Pantheon Report

Generated at 2017-08-17 01:58:34 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

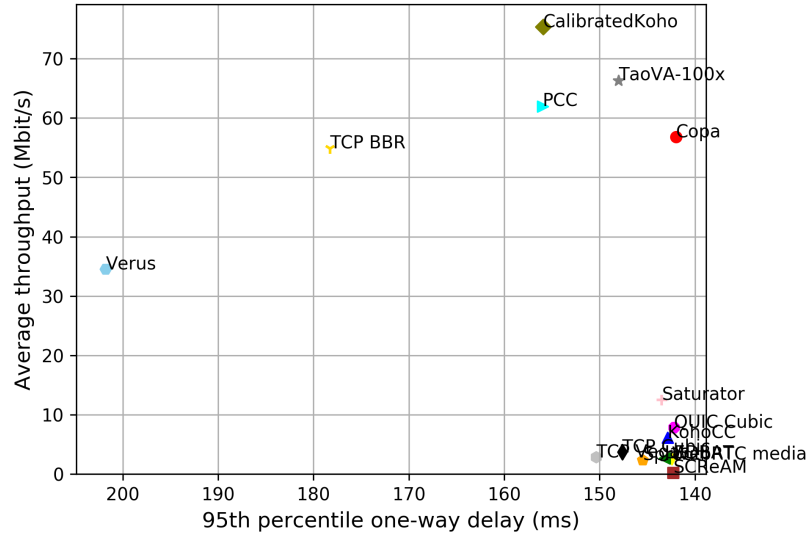Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

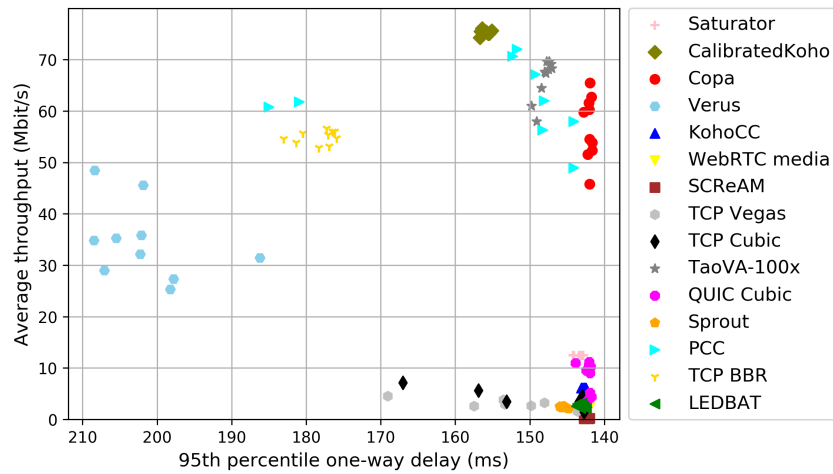NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
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

2

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	54.86	178.30	1.56
CalibratedKoho	10	75.32	155.93	1.01
Copa	10	56.77	142.01	0.79
TCP Cubic	10	3.69	147.64	0.65
KohoCC	10	6.14	142.86	0.83
LEDBAT	10	2.68	143.17	0.86
PCC	9	61.96	155.99	1.27
QUIC Cubic	10	7.88	142.22	0.61
Saturator	10	12.47	143.47	0.82
SCReAM	9	0.20	142.28	0.69
Sprout	9	2.39	145.49	0.79
TaoVA-100x	10	66.32	148.00	0.93
TCP Vegas	10	2.84	150.36	0.73
Verus	10	34.51	201.79	39.06
WebRTC media	10	2.50	142.44	1.04

```
Run 1: Statistics of TCP BBR

Start at: 2017-08-16 18:48:50
End at: 2017-08-16 18:49:21
Local clock offset: 0.445 ms
Remote clock offset: -0.91 ms

# Below is generated by plot.py at 2017-08-17 01:52:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.63 Mbit/s
95th percentile per-packet one-way delay: 180.430 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 55.63 Mbit/s
95th percentile per-packet one-way delay: 180.430 ms
Loss rate: 1.55%
```
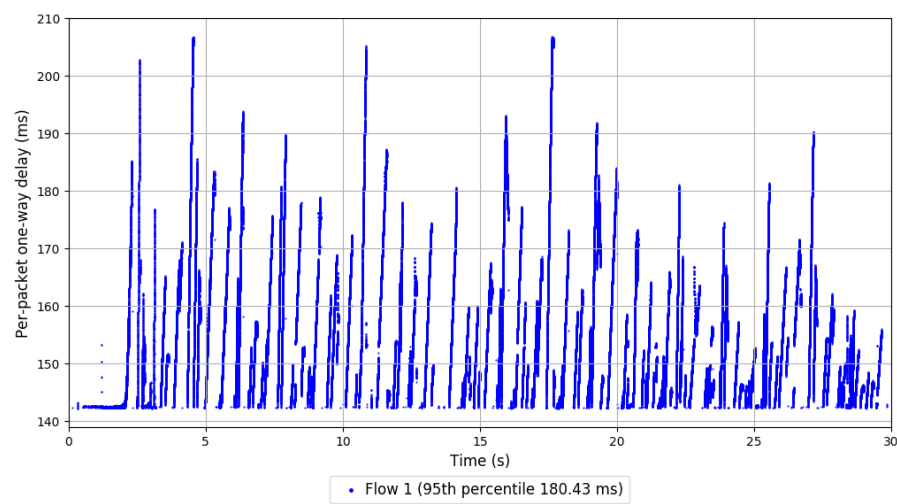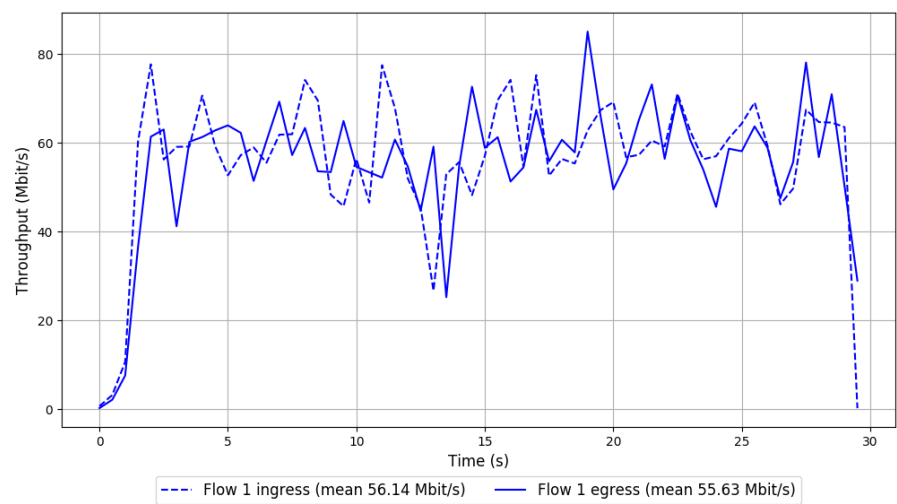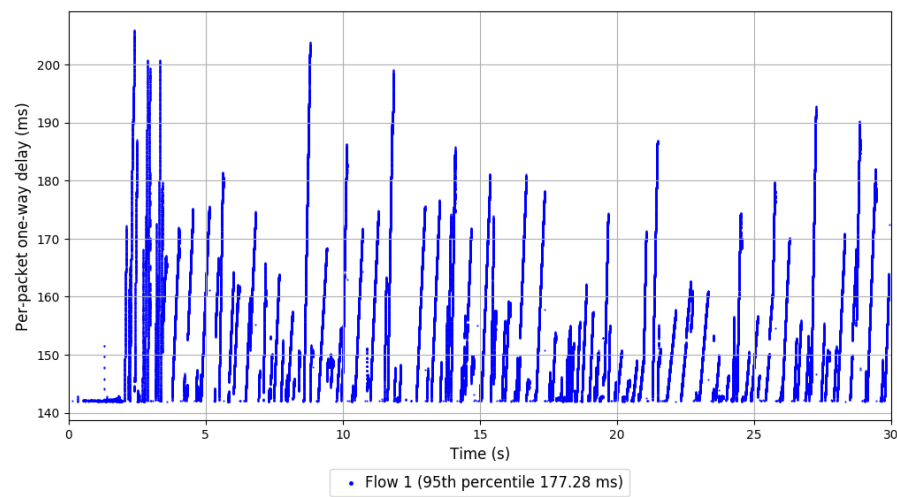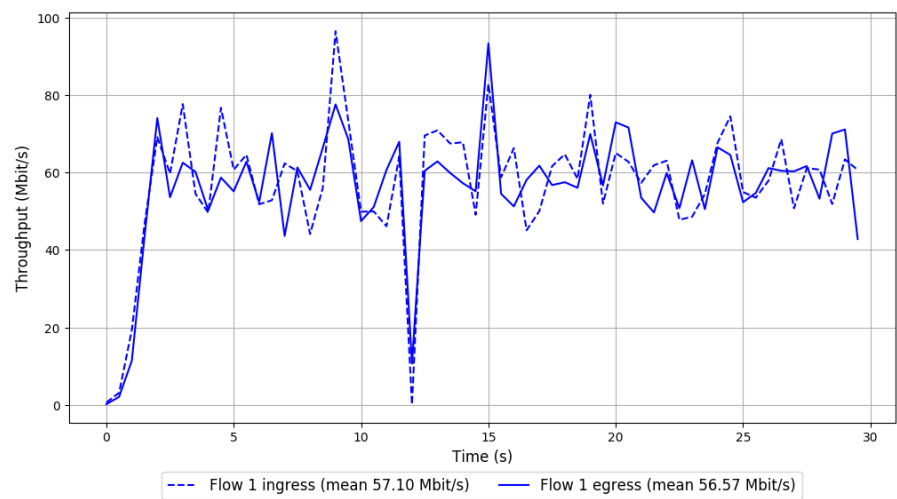
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 56.14 Mbit/s)   Flow 1 egress (mean 55.63 Mbit/s)

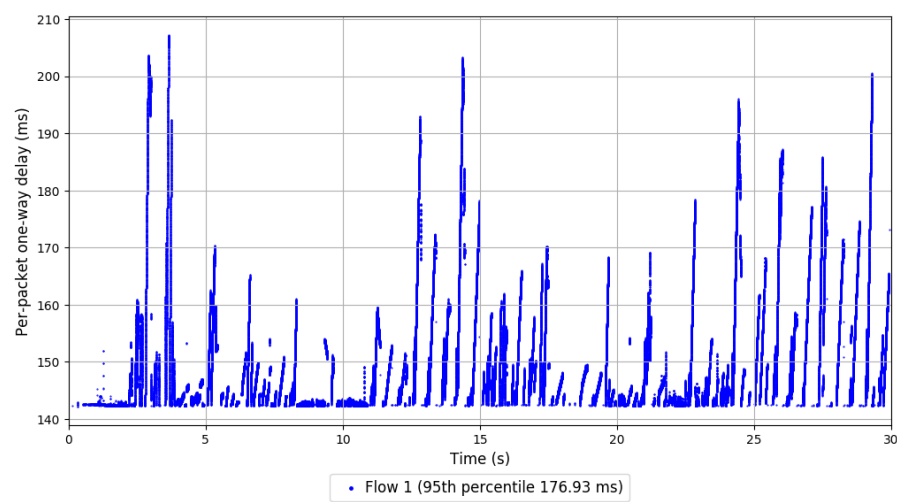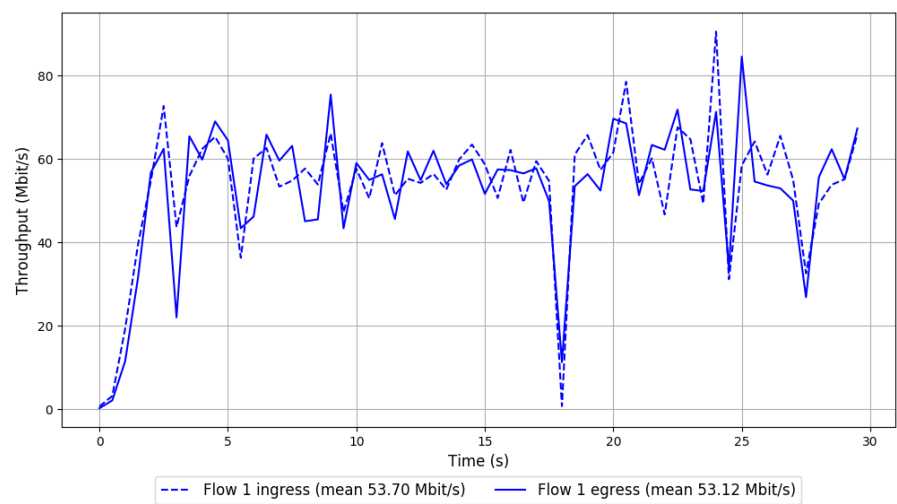• Flow 1 (95th percentile 180.43 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2017-08-16 19:10:05
End at: 2017-08-16 19:10:35
Local clock offset: 0.319 ms
Remote clock offset: -0.212 ms


# Below is generated by plot.py at 2017-08-17 01:52:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.57 Mbit/s
95th percentile per-packet one-way delay: 177.279 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 56.57 Mbit/s
95th percentile per-packet one-way delay: 177.279 ms
Loss rate: 1.49%
```

Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2017-08-16 19:31:39
End at: 2017-08-16 19:32:09
Local clock offset: 0.655 ms
Remote clock offset: -0.182 ms


# Below is generated by plot.py at 2017-08-17 01:52:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.12 Mbit/s
95th percentile per-packet one-way delay: 176.930 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 53.12 Mbit/s
95th percentile per-packet one-way delay: 176.930 ms
Loss rate: 1.61%
```
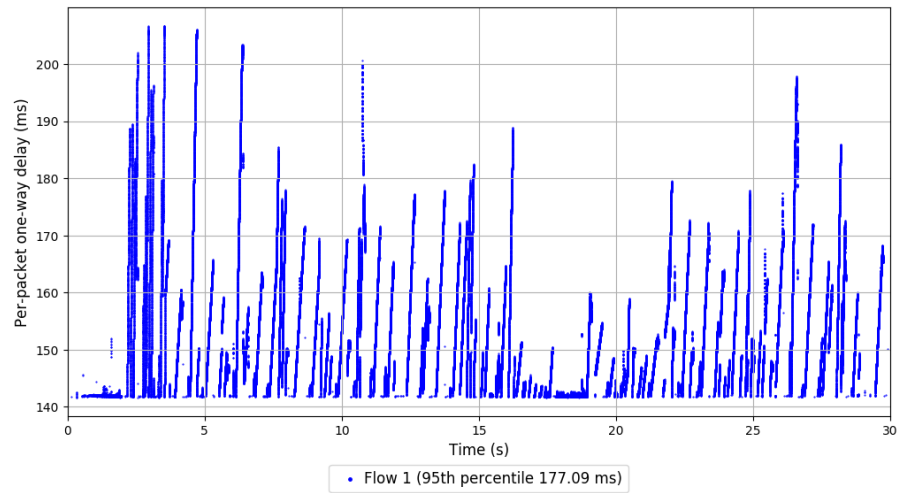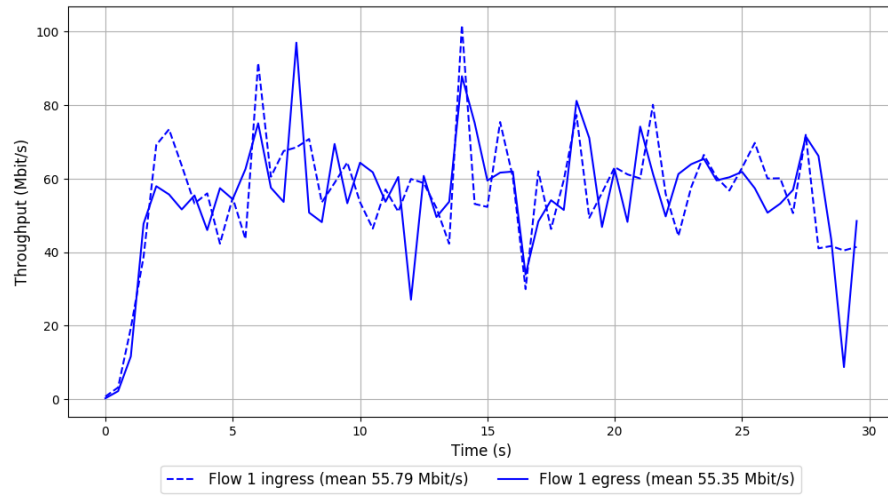
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 53.70 Mbit/s) --- Flow 1 egress (mean 53.12 Mbit/s)

Flow 1 (95th percentile 176.93 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2017-08-16 19:53:21
End at: 2017-08-16 19:53:51
Local clock offset: 0.856 ms
Remote clock offset: 0.031 ms


# Below is generated by plot.py at 2017-08-17 01:52:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.35 Mbit/s
95th percentile per-packet one-way delay: 177.088 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 55.35 Mbit/s
95th percentile per-packet one-way delay: 177.088 ms
Loss rate: 1.41%
```
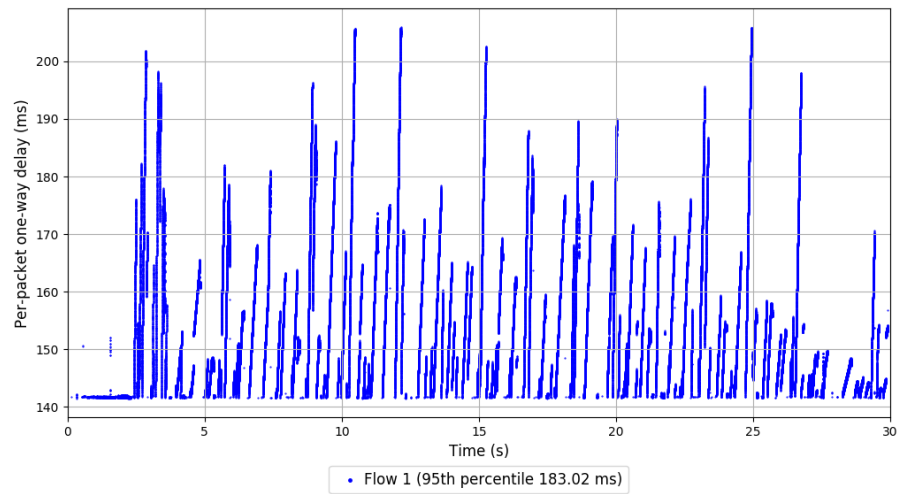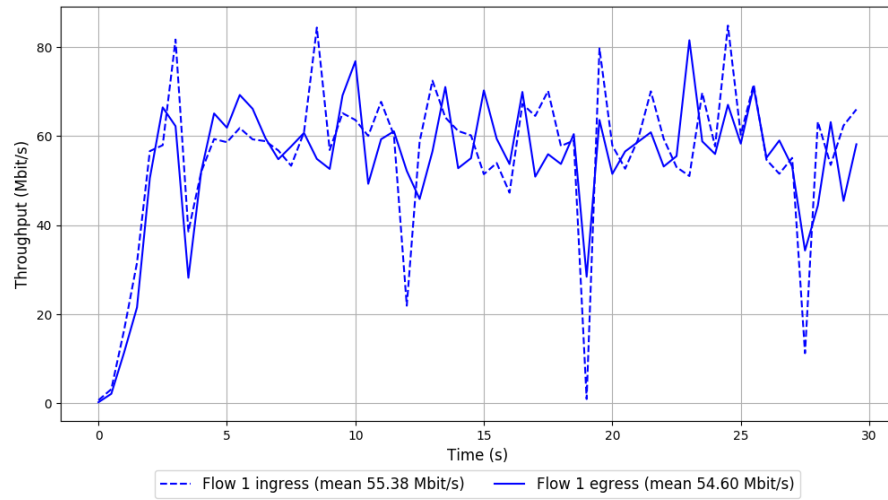
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 55.79 Mbit/s)   Flow 1 egress (mean 55.35 Mbit/s)

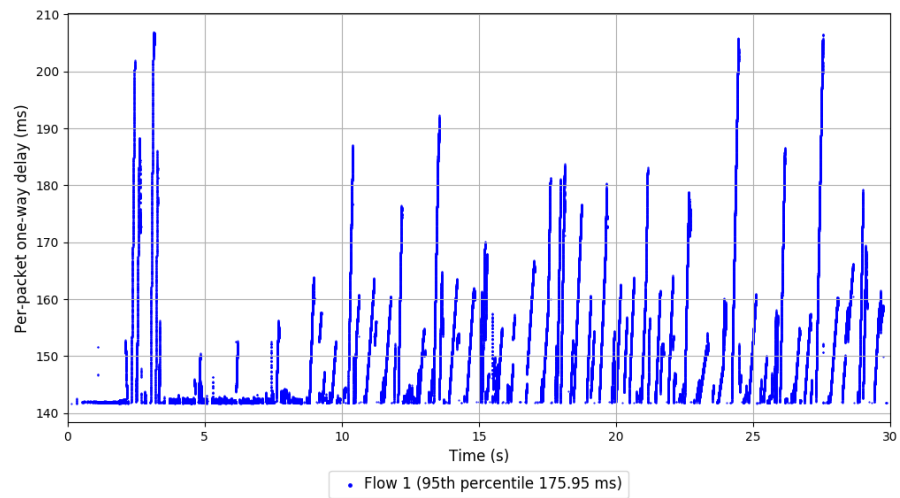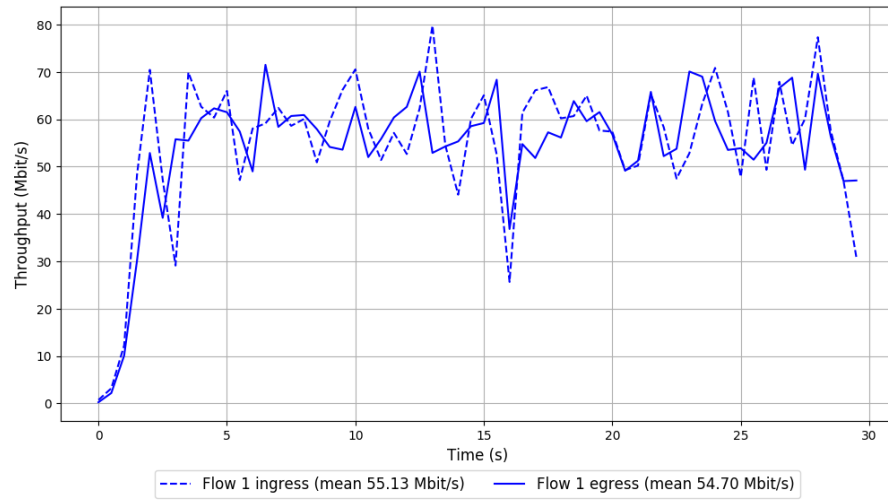• Flow 1 (95th percentile 177.09 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2017-08-16 20:14:30
End at: 2017-08-16 20:15:00
Local clock offset: 0.724 ms
Remote clock offset: 0.1 ms


# Below is generated by plot.py at 2017-08-17 01:52:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.60 Mbit/s
95th percentile per-packet one-way delay: 183.021 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 54.60 Mbit/s
95th percentile per-packet one-way delay: 183.021 ms
Loss rate: 2.01%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 55.38 Mbit/s)   Flow 1 egress (mean 54.60 Mbit/s)

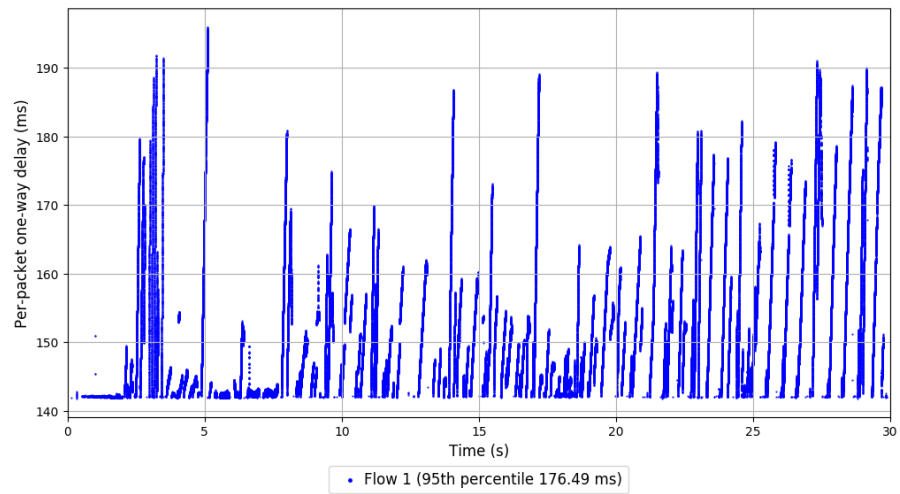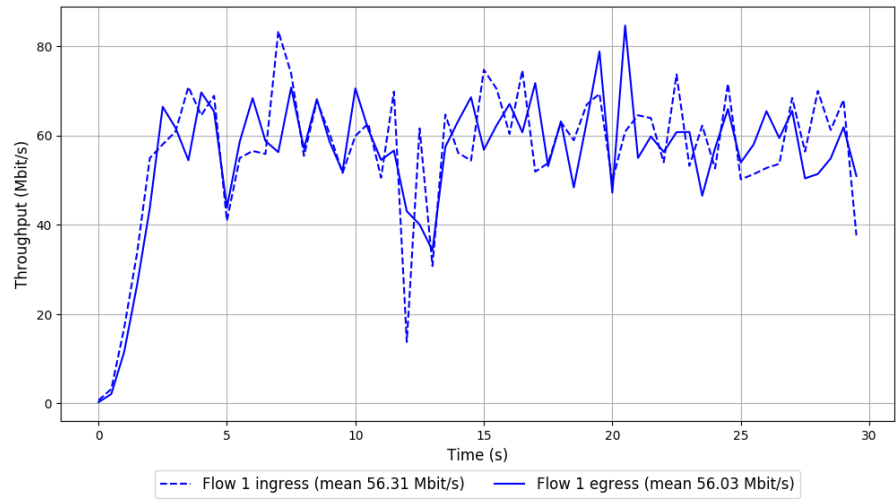Flow 1 (95th percentile 183.02 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2017-08-16 20:36:13
End at: 2017-08-16 20:36:43
Local clock offset: 0.91 ms
Remote clock offset: -0.021 ms


# Below is generated by plot.py at 2017-08-17 01:52:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.70 Mbit/s
95th percentile per-packet one-way delay: 175.950 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 54.70 Mbit/s
95th percentile per-packet one-way delay: 175.950 ms
Loss rate: 1.44%
```
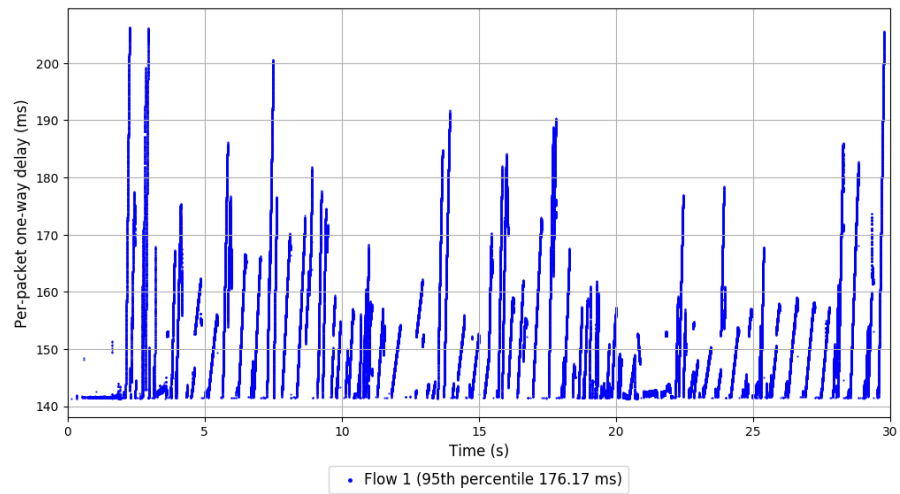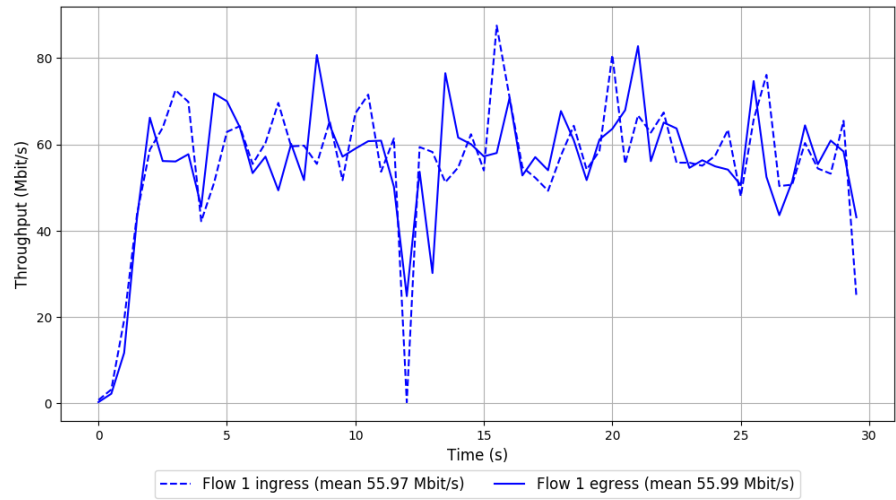
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 55.13 Mbit/s) ----   Flow 1 egress (mean 54.70 Mbit/s) ——

• Flow 1 (95th percentile 175.95 ms)

15

```
Run 7: Statistics of TCP BBR

Start at: 2017-08-16 20:57:36
End at: 2017-08-16 20:58:06
Local clock offset: 0.528 ms
Remote clock offset: -0.032 ms


# Below is generated by plot.py at 2017-08-17 01:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.03 Mbit/s
95th percentile per-packet one-way delay: 176.492 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 56.03 Mbit/s
95th percentile per-packet one-way delay: 176.492 ms
Loss rate: 1.26%
```
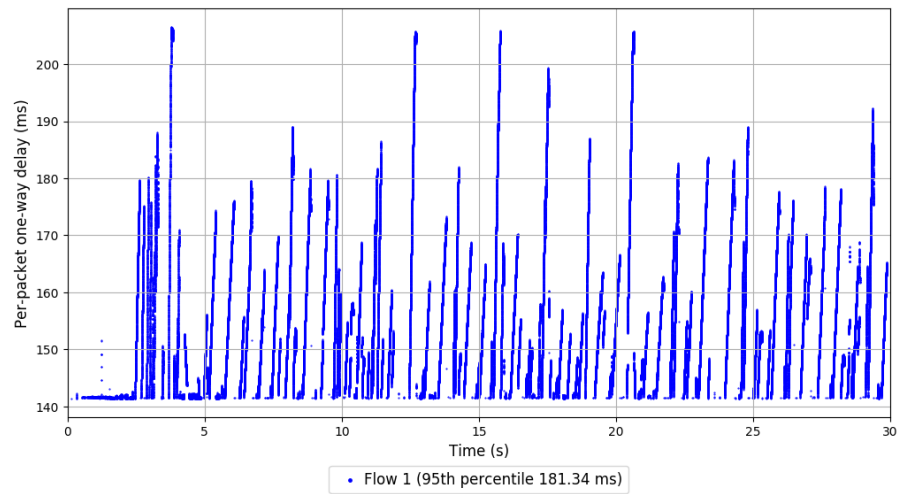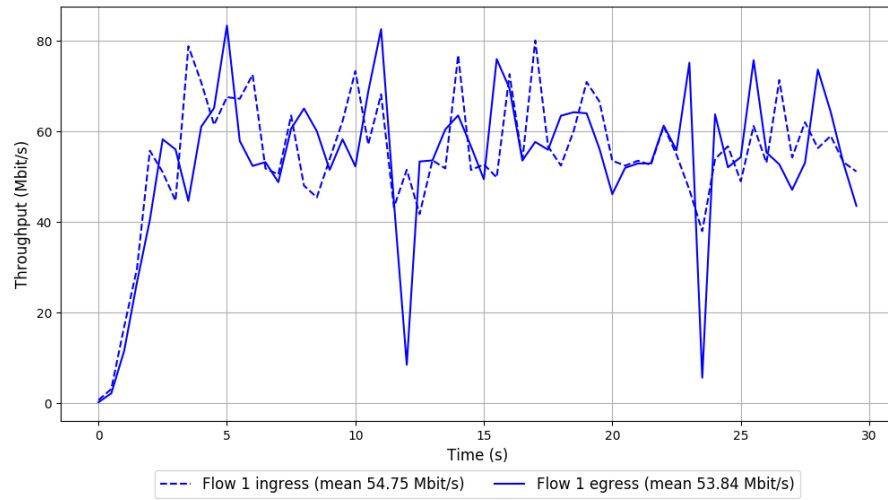
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 56.31 Mbit/s) —— Flow 1 egress (mean 56.03 Mbit/s)

• Flow 1 (95th percentile 176.49 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2017-08-16 21:18:09
End at: 2017-08-16 21:18:39
Local clock offset: 0.363 ms
Remote clock offset: -0.271 ms


# Below is generated by plot.py at 2017-08-17 01:52:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.99 Mbit/s
95th percentile per-packet one-way delay: 176.174 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 55.99 Mbit/s
95th percentile per-packet one-way delay: 176.174 ms
Loss rate: 0.61%
```
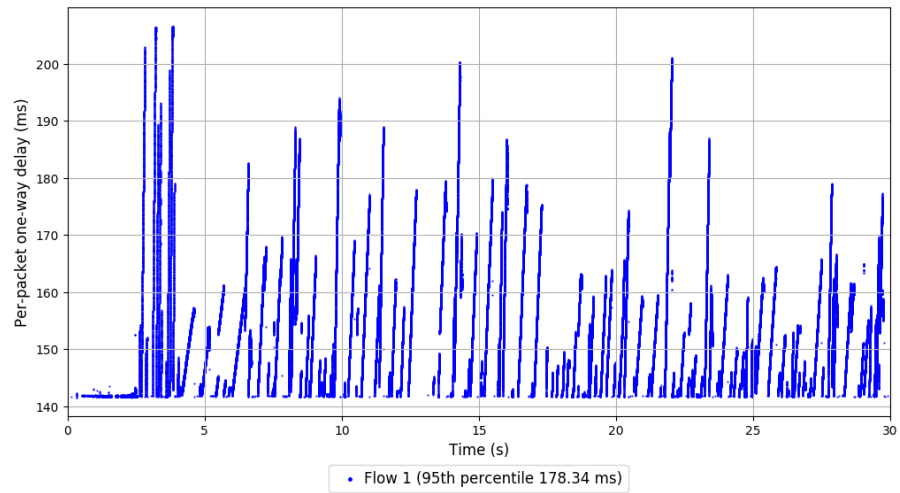
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 55.97 Mbit/s) ----   Flow 1 egress (mean 55.99 Mbit/s) ——

• Flow 1 (95th percentile 176.17 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2017-08-16 21:39:19
End at: 2017-08-16 21:39:49
Local clock offset: 0.216 ms
Remote clock offset: -0.447 ms


# Below is generated by plot.py at 2017-08-17 01:52:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.84 Mbit/s
95th percentile per-packet one-way delay: 181.343 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 53.84 Mbit/s
95th percentile per-packet one-way delay: 181.343 ms
Loss rate: 2.22%
```
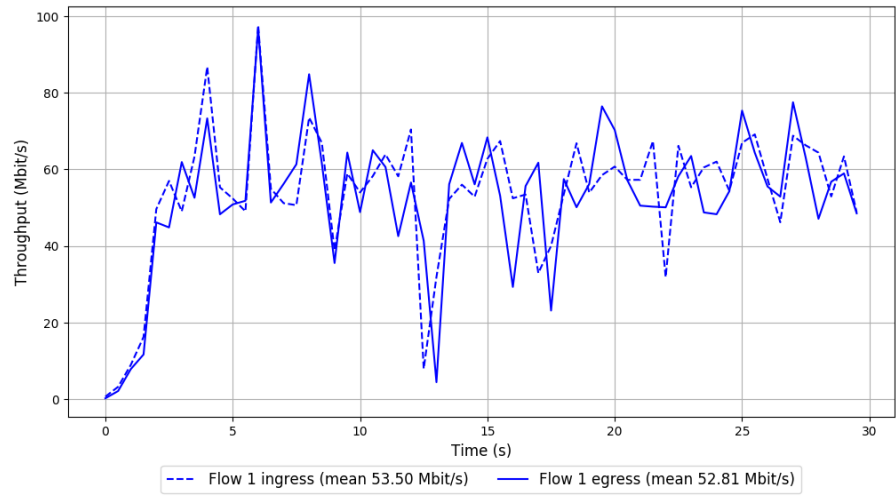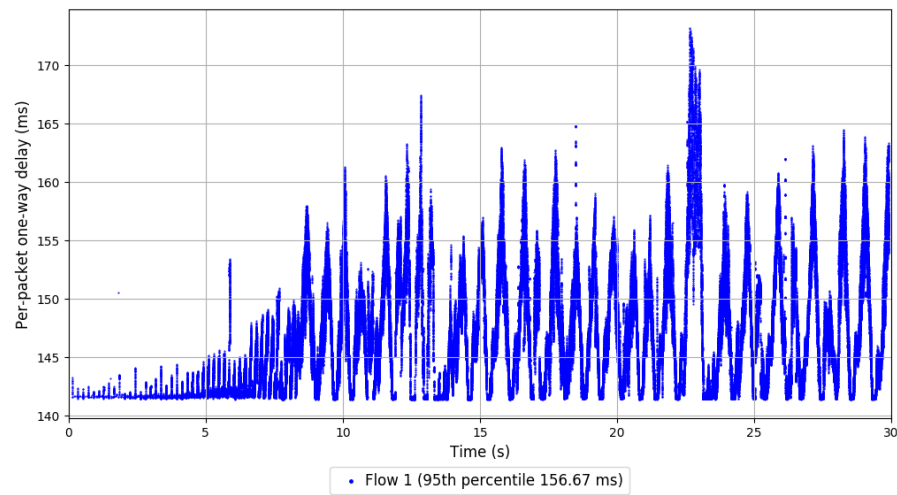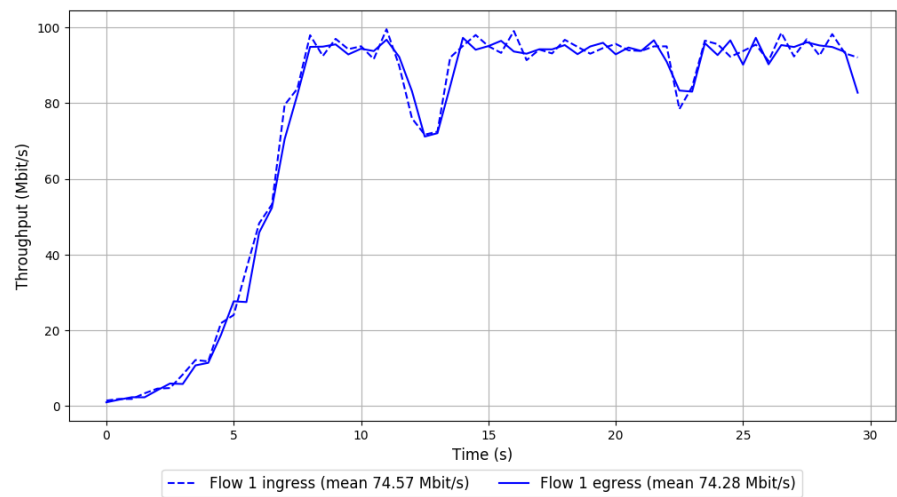
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 54.75 Mbit/s)   Flow 1 egress (mean 53.84 Mbit/s)

Flow 1 (95th percentile 181.34 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2017-08-16 22:01:10
End at: 2017-08-16 22:01:40
Local clock offset: 0.193 ms
Remote clock offset: -0.48 ms


# Below is generated by plot.py at 2017-08-17 01:52:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.81 Mbit/s
95th percentile per-packet one-way delay: 178.336 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 52.81 Mbit/s
95th percentile per-packet one-way delay: 178.336 ms
Loss rate: 1.99%
```
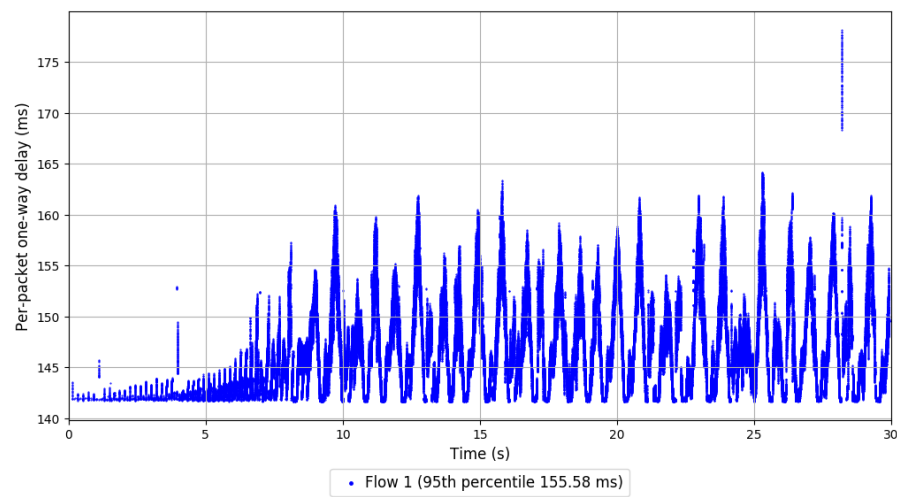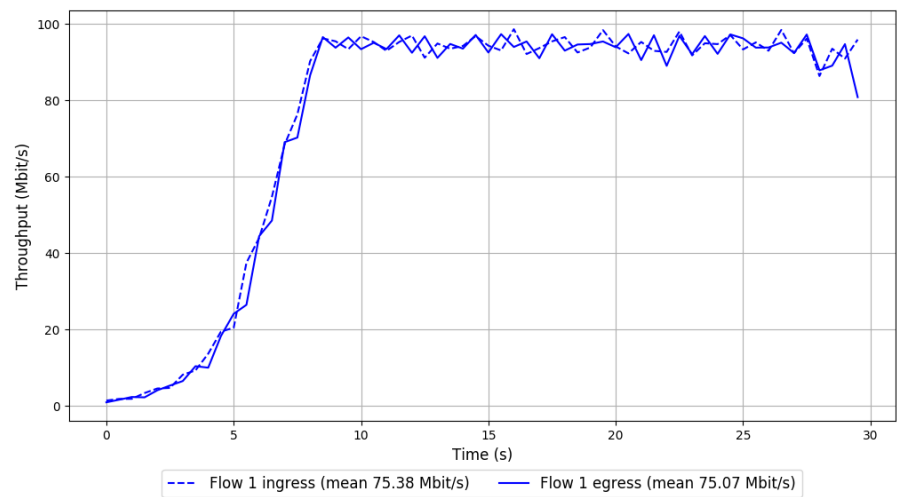
Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of CalibratedKoho

Start at: 2017-08-16 18:34:43
End at: 2017-08-16 18:35:14
Local clock offset: -0.066 ms
Remote clock offset: -1.403 ms


# Below is generated by plot.py at 2017-08-17 01:52:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.28 Mbit/s
95th percentile per-packet one-way delay: 156.670 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 74.28 Mbit/s
95th percentile per-packet one-way delay: 156.670 ms
Loss rate: 1.03%
```
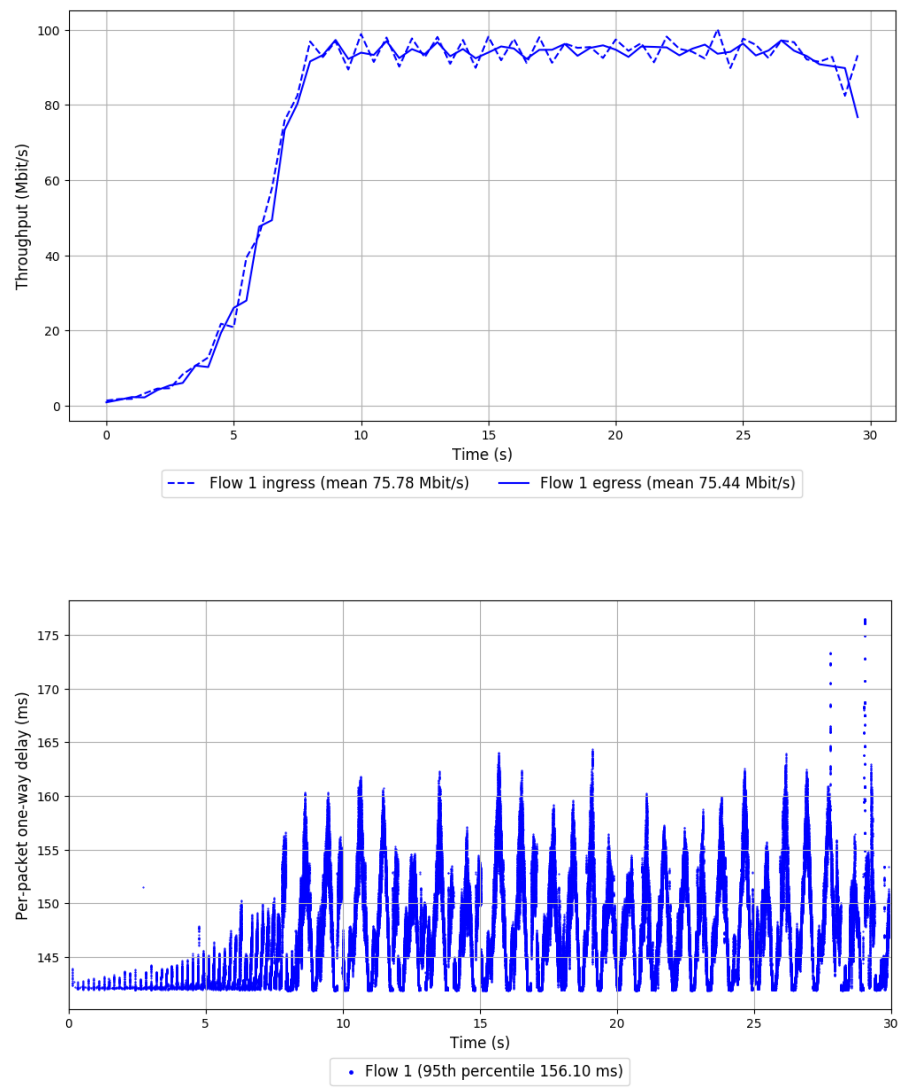
Run 1: Report of CalibratedKoho — Data Link

```
Run 2: Statistics of CalibratedKoho

Start at: 2017-08-16 18:56:17
End at: 2017-08-16 18:56:47
Local clock offset: 0.301 ms
Remote clock offset: -0.732 ms


# Below is generated by plot.py at 2017-08-17 01:53:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.07 Mbit/s
95th percentile per-packet one-way delay: 155.584 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 75.07 Mbit/s
95th percentile per-packet one-way delay: 155.584 ms
Loss rate: 1.07%
```
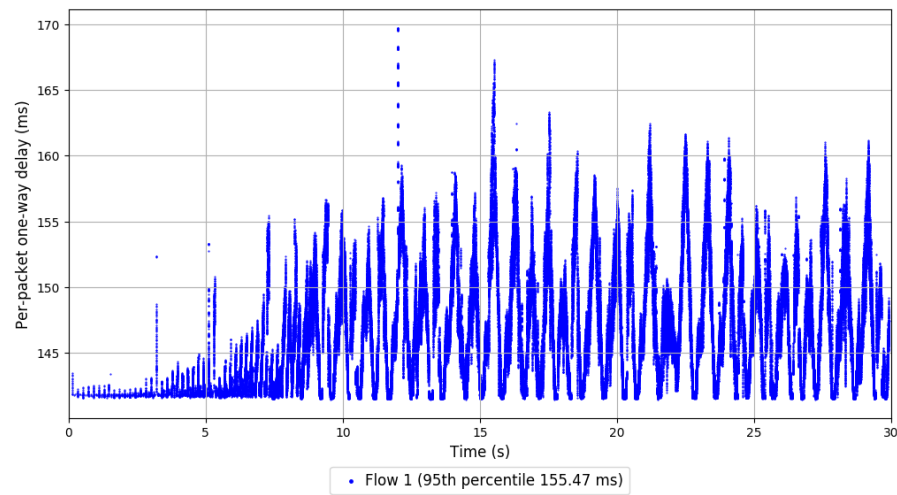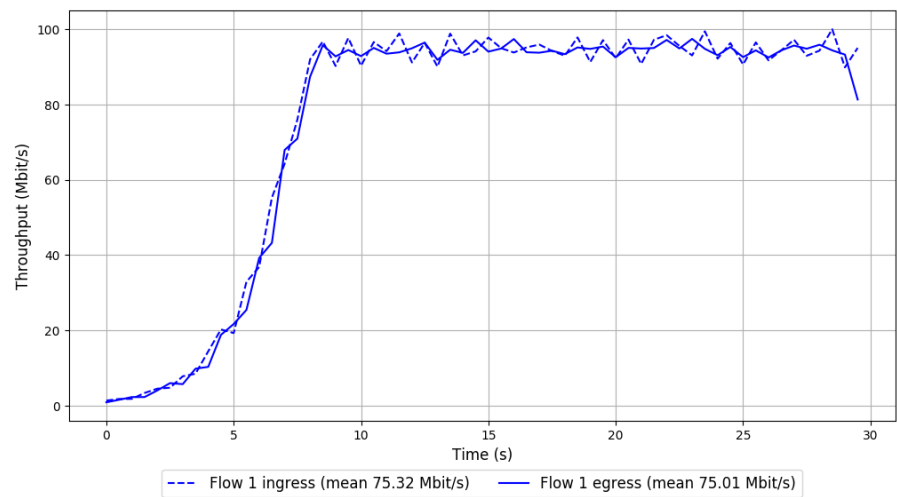
Run 2: Report of CalibratedKoho — Data Link

```
Run 3: Statistics of CalibratedKoho

Start at: 2017-08-16 19:17:15
End at: 2017-08-16 19:17:45
Local clock offset: 0.651 ms
Remote clock offset: -0.204 ms


# Below is generated by plot.py at 2017-08-17 01:53:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.44 Mbit/s
95th percentile per-packet one-way delay: 156.096 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 75.44 Mbit/s
95th percentile per-packet one-way delay: 156.096 ms
Loss rate: 1.10%
```
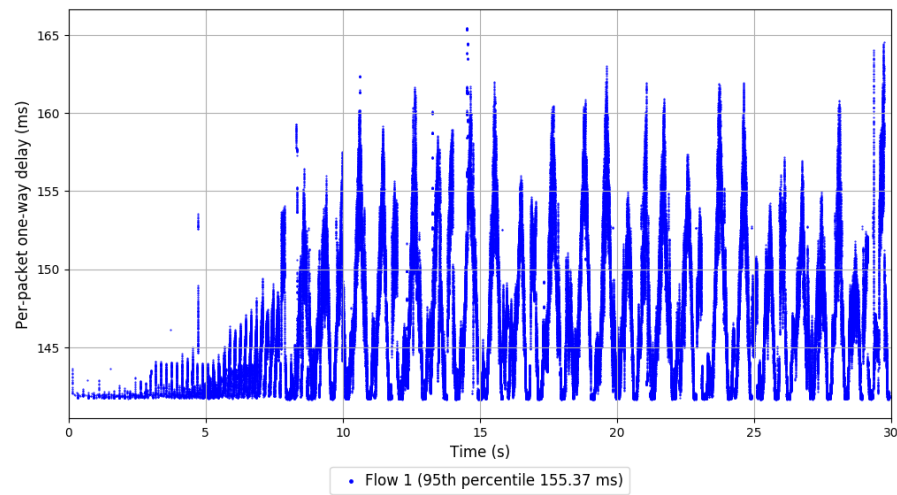
Run 3: Report of CalibratedKoho — Data Link

```
Run 4: Statistics of CalibratedKoho

Start at: 2017-08-16 19:38:46
End at: 2017-08-16 19:39:16
Local clock offset: 0.487 ms
Remote clock offset: -0.06 ms


# Below is generated by plot.py at 2017-08-17 01:53:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.01 Mbit/s
95th percentile per-packet one-way delay: 155.475 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 75.01 Mbit/s
95th percentile per-packet one-way delay: 155.475 ms
Loss rate: 1.08%
```
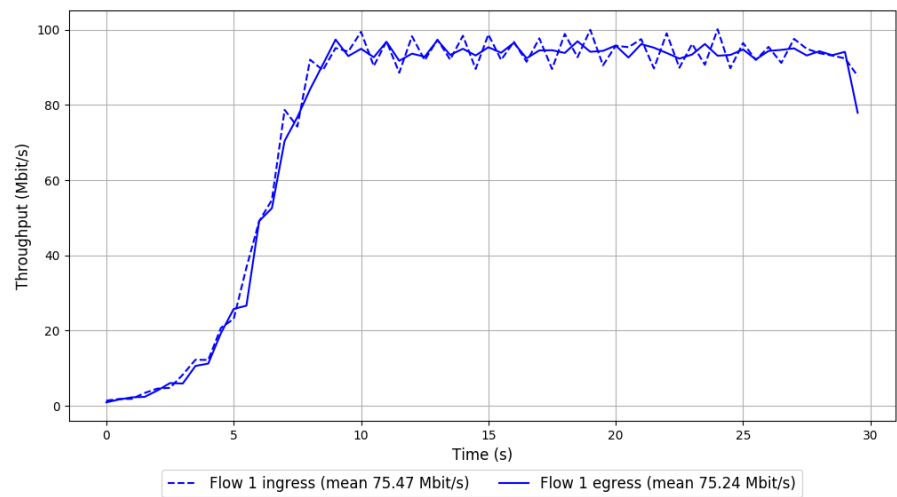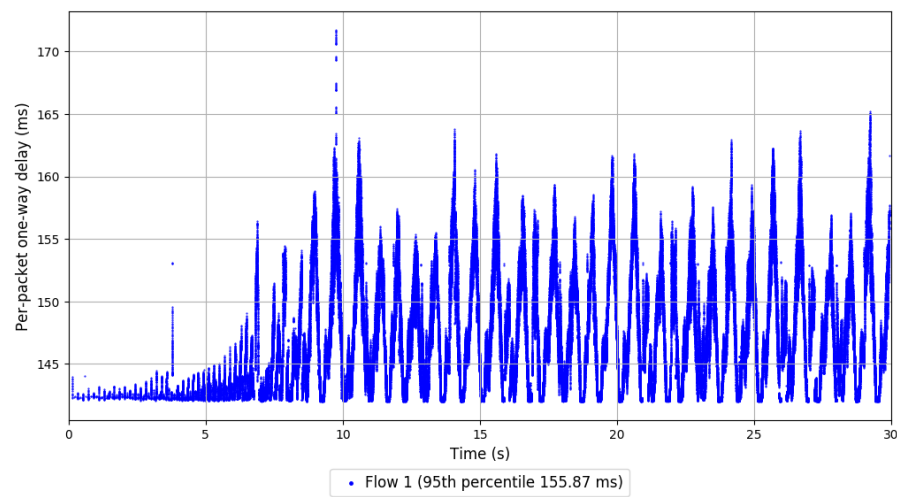
Run 4: Report of CalibratedKoho — Data Link

```
Run 5: Statistics of CalibratedKoho

Start at: 2017-08-16 20:00:29
End at: 2017-08-16 20:00:59
Local clock offset: 0.93 ms
Remote clock offset: 0.077 ms


# Below is generated by plot.py at 2017-08-17 01:53:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.24 Mbit/s
95th percentile per-packet one-way delay: 155.374 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 75.24 Mbit/s
95th percentile per-packet one-way delay: 155.374 ms
Loss rate: 0.97%
```
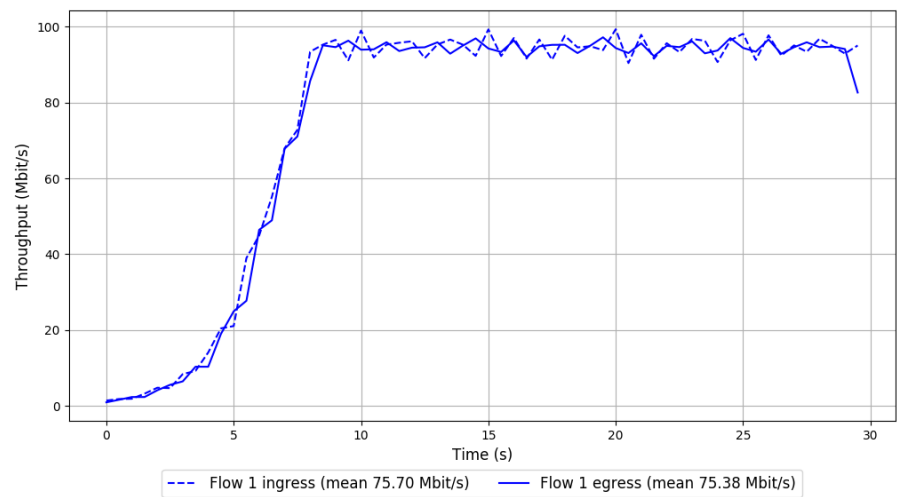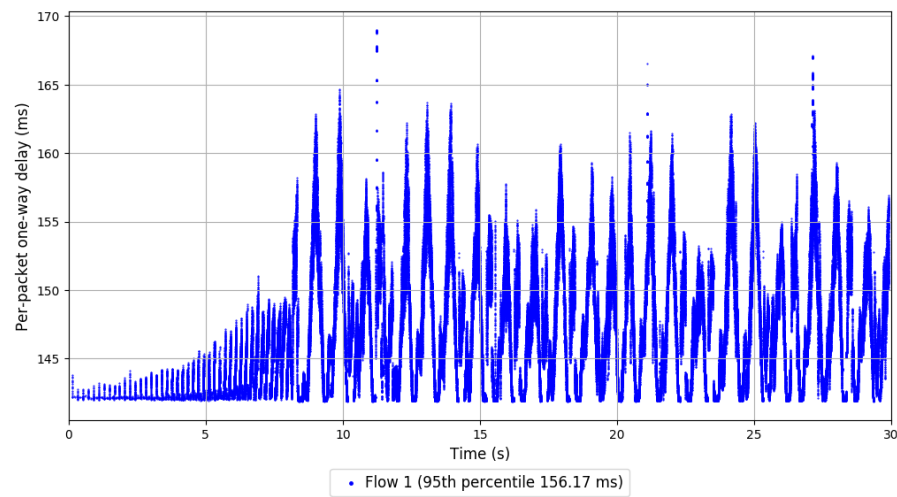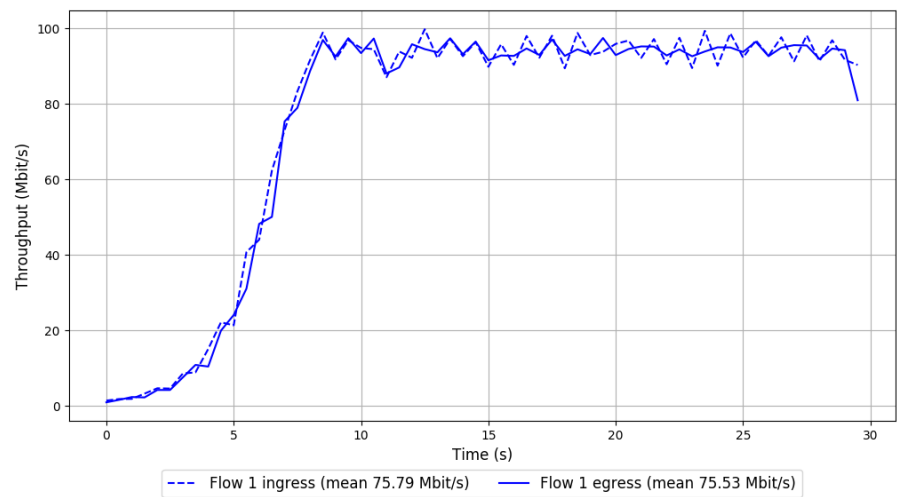
Run 5: Report of CalibratedKoho — Data Link

```
Run 6: Statistics of CalibratedKoho

Start at: 2017-08-16 20:21:53
End at: 2017-08-16 20:22:23
Local clock offset: 0.695 ms
Remote clock offset: 0.042 ms


# Below is generated by plot.py at 2017-08-17 01:53:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.38 Mbit/s
95th percentile per-packet one-way delay: 155.872 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 75.38 Mbit/s
95th percentile per-packet one-way delay: 155.872 ms
Loss rate: 1.05%
```

Run 6: Report of CalibratedKoho — Data Link

```
Run 7: Statistics of CalibratedKoho

Start at: 2017-08-16 20:43:29
End at: 2017-08-16 20:43:59
Local clock offset: 0.537 ms
Remote clock offset: -0.052 ms


# Below is generated by plot.py at 2017-08-17 01:53:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.53 Mbit/s
95th percentile per-packet one-way delay: 156.167 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 75.53 Mbit/s
95th percentile per-packet one-way delay: 156.167 ms
Loss rate: 0.97%
```
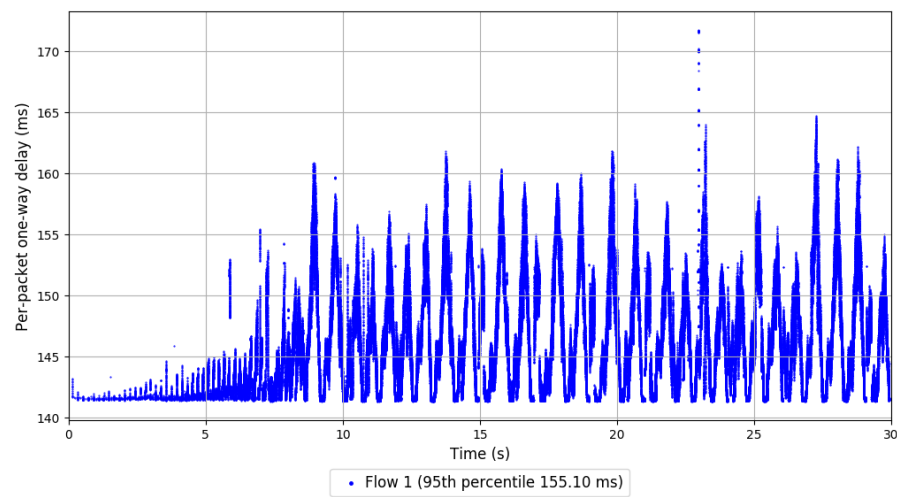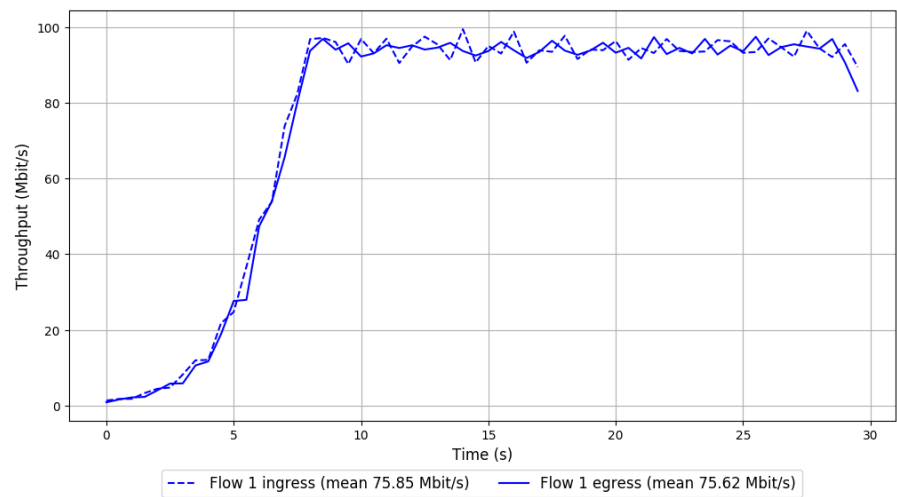
Run 7: Report of CalibratedKoho — Data Link

```
Run 8: Statistics of CalibratedKoho

Start at: 2017-08-16 21:04:59
End at: 2017-08-16 21:05:29
Local clock offset: 0.415 ms
Remote clock offset: -0.117 ms


# Below is generated by plot.py at 2017-08-17 01:53:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.62 Mbit/s
95th percentile per-packet one-way delay: 155.098 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 75.62 Mbit/s
95th percentile per-packet one-way delay: 155.098 ms
Loss rate: 0.94%
```
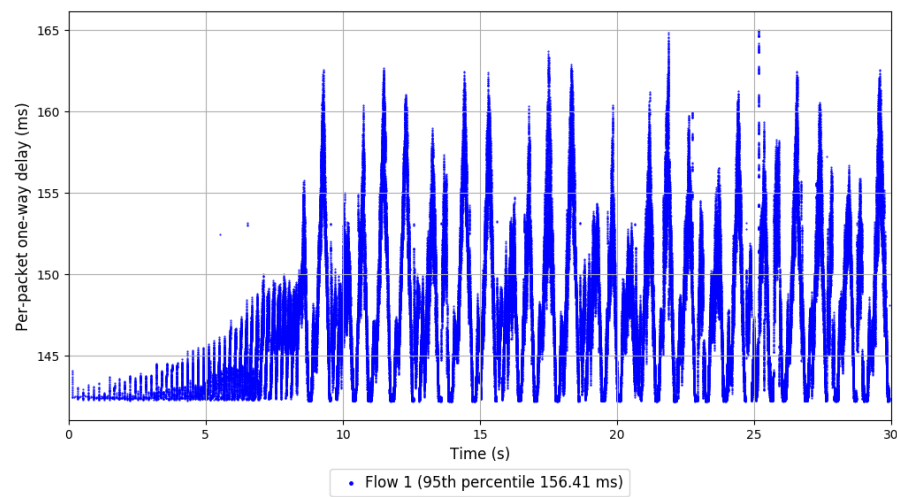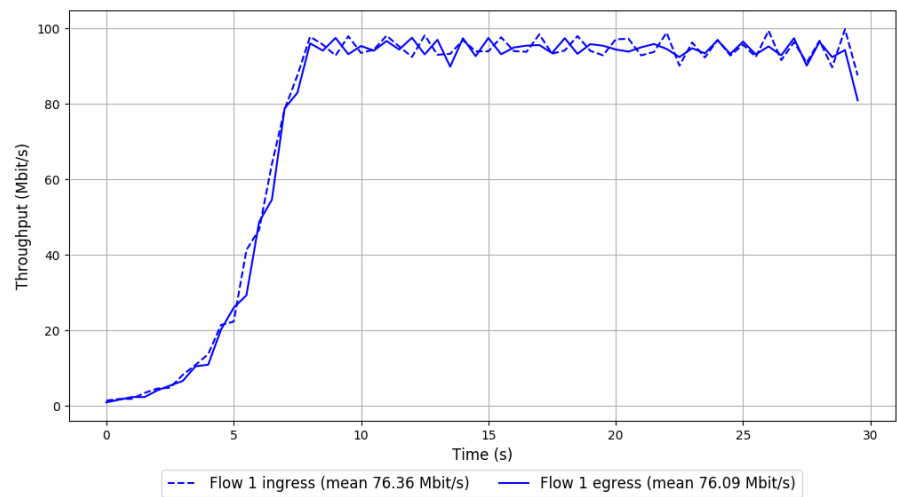
Run 8: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 75.85 Mbit/s)   Flow 1 egress (mean 75.62 Mbit/s)
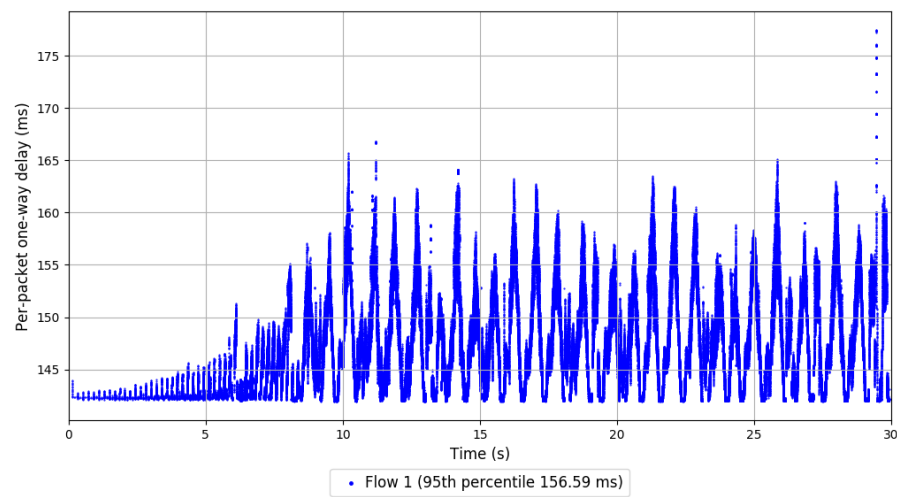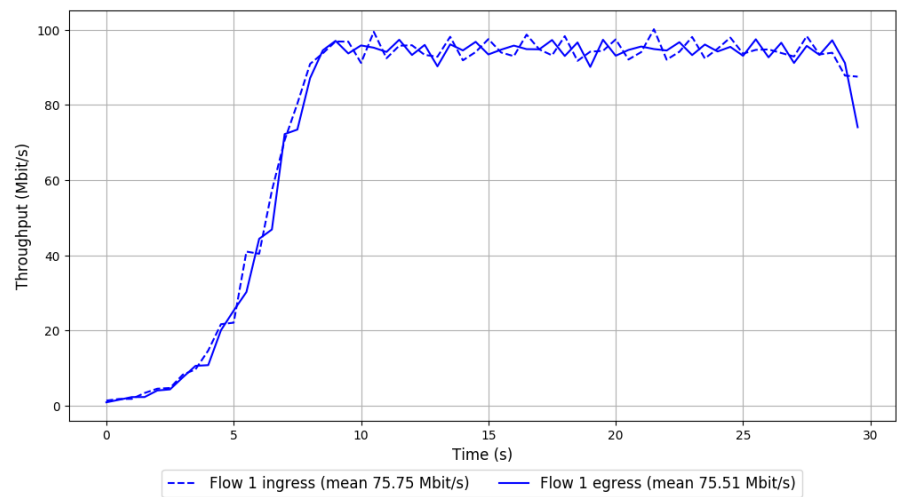

Flow 1 (95th percentile 155.10 ms)

```
Run 9: Statistics of CalibratedKoho

Start at: 2017-08-16 21:25:07
End at: 2017-08-16 21:25:37
Local clock offset: 0.602 ms
Remote clock offset: -0.331 ms


# Below is generated by plot.py at 2017-08-17 01:53:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.09 Mbit/s
95th percentile per-packet one-way delay: 156.409 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 76.09 Mbit/s
95th percentile per-packet one-way delay: 156.409 ms
Loss rate: 0.97%
```
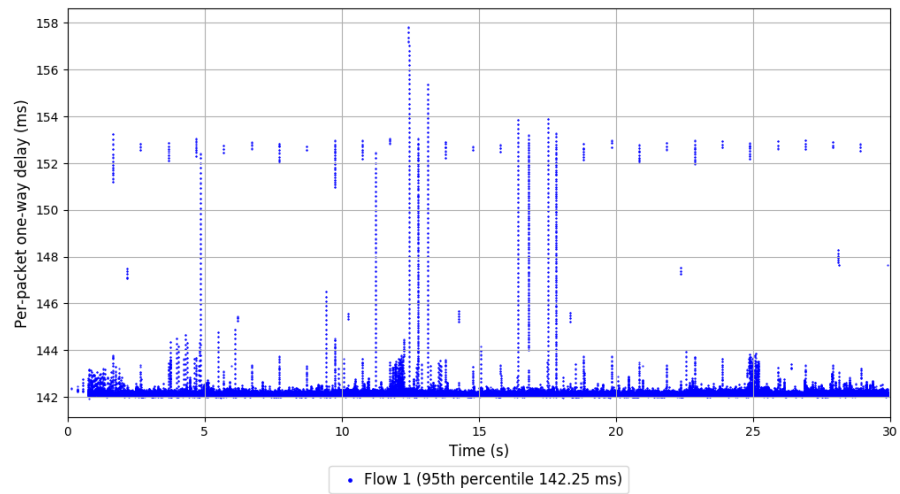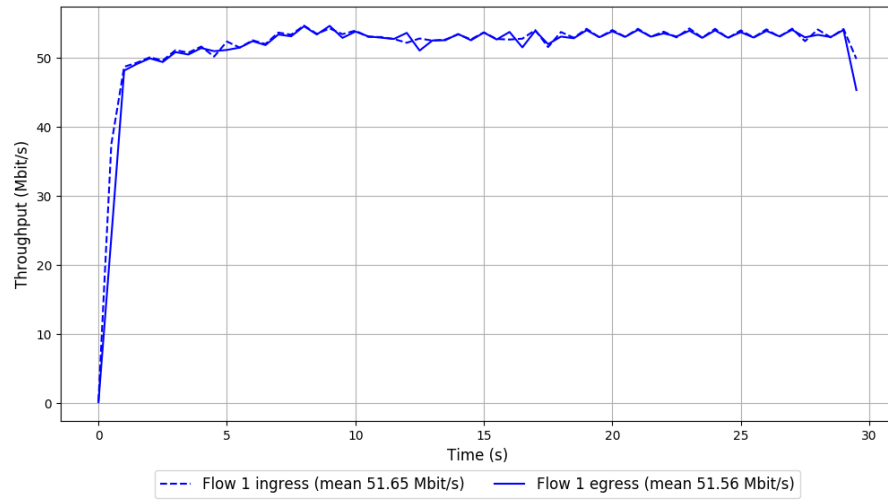
Run 9: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 76.36 Mbit/s)   Flow 1 egress (mean 76.09 Mbit/s)

• Flow 1 (95th percentile 156.41 ms)

```
Run 10: Statistics of CalibratedKoho

Start at: 2017-08-16 21:46:50
End at: 2017-08-16 21:47:20
Local clock offset: 0.554 ms
Remote clock offset: -0.302 ms


# Below is generated by plot.py at 2017-08-17 01:53:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.51 Mbit/s
95th percentile per-packet one-way delay: 156.585 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 75.51 Mbit/s
95th percentile per-packet one-way delay: 156.585 ms
Loss rate: 0.95%
```

Run 10: Report of CalibratedKoho — Data Link

Flow 1 ingress (mean 75.75 Mbit/s)   Flow 1 egress (mean 75.51 Mbit/s)

Flow 1 (95th percentile 156.59 ms)

```
Run 1: Statistics of Copa

Start at: 2017-08-16 18:43:01
End at: 2017-08-16 18:43:31
Local clock offset: 0.484 ms
Remote clock offset: -1.166 ms


# Below is generated by plot.py at 2017-08-17 01:53:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.56 Mbit/s
95th percentile per-packet one-way delay: 142.246 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 51.56 Mbit/s
95th percentile per-packet one-way delay: 142.246 ms
Loss rate: 0.80%
```
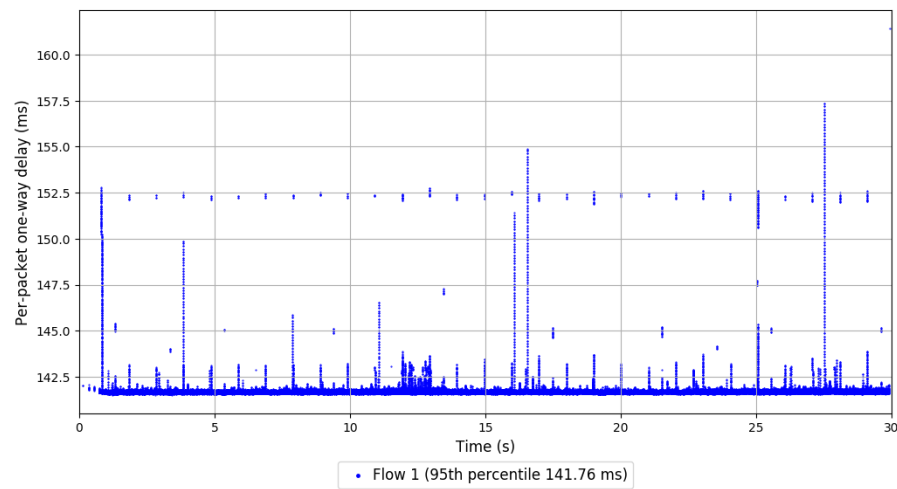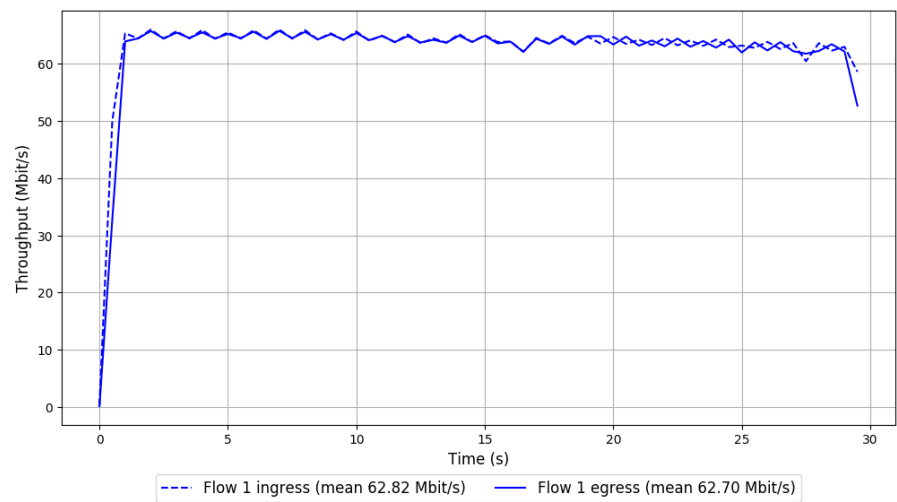
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2017-08-16 19:04:22
End at: 2017-08-16 19:04:52
Local clock offset: 0.283 ms
Remote clock offset: -0.48 ms


# Below is generated by plot.py at 2017-08-17 01:53:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.70 Mbit/s
95th percentile per-packet one-way delay: 141.759 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 62.70 Mbit/s
95th percentile per-packet one-way delay: 141.759 ms
Loss rate: 0.79%
```
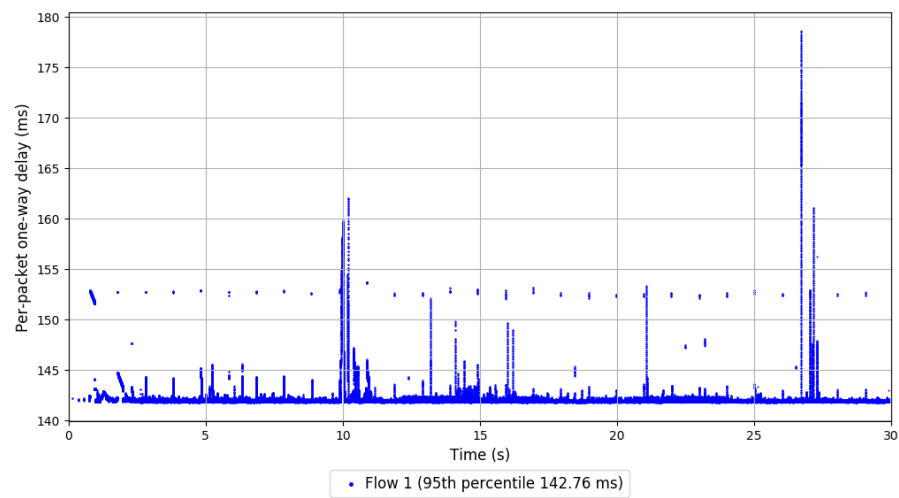
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2017-08-16 19:25:46
End at: 2017-08-16 19:26:16
Local clock offset: 0.3 ms
Remote clock offset: -0.181 ms


# Below is generated by plot.py at 2017-08-17 01:54:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.77 Mbit/s
95th percentile per-packet one-way delay: 142.757 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 59.77 Mbit/s
95th percentile per-packet one-way delay: 142.757 ms
Loss rate: 0.75%
```
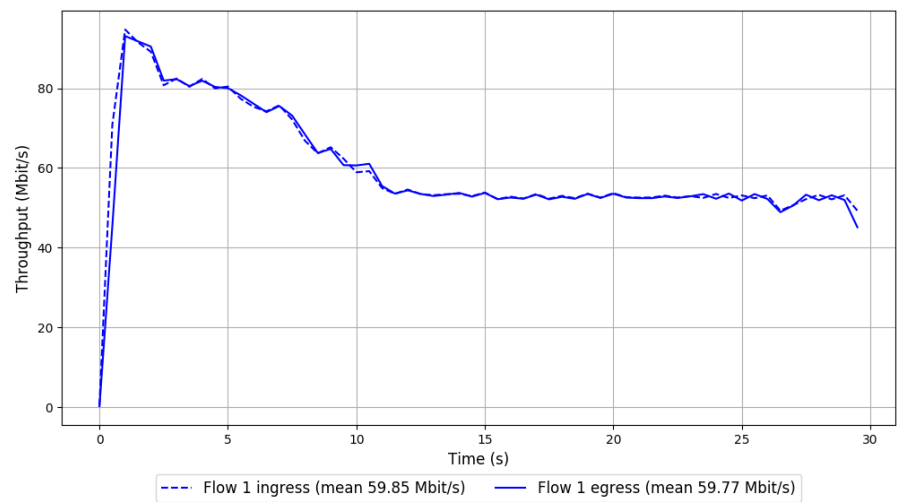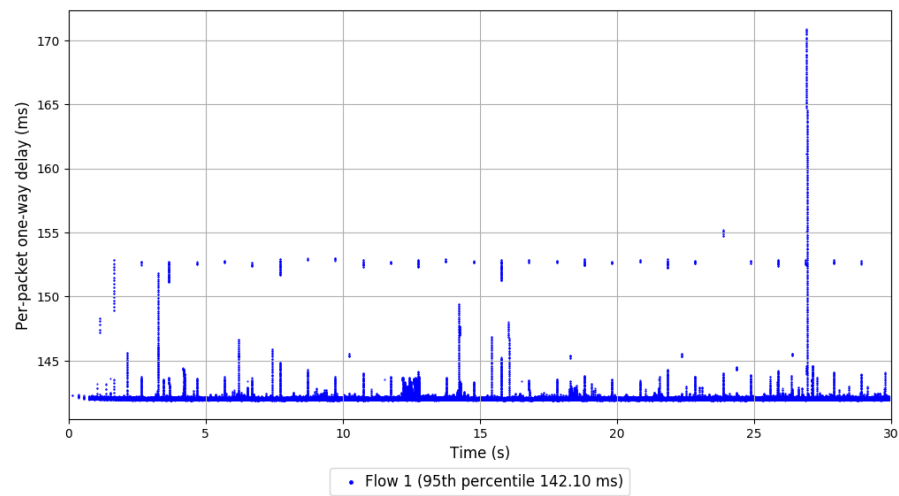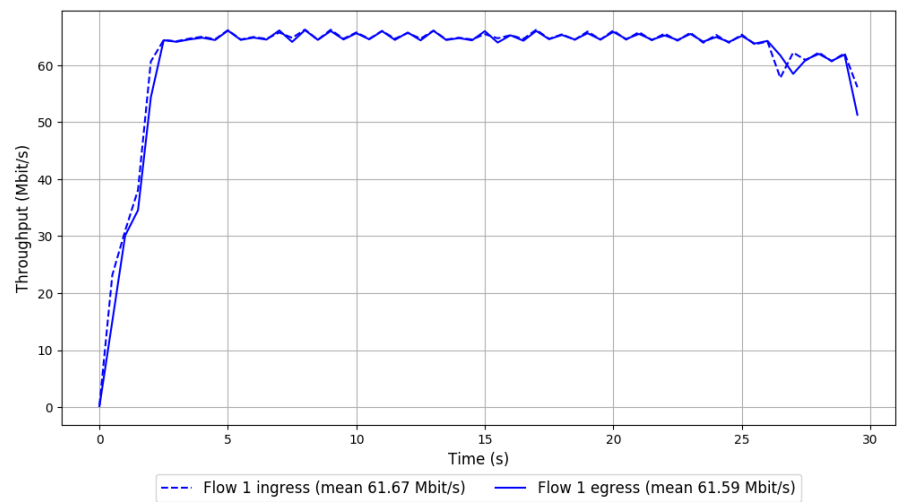
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2017-08-16 19:47:27
End at: 2017-08-16 19:47:57
Local clock offset: 0.577 ms
Remote clock offset: -0.079 ms


# Below is generated by plot.py at 2017-08-17 01:54:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.59 Mbit/s
95th percentile per-packet one-way delay: 142.103 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 61.59 Mbit/s
95th percentile per-packet one-way delay: 142.103 ms
Loss rate: 0.78%
```

Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2017-08-16 20:08:34
End at: 2017-08-16 20:09:04
Local clock offset: 0.692 ms
Remote clock offset: 0.087 ms


# Below is generated by plot.py at 2017-08-17 01:54:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.83 Mbit/s
95th percentile per-packet one-way delay: 141.629 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 53.83 Mbit/s
95th percentile per-packet one-way delay: 141.629 ms
Loss rate: 0.83%
```
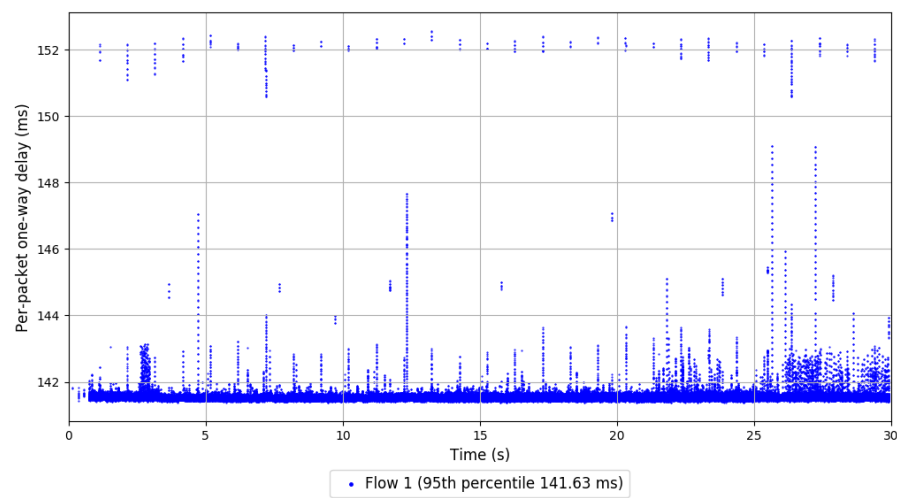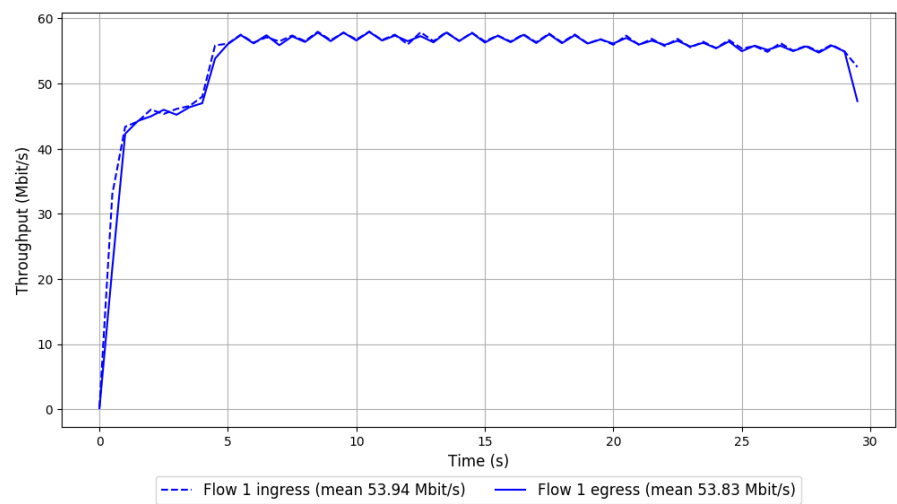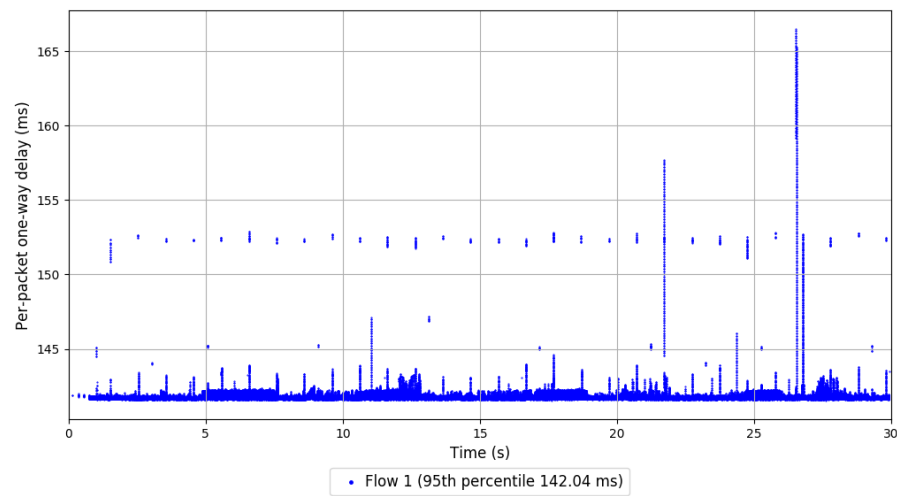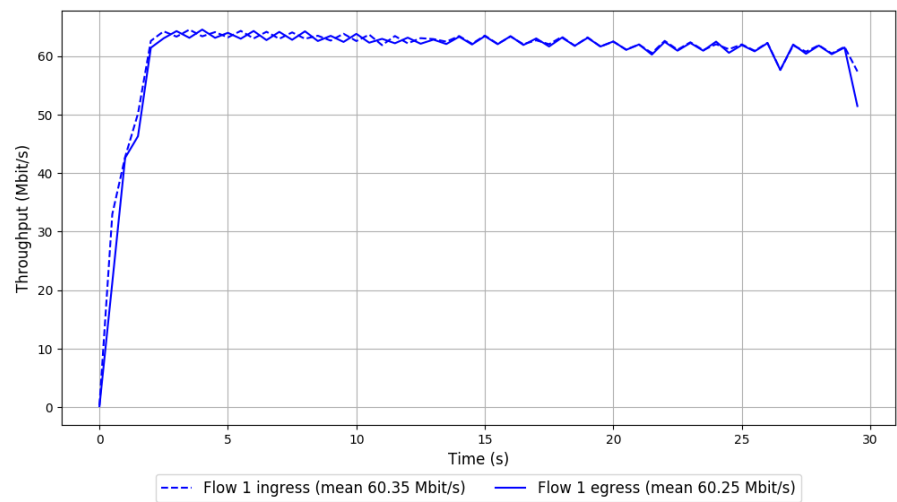
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 53.94 Mbit/s) ----- Flow 1 egress (mean 53.83 Mbit/s) ———

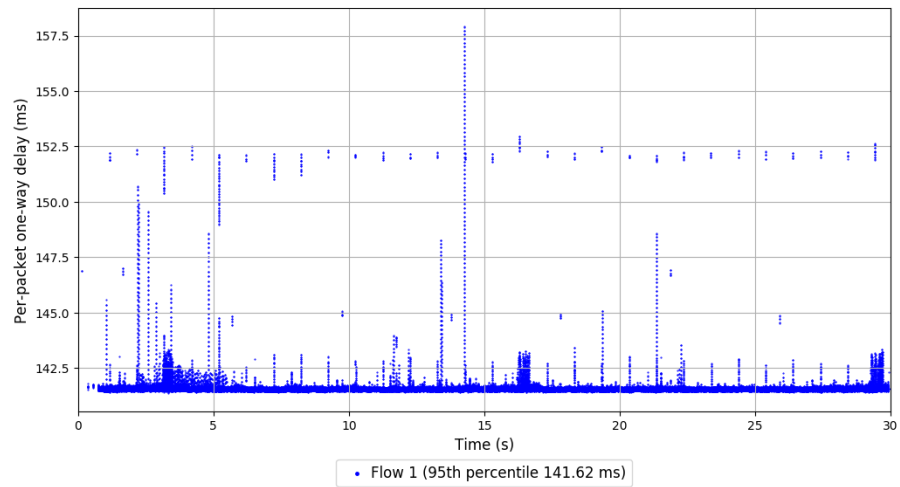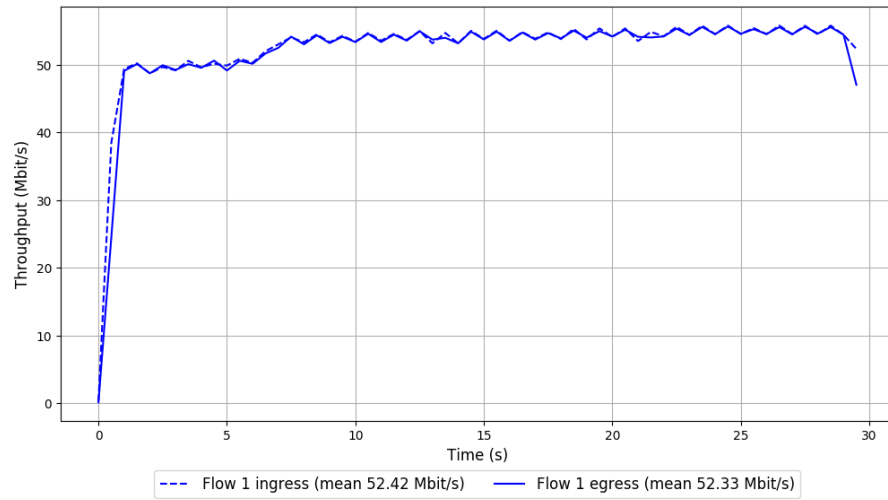• Flow 1 (95th percentile 141.63 ms)

```
Run 6: Statistics of Copa

Start at: 2017-08-16 20:30:13
End at: 2017-08-16 20:30:43
Local clock offset: 0.608 ms
Remote clock offset: -0.0 ms


# Below is generated by plot.py at 2017-08-17 01:54:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.25 Mbit/s
95th percentile per-packet one-way delay: 142.038 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 60.25 Mbit/s
95th percentile per-packet one-way delay: 142.038 ms
Loss rate: 0.79%
```
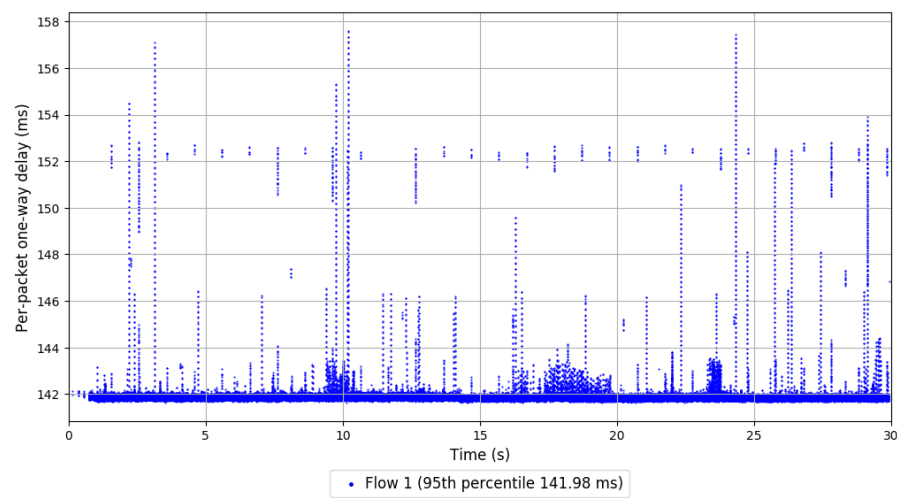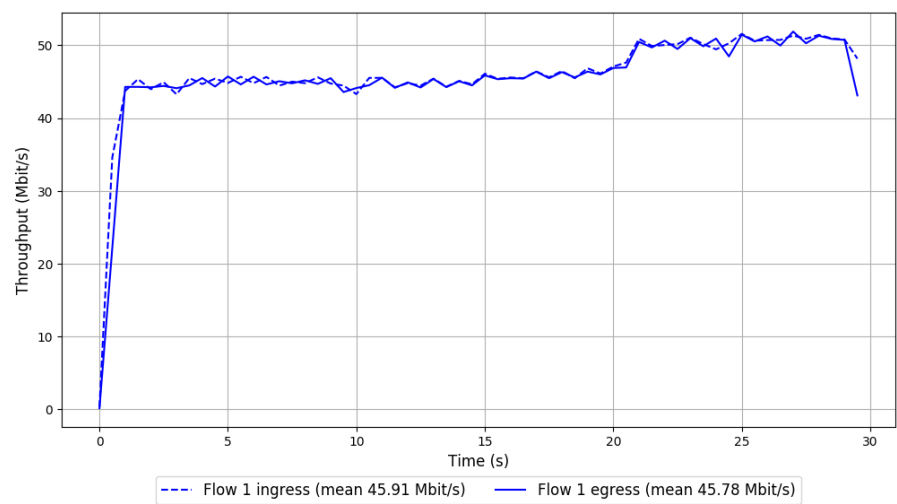
Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 60.35 Mbit/s)   Flow 1 egress (mean 60.25 Mbit/s)

Flow 1 (95th percentile 142.04 ms)

```
Run 7: Statistics of Copa

Start at: 2017-08-16 20:51:58
End at: 2017-08-16 20:52:28
Local clock offset: 0.556 ms
Remote clock offset: -0.096 ms


# Below is generated by plot.py at 2017-08-17 01:54:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.33 Mbit/s
95th percentile per-packet one-way delay: 141.621 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 52.33 Mbit/s
95th percentile per-packet one-way delay: 141.621 ms
Loss rate: 0.81%
```
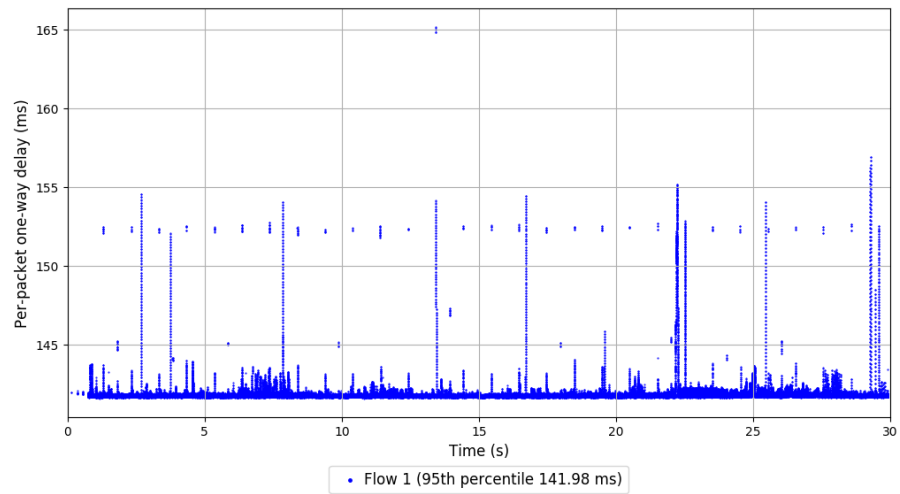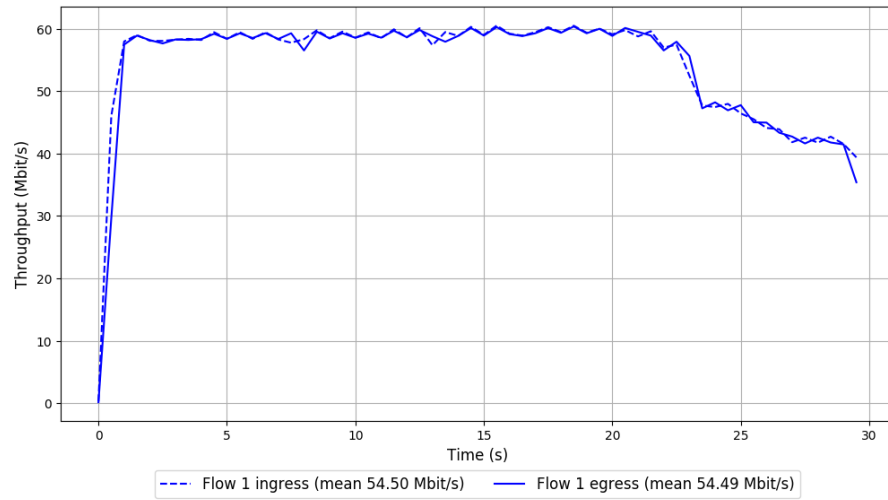
Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2017-08-16 21:12:44
End at: 2017-08-16 21:13:14
Local clock offset: 0.393 ms
Remote clock offset: -0.261 ms


# Below is generated by plot.py at 2017-08-17 01:54:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.78 Mbit/s
95th percentile per-packet one-way delay: 141.979 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 45.78 Mbit/s
95th percentile per-packet one-way delay: 141.979 ms
Loss rate: 0.88%
```
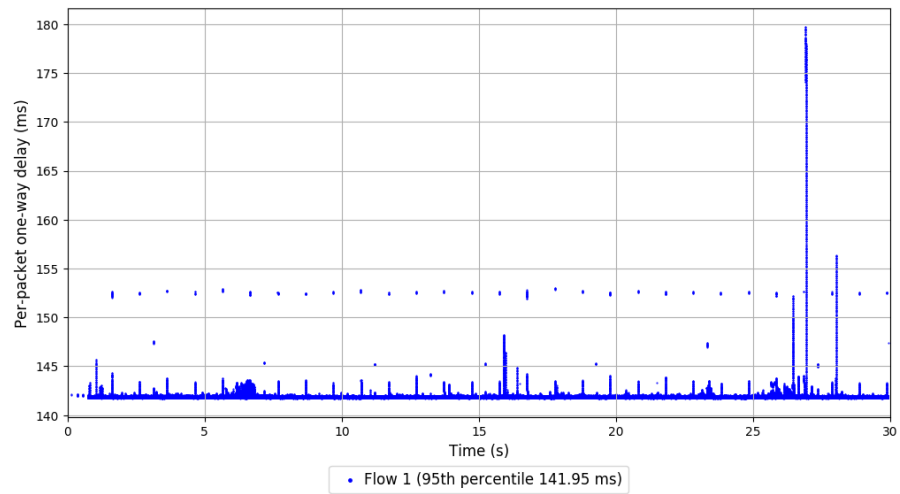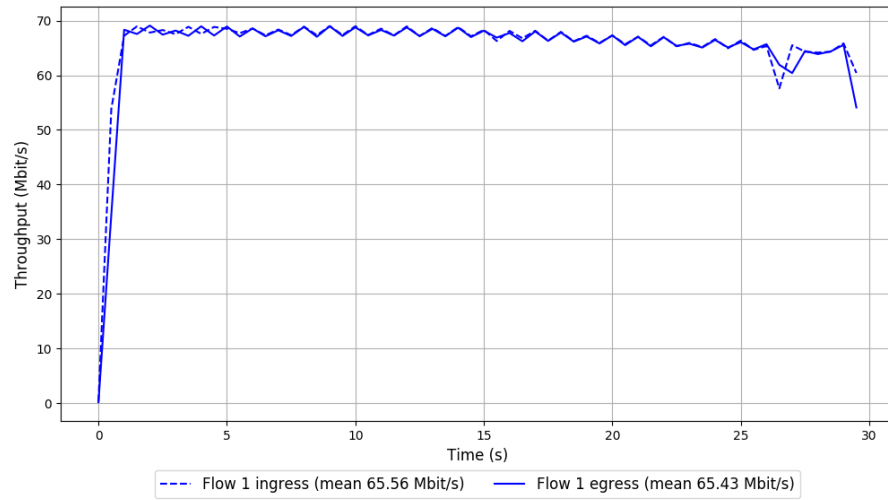
Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 45.91 Mbit/s)   Flow 1 egress (mean 45.78 Mbit/s)

· Flow 1 (95th percentile 141.98 ms)

```
Run 9: Statistics of Copa

Start at: 2017-08-16 21:33:30
End at: 2017-08-16 21:34:00
Local clock offset: 0.275 ms
Remote clock offset: -0.399 ms


# Below is generated by plot.py at 2017-08-17 01:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.49 Mbit/s
95th percentile per-packet one-way delay: 141.982 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 54.49 Mbit/s
95th percentile per-packet one-way delay: 141.982 ms
Loss rate: 0.65%
```
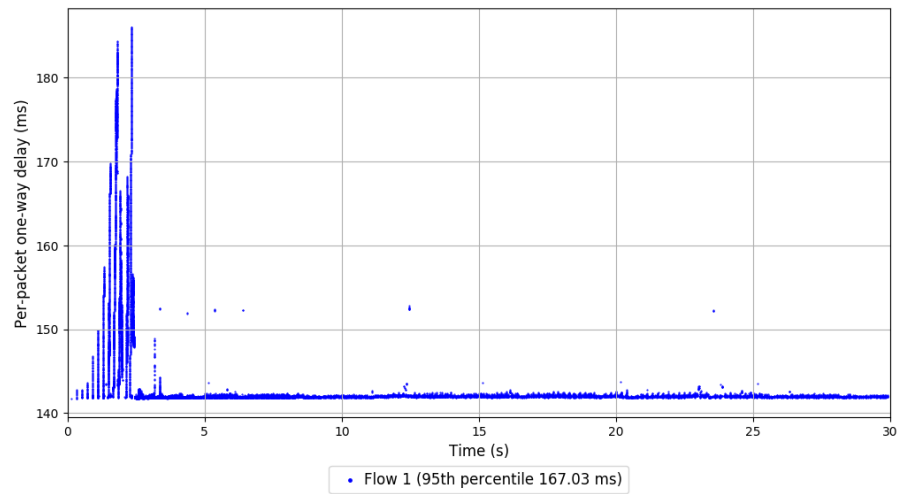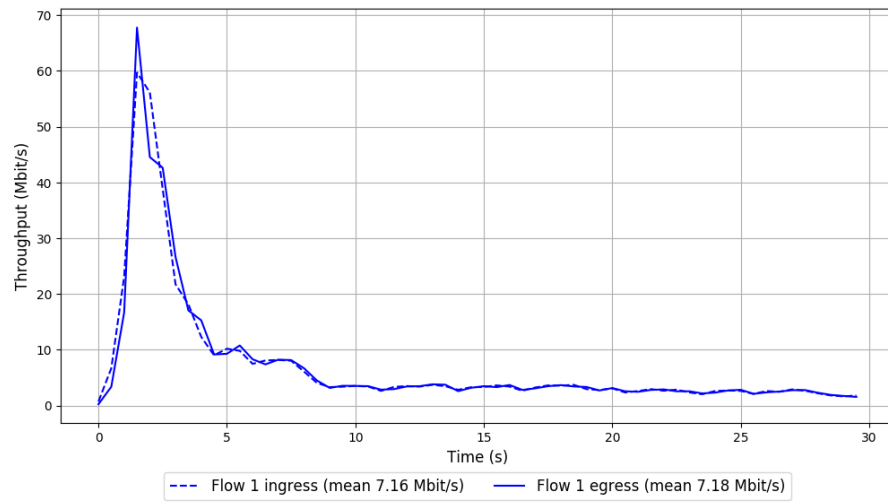
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2017-08-16 21:55:14
End at: 2017-08-16 21:55:44
Local clock offset: 0.298 ms
Remote clock offset: -0.423 ms


# Below is generated by plot.py at 2017-08-17 01:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.43 Mbit/s
95th percentile per-packet one-way delay: 141.949 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 65.43 Mbit/s
95th percentile per-packet one-way delay: 141.949 ms
Loss rate: 0.81%
```

Run 10: Report of Copa — Data Link

Flow 1 ingress (mean 65.56 Mbit/s)   Flow 1 egress (mean 65.43 Mbit/s)

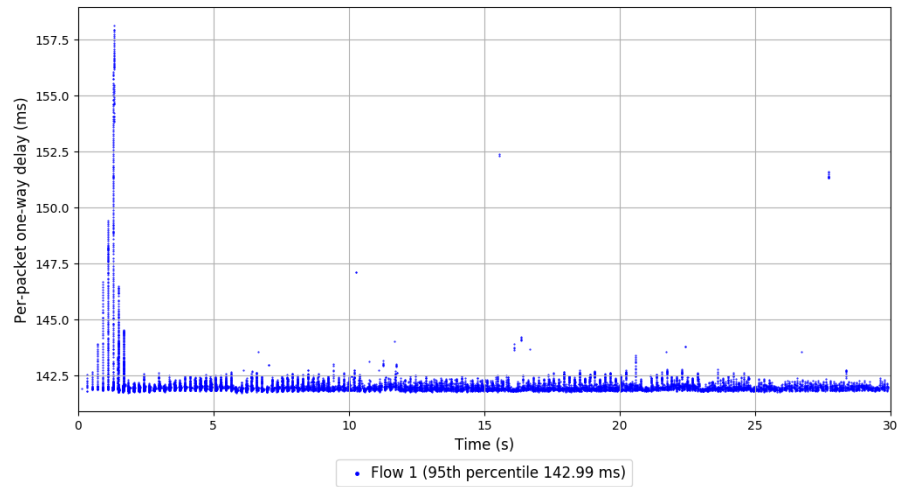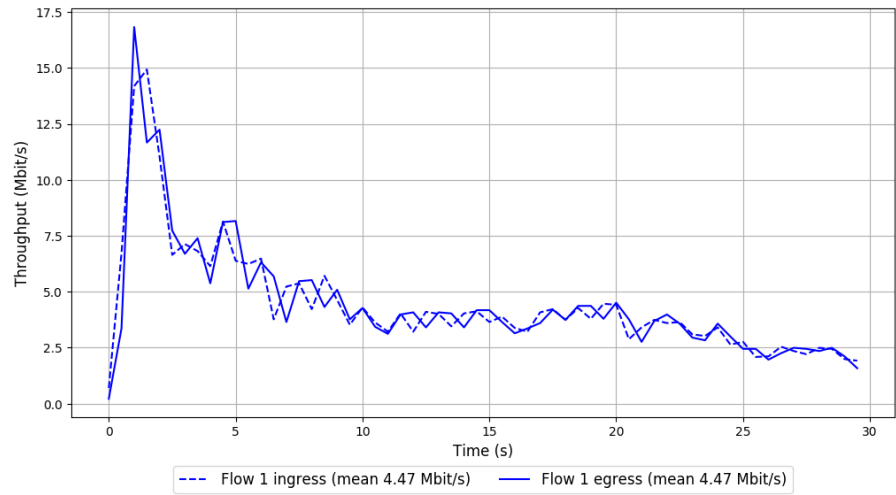Flow 1 (95th percentile 141.95 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2017-08-16 18:47:37
End at: 2017-08-16 18:48:07
Local clock offset: 0.104 ms
Remote clock offset: -0.937 ms


# Below is generated by plot.py at 2017-08-17 01:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.18 Mbit/s
95th percentile per-packet one-way delay: 167.033 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 7.18 Mbit/s
95th percentile per-packet one-way delay: 167.033 ms
Loss rate: 0.37%
```

Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2017-08-16 19:08:51
End at: 2017-08-16 19:09:21
Local clock offset: 0.585 ms
Remote clock offset: -0.351 ms


# Below is generated by plot.py at 2017-08-17 01:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 142.988 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 142.988 ms
Loss rate: 0.47%
```
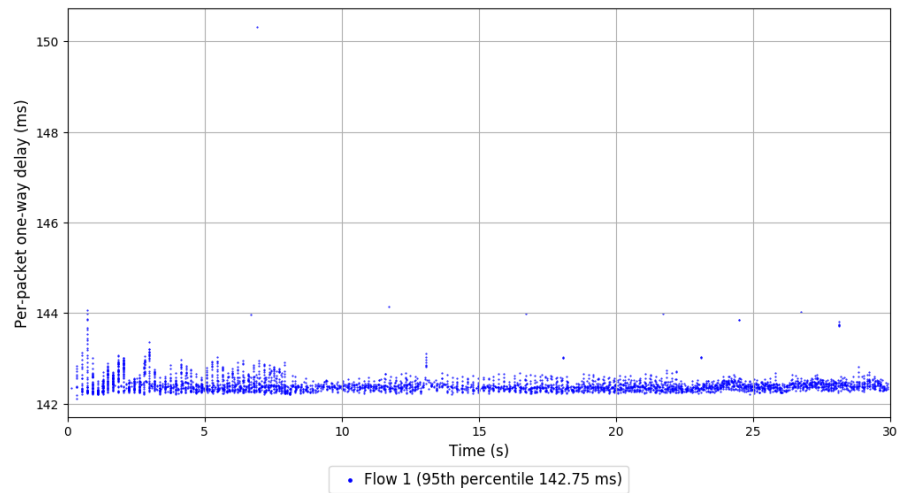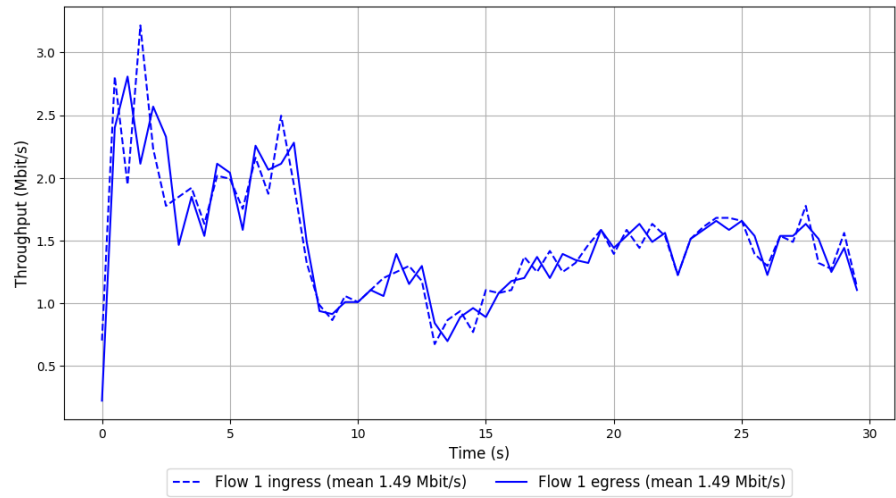
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 4.47 Mbit/s)   Flow 1 egress (mean 4.47 Mbit/s)

Flow 1 (95th percentile 142.99 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2017-08-16 19:30:22
End at: 2017-08-16 19:30:52
Local clock offset: 1.226 ms
Remote clock offset: -0.11 ms


# Below is generated by plot.py at 2017-08-17 01:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 142.748 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 142.748 ms
Loss rate: 0.89%
```

Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2017-08-16 19:52:02
End at: 2017-08-16 19:52:32
Local clock offset: 0.556 ms
Remote clock offset: 0.026 ms


# Below is generated by plot.py at 2017-08-17 01:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 153.131 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 153.131 ms
Loss rate: 0.71%
```
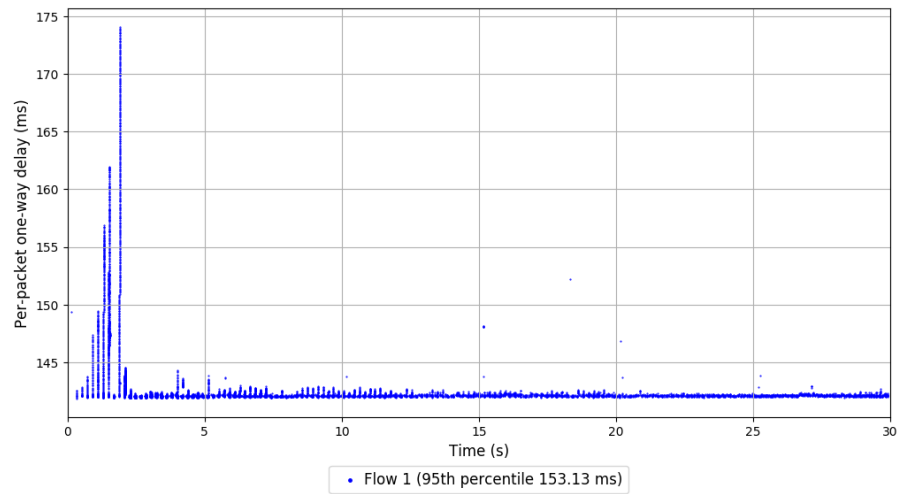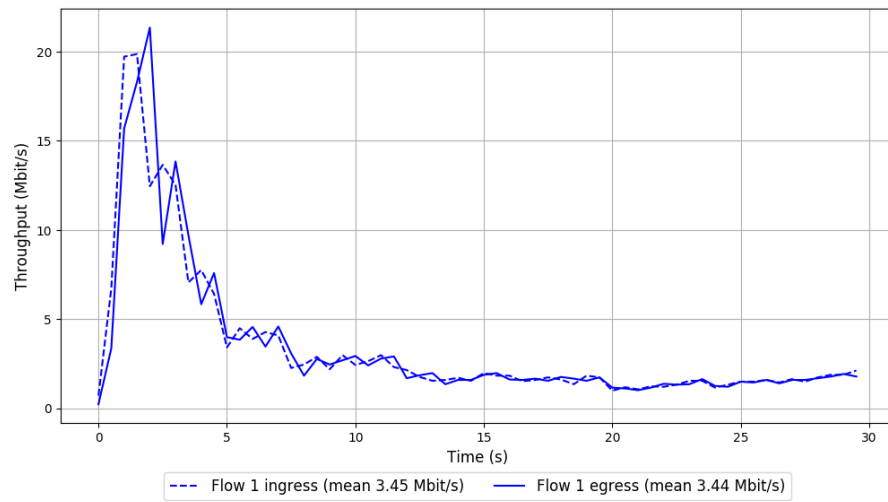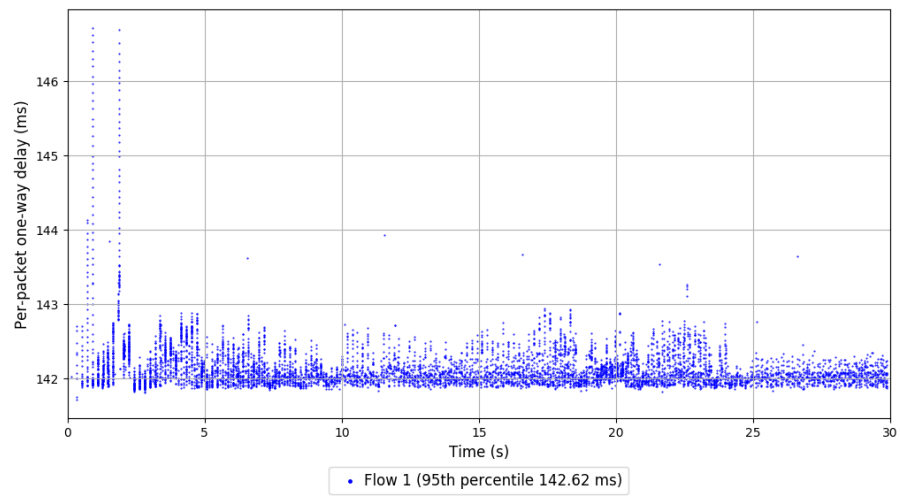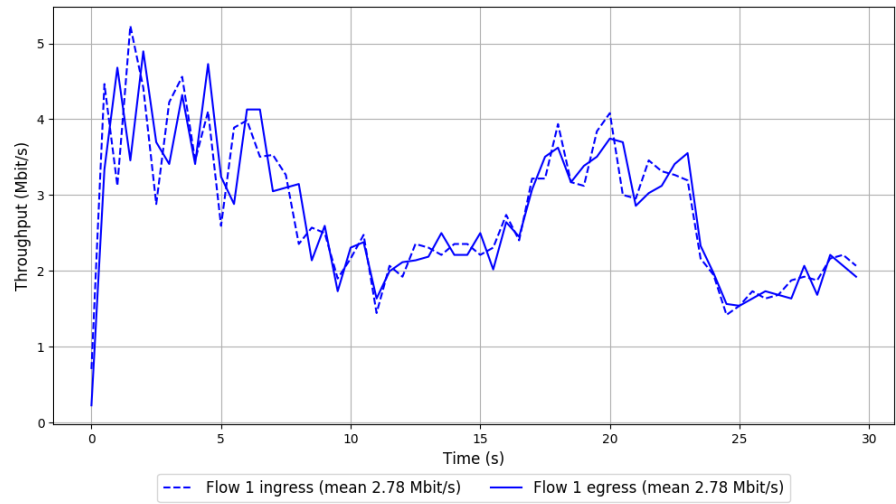
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 3.45 Mbit/s)   —— Flow 1 egress (mean 3.44 Mbit/s)

• Flow 1 (95th percentile 153.13 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2017-08-16 20:13:17
End at: 2017-08-16 20:13:47
Local clock offset: 0.867 ms
Remote clock offset: 0.054 ms


# Below is generated by plot.py at 2017-08-17 01:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.78 Mbit/s
95th percentile per-packet one-way delay: 142.621 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 2.78 Mbit/s
95th percentile per-packet one-way delay: 142.621 ms
Loss rate: 0.76%
```
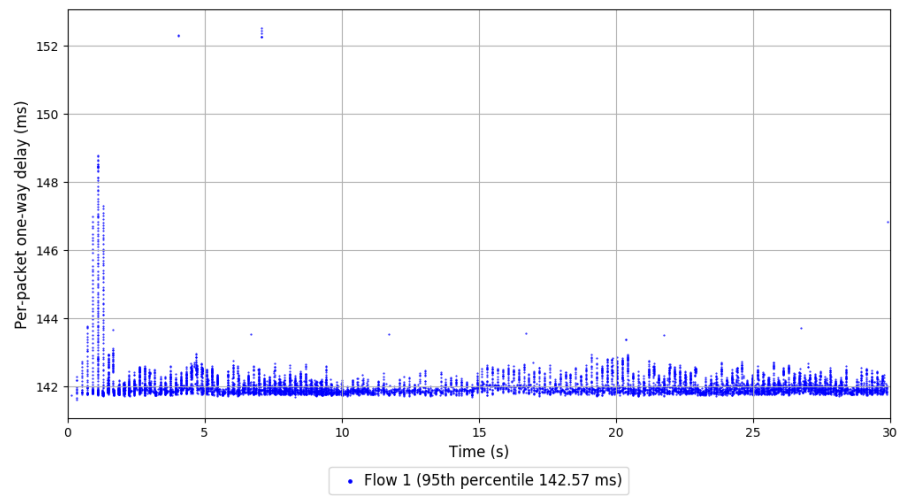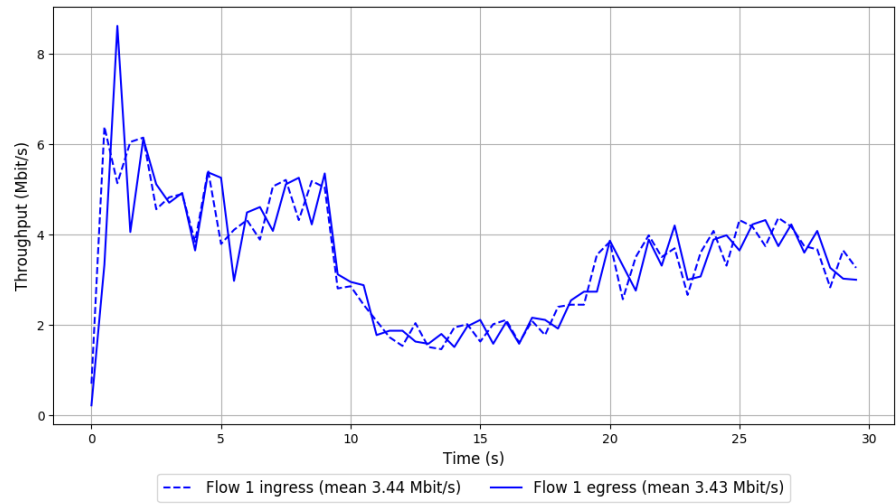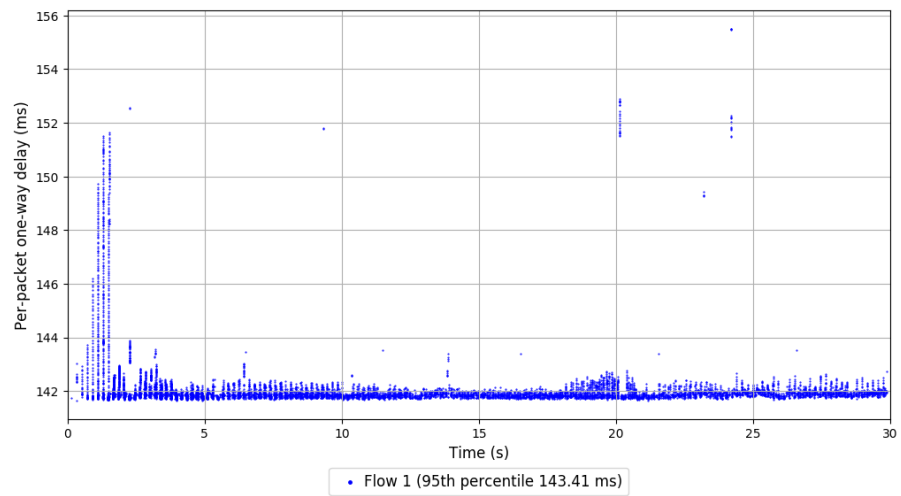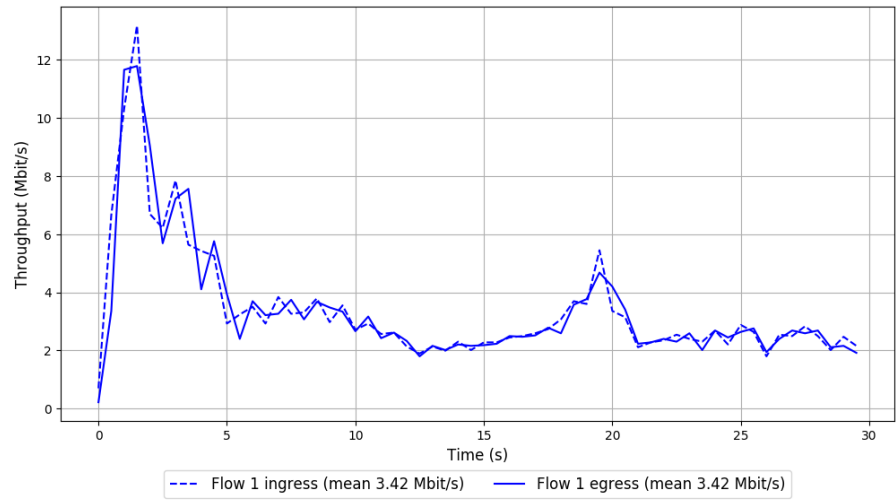
Run 5: Report of TCP Cubic — Data Link

```
Run 6: Statistics of TCP Cubic

Start at: 2017-08-16 20:35:00
End at: 2017-08-16 20:35:30
Local clock offset: 0.613 ms
Remote clock offset: 0.014 ms


# Below is generated by plot.py at 2017-08-17 01:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 142.568 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 142.568 ms
Loss rate: 0.83%
```
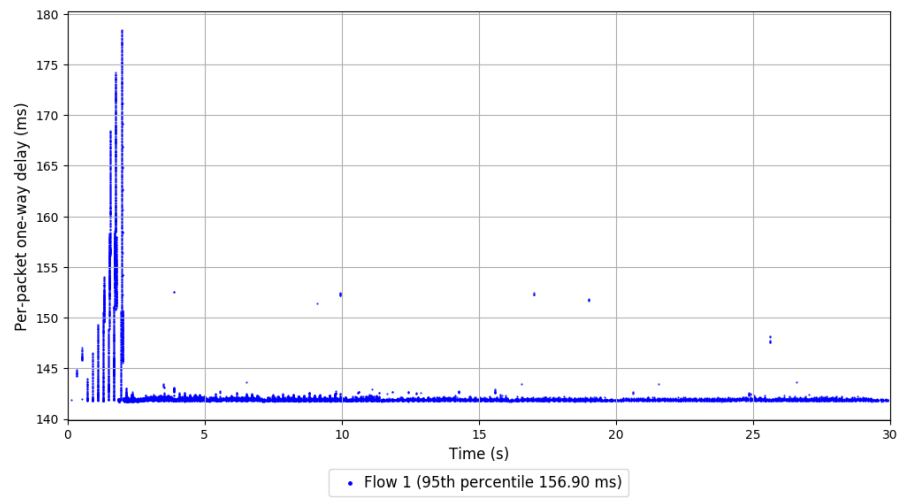
Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2017-08-16 20:56:22
End at: 2017-08-16 20:56:52
Local clock offset: 0.475 ms
Remote clock offset: -0.038 ms


# Below is generated by plot.py at 2017-08-17 01:54:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 143.408 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 143.408 ms
Loss rate: 0.69%
```

Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 3.42 Mbit/s) — Flow 1 egress (mean 3.42 Mbit/s)

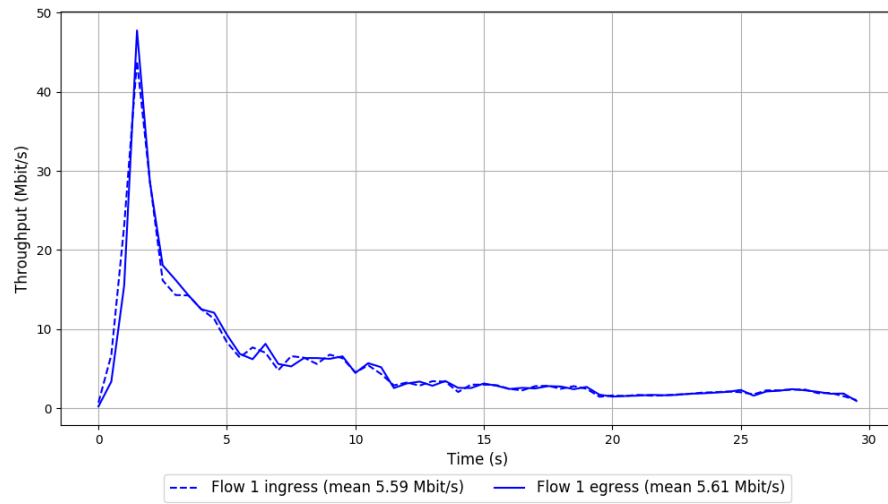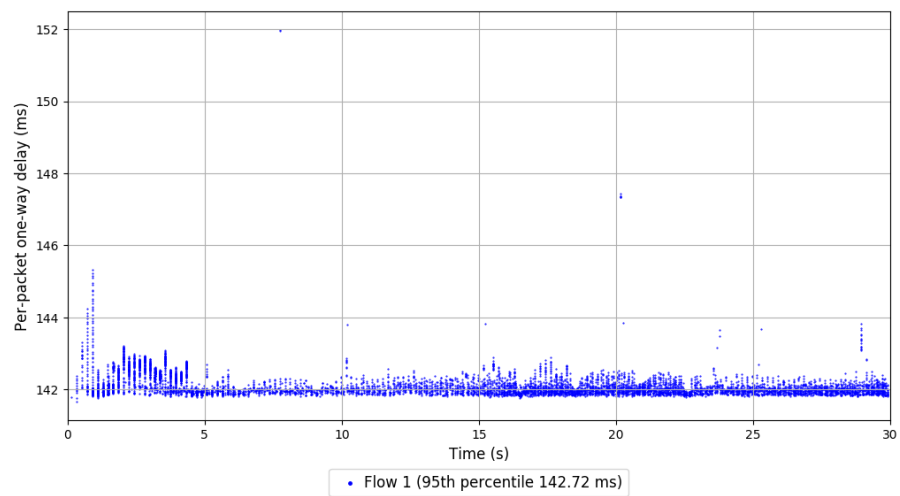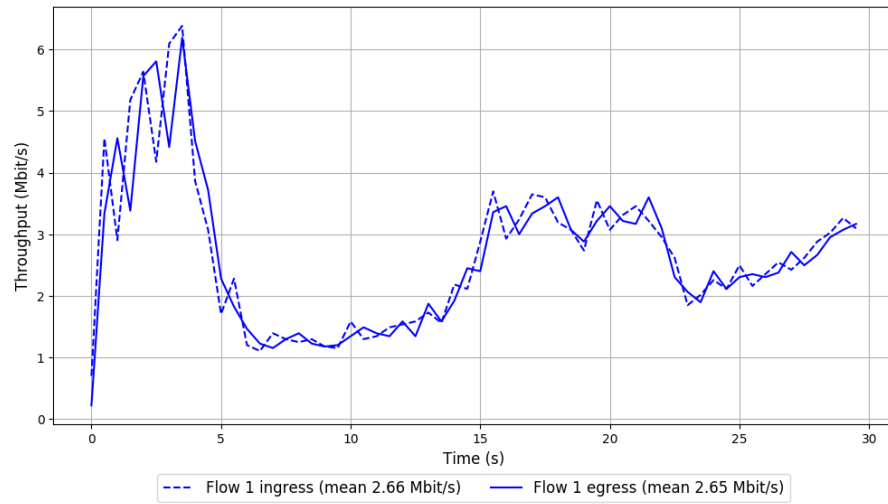• Flow 1 (95th percentile 143.41 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2017-08-16 21:16:50
End at: 2017-08-16 21:17:20
Local clock offset: 0.374 ms
Remote clock offset: -0.307 ms


# Below is generated by plot.py at 2017-08-17 01:54:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.61 Mbit/s
95th percentile per-packet one-way delay: 156.895 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 5.61 Mbit/s
95th percentile per-packet one-way delay: 156.895 ms
Loss rate: 0.30%
```
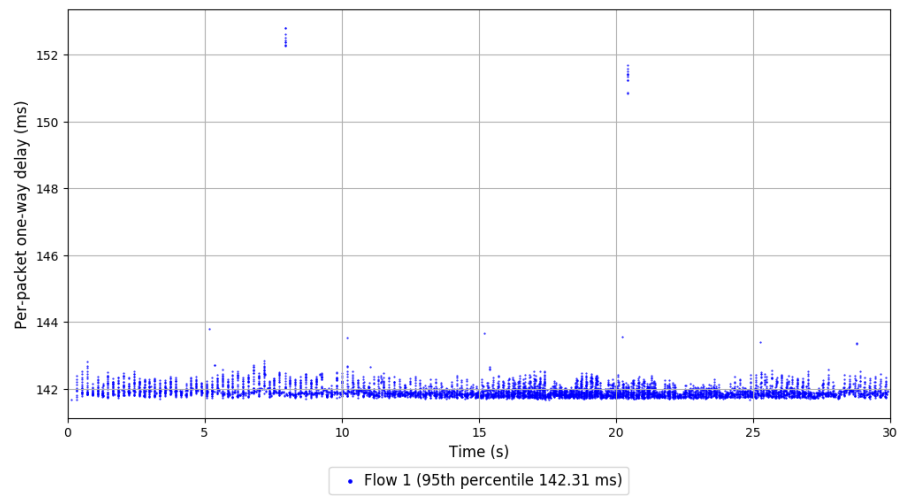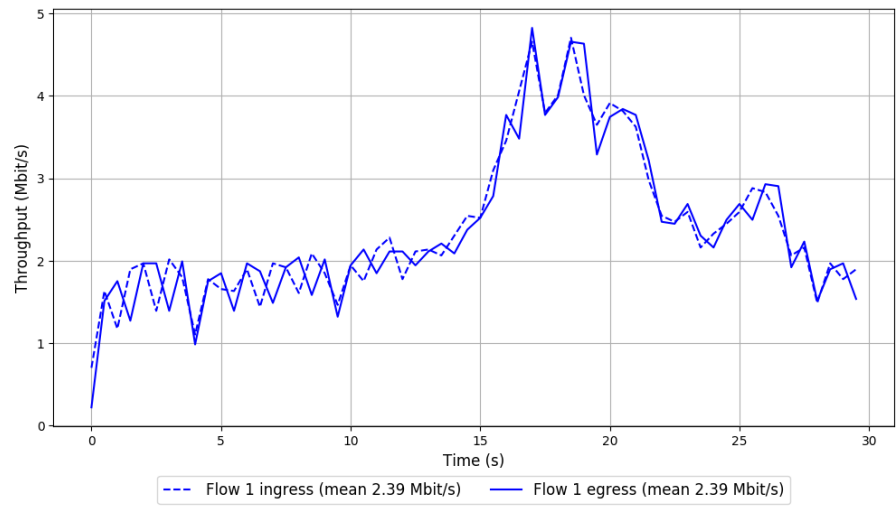
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 5.59 Mbit/s)   Flow 1 egress (mean 5.61 Mbit/s)

Flow 1 (95th percentile 156.90 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2017-08-16 21:38:06
End at: 2017-08-16 21:38:36
Local clock offset: 0.257 ms
Remote clock offset: -0.446 ms


# Below is generated by plot.py at 2017-08-17 01:54:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 142.715 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 142.715 ms
Loss rate: 0.84%
```
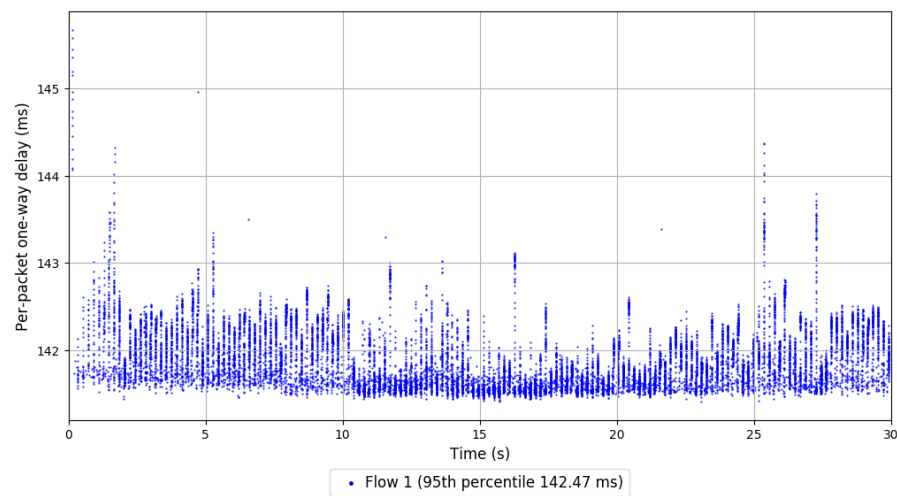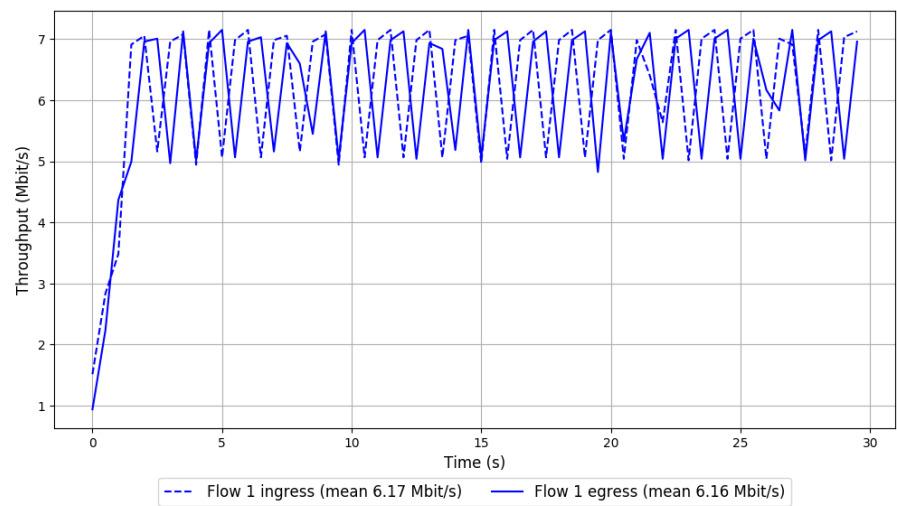
Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2017-08-16 21:59:51
End at: 2017-08-16 22:00:21
Local clock offset: 0.232 ms
Remote clock offset: -0.438 ms


# Below is generated by plot.py at 2017-08-17 01:55:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 142.306 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 142.306 ms
Loss rate: 0.69%
```
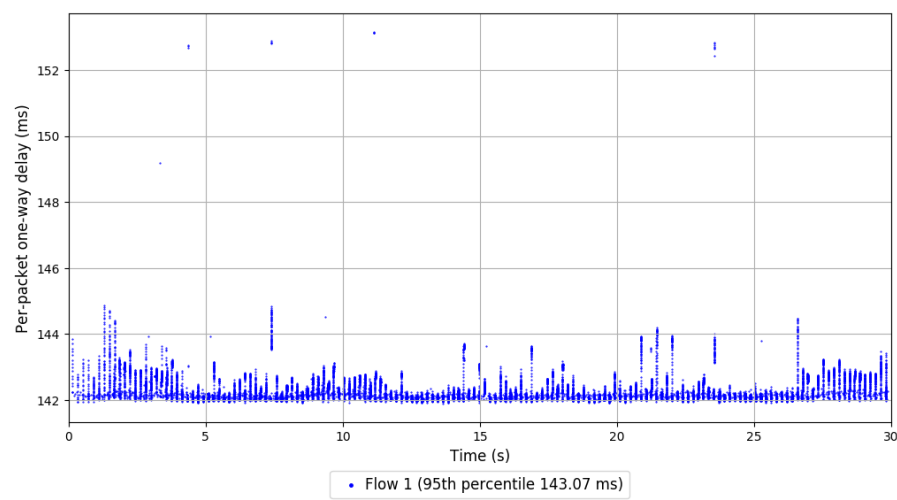
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of KohoCC

Start at: 2017-08-16 18:44:49
End at: 2017-08-16 18:45:19
Local clock offset: 0.161 ms
Remote clock offset: -1.1 ms


# Below is generated by plot.py at 2017-08-17 01:55:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 142.474 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 142.474 ms
Loss rate: 0.85%
```

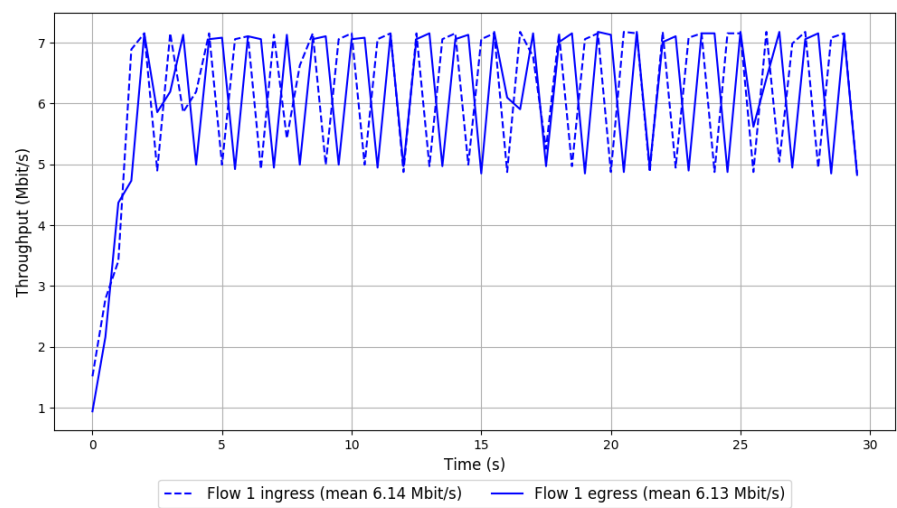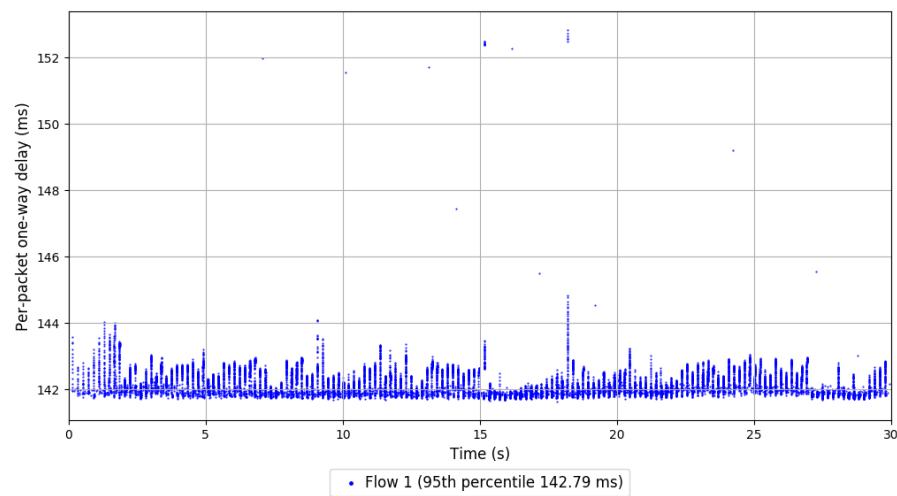Run 1: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.17 Mbit/s) — Flow 1 egress (mean 6.16 Mbit/s)

• Flow 1 (95th percentile 142.47 ms)

```
Run 2: Statistics of KohoCC

Start at: 2017-08-16 19:05:59
End at: 2017-08-16 19:06:29
Local clock offset: 0.328 ms
Remote clock offset: -0.429 ms


# Below is generated by plot.py at 2017-08-17 01:55:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 143.069 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 143.069 ms
Loss rate: 0.82%
```

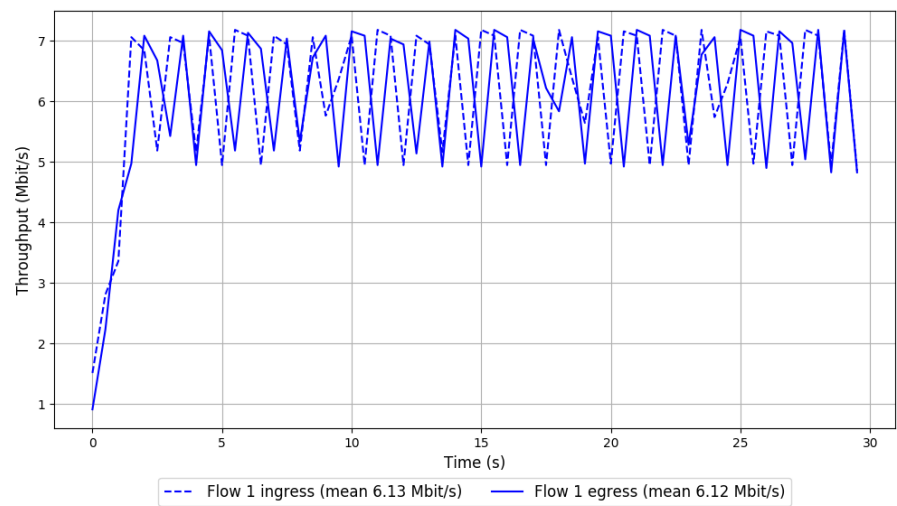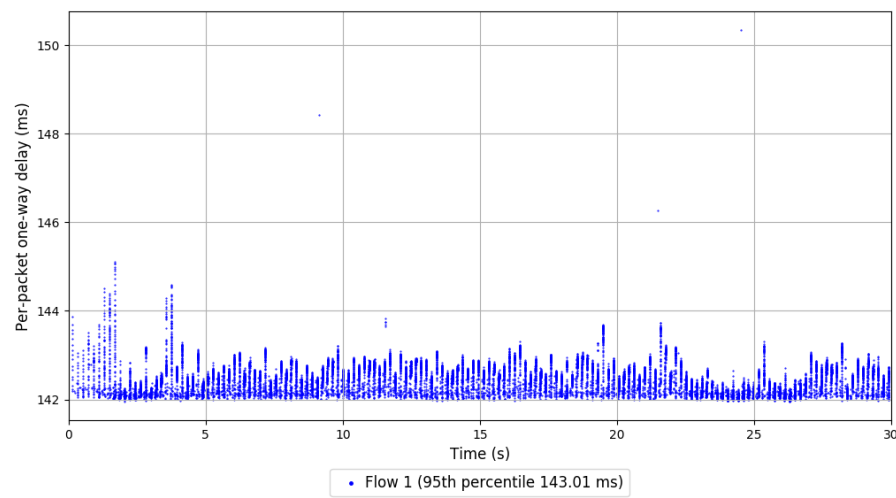Run 2: Report of KohoCC — Data Link

```
Run 3: Statistics of KohoCC

Start at: 2017-08-16 19:27:29
End at: 2017-08-16 19:27:59
Local clock offset: 0.4 ms
Remote clock offset: -0.169 ms


# Below is generated by plot.py at 2017-08-17 01:55:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 142.793 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 142.793 ms
Loss rate: 0.89%
```

Run 3: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.13 Mbit/s)   Flow 1 egress (mean 6.12 Mbit/s)

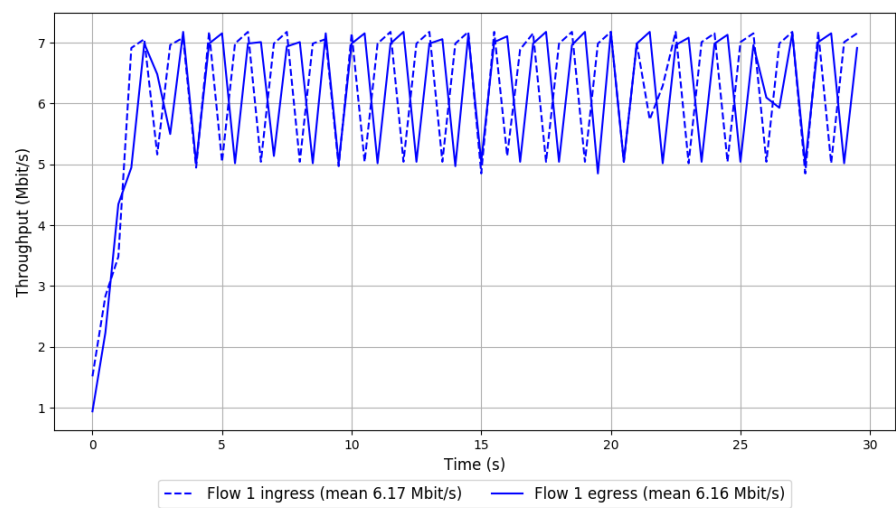Flow 1 (95th percentile 142.79 ms)

```
Run 4: Statistics of KohoCC

Start at: 2017-08-16 19:49:11
End at: 2017-08-16 19:49:41
Local clock offset: 0.858 ms
Remote clock offset: -0.015 ms


# Below is generated by plot.py at 2017-08-17 01:55:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 143.010 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 143.010 ms
Loss rate: 0.86%
```
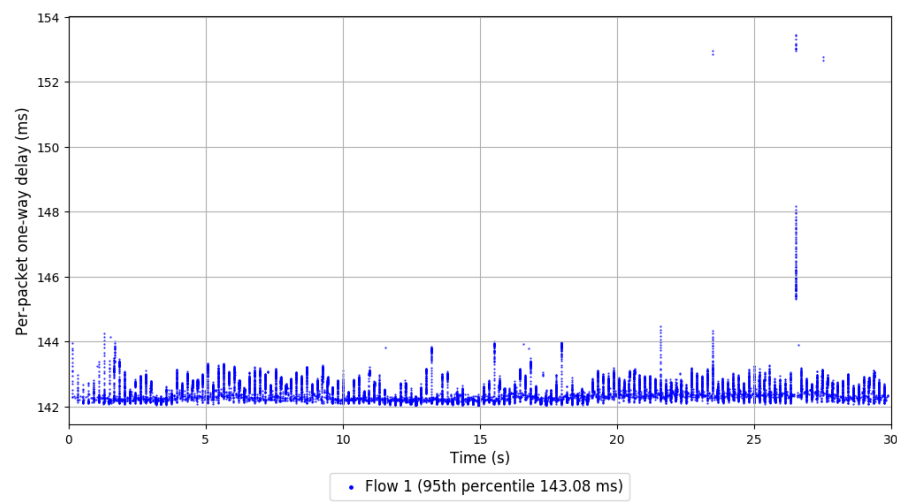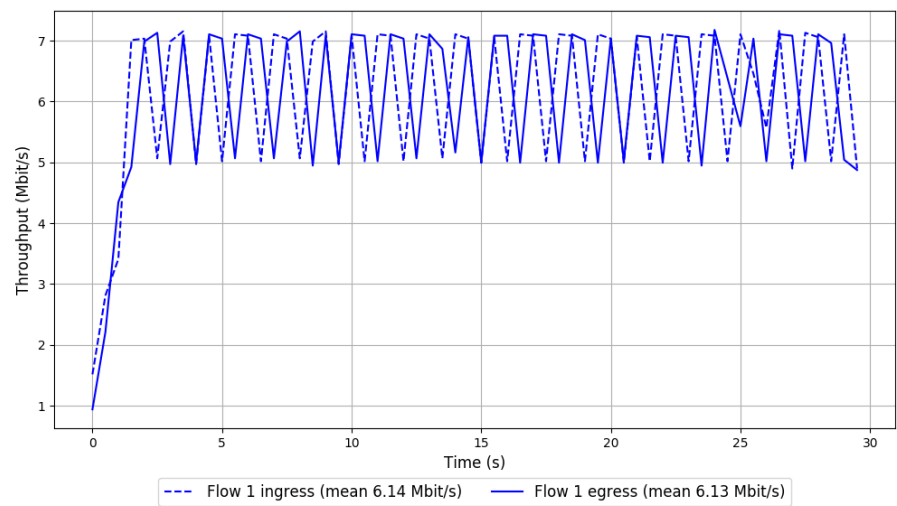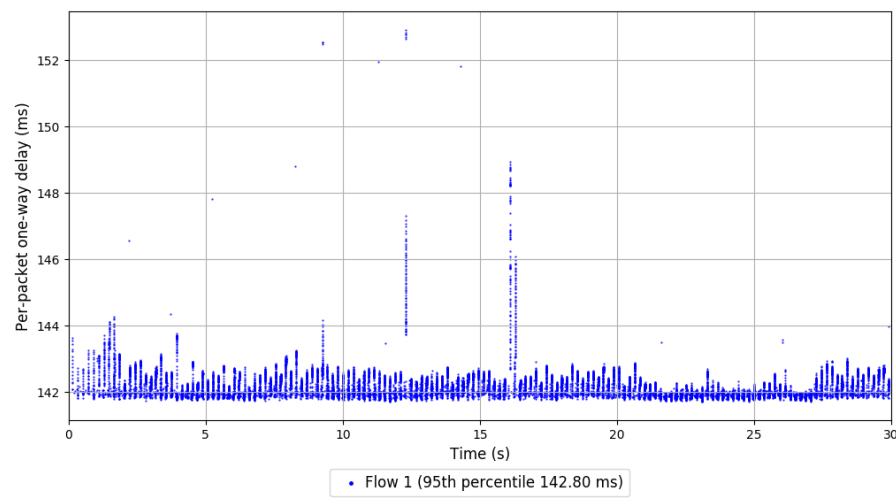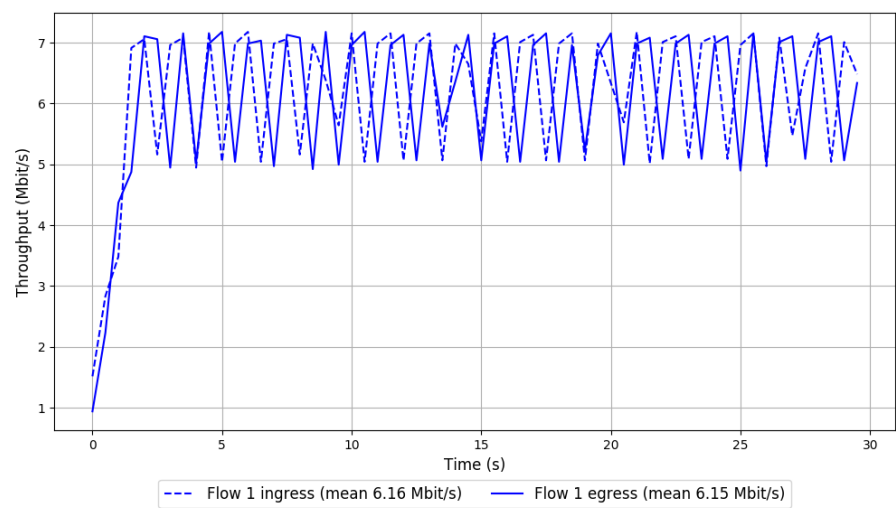
Run 4: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.17 Mbit/s) --- Flow 1 egress (mean 6.16 Mbit/s)

Flow 1 (95th percentile 143.01 ms)

```
Run 5: Statistics of KohoCC

Start at: 2017-08-16 20:10:29
End at: 2017-08-16 20:10:59
Local clock offset: 0.932 ms
Remote clock offset: 0.075 ms


# Below is generated by plot.py at 2017-08-17 01:55:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 143.077 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 143.077 ms
Loss rate: 0.78%
```

Run 5: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.14 Mbit/s) --- Flow 1 egress (mean 6.13 Mbit/s)

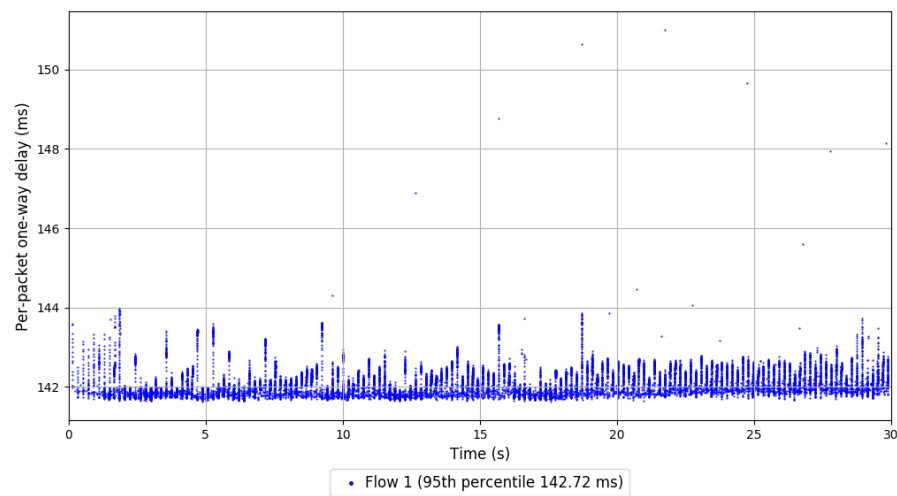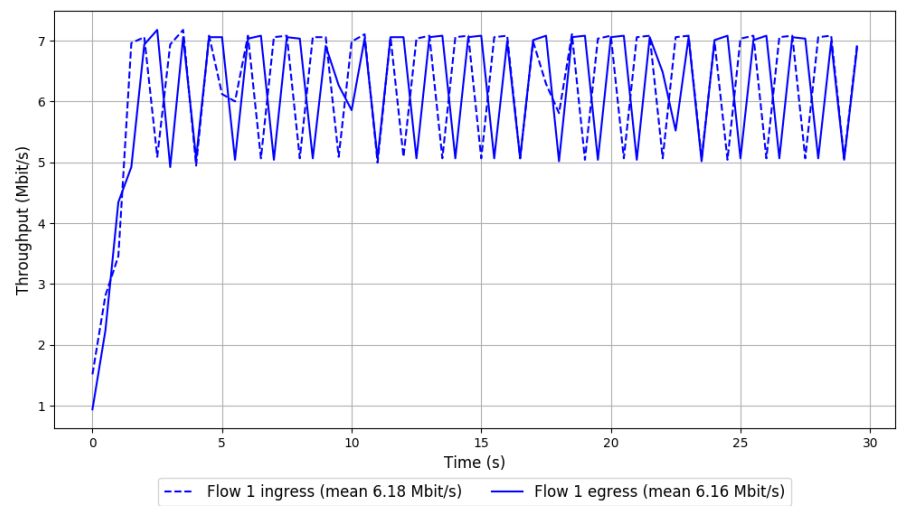Flow 1 (95th percentile 143.08 ms)

```
Run 6: Statistics of KohoCC

Start at: 2017-08-16 20:32:16
End at: 2017-08-16 20:32:46
Local clock offset: 0.603 ms
Remote clock offset: -0.023 ms


# Below is generated by plot.py at 2017-08-17 01:55:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.15 Mbit/s
95th percentile per-packet one-way delay: 142.797 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 6.15 Mbit/s
95th percentile per-packet one-way delay: 142.797 ms
Loss rate: 0.79%
```

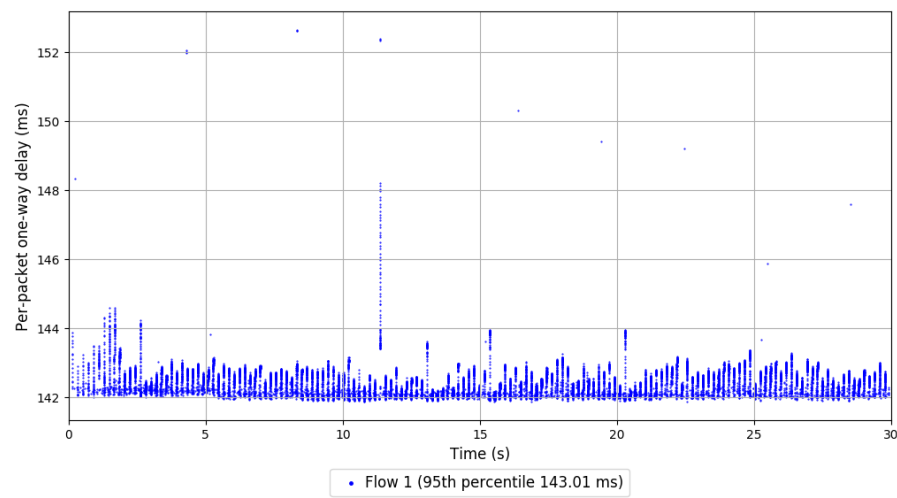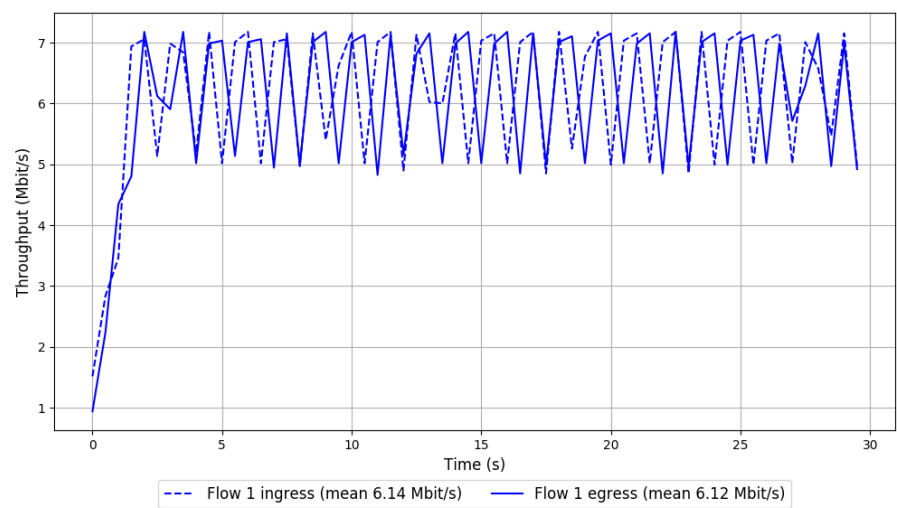# Run 6: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.16 Mbit/s) Flow 1 egress (mean 6.15 Mbit/s)

Flow 1 (95th percentile 142.80 ms)

```
Run 7: Statistics of KohoCC

Start at: 2017-08-16 20:53:26
End at: 2017-08-16 20:53:56
Local clock offset: 0.711 ms
Remote clock offset: -0.027 ms


# Below is generated by plot.py at 2017-08-17 01:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 142.722 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 142.722 ms
Loss rate: 0.83%
```

Run 7: Report of KohoCC — Data Link

Flow 1 ingress (mean 6.18 Mbit/s)　　Flow 1 egress (mean 6.16 Mbit/s)

Flow 1 (95th percentile 142.72 ms)

```
Run 8: Statistics of KohoCC

Start at: 2017-08-16 21:14:09
End at: 2017-08-16 21:14:39
Local clock offset: 0.366 ms
Remote clock offset: -0.254 ms


# Below is generated by plot.py at 2017-08-17 01:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 143.012 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 143.012 ms
Loss rate: 0.86%
```
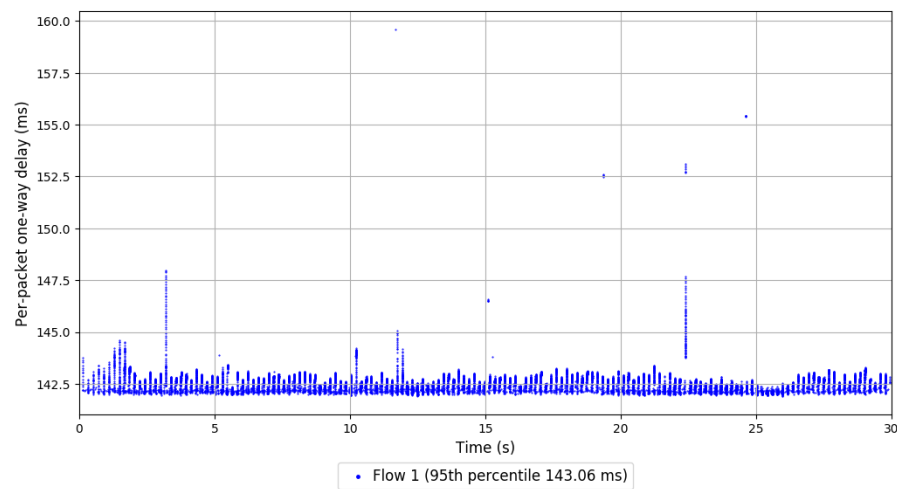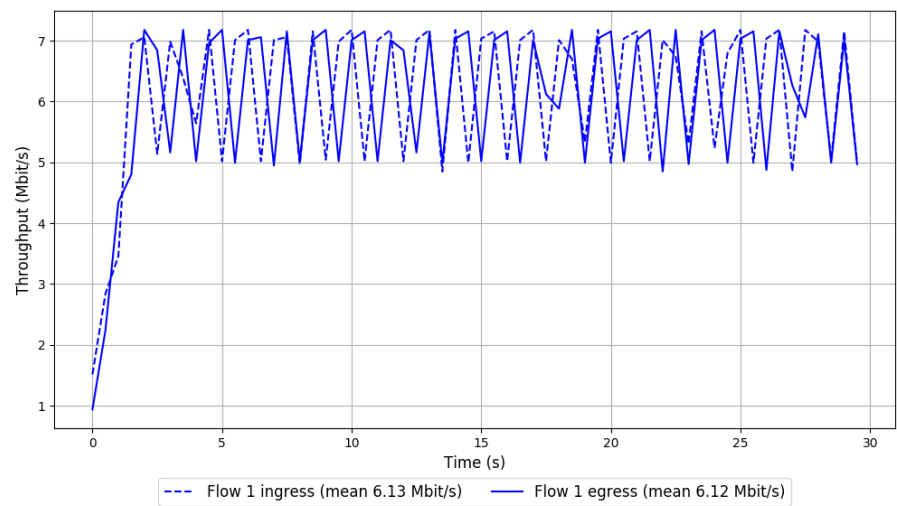
Run 8: Report of KohoCC — Data Link

```
Run 9: Statistics of KohoCC

Start at: 2017-08-16 21:35:17
End at: 2017-08-16 21:35:47
Local clock offset: 0.562 ms
Remote clock offset: -0.44 ms


# Below is generated by plot.py at 2017-08-17 01:55:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 143.065 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 143.065 ms
Loss rate: 0.78%
```
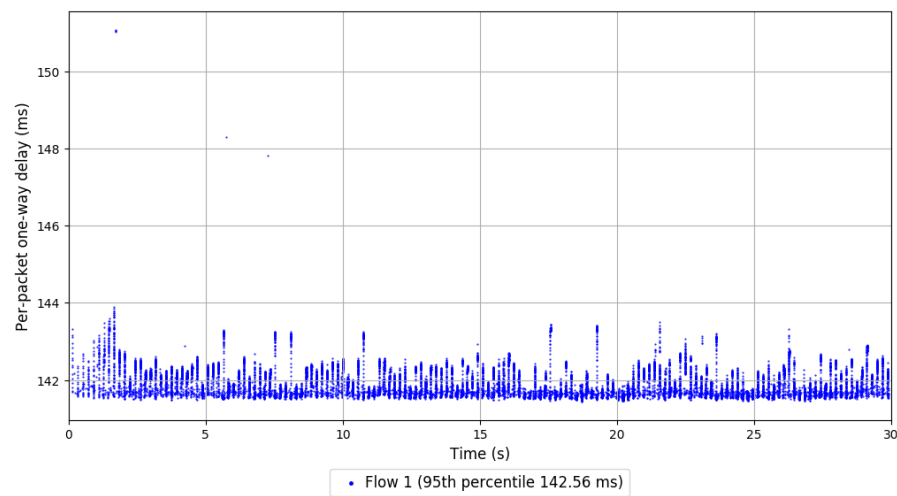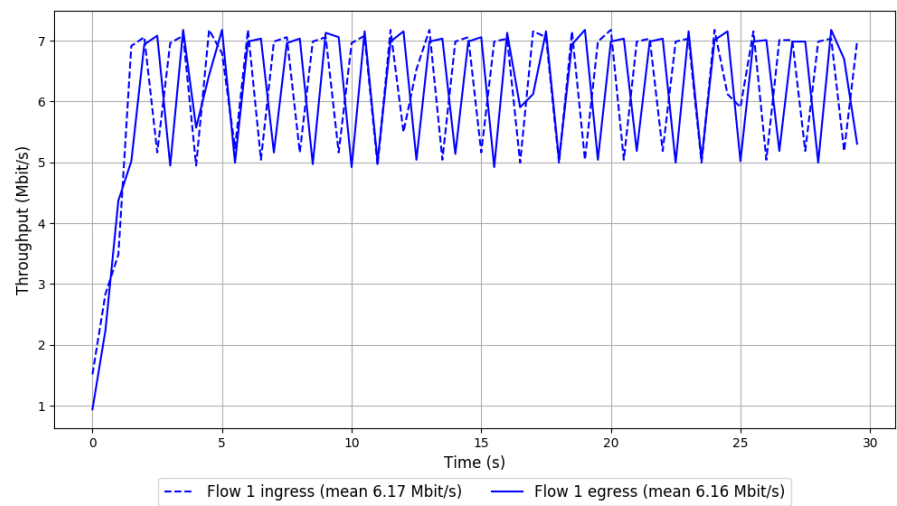
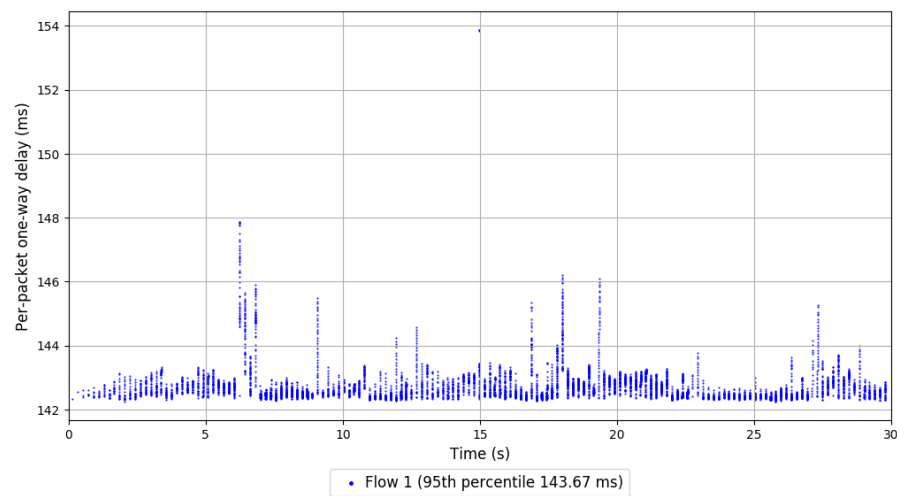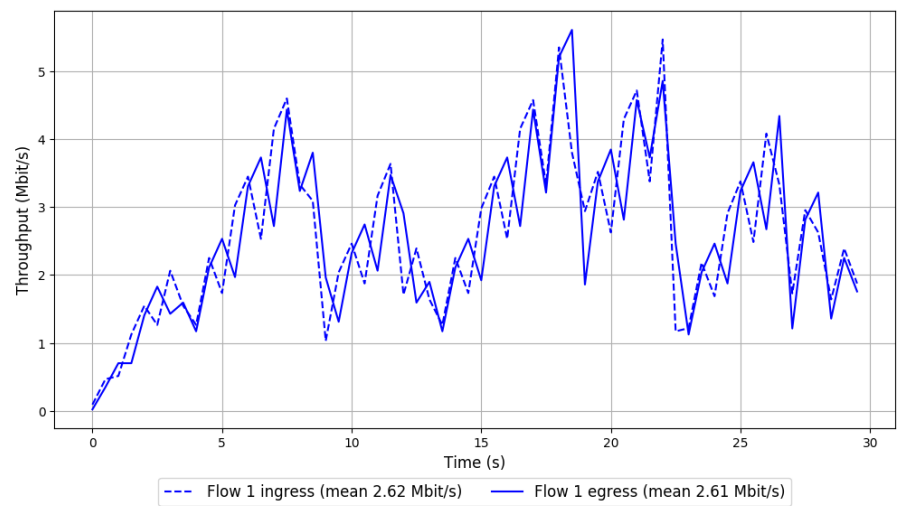## Run 9: Report of KohoCC — Data Link

```
Run 10: Statistics of KohoCC

Start at: 2017-08-16 21:57:06
End at: 2017-08-16 21:57:36
Local clock offset: 0.24 ms
Remote clock offset: -0.448 ms


# Below is generated by plot.py at 2017-08-17 01:55:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 142.561 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 142.561 ms
Loss rate: 0.81%
```

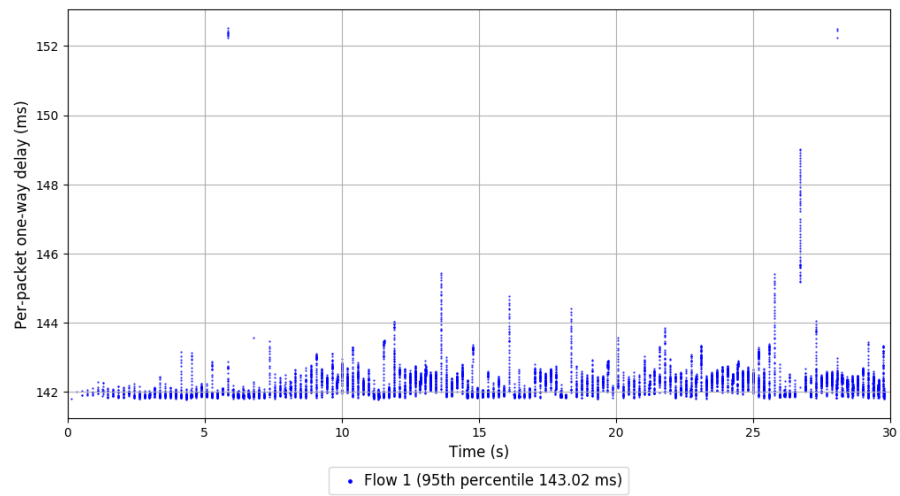# Run 10: Report of KohoCC — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2017-08-16 18:37:45
End at: 2017-08-16 18:38:15
Local clock offset: 0.312 ms
Remote clock offset: -1.321 ms


# Below is generated by plot.py at 2017-08-17 01:55:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 143.672 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 143.672 ms
Loss rate: 0.77%
```

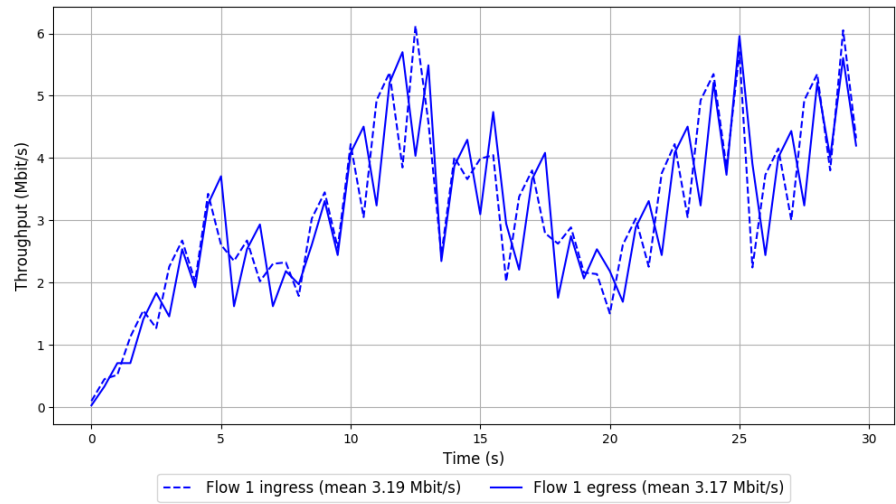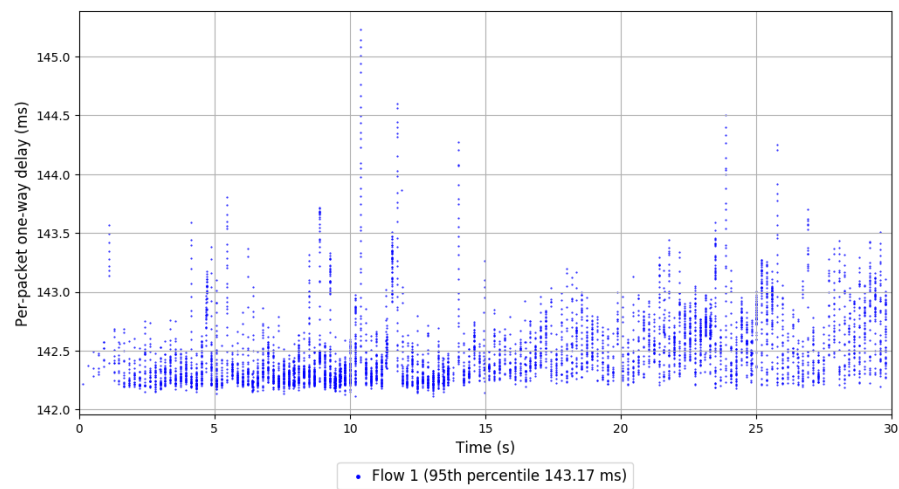# Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2017-08-16 18:59:08
End at: 2017-08-16 18:59:38
Local clock offset: 0.309 ms
Remote clock offset: -0.669 ms


# Below is generated by plot.py at 2017-08-17 01:55:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 143.021 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 143.021 ms
Loss rate: 1.23%
```

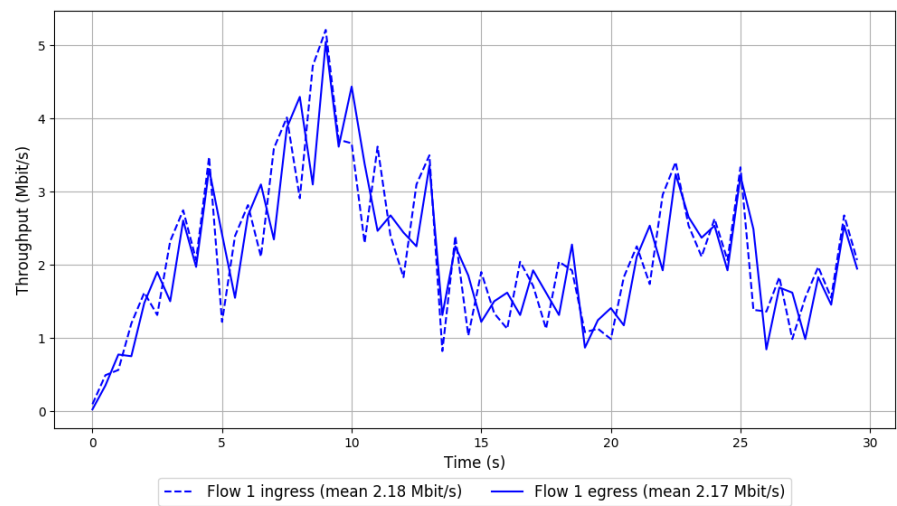## Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2017-08-16 19:20:34
End at: 2017-08-16 19:21:04
Local clock offset: 0.695 ms
Remote clock offset: -0.234 ms

# Below is generated by plot.py at 2017-08-17 01:55:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 143.172 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 143.172 ms
Loss rate: 1.05%
```

Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 2.18 Mbit/s) --- Flow 1 egress (mean 2.17 Mbit/s)

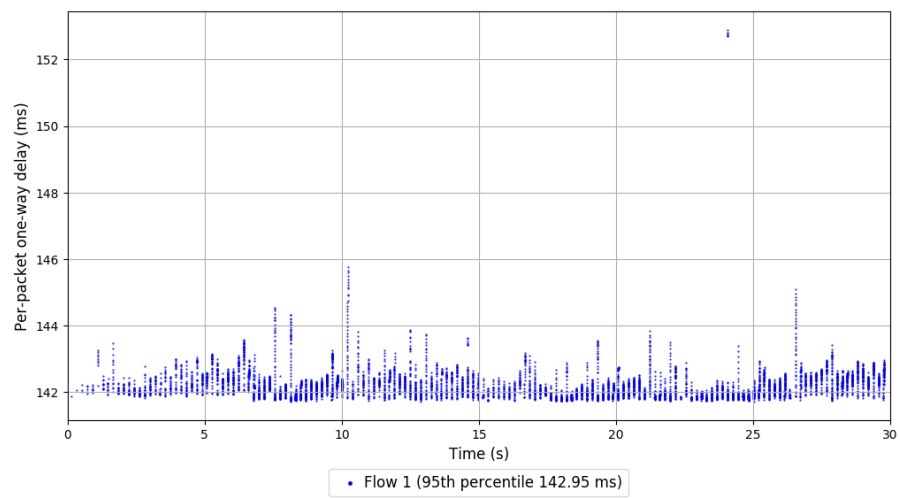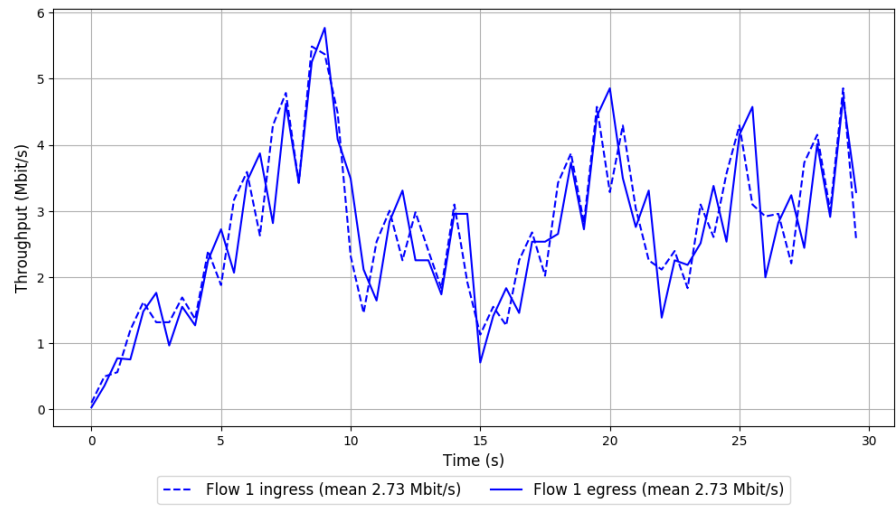Flow 1 (95th percentile 143.17 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2017-08-16 19:41:54
End at: 2017-08-16 19:42:24
Local clock offset: 0.495 ms
Remote clock offset: -0.117 ms


# Below is generated by plot.py at 2017-08-17 01:55:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 142.948 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 142.948 ms
Loss rate: 0.72%
```
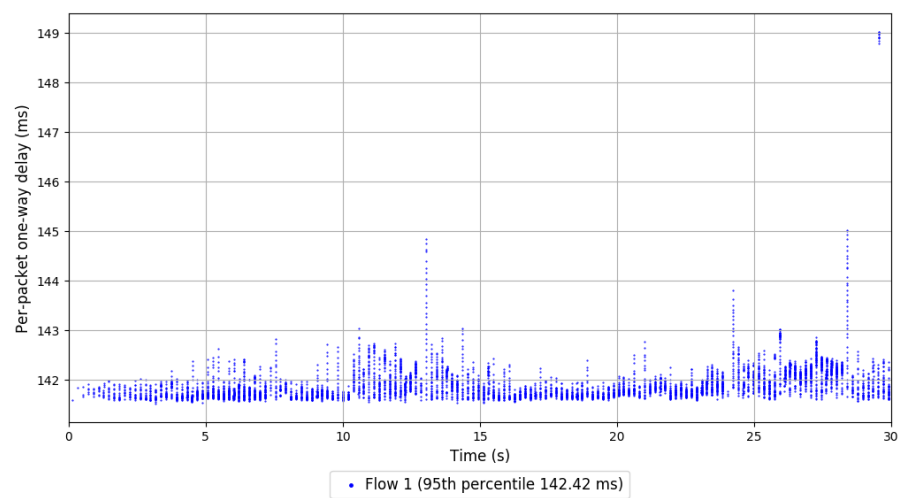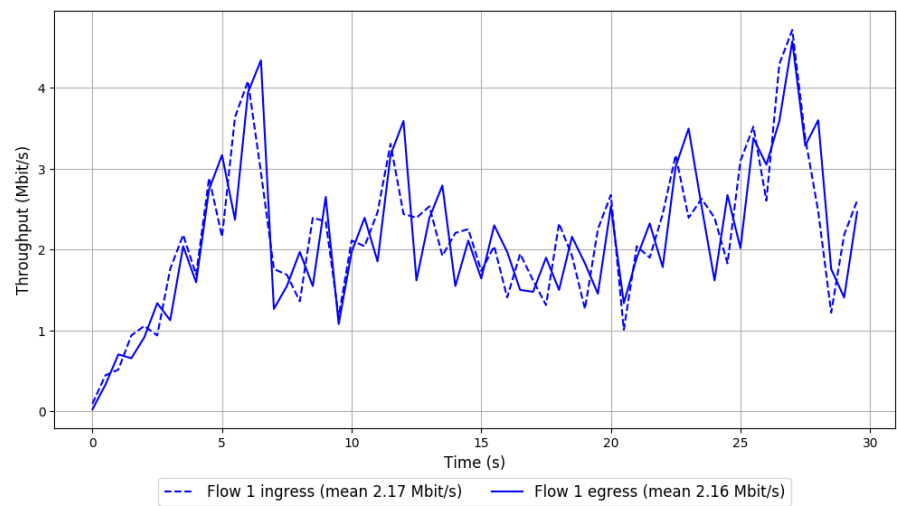
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2017-08-16 20:03:31
End at: 2017-08-16 20:04:02
Local clock offset: 0.639 ms
Remote clock offset: 0.151 ms

# Below is generated by plot.py at 2017-08-17 01:55:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 142.421 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 142.421 ms
Loss rate: 0.96%
```

Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2017-08-16 20:25:06
End at: 2017-08-16 20:25:36
Local clock offset: 0.577 ms
Remote clock offset: 0.12 ms


# Below is generated by plot.py at 2017-08-17 01:55:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 142.710 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 142.710 ms
Loss rate: 1.04%
```
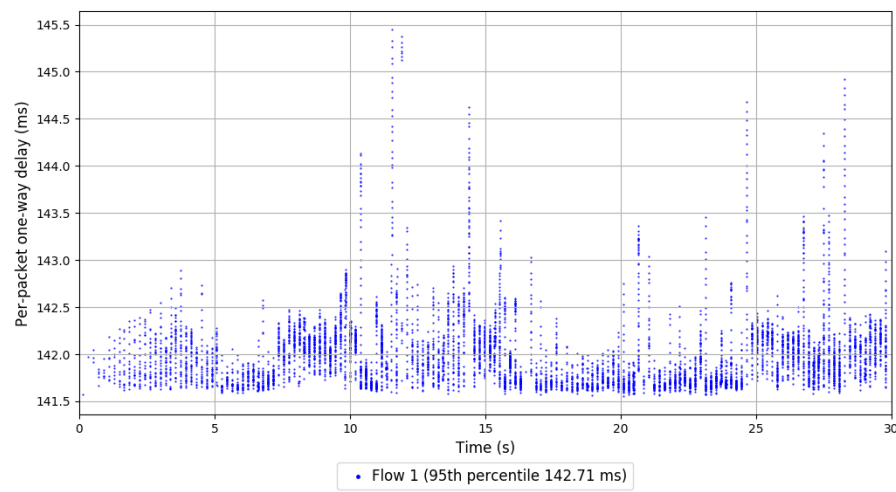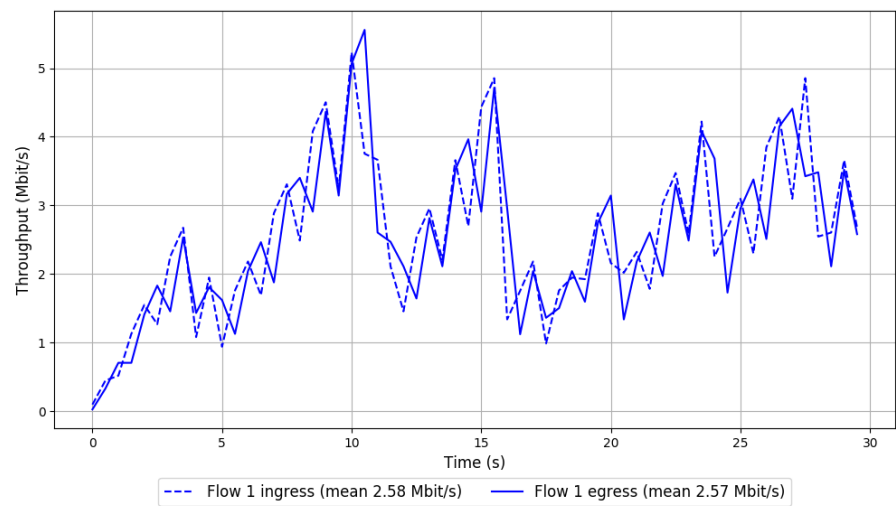
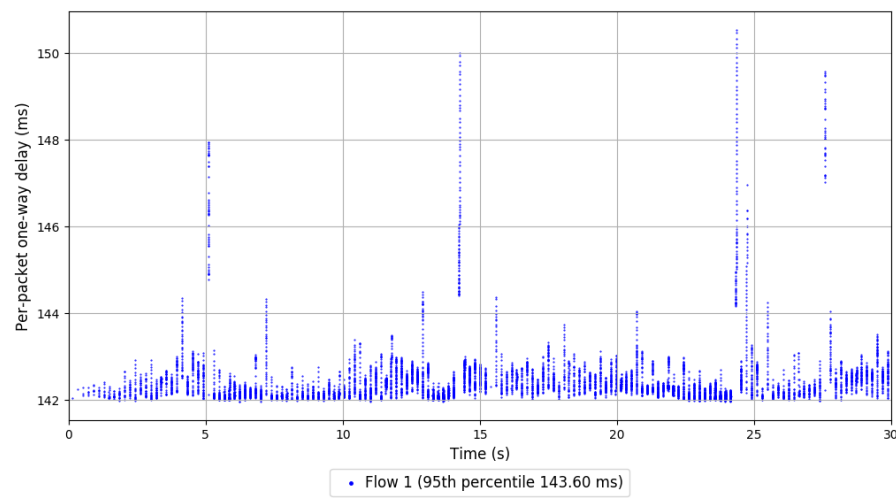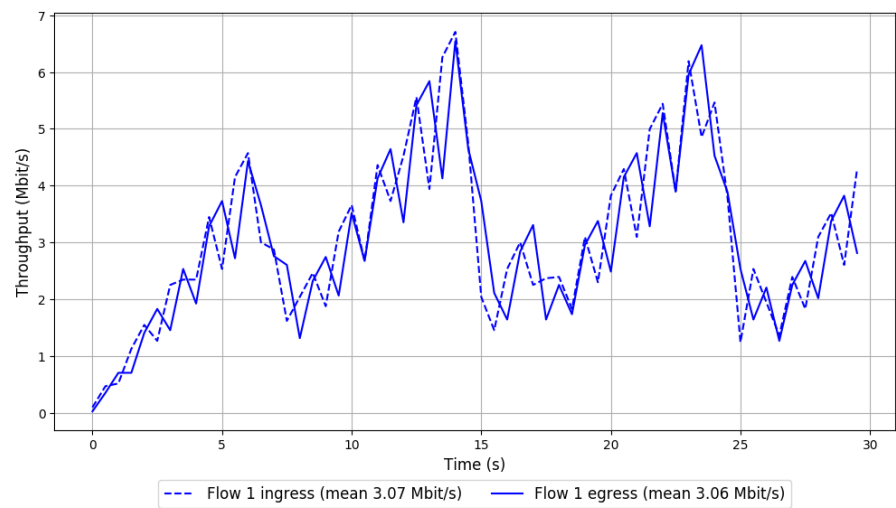## Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2017-08-16 20:46:35
End at: 2017-08-16 20:47:05
Local clock offset: 0.49 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2017-08-17 01:55:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 143.603 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 143.603 ms
Loss rate: 0.91%
```
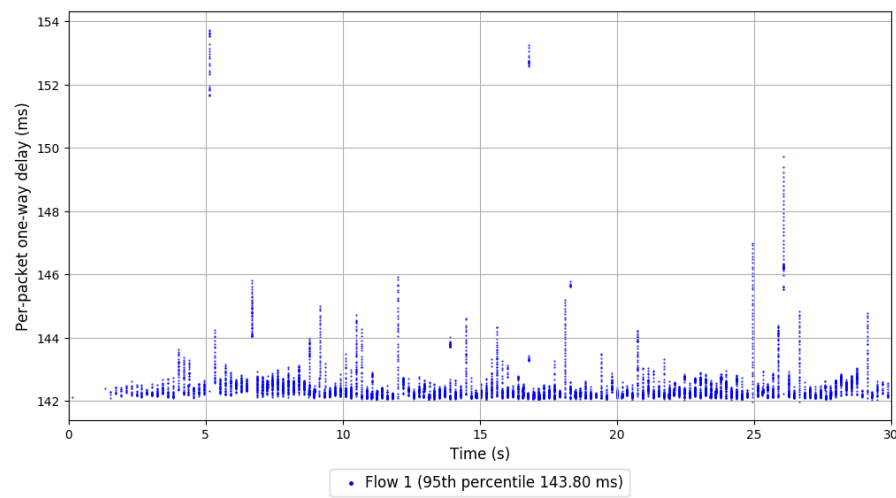
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 3.07 Mbit/s)   Flow 1 egress (mean 3.06 Mbit/s)

• Flow 1 (95th percentile 143.60 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2017-08-16 21:07:47
End at: 2017-08-16 21:08:17
Local clock offset: 0.438 ms
Remote clock offset: -0.18 ms

# Below is generated by plot.py at 2017-08-17 01:55:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 143.797 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 143.797 ms
Loss rate: 0.45%
```
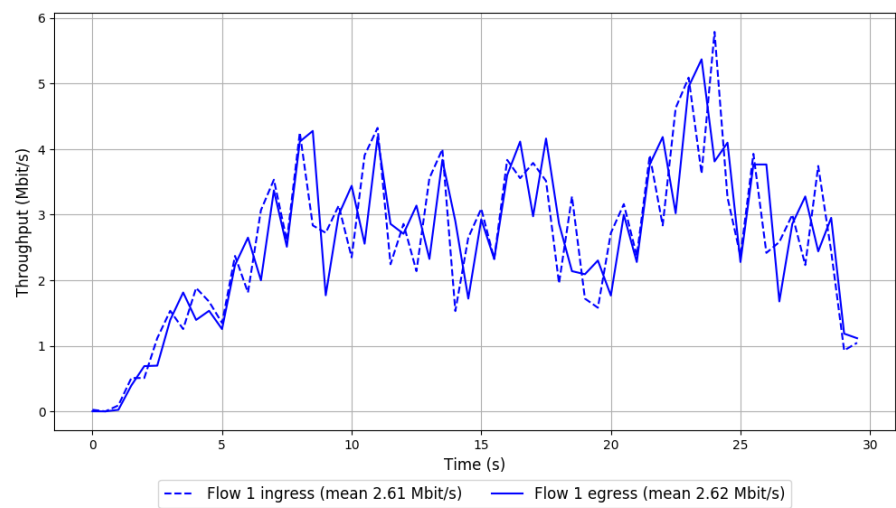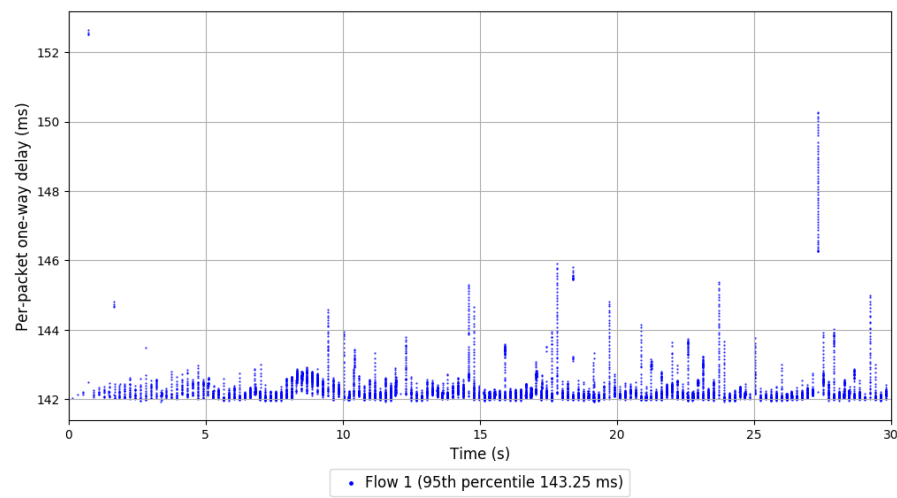
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2017-08-16 21:28:07
End at: 2017-08-16 21:28:37
Local clock offset: 0.57 ms
Remote clock offset: -0.38 ms


# Below is generated by plot.py at 2017-08-17 01:55:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 143.249 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 143.249 ms
Loss rate: 0.75%
```
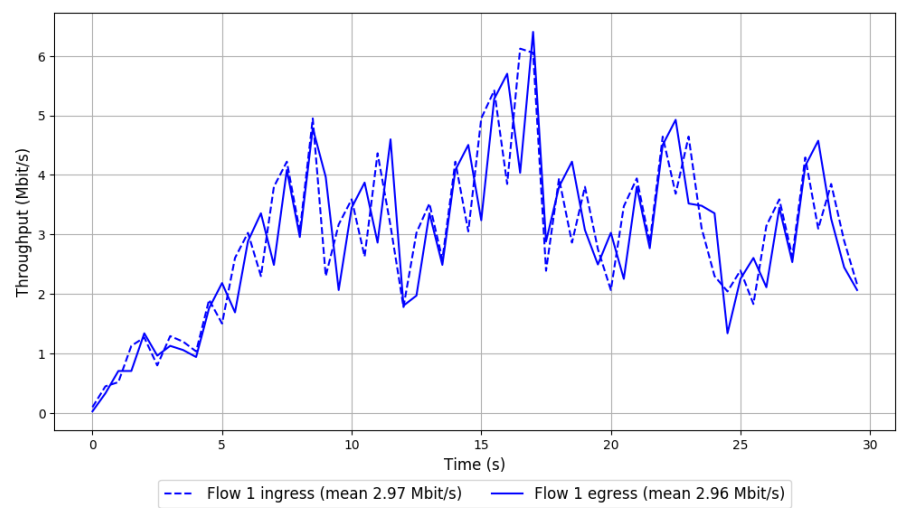
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 2.97 Mbit/s) --- Flow 1 egress (mean 2.96 Mbit/s)

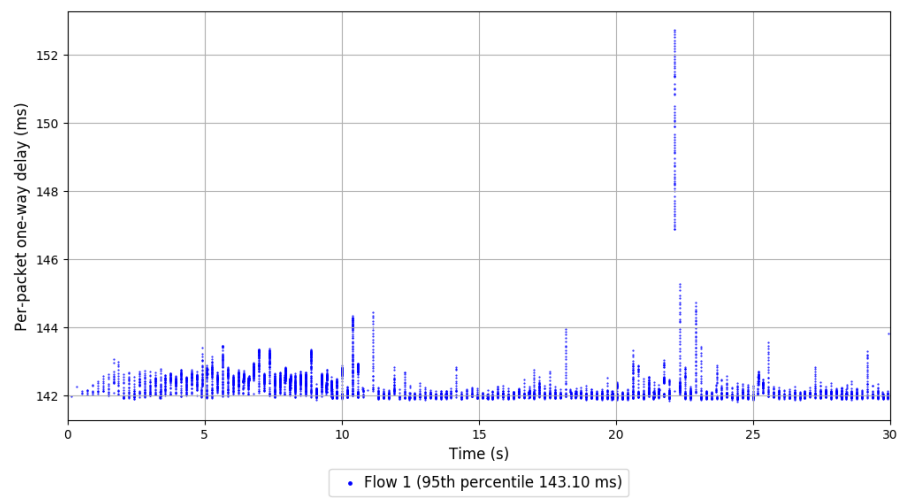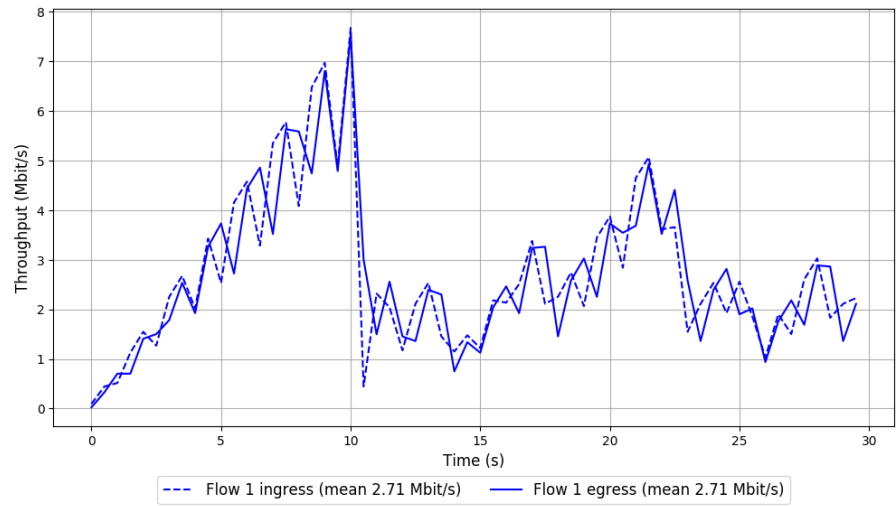Flow 1 (95th percentile 143.25 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2017-08-16 21:50:01
End at: 2017-08-16 21:50:31
Local clock offset: 0.507 ms
Remote clock offset: -0.298 ms


# Below is generated by plot.py at 2017-08-17 01:55:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 143.097 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 143.097 ms
Loss rate: 0.69%
```

Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC

Start at: 2017-08-16 18:40:18
End at: 2017-08-16 18:40:48
Local clock offset: 0.044 ms
Remote clock offset: -1.23 ms

# Below is generated by plot.py at 2017-08-17 01:55:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.81 Mbit/s
95th percentile per-packet one-way delay: 180.950 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 61.81 Mbit/s
95th percentile per-packet one-way delay: 180.950 ms
Loss rate: 1.47%
```
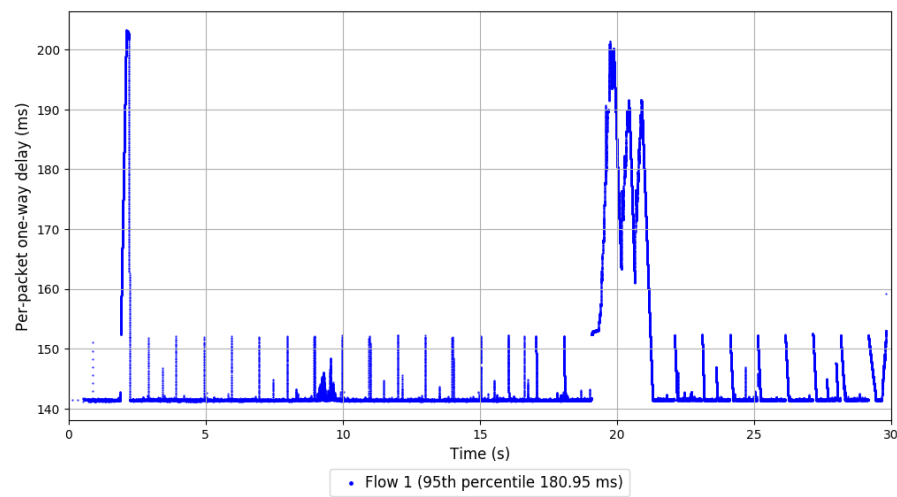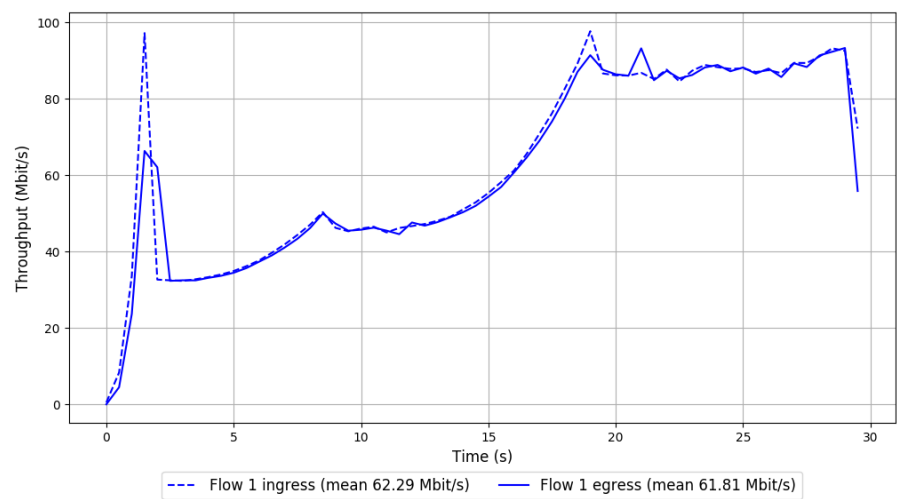
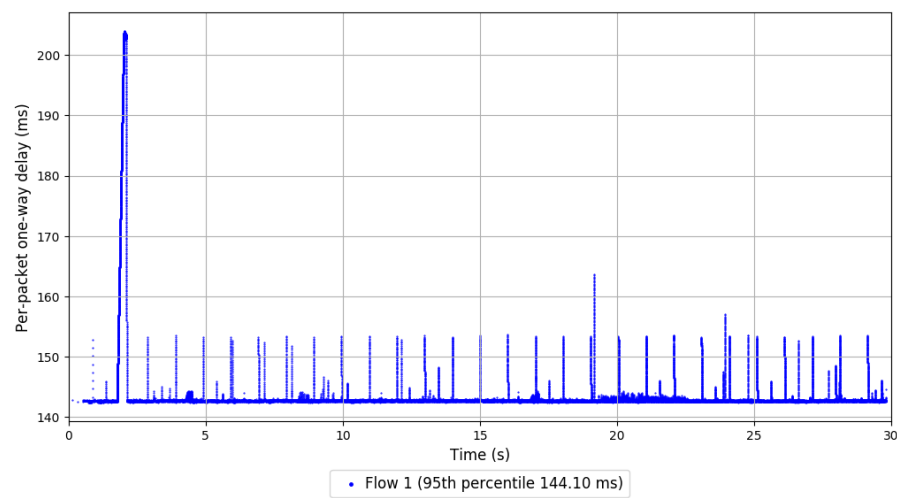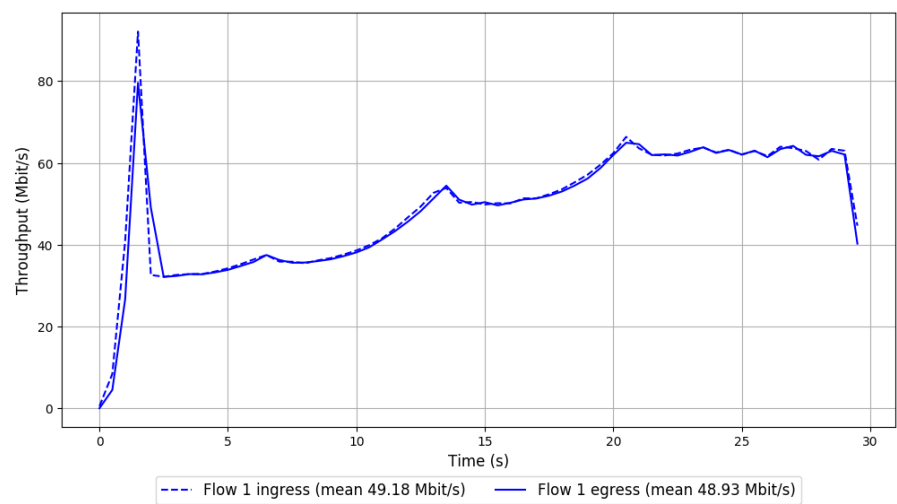Run 1: Report of PCC — Data Link

```
Run 2: Statistics of PCC

Start at: 2017-08-16 19:01:40
End at: 2017-08-16 19:02:10
Local clock offset: 1.143 ms
Remote clock offset: -0.536 ms


# Below is generated by plot.py at 2017-08-17 01:55:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.93 Mbit/s
95th percentile per-packet one-way delay: 144.098 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 48.93 Mbit/s
95th percentile per-packet one-way delay: 144.098 ms
Loss rate: 1.14%
```

Run 2: Report of PCC — Data Link

Flow 1 ingress (mean 49.18 Mbit/s) — Flow 1 egress (mean 48.93 Mbit/s)

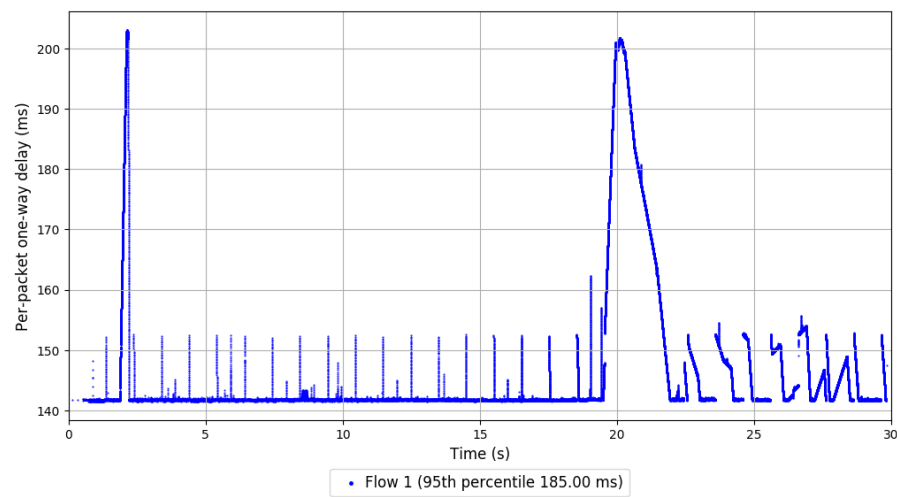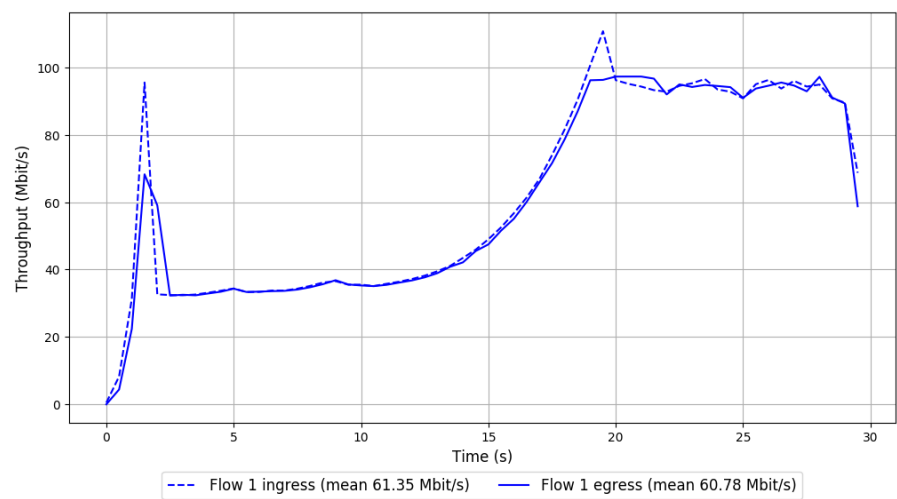• Flow 1 (95th percentile 144.10 ms)

```
Run 3: Statistics of PCC

Start at: 2017-08-16 19:23:07
End at: 2017-08-16 19:23:37
Local clock offset: 0.361 ms
Remote clock offset: -0.197 ms


# Below is generated by plot.py at 2017-08-17 01:55:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.78 Mbit/s
95th percentile per-packet one-way delay: 185.002 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 60.78 Mbit/s
95th percentile per-packet one-way delay: 185.002 ms
Loss rate: 1.55%
```

Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 61.35 Mbit/s)   Flow 1 egress (mean 60.78 Mbit/s)

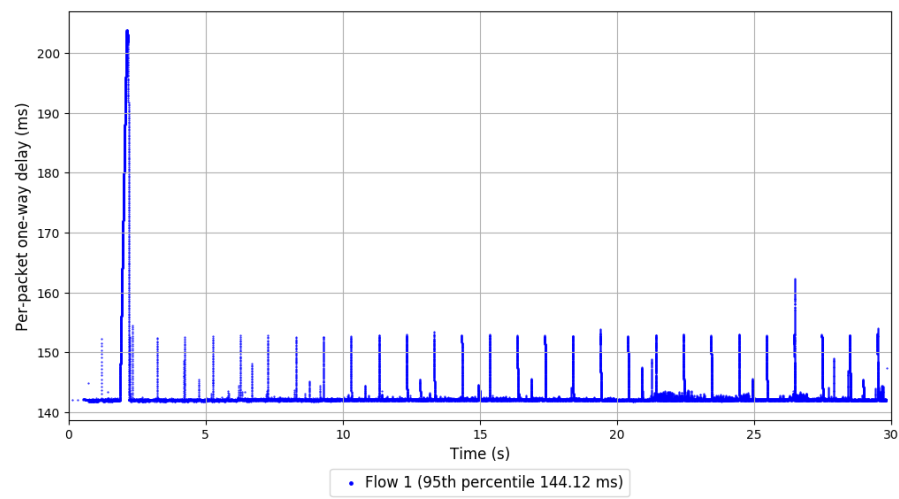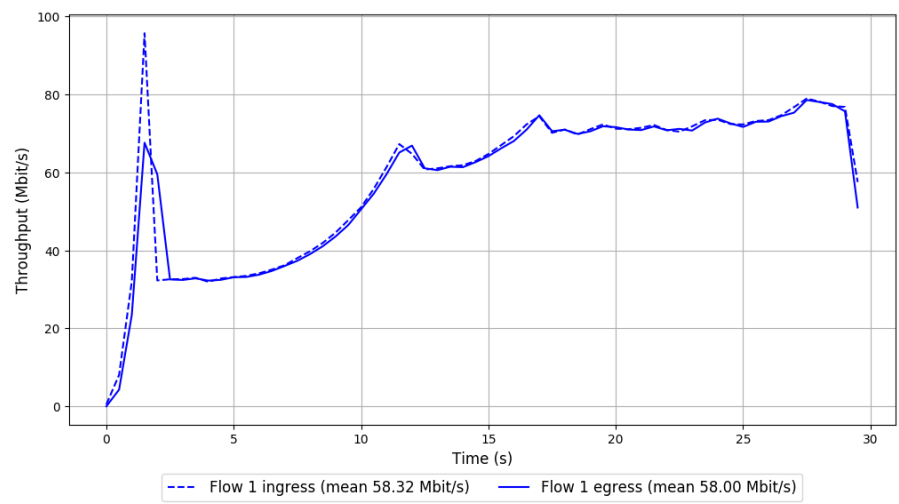Flow 1 (95th percentile 185.00 ms)

```
Run 4: Statistics of PCC

Start at: 2017-08-16 19:44:39
End at: 2017-08-16 19:45:09
Local clock offset: 0.895 ms
Remote clock offset: -0.086 ms


# Below is generated by plot.py at 2017-08-17 01:55:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.00 Mbit/s
95th percentile per-packet one-way delay: 144.120 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 58.00 Mbit/s
95th percentile per-packet one-way delay: 144.120 ms
Loss rate: 1.16%
```
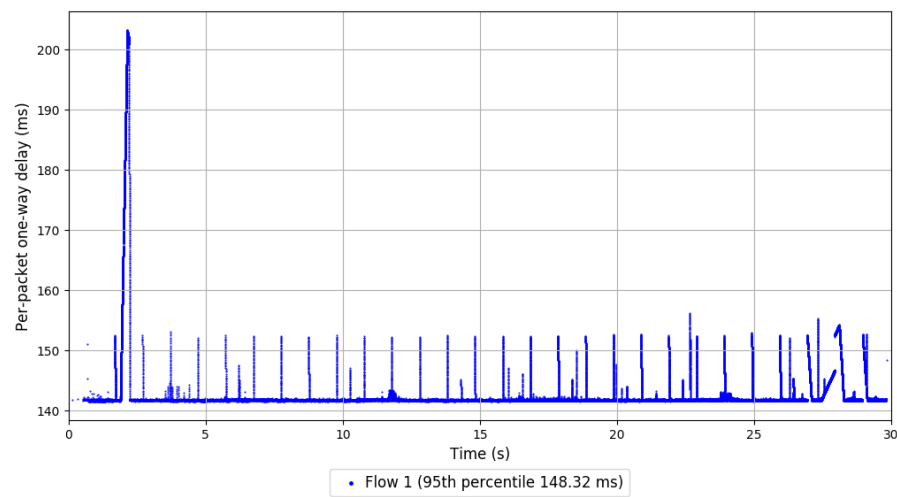
Run 4: Report of PCC — Data Link

Flow 1 ingress (mean 58.32 Mbit/s) ---- Flow 1 egress (mean 58.00 Mbit/s)

Flow 1 (95th percentile 144.12 ms)

```
Run 5: Statistics of PCC

Start at: 2017-08-16 20:06:02
End at: 2017-08-16 20:06:32
Local clock offset: 0.683 ms
Remote clock offset: 0.093 ms


# Below is generated by plot.py at 2017-08-17 01:55:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.29 Mbit/s
95th percentile per-packet one-way delay: 148.318 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 56.29 Mbit/s
95th percentile per-packet one-way delay: 148.318 ms
Loss rate: 1.38%
```
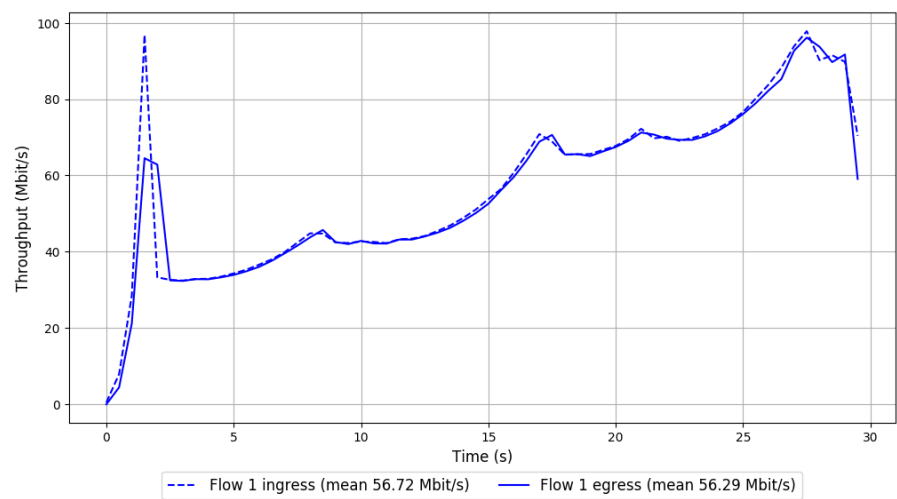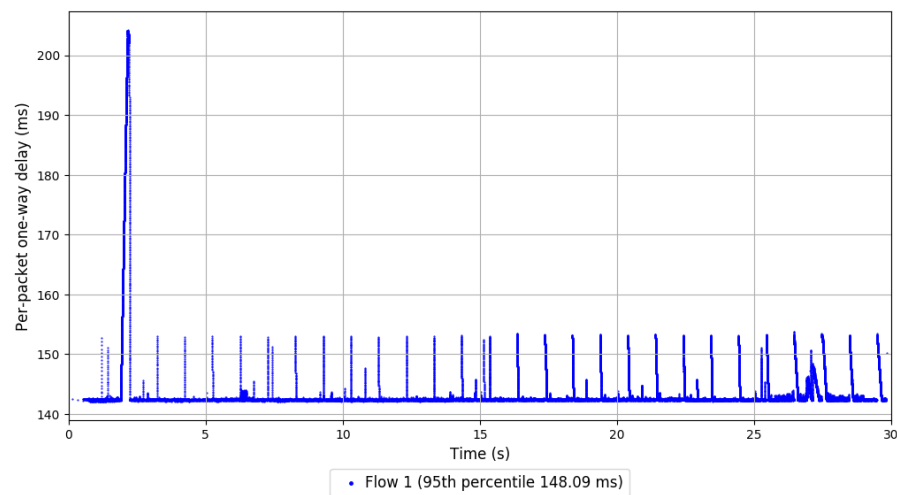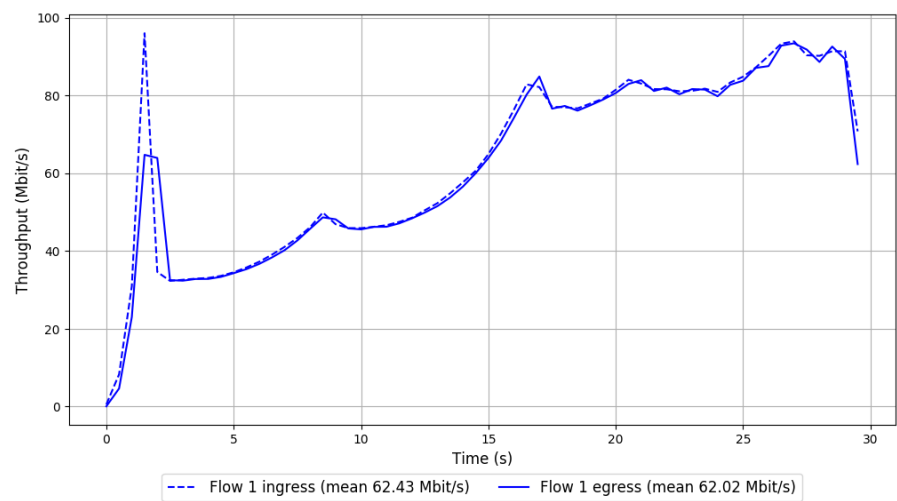
Run 5: Report of PCC — Data Link

Flow 1 ingress (mean 56.72 Mbit/s)   Flow 1 egress (mean 56.29 Mbit/s)

Flow 1 (95th percentile 148.32 ms)

```
Run 6: Statistics of PCC

Start at: 2017-08-16 20:27:34
End at: 2017-08-16 20:28:04
Local clock offset: 0.878 ms
Remote clock offset: 0.005 ms


# Below is generated by plot.py at 2017-08-17 01:55:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.02 Mbit/s
95th percentile per-packet one-way delay: 148.094 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 62.02 Mbit/s
95th percentile per-packet one-way delay: 148.094 ms
Loss rate: 1.28%
```
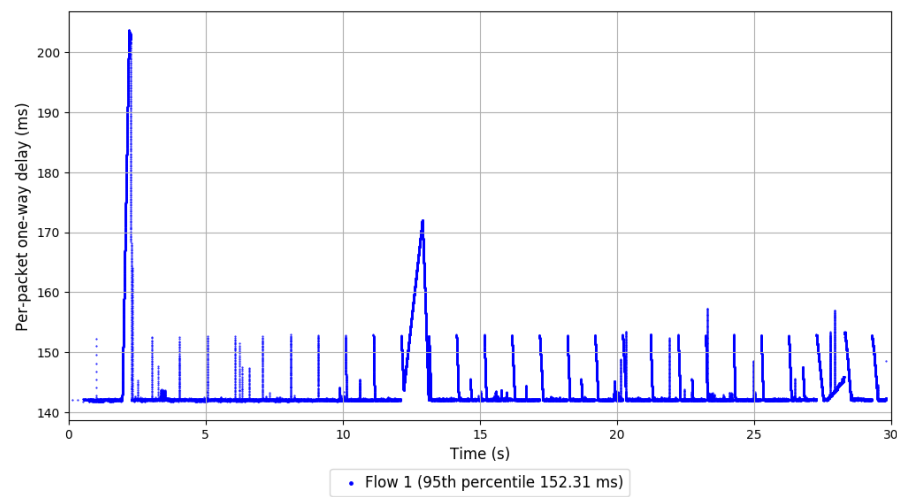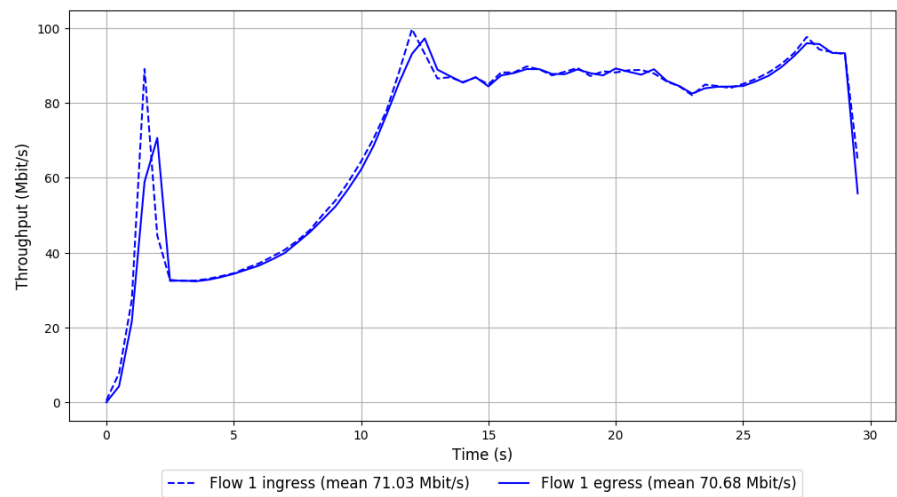
Run 6: Report of PCC — Data Link

Flow 1 ingress (mean 62.43 Mbit/s)   Flow 1 egress (mean 62.02 Mbit/s)

• Flow 1 (95th percentile 148.09 ms)

```
Run 7: Statistics of PCC

Start at: 2017-08-16 20:49:11
End at: 2017-08-16 20:49:41
Local clock offset: 0.806 ms
Remote clock offset: -0.0 ms


# Below is generated by plot.py at 2017-08-17 01:55:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.68 Mbit/s
95th percentile per-packet one-way delay: 152.313 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 70.68 Mbit/s
95th percentile per-packet one-way delay: 152.313 ms
Loss rate: 1.10%
```

Run 7: Report of PCC — Data Link

Flow 1 ingress (mean 71.03 Mbit/s) —— Flow 1 egress (mean 70.68 Mbit/s)

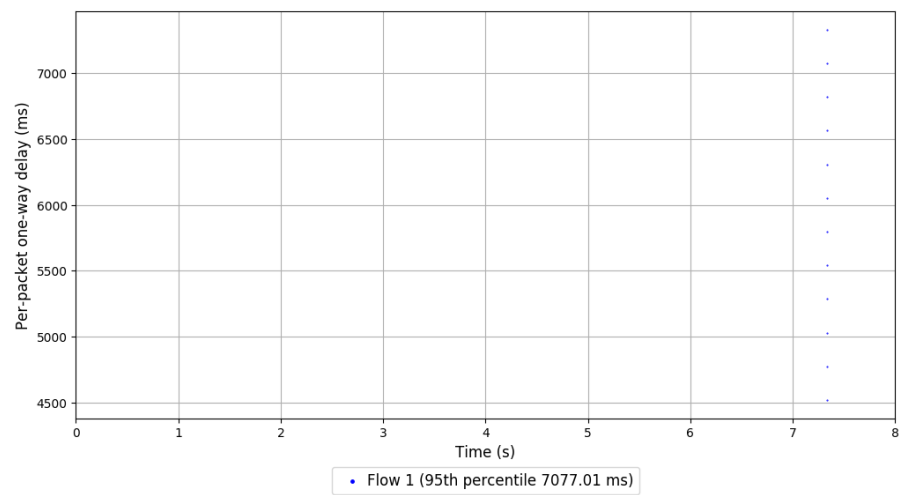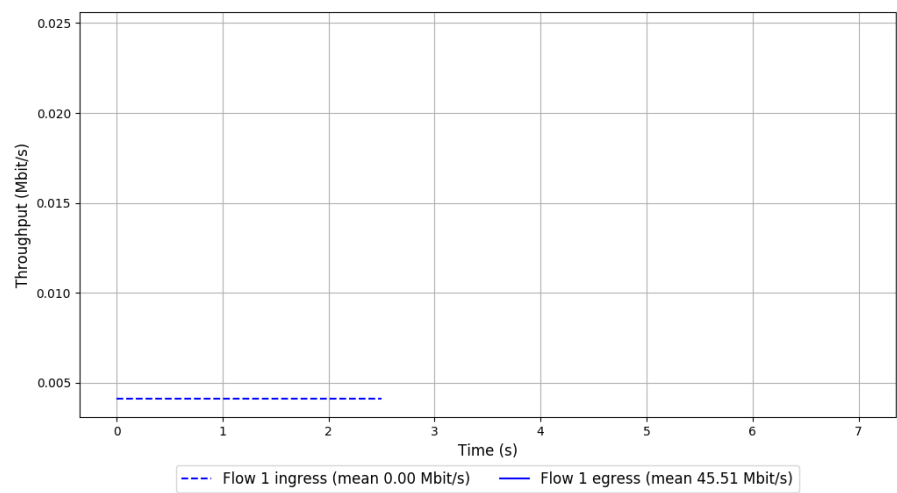• Flow 1 (95th percentile 152.31 ms)

137

Run 8: Statistics of PCC

Start at: 2017-08-16 21:10:20
End at: 2017-08-16 21:10:50
Local clock offset: 0.377 ms
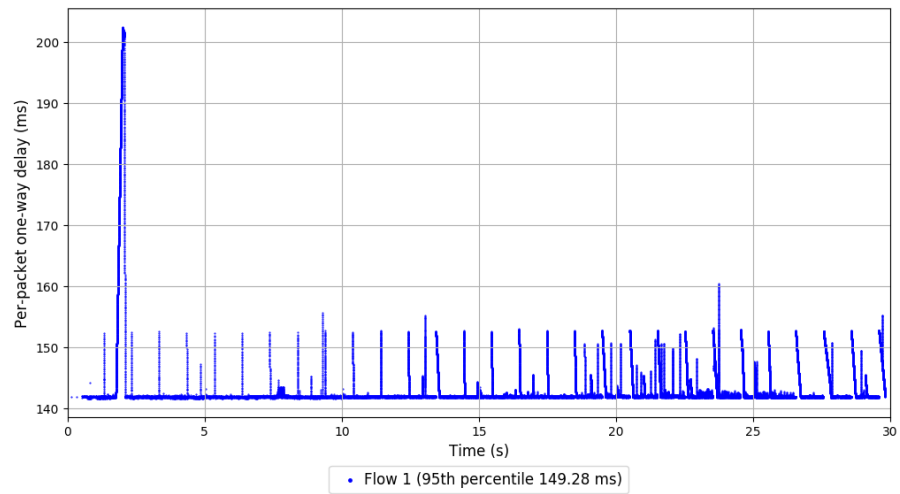Remote clock offset: -0.213 ms

Run 8: Report of PCC — Data Link

Flow 1 ingress (mean 0.00 Mbit/s) --- Flow 1 egress (mean 45.51 Mbit/s)
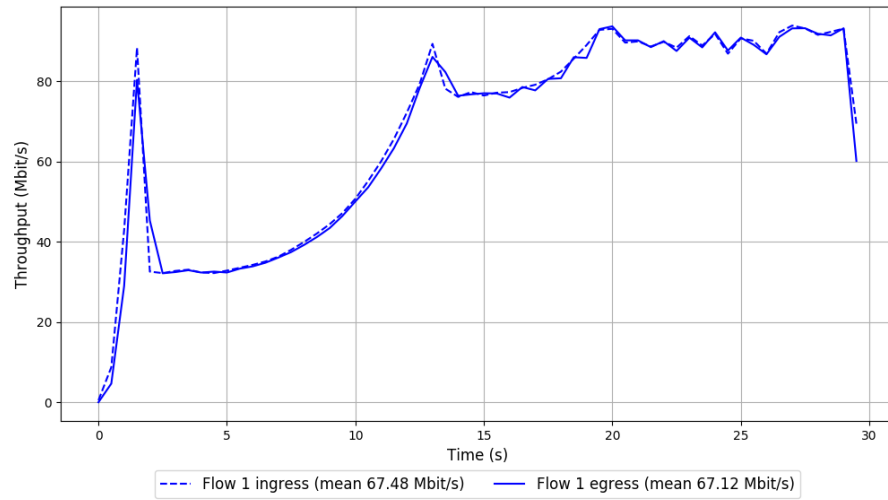

• Flow 1 (95th percentile 7077.01 ms)

```
Run 9: Statistics of PCC

Start at: 2017-08-16 21:30:37
End at: 2017-08-16 21:31:07
Local clock offset: 0.506 ms
Remote clock offset: -0.429 ms


# Below is generated by plot.py at 2017-08-17 01:55:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.12 Mbit/s
95th percentile per-packet one-way delay: 149.280 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 67.12 Mbit/s
95th percentile per-packet one-way delay: 149.280 ms
Loss rate: 1.16%
```

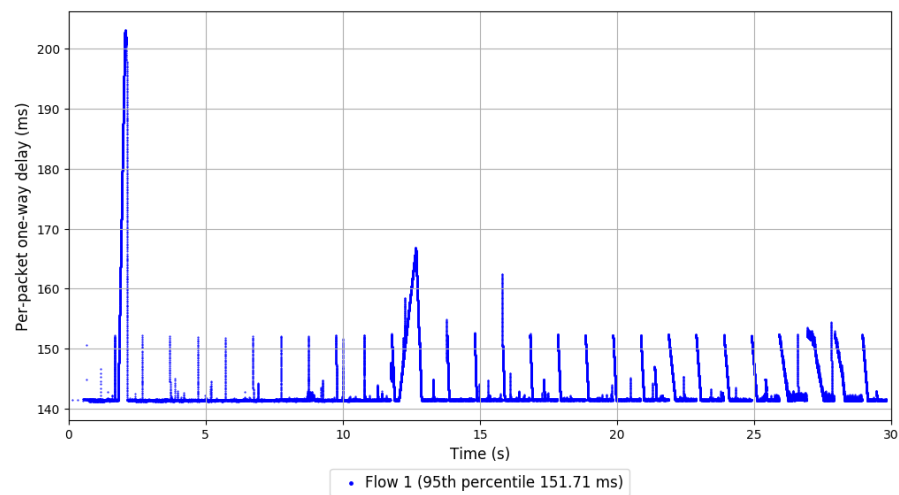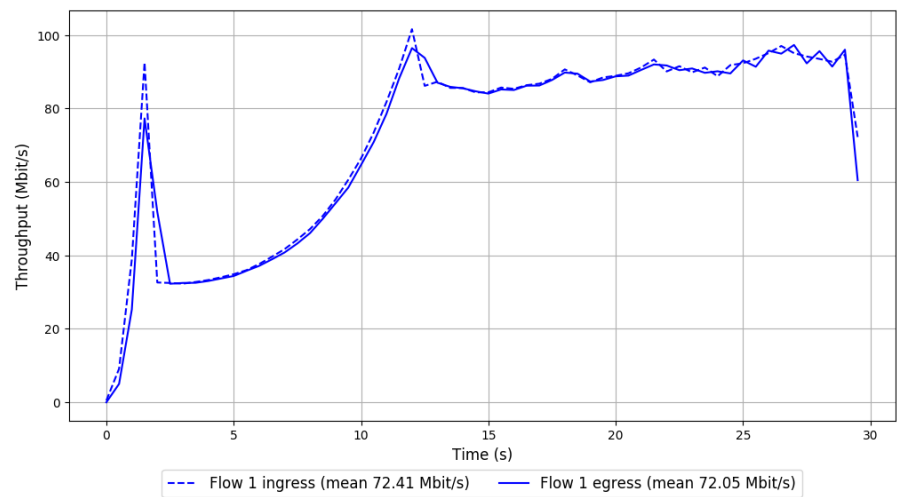## Run 9: Report of PCC — Data Link

```
Run 10: Statistics of PCC

Start at: 2017-08-16 21:52:34
End at: 2017-08-16 21:53:04
Local clock offset: 0.26 ms
Remote clock offset: -0.388 ms


# Below is generated by plot.py at 2017-08-17 01:56:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.05 Mbit/s
95th percentile per-packet one-way delay: 151.707 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 72.05 Mbit/s
95th percentile per-packet one-way delay: 151.707 ms
Loss rate: 1.16%
```
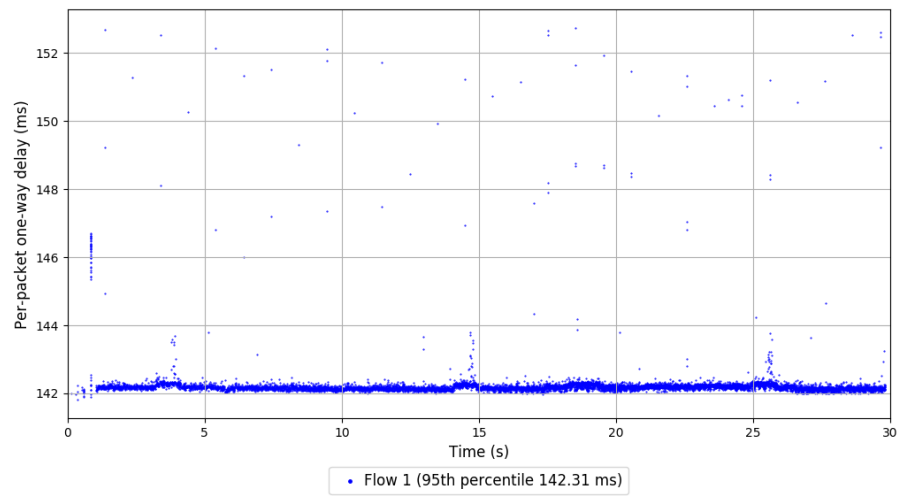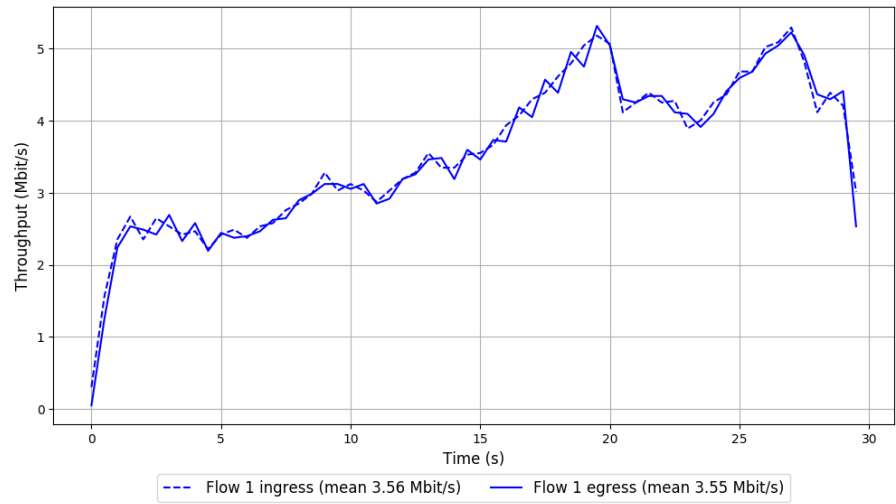
Run 10: Report of PCC — Data Link

Flow 1 ingress (mean 72.41 Mbit/s)   Flow 1 egress (mean 72.05 Mbit/s)

Flow 1 (95th percentile 151.71 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-16 18:50:30
End at: 2017-08-16 18:51:00
Local clock offset: 0.208 ms
Remote clock offset: -0.911 ms


# Below is generated by plot.py at 2017-08-17 01:56:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 142.310 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 142.310 ms
Loss rate: 0.87%
```

Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2017-08-16 19:11:35
End at: 2017-08-16 19:12:05
Local clock offset: 0.314 ms
Remote clock offset: -0.275 ms


# Below is generated by plot.py at 2017-08-17 01:56:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.96 Mbit/s
95th percentile per-packet one-way delay: 143.883 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 10.96 Mbit/s
95th percentile per-packet one-way delay: 143.883 ms
Loss rate: 0.47%
```
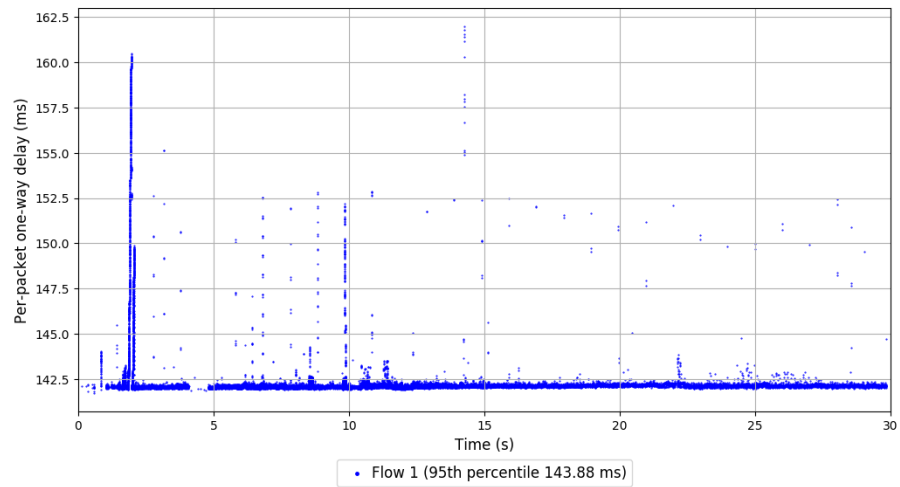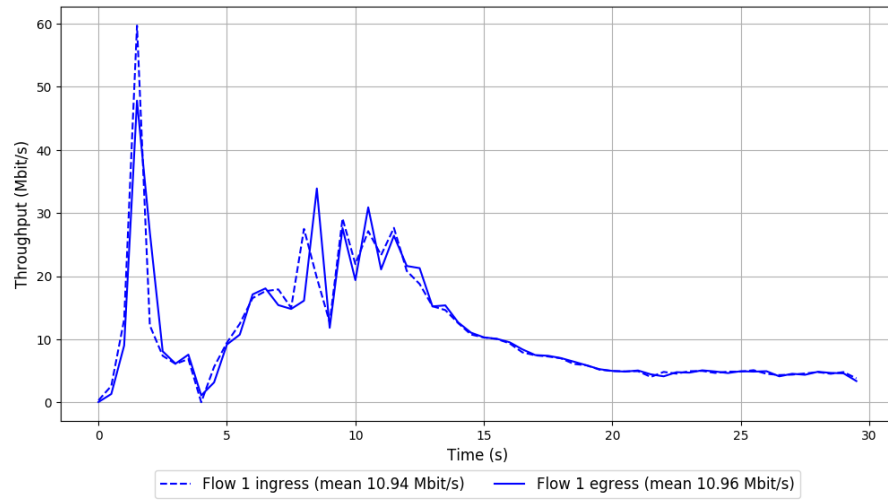
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2017-08-16 19:33:18
End at: 2017-08-16 19:33:48
Local clock offset: 0.349 ms
Remote clock offset: -0.136 ms


# Below is generated by plot.py at 2017-08-17 01:56:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 141.912 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 141.912 ms
Loss rate: 0.84%
```
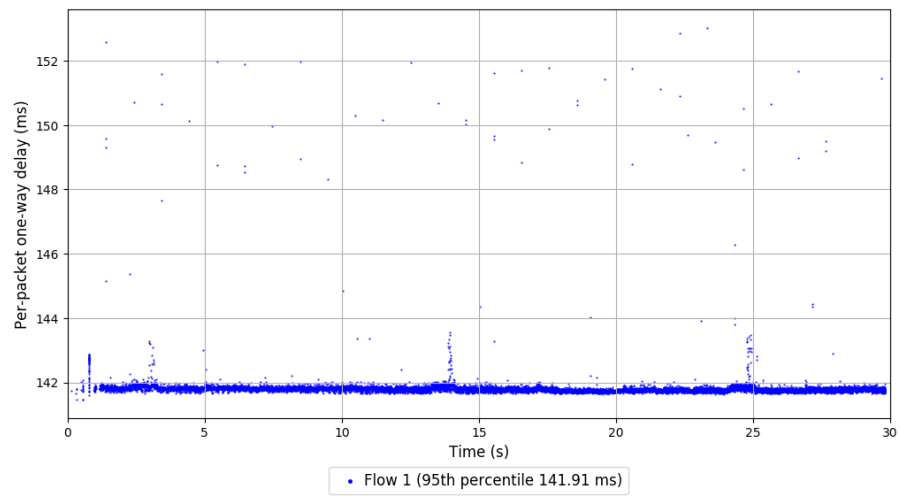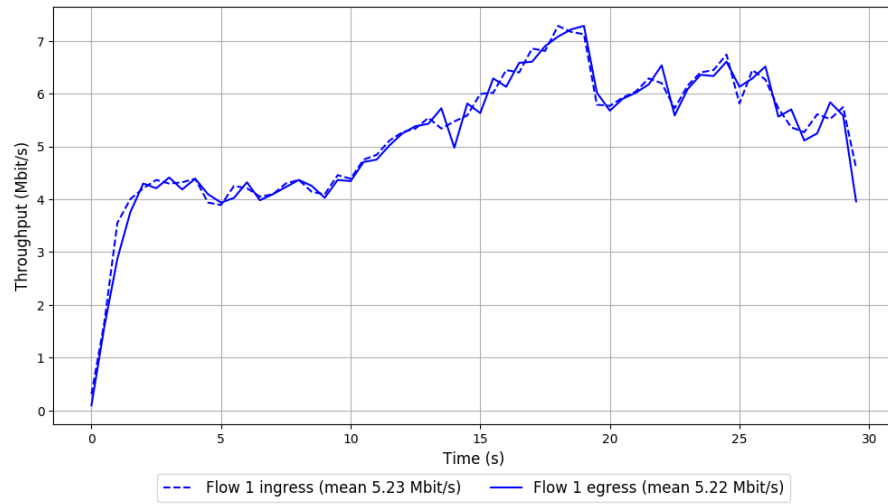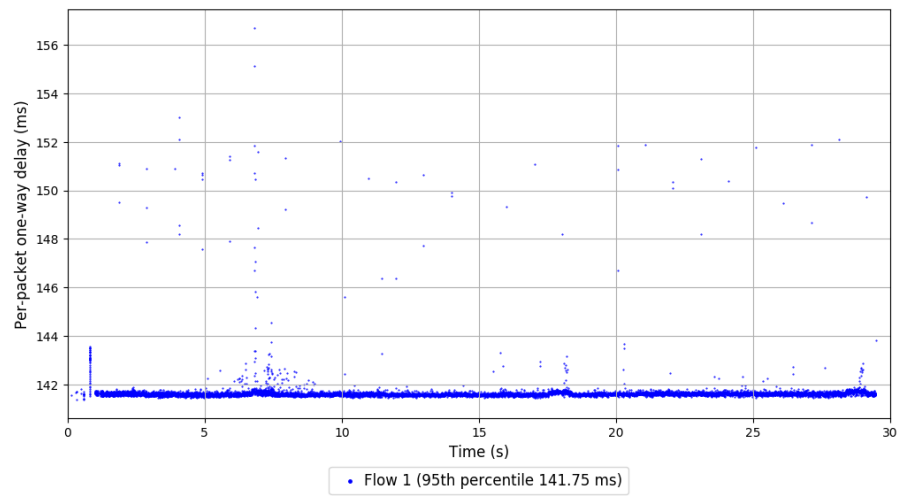
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 5.23 Mbit/s)   Flow 1 egress (mean 5.22 Mbit/s)

Flow 1 (95th percentile 141.91 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-08-16 19:54:54
End at: 2017-08-16 19:55:24
Local clock offset: 0.643 ms
Remote clock offset: 0.008 ms


# Below is generated by plot.py at 2017-08-17 01:56:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 141.746 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 141.746 ms
Loss rate: 0.89%
```
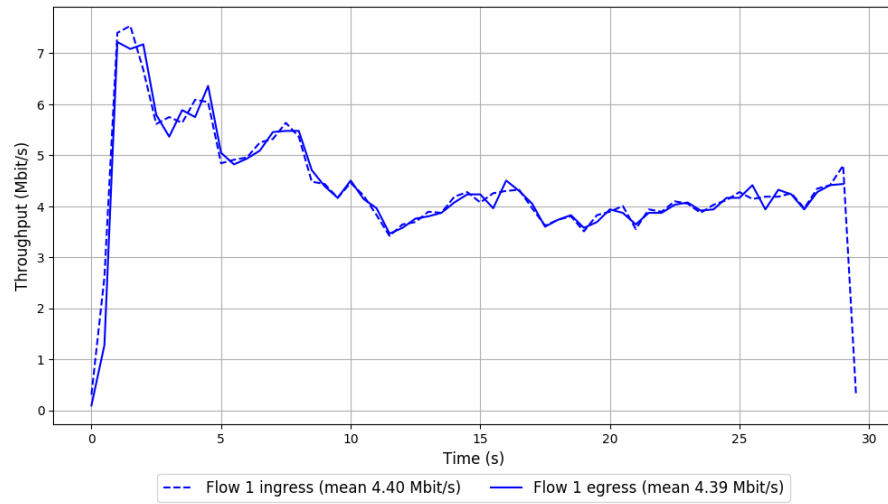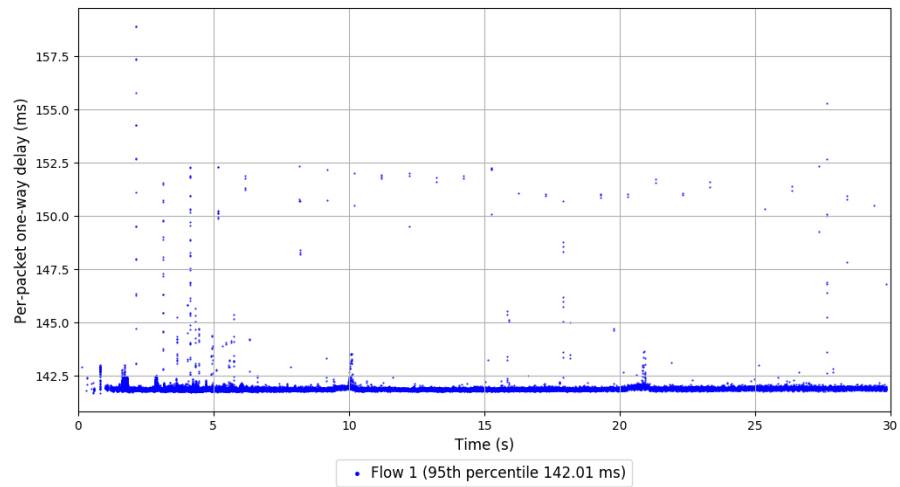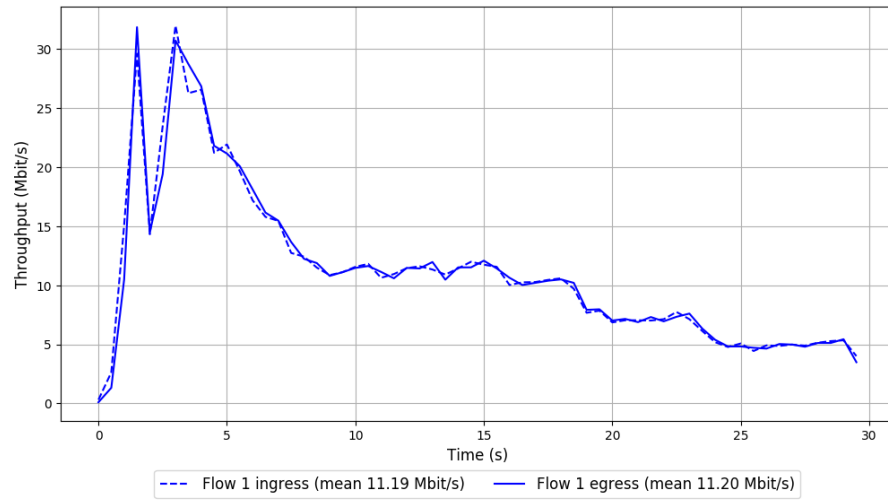
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 4.40 Mbit/s) ----   Flow 1 egress (mean 4.39 Mbit/s) ——

Flow 1 (95th percentile 141.75 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2017-08-16 20:16:02
End at: 2017-08-16 20:16:32
Local clock offset: 0.689 ms
Remote clock offset: 0.091 ms


# Below is generated by plot.py at 2017-08-17 01:56:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.20 Mbit/s
95th percentile per-packet one-way delay: 142.014 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 11.20 Mbit/s
95th percentile per-packet one-way delay: 142.014 ms
Loss rate: 0.44%
```
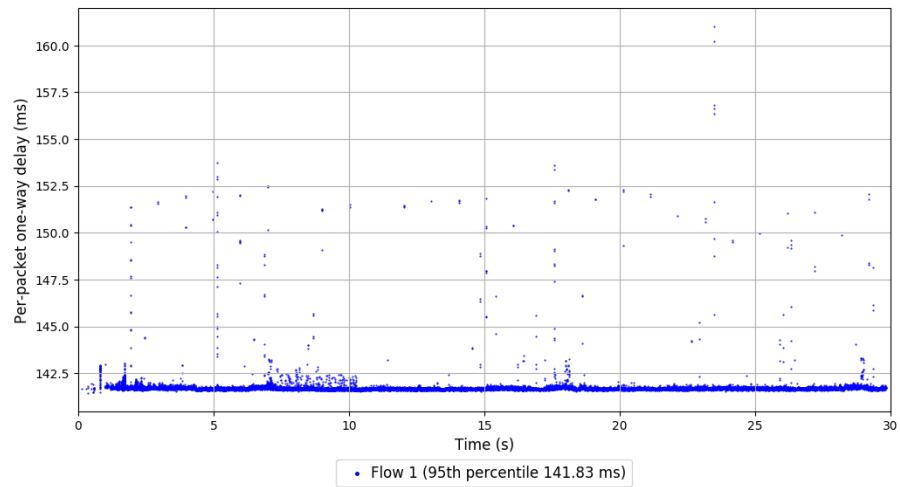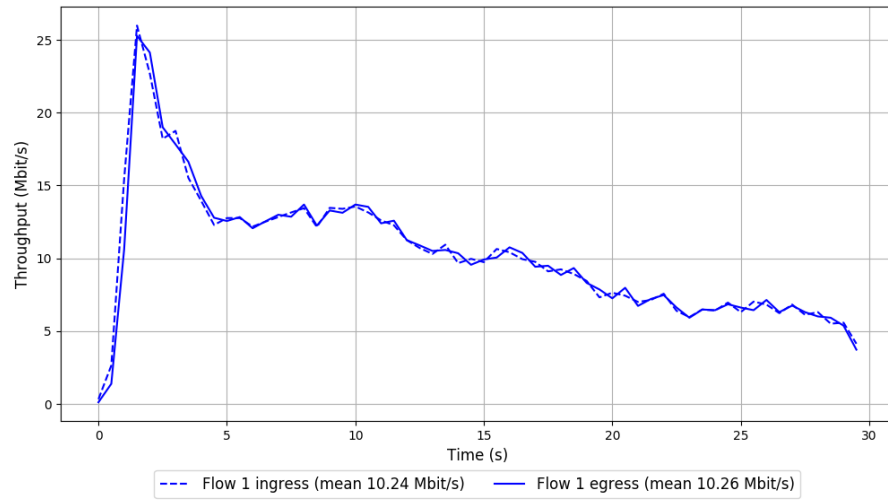
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 11.19 Mbit/s)   Flow 1 egress (mean 11.20 Mbit/s)

Flow 1 (95th percentile 142.01 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2017-08-16 20:37:52
End at: 2017-08-16 20:38:22
Local clock offset: 0.545 ms
Remote clock offset: -0.017 ms


# Below is generated by plot.py at 2017-08-17 01:56:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.26 Mbit/s
95th percentile per-packet one-way delay: 141.828 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 10.26 Mbit/s
95th percentile per-packet one-way delay: 141.828 ms
Loss rate: 0.45%
```

Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 10.24 Mbit/s) --- Flow 1 egress (mean 10.26 Mbit/s)
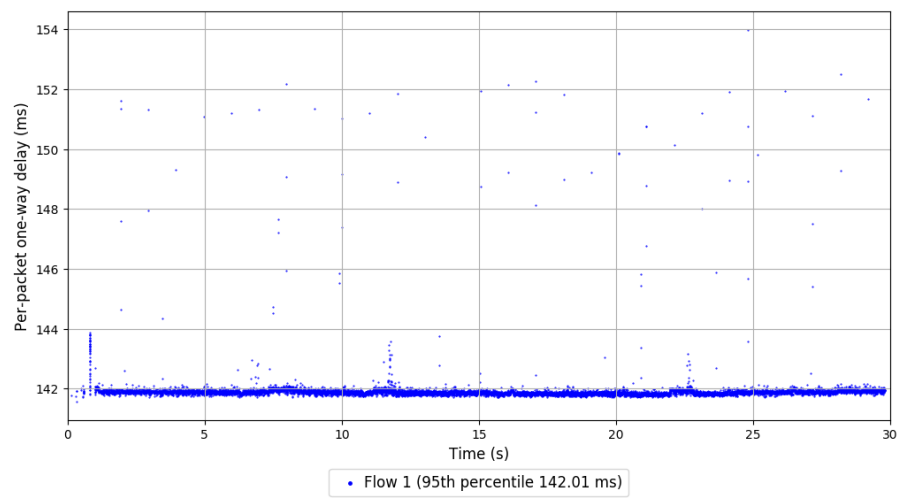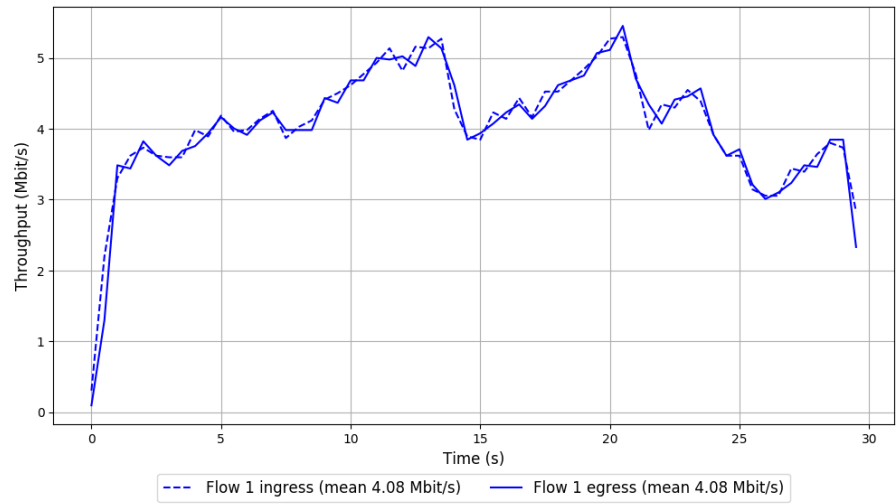

Flow 1 (95th percentile 141.83 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2017-08-16 20:59:20
End at: 2017-08-16 20:59:50
Local clock offset: 0.488 ms
Remote clock offset: -0.038 ms


# Below is generated by plot.py at 2017-08-17 01:56:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 142.010 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 142.010 ms
Loss rate: 0.76%
```

Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2017-08-16 21:19:43
End at: 2017-08-16 21:20:13
Local clock offset: 0.332 ms
Remote clock offset: -0.232 ms


# Below is generated by plot.py at 2017-08-17 01:56:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.00 Mbit/s
95th percentile per-packet one-way delay: 141.945 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 9.00 Mbit/s
95th percentile per-packet one-way delay: 141.945 ms
Loss rate: 0.51%
```
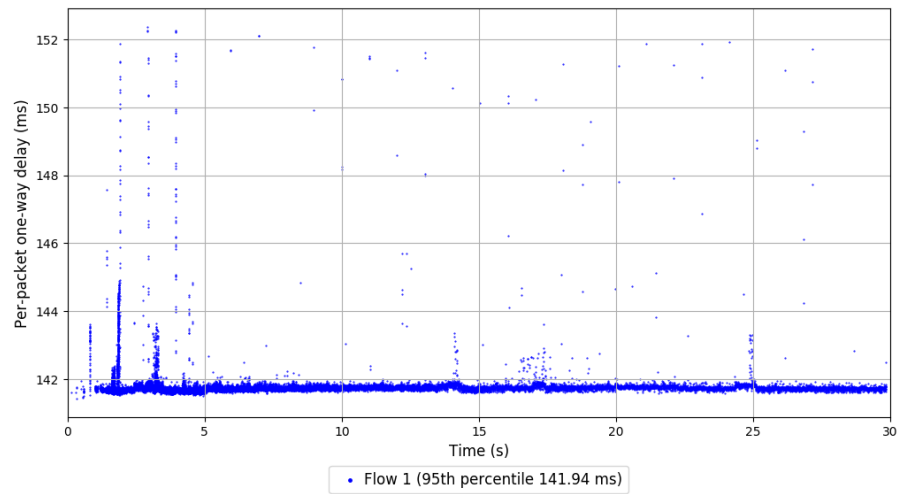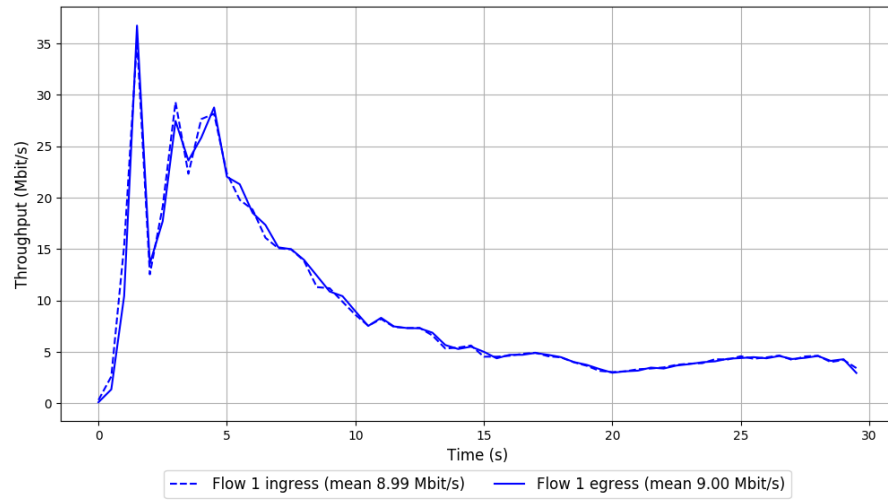
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2017-08-16 21:40:53
End at: 2017-08-16 21:41:23
Local clock offset: 0.296 ms
Remote clock offset: -0.441 ms


# Below is generated by plot.py at 2017-08-17 01:56:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.53 Mbit/s
95th percentile per-packet one-way delay: 142.106 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 10.53 Mbit/s
95th percentile per-packet one-way delay: 142.106 ms
Loss rate: 0.48%
```
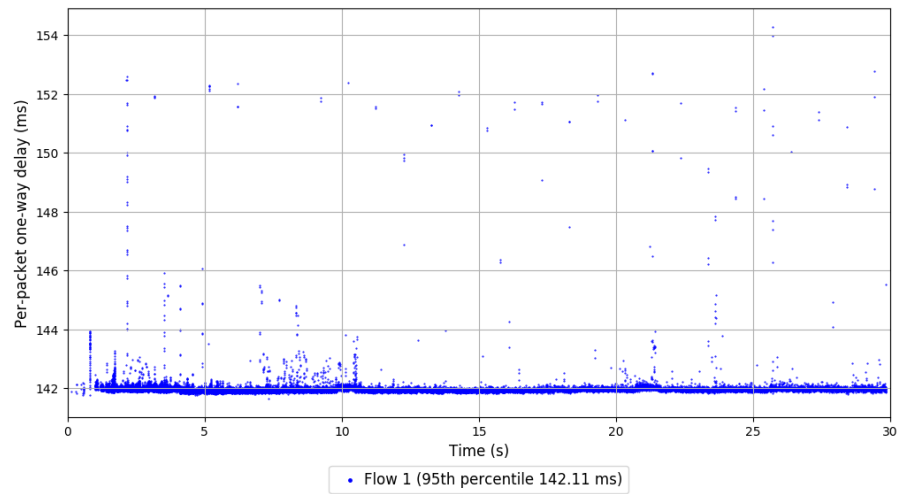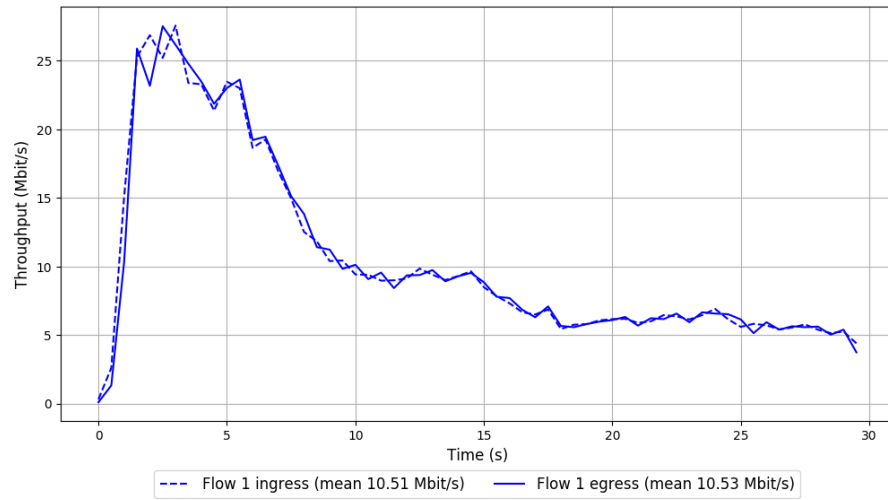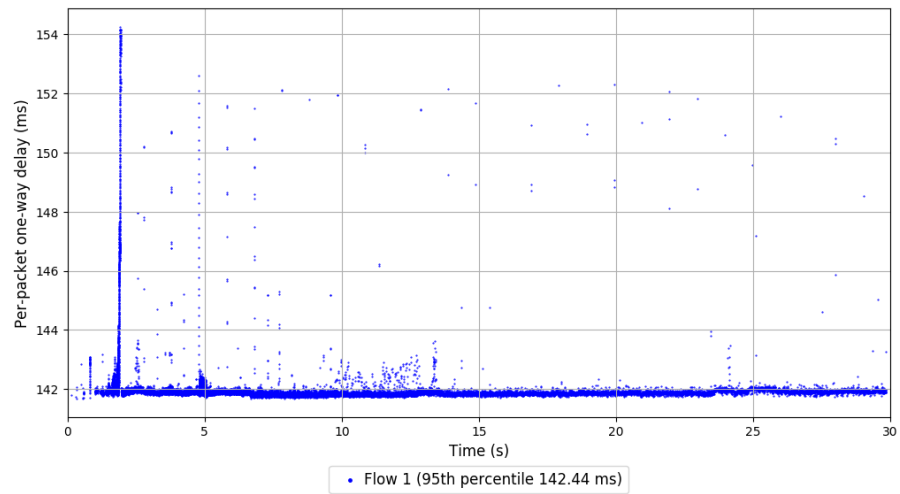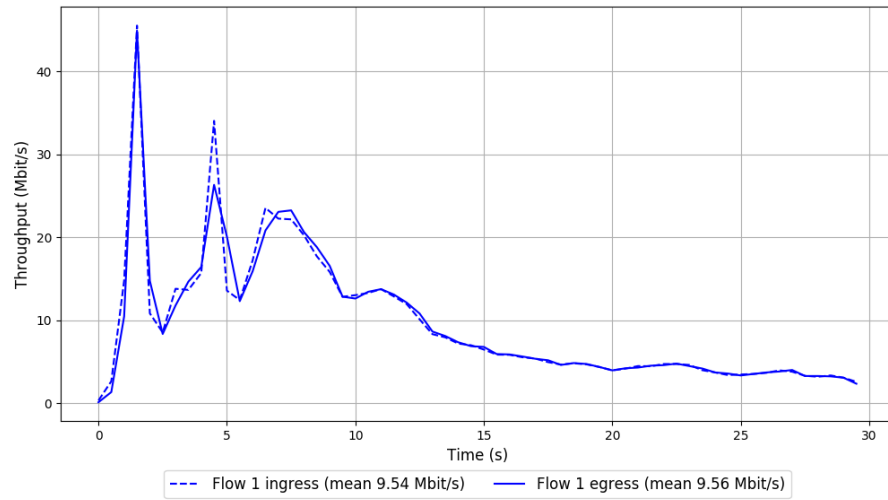
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 10.51 Mbit/s)   Flow 1 egress (mean 10.53 Mbit/s)

• Flow 1 (95th percentile 142.11 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-16 22:02:50
End at: 2017-08-16 22:03:20
Local clock offset: 0.229 ms
Remote clock offset: -0.465 ms


# Below is generated by plot.py at 2017-08-17 01:56:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 142.435 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 142.435 ms
Loss rate: 0.40%
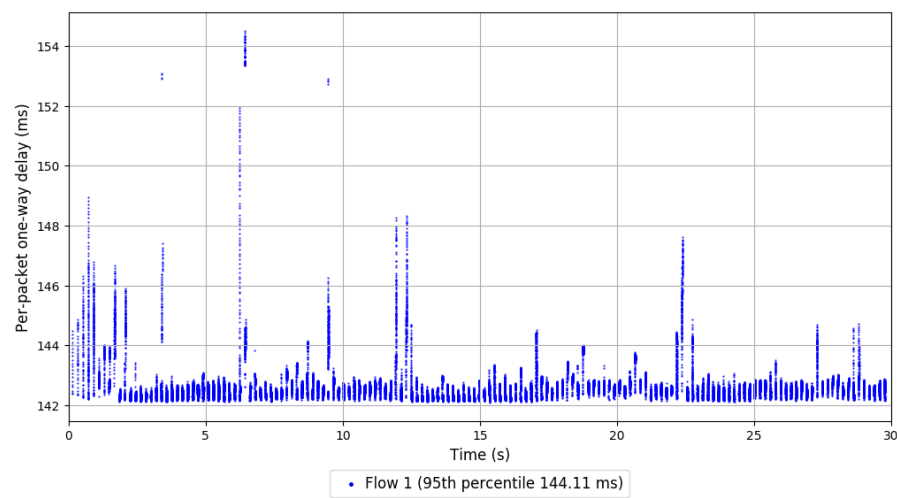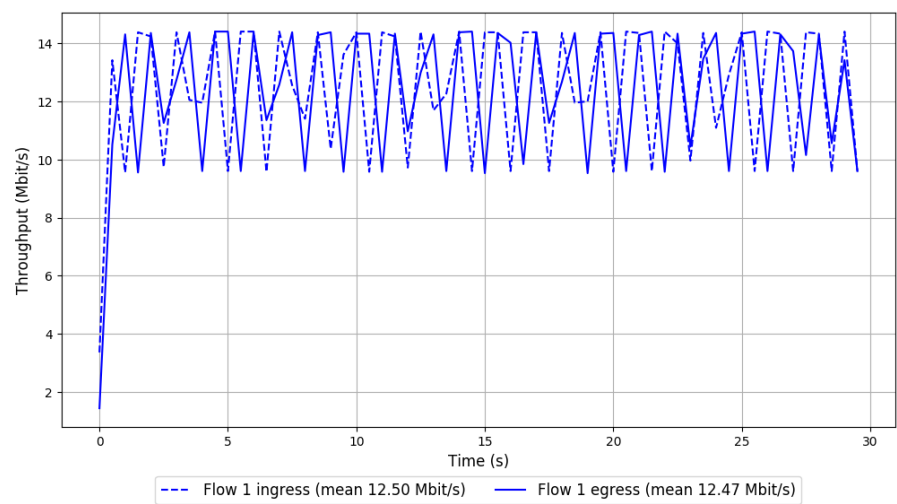```

Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of Saturator

Start at: 2017-08-16 18:39:02
End at: 2017-08-16 18:39:33
Local clock offset: 0.273 ms
Remote clock offset: -1.266 ms

Below is generated by plot.py at 2017-08-17 01:56:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 144.109 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 144.109 ms
Loss rate: 0.82%
```
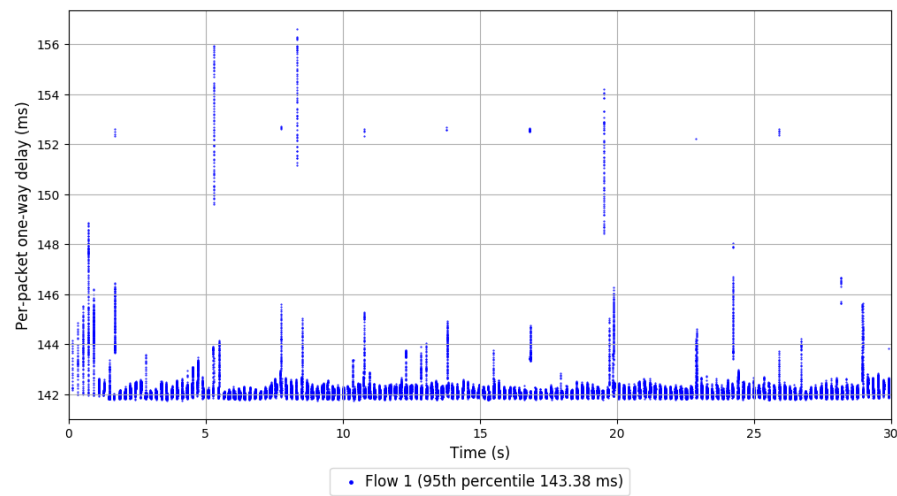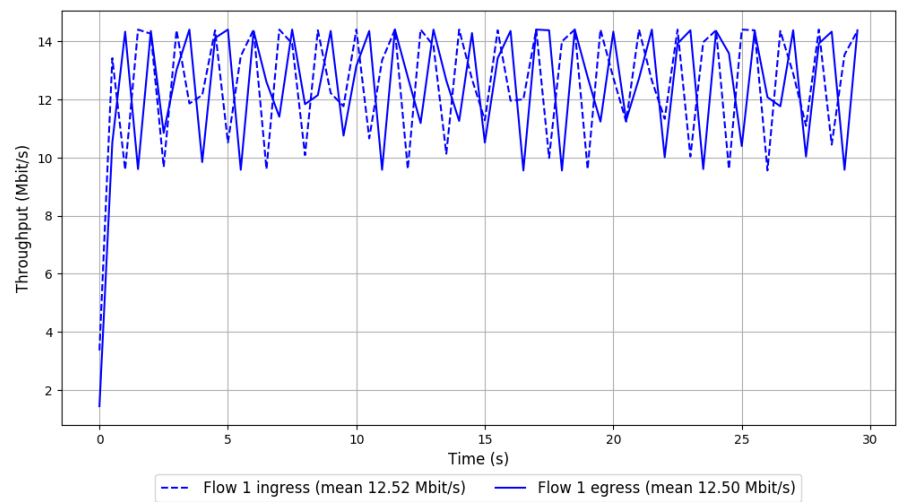
Run 1: Report of Saturator — Data Link

```
Run 2: Statistics of Saturator

Start at: 2017-08-16 19:00:21
End at: 2017-08-16 19:00:51
Local clock offset: 0.339 ms
Remote clock offset: -0.652 ms

Below is generated by plot.py at 2017-08-17 01:56:07
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.50 Mbit/s
95th percentile per-packet one-way delay: 143.382 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 12.50 Mbit/s
95th percentile per-packet one-way delay: 143.382 ms
Loss rate: 0.80%
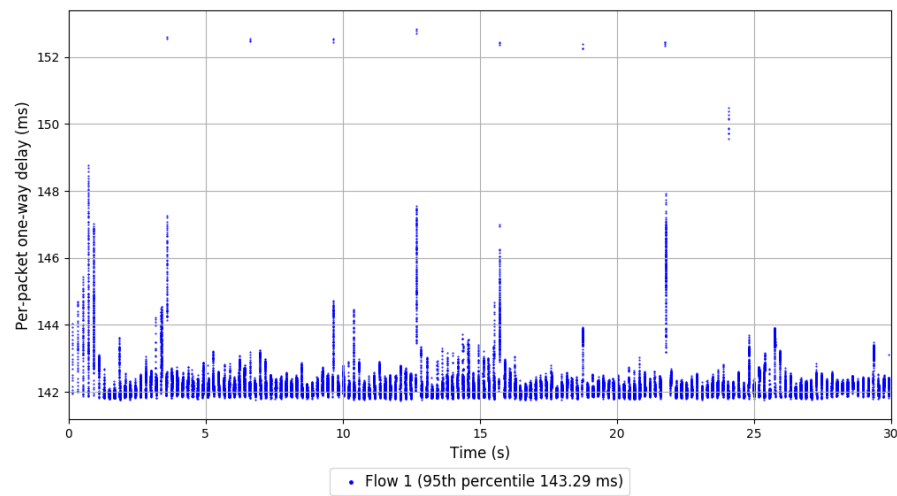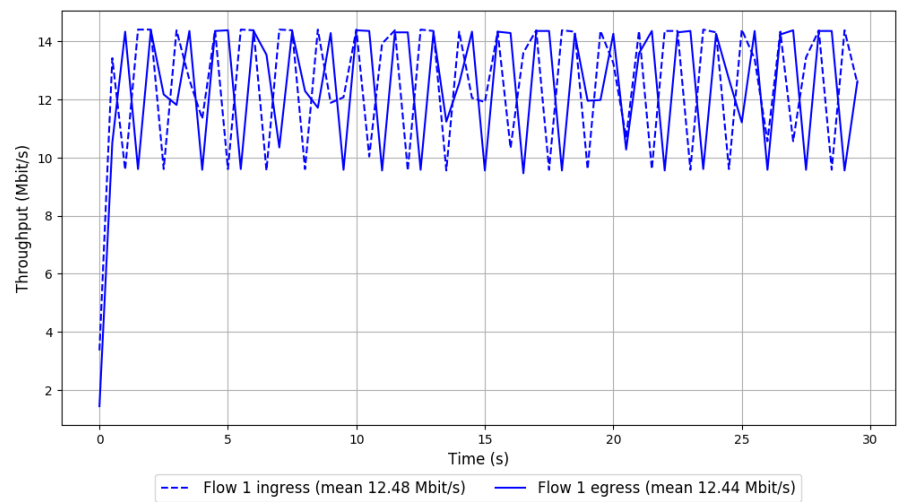```

Run 2: Report of Saturator — Data Link

```
Run 3: Statistics of Saturator

Start at: 2017-08-16 19:21:47
End at: 2017-08-16 19:22:17
Local clock offset: 0.368 ms
Remote clock offset: -0.199 ms


# Below is generated by plot.py at 2017-08-17 01:56:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 143.295 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 143.295 ms
Loss rate: 0.89%
```

Run 3: Report of Saturator — Data Link

Flow 1 ingress (mean 12.48 Mbit/s)　　Flow 1 egress (mean 12.44 Mbit/s)

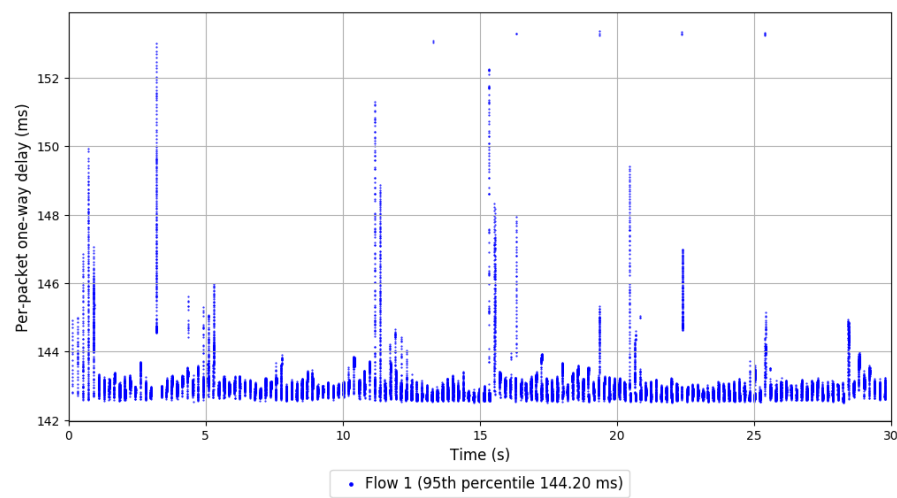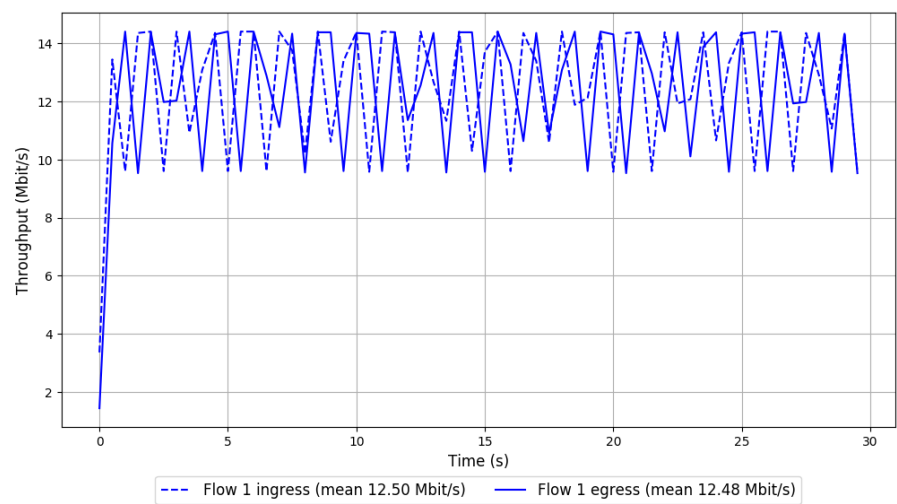

• Flow 1 (95th percentile 143.29 ms)

```
Run 4: Statistics of Saturator

Start at: 2017-08-16 19:43:08
End at: 2017-08-16 19:43:38
Local clock offset: 1.359 ms
Remote clock offset: -0.065 ms


# Below is generated by plot.py at 2017-08-17 01:56:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.48 Mbit/s
95th percentile per-packet one-way delay: 144.199 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 12.48 Mbit/s
95th percentile per-packet one-way delay: 144.199 ms
Loss rate: 0.79%
```
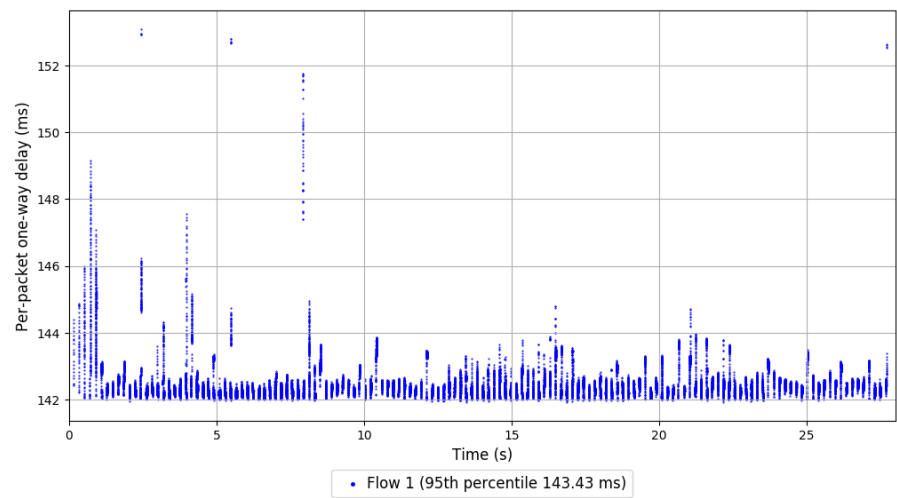
Run 4: Report of Saturator — Data Link

Flow 1 ingress (mean 12.50 Mbit/s) ---- Flow 1 egress (mean 12.48 Mbit/s)

· Flow 1 (95th percentile 144.20 ms)

```
Run 5: Statistics of Saturator

Start at: 2017-08-16 20:04:44
End at: 2017-08-16 20:05:14
Local clock offset: 0.7 ms
Remote clock offset: 0.114 ms


# Below is generated by plot.py at 2017-08-17 01:56:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.46 Mbit/s
95th percentile per-packet one-way delay: 143.425 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 12.46 Mbit/s
95th percentile per-packet one-way delay: 143.425 ms
Loss rate: 0.86%
```
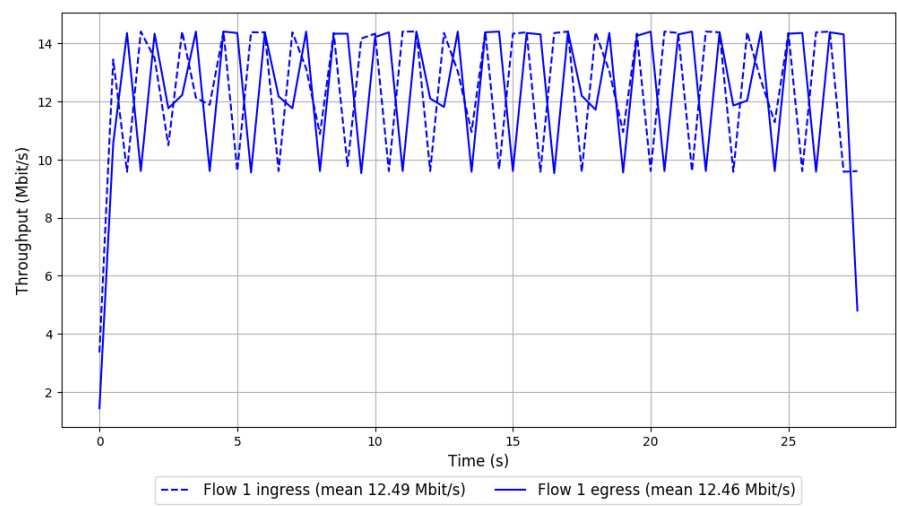
Run 5: Report of Saturator — Data Link

Flow 1 ingress (mean 12.49 Mbit/s) --- Flow 1 egress (mean 12.46 Mbit/s)

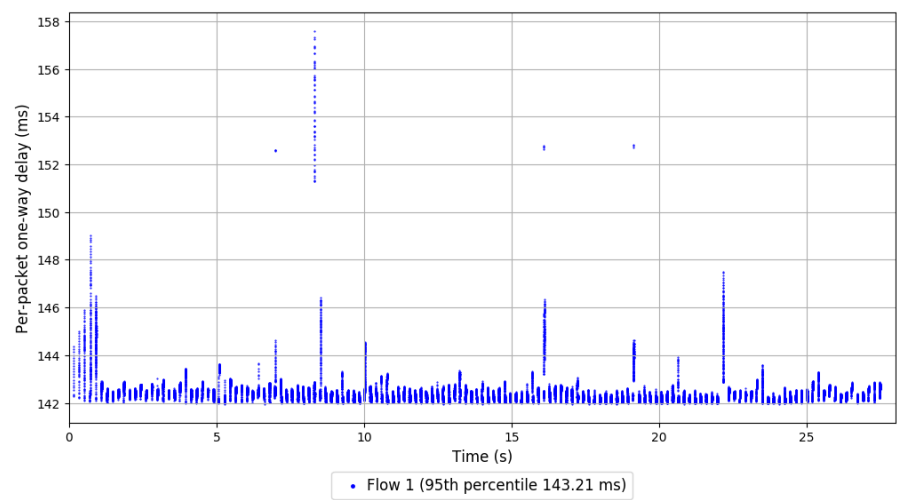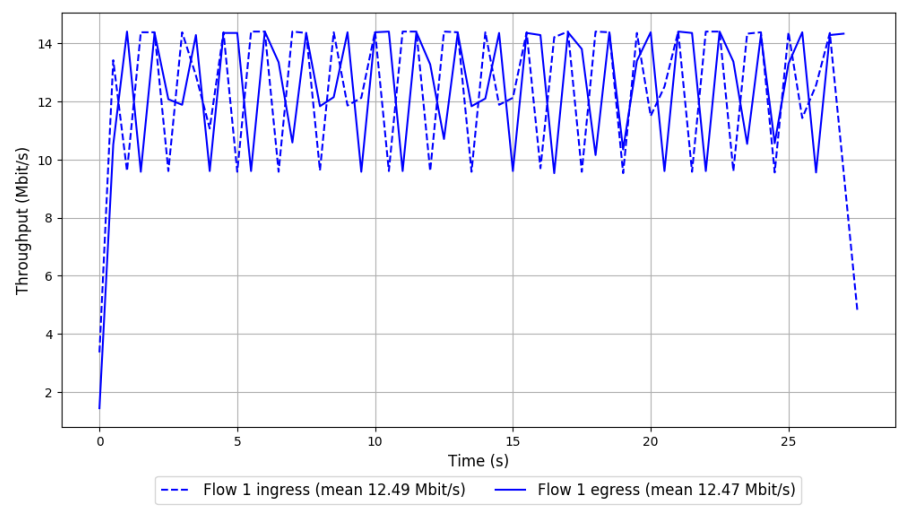
Flow 1 (95th percentile 143.43 ms)

173

```
Run 6: Statistics of Saturator

Start at: 2017-08-16 20:26:18
End at: 2017-08-16 20:26:48
Local clock offset: 0.655 ms
Remote clock offset: -0.015 ms


# Below is generated by plot.py at 2017-08-17 01:56:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 143.213 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 143.213 ms
Loss rate: 0.87%
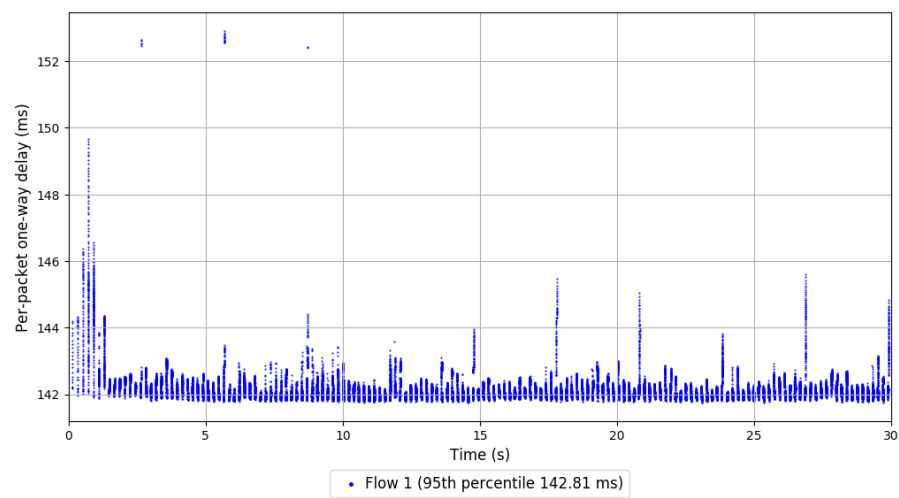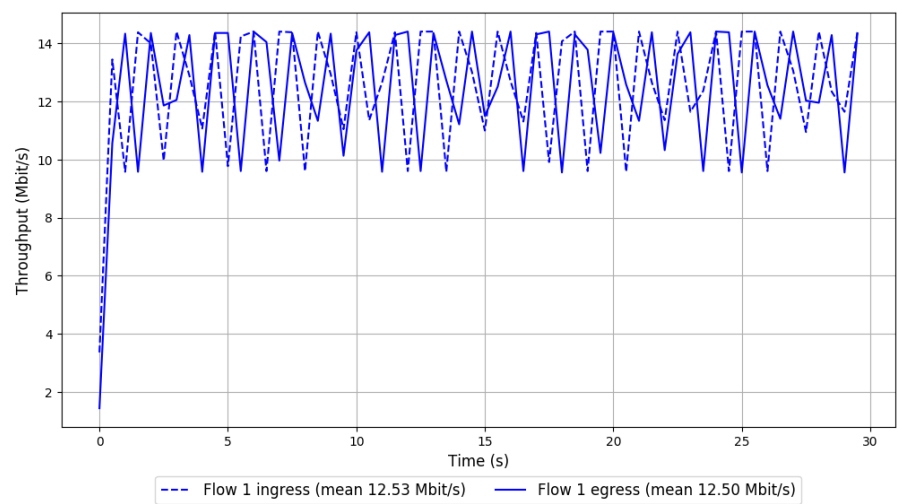```

## Run 6: Report of Saturator — Data Link

```
Run 7: Statistics of Saturator

Start at: 2017-08-16 20:47:53
End at: 2017-08-16 20:48:23
Local clock offset: 0.849 ms
Remote clock offset: -0.031 ms

Below is generated by plot.py at 2017-08-17 01:56:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.50 Mbit/s
95th percentile per-packet one-way delay: 142.807 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 12.50 Mbit/s
95th percentile per-packet one-way delay: 142.807 ms
Loss rate: 0.83%
```
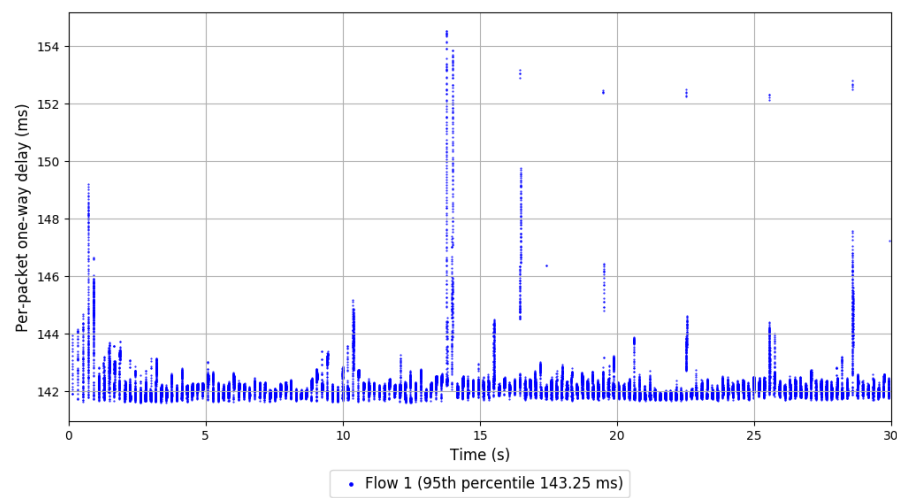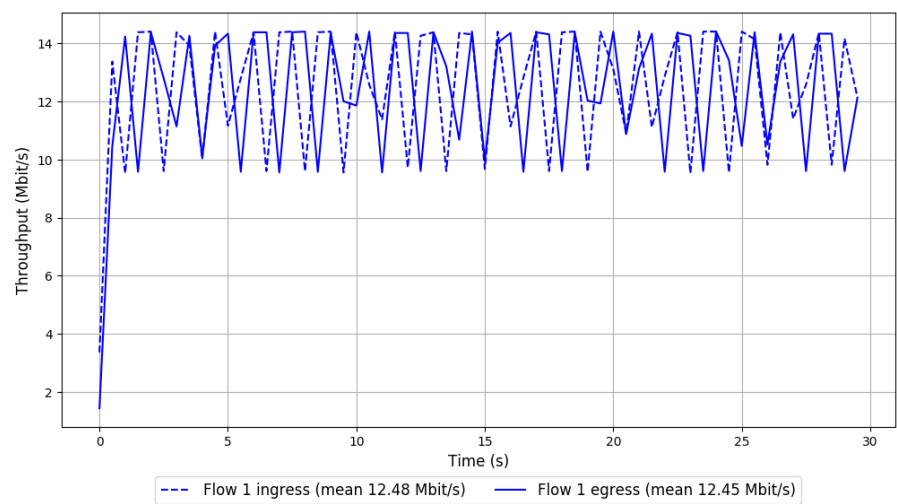
Run 7: Report of Saturator — Data Link



Flow 1 ingress (mean 12.53 Mbit/s)    Flow 1 egress (mean 12.50 Mbit/s)



Flow 1 (95th percentile 142.81 ms)

```
Run 8: Statistics of Saturator

Start at: 2017-08-16 21:09:00
End at: 2017-08-16 21:09:30
Local clock offset: 0.392 ms
Remote clock offset: -0.18 ms

Below is generated by plot.py at 2017-08-17 01:56:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.45 Mbit/s
95th percentile per-packet one-way delay: 143.254 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 12.45 Mbit/s
95th percentile per-packet one-way delay: 143.254 ms
Loss rate: 0.82%
```
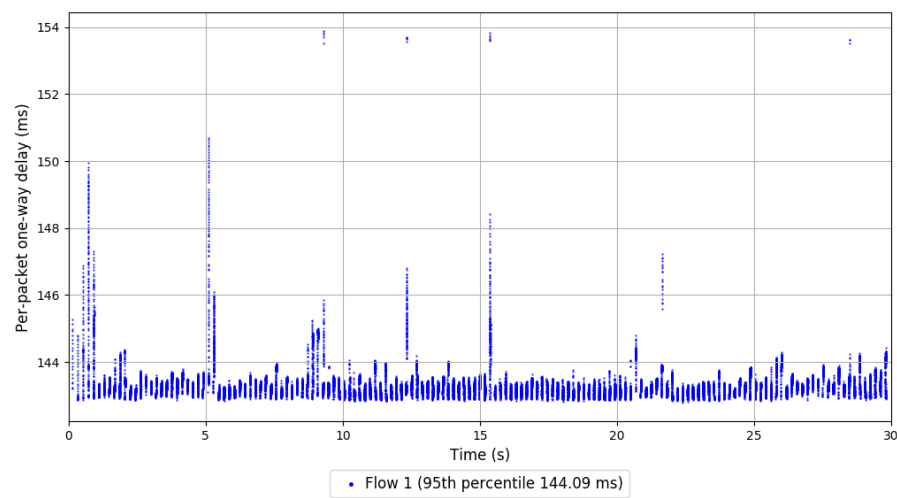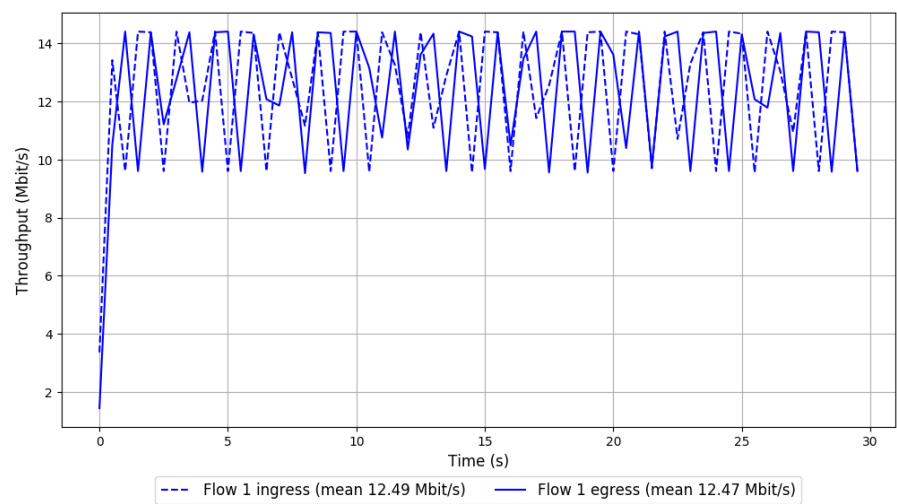
Run 8: Report of Saturator — Data Link

```
Run 9: Statistics of Saturator

Start at: 2017-08-16 21:29:20
End at: 2017-08-16 21:29:50
Local clock offset: 1.114 ms
Remote clock offset: -0.429 ms

Below is generated by plot.py at 2017-08-17 01:56:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 144.088 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 144.088 ms
Loss rate: 0.75%
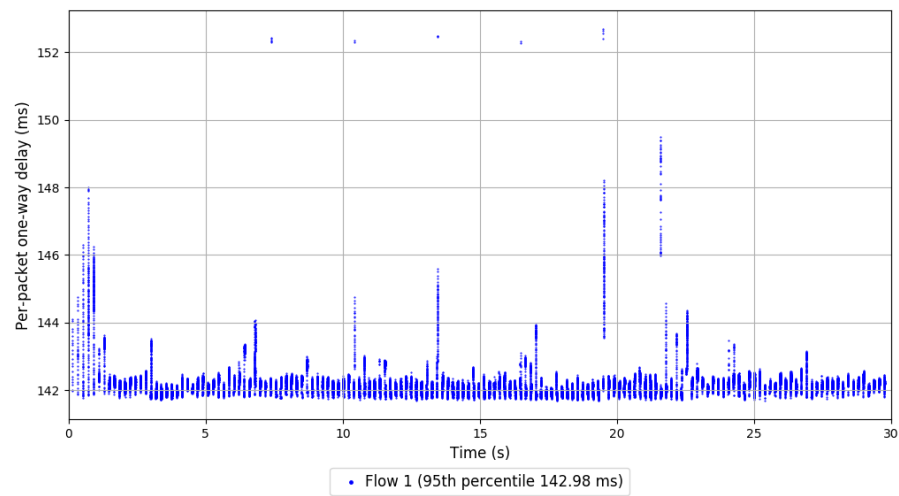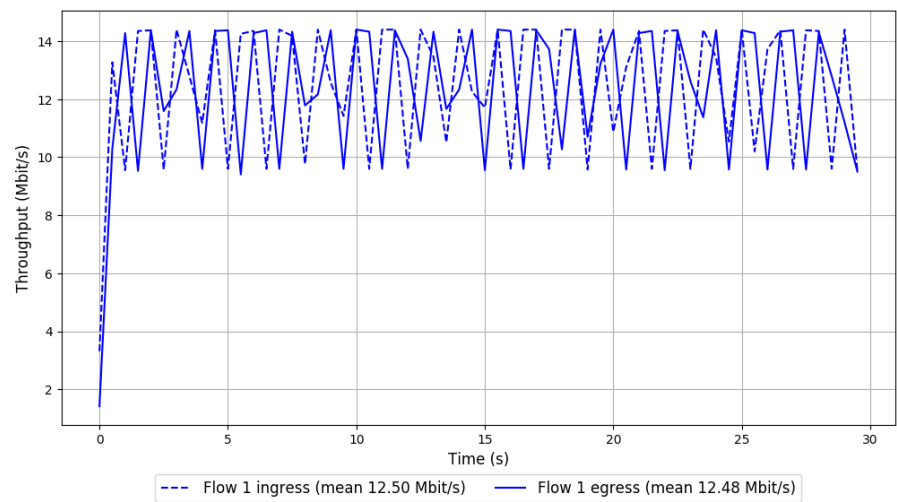```

Run 9: Report of Saturator — Data Link

```
Run 10: Statistics of Saturator

Start at: 2017-08-16 21:51:14
End at: 2017-08-16 21:51:44
Local clock offset: 0.26 ms
Remote clock offset: -0.384 ms


# Below is generated by plot.py at 2017-08-17 01:56:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.48 Mbit/s
95th percentile per-packet one-way delay: 142.976 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 12.48 Mbit/s
95th percentile per-packet one-way delay: 142.976 ms
Loss rate: 0.81%
```
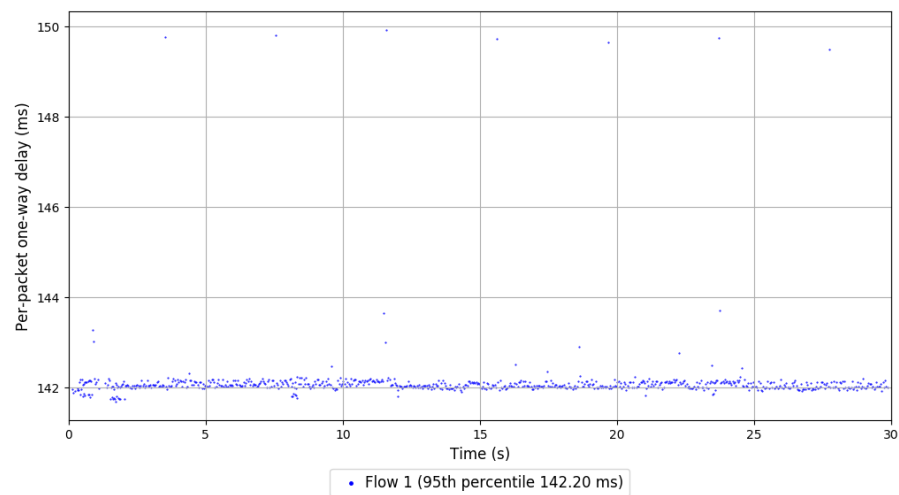
Run 10: Report of Saturator — Data Link

Flow 1 ingress (mean 12.50 Mbit/s) --- Flow 1 egress (mean 12.48 Mbit/s)

Flow 1 (95th percentile 142.98 ms)

```
Run 1: Statistics of SCReAM

Start at: 2017-08-16 18:41:44
End at: 2017-08-16 18:42:14
Local clock offset: 0.39 ms
Remote clock offset: -1.22 ms

# Below is generated by plot.py at 2017-08-17 01:56:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.200 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.200 ms
Loss rate: 0.64%
```
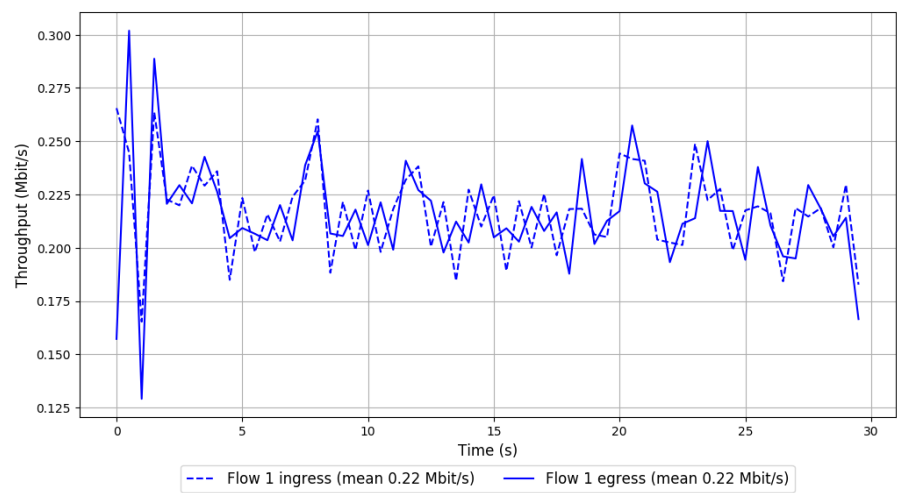
Run 1: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s)   Flow 1 egress (mean 0.22 Mbit/s)

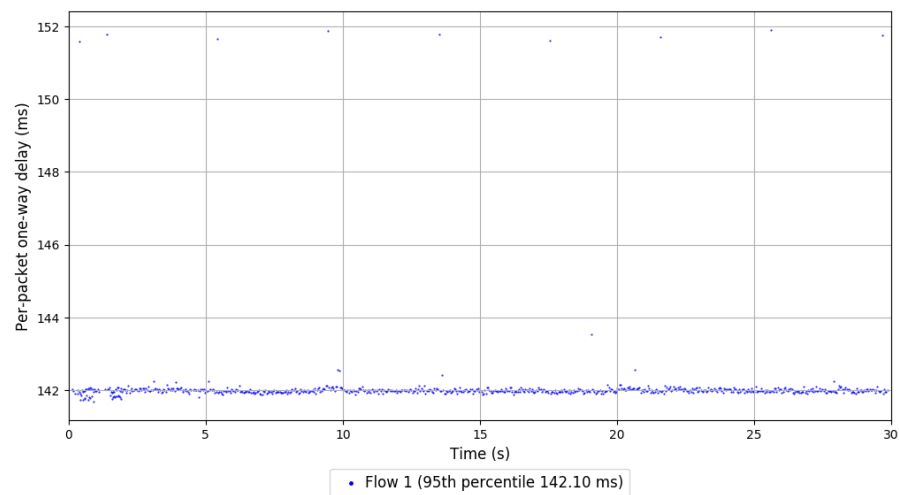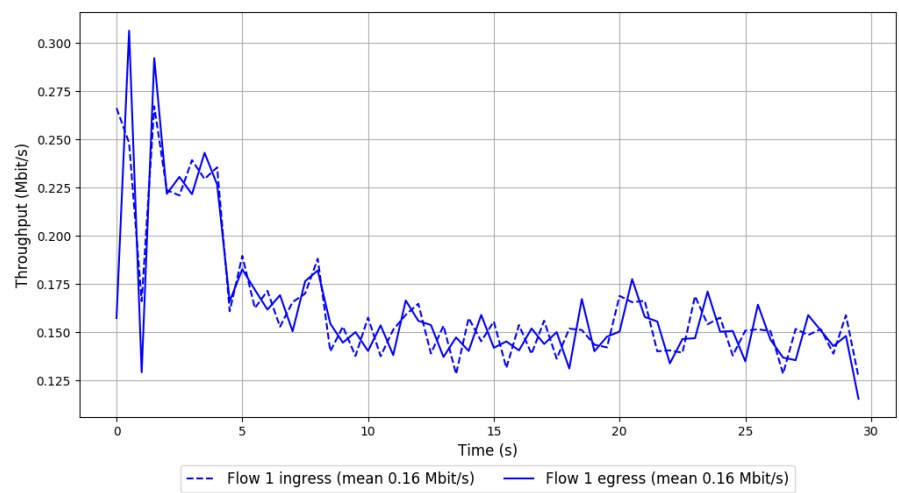Flow 1 (95th percentile 142.20 ms)

```
Run 2: Statistics of SCReAM

Start at: 2017-08-16 19:03:06
End at: 2017-08-16 19:03:36
Local clock offset: 0.304 ms
Remote clock offset: -0.534 ms


# Below is generated by plot.py at 2017-08-17 01:56:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 142.096 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 142.096 ms
Loss rate: 0.76%
```
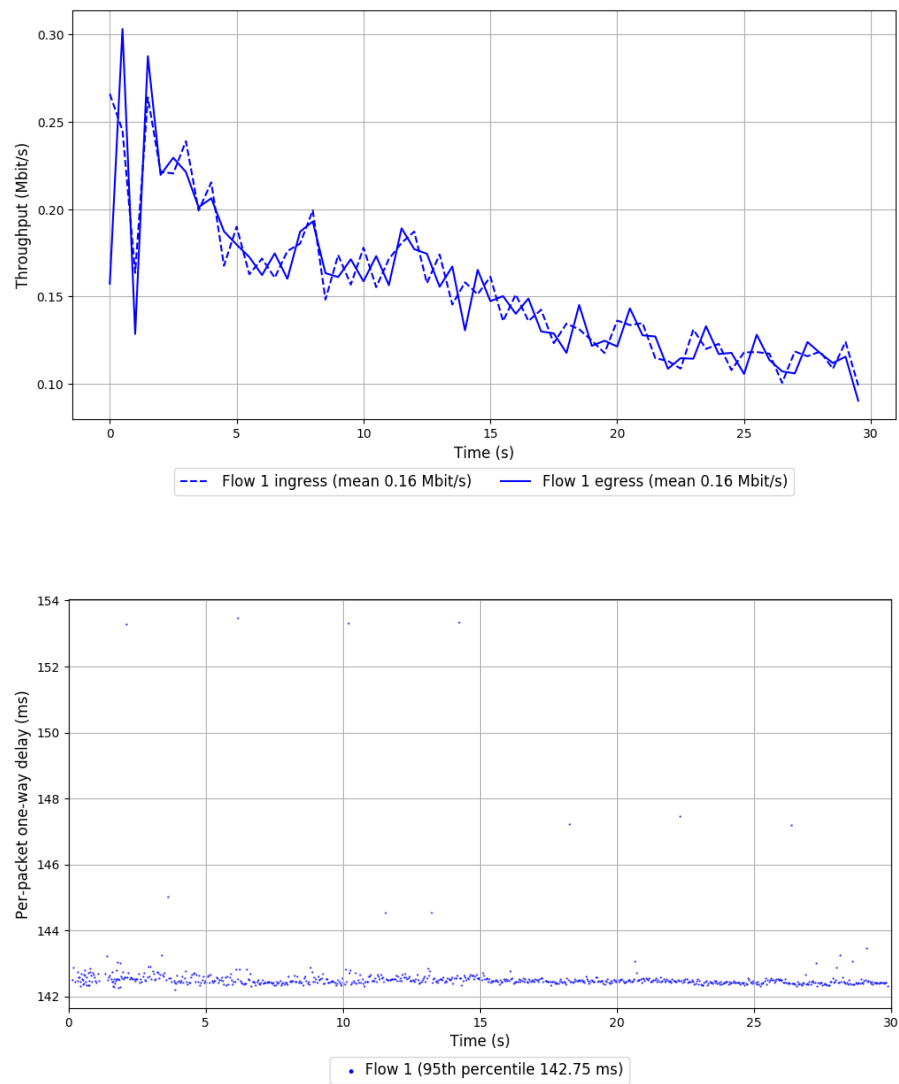
Run 2: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.16 Mbit/s)   Flow 1 egress (mean 0.16 Mbit/s)
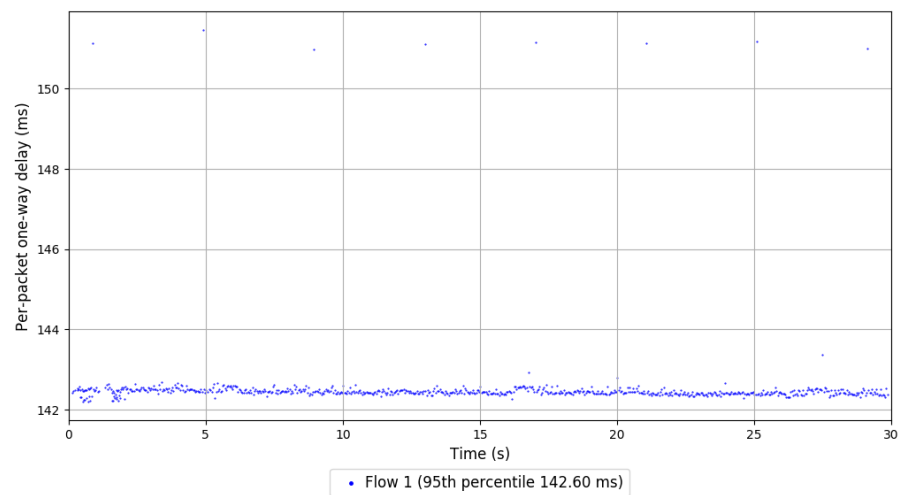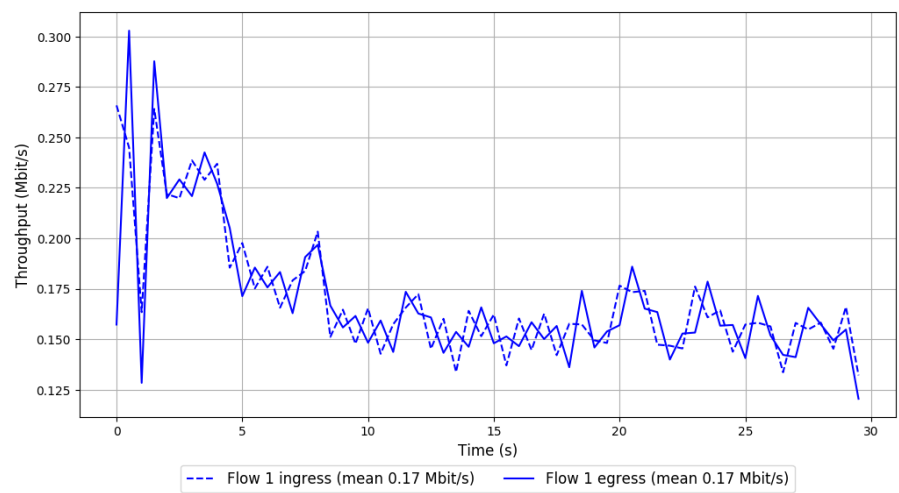

Flow 1 (95th percentile 142.10 ms)

```
Run 3: Statistics of SCReAM

Start at: 2017-08-16 19:24:34
End at: 2017-08-16 19:25:04
Local clock offset: 0.629 ms
Remote clock offset: -0.2 ms


# Below is generated by plot.py at 2017-08-17 01:56:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 142.752 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 142.752 ms
Loss rate: 0.92%
```

Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2017-08-16 19:46:15
End at: 2017-08-16 19:46:45
Local clock offset: 0.764 ms
Remote clock offset: -0.074 ms


# Below is generated by plot.py at 2017-08-17 01:56:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 142.599 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 142.599 ms
Loss rate: 0.76%
```

Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2017-08-16 20:07:22
End at: 2017-08-16 20:07:52
Local clock offset: 0.645 ms
Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2017-08-17 01:56:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.000 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.000 ms
Loss rate: 0.64%
```
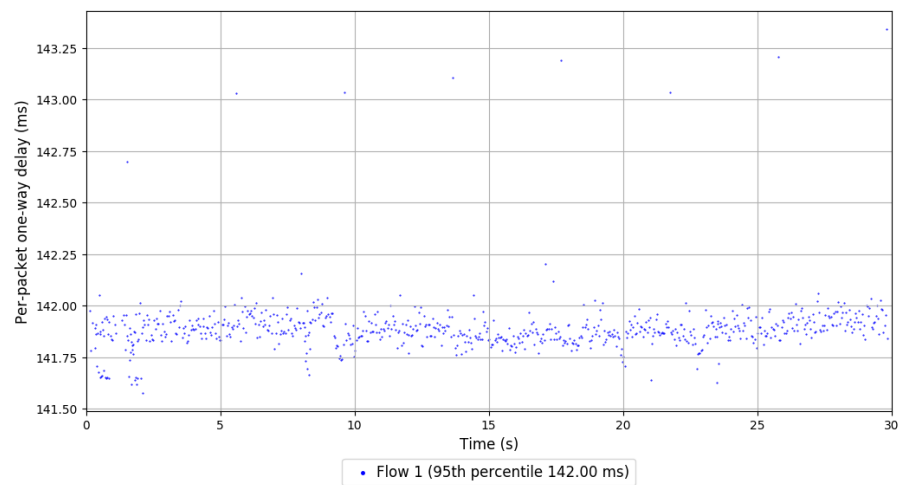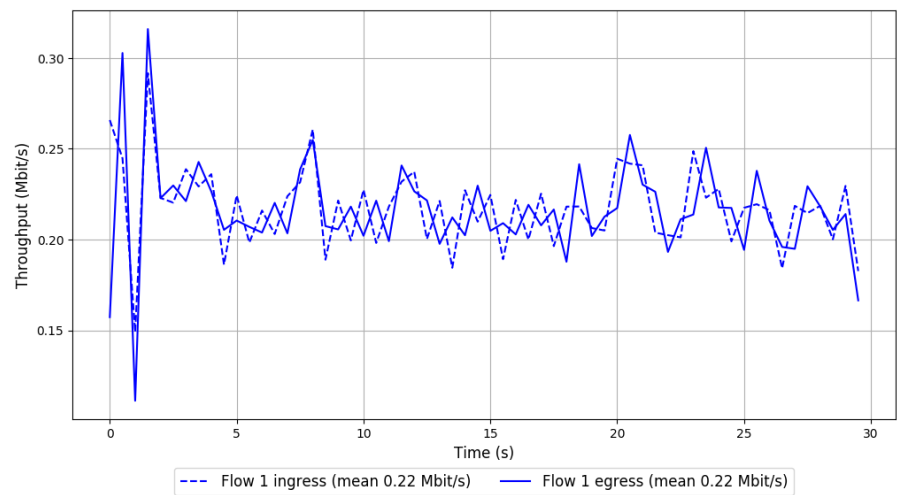
Run 5: Report of SCReAM — Data Link
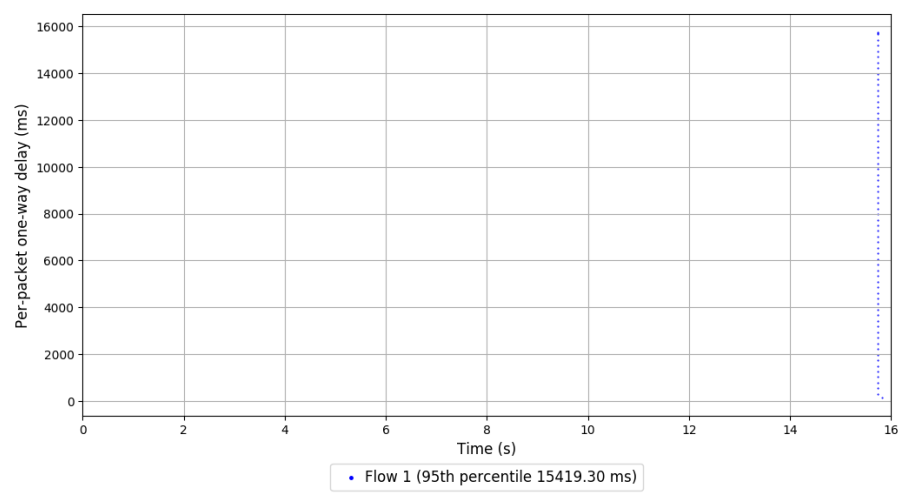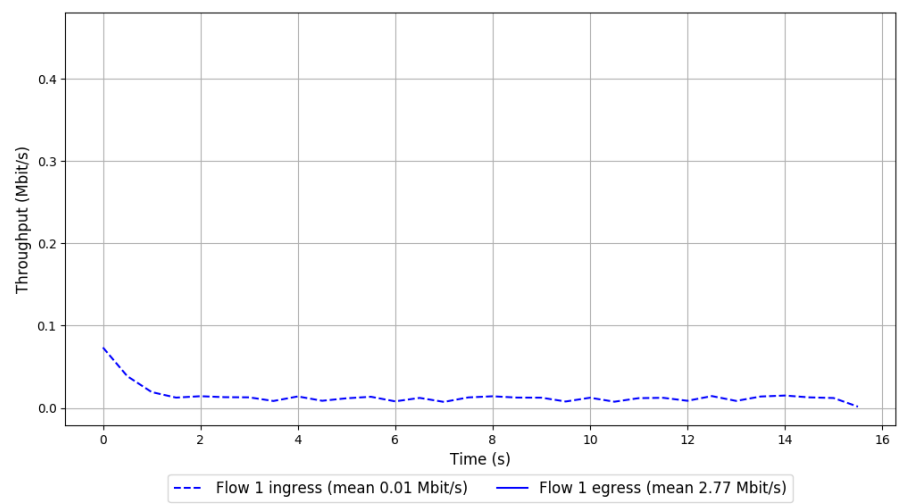
```
Run 6: Statistics of SCReAM

Start at: 2017-08-16 20:29:02
End at: 2017-08-16 20:29:32
Local clock offset: 0.617 ms
Remote clock offset: -0.0 ms
```
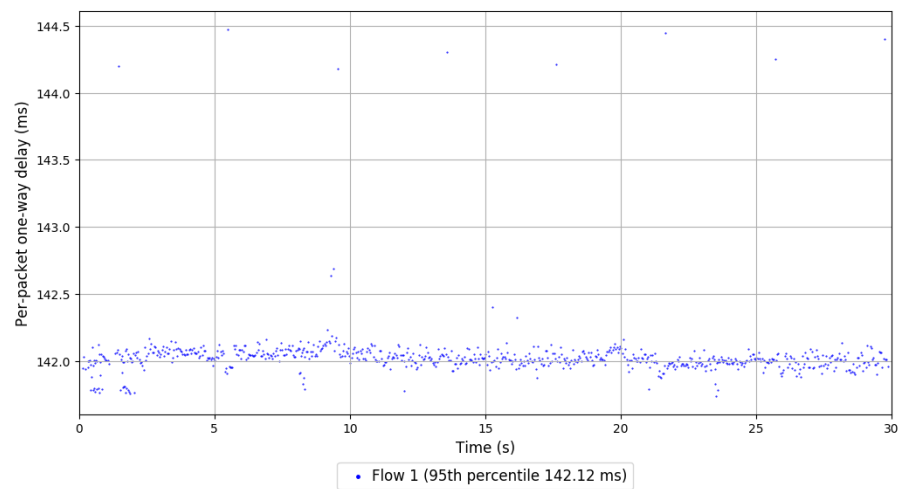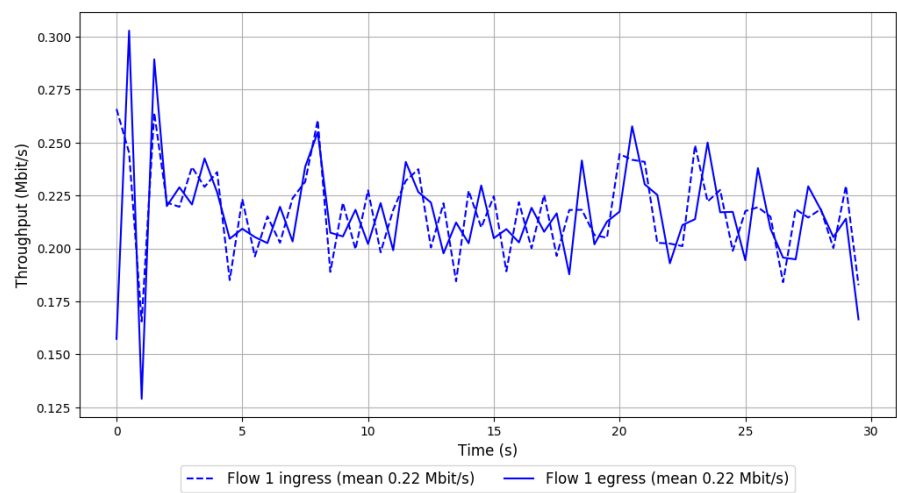
Run 6: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.01 Mbit/s)   Flow 1 egress (mean 2.77 Mbit/s)

Flow 1 (95th percentile 15419.30 ms)

```
Run 7: Statistics of SCReAM

Start at: 2017-08-16 20:50:46
End at: 2017-08-16 20:51:16
Local clock offset: 0.687 ms
Remote clock offset: -0.024 ms


# Below is generated by plot.py at 2017-08-17 01:56:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.124 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.124 ms
Loss rate: 0.64%
```

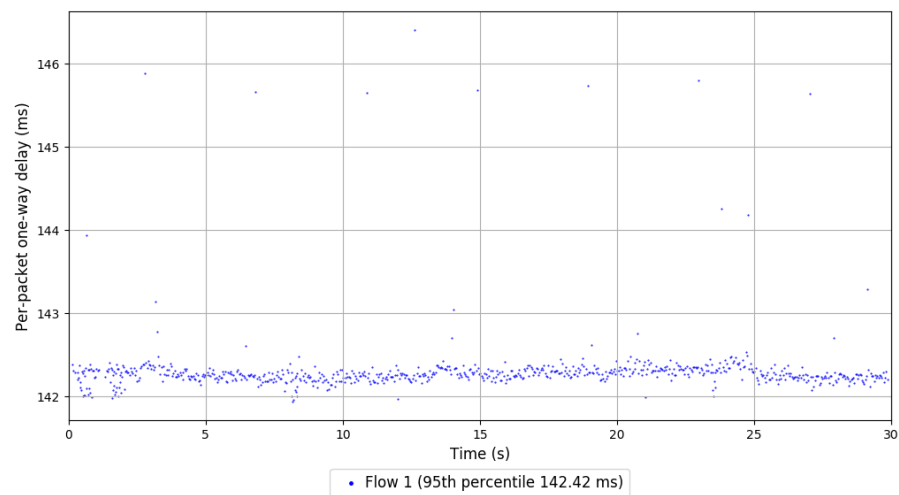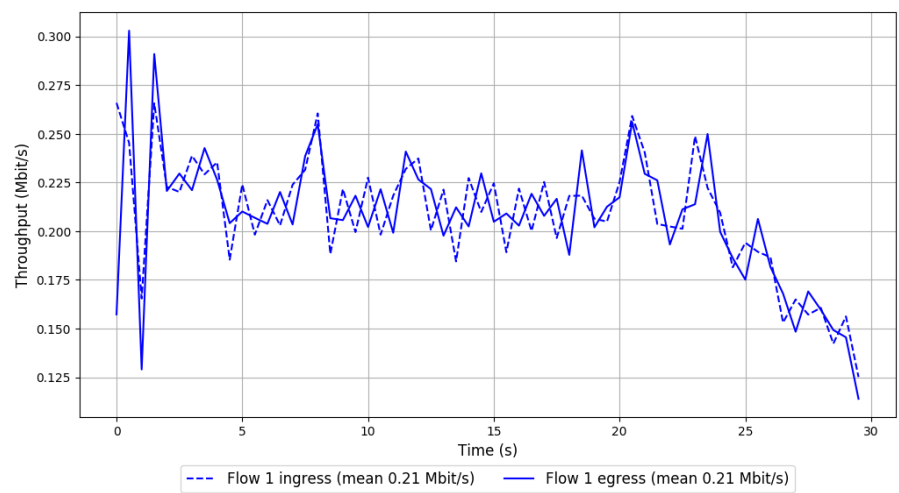## Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2017-08-16 21:11:32
End at: 2017-08-16 21:12:02
Local clock offset: 0.389 ms
Remote clock offset: -0.227 ms


# Below is generated by plot.py at 2017-08-17 01:56:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 142.424 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 142.424 ms
Loss rate: 0.60%
```

Run 8: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.21 Mbit/s)   Flow 1 egress (mean 0.21 Mbit/s)

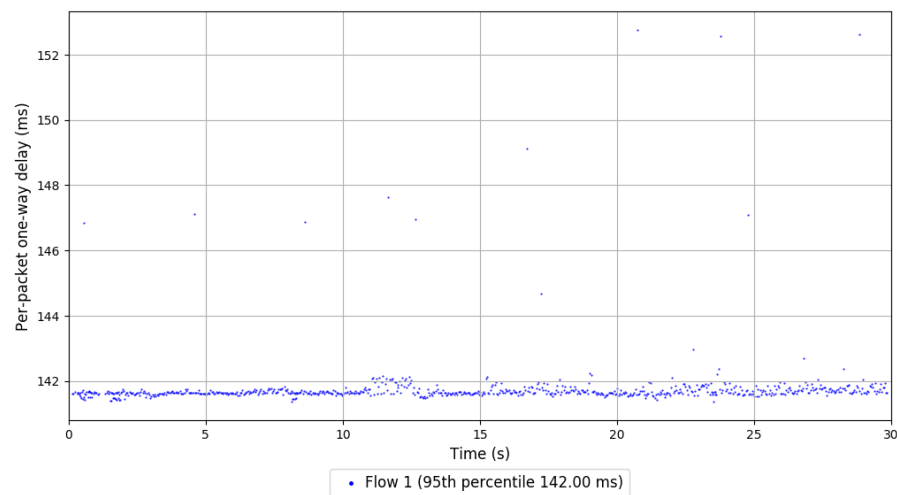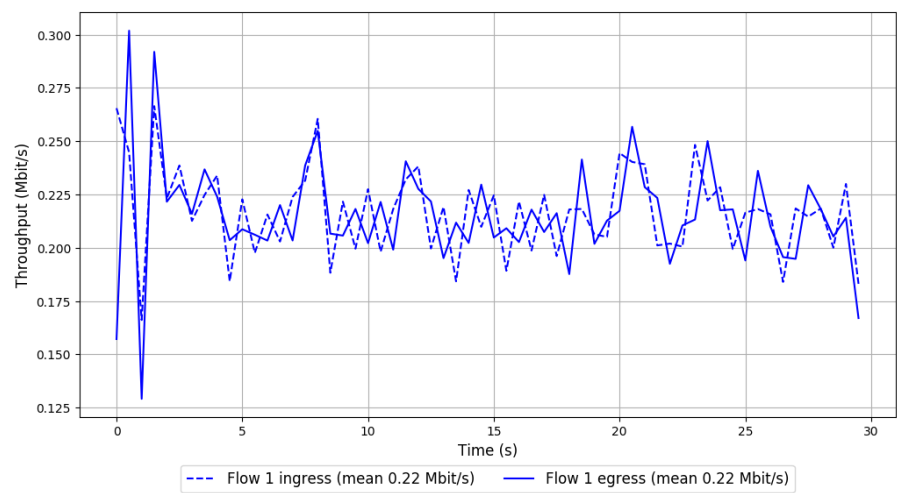Flow 1 (95th percentile 142.42 ms)

```
Run 9: Statistics of SCReAM

Start at: 2017-08-16 21:32:18
End at: 2017-08-16 21:32:48
Local clock offset: 0.275 ms
Remote clock offset: -0.469 ms


# Below is generated by plot.py at 2017-08-17 01:56:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.000 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.000 ms
Loss rate: 0.64%
```

Run 9: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.22 Mbit/s)   Flow 1 egress (mean 0.22 Mbit/s)

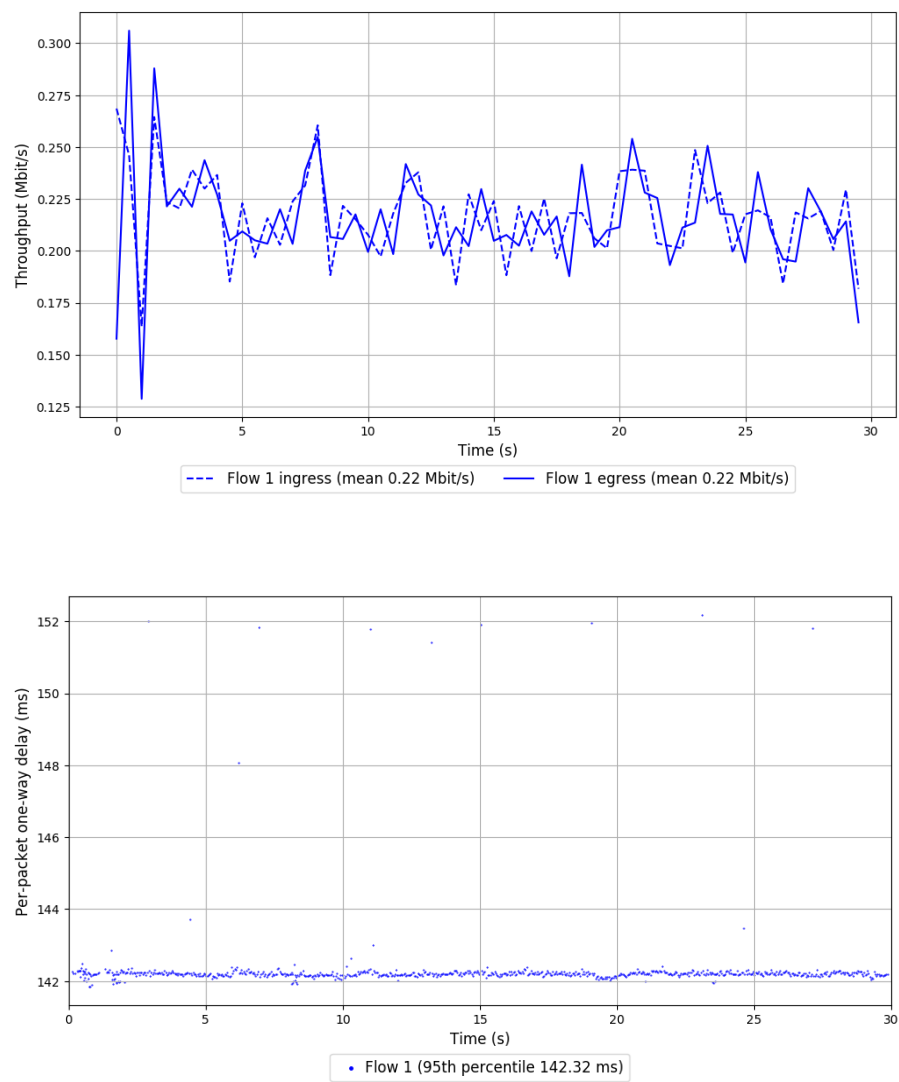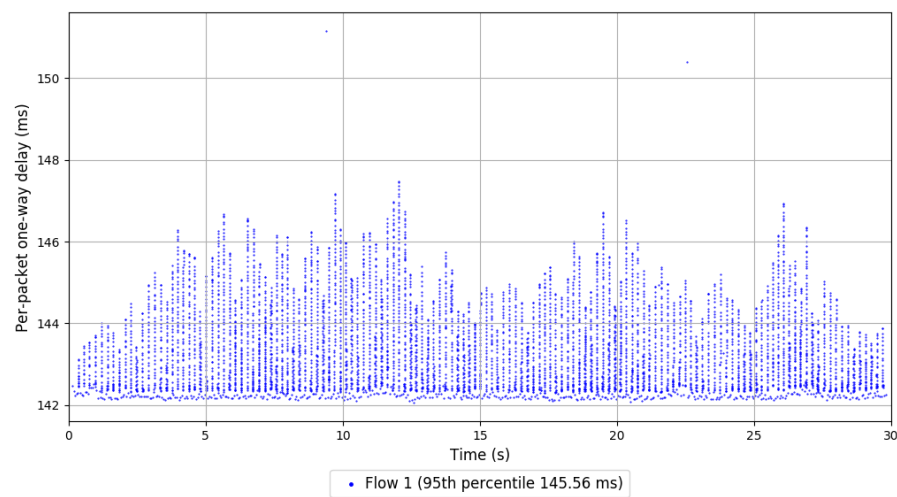Flow 1 (95th percentile 142.00 ms)

```
Run 10: Statistics of SCReAM

Start at: 2017-08-16 21:54:02
End at: 2017-08-16 21:54:32
Local clock offset: 0.214 ms
Remote clock offset: -0.435 ms


# Below is generated by plot.py at 2017-08-17 01:56:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.319 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 142.319 ms
Loss rate: 0.64%
```

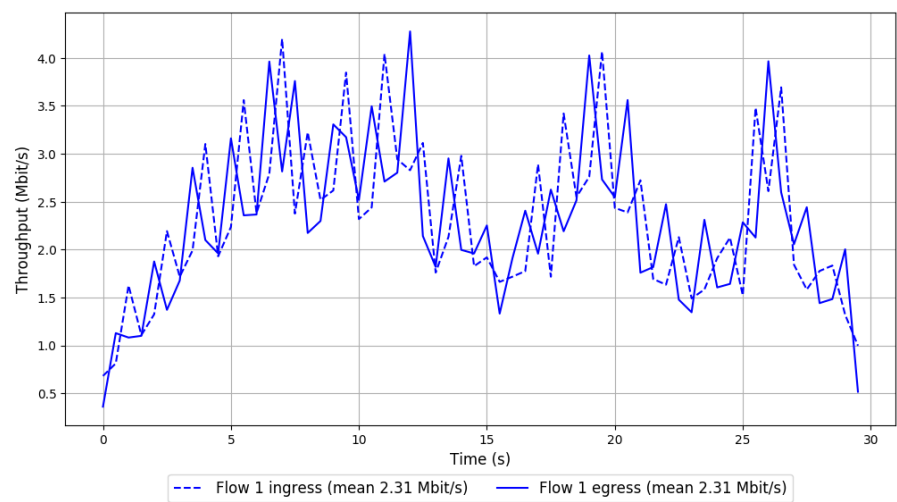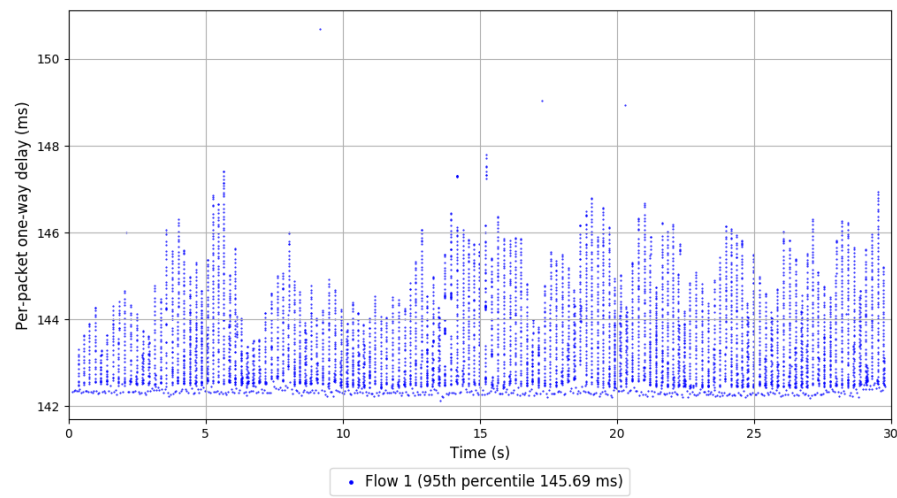## Run 10: Report of SCReAM — Data Link

```
Run 1: Statistics of Sprout

Start at: 2017-08-16 18:32:18
End at: 2017-08-16 18:32:48
Local clock offset: 0.186 ms
Remote clock offset: -1.436 ms


# Below is generated by plot.py at 2017-08-17 01:56:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 145.562 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 145.562 ms
Loss rate: 0.66%
```

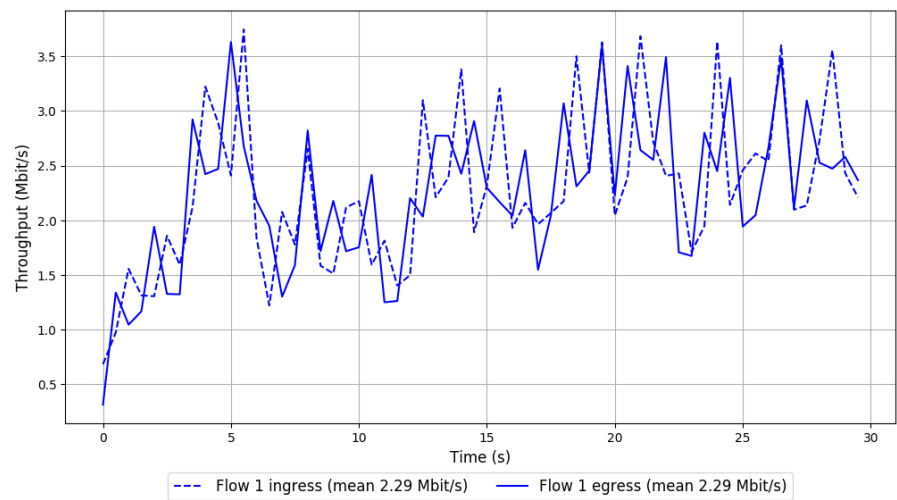Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-08-16 18:53:47
End at: 2017-08-16 18:54:17
Local clock offset: 0.493 ms
Remote clock offset: -0.843 ms


# Below is generated by plot.py at 2017-08-17 01:56:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 145.693 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 145.693 ms
Loss rate: 0.91%
```

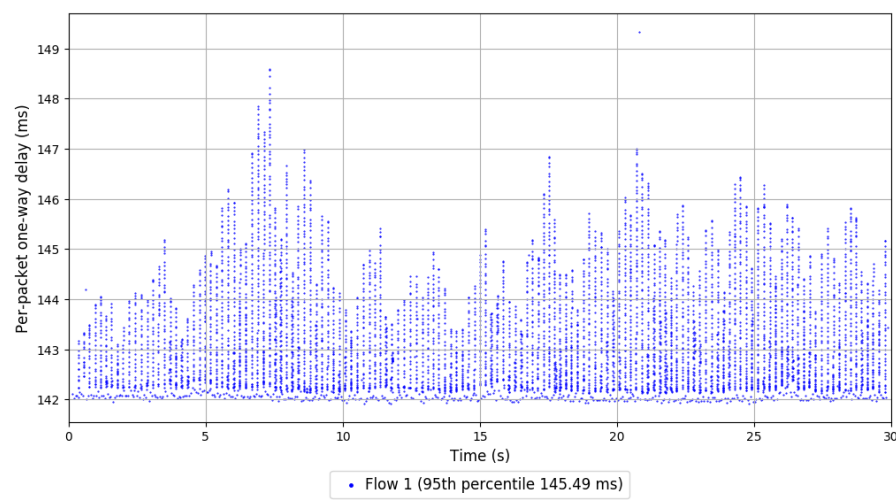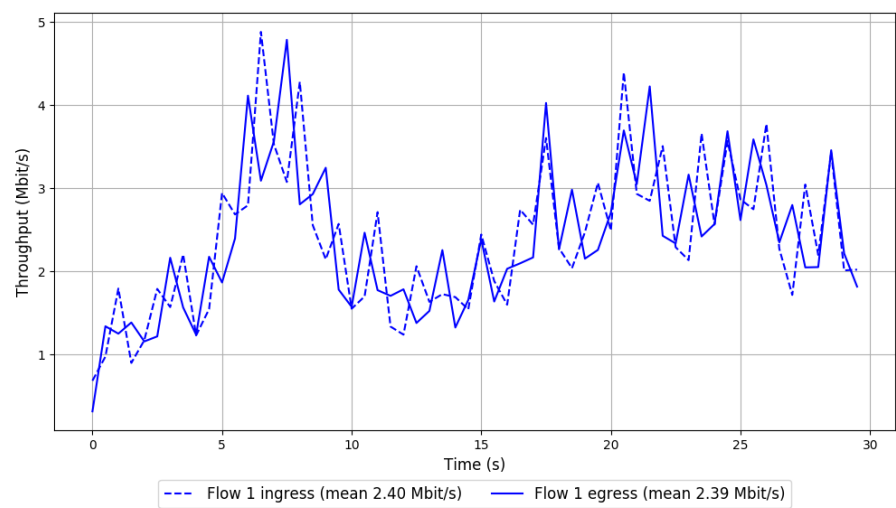Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-08-16 19:14:49
End at: 2017-08-16 19:15:19
Local clock offset: 0.601 ms
Remote clock offset: -0.225 ms


# Below is generated by plot.py at 2017-08-17 01:56:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 145.494 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 145.494 ms
Loss rate: 1.10%
```

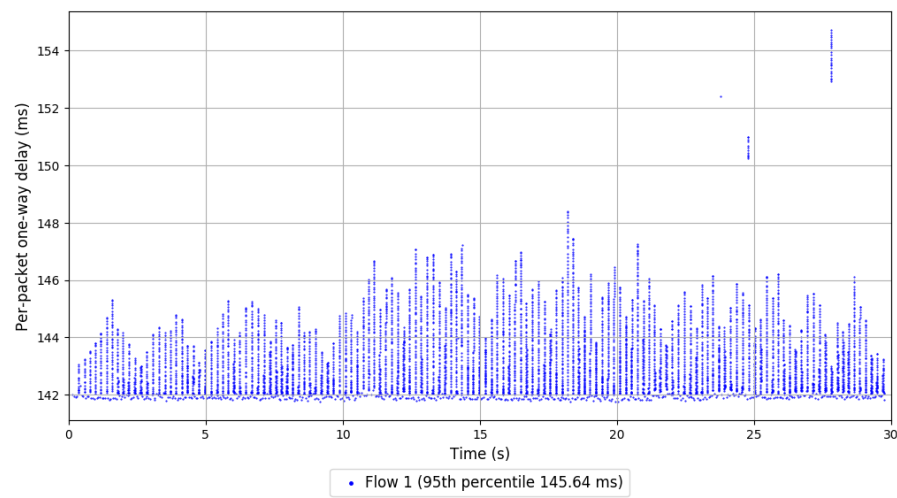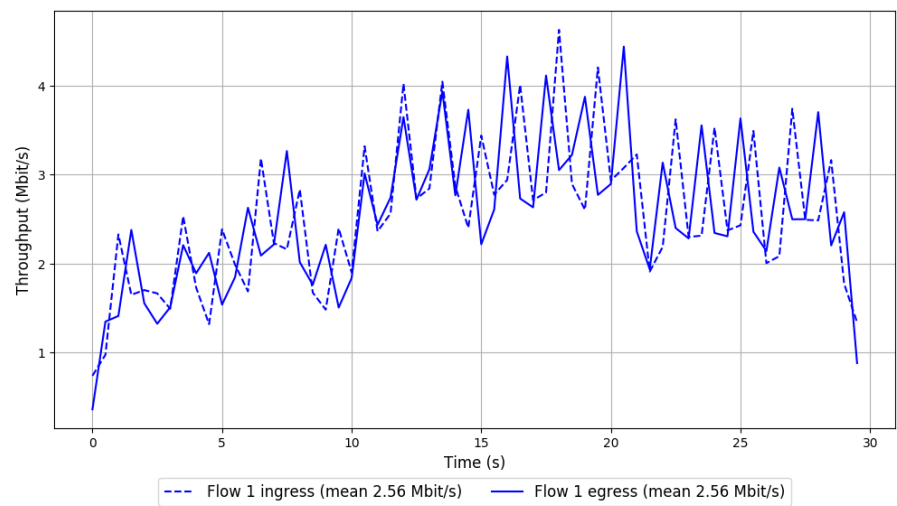Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2017-08-16 19:36:21
End at: 2017-08-16 19:36:51
Local clock offset: 0.699 ms
Remote clock offset: -0.096 ms


# Below is generated by plot.py at 2017-08-17 01:56:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 145.639 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 145.639 ms
Loss rate: 0.55%
```

Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2017-08-16 19:57:58
End at: 2017-08-16 19:58:28
Local clock offset: 0.696 ms
Remote clock offset: 0.087 ms


# Below is generated by plot.py at 2017-08-17 01:56:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 145.429 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 145.429 ms
Loss rate: 0.64%
```
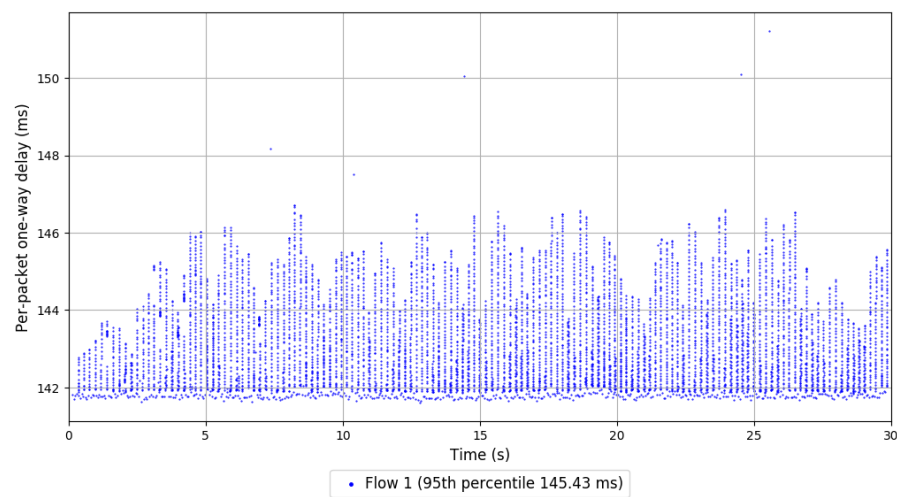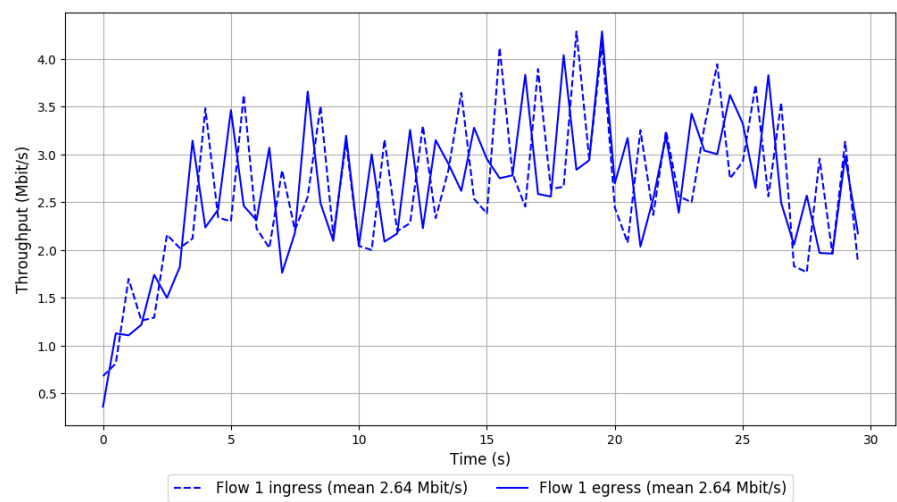
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2017-08-16 20:19:28
End at: 2017-08-16 20:19:58
Local clock offset: 0.703 ms
Remote clock offset: 0.049 ms


# Below is generated by plot.py at 2017-08-17 01:56:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 145.160 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 145.160 ms
Loss rate: 1.02%
```
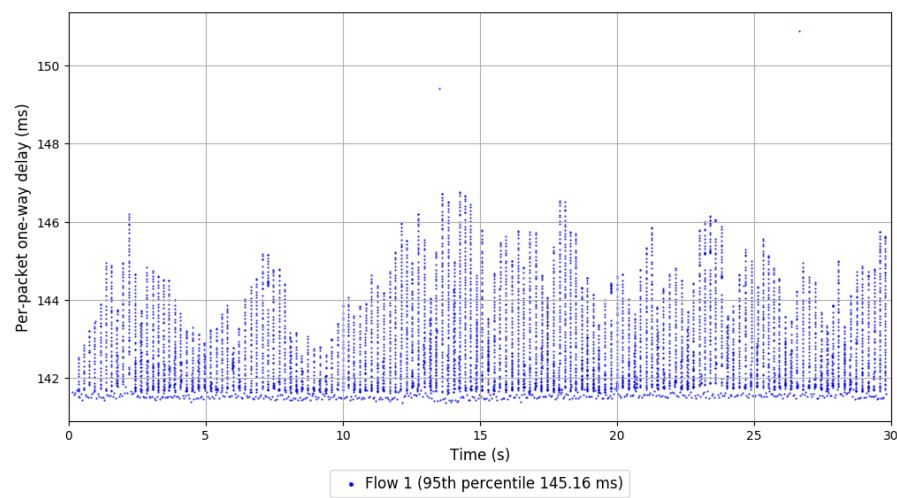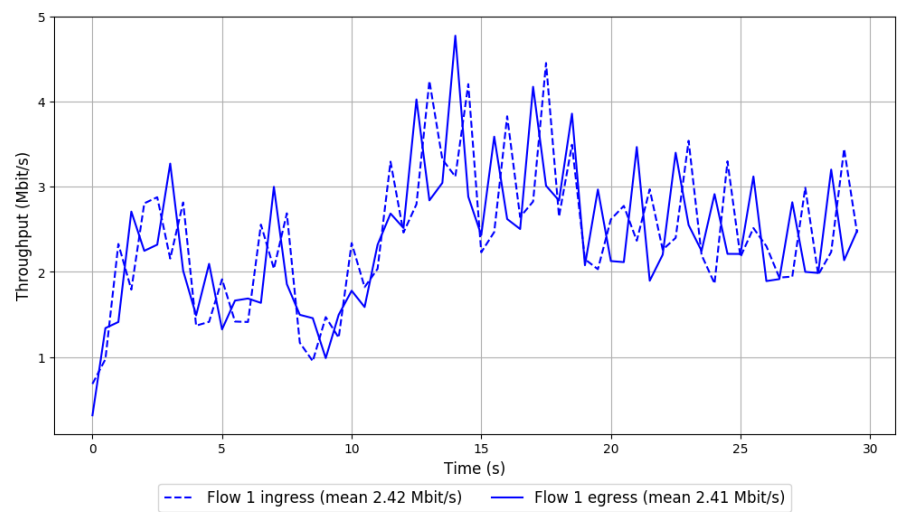
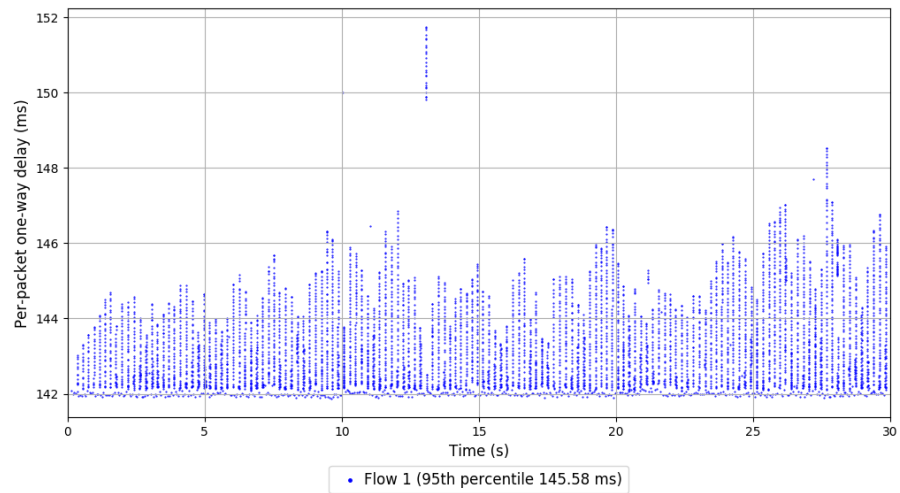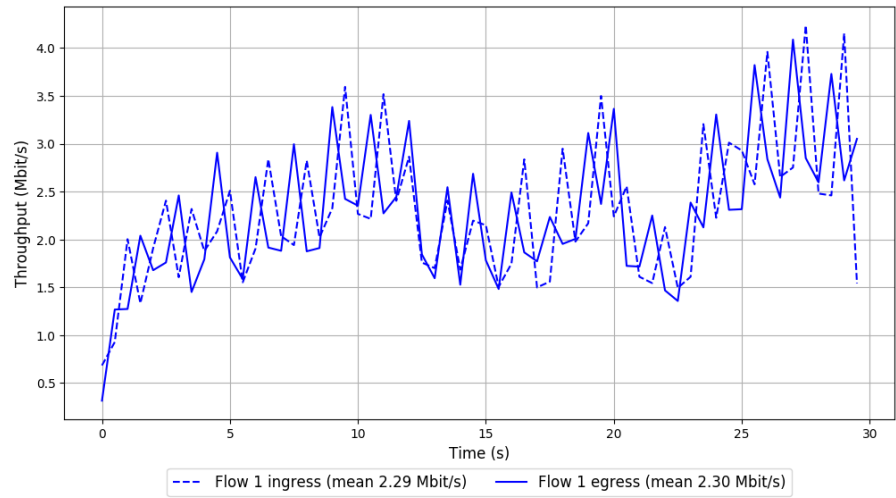Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2017-08-16 20:41:03
End at: 2017-08-16 20:41:33
Local clock offset: 0.518 ms
Remote clock offset: -0.04 ms


# Below is generated by plot.py at 2017-08-17 01:56:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 145.576 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 145.576 ms
Loss rate: 0.26%
```

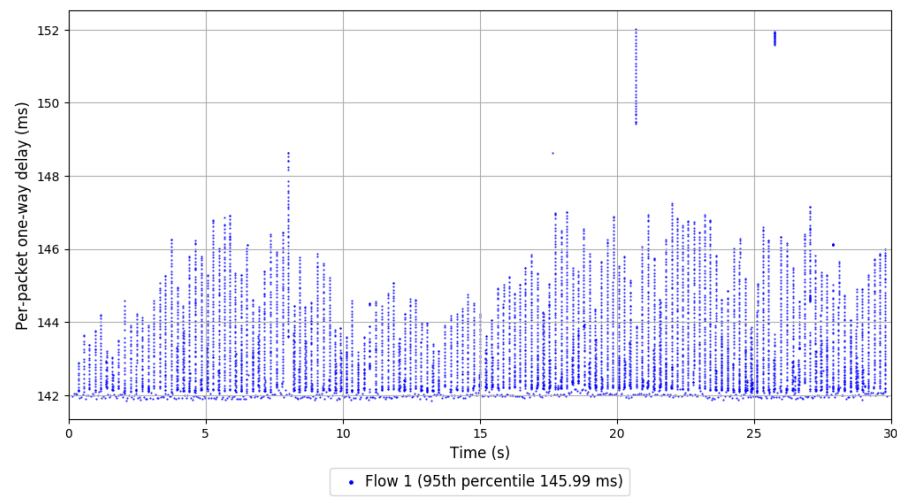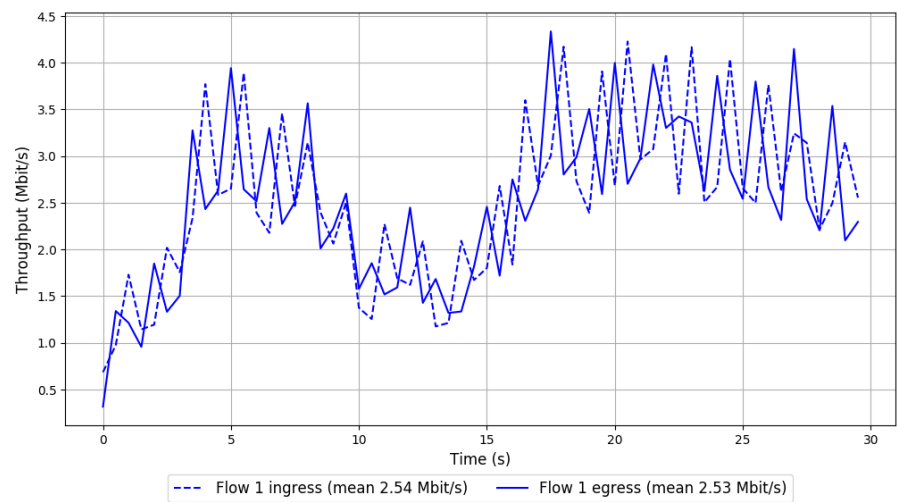Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2017-08-16 21:02:34
End at: 2017-08-16 21:03:04
Local clock offset: 0.469 ms
Remote clock offset: -0.103 ms


# Below is generated by plot.py at 2017-08-17 01:56:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 145.992 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 145.992 ms
Loss rate: 1.07%
```

Run 8: Report of Sprout — Data Link

Flow 1 ingress (mean 2.54 Mbit/s) ----- Flow 1 egress (mean 2.53 Mbit/s)

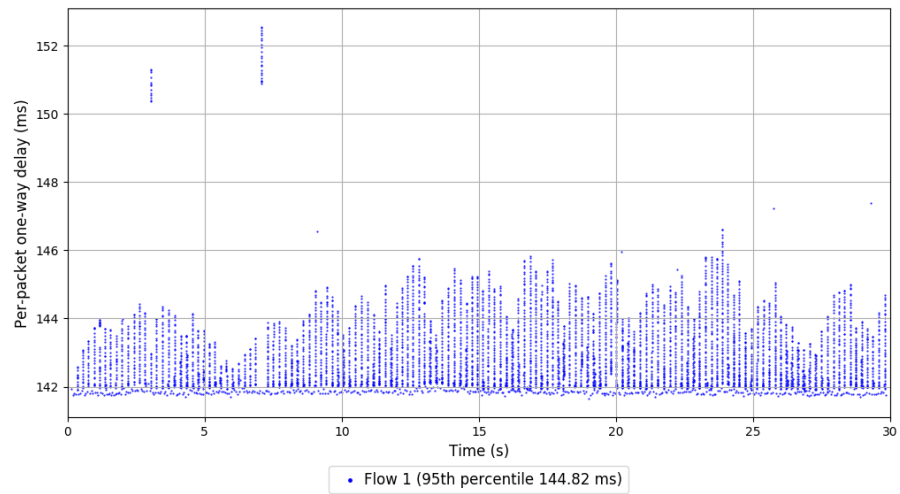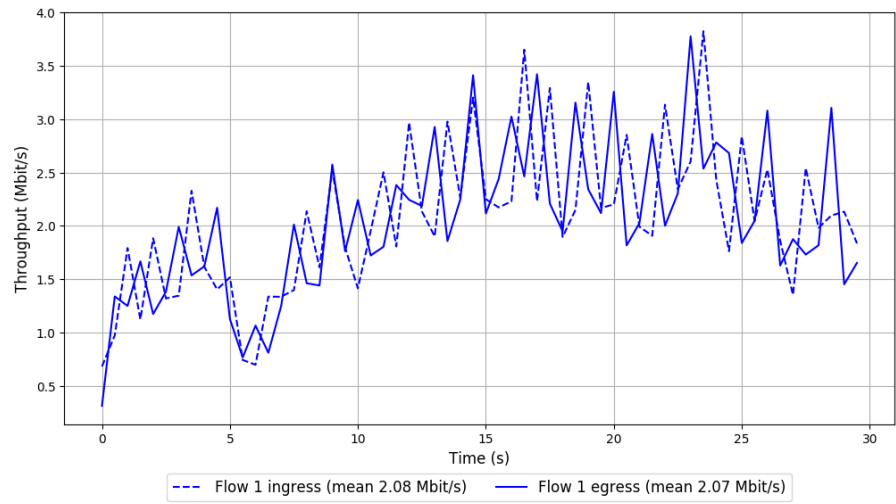Flow 1 (95th percentile 145.99 ms)

```
Run 9: Statistics of Sprout

Start at: 2017-08-16 21:22:42
End at: 2017-08-16 21:23:12
Local clock offset: 0.315 ms
Remote clock offset: -0.264 ms


# Below is generated by plot.py at 2017-08-17 01:56:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 144.825 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 144.825 ms
Loss rate: 0.89%
```

Run 9: Report of Sprout — Data Link
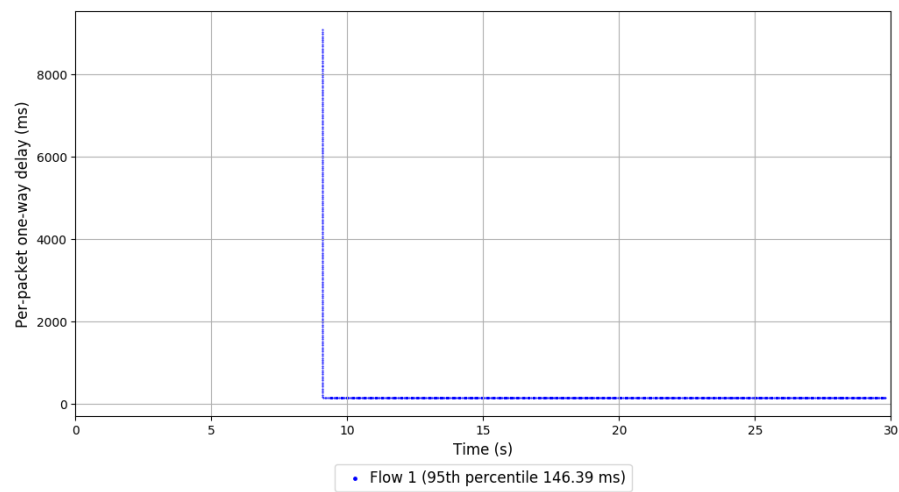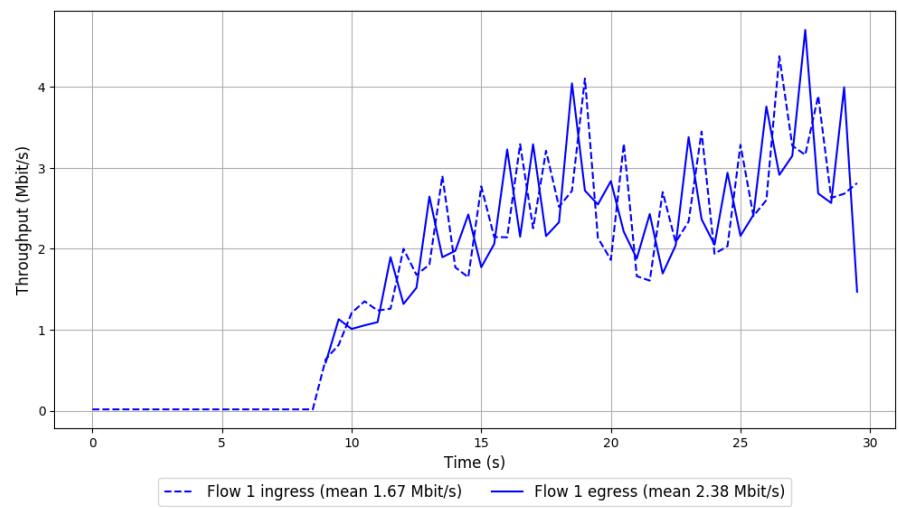
```
Run 10: Statistics of Sprout

Start at: 2017-08-16 21:44:20
End at: 2017-08-16 21:44:50
Local clock offset: 0.541 ms
Remote clock offset: -0.404 ms
```

Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 1.67 Mbit/s) --- Flow 1 egress (mean 2.38 Mbit/s)
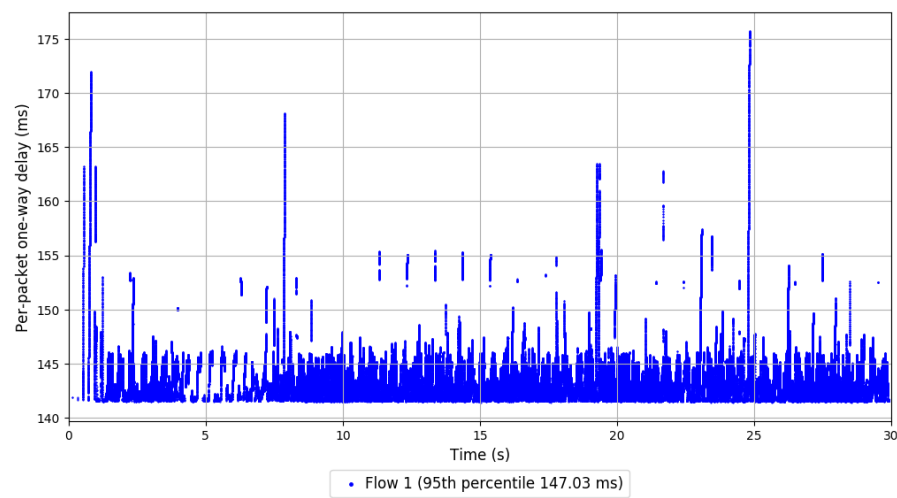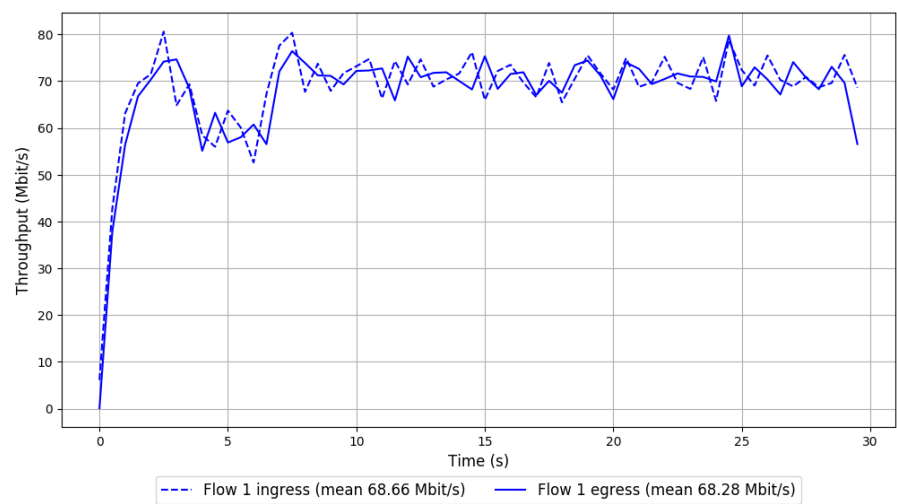

Flow 1 (95th percentile 146.39 ms)

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

Start at: 2017-08-16 18:51:48
End at: 2017-08-16 18:52:18
Local clock offset: 0.26 ms
Remote clock offset: -0.908 ms


# Below is generated by plot.py at 2017-08-17 01:56:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.28 Mbit/s
95th percentile per-packet one-way delay: 147.035 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 68.28 Mbit/s
95th percentile per-packet one-way delay: 147.035 ms
Loss rate: 1.24%
```

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

Flow 1 ingress (mean 68.66 Mbit/s)   Flow 1 egress (mean 68.28 Mbit/s)
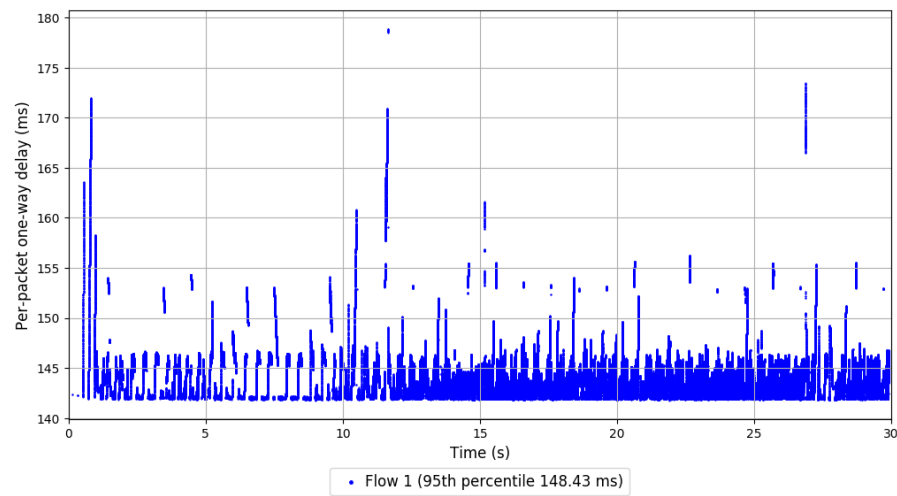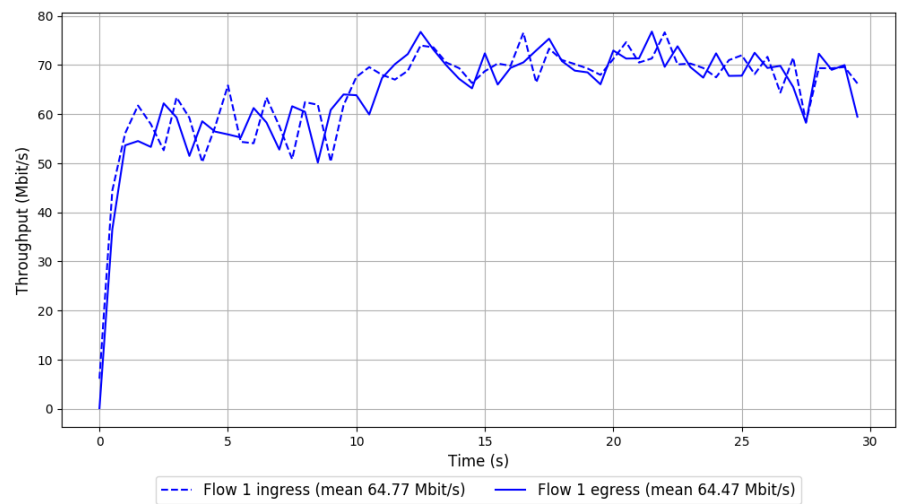

• Flow 1 (95th percentile 147.03 ms)

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

Start at: 2017-08-16 19:12:51
End at: 2017-08-16 19:13:21
Local clock offset: 0.297 ms
Remote clock offset: -0.244 ms


# Below is generated by plot.py at 2017-08-17 01:56:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.47 Mbit/s
95th percentile per-packet one-way delay: 148.430 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 64.47 Mbit/s
95th percentile per-packet one-way delay: 148.430 ms
Loss rate: 1.11%
```

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

Flow 1 ingress (mean 64.77 Mbit/s) —— Flow 1 egress (mean 64.47 Mbit/s)

• Flow 1 (95th percentile 148.43 ms)

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

Start at: 2017-08-16 19:34:31
End at: 2017-08-16 19:35:01
Local clock offset: 0.407 ms
Remote clock offset: -0.089 ms


# Below is generated by plot.py at 2017-08-17 01:57:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.12 Mbit/s
95th percentile per-packet one-way delay: 147.140 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 69.12 Mbit/s
95th percentile per-packet one-way delay: 147.140 ms
Loss rate: 0.91%
```
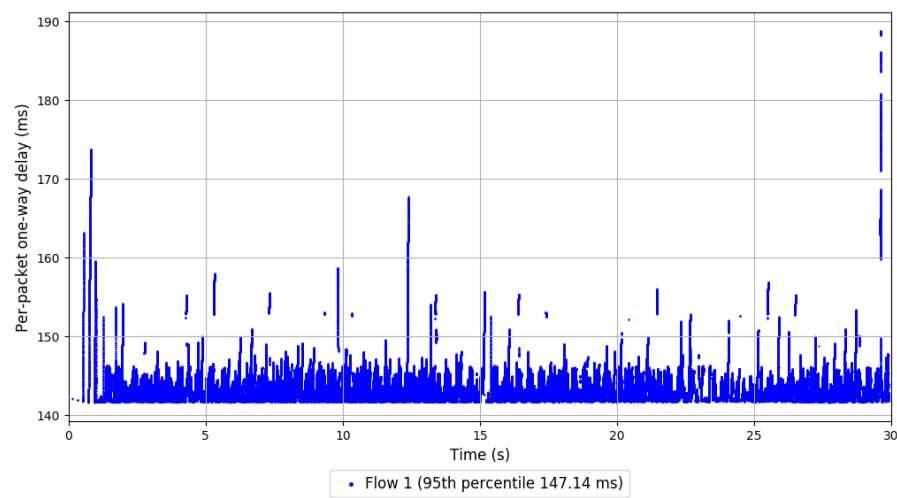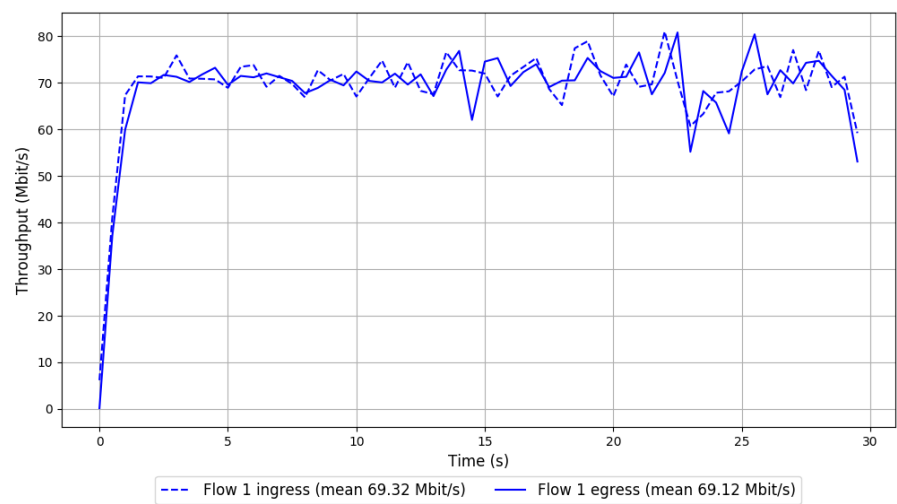
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 69.32 Mbit/s) --- Flow 1 egress (mean 69.12 Mbit/s)

Flow 1 (95th percentile 147.14 ms)

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

Start at: 2017-08-16 19:56:11
End at: 2017-08-16 19:56:41
Local clock offset: 0.929 ms
Remote clock offset: 0.018 ms


# Below is generated by plot.py at 2017-08-17 01:57:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.99 Mbit/s
95th percentile per-packet one-way delay: 149.100 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 57.99 Mbit/s
95th percentile per-packet one-way delay: 149.100 ms
Loss rate: 0.83%
```
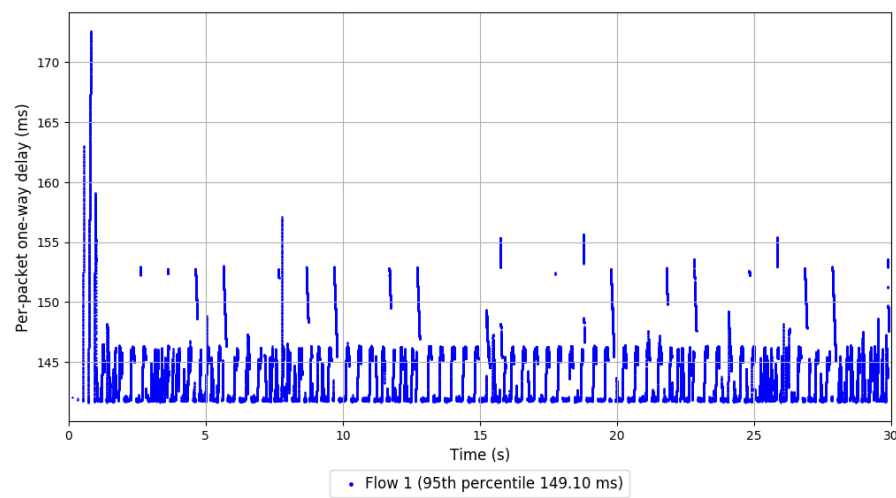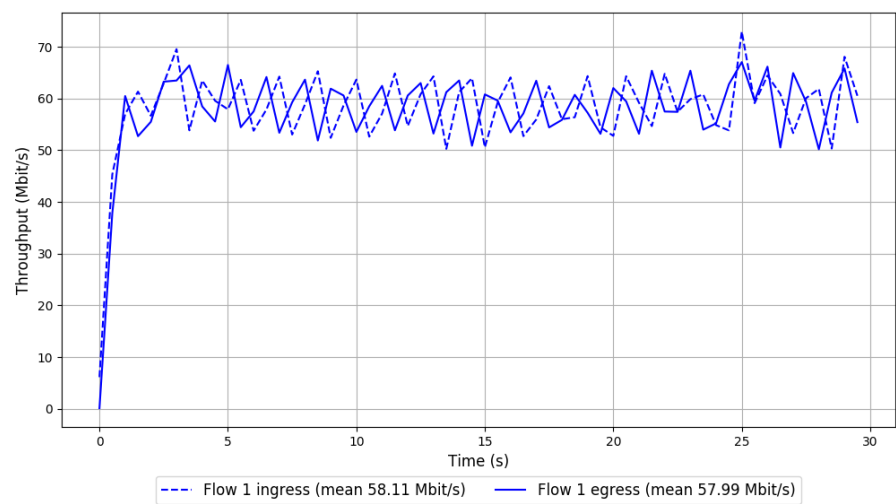
Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2017-08-16 20:17:20
End at: 2017-08-16 20:17:50
Local clock offset: 0.707 ms
Remote clock offset: 0.067 ms


# Below is generated by plot.py at 2017-08-17 01:57:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.04 Mbit/s
95th percentile per-packet one-way delay: 147.523 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 68.04 Mbit/s
95th percentile per-packet one-way delay: 147.523 ms
Loss rate: 0.89%
```
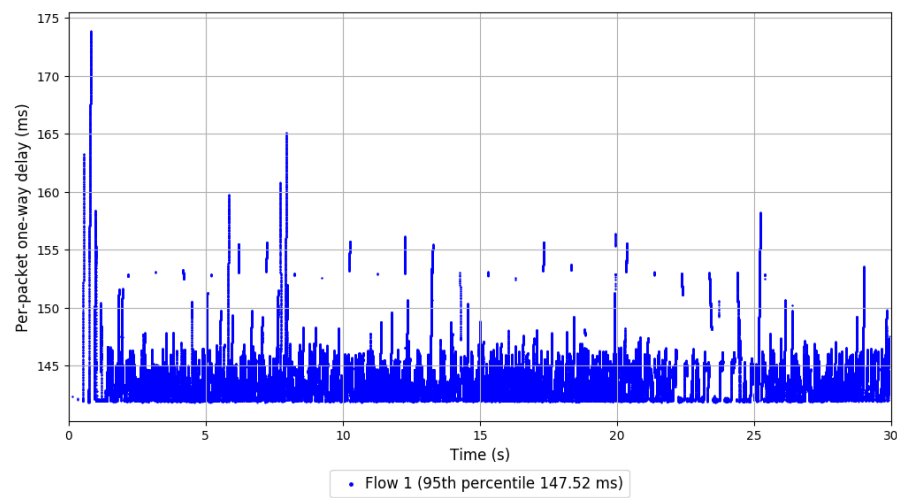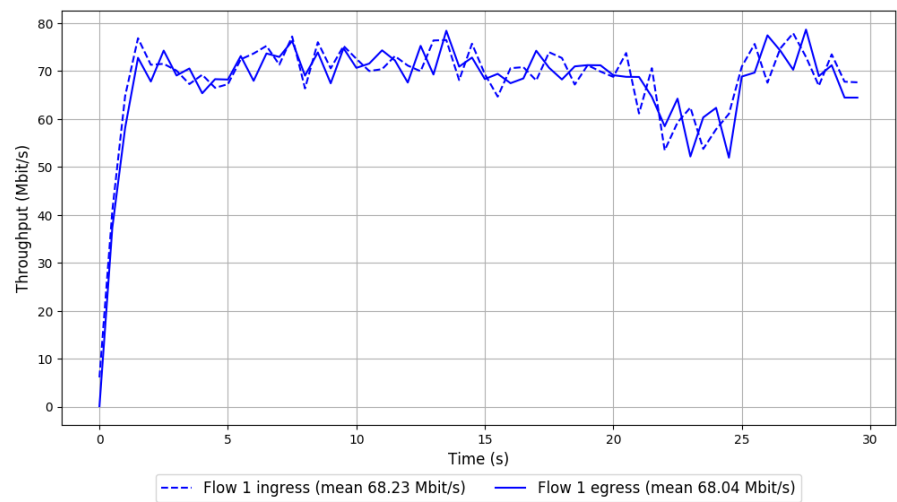
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 68.23 Mbit/s) ----   Flow 1 egress (mean 68.04 Mbit/s) ——

• Flow 1 (95th percentile 147.52 ms)

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

Start at: 2017-08-16 20:39:08
End at: 2017-08-16 20:39:38
Local clock offset: 0.895 ms
Remote clock offset: -0.045 ms


# Below is generated by plot.py at 2017-08-17 01:57:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.63 Mbit/s
95th percentile per-packet one-way delay: 147.985 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 67.63 Mbit/s
95th percentile per-packet one-way delay: 147.985 ms
Loss rate: 0.93%
```
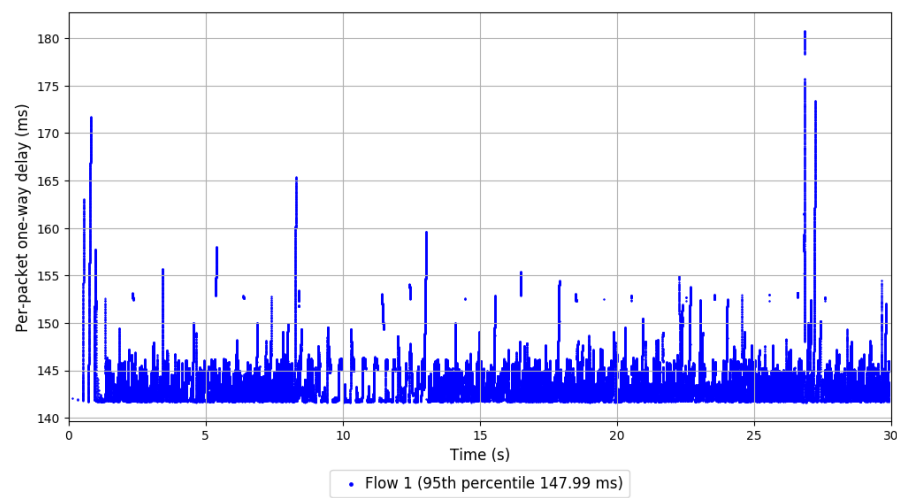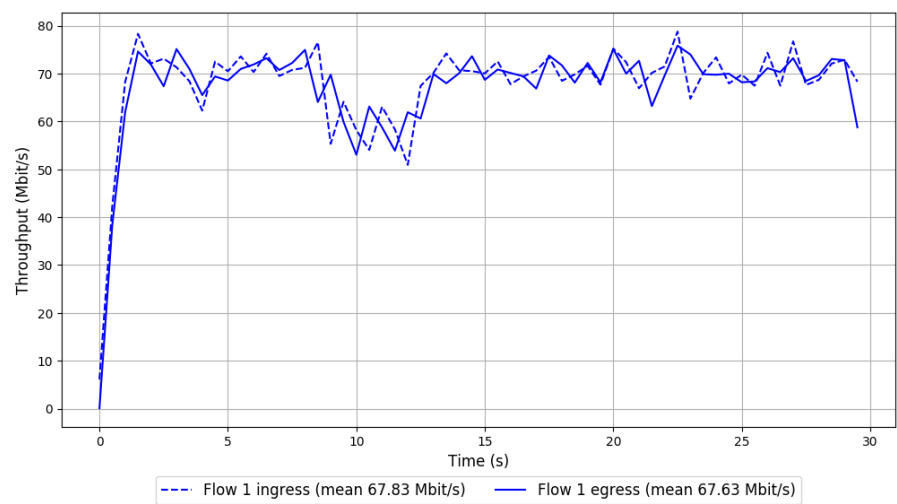
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 67.83 Mbit/s)   Flow 1 egress (mean 67.63 Mbit/s)

• Flow 1 (95th percentile 147.99 ms)

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

Start at: 2017-08-16 21:00:34
End at: 2017-08-16 21:01:04
Local clock offset: 0.456 ms
Remote clock offset: -0.051 ms


# Below is generated by plot.py at 2017-08-17 01:57:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.00 Mbit/s
95th percentile per-packet one-way delay: 149.791 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 61.00 Mbit/s
95th percentile per-packet one-way delay: 149.791 ms
Loss rate: 0.86%
```
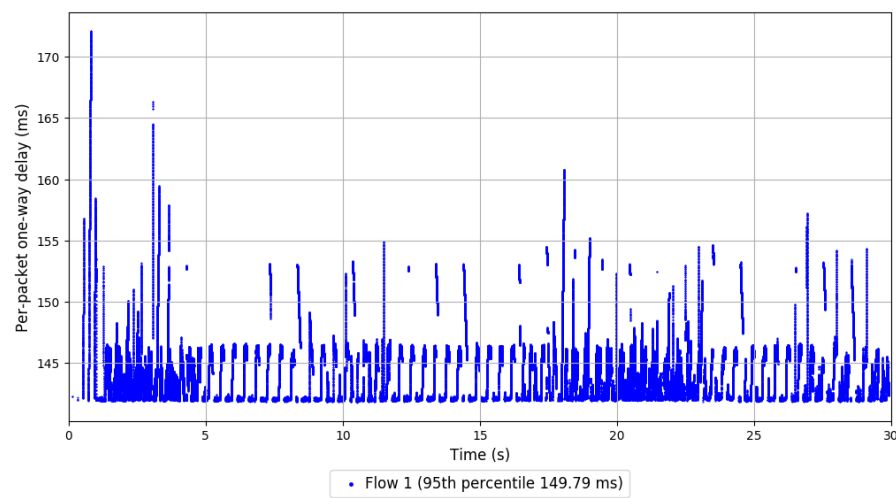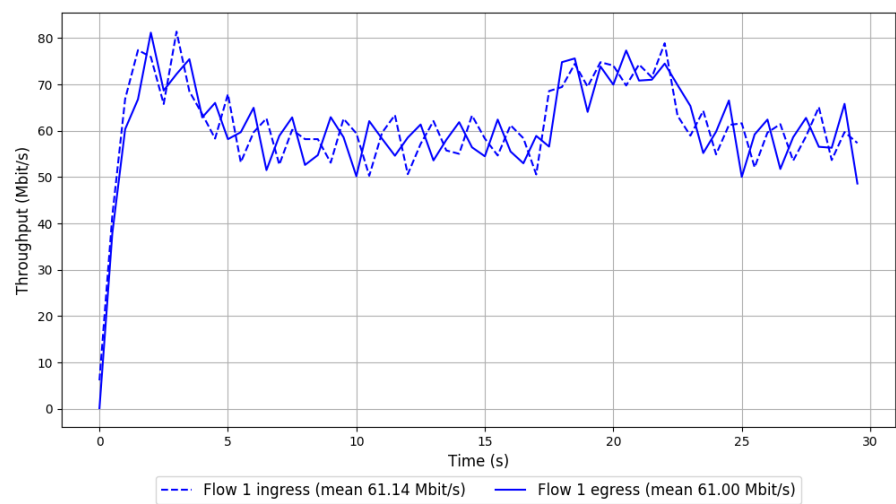
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 61.14 Mbit/s) --- Flow 1 egress (mean 61.00 Mbit/s)

• Flow 1 (95th percentile 149.79 ms)

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

Start at: 2017-08-16 21:21:02
End at: 2017-08-16 21:21:32
Local clock offset: 0.334 ms
Remote clock offset: -0.394 ms


# Below is generated by plot.py at 2017-08-17 01:57:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.63 Mbit/s
95th percentile per-packet one-way delay: 147.742 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 69.63 Mbit/s
95th percentile per-packet one-way delay: 147.742 ms
Loss rate: 0.91%
```
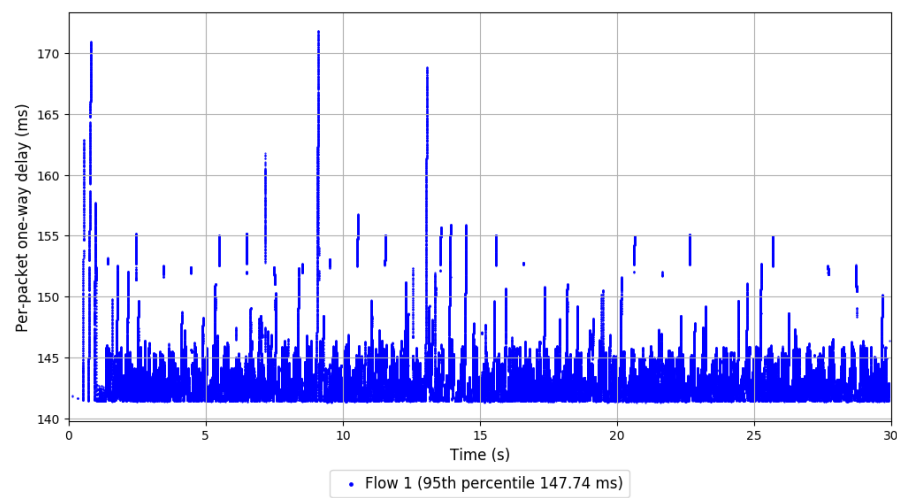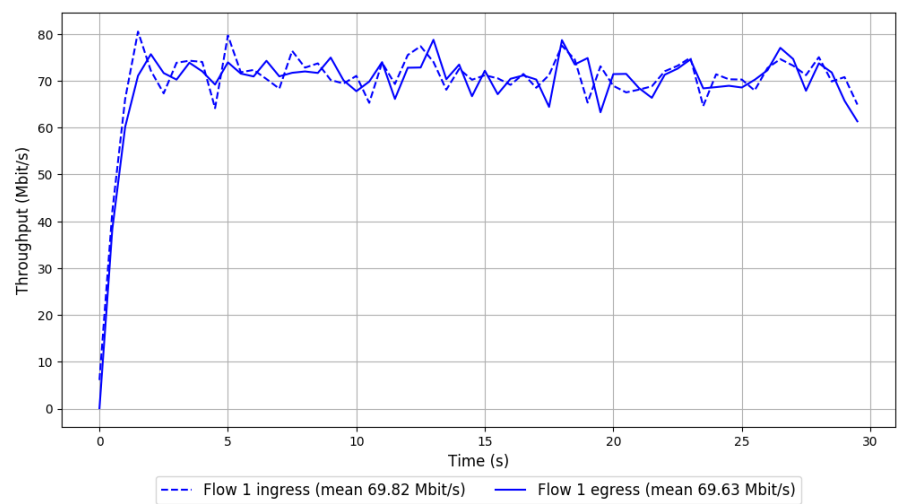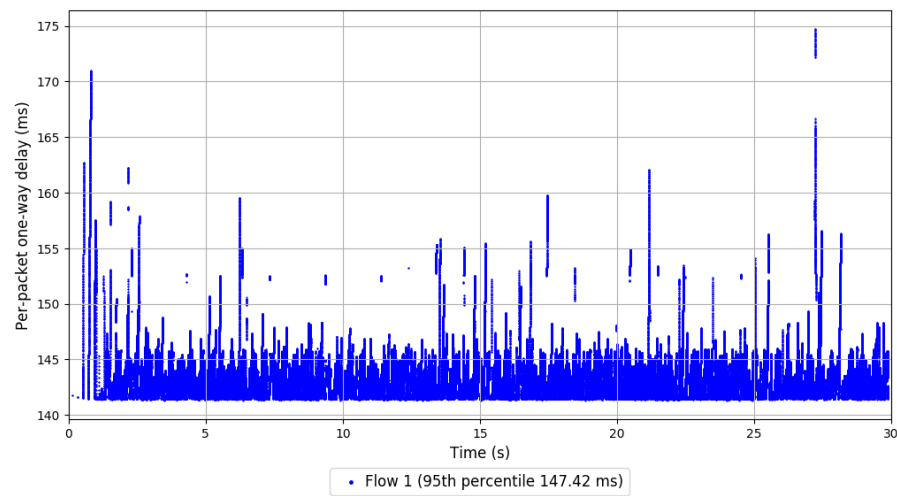
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 69.82 Mbit/s) — — — — Flow 1 egress (mean 69.63 Mbit/s)

• Flow 1 (95th percentile 147.74 ms)

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

Start at: 2017-08-16 21:42:09
End at: 2017-08-16 21:42:39
Local clock offset: 0.271 ms
Remote clock offset: -0.425 ms


# Below is generated by plot.py at 2017-08-17 01:57:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.66 Mbit/s
95th percentile per-packet one-way delay: 147.417 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 69.66 Mbit/s
95th percentile per-packet one-way delay: 147.417 ms
Loss rate: 0.87%
```
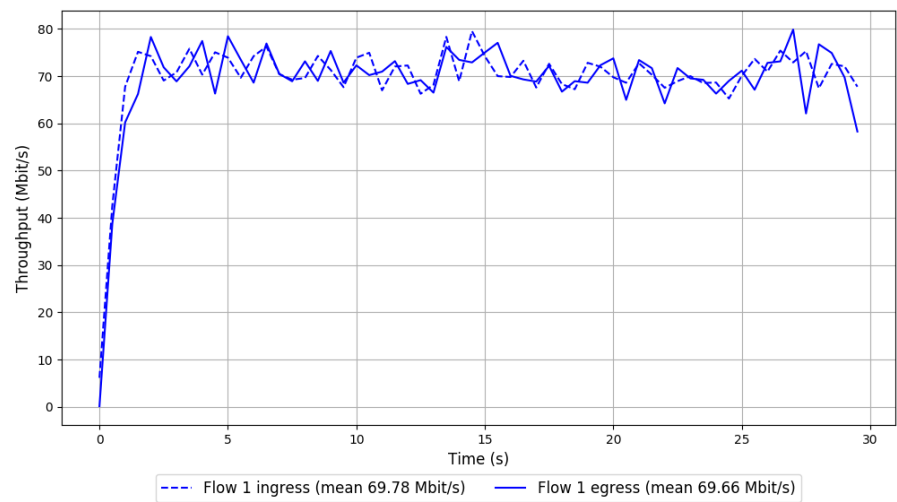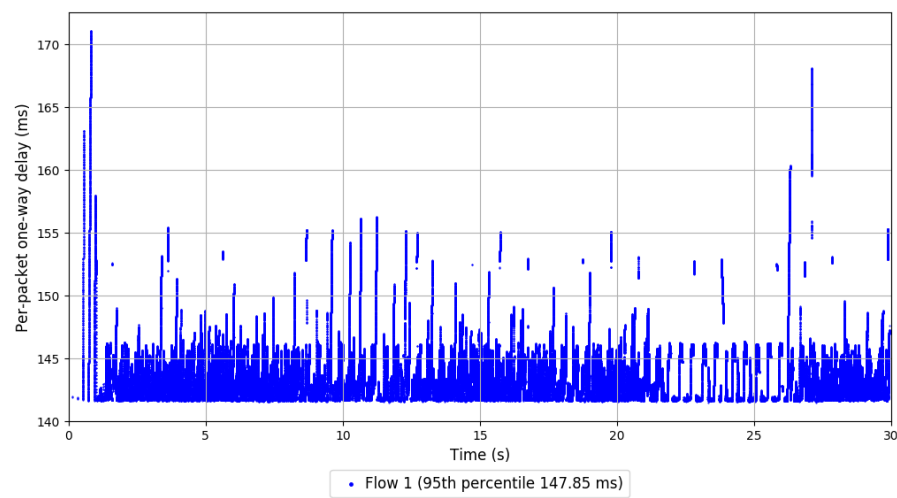
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 69.78 Mbit/s) ----- Flow 1 egress (mean 69.66 Mbit/s) ——

• Flow 1 (95th percentile 147.42 ms)

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

Start at: 2017-08-16 22:04:06
End at: 2017-08-16 22:04:36
Local clock offset: 0.212 ms
Remote clock offset: -0.522 ms


# Below is generated by plot.py at 2017-08-17 01:57:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.35 Mbit/s
95th percentile per-packet one-way delay: 147.851 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 67.35 Mbit/s
95th percentile per-packet one-way delay: 147.851 ms
Loss rate: 0.80%
```
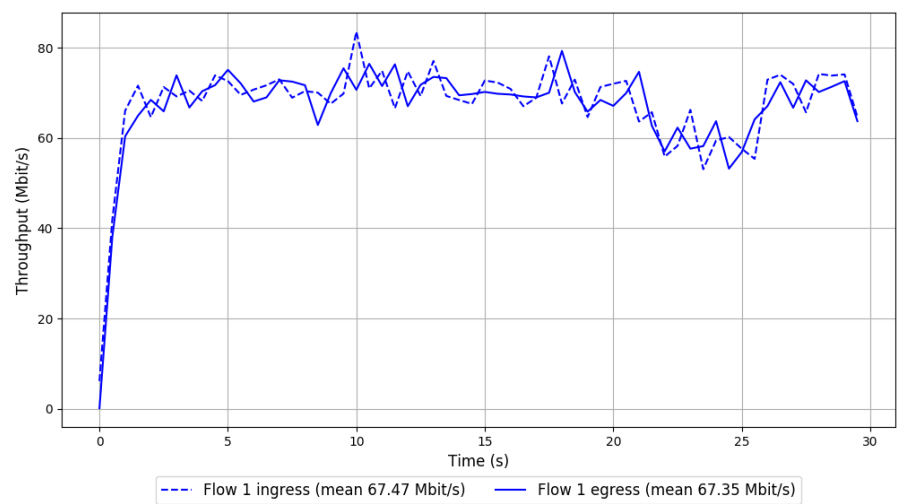
Run 10: Report of TaoVA-100x — Data Link

243

```
Run 1: Statistics of TCP Vegas

Start at: 2017-08-16 18:36:28
End at: 2017-08-16 18:36:58
Local clock offset: 0.011 ms
Remote clock offset: -1.32 ms


# Below is generated by plot.py at 2017-08-17 01:57:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 142.924 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 142.924 ms
Loss rate: 1.26%
```
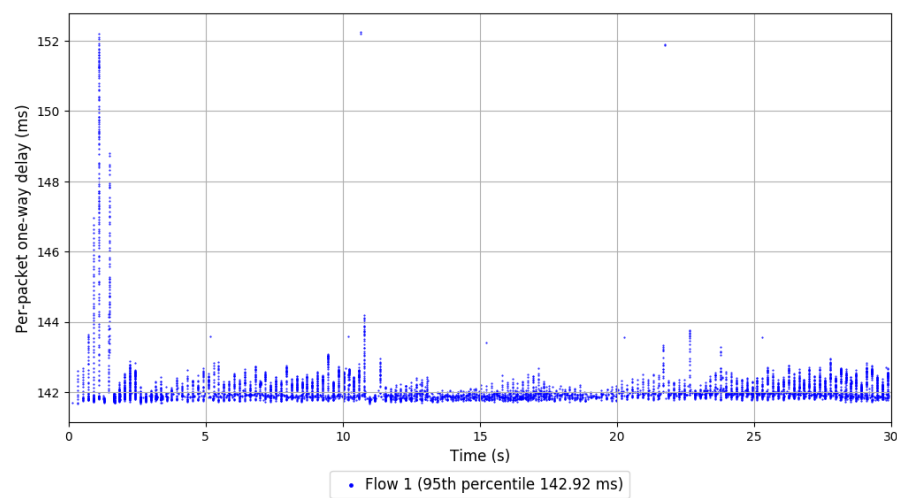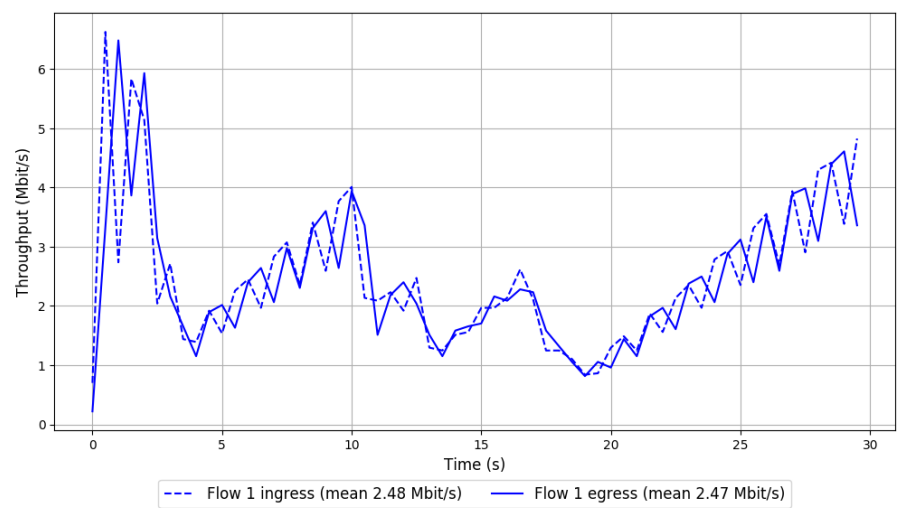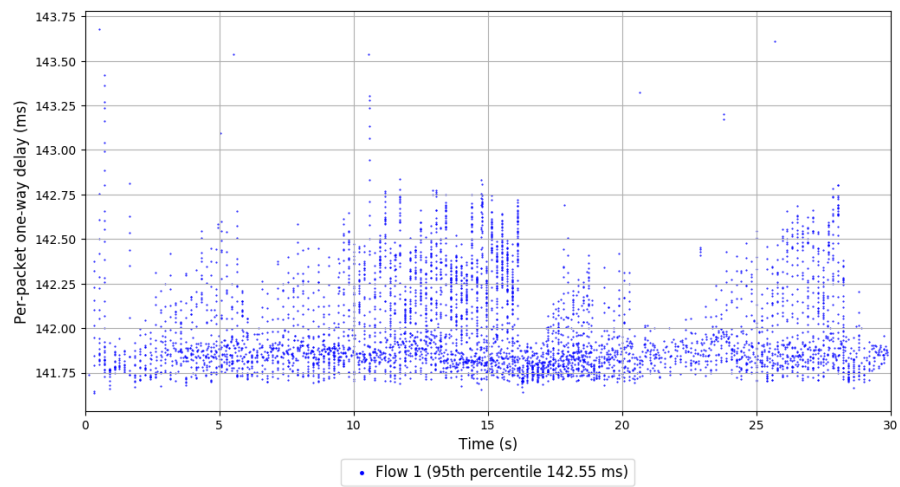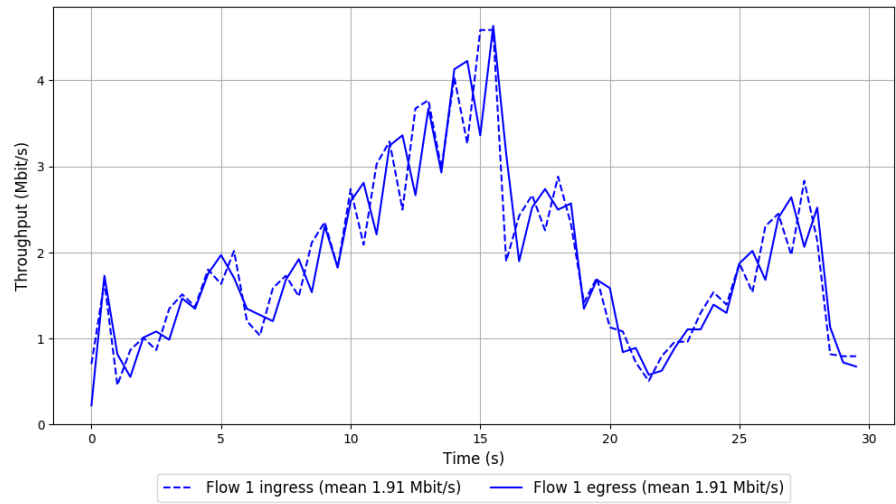
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-08-16 18:57:56
End at: 2017-08-16 18:58:26
Local clock offset: 0.339 ms
Remote clock offset: -0.628 ms


# Below is generated by plot.py at 2017-08-17 01:57:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 142.547 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 142.547 ms
Loss rate: 0.50%
```

Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2017-08-16 19:19:22
End at: 2017-08-16 19:19:52
Local clock offset: 1.087 ms
Remote clock offset: -0.24 ms


# Below is generated by plot.py at 2017-08-17 01:57:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 143.624 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 143.624 ms
Loss rate: 0.91%
```
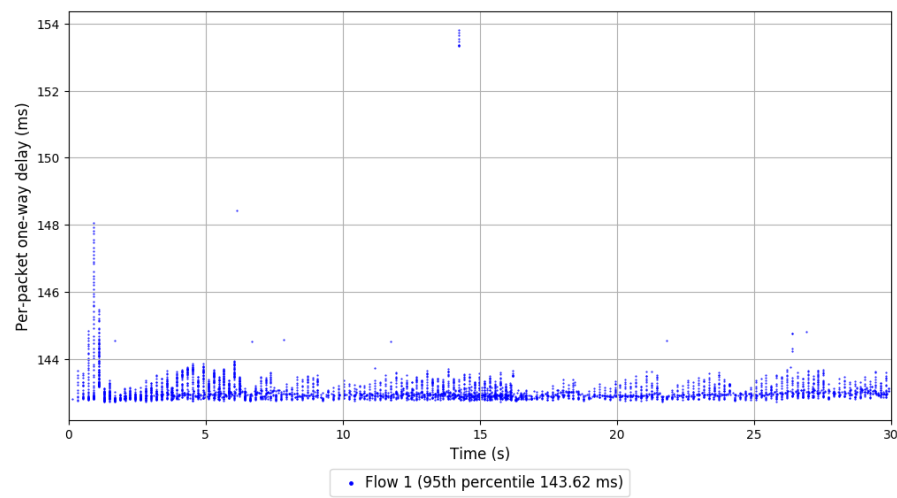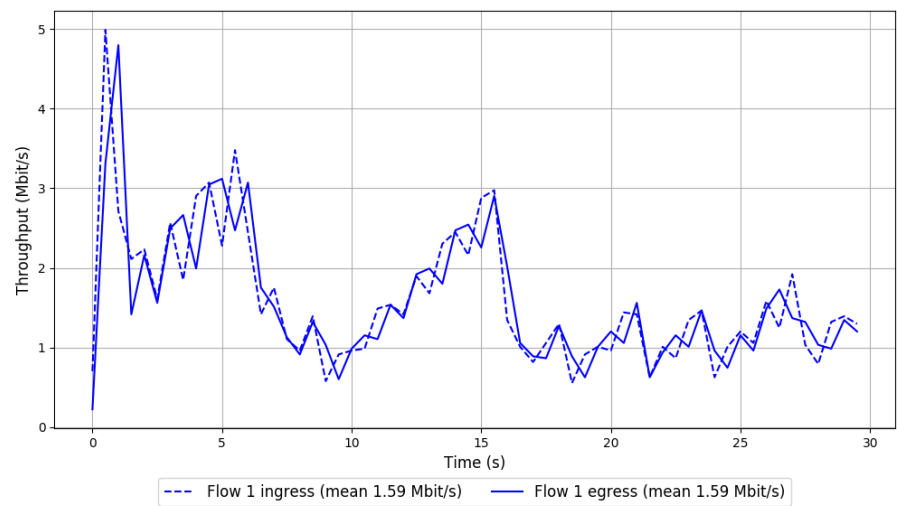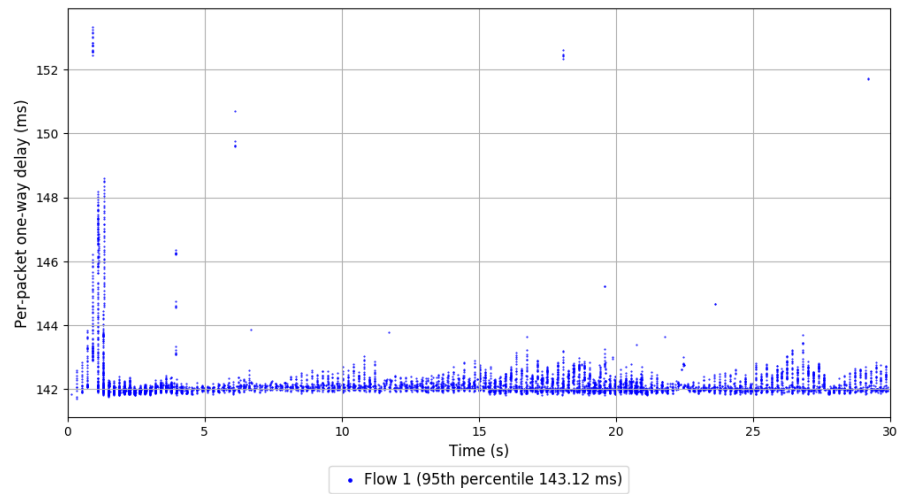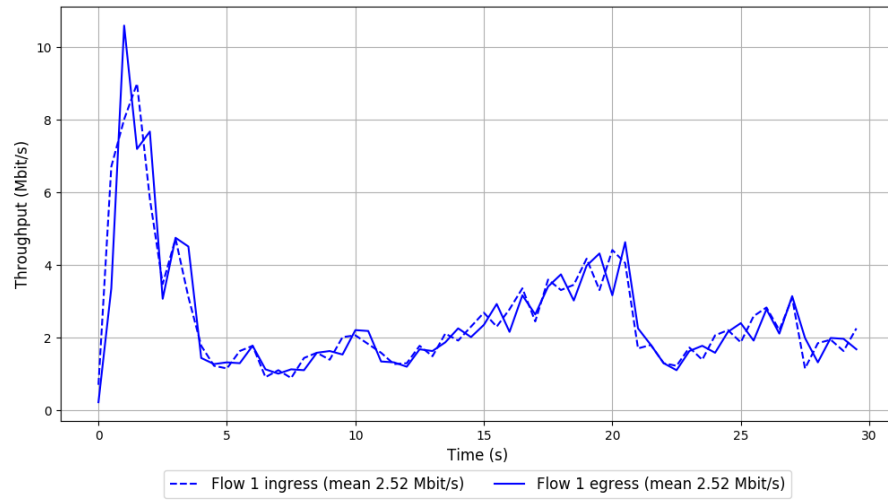
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2017-08-16 19:40:42
End at: 2017-08-16 19:41:12
Local clock offset: 0.515 ms
Remote clock offset: -0.042 ms


# Below is generated by plot.py at 2017-08-17 01:57:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 143.116 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 143.116 ms
Loss rate: 0.73%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 2.52 Mbit/s) — — —   Flow 1 egress (mean 2.52 Mbit/s) ———

• Flow 1 (95th percentile 143.12 ms)

251

```
Run 5: Statistics of TCP Vegas

Start at: 2017-08-16 20:02:18
End at: 2017-08-16 20:02:48
Local clock offset: 0.644 ms
Remote clock offset: 0.069 ms


# Below is generated by plot.py at 2017-08-17 01:57:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 153.386 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 153.386 ms
Loss rate: 0.41%
```
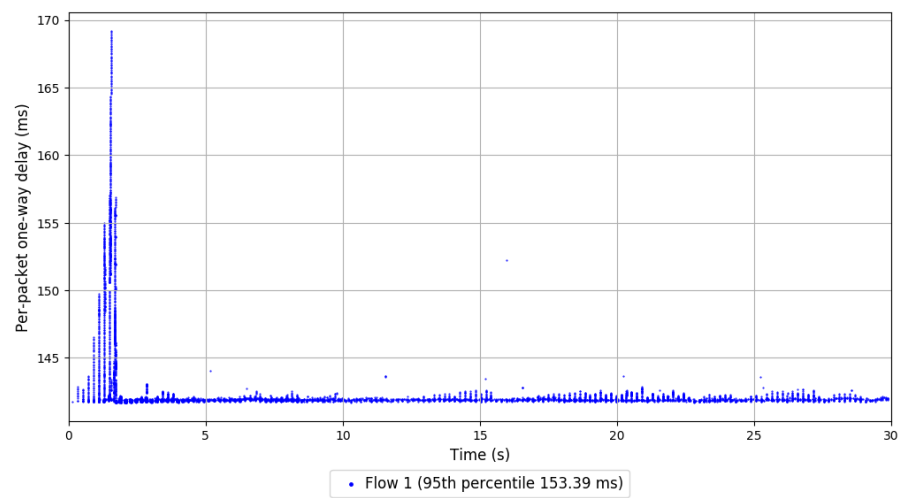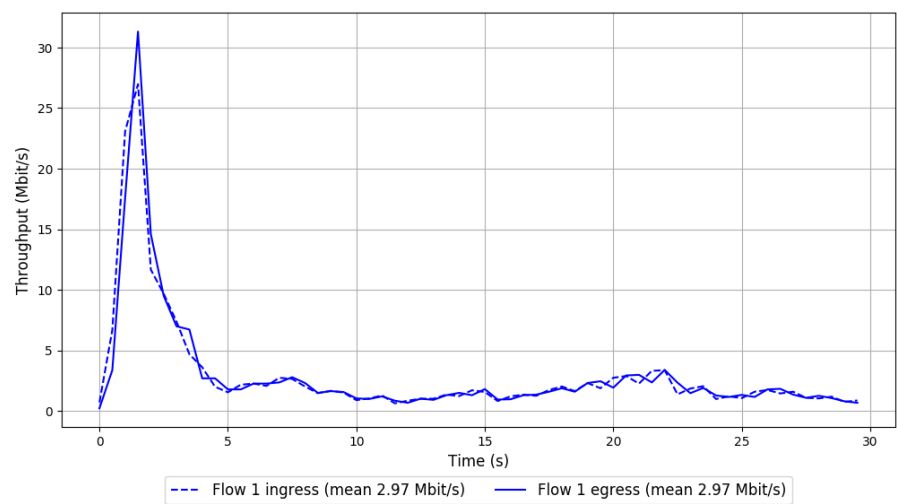
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2017-08-16 20:23:53
End at: 2017-08-16 20:24:23
Local clock offset: 0.861 ms
Remote clock offset: 0.04 ms


# Below is generated by plot.py at 2017-08-17 01:57:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 153.561 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 153.561 ms
Loss rate: 0.78%
```
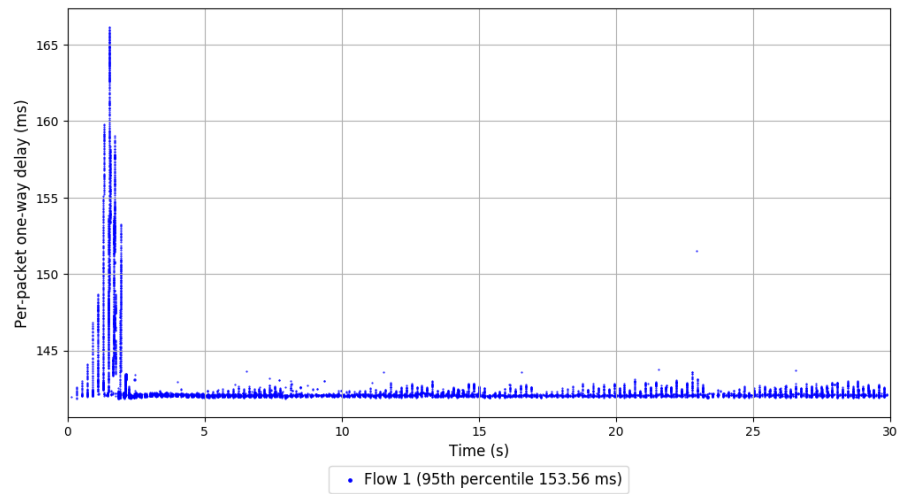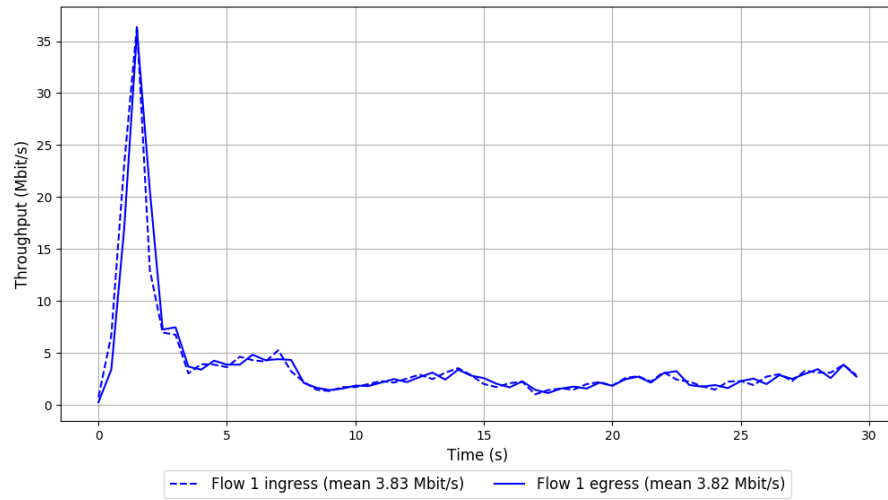
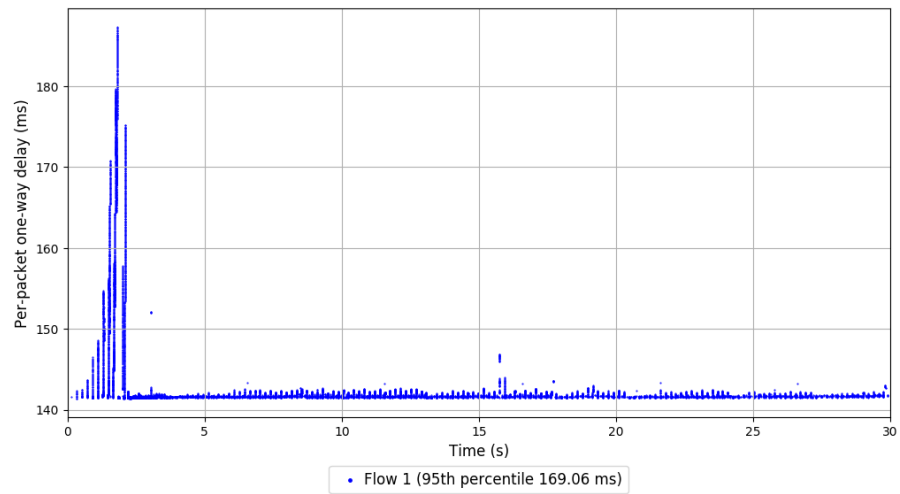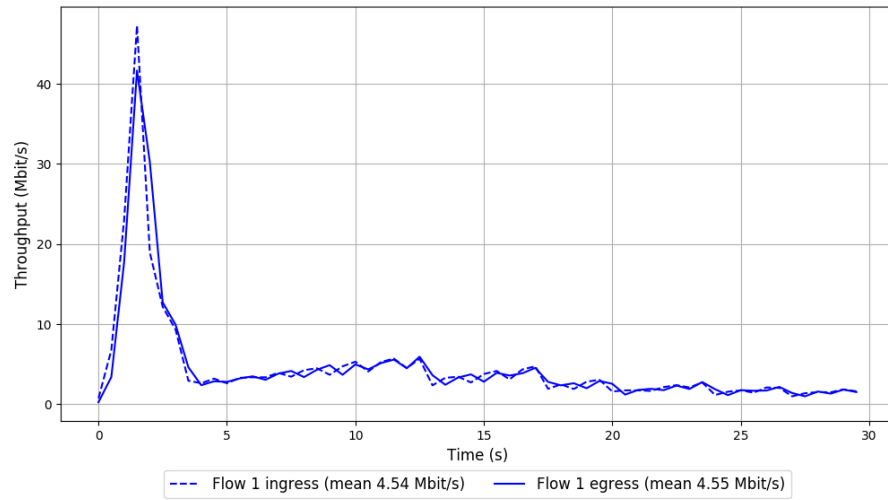Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2017-08-16 20:45:21
End at: 2017-08-16 20:45:51
Local clock offset: 0.568 ms
Remote clock offset: -0.043 ms


# Below is generated by plot.py at 2017-08-17 01:57:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 169.061 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 169.061 ms
Loss rate: 0.36%
```

Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2017-08-16 21:06:34
End at: 2017-08-16 21:07:04
Local clock offset: 0.747 ms
Remote clock offset: -0.13 ms


# Below is generated by plot.py at 2017-08-17 01:57:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 157.491 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 157.491 ms
Loss rate: 0.98%
```
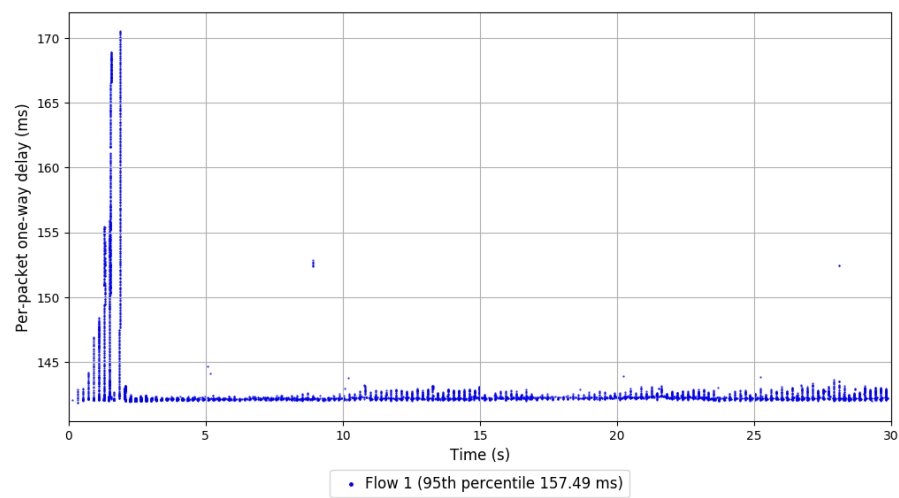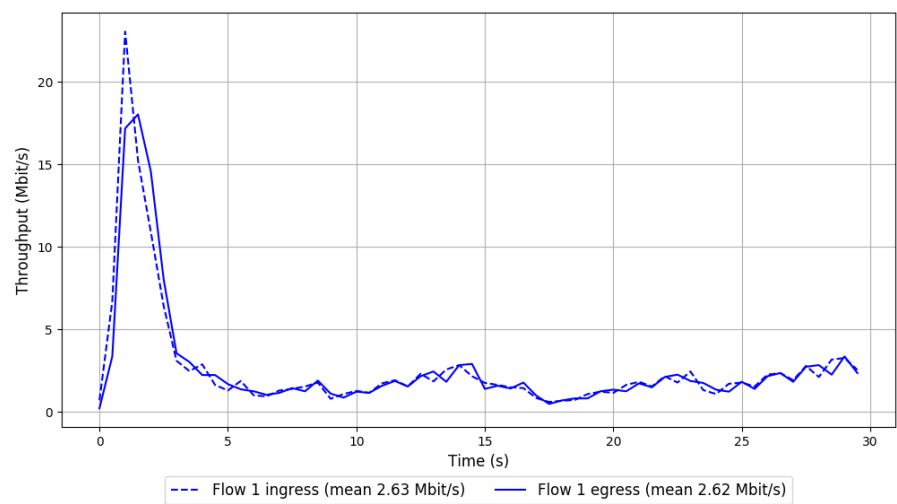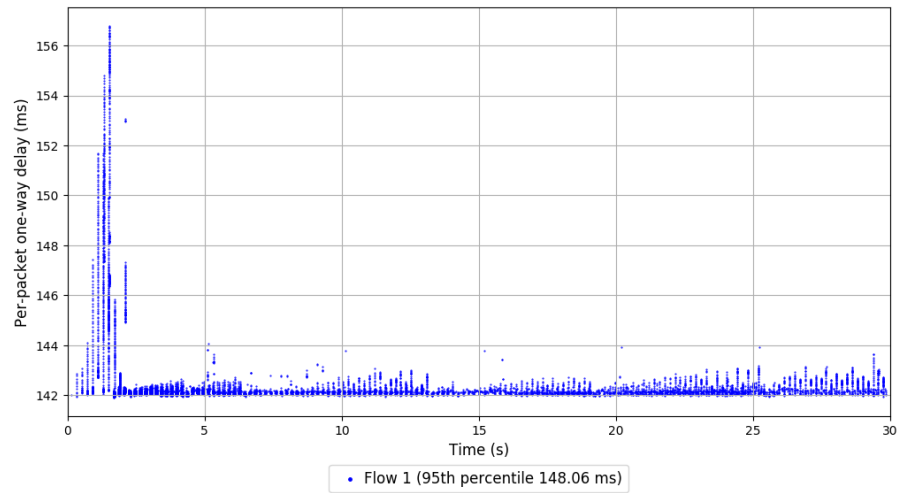
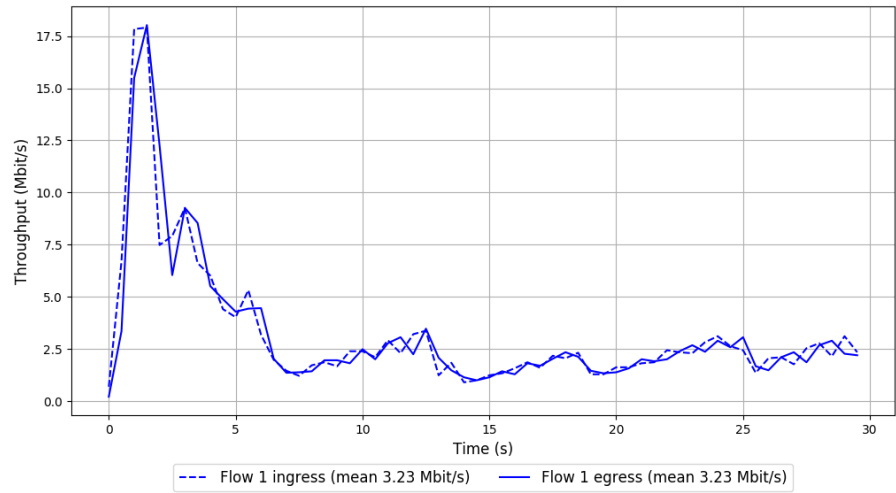Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2017-08-16 21:26:53
End at: 2017-08-16 21:27:23
Local clock offset: 0.275 ms
Remote clock offset: -0.374 ms


# Below is generated by plot.py at 2017-08-17 01:57:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 148.061 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 148.061 ms
Loss rate: 0.72%
```

Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 3.23 Mbit/s) --- Flow 1 egress (mean 3.23 Mbit/s)
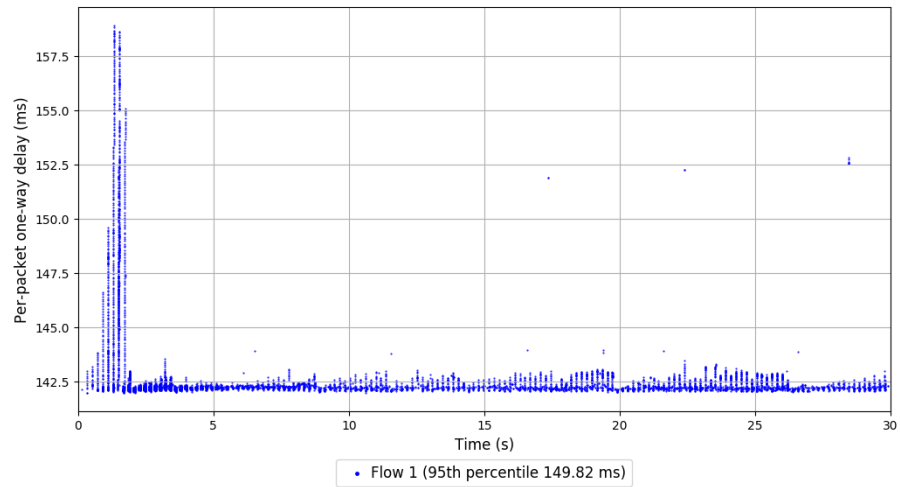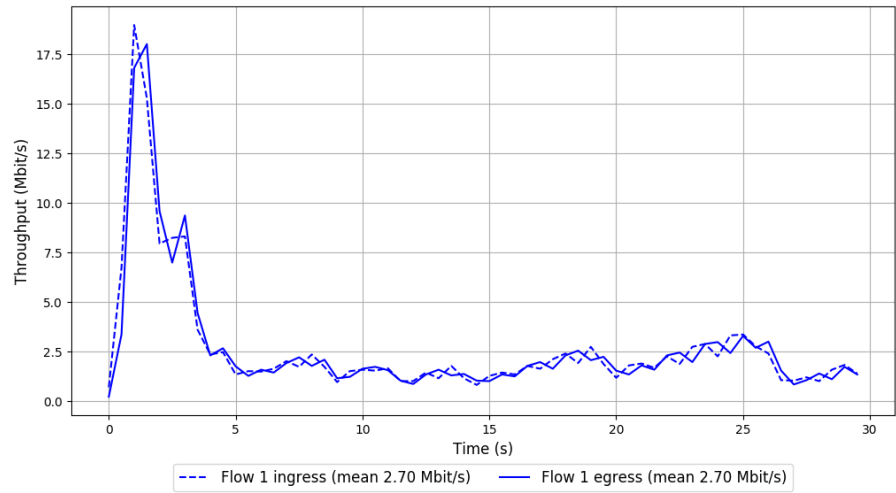

Flow 1 (95th percentile 148.06 ms)

```
Run 10: Statistics of TCP Vegas

Start at: 2017-08-16 21:48:48
End at: 2017-08-16 21:49:18
Local clock offset: 0.22 ms
Remote clock offset: -0.393 ms


# Below is generated by plot.py at 2017-08-17 01:57:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 149.817 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 149.817 ms
Loss rate: 0.62%
```

Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 2.70 Mbit/s) --- Flow 1 egress (mean 2.70 Mbit/s)
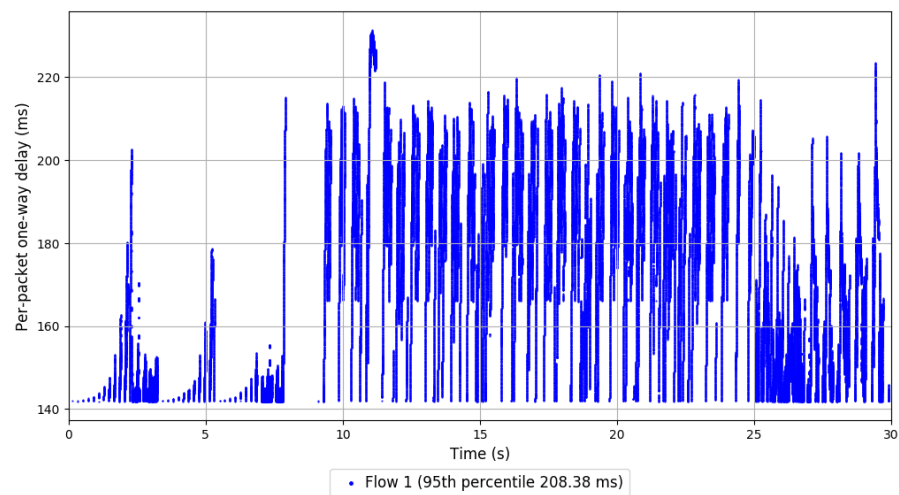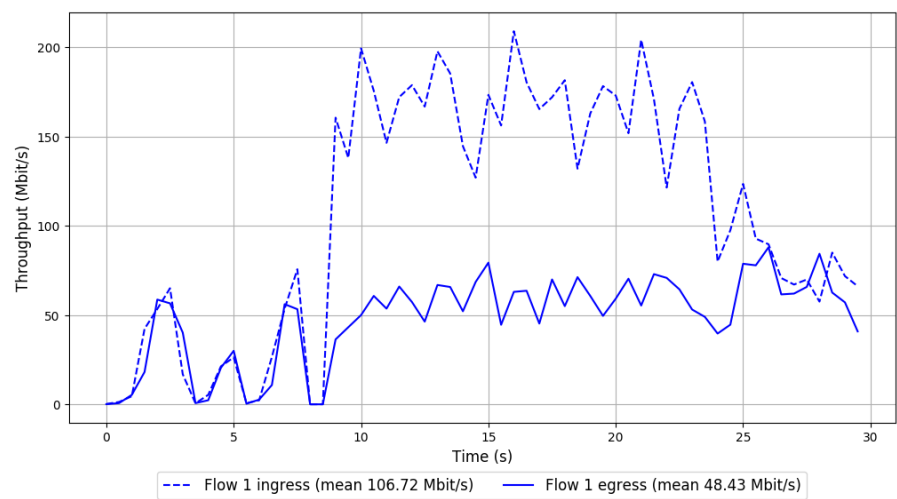

• Flow 1 (95th percentile 149.82 ms)

```
Run 1: Statistics of Verus

Start at: 2017-08-16 18:46:04
End at: 2017-08-16 18:46:34
Local clock offset: 0.182 ms
Remote clock offset: -1.067 ms


# Below is generated by plot.py at 2017-08-17 01:58:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.43 Mbit/s
95th percentile per-packet one-way delay: 208.380 ms
Loss rate: 54.93%
-- Flow 1:
Average throughput: 48.43 Mbit/s
95th percentile per-packet one-way delay: 208.380 ms
Loss rate: 54.93%
```
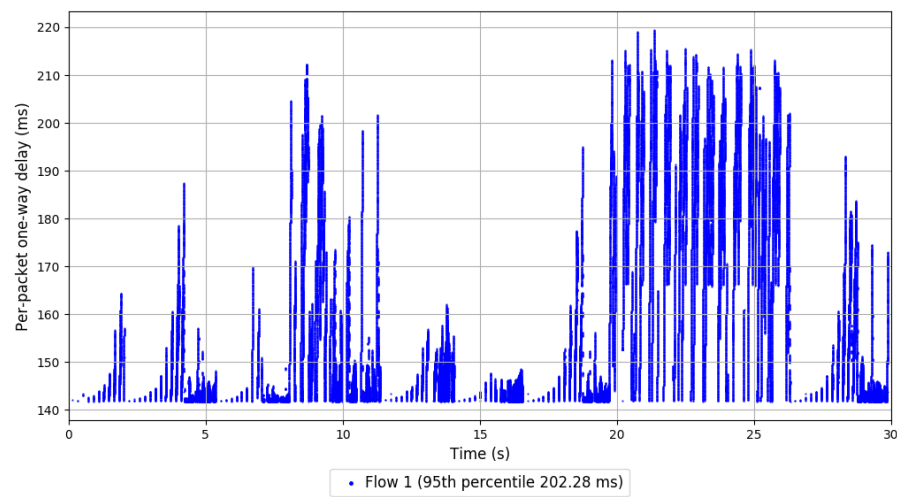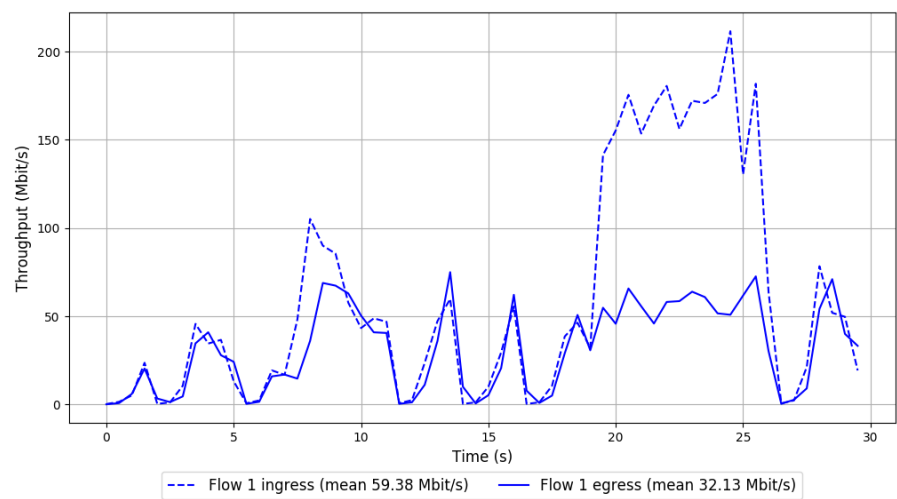
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2017-08-16 19:07:13
End at: 2017-08-16 19:07:43
Local clock offset: 0.339 ms
Remote clock offset: -0.391 ms


# Below is generated by plot.py at 2017-08-17 01:58:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.13 Mbit/s
95th percentile per-packet one-way delay: 202.280 ms
Loss rate: 46.23%
-- Flow 1:
Average throughput: 32.13 Mbit/s
95th percentile per-packet one-way delay: 202.280 ms
Loss rate: 46.23%
```

Run 2: Report of Verus — Data Link

Flow 1 ingress (mean 59.38 Mbit/s)   Flow 1 egress (mean 32.13 Mbit/s)

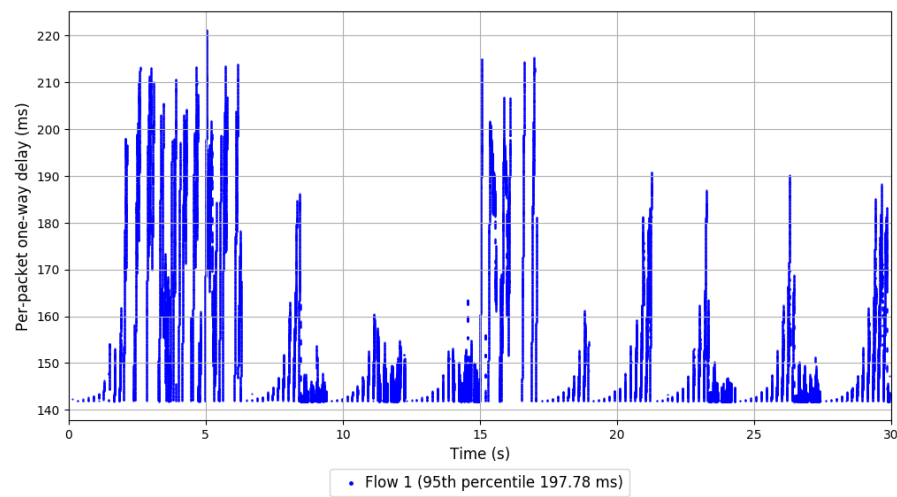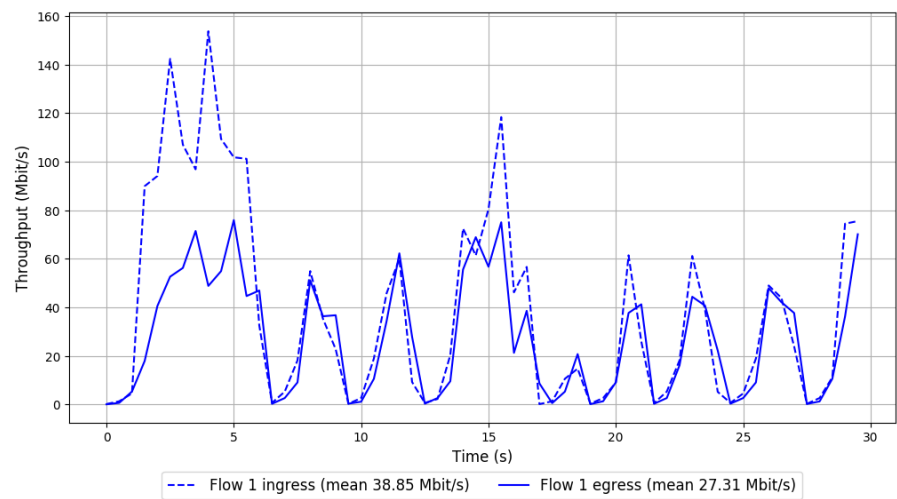

Flow 1 (95th percentile 202.28 ms)

267

```
Run 3: Statistics of Verus

Start at: 2017-08-16 19:28:48
End at: 2017-08-16 19:29:18
Local clock offset: 0.614 ms
Remote clock offset: -0.069 ms


# Below is generated by plot.py at 2017-08-17 01:58:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 27.31 Mbit/s
95th percentile per-packet one-way delay: 197.781 ms
Loss rate: 30.13%
-- Flow 1:
Average throughput: 27.31 Mbit/s
95th percentile per-packet one-way delay: 197.781 ms
Loss rate: 30.13%
```
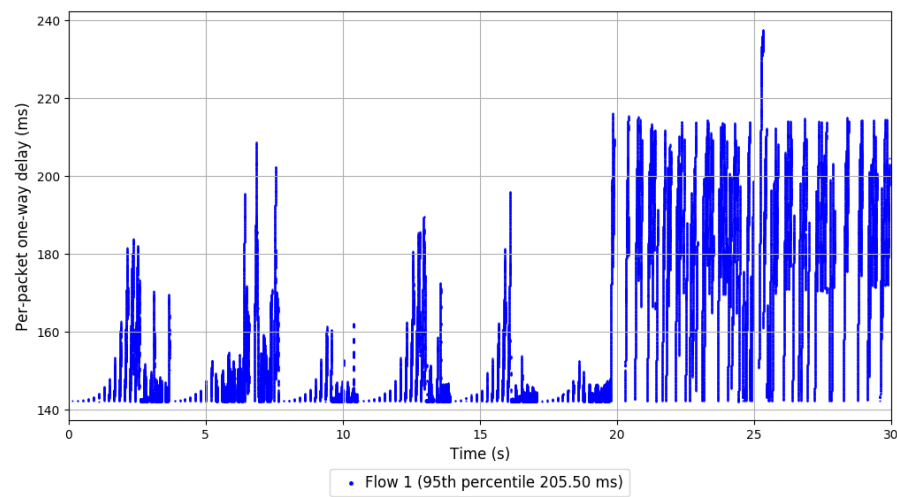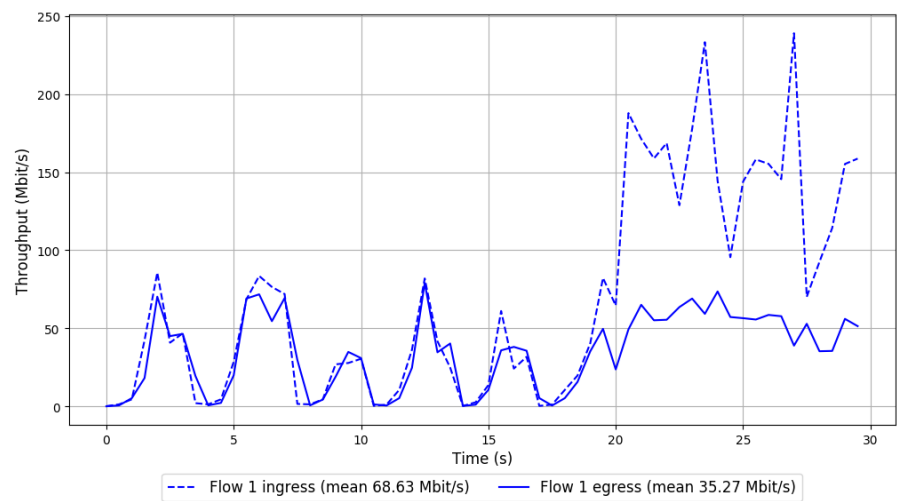
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2017-08-16 19:50:26
End at: 2017-08-16 19:50:56
Local clock offset: 0.791 ms
Remote clock offset: -0.048 ms


# Below is generated by plot.py at 2017-08-17 01:58:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.27 Mbit/s
95th percentile per-packet one-way delay: 205.499 ms
Loss rate: 48.73%
-- Flow 1:
Average throughput: 35.27 Mbit/s
95th percentile per-packet one-way delay: 205.499 ms
Loss rate: 48.73%
```

Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2017-08-16 20:11:43
End at: 2017-08-16 20:12:13
Local clock offset: 0.957 ms
Remote clock offset: 0.086 ms

# Below is generated by plot.py at 2017-08-17 01:58:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.58 Mbit/s
95th percentile per-packet one-way delay: 201.880 ms
Loss rate: 39.67%
-- Flow 1:
Average throughput: 45.58 Mbit/s
95th percentile per-packet one-way delay: 201.880 ms
Loss rate: 39.67%
```
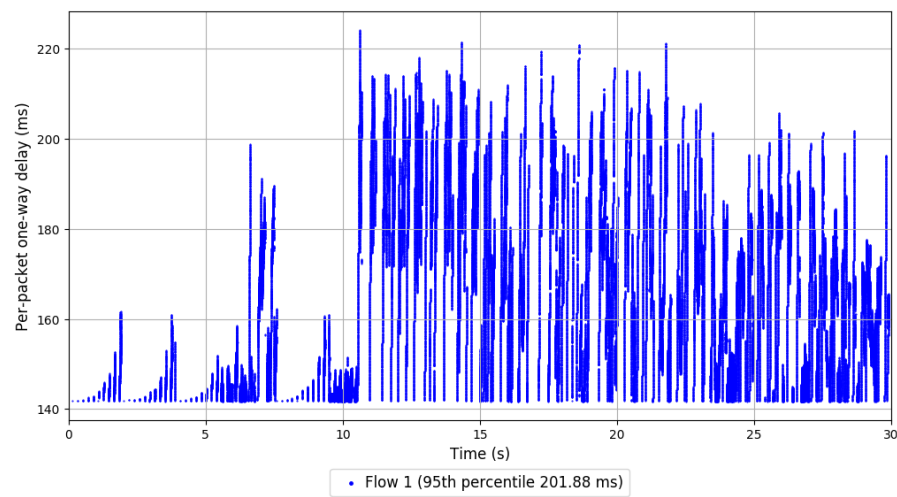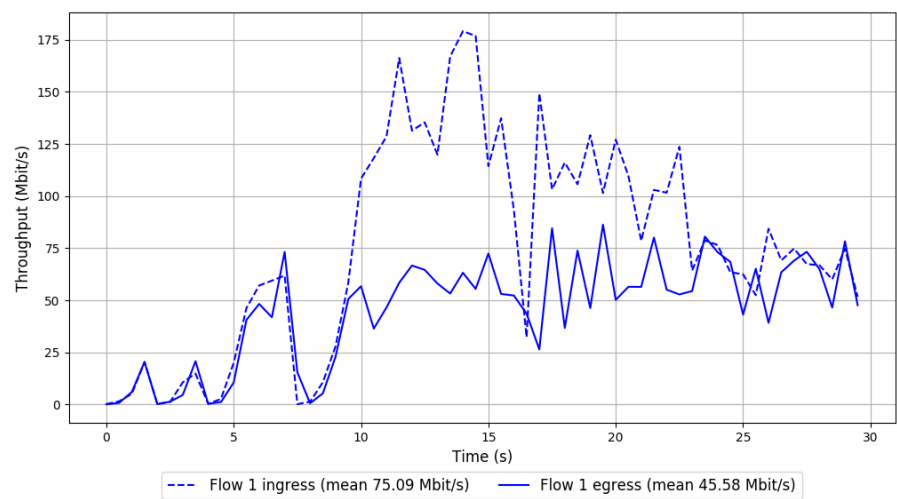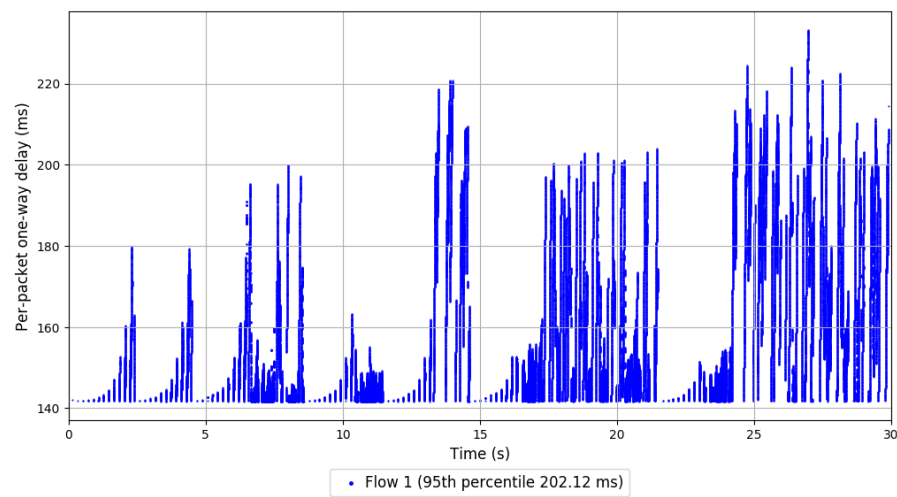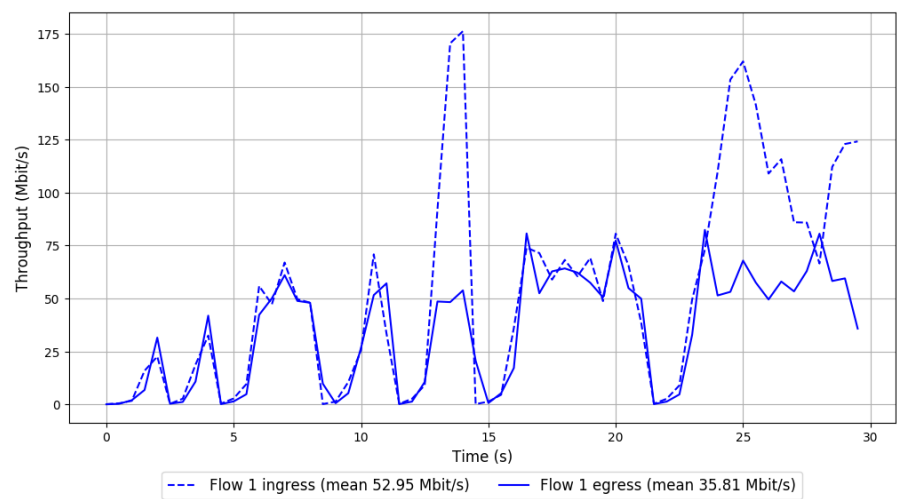
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2017-08-16 20:33:30
End at: 2017-08-16 20:34:00
Local clock offset: 0.57 ms
Remote clock offset: -0.011 ms


# Below is generated by plot.py at 2017-08-17 01:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.81 Mbit/s
95th percentile per-packet one-way delay: 202.121 ms
Loss rate: 32.78%
-- Flow 1:
Average throughput: 35.81 Mbit/s
95th percentile per-packet one-way delay: 202.121 ms
Loss rate: 32.78%
```

Run 6: Report of Verus — Data Link

Flow 1 ingress (mean 52.95 Mbit/s) --- Flow 1 egress (mean 35.81 Mbit/s)

Flow 1 (95th percentile 202.12 ms)

```
Run 7: Statistics of Verus

Start at: 2017-08-16 20:54:40
End at: 2017-08-16 20:55:10
Local clock offset: 0.465 ms
Remote clock offset: -0.02 ms


# Below is generated by plot.py at 2017-08-17 01:58:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.82 Mbit/s
95th percentile per-packet one-way delay: 208.460 ms
Loss rate: 54.93%
-- Flow 1:
Average throughput: 34.82 Mbit/s
95th percentile per-packet one-way delay: 208.460 ms
Loss rate: 54.93%
```
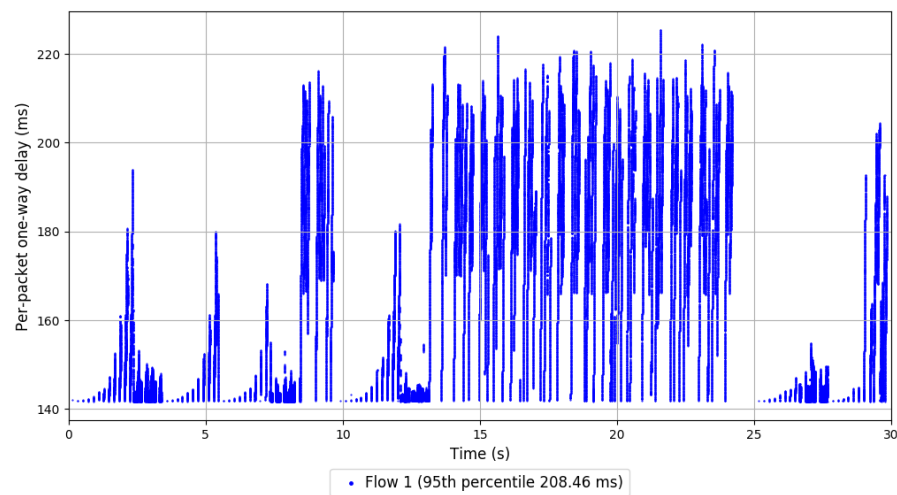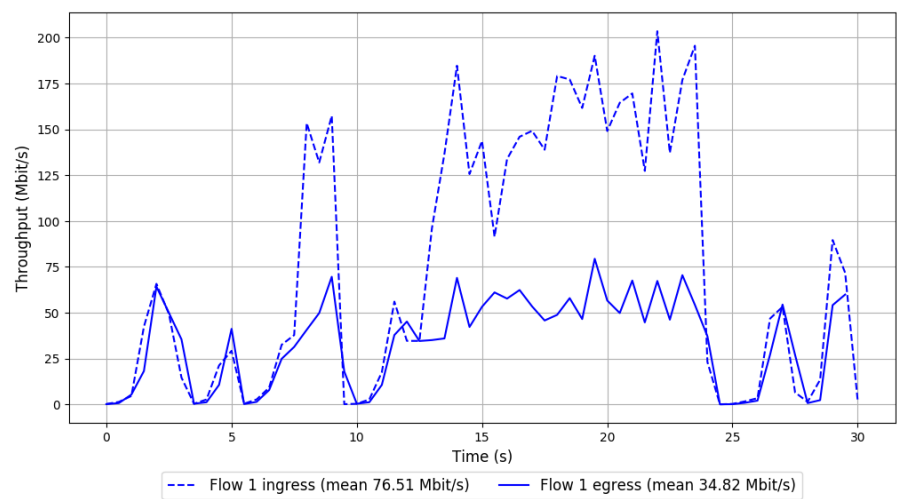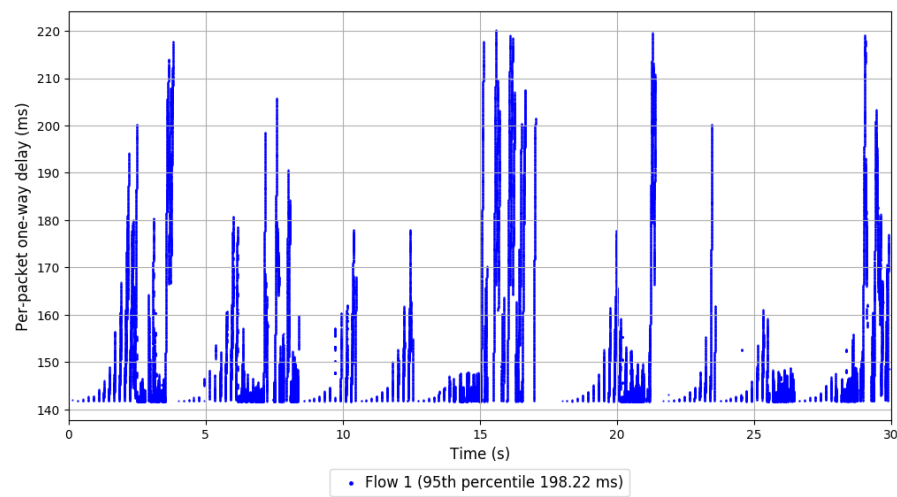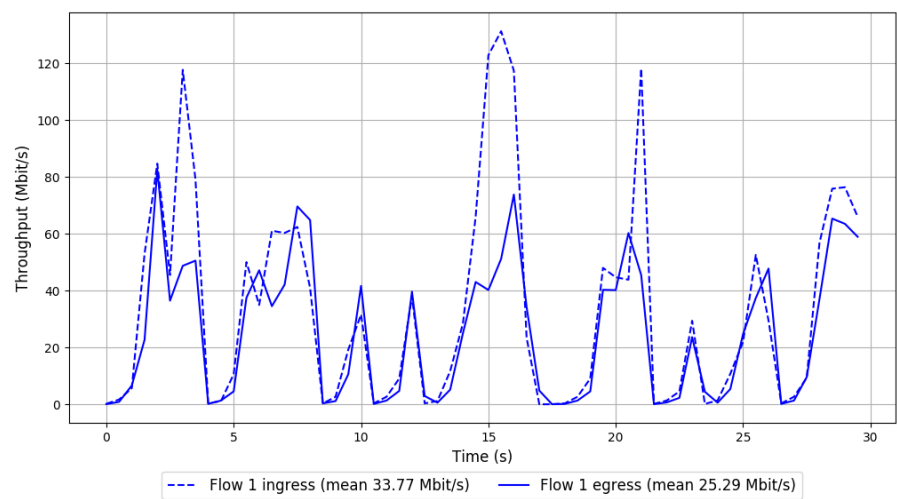
Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2017-08-16 21:15:22
End at: 2017-08-16 21:15:52
Local clock offset: 0.309 ms
Remote clock offset: -0.288 ms


# Below is generated by plot.py at 2017-08-17 01:58:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.29 Mbit/s
95th percentile per-packet one-way delay: 198.220 ms
Loss rate: 25.50%
-- Flow 1:
Average throughput: 25.29 Mbit/s
95th percentile per-packet one-way delay: 198.220 ms
Loss rate: 25.50%
```
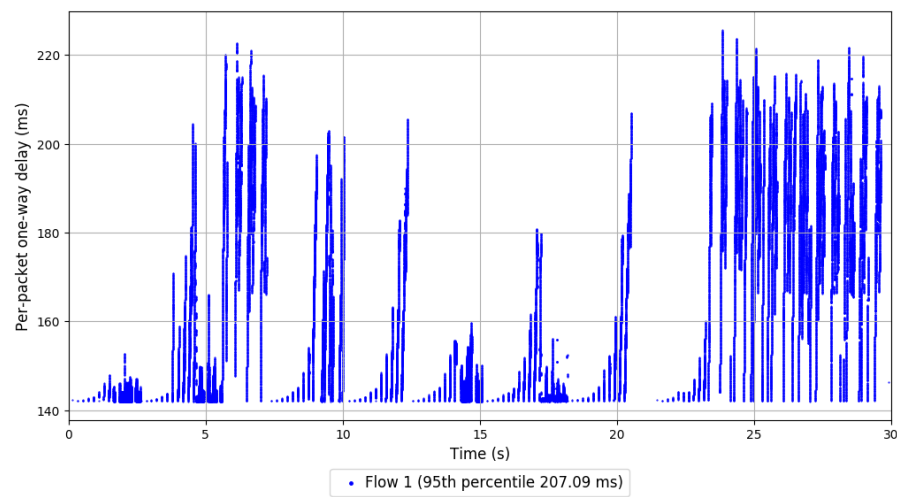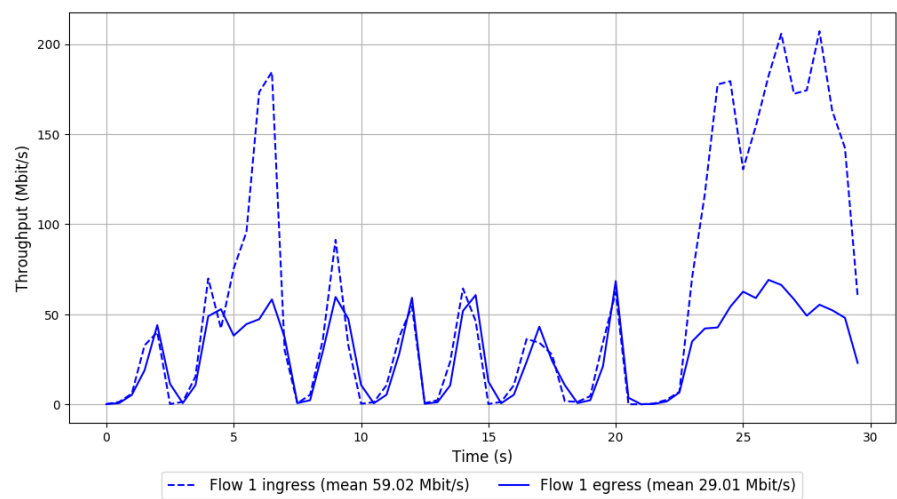
Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2017-08-16 21:36:32
End at: 2017-08-16 21:37:02
Local clock offset: 0.533 ms
Remote clock offset: -0.452 ms


# Below is generated by plot.py at 2017-08-17 01:58:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.01 Mbit/s
95th percentile per-packet one-way delay: 207.085 ms
Loss rate: 51.14%
-- Flow 1:
Average throughput: 29.01 Mbit/s
95th percentile per-packet one-way delay: 207.085 ms
Loss rate: 51.14%
```
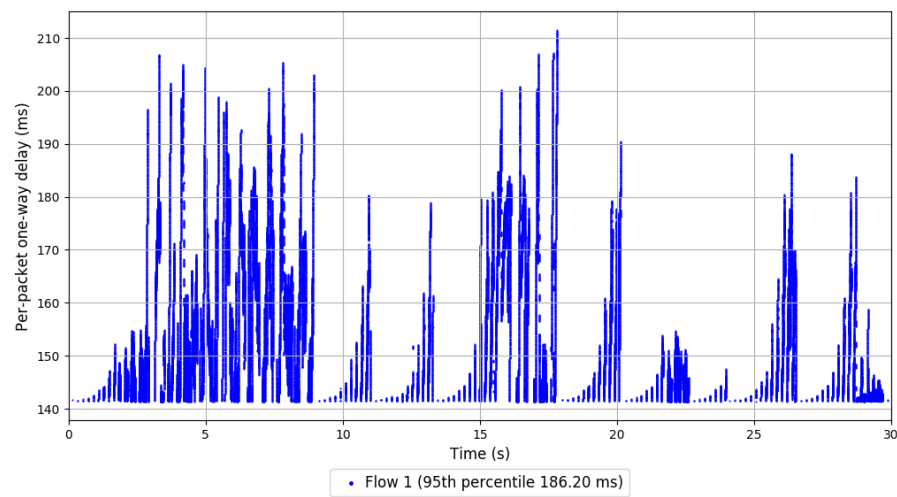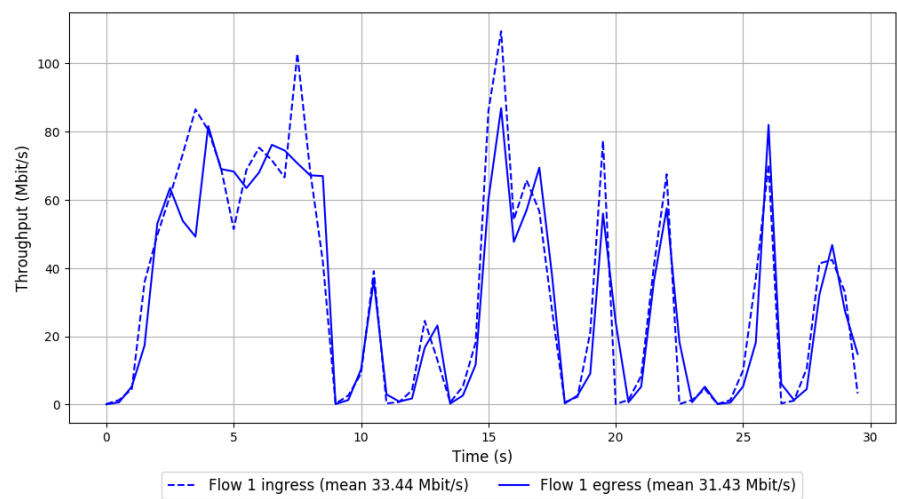
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2017-08-16 21:58:20
End at: 2017-08-16 21:58:50
Local clock offset: 0.252 ms
Remote clock offset: -0.431 ms

# Below is generated by plot.py at 2017-08-17 01:58:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 186.204 ms
Loss rate: 6.60%
-- Flow 1:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 186.204 ms
Loss rate: 6.60%
```

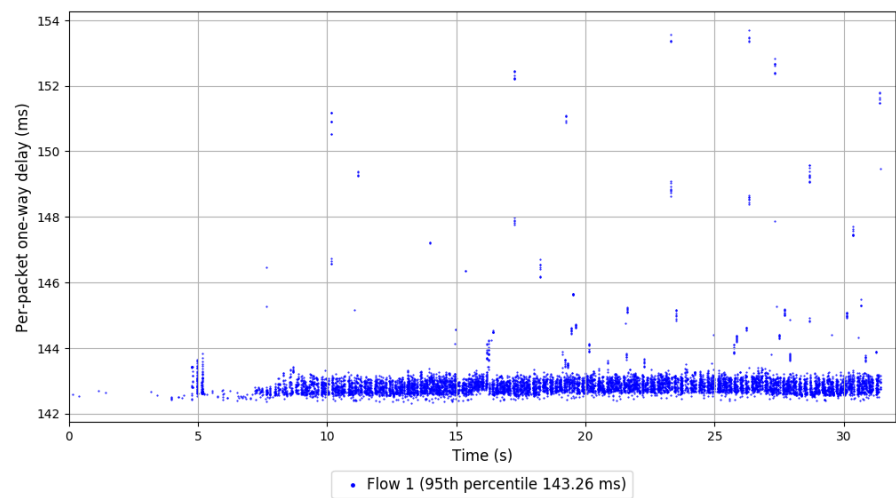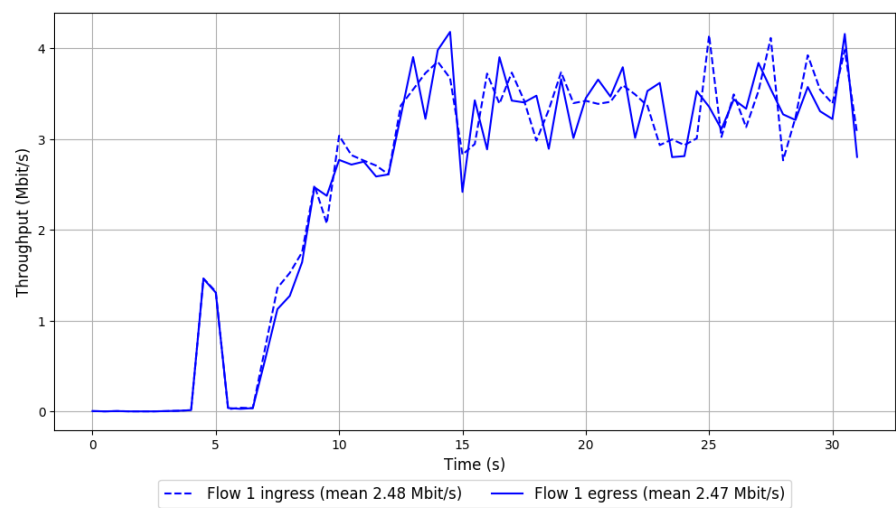# Run 10: Report of Verus — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2017-08-16 18:33:31
End at: 2017-08-16 18:34:01
Local clock offset: 0.775 ms
Remote clock offset: -1.366 ms


# Below is generated by plot.py at 2017-08-17 01:58:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 143.259 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 143.259 ms
Loss rate: 1.02%
```

Run 1: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.48 Mbit/s)   Flow 1 egress (mean 2.47 Mbit/s)

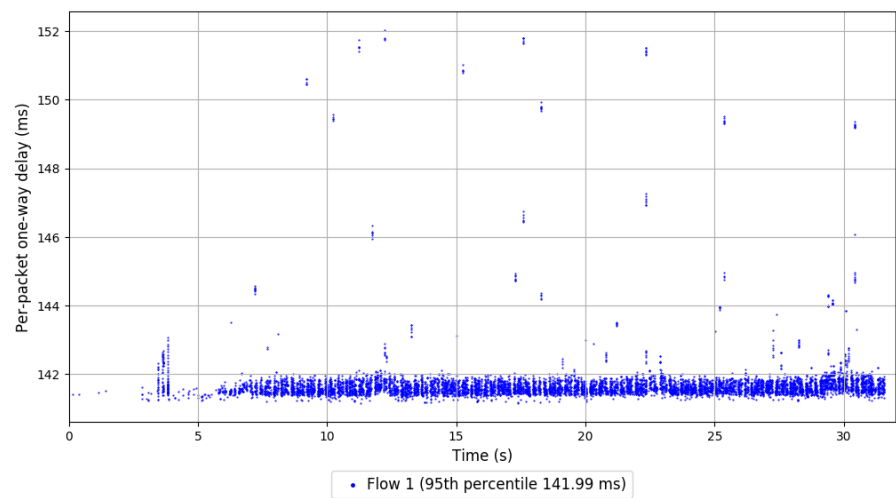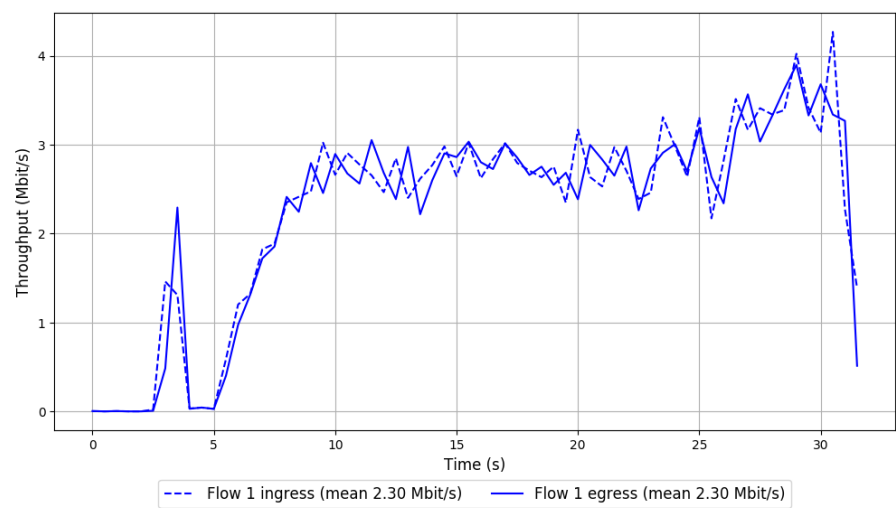
• Flow 1 (95th percentile 143.26 ms)

```
Run 2: Statistics of WebRTC media

Start at: 2017-08-16 18:55:00
End at: 2017-08-16 18:55:30
Local clock offset: 0.24 ms
Remote clock offset: -0.739 ms


# Below is generated by plot.py at 2017-08-17 01:58:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 141.985 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 141.985 ms
Loss rate: 1.06%
```

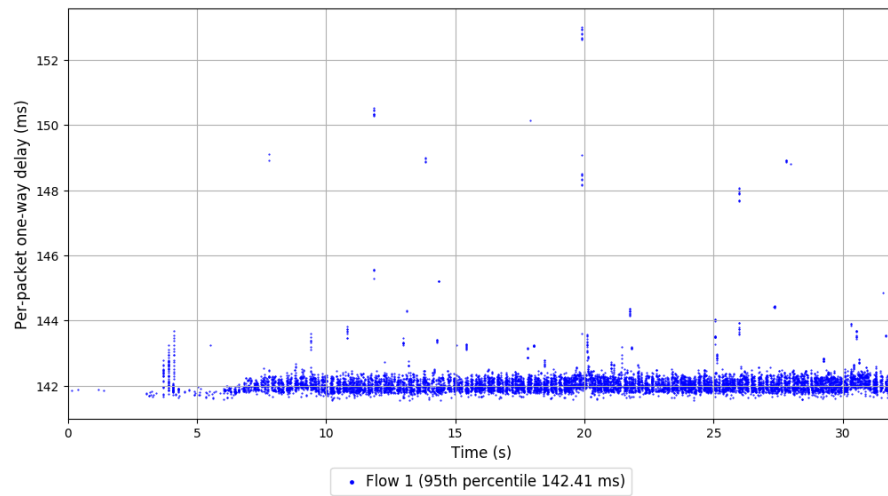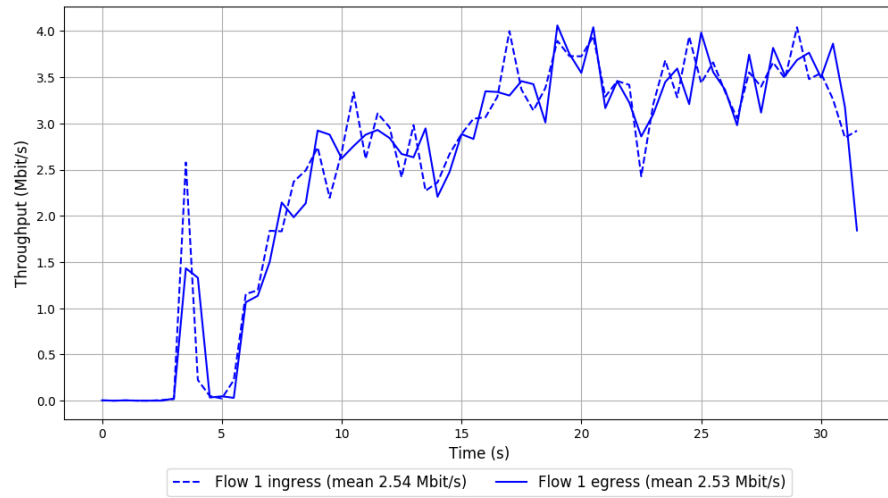Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2017-08-16 19:16:02
End at: 2017-08-16 19:16:32
Local clock offset: 0.434 ms
Remote clock offset: -0.291 ms


# Below is generated by plot.py at 2017-08-17 01:58:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 142.409 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 142.409 ms
Loss rate: 1.00%
```

Run 3: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.54 Mbit/s) --- Flow 1 egress (mean 2.53 Mbit/s)

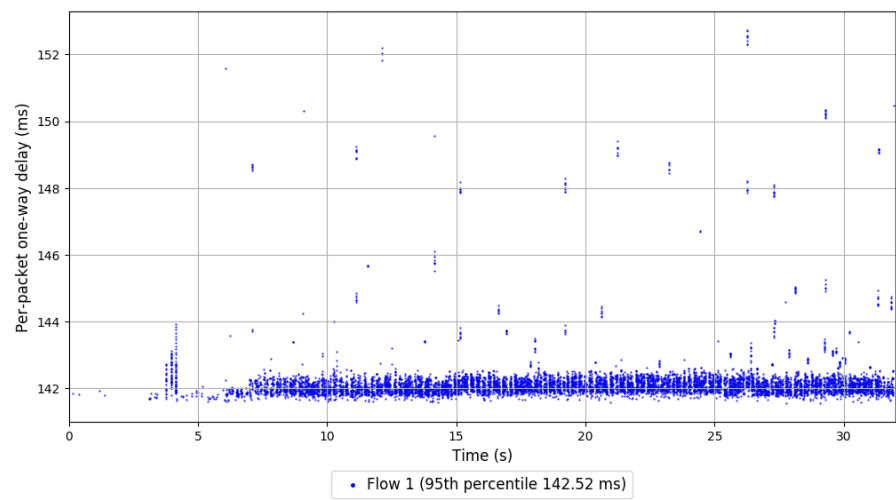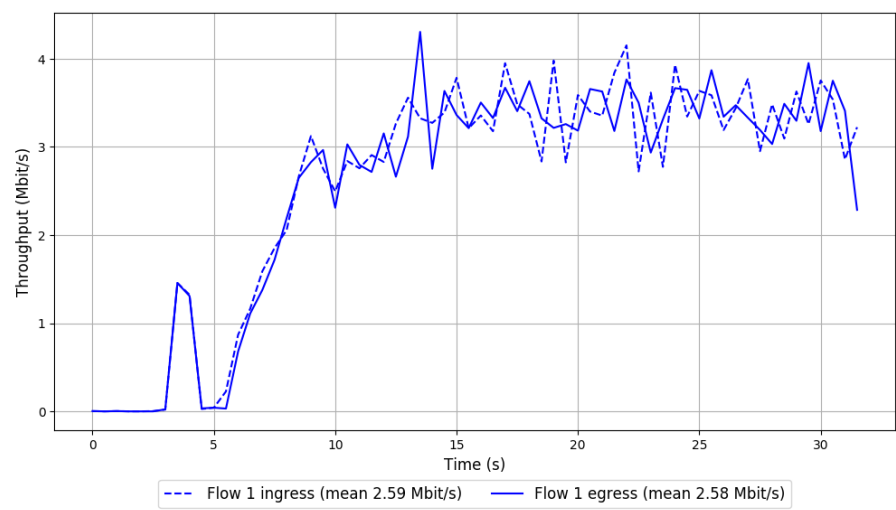
• Flow 1 (95th percentile 142.41 ms)

```
Run 4: Statistics of WebRTC media

Start at: 2017-08-16 19:37:34
End at: 2017-08-16 19:38:04
Local clock offset: 0.438 ms
Remote clock offset: -0.109 ms


# Below is generated by plot.py at 2017-08-17 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 142.517 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 142.517 ms
Loss rate: 0.97%
```

Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.59 Mbit/s)   Flow 1 egress (mean 2.58 Mbit/s)

Flow 1 (95th percentile 142.52 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2017-08-16 19:59:11
End at: 2017-08-16 19:59:41
Local clock offset: 0.929 ms
Remote clock offset: 0.087 ms


# Below is generated by plot.py at 2017-08-17 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 142.418 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 142.418 ms
Loss rate: 1.20%
```
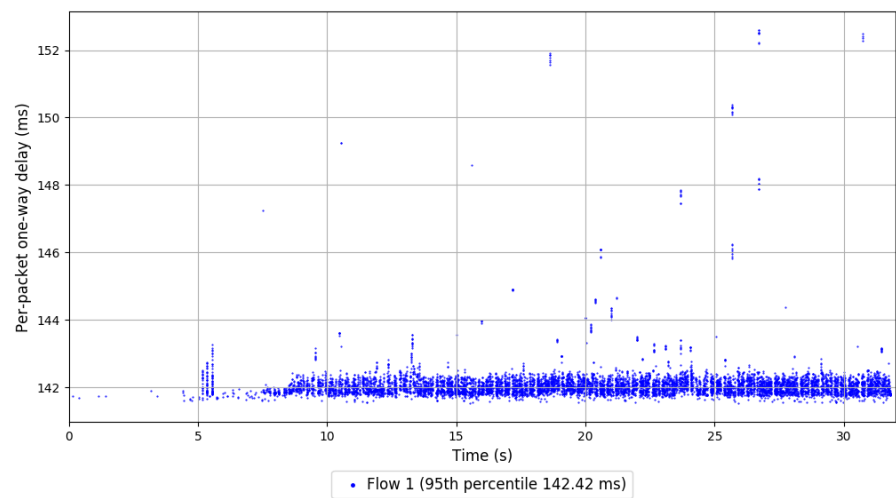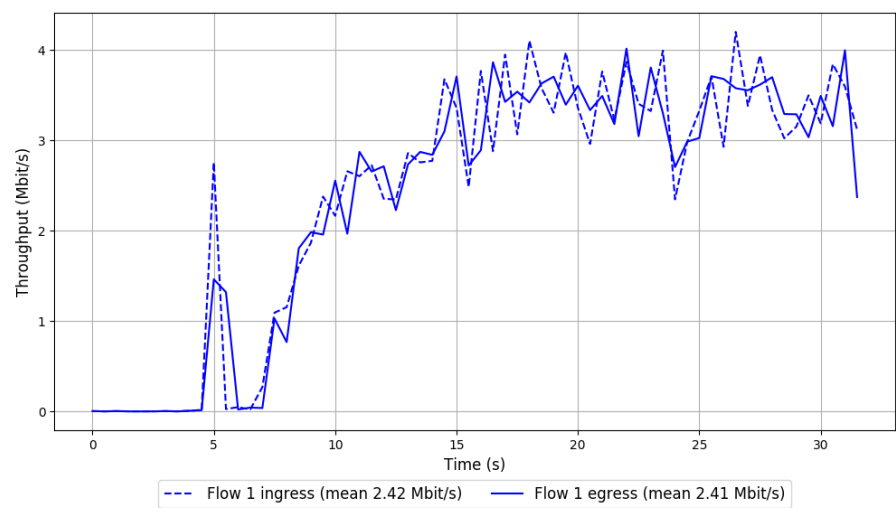
Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2017-08-16 20:20:40
End at: 2017-08-16 20:21:10
Local clock offset: 0.652 ms
Remote clock offset: 0.048 ms


# Below is generated by plot.py at 2017-08-17 01:58:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 142.169 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 142.169 ms
Loss rate: 1.10%
```
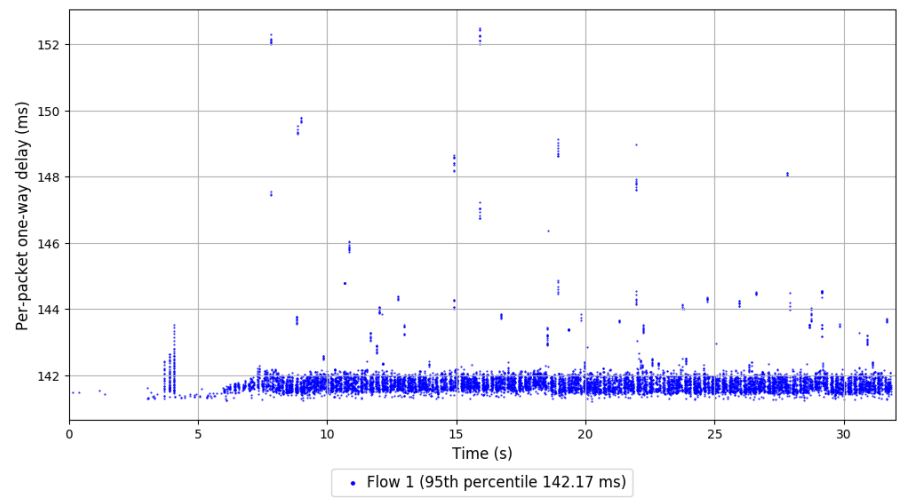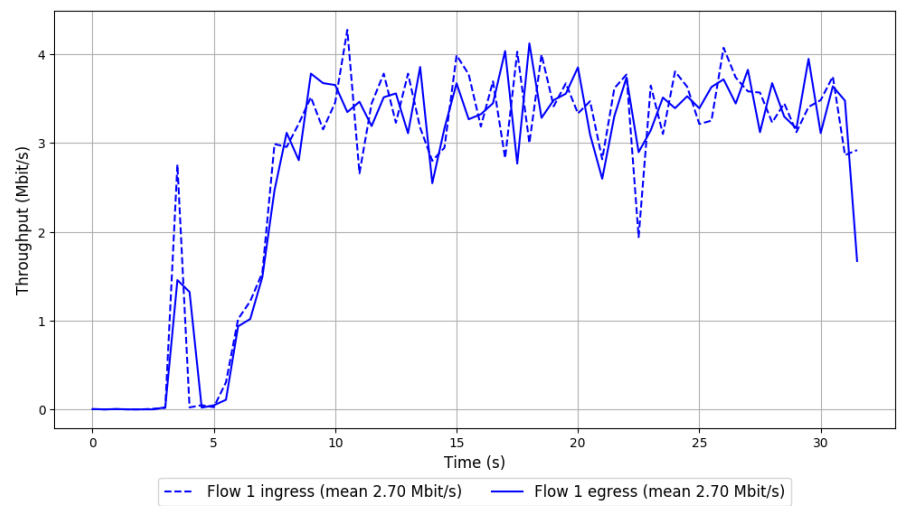
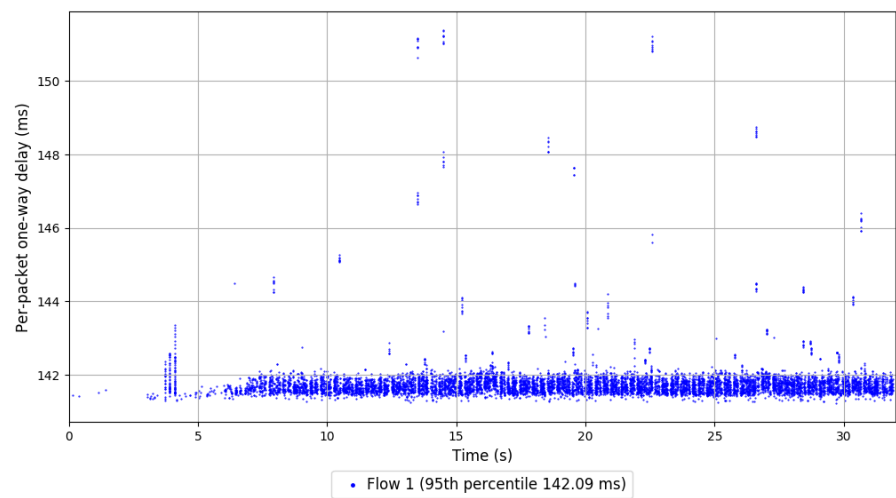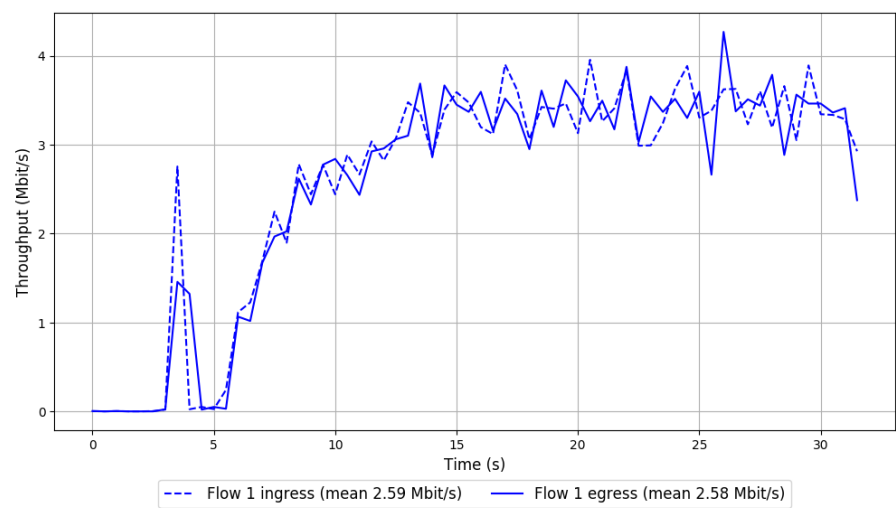Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2017-08-16 20:42:16
End at: 2017-08-16 20:42:46
Local clock offset: 0.583 ms
Remote clock offset: -0.036 ms


# Below is generated by plot.py at 2017-08-17 01:58:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 142.087 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 142.087 ms
Loss rate: 0.98%
```

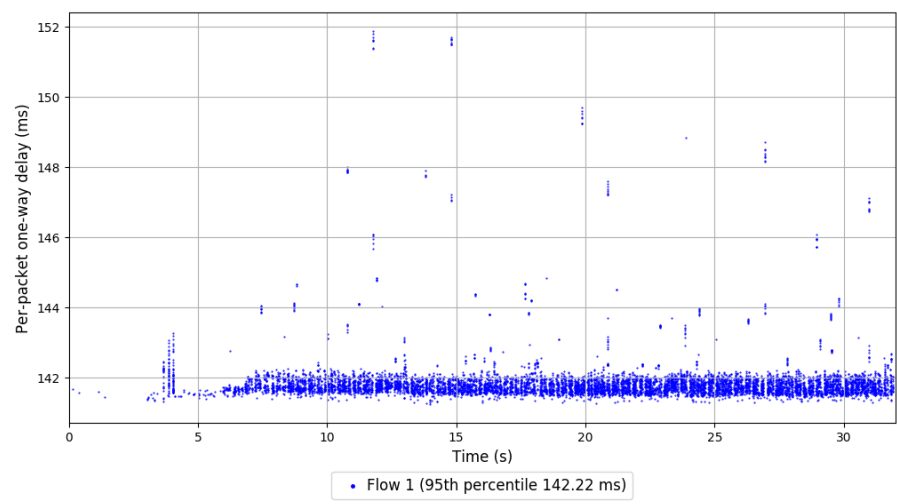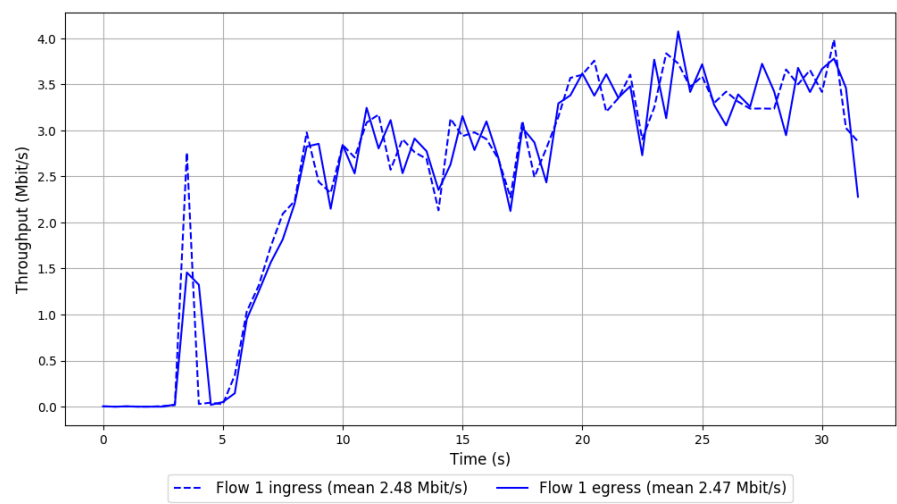Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2017-08-16 21:03:46
End at: 2017-08-16 21:04:16
Local clock offset: 0.47 ms
Remote clock offset: -0.102 ms


# Below is generated by plot.py at 2017-08-17 01:58:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 142.224 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 142.224 ms
Loss rate: 0.98%
```

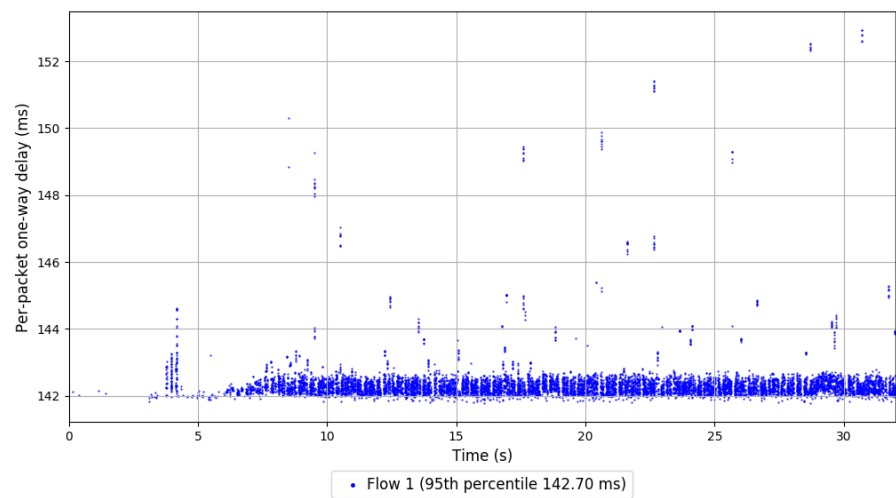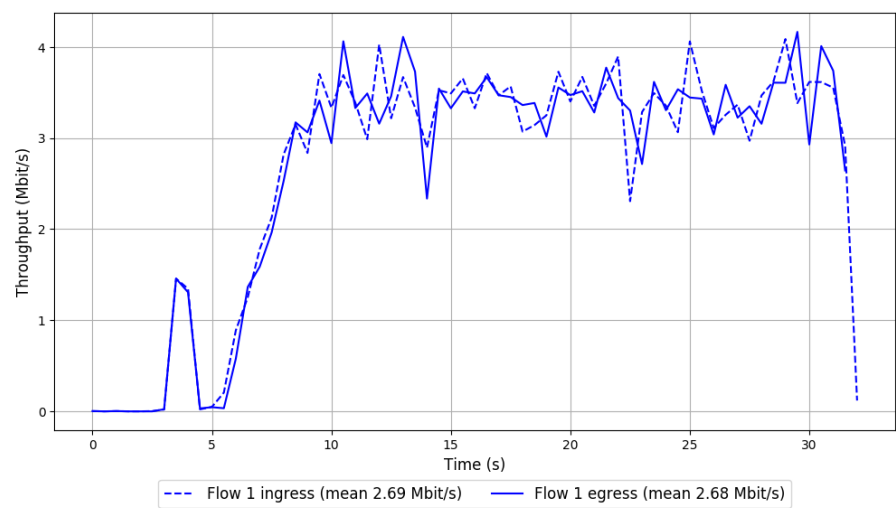Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2017-08-16 21:23:54
End at: 2017-08-16 21:24:24
Local clock offset: 0.61 ms
Remote clock offset: -0.372 ms


# Below is generated by plot.py at 2017-08-17 01:58:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 142.699 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 142.699 ms
Loss rate: 0.80%
```

Run 9: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.69 Mbit/s) — — — Flow 1 egress (mean 2.68 Mbit/s)

• Flow 1 (95th percentile 142.70 ms)

```
Run 10: Statistics of WebRTC media

Start at: 2017-08-16 21:45:37
End at: 2017-08-16 21:46:07
Local clock offset: 0.262 ms
Remote clock offset: -0.418 ms


# Below is generated by plot.py at 2017-08-17 01:58:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 142.682 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 142.682 ms
Loss rate: 1.29%
```

Run 10: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.28 Mbit/s)   Flow 1 egress (mean 2.27 Mbit/s)

Flow 1 (95th percentile 142.68 ms)