Pantheon Report

Generated at 2018-06-18 12:05:37 (UTC).

Data path: AWS India 1 Ethernet (*local*) →India Ethernet (*remote*).

Repeated the test of 16 congestion control schemes 10 times.
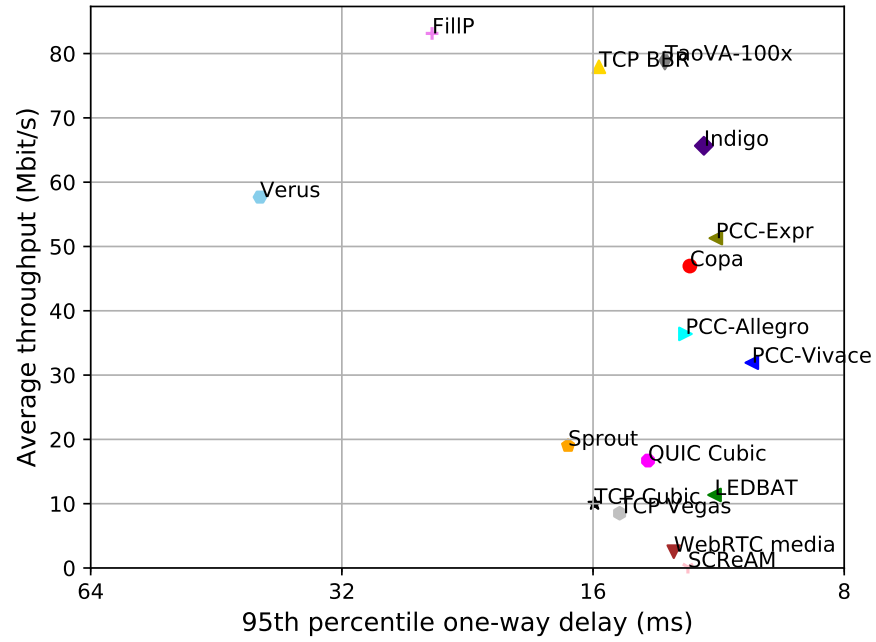
Each test lasted for 30 seconds running 1 flow.

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

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```
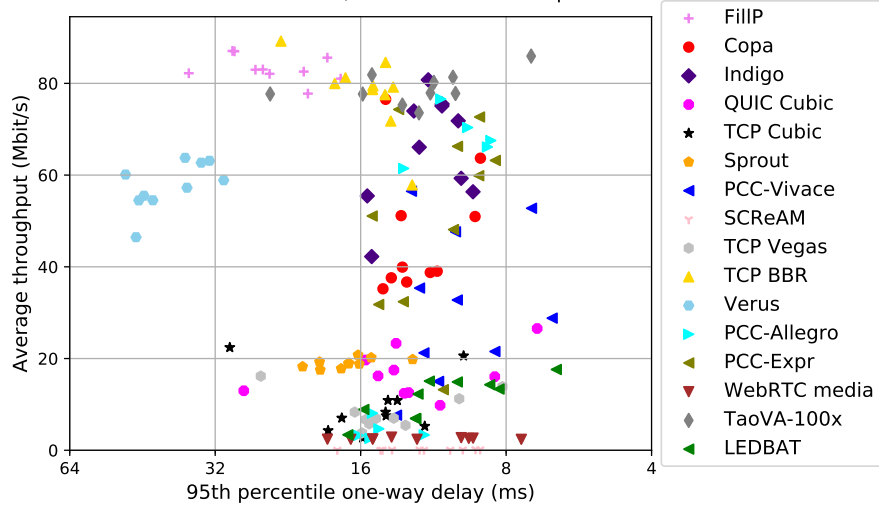
test from AWS India 1 to India, 10 runs of 30s each per scheme
(mean of all runs by scheme)

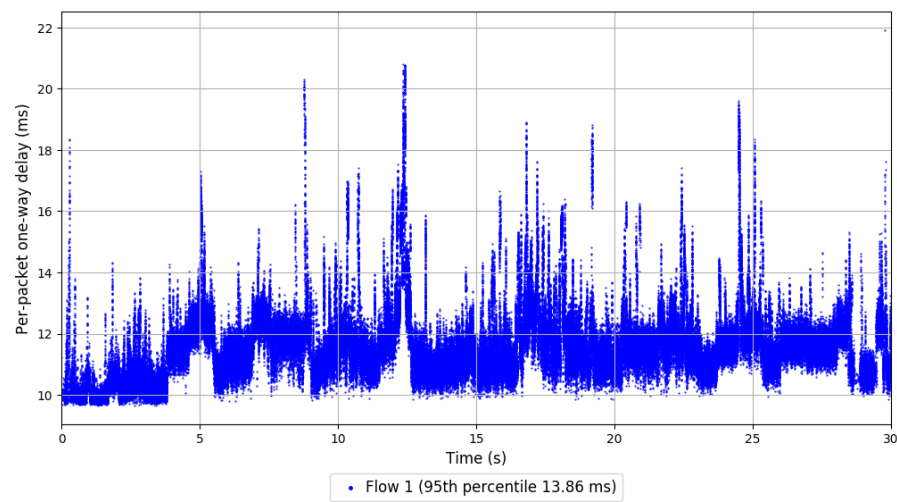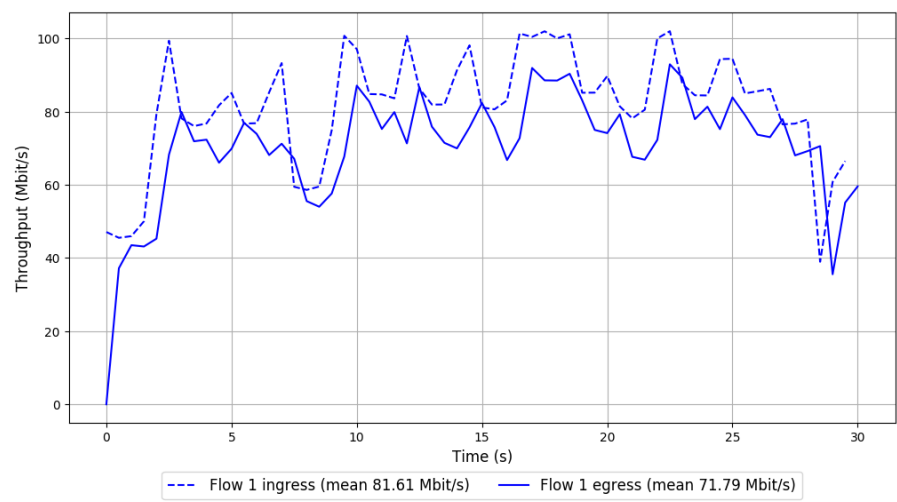test from AWS India 1 to India, 10 runs of 30s each per scheme

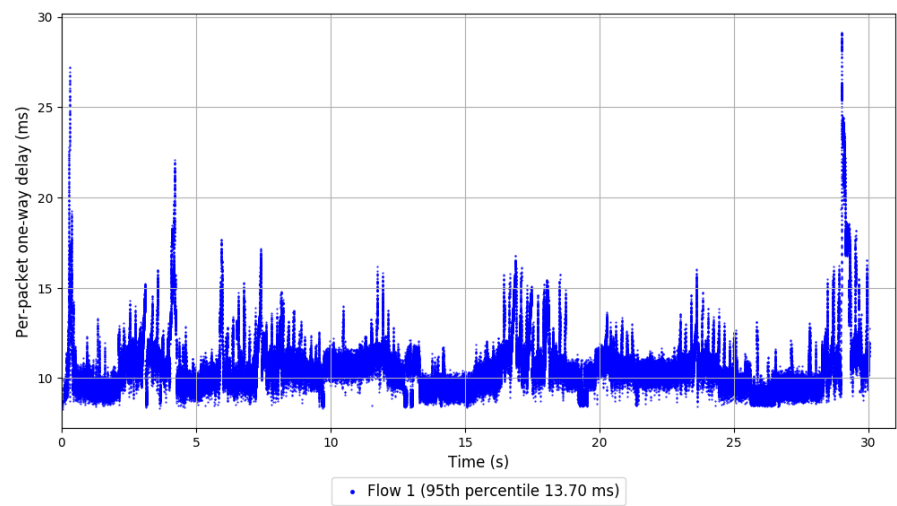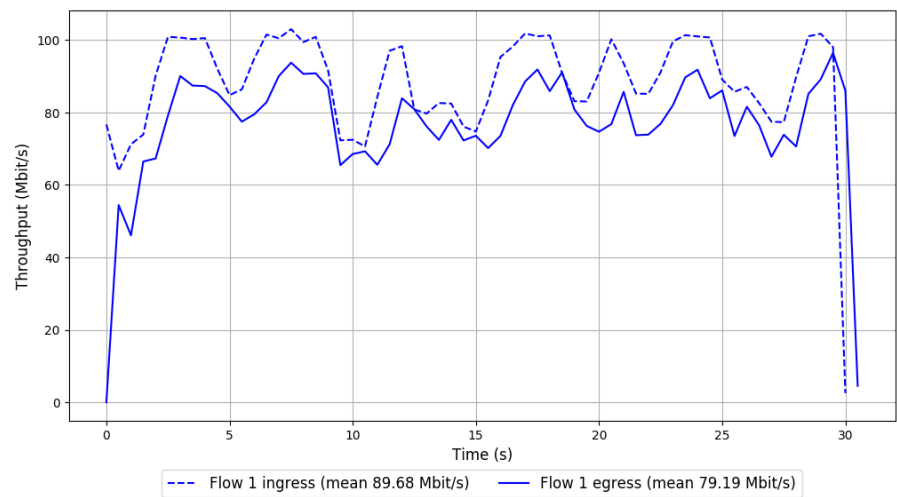| scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	77.95	15.74	10.84
Copa	10	46.96	12.25	6.67
TCP Cubic	10	9.99	15.93	1.44
FillP	10	83.13	24.95	12.31
Indigo	10	65.66	11.78	8.50
LEDBAT	10	11.36	11.44	1.30
PCC-Allegro	10	36.40	12.40	5.24
PCC-Expr	10	51.29	11.40	6.48
QUIC Cubic	10	16.71	13.75	1.56
SCReAM	10	0.13	12.31	1.55
Sprout	10	19.02	17.14	3.27
TaoVA-100x	10	78.92	13.12	10.64
TCP Vegas	10	8.51	14.87	1.32
Verus	10	57.68	40.12	26.17
PCC-Vivace	10	31.93	10.32	5.89
WebRTC media	10	2.53	12.80	1.85

```
Run 1: Statistics of TCP BBR

Start at: 2018-06-18 09:04:31
End at: 2018-06-18 09:05:01
Local clock offset: -3.796 ms
Remote clock offset: -4.243 ms


# Below is generated by plot.py at 2018-06-18 11:53:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.79 Mbit/s
95th percentile per-packet one-way delay: 13.860 ms
Loss rate: 12.04%
-- Flow 1:
Average throughput: 71.79 Mbit/s
95th percentile per-packet one-way delay: 13.860 ms
Loss rate: 12.04%
```
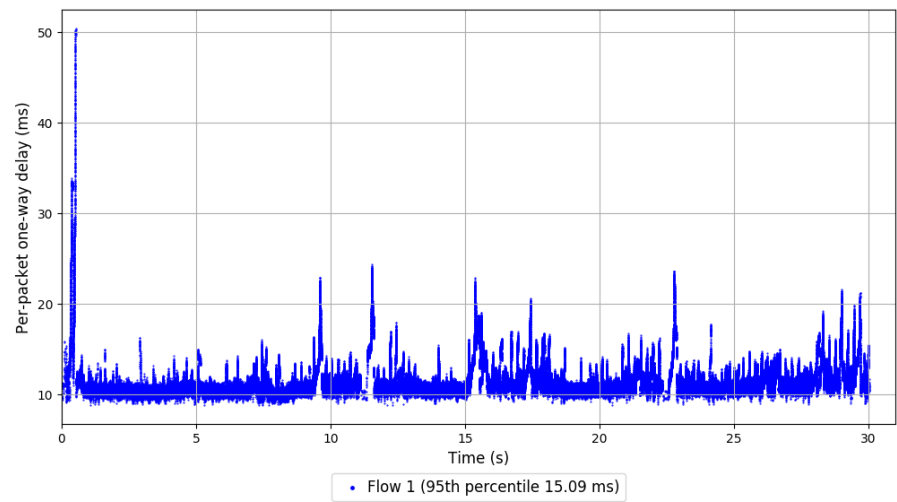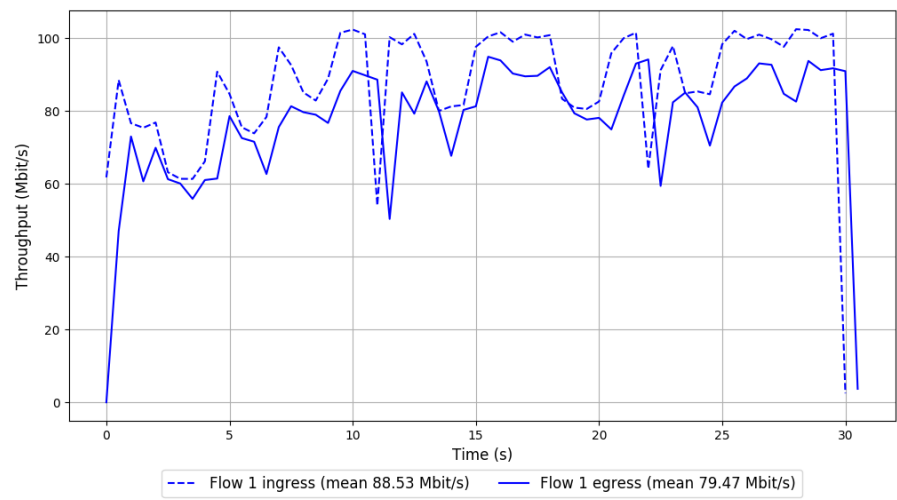
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 81.61 Mbit/s)   Flow 1 egress (mean 71.79 Mbit/s)

Flow 1 (95th percentile 13.86 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2018-06-18 09:23:01
End at: 2018-06-18 09:23:31
Local clock offset: 0.403 ms
Remote clock offset: -5.637 ms


# Below is generated by plot.py at 2018-06-18 11:53:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.19 Mbit/s
95th percentile per-packet one-way delay: 13.698 ms
Loss rate: 11.68%
-- Flow 1:
Average throughput: 79.19 Mbit/s
95th percentile per-packet one-way delay: 13.698 ms
Loss rate: 11.68%
```
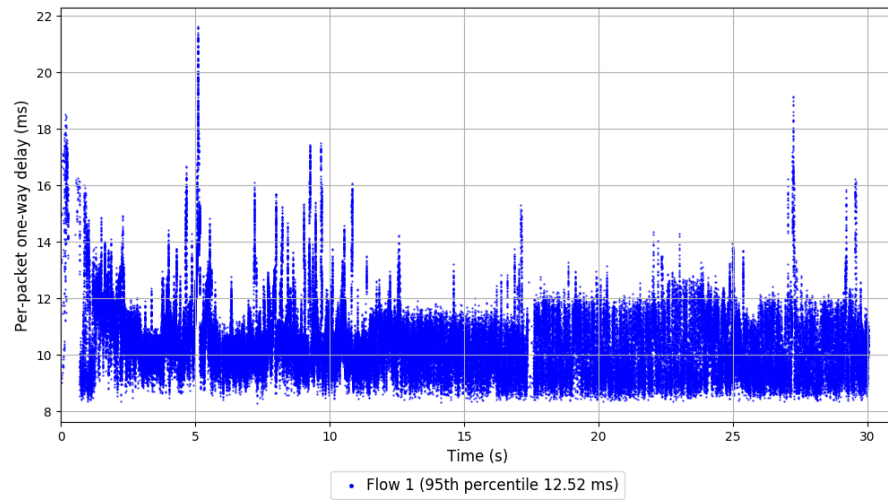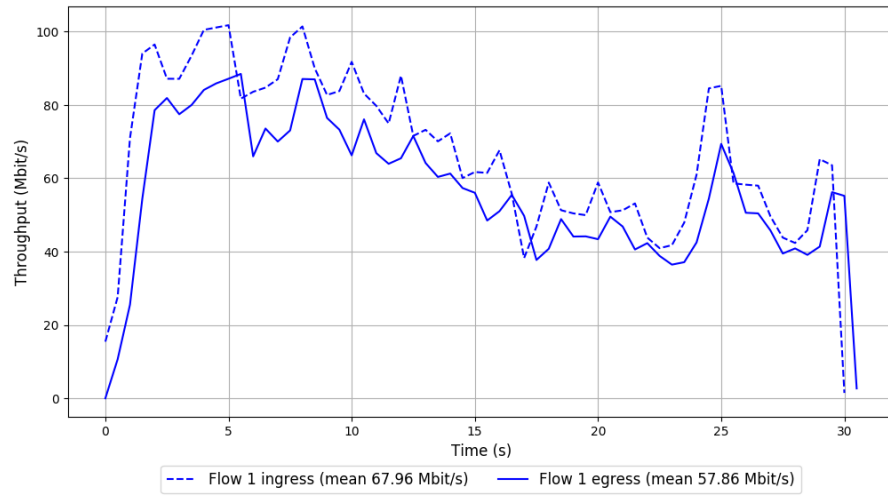
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 89.68 Mbit/s)　　Flow 1 egress (mean 79.19 Mbit/s)

Flow 1 (95th percentile 13.70 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2018-06-18 09:41:40
End at: 2018-06-18 09:42:10
Local clock offset: 1.229 ms
Remote clock offset: -7.875 ms


# Below is generated by plot.py at 2018-06-18 11:53:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.47 Mbit/s
95th percentile per-packet one-way delay: 15.089 ms
Loss rate: 10.24%
-- Flow 1:
Average throughput: 79.47 Mbit/s
95th percentile per-packet one-way delay: 15.089 ms
Loss rate: 10.24%
```
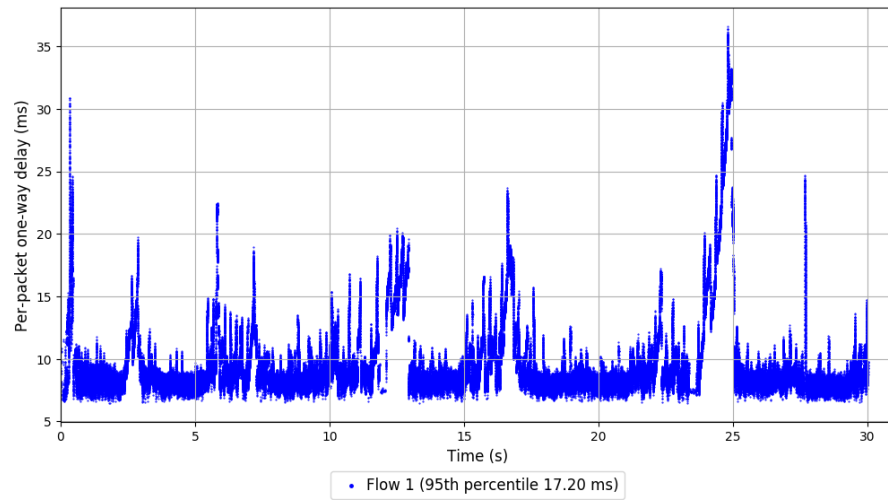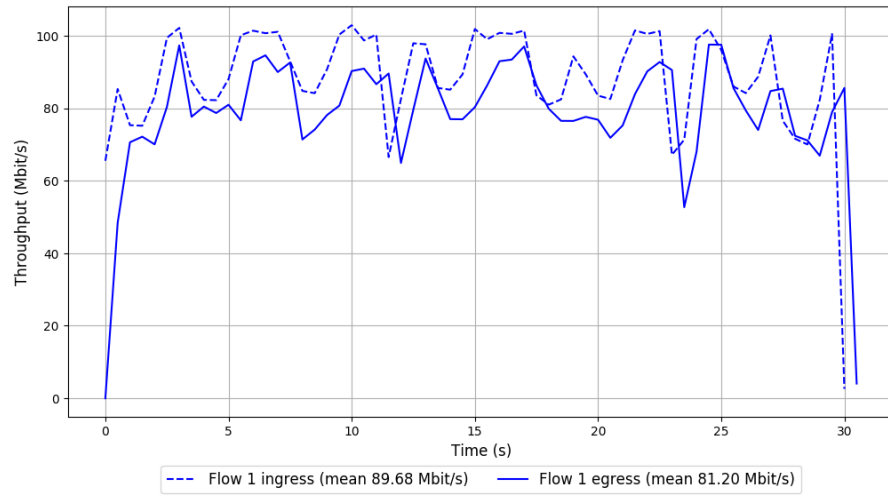
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 88.53 Mbit/s)   Flow 1 egress (mean 79.47 Mbit/s)

Flow 1 (95th percentile 15.09 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2018-06-18 10:00:18
End at: 2018-06-18 10:00:48
Local clock offset: 1.055 ms
Remote clock offset: -8.647 ms


# Below is generated by plot.py at 2018-06-18 11:53:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.86 Mbit/s
95th percentile per-packet one-way delay: 12.516 ms
Loss rate: 14.87%
-- Flow 1:
Average throughput: 57.86 Mbit/s
95th percentile per-packet one-way delay: 12.516 ms
Loss rate: 14.87%
```
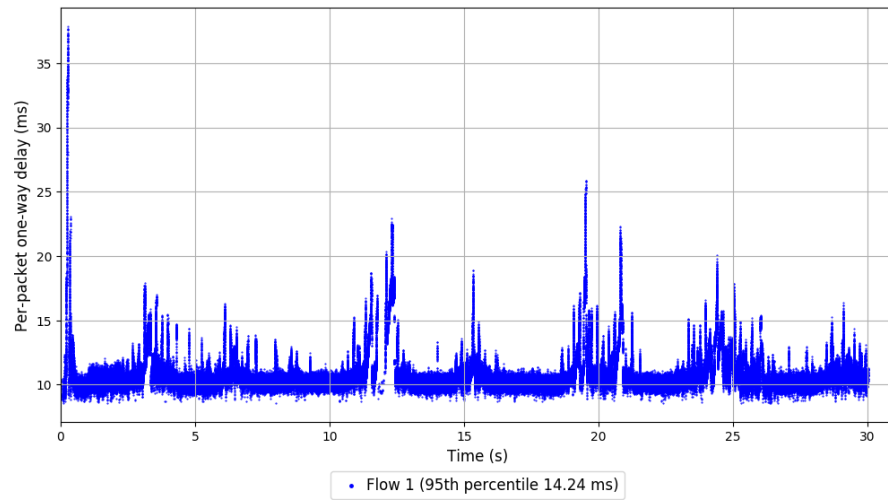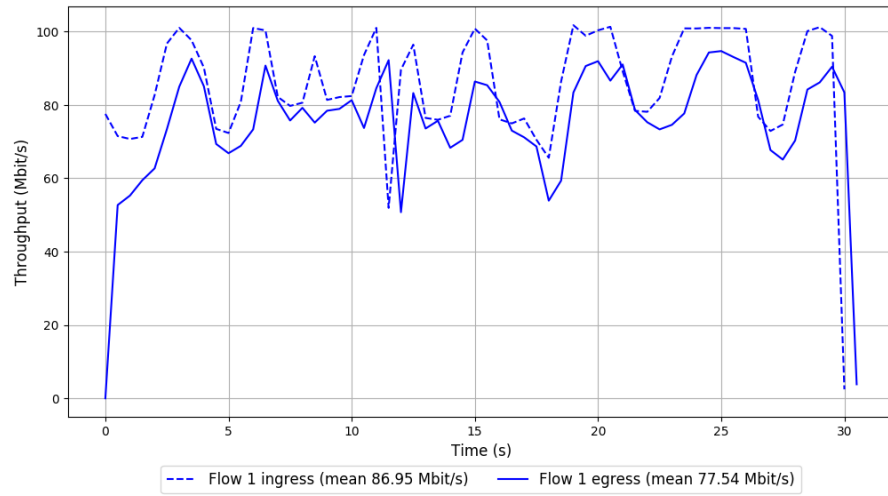
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 67.96 Mbit/s)   Flow 1 egress (mean 57.86 Mbit/s)

Flow 1 (95th percentile 12.52 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2018-06-18 10:18:32
End at: 2018-06-18 10:19:02
Local clock offset: 1.722 ms
Remote clock offset: -9.699 ms


# Below is generated by plot.py at 2018-06-18 11:53:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.20 Mbit/s
95th percentile per-packet one-way delay: 17.201 ms
Loss rate: 9.45%
-- Flow 1:
Average throughput: 81.20 Mbit/s
95th percentile per-packet one-way delay: 17.201 ms
Loss rate: 9.45%
```

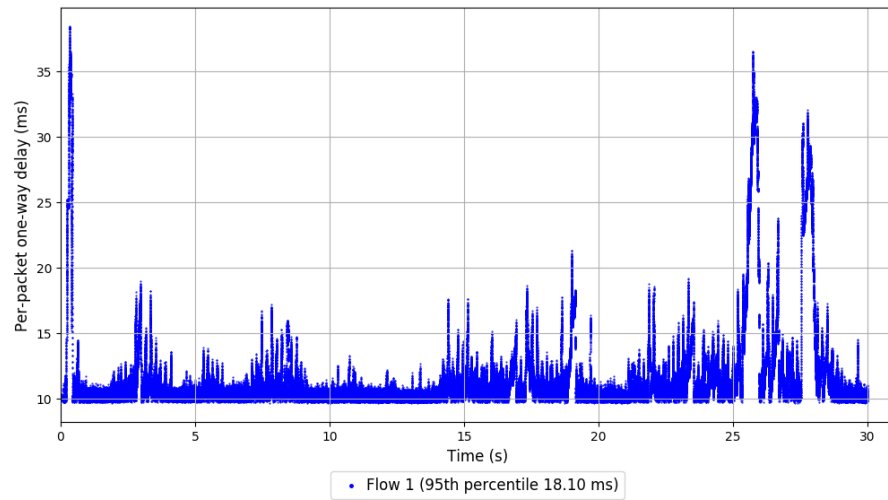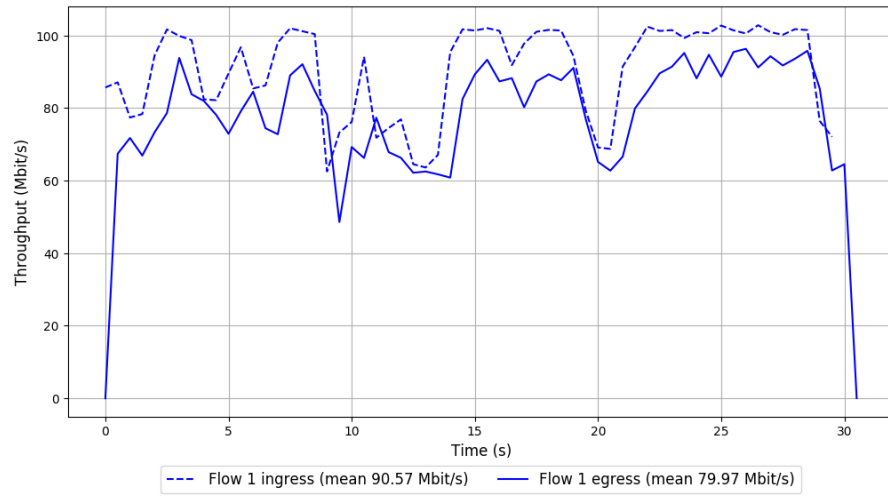Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 89.68 Mbit/s)   Flow 1 egress (mean 81.20 Mbit/s)

Flow 1 (95th percentile 17.20 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-06-18 10:36:51
End at: 2018-06-18 10:37:21
Local clock offset: -0.395 ms
Remote clock offset: -5.281 ms


# Below is generated by plot.py at 2018-06-18 11:53:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.54 Mbit/s
95th percentile per-packet one-way delay: 14.243 ms
Loss rate: 10.82%
-- Flow 1:
Average throughput: 77.54 Mbit/s
95th percentile per-packet one-way delay: 14.243 ms
Loss rate: 10.82%
```
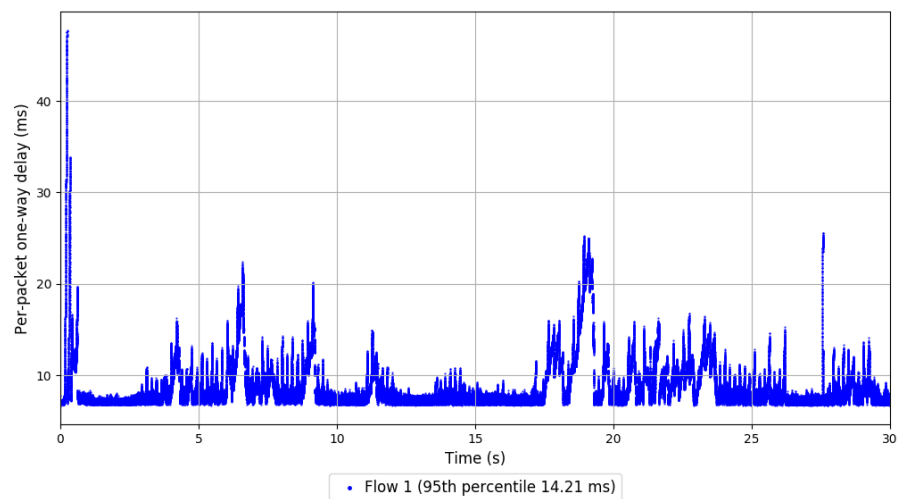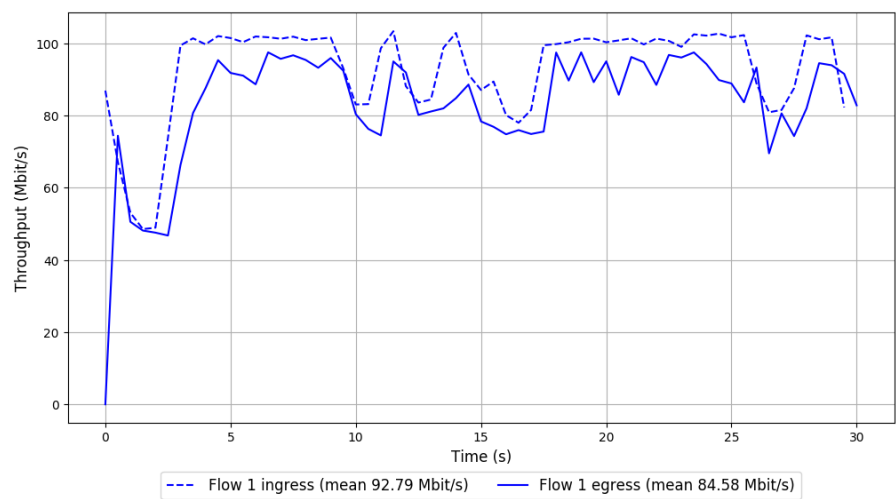
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 86.95 Mbit/s)   Flow 1 egress (mean 77.54 Mbit/s)

Flow 1 (95th percentile 14.24 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-06-18 10:55:15
End at: 2018-06-18 10:55:45
Local clock offset: 0.637 ms
Remote clock offset: -1.709 ms


# Below is generated by plot.py at 2018-06-18 11:53:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.97 Mbit/s
95th percentile per-packet one-way delay: 18.100 ms
Loss rate: 11.71%
-- Flow 1:
Average throughput: 79.97 Mbit/s
95th percentile per-packet one-way delay: 18.100 ms
Loss rate: 11.71%
```
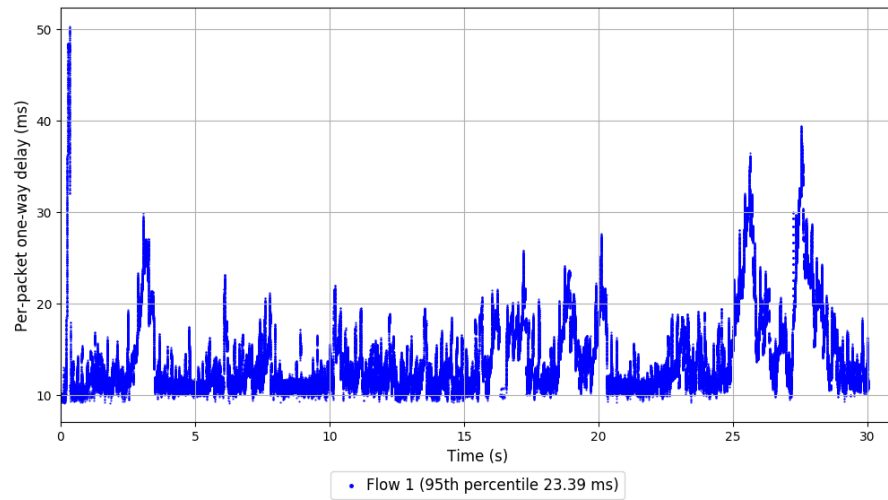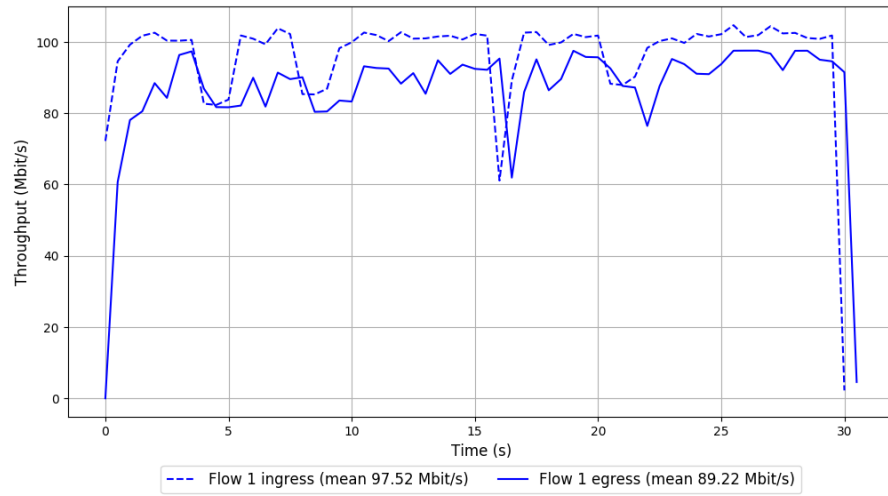
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 90.57 Mbit/s) ---- Flow 1 egress (mean 79.97 Mbit/s)

• Flow 1 (95th percentile 18.10 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2018-06-18 11:13:33
End at: 2018-06-18 11:14:03
Local clock offset: 2.956 ms
Remote clock offset: 0.779 ms


# Below is generated by plot.py at 2018-06-18 11:53:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.58 Mbit/s
95th percentile per-packet one-way delay: 14.209 ms
Loss rate: 8.84%
-- Flow 1:
Average throughput: 84.58 Mbit/s
95th percentile per-packet one-way delay: 14.209 ms
Loss rate: 8.84%
```

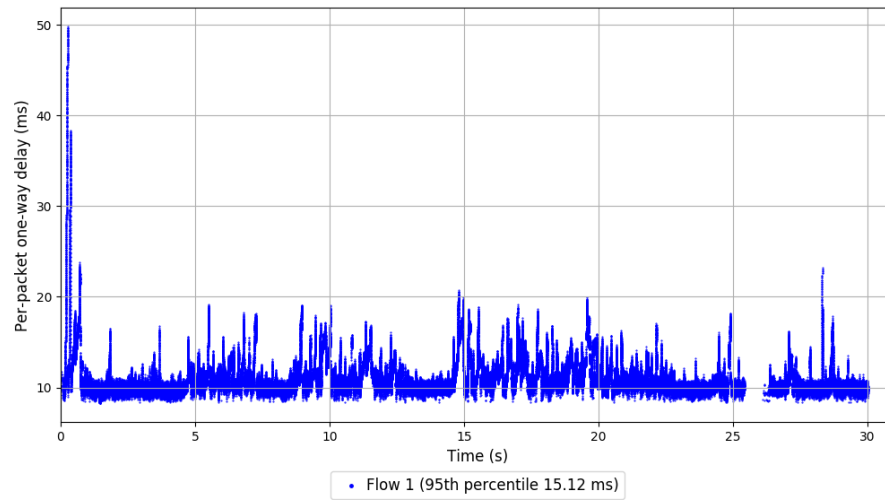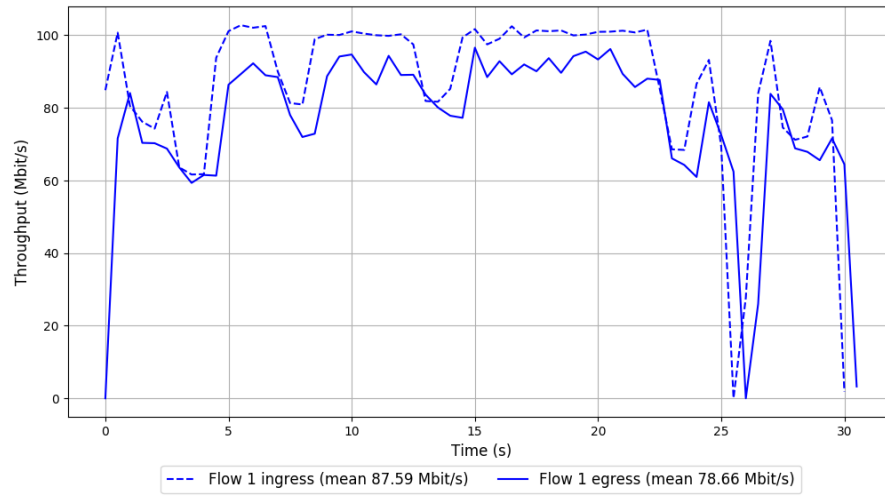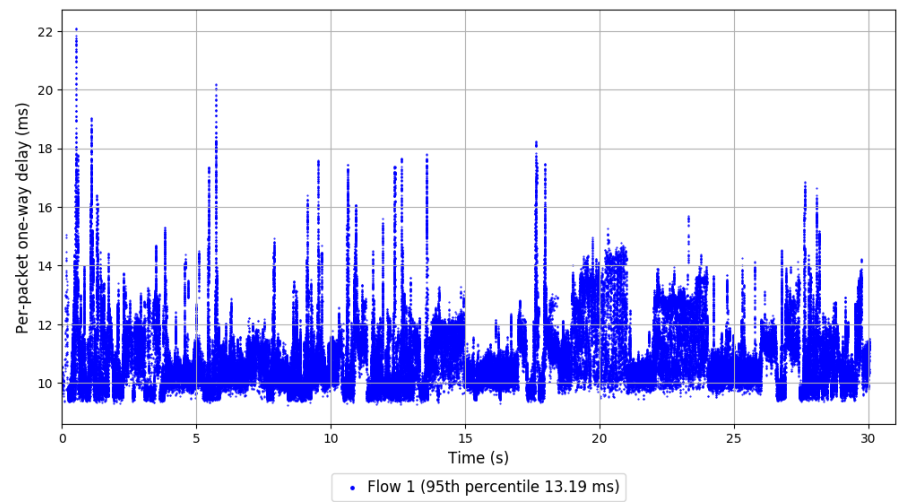Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 92.79 Mbit/s)   Flow 1 egress (mean 84.58 Mbit/s)

Flow 1 (95th percentile 14.21 ms)

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```
Run 9: Statistics of TCP BBR

Start at: 2018-06-18 11:31:56
End at: 2018-06-18 11:32:26
Local clock offset: 0.161 ms
Remote clock offset: 1.659 ms


# Below is generated by plot.py at 2018-06-18 11:54:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.22 Mbit/s
95th percentile per-packet one-way delay: 23.394 ms
Loss rate: 8.51%
-- Flow 1:
Average throughput: 89.22 Mbit/s
95th percentile per-packet one-way delay: 23.394 ms
Loss rate: 8.51%
```

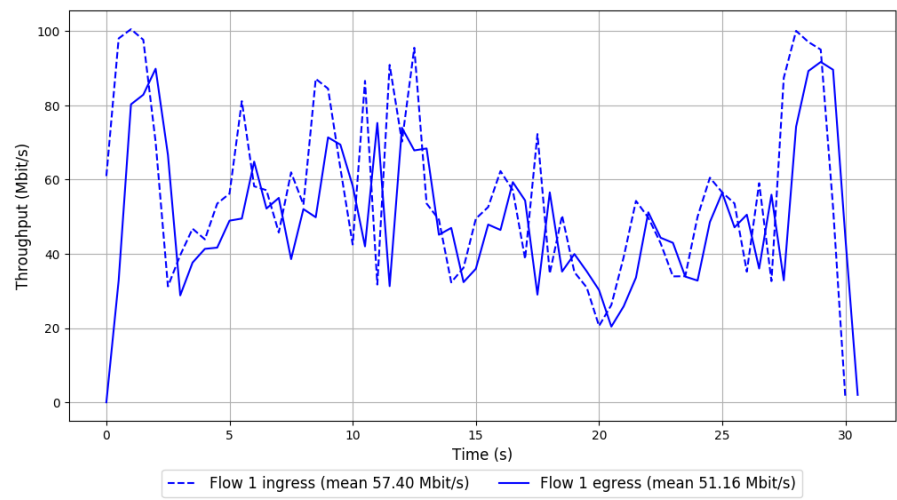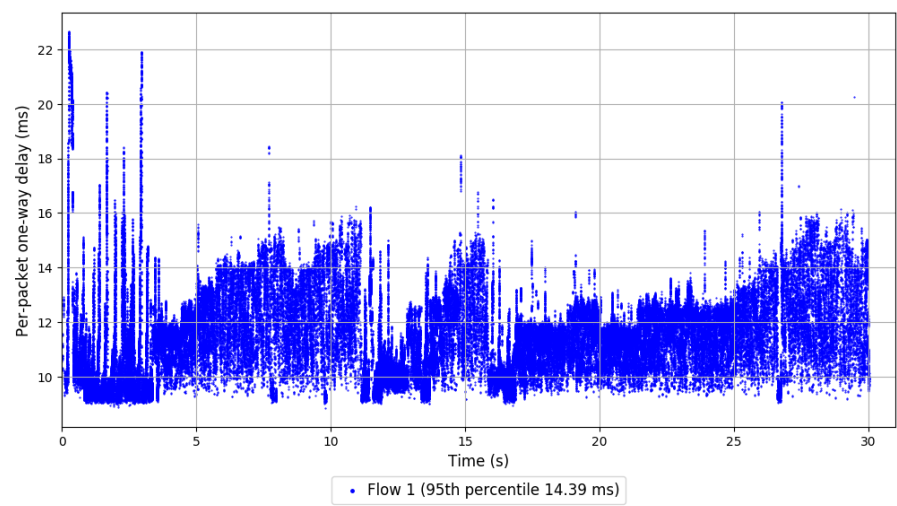Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 97.52 Mbit/s)   Flow 1 egress (mean 89.22 Mbit/s)

Flow 1 (95th percentile 23.39 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2018-06-18 11:49:59
End at: 2018-06-18 11:50:29
Local clock offset: -0.825 ms
Remote clock offset: -2.094 ms


# Below is generated by plot.py at 2018-06-18 11:54:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.66 Mbit/s
95th percentile per-packet one-way delay: 15.122 ms
Loss rate: 10.19%
-- Flow 1:
Average throughput: 78.66 Mbit/s
95th percentile per-packet one-way delay: 15.122 ms
Loss rate: 10.19%
```
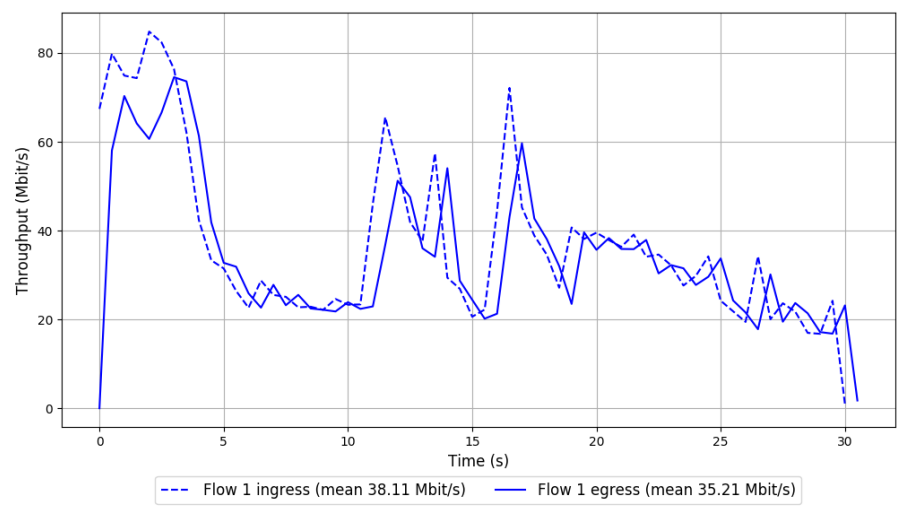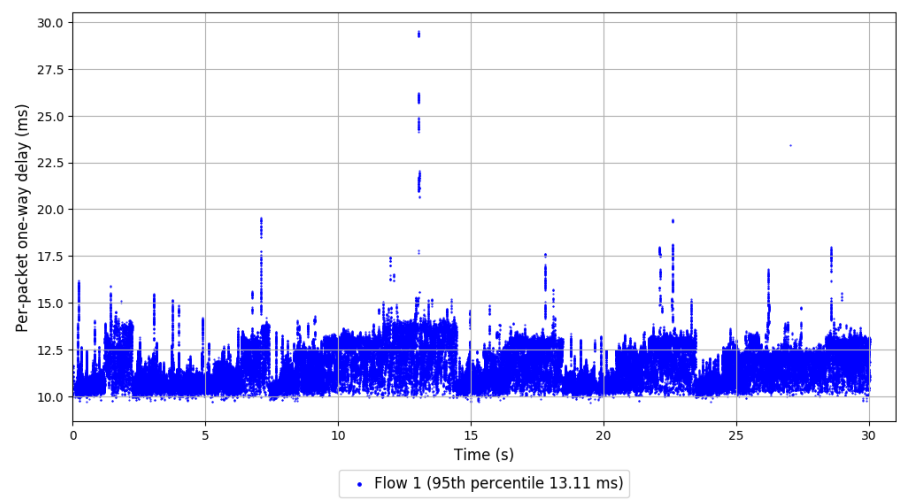
Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-06-18 08:54:04
End at: 2018-06-18 08:54:34
Local clock offset: -2.627 ms
Remote clock offset: -4.261 ms


# Below is generated by plot.py at 2018-06-18 11:54:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.16 Mbit/s
95th percentile per-packet one-way delay: 13.194 ms
Loss rate: 10.89%
-- Flow 1:
Average throughput: 51.16 Mbit/s
95th percentile per-packet one-way delay: 13.194 ms
Loss rate: 10.89%
```

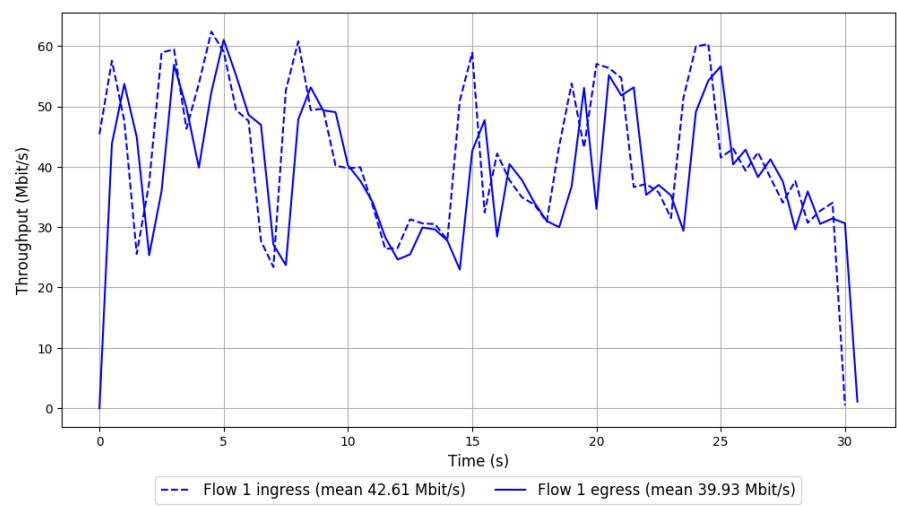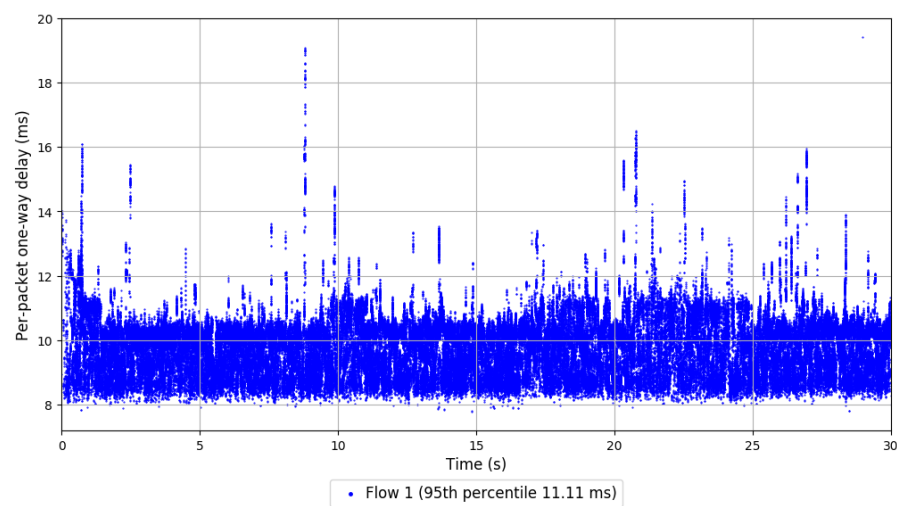Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-06-18 09:12:35
End at: 2018-06-18 09:13:05
Local clock offset: -1.202 ms
Remote clock offset: -3.494 ms


# Below is generated by plot.py at 2018-06-18 11:54:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.21 Mbit/s
95th percentile per-packet one-way delay: 14.387 ms
Loss rate: 7.61%
-- Flow 1:
Average throughput: 35.21 Mbit/s
95th percentile per-packet one-way delay: 14.387 ms
Loss rate: 7.61%
```
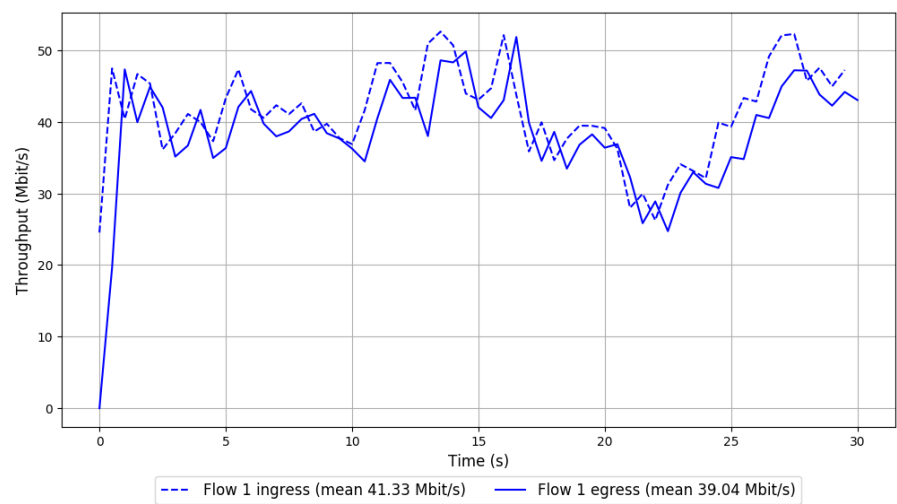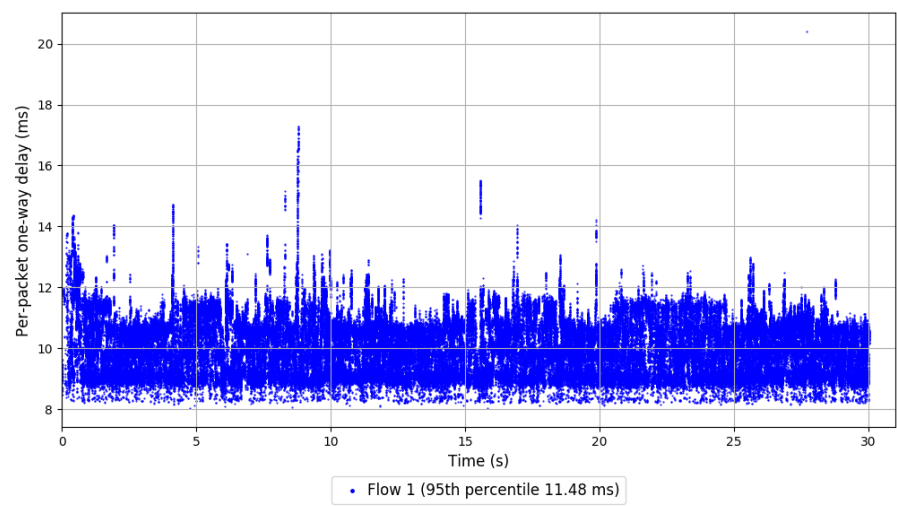
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-06-18 09:31:09
End at: 2018-06-18 09:31:39
Local clock offset: -1.716 ms
Remote clock offset: -6.689 ms

# Below is generated by plot.py at 2018-06-18 11:54:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.93 Mbit/s
95th percentile per-packet one-way delay: 13.114 ms
Loss rate: 6.28%
-- Flow 1:
Average throughput: 39.93 Mbit/s
95th percentile per-packet one-way delay: 13.114 ms
Loss rate: 6.28%
```
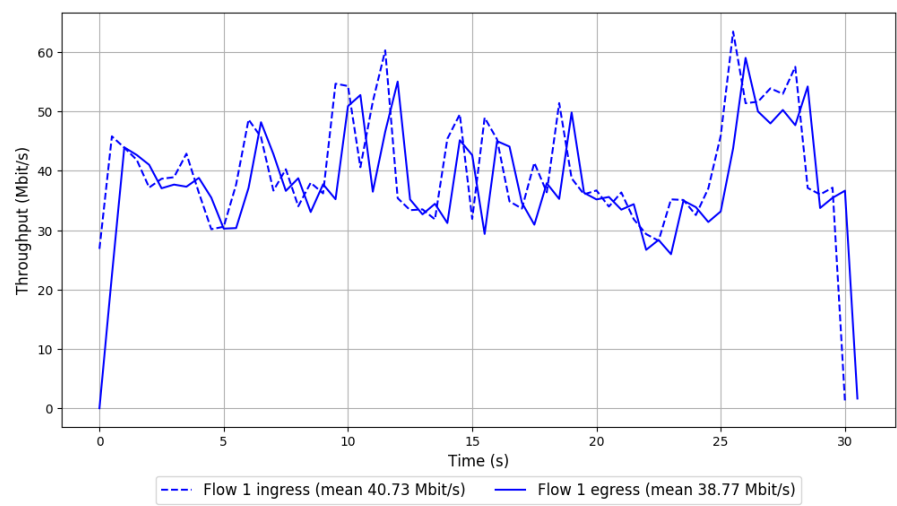
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-06-18 09:49:55
End at: 2018-06-18 09:50:25
Local clock offset: 0.76 ms
Remote clock offset: -9.621 ms

# Below is generated by plot.py at 2018-06-18 11:54:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.04 Mbit/s
95th percentile per-packet one-way delay: 11.111 ms
Loss rate: 5.53%
-- Flow 1:
Average throughput: 39.04 Mbit/s
95th percentile per-packet one-way delay: 11.111 ms
Loss rate: 5.53%
```
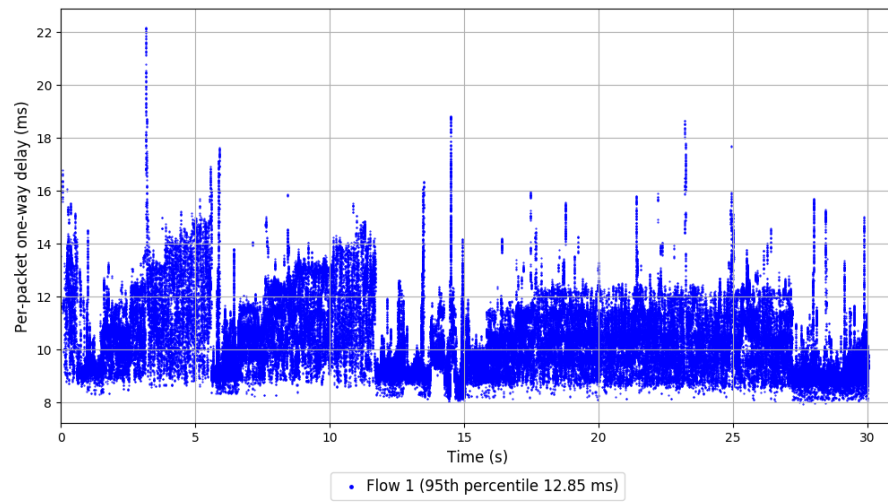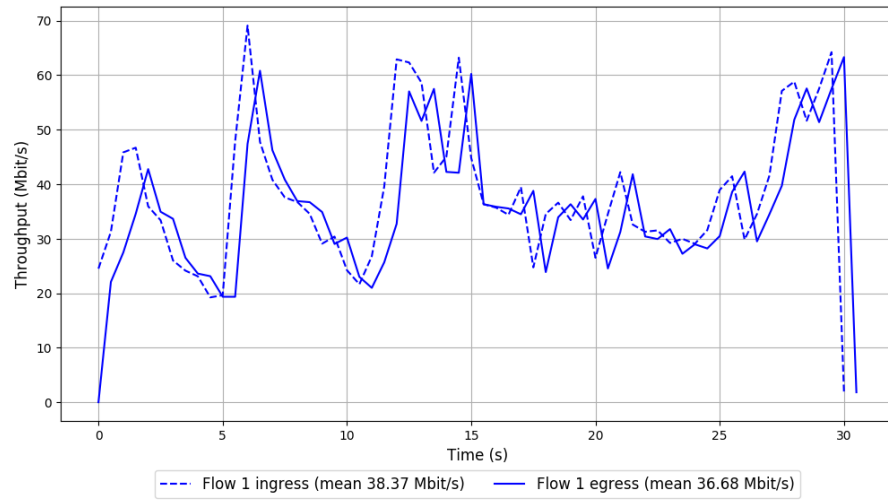
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 41.33 Mbit/s) — Flow 1 egress (mean 39.04 Mbit/s)

• Flow 1 (95th percentile 11.11 ms)

```
Run 5: Statistics of Copa

Start at: 2018-06-18 10:08:17
End at: 2018-06-18 10:08:47
Local clock offset: 0.313 ms
Remote clock offset: -9.264 ms


# Below is generated by plot.py at 2018-06-18 11:54:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 11.484 ms
Loss rate: 4.81%
-- Flow 1:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 11.484 ms
Loss rate: 4.81%
```
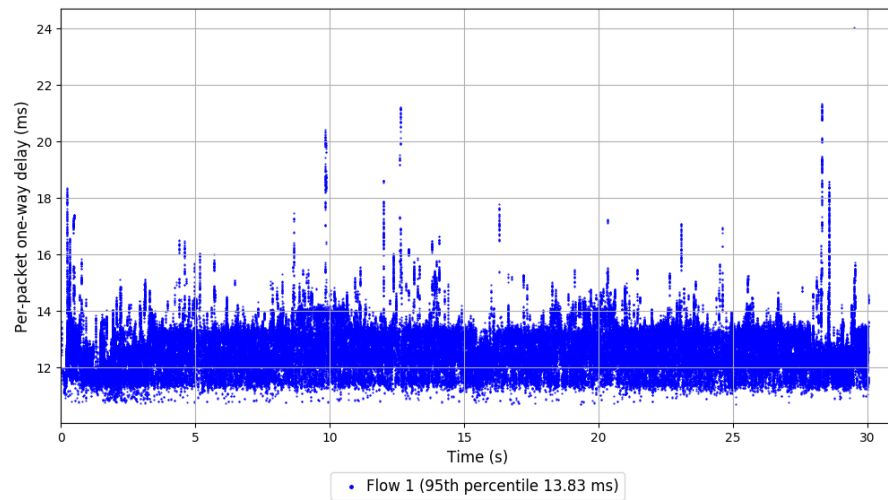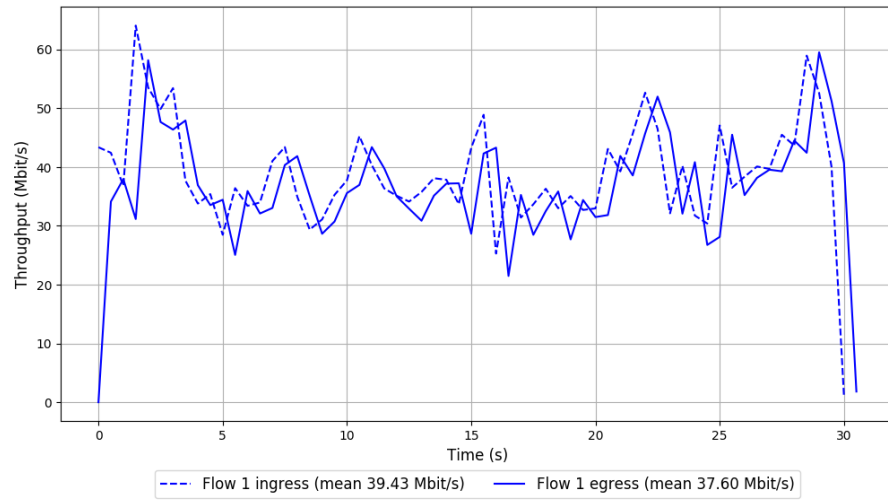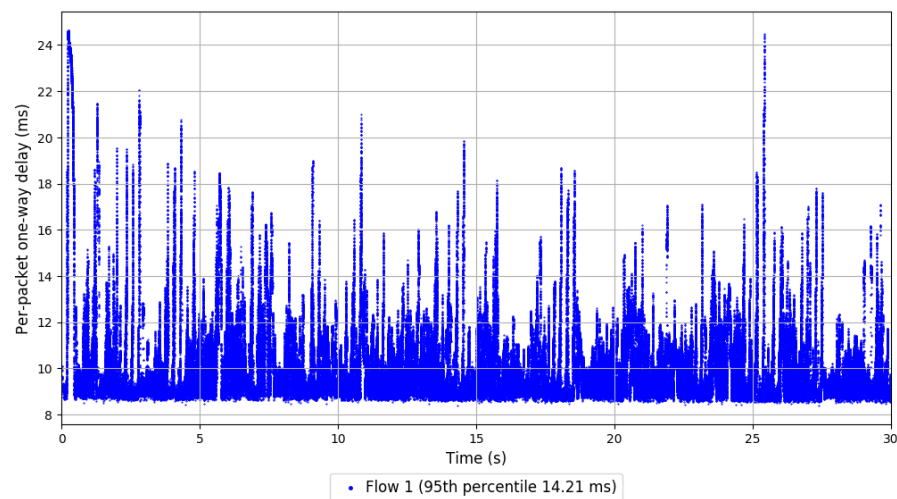
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 40.73 Mbit/s)   Flow 1 egress (mean 38.77 Mbit/s)

• Flow 1 (95th percentile 11.48 ms)

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```
Run 6: Statistics of Copa

Start at: 2018-06-18 10:26:33
End at: 2018-06-18 10:27:03
Local clock offset: -0.755 ms
Remote clock offset: -9.018 ms


# Below is generated by plot.py at 2018-06-18 11:54:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.68 Mbit/s
95th percentile per-packet one-way delay: 12.848 ms
Loss rate: 4.42%
-- Flow 1:
Average throughput: 36.68 Mbit/s
95th percentile per-packet one-way delay: 12.848 ms
Loss rate: 4.42%
```

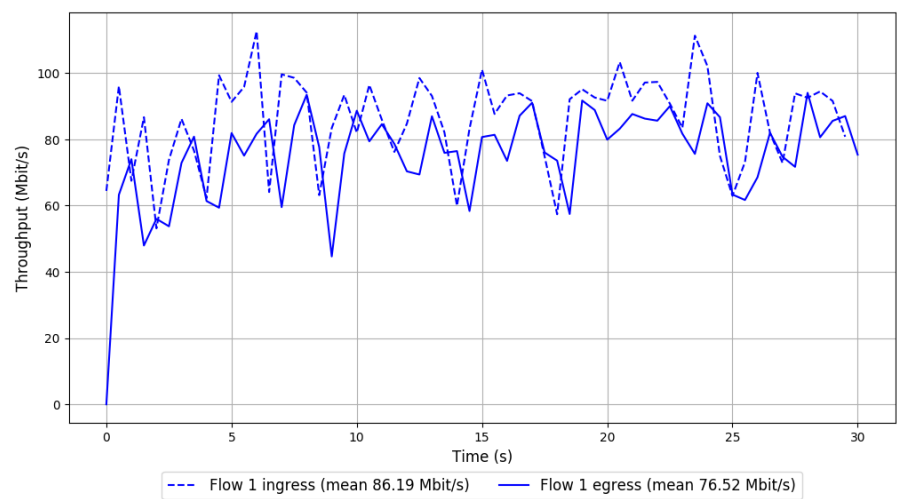# Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 38.37 Mbit/s)   Flow 1 egress (mean 36.68 Mbit/s)

Flow 1 (95th percentile 12.85 ms)

```
Run 7: Statistics of Copa

Start at: 2018-06-18 10:45:03
End at: 2018-06-18 10:45:33
Local clock offset: -0.861 ms
Remote clock offset: -3.225 ms


# Below is generated by plot.py at 2018-06-18 11:55:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 13.826 ms
Loss rate: 4.64%
-- Flow 1:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 13.826 ms
Loss rate: 4.64%
```
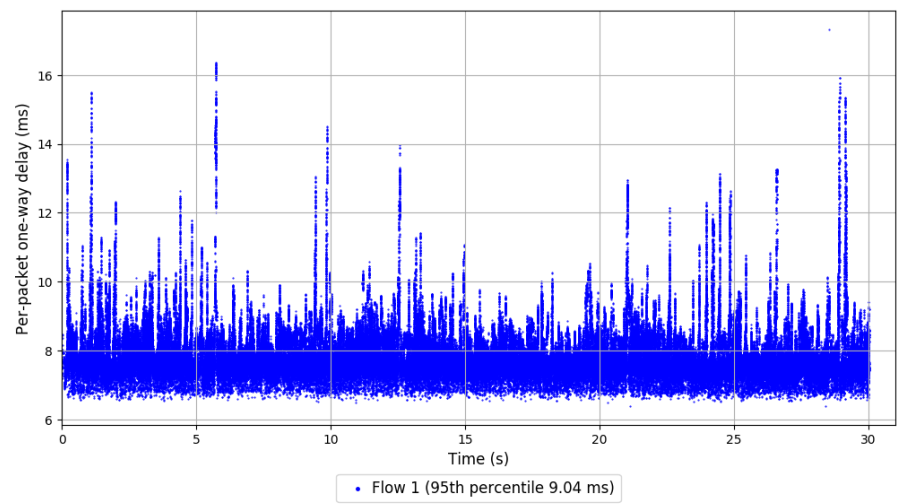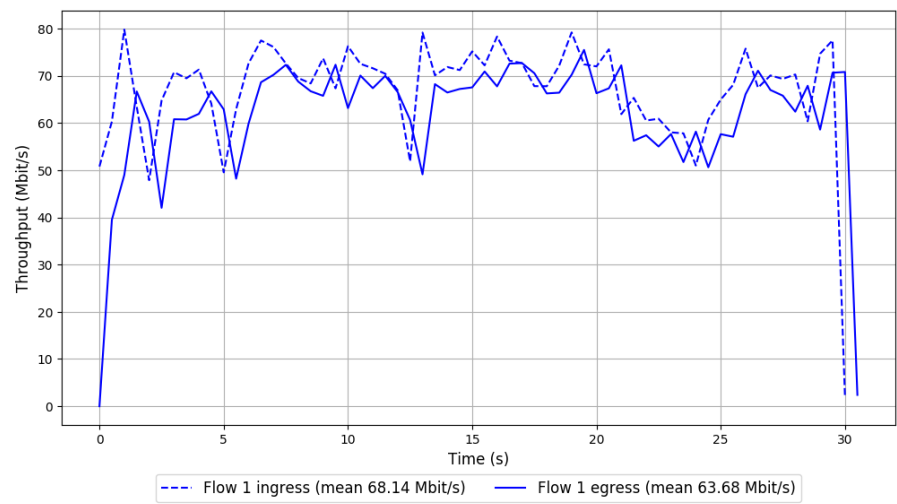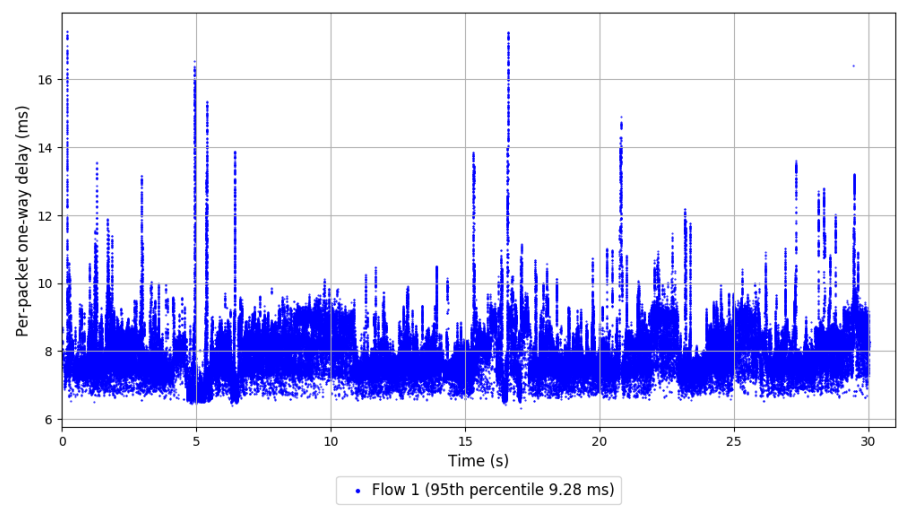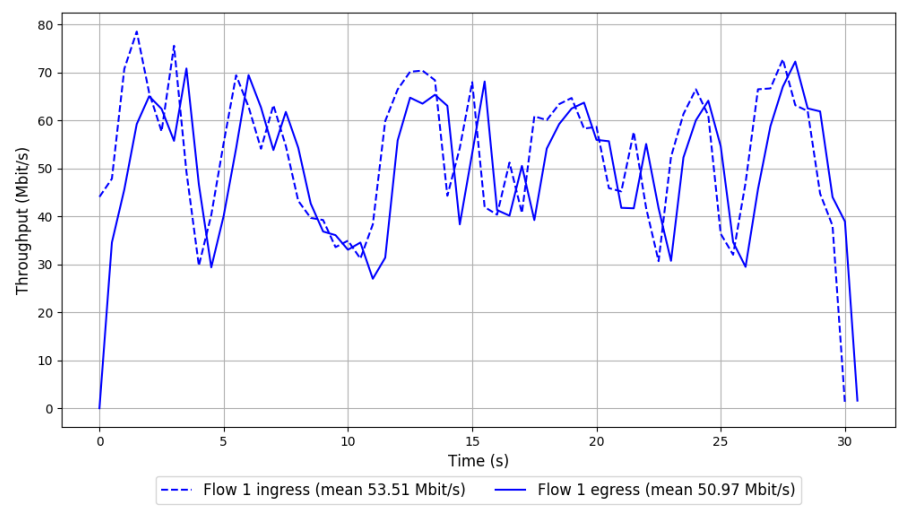
Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 39.43 Mbit/s) ----   Flow 1 egress (mean 37.60 Mbit/s) ———

• Flow 1 (95th percentile 13.83 ms)

```
Run 8: Statistics of Copa

Start at: 2018-06-18 11:03:22
End at: 2018-06-18 11:03:52
Local clock offset: 0.983 ms
Remote clock offset: -1.368 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.52 Mbit/s
95th percentile per-packet one-way delay: 14.205 ms
Loss rate: 11.22%
-- Flow 1:
Average throughput: 76.52 Mbit/s
95th percentile per-packet one-way delay: 14.205 ms
Loss rate: 11.22%
```
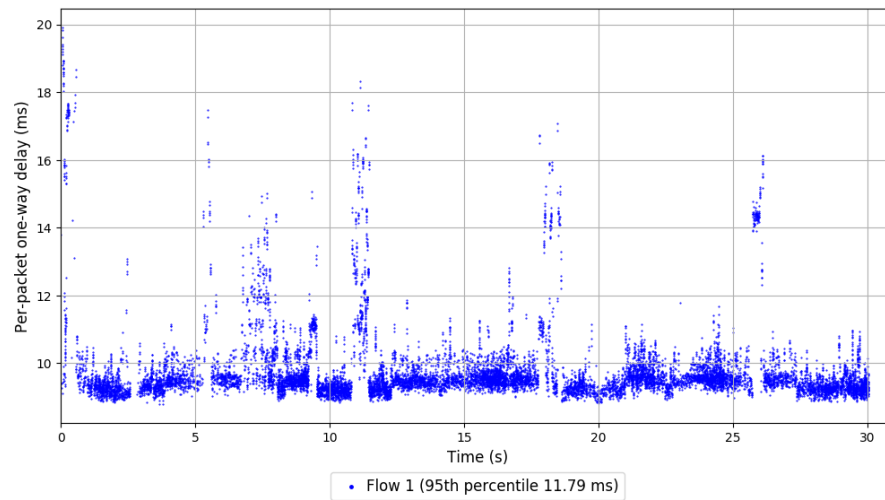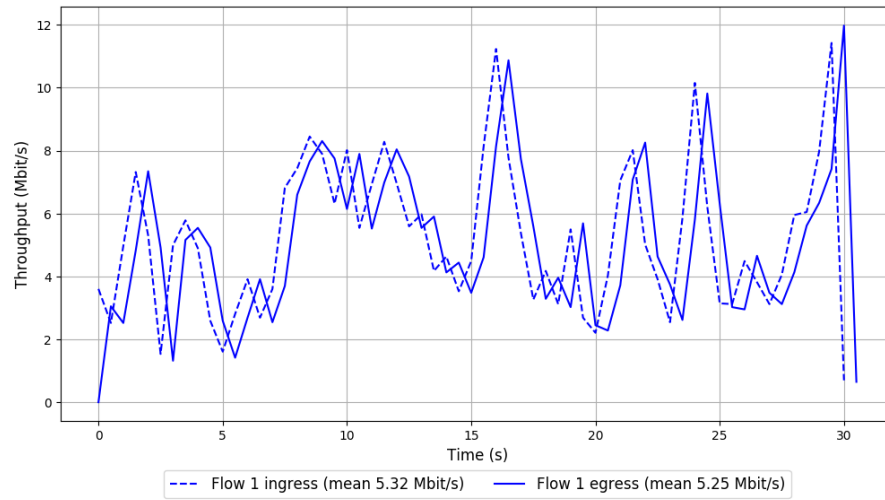
Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2018-06-18 11:21:34
End at: 2018-06-18 11:22:04
Local clock offset: 2.075 ms
Remote clock offset: 0.432 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.68 Mbit/s
95th percentile per-packet one-way delay: 9.042 ms
Loss rate: 6.54%
-- Flow 1:
Average throughput: 63.68 Mbit/s
95th percentile per-packet one-way delay: 9.042 ms
Loss rate: 6.54%
```
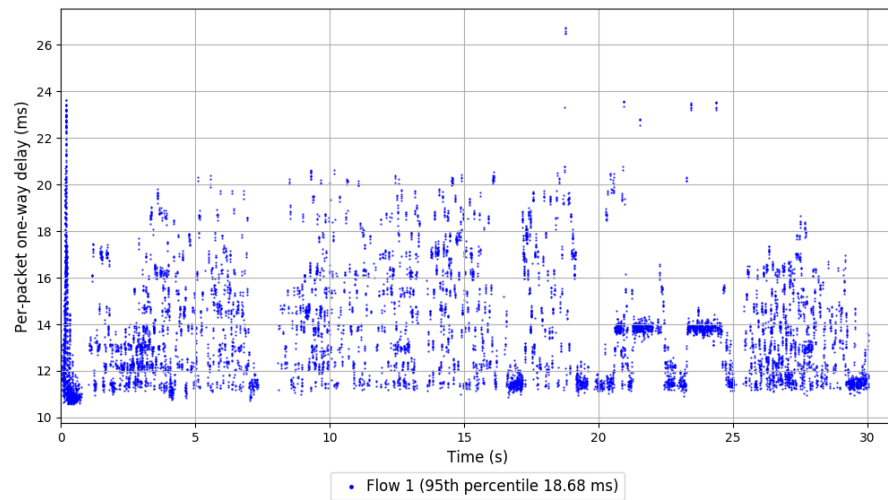
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-06-18 11:39:49
End at: 2018-06-18 11:40:19
Local clock offset: 0.63 ms
Remote clock offset: -1.743 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.97 Mbit/s
95th percentile per-packet one-way delay: 9.276 ms
Loss rate: 4.76%
-- Flow 1:
Average throughput: 50.97 Mbit/s
95th percentile per-packet one-way delay: 9.276 ms
Loss rate: 4.76%
```
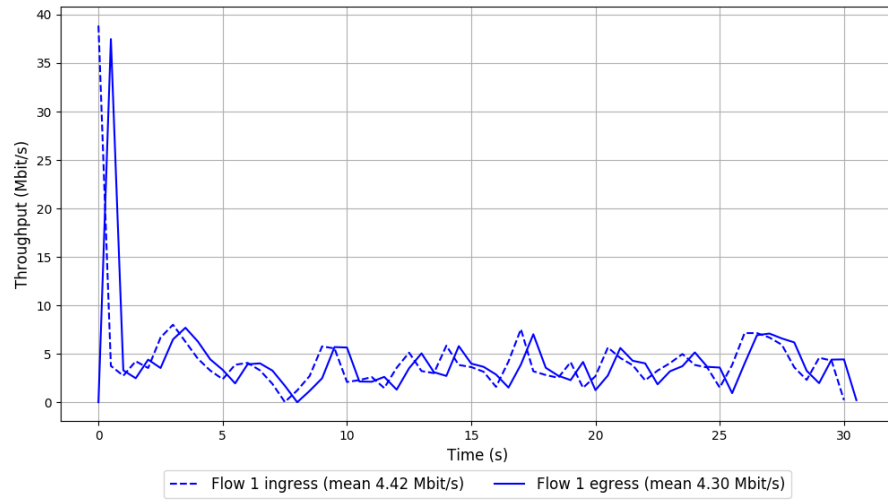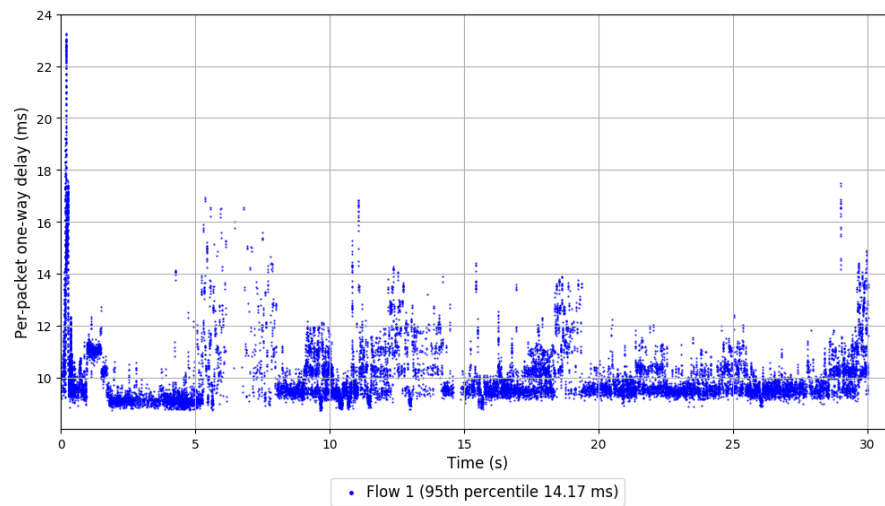
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-06-18 08:50:39
End at: 2018-06-18 08:51:09
Local clock offset: -0.405 ms
Remote clock offset: -2.423 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.25 Mbit/s
95th percentile per-packet one-way delay: 11.791 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 5.25 Mbit/s
95th percentile per-packet one-way delay: 11.791 ms
Loss rate: 1.35%
```
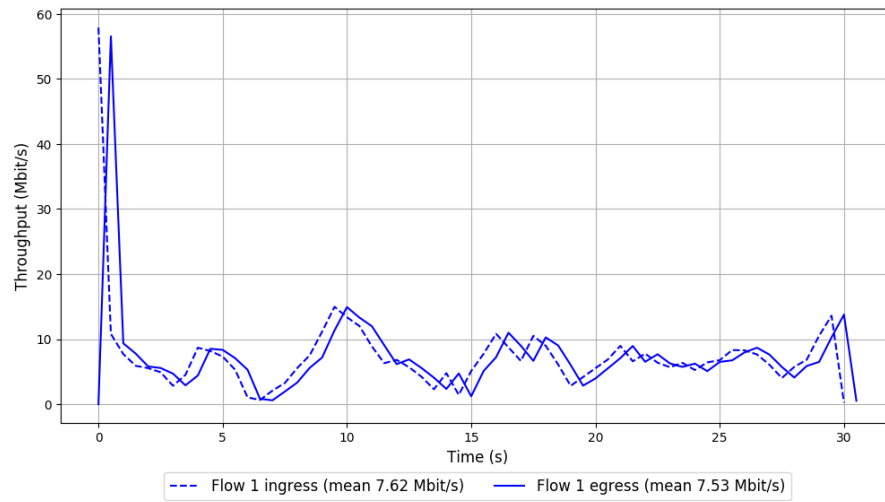
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-06-18 09:09:08
End at: 2018-06-18 09:09:38
Local clock offset: -2.712 ms
Remote clock offset: -3.111 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 18.682 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 18.682 ms
Loss rate: 2.87%
```
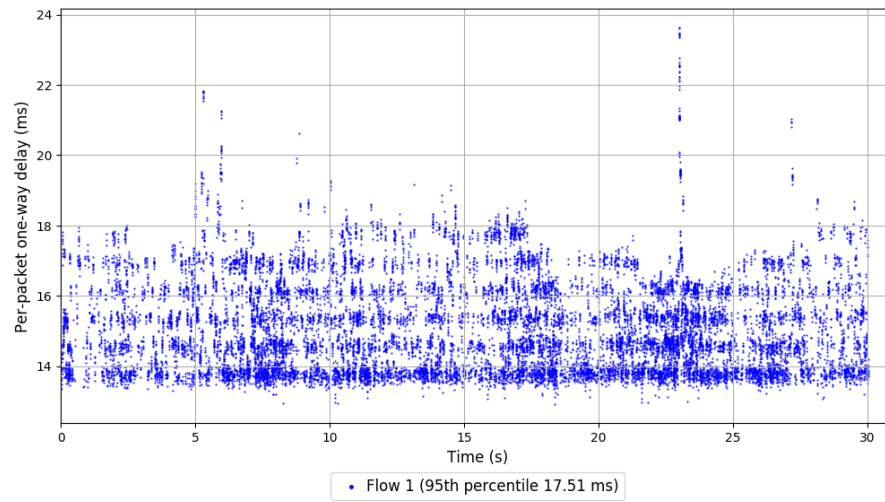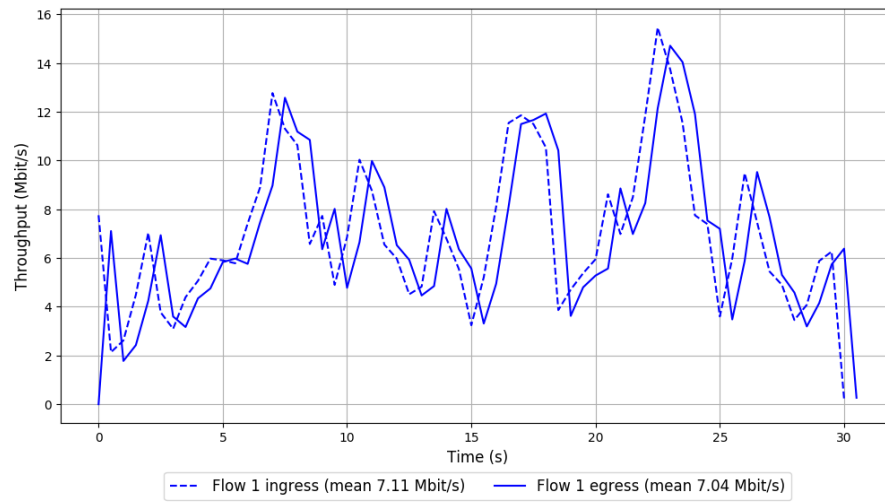
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-06-18 09:27:44
End at: 2018-06-18 09:28:14
Local clock offset: -0.322 ms
Remote clock offset: -6.734 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: 14.170 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: 14.170 ms
Loss rate: 1.16%
```
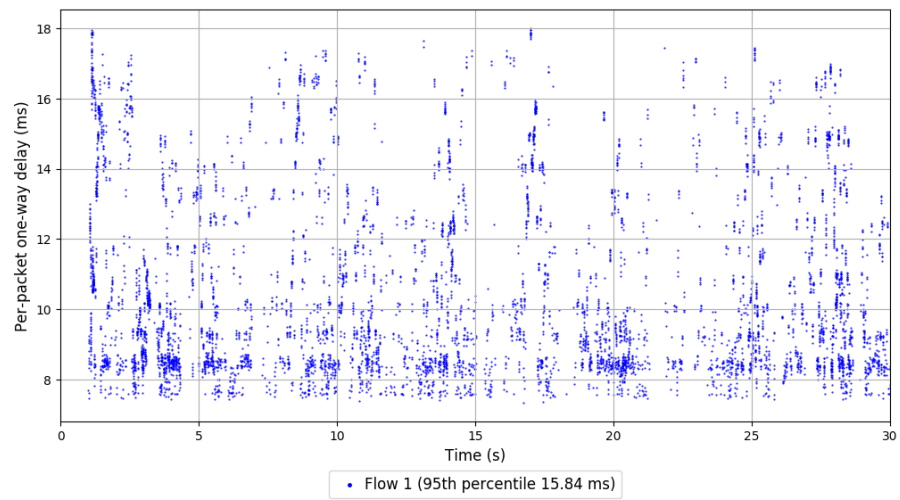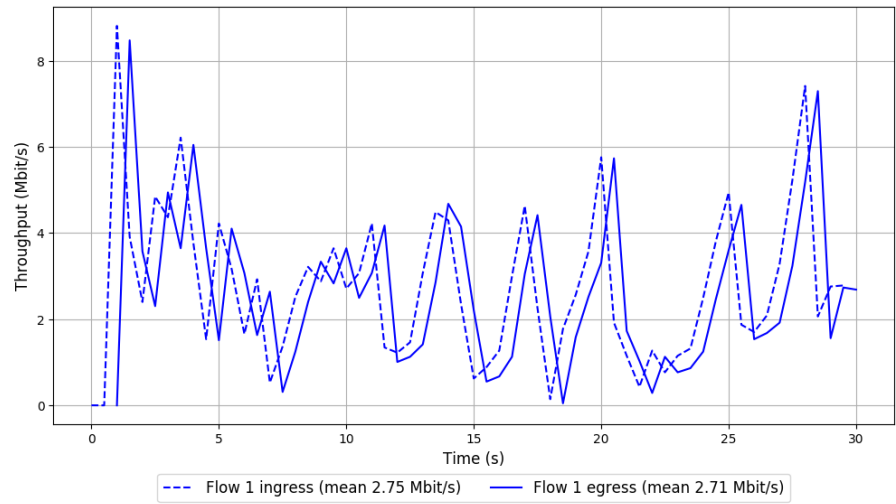
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 7.62 Mbit/s) --- Flow 1 egress (mean 7.53 Mbit/s)

Flow 1 (95th percentile 14.17 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-06-18 09:46:33
End at: 2018-06-18 09:47:03
Local clock offset: 0.32 ms
Remote clock offset: -4.542 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 17.508 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 17.508 ms
Loss rate: 0.98%
```

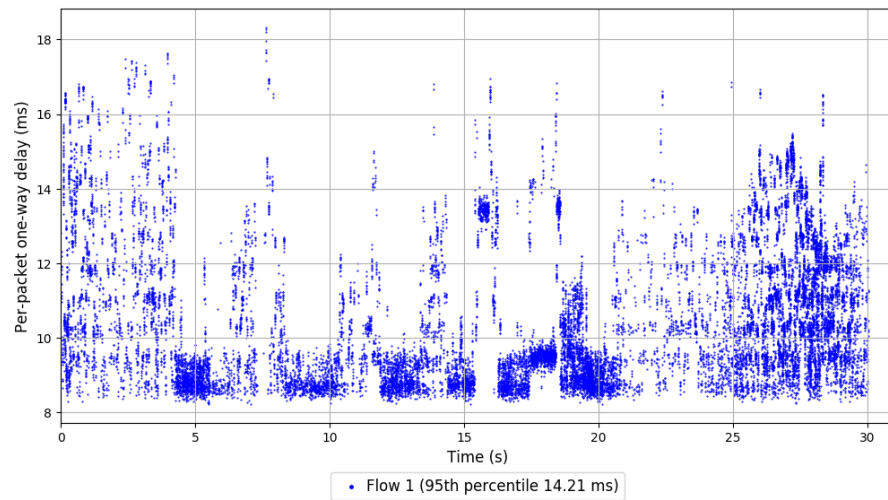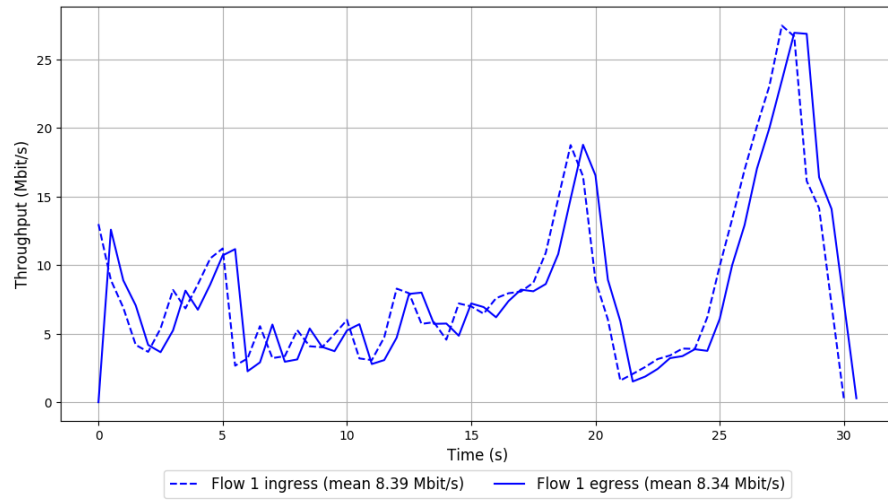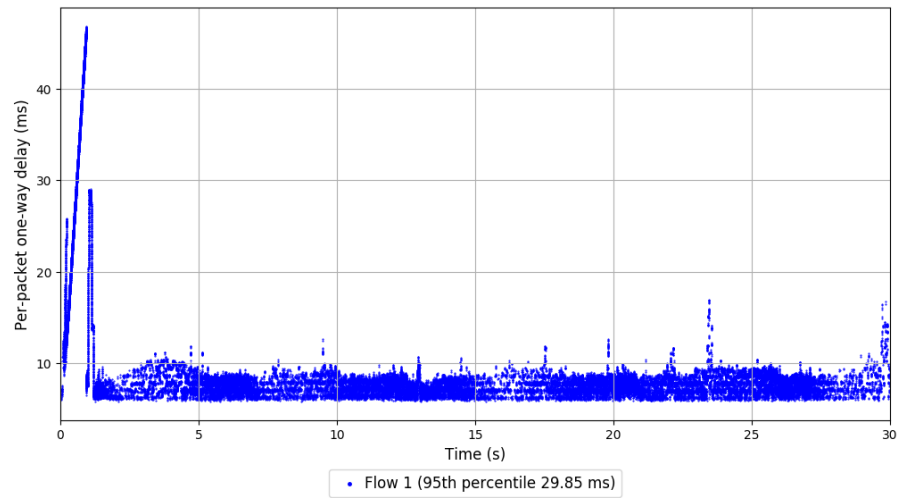Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2018-06-18 10:04:49
End at: 2018-06-18 10:05:19
Local clock offset: 0.609 ms
Remote clock offset: -10.035 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 15.844 ms
Loss rate: 4.81%
-- Flow 1:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 15.844 ms
Loss rate: 4.81%
```
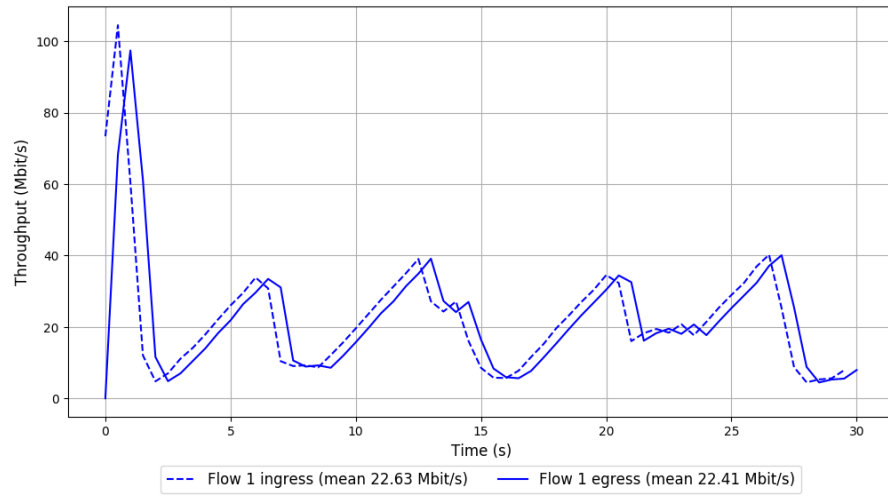
Run 5: Report of TCP Cubic — Data Link

```
Run 6: Statistics of TCP Cubic

Start at: 2018-06-18 10:23:14
End at: 2018-06-18 10:23:44
Local clock offset: -0.735 ms
Remote clock offset: -10.265 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.34 Mbit/s
95th percentile per-packet one-way delay: 14.210 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 8.34 Mbit/s
95th percentile per-packet one-way delay: 14.210 ms
Loss rate: 0.67%
```
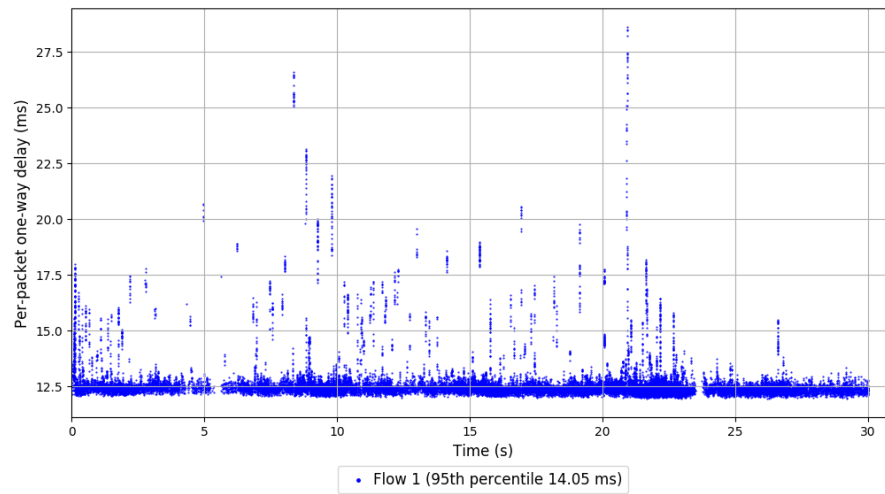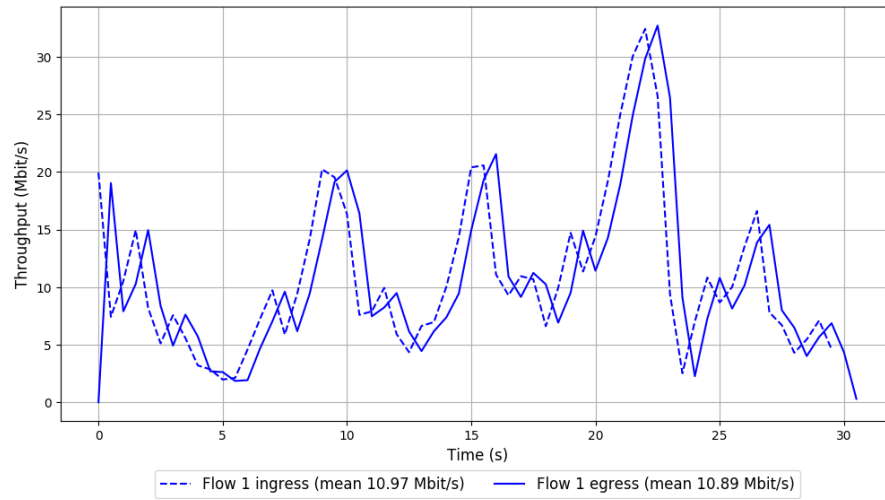
Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 8.39 Mbit/s) — — — Flow 1 egress (mean 8.34 Mbit/s)

• Flow 1 (95th percentile 14.21 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2018-06-18 10:41:40
End at: 2018-06-18 10:42:10
Local clock offset: 3.029 ms
Remote clock offset: -4.145 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.41 Mbit/s
95th percentile per-packet one-way delay: 29.854 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 22.41 Mbit/s
95th percentile per-packet one-way delay: 29.854 ms
Loss rate: 0.96%
```
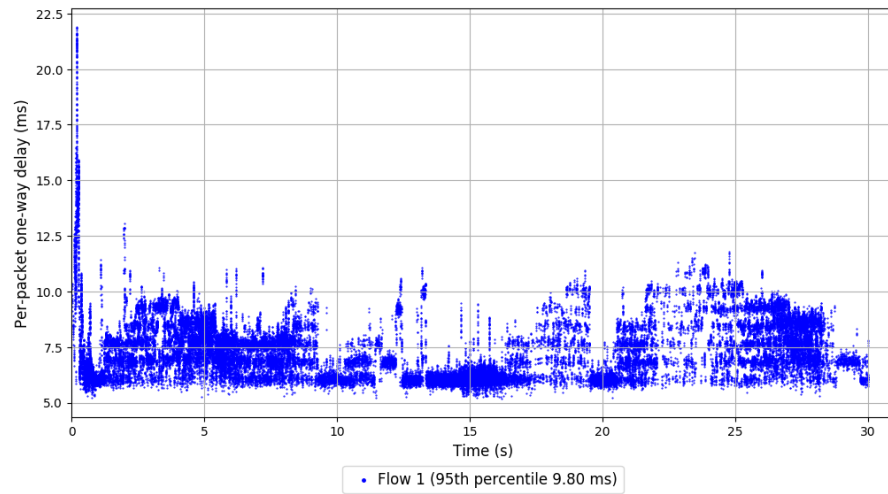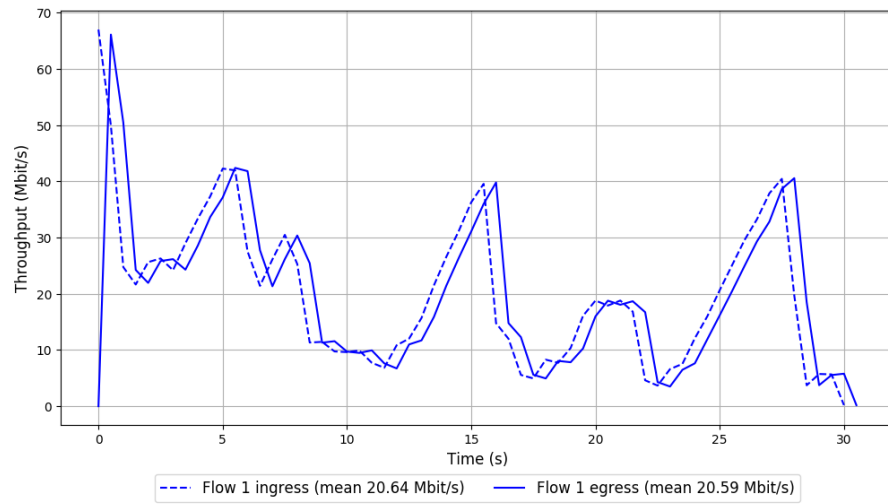
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 22.63 Mbit/s) ---- Flow 1 egress (mean 22.41 Mbit/s) ——

• Flow 1 (95th percentile 29.85 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2018-06-18 10:59:57
End at: 2018-06-18 11:00:27
Local clock offset: -1.877 ms
Remote clock offset: -1.603 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.89 Mbit/s
95th percentile per-packet one-way delay: 14.048 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 10.89 Mbit/s
95th percentile per-packet one-way delay: 14.048 ms
Loss rate: 0.73%
```
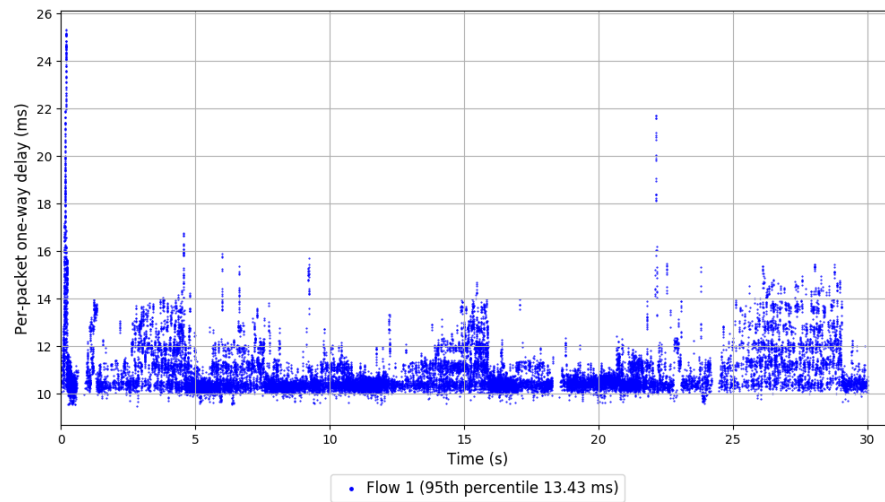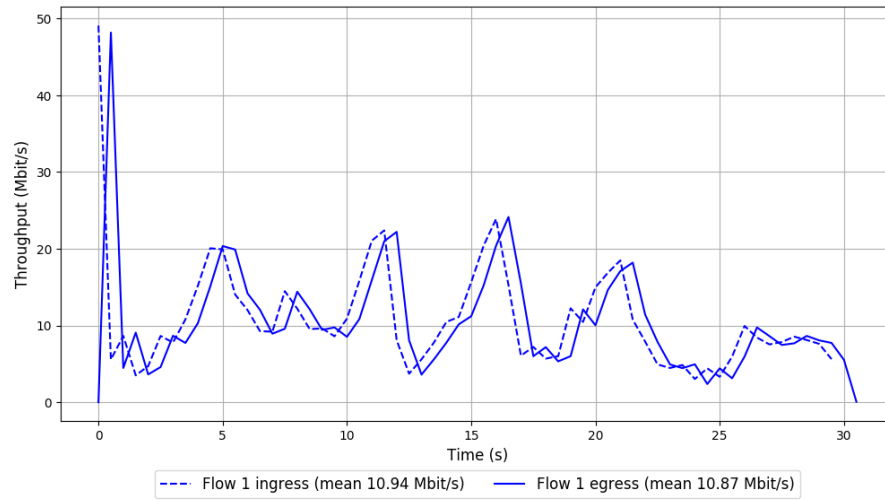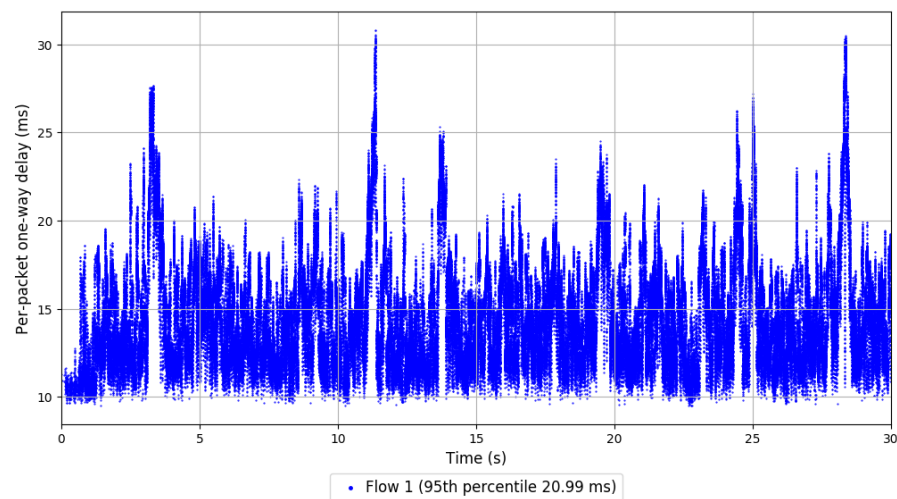
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 10.97 Mbit/s) --- Flow 1 egress (mean 10.89 Mbit/s)

Flow 1 (95th percentile 14.05 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2018-06-18 11:18:09
End at: 2018-06-18 11:18:39
Local clock offset: 3.635 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.59 Mbit/s
95th percentile per-packet one-way delay: 9.798 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 20.59 Mbit/s
95th percentile per-packet one-way delay: 9.798 ms
Loss rate: 0.25%
```

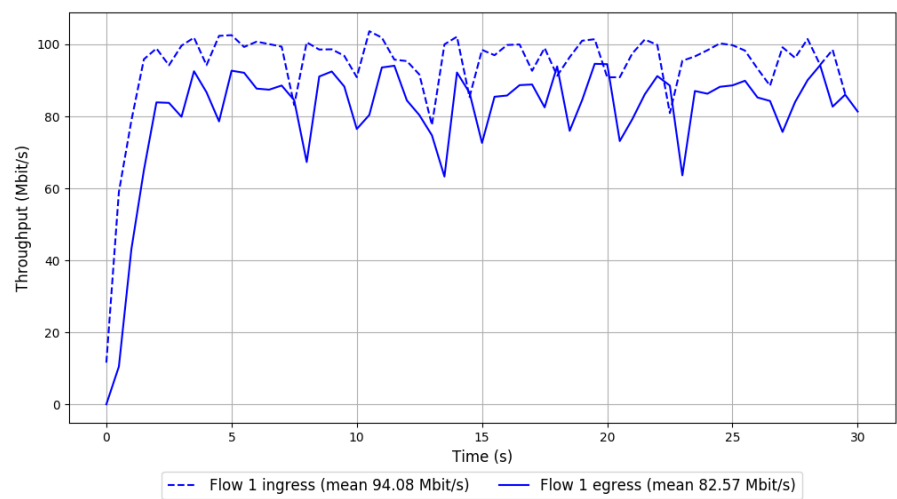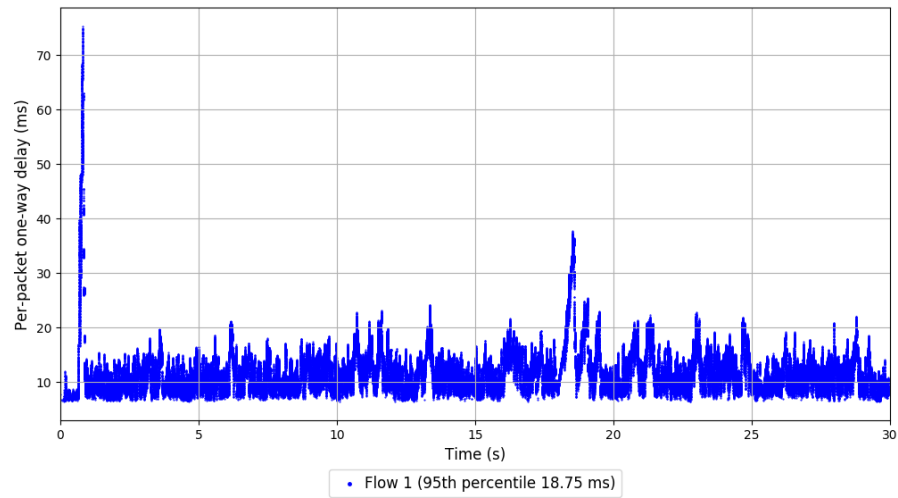Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2018-06-18 11:36:29
End at: 2018-06-18 11:36:59
Local clock offset: -0.973 ms
Remote clock offset: -0.212 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.87 Mbit/s
95th percentile per-packet one-way delay: 13.434 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 10.87 Mbit/s
95th percentile per-packet one-way delay: 13.434 ms
Loss rate: 0.63%
```

Run 10: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 10.94 Mbit/s) ----- Flow 1 egress (mean 10.87 Mbit/s)
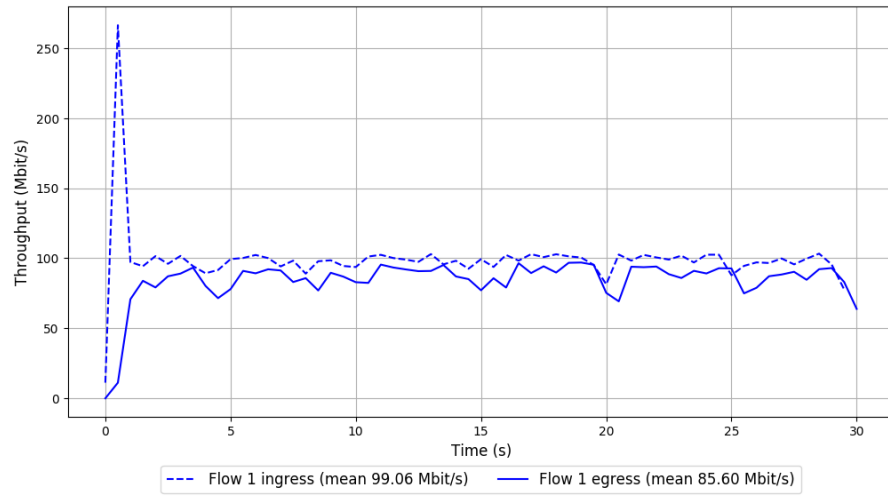

• Flow 1 (95th percentile 13.43 ms)

```
Run 1: Statistics of FillP

Start at: 2018-06-18 08:55:18
End at: 2018-06-18 08:55:48
Local clock offset: -2.968 ms
Remote clock offset: -3.373 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.57 Mbit/s
95th percentile per-packet one-way delay: 20.986 ms
Loss rate: 12.23%
-- Flow 1:
Average throughput: 82.57 Mbit/s
95th percentile per-packet one-way delay: 20.986 ms
Loss rate: 12.23%
```
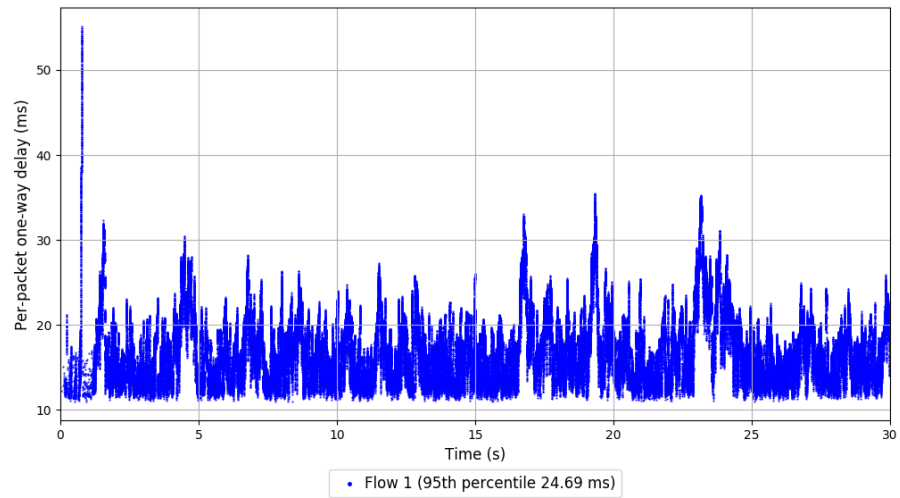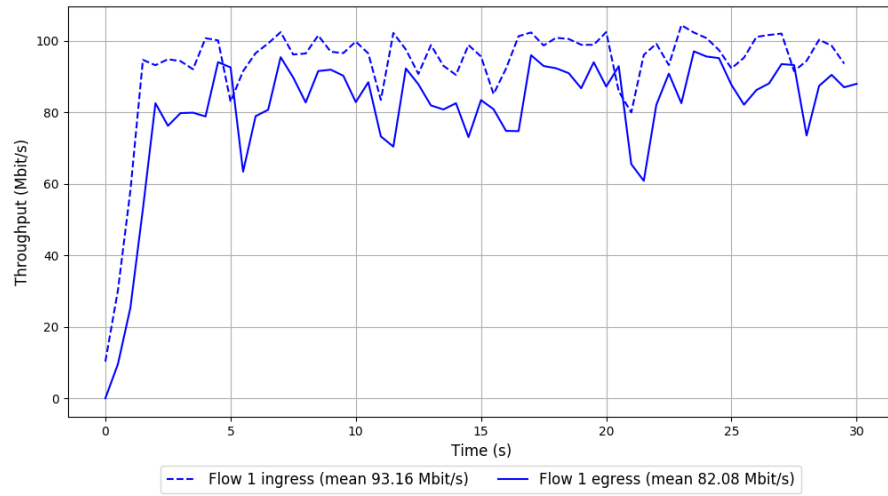
Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 94.08 Mbit/s) --- Flow 1 egress (mean 82.57 Mbit/s)

Flow 1 (95th percentile 20.99 ms)

```
Run 2: Statistics of FillP

Start at: 2018-06-18 09:13:47
End at: 2018-06-18 09:14:17
Local clock offset: -0.08 ms
Remote clock offset: -4.826 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.60 Mbit/s
95th percentile per-packet one-way delay: 18.753 ms
Loss rate: 13.58%
-- Flow 1:
Average throughput: 85.60 Mbit/s
95th percentile per-packet one-way delay: 18.753 ms
Loss rate: 13.58%
```
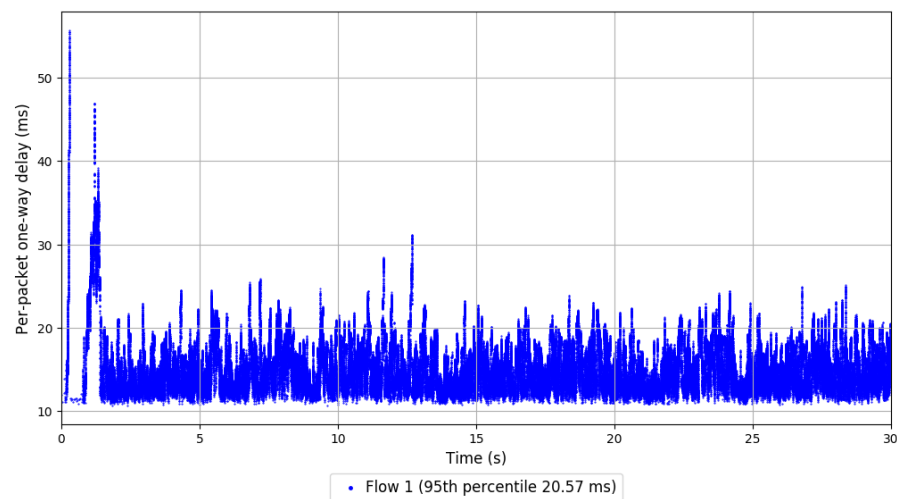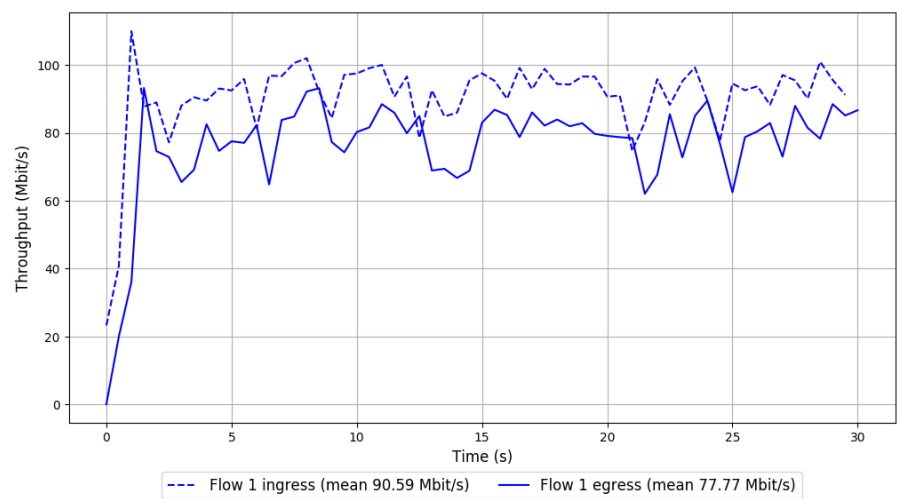
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-06-18 09:32:22
End at: 2018-06-18 09:32:52
Local clock offset: -2.604 ms
Remote clock offset: -7.27 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.08 Mbit/s
95th percentile per-packet one-way delay: 24.692 ms
Loss rate: 11.88%
-- Flow 1:
Average throughput: 82.08 Mbit/s
95th percentile per-packet one-way delay: 24.692 ms
Loss rate: 11.88%
```
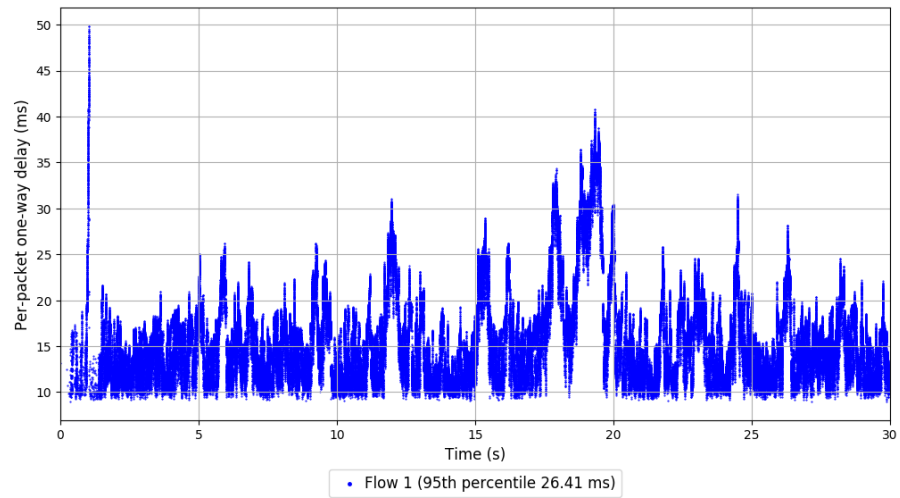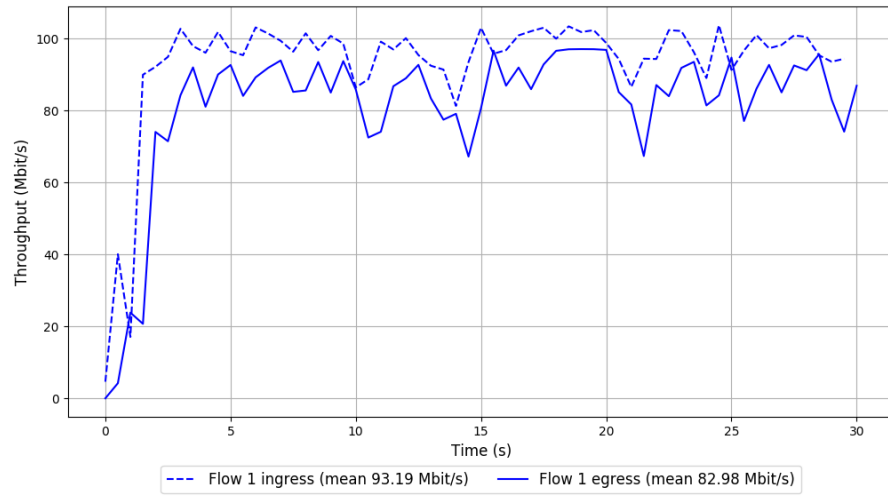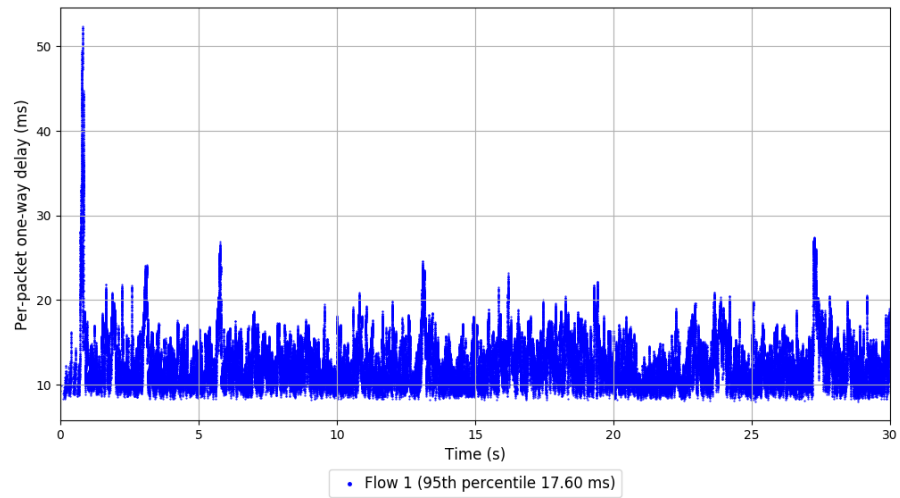
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 93.16 Mbit/s)   Flow 1 egress (mean 82.08 Mbit/s)

• Flow 1 (95th percentile 24.69 ms)

```
Run 4: Statistics of FillP

Start at: 2018-06-18 09:51:05
End at: 2018-06-18 09:51:35
Local clock offset: -1.28 ms
Remote clock offset: -8.6 ms


# Below is generated by plot.py at 2018-06-18 11:56:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.77 Mbit/s
95th percentile per-packet one-way delay: 20.574 ms
Loss rate: 14.14%
-- Flow 1:
Average throughput: 77.77 Mbit/s
95th percentile per-packet one-way delay: 20.574 ms
Loss rate: 14.14%
```
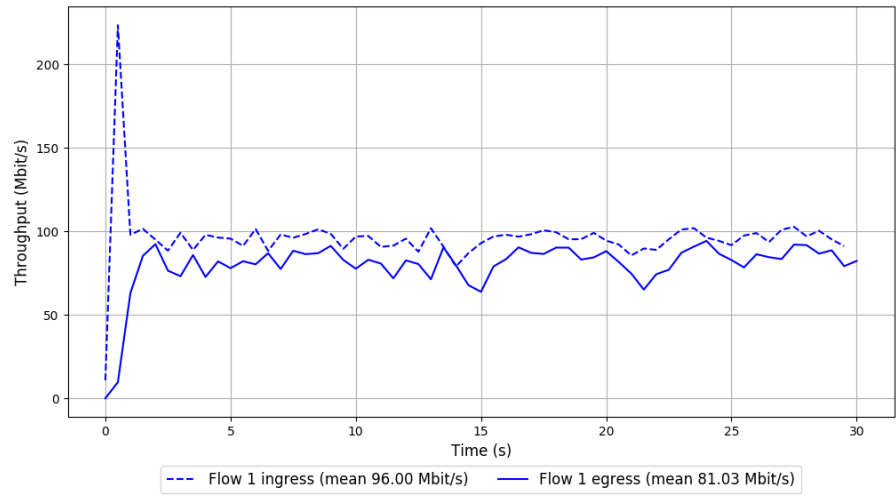
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 90.59 Mbit/s)   Flow 1 egress (mean 77.77 Mbit/s)
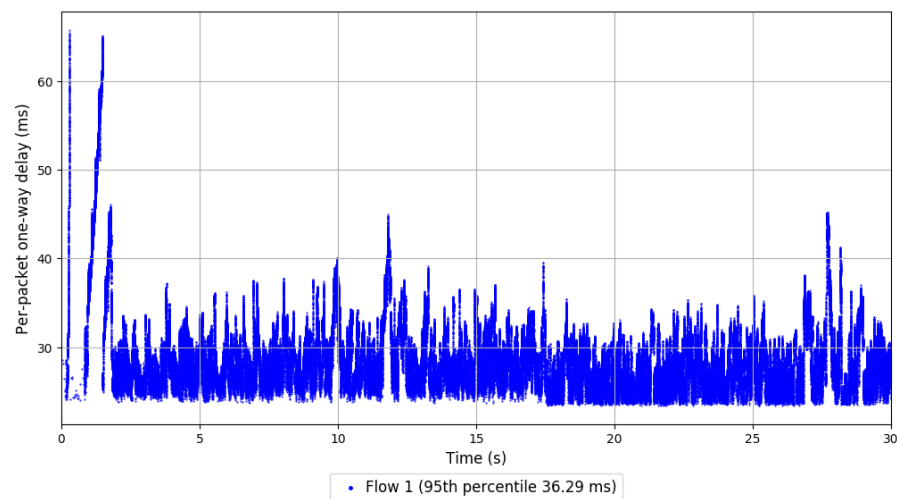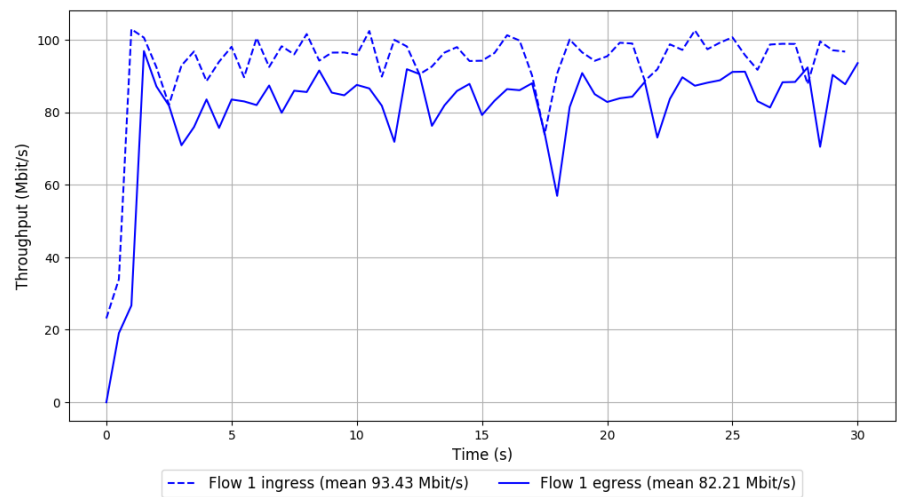

• Flow 1 (95th percentile 20.57 ms)

```
Run 5: Statistics of FillP

Start at: 2018-06-18 10:09:31
End at: 2018-06-18 10:10:01
Local clock offset: -0.914 ms
Remote clock offset: -9.41 ms


# Below is generated by plot.py at 2018-06-18 11:56:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.98 Mbit/s
95th percentile per-packet one-way delay: 26.415 ms
Loss rate: 10.96%
-- Flow 1:
Average throughput: 82.98 Mbit/s
95th percentile per-packet one-way delay: 26.415 ms
Loss rate: 10.96%
```

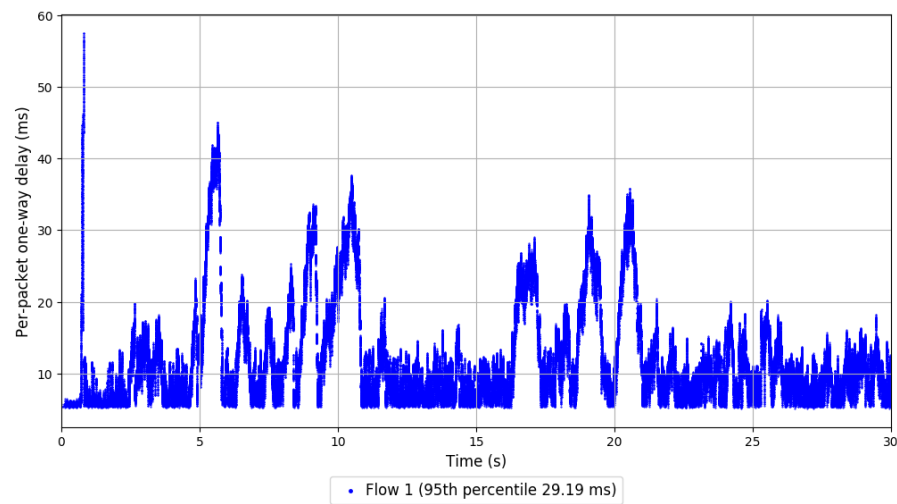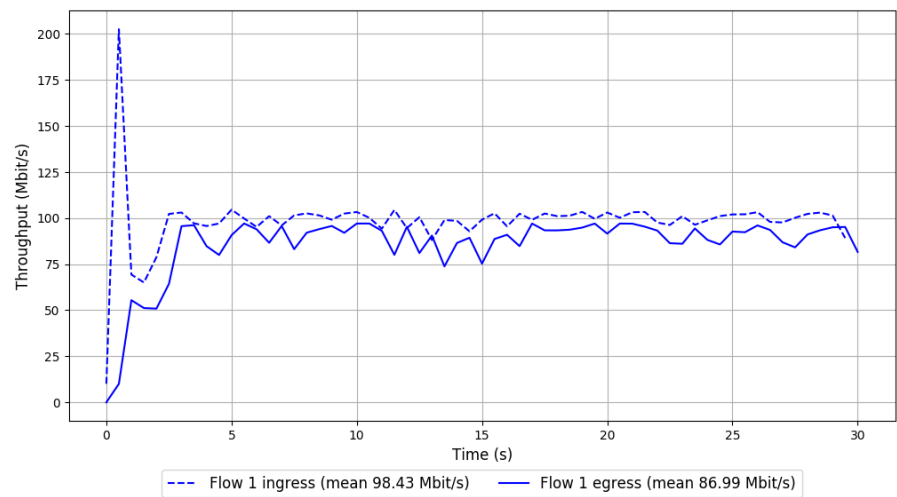Run 5: Report of FillP — Data Link

```
Run 6: Statistics of FillP

Start at: 2018-06-18 10:27:41
End at: 2018-06-18 10:28:11
Local clock offset: -0.957 ms
Remote clock offset: -8.243 ms


# Below is generated by plot.py at 2018-06-18 11:56:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.03 Mbit/s
95th percentile per-packet one-way delay: 17.599 ms
Loss rate: 15.59%
-- Flow 1:
Average throughput: 81.03 Mbit/s
95th percentile per-packet one-way delay: 17.599 ms
Loss rate: 15.59%
```

Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 96.00 Mbit/s)   Flow 1 egress (mean 81.03 Mbit/s)

Flow 1 (95th percentile 17.60 ms)

```
Run 7: Statistics of FillP

Start at: 2018-06-18 10:46:12
End at: 2018-06-18 10:46:42
Local clock offset: -0.666 ms
Remote clock offset: 10.141 ms


# Below is generated by plot.py at 2018-06-18 11:57:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.21 Mbit/s
95th percentile per-packet one-way delay: 36.290 ms
Loss rate: 12.02%
-- Flow 1:
Average throughput: 82.21 Mbit/s
95th percentile per-packet one-way delay: 36.290 ms
Loss rate: 12.02%
```
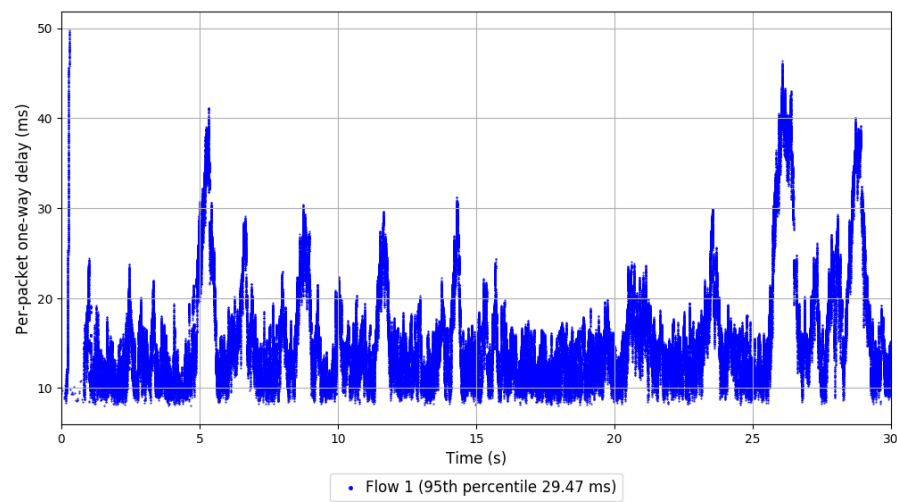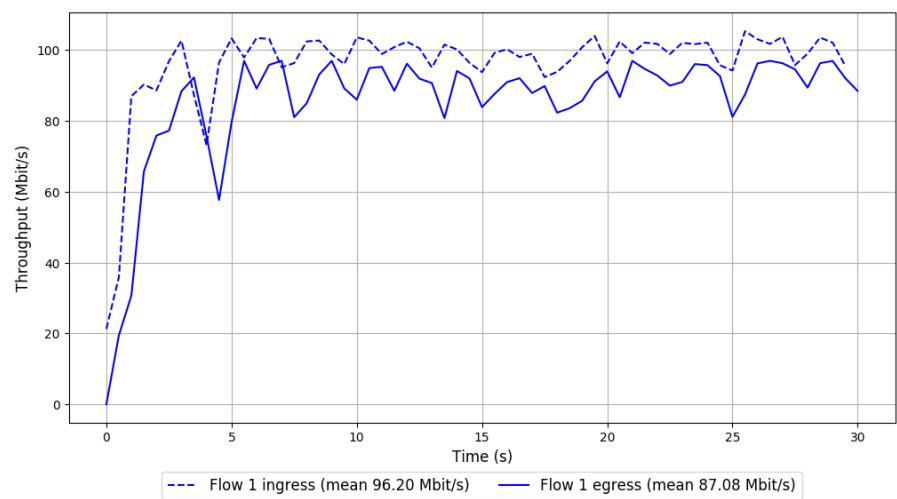
Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 93.43 Mbit/s)   Flow 1 egress (mean 82.21 Mbit/s)

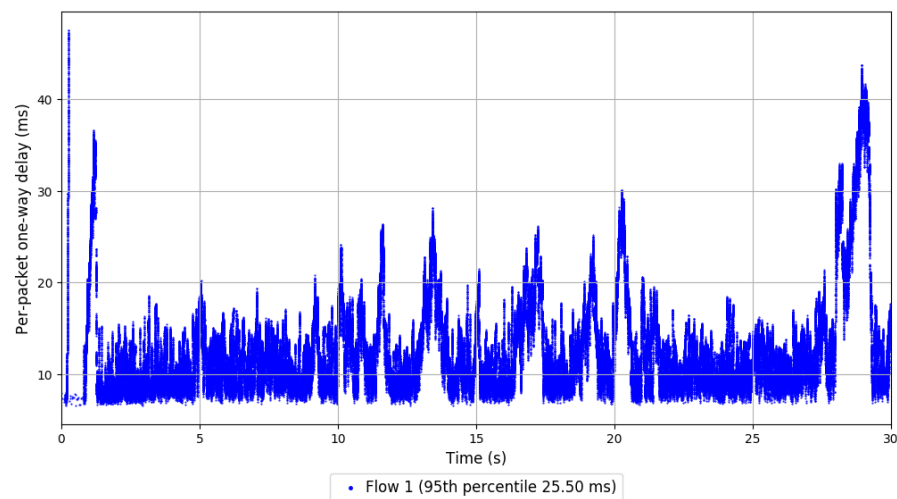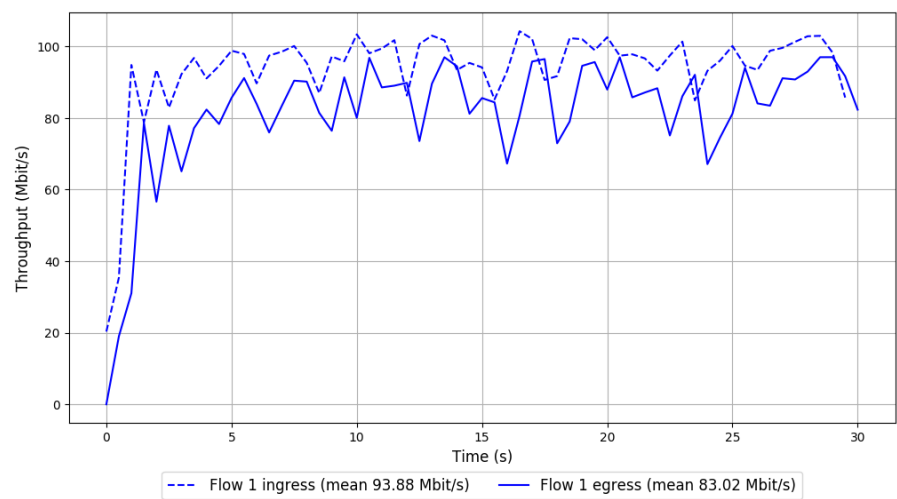

• Flow 1 (95th percentile 36.29 ms)

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```
Run 8: Statistics of FillP

Start at: 2018-06-18 11:04:33
End at: 2018-06-18 11:05:03
Local clock offset: 3.983 ms
Remote clock offset: -1.017 ms


# Below is generated by plot.py at 2018-06-18 11:57:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.99 Mbit/s
95th percentile per-packet one-way delay: 29.193 ms
Loss rate: 11.65%
-- Flow 1:
Average throughput: 86.99 Mbit/s
95th percentile per-packet one-way delay: 29.193 ms
Loss rate: 11.65%
```

Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 98.43 Mbit/s) — — —   Flow 1 egress (mean 86.99 Mbit/s)

• Flow 1 (95th percentile 29.19 ms)

```
Run 9: Statistics of FillP

Start at: 2018-06-18 11:22:46
End at: 2018-06-18 11:23:16
Local clock offset: 2.281 ms
Remote clock offset: 2.075 ms


# Below is generated by plot.py at 2018-06-18 11:57:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 29.474 ms
Loss rate: 9.48%
-- Flow 1:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 29.474 ms
Loss rate: 9.48%
```
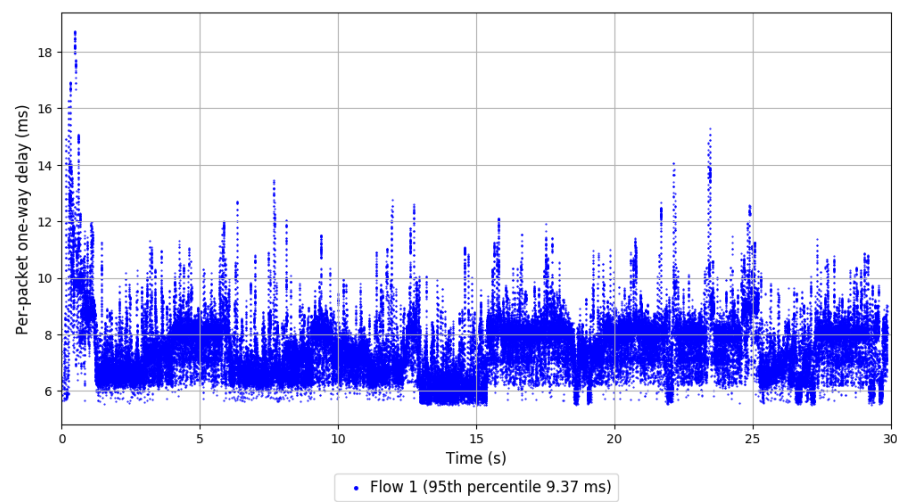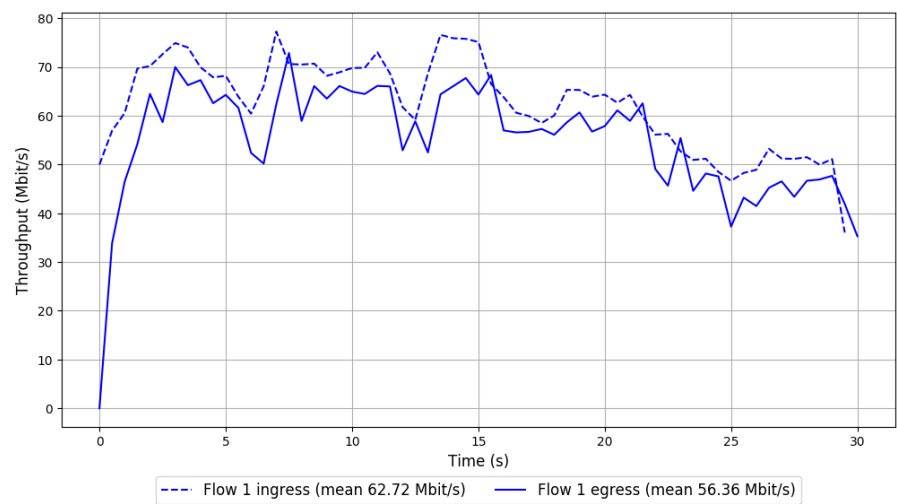
Run 9: Report of FillP — Data Link

```
Run 10: Statistics of FillP

Start at: 2018-06-18 11:41:02
End at: 2018-06-18 11:41:32
Local clock offset: 0.899 ms
Remote clock offset: -1.417 ms

# Below is generated by plot.py at 2018-06-18 11:57:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.02 Mbit/s
95th percentile per-packet one-way delay: 25.499 ms
Loss rate: 11.54%
-- Flow 1:
Average throughput: 83.02 Mbit/s
95th percentile per-packet one-way delay: 25.499 ms
Loss rate: 11.54%
```
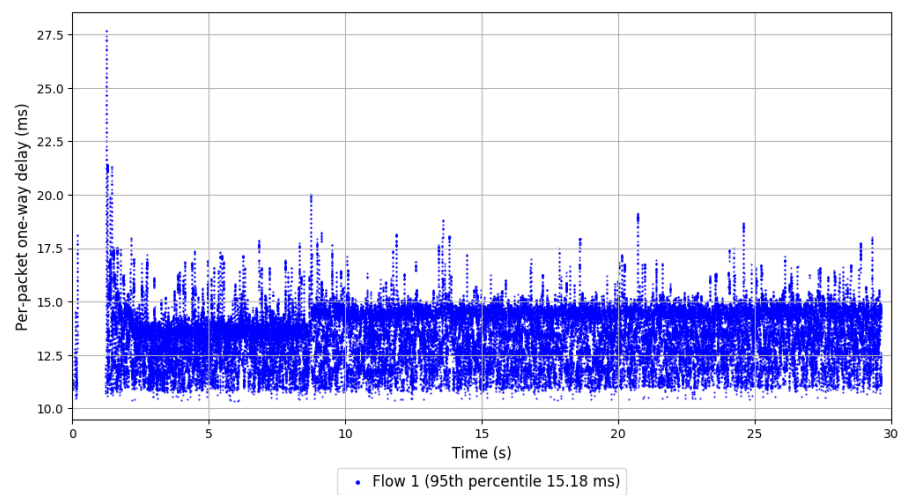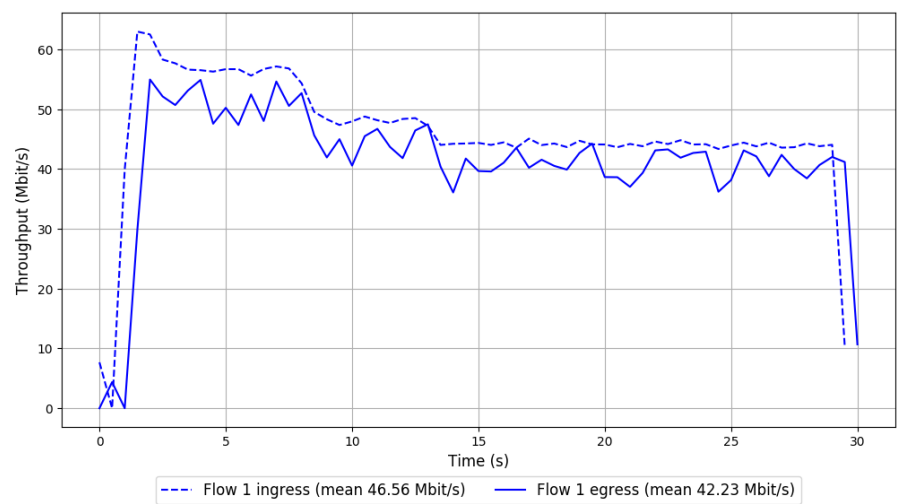
Run 10: Report of FillP — Data Link

Flow 1 ingress (mean 93.88 Mbit/s) —— Flow 1 egress (mean 83.02 Mbit/s)

• Flow 1 (95th percentile 25.50 ms)

```
Run 1: Statistics of Indigo

Start at: 2018-06-18 08:58:38
End at: 2018-06-18 08:59:08
Local clock offset: 0.056 ms
Remote clock offset: -4.487 ms


# Below is generated by plot.py at 2018-06-18 11:57:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.36 Mbit/s
95th percentile per-packet one-way delay: 9.367 ms
Loss rate: 10.14%
-- Flow 1:
Average throughput: 56.36 Mbit/s
95th percentile per-packet one-way delay: 9.367 ms
Loss rate: 10.14%
```
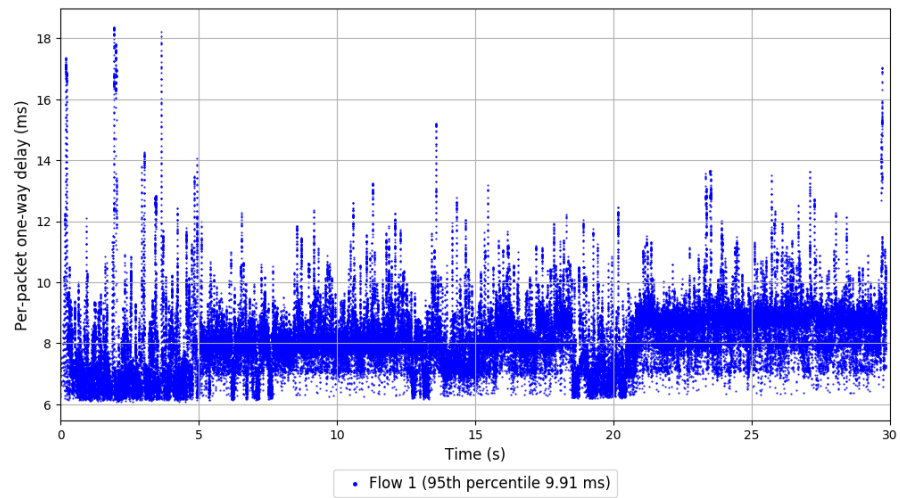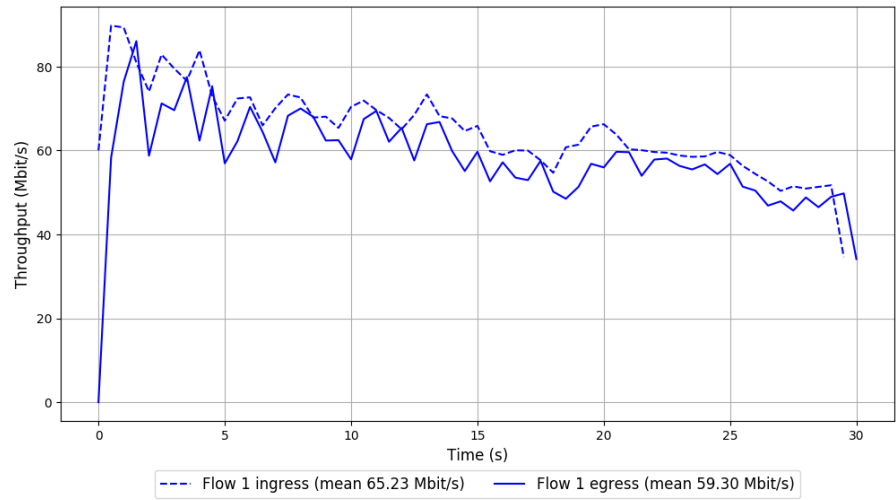
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-06-18 09:17:09
End at: 2018-06-18 09:17:39
Local clock offset: -1.875 ms
Remote clock offset: -4.38 ms

# Below is generated by plot.py at 2018-06-18 11:57:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.23 Mbit/s
95th percentile per-packet one-way delay: 15.180 ms
Loss rate: 9.27%
-- Flow 1:
Average throughput: 42.23 Mbit/s
95th percentile per-packet one-way delay: 15.180 ms
Loss rate: 9.27%
```
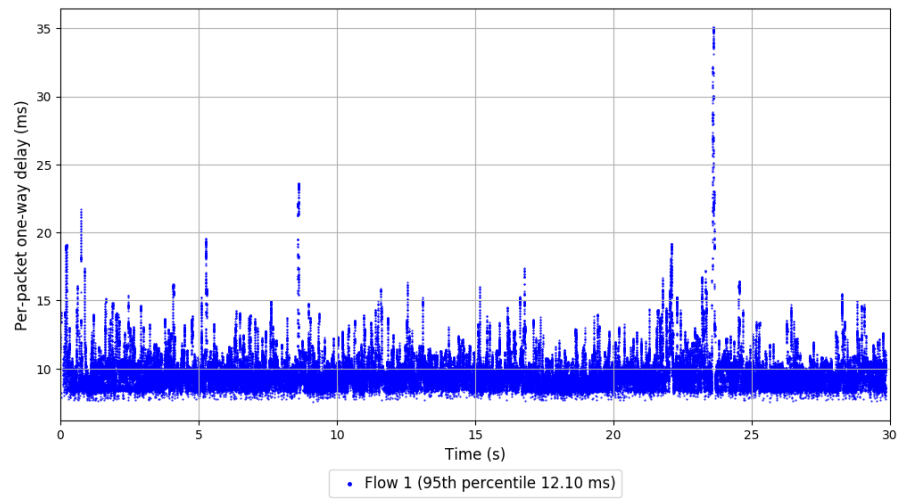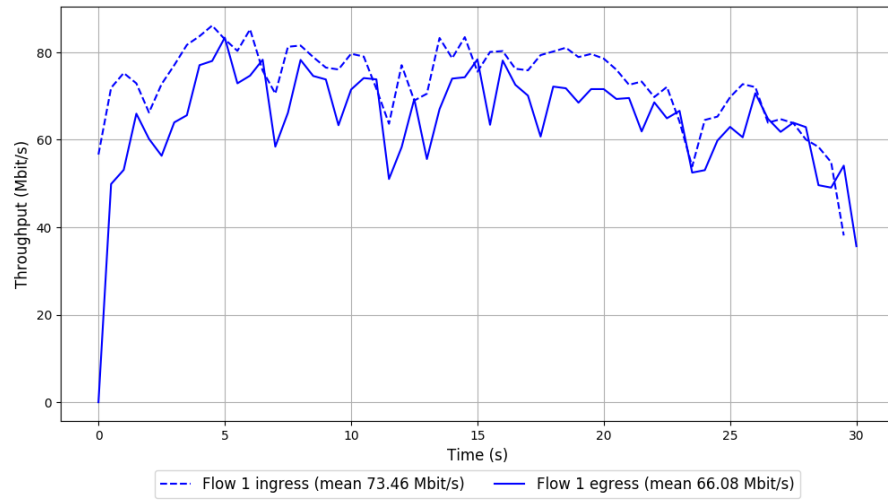
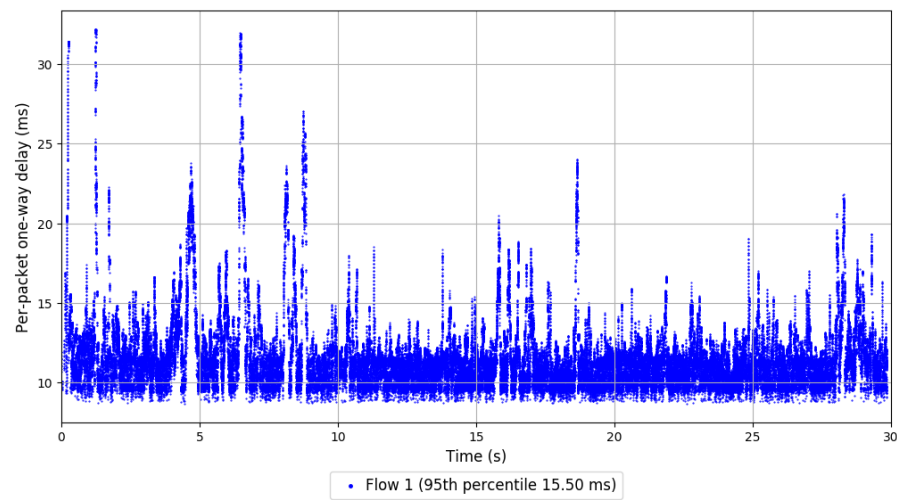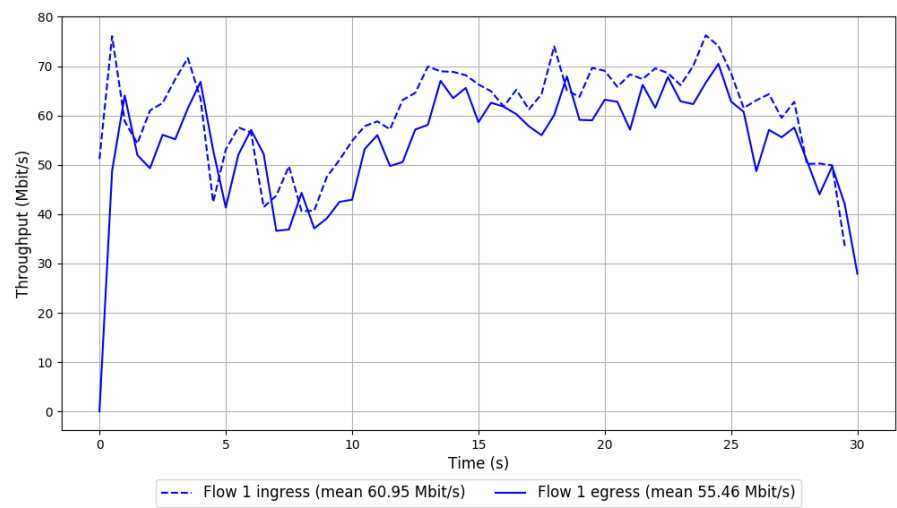Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 46.56 Mbit/s)   ——— Flow 1 egress (mean 42.23 Mbit/s)

• Flow 1 (95th percentile 15.18 ms)

```
Run 3: Statistics of Indigo

Start at: 2018-06-18 09:35:46
End at: 2018-06-18 09:36:16
Local clock offset: 1.411 ms
Remote clock offset: -7.908 ms


# Below is generated by plot.py at 2018-06-18 11:57:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 9.911 ms
Loss rate: 9.09%
-- Flow 1:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 9.911 ms
Loss rate: 9.09%
```
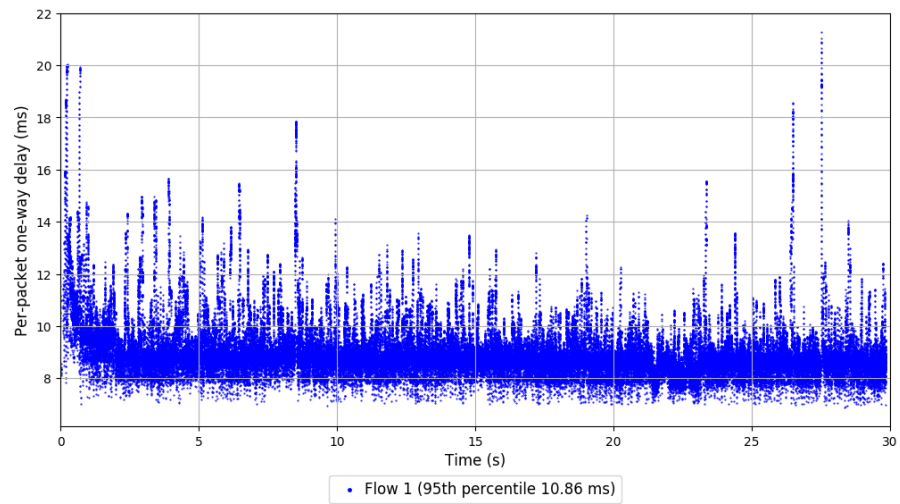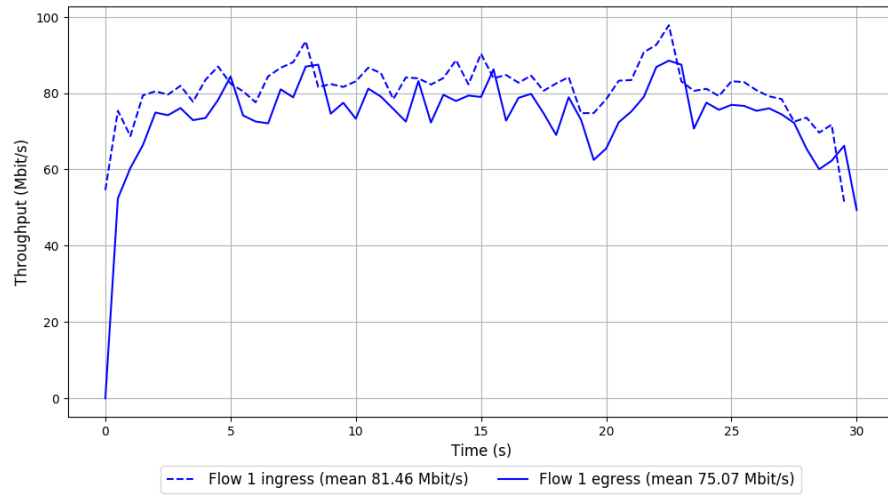
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-06-18 09:54:24
End at: 2018-06-18 09:54:54
Local clock offset: 2.773 ms
Remote clock offset: -7.736 ms


# Below is generated by plot.py at 2018-06-18 11:57:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.08 Mbit/s
95th percentile per-packet one-way delay: 12.102 ms
Loss rate: 10.06%
-- Flow 1:
Average throughput: 66.08 Mbit/s
95th percentile per-packet one-way delay: 12.102 ms
Loss rate: 10.06%
```
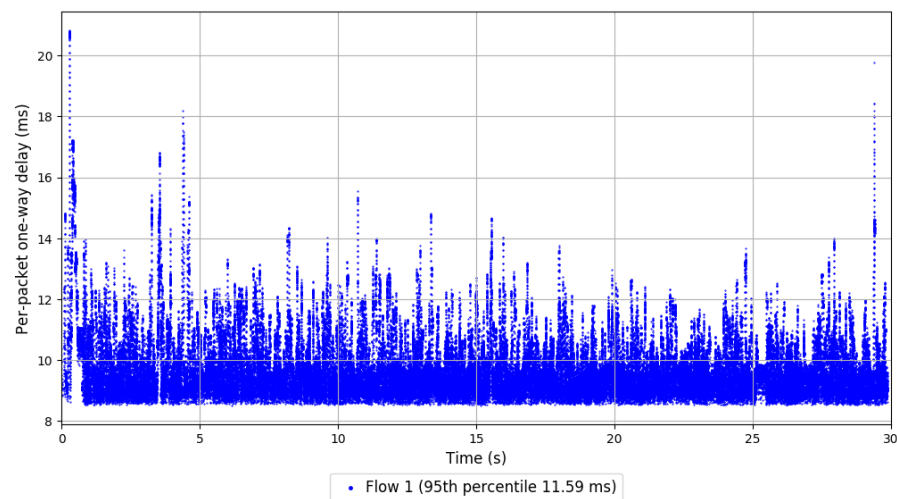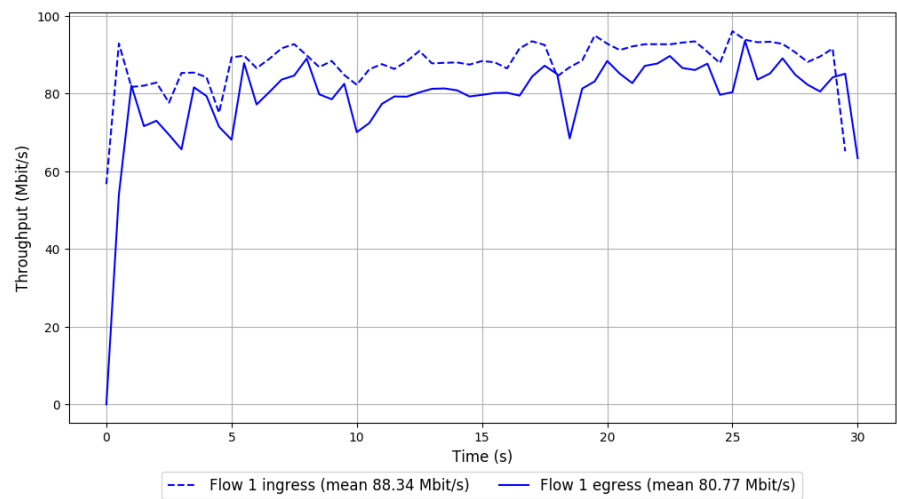
Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 73.46 Mbit/s)   Flow 1 egress (mean 66.08 Mbit/s)

• Flow 1 (95th percentile 12.10 ms)

```
Run 5: Statistics of Indigo

Start at: 2018-06-18 10:12:51
End at: 2018-06-18 10:13:21
Local clock offset: -0.104 ms
Remote clock offset: -9.237 ms


# Below is generated by plot.py at 2018-06-18 11:57:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.46 Mbit/s
95th percentile per-packet one-way delay: 15.504 ms
Loss rate: 9.00%
-- Flow 1:
Average throughput: 55.46 Mbit/s
95th percentile per-packet one-way delay: 15.504 ms
Loss rate: 9.00%
```

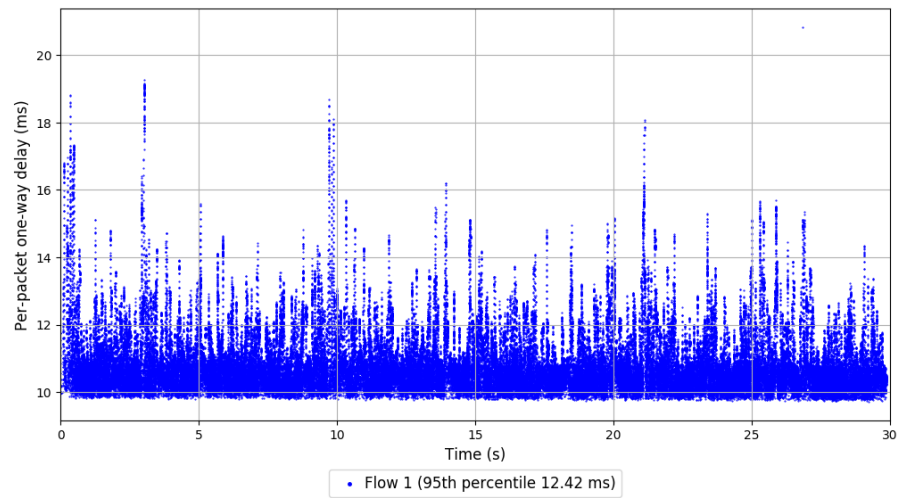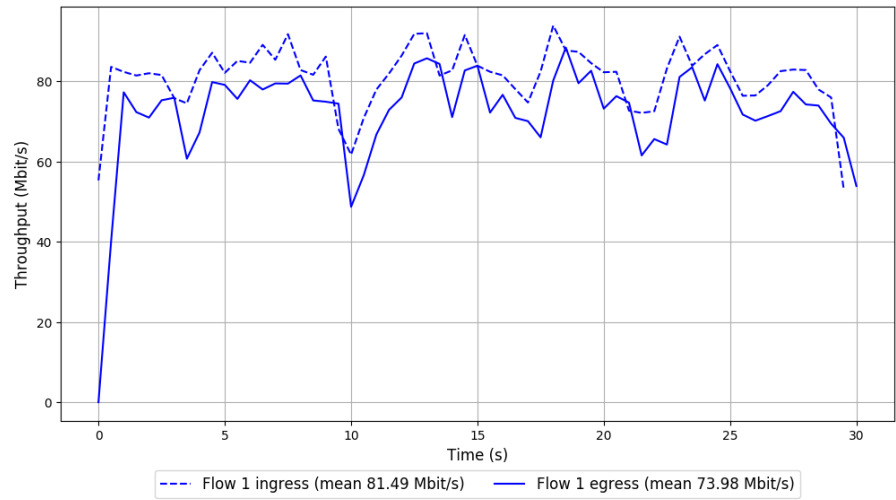Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2018-06-18 10:31:05
End at: 2018-06-18 10:31:35
Local clock offset: 0.626 ms
Remote clock offset: -6.763 ms


# Below is generated by plot.py at 2018-06-18 11:57:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.07 Mbit/s
95th percentile per-packet one-way delay: 10.862 ms
Loss rate: 7.85%
-- Flow 1:
Average throughput: 75.07 Mbit/s
95th percentile per-packet one-way delay: 10.862 ms
Loss rate: 7.85%
```

Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2018-06-18 10:49:29
End at: 2018-06-18 10:50:00
Local clock offset: 1.494 ms
Remote clock offset: -2.367 ms


# Below is generated by plot.py at 2018-06-18 11:58:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.77 Mbit/s
95th percentile per-packet one-way delay: 11.593 ms
Loss rate: 8.56%
-- Flow 1:
Average throughput: 80.77 Mbit/s
95th percentile per-packet one-way delay: 11.593 ms
Loss rate: 8.56%
```
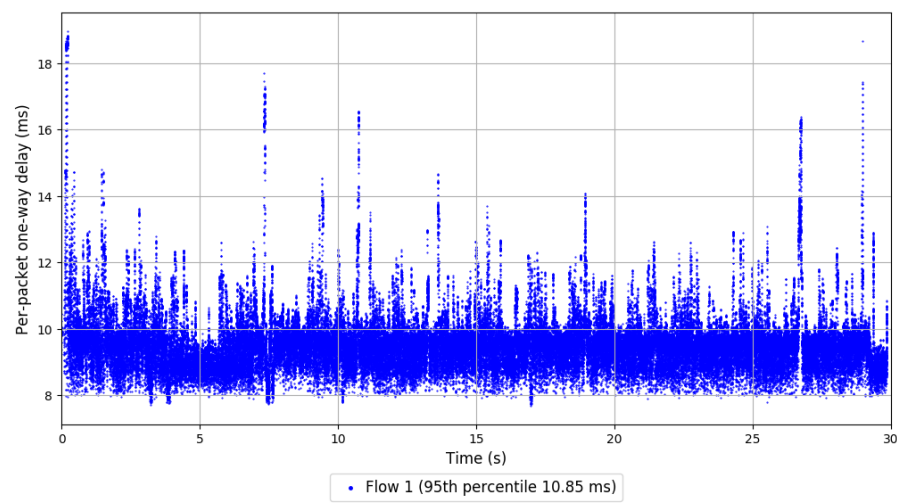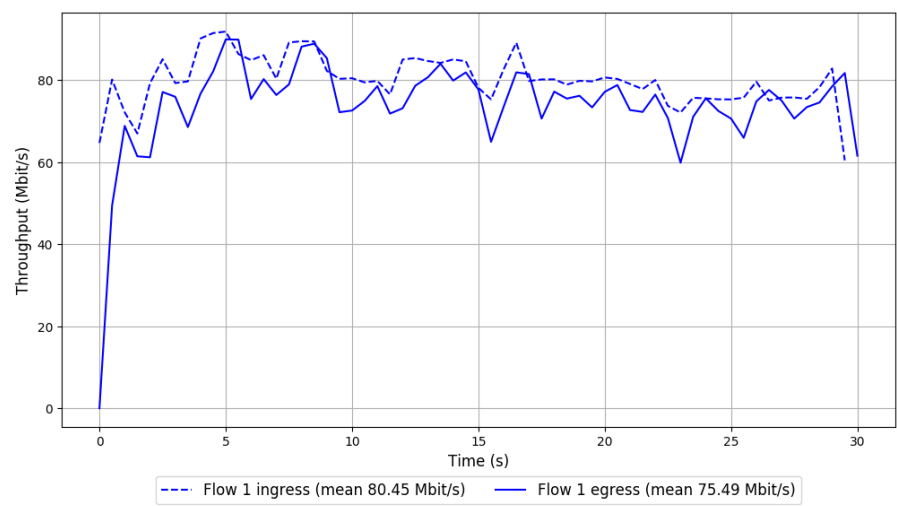
Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2018-06-18 11:07:51
End at: 2018-06-18 11:08:21
Local clock offset: 0.058 ms
Remote clock offset: -0.186 ms


# Below is generated by plot.py at 2018-06-18 11:58:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.98 Mbit/s
95th percentile per-packet one-way delay: 12.418 ms
Loss rate: 9.22%
-- Flow 1:
Average throughput: 73.98 Mbit/s
95th percentile per-packet one-way delay: 12.418 ms
Loss rate: 9.22%
```
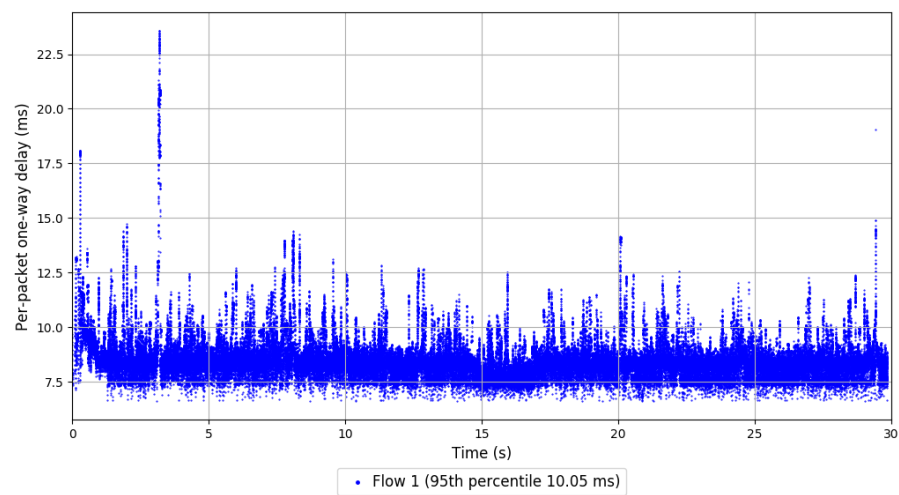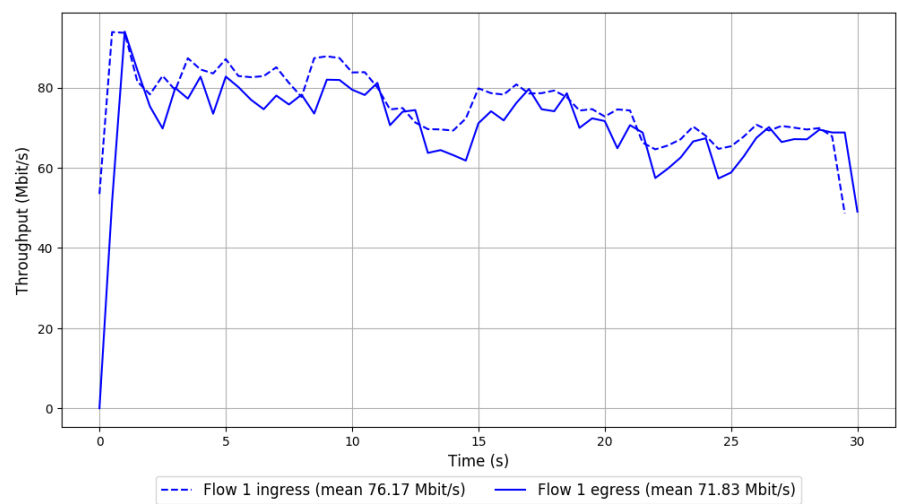
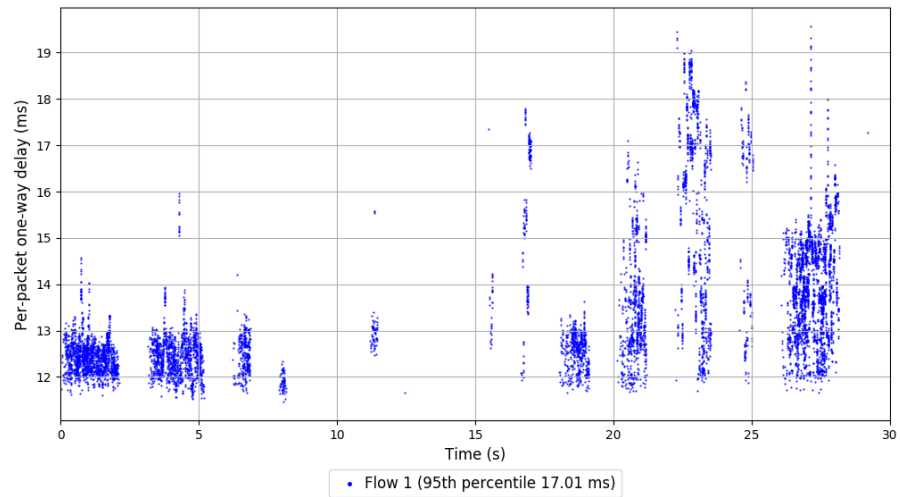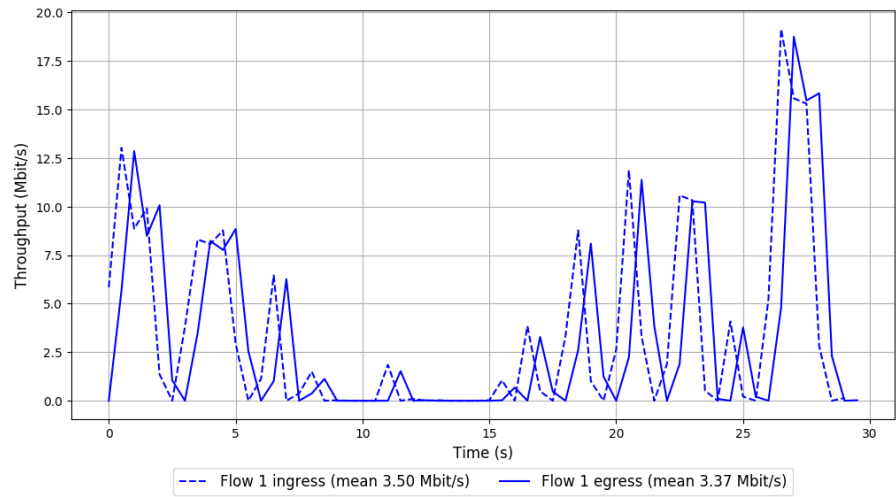Run 8: Report of Indigo — Data Link

Flow 1 ingress (mean 81.49 Mbit/s)   Flow 1 egress (mean 73.98 Mbit/s)

• Flow 1 (95th percentile 12.42 ms)

```
Run 9: Statistics of Indigo

Start at: 2018-06-18 11:26:05
End at: 2018-06-18 11:26:35
Local clock offset: 2.249 ms
Remote clock offset: 2.269 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.49 Mbit/s
95th percentile per-packet one-way delay: 10.853 ms
Loss rate: 6.16%
-- Flow 1:
Average throughput: 75.49 Mbit/s
95th percentile per-packet one-way delay: 10.853 ms
Loss rate: 6.16%
```

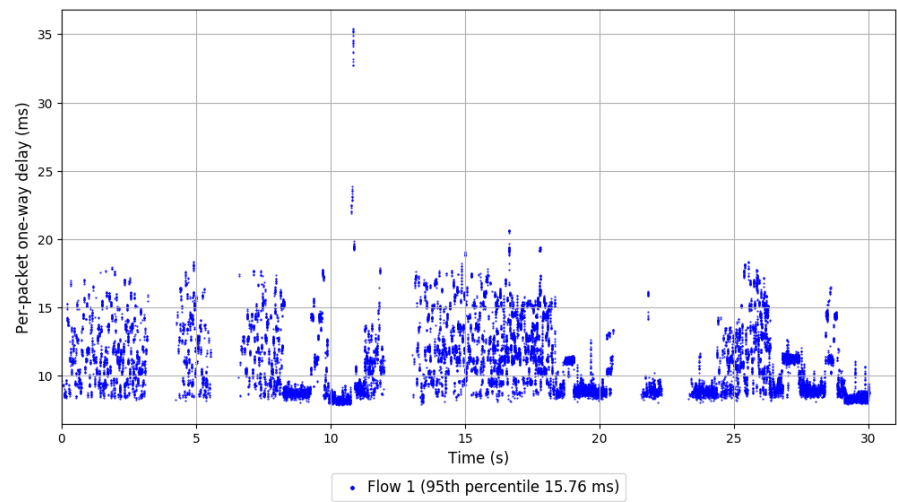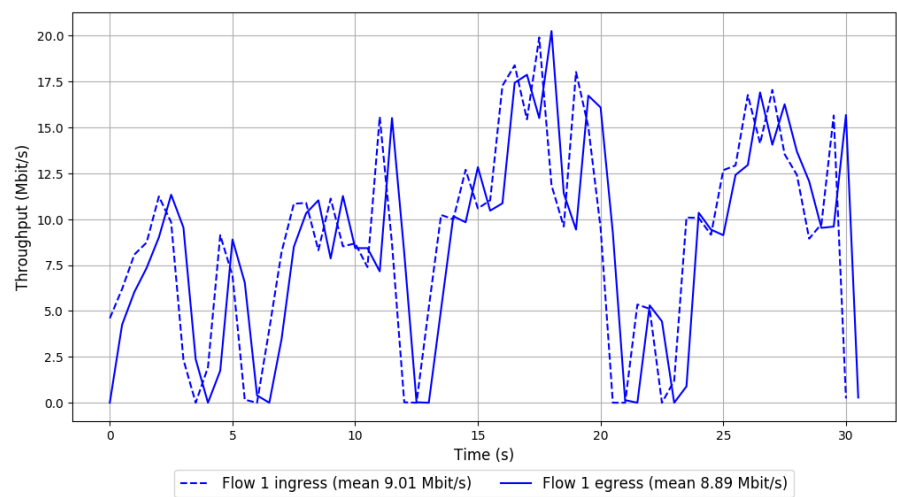Run 9: Report of Indigo — Data Link

Flow 1 ingress (mean 80.45 Mbit/s) --- Flow 1 egress (mean 75.49 Mbit/s)

· Flow 1 (95th percentile 10.85 ms)

```
Run 10: Statistics of Indigo

Start at: 2018-06-18 11:44:20
End at: 2018-06-18 11:44:50
Local clock offset: 1.035 ms
Remote clock offset: -1.94 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.83 Mbit/s
95th percentile per-packet one-way delay: 10.051 ms
Loss rate: 5.70%
-- Flow 1:
Average throughput: 71.83 Mbit/s
95th percentile per-packet one-way delay: 10.051 ms
Loss rate: 5.70%
```

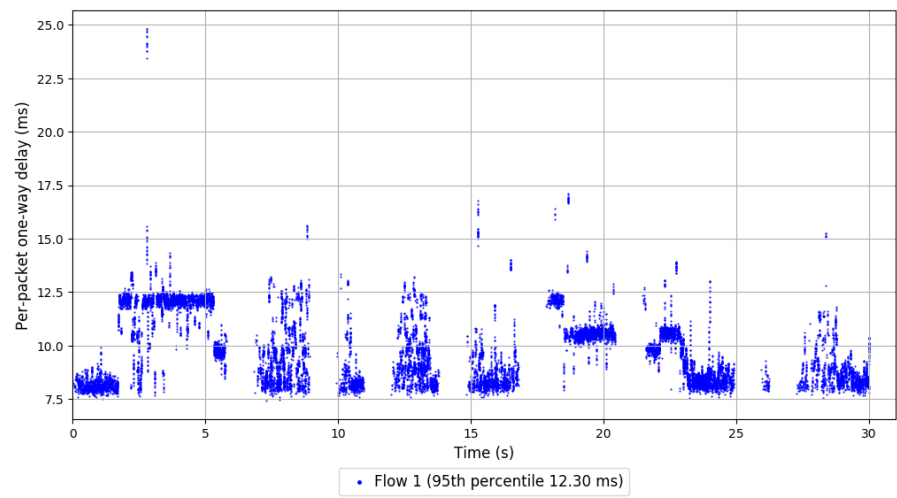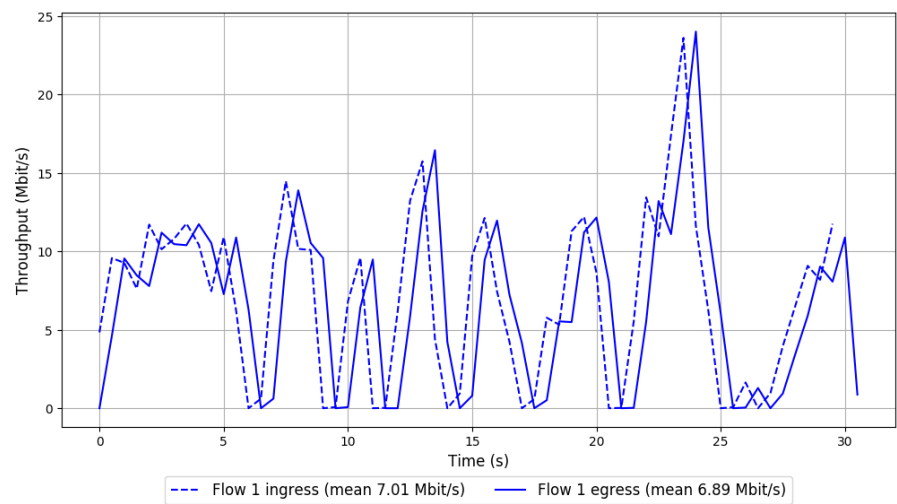Run 10: Report of Indigo — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-06-18 08:59:47
End at: 2018-06-18 09:00:17
Local clock offset: -4.442 ms
Remote clock offset: -3.949 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 17.011 ms
Loss rate: 3.74%
-- Flow 1:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 17.011 ms
Loss rate: 3.74%
```

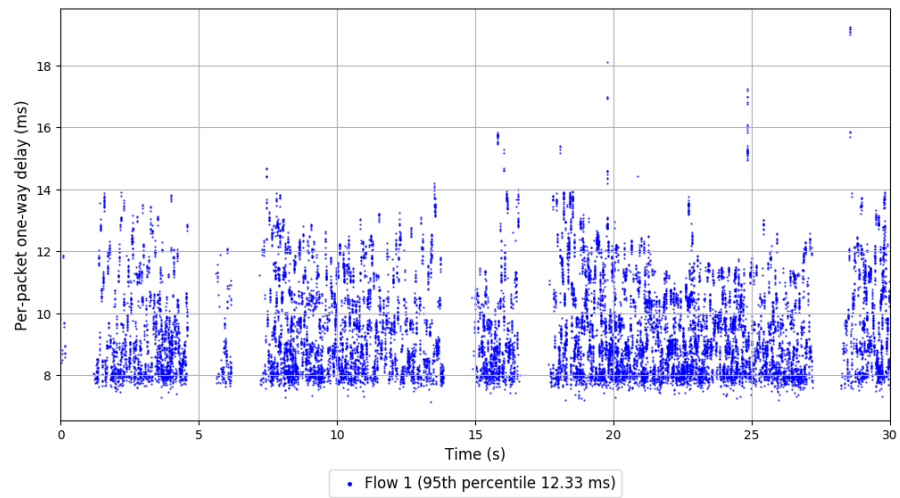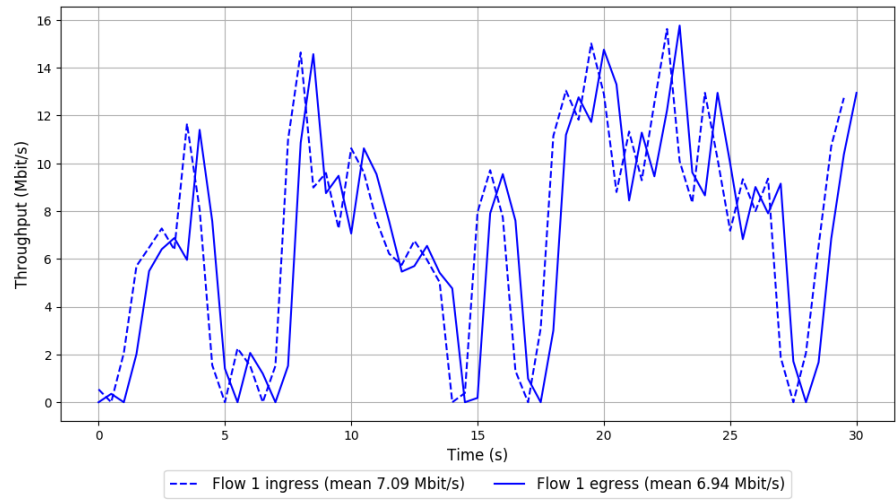Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-06-18 09:18:21
End at: 2018-06-18 09:18:51
Local clock offset: -0.934 ms
Remote clock offset: -5.358 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.89 Mbit/s
95th percentile per-packet one-way delay: 15.760 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 8.89 Mbit/s
95th percentile per-packet one-way delay: 15.760 ms
Loss rate: 1.34%
```

Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 9.01 Mbit/s) —— Flow 1 egress (mean 8.89 Mbit/s)

Flow 1 (95th percentile 15.76 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2018-06-18 09:36:59
End at: 2018-06-18 09:37:29
Local clock offset: 1.819 ms
Remote clock offset: -7.659 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 12.300 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 12.300 ms
Loss rate: 1.67%
```
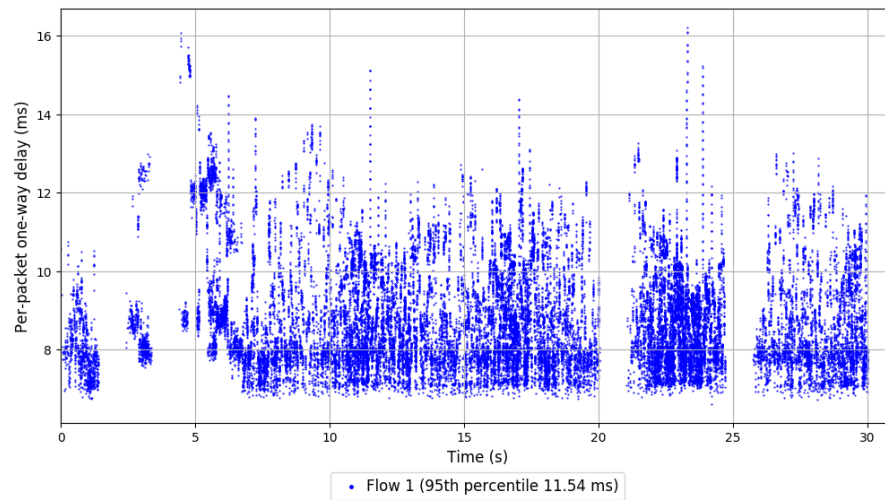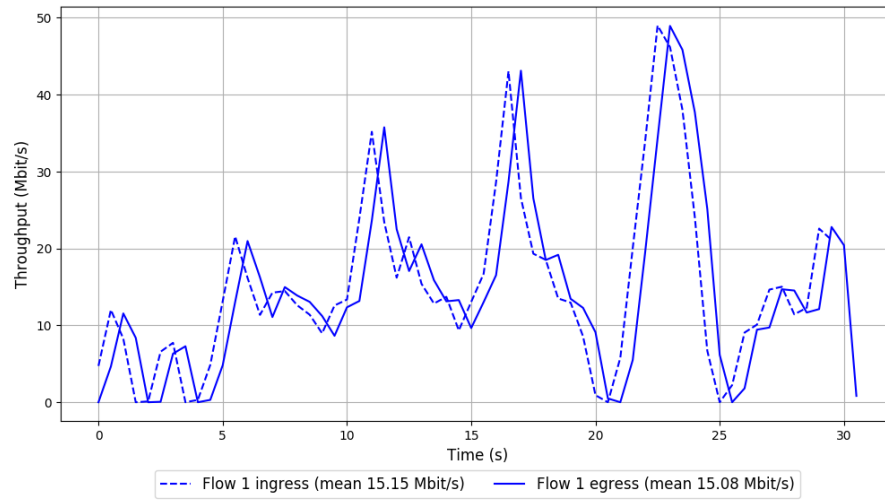
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-06-18 09:55:40
End at: 2018-06-18 09:56:10
Local clock offset: 2.101 ms
Remote clock offset: -8.868 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 12.330 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 12.330 ms
Loss rate: 2.05%
```
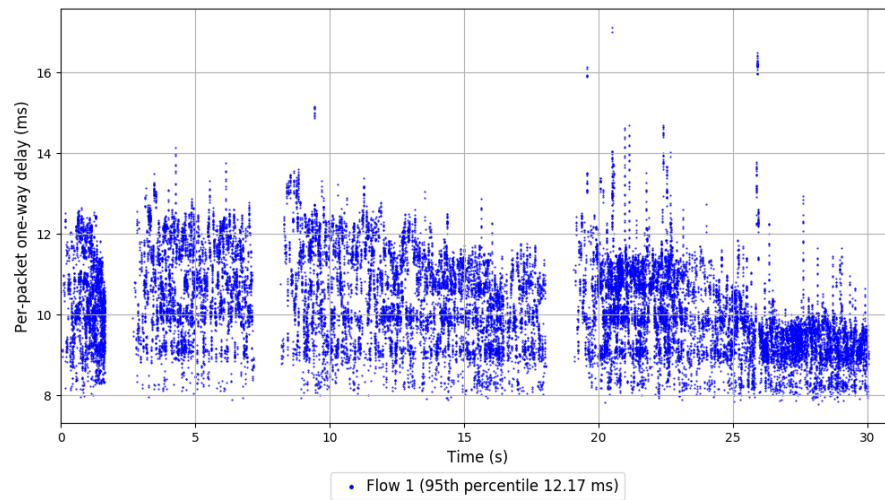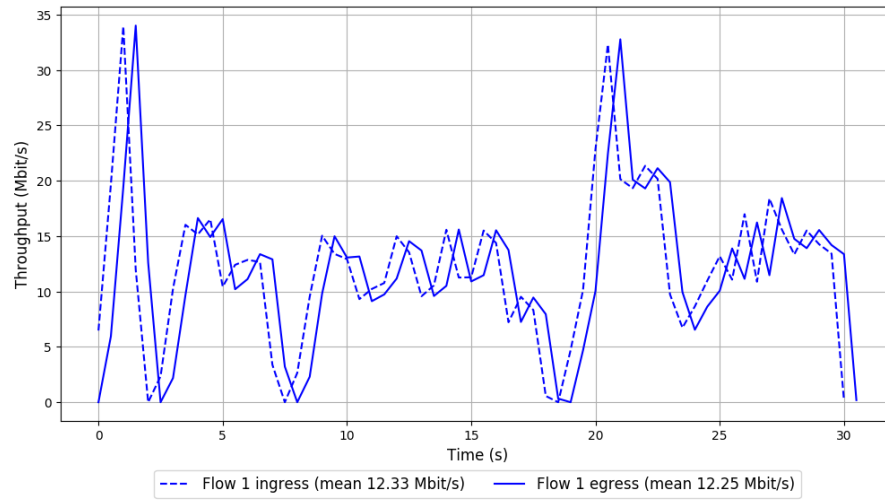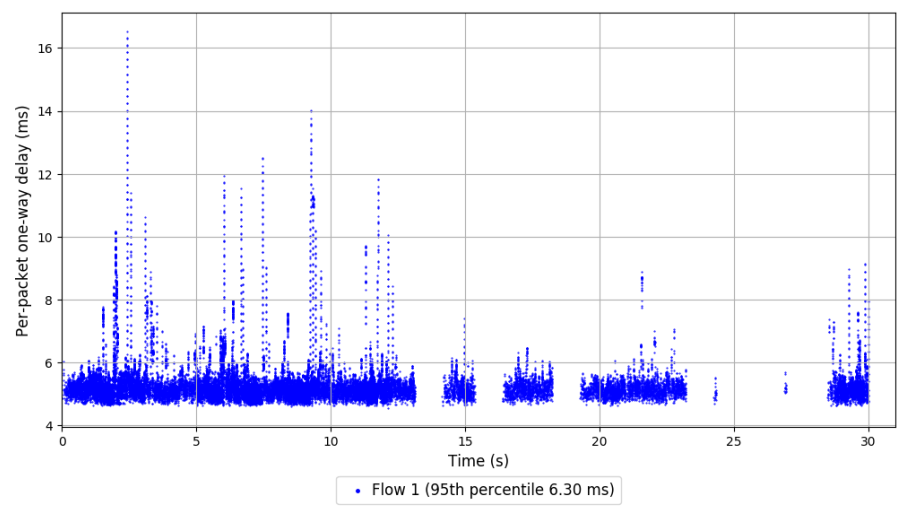
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-06-18 10:14:00
End at: 2018-06-18 10:14:30
Local clock offset: 1.612 ms
Remote clock offset: -9.23 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.08 Mbit/s
95th percentile per-packet one-way delay: 11.537 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 15.08 Mbit/s
95th percentile per-packet one-way delay: 11.537 ms
Loss rate: 0.50%
```

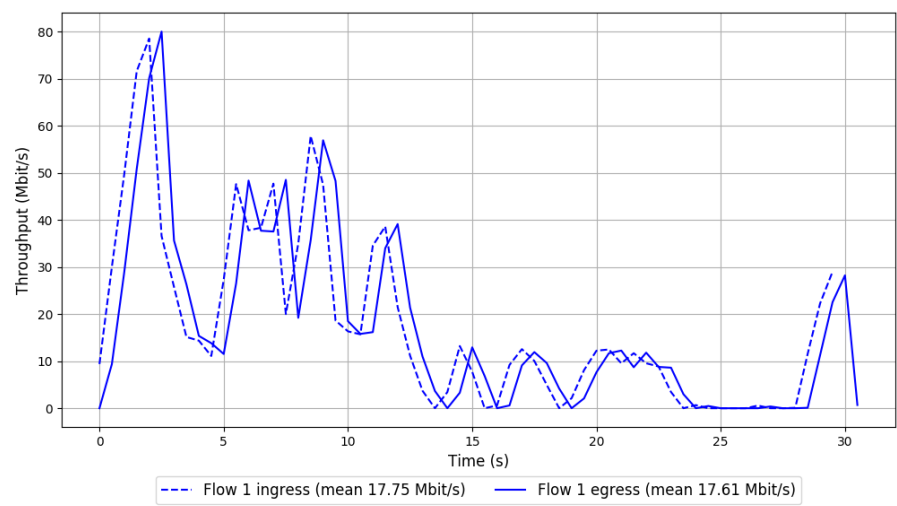# Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 15.15 Mbit/s)   Flow 1 egress (mean 15.08 Mbit/s)

• Flow 1 (95th percentile 11.54 ms)

113

```
Run 6: Statistics of LEDBAT

Start at: 2018-06-18 10:32:14
End at: 2018-06-18 10:32:44
Local clock offset: -0.234 ms
Remote clock offset: -6.04 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.25 Mbit/s
95th percentile per-packet one-way delay: 12.174 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 12.25 Mbit/s
95th percentile per-packet one-way delay: 12.174 ms
Loss rate: 0.65%
```
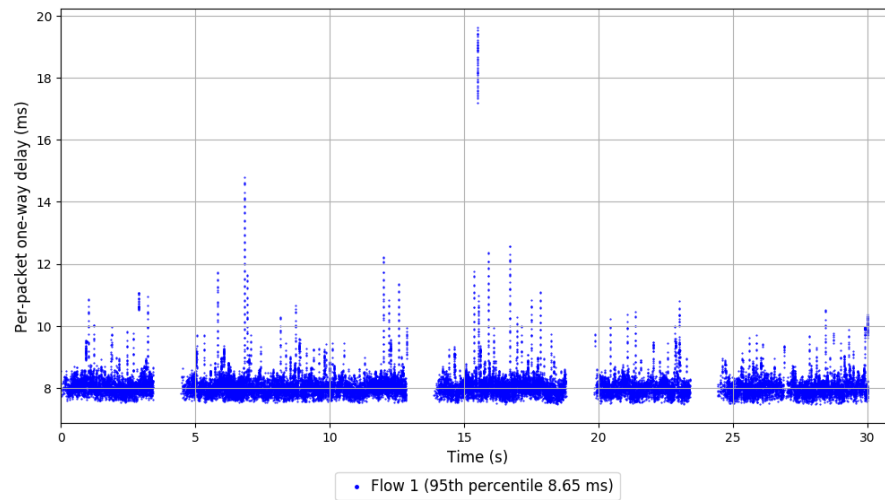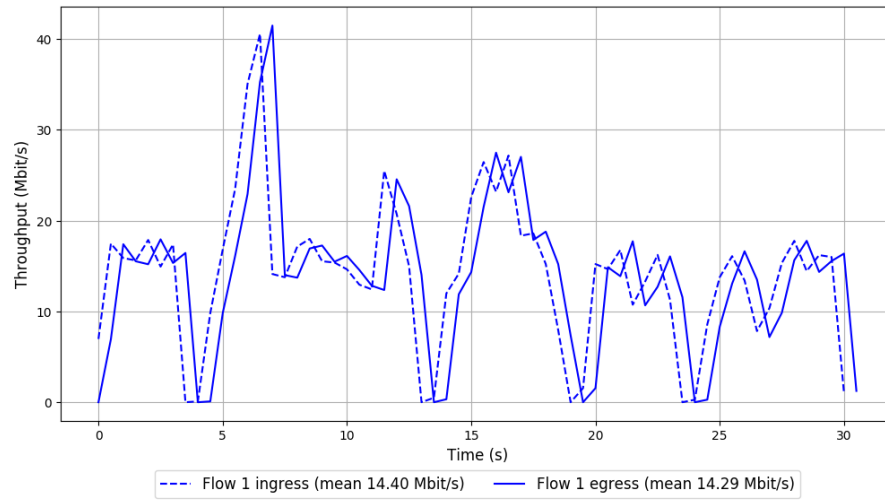
Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 12.33 Mbit/s) --- Flow 1 egress (mean 12.25 Mbit/s)

Flow 1 (95th percentile 12.17 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2018-06-18 10:50:41
End at: 2018-06-18 10:51:11
Local clock offset: 4.071 ms
Remote clock offset: -3.938 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.61 Mbit/s
95th percentile per-packet one-way delay: 6.299 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 17.61 Mbit/s
95th percentile per-packet one-way delay: 6.299 ms
Loss rate: 0.79%
```
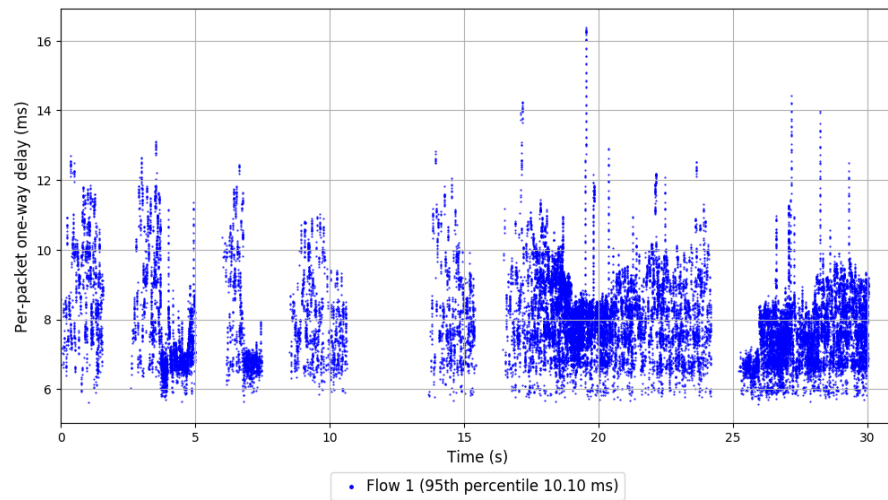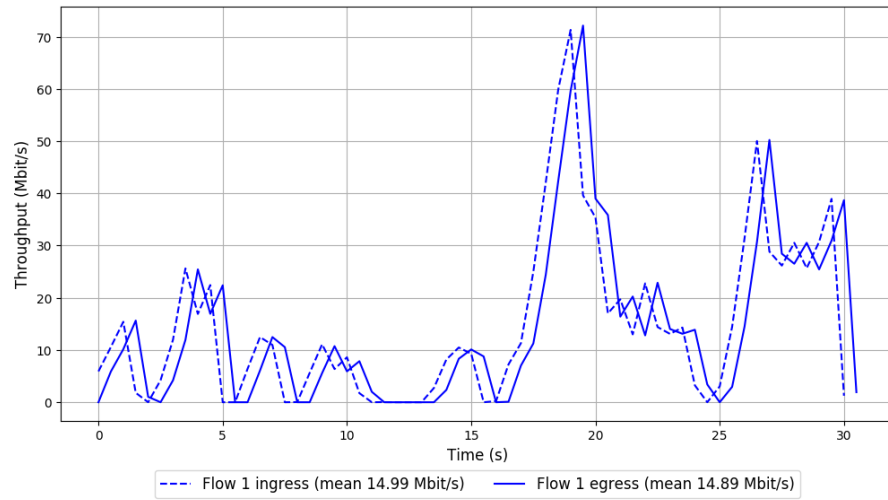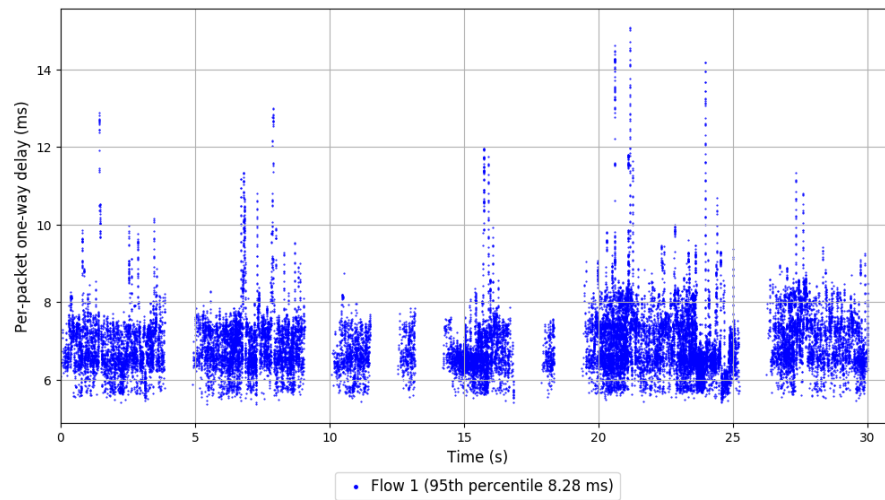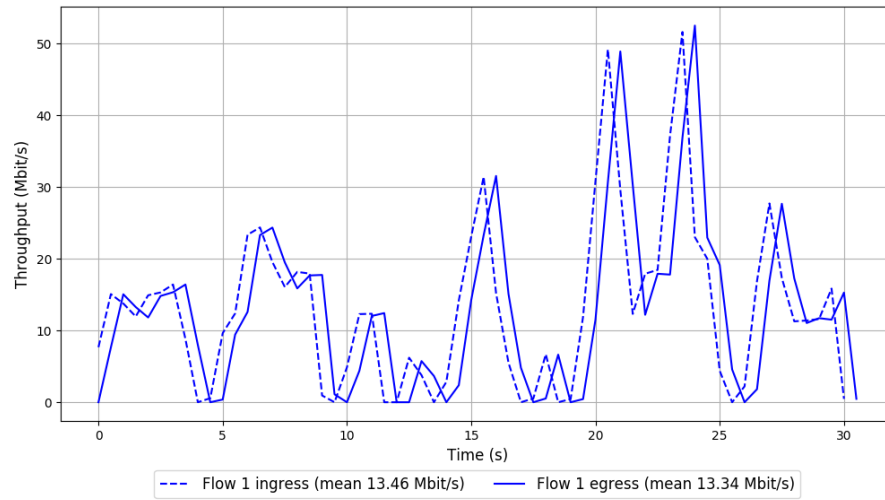
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 17.75 Mbit/s)   Flow 1 egress (mean 17.61 Mbit/s)

Flow 1 (95th percentile 6.30 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-06-18 11:09:01
End at: 2018-06-18 11:09:31
Local clock offset: 2.073 ms
Remote clock offset: 0.034 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.29 Mbit/s
95th percentile per-packet one-way delay: 8.651 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 14.29 Mbit/s
95th percentile per-packet one-way delay: 8.651 ms
Loss rate: 0.75%
```

Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2018-06-18 11:27:14
End at: 2018-06-18 11:27:44
Local clock offset: 4.228 ms
Remote clock offset: 2.134 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.89 Mbit/s
95th percentile per-packet one-way delay: 10.096 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 14.89 Mbit/s
95th percentile per-packet one-way delay: 10.096 ms
Loss rate: 0.64%
```
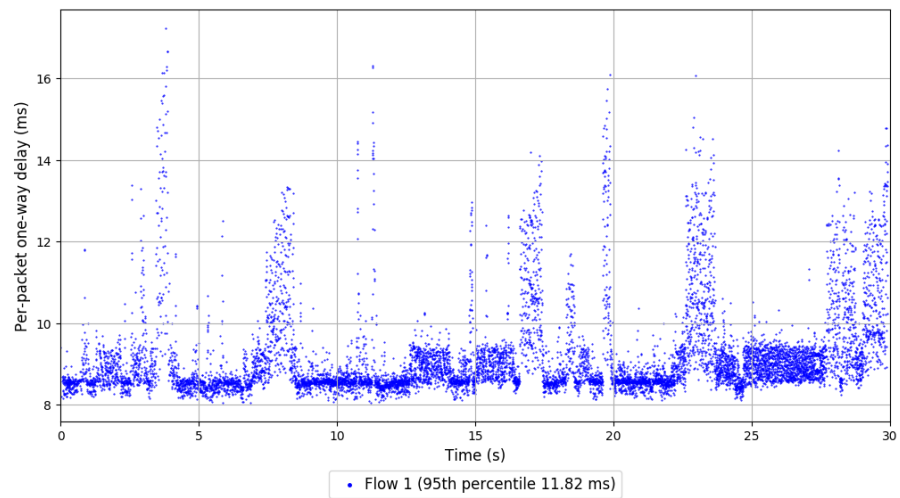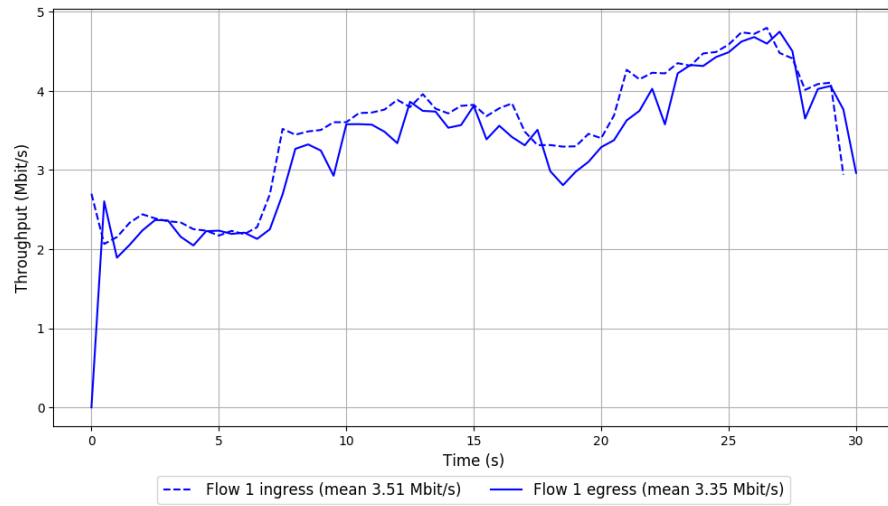
Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2018-06-18 11:45:29
End at: 2018-06-18 11:45:59
Local clock offset: 1.535 ms
Remote clock offset: -2.407 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.34 Mbit/s
95th percentile per-packet one-way delay: 8.275 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 13.34 Mbit/s
95th percentile per-packet one-way delay: 8.275 ms
Loss rate: 0.85%
```
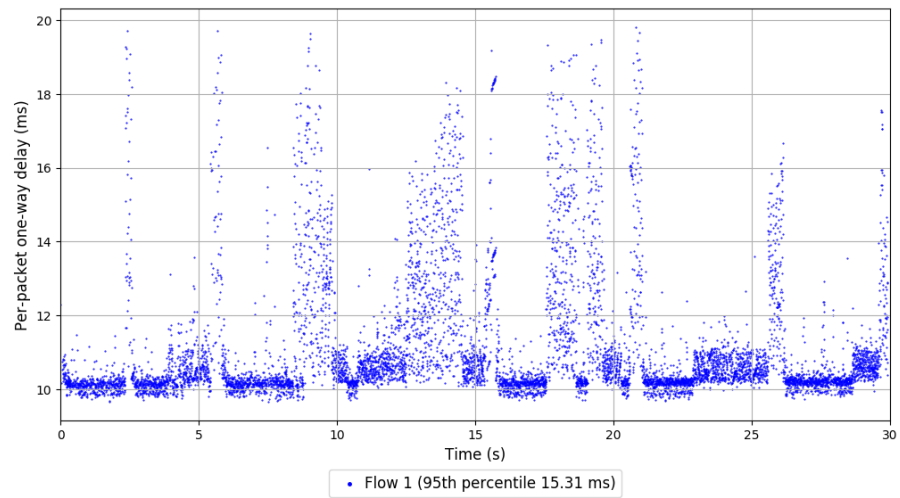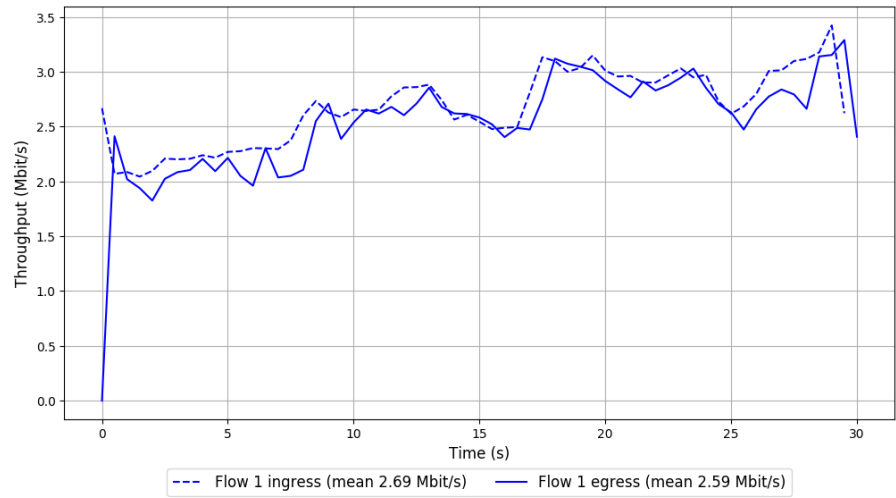
Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-18 08:48:18
End at: 2018-06-18 08:48:48
Local clock offset: -0.78 ms
Remote clock offset: -3.093 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 11.817 ms
Loss rate: 4.55%
-- Flow 1:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 11.817 ms
Loss rate: 4.55%
```
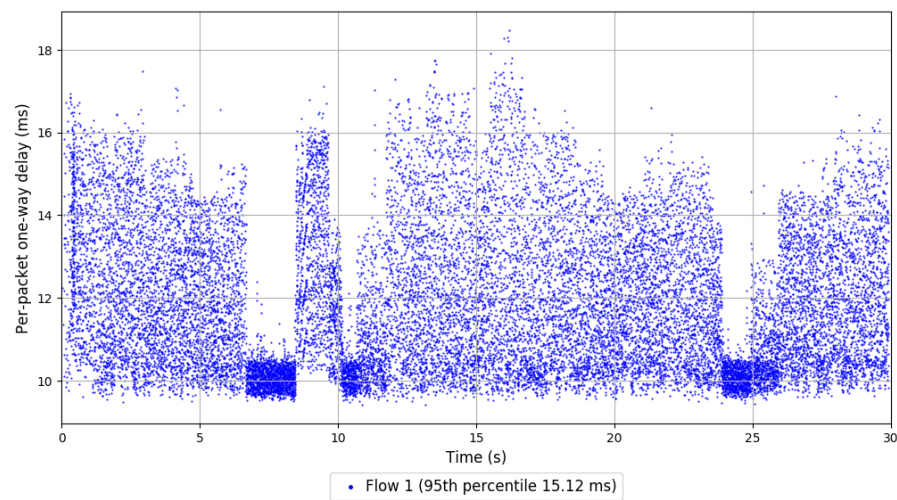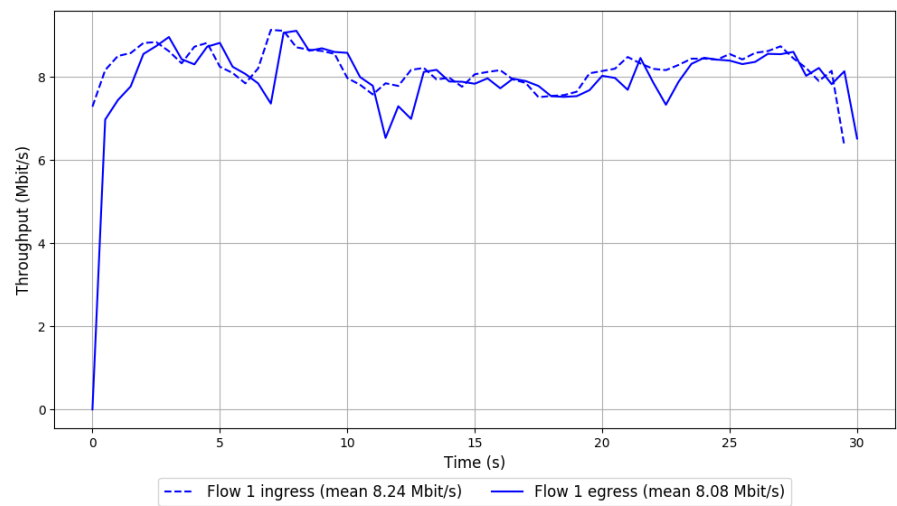
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-18 09:06:46
End at: 2018-06-18 09:07:16
Local clock offset: -1.543 ms
Remote clock offset: -2.285 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.59 Mbit/s
95th percentile per-packet one-way delay: 15.306 ms
Loss rate: 3.86%
-- Flow 1:
Average throughput: 2.59 Mbit/s
95th percentile per-packet one-way delay: 15.306 ms
Loss rate: 3.86%
```
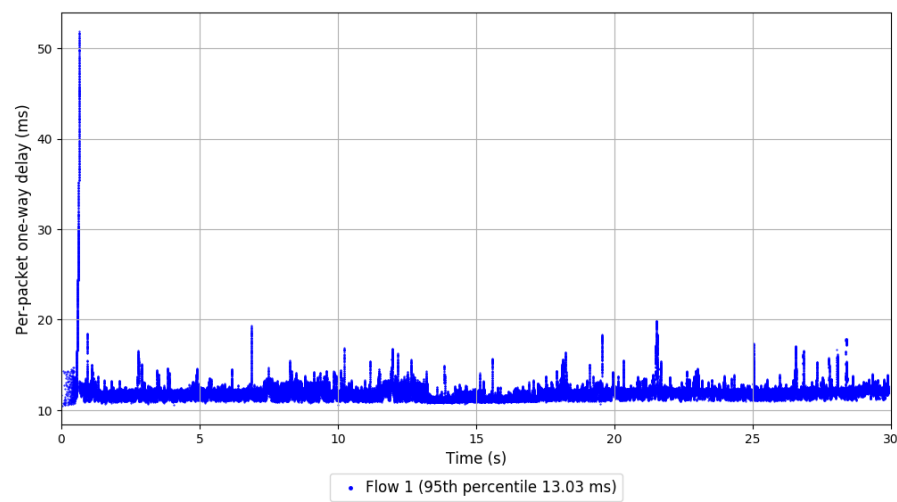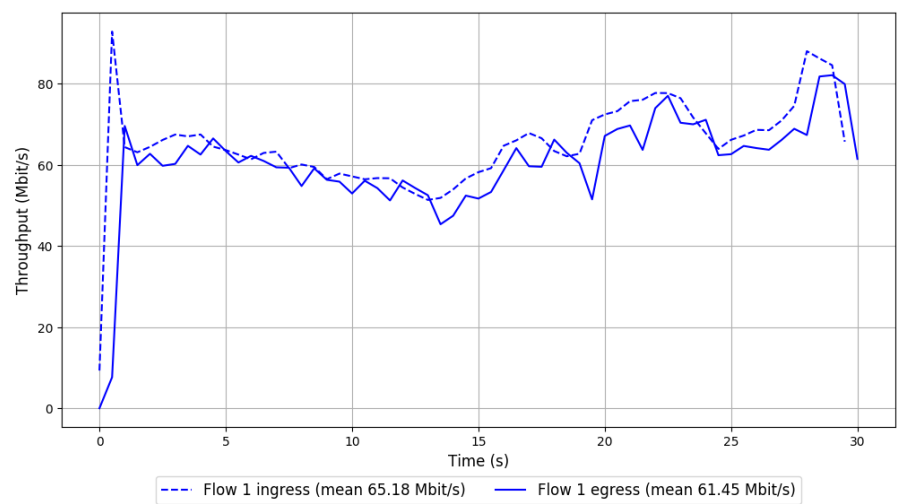
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-18 09:25:24
End at: 2018-06-18 09:25:54
Local clock offset: -0.734 ms
Remote clock offset: -5.243 ms


# Below is generated by plot.py at 2018-06-18 11:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.08 Mbit/s
95th percentile per-packet one-way delay: 15.124 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 8.08 Mbit/s
95th percentile per-packet one-way delay: 15.124 ms
Loss rate: 1.93%
```
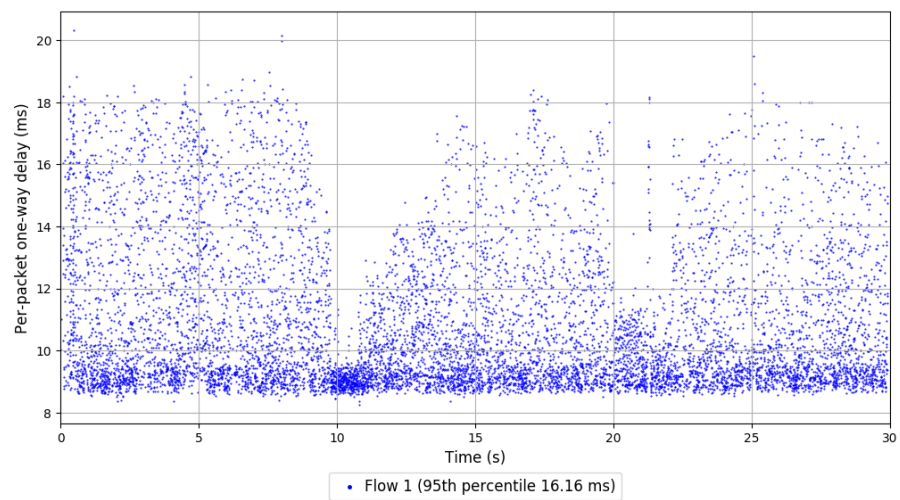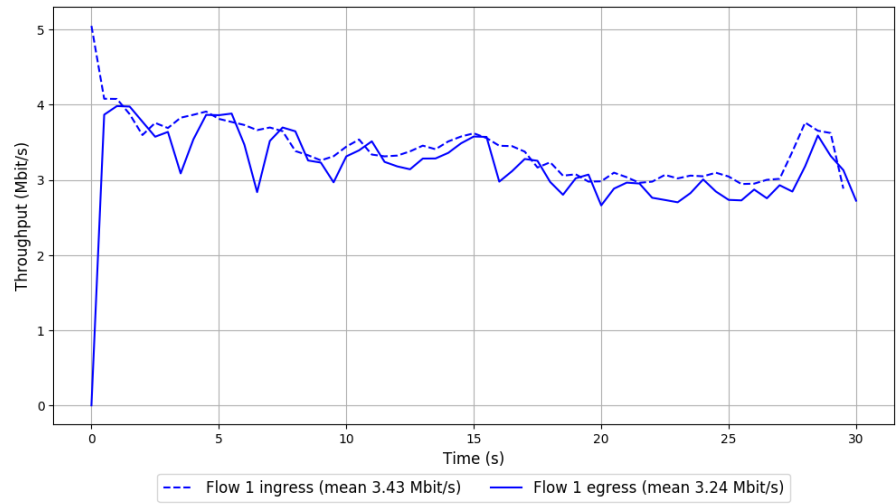
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 8.24 Mbit/s)   Flow 1 egress (mean 8.08 Mbit/s)

Flow 1 (95th percentile 15.12 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-18 09:44:12
End at: 2018-06-18 09:44:42
Local clock offset: -0.583 ms
Remote clock offset: -8.537 ms


# Below is generated by plot.py at 2018-06-18 11:58:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.45 Mbit/s
95th percentile per-packet one-way delay: 13.033 ms
Loss rate: 5.73%
-- Flow 1:
Average throughput: 61.45 Mbit/s
95th percentile per-packet one-way delay: 13.033 ms
Loss rate: 5.73%
```
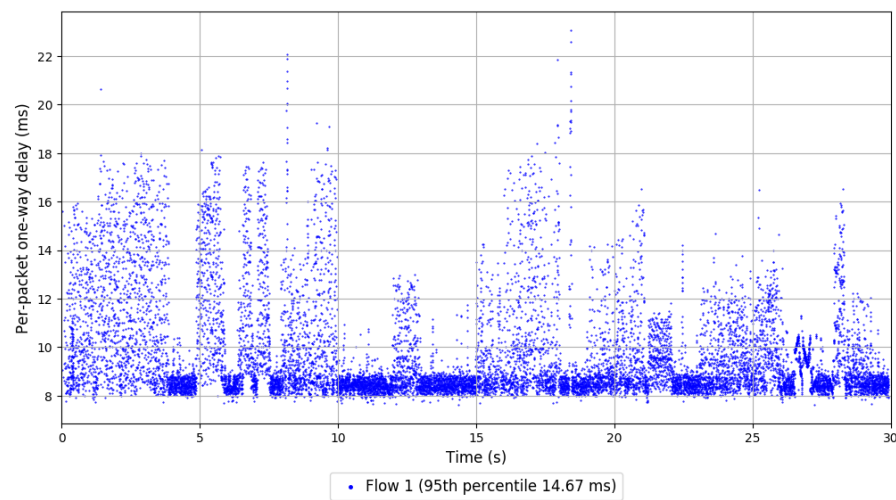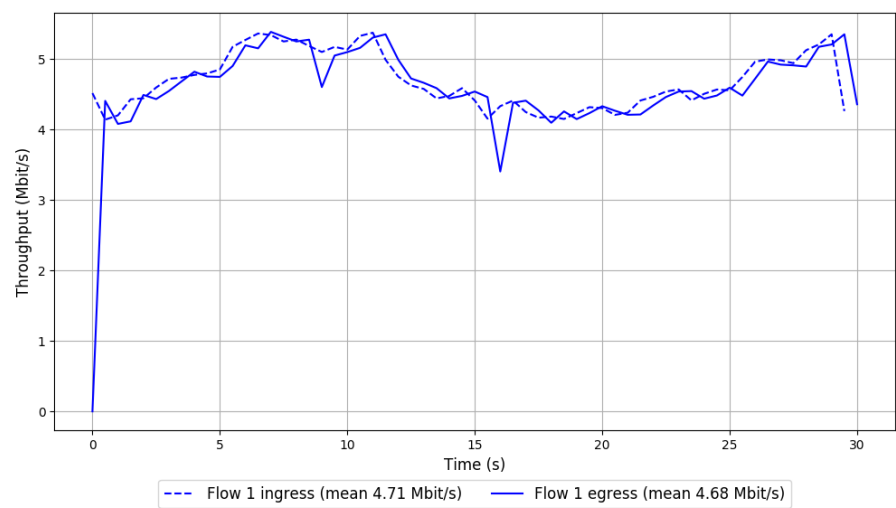
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 65.18 Mbit/s)   Flow 1 egress (mean 61.45 Mbit/s)

• Flow 1 (95th percentile 13.03 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-18 10:02:34
End at: 2018-06-18 10:03:04
Local clock offset: 0.599 ms
Remote clock offset: -9.312 ms


# Below is generated by plot.py at 2018-06-18 11:58:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 16.160 ms
Loss rate: 5.62%
-- Flow 1:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 16.160 ms
Loss rate: 5.62%
```
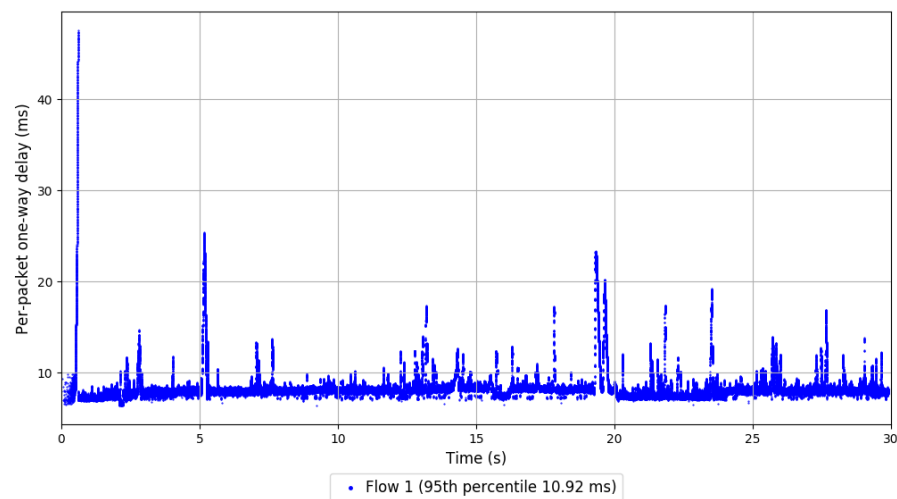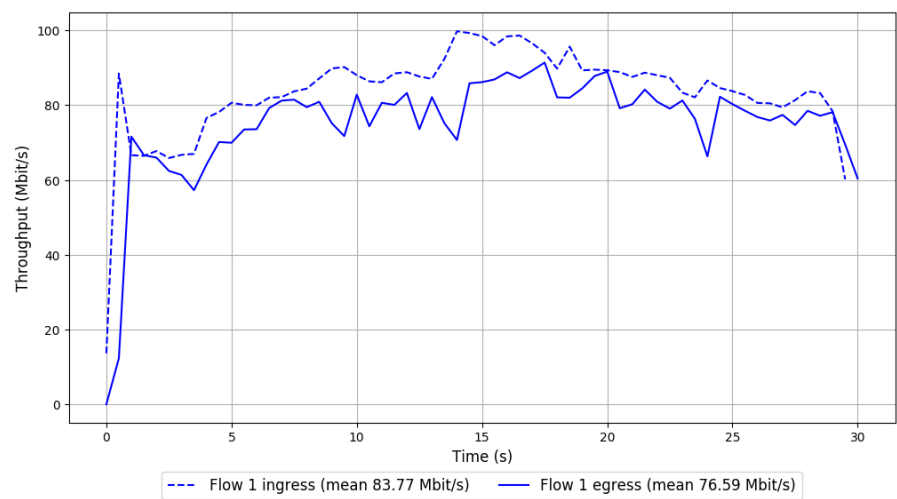
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 3.43 Mbit/s)　　Flow 1 egress (mean 3.24 Mbit/s)

• Flow 1 (95th percentile 16.16 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-18 10:20:49
End at: 2018-06-18 10:21:19
Local clock offset: 0.489 ms
Remote clock offset: -9.634 ms


# Below is generated by plot.py at 2018-06-18 11:58:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 14.667 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 14.667 ms
Loss rate: 0.70%
```
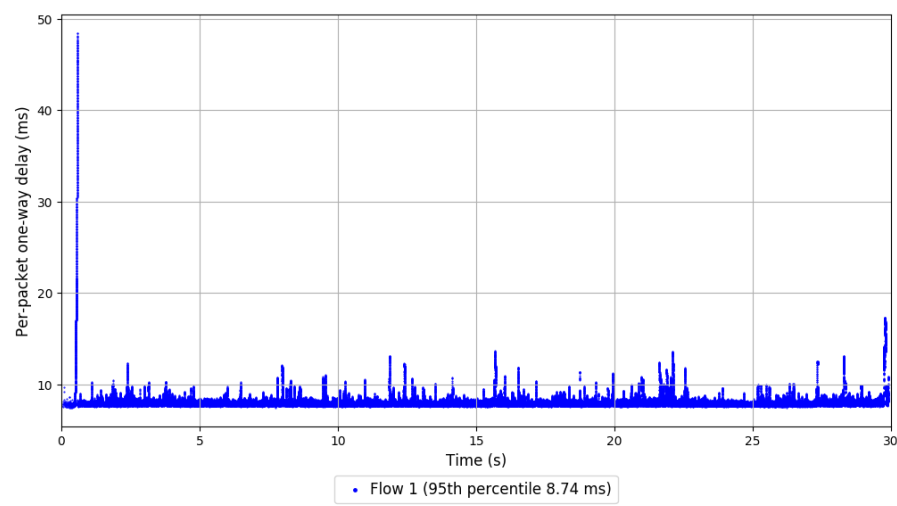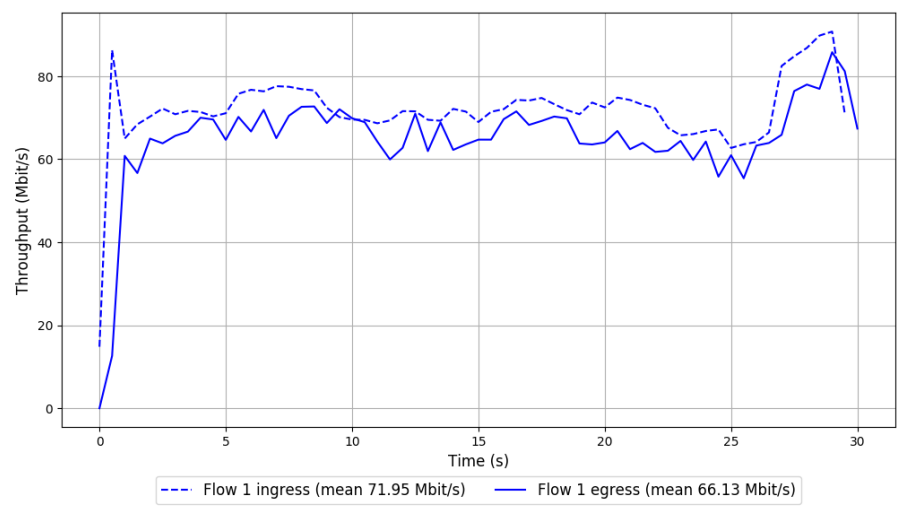
Run 6: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 4.71 Mbit/s)   Flow 1 egress (mean 4.68 Mbit/s)

• Flow 1 (95th percentile 14.67 ms)

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-18 10:39:09
End at: 2018-06-18 10:39:39
Local clock offset: 1.272 ms
Remote clock offset: -5.571 ms


# Below is generated by plot.py at 2018-06-18 11:59:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.59 Mbit/s
95th percentile per-packet one-way delay: 10.922 ms
Loss rate: 8.57%
-- Flow 1:
Average throughput: 76.59 Mbit/s
95th percentile per-packet one-way delay: 10.922 ms
Loss rate: 8.57%
```
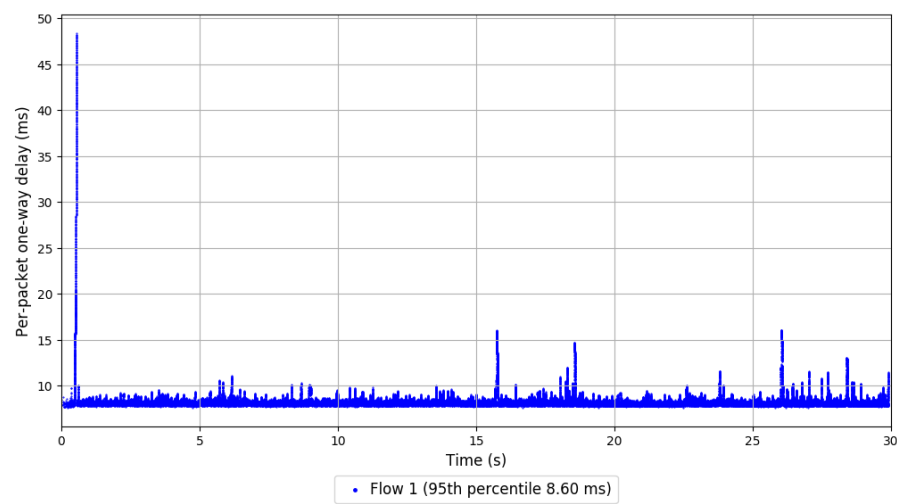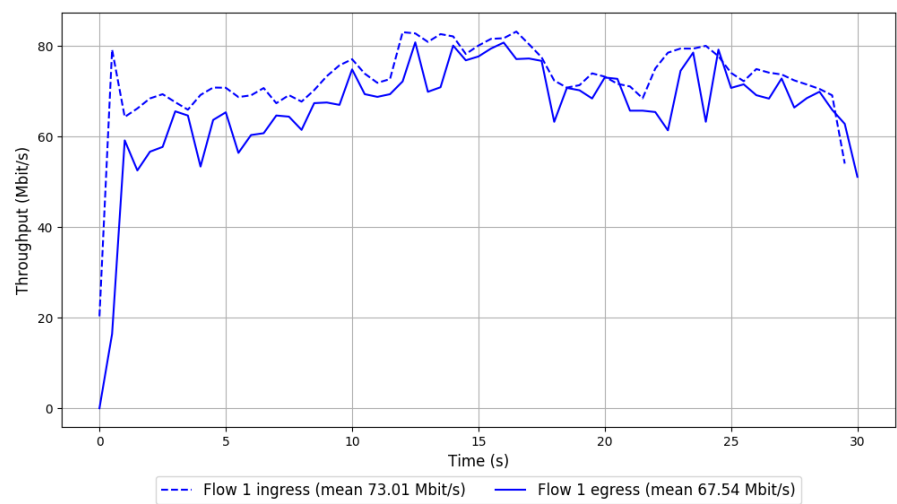
Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 83.77 Mbit/s)   Flow 1 egress (mean 76.59 Mbit/s)

Flow 1 (95th percentile 10.92 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-18 10:57:33
End at: 2018-06-18 10:58:03
Local clock offset: 1.659 ms
Remote clock offset: -2.958 ms


# Below is generated by plot.py at 2018-06-18 11:59:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.13 Mbit/s
95th percentile per-packet one-way delay: 8.743 ms
Loss rate: 8.08%
-- Flow 1:
Average throughput: 66.13 Mbit/s
95th percentile per-packet one-way delay: 8.743 ms
Loss rate: 8.08%
```
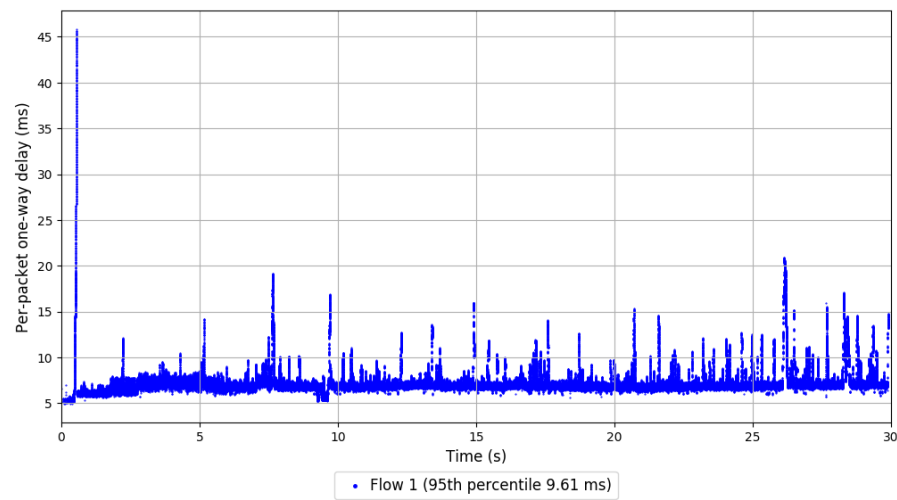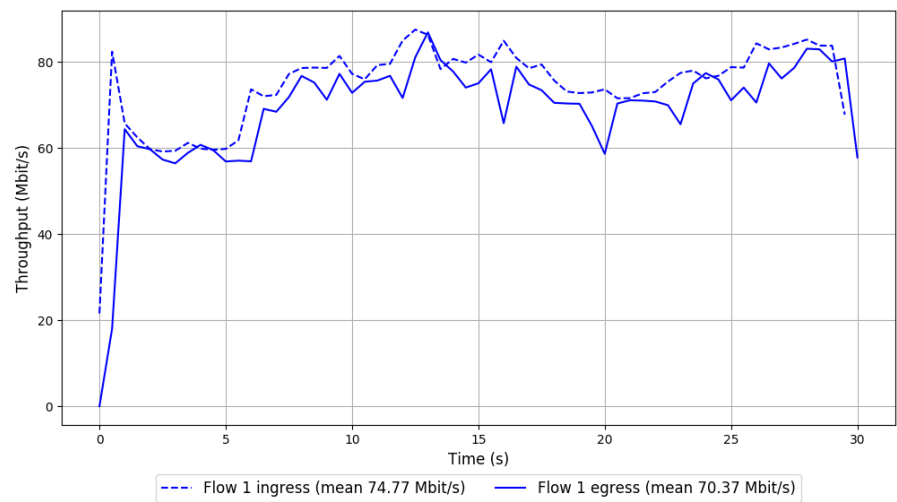
Run 8: Report of PCC-Allegro — Data Link

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-18 11:15:49
End at: 2018-06-18 11:16:19
Local clock offset: 0.767 ms
Remote clock offset: -0.096 ms


# Below is generated by plot.py at 2018-06-18 11:59:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.54 Mbit/s
95th percentile per-packet one-way delay: 8.603 ms
Loss rate: 7.50%
-- Flow 1:
Average throughput: 67.54 Mbit/s
95th percentile per-packet one-way delay: 8.603 ms
Loss rate: 7.50%
```
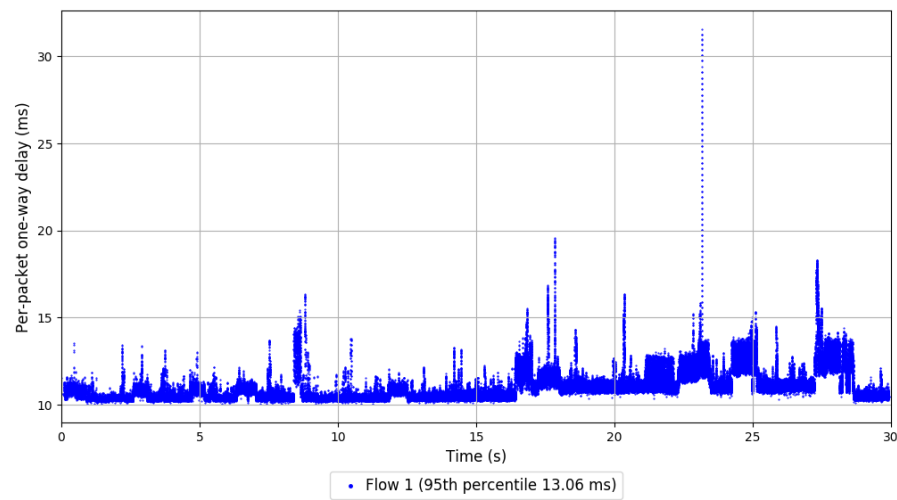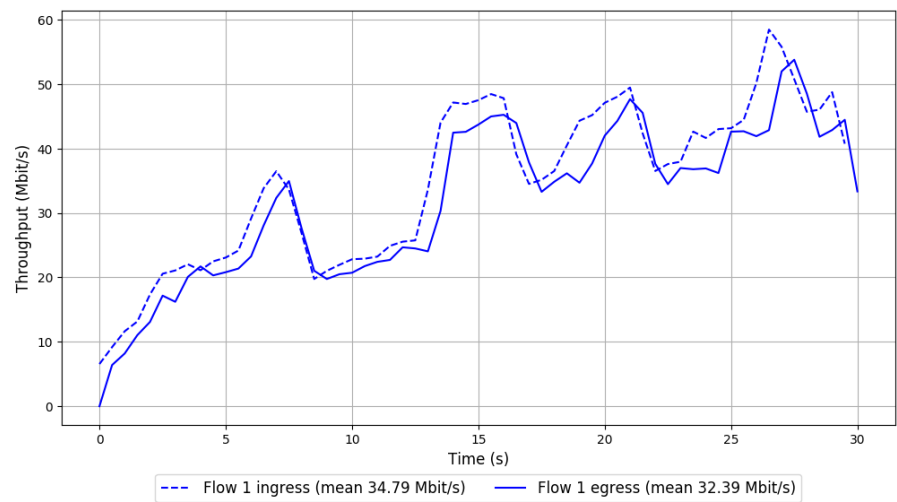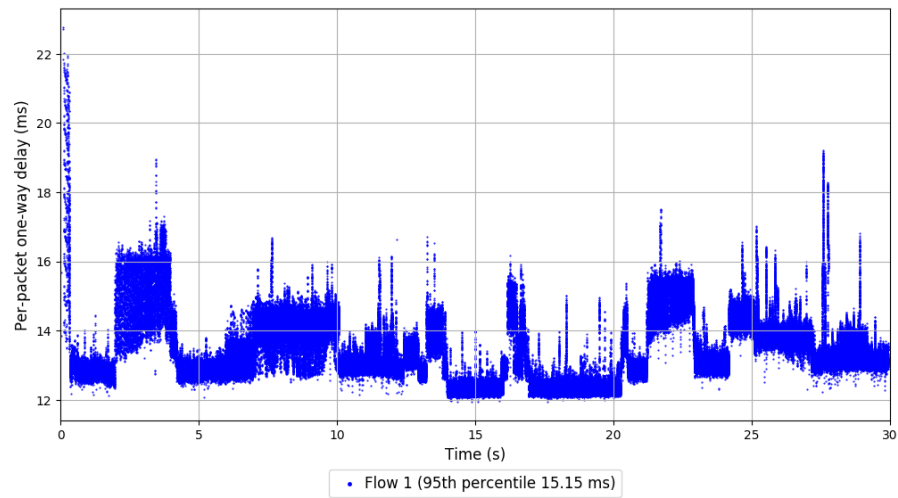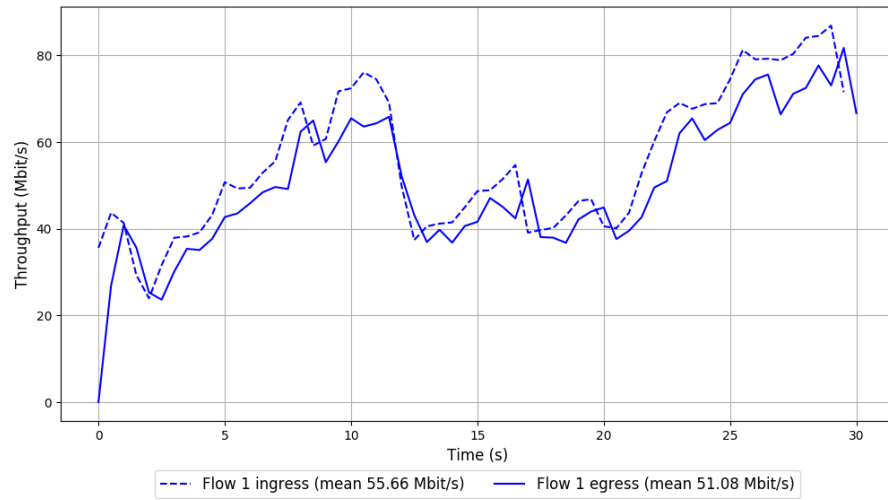
Run 9: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 73.01 Mbit/s)   Flow 1 egress (mean 67.54 Mbit/s)

Flow 1 (95th percentile 8.60 ms)

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-18 11:34:12
End at: 2018-06-18 11:34:42
Local clock offset: 5.2 ms
Remote clock offset: 2.153 ms


# Below is generated by plot.py at 2018-06-18 11:59:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.37 Mbit/s
95th percentile per-packet one-way delay: 9.608 ms
Loss rate: 5.87%
-- Flow 1:
Average throughput: 70.37 Mbit/s
95th percentile per-packet one-way delay: 9.608 ms
Loss rate: 5.87%
```

Run 10: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 74.77 Mbit/s)   Flow 1 egress (mean 70.37 Mbit/s)
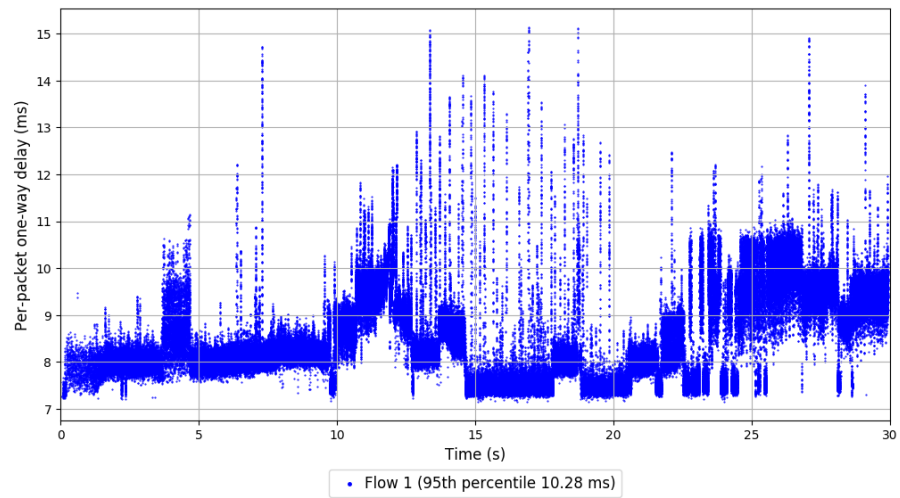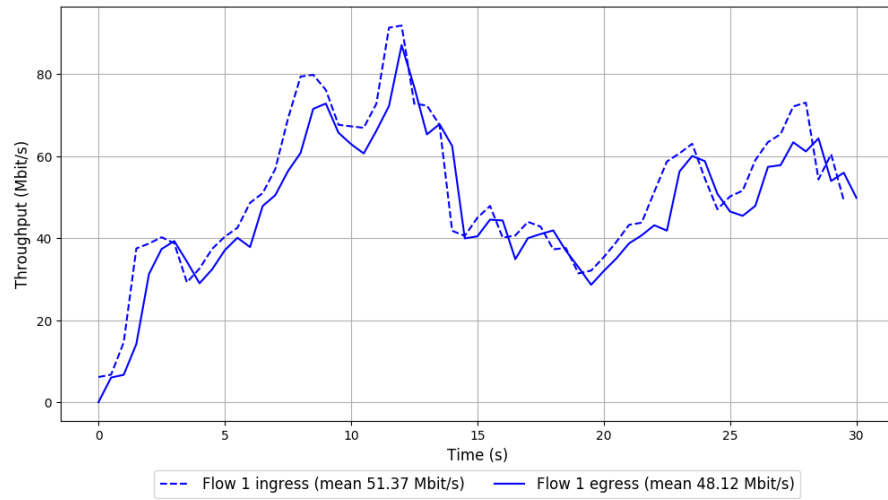

Flow 1 (95th percentile 9.61 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-18 08:49:24
End at: 2018-06-18 08:49:54
Local clock offset: -2.498 ms
Remote clock offset: -3.028 ms


# Below is generated by plot.py at 2018-06-18 11:59:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: 13.059 ms
Loss rate: 6.90%
-- Flow 1:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: 13.059 ms
Loss rate: 6.90%
```
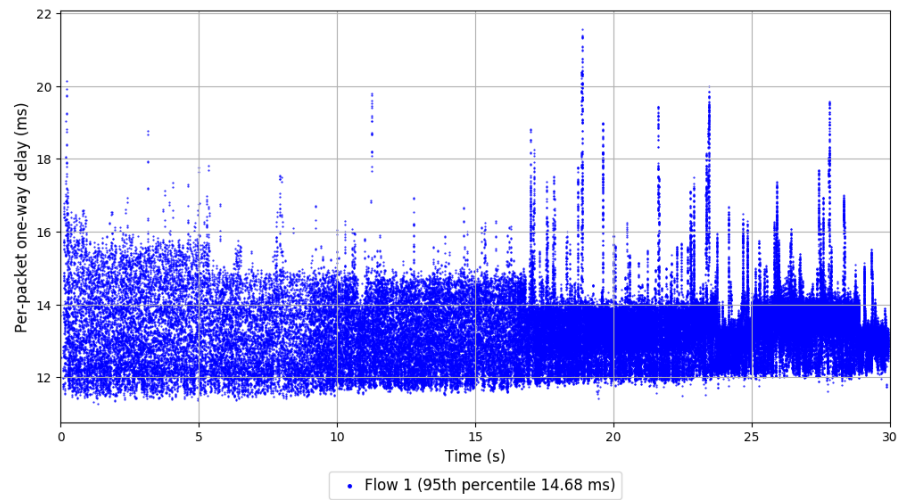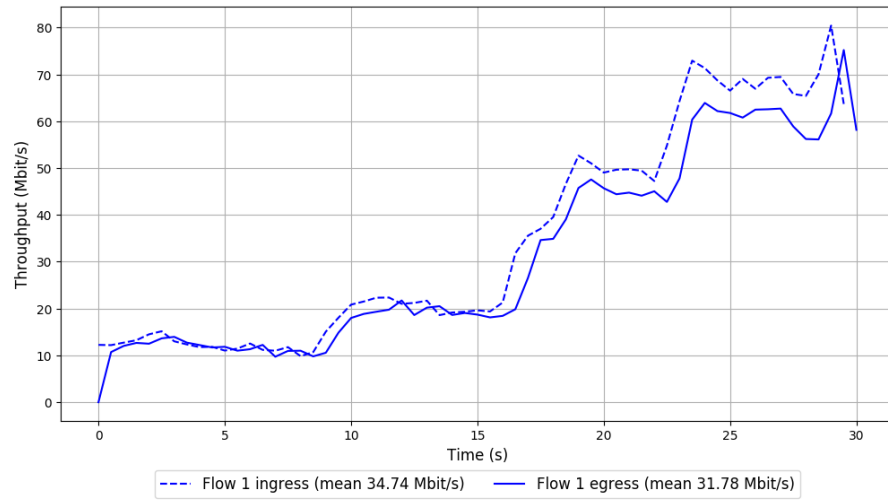
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 34.79 Mbit/s) --- Flow 1 egress (mean 32.39 Mbit/s)

Flow 1 (95th percentile 13.06 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-18 09:07:50
End at: 2018-06-18 09:08:20
Local clock offset: -4.318 ms
Remote clock offset: -4.003 ms


# Below is generated by plot.py at 2018-06-18 11:59:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.08 Mbit/s
95th percentile per-packet one-way delay: 15.148 ms
Loss rate: 8.24%
-- Flow 1:
Average throughput: 51.08 Mbit/s
95th percentile per-packet one-way delay: 15.148 ms
Loss rate: 8.24%
```
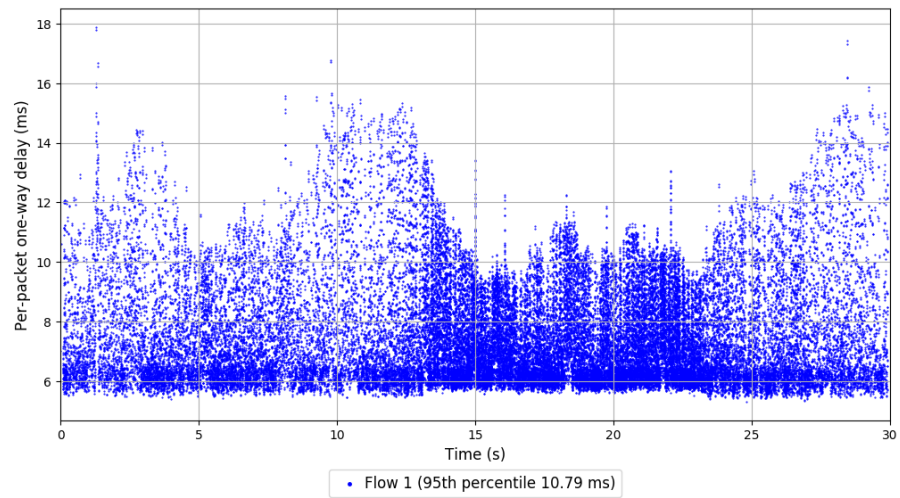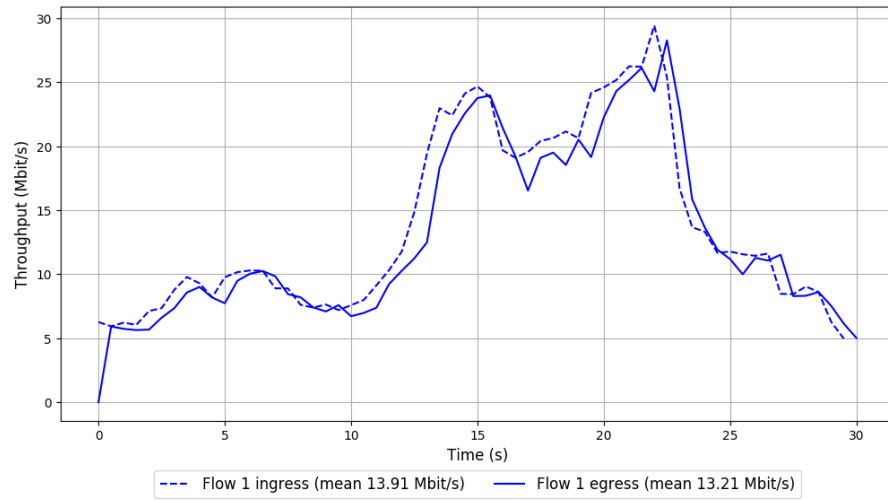
Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2018-06-18 09:26:29
End at: 2018-06-18 09:26:59
Local clock offset: -0.002 ms
Remote clock offset: -6.812 ms


# Below is generated by plot.py at 2018-06-18 11:59:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.12 Mbit/s
95th percentile per-packet one-way delay: 10.283 ms
Loss rate: 6.31%
-- Flow 1:
Average throughput: 48.12 Mbit/s
95th percentile per-packet one-way delay: 10.283 ms
Loss rate: 6.31%
```
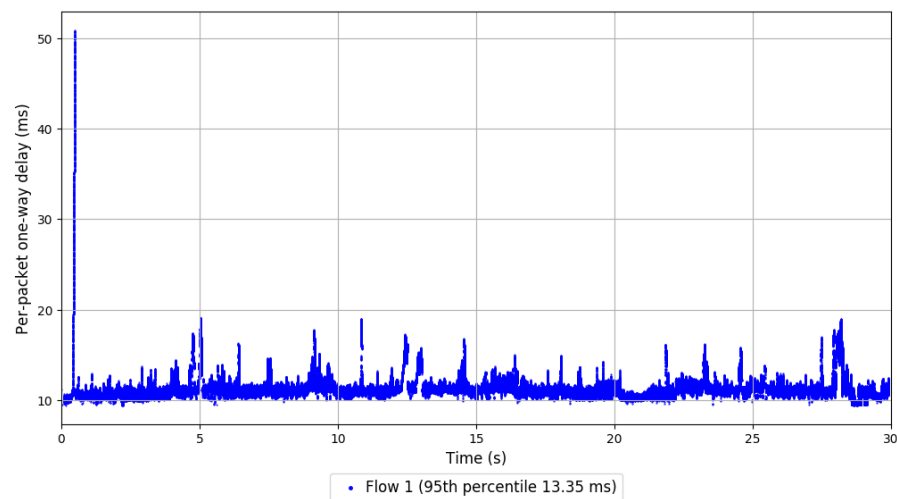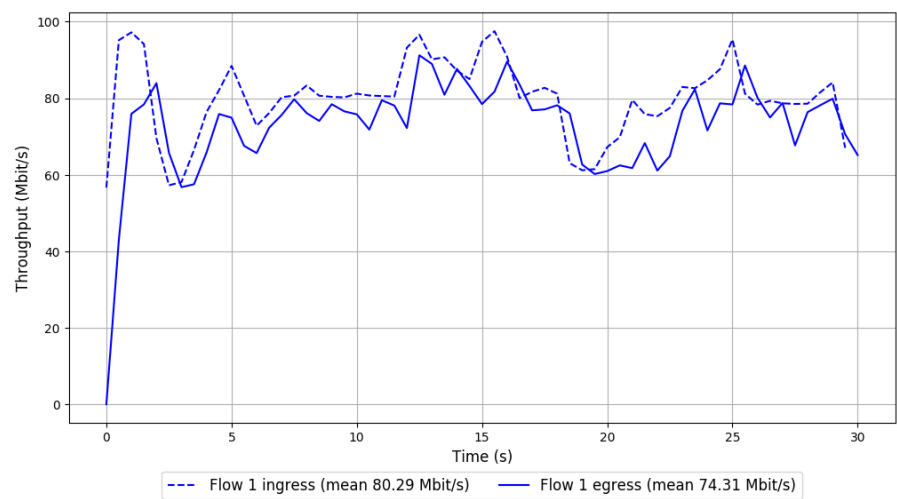
Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2018-06-18 09:45:20
End at: 2018-06-18 09:45:50
Local clock offset: 1.409 ms
Remote clock offset: -4.767 ms


# Below is generated by plot.py at 2018-06-18 11:59:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 14.684 ms
Loss rate: 8.51%
-- Flow 1:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 14.684 ms
Loss rate: 8.51%
```
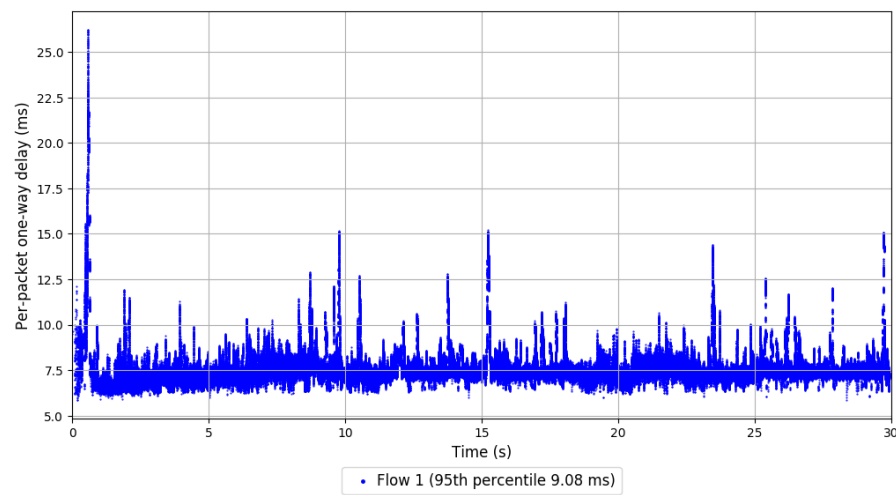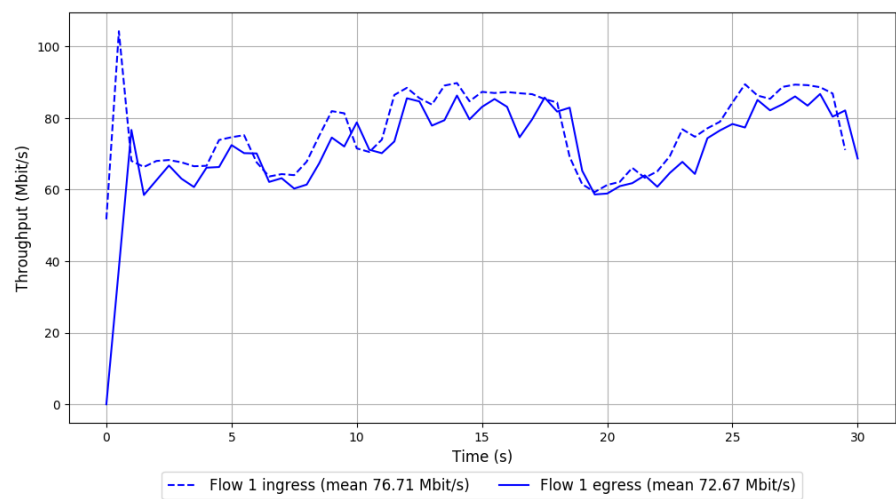
Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2018-06-18 10:03:39
End at: 2018-06-18 10:04:09
Local clock offset: 3.517 ms
Remote clock offset: -9.451 ms


# Below is generated by plot.py at 2018-06-18 11:59:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.21 Mbit/s
95th percentile per-packet one-way delay: 10.791 ms
Loss rate: 5.02%
-- Flow 1:
Average throughput: 13.21 Mbit/s
95th percentile per-packet one-way delay: 10.791 ms
Loss rate: 5.02%
```

Run 5: Report of PCC-Expr — Data Link

```
Run 6: Statistics of PCC-Expr

Start at: 2018-06-18 10:21:53
End at: 2018-06-18 10:22:23
Local clock offset: -1.615 ms
Remote clock offset: -9.837 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.31 Mbit/s
95th percentile per-packet one-way delay: 13.352 ms
Loss rate: 7.45%
-- Flow 1:
Average throughput: 74.31 Mbit/s
95th percentile per-packet one-way delay: 13.352 ms
Loss rate: 7.45%
```
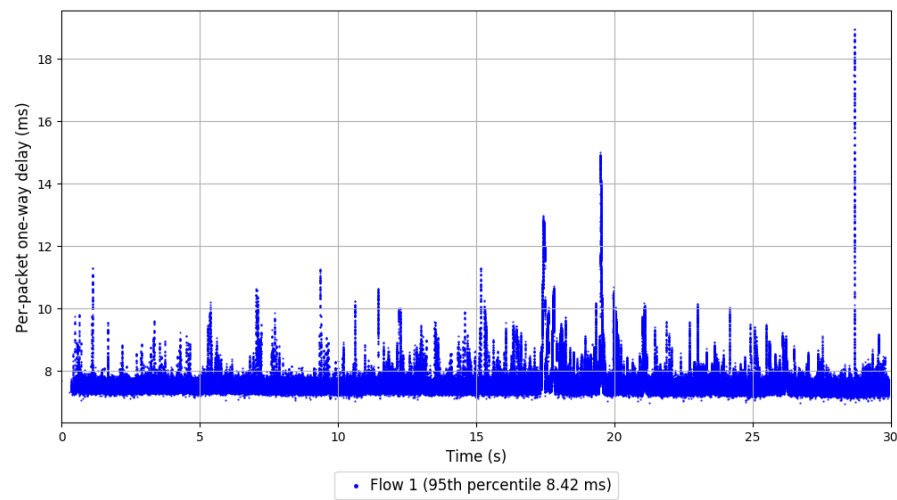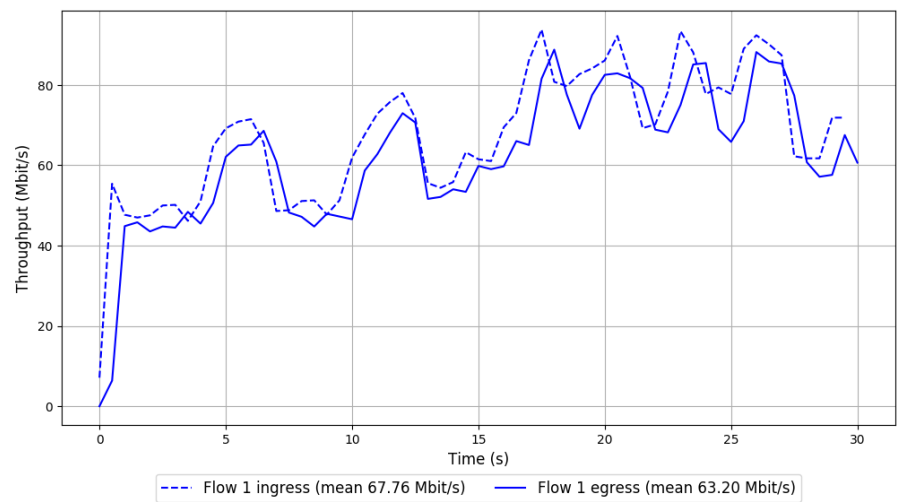
Run 6: Report of PCC-Expr — Data Link

```
Run 7: Statistics of PCC-Expr

Start at: 2018-06-18 10:40:20
End at: 2018-06-18 10:40:50
Local clock offset: 1.553 ms
Remote clock offset: -5.739 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.67 Mbit/s
95th percentile per-packet one-way delay: 9.081 ms
Loss rate: 5.27%
-- Flow 1:
Average throughput: 72.67 Mbit/s
95th percentile per-packet one-way delay: 9.081 ms
Loss rate: 5.27%
```
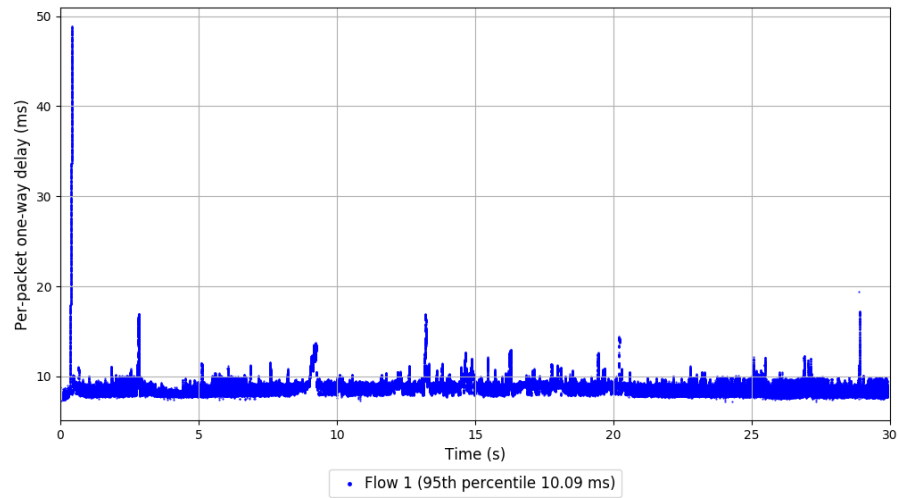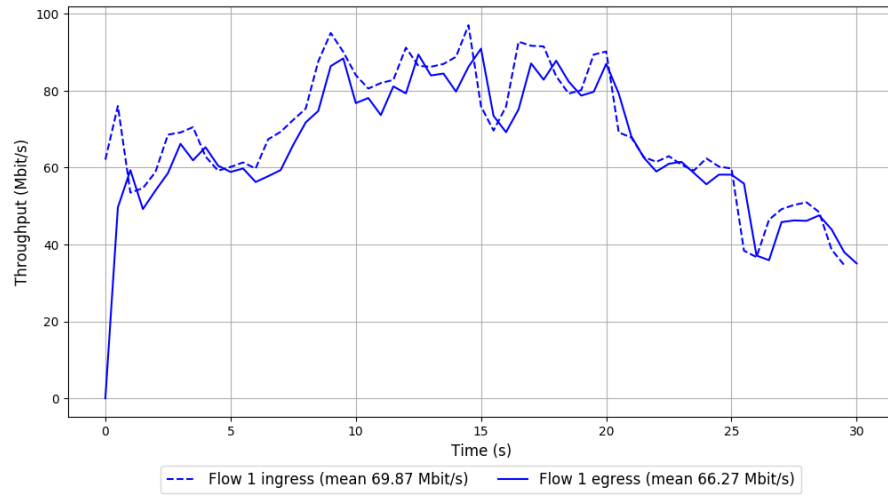
Run 7: Report of PCC-Expr — Data Link

```
Run 8: Statistics of PCC-Expr

Start at: 2018-06-18 10:58:44
End at: 2018-06-18 10:59:14
Local clock offset: 2.071 ms
Remote clock offset: -2.763 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.20 Mbit/s
95th percentile per-packet one-way delay: 8.423 ms
Loss rate: 6.74%
-- Flow 1:
Average throughput: 63.20 Mbit/s
95th percentile per-packet one-way delay: 8.423 ms
Loss rate: 6.74%
```
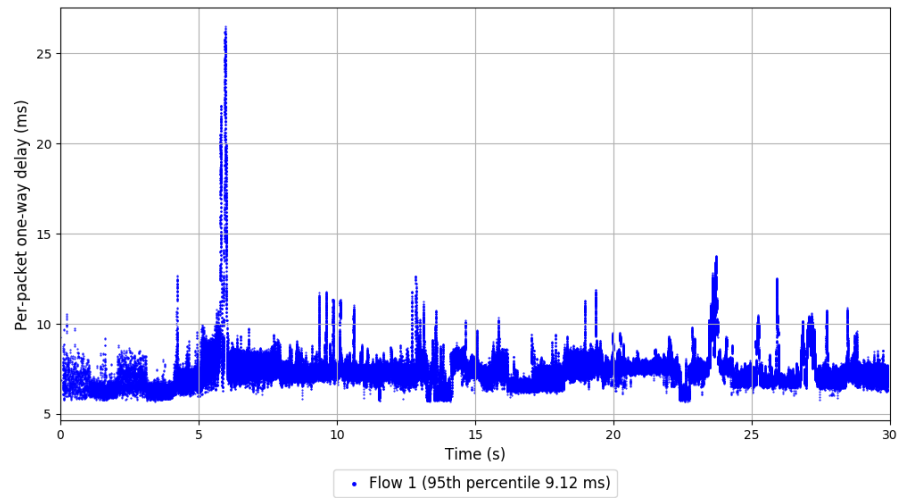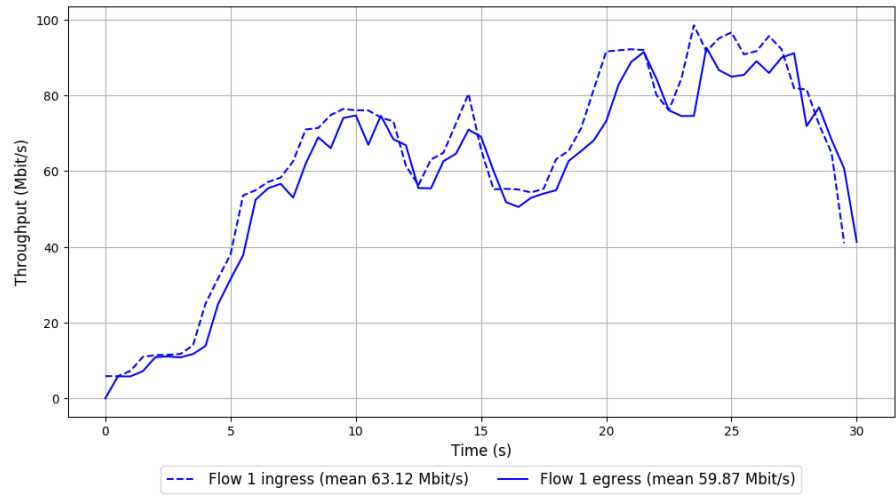
Run 8: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 67.76 Mbit/s)   Flow 1 egress (mean 63.20 Mbit/s)

Flow 1 (95th percentile 8.42 ms)

```
Run 9: Statistics of PCC-Expr

Start at: 2018-06-18 11:16:57
End at: 2018-06-18 11:17:27
Local clock offset: 2.065 ms
Remote clock offset: 0.625 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.27 Mbit/s
95th percentile per-packet one-way delay: 10.087 ms
Loss rate: 5.16%
-- Flow 1:
Average throughput: 66.27 Mbit/s
95th percentile per-packet one-way delay: 10.087 ms
Loss rate: 5.16%
```
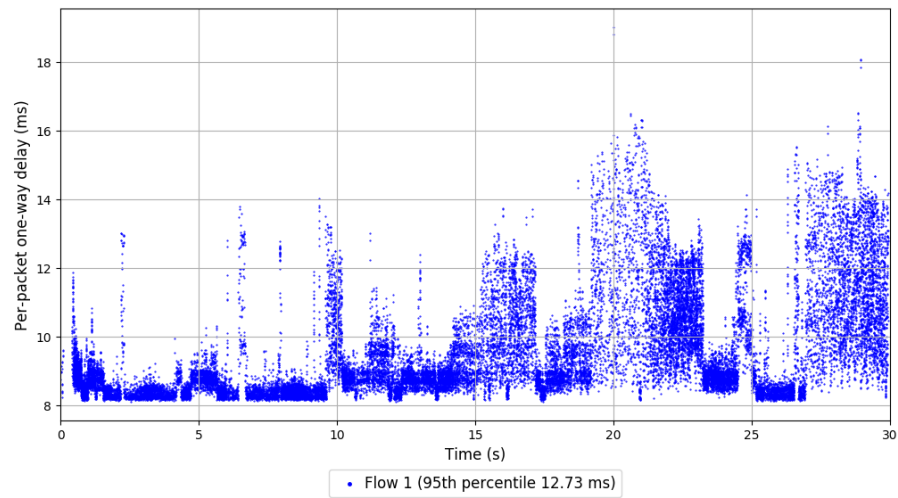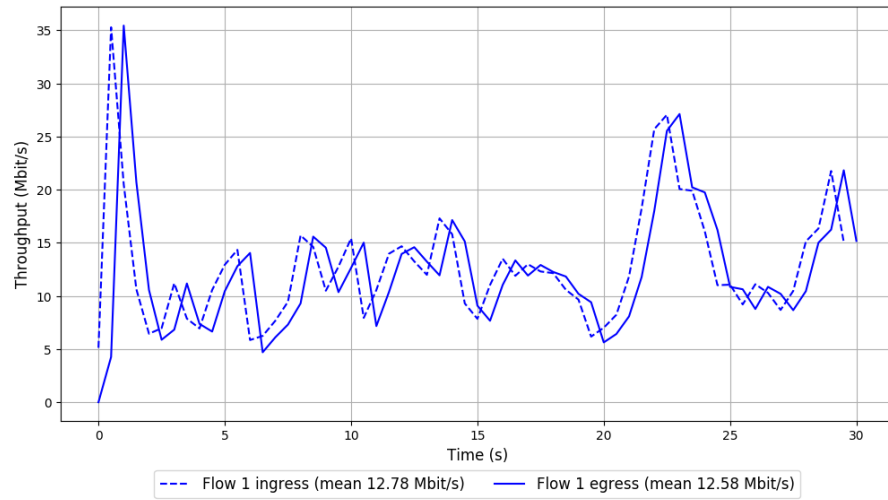
Run 9: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 69.87 Mbit/s) --- Flow 1 egress (mean 66.27 Mbit/s)

Flow 1 (95th percentile 10.09 ms)

```
Run 10: Statistics of PCC-Expr

Start at: 2018-06-18 11:35:20
End at: 2018-06-18 11:35:50
Local clock offset: 3.426 ms
Remote clock offset: 0.636 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.87 Mbit/s
95th percentile per-packet one-way delay: 9.115 ms
Loss rate: 5.17%
-- Flow 1:
Average throughput: 59.87 Mbit/s
95th percentile per-packet one-way delay: 9.115 ms
Loss rate: 5.17%
```
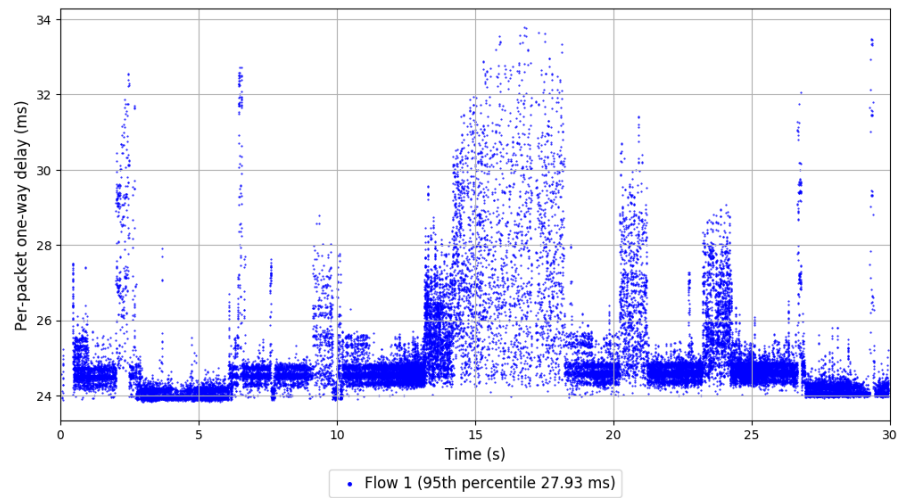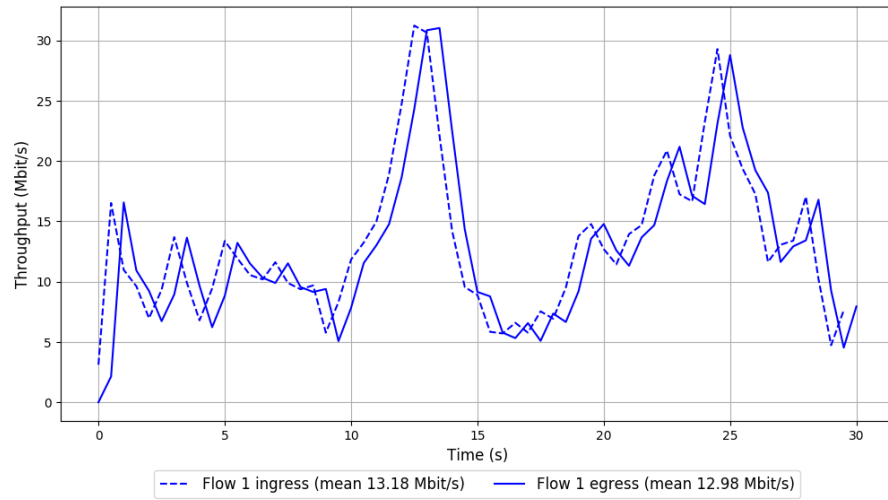
Run 10: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 63.12 Mbit/s) --- Flow 1 egress (mean 59.87 Mbit/s)

Flow 1 (95th percentile 9.12 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-18 09:02:01
End at: 2018-06-18 09:02:31
Local clock offset: -2.036 ms
Remote clock offset: -4.76 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.58 Mbit/s
95th percentile per-packet one-way delay: 12.730 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 12.58 Mbit/s
95th percentile per-packet one-way delay: 12.730 ms
Loss rate: 1.54%
```
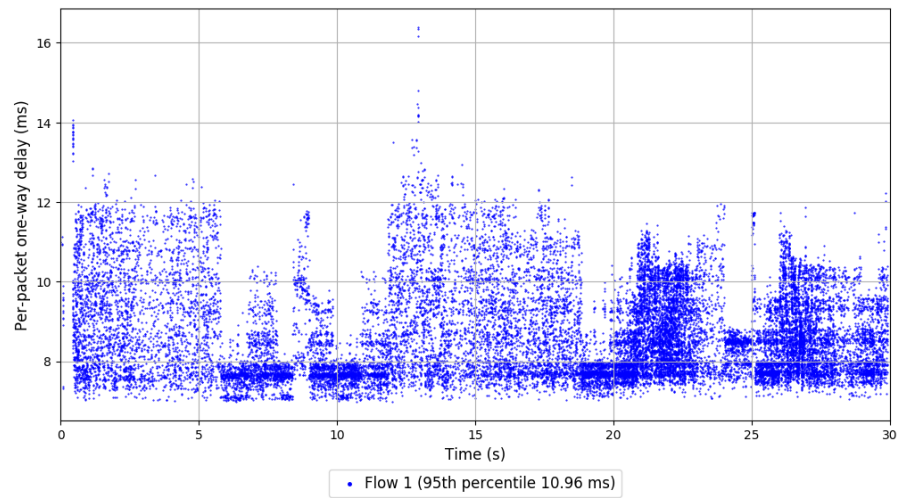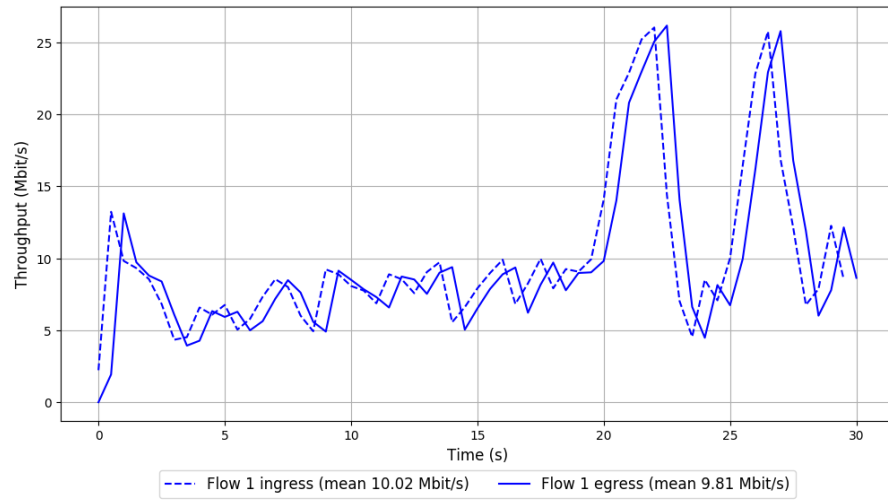
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-18 09:20:38
End at: 2018-06-18 09:21:08
Local clock offset: 1.203 ms
Remote clock offset: 11.256 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 27.927 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 27.927 ms
Loss rate: 1.58%
```
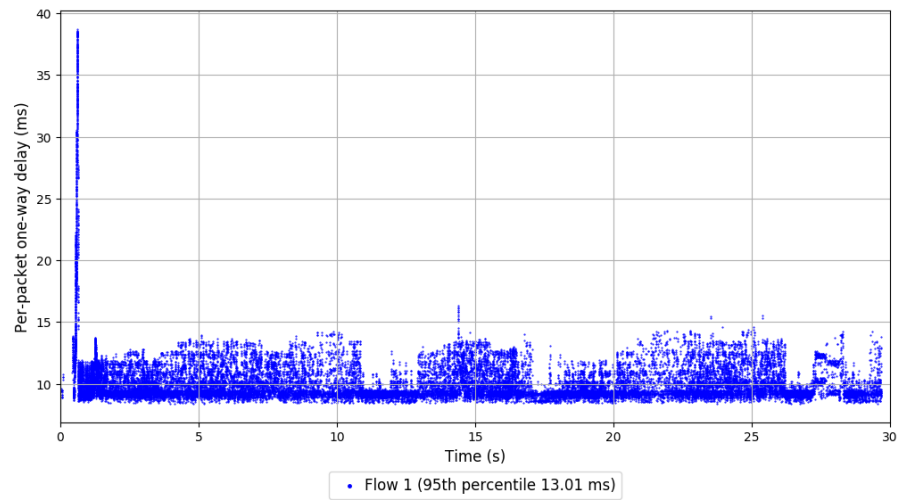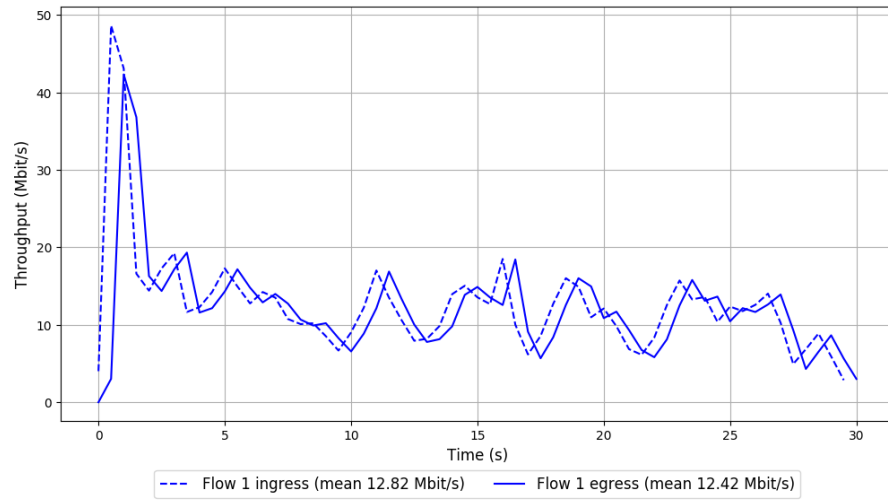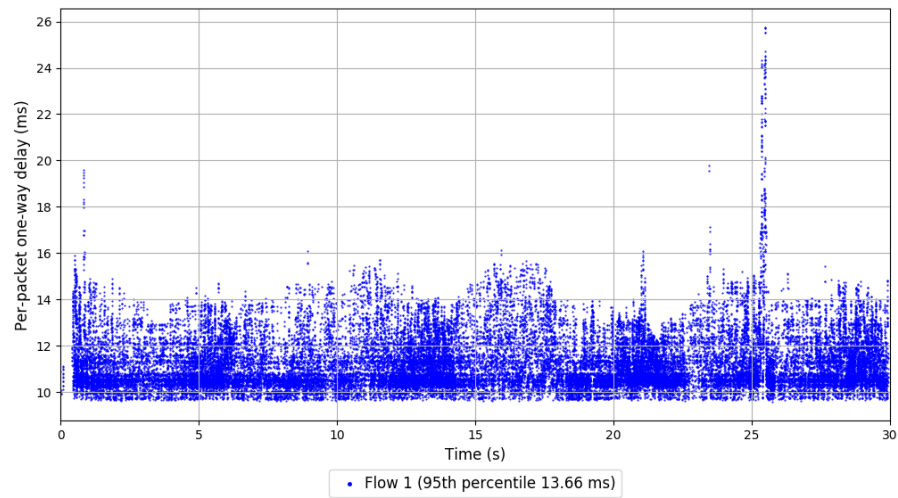
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-18 09:39:10
End at: 2018-06-18 09:39:40
Local clock offset: 2.385 ms
Remote clock offset: -7.94 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.81 Mbit/s
95th percentile per-packet one-way delay: 10.958 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 9.81 Mbit/s
95th percentile per-packet one-way delay: 10.958 ms
Loss rate: 2.11%
```

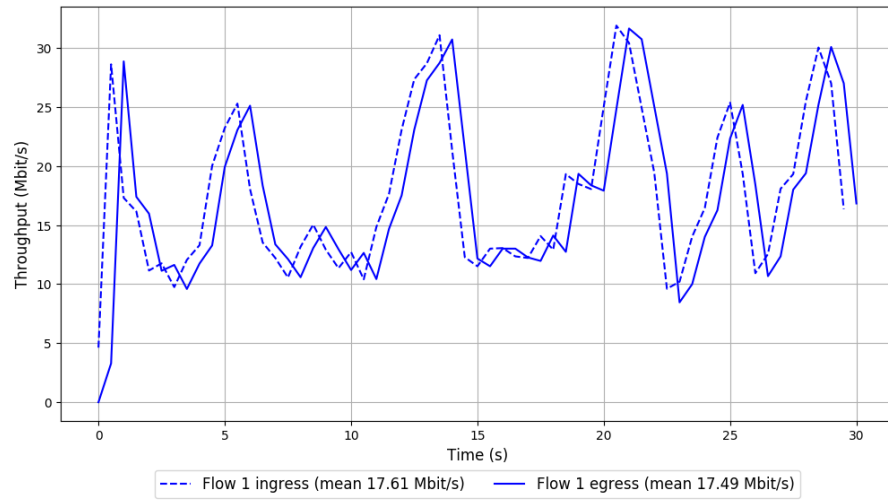Run 3: Report of QUIC Cubic — Data Link

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```
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-18 09:57:52
End at: 2018-06-18 09:58:22
Local clock offset: 0.788 ms
Remote clock offset: -8.936 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.42 Mbit/s
95th percentile per-packet one-way delay: 13.006 ms
Loss rate: 3.13%
-- Flow 1:
Average throughput: 12.42 Mbit/s
95th percentile per-packet one-way delay: 13.006 ms
Loss rate: 3.13%
```
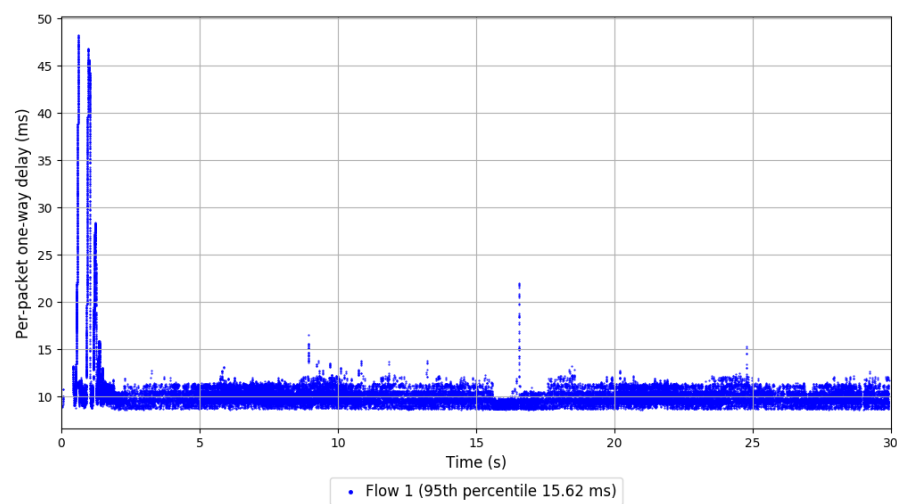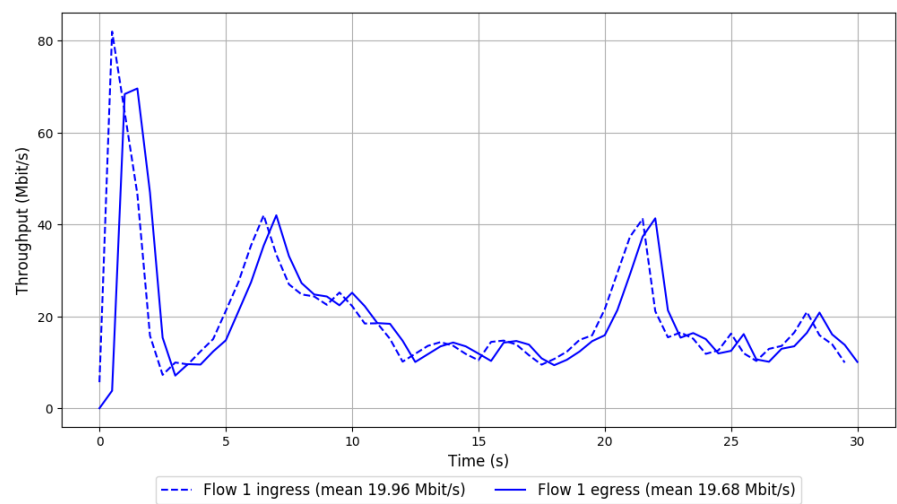
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-18 10:16:13
End at: 2018-06-18 10:16:43
Local clock offset: -0.593 ms
Remote clock offset: -8.772 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.49 Mbit/s
95th percentile per-packet one-way delay: 13.656 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 17.49 Mbit/s
95th percentile per-packet one-way delay: 13.656 ms
Loss rate: 0.69%
```
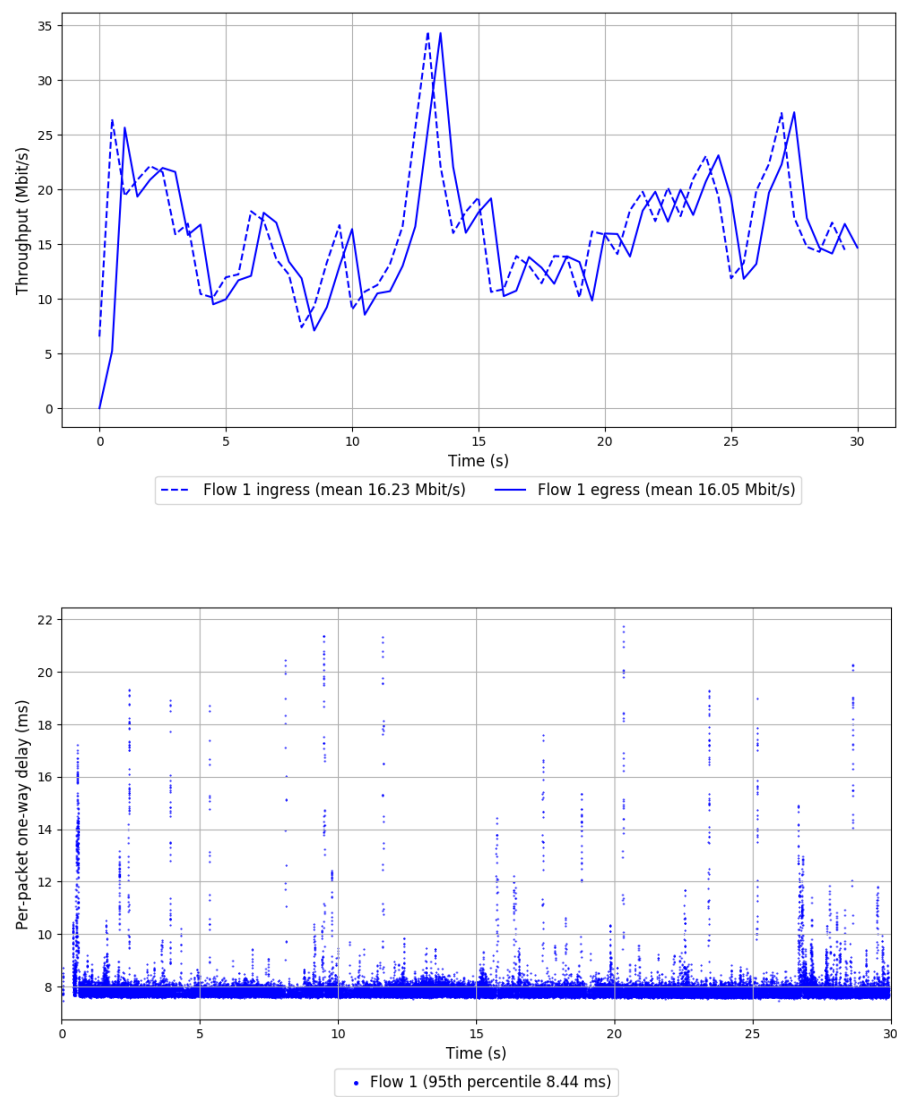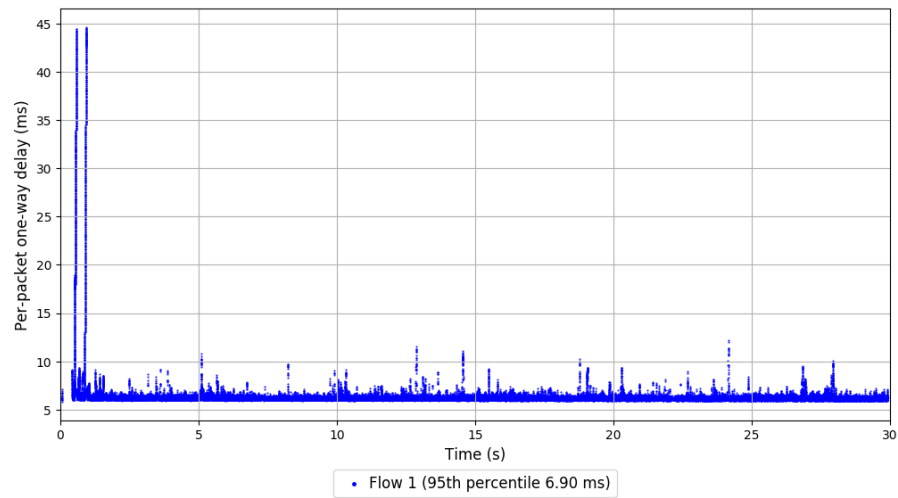
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 17.61 Mbit/s)   Flow 1 egress (mean 17.49 Mbit/s)
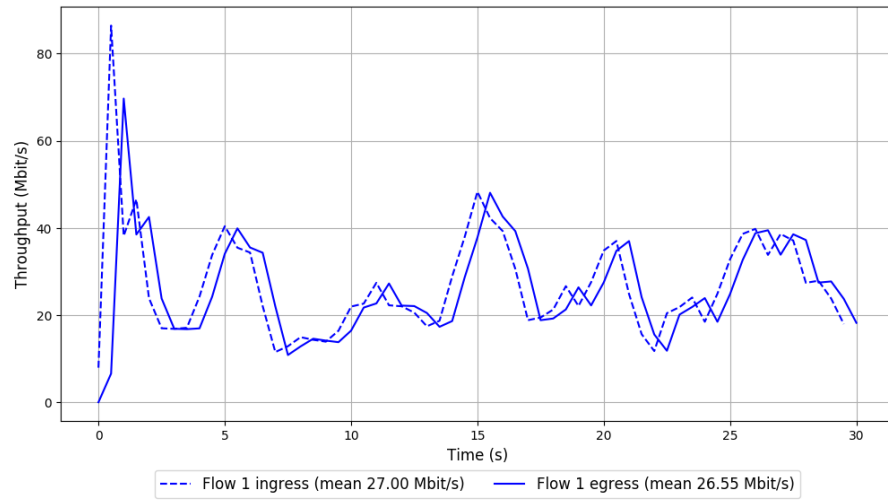

Flow 1 (95th percentile 13.66 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-18 10:34:26
End at: 2018-06-18 10:34:56
Local clock offset: 0.044 ms
Remote clock offset: -4.717 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.68 Mbit/s
95th percentile per-packet one-way delay: 15.620 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 19.68 Mbit/s
95th percentile per-packet one-way delay: 15.620 ms
Loss rate: 1.36%
```

Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 19.96 Mbit/s)   Flow 1 egress (mean 19.68 Mbit/s)
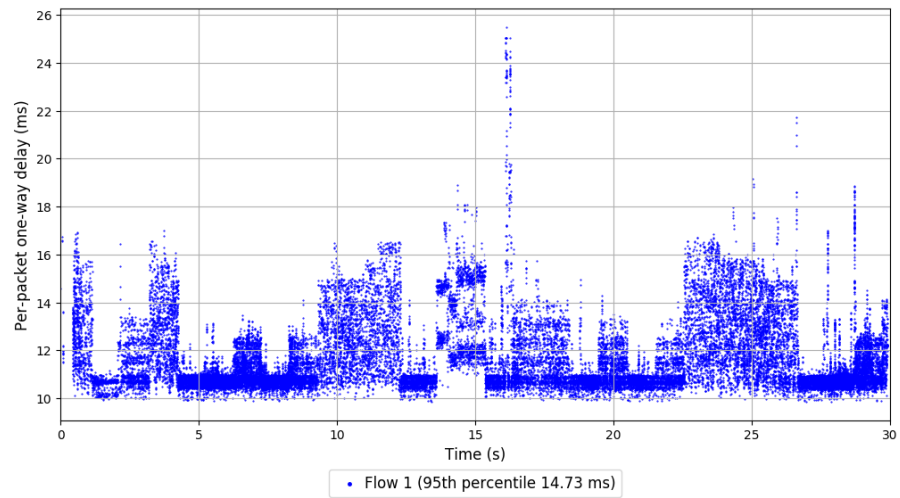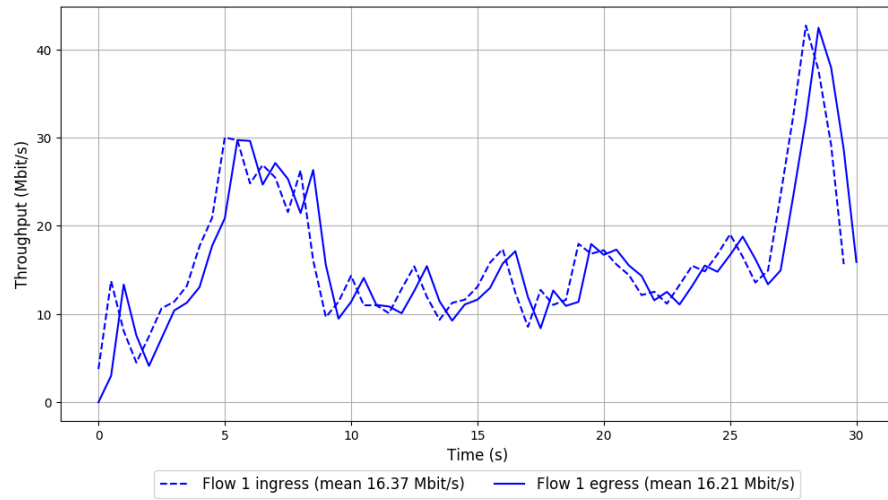

Flow 1 (95th percentile 15.62 ms)

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```
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-18 10:52:57
End at: 2018-06-18 10:53:27
Local clock offset: 2.219 ms
Remote clock offset: -2.671 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.05 Mbit/s
95th percentile per-packet one-way delay: 8.444 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 16.05 Mbit/s
95th percentile per-packet one-way delay: 8.444 ms
Loss rate: 1.10%
```
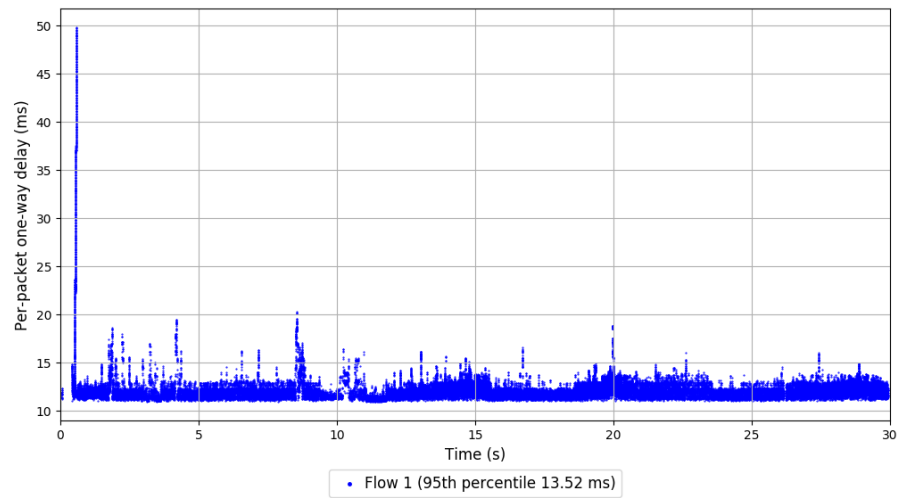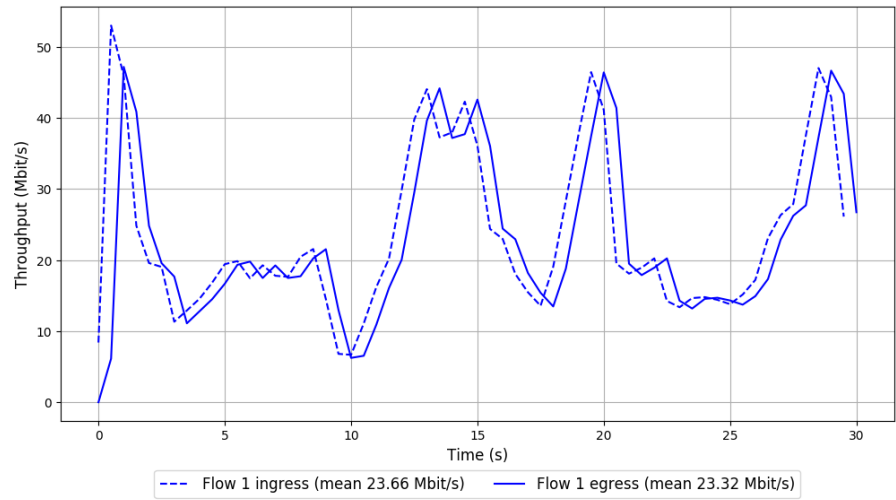
Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-18 11:11:15
End at: 2018-06-18 11:11:45
Local clock offset: 3.493 ms
Remote clock offset: -0.022 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.55 Mbit/s
95th percentile per-packet one-way delay: 6.900 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 26.55 Mbit/s
95th percentile per-packet one-way delay: 6.900 ms
Loss rate: 1.65%
```
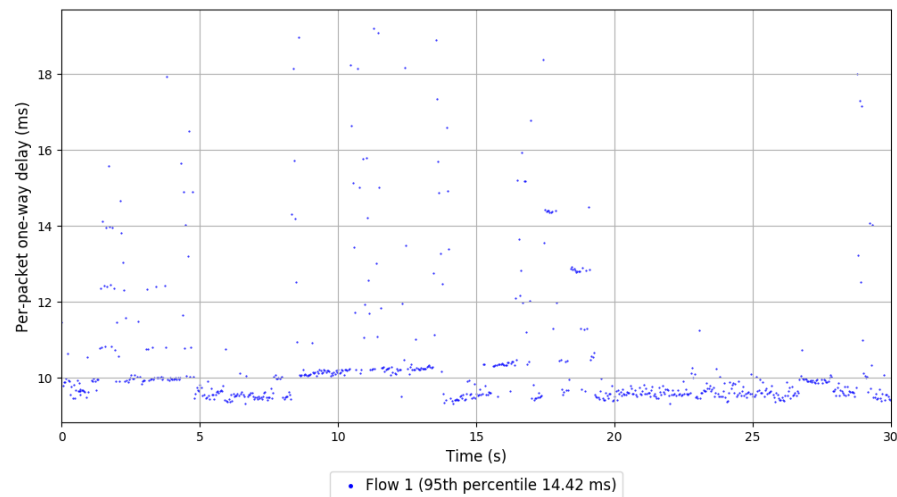
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-18 11:29:27
End at: 2018-06-18 11:29:57
Local clock offset: -4.131 ms
Remote clock offset: -1.994 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.21 Mbit/s
95th percentile per-packet one-way delay: 14.727 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 16.21 Mbit/s
95th percentile per-packet one-way delay: 14.727 ms
Loss rate: 0.97%
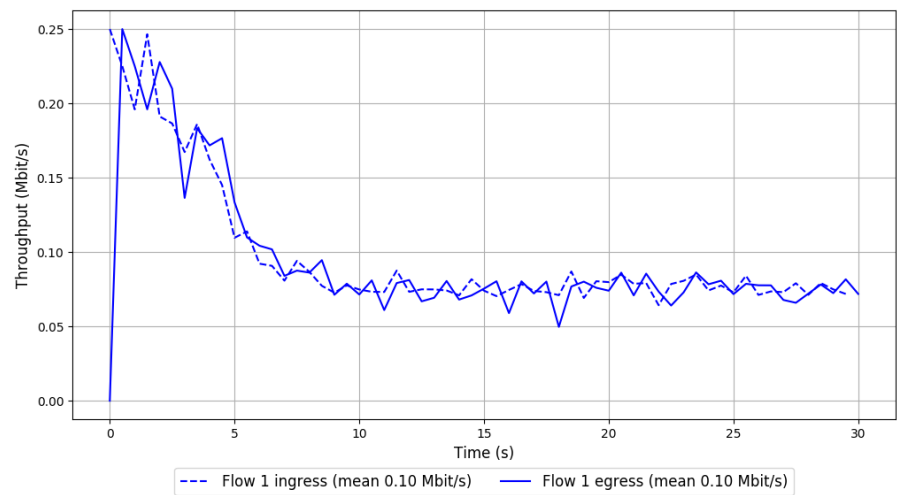```

Run 9: Report of QUIC Cubic — Data Link



Flow 1 ingress (mean 16.37 Mbit/s)    Flow 1 egress (mean 16.21 Mbit/s)



Flow 1 (95th percentile 14.73 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-18 11:47:41
End at: 2018-06-18 11:48:11
Local clock offset: -4.501 ms
Remote clock offset: -2.893 ms

Below is generated by plot.py at 2018-06-18 12:01:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 23.32 Mbit/s
95th percentile per-packet one-way delay: 13.515 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 23.32 Mbit/s
95th percentile per-packet one-way delay: 13.515 ms
Loss rate: 1.43%
```
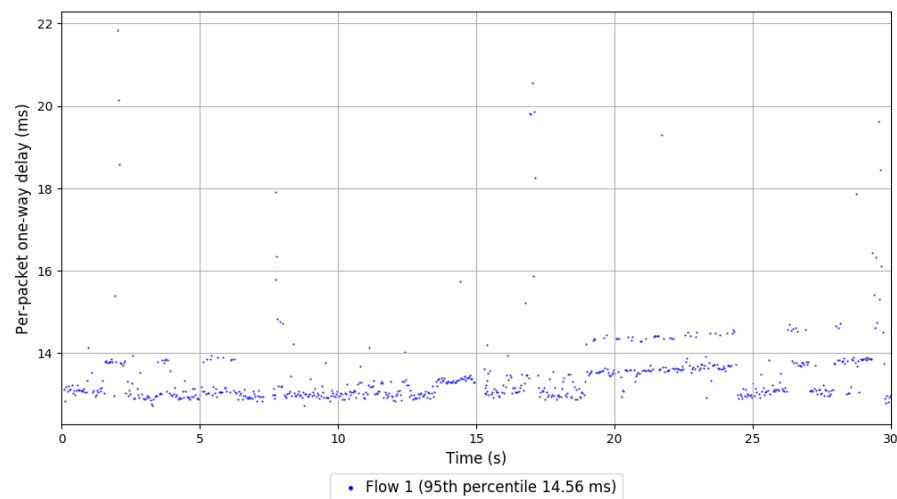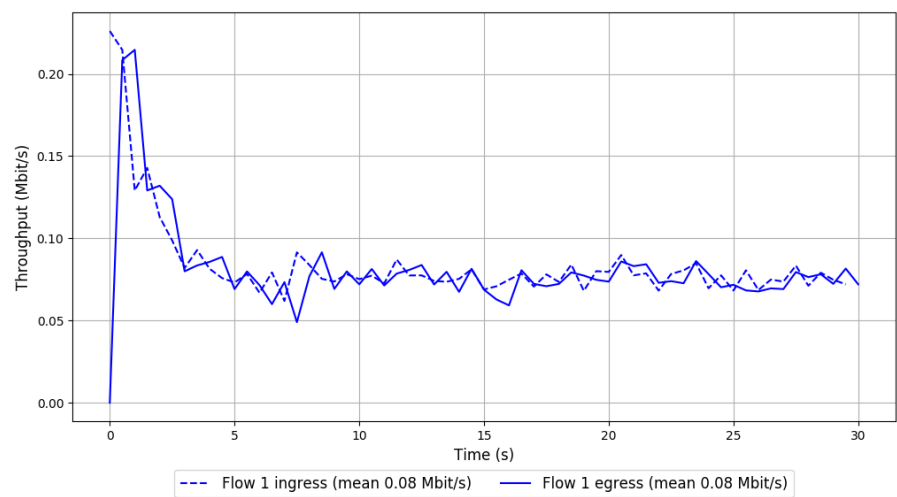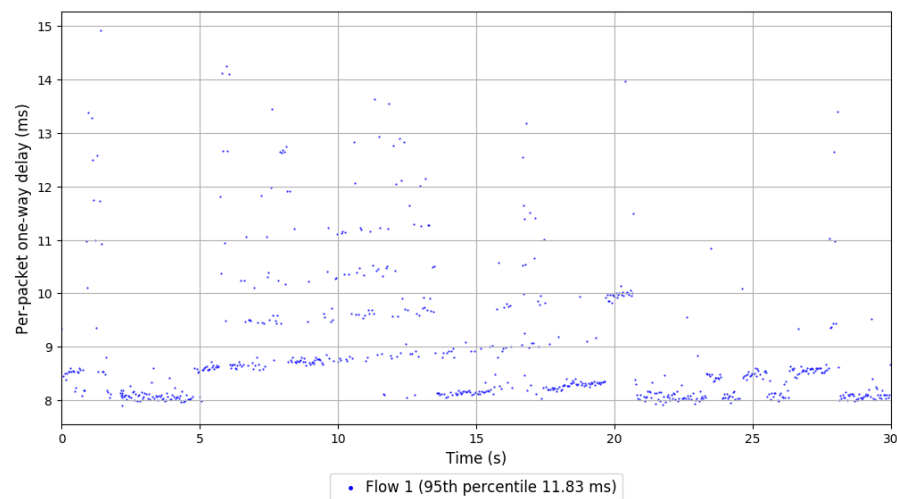
## Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-06-18 08:47:14
End at: 2018-06-18 08:47:44
Local clock offset: -1.755 ms
Remote clock offset: -2.742 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 14.420 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 14.420 ms
Loss rate: 2.03%
```

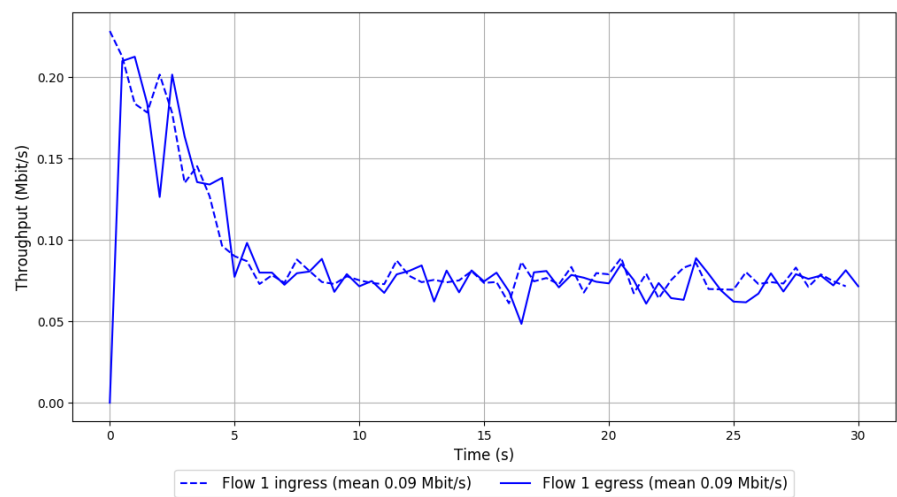## Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-06-18 09:05:42
End at: 2018-06-18 09:06:12
Local clock offset: -1.956 ms
Remote clock offset: 0.541 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 14.559 ms
Loss rate: 2.53%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 14.559 ms
Loss rate: 2.53%
```
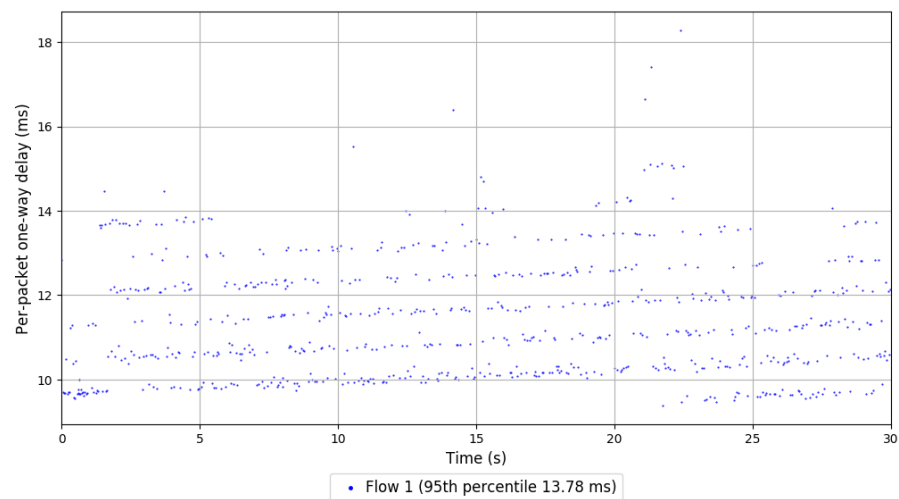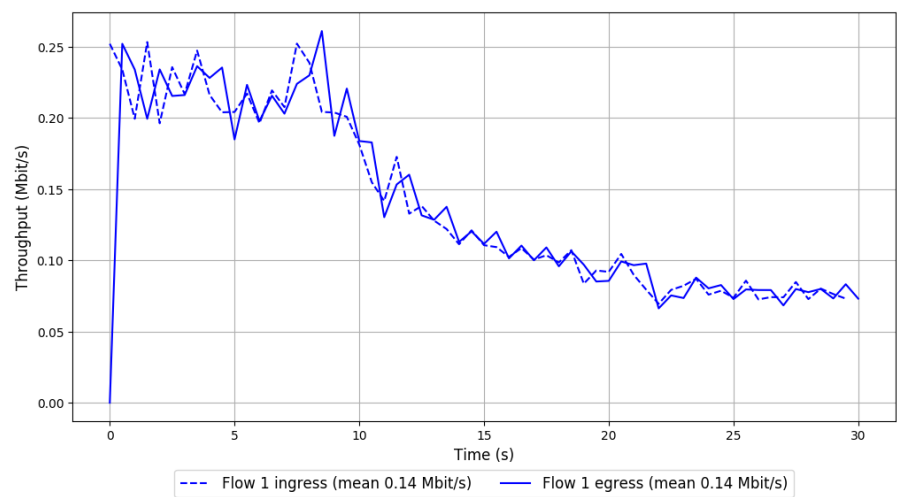
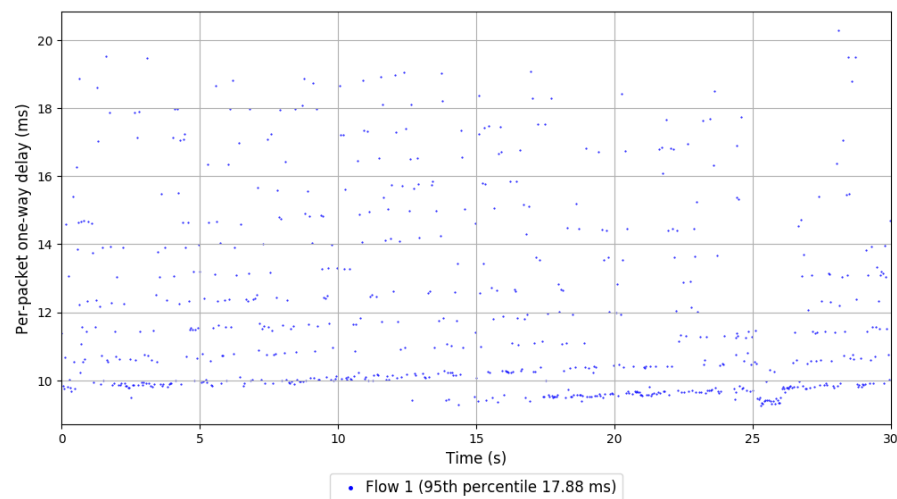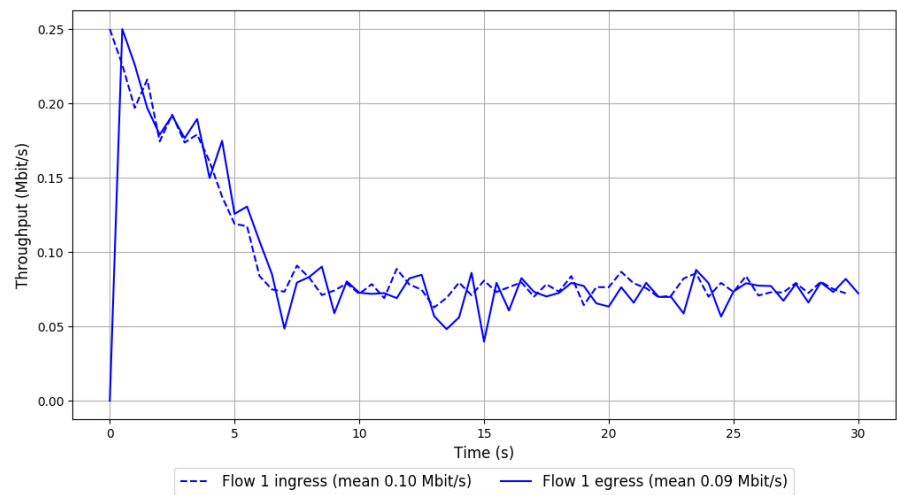## Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-06-18 09:24:20
End at: 2018-06-18 09:24:50
Local clock offset: 0.647 ms
Remote clock offset: -6.057 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 11.834 ms
Loss rate: 3.40%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 11.834 ms
Loss rate: 3.40%
```

Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-06-18 09:42:53
End at: 2018-06-18 09:43:23
Local clock offset: -0.568 ms
Remote clock offset: -9.23 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 13.777 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 13.777 ms
Loss rate: 0.69%
```
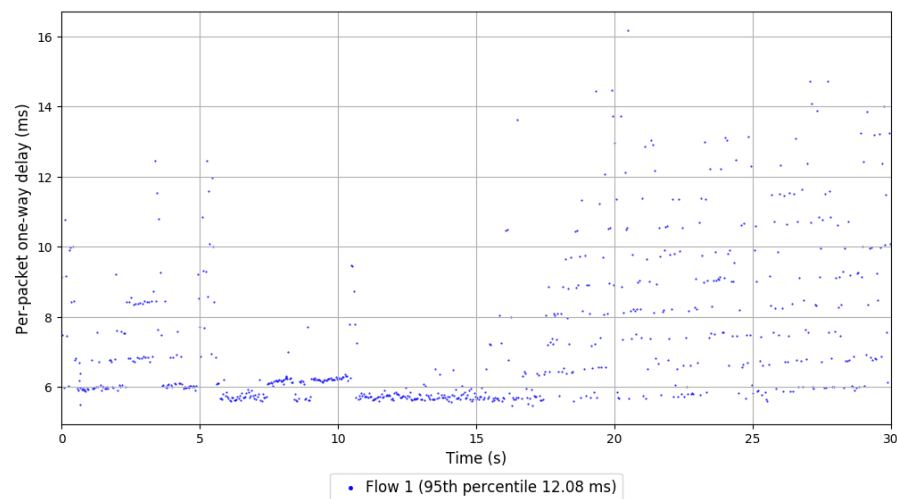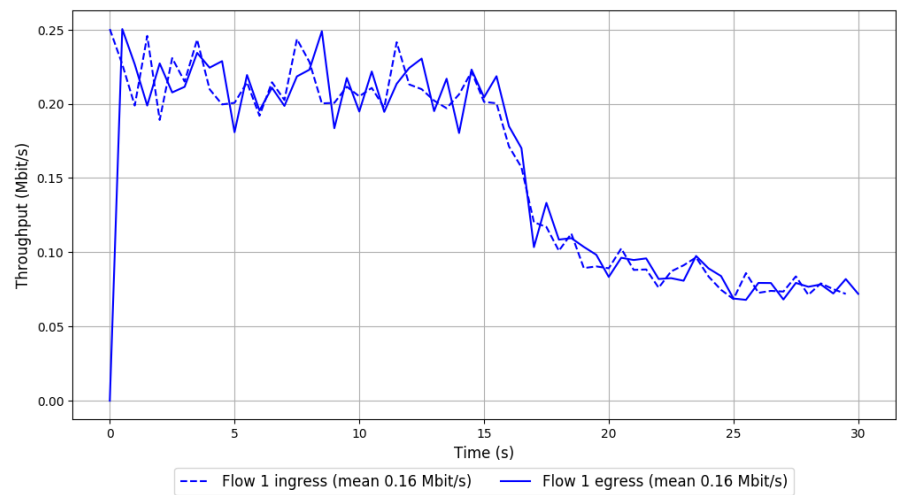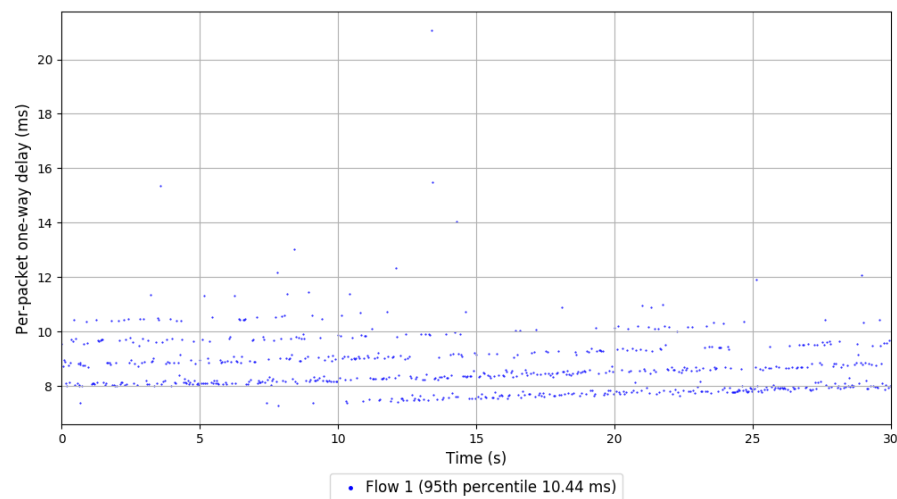
Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-06-18 10:01:30
End at: 2018-06-18 10:02:00
Local clock offset: 1.235 ms
Remote clock offset: -7.415 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 17.883 ms
Loss rate: 4.19%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 17.883 ms
Loss rate: 4.19%
```

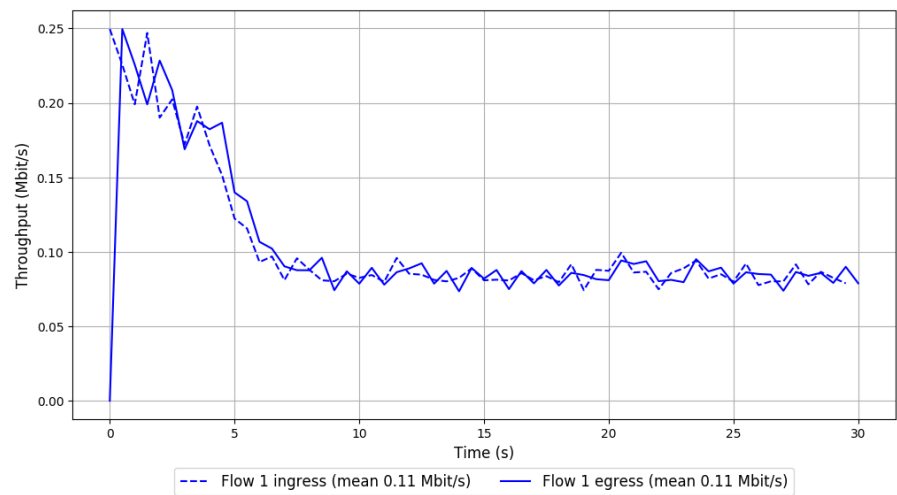## Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2018-06-18 10:19:44
End at: 2018-06-18 10:20:14
Local clock offset: 2.993 ms
Remote clock offset: -9.317 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 12.080 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 12.080 ms
Loss rate: 0.75%
```
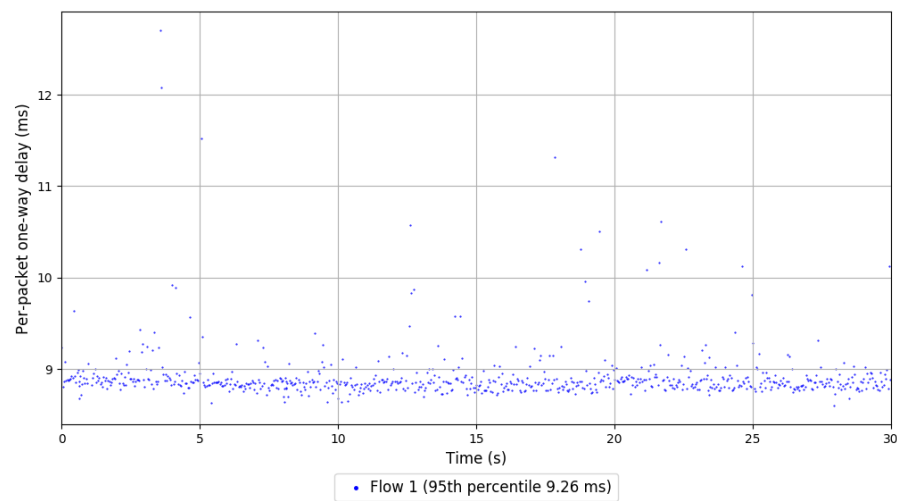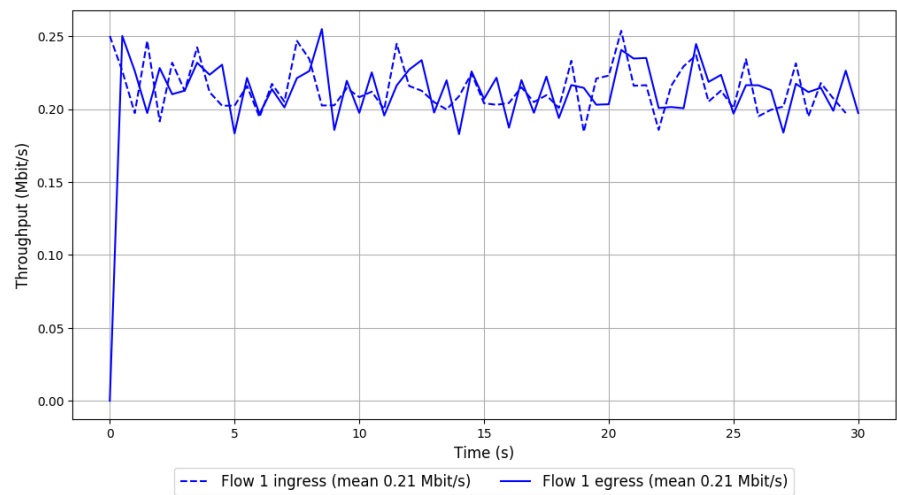
Run 6: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 12.08 ms)

```
Run 7: Statistics of SCReAM

Start at: 2018-06-18 10:38:04
End at: 2018-06-18 10:38:34
Local clock offset: 0.779 ms
Remote clock offset: -5.158 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 10.443 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 10.443 ms
Loss rate: 0.28%
```
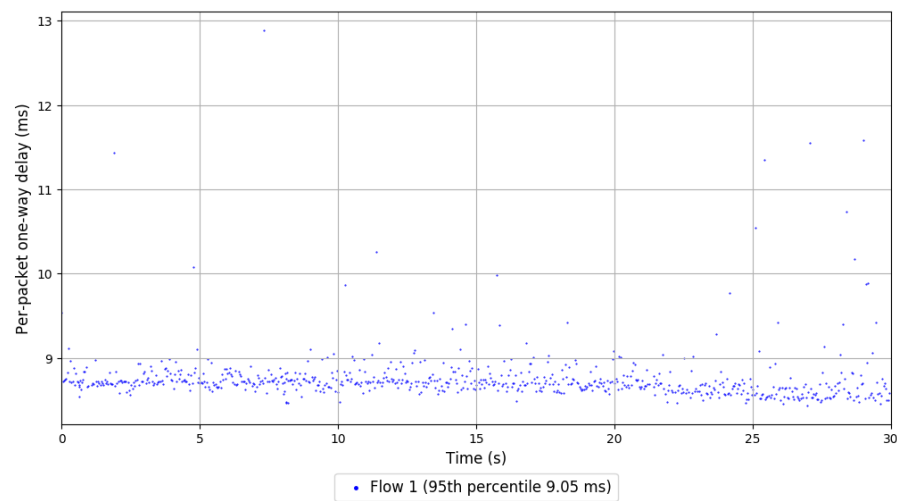
Run 7: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.11 Mbit/s)   Flow 1 egress (mean 0.11 Mbit/s)

Flow 1 (95th percentile 10.44 ms)

```
Run 8: Statistics of SCReAM

Start at: 2018-06-18 10:56:29
End at: 2018-06-18 10:56:59
Local clock offset: 1.671 ms
Remote clock offset: -1.645 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 9.258 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 9.258 ms
Loss rate: 0.00%
```
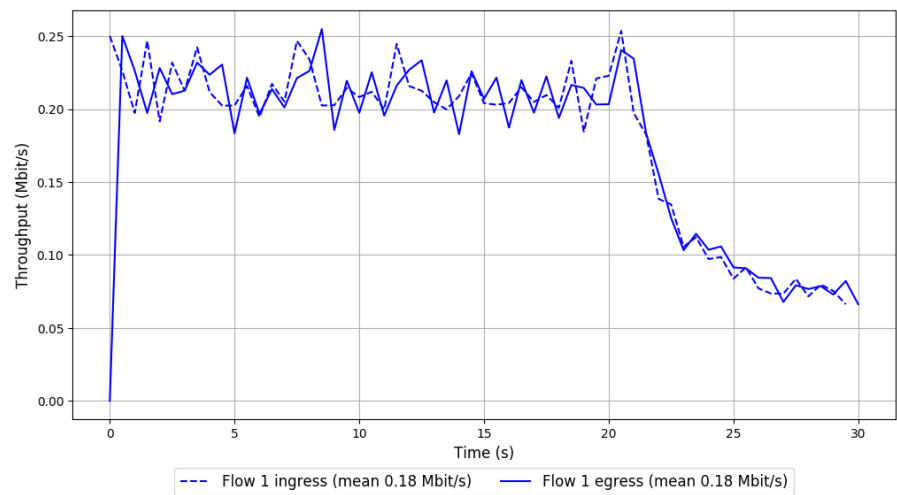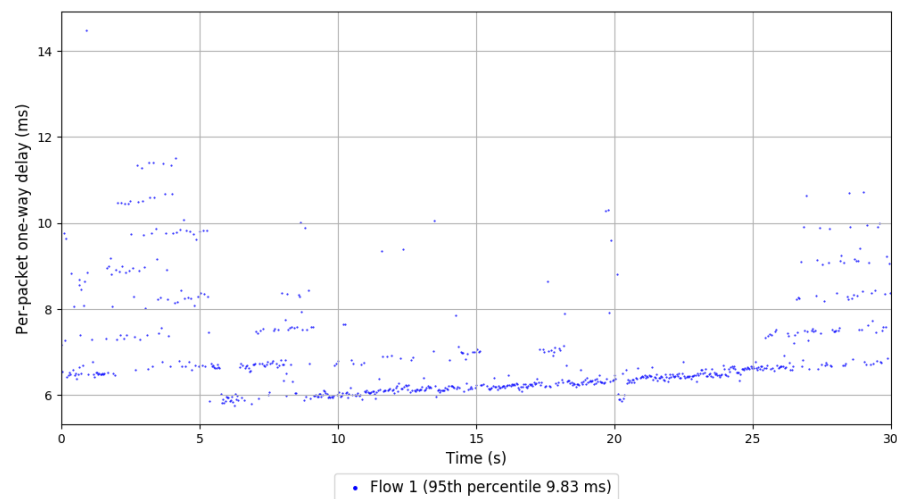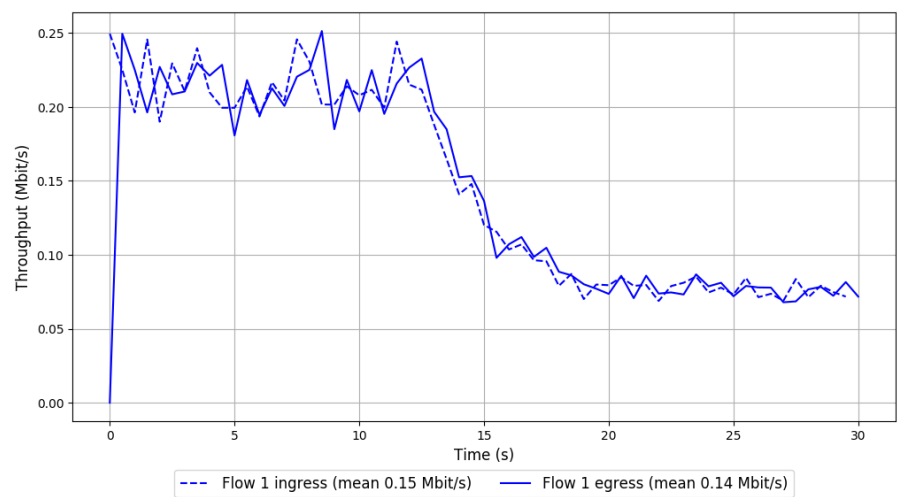
Run 8: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 9.26 ms)

```
Run 9: Statistics of SCReAM

Start at: 2018-06-18 11:14:44
End at: 2018-06-18 11:15:14
Local clock offset: 1.354 ms
Remote clock offset: 1.116 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 9.053 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 9.053 ms
Loss rate: 0.88%
```
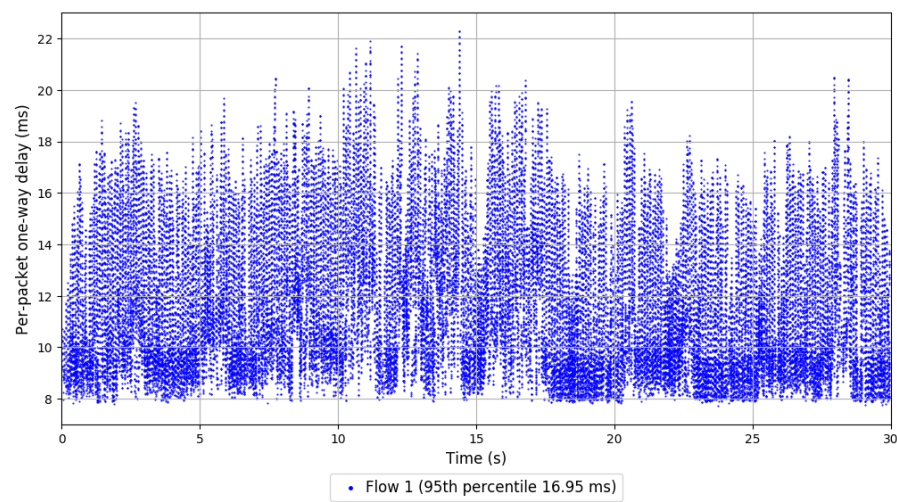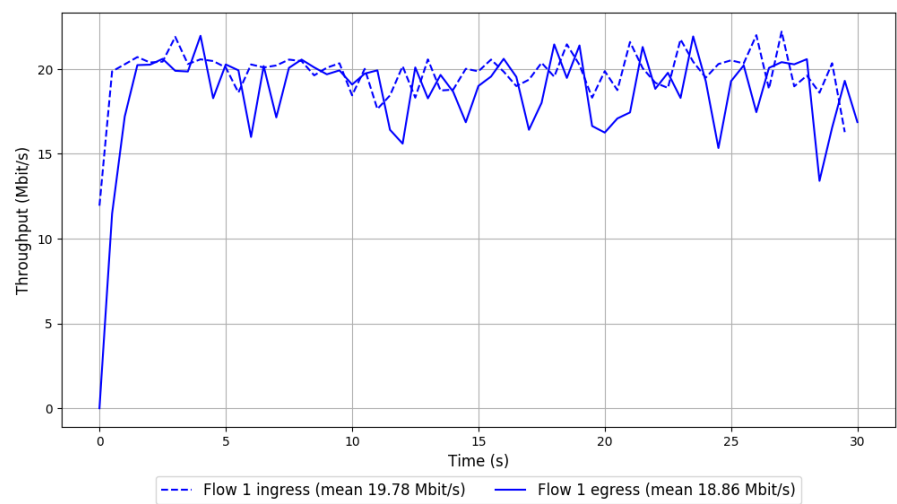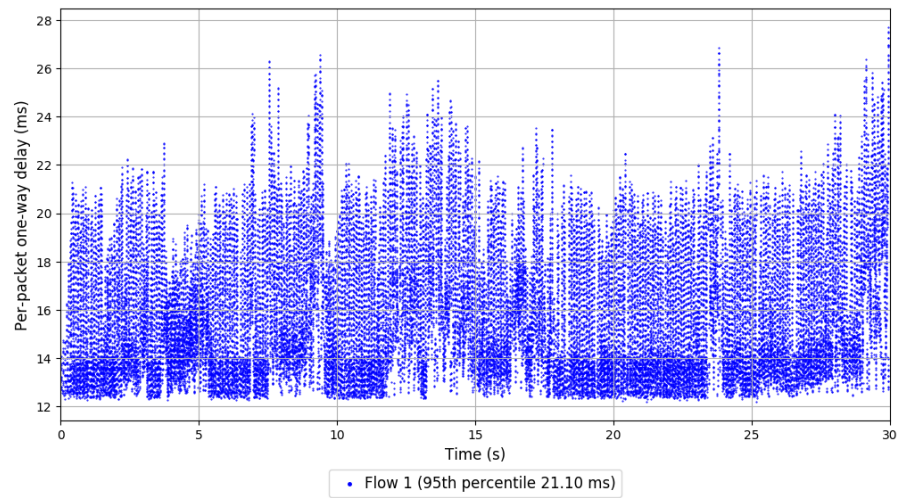
Run 9: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.18 Mbit/s)　　Flow 1 egress (mean 0.18 Mbit/s)

Flow 1 (95th percentile 9.05 ms)

```
Run 10: Statistics of SCReAM

Start at: 2018-06-18 11:33:08
End at: 2018-06-18 11:33:38
Local clock offset: 3.315 ms
Remote clock offset: 1.212 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 9.833 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 9.833 ms
Loss rate: 0.74%
```
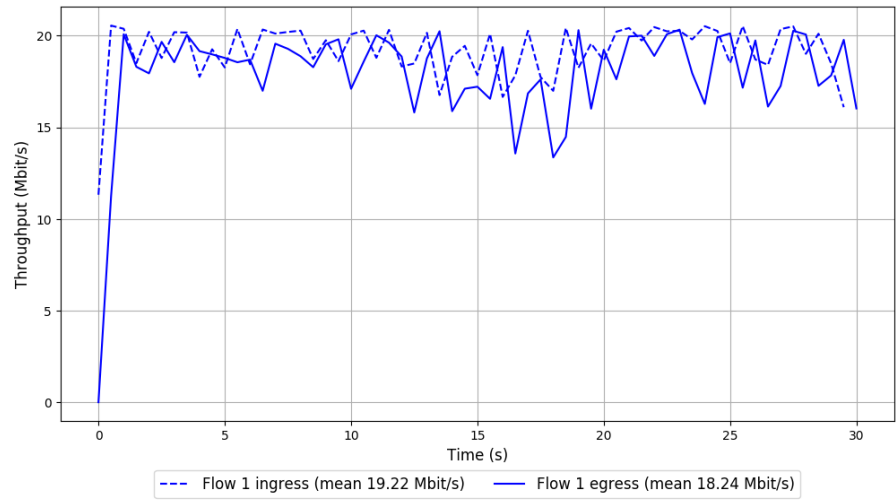
Run 10: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.15 Mbit/s) ----   Flow 1 egress (mean 0.14 Mbit/s) ——
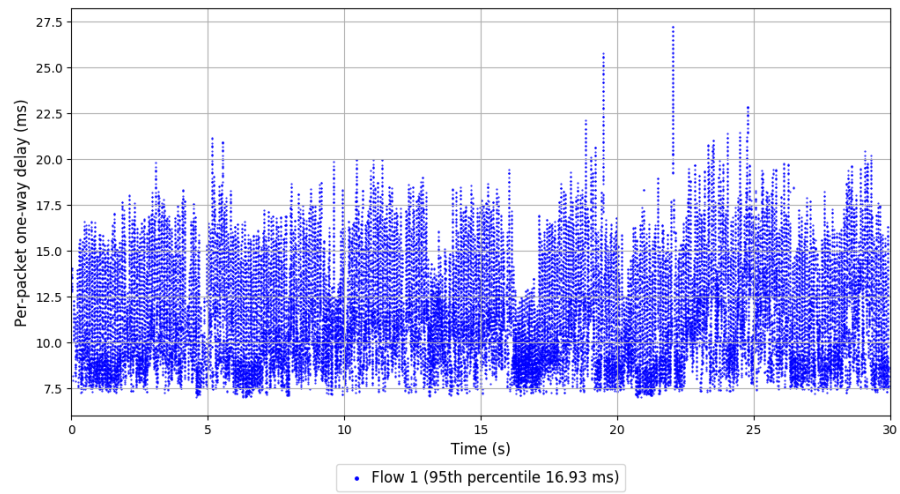

• Flow 1 (95th percentile 9.83 ms)

```
Run 1: Statistics of Sprout

Start at: 2018-06-18 08:52:56
End at: 2018-06-18 08:53:26
Local clock offset: -1.999 ms
Remote clock offset: -4.201 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.86 Mbit/s
95th percentile per-packet one-way delay: 16.955 ms
Loss rate: 4.64%
-- Flow 1:
Average throughput: 18.86 Mbit/s
95th percentile per-packet one-way delay: 16.955 ms
Loss rate: 4.64%
```

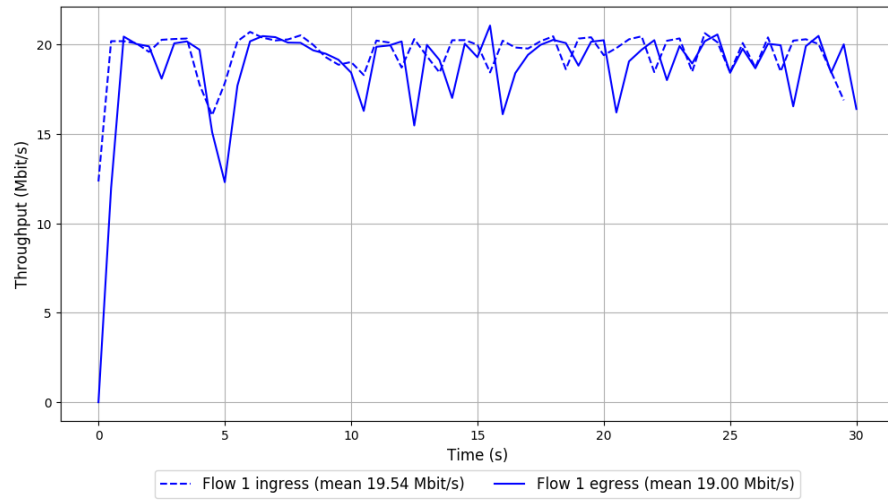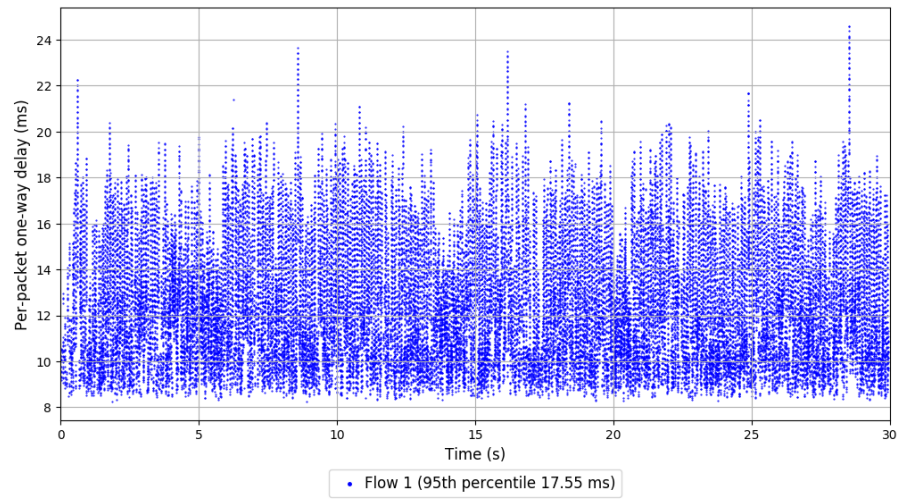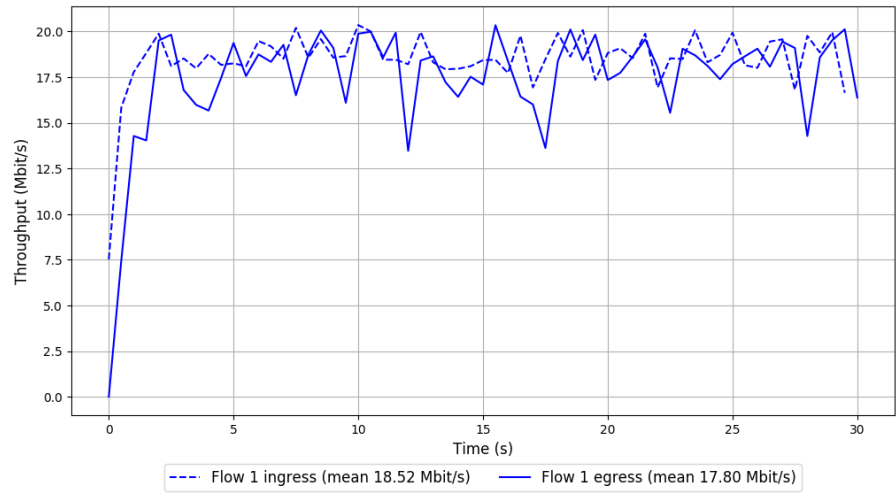Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-06-18 09:11:27
End at: 2018-06-18 09:11:57
Local clock offset: -3.928 ms
Remote clock offset: -3.803 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.24 Mbit/s
95th percentile per-packet one-way delay: 21.100 ms
Loss rate: 5.13%
-- Flow 1:
Average throughput: 18.24 Mbit/s
95th percentile per-packet one-way delay: 21.100 ms
Loss rate: 5.13%
```

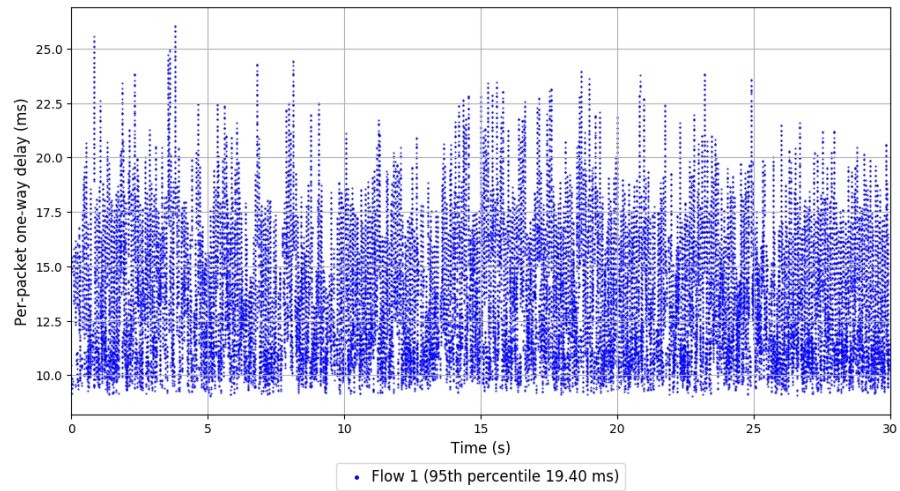## Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-06-18 09:30:03
End at: 2018-06-18 09:30:33
Local clock offset: -0.216 ms
Remote clock offset: -7.701 ms


# Below is generated by plot.py at 2018-06-18 12:01:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.00 Mbit/s
95th percentile per-packet one-way delay: 16.930 ms
Loss rate: 2.75%
-- Flow 1:
Average throughput: 19.00 Mbit/s
95th percentile per-packet one-way delay: 16.930 ms
Loss rate: 2.75%
```

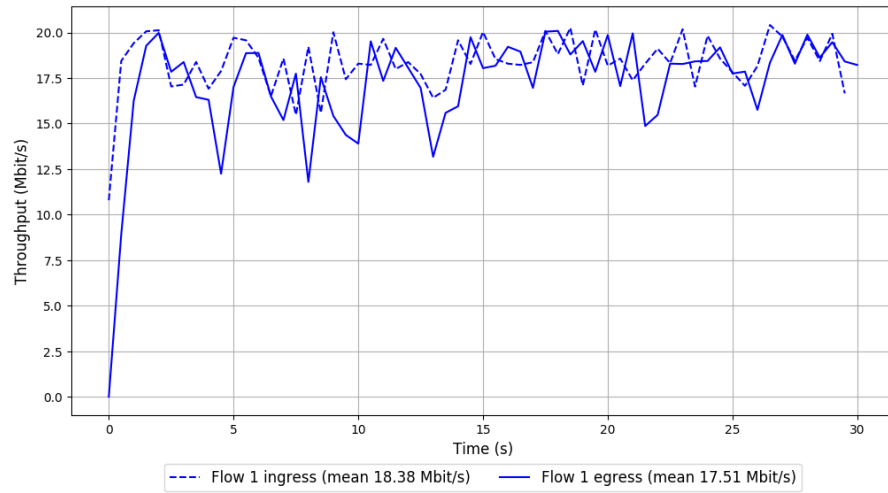Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-06-18 09:48:49
End at: 2018-06-18 09:49:19
Local clock offset: 2.598 ms
Remote clock offset: -6.934 ms


# Below is generated by plot.py at 2018-06-18 12:01:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.80 Mbit/s
95th percentile per-packet one-way delay: 17.554 ms
Loss rate: 3.93%
-- Flow 1:
Average throughput: 17.80 Mbit/s
95th percentile per-packet one-way delay: 17.554 ms
Loss rate: 3.93%
```

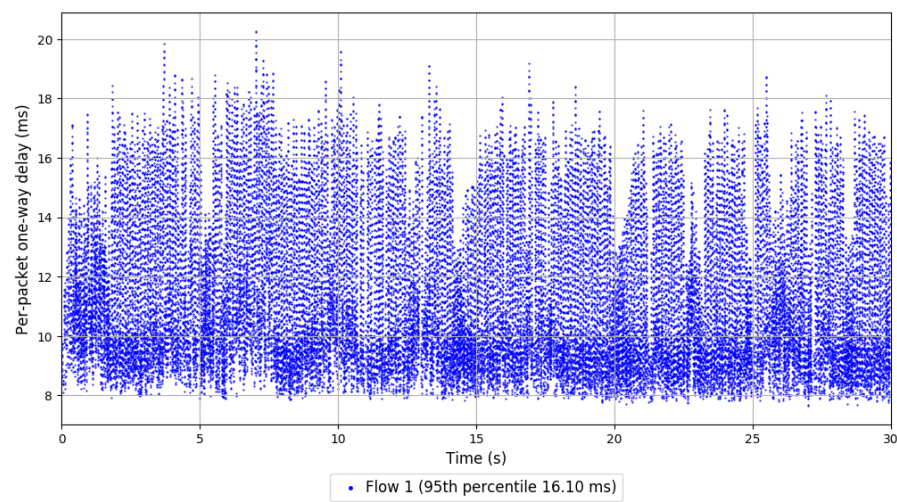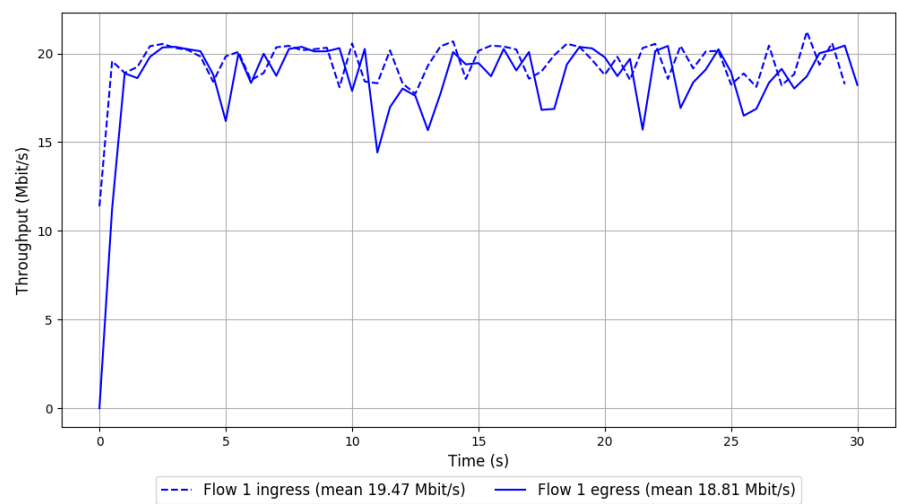# Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-06-18 10:07:10
End at: 2018-06-18 10:07:40
Local clock offset: 0.185 ms
Remote clock offset: -8.552 ms


# Below is generated by plot.py at 2018-06-18 12:01:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.51 Mbit/s
95th percentile per-packet one-way delay: 19.396 ms
Loss rate: 4.70%
-- Flow 1:
Average throughput: 17.51 Mbit/s
95th percentile per-packet one-way delay: 19.396 ms
Loss rate: 4.70%
```

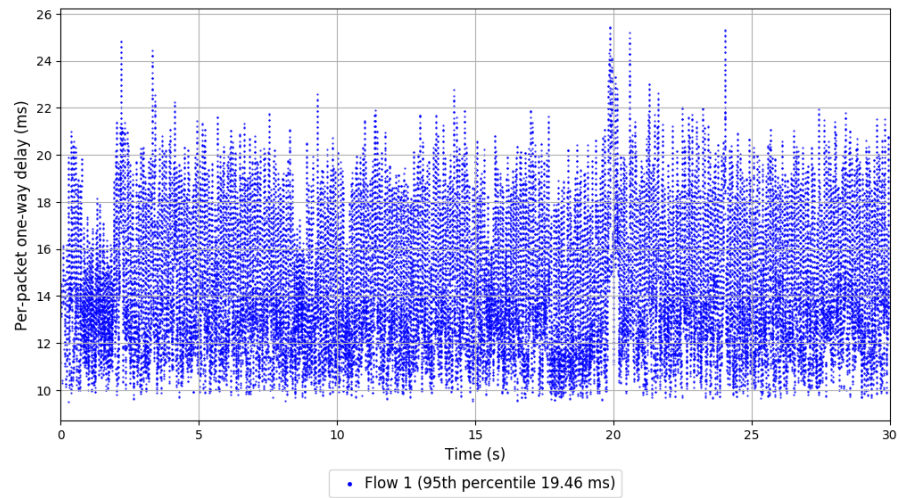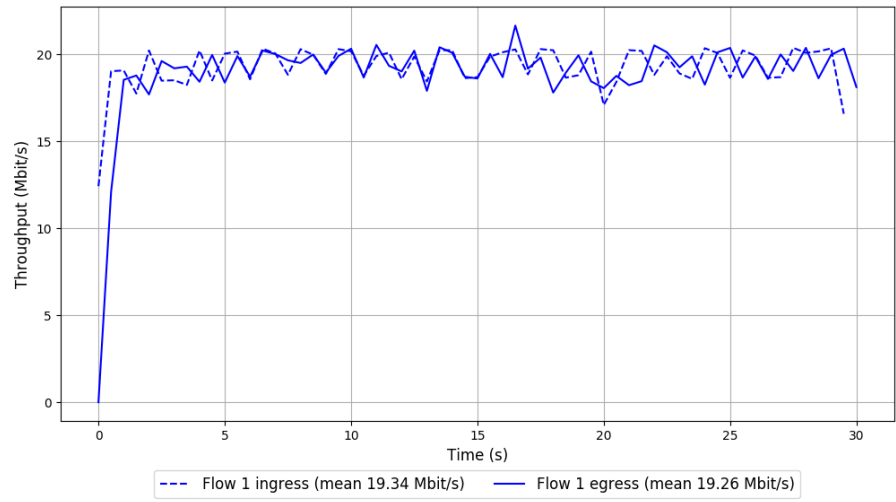## Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-06-18 10:25:27
End at: 2018-06-18 10:25:57
Local clock offset: 0.304 ms
Remote clock offset: -8.711 ms


# Below is generated by plot.py at 2018-06-18 12:01:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.81 Mbit/s
95th percentile per-packet one-way delay: 16.103 ms
Loss rate: 3.37%
-- Flow 1:
Average throughput: 18.81 Mbit/s
95th percentile per-packet one-way delay: 16.103 ms
Loss rate: 3.37%
```

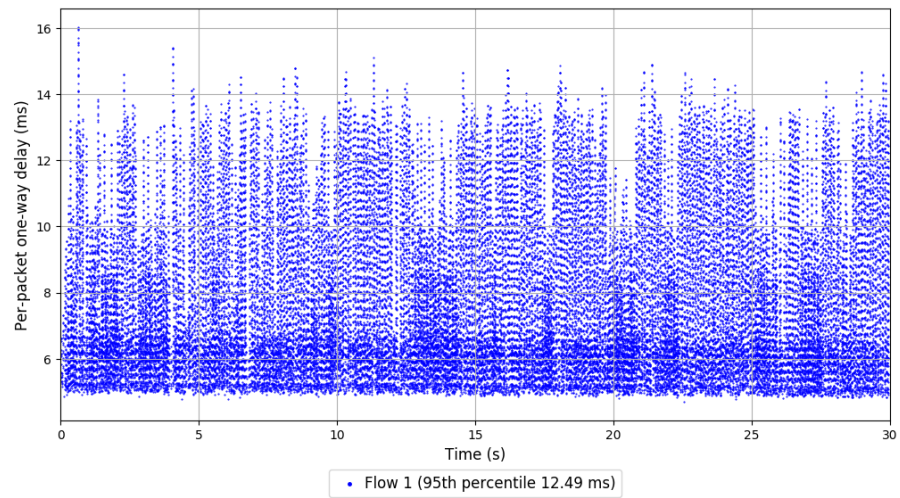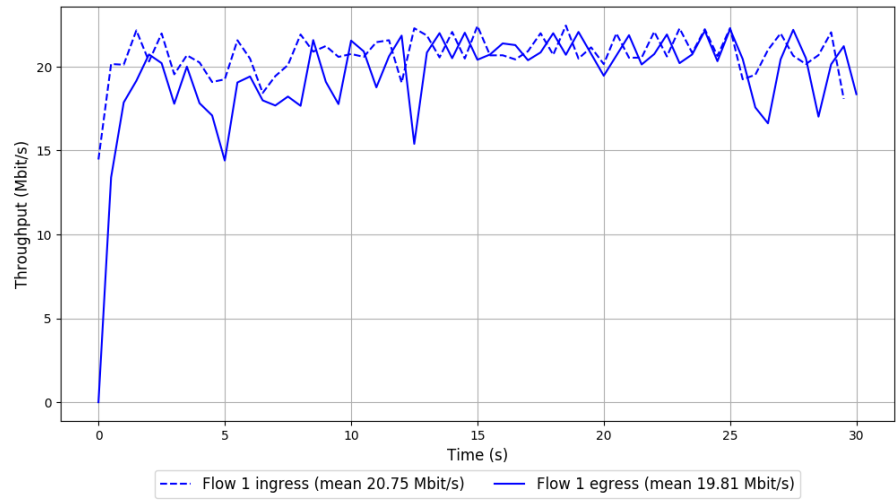## Run 6: Report of Sprout — Data Link

215

```
Run 7: Statistics of Sprout

Start at: 2018-06-18 10:43:57
End at: 2018-06-18 10:44:27
Local clock offset: -1.586 ms
Remote clock offset: -4.903 ms


# Below is generated by plot.py at 2018-06-18 12:01:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.26 Mbit/s
95th percentile per-packet one-way delay: 19.460 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 19.26 Mbit/s
95th percentile per-packet one-way delay: 19.460 ms
Loss rate: 0.37%
```

Run 7: Report of Sprout — Data Link

217

```
Run 8: Statistics of Sprout

Start at: 2018-06-18 11:02:16
End at: 2018-06-18 11:02:46
Local clock offset: 4.583 ms
Remote clock offset: -1.748 ms


# Below is generated by plot.py at 2018-06-18 12:01:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.81 Mbit/s
95th percentile per-packet one-way delay: 12.490 ms
Loss rate: 4.49%
-- Flow 1:
Average throughput: 19.81 Mbit/s
95th percentile per-packet one-way delay: 12.490 ms
Loss rate: 4.49%
```
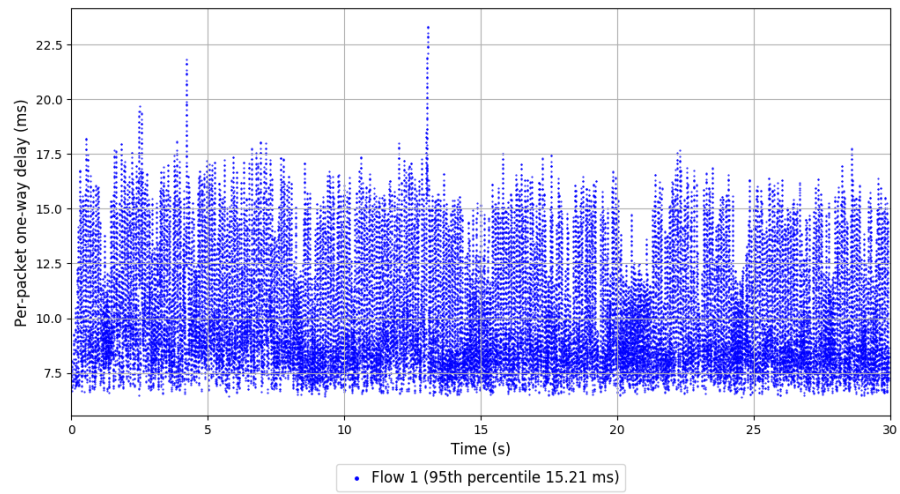
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-06-18 11:20:25
End at: 2018-06-18 11:20:55
Local clock offset: 2.651 ms
Remote clock offset: 0.734 ms


# Below is generated by plot.py at 2018-06-18 12:01:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.20 Mbit/s
95th percentile per-packet one-way delay: 15.213 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 20.20 Mbit/s
95th percentile per-packet one-way delay: 15.213 ms
Loss rate: 2.30%
```
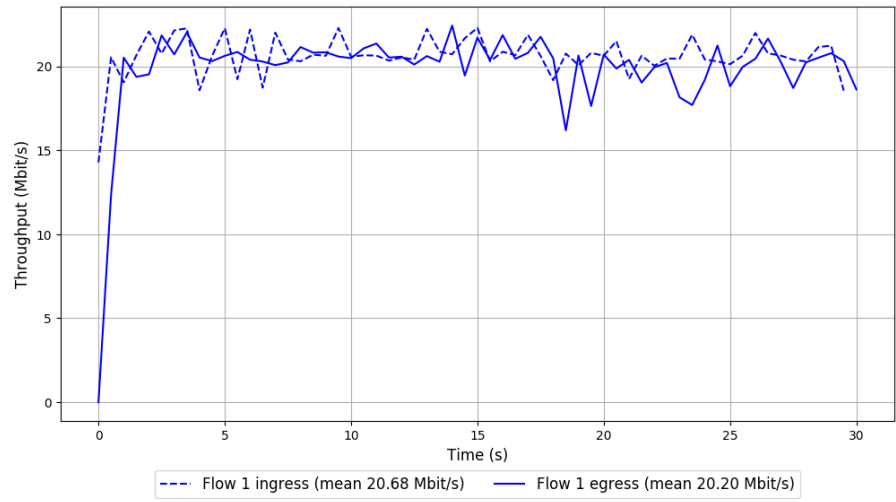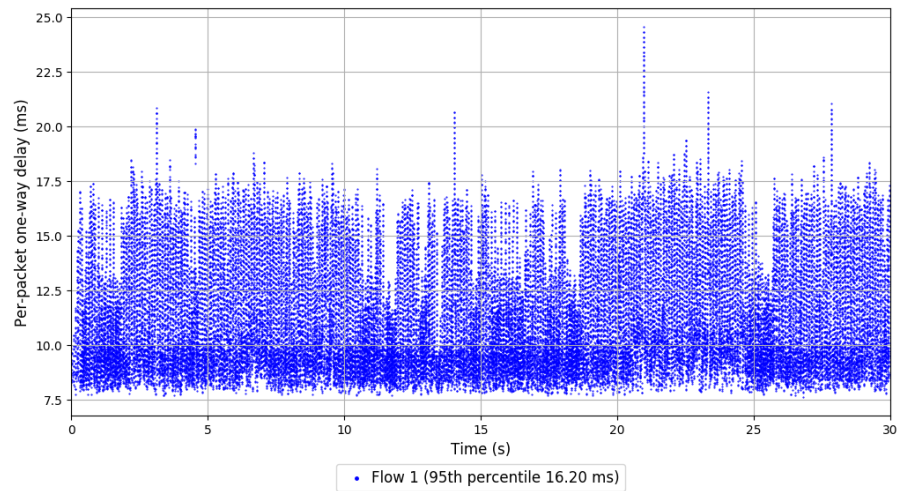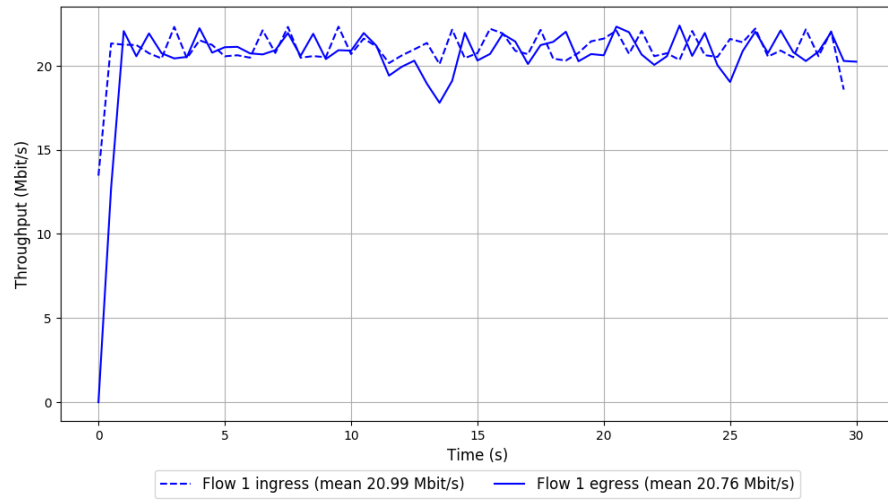
Run 9: Report of Sprout — Data Link

Flow 1 ingress (mean 20.68 Mbit/s)   Flow 1 egress (mean 20.20 Mbit/s)

Flow 1 (95th percentile 15.21 ms)

```
Run 10: Statistics of Sprout

Start at: 2018-06-18 11:38:42
End at: 2018-06-18 11:39:12
Local clock offset: 0.547 ms
Remote clock offset: -0.857 ms


# Below is generated by plot.py at 2018-06-18 12:01:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.76 Mbit/s
95th percentile per-packet one-way delay: 16.200 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 20.76 Mbit/s
95th percentile per-packet one-way delay: 16.200 ms
Loss rate: 1.04%
```
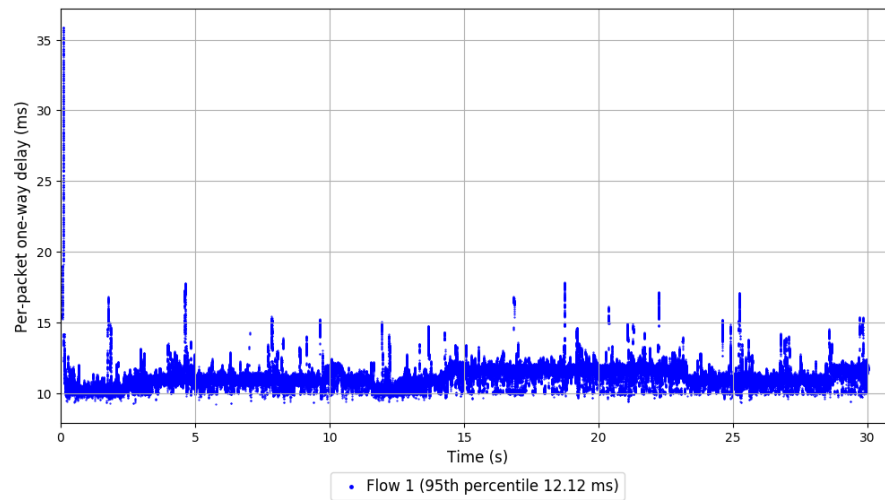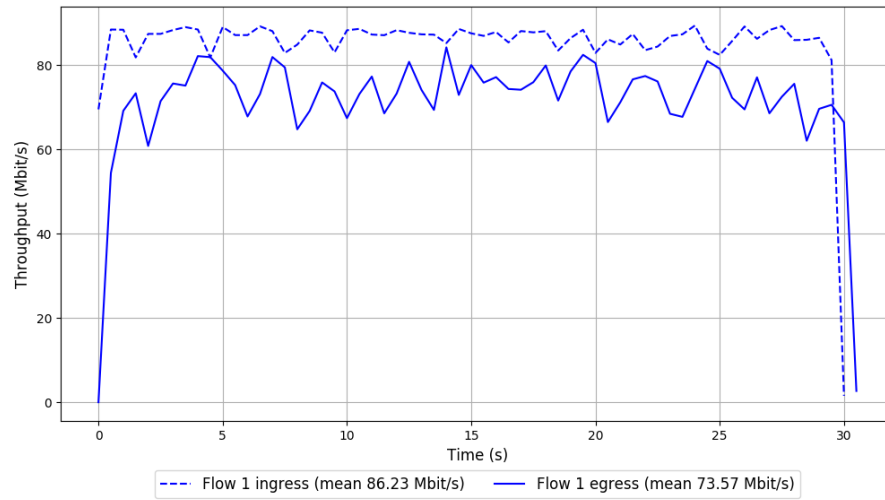
Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 20.99 Mbit/s) —— Flow 1 egress (mean 20.76 Mbit/s)

Flow 1 (95th percentile 16.20 ms)

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

Start at: 2018-06-18 09:03:07
End at: 2018-06-18 09:03:37
Local clock offset: -3.1 ms
Remote clock offset: -3.914 ms


# Below is generated by plot.py at 2018-06-18 12:02:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.57 Mbit/s
95th percentile per-packet one-way delay: 12.118 ms
Loss rate: 14.70%
-- Flow 1:
Average throughput: 73.57 Mbit/s
95th percentile per-packet one-way delay: 12.118 ms
Loss rate: 14.70%
```
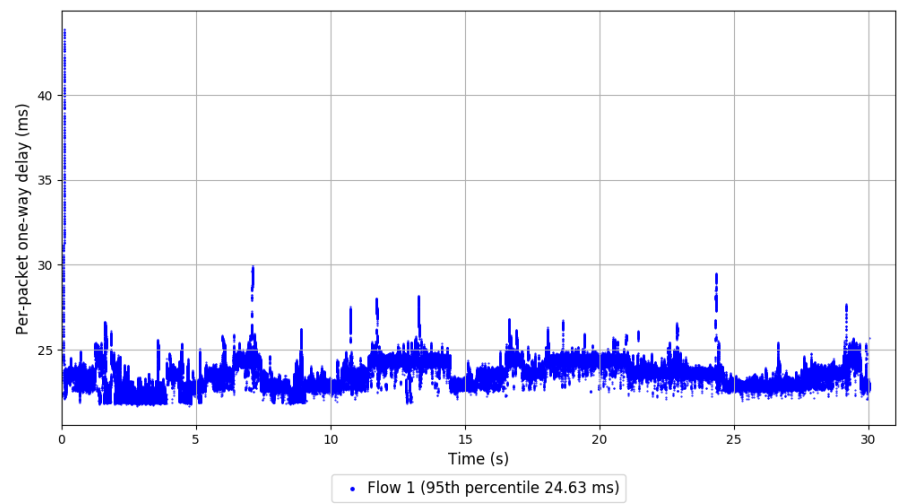
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-18 09:21:44
End at: 2018-06-18 09:22:14
Local clock offset: -1.194 ms
Remote clock offset: 6.463 ms


# Below is generated by plot.py at 2018-06-18 12:03:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.68 Mbit/s
95th percentile per-packet one-way delay: 24.628 ms
Loss rate: 12.29%
-- Flow 1:
Average throughput: 77.68 Mbit/s
95th percentile per-packet one-way delay: 24.628 ms
Loss rate: 12.29%
```
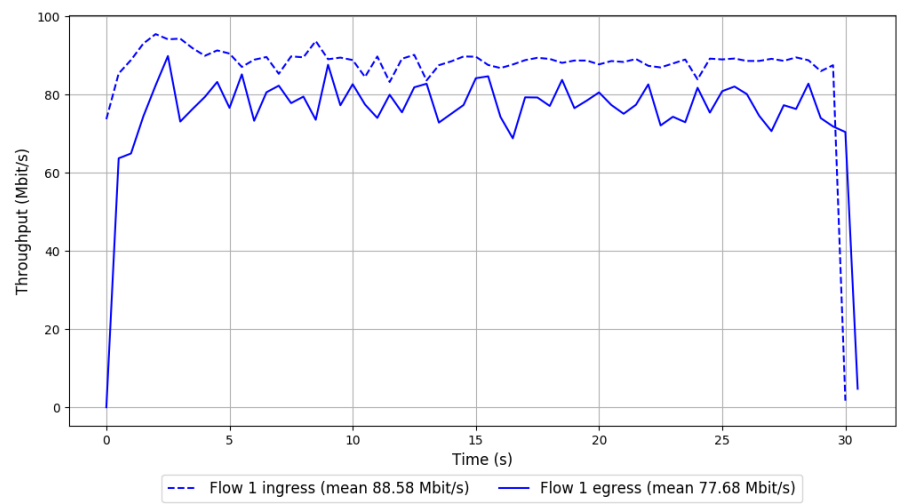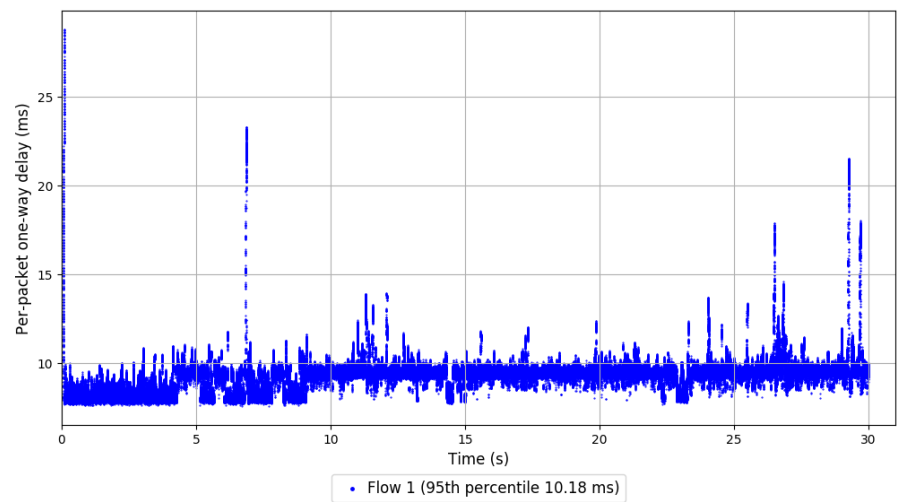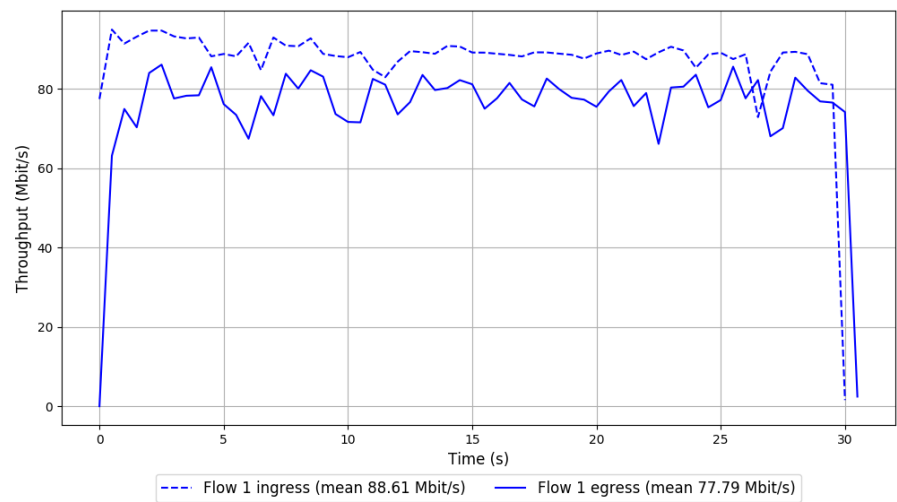
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 88.58 Mbit/s) — — — —   Flow 1 egress (mean 77.68 Mbit/s) ———

• Flow 1 (95th percentile 24.63 ms)

227

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

Start at: 2018-06-18 09:40:16
End at: 2018-06-18 09:40:46
Local clock offset: 0.788 ms
Remote clock offset: -8.117 ms


# Below is generated by plot.py at 2018-06-18 12:03:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.79 Mbit/s
95th percentile per-packet one-way delay: 10.183 ms
Loss rate: 12.21%
-- Flow 1:
Average throughput: 77.79 Mbit/s
95th percentile per-packet one-way delay: 10.183 ms
Loss rate: 12.21%
```
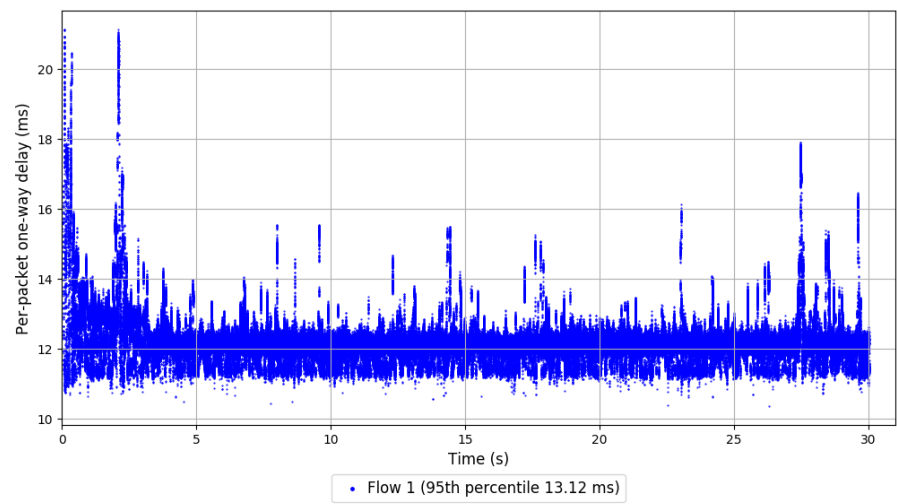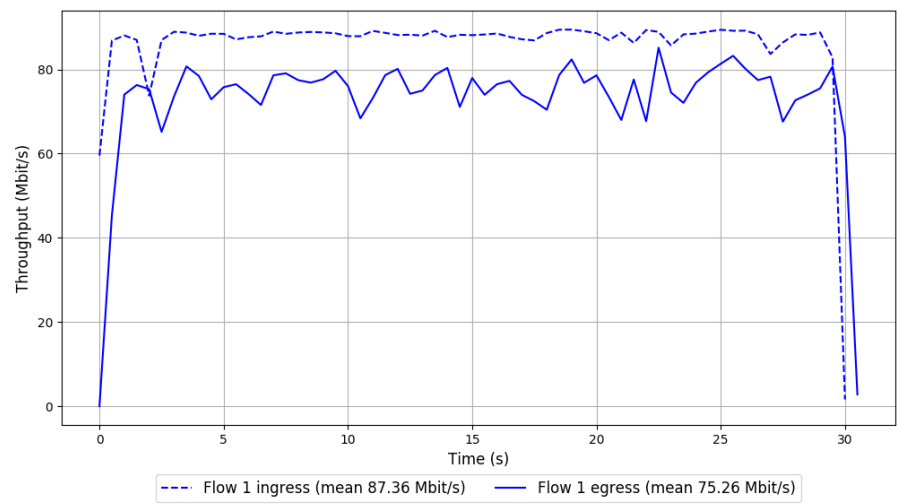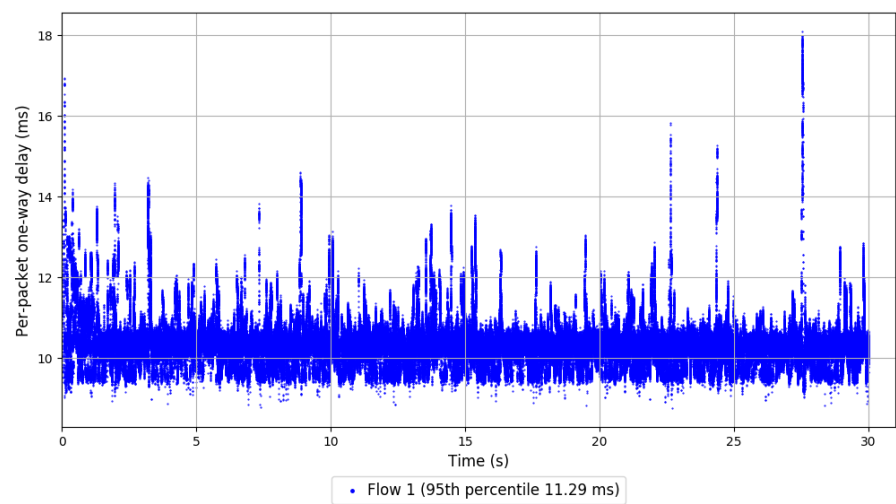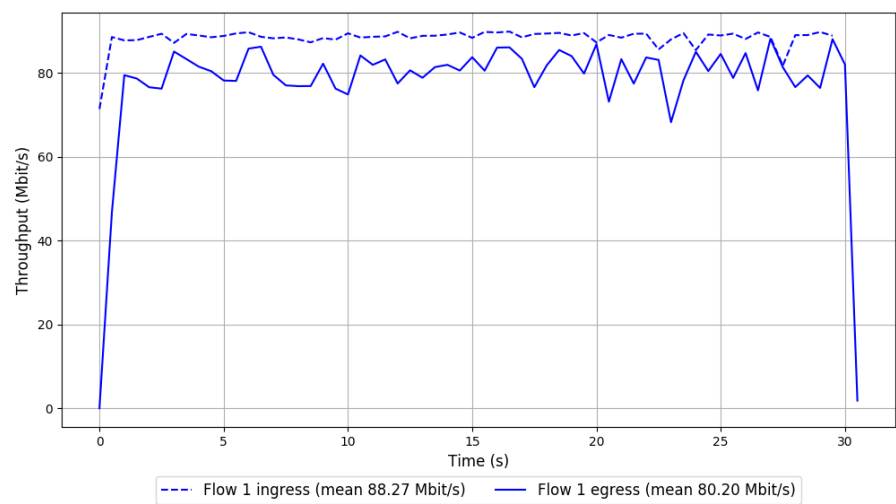
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 88.61 Mbit/s)   Flow 1 egress (mean 77.79 Mbit/s)

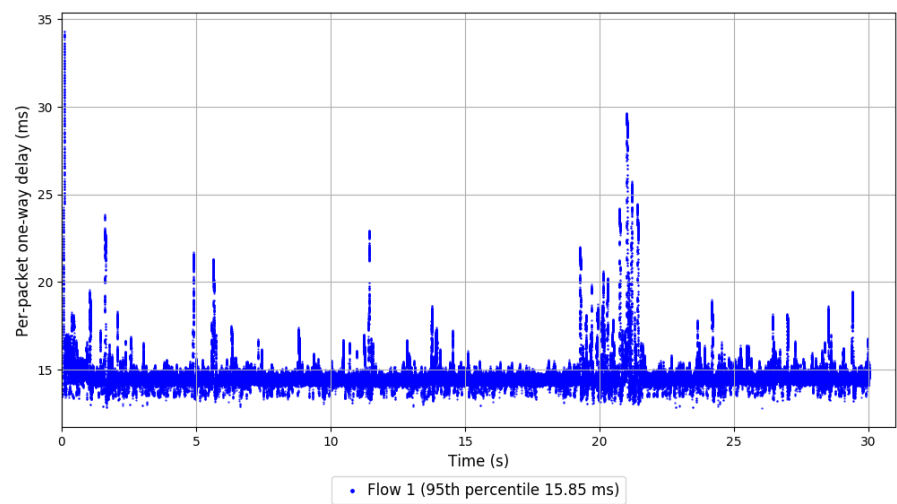Flow 1 (95th percentile 10.18 ms)

229

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

Start at: 2018-06-18 09:58:58
End at: 2018-06-18 09:59:28
Local clock offset: -1.363 ms
Remote clock offset: -8.831 ms


# Below is generated by plot.py at 2018-06-18 12:03:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.26 Mbit/s
95th percentile per-packet one-way delay: 13.115 ms
Loss rate: 13.86%
-- Flow 1:
Average throughput: 75.26 Mbit/s
95th percentile per-packet one-way delay: 13.115 ms
Loss rate: 13.86%
```
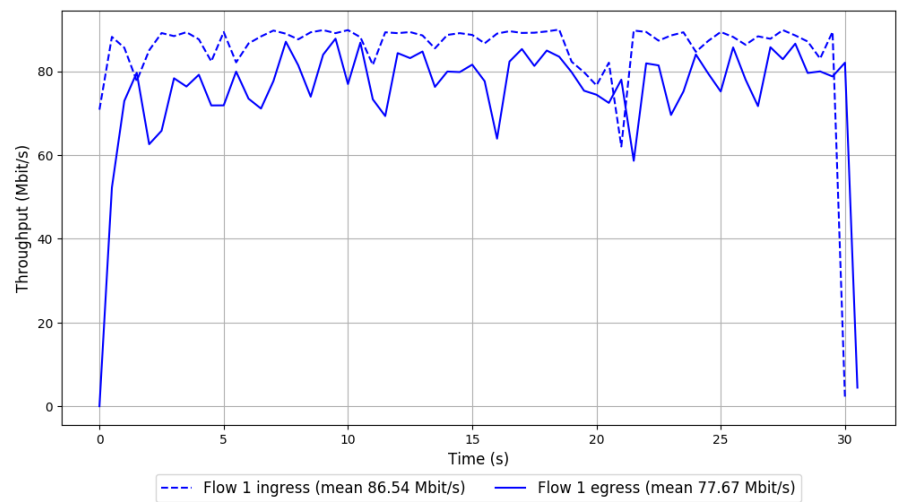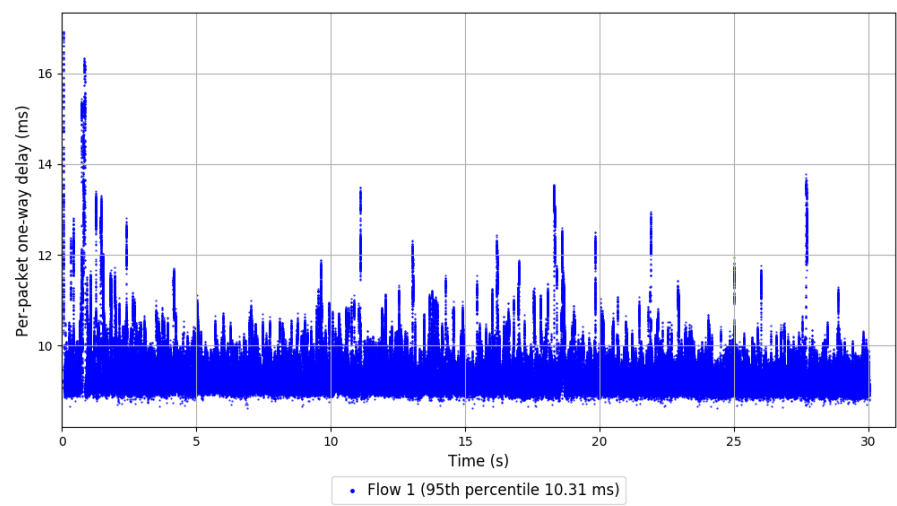
Run 4: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-18 10:17:19
End at: 2018-06-18 10:17:49
Local clock offset: -0.987 ms
Remote clock offset: -10.178 ms


# Below is generated by plot.py at 2018-06-18 12:03:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.20 Mbit/s
95th percentile per-packet one-way delay: 11.287 ms
Loss rate: 9.14%
-- Flow 1:
Average throughput: 80.20 Mbit/s
95th percentile per-packet one-way delay: 11.287 ms
Loss rate: 9.14%
```

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

Flow 1 ingress (mean 88.27 Mbit/s) ----- Flow 1 egress (mean 80.20 Mbit/s)
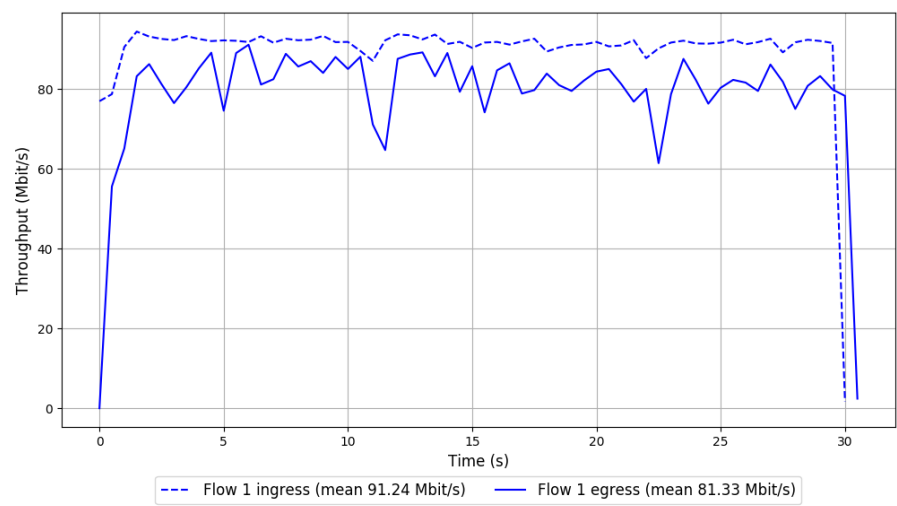

Flow 1 (95th percentile 11.29 ms)

233

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

Start at: 2018-06-18 10:35:37
End at: 2018-06-18 10:36:07
Local clock offset: -3.969 ms
Remote clock offset: -4.682 ms


# Below is generated by plot.py at 2018-06-18 12:03:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.67 Mbit/s
95th percentile per-packet one-way delay: 15.849 ms
Loss rate: 10.25%
-- Flow 1:
Average throughput: 77.67 Mbit/s
95th percentile per-packet one-way delay: 15.849 ms
Loss rate: 10.25%
```
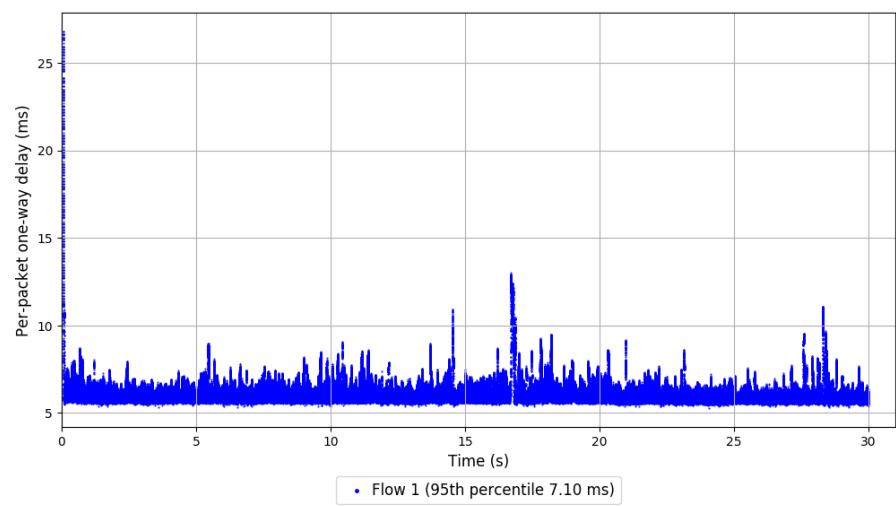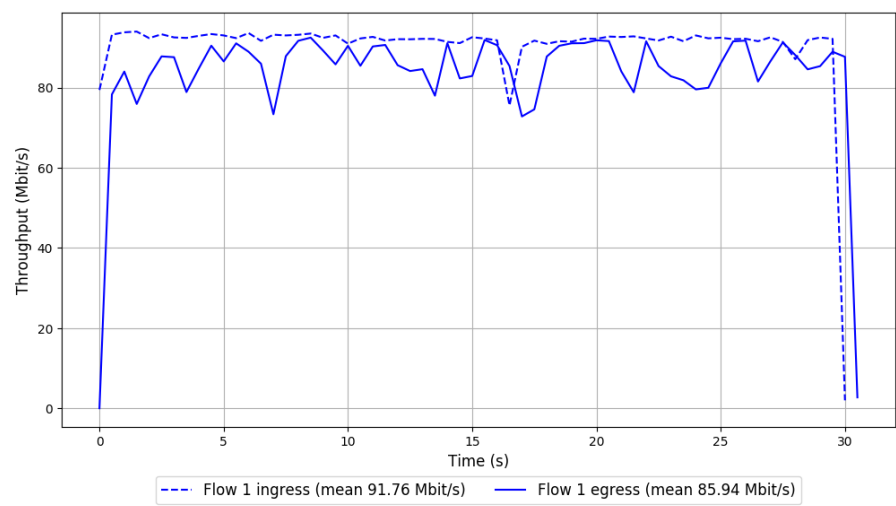
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 86.54 Mbit/s) — — — Flow 1 egress (mean 77.67 Mbit/s)

• Flow 1 (95th percentile 15.85 ms)

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

Start at: 2018-06-18 10:54:03
End at: 2018-06-18 10:54:33
Local clock offset: 0.263 ms
Remote clock offset: -3.112 ms


# Below is generated by plot.py at 2018-06-18 12:03:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.33 Mbit/s
95th percentile per-packet one-way delay: 10.306 ms
Loss rate: 10.86%
-- Flow 1:
Average throughput: 81.33 Mbit/s
95th percentile per-packet one-way delay: 10.306 ms
Loss rate: 10.86%
```
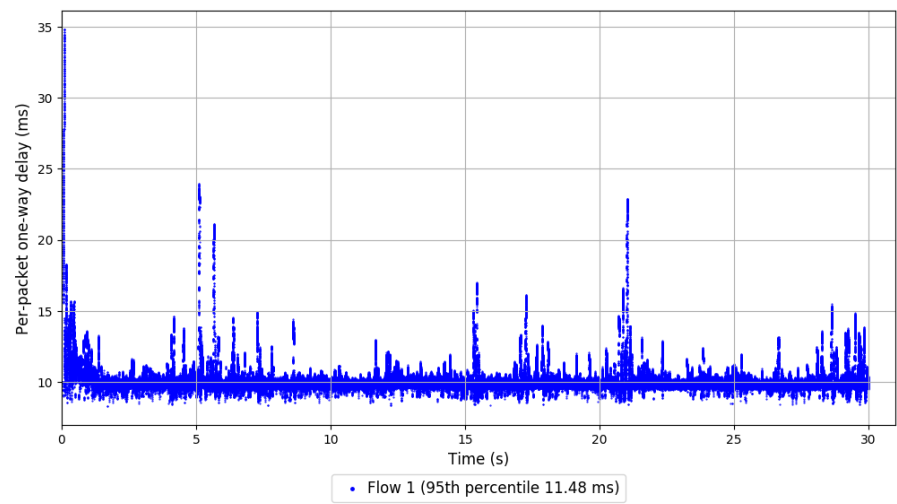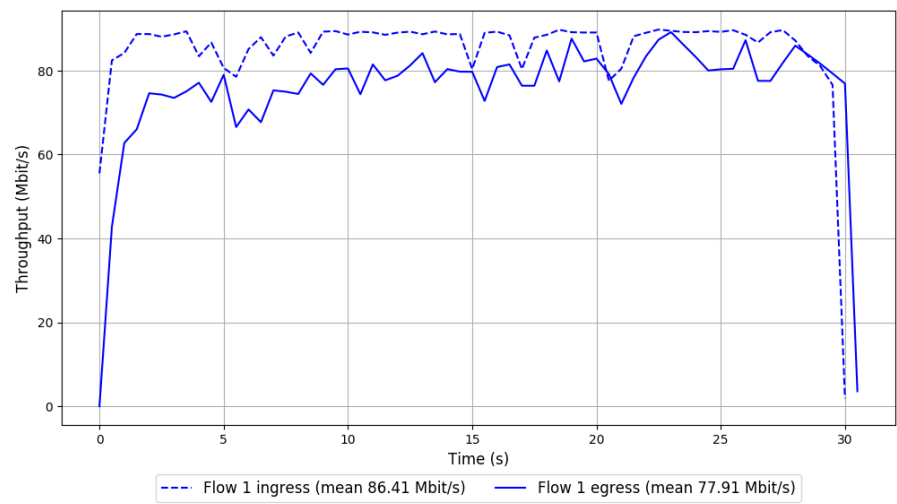
Run 7: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-18 11:12:21
End at: 2018-06-18 11:12:51
Local clock offset: 3.892 ms
Remote clock offset: 0.309 ms


# Below is generated by plot.py at 2018-06-18 12:03:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.94 Mbit/s
95th percentile per-packet one-way delay: 7.100 ms
Loss rate: 6.34%
-- Flow 1:
Average throughput: 85.94 Mbit/s
95th percentile per-packet one-way delay: 7.100 ms
Loss rate: 6.34%
```
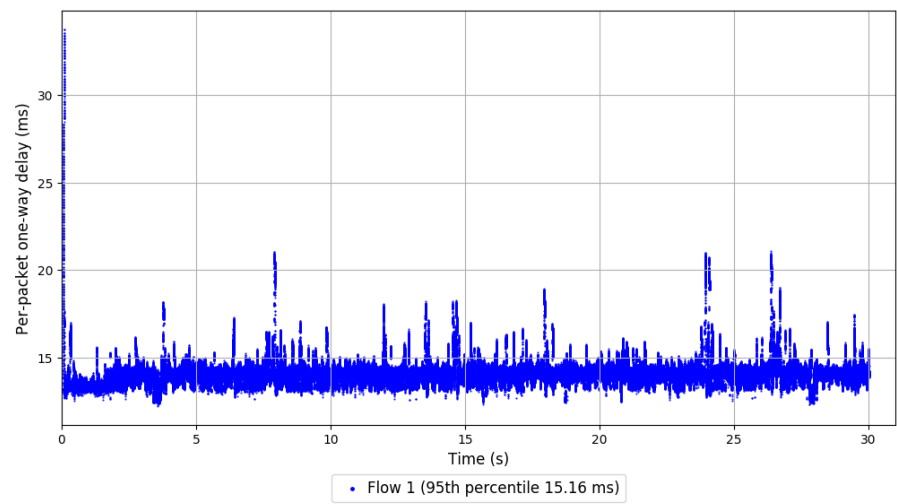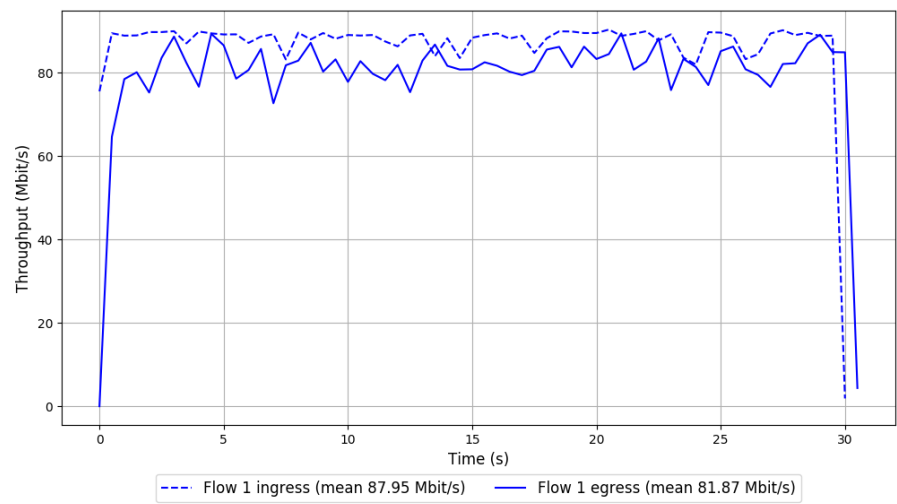
Run 8: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-18 11:30:37
End at: 2018-06-18 11:31:07
Local clock offset: 1.562 ms
Remote clock offset: 1.951 ms


# Below is generated by plot.py at 2018-06-18 12:04:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.91 Mbit/s
95th percentile per-packet one-way delay: 11.477 ms
Loss rate: 9.84%
-- Flow 1:
Average throughput: 77.91 Mbit/s
95th percentile per-packet one-way delay: 11.477 ms
Loss rate: 9.84%
```
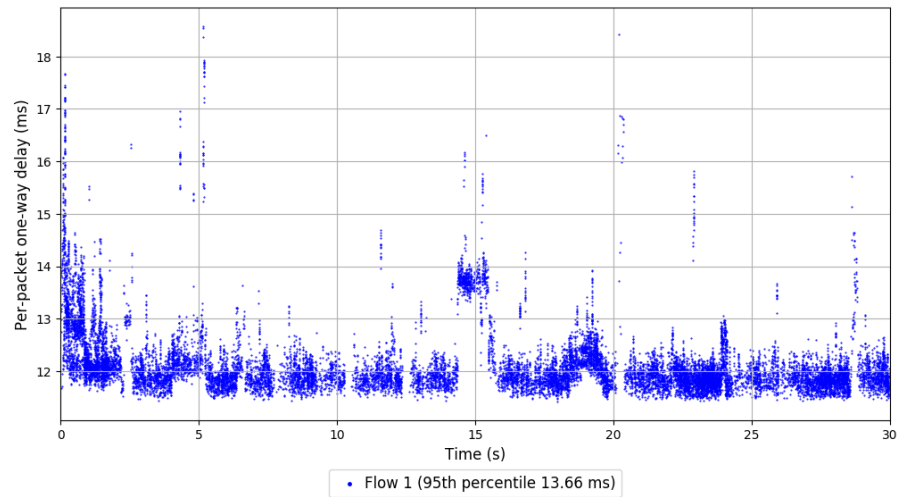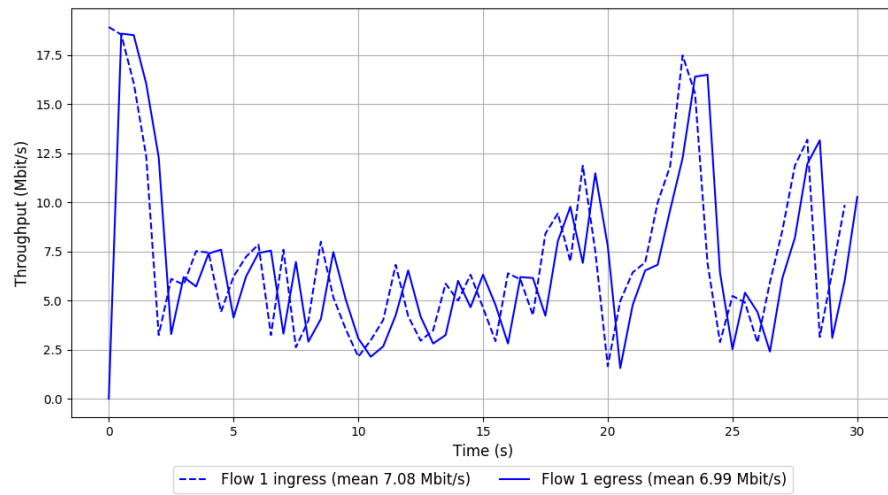
Run 9: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-18 11:48:46
End at: 2018-06-18 11:49:16
Local clock offset: -4.784 ms
Remote clock offset: -2.191 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.87 Mbit/s
95th percentile per-packet one-way delay: 15.163 ms
Loss rate: 6.92%
-- Flow 1:
Average throughput: 81.87 Mbit/s
95th percentile per-packet one-way delay: 15.163 ms
Loss rate: 6.92%
```
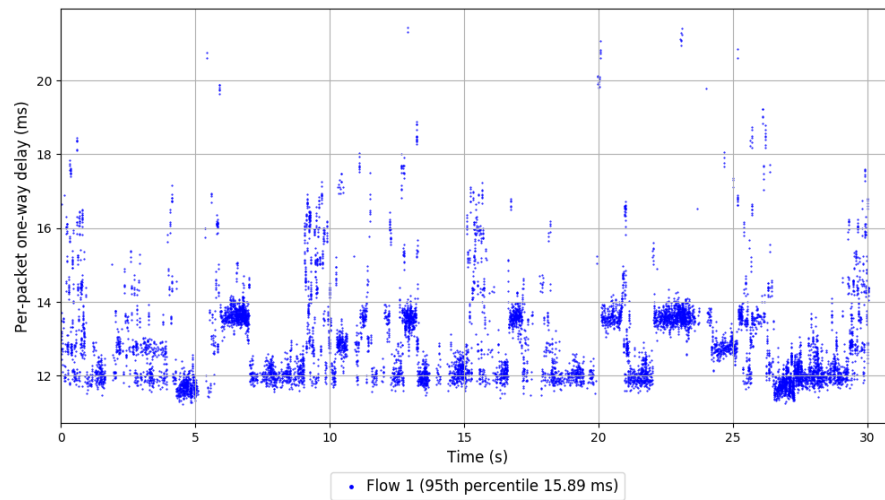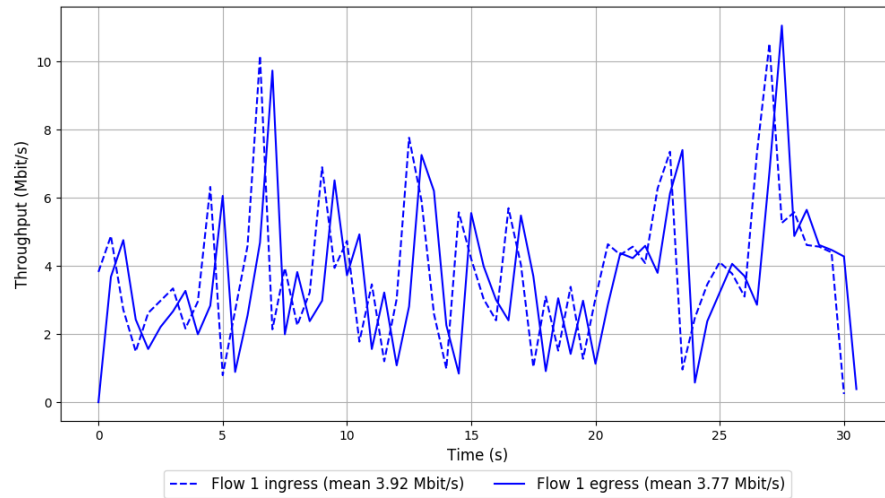
Run 10: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2018-06-18 08:56:29
End at: 2018-06-18 08:56:59
Local clock offset: -4.074 ms
Remote clock offset: -3.691 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 13.665 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 13.665 ms
Loss rate: 1.32%
```
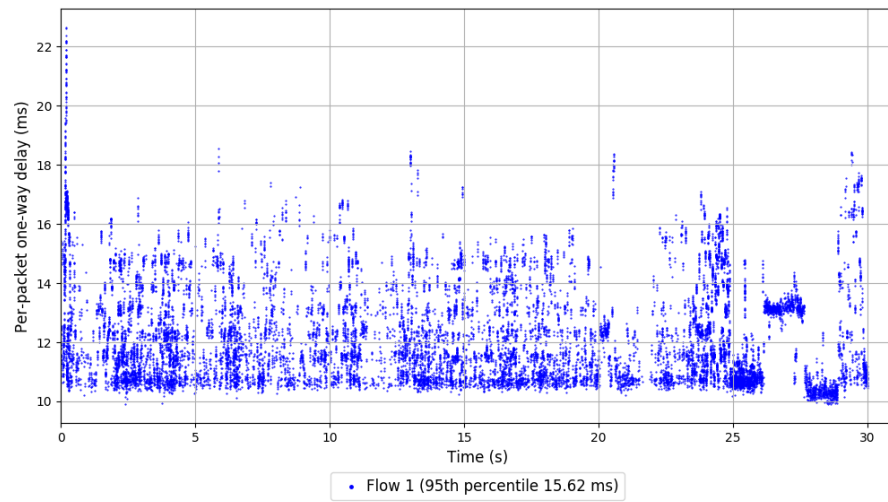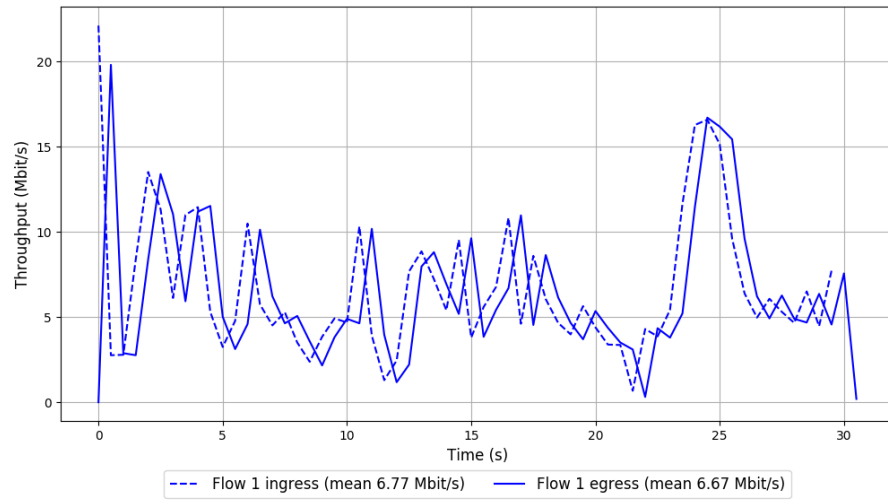
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-06-18 09:14:59
End at: 2018-06-18 09:15:29
Local clock offset: -2.177 ms
Remote clock offset: -3.304 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 15.893 ms
Loss rate: 3.64%
-- Flow 1:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 15.893 ms
Loss rate: 3.64%
```
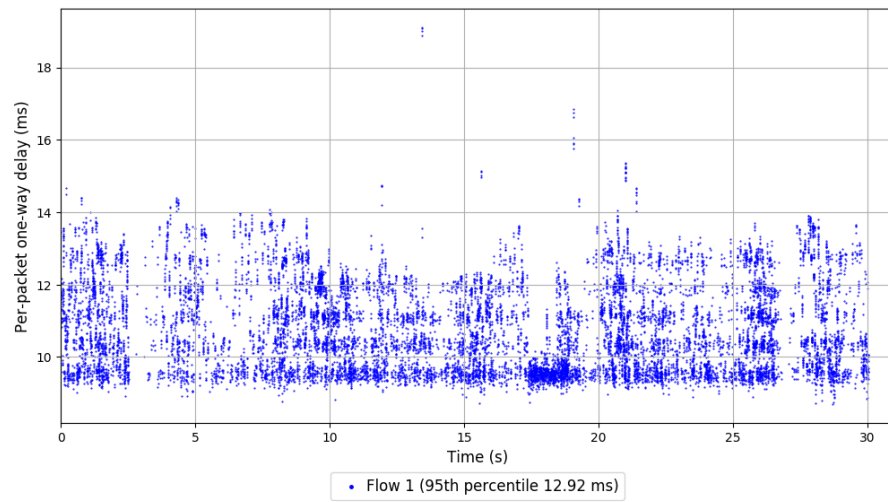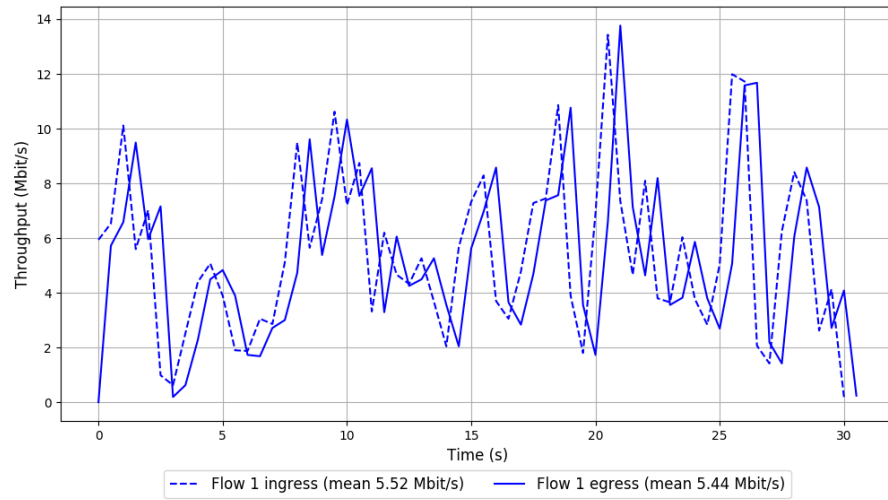
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-06-18 09:33:36
End at: 2018-06-18 09:34:06
Local clock offset: -1.948 ms
Remote clock offset: -7.883 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.67 Mbit/s
95th percentile per-packet one-way delay: 15.621 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 6.67 Mbit/s
95th percentile per-packet one-way delay: 15.621 ms
Loss rate: 1.38%
```
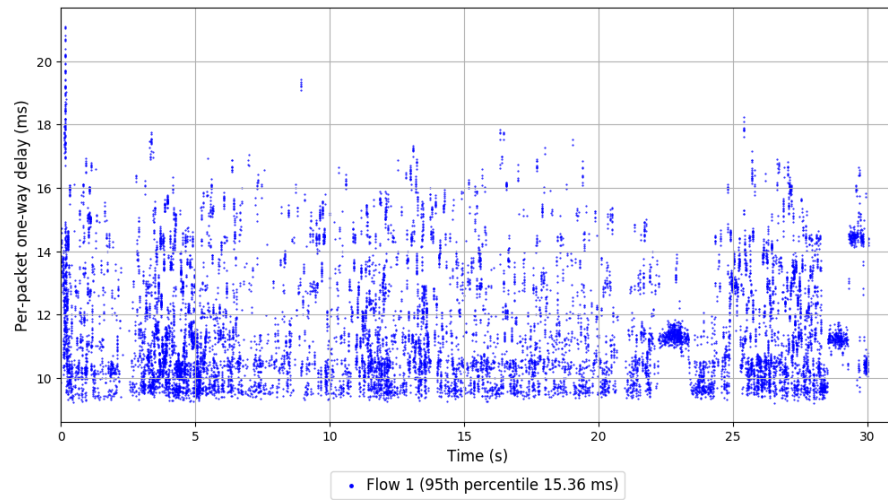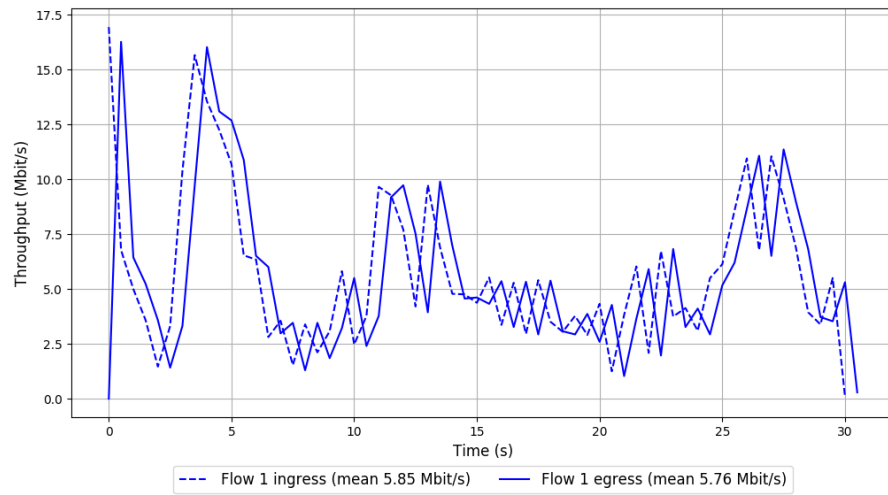
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 6.77 Mbit/s) — — —   Flow 1 egress (mean 6.67 Mbit/s) ——

Flow 1 (95th percentile 15.62 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2018-06-18 09:52:15
End at: 2018-06-18 09:52:45
Local clock offset: 0.509 ms
Remote clock offset: -9.002 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.44 Mbit/s
95th percentile per-packet one-way delay: 12.921 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 5.44 Mbit/s
95th percentile per-packet one-way delay: 12.921 ms
Loss rate: 1.45%
```

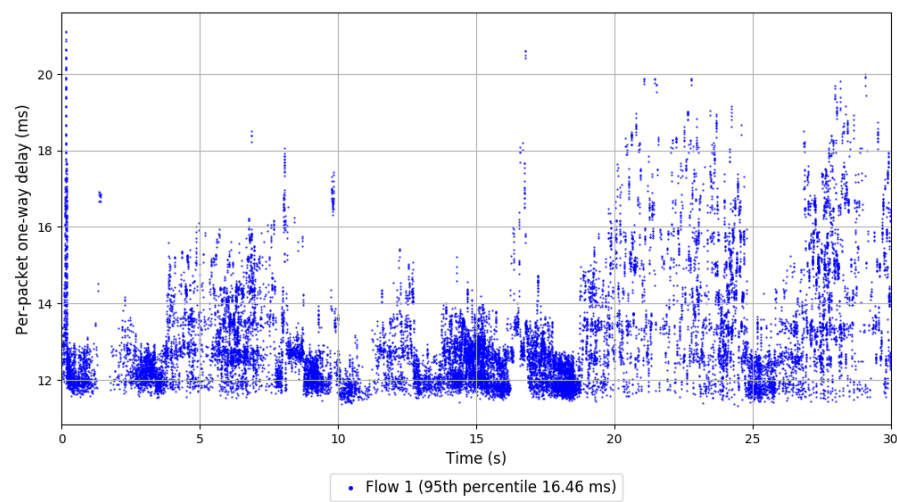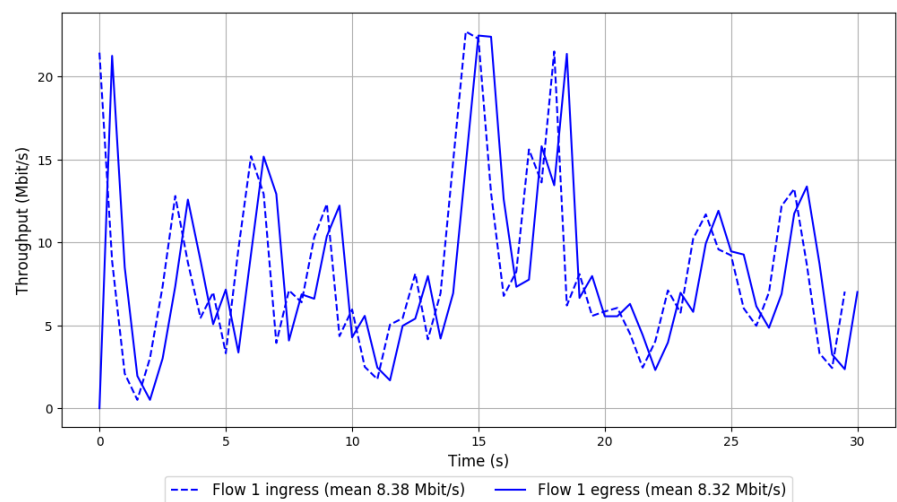Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-06-18 10:10:42
End at: 2018-06-18 10:11:12
Local clock offset: -0.17 ms
Remote clock offset: -8.636 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.76 Mbit/s
95th percentile per-packet one-way delay: 15.357 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 5.76 Mbit/s
95th percentile per-packet one-way delay: 15.357 ms
Loss rate: 1.48%
```

Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-06-18 10:28:56
End at: 2018-06-18 10:29:26
Local clock offset: -2.247 ms
Remote clock offset: -5.779 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.32 Mbit/s
95th percentile per-packet one-way delay: 16.456 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 8.32 Mbit/s
95th percentile per-packet one-way delay: 16.456 ms
Loss rate: 0.70%
```
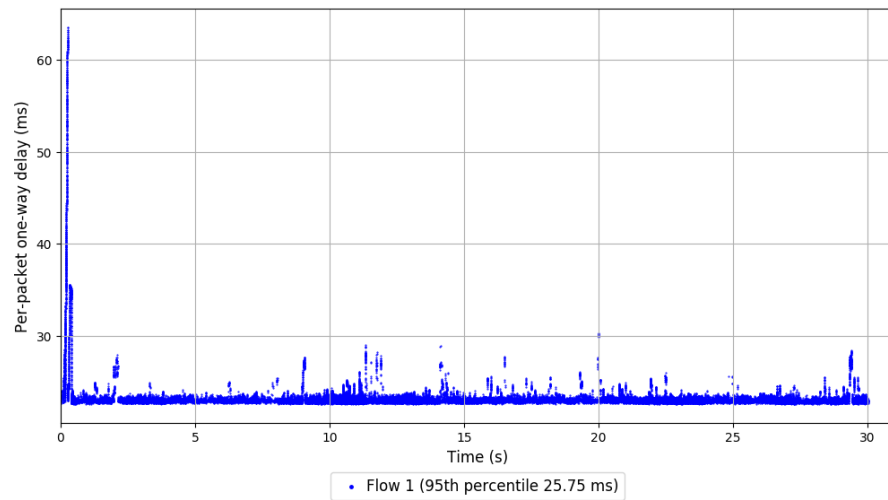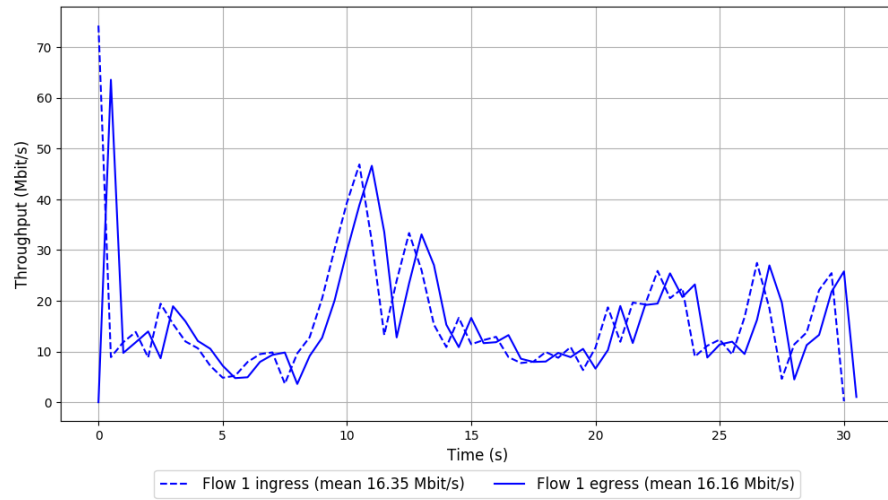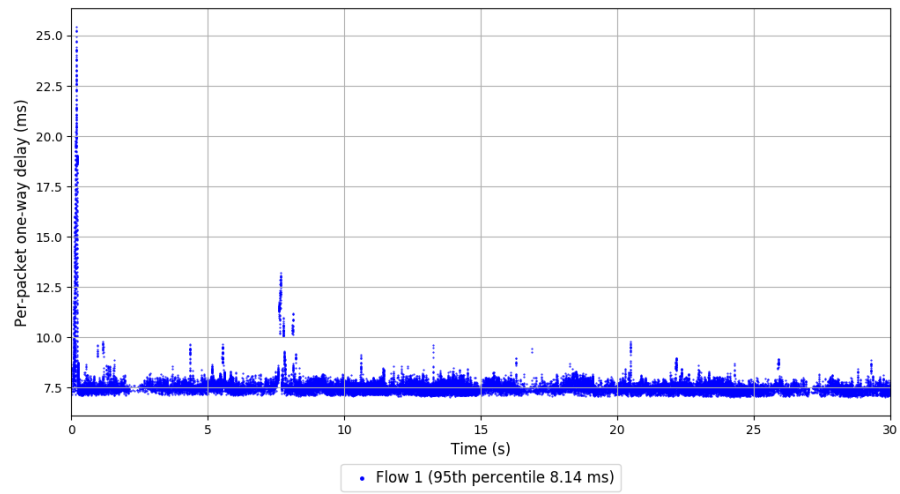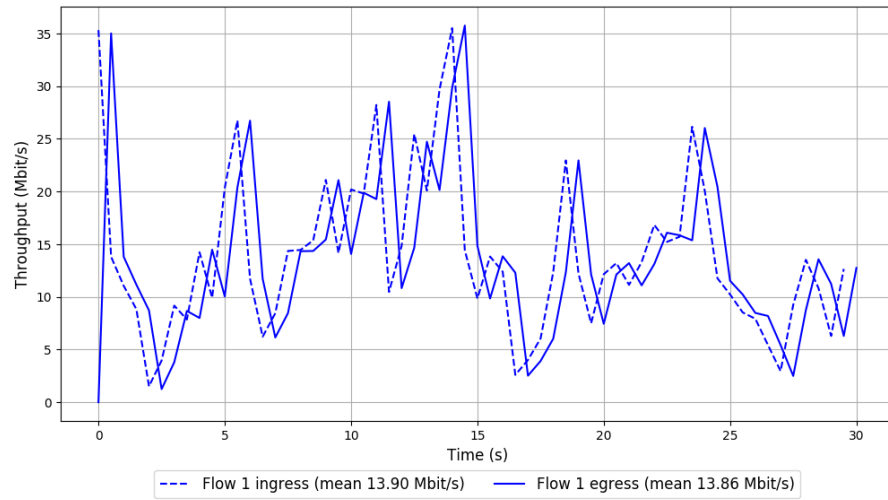
Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 8.38 Mbit/s) — — — Flow 1 egress (mean 8.32 Mbit/s)

Flow 1 (95th percentile 16.46 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2018-06-18 10:47:20
End at: 2018-06-18 10:47:50
Local clock offset: 1.545 ms
Remote clock offset: 11.64 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.16 Mbit/s
95th percentile per-packet one-way delay: 25.755 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 16.16 Mbit/s
95th percentile per-packet one-way delay: 25.755 ms
Loss rate: 1.16%
```

Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2018-06-18 11:05:41
End at: 2018-06-18 11:06:11
Local clock offset: 2.792 ms
Remote clock offset: -0.284 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.86 Mbit/s
95th percentile per-packet one-way delay: 8.142 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 13.86 Mbit/s
95th percentile per-packet one-way delay: 8.142 ms
Loss rate: 0.29%
```

Run 8: Report of TCP Vegas — Data Link

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```
Run 9: Statistics of TCP Vegas

Start at: 2018-06-18 11:23:56
End at: 2018-06-18 11:24:26
Local clock offset: 5.367 ms
Remote clock offset: 1.326 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.24 Mbit/s
95th percentile per-packet one-way delay: 10.002 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 11.24 Mbit/s
95th percentile per-packet one-way delay: 10.002 ms
Loss rate: 0.37%
```
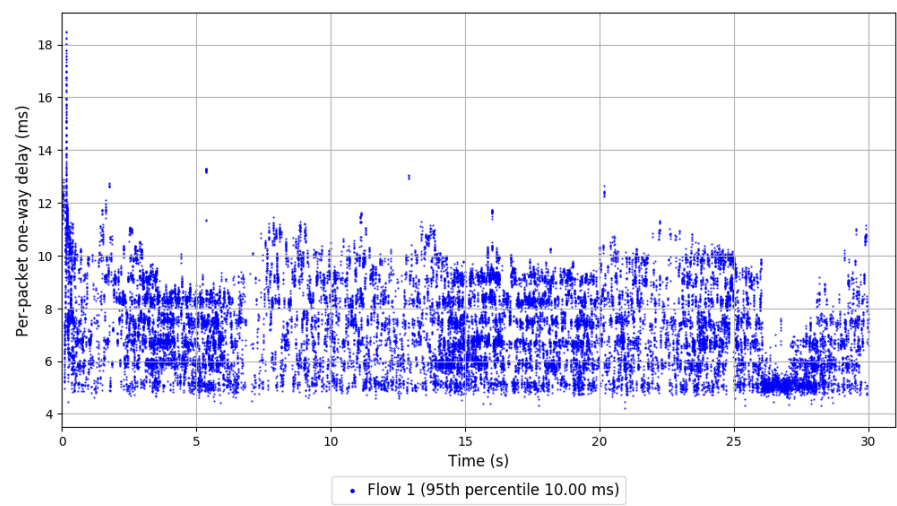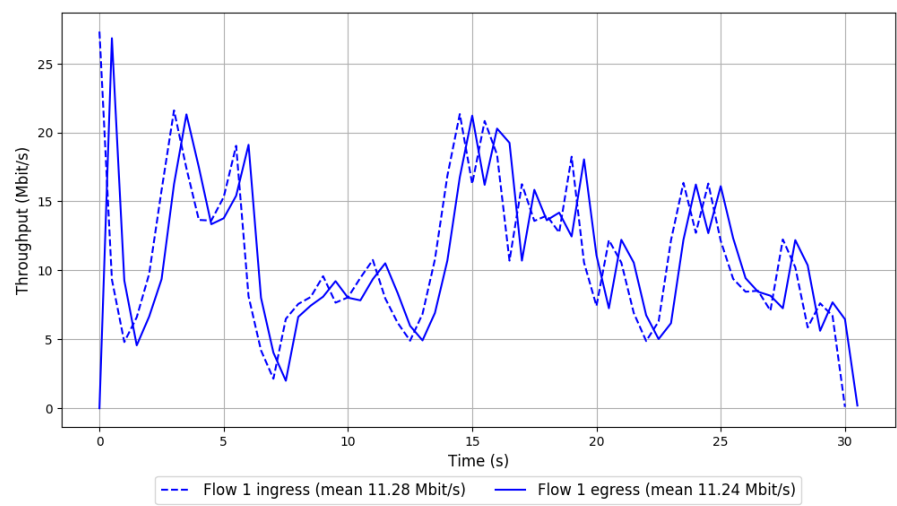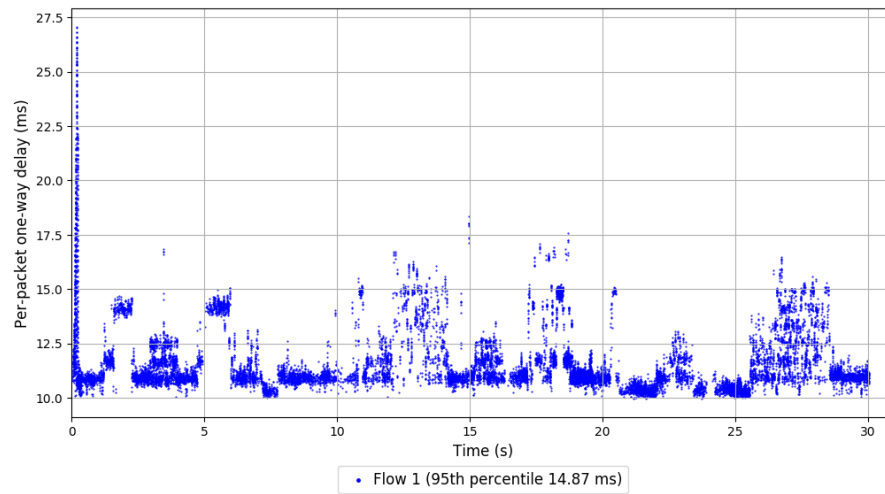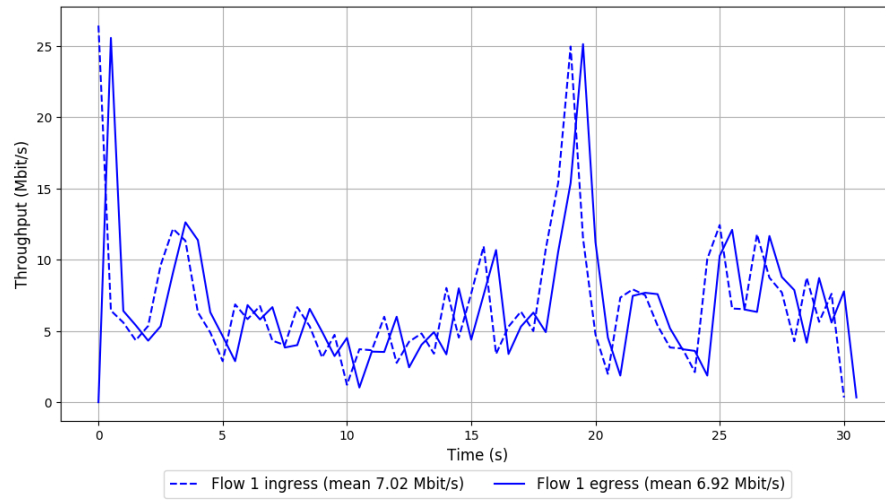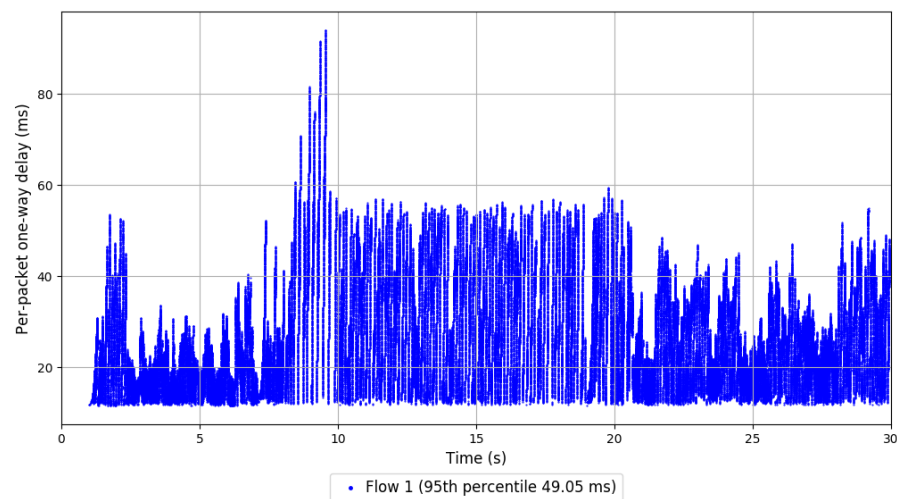
Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2018-06-18 11:42:11
End at: 2018-06-18 11:42:41
Local clock offset: -1.32 ms
Remote clock offset: -0.702 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 14.874 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 14.874 ms
Loss rate: 1.42%
```
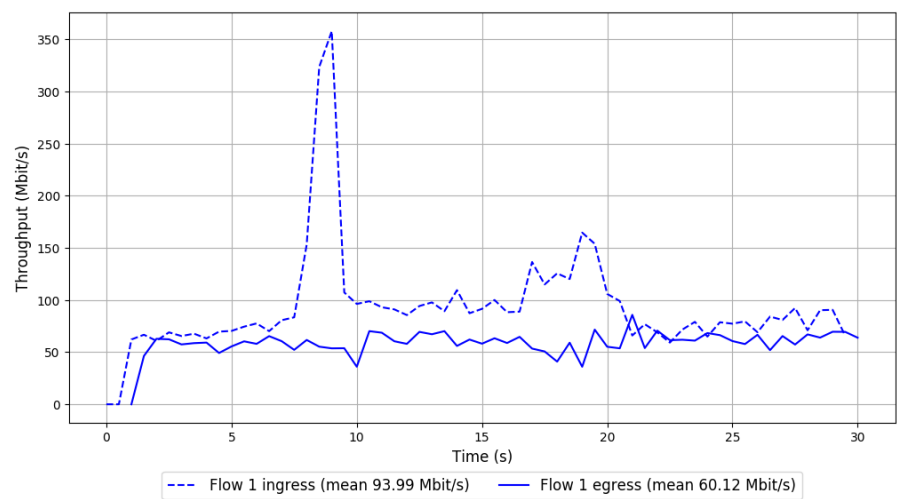
Run 10: Report of TCP Vegas — Data Link

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```
Run 1: Statistics of Verus

Start at: 2018-06-18 08:51:44
End at: 2018-06-18 08:52:14
Local clock offset: -4.041 ms
Remote clock offset: -2.512 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.12 Mbit/s
95th percentile per-packet one-way delay: 49.054 ms
Loss rate: 38.11%
-- Flow 1:
Average throughput: 60.12 Mbit/s
95th percentile per-packet one-way delay: 49.054 ms
Loss rate: 38.11%
```

Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-06-18 09:10:13
End at: 2018-06-18 09:10:43
Local clock offset: -0.337 ms
Remote clock offset: -3.88 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.46 Mbit/s
95th percentile per-packet one-way delay: 46.670 ms
Loss rate: 52.83%
-- Flow 1:
Average throughput: 46.46 Mbit/s
95th percentile per-packet one-way delay: 46.670 ms
Loss rate: 52.83%
```
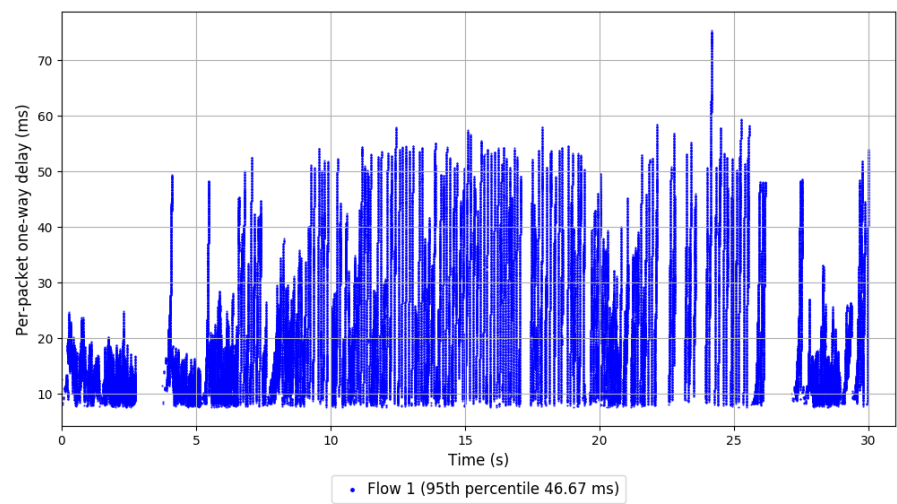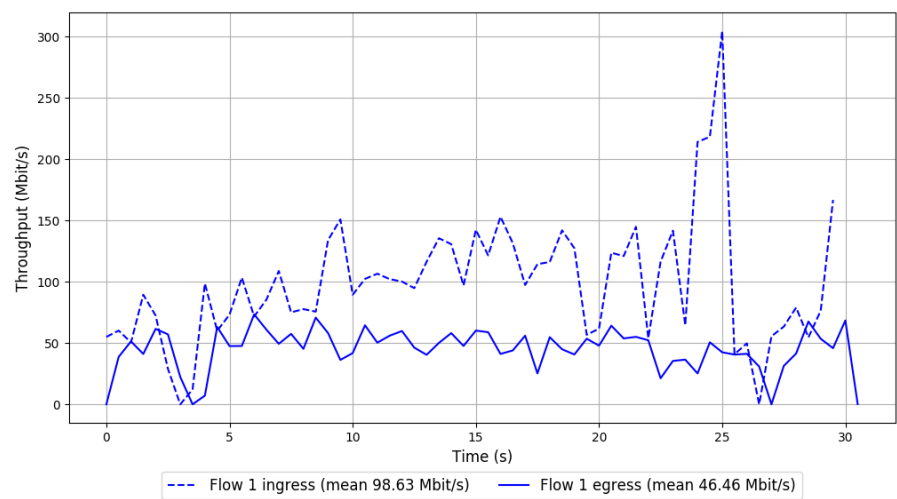
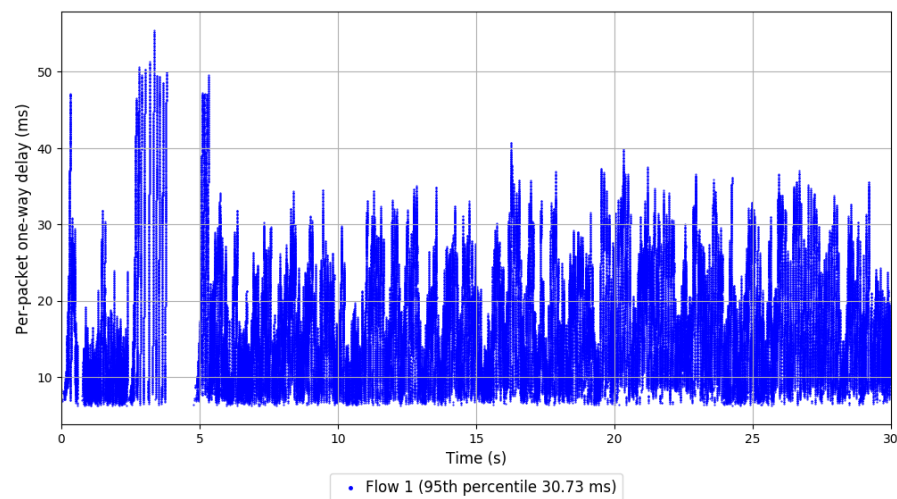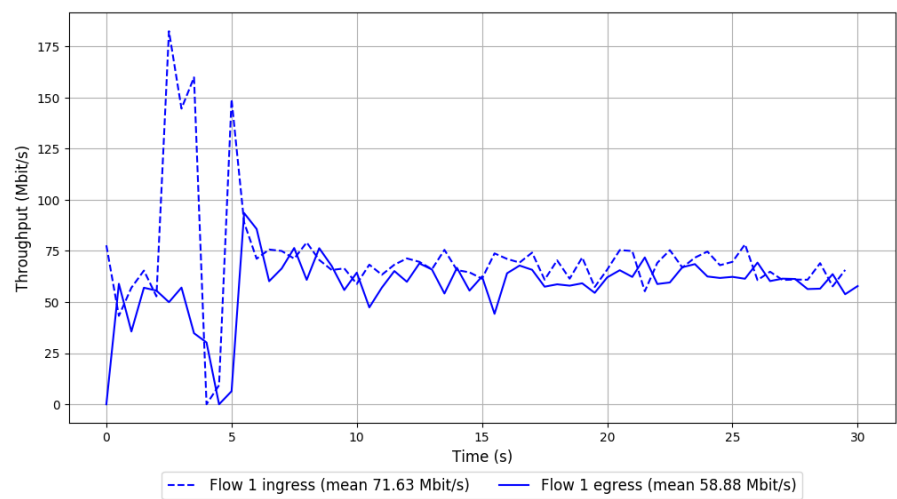Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-06-18 09:28:49
End at: 2018-06-18 09:29:19
Local clock offset: 1.747 ms
Remote clock offset: -6.428 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.88 Mbit/s
95th percentile per-packet one-way delay: 30.731 ms
Loss rate: 17.80%
-- Flow 1:
Average throughput: 58.88 Mbit/s
95th percentile per-packet one-way delay: 30.731 ms
Loss rate: 17.80%
```

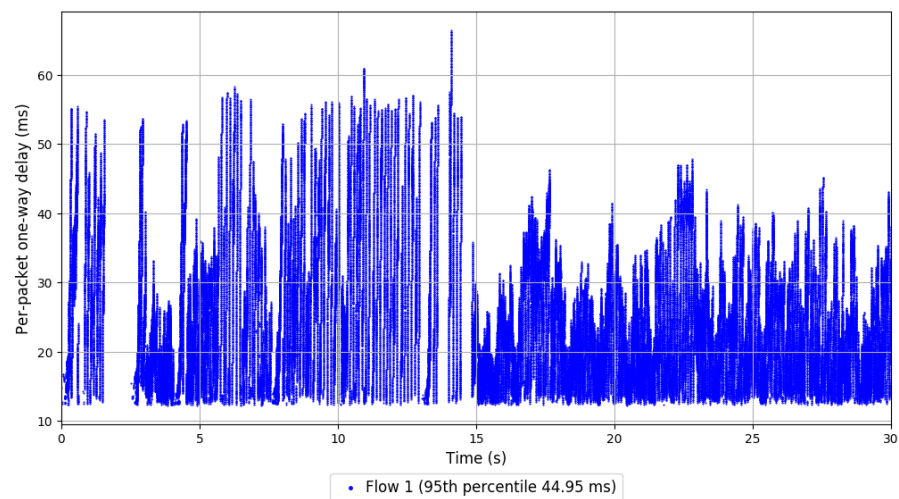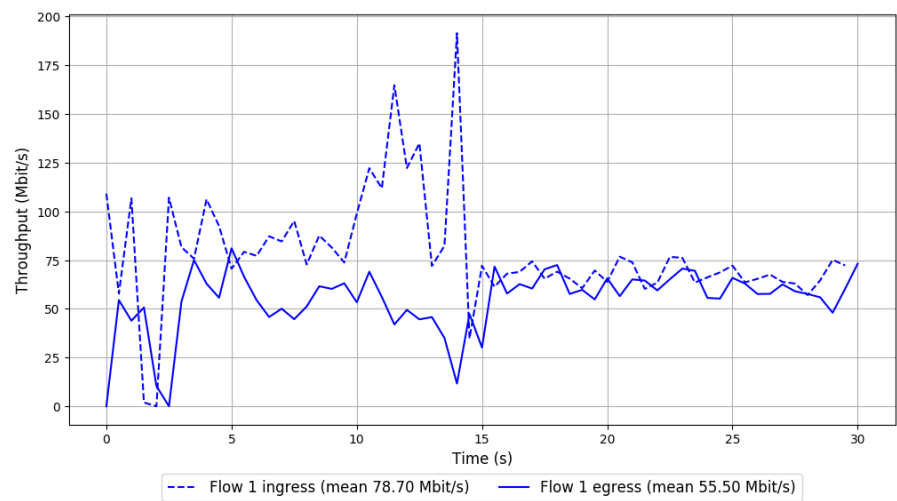Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-06-18 09:47:38
End at: 2018-06-18 09:48:08
Local clock offset: 1.534 ms
Remote clock offset: -3.828 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.50 Mbit/s
95th percentile per-packet one-way delay: 44.946 ms
Loss rate: 29.42%
-- Flow 1:
Average throughput: 55.50 Mbit/s
95th percentile per-packet one-way delay: 44.946 ms
Loss rate: 29.42%
```

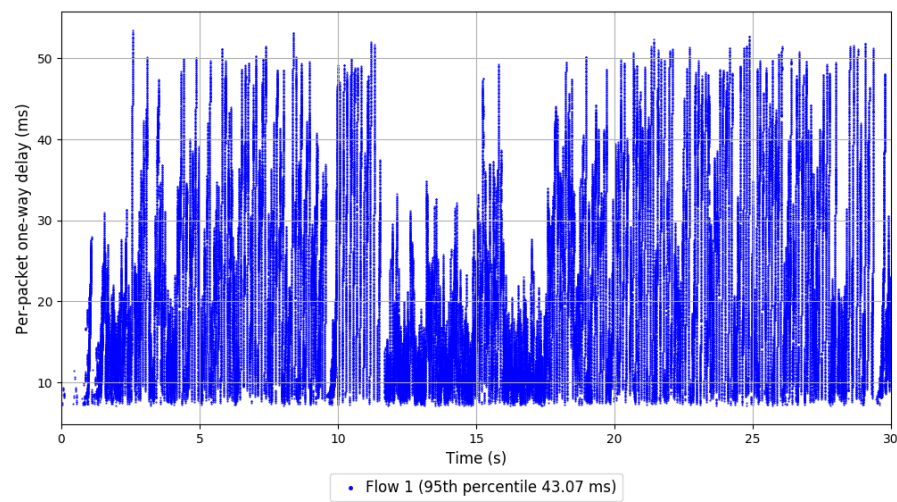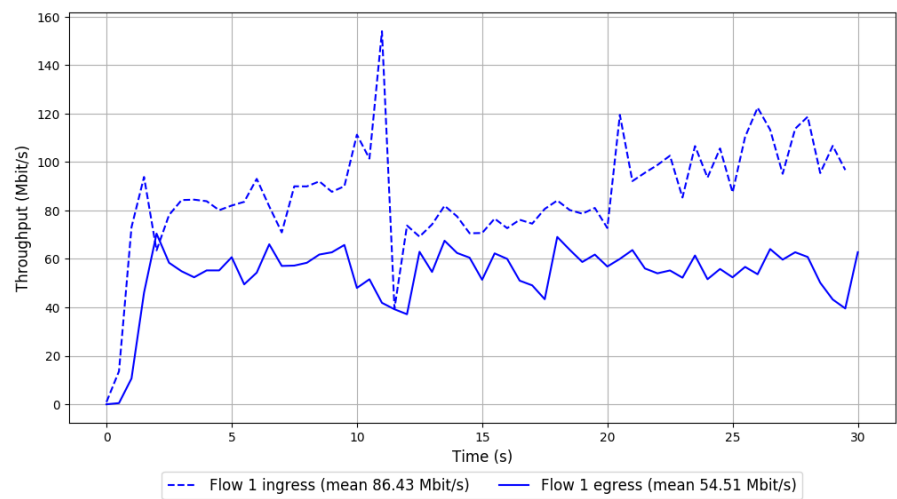Run 4: Report of Verus — Data Link

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```
Run 5: Statistics of Verus

Start at: 2018-06-18 10:05:54
End at: 2018-06-18 10:06:24
Local clock offset: 1.764 ms
Remote clock offset: -8.984 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.51 Mbit/s
95th percentile per-packet one-way delay: 43.072 ms
Loss rate: 36.90%
-- Flow 1:
Average throughput: 54.51 Mbit/s
95th percentile per-packet one-way delay: 43.072 ms
Loss rate: 36.90%
```

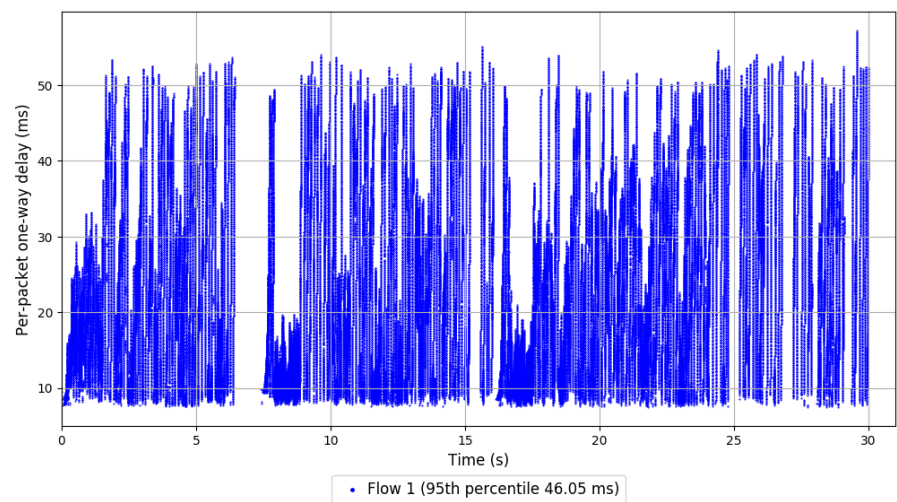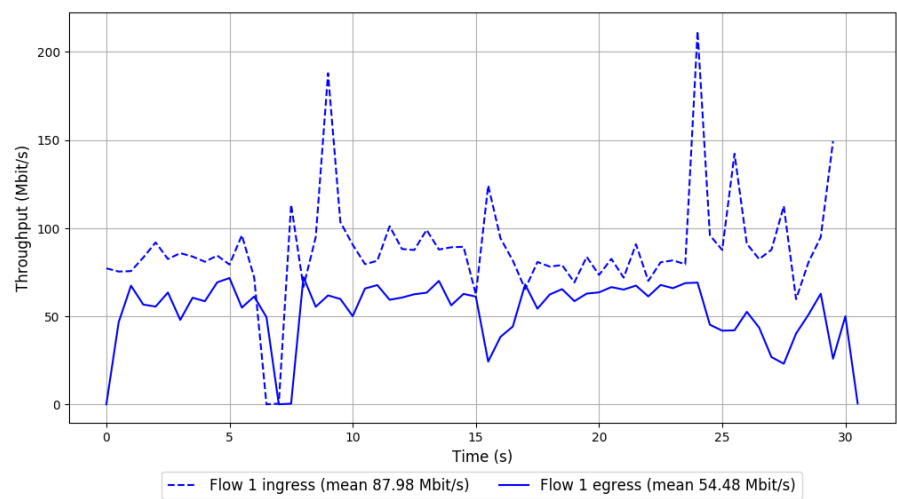Run 5: Report of Verus — Data Link

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```
Run 6: Statistics of Verus

Start at: 2018-06-18 10:24:19
End at: 2018-06-18 10:24:49
Local clock offset: 0.15 ms
Remote clock offset: -10.178 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.48 Mbit/s
95th percentile per-packet one-way delay: 46.053 ms
Loss rate: 38.00%
-- Flow 1:
Average throughput: 54.48 Mbit/s
95th percentile per-packet one-way delay: 46.053 ms
Loss rate: 38.00%
```

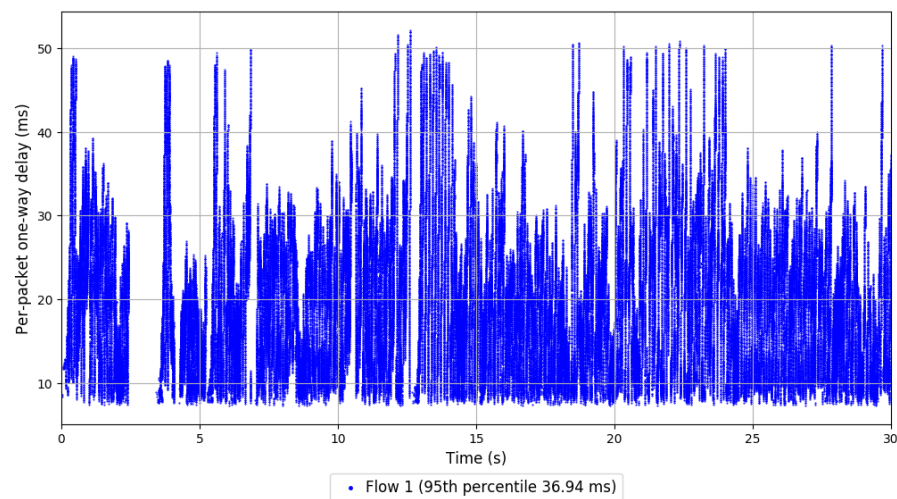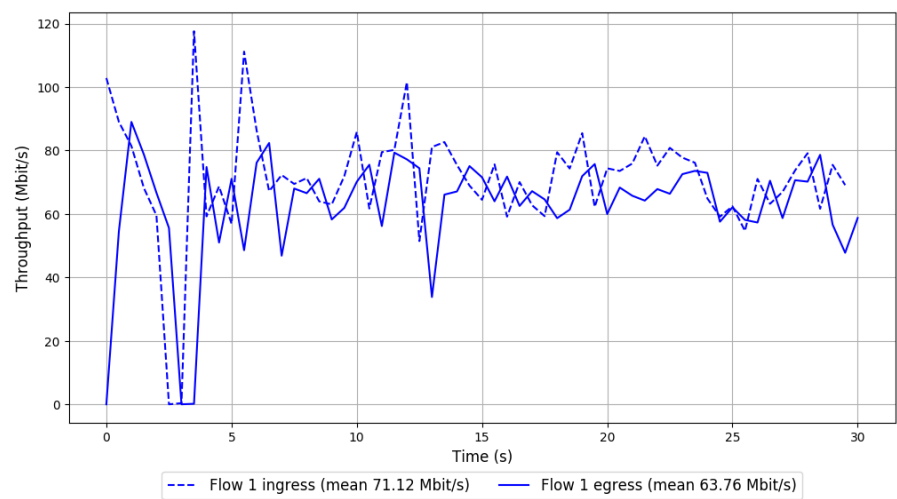Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-06-18 10:42:47
End at: 2018-06-18 10:43:17
Local clock offset: 1.027 ms
Remote clock offset: -4.548 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.76 Mbit/s
95th percentile per-packet one-way delay: 36.939 ms
Loss rate: 10.26%
-- Flow 1:
Average throughput: 63.76 Mbit/s
95th percentile per-packet one-way delay: 36.939 ms
Loss rate: 10.26%
```

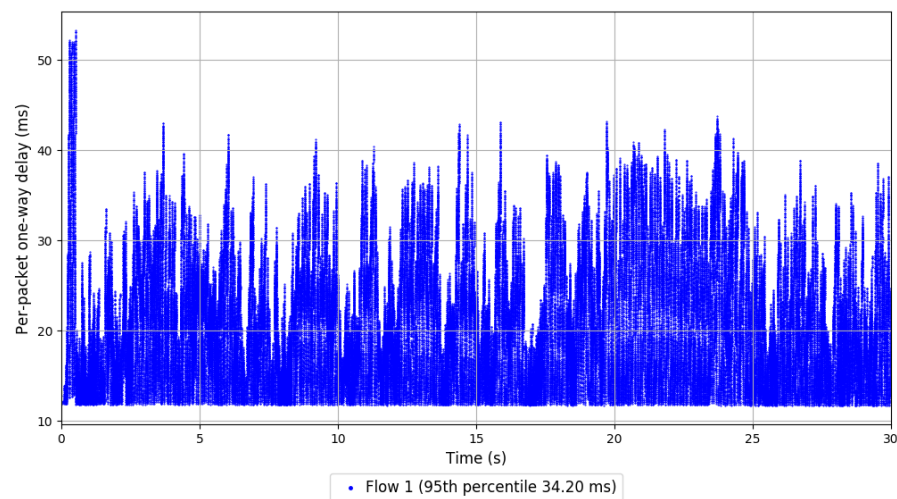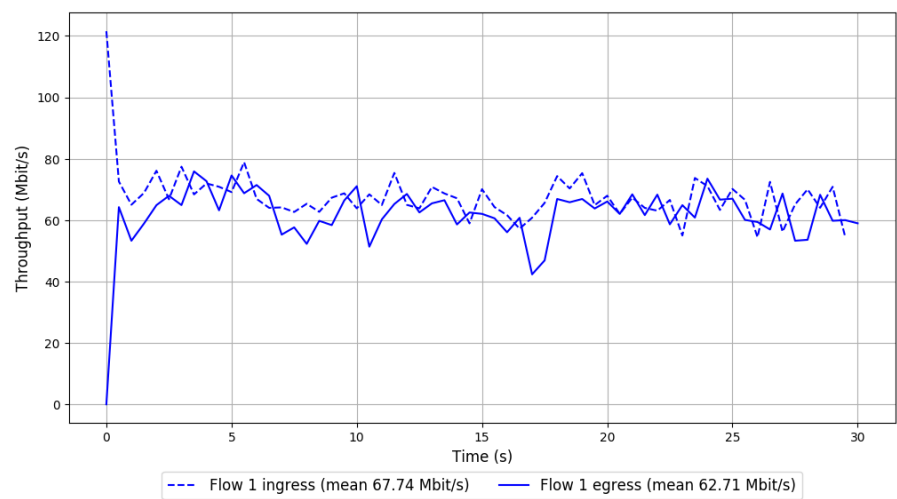## Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-06-18 11:01:07
End at: 2018-06-18 11:01:37
Local clock offset: -2.23 ms
Remote clock offset: -1.641 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.71 Mbit/s
95th percentile per-packet one-way delay: 34.205 ms
Loss rate: 7.39%
-- Flow 1:
Average throughput: 62.71 Mbit/s
95th percentile per-packet one-way delay: 34.205 ms
Loss rate: 7.39%
```

Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 67.74 Mbit/s) — — — Flow 1 egress (mean 62.71 Mbit/s)

• Flow 1 (95th percentile 34.20 ms)

```
Run 9: Statistics of Verus

Start at: 2018-06-18 11:19:15
End at: 2018-06-18 11:19:45
Local clock offset: 1.323 ms
Remote clock offset: 0.849 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.12 Mbit/s
95th percentile per-packet one-way delay: 32.883 ms
Loss rate: 6.69%
-- Flow 1:
Average throughput: 63.12 Mbit/s
95th percentile per-packet one-way delay: 32.883 ms
Loss rate: 6.69%
```
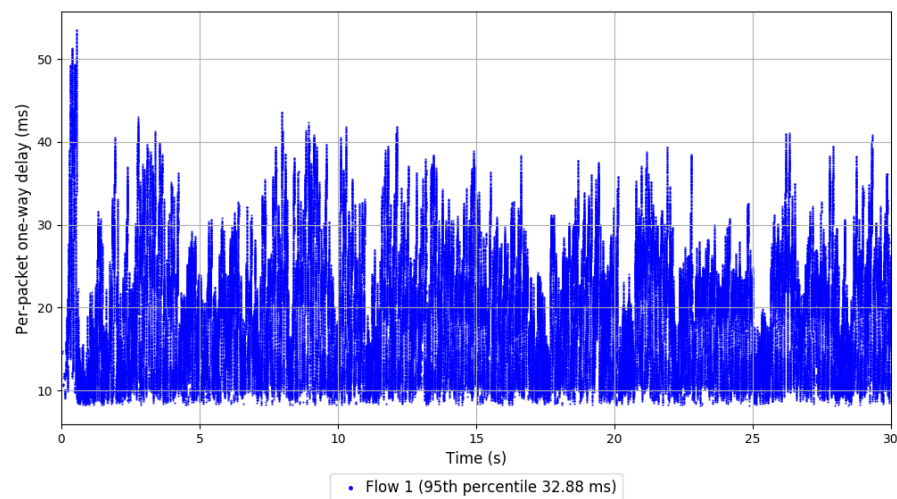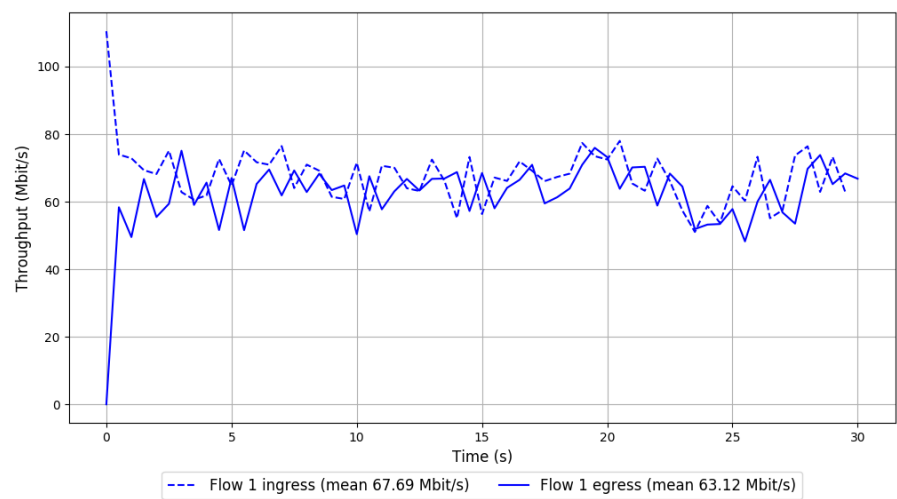
Run 9: Report of Verus — Data Link

Flow 1 ingress (mean 67.69 Mbit/s)   Flow 1 egress (mean 63.12 Mbit/s)

• Flow 1 (95th percentile 32.88 ms)

```
Run 10: Statistics of Verus

Start at: 2018-06-18 11:37:34
End at: 2018-06-18 11:38:04
Local clock offset: 1.928 ms
Remote clock offset: 0.031 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.25 Mbit/s
95th percentile per-packet one-way delay: 36.605 ms
Loss rate: 24.29%
-- Flow 1:
Average throughput: 57.25 Mbit/s
95th percentile per-packet one-way delay: 36.605 ms
Loss rate: 24.29%
```
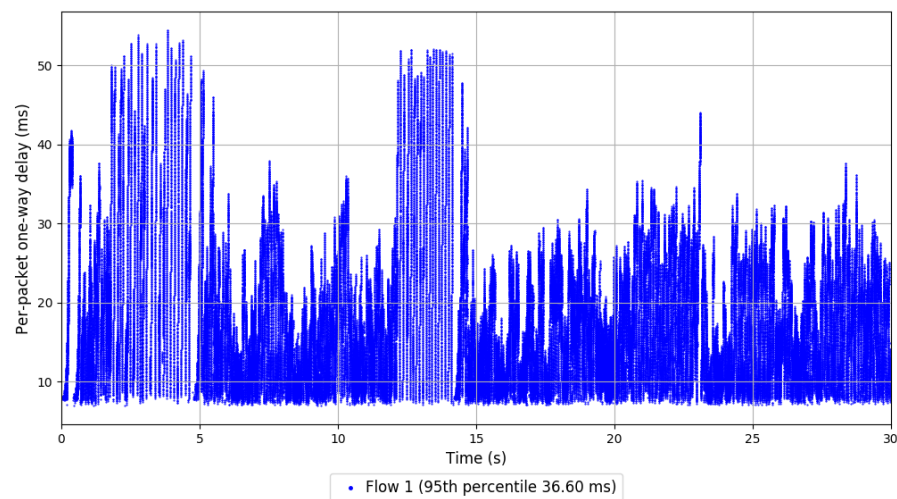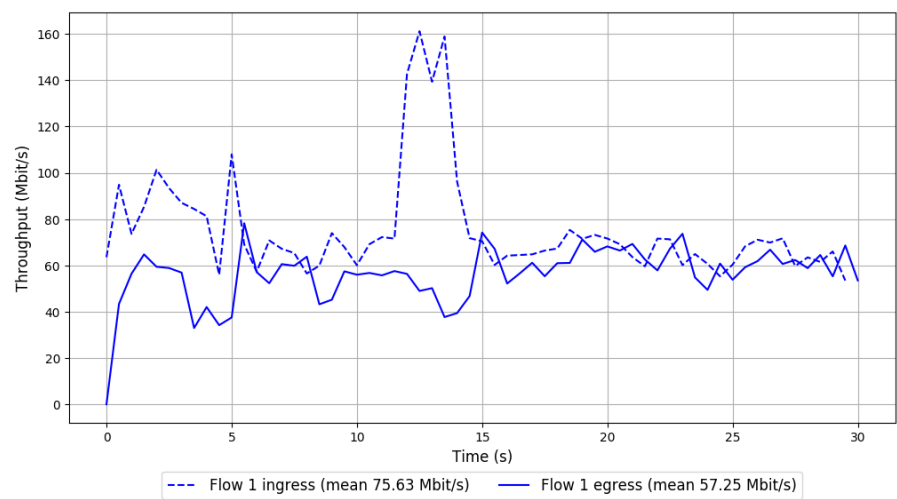
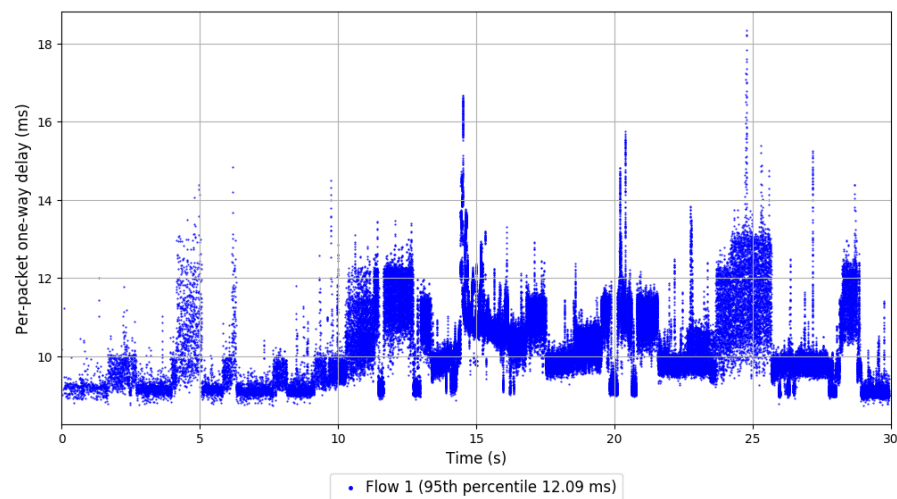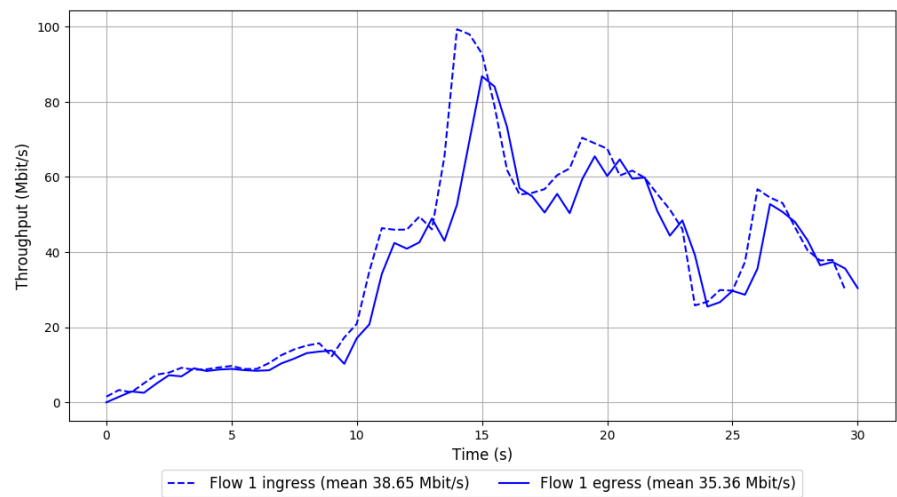Run 10: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-18 09:00:51
End at: 2018-06-18 09:01:21
Local clock offset: -9.071 ms
Remote clock offset: -11.076 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.36 Mbit/s
95th percentile per-packet one-way delay: 12.087 ms
Loss rate: 8.51%
-- Flow 1:
Average throughput: 35.36 Mbit/s
95th percentile per-packet one-way delay: 12.087 ms
Loss rate: 8.51%
```
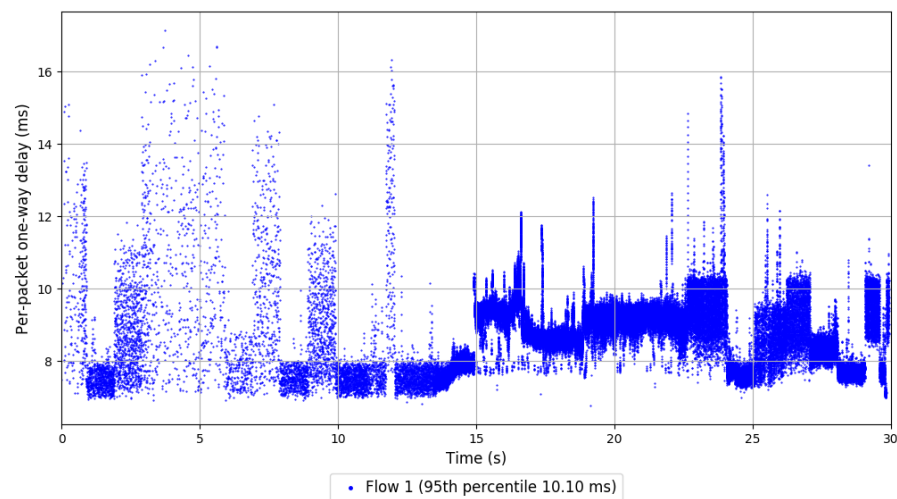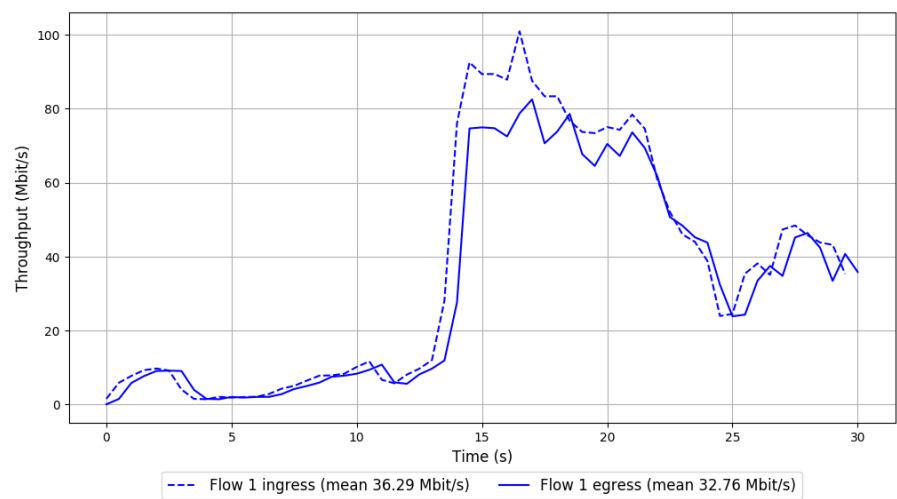
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-18 09:19:26
End at: 2018-06-18 09:19:56
Local clock offset: -1.139 ms
Remote clock offset: -7.786 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.76 Mbit/s
95th percentile per-packet one-way delay: 10.097 ms
Loss rate: 9.70%
-- Flow 1:
Average throughput: 32.76 Mbit/s
95th percentile per-packet one-way delay: 10.097 ms
Loss rate: 9.70%
```

Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-18 09:38:04
End at: 2018-06-18 09:38:34
Local clock offset: 2.308 ms
Remote clock offset: -7.821 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.01 Mbit/s
95th percentile per-packet one-way delay: 11.037 ms
Loss rate: 5.45%
-- Flow 1:
Average throughput: 15.01 Mbit/s
95th percentile per-packet one-way delay: 11.037 ms
Loss rate: 5.45%
```
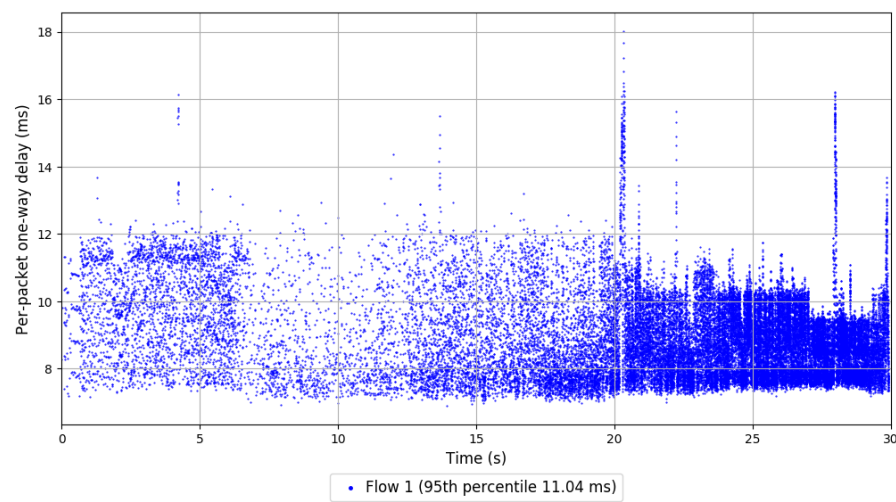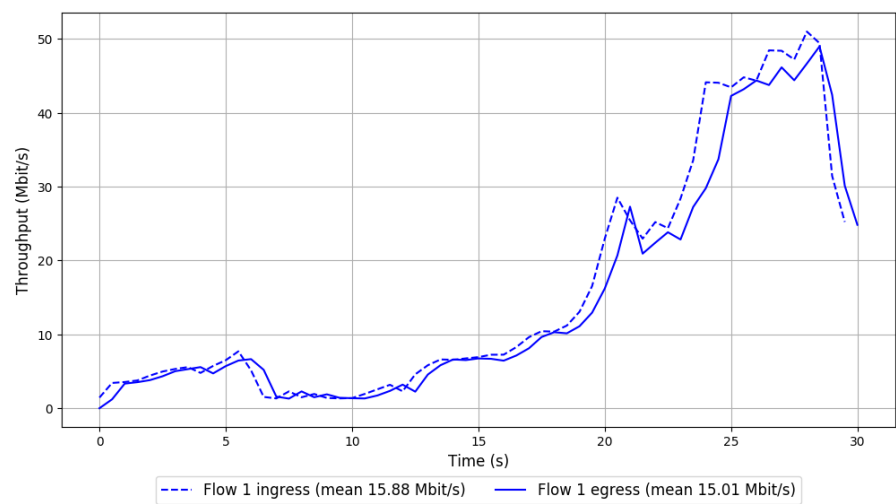
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 15.88 Mbit/s)   Flow 1 egress (mean 15.01 Mbit/s)

Flow 1 (95th percentile 11.04 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-18 09:56:45
End at: 2018-06-18 09:57:15
Local clock offset: 0.669 ms
Remote clock offset: -8.439 ms


# Below is generated by plot.py at 2018-06-18 12:05:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 13.487 ms
Loss rate: 3.21%
-- Flow 1:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 13.487 ms
Loss rate: 3.21%
```
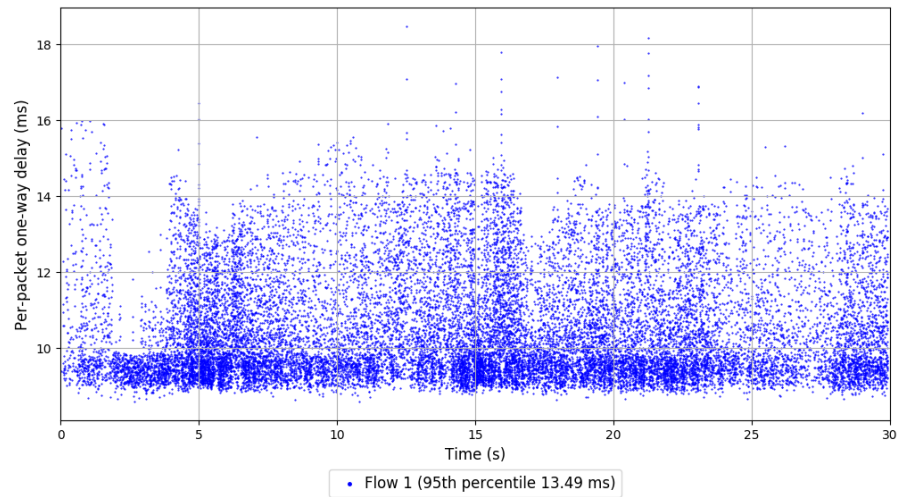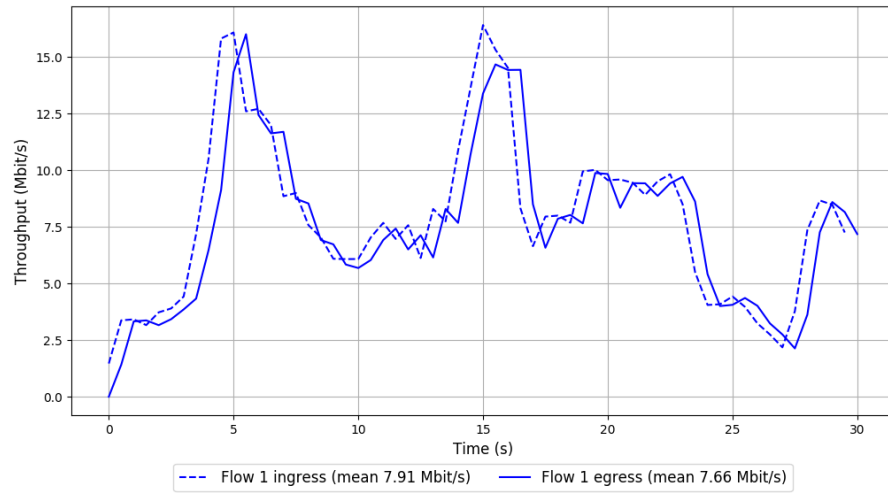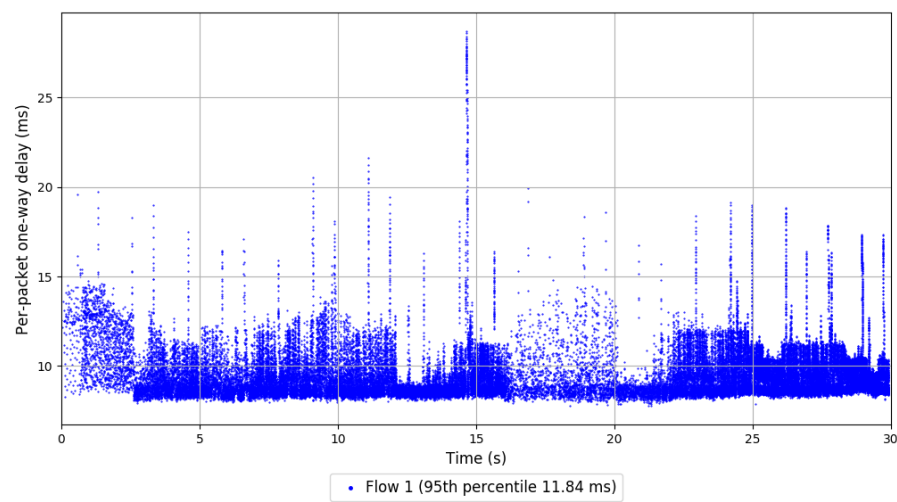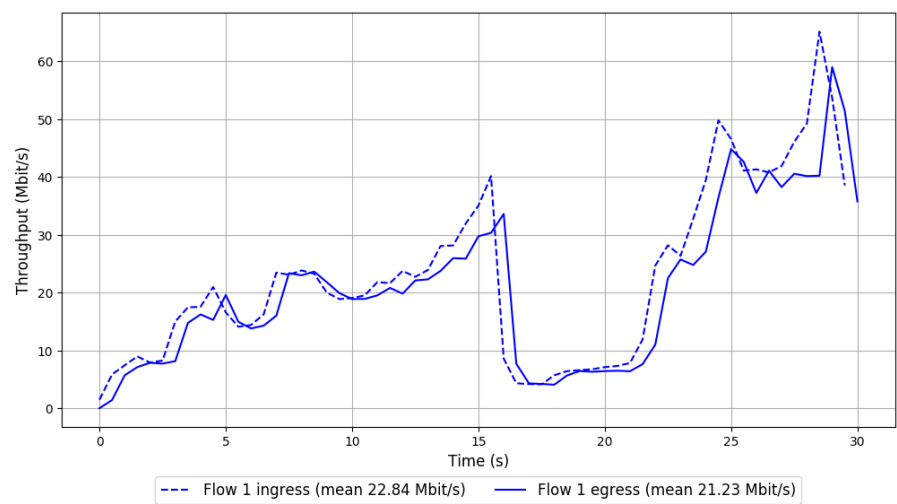
Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-18 10:15:06
End at: 2018-06-18 10:15:36
Local clock offset: -5.349 ms
Remote clock offset: -15.26 ms

# Below is generated by plot.py at 2018-06-18 12:05:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.23 Mbit/s
95th percentile per-packet one-way delay: 11.837 ms
Loss rate: 7.06%
-- Flow 1:
Average throughput: 21.23 Mbit/s
95th percentile per-packet one-way delay: 11.837 ms
Loss rate: 7.06%
```
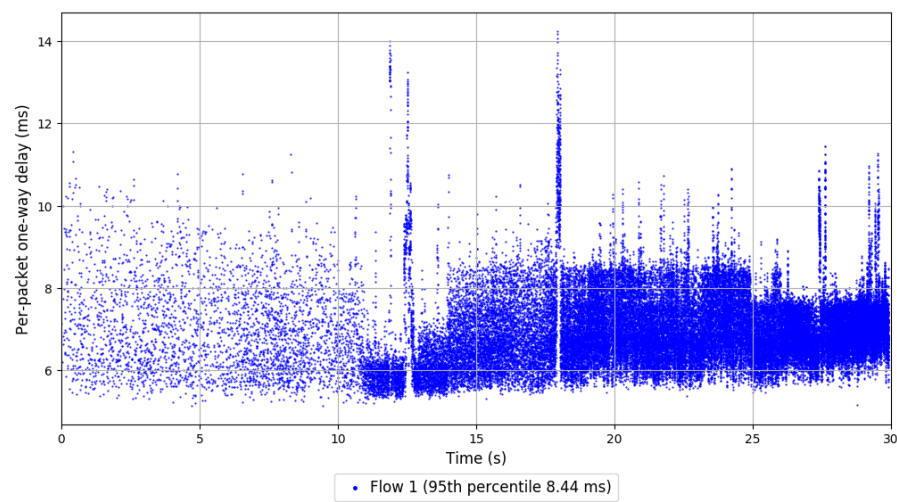
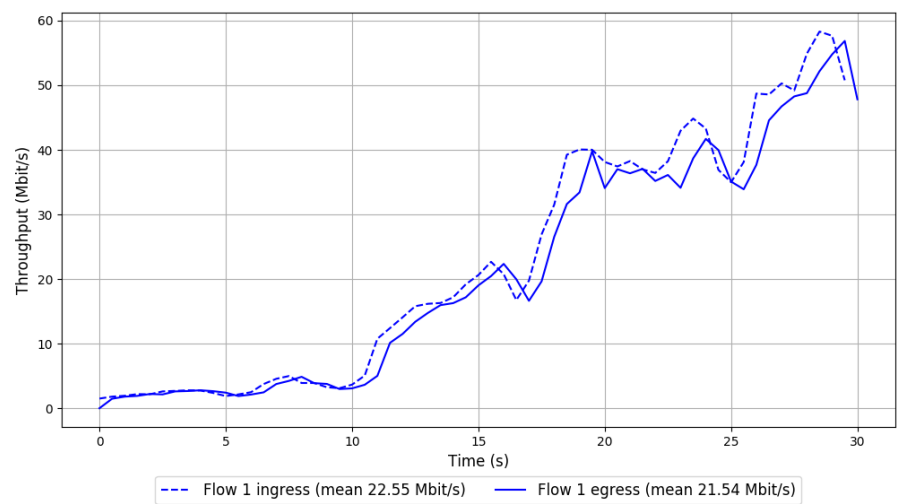Run 5: Report of PCC-Vivace — Data Link

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-18 10:33:19
End at: 2018-06-18 10:33:49
Local clock offset: 2.55 ms
Remote clock offset: -5.495 ms


# Below is generated by plot.py at 2018-06-18 12:05:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.54 Mbit/s
95th percentile per-packet one-way delay: 8.441 ms
Loss rate: 4.50%
-- Flow 1:
Average throughput: 21.54 Mbit/s
95th percentile per-packet one-way delay: 8.441 ms
Loss rate: 4.50%
```

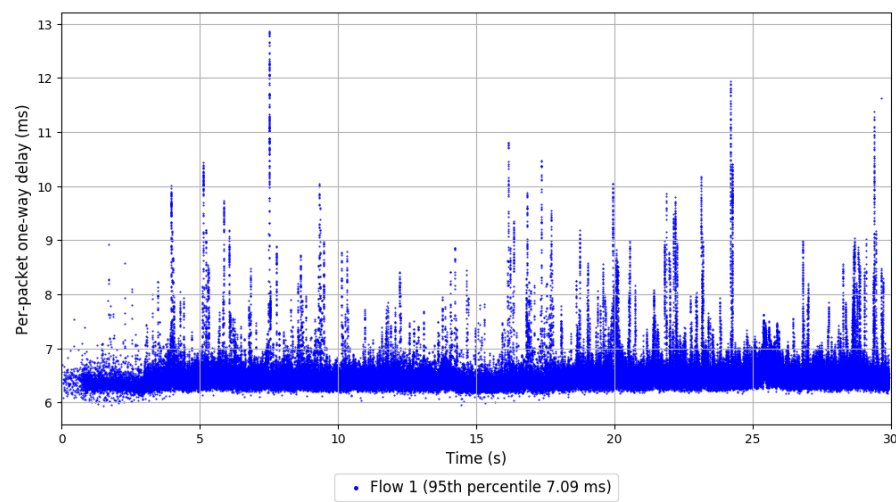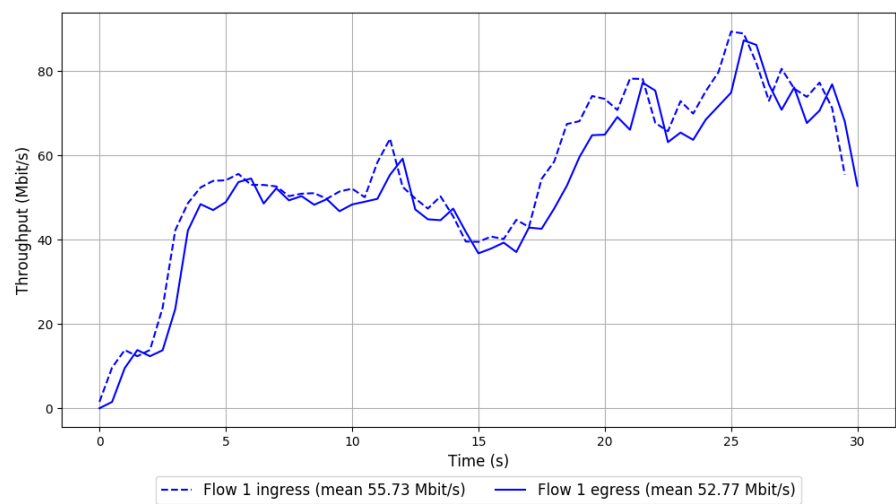Run 6: Report of PCC-Vivace — Data Link

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-18 10:51:48
End at: 2018-06-18 10:52:18
Local clock offset: 2.52 ms
Remote clock offset: -3.869 ms


# Below is generated by plot.py at 2018-06-18 12:05:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.77 Mbit/s
95th percentile per-packet one-way delay: 7.089 ms
Loss rate: 5.31%
-- Flow 1:
Average throughput: 52.77 Mbit/s
95th percentile per-packet one-way delay: 7.089 ms
Loss rate: 5.31%
```

Run 7: Report of PCC-Vivace — Data Link

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-18 11:10:07
End at: 2018-06-18 11:10:37
Local clock offset: 0.262 ms
Remote clock offset: 0.419 ms


# Below is generated by plot.py at 2018-06-18 12:05:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.63 Mbit/s
95th percentile per-packet one-way delay: 10.184 ms
Loss rate: 5.21%
-- Flow 1:
Average throughput: 47.63 Mbit/s
95th percentile per-packet one-way delay: 10.184 ms
Loss rate: 5.21%
```
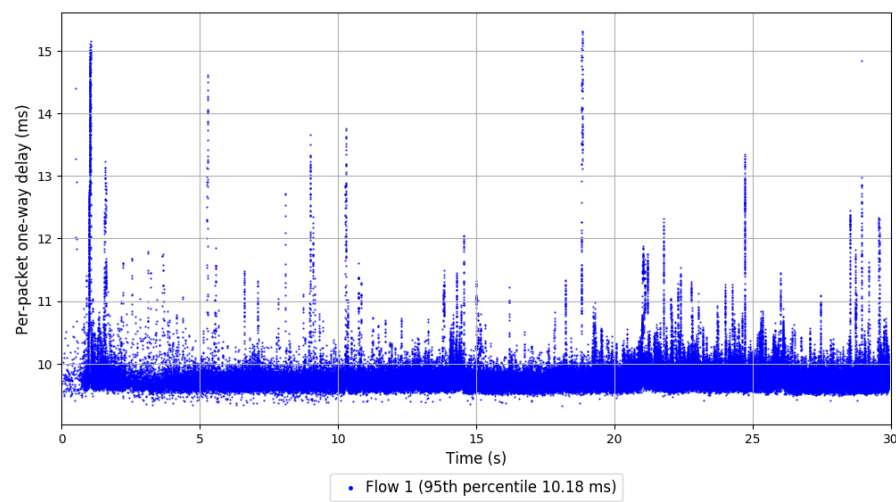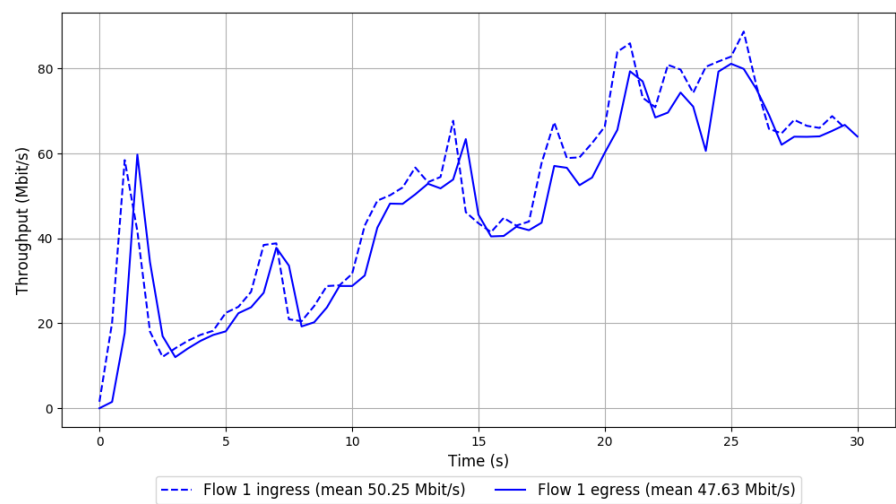
Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 50.25 Mbit/s)   Flow 1 egress (mean 47.63 Mbit/s)

• Flow 1 (95th percentile 10.18 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-18 11:28:19
End at: 2018-06-18 11:28:49
Local clock offset: -0.807 ms
Remote clock offset: 1.16 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.48 Mbit/s
95th percentile per-packet one-way delay: 12.561 ms
Loss rate: 4.80%
-- Flow 1:
Average throughput: 56.48 Mbit/s
95th percentile per-packet one-way delay: 12.561 ms
Loss rate: 4.80%
```
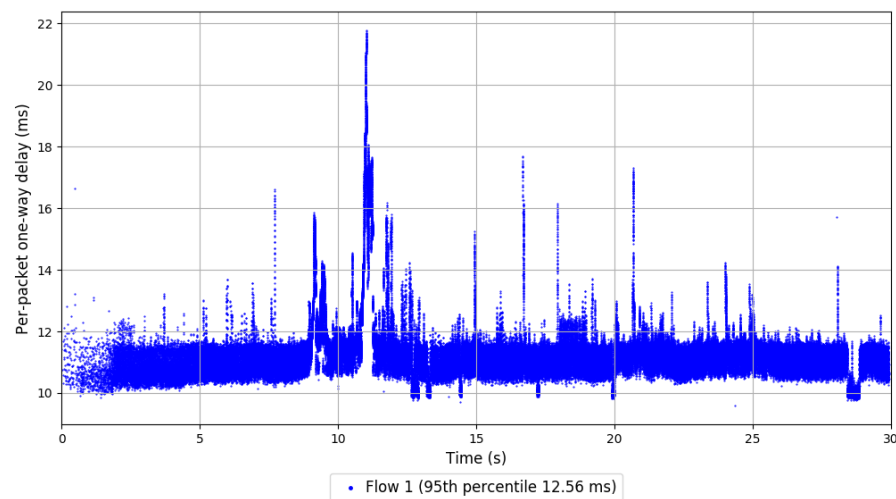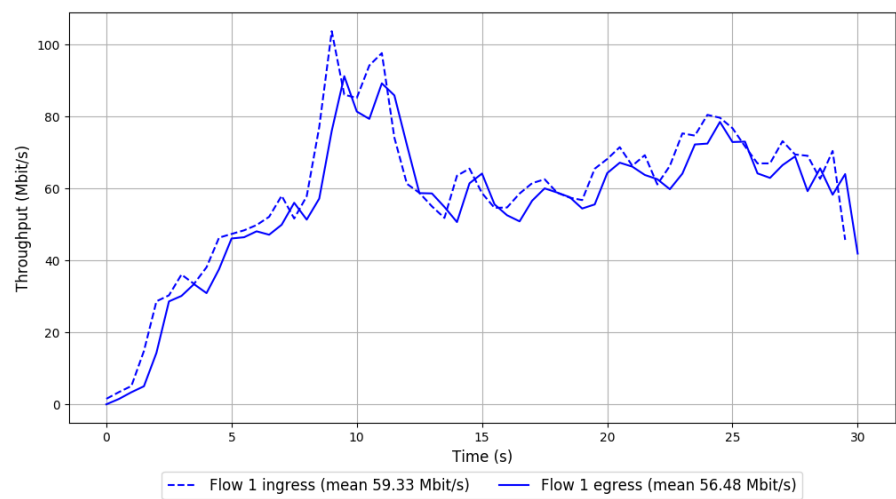
Run 9: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 59.33 Mbit/s) — — — Flow 1 egress (mean 56.48 Mbit/s)

Flow 1 (95th percentile 12.56 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-18 11:46:34
End at: 2018-06-18 11:47:04
Local clock offset: 3.337 ms
Remote clock offset: -2.207 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.81 Mbit/s
95th percentile per-packet one-way delay: 6.425 ms
Loss rate: 5.15%
-- Flow 1:
Average throughput: 28.81 Mbit/s
95th percentile per-packet one-way delay: 6.425 ms
Loss rate: 5.15%
```
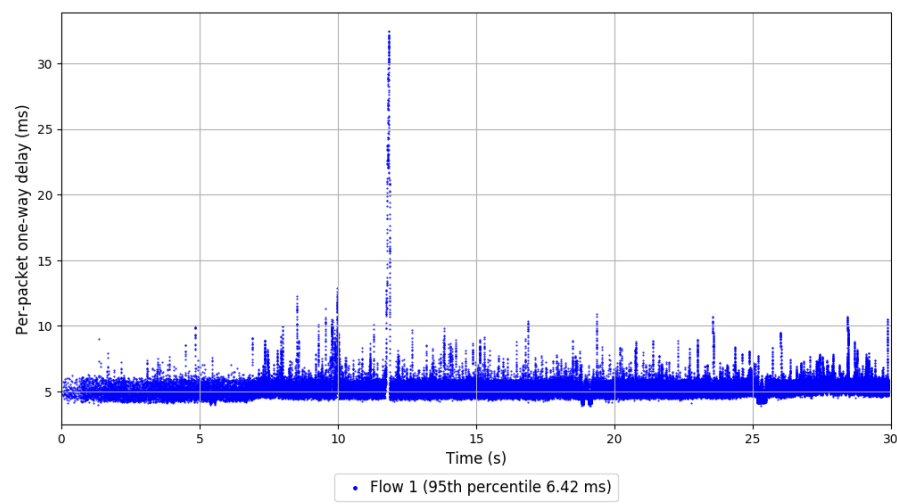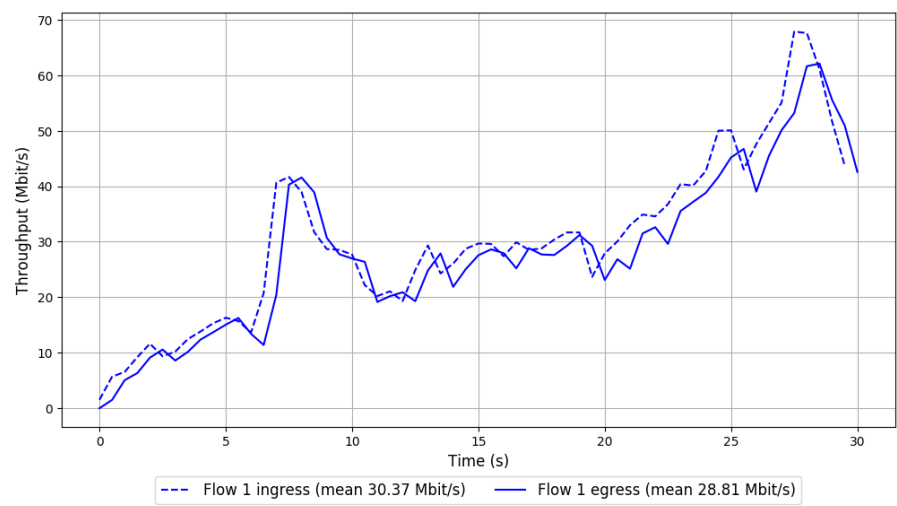
Run 10: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 30.37 Mbit/s) --- Flow 1 egress (mean 28.81 Mbit/s)
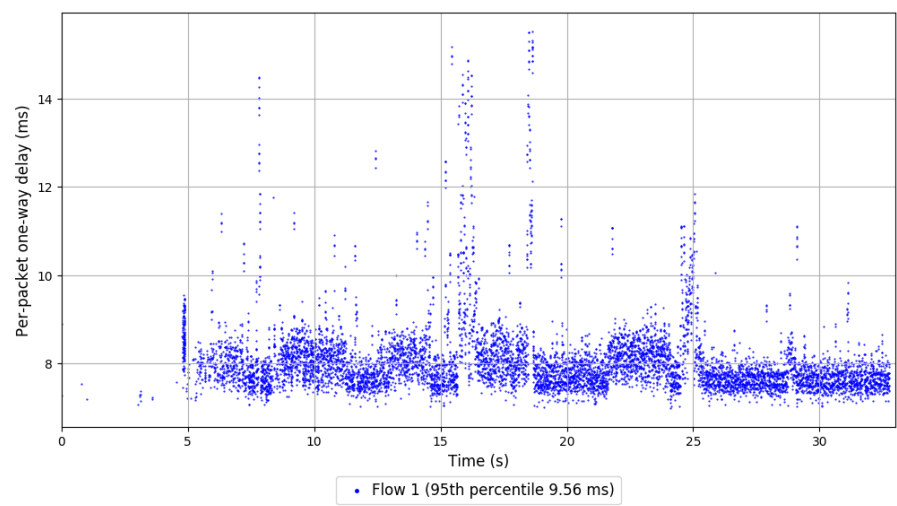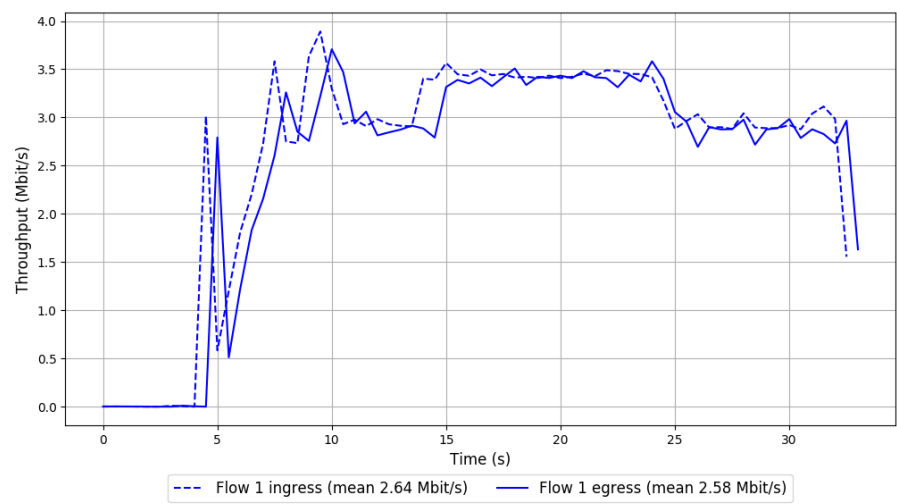

Flow 1 (95th percentile 6.42 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2018-06-18 08:57:34
End at: 2018-06-18 08:58:04
Local clock offset: -0.224 ms
Remote clock offset: -3.088 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 9.559 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 9.559 ms
Loss rate: 2.27%
```
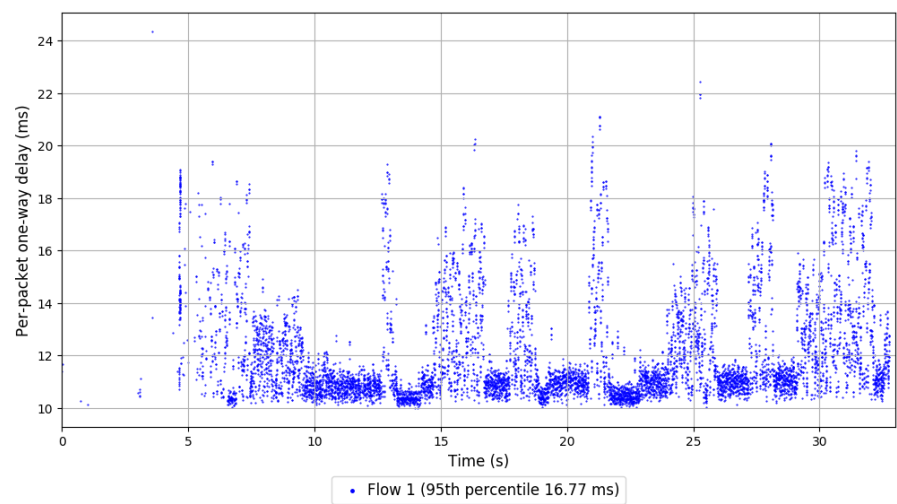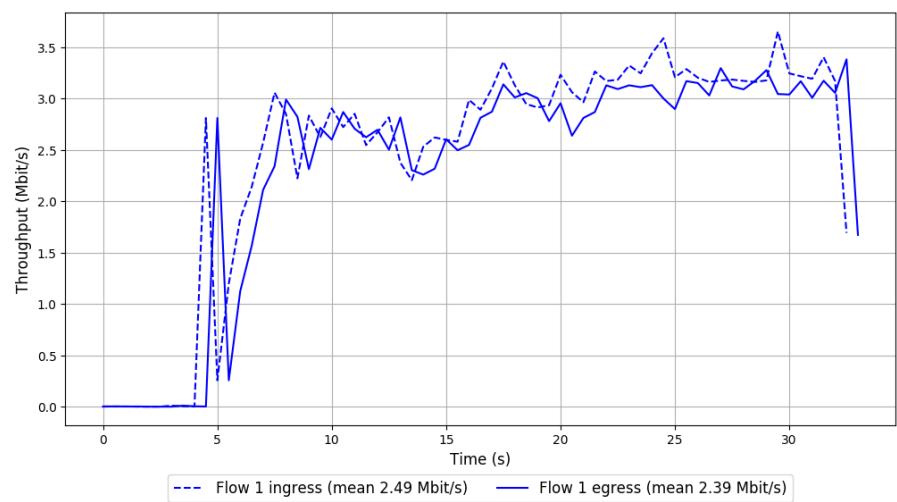
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-06-18 09:16:04
End at: 2018-06-18 09:16:34
Local clock offset: -1.792 ms
Remote clock offset: -4.067 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 16.771 ms
Loss rate: 3.80%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 16.771 ms
Loss rate: 3.80%
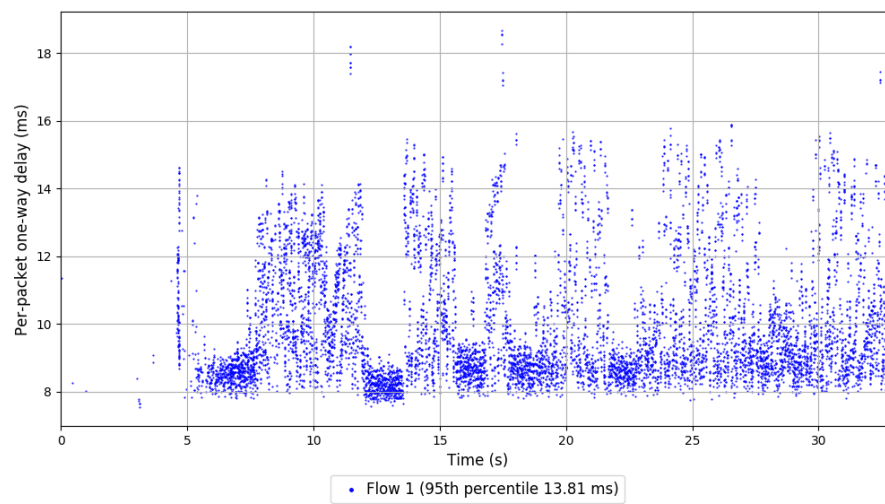```

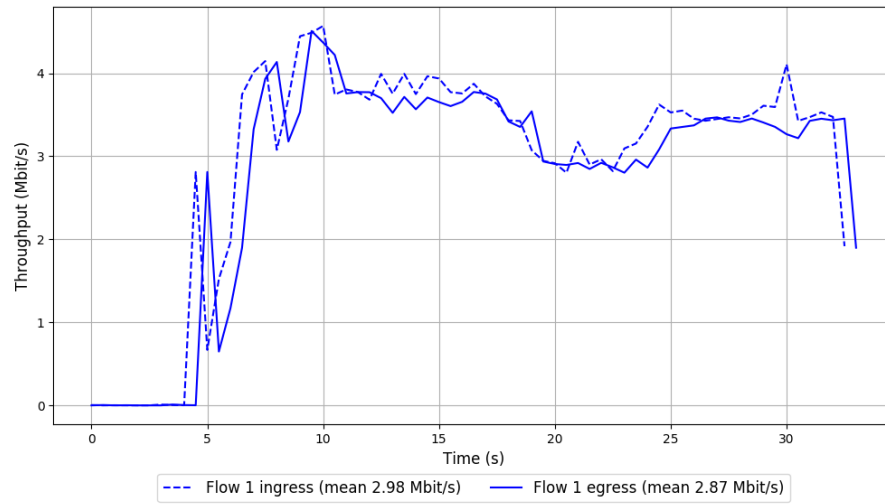Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-06-18 09:34:41
End at: 2018-06-18 09:35:11
Local clock offset: -0.591 ms
Remote clock offset: -7.975 ms

Below is generated by plot.py at 2018-06-18 12:05:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 13.809 ms
Loss rate: 3.62%
-- Flow 1:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 13.809 ms
Loss rate: 3.62%
```
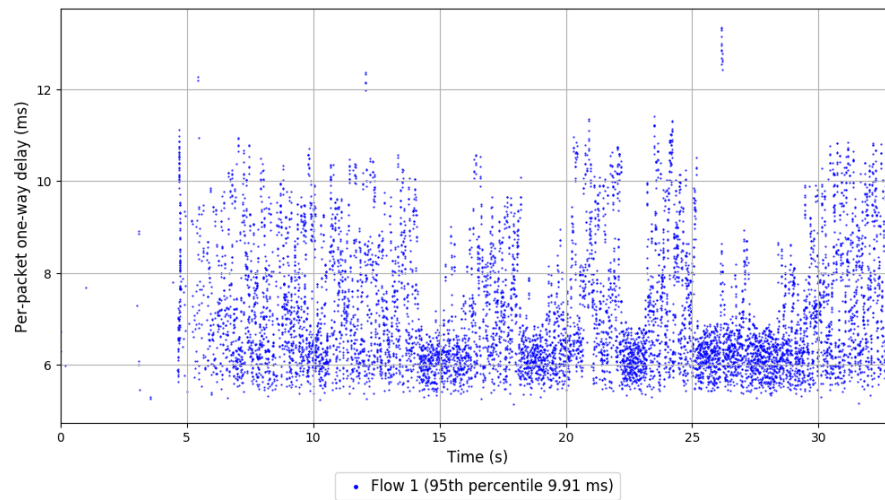
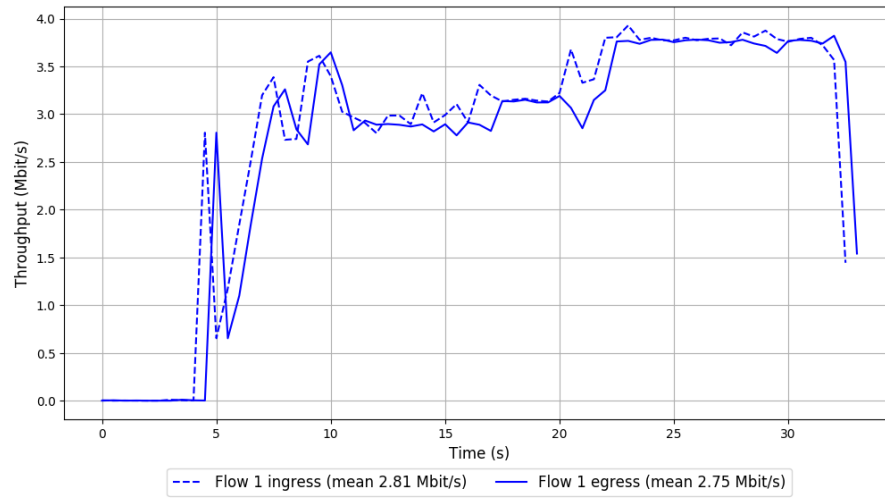Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-06-18 09:53:20
End at: 2018-06-18 09:53:50
Local clock offset: 4.272 ms
Remote clock offset: -8.549 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 9.909 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 9.909 ms
Loss rate: 2.21%
```

Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.81 Mbit/s)   Flow 1 egress (mean 2.75 Mbit/s)
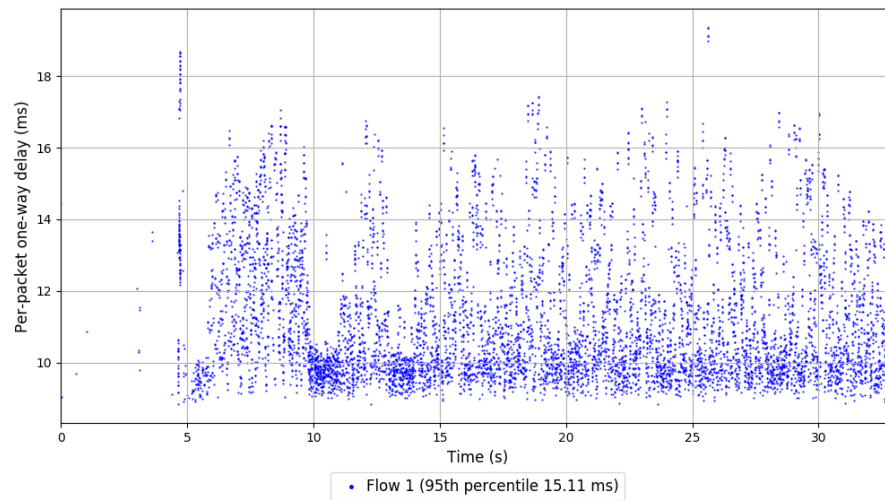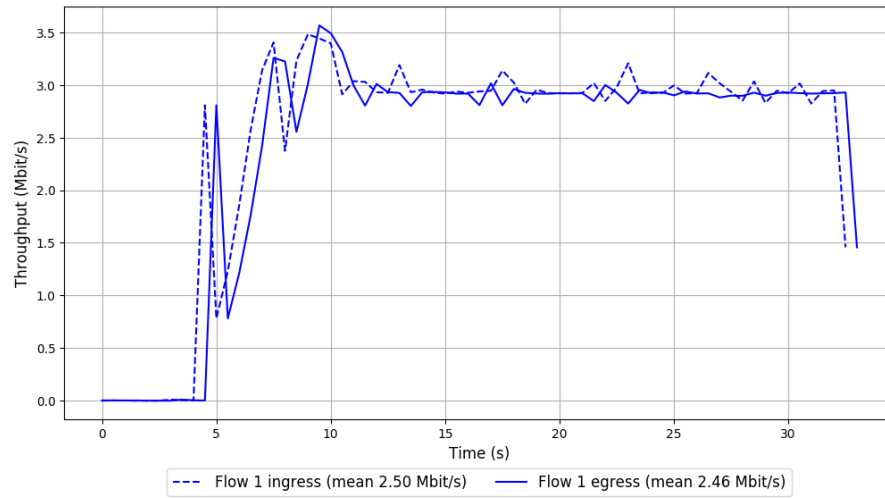

Flow 1 (95th percentile 9.91 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2018-06-18 10:11:47
End at: 2018-06-18 10:12:17
Local clock offset: -0.253 ms
Remote clock offset: -9.145 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 15.109 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 15.109 ms
Loss rate: 1.36%
```

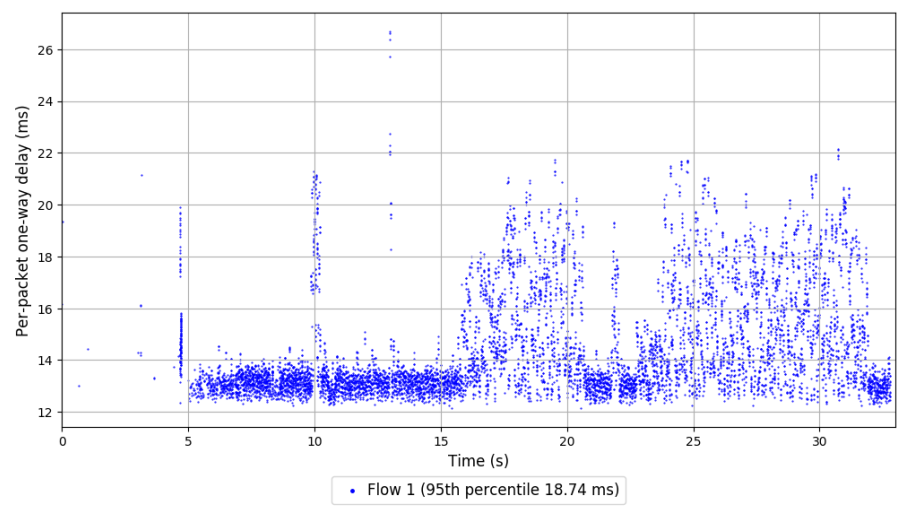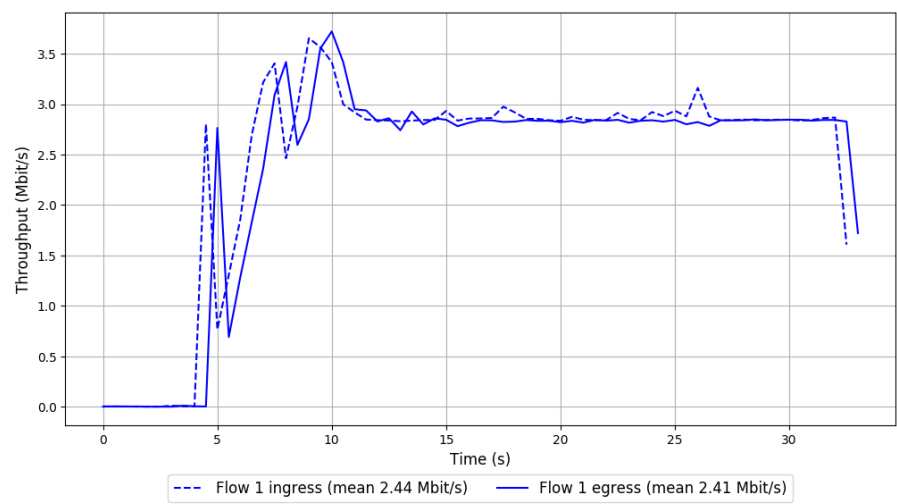## Run 5: Report of WebRTC media — Data Link

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```
Run 6: Statistics of WebRTC media

Start at: 2018-06-18 10:30:01
End at: 2018-06-18 10:30:31
Local clock offset: -3.843 ms
Remote clock offset: -6.252 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 18.744 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 18.744 ms
Loss rate: 1.24%
```

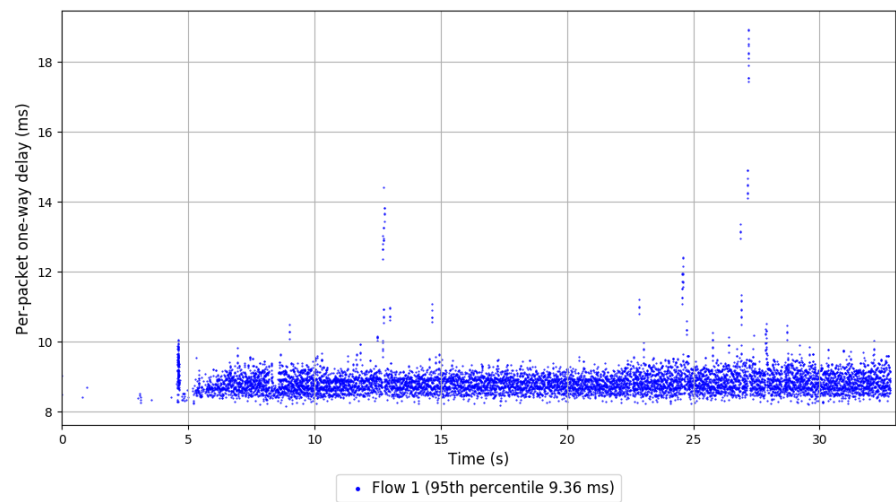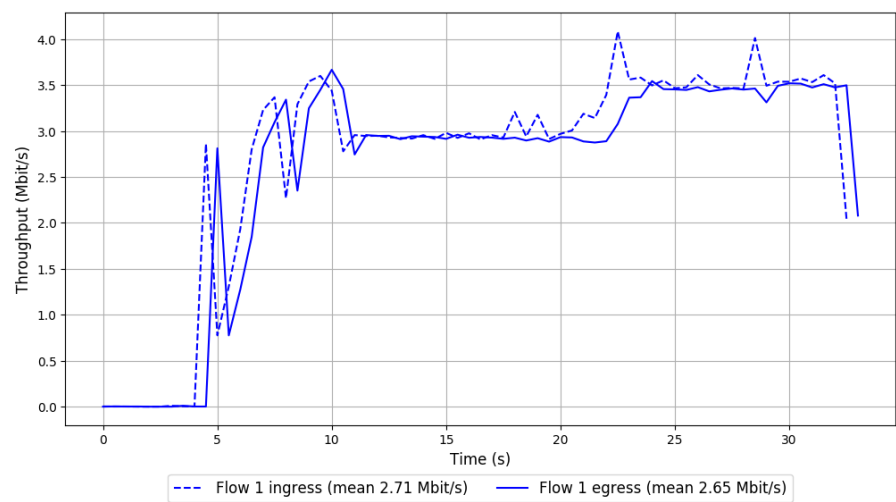Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-06-18 10:48:25
End at: 2018-06-18 10:48:55
Local clock offset: 0.716 ms
Remote clock offset: -3.583 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 9.364 ms
Loss rate: 2.45%
-- Flow 1:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 9.364 ms
Loss rate: 2.45%
```

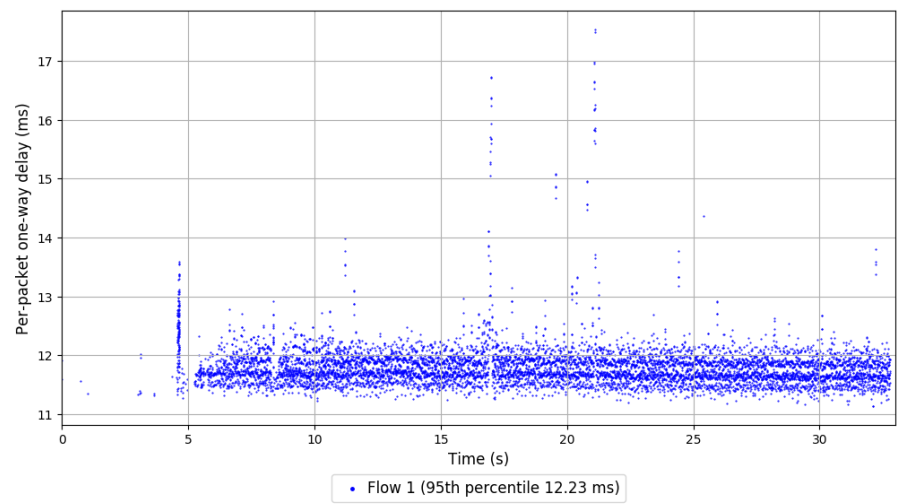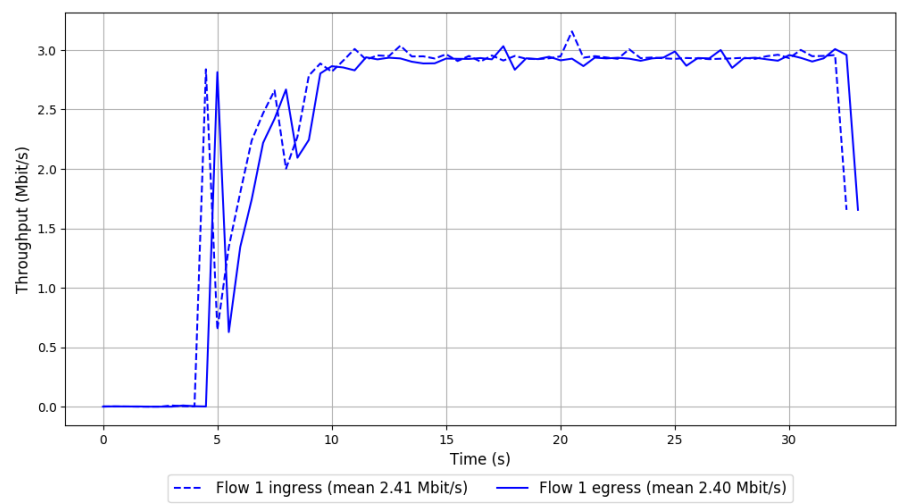Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-06-18 11:06:46
End at: 2018-06-18 11:07:16
Local clock offset: -1.965 ms
Remote clock offset: -0.461 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 12.231 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 12.231 ms
Loss rate: 0.68%
```

Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-06-18 11:25:00
End at: 2018-06-18 11:25:30
Local clock offset: -1.636 ms
Remote clock offset: 1.938 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 15.106 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 15.106 ms
Loss rate: 0.50%
```
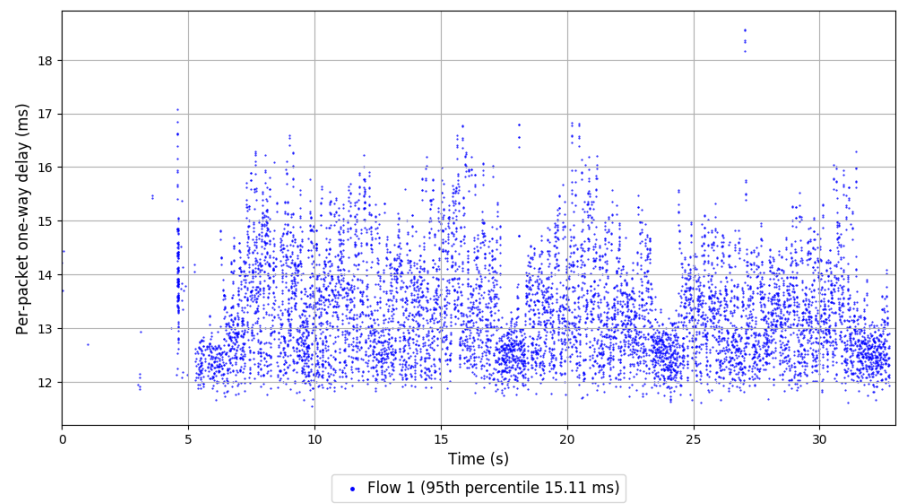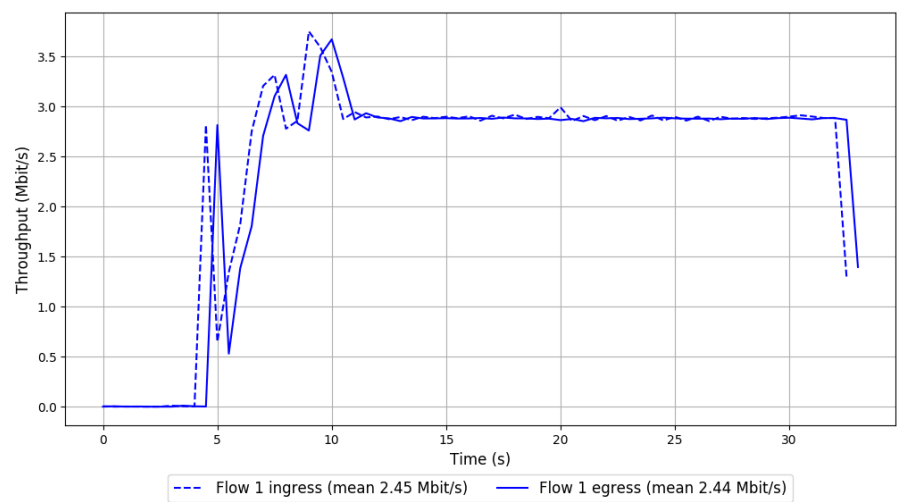
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-06-18 11:43:16
End at: 2018-06-18 11:43:46
Local clock offset: 2.57 ms
Remote clock offset: -1.973 ms


# Below is generated by plot.py at 2018-06-18 12:05:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 7.441 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 7.441 ms
Loss rate: 0.34%
```

Run 10: Report of WebRTC media — Data Link