Pantheon Report

Generated at 2018-05-22 01:23:35 (UTC).

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

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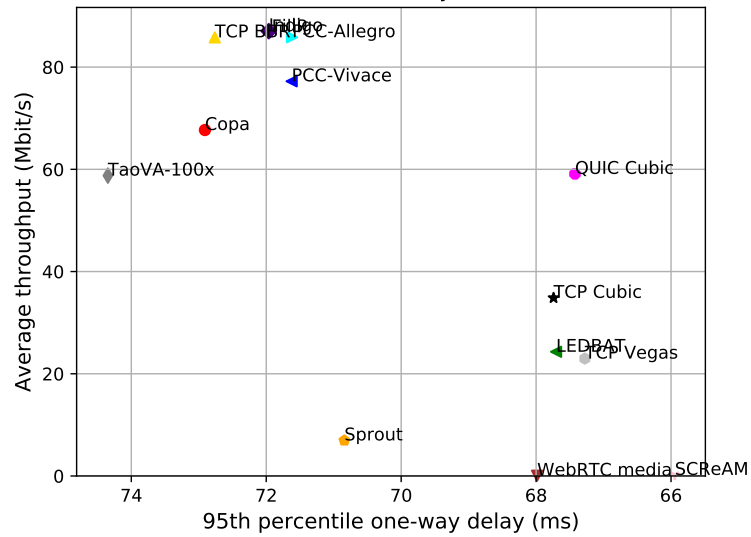
Each test lasted for 30 seconds running 1 flow.

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

NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.
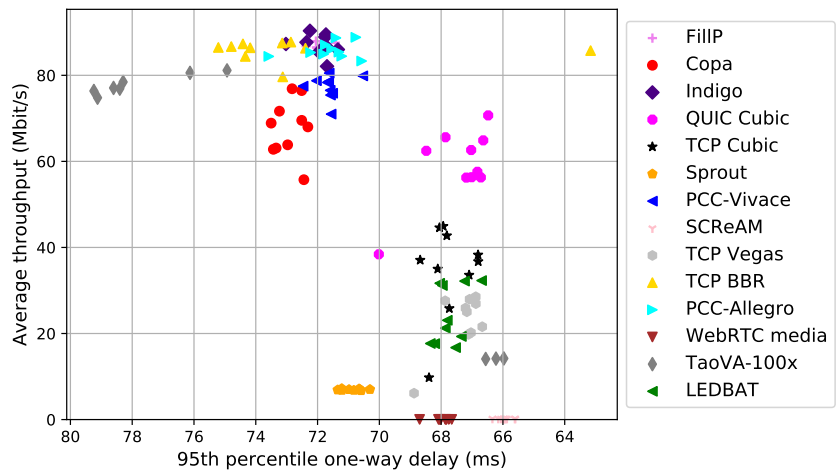
```
Git summary:
branch: master @ 2d1d4407e851ba626e5ca4626a306105793df686
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
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
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS Korea Ethernet to China Ethernet, 10 runs of 30s each per scheme (mean of all runs by scheme)

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

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	85.82	72.76	4.48
Copa	10	67.69	72.91	2.91
TCP Cubic	10	34.85	67.74	0.18
FillP	10	86.82	71.92	11.24
Indigo	10	87.03	71.96	4.80
LEDBAT	10	24.30	67.70	0.09
PCC-Allegro	10	85.85	71.62	0.99
PCC-Expr	0	N/A	N/A	N/A
QUIC Cubic	10	59.11	67.42	0.80
SCReAM	10	0.21	65.94	0.00
Sprout	10	6.96	70.84	1.67
TaoVA-100x	10	58.77	74.35	1.90
TCP Vegas	10	22.97	67.28	0.16
Verus	0	N/A	N/A	N/A
PCC-Vivace	10	77.22	71.62	0.20
WebRTC media	10	0.05	67.99	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2018-05-21 21:42:16
End at: 2018-05-21 21:42:46
Local clock offset: 0.167 ms
Remote clock offset: 0.012 ms


# Below is generated by plot.py at 2018-05-22 01:09:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.50 Mbit/s
95th percentile per-packet one-way delay: 73.143 ms
Loss rate: 4.75%
-- Flow 1:
Average throughput: 87.50 Mbit/s
95th percentile per-packet one-way delay: 73.143 ms
Loss rate: 4.75%
```
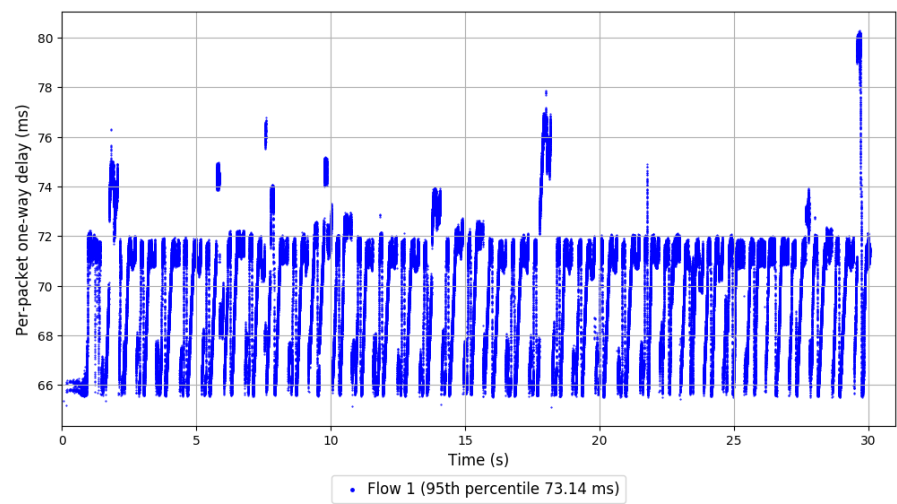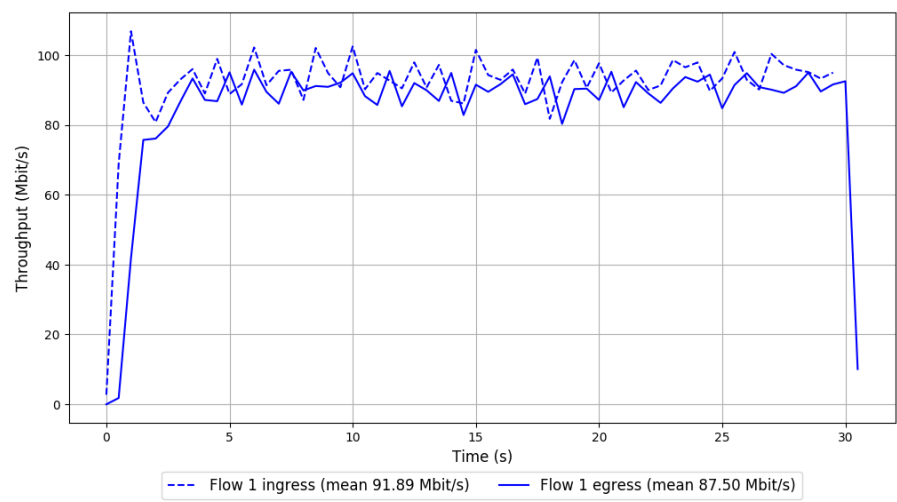
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-05-21 22:02:52
End at: 2018-05-21 22:03:22
Local clock offset: 1.83 ms
Remote clock offset: -0.853 ms


# Below is generated by plot.py at 2018-05-22 01:09:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.39 Mbit/s
95th percentile per-packet one-way delay: 74.338 ms
Loss rate: 4.04%
-- Flow 1:
Average throughput: 84.39 Mbit/s
95th percentile per-packet one-way delay: 74.338 ms
Loss rate: 4.04%
```
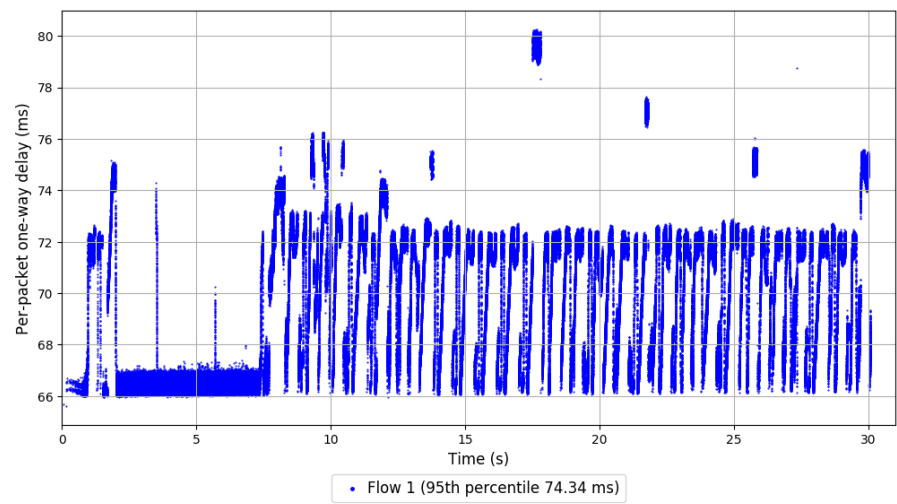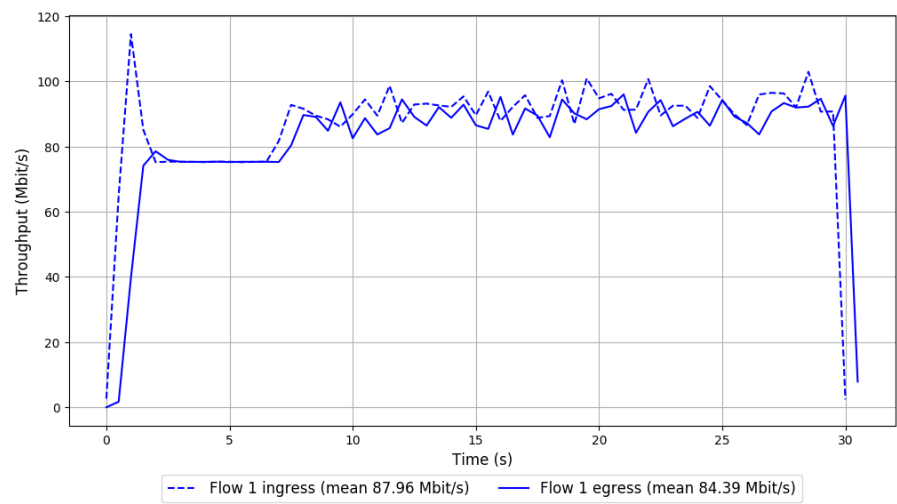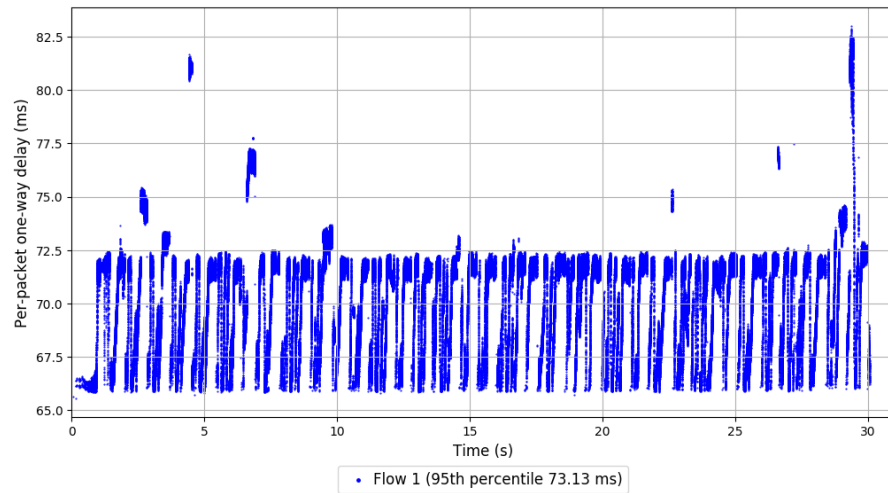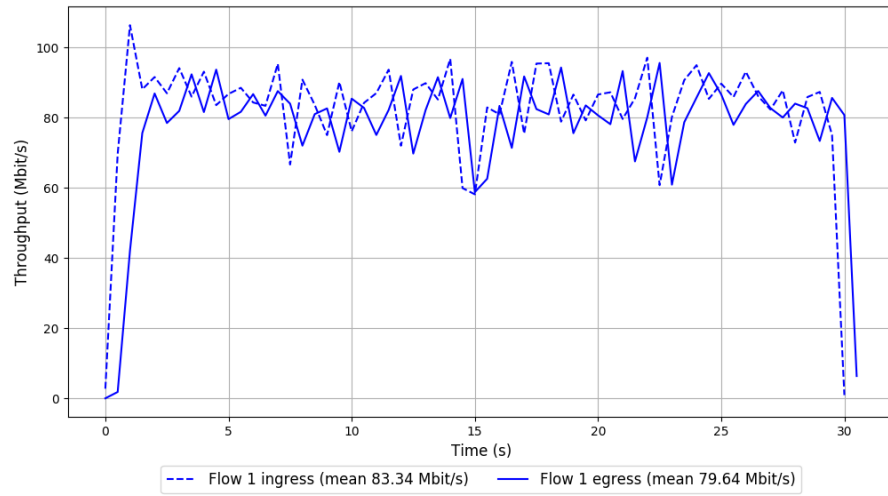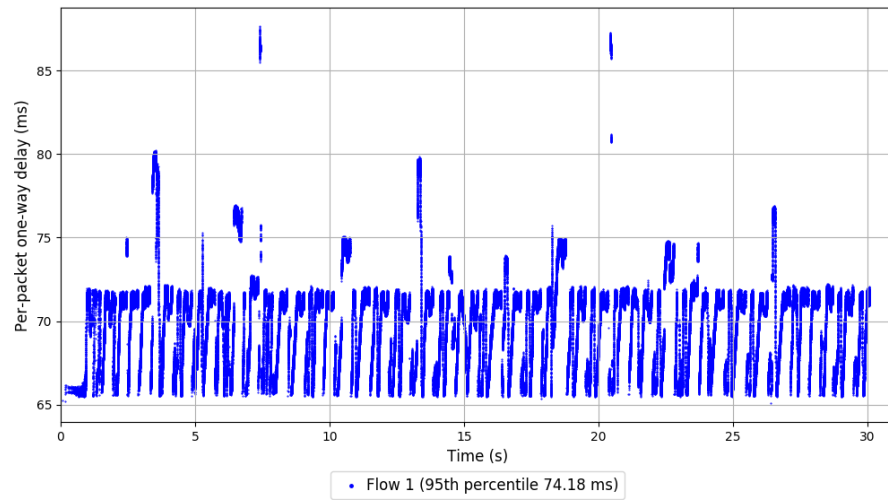
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 87.96 Mbit/s)   Flow 1 egress (mean 84.39 Mbit/s)

Flow 1 (95th percentile 74.34 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2018-05-21 22:23:27
End at: 2018-05-21 22:23:57
Local clock offset: 4.715 ms
Remote clock offset: -1.421 ms


# Below is generated by plot.py at 2018-05-22 01:09:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.64 Mbit/s
95th percentile per-packet one-way delay: 73.128 ms
Loss rate: 4.43%
-- Flow 1:
Average throughput: 79.64 Mbit/s
95th percentile per-packet one-way delay: 73.128 ms
Loss rate: 4.43%
```

Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 83.34 Mbit/s)   Flow 1 egress (mean 79.64 Mbit/s)

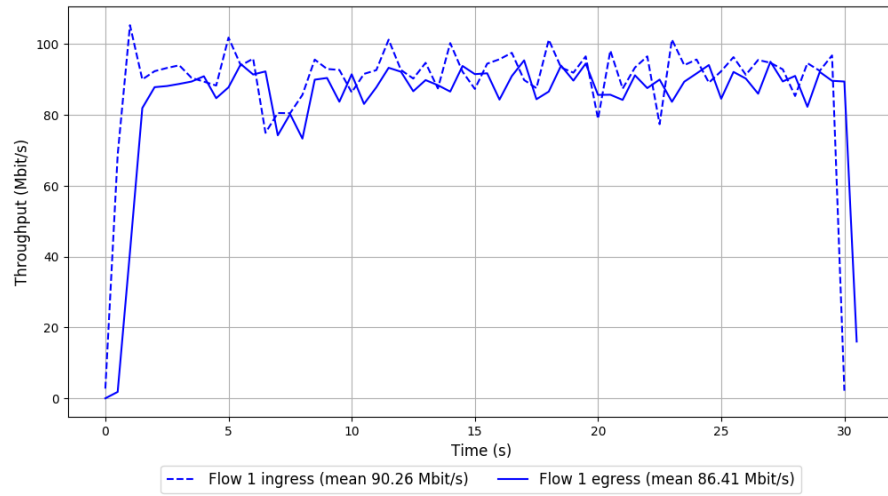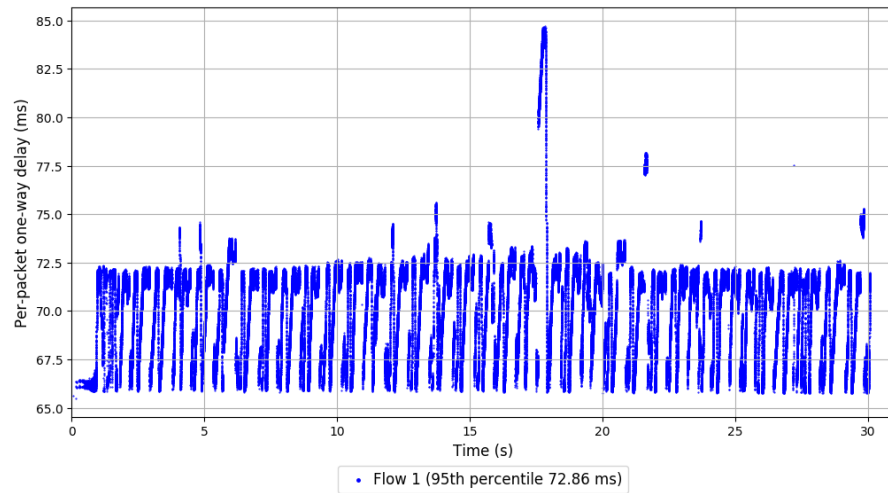Flow 1 (95th percentile 73.13 ms)

9

```
Run 4: Statistics of TCP BBR

Start at: 2018-05-21 22:44:07
End at: 2018-05-21 22:44:37
Local clock offset: 4.605 ms
Remote clock offset: -0.806 ms


# Below is generated by plot.py at 2018-05-22 01:09:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.41 Mbit/s
95th percentile per-packet one-way delay: 74.180 ms
Loss rate: 4.25%
-- Flow 1:
Average throughput: 86.41 Mbit/s
95th percentile per-packet one-way delay: 74.180 ms
Loss rate: 4.25%
```

Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 90.26 Mbit/s)   Flow 1 egress (mean 86.41 Mbit/s)

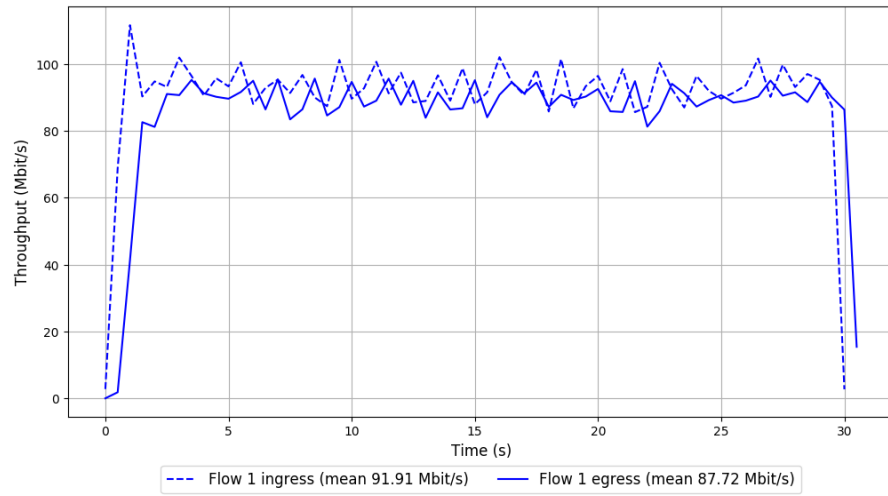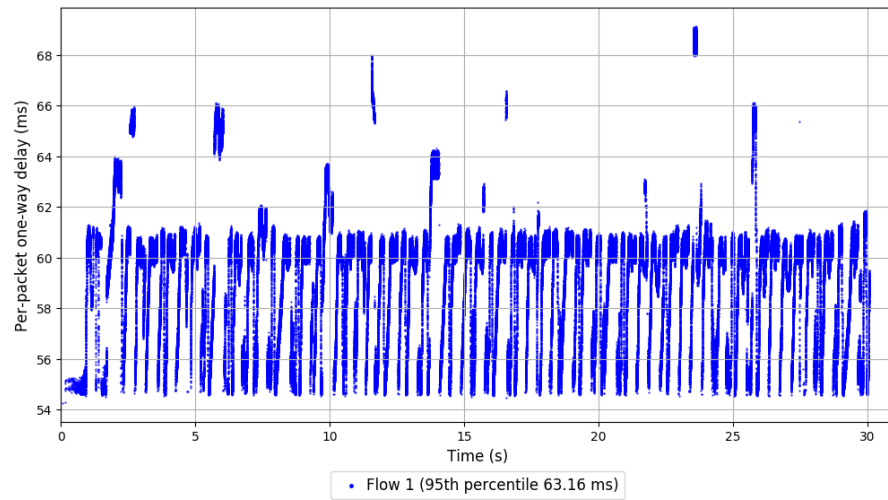Flow 1 (95th percentile 74.18 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2018-05-21 23:04:48
End at: 2018-05-21 23:05:18
Local clock offset: 1.308 ms
Remote clock offset: -0.734 ms


# Below is generated by plot.py at 2018-05-22 01:09:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.72 Mbit/s
95th percentile per-packet one-way delay: 72.865 ms
Loss rate: 4.54%
-- Flow 1:
Average throughput: 87.72 Mbit/s
95th percentile per-packet one-way delay: 72.865 ms
Loss rate: 4.54%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 91.91 Mbit/s)   Flow 1 egress (mean 87.72 Mbit/s)

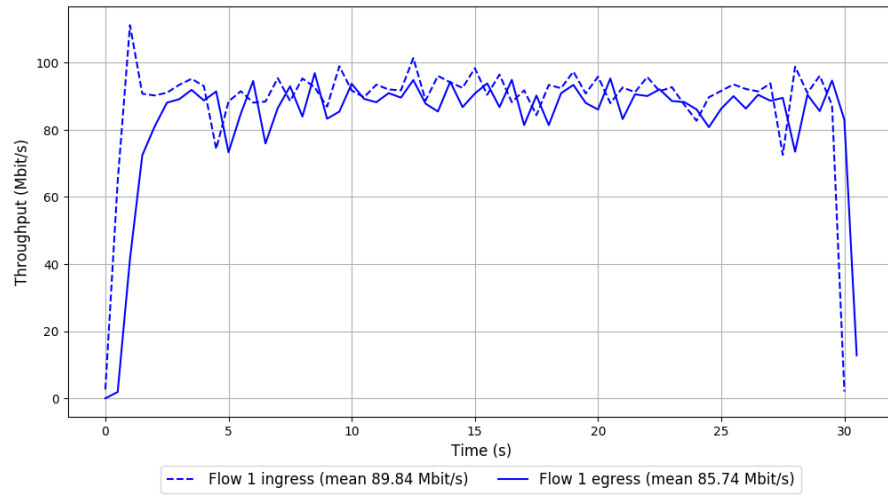Flow 1 (95th percentile 72.86 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-05-21 23:25:28
End at: 2018-05-21 23:25:58
Local clock offset: -1.107 ms
Remote clock offset: -12.026 ms


# Below is generated by plot.py at 2018-05-22 01:09:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.74 Mbit/s
95th percentile per-packet one-way delay: 63.162 ms
Loss rate: 4.54%
-- Flow 1:
Average throughput: 85.74 Mbit/s
95th percentile per-packet one-way delay: 63.162 ms
Loss rate: 4.54%
```
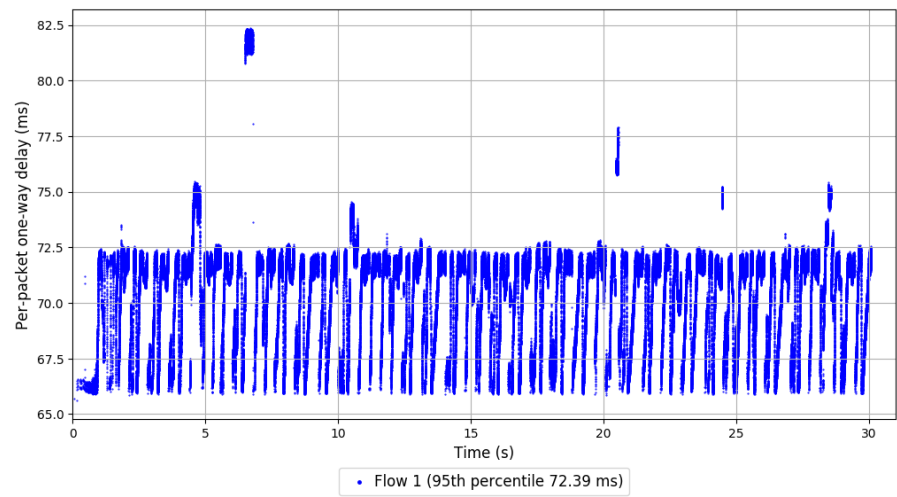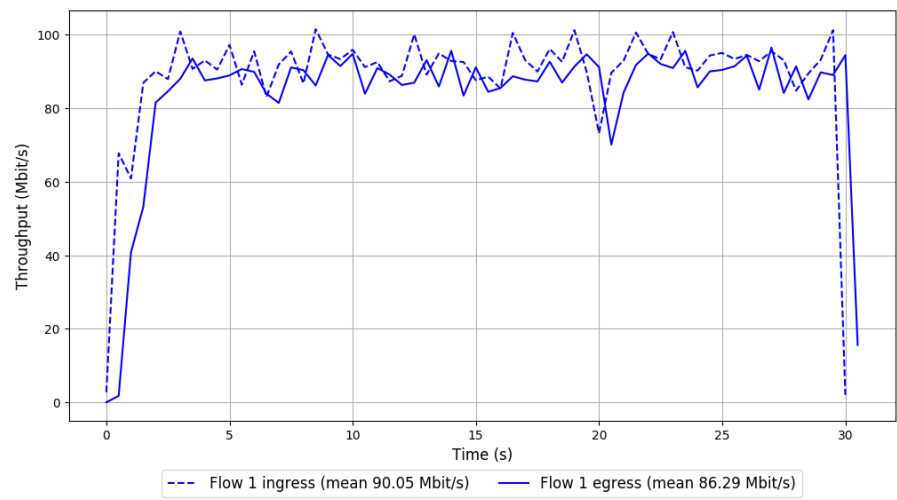
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 89.84 Mbit/s)   Flow 1 egress (mean 85.74 Mbit/s)

Flow 1 (95th percentile 63.16 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-05-21 23:46:13
End at: 2018-05-21 23:46:43
Local clock offset: 2.378 ms
Remote clock offset: 0.087 ms


# Below is generated by plot.py at 2018-05-22 01:09:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.29 Mbit/s
95th percentile per-packet one-way delay: 72.392 ms
Loss rate: 4.15%
-- Flow 1:
Average throughput: 86.29 Mbit/s
95th percentile per-packet one-way delay: 72.392 ms
Loss rate: 4.15%
```
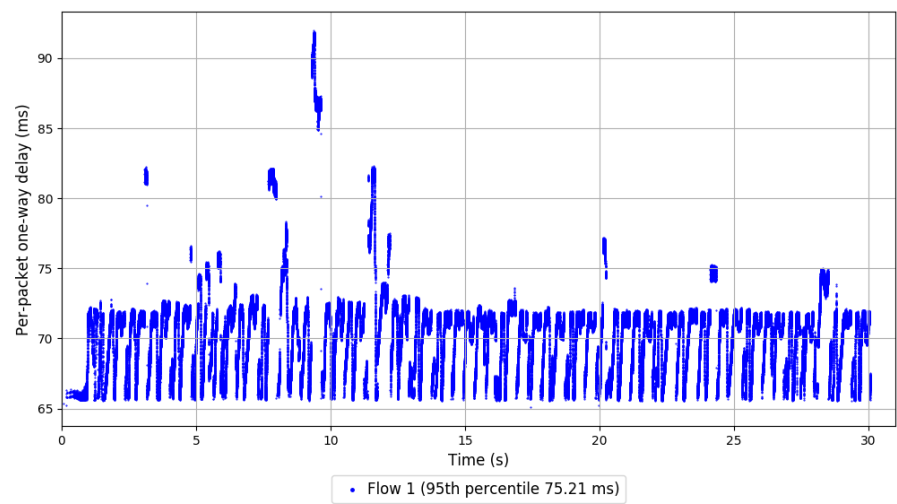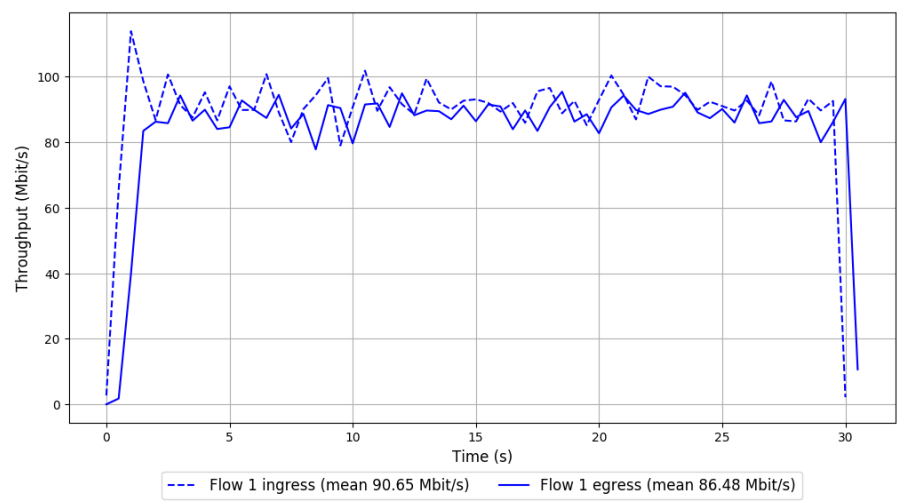
Run 7: Report of TCP BBR — Data Link

```
Run 8: Statistics of TCP BBR

Start at: 2018-05-22 00:06:54
End at: 2018-05-22 00:07:24
Local clock offset: 1.268 ms
Remote clock offset: 0.424 ms


# Below is generated by plot.py at 2018-05-22 01:09:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.48 Mbit/s
95th percentile per-packet one-way delay: 75.211 ms
Loss rate: 4.60%
-- Flow 1:
Average throughput: 86.48 Mbit/s
95th percentile per-packet one-way delay: 75.211 ms
Loss rate: 4.60%
```
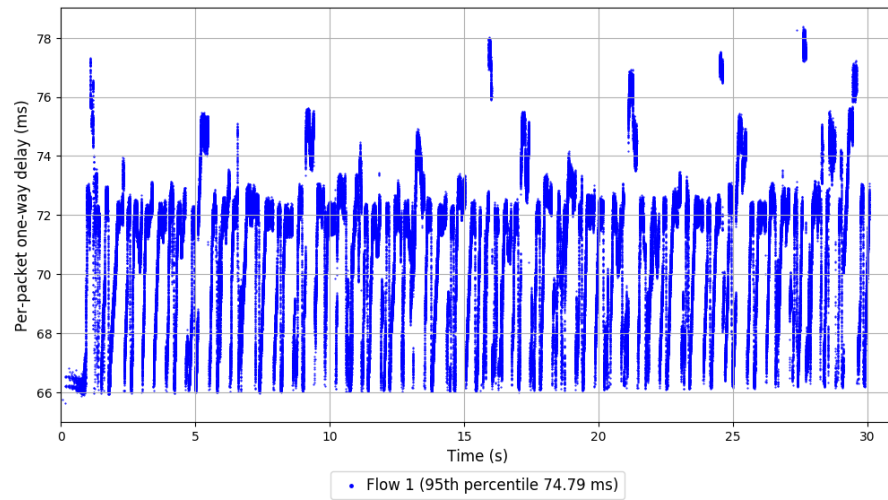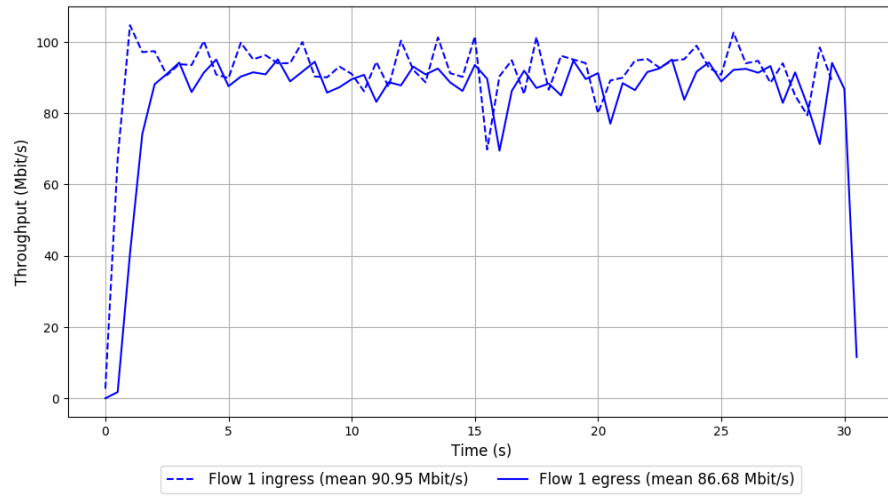
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 90.65 Mbit/s)   Flow 1 egress (mean 86.48 Mbit/s)

Flow 1 (95th percentile 75.21 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2018-05-22 00:27:33
End at: 2018-05-22 00:28:03
Local clock offset: 1.068 ms
Remote clock offset: 0.155 ms


# Below is generated by plot.py at 2018-05-22 01:10:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.68 Mbit/s
95th percentile per-packet one-way delay: 74.792 ms
Loss rate: 4.68%
-- Flow 1:
Average throughput: 86.68 Mbit/s
95th percentile per-packet one-way delay: 74.792 ms
Loss rate: 4.68%
```
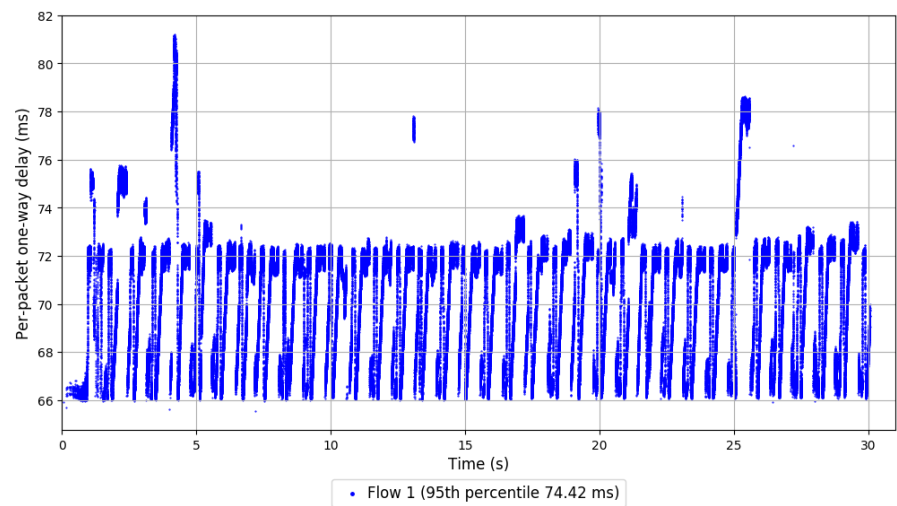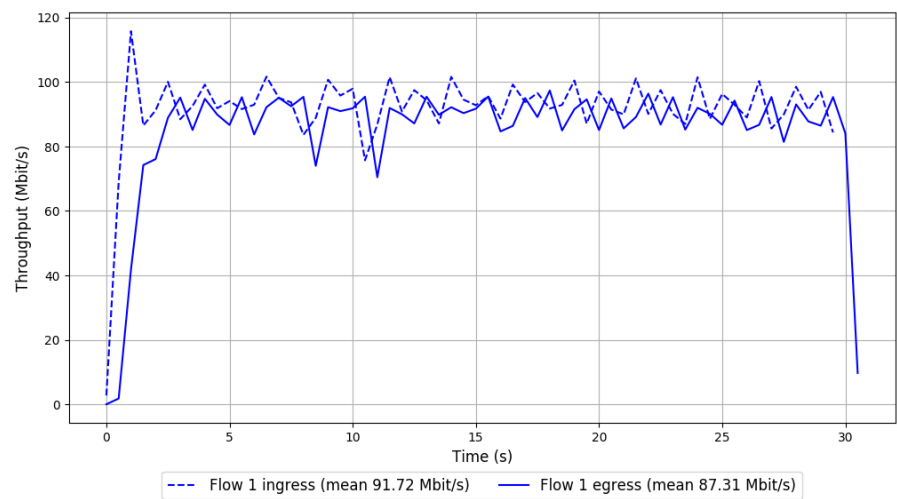
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 90.95 Mbit/s)   Flow 1 egress (mean 86.68 Mbit/s)

Flow 1 (95th percentile 74.79 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2018-05-22 00:48:55
End at: 2018-05-22 00:49:25
Local clock offset: 4.756 ms
Remote clock offset: -1.582 ms


# Below is generated by plot.py at 2018-05-22 01:10:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.31 Mbit/s
95th percentile per-packet one-way delay: 74.416 ms
Loss rate: 4.79%
-- Flow 1:
Average throughput: 87.31 Mbit/s
95th percentile per-packet one-way delay: 74.416 ms
Loss rate: 4.79%
```
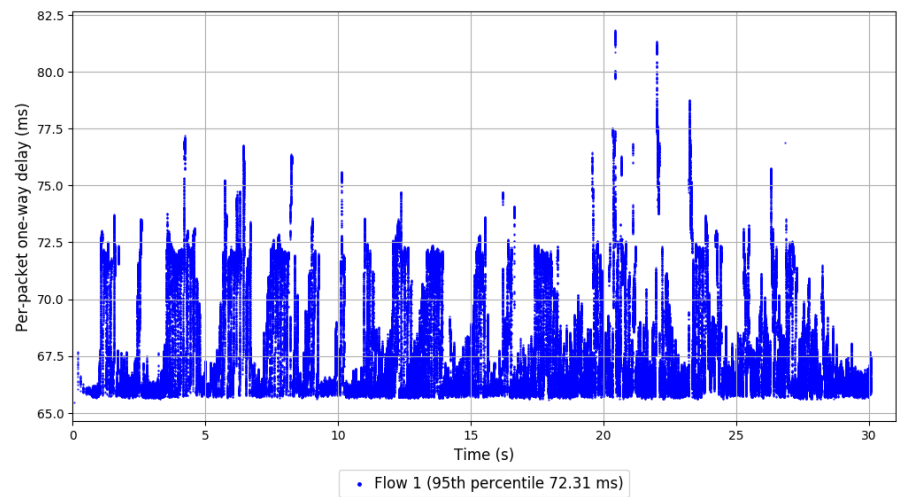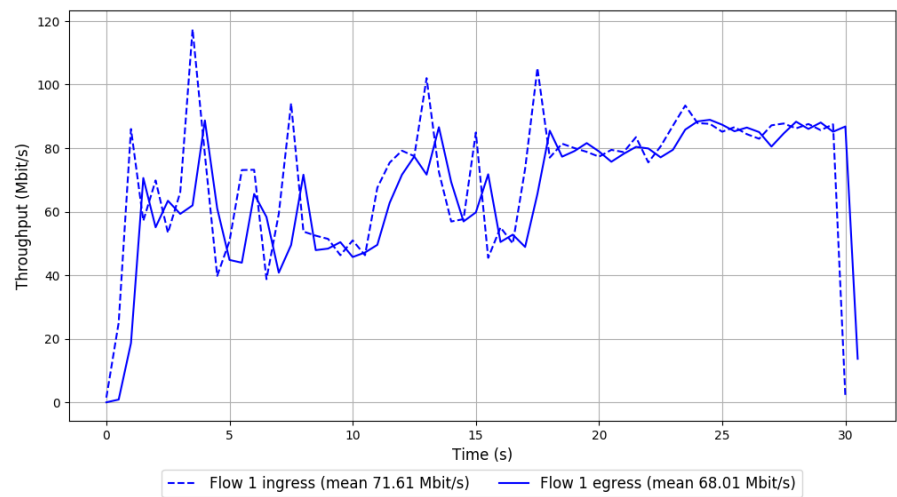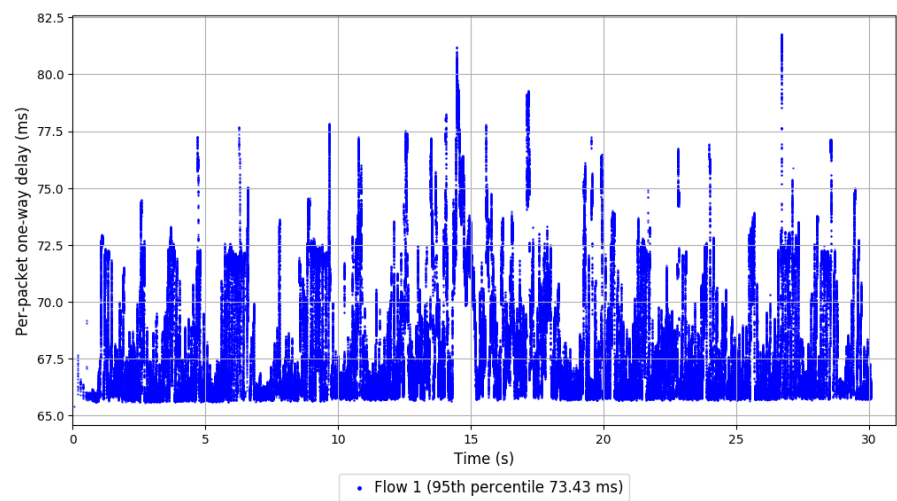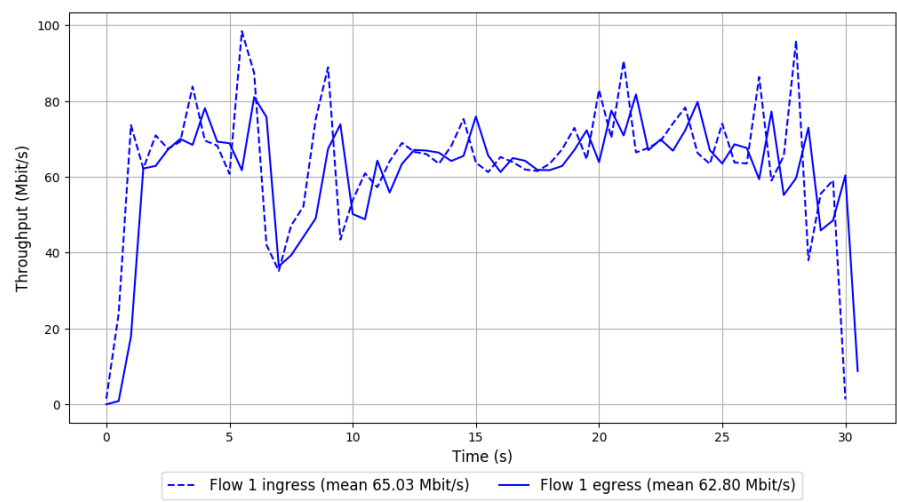
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 91.72 Mbit/s) ----   Flow 1 egress (mean 87.31 Mbit/s) ——

• Flow 1 (95th percentile 74.42 ms)

```
Run 1: Statistics of Copa

Start at: 2018-05-21 21:46:10
End at: 2018-05-21 21:46:40
Local clock offset: -0.237 ms
Remote clock offset: 0.038 ms


# Below is generated by plot.py at 2018-05-22 01:11:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.01 Mbit/s
95th percentile per-packet one-way delay: 72.314 ms
Loss rate: 5.02%
-- Flow 1:
Average throughput: 68.01 Mbit/s
95th percentile per-packet one-way delay: 72.314 ms
Loss rate: 5.02%
```
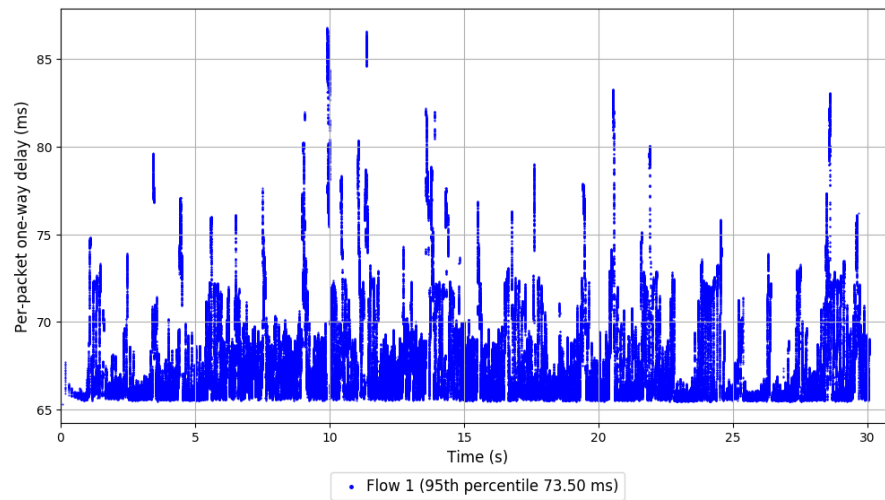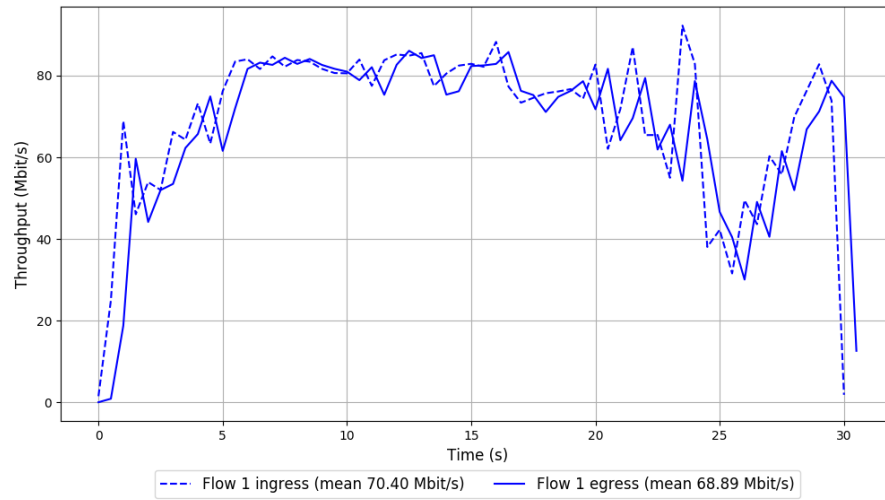
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 71.61 Mbit/s)   Flow 1 egress (mean 68.01 Mbit/s)

• Flow 1 (95th percentile 72.31 ms)

```
Run 2: Statistics of Copa

Start at: 2018-05-21 22:06:45
End at: 2018-05-21 22:07:15
Local clock offset: 2.733 ms
Remote clock offset: -1.012 ms

# Below is generated by plot.py at 2018-05-22 01:11:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.80 Mbit/s
95th percentile per-packet one-way delay: 73.431 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 62.80 Mbit/s
95th percentile per-packet one-way delay: 73.431 ms
Loss rate: 3.42%
```
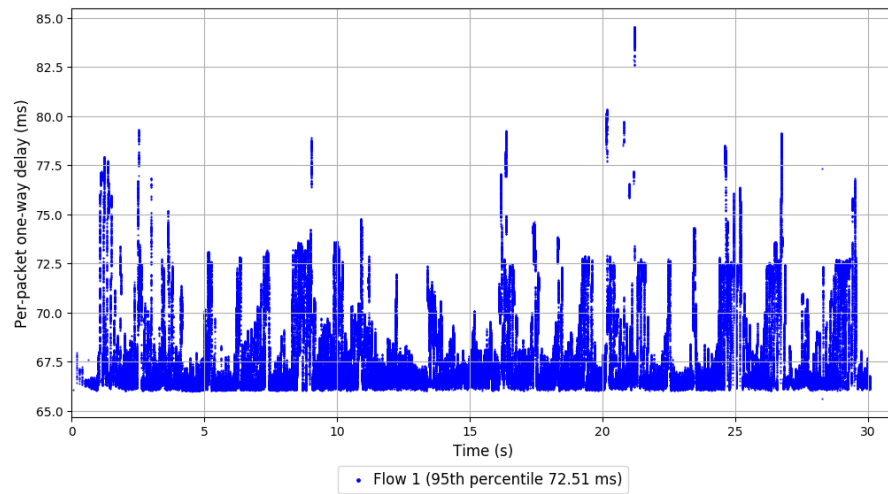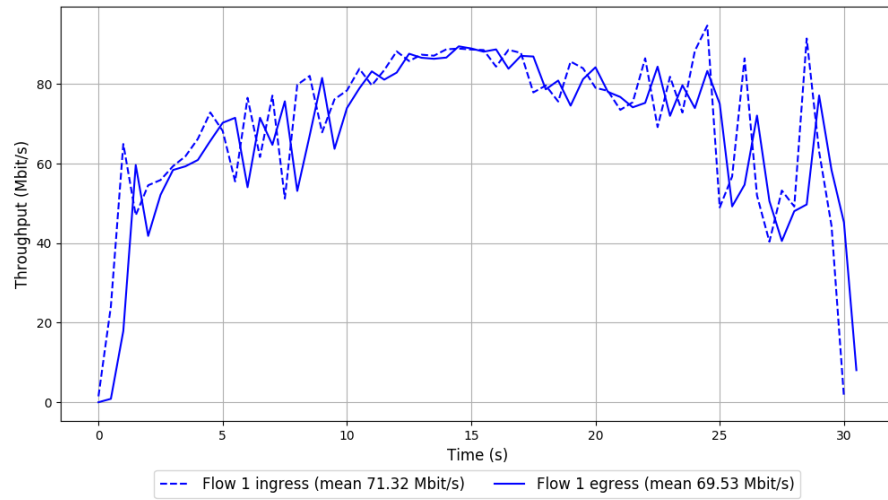
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 65.03 Mbit/s)　　　Flow 1 egress (mean 62.80 Mbit/s)

Flow 1 (95th percentile 73.43 ms)

```
Run 3: Statistics of Copa

Start at: 2018-05-21 22:27:20
End at: 2018-05-21 22:27:50
Local clock offset: 4.892 ms
Remote clock offset: -1.246 ms


# Below is generated by plot.py at 2018-05-22 01:11:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.89 Mbit/s
95th percentile per-packet one-way delay: 73.502 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 68.89 Mbit/s
95th percentile per-packet one-way delay: 73.502 ms
Loss rate: 2.14%
```
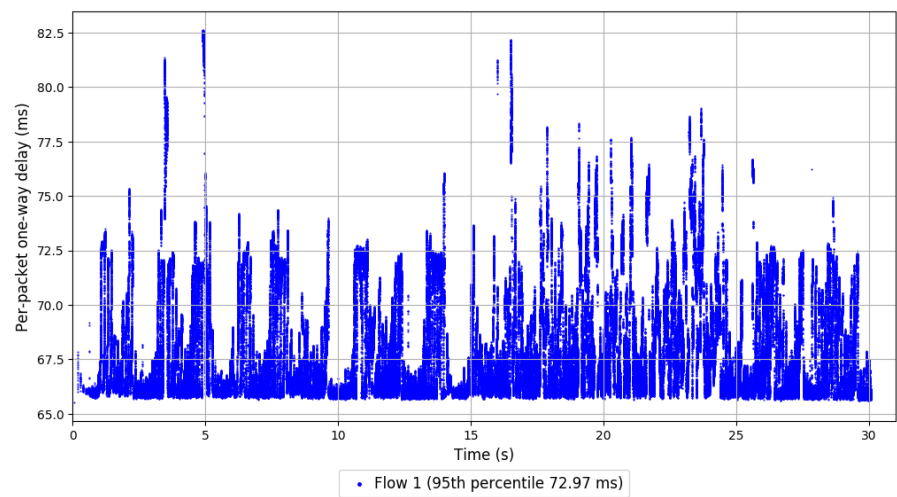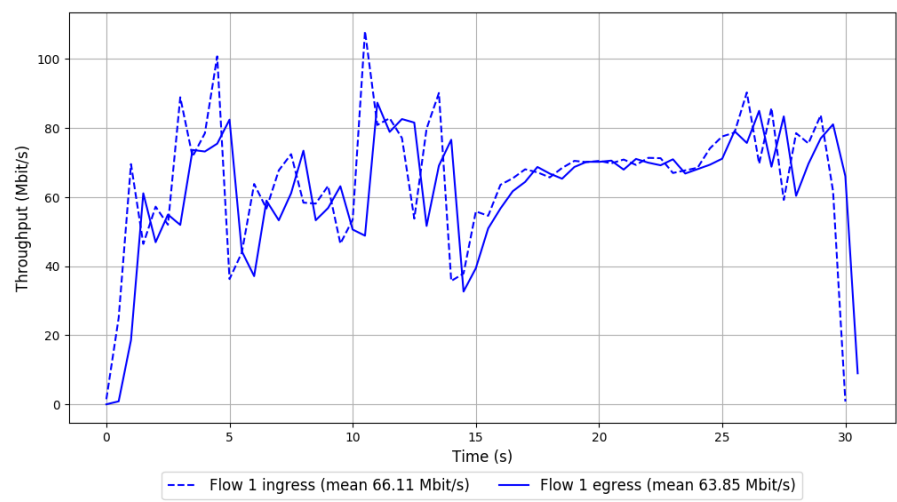
Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-05-21 22:48:00
End at: 2018-05-21 22:48:30
Local clock offset: 4.412 ms
Remote clock offset: -0.668 ms


# Below is generated by plot.py at 2018-05-22 01:11:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.53 Mbit/s
95th percentile per-packet one-way delay: 72.513 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 69.53 Mbit/s
95th percentile per-packet one-way delay: 72.513 ms
Loss rate: 2.50%
```
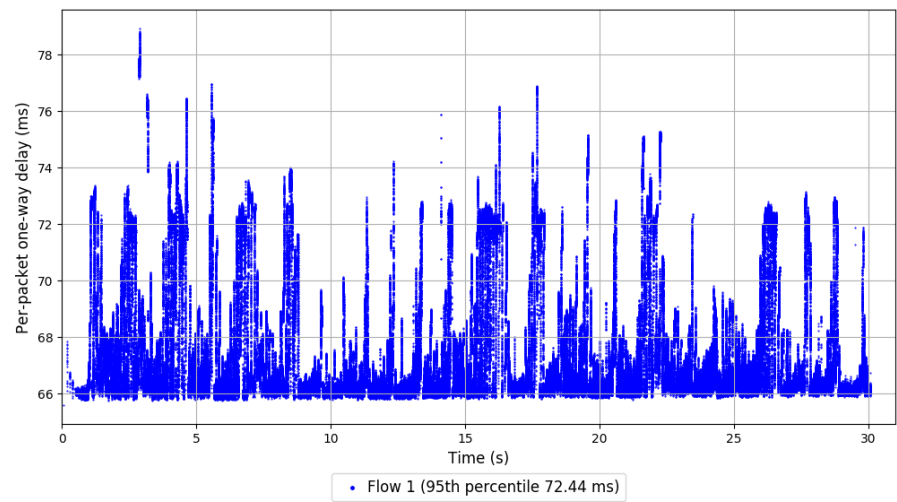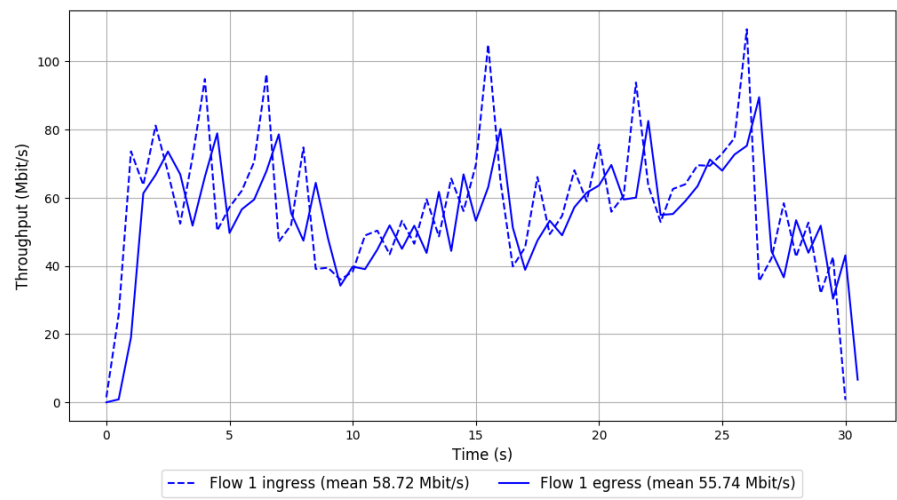
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-05-21 23:08:41
End at: 2018-05-21 23:09:11
Local clock offset: 0.598 ms
Remote clock offset: -0.784 ms


# Below is generated by plot.py at 2018-05-22 01:11:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.85 Mbit/s
95th percentile per-packet one-way delay: 72.968 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 63.85 Mbit/s
95th percentile per-packet one-way delay: 72.968 ms
Loss rate: 3.42%
```

Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 66.11 Mbit/s)   Flow 1 egress (mean 63.85 Mbit/s)

• Flow 1 (95th percentile 72.97 ms)

```
Run 6: Statistics of Copa

Start at: 2018-05-21 23:29:22
End at: 2018-05-21 23:29:52
Local clock offset: -0.27 ms
Remote clock offset: -0.888 ms


# Below is generated by plot.py at 2018-05-22 01:11:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.74 Mbit/s
95th percentile per-packet one-way delay: 72.443 ms
Loss rate: 5.06%
-- Flow 1:
Average throughput: 55.74 Mbit/s
95th percentile per-packet one-way delay: 72.443 ms
Loss rate: 5.06%
```

Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-05-21 23:50:07
End at: 2018-05-21 23:50:37
Local clock offset: 2.551 ms
Remote clock offset: 0.166 ms


# Below is generated by plot.py at 2018-05-22 01:12:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.67 Mbit/s
95th percentile per-packet one-way delay: 73.234 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 71.67 Mbit/s
95th percentile per-packet one-way delay: 73.234 ms
Loss rate: 2.87%
```
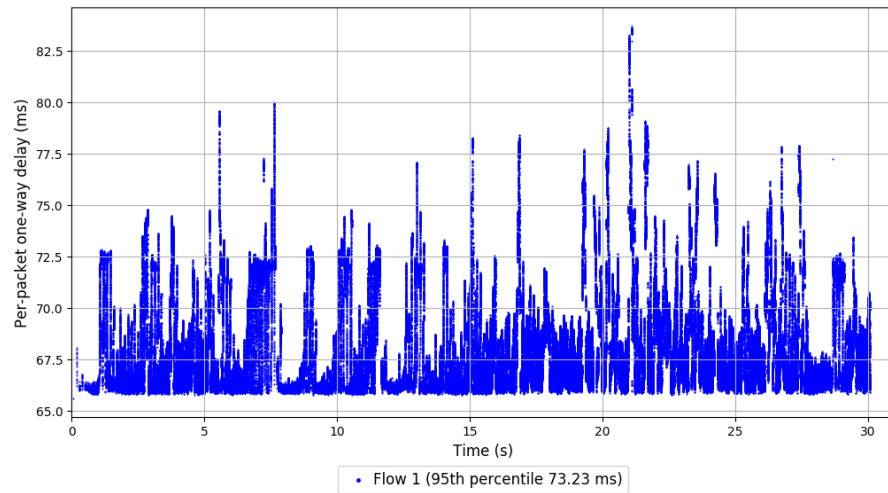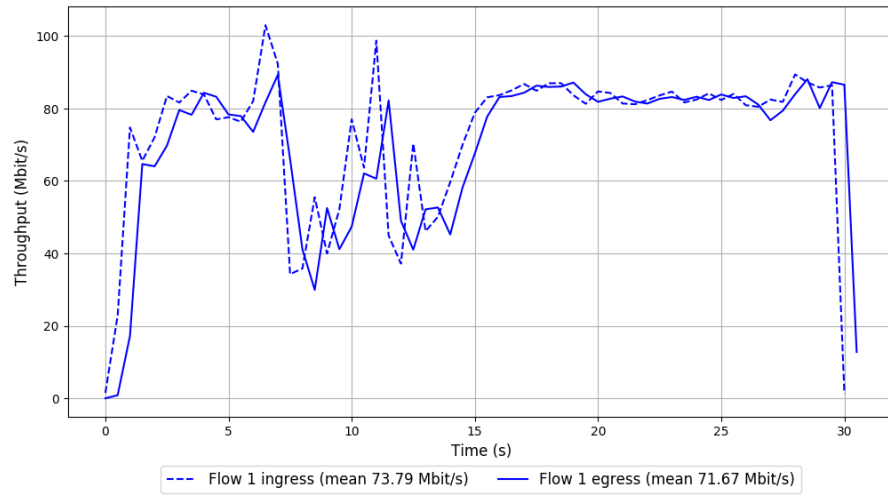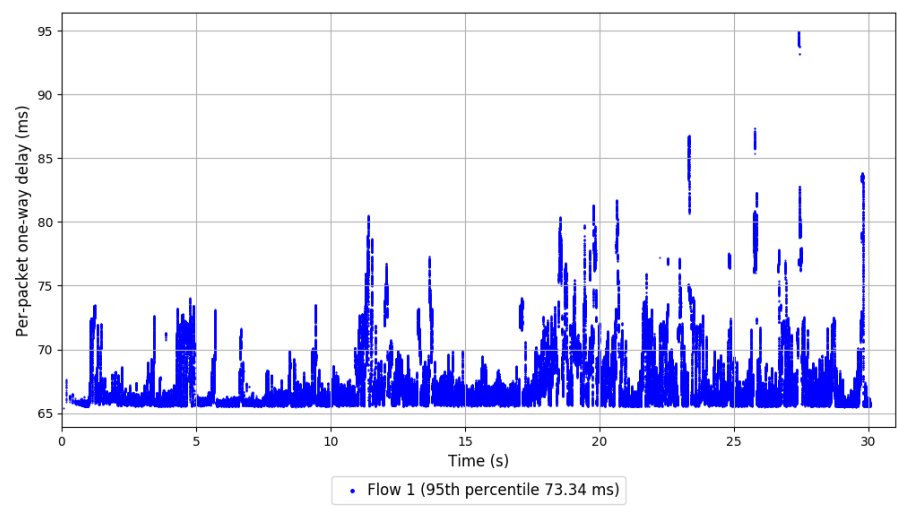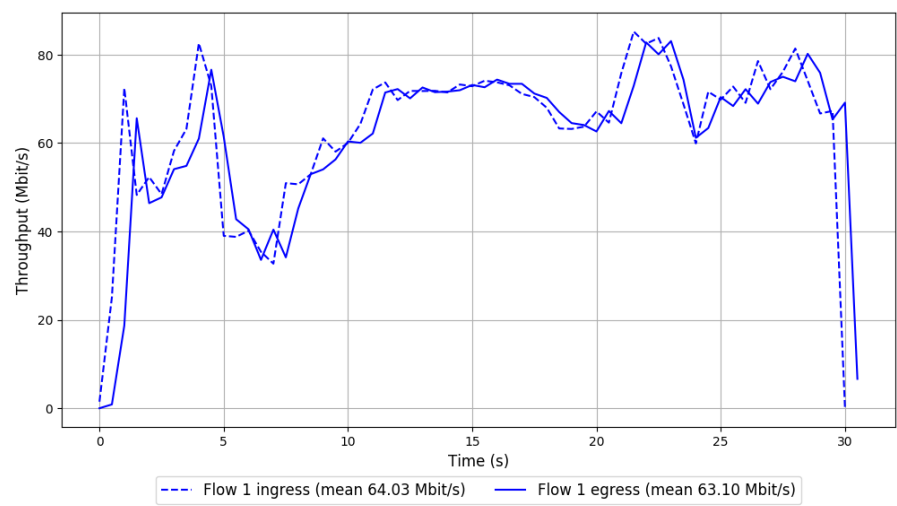
Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 73.79 Mbit/s)　　Flow 1 egress (mean 71.67 Mbit/s)

Flow 1 (95th percentile 73.23 ms)

```
Run 8: Statistics of Copa

Start at: 2018-05-22 00:10:47
End at: 2018-05-22 00:11:17
Local clock offset: 1.156 ms
Remote clock offset: 0.359 ms


# Below is generated by plot.py at 2018-05-22 01:12:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.10 Mbit/s
95th percentile per-packet one-way delay: 73.342 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 63.10 Mbit/s
95th percentile per-packet one-way delay: 73.342 ms
Loss rate: 1.45%
```

Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2018-05-22 00:32:12
End at: 2018-05-22 00:32:42
Local clock offset: 2.518 ms
Remote clock offset: 0.192 ms


# Below is generated by plot.py at 2018-05-22 01:13:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.88 Mbit/s
95th percentile per-packet one-way delay: 72.824 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 76.88 Mbit/s
95th percentile per-packet one-way delay: 72.824 ms
Loss rate: 1.74%
```
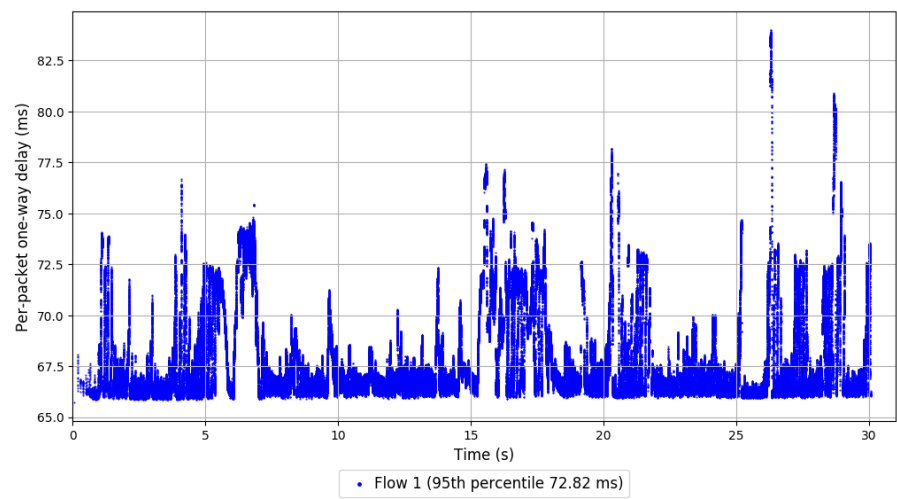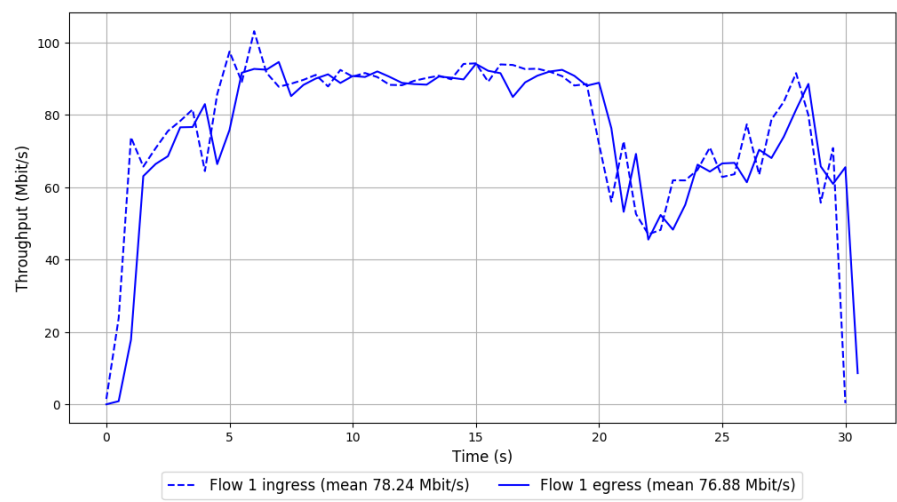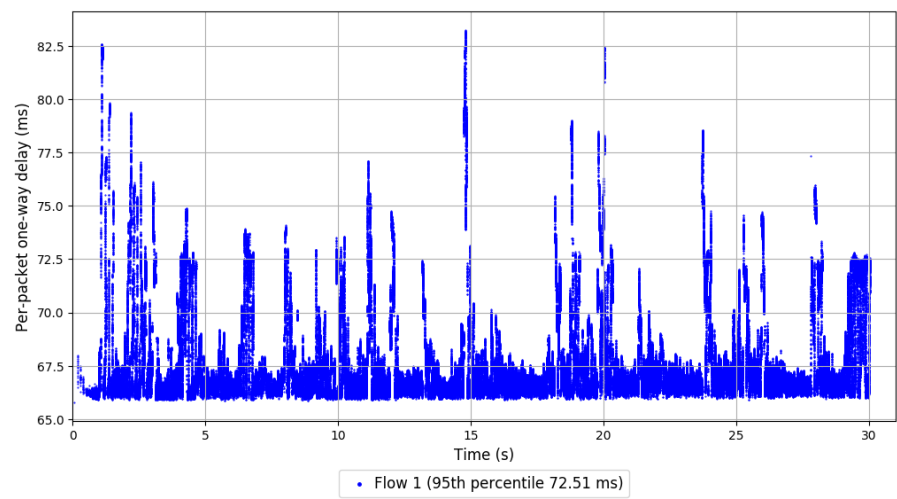
Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 78.24 Mbit/s)   Flow 1 egress (mean 76.88 Mbit/s)

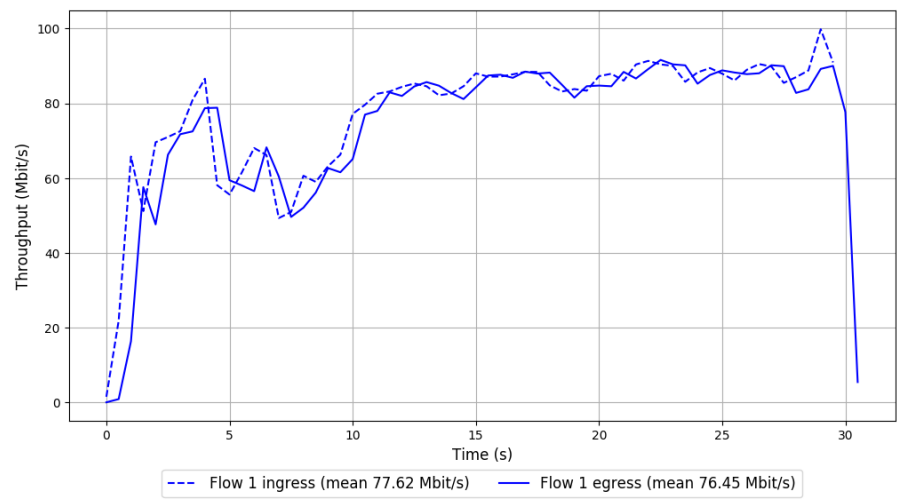Flow 1 (95th percentile 72.82 ms)

```
Run 10: Statistics of Copa

Start at: 2018-05-22 00:52:48
End at: 2018-05-22 00:53:18
Local clock offset: 5.063 ms
Remote clock offset: -2.129 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.45 Mbit/s
95th percentile per-packet one-way delay: 72.514 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 76.45 Mbit/s
95th percentile per-packet one-way delay: 72.514 ms
Loss rate: 1.48%
```

Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-05-21 21:43:36
End at: 2018-05-21 21:44:06
Local clock offset: 0.189 ms
Remote clock offset: 0.023 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.28 Mbit/s
95th percentile per-packet one-way delay: 66.804 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 38.28 Mbit/s
95th percentile per-packet one-way delay: 66.804 ms
Loss rate: 0.11%
```
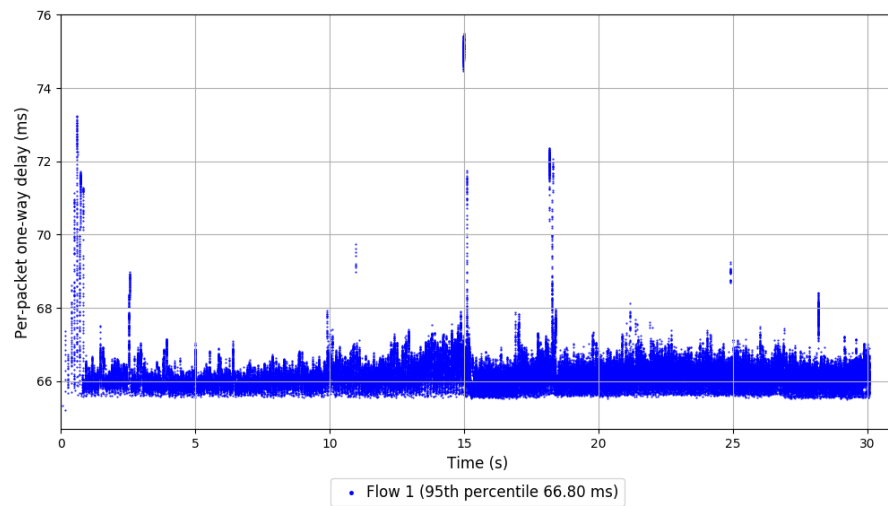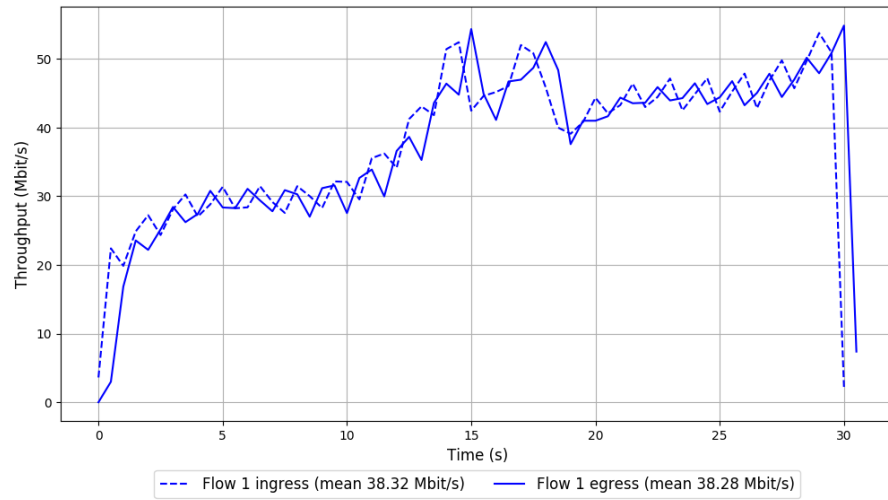
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 38.32 Mbit/s) --- Flow 1 egress (mean 38.28 Mbit/s)

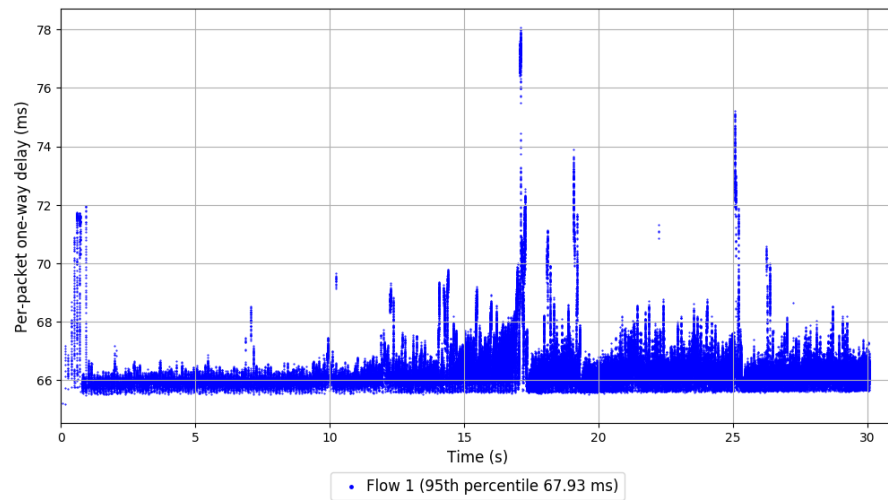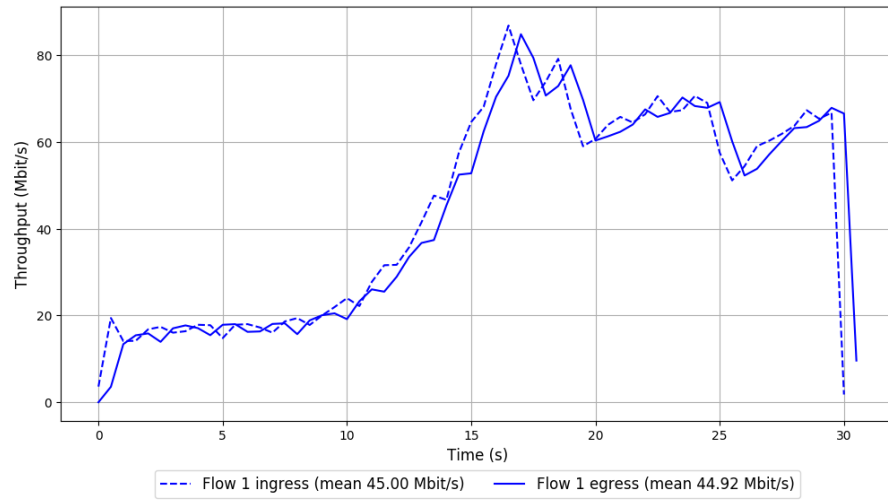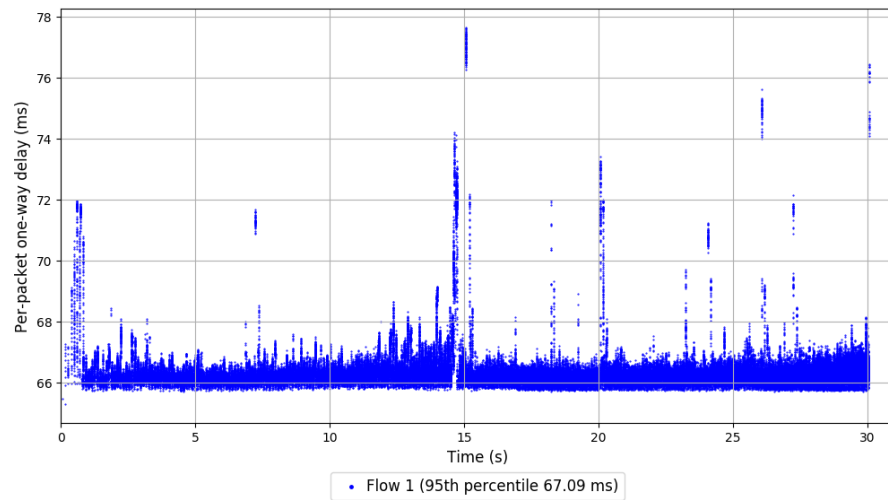Flow 1 (95th percentile 66.80 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2018-05-21 22:04:12
End at: 2018-05-21 22:04:42
Local clock offset: 2.273 ms
Remote clock offset: -0.949 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.92 Mbit/s
95th percentile per-packet one-way delay: 67.933 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 44.92 Mbit/s
95th percentile per-packet one-way delay: 67.933 ms
Loss rate: 0.17%
```

Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 45.00 Mbit/s) ----   Flow 1 egress (mean 44.92 Mbit/s) ——
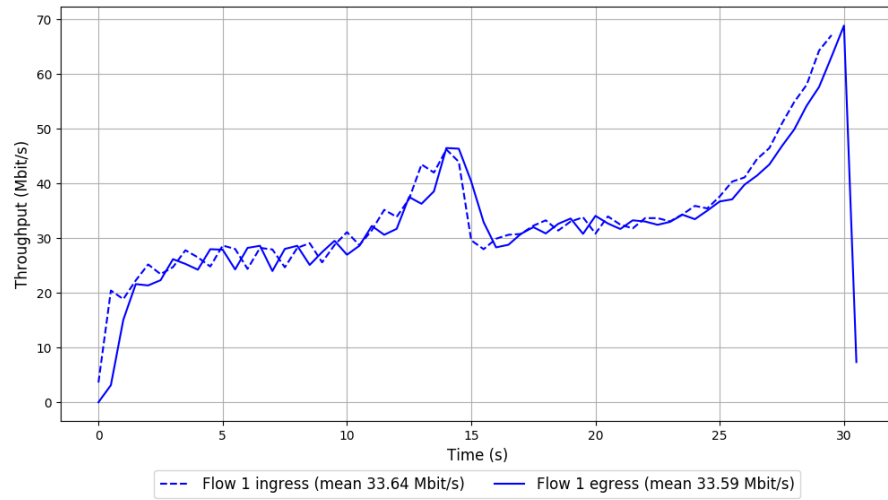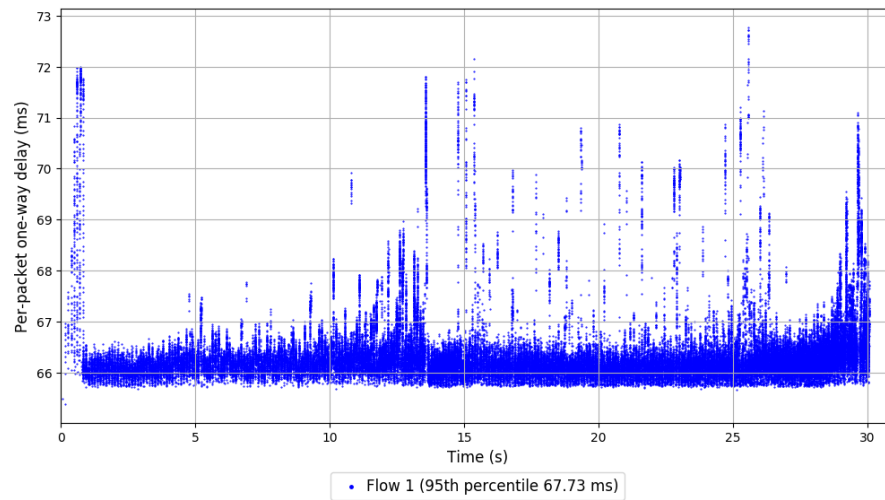

• Flow 1 (95th percentile 67.93 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2018-05-21 22:24:47
End at: 2018-05-21 22:25:17
Local clock offset: 4.696 ms
Remote clock offset: -1.449 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.59 Mbit/s
95th percentile per-packet one-way delay: 67.094 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 33.59 Mbit/s
95th percentile per-packet one-way delay: 67.094 ms
Loss rate: 0.13%
```
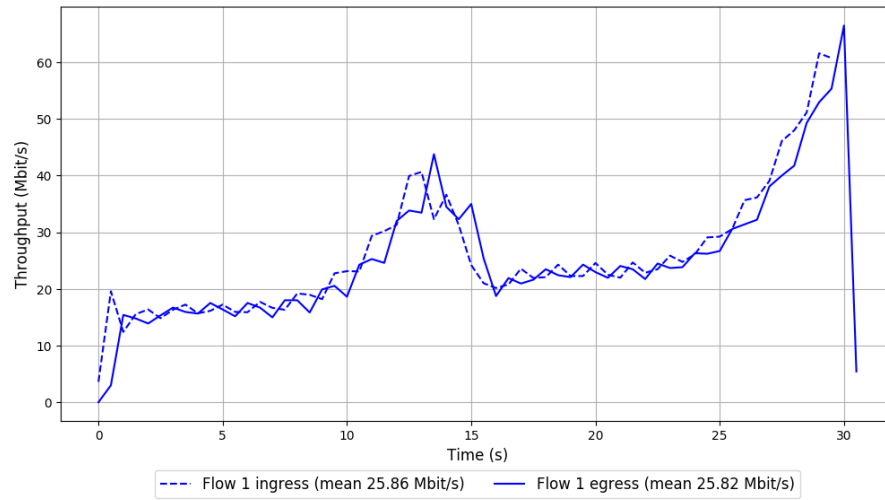
Run 3: Report of TCP Cubic — Data Link

```
Run 4: Statistics of TCP Cubic

Start at: 2018-05-21 22:45:27
End at: 2018-05-21 22:45:57
Local clock offset: 4.633 ms
Remote clock offset: -0.699 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.82 Mbit/s
95th percentile per-packet one-way delay: 67.735 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 25.82 Mbit/s
95th percentile per-packet one-way delay: 67.735 ms
Loss rate: 0.16%
```

Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2018-05-21 23:06:08
End at: 2018-05-21 23:06:38
Local clock offset: 1.253 ms
Remote clock offset: -0.8 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.72 Mbit/s
95th percentile per-packet one-way delay: 66.800 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 36.72 Mbit/s
95th percentile per-packet one-way delay: 66.800 ms
Loss rate: 0.12%
```
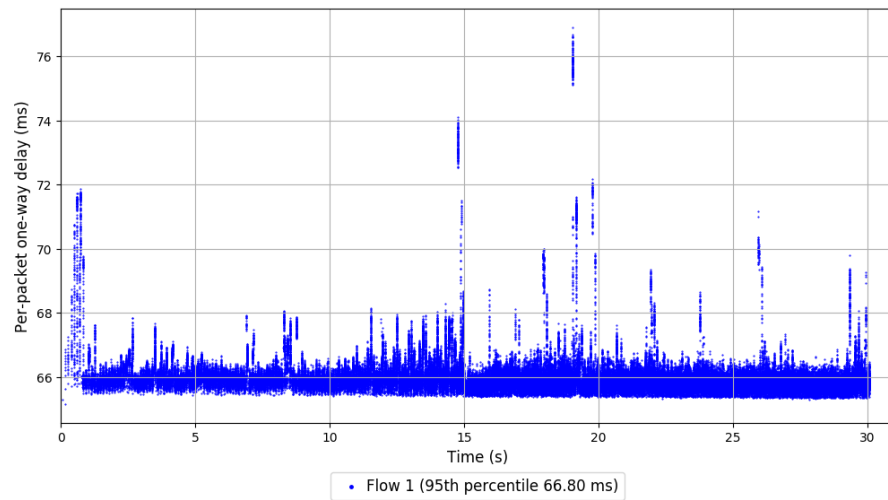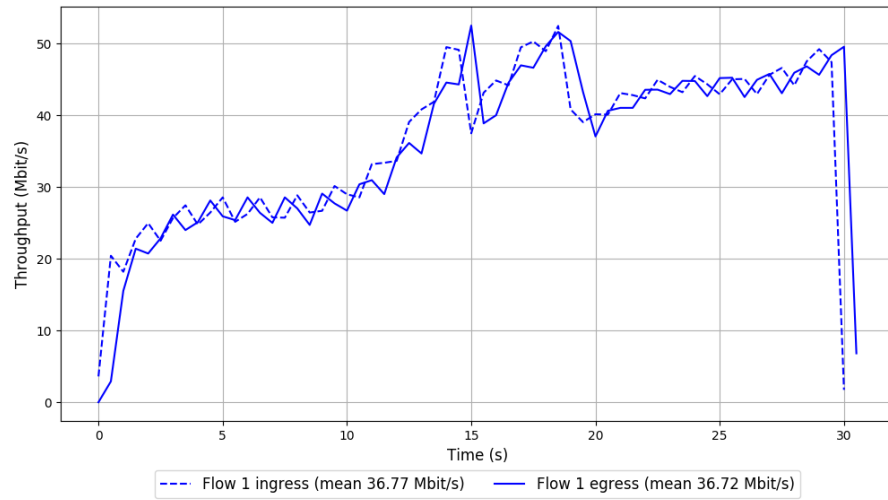
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 36.77 Mbit/s)   Flow 1 egress (mean 36.72 Mbit/s)
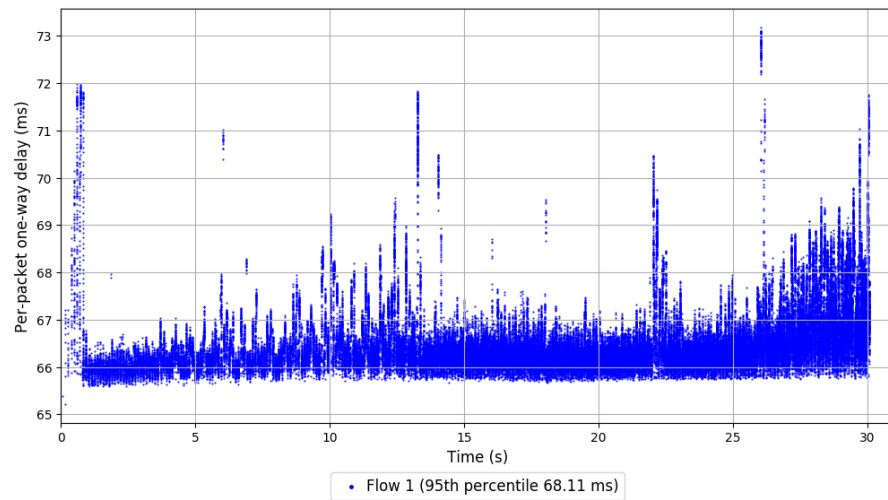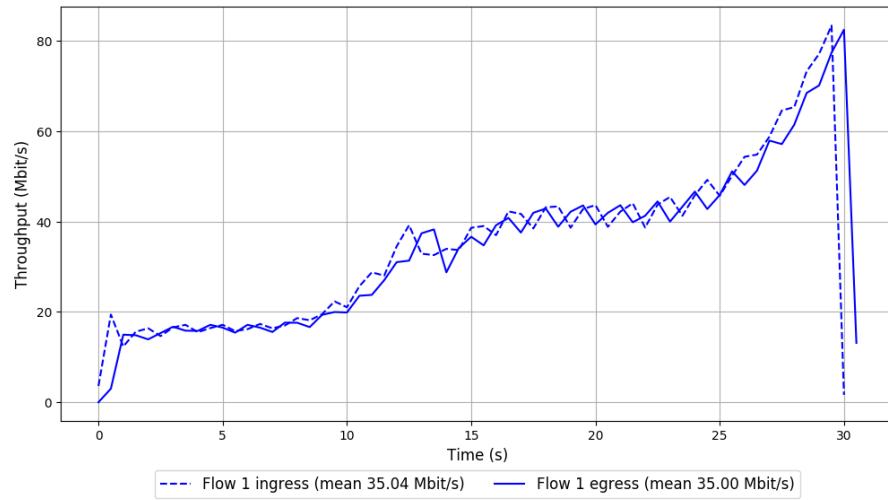

Flow 1 (95th percentile 66.80 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-05-21 23:26:48
End at: 2018-05-21 23:27:18
Local clock offset: -1.054 ms
Remote clock offset: -0.881 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.00 Mbit/s
95th percentile per-packet one-way delay: 68.110 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 35.00 Mbit/s
95th percentile per-packet one-way delay: 68.110 ms
Loss rate: 0.11%
```
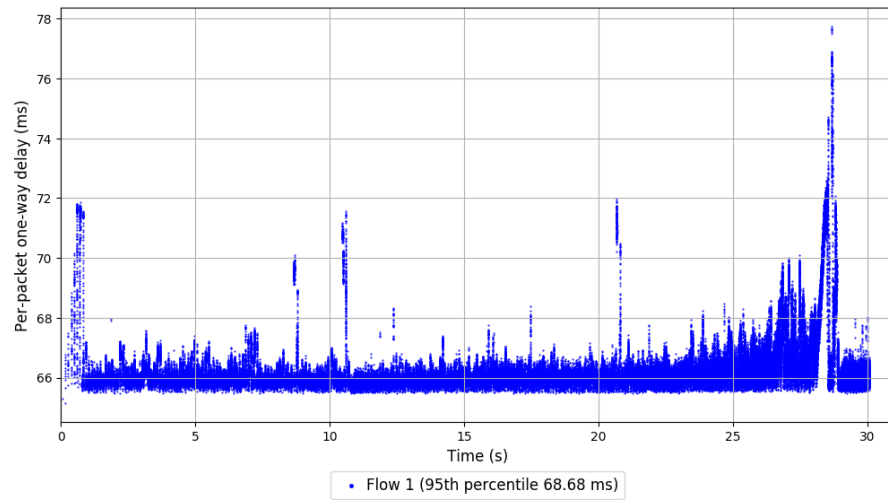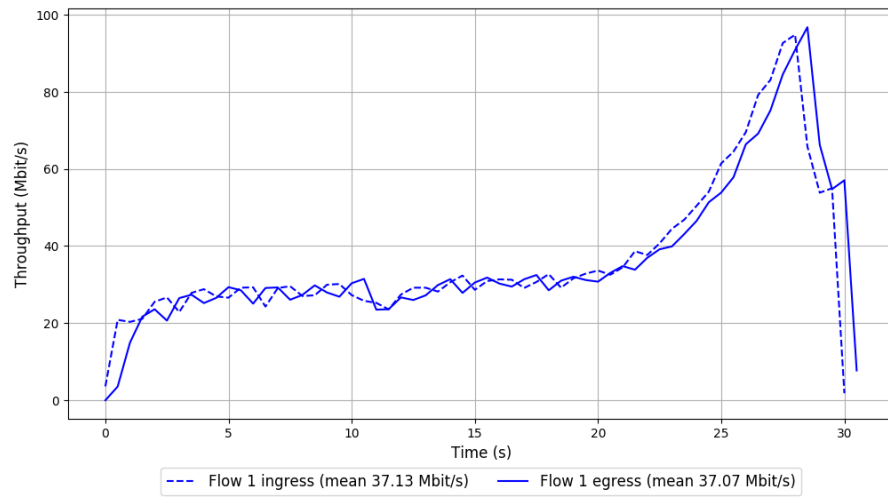
Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 35.04 Mbit/s)   Flow 1 egress (mean 35.00 Mbit/s)

• Flow 1 (95th percentile 68.11 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2018-05-21 23:47:33
End at: 2018-05-21 23:48:03
Local clock offset: 2.456 ms
Remote clock offset: 0.076 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.07 Mbit/s
95th percentile per-packet one-way delay: 68.678 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 37.07 Mbit/s
95th percentile per-packet one-way delay: 68.678 ms
Loss rate: 0.16%
```
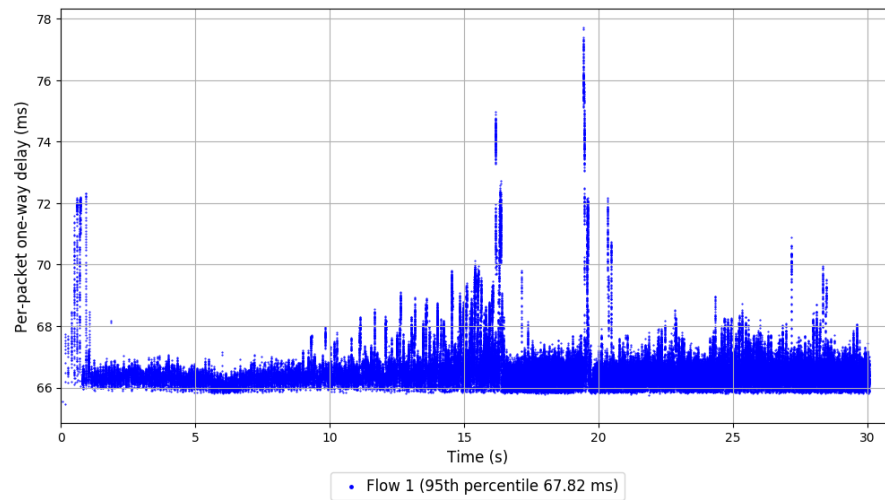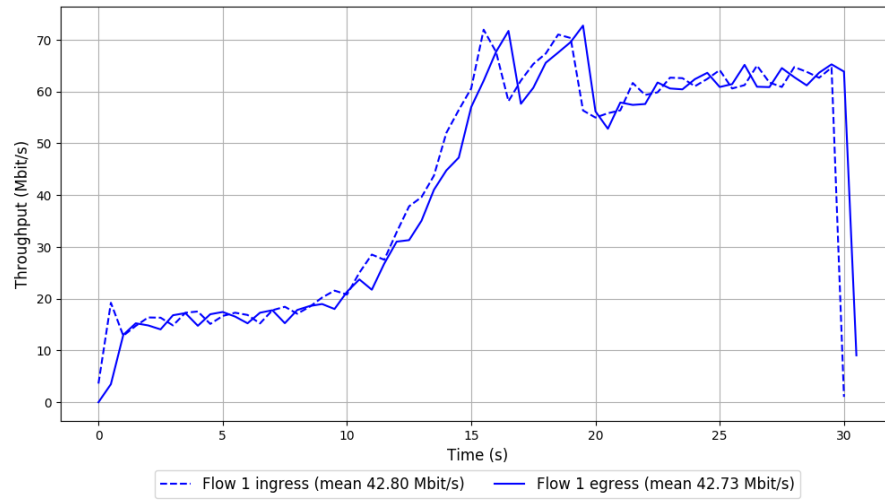
Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2018-05-22 00:08:14
End at: 2018-05-22 00:08:44
Local clock offset: 1.201 ms
Remote clock offset: 0.415 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.73 Mbit/s
95th percentile per-packet one-way delay: 67.816 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 42.73 Mbit/s
95th percentile per-packet one-way delay: 67.816 ms
Loss rate: 0.16%
```

Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2018-05-22 00:29:39
End at: 2018-05-22 00:30:09
Local clock offset: 1.589 ms
Remote clock offset: 0.256 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.75 Mbit/s
95th percentile per-packet one-way delay: 68.392 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 9.75 Mbit/s
95th percentile per-packet one-way delay: 68.392 ms
Loss rate: 0.60%
```
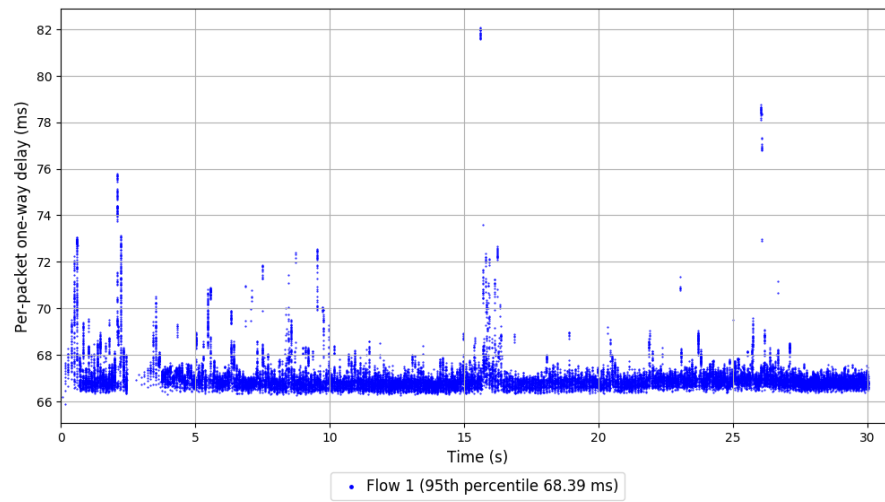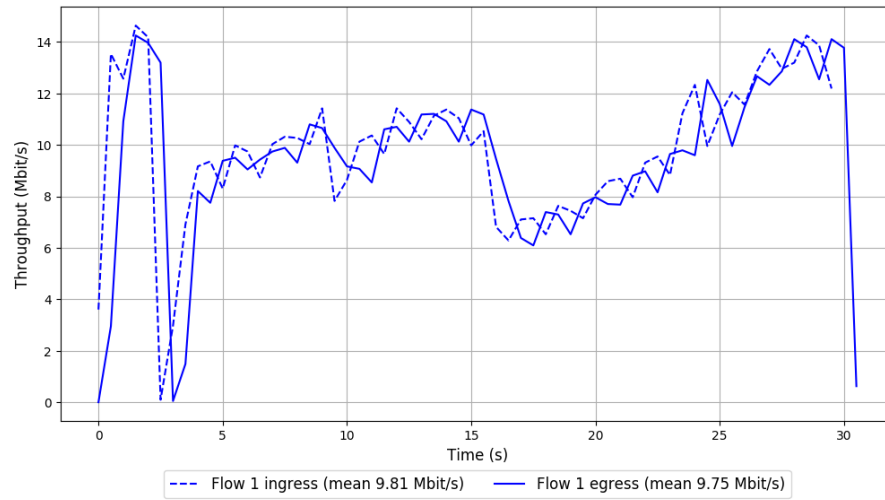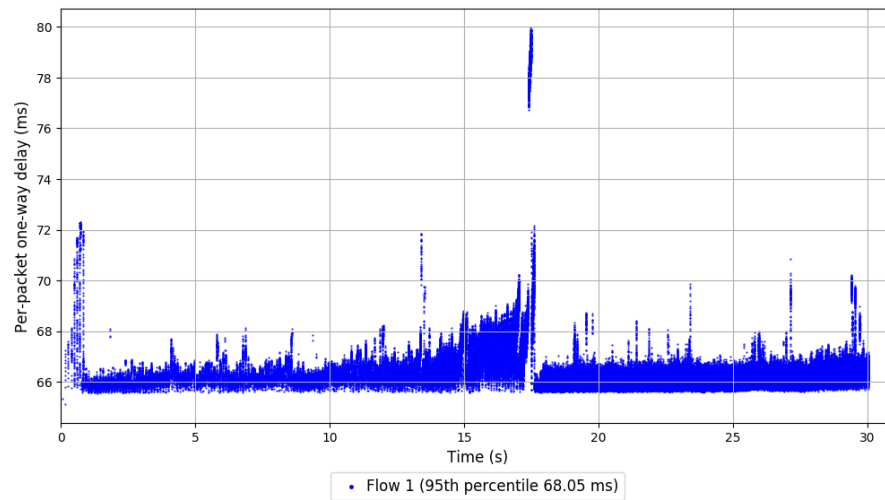
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 9.81 Mbit/s) --- Flow 1 egress (mean 9.75 Mbit/s)

Flow 1 (95th percentile 68.39 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2018-05-22 00:50:14
End at: 2018-05-22 00:50:44
Local clock offset: 4.878 ms
Remote clock offset: -1.842 ms


# Below is generated by plot.py at 2018-05-22 01:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.59 Mbit/s
95th percentile per-packet one-way delay: 68.053 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 44.59 Mbit/s
95th percentile per-packet one-way delay: 68.053 ms
Loss rate: 0.10%
```
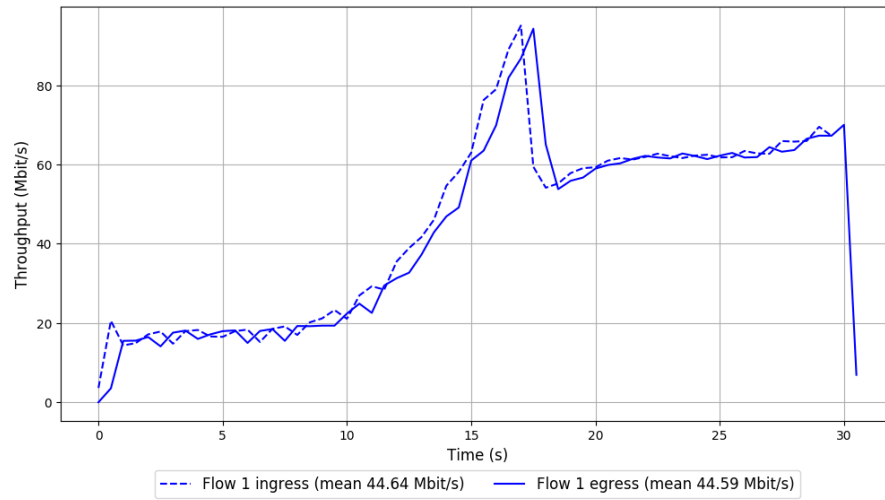
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-05-21 21:51:18
End at: 2018-05-21 21:51:48
Local clock offset: -0.371 ms
Remote clock offset: 0.043 ms


# Below is generated by plot.py at 2018-05-22 01:13:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.69 Mbit/s
95th percentile per-packet one-way delay: 71.769 ms
Loss rate: 11.31%
-- Flow 1:
Average throughput: 86.69 Mbit/s
95th percentile per-packet one-way delay: 71.769 ms
Loss rate: 11.31%
```
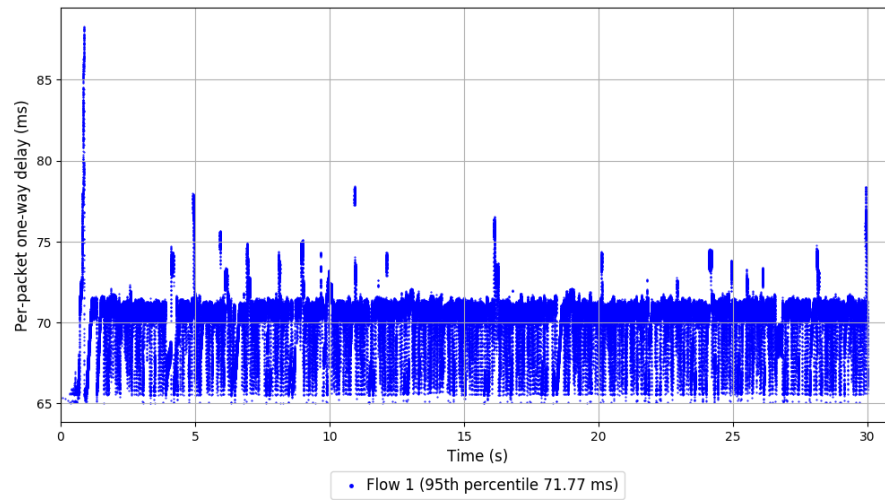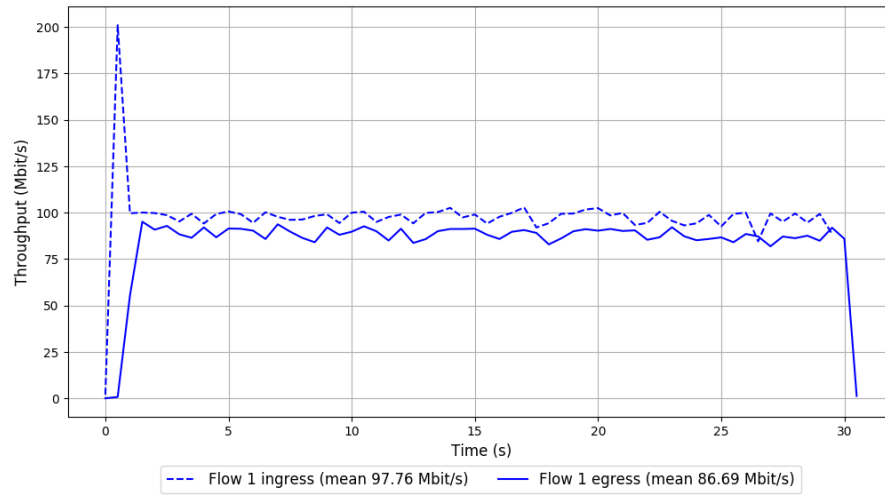
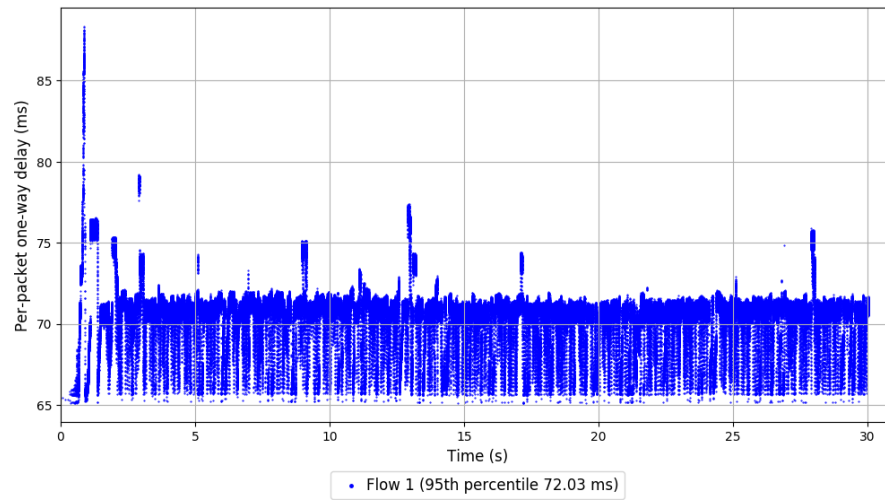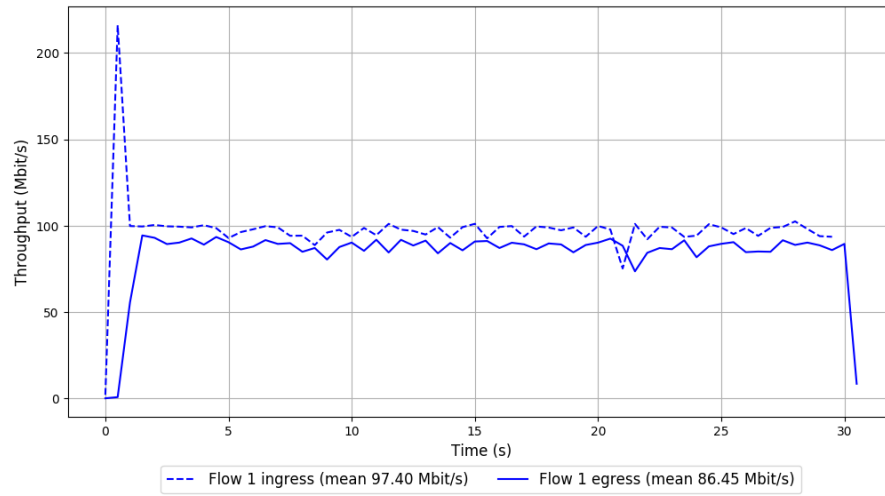Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-05-21 22:11:53
End at: 2018-05-21 22:12:23
Local clock offset: 3.73 ms
Remote clock offset: -1.208 ms


# Below is generated by plot.py at 2018-05-22 01:13:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.45 Mbit/s
95th percentile per-packet one-way delay: 72.035 ms
Loss rate: 11.23%
-- Flow 1:
Average throughput: 86.45 Mbit/s
95th percentile per-packet one-way delay: 72.035 ms
Loss rate: 11.23%
```

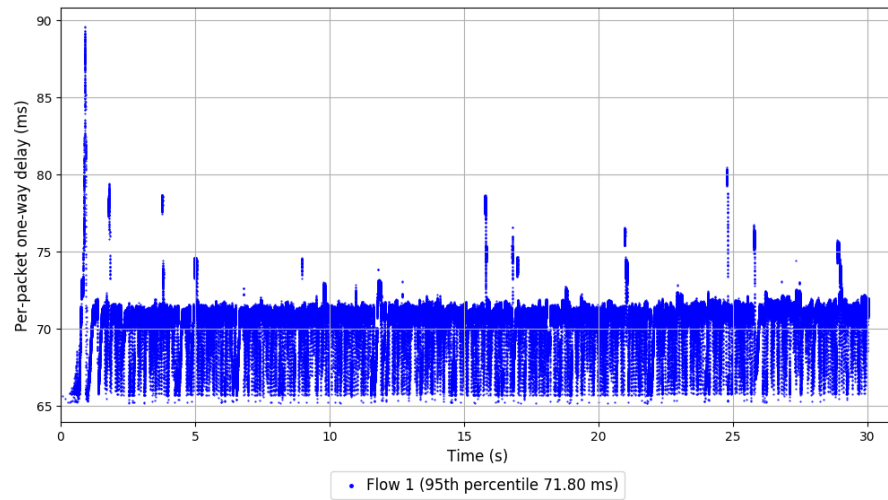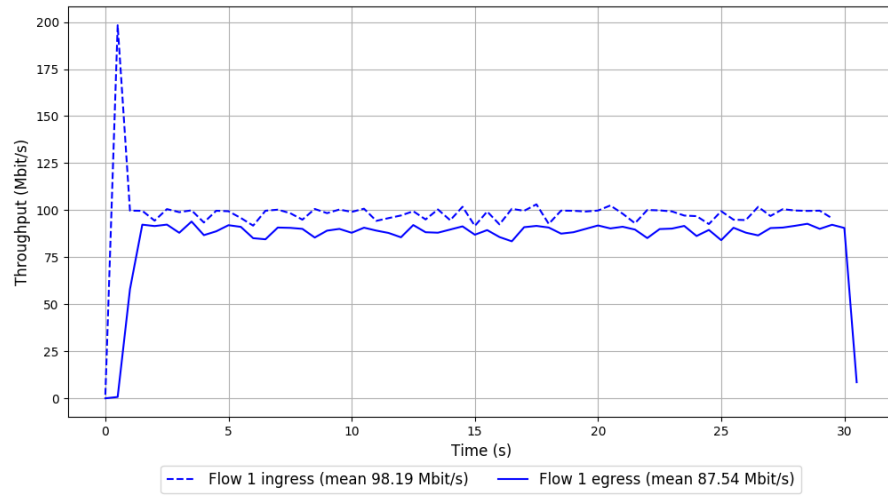Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-05-21 22:32:33
End at: 2018-05-21 22:33:03
Local clock offset: 4.557 ms
Remote clock offset: -0.973 ms


# Below is generated by plot.py at 2018-05-22 01:14:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.54 Mbit/s
95th percentile per-packet one-way delay: 71.799 ms
Loss rate: 10.82%
-- Flow 1:
Average throughput: 87.54 Mbit/s
95th percentile per-packet one-way delay: 71.799 ms
Loss rate: 10.82%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 98.19 Mbit/s) — Flow 1 egress (mean 87.54 Mbit/s)

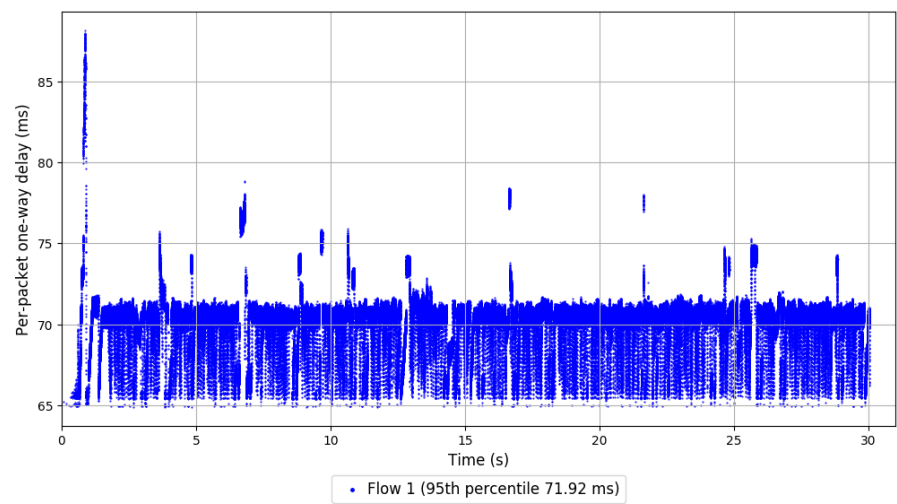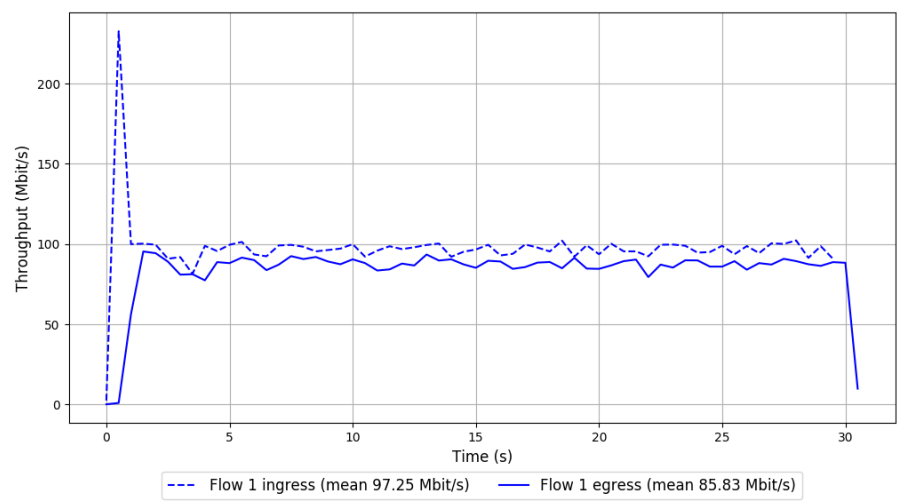Flow 1 (95th percentile 71.80 ms)

```
Run 4: Statistics of FillP

Start at: 2018-05-21 22:53:13
End at: 2018-05-21 22:53:43
Local clock offset: 4.694 ms
Remote clock offset: -0.809 ms


# Below is generated by plot.py at 2018-05-22 01:14:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.83 Mbit/s
95th percentile per-packet one-way delay: 71.925 ms
Loss rate: 11.72%
-- Flow 1:
Average throughput: 85.83 Mbit/s
95th percentile per-packet one-way delay: 71.925 ms
Loss rate: 11.72%
```

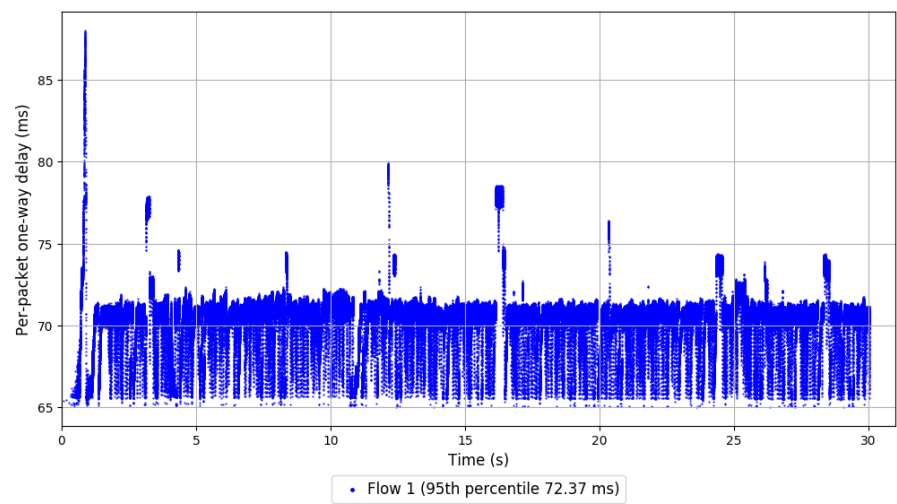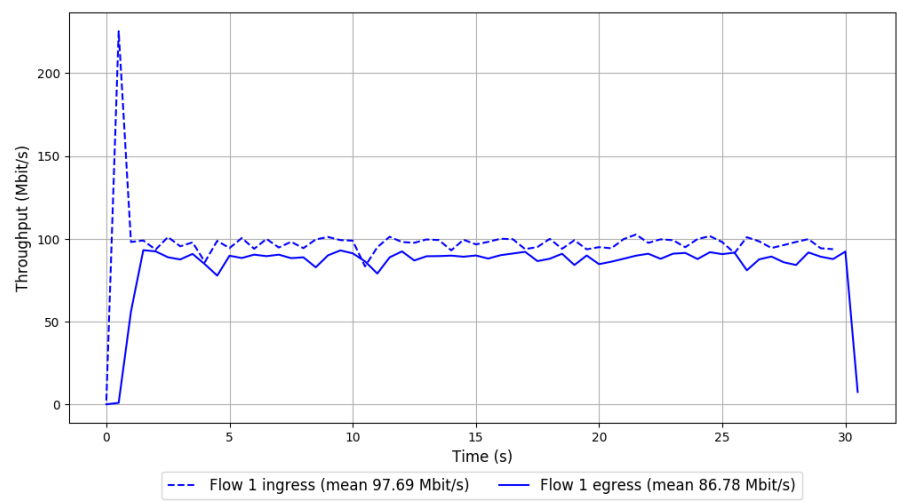Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-05-21 23:13:53
End at: 2018-05-21 23:14:23
Local clock offset: -0.311 ms
Remote clock offset: -0.836 ms


# Below is generated by plot.py at 2018-05-22 01:14:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.78 Mbit/s
95th percentile per-packet one-way delay: 72.369 ms
Loss rate: 11.15%
-- Flow 1:
Average throughput: 86.78 Mbit/s
95th percentile per-packet one-way delay: 72.369 ms
Loss rate: 11.15%
```

Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 97.69 Mbit/s)   Flow 1 egress (mean 86.78 Mbit/s)

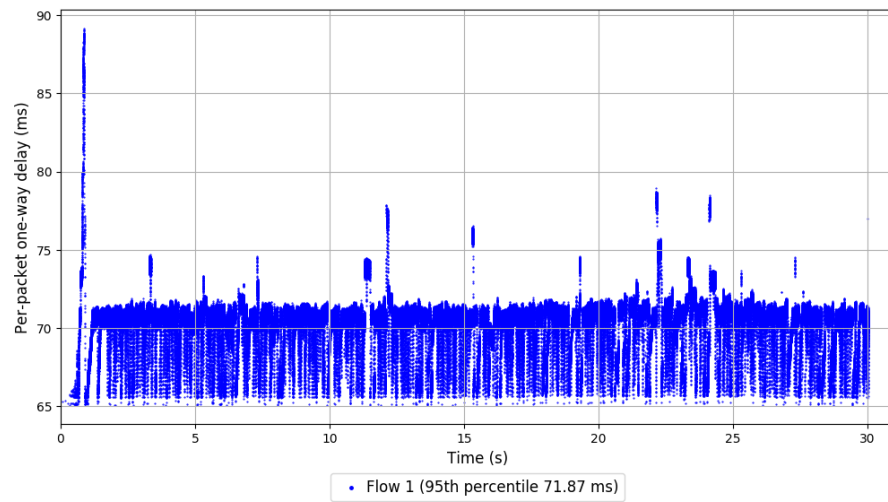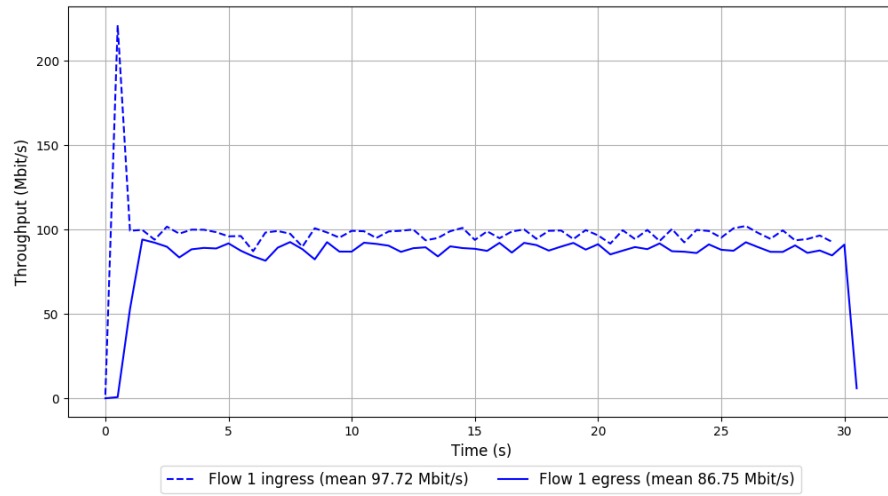Flow 1 (95th percentile 72.37 ms)

```
Run 6: Statistics of FillP

Start at: 2018-05-21 23:34:38
End at: 2018-05-21 23:35:09
Local clock offset: 1.116 ms
Remote clock offset: -0.814 ms


# Below is generated by plot.py at 2018-05-22 01:14:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.75 Mbit/s
95th percentile per-packet one-way delay: 71.867 ms
Loss rate: 11.21%
-- Flow 1:
Average throughput: 86.75 Mbit/s
95th percentile per-packet one-way delay: 71.867 ms
Loss rate: 11.21%
```

Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 97.72 Mbit/s)   Flow 1 egress (mean 86.75 Mbit/s)

Flow 1 (95th percentile 71.87 ms)

```
Run 7: Statistics of FillP

Start at: 2018-05-21 23:55:19
End at: 2018-05-21 23:55:49
Local clock offset: 2.701 ms
Remote clock offset: 0.253 ms


# Below is generated by plot.py at 2018-05-22 01:14:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.45 Mbit/s
95th percentile per-packet one-way delay: 72.010 ms
Loss rate: 11.29%
-- Flow 1:
Average throughput: 86.45 Mbit/s
95th percentile per-packet one-way delay: 72.010 ms
Loss rate: 11.29%
```
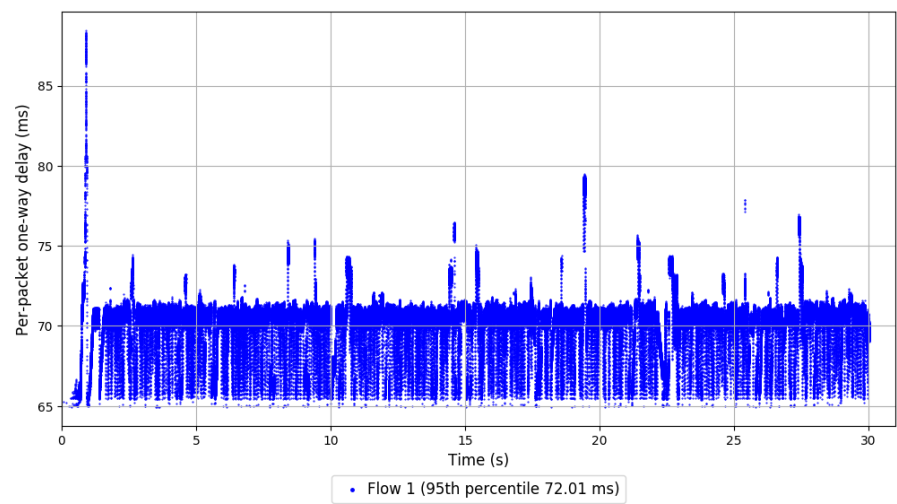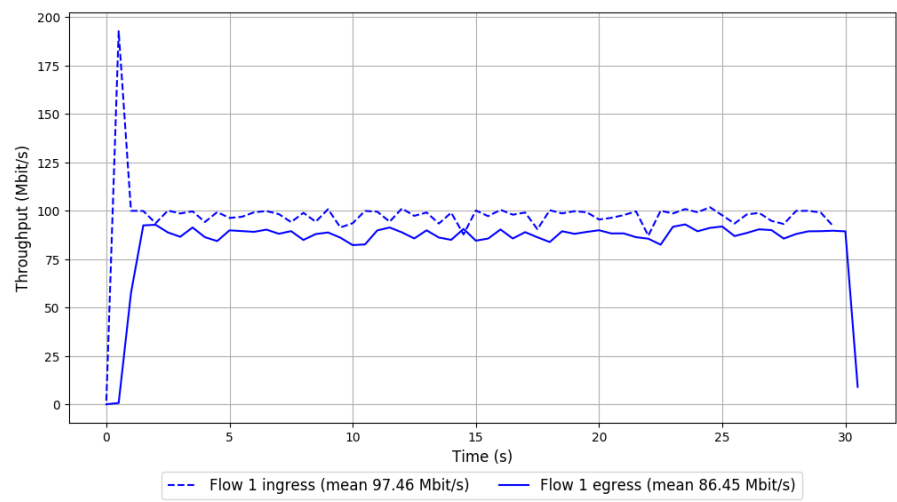
Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 97.46 Mbit/s)   Flow 1 egress (mean 86.45 Mbit/s)

Flow 1 (95th percentile 72.01 ms)

```
Run 8: Statistics of FillP

Start at: 2018-05-22 00:15:59
End at: 2018-05-22 00:16:29
Local clock offset: 0.903 ms
Remote clock offset: 0.239 ms


# Below is generated by plot.py at 2018-05-22 01:14:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.24 Mbit/s
95th percentile per-packet one-way delay: 71.943 ms
Loss rate: 11.80%
-- Flow 1:
Average throughput: 86.24 Mbit/s
95th percentile per-packet one-way delay: 71.943 ms
Loss rate: 11.80%
```
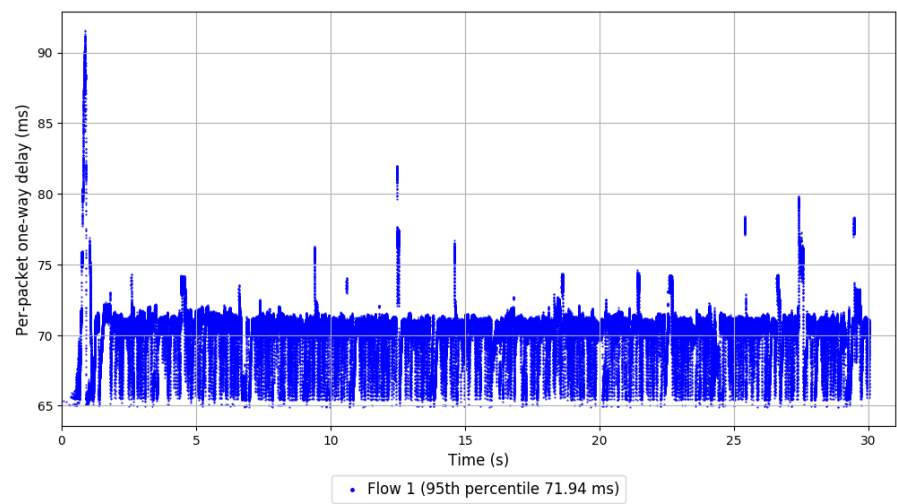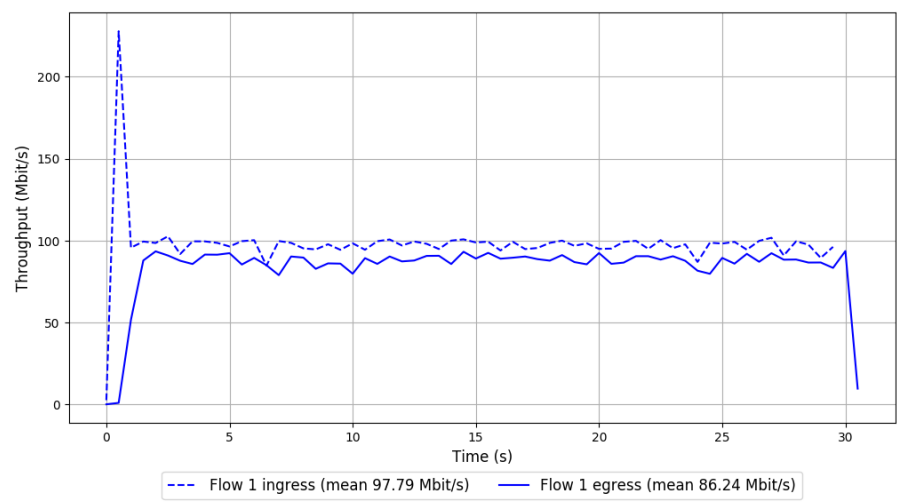
Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 97.79 Mbit/s)   —— Flow 1 egress (mean 86.24 Mbit/s)

• Flow 1 (95th percentile 71.94 ms)

```
Run 9: Statistics of FillP

Start at: 2018-05-22 00:37:19
End at: 2018-05-22 00:37:50
Local clock offset: 3.686 ms
Remote clock offset: 0.185 ms


# Below is generated by plot.py at 2018-05-22 01:15:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.94 Mbit/s
95th percentile per-packet one-way delay: 72.054 ms
Loss rate: 11.17%
-- Flow 1:
Average throughput: 87.94 Mbit/s
95th percentile per-packet one-way delay: 72.054 ms
Loss rate: 11.17%
```
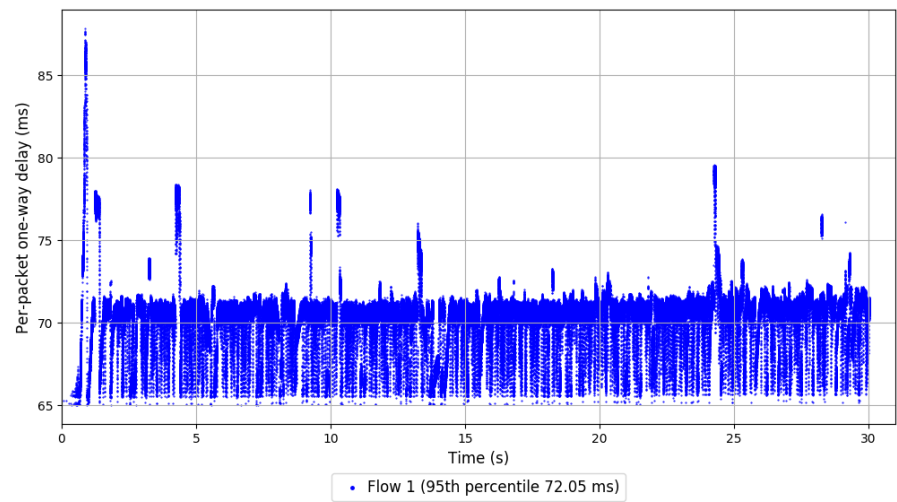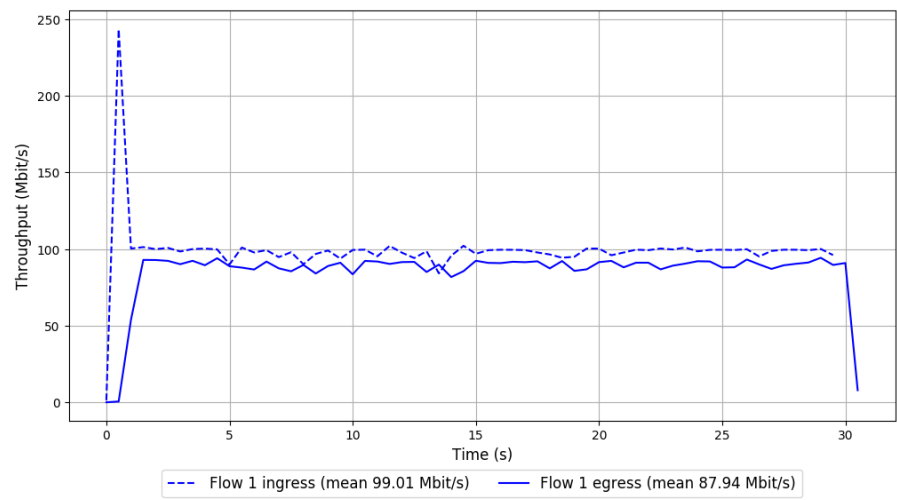
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 99.01 Mbit/s) Flow 1 egress (mean 87.94 Mbit/s)

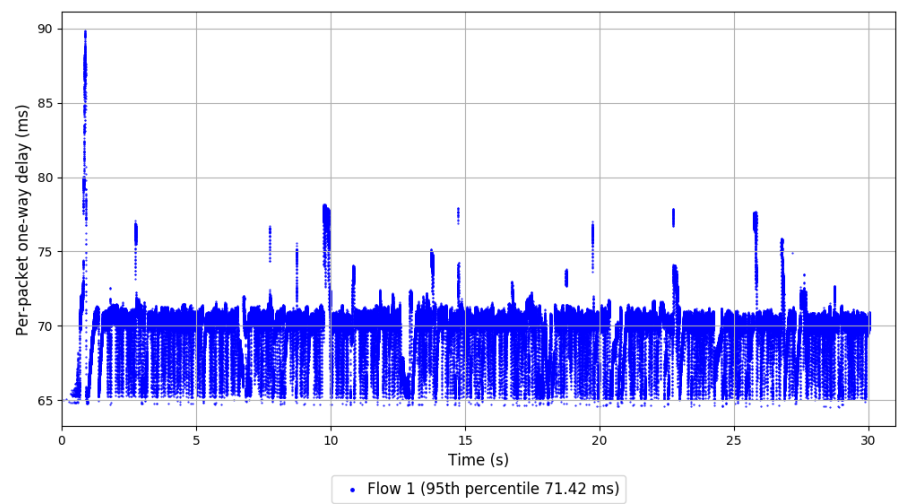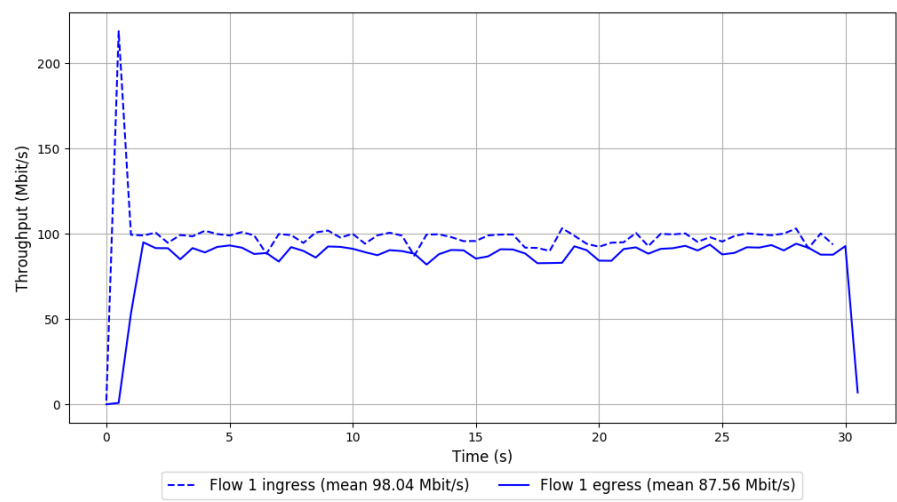Flow 1 (95th percentile 72.05 ms)

```
Run 10: Statistics of FillP

Start at: 2018-05-22 00:58:01
End at: 2018-05-22 00:58:31
Local clock offset: 4.522 ms
Remote clock offset: -2.627 ms


# Below is generated by plot.py at 2018-05-22 01:15:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.56 Mbit/s
95th percentile per-packet one-way delay: 71.423 ms
Loss rate: 10.67%
-- Flow 1:
Average throughput: 87.56 Mbit/s
95th percentile per-packet one-way delay: 71.423 ms
Loss rate: 10.67%
```
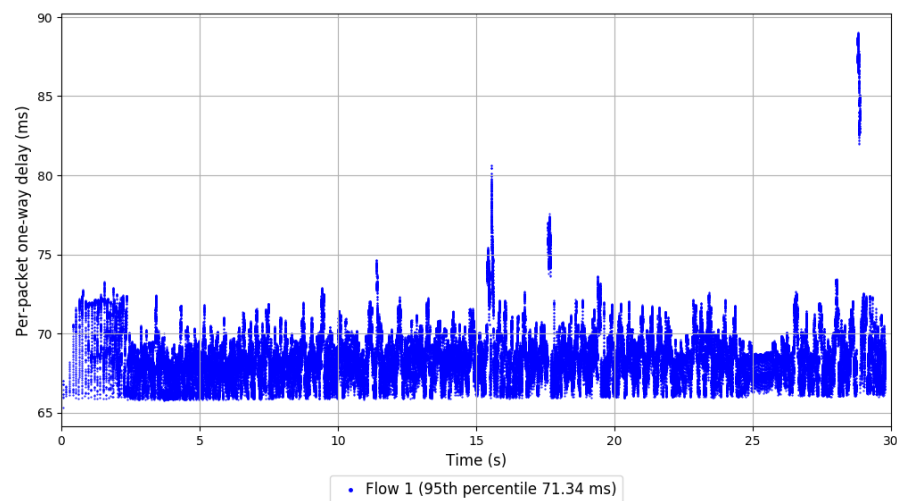
Run 10: Report of FillP — Data Link

Flow 1 ingress (mean 98.04 Mbit/s)   Flow 1 egress (mean 87.56 Mbit/s)

Flow 1 (95th percentile 71.42 ms)

```
Run 1: Statistics of Indigo

Start at: 2018-05-21 22:00:14
End at: 2018-05-21 22:00:44
Local clock offset: 0.959 ms
Remote clock offset: -0.711 ms


# Below is generated by plot.py at 2018-05-22 01:15:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.99 Mbit/s
95th percentile per-packet one-way delay: 71.342 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 85.99 Mbit/s
95th percentile per-packet one-way delay: 71.342 ms
Loss rate: 2.11%
```
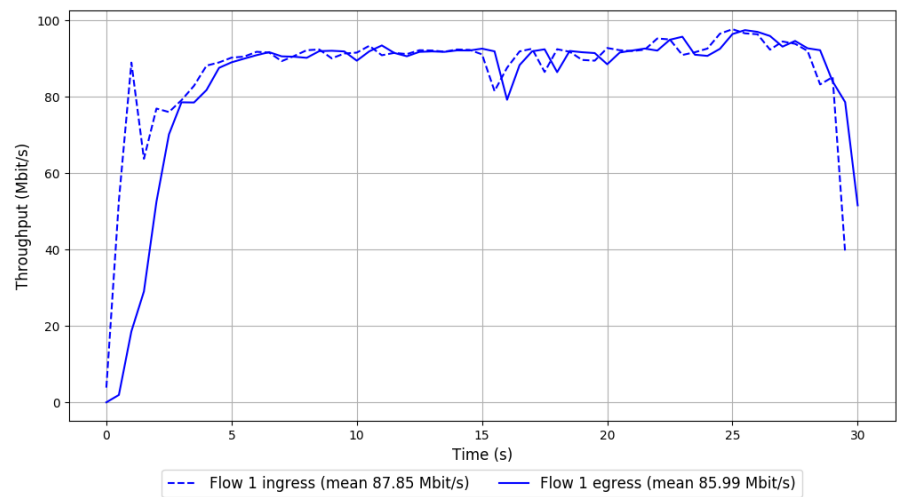
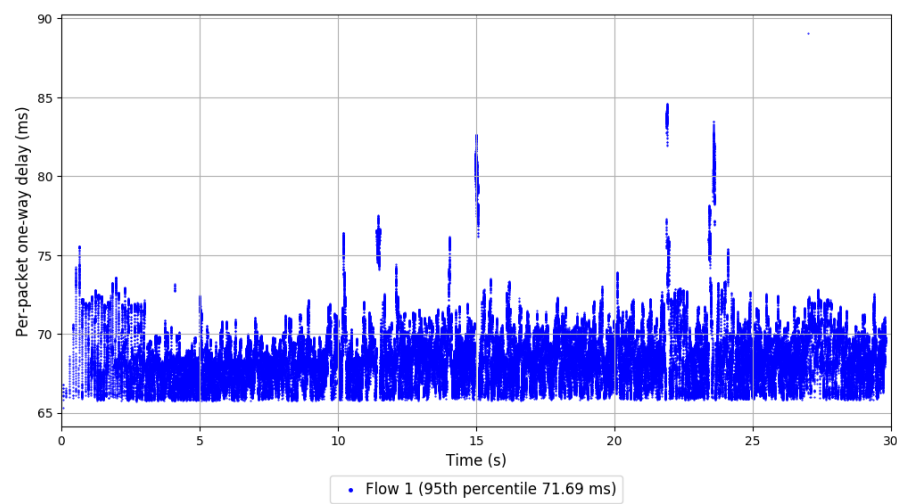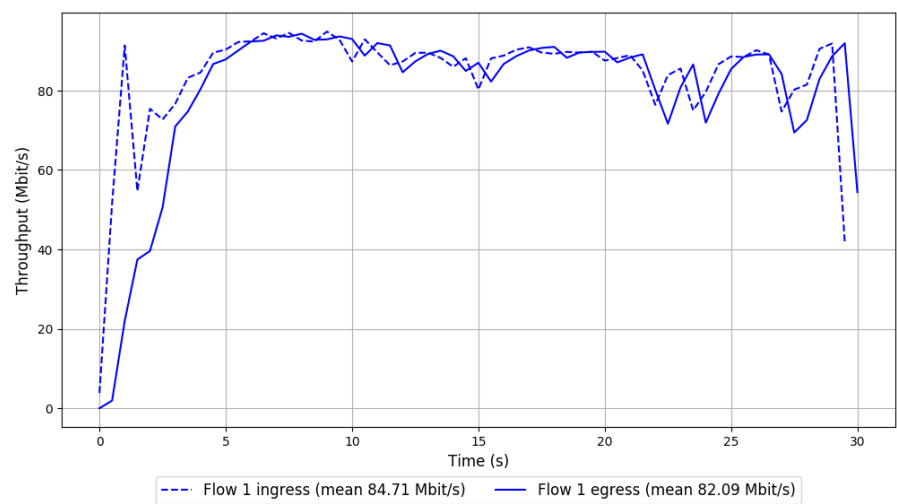Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-05-21 22:20:49
End at: 2018-05-21 22:21:19
Local clock offset: 4.371 ms
Remote clock offset: -1.419 ms


# Below is generated by plot.py at 2018-05-22 01:15:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.09 Mbit/s
95th percentile per-packet one-way delay: 71.694 ms
Loss rate: 3.08%
-- Flow 1:
Average throughput: 82.09 Mbit/s
95th percentile per-packet one-way delay: 71.694 ms
Loss rate: 3.08%
```

Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-05-21 22:41:30
End at: 2018-05-21 22:42:00
Local clock offset: 4.369 ms
Remote clock offset: -0.83 ms


# Below is generated by plot.py at 2018-05-22 01:15:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.63 Mbit/s
95th percentile per-packet one-way delay: 71.707 ms
Loss rate: 6.53%
-- Flow 1:
Average throughput: 86.63 Mbit/s
95th percentile per-packet one-way delay: 71.707 ms
Loss rate: 6.53%
```
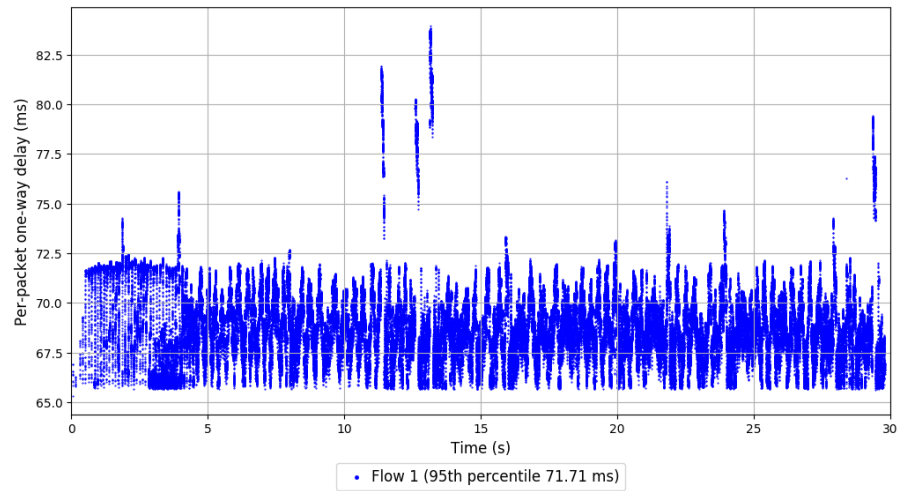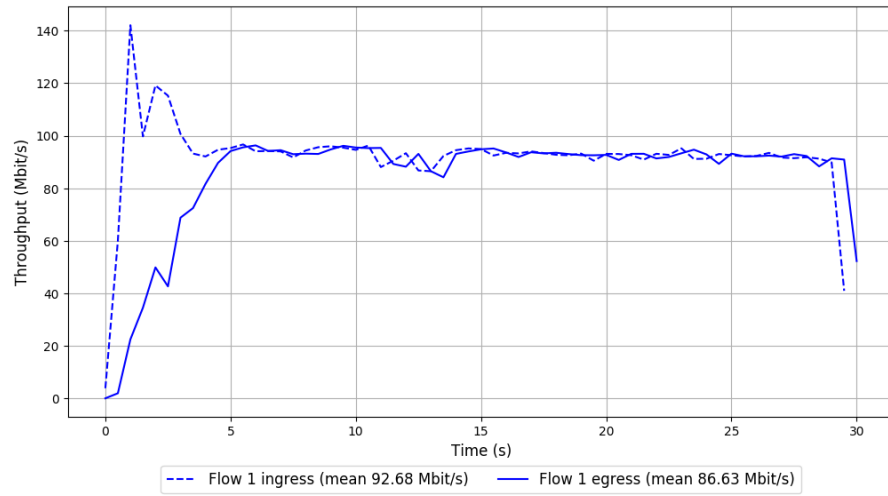
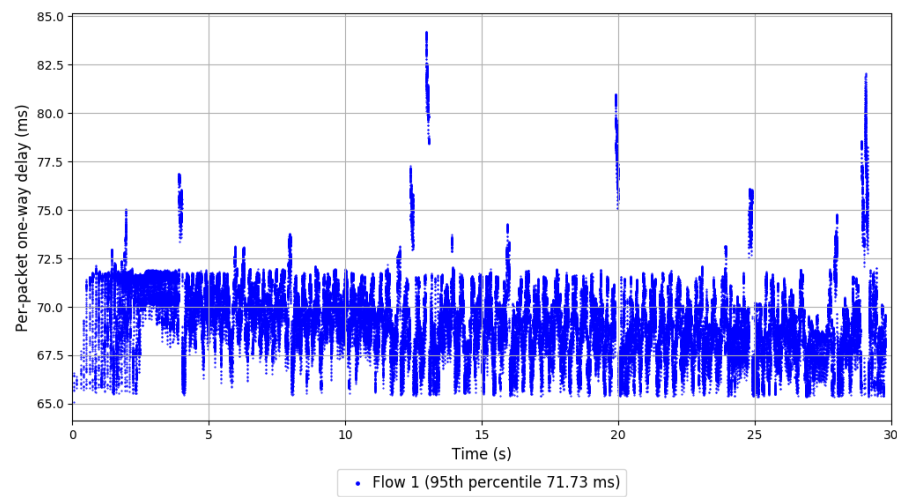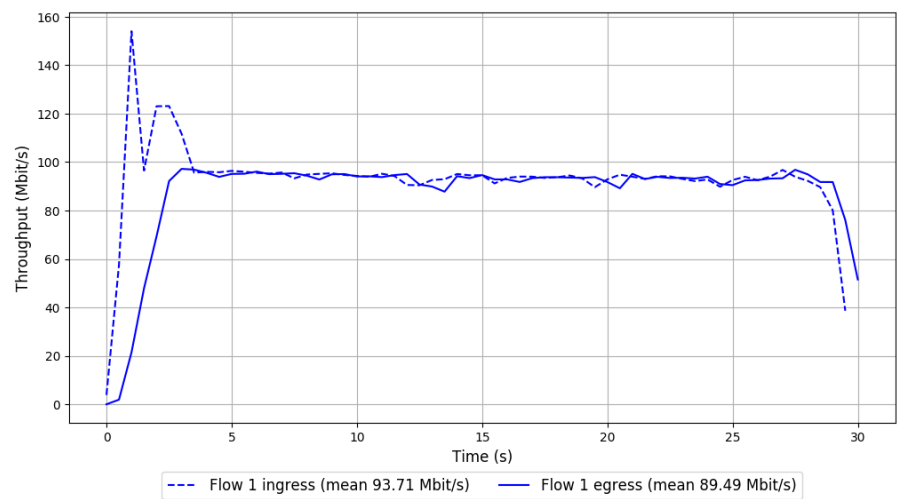## Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-05-21 23:02:10
End at: 2018-05-21 23:02:40
Local clock offset: 2.173 ms
Remote clock offset: -0.769 ms


# Below is generated by plot.py at 2018-05-22 01:15:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.49 Mbit/s
95th percentile per-packet one-way delay: 71.729 ms
Loss rate: 4.49%
-- Flow 1:
Average throughput: 89.49 Mbit/s
95th percentile per-packet one-way delay: 71.729 ms
Loss rate: 4.49%
```

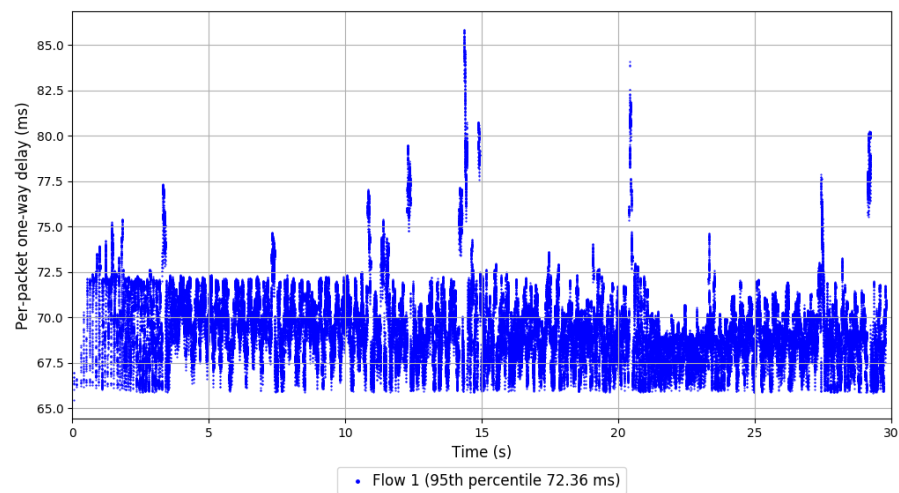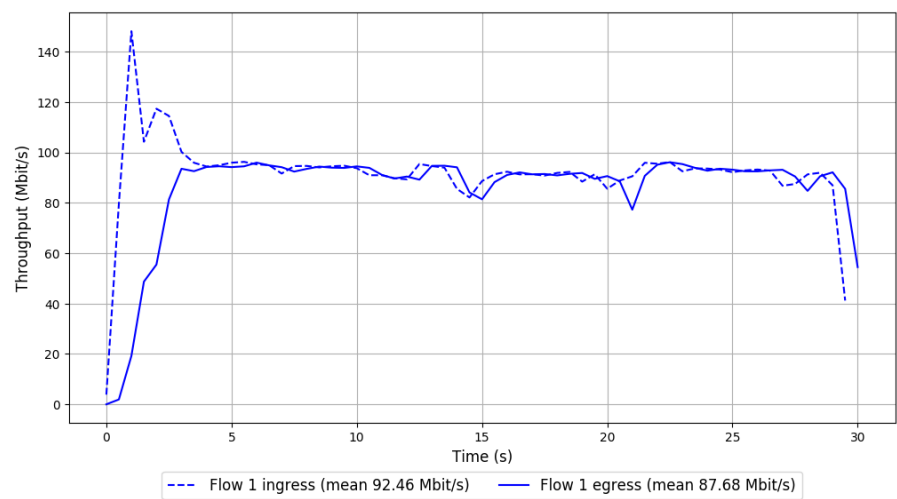Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2018-05-21 23:22:50
End at: 2018-05-21 23:23:20
Local clock offset: -1.072 ms
Remote clock offset: -0.912 ms


# Below is generated by plot.py at 2018-05-22 01:15:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.68 Mbit/s
95th percentile per-packet one-way delay: 72.359 ms
Loss rate: 5.15%
-- Flow 1:
Average throughput: 87.68 Mbit/s
95th percentile per-packet one-way delay: 72.359 ms
Loss rate: 5.15%
```

Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2018-05-21 23:43:35
End at: 2018-05-21 23:44:05
Local clock offset: 2.181 ms
Remote clock offset: -0.074 ms


# Below is generated by plot.py at 2018-05-22 01:16:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.45 Mbit/s
95th percentile per-packet one-way delay: 71.958 ms
Loss rate: 3.99%
-- Flow 1:
Average throughput: 85.45 Mbit/s
95th percentile per-packet one-way delay: 71.958 ms
Loss rate: 3.99%
```
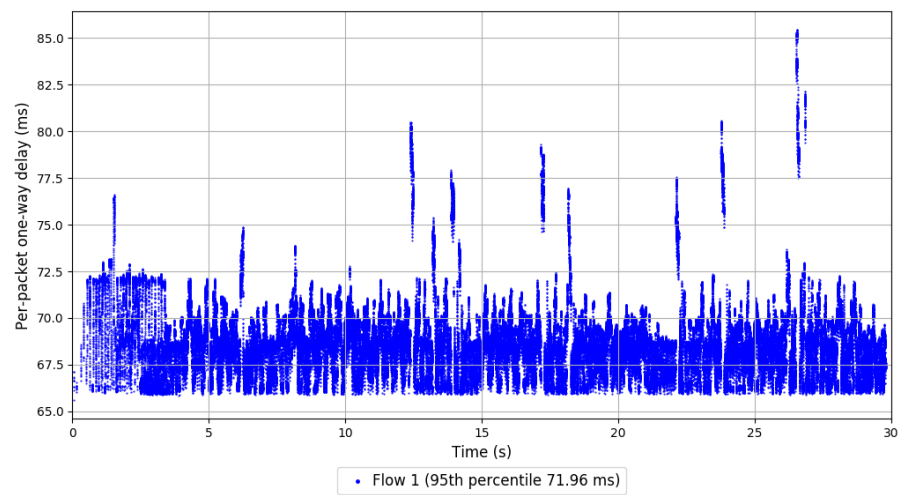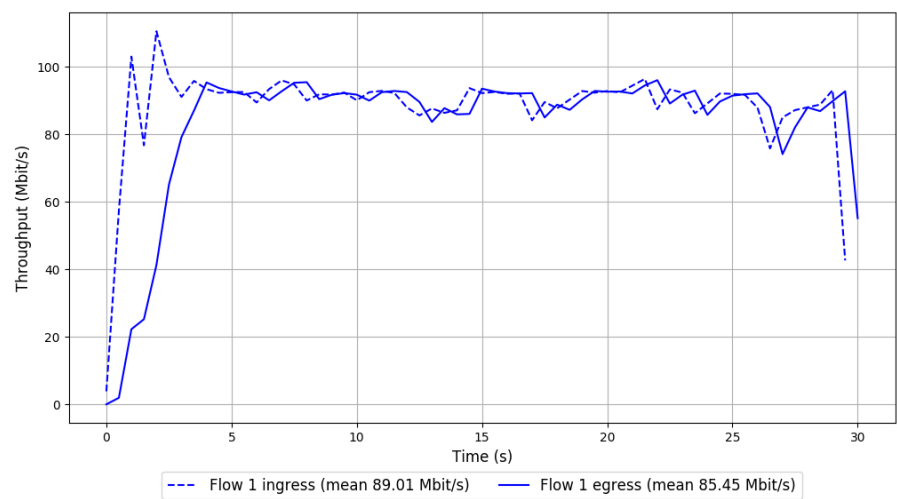
Run 6: Report of Indigo — Data Link

Flow 1 ingress (mean 89.01 Mbit/s) --- Flow 1 egress (mean 85.45 Mbit/s)

• Flow 1 (95th percentile 71.96 ms)

```
Run 7: Statistics of Indigo

Start at: 2018-05-22 00:04:16
End at: 2018-05-22 00:04:46
Local clock offset: 1.611 ms
Remote clock offset: 0.436 ms


# Below is generated by plot.py at 2018-05-22 01:16:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 71.818 ms
Loss rate: 6.55%
-- Flow 1:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 71.818 ms
Loss rate: 6.55%
```
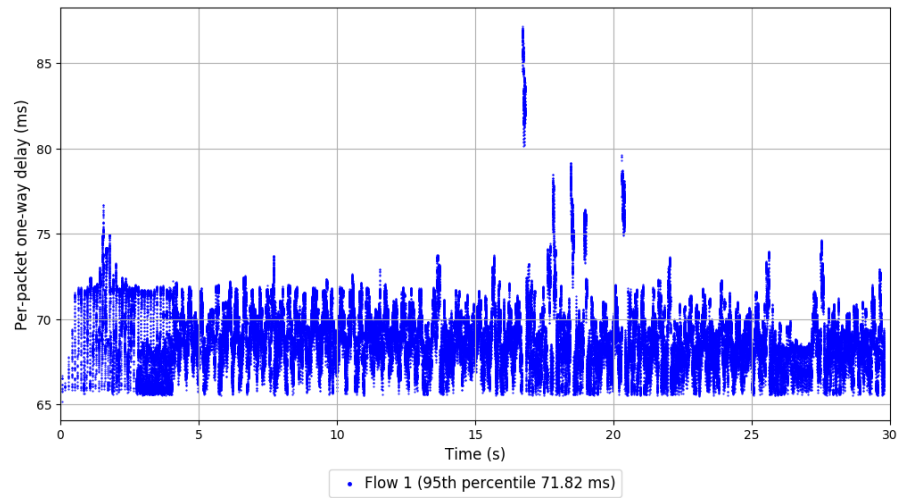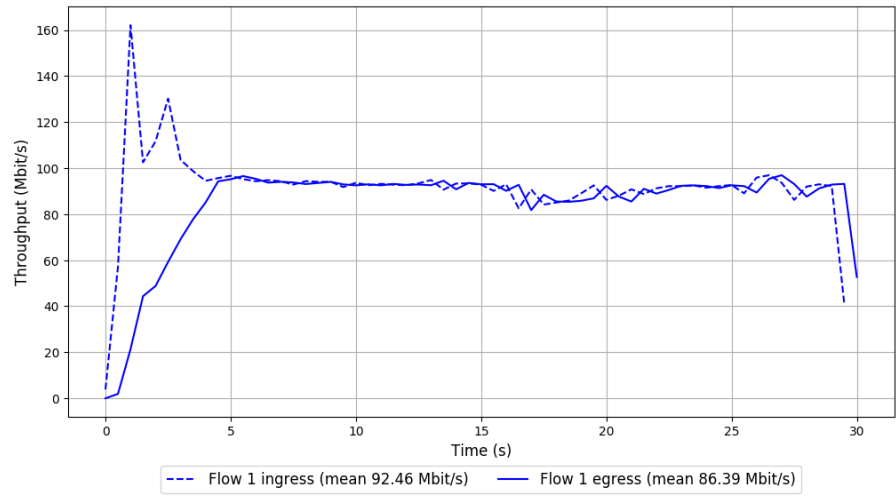
Run 7: Report of Indigo — Data Link

Flow 1 ingress (mean 92.46 Mbit/s)   Flow 1 egress (mean 86.39 Mbit/s)

Flow 1 (95th percentile 71.82 ms)

```
Run 8: Statistics of Indigo

Start at: 2018-05-22 00:24:56
End at: 2018-05-22 00:25:26
Local clock offset: 0.631 ms
Remote clock offset: 0.181 ms


# Below is generated by plot.py at 2018-05-22 01:16:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.28 Mbit/s
95th percentile per-packet one-way delay: 73.024 ms
Loss rate: 6.42%
-- Flow 1:
Average throughput: 87.28 Mbit/s
95th percentile per-packet one-way delay: 73.024 ms
Loss rate: 6.42%
```
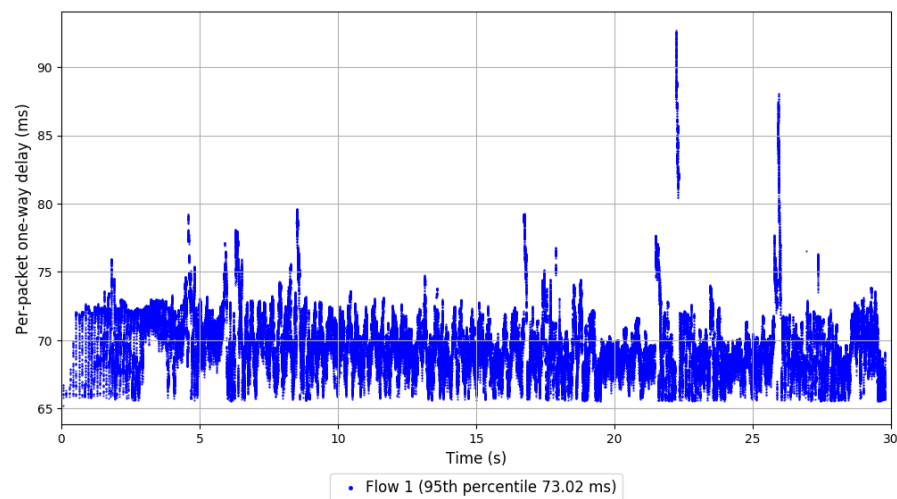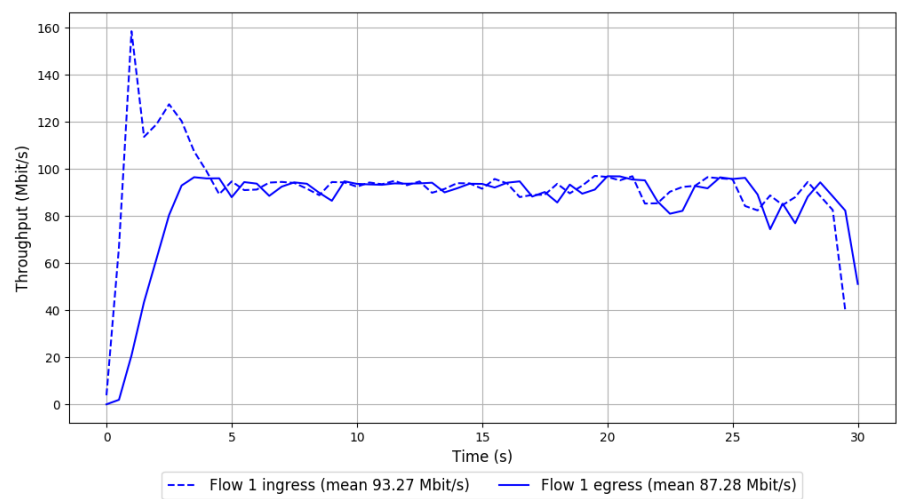
Run 8: Report of Indigo — Data Link

```
Run 9: Statistics of Indigo

Start at: 2018-05-22 00:46:17
End at: 2018-05-22 00:46:47
Local clock offset: 4.574 ms
Remote clock offset: -1.15 ms


# Below is generated by plot.py at 2018-05-22 01:16:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.35 Mbit/s
95th percentile per-packet one-way delay: 72.247 ms
Loss rate: 5.73%
-- Flow 1:
Average throughput: 90.35 Mbit/s
95th percentile per-packet one-way delay: 72.247 ms
Loss rate: 5.73%
```
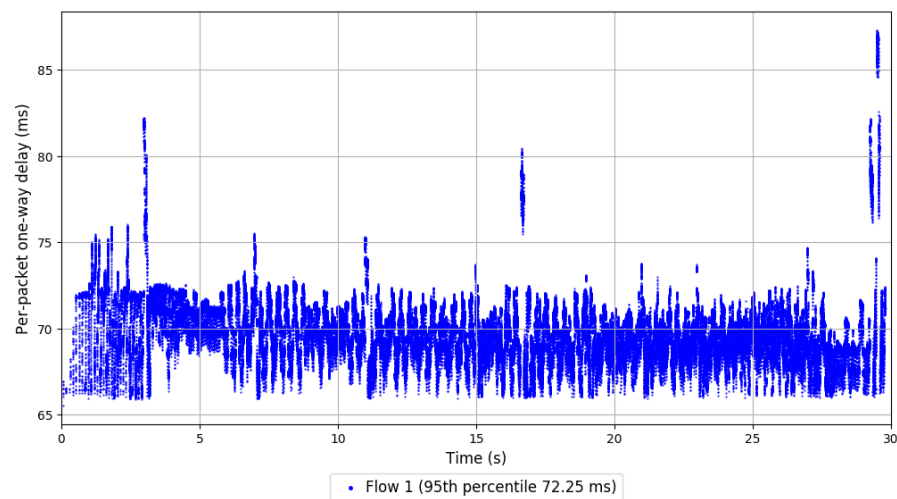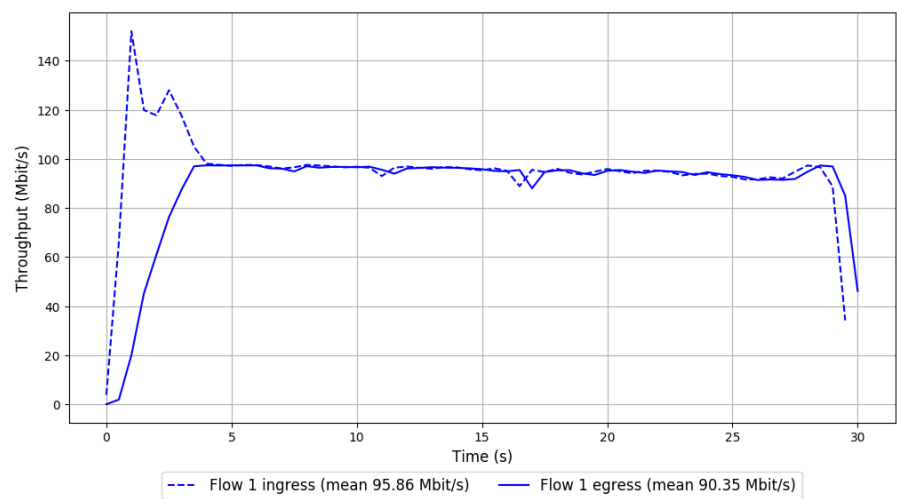
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-05-22 01:06:58
End at: 2018-05-22 01:07:28
Local clock offset: 1.302 ms
Remote clock offset: -3.245 ms


# Below is generated by plot.py at 2018-05-22 01:16:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.91 Mbit/s
95th percentile per-packet one-way delay: 71.752 ms
Loss rate: 3.95%
-- Flow 1:
Average throughput: 88.91 Mbit/s
95th percentile per-packet one-way delay: 71.752 ms
Loss rate: 3.95%
```
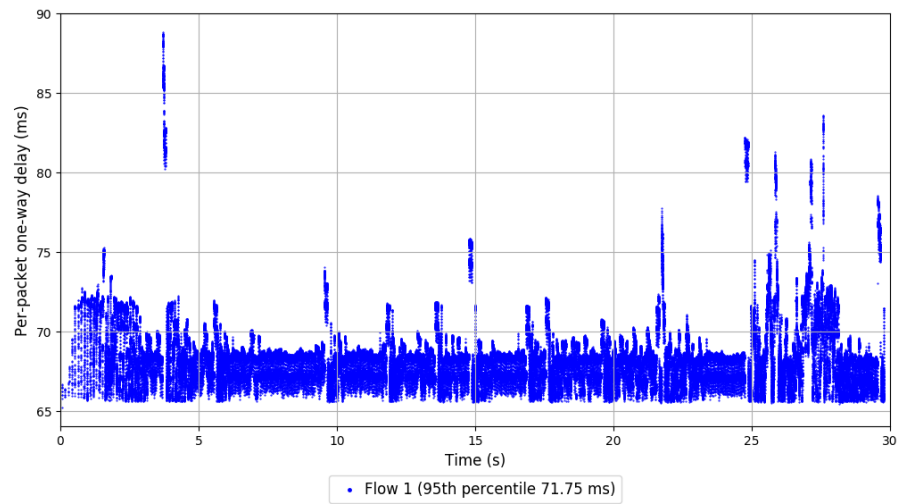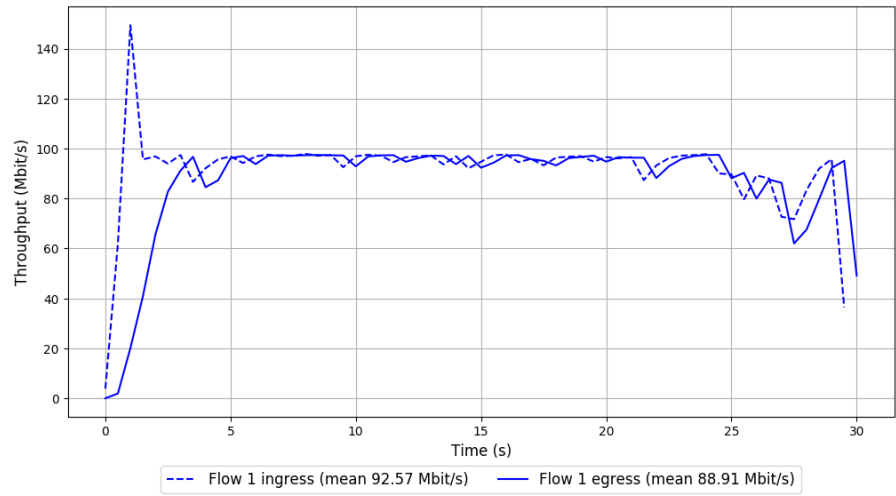
Run 10: Report of Indigo — Data Link

Flow 1 ingress (mean 92.57 Mbit/s) --- Flow 1 egress (mean 88.91 Mbit/s)
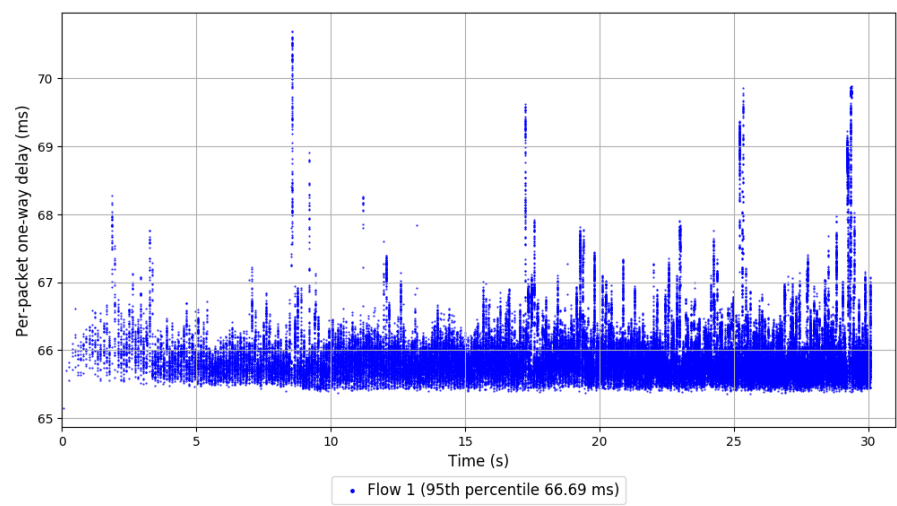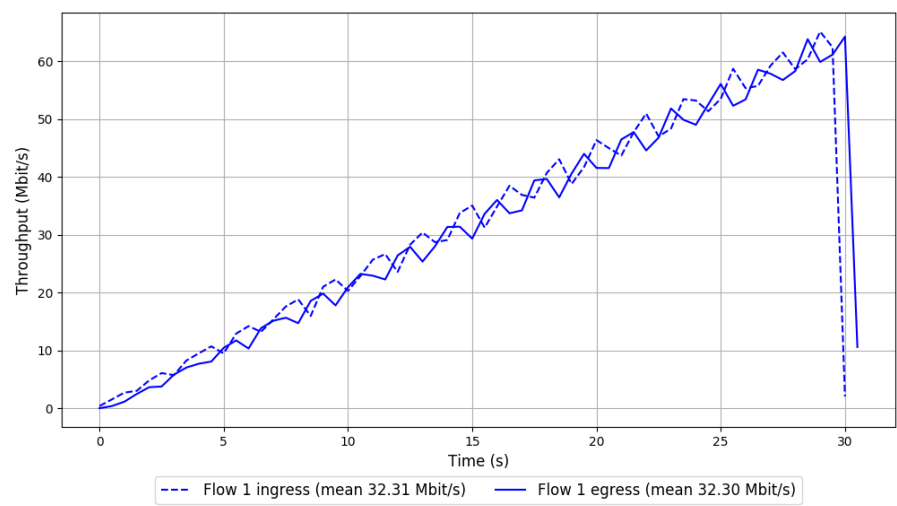

Flow 1 (95th percentile 71.75 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2018-05-21 21:44:53
End at: 2018-05-21 21:45:23
Local clock offset: 0.111 ms
Remote clock offset: 0.061 ms

# Below is generated by plot.py at 2018-05-22 01:16:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: 66.691 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: 66.691 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 32.31 Mbit/s) --- Flow 1 egress (mean 32.30 Mbit/s)
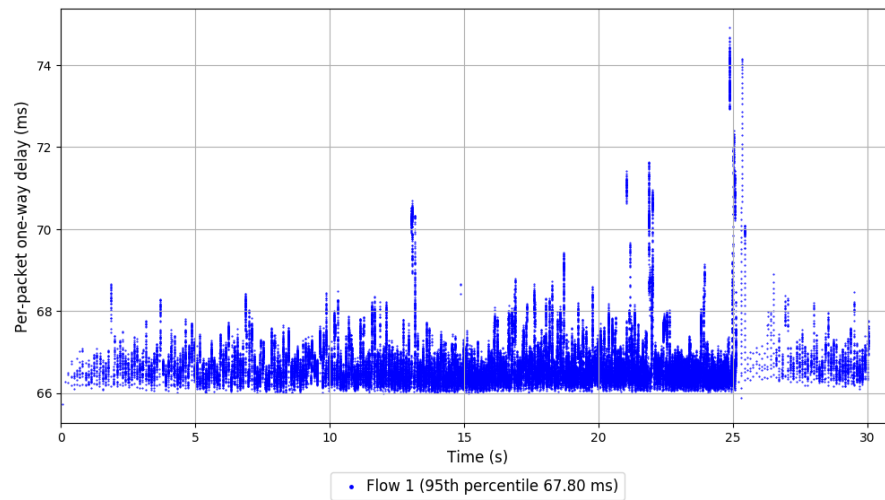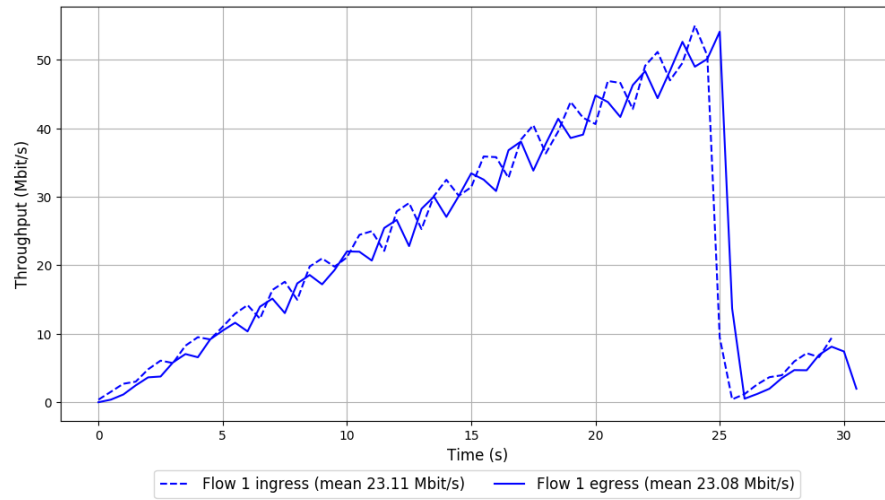

Flow 1 (95th percentile 66.69 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2018-05-21 22:05:29
End at: 2018-05-21 22:05:59
Local clock offset: 2.441 ms
Remote clock offset: -0.942 ms

# Below is generated by plot.py at 2018-05-22 01:16:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.08 Mbit/s
95th percentile per-packet one-way delay: 67.801 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 23.08 Mbit/s
95th percentile per-packet one-way delay: 67.801 ms
Loss rate: 0.14%
```
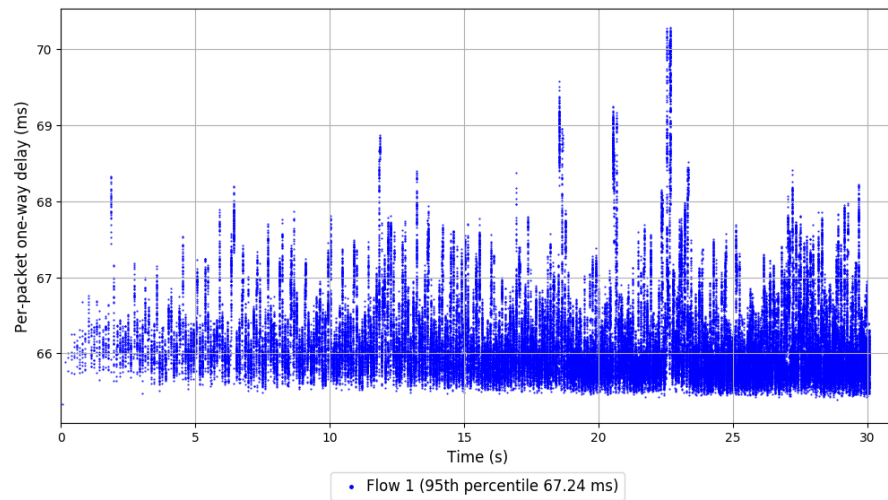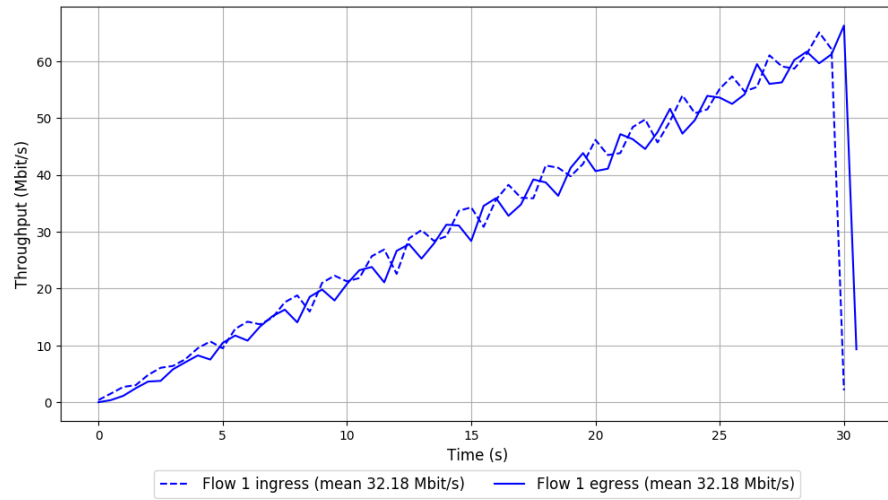
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-05-21 22:26:03
End at: 2018-05-21 22:26:33
Local clock offset: 4.927 ms
Remote clock offset: -1.399 ms


# Below is generated by plot.py at 2018-05-22 01:16:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 67.244 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 67.244 ms
Loss rate: 0.00%
```

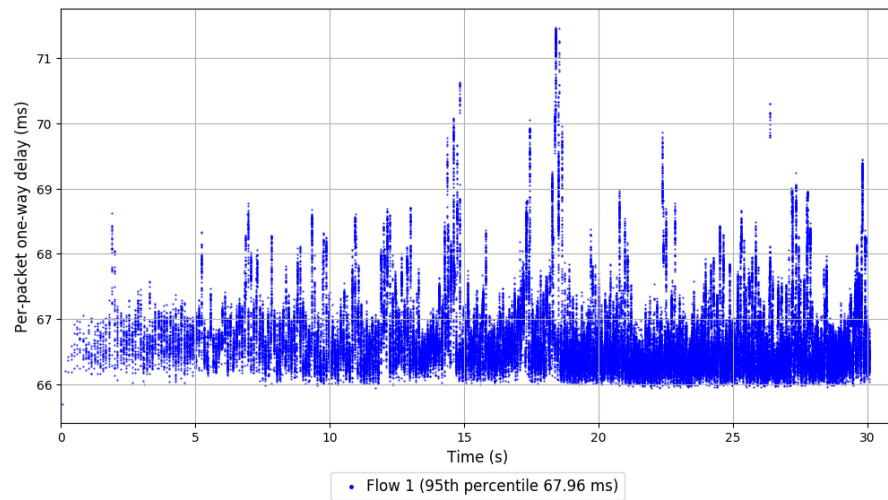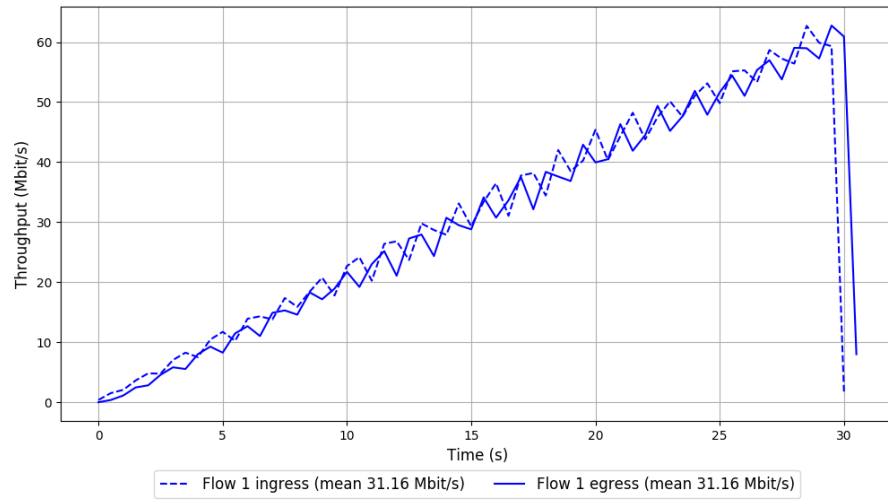## Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-05-21 22:46:43
End at: 2018-05-21 22:47:13
Local clock offset: 4.413 ms
Remote clock offset: -0.691 ms


# Below is generated by plot.py at 2018-05-22 01:16:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.16 Mbit/s
95th percentile per-packet one-way delay: 67.960 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.16 Mbit/s
95th percentile per-packet one-way delay: 67.960 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 31.16 Mbit/s) --- Flow 1 egress (mean 31.16 Mbit/s)
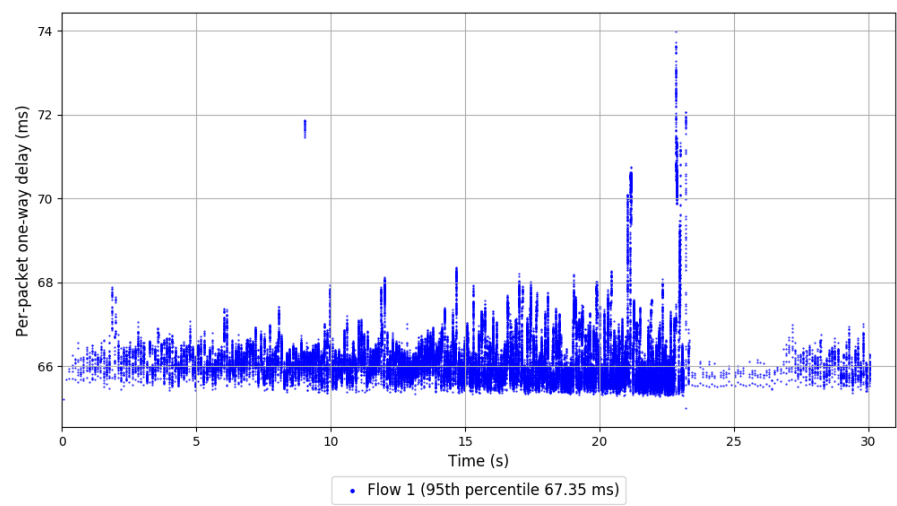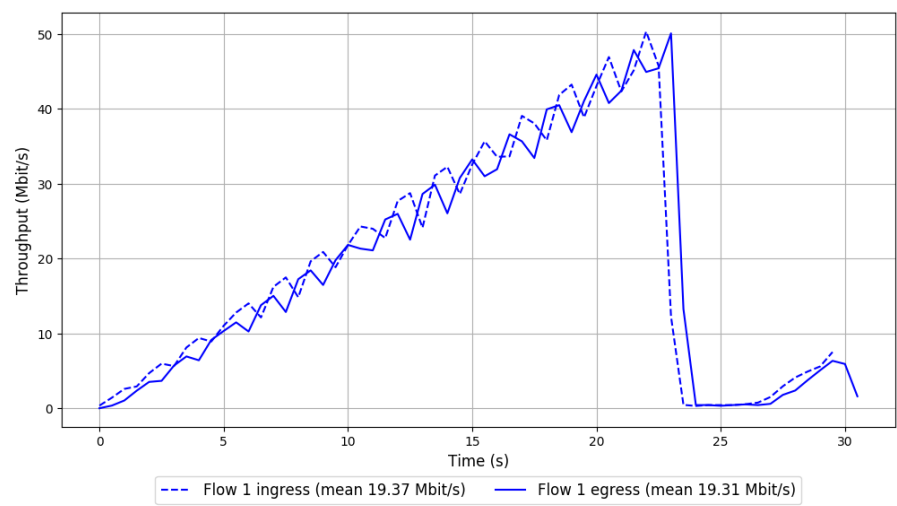

Flow 1 (95th percentile 67.96 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2018-05-21 23:07:25
End at: 2018-05-21 23:07:55
Local clock offset: 0.844 ms
Remote clock offset: -0.797 ms


# Below is generated by plot.py at 2018-05-22 01:16:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.31 Mbit/s
95th percentile per-packet one-way delay: 67.346 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 19.31 Mbit/s
95th percentile per-packet one-way delay: 67.346 ms
Loss rate: 0.31%
```

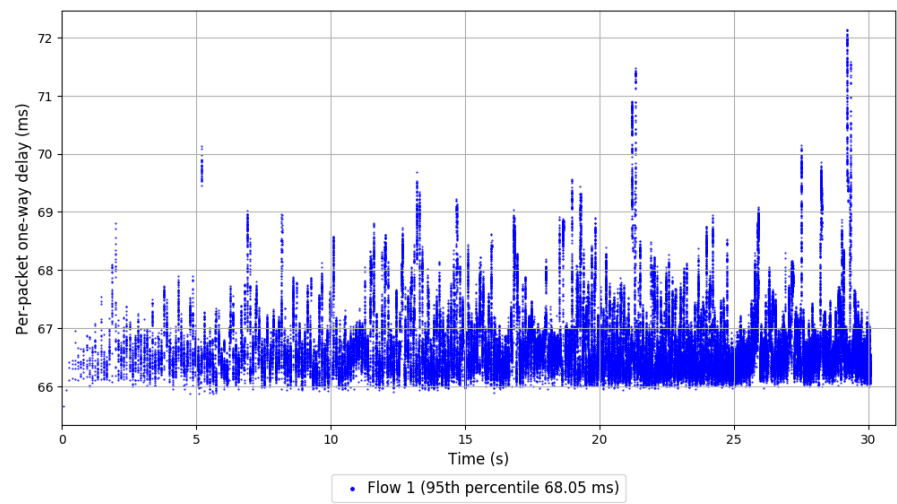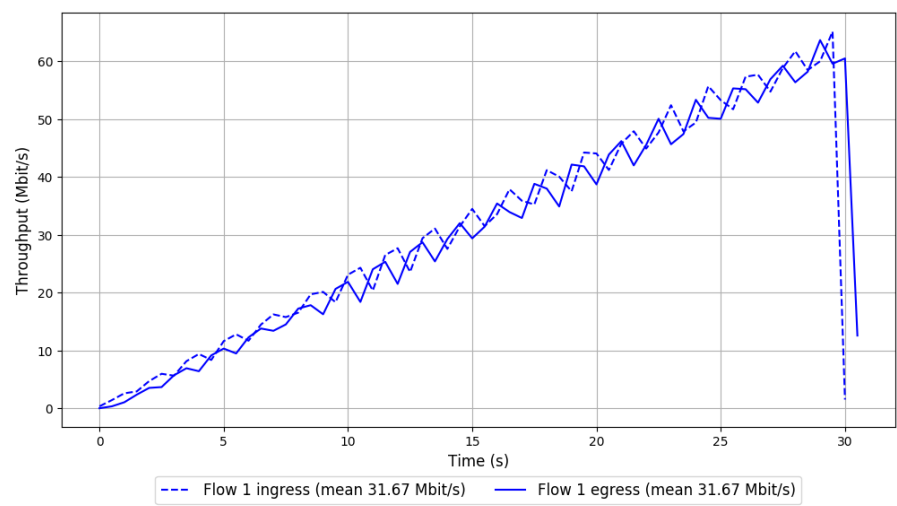# Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2018-05-21 23:28:05
End at: 2018-05-21 23:28:35
Local clock offset: -0.634 ms
Remote clock offset: -0.948 ms


# Below is generated by plot.py at 2018-05-22 01:16:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 68.047 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 68.047 ms
Loss rate: 0.00%
```

Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 31.67 Mbit/s)   Flow 1 egress (mean 31.67 Mbit/s)

Flow 1 (95th percentile 68.05 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2018-05-21 23:48:50
End at: 2018-05-21 23:49:20
Local clock offset: 2.508 ms
Remote clock offset: 0.091 ms


# Below is generated by plot.py at 2018-05-22 01:16:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.26 Mbit/s
95th percentile per-packet one-way delay: 67.865 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 21.26 Mbit/s
95th percentile per-packet one-way delay: 67.865 ms
Loss rate: 0.11%
```
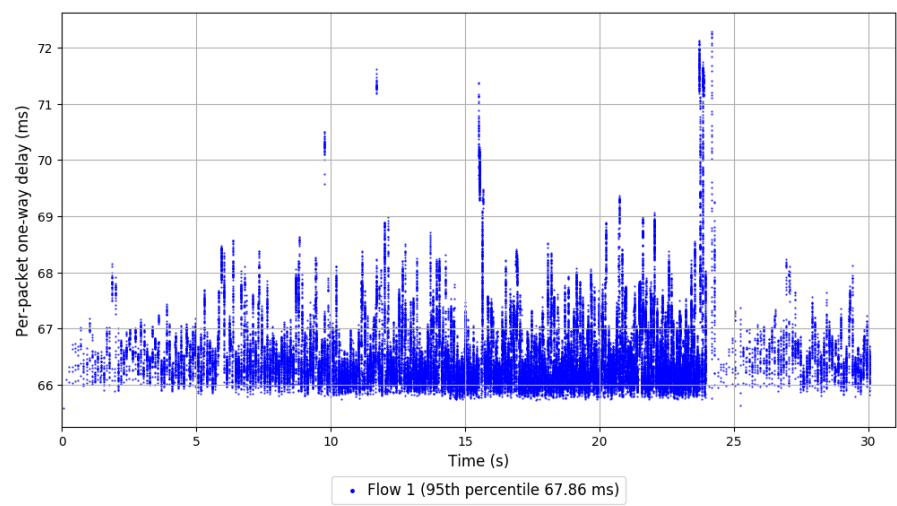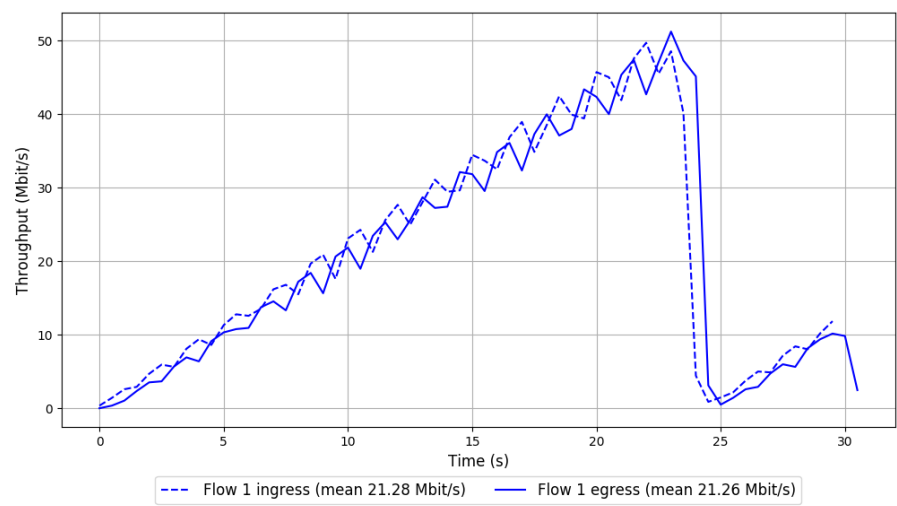
Run 7: Report of LEDBAT — Data Link

```
Run 8: Statistics of LEDBAT

Start at: 2018-05-22 00:09:31
End at: 2018-05-22 00:10:01
Local clock offset: 1.095 ms
Remote clock offset: 0.338 ms


# Below is generated by plot.py at 2018-05-22 01:16:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.73 Mbit/s
95th percentile per-packet one-way delay: 67.533 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 16.73 Mbit/s
95th percentile per-packet one-way delay: 67.533 ms
Loss rate: 0.14%
```
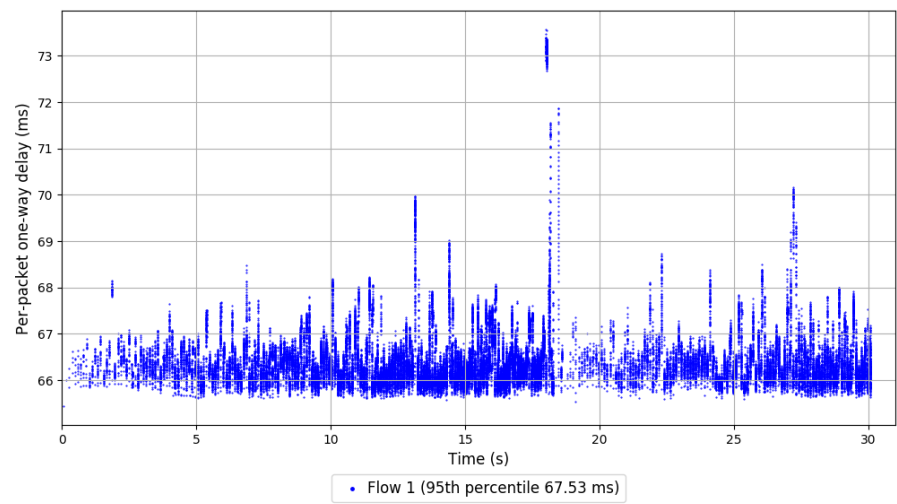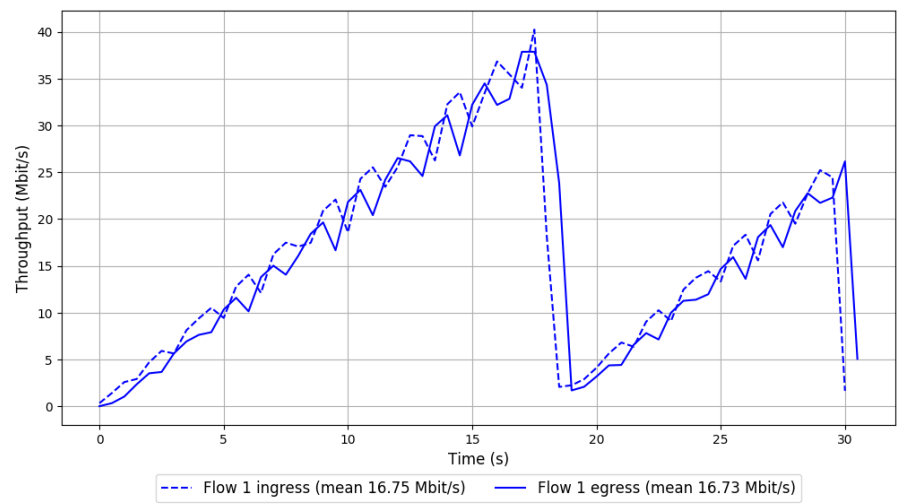
Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 16.75 Mbit/s)   Flow 1 egress (mean 16.73 Mbit/s)

Flow 1 (95th percentile 67.53 ms)

```
Run 9: Statistics of LEDBAT

Start at: 2018-05-22 00:30:55
End at: 2018-05-22 00:31:25
Local clock offset: 2.14 ms
Remote clock offset: 0.135 ms


# Below is generated by plot.py at 2018-05-22 01:16:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.68 Mbit/s
95th percentile per-packet one-way delay: 68.351 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 17.68 Mbit/s
95th percentile per-packet one-way delay: 68.351 ms
Loss rate: 0.12%
```
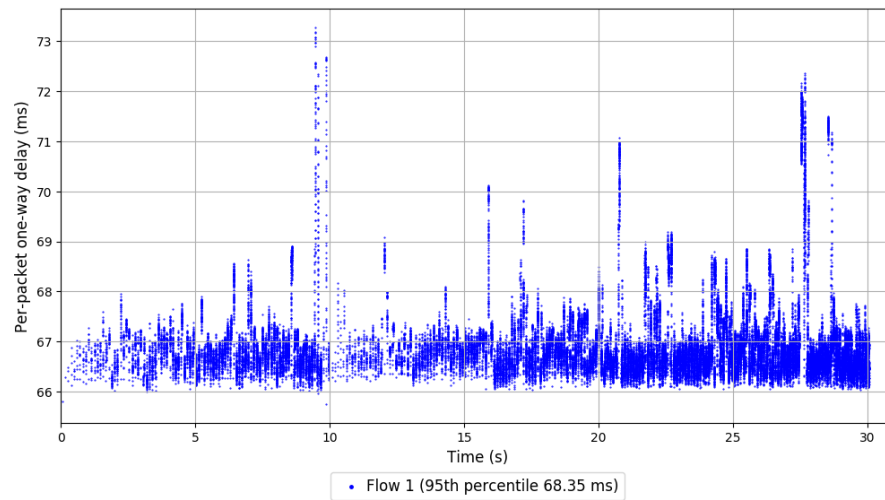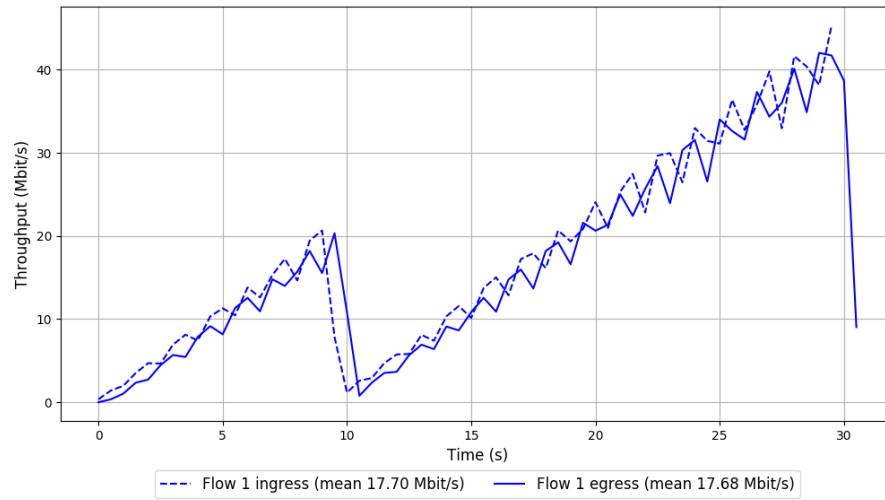
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 17.70 Mbit/s)   Flow 1 egress (mean 17.68 Mbit/s)

Flow 1 (95th percentile 68.35 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2018-05-22 00:51:32
End at: 2018-05-22 00:52:02
Local clock offset: 5.128 ms
Remote clock offset: -1.94 ms


# Below is generated by plot.py at 2018-05-22 01:16:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.65 Mbit/s
95th percentile per-packet one-way delay: 68.207 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 17.65 Mbit/s
95th percentile per-packet one-way delay: 68.207 ms
Loss rate: 0.06%
```
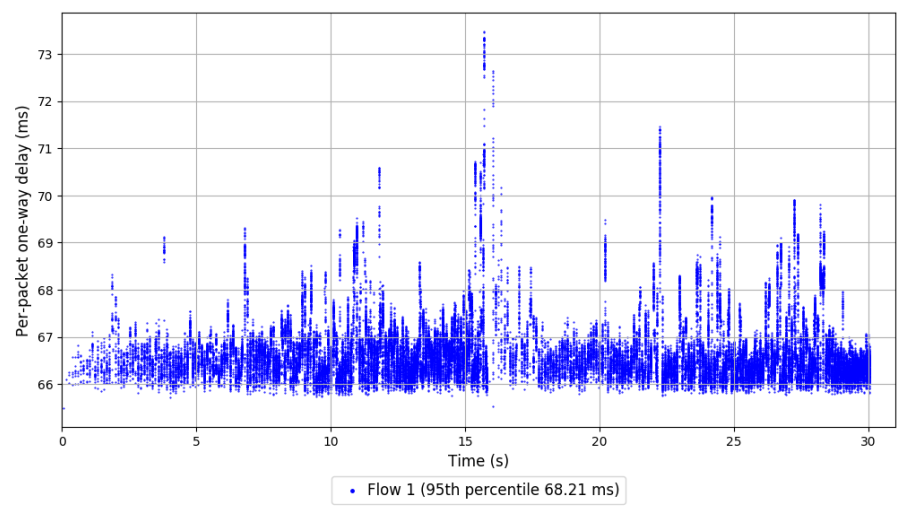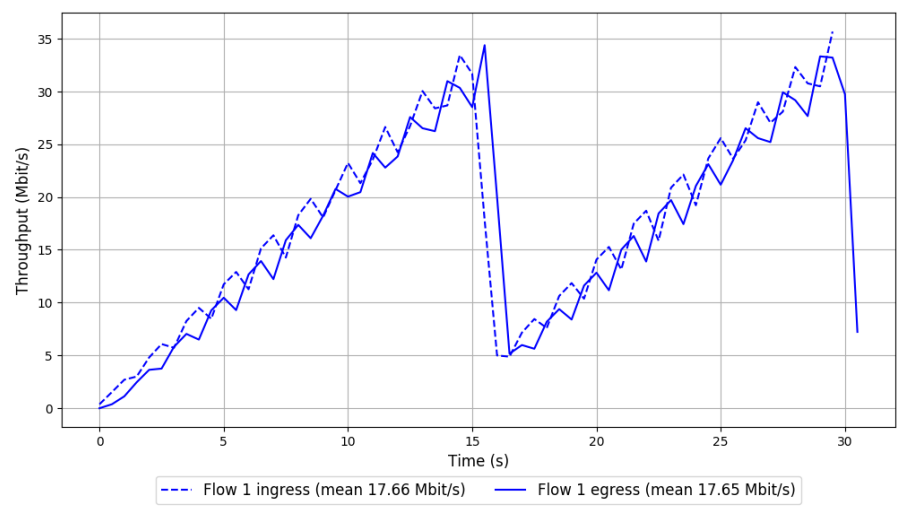
Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-05-21 21:55:06
End at: 2018-05-21 21:55:36
Local clock offset: -0.486 ms
Remote clock offset: -0.344 ms


# Below is generated by plot.py at 2018-05-22 01:17:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.45 Mbit/s
95th percentile per-packet one-way delay: 71.216 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 84.45 Mbit/s
95th percentile per-packet one-way delay: 71.216 ms
Loss rate: 0.98%
```
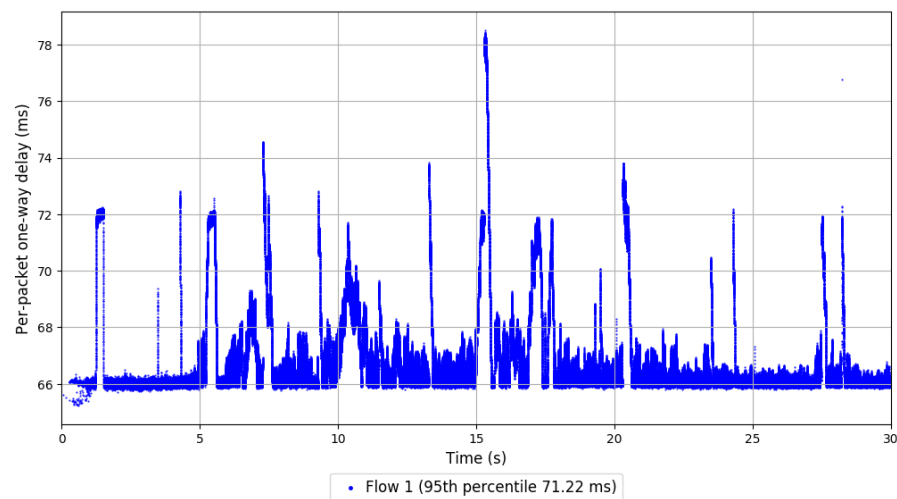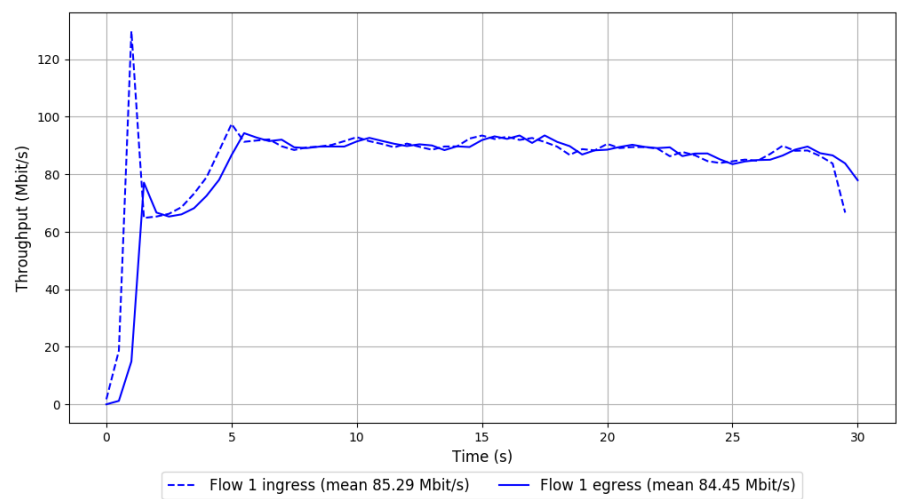
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 85.29 Mbit/s) — Flow 1 egress (mean 84.45 Mbit/s)
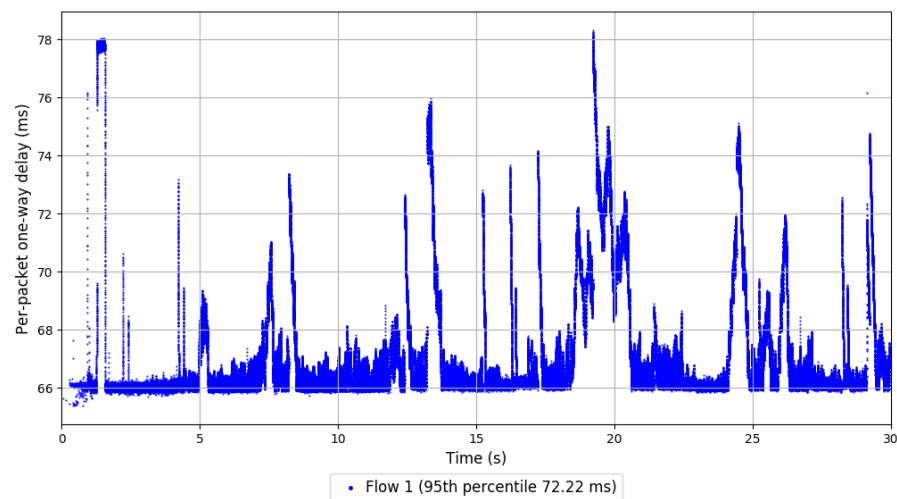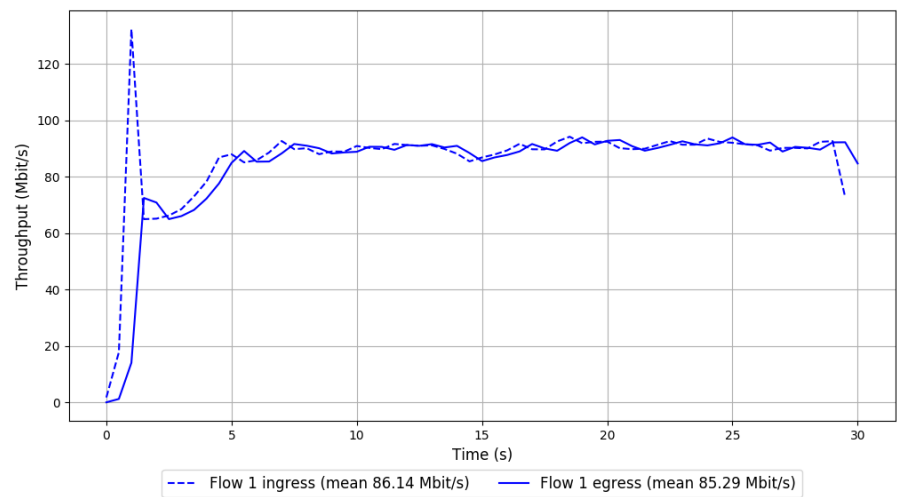

Flow 1 (95th percentile 71.22 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-05-21 22:15:41
End at: 2018-05-21 22:16:11
Local clock offset: 4.032 ms
Remote clock offset: -1.283 ms


# Below is generated by plot.py at 2018-05-22 01:17:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.29 Mbit/s
95th percentile per-packet one-way delay: 72.224 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 85.29 Mbit/s
95th percentile per-packet one-way delay: 72.224 ms
Loss rate: 0.99%
```

Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 86.14 Mbit/s) ----- Flow 1 egress (mean 85.29 Mbit/s) ———

• Flow 1 (95th percentile 72.22 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-05-21 22:36:22
End at: 2018-05-21 22:36:52
Local clock offset: 4.453 ms
Remote clock offset: -0.838 ms


# Below is generated by plot.py at 2018-05-22 01:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.38 Mbit/s
95th percentile per-packet one-way delay: 71.308 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 85.38 Mbit/s
95th percentile per-packet one-way delay: 71.308 ms
Loss rate: 0.96%
```
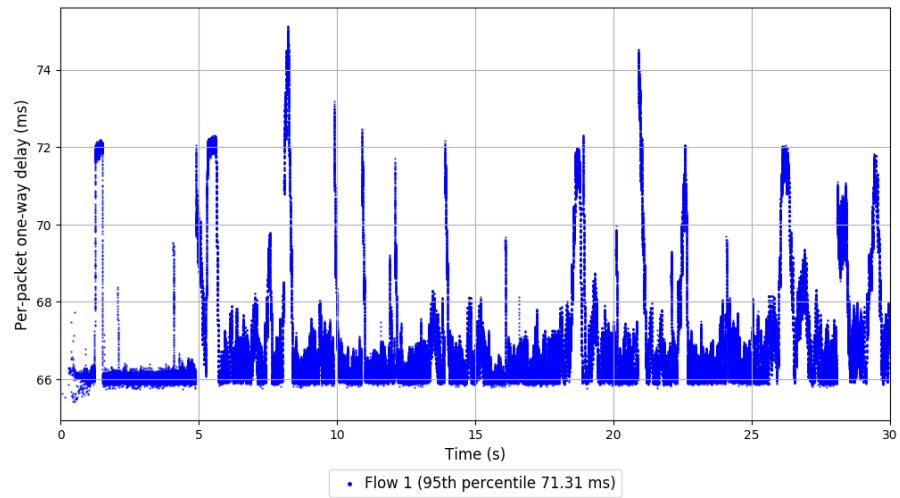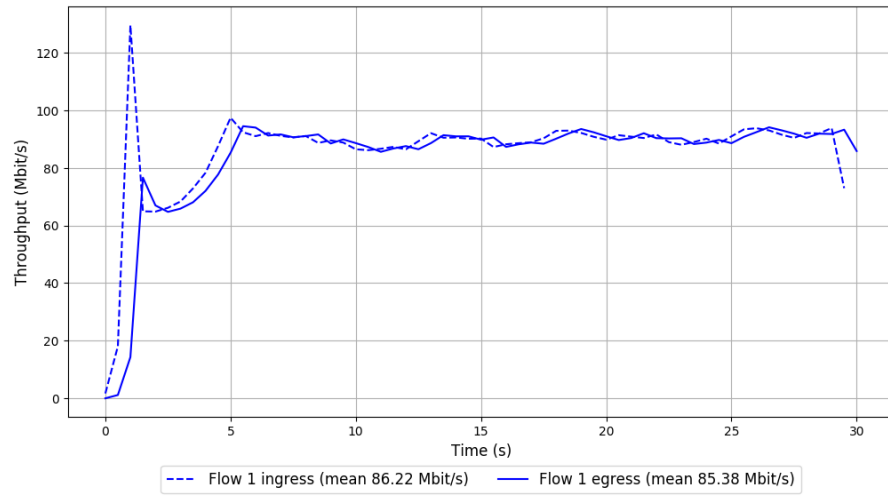
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 86.22 Mbit/s) --- Flow 1 egress (mean 85.38 Mbit/s)

Flow 1 (95th percentile 71.31 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-05-21 22:57:02
End at: 2018-05-21 22:57:32
Local clock offset: 4.672 ms
Remote clock offset: -0.769 ms


# Below is generated by plot.py at 2018-05-22 01:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.32 Mbit/s
95th percentile per-packet one-way delay: 70.572 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 83.32 Mbit/s
95th percentile per-packet one-way delay: 70.572 ms
Loss rate: 0.92%
```
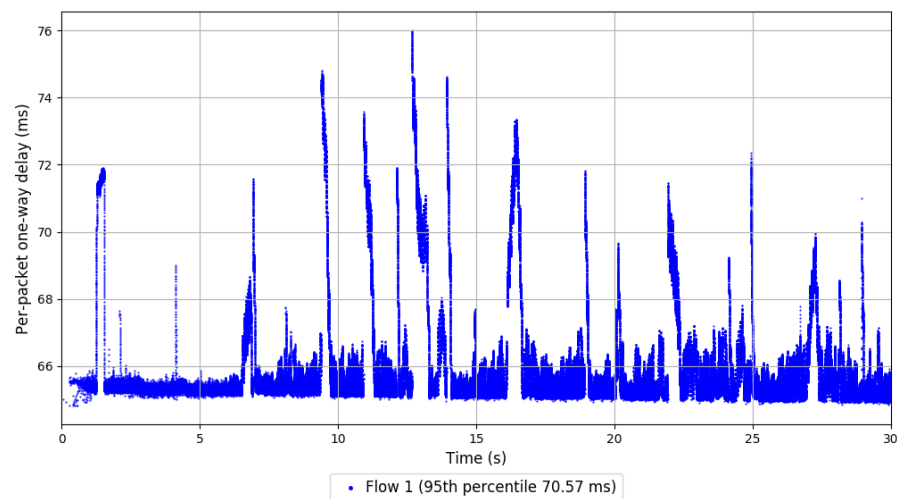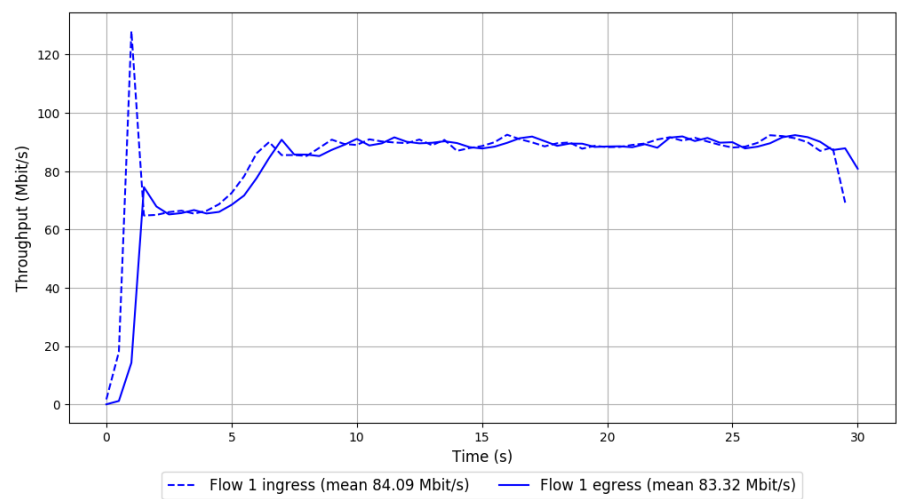
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 84.09 Mbit/s)   Flow 1 egress (mean 83.32 Mbit/s)

Flow 1 (95th percentile 70.57 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-05-21 23:17:42
End at: 2018-05-21 23:18:12
Local clock offset: -0.577 ms
Remote clock offset: -0.889 ms


# Below is generated by plot.py at 2018-05-22 01:18:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.13 Mbit/s
95th percentile per-packet one-way delay: 71.545 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 86.13 Mbit/s
95th percentile per-packet one-way delay: 71.545 ms
Loss rate: 0.92%
```
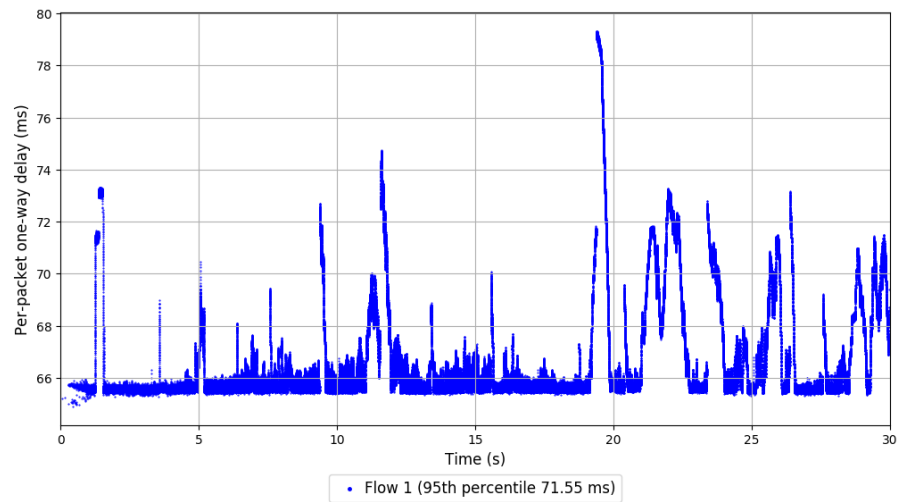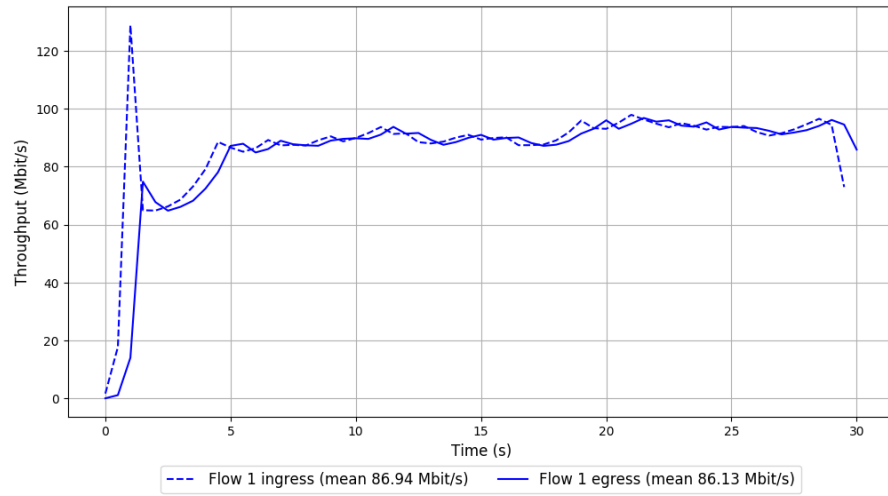
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 86.94 Mbit/s)   Flow 1 egress (mean 86.13 Mbit/s)

Flow 1 (95th percentile 71.55 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-05-21 23:38:27
End at: 2018-05-21 23:38:57
Local clock offset: 1.686 ms
Remote clock offset: -0.459 ms


# Below is generated by plot.py at 2018-05-22 01:18:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.93 Mbit/s
95th percentile per-packet one-way delay: 71.803 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 84.93 Mbit/s
95th percentile per-packet one-way delay: 71.803 ms
Loss rate: 1.03%
```
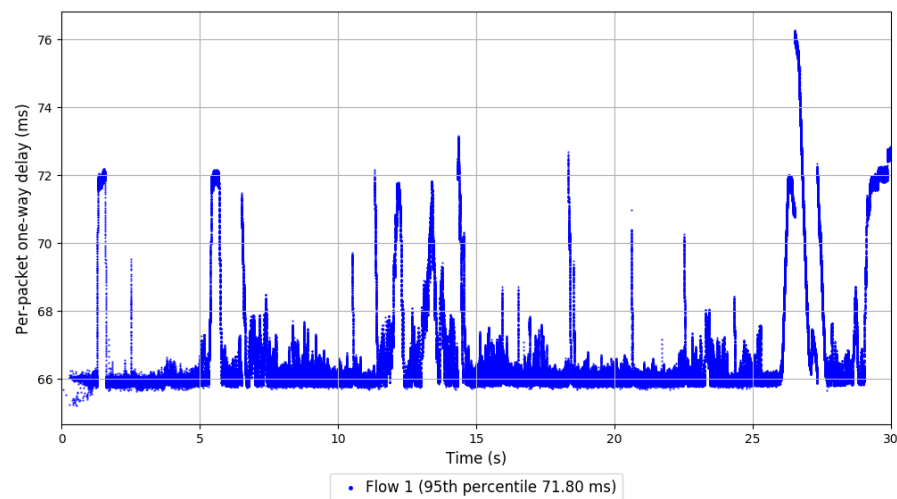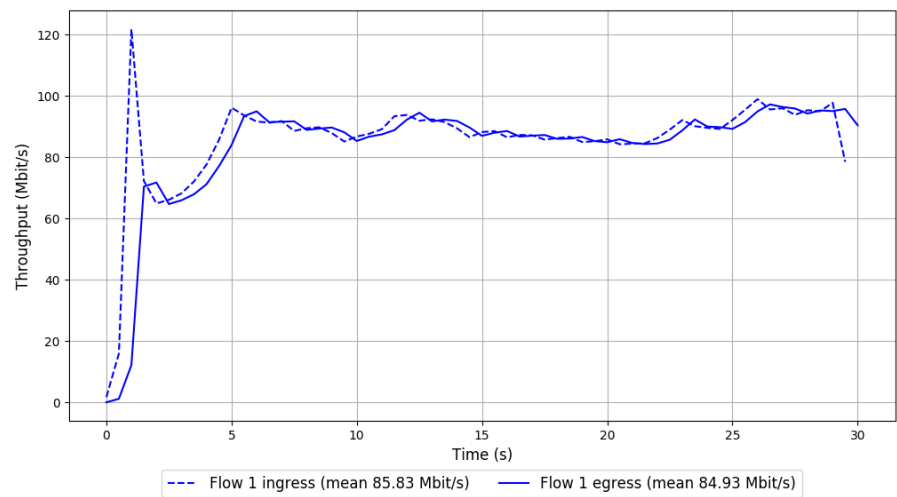
Run 6: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 85.83 Mbit/s)   Flow 1 egress (mean 84.93 Mbit/s)

Flow 1 (95th percentile 71.80 ms)

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-05-21 23:59:08
End at: 2018-05-21 23:59:38
Local clock offset: 2.326 ms
Remote clock offset: 0.354 ms


# Below is generated by plot.py at 2018-05-22 01:18:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.39 Mbit/s
95th percentile per-packet one-way delay: 73.578 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 84.39 Mbit/s
95th percentile per-packet one-way delay: 73.578 ms
Loss rate: 1.14%
```
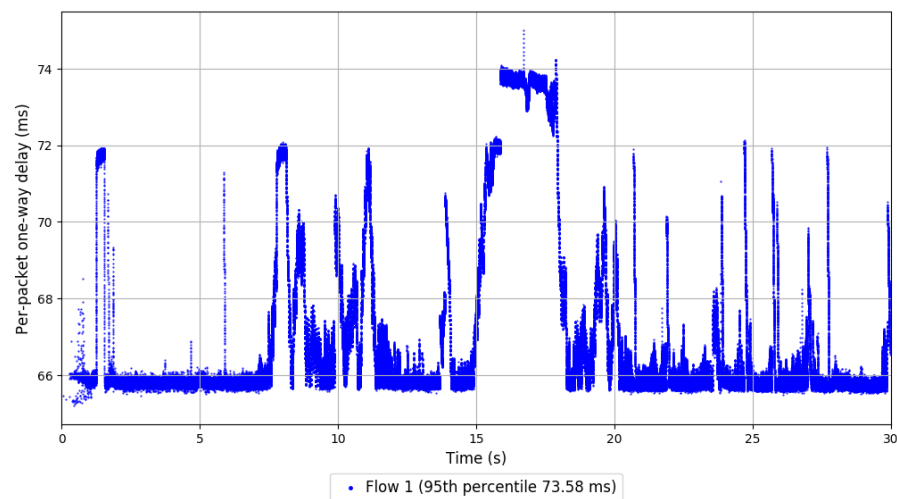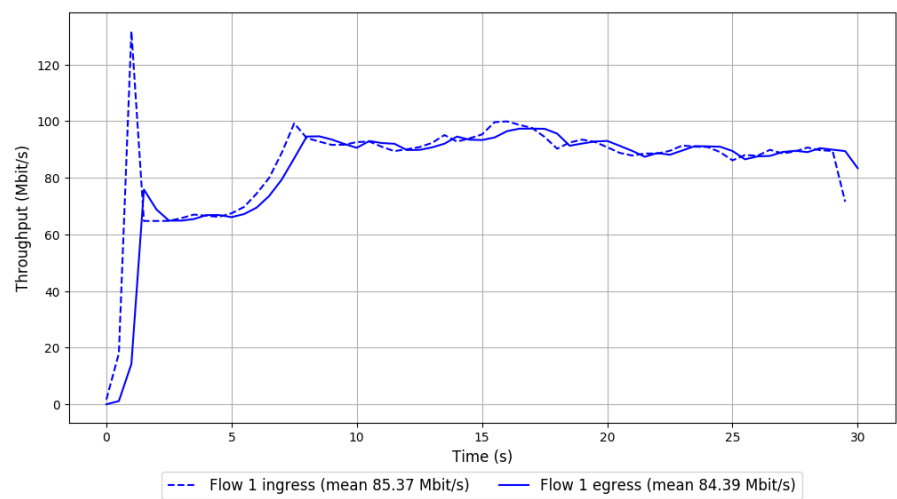
Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 85.37 Mbit/s) --- Flow 1 egress (mean 84.39 Mbit/s)

Flow 1 (95th percentile 73.58 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-05-22 00:19:48
End at: 2018-05-22 00:20:18
Local clock offset: 0.768 ms
Remote clock offset: 0.176 ms


# Below is generated by plot.py at 2018-05-22 01:18:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 71.748 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 71.748 ms
Loss rate: 1.06%
```
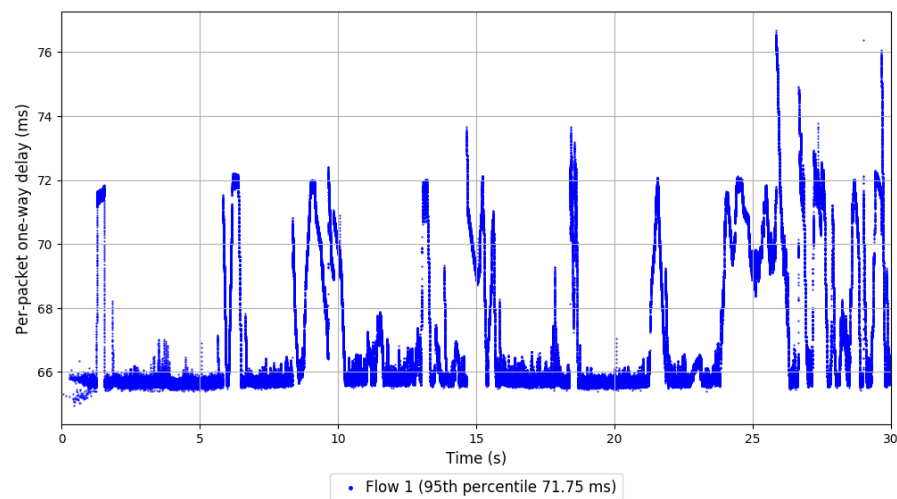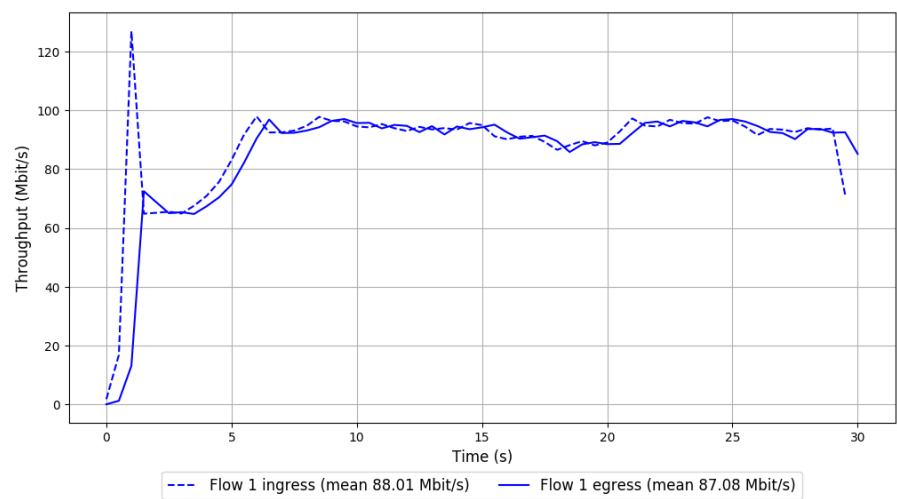
Run 8: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 88.01 Mbit/s)   Flow 1 egress (mean 87.08 Mbit/s)

• Flow 1 (95th percentile 71.75 ms)

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-05-22 00:41:08
End at: 2018-05-22 00:41:38
Local clock offset: 4.196 ms
Remote clock offset: 0.151 ms


# Below is generated by plot.py at 2018-05-22 01:19:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.83 Mbit/s
95th percentile per-packet one-way delay: 70.760 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 88.83 Mbit/s
95th percentile per-packet one-way delay: 70.760 ms
Loss rate: 1.03%
```
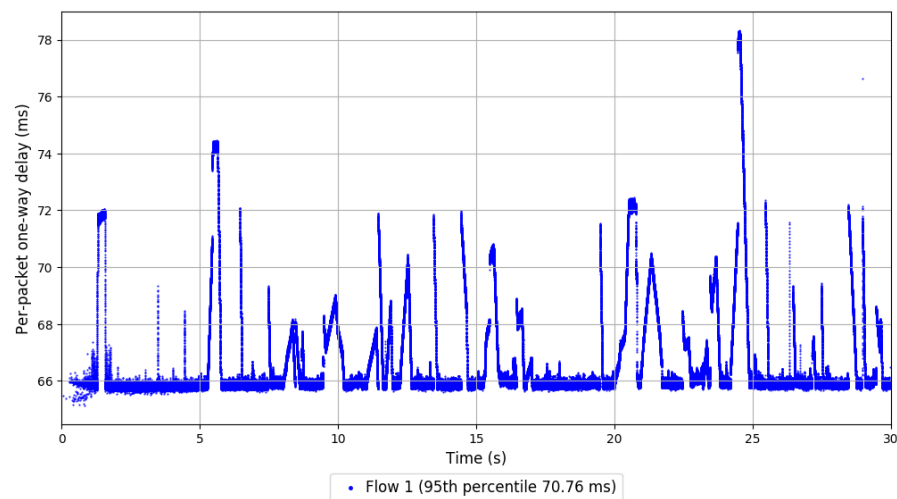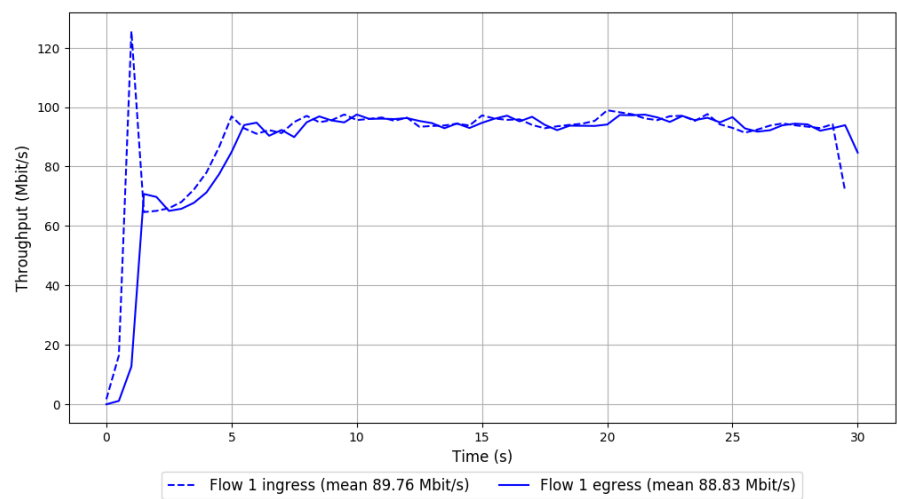
Run 9: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 89.76 Mbit/s)   Flow 1 egress (mean 88.83 Mbit/s)

Flow 1 (95th percentile 70.76 ms)

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-05-22 01:01:50
End at: 2018-05-22 01:02:20
Local clock offset: 2.765 ms
Remote clock offset: -2.92 ms


# Below is generated by plot.py at 2018-05-22 01:19:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.69 Mbit/s
95th percentile per-packet one-way delay: 71.405 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 88.69 Mbit/s
95th percentile per-packet one-way delay: 71.405 ms
Loss rate: 0.89%
```
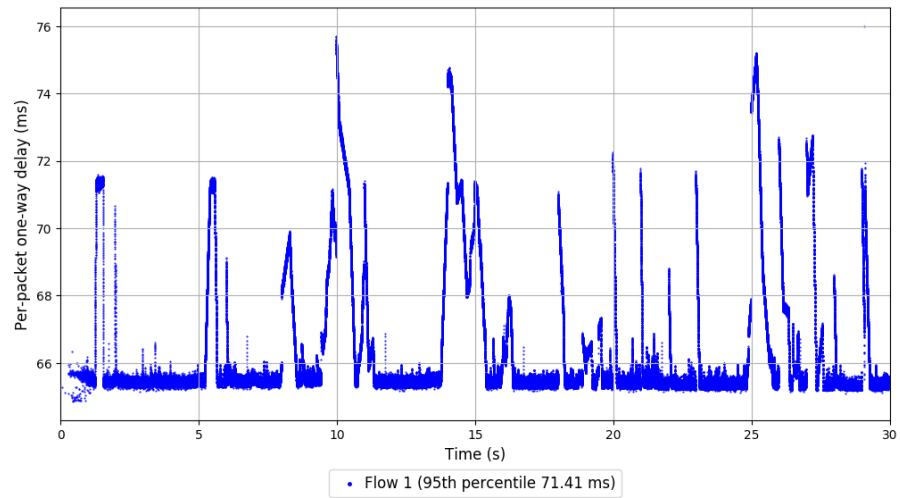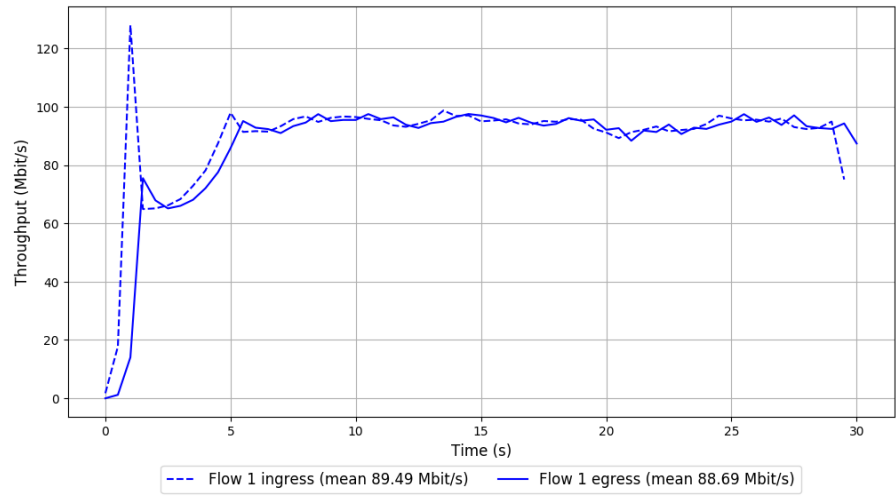
Run 10: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 89.49 Mbit/s) — Flow 1 egress (mean 88.69 Mbit/s)

Flow 1 (95th percentile 71.41 ms)
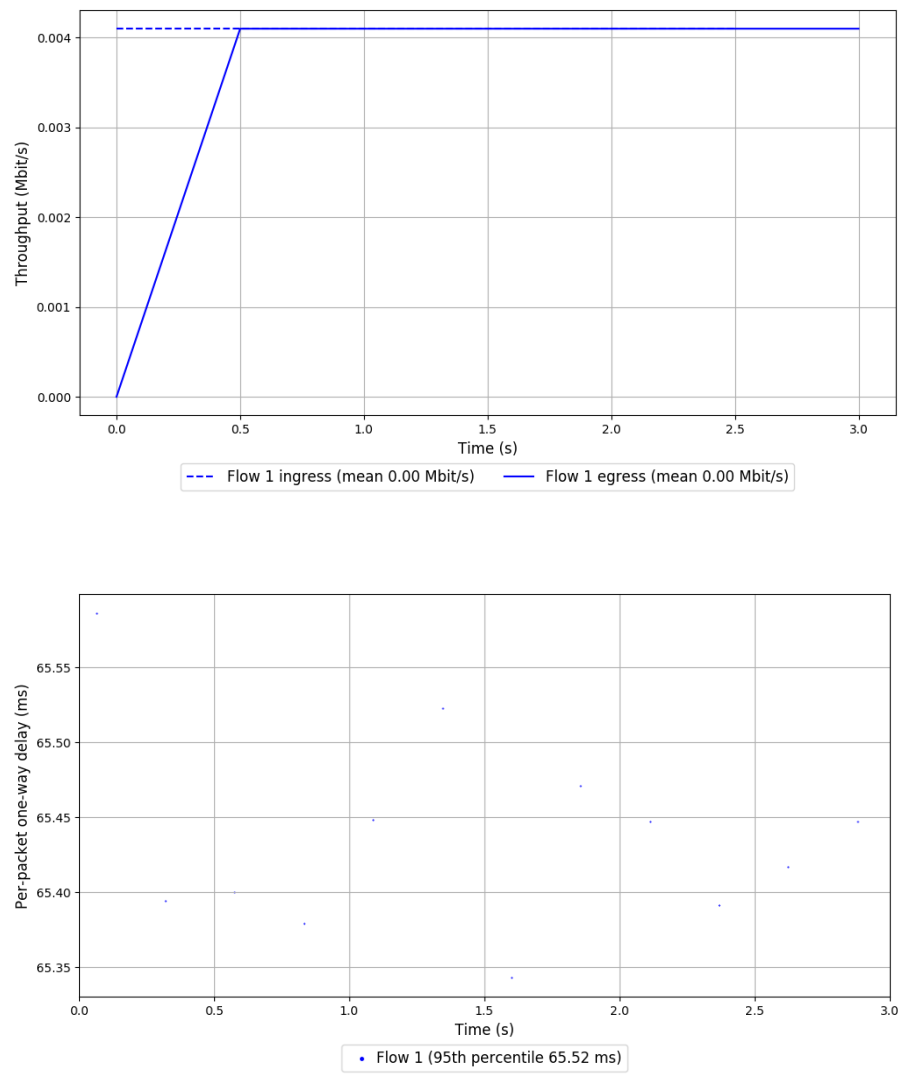
```
Run 1: Statistics of PCC-Expr

Start at: 2018-05-21 21:56:24
End at: 2018-05-21 21:56:54
Local clock offset: -0.641 ms
Remote clock offset: -0.472 ms
```

Run 1: Report of PCC-Expr — Data Link

```
Run 2: Statistics of PCC-Expr

Start at: 2018-05-21 22:16:59
End at: 2018-05-21 22:17:29
Local clock offset: 4.015 ms
Remote clock offset: -1.296 ms
```
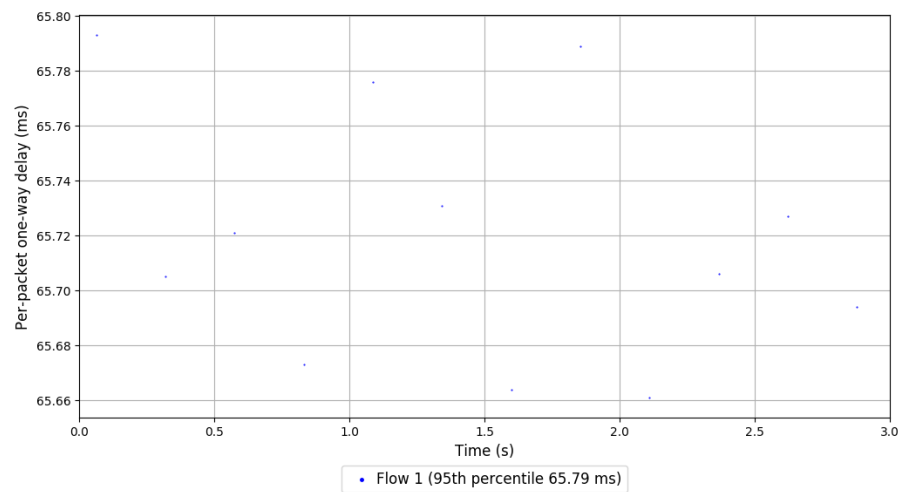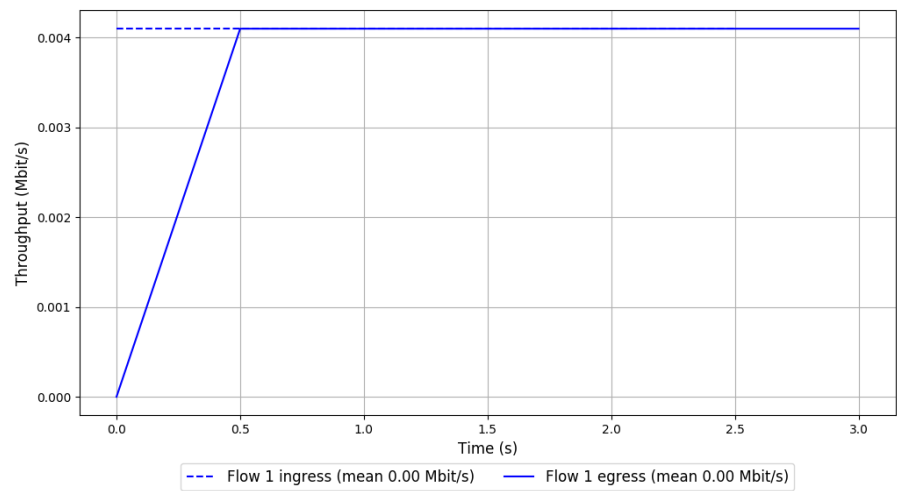
Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 0.00 Mbit/s) ——— Flow 1 egress (mean 0.00 Mbit/s)

• Flow 1 (95th percentile 65.79 ms)
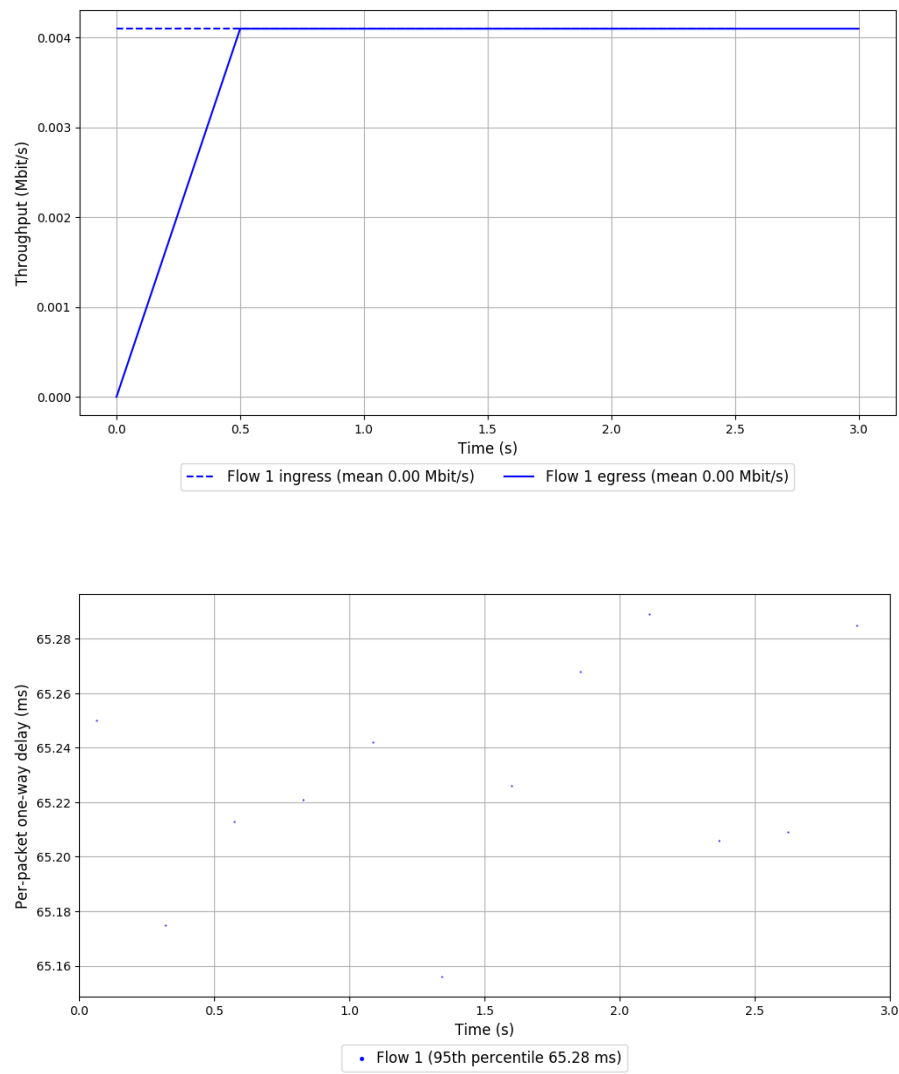
```
Run 3: Statistics of PCC-Expr

Start at: 2018-05-21 22:37:40
End at: 2018-05-21 22:38:10
Local clock offset: 4.418 ms
Remote clock offset: -0.871 ms
```

Run 3: Report of PCC-Expr — Data Link

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

Flow 1 (95th percentile 65.28 ms)
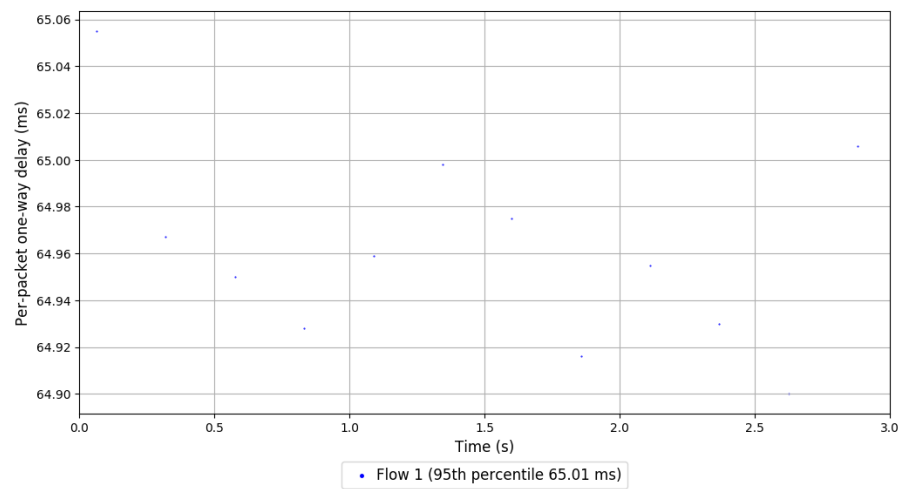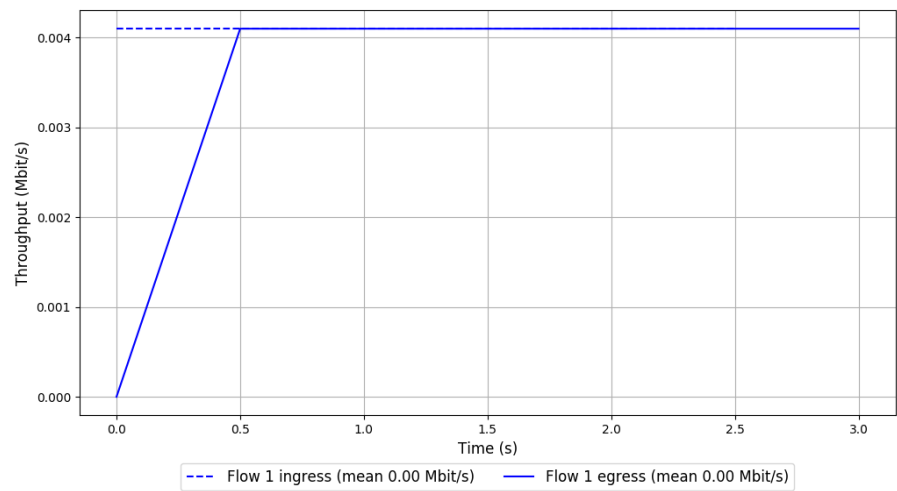
```
Run 4: Statistics of PCC-Expr

Start at: 2018-05-21 22:58:19
End at: 2018-05-21 22:58:49
Local clock offset: 3.879 ms
Remote clock offset: -0.775 ms
```

Run 4: Report of PCC-Expr — Data Link
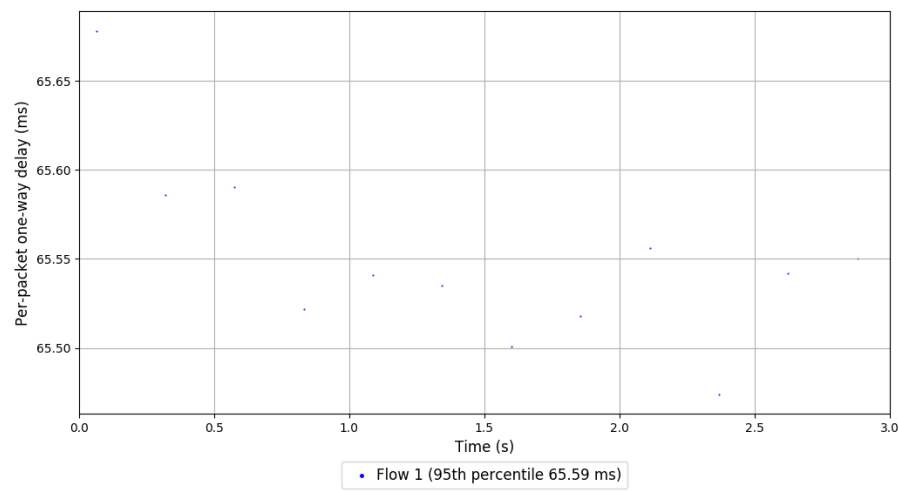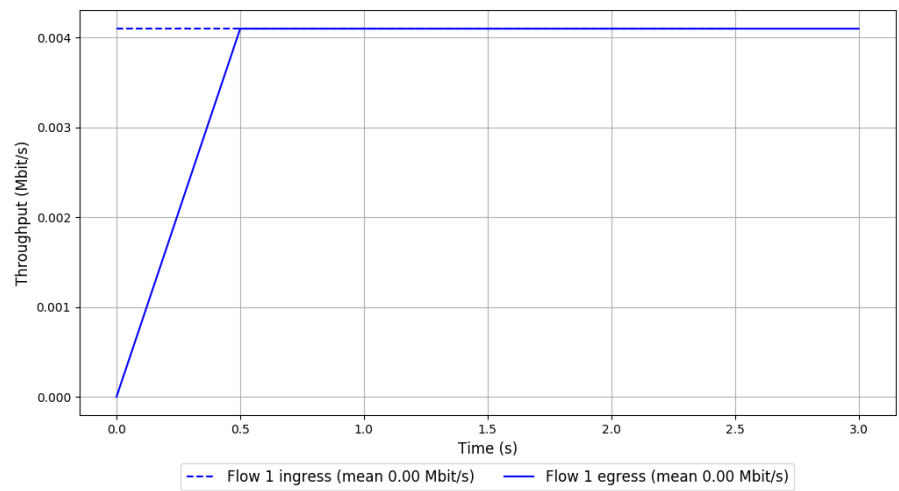
```
Run 5: Statistics of PCC-Expr

Start at: 2018-05-21 23:19:00
End at: 2018-05-21 23:19:30
Local clock offset: -0.656 ms
Remote clock offset: -0.86 ms
```

Run 5: Report of PCC-Expr — Data Link
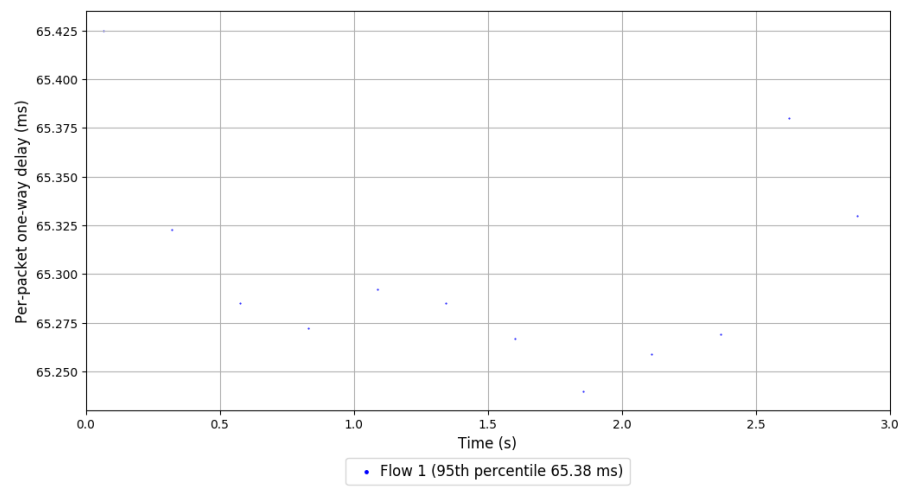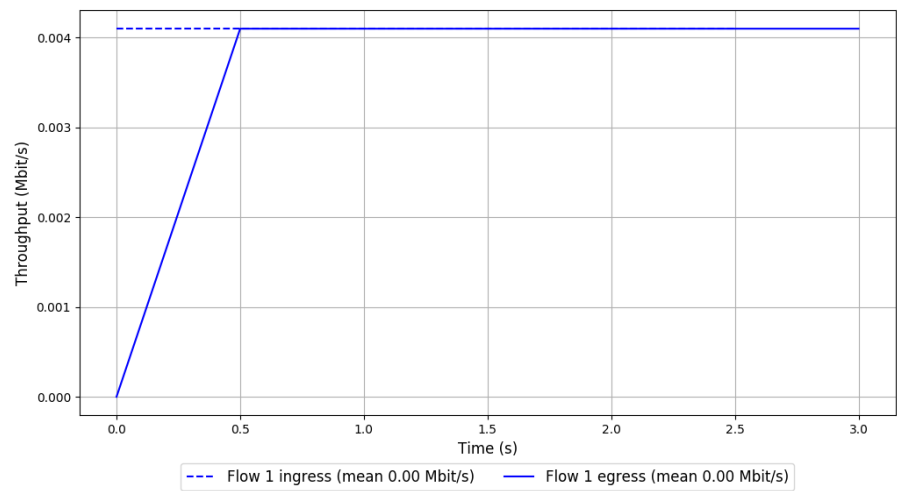
```
Run 6: Statistics of PCC-Expr

Start at: 2018-05-21 23:39:45
End at: 2018-05-21 23:40:15
Local clock offset: 1.83 ms
Remote clock offset: -0.343 ms
```

Run 6: Report of PCC-Expr — Data Link

```
Run 7: Statistics of PCC-Expr

Start at: 2018-05-22 00:00:26
End at: 2018-05-22 00:00:56
Local clock offset: 2.249 ms
Remote clock offset: 0.36 ms
```
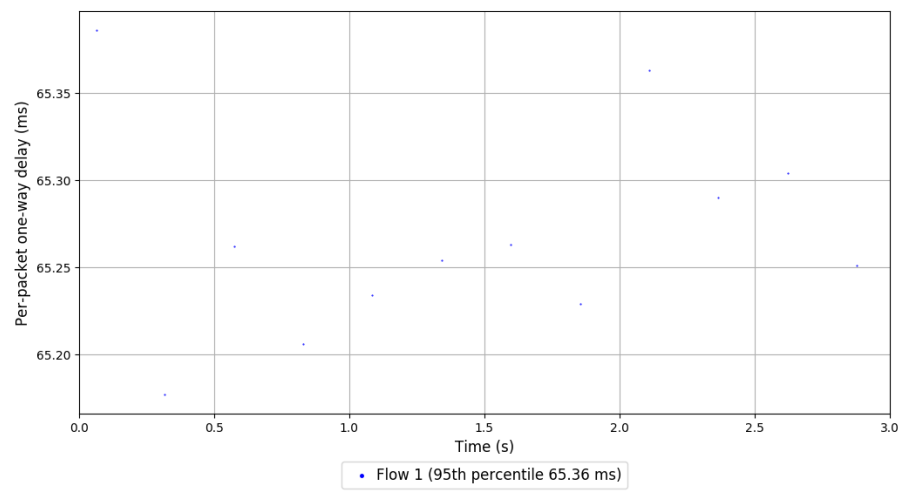
Run 7: Report of PCC-Expr — Data Link

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

• Flow 1 (95th percentile 65.36 ms)

```
Run 8: Statistics of PCC-Expr

Start at: 2018-05-22 00:21:06
End at: 2018-05-22 00:21:36
Local clock offset: 0.766 ms
Remote clock offset: 0.187 ms
```

Run 8: Report of PCC-Expr — Data Link

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

• Flow 1 (95th percentile 65.26 ms)
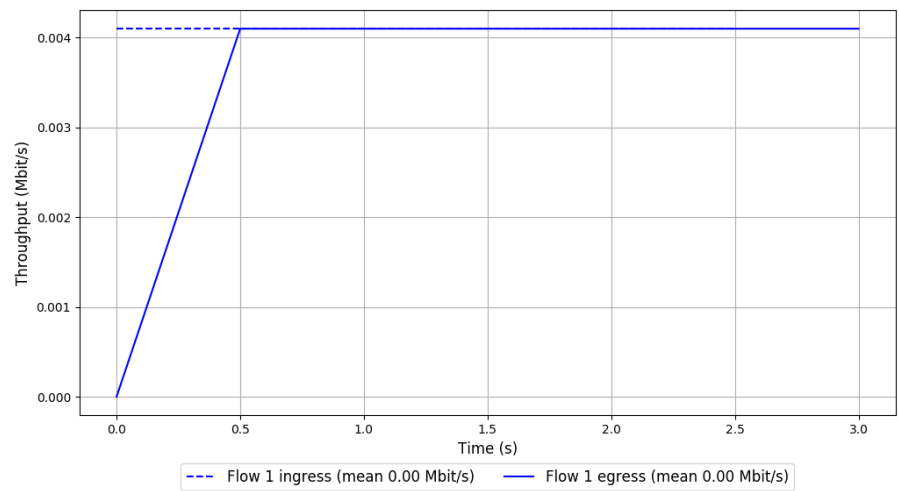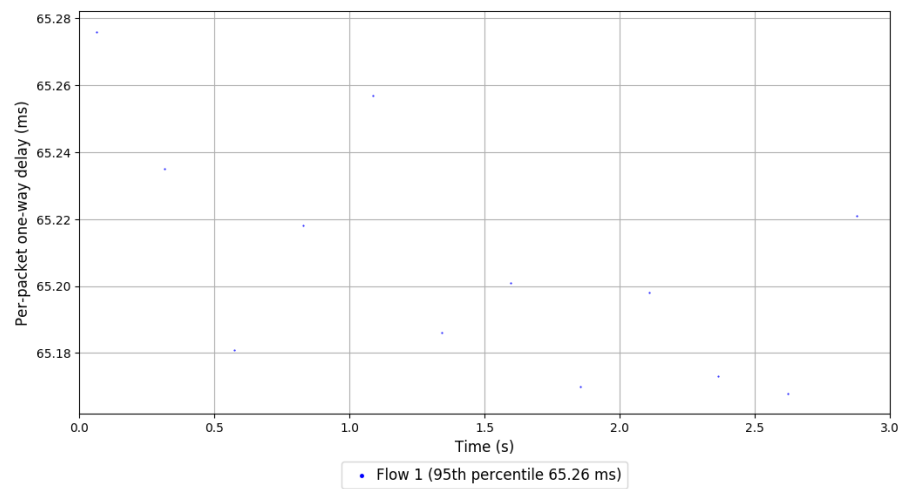
```
Run 9: Statistics of PCC-Expr

Start at: 2018-05-22 00:42:26
End at: 2018-05-22 00:42:56
Local clock offset: 4.224 ms
Remote clock offset: -0.077 ms
```

Run 9: Report of PCC-Expr — Data Link

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

Flow 1 (95th percentile 65.57 ms)
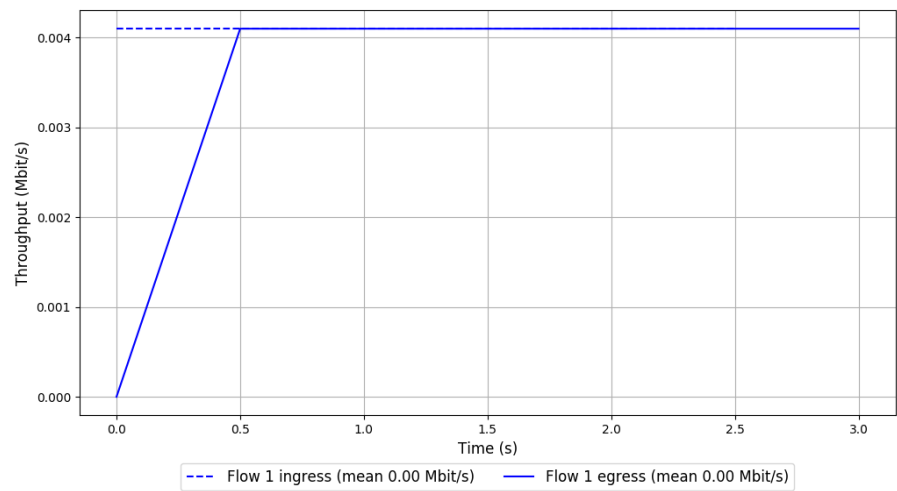
```
Run 10: Statistics of PCC-Expr

Start at: 2018-05-22 01:03:08
End at: 2018-05-22 01:03:38
Local clock offset: 2.357 ms
Remote clock offset: -2.998 ms
```

Run 10: Report of PCC-Expr — Data Link
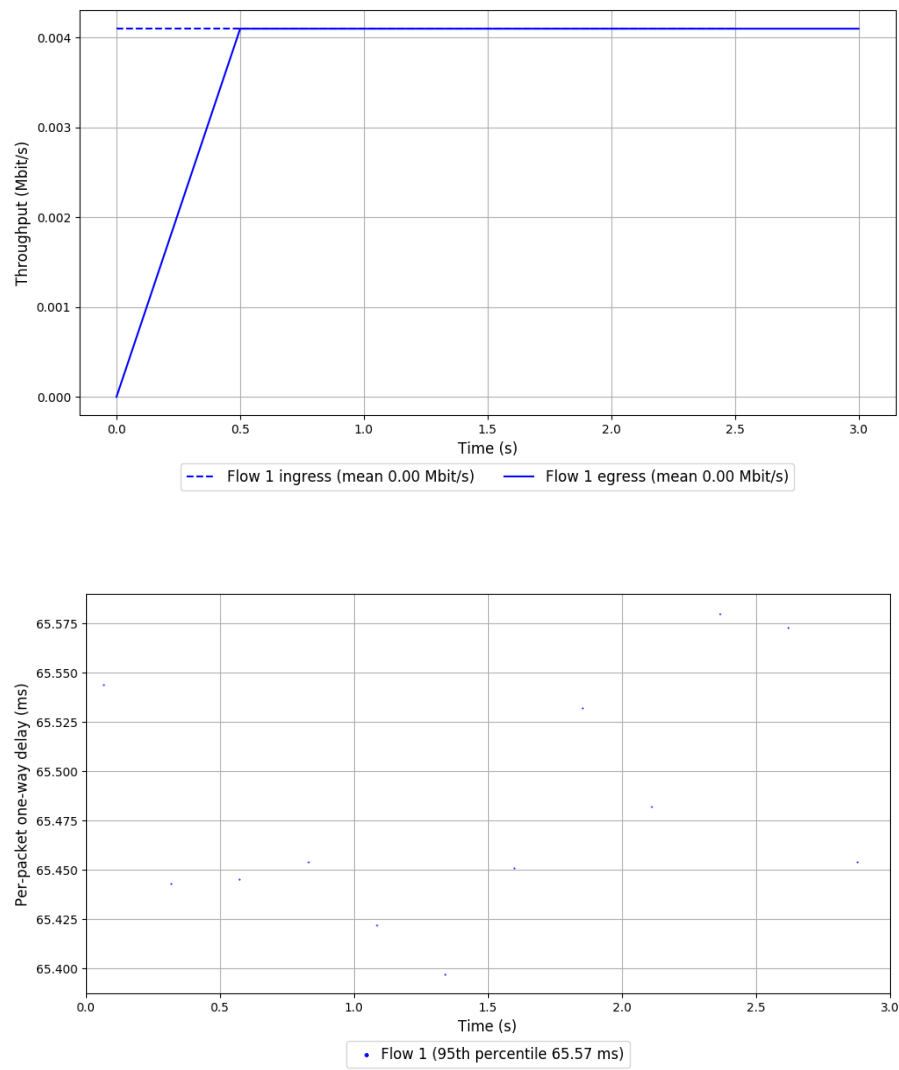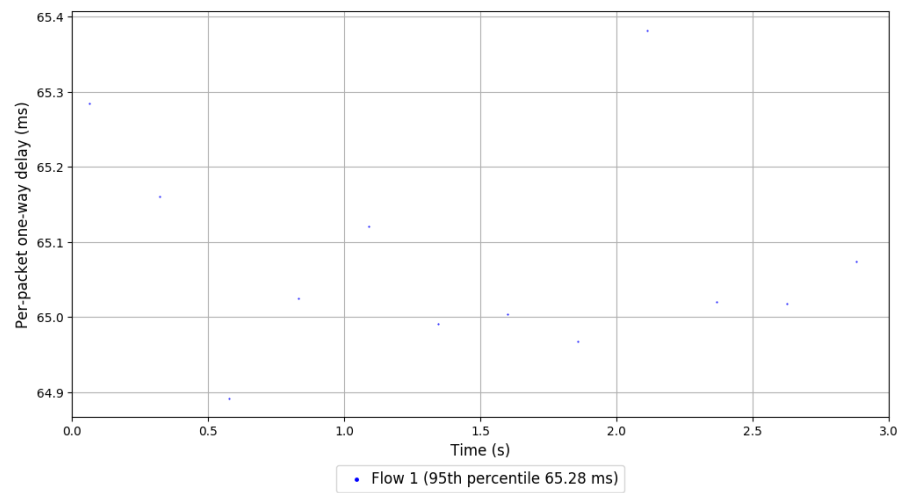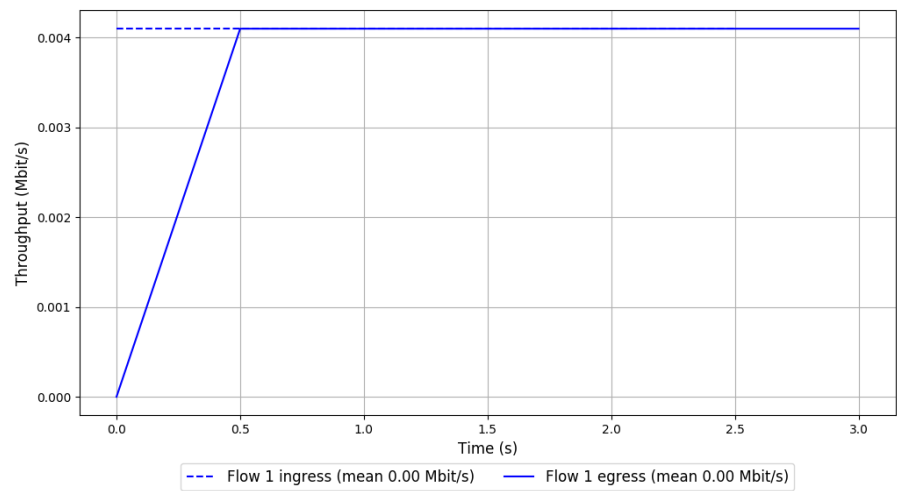
```
Run 1: Statistics of QUIC Cubic

Start at: 2018-05-21 21:40:58
End at: 2018-05-21 21:41:28
Local clock offset: 0.321 ms
Remote clock offset: -0.019 ms


# Below is generated by plot.py at 2018-05-22 01:19:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.58 Mbit/s
95th percentile per-packet one-way delay: 66.827 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 57.58 Mbit/s
95th percentile per-packet one-way delay: 66.827 ms
Loss rate: 0.88%
```
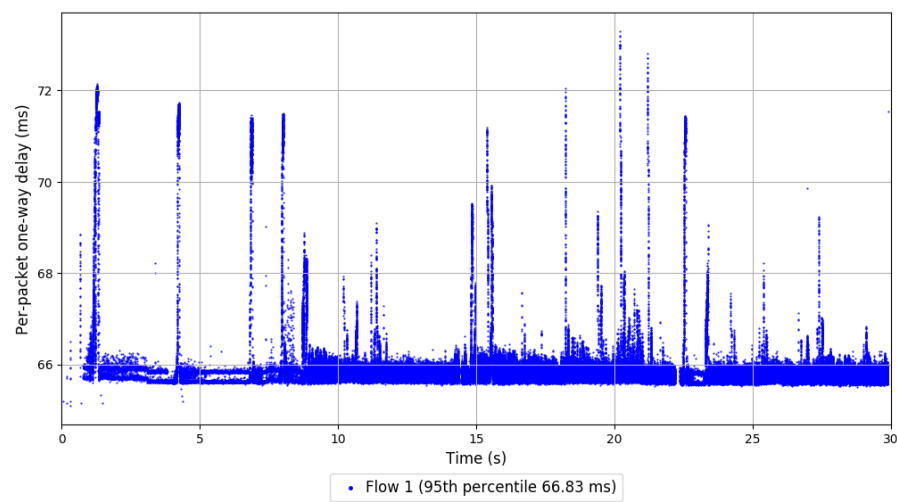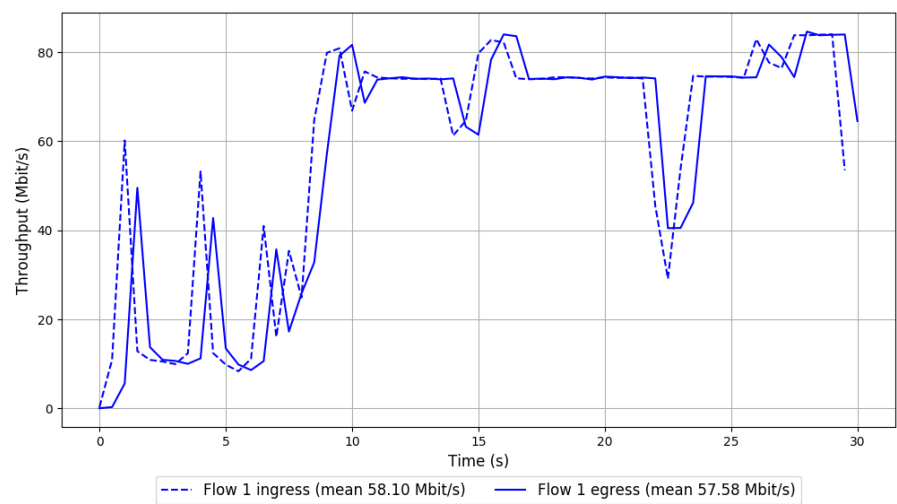
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-05-21 22:01:34
End at: 2018-05-21 22:02:04
Local clock offset: 1.256 ms
Remote clock offset: -0.819 ms


# Below is generated by plot.py at 2018-05-22 01:19:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.61 Mbit/s
95th percentile per-packet one-way delay: 67.859 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 65.61 Mbit/s
95th percentile per-packet one-way delay: 67.859 ms
Loss rate: 0.46%
```
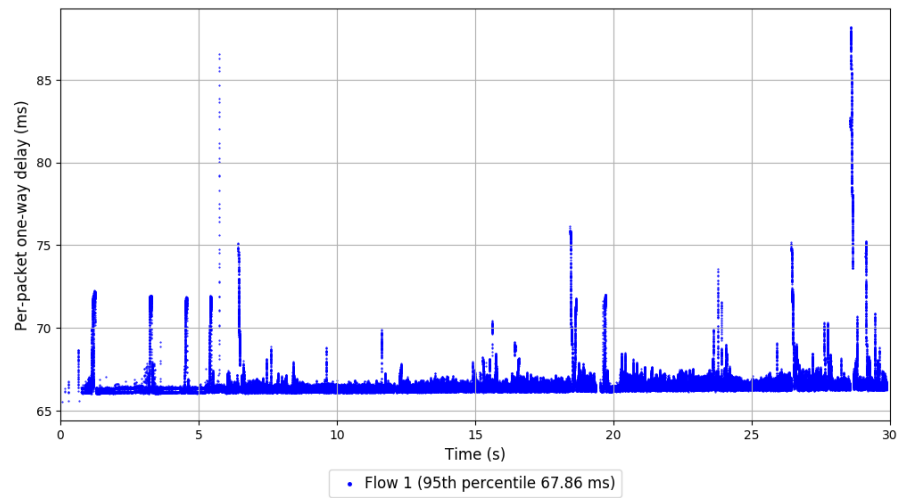
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-05-21 22:22:09
End at: 2018-05-21 22:22:39
Local clock offset: 4.65 ms
Remote clock offset: -1.439 ms


# Below is generated by plot.py at 2018-05-22 01:19:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.88 Mbit/s
95th percentile per-packet one-way delay: 66.637 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 64.88 Mbit/s
95th percentile per-packet one-way delay: 66.637 ms
Loss rate: 0.52%
```

Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 65.23 Mbit/s)   Flow 1 egress (mean 64.88 Mbit/s)

Flow 1 (95th percentile 66.64 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-05-21 22:42:50
End at: 2018-05-21 22:43:20
Local clock offset: 4.578 ms
Remote clock offset: -0.827 ms


# Below is generated by plot.py at 2018-05-22 01:19:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.27 Mbit/s
95th percentile per-packet one-way delay: 66.715 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 56.27 Mbit/s
95th percentile per-packet one-way delay: 66.715 ms
Loss rate: 1.14%
```
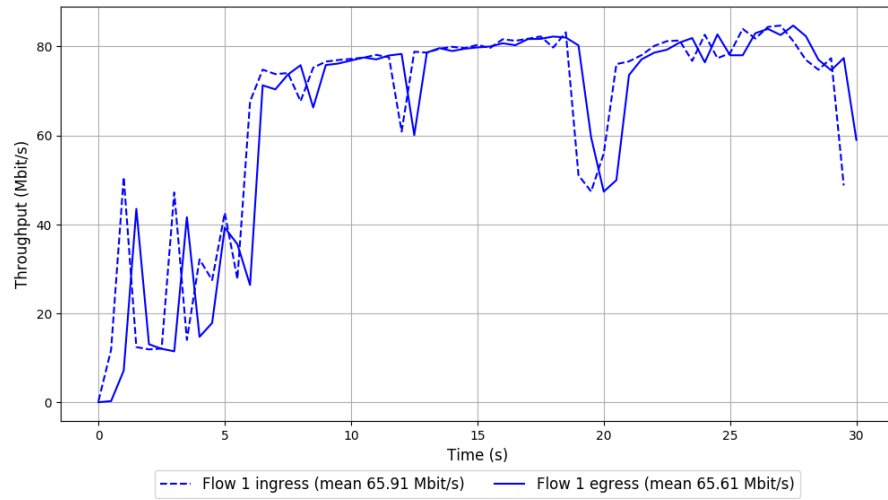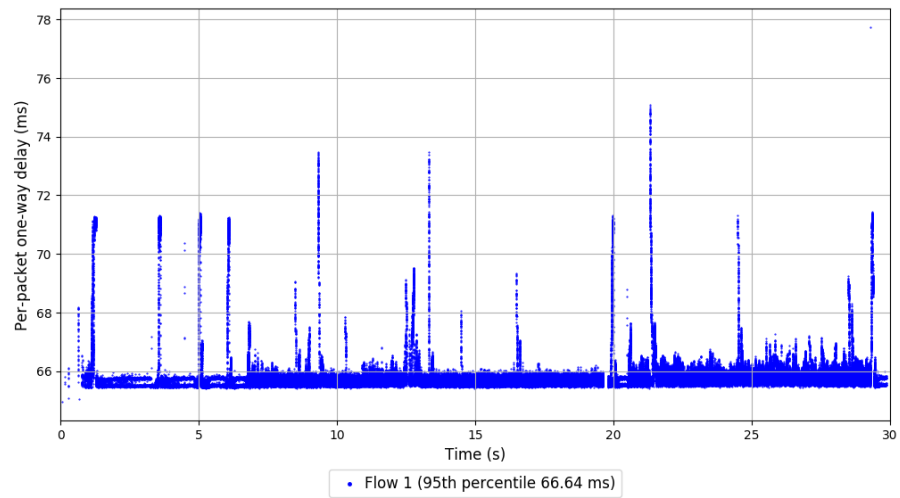
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 56.92 Mbit/s) — — — —   Flow 1 egress (mean 56.27 Mbit/s) ———

• Flow 1 (95th percentile 66.72 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-05-21 23:03:30
End at: 2018-05-21 23:04:00
Local clock offset: 1.934 ms
Remote clock offset: -0.773 ms


# Below is generated by plot.py at 2018-05-22 01:19:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.68 Mbit/s
95th percentile per-packet one-way delay: 66.477 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 70.68 Mbit/s
95th percentile per-packet one-way delay: 66.477 ms
Loss rate: 0.30%
```
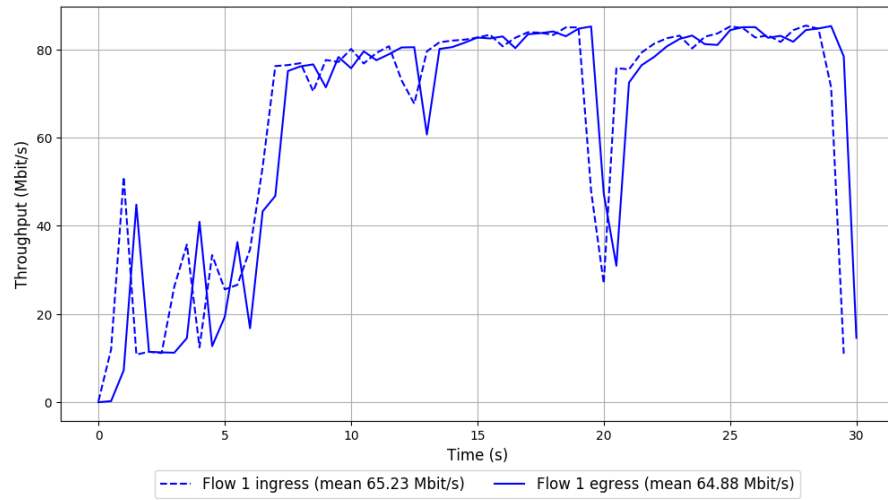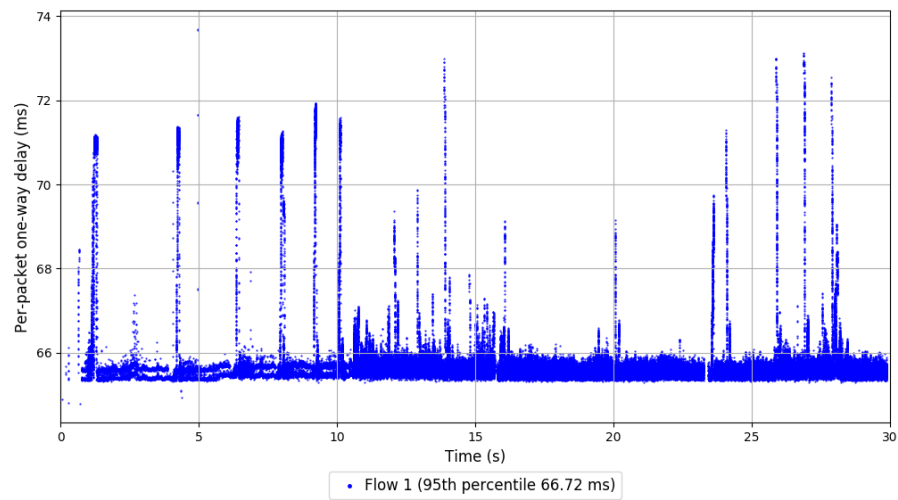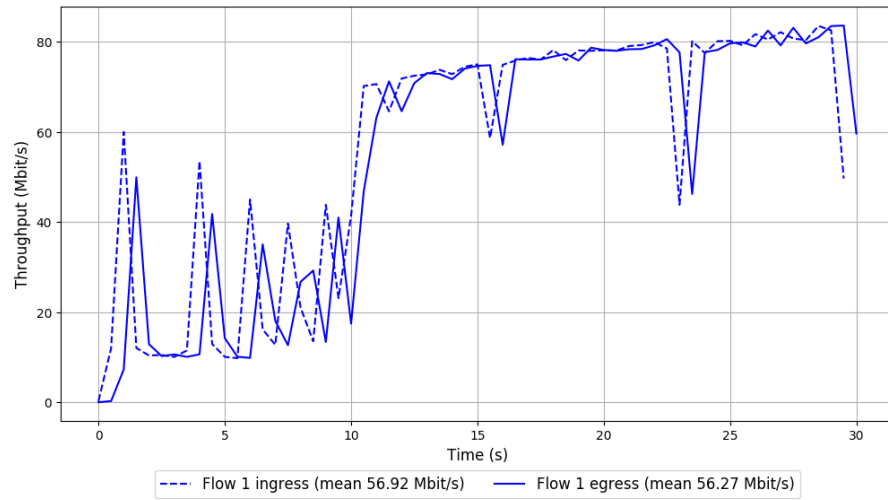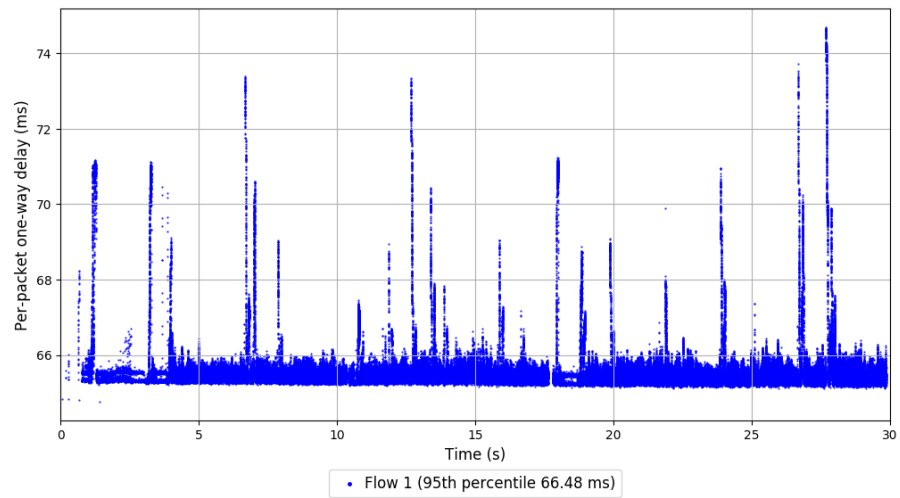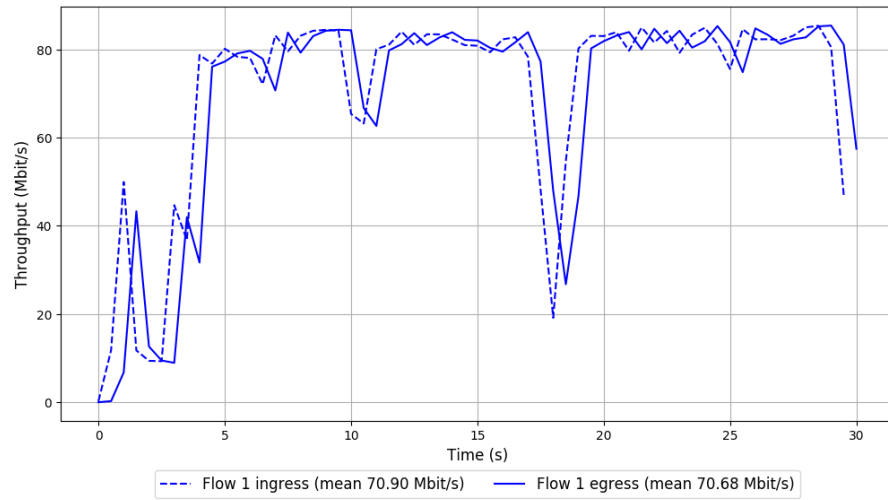
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 70.90 Mbit/s) ----- Flow 1 egress (mean 70.68 Mbit/s)

• Flow 1 (95th percentile 66.48 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-05-21 23:24:10
End at: 2018-05-21 23:24:40
Local clock offset: -1.04 ms
Remote clock offset: -0.856 ms


# Below is generated by plot.py at 2018-05-22 01:19:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.23 Mbit/s
95th percentile per-packet one-way delay: 67.186 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 56.23 Mbit/s
95th percentile per-packet one-way delay: 67.186 ms
Loss rate: 1.10%
```
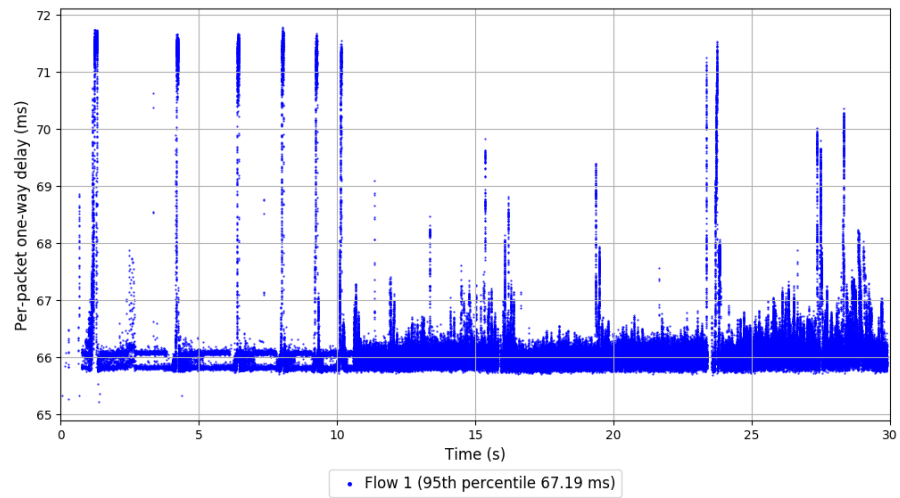
Run 6: Report of QUIC Cubic — Data Link

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-05-21 23:44:55
End at: 2018-05-21 23:45:25
Local clock offset: 2.307 ms
Remote clock offset: -0.009 ms


# Below is generated by plot.py at 2018-05-22 01:20:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.64 Mbit/s
95th percentile per-packet one-way delay: 67.028 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 62.64 Mbit/s
95th percentile per-packet one-way delay: 67.028 ms
Loss rate: 0.59%
```

Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 63.01 Mbit/s)   Flow 1 egress (mean 62.64 Mbit/s)

Flow 1 (95th percentile 67.03 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-05-22 00:05:36
End at: 2018-05-22 00:06:06
Local clock offset: 1.484 ms
Remote clock offset: 0.389 ms


# Below is generated by plot.py at 2018-05-22 01:20:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.32 Mbit/s
95th percentile per-packet one-way delay: 67.012 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 56.32 Mbit/s
95th percentile per-packet one-way delay: 67.012 ms
Loss rate: 0.94%
```
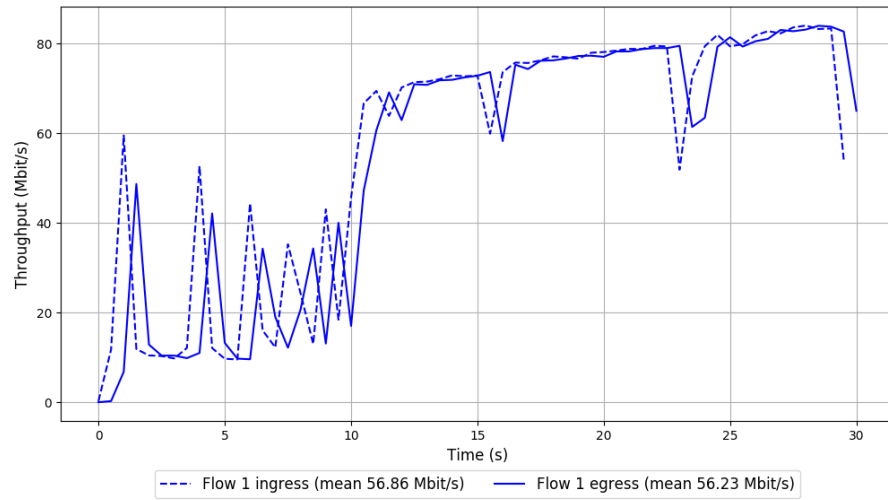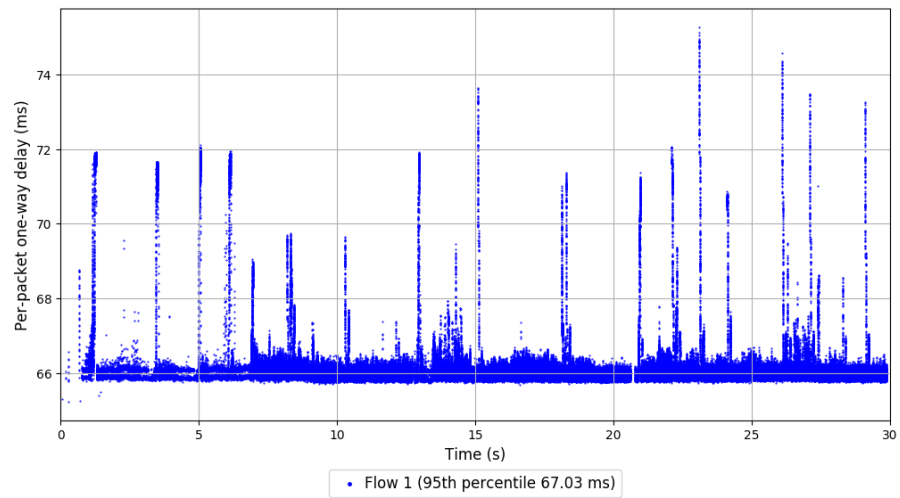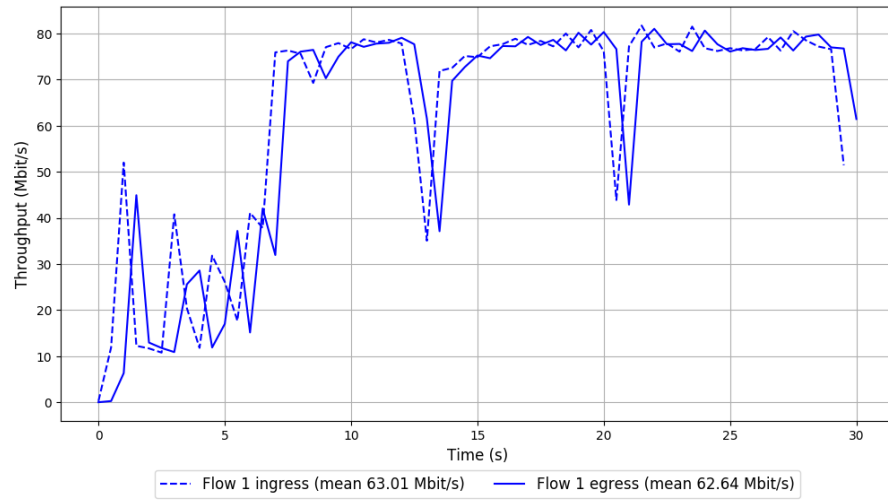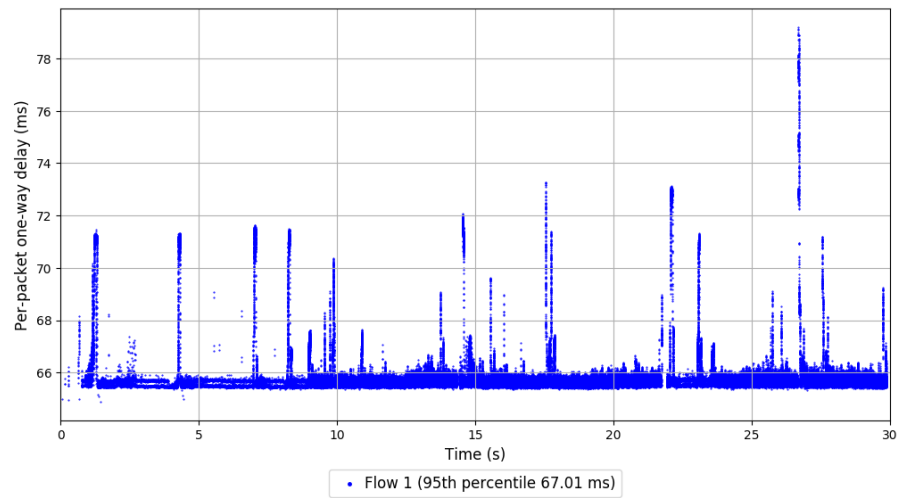
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-05-22 00:26:16
End at: 2018-05-22 00:26:46
Local clock offset: 0.634 ms
Remote clock offset: 0.129 ms


# Below is generated by plot.py at 2018-05-22 01:20:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.41 Mbit/s
95th percentile per-packet one-way delay: 70.017 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 38.41 Mbit/s
95th percentile per-packet one-way delay: 70.017 ms
Loss rate: 1.37%
```

Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 38.95 Mbit/s)   Flow 1 egress (mean 38.41 Mbit/s)

Flow 1 (95th percentile 70.02 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-05-22 00:47:37
End at: 2018-05-22 00:48:07
Local clock offset: 4.676 ms
Remote clock offset: -1.342 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.46 Mbit/s
95th percentile per-packet one-way delay: 68.481 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 62.46 Mbit/s
95th percentile per-packet one-way delay: 68.481 ms
Loss rate: 0.74%
```
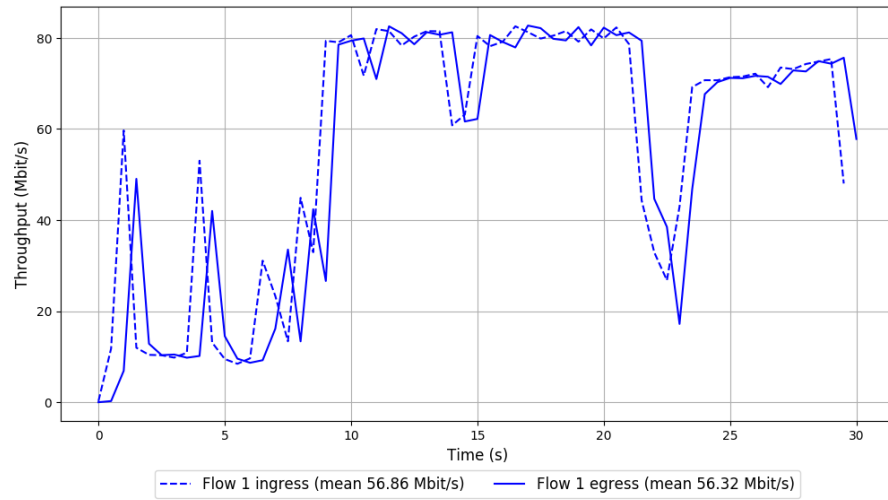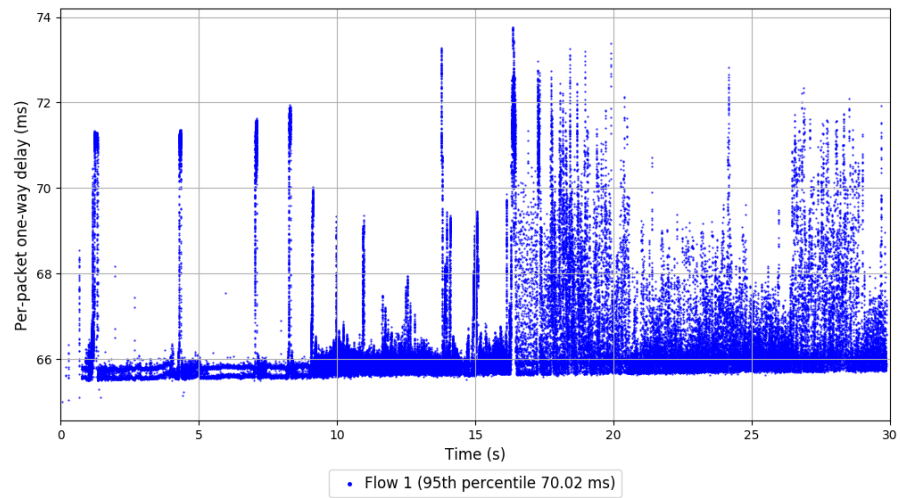
Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 62.92 Mbit/s)   Flow 1 egress (mean 62.46 Mbit/s)

Flow 1 (95th percentile 68.48 ms)

```
Run 1: Statistics of SCReAM

Start at: 2018-05-21 21:52:36
End at: 2018-05-21 21:53:06
Local clock offset: -0.52 ms
Remote clock offset: -0.093 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 66.152 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 66.152 ms
Loss rate: 0.00%
```
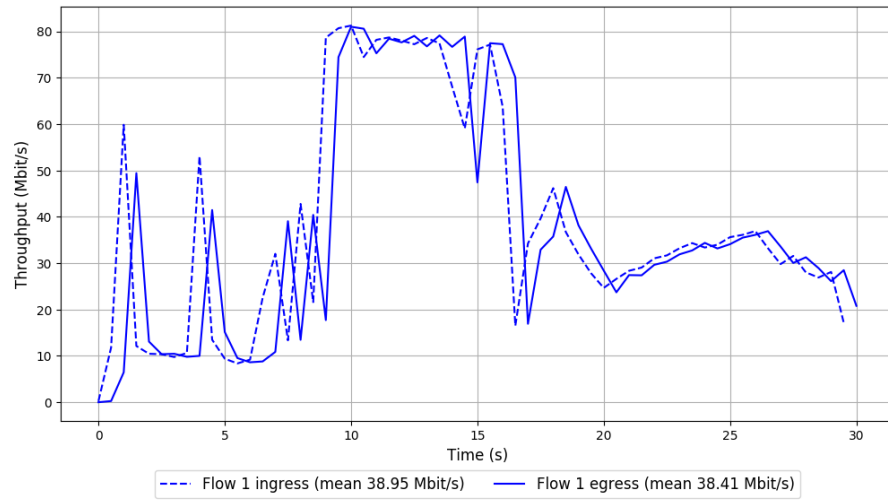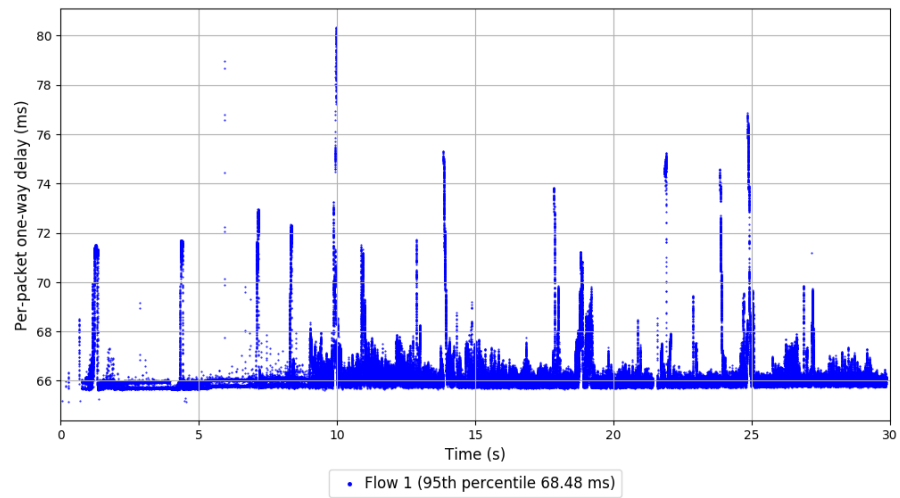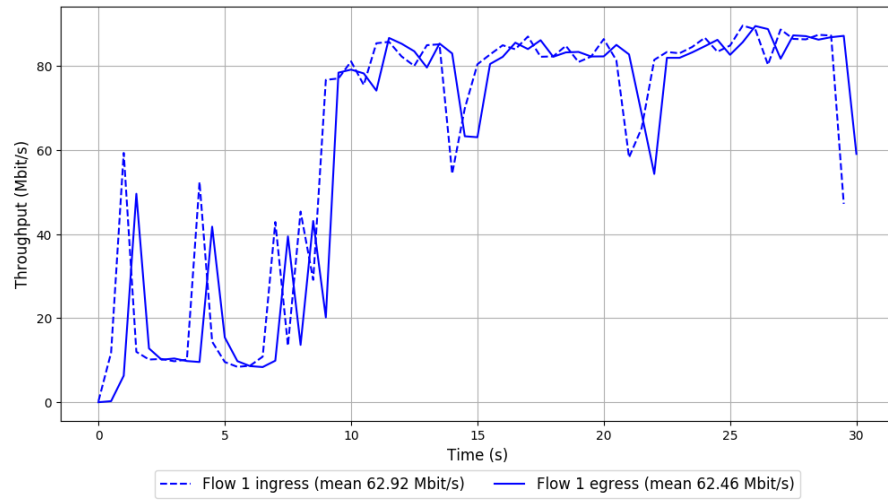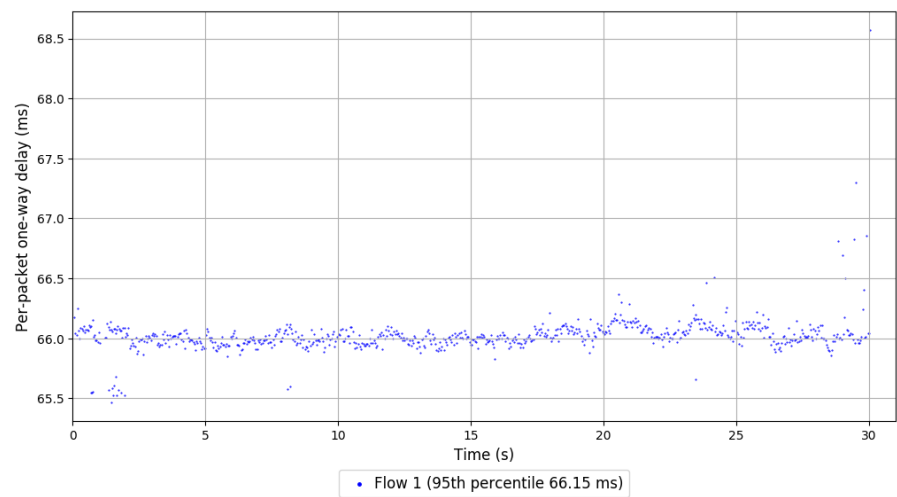
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-05-21 22:13:11
End at: 2018-05-21 22:13:41
Local clock offset: 3.762 ms
Remote clock offset: -1.161 ms

# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.910 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.910 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

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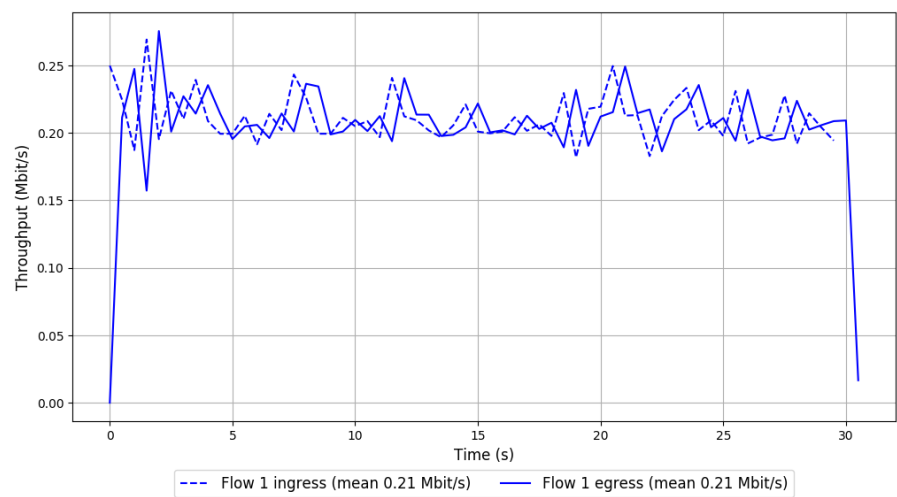

Flow 1 (95th percentile 65.91 ms)

```
Run 3: Statistics of SCReAM

Start at: 2018-05-21 22:33:52
End at: 2018-05-21 22:34:22
Local clock offset: 4.529 ms
Remote clock offset: -0.956 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.982 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.982 ms
Loss rate: 0.00%
```

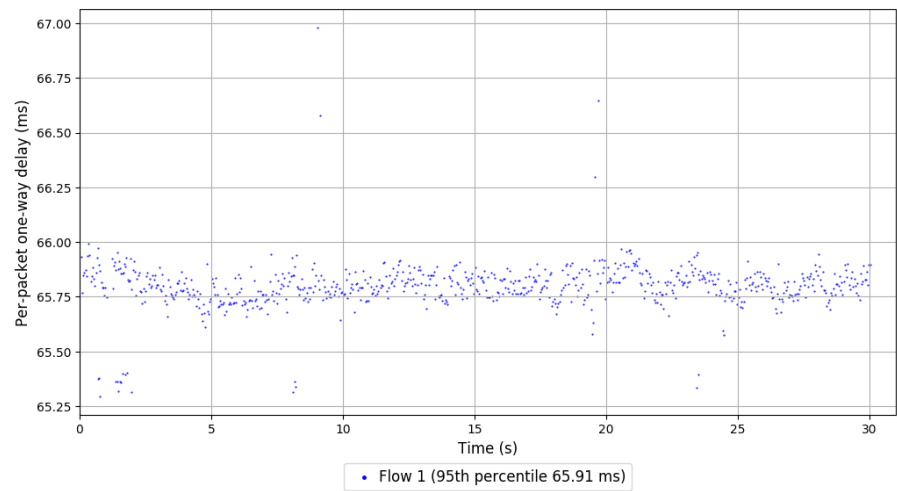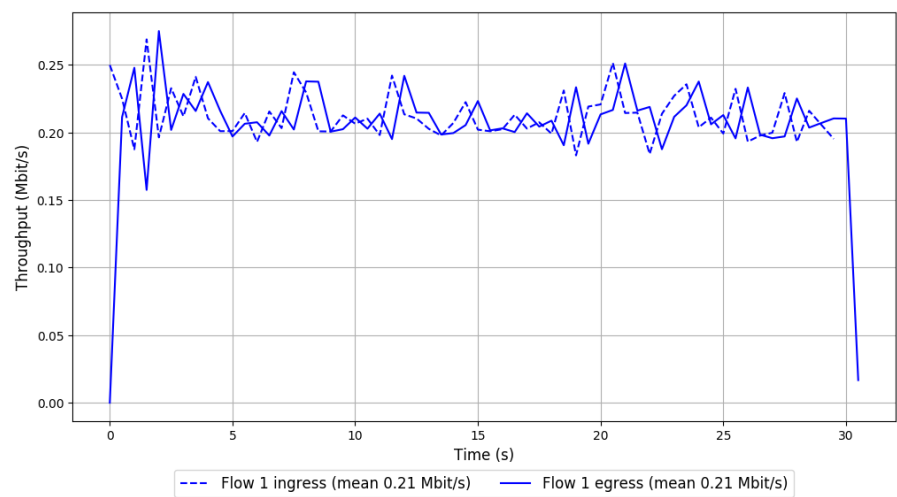Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-05-21 22:54:32
End at: 2018-05-21 22:55:02
Local clock offset: 4.746 ms
Remote clock offset: -0.735 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.971 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.971 ms
Loss rate: 0.00%
```
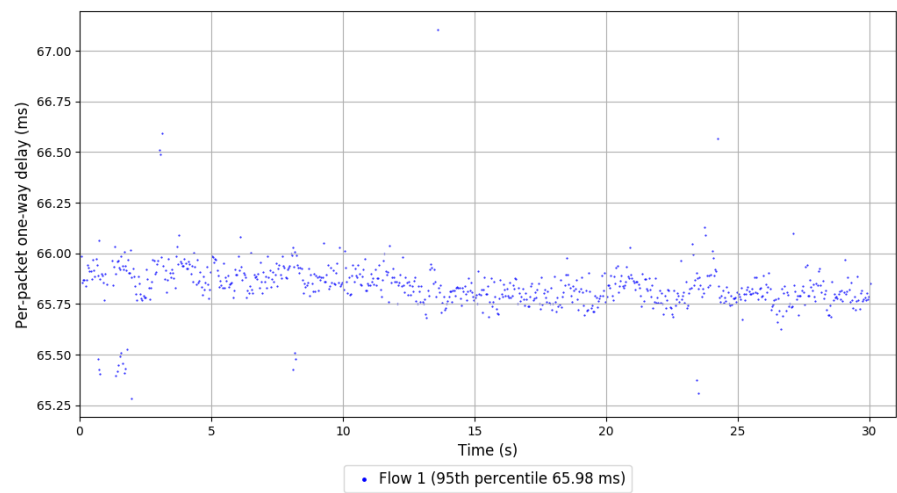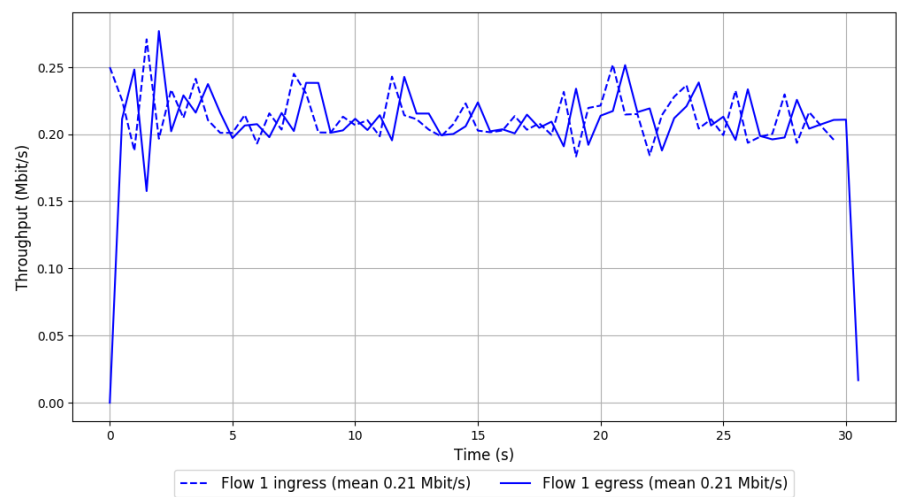
Run 4: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 65.97 ms)

```
Run 5: Statistics of SCReAM

Start at: 2018-05-21 23:15:12
End at: 2018-05-21 23:15:42
Local clock offset: -0.35 ms
Remote clock offset: -0.829 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.937 ms
Loss rate: 0.00%
```
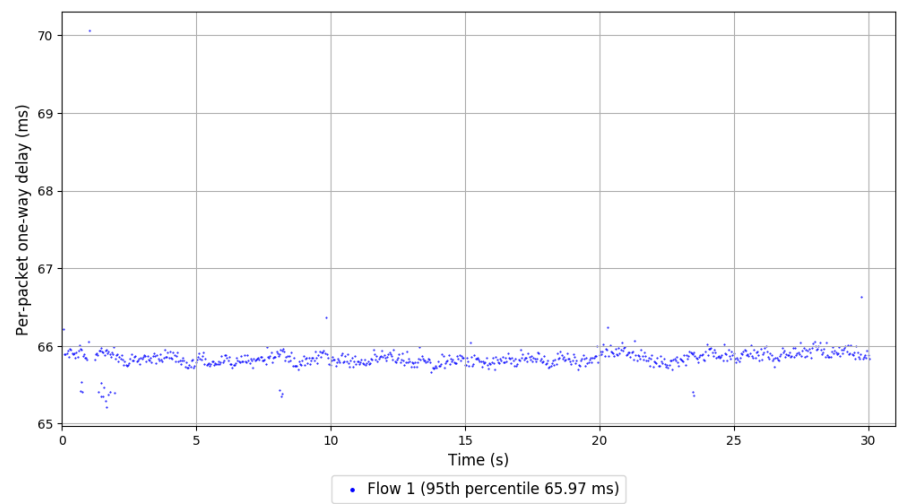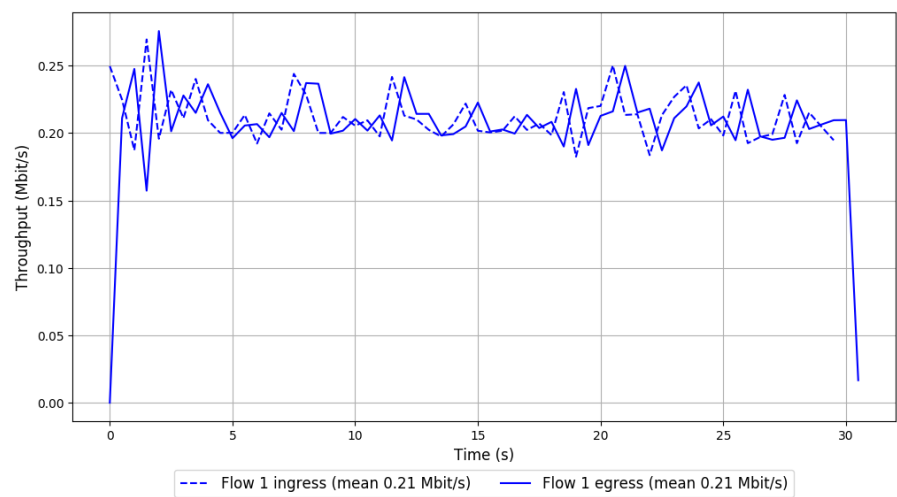
Run 5: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 65.94 ms)

```
Run 6: Statistics of SCReAM

Start at: 2018-05-21 23:35:57
End at: 2018-05-21 23:36:27
Local clock offset: 1.453 ms
Remote clock offset: -0.632 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 66.061 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 66.061 ms
Loss rate: 0.00%
```
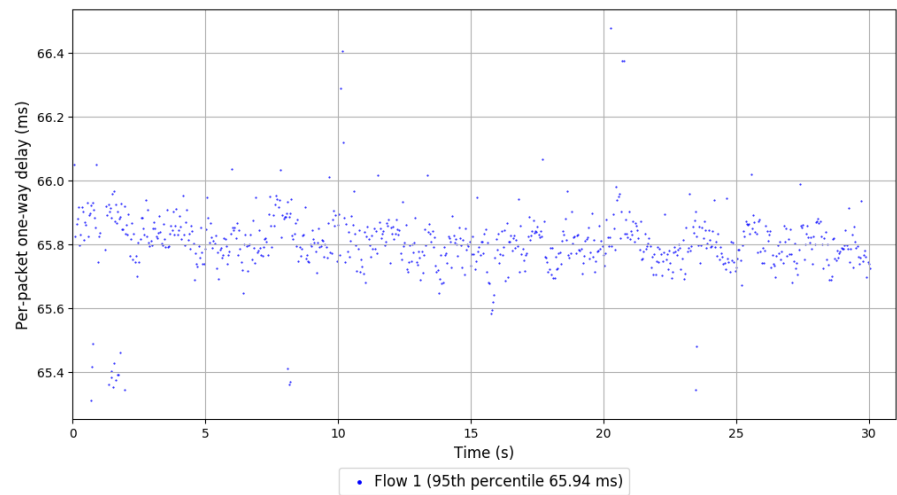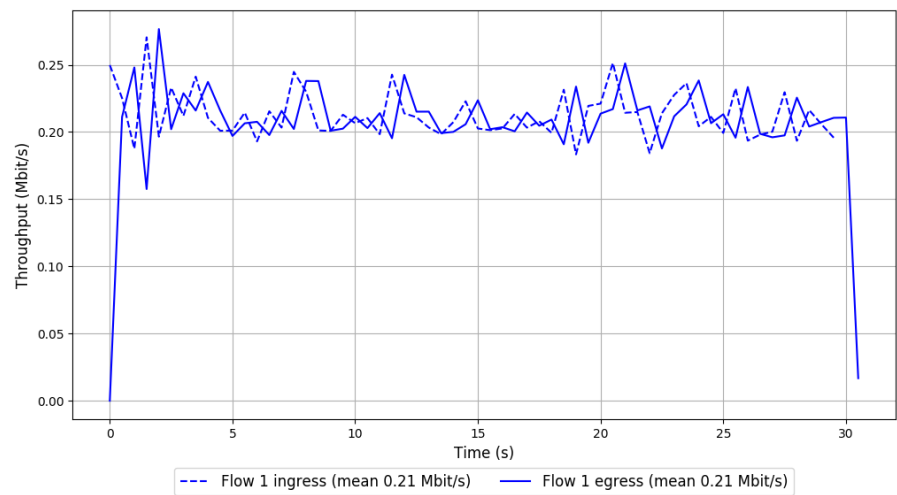
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2018-05-21 23:56:38
End at: 2018-05-21 23:57:08
Local clock offset: 2.796 ms
Remote clock offset: 0.266 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.871 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.871 ms
Loss rate: 0.00%
```
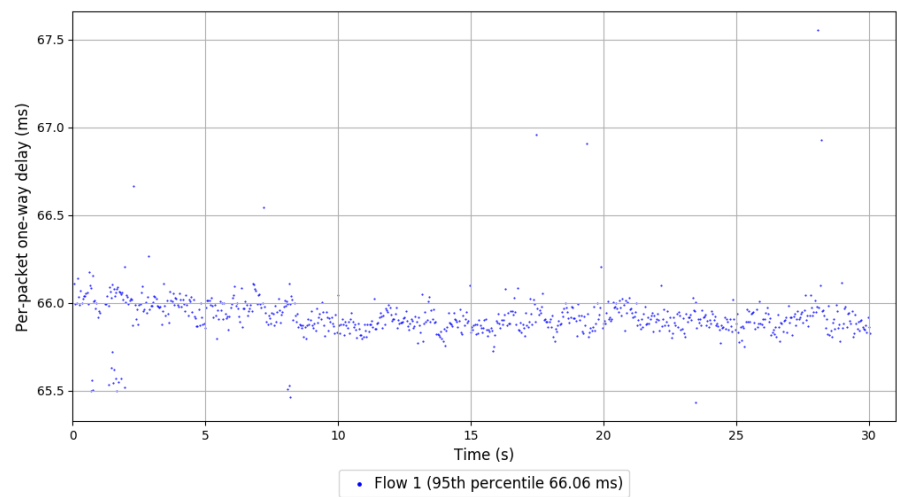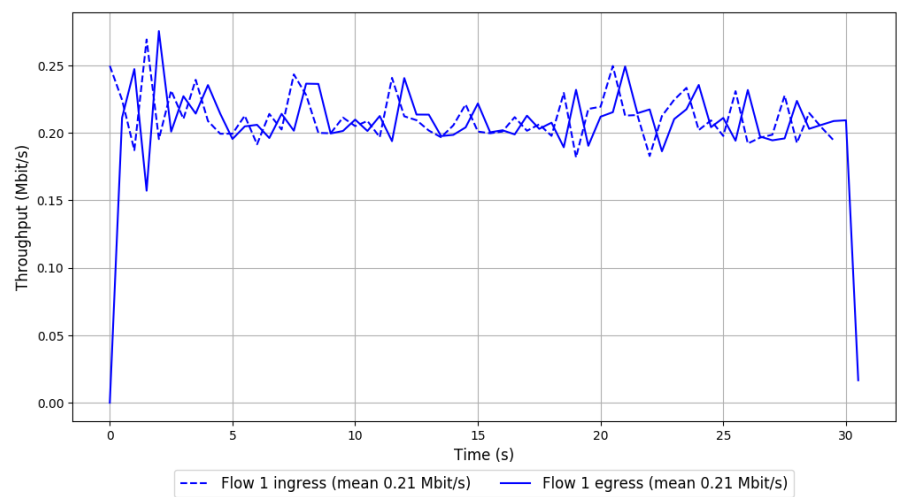
Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2018-05-22 00:17:18
End at: 2018-05-22 00:17:48
Local clock offset: 0.993 ms
Remote clock offset: 0.235 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.614 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.614 ms
Loss rate: 0.00%
```

Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-05-22 00:38:38
End at: 2018-05-22 00:39:08
Local clock offset: 3.628 ms
Remote clock offset: 0.149 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 66.340 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 66.340 ms
Loss rate: 0.00%
```
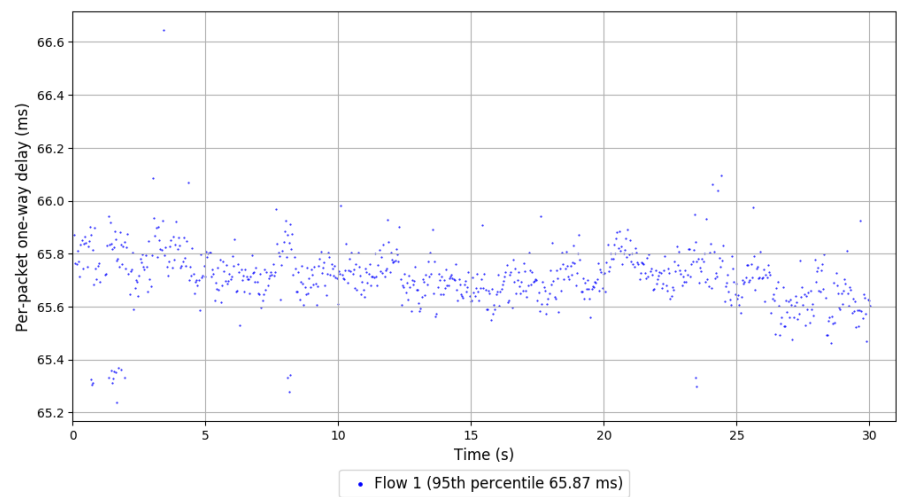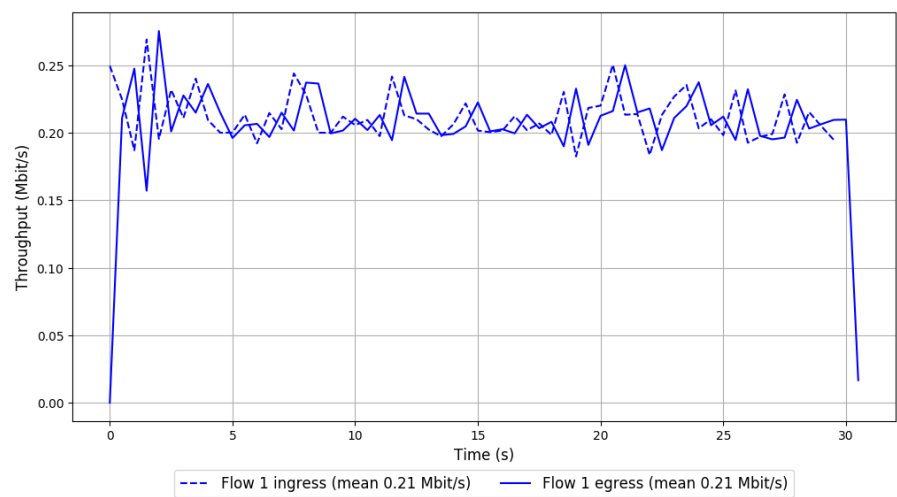
Run 9: Report of SCReAM — Data Link

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

• Flow 1 (95th percentile 66.34 ms)

```
Run 10: Statistics of SCReAM

Start at: 2018-05-22 00:59:20
End at: 2018-05-22 00:59:50
Local clock offset: 3.754 ms
Remote clock offset: -2.75 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.600 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.600 ms
Loss rate: 0.00%
```
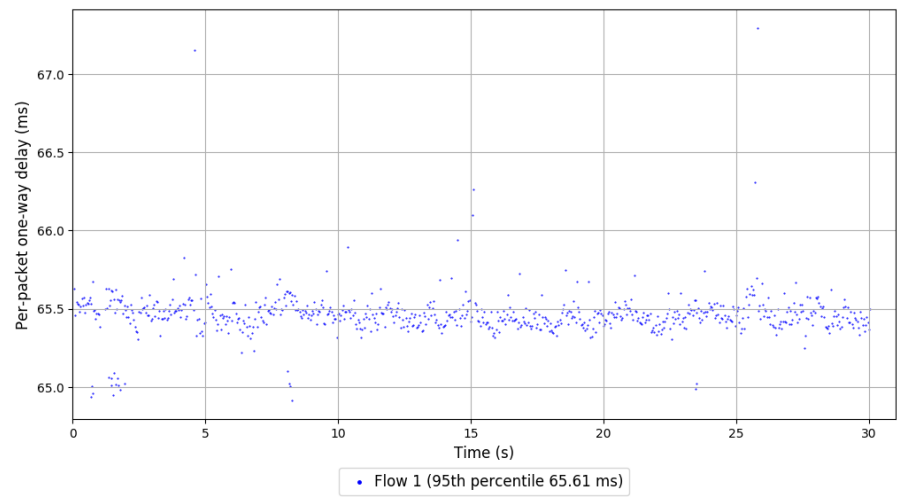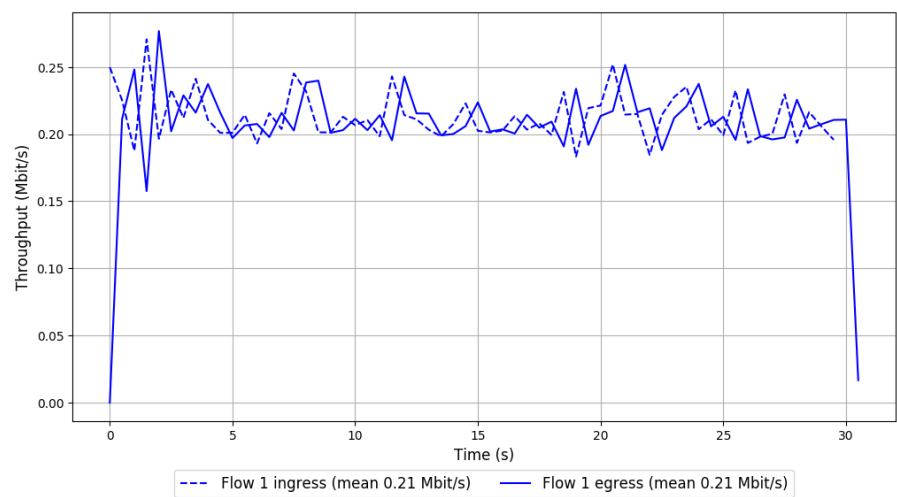
Run 10: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 65.60 ms)

```
Run 1: Statistics of Sprout

Start at: 2018-05-21 21:58:59
End at: 2018-05-21 21:59:29
Local clock offset: 0.307 ms
Remote clock offset: -0.65 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 71.349 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 71.349 ms
Loss rate: 2.29%
```
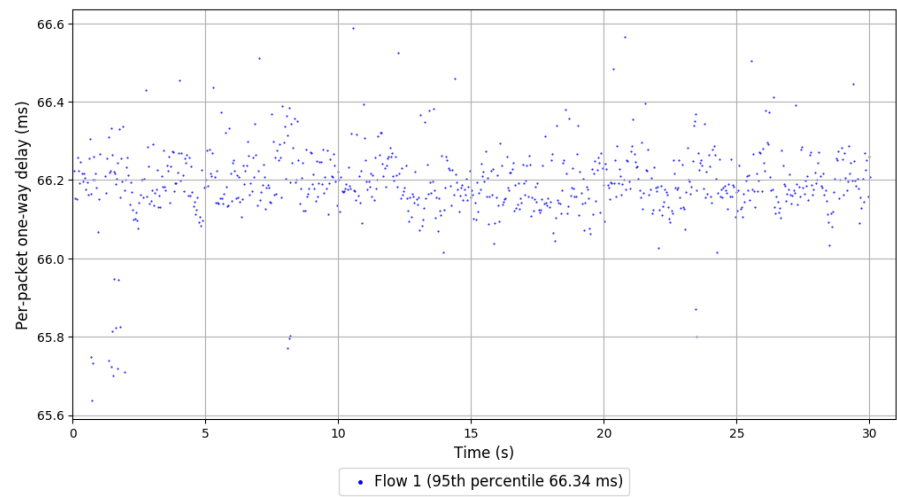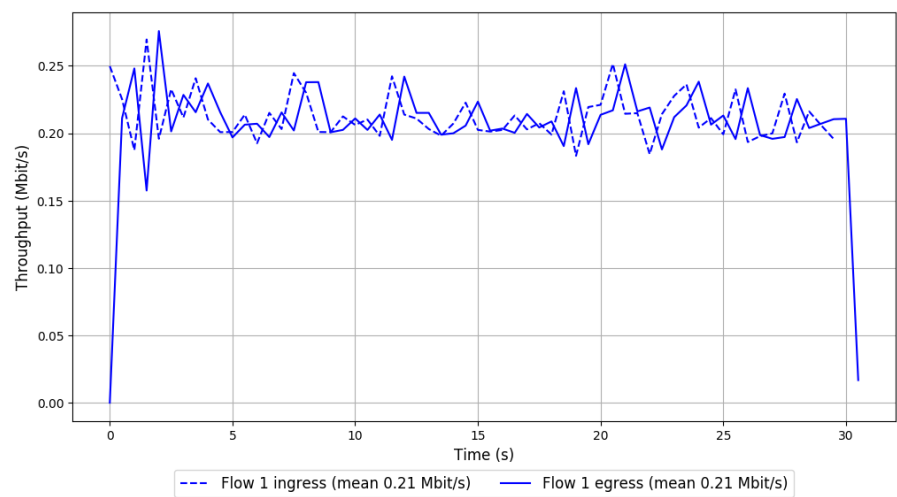
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-05-21 22:19:34
End at: 2018-05-21 22:20:04
Local clock offset: 4.277 ms
Remote clock offset: -1.391 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 71.217 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 71.217 ms
Loss rate: 1.47%
```
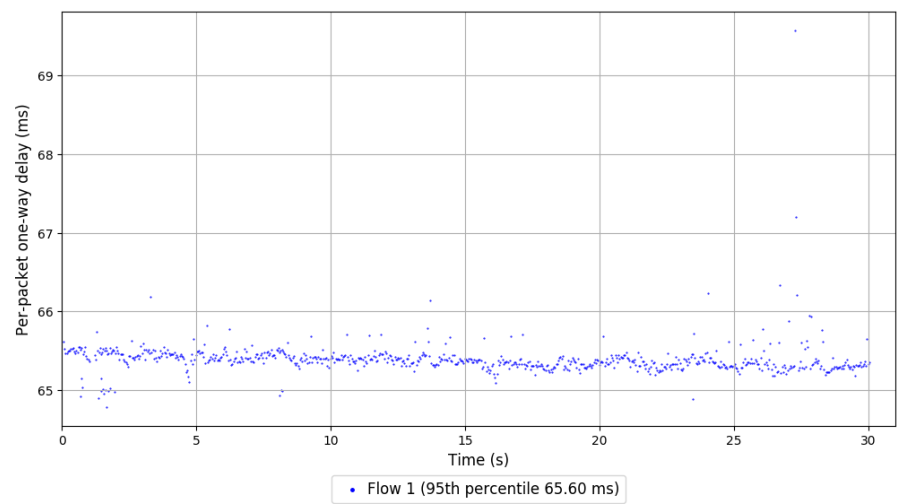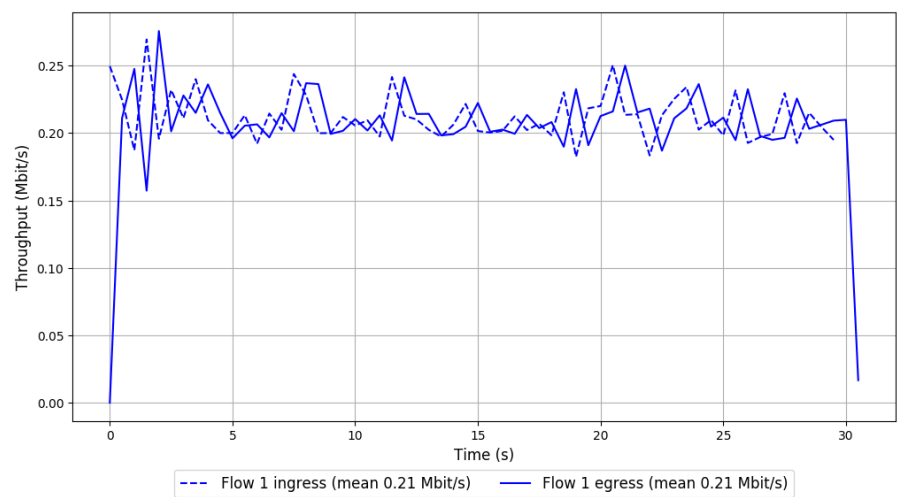
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-05-21 22:40:14
End at: 2018-05-21 22:40:44
Local clock offset: 4.427 ms
Remote clock offset: -0.888 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 70.641 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 70.641 ms
Loss rate: 1.78%
```
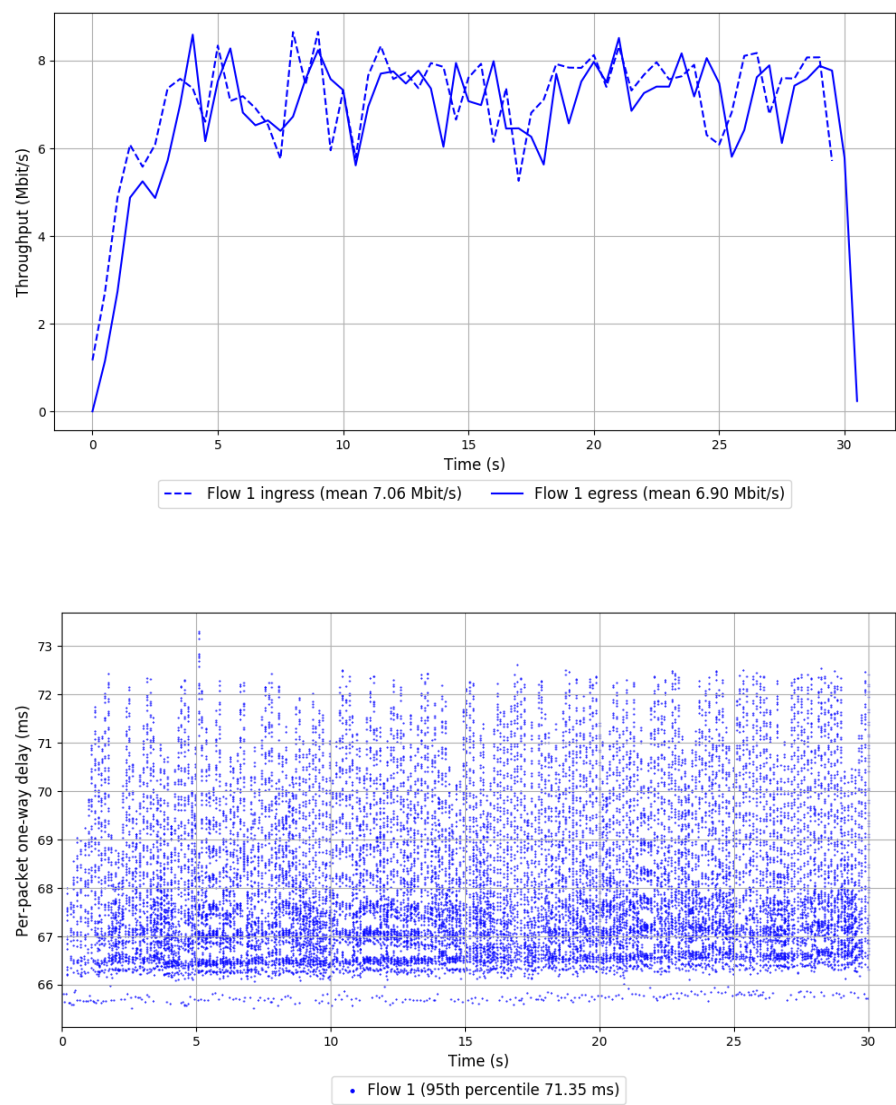
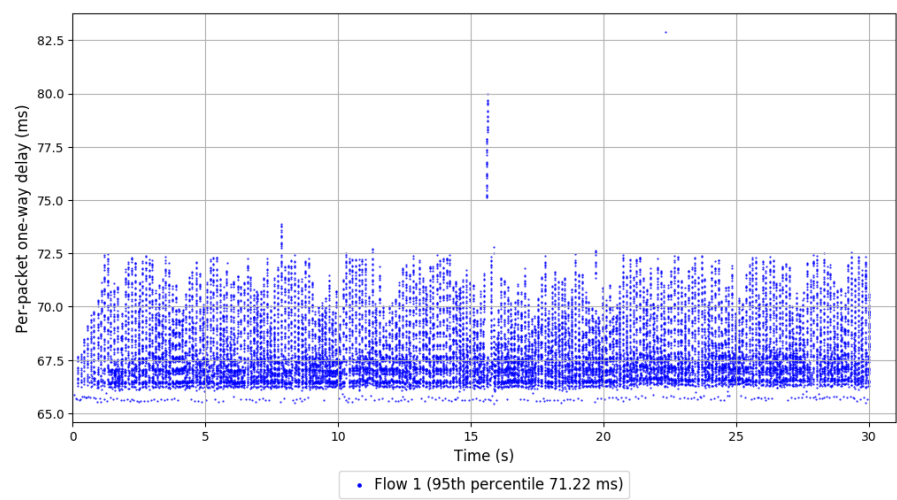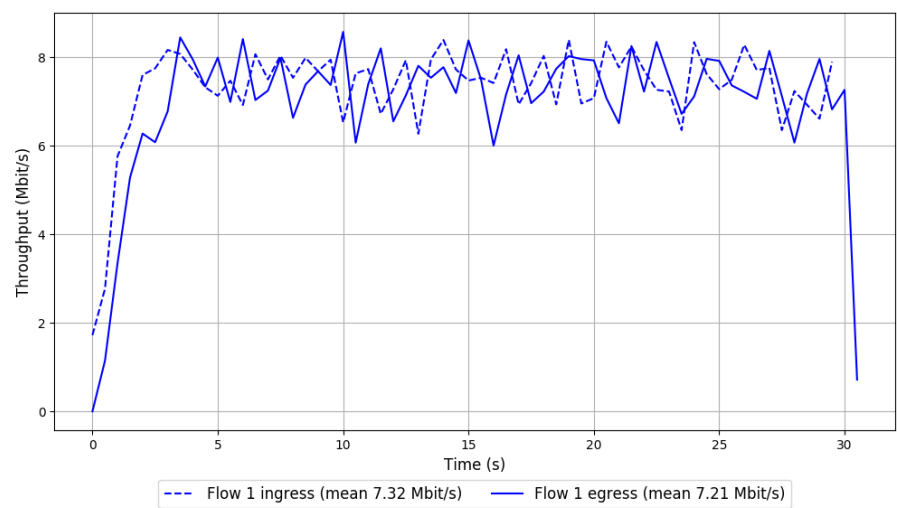## Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-05-21 23:00:54
End at: 2018-05-21 23:01:24
Local clock offset: 2.861 ms
Remote clock offset: -0.8 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 70.304 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 70.304 ms
Loss rate: 1.50%
```
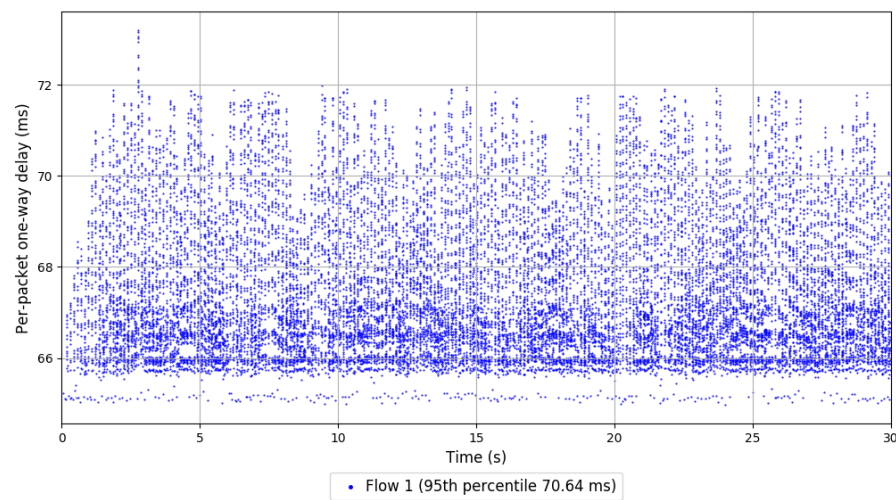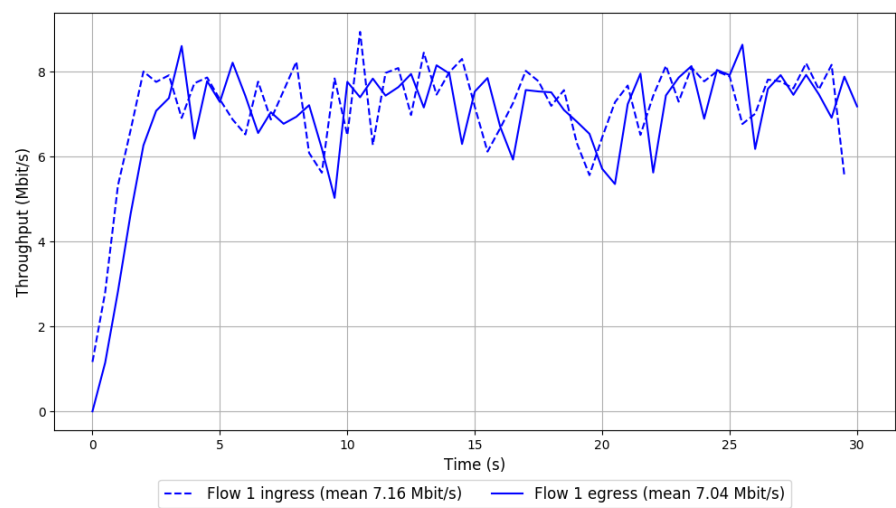
Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 7.12 Mbit/s) — — —   Flow 1 egress (mean 7.01 Mbit/s) ———

• Flow 1 (95th percentile 70.30 ms)

```
Run 5: Statistics of Sprout

Start at: 2018-05-21 23:21:35
End at: 2018-05-21 23:22:05
Local clock offset: -0.719 ms
Remote clock offset: -0.895 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 70.656 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 70.656 ms
Loss rate: 1.50%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 7.24 Mbit/s)   Flow 1 egress (mean 7.13 Mbit/s)

• Flow 1 (95th percentile 70.66 ms)

```
Run 6: Statistics of Sprout

Start at: 2018-05-21 23:42:20
End at: 2018-05-21 23:42:50
Local clock offset: 1.957 ms
Remote clock offset: -0.19 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 71.212 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 71.212 ms
Loss rate: 1.95%
```
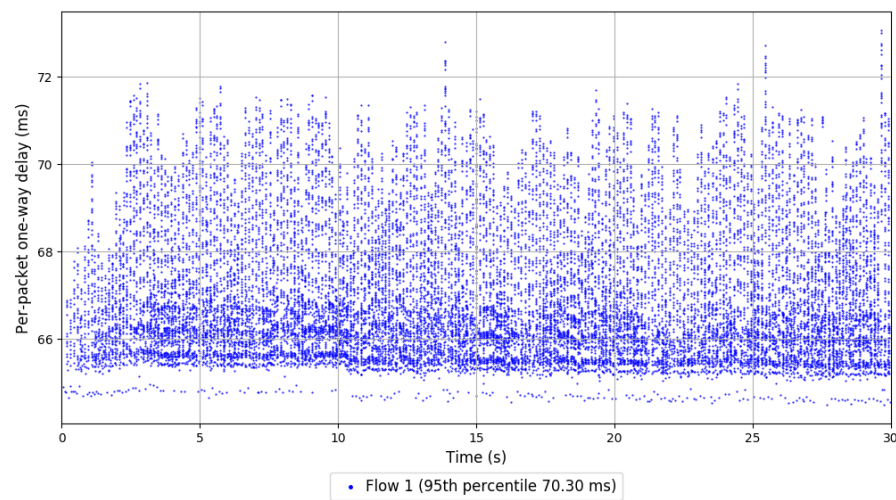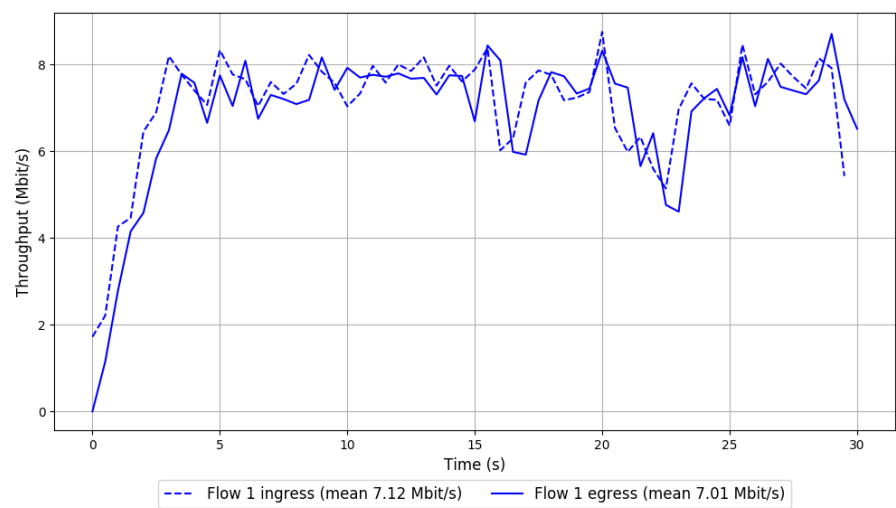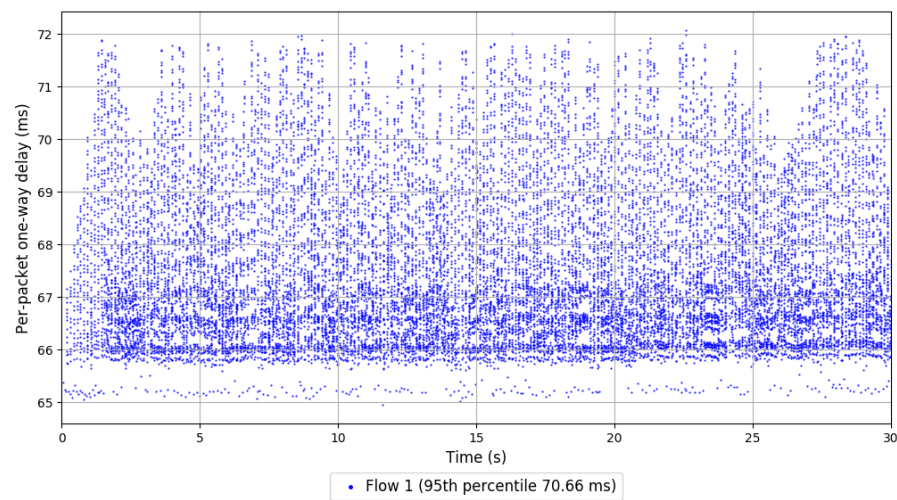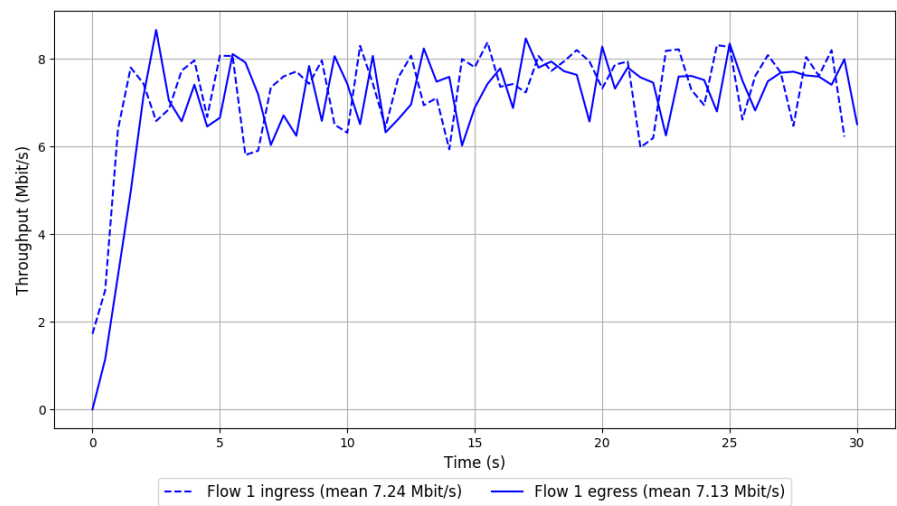
Run 6: Report of Sprout — Data Link

Flow 1 ingress (mean 6.95 Mbit/s) ———— Flow 1 egress (mean 6.81 Mbit/s)

• Flow 1 (95th percentile 71.21 ms)

```
Run 7: Statistics of Sprout

Start at: 2018-05-22 00:03:00
End at: 2018-05-22 00:03:30
Local clock offset: 1.735 ms
Remote clock offset: 0.395 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 70.649 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 70.649 ms
Loss rate: 1.57%
```

Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-05-22 00:23:40
End at: 2018-05-22 00:24:10
Local clock offset: 0.695 ms
Remote clock offset: 0.209 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 70.825 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 70.825 ms
Loss rate: 1.66%
```
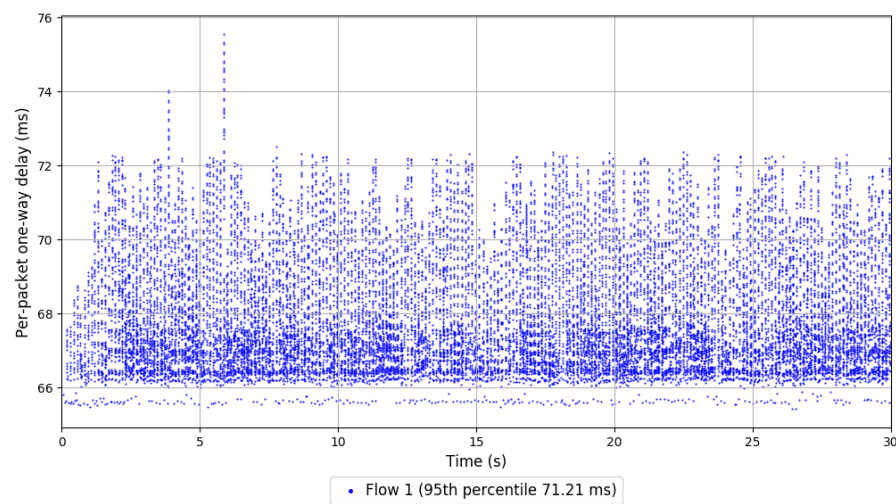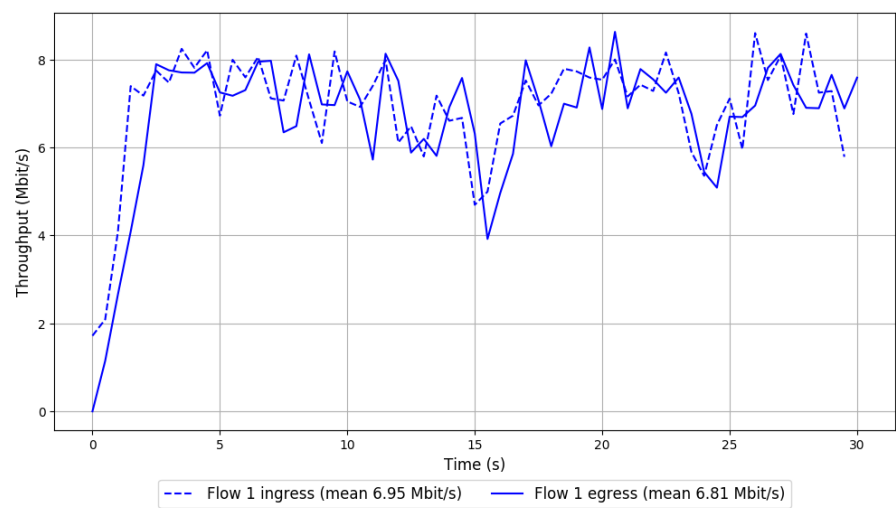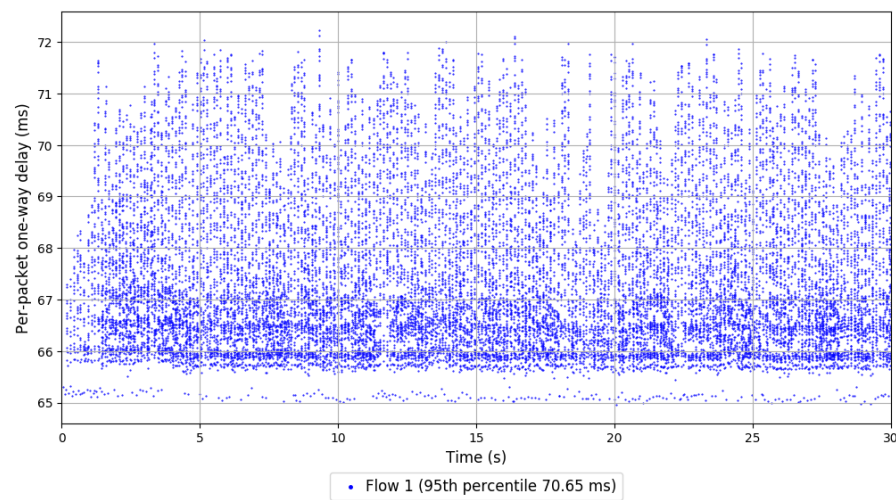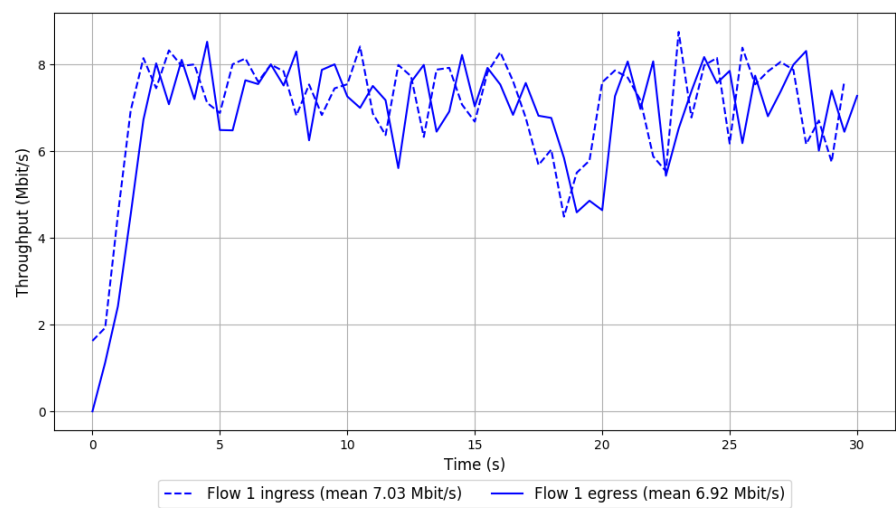
Run 8: Report of Sprout — Data Link

Flow 1 ingress (mean 6.93 Mbit/s)   Flow 1 egress (mean 6.82 Mbit/s)

Flow 1 (95th percentile 70.83 ms)

```
Run 9: Statistics of Sprout

Start at: 2018-05-22 00:45:01
End at: 2018-05-22 00:45:31
Local clock offset: 4.47 ms
Remote clock offset: -0.736 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 70.981 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 70.981 ms
Loss rate: 1.43%
```

Run 9: Report of Sprout — Data Link

Flow 1 ingress (mean 7.09 Mbit/s)   Flow 1 egress (mean 6.99 Mbit/s)

Flow 1 (95th percentile 70.98 ms)

```
Run 10: Statistics of Sprout

Start at: 2018-05-22 01:05:42
End at: 2018-05-22 01:06:12
Local clock offset: 1.361 ms
Remote clock offset: -3.153 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 70.588 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 70.588 ms
Loss rate: 1.55%
```
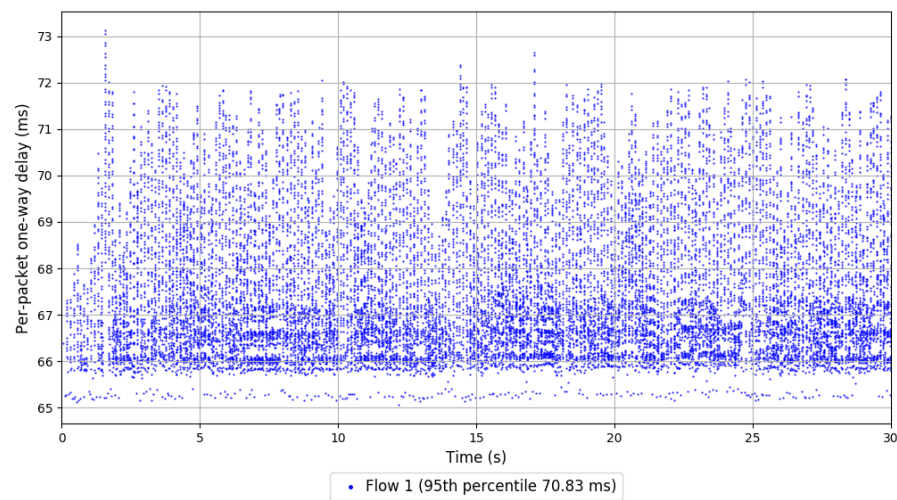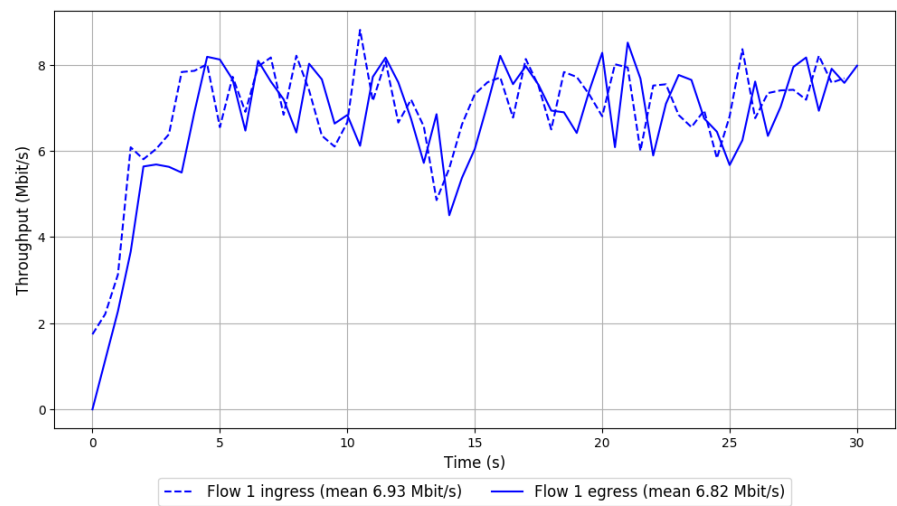
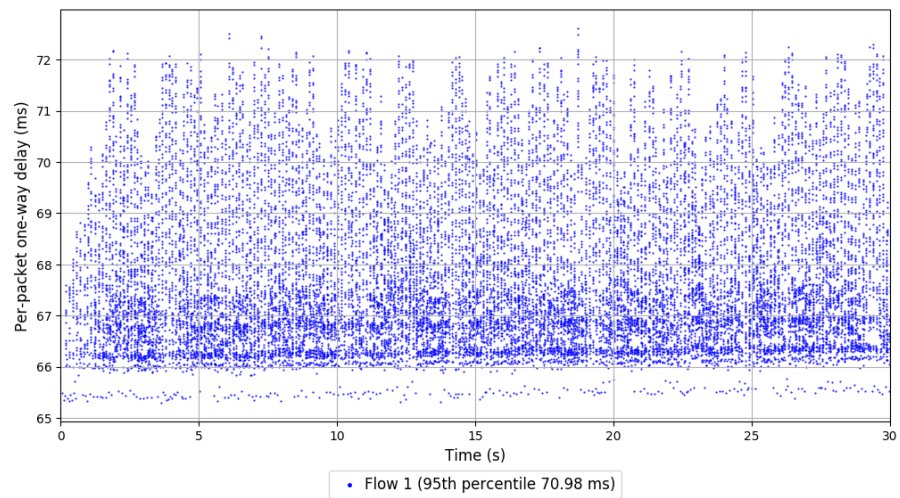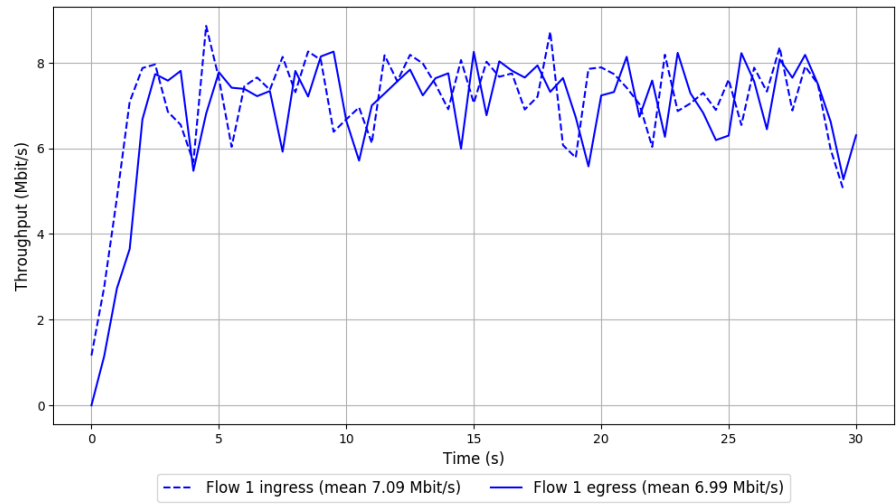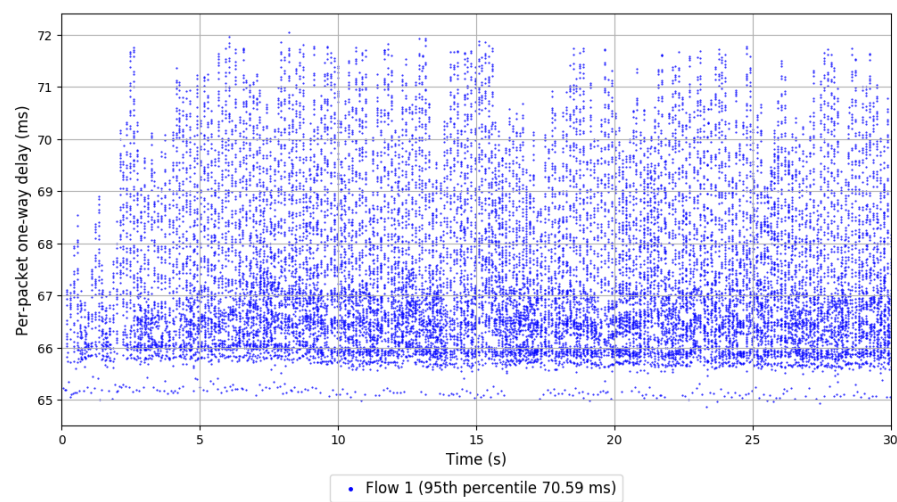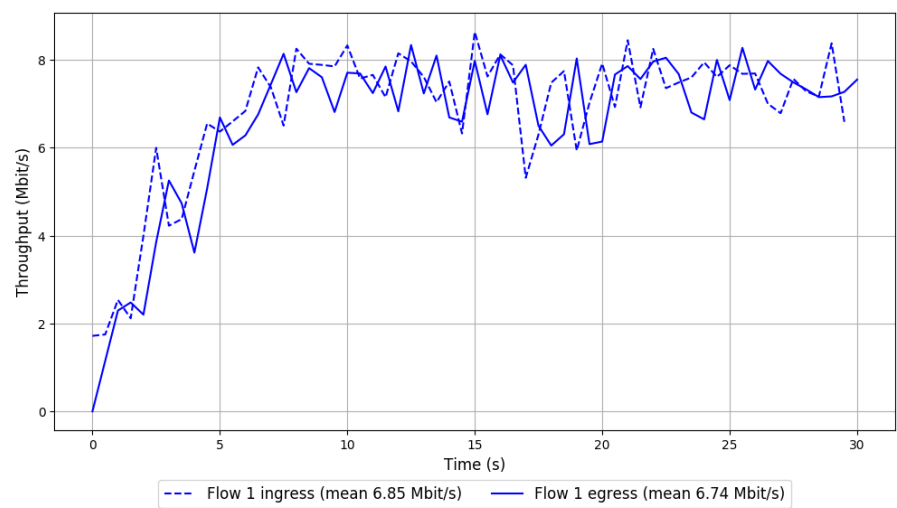Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 6.85 Mbit/s)   Flow 1 egress (mean 6.74 Mbit/s)

Flow 1 (95th percentile 70.59 ms)

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

Start at: 2018-05-21 21:48:46
End at: 2018-05-21 21:49:16
Local clock offset: -0.404 ms
Remote clock offset: 0.047 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.16 Mbit/s
95th percentile per-packet one-way delay: 66.225 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 14.16 Mbit/s
95th percentile per-packet one-way delay: 66.225 ms
Loss rate: 0.91%
```

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

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

Start at: 2018-05-21 22:09:21
End at: 2018-05-21 22:09:51
Local clock offset: 3.053 ms
Remote clock offset: -1.082 ms


# Below is generated by plot.py at 2018-05-22 01:20:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.08 Mbit/s
95th percentile per-packet one-way delay: 66.558 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 14.08 Mbit/s
95th percentile per-packet one-way delay: 66.558 ms
Loss rate: 0.93%
```

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

Flow 1 ingress (mean 14.22 Mbit/s) --- Flow 1 egress (mean 14.08 Mbit/s)
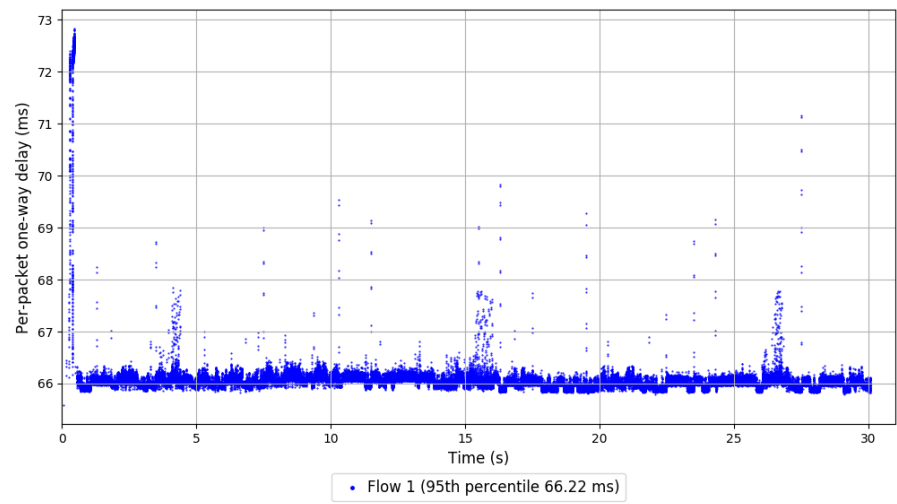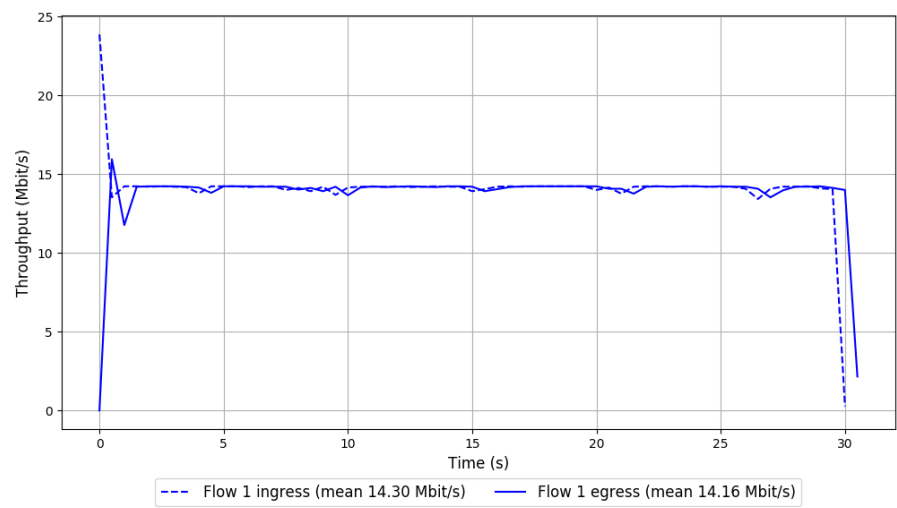

Flow 1 (95th percentile 66.56 ms)

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

Start at: 2018-05-21 22:29:57
End at: 2018-05-21 22:30:27
Local clock offset: 4.723 ms
Remote clock offset: -1.127 ms


# Below is generated by plot.py at 2018-05-22 01:21:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.36 Mbit/s
95th percentile per-packet one-way delay: 79.241 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 76.36 Mbit/s
95th percentile per-packet one-way delay: 79.241 ms
Loss rate: 2.50%
```
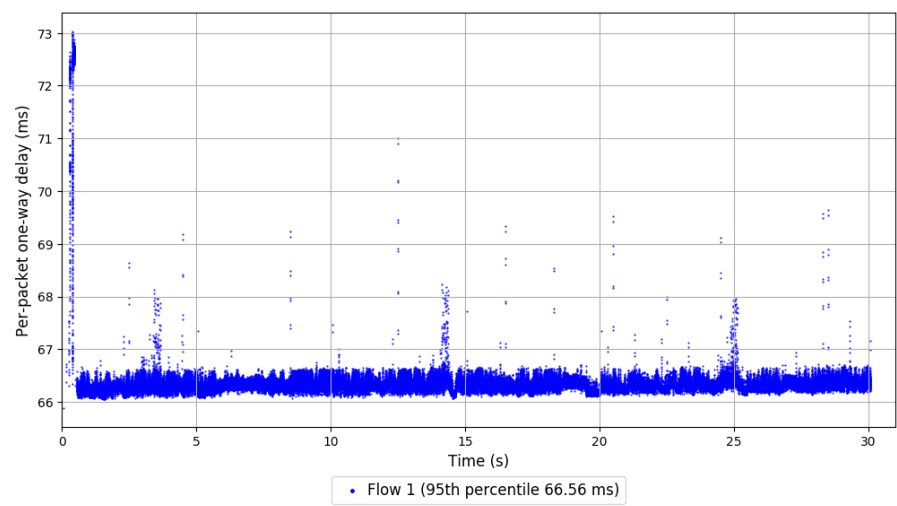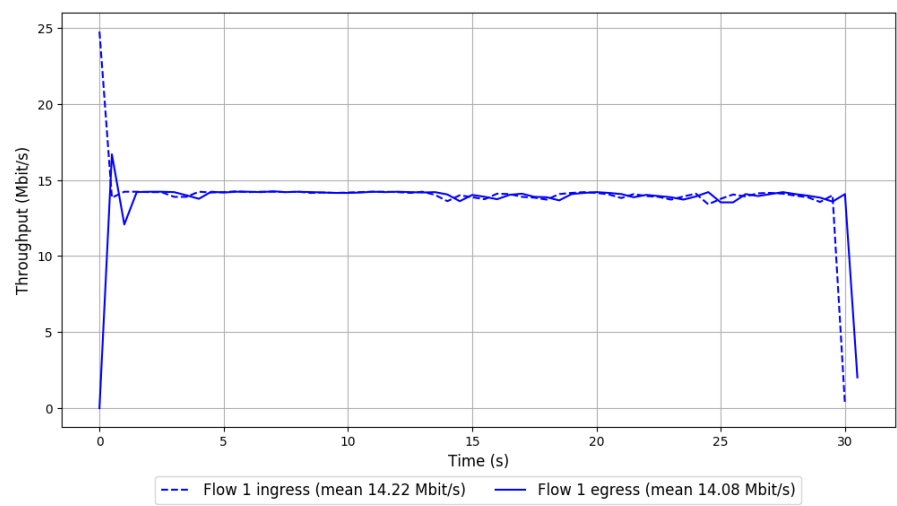
Run 3: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 78.33 Mbit/s)   Flow 1 egress (mean 76.36 Mbit/s)

Flow 1 (95th percentile 79.24 ms)

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

Start at: 2018-05-21 22:50:37
End at: 2018-05-21 22:51:07
Local clock offset: 4.558 ms
Remote clock offset: -0.757 ms

# Below is generated by plot.py at 2018-05-22 01:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.07 Mbit/s
95th percentile per-packet one-way delay: 78.604 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 77.07 Mbit/s
95th percentile per-packet one-way delay: 78.604 ms
Loss rate: 2.11%
```

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

Flow 1 ingress (mean 78.73 Mbit/s)   Flow 1 egress (mean 77.07 Mbit/s)

Flow 1 (95th percentile 78.60 ms)

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

Start at: 2018-05-21 23:11:17
End at: 2018-05-21 23:11:47
Local clock offset: 0.017 ms
Remote clock offset: -0.794 ms


# Below is generated by plot.py at 2018-05-22 01:21:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.57 Mbit/s
95th percentile per-packet one-way delay: 76.129 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 80.57 Mbit/s
95th percentile per-packet one-way delay: 76.129 ms
Loss rate: 2.13%
```
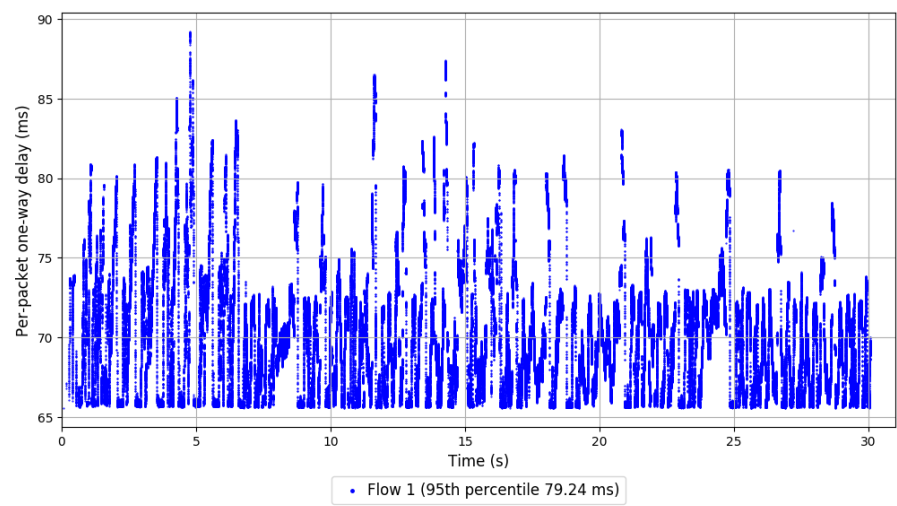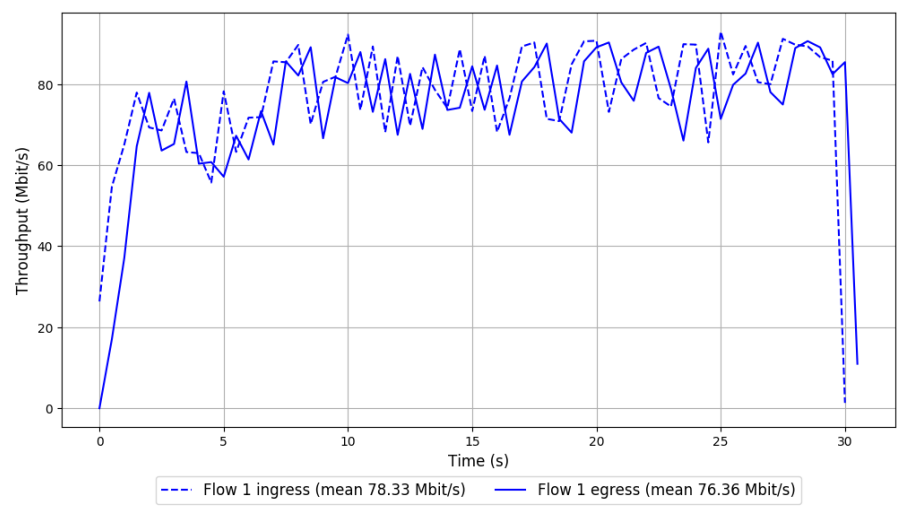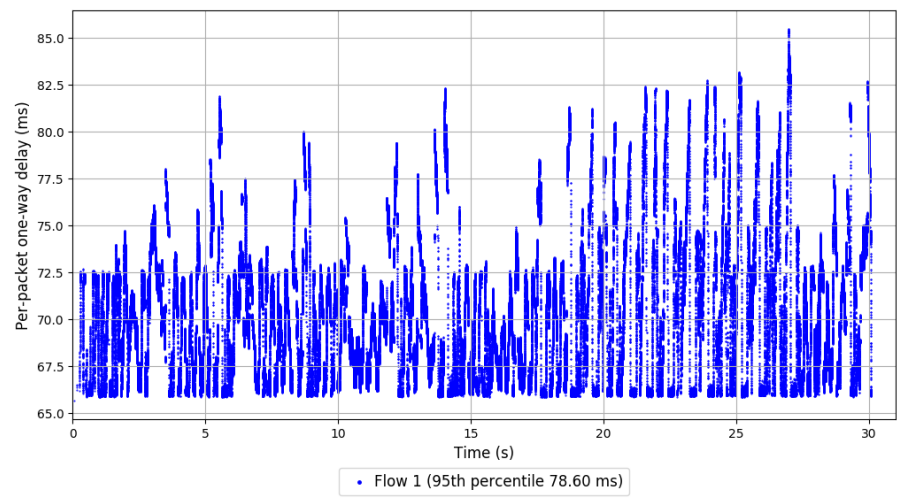
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 82.33 Mbit/s)   Flow 1 egress (mean 80.57 Mbit/s)

• Flow 1 (95th percentile 76.13 ms)

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

Start at: 2018-05-21 23:31:57
End at: 2018-05-21 23:32:27
Local clock offset: 0.64 ms
Remote clock offset: -0.853 ms


# Below is generated by plot.py at 2018-05-22 01:21:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.45 Mbit/s
95th percentile per-packet one-way delay: 78.293 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 78.45 Mbit/s
95th percentile per-packet one-way delay: 78.293 ms
Loss rate: 1.78%
```
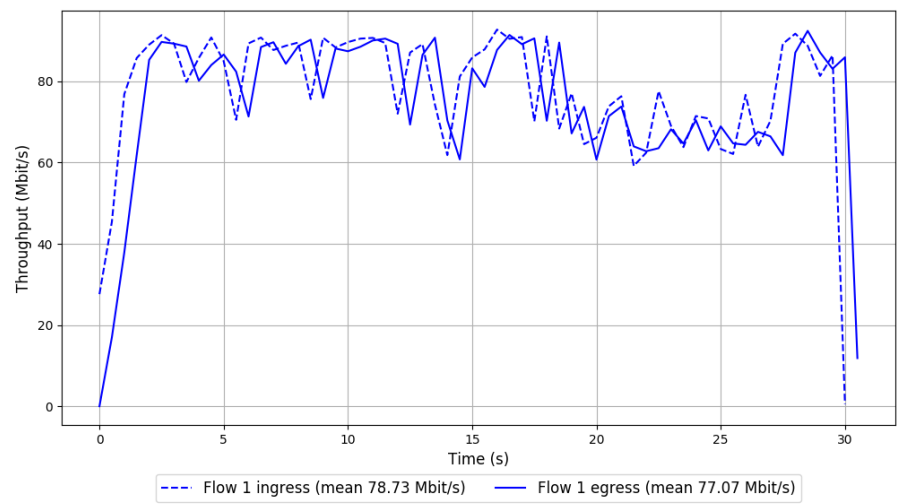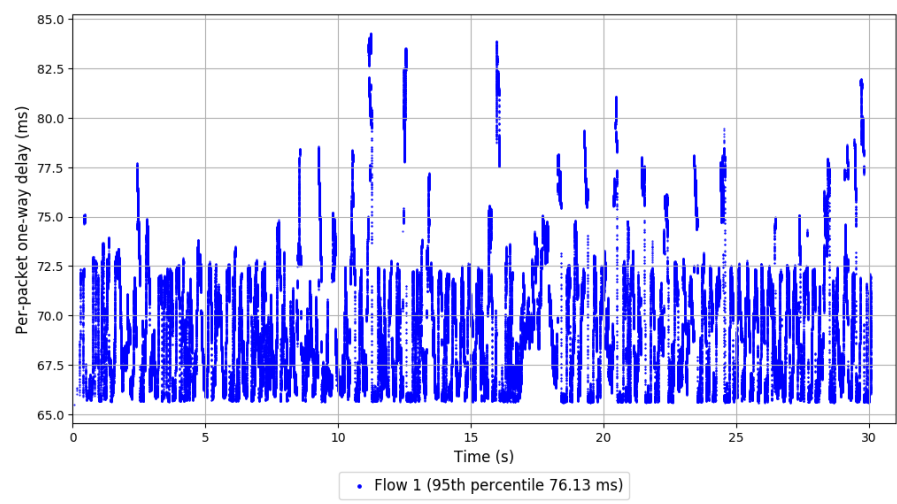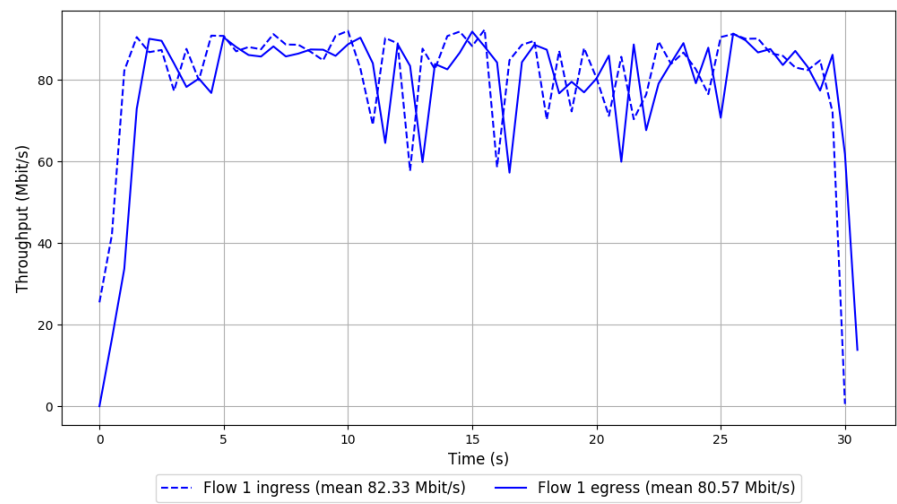
Run 6: Report of TaoVA-100x — Data Link

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

Start at: 2018-05-21 23:52:44
End at: 2018-05-21 23:53:14
Local clock offset: 2.789 ms
Remote clock offset: 0.245 ms


# Below is generated by plot.py at 2018-05-22 01:21:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.80 Mbit/s
95th percentile per-packet one-way delay: 79.122 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 74.80 Mbit/s
95th percentile per-packet one-way delay: 79.122 ms
Loss rate: 2.61%
```

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

Flow 1 ingress (mean 76.80 Mbit/s) --- Flow 1 egress (mean 74.80 Mbit/s)

Flow 1 (95th percentile 79.12 ms)

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

Start at: 2018-05-22 00:13:23
End at: 2018-05-22 00:13:53
Local clock offset: 0.918 ms
Remote clock offset: 0.262 ms


# Below is generated by plot.py at 2018-05-22 01:22:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.14 Mbit/s
95th percentile per-packet one-way delay: 74.930 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 81.14 Mbit/s
95th percentile per-packet one-way delay: 74.930 ms
Loss rate: 2.35%
```
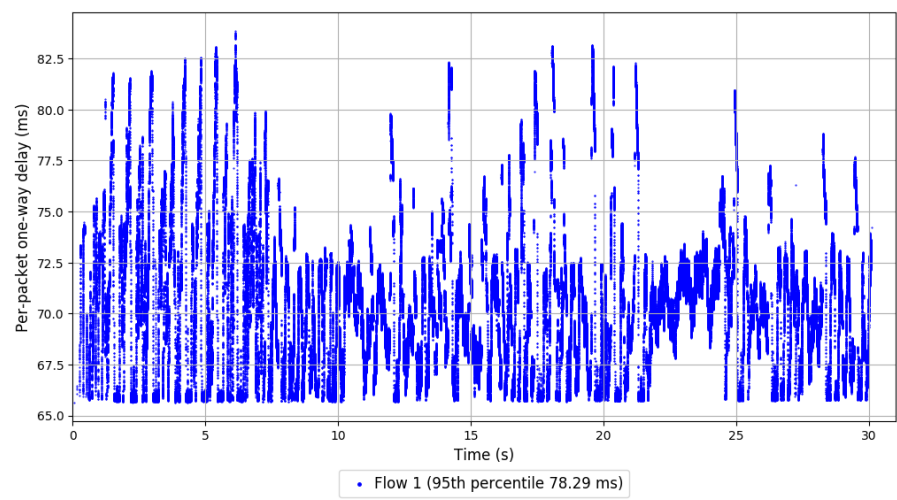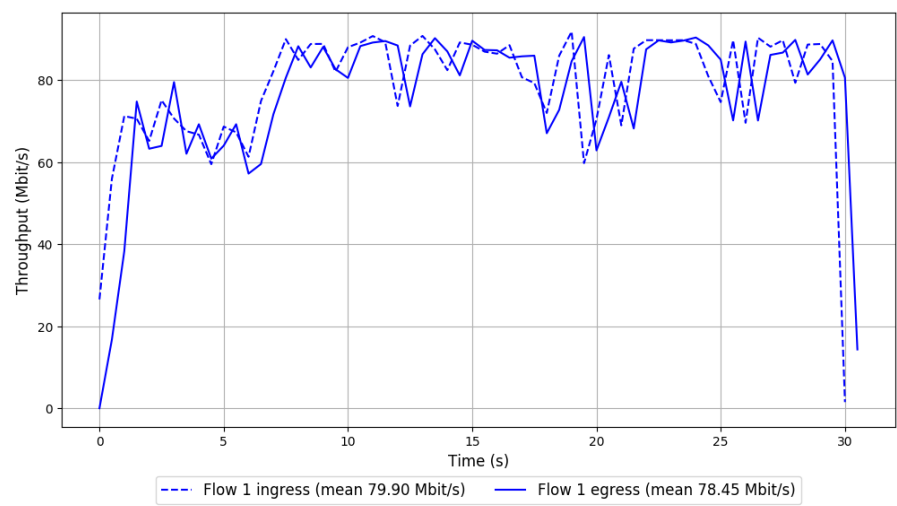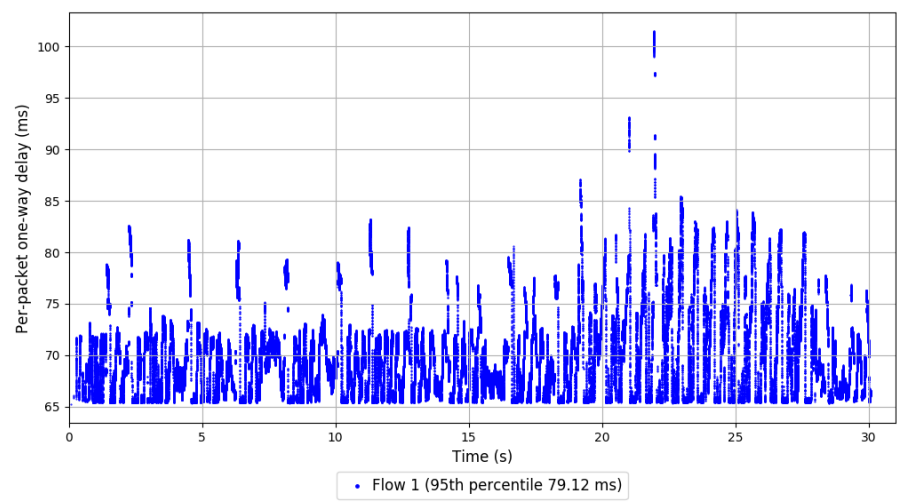
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 83.10 Mbit/s)   Flow 1 egress (mean 81.14 Mbit/s)

Flow 1 (95th percentile 74.93 ms)

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

Start at: 2018-05-22 00:34:48
End at: 2018-05-22 00:35:18
Local clock offset: 3.26 ms
Remote clock offset: 0.255 ms


# Below is generated by plot.py at 2018-05-22 01:22:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.21 Mbit/s
95th percentile per-packet one-way delay: 65.970 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 14.21 Mbit/s
95th percentile per-packet one-way delay: 65.970 ms
Loss rate: 0.90%
```
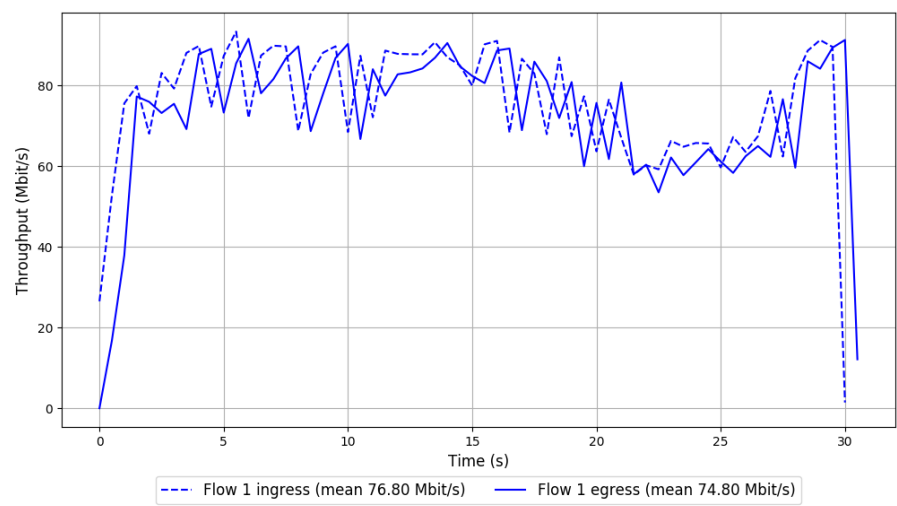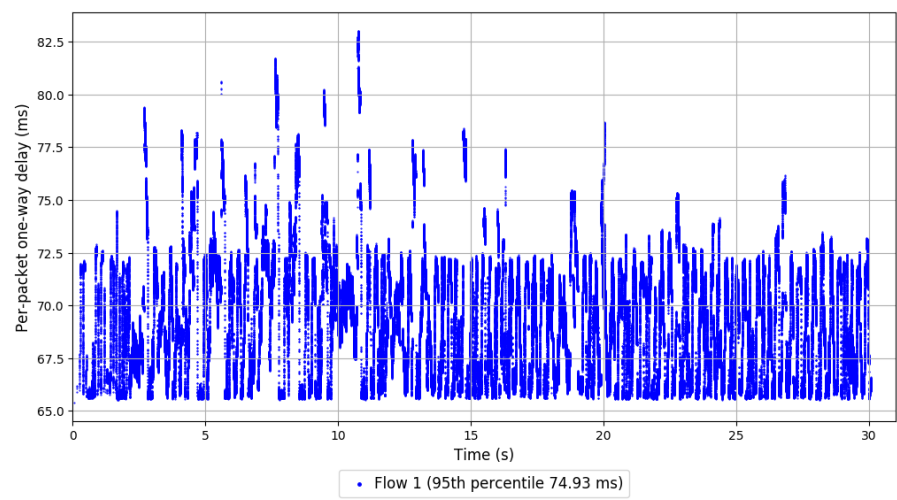
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 14.33 Mbit/s) —— Flow 1 egress (mean 14.21 Mbit/s)

• Flow 1 (95th percentile 65.97 ms)

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

Start at: 2018-05-22 00:55:25
End at: 2018-05-22 00:55:55
Local clock offset: 5.072 ms
Remote clock offset: -2.444 ms


# Below is generated by plot.py at 2018-05-22 01:22:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.90 Mbit/s
95th percentile per-packet one-way delay: 78.402 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 76.90 Mbit/s
95th percentile per-packet one-way delay: 78.402 ms
Loss rate: 2.80%
```
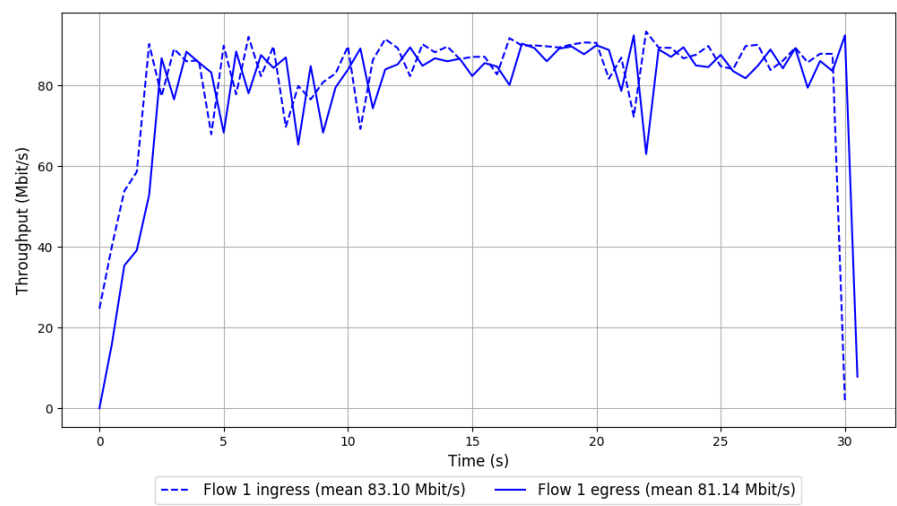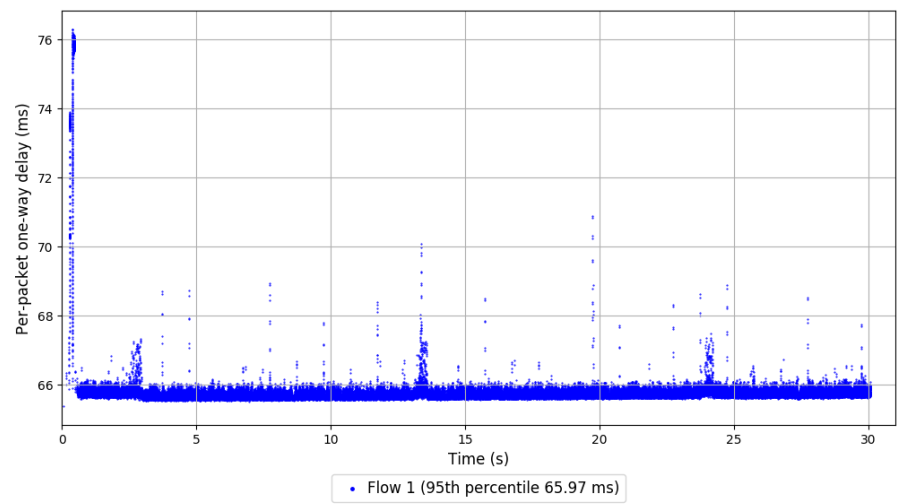
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 79.11 Mbit/s)   Flow 1 egress (mean 76.90 Mbit/s)

• Flow 1 (95th percentile 78.40 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-05-21 21:47:30
End at: 2018-05-21 21:48:00
Local clock offset: -0.188 ms
Remote clock offset: 0.022 ms


# Below is generated by plot.py at 2018-05-22 01:22:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.54 Mbit/s
95th percentile per-packet one-way delay: 66.879 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 28.54 Mbit/s
95th percentile per-packet one-way delay: 66.879 ms
Loss rate: 0.11%
```
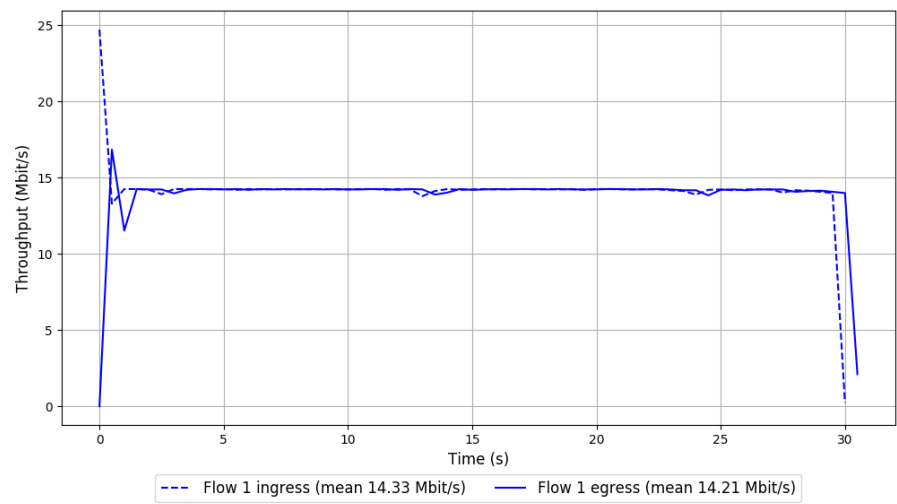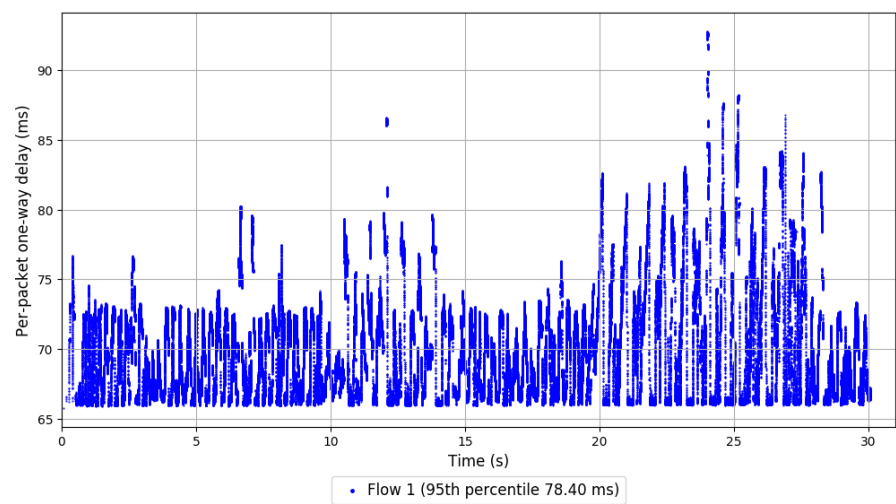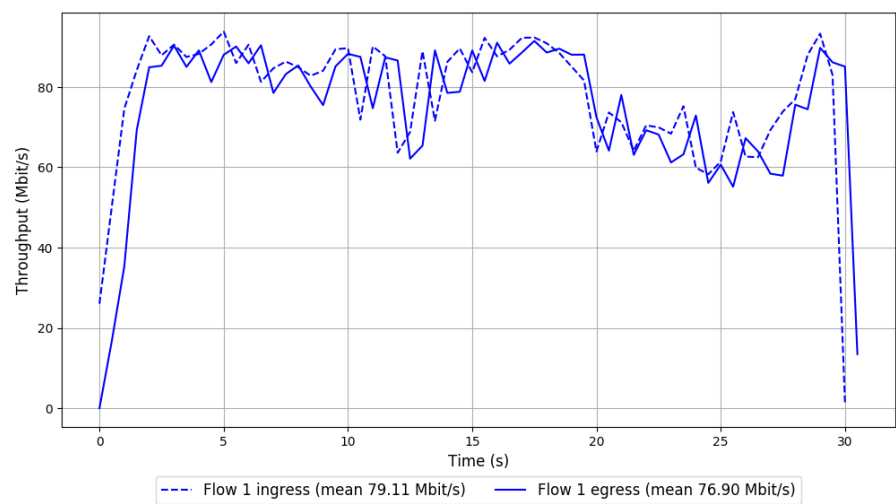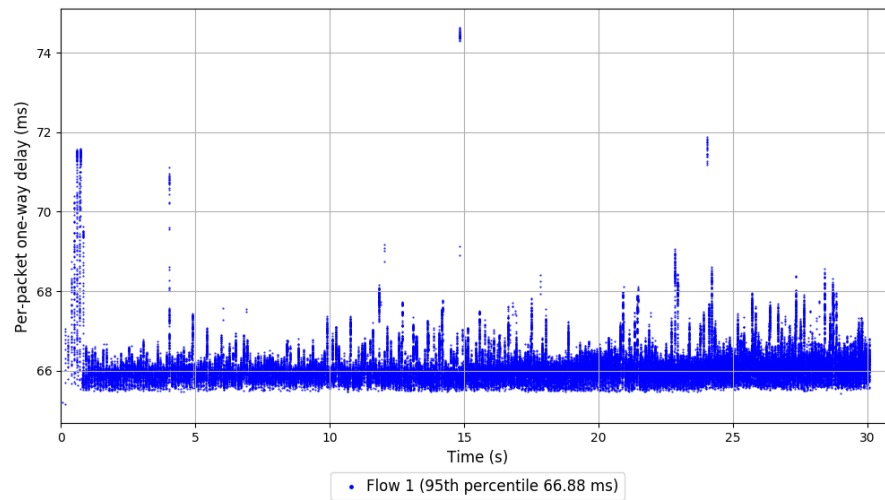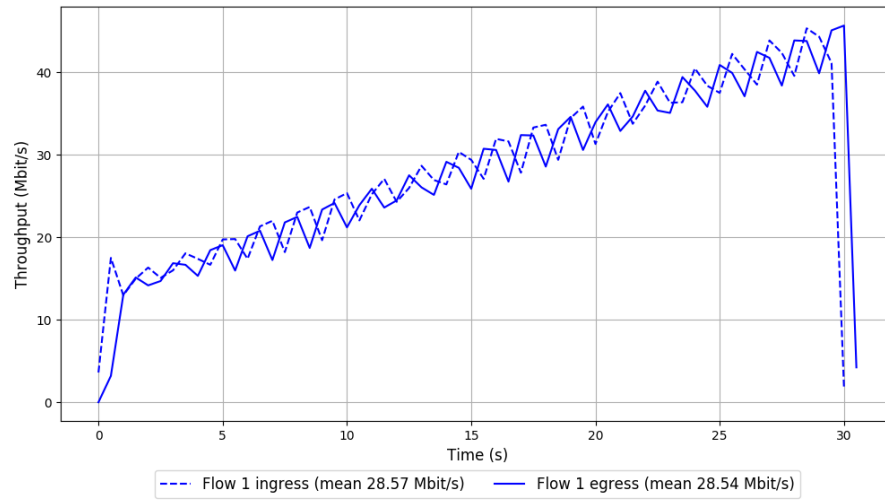
Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 28.57 Mbit/s)   Flow 1 egress (mean 28.54 Mbit/s)

Flow 1 (95th percentile 66.88 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2018-05-21 22:08:05
End at: 2018-05-21 22:08:35
Local clock offset: 2.989 ms
Remote clock offset: -1.029 ms


# Below is generated by plot.py at 2018-05-22 01:22:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.80 Mbit/s
95th percentile per-packet one-way delay: 67.116 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 19.80 Mbit/s
95th percentile per-packet one-way delay: 67.116 ms
Loss rate: 0.30%
```

Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-05-21 22:28:41
End at: 2018-05-21 22:29:11
Local clock offset: 4.783 ms
Remote clock offset: -1.216 ms


# Below is generated by plot.py at 2018-05-22 01:22:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 27.96 Mbit/s
95th percentile per-packet one-way delay: 67.079 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 27.96 Mbit/s
95th percentile per-packet one-way delay: 67.079 ms
Loss rate: 0.11%
```
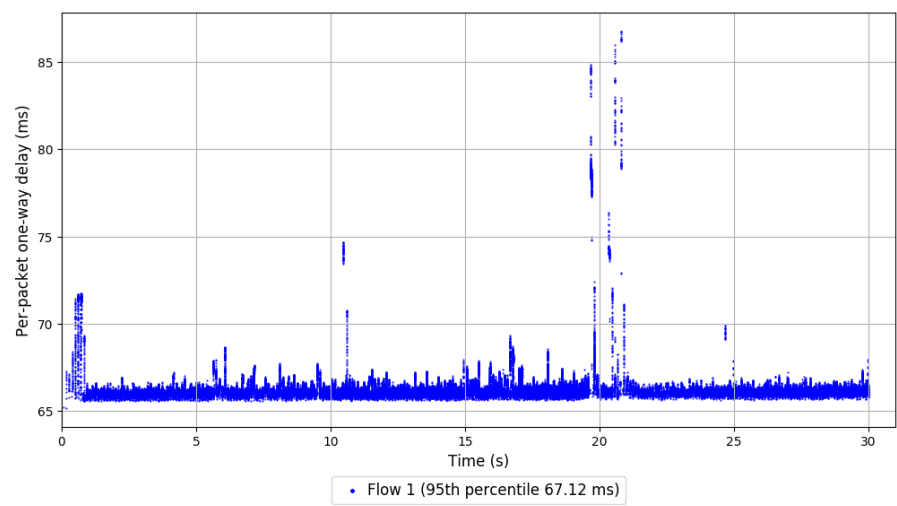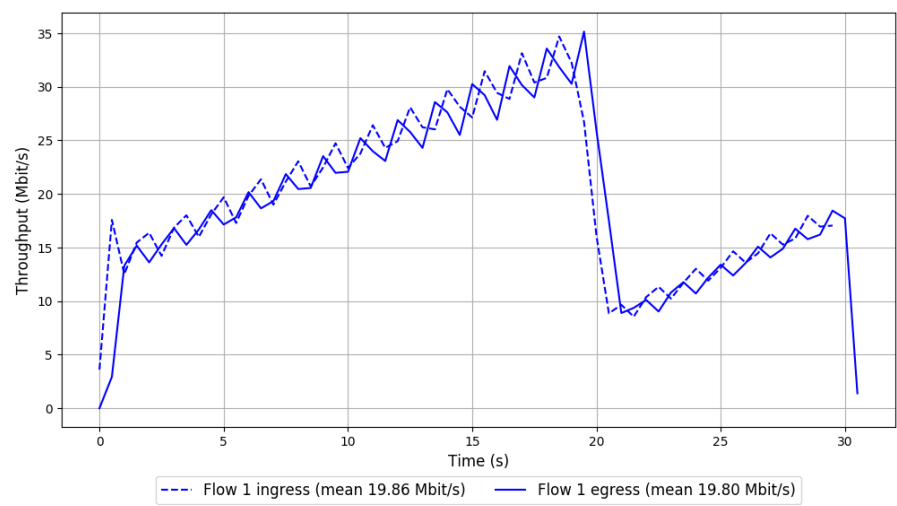
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 27.99 Mbit/s)   Flow 1 egress (mean 27.96 Mbit/s)

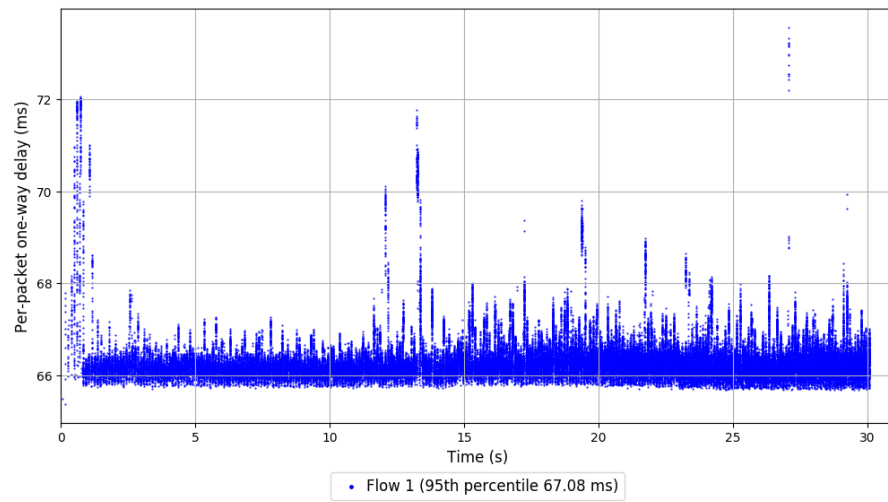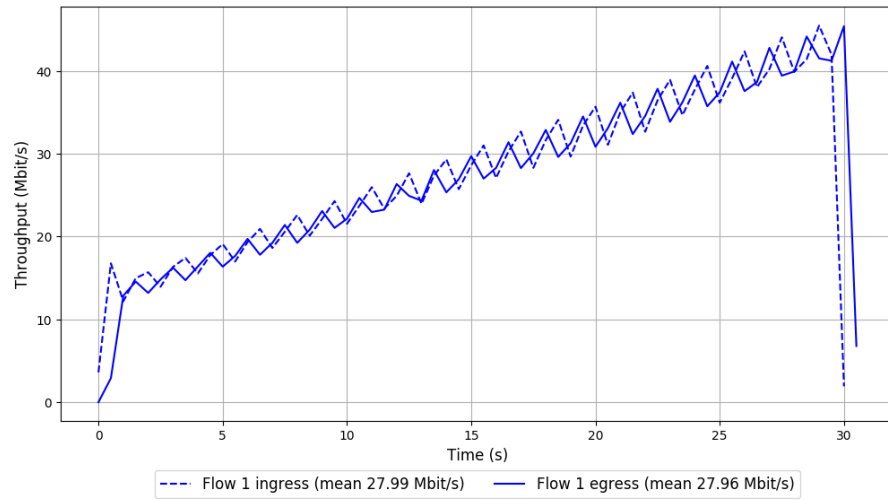

• Flow 1 (95th percentile 67.08 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2018-05-21 22:49:21
End at: 2018-05-21 22:49:51
Local clock offset: 4.562 ms
Remote clock offset: -0.832 ms


# Below is generated by plot.py at 2018-05-22 01:22:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.04 Mbit/s
95th percentile per-packet one-way delay: 67.167 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 25.04 Mbit/s
95th percentile per-packet one-way delay: 67.167 ms
Loss rate: 0.12%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 25.07 Mbit/s)   Flow 1 egress (mean 25.04 Mbit/s)

• Flow 1 (95th percentile 67.17 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2018-05-21 23:10:01
End at: 2018-05-21 23:10:31
Local clock offset: 0.347 ms
Remote clock offset: -0.753 ms


# Below is generated by plot.py at 2018-05-22 01:22:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.58 Mbit/s
95th percentile per-packet one-way delay: 66.669 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 21.58 Mbit/s
95th percentile per-packet one-way delay: 66.669 ms
Loss rate: 0.17%
```
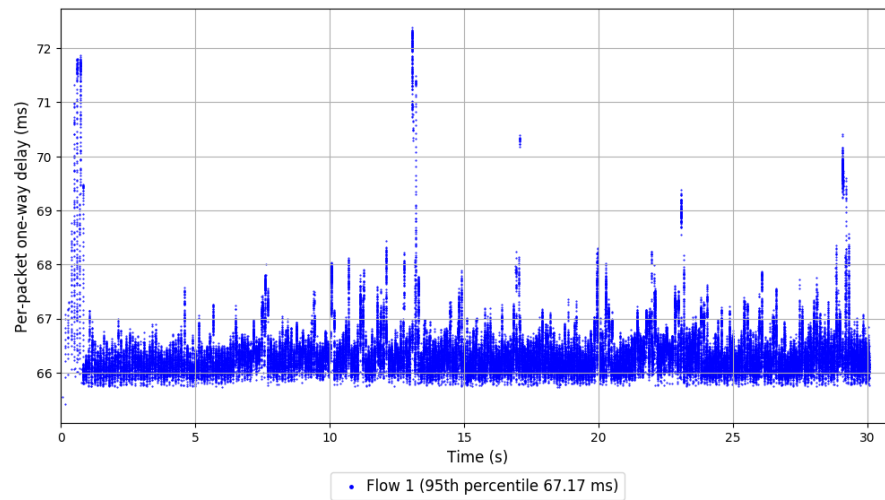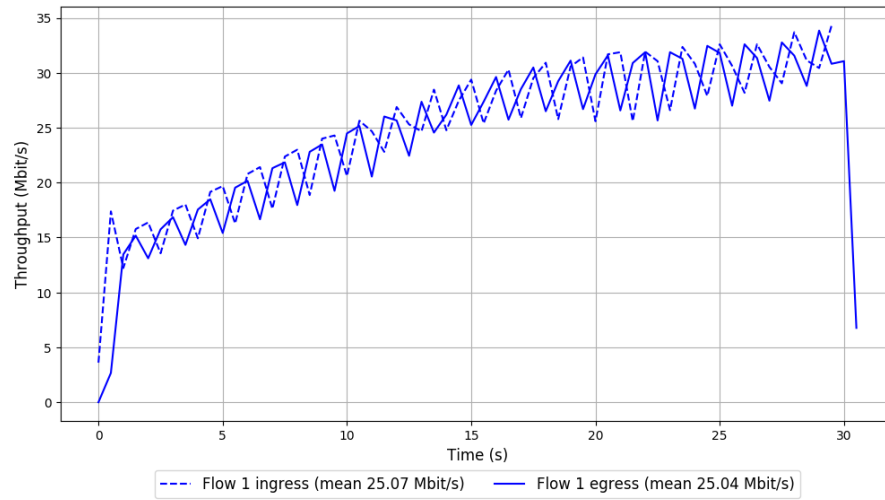
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 21.62 Mbit/s) ----   Flow 1 egress (mean 21.58 Mbit/s) ——
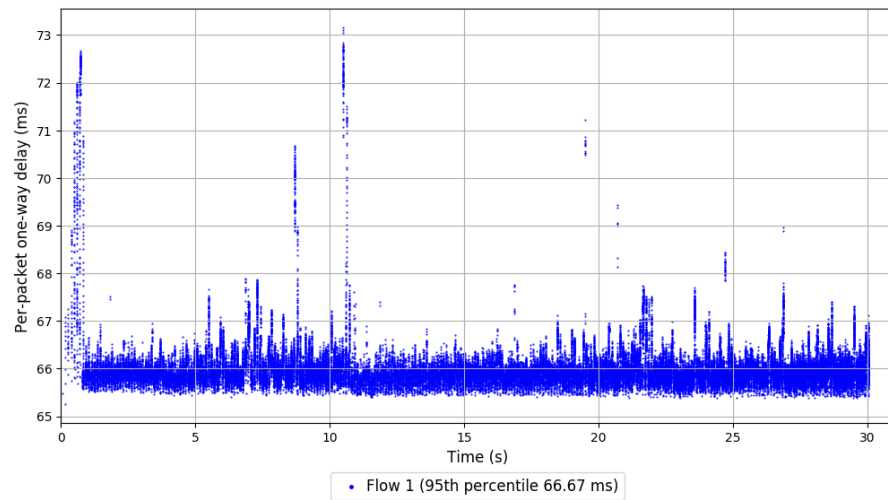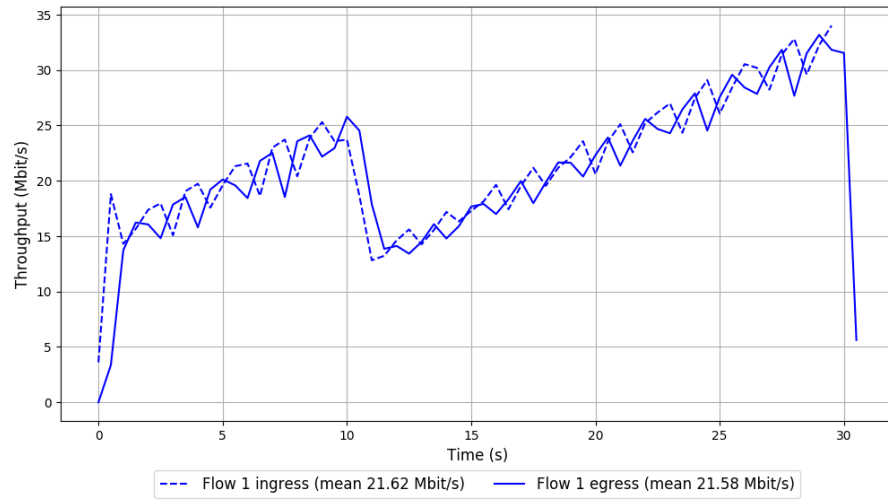

• Flow 1 (95th percentile 66.67 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2018-05-21 23:30:41
End at: 2018-05-21 23:31:11
Local clock offset: 0.01 ms
Remote clock offset: -0.924 ms


# Below is generated by plot.py at 2018-05-22 01:22:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 27.61 Mbit/s
95th percentile per-packet one-way delay: 67.869 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 27.61 Mbit/s
95th percentile per-packet one-way delay: 67.869 ms
Loss rate: 0.11%
```
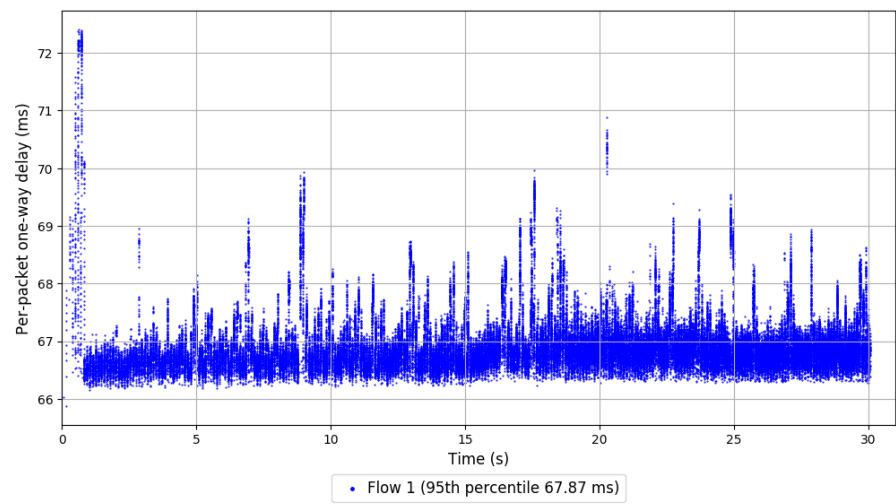
Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 27.64 Mbit/s) ----- Flow 1 egress (mean 27.61 Mbit/s)

• Flow 1 (95th percentile 67.87 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2018-05-21 23:51:27
End at: 2018-05-21 23:51:57
Local clock offset: 2.486 ms
Remote clock offset: 0.212 ms


# Below is generated by plot.py at 2018-05-22 01:22:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 67.211 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 67.211 ms
Loss rate: 0.12%
```
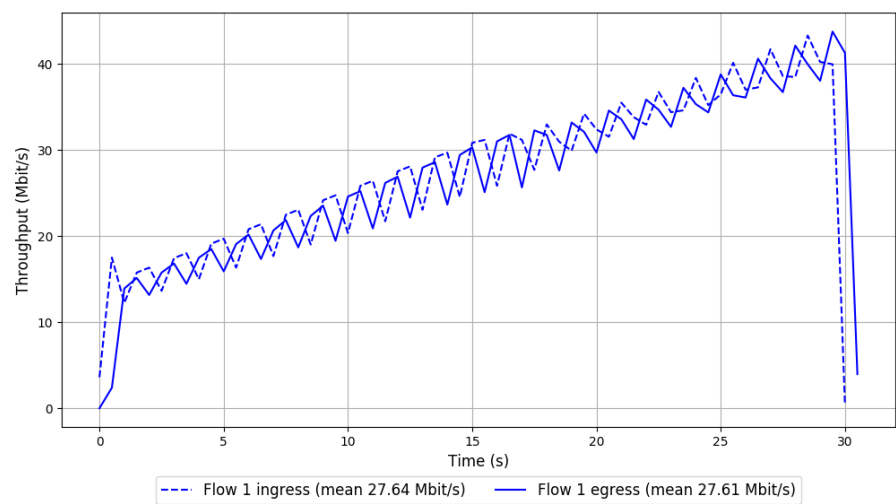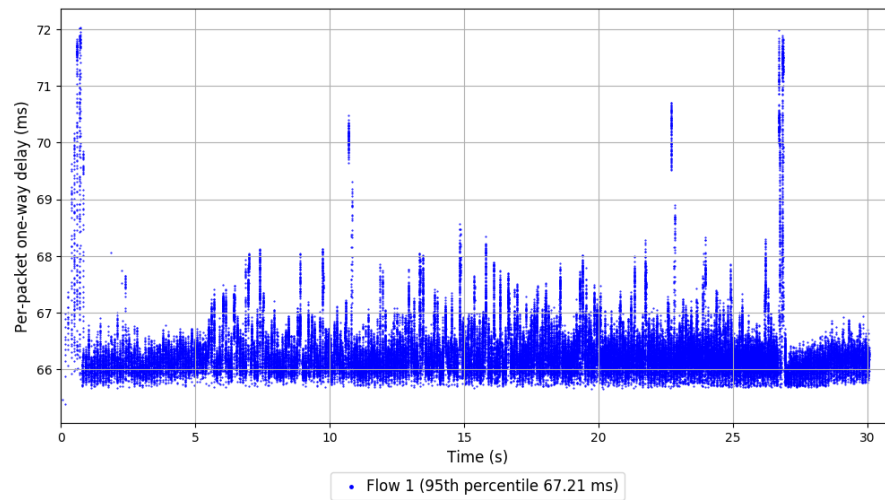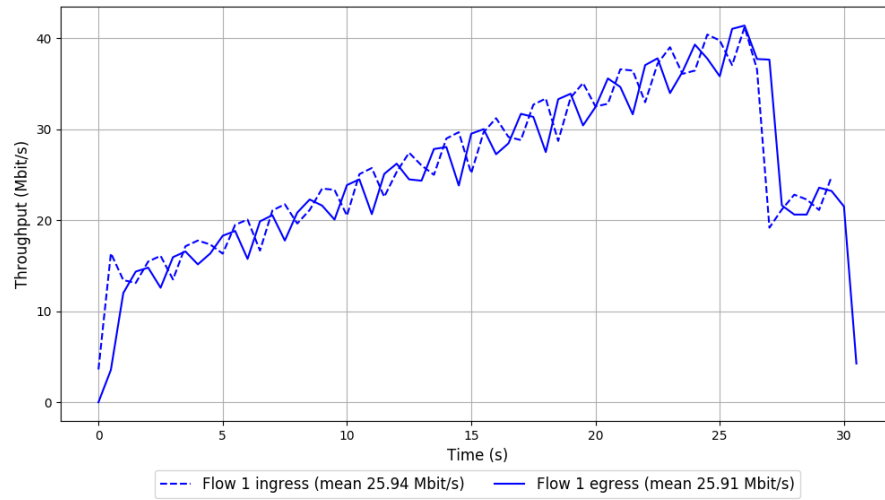
Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2018-05-22 00:12:07
End at: 2018-05-22 00:12:37
Local clock offset: 1.053 ms
Remote clock offset: 0.268 ms


# Below is generated by plot.py at 2018-05-22 01:22:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.20 Mbit/s
95th percentile per-packet one-way delay: 67.034 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 20.20 Mbit/s
95th percentile per-packet one-way delay: 67.034 ms
Loss rate: 0.23%
```
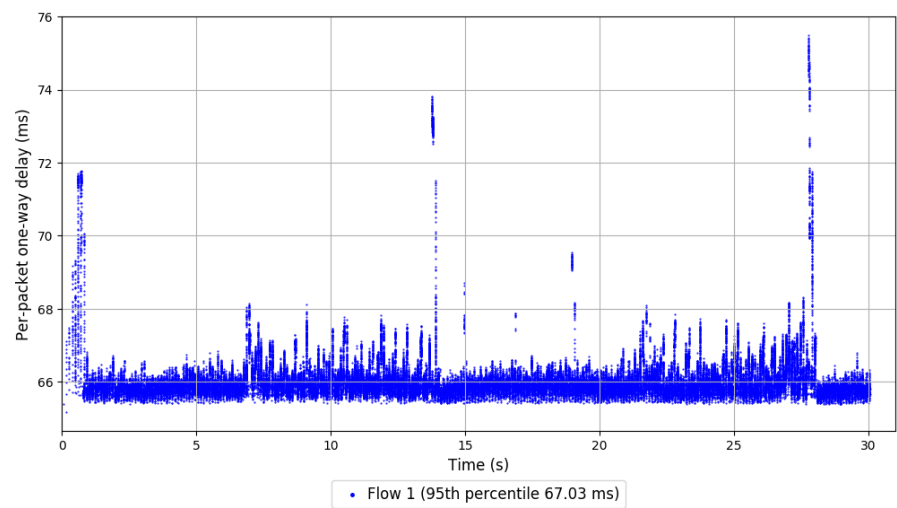
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-05-22 00:33:33
End at: 2018-05-22 00:34:03
Local clock offset: 2.69 ms
Remote clock offset: 0.228 ms


# Below is generated by plot.py at 2018-05-22 01:22:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 68.877 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 68.877 ms
Loss rate: 0.24%
```
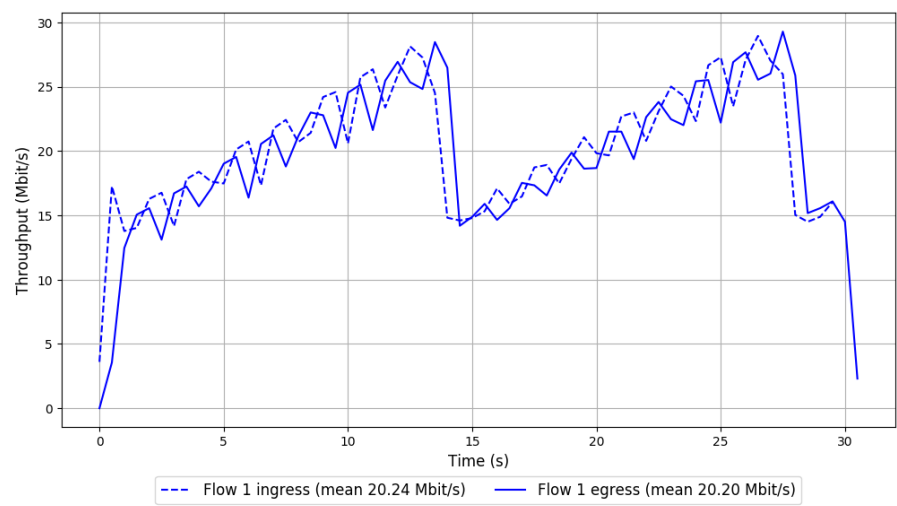
Run 9: Report of TCP Vegas — Data Link

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

Flow 1 (95th percentile 68.88 ms)

```
Run 10: Statistics of TCP Vegas

Start at: 2018-05-22 00:54:09
End at: 2018-05-22 00:54:39
Local clock offset: 5.14 ms
Remote clock offset: -2.332 ms


# Below is generated by plot.py at 2018-05-22 01:22:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.93 Mbit/s
95th percentile per-packet one-way delay: 66.876 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 26.93 Mbit/s
95th percentile per-packet one-way delay: 66.876 ms
Loss rate: 0.13%
```
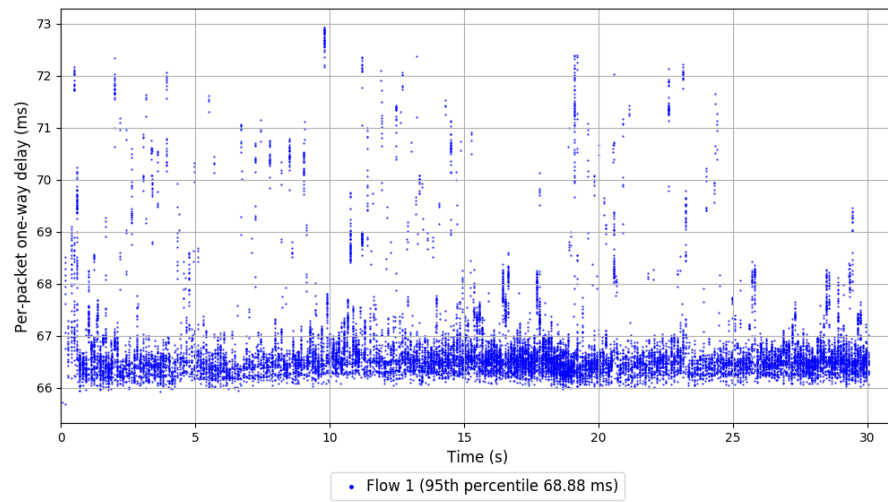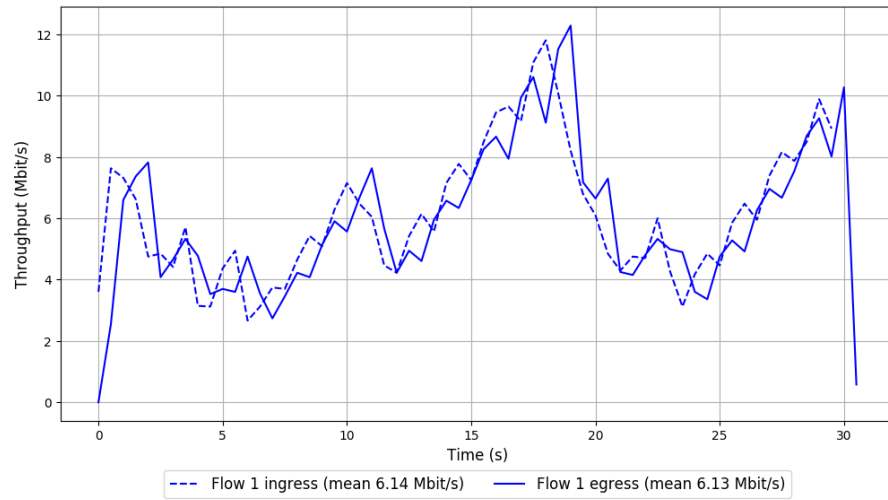
Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 26.97 Mbit/s)   Flow 1 egress (mean 26.93 Mbit/s)

Flow 1 (95th percentile 66.88 ms)

```
Run 1: Statistics of Verus

Start at: 2018-05-21 21:53:51
End at: 2018-05-21 21:54:21
Local clock offset: -0.347 ms
Remote clock offset: -0.273 ms
```

Run 1: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 2: Statistics of Verus

Start at: 2018-05-21 22:14:26
End at: 2018-05-21 22:14:56
Local clock offset: 3.895 ms
Remote clock offset: -1.276 ms
```

Run 2: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 3: Statistics of Verus

Start at: 2018-05-21 22:35:07
End at: 2018-05-21 22:35:37
Local clock offset: 4.464 ms
Remote clock offset: -0.952 ms
```

Run 3: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 4: Statistics of Verus

Start at: 2018-05-21 22:55:47
End at: 2018-05-21 22:56:17
Local clock offset: 4.899 ms
Remote clock offset: -0.745 ms
```

Run 4: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 5: Statistics of Verus

Start at: 2018-05-21 23:16:27
End at: 2018-05-21 23:16:57
Local clock offset: -0.344 ms
Remote clock offset: -0.849 ms
```

Run 5: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 6: Statistics of Verus

Start at: 2018-05-21 23:37:12
End at: 2018-05-21 23:37:42
Local clock offset: 1.533 ms
Remote clock offset: -0.533 ms
```

Run 6: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 7: Statistics of Verus

Start at: 2018-05-21 23:57:53
End at: 2018-05-21 23:58:23
Local clock offset: 2.575 ms
Remote clock offset: 0.336 ms
```

Run 7: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 8: Statistics of Verus

Start at: 2018-05-22 00:18:33
End at: 2018-05-22 00:19:03
Local clock offset: 0.83 ms
Remote clock offset: 0.224 ms
```

Run 8: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 9: Statistics of Verus

Start at: 2018-05-22 00:39:53
End at: 2018-05-22 00:40:23
Local clock offset: 3.942 ms
Remote clock offset: 0.124 ms
```

Run 9: Report of Verus — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of Verus

Start at: 2018-05-22 01:00:35
End at: 2018-05-22 01:01:05
Local clock offset: 3.372 ms
Remote clock offset: -2.894 ms

Run 10: Report of Verus — Data Link
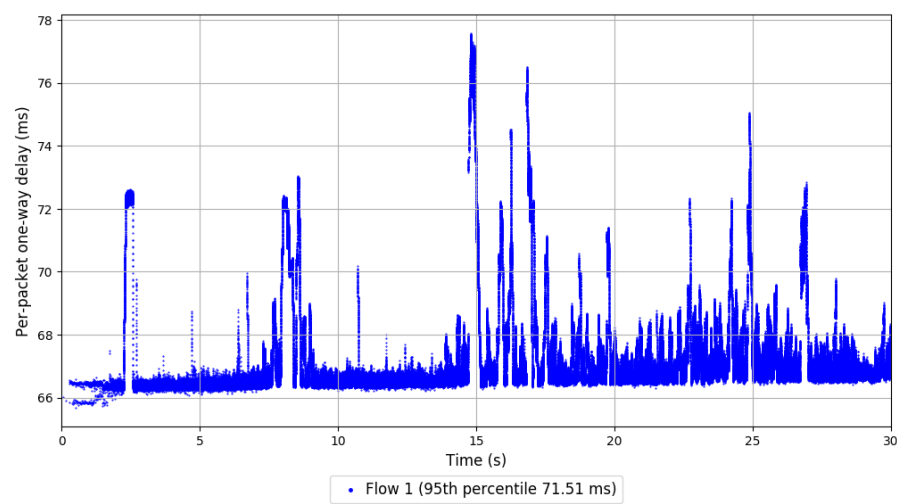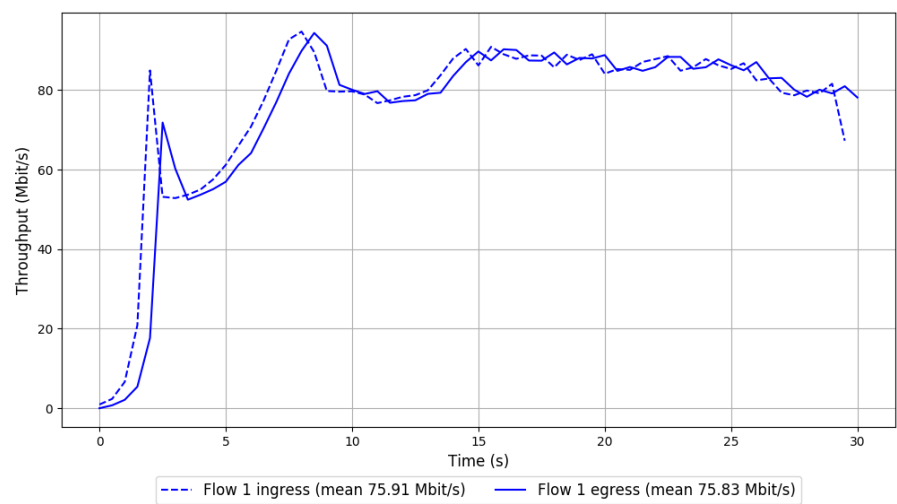
Figure is missing

Figure is missing

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-05-21 21:57:39
End at: 2018-05-21 21:58:09
Local clock offset: -0.238 ms
Remote clock offset: -0.529 ms


# Below is generated by plot.py at 2018-05-22 01:23:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.83 Mbit/s
95th percentile per-packet one-way delay: 71.512 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 75.83 Mbit/s
95th percentile per-packet one-way delay: 71.512 ms
Loss rate: 0.11%
```

Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-05-21 22:18:14
End at: 2018-05-21 22:18:44
Local clock offset: 4.28 ms
Remote clock offset: -1.378 ms


# Below is generated by plot.py at 2018-05-22 01:23:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.56 Mbit/s
95th percentile per-packet one-way delay: 71.641 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 78.56 Mbit/s
95th percentile per-packet one-way delay: 71.641 ms
Loss rate: 0.15%
```
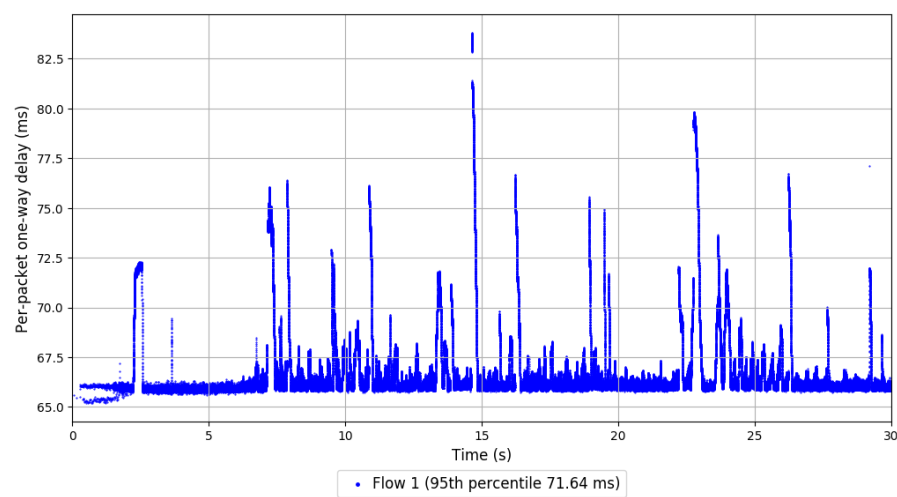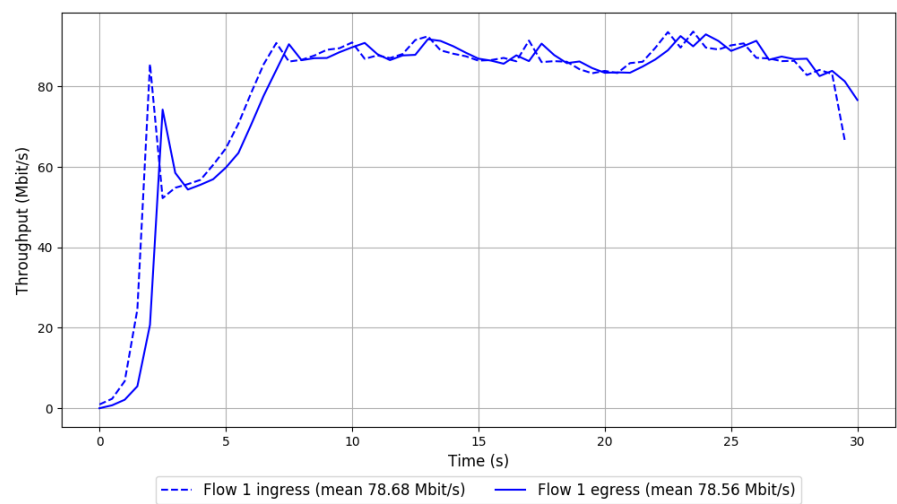
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 78.68 Mbit/s) ----- Flow 1 egress (mean 78.56 Mbit/s) ——

• Flow 1 (95th percentile 71.64 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-05-21 22:38:54
End at: 2018-05-21 22:39:24
Local clock offset: 4.562 ms
Remote clock offset: -0.879 ms


# Below is generated by plot.py at 2018-05-22 01:23:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.48 Mbit/s
95th percentile per-packet one-way delay: 72.468 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 77.48 Mbit/s
95th percentile per-packet one-way delay: 72.468 ms
Loss rate: 0.26%
```
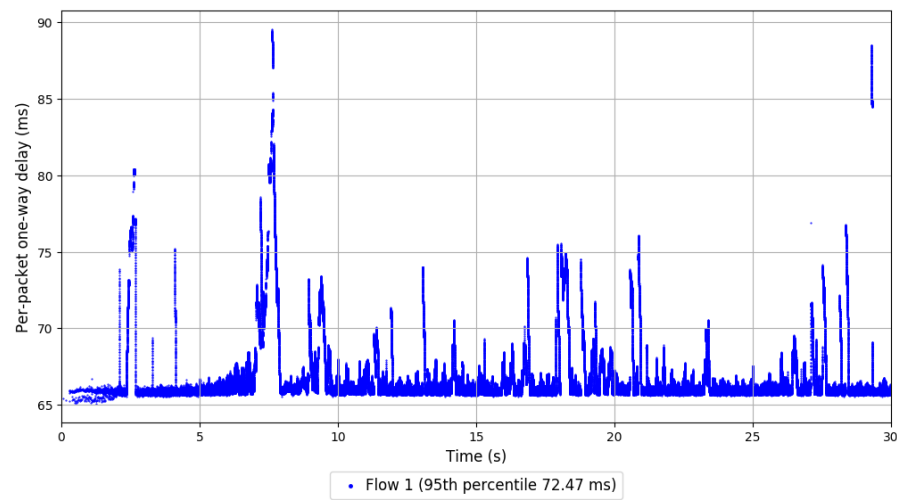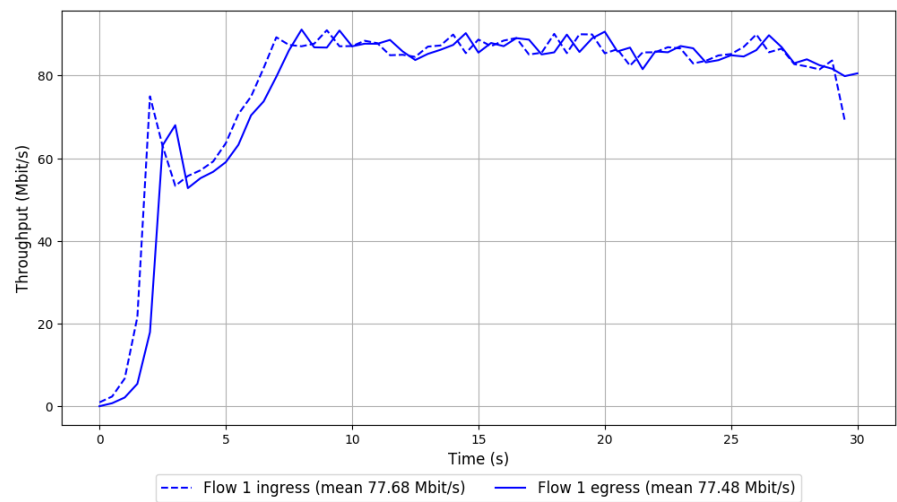
Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 77.68 Mbit/s)   Flow 1 egress (mean 77.48 Mbit/s)

Flow 1 (95th percentile 72.47 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-05-21 22:59:34
End at: 2018-05-21 23:00:04
Local clock offset: 3.471 ms
Remote clock offset: -0.798 ms


# Below is generated by plot.py at 2018-05-22 01:23:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.51 Mbit/s
95th percentile per-packet one-way delay: 71.592 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 76.51 Mbit/s
95th percentile per-packet one-way delay: 71.592 ms
Loss rate: 0.12%
```
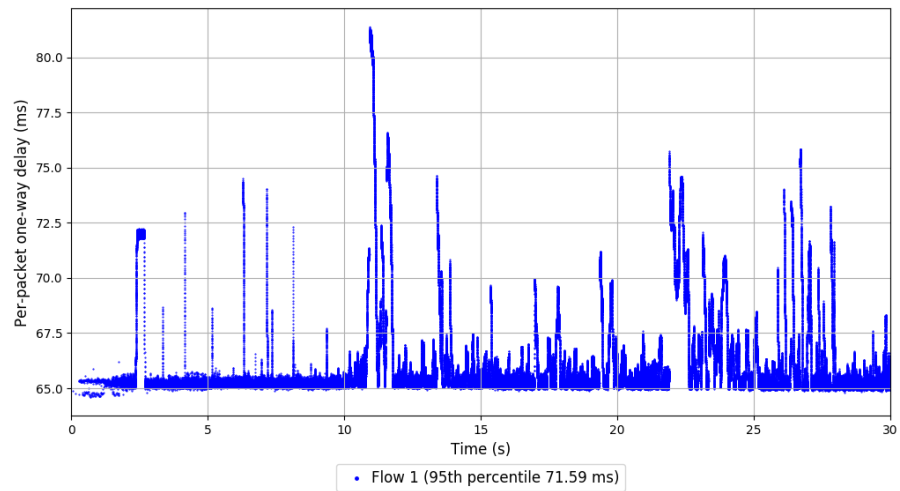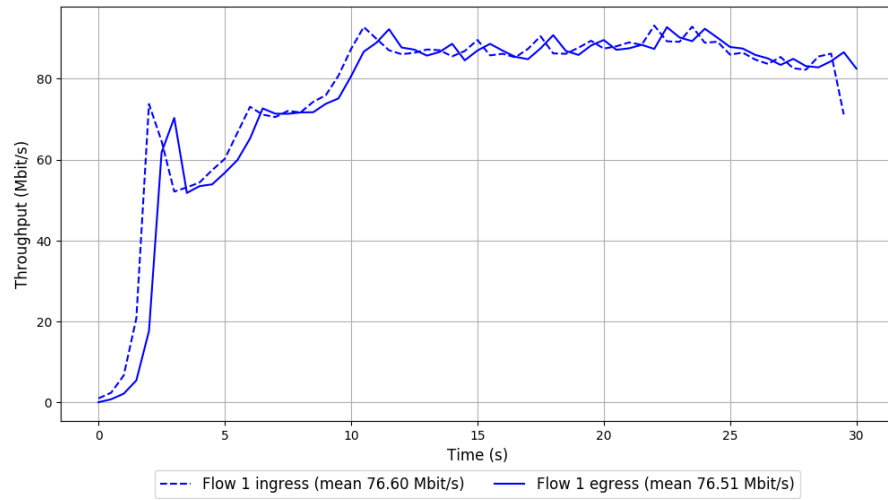
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 76.60 Mbit/s) — — — Flow 1 egress (mean 76.51 Mbit/s)
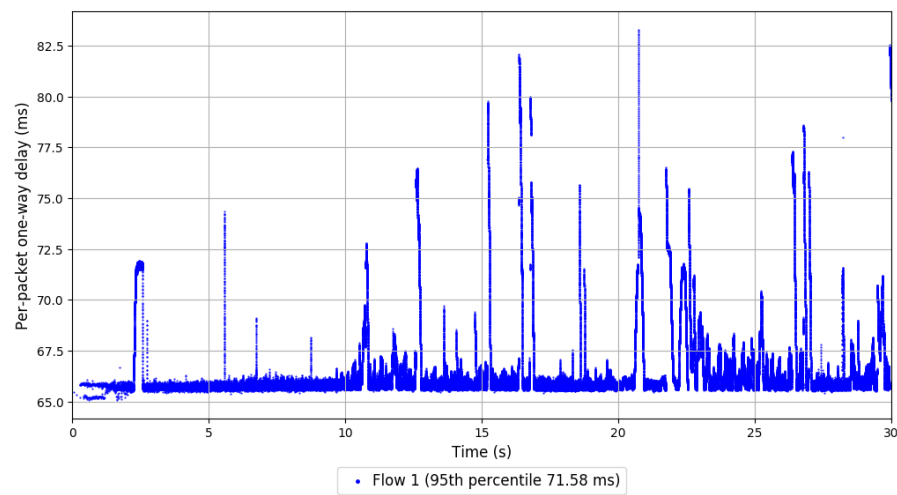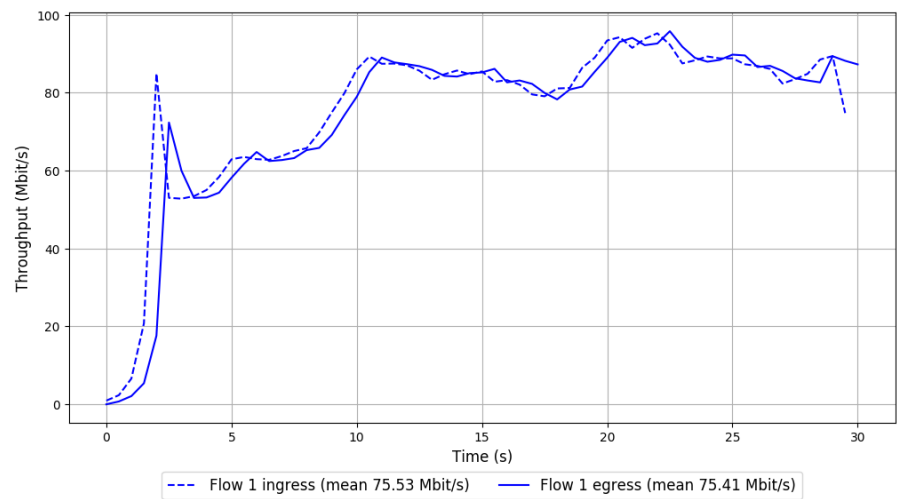

· Flow 1 (95th percentile 71.59 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-05-21 23:20:15
End at: 2018-05-21 23:20:45
Local clock offset: -0.637 ms
Remote clock offset: -0.916 ms


# Below is generated by plot.py at 2018-05-22 01:23:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.41 Mbit/s
95th percentile per-packet one-way delay: 71.583 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 75.41 Mbit/s
95th percentile per-packet one-way delay: 71.583 ms
Loss rate: 0.11%
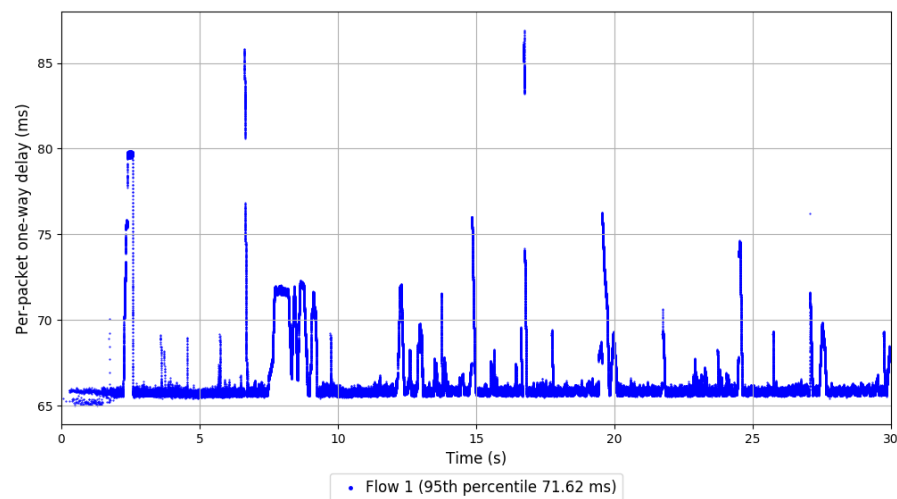```

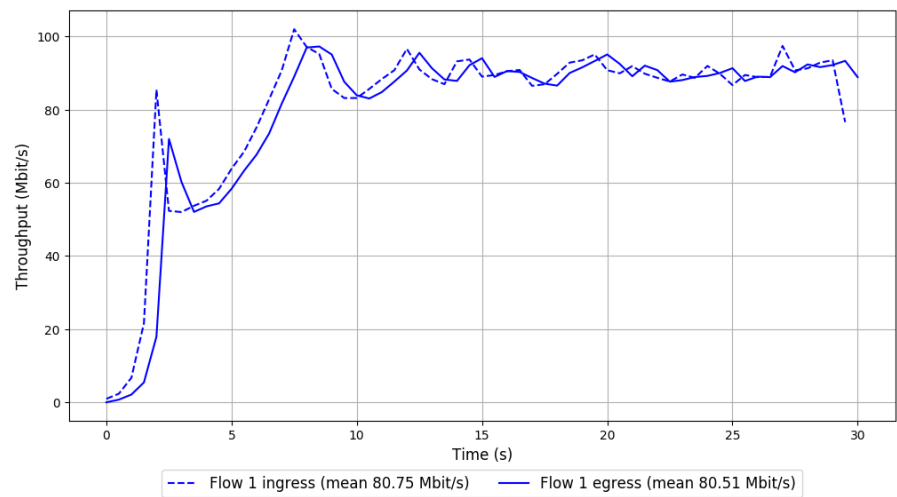# Run 5: Report of PCC-Vivace — Data Link

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-05-21 23:41:00
End at: 2018-05-21 23:41:30
Local clock offset: 1.98 ms
Remote clock offset: -0.266 ms


# Below is generated by plot.py at 2018-05-22 01:23:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.51 Mbit/s
95th percentile per-packet one-way delay: 71.624 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 80.51 Mbit/s
95th percentile per-packet one-way delay: 71.624 ms
Loss rate: 0.29%
```

Run 6: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 80.75 Mbit/s) — — — — Flow 1 egress (mean 80.51 Mbit/s)

· Flow 1 (95th percentile 71.62 ms)

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-05-22 00:01:41
End at: 2018-05-22 00:02:11
Local clock offset: 1.805 ms
Remote clock offset: 0.382 ms


# Below is generated by plot.py at 2018-05-22 01:23:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.34 Mbit/s
95th percentile per-packet one-way delay: 71.684 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 78.34 Mbit/s
95th percentile per-packet one-way delay: 71.684 ms
Loss rate: 0.15%
```
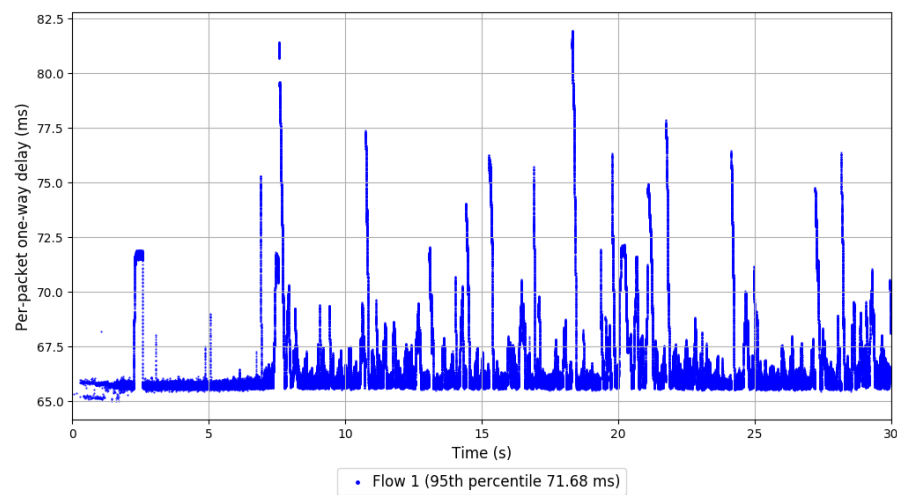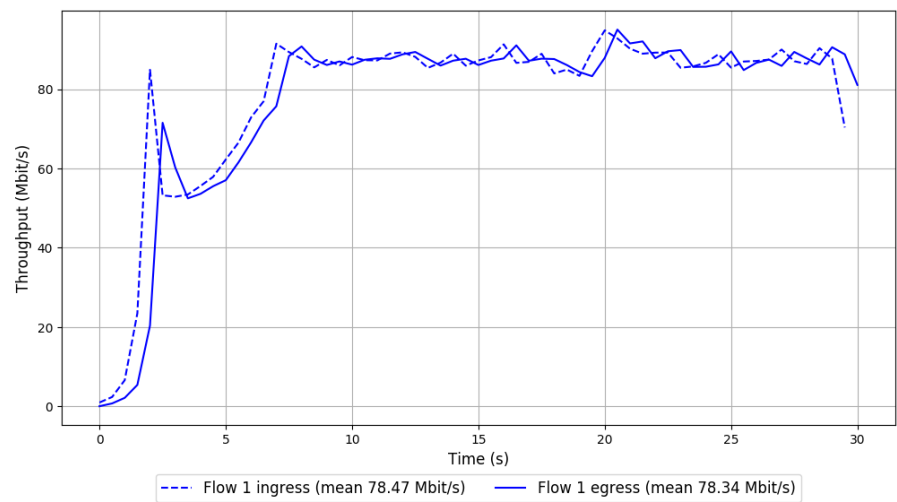
Run 7: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 78.47 Mbit/s)   Flow 1 egress (mean 78.34 Mbit/s)

Flow 1 (95th percentile 71.68 ms)

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-05-22 00:22:21
End at: 2018-05-22 00:22:51
Local clock offset: 0.723 ms
Remote clock offset: 0.187 ms


# Below is generated by plot.py at 2018-05-22 01:23:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.99 Mbit/s
95th percentile per-packet one-way delay: 71.561 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 70.99 Mbit/s
95th percentile per-packet one-way delay: 71.561 ms
Loss rate: 0.27%
```
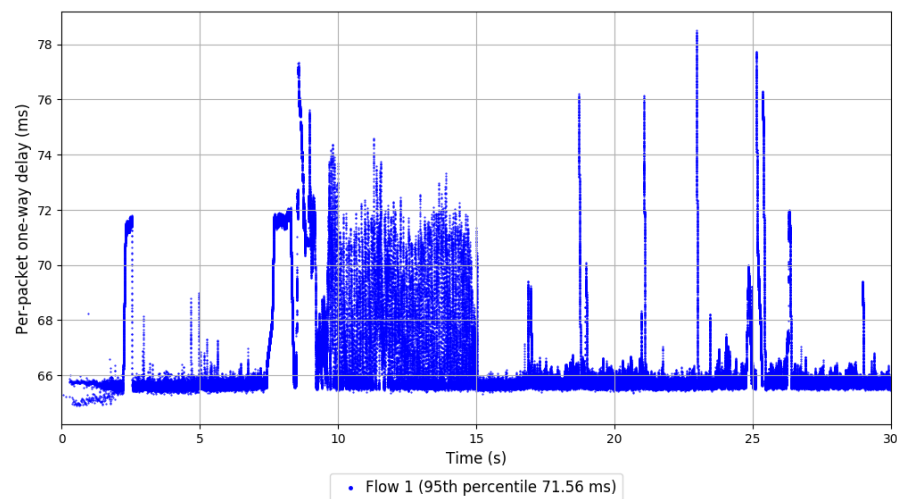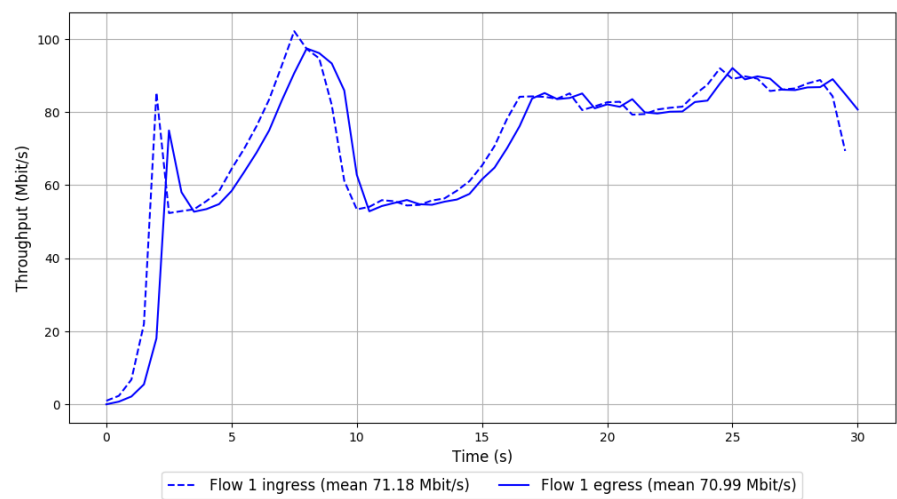
Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 71.18 Mbit/s)   Flow 1 egress (mean 70.99 Mbit/s)

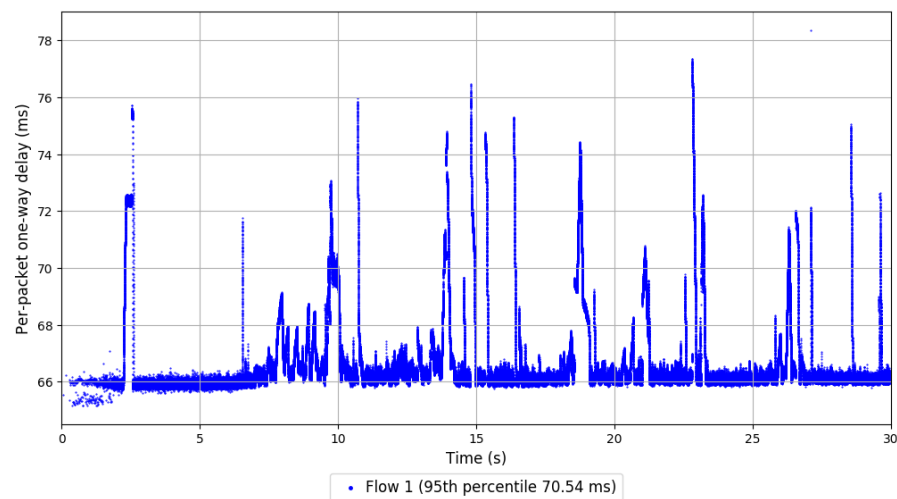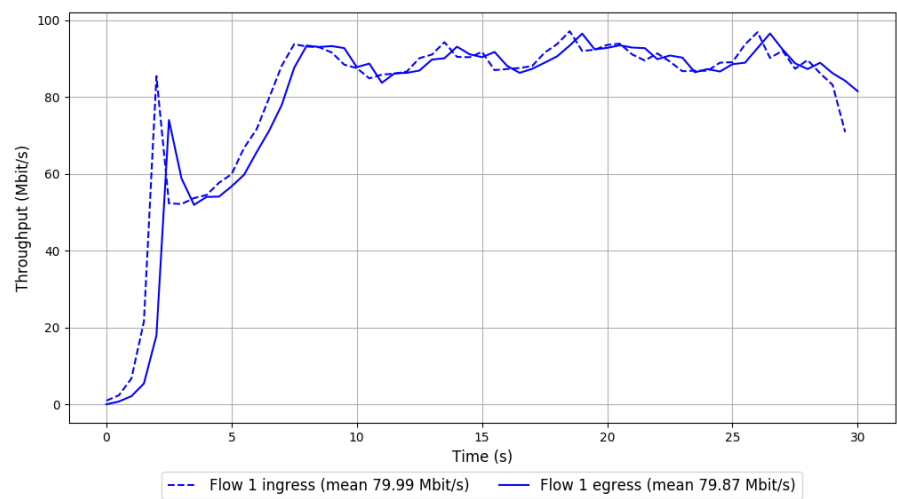
• Flow 1 (95th percentile 71.56 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-05-22 00:43:41
End at: 2018-05-22 00:44:11
Local clock offset: 4.493 ms
Remote clock offset: -0.413 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.87 Mbit/s
95th percentile per-packet one-way delay: 70.536 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 79.87 Mbit/s
95th percentile per-packet one-way delay: 70.536 ms
Loss rate: 0.15%
```

Run 9: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 79.99 Mbit/s) --- Flow 1 egress (mean 79.87 Mbit/s)

• Flow 1 (95th percentile 70.54 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-05-22 01:04:23
End at: 2018-05-22 01:04:53
Local clock offset: 1.841 ms
Remote clock offset: -3.121 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.74 Mbit/s
95th percentile per-packet one-way delay: 72.037 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 78.74 Mbit/s
95th percentile per-packet one-way delay: 72.037 ms
Loss rate: 0.38%
```
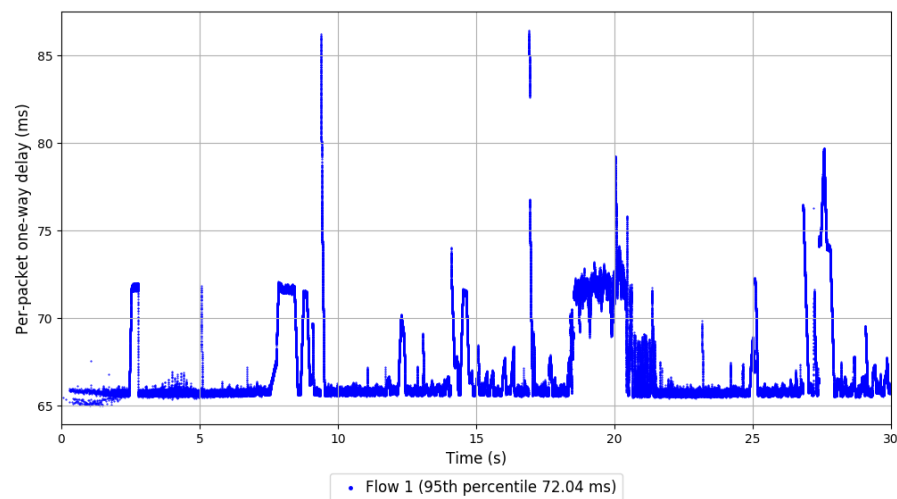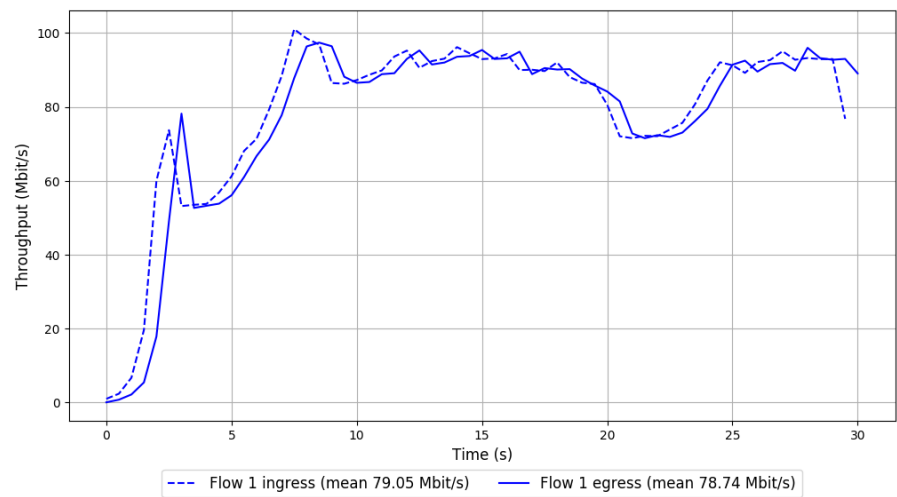
Run 10: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 79.05 Mbit/s)   Flow 1 egress (mean 78.74 Mbit/s)
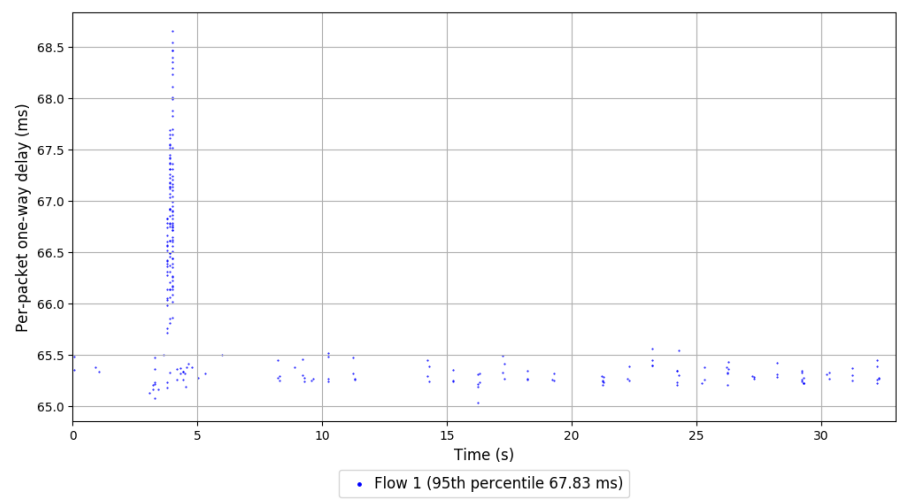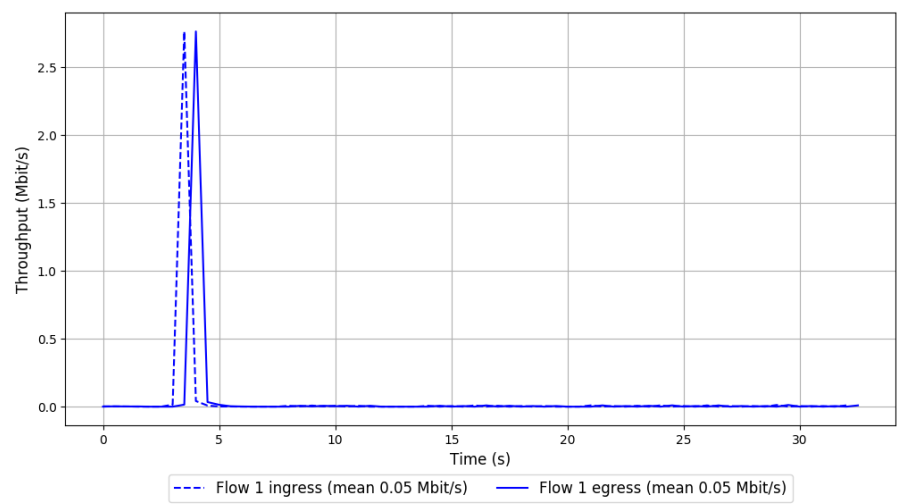

Flow 1 (95th percentile 72.04 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2018-05-21 21:50:03
End at: 2018-05-21 21:50:33
Local clock offset: -0.421 ms
Remote clock offset: 0.065 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.829 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.829 ms
Loss rate: 0.00%
```
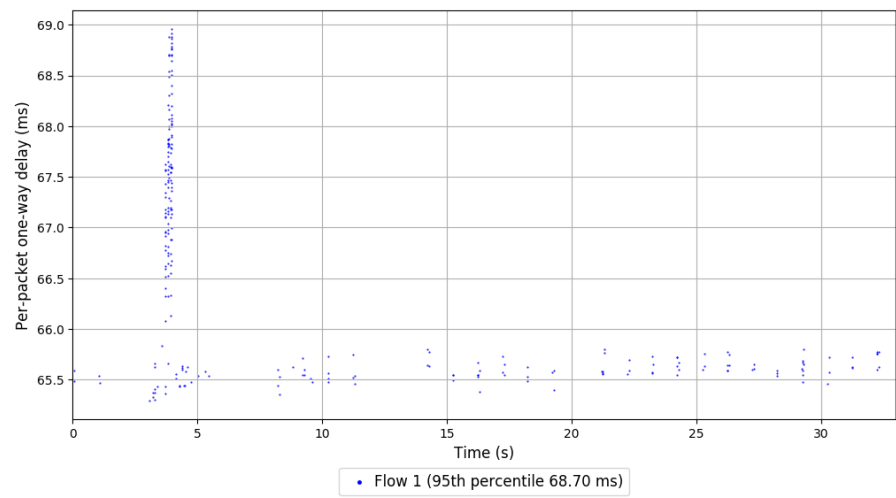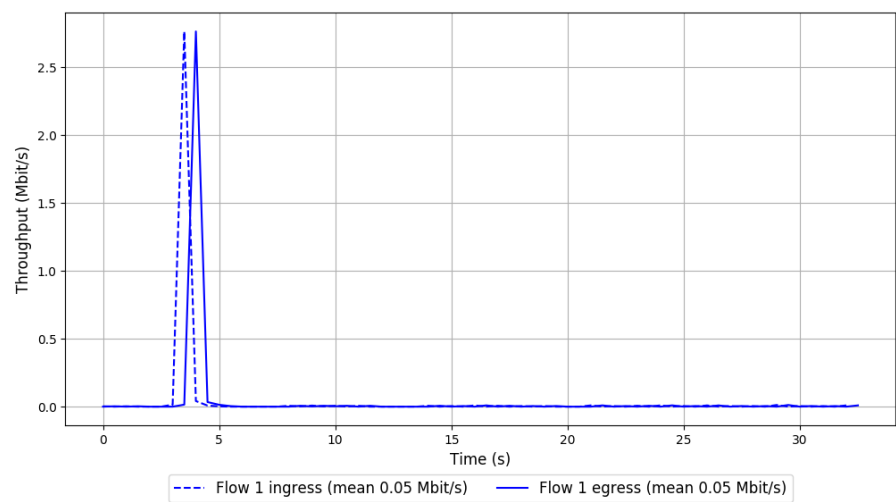
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-05-21 22:10:38
End at: 2018-05-21 22:11:08
Local clock offset: 3.378 ms
Remote clock offset: -1.125 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.697 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.697 ms
Loss rate: 0.00%
```
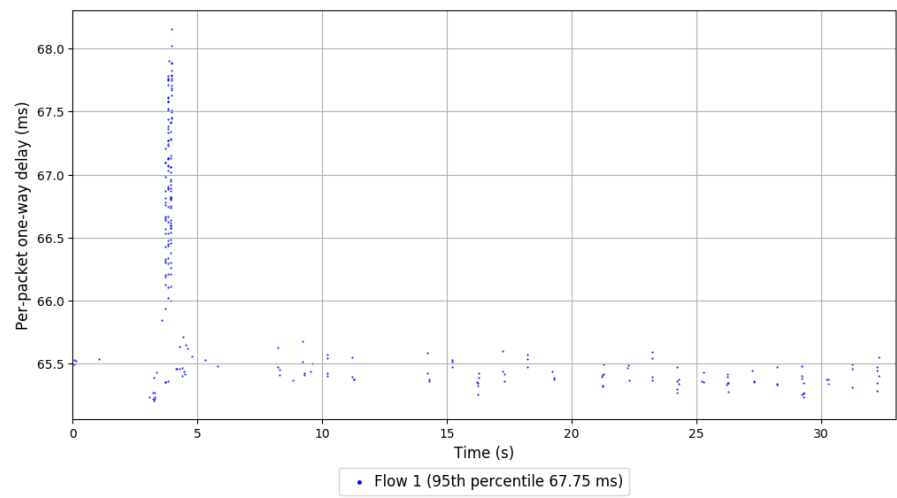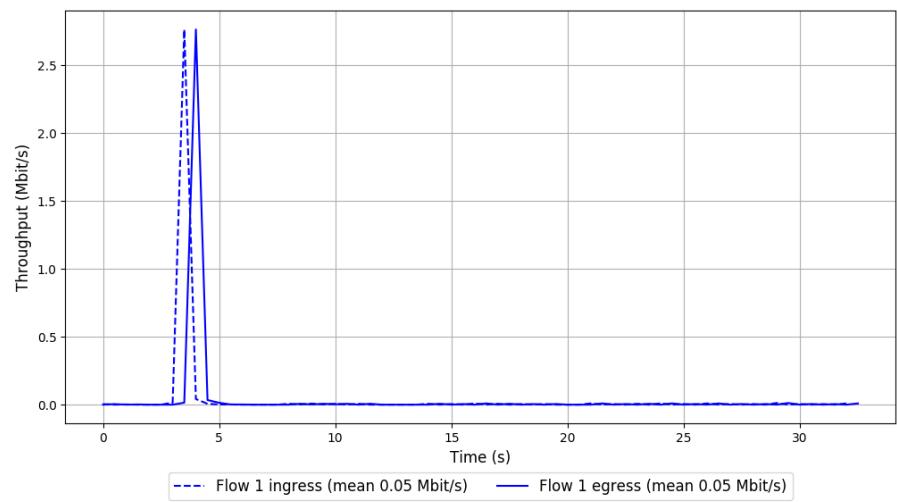
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-05-21 22:31:18
End at: 2018-05-21 22:31:48
Local clock offset: 4.615 ms
Remote clock offset: -1.066 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.752 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.752 ms
Loss rate: 0.00%
```
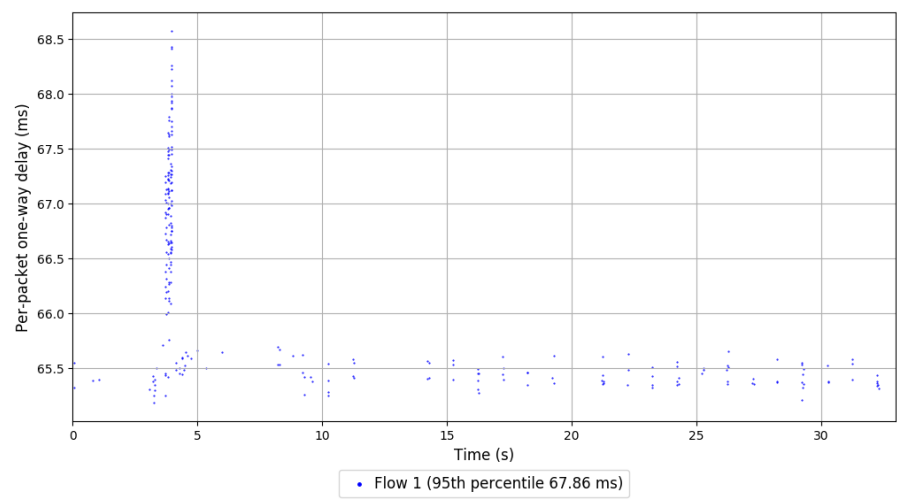
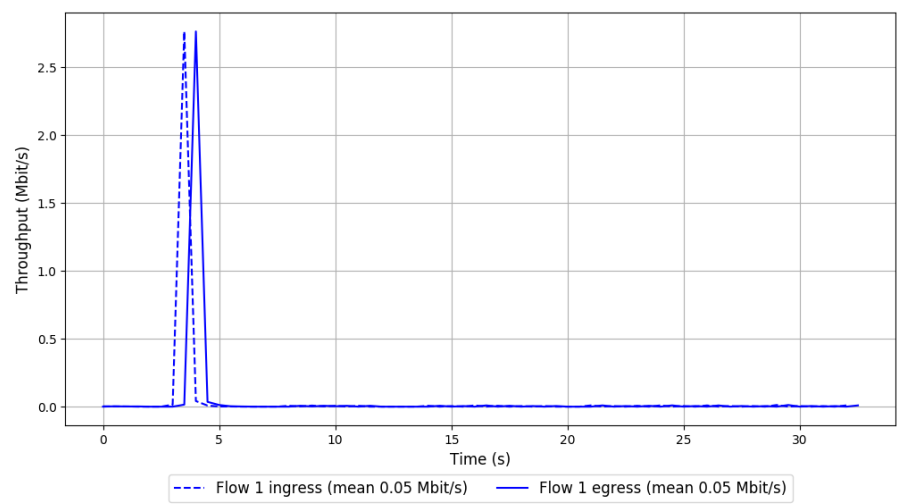Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-05-21 22:51:58
End at: 2018-05-21 22:52:28
Local clock offset: 4.533 ms
Remote clock offset: -0.747 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.864 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.864 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.05 Mbit/s)   Flow 1 egress (mean 0.05 Mbit/s)
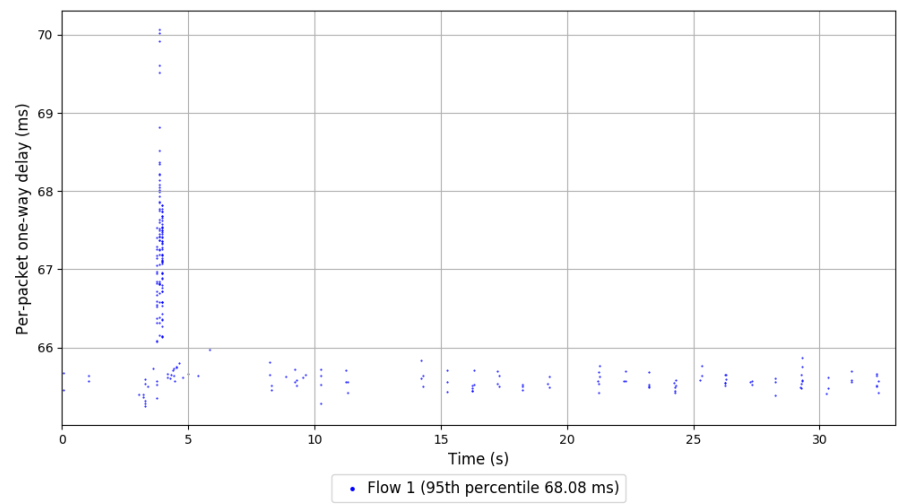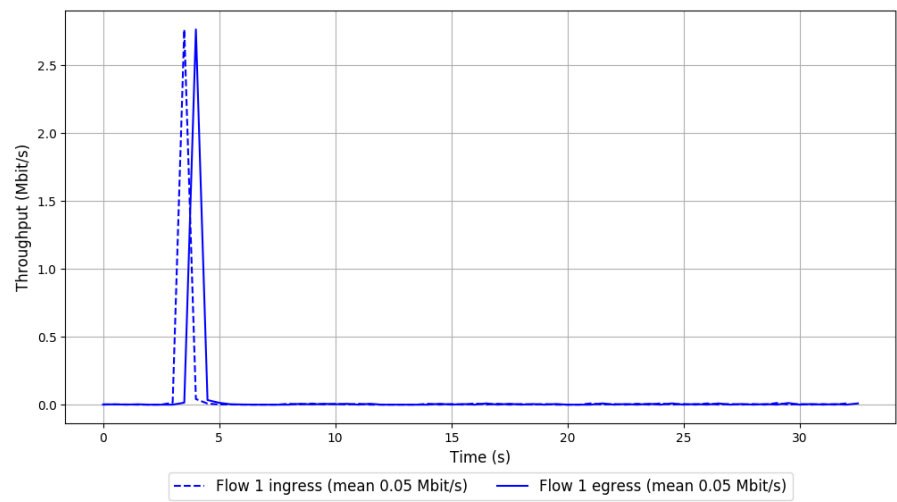

Flow 1 (95th percentile 67.86 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2018-05-21 23:12:38
End at: 2018-05-21 23:13:09
Local clock offset: -0.155 ms
Remote clock offset: -0.801 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.085 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.085 ms
Loss rate: 0.00%
```
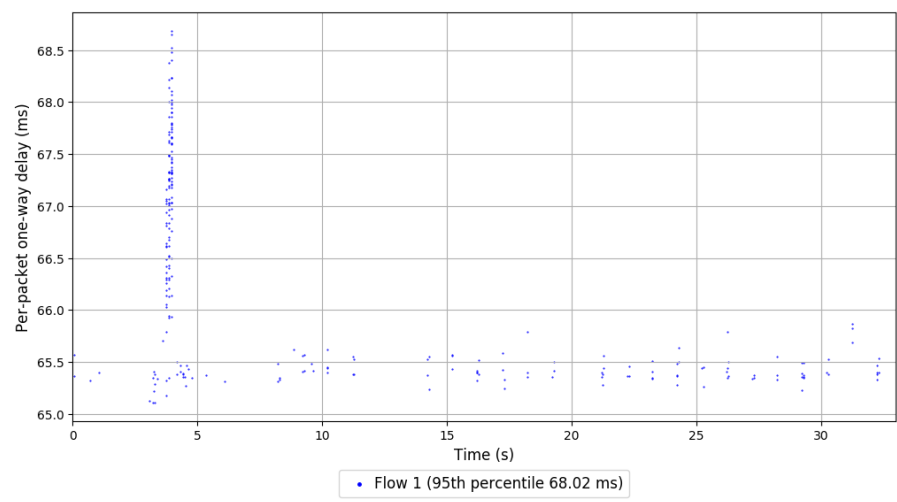
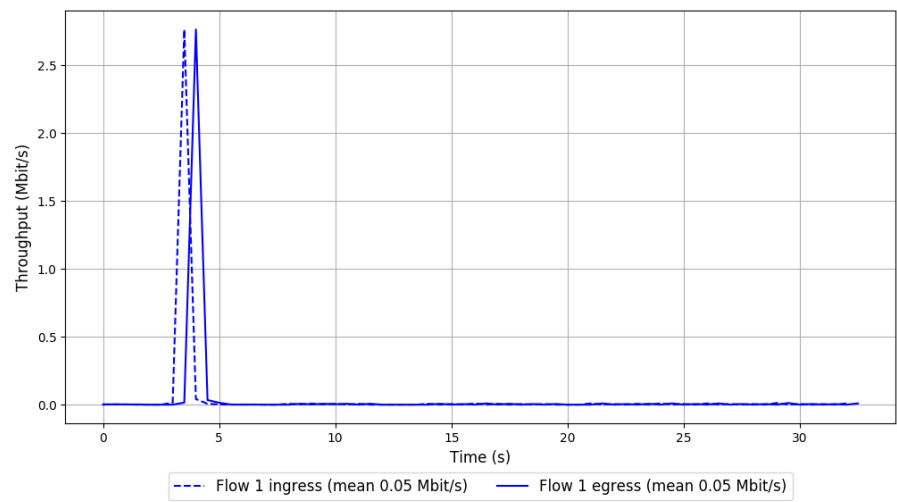Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-05-21 23:33:24
End at: 2018-05-21 23:33:54
Local clock offset: 0.842 ms
Remote clock offset: -0.906 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.019 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.019 ms
Loss rate: 0.00%
```

Run 6: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.05 Mbit/s)   Flow 1 egress (mean 0.05 Mbit/s)

Flow 1 (95th percentile 68.02 ms)

315

```
Run 7: Statistics of WebRTC media

Start at: 2018-05-21 23:54:04
End at: 2018-05-21 23:54:34
Local clock offset: 2.586 ms
Remote clock offset: 0.274 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.843 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.843 ms
Loss rate: 0.00%
```
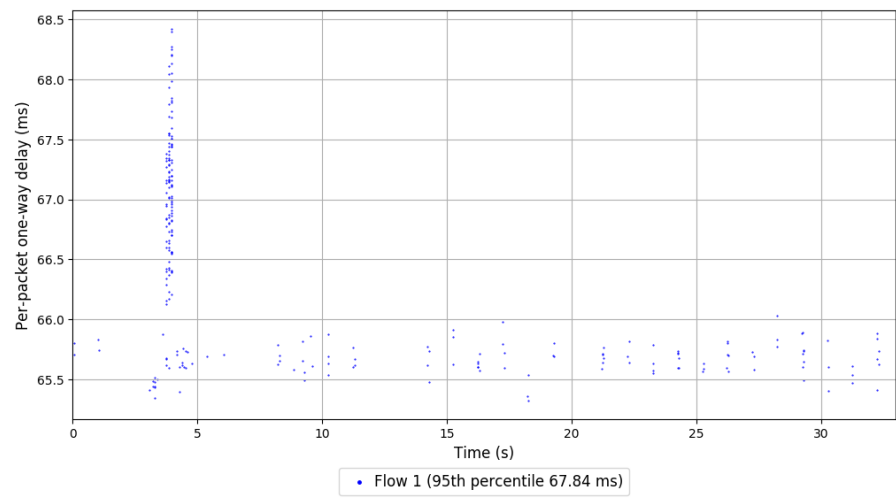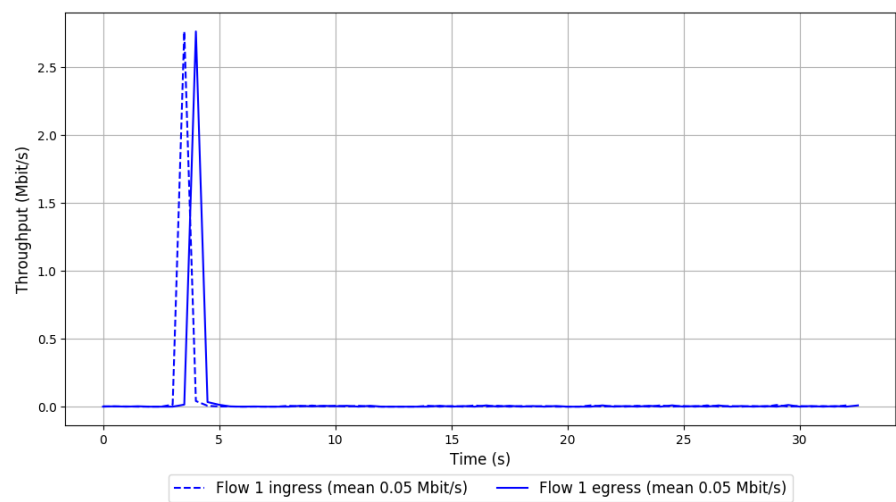
Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-05-22 00:14:44
End at: 2018-05-22 00:15:14
Local clock offset: 0.832 ms
Remote clock offset: 0.283 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.040 ms
Loss rate: 0.00%
```
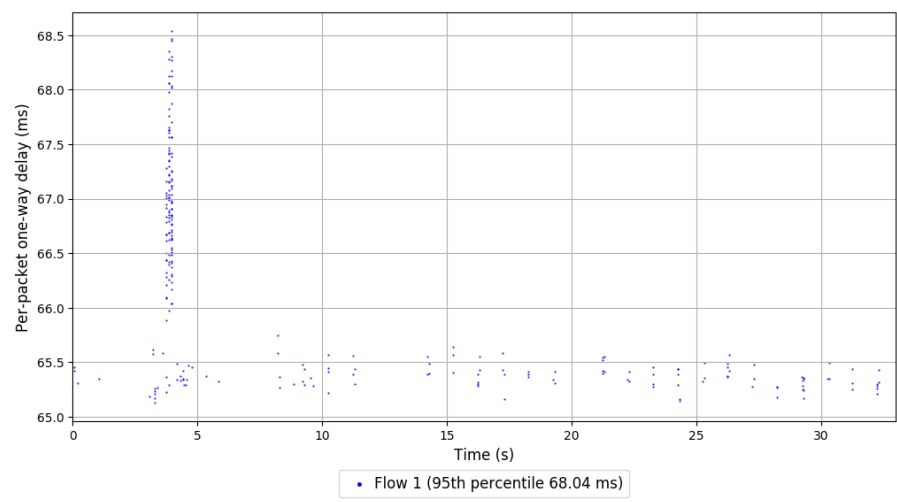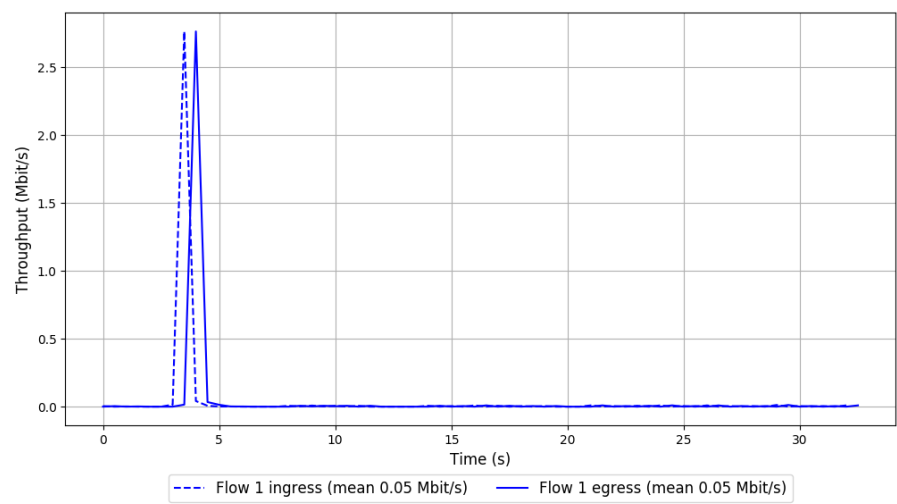
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-05-22 00:36:05
End at: 2018-05-22 00:36:35
Local clock offset: 3.506 ms
Remote clock offset: 0.199 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.659 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.659 ms
Loss rate: 0.00%
```
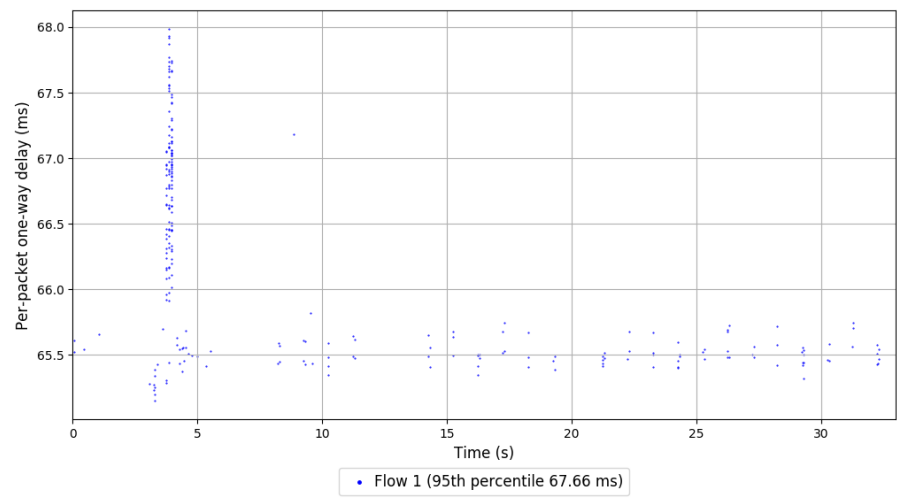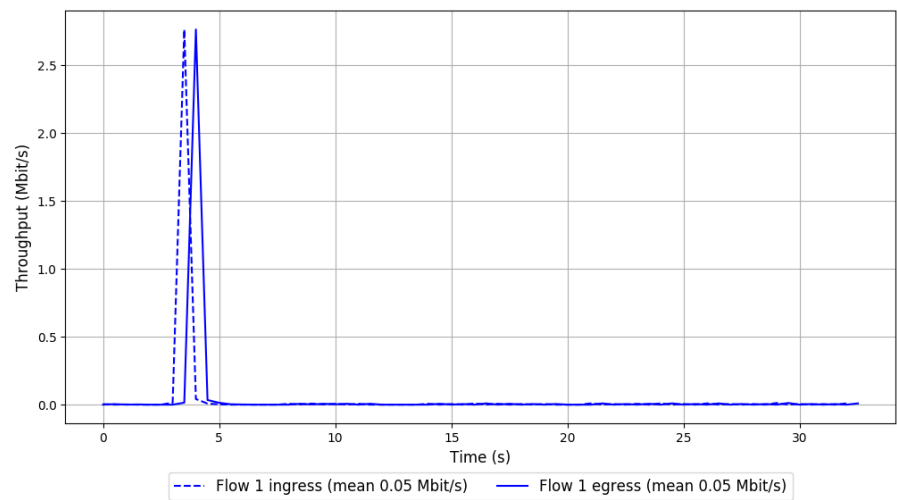
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-05-22 00:56:46
End at: 2018-05-22 00:57:16
Local clock offset: 5.265 ms
Remote clock offset: -2.479 ms


# Below is generated by plot.py at 2018-05-22 01:23:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.065 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.065 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link