Pantheon Report

Generated at 2018-05-22 13:51:48 (UTC).

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

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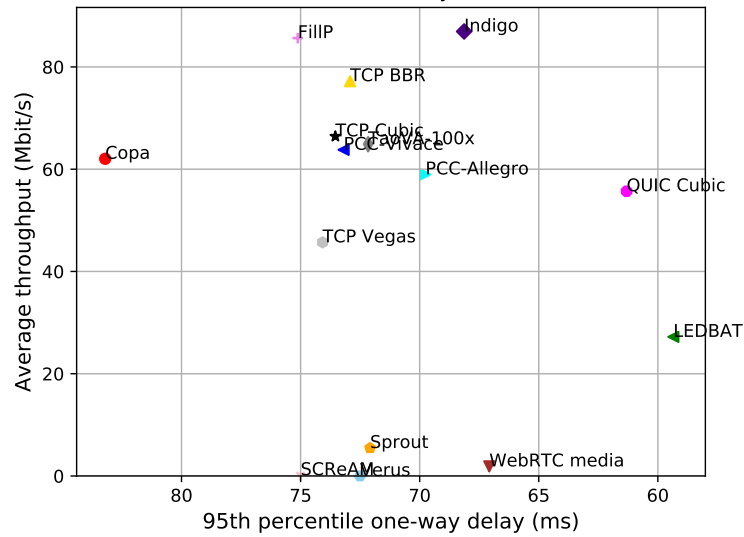
Each test lasted for 30 seconds running 1 flow.

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.
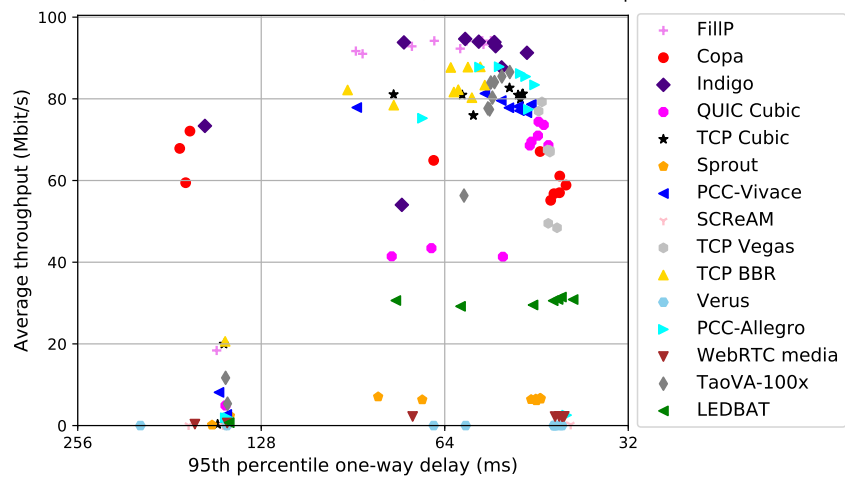
```
Git summary:
branch: master @ 2d1d4407e851ba626e5ca4626a306105793df686
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
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 China Ethernet to AWS Korea Ethernet, 10 runs of 30s each per scheme (mean of all runs by scheme)

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

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	77.21	72.92	1.59
Copa	10	62.04	83.20	6.85
TCP Cubic	10	66.42	73.54	1.37
FillP	10	85.64	75.12	2.03
Indigo	10	86.93	68.13	2.81
LEDBAT	9	27.21	59.35	1.04
PCC-Allegro	10	58.98	69.76	4.12
PCC-Expr	0	N/A	N/A	N/A
QUIC Cubic	10	55.69	61.31	1.63
SCReAM	10	0.17	75.00	3.07
Sprout	10	5.47	72.08	2.03
TaoVA-100x	10	64.89	72.17	3.45
TCP Vegas	10	45.70	74.08	3.81
Verus	10	0.00	72.51	4.33
PCC-Vivace	10	63.79	73.20	3.70
WebRTC media	10	1.87	67.08	3.43

```
Run 1: Statistics of TCP BBR

Start at: 2018-05-22 10:06:15
End at: 2018-05-22 10:06:45
Local clock offset: 1.512 ms
Remote clock offset: 13.427 ms

# Below is generated by plot.py at 2018-05-22 13:39:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.36 Mbit/s
95th percentile per-packet one-way delay: 55.017 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 83.36 Mbit/s
95th percentile per-packet one-way delay: 55.017 ms
Loss rate: 0.35%
```
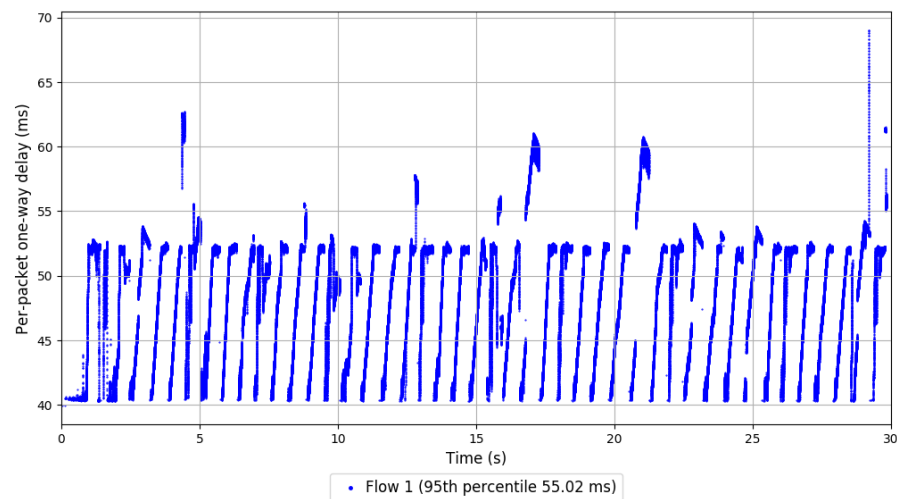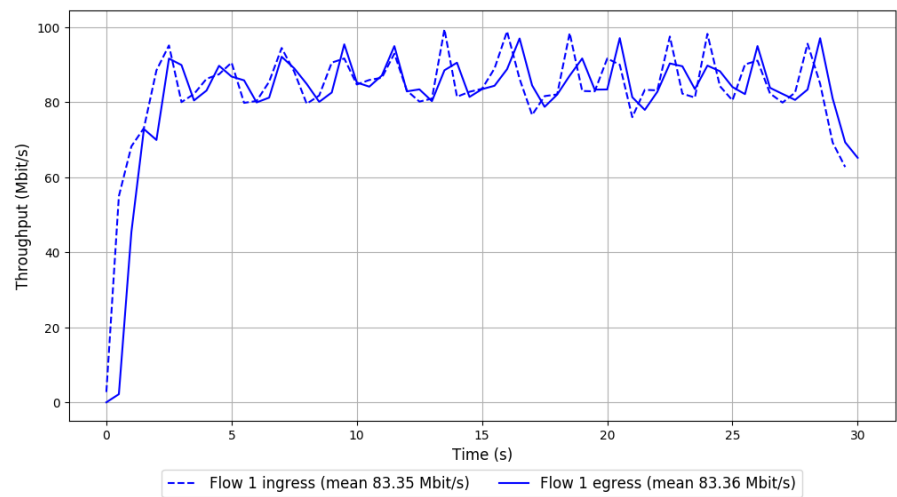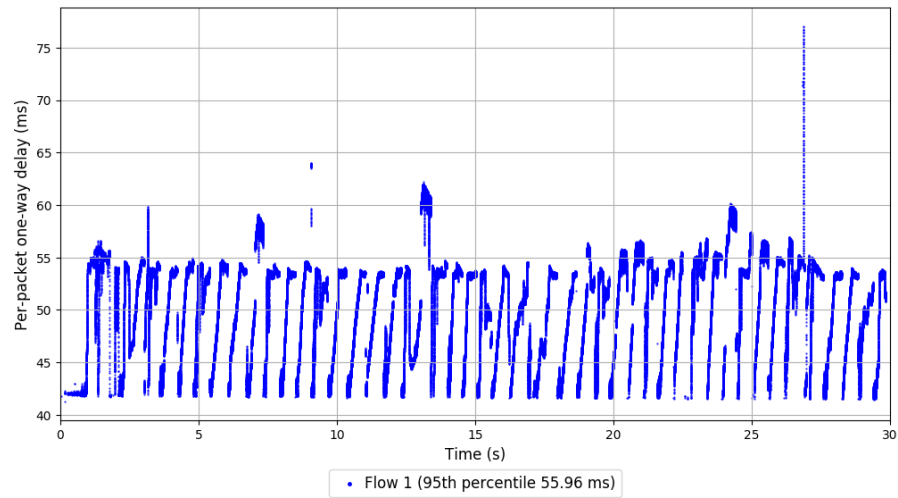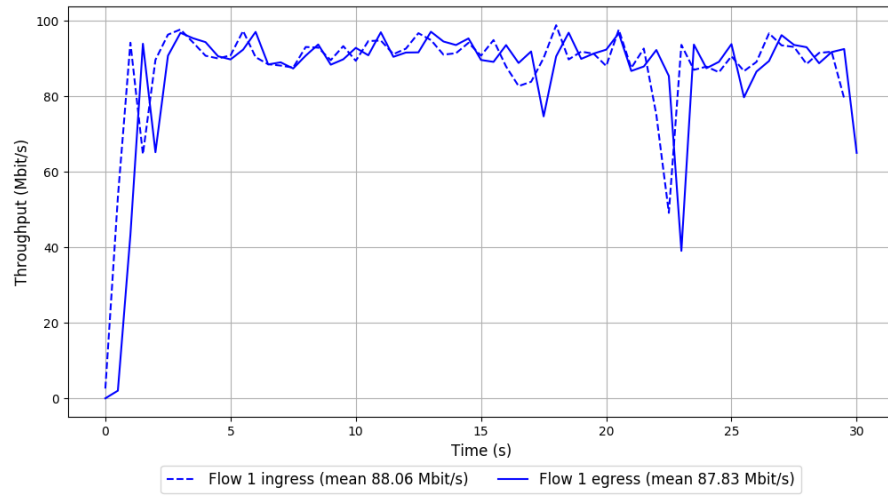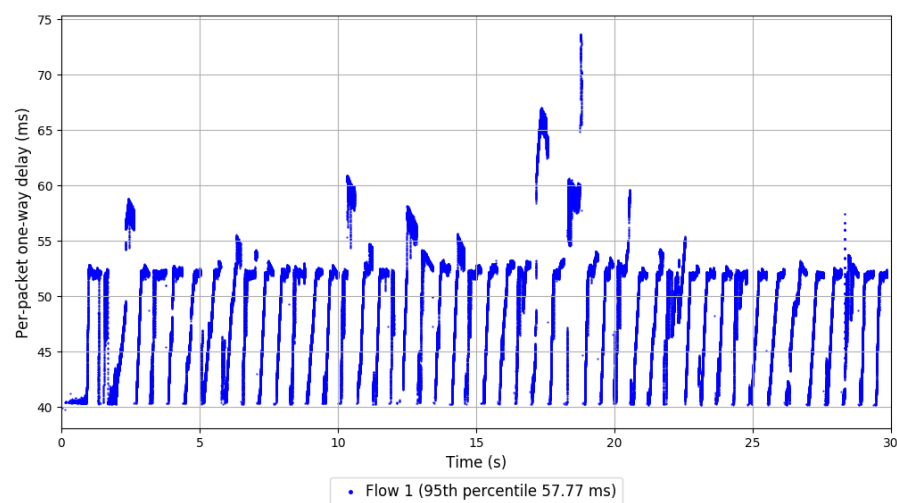
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 83.35 Mbit/s)   Flow 1 egress (mean 83.36 Mbit/s)

• Flow 1 (95th percentile 55.02 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2018-05-22 10:27:01
End at: 2018-05-22 10:27:31
Local clock offset: 3.699 ms
Remote clock offset: 7.502 ms


# Below is generated by plot.py at 2018-05-22 13:39:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.83 Mbit/s
95th percentile per-packet one-way delay: 55.958 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 87.83 Mbit/s
95th percentile per-packet one-way delay: 55.958 ms
Loss rate: 0.62%
```

Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 88.06 Mbit/s)   Flow 1 egress (mean 87.83 Mbit/s)
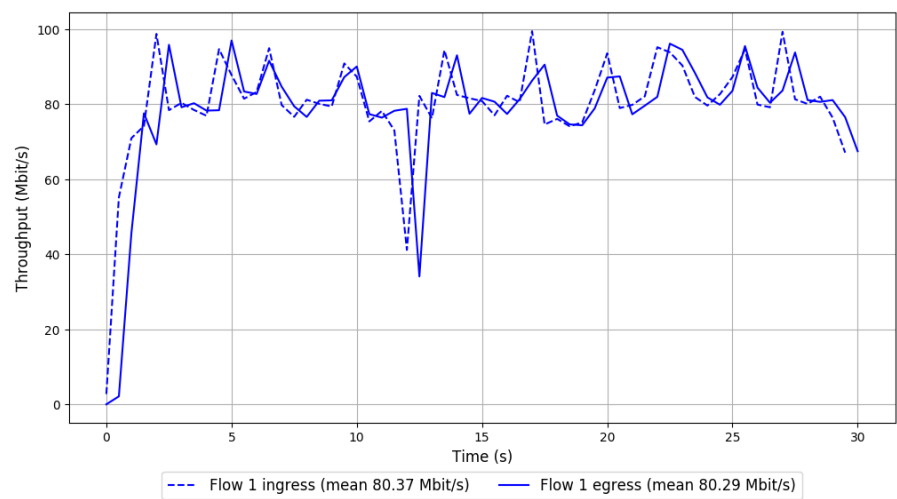

Flow 1 (95th percentile 55.96 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2018-05-22 10:47:46
End at: 2018-05-22 10:48:16
Local clock offset: -1.592 ms
Remote clock offset: -5.369 ms


# Below is generated by plot.py at 2018-05-22 13:39:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.29 Mbit/s
95th percentile per-packet one-way delay: 57.765 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 80.29 Mbit/s
95th percentile per-packet one-way delay: 57.765 ms
Loss rate: 0.43%
```
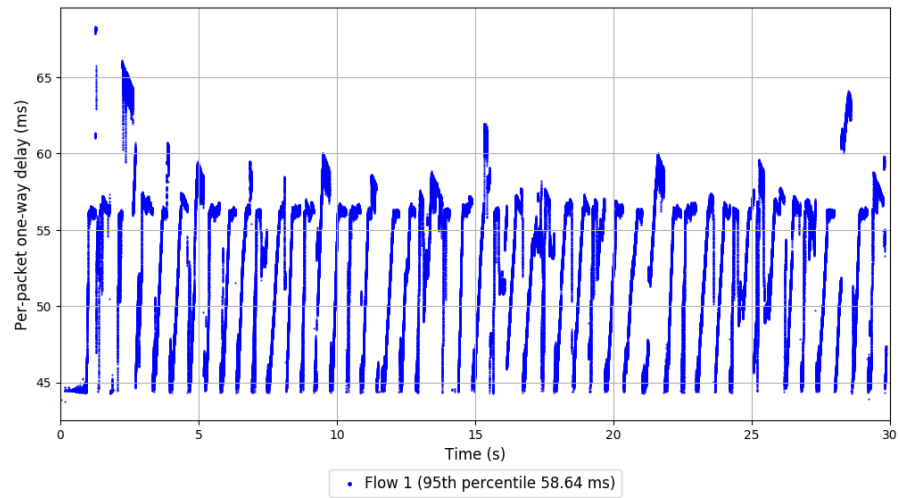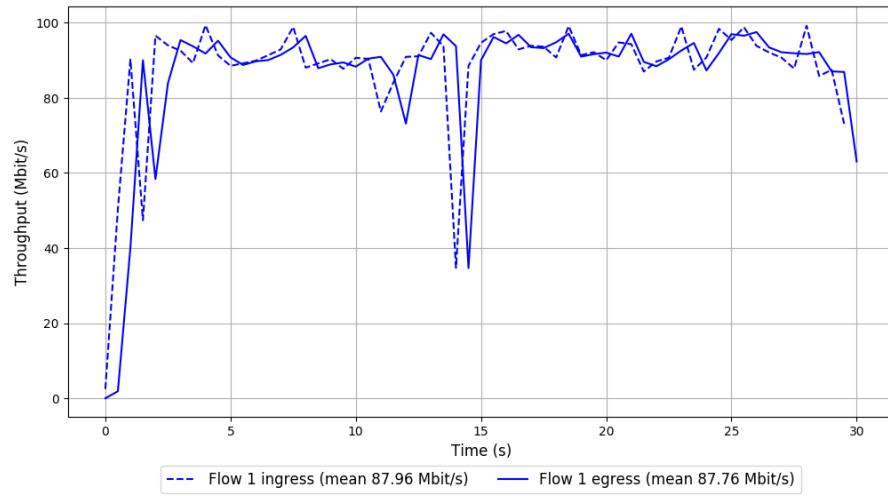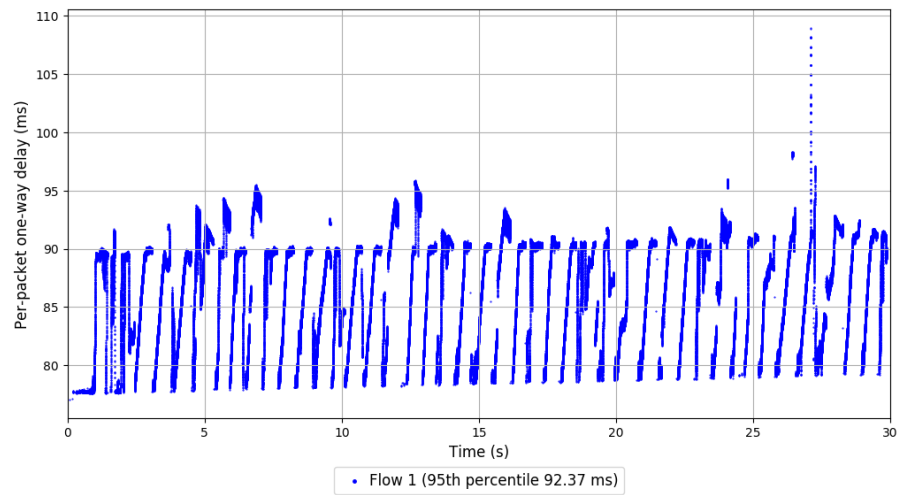
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 80.37 Mbit/s)   Flow 1 egress (mean 80.29 Mbit/s)

Flow 1 (95th percentile 57.77 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2018-05-22 11:08:27
End at: 2018-05-22 11:08:57
Local clock offset: 2.022 ms
Remote clock offset: -5.361 ms


# Below is generated by plot.py at 2018-05-22 13:39:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.76 Mbit/s
95th percentile per-packet one-way delay: 58.638 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 87.76 Mbit/s
95th percentile per-packet one-way delay: 58.638 ms
Loss rate: 0.58%
```

Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 87.96 Mbit/s)   Flow 1 egress (mean 87.76 Mbit/s)
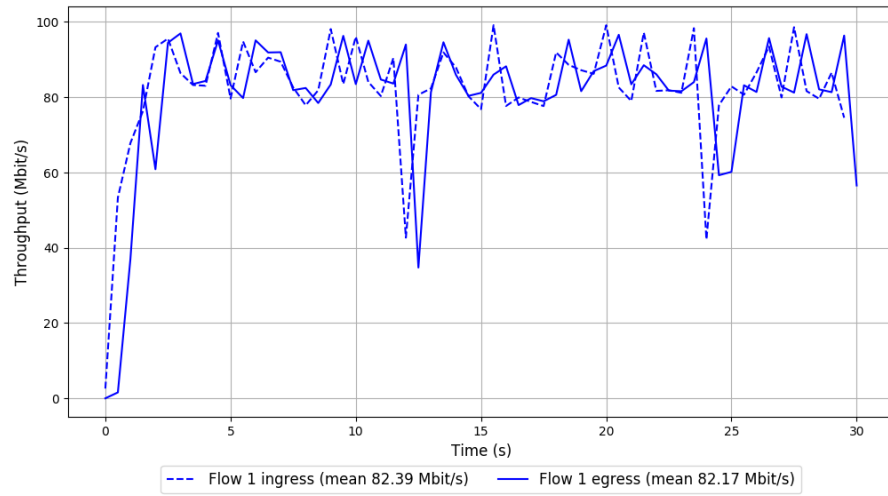

Flow 1 (95th percentile 58.64 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2018-05-22 11:33:36
End at: 2018-05-22 11:34:06
Local clock offset: 1.543 ms
Remote clock offset: -26.707 ms

# Below is generated by plot.py at 2018-05-22 13:39:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.17 Mbit/s
95th percentile per-packet one-way delay: 92.371 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 82.17 Mbit/s
95th percentile per-packet one-way delay: 92.371 ms
Loss rate: 0.63%
```
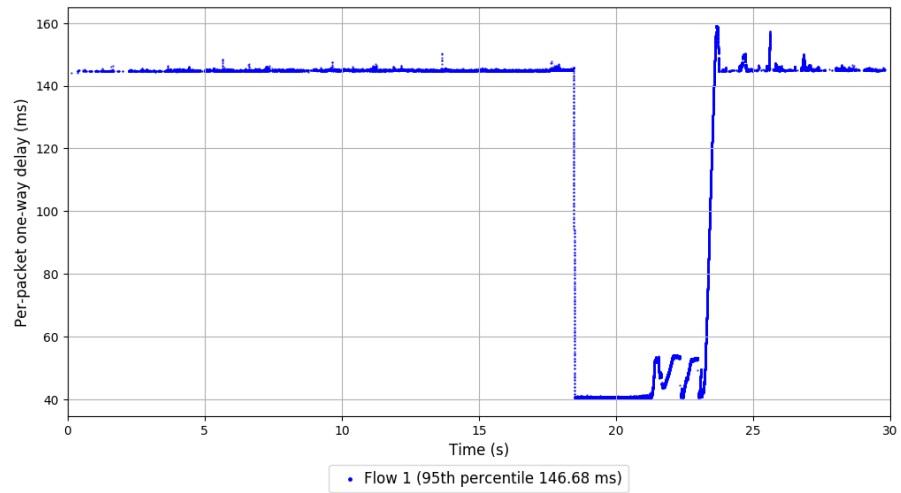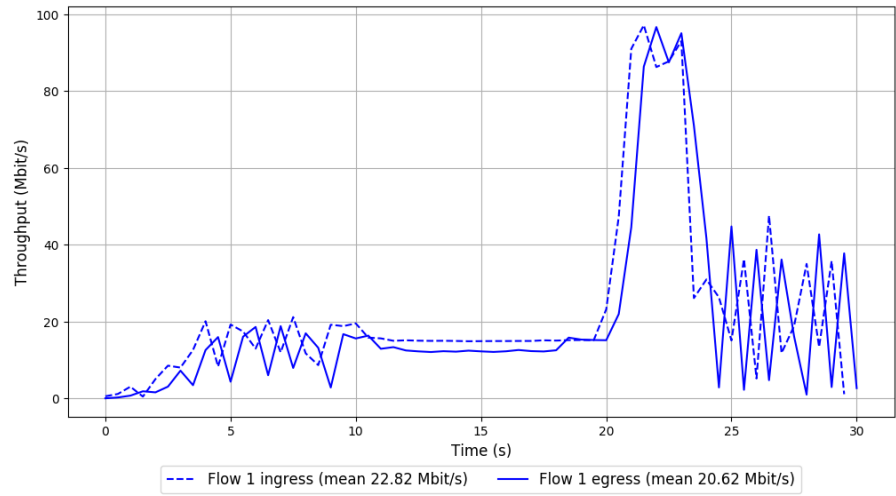
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 82.39 Mbit/s) — Flow 1 egress (mean 82.17 Mbit/s)

Flow 1 (95th percentile 92.37 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-05-22 11:59:54
End at: 2018-05-22 12:00:24
Local clock offset: 0.439 ms
Remote clock offset: 45.698 ms


# Below is generated by plot.py at 2018-05-22 13:39:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.62 Mbit/s
95th percentile per-packet one-way delay: 146.679 ms
Loss rate: 10.22%
-- Flow 1:
Average throughput: 20.62 Mbit/s
95th percentile per-packet one-way delay: 146.679 ms
Loss rate: 10.22%
```
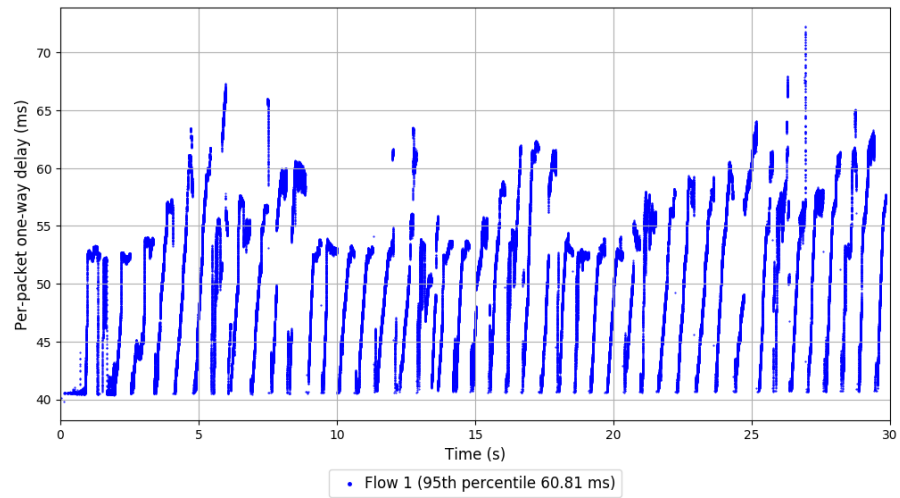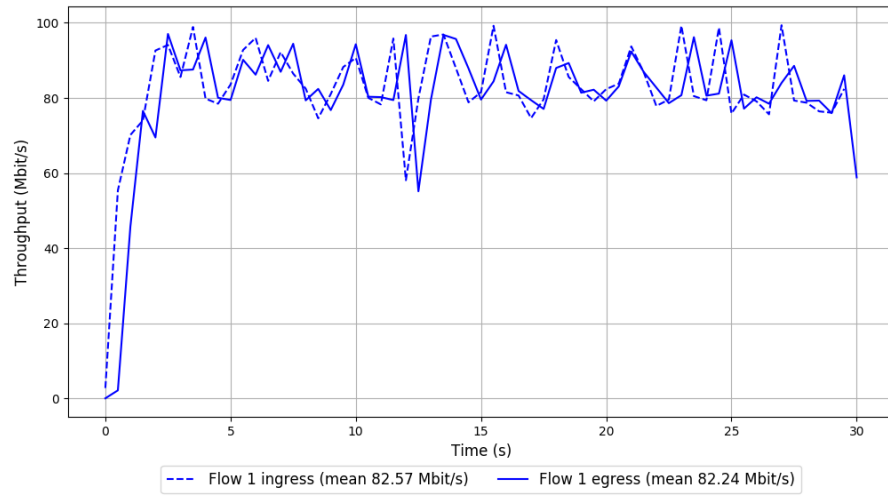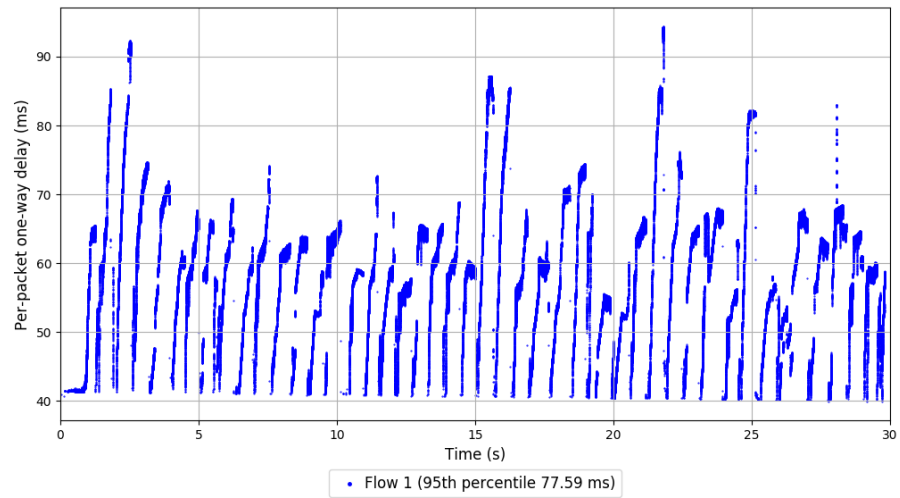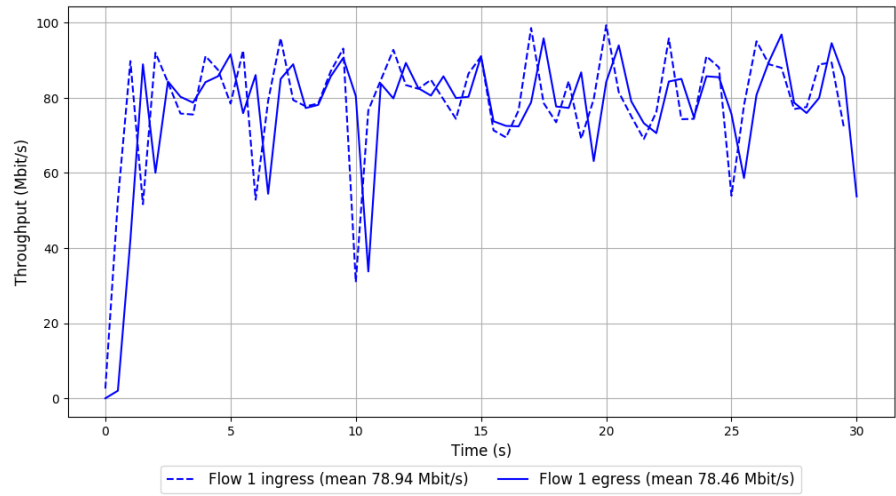
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 22.82 Mbit/s)   Flow 1 egress (mean 20.62 Mbit/s)

Flow 1 (95th percentile 146.68 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-05-22 12:27:51
End at: 2018-05-22 12:28:21
Local clock offset: 3.154 ms
Remote clock offset: 63.21 ms

# Below is generated by plot.py at 2018-05-22 13:39:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.24 Mbit/s
95th percentile per-packet one-way delay: 60.807 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 82.24 Mbit/s
95th percentile per-packet one-way delay: 60.807 ms
Loss rate: 0.78%
```

Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 82.57 Mbit/s)　　Flow 1 egress (mean 82.24 Mbit/s)

Flow 1 (95th percentile 60.81 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2018-05-22 12:48:36
End at: 2018-05-22 12:49:06
Local clock offset: 4.76 ms
Remote clock offset: 21.613 ms


# Below is generated by plot.py at 2018-05-22 13:39:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.46 Mbit/s
95th percentile per-packet one-way delay: 77.594 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 78.46 Mbit/s
95th percentile per-packet one-way delay: 77.594 ms
Loss rate: 0.99%
```
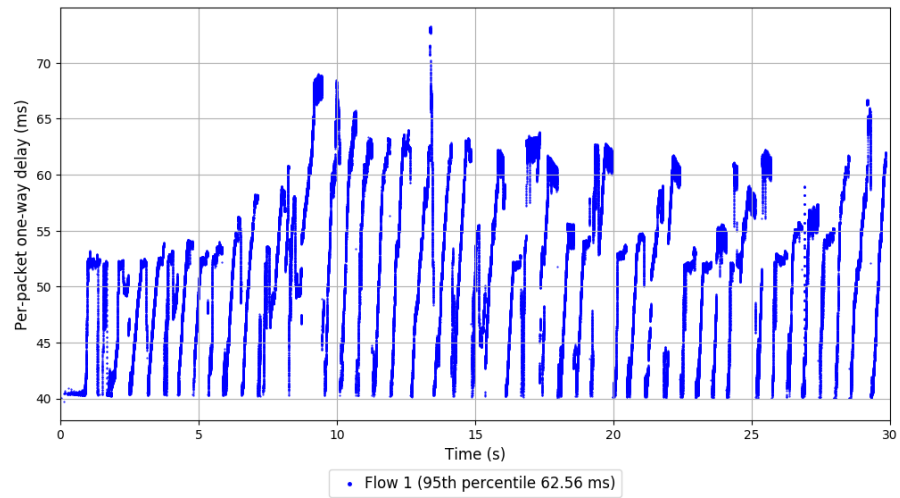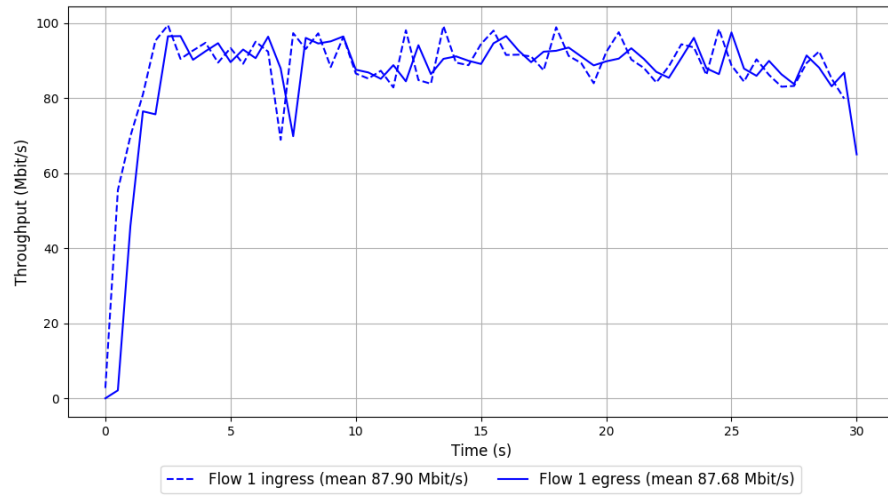
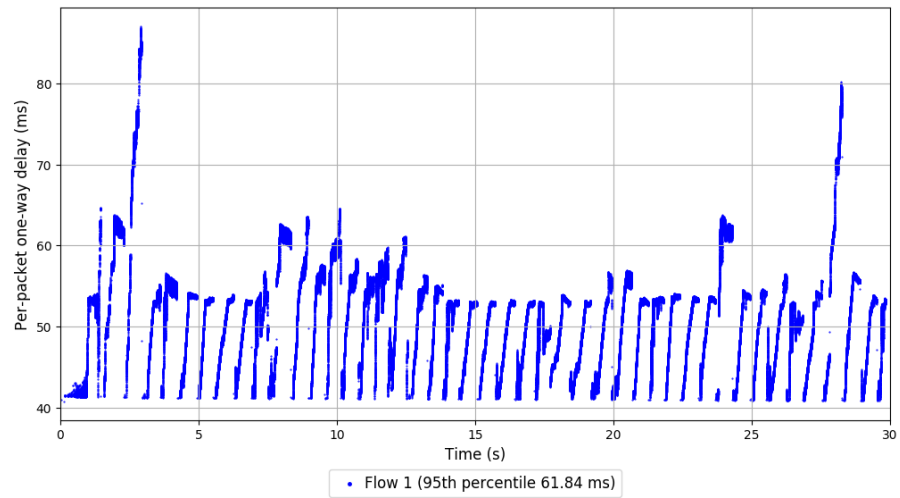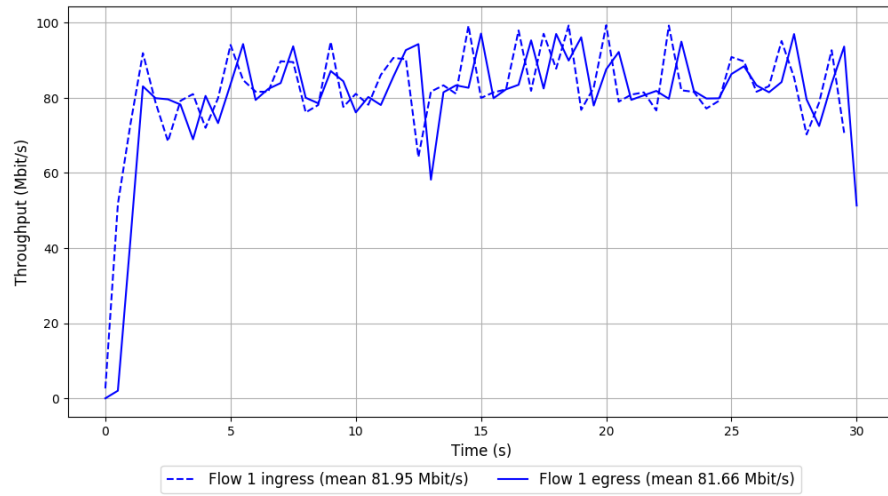Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 78.94 Mbit/s)   Flow 1 egress (mean 78.46 Mbit/s)

Flow 1 (95th percentile 77.59 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2018-05-22 13:09:23
End at: 2018-05-22 13:09:53
Local clock offset: 1.531 ms
Remote clock offset: -7.578 ms


# Below is generated by plot.py at 2018-05-22 13:40:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.68 Mbit/s
95th percentile per-packet one-way delay: 62.559 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 87.68 Mbit/s
95th percentile per-packet one-way delay: 62.559 ms
Loss rate: 0.62%
```

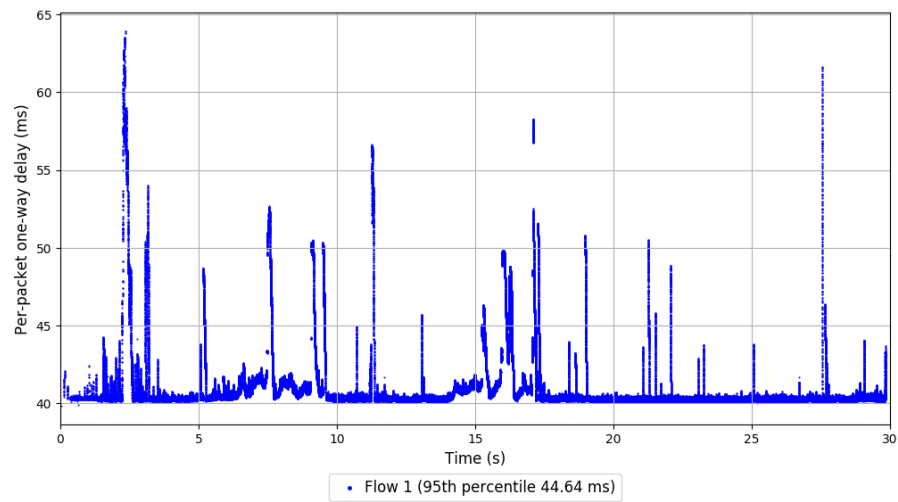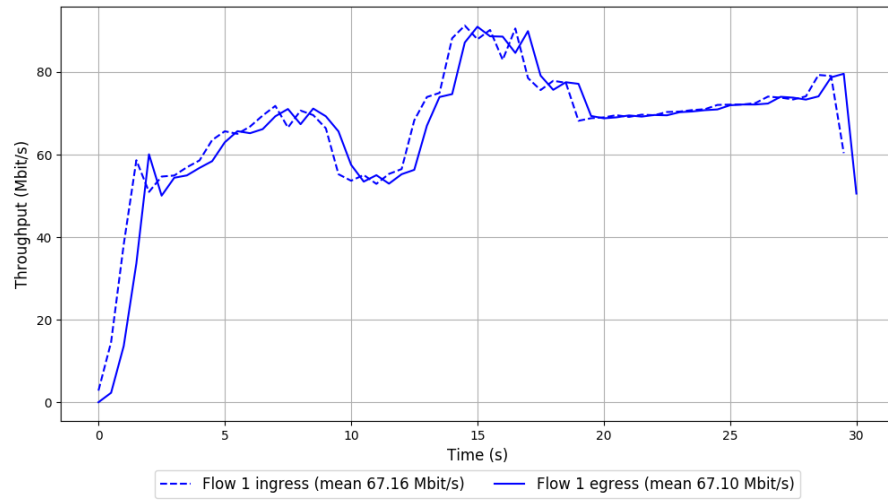# Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 87.90 Mbit/s)   Flow 1 egress (mean 87.68 Mbit/s)

Flow 1 (95th percentile 62.56 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2018-05-22 13:32:04
End at: 2018-05-22 13:32:34
Local clock offset: 2.132 ms
Remote clock offset: -21.601 ms


# Below is generated by plot.py at 2018-05-22 13:40:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.66 Mbit/s
95th percentile per-packet one-way delay: 61.836 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 81.66 Mbit/s
95th percentile per-packet one-way delay: 61.836 ms
Loss rate: 0.71%
```

Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 81.95 Mbit/s)   Flow 1 egress (mean 81.66 Mbit/s)

Flow 1 (95th percentile 61.84 ms)

```
Run 1: Statistics of Copa

Start at: 2018-05-22 10:04:55
End at: 2018-05-22 10:05:25
Local clock offset: 1.037 ms
Remote clock offset: 13.157 ms


# Below is generated by plot.py at 2018-05-22 13:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.10 Mbit/s
95th percentile per-packet one-way delay: 44.640 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 67.10 Mbit/s
95th percentile per-packet one-way delay: 44.640 ms
Loss rate: 0.44%
```
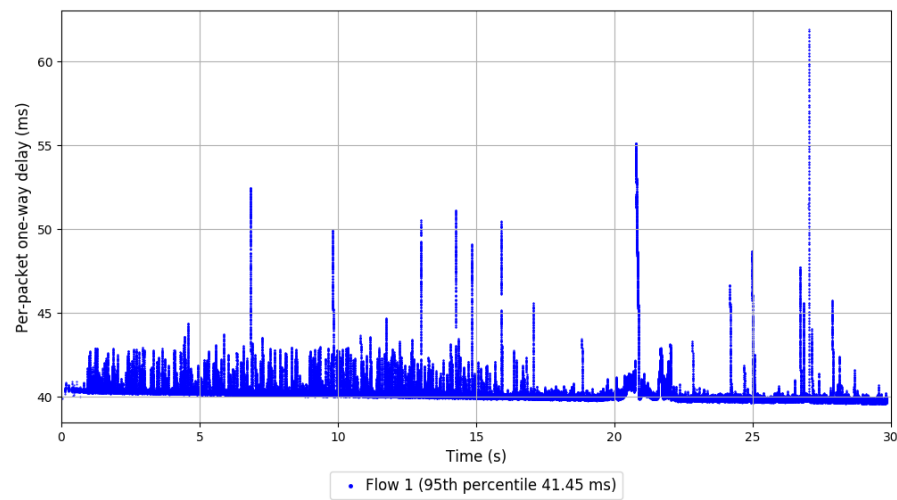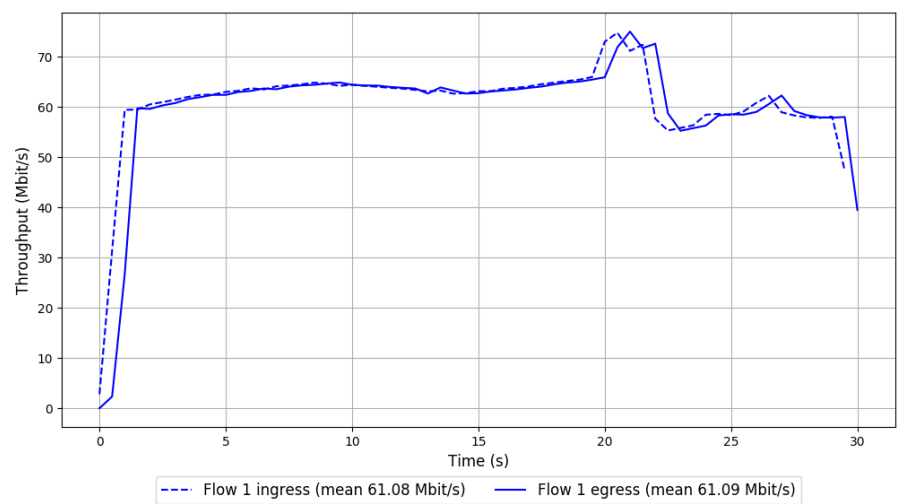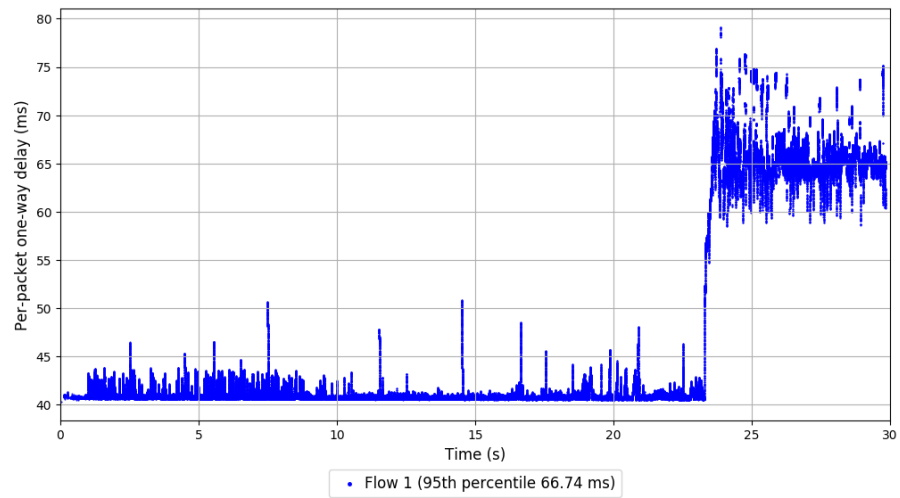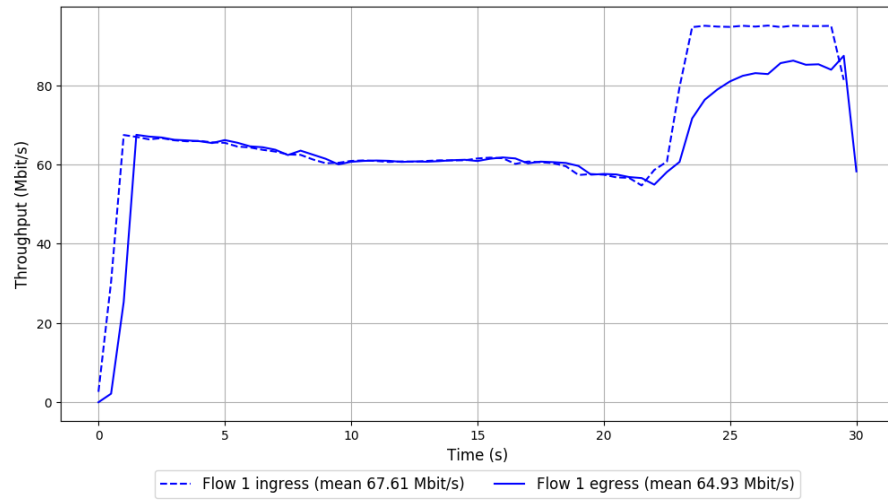
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-05-22 10:25:41
End at: 2018-05-22 10:26:11
Local clock offset: 3.915 ms
Remote clock offset: 9.2 ms


# Below is generated by plot.py at 2018-05-22 13:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.09 Mbit/s
95th percentile per-packet one-way delay: 41.449 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 61.09 Mbit/s
95th percentile per-packet one-way delay: 41.449 ms
Loss rate: 0.34%
```
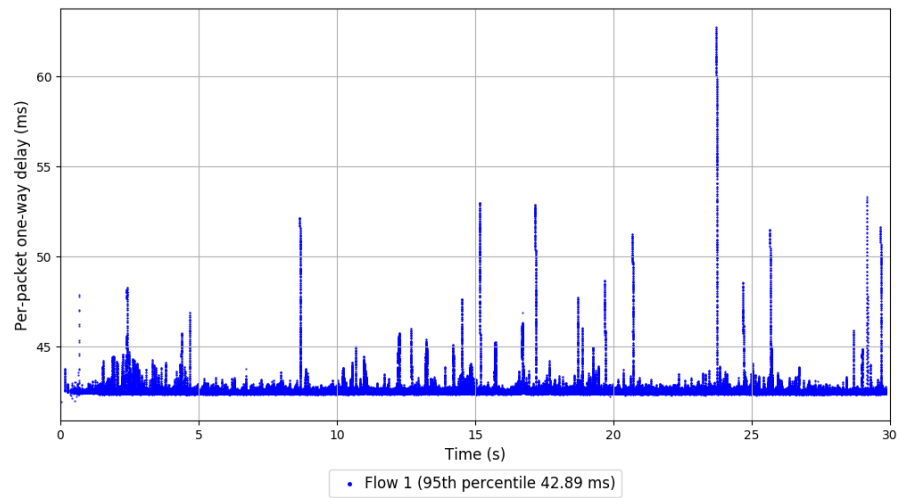
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-05-22 10:46:25
End at: 2018-05-22 10:46:55
Local clock offset: -1.35 ms
Remote clock offset: -5.138 ms


# Below is generated by plot.py at 2018-05-22 13:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.93 Mbit/s
95th percentile per-packet one-way delay: 66.736 ms
Loss rate: 4.36%
-- Flow 1:
Average throughput: 64.93 Mbit/s
95th percentile per-packet one-way delay: 66.736 ms
Loss rate: 4.36%
```

Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 67.61 Mbit/s) --- Flow 1 egress (mean 64.93 Mbit/s)

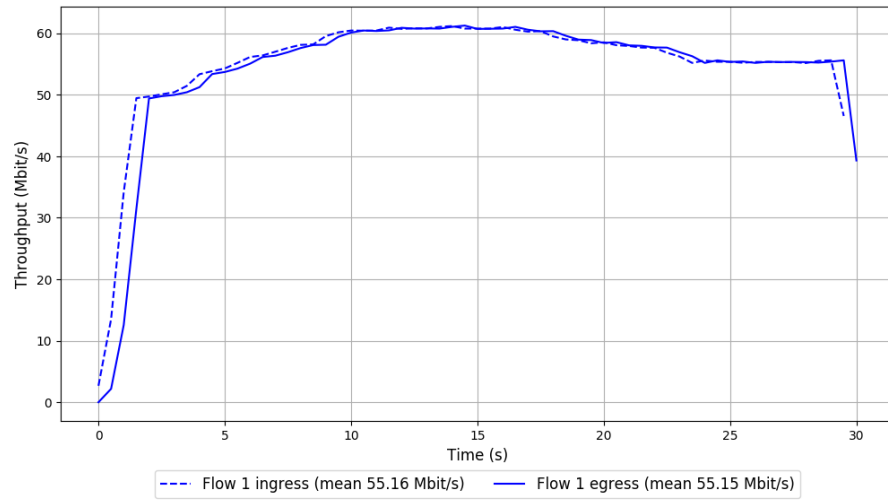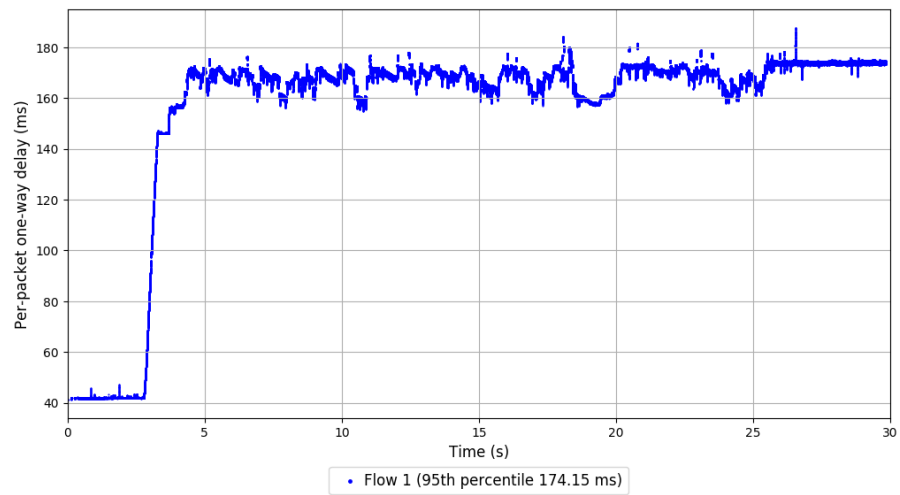• Flow 1 (95th percentile 66.74 ms)

```
Run 4: Statistics of Copa

Start at: 2018-05-22 11:07:07
End at: 2018-05-22 11:07:37
Local clock offset: 1.64 ms
Remote clock offset: -4.114 ms


# Below is generated by plot.py at 2018-05-22 13:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.15 Mbit/s
95th percentile per-packet one-way delay: 42.894 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 55.15 Mbit/s
95th percentile per-packet one-way delay: 42.894 ms
Loss rate: 0.36%
```

Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 55.16 Mbit/s)   Flow 1 egress (mean 55.15 Mbit/s)
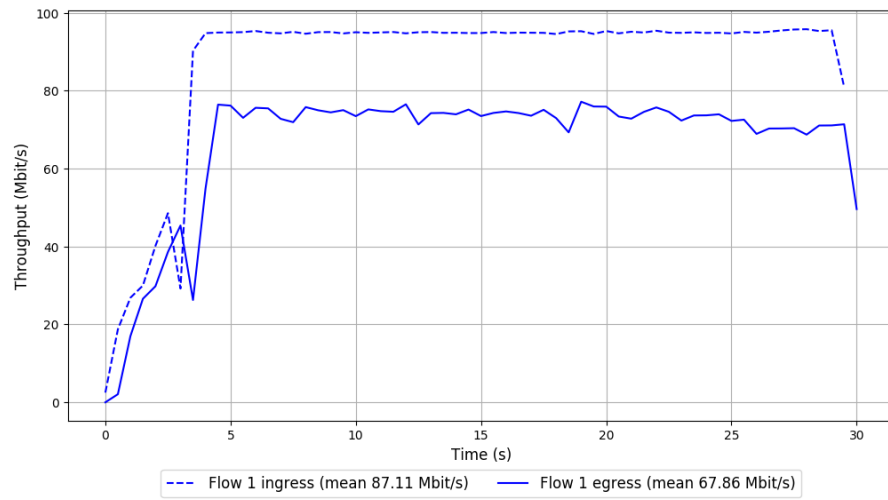

Flow 1 (95th percentile 42.89 ms)

```
Run 5: Statistics of Copa

Start at: 2018-05-22 11:30:46
End at: 2018-05-22 11:31:16
Local clock offset: 2.094 ms
Remote clock offset: -1.589 ms


# Below is generated by plot.py at 2018-05-22 13:41:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.86 Mbit/s
95th percentile per-packet one-way delay: 174.149 ms
Loss rate: 22.42%
-- Flow 1:
Average throughput: 67.86 Mbit/s
95th percentile per-packet one-way delay: 174.149 ms
Loss rate: 22.42%
```
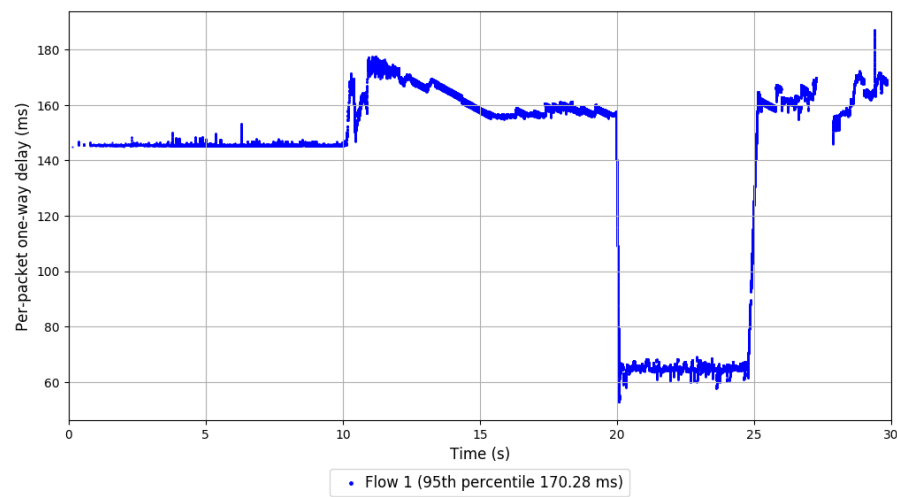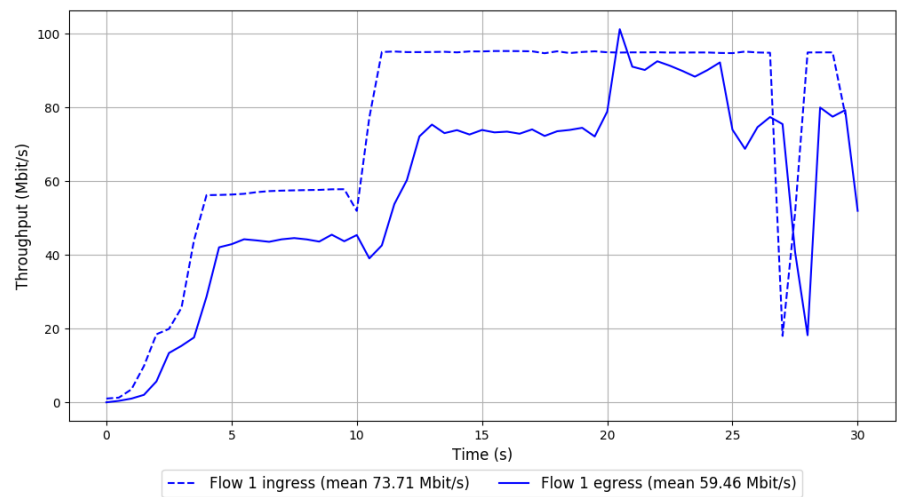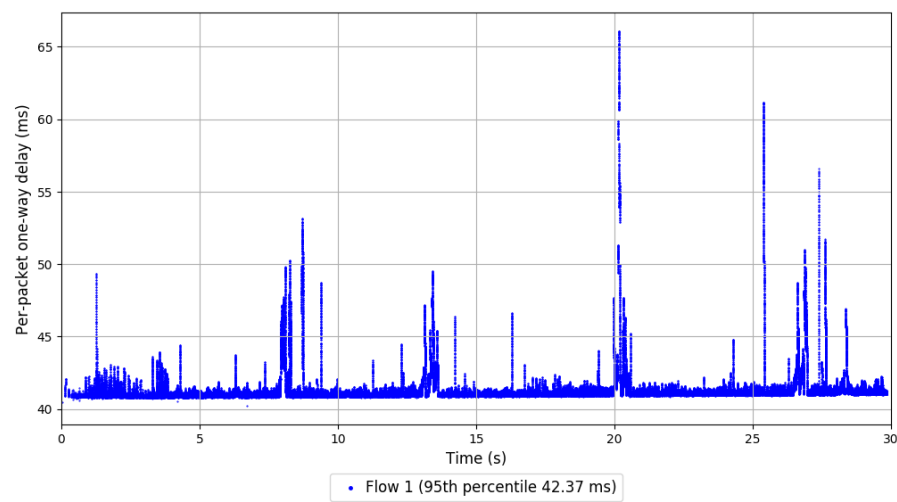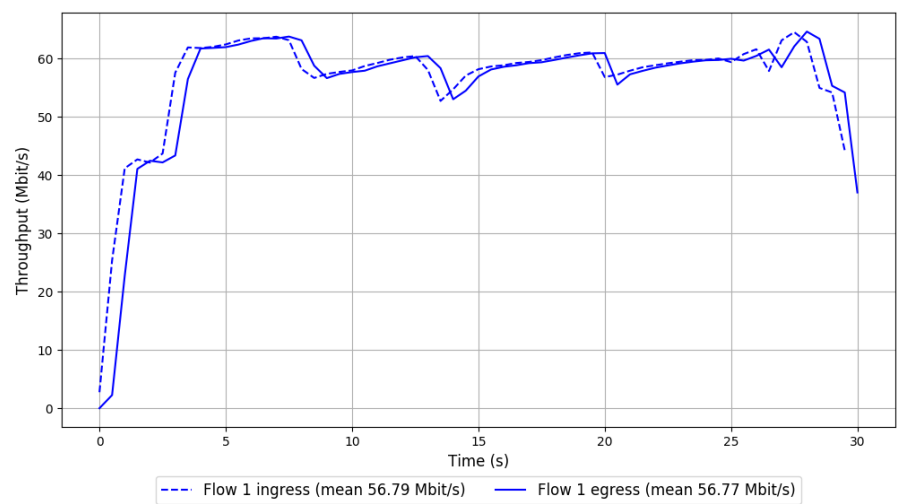
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 87.11 Mbit/s) — Flow 1 egress (mean 67.86 Mbit/s)

• Flow 1 (95th percentile 174.15 ms)

```
Run 6: Statistics of Copa

Start at: 2018-05-22 11:54:02
End at: 2018-05-22 11:54:32
Local clock offset: -0.497 ms
Remote clock offset: 41.25 ms


# Below is generated by plot.py at 2018-05-22 13:41:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.46 Mbit/s
95th percentile per-packet one-way delay: 170.281 ms
Loss rate: 19.93%
-- Flow 1:
Average throughput: 59.46 Mbit/s
95th percentile per-packet one-way delay: 170.281 ms
Loss rate: 19.93%
```
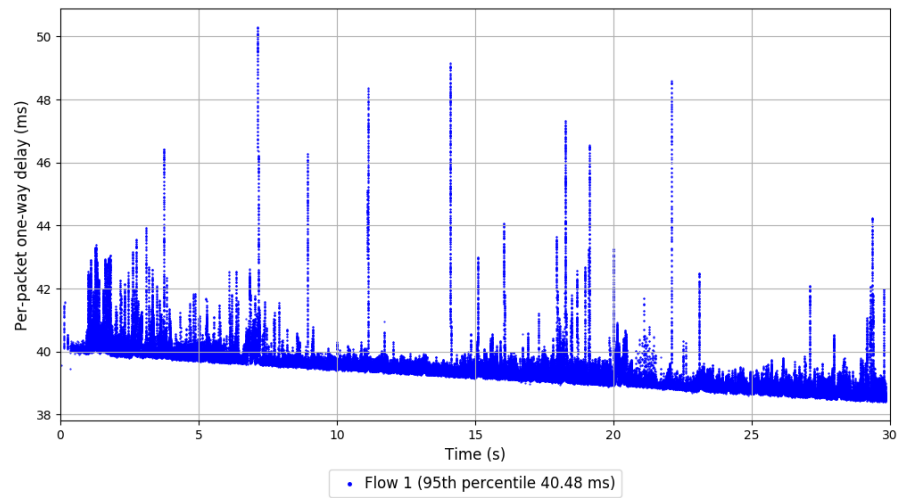
Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-05-22 12:26:32
End at: 2018-05-22 12:27:02
Local clock offset: 3.081 ms
Remote clock offset: 62.393 ms


# Below is generated by plot.py at 2018-05-22 13:41:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.77 Mbit/s
95th percentile per-packet one-way delay: 42.368 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 56.77 Mbit/s
95th percentile per-packet one-way delay: 42.368 ms
Loss rate: 0.39%
```

Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 56.79 Mbit/s)　　Flow 1 egress (mean 56.77 Mbit/s)

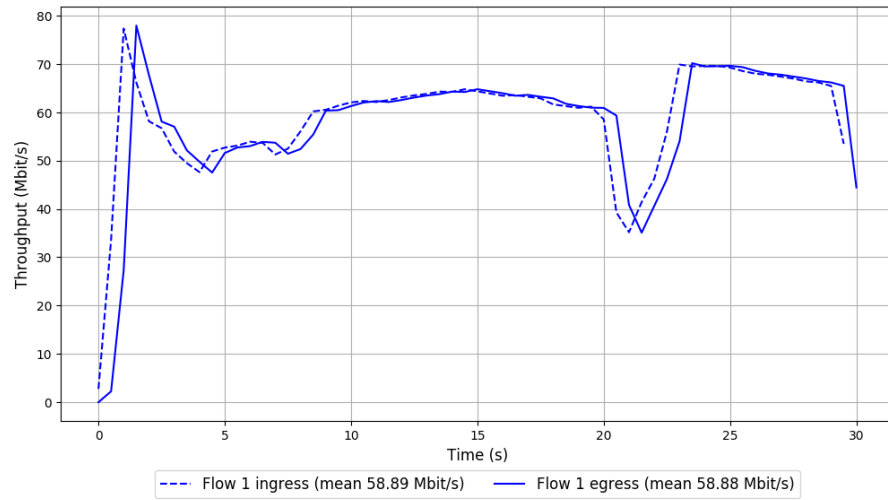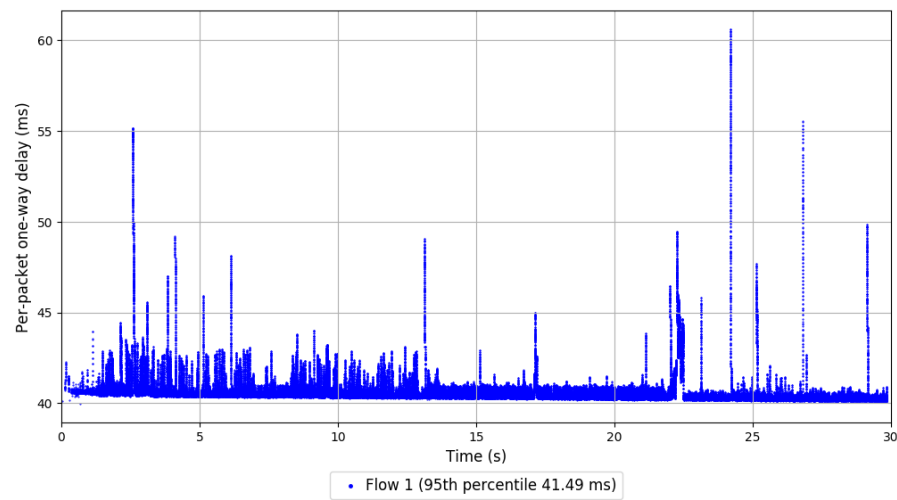• Flow 1 (95th percentile 42.37 ms)

```
Run 8: Statistics of Copa

Start at: 2018-05-22 12:47:17
End at: 2018-05-22 12:47:47
Local clock offset: 4.49 ms
Remote clock offset: 25.764 ms


# Below is generated by plot.py at 2018-05-22 13:42:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.88 Mbit/s
95th percentile per-packet one-way delay: 40.480 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 58.88 Mbit/s
95th percentile per-packet one-way delay: 40.480 ms
Loss rate: 0.40%
```

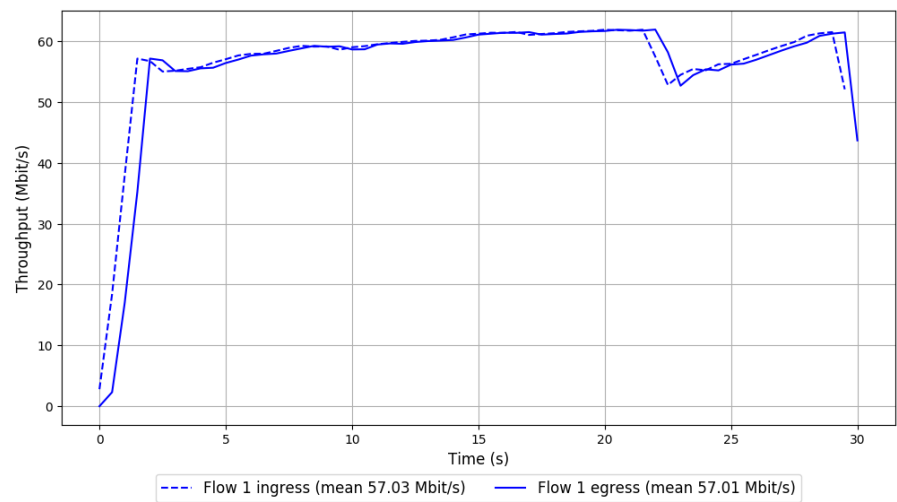Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2018-05-22 13:08:03
End at: 2018-05-22 13:08:33
Local clock offset: 1.711 ms
Remote clock offset: -6.484 ms


# Below is generated by plot.py at 2018-05-22 13:42:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.01 Mbit/s
95th percentile per-packet one-way delay: 41.490 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 57.01 Mbit/s
95th percentile per-packet one-way delay: 41.490 ms
Loss rate: 0.39%
```

Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-05-22 13:28:47
End at: 2018-05-22 13:29:17
Local clock offset: 1.385 ms
Remote clock offset: -19.642 ms


# Below is generated by plot.py at 2018-05-22 13:42:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.10 Mbit/s
95th percentile per-packet one-way delay: 167.557 ms
Loss rate: 19.42%
-- Flow 1:
Average throughput: 72.10 Mbit/s
95th percentile per-packet one-way delay: 167.557 ms
Loss rate: 19.42%
```
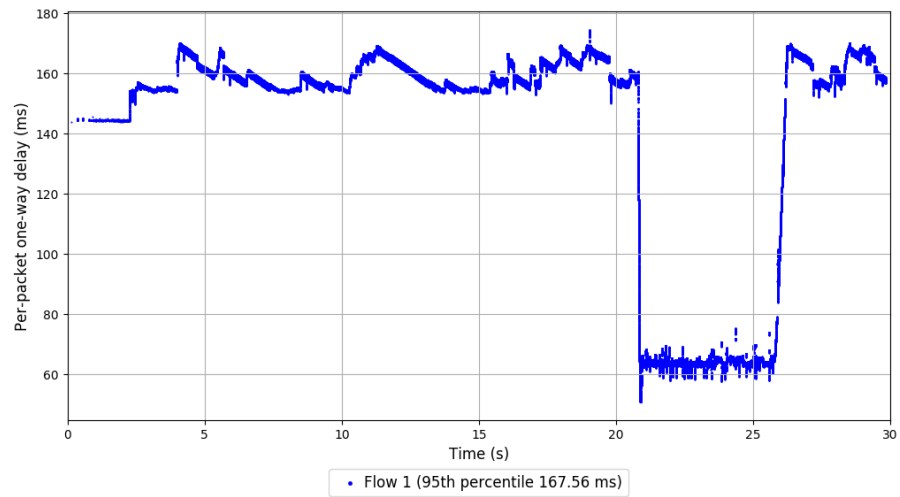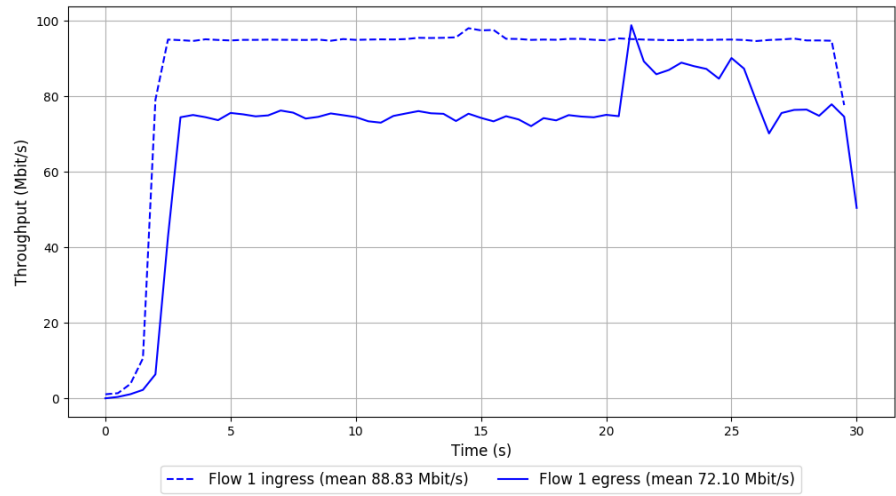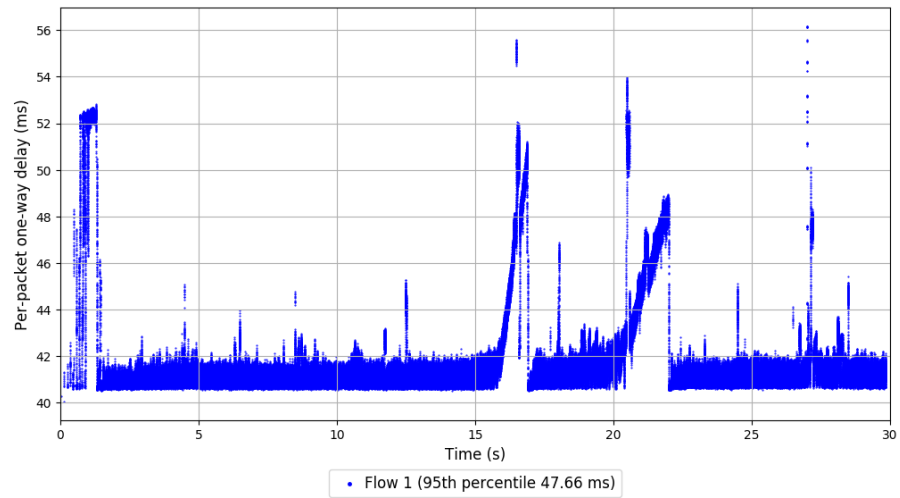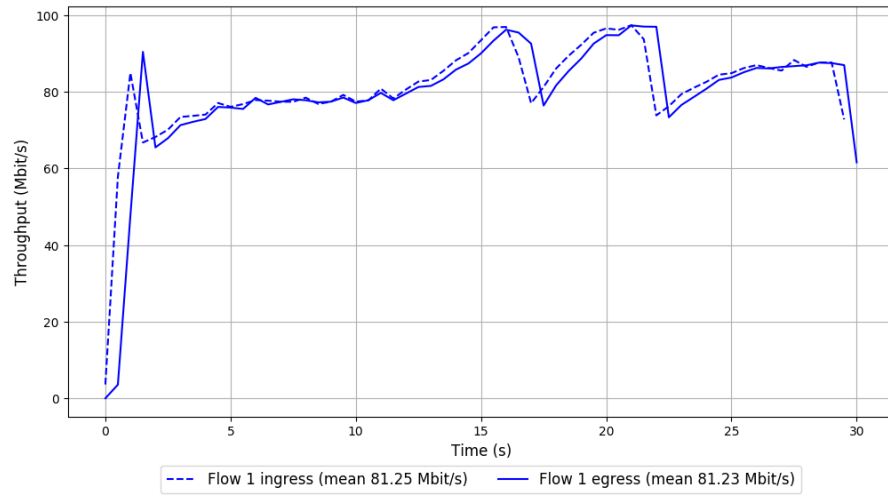
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-05-22 10:11:31
End at: 2018-05-22 10:12:01
Local clock offset: 2.423 ms
Remote clock offset: 14.084 ms


# Below is generated by plot.py at 2018-05-22 13:42:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.23 Mbit/s
95th percentile per-packet one-way delay: 47.655 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 81.23 Mbit/s
95th percentile per-packet one-way delay: 47.655 ms
Loss rate: 0.39%
```

Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-05-22 10:32:16
End at: 2018-05-22 10:32:46
Local clock offset: 1.313 ms
Remote clock offset: 2.353 ms


# Below is generated by plot.py at 2018-05-22 13:42:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.92 Mbit/s
95th percentile per-packet one-way delay: 48.096 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 79.92 Mbit/s
95th percentile per-packet one-way delay: 48.096 ms
Loss rate: 0.40%
```
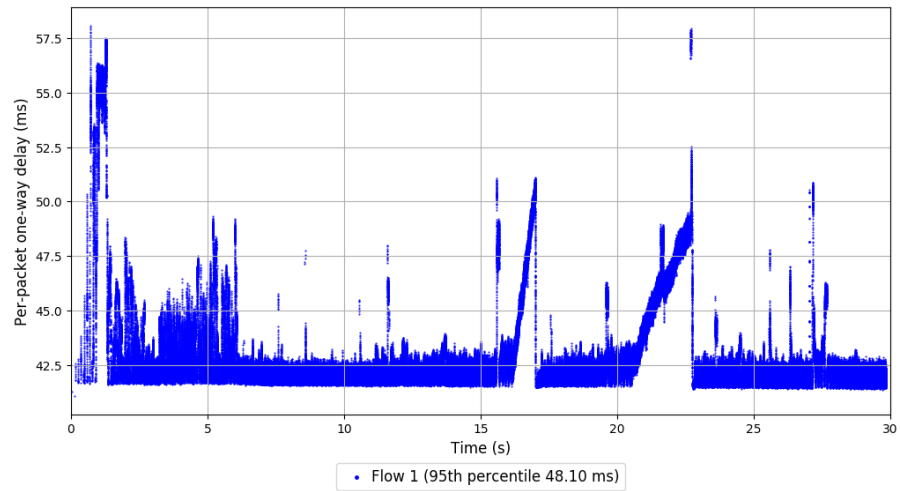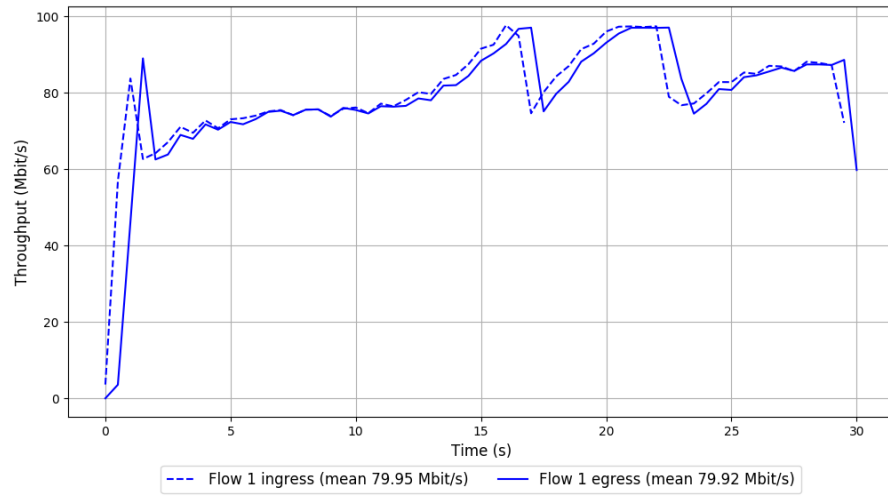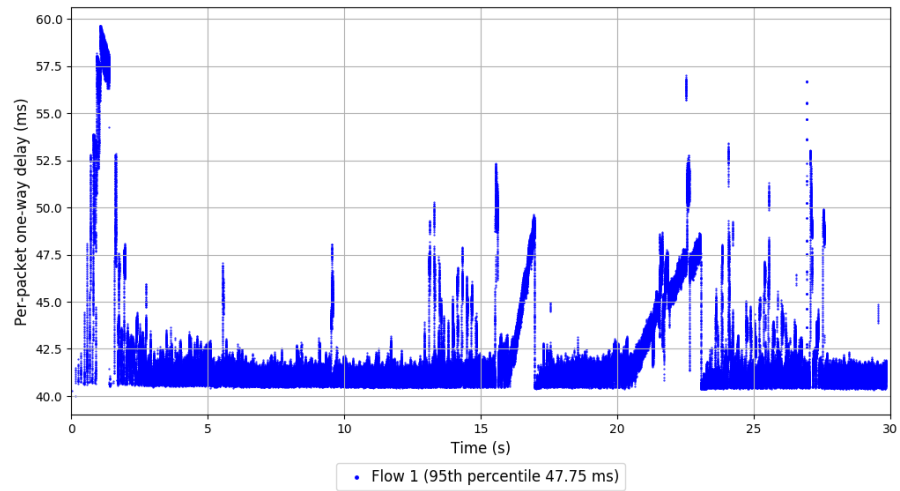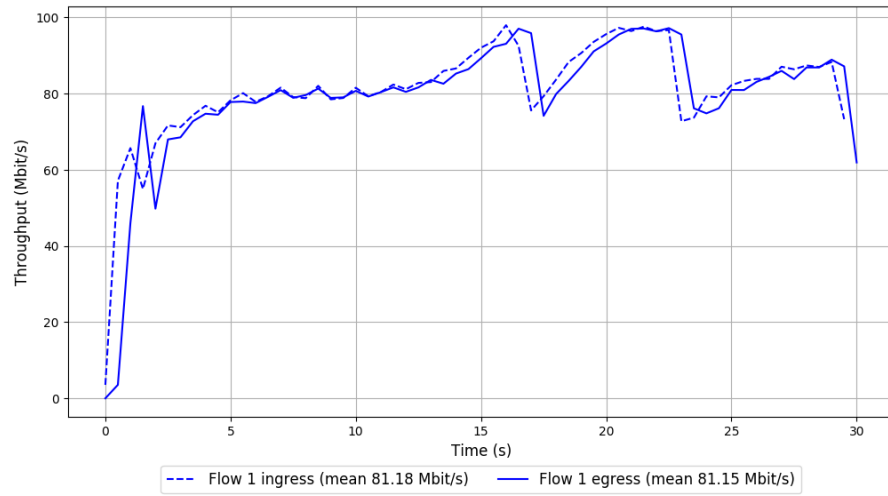
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-05-22 10:53:02
End at: 2018-05-22 10:53:32
Local clock offset: -1.844 ms
Remote clock offset: -7.251 ms


# Below is generated by plot.py at 2018-05-22 13:42:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.15 Mbit/s
95th percentile per-packet one-way delay: 47.749 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 81.15 Mbit/s
95th percentile per-packet one-way delay: 47.749 ms
Loss rate: 0.39%
```

Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 81.18 Mbit/s)   Flow 1 egress (mean 81.15 Mbit/s)

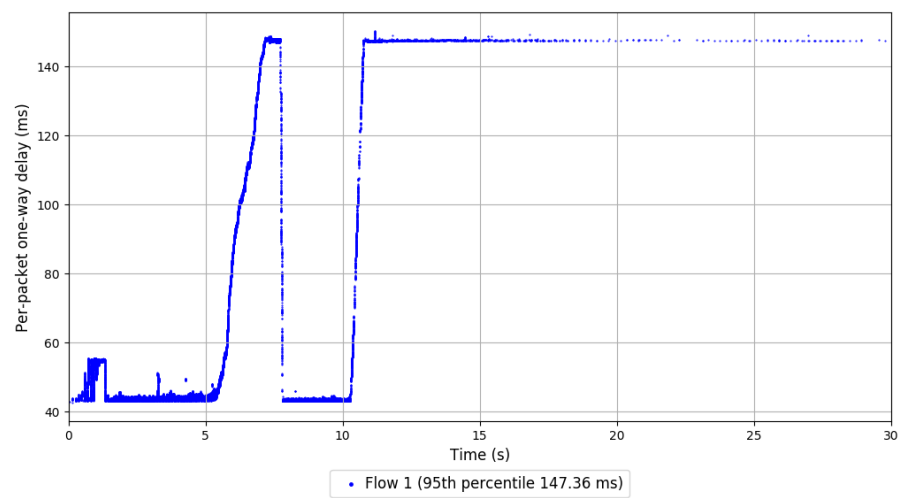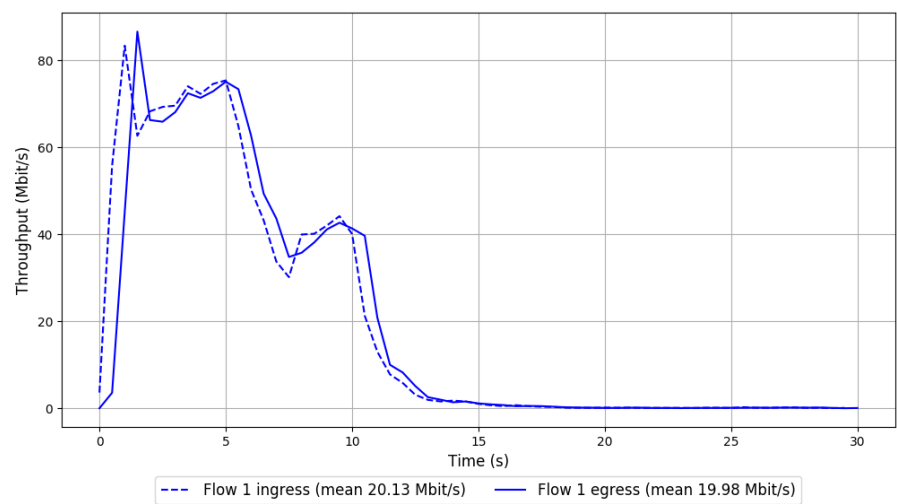

Flow 1 (95th percentile 47.75 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-05-22 11:13:44
End at: 2018-05-22 11:14:14
Local clock offset: 2.628 ms
Remote clock offset: -3.829 ms


# Below is generated by plot.py at 2018-05-22 13:42:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.98 Mbit/s
95th percentile per-packet one-way delay: 147.357 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 19.98 Mbit/s
95th percentile per-packet one-way delay: 147.357 ms
Loss rate: 1.11%
```

Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 20.13 Mbit/s) — Flow 1 egress (mean 19.98 Mbit/s)

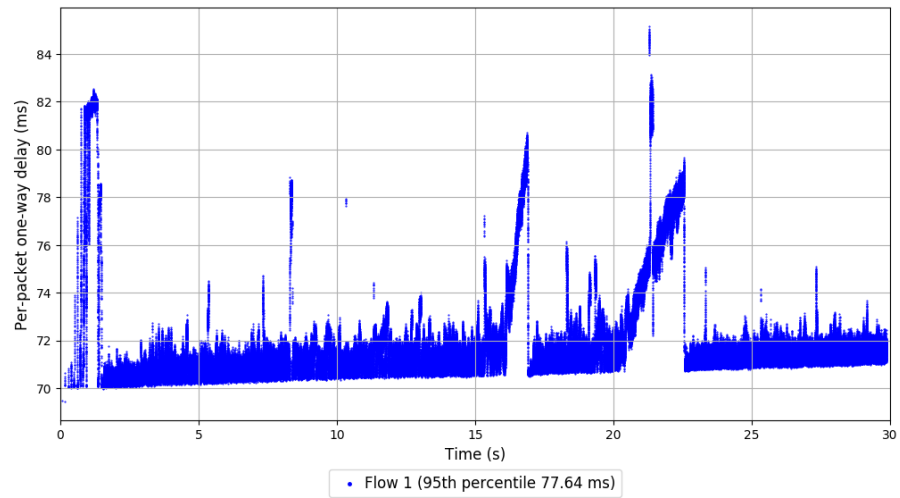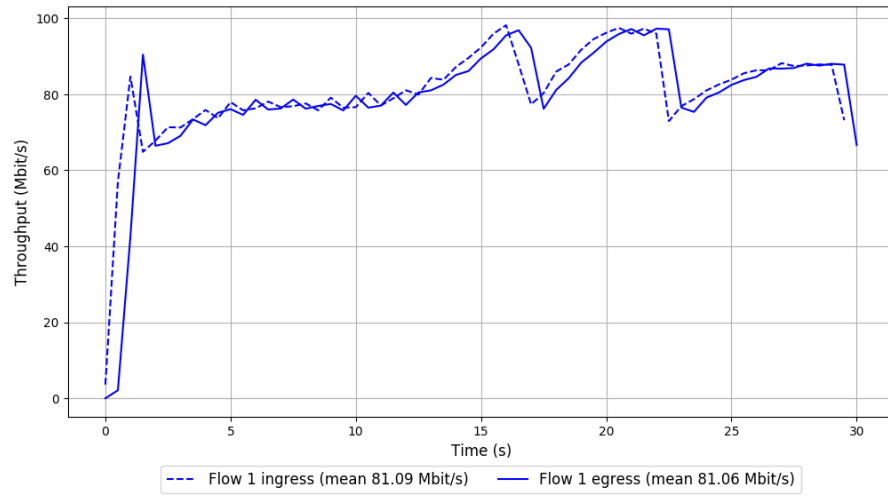Flow 1 (95th percentile 147.36 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-05-22 11:38:53
End at: 2018-05-22 11:39:23
Local clock offset: 0.395 ms
Remote clock offset: -6.434 ms


# Below is generated by plot.py at 2018-05-22 13:42:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.06 Mbit/s
95th percentile per-packet one-way delay: 77.642 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 81.06 Mbit/s
95th percentile per-packet one-way delay: 77.642 ms
Loss rate: 0.39%
```
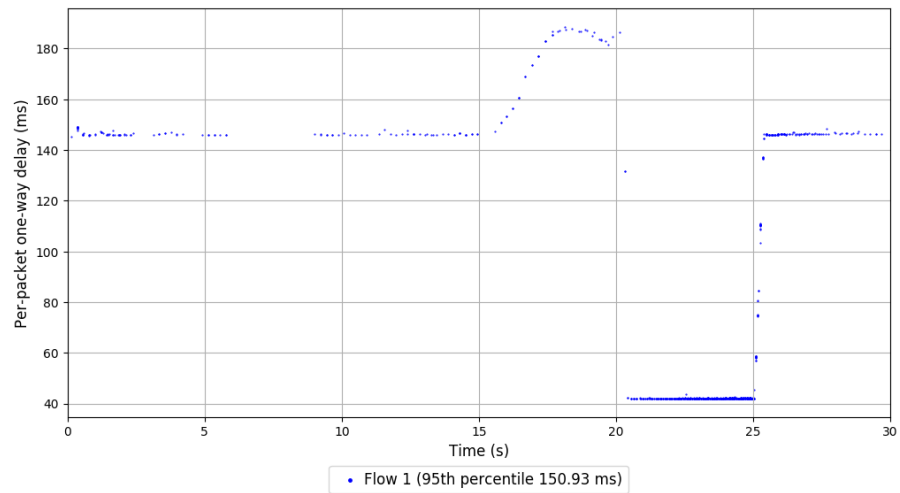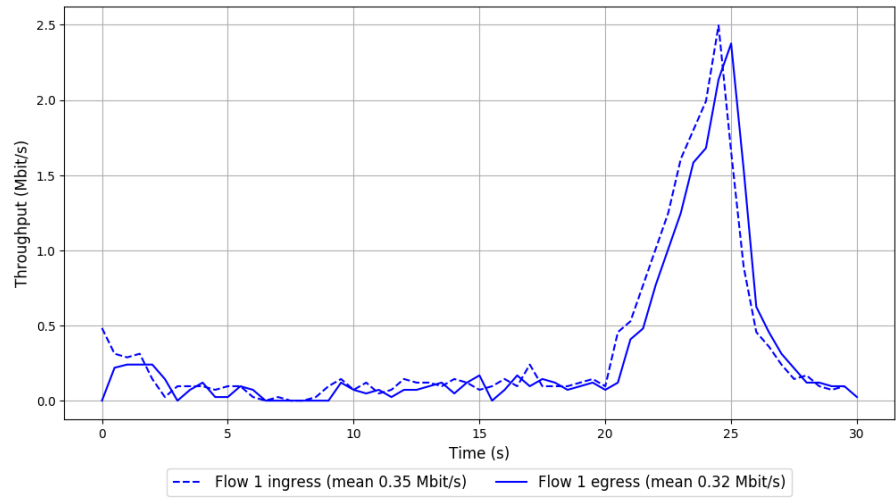
Run 5: Report of TCP Cubic — Data Link

```
Run 6: Statistics of TCP Cubic

Start at: 2018-05-22 12:10:55
End at: 2018-05-22 12:11:25
Local clock offset: 2.258 ms
Remote clock offset: 52.991 ms


# Below is generated by plot.py at 2018-05-22 13:42:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 150.928 ms
Loss rate: 9.43%
-- Flow 1:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 150.928 ms
Loss rate: 9.43%
```

Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 0.35 Mbit/s) --- Flow 1 egress (mean 0.32 Mbit/s)

Flow 1 (95th percentile 150.93 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2018-05-22 12:33:08
End at: 2018-05-22 12:33:38
Local clock offset: 3.713 ms
Remote clock offset: 66.55 ms


# Below is generated by plot.py at 2018-05-22 13:42:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.95 Mbit/s
95th percentile per-packet one-way delay: 48.515 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 80.95 Mbit/s
95th percentile per-packet one-way delay: 48.515 ms
Loss rate: 0.39%
```
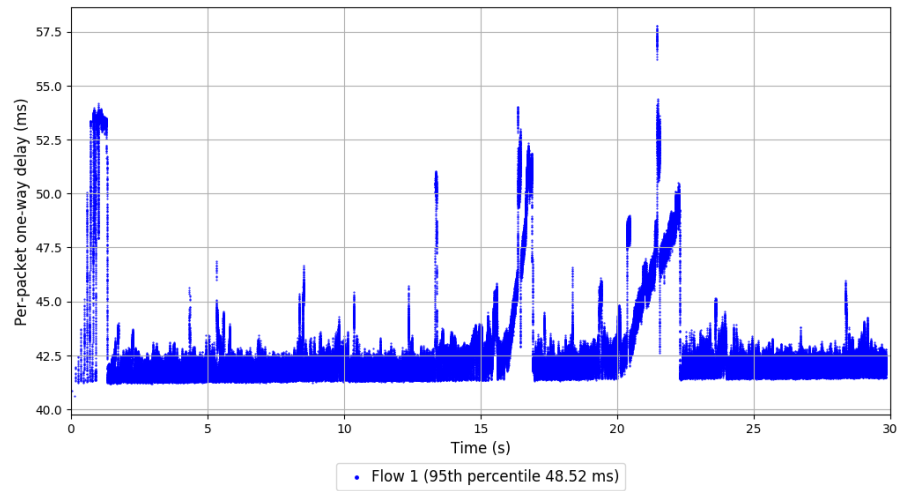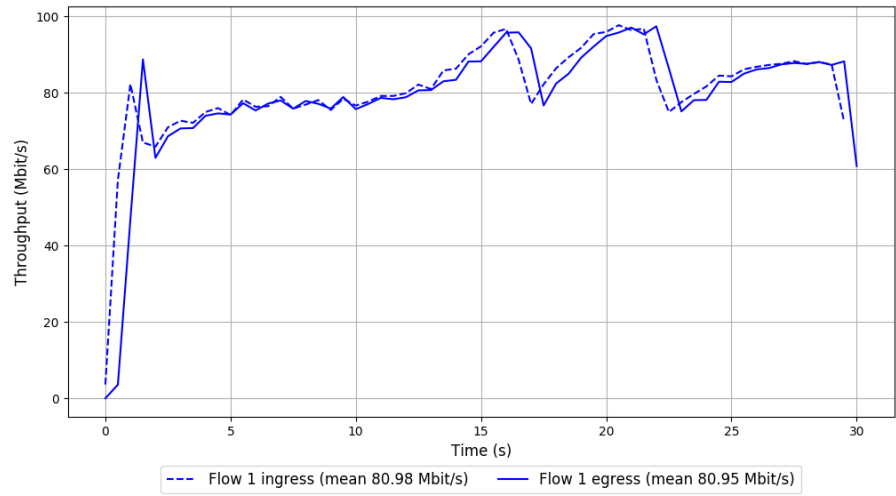
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 80.98 Mbit/s) — Flow 1 egress (mean 80.95 Mbit/s)

Flow 1 (95th percentile 48.52 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2018-05-22 12:53:51
End at: 2018-05-22 12:54:21
Local clock offset: 4.981 ms
Remote clock offset: 9.87 ms


# Below is generated by plot.py at 2018-05-22 13:42:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.95 Mbit/s
95th percentile per-packet one-way delay: 57.436 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 75.95 Mbit/s
95th percentile per-packet one-way delay: 57.436 ms
Loss rate: 0.37%
```
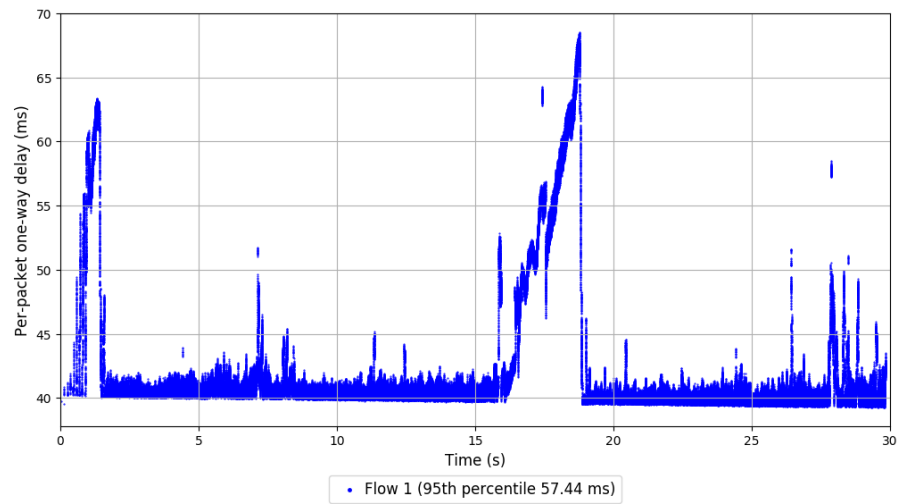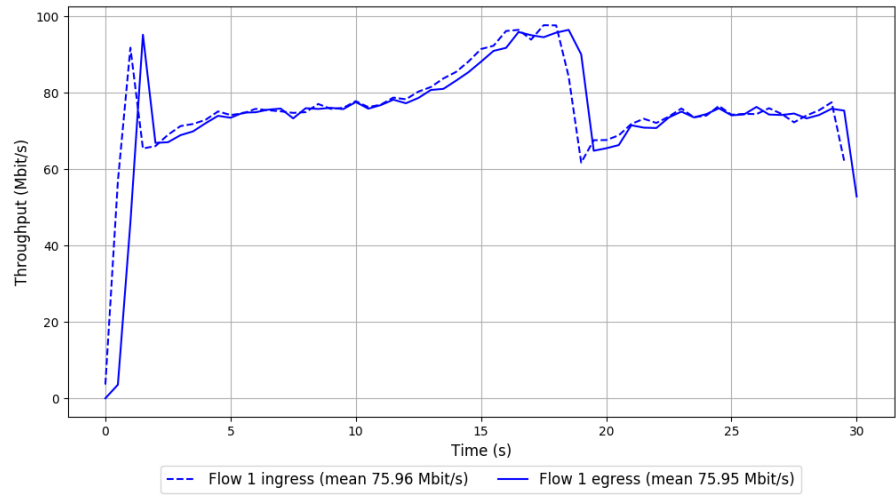
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 75.96 Mbit/s)   Flow 1 egress (mean 75.95 Mbit/s)

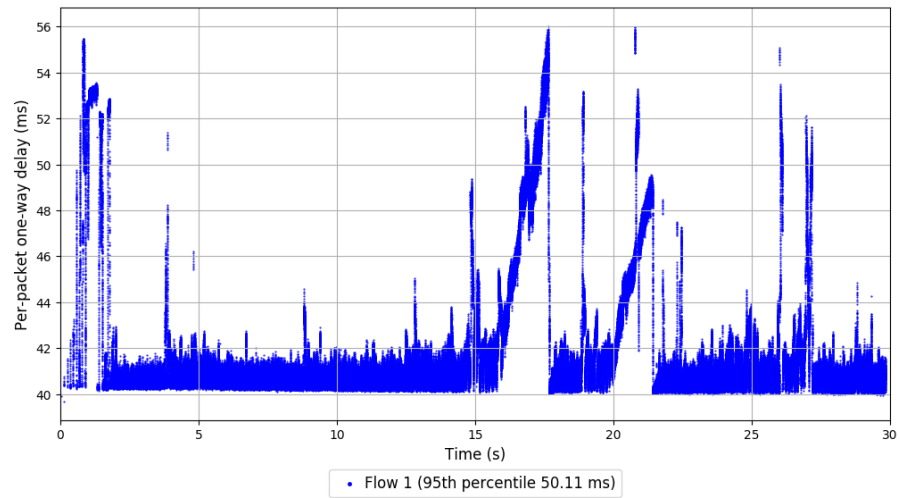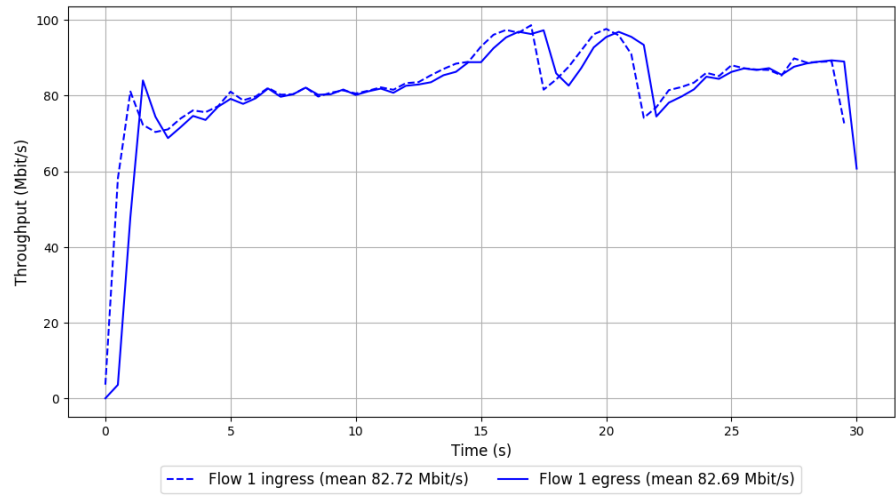• Flow 1 (95th percentile 57.44 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2018-05-22 13:14:39
End at: 2018-05-22 13:15:09
Local clock offset: 0.983 ms
Remote clock offset: -11.205 ms


# Below is generated by plot.py at 2018-05-22 13:42:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.69 Mbit/s
95th percentile per-packet one-way delay: 50.113 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 82.69 Mbit/s
95th percentile per-packet one-way delay: 50.113 ms
Loss rate: 0.39%
```
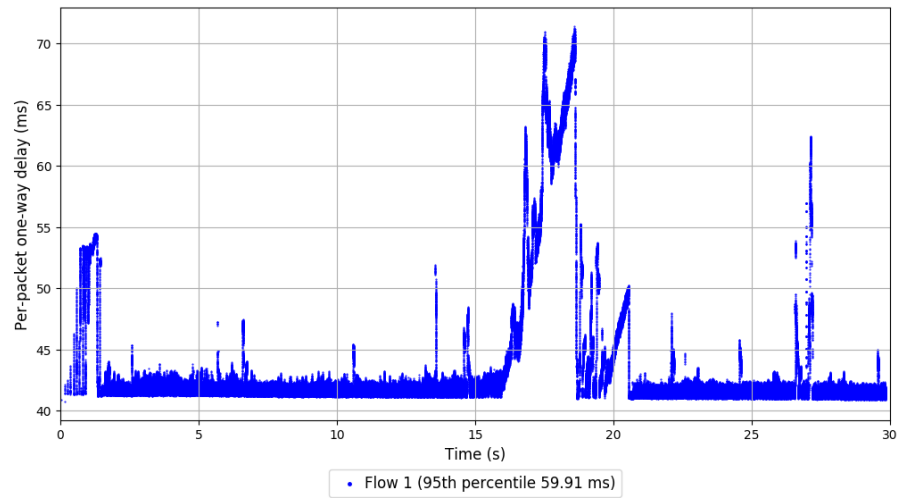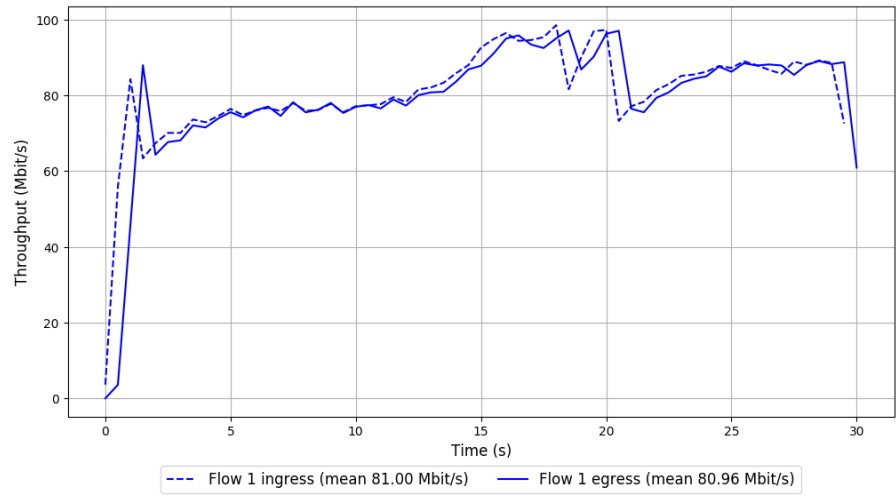
Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2018-05-22 13:37:21
End at: 2018-05-22 13:37:51
Local clock offset: 3.294 ms
Remote clock offset: -24.447 ms


# Below is generated by plot.py at 2018-05-22 13:42:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.96 Mbit/s
95th percentile per-packet one-way delay: 59.914 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 80.96 Mbit/s
95th percentile per-packet one-way delay: 59.914 ms
Loss rate: 0.40%
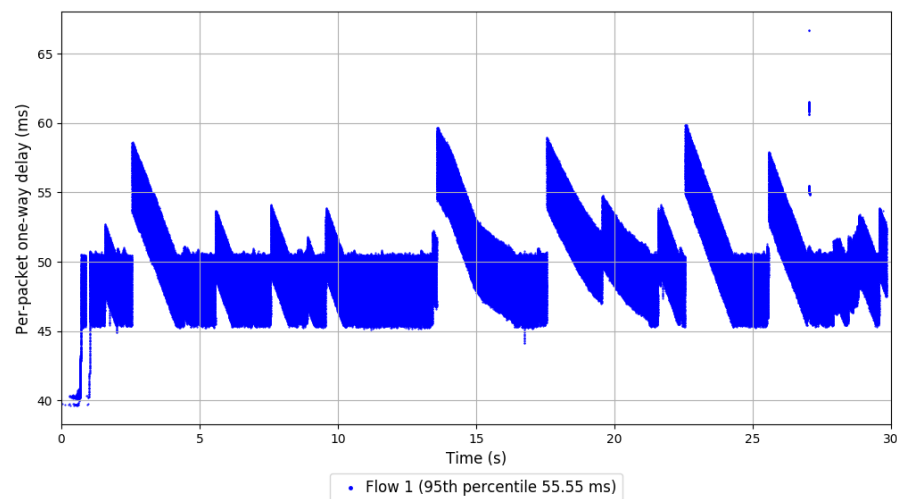```

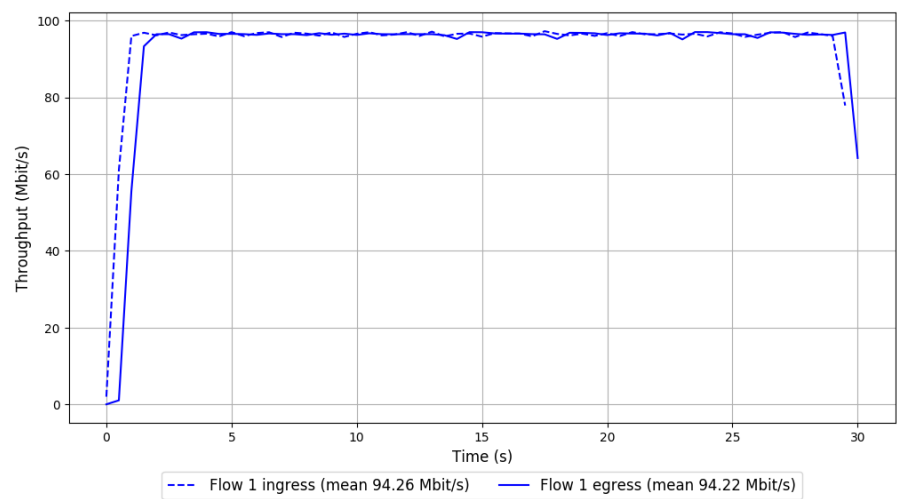Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-05-22 10:07:34
End at: 2018-05-22 10:08:04
Local clock offset: 1.679 ms
Remote clock offset: 13.615 ms


# Below is generated by plot.py at 2018-05-22 13:43:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.22 Mbit/s
95th percentile per-packet one-way delay: 55.547 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 94.22 Mbit/s
95th percentile per-packet one-way delay: 55.547 ms
Loss rate: 0.40%
```

Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 94.26 Mbit/s)   Flow 1 egress (mean 94.22 Mbit/s)

• Flow 1 (95th percentile 55.55 ms)

```
Run 2: Statistics of FillP

Start at: 2018-05-22 10:28:20
End at: 2018-05-22 10:28:50
Local clock offset: 2.86 ms
Remote clock offset: 6.154 ms


# Below is generated by plot.py at 2018-05-22 13:43:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.23 Mbit/s
95th percentile per-packet one-way delay: 53.757 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 94.23 Mbit/s
95th percentile per-packet one-way delay: 53.757 ms
Loss rate: 0.39%
```
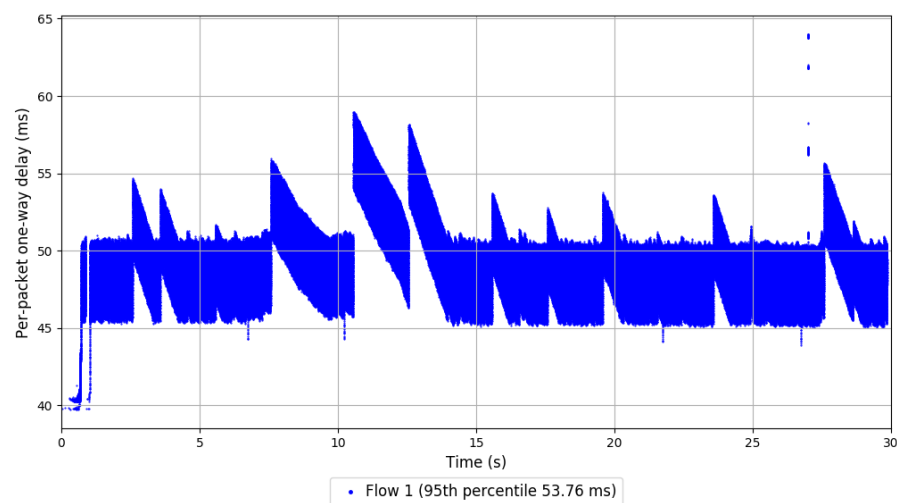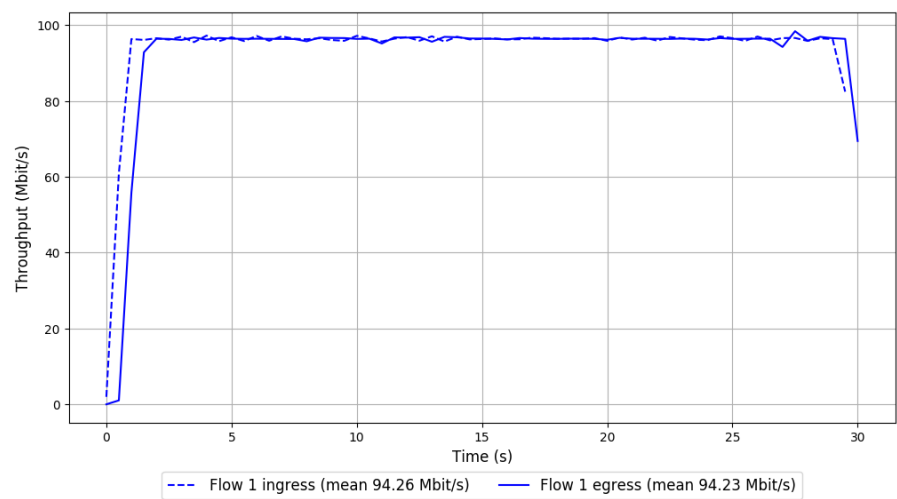
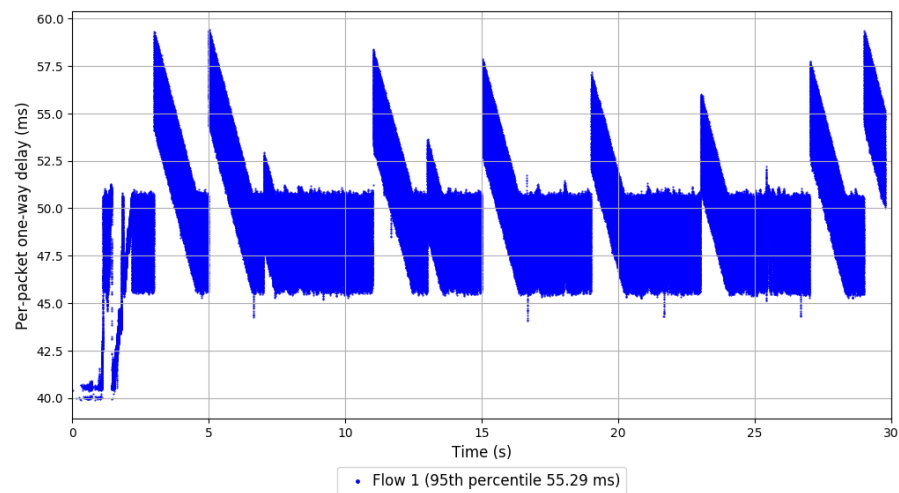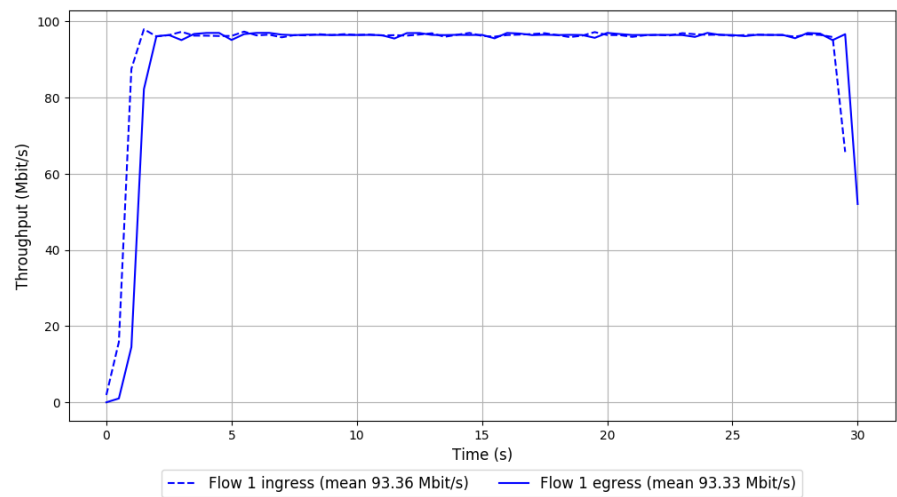Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-05-22 10:49:05
End at: 2018-05-22 10:49:35
Local clock offset: -1.572 ms
Remote clock offset: -5.914 ms


# Below is generated by plot.py at 2018-05-22 13:43:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.33 Mbit/s
95th percentile per-packet one-way delay: 55.292 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 93.33 Mbit/s
95th percentile per-packet one-way delay: 55.292 ms
Loss rate: 0.42%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 93.36 Mbit/s) --- Flow 1 egress (mean 93.33 Mbit/s)
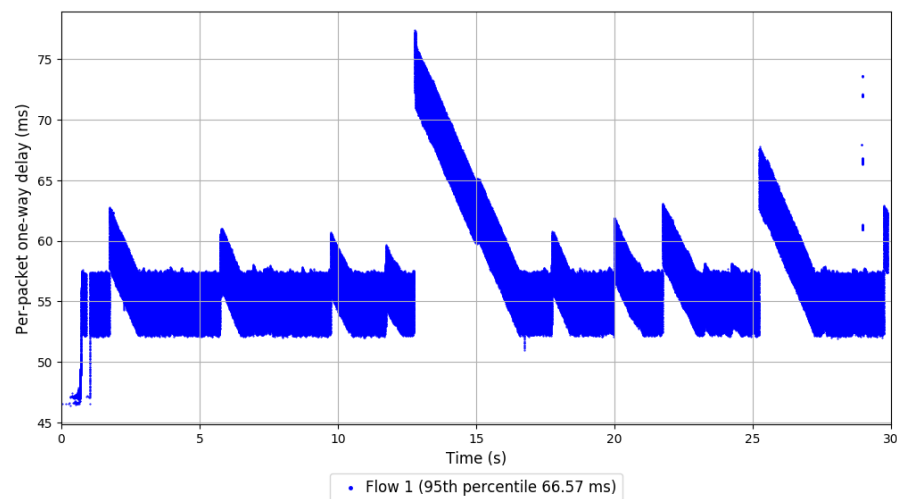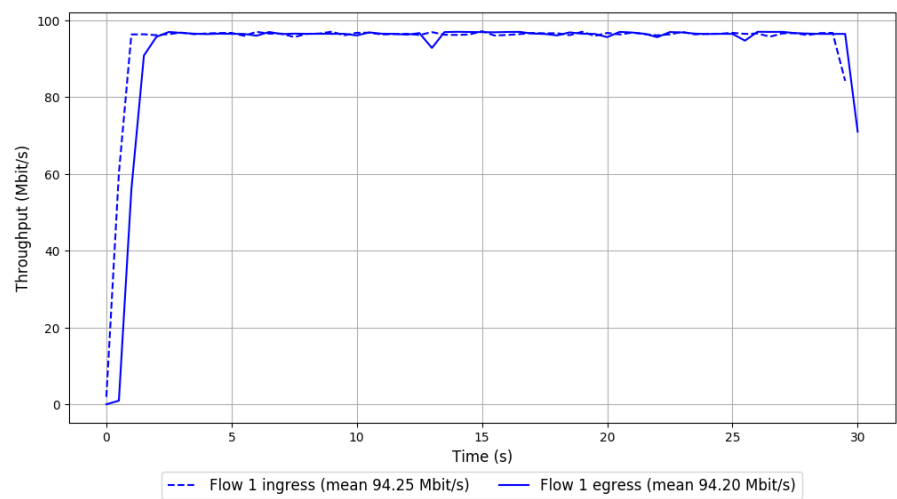

Flow 1 (95th percentile 55.29 ms)

```
Run 4: Statistics of FillP

Start at: 2018-05-22 11:09:46
End at: 2018-05-22 11:10:16
Local clock offset: 2.229 ms
Remote clock offset: -7.946 ms


# Below is generated by plot.py at 2018-05-22 13:43:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.20 Mbit/s
95th percentile per-packet one-way delay: 66.572 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 94.20 Mbit/s
95th percentile per-packet one-way delay: 66.572 ms
Loss rate: 0.43%
```

Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 94.25 Mbit/s) —— Flow 1 egress (mean 94.20 Mbit/s)

• Flow 1 (95th percentile 66.57 ms)

```
Run 5: Statistics of FillP

Start at: 2018-05-22 11:34:56
End at: 2018-05-22 11:35:26
Local clock offset: 1.091 ms
Remote clock offset: 8.519 ms


# Below is generated by plot.py at 2018-05-22 13:44:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 60.367 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 60.367 ms
Loss rate: 0.39%
```
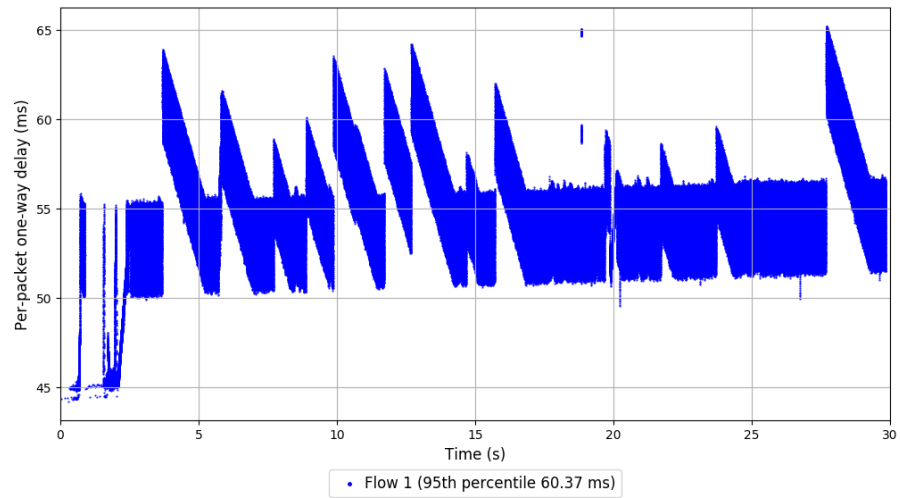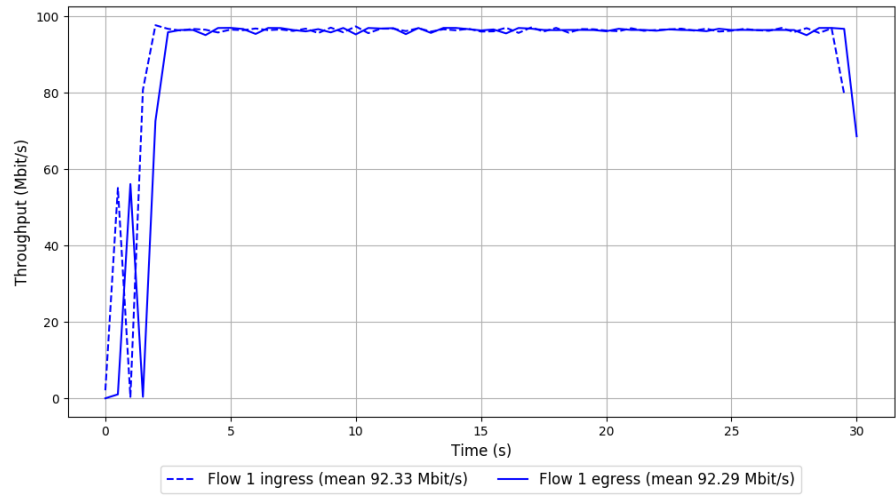
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 92.33 Mbit/s)   Flow 1 egress (mean 92.29 Mbit/s)
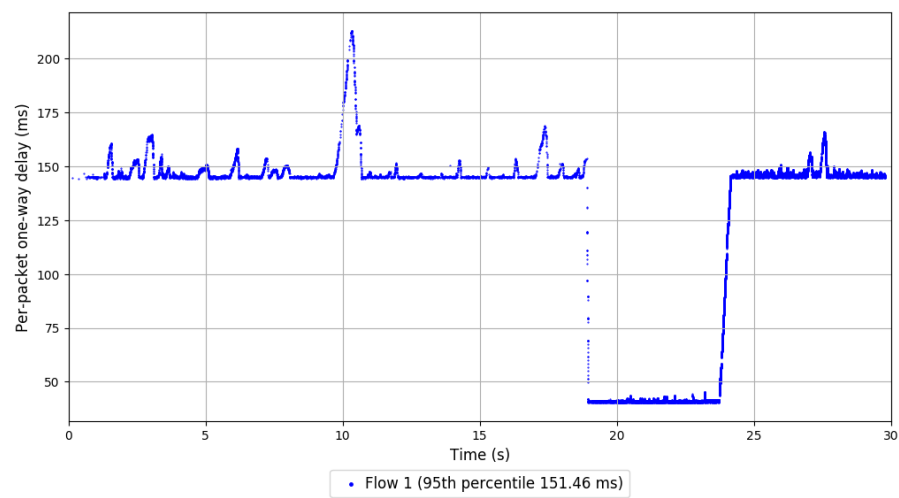
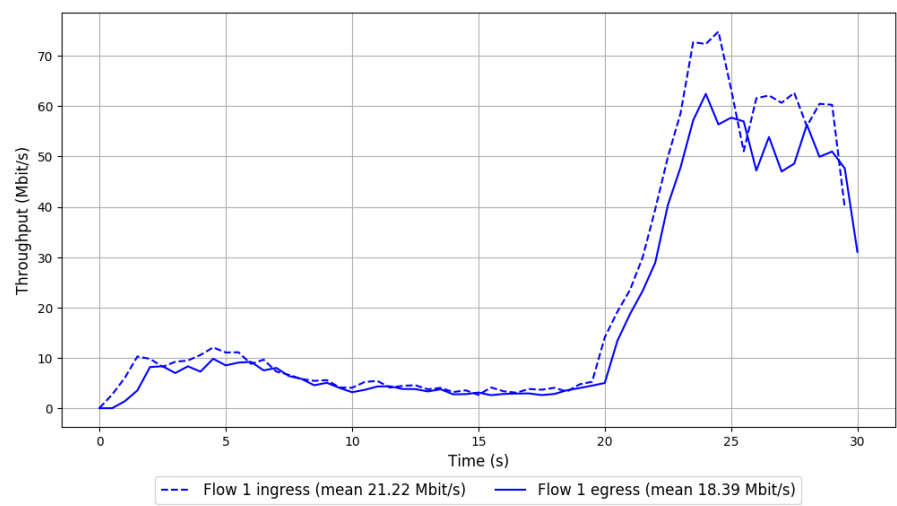

• Flow 1 (95th percentile 60.37 ms)

```
Run 6: Statistics of FillP

Start at: 2018-05-22 12:02:14
End at: 2018-05-22 12:02:44
Local clock offset: 0.813 ms
Remote clock offset: 47.004 ms


# Below is generated by plot.py at 2018-05-22 13:44:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.39 Mbit/s
95th percentile per-packet one-way delay: 151.460 ms
Loss rate: 13.93%
-- Flow 1:
Average throughput: 18.39 Mbit/s
95th percentile per-packet one-way delay: 151.460 ms
Loss rate: 13.93%
```
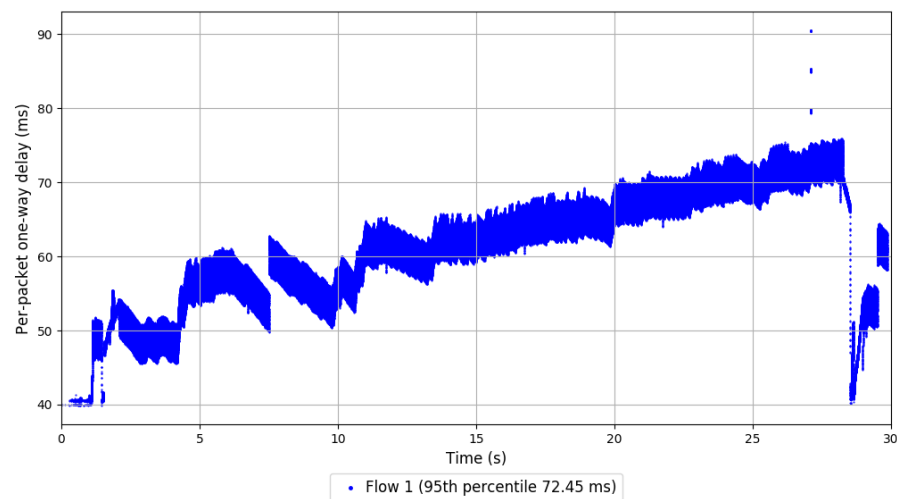
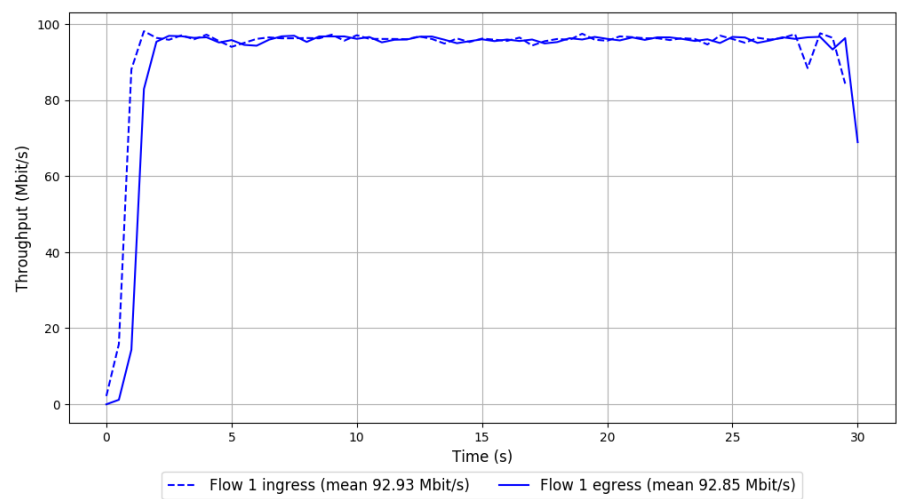Run 6: Report of FillP — Data Link

75

```
Run 7: Statistics of FillP

Start at: 2018-05-22 12:29:10
End at: 2018-05-22 12:29:40
Local clock offset: 3.278 ms
Remote clock offset: 63.999 ms

# Below is generated by plot.py at 2018-05-22 13:44:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 72.452 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 72.452 ms
Loss rate: 0.47%
```

Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 92.93 Mbit/s)   Flow 1 egress (mean 92.85 Mbit/s)
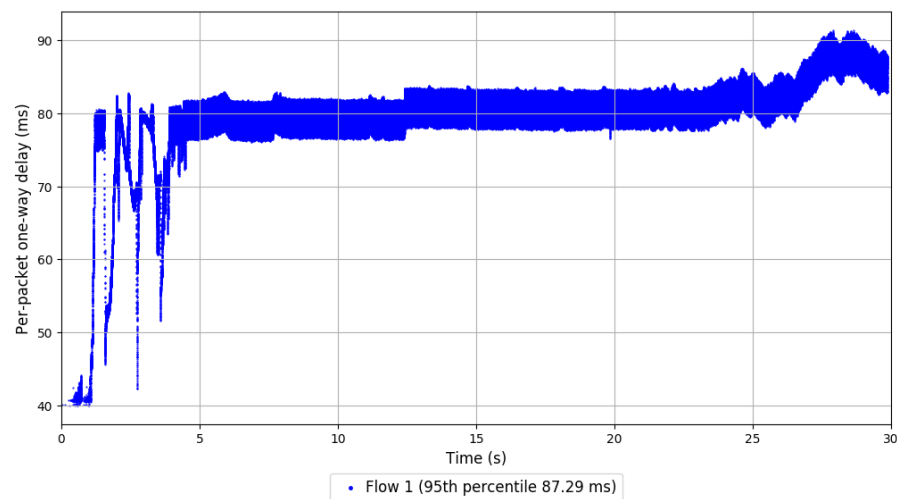

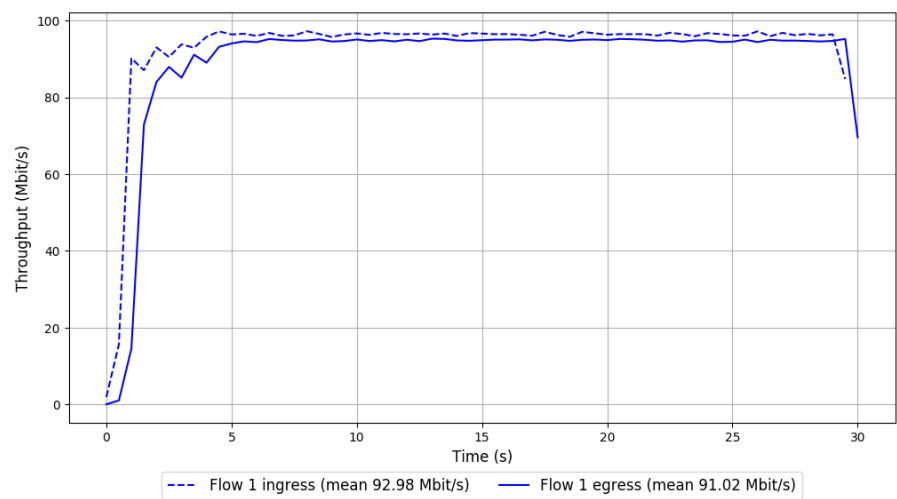Flow 1 (95th percentile 72.45 ms)

77

```
Run 8: Statistics of FillP

Start at: 2018-05-22 12:49:55
End at: 2018-05-22 12:50:25
Local clock offset: 4.554 ms
Remote clock offset: 18.621 ms


# Below is generated by plot.py at 2018-05-22 13:44:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.02 Mbit/s
95th percentile per-packet one-way delay: 87.290 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 91.02 Mbit/s
95th percentile per-packet one-way delay: 87.290 ms
Loss rate: 2.47%
```

Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 92.98 Mbit/s)   Flow 1 egress (mean 91.02 Mbit/s)
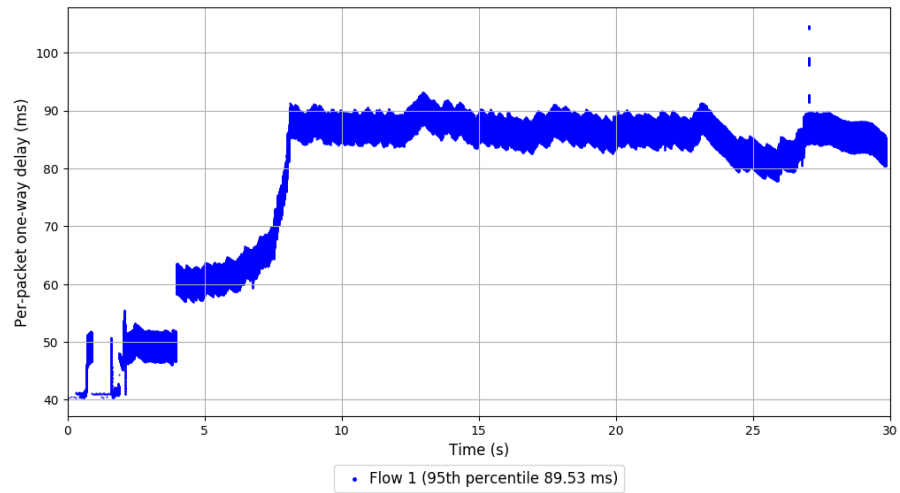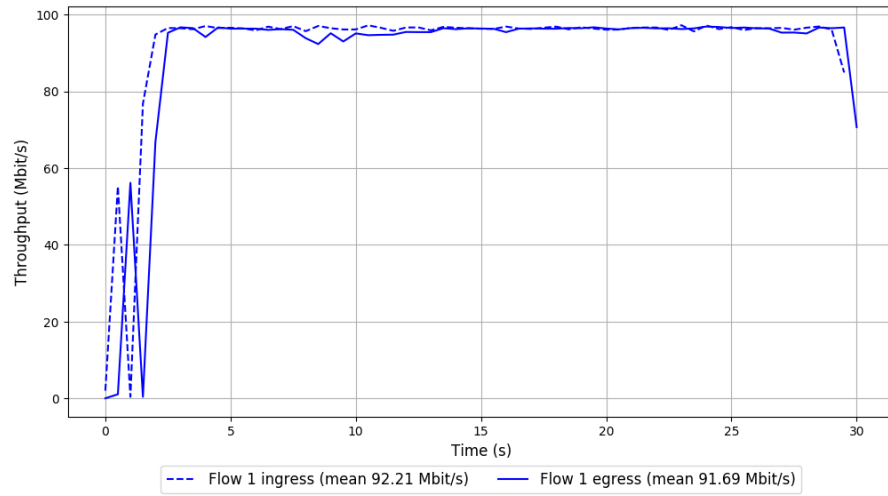

Flow 1 (95th percentile 87.29 ms)

```
Run 9: Statistics of FillP

Start at: 2018-05-22 13:10:42
End at: 2018-05-22 13:11:12
Local clock offset: 1.222 ms
Remote clock offset: -8.449 ms


# Below is generated by plot.py at 2018-05-22 13:44:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 89.533 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 89.533 ms
Loss rate: 0.95%
```

Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 92.21 Mbit/s) — — — Flow 1 egress (mean 91.69 Mbit/s)

• Flow 1 (95th percentile 89.53 ms)

```
Run 10: Statistics of FillP

Start at: 2018-05-22 13:33:24
End at: 2018-05-22 13:33:54
Local clock offset: 2.611 ms
Remote clock offset: -22.26 ms


# Below is generated by plot.py at 2018-05-22 13:44:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 58.912 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 58.912 ms
Loss rate: 0.45%
```
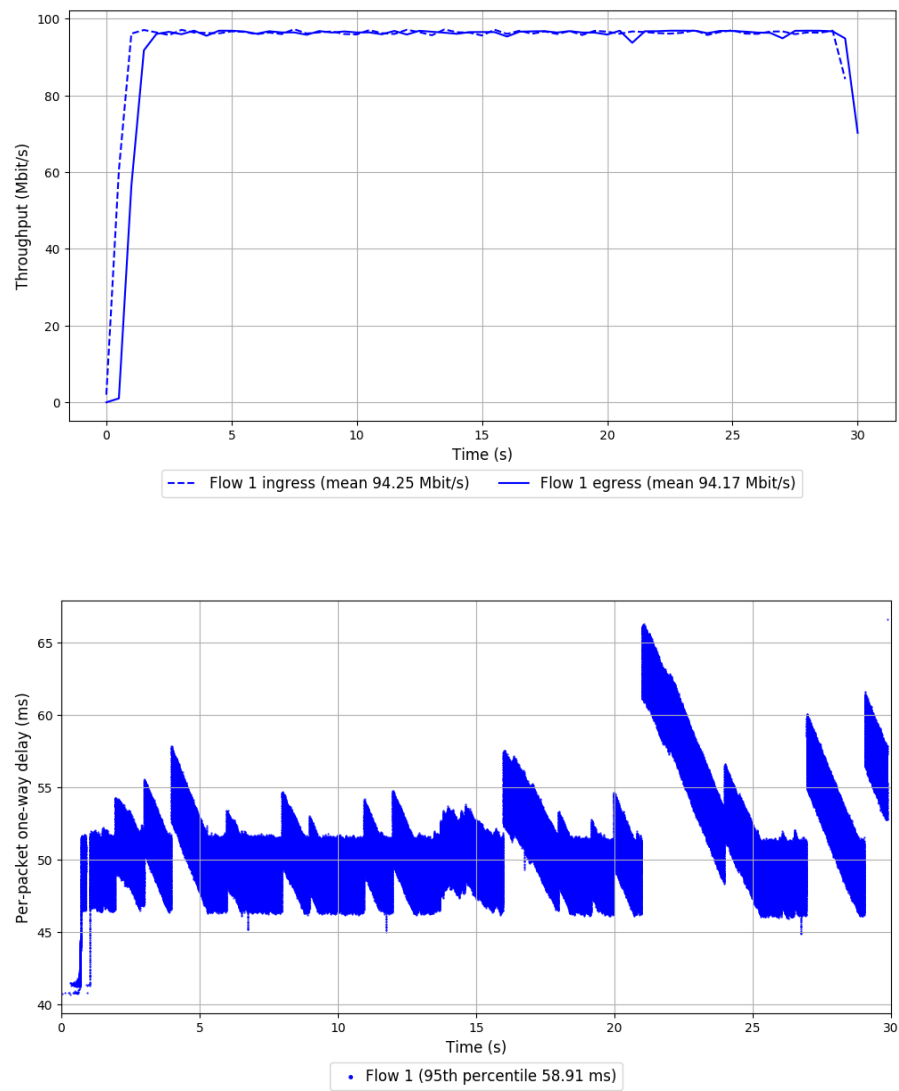
Run 10: Report of FillP — Data Link

Flow 1 ingress (mean 94.25 Mbit/s)   Flow 1 egress (mean 94.17 Mbit/s)

Flow 1 (95th percentile 58.91 ms)

```
Run 1: Statistics of Indigo

Start at: 2018-05-22 10:08:53
End at: 2018-05-22 10:09:23
Local clock offset: 1.849 ms
Remote clock offset: 13.879 ms


# Below is generated by plot.py at 2018-05-22 13:44:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 52.814 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 52.814 ms
Loss rate: 0.43%
```
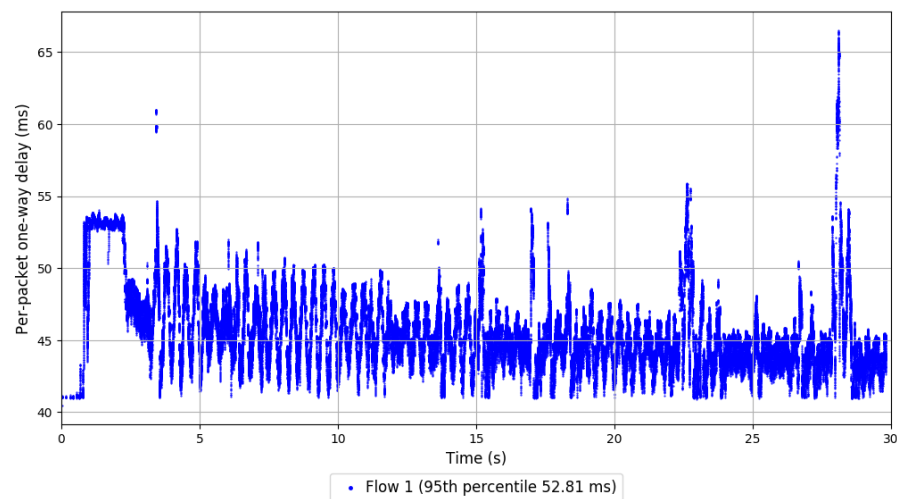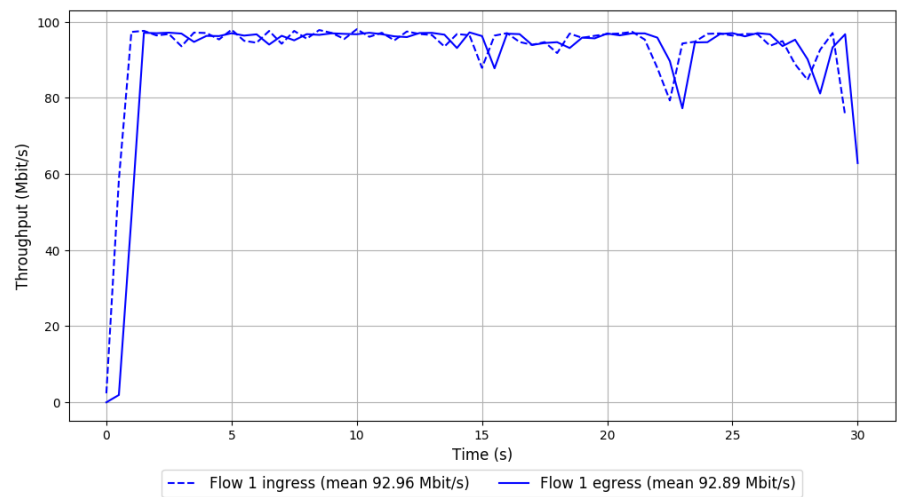
Run 1: Report of Indigo — Data Link

Flow 1 ingress (mean 92.96 Mbit/s) ----- Flow 1 egress (mean 92.89 Mbit/s)

• Flow 1 (95th percentile 52.81 ms)

```
Run 2: Statistics of Indigo

Start at: 2018-05-22 10:29:39
End at: 2018-05-22 10:30:09
Local clock offset: 2.181 ms
Remote clock offset: 4.66 ms


# Below is generated by plot.py at 2018-05-22 13:44:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.89 Mbit/s
95th percentile per-packet one-way delay: 53.054 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 93.89 Mbit/s
95th percentile per-packet one-way delay: 53.054 ms
Loss rate: 0.41%
```
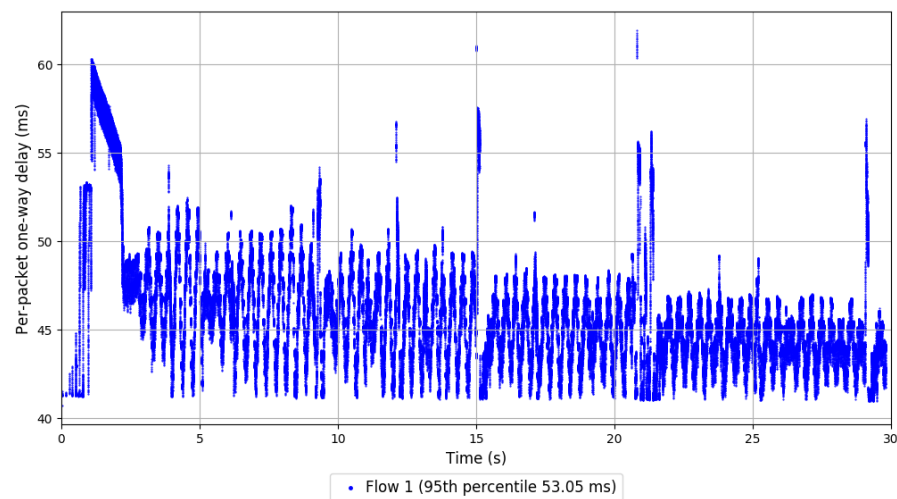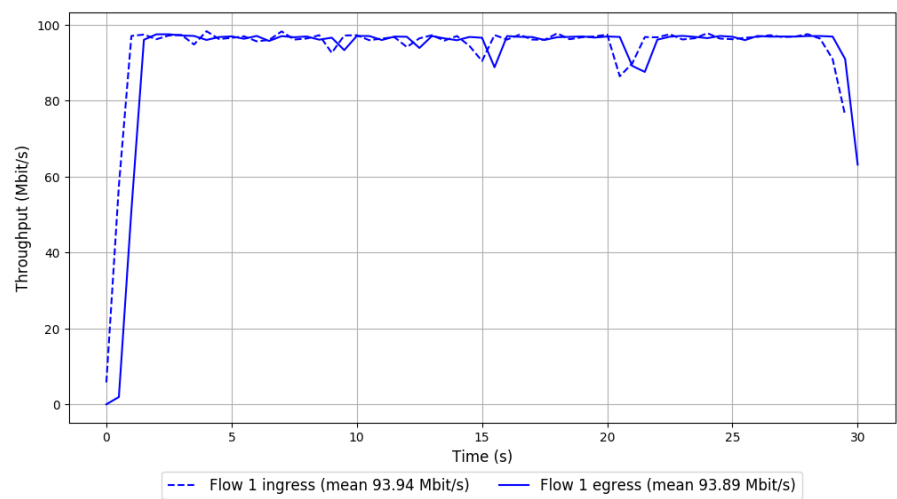
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 93.94 Mbit/s)   Flow 1 egress (mean 93.89 Mbit/s)

Flow 1 (95th percentile 53.05 ms)

```
Run 3: Statistics of Indigo

Start at: 2018-05-22 10:50:23
End at: 2018-05-22 10:50:53
Local clock offset: -1.66 ms
Remote clock offset: -6.344 ms


# Below is generated by plot.py at 2018-05-22 13:45:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.66 Mbit/s
95th percentile per-packet one-way delay: 59.241 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 94.66 Mbit/s
95th percentile per-packet one-way delay: 59.241 ms
Loss rate: 2.80%
```
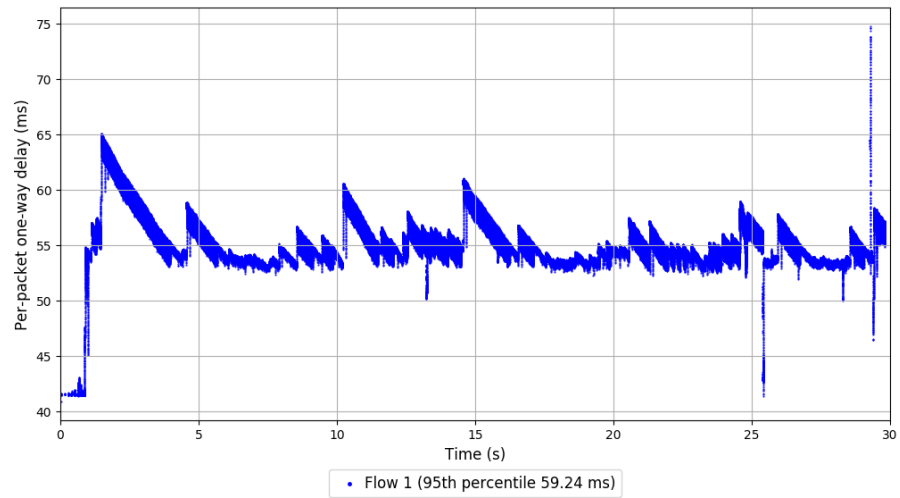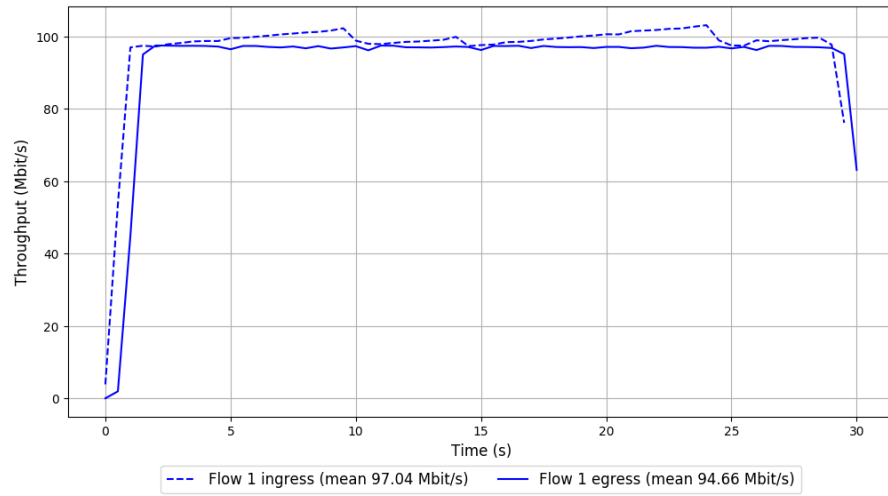
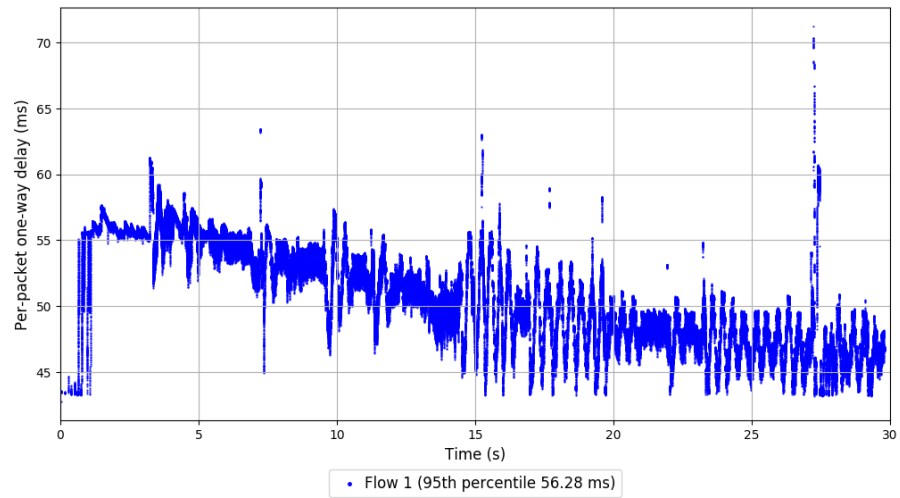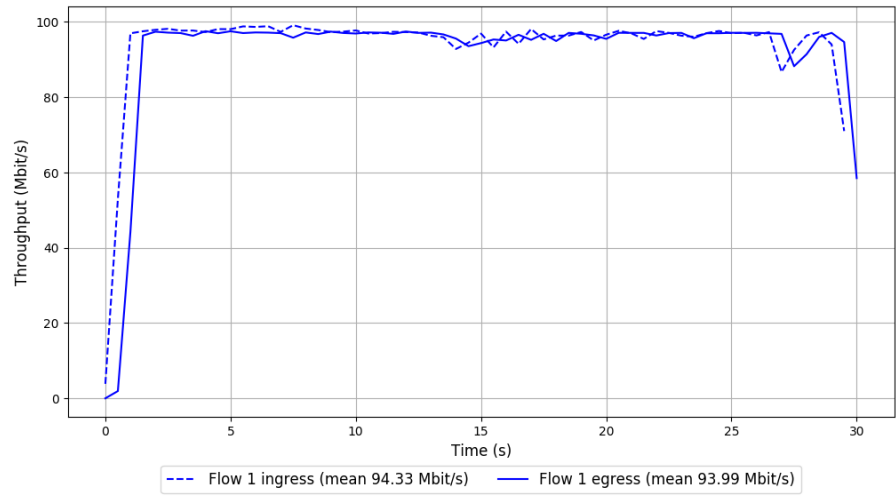Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-05-22 11:11:05
End at: 2018-05-22 11:11:35
Local clock offset: 2.335 ms
Remote clock offset: -5.051 ms


# Below is generated by plot.py at 2018-05-22 13:45:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.99 Mbit/s
95th percentile per-packet one-way delay: 56.281 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 93.99 Mbit/s
95th percentile per-packet one-way delay: 56.281 ms
Loss rate: 0.71%
```

Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 94.33 Mbit/s)   —— Flow 1 egress (mean 93.99 Mbit/s)

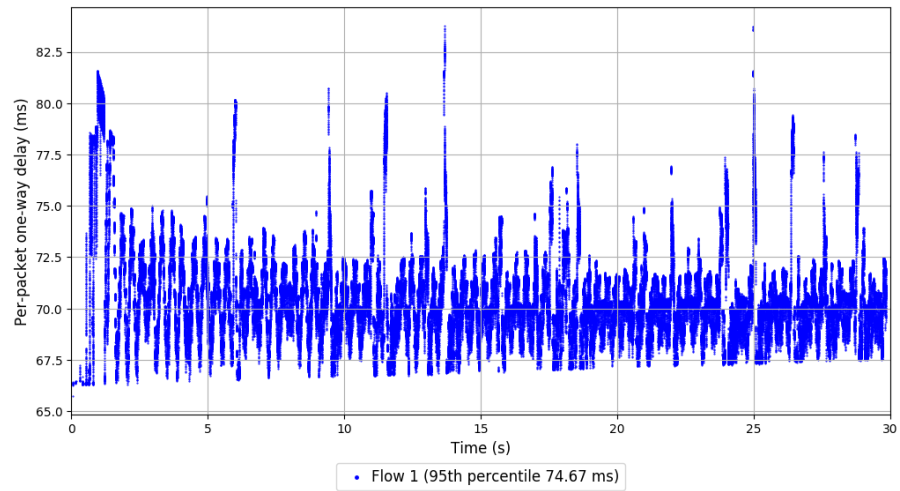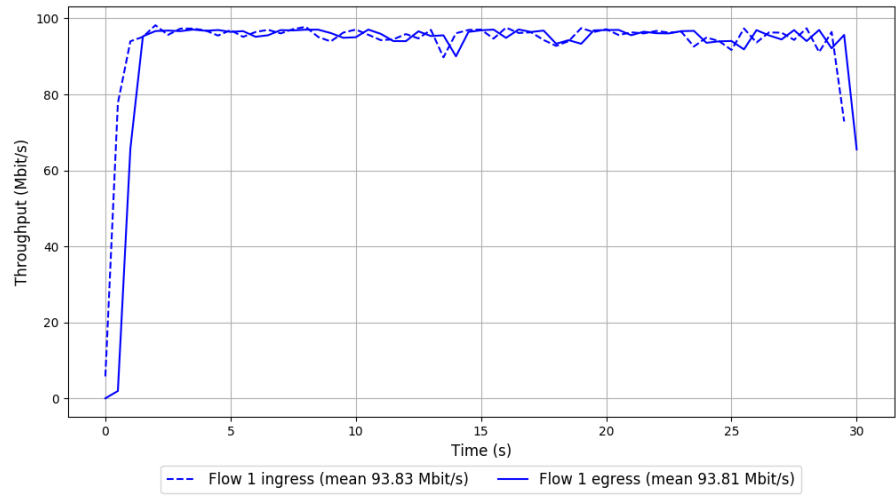• Flow 1 (95th percentile 56.28 ms)

```
Run 5: Statistics of Indigo

Start at: 2018-05-22 11:36:15
End at: 2018-05-22 11:36:45
Local clock offset: 0.886 ms
Remote clock offset: -9.405 ms

# Below is generated by plot.py at 2018-05-22 13:45:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.81 Mbit/s
95th percentile per-packet one-way delay: 74.666 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 93.81 Mbit/s
95th percentile per-packet one-way delay: 74.666 ms
Loss rate: 0.37%
```

Run 5: Report of Indigo — Data Link

Flow 1 ingress (mean 93.83 Mbit/s) ----- Flow 1 egress (mean 93.81 Mbit/s)

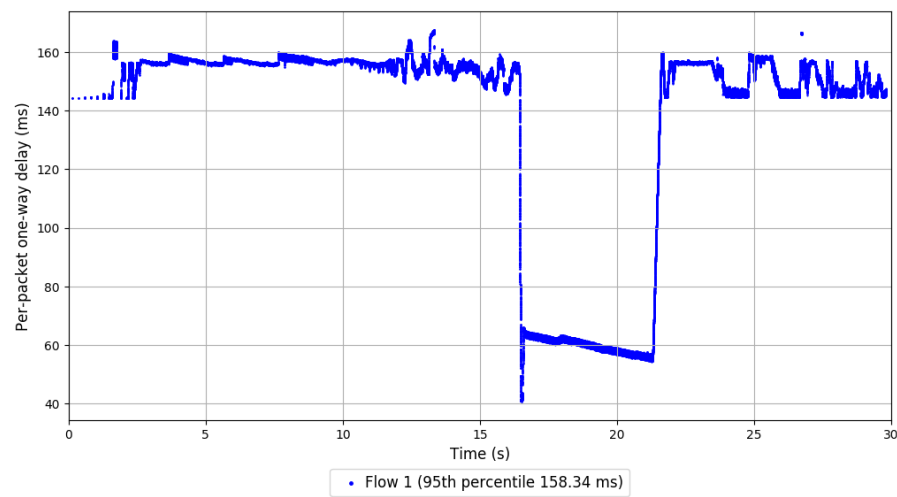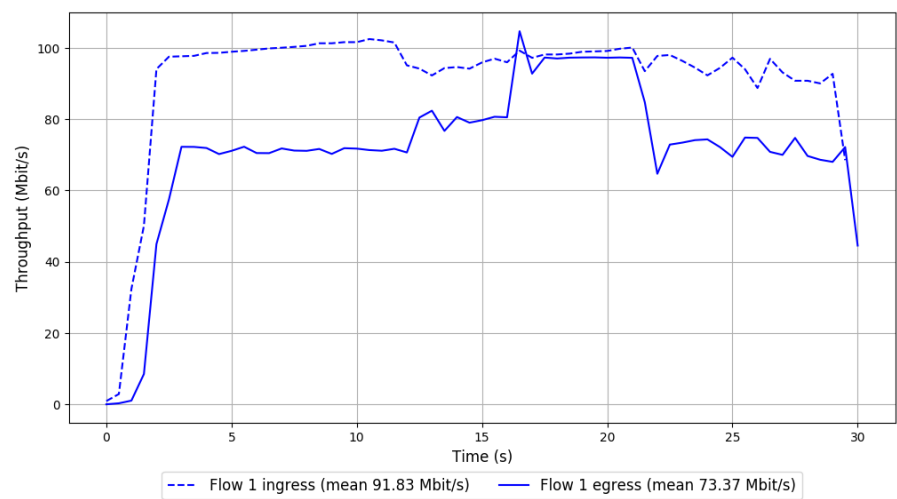Flow 1 (95th percentile 74.67 ms)

```
Run 6: Statistics of Indigo

Start at: 2018-05-22 12:04:32
End at: 2018-05-22 12:05:02
Local clock offset: 1.23 ms
Remote clock offset: 48.951 ms


# Below is generated by plot.py at 2018-05-22 13:45:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.37 Mbit/s
95th percentile per-packet one-way delay: 158.340 ms
Loss rate: 20.66%
-- Flow 1:
Average throughput: 73.37 Mbit/s
95th percentile per-packet one-way delay: 158.340 ms
Loss rate: 20.66%
```
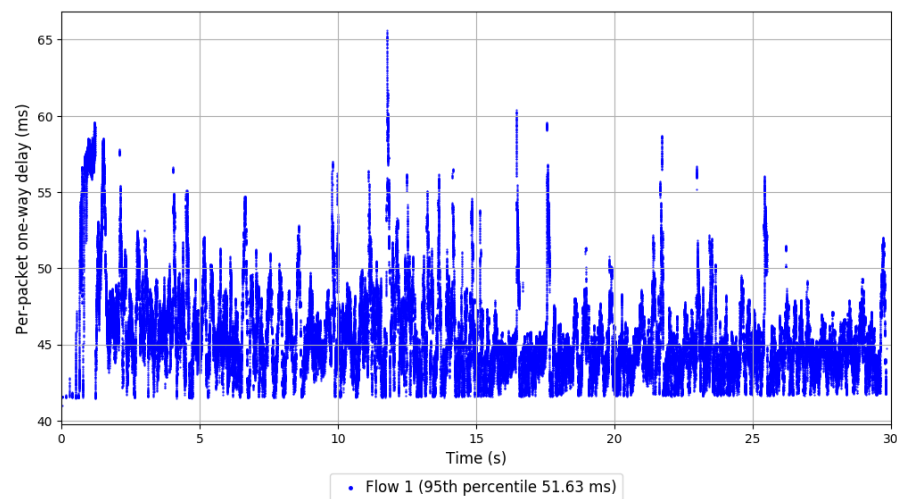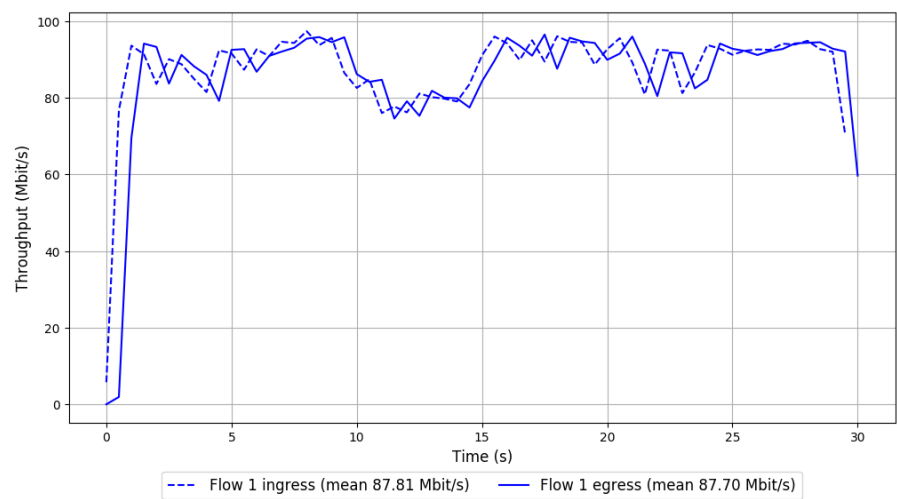
Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2018-05-22 12:30:29
End at: 2018-05-22 12:30:59
Local clock offset: 3.555 ms
Remote clock offset: 64.783 ms


# Below is generated by plot.py at 2018-05-22 13:45:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.70 Mbit/s
95th percentile per-packet one-way delay: 51.634 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 87.70 Mbit/s
95th percentile per-packet one-way delay: 51.634 ms
Loss rate: 0.47%
```

Run 7: Report of Indigo — Data Link

Flow 1 ingress (mean 87.81 Mbit/s) Flow 1 egress (mean 87.70 Mbit/s)

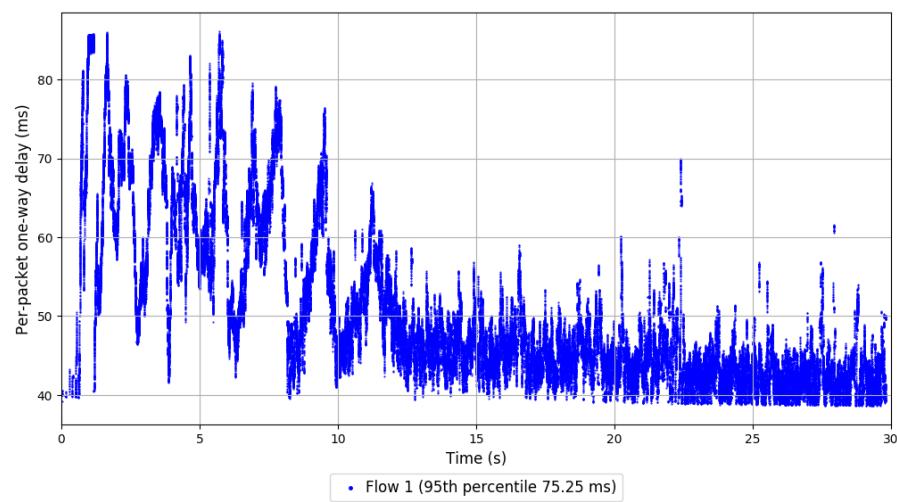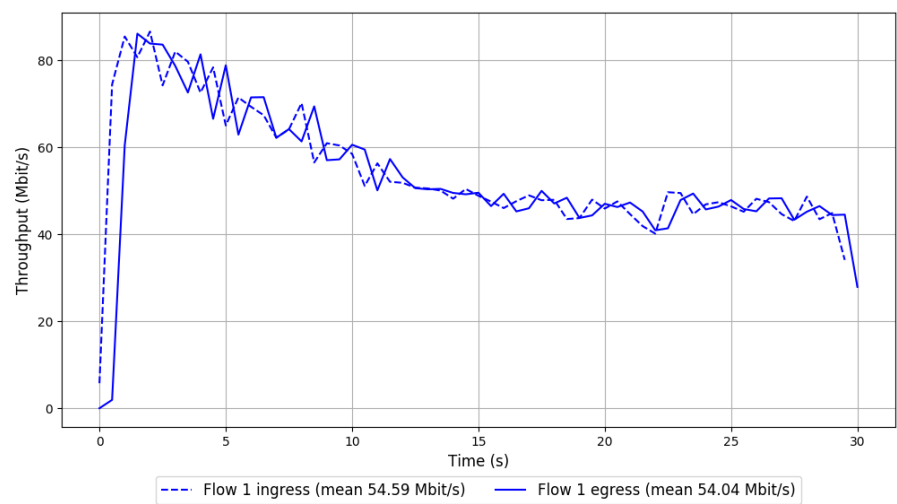• Flow 1 (95th percentile 51.63 ms)

```
Run 8: Statistics of Indigo

Start at: 2018-05-22 12:51:14
End at: 2018-05-22 12:51:44
Local clock offset: 4.738 ms
Remote clock offset: 15.632 ms


# Below is generated by plot.py at 2018-05-22 13:45:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.04 Mbit/s
95th percentile per-packet one-way delay: 75.255 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 54.04 Mbit/s
95th percentile per-packet one-way delay: 75.255 ms
Loss rate: 1.36%
```

Run 8: Report of Indigo — Data Link

Flow 1 ingress (mean 54.59 Mbit/s)   Flow 1 egress (mean 54.04 Mbit/s)

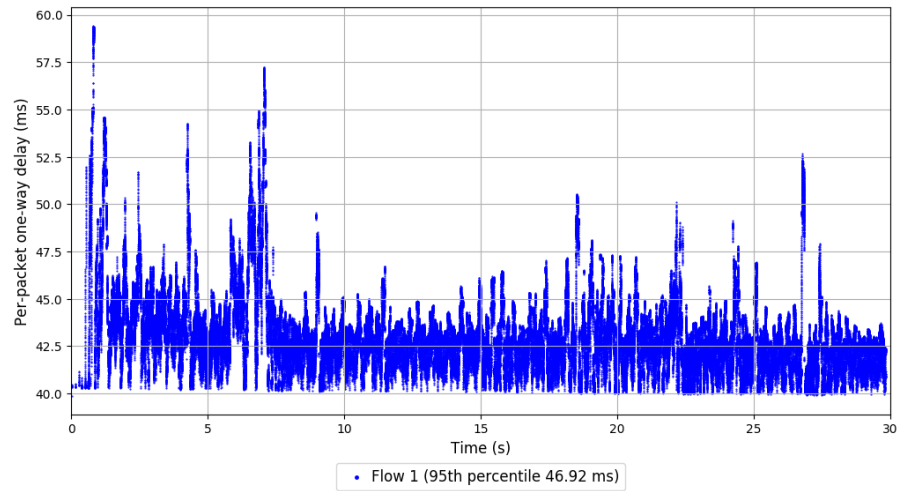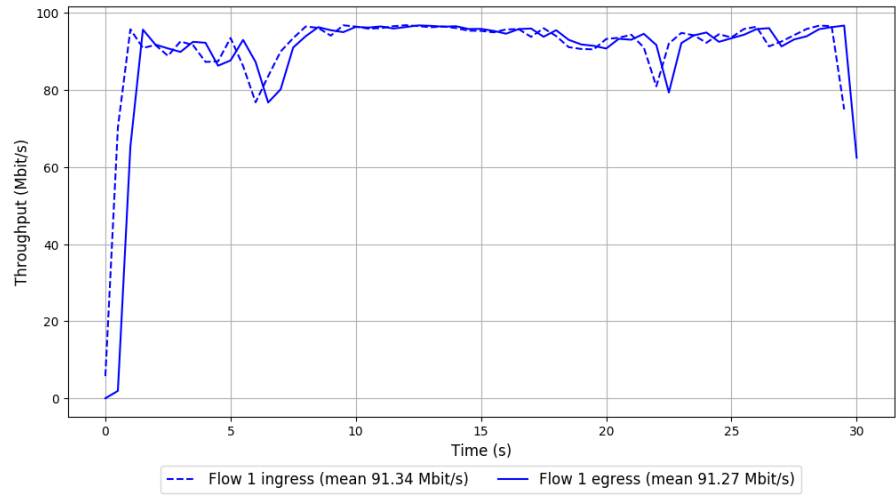• Flow 1 (95th percentile 75.25 ms)

```
Run 9: Statistics of Indigo

Start at: 2018-05-22 13:12:01
End at: 2018-05-22 13:12:31
Local clock offset: 1.247 ms
Remote clock offset: -9.387 ms

# Below is generated by plot.py at 2018-05-22 13:46:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.27 Mbit/s
95th percentile per-packet one-way delay: 46.918 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 91.27 Mbit/s
95th percentile per-packet one-way delay: 46.918 ms
Loss rate: 0.42%
```
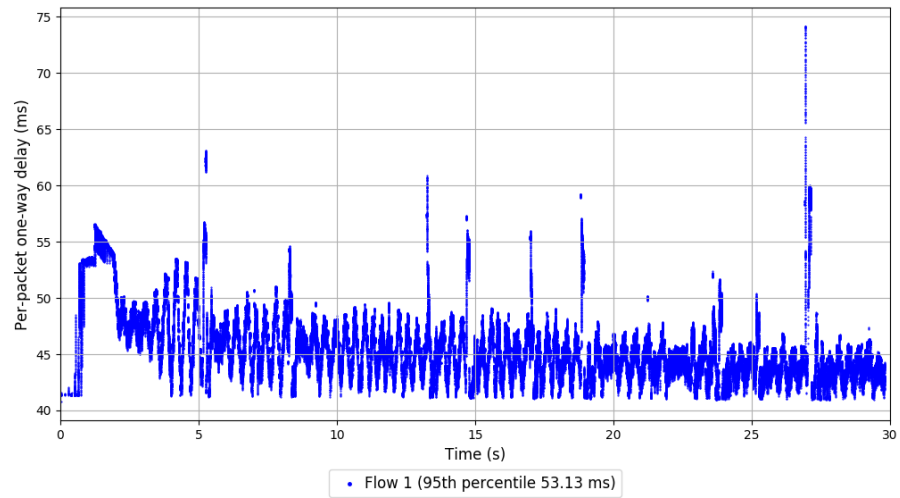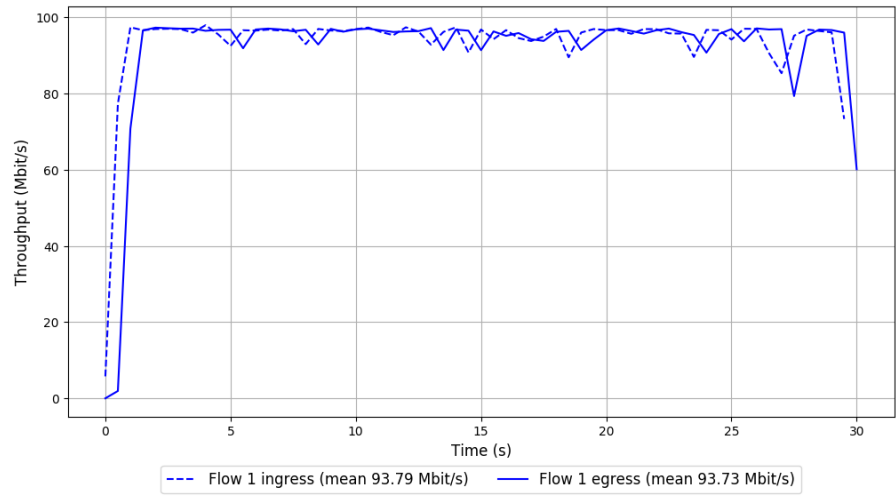
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-05-22 13:34:43
End at: 2018-05-22 13:35:13
Local clock offset: 2.859 ms
Remote clock offset: -23.014 ms


# Below is generated by plot.py at 2018-05-22 13:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.73 Mbit/s
95th percentile per-packet one-way delay: 53.129 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 93.73 Mbit/s
95th percentile per-packet one-way delay: 53.129 ms
Loss rate: 0.42%
```

Run 10: Report of Indigo — Data Link

Flow 1 ingress (mean 93.79 Mbit/s)   Flow 1 egress (mean 93.73 Mbit/s)

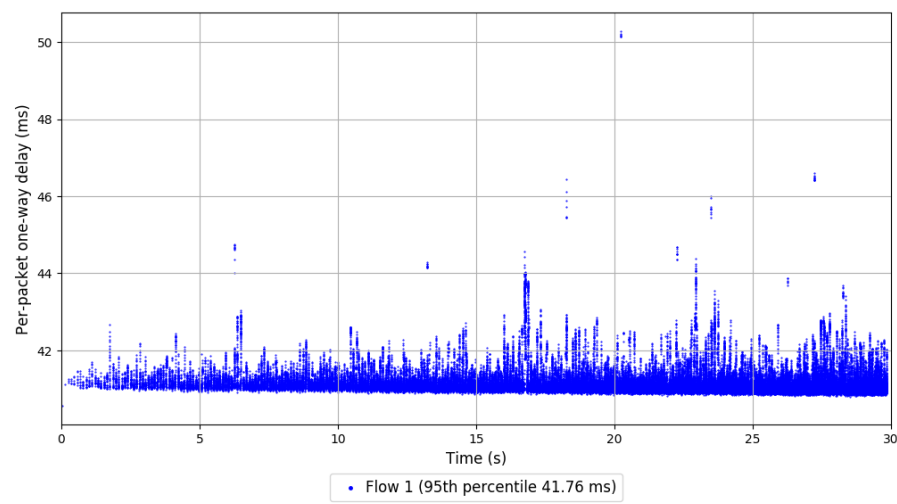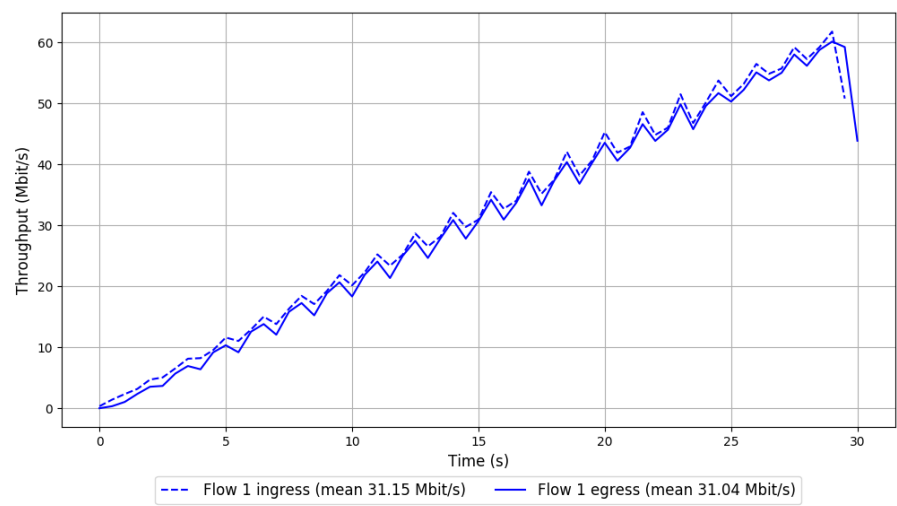• Flow 1 (95th percentile 53.13 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2018-05-22 09:57:10
End at: 2018-05-22 09:57:40
Local clock offset: -2.213 ms
Remote clock offset: 11.401 ms

# Below is generated by plot.py at 2018-05-22 13:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 41.761 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 41.761 ms
Loss rate: 0.71%
```

Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 31.15 Mbit/s)   Flow 1 egress (mean 31.04 Mbit/s)

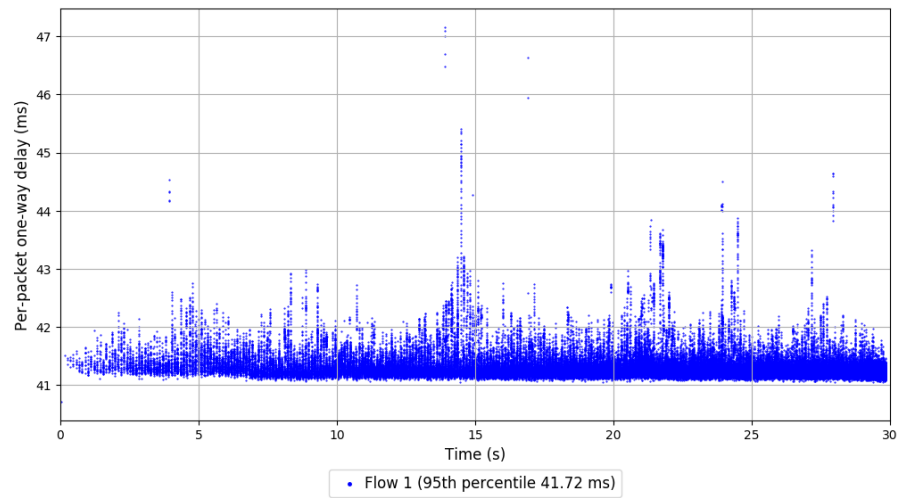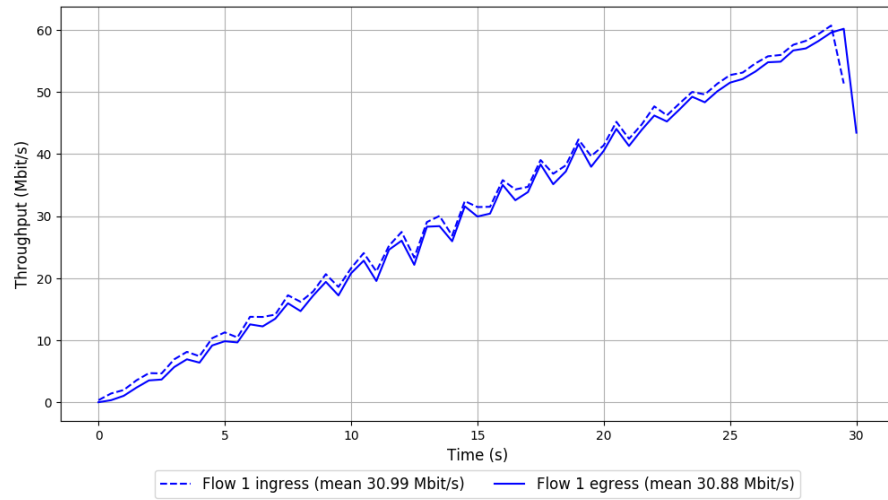Flow 1 (95th percentile 41.76 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2018-05-22 10:17:56
End at: 2018-05-22 10:18:26
Local clock offset: 3.18 ms
Remote clock offset: 14.945 ms


# Below is generated by plot.py at 2018-05-22 13:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.88 Mbit/s
95th percentile per-packet one-way delay: 41.718 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 30.88 Mbit/s
95th percentile per-packet one-way delay: 41.718 ms
Loss rate: 0.71%
```

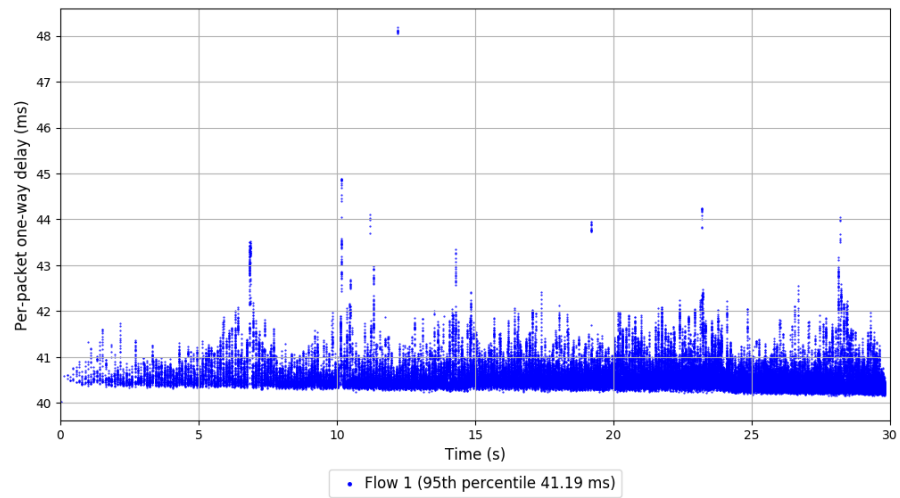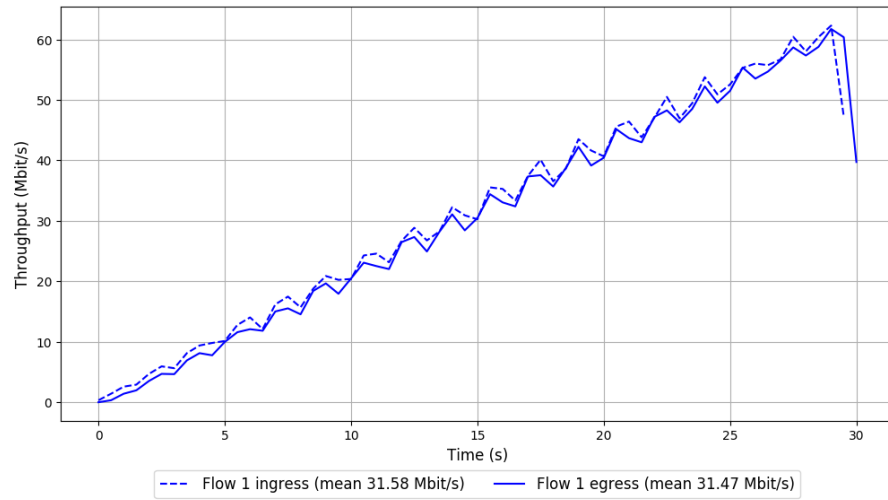Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-05-22 10:38:41
End at: 2018-05-22 10:39:11
Local clock offset: -0.386 ms
Remote clock offset: -1.785 ms


# Below is generated by plot.py at 2018-05-22 13:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.47 Mbit/s
95th percentile per-packet one-way delay: 41.191 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 31.47 Mbit/s
95th percentile per-packet one-way delay: 41.191 ms
Loss rate: 0.71%
```

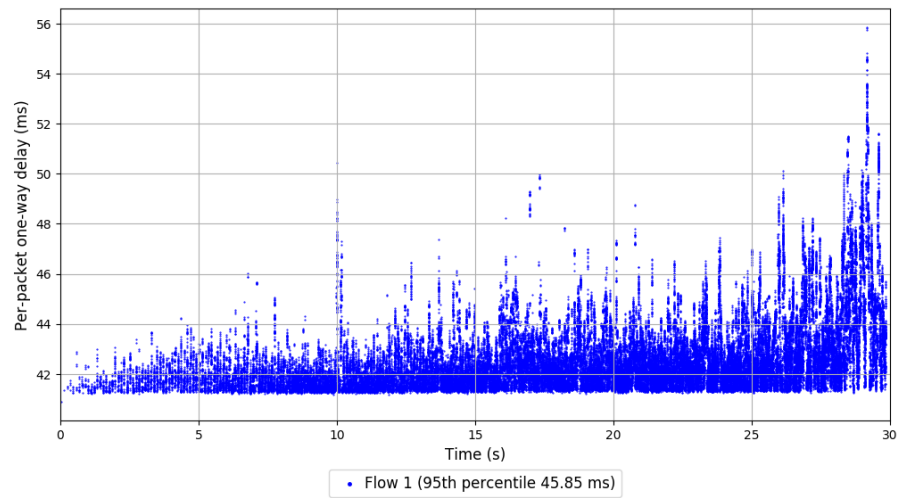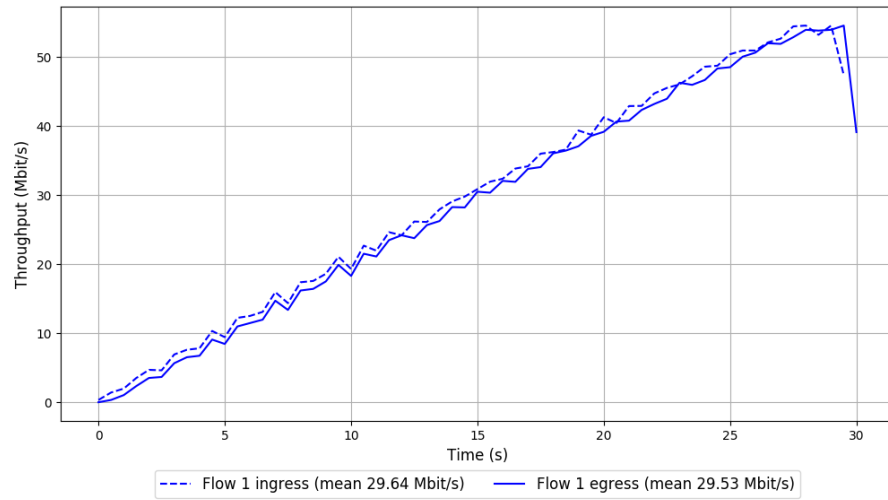# Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-05-22 10:59:27
End at: 2018-05-22 10:59:57
Local clock offset: -0.644 ms
Remote clock offset: -5.864 ms


# Below is generated by plot.py at 2018-05-22 13:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.53 Mbit/s
95th percentile per-packet one-way delay: 45.852 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 29.53 Mbit/s
95th percentile per-packet one-way delay: 45.852 ms
Loss rate: 0.72%
```

Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 29.64 Mbit/s) ----- Flow 1 egress (mean 29.53 Mbit/s)
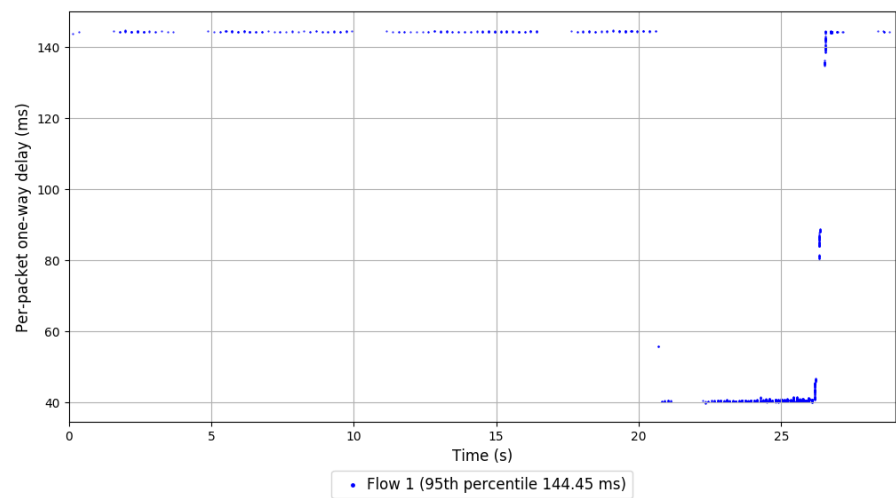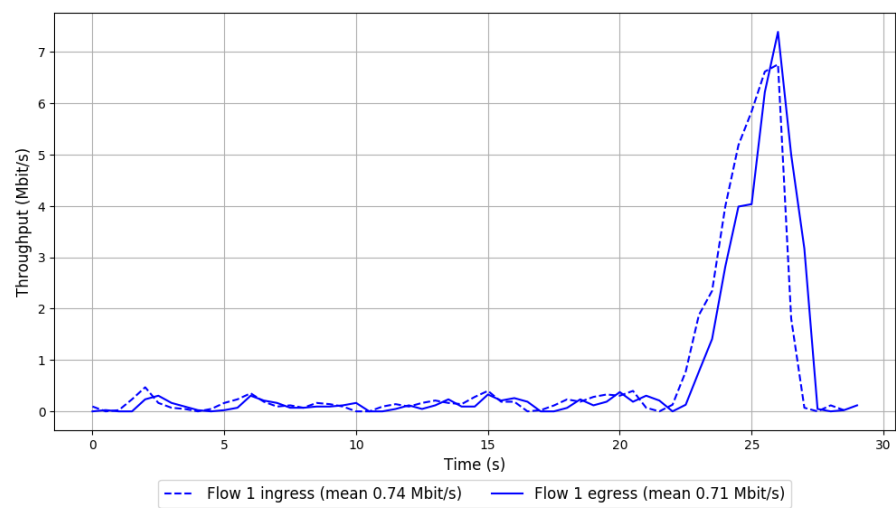

Flow 1 (95th percentile 45.85 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2018-05-22 11:21:38
End at: 2018-05-22 11:22:08
Local clock offset: 3.184 ms
Remote clock offset: -2.383 ms


# Below is generated by plot.py at 2018-05-22 13:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 144.446 ms
Loss rate: 3.66%
-- Flow 1:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 144.446 ms
Loss rate: 3.66%
```

Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.74 Mbit/s)   Flow 1 egress (mean 0.71 Mbit/s)
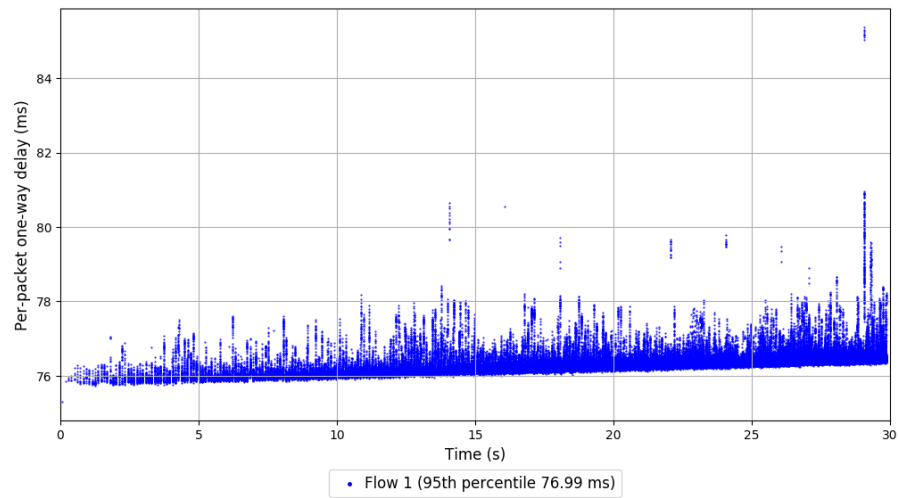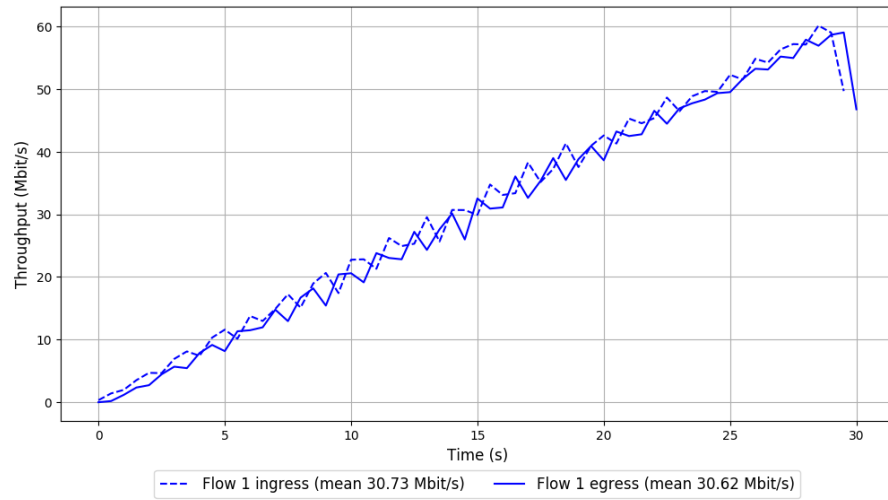

Flow 1 (95th percentile 144.45 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2018-05-22 11:45:18
End at: 2018-05-22 11:45:48
Local clock offset: -0.197 ms
Remote clock offset: -1.818 ms


# Below is generated by plot.py at 2018-05-22 13:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.62 Mbit/s
95th percentile per-packet one-way delay: 76.990 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 30.62 Mbit/s
95th percentile per-packet one-way delay: 76.990 ms
Loss rate: 0.71%
```

Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 30.73 Mbit/s) --- Flow 1 egress (mean 30.62 Mbit/s)

• Flow 1 (95th percentile 76.99 ms)
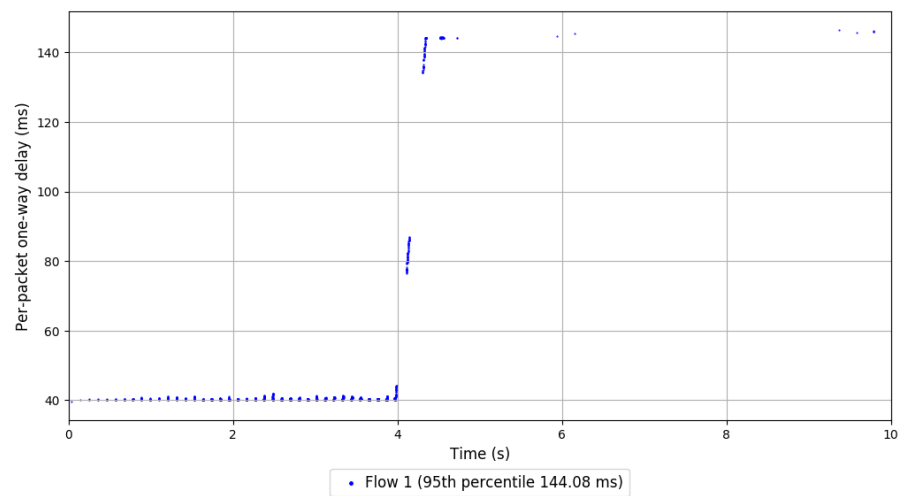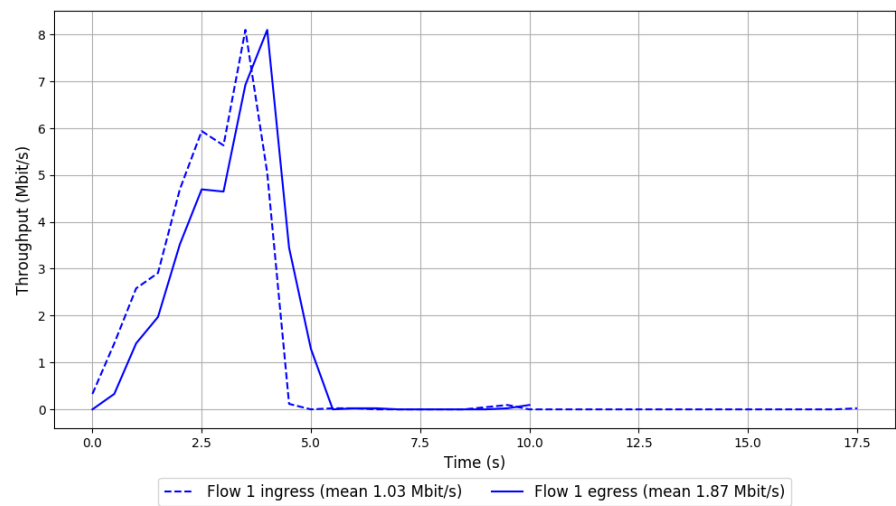
```
Run 7: Statistics of LEDBAT

Start at: 2018-05-22 12:18:17
End at: 2018-05-22 12:18:47
Local clock offset: 2.61 ms
Remote clock offset: 57.869 ms
```

Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 1.03 Mbit/s)   Flow 1 egress (mean 1.87 Mbit/s)
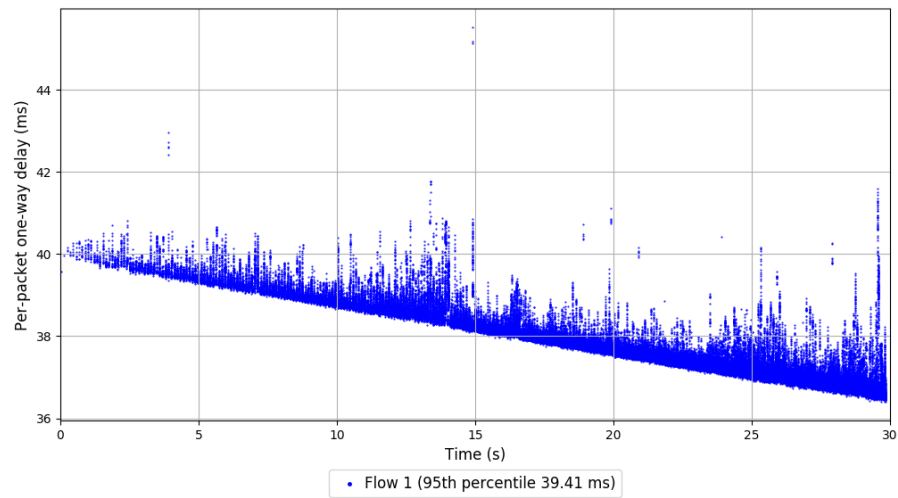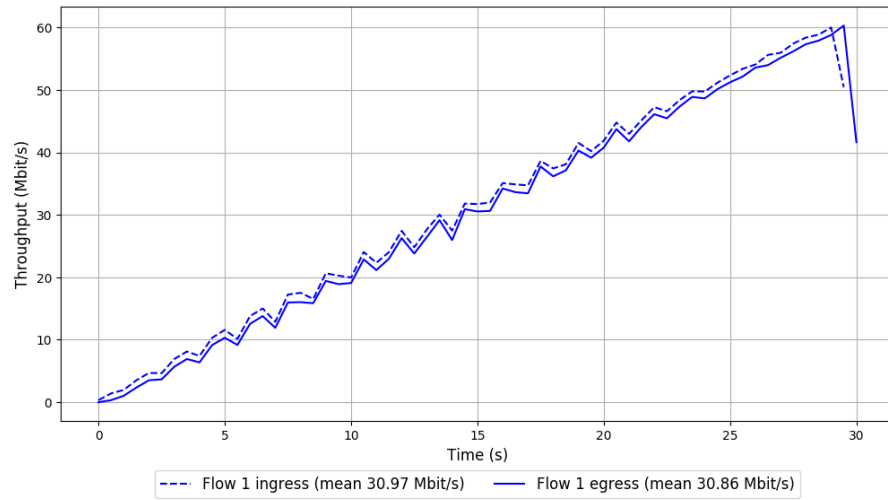

Flow 1 (95th percentile 144.08 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-05-22 12:39:32
End at: 2018-05-22 12:40:02
Local clock offset: 4.265 ms
Remote clock offset: 64.657 ms


# Below is generated by plot.py at 2018-05-22 13:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.86 Mbit/s
95th percentile per-packet one-way delay: 39.407 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 30.86 Mbit/s
95th percentile per-packet one-way delay: 39.407 ms
Loss rate: 0.71%
```

Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 30.97 Mbit/s)　　Flow 1 egress (mean 30.86 Mbit/s)

Flow 1 (95th percentile 39.41 ms)

```
Run 9: Statistics of LEDBAT

Start at: 2018-05-22 13:00:18
End at: 2018-05-22 13:00:48
Local clock offset: 3.602 ms
Remote clock offset: 0.653 ms


# Below is generated by plot.py at 2018-05-22 13:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.57 Mbit/s
95th percentile per-packet one-way delay: 42.493 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 30.57 Mbit/s
95th percentile per-packet one-way delay: 42.493 ms
Loss rate: 0.72%
```
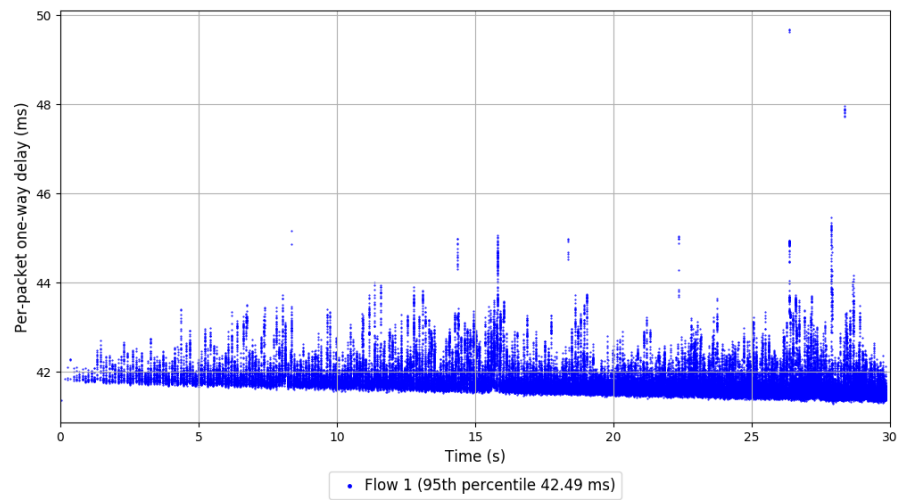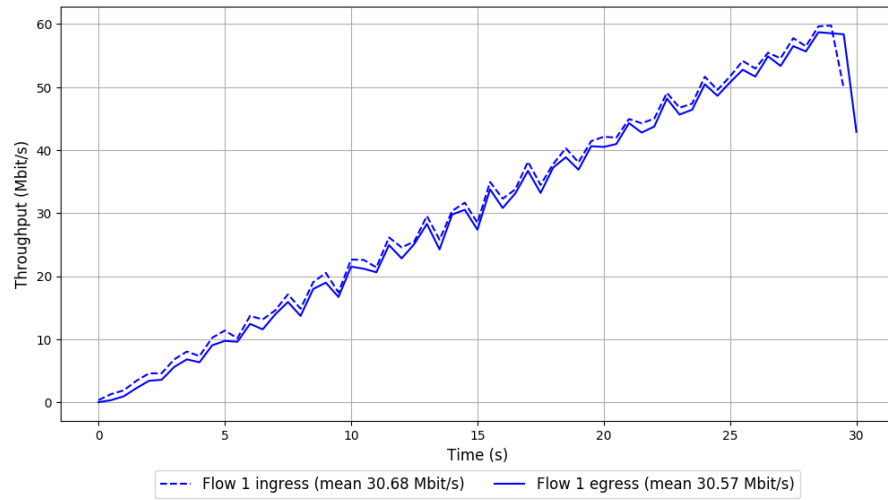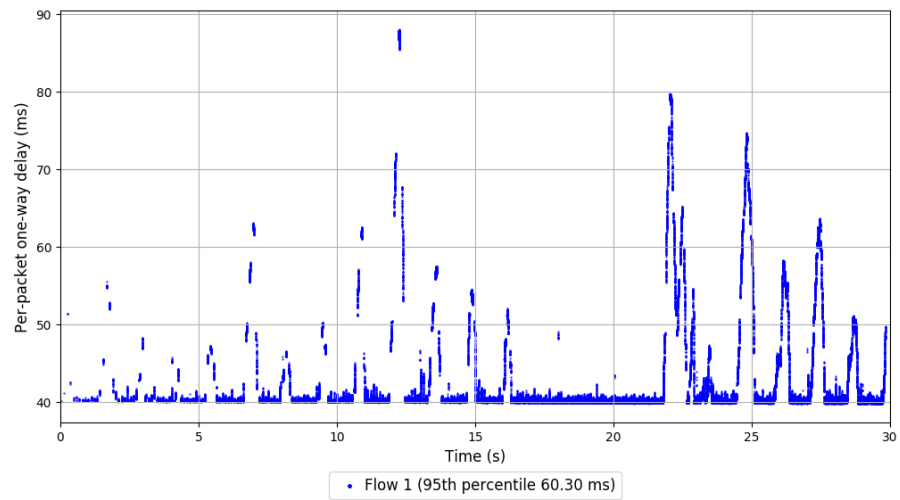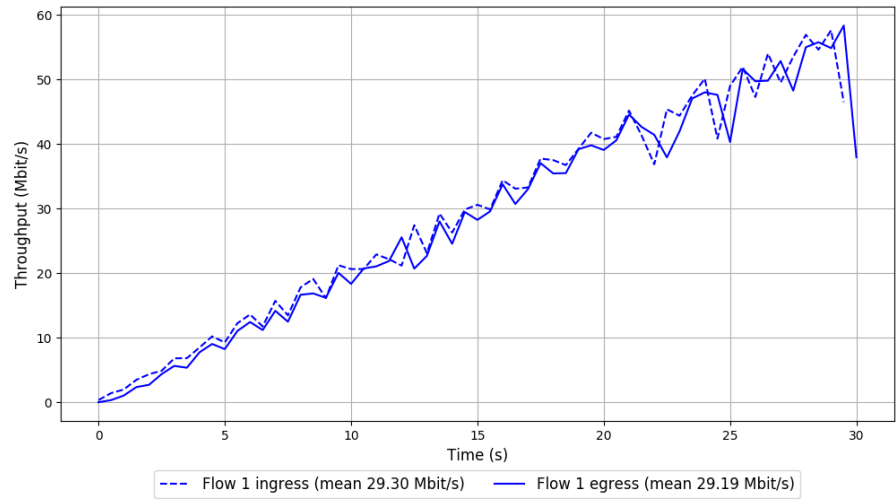
Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2018-05-22 13:21:04
End at: 2018-05-22 13:21:34
Local clock offset: 0.453 ms
Remote clock offset: -15.136 ms


# Below is generated by plot.py at 2018-05-22 13:46:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.19 Mbit/s
95th percentile per-packet one-way delay: 60.298 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 29.19 Mbit/s
95th percentile per-packet one-way delay: 60.298 ms
Loss rate: 0.72%
```

Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-05-22 10:01:04
End at: 2018-05-22 10:01:34
Local clock offset: -0.237 ms
Remote clock offset: 12.47 ms

# Below is generated by plot.py at 2018-05-22 13:46:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.20 Mbit/s
95th percentile per-packet one-way delay: 48.106 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 86.20 Mbit/s
95th percentile per-packet one-way delay: 48.106 ms
Loss rate: 0.43%
```
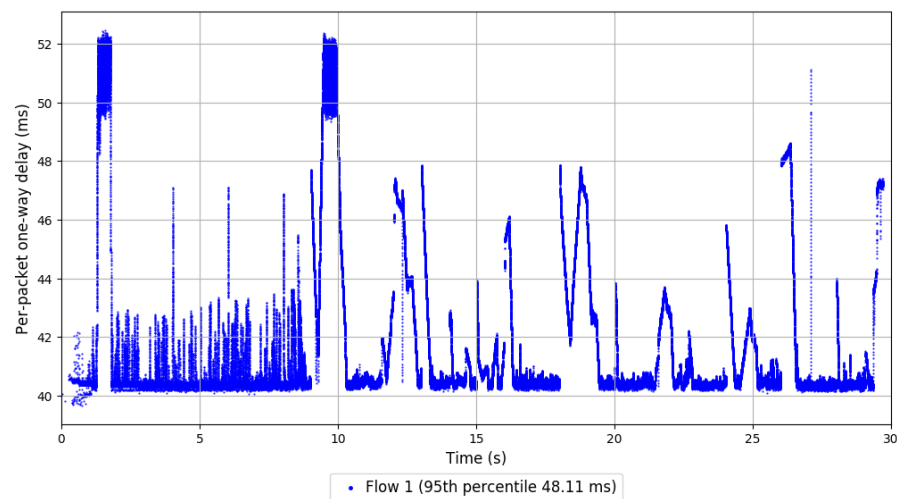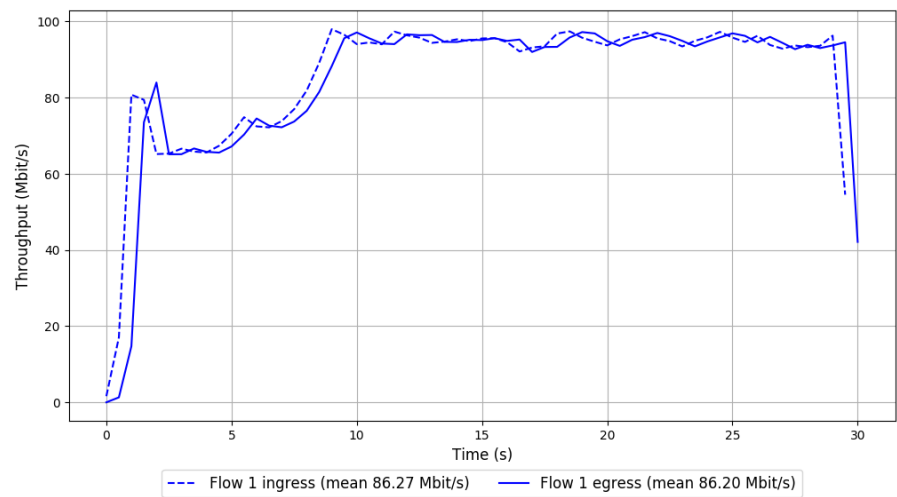
Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 86.27 Mbit/s)   Flow 1 egress (mean 86.20 Mbit/s)

Flow 1 (95th percentile 48.11 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-05-22 10:21:50
End at: 2018-05-22 10:22:20
Local clock offset: 3.54 ms
Remote clock offset: 15.226 ms

# Below is generated by plot.py at 2018-05-22 13:46:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.40 Mbit/s
95th percentile per-packet one-way delay: 46.660 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 77.40 Mbit/s
95th percentile per-packet one-way delay: 46.660 ms
Loss rate: 0.44%
```
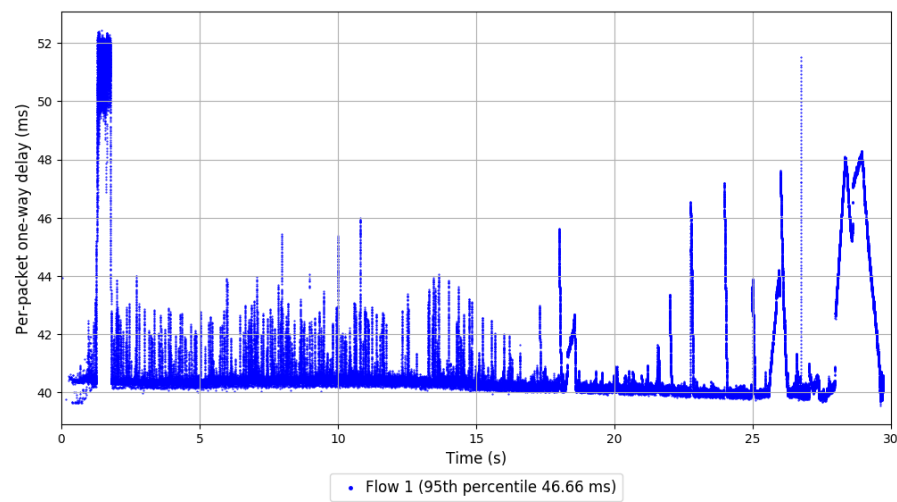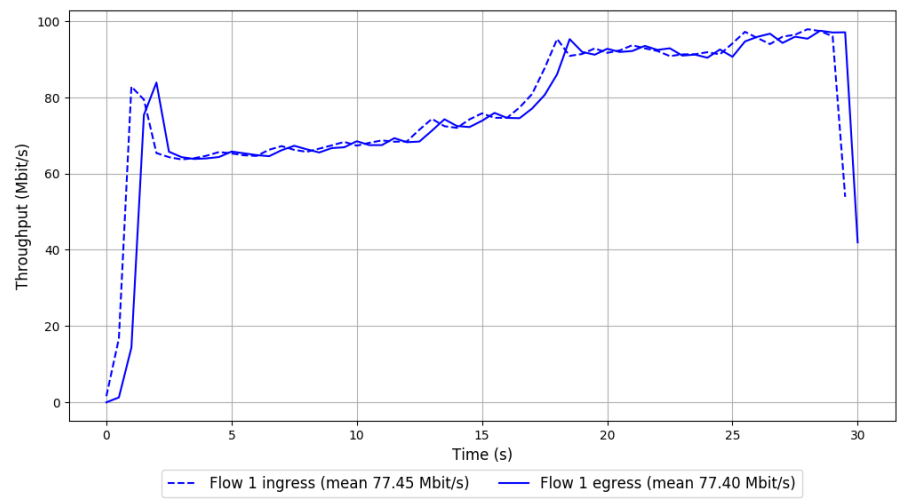
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 77.45 Mbit/s) ----   Flow 1 egress (mean 77.40 Mbit/s) ——

• Flow 1 (95th percentile 46.66 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-05-22 10:42:34
End at: 2018-05-22 10:43:04
Local clock offset: -0.825 ms
Remote clock offset: -3.464 ms


# Below is generated by plot.py at 2018-05-22 13:46:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.45 Mbit/s
95th percentile per-packet one-way delay: 47.151 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 85.45 Mbit/s
95th percentile per-packet one-way delay: 47.151 ms
Loss rate: 0.40%
```
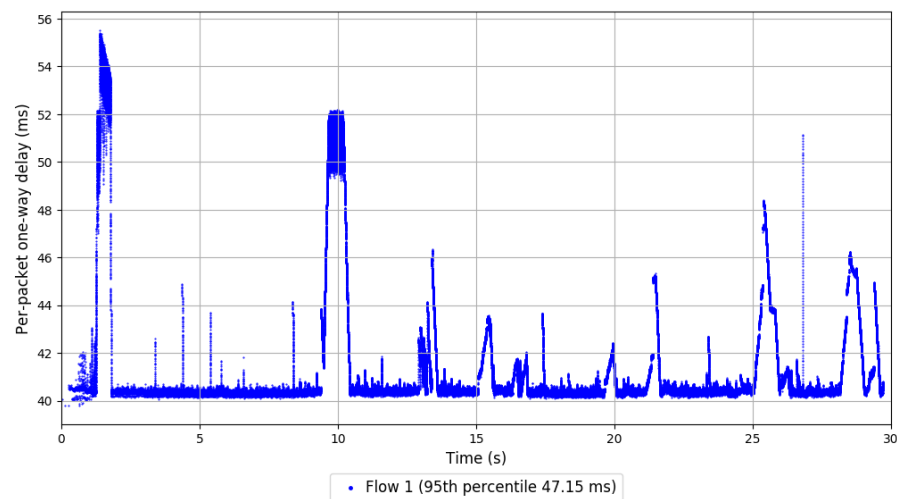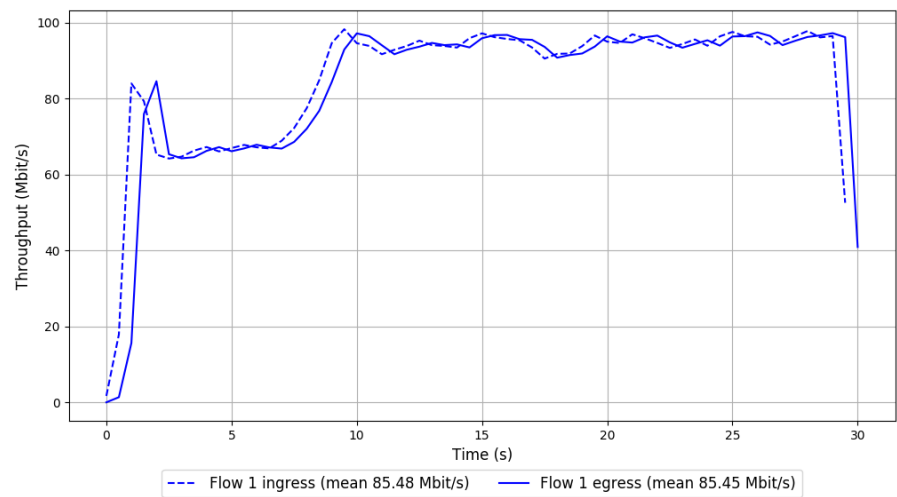
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 85.48 Mbit/s)   Flow 1 egress (mean 85.45 Mbit/s)

Flow 1 (95th percentile 47.15 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-05-22 11:03:19
End at: 2018-05-22 11:03:49
Local clock offset: 0.602 ms
Remote clock offset: -3.844 ms


# Below is generated by plot.py at 2018-05-22 13:46:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 40.384 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 40.384 ms
Loss rate: 0.47%
```
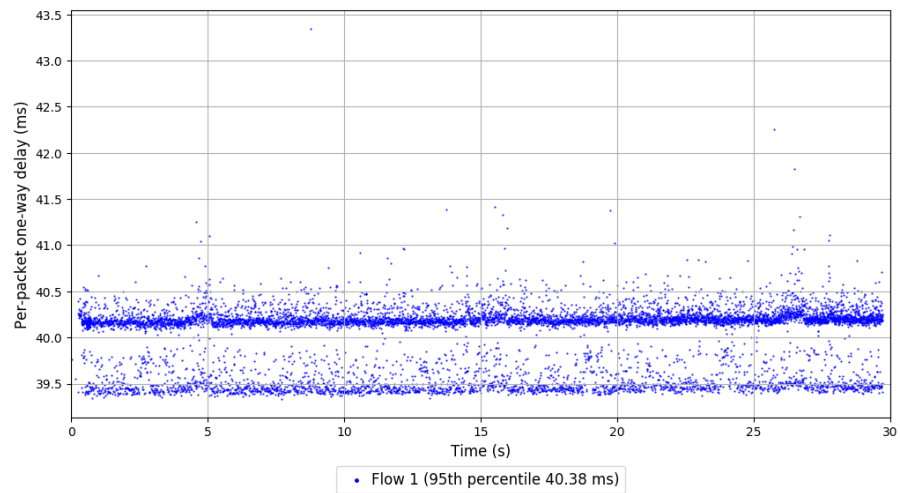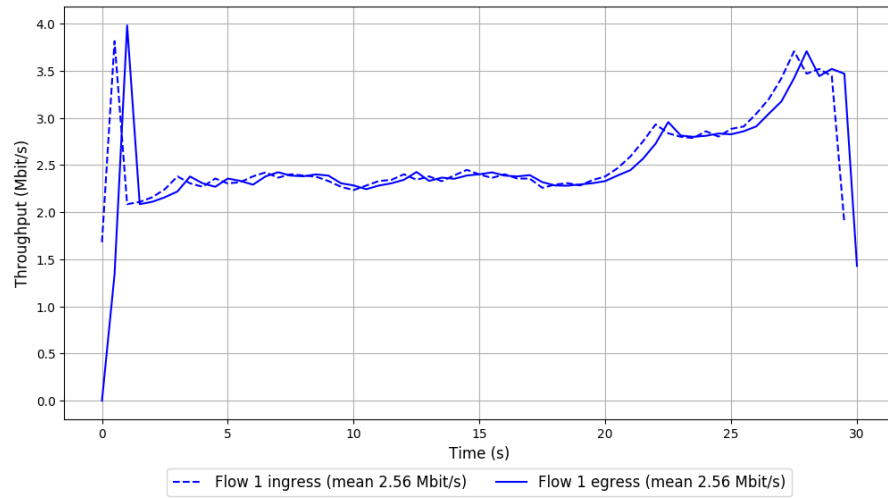
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 2.56 Mbit/s) --- Flow 1 egress (mean 2.56 Mbit/s)
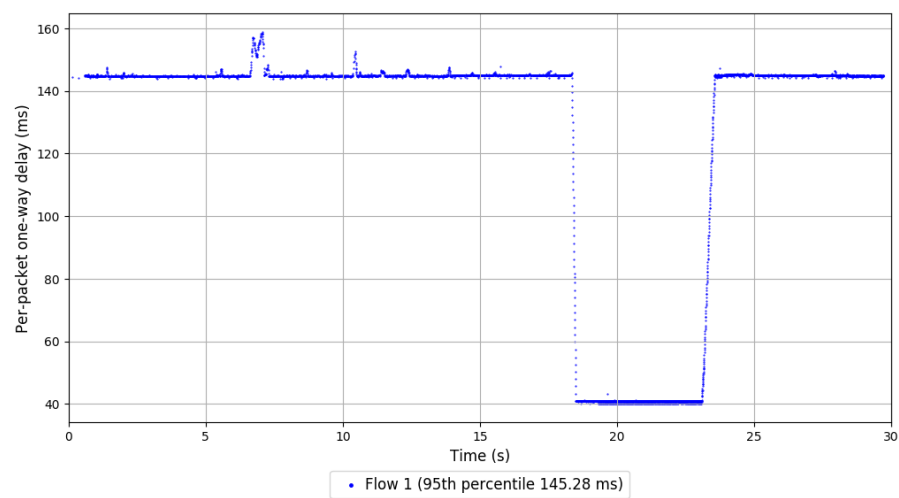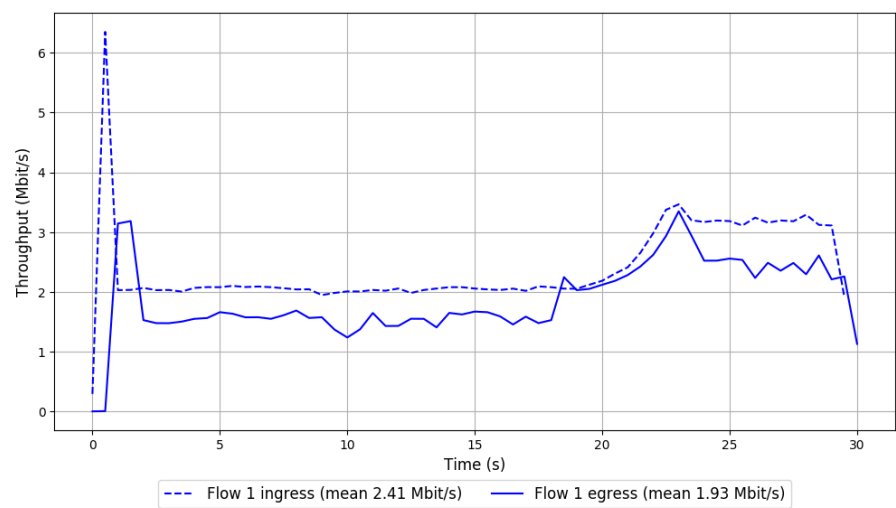

Flow 1 (95th percentile 40.38 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-05-22 11:26:20
End at: 2018-05-22 11:26:50
Local clock offset: 3.579 ms
Remote clock offset: -2.818 ms


# Below is generated by plot.py at 2018-05-22 13:46:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 145.278 ms
Loss rate: 20.46%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 145.278 ms
Loss rate: 20.46%
```

Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 2.41 Mbit/s) --- Flow 1 egress (mean 1.93 Mbit/s)
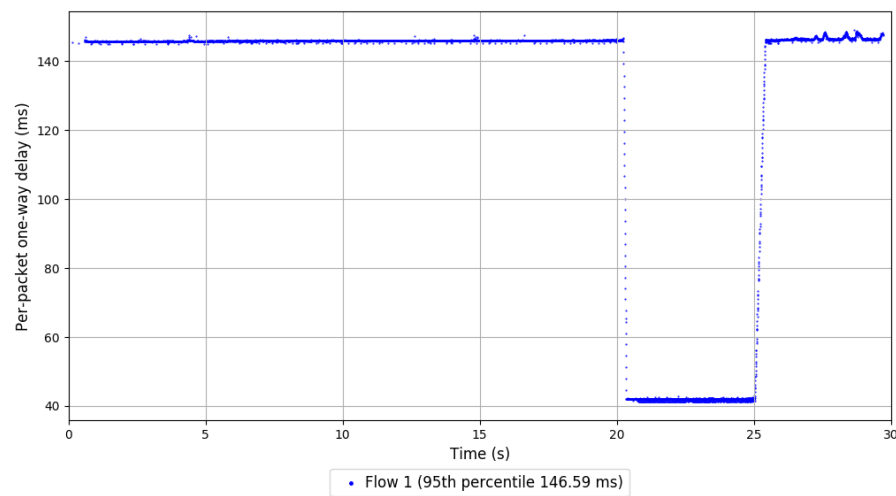

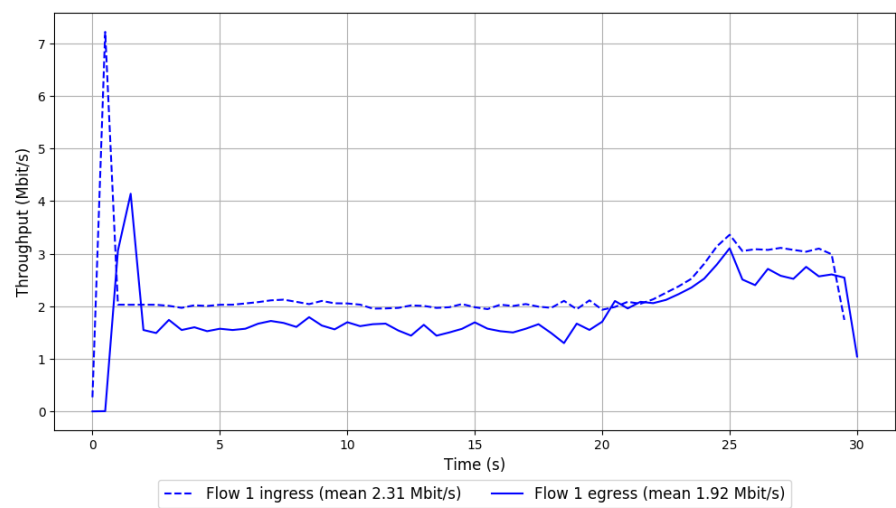
• Flow 1 (95th percentile 145.28 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-05-22 11:49:55
End at: 2018-05-22 11:50:25
Local clock offset: -0.453 ms
Remote clock offset: 37.254 ms


# Below is generated by plot.py at 2018-05-22 13:46:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 146.594 ms
Loss rate: 17.28%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 146.594 ms
Loss rate: 17.28%
```

Run 6: Report of PCC-Allegro — Data Link

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-05-22 12:22:40
End at: 2018-05-22 12:23:11
Local clock offset: 2.82 ms
Remote clock offset: 60.039 ms


# Below is generated by plot.py at 2018-05-22 13:46:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.25 Mbit/s
95th percentile per-packet one-way delay: 69.616 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 75.25 Mbit/s
95th percentile per-packet one-way delay: 69.616 ms
Loss rate: 0.50%
```
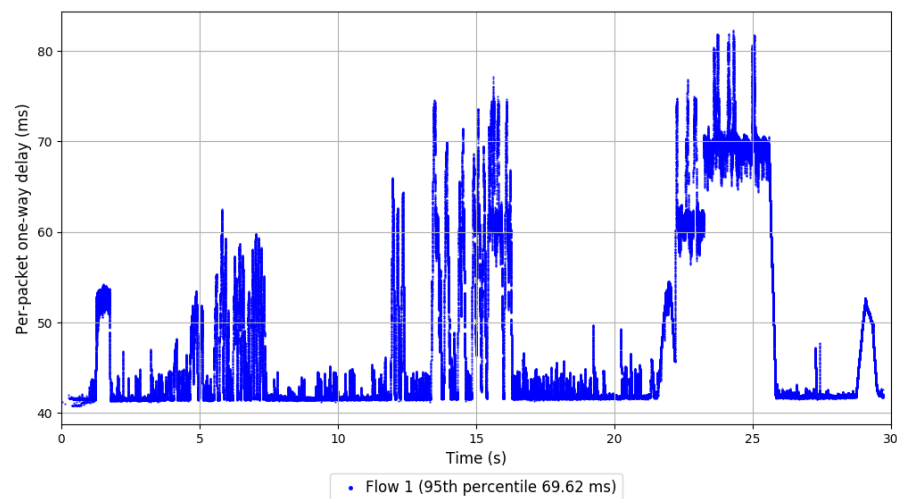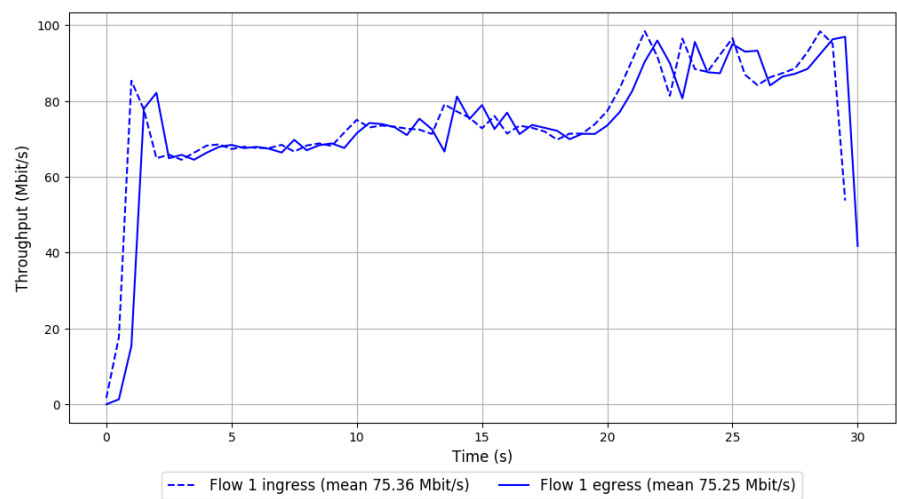
Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 75.36 Mbit/s)   Flow 1 egress (mean 75.25 Mbit/s)

Flow 1 (95th percentile 69.62 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-05-22 12:43:25
End at: 2018-05-22 12:43:55
Local clock offset: 4.378 ms
Remote clock offset: 41.009 ms


# Below is generated by plot.py at 2018-05-22 13:47:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.86 Mbit/s
95th percentile per-packet one-way delay: 52.105 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 87.86 Mbit/s
95th percentile per-packet one-way delay: 52.105 ms
Loss rate: 0.41%
```
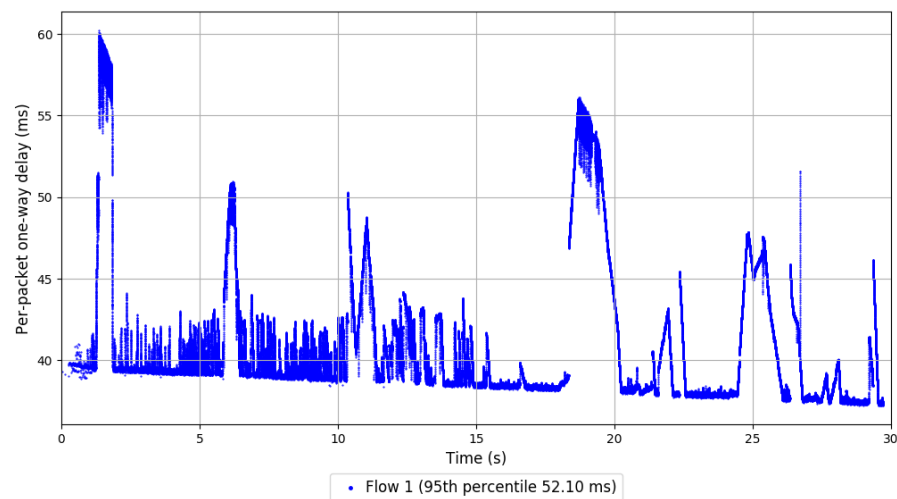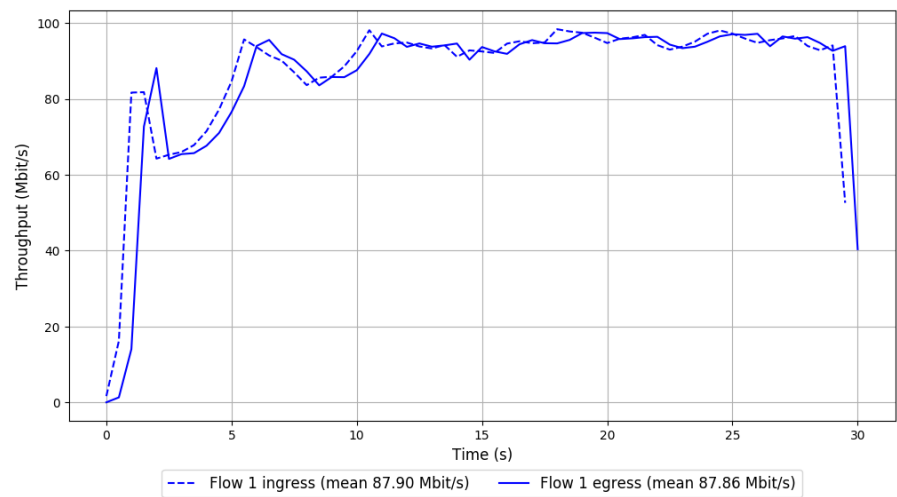
Run 8: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 87.90 Mbit/s)   Flow 1 egress (mean 87.86 Mbit/s)

Flow 1 (95th percentile 52.10 ms)

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-05-22 13:04:12
End at: 2018-05-22 13:04:42
Local clock offset: 2.291 ms
Remote clock offset: -3.21 ms


# Below is generated by plot.py at 2018-05-22 13:47:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.78 Mbit/s
95th percentile per-packet one-way delay: 56.114 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 87.78 Mbit/s
95th percentile per-packet one-way delay: 56.114 ms
Loss rate: 0.41%
```
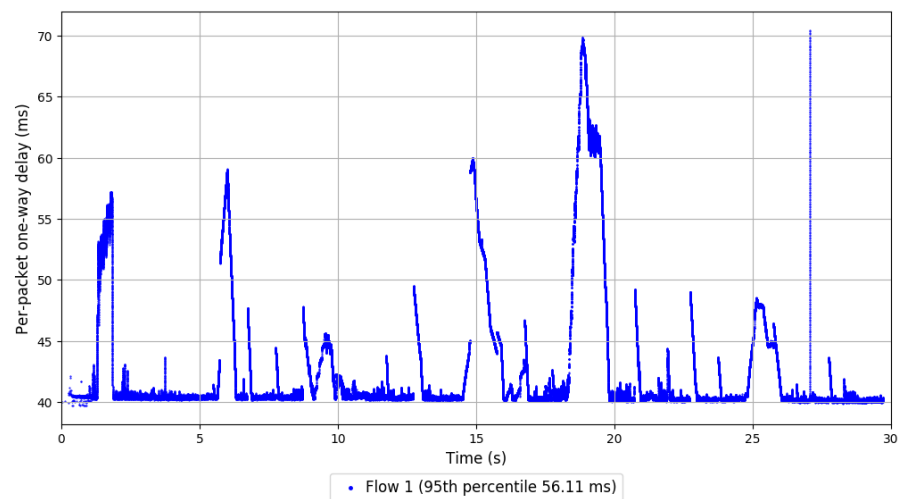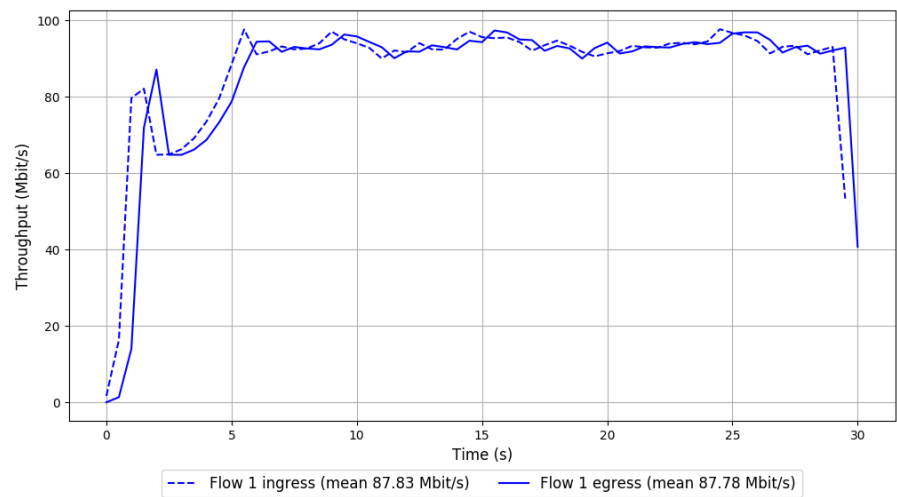
Run 9: Report of PCC-Allegro — Data Link

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-05-22 13:24:58
End at: 2018-05-22 13:25:28
Local clock offset: 0.423 ms
Remote clock offset: -17.404 ms


# Below is generated by plot.py at 2018-05-22 13:47:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.41 Mbit/s
95th percentile per-packet one-way delay: 45.578 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 83.41 Mbit/s
95th percentile per-packet one-way delay: 45.578 ms
Loss rate: 0.39%
```
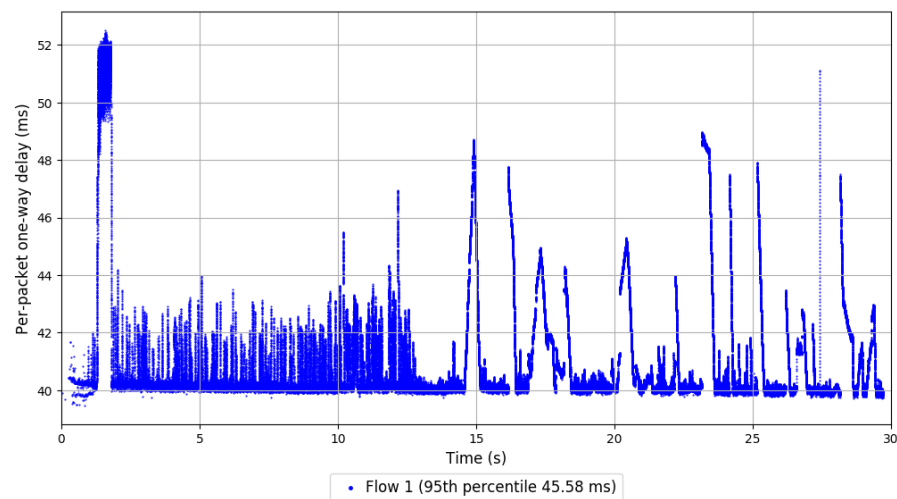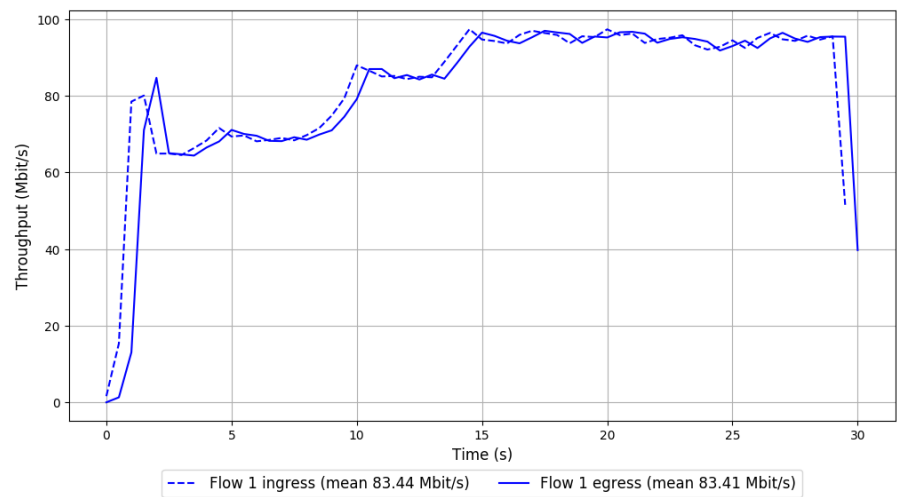
Run 10: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 83.44 Mbit/s)   Flow 1 egress (mean 83.41 Mbit/s)

• Flow 1 (95th percentile 45.58 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2018-05-22 10:02:22
End at: 2018-05-22 10:02:52
Local clock offset: 0.232 ms
Remote clock offset: 12.668 ms
```

Run 1: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 2: Statistics of PCC-Expr

Start at: 2018-05-22 10:23:07
End at: 2018-05-22 10:23:37
Local clock offset: 3.51 ms
Remote clock offset: 13.574 ms
```

Run 2: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 3: Statistics of PCC-Expr

Start at: 2018-05-22 10:43:52
End at: 2018-05-22 10:44:22
Local clock offset: -0.976 ms
Remote clock offset: -4.105 ms
```

Run 3: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 4: Statistics of PCC-Expr

Start at: 2018-05-22 11:04:34
End at: 2018-05-22 11:05:04
Local clock offset: 1.097 ms
Remote clock offset: -3.58 ms
```

Run 4: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 5: Statistics of PCC-Expr

Start at: 2018-05-22 11:28:01
End at: 2018-05-22 11:28:31
Local clock offset: 3.194 ms
Remote clock offset: -2.943 ms
```

Run 5: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 6: Statistics of PCC-Expr

Start at: 2018-05-22 11:51:25
End at: 2018-05-22 11:51:55
Local clock offset: -0.416 ms
Remote clock offset: 38.927 ms
```

Run 6: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 7: Statistics of PCC-Expr

Start at: 2018-05-22 12:23:58
End at: 2018-05-22 12:24:28
Local clock offset: 2.844 ms
Remote clock offset: 60.758 ms
```

Run 7: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 8: Statistics of PCC-Expr

Start at: 2018-05-22 12:44:43
End at: 2018-05-22 12:45:13
Local clock offset: 4.427 ms
Remote clock offset: 34.815 ms
```

Run 8: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 9: Statistics of PCC-Expr

Start at: 2018-05-22 13:05:30
End at: 2018-05-22 13:06:00
Local clock offset: 2.082 ms
Remote clock offset: -4.533 ms
```

Run 9: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of PCC-Expr

Start at: 2018-05-22 13:26:15
End at: 2018-05-22 13:26:46
Local clock offset: 0.501 ms
Remote clock offset: -18.022 ms

Run 10: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-05-22 10:10:13
End at: 2018-05-22 10:10:43
Local clock offset: 2.104 ms
Remote clock offset: 14.029 ms


# Below is generated by plot.py at 2018-05-22 13:47:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.51 Mbit/s
95th percentile per-packet one-way delay: 46.120 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 69.51 Mbit/s
95th percentile per-packet one-way delay: 46.120 ms
Loss rate: 0.42%
```

Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-05-22 10:30:59
End at: 2018-05-22 10:31:29
Local clock offset: 1.837 ms
Remote clock offset: 3.585 ms


# Below is generated by plot.py at 2018-05-22 13:47:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.32 Mbit/s
95th percentile per-packet one-way delay: 51.379 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 41.32 Mbit/s
95th percentile per-packet one-way delay: 51.379 ms
Loss rate: 0.71%
```
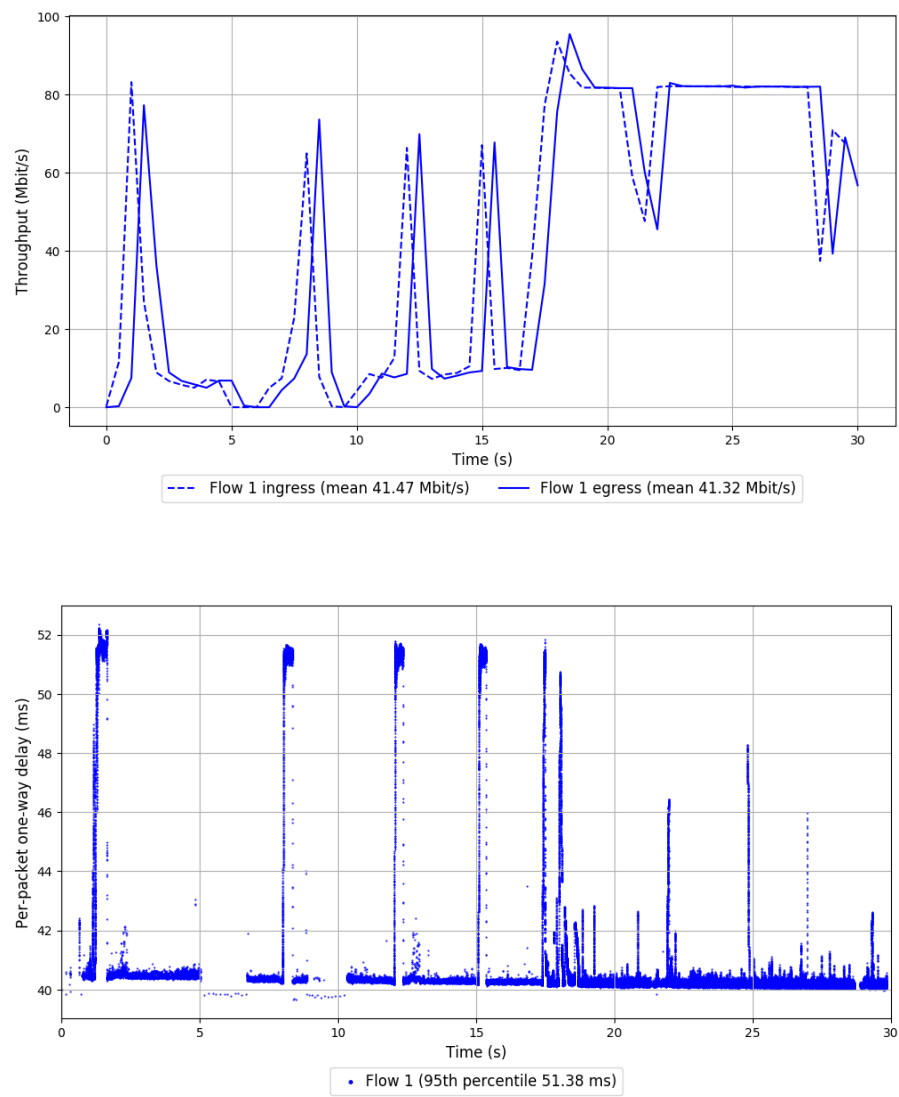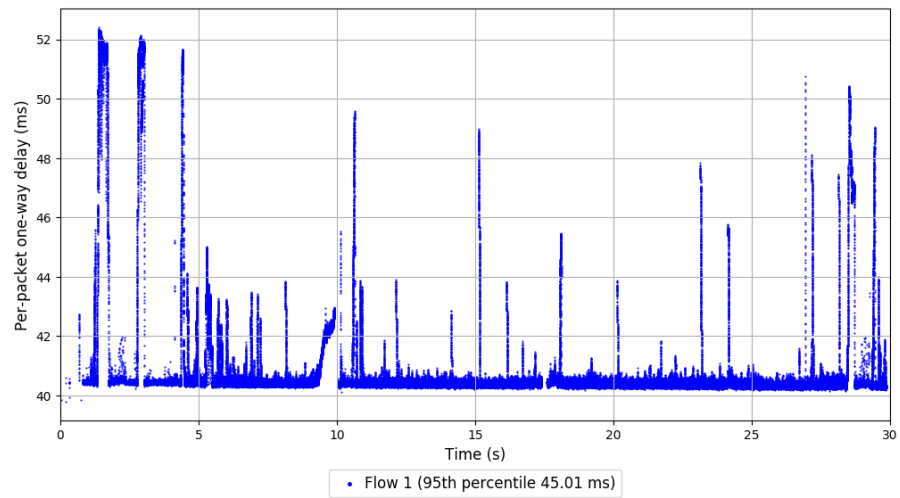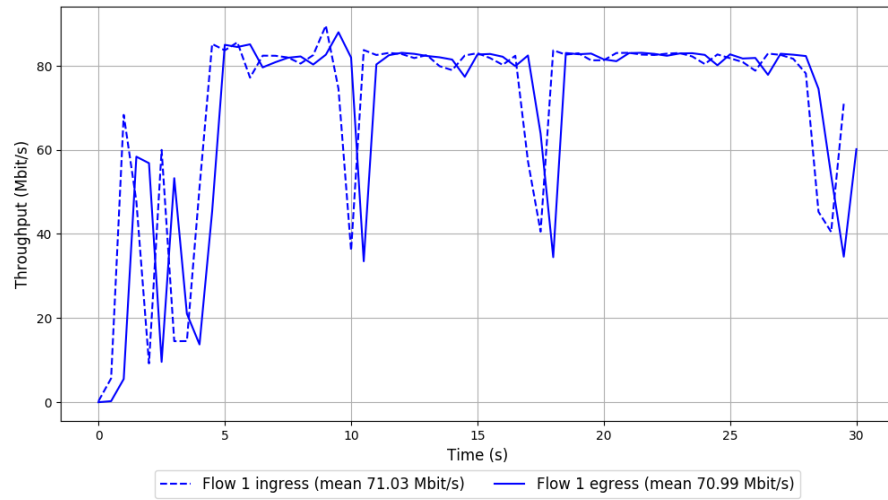
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 41.47 Mbit/s) --- Flow 1 egress (mean 41.32 Mbit/s)
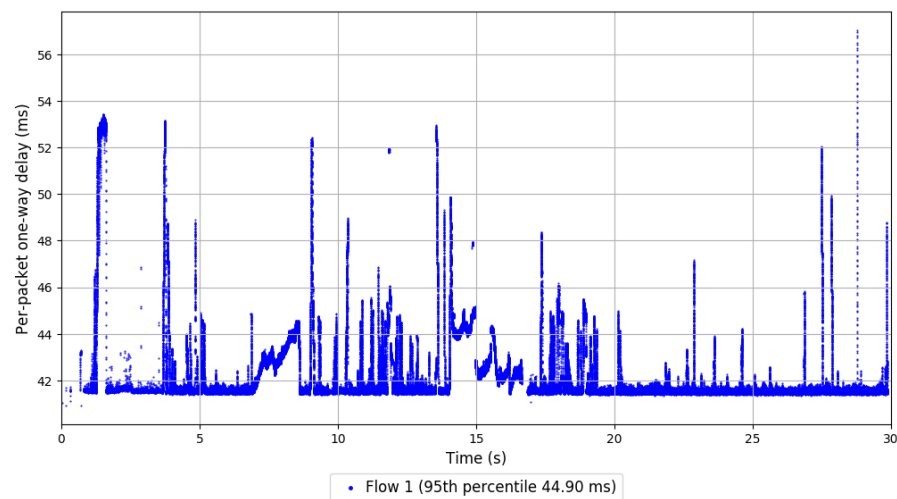

• Flow 1 (95th percentile 51.38 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-05-22 10:51:44
End at: 2018-05-22 10:52:14
Local clock offset: -1.884 ms
Remote clock offset: -6.823 ms


# Below is generated by plot.py at 2018-05-22 13:47:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.99 Mbit/s
95th percentile per-packet one-way delay: 45.007 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 70.99 Mbit/s
95th percentile per-packet one-way delay: 45.007 ms
Loss rate: 0.42%
```

Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 71.03 Mbit/s) --- Flow 1 egress (mean 70.99 Mbit/s)
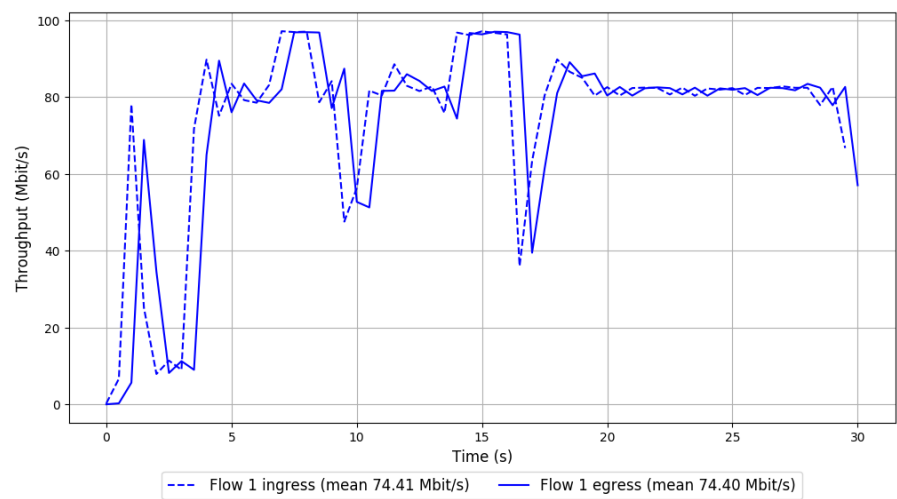

Flow 1 (95th percentile 45.01 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-05-22 11:12:25
End at: 2018-05-22 11:12:55
Local clock offset: 2.471 ms
Remote clock offset: -2.318 ms


# Below is generated by plot.py at 2018-05-22 13:48:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.40 Mbit/s
95th percentile per-packet one-way delay: 44.903 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 74.40 Mbit/s
95th percentile per-packet one-way delay: 44.903 ms
Loss rate: 0.37%
```

Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-05-22 11:37:35
End at: 2018-05-22 11:38:05
Local clock offset: 0.534 ms
Remote clock offset: -5.697 ms


# Below is generated by plot.py at 2018-05-22 13:48:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.43 Mbit/s
95th percentile per-packet one-way delay: 78.188 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 41.43 Mbit/s
95th percentile per-packet one-way delay: 78.188 ms
Loss rate: 0.72%
```
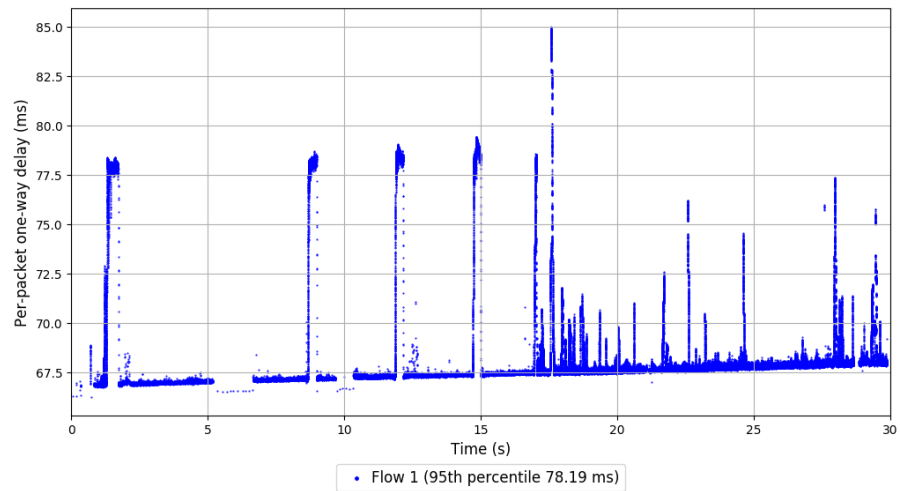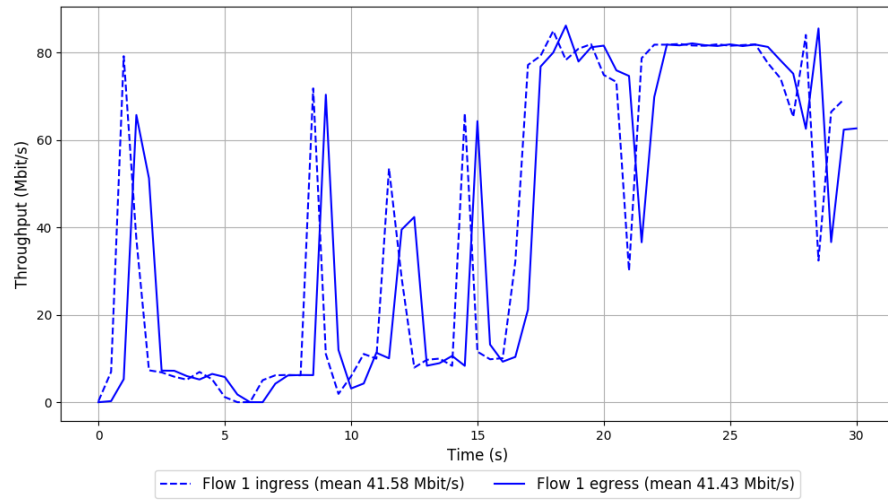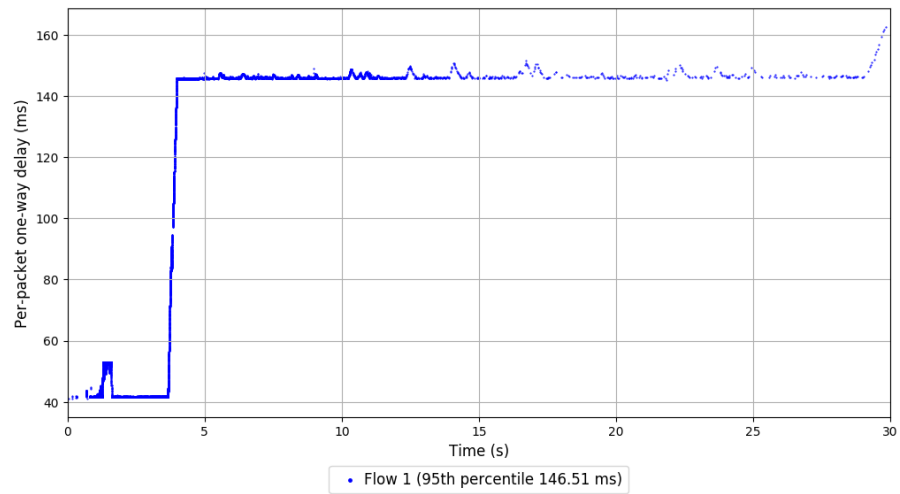
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 41.58 Mbit/s)   Flow 1 egress (mean 41.43 Mbit/s)
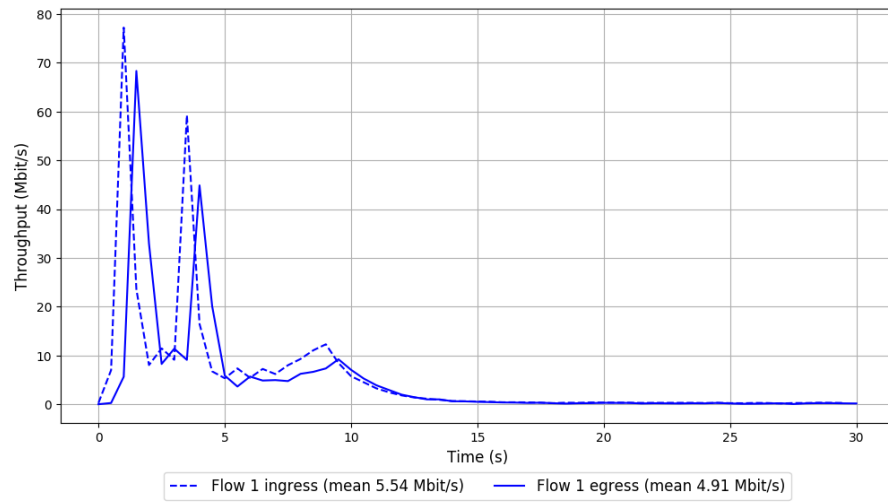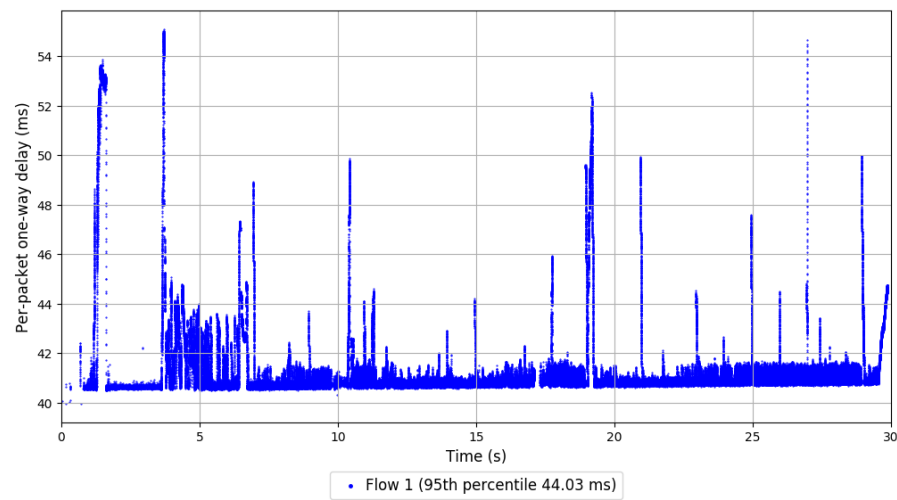

Flow 1 (95th percentile 78.19 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-05-22 12:09:31
End at: 2018-05-22 12:10:01
Local clock offset: 1.982 ms
Remote clock offset: 52.003 ms


# Below is generated by plot.py at 2018-05-22 13:48:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 146.507 ms
Loss rate: 11.68%
-- Flow 1:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 146.507 ms
Loss rate: 11.68%
```
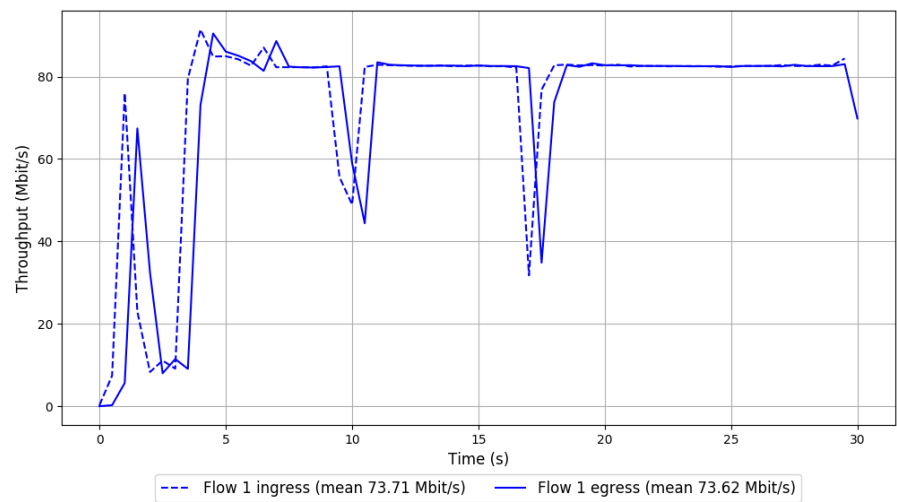
Run 6: Report of QUIC Cubic — Data Link

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-05-22 12:31:49
End at: 2018-05-22 12:32:19
Local clock offset: 3.567 ms
Remote clock offset: 65.431 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.62 Mbit/s
95th percentile per-packet one-way delay: 44.030 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 73.62 Mbit/s
95th percentile per-packet one-way delay: 44.030 ms
Loss rate: 0.48%
```
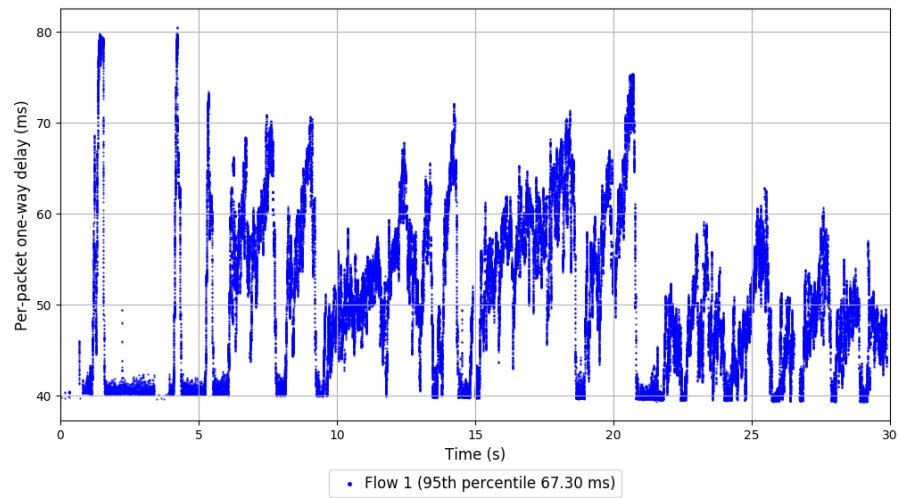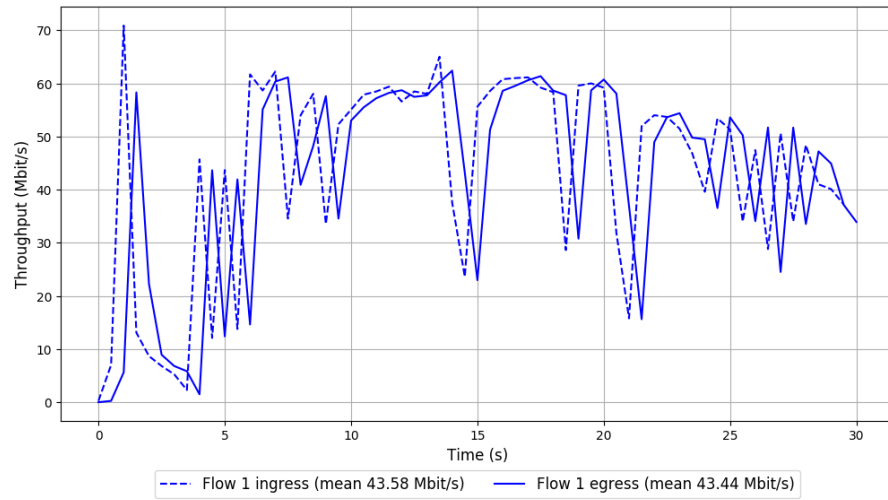
Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 73.71 Mbit/s)   Flow 1 egress (mean 73.62 Mbit/s)

Flow 1 (95th percentile 44.03 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-05-22 12:52:34
End at: 2018-05-22 12:53:04
Local clock offset: 4.679 ms
Remote clock offset: 12.178 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.44 Mbit/s
95th percentile per-packet one-way delay: 67.303 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 43.44 Mbit/s
95th percentile per-packet one-way delay: 67.303 ms
Loss rate: 0.68%
```

Run 8: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 43.58 Mbit/s) ----   Flow 1 egress (mean 43.44 Mbit/s) ——
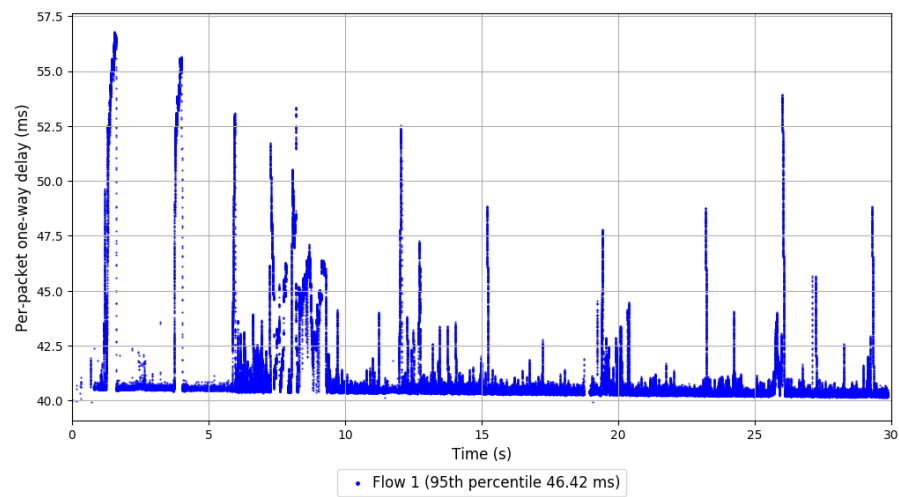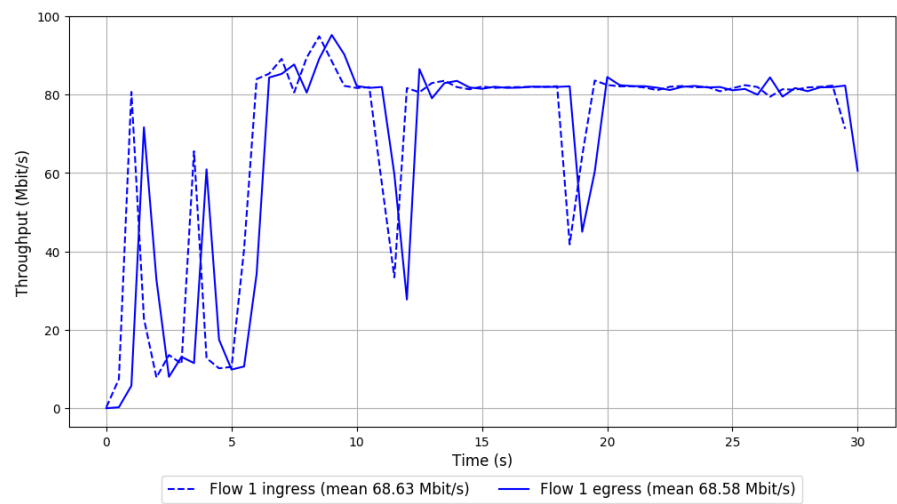

• Flow 1 (95th percentile 67.30 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-05-22 13:13:21
End at: 2018-05-22 13:13:51
Local clock offset: 1.104 ms
Remote clock offset: -10.347 ms

# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.58 Mbit/s
95th percentile per-packet one-way delay: 46.418 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 68.58 Mbit/s
95th percentile per-packet one-way delay: 46.418 ms
Loss rate: 0.42%
```
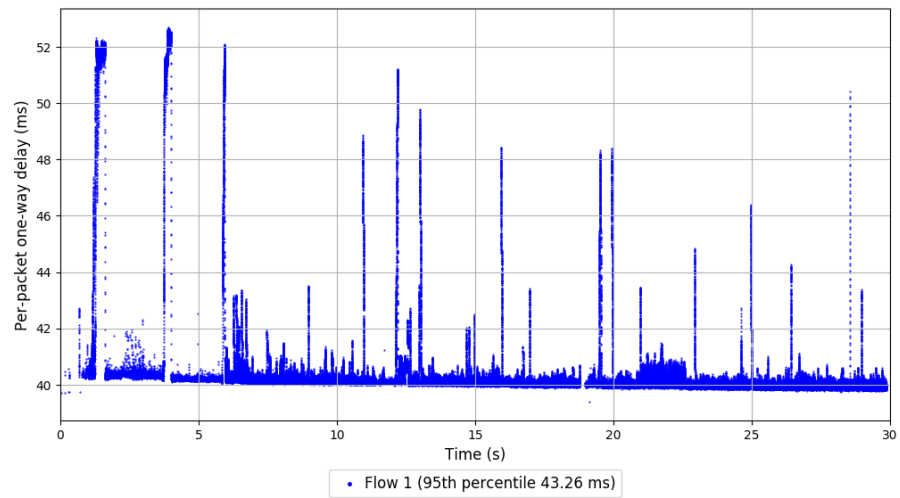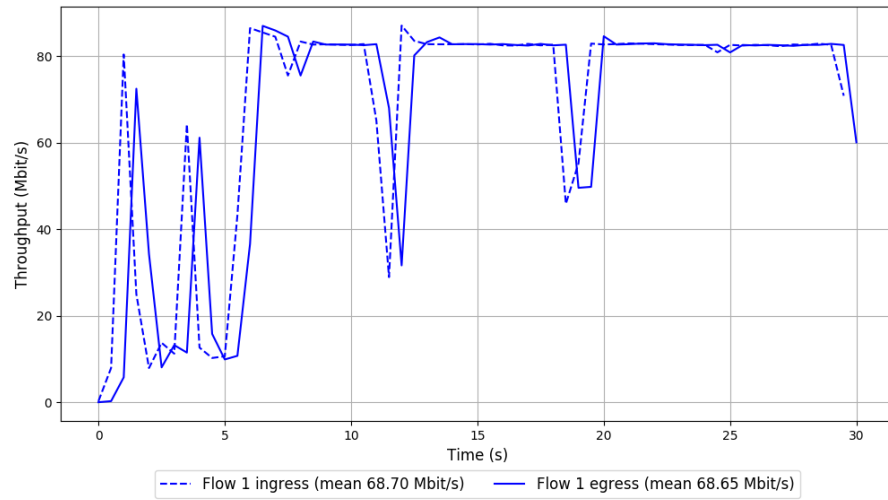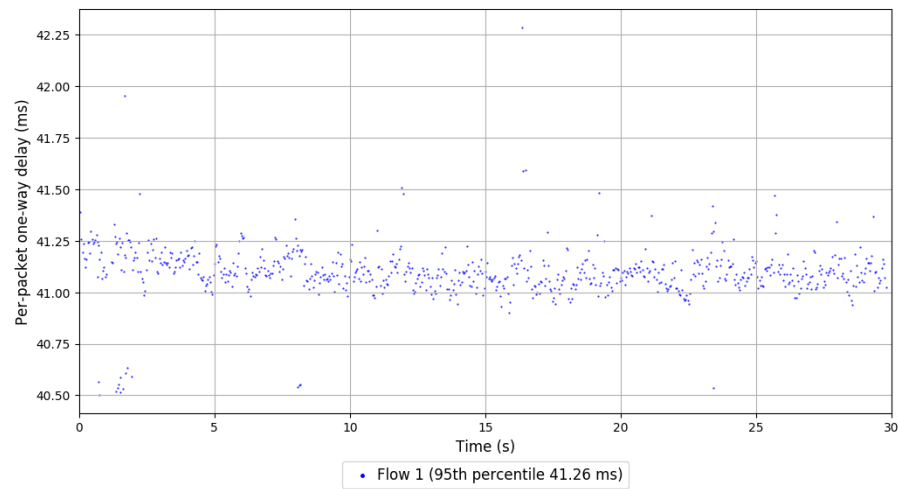
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 68.63 Mbit/s) --- Flow 1 egress (mean 68.58 Mbit/s)

Flow 1 (95th percentile 46.42 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-05-22 13:36:03
End at: 2018-05-22 13:36:33
Local clock offset: 3.198 ms
Remote clock offset: -23.762 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.65 Mbit/s
95th percentile per-packet one-way delay: 43.264 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 68.65 Mbit/s
95th percentile per-packet one-way delay: 43.264 ms
Loss rate: 0.43%
```

Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 68.70 Mbit/s) —— Flow 1 egress (mean 68.65 Mbit/s)
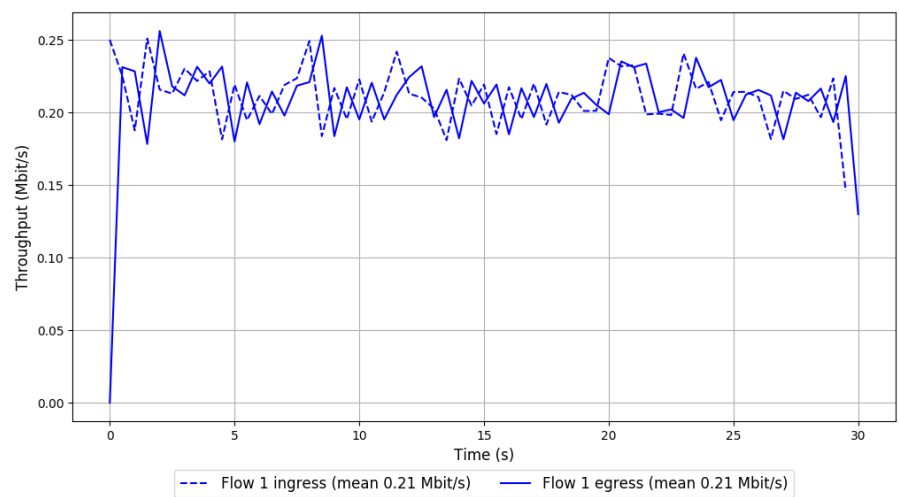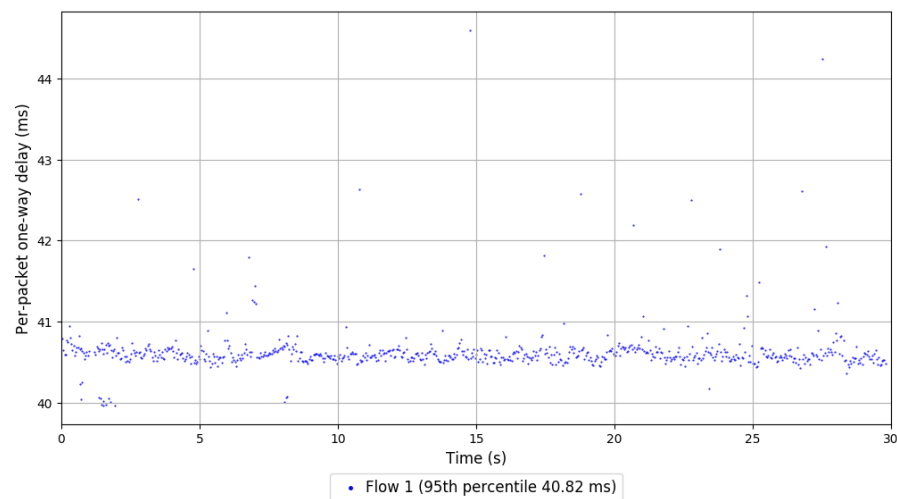

• Flow 1 (95th percentile 43.26 ms)

```
Run 1: Statistics of SCReAM

Start at: 2018-05-22 09:58:27
End at: 2018-05-22 09:58:57
Local clock offset: -1.339 ms
Remote clock offset: 11.781 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 41.257 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 41.257 ms
Loss rate: 0.25%
```

Run 1: Report of SCReAM — Data Link

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

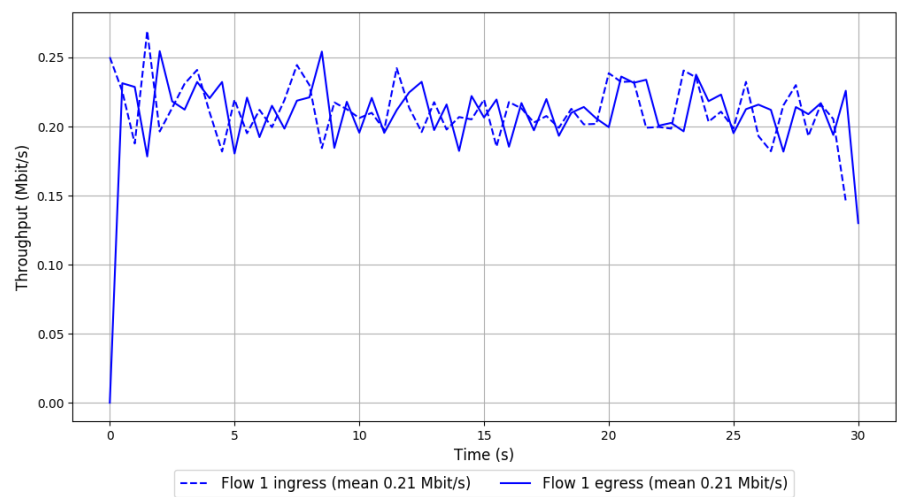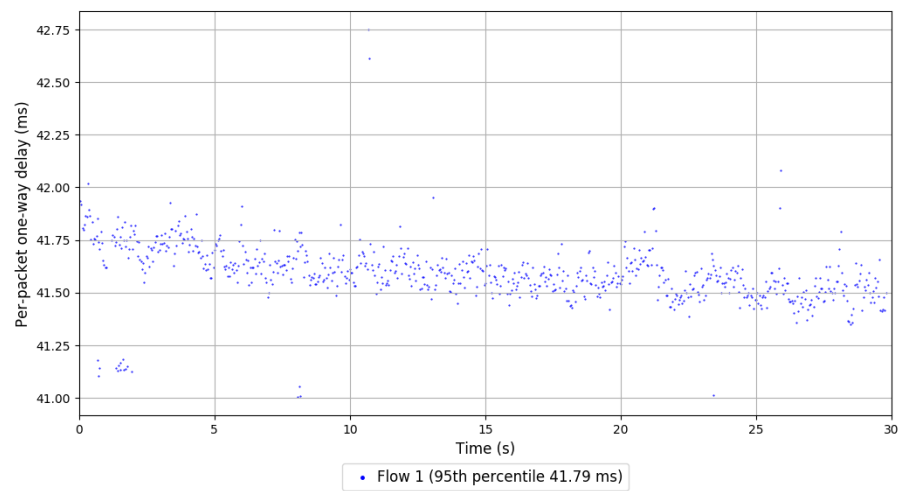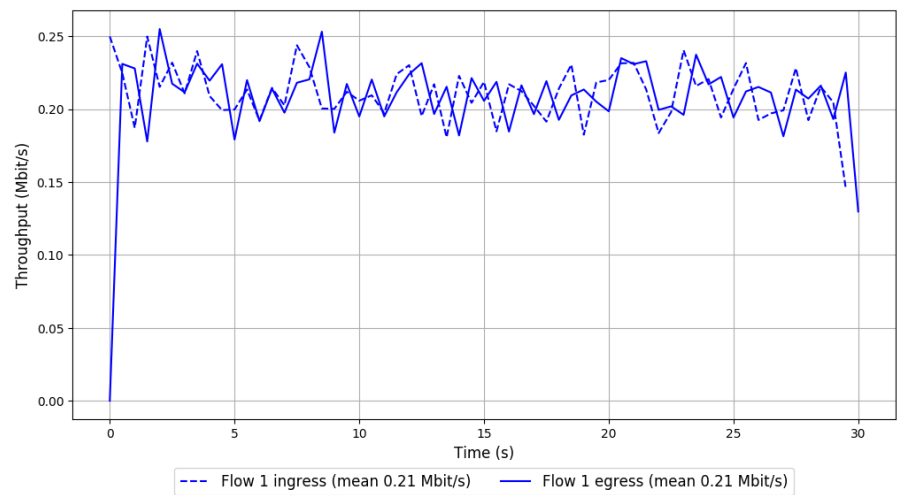Flow 1 (95th percentile 41.26 ms)

```
Run 2: Statistics of SCReAM

Start at: 2018-05-22 10:19:13
End at: 2018-05-22 10:19:43
Local clock offset: 3.419 ms
Remote clock offset: 15.085 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.824 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.824 ms
Loss rate: 0.25%
```
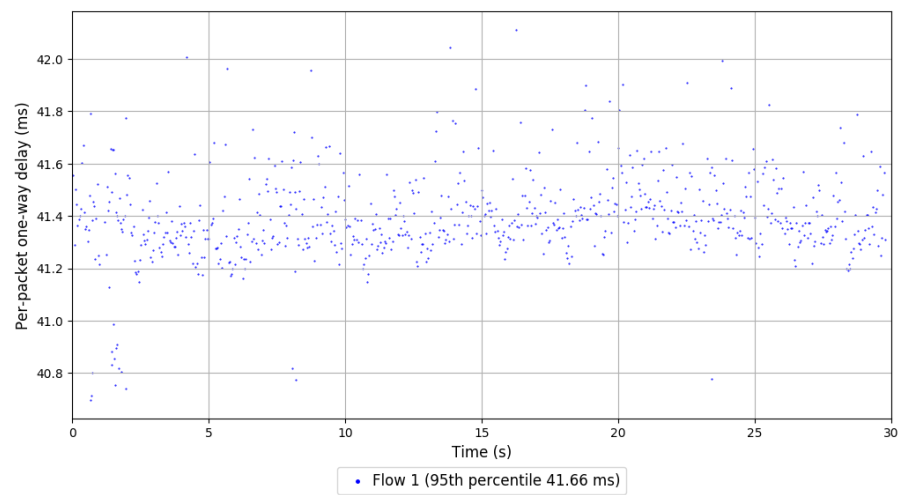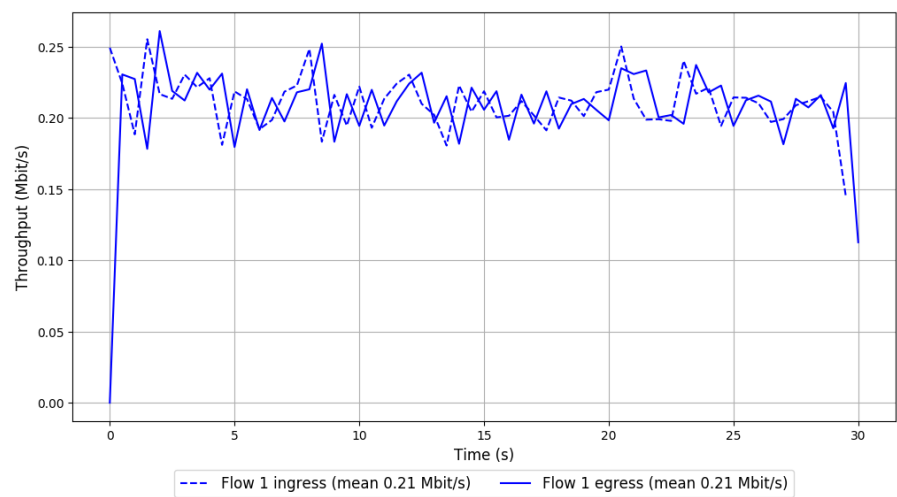
Run 2: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 40.82 ms)

```
Run 3: Statistics of SCReAM

Start at: 2018-05-22 10:39:58
End at: 2018-05-22 10:40:28
Local clock offset: -0.49 ms
Remote clock offset: -2.378 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 41.793 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 41.793 ms
Loss rate: 0.25%
```
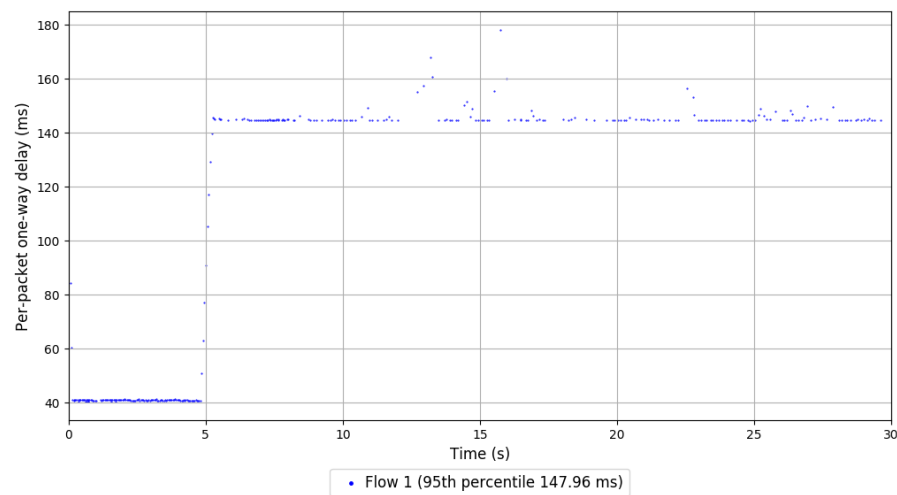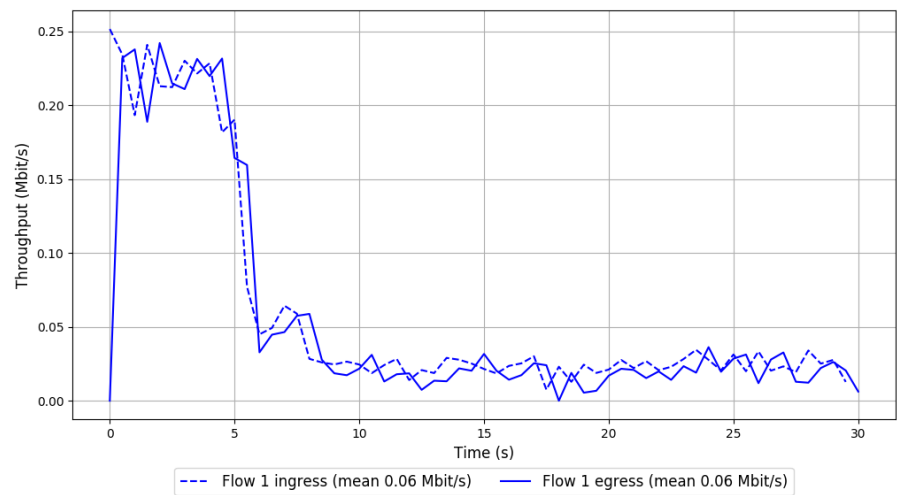
Run 3: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 41.79 ms)

```
Run 4: Statistics of SCReAM

Start at: 2018-05-22 11:00:44
End at: 2018-05-22 11:01:14
Local clock offset: -0.127 ms
Remote clock offset: -5.202 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 41.661 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 41.661 ms
Loss rate: 0.38%
```

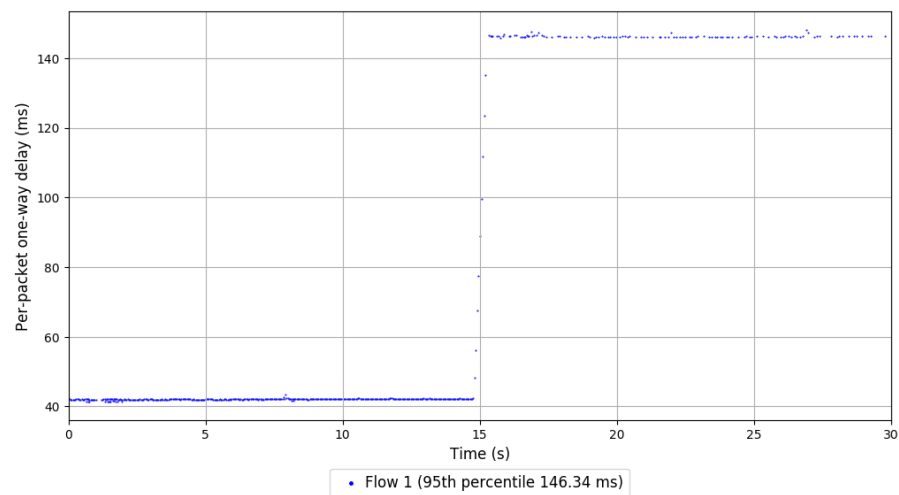Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-05-22 11:23:08
End at: 2018-05-22 11:23:38
Local clock offset: 3.608 ms
Remote clock offset: -2.542 ms

# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 147.963 ms
Loss rate: 8.42%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 147.963 ms
Loss rate: 8.42%
```

Run 5: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.06 Mbit/s) --- Flow 1 egress (mean 0.06 Mbit/s)

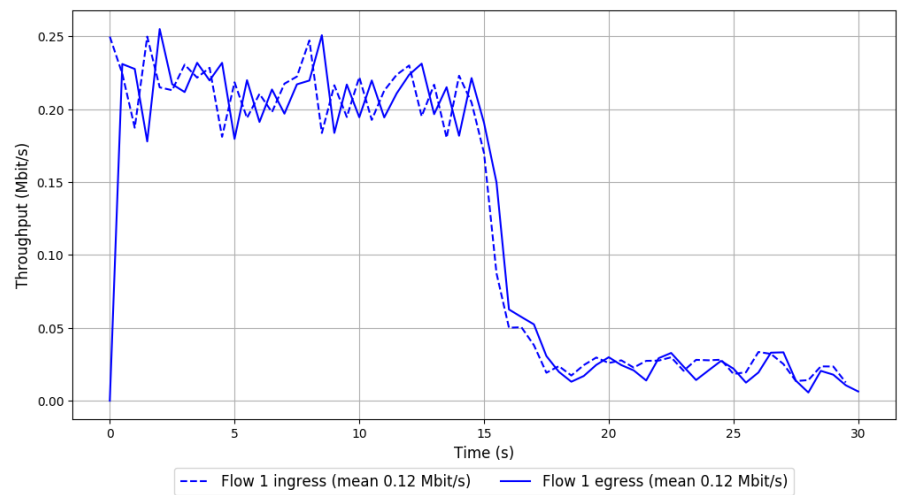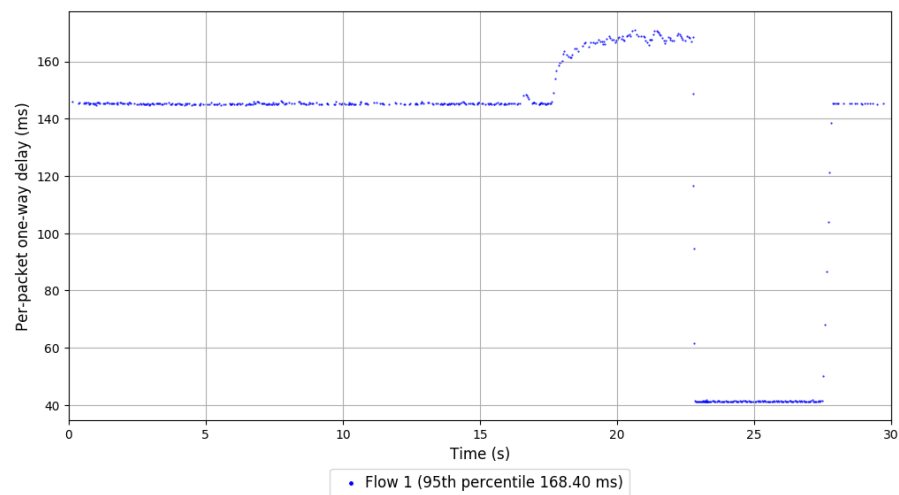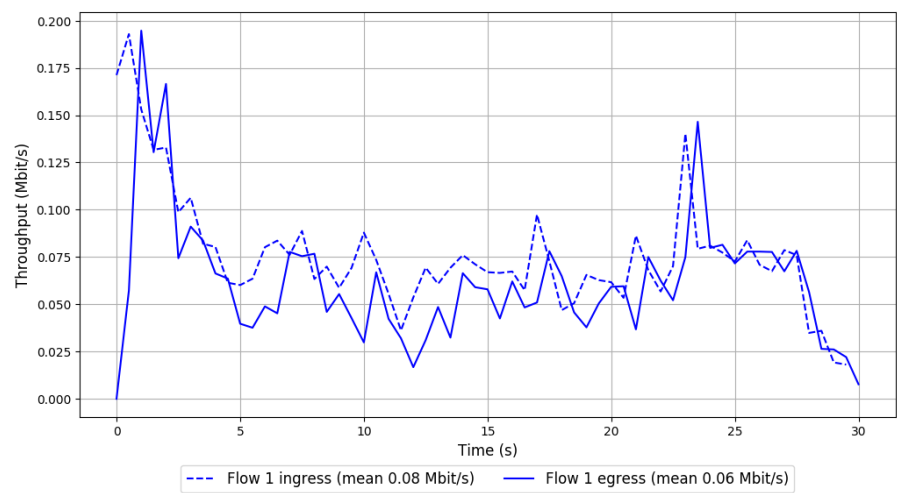Flow 1 (95th percentile 147.96 ms)

```
Run 6: Statistics of SCReAM

Start at: 2018-05-22 11:46:35
End at: 2018-05-22 11:47:05
Local clock offset: -0.153 ms
Remote clock offset: 33.683 ms

# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 146.338 ms
Loss rate: 2.23%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 146.338 ms
Loss rate: 2.23%
```

Run 6: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.12 Mbit/s) --- Flow 1 egress (mean 0.12 Mbit/s)

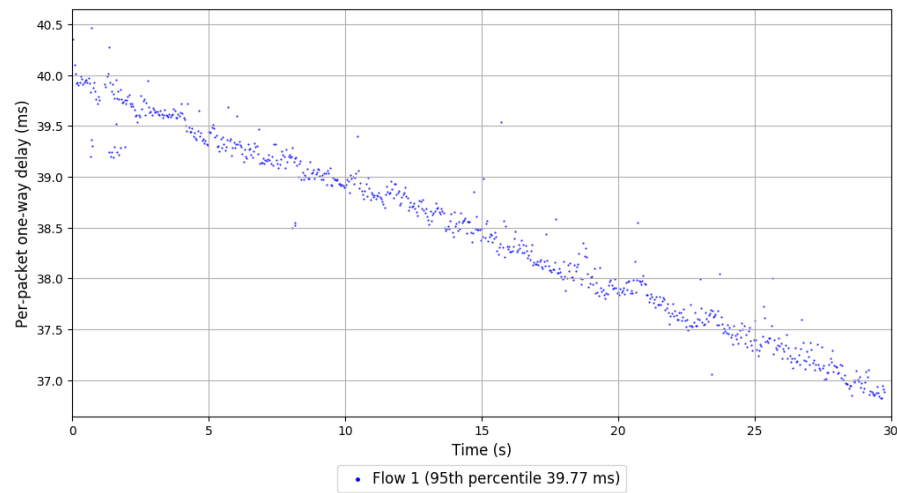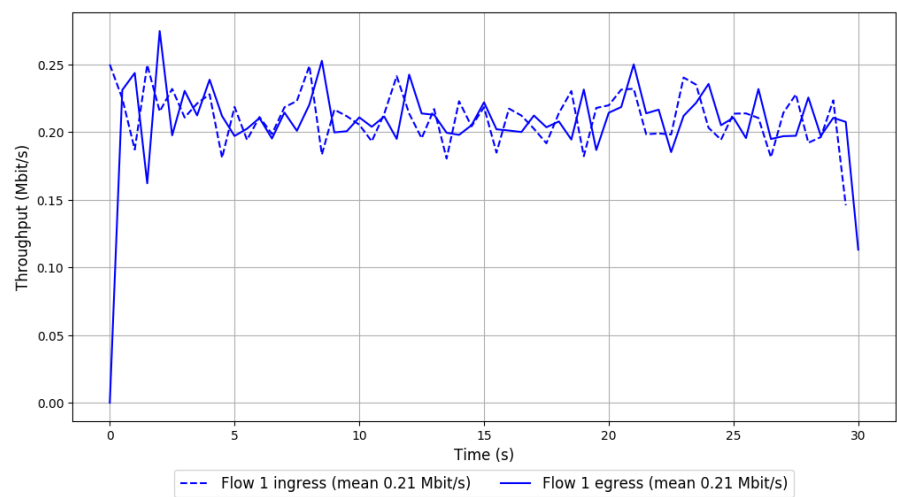Flow 1 (95th percentile 146.34 ms)

```
Run 7: Statistics of SCReAM

Start at: 2018-05-22 12:19:39
End at: 2018-05-22 12:20:09
Local clock offset: 2.79 ms
Remote clock offset: 58.355 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 168.401 ms
Loss rate: 17.73%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 168.401 ms
Loss rate: 17.73%
```

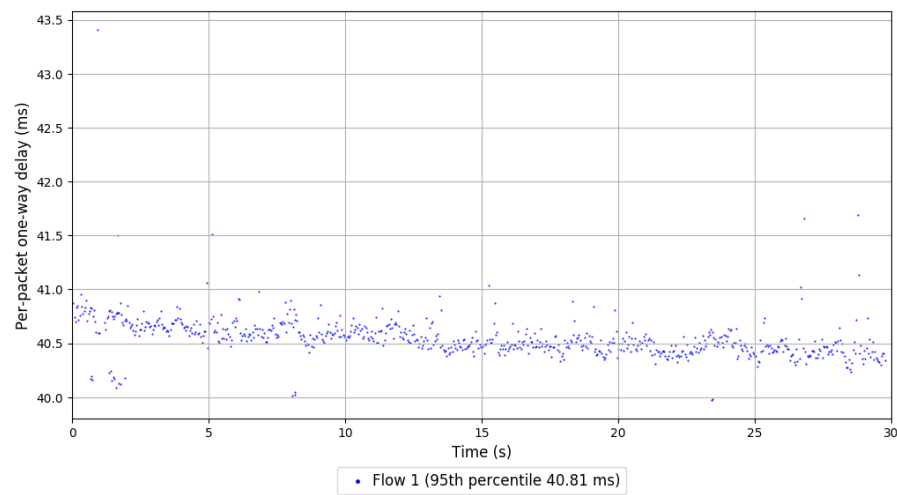## Run 7: Report of SCReAM — Data Link

```
Run 8: Statistics of SCReAM

Start at: 2018-05-22 12:40:49
End at: 2018-05-22 12:41:19
Local clock offset: 4.156 ms
Remote clock offset: 55.828 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.772 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 39.772 ms
Loss rate: 0.39%
```

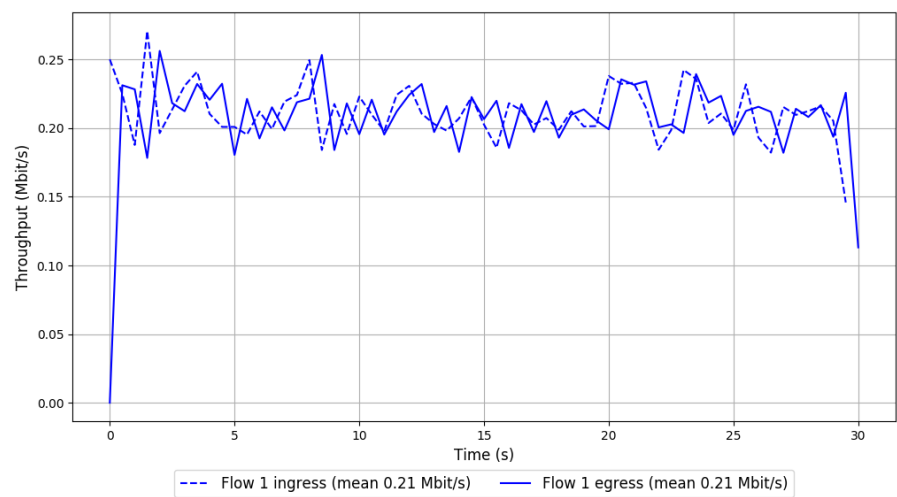Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-05-22 13:01:35
End at: 2018-05-22 13:02:05
Local clock offset: 2.997 ms
Remote clock offset: -0.904 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.806 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 40.806 ms
Loss rate: 0.38%
```
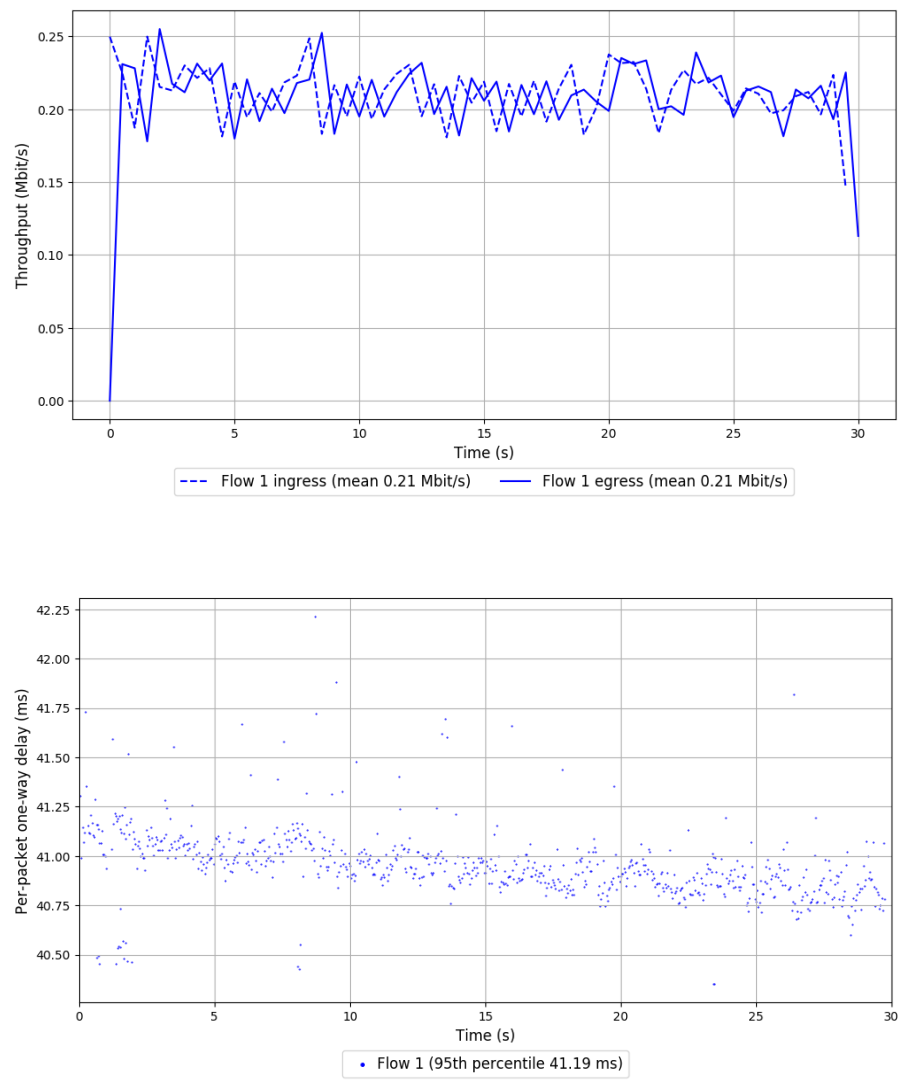
Run 9: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 40.81 ms)

```
Run 10: Statistics of SCReAM

Start at: 2018-05-22 13:22:21
End at: 2018-05-22 13:22:51
Local clock offset: 0.476 ms
Remote clock offset: -15.923 ms

# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 41.193 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 41.193 ms
Loss rate: 0.38%
```
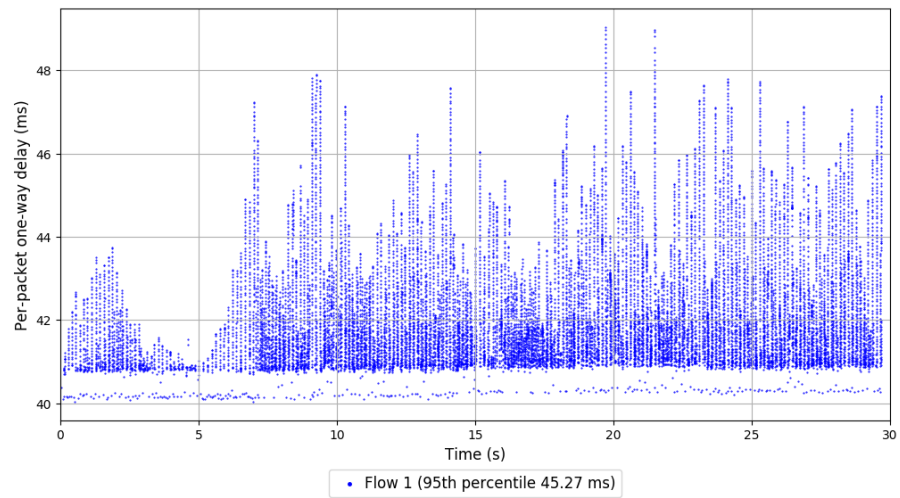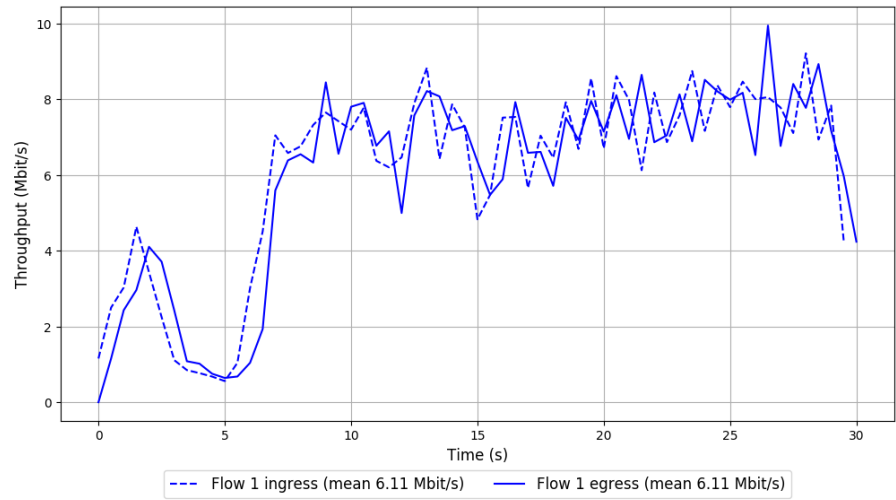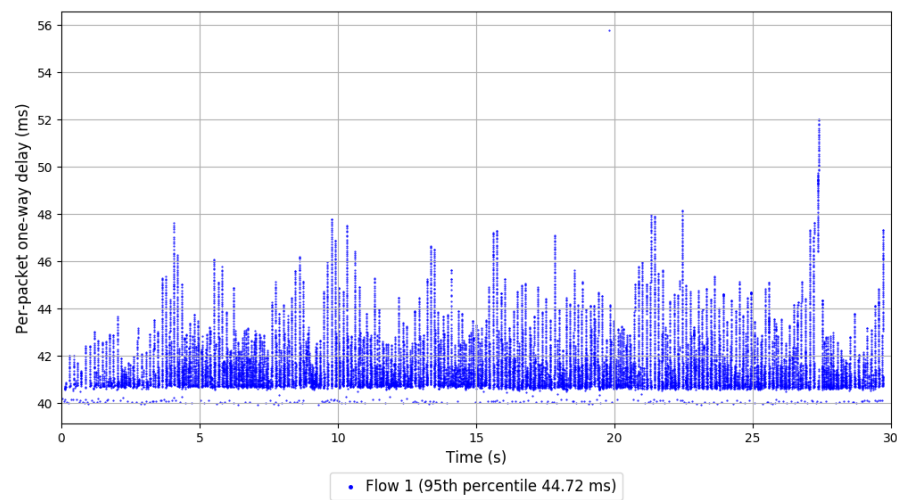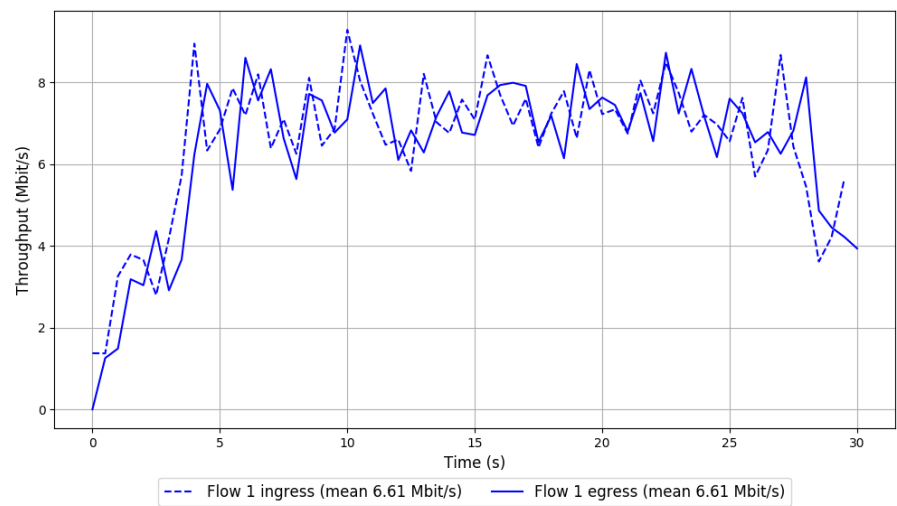
Run 10: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 41.19 ms)

```
Run 1: Statistics of Sprout

Start at: 2018-05-22 09:54:34
End at: 2018-05-22 09:55:04
Local clock offset: -2.52 ms
Remote clock offset: 10.471 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 45.269 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 45.269 ms
Loss rate: 0.53%
```
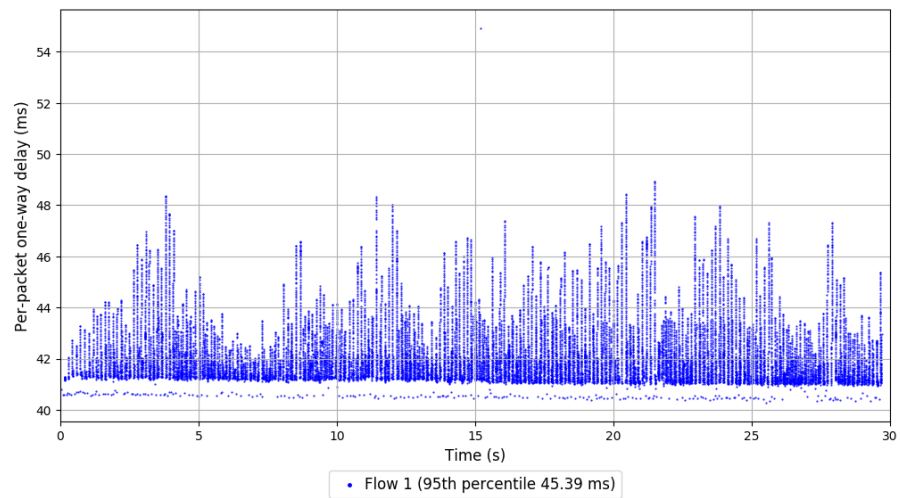
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-05-22 10:15:20
End at: 2018-05-22 10:15:50
Local clock offset: 2.914 ms
Remote clock offset: 14.604 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 44.716 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 44.716 ms
Loss rate: 0.43%
```

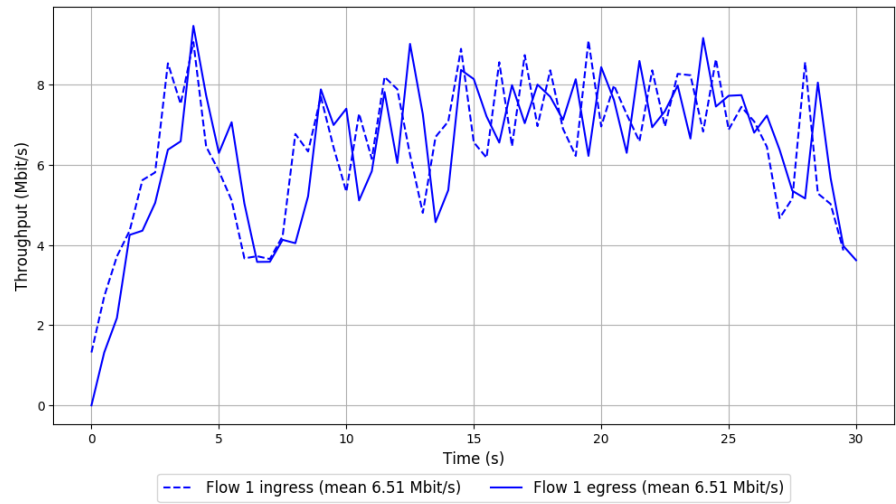Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-05-22 10:36:05
End at: 2018-05-22 10:36:35
Local clock offset: 0.011 ms
Remote clock offset: -0.252 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 45.386 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 45.386 ms
Loss rate: 0.37%
```

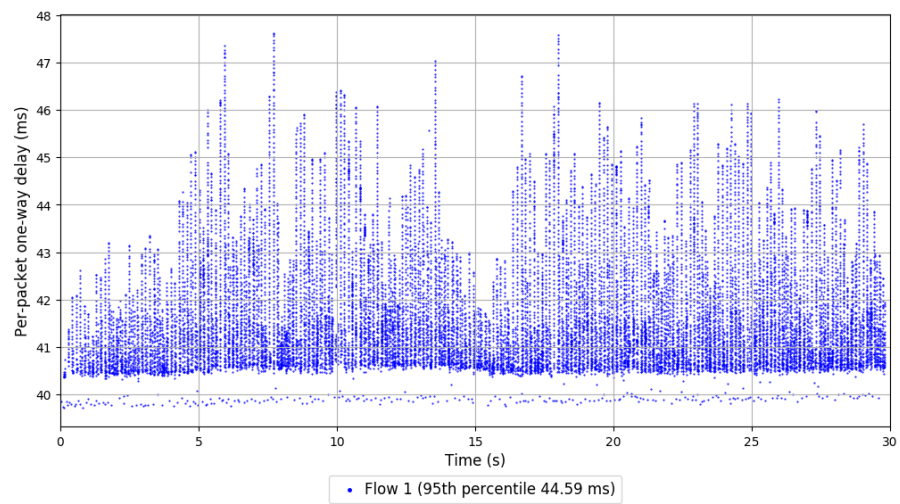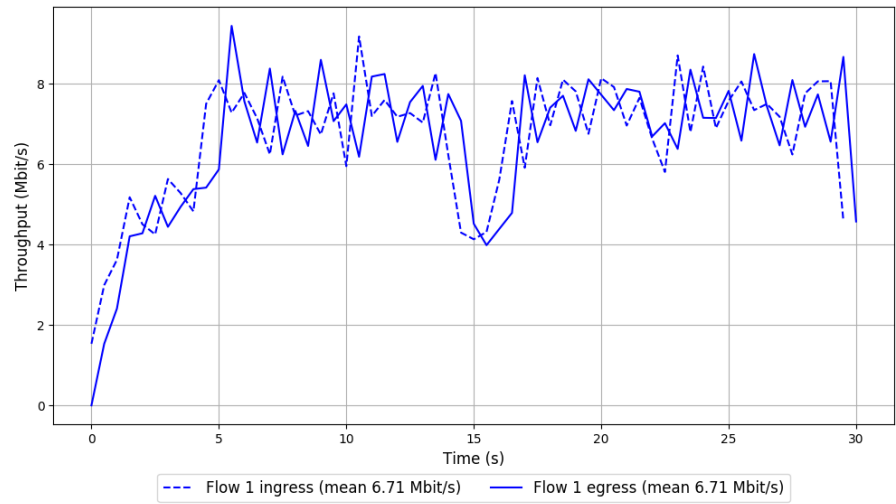Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-05-22 10:56:51
End at: 2018-05-22 10:57:21
Local clock offset: -1.957 ms
Remote clock offset: -7.687 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 44.590 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 44.590 ms
Loss rate: 0.24%
```

Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 6.71 Mbit/s) ——— Flow 1 egress (mean 6.71 Mbit/s)

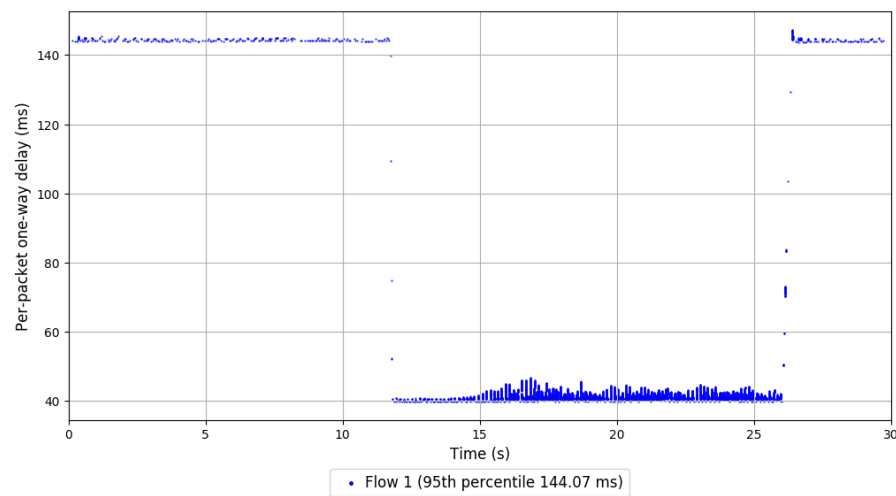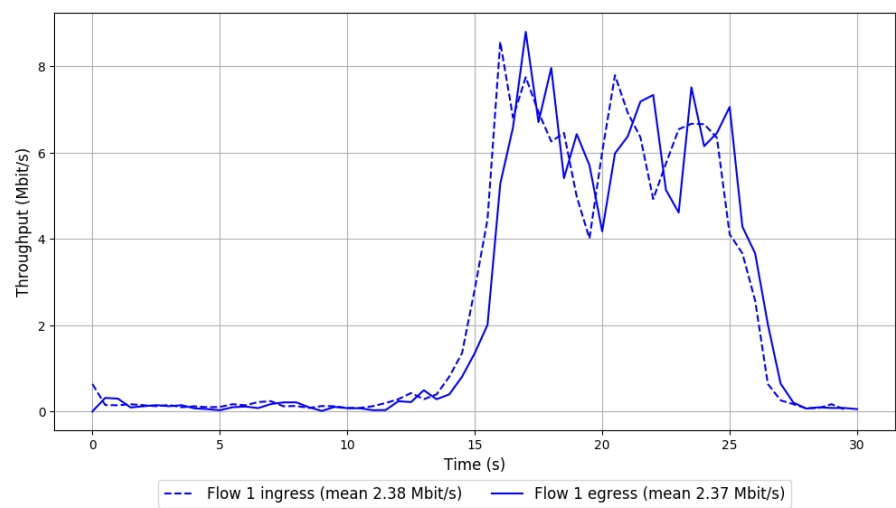• Flow 1 (95th percentile 44.59 ms)

```
Run 5: Statistics of Sprout

Start at: 2018-05-22 11:18:18
End at: 2018-05-22 11:18:48
Local clock offset: 3.032 ms
Remote clock offset: -2.204 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 144.071 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 144.071 ms
Loss rate: 1.11%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 2.38 Mbit/s) — Flow 1 egress (mean 2.37 Mbit/s)

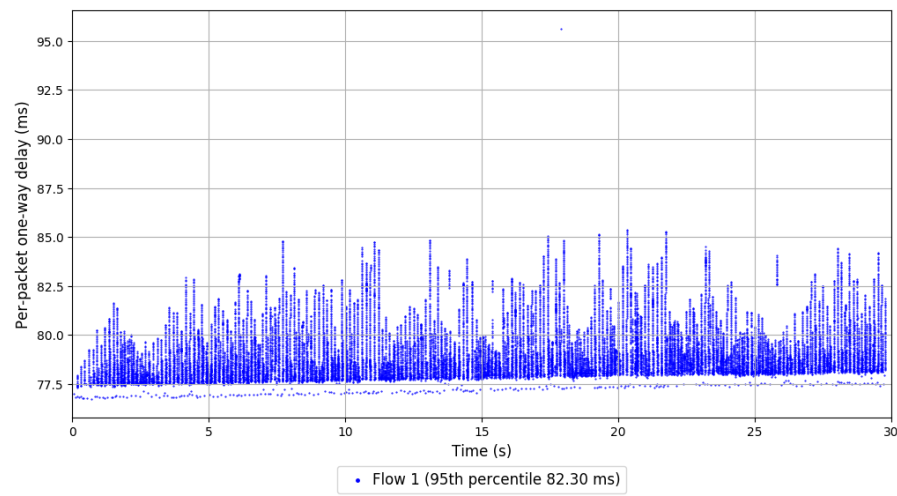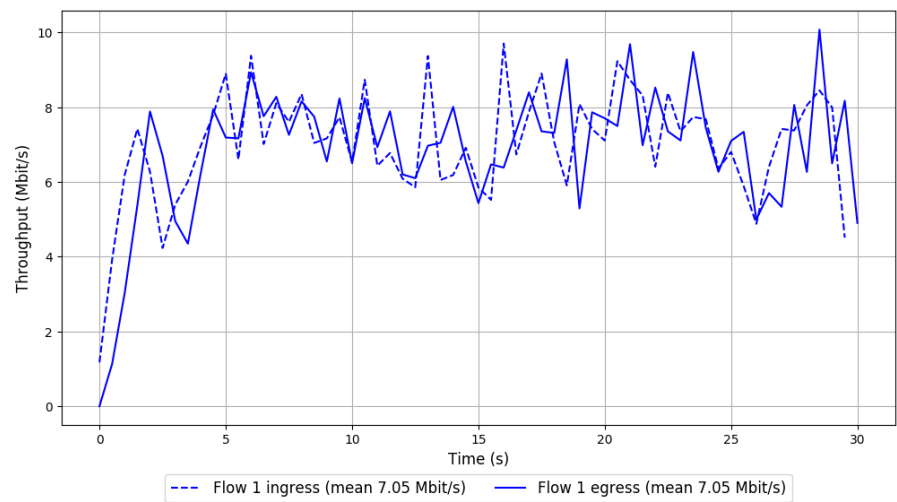• Flow 1 (95th percentile 144.07 ms)

```
Run 6: Statistics of Sprout

Start at: 2018-05-22 11:42:42
End at: 2018-05-22 11:43:12
Local clock offset: -0.023 ms
Remote clock offset: -8.145 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.05 Mbit/s
95th percentile per-packet one-way delay: 82.304 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 7.05 Mbit/s
95th percentile per-packet one-way delay: 82.304 ms
Loss rate: 0.33%
```

Run 6: Report of Sprout — Data Link

Flow 1 ingress (mean 7.05 Mbit/s)   Flow 1 egress (mean 7.05 Mbit/s)

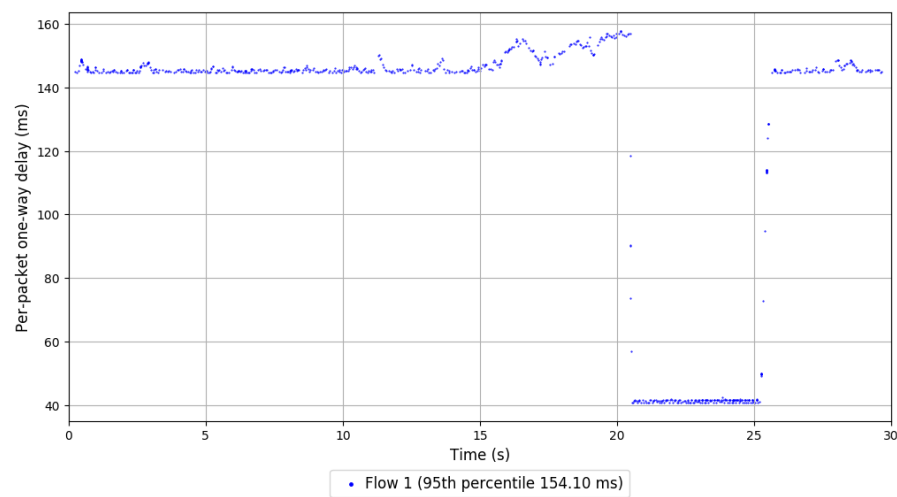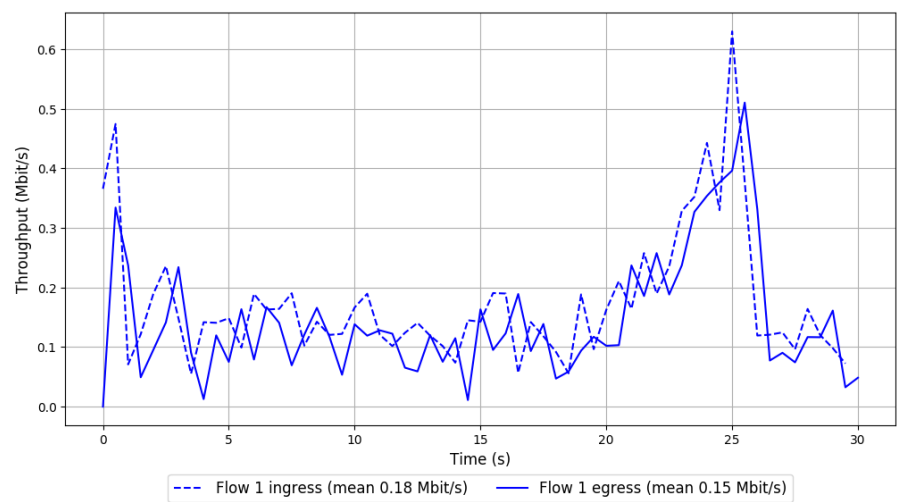Flow 1 (95th percentile 82.30 ms)

```
Run 7: Statistics of Sprout

Start at: 2018-05-22 12:15:01
End at: 2018-05-22 12:15:31
Local clock offset: 2.428 ms
Remote clock offset: 55.676 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 154.105 ms
Loss rate: 15.88%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 154.105 ms
Loss rate: 15.88%
```
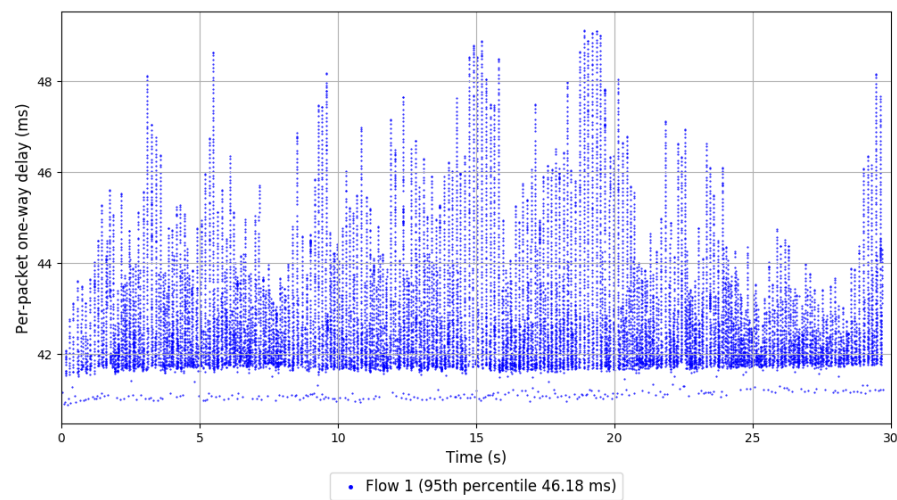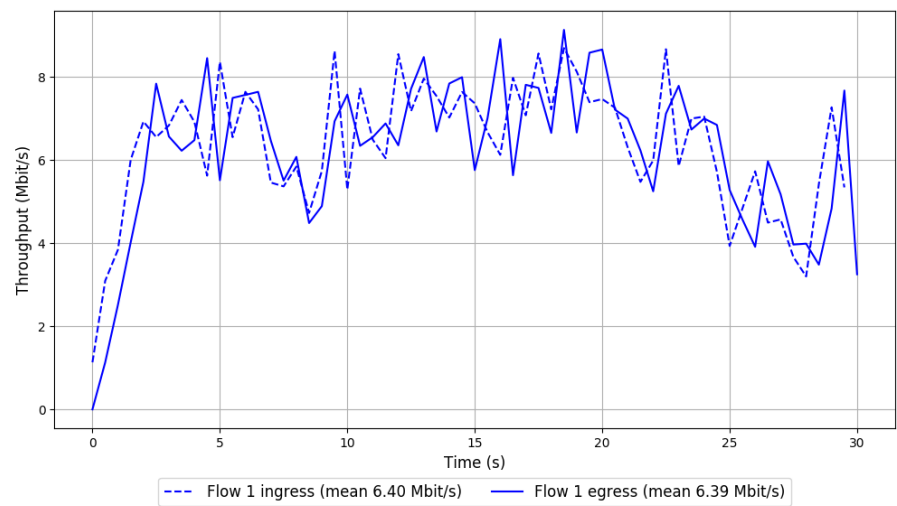
Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-05-22 12:36:57
End at: 2018-05-22 12:37:27
Local clock offset: 3.933 ms
Remote clock offset: 68.844 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 46.179 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 46.179 ms
Loss rate: 0.60%
```

Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-05-22 12:57:41
End at: 2018-05-22 12:58:11
Local clock offset: 4.597 ms
Remote clock offset: 4.069 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 44.543 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 44.543 ms
Loss rate: 0.56%
```
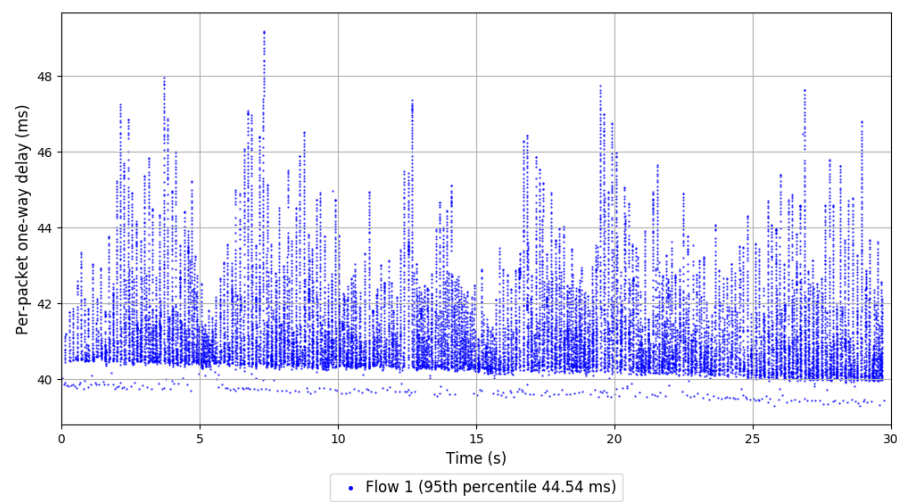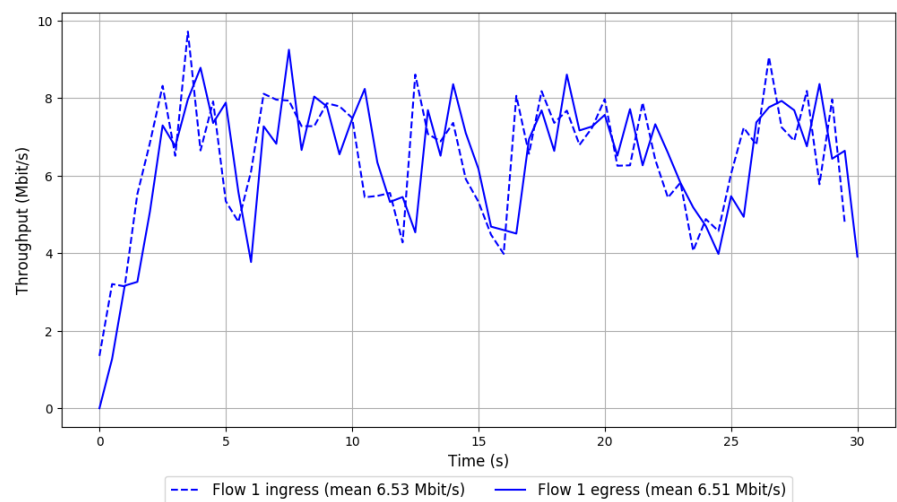
Run 9: Report of Sprout — Data Link

Flow 1 ingress (mean 6.53 Mbit/s)   Flow 1 egress (mean 6.51 Mbit/s)
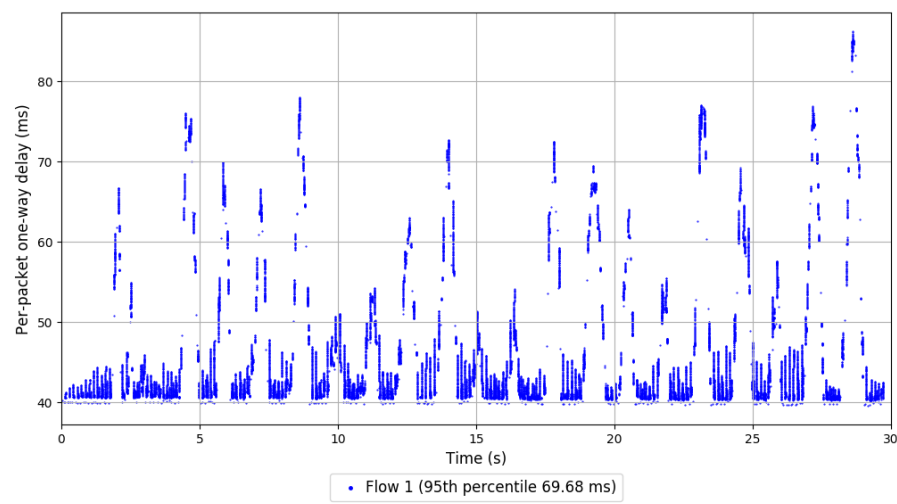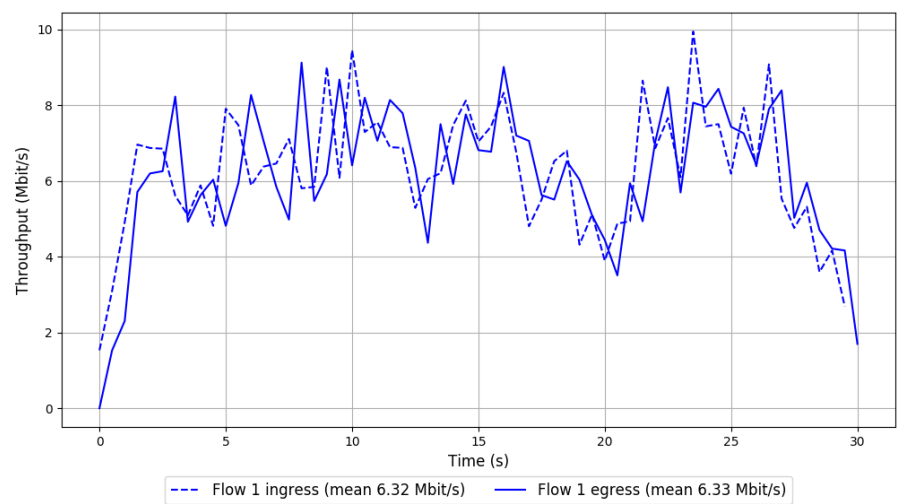

Flow 1 (95th percentile 44.54 ms)

```
Run 10: Statistics of Sprout

Start at: 2018-05-22 13:18:28
End at: 2018-05-22 13:18:58
Local clock offset: 0.614 ms
Remote clock offset: -13.654 ms


# Below is generated by plot.py at 2018-05-22 13:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.33 Mbit/s
95th percentile per-packet one-way delay: 69.676 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 6.33 Mbit/s
95th percentile per-packet one-way delay: 69.676 ms
Loss rate: 0.26%
```
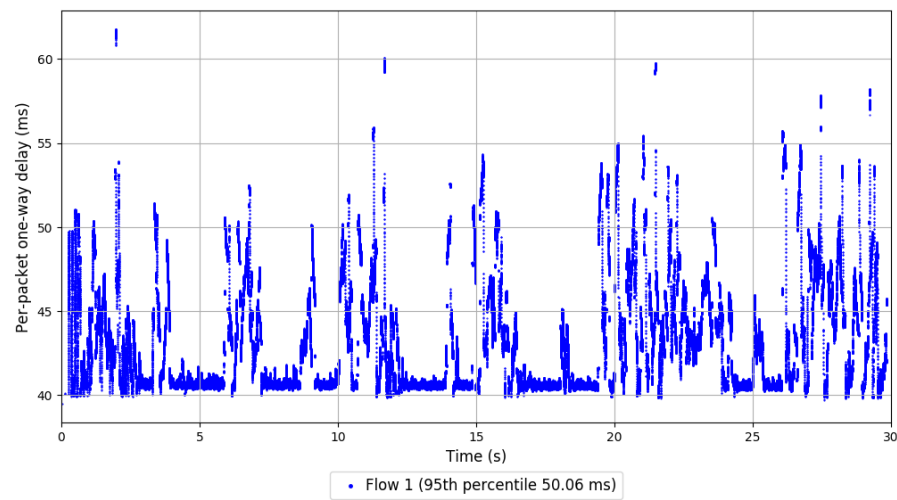
Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 6.32 Mbit/s)   Flow 1 egress (mean 6.33 Mbit/s)

Flow 1 (95th percentile 69.68 ms)

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

Start at: 2018-05-22 09:59:42
End at: 2018-05-22 10:00:12
Local clock offset: -0.943 ms
Remote clock offset: 12.161 ms


# Below is generated by plot.py at 2018-05-22 13:49:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.56 Mbit/s
95th percentile per-packet one-way delay: 50.062 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 86.56 Mbit/s
95th percentile per-packet one-way delay: 50.062 ms
Loss rate: 0.59%
```
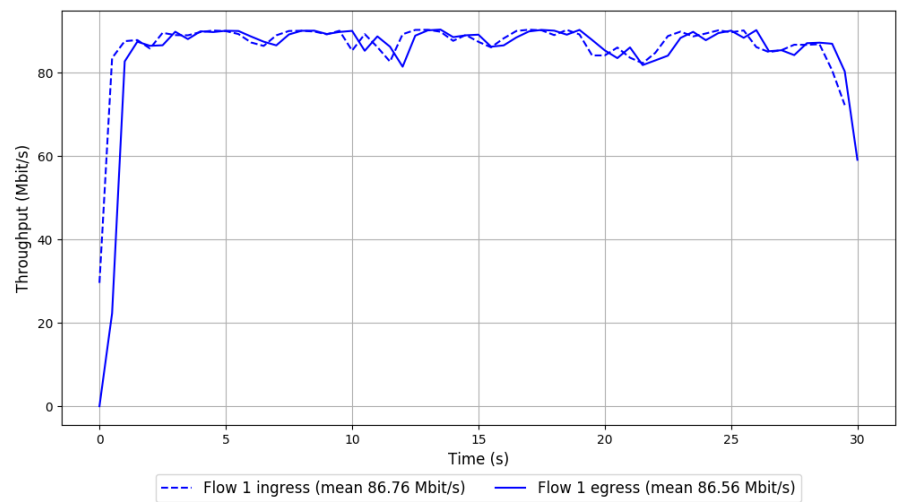
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2018-05-22 10:20:28
End at: 2018-05-22 10:20:58
Local clock offset: 3.409 ms
Remote clock offset: 15.185 ms


# Below is generated by plot.py at 2018-05-22 13:49:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 51.578 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 51.578 ms
Loss rate: 0.88%
```
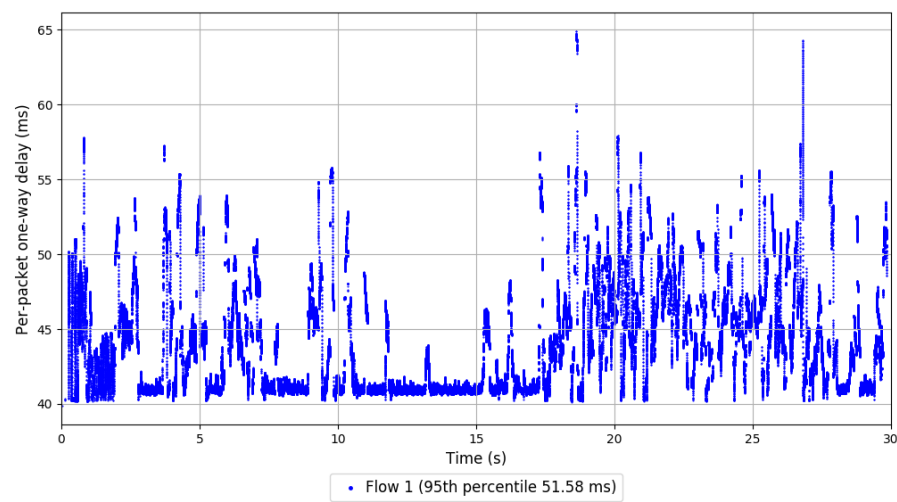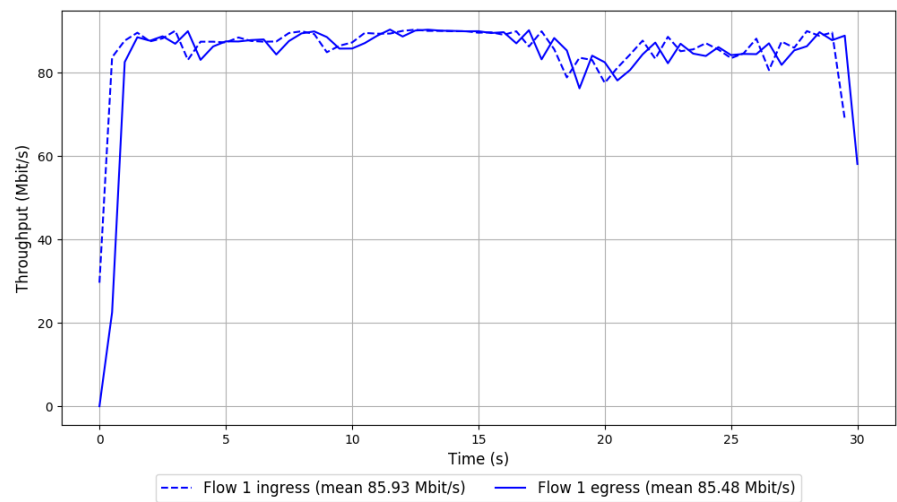
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 85.93 Mbit/s)   Flow 1 egress (mean 85.48 Mbit/s)
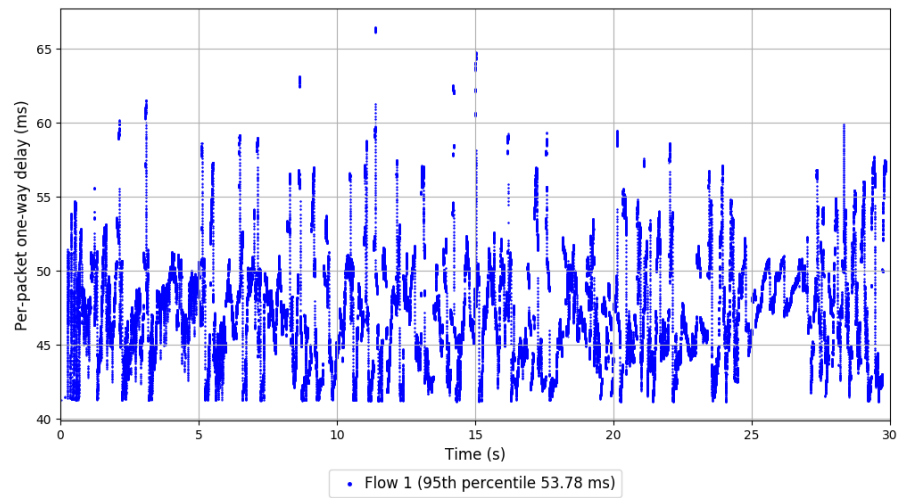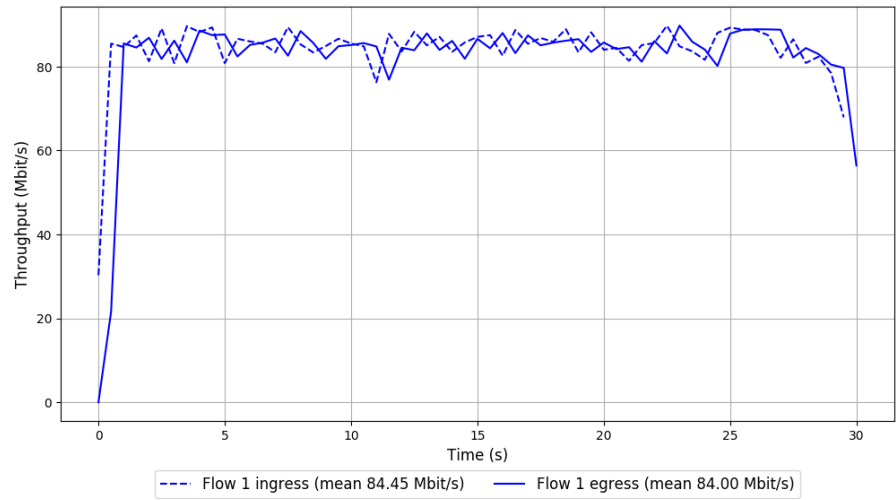

• Flow 1 (95th percentile 51.58 ms)

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

Start at: 2018-05-22 10:41:13
End at: 2018-05-22 10:41:43
Local clock offset: -0.656 ms
Remote clock offset: -2.884 ms


# Below is generated by plot.py at 2018-05-22 13:49:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.00 Mbit/s
95th percentile per-packet one-way delay: 53.781 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 84.00 Mbit/s
95th percentile per-packet one-way delay: 53.781 ms
Loss rate: 0.90%
```

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

Flow 1 ingress (mean 84.45 Mbit/s)   Flow 1 egress (mean 84.00 Mbit/s)

Flow 1 (95th percentile 53.78 ms)

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

Start at: 2018-05-22 11:01:59
End at: 2018-05-22 11:02:29
Local clock offset: 0.312 ms
Remote clock offset: -4.449 ms


# Below is generated by plot.py at 2018-05-22 13:49:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.32 Mbit/s
95th percentile per-packet one-way delay: 59.506 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 56.32 Mbit/s
95th percentile per-packet one-way delay: 59.506 ms
Loss rate: 1.07%
```
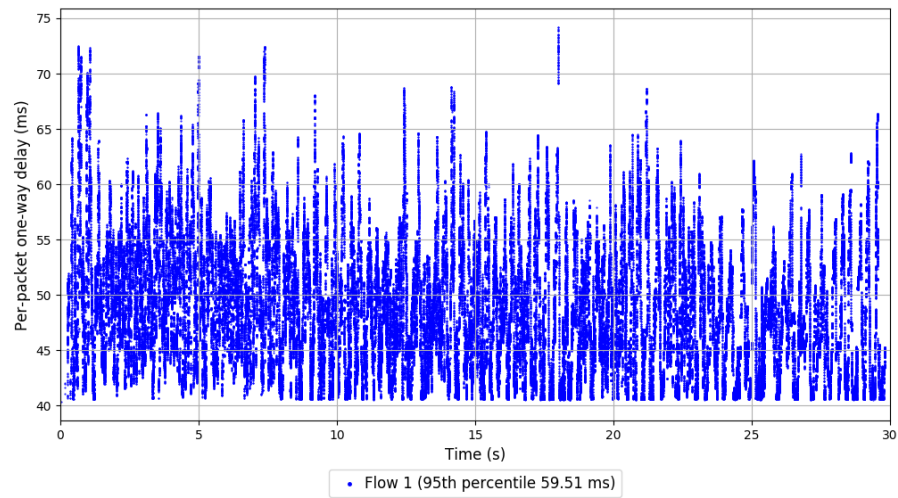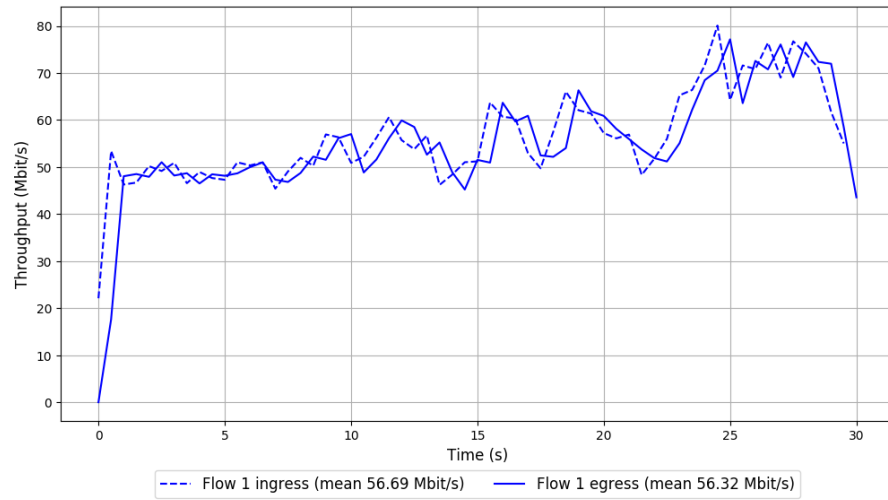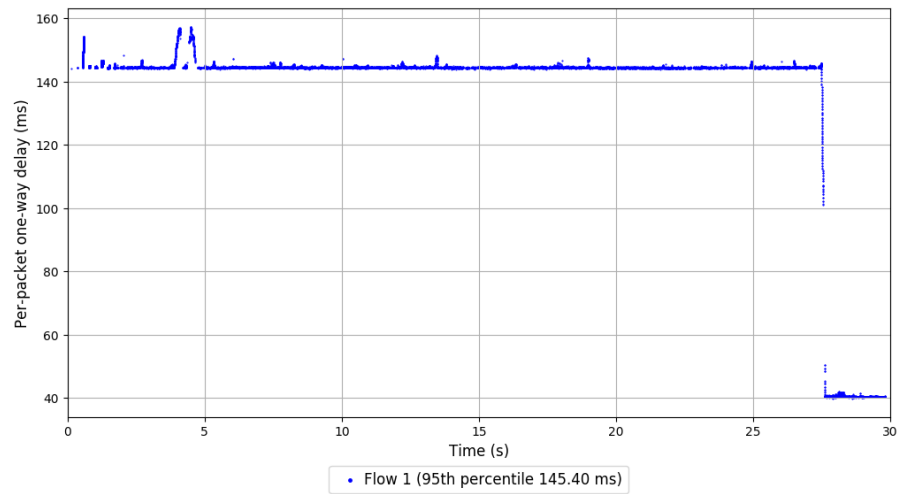
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 56.69 Mbit/s) ---- Flow 1 egress (mean 56.32 Mbit/s) ——

Flow 1 (95th percentile 59.51 ms)

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

Start at: 2018-05-22 11:24:26
End at: 2018-05-22 11:24:56
Local clock offset: 3.616 ms
Remote clock offset: -2.642 ms


# Below is generated by plot.py at 2018-05-22 13:49:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.36 Mbit/s
95th percentile per-packet one-way delay: 145.398 ms
Loss rate: 22.02%
-- Flow 1:
Average throughput: 5.36 Mbit/s
95th percentile per-packet one-way delay: 145.398 ms
Loss rate: 22.02%
```
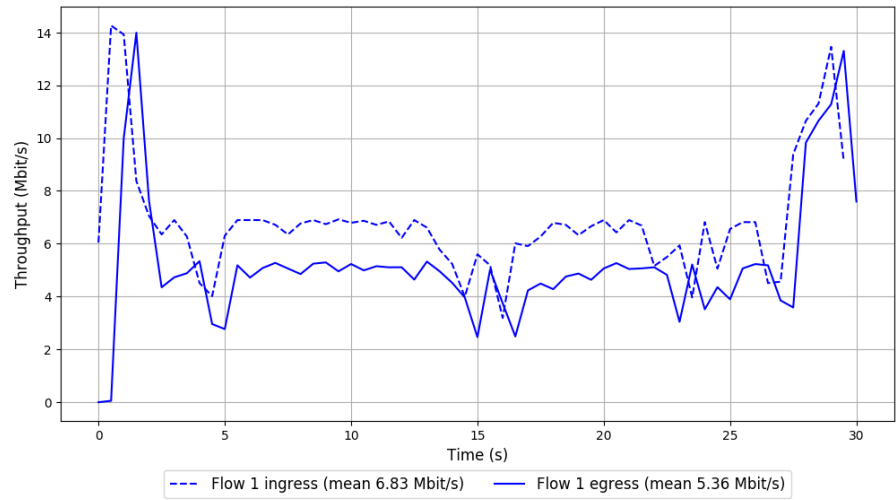
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 6.83 Mbit/s)　　Flow 1 egress (mean 5.36 Mbit/s)

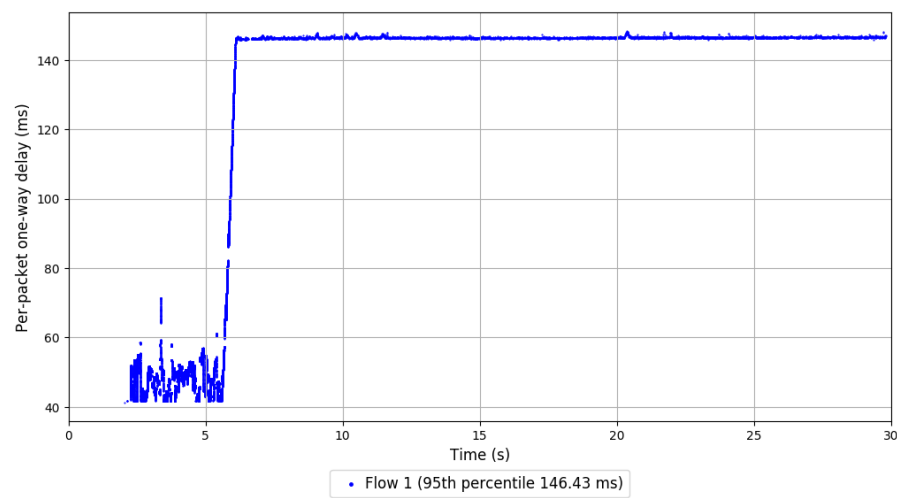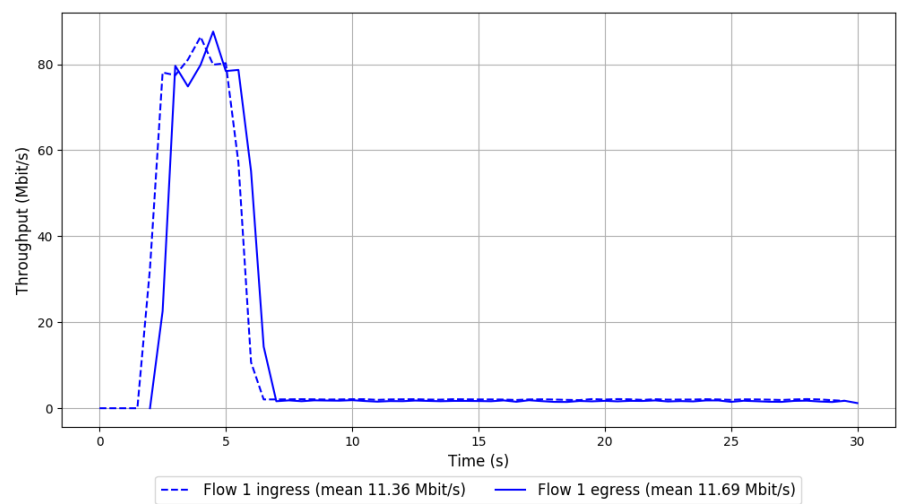
Flow 1 (95th percentile 145.40 ms)

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

Start at: 2018-05-22 11:47:54
End at: 2018-05-22 11:48:24
Local clock offset: -0.222 ms
Remote clock offset: 35.448 ms


# Below is generated by plot.py at 2018-05-22 13:49:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.69 Mbit/s
95th percentile per-packet one-way delay: 146.434 ms
Loss rate: 4.39%
-- Flow 1:
Average throughput: 11.69 Mbit/s
95th percentile per-packet one-way delay: 146.434 ms
Loss rate: 4.39%
```

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

Flow 1 ingress (mean 11.36 Mbit/s) --- Flow 1 egress (mean 11.69 Mbit/s)
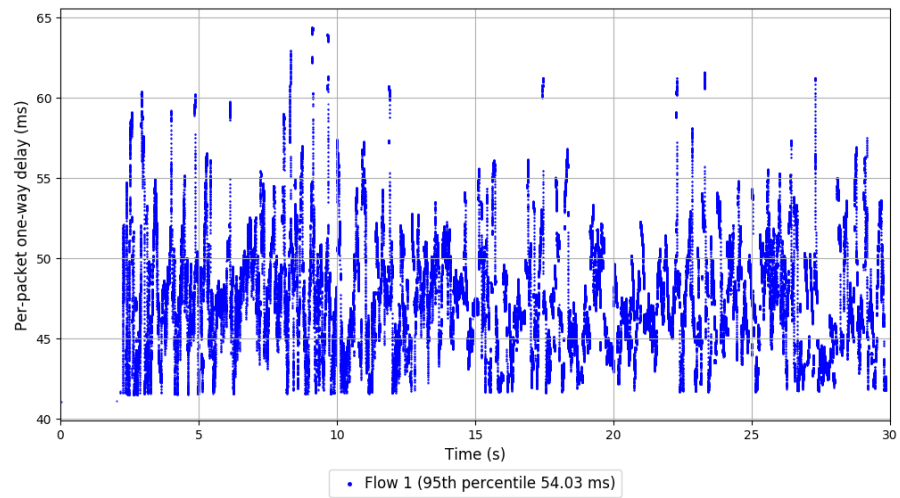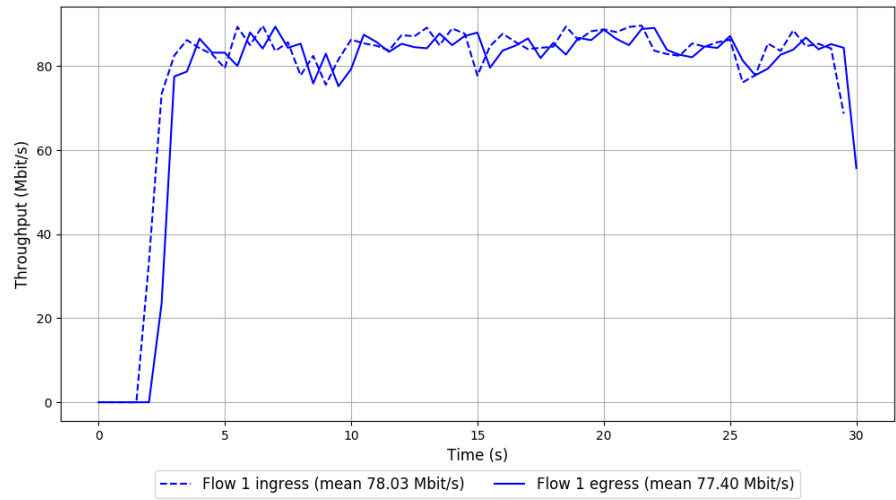

Flow 1 (95th percentile 146.43 ms)

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

Start at: 2018-05-22 12:21:12
End at: 2018-05-22 12:21:42
Local clock offset: 2.611 ms
Remote clock offset: 59.194 ms


# Below is generated by plot.py at 2018-05-22 13:49:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.40 Mbit/s
95th percentile per-packet one-way delay: 54.029 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 77.40 Mbit/s
95th percentile per-packet one-way delay: 54.029 ms
Loss rate: 1.17%
```
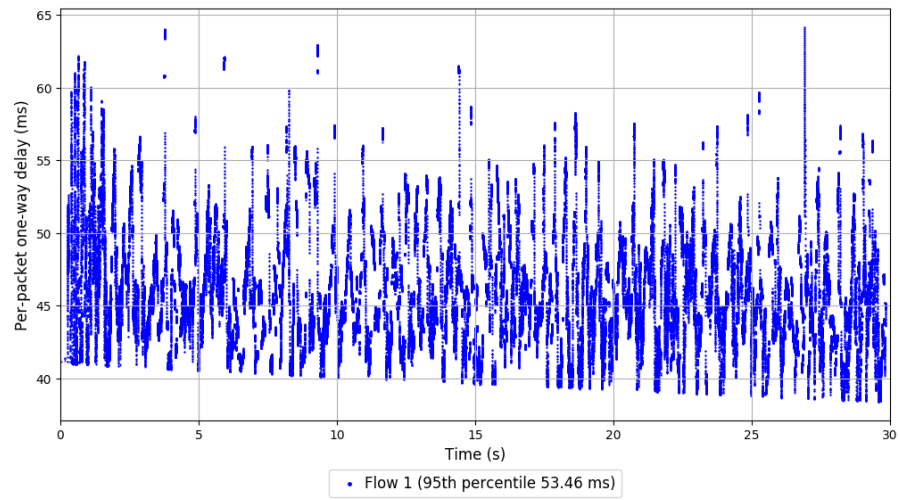
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 78.03 Mbit/s)   Flow 1 egress (mean 77.40 Mbit/s)

Flow 1 (95th percentile 54.03 ms)

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

Start at: 2018-05-22 12:42:04
End at: 2018-05-22 12:42:34
Local clock offset: 4.236 ms
Remote clock offset: 47.547 ms


# Below is generated by plot.py at 2018-05-22 13:49:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.30 Mbit/s
95th percentile per-packet one-way delay: 53.456 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 80.30 Mbit/s
95th percentile per-packet one-way delay: 53.456 ms
Loss rate: 1.20%
```
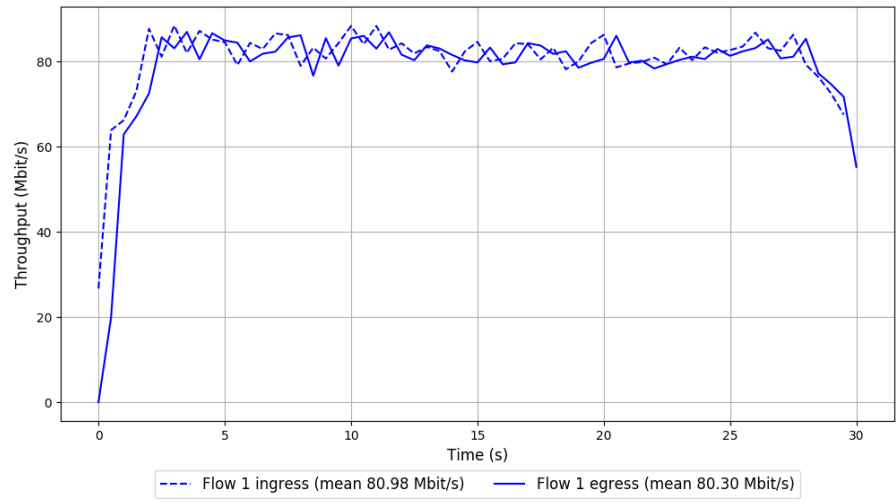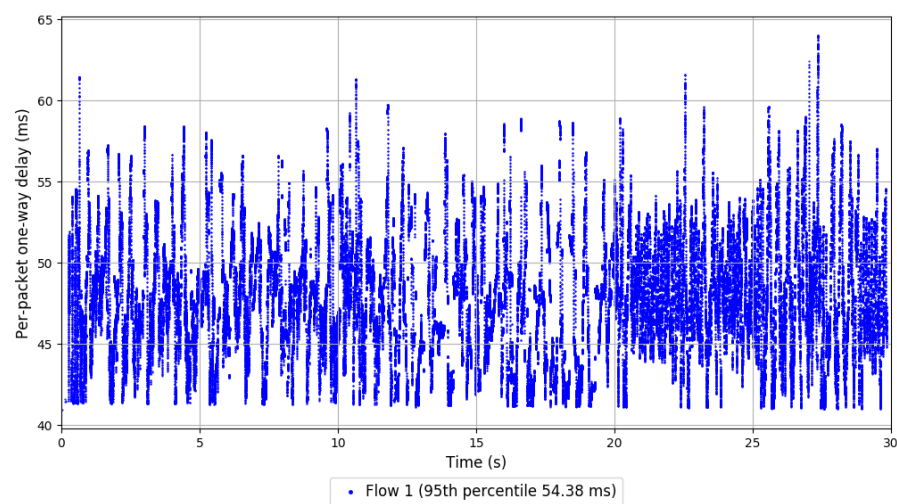
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 80.98 Mbit/s) --- Flow 1 egress (mean 80.30 Mbit/s)

• Flow 1 (95th percentile 53.46 ms)

239

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

Start at: 2018-05-22 13:02:50
End at: 2018-05-22 13:03:20
Local clock offset: 2.865 ms
Remote clock offset: -1.934 ms


# Below is generated by plot.py at 2018-05-22 13:49:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.66 Mbit/s
95th percentile per-packet one-way delay: 54.376 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 77.66 Mbit/s
95th percentile per-packet one-way delay: 54.376 ms
Loss rate: 0.97%
```
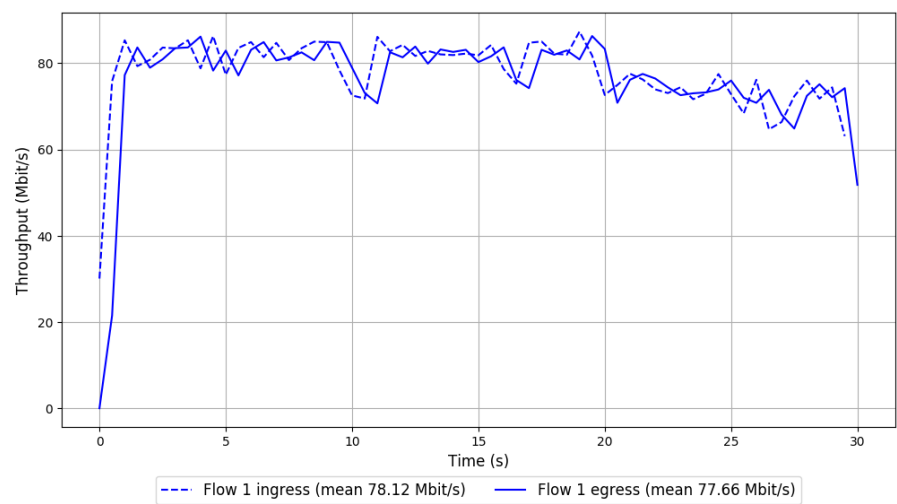
Run 9: Report of TaoVA-100x — Data Link

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

Start at: 2018-05-22 13:23:36
End at: 2018-05-22 13:24:06
Local clock offset: 0.292 ms
Remote clock offset: -16.569 ms


# Below is generated by plot.py at 2018-05-22 13:50:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.10 Mbit/s
95th percentile per-packet one-way delay: 53.033 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 84.10 Mbit/s
95th percentile per-packet one-way delay: 53.033 ms
Loss rate: 1.28%
```
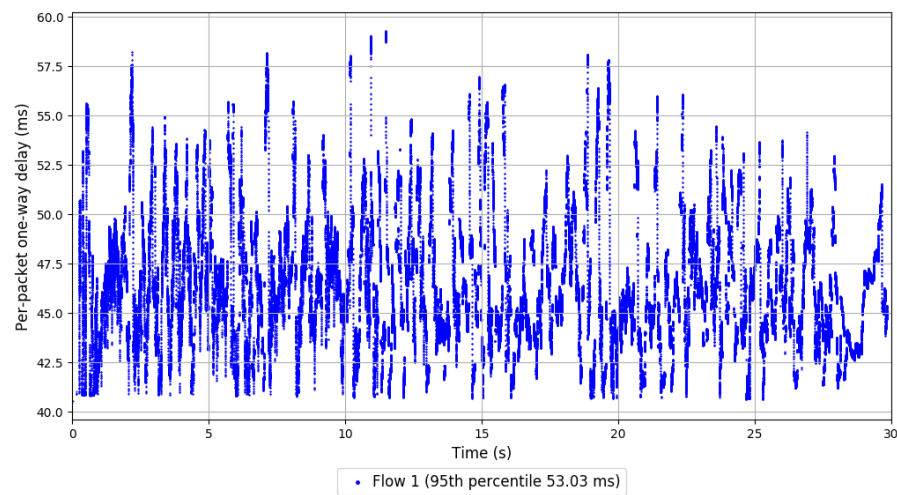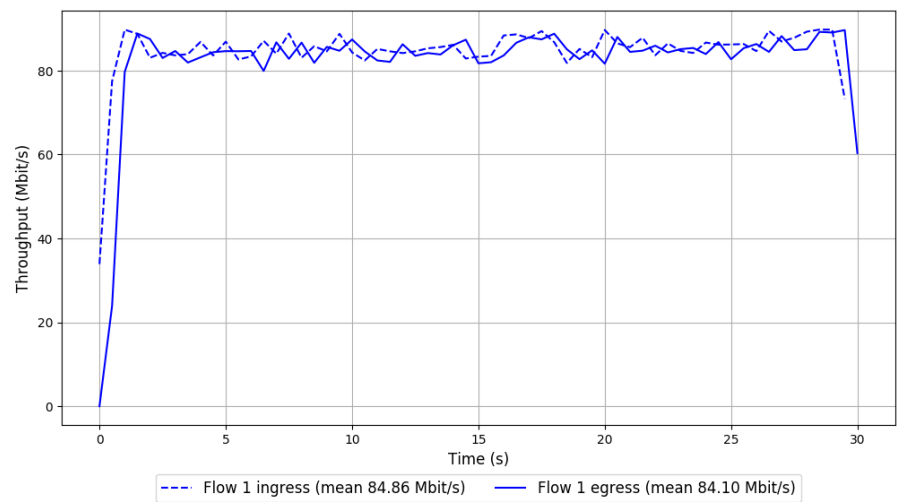
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 84.86 Mbit/s)   Flow 1 egress (mean 84.10 Mbit/s)
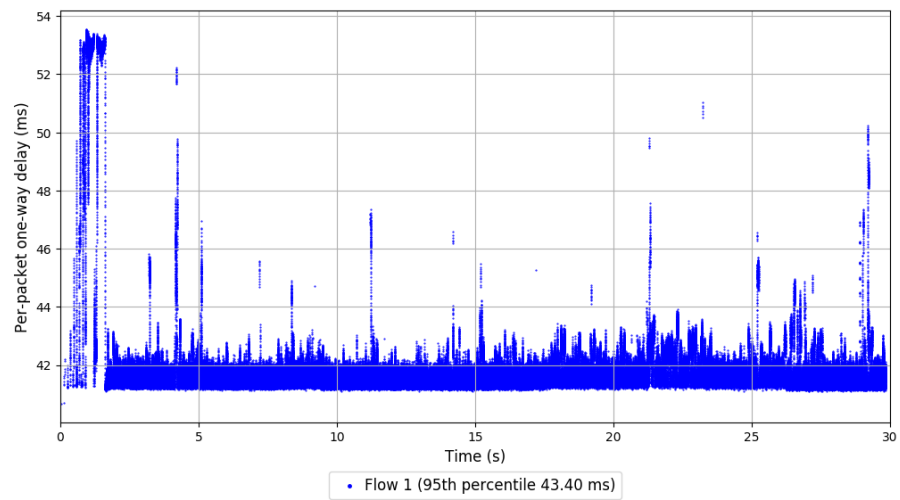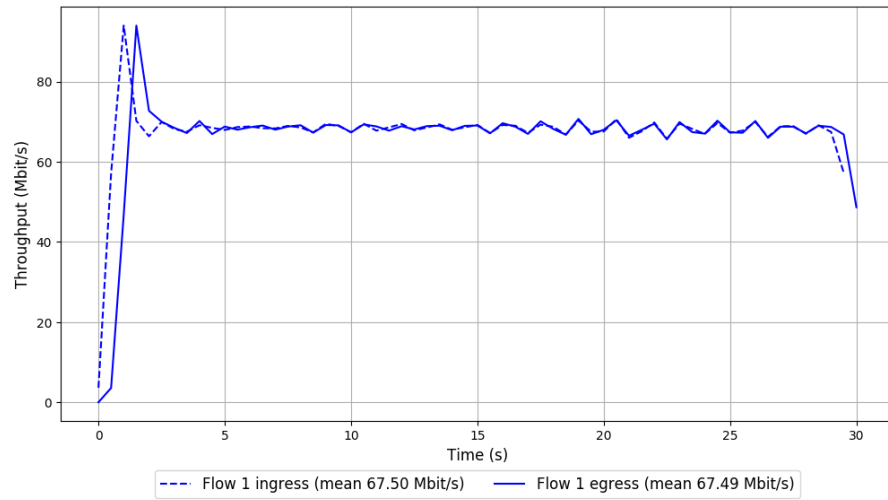

Flow 1 (95th percentile 53.03 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-05-22 10:03:37
End at: 2018-05-22 10:04:07
Local clock offset: 0.781 ms
Remote clock offset: 13.008 ms


# Below is generated by plot.py at 2018-05-22 13:50:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.49 Mbit/s
95th percentile per-packet one-way delay: 43.398 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 67.49 Mbit/s
95th percentile per-packet one-way delay: 43.398 ms
Loss rate: 0.37%
```

Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 67.50 Mbit/s) ----- Flow 1 egress (mean 67.49 Mbit/s)

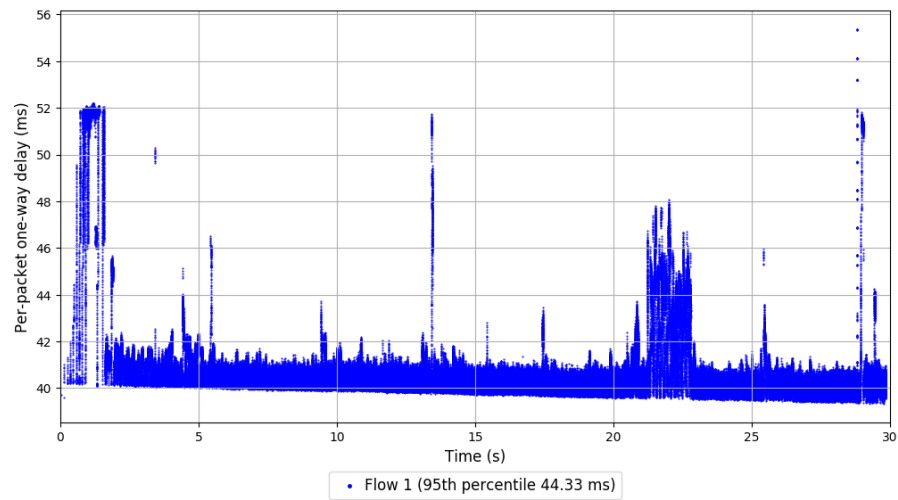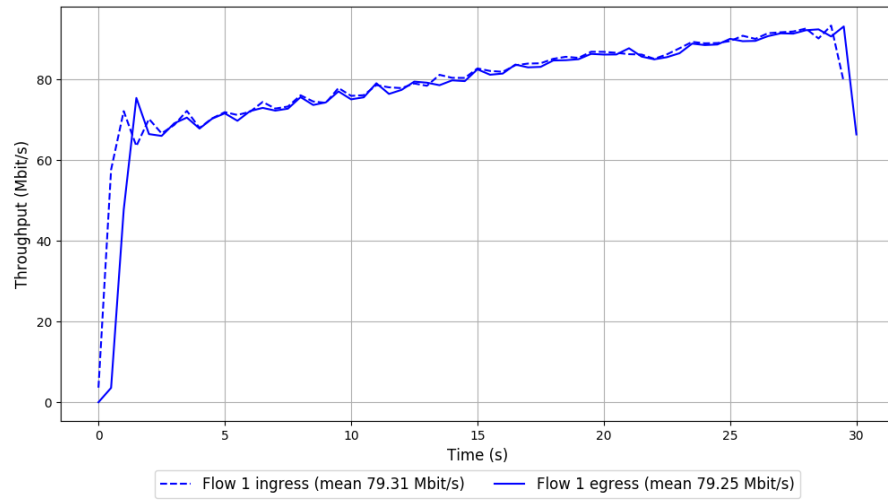

• Flow 1 (95th percentile 43.40 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2018-05-22 10:24:22
End at: 2018-05-22 10:24:52
Local clock offset: 3.588 ms
Remote clock offset: 11.367 ms


# Below is generated by plot.py at 2018-05-22 13:50:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.25 Mbit/s
95th percentile per-packet one-way delay: 44.330 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 79.25 Mbit/s
95th percentile per-packet one-way delay: 44.330 ms
Loss rate: 0.42%
```

Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-05-22 10:45:07
End at: 2018-05-22 10:45:37
Local clock offset: -1.204 ms
Remote clock offset: -4.54 ms


# Below is generated by plot.py at 2018-05-22 13:50:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.96 Mbit/s
95th percentile per-packet one-way delay: 43.022 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 66.96 Mbit/s
95th percentile per-packet one-way delay: 43.022 ms
Loss rate: 0.37%
```
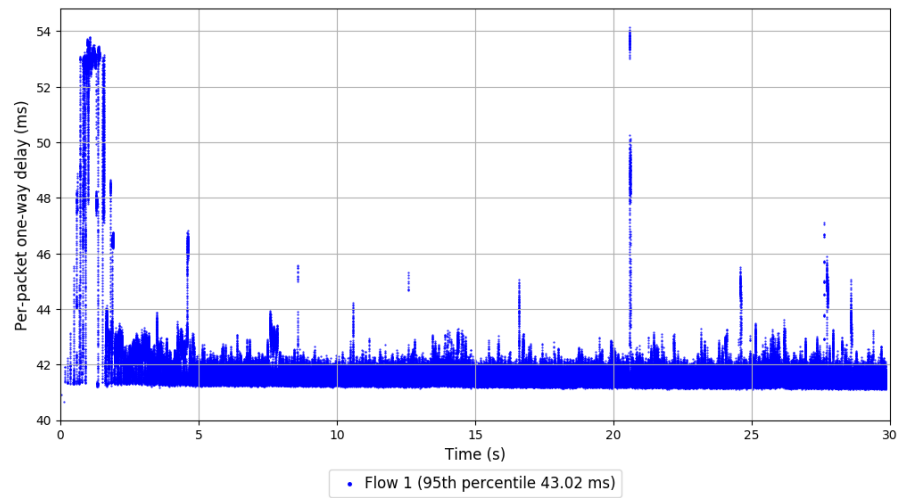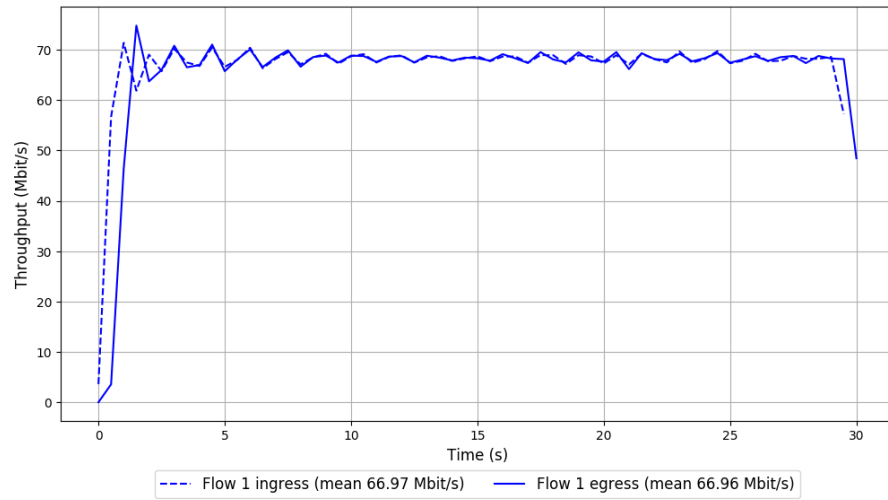
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 66.97 Mbit/s)   —— Flow 1 egress (mean 66.96 Mbit/s)

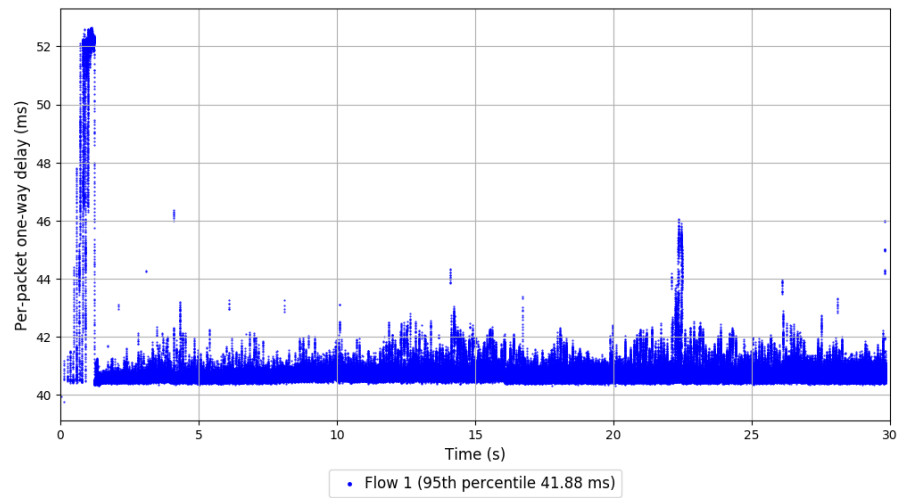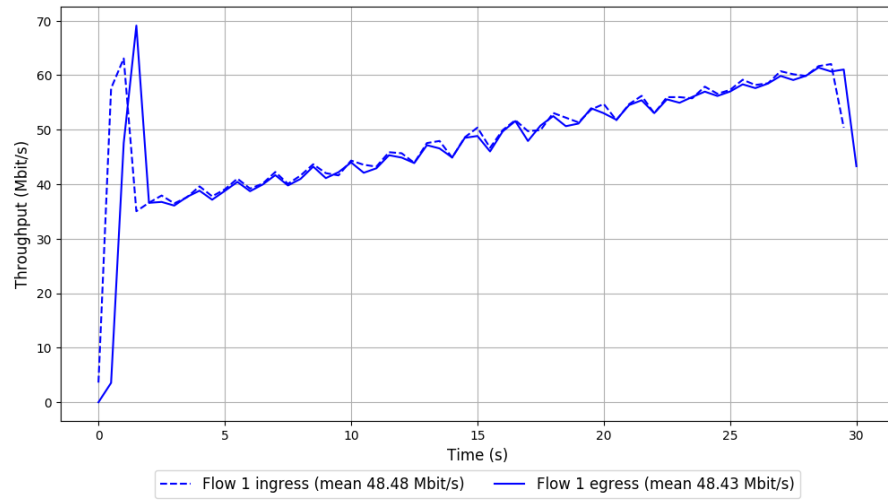
• Flow 1 (95th percentile 43.02 ms)

249

```
Run 4: Statistics of TCP Vegas

Start at: 2018-05-22 11:05:50
End at: 2018-05-22 11:06:20
Local clock offset: 1.405 ms
Remote clock offset: -3.261 ms


# Below is generated by plot.py at 2018-05-22 13:50:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.43 Mbit/s
95th percentile per-packet one-way delay: 41.877 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 48.43 Mbit/s
95th percentile per-packet one-way delay: 41.877 ms
Loss rate: 0.46%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 48.48 Mbit/s)   —— Flow 1 egress (mean 48.43 Mbit/s)

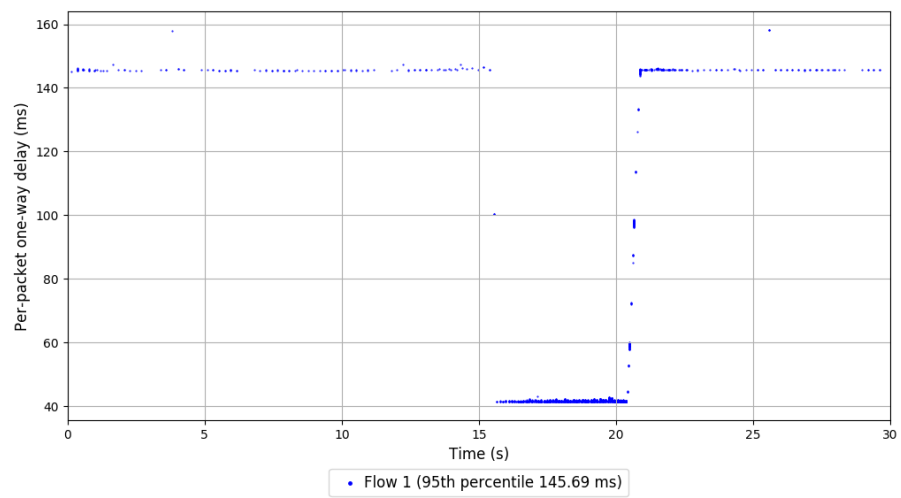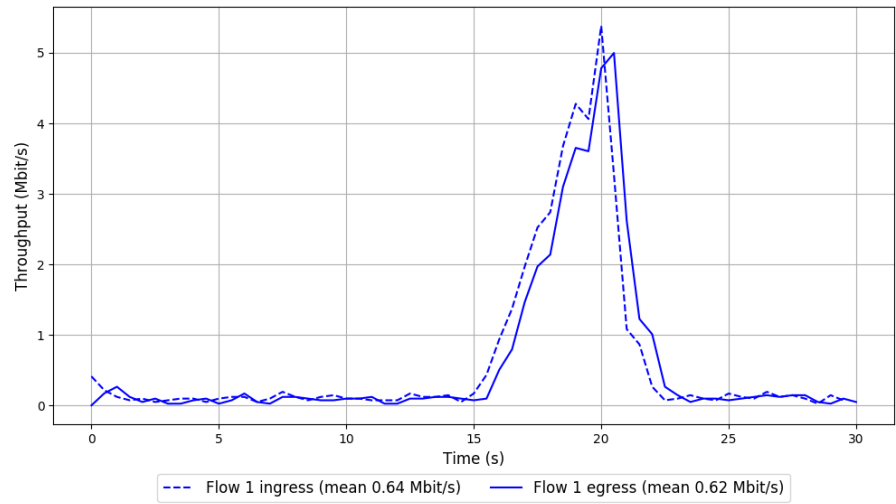

• Flow 1 (95th percentile 41.88 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2018-05-22 11:29:19
End at: 2018-05-22 11:29:49
Local clock offset: 2.402 ms
Remote clock offset: -3.078 ms


# Below is generated by plot.py at 2018-05-22 13:50:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 145.693 ms
Loss rate: 4.55%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 145.693 ms
Loss rate: 4.55%
```

Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.64 Mbit/s) ---- Flow 1 egress (mean 0.62 Mbit/s) ——
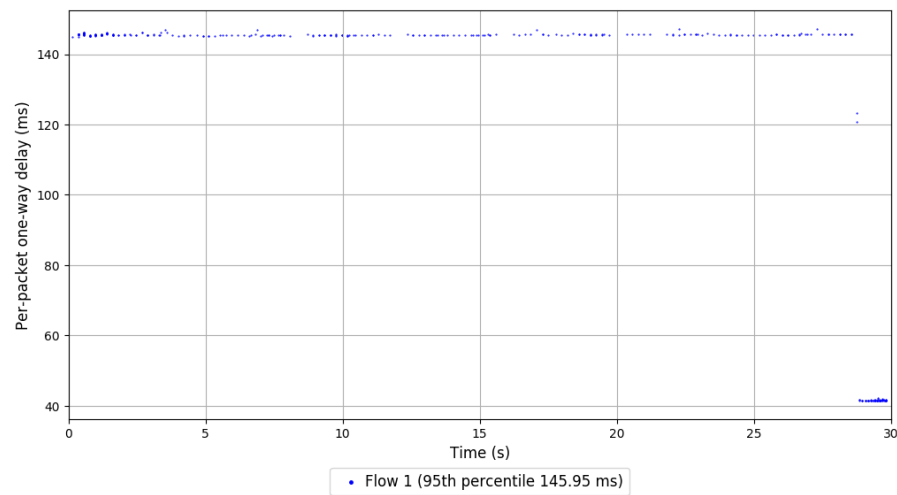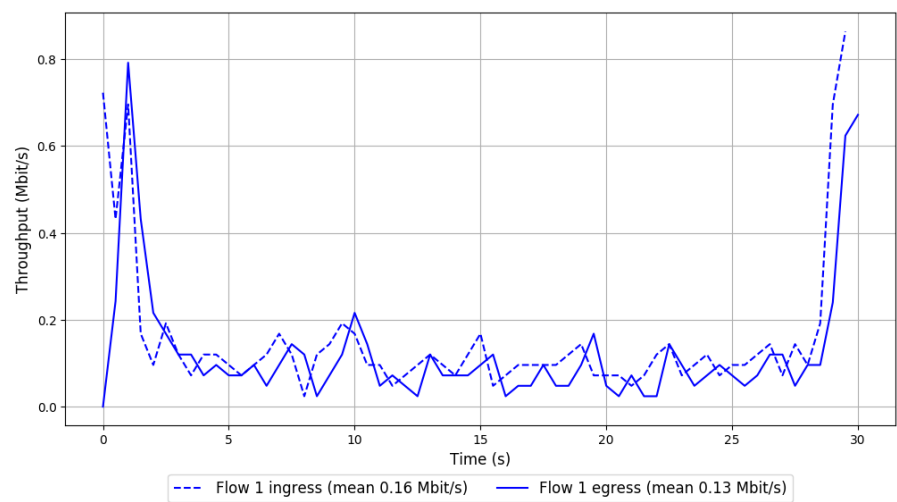

• Flow 1 (95th percentile 145.69 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2018-05-22 11:52:43
End at: 2018-05-22 11:53:13
Local clock offset: -0.321 ms
Remote clock offset: 39.913 ms


# Below is generated by plot.py at 2018-05-22 13:50:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 145.953 ms
Loss rate: 17.57%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 145.953 ms
Loss rate: 17.57%
```
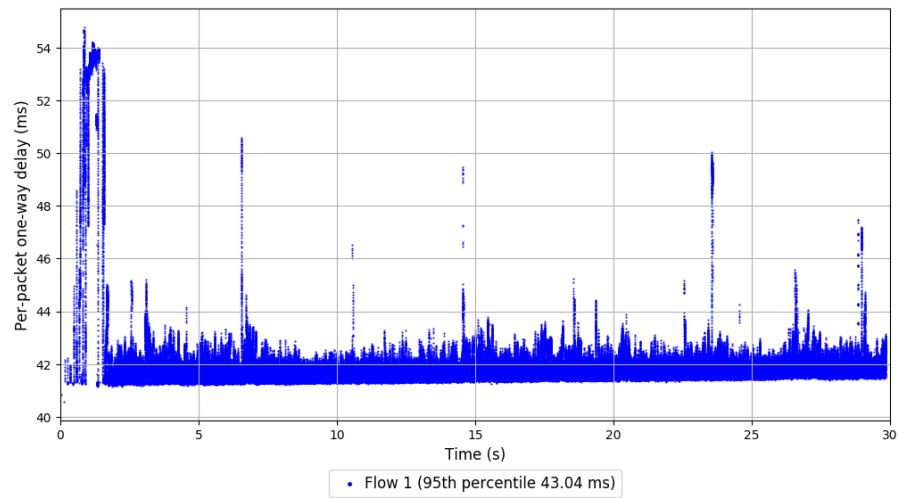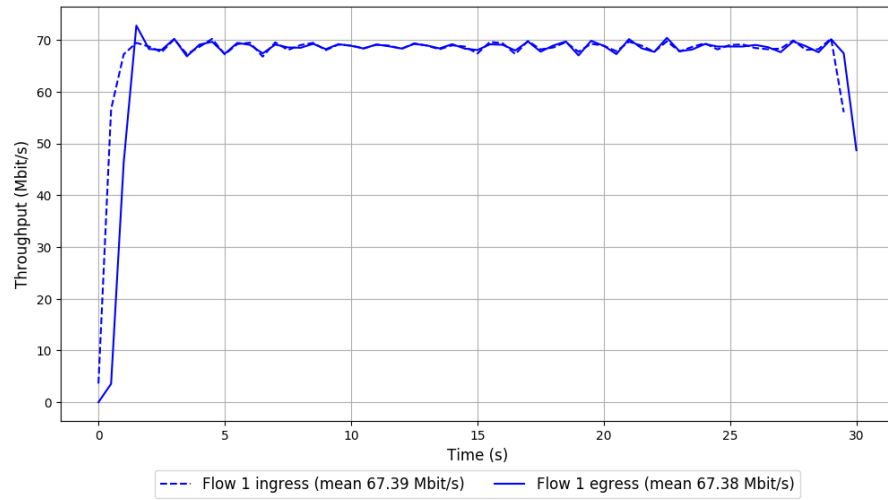
Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2018-05-22 12:25:13
End at: 2018-05-22 12:25:43
Local clock offset: 2.784 ms
Remote clock offset: 61.659 ms

# Below is generated by plot.py at 2018-05-22 13:50:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.38 Mbit/s
95th percentile per-packet one-way delay: 43.039 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 67.38 Mbit/s
95th percentile per-packet one-way delay: 43.039 ms
Loss rate: 0.37%
```

Run 7: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 67.39 Mbit/s) --- Flow 1 egress (mean 67.38 Mbit/s)

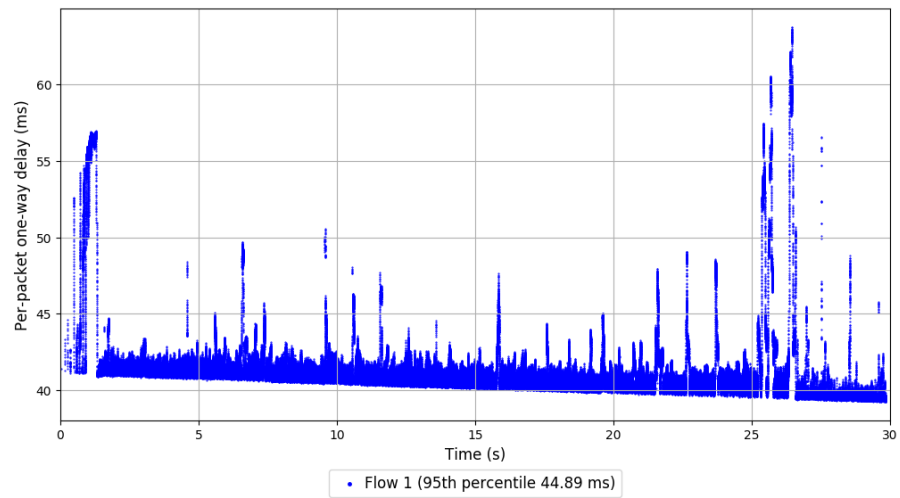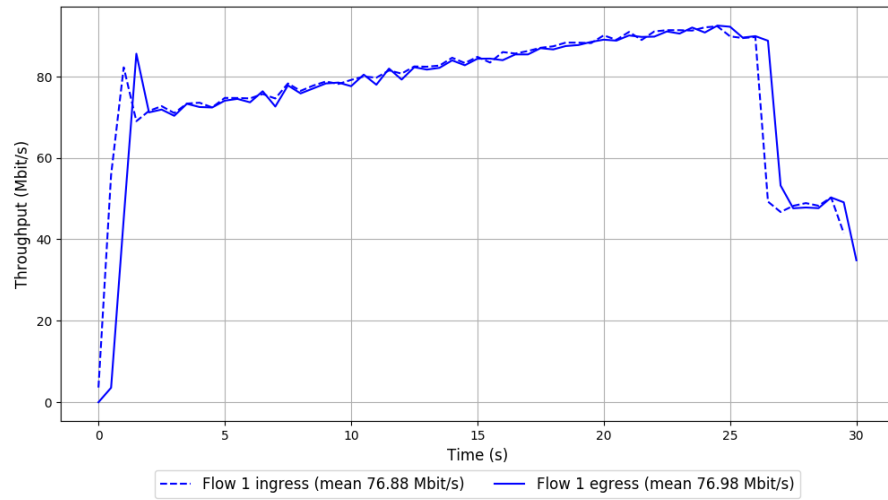• Flow 1 (95th percentile 43.04 ms)

```
Run 8: Statistics of TCP Vegas

Start at: 2018-05-22 12:45:58
End at: 2018-05-22 12:46:28
Local clock offset: 4.558 ms
Remote clock offset: 30.277 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.98 Mbit/s
95th percentile per-packet one-way delay: 44.893 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 76.98 Mbit/s
95th percentile per-packet one-way delay: 44.893 ms
Loss rate: 0.24%
```

Run 8: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 76.88 Mbit/s)   Flow 1 egress (mean 76.98 Mbit/s)

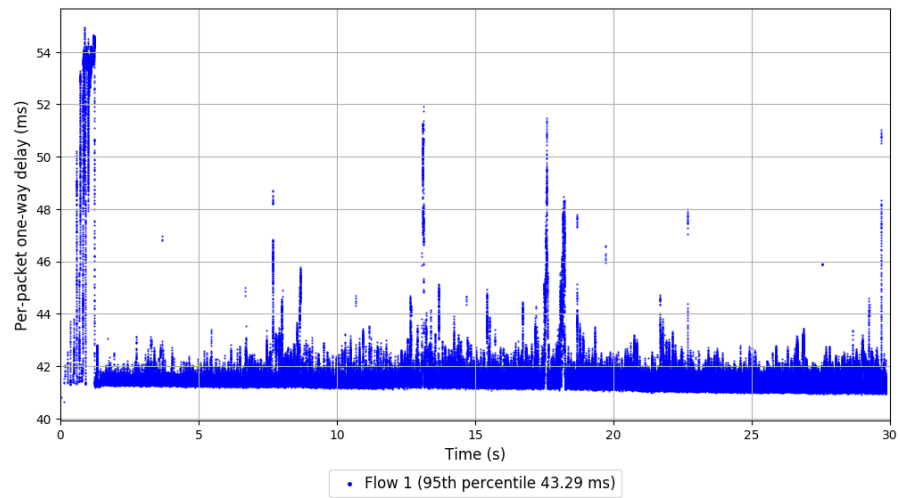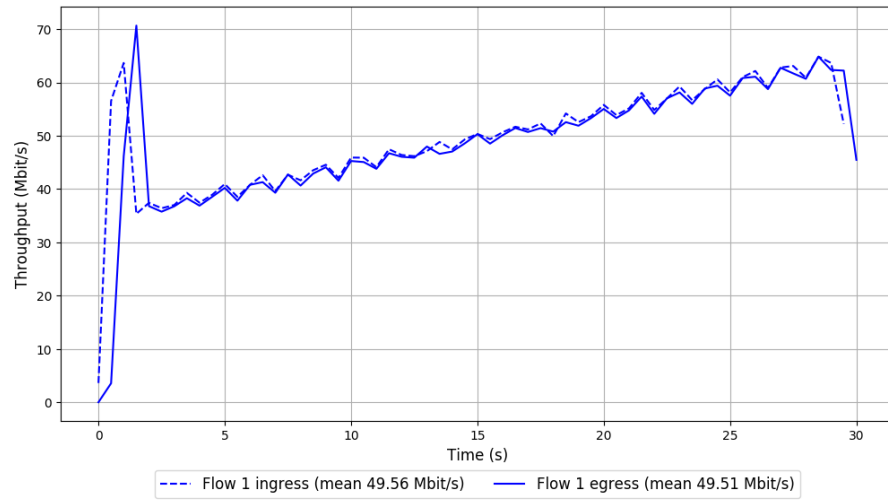• Flow 1 (95th percentile 44.89 ms)

```
Run 9: Statistics of TCP Vegas

Start at: 2018-05-22 13:06:45
End at: 2018-05-22 13:07:15
Local clock offset: 1.767 ms
Remote clock offset: -5.406 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.51 Mbit/s
95th percentile per-packet one-way delay: 43.290 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 49.51 Mbit/s
95th percentile per-packet one-way delay: 43.290 ms
Loss rate: 0.47%
```
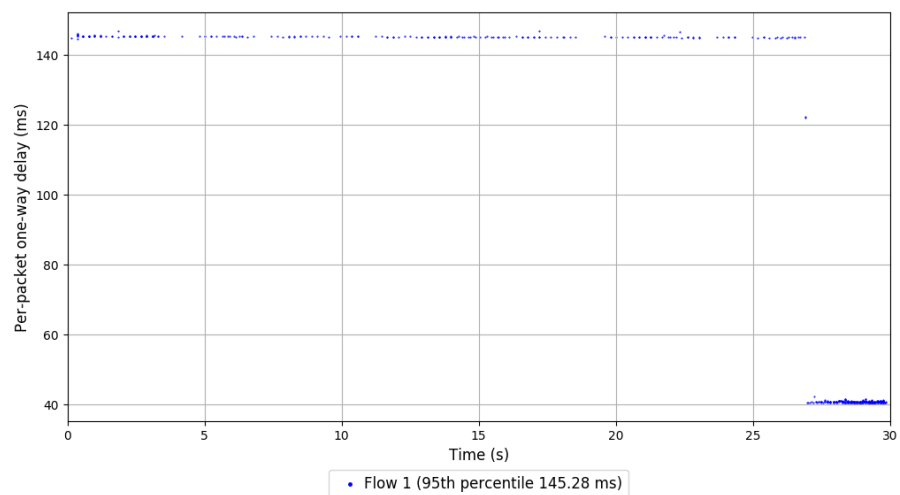
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 49.56 Mbit/s) ----- Flow 1 egress (mean 49.51 Mbit/s)

Flow 1 (95th percentile 43.29 ms)

```
Run 10: Statistics of TCP Vegas

Start at: 2018-05-22 13:27:31
End at: 2018-05-22 13:28:01
Local clock offset: 0.731 ms
Remote clock offset: -18.947 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 145.285 ms
Loss rate: 13.24%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 145.285 ms
Loss rate: 13.24%
```
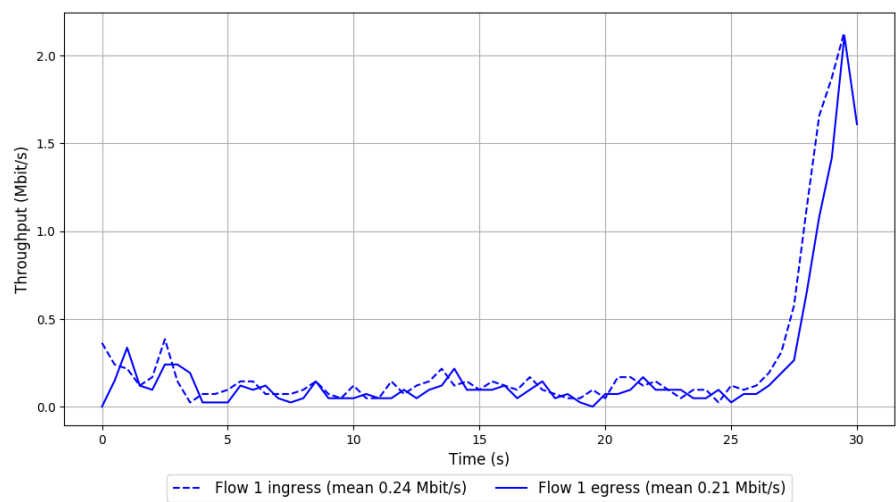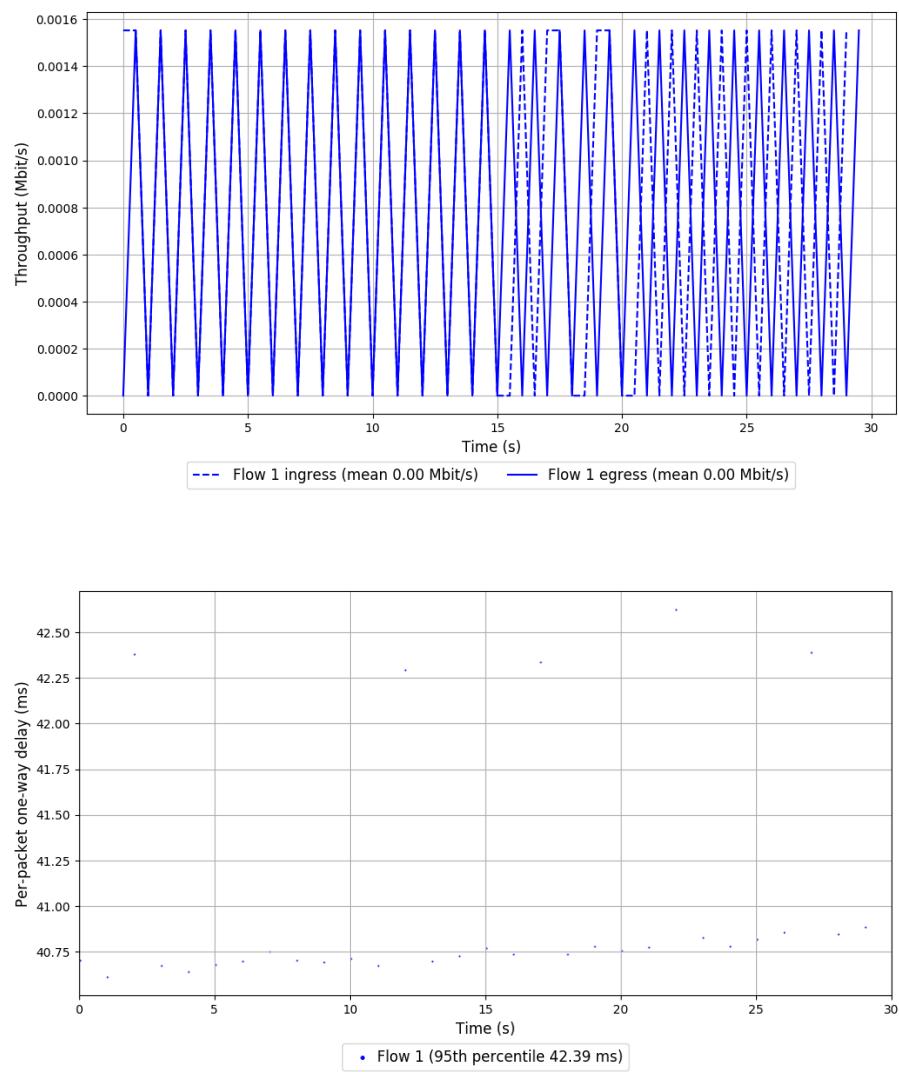
Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 0.24 Mbit/s) --- Flow 1 egress (mean 0.21 Mbit/s)
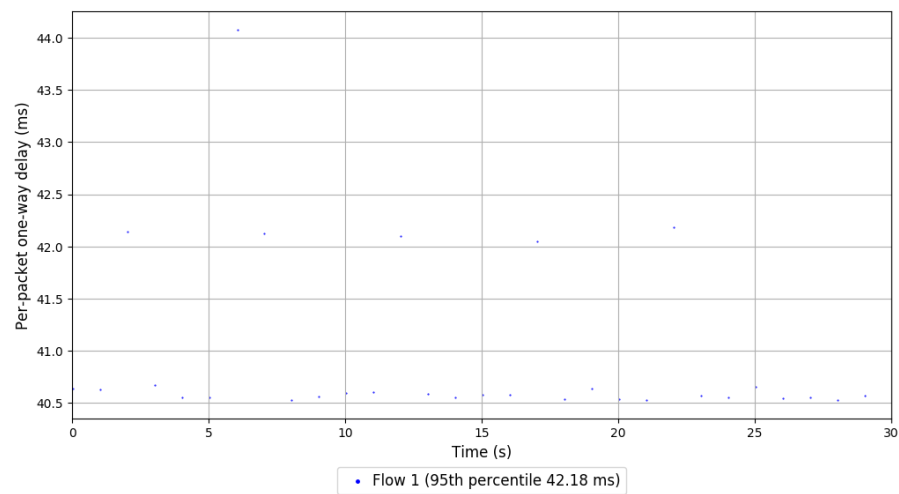

Flow 1 (95th percentile 145.28 ms)

263

```
Run 1: Statistics of Verus

Start at: 2018-05-22 09:53:19
End at: 2018-05-22 09:53:49
Local clock offset: -2.426 ms
Remote clock offset: 10.11 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 42.392 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 42.392 ms
Loss rate: 0.00%
```

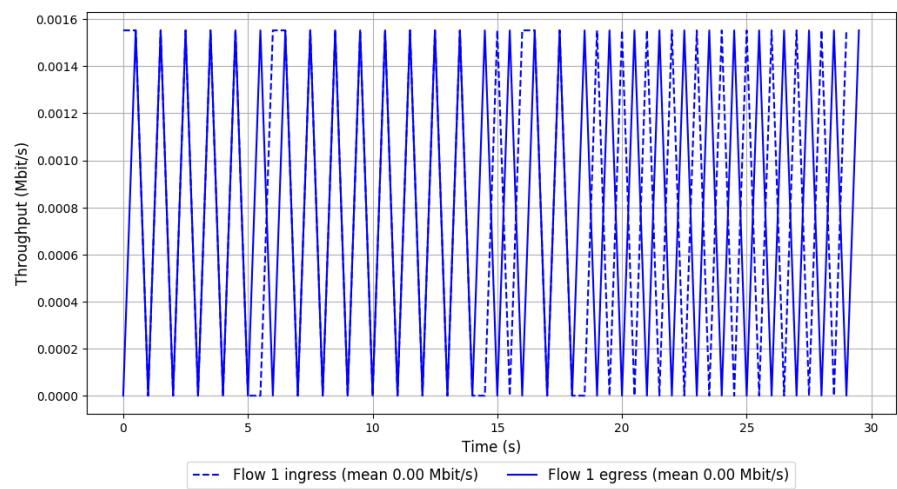Run 1: Report of Verus — Data Link

Run 2: Statistics of Verus

Start at: 2018-05-22 10:14:05
End at: 2018-05-22 10:14:35
Local clock offset: 2.766 ms
Remote clock offset: 14.509 ms

Below is generated by plot.py at 2018-05-22 13:50:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.00 Mbit/s
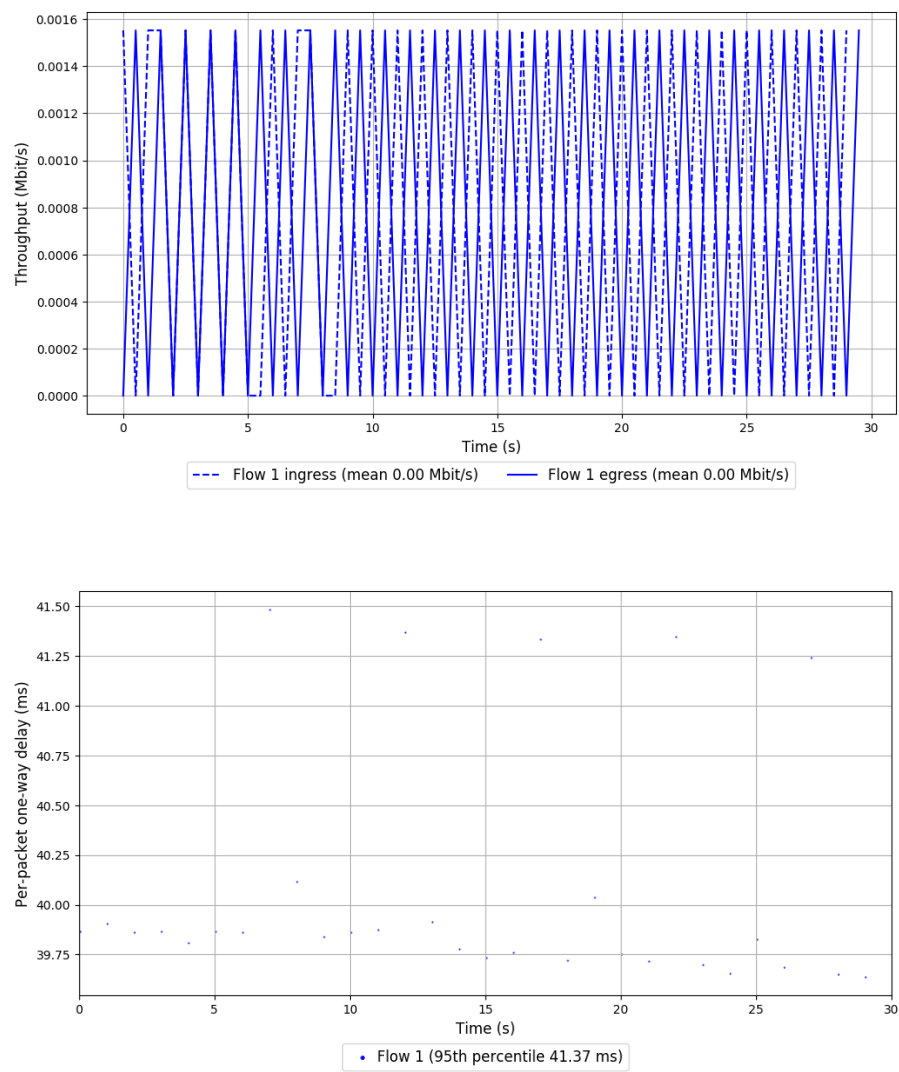95th percentile per-packet one-way delay: 42.180 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 42.180 ms
Loss rate: 0.00%

Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-05-22 10:34:50
End at: 2018-05-22 10:35:20
Local clock offset: 0.44 ms
Remote clock offset: 0.418 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 41.367 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 41.367 ms
Loss rate: 0.00%
```
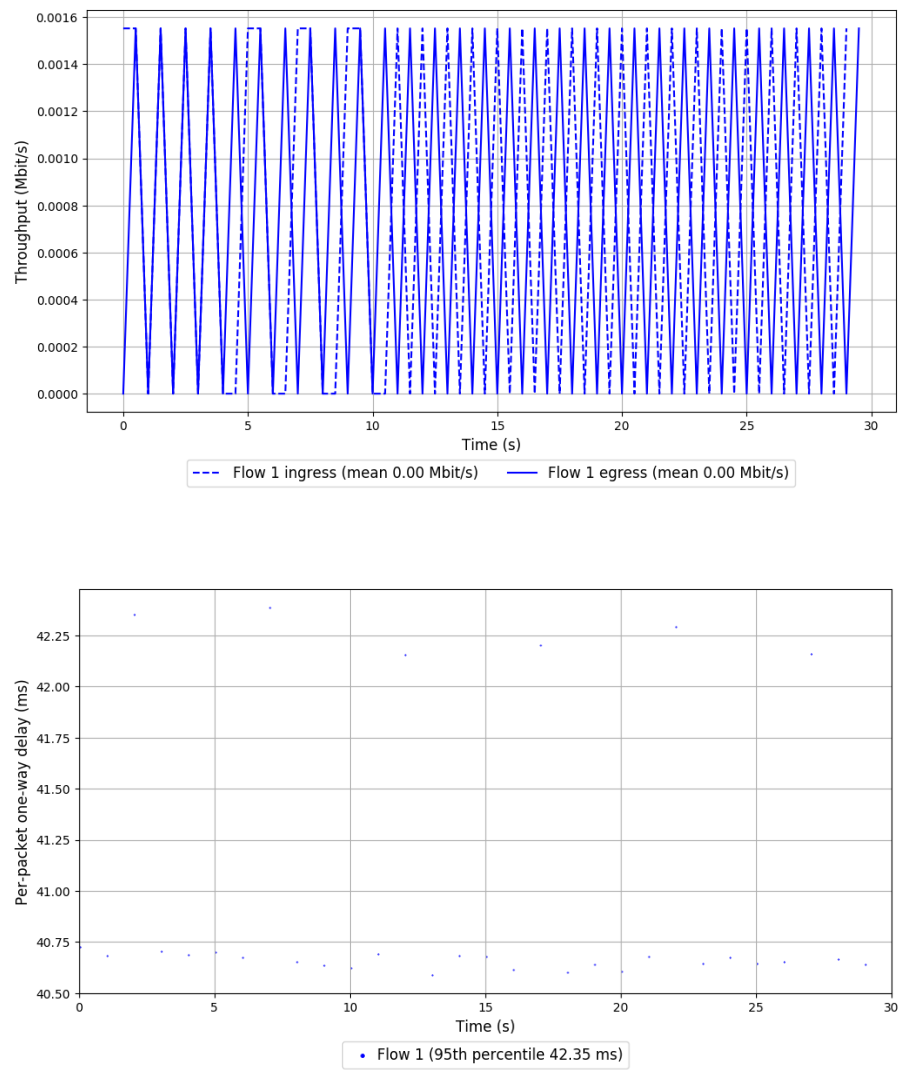
Run 3: Report of Verus — Data Link

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

Flow 1 (95th percentile 41.37 ms)

```
Run 4: Statistics of Verus

Start at: 2018-05-22 10:55:36
End at: 2018-05-22 10:56:06
Local clock offset: -1.952 ms
Remote clock offset: -8.08 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 42.351 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 42.351 ms
Loss rate: 0.00%
```
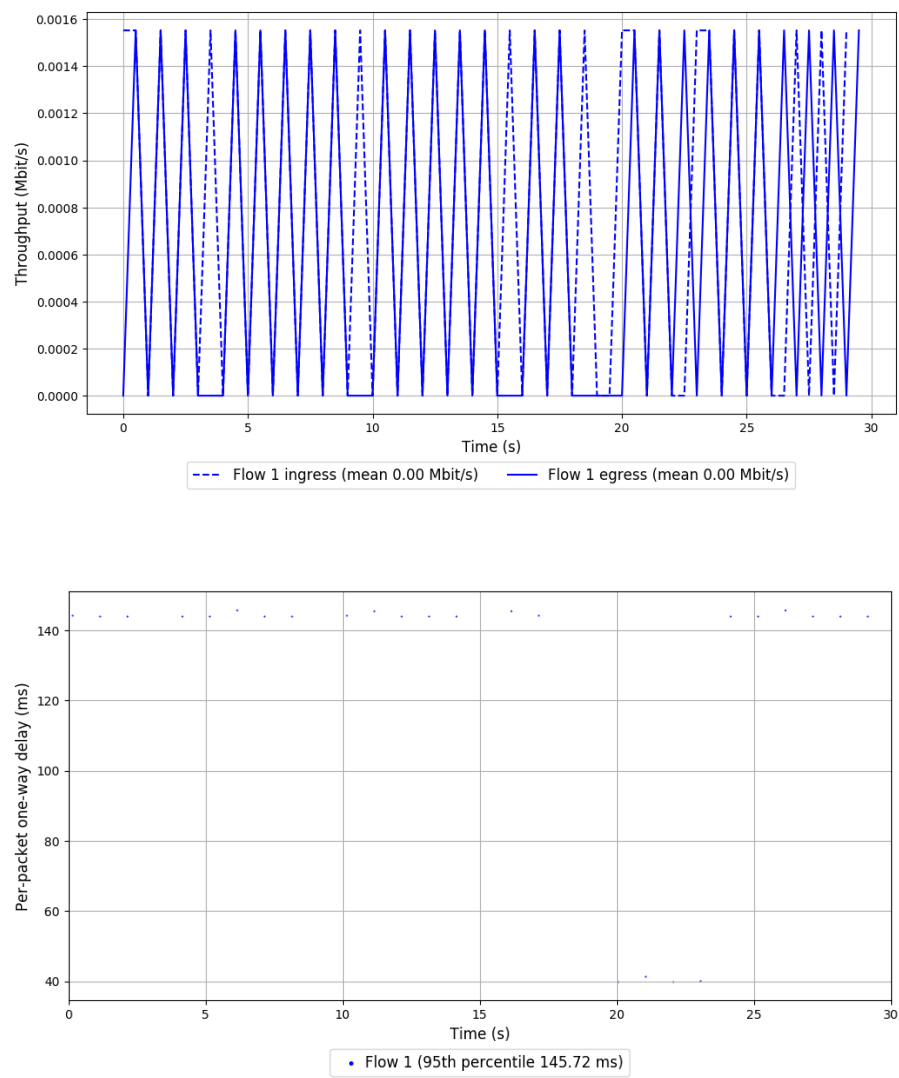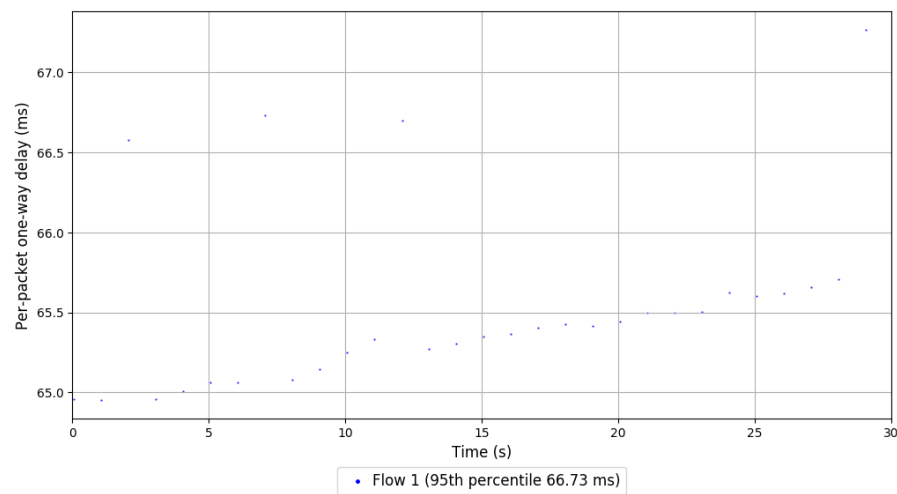
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-05-22 11:16:59
End at: 2018-05-22 11:17:29
Local clock offset: 2.885 ms
Remote clock offset: -2.25 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 145.715 ms
Loss rate: 16.67%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 145.715 ms
Loss rate: 16.67%
```

Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-05-22 11:41:27
End at: 2018-05-22 11:41:57
Local clock offset: 0.084 ms
Remote clock offset: 2.905 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 66.734 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 66.734 ms
Loss rate: 0.00%
```
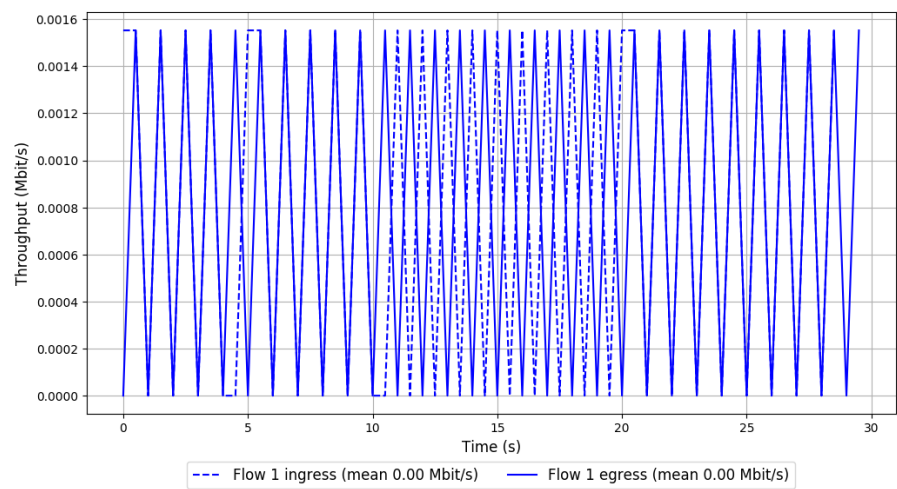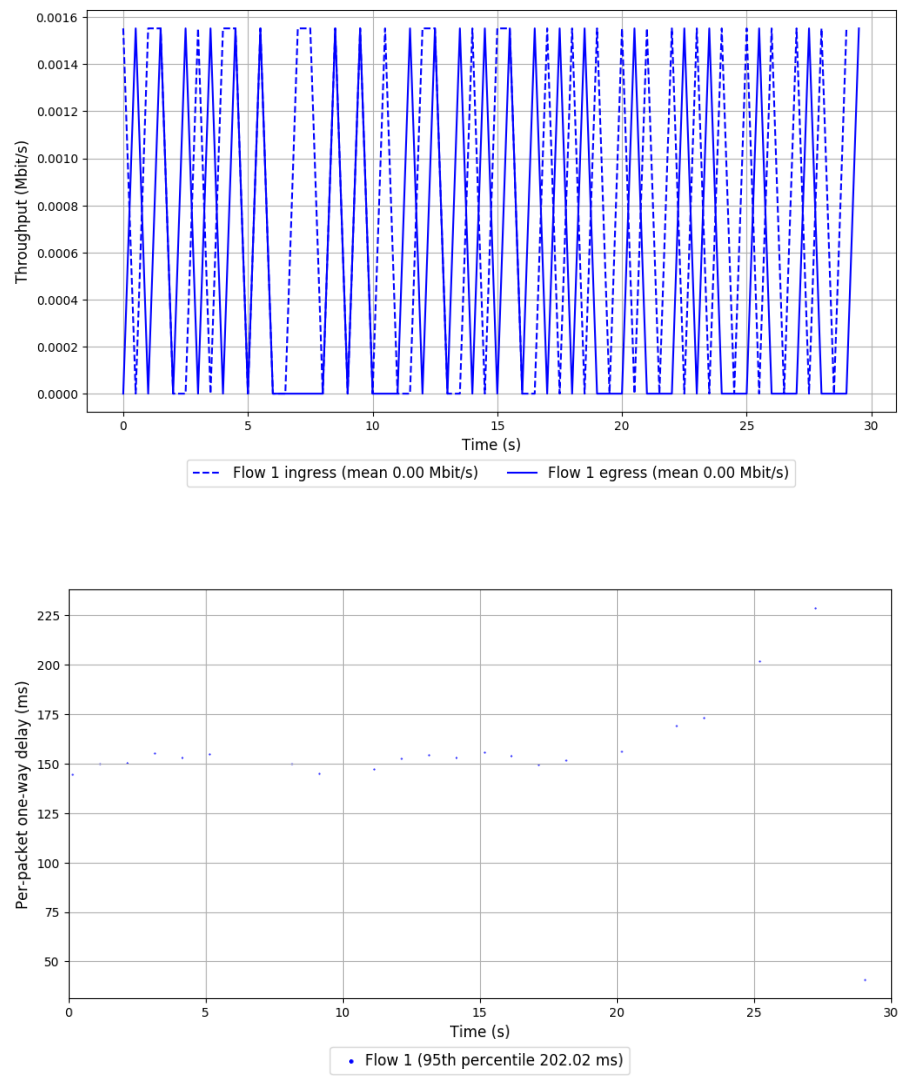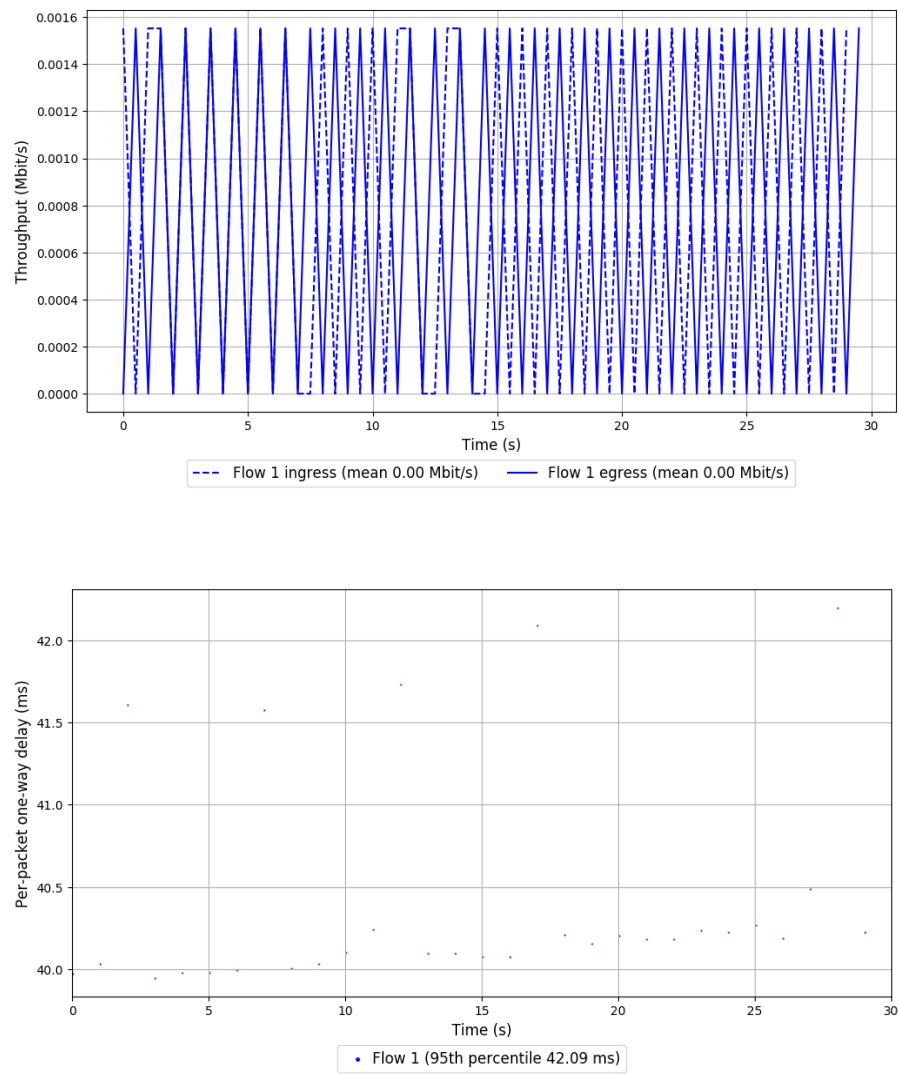
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-05-22 12:13:43
End at: 2018-05-22 12:14:13
Local clock offset: 2.195 ms
Remote clock offset: 54.721 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 202.024 ms
Loss rate: 26.67%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 202.024 ms
Loss rate: 26.67%
```

Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-05-22 12:35:42
End at: 2018-05-22 12:36:12
Local clock offset: 3.84 ms
Remote clock offset: 68.061 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 42.089 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 42.089 ms
Loss rate: 0.00%
```
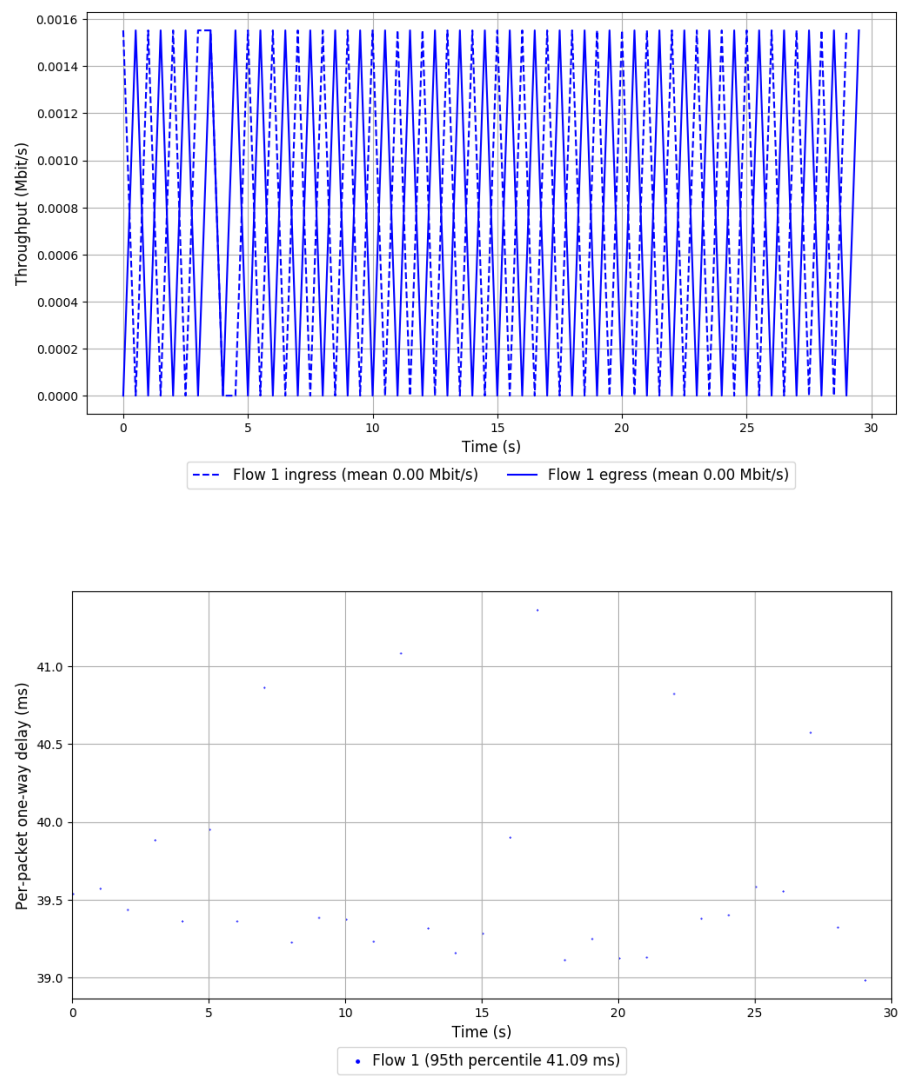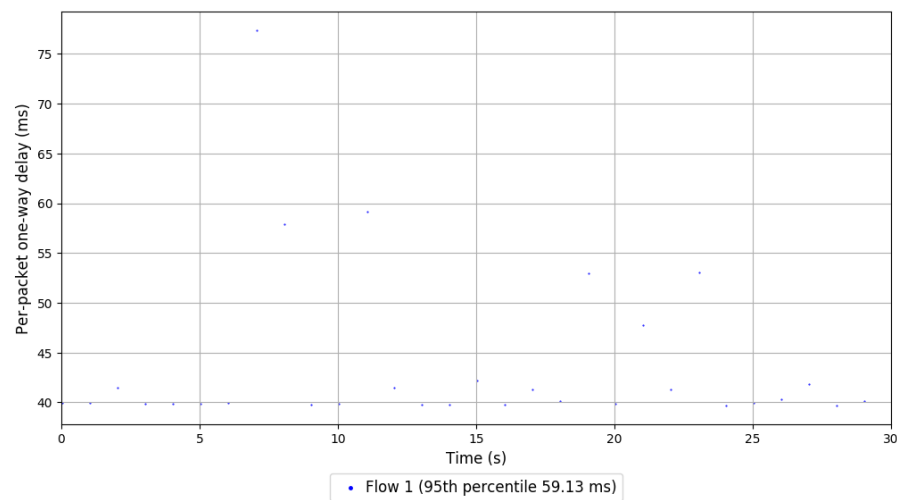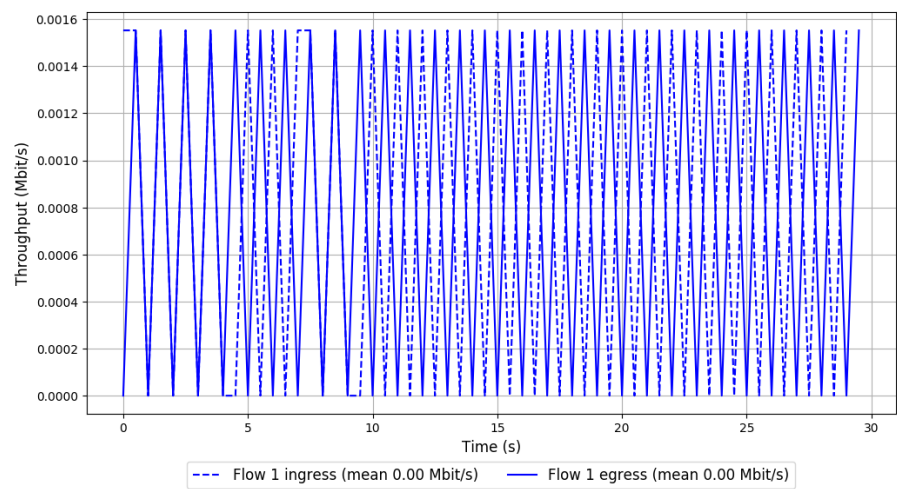
Run 8: Report of Verus — Data Link

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

Flow 1 (95th percentile 42.09 ms)

```
Run 9: Statistics of Verus

Start at: 2018-05-22 12:56:26
End at: 2018-05-22 12:56:56
Local clock offset: 4.835 ms
Remote clock offset: 5.839 ms


# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 41.087 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 41.087 ms
Loss rate: 0.00%
```

Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2018-05-22 13:17:13
End at: 2018-05-22 13:17:43
Local clock offset: 0.814 ms
Remote clock offset: -12.815 ms

# Below is generated by plot.py at 2018-05-22 13:50:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 59.126 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 59.126 ms
Loss rate: 0.00%
```

Run 10: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-05-22 09:55:50
End at: 2018-05-22 09:56:20
Local clock offset: -2.38 ms
Remote clock offset: 10.95 ms

# Below is generated by plot.py at 2018-05-22 13:51:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.60 Mbit/s
95th percentile per-packet one-way delay: 46.933 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 76.60 Mbit/s
95th percentile per-packet one-way delay: 46.933 ms
Loss rate: 0.43%
```
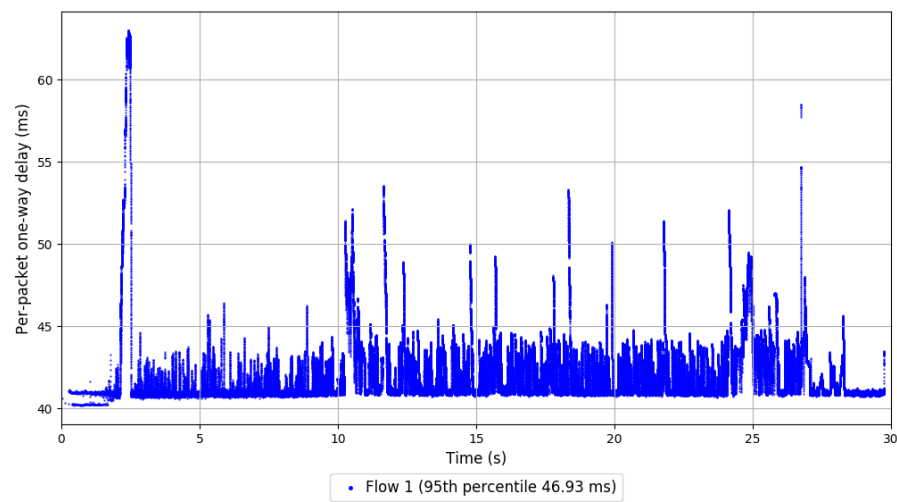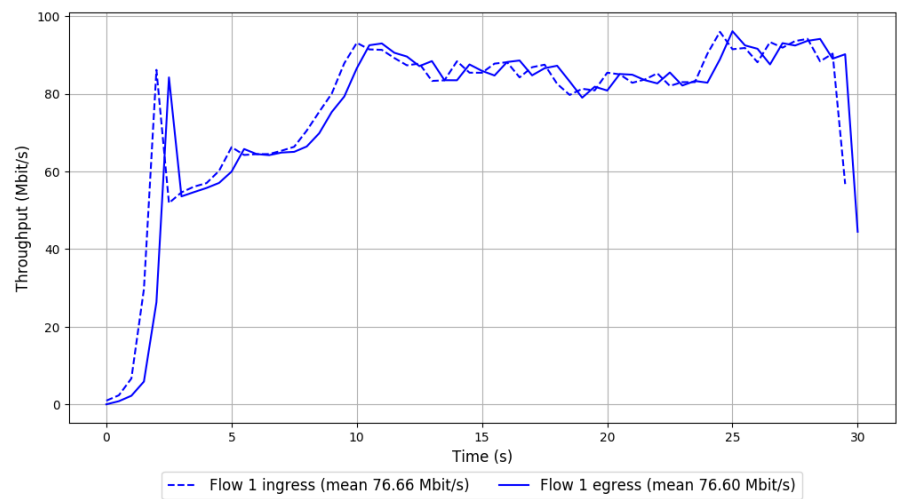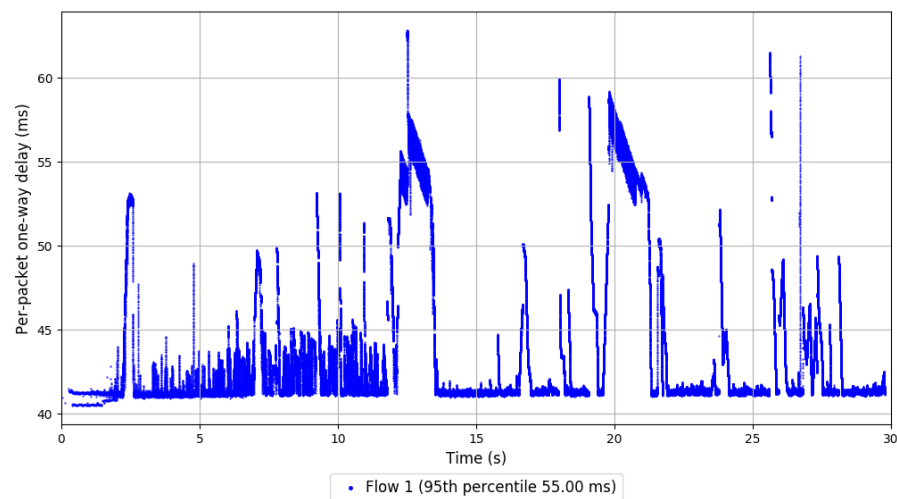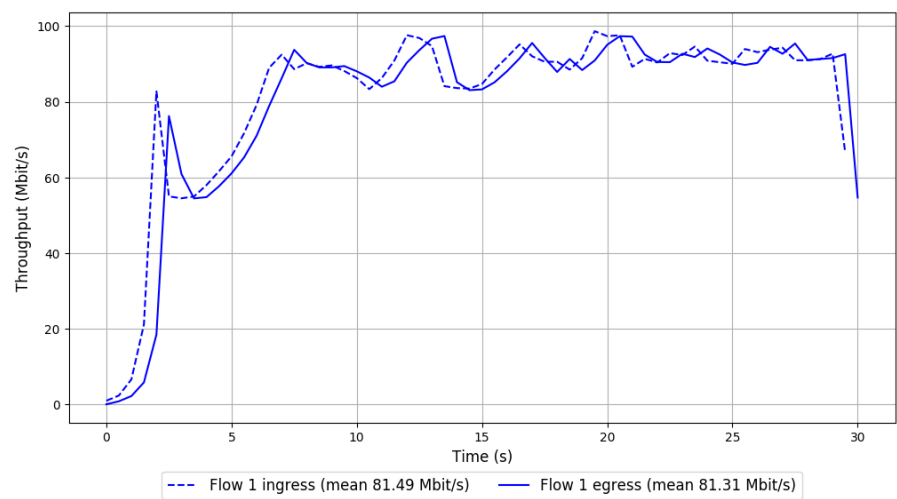
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-05-22 10:16:36
End at: 2018-05-22 10:17:06
Local clock offset: 3.051 ms
Remote clock offset: 14.803 ms


# Below is generated by plot.py at 2018-05-22 13:51:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.31 Mbit/s
95th percentile per-packet one-way delay: 55.002 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 81.31 Mbit/s
95th percentile per-packet one-way delay: 55.002 ms
Loss rate: 0.57%
```
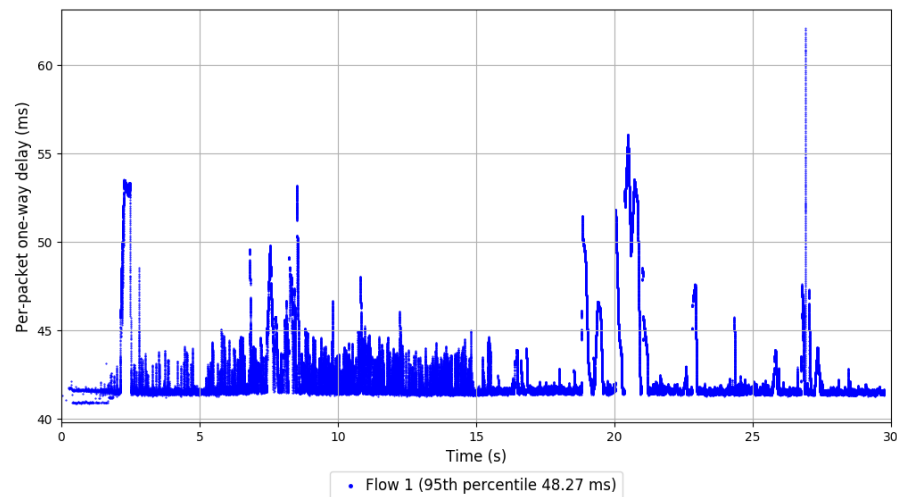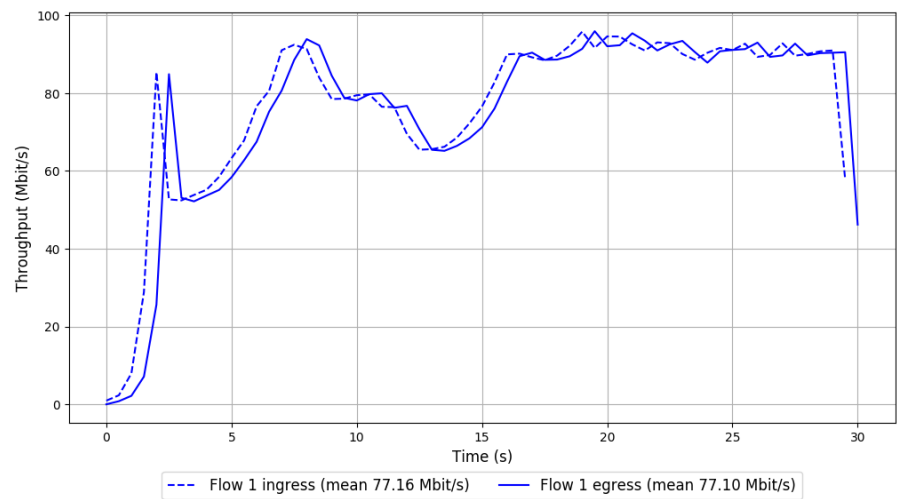
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 81.49 Mbit/s)   Flow 1 egress (mean 81.31 Mbit/s)
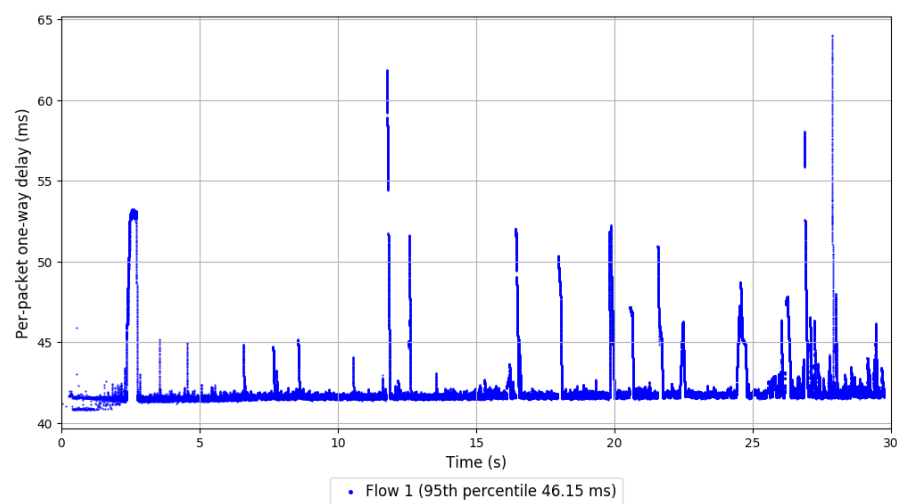

Flow 1 (95th percentile 55.00 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-05-22 10:37:21
End at: 2018-05-22 10:37:51
Local clock offset: -0.131 ms
Remote clock offset: -1.08 ms


# Below is generated by plot.py at 2018-05-22 13:51:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.10 Mbit/s
95th percentile per-packet one-way delay: 48.268 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 77.10 Mbit/s
95th percentile per-packet one-way delay: 48.268 ms
Loss rate: 0.45%
```
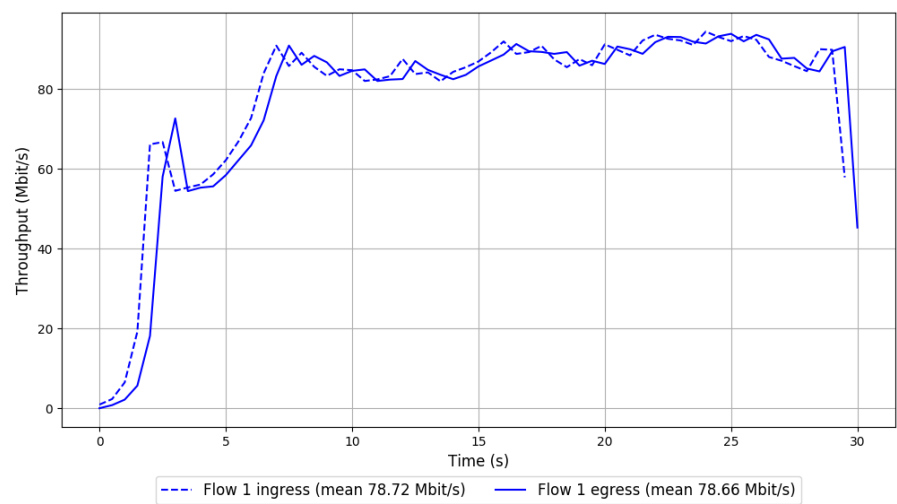
Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-05-22 10:58:07
End at: 2018-05-22 10:58:37
Local clock offset: -1.261 ms
Remote clock offset: -6.869 ms

# Below is generated by plot.py at 2018-05-22 13:51:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.66 Mbit/s
95th percentile per-packet one-way delay: 46.153 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 78.66 Mbit/s
95th percentile per-packet one-way delay: 46.153 ms
Loss rate: 0.45%
```

Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 78.72 Mbit/s) —— Flow 1 egress (mean 78.66 Mbit/s)
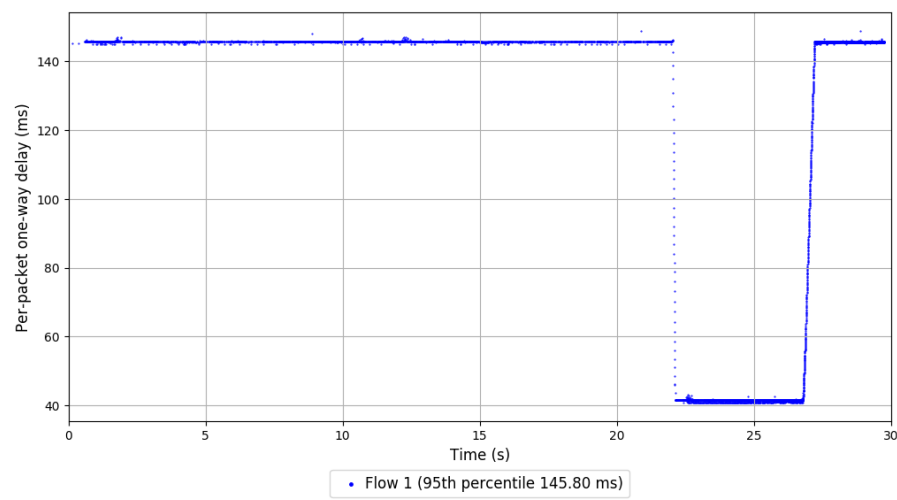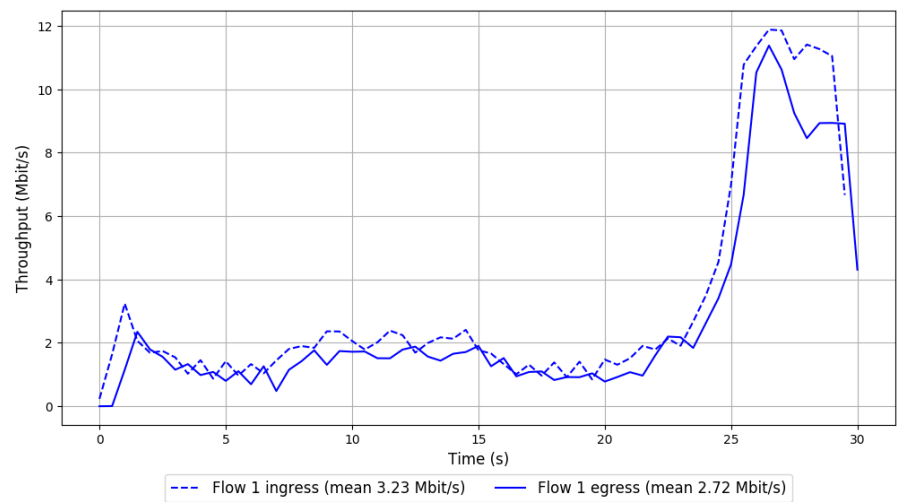

• Flow 1 (95th percentile 46.15 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-05-22 11:19:51
End at: 2018-05-22 11:20:21
Local clock offset: 3.291 ms
Remote clock offset: -2.278 ms


# Below is generated by plot.py at 2018-05-22 13:51:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 145.797 ms
Loss rate: 16.22%
-- Flow 1:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 145.797 ms
Loss rate: 16.22%
```
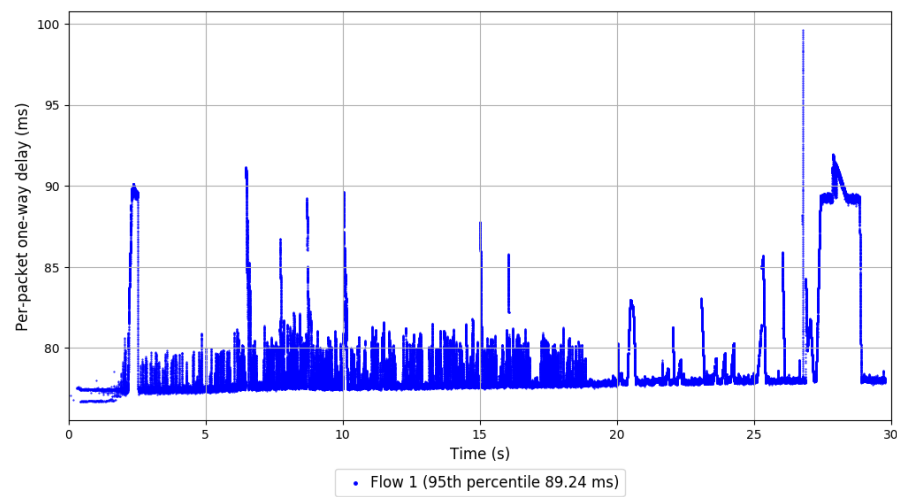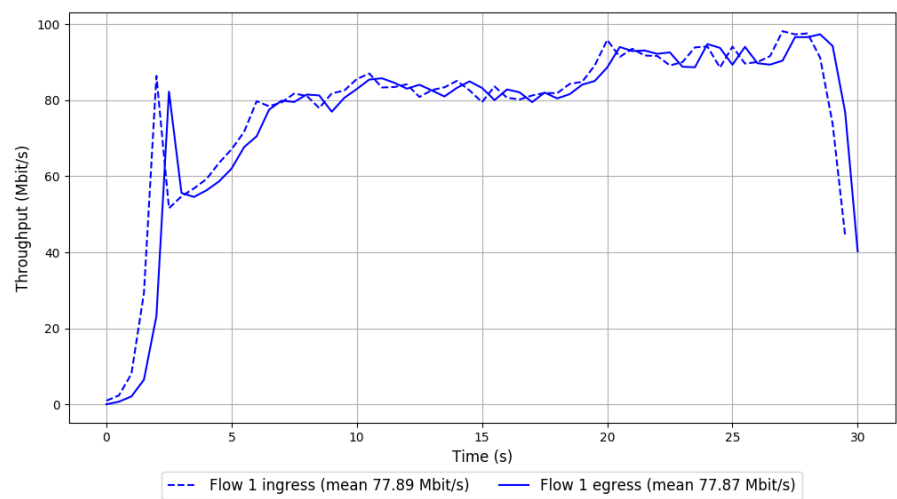
Run 5: Report of PCC-Vivace — Data Link

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-05-22 11:43:58
End at: 2018-05-22 11:44:28
Local clock offset: -0.082 ms
Remote clock offset: -5.135 ms

# Below is generated by plot.py at 2018-05-22 13:51:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.87 Mbit/s
95th percentile per-packet one-way delay: 89.239 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 77.87 Mbit/s
95th percentile per-packet one-way delay: 89.239 ms
Loss rate: 0.37%
```

Run 6: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 77.89 Mbit/s)   Flow 1 egress (mean 77.87 Mbit/s)
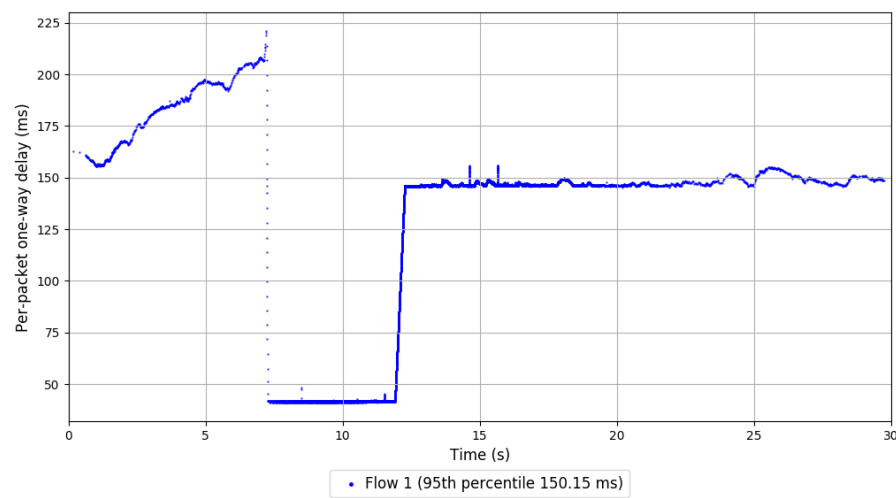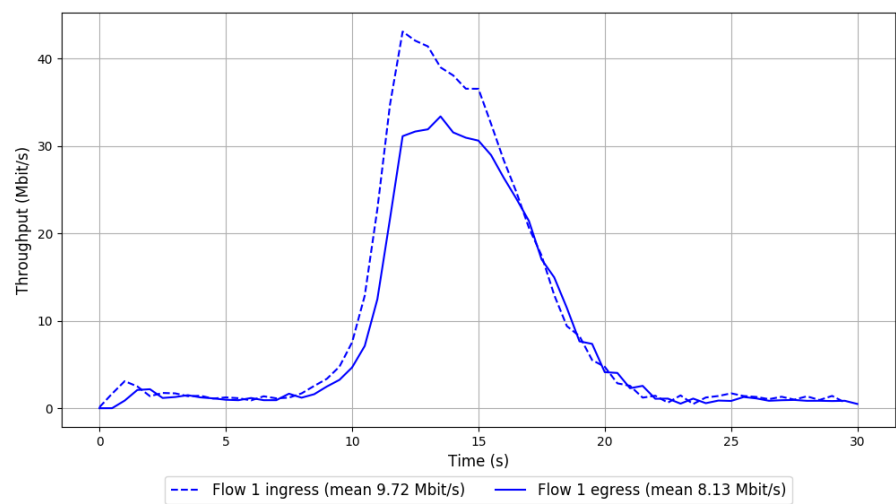

Flow 1 (95th percentile 89.24 ms)

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-05-22 12:16:24
End at: 2018-05-22 12:16:54
Local clock offset: 2.46 ms
Remote clock offset: 56.302 ms


# Below is generated by plot.py at 2018-05-22 13:51:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 150.152 ms
Loss rate: 17.08%
-- Flow 1:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 150.152 ms
Loss rate: 17.08%
```

Run 7: Report of PCC-Vivace — Data Link

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-05-22 12:38:12
End at: 2018-05-22 12:38:42
Local clock offset: 4.194 ms
Remote clock offset: 69.555 ms

# Below is generated by plot.py at 2018-05-22 13:51:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.13 Mbit/s
95th percentile per-packet one-way delay: 48.492 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 78.13 Mbit/s
95th percentile per-packet one-way delay: 48.492 ms
Loss rate: 0.47%
```
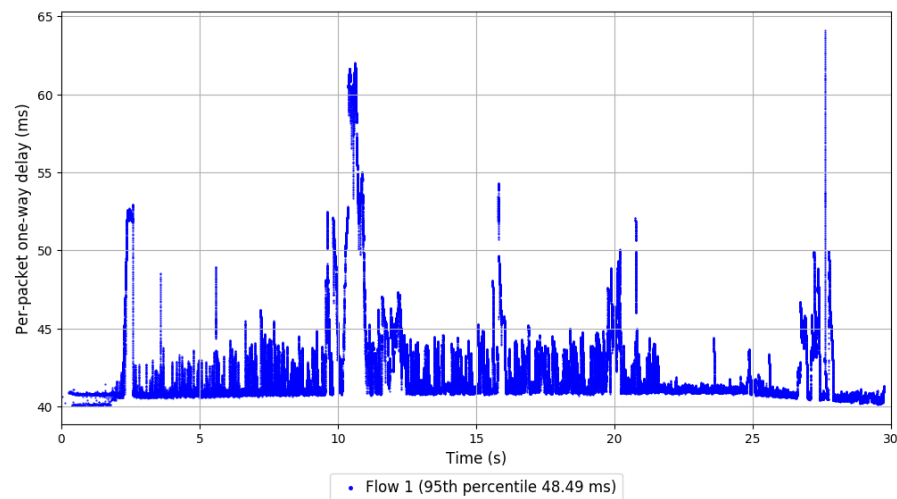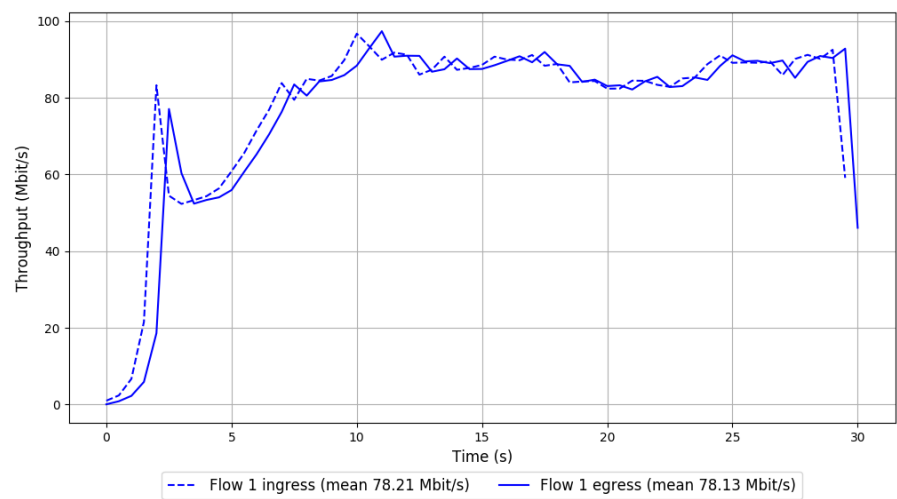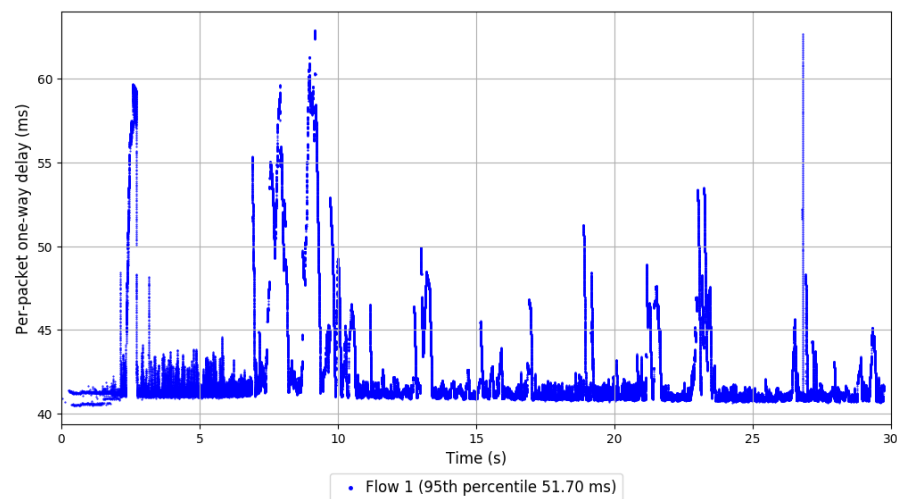
Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 78.21 Mbit/s) ---- Flow 1 egress (mean 78.13 Mbit/s) ——

• Flow 1 (95th percentile 48.49 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-05-22 12:58:57
End at: 2018-05-22 12:59:27
Local clock offset: 3.992 ms
Remote clock offset: 2.432 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.57 Mbit/s
95th percentile per-packet one-way delay: 51.702 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 79.57 Mbit/s
95th percentile per-packet one-way delay: 51.702 ms
Loss rate: 0.55%
```
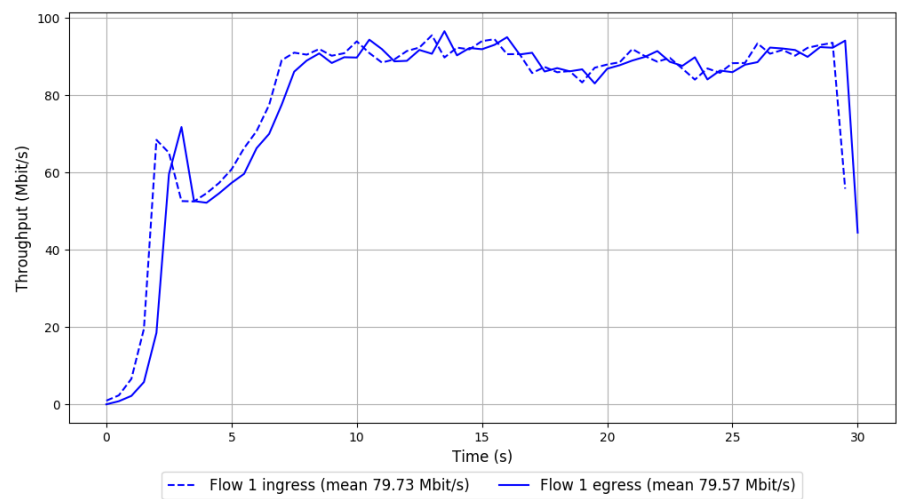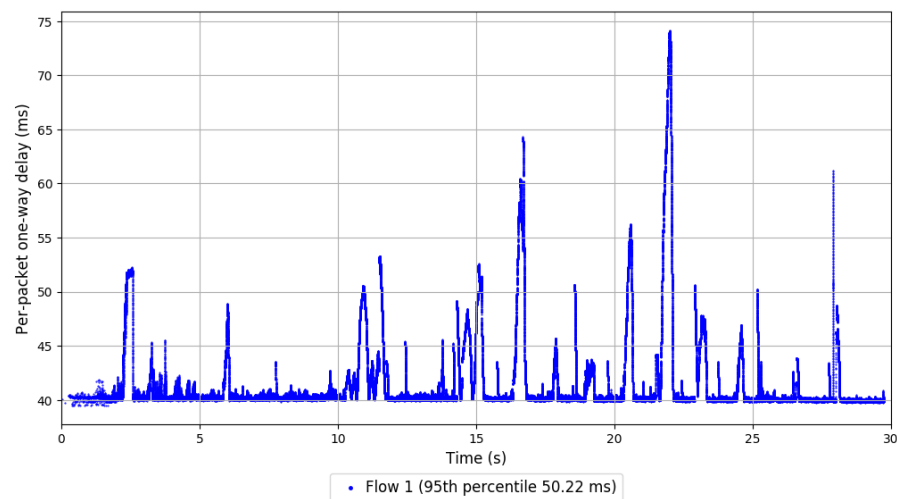
Run 9: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 79.73 Mbit/s) — — — Flow 1 egress (mean 79.57 Mbit/s)

Flow 1 (95th percentile 51.70 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-05-22 13:19:44
End at: 2018-05-22 13:20:14
Local clock offset: 0.782 ms
Remote clock offset: -14.207 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.82 Mbit/s
95th percentile per-packet one-way delay: 50.224 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 77.82 Mbit/s
95th percentile per-packet one-way delay: 50.224 ms
Loss rate: 0.39%
```
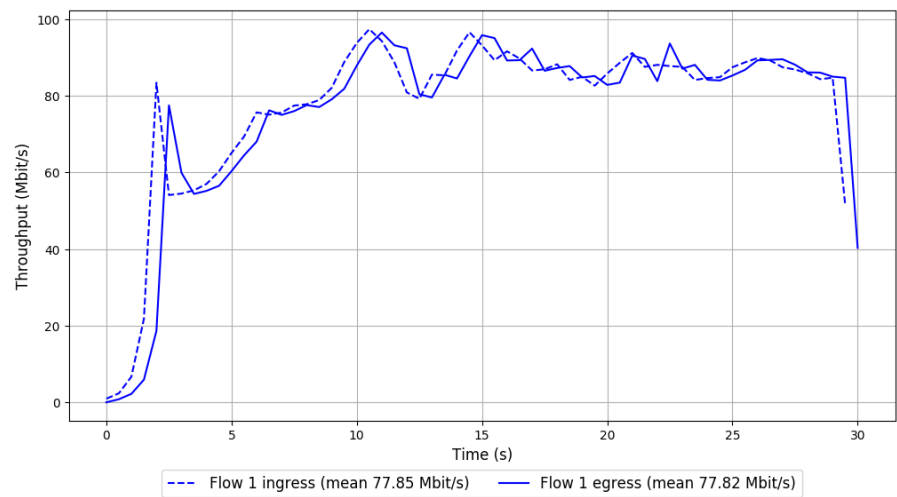
Run 10: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 77.85 Mbit/s)   Flow 1 egress (mean 77.82 Mbit/s)
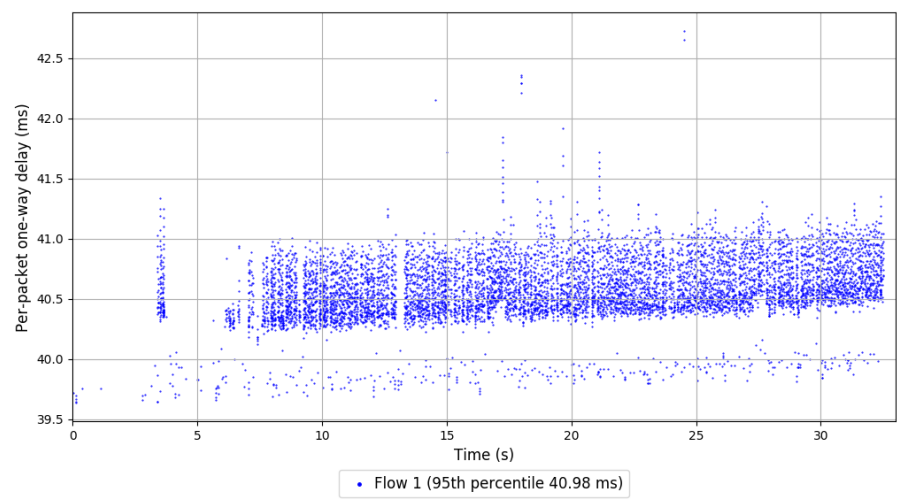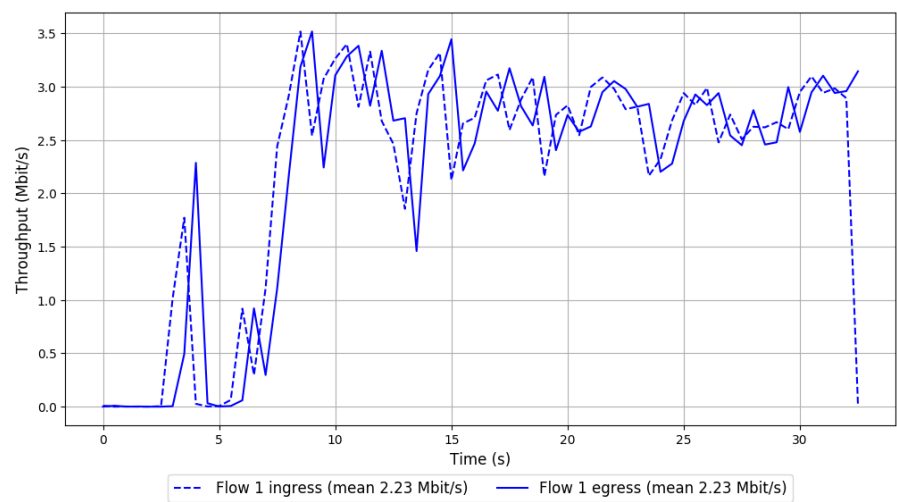

Flow 1 (95th percentile 50.22 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2018-05-22 09:52:04
End at: 2018-05-22 09:52:34
Local clock offset: -2.495 ms
Remote clock offset: 9.435 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 40.978 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 40.978 ms
Loss rate: 0.01%
```

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-05-22 10:12:50
End at: 2018-05-22 10:13:20
Local clock offset: 2.717 ms
Remote clock offset: 14.41 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 41.100 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 41.100 ms
Loss rate: 0.44%
```
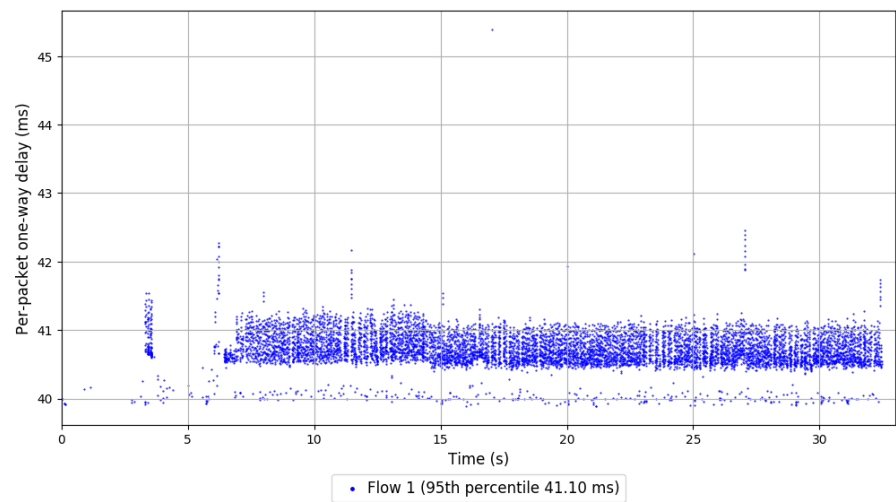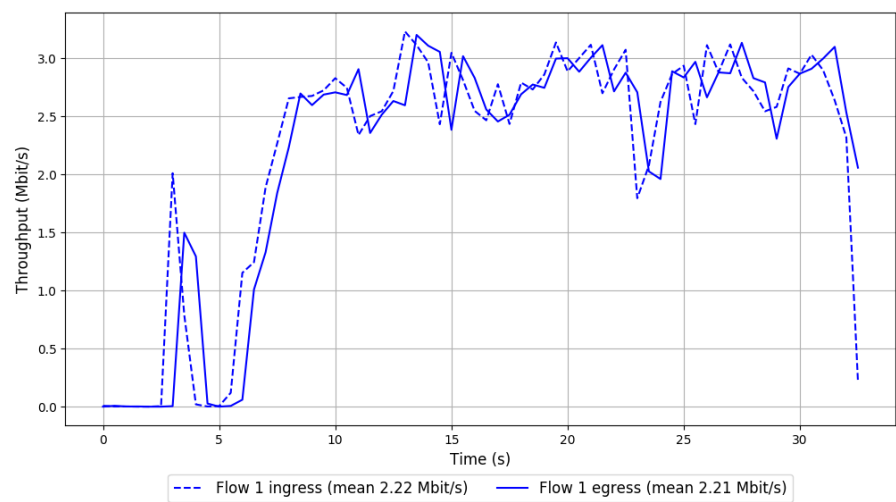
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-05-22 10:33:35
End at: 2018-05-22 10:34:05
Local clock offset: 0.782 ms
Remote clock offset: 1.403 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 40.749 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 40.749 ms
Loss rate: 0.15%
```
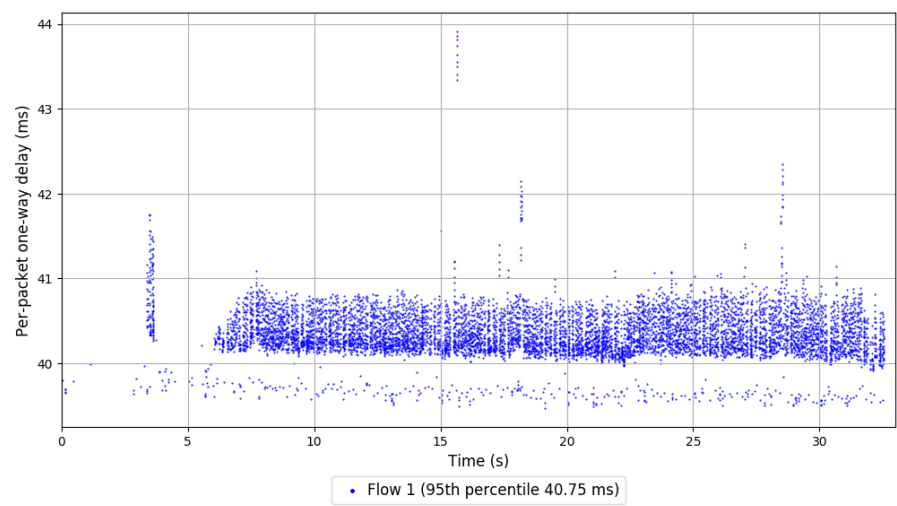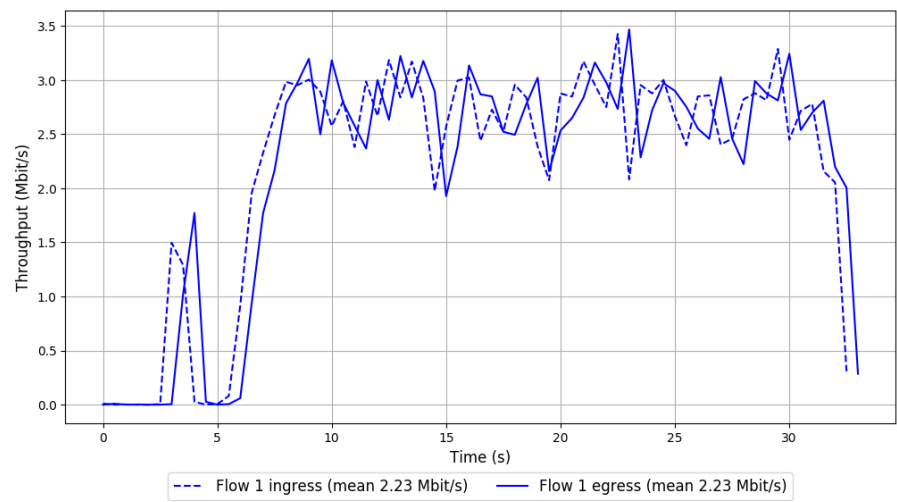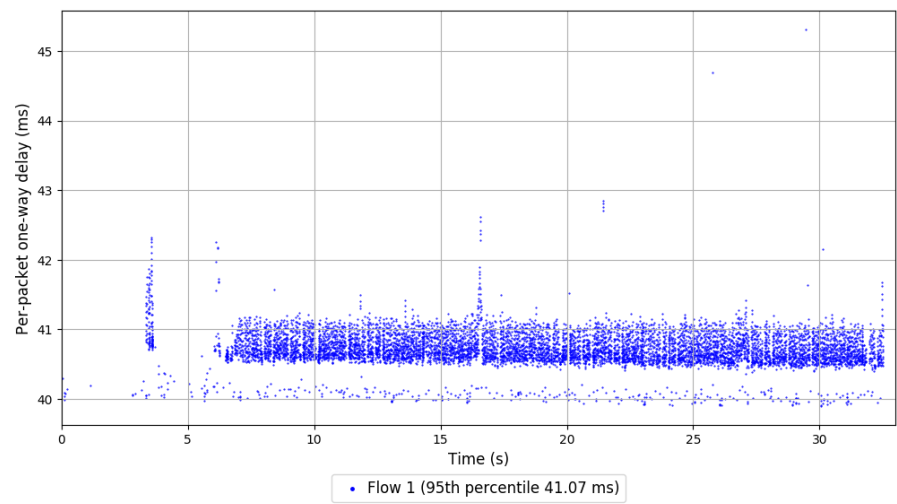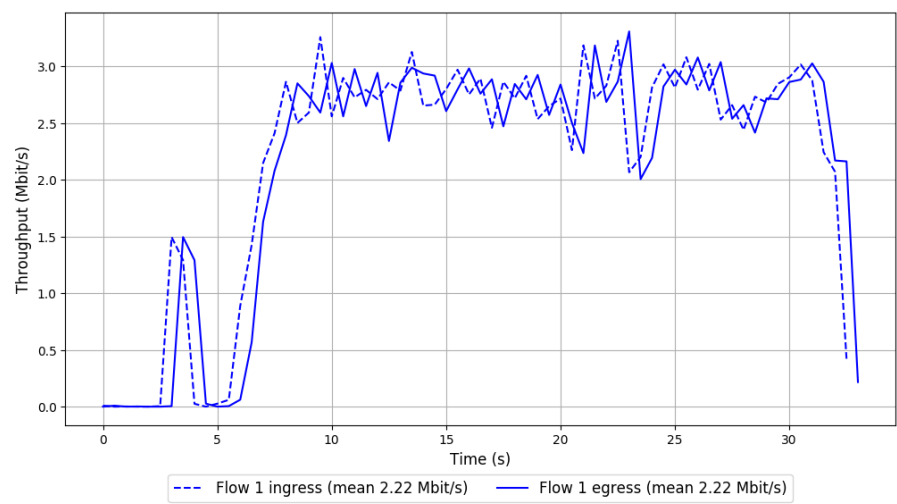
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-05-22 10:54:21
End at: 2018-05-22 10:54:51
Local clock offset: -1.871 ms
Remote clock offset: -8.004 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 41.074 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 41.074 ms
Loss rate: 0.29%
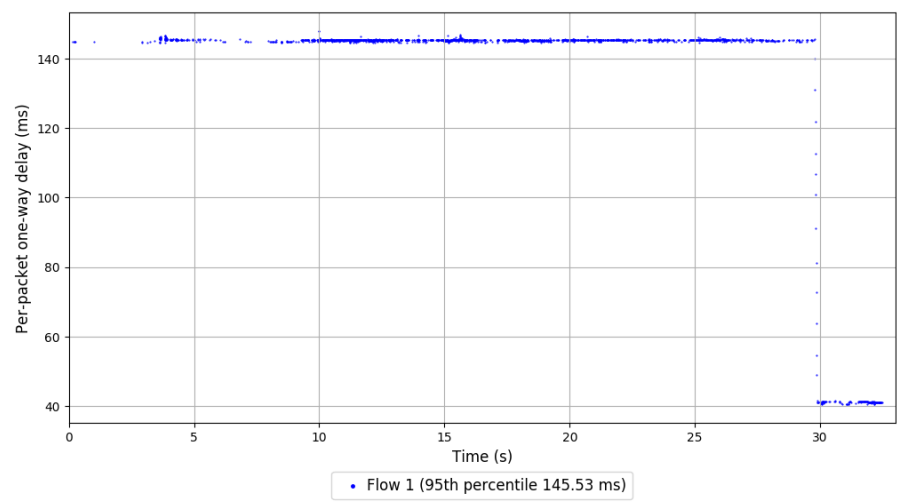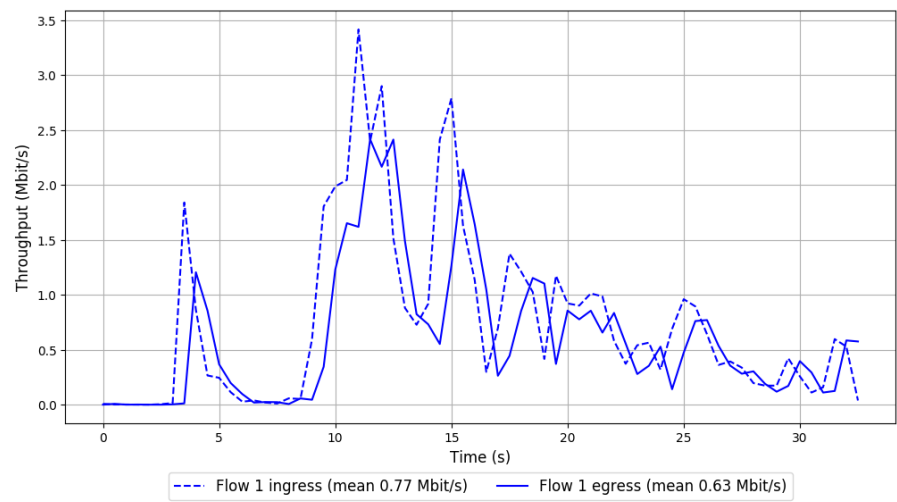```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-05-22 11:15:41
End at: 2018-05-22 11:16:11
Local clock offset: 2.844 ms
Remote clock offset: -2.203 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 145.528 ms
Loss rate: 19.04%
-- Flow 1:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 145.528 ms
Loss rate: 19.04%
```

Run 5: Report of WebRTC media — Data Link

Flow 1 ingress (mean 0.77 Mbit/s) --- Flow 1 egress (mean 0.63 Mbit/s)

Flow 1 (95th percentile 145.53 ms)

```
Run 6: Statistics of WebRTC media

Start at: 2018-05-22 11:40:12
End at: 2018-05-22 11:40:42
Local clock offset: 0.486 ms
Remote clock offset: -5.74 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 72.249 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 72.249 ms
Loss rate: 0.46%
```
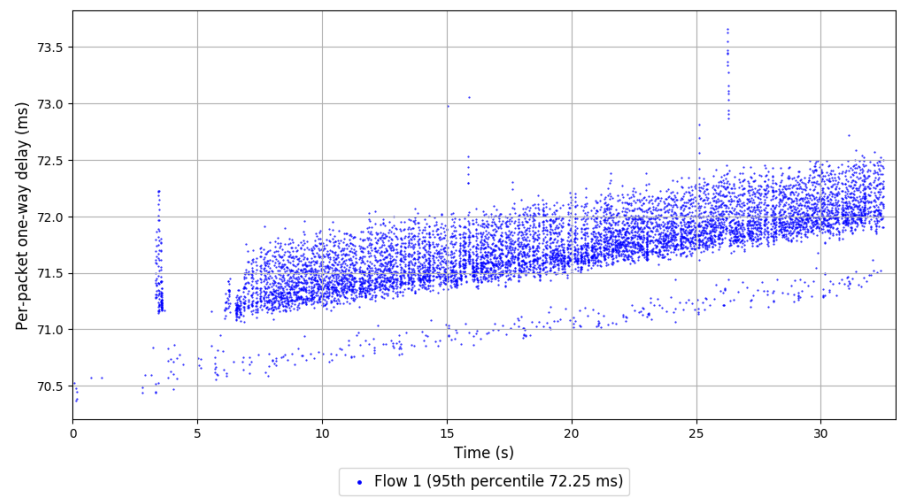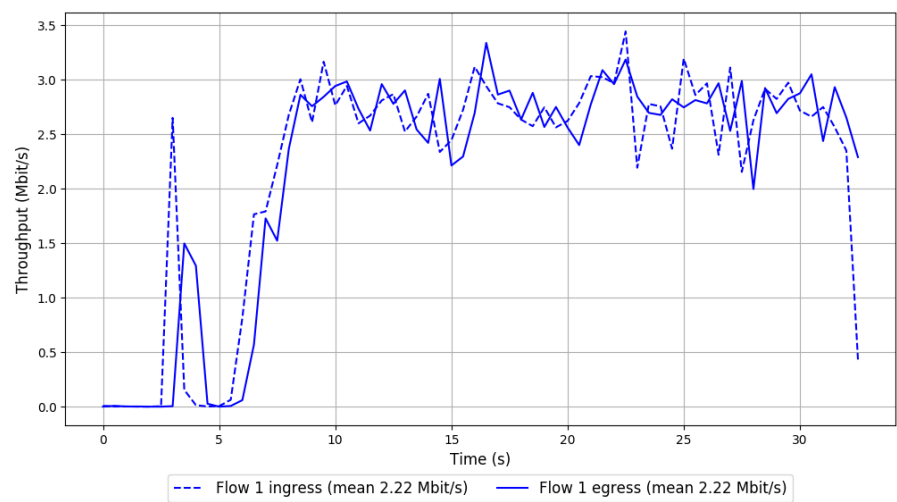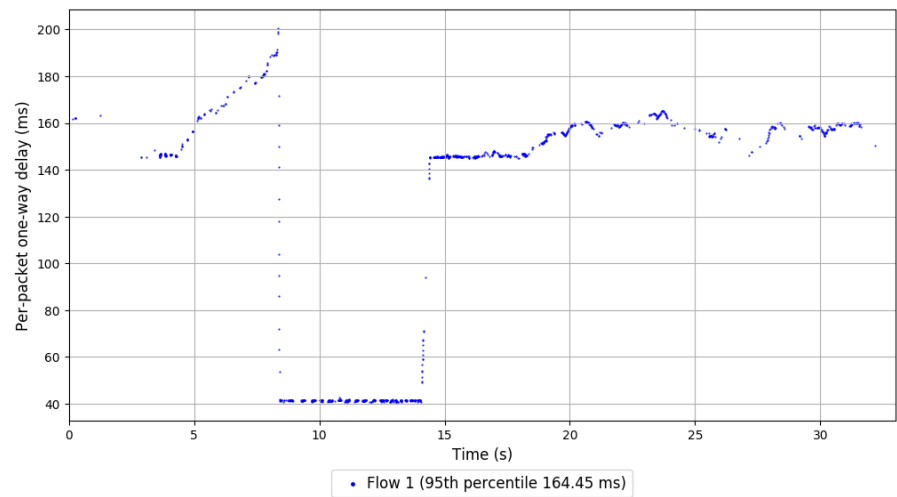
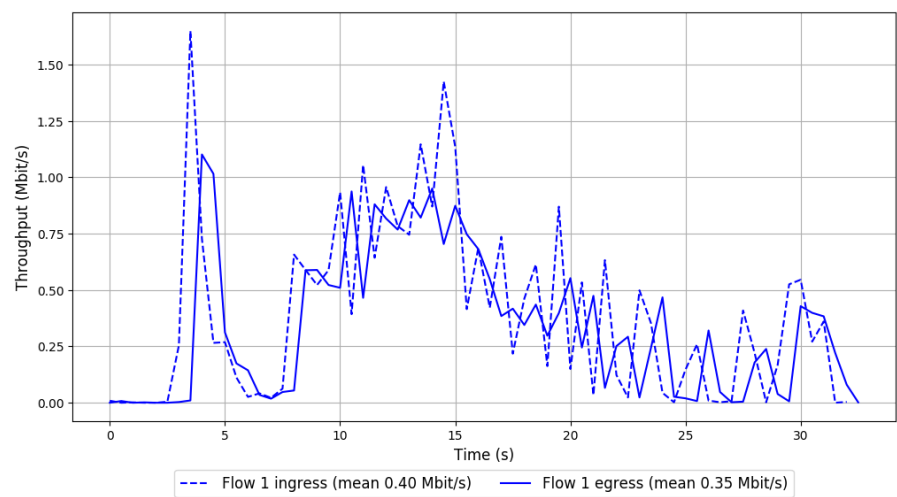Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-05-22 12:12:20
End at: 2018-05-22 12:12:50
Local clock offset: 2.223 ms
Remote clock offset: 53.784 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 164.448 ms
Loss rate: 12.69%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 164.448 ms
Loss rate: 12.69%
```

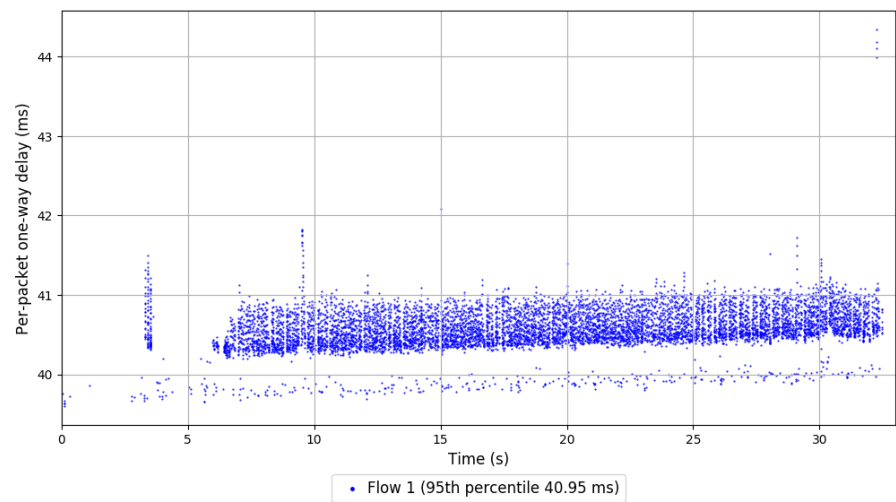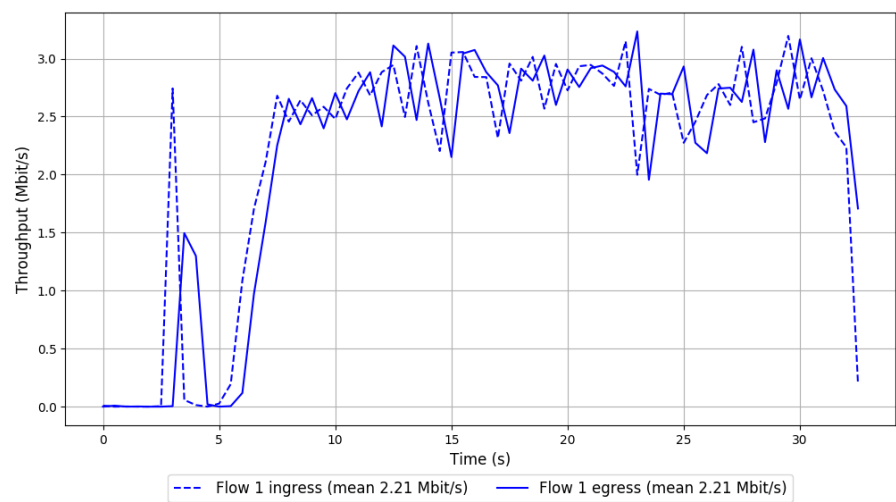## Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-05-22 12:34:26
End at: 2018-05-22 12:34:56
Local clock offset: 3.787 ms
Remote clock offset: 67.304 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 40.950 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 40.950 ms
Loss rate: 0.51%
```

Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-05-22 12:55:11
End at: 2018-05-22 12:55:41
Local clock offset: 5.052 ms
Remote clock offset: 7.792 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 41.524 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 41.524 ms
Loss rate: 0.45%
```
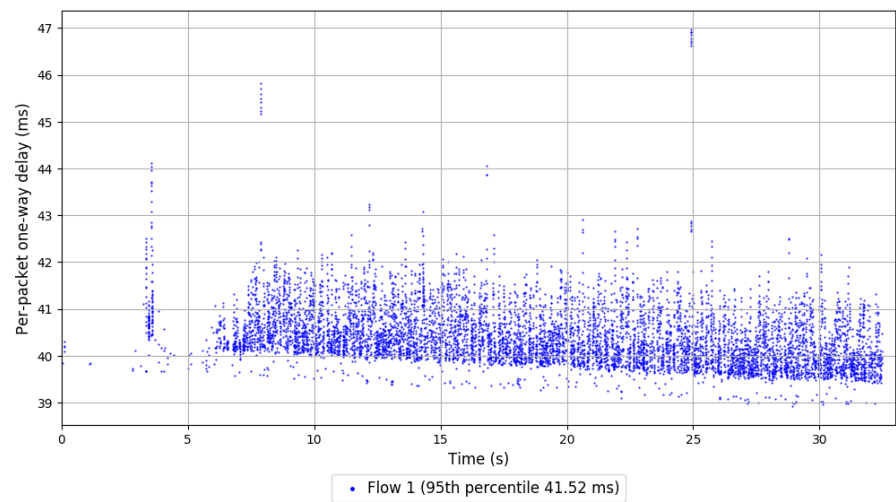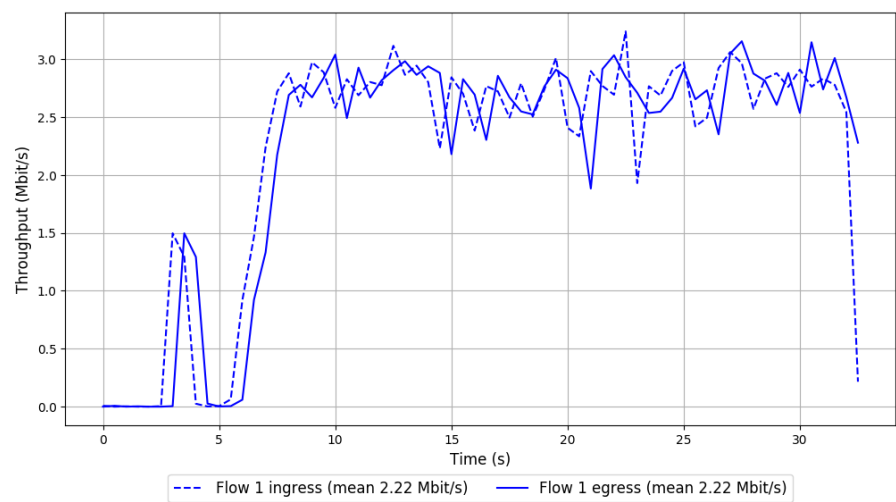
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-05-22 13:15:58
End at: 2018-05-22 13:16:28
Local clock offset: 1.002 ms
Remote clock offset: -12.475 ms


# Below is generated by plot.py at 2018-05-22 13:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 42.185 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 42.185 ms
Loss rate: 0.26%
```

Run 10: Report of WebRTC media — Data Link