Pantheon Report
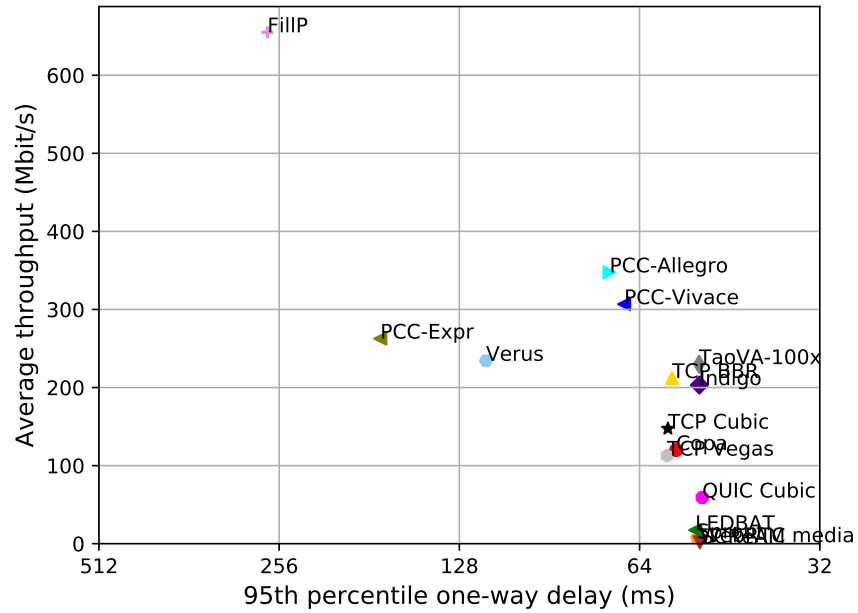
Generated at 2018-06-01 21:57:24 (UTC).

Data path: GCE Iowa Ethernet (*remote*) →GCE London 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).

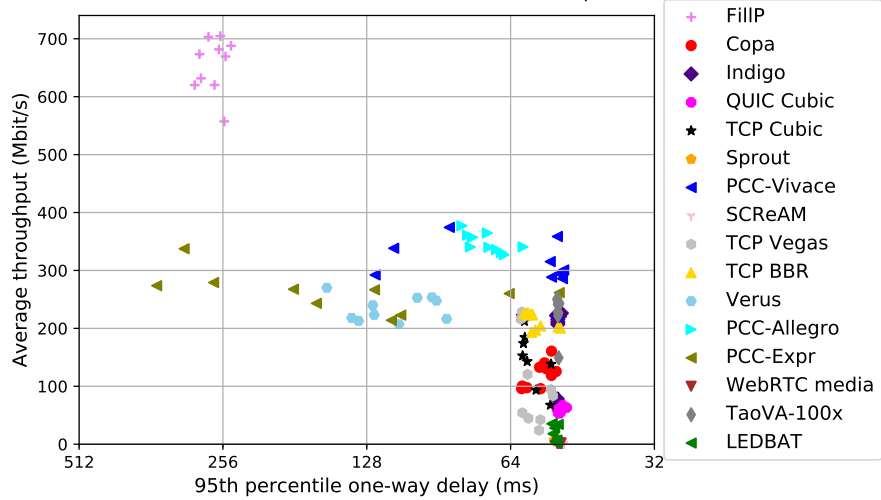NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 227fdf9a3757f17b88537cceed5743a33037a3d2
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from GCE Iowa to GCE London, 10 runs of 30s each per scheme
(mean of all runs by scheme)

test from GCE Iowa to GCE London, 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	212.15	56.48	0.36
Copa	10	119.84	55.60	0.50
TCP Cubic	10	147.34	57.40	0.36
FillP	10	654.96	267.89	2.23
Indigo	9	203.14	50.85	0.34
LEDBAT	10	17.42	51.68	0.54
PCC-Allegro	10	347.47	71.84	0.49
PCC-Expr	10	262.61	173.51	4.01
QUIC Cubic	9	59.12	50.29	0.50
SCReAM	10	0.22	50.58	0.31
Sprout	10	6.80	51.34	0.32
TaoVA-100x	10	229.95	50.91	0.33
TCP Vegas	10	112.79	57.60	0.23
Verus	10	234.23	115.57	0.74
PCC-Vivace	10	306.77	67.92	0.66
WebRTC media	10	1.92	50.77	0.38

```
Run 1: Statistics of TCP BBR

Start at: 2018-06-01 16:58:40
End at: 2018-06-01 16:59:10
Local clock offset: -0.094 ms
Remote clock offset: 0.08 ms


# Below is generated by plot.py at 2018-06-01 20:32:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 204.06 Mbit/s
95th percentile per-packet one-way delay: 55.392 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 204.06 Mbit/s
95th percentile per-packet one-way delay: 55.392 ms
Loss rate: 0.42%
```
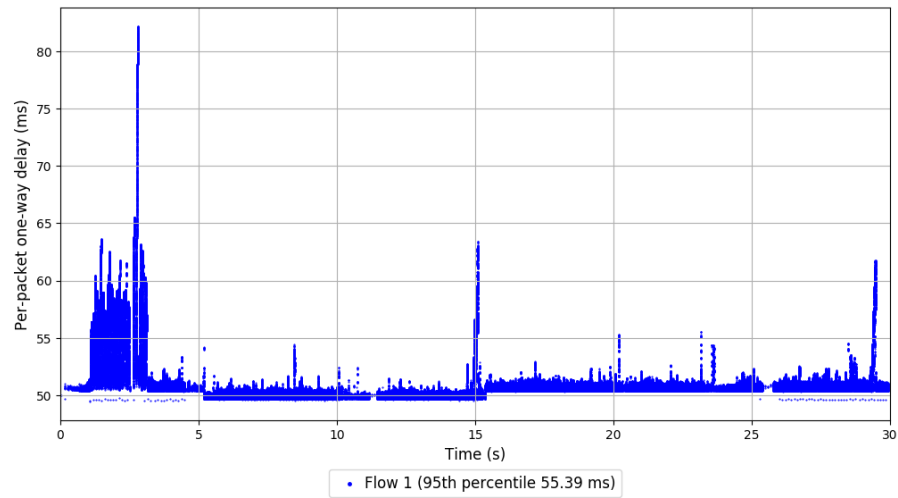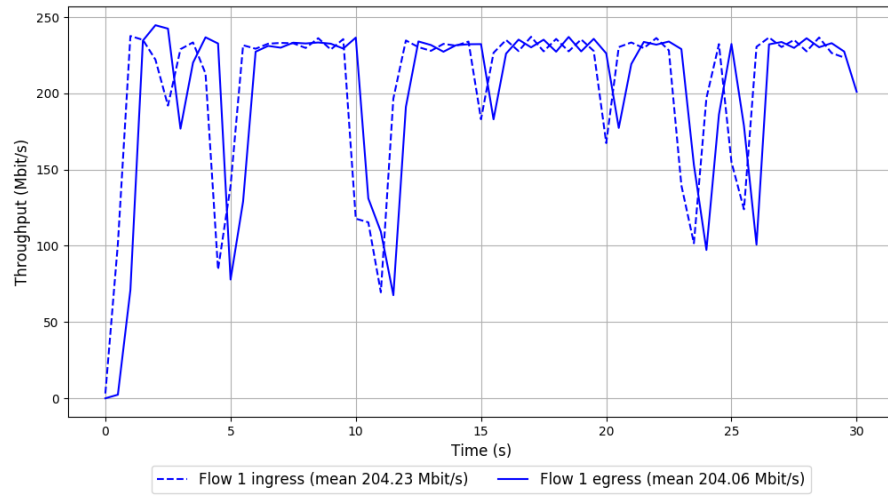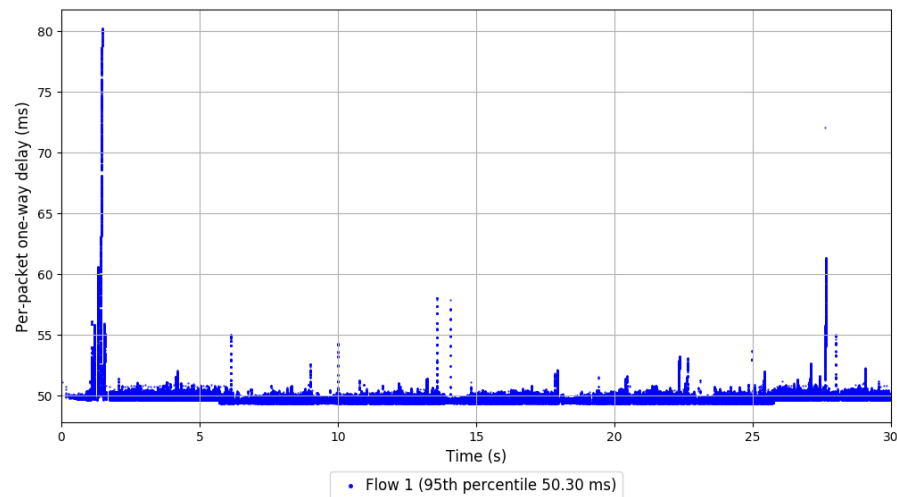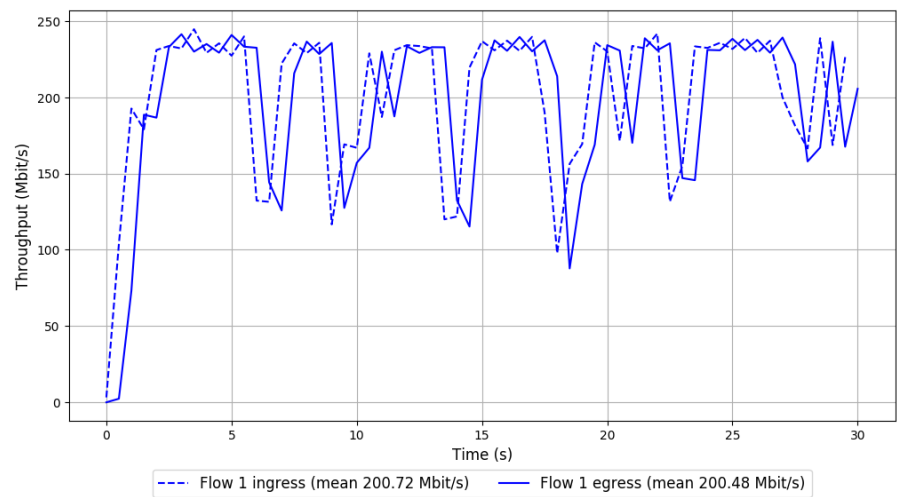
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 204.23 Mbit/s)   Flow 1 egress (mean 204.06 Mbit/s)

Flow 1 (95th percentile 55.39 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2018-06-01 17:18:20
End at: 2018-06-01 17:18:50
Local clock offset: 0.002 ms
Remote clock offset: -0.052 ms


# Below is generated by plot.py at 2018-06-01 20:32:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.48 Mbit/s
95th percentile per-packet one-way delay: 50.305 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 200.48 Mbit/s
95th percentile per-packet one-way delay: 50.305 ms
Loss rate: 0.46%
```
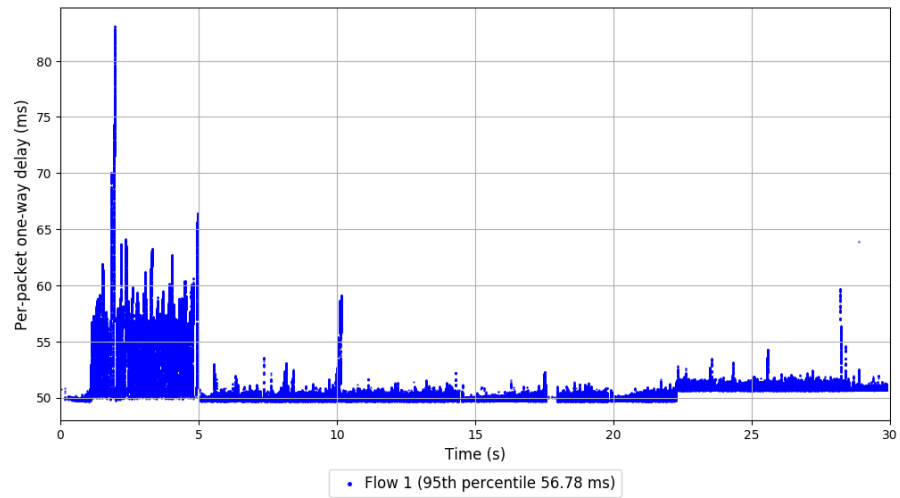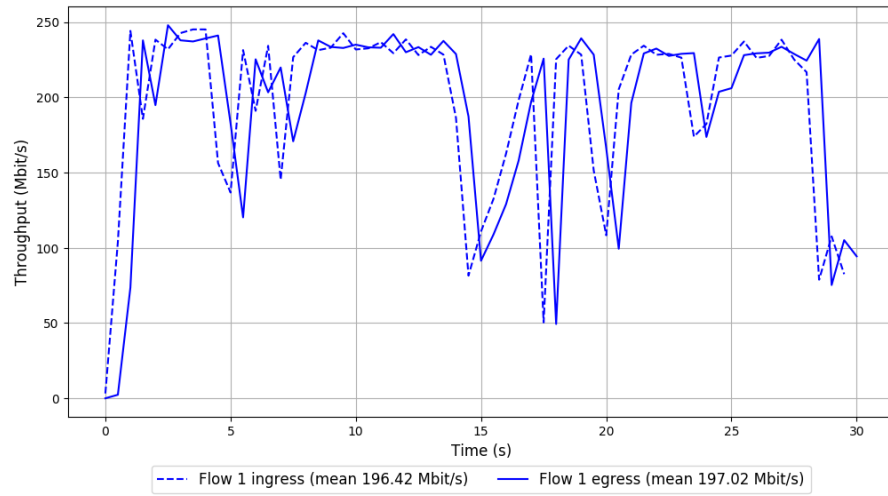
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 200.72 Mbit/s)   Flow 1 egress (mean 200.48 Mbit/s)

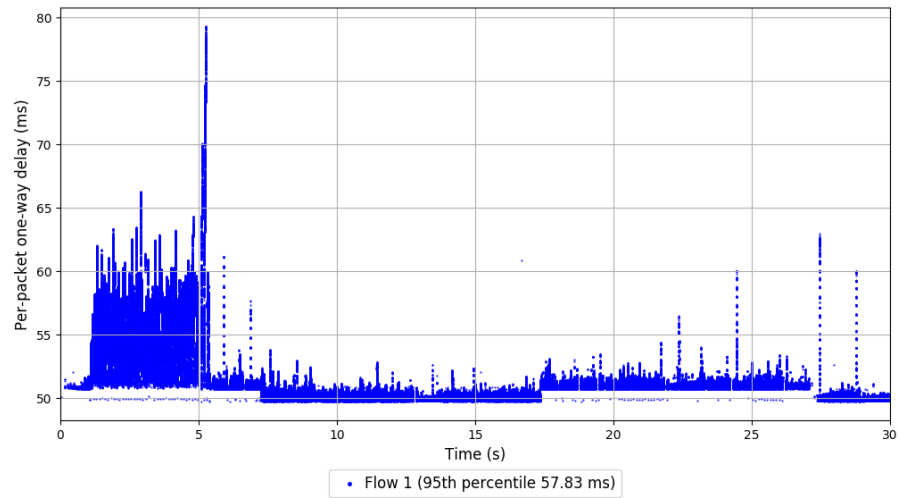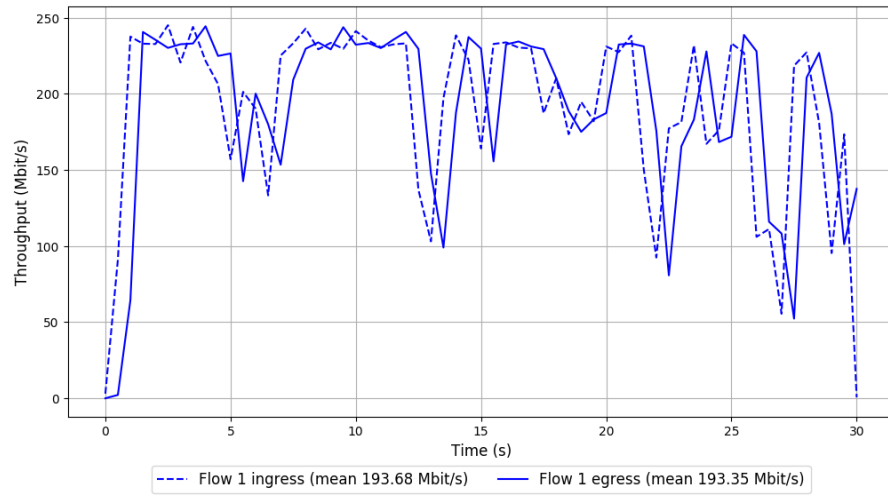
Flow 1 (95th percentile 50.30 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2018-06-01 17:38:23
End at: 2018-06-01 17:38:53
Local clock offset: 0.029 ms
Remote clock offset: -0.119 ms


# Below is generated by plot.py at 2018-06-01 20:32:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.02 Mbit/s
95th percentile per-packet one-way delay: 56.781 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 197.02 Mbit/s
95th percentile per-packet one-way delay: 56.781 ms
Loss rate: 0.03%
```
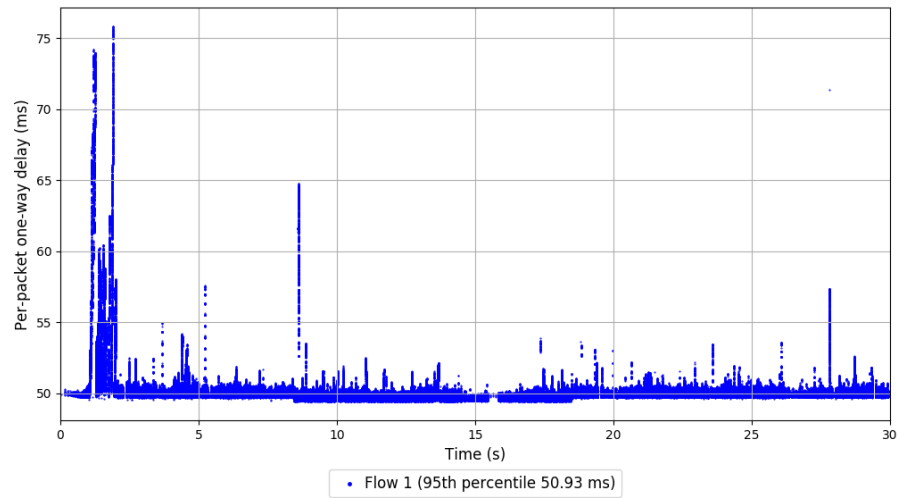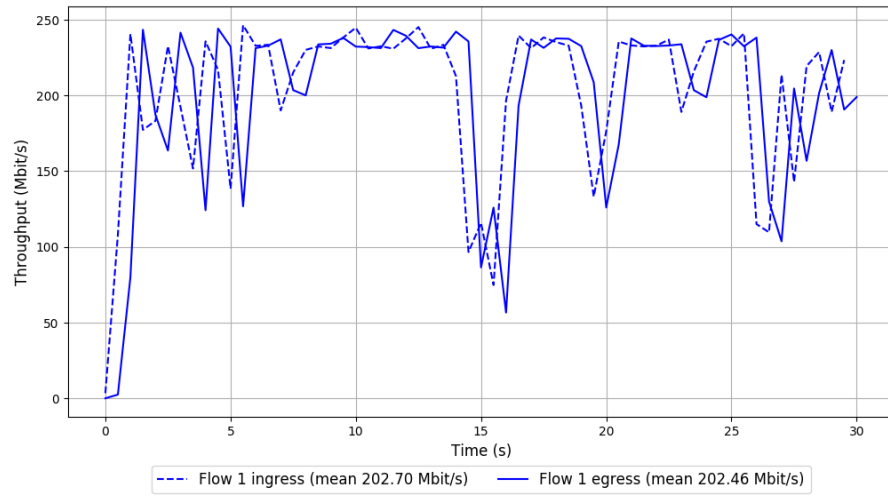
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-06-01 17:58:38
End at: 2018-06-01 17:59:08
Local clock offset: -0.061 ms
Remote clock offset: -0.124 ms


# Below is generated by plot.py at 2018-06-01 20:32:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.35 Mbit/s
95th percentile per-packet one-way delay: 57.834 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 193.35 Mbit/s
95th percentile per-packet one-way delay: 57.834 ms
Loss rate: 0.51%
```

Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2018-06-01 18:18:57
End at: 2018-06-01 18:19:27
Local clock offset: -0.068 ms
Remote clock offset: -0.039 ms


# Below is generated by plot.py at 2018-06-01 20:32:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.46 Mbit/s
95th percentile per-packet one-way delay: 50.927 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 202.46 Mbit/s
95th percentile per-packet one-way delay: 50.927 ms
Loss rate: 0.45%
```
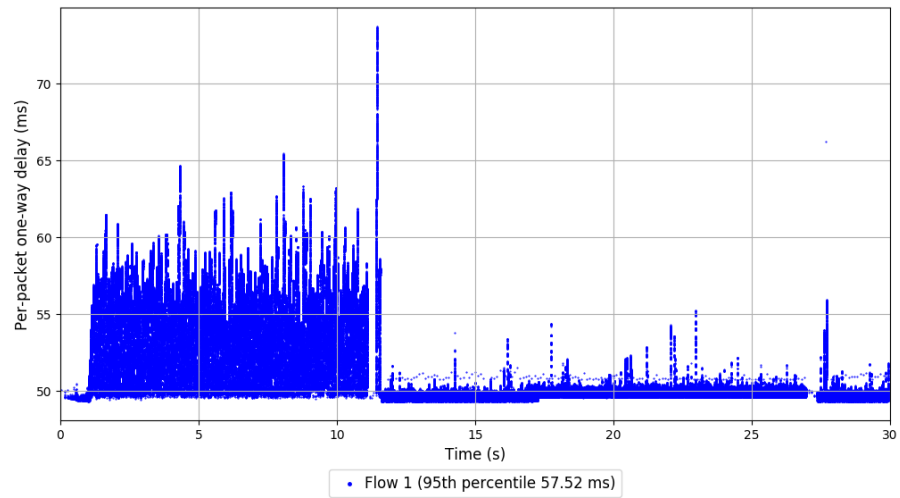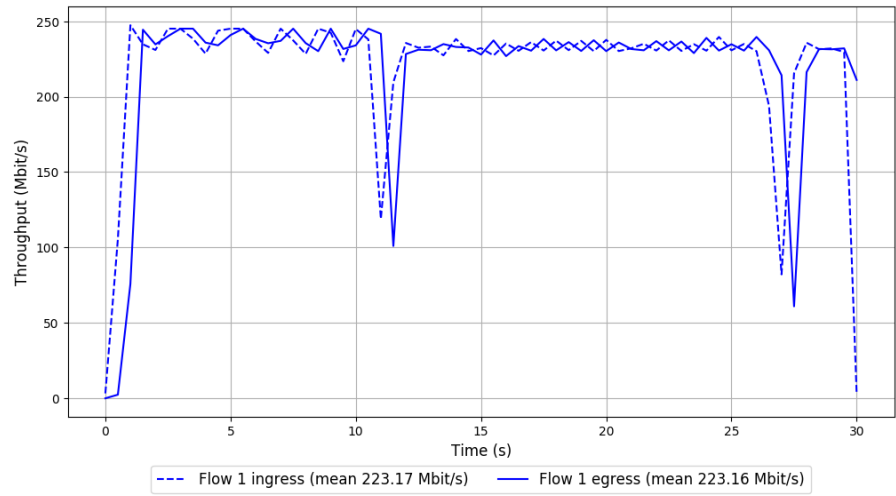
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 202.70 Mbit/s)   Flow 1 egress (mean 202.46 Mbit/s)

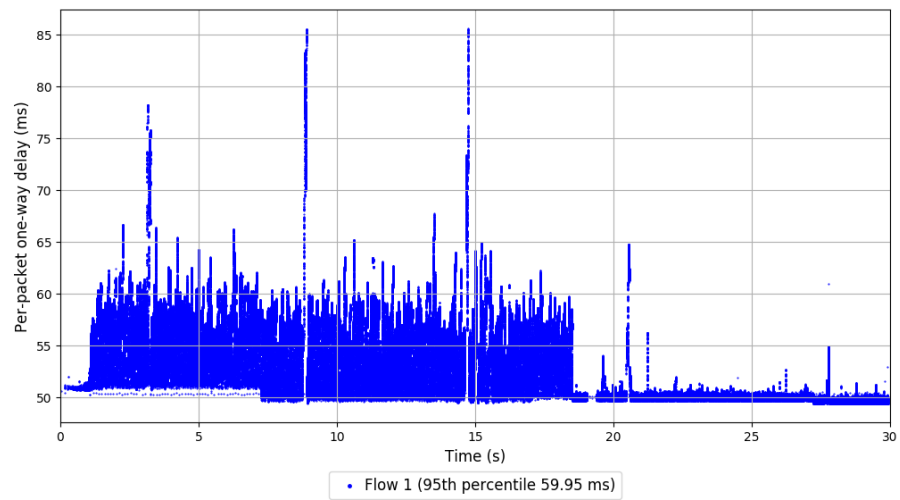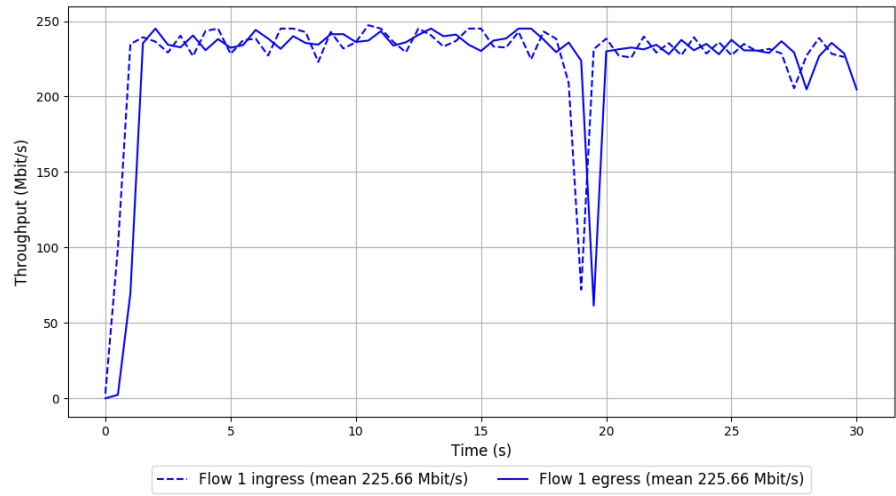

• Flow 1 (95th percentile 50.93 ms)

13

```
Run 6: Statistics of TCP BBR

Start at: 2018-06-01 18:39:08
End at: 2018-06-01 18:39:38
Local clock offset: -0.105 ms
Remote clock offset: 0.01 ms


# Below is generated by plot.py at 2018-06-01 20:32:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.16 Mbit/s
95th percentile per-packet one-way delay: 57.517 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 223.16 Mbit/s
95th percentile per-packet one-way delay: 57.517 ms
Loss rate: 0.34%
```
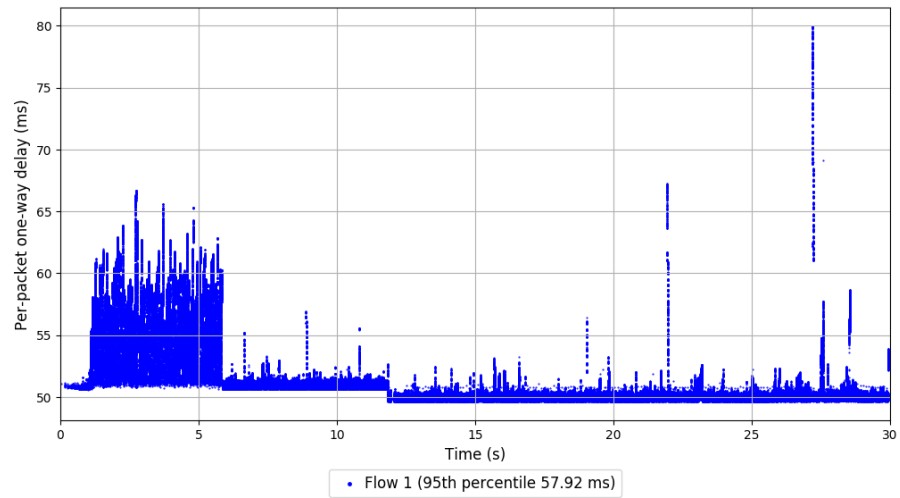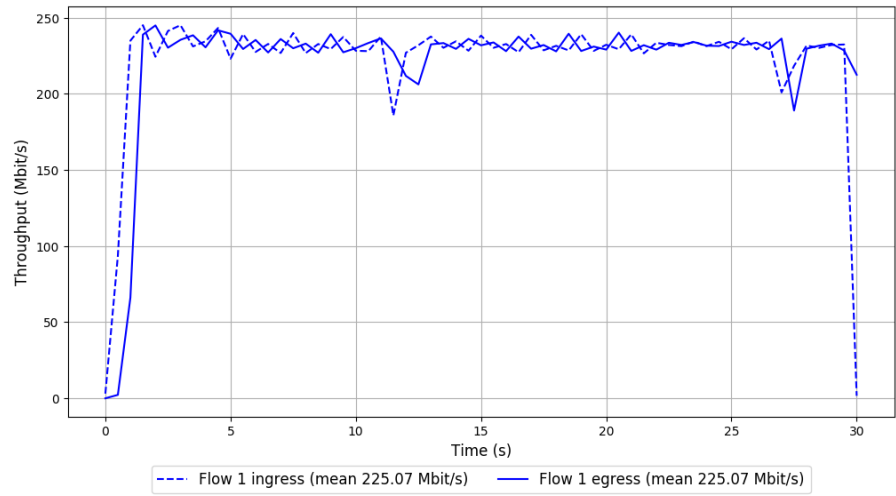
Run 6: Report of TCP BBR — Data Link

```
Run 7: Statistics of TCP BBR

Start at: 2018-06-01 18:59:28
End at: 2018-06-01 18:59:58
Local clock offset: -0.014 ms
Remote clock offset: -0.002 ms


# Below is generated by plot.py at 2018-06-01 20:32:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.66 Mbit/s
95th percentile per-packet one-way delay: 59.946 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 225.66 Mbit/s
95th percentile per-packet one-way delay: 59.946 ms
Loss rate: 0.34%
```
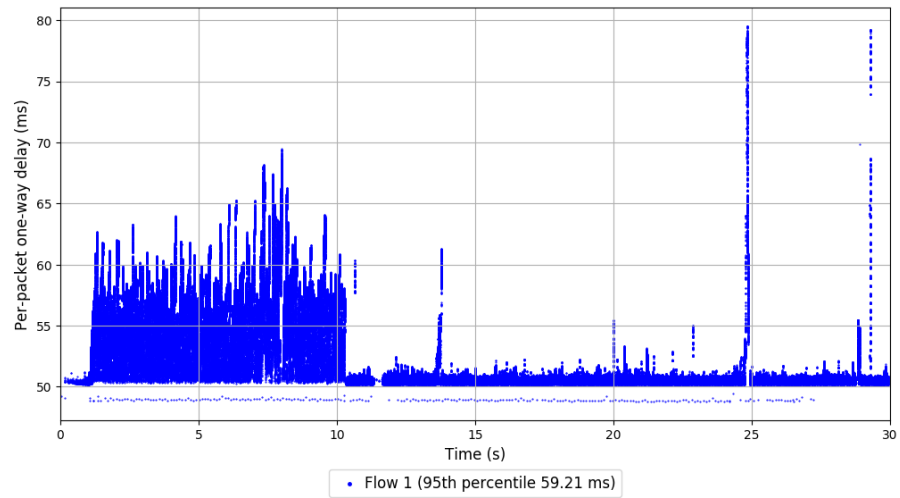
Run 7: Report of TCP BBR — Data Link

```
Run 8: Statistics of TCP BBR

Start at: 2018-06-01 19:19:44
End at: 2018-06-01 19:20:14
Local clock offset: -0.103 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2018-06-01 20:32:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.07 Mbit/s
95th percentile per-packet one-way delay: 57.917 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 225.07 Mbit/s
95th percentile per-packet one-way delay: 57.917 ms
Loss rate: 0.34%
```

Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 225.07 Mbit/s) — — —   Flow 1 egress (mean 225.07 Mbit/s) ———
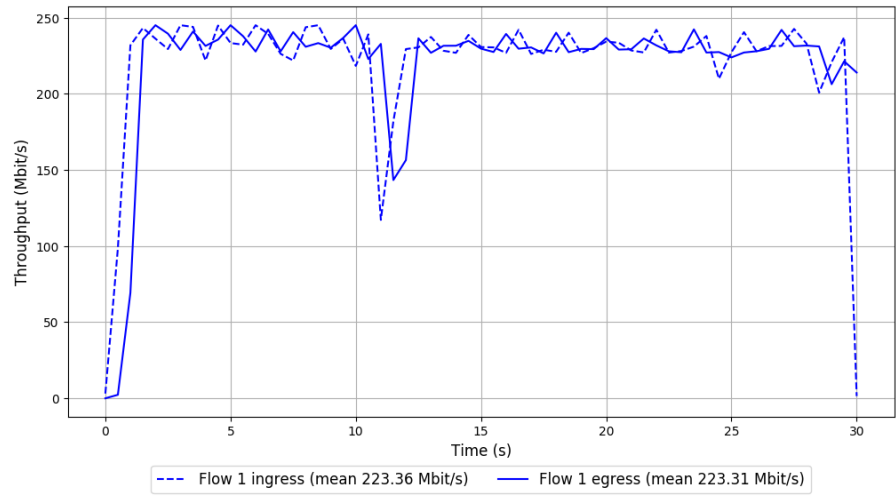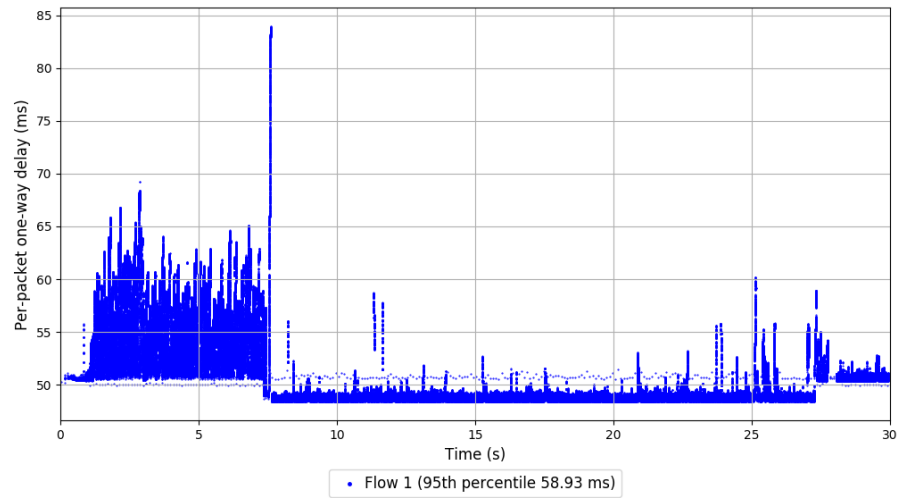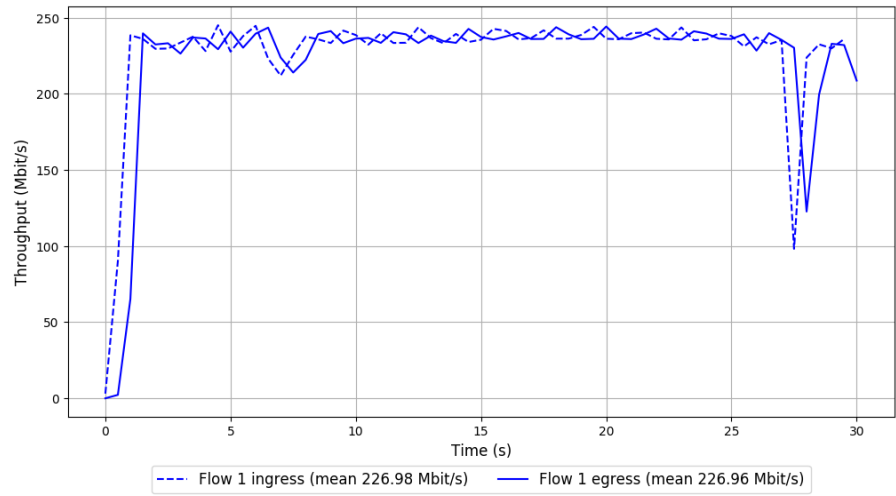

• Flow 1 (95th percentile 57.92 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2018-06-01 19:40:08
End at: 2018-06-01 19:40:38
Local clock offset: -0.174 ms
Remote clock offset: -0.073 ms


# Below is generated by plot.py at 2018-06-01 20:36:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.31 Mbit/s
95th percentile per-packet one-way delay: 59.207 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 223.31 Mbit/s
95th percentile per-packet one-way delay: 59.207 ms
Loss rate: 0.36%
```
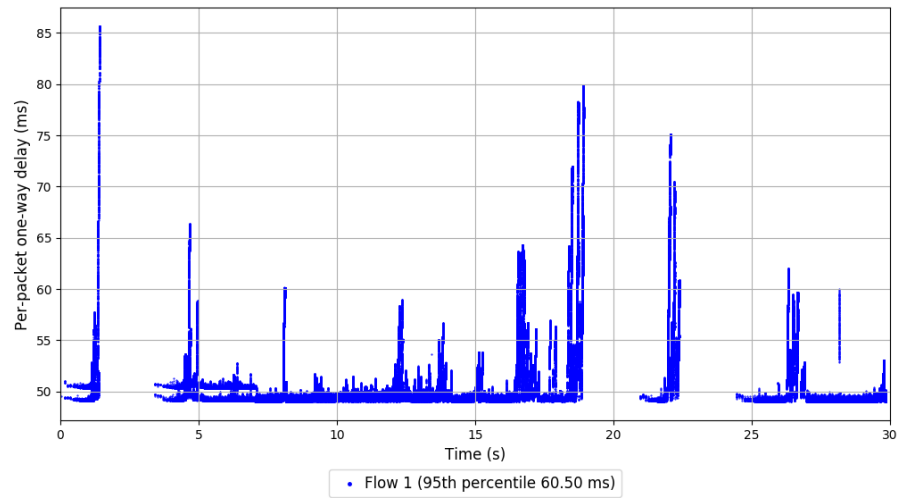
Run 9: Report of TCP BBR — Data Link

```
Run 10: Statistics of TCP BBR

Start at: 2018-06-01 20:00:18
End at: 2018-06-01 20:00:48
Local clock offset: -0.496 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-06-01 20:37:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.96 Mbit/s
95th percentile per-packet one-way delay: 58.926 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 226.96 Mbit/s
95th percentile per-packet one-way delay: 58.926 ms
Loss rate: 0.36%
```
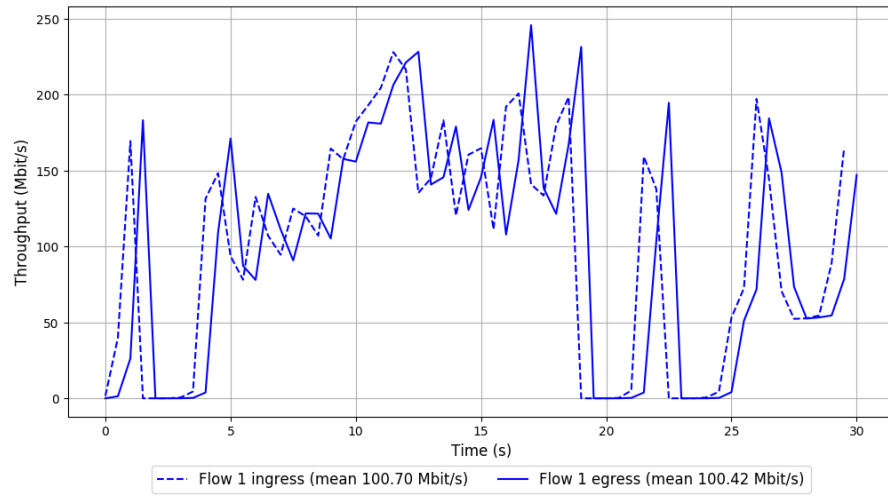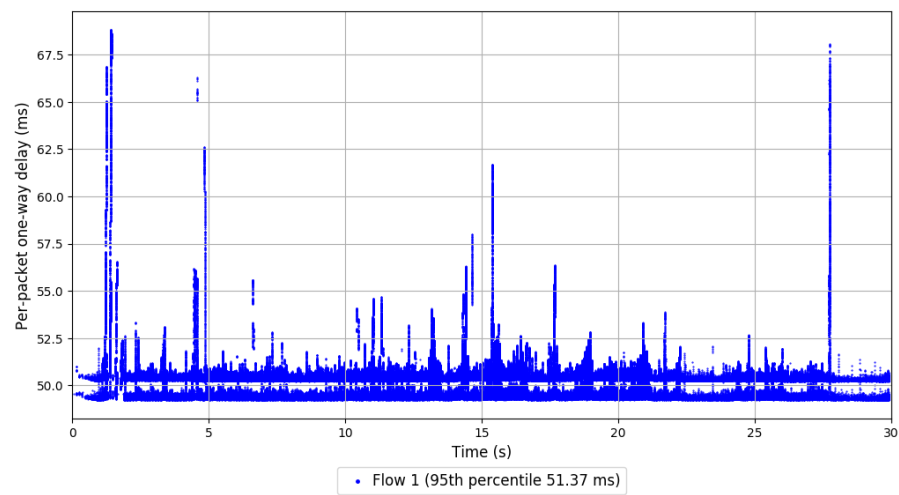
Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-06-01 17:11:08
End at: 2018-06-01 17:11:38
Local clock offset: -0.392 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2018-06-01 20:37:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 100.42 Mbit/s
95th percentile per-packet one-way delay: 60.501 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 100.42 Mbit/s
95th percentile per-packet one-way delay: 60.501 ms
Loss rate: 0.61%
```

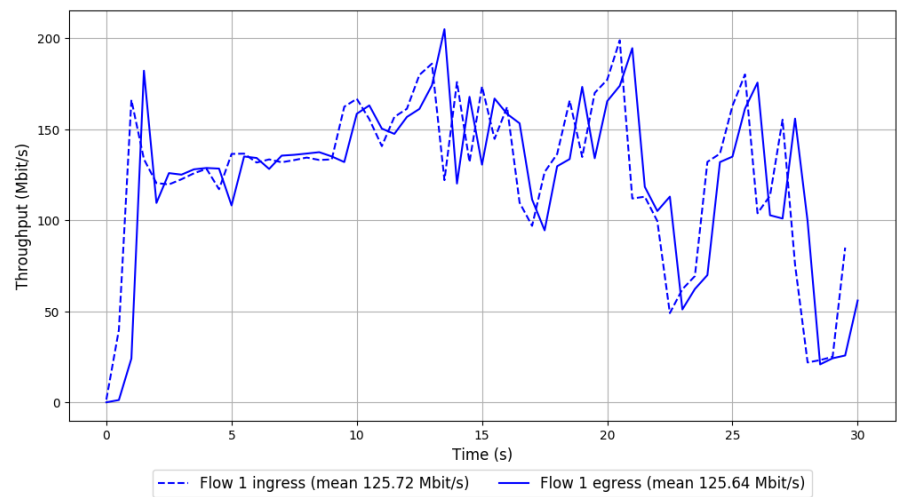Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-06-01 17:31:01
End at: 2018-06-01 17:31:31
Local clock offset: -0.36 ms
Remote clock offset: -0.109 ms


# Below is generated by plot.py at 2018-06-01 20:37:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 125.64 Mbit/s
95th percentile per-packet one-way delay: 51.374 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 125.64 Mbit/s
95th percentile per-packet one-way delay: 51.374 ms
Loss rate: 0.40%
```

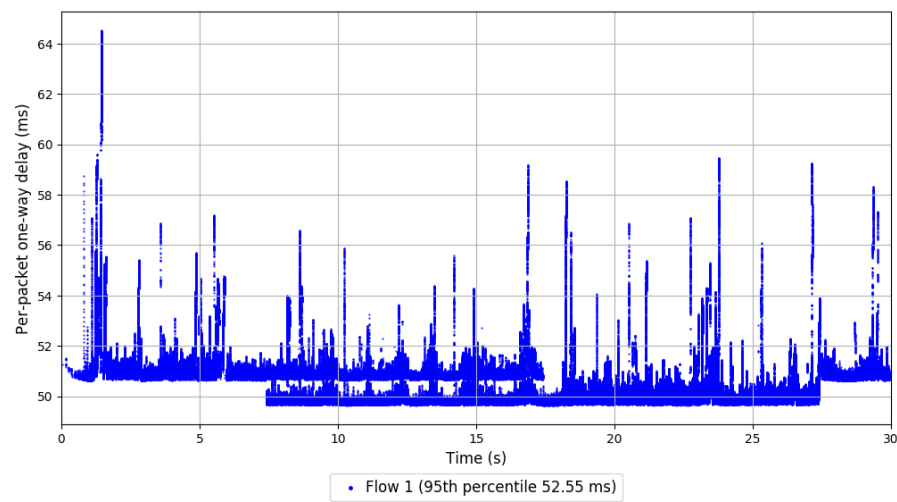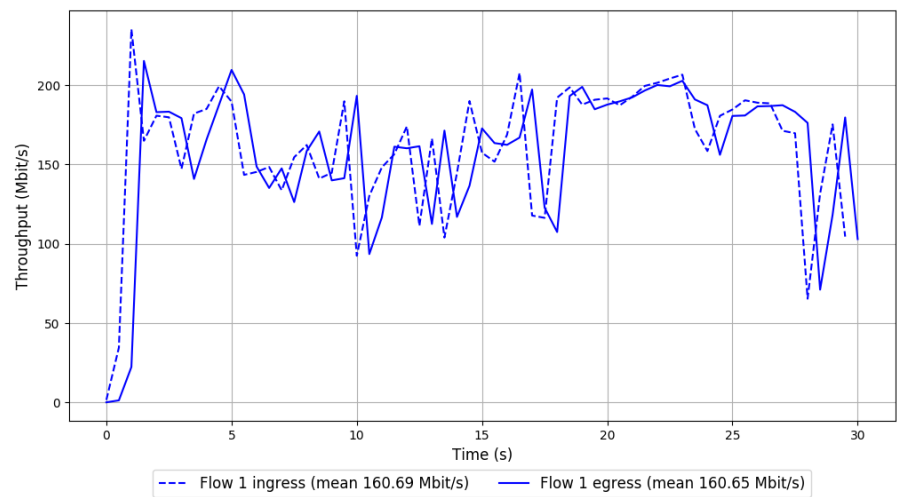Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-06-01 17:51:08
End at: 2018-06-01 17:51:38
Local clock offset: -0.064 ms
Remote clock offset: -0.093 ms


# Below is generated by plot.py at 2018-06-01 20:38:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 160.65 Mbit/s
95th percentile per-packet one-way delay: 52.545 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 160.65 Mbit/s
95th percentile per-packet one-way delay: 52.545 ms
Loss rate: 0.36%
```

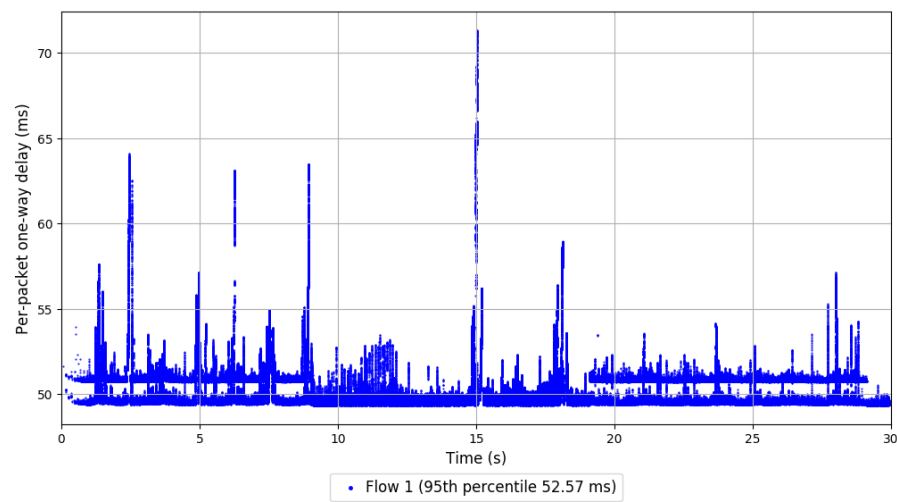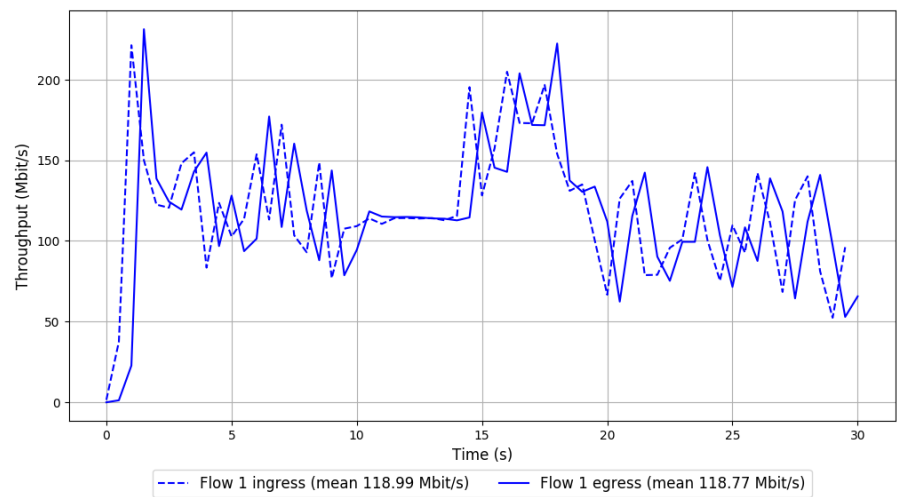Run 3: Report of Copa — Data Link

```
Run 4: Statistics of Copa

Start at: 2018-06-01 18:11:26
End at: 2018-06-01 18:11:56
Local clock offset: -0.062 ms
Remote clock offset: -0.044 ms


# Below is generated by plot.py at 2018-06-01 20:38:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.77 Mbit/s
95th percentile per-packet one-way delay: 52.569 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 118.77 Mbit/s
95th percentile per-packet one-way delay: 52.569 ms
Loss rate: 0.52%
```
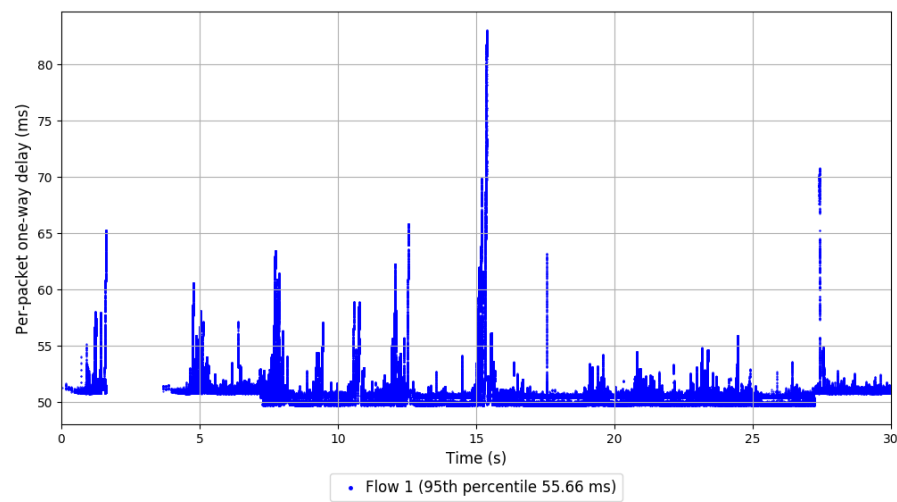
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 118.99 Mbit/s)   —— Flow 1 egress (mean 118.77 Mbit/s)

• Flow 1 (95th percentile 52.57 ms)

```
Run 5: Statistics of Copa

Start at: 2018-06-01 18:31:38
End at: 2018-06-01 18:32:08
Local clock offset: 0.296 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2018-06-01 20:38:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 132.84 Mbit/s
95th percentile per-packet one-way delay: 55.658 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 132.84 Mbit/s
95th percentile per-packet one-way delay: 55.658 ms
Loss rate: 0.62%
```
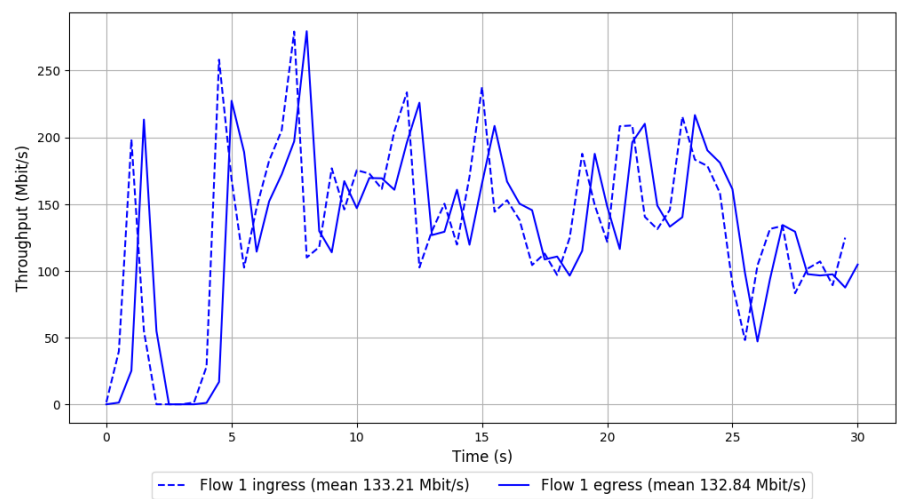
Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2018-06-01 18:51:58
End at: 2018-06-01 18:52:28
Local clock offset: -0.052 ms
Remote clock offset: 0.01 ms


# Below is generated by plot.py at 2018-06-01 20:38:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.61 Mbit/s
95th percentile per-packet one-way delay: 59.138 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 97.61 Mbit/s
95th percentile per-packet one-way delay: 59.138 ms
Loss rate: 0.75%
```
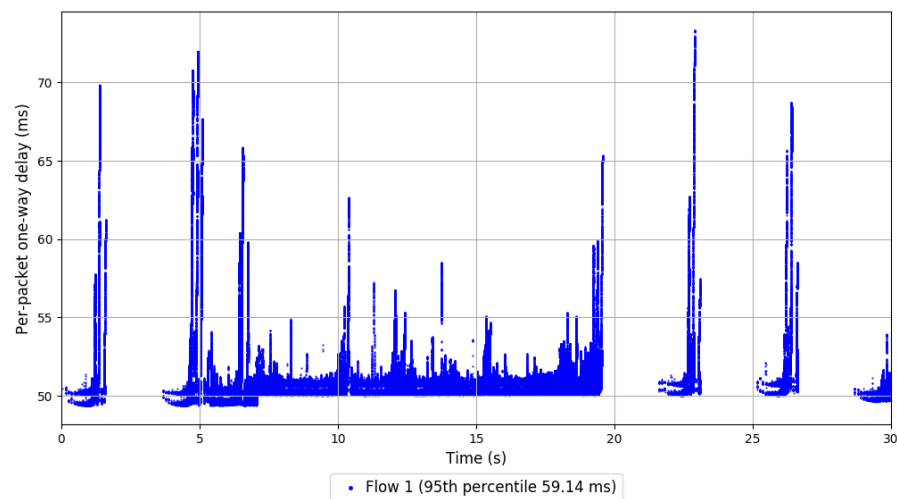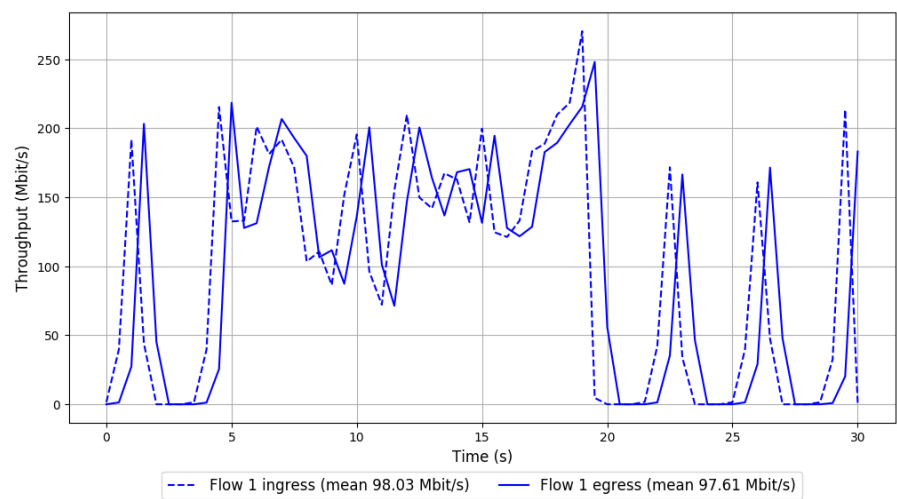
Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 98.03 Mbit/s) --- Flow 1 egress (mean 97.61 Mbit/s)

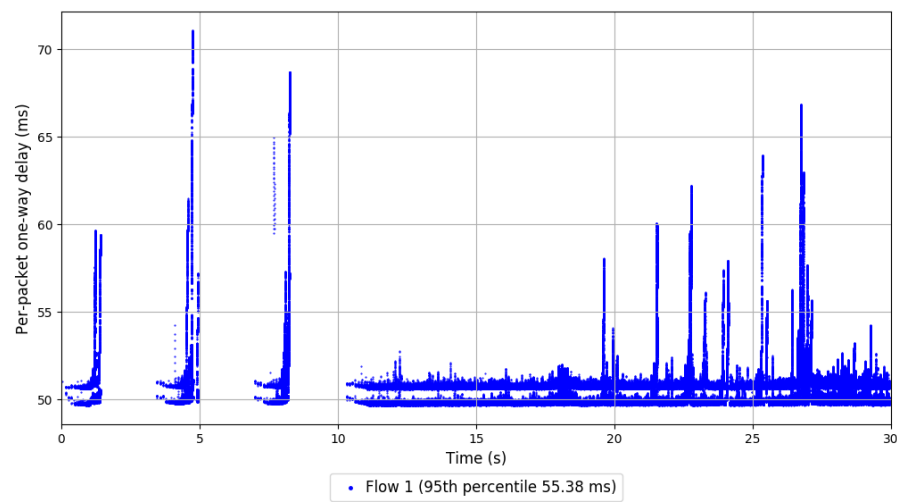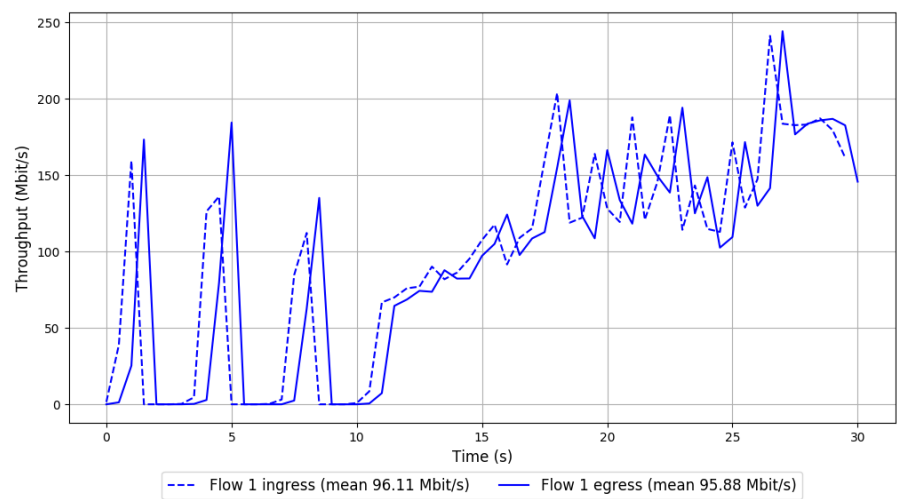· Flow 1 (95th percentile 59.14 ms)

```
Run 7: Statistics of Copa

Start at: 2018-06-01 19:12:14
End at: 2018-06-01 19:12:44
Local clock offset: -0.098 ms
Remote clock offset: -0.031 ms


# Below is generated by plot.py at 2018-06-01 20:39:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.88 Mbit/s
95th percentile per-packet one-way delay: 55.380 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 95.88 Mbit/s
95th percentile per-packet one-way delay: 55.380 ms
Loss rate: 0.57%
```

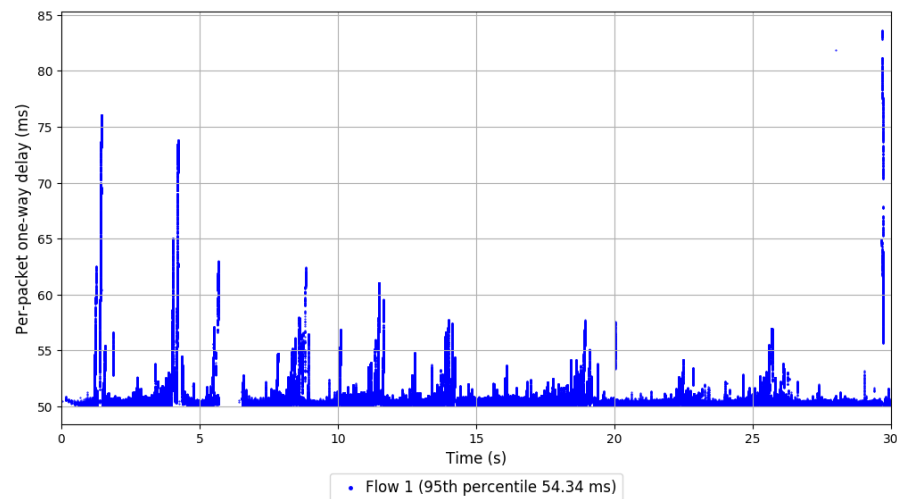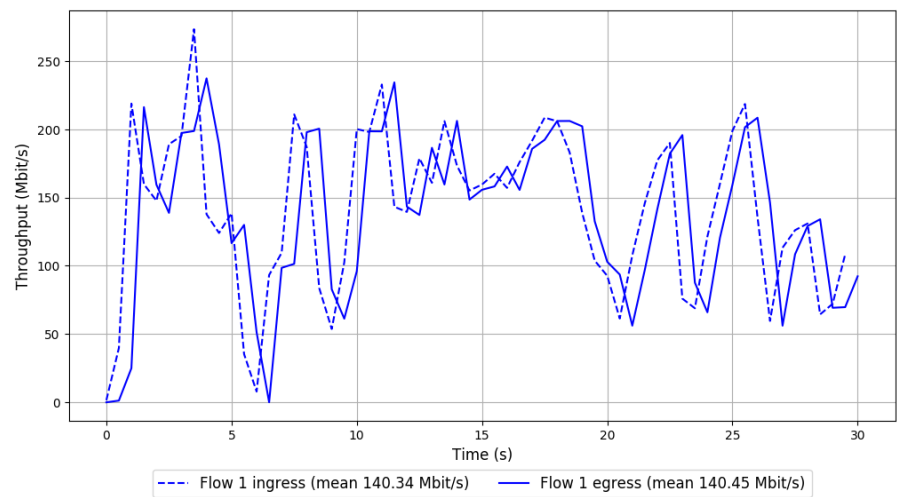Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2018-06-01 19:32:35
End at: 2018-06-01 19:33:05
Local clock offset: -0.124 ms
Remote clock offset: -0.012 ms


# Below is generated by plot.py at 2018-06-01 20:41:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 140.45 Mbit/s
95th percentile per-packet one-way delay: 54.337 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 140.45 Mbit/s
95th percentile per-packet one-way delay: 54.337 ms
Loss rate: 0.25%
```

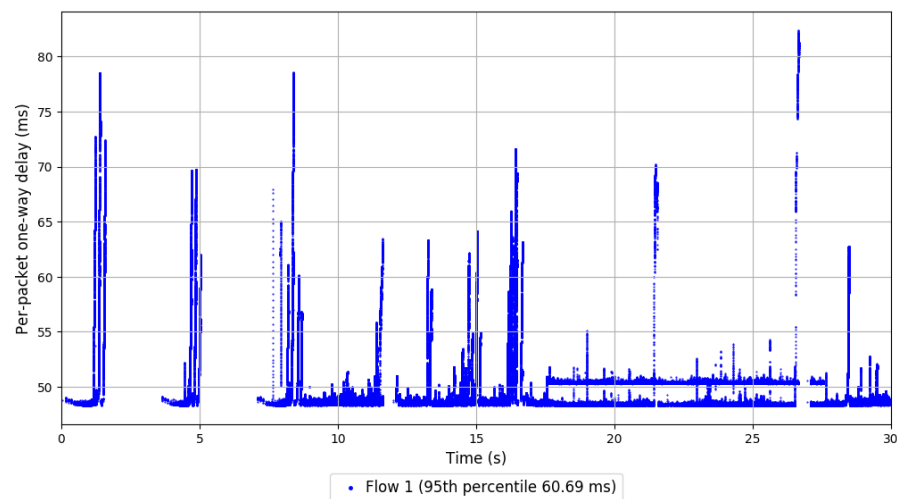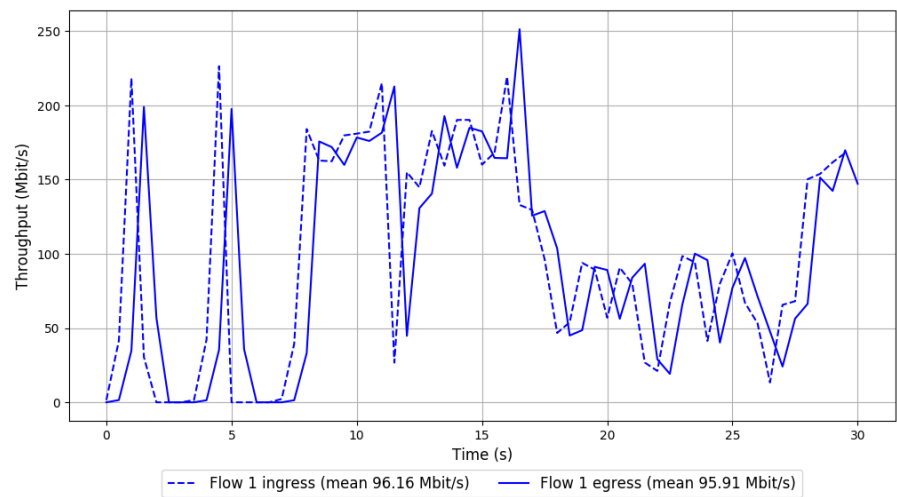## Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2018-06-01 19:52:58
End at: 2018-06-01 19:53:28
Local clock offset: -0.56 ms
Remote clock offset: -0.041 ms


# Below is generated by plot.py at 2018-06-01 20:41:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 60.692 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 60.692 ms
Loss rate: 0.59%
```

Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-06-01 20:13:04
End at: 2018-06-01 20:13:34
Local clock offset: -0.053 ms
Remote clock offset: 0.04 ms


# Below is generated by plot.py at 2018-06-01 20:41:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 130.26 Mbit/s
95th percentile per-packet one-way delay: 53.814 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 130.26 Mbit/s
95th percentile per-packet one-way delay: 53.814 ms
Loss rate: 0.31%
```
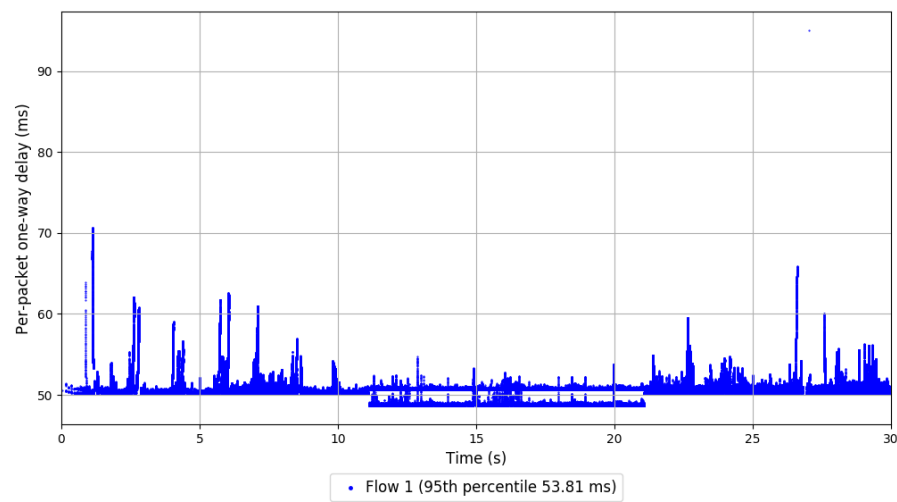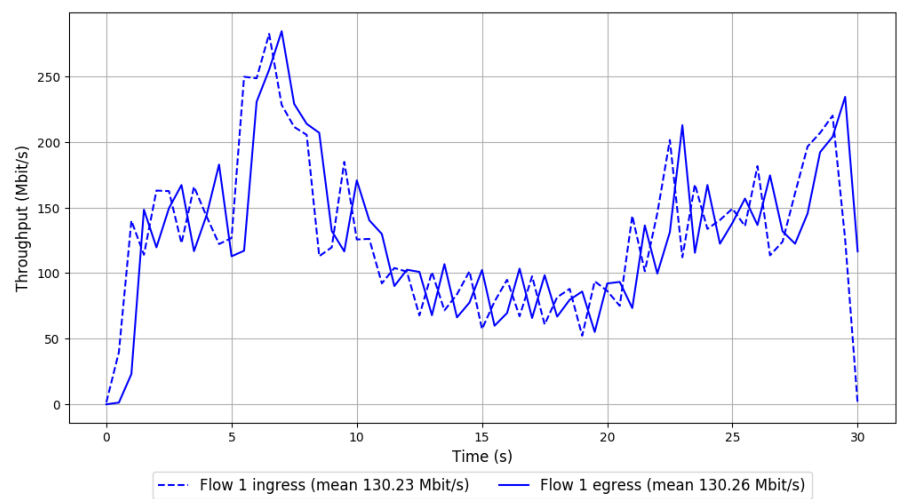
Run 10: Report of Copa — Data Link

Flow 1 ingress (mean 130.23 Mbit/s)　　Flow 1 egress (mean 130.26 Mbit/s)

Flow 1 (95th percentile 53.81 ms)

43

```
Run 1: Statistics of TCP Cubic

Start at: 2018-06-01 17:01:03
End at: 2018-06-01 17:01:33
Local clock offset: -0.485 ms
Remote clock offset: 0.044 ms


# Below is generated by plot.py at 2018-06-01 20:41:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.65 Mbit/s
95th percentile per-packet one-way delay: 52.816 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 67.65 Mbit/s
95th percentile per-packet one-way delay: 52.816 ms
Loss rate: 0.36%
```
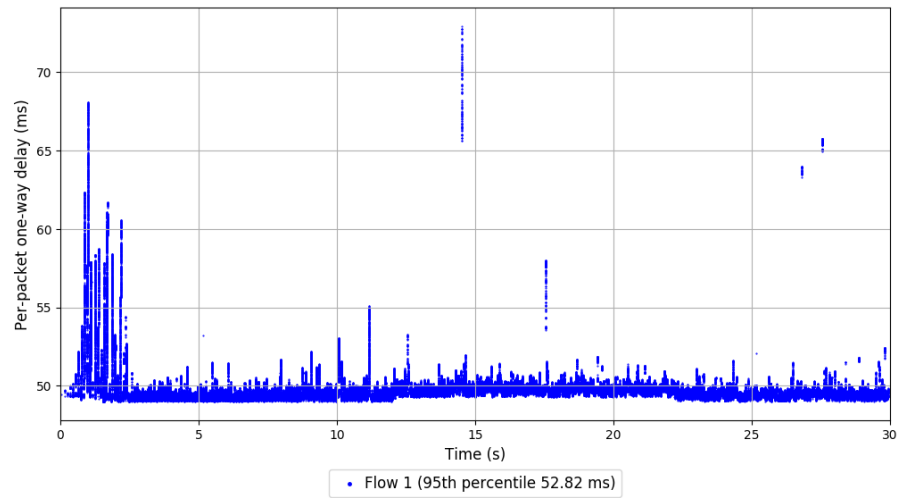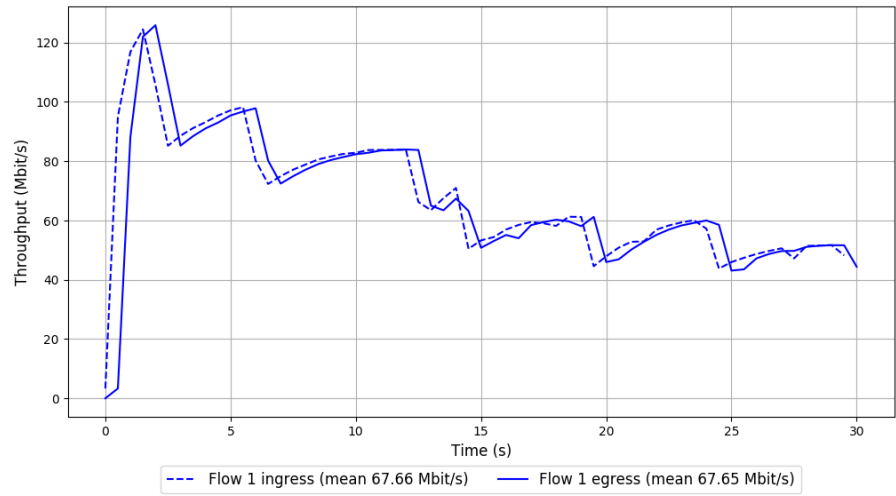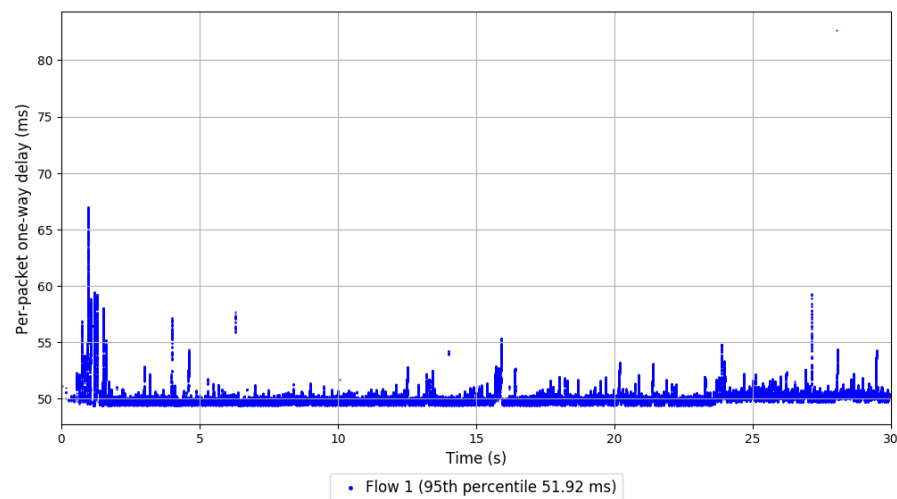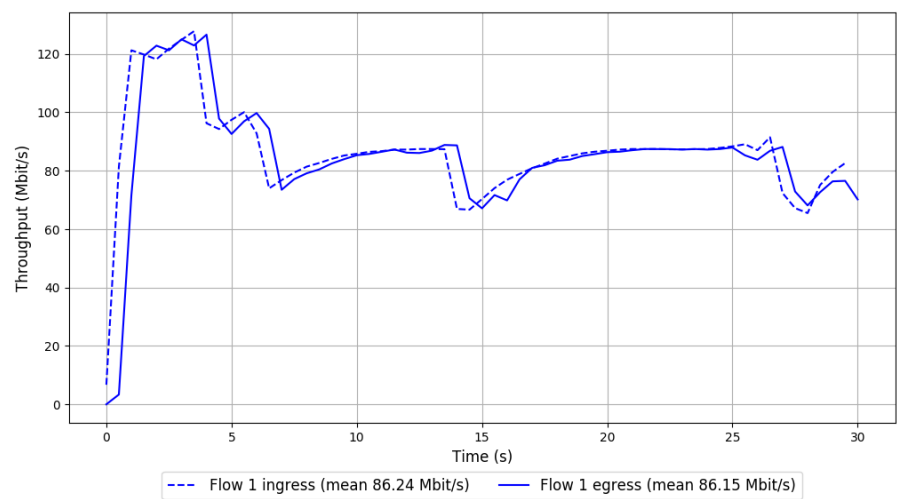
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-06-01 17:20:42
End at: 2018-06-01 17:21:12
Local clock offset: 0.018 ms
Remote clock offset: -0.092 ms


# Below is generated by plot.py at 2018-06-01 20:41:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.15 Mbit/s
95th percentile per-packet one-way delay: 51.917 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 86.15 Mbit/s
95th percentile per-packet one-way delay: 51.917 ms
Loss rate: 0.44%
```
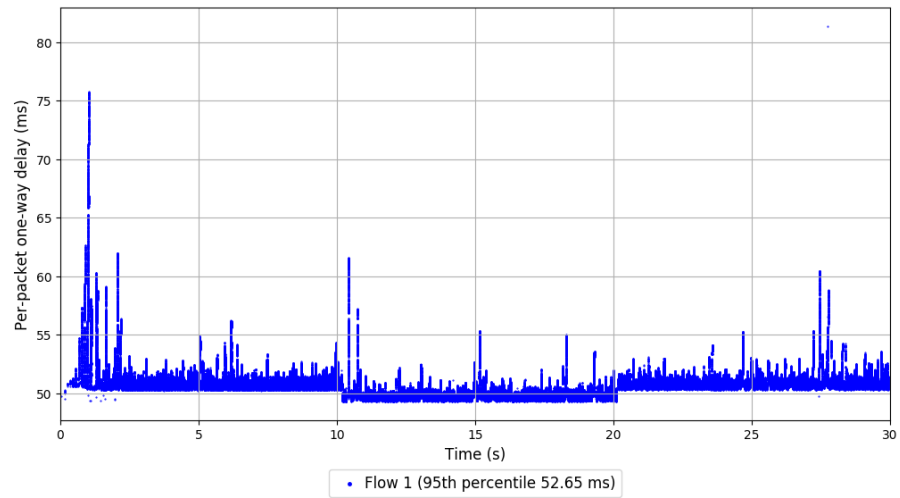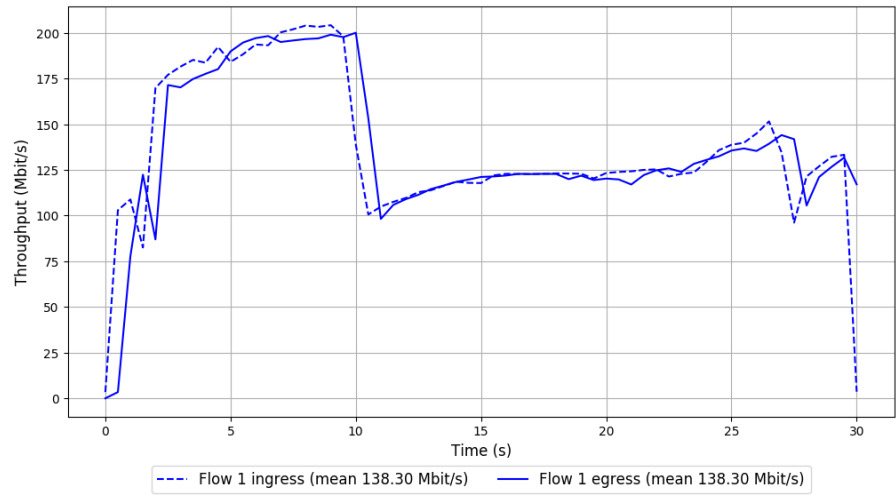
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-06-01 17:40:45
End at: 2018-06-01 17:41:15
Local clock offset: -0.34 ms
Remote clock offset: -0.096 ms


# Below is generated by plot.py at 2018-06-01 20:41:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 138.30 Mbit/s
95th percentile per-packet one-way delay: 52.647 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 138.30 Mbit/s
95th percentile per-packet one-way delay: 52.647 ms
Loss rate: 0.34%
```

Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 138.30 Mbit/s)   Flow 1 egress (mean 138.30 Mbit/s)
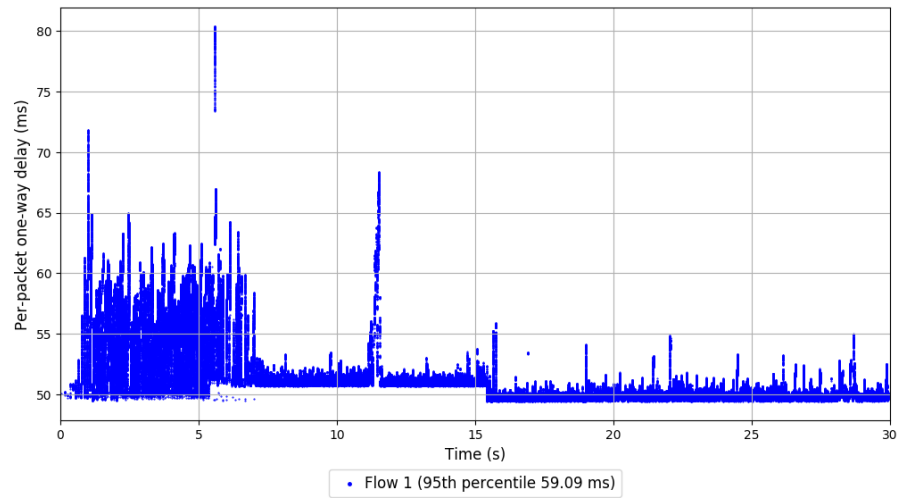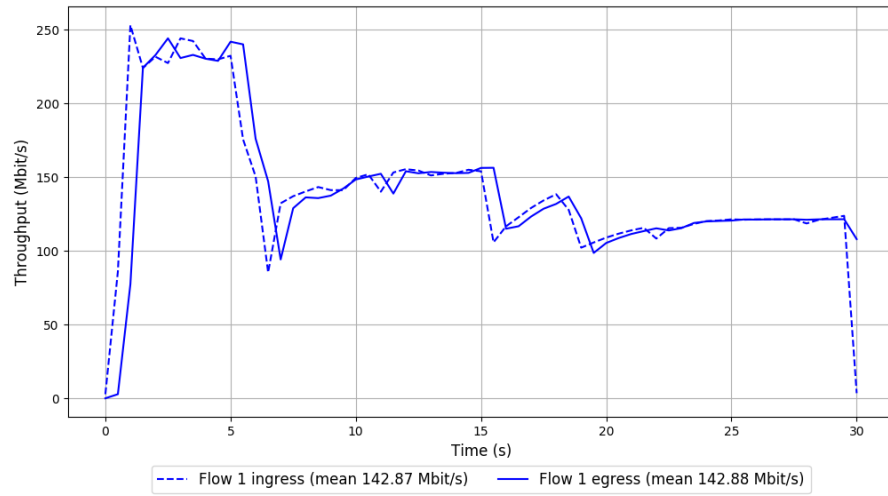

Flow 1 (95th percentile 52.65 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-06-01 18:01:00
End at: 2018-06-01 18:01:30
Local clock offset: -0.095 ms
Remote clock offset: -0.094 ms


# Below is generated by plot.py at 2018-06-01 20:41:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 142.88 Mbit/s
95th percentile per-packet one-way delay: 59.085 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 142.88 Mbit/s
95th percentile per-packet one-way delay: 59.085 ms
Loss rate: 0.32%
```
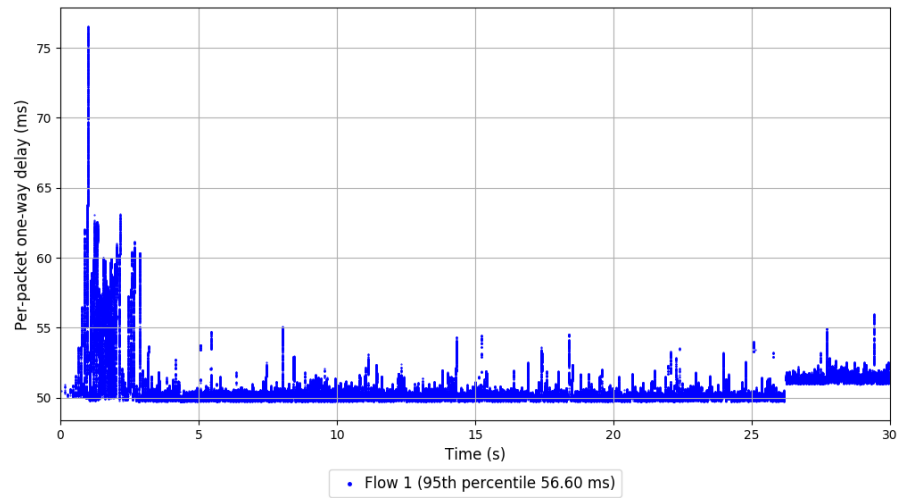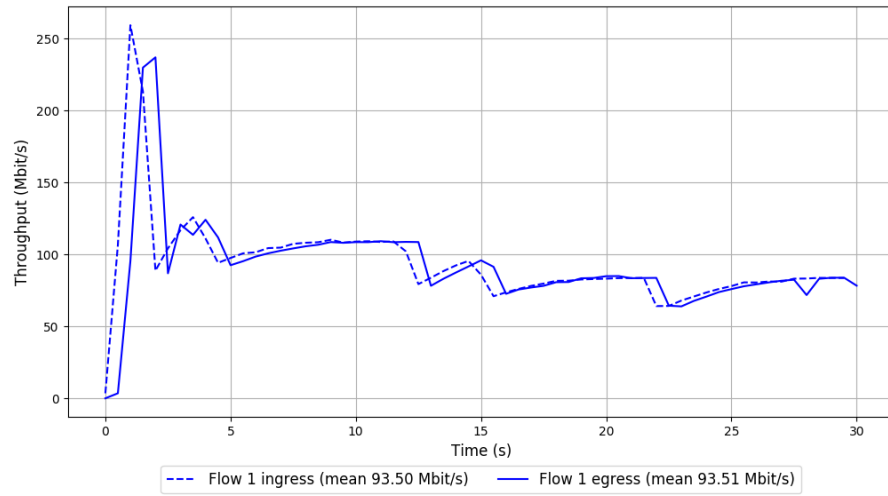
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2018-06-01 18:21:19
End at: 2018-06-01 18:21:49
Local clock offset: 0.284 ms
Remote clock offset: -0.001 ms


# Below is generated by plot.py at 2018-06-01 20:41:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.51 Mbit/s
95th percentile per-packet one-way delay: 56.596 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 93.51 Mbit/s
95th percentile per-packet one-way delay: 56.596 ms
Loss rate: 0.32%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 93.50 Mbit/s)　　Flow 1 egress (mean 93.51 Mbit/s)

Flow 1 (95th percentile 56.60 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-06-01 18:41:30
End at: 2018-06-01 18:42:00
Local clock offset: -0.035 ms
Remote clock offset: 0.018 ms


# Below is generated by plot.py at 2018-06-01 20:43:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.35 Mbit/s
95th percentile per-packet one-way delay: 59.856 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 212.35 Mbit/s
95th percentile per-packet one-way delay: 59.856 ms
Loss rate: 0.16%
```
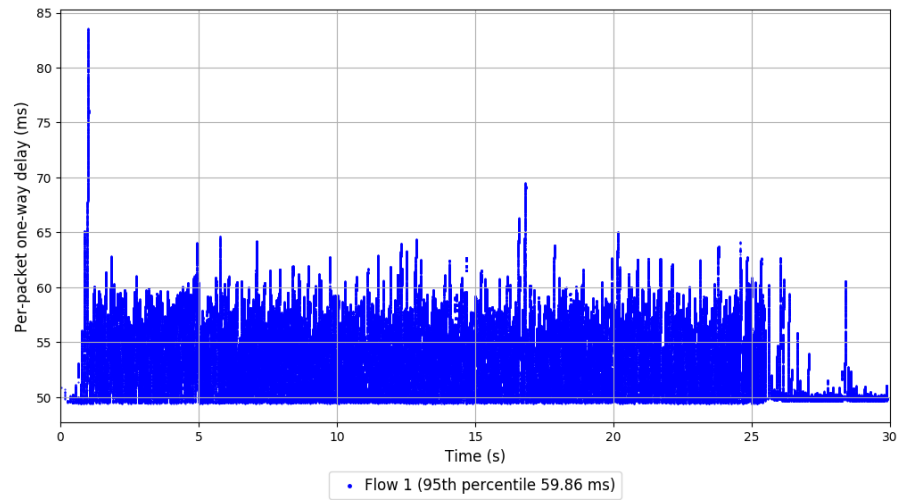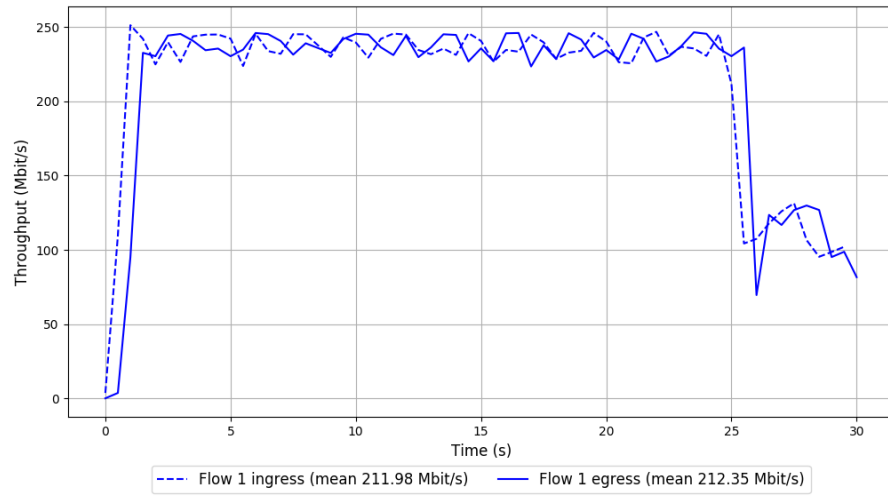
Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 211.98 Mbit/s)   Flow 1 egress (mean 212.35 Mbit/s)

• Flow 1 (95th percentile 59.86 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2018-06-01 19:01:51
End at: 2018-06-01 19:02:21
Local clock offset: -0.051 ms
Remote clock offset: 0.004 ms


# Below is generated by plot.py at 2018-06-01 20:43:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.72 Mbit/s
95th percentile per-packet one-way delay: 60.401 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 152.72 Mbit/s
95th percentile per-packet one-way delay: 60.401 ms
Loss rate: 0.52%
```
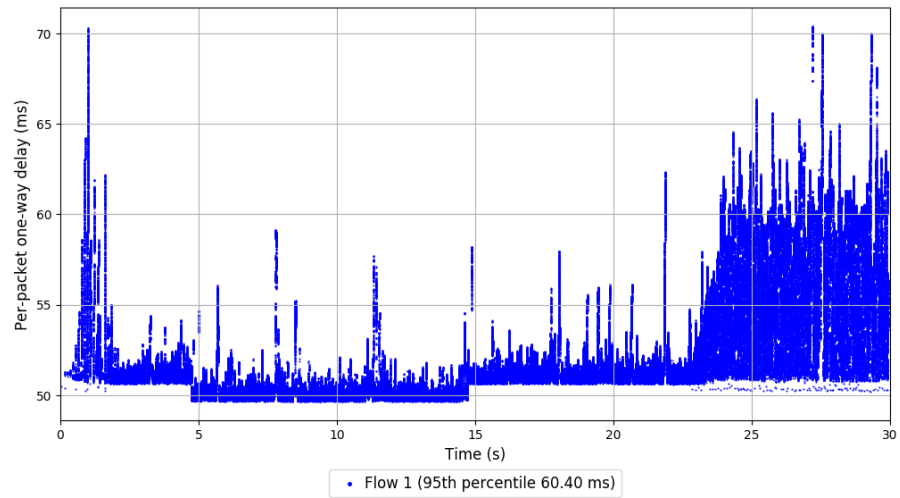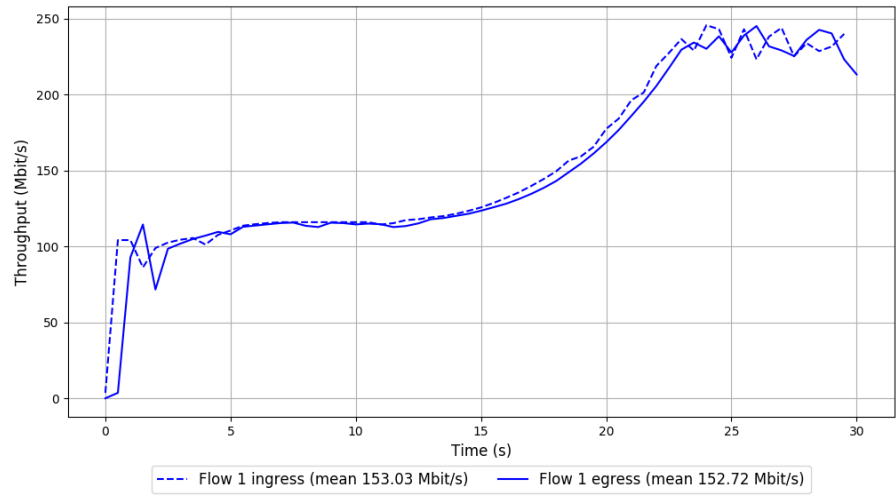
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 153.03 Mbit/s) —— Flow 1 egress (mean 152.72 Mbit/s)
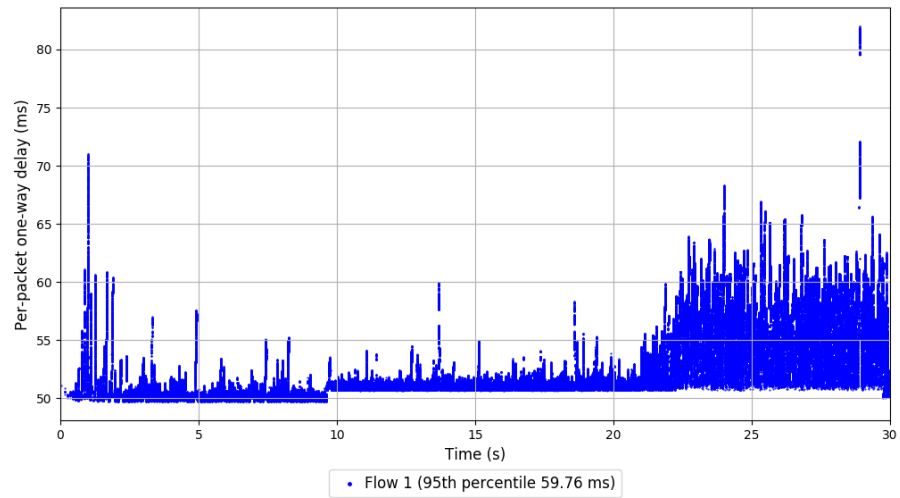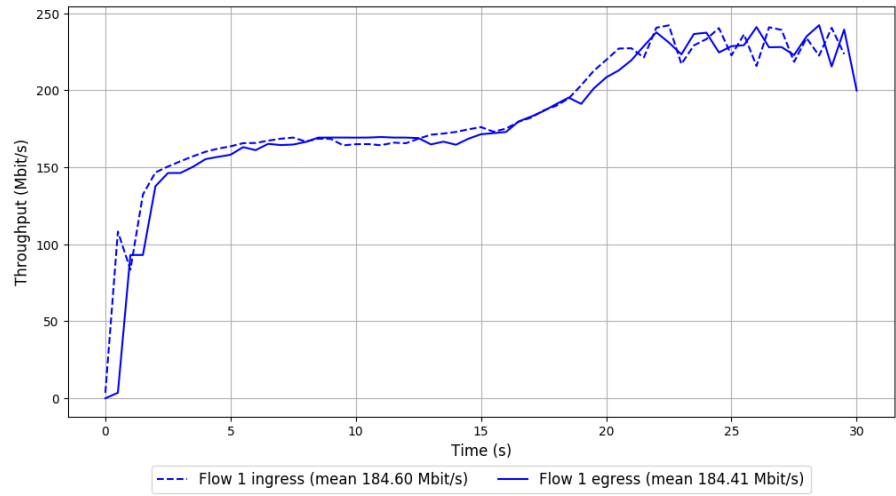

• Flow 1 (95th percentile 60.40 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2018-06-01 19:22:06
End at: 2018-06-01 19:22:36
Local clock offset: -0.044 ms
Remote clock offset: -0.023 ms


# Below is generated by plot.py at 2018-06-01 20:43:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.41 Mbit/s
95th percentile per-packet one-way delay: 59.762 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 184.41 Mbit/s
95th percentile per-packet one-way delay: 59.762 ms
Loss rate: 0.44%
```
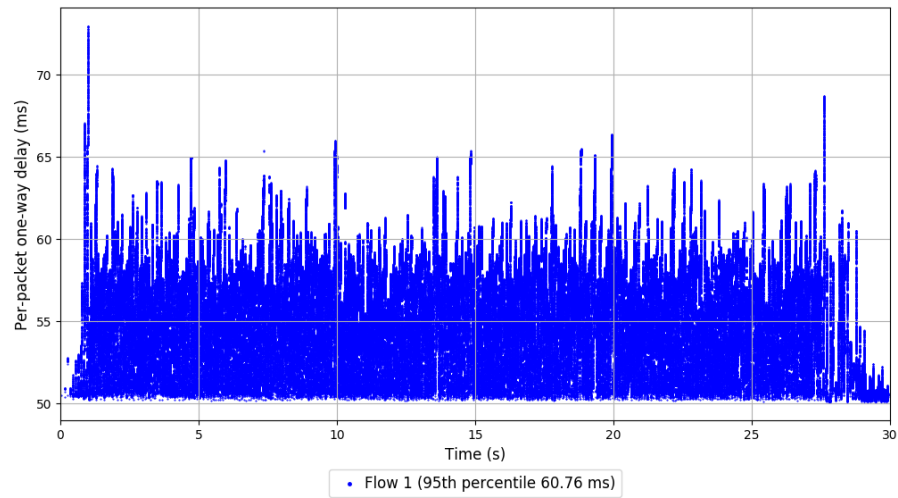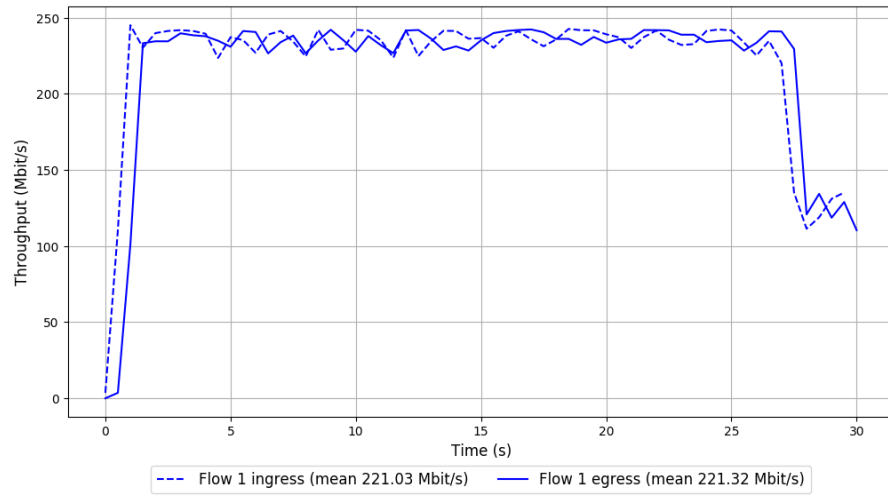
Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2018-06-01 19:42:30
End at: 2018-06-01 19:43:00
Local clock offset: -0.157 ms
Remote clock offset: -0.007 ms


# Below is generated by plot.py at 2018-06-01 20:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.32 Mbit/s
95th percentile per-packet one-way delay: 60.756 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 221.32 Mbit/s
95th percentile per-packet one-way delay: 60.756 ms
Loss rate: 0.21%
```

Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 221.03 Mbit/s)   Flow 1 egress (mean 221.32 Mbit/s)
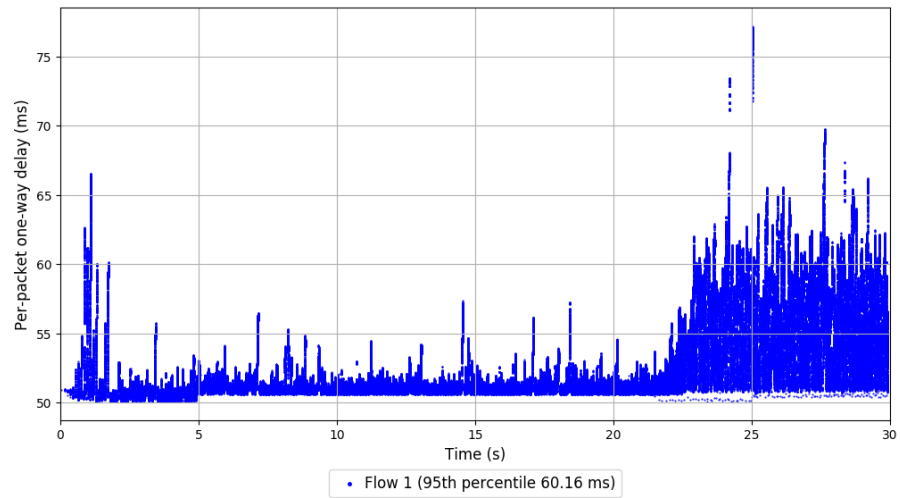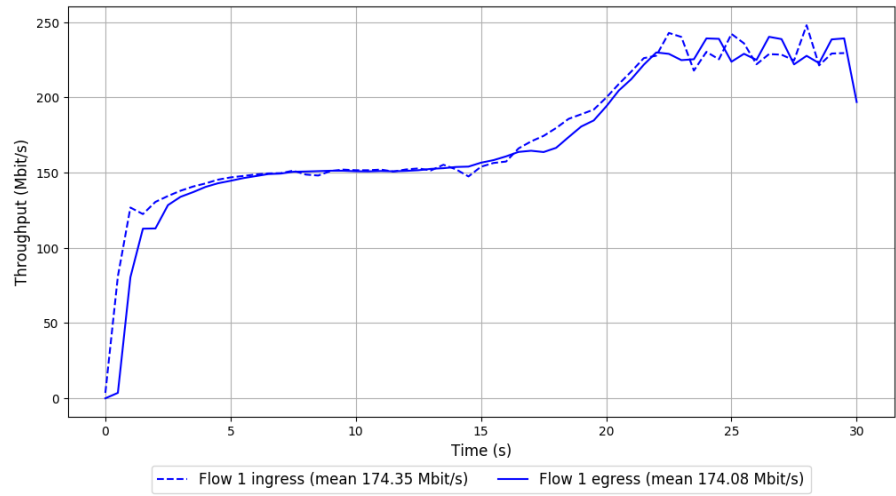

Flow 1 (95th percentile 60.76 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2018-06-01 20:02:41
End at: 2018-06-01 20:03:11
Local clock offset: -0.162 ms
Remote clock offset: -0.015 ms


# Below is generated by plot.py at 2018-06-01 20:44:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 174.08 Mbit/s
95th percentile per-packet one-way delay: 60.158 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 174.08 Mbit/s
95th percentile per-packet one-way delay: 60.158 ms
Loss rate: 0.45%
```

Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-06-01 17:04:37
End at: 2018-06-01 17:05:07
Local clock offset: -0.088 ms
Remote clock offset: 0.11 ms


# Below is generated by plot.py at 2018-06-01 20:57:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 681.62 Mbit/s
95th percentile per-packet one-way delay: 260.938 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 681.62 Mbit/s
95th percentile per-packet one-way delay: 260.938 ms
Loss rate: 1.91%
```
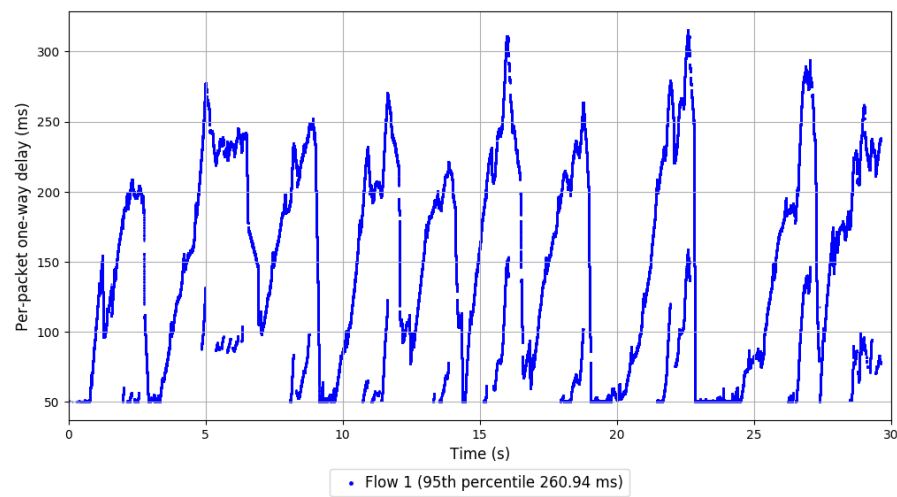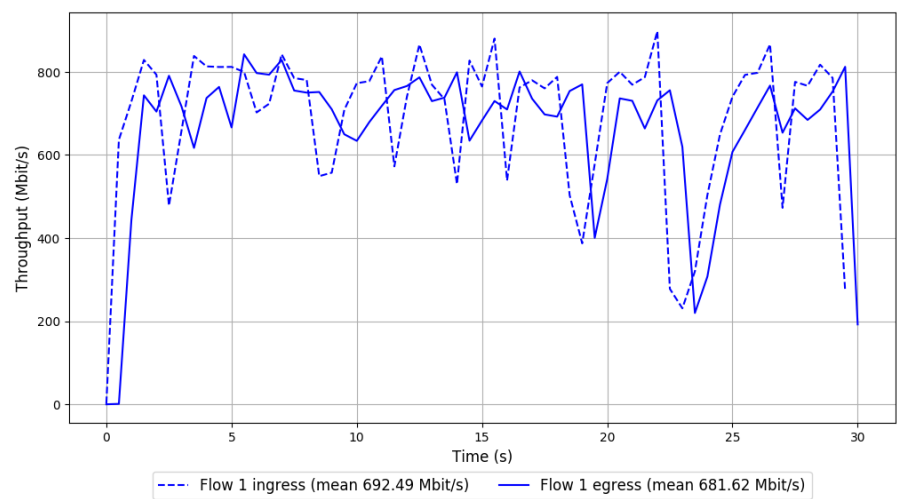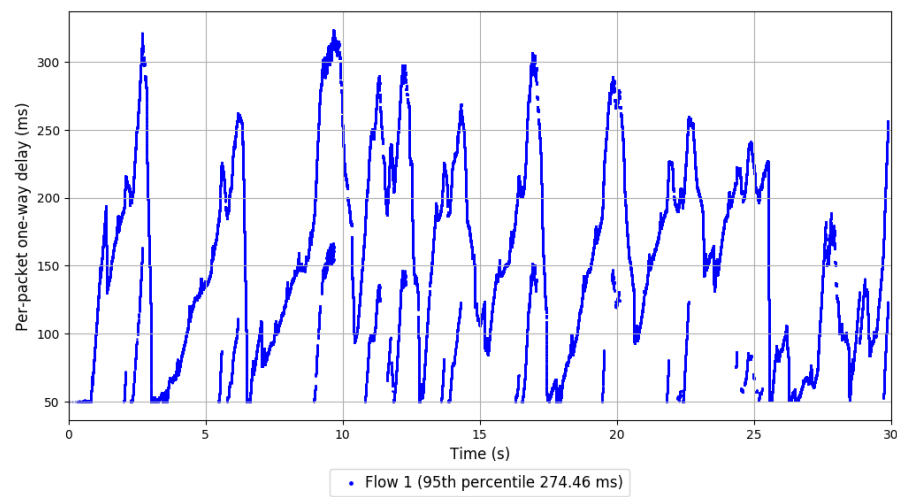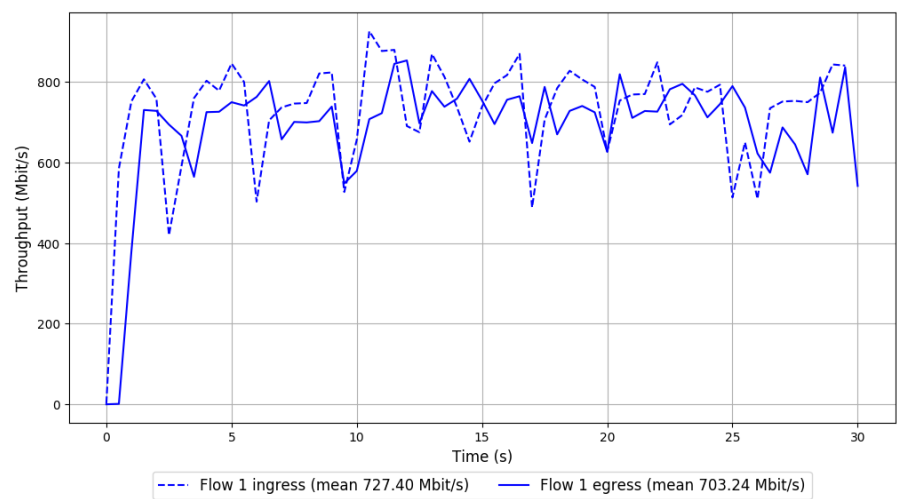
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-06-01 17:24:22
End at: 2018-06-01 17:24:52
Local clock offset: 0.026 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2018-06-01 20:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 703.24 Mbit/s
95th percentile per-packet one-way delay: 274.464 ms
Loss rate: 3.65%
-- Flow 1:
Average throughput: 703.24 Mbit/s
95th percentile per-packet one-way delay: 274.464 ms
Loss rate: 3.65%
```

Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 727.40 Mbit/s)   Flow 1 egress (mean 703.24 Mbit/s)

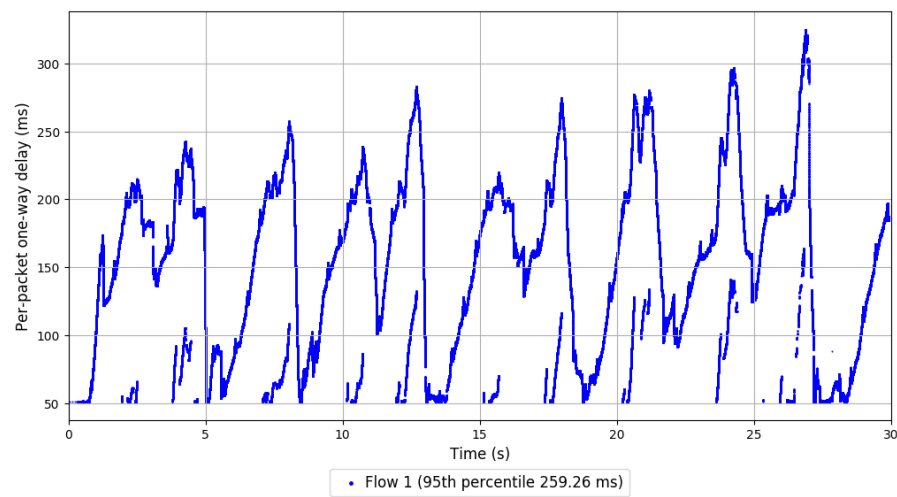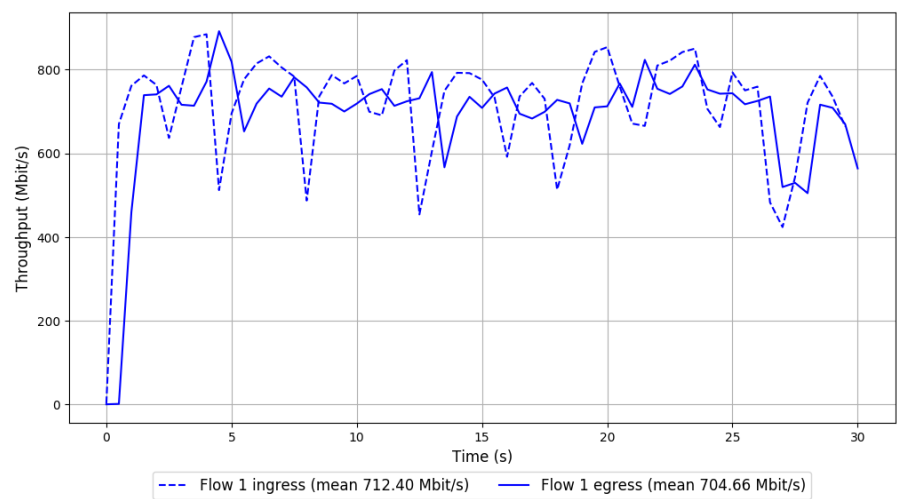• Flow 1 (95th percentile 274.46 ms)

```
Run 3: Statistics of FillP

Start at: 2018-06-01 17:44:26
End at: 2018-06-01 17:44:56
Local clock offset: 0.397 ms
Remote clock offset: -0.069 ms


# Below is generated by plot.py at 2018-06-01 20:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 704.66 Mbit/s
95th percentile per-packet one-way delay: 259.260 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 704.66 Mbit/s
95th percentile per-packet one-way delay: 259.260 ms
Loss rate: 1.42%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 712.40 Mbit/s) ----   Flow 1 egress (mean 704.66 Mbit/s) ——
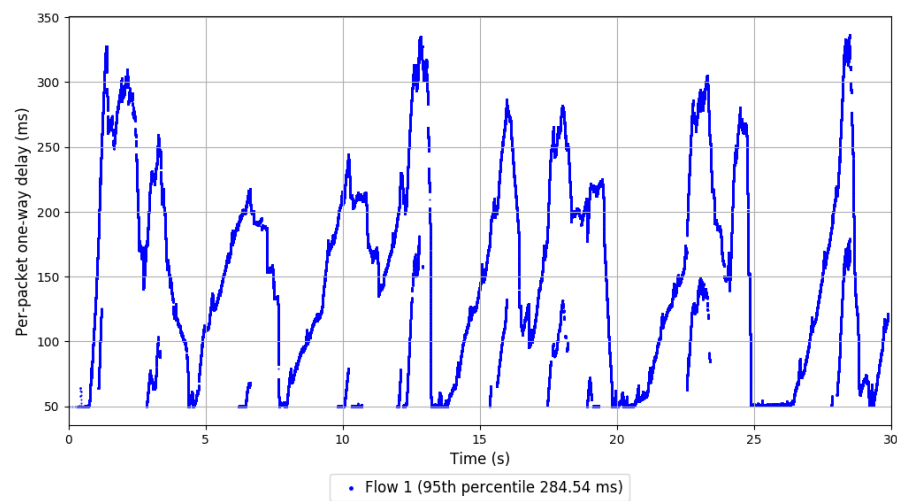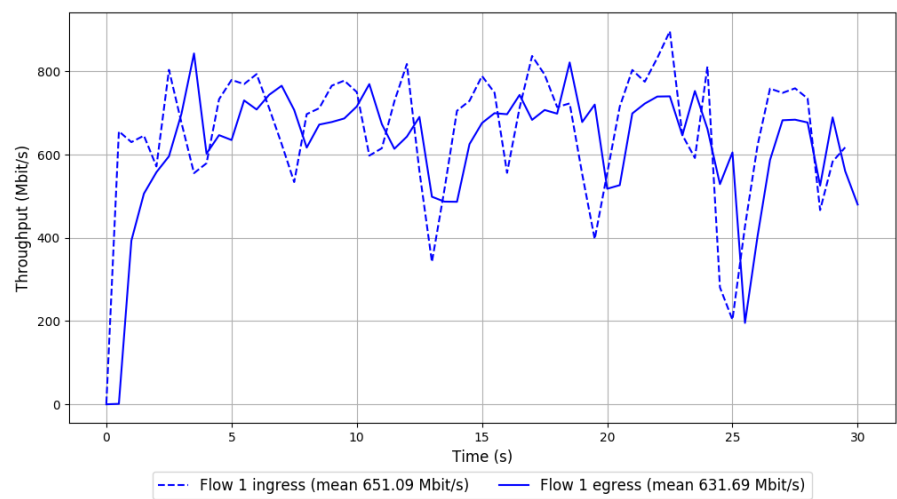

• Flow 1 (95th percentile 259.26 ms)

69

```
Run 4: Statistics of FillP

Start at: 2018-06-01 18:04:43
End at: 2018-06-01 18:05:13
Local clock offset: -0.04 ms
Remote clock offset: -0.058 ms


# Below is generated by plot.py at 2018-06-01 20:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 631.69 Mbit/s
95th percentile per-packet one-way delay: 284.535 ms
Loss rate: 3.31%
-- Flow 1:
Average throughput: 631.69 Mbit/s
95th percentile per-packet one-way delay: 284.535 ms
Loss rate: 3.31%
```

Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 651.09 Mbit/s)   Flow 1 egress (mean 631.69 Mbit/s)

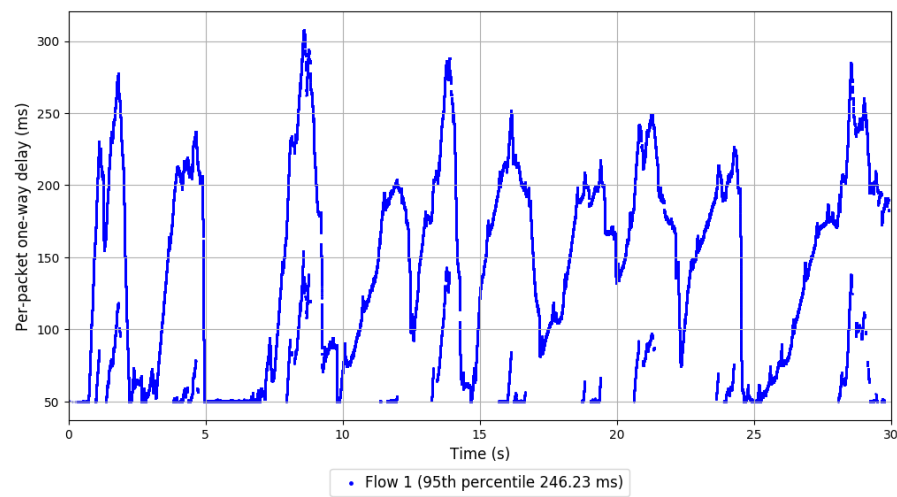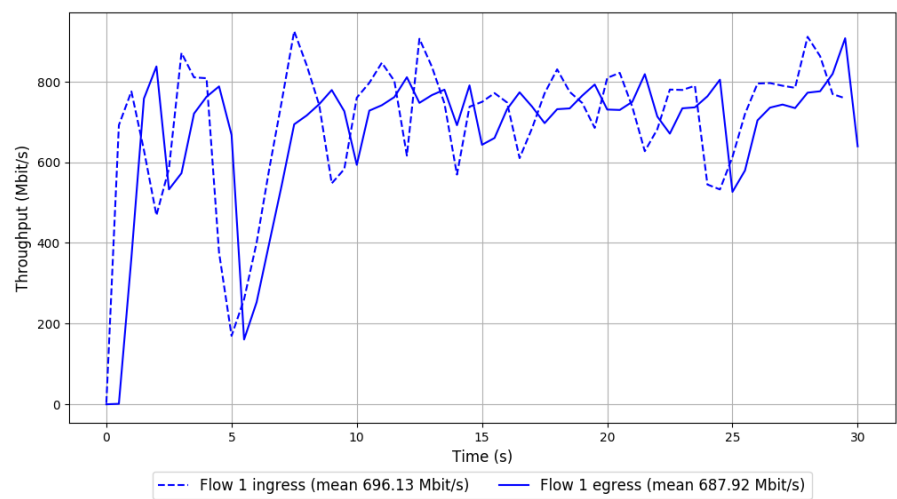• Flow 1 (95th percentile 284.54 ms)

71

```
Run 5: Statistics of FillP

Start at: 2018-06-01 18:24:57
End at: 2018-06-01 18:25:27
Local clock offset: 0.333 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-06-01 20:58:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 687.92 Mbit/s
95th percentile per-packet one-way delay: 246.233 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 687.92 Mbit/s
95th percentile per-packet one-way delay: 246.233 ms
Loss rate: 1.51%
```
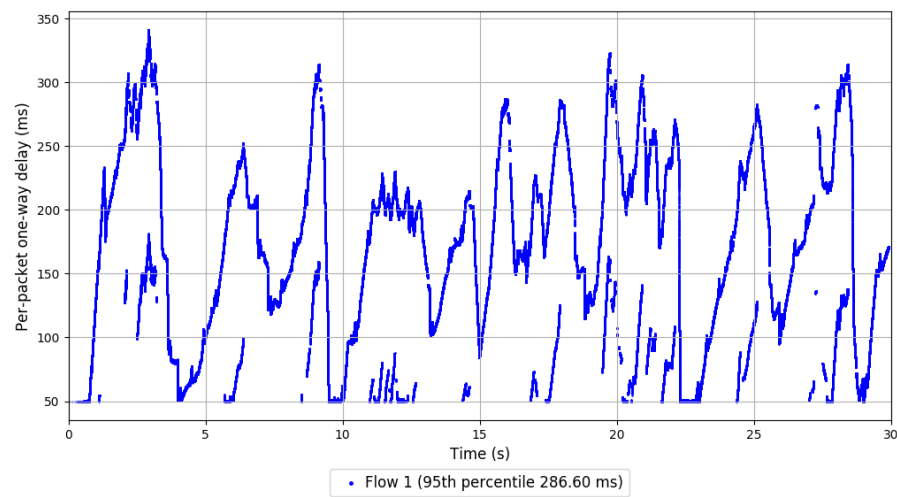
Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 696.13 Mbit/s) ——— Flow 1 egress (mean 687.92 Mbit/s)

• Flow 1 (95th percentile 246.23 ms)

```
Run 6: Statistics of FillP

Start at: 2018-06-01 18:45:13
End at: 2018-06-01 18:45:43
Local clock offset: -0.384 ms
Remote clock offset: 0.138 ms


# Below is generated by plot.py at 2018-06-01 20:59:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 673.38 Mbit/s
95th percentile per-packet one-way delay: 286.596 ms
Loss rate: 3.16%
-- Flow 1:
Average throughput: 673.38 Mbit/s
95th percentile per-packet one-way delay: 286.596 ms
Loss rate: 3.16%
```
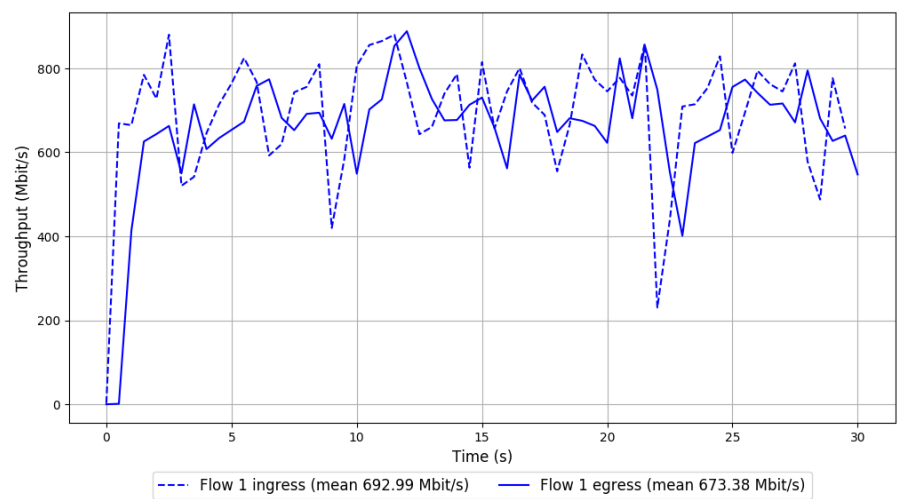
Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 692.99 Mbit/s)   Flow 1 egress (mean 673.38 Mbit/s)

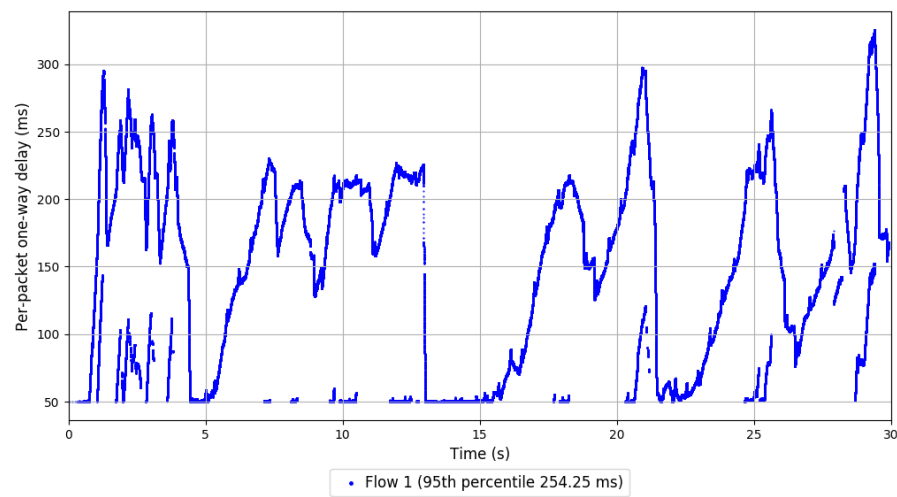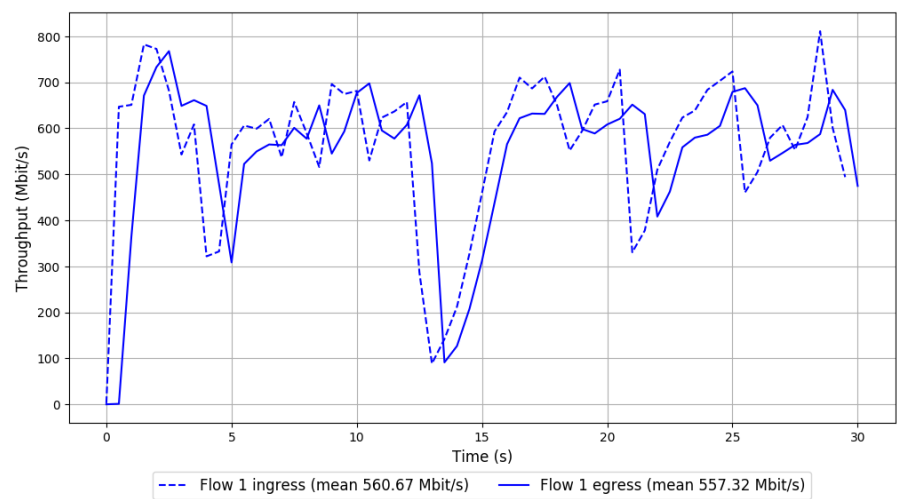Flow 1 (95th percentile 286.60 ms)

75

```
Run 7: Statistics of FillP

Start at: 2018-06-01 19:05:31
End at: 2018-06-01 19:06:01
Local clock offset: -0.037 ms
Remote clock offset: -0.028 ms


# Below is generated by plot.py at 2018-06-01 20:59:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 557.32 Mbit/s
95th percentile per-packet one-way delay: 254.245 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 557.32 Mbit/s
95th percentile per-packet one-way delay: 254.245 ms
Loss rate: 0.93%
```
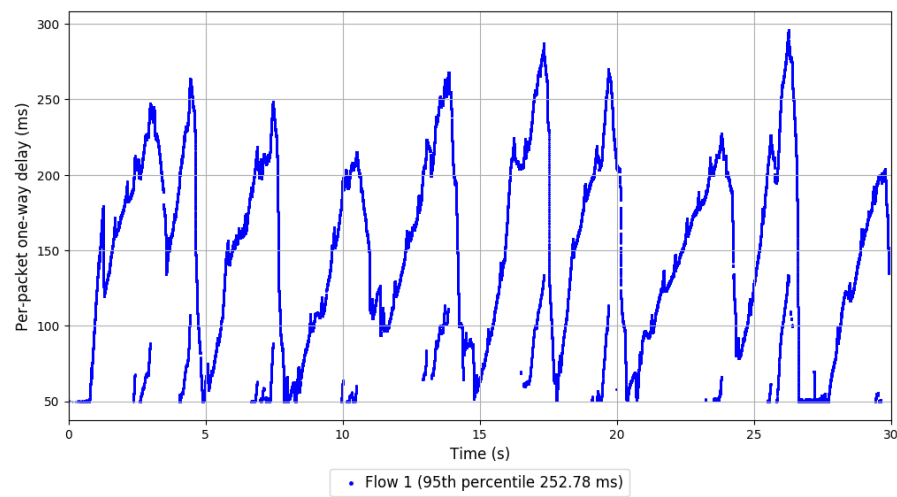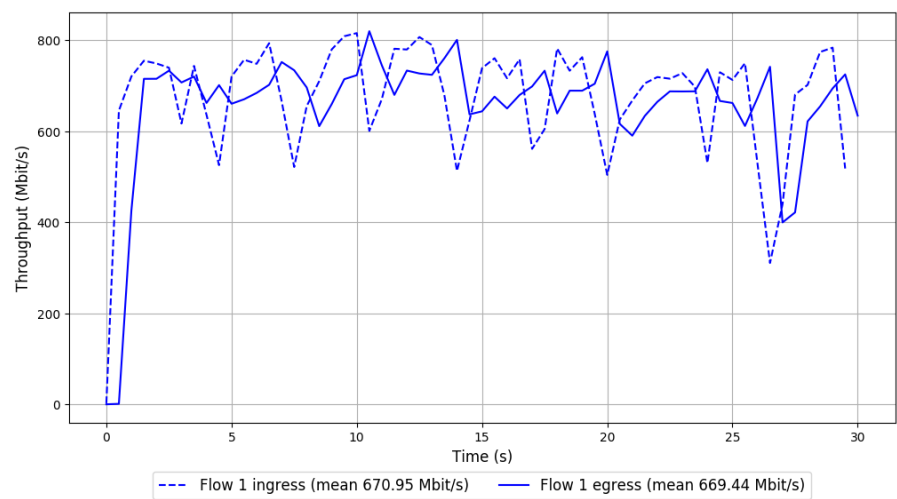
Run 7: Report of FillP — Data Link

```
Run 8: Statistics of FillP

Start at: 2018-06-01 19:25:51
End at: 2018-06-01 19:26:21
Local clock offset: -0.104 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2018-06-01 21:00:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 669.44 Mbit/s
95th percentile per-packet one-way delay: 252.775 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 669.44 Mbit/s
95th percentile per-packet one-way delay: 252.775 ms
Loss rate: 0.56%
```

Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 670.95 Mbit/s)   Flow 1 egress (mean 669.44 Mbit/s)

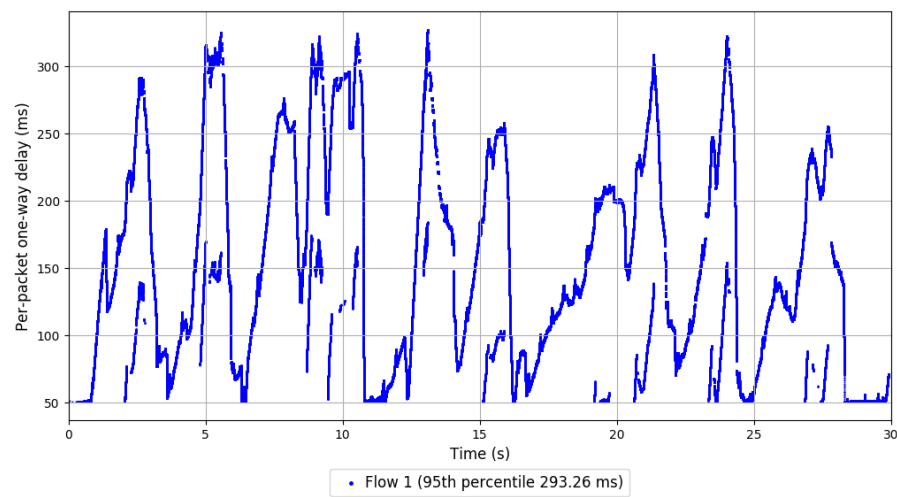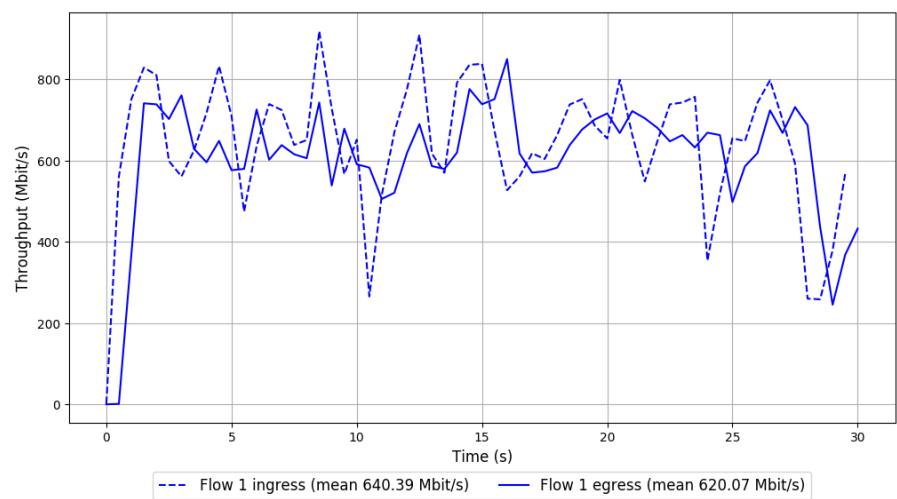Flow 1 (95th percentile 252.78 ms)

```
Run 9: Statistics of FillP

Start at: 2018-06-01 19:46:16
End at: 2018-06-01 19:46:46
Local clock offset: -0.266 ms
Remote clock offset: -0.019 ms


# Below is generated by plot.py at 2018-06-01 21:11:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 620.07 Mbit/s
95th percentile per-packet one-way delay: 293.264 ms
Loss rate: 3.50%
-- Flow 1:
Average throughput: 620.07 Mbit/s
95th percentile per-packet one-way delay: 293.264 ms
Loss rate: 3.50%
```
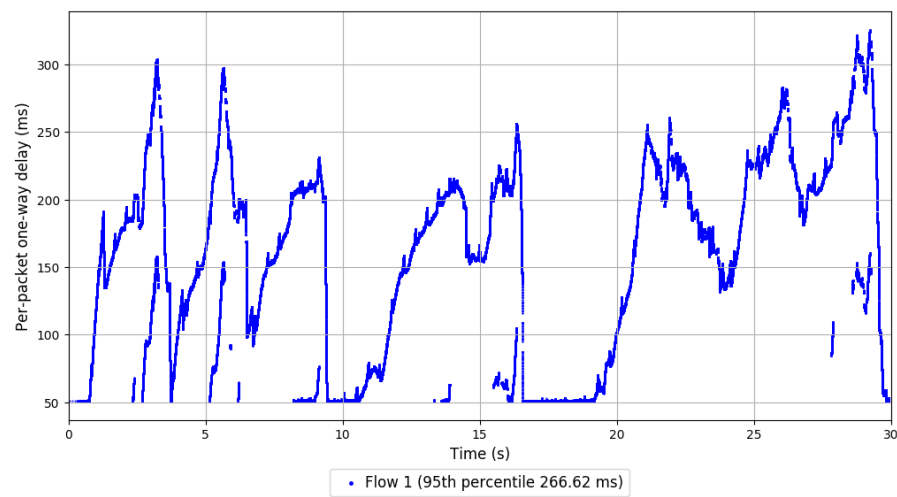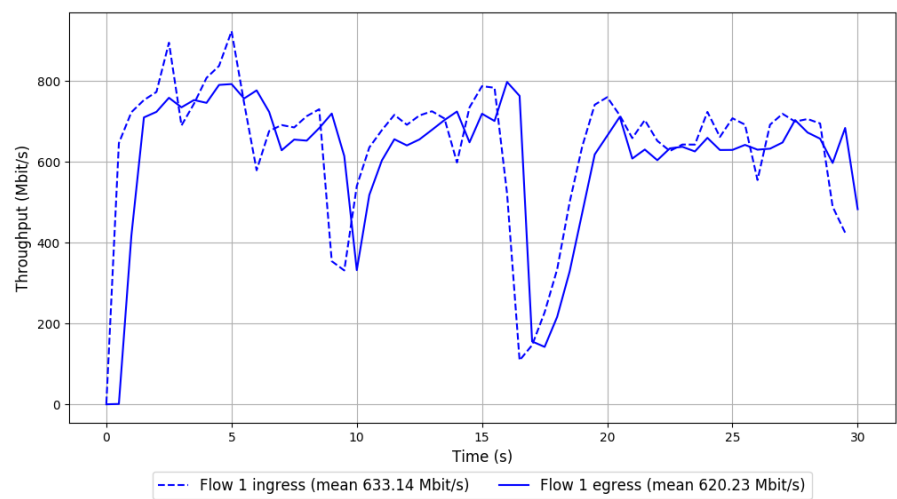
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 640.39 Mbit/s) — — — Flow 1 egress (mean 620.07 Mbit/s)

Flow 1 (95th percentile 293.26 ms)

```
Run 10: Statistics of FillP

Start at: 2018-06-01 20:06:24
End at: 2018-06-01 20:06:54
Local clock offset: -0.111 ms
Remote clock offset: 0.015 ms


# Below is generated by plot.py at 2018-06-01 21:12:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 620.23 Mbit/s
95th percentile per-packet one-way delay: 266.616 ms
Loss rate: 2.37%
-- Flow 1:
Average throughput: 620.23 Mbit/s
95th percentile per-packet one-way delay: 266.616 ms
Loss rate: 2.37%
```

Run 10: Report of FillP — Data Link

Flow 1 ingress (mean 633.14 Mbit/s) --- Flow 1 egress (mean 620.23 Mbit/s)

Flow 1 (95th percentile 266.62 ms)
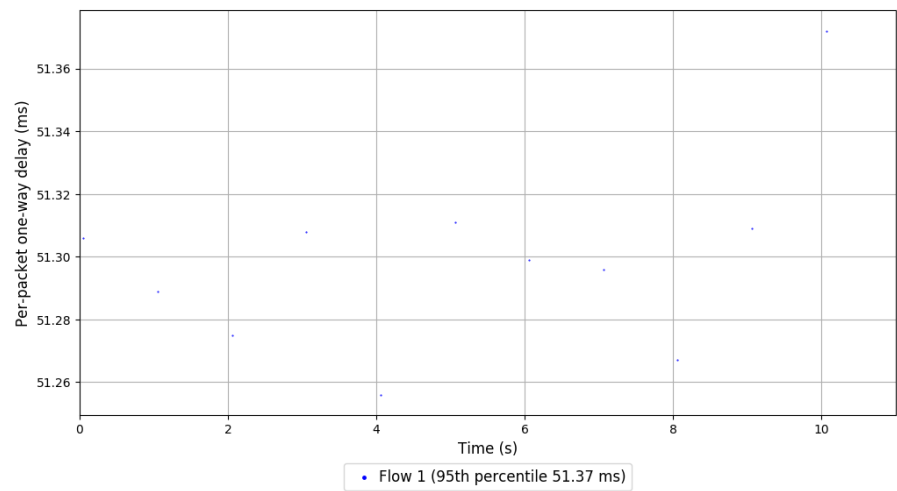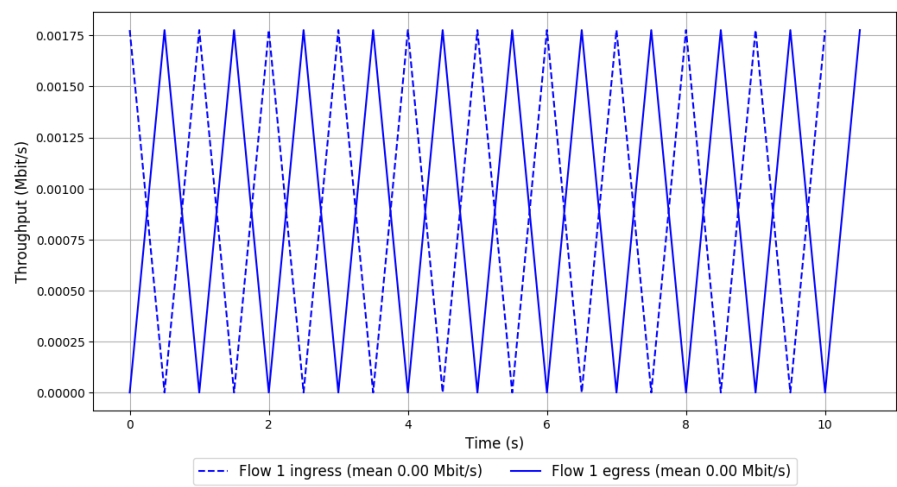
```
Run 1: Statistics of Indigo

Start at: 2018-06-01 17:12:22
End at: 2018-06-01 17:12:52
Local clock offset: 0.355 ms
Remote clock offset: -0.018 ms
```
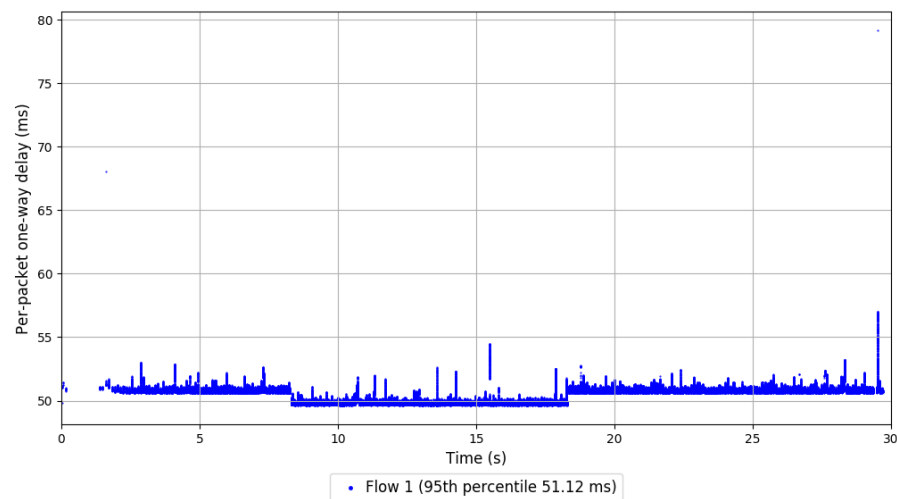
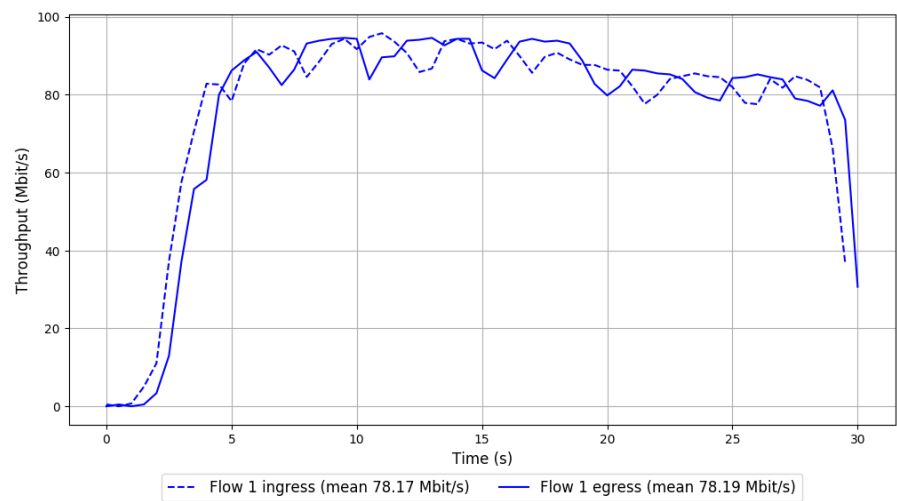# Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-06-01 17:32:17
End at: 2018-06-01 17:32:47
Local clock offset: 0.007 ms
Remote clock offset: -0.113 ms


# Below is generated by plot.py at 2018-06-01 21:12:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.19 Mbit/s
95th percentile per-packet one-way delay: 51.120 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 78.19 Mbit/s
95th percentile per-packet one-way delay: 51.120 ms
Loss rate: 0.33%
```

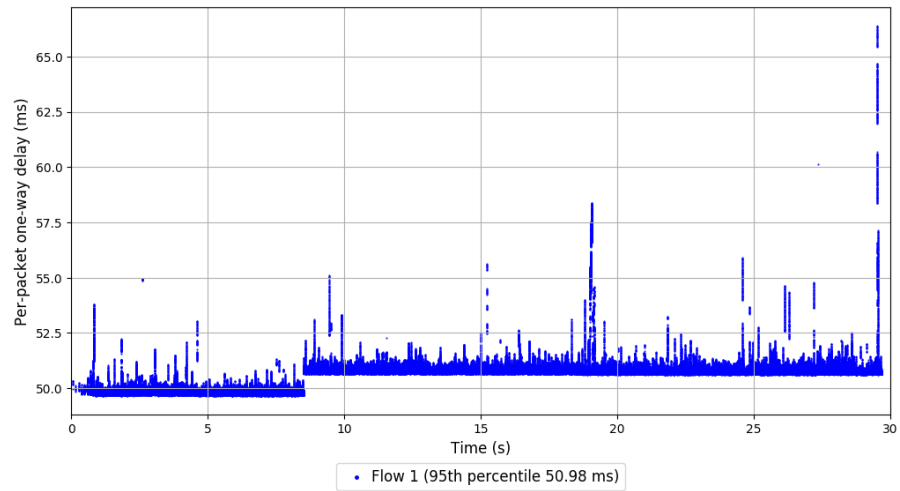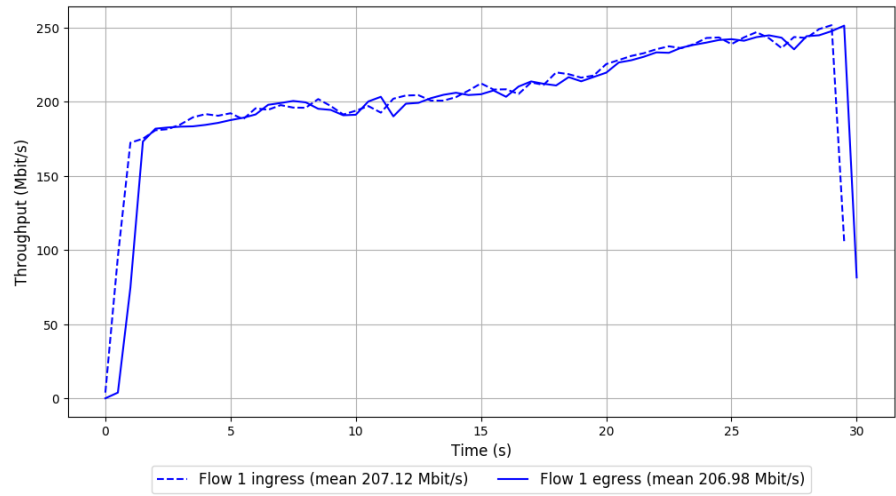Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-06-01 17:52:27
End at: 2018-06-01 17:52:57
Local clock offset: -0.074 ms
Remote clock offset: -0.077 ms


# Below is generated by plot.py at 2018-06-01 21:12:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.98 Mbit/s
95th percentile per-packet one-way delay: 50.979 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 206.98 Mbit/s
95th percentile per-packet one-way delay: 50.979 ms
Loss rate: 0.40%
```
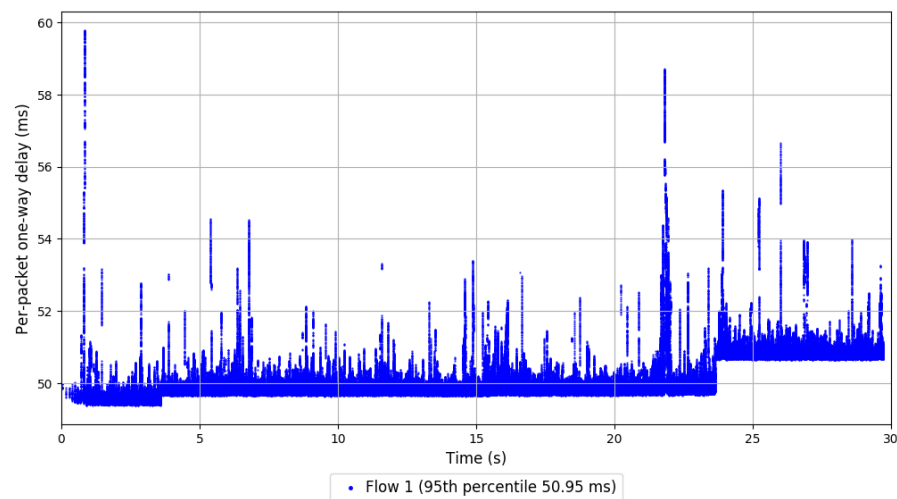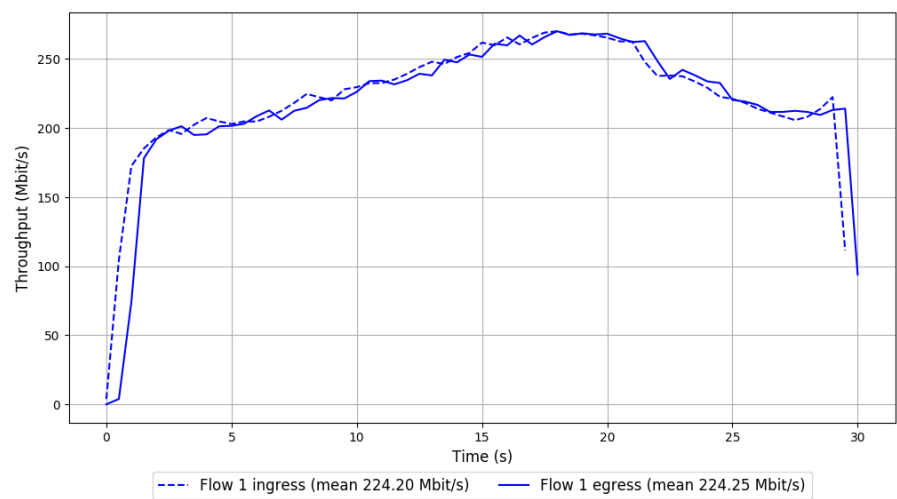
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-06-01 18:12:42
End at: 2018-06-01 18:13:12
Local clock offset: -0.142 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2018-06-01 21:12:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.25 Mbit/s
95th percentile per-packet one-way delay: 50.952 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 224.25 Mbit/s
95th percentile per-packet one-way delay: 50.952 ms
Loss rate: 0.31%
```

Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2018-06-01 18:32:55
End at: 2018-06-01 18:33:25
Local clock offset: 0.336 ms
Remote clock offset: 0.007 ms


# Below is generated by plot.py at 2018-06-01 21:12:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.14 Mbit/s
95th percentile per-packet one-way delay: 51.290 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 222.14 Mbit/s
95th percentile per-packet one-way delay: 51.290 ms
Loss rate: 0.31%
```
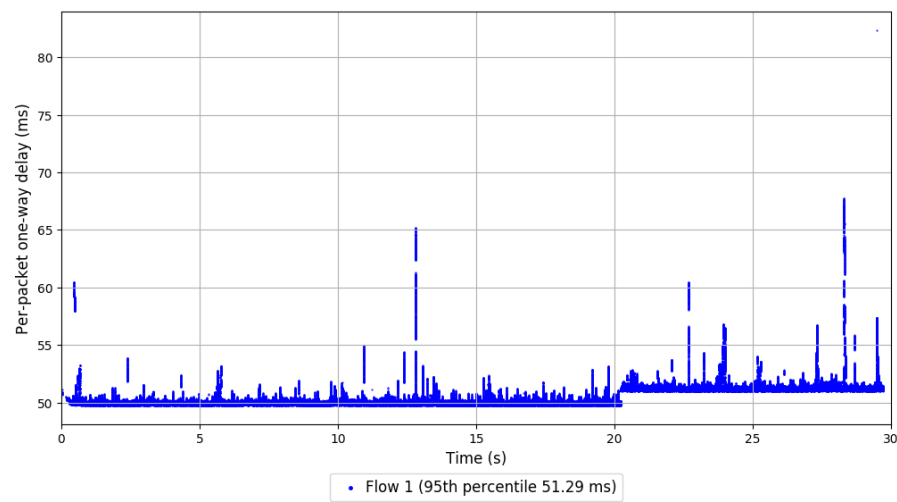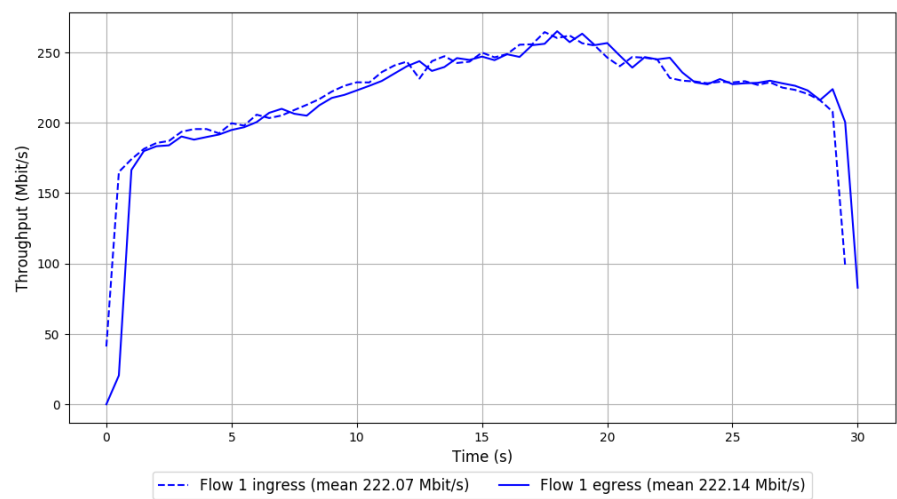
Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2018-06-01 18:53:12
End at: 2018-06-01 18:53:42
Local clock offset: -0.058 ms
Remote clock offset: -0.01 ms


# Below is generated by plot.py at 2018-06-01 21:12:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.25 Mbit/s
95th percentile per-packet one-way delay: 50.108 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 226.25 Mbit/s
95th percentile per-packet one-way delay: 50.108 ms
Loss rate: 0.33%
```
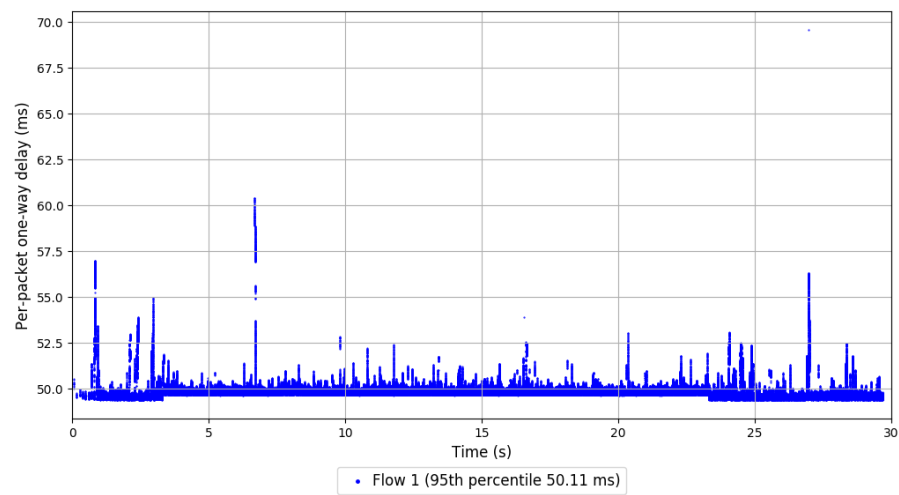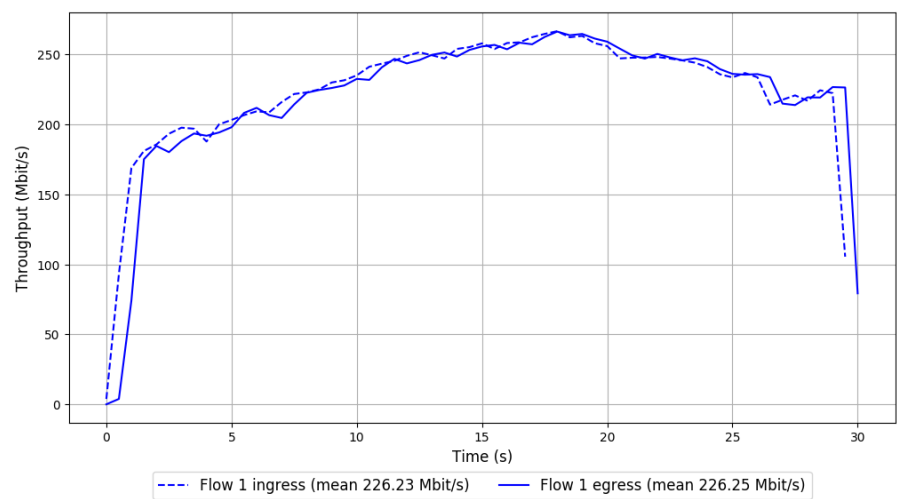
Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2018-06-01 19:13:28
End at: 2018-06-01 19:13:58
Local clock offset: -0.46 ms
Remote clock offset: 0.016 ms


# Below is generated by plot.py at 2018-06-01 21:12:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.74 Mbit/s
95th percentile per-packet one-way delay: 50.563 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 220.74 Mbit/s
95th percentile per-packet one-way delay: 50.563 ms
Loss rate: 0.35%
```
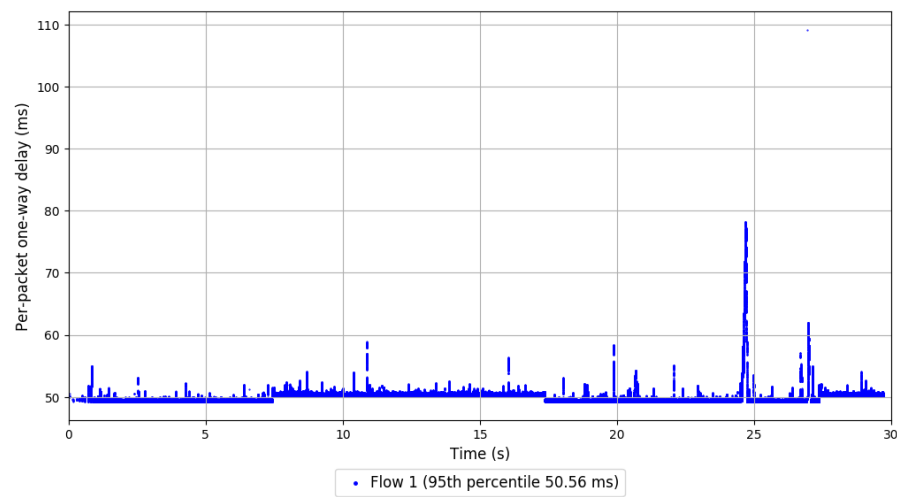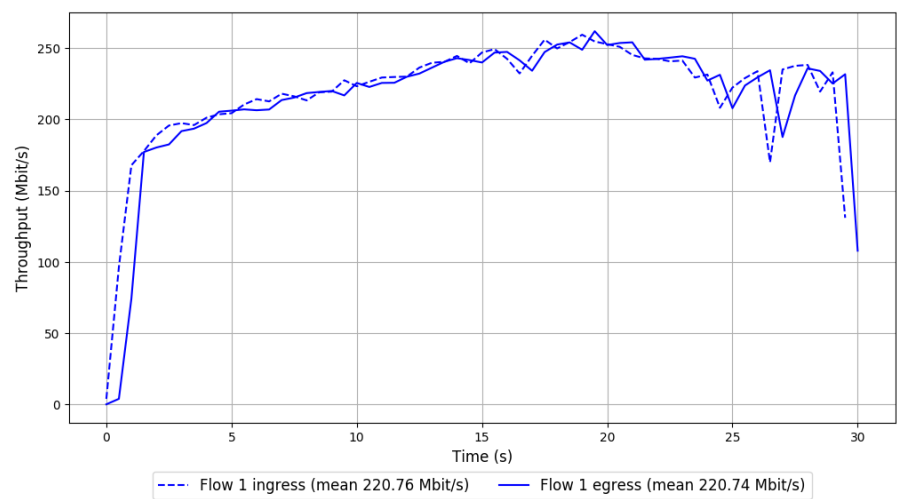
Run 7: Report of Indigo — Data Link

Flow 1 ingress (mean 220.76 Mbit/s)   Flow 1 egress (mean 220.74 Mbit/s)

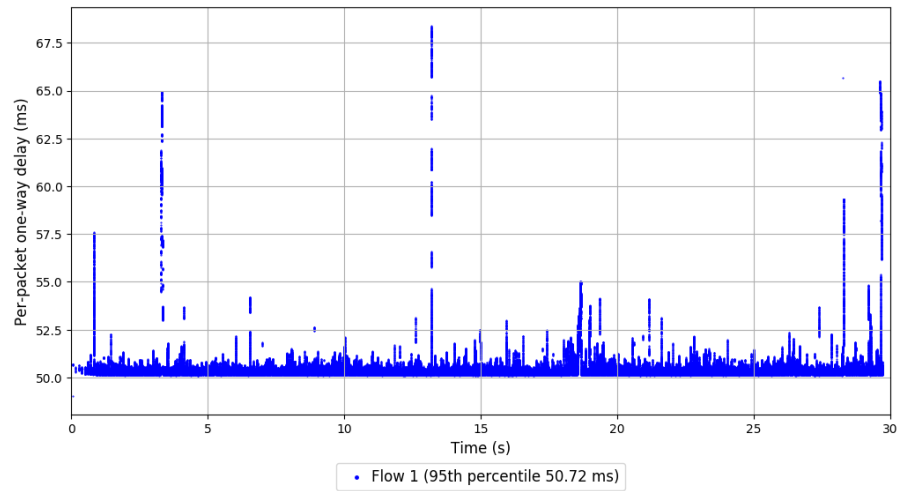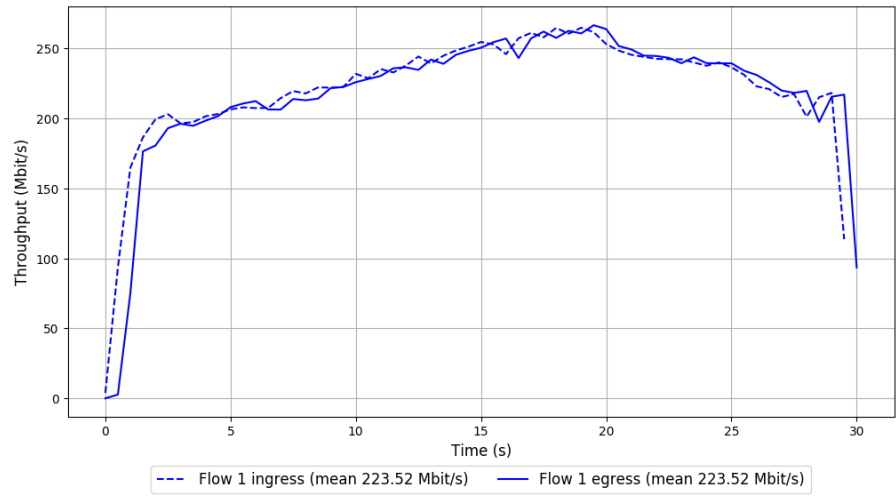Flow 1 (95th percentile 50.56 ms)

97

```
Run 8: Statistics of Indigo

Start at: 2018-06-01 19:33:52
End at: 2018-06-01 19:34:22
Local clock offset: -0.163 ms
Remote clock offset: -0.033 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.52 Mbit/s
95th percentile per-packet one-way delay: 50.724 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 223.52 Mbit/s
95th percentile per-packet one-way delay: 50.724 ms
Loss rate: 0.33%
```
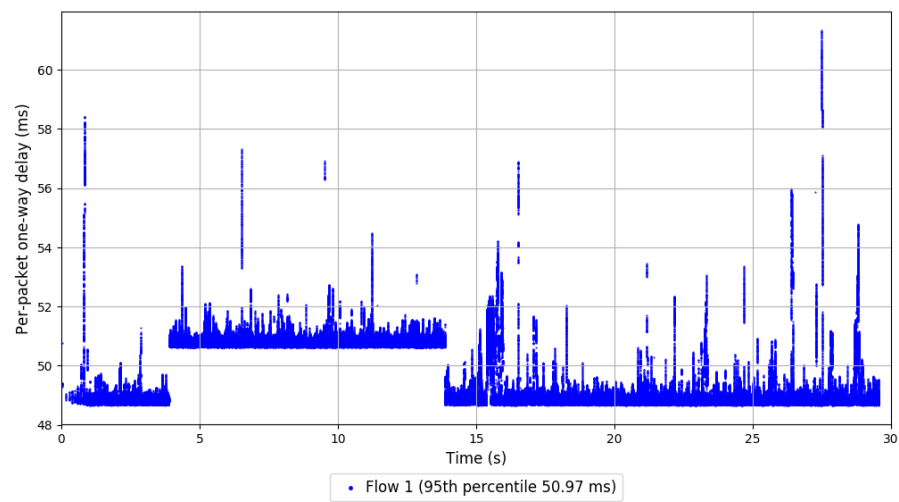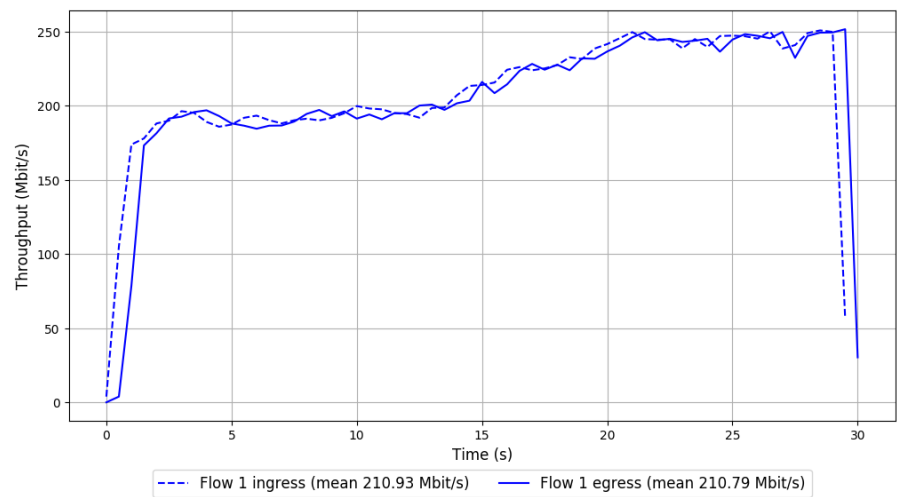
Run 8: Report of Indigo — Data Link

```
Run 9: Statistics of Indigo

Start at: 2018-06-01 19:54:11
End at: 2018-06-01 19:54:41
Local clock offset: -0.236 ms
Remote clock offset: -0.032 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.79 Mbit/s
95th percentile per-packet one-way delay: 50.971 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 210.79 Mbit/s
95th percentile per-packet one-way delay: 50.971 ms
Loss rate: 0.40%
```

Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-06-01 20:14:21
End at: 2018-06-01 20:14:51
Local clock offset: -0.046 ms
Remote clock offset: 0.034 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.42 Mbit/s
95th percentile per-packet one-way delay: 50.974 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 215.42 Mbit/s
95th percentile per-packet one-way delay: 50.974 ms
Loss rate: 0.34%
```
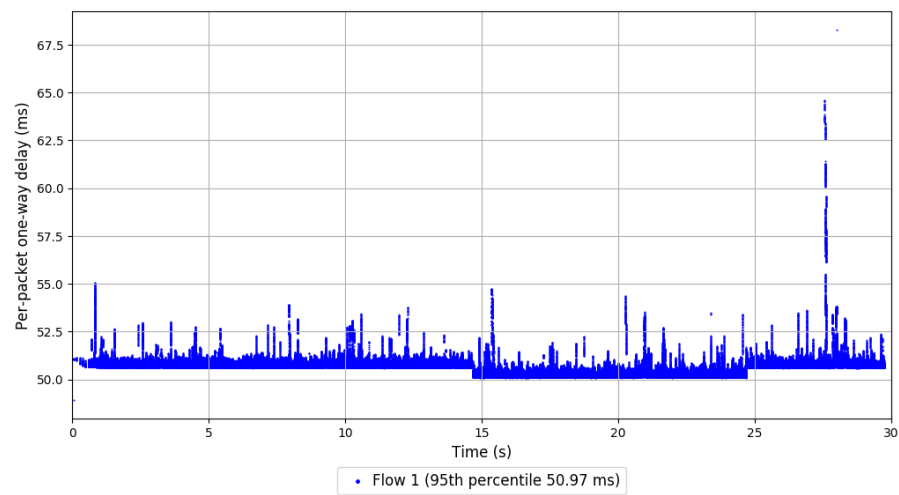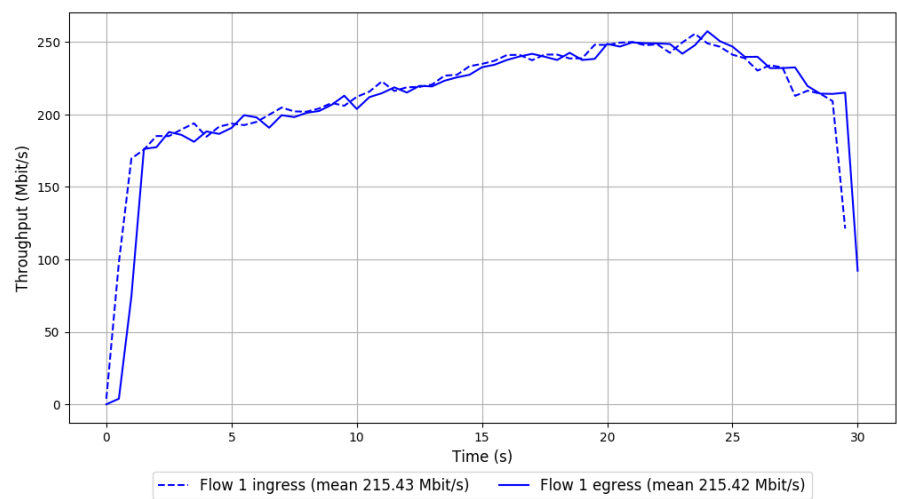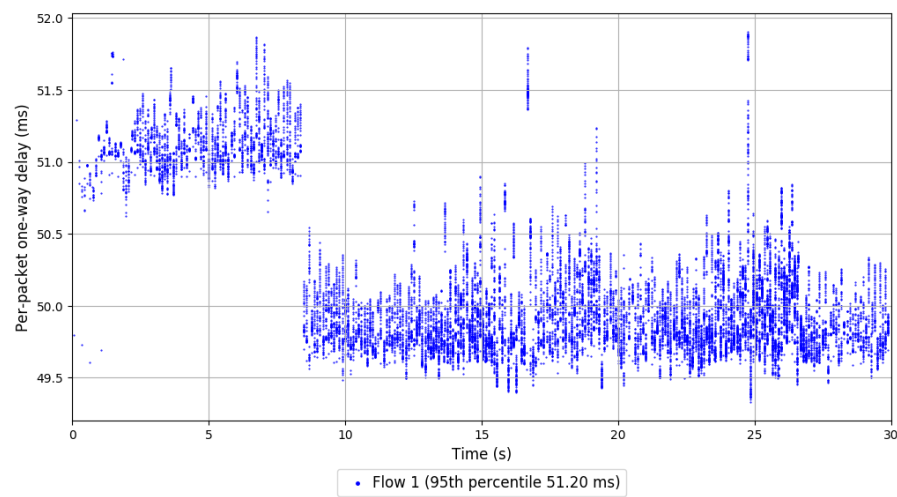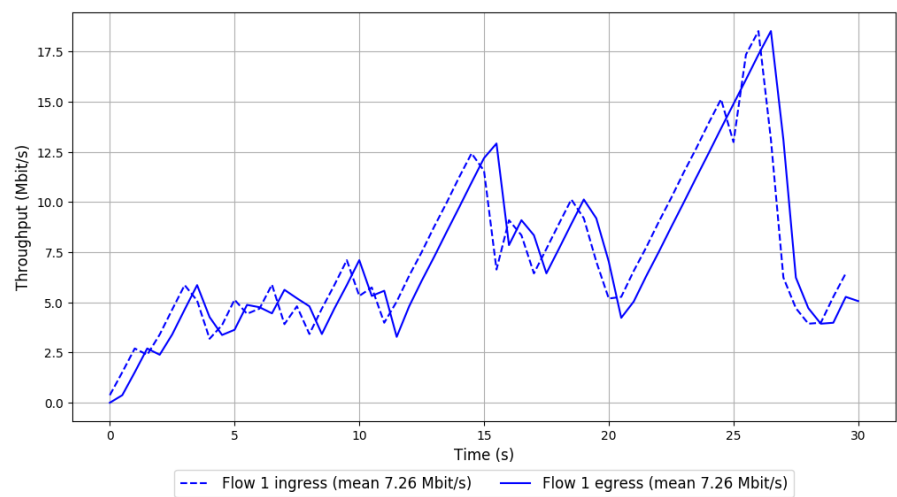
Run 10: Report of Indigo — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-06-01 17:13:27
End at: 2018-06-01 17:13:57
Local clock offset: -0.05 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.26 Mbit/s
95th percentile per-packet one-way delay: 51.205 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 7.26 Mbit/s
95th percentile per-packet one-way delay: 51.205 ms
Loss rate: 0.33%
```

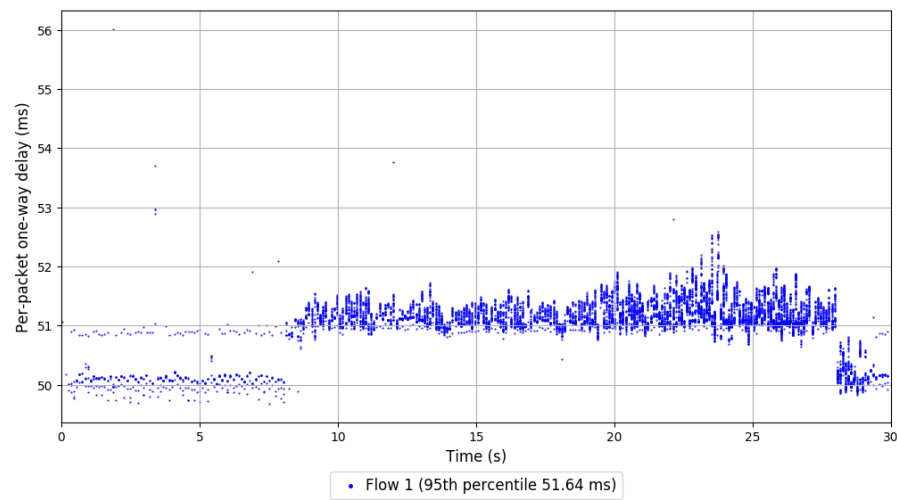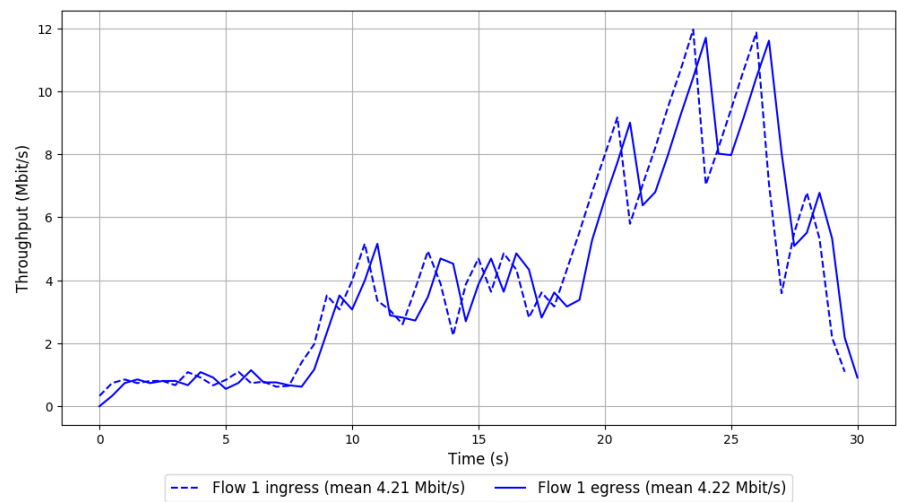# Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-06-01 17:33:27
End at: 2018-06-01 17:33:57
Local clock offset: 0.029 ms
Remote clock offset: -0.097 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 51.636 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 51.636 ms
Loss rate: 0.07%
```
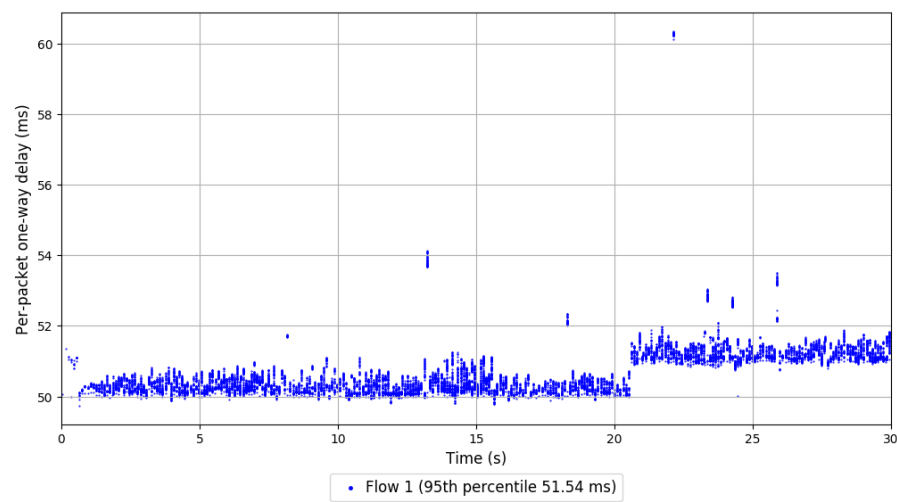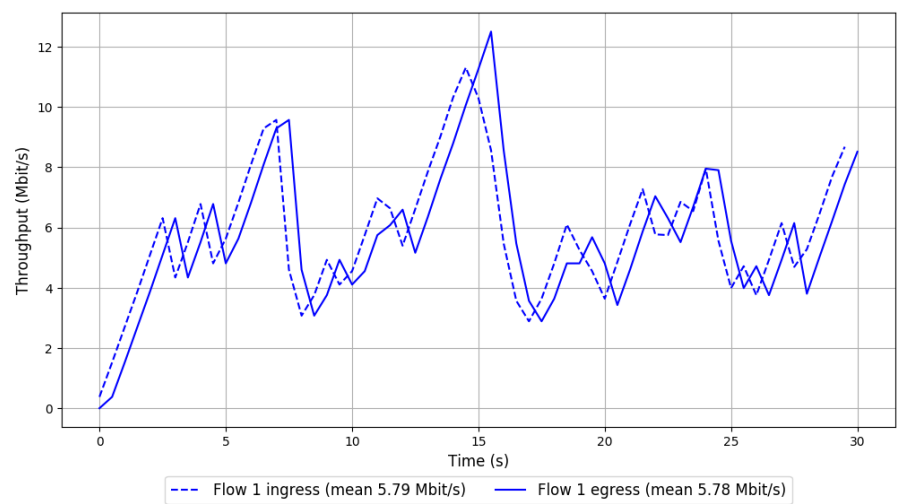
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-06-01 17:53:45
End at: 2018-06-01 17:54:15
Local clock offset: -0.012 ms
Remote clock offset: -0.078 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.78 Mbit/s
95th percentile per-packet one-way delay: 51.539 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 5.78 Mbit/s
95th percentile per-packet one-way delay: 51.539 ms
Loss rate: 0.53%
```

Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 5.79 Mbit/s) --- Flow 1 egress (mean 5.78 Mbit/s)

Flow 1 (95th percentile 51.54 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2018-06-01 18:14:01
End at: 2018-06-01 18:14:31
Local clock offset: 0.261 ms
Remote clock offset: -0.06 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 51.156 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 51.156 ms
Loss rate: 0.32%
```
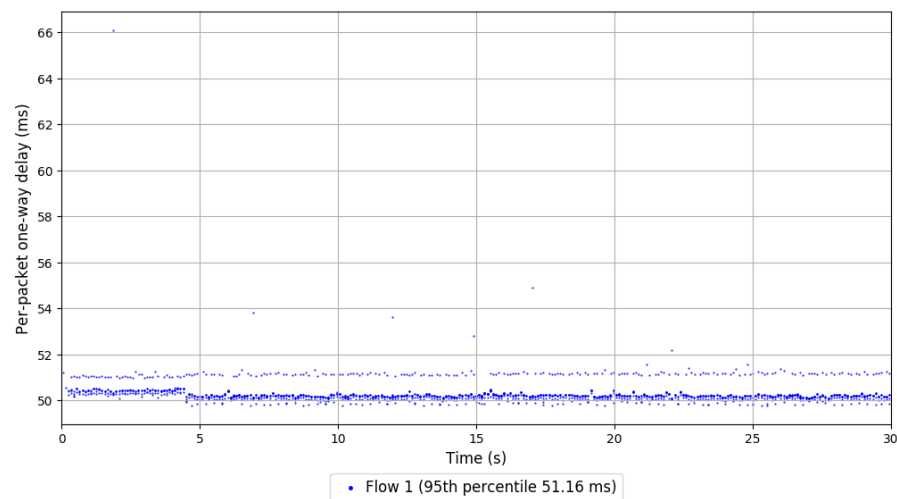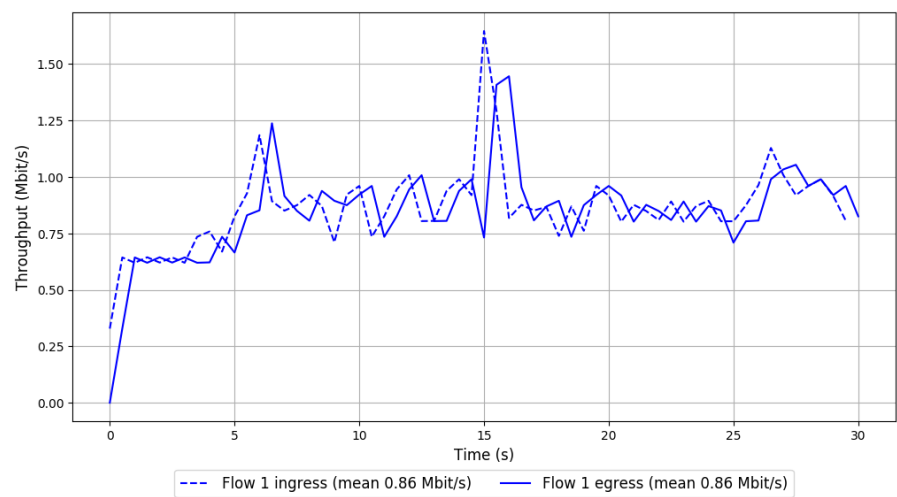
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 0.86 Mbit/s)   Flow 1 egress (mean 0.86 Mbit/s)

• Flow 1 (95th percentile 51.16 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2018-06-01 18:34:14
End at: 2018-06-01 18:34:44
Local clock offset: -0.02 ms
Remote clock offset: 0.016 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 51.572 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 51.572 ms
Loss rate: 0.45%
```
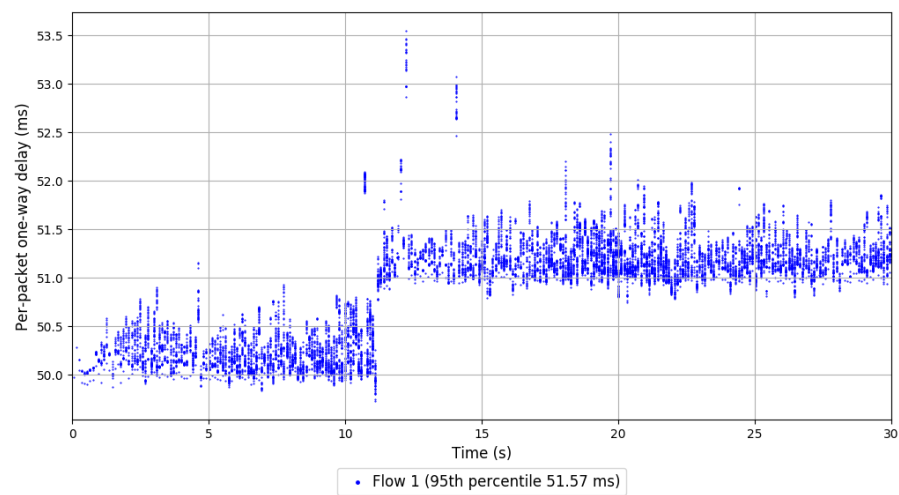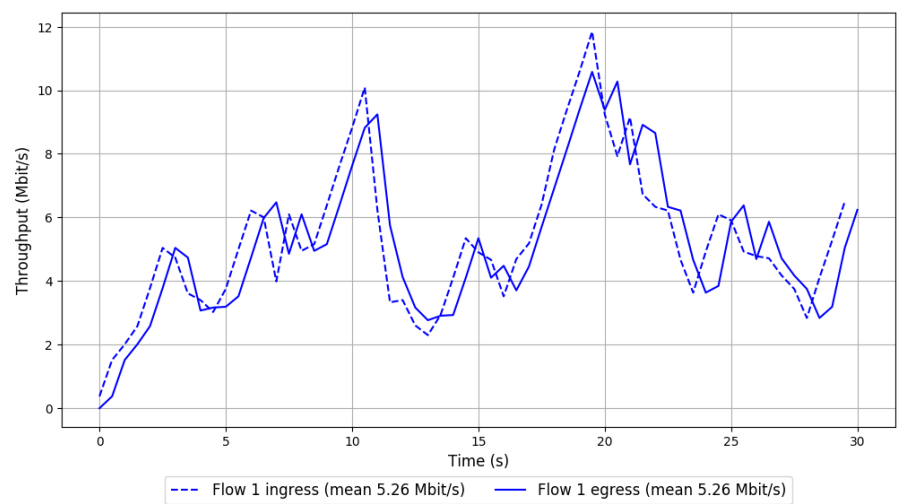
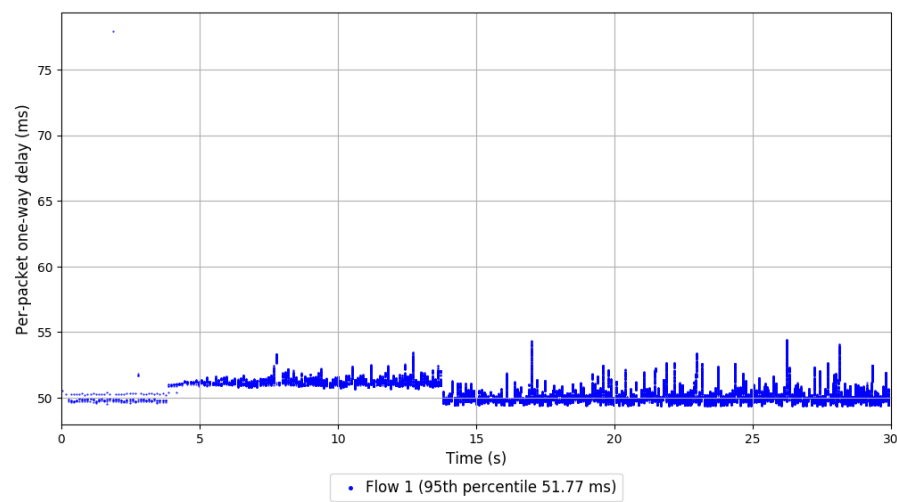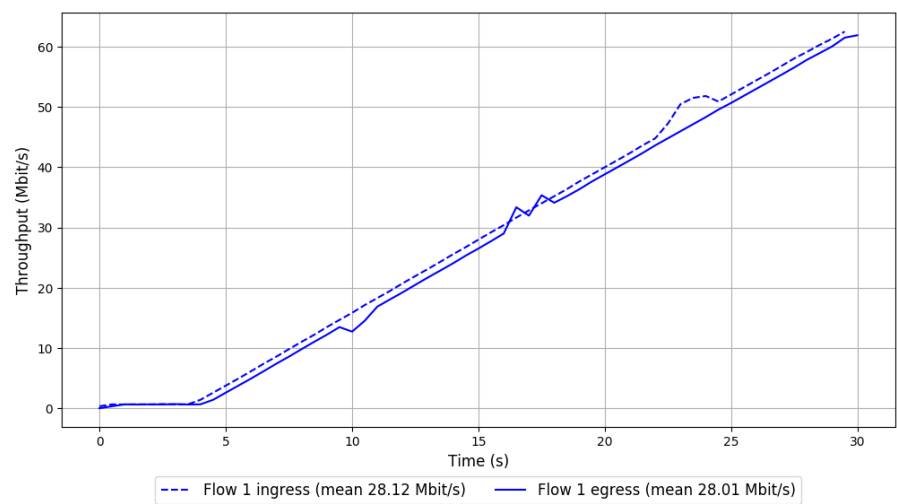# Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2018-06-01 18:54:32
End at: 2018-06-01 18:55:02
Local clock offset: -0.056 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.01 Mbit/s
95th percentile per-packet one-way delay: 51.768 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 28.01 Mbit/s
95th percentile per-packet one-way delay: 51.768 ms
Loss rate: 0.75%
```

Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 28.12 Mbit/s)   Flow 1 egress (mean 28.01 Mbit/s)
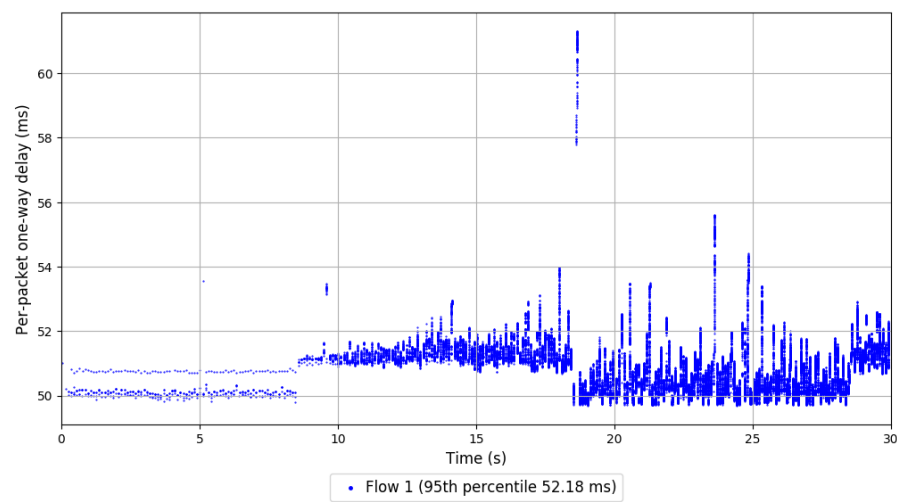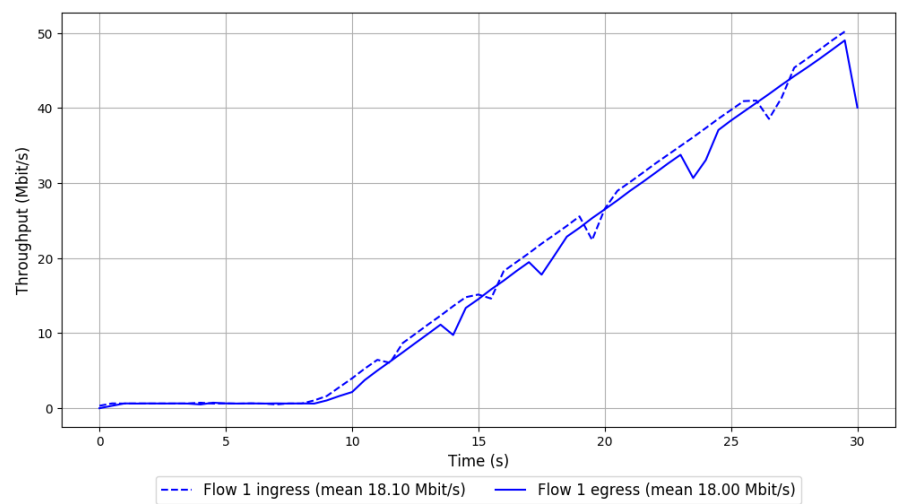

Flow 1 (95th percentile 51.77 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2018-06-01 19:14:47
End at: 2018-06-01 19:15:17
Local clock offset: -0.054 ms
Remote clock offset: -0.022 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.00 Mbit/s
95th percentile per-packet one-way delay: 52.181 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 18.00 Mbit/s
95th percentile per-packet one-way delay: 52.181 ms
Loss rate: 0.93%
```

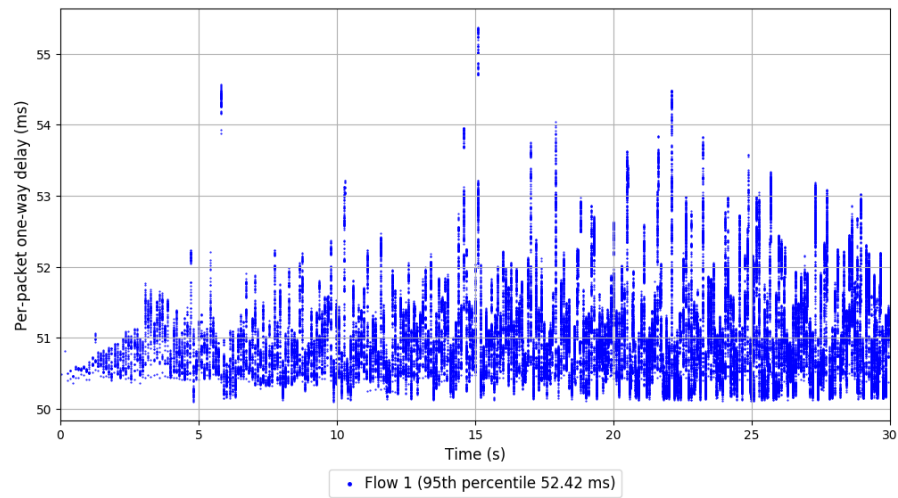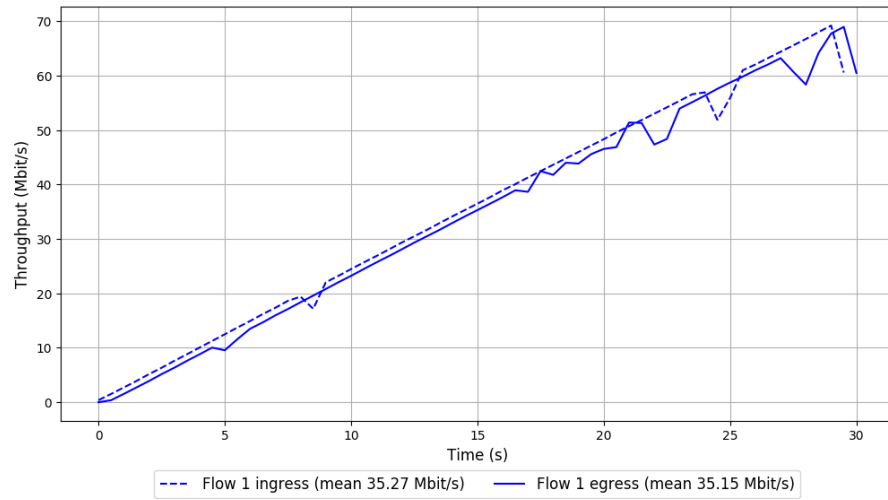## Run 7: Report of LEDBAT — Data Link

```
Run 8: Statistics of LEDBAT

Start at: 2018-06-01 19:35:12
End at: 2018-06-01 19:35:42
Local clock offset: -0.167 ms
Remote clock offset: -0.033 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.15 Mbit/s
95th percentile per-packet one-way delay: 52.424 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 35.15 Mbit/s
95th percentile per-packet one-way delay: 52.424 ms
Loss rate: 0.66%
```
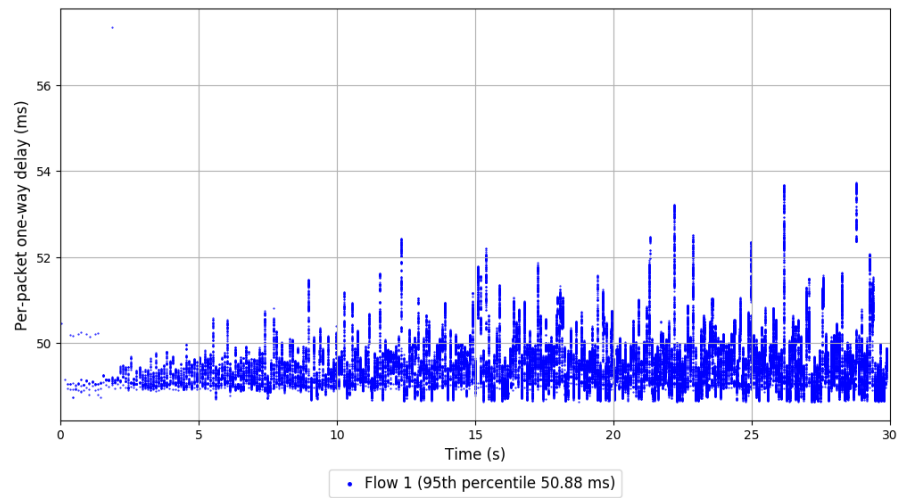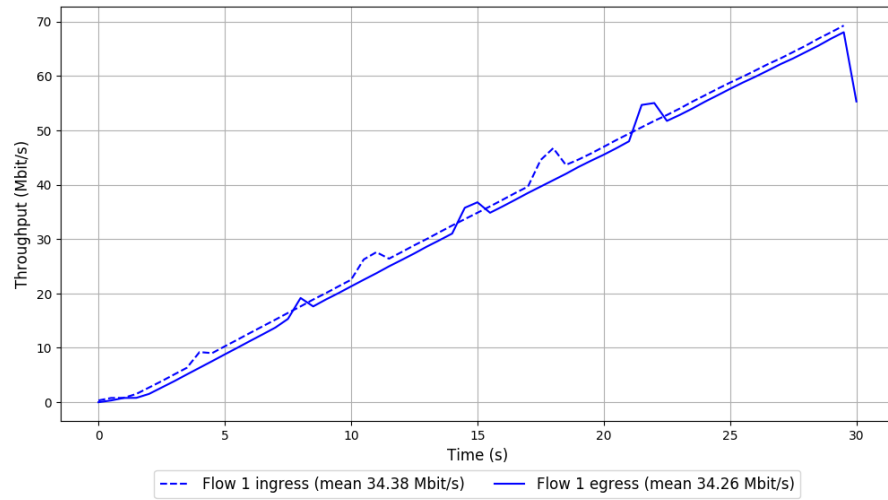
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2018-06-01 19:55:30
End at: 2018-06-01 19:56:00
Local clock offset: -0.271 ms
Remote clock offset: -0.027 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.26 Mbit/s
95th percentile per-packet one-way delay: 50.876 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 34.26 Mbit/s
95th percentile per-packet one-way delay: 50.876 ms
Loss rate: 0.68%
```

Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 34.38 Mbit/s) --- Flow 1 egress (mean 34.26 Mbit/s)

Flow 1 (95th percentile 50.88 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2018-06-01 20:15:40
End at: 2018-06-01 20:16:10
Local clock offset: 0.055 ms
Remote clock offset: 0.016 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.38 Mbit/s
95th percentile per-packet one-way delay: 52.440 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 35.38 Mbit/s
95th percentile per-packet one-way delay: 52.440 ms
Loss rate: 0.66%
```
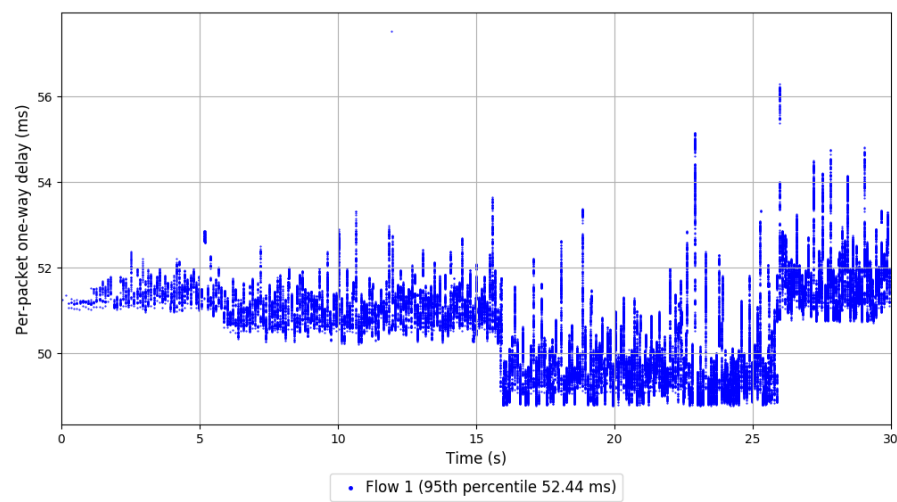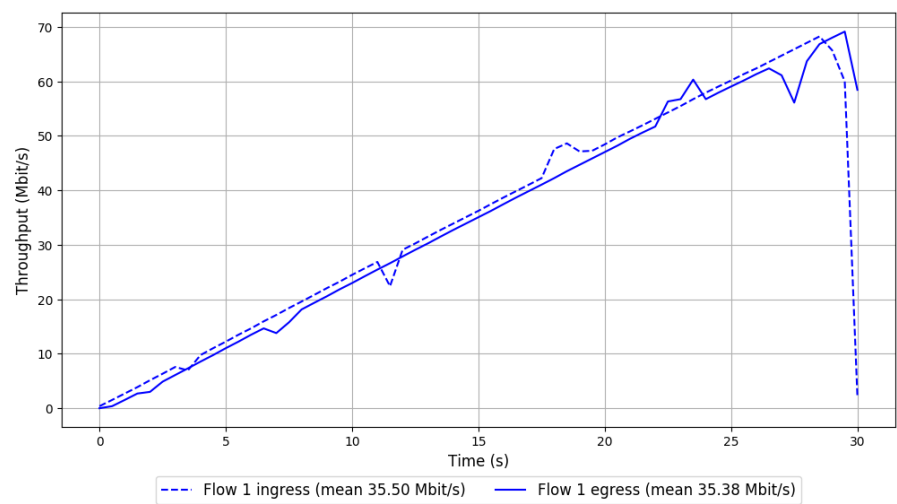
Run 10: Report of LEDBAT — Data Link

Flow 1 ingress (mean 35.50 Mbit/s)　　Flow 1 egress (mean 35.38 Mbit/s)

Flow 1 (95th percentile 52.44 ms)

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-01 17:14:33
End at: 2018-06-01 17:15:03
Local clock offset: 0.106 ms
Remote clock offset: -0.041 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 340.63 Mbit/s
95th percentile per-packet one-way delay: 60.244 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 340.63 Mbit/s
95th percentile per-packet one-way delay: 60.244 ms
Loss rate: 0.36%
```
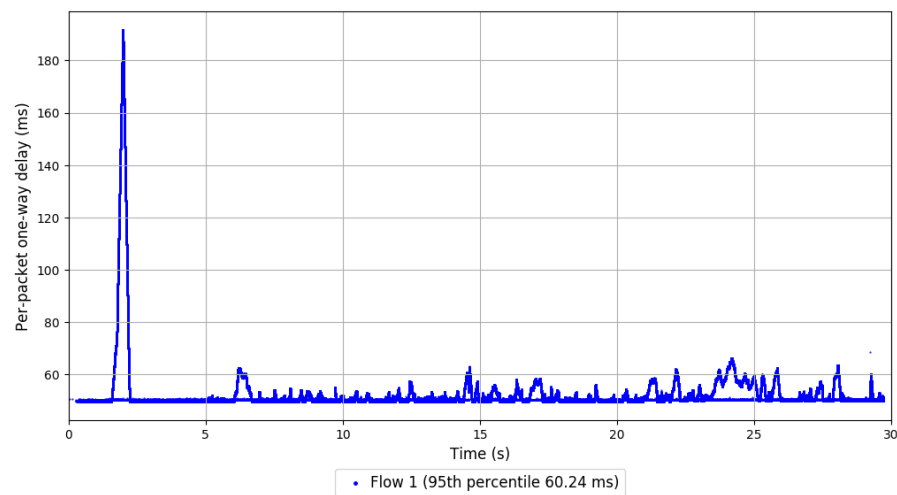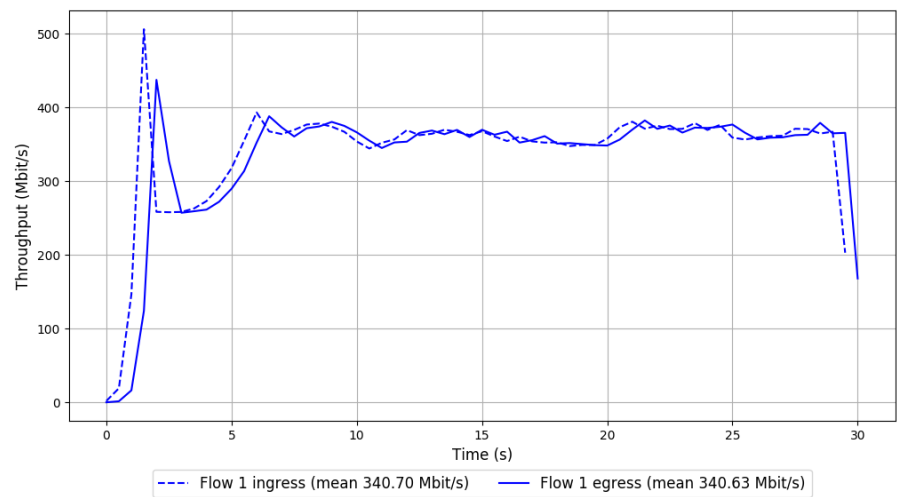
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-01 17:34:33
End at: 2018-06-01 17:35:03
Local clock offset: 0.004 ms
Remote clock offset: -0.086 ms


# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 360.82 Mbit/s
95th percentile per-packet one-way delay: 78.722 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 360.82 Mbit/s
95th percentile per-packet one-way delay: 78.722 ms
Loss rate: 0.51%
```
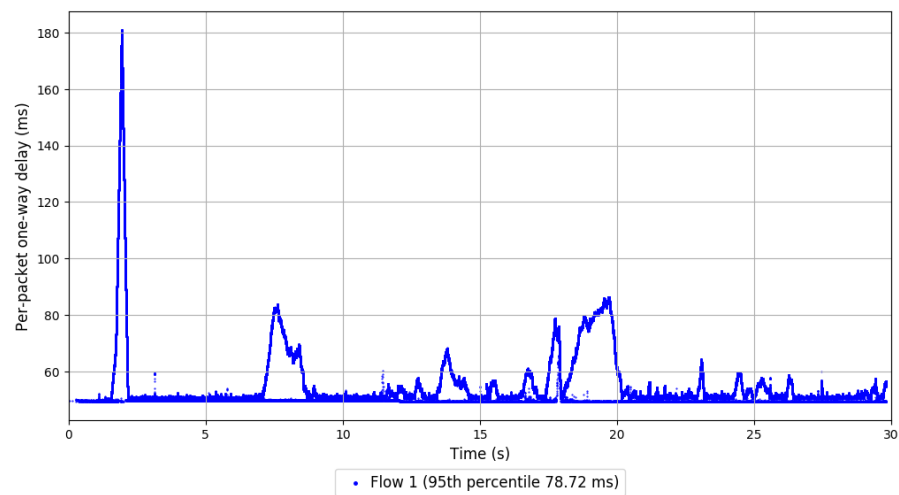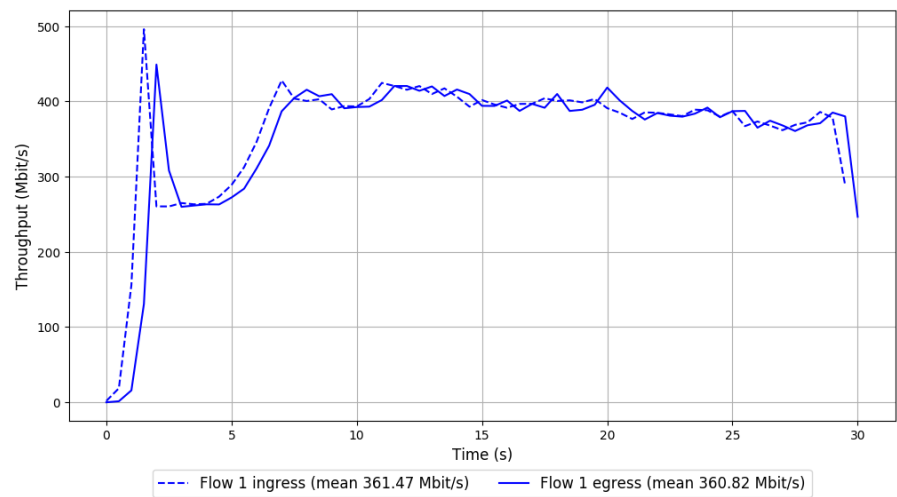
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-01 17:54:51
End at: 2018-06-01 17:55:21
Local clock offset: -0.1 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2018-06-01 21:12:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 340.44 Mbit/s
95th percentile per-packet one-way delay: 77.651 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 340.44 Mbit/s
95th percentile per-packet one-way delay: 77.651 ms
Loss rate: 0.63%
```
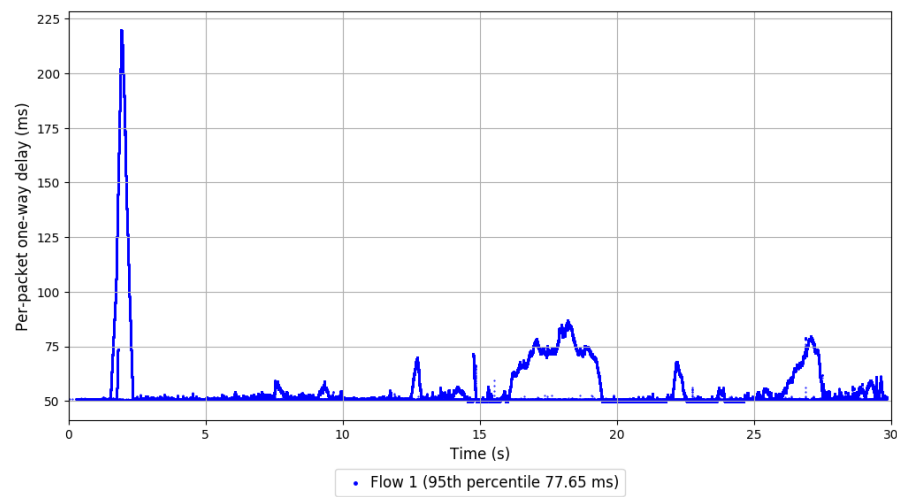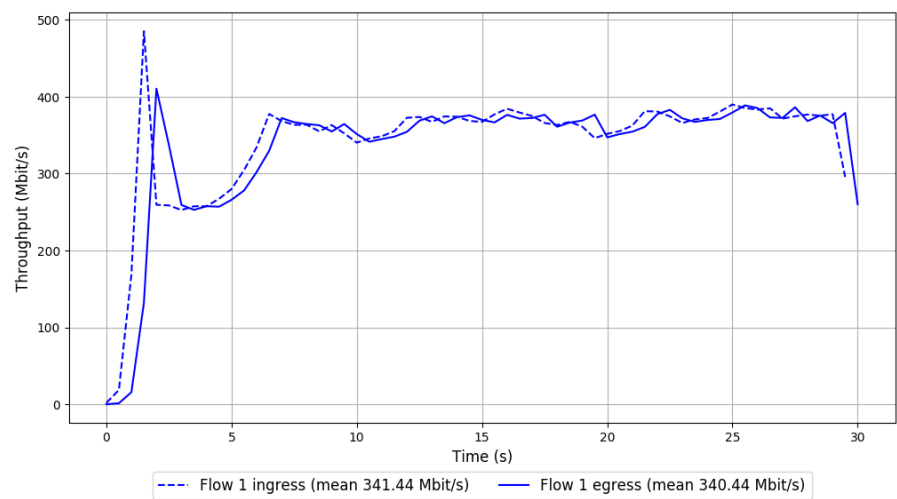
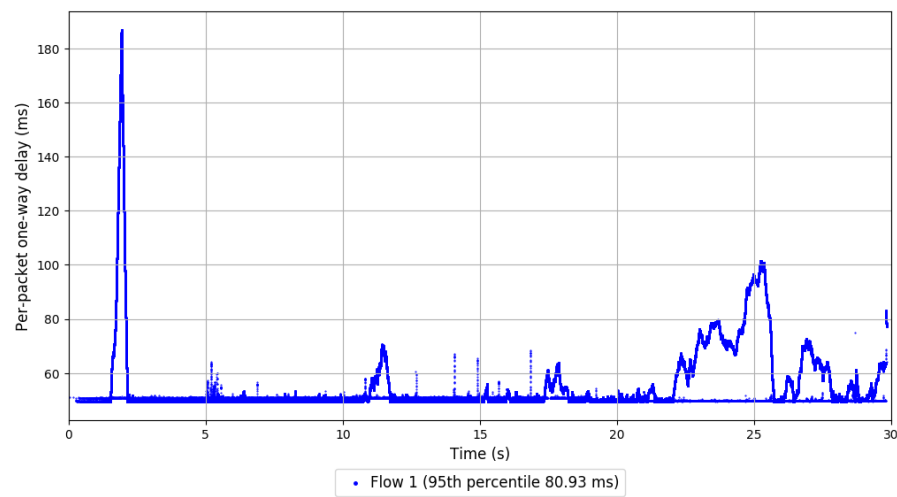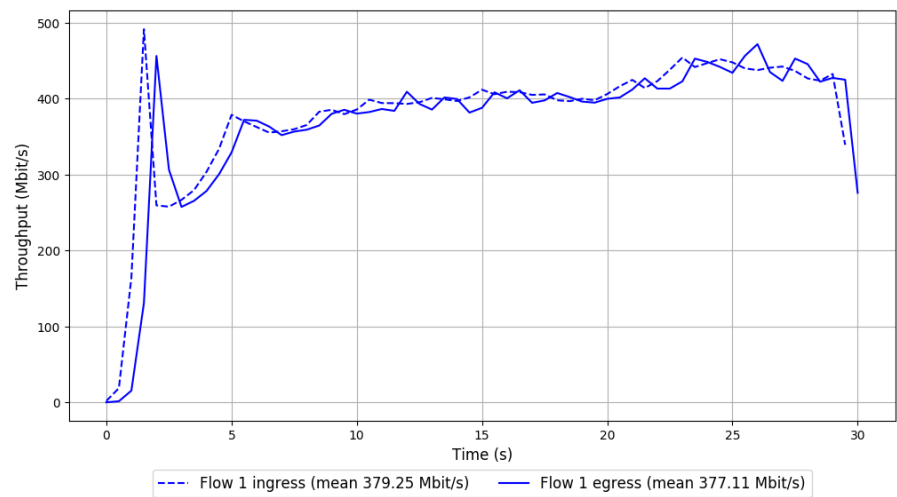Run 3: Report of PCC-Allegro — Data Link

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-01 18:15:06
End at: 2018-06-01 18:15:36
Local clock offset: -0.096 ms
Remote clock offset: -0.067 ms


# Below is generated by plot.py at 2018-06-01 21:12:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 377.11 Mbit/s
95th percentile per-packet one-way delay: 80.927 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 377.11 Mbit/s
95th percentile per-packet one-way delay: 80.927 ms
Loss rate: 0.90%
```

Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 379.25 Mbit/s)   Flow 1 egress (mean 377.11 Mbit/s)

Flow 1 (95th percentile 80.93 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-01 18:35:20
End at: 2018-06-01 18:35:50
Local clock offset: -0.051 ms
Remote clock offset: 0.018 ms


# Below is generated by plot.py at 2018-06-01 21:12:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 330.95 Mbit/s
95th percentile per-packet one-way delay: 66.920 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 330.95 Mbit/s
95th percentile per-packet one-way delay: 66.920 ms
Loss rate: 0.38%
```
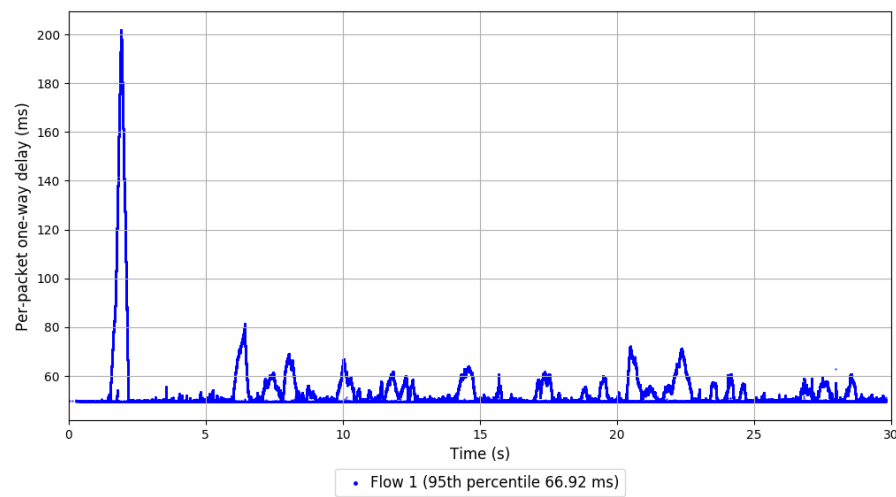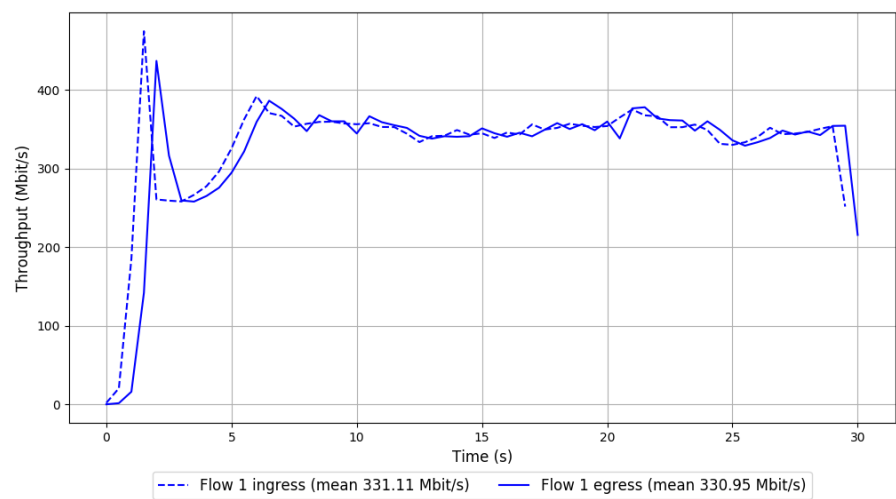
Run 5: Report of PCC-Allegro — Data Link

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-01 18:55:39
End at: 2018-06-01 18:56:09
Local clock offset: -0.428 ms
Remote clock offset: 0.013 ms


# Below is generated by plot.py at 2018-06-01 21:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 357.17 Mbit/s
95th percentile per-packet one-way delay: 76.870 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 357.17 Mbit/s
95th percentile per-packet one-way delay: 76.870 ms
Loss rate: 0.39%
```
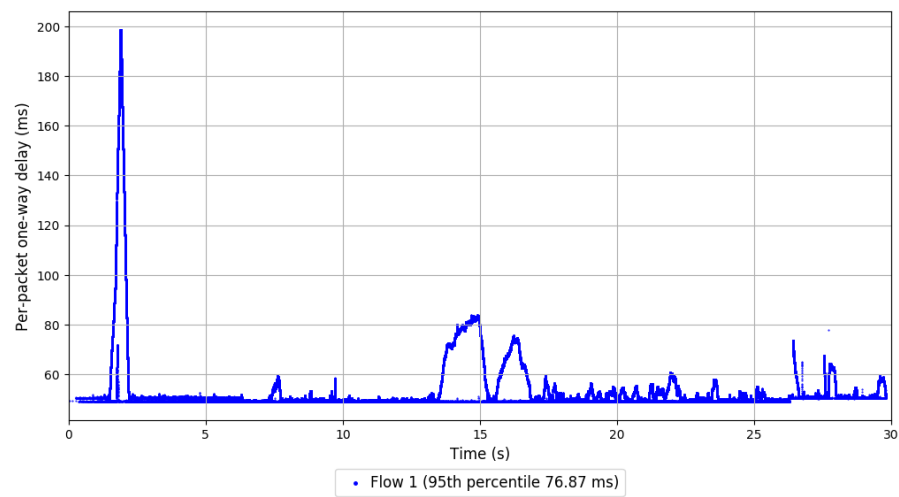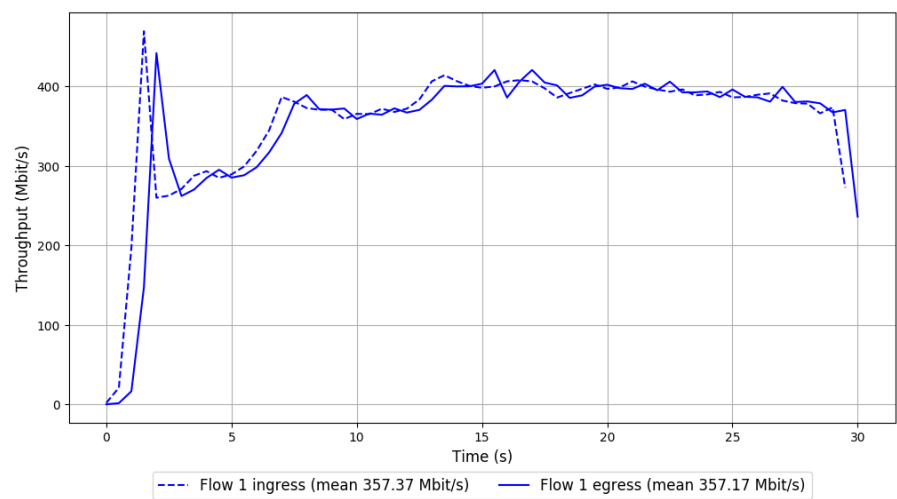
Run 6: Report of PCC-Allegro — Data Link

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-01 19:15:54
End at: 2018-06-01 19:16:24
Local clock offset: -0.08 ms
Remote clock offset: -0.004 ms


# Below is generated by plot.py at 2018-06-01 21:18:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 364.56 Mbit/s
95th percentile per-packet one-way delay: 71.556 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 364.56 Mbit/s
95th percentile per-packet one-way delay: 71.556 ms
Loss rate: 0.42%
```
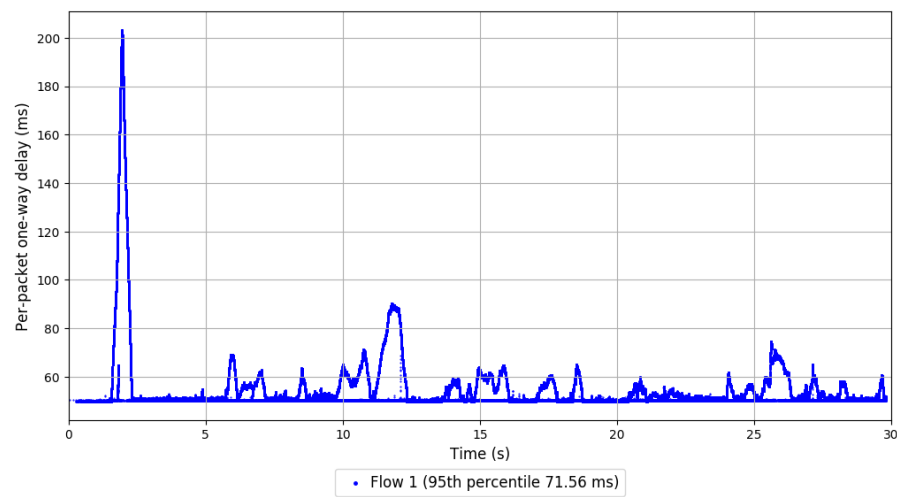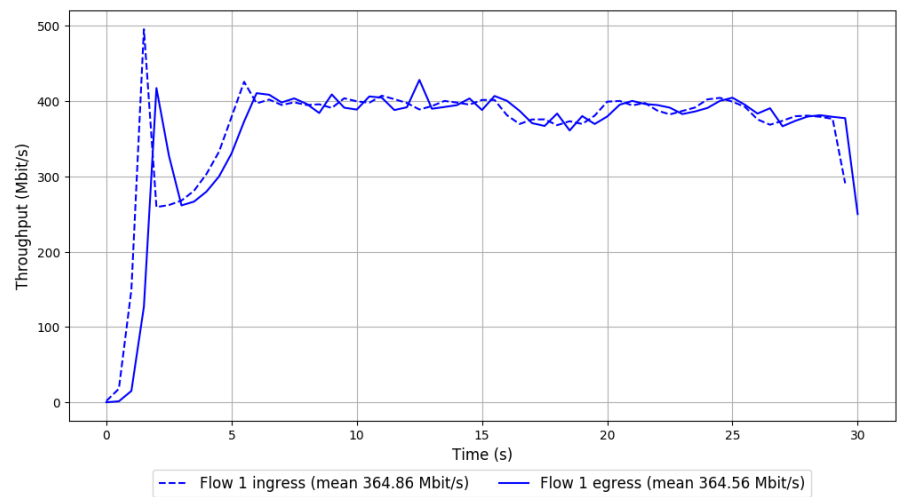
Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 364.86 Mbit/s)   Flow 1 egress (mean 364.56 Mbit/s)

Flow 1 (95th percentile 71.56 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-01 19:36:19
End at: 2018-06-01 19:36:49
Local clock offset: 0.215 ms
Remote clock offset: -0.011 ms


# Below is generated by plot.py at 2018-06-01 21:18:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 336.08 Mbit/s
95th percentile per-packet one-way delay: 68.473 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 336.08 Mbit/s
95th percentile per-packet one-way delay: 68.473 ms
Loss rate: 0.53%
```
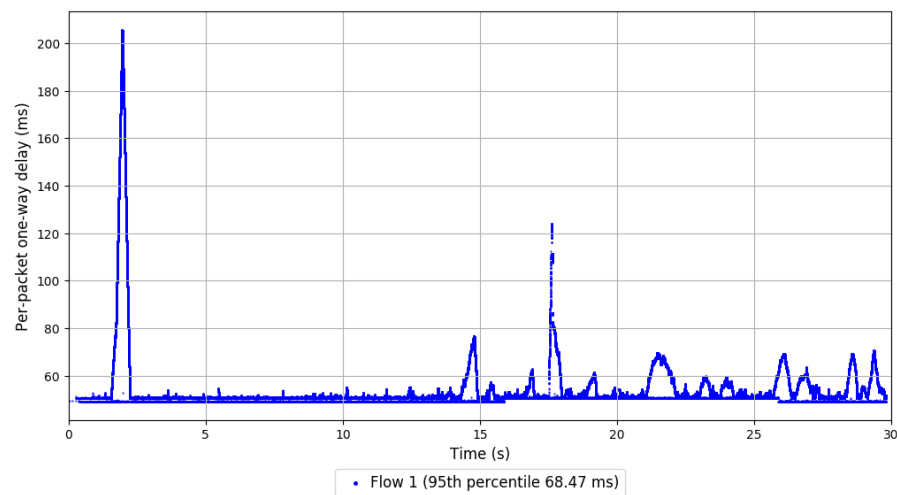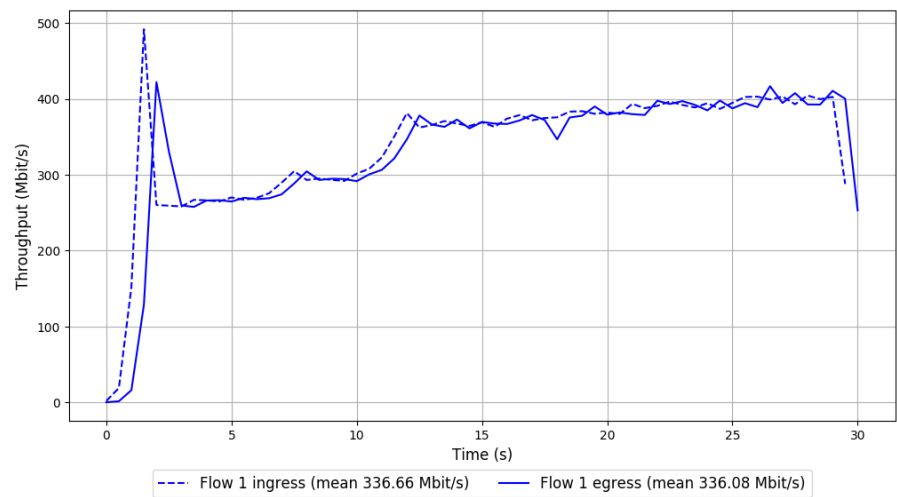
Run 8: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 336.66 Mbit/s)   Flow 1 egress (mean 336.08 Mbit/s)
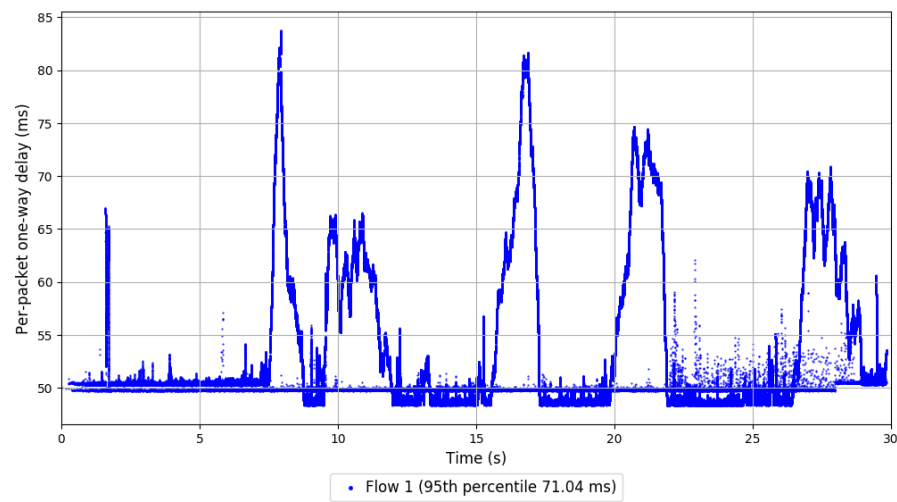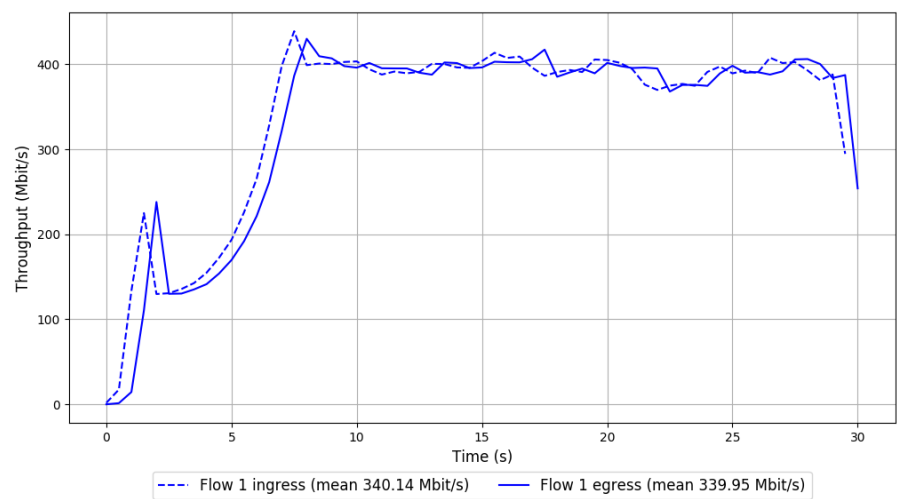

Flow 1 (95th percentile 68.47 ms)

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-01 19:56:37
End at: 2018-06-01 19:57:07
Local clock offset: -0.603 ms
Remote clock offset: -0.025 ms


# Below is generated by plot.py at 2018-06-01 21:18:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 339.95 Mbit/s
95th percentile per-packet one-way delay: 71.040 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 339.95 Mbit/s
95th percentile per-packet one-way delay: 71.040 ms
Loss rate: 0.39%
```

Run 9: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 340.14 Mbit/s)   Flow 1 egress (mean 339.95 Mbit/s)
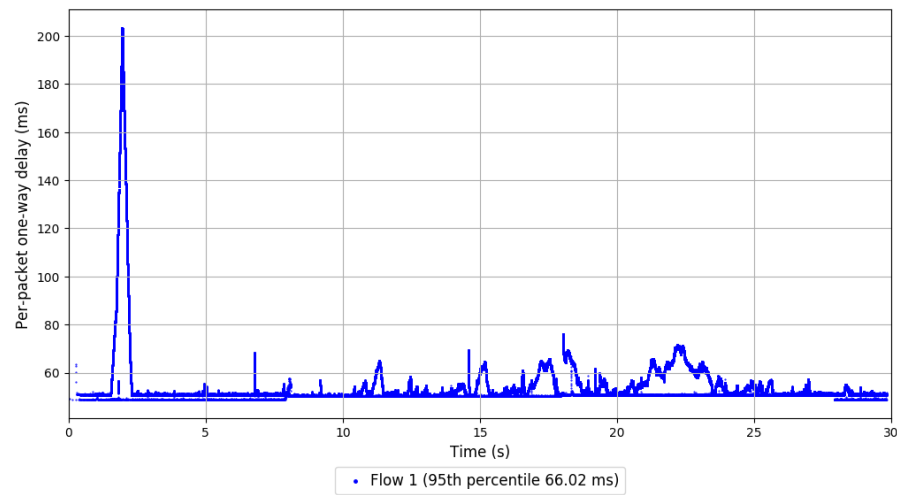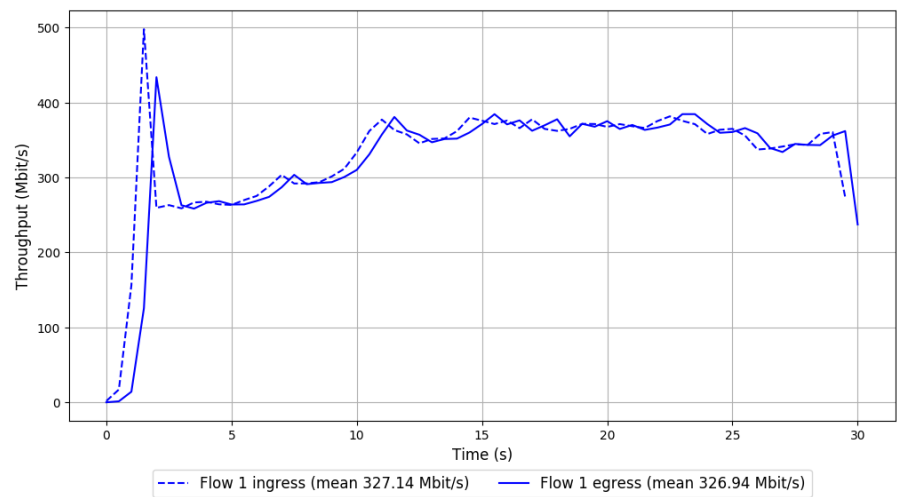

Flow 1 (95th percentile 71.04 ms)

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-01 20:16:47
End at: 2018-06-01 20:17:17
Local clock offset: 0.024 ms
Remote clock offset: -0.005 ms


# Below is generated by plot.py at 2018-06-01 21:18:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 326.94 Mbit/s
95th percentile per-packet one-way delay: 66.017 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 326.94 Mbit/s
95th percentile per-packet one-way delay: 66.017 ms
Loss rate: 0.39%
```

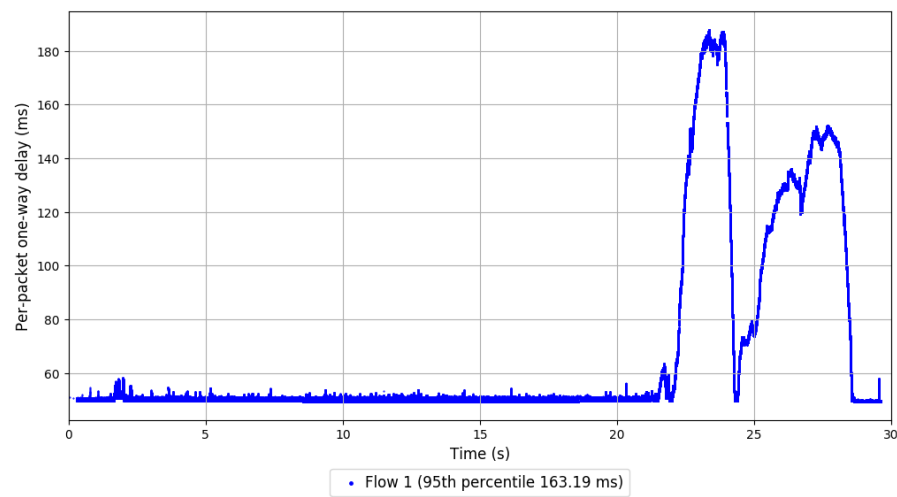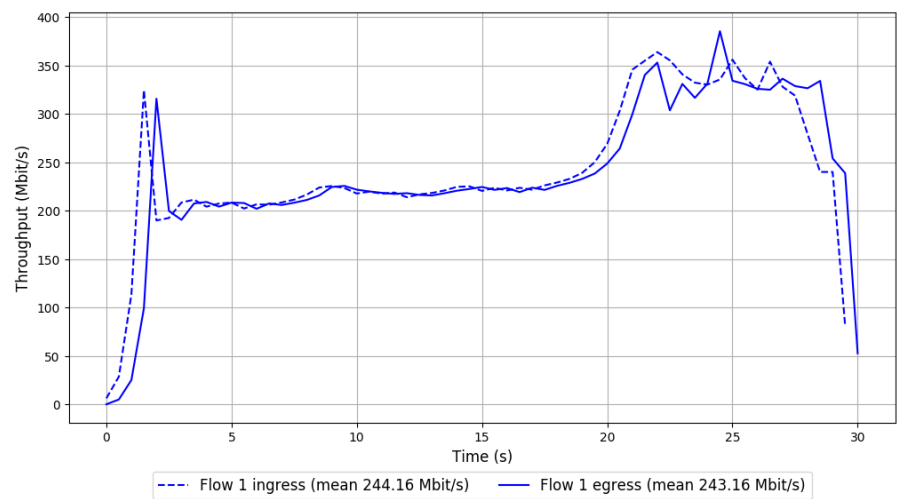## Run 10: Report of PCC-Allegro — Data Link

```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-01 17:07:16
End at: 2018-06-01 17:07:46
Local clock offset: -0.042 ms
Remote clock offset: 0.032 ms


# Below is generated by plot.py at 2018-06-01 21:20:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 243.16 Mbit/s
95th percentile per-packet one-way delay: 163.189 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 243.16 Mbit/s
95th percentile per-packet one-way delay: 163.189 ms
Loss rate: 0.75%
```

Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 244.16 Mbit/s) --- Flow 1 egress (mean 243.16 Mbit/s)
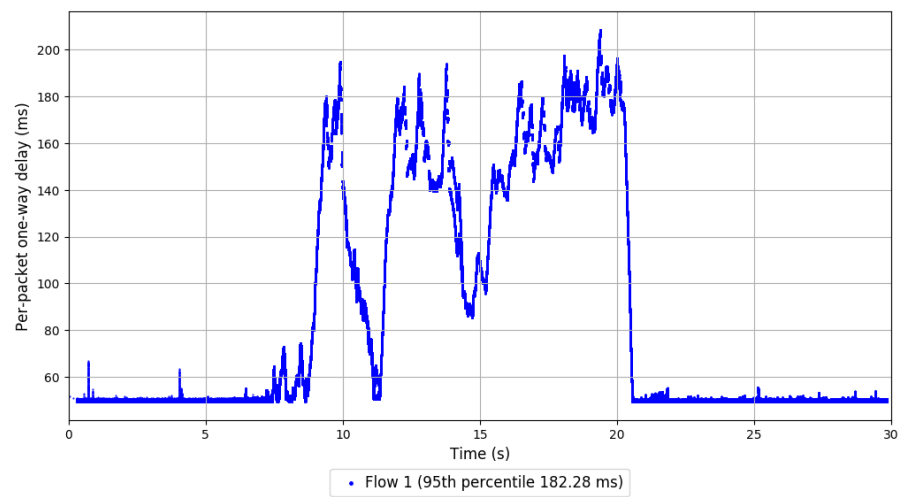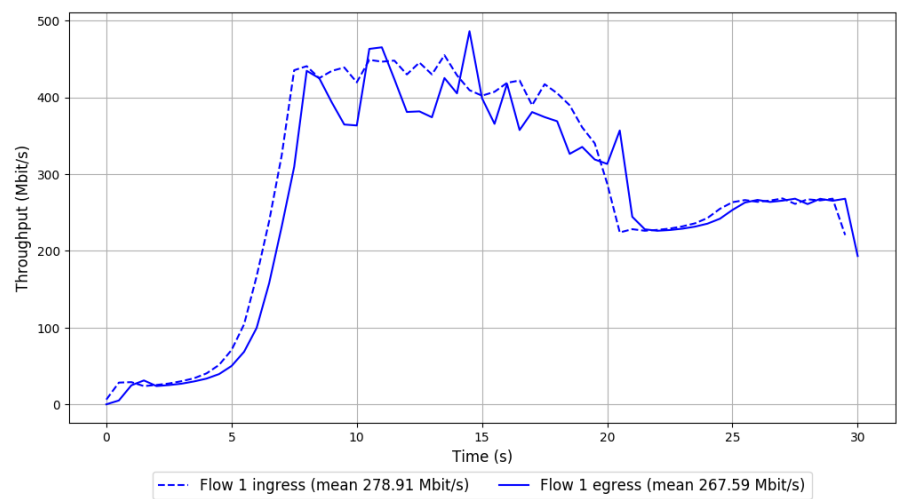

Flow 1 (95th percentile 163.19 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-01 17:27:05
End at: 2018-06-01 17:27:35
Local clock offset: 0.053 ms
Remote clock offset: -0.088 ms


# Below is generated by plot.py at 2018-06-01 21:22:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 267.59 Mbit/s
95th percentile per-packet one-way delay: 182.277 ms
Loss rate: 4.38%
-- Flow 1:
Average throughput: 267.59 Mbit/s
95th percentile per-packet one-way delay: 182.277 ms
Loss rate: 4.38%
```

Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 278.91 Mbit/s) --- Flow 1 egress (mean 267.59 Mbit/s)
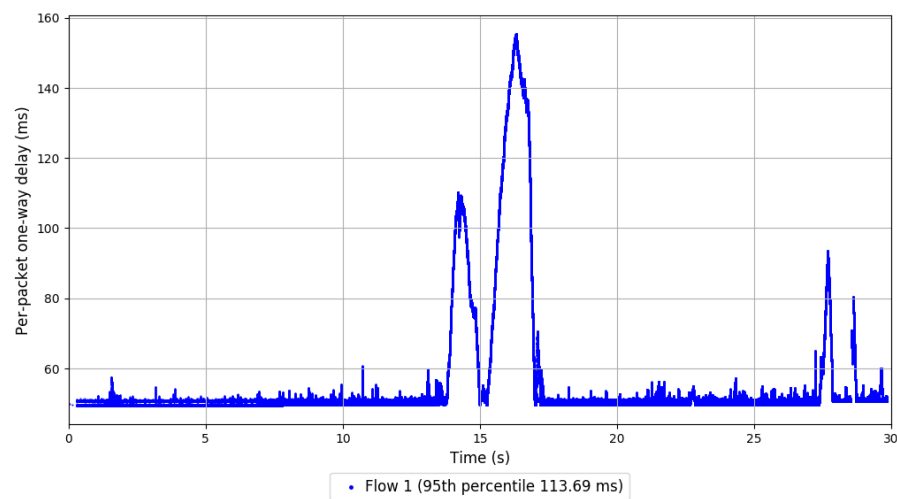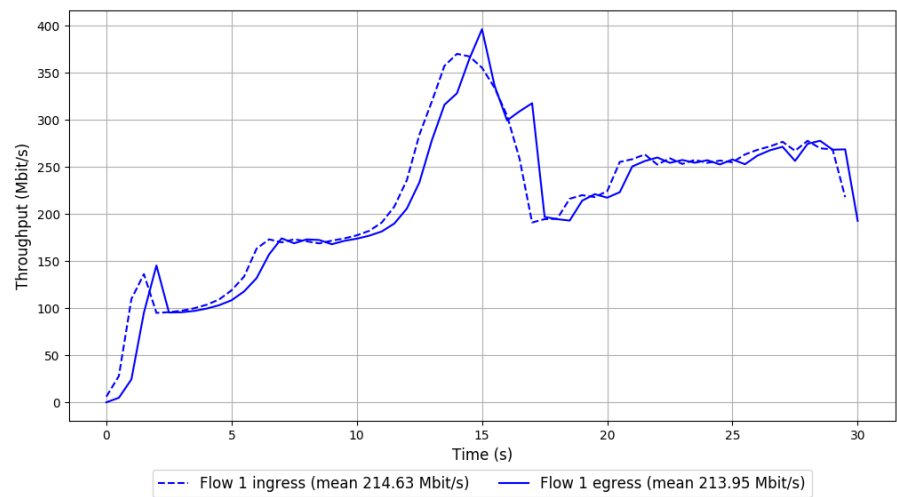

• Flow 1 (95th percentile 182.28 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2018-06-01 17:47:08
End at: 2018-06-01 17:47:38
Local clock offset: -0.07 ms
Remote clock offset: -0.078 ms


# Below is generated by plot.py at 2018-06-01 21:22:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.95 Mbit/s
95th percentile per-packet one-way delay: 113.691 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 213.95 Mbit/s
95th percentile per-packet one-way delay: 113.691 ms
Loss rate: 0.65%
```

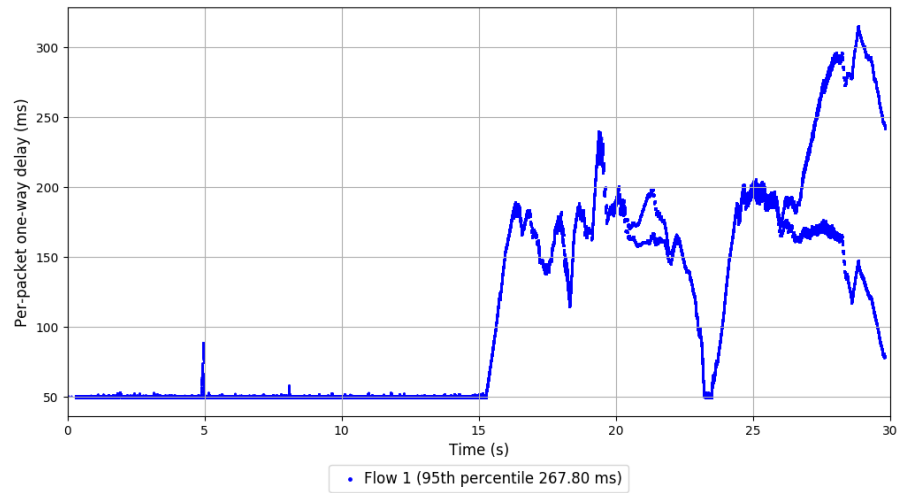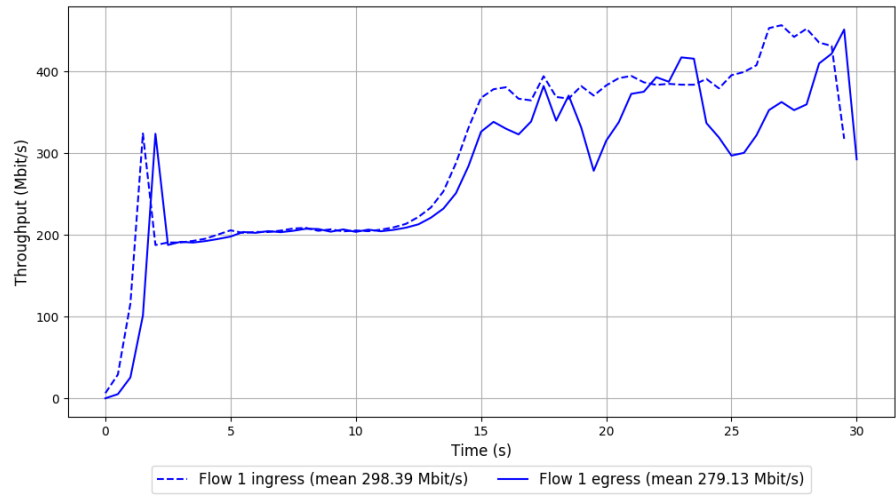Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2018-06-01 18:07:27
End at: 2018-06-01 18:07:57
Local clock offset: -0.125 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2018-06-01 21:24:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 279.13 Mbit/s
95th percentile per-packet one-way delay: 267.800 ms
Loss rate: 6.77%
-- Flow 1:
Average throughput: 279.13 Mbit/s
95th percentile per-packet one-way delay: 267.800 ms
Loss rate: 6.77%
```

Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 298.39 Mbit/s)   Flow 1 egress (mean 279.13 Mbit/s)

Flow 1 (95th percentile 267.80 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2018-06-01 18:27:39
End at: 2018-06-01 18:28:09
Local clock offset: -0.06 ms
Remote clock offset: 0.031 ms


# Below is generated by plot.py at 2018-06-01 21:30:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 273.70 Mbit/s
95th percentile per-packet one-way delay: 352.386 ms
Loss rate: 13.97%
-- Flow 1:
Average throughput: 273.70 Mbit/s
95th percentile per-packet one-way delay: 352.386 ms
Loss rate: 13.97%
```
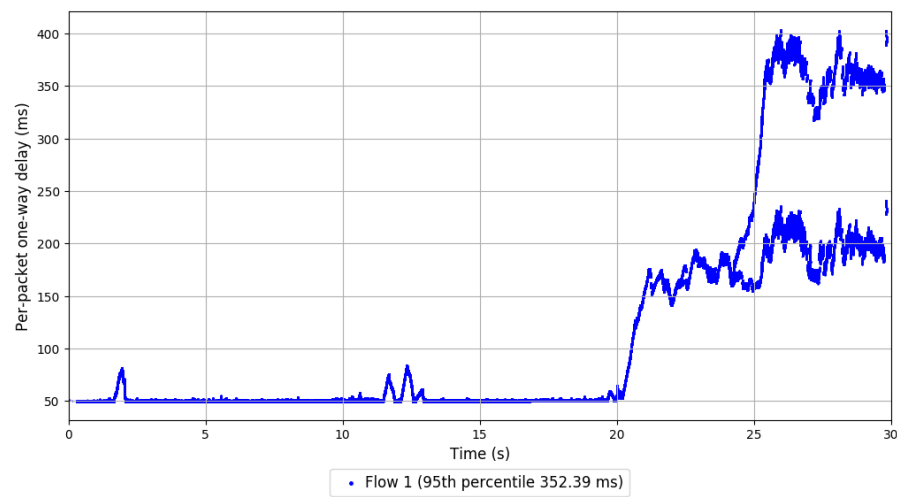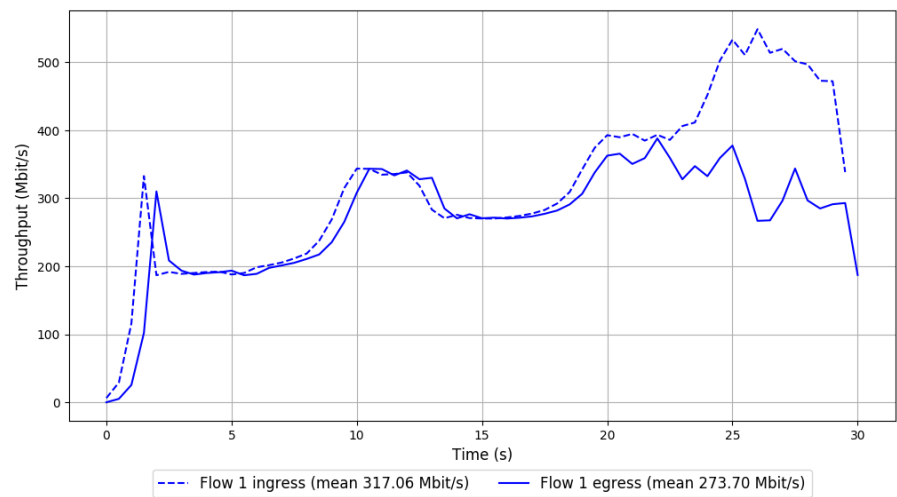
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 317.06 Mbit/s) — — —   Flow 1 egress (mean 273.70 Mbit/s) ———

• Flow 1 (95th percentile 352.39 ms)

```
Run 6: Statistics of PCC-Expr

Start at: 2018-06-01 18:48:01
End at: 2018-06-01 18:48:31
Local clock offset: -0.049 ms
Remote clock offset: 0.021 ms


# Below is generated by plot.py at 2018-06-01 21:30:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 261.70 Mbit/s
95th percentile per-packet one-way delay: 50.637 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 261.70 Mbit/s
95th percentile per-packet one-way delay: 50.637 ms
Loss rate: 0.42%
```
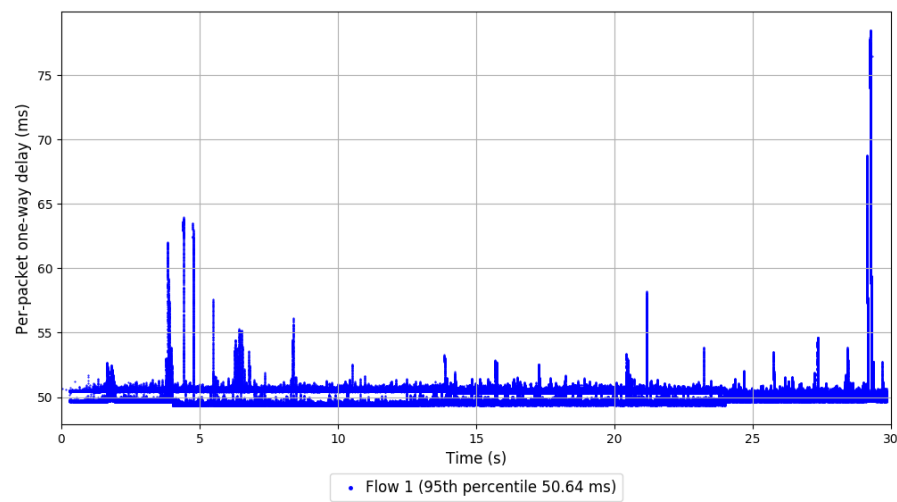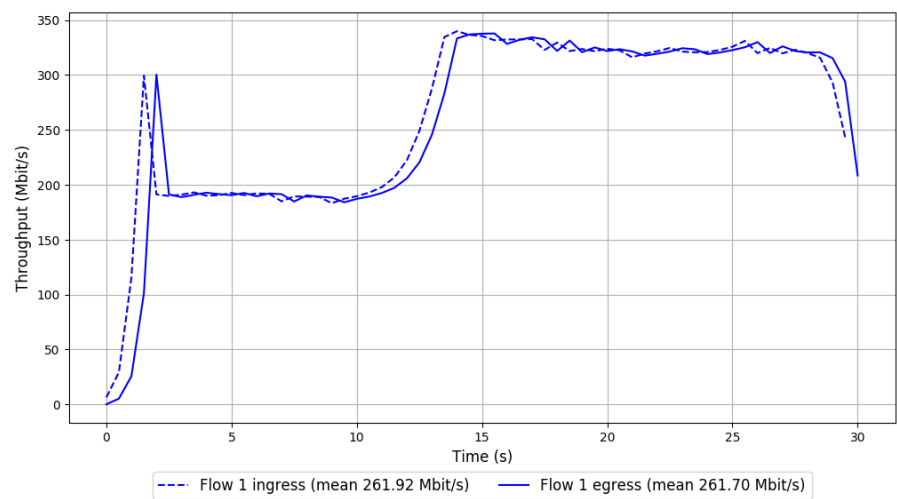
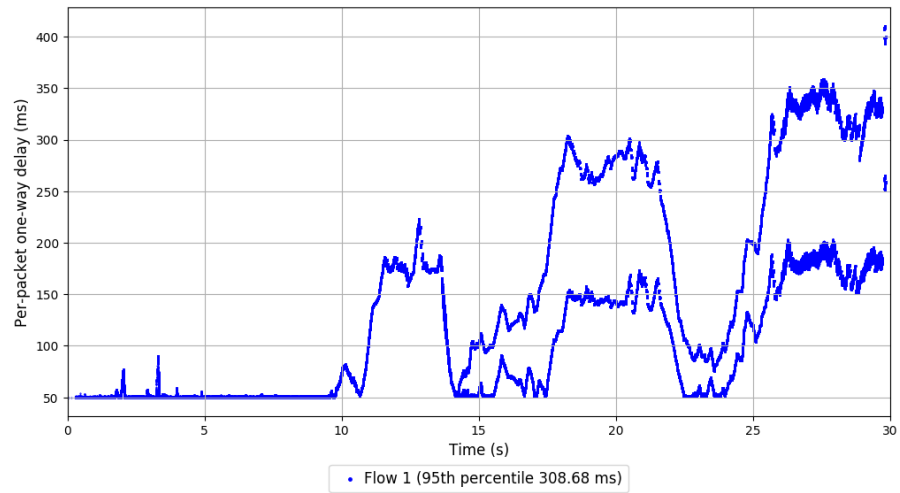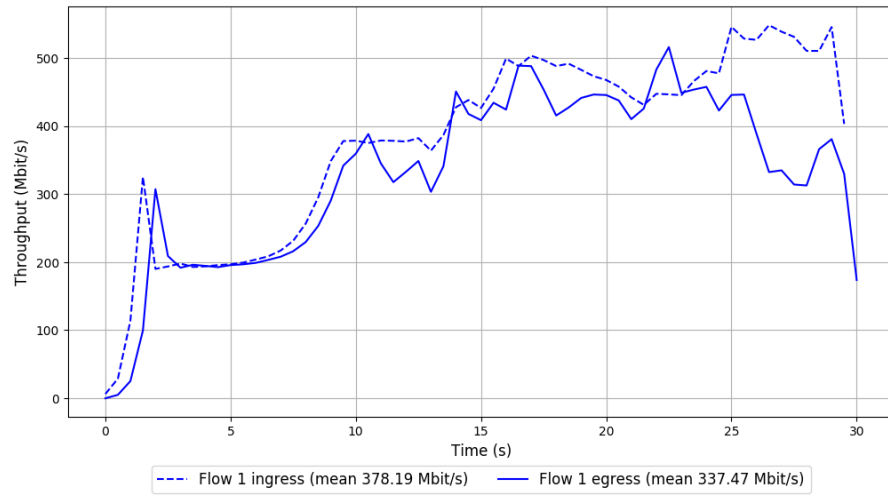# Run 6: Report of PCC-Expr — Data Link

```
Run 7: Statistics of PCC-Expr

Start at: 2018-06-01 19:08:15
End at: 2018-06-01 19:08:45
Local clock offset: -0.044 ms
Remote clock offset: -0.019 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 337.47 Mbit/s
95th percentile per-packet one-way delay: 308.675 ms
Loss rate: 11.06%
-- Flow 1:
Average throughput: 337.47 Mbit/s
95th percentile per-packet one-way delay: 308.675 ms
Loss rate: 11.06%
```

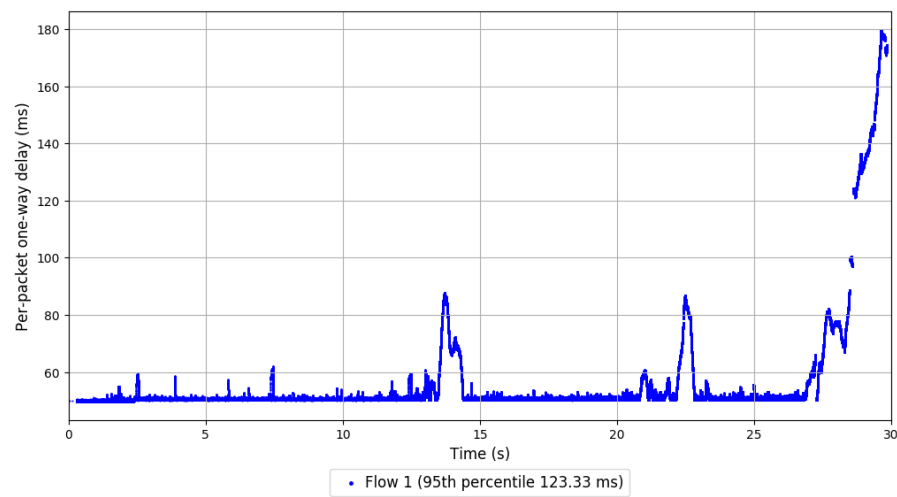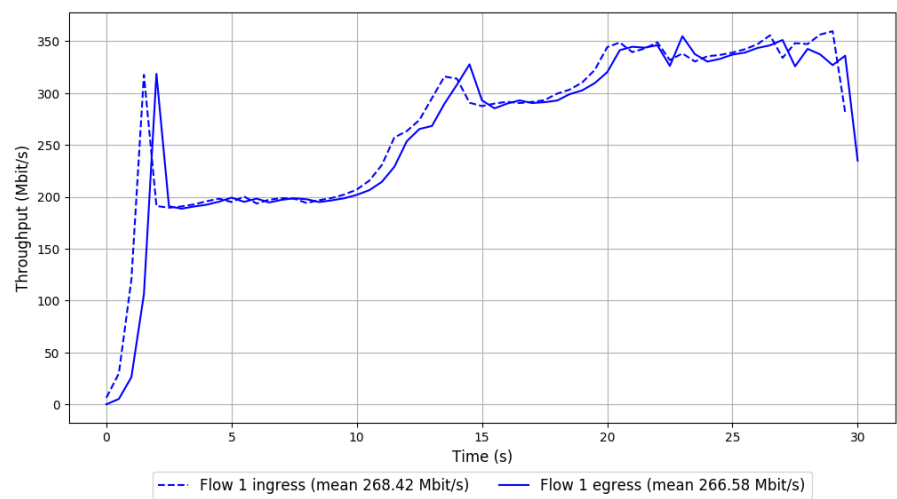Run 7: Report of PCC-Expr — Data Link

```
Run 8: Statistics of PCC-Expr

Start at: 2018-06-01 19:28:33
End at: 2018-06-01 19:29:03
Local clock offset: -0.121 ms
Remote clock offset: -0.046 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 266.58 Mbit/s
95th percentile per-packet one-way delay: 123.333 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 266.58 Mbit/s
95th percentile per-packet one-way delay: 123.333 ms
Loss rate: 1.02%
```

Run 8: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 268.42 Mbit/s) — — — Flow 1 egress (mean 266.58 Mbit/s)

• Flow 1 (95th percentile 123.33 ms)

```
Run 9: Statistics of PCC-Expr

Start at: 2018-06-01 19:49:03
End at: 2018-06-01 19:49:33
Local clock offset: -0.136 ms
Remote clock offset: -0.01 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.72 Mbit/s
95th percentile per-packet one-way delay: 108.649 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 222.72 Mbit/s
95th percentile per-packet one-way delay: 108.649 ms
Loss rate: 0.45%
```
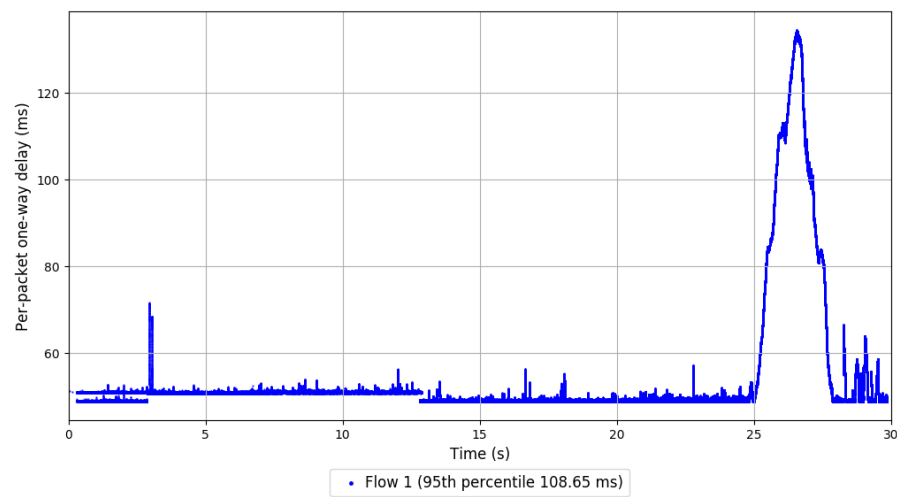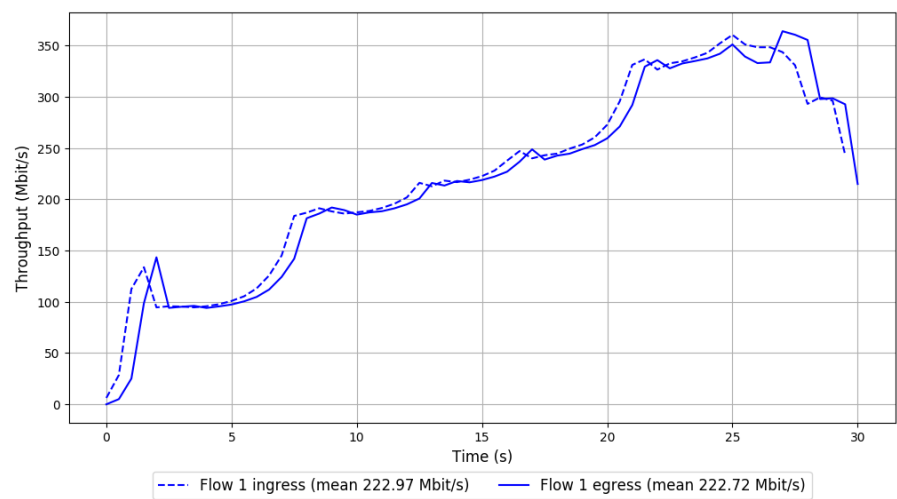
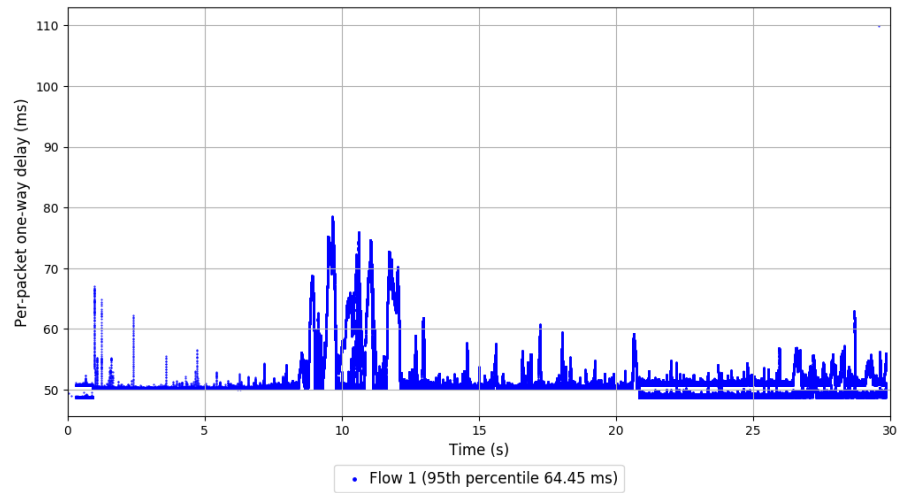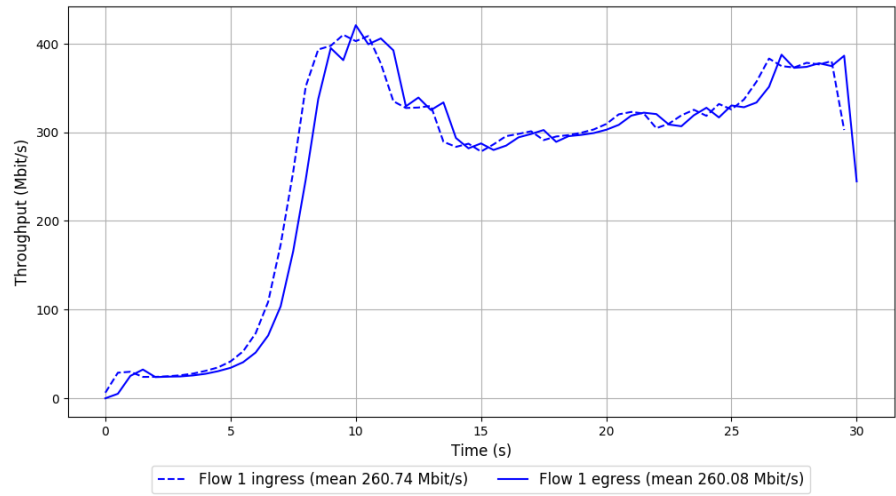# Run 9: Report of PCC-Expr — Data Link

```
Run 10: Statistics of PCC-Expr

Start at: 2018-06-01 20:09:04
End at: 2018-06-01 20:09:35
Local clock offset: -0.128 ms
Remote clock offset: -0.024 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 260.08 Mbit/s
95th percentile per-packet one-way delay: 64.450 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 260.08 Mbit/s
95th percentile per-packet one-way delay: 64.450 ms
Loss rate: 0.59%
```

Run 10: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 260.74 Mbit/s)   Flow 1 egress (mean 260.08 Mbit/s)

Flow 1 (95th percentile 64.45 ms)

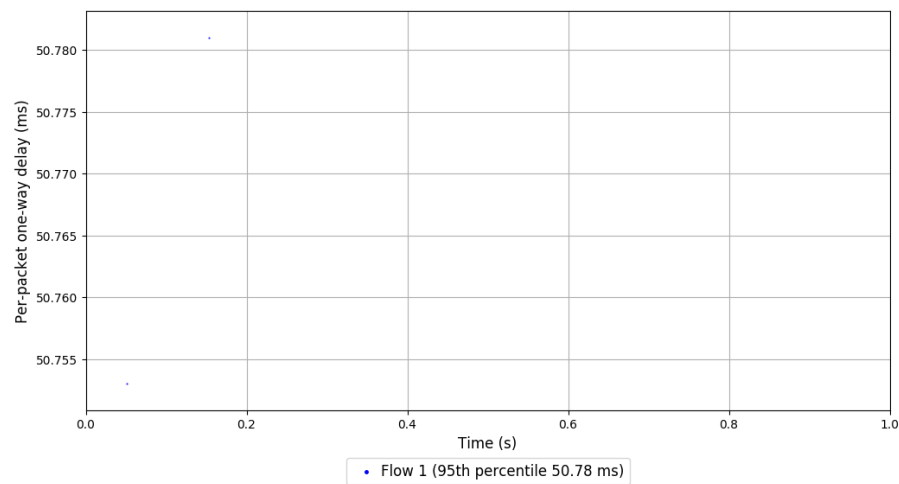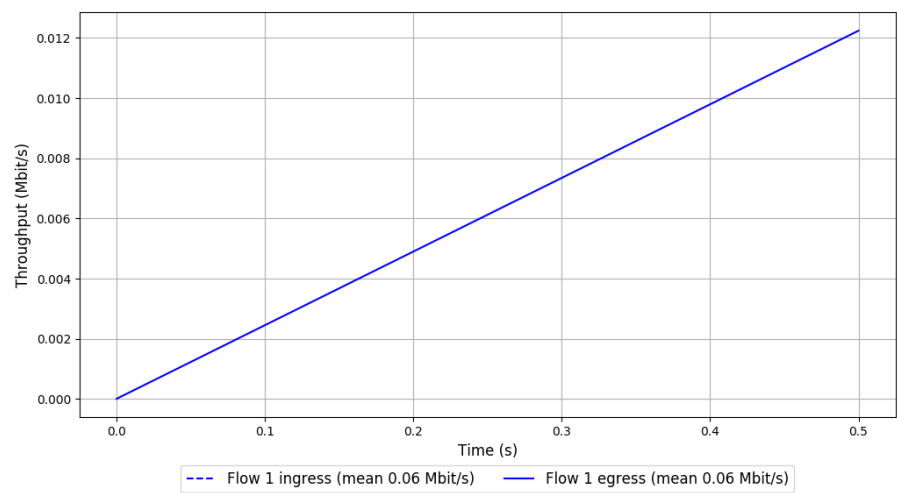```
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-01 17:02:13
End at: 2018-06-01 17:02:43
Local clock offset: 0.268 ms
Remote clock offset: 0.096 ms
```

# Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-01 17:21:52
End at: 2018-06-01 17:22:22
Local clock offset: -0.001 ms
Remote clock offset: -0.063 ms

Below is generated by plot.py at 2018-06-01 21:32:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 67.05 Mbit/s
95th percentile per-packet one-way delay: 49.732 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 67.05 Mbit/s
95th percentile per-packet one-way delay: 49.732 ms
Loss rate: 0.44%
```
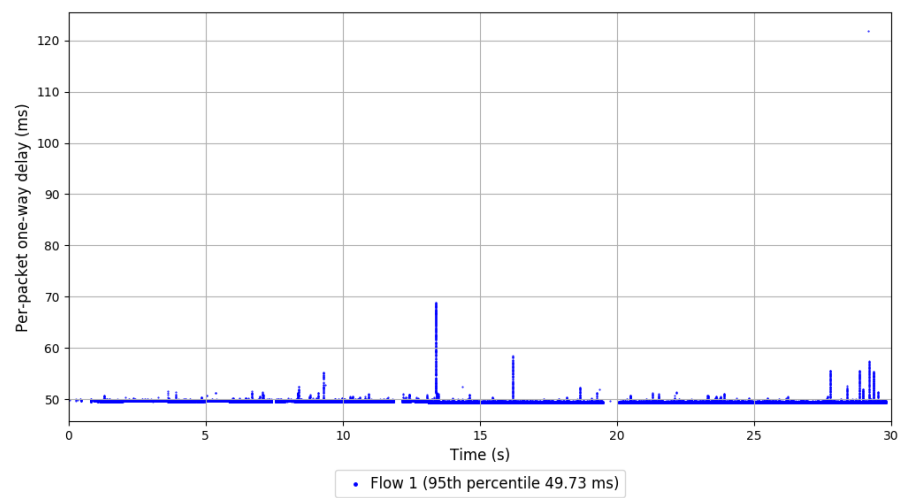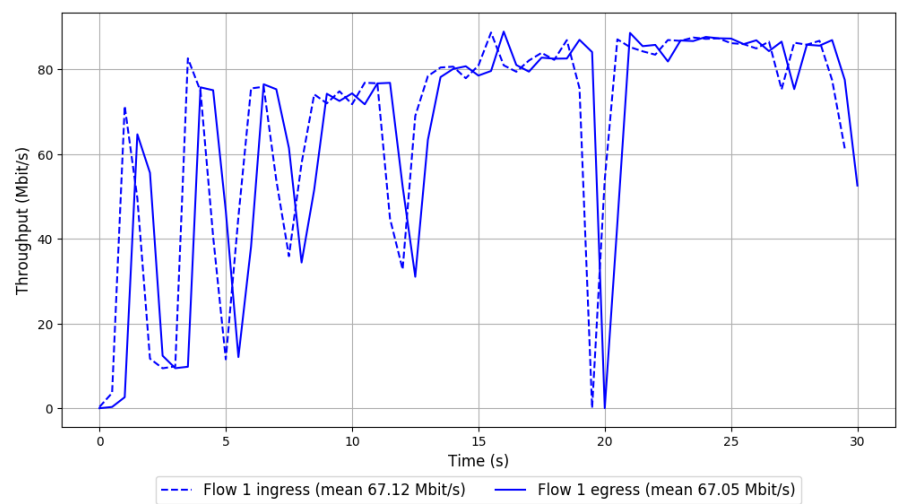
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-01 17:41:58
End at: 2018-06-01 17:42:28
Local clock offset: -0.353 ms
Remote clock offset: -0.089 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.63 Mbit/s
95th percentile per-packet one-way delay: 50.442 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 53.63 Mbit/s
95th percentile per-packet one-way delay: 50.442 ms
Loss rate: 0.54%
```

Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 53.74 Mbit/s) Flow 1 egress (mean 53.63 Mbit/s)

Flow 1 (95th percentile 50.44 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-01 18:02:14
End at: 2018-06-01 18:02:44
Local clock offset: -0.071 ms
Remote clock offset: -0.088 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.18 Mbit/s
95th percentile per-packet one-way delay: 50.296 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 56.18 Mbit/s
95th percentile per-packet one-way delay: 50.296 ms
Loss rate: 0.53%
```
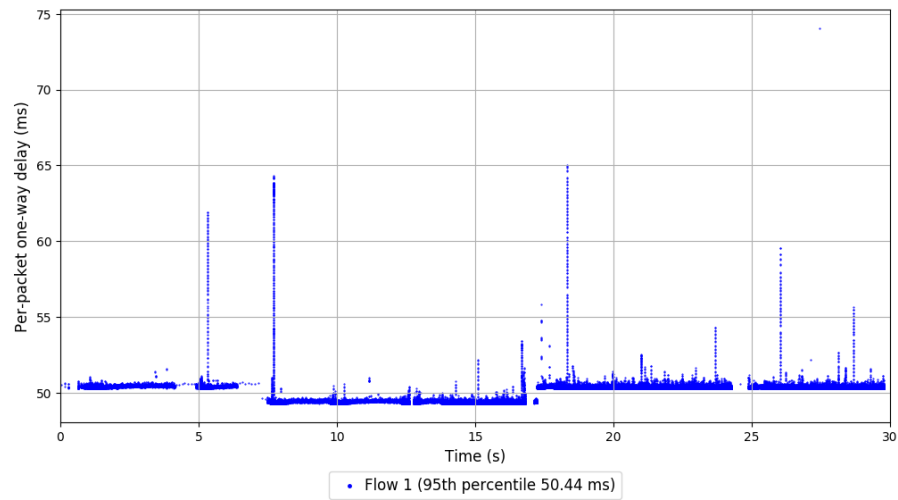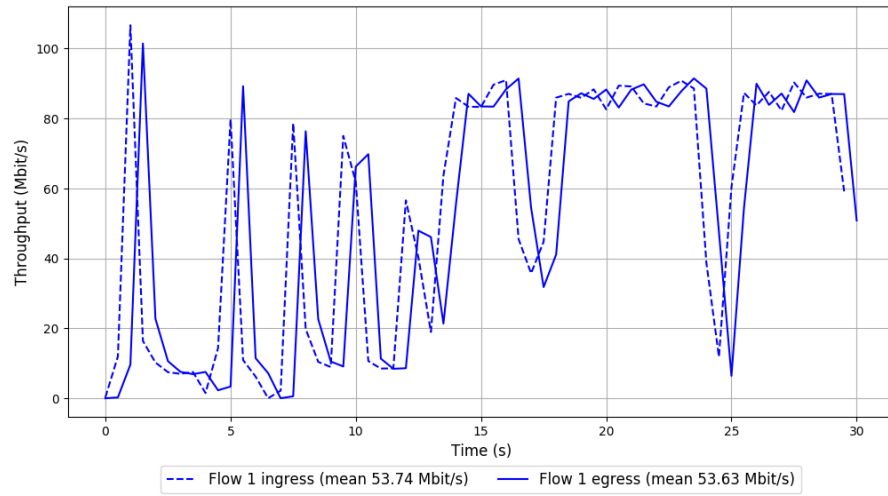
Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-01 18:22:30
End at: 2018-06-01 18:23:00
Local clock offset: -0.068 ms
Remote clock offset: -0.038 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.81 Mbit/s
95th percentile per-packet one-way delay: 50.721 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 53.81 Mbit/s
95th percentile per-packet one-way delay: 50.721 ms
Loss rate: 0.53%
```
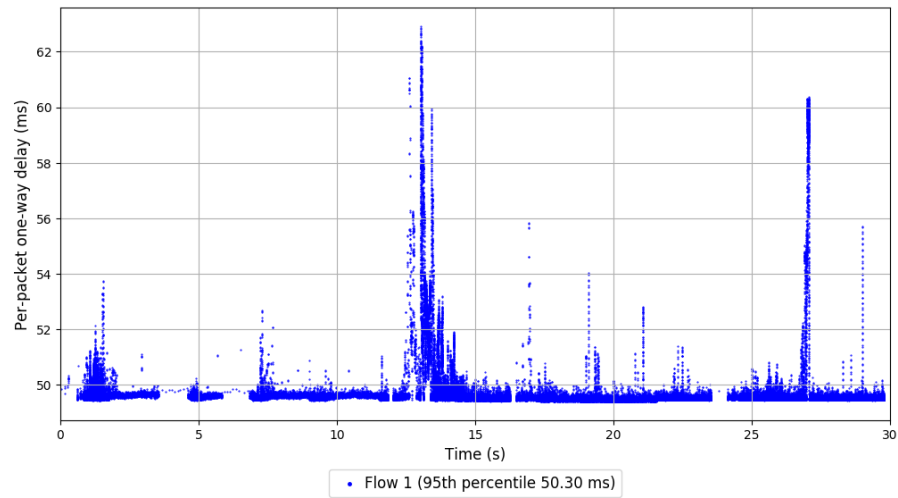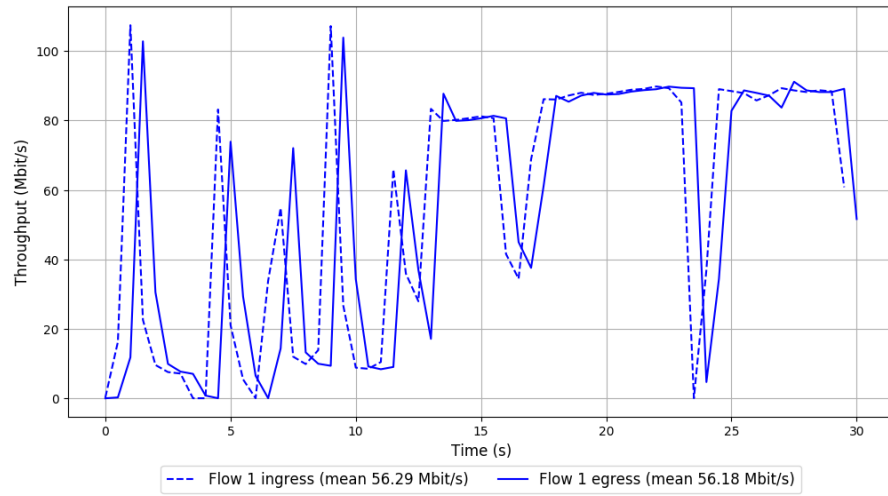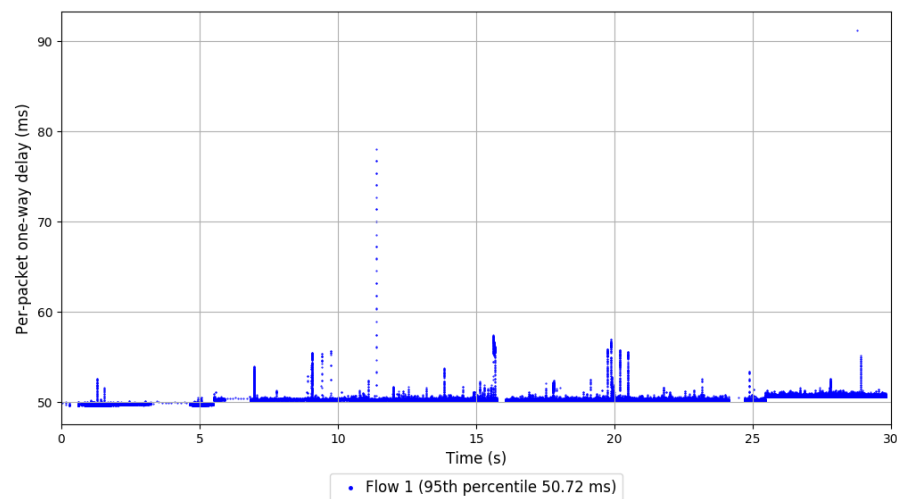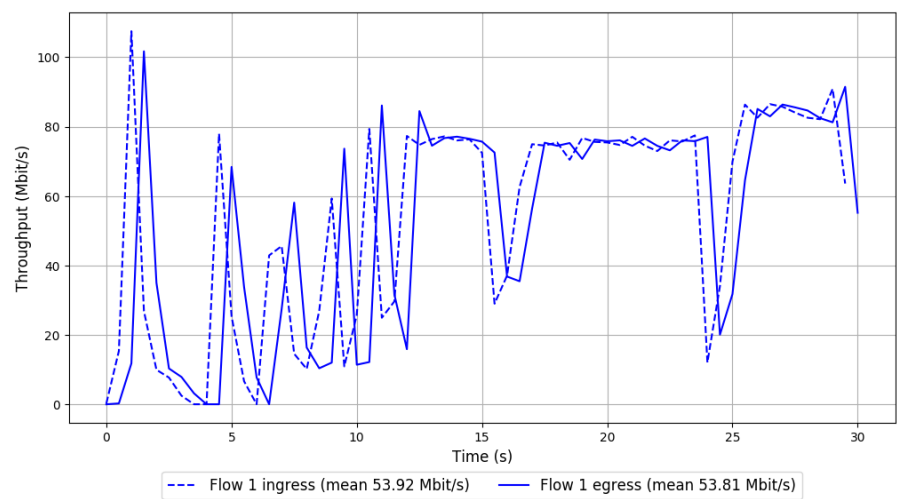
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 53.92 Mbit/s)   Flow 1 egress (mean 53.81 Mbit/s)

Flow 1 (95th percentile 50.72 ms)

173

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-01 18:42:45
End at: 2018-06-01 18:43:15
Local clock offset: -0.026 ms
Remote clock offset: 0.023 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.52 Mbit/s
95th percentile per-packet one-way delay: 49.733 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 64.52 Mbit/s
95th percentile per-packet one-way delay: 49.733 ms
Loss rate: 0.46%
```
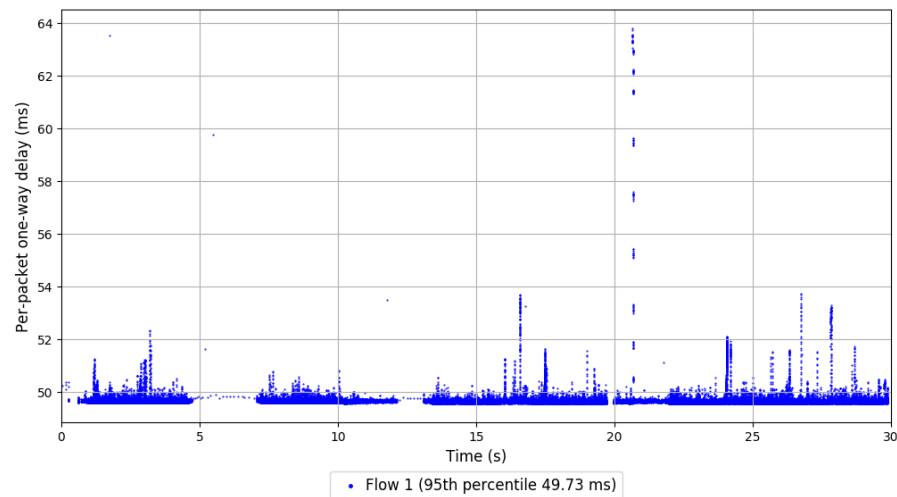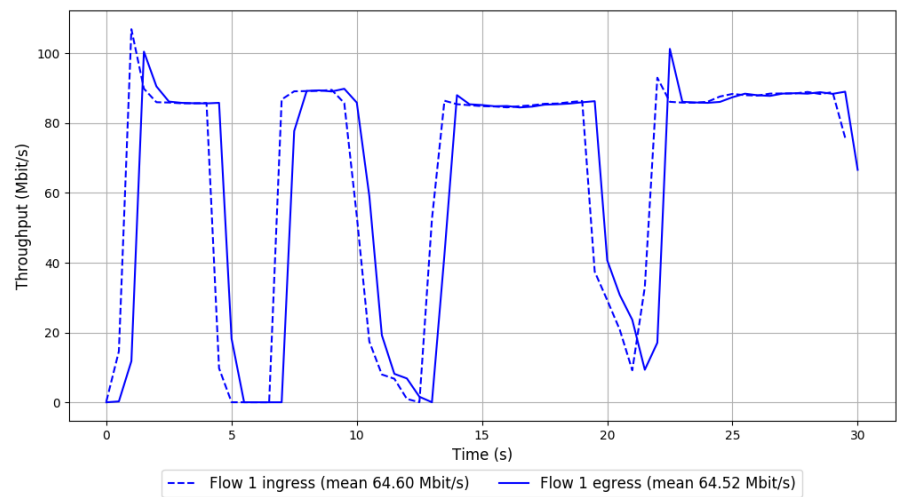
Run 6: Report of QUIC Cubic — Data Link

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-01 19:03:04
End at: 2018-06-01 19:03:34
Local clock offset: -0.078 ms
Remote clock offset: -0.02 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.15 Mbit/s
95th percentile per-packet one-way delay: 50.800 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 59.15 Mbit/s
95th percentile per-packet one-way delay: 50.800 ms
Loss rate: 0.46%
```
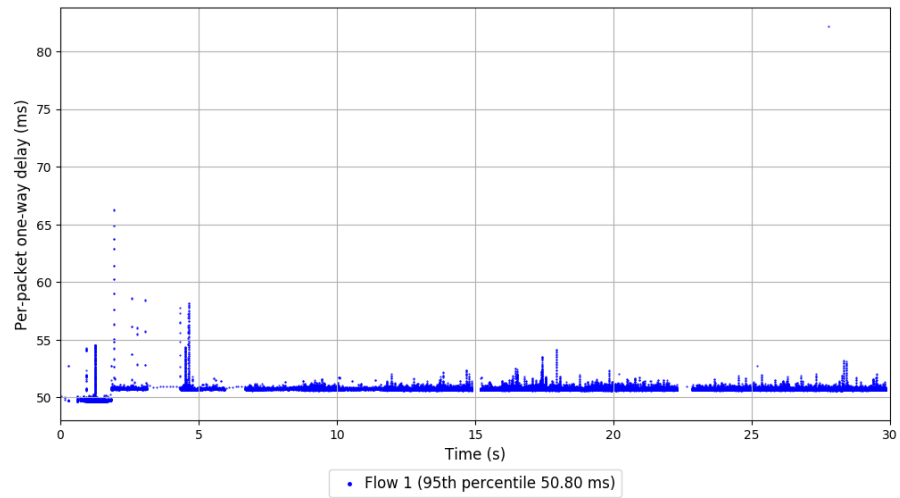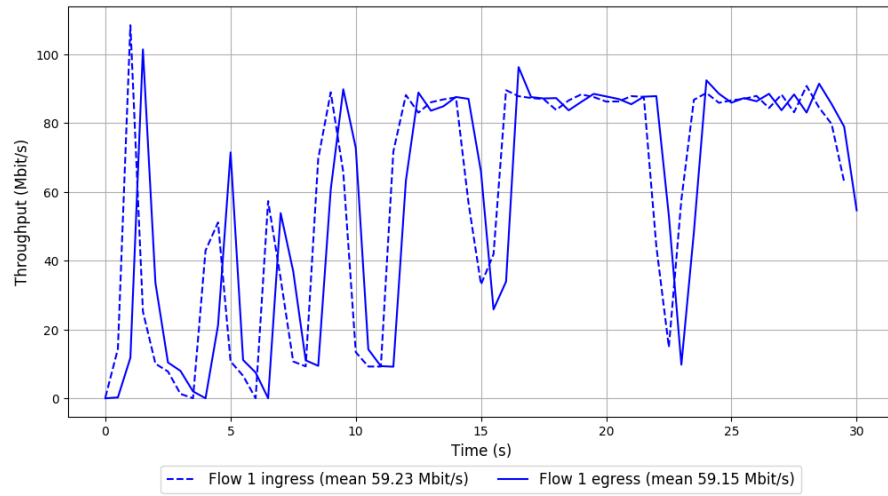
Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 59.23 Mbit/s)   Flow 1 egress (mean 59.15 Mbit/s)
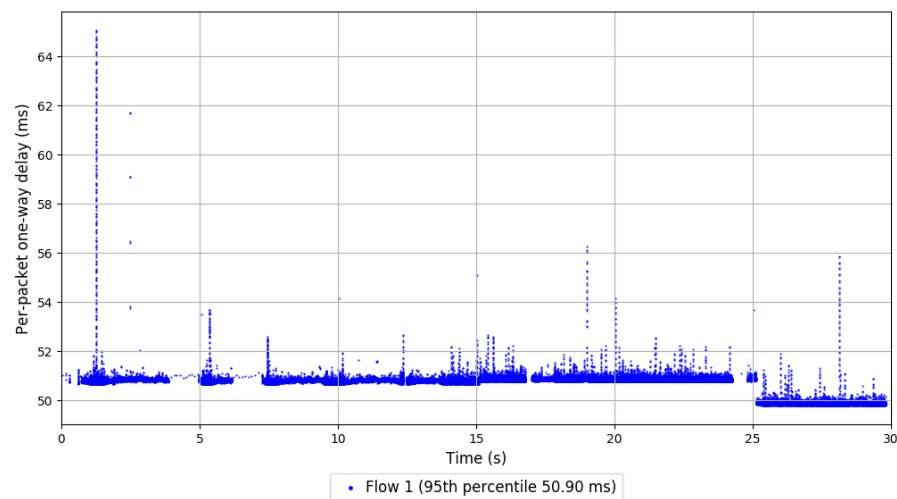

Flow 1 (95th percentile 50.80 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-01 19:23:20
End at: 2018-06-01 19:23:50
Local clock offset: -0.061 ms
Remote clock offset: -0.029 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.92 Mbit/s
95th percentile per-packet one-way delay: 50.895 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 53.92 Mbit/s
95th percentile per-packet one-way delay: 50.895 ms
Loss rate: 0.55%
```

Run 8: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 54.03 Mbit/s)   Flow 1 egress (mean 53.92 Mbit/s)
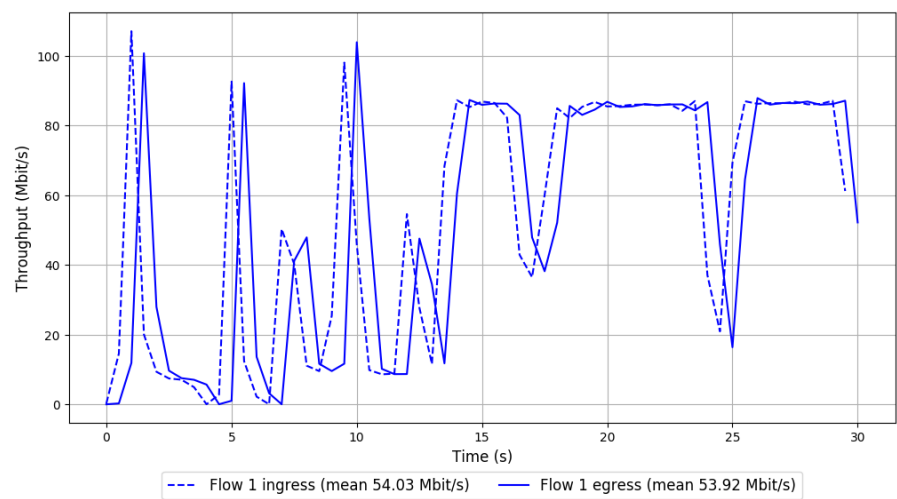

Flow 1 (95th percentile 50.90 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-01 19:43:47
End at: 2018-06-01 19:44:17
Local clock offset: -0.176 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.73 Mbit/s
95th percentile per-packet one-way delay: 51.180 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 60.73 Mbit/s
95th percentile per-packet one-way delay: 51.180 ms
Loss rate: 0.49%
```
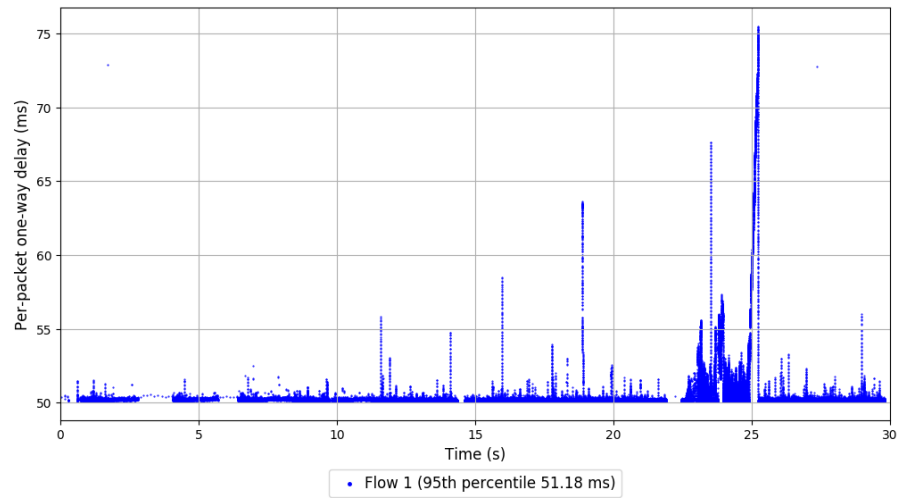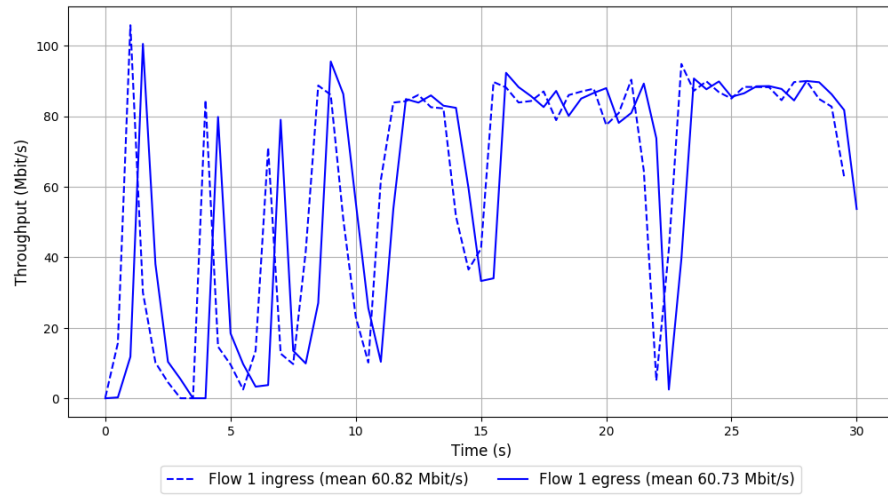
Run 9: Report of QUIC Cubic — Data Link

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-01 20:03:54
End at: 2018-06-01 20:04:24
Local clock offset: -0.114 ms
Remote clock offset: 0.007 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.13 Mbit/s
95th percentile per-packet one-way delay: 48.849 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 63.13 Mbit/s
95th percentile per-packet one-way delay: 48.849 ms
Loss rate: 0.47%
```
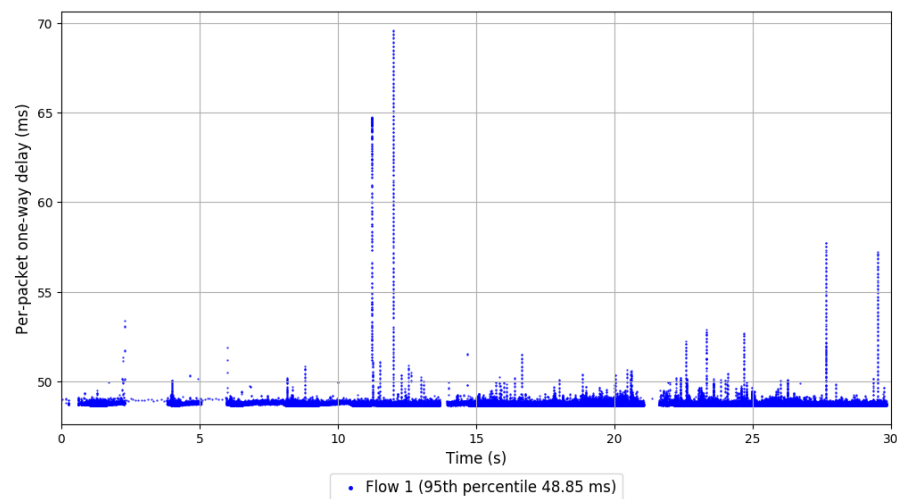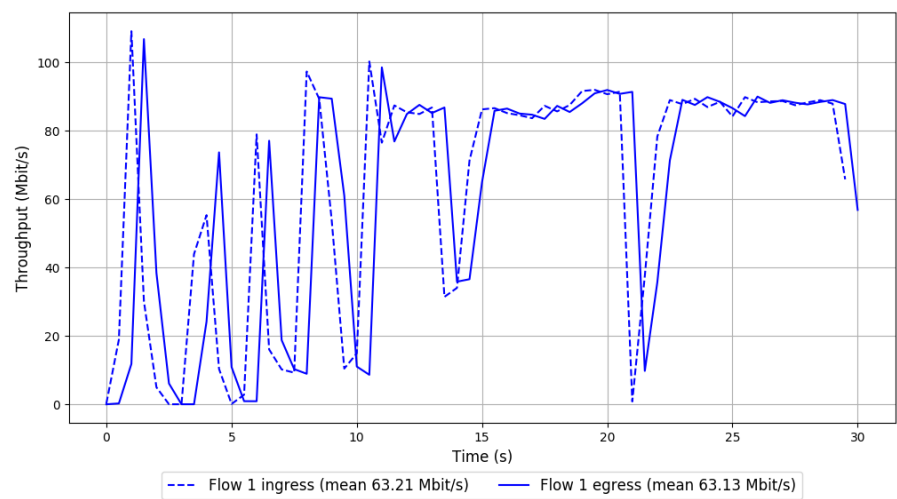
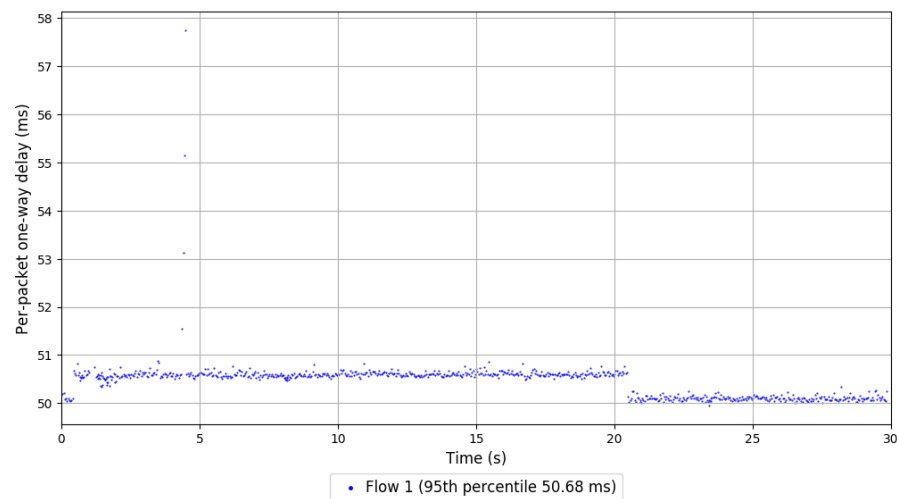# Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-06-01 16:57:35
End at: 2018-06-01 16:58:05
Local clock offset: -0.454 ms
Remote clock offset: 0.07 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.684 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.684 ms
Loss rate: 0.38%
```
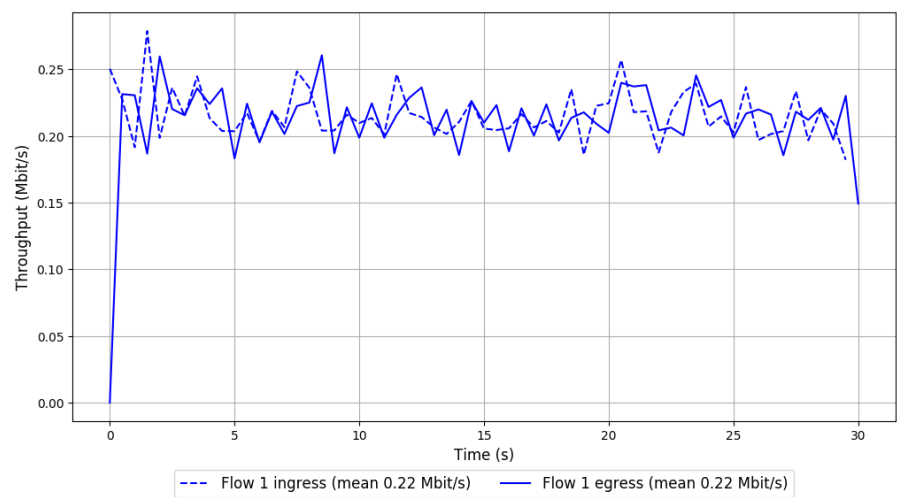
Run 1: Report of SCReAM — Data Link

```
Run 2: Statistics of SCReAM

Start at: 2018-06-01 17:17:14
End at: 2018-06-01 17:17:44
Local clock offset: -0.376 ms
Remote clock offset: -0.066 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.430 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.430 ms
Loss rate: 0.38%
```
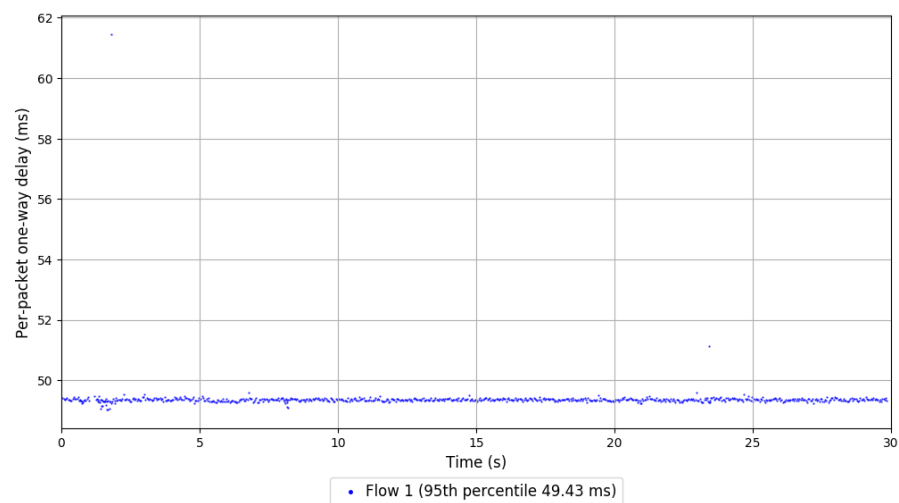
Run 2: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 49.43 ms)

187

```
Run 3: Statistics of SCReAM

Start at: 2018-06-01 17:37:18
End at: 2018-06-01 17:37:48
Local clock offset: 0.055 ms
Remote clock offset: -0.104 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.058 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.058 ms
Loss rate: 0.26%
```

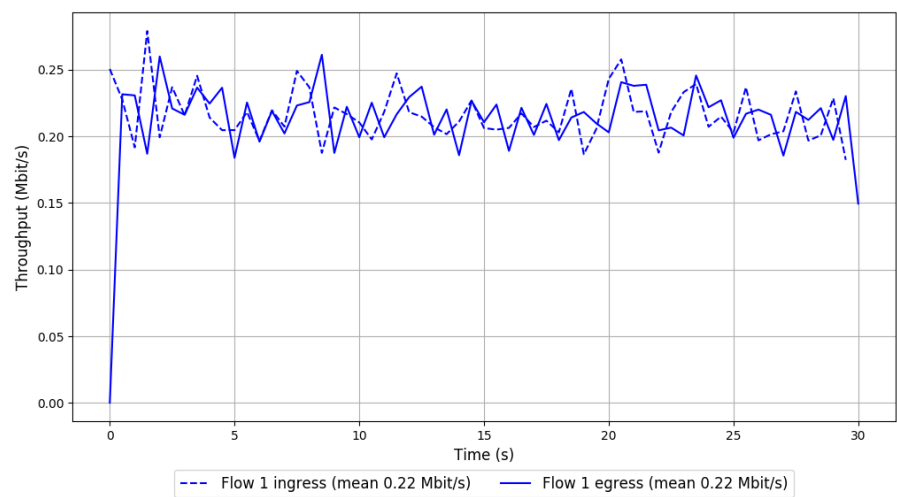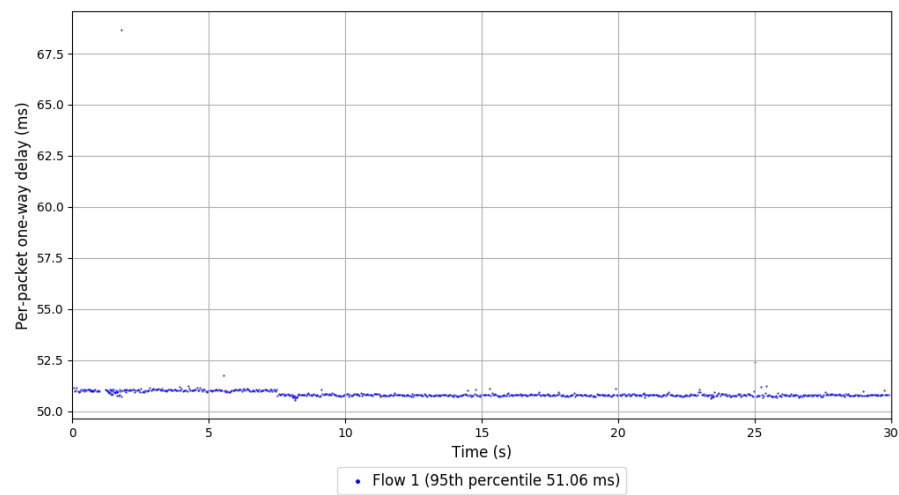## Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-06-01 17:57:33
End at: 2018-06-01 17:58:03
Local clock offset: -0.099 ms
Remote clock offset: -0.095 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.038 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.038 ms
Loss rate: 0.38%
```
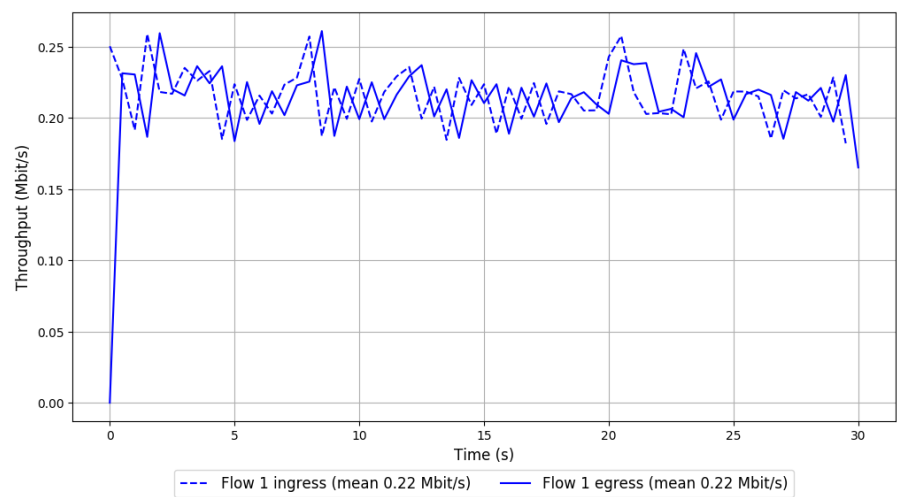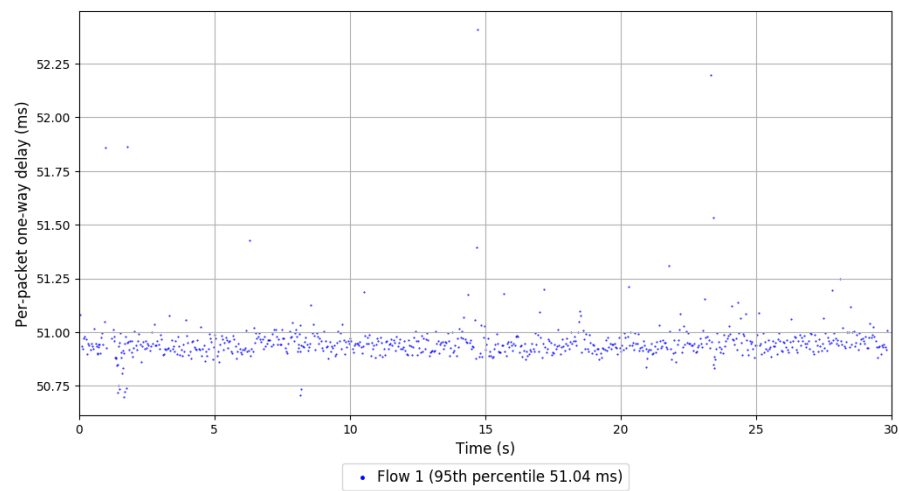
Run 4: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 51.04 ms)

```
Run 5: Statistics of SCReAM

Start at: 2018-06-01 18:17:52
End at: 2018-06-01 18:18:22
Local clock offset: -0.087 ms
Remote clock offset: -0.039 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.781 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.781 ms
Loss rate: 0.26%
```
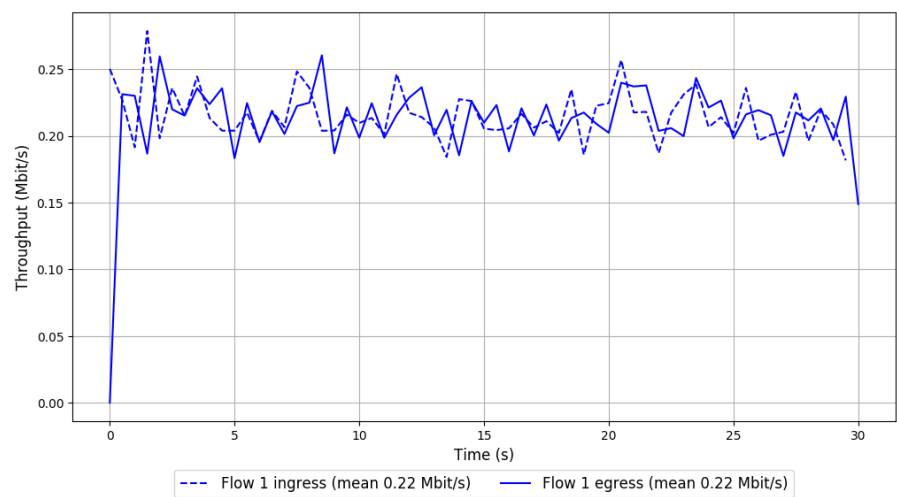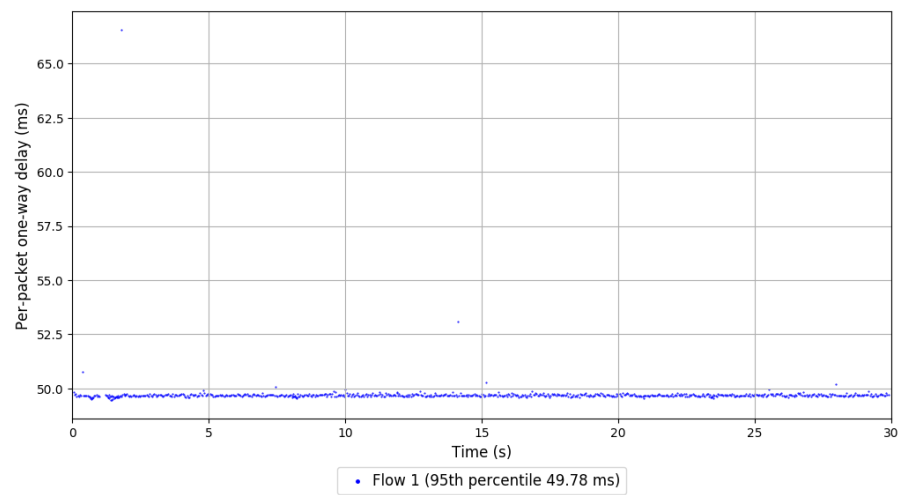
Run 5: Report of SCReAM — Data Link

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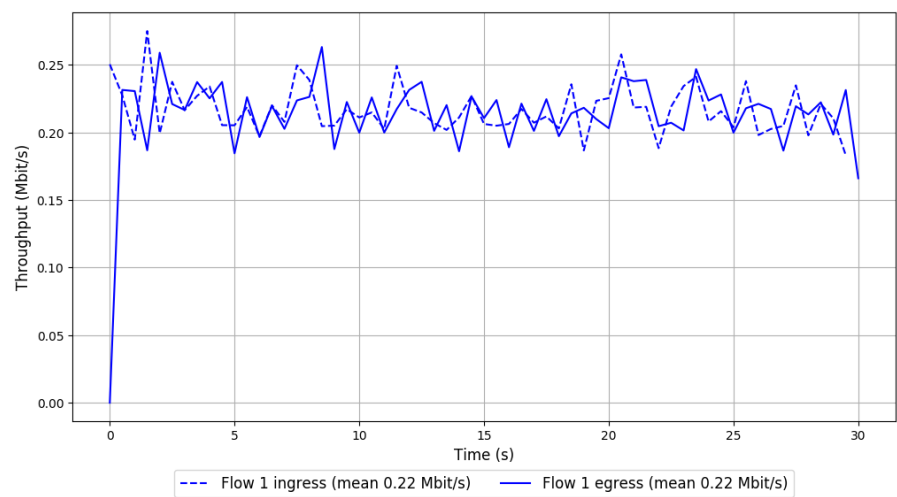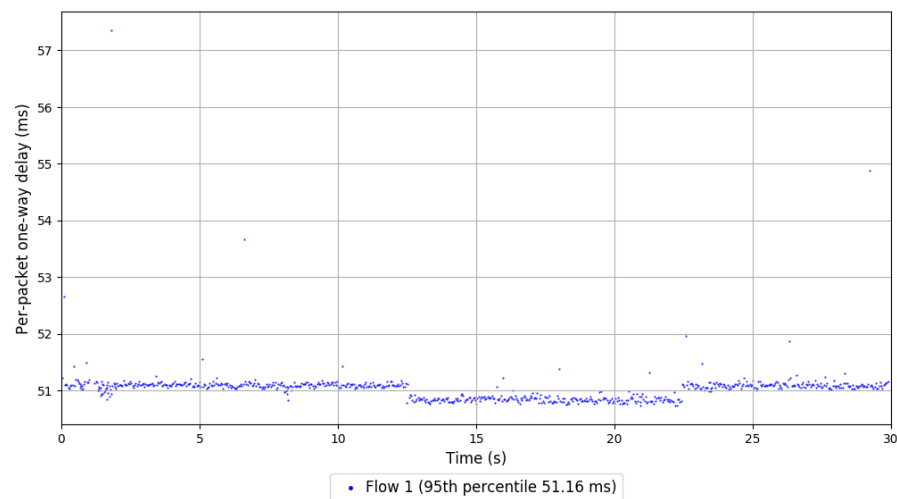

Flow 1 (95th percentile 49.78 ms)

```
Run 6: Statistics of SCReAM

Start at: 2018-06-01 18:38:03
End at: 2018-06-01 18:38:33
Local clock offset: -0.05 ms
Remote clock offset: -0.054 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.160 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.160 ms
Loss rate: 0.26%
```

Run 6: Report of SCReAM — Data Link

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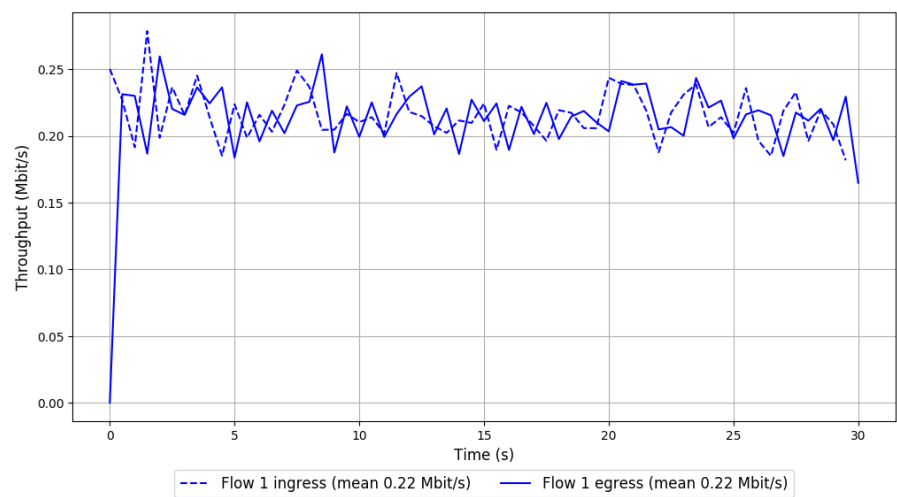
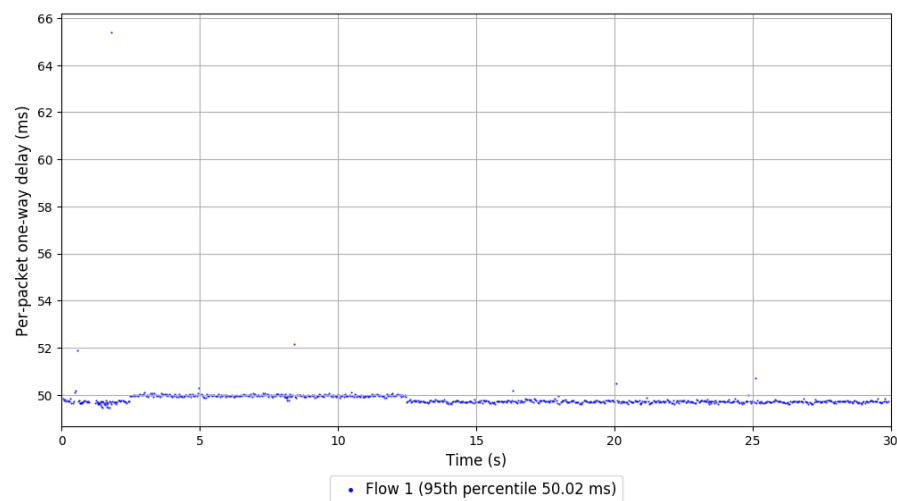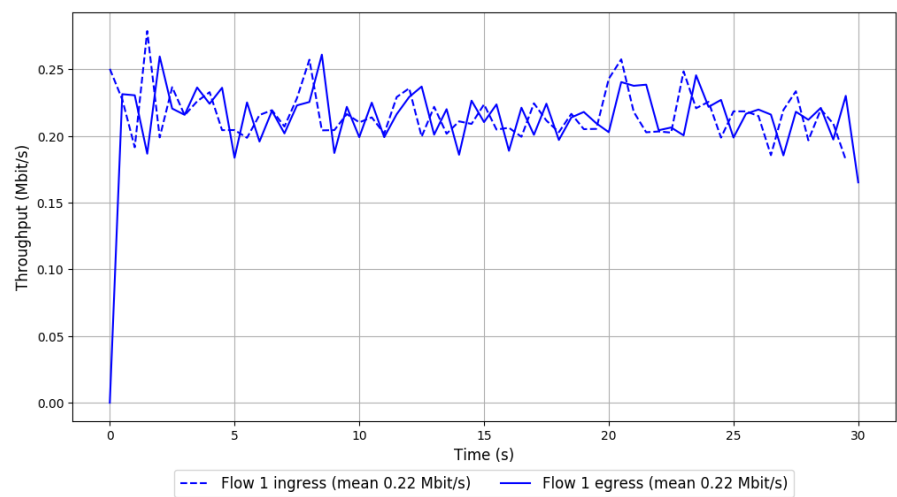

• Flow 1 (95th percentile 51.16 ms)

```
Run 7: Statistics of SCReAM

Start at: 2018-06-01 18:58:23
End at: 2018-06-01 18:58:53
Local clock offset: -0.069 ms
Remote clock offset: -0.017 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.024 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.024 ms
Loss rate: 0.26%
```

Run 7: Report of SCReAM — Data Link

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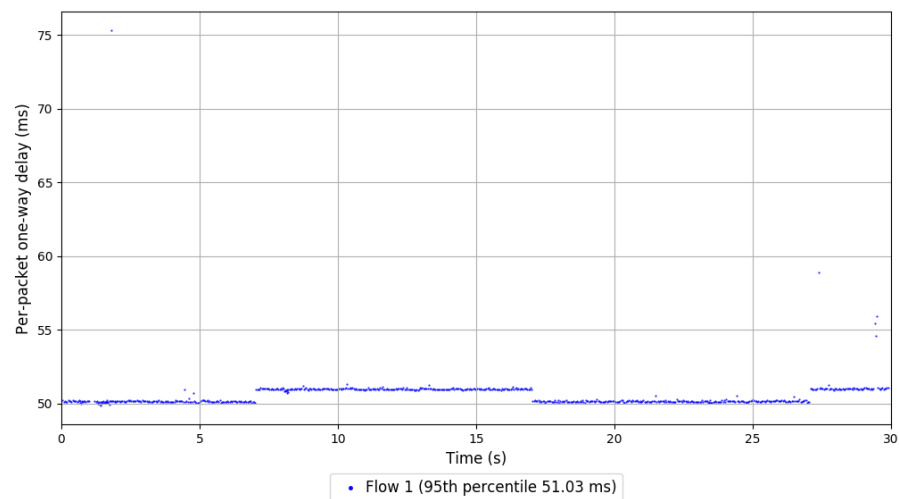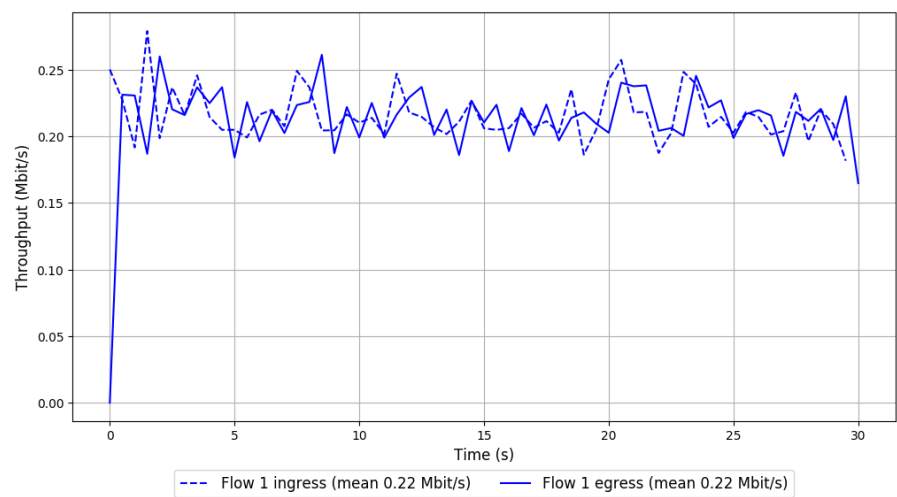

Flow 1 (95th percentile 50.02 ms)

```
Run 8: Statistics of SCReAM

Start at: 2018-06-01 19:18:38
End at: 2018-06-01 19:19:08
Local clock offset: -0.053 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.033 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.033 ms
Loss rate: 0.26%
```

Run 8: Report of SCReAM — Data Link

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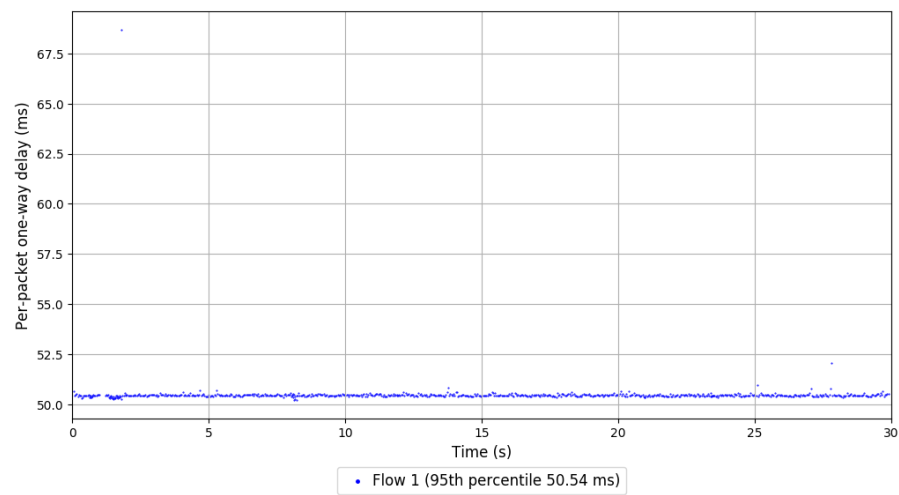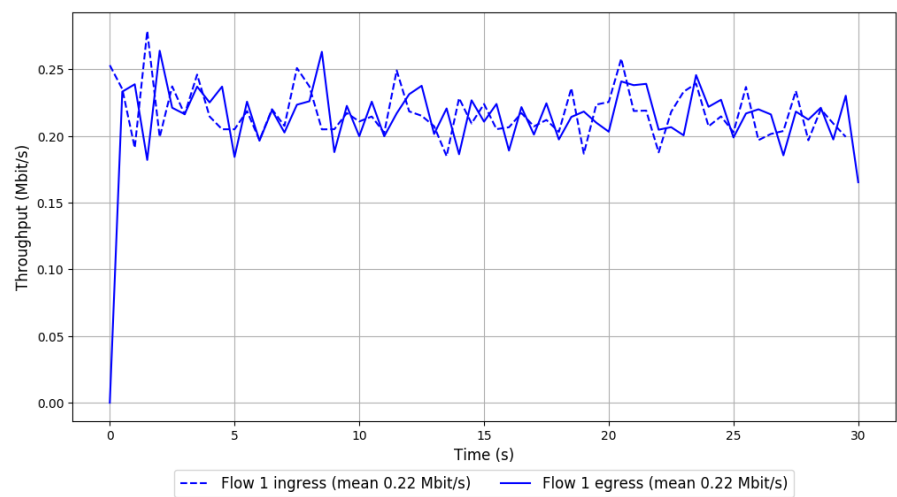

Flow 1 (95th percentile 51.03 ms)

```
Run 9: Statistics of SCReAM

Start at: 2018-06-01 19:39:03
End at: 2018-06-01 19:39:33
Local clock offset: -0.167 ms
Remote clock offset: -0.058 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.539 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.539 ms
Loss rate: 0.39%
```

Run 9: Report of SCReAM — Data Link

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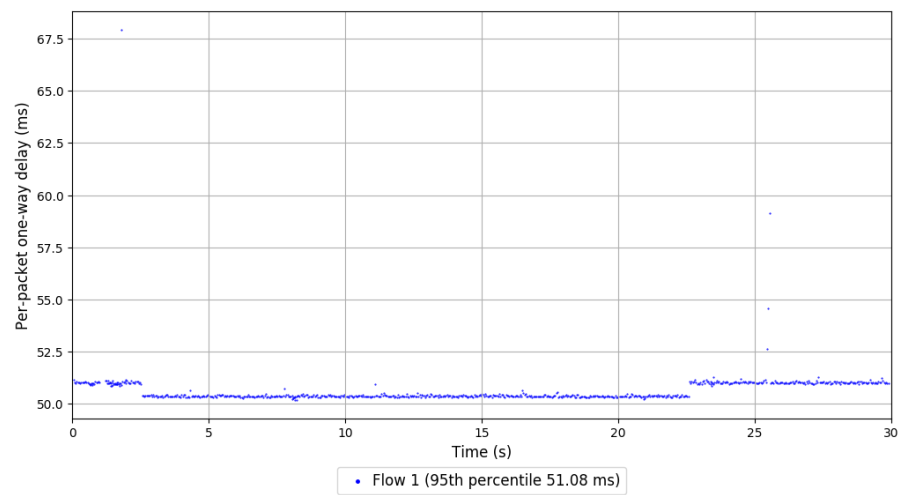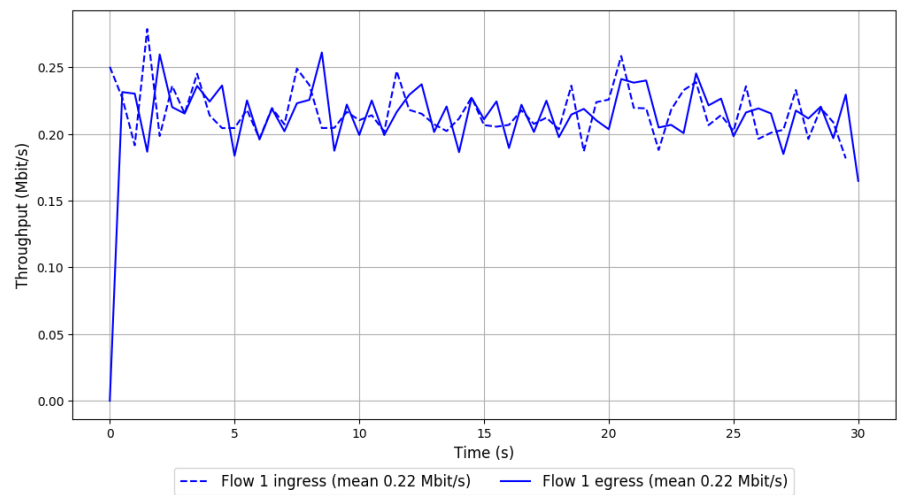

Flow 1 (95th percentile 50.54 ms)

```
Run 10: Statistics of SCReAM

Start at: 2018-06-01 19:59:13
End at: 2018-06-01 19:59:43
Local clock offset: -0.205 ms
Remote clock offset: -0.017 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.078 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.078 ms
Loss rate: 0.26%
```

Run 10: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 51.08 ms)

```
Run 1: Statistics of Sprout

Start at: 2018-06-01 16:59:57
End at: 2018-06-01 17:00:27
Local clock offset: -0.056 ms
Remote clock offset: 0.096 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 51.575 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 51.575 ms
Loss rate: 0.41%
```
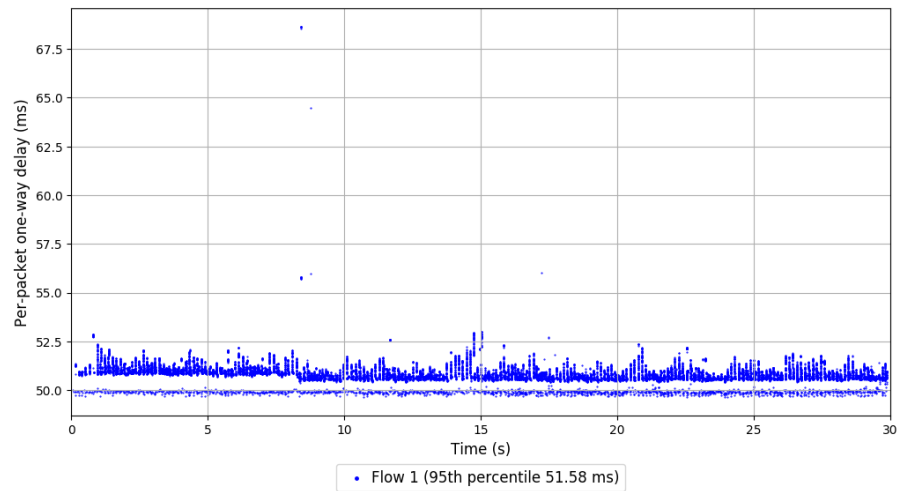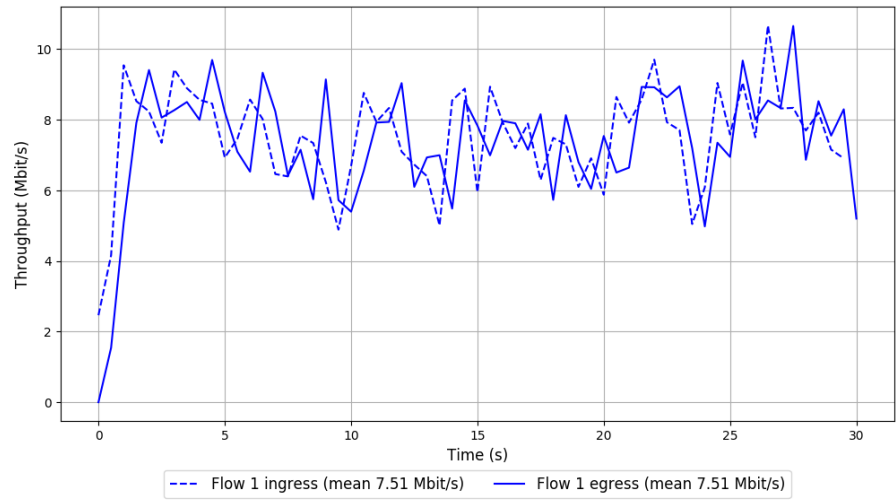
Run 1: Report of Sprout — Data Link

Flow 1 ingress (mean 7.51 Mbit/s) --- Flow 1 egress (mean 7.51 Mbit/s)
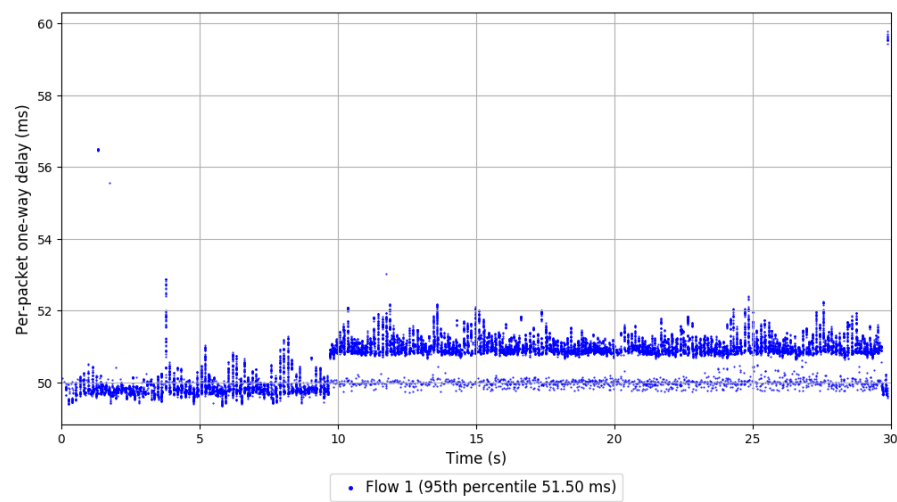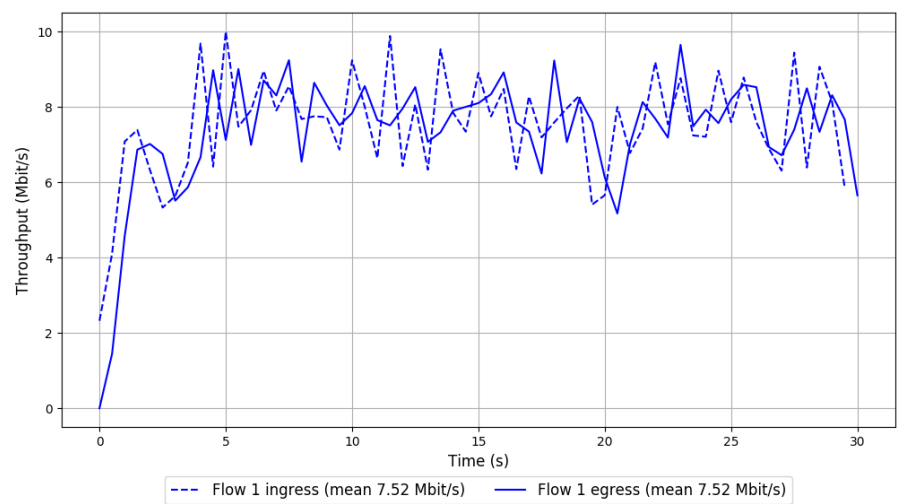
Flow 1 (95th percentile 51.58 ms)

```
Run 2: Statistics of Sprout

Start at: 2018-06-01 17:19:36
End at: 2018-06-01 17:20:06
Local clock offset: 0.003 ms
Remote clock offset: -0.039 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 51.499 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 51.499 ms
Loss rate: 0.31%
```

Run 2: Report of Sprout — Data Link

Flow 1 ingress (mean 7.52 Mbit/s)   Flow 1 egress (mean 7.52 Mbit/s)

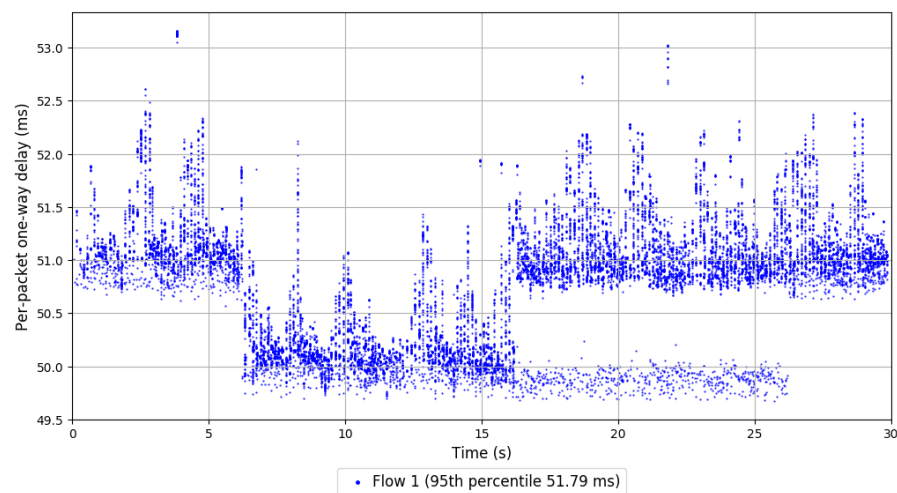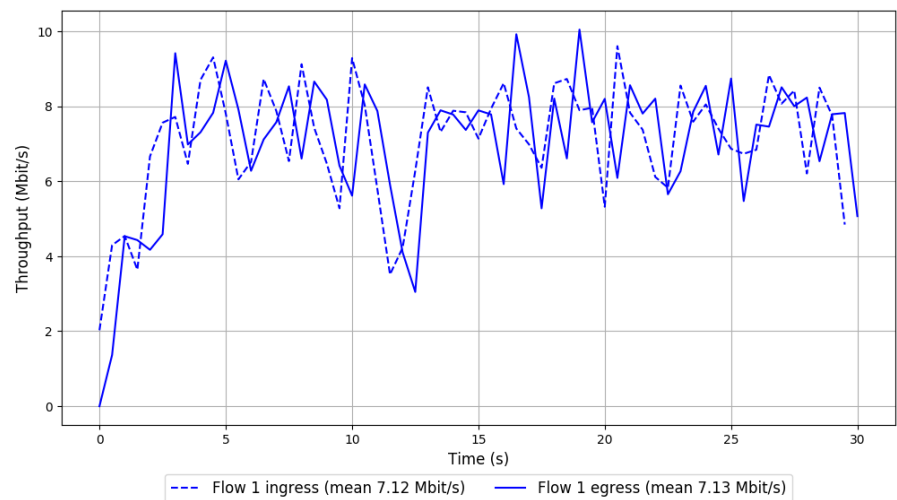Flow 1 (95th percentile 51.50 ms)

207

```
Run 3: Statistics of Sprout

Start at: 2018-06-01 17:39:39
End at: 2018-06-01 17:40:09
Local clock offset: 0.041 ms
Remote clock offset: -0.088 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 51.790 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 51.790 ms
Loss rate: 0.16%
```
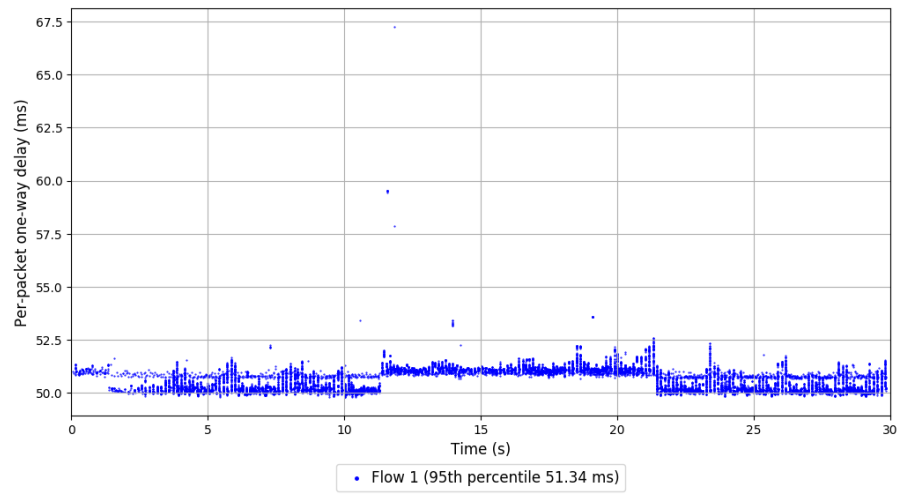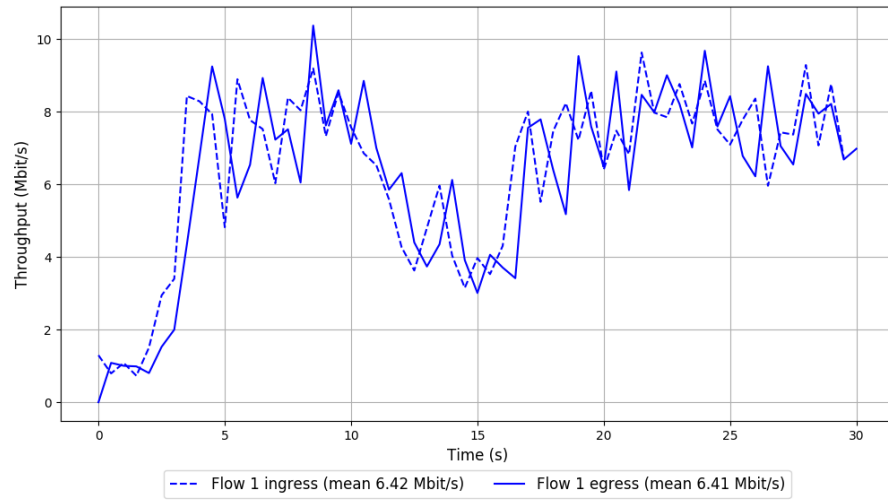
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-06-01 17:59:54
End at: 2018-06-01 18:00:24
Local clock offset: -0.067 ms
Remote clock offset: -0.105 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 51.345 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 51.345 ms
Loss rate: 0.53%
```

Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 6.42 Mbit/s)   Flow 1 egress (mean 6.41 Mbit/s)
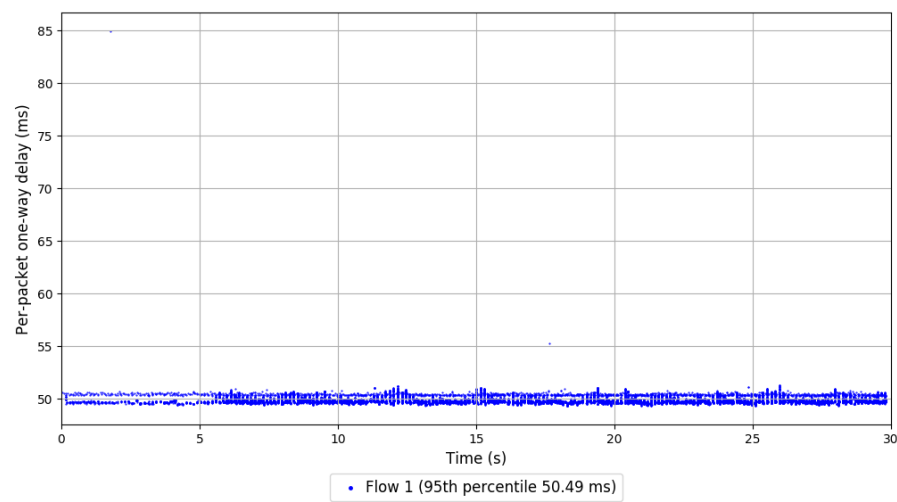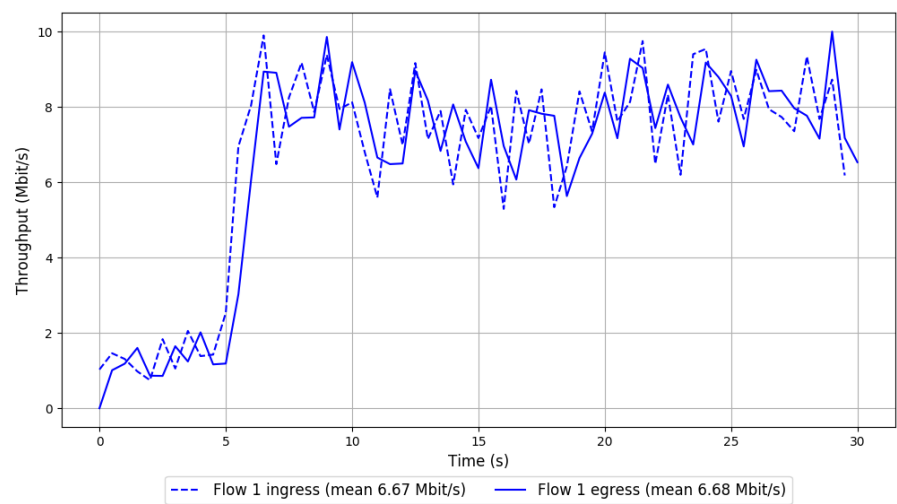

Flow 1 (95th percentile 51.34 ms)

```
Run 5: Statistics of Sprout

Start at: 2018-06-01 18:20:13
End at: 2018-06-01 18:20:43
Local clock offset: -0.471 ms
Remote clock offset: -0.064 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 50.492 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 50.492 ms
Loss rate: 0.30%
```

Run 5: Report of Sprout — Data Link

Flow 1 ingress (mean 6.67 Mbit/s) --- Flow 1 egress (mean 6.68 Mbit/s)

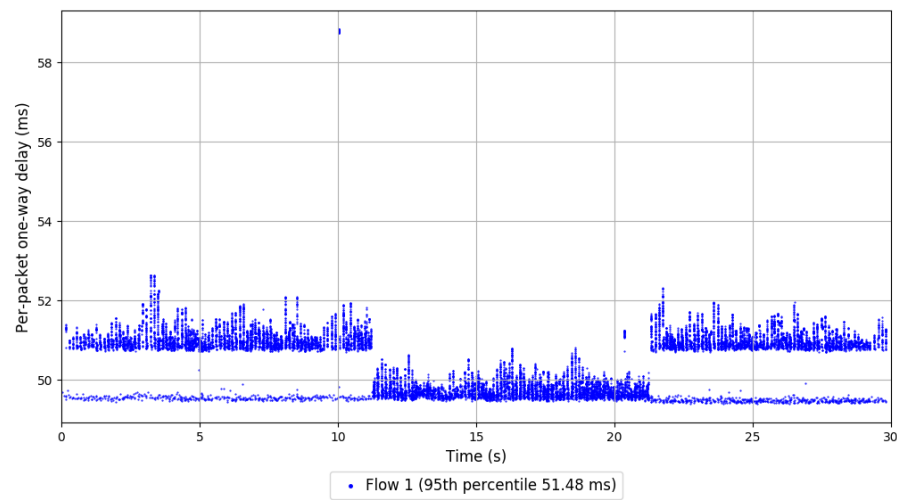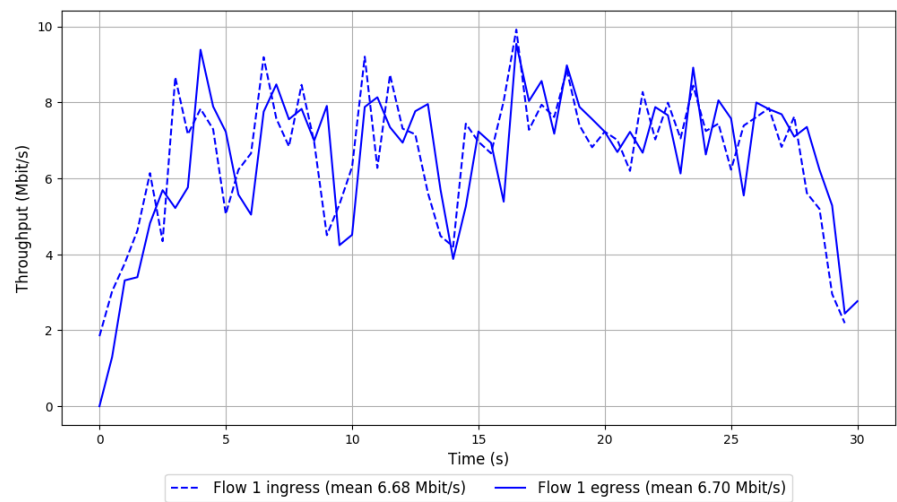

• Flow 1 (95th percentile 50.49 ms)

```
Run 6: Statistics of Sprout

Start at: 2018-06-01 18:40:24
End at: 2018-06-01 18:40:54
Local clock offset: -0.04 ms
Remote clock offset: -0.018 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 51.483 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 51.483 ms
Loss rate: 0.03%
```

Run 6: Report of Sprout — Data Link

Flow 1 ingress (mean 6.68 Mbit/s)   Flow 1 egress (mean 6.70 Mbit/s)
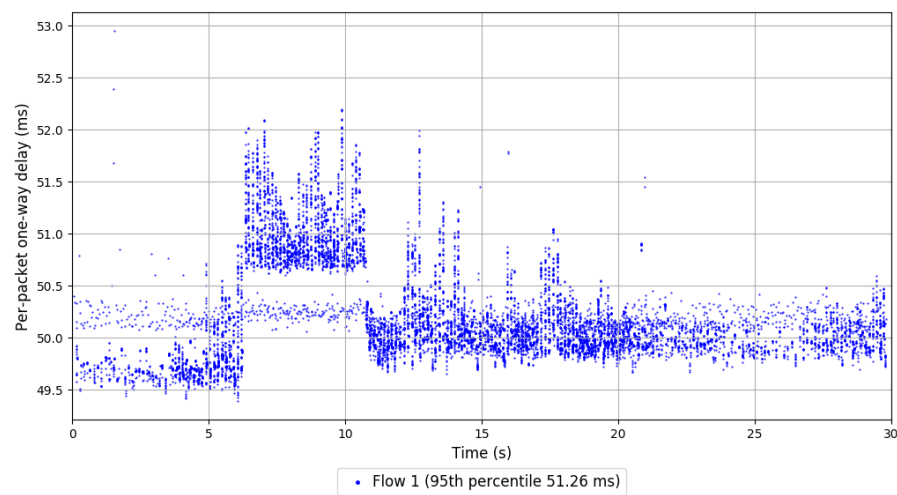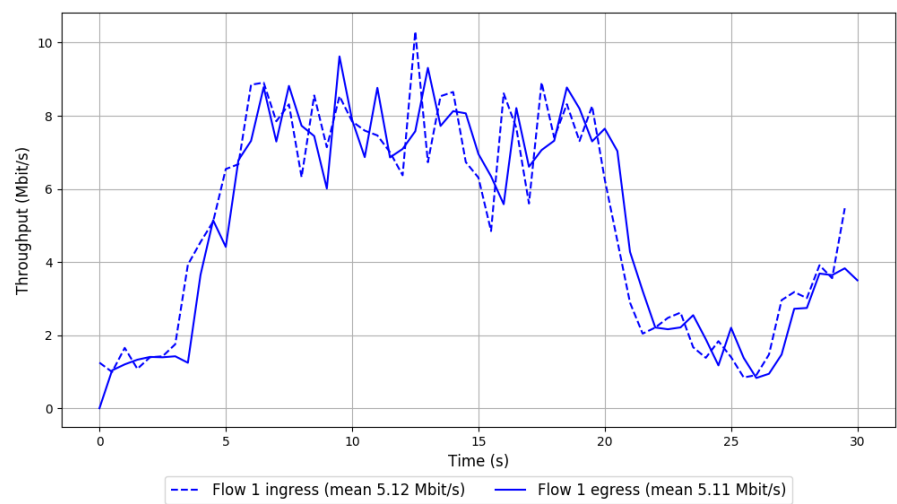

Flow 1 (95th percentile 51.48 ms)

```
Run 7: Statistics of Sprout

Start at: 2018-06-01 19:00:45
End at: 2018-06-01 19:01:15
Local clock offset: -0.123 ms
Remote clock offset: -0.014 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.11 Mbit/s
95th percentile per-packet one-way delay: 51.259 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 5.11 Mbit/s
95th percentile per-packet one-way delay: 51.259 ms
Loss rate: 0.65%
```

Run 7: Report of Sprout — Data Link

Flow 1 ingress (mean 5.12 Mbit/s)   Flow 1 egress (mean 5.11 Mbit/s)

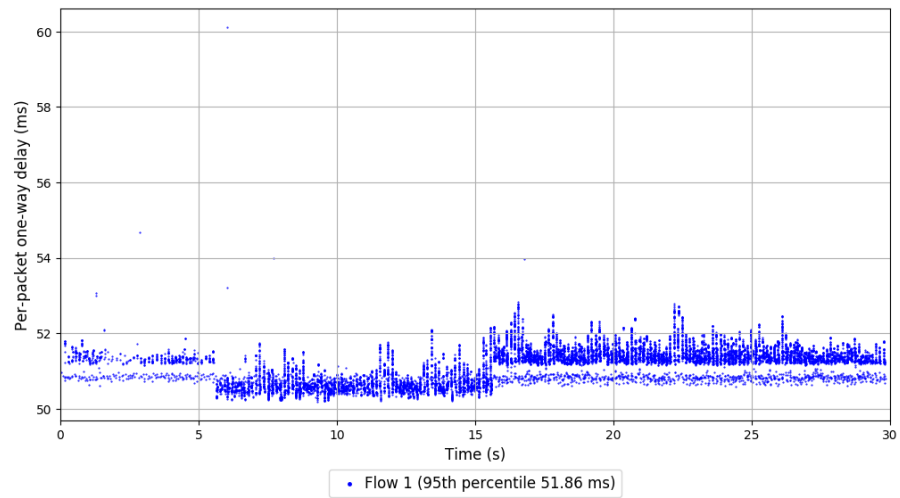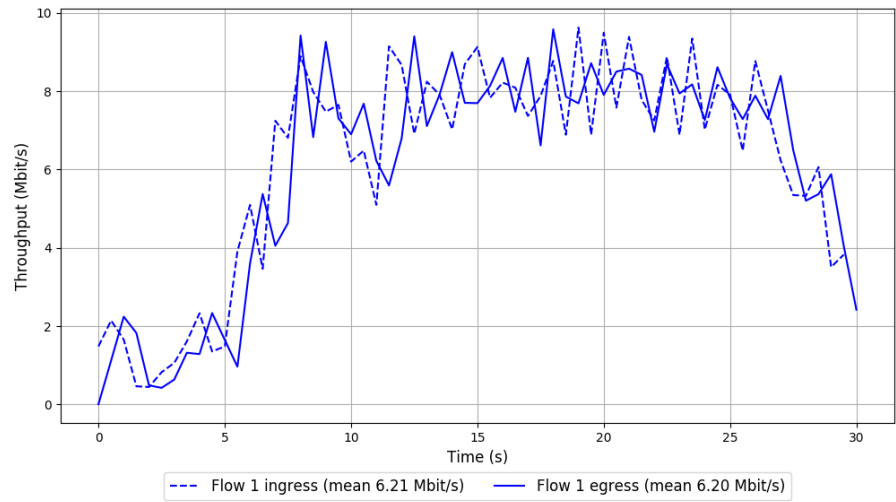Flow 1 (95th percentile 51.26 ms)

```
Run 8: Statistics of Sprout

Start at: 2018-06-01 19:21:00
End at: 2018-06-01 19:21:30
Local clock offset: 0.368 ms
Remote clock offset: -0.024 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.20 Mbit/s
95th percentile per-packet one-way delay: 51.859 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 6.20 Mbit/s
95th percentile per-packet one-way delay: 51.859 ms
Loss rate: 0.42%
```
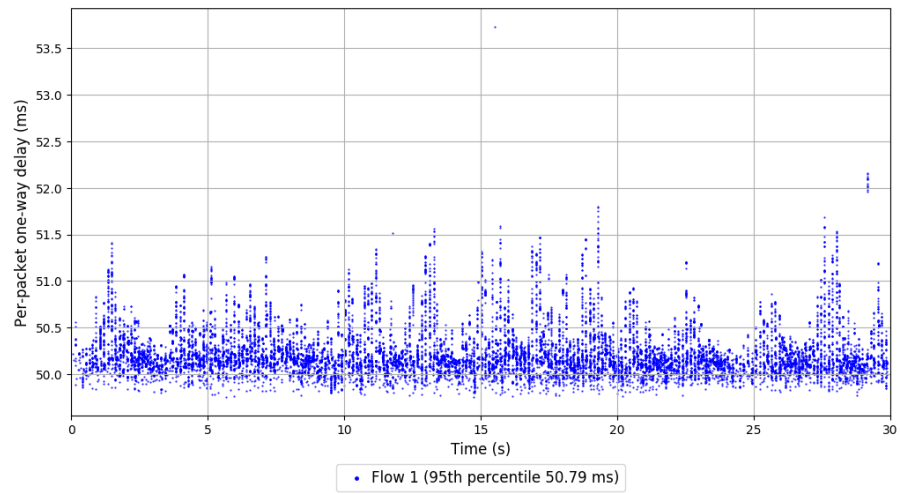
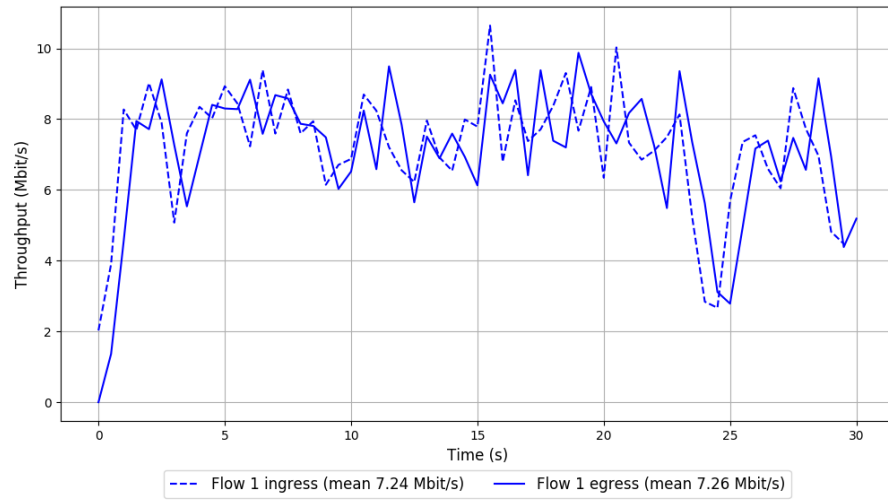## Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-06-01 19:41:24
End at: 2018-06-01 19:41:54
Local clock offset: -0.568 ms
Remote clock offset: -0.022 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.26 Mbit/s
95th percentile per-packet one-way delay: 50.791 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 7.26 Mbit/s
95th percentile per-packet one-way delay: 50.791 ms
Loss rate: 0.15%
```

Run 9: Report of Sprout — Data Link

Flow 1 ingress (mean 7.24 Mbit/s)   Flow 1 egress (mean 7.26 Mbit/s)

Flow 1 (95th percentile 50.79 ms)

```
Run 10: Statistics of Sprout

Start at: 2018-06-01 20:01:34
End at: 2018-06-01 20:02:04
Local clock offset: -0.148 ms
Remote clock offset: 0.044 ms


# Below is generated by plot.py at 2018-06-01 21:32:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 51.283 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 51.283 ms
Loss rate: 0.28%
```
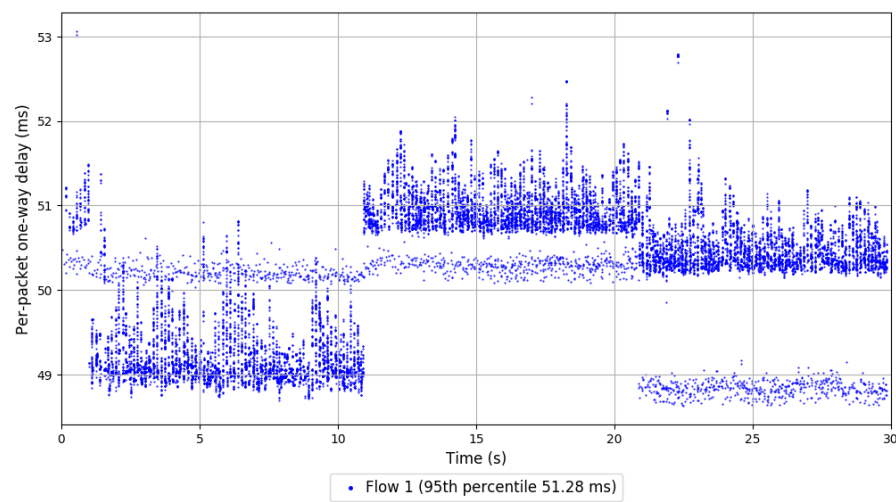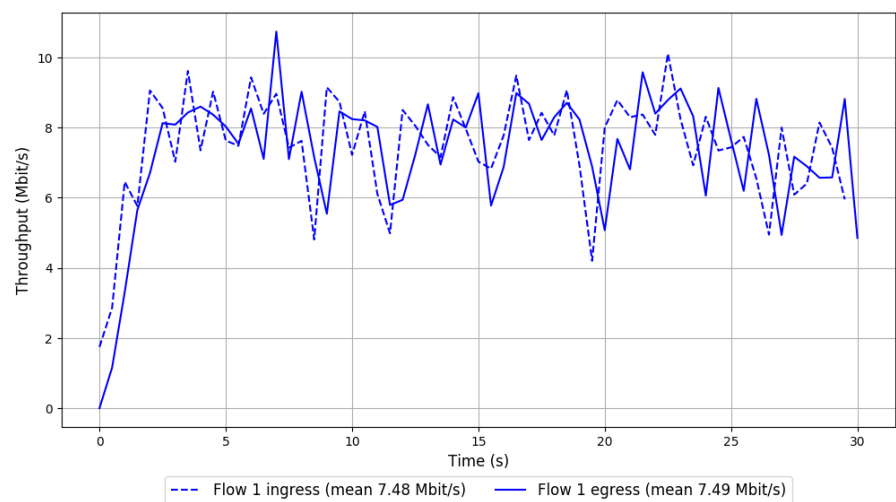
Run 10: Report of Sprout — Data Link

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

Start at: 2018-06-01 17:15:50
End at: 2018-06-01 17:16:20
Local clock offset: 0.023 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2018-06-01 21:37:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.04 Mbit/s
95th percentile per-packet one-way delay: 50.942 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 222.04 Mbit/s
95th percentile per-packet one-way delay: 50.942 ms
Loss rate: 0.41%
```
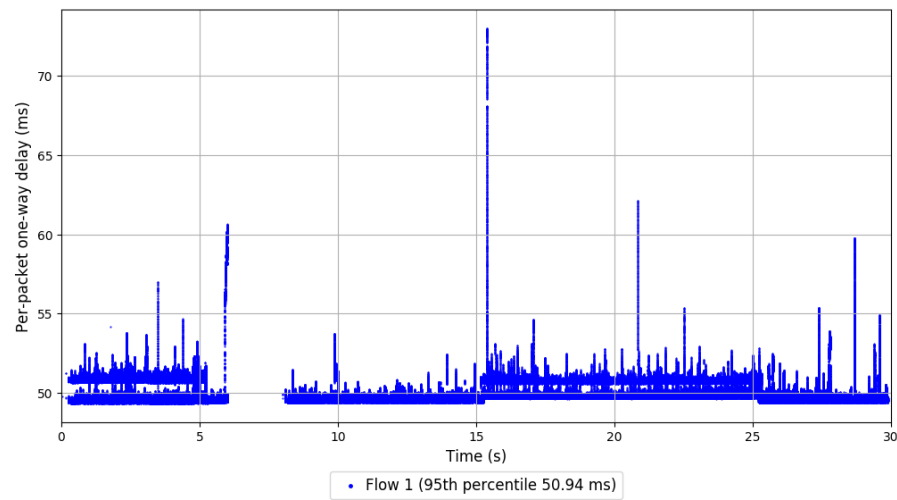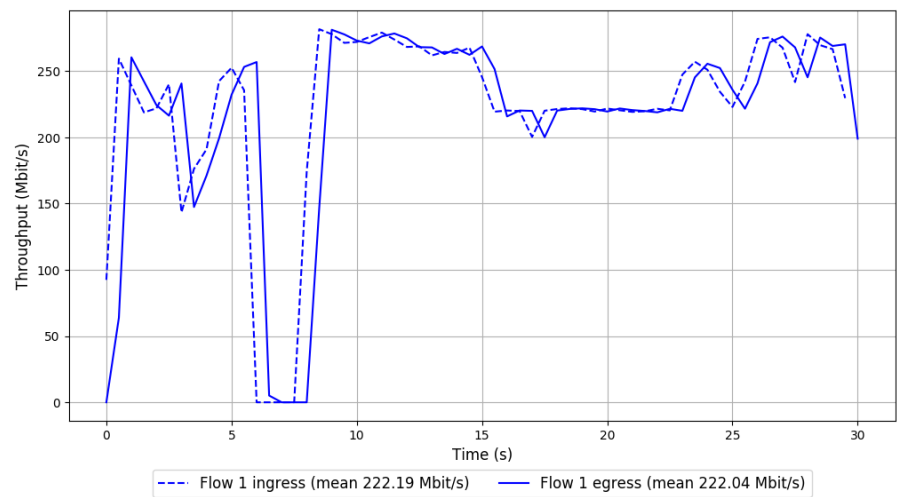
Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 222.19 Mbit/s) — — —   Flow 1 egress (mean 222.04 Mbit/s) ———

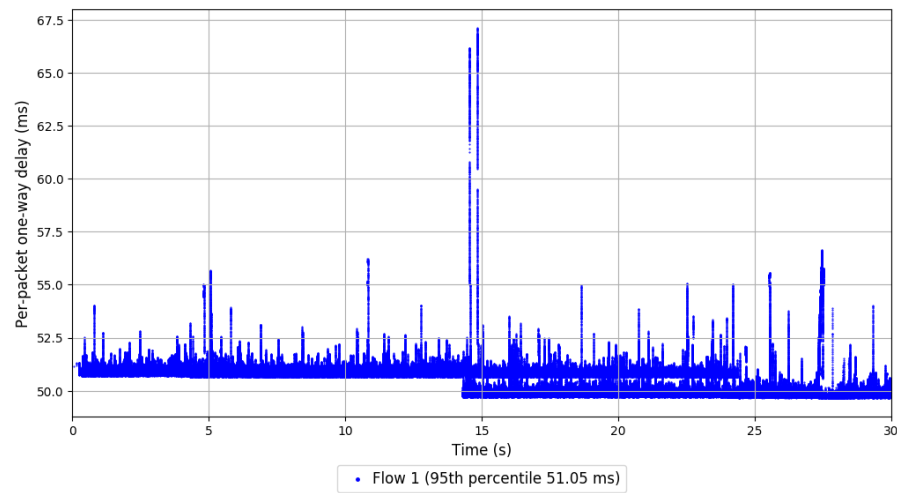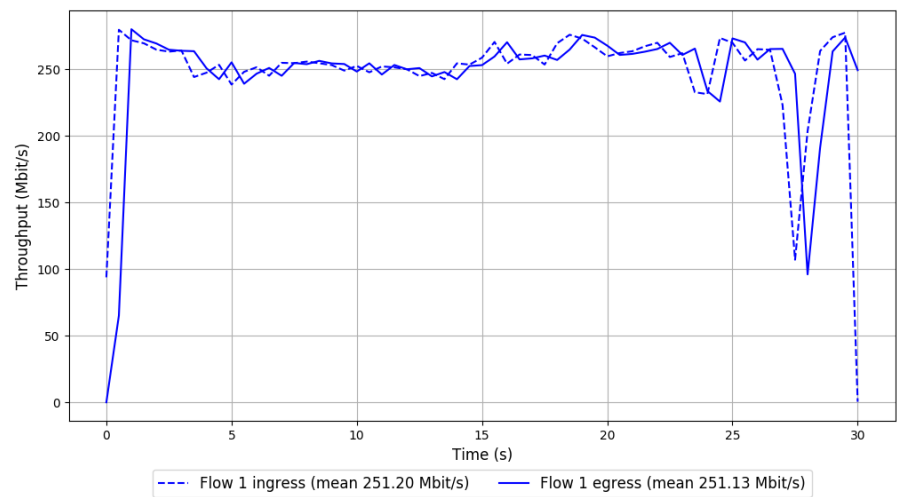• Flow 1 (95th percentile 50.94 ms)

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

Start at: 2018-06-01 17:35:51
End at: 2018-06-01 17:36:21
Local clock offset: 0.075 ms
Remote clock offset: -0.132 ms


# Below is generated by plot.py at 2018-06-01 21:39:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 251.13 Mbit/s
95th percentile per-packet one-way delay: 51.050 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 251.13 Mbit/s
95th percentile per-packet one-way delay: 51.050 ms
Loss rate: 0.37%
```

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

Flow 1 ingress (mean 251.20 Mbit/s) --- Flow 1 egress (mean 251.13 Mbit/s)
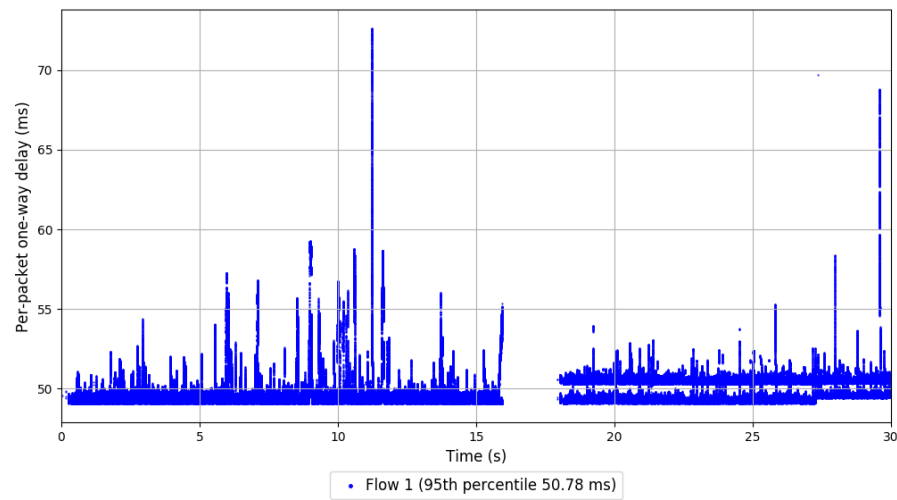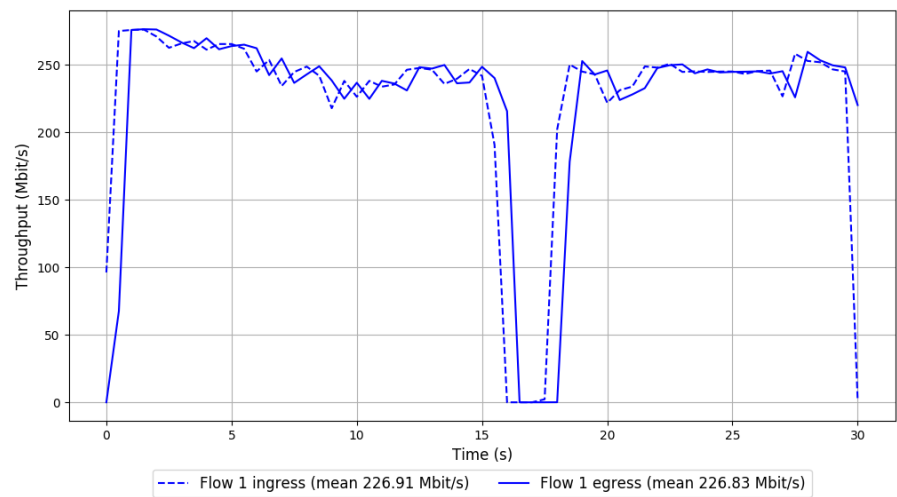

Flow 1 (95th percentile 51.05 ms)

227

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

Start at: 2018-06-01 17:56:08
End at: 2018-06-01 17:56:38
Local clock offset: -0.451 ms
Remote clock offset: -0.081 ms


# Below is generated by plot.py at 2018-06-01 21:39:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.83 Mbit/s
95th percentile per-packet one-way delay: 50.776 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 226.83 Mbit/s
95th percentile per-packet one-way delay: 50.776 ms
Loss rate: 0.38%
```
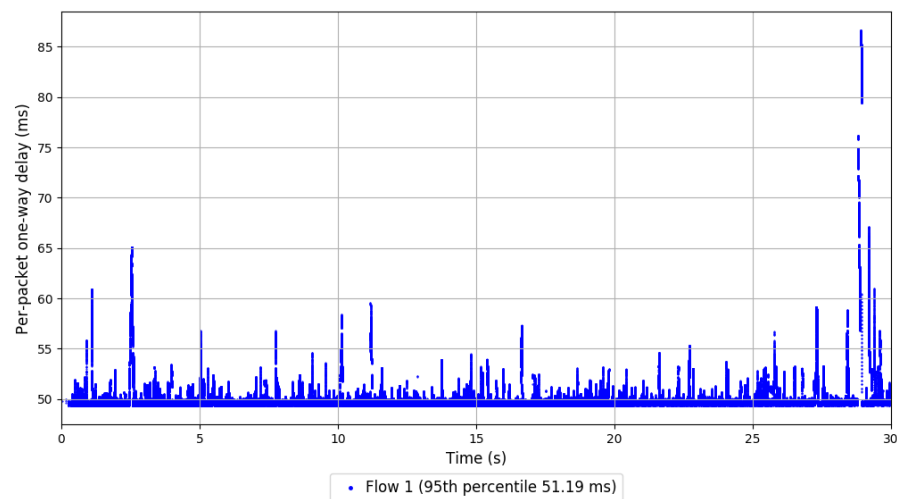
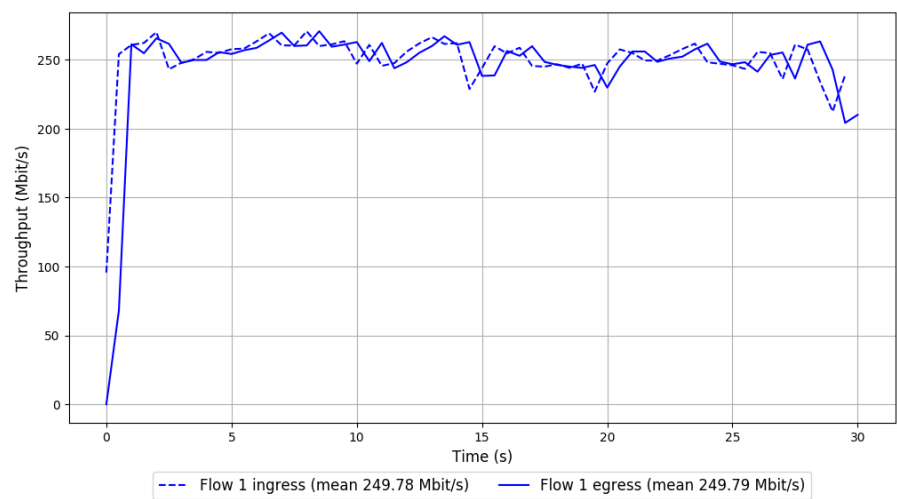# Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-01 18:16:25
End at: 2018-06-01 18:16:55
Local clock offset: -0.133 ms
Remote clock offset: -0.071 ms


# Below is generated by plot.py at 2018-06-01 21:39:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 249.79 Mbit/s
95th percentile per-packet one-way delay: 51.188 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 249.79 Mbit/s
95th percentile per-packet one-way delay: 51.188 ms
Loss rate: 0.33%
```

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

Flow 1 ingress (mean 249.78 Mbit/s) — Flow 1 egress (mean 249.79 Mbit/s)

• Flow 1 (95th percentile 51.19 ms)

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

Start at: 2018-06-01 18:36:37
End at: 2018-06-01 18:37:07
Local clock offset: -0.017 ms
Remote clock offset: 0.012 ms


# Below is generated by plot.py at 2018-06-01 21:39:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 241.54 Mbit/s
95th percentile per-packet one-way delay: 51.038 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 241.54 Mbit/s
95th percentile per-packet one-way delay: 51.038 ms
Loss rate: 0.30%
```
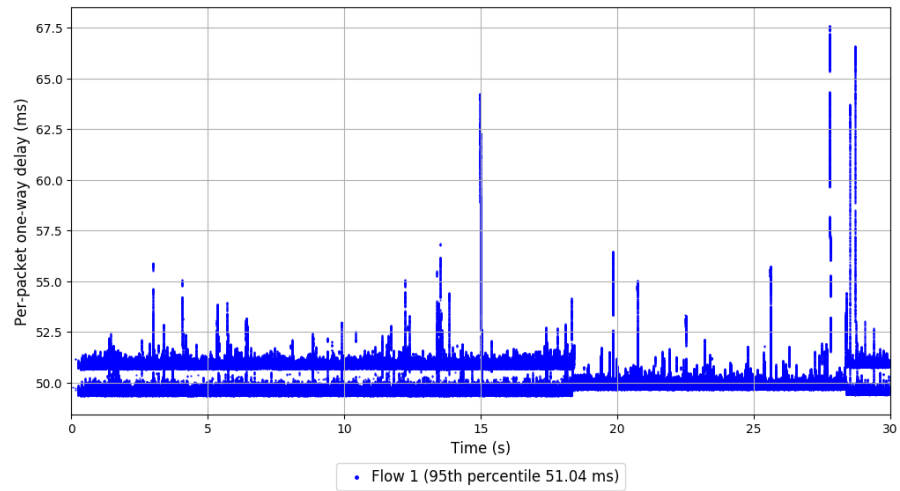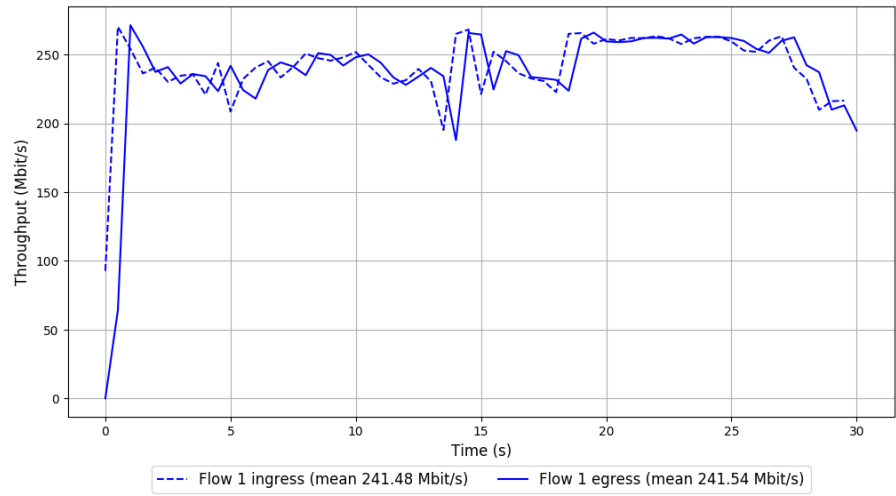
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 241.48 Mbit/s)   Flow 1 egress (mean 241.54 Mbit/s)

Flow 1 (95th percentile 51.04 ms)

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

Start at: 2018-06-01 18:56:57
End at: 2018-06-01 18:57:27
Local clock offset: -0.002 ms
Remote clock offset: 0.017 ms


# Below is generated by plot.py at 2018-06-01 21:39:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 242.60 Mbit/s
95th percentile per-packet one-way delay: 50.913 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 242.60 Mbit/s
95th percentile per-packet one-way delay: 50.913 ms
Loss rate: 0.38%
```
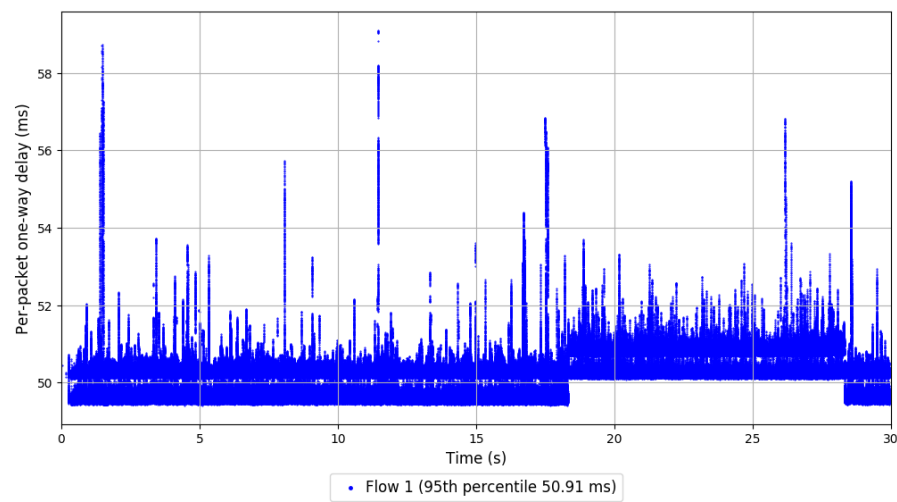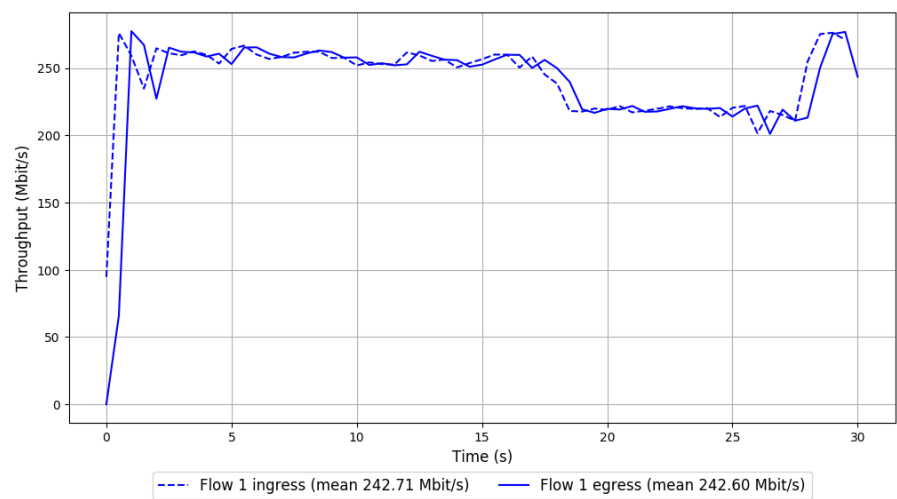
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 242.71 Mbit/s) — — —   Flow 1 egress (mean 242.60 Mbit/s) ——————

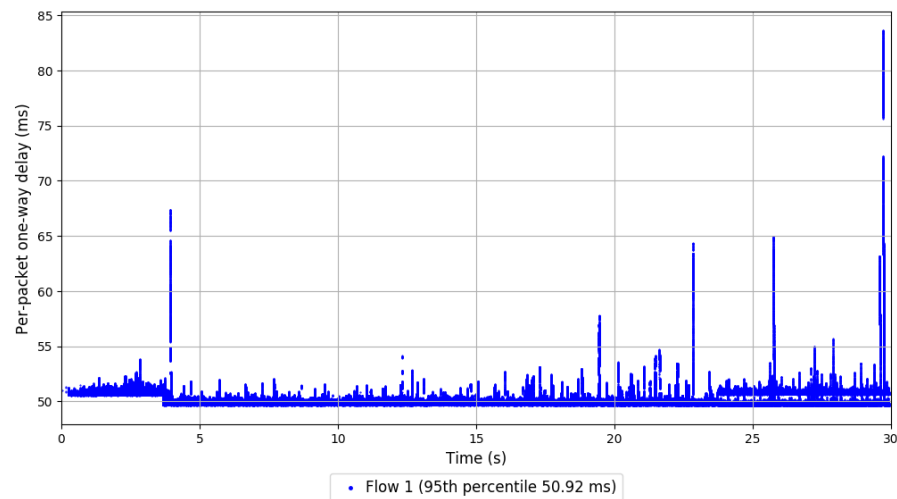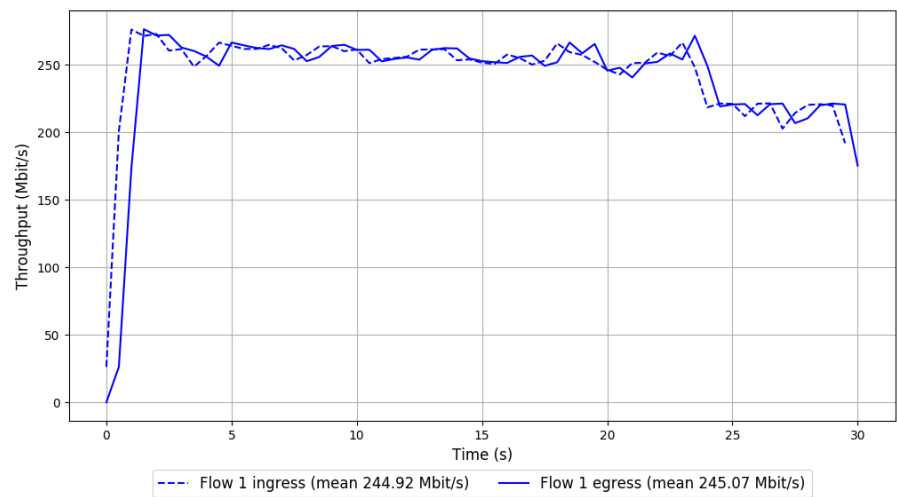• Flow 1 (95th percentile 50.91 ms)

235

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

Start at: 2018-06-01 19:17:12
End at: 2018-06-01 19:17:42
Local clock offset: -0.09 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2018-06-01 21:39:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 245.07 Mbit/s
95th percentile per-packet one-way delay: 50.920 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 245.07 Mbit/s
95th percentile per-packet one-way delay: 50.920 ms
Loss rate: 0.26%
```

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

Flow 1 ingress (mean 244.92 Mbit/s) — — —   Flow 1 egress (mean 245.07 Mbit/s) ———

Flow 1 (95th percentile 50.92 ms)

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

Start at: 2018-06-01 19:37:37
End at: 2018-06-01 19:38:07
Local clock offset: -0.195 ms
Remote clock offset: 0.031 ms


# Below is generated by plot.py at 2018-06-01 21:41:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 243.07 Mbit/s
95th percentile per-packet one-way delay: 50.517 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 243.07 Mbit/s
95th percentile per-packet one-way delay: 50.517 ms
Loss rate: 0.33%
```
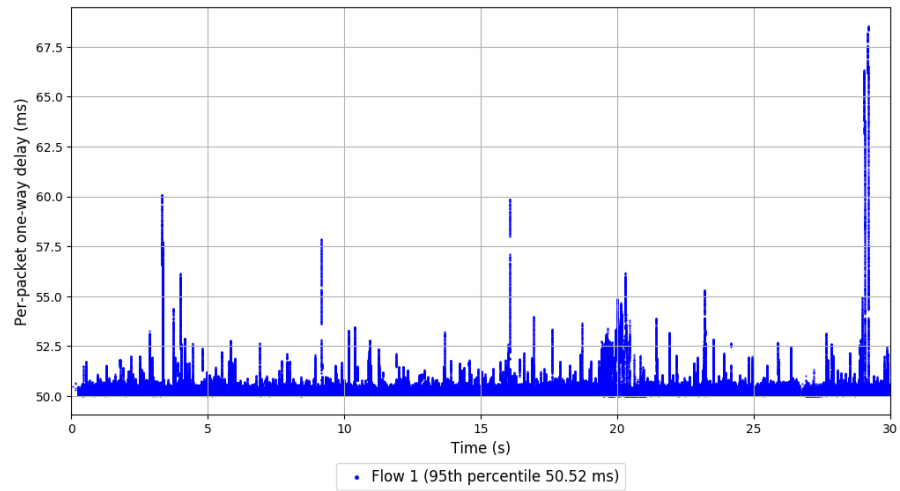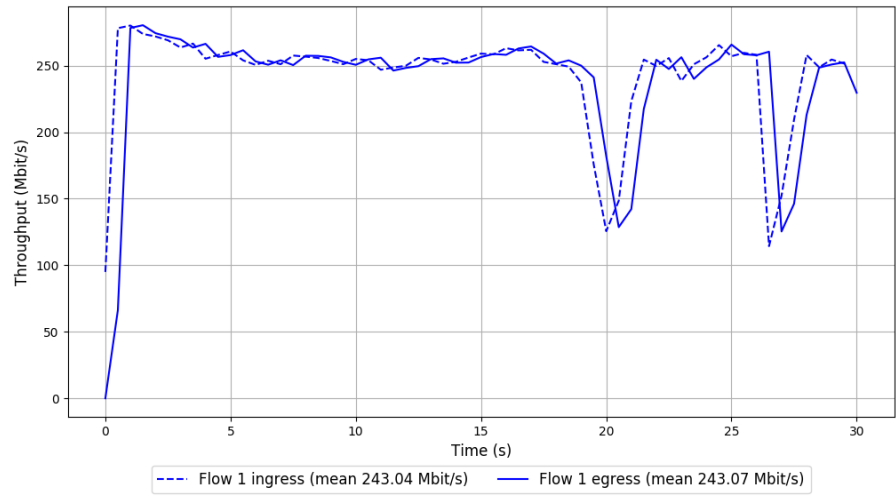
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 243.04 Mbit/s) --- Flow 1 egress (mean 243.07 Mbit/s)
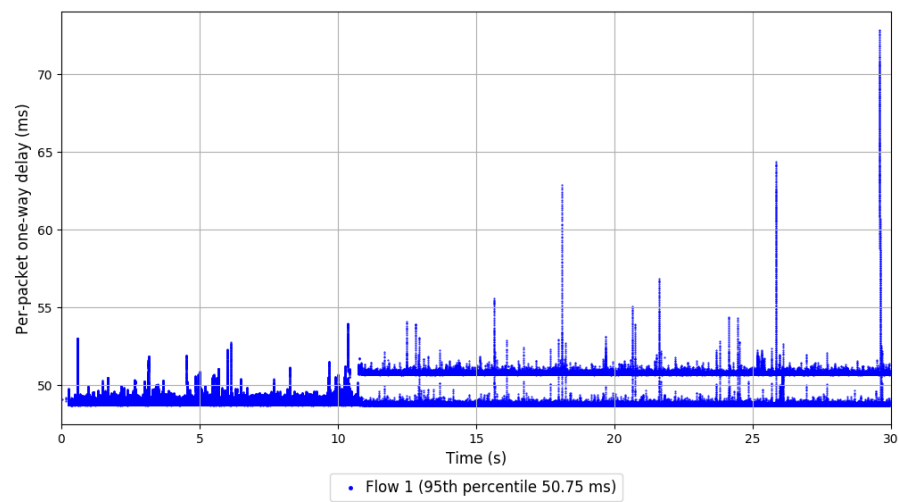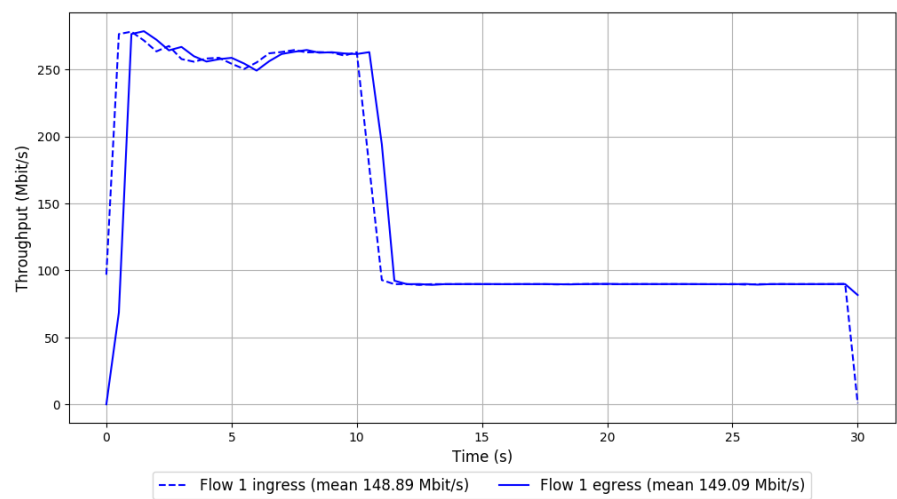

Flow 1 (95th percentile 50.52 ms)

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

Start at: 2018-06-01 19:57:55
End at: 2018-06-01 19:58:25
Local clock offset: -0.201 ms
Remote clock offset: -0.049 ms


# Below is generated by plot.py at 2018-06-01 21:43:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.09 Mbit/s
95th percentile per-packet one-way delay: 50.751 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 149.09 Mbit/s
95th percentile per-packet one-way delay: 50.751 ms
Loss rate: 0.20%
```

Run 9: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-01 20:18:04
End at: 2018-06-01 20:18:34
Local clock offset: -0.021 ms
Remote clock offset: 0.032 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.38 Mbit/s
95th percentile per-packet one-way delay: 51.018 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 228.38 Mbit/s
95th percentile per-packet one-way delay: 51.018 ms
Loss rate: 0.33%
```
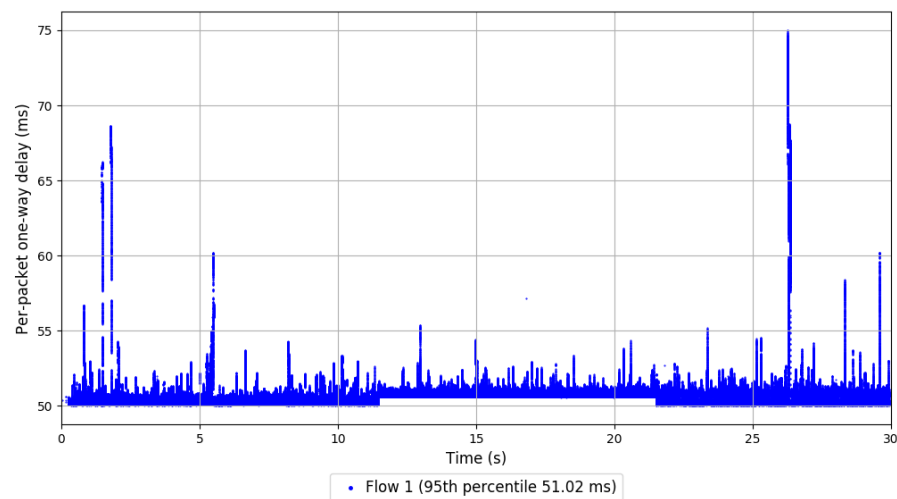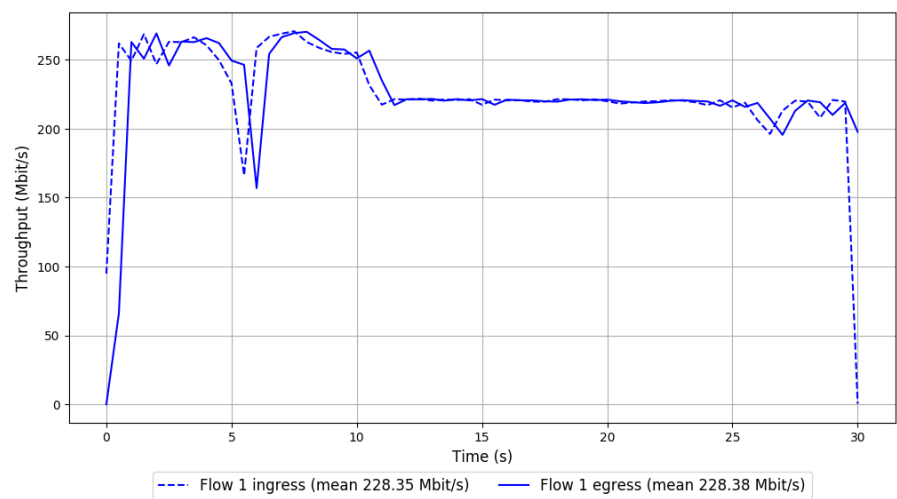
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 228.35 Mbit/s)   Flow 1 egress (mean 228.38 Mbit/s)

Flow 1 (95th percentile 51.02 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-06-01 17:06:10
End at: 2018-06-01 17:06:40
Local clock offset: -0.077 ms
Remote clock offset: 0.073 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.97 Mbit/s
95th percentile per-packet one-way delay: 55.794 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 23.97 Mbit/s
95th percentile per-packet one-way delay: 55.794 ms
Loss rate: 0.31%
```
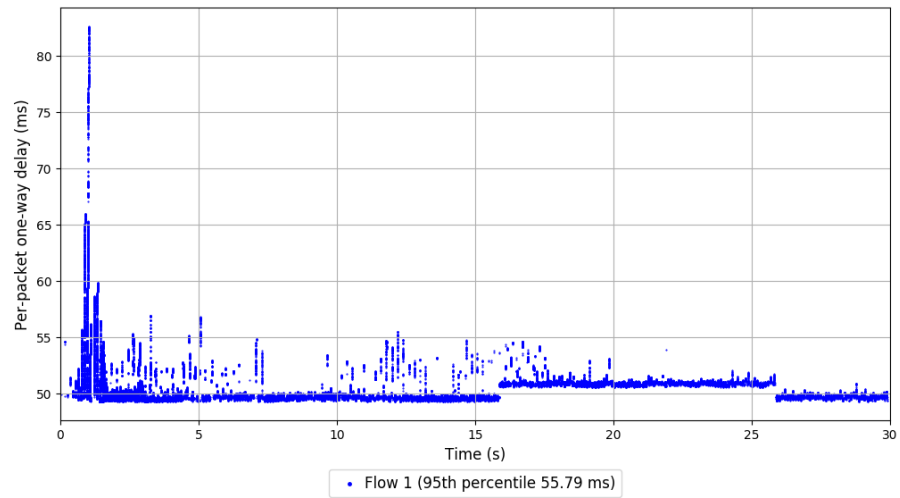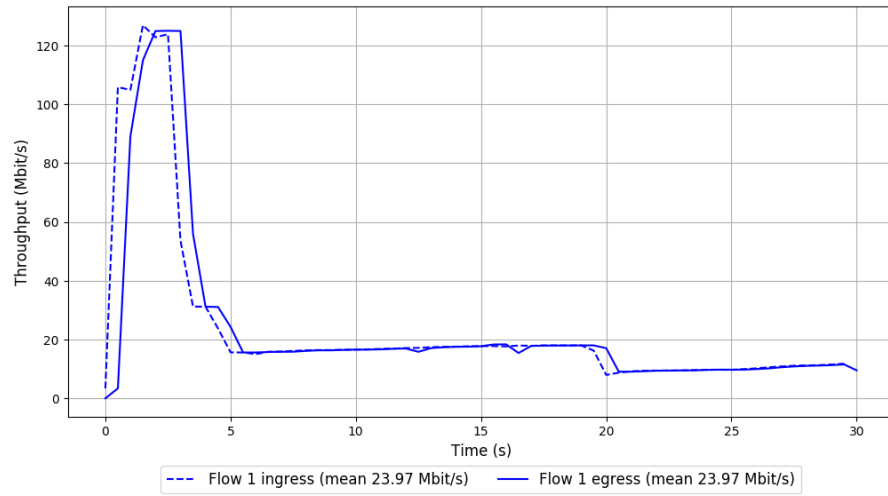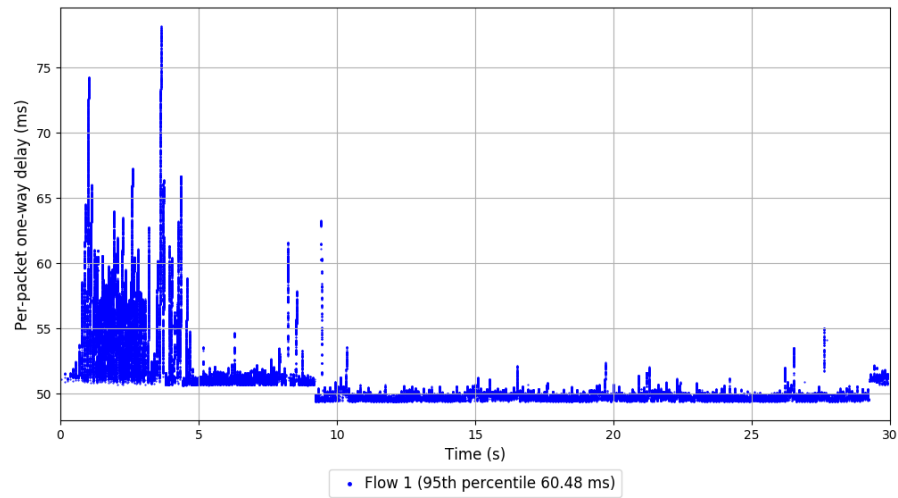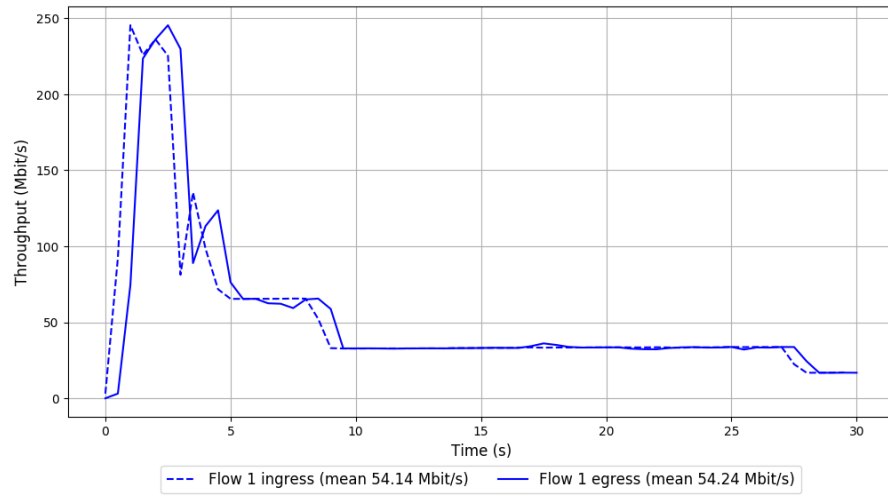
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-06-01 17:25:56
End at: 2018-06-01 17:26:26
Local clock offset: 0.005 ms
Remote clock offset: -0.124 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.24 Mbit/s
95th percentile per-packet one-way delay: 60.483 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 54.24 Mbit/s
95th percentile per-packet one-way delay: 60.483 ms
Loss rate: 0.15%
```

Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 54.14 Mbit/s)   ——— Flow 1 egress (mean 54.24 Mbit/s)
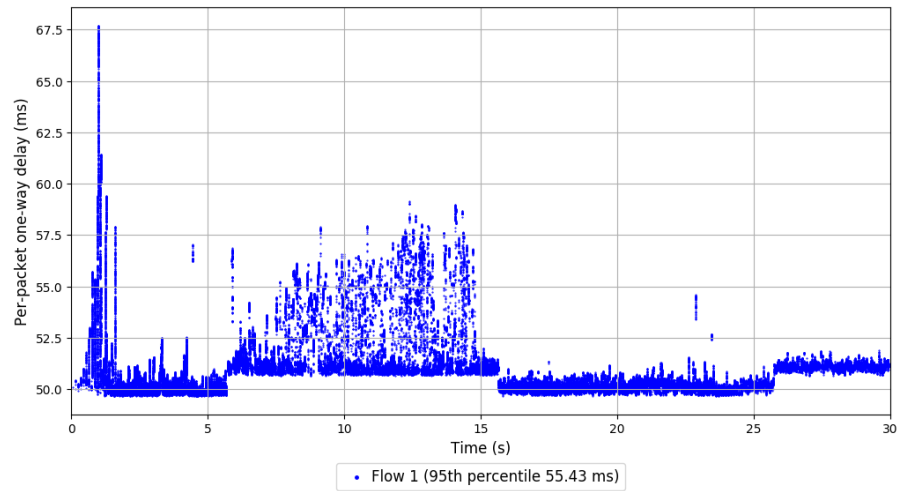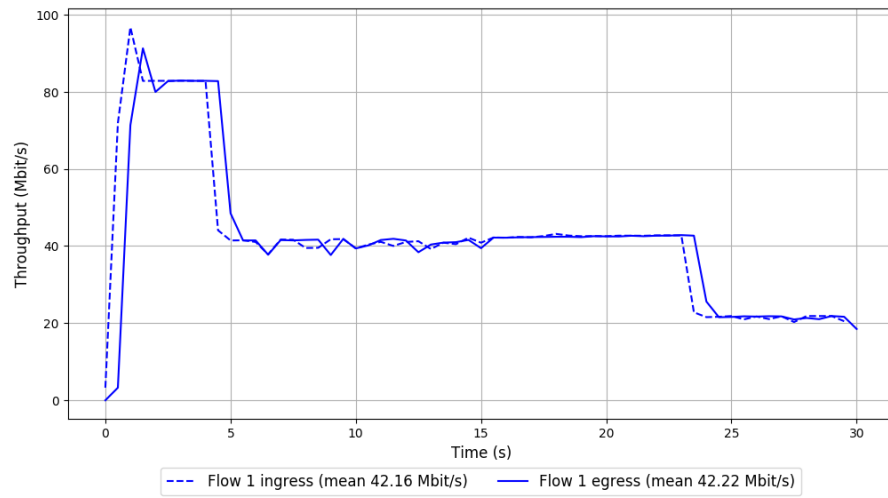

• Flow 1 (95th percentile 60.48 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2018-06-01 17:46:00
End at: 2018-06-01 17:46:30
Local clock offset: -0.032 ms
Remote clock offset: -0.095 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.22 Mbit/s
95th percentile per-packet one-way delay: 55.432 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 42.22 Mbit/s
95th percentile per-packet one-way delay: 55.432 ms
Loss rate: 0.18%
```

Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 42.16 Mbit/s) ---- Flow 1 egress (mean 42.22 Mbit/s) ——
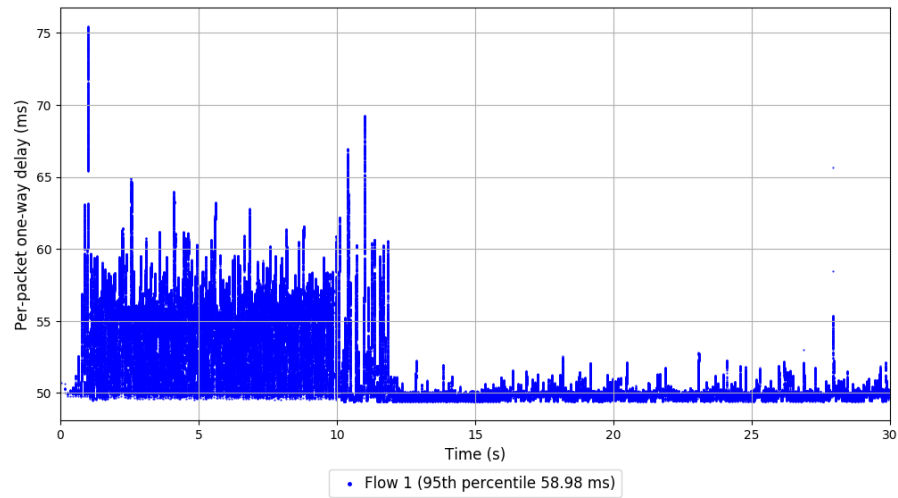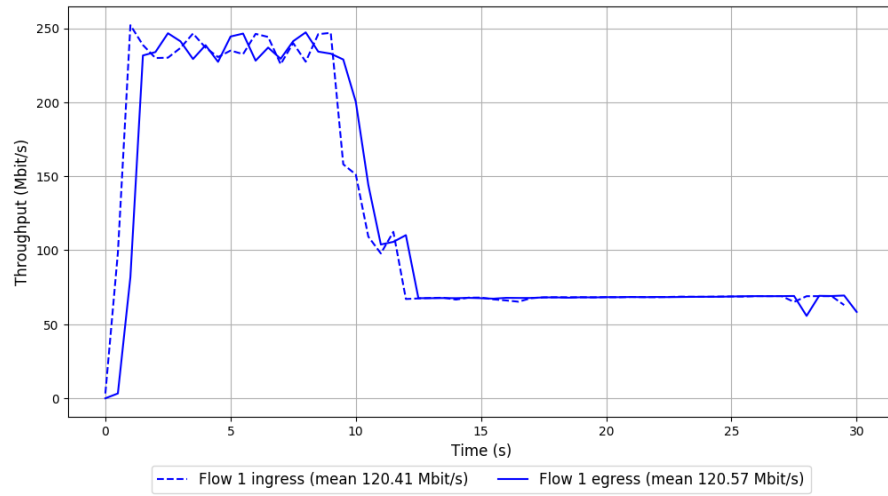

Flow 1 (95th percentile 55.43 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2018-06-01 18:06:15
End at: 2018-06-01 18:06:45
Local clock offset: -0.091 ms
Remote clock offset: -0.081 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 120.57 Mbit/s
95th percentile per-packet one-way delay: 58.980 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 120.57 Mbit/s
95th percentile per-packet one-way delay: 58.980 ms
Loss rate: 0.21%
```
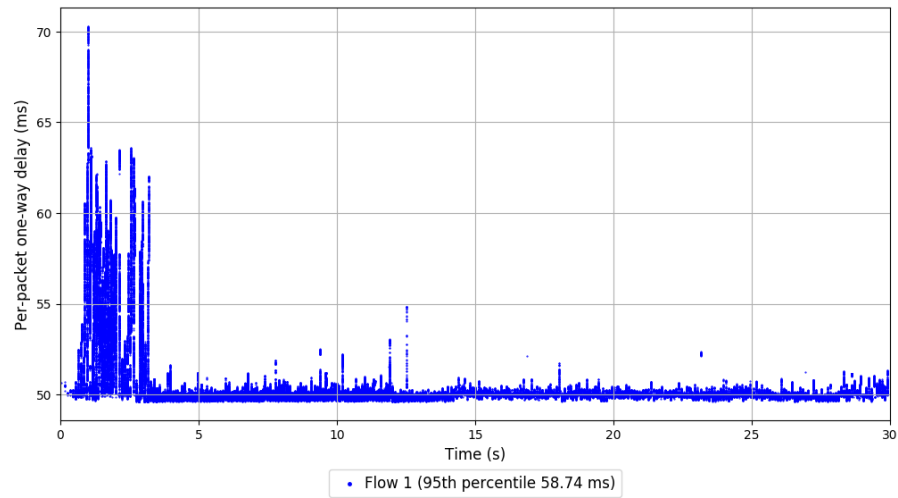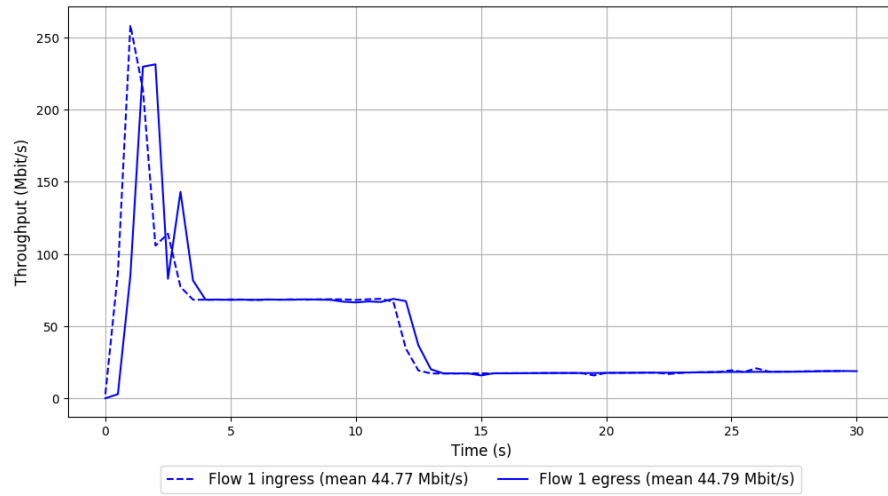
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-06-01 18:26:30
End at: 2018-06-01 18:27:01
Local clock offset: -0.094 ms
Remote clock offset: -0.019 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.79 Mbit/s
95th percentile per-packet one-way delay: 58.743 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 44.79 Mbit/s
95th percentile per-packet one-way delay: 58.743 ms
Loss rate: 0.29%
```

Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 44.77 Mbit/s) ----- Flow 1 egress (mean 44.79 Mbit/s)
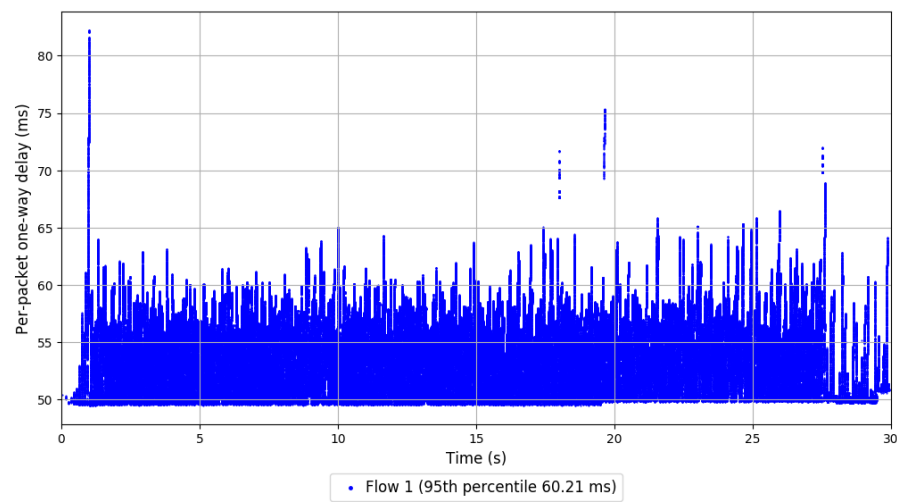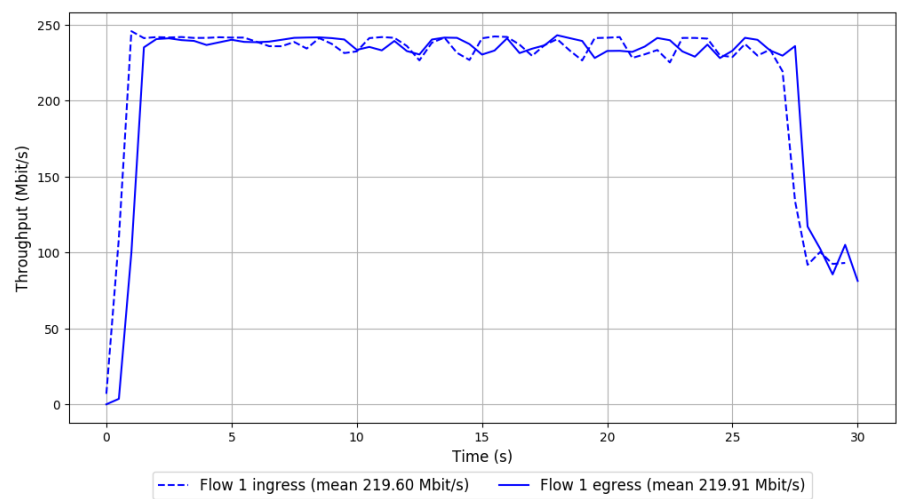

• Flow 1 (95th percentile 58.74 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2018-06-01 18:46:46
End at: 2018-06-01 18:47:16
Local clock offset: 0.009 ms
Remote clock offset: -0.015 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 219.91 Mbit/s
95th percentile per-packet one-way delay: 60.210 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 219.91 Mbit/s
95th percentile per-packet one-way delay: 60.210 ms
Loss rate: 0.19%
```

Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 219.60 Mbit/s)   Flow 1 egress (mean 219.91 Mbit/s)
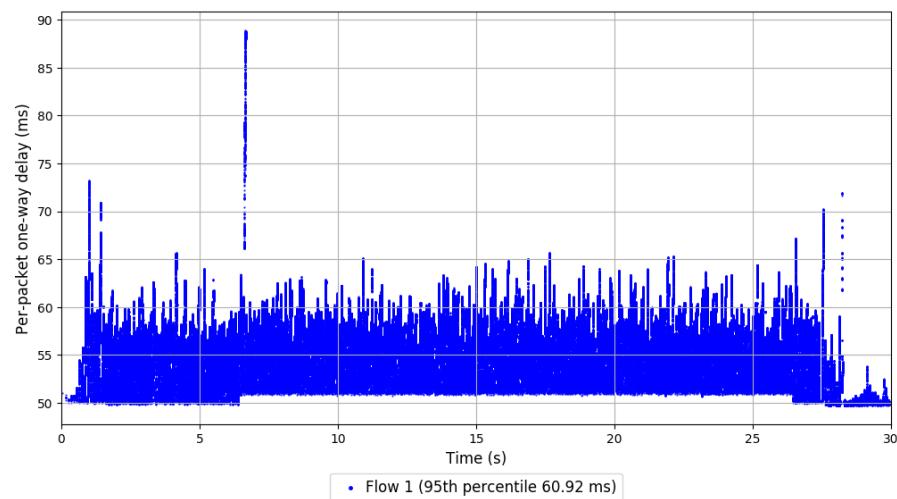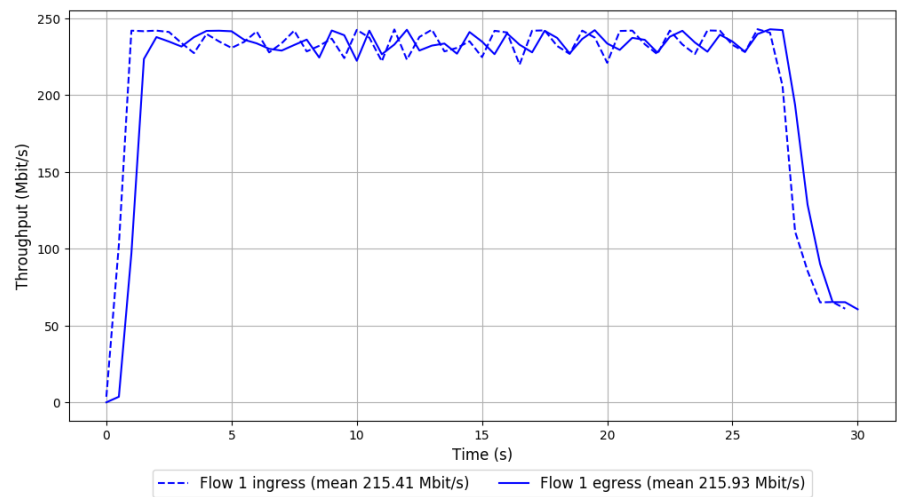

Flow 1 (95th percentile 60.21 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2018-06-01 19:06:59
End at: 2018-06-01 19:07:29
Local clock offset: -0.009 ms
Remote clock offset: -0.011 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.93 Mbit/s
95th percentile per-packet one-way delay: 60.919 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 215.93 Mbit/s
95th percentile per-packet one-way delay: 60.919 ms
Loss rate: 0.10%
```
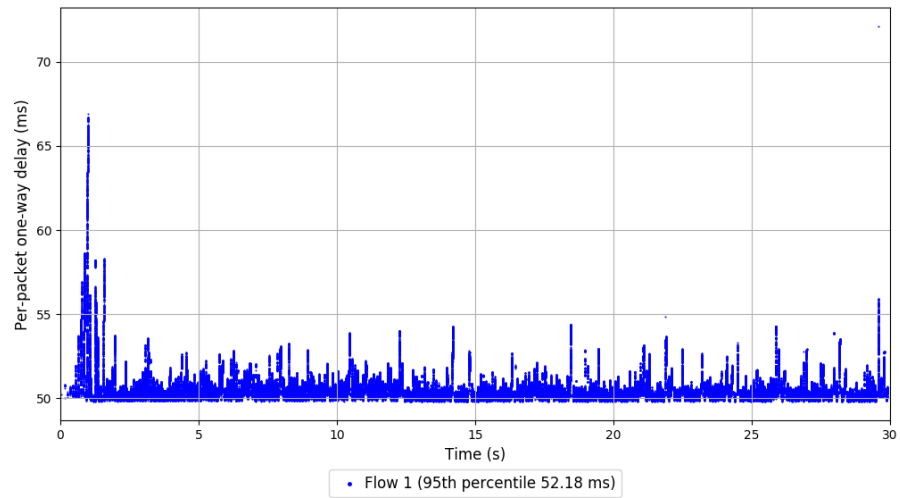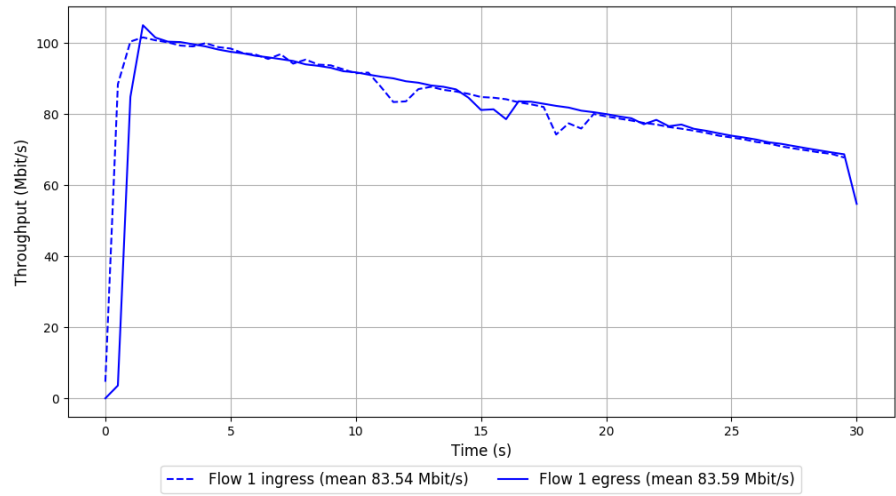
Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2018-06-01 19:27:23
End at: 2018-06-01 19:27:53
Local clock offset: -0.441 ms
Remote clock offset: -0.028 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.59 Mbit/s
95th percentile per-packet one-way delay: 52.183 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 83.59 Mbit/s
95th percentile per-packet one-way delay: 52.183 ms
Loss rate: 0.27%
```

Run 8: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 83.54 Mbit/s)   Flow 1 egress (mean 83.59 Mbit/s)
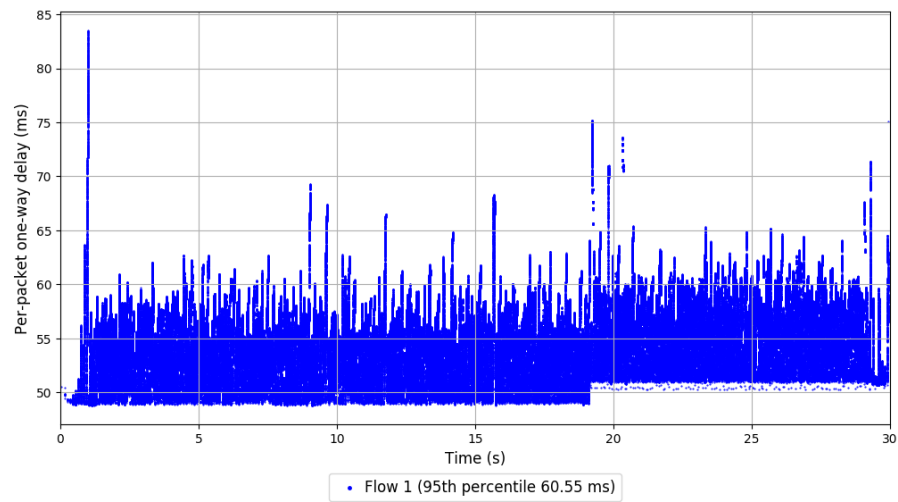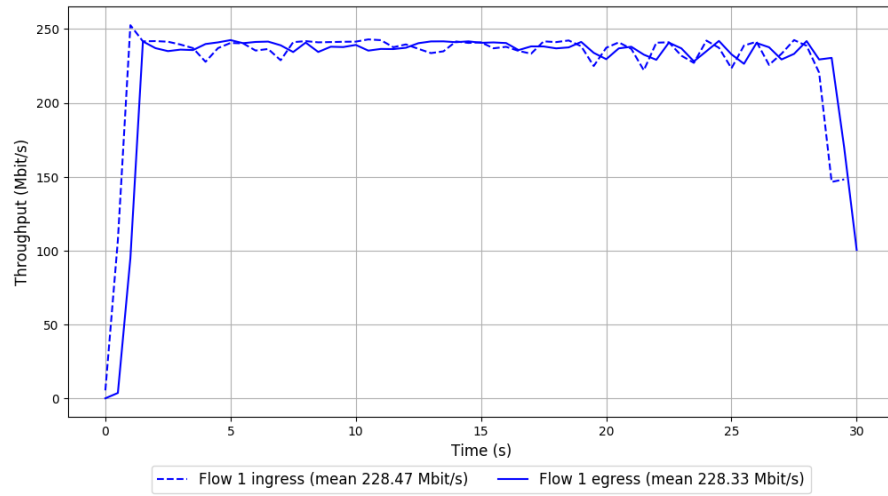

Flow 1 (95th percentile 52.18 ms)

```
Run 9: Statistics of TCP Vegas

Start at: 2018-06-01 19:47:46
End at: 2018-06-01 19:48:16
Local clock offset: -0.2 ms
Remote clock offset: -0.077 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.33 Mbit/s
95th percentile per-packet one-way delay: 60.553 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 228.33 Mbit/s
95th percentile per-packet one-way delay: 60.553 ms
Loss rate: 0.35%
```
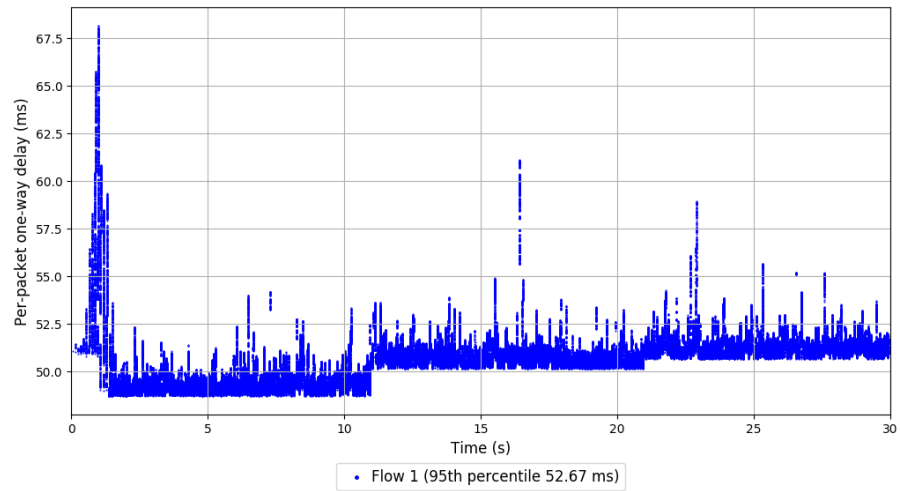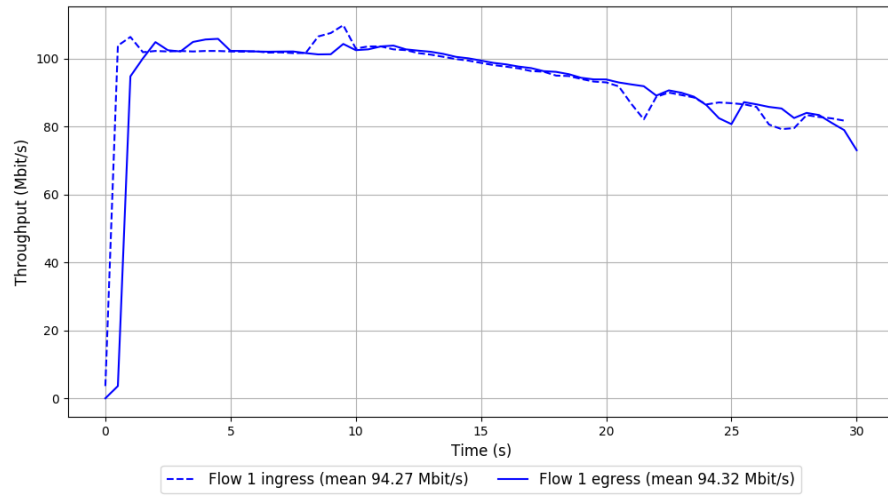
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 228.47 Mbit/s) --- Flow 1 egress (mean 228.33 Mbit/s)

• Flow 1 (95th percentile 60.55 ms)

261

```
Run 10: Statistics of TCP Vegas

Start at: 2018-06-01 20:07:55
End at: 2018-06-01 20:08:25
Local clock offset: -0.083 ms
Remote clock offset: -0.018 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.32 Mbit/s
95th percentile per-packet one-way delay: 52.668 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 94.32 Mbit/s
95th percentile per-packet one-way delay: 52.668 ms
Loss rate: 0.29%
```

Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2018-06-01 17:03:18
End at: 2018-06-01 17:03:48
Local clock offset: -0.072 ms
Remote clock offset: 0.068 ms


# Below is generated by plot.py at 2018-06-01 21:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.21 Mbit/s
95th percentile per-packet one-way delay: 109.601 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 207.21 Mbit/s
95th percentile per-packet one-way delay: 109.601 ms
Loss rate: 1.20%
```
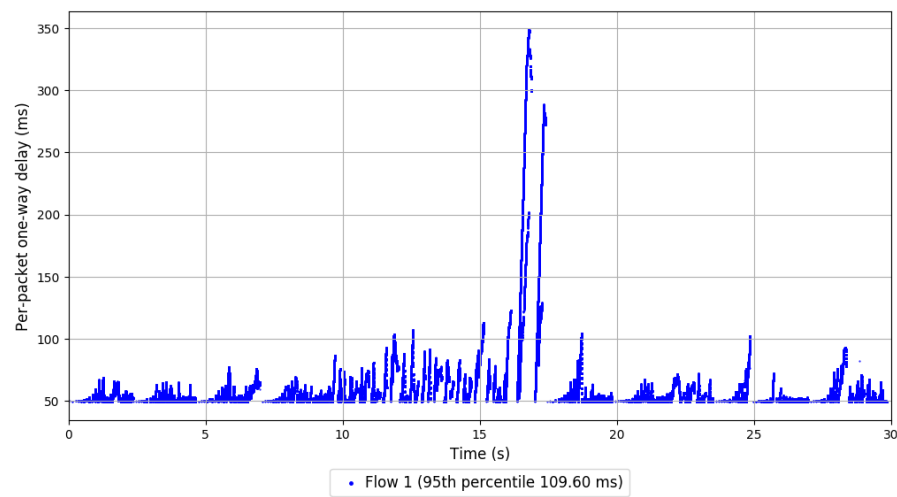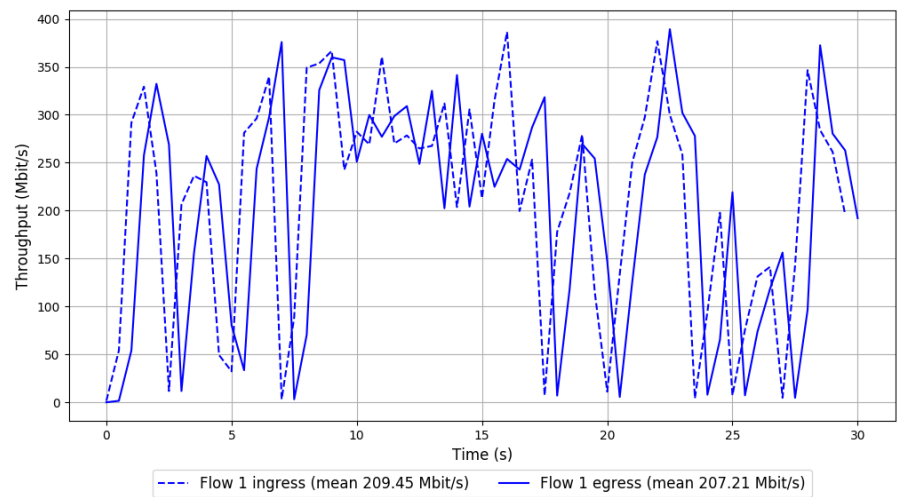
Run 1: Report of Verus — Data Link

Flow 1 ingress (mean 209.45 Mbit/s)   Flow 1 egress (mean 207.21 Mbit/s)

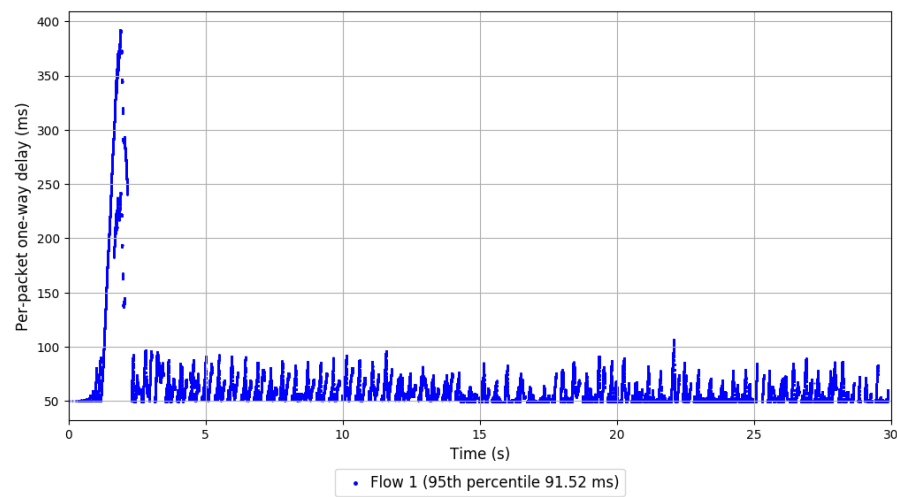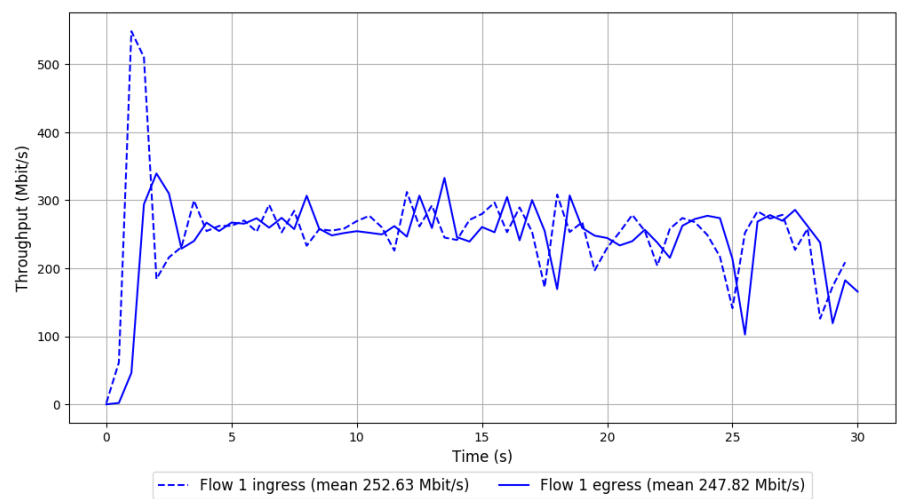Flow 1 (95th percentile 109.60 ms)

```
Run 2: Statistics of Verus

Start at: 2018-06-01 17:23:01
End at: 2018-06-01 17:23:31
Local clock offset: -0.001 ms
Remote clock offset: -0.074 ms


# Below is generated by plot.py at 2018-06-01 21:46:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 247.82 Mbit/s
95th percentile per-packet one-way delay: 91.517 ms
Loss rate: 2.23%
-- Flow 1:
Average throughput: 247.82 Mbit/s
95th percentile per-packet one-way delay: 91.517 ms
Loss rate: 2.23%
```
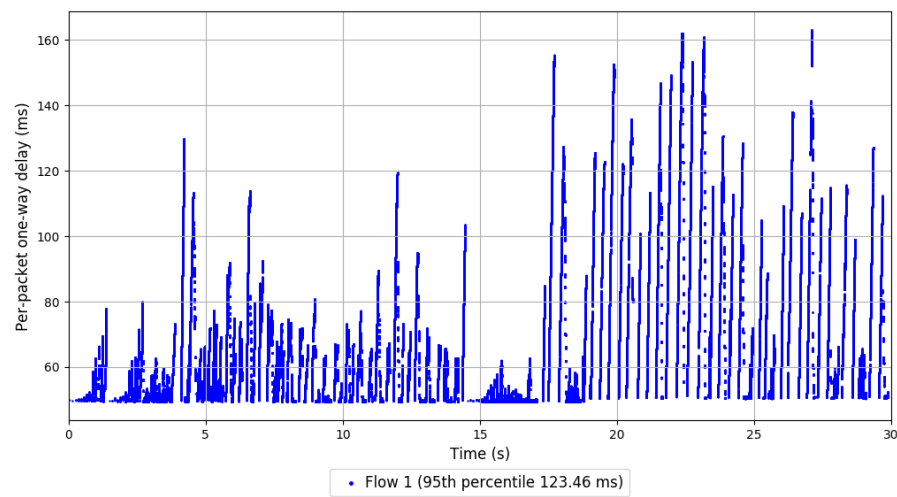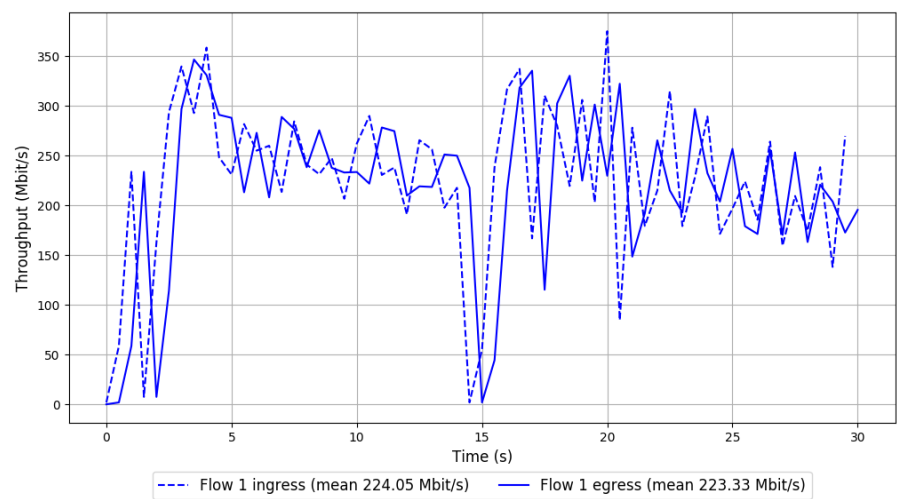
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-06-01 17:43:06
End at: 2018-06-01 17:43:36
Local clock offset: -0.367 ms
Remote clock offset: -0.097 ms


# Below is generated by plot.py at 2018-06-01 21:47:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.33 Mbit/s
95th percentile per-packet one-way delay: 123.460 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 223.33 Mbit/s
95th percentile per-packet one-way delay: 123.460 ms
Loss rate: 0.66%
```
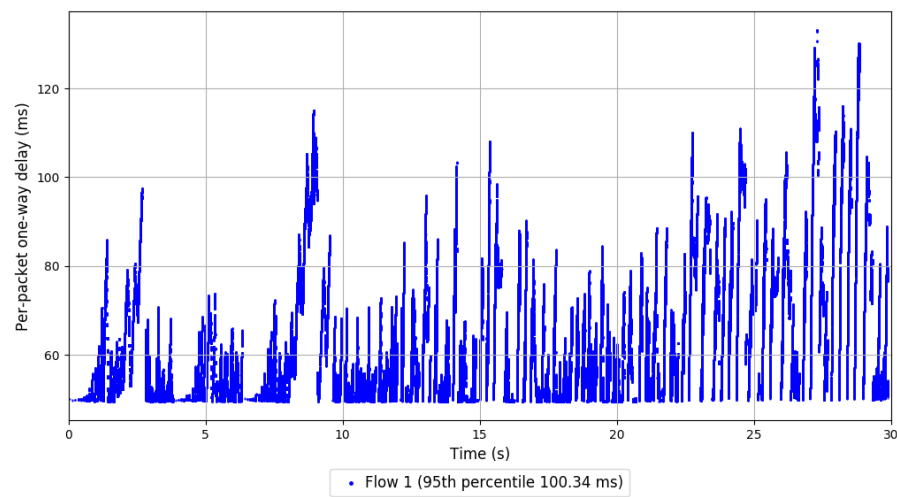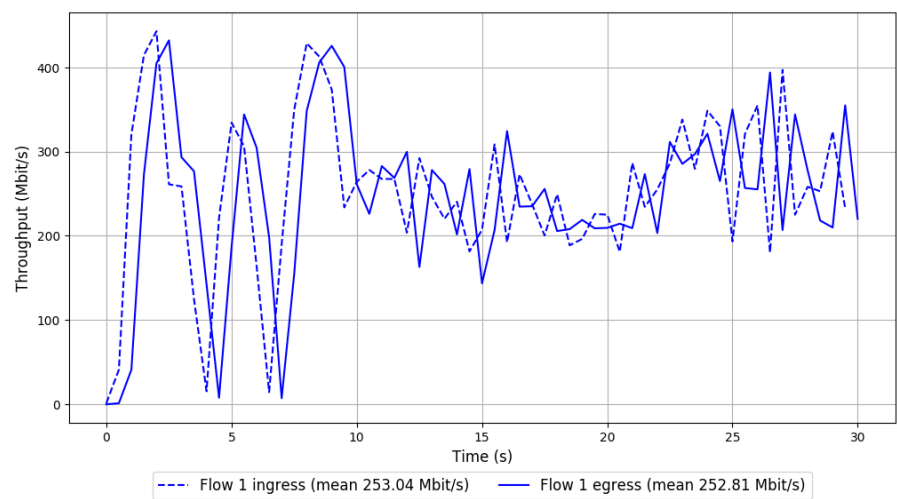
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-06-01 18:03:22
End at: 2018-06-01 18:03:52
Local clock offset: -0.084 ms
Remote clock offset: -0.081 ms


# Below is generated by plot.py at 2018-06-01 21:48:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 252.81 Mbit/s
95th percentile per-packet one-way delay: 100.338 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 252.81 Mbit/s
95th percentile per-packet one-way delay: 100.338 ms
Loss rate: 0.43%
```
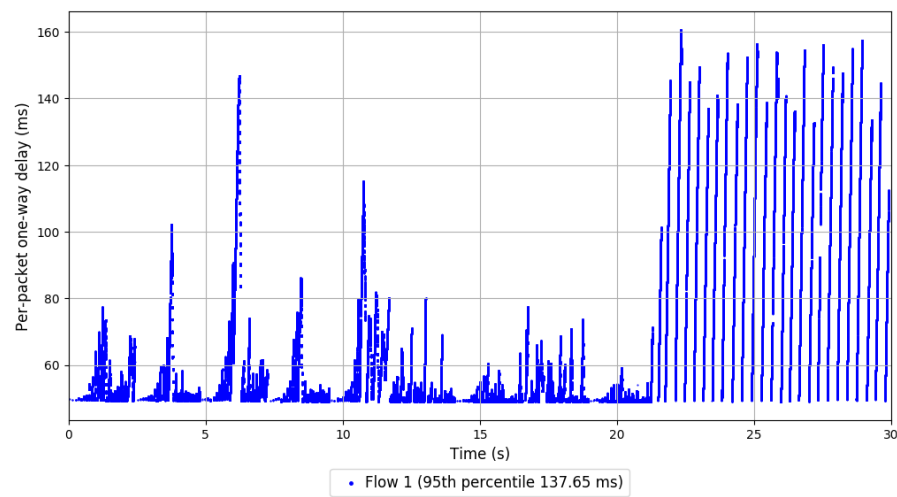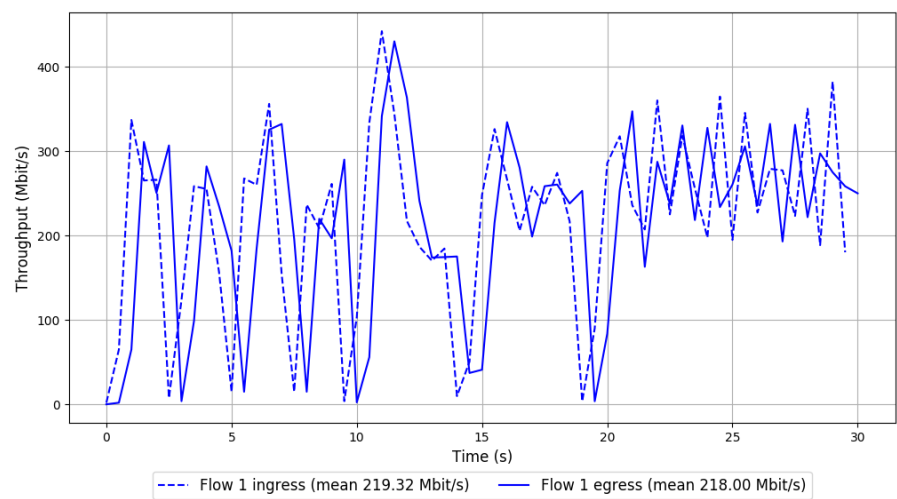
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-06-01 18:23:38
End at: 2018-06-01 18:24:08
Local clock offset: -0.502 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2018-06-01 21:48:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.00 Mbit/s
95th percentile per-packet one-way delay: 137.646 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 218.00 Mbit/s
95th percentile per-packet one-way delay: 137.646 ms
Loss rate: 0.49%
```
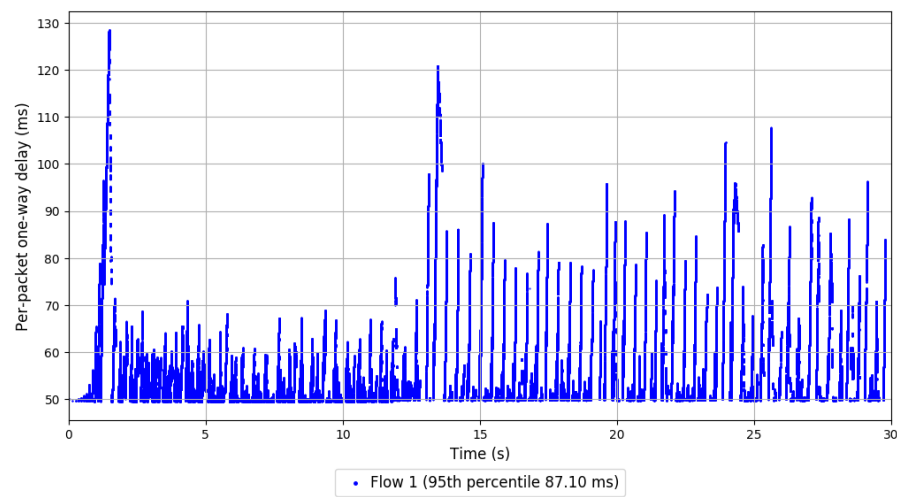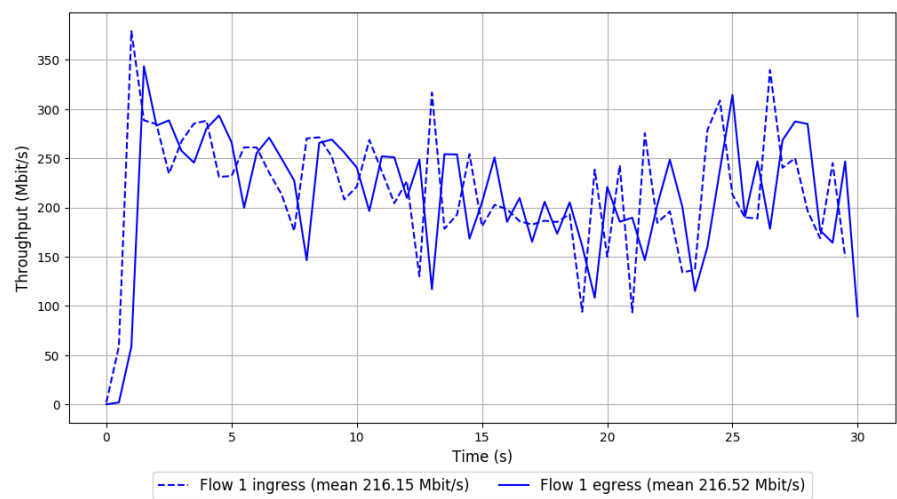
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-06-01 18:43:54
End at: 2018-06-01 18:44:24
Local clock offset: -0.017 ms
Remote clock offset: -0.025 ms


# Below is generated by plot.py at 2018-06-01 21:48:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.52 Mbit/s
95th percentile per-packet one-way delay: 87.098 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 216.52 Mbit/s
95th percentile per-packet one-way delay: 87.098 ms
Loss rate: 0.64%
```
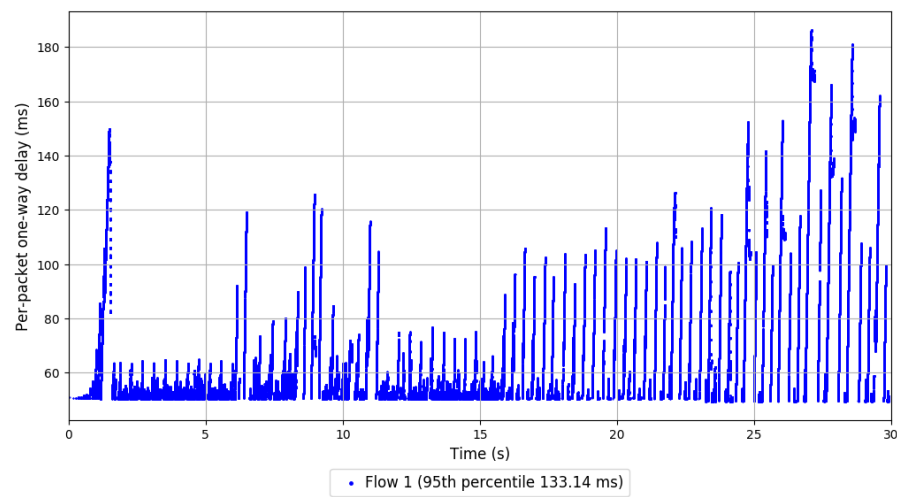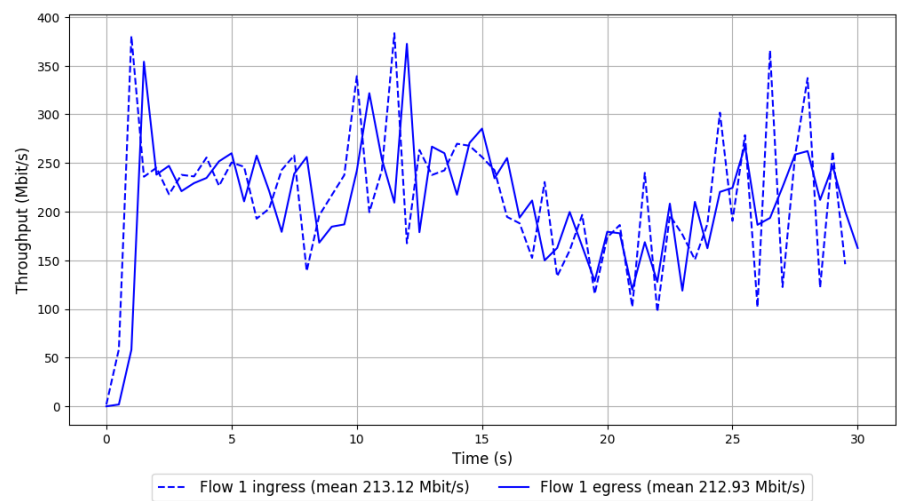
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-06-01 19:04:12
End at: 2018-06-01 19:04:42
Local clock offset: -0.425 ms
Remote clock offset: -0.024 ms


# Below is generated by plot.py at 2018-06-01 21:48:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.93 Mbit/s
95th percentile per-packet one-way delay: 133.143 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 212.93 Mbit/s
95th percentile per-packet one-way delay: 133.143 ms
Loss rate: 0.35%
```

Run 7: Report of Verus — Data Link

Flow 1 ingress (mean 213.12 Mbit/s) ---- Flow 1 egress (mean 212.93 Mbit/s) ——

Flow 1 (95th percentile 133.14 ms)

```
Run 8: Statistics of Verus

Start at: 2018-06-01 19:24:29
End at: 2018-06-01 19:24:59
Local clock offset: -0.064 ms
Remote clock offset: 0.024 ms


# Below is generated by plot.py at 2018-06-01 21:50:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 270.08 Mbit/s
95th percentile per-packet one-way delay: 155.143 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 270.08 Mbit/s
95th percentile per-packet one-way delay: 155.143 ms
Loss rate: 0.92%
```
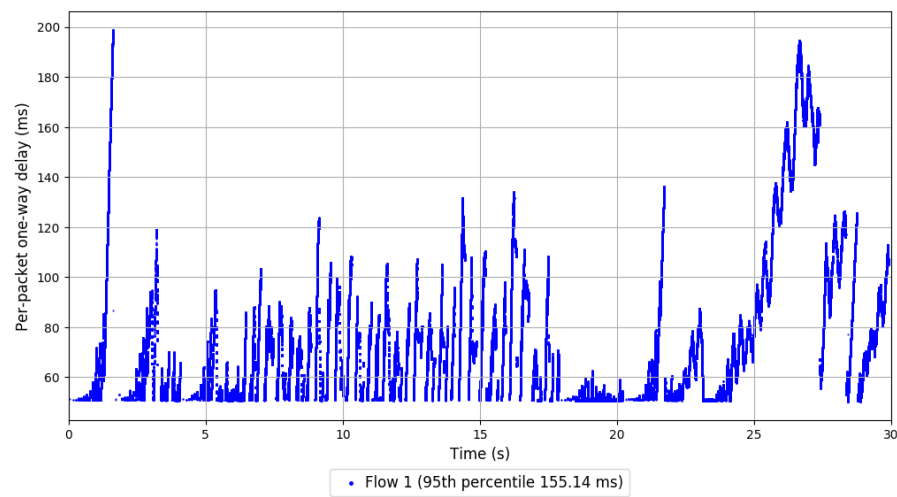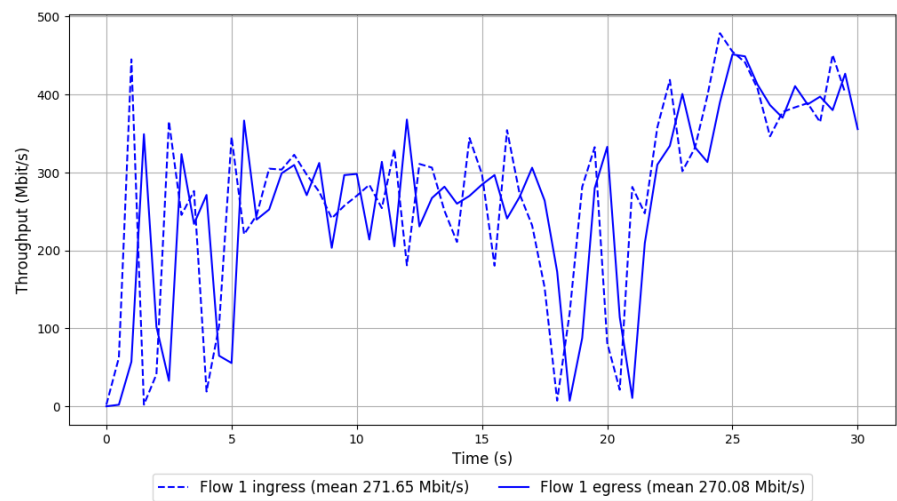
Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2018-06-01 19:44:55
End at: 2018-06-01 19:45:25
Local clock offset: -0.558 ms
Remote clock offset: 0.012 ms


# Below is generated by plot.py at 2018-06-01 21:50:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 239.94 Mbit/s
95th percentile per-packet one-way delay: 124.320 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 239.94 Mbit/s
95th percentile per-packet one-way delay: 124.320 ms
Loss rate: 0.41%
```
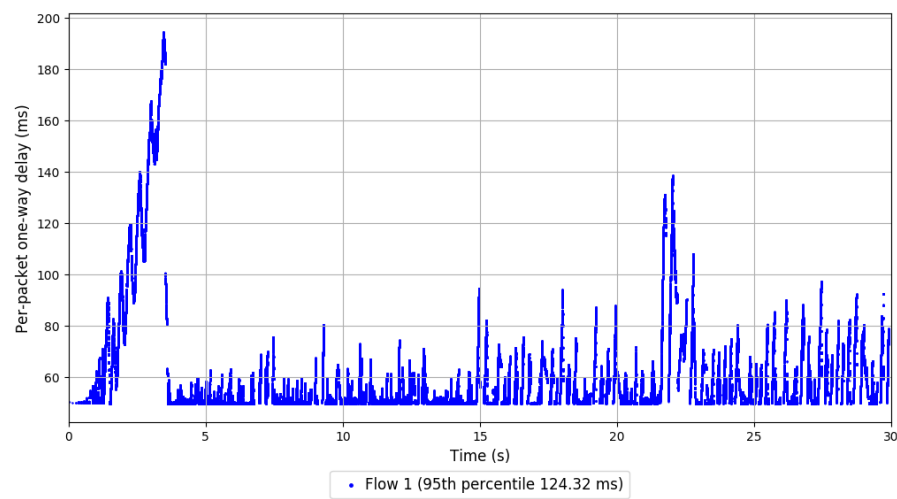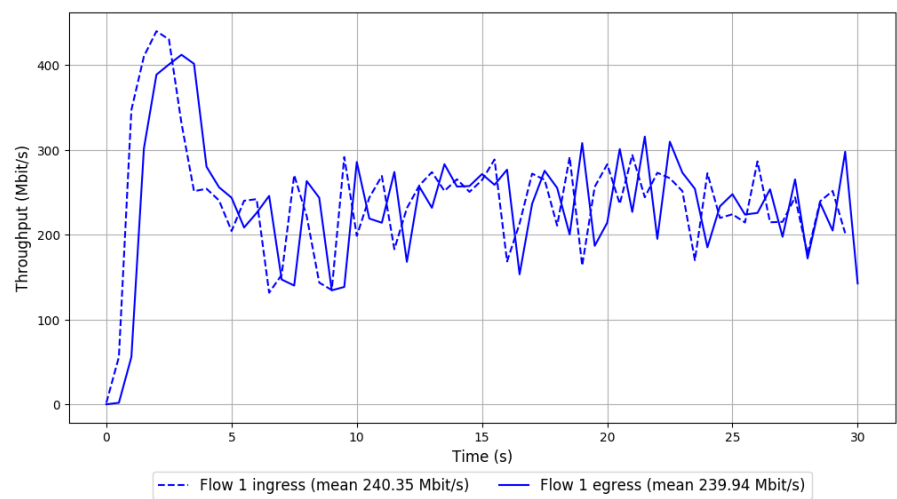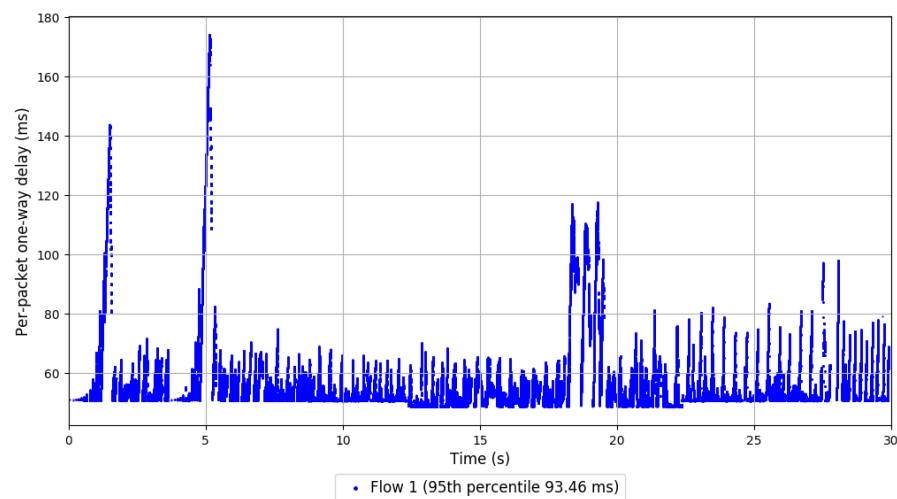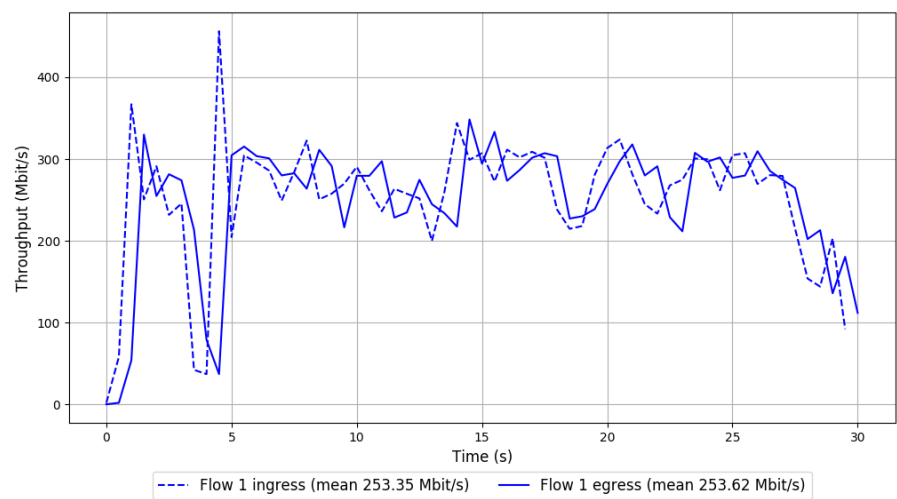
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2018-06-01 20:05:03
End at: 2018-06-01 20:05:33
Local clock offset: -0.152 ms
Remote clock offset: -0.027 ms


# Below is generated by plot.py at 2018-06-01 21:51:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 253.62 Mbit/s
95th percentile per-packet one-way delay: 93.456 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 253.62 Mbit/s
95th percentile per-packet one-way delay: 93.456 ms
Loss rate: 0.07%
```

Run 10: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-01 17:08:43
End at: 2018-06-01 17:09:13
Local clock offset: -0.05 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-06-01 21:51:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 219.39 Mbit/s
95th percentile per-packet one-way delay: 51.229 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 219.39 Mbit/s
95th percentile per-packet one-way delay: 51.229 ms
Loss rate: 0.69%
```
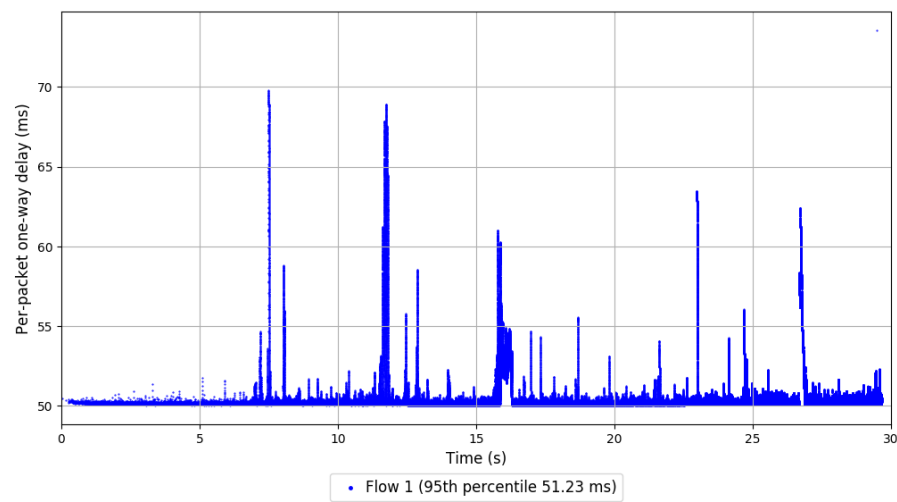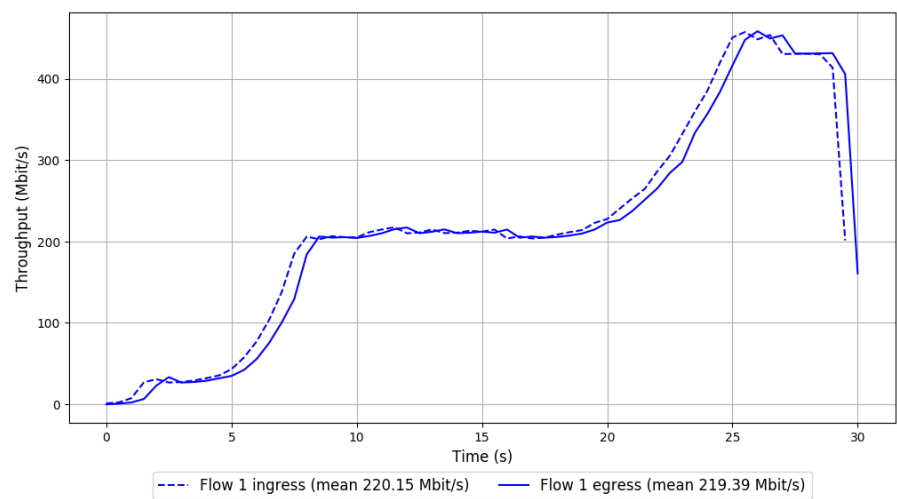
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-01 17:28:31
End at: 2018-06-01 17:29:01
Local clock offset: -0.326 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-06-01 21:54:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 285.89 Mbit/s
95th percentile per-packet one-way delay: 49.846 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 285.89 Mbit/s
95th percentile per-packet one-way delay: 49.846 ms
Loss rate: 0.49%
```
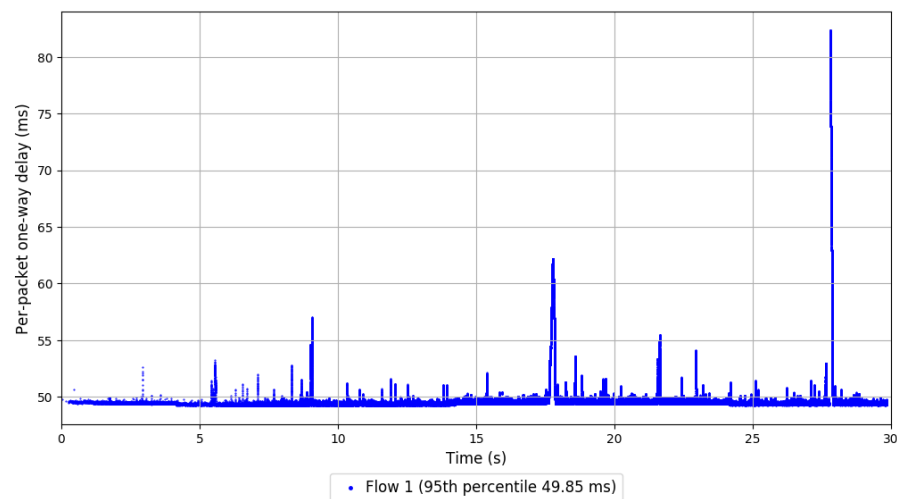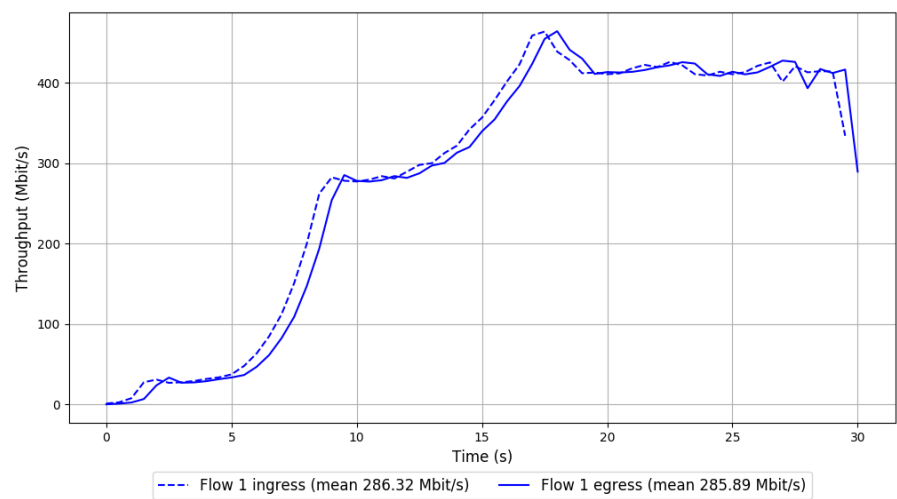
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 286.32 Mbit/s)   Flow 1 egress (mean 285.89 Mbit/s)
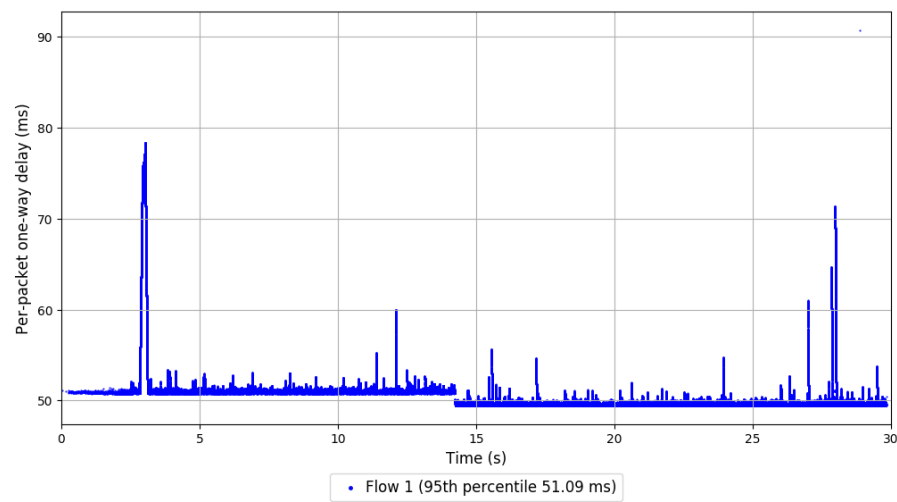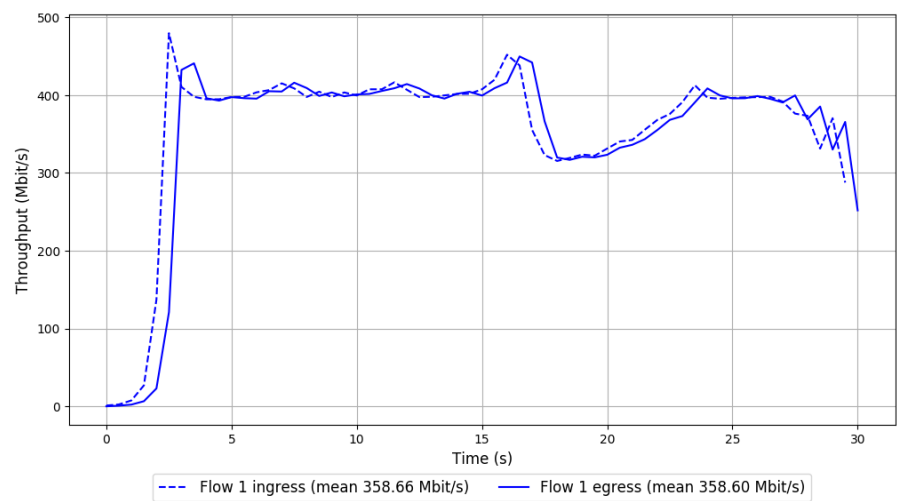

Flow 1 (95th percentile 49.85 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-01 17:48:31
End at: 2018-06-01 17:49:01
Local clock offset: -0.033 ms
Remote clock offset: -0.092 ms


# Below is generated by plot.py at 2018-06-01 21:55:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 358.60 Mbit/s
95th percentile per-packet one-way delay: 51.089 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 358.60 Mbit/s
95th percentile per-packet one-way delay: 51.089 ms
Loss rate: 0.36%
```

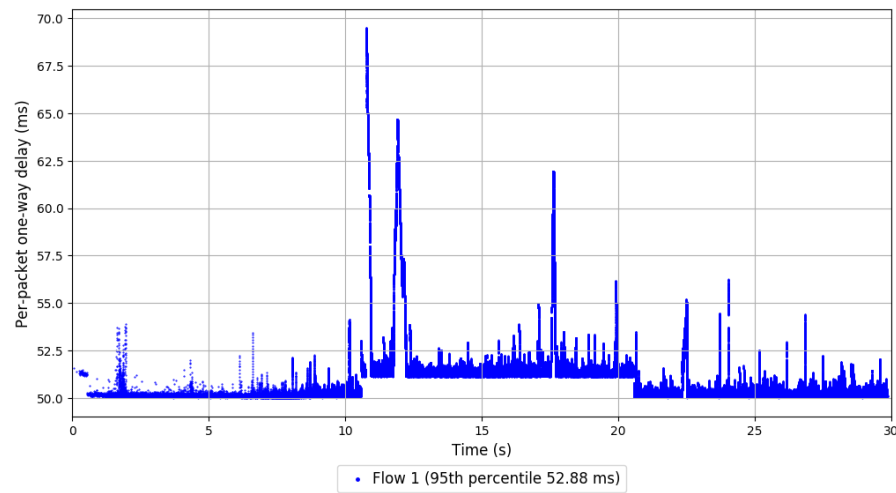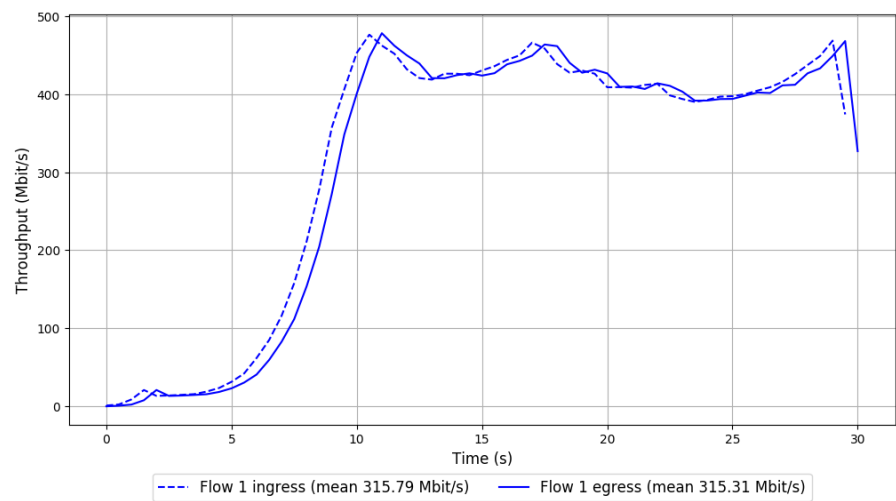# Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-01 18:08:55
End at: 2018-06-01 18:09:25
Local clock offset: 0.262 ms
Remote clock offset: -0.089 ms


# Below is generated by plot.py at 2018-06-01 21:55:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 315.31 Mbit/s
95th percentile per-packet one-way delay: 52.877 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 315.31 Mbit/s
95th percentile per-packet one-way delay: 52.877 ms
Loss rate: 0.49%
```

Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-01 18:29:07
End at: 2018-06-01 18:29:37
Local clock offset: -0.058 ms
Remote clock offset: -0.02 ms


# Below is generated by plot.py at 2018-06-01 21:55:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 294.50 Mbit/s
95th percentile per-packet one-way delay: 50.661 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 294.50 Mbit/s
95th percentile per-packet one-way delay: 50.661 ms
Loss rate: 0.43%
```
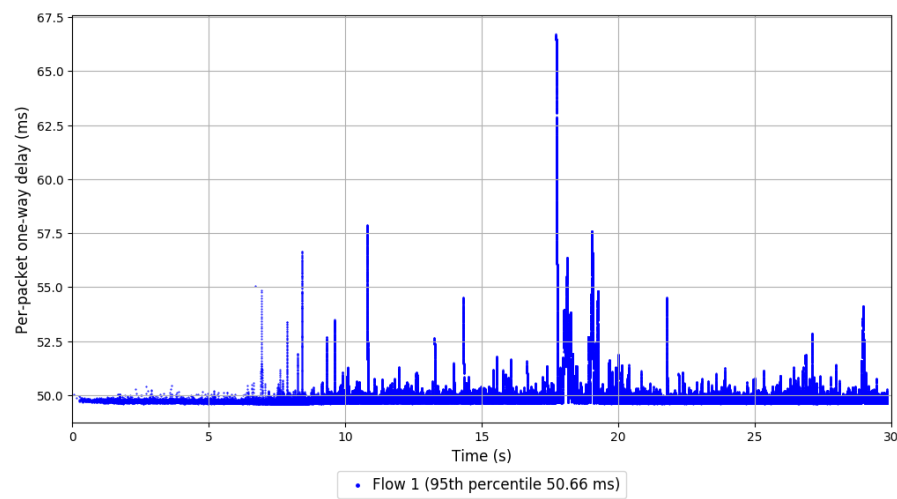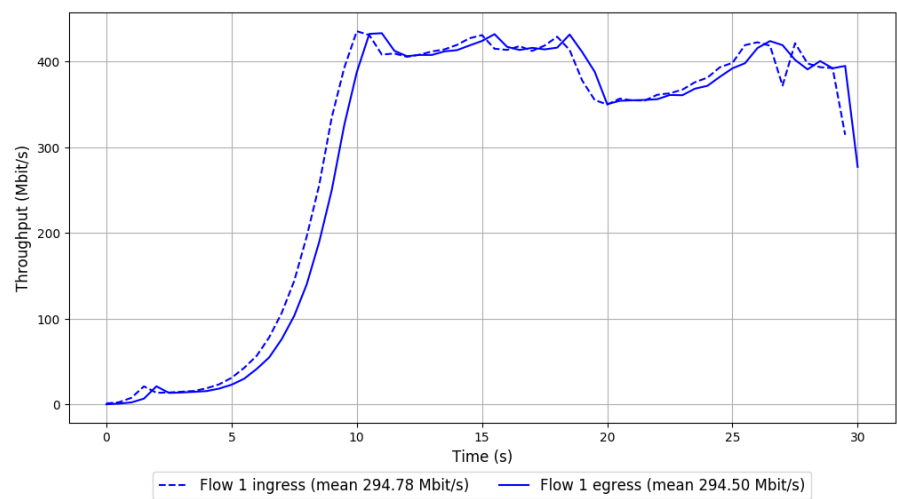
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 294.78 Mbit/s)   Flow 1 egress (mean 294.50 Mbit/s)

Flow 1 (95th percentile 50.66 ms)

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-01 18:49:28
End at: 2018-06-01 18:49:58
Local clock offset: -0.011 ms
Remote clock offset: 0.066 ms


# Below is generated by plot.py at 2018-06-01 21:56:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 300.84 Mbit/s
95th percentile per-packet one-way delay: 49.552 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 300.84 Mbit/s
95th percentile per-packet one-way delay: 49.552 ms
Loss rate: 0.46%
```
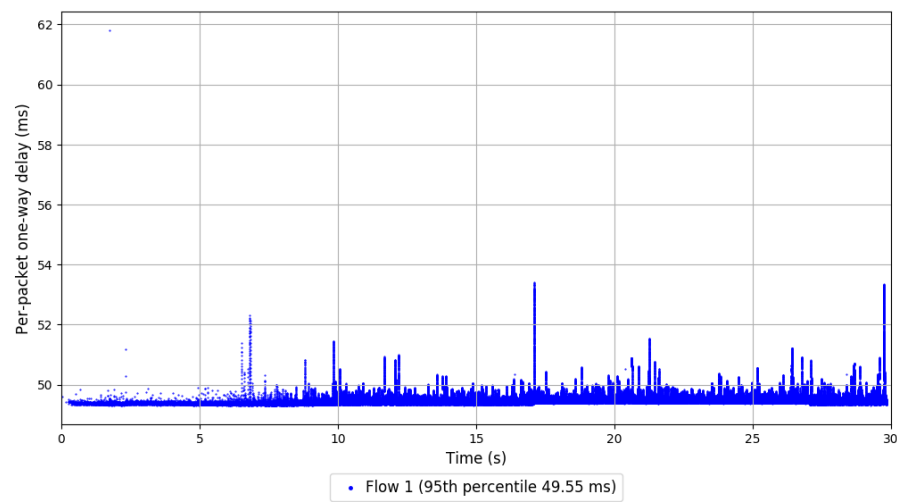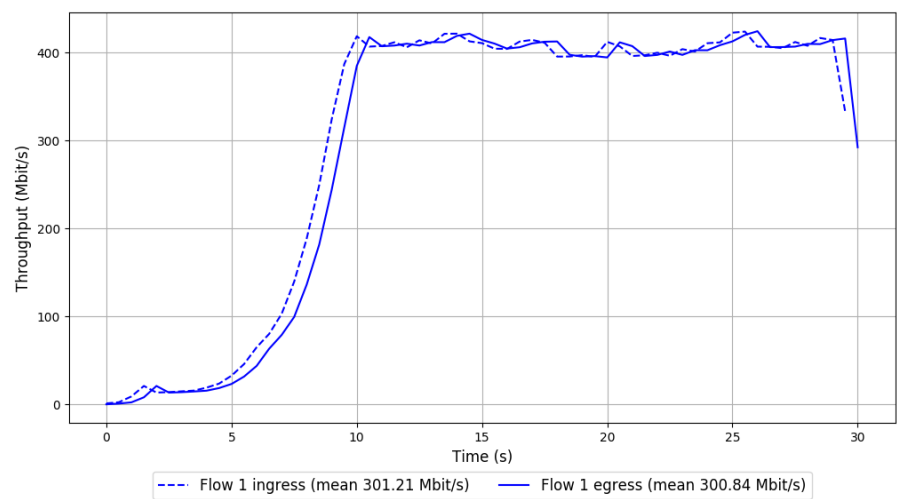
Run 6: Report of PCC-Vivace — Data Link

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-01 19:09:45
End at: 2018-06-01 19:10:15
Local clock offset: -0.055 ms
Remote clock offset: -0.03 ms


# Below is generated by plot.py at 2018-06-01 21:56:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 292.22 Mbit/s
95th percentile per-packet one-way delay: 122.943 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 292.22 Mbit/s
95th percentile per-packet one-way delay: 122.943 ms
Loss rate: 1.13%
```
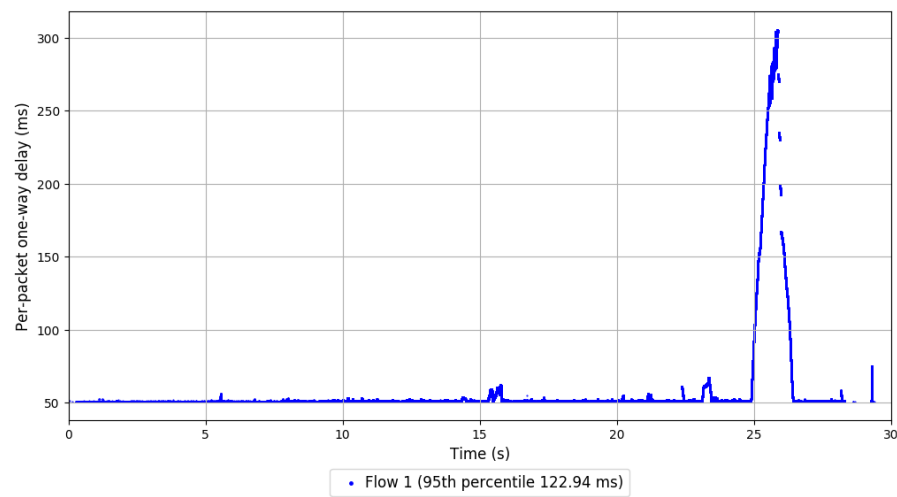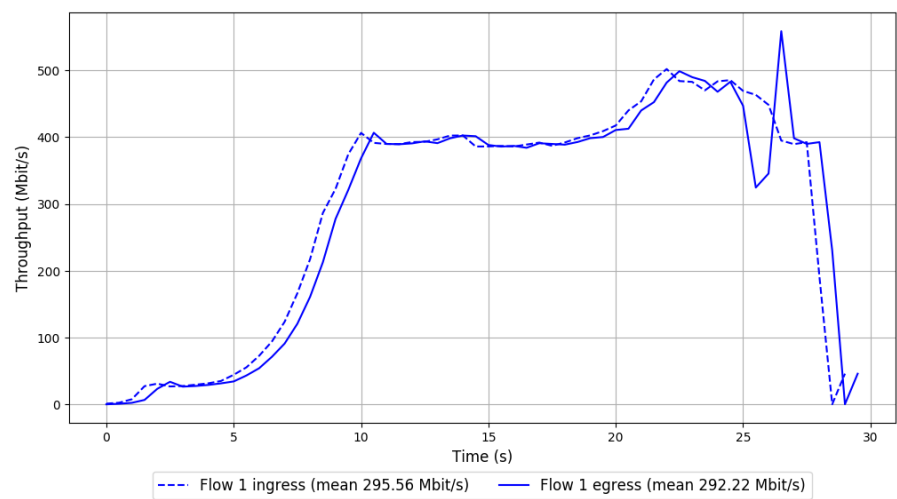
Run 7: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 295.56 Mbit/s)   Flow 1 egress (mean 292.22 Mbit/s)

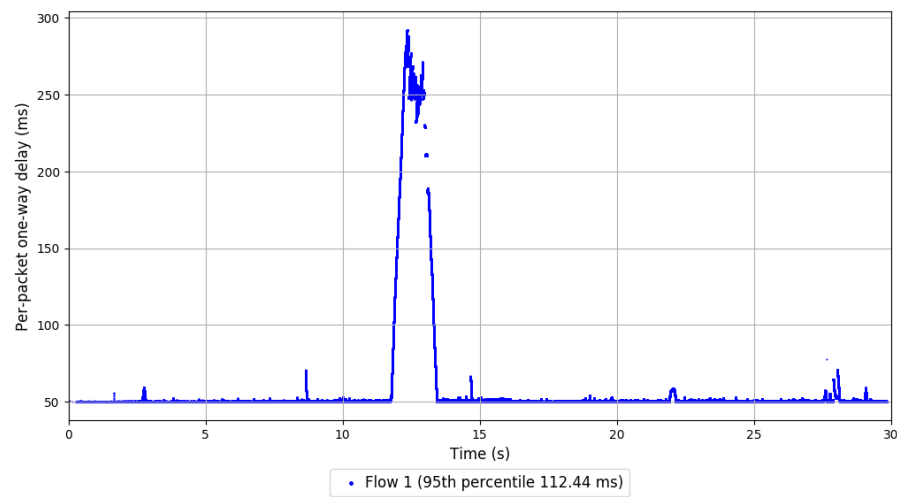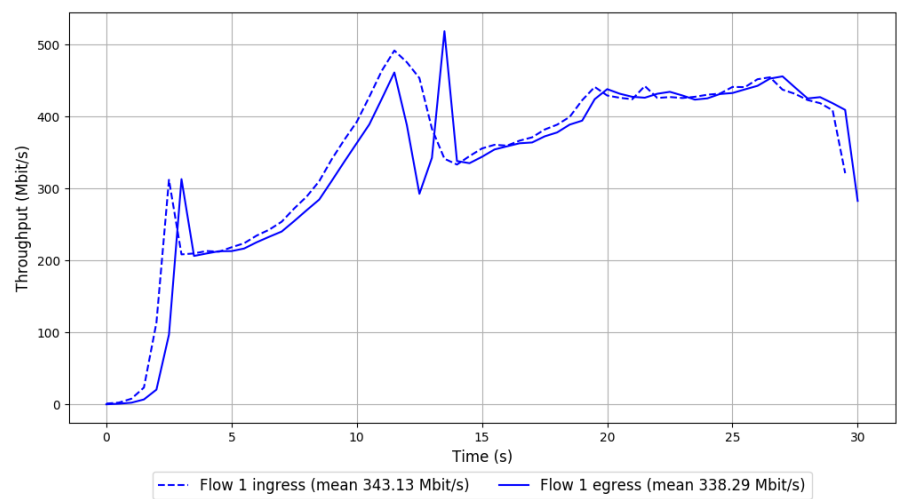
• Flow 1 (95th percentile 122.94 ms)

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-01 19:30:02
End at: 2018-06-01 19:30:32
Local clock offset: -0.125 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2018-06-01 21:57:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 338.29 Mbit/s
95th percentile per-packet one-way delay: 112.440 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 338.29 Mbit/s
95th percentile per-packet one-way delay: 112.440 ms
Loss rate: 1.74%
```

Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 343.13 Mbit/s) — — — Flow 1 egress (mean 338.29 Mbit/s)
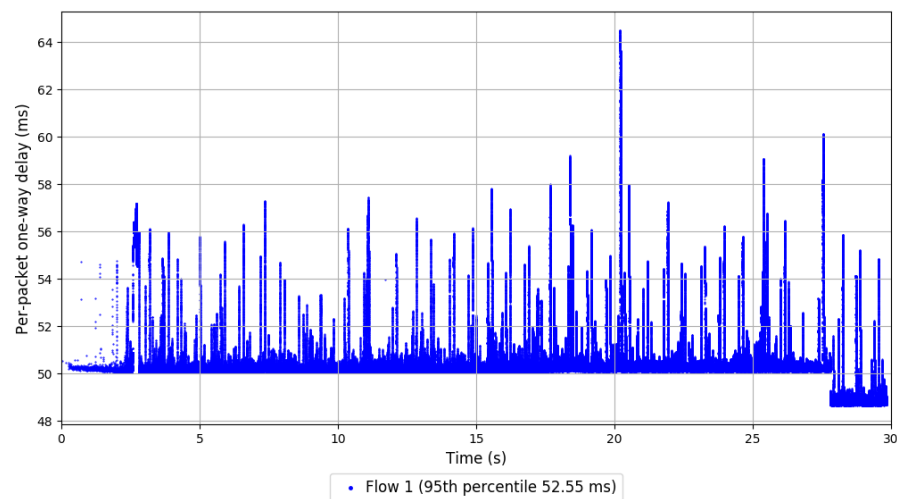

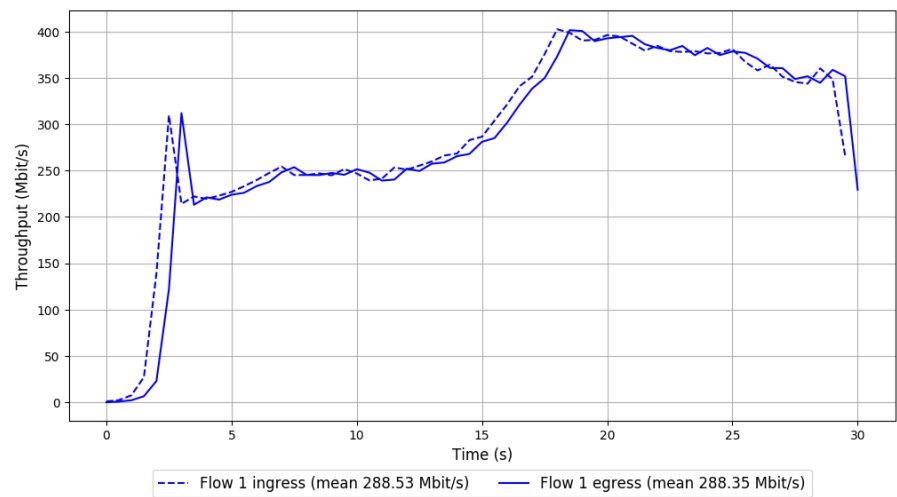
• Flow 1 (95th percentile 112.44 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-01 19:50:28
End at: 2018-06-01 19:50:58
Local clock offset: -0.225 ms
Remote clock offset: -0.015 ms


# Below is generated by plot.py at 2018-06-01 21:57:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 288.35 Mbit/s
95th percentile per-packet one-way delay: 52.554 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 288.35 Mbit/s
95th percentile per-packet one-way delay: 52.554 ms
Loss rate: 0.40%
```

Run 9: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 288.53 Mbit/s) --- Flow 1 egress (mean 288.35 Mbit/s)

• Flow 1 (95th percentile 52.55 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-01 20:10:29
End at: 2018-06-01 20:10:59
Local clock offset: -0.081 ms
Remote clock offset: 0.044 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 374.35 Mbit/s
95th percentile per-packet one-way delay: 85.987 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 374.35 Mbit/s
95th percentile per-packet one-way delay: 85.987 ms
Loss rate: 0.37%
```
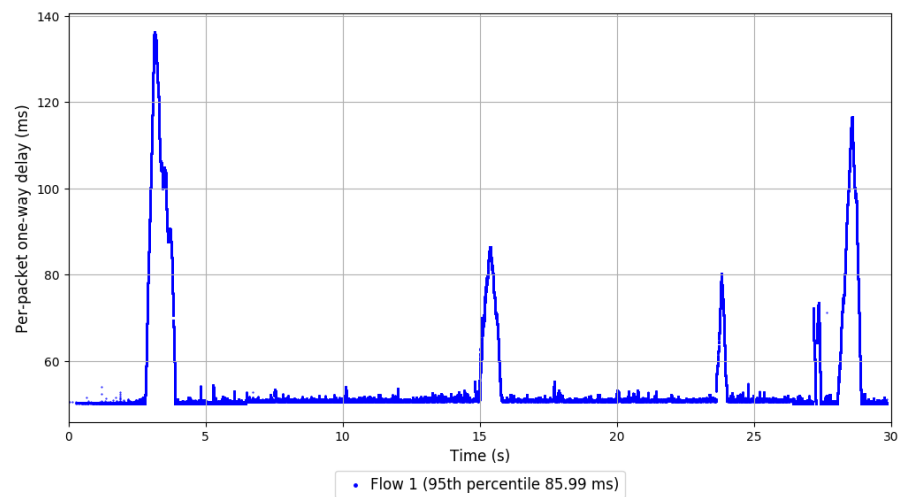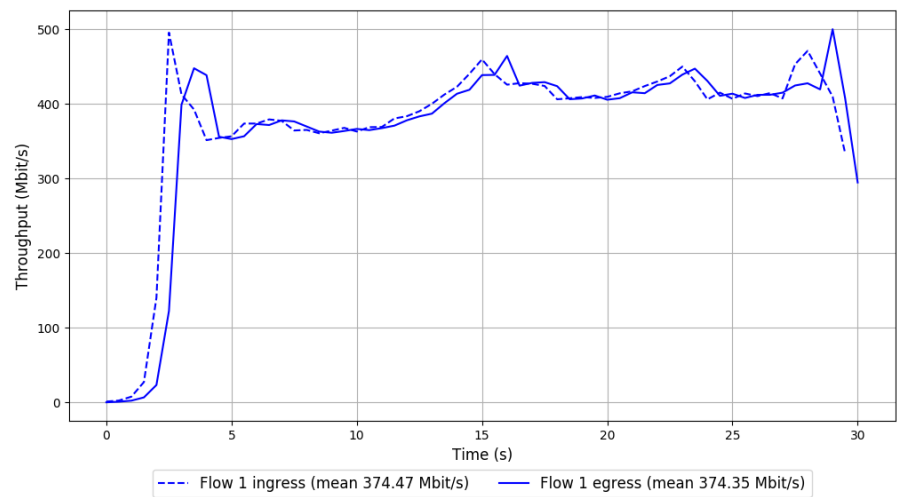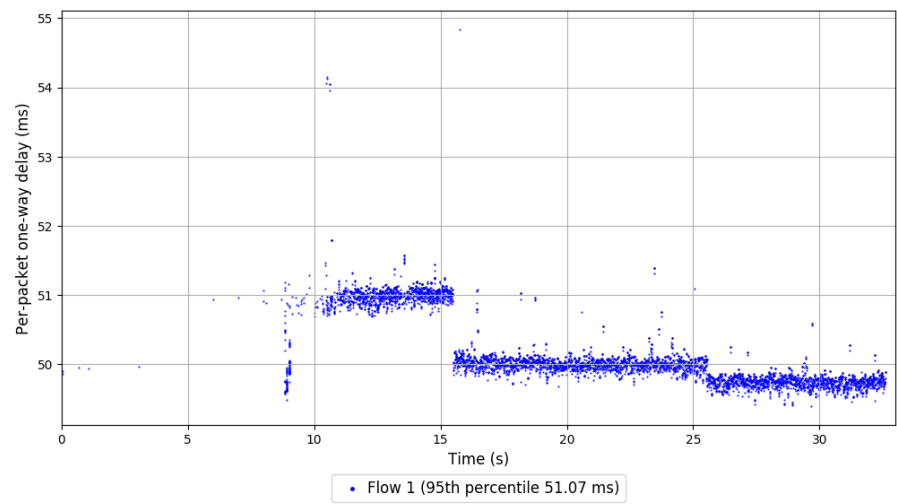
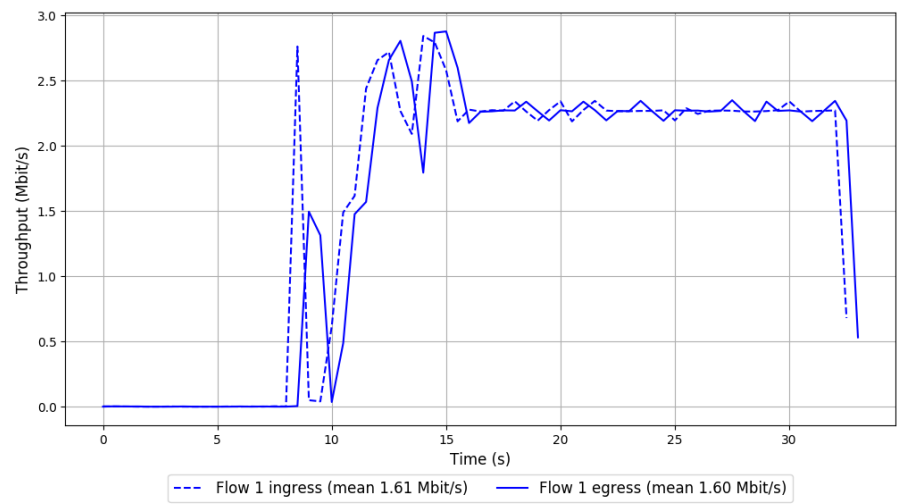## Run 10: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-06-01 17:10:03
End at: 2018-06-01 17:10:33
Local clock offset: -0.063 ms
Remote clock offset: -0.032 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 51.072 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 51.072 ms
Loss rate: 0.43%
```

Run 1: Report of WebRTC media — Data Link

Flow 1 ingress (mean 1.61 Mbit/s) --- Flow 1 egress (mean 1.60 Mbit/s)
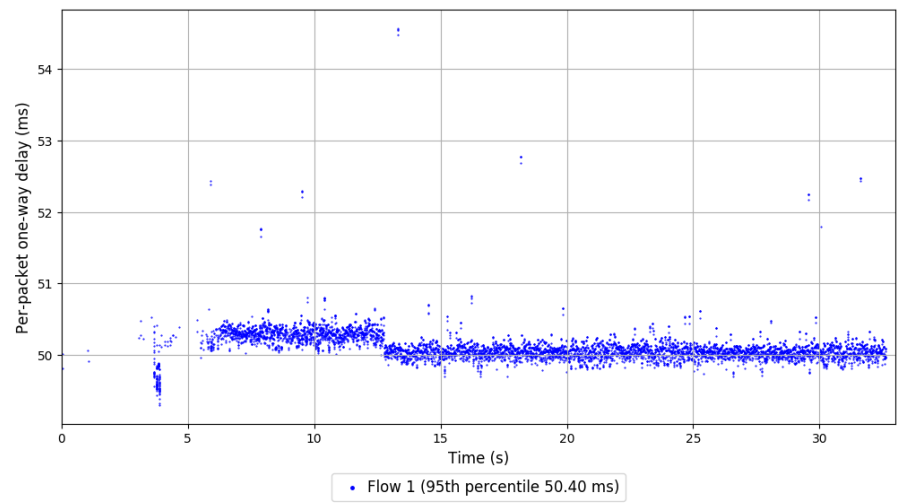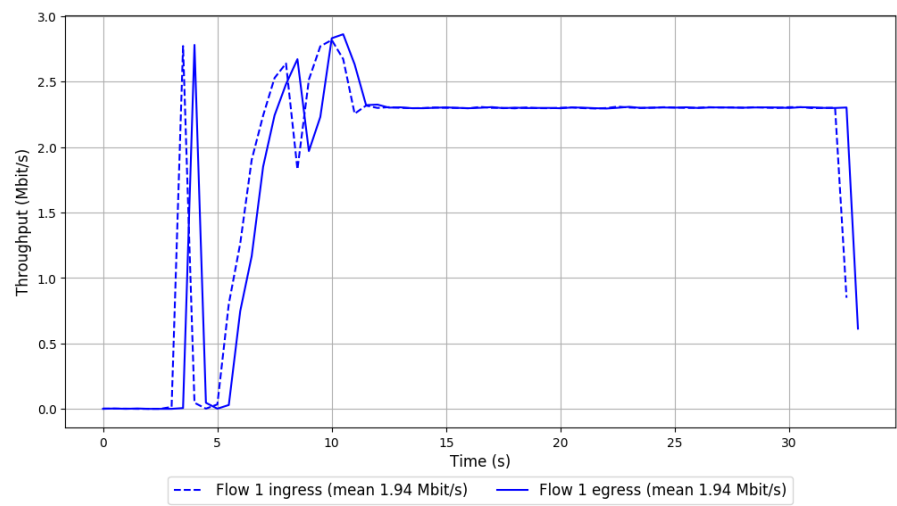

Flow 1 (95th percentile 51.07 ms)

```
Run 2: Statistics of WebRTC media

Start at: 2018-06-01 17:29:55
End at: 2018-06-01 17:30:25
Local clock offset: -0.365 ms
Remote clock offset: -0.092 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 50.401 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 50.401 ms
Loss rate: 0.37%
```
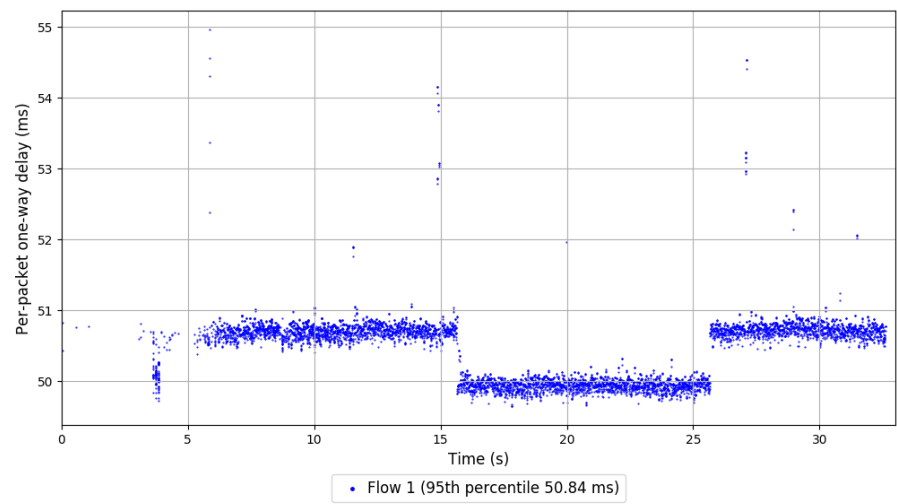
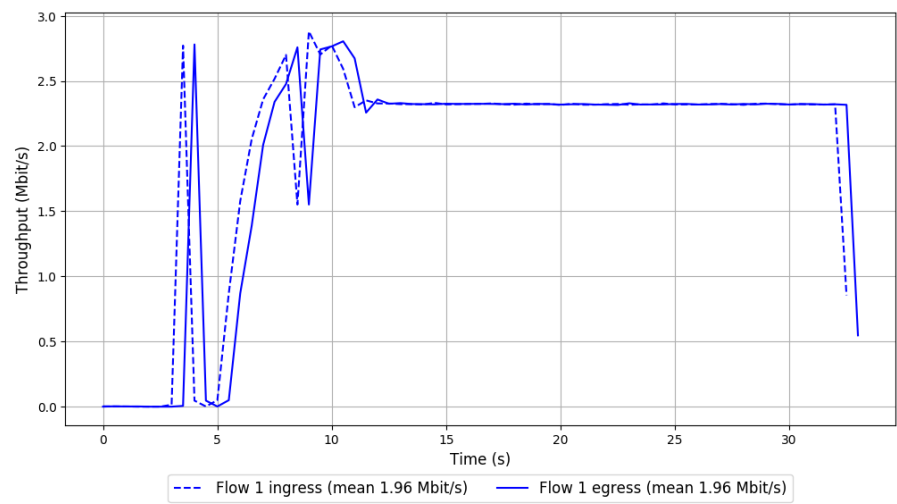Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-06-01 17:50:02
End at: 2018-06-01 17:50:32
Local clock offset: -0.053 ms
Remote clock offset: -0.081 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.844 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.844 ms
Loss rate: 0.42%
```

Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-06-01 18:10:21
End at: 2018-06-01 18:10:51
Local clock offset: -0.107 ms
Remote clock offset: -0.07 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 51.010 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 51.010 ms
Loss rate: 0.36%
```
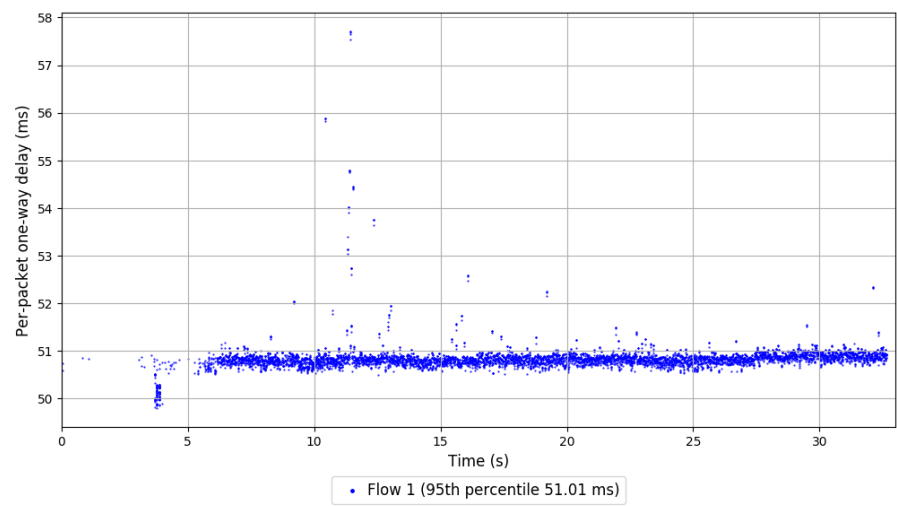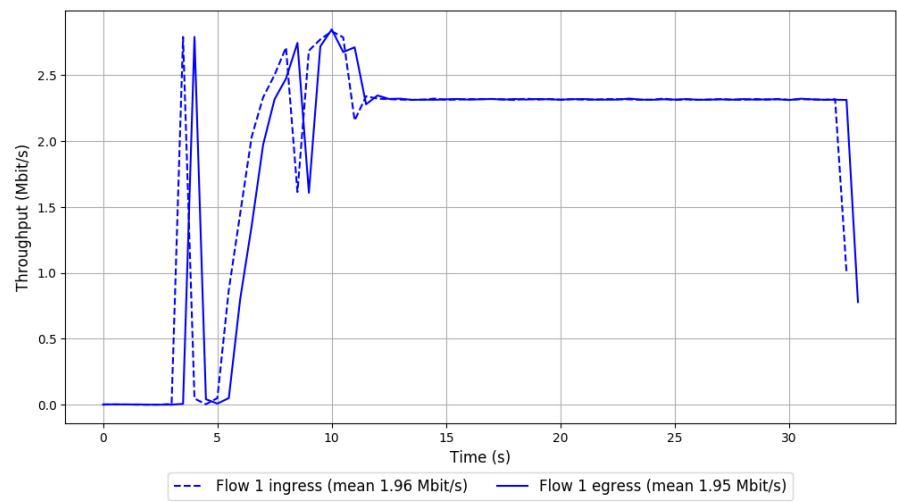
Run 4: Report of WebRTC media — Data Link

Flow 1 ingress (mean 1.96 Mbit/s)   Flow 1 egress (mean 1.95 Mbit/s)
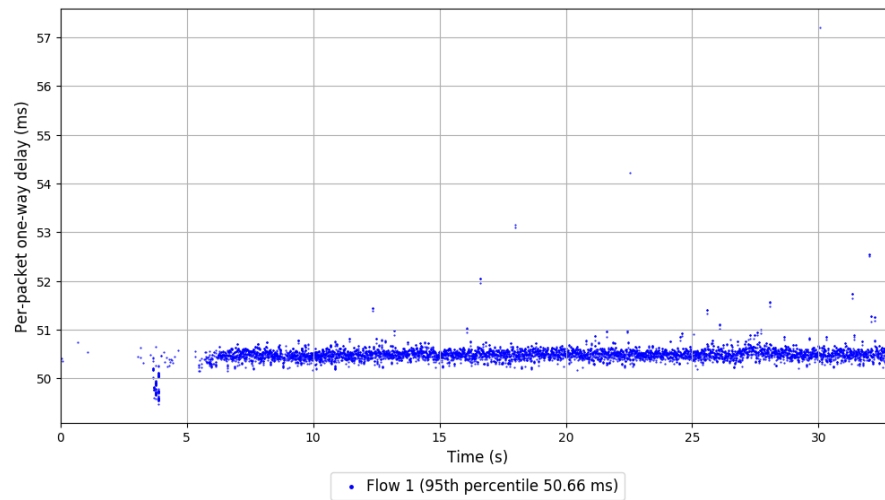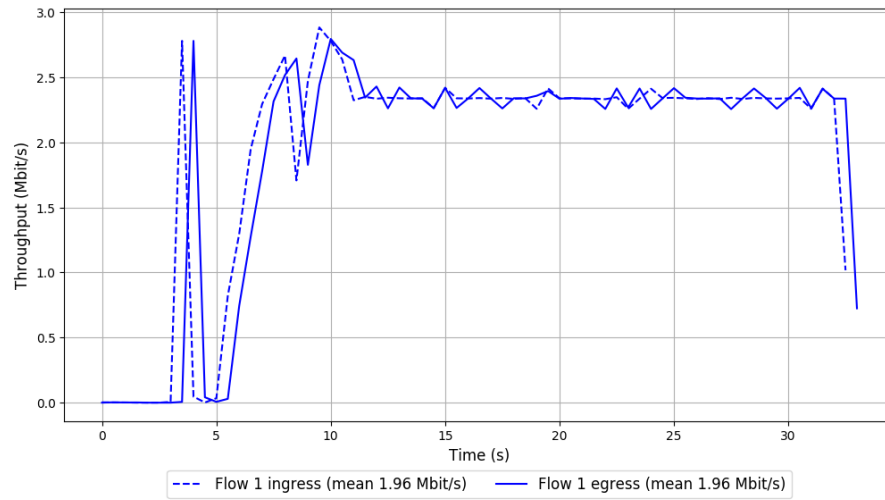

Flow 1 (95th percentile 51.01 ms)

```
Run 5: Statistics of WebRTC media

Start at: 2018-06-01 18:30:33
End at: 2018-06-01 18:31:03
Local clock offset: -0.054 ms
Remote clock offset: -0.028 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.661 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.661 ms
Loss rate: 0.41%
```

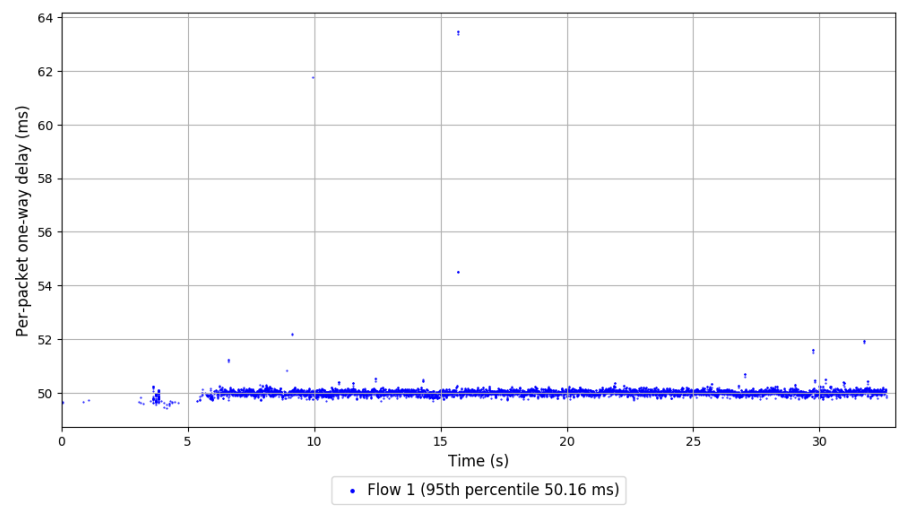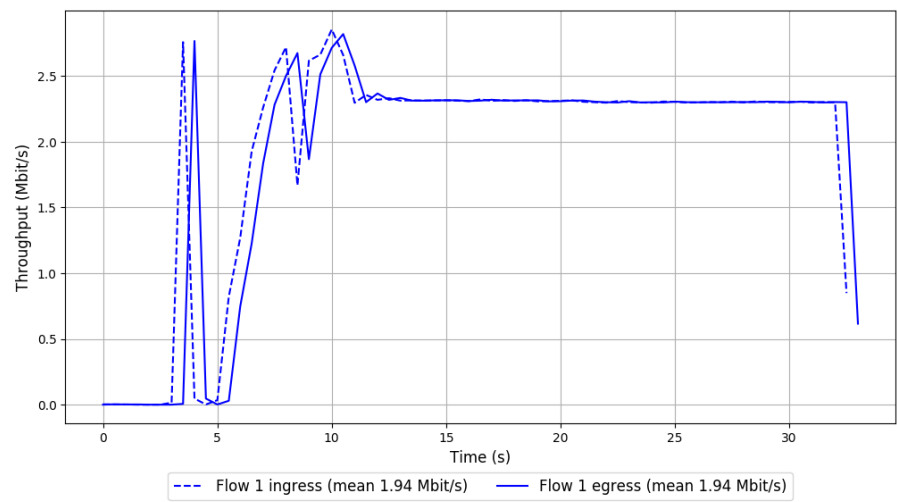# Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-06-01 18:50:53
End at: 2018-06-01 18:51:23
Local clock offset: -0.052 ms
Remote clock offset: -0.024 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 50.160 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 50.160 ms
Loss rate: 0.36%
```

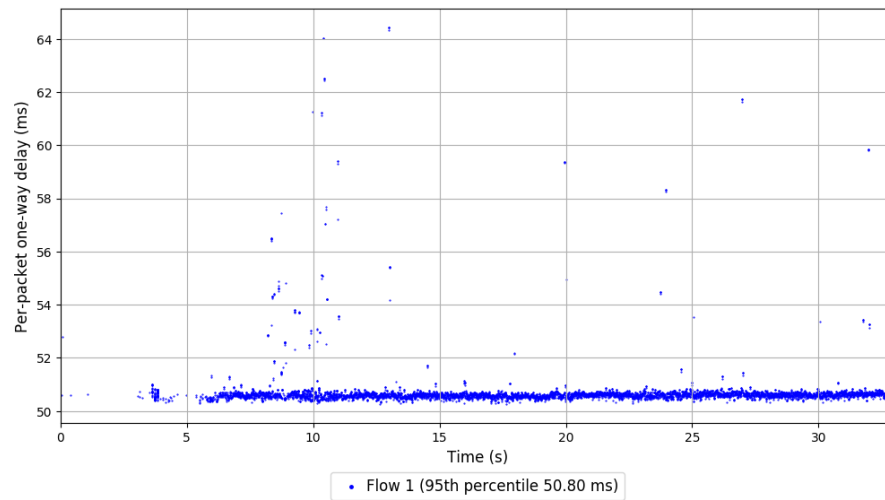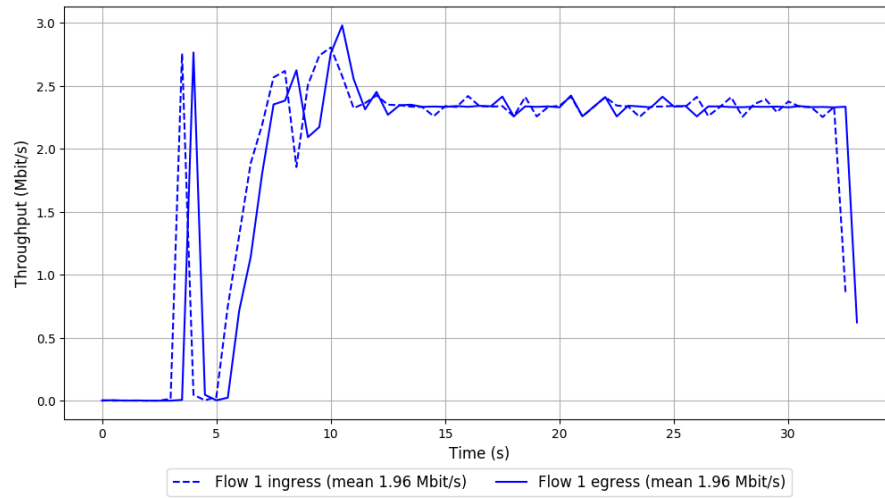Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-06-01 19:11:09
End at: 2018-06-01 19:11:39
Local clock offset: -0.461 ms
Remote clock offset: -0.041 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.800 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.800 ms
Loss rate: 0.37%
```

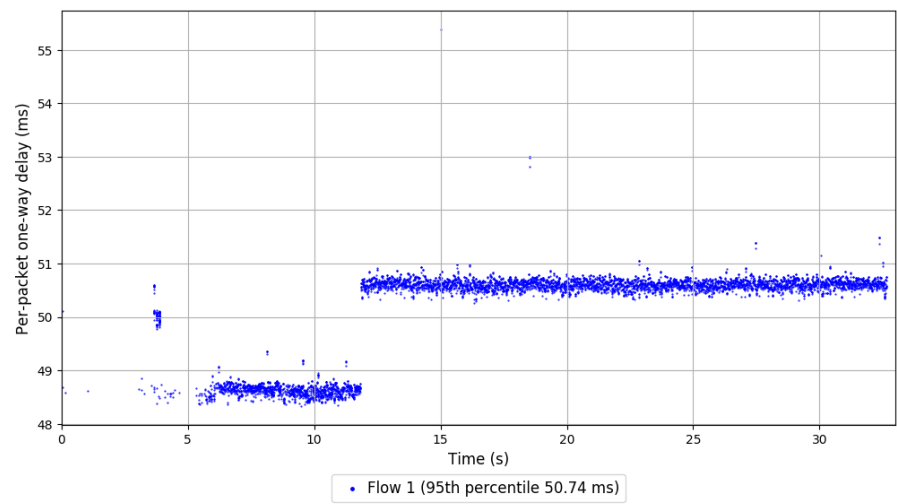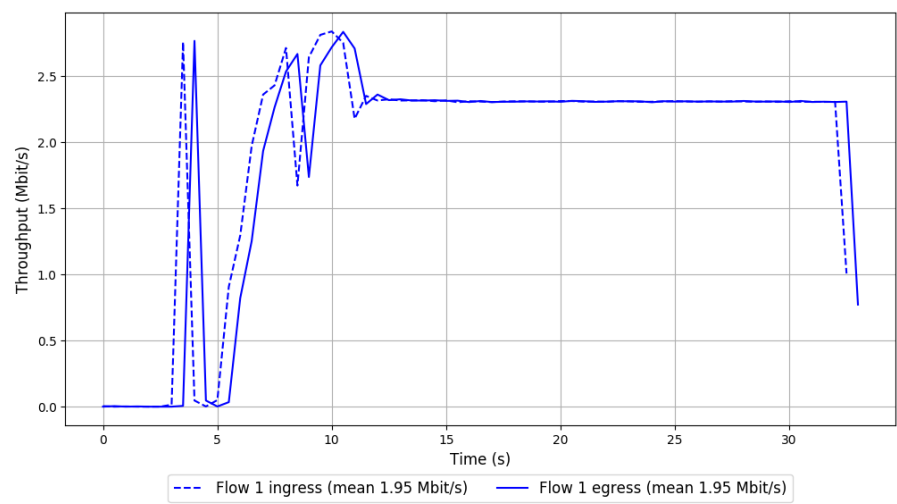Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-06-01 19:31:29
End at: 2018-06-01 19:31:59
Local clock offset: -0.52 ms
Remote clock offset: -0.013 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 50.741 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 50.741 ms
Loss rate: 0.36%
```

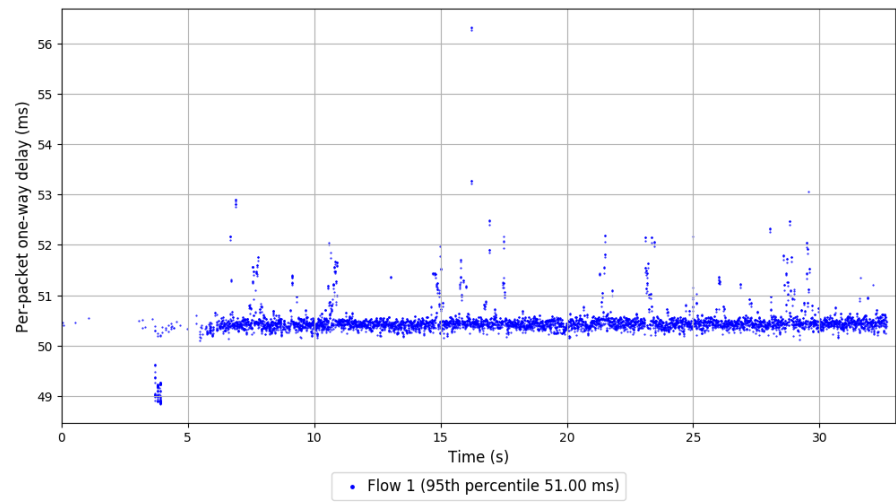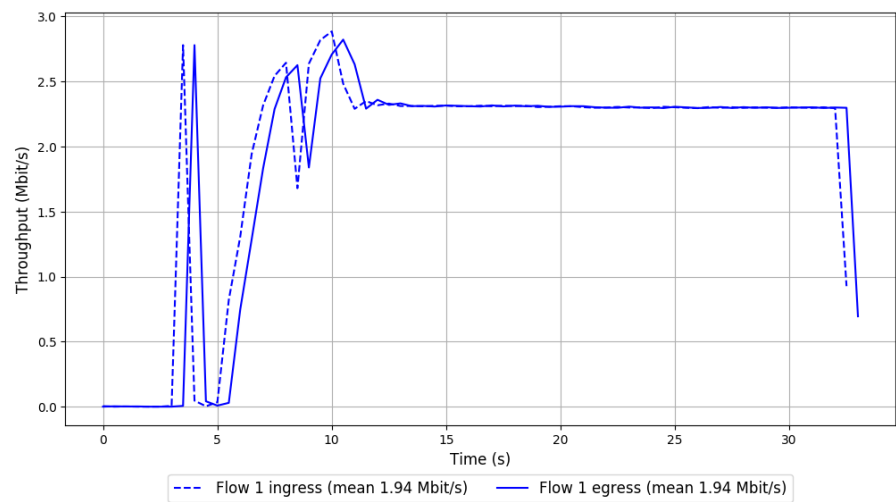Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-06-01 19:51:52
End at: 2018-06-01 19:52:22
Local clock offset: -0.144 ms
Remote clock offset: -0.013 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 50.999 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 50.999 ms
Loss rate: 0.36%
```

Run 9: Report of WebRTC media — Data Link

Flow 1 ingress (mean 1.94 Mbit/s) --- Flow 1 egress (mean 1.94 Mbit/s)

• Flow 1 (95th percentile 51.00 ms)

```
Run 10: Statistics of WebRTC media

Start at: 2018-06-01 20:11:59
End at: 2018-06-01 20:12:29
Local clock offset: -0.056 ms
Remote clock offset: 0.044 ms


# Below is generated by plot.py at 2018-06-01 21:57:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.978 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.978 ms
Loss rate: 0.37%
```

Run 10: Report of WebRTC media — Data Link