Pantheon Report
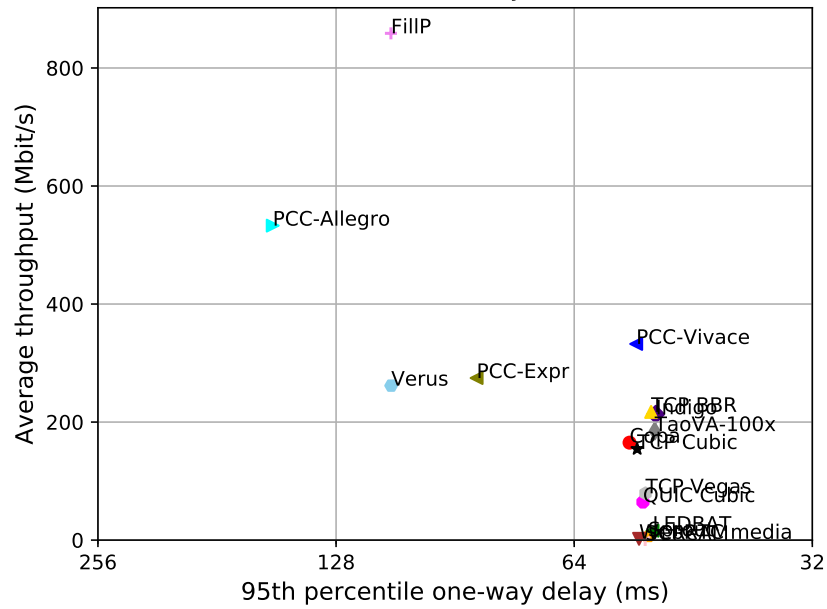
Generated at 2018-06-01 21:53:10 (UTC).

Data path: GCE Tokyo Ethernet (*remote*) →GCE Sydney 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).

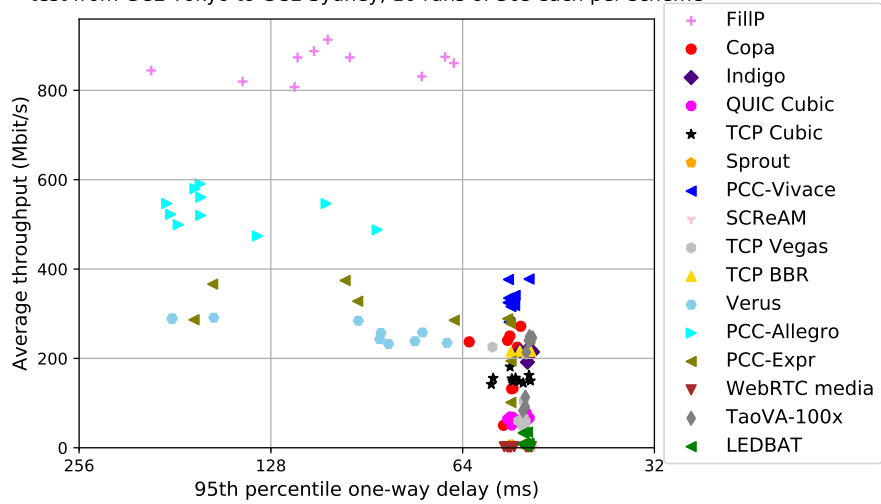NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

```
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 Tokyo to GCE Sydney, 10 runs of 30s each per scheme
(mean of all runs by scheme)

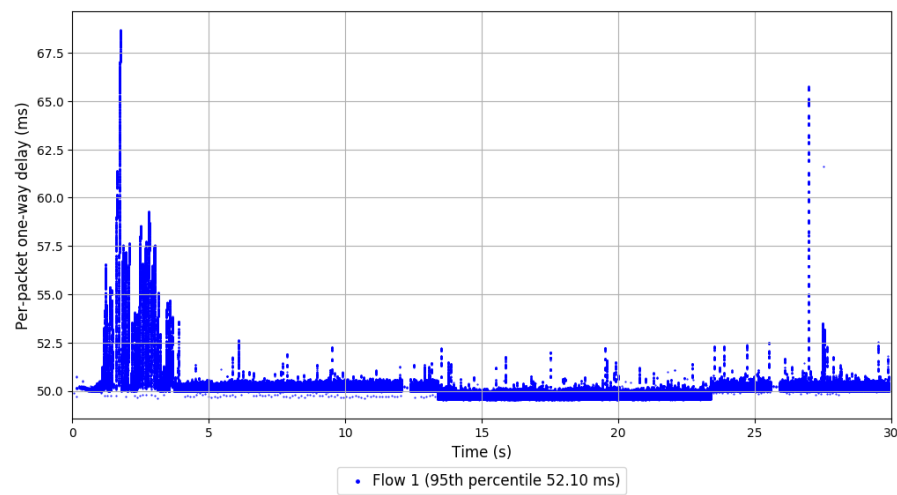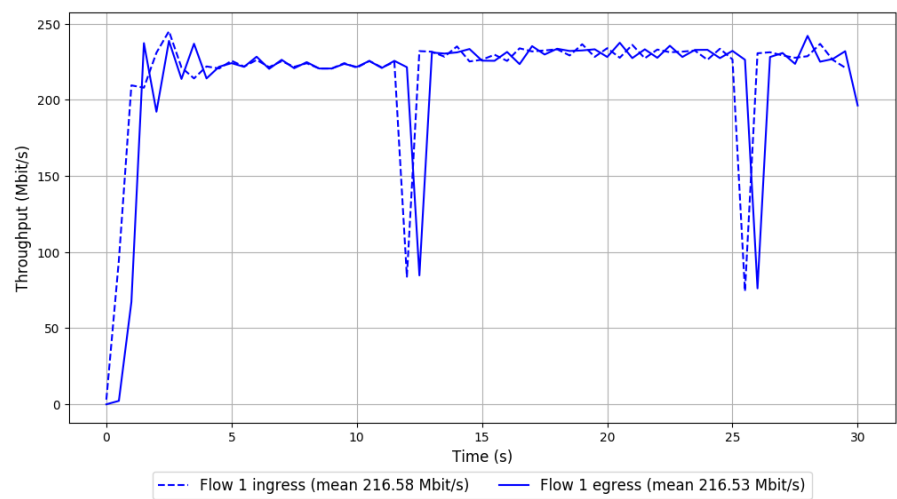## test from GCE Tokyo to GCE Sydney, 10 runs of 30s each per scheme

2

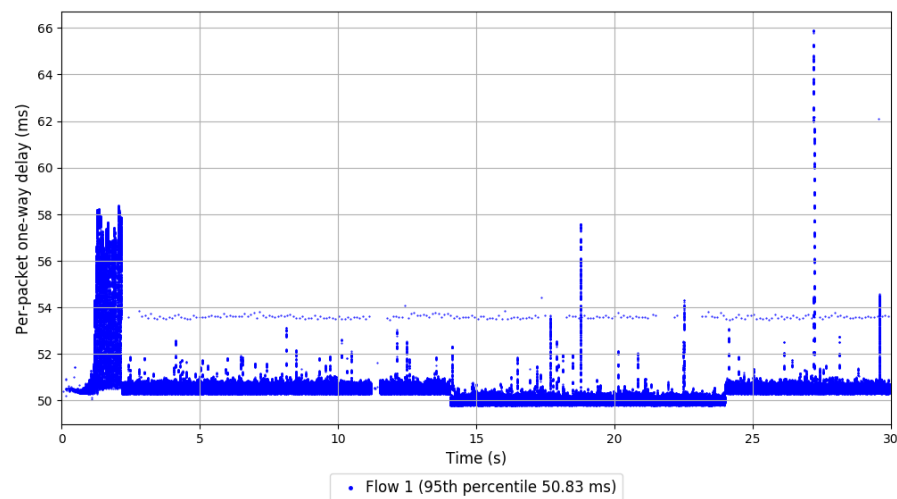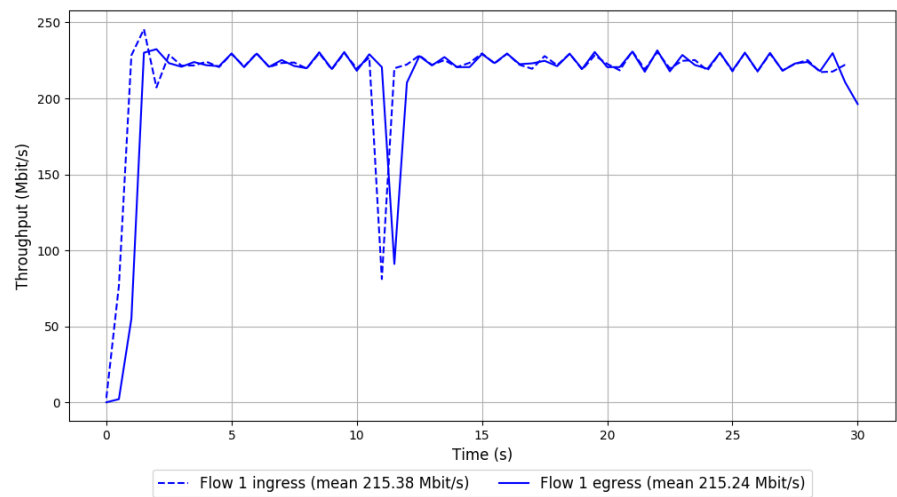| scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	217.25	51.16	0.36
Copa	10	165.14	54.48	0.33
TCP Cubic	10	154.44	53.28	0.36
FillP	10	858.71	109.11	0.77
Indigo	10	213.25	50.48	0.35
LEDBAT	10	15.84	50.96	0.59
PCC-Allegro	10	532.87	153.91	1.20
PCC-Expr	10	274.65	85.03	1.12
QUIC Cubic	10	64.53	52.39	0.47
SCReAM	10	0.21	52.06	0.34
Sprout	10	6.42	51.64	0.35
TaoVA-100x	8	184.72	50.63	0.21
TCP Vegas	10	79.27	52.00	0.30
Verus	10	261.74	109.03	0.48
PCC-Vivace	10	332.41	53.44	0.39
WebRTC media	10	2.14	52.99	0.44

```
Run 1: Statistics of TCP BBR

Start at: 2018-06-01 17:06:47
End at: 2018-06-01 17:07:17
Local clock offset: -0.446 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2018-06-01 20:34:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.53 Mbit/s
95th percentile per-packet one-way delay: 52.099 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 216.53 Mbit/s
95th percentile per-packet one-way delay: 52.099 ms
Loss rate: 0.37%
```

Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-06-01 17:26:37
End at: 2018-06-01 17:27:07
Local clock offset: -0.236 ms
Remote clock offset: -0.123 ms


# Below is generated by plot.py at 2018-06-01 20:34:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.24 Mbit/s
95th percentile per-packet one-way delay: 50.833 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 215.24 Mbit/s
95th percentile per-packet one-way delay: 50.833 ms
Loss rate: 0.38%
```
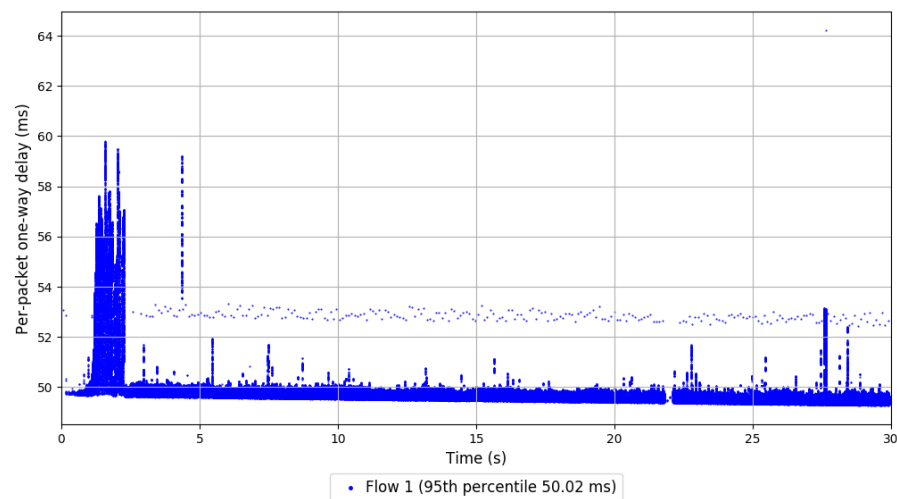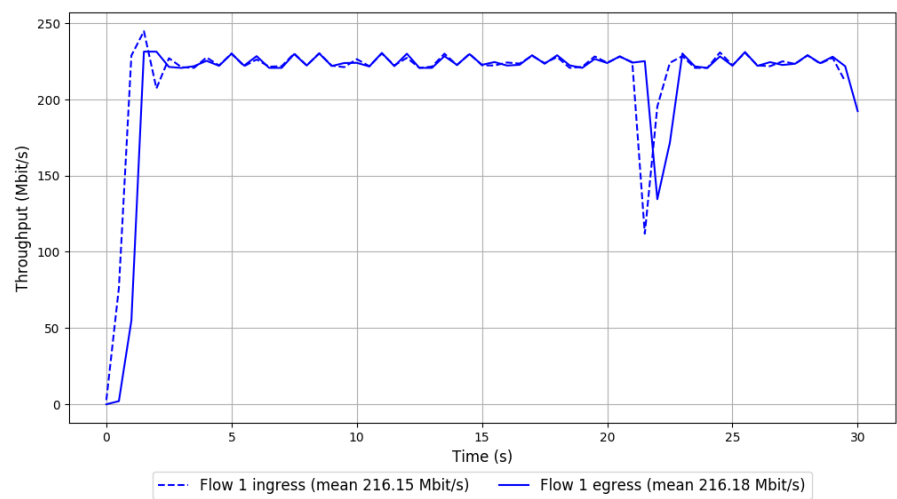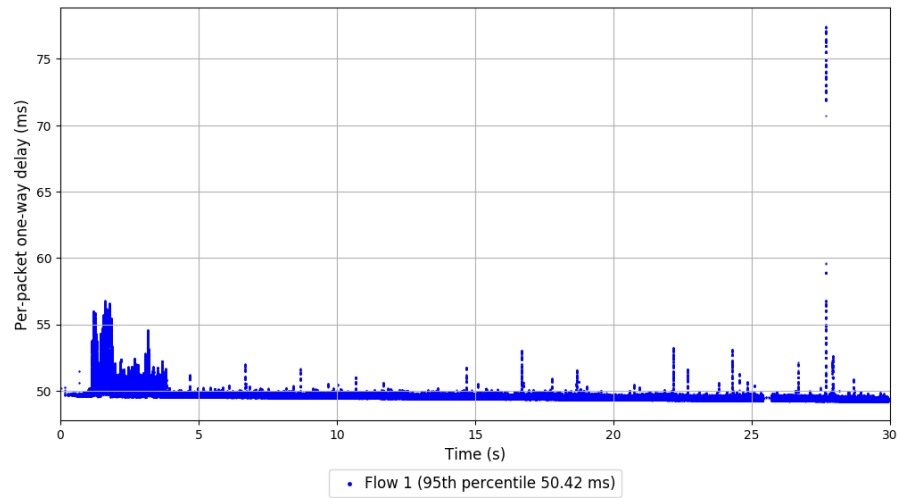
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-06-01 17:47:00
End at: 2018-06-01 17:47:30
Local clock offset: 3.486 ms
Remote clock offset: -0.16 ms


# Below is generated by plot.py at 2018-06-01 20:34:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.18 Mbit/s
95th percentile per-packet one-way delay: 50.018 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 216.18 Mbit/s
95th percentile per-packet one-way delay: 50.018 ms
Loss rate: 0.34%
```
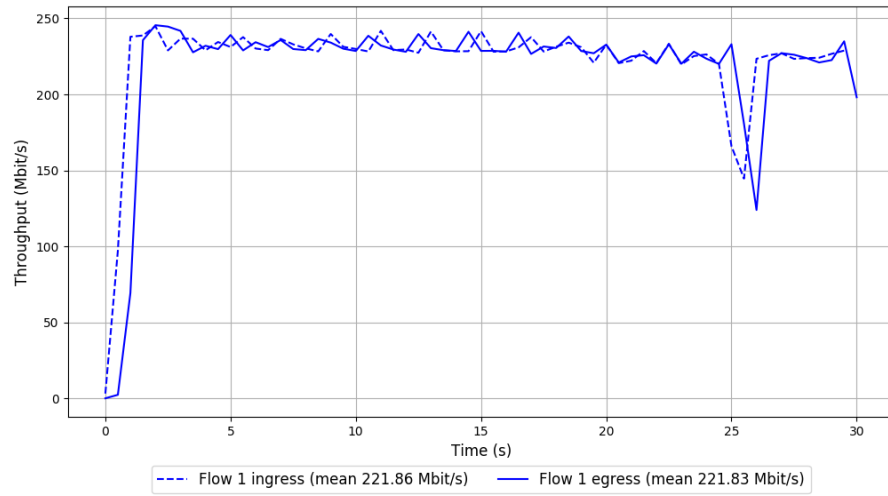
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-06-01 18:07:31
End at: 2018-06-01 18:08:01
Local clock offset: 19.327 ms
Remote clock offset: -0.143 ms


# Below is generated by plot.py at 2018-06-01 20:34:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.83 Mbit/s
95th percentile per-packet one-way delay: 50.424 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 221.83 Mbit/s
95th percentile per-packet one-way delay: 50.424 ms
Loss rate: 0.36%
```
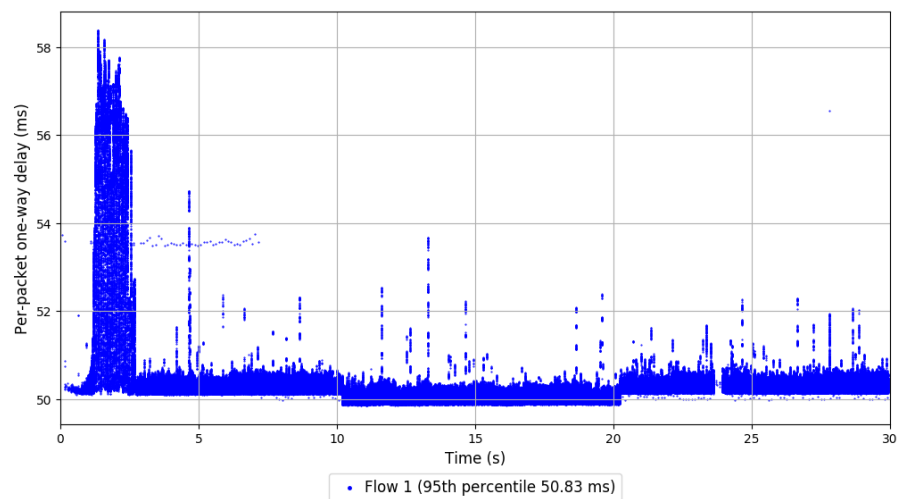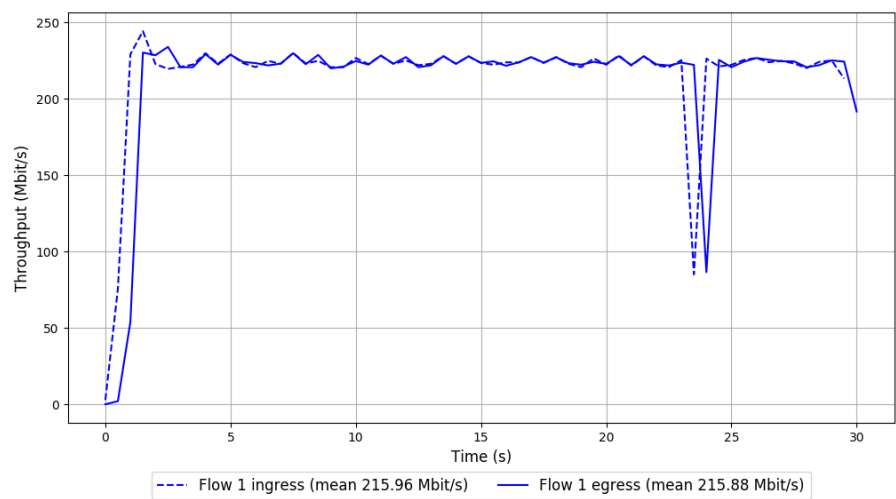
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2018-06-01 18:27:51
End at: 2018-06-01 18:28:21
Local clock offset: 8.877 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2018-06-01 20:34:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.88 Mbit/s
95th percentile per-packet one-way delay: 50.834 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 215.88 Mbit/s
95th percentile per-packet one-way delay: 50.834 ms
Loss rate: 0.34%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 215.96 Mbit/s)   Flow 1 egress (mean 215.88 Mbit/s)
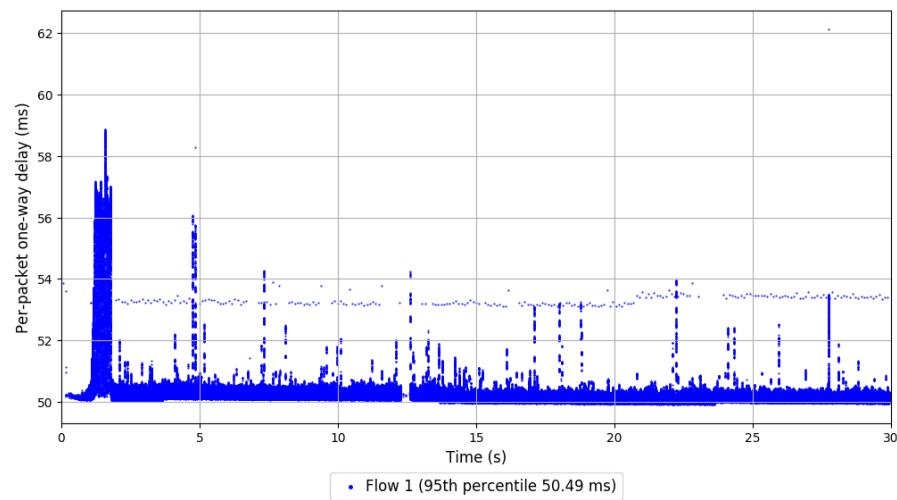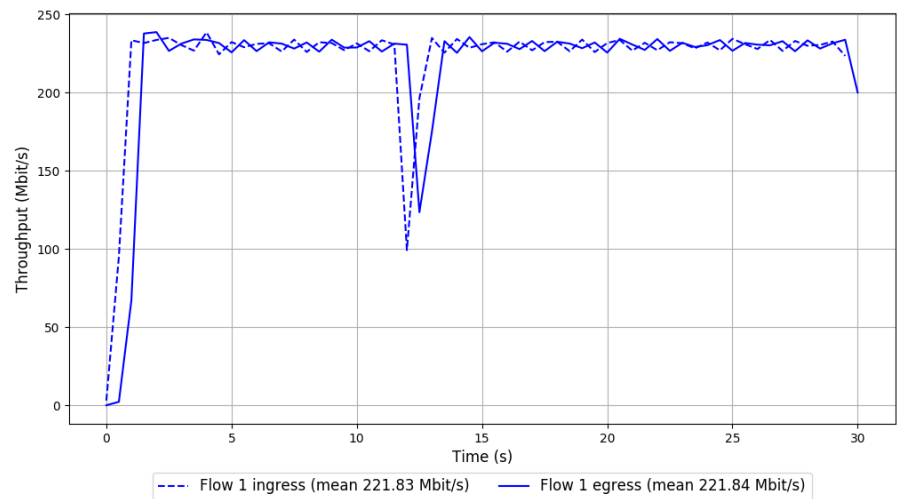

Flow 1 (95th percentile 50.83 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-06-01 18:48:17
End at: 2018-06-01 18:48:47
Local clock offset: 13.211 ms
Remote clock offset: -0.028 ms


# Below is generated by plot.py at 2018-06-01 20:34:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.84 Mbit/s
95th percentile per-packet one-way delay: 50.487 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 221.84 Mbit/s
95th percentile per-packet one-way delay: 50.487 ms
Loss rate: 0.34%
```
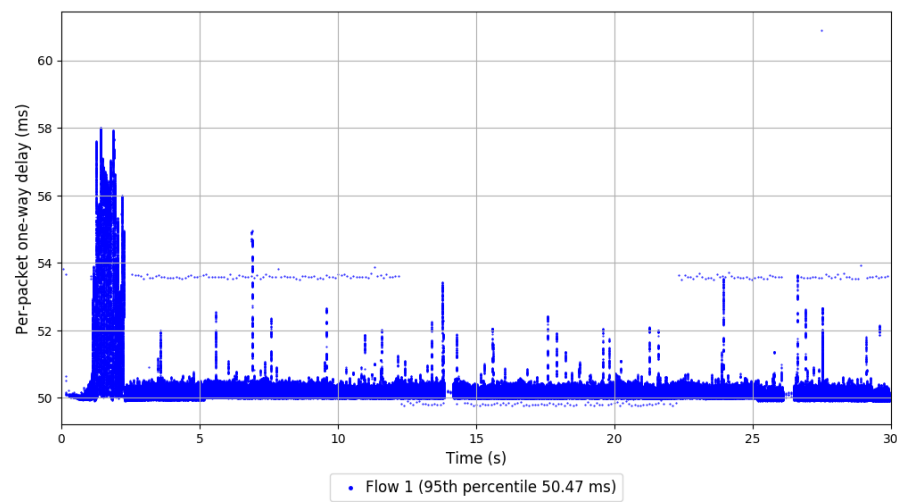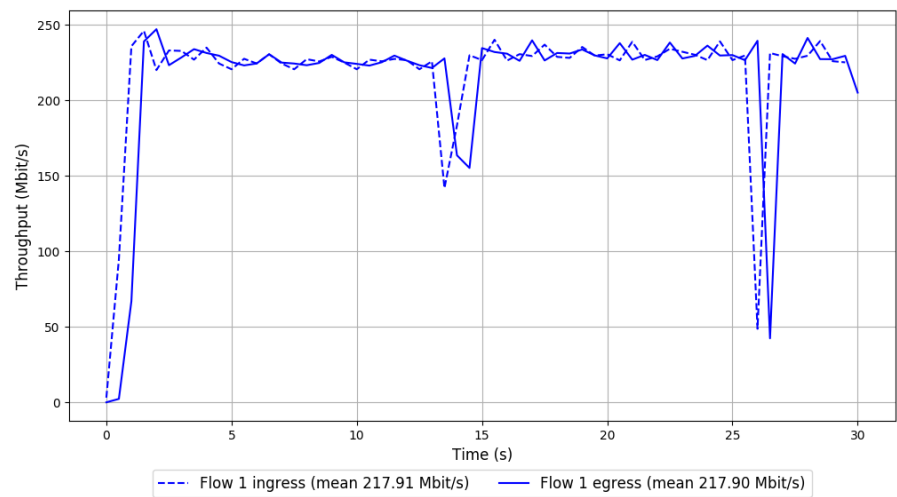
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 221.83 Mbit/s)   Flow 1 egress (mean 221.84 Mbit/s)

Flow 1 (95th percentile 50.49 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-06-01 19:08:46
End at: 2018-06-01 19:09:16
Local clock offset: 5.226 ms
Remote clock offset: 0.212 ms


# Below is generated by plot.py at 2018-06-01 20:34:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.90 Mbit/s
95th percentile per-packet one-way delay: 50.473 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 217.90 Mbit/s
95th percentile per-packet one-way delay: 50.473 ms
Loss rate: 0.35%
```
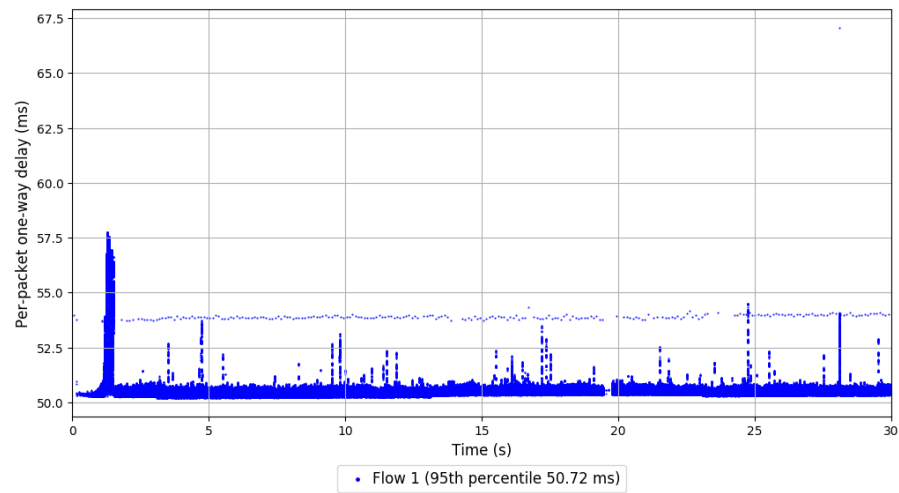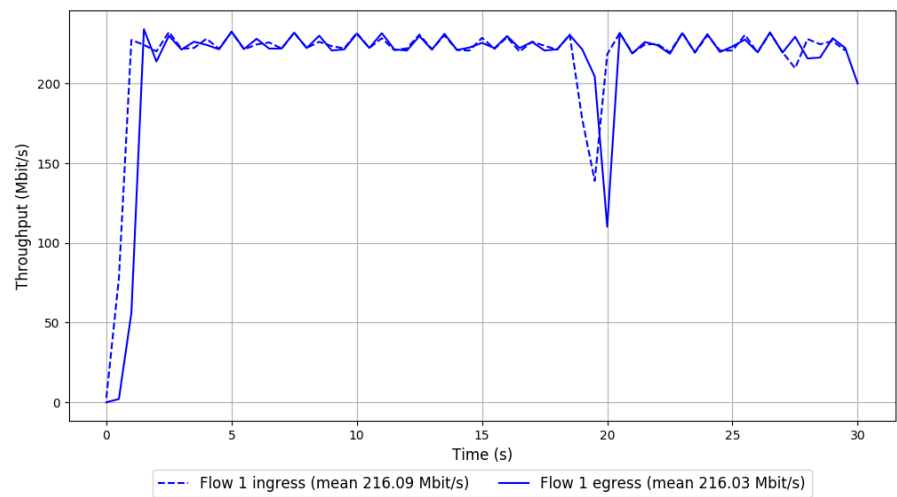
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 217.91 Mbit/s)   Flow 1 egress (mean 217.90 Mbit/s)

Flow 1 (95th percentile 50.47 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2018-06-01 19:29:28
End at: 2018-06-01 19:29:58
Local clock offset: 3.842 ms
Remote clock offset: -0.221 ms


# Below is generated by plot.py at 2018-06-01 20:34:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.03 Mbit/s
95th percentile per-packet one-way delay: 50.724 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 216.03 Mbit/s
95th percentile per-packet one-way delay: 50.724 ms
Loss rate: 0.35%
```
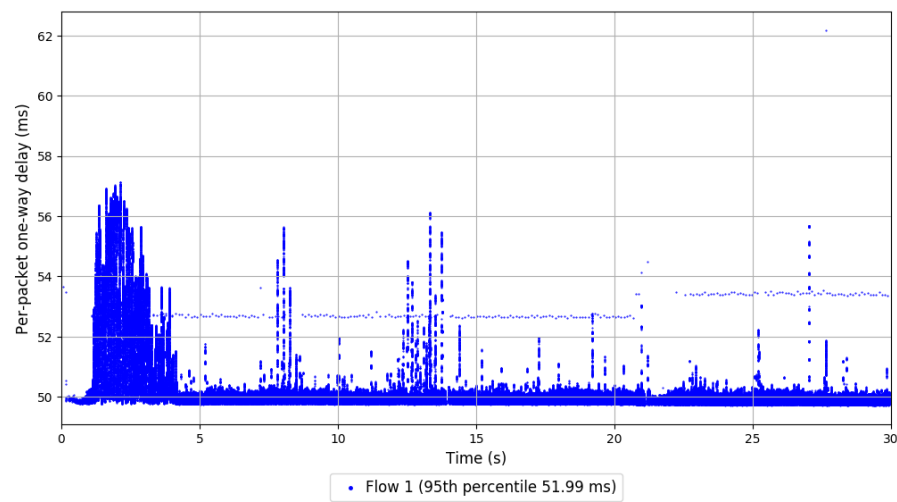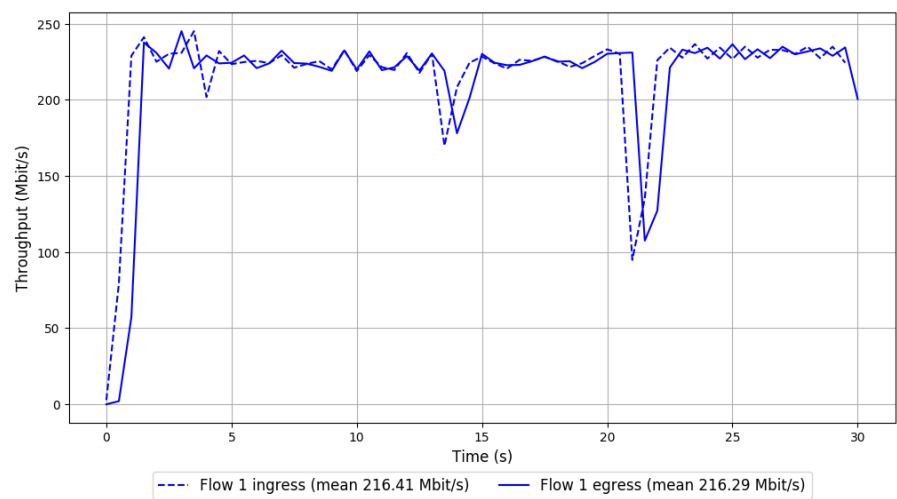
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 216.09 Mbit/s) ----   Flow 1 egress (mean 216.03 Mbit/s) ——

Flow 1 (95th percentile 50.72 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2018-06-01 19:49:50
End at: 2018-06-01 19:50:20
Local clock offset: 2.623 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-06-01 20:37:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.29 Mbit/s
95th percentile per-packet one-way delay: 51.991 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 216.29 Mbit/s
95th percentile per-packet one-way delay: 51.991 ms
Loss rate: 0.37%
```
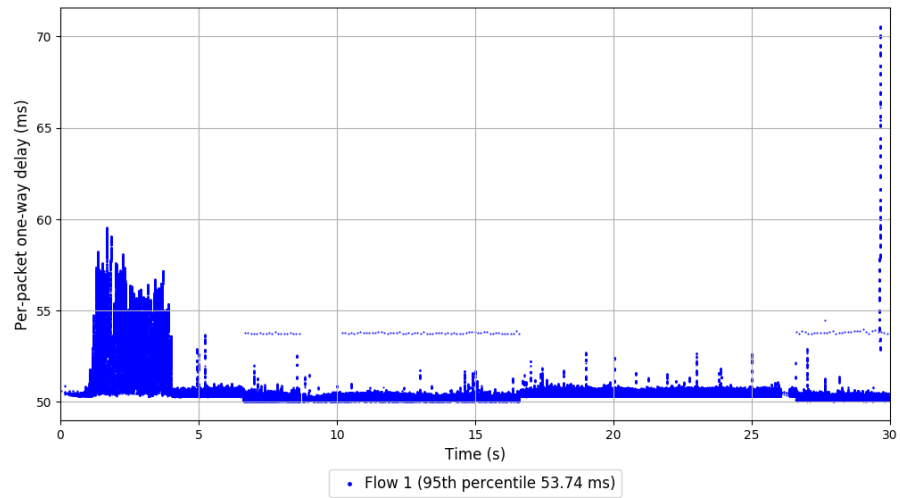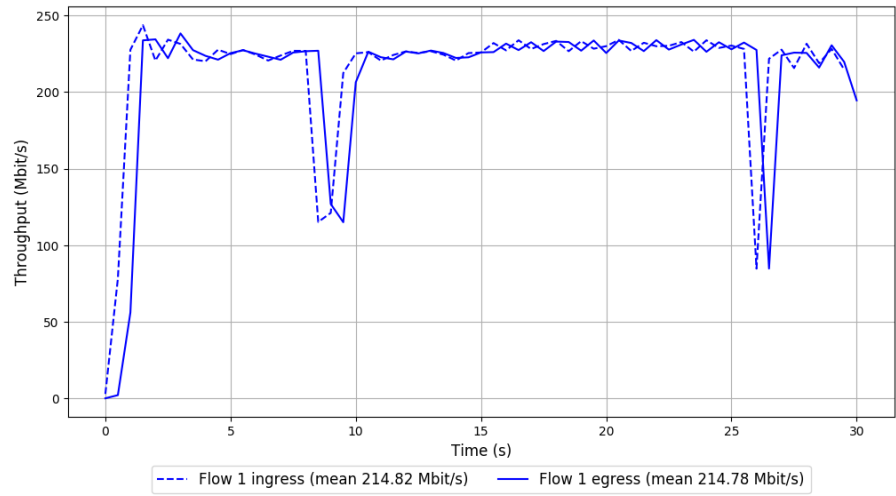
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 216.41 Mbit/s)   Flow 1 egress (mean 216.29 Mbit/s)

Flow 1 (95th percentile 51.99 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2018-06-01 20:10:04
End at: 2018-06-01 20:10:34
Local clock offset: 1.484 ms
Remote clock offset: -0.196 ms


# Below is generated by plot.py at 2018-06-01 20:37:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.78 Mbit/s
95th percentile per-packet one-way delay: 53.744 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 214.78 Mbit/s
95th percentile per-packet one-way delay: 53.744 ms
Loss rate: 0.36%
```

Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-06-01 17:11:34
End at: 2018-06-01 17:12:04
Local clock offset: -0.105 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-06-01 20:37:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.03 Mbit/s
95th percentile per-packet one-way delay: 53.637 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 57.03 Mbit/s
95th percentile per-packet one-way delay: 53.637 ms
Loss rate: 0.33%
```
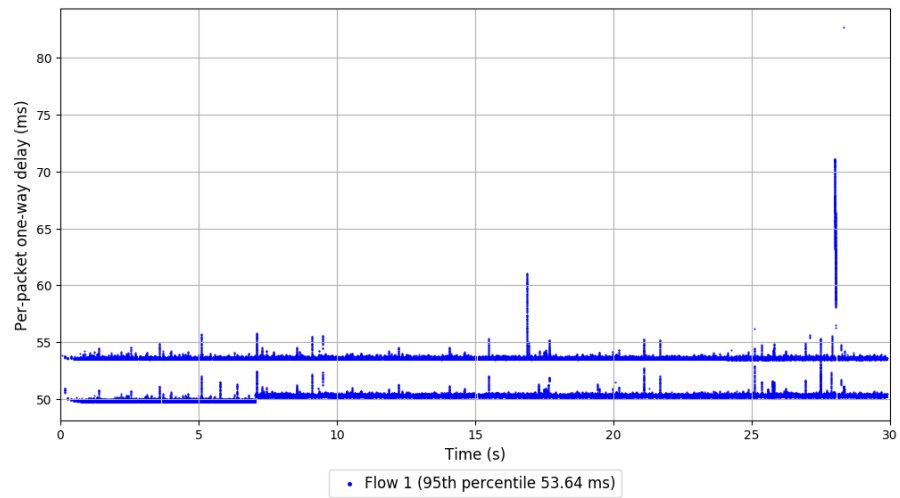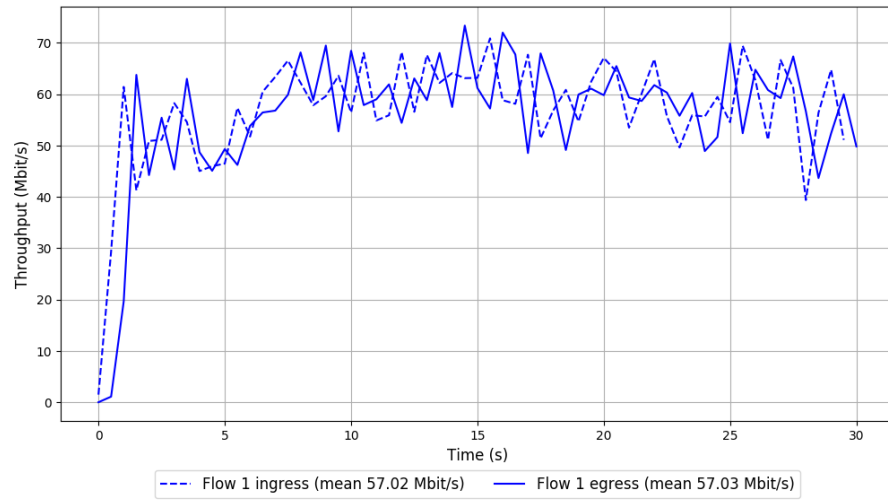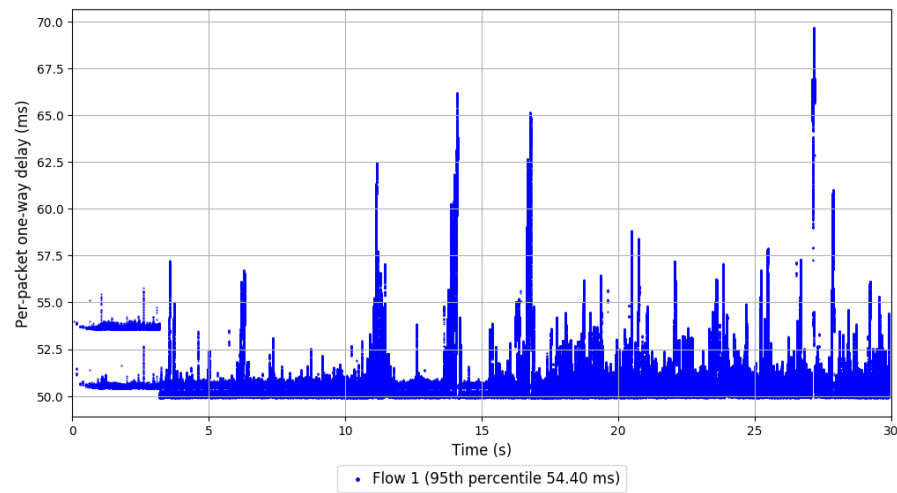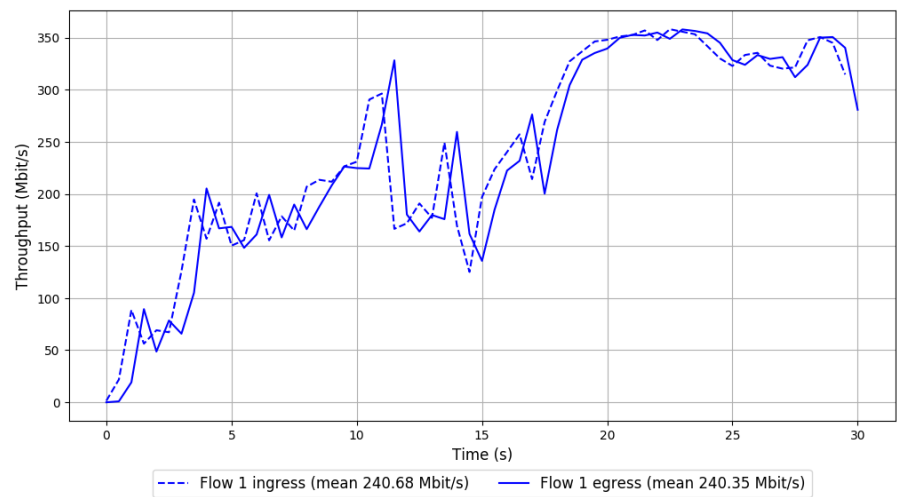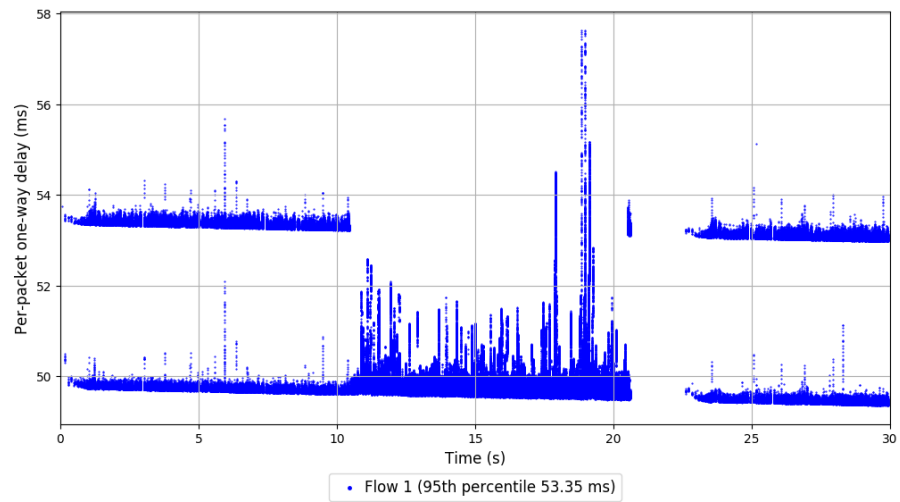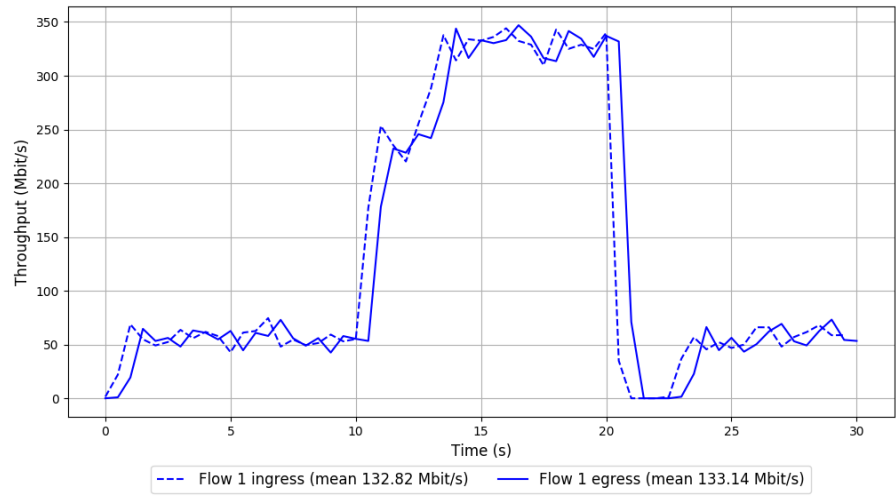
Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 57.02 Mbit/s) — Flow 1 egress (mean 57.03 Mbit/s)

• Flow 1 (95th percentile 53.64 ms)

```
Run 2: Statistics of Copa

Start at: 2018-06-01 17:31:25
End at: 2018-06-01 17:31:55
Local clock offset: -0.097 ms
Remote clock offset: -0.138 ms


# Below is generated by plot.py at 2018-06-01 20:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 240.35 Mbit/s
95th percentile per-packet one-way delay: 54.401 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 240.35 Mbit/s
95th percentile per-packet one-way delay: 54.401 ms
Loss rate: 0.50%
```

Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-06-01 17:51:47
End at: 2018-06-01 17:52:17
Local clock offset: 7.348 ms
Remote clock offset: -0.092 ms


# Below is generated by plot.py at 2018-06-01 20:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 133.14 Mbit/s
95th percentile per-packet one-way delay: 53.347 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 133.14 Mbit/s
95th percentile per-packet one-way delay: 53.347 ms
Loss rate: 0.14%
```
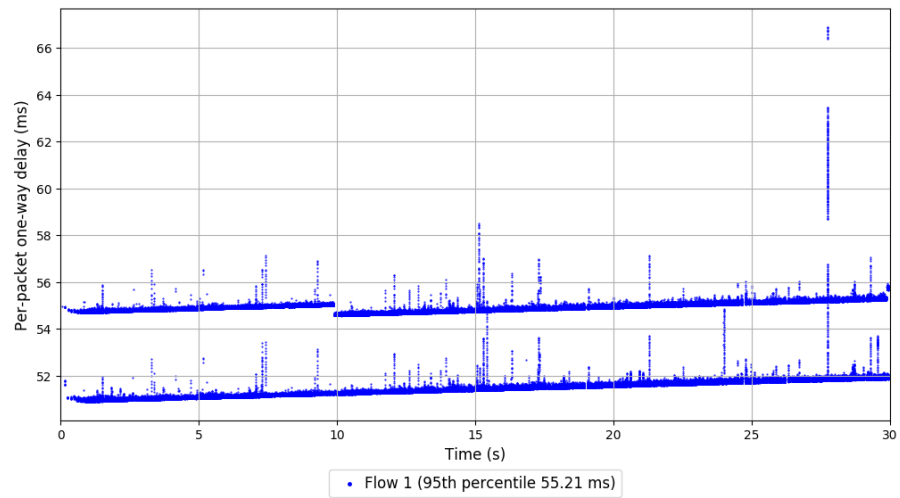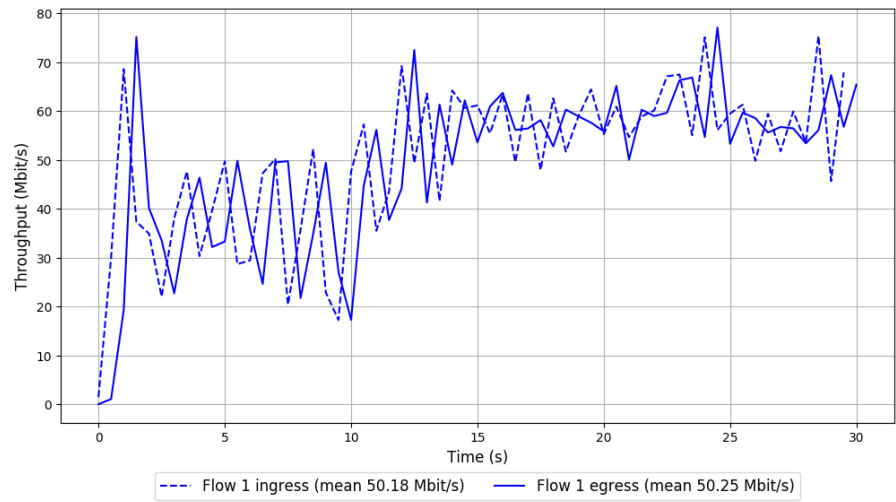
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 132.82 Mbit/s)   Flow 1 egress (mean 133.14 Mbit/s)

• Flow 1 (95th percentile 53.35 ms)

```
Run 4: Statistics of Copa

Start at: 2018-06-01 18:12:18
End at: 2018-06-01 18:12:48
Local clock offset: 22.54 ms
Remote clock offset: -0.41 ms


# Below is generated by plot.py at 2018-06-01 20:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.25 Mbit/s
95th percentile per-packet one-way delay: 55.213 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 50.25 Mbit/s
95th percentile per-packet one-way delay: 55.213 ms
Loss rate: 0.22%
```
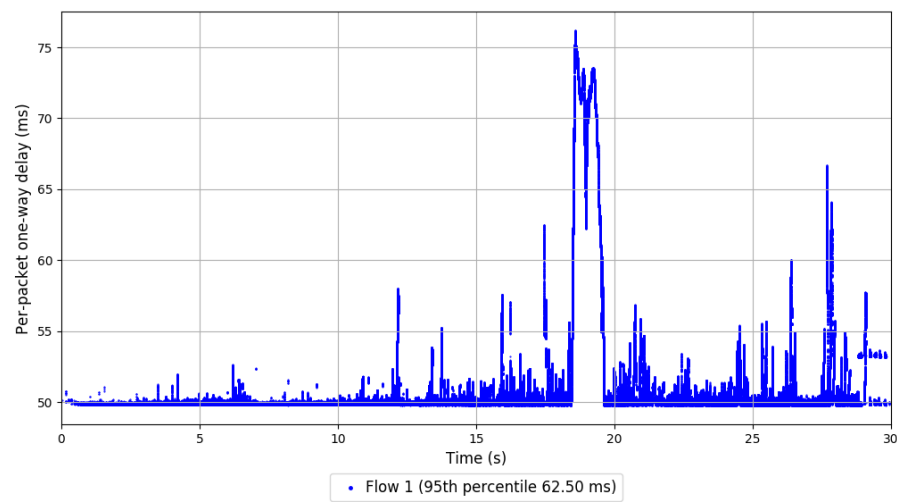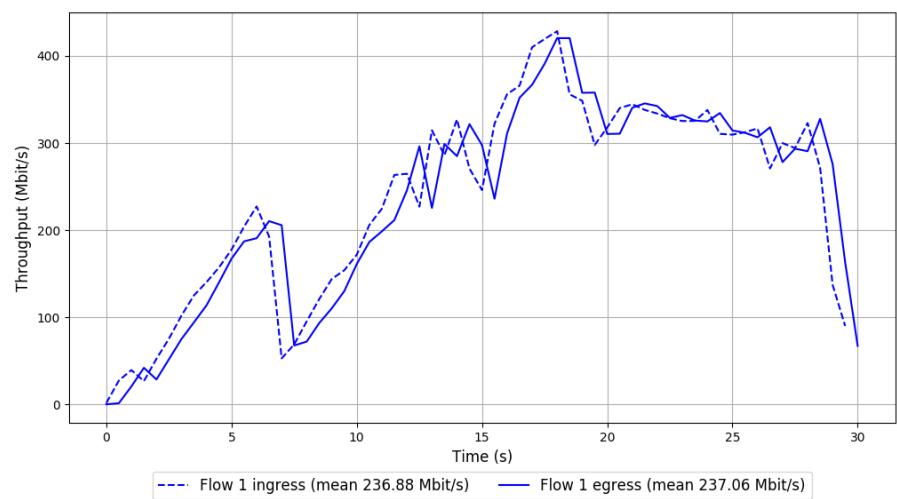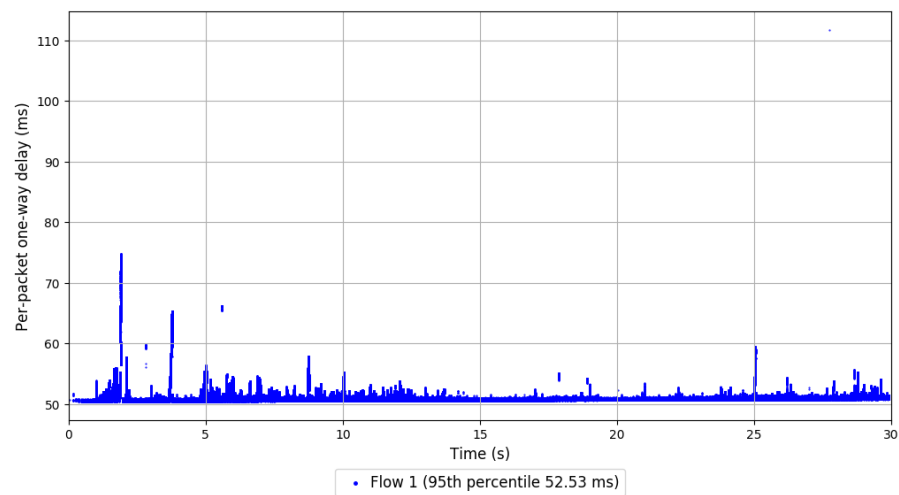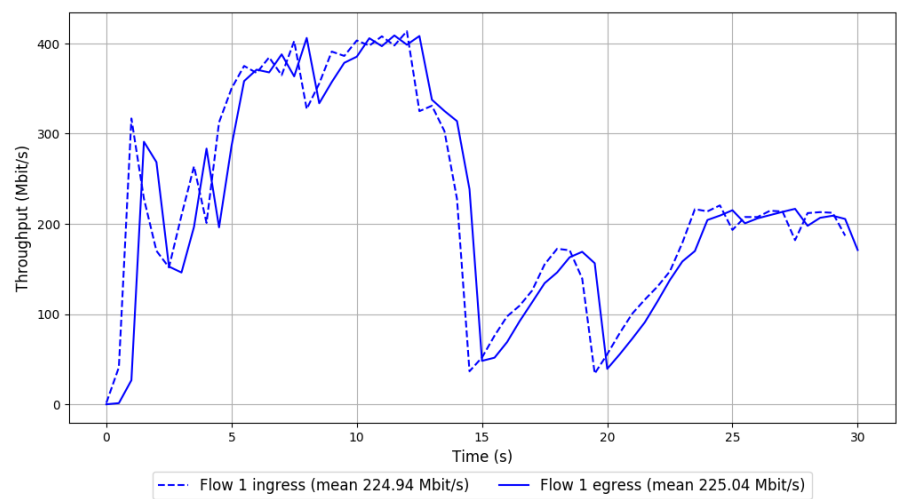
Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 50.18 Mbit/s) — Flow 1 egress (mean 50.25 Mbit/s)

• Flow 1 (95th percentile 55.21 ms)

```
Run 5: Statistics of Copa

Start at: 2018-06-01 18:32:39
End at: 2018-06-01 18:33:09
Local clock offset: 8.887 ms
Remote clock offset: 0.049 ms


# Below is generated by plot.py at 2018-06-01 20:41:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 237.06 Mbit/s
95th percentile per-packet one-way delay: 62.503 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 237.06 Mbit/s
95th percentile per-packet one-way delay: 62.503 ms
Loss rate: 0.22%
```
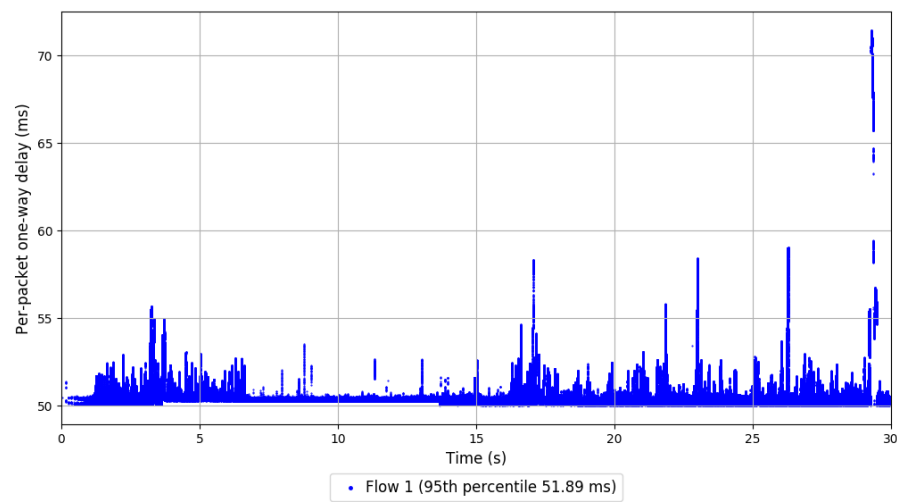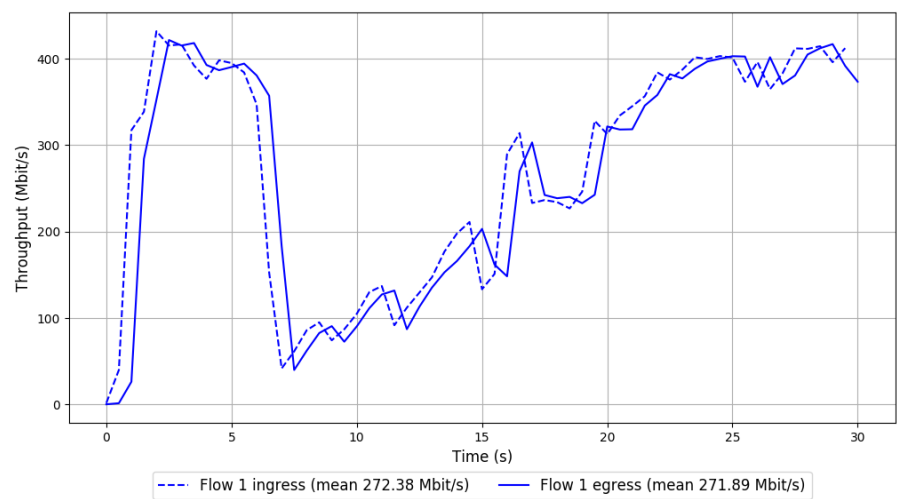
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 236.88 Mbit/s)   Flow 1 egress (mean 237.06 Mbit/s)

Flow 1 (95th percentile 62.50 ms)

```
Run 6: Statistics of Copa

Start at: 2018-06-01 18:53:06
End at: 2018-06-01 18:53:36
Local clock offset: 9.569 ms
Remote clock offset: -0.218 ms


# Below is generated by plot.py at 2018-06-01 20:41:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.04 Mbit/s
95th percentile per-packet one-way delay: 52.526 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 225.04 Mbit/s
95th percentile per-packet one-way delay: 52.526 ms
Loss rate: 0.29%
```

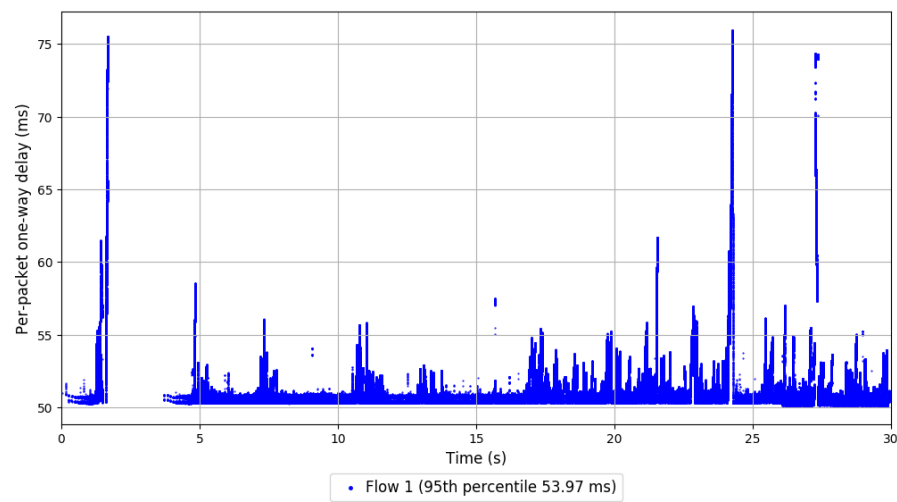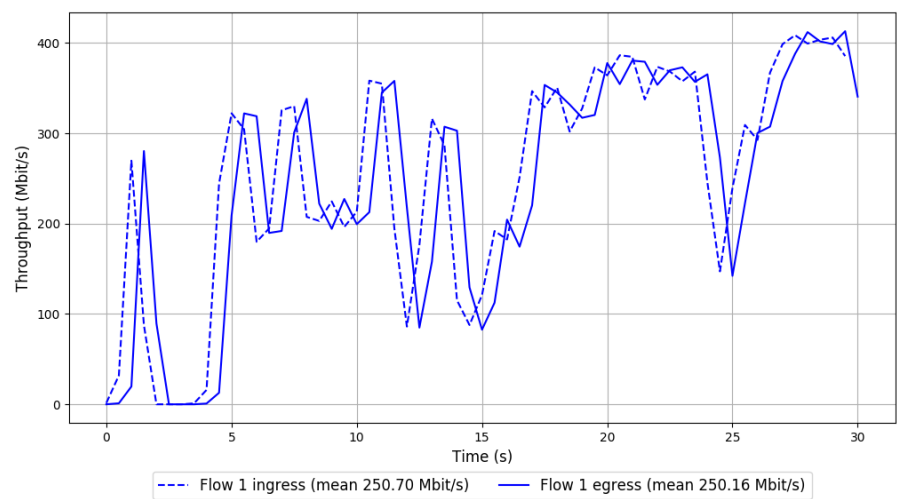Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-06-01 19:13:34
End at: 2018-06-01 19:14:04
Local clock offset: 5.565 ms
Remote clock offset: -0.128 ms


# Below is generated by plot.py at 2018-06-01 20:43:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 271.89 Mbit/s
95th percentile per-packet one-way delay: 51.893 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 271.89 Mbit/s
95th percentile per-packet one-way delay: 51.893 ms
Loss rate: 0.52%
```
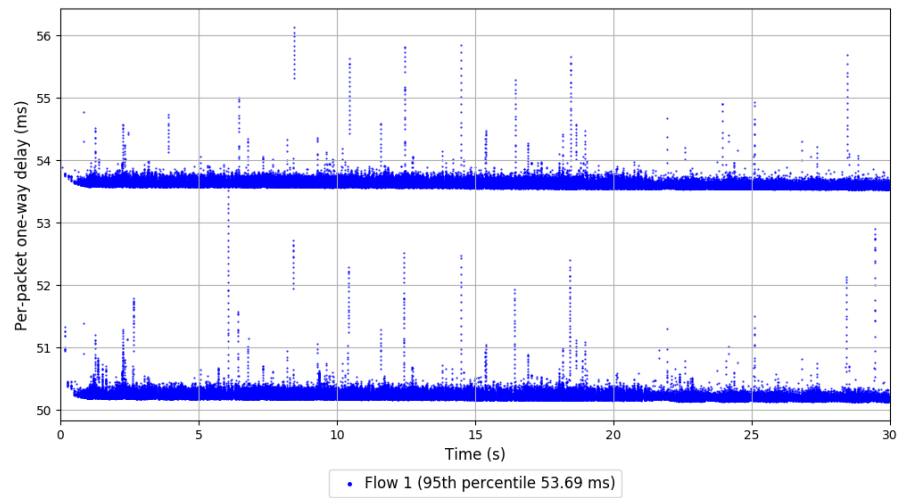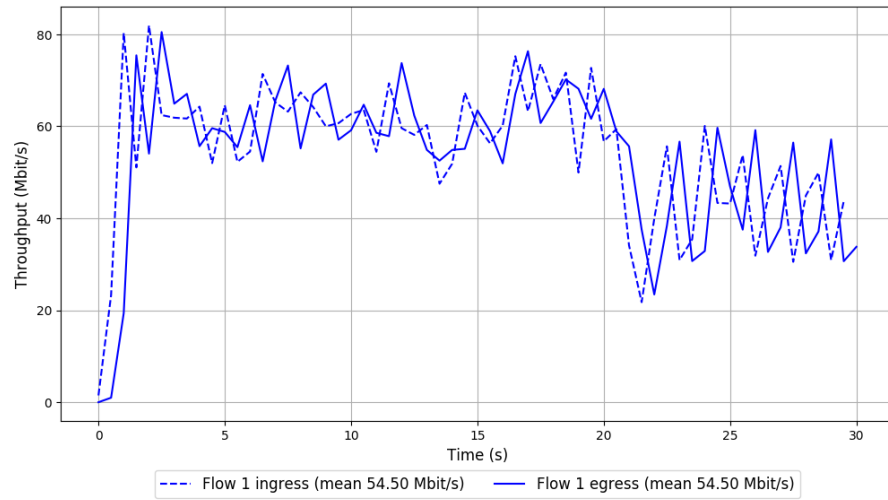
Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2018-06-01 19:34:15
End at: 2018-06-01 19:34:45
Local clock offset: 3.08 ms
Remote clock offset: -0.183 ms


# Below is generated by plot.py at 2018-06-01 20:43:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 250.16 Mbit/s
95th percentile per-packet one-way delay: 53.968 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 250.16 Mbit/s
95th percentile per-packet one-way delay: 53.968 ms
Loss rate: 0.56%
```

Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2018-06-01 19:54:39
End at: 2018-06-01 19:55:09
Local clock offset: 3.319 ms
Remote clock offset: -0.049 ms


# Below is generated by plot.py at 2018-06-01 20:43:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.50 Mbit/s
95th percentile per-packet one-way delay: 53.685 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 54.50 Mbit/s
95th percentile per-packet one-way delay: 53.685 ms
Loss rate: 0.36%
```

Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-06-01 20:14:52
End at: 2018-06-01 20:15:22
Local clock offset: 1.182 ms
Remote clock offset: -0.169 ms


# Below is generated by plot.py at 2018-06-01 20:43:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 131.93 Mbit/s
95th percentile per-packet one-way delay: 53.614 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 131.93 Mbit/s
95th percentile per-packet one-way delay: 53.614 ms
Loss rate: 0.12%
```
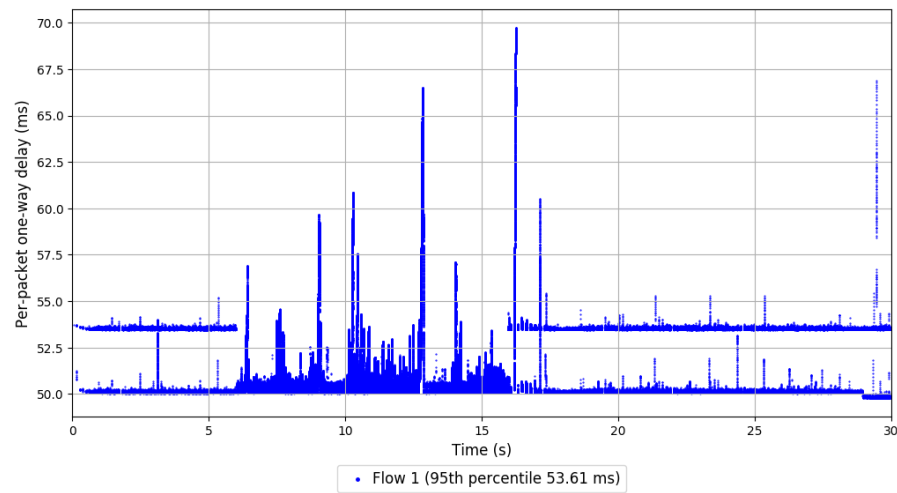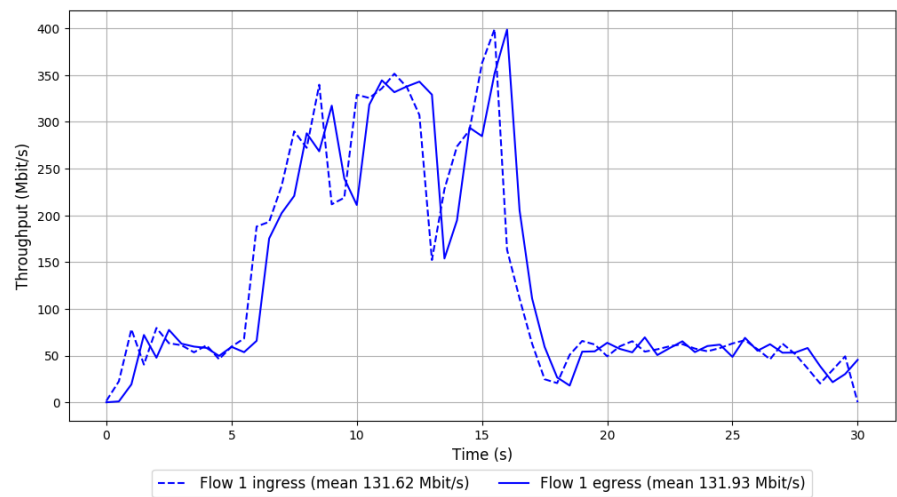
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-06-01 17:04:12
End at: 2018-06-01 17:04:42
Local clock offset: -0.394 ms
Remote clock offset: 0.038 ms


# Below is generated by plot.py at 2018-06-01 20:43:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 148.86 Mbit/s
95th percentile per-packet one-way delay: 53.416 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 148.86 Mbit/s
95th percentile per-packet one-way delay: 53.416 ms
Loss rate: 0.35%
```
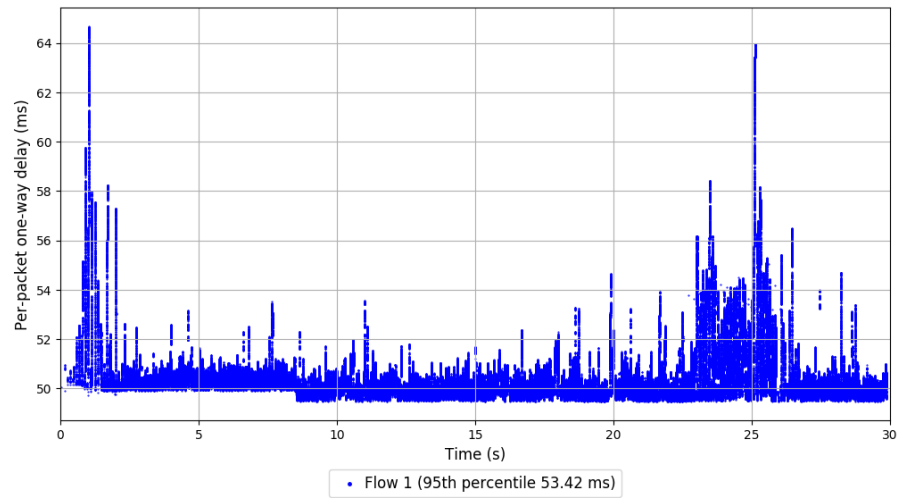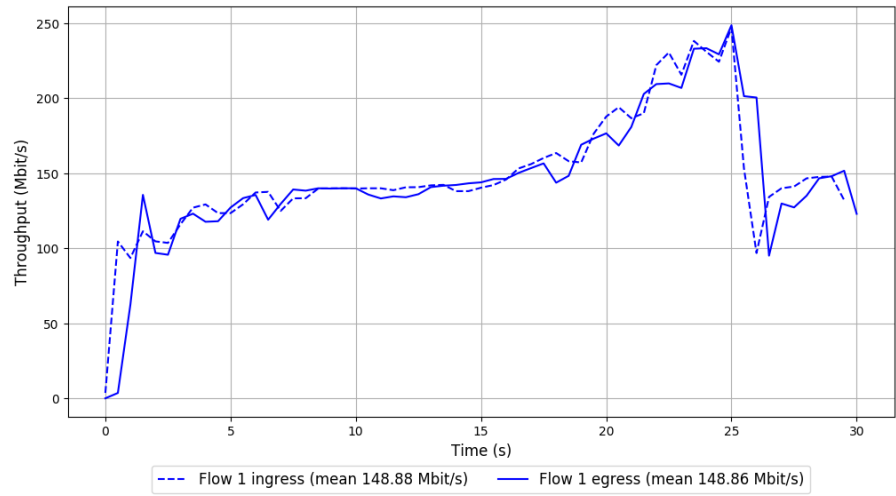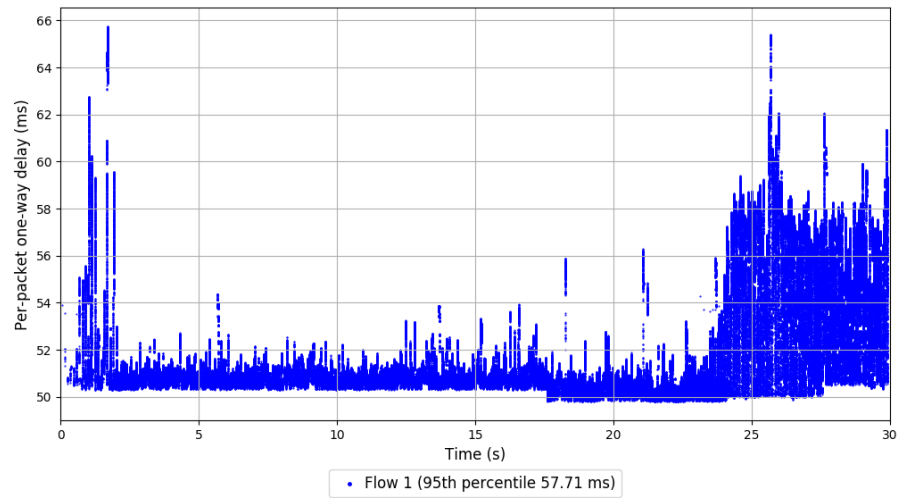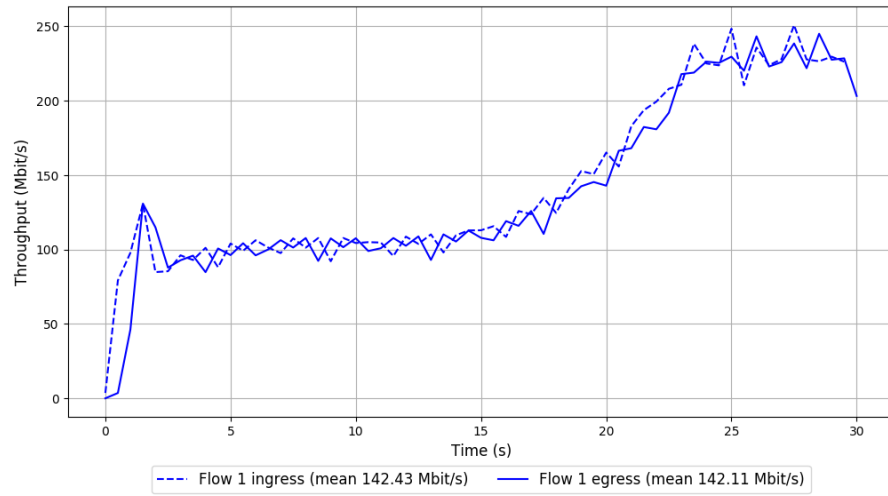
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-06-01 17:24:03
End at: 2018-06-01 17:24:33
Local clock offset: -0.146 ms
Remote clock offset: -0.055 ms


# Below is generated by plot.py at 2018-06-01 20:43:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 142.11 Mbit/s
95th percentile per-packet one-way delay: 57.711 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 142.11 Mbit/s
95th percentile per-packet one-way delay: 57.711 ms
Loss rate: 0.57%
```
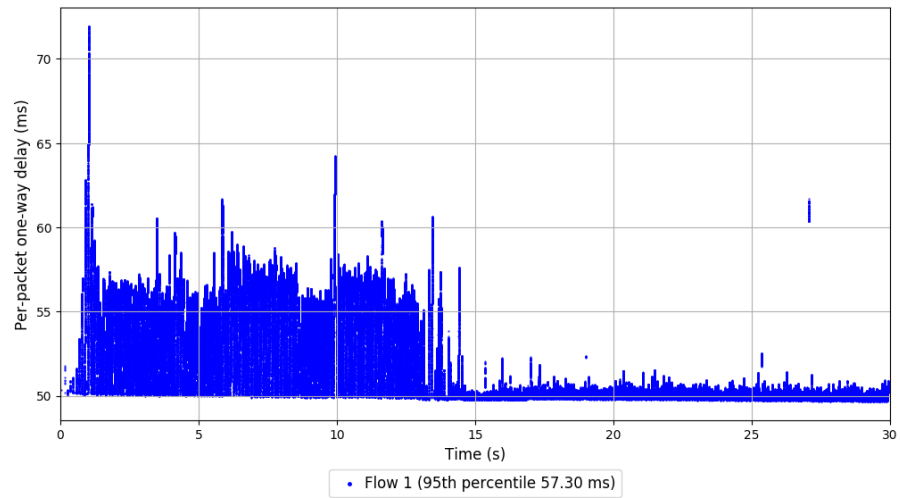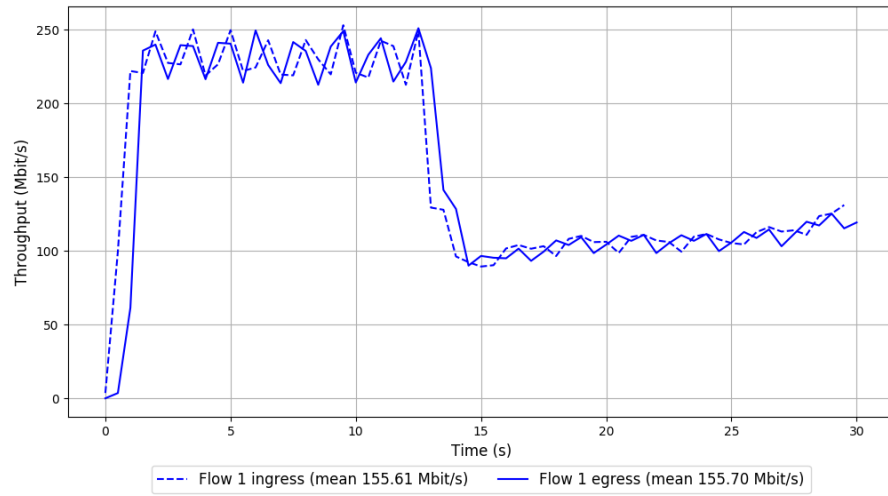
Run 2: Report of TCP Cubic — Data Link

```
Run 3: Statistics of TCP Cubic

Start at: 2018-06-01 17:44:24
End at: 2018-06-01 17:44:54
Local clock offset: 1.523 ms
Remote clock offset: -0.466 ms


# Below is generated by plot.py at 2018-06-01 20:43:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 155.70 Mbit/s
95th percentile per-packet one-way delay: 57.305 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 155.70 Mbit/s
95th percentile per-packet one-way delay: 57.305 ms
Loss rate: 0.29%
```
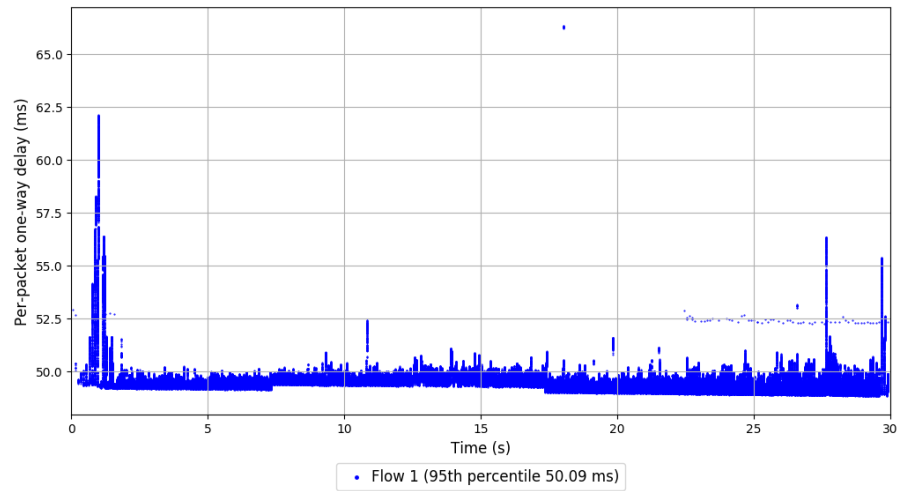
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 155.61 Mbit/s) --- Flow 1 egress (mean 155.70 Mbit/s)

• Flow 1 (95th percentile 57.30 ms)

49

```
Run 4: Statistics of TCP Cubic

Start at: 2018-06-01 18:04:53
End at: 2018-06-01 18:05:23
Local clock offset: 17.214 ms
Remote clock offset: 0.091 ms


# Below is generated by plot.py at 2018-06-01 20:43:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.78 Mbit/s
95th percentile per-packet one-way delay: 50.087 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 149.78 Mbit/s
95th percentile per-packet one-way delay: 50.087 ms
Loss rate: 0.24%
```
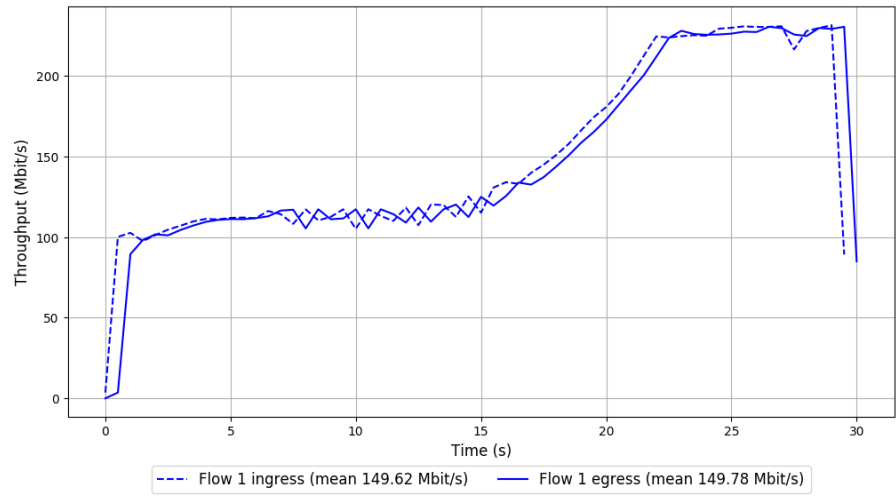
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 149.62 Mbit/s)   Flow 1 egress (mean 149.78 Mbit/s)
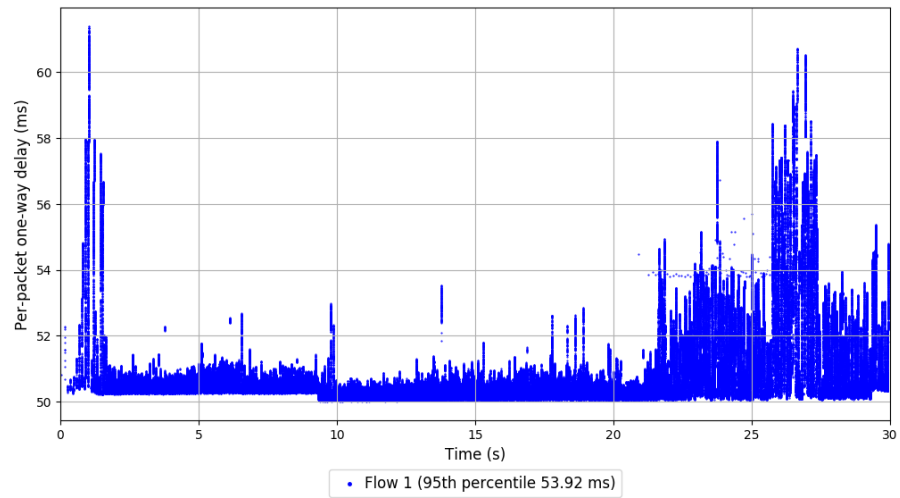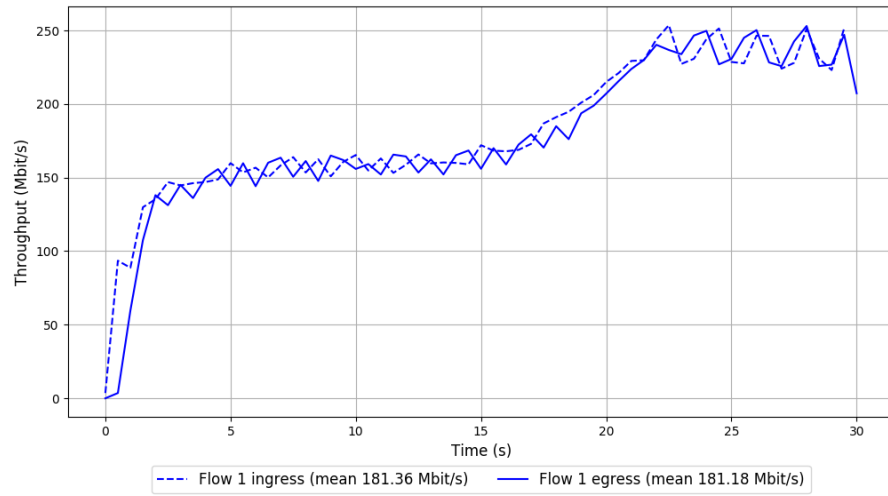

• Flow 1 (95th percentile 50.09 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-06-01 18:25:11
End at: 2018-06-01 18:25:42
Local clock offset: 9.125 ms
Remote clock offset: -0.244 ms


# Below is generated by plot.py at 2018-06-01 20:44:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.18 Mbit/s
95th percentile per-packet one-way delay: 53.922 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 181.18 Mbit/s
95th percentile per-packet one-way delay: 53.922 ms
Loss rate: 0.46%
```

Run 5: Report of TCP Cubic — Data Link

```
Run 6: Statistics of TCP Cubic

Start at: 2018-06-01 18:45:40
End at: 2018-06-01 18:46:10
Local clock offset: 12.001 ms
Remote clock offset: 0.159 ms


# Below is generated by plot.py at 2018-06-01 20:44:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 162.46 Mbit/s
95th percentile per-packet one-way delay: 50.347 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 162.46 Mbit/s
95th percentile per-packet one-way delay: 50.347 ms
Loss rate: 0.29%
```
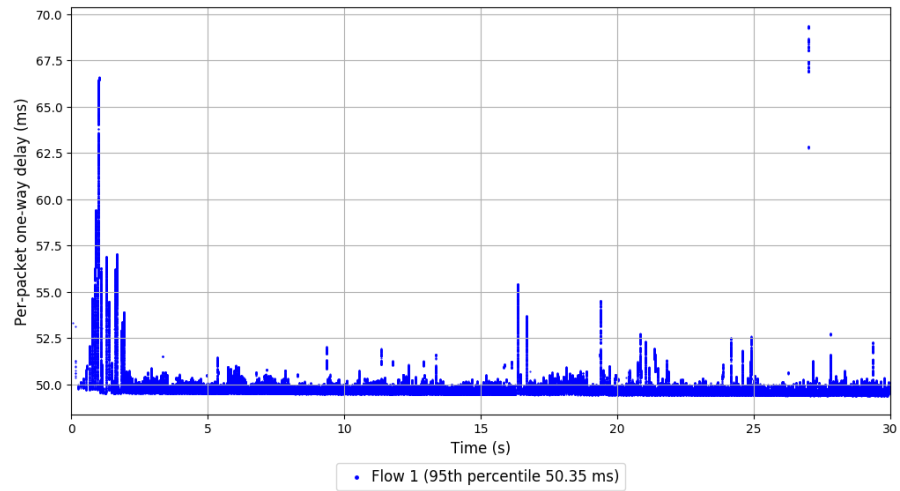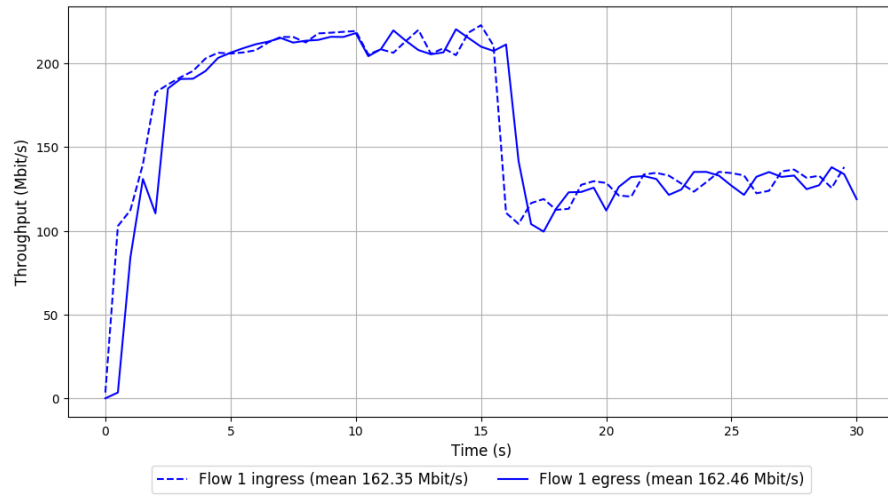
Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2018-06-01 19:06:06
End at: 2018-06-01 19:06:36
Local clock offset: 5.151 ms
Remote clock offset: 0.115 ms


# Below is generated by plot.py at 2018-06-01 20:44:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 156.12 Mbit/s
95th percentile per-packet one-way delay: 52.862 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 156.12 Mbit/s
95th percentile per-packet one-way delay: 52.862 ms
Loss rate: 0.51%
```
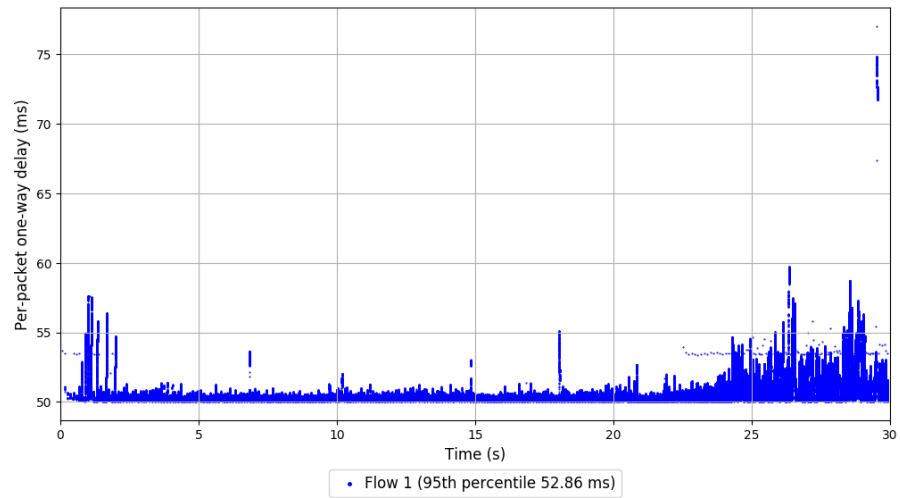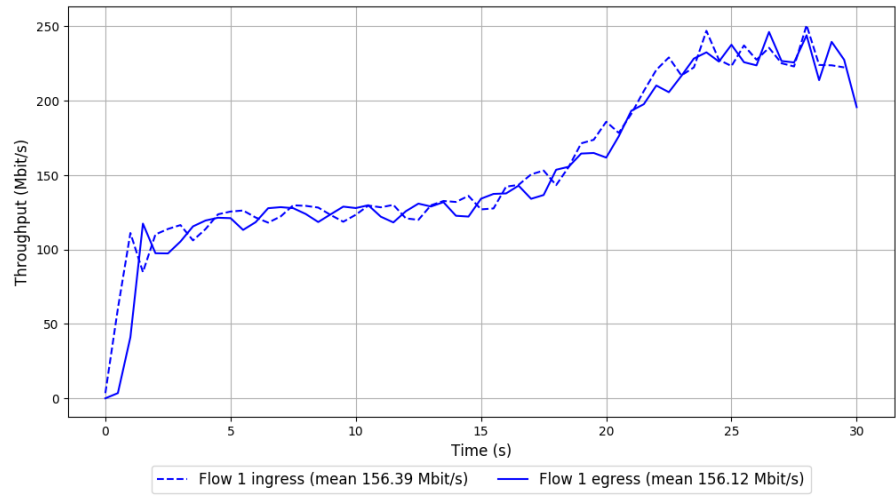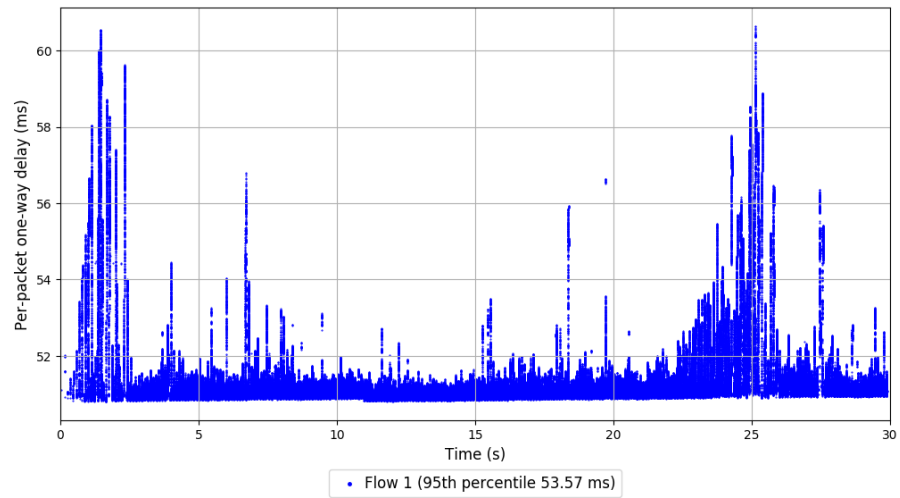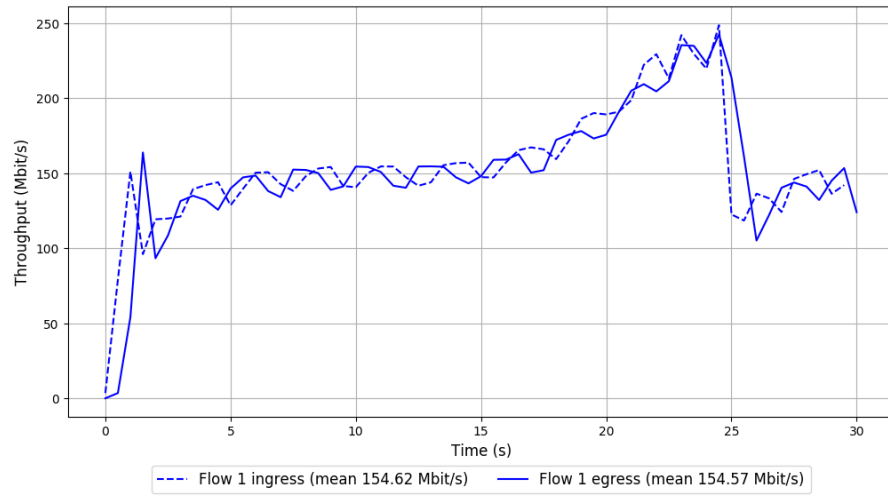
Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2018-06-01 19:26:50
End at: 2018-06-01 19:27:20
Local clock offset: 5.058 ms
Remote clock offset: -0.449 ms


# Below is generated by plot.py at 2018-06-01 20:44:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 154.57 Mbit/s
95th percentile per-packet one-way delay: 53.571 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 154.57 Mbit/s
95th percentile per-packet one-way delay: 53.571 ms
Loss rate: 0.38%
```
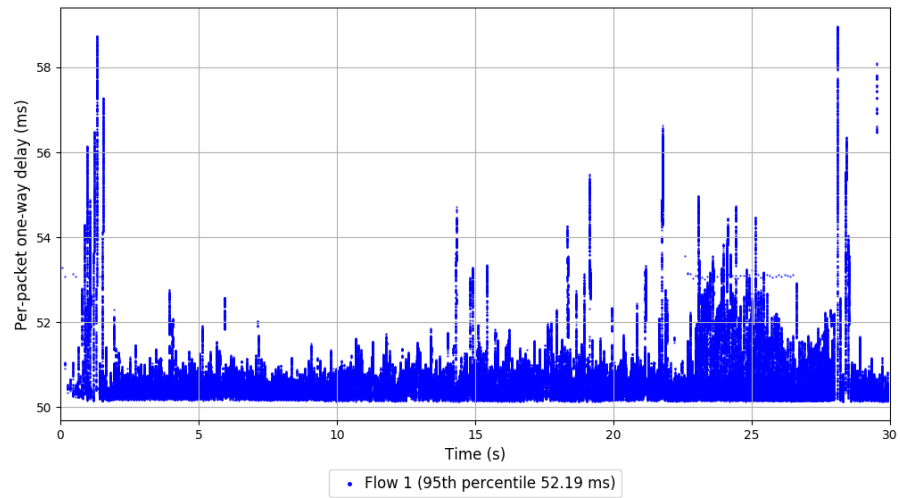
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 154.62 Mbit/s) — Flow 1 egress (mean 154.57 Mbit/s)

• Flow 1 (95th percentile 53.57 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2018-06-01 19:47:11
End at: 2018-06-01 19:47:41
Local clock offset: 2.693 ms
Remote clock offset: -0.19 ms


# Below is generated by plot.py at 2018-06-01 20:45:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 148.59 Mbit/s
95th percentile per-packet one-way delay: 52.193 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 148.59 Mbit/s
95th percentile per-packet one-way delay: 52.193 ms
Loss rate: 0.22%
```
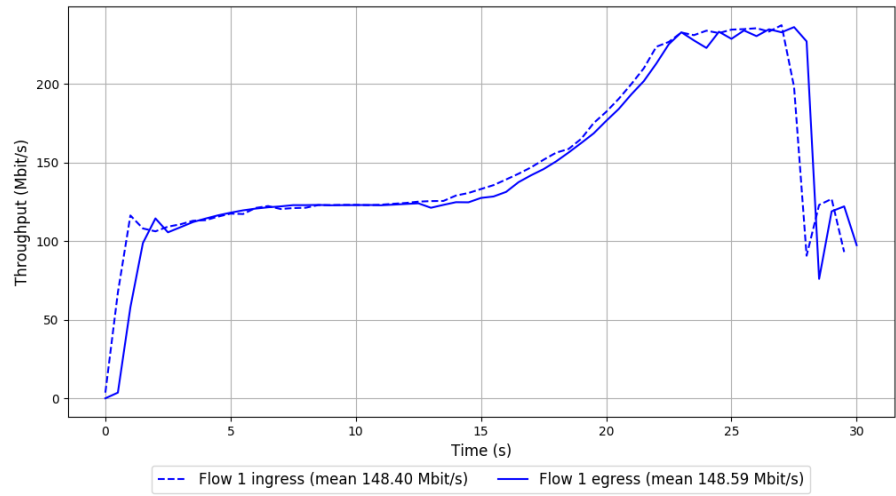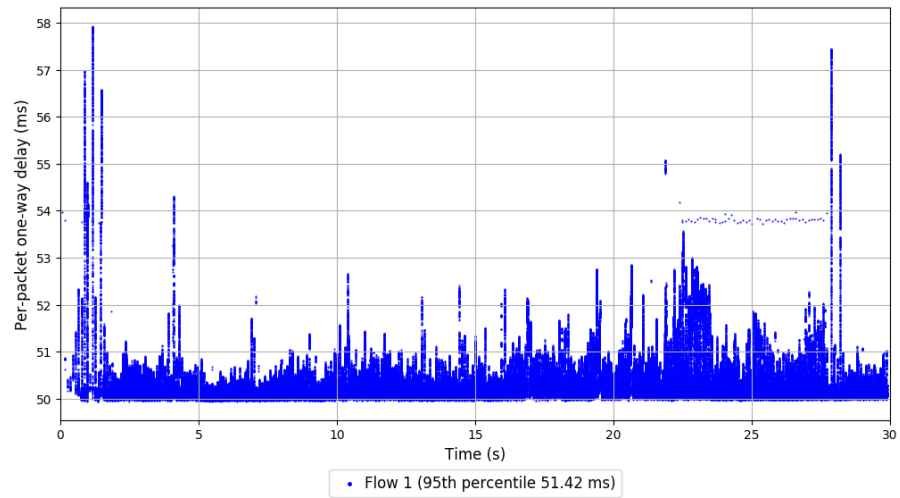
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 148.40 Mbit/s) — Flow 1 egress (mean 148.59 Mbit/s)

· Flow 1 (95th percentile 52.19 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2018-06-01 20:07:28
End at: 2018-06-01 20:07:58
Local clock offset: 1.556 ms
Remote clock offset: -0.209 ms


# Below is generated by plot.py at 2018-06-01 20:45:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 145.06 Mbit/s
95th percentile per-packet one-way delay: 51.420 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 145.06 Mbit/s
95th percentile per-packet one-way delay: 51.420 ms
Loss rate: 0.30%
```
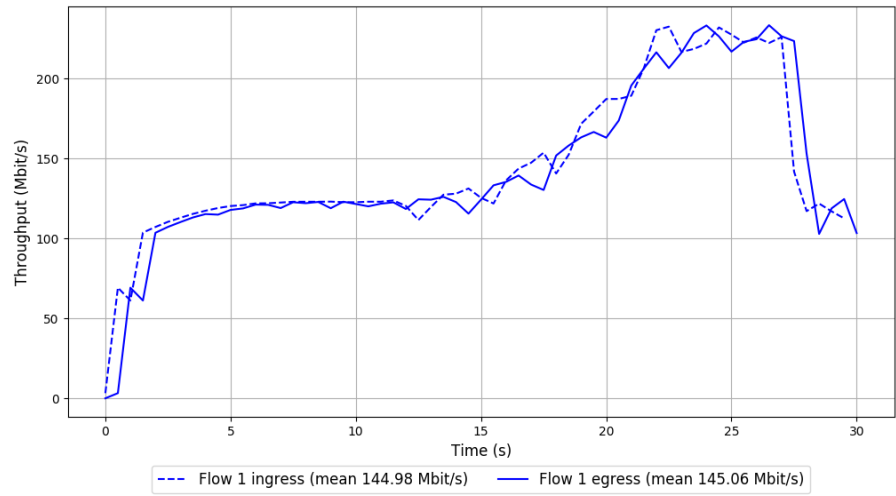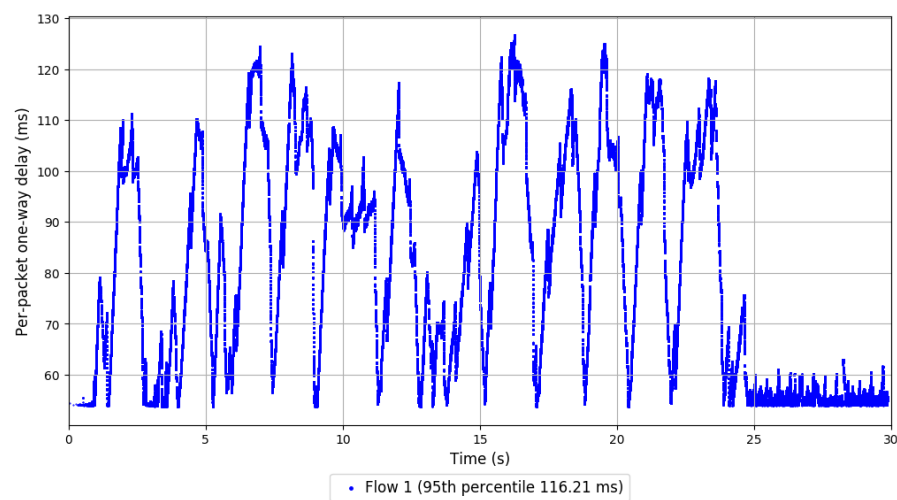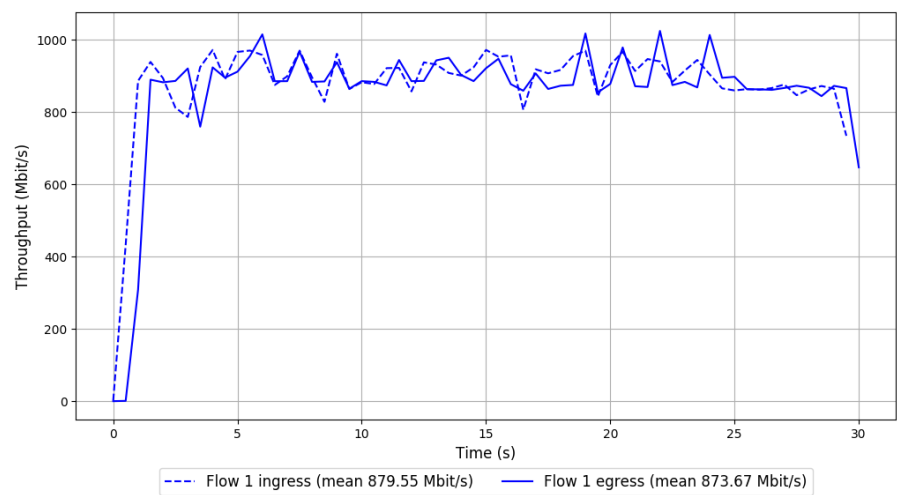
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-06-01 17:16:18
End at: 2018-06-01 17:16:48
Local clock offset: 0.114 ms
Remote clock offset: -0.111 ms


# Below is generated by plot.py at 2018-06-01 21:00:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 873.67 Mbit/s
95th percentile per-packet one-way delay: 116.208 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 873.67 Mbit/s
95th percentile per-packet one-way delay: 116.208 ms
Loss rate: 1.02%
```

Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 879.55 Mbit/s)   Flow 1 egress (mean 873.67 Mbit/s)

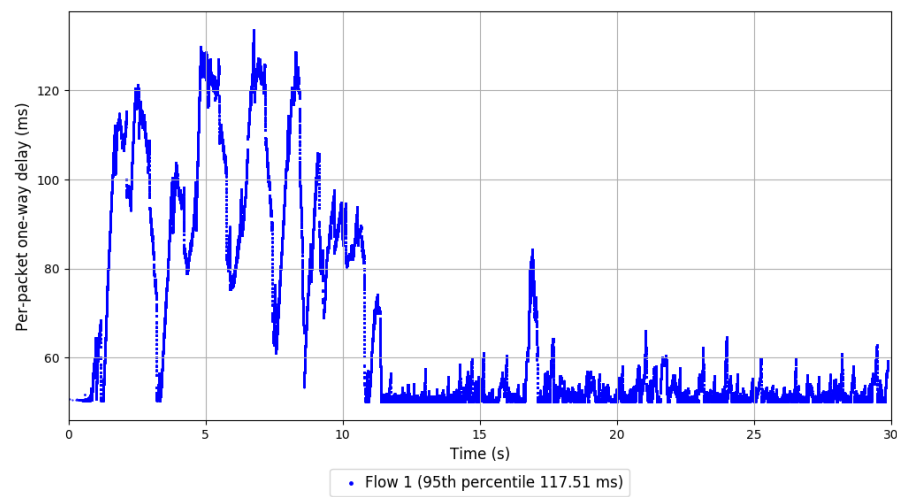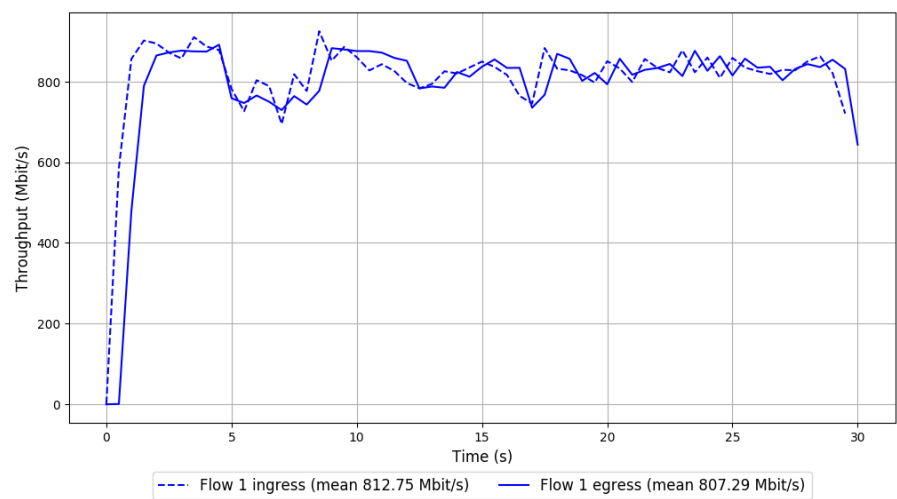• Flow 1 (95th percentile 116.21 ms)

```
Run 2: Statistics of FillP

Start at: 2018-06-01 17:36:28
End at: 2018-06-01 17:36:58
Local clock offset: 0.248 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2018-06-01 21:00:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 807.29 Mbit/s
95th percentile per-packet one-way delay: 117.506 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 807.29 Mbit/s
95th percentile per-packet one-way delay: 117.506 ms
Loss rate: 1.02%
```

Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 812.75 Mbit/s)   Flow 1 egress (mean 807.29 Mbit/s)

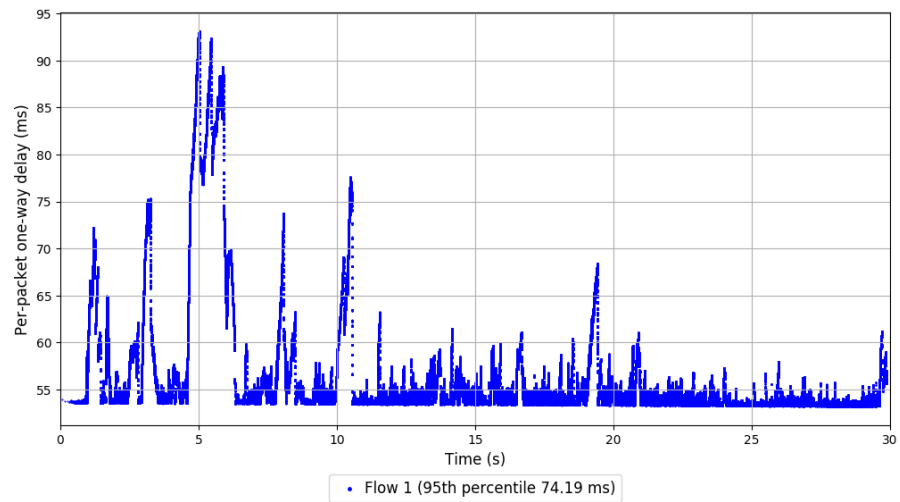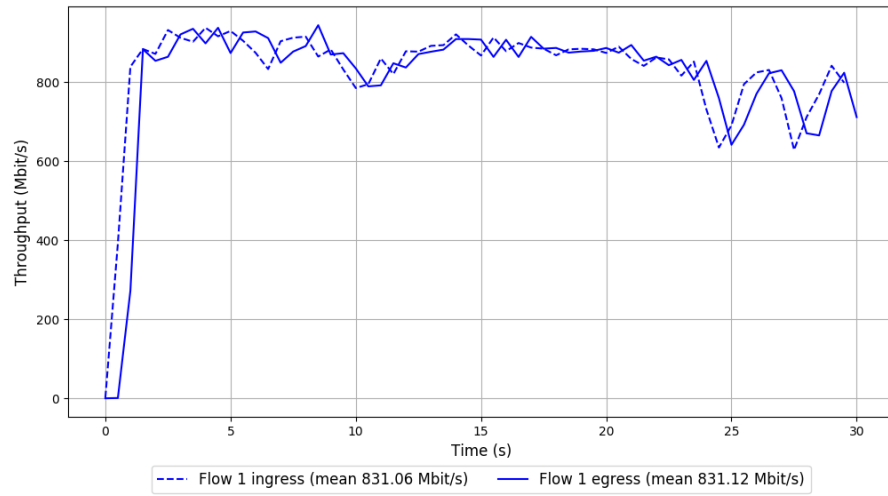Flow 1 (95th percentile 117.51 ms)

```
Run 3: Statistics of FillP

Start at: 2018-06-01 17:56:46
End at: 2018-06-01 17:57:16
Local clock offset: 11.402 ms
Remote clock offset: -0.096 ms


# Below is generated by plot.py at 2018-06-01 21:00:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 831.12 Mbit/s
95th percentile per-packet one-way delay: 74.188 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 831.12 Mbit/s
95th percentile per-packet one-way delay: 74.188 ms
Loss rate: 0.36%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 831.06 Mbit/s) ---- Flow 1 egress (mean 831.12 Mbit/s) ——

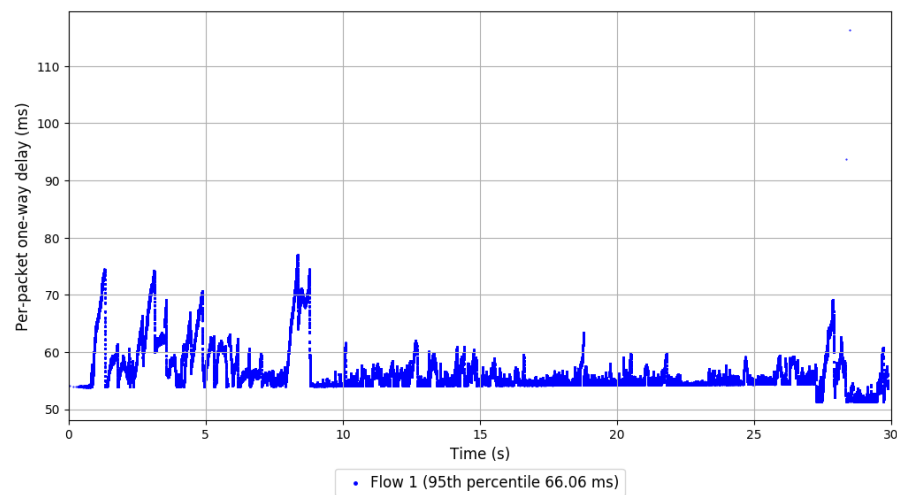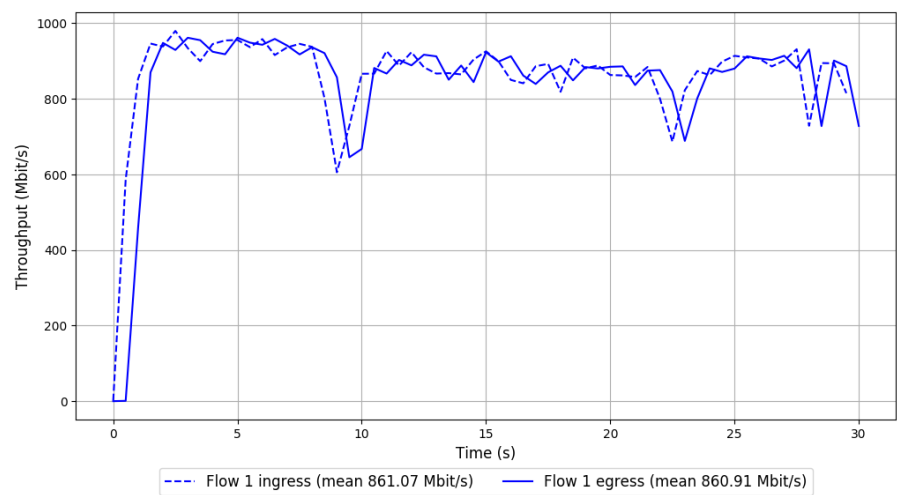
· Flow 1 (95th percentile 74.19 ms)

```
Run 4: Statistics of FillP

Start at: 2018-06-01 18:17:03
End at: 2018-06-01 18:17:33
Local clock offset: 14.921 ms
Remote clock offset: -0.024 ms


# Below is generated by plot.py at 2018-06-01 21:00:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 860.91 Mbit/s
95th percentile per-packet one-way delay: 66.060 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 860.91 Mbit/s
95th percentile per-packet one-way delay: 66.060 ms
Loss rate: 0.37%
```

Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-06-01 18:37:44
End at: 2018-06-01 18:38:14
Local clock offset: 9.697 ms
Remote clock offset: 0.276 ms


# Below is generated by plot.py at 2018-06-01 21:00:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 844.56 Mbit/s
95th percentile per-packet one-way delay: 197.221 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 844.56 Mbit/s
95th percentile per-packet one-way delay: 197.221 ms
Loss rate: 0.43%
```
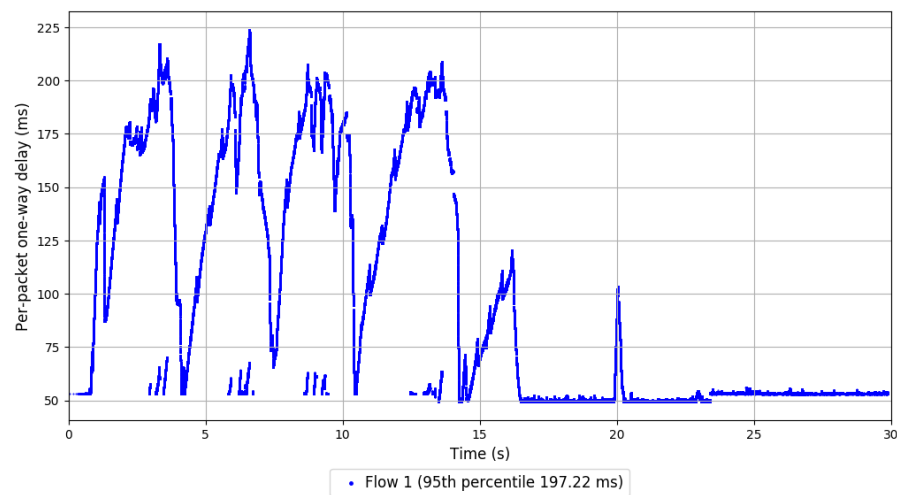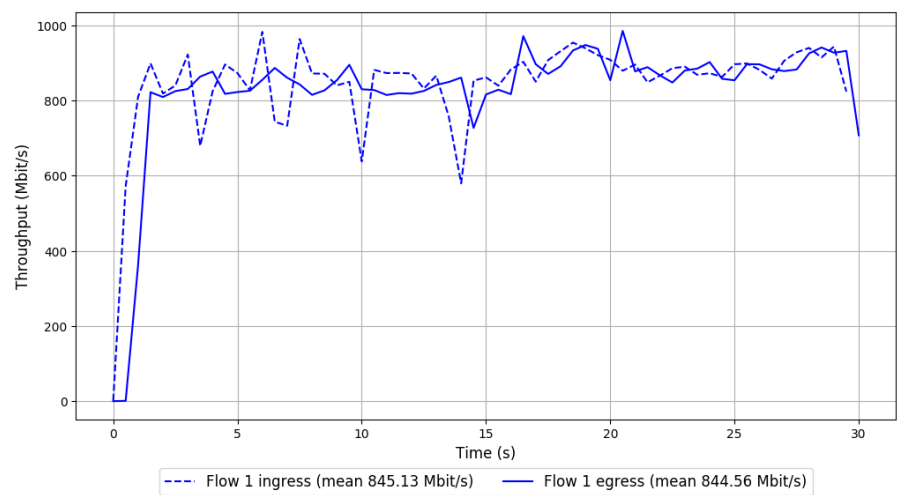
Run 5: Report of FillP — Data Link

73

```
Run 6: Statistics of FillP

Start at: 2018-06-01 18:58:05
End at: 2018-06-01 18:58:35
Local clock offset: 6.615 ms
Remote clock offset: 0.107 ms


# Below is generated by plot.py at 2018-06-01 21:01:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 913.49 Mbit/s
95th percentile per-packet one-way delay: 104.210 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 913.49 Mbit/s
95th percentile per-packet one-way delay: 104.210 ms
Loss rate: 0.52%
```
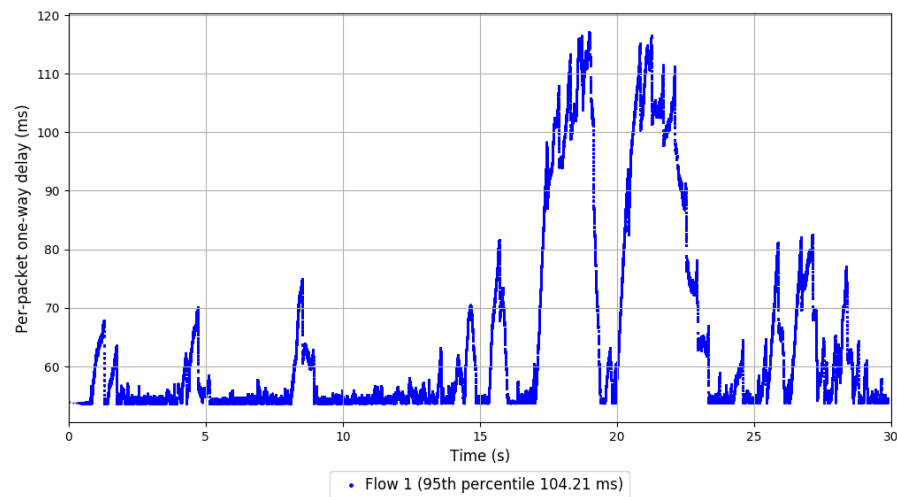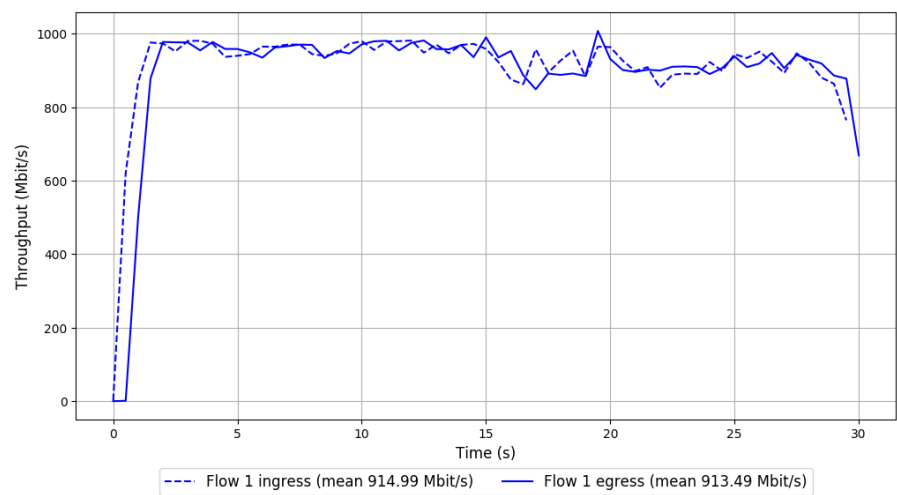
Run 6: Report of FillP — Data Link

Flow 1 ingress (mean 914.99 Mbit/s)   Flow 1 egress (mean 913.49 Mbit/s)

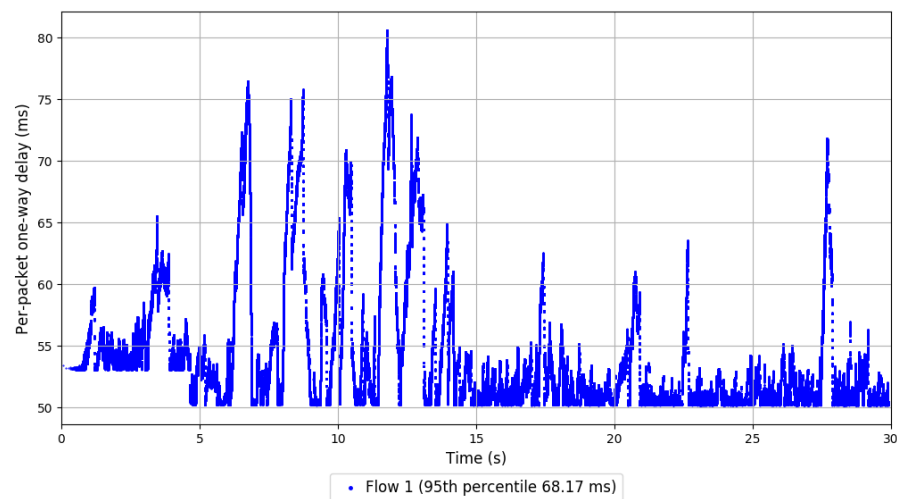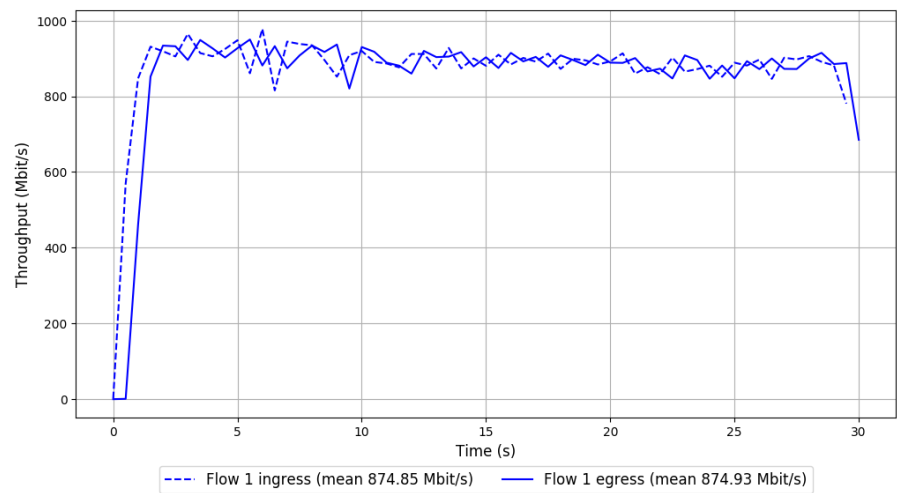• Flow 1 (95th percentile 104.21 ms)

75

```
Run 7: Statistics of FillP

Start at: 2018-06-01 19:18:36
End at: 2018-06-01 19:19:06
Local clock offset: 6.188 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-06-01 21:02:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 874.93 Mbit/s
95th percentile per-packet one-way delay: 68.174 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 874.93 Mbit/s
95th percentile per-packet one-way delay: 68.174 ms
Loss rate: 0.35%
```

Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 874.85 Mbit/s)　　Flow 1 egress (mean 874.93 Mbit/s)

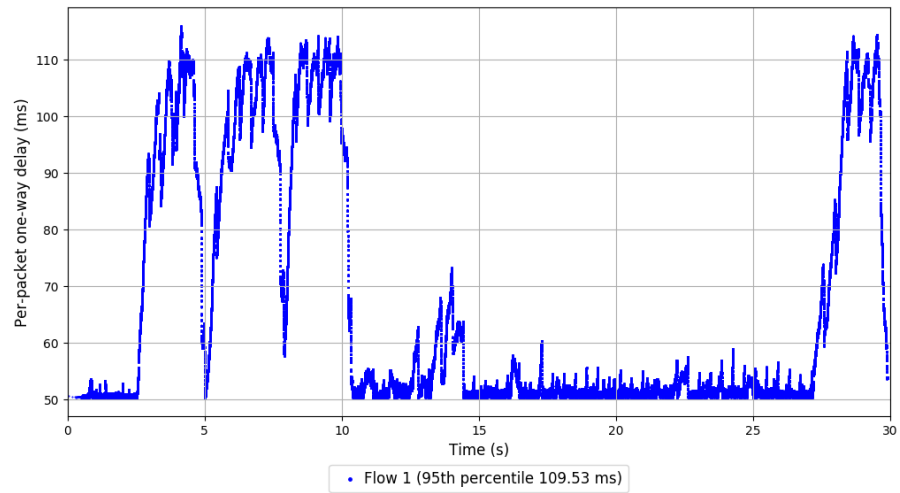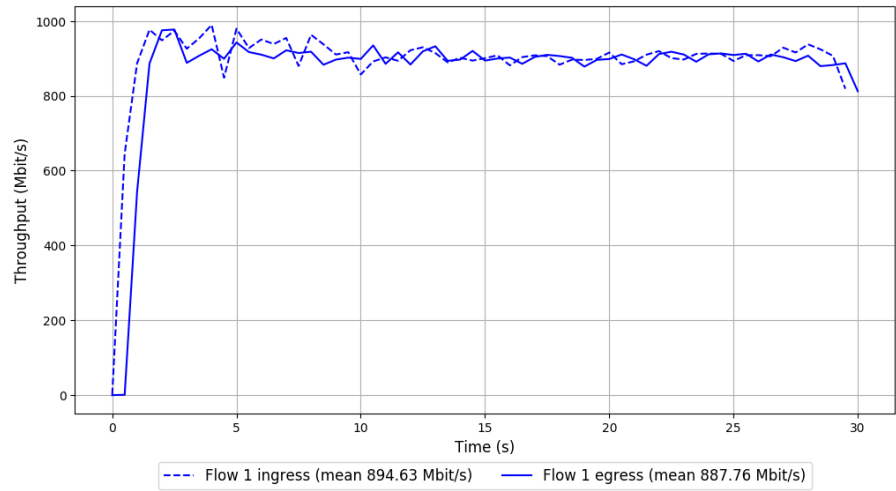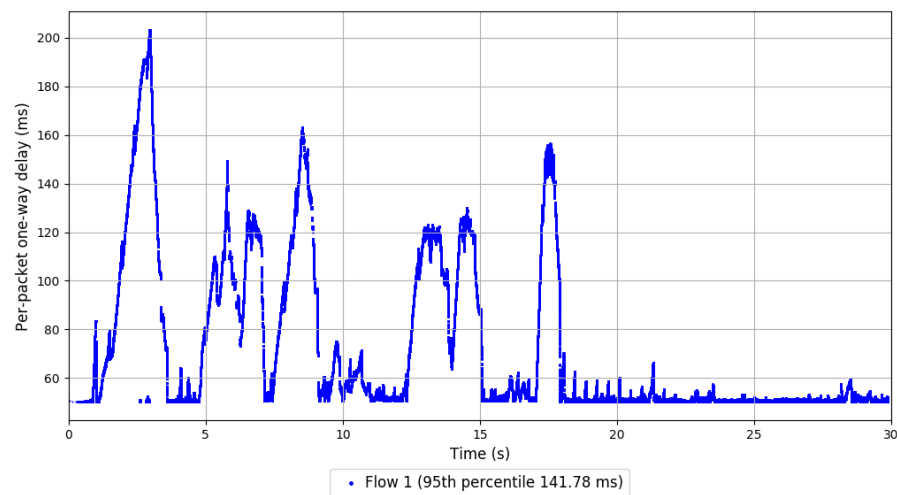• Flow 1 (95th percentile 68.17 ms)

```
Run 8: Statistics of FillP

Start at: 2018-06-01 19:39:18
End at: 2018-06-01 19:39:48
Local clock offset: 2.596 ms
Remote clock offset: -0.145 ms


# Below is generated by plot.py at 2018-06-01 21:03:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 887.76 Mbit/s
95th percentile per-packet one-way delay: 109.532 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 887.76 Mbit/s
95th percentile per-packet one-way delay: 109.532 ms
Loss rate: 1.12%
```

Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 894.63 Mbit/s) —— Flow 1 egress (mean 887.76 Mbit/s)

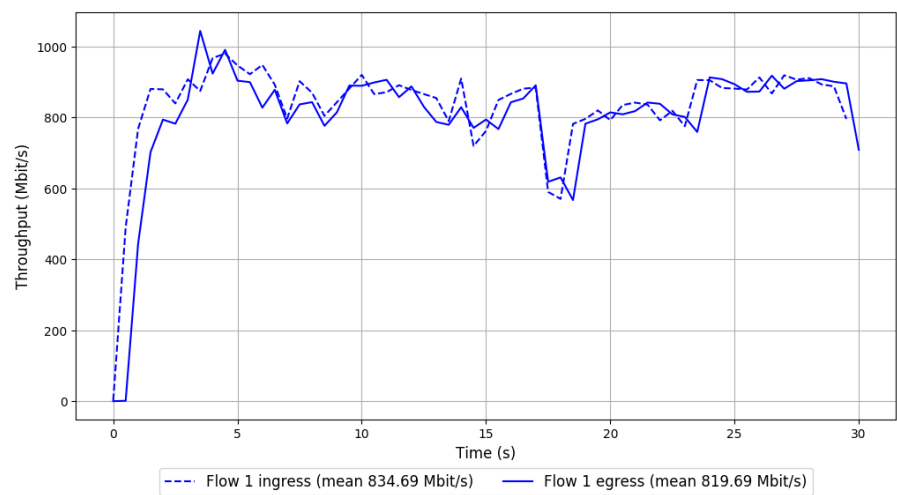
• Flow 1 (95th percentile 109.53 ms)

79

```
Run 9: Statistics of FillP

Start at: 2018-06-01 19:59:24
End at: 2018-06-01 19:59:54
Local clock offset: 3.052 ms
Remote clock offset: -0.203 ms


# Below is generated by plot.py at 2018-06-01 21:16:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 819.69 Mbit/s
95th percentile per-packet one-way delay: 141.783 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 819.69 Mbit/s
95th percentile per-packet one-way delay: 141.783 ms
Loss rate: 2.14%
```
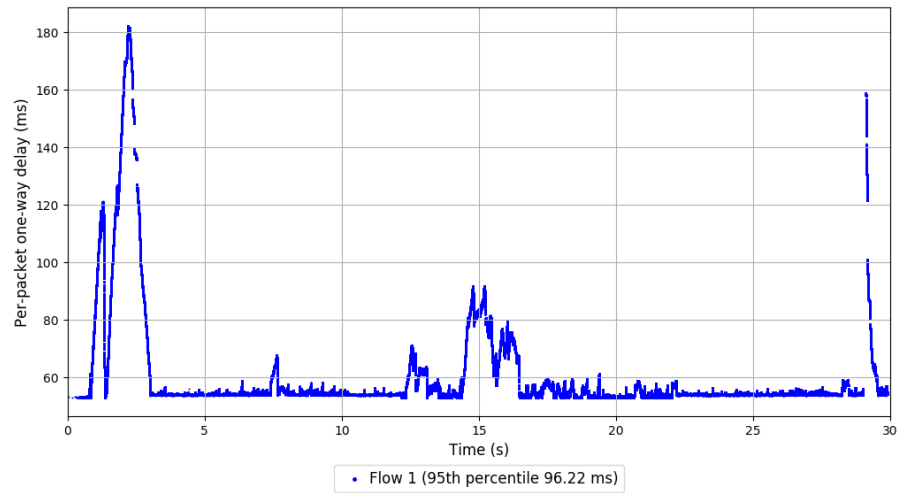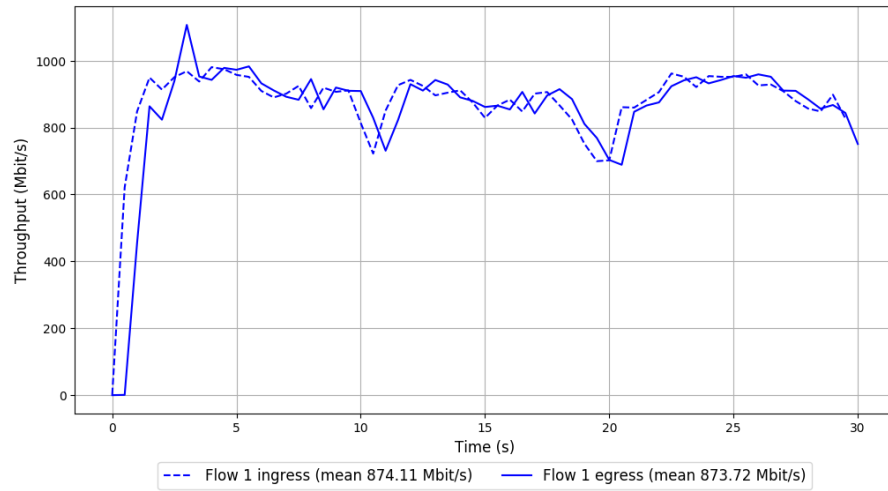
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 834.69 Mbit/s)   Flow 1 egress (mean 819.69 Mbit/s)

Flow 1 (95th percentile 141.78 ms)

```
Run 10: Statistics of FillP

Start at: 2018-06-01 20:19:46
End at: 2018-06-01 20:20:16
Local clock offset: 1.461 ms
Remote clock offset: 0.087 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 873.72 Mbit/s
95th percentile per-packet one-way delay: 96.221 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 873.72 Mbit/s
95th percentile per-packet one-way delay: 96.221 ms
Loss rate: 0.39%
```
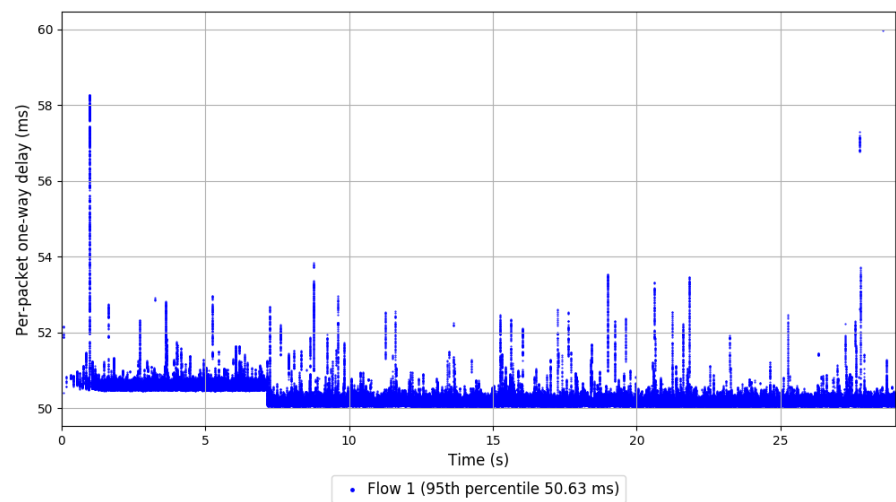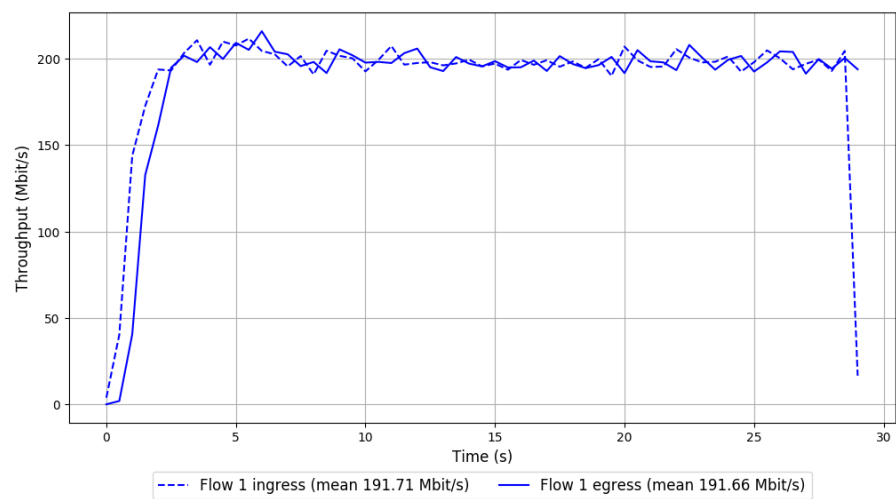
Run 10: Report of FillP — Data Link

Flow 1 ingress (mean 874.11 Mbit/s)   Flow 1 egress (mean 873.72 Mbit/s)

Flow 1 (95th percentile 96.22 ms)

```
Run 1: Statistics of Indigo

Start at: 2018-06-01 17:08:03
End at: 2018-06-01 17:08:33
Local clock offset: -0.07 ms
Remote clock offset: -0.197 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.66 Mbit/s
95th percentile per-packet one-way delay: 50.635 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 191.66 Mbit/s
95th percentile per-packet one-way delay: 50.635 ms
Loss rate: 0.38%
```

Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-06-01 17:27:52
End at: 2018-06-01 17:28:22
Local clock offset: -0.51 ms
Remote clock offset: 0.02 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.87 Mbit/s
95th percentile per-packet one-way delay: 50.047 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 216.87 Mbit/s
95th percentile per-packet one-way delay: 50.047 ms
Loss rate: 0.31%
```
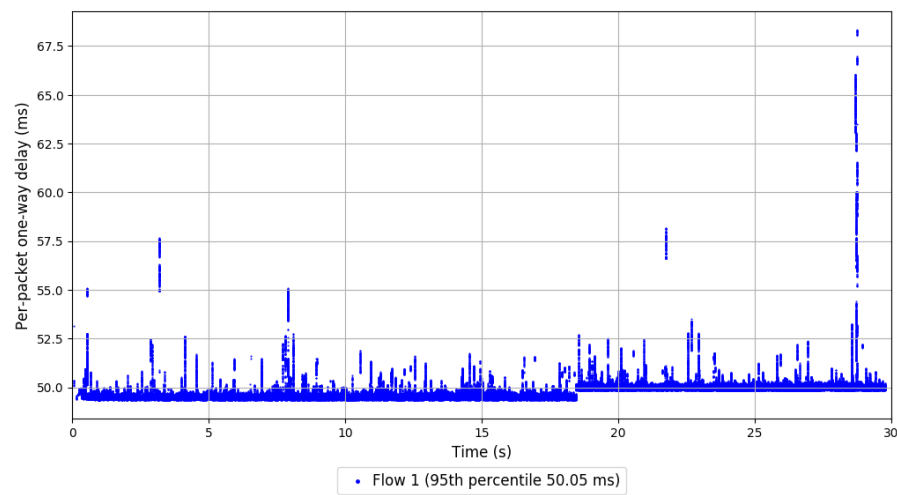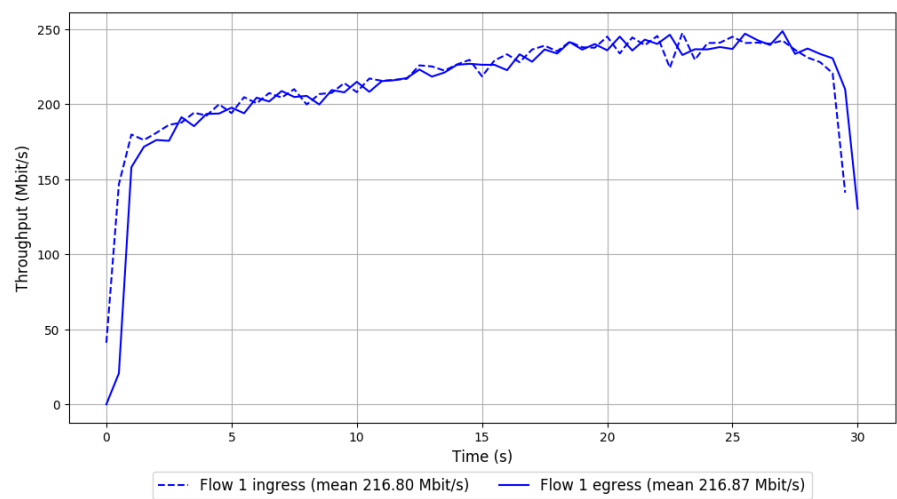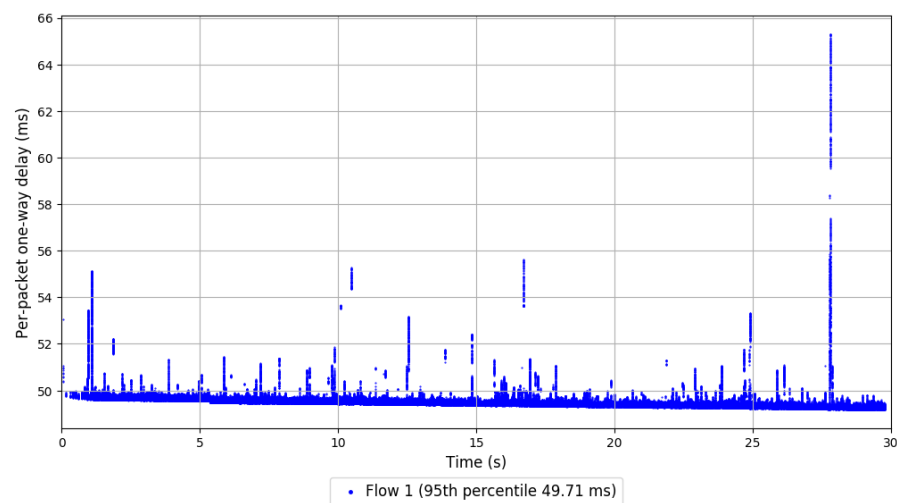
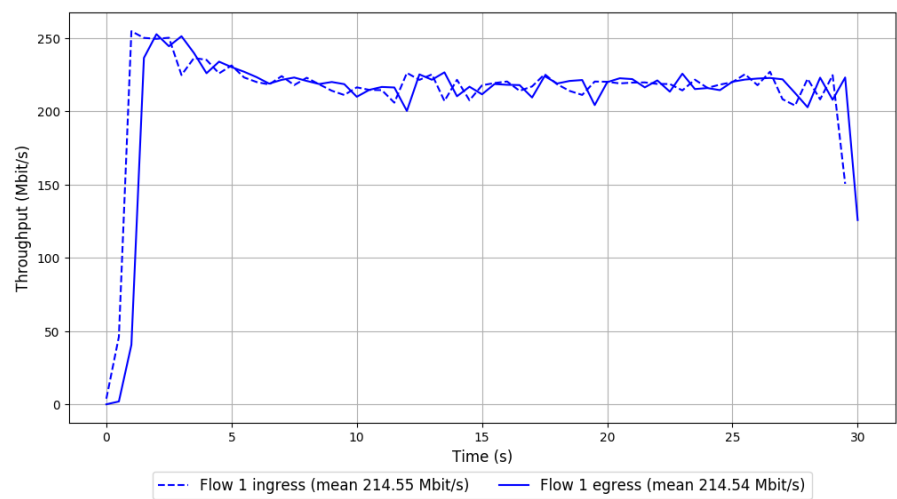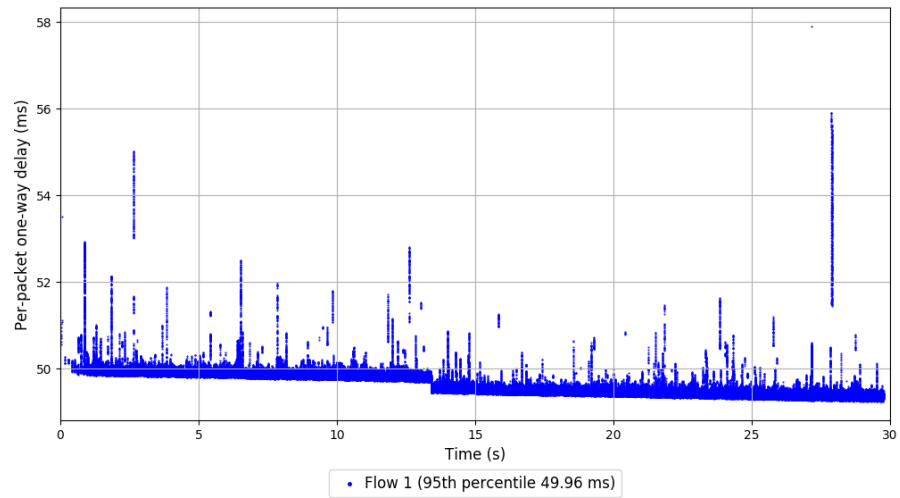## Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-06-01 17:48:15
End at: 2018-06-01 17:48:45
Local clock offset: 4.439 ms
Remote clock offset: -0.111 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.54 Mbit/s
95th percentile per-packet one-way delay: 49.707 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 214.54 Mbit/s
95th percentile per-packet one-way delay: 49.707 ms
Loss rate: 0.37%
```
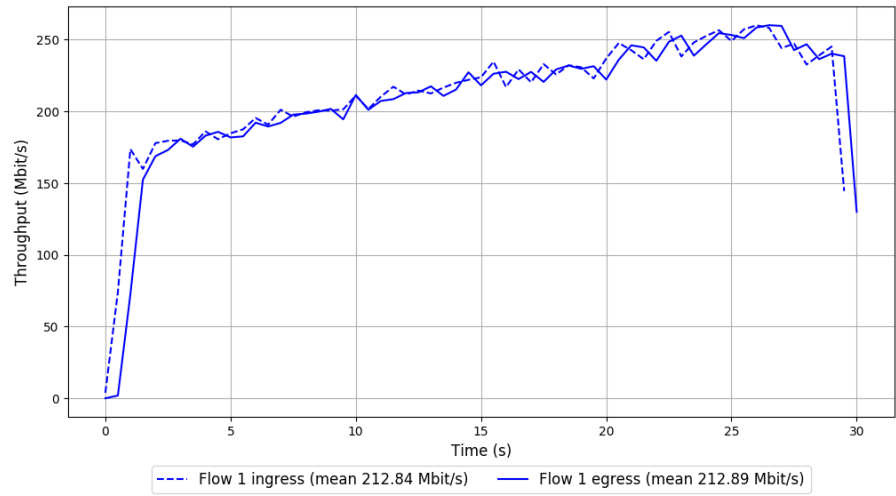
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-06-01 18:08:47
End at: 2018-06-01 18:09:17
Local clock offset: 20.405 ms
Remote clock offset: -0.127 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.89 Mbit/s
95th percentile per-packet one-way delay: 49.962 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 212.89 Mbit/s
95th percentile per-packet one-way delay: 49.962 ms
Loss rate: 0.33%
```

Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 212.84 Mbit/s)   Flow 1 egress (mean 212.89 Mbit/s)

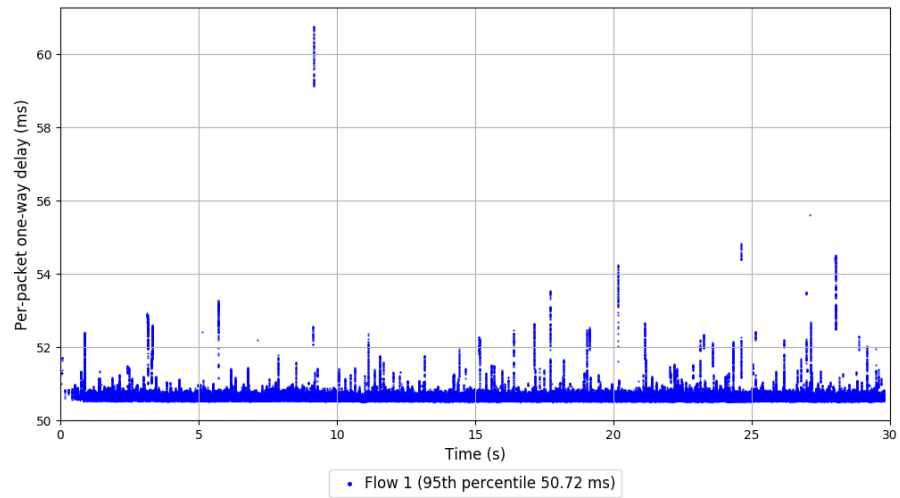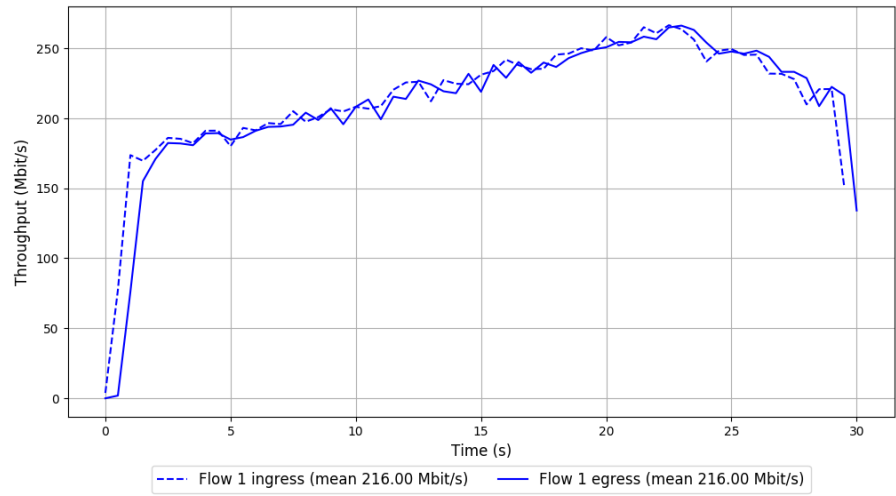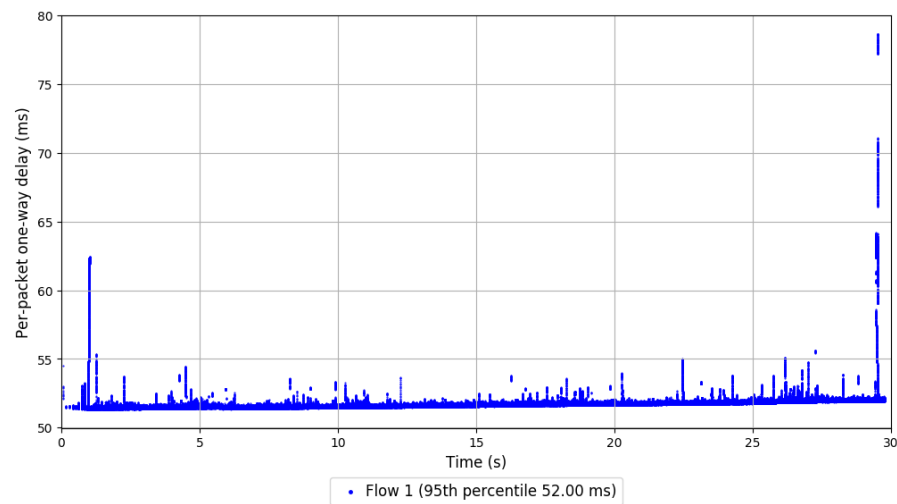Flow 1 (95th percentile 49.96 ms)

```
Run 5: Statistics of Indigo

Start at: 2018-06-01 18:29:08
End at: 2018-06-01 18:29:38
Local clock offset: 9.132 ms
Remote clock offset: -0.154 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.00 Mbit/s
95th percentile per-packet one-way delay: 50.724 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 216.00 Mbit/s
95th percentile per-packet one-way delay: 50.724 ms
Loss rate: 0.34%
```
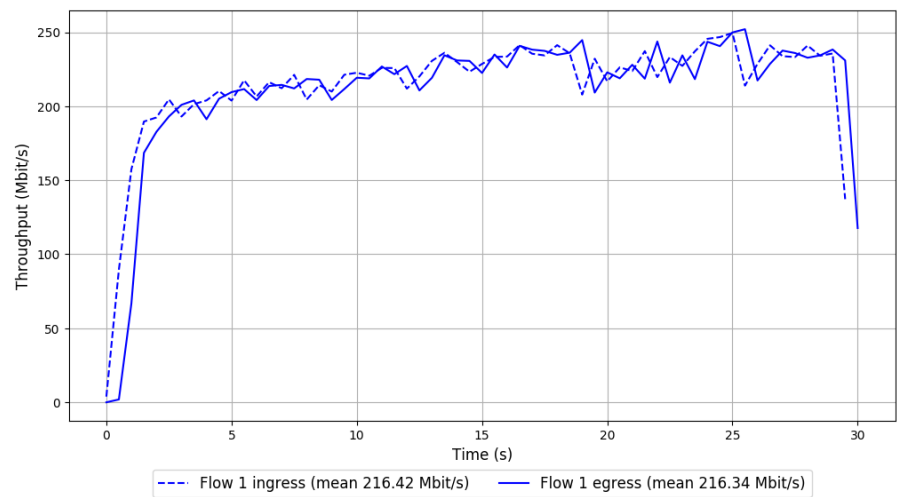
Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2018-06-01 18:49:35
End at: 2018-06-01 18:50:05
Local clock offset: 13.566 ms
Remote clock offset: -0.424 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.34 Mbit/s
95th percentile per-packet one-way delay: 51.996 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 216.34 Mbit/s
95th percentile per-packet one-way delay: 51.996 ms
Loss rate: 0.38%
```

Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2018-06-01 19:10:03
End at: 2018-06-01 19:10:33
Local clock offset: 5.18 ms
Remote clock offset: 0.131 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.12 Mbit/s
95th percentile per-packet one-way delay: 50.112 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 220.12 Mbit/s
95th percentile per-packet one-way delay: 50.112 ms
Loss rate: 0.34%
```
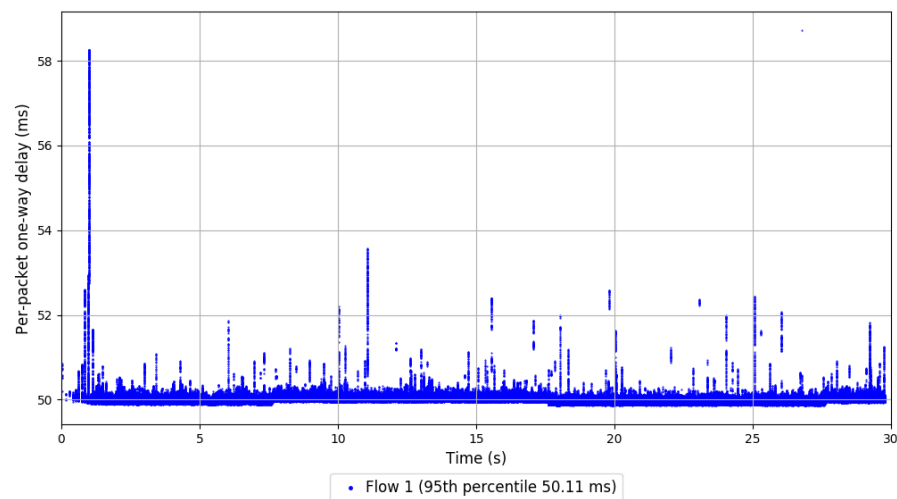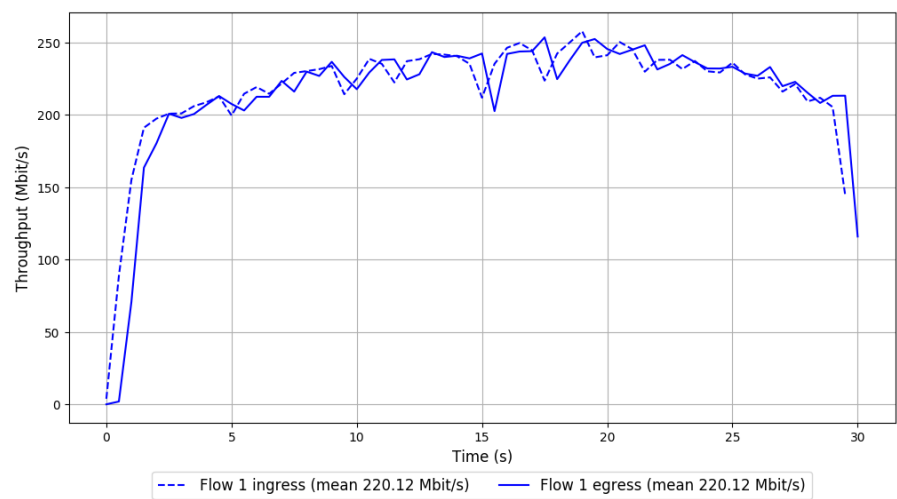
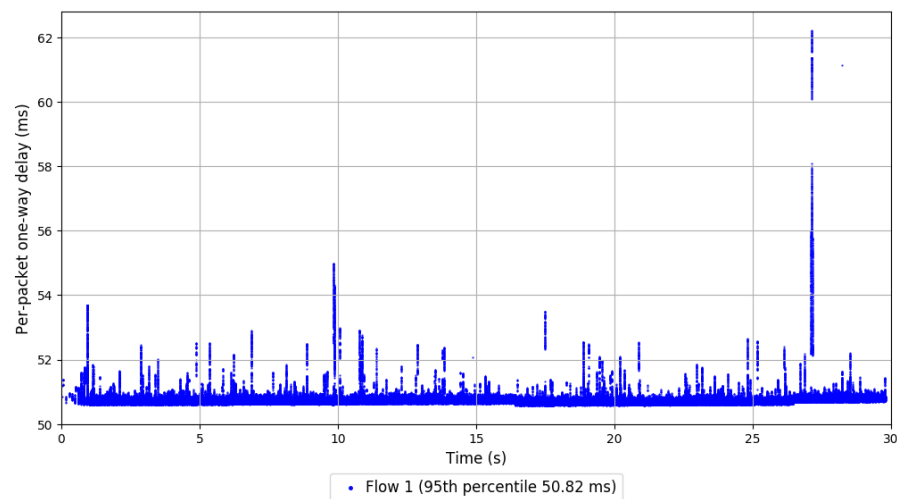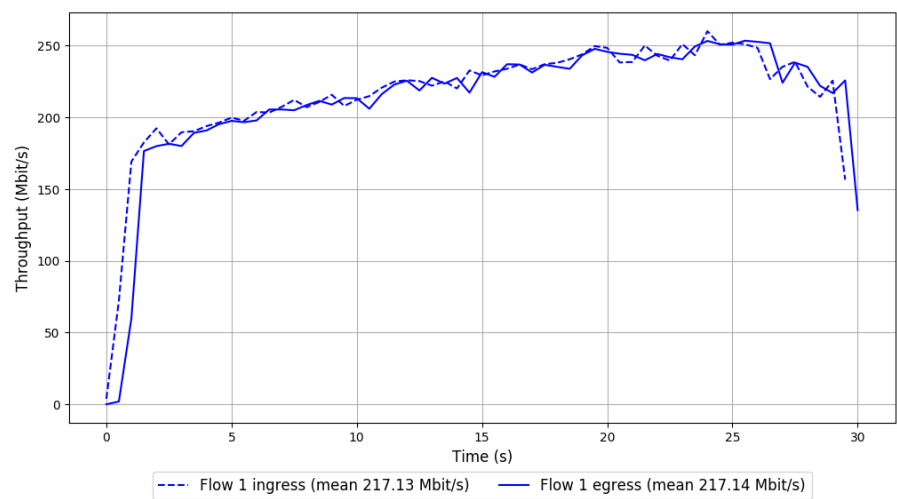Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2018-06-01 19:30:44
End at: 2018-06-01 19:31:14
Local clock offset: 3.765 ms
Remote clock offset: -0.312 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.14 Mbit/s
95th percentile per-packet one-way delay: 50.824 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 217.14 Mbit/s
95th percentile per-packet one-way delay: 50.824 ms
Loss rate: 0.33%
```
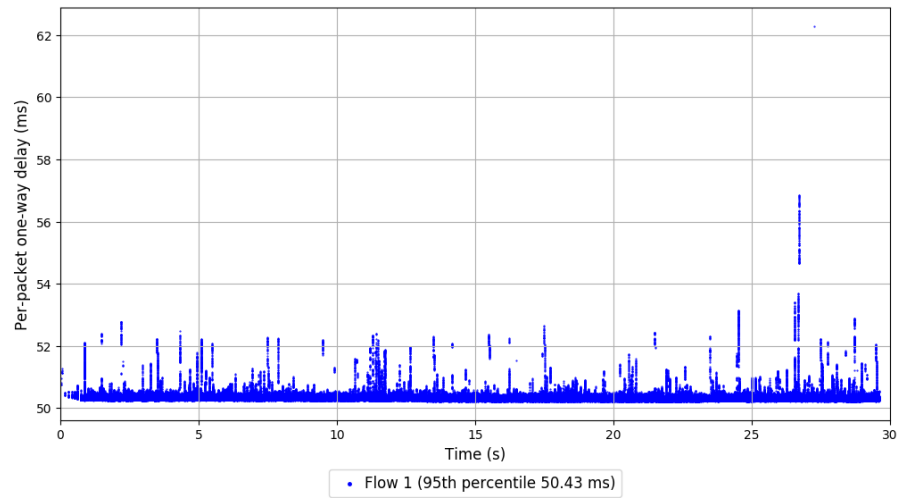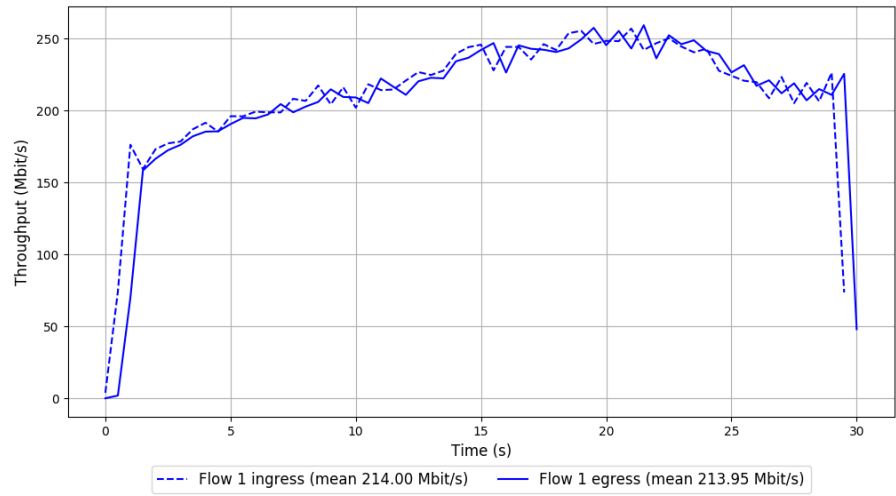
Run 8: Report of Indigo — Data Link

```
Run 9: Statistics of Indigo

Start at: 2018-06-01 19:51:07
End at: 2018-06-01 19:51:37
Local clock offset: 3.033 ms
Remote clock offset: -0.173 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.95 Mbit/s
95th percentile per-packet one-way delay: 50.427 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 213.95 Mbit/s
95th percentile per-packet one-way delay: 50.427 ms
Loss rate: 0.37%
```
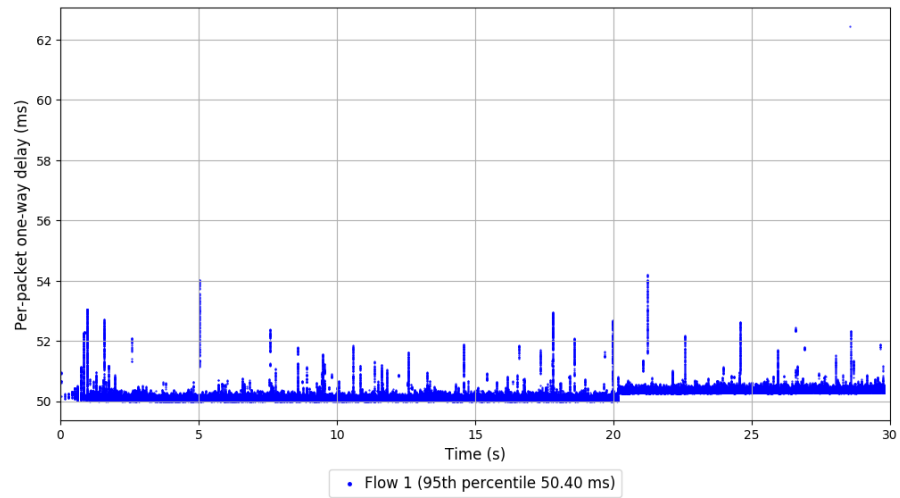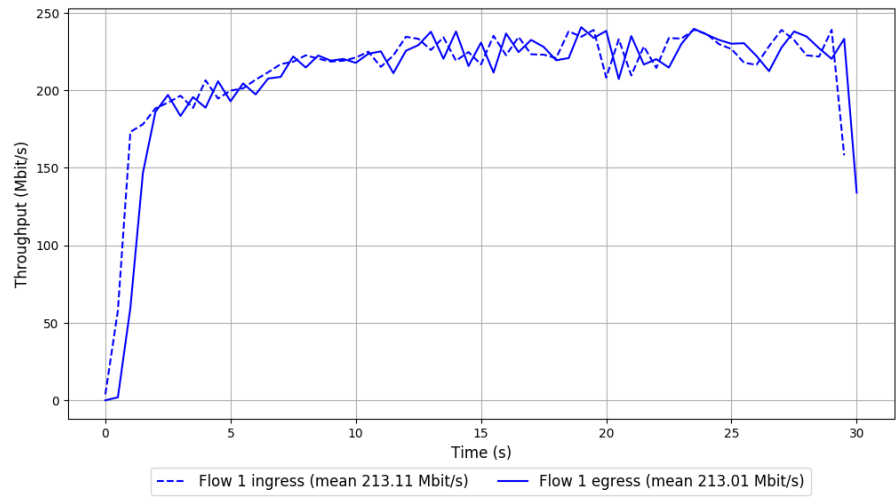
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-06-01 20:11:21
End at: 2018-06-01 20:11:51
Local clock offset: 1.405 ms
Remote clock offset: -0.224 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.01 Mbit/s
95th percentile per-packet one-way delay: 50.400 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 213.01 Mbit/s
95th percentile per-packet one-way delay: 50.400 ms
Loss rate: 0.38%
```
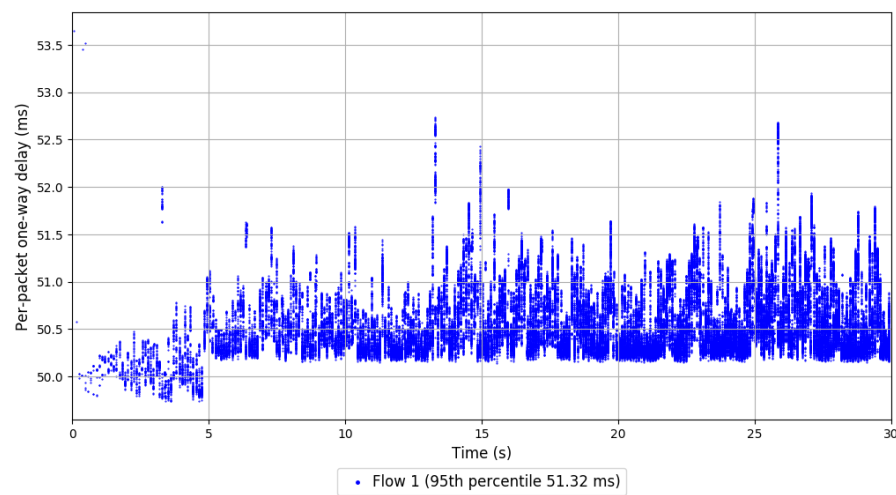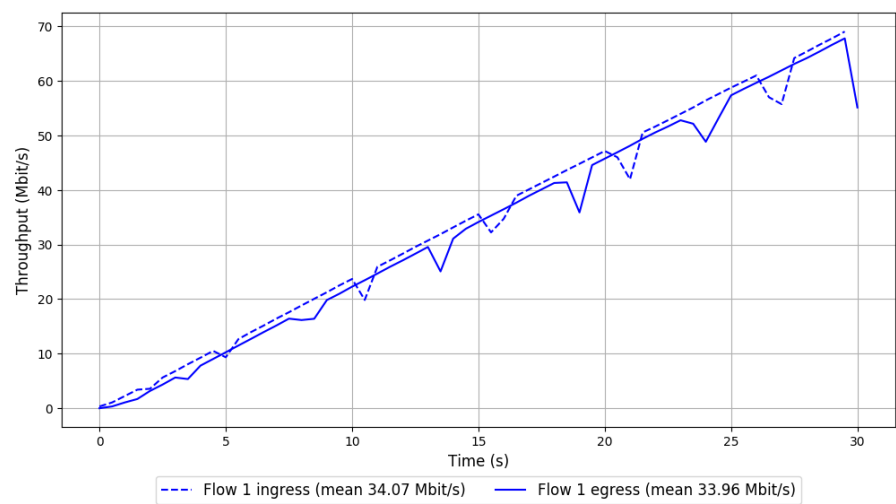
Run 10: Report of Indigo — Data Link

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```
Run 1: Statistics of LEDBAT

Start at: 2018-06-01 17:10:26
End at: 2018-06-01 17:10:56
Local clock offset: -0.093 ms
Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.96 Mbit/s
95th percentile per-packet one-way delay: 51.319 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 33.96 Mbit/s
95th percentile per-packet one-way delay: 51.319 ms
Loss rate: 0.68%
```

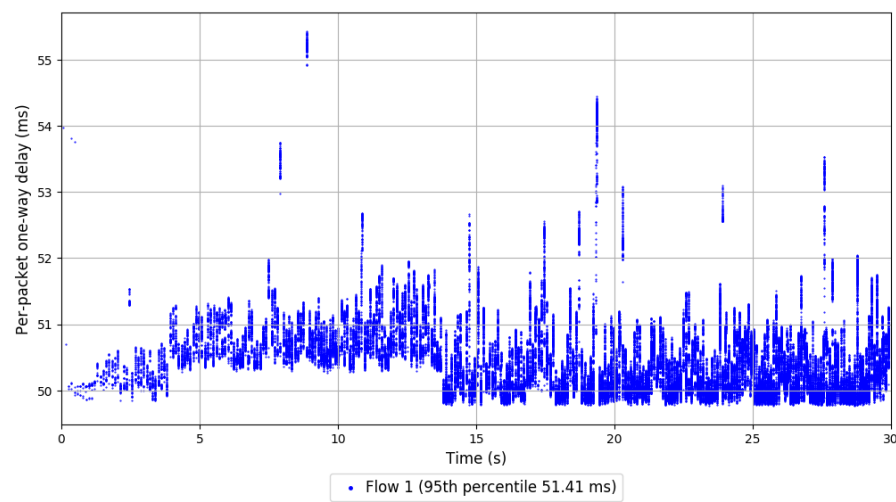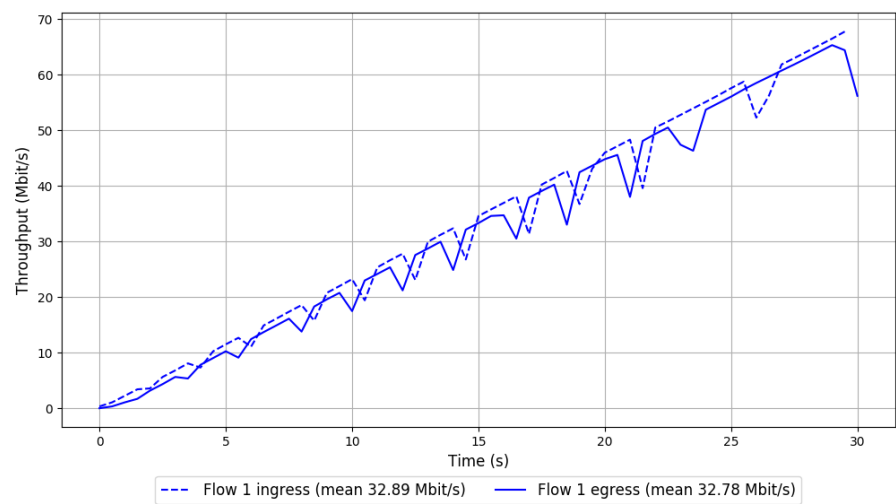## Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-06-01 17:30:17
End at: 2018-06-01 17:30:47
Local clock offset: -0.117 ms
Remote clock offset: -0.002 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.78 Mbit/s
95th percentile per-packet one-way delay: 51.413 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 32.78 Mbit/s
95th percentile per-packet one-way delay: 51.413 ms
Loss rate: 0.69%
```

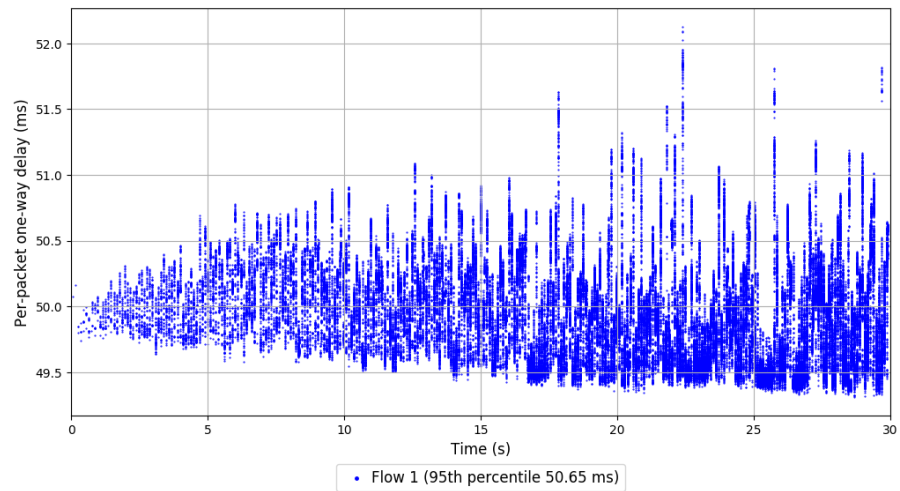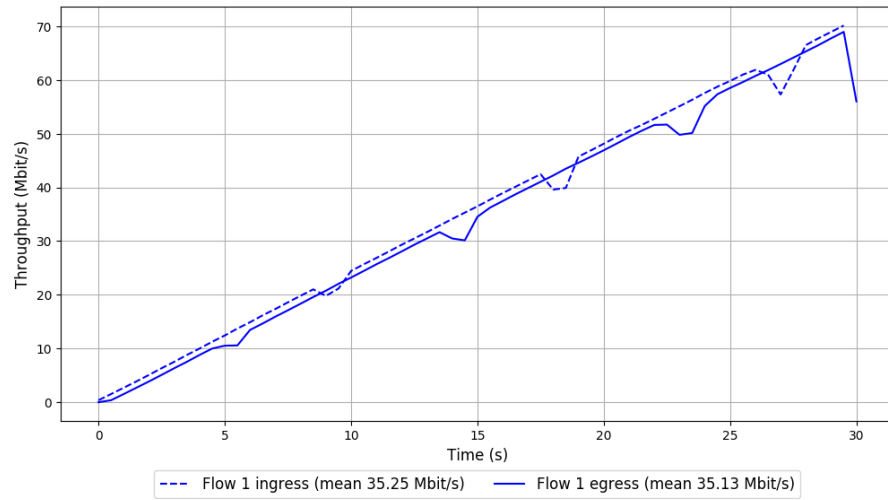Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-06-01 17:50:40
End at: 2018-06-01 17:51:10
Local clock offset: 6.251 ms
Remote clock offset: -0.193 ms


# Below is generated by plot.py at 2018-06-01 21:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.13 Mbit/s
95th percentile per-packet one-way delay: 50.652 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 35.13 Mbit/s
95th percentile per-packet one-way delay: 50.652 ms
Loss rate: 0.67%
```

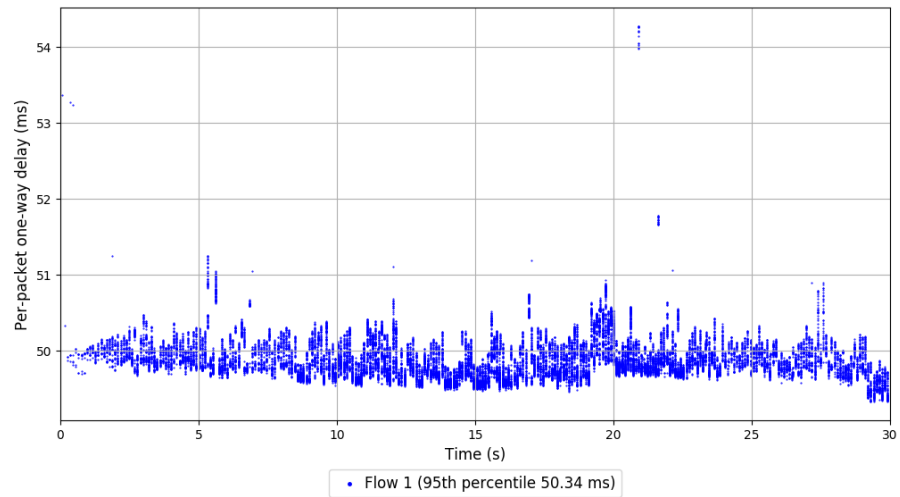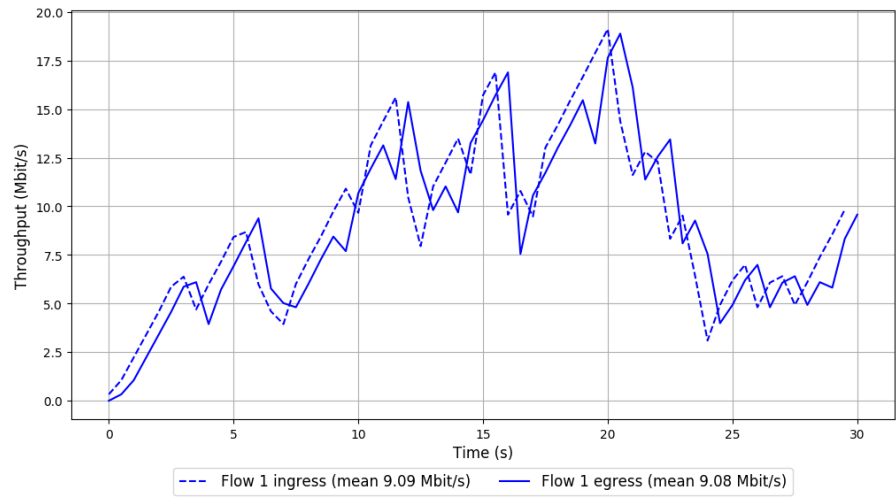# Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-06-01 18:11:12
End at: 2018-06-01 18:11:42
Local clock offset: 22.277 ms
Remote clock offset: -0.122 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.08 Mbit/s
95th percentile per-packet one-way delay: 50.343 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 9.08 Mbit/s
95th percentile per-packet one-way delay: 50.343 ms
Loss rate: 0.38%
```
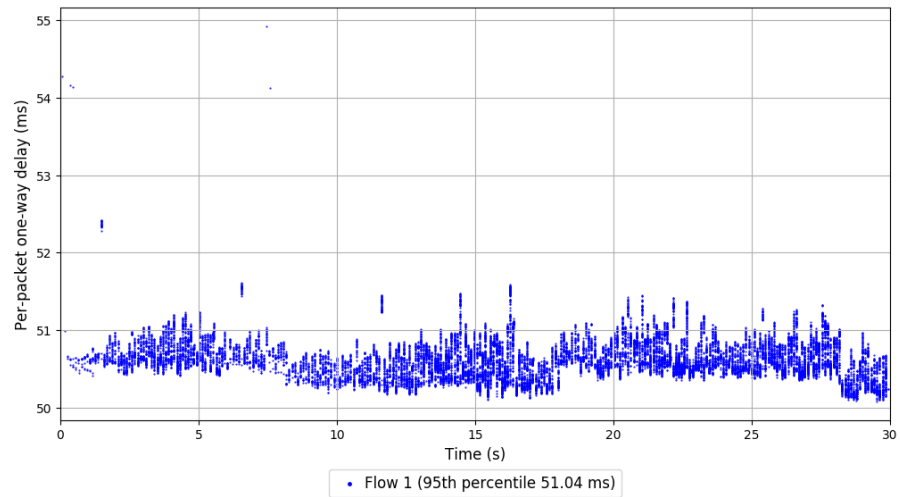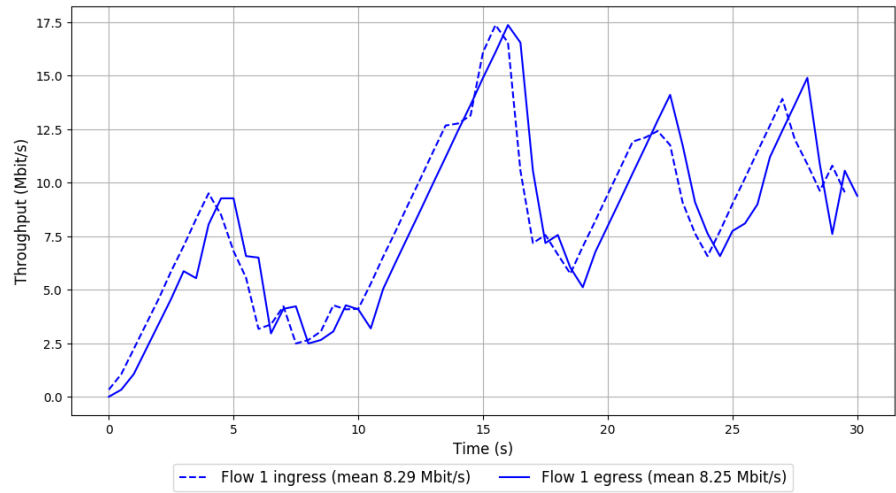
Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-06-01 18:31:33
End at: 2018-06-01 18:32:03
Local clock offset: 8.997 ms
Remote clock offset: -0.241 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 51.043 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 51.043 ms
Loss rate: 0.49%
```

Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 8.29 Mbit/s)   Flow 1 egress (mean 8.25 Mbit/s)

· Flow 1 (95th percentile 51.04 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2018-06-01 18:52:00
End at: 2018-06-01 18:52:30
Local clock offset: 10.607 ms
Remote clock offset: 0.136 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.60 Mbit/s
95th percentile per-packet one-way delay: 51.572 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 8.60 Mbit/s
95th percentile per-packet one-way delay: 51.572 ms
Loss rate: 0.67%
```
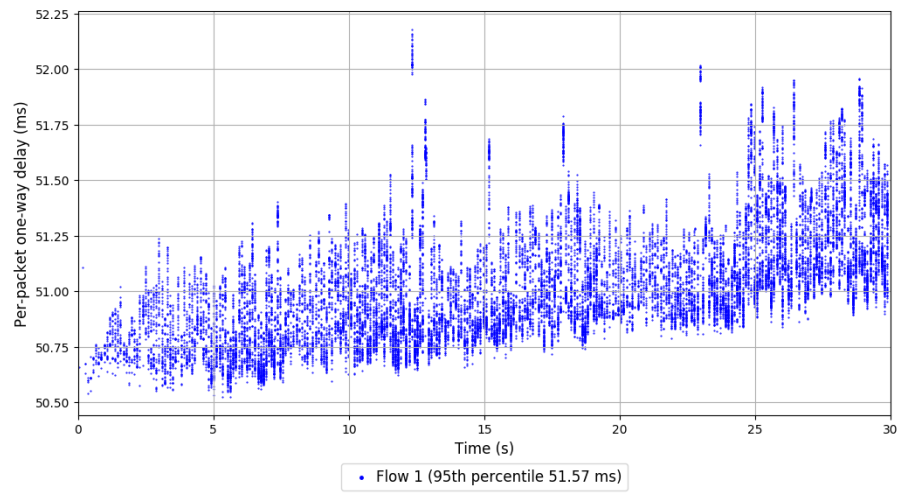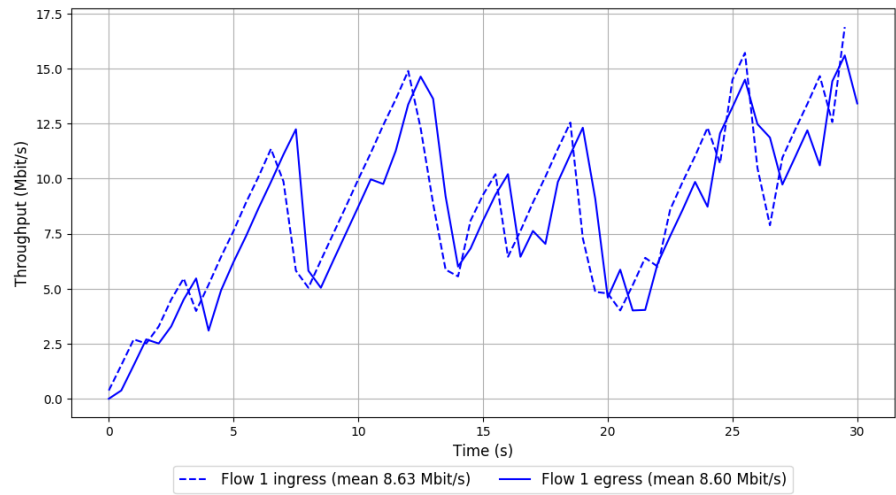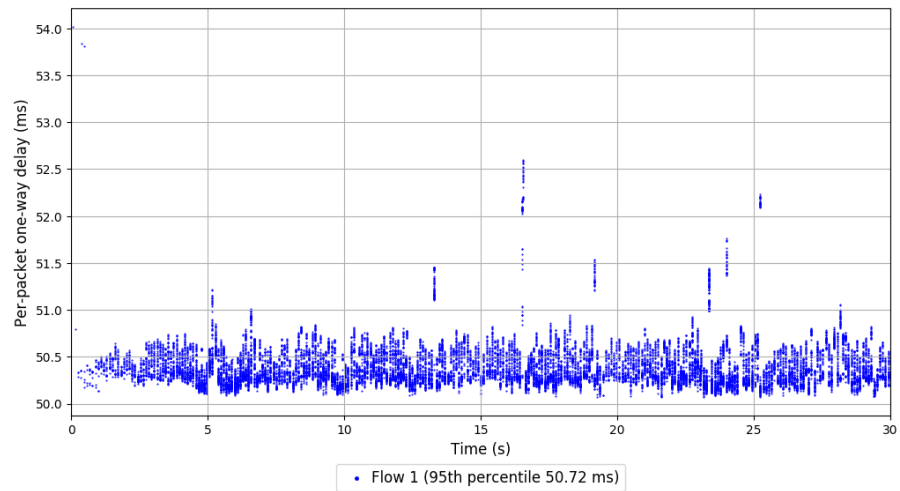
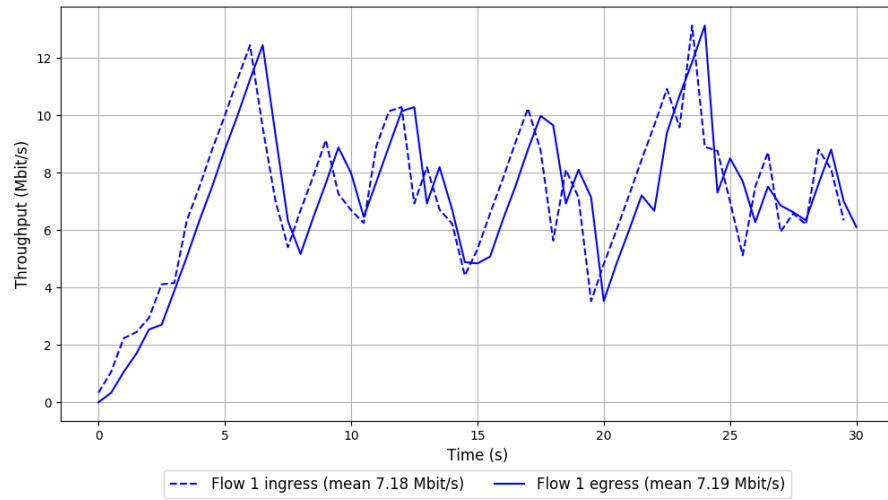# Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-06-01 19:12:28
End at: 2018-06-01 19:12:58
Local clock offset: 5.111 ms
Remote clock offset: -0.303 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.19 Mbit/s
95th percentile per-packet one-way delay: 50.716 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 7.19 Mbit/s
95th percentile per-packet one-way delay: 50.716 ms
Loss rate: 0.32%
```

Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 7.18 Mbit/s) — — — Flow 1 egress (mean 7.19 Mbit/s)
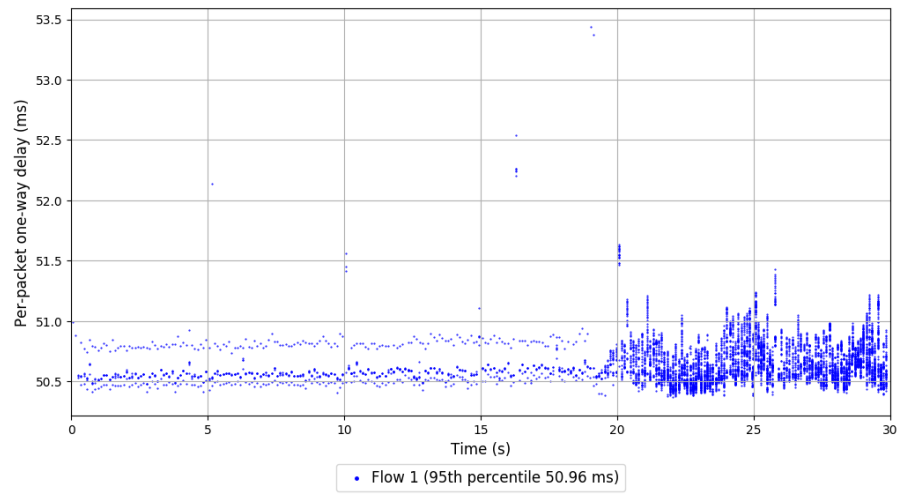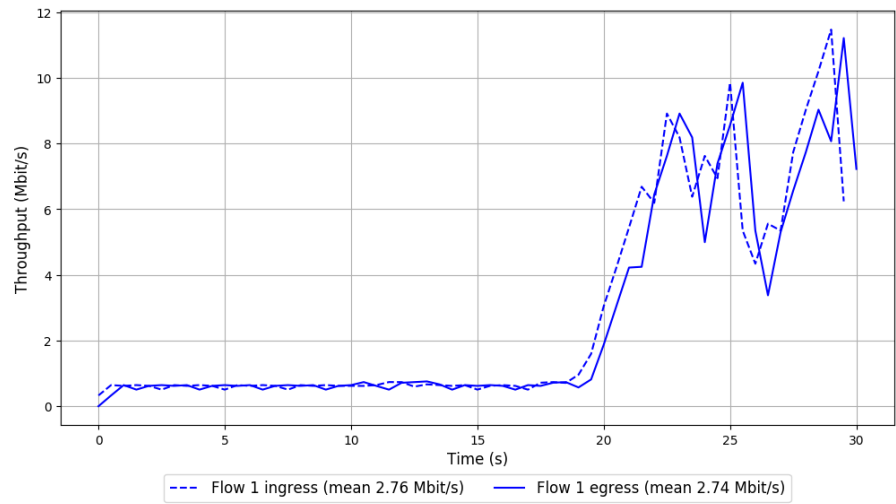

Flow 1 (95th percentile 50.72 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-06-01 19:33:09
End at: 2018-06-01 19:33:39
Local clock offset: 3.139 ms
Remote clock offset: -0.238 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 50.959 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 50.959 ms
Loss rate: 0.85%
```
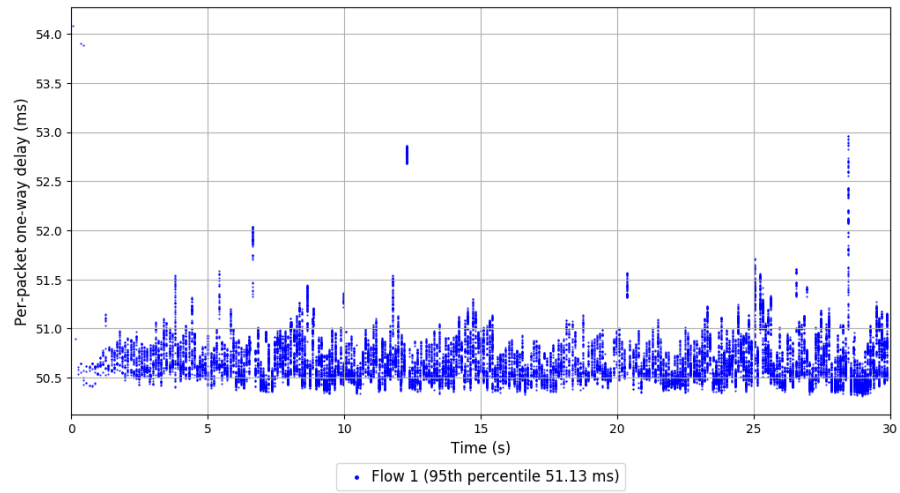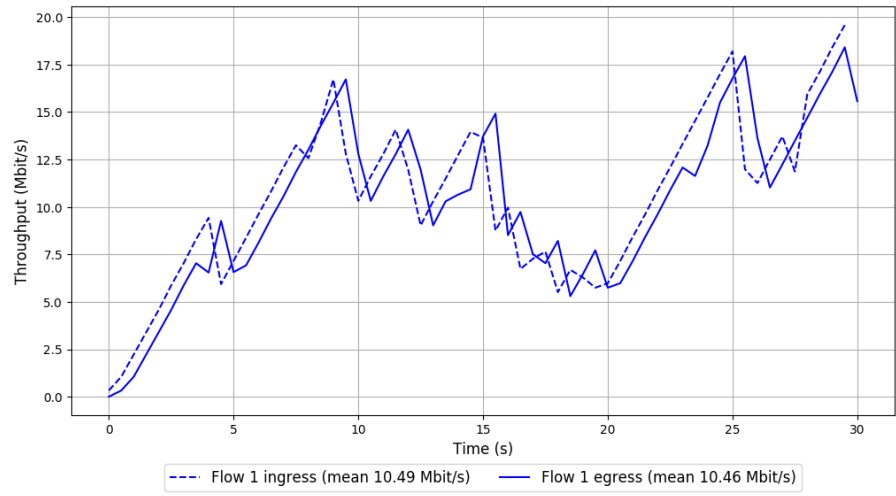
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2018-06-01 19:53:32
End at: 2018-06-01 19:54:02
Local clock offset: 3.329 ms
Remote clock offset: -0.134 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 51.127 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 51.127 ms
Loss rate: 0.64%
```

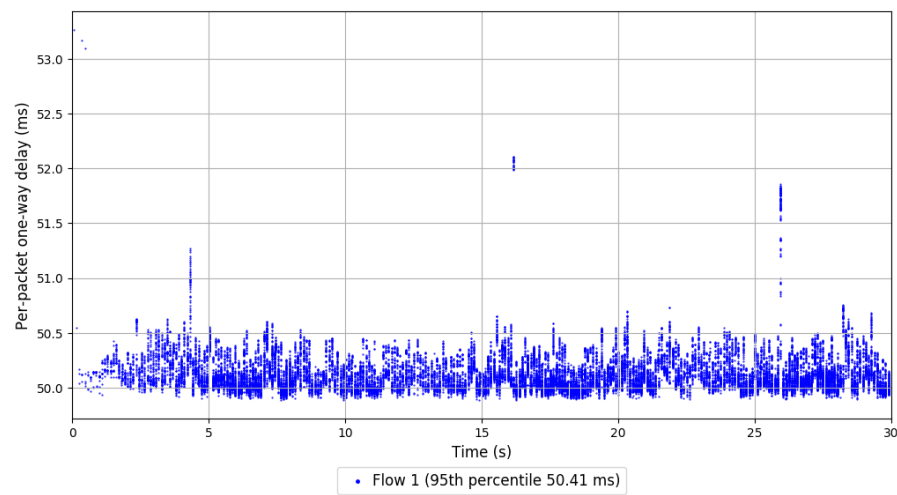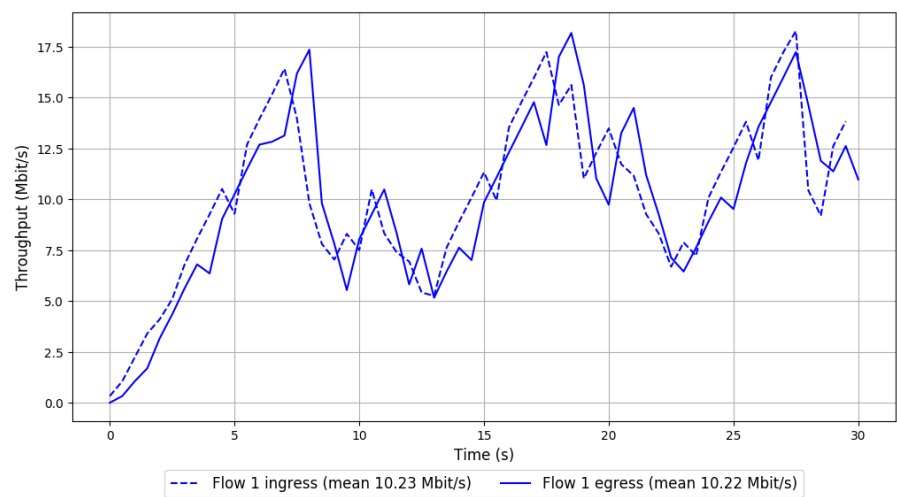# Run 9: Report of LEDBAT — Data Link

```
Run 10: Statistics of LEDBAT

Start at: 2018-06-01 20:13:46
End at: 2018-06-01 20:14:16
Local clock offset: 1.302 ms
Remote clock offset: -0.166 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.22 Mbit/s
95th percentile per-packet one-way delay: 50.414 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 10.22 Mbit/s
95th percentile per-packet one-way delay: 50.414 ms
Loss rate: 0.47%
```

Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-01 17:05:25
End at: 2018-06-01 17:05:55
Local clock offset: -0.087 ms
Remote clock offset: -0.094 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 499.36 Mbit/s
95th percentile per-packet one-way delay: 178.899 ms
Loss rate: 3.16%
-- Flow 1:
Average throughput: 499.36 Mbit/s
95th percentile per-packet one-way delay: 178.899 ms
Loss rate: 3.16%
```
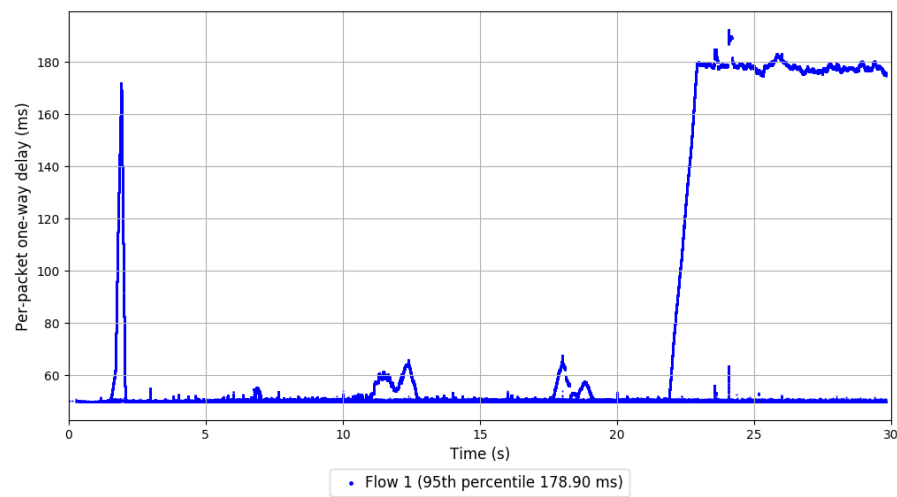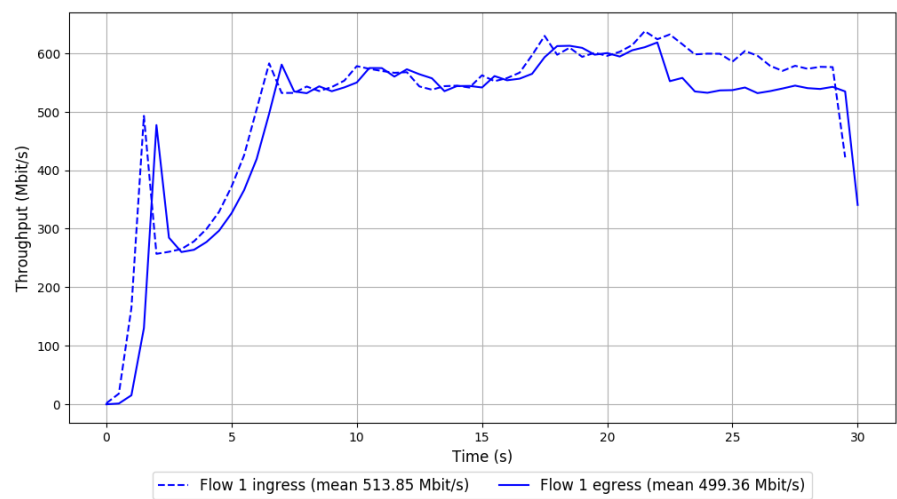
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-01 17:25:16
End at: 2018-06-01 17:25:46
Local clock offset: -0.208 ms
Remote clock offset: -0.0 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 474.15 Mbit/s
95th percentile per-packet one-way delay: 134.316 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 474.15 Mbit/s
95th percentile per-packet one-way delay: 134.316 ms
Loss rate: 0.38%
```
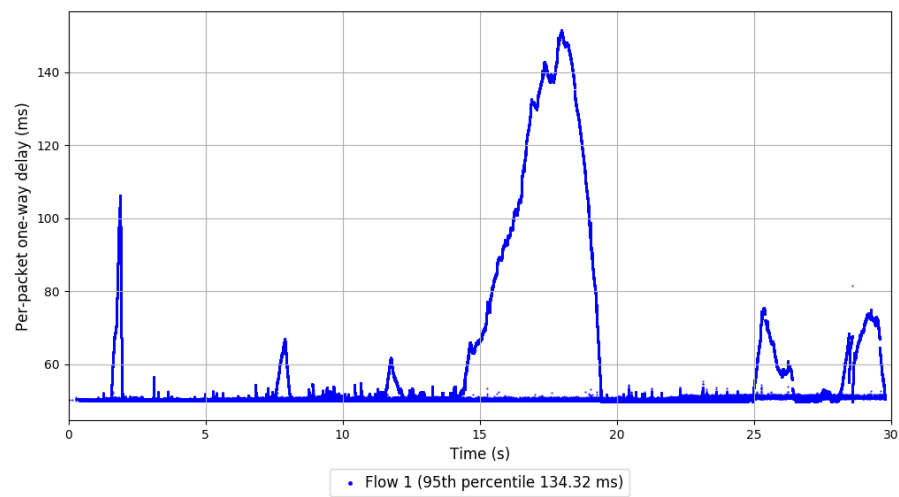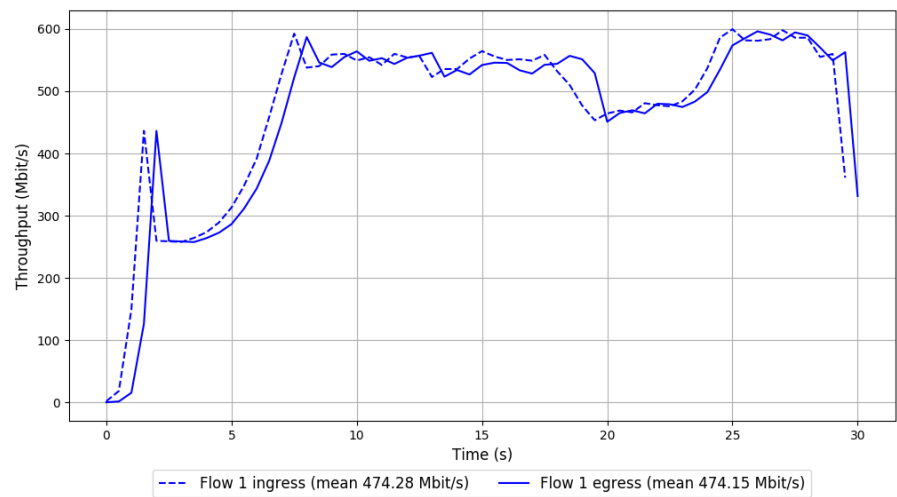
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 474.28 Mbit/s)   Flow 1 egress (mean 474.15 Mbit/s)

• Flow 1 (95th percentile 134.32 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-01 17:45:37
End at: 2018-06-01 17:46:07
Local clock offset: 2.754 ms
Remote clock offset: -0.166 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 520.14 Mbit/s
95th percentile per-packet one-way delay: 164.948 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 520.14 Mbit/s
95th percentile per-packet one-way delay: 164.948 ms
Loss rate: 0.87%
```
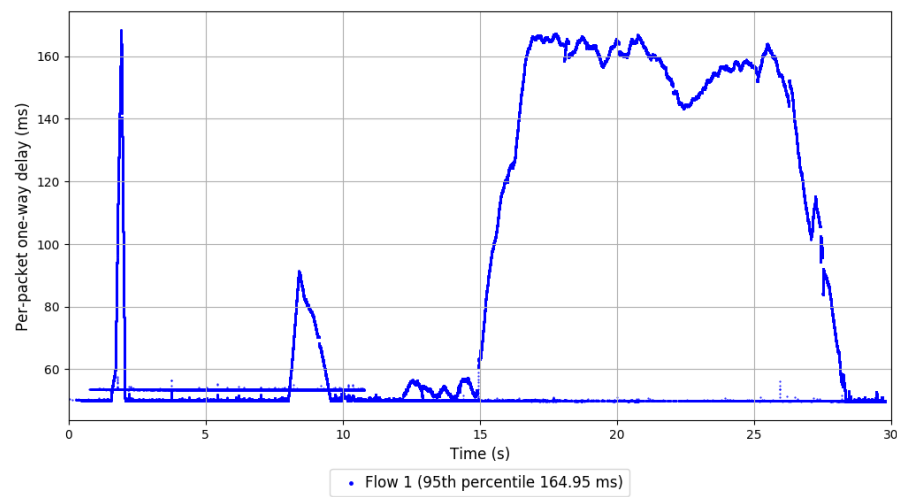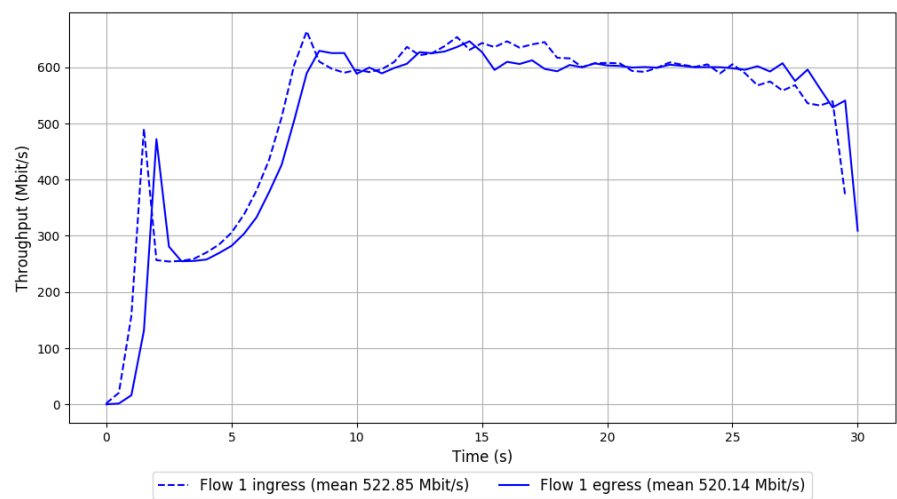
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 522.85 Mbit/s) ----- Flow 1 egress (mean 520.14 Mbit/s)

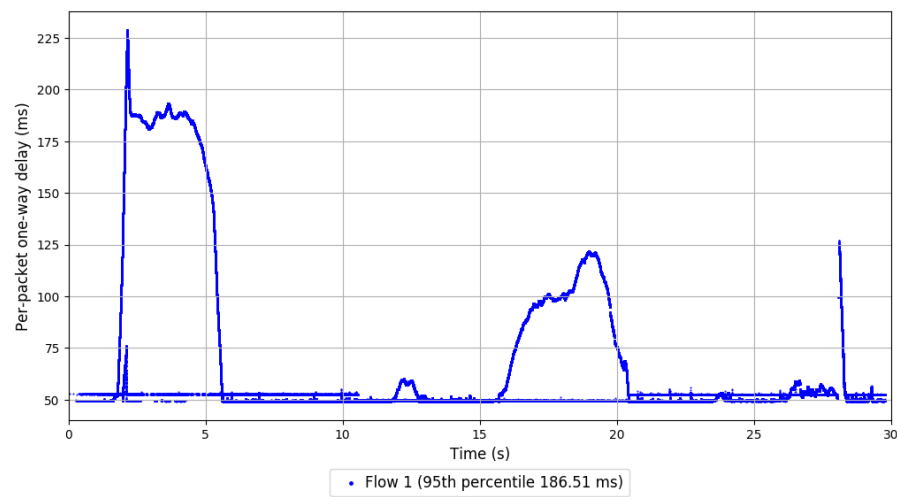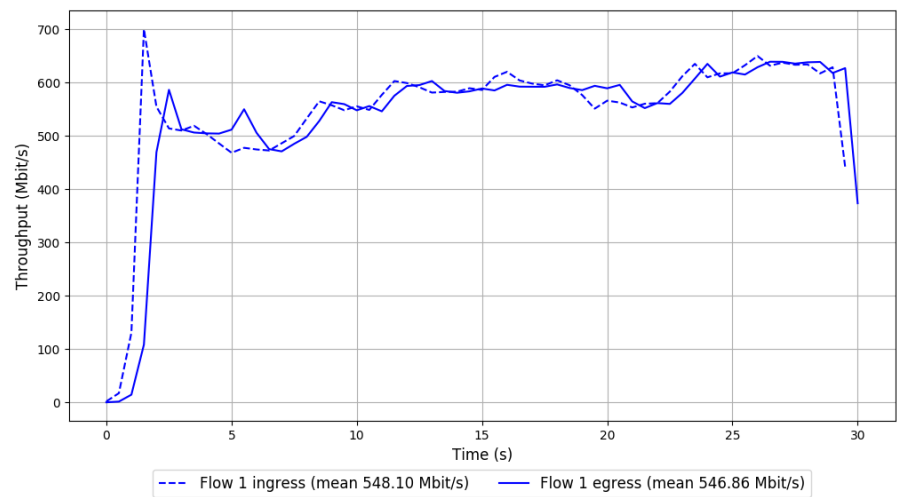
• Flow 1 (95th percentile 164.95 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-01 18:06:07
End at: 2018-06-01 18:06:37
Local clock offset: 18.012 ms
Remote clock offset: -0.144 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 546.86 Mbit/s
95th percentile per-packet one-way delay: 186.506 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 546.86 Mbit/s
95th percentile per-packet one-way delay: 186.506 ms
Loss rate: 0.59%
```

Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 548.10 Mbit/s)   Flow 1 egress (mean 546.86 Mbit/s)

Flow 1 (95th percentile 186.51 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-01 18:26:27
End at: 2018-06-01 18:26:57
Local clock offset: 9.019 ms
Remote clock offset: -0.097 ms


# Below is generated by plot.py at 2018-06-01 21:16:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 546.60 Mbit/s
95th percentile per-packet one-way delay: 104.827 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 546.60 Mbit/s
95th percentile per-packet one-way delay: 104.827 ms
Loss rate: 1.00%
```
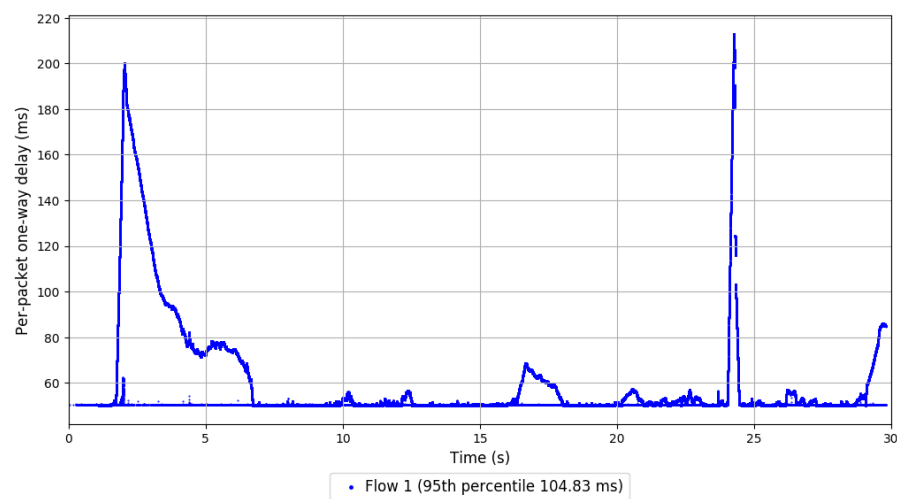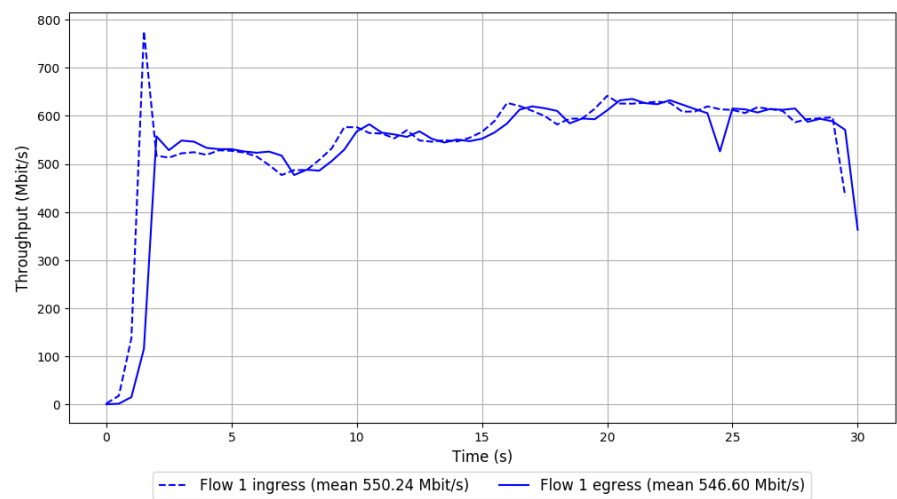
Run 5: Report of PCC-Allegro — Data Link

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-01 18:46:54
End at: 2018-06-01 18:47:24
Local clock offset: 12.424 ms
Remote clock offset: 0.304 ms


# Below is generated by plot.py at 2018-06-01 21:17:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 522.46 Mbit/s
95th percentile per-packet one-way delay: 183.899 ms
Loss rate: 2.92%
-- Flow 1:
Average throughput: 522.46 Mbit/s
95th percentile per-packet one-way delay: 183.899 ms
Loss rate: 2.92%
```
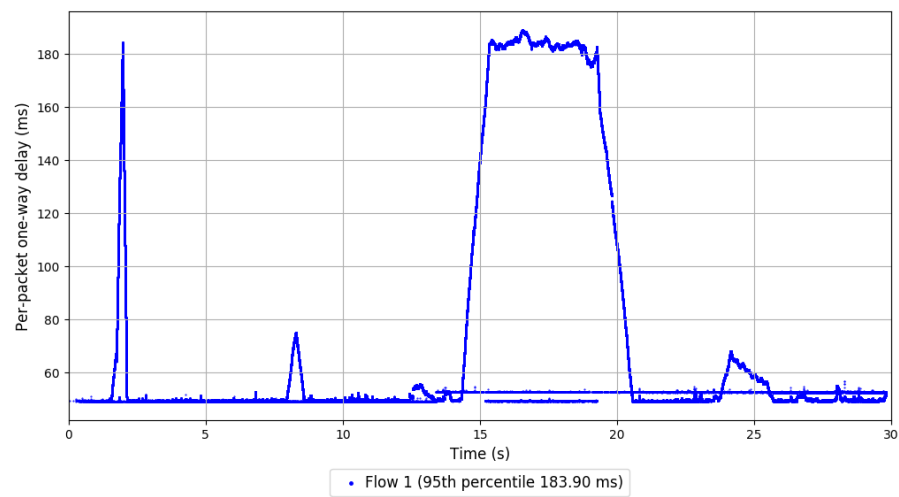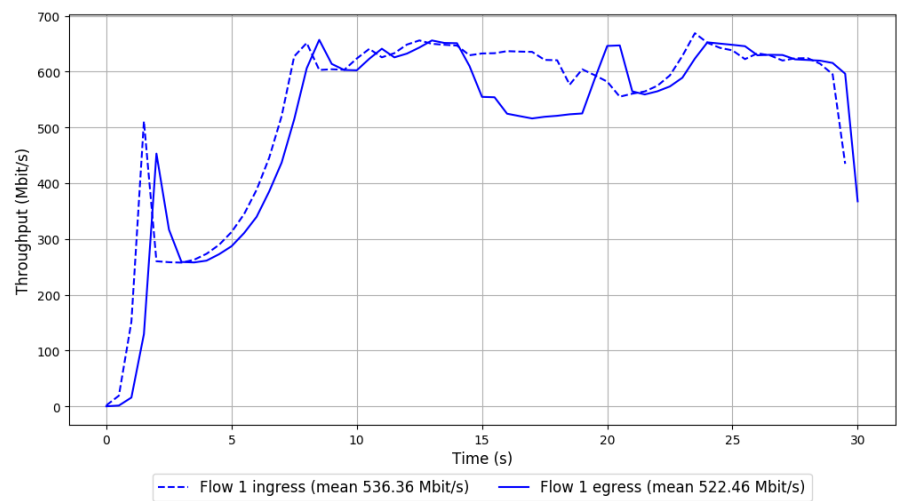
Run 6: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 536.36 Mbit/s) --- Flow 1 egress (mean 522.46 Mbit/s)
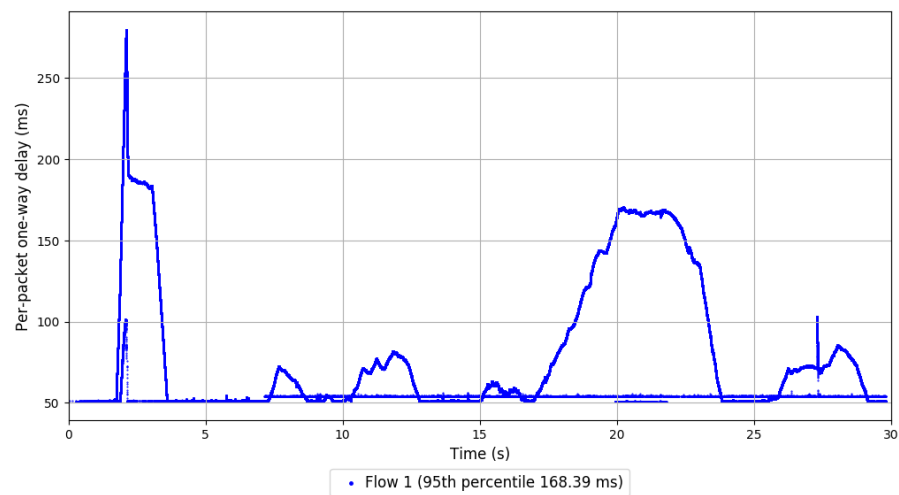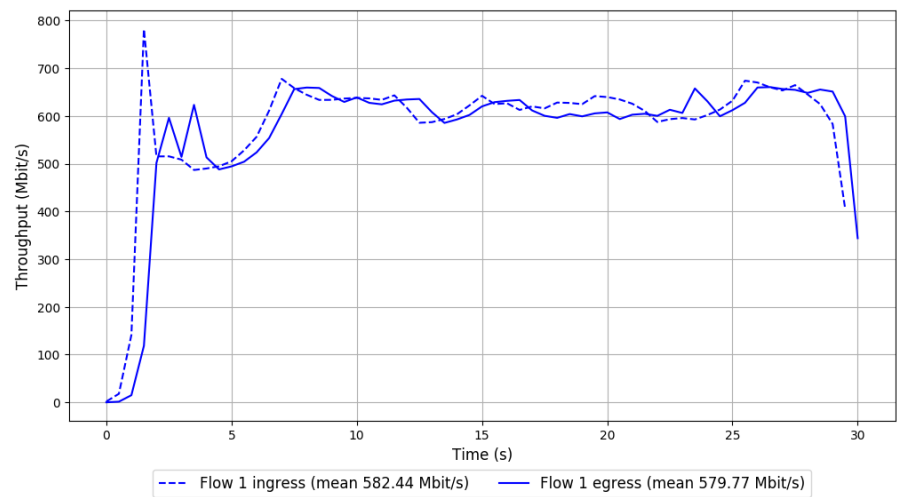

Flow 1 (95th percentile 183.90 ms)

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-01 19:07:21
End at: 2018-06-01 19:07:51
Local clock offset: 5.334 ms
Remote clock offset: -0.346 ms


# Below is generated by plot.py at 2018-06-01 21:24:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 579.77 Mbit/s
95th percentile per-packet one-way delay: 168.391 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 579.77 Mbit/s
95th percentile per-packet one-way delay: 168.391 ms
Loss rate: 0.80%
```

Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 582.44 Mbit/s) --- Flow 1 egress (mean 579.77 Mbit/s)

• Flow 1 (95th percentile 168.39 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-01 19:28:04
End at: 2018-06-01 19:28:34
Local clock offset: 4.695 ms
Remote clock offset: -0.131 ms


# Below is generated by plot.py at 2018-06-01 21:24:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 560.81 Mbit/s
95th percentile per-packet one-way delay: 164.865 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 560.81 Mbit/s
95th percentile per-packet one-way delay: 164.865 ms
Loss rate: 0.92%
```
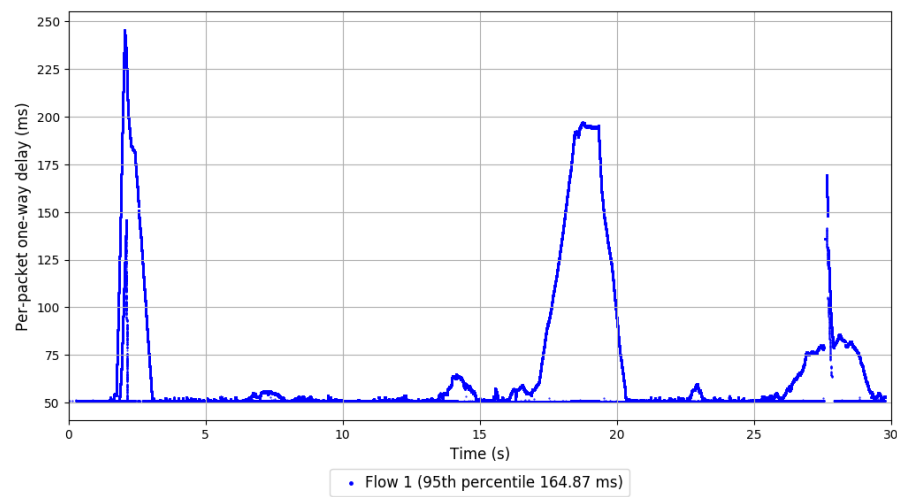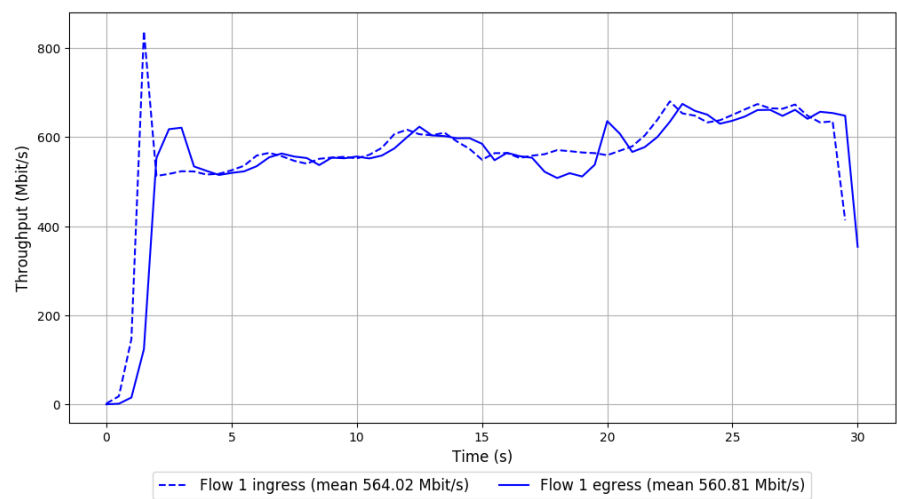
Run 8: Report of PCC-Allegro — Data Link

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-01 19:48:24
End at: 2018-06-01 19:48:54
Local clock offset: 2.925 ms
Remote clock offset: -0.366 ms


# Below is generated by plot.py at 2018-06-01 21:25:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 590.74 Mbit/s
95th percentile per-packet one-way delay: 165.304 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 590.74 Mbit/s
95th percentile per-packet one-way delay: 165.304 ms
Loss rate: 0.63%
```
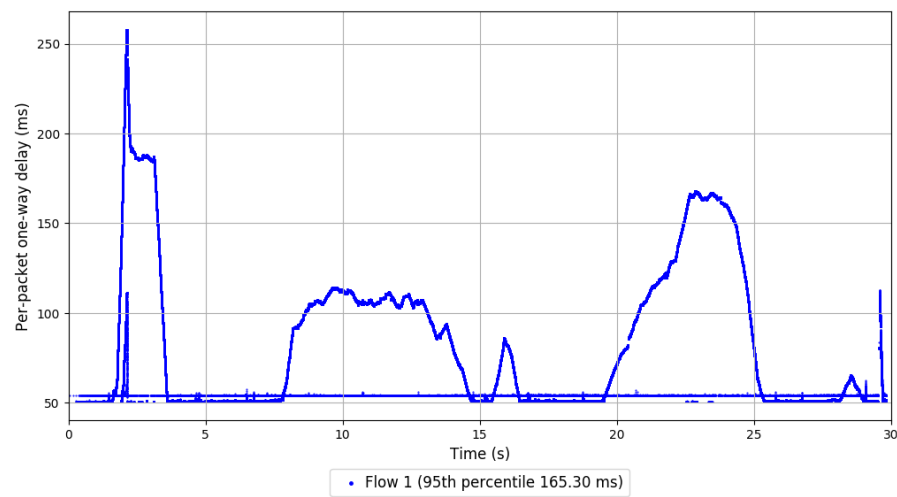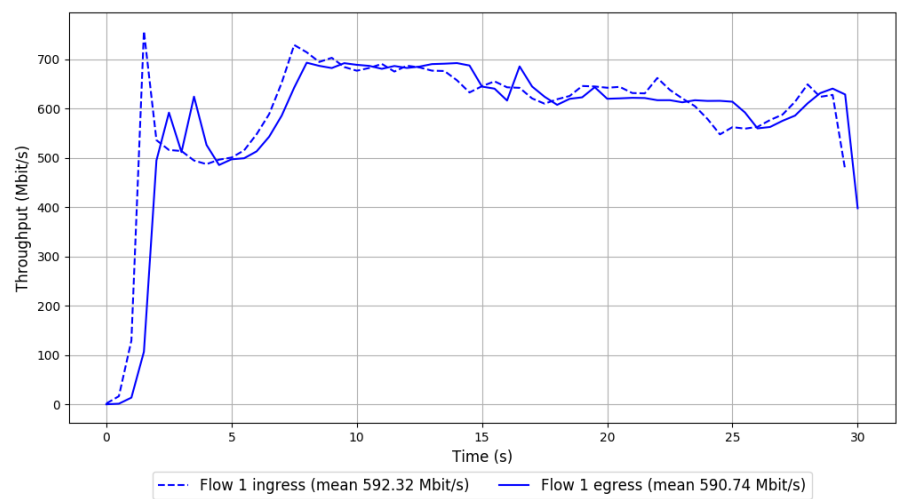
Run 9: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 592.32 Mbit/s) ---- Flow 1 egress (mean 590.74 Mbit/s) ——

• Flow 1 (95th percentile 165.30 ms)

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-01 20:08:42
End at: 2018-06-01 20:09:12
Local clock offset: 1.639 ms
Remote clock offset: -0.323 ms


# Below is generated by plot.py at 2018-06-01 21:25:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 487.82 Mbit/s
95th percentile per-packet one-way delay: 87.167 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 487.82 Mbit/s
95th percentile per-packet one-way delay: 87.167 ms
Loss rate: 0.75%
```
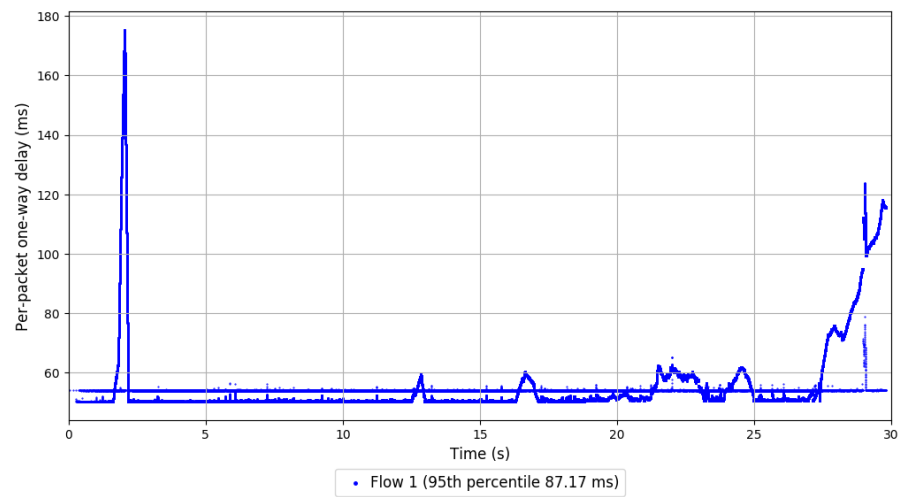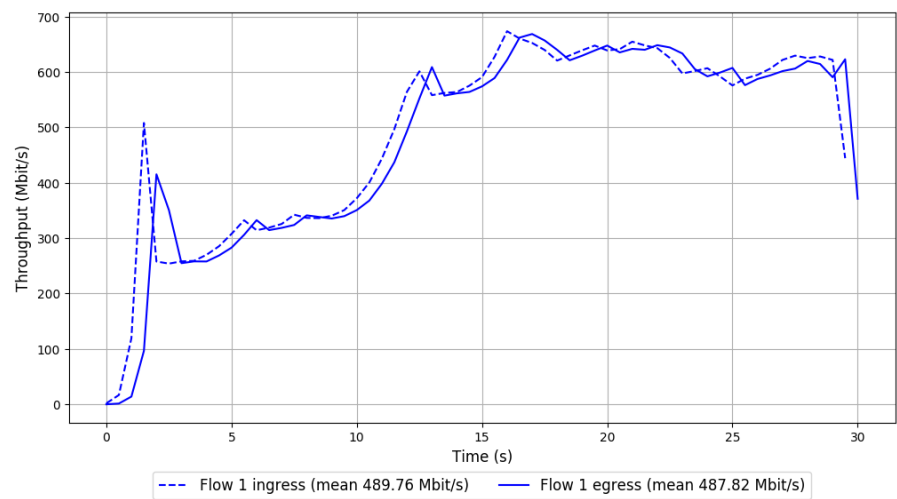
Run 10: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 489.76 Mbit/s) —— Flow 1 egress (mean 487.82 Mbit/s)

Flow 1 (95th percentile 87.17 ms)

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```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-01 16:57:36
End at: 2018-06-01 16:58:06
Local clock offset: -0.341 ms
Remote clock offset: -0.153 ms


# Below is generated by plot.py at 2018-06-01 21:27:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 366.34 Mbit/s
95th percentile per-packet one-way delay: 157.979 ms
Loss rate: 4.76%
-- Flow 1:
Average throughput: 366.34 Mbit/s
95th percentile per-packet one-way delay: 157.979 ms
Loss rate: 4.76%
```
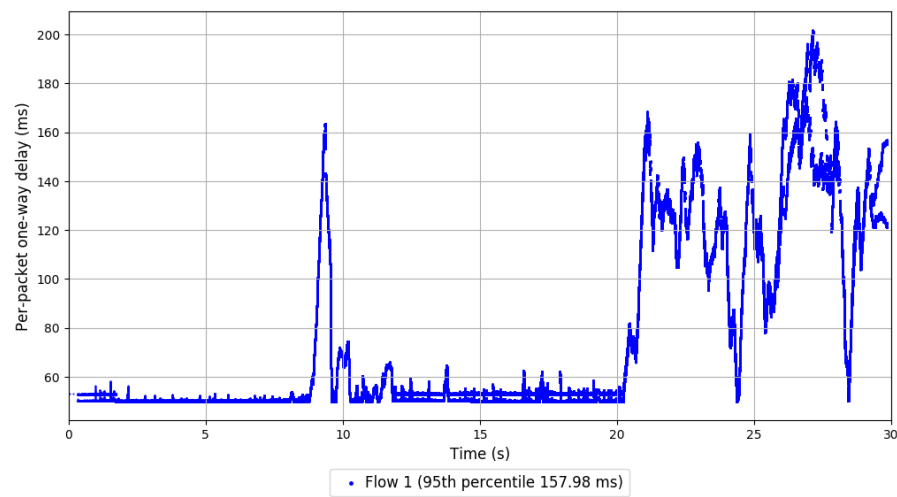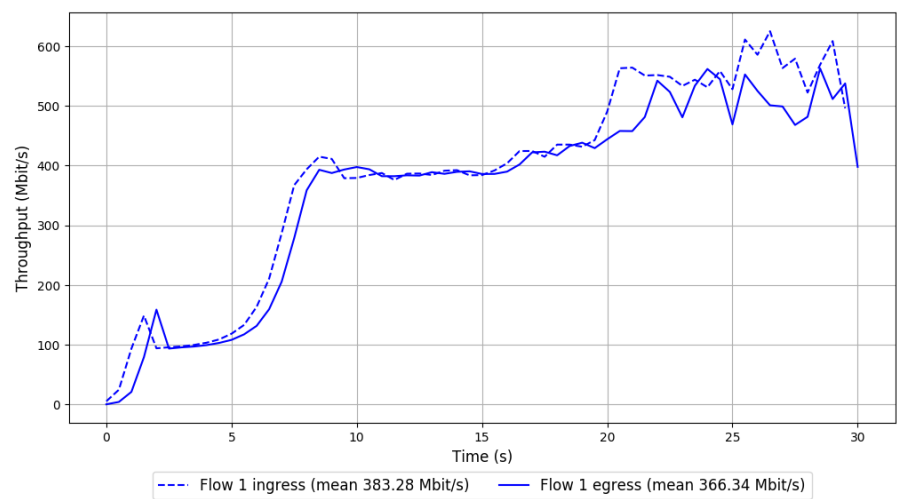
Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 383.28 Mbit/s) Flow 1 egress (mean 366.34 Mbit/s)

Flow 1 (95th percentile 157.98 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-01 17:17:56
End at: 2018-06-01 17:18:26
Local clock offset: -0.18 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2018-06-01 21:27:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.18 Mbit/s
95th percentile per-packet one-way delay: 53.728 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 194.18 Mbit/s
95th percentile per-packet one-way delay: 53.728 ms
Loss rate: 0.77%
```
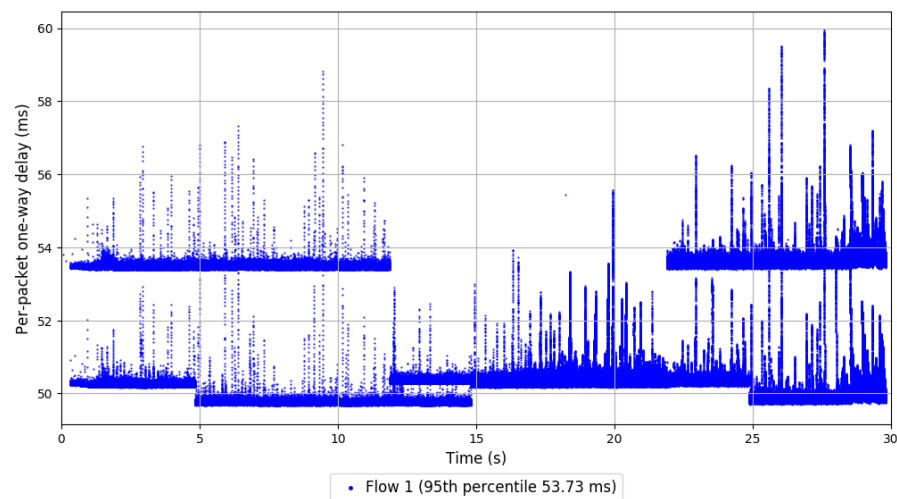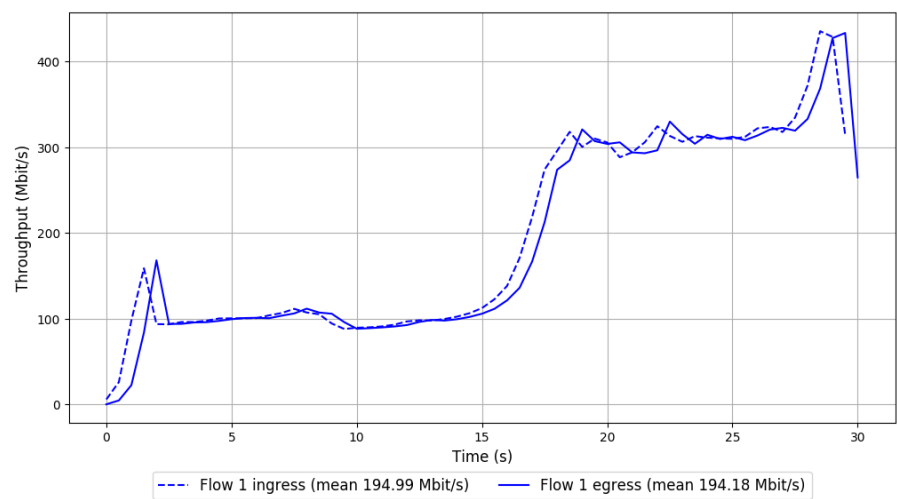
Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 194.99 Mbit/s) — Flow 1 egress (mean 194.18 Mbit/s)

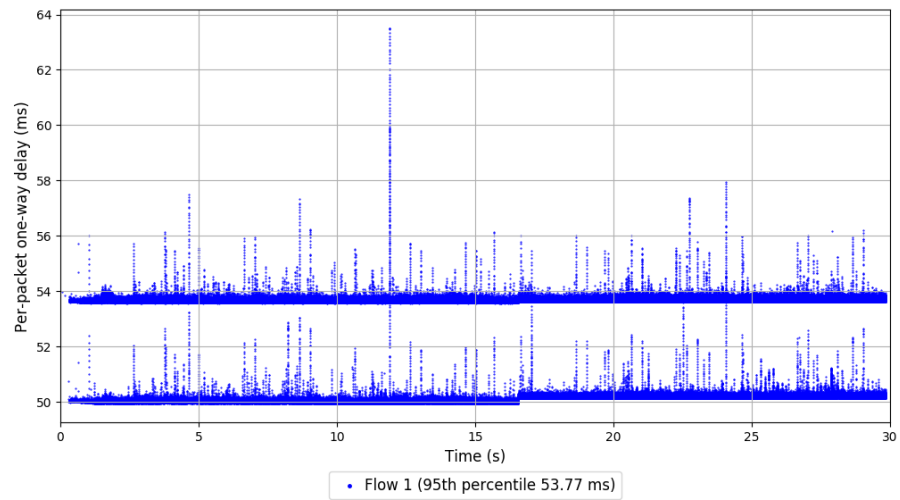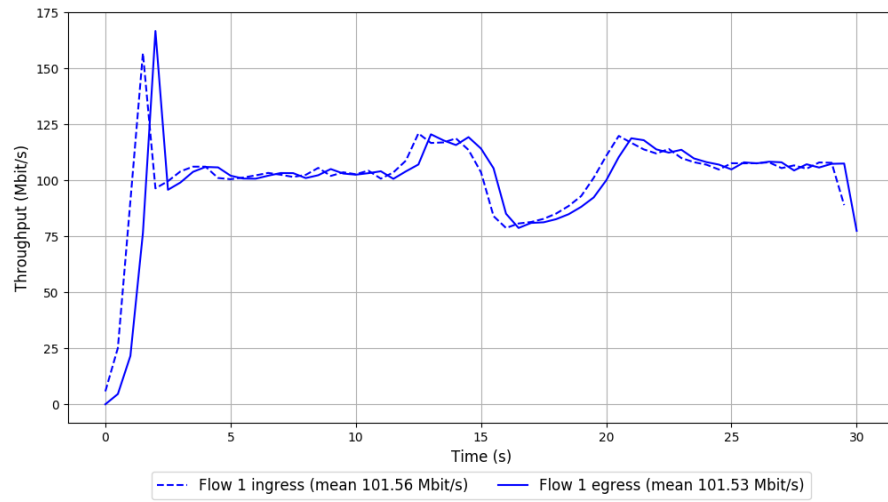• Flow 1 (95th percentile 53.73 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2018-06-01 17:38:04
End at: 2018-06-01 17:38:34
Local clock offset: -0.145 ms
Remote clock offset: -0.204 ms


# Below is generated by plot.py at 2018-06-01 21:27:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 101.53 Mbit/s
95th percentile per-packet one-way delay: 53.769 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 101.53 Mbit/s
95th percentile per-packet one-way delay: 53.769 ms
Loss rate: 0.37%
```

Run 3: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 101.56 Mbit/s) ---- Flow 1 egress (mean 101.53 Mbit/s) ——
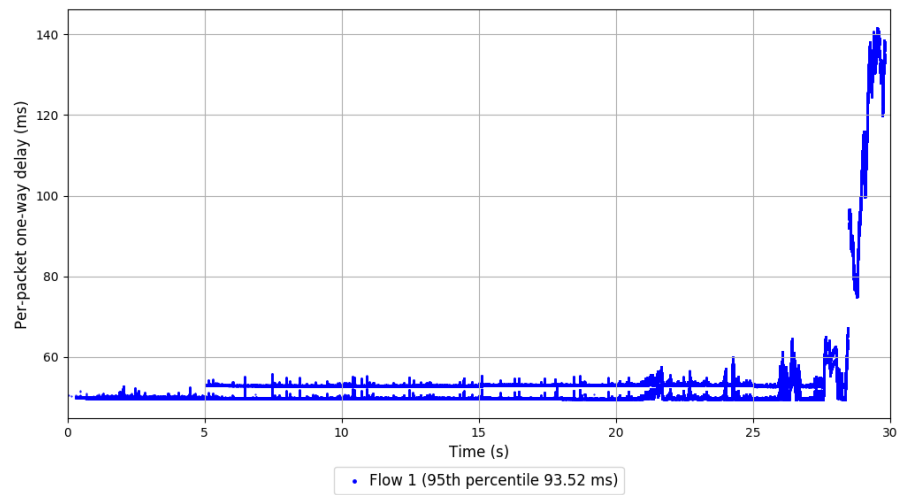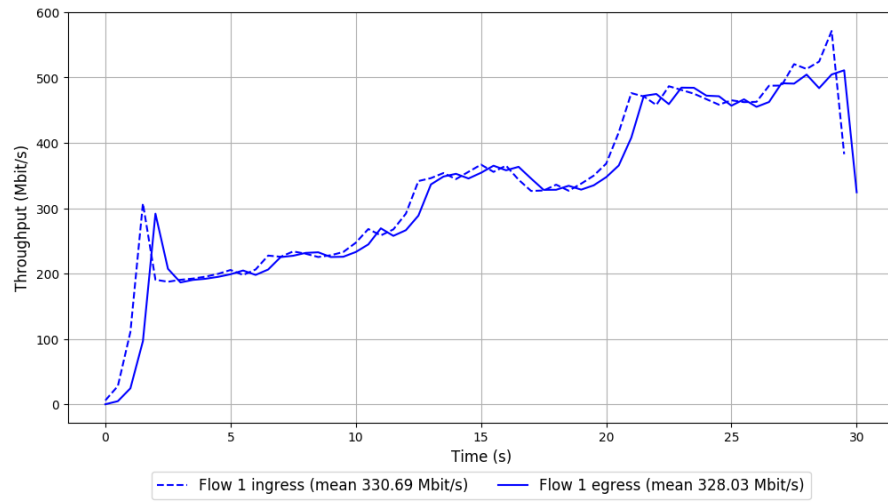

Flow 1 (95th percentile 53.77 ms)

```
Run 4: Statistics of PCC-Expr

Start at: 2018-06-01 17:58:23
End at: 2018-06-01 17:58:53
Local clock offset: 12.223 ms
Remote clock offset: -0.205 ms

# Below is generated by plot.py at 2018-06-01 21:28:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 328.03 Mbit/s
95th percentile per-packet one-way delay: 93.517 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 328.03 Mbit/s
95th percentile per-packet one-way delay: 93.517 ms
Loss rate: 1.15%
```

Run 4: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 330.69 Mbit/s) —— Flow 1 egress (mean 328.03 Mbit/s)
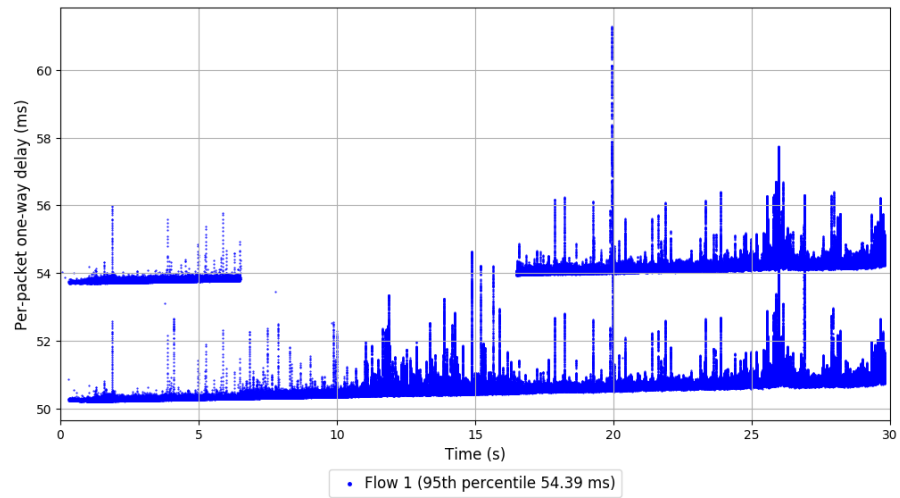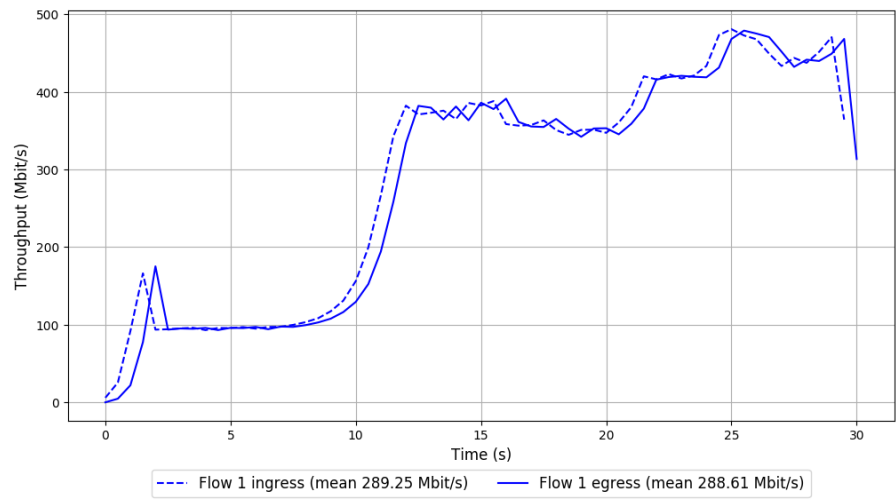

• Flow 1 (95th percentile 93.52 ms)

```
Run 5: Statistics of PCC-Expr

Start at: 2018-06-01 18:18:41
End at: 2018-06-01 18:19:11
Local clock offset: 12.917 ms
Remote clock offset: -0.079 ms


# Below is generated by plot.py at 2018-06-01 21:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 288.61 Mbit/s
95th percentile per-packet one-way delay: 54.394 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 288.61 Mbit/s
95th percentile per-packet one-way delay: 54.394 ms
Loss rate: 0.58%
```
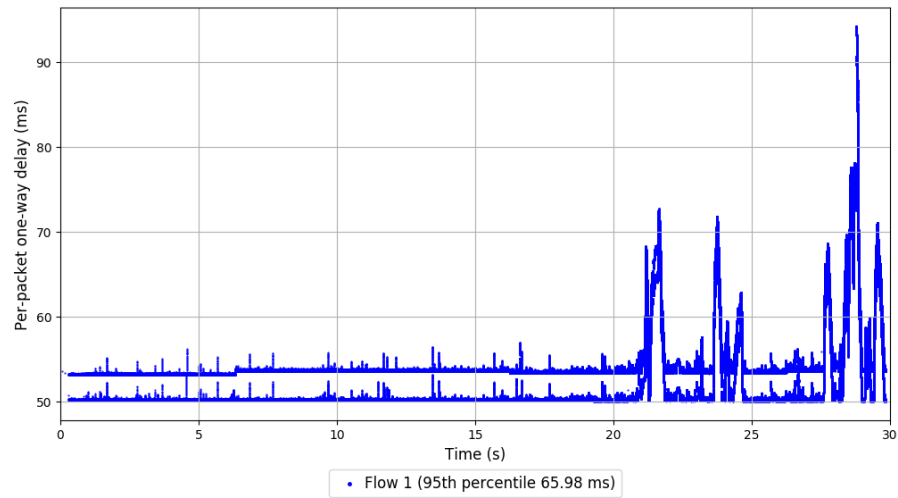
Run 5: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 289.25 Mbit/s)   Flow 1 egress (mean 288.61 Mbit/s)

Flow 1 (95th percentile 54.39 ms)

```
Run 6: Statistics of PCC-Expr

Start at: 2018-06-01 18:39:21
End at: 2018-06-01 18:39:52
Local clock offset: 10.454 ms
Remote clock offset: -0.03 ms


# Below is generated by plot.py at 2018-06-01 21:31:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 285.44 Mbit/s
95th percentile per-packet one-way delay: 65.982 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 285.44 Mbit/s
95th percentile per-packet one-way delay: 65.982 ms
Loss rate: 0.57%
```
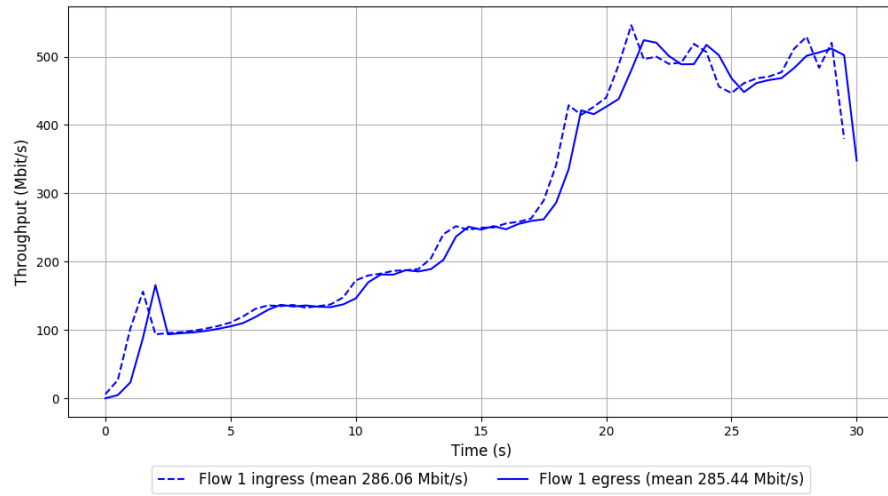
Run 6: Report of PCC-Expr — Data Link

```
Run 7: Statistics of PCC-Expr

Start at: 2018-06-01 18:59:45
End at: 2018-06-01 19:00:15
Local clock offset: 6.308 ms
Remote clock offset: 0.006 ms


# Below is generated by plot.py at 2018-06-01 21:32:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 286.57 Mbit/s
95th percentile per-packet one-way delay: 168.965 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 286.57 Mbit/s
95th percentile per-packet one-way delay: 168.965 ms
Loss rate: 0.87%
```
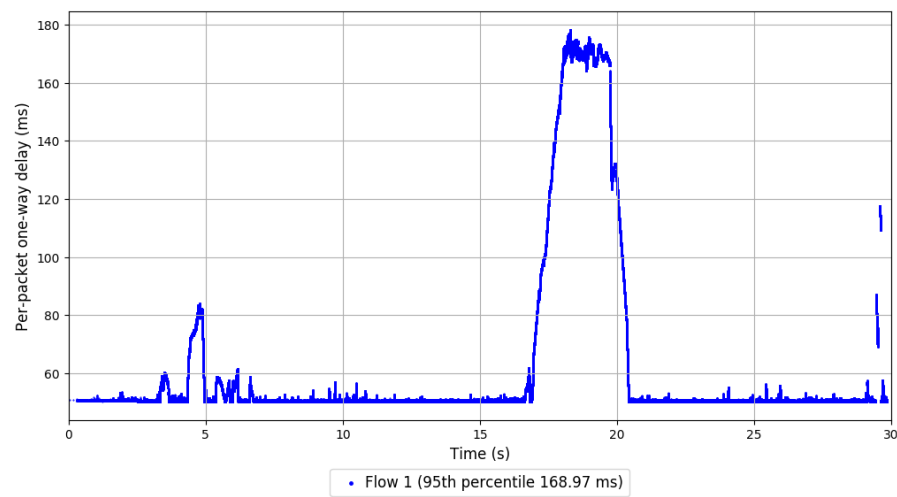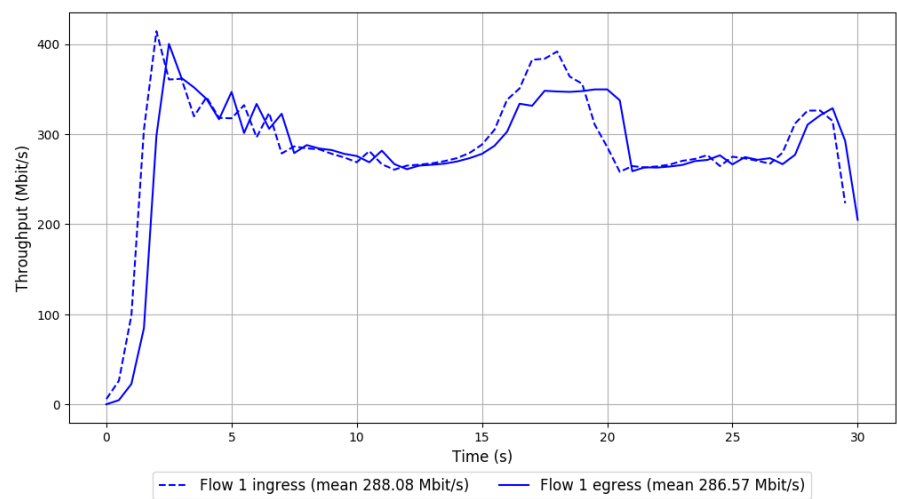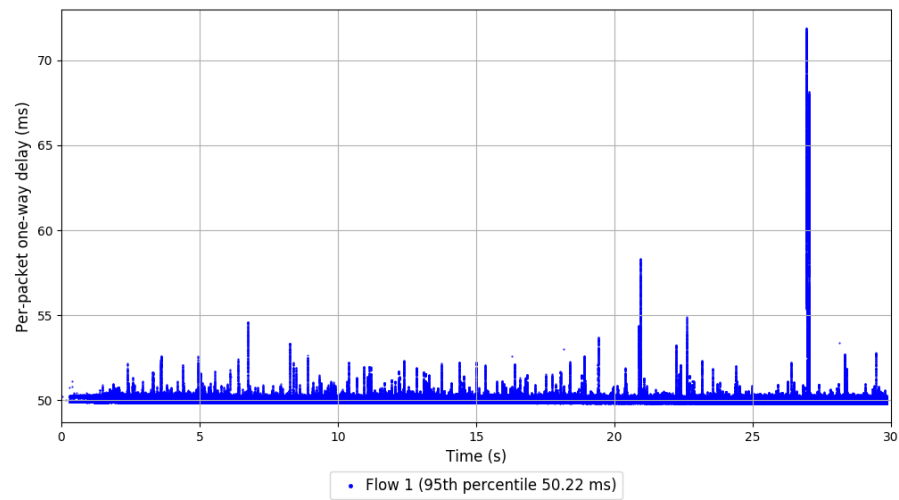
Run 7: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 288.08 Mbit/s) --- Flow 1 egress (mean 286.57 Mbit/s)

Flow 1 (95th percentile 168.97 ms)

```
Run 8: Statistics of PCC-Expr

Start at: 2018-06-01 19:20:15
End at: 2018-06-01 19:20:45
Local clock offset: 6.351 ms
Remote clock offset: 0.008 ms


# Below is generated by plot.py at 2018-06-01 21:32:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 242.88 Mbit/s
95th percentile per-packet one-way delay: 50.217 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 242.88 Mbit/s
95th percentile per-packet one-way delay: 50.217 ms
Loss rate: 0.47%
```
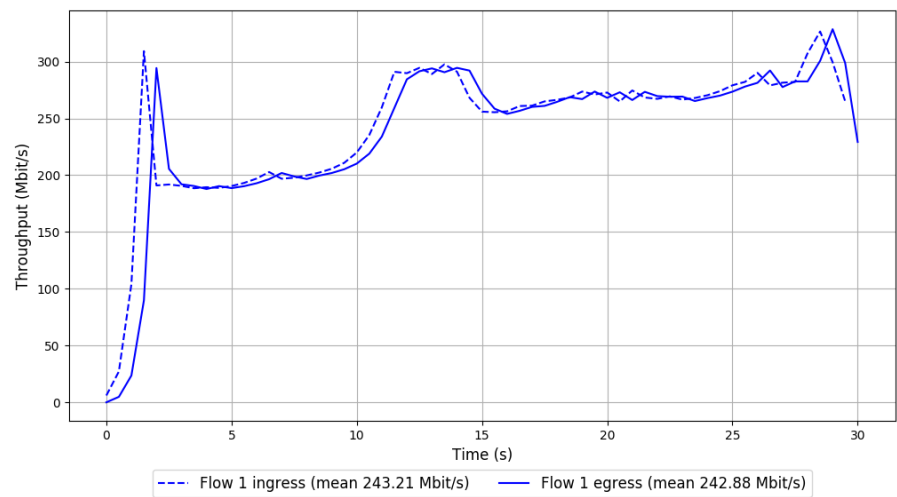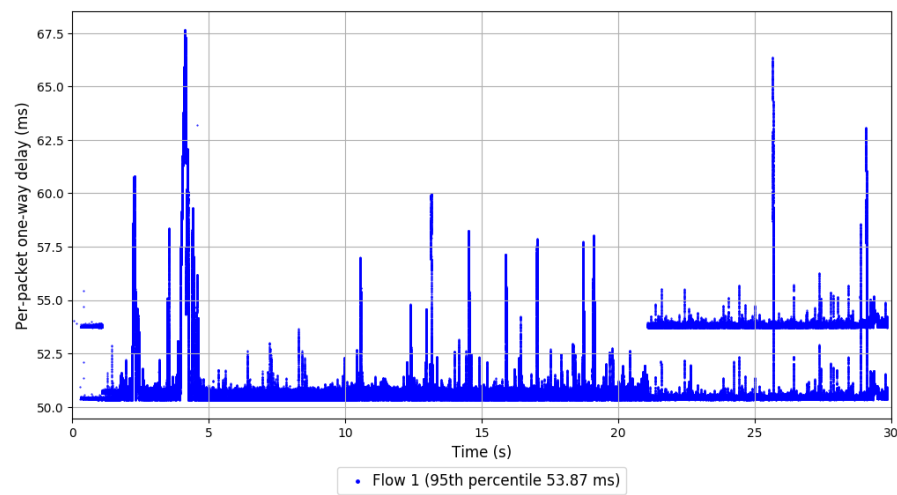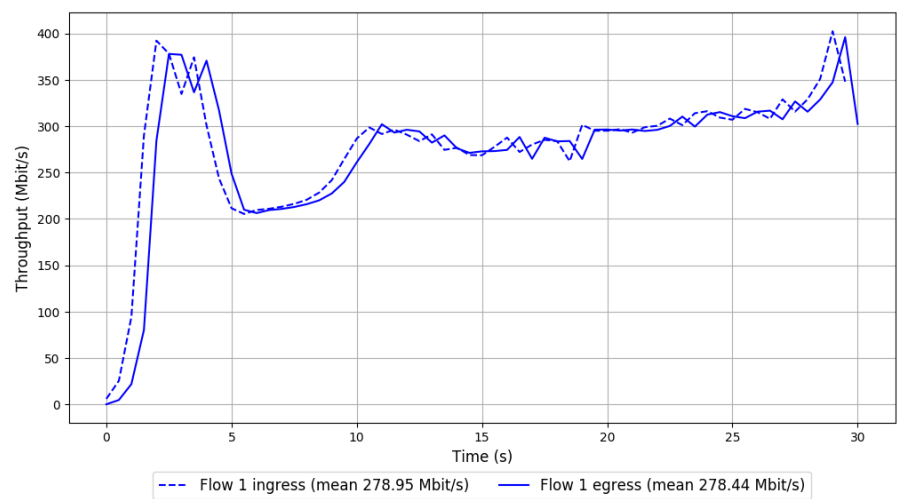
Run 8: Report of PCC-Expr — Data Link

```
Run 9: Statistics of PCC-Expr

Start at: 2018-06-01 19:40:57
End at: 2018-06-01 19:41:27
Local clock offset: 2.542 ms
Remote clock offset: -0.364 ms


# Below is generated by plot.py at 2018-06-01 21:33:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 278.44 Mbit/s
95th percentile per-packet one-way delay: 53.865 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 278.44 Mbit/s
95th percentile per-packet one-way delay: 53.865 ms
Loss rate: 0.54%
```
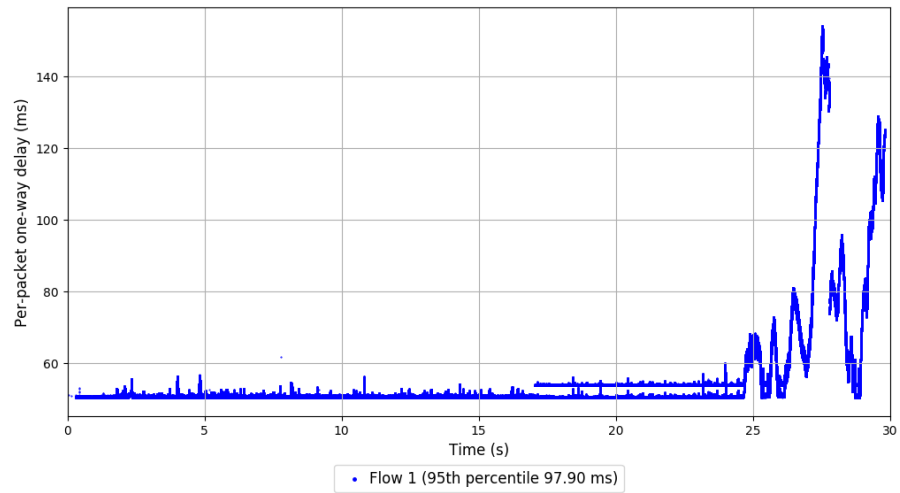
Run 9: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 278.95 Mbit/s)   Flow 1 egress (mean 278.44 Mbit/s)

Flow 1 (95th percentile 53.87 ms)

```
Run 10: Statistics of PCC-Expr

Start at: 2018-06-01 20:01:01
End at: 2018-06-01 20:01:31
Local clock offset: 2.381 ms
Remote clock offset: -0.25 ms


# Below is generated by plot.py at 2018-06-01 21:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 374.44 Mbit/s
95th percentile per-packet one-way delay: 97.898 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 374.44 Mbit/s
95th percentile per-packet one-way delay: 97.898 ms
Loss rate: 1.08%
```
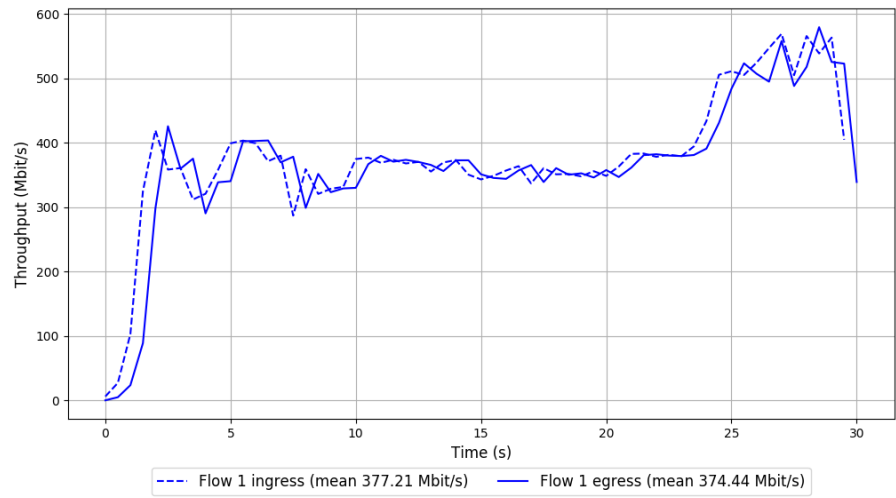
Run 10: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 377.21 Mbit/s)   Flow 1 egress (mean 374.44 Mbit/s)

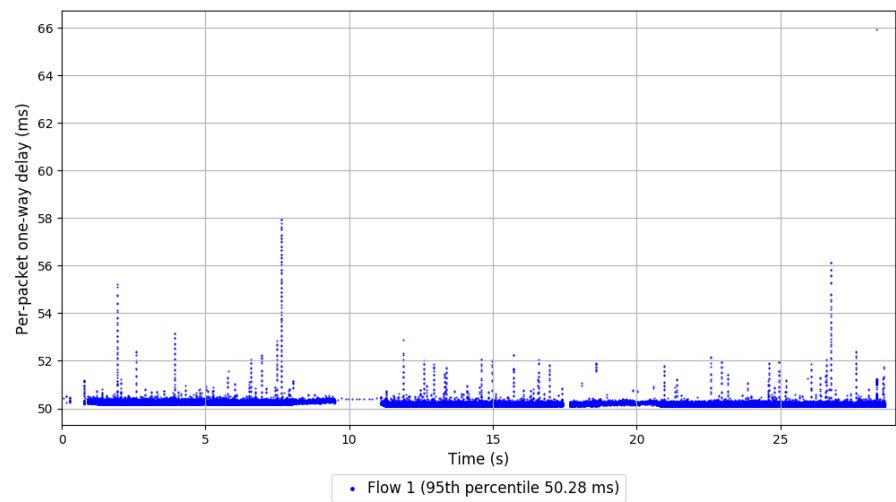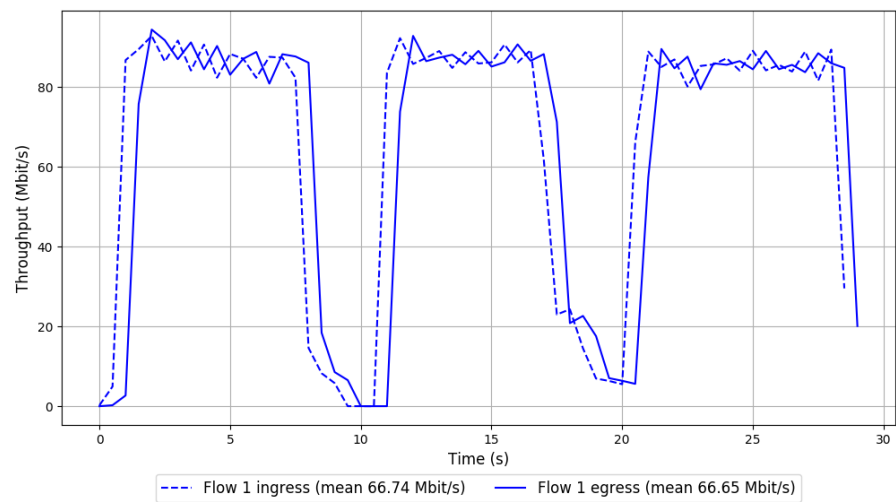

Flow 1 (95th percentile 97.90 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-01 17:01:37
End at: 2018-06-01 17:02:07
Local clock offset: -0.004 ms
Remote clock offset: -0.303 ms


# Below is generated by plot.py at 2018-06-01 21:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.65 Mbit/s
95th percentile per-packet one-way delay: 50.283 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 66.65 Mbit/s
95th percentile per-packet one-way delay: 50.283 ms
Loss rate: 0.49%
```
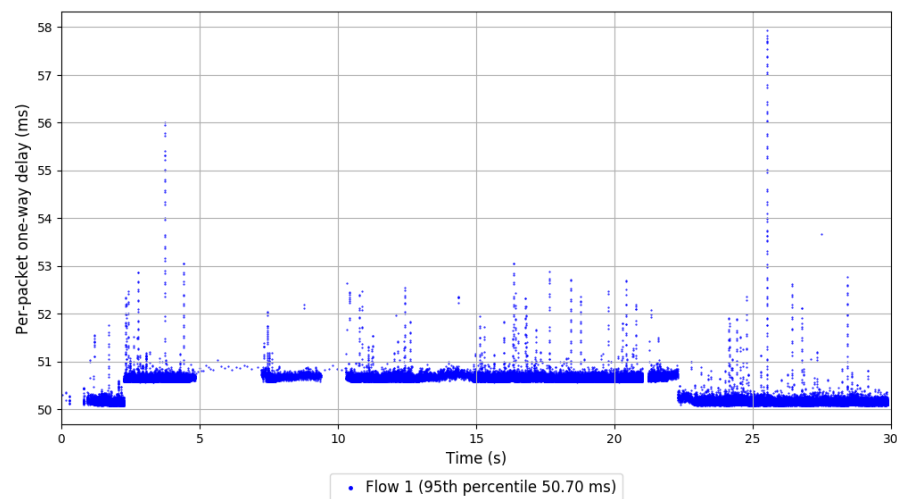
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-01 17:21:28
End at: 2018-06-01 17:21:58
Local clock offset: 0.125 ms
Remote clock offset: -0.094 ms


# Below is generated by plot.py at 2018-06-01 21:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.61 Mbit/s
95th percentile per-packet one-way delay: 50.702 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 61.61 Mbit/s
95th percentile per-packet one-way delay: 50.702 ms
Loss rate: 0.52%
```
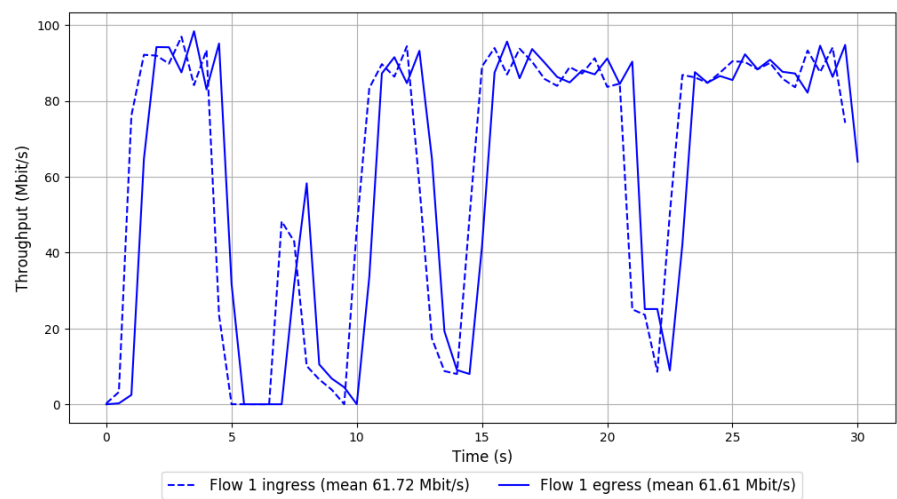
Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-01 17:41:49
End at: 2018-06-01 17:42:19
Local clock offset: -0.466 ms
Remote clock offset: -0.428 ms


# Below is generated by plot.py at 2018-06-01 21:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.38 Mbit/s
95th percentile per-packet one-way delay: 53.598 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 50.38 Mbit/s
95th percentile per-packet one-way delay: 53.598 ms
Loss rate: 0.69%
```
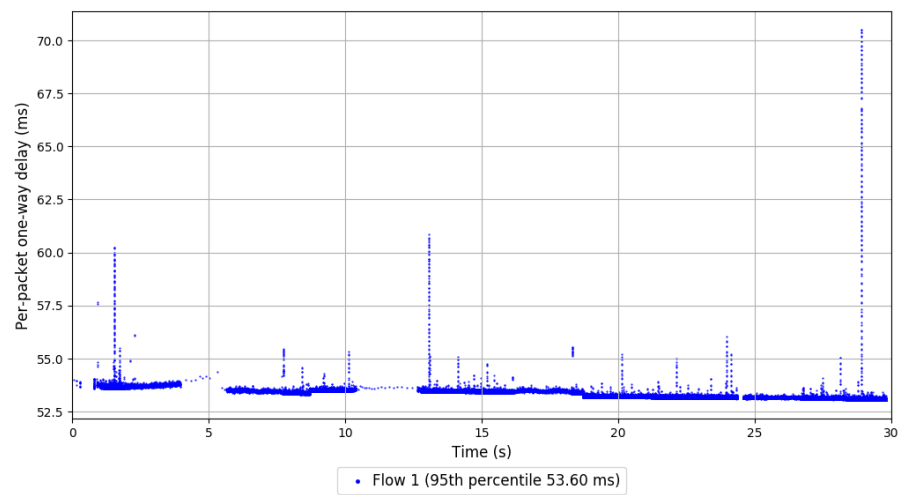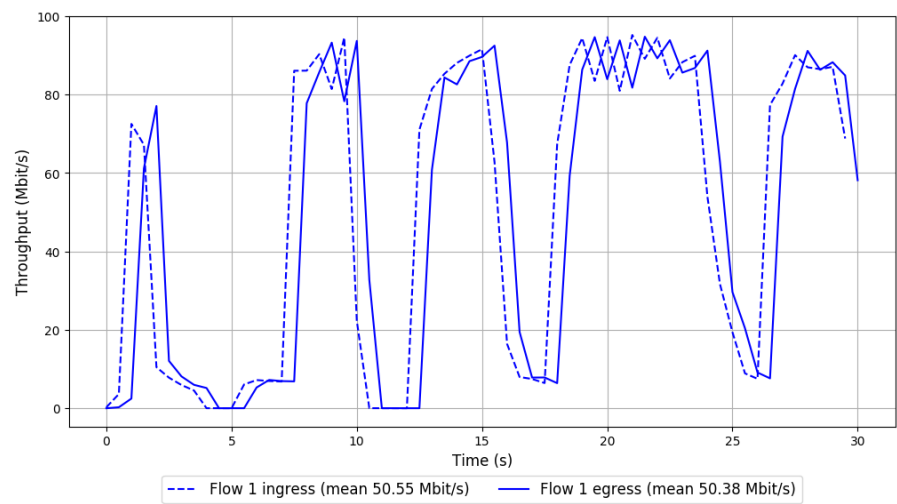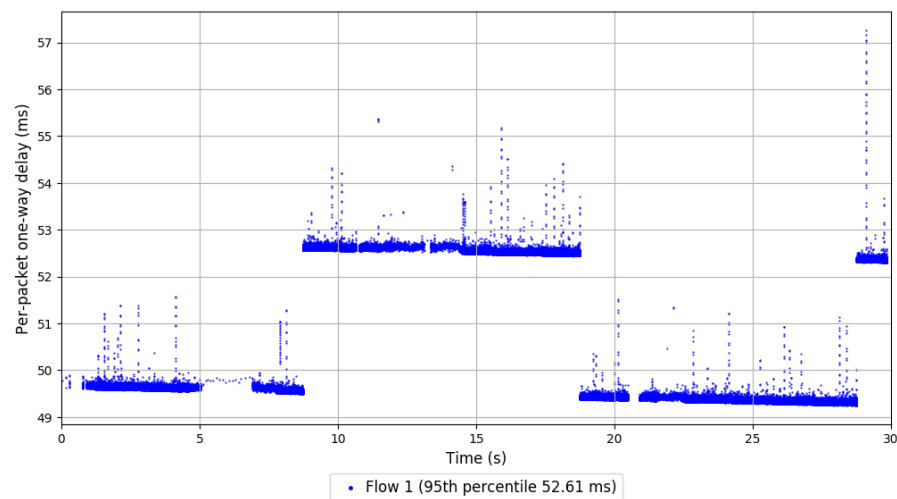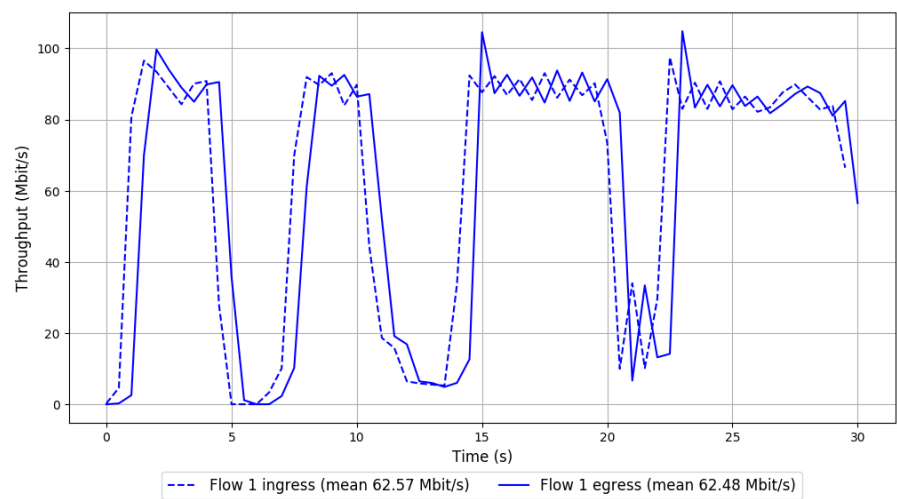
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-01 18:02:19
End at: 2018-06-01 18:02:49
Local clock offset: 15.156 ms
Remote clock offset: -0.086 ms


# Below is generated by plot.py at 2018-06-01 21:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.48 Mbit/s
95th percentile per-packet one-way delay: 52.611 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 62.48 Mbit/s
95th percentile per-packet one-way delay: 52.611 ms
Loss rate: 0.49%
```

Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 62.57 Mbit/s)   ——— Flow 1 egress (mean 62.48 Mbit/s)

• Flow 1 (95th percentile 52.61 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-01 18:22:35
End at: 2018-06-01 18:23:05
Local clock offset: 10.2 ms
Remote clock offset: -0.101 ms


# Below is generated by plot.py at 2018-06-01 21:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.62 Mbit/s
95th percentile per-packet one-way delay: 50.849 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 78.62 Mbit/s
95th percentile per-packet one-way delay: 50.849 ms
Loss rate: 0.06%
```
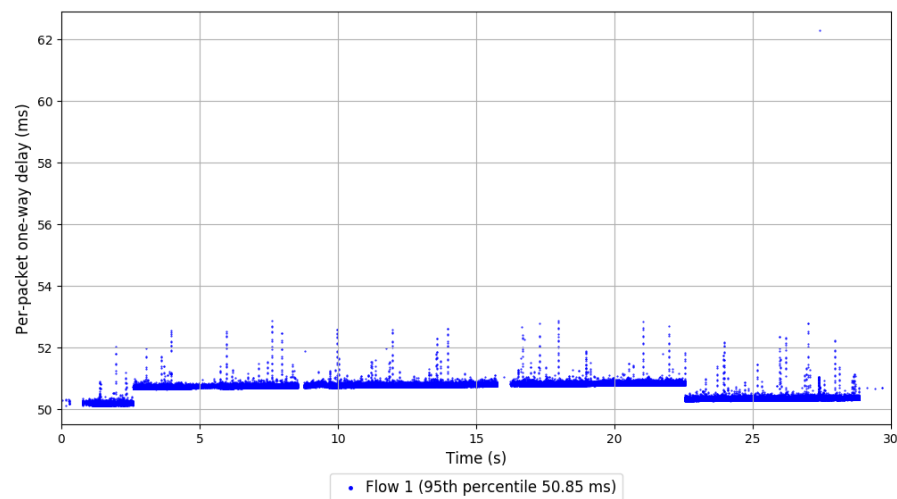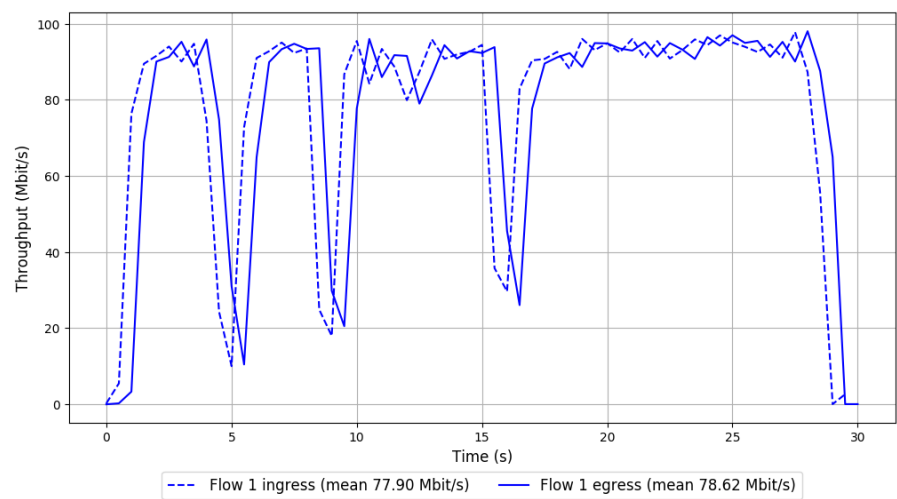
Run 5: Report of QUIC Cubic — Data Link

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-01 18:43:02
End at: 2018-06-01 18:43:32
Local clock offset: 11.618 ms
Remote clock offset: -0.065 ms


# Below is generated by plot.py at 2018-06-01 21:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.49 Mbit/s
95th percentile per-packet one-way delay: 53.882 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 69.49 Mbit/s
95th percentile per-packet one-way delay: 53.882 ms
Loss rate: 0.49%
```
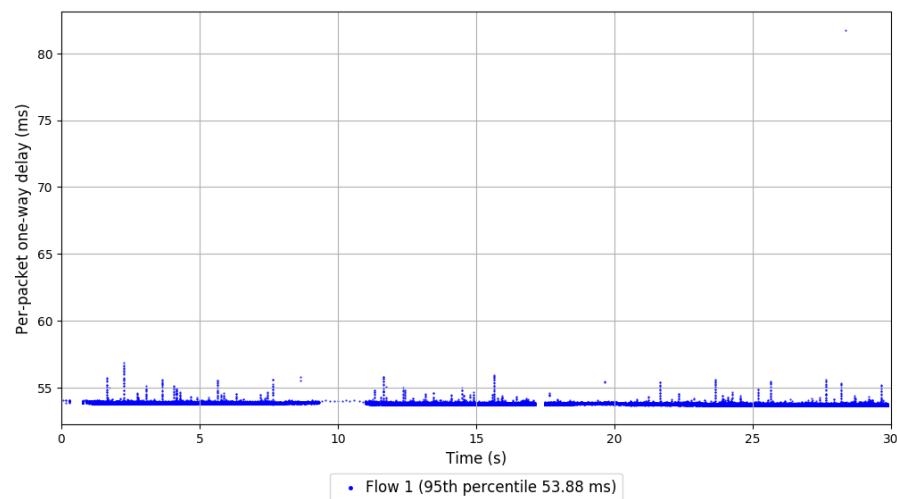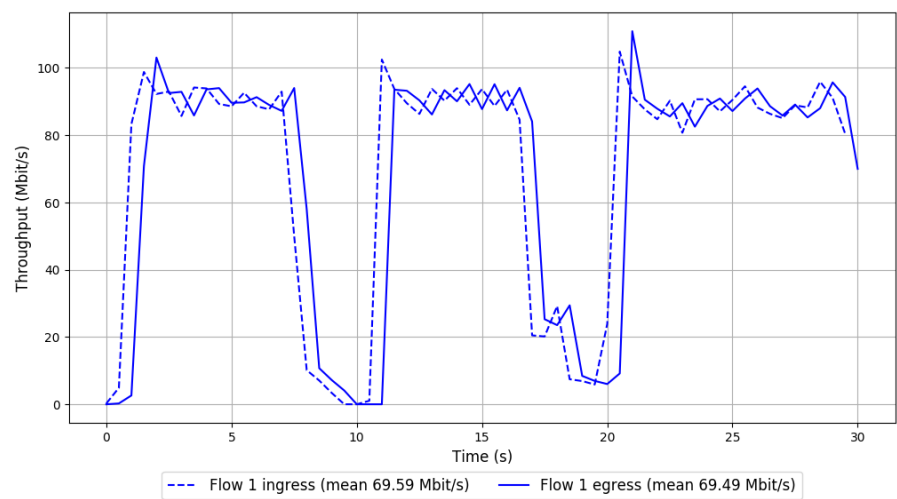
Run 6: Report of QUIC Cubic — Data Link

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-01 19:03:34
End at: 2018-06-01 19:04:04
Local clock offset: 5.196 ms
Remote clock offset: -0.23 ms


# Below is generated by plot.py at 2018-06-01 21:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.80 Mbit/s
95th percentile per-packet one-way delay: 53.696 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 58.80 Mbit/s
95th percentile per-packet one-way delay: 53.696 ms
Loss rate: 0.57%
```
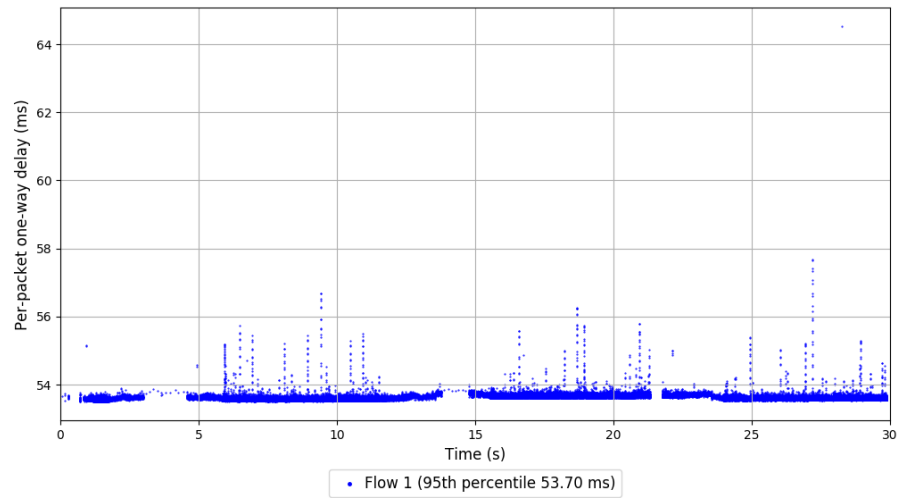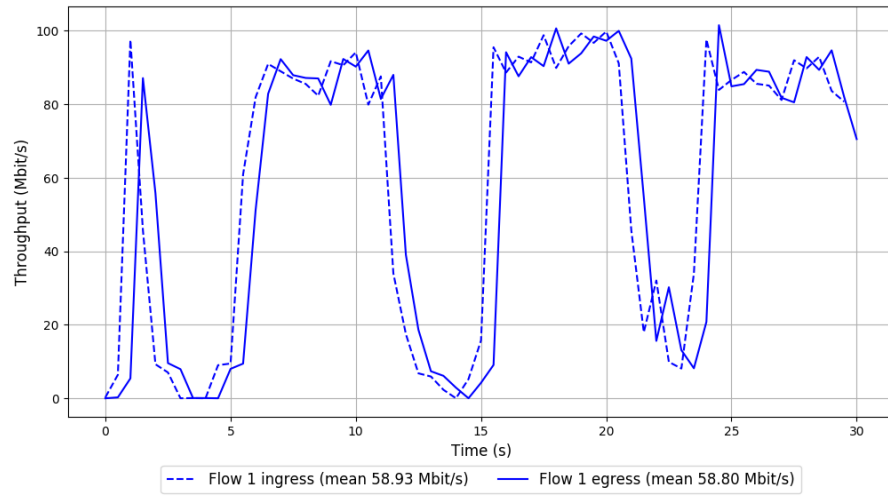
Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 58.93 Mbit/s) Flow 1 egress (mean 58.80 Mbit/s)

• Flow 1 (95th percentile 53.70 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-01 19:24:12
End at: 2018-06-01 19:24:42
Local clock offset: 6.702 ms
Remote clock offset: -0.105 ms


# Below is generated by plot.py at 2018-06-01 21:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.98 Mbit/s
95th percentile per-packet one-way delay: 54.431 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 63.98 Mbit/s
95th percentile per-packet one-way delay: 54.431 ms
Loss rate: 0.43%
```
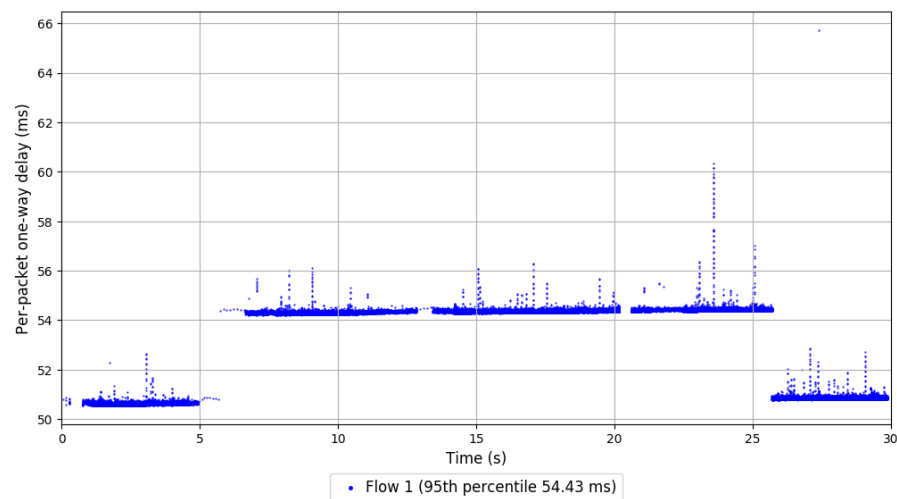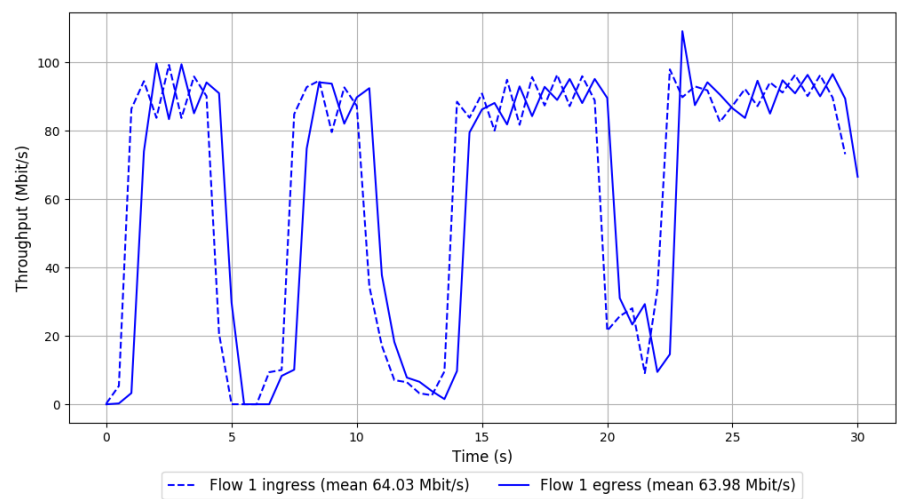
Run 8: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 64.03 Mbit/s)   Flow 1 egress (mean 63.98 Mbit/s)

Flow 1 (95th percentile 54.43 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-01 19:44:37
End at: 2018-06-01 19:45:07
Local clock offset: 2.462 ms
Remote clock offset: -0.121 ms


# Below is generated by plot.py at 2018-06-01 21:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.21 Mbit/s
95th percentile per-packet one-way delay: 53.380 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 68.21 Mbit/s
95th percentile per-packet one-way delay: 53.380 ms
Loss rate: 0.45%
```
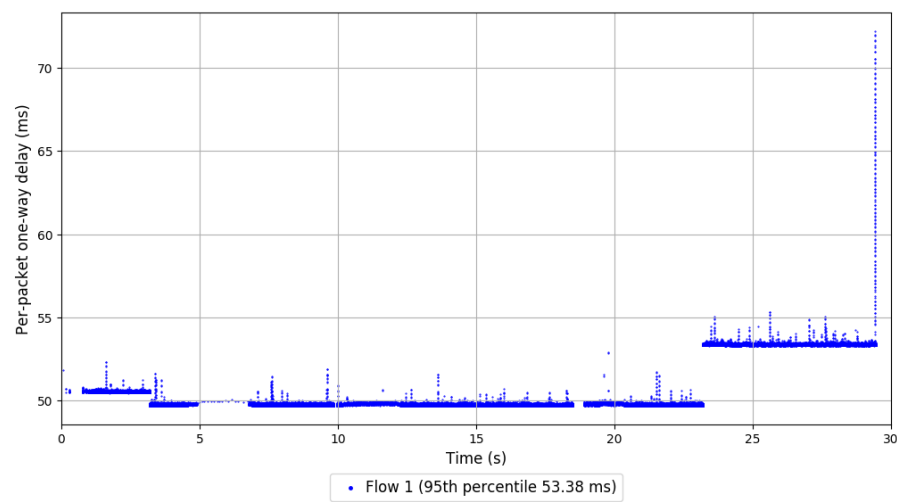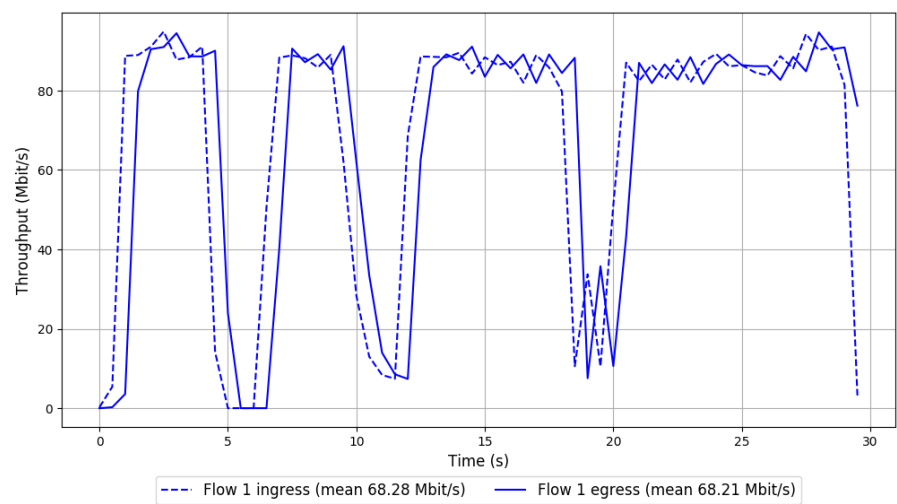
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 68.28 Mbit/s)   Flow 1 egress (mean 68.21 Mbit/s)

Flow 1 (95th percentile 53.38 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-01 20:04:53
End at: 2018-06-01 20:05:23
Local clock offset: 2.105 ms
Remote clock offset: -0.017 ms


# Below is generated by plot.py at 2018-06-01 21:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.05 Mbit/s
95th percentile per-packet one-way delay: 50.512 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 65.05 Mbit/s
95th percentile per-packet one-way delay: 50.512 ms
Loss rate: 0.51%
```
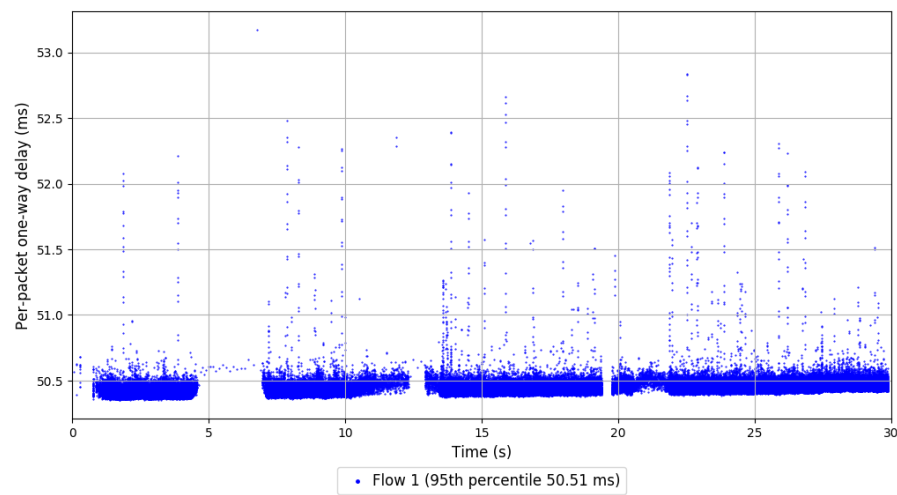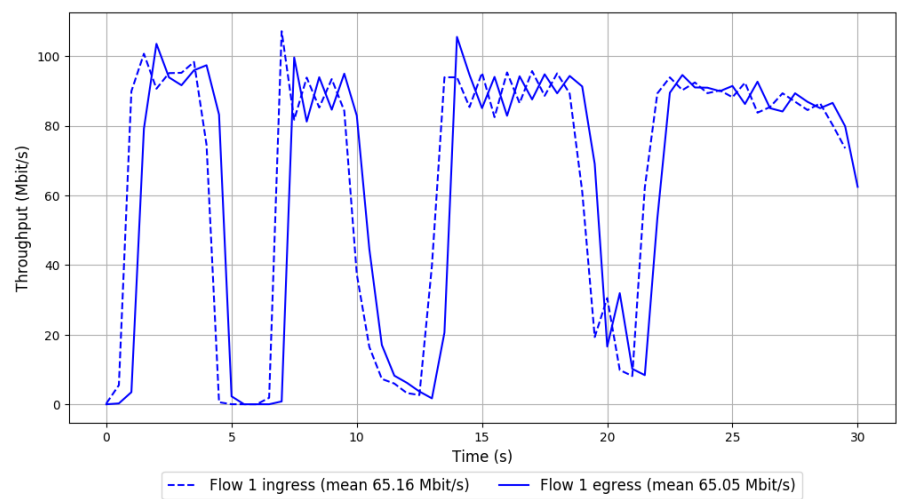
Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 65.16 Mbit/s)   Flow 1 egress (mean 65.05 Mbit/s)
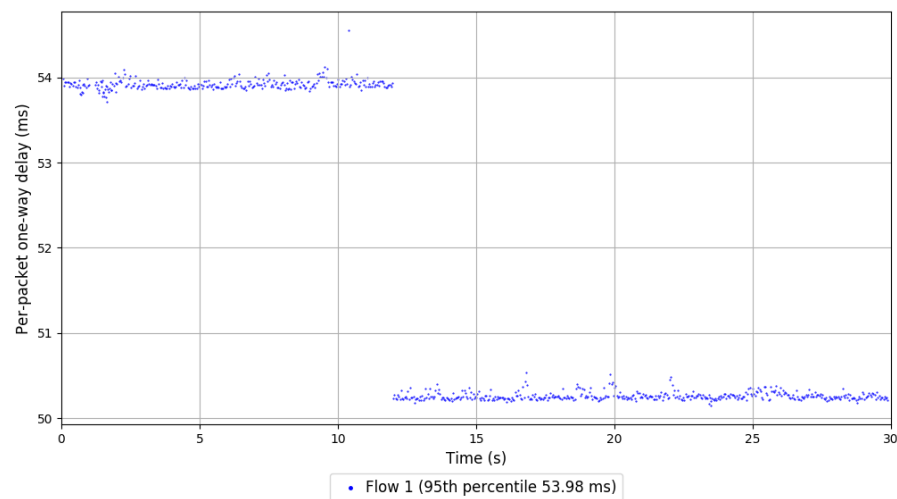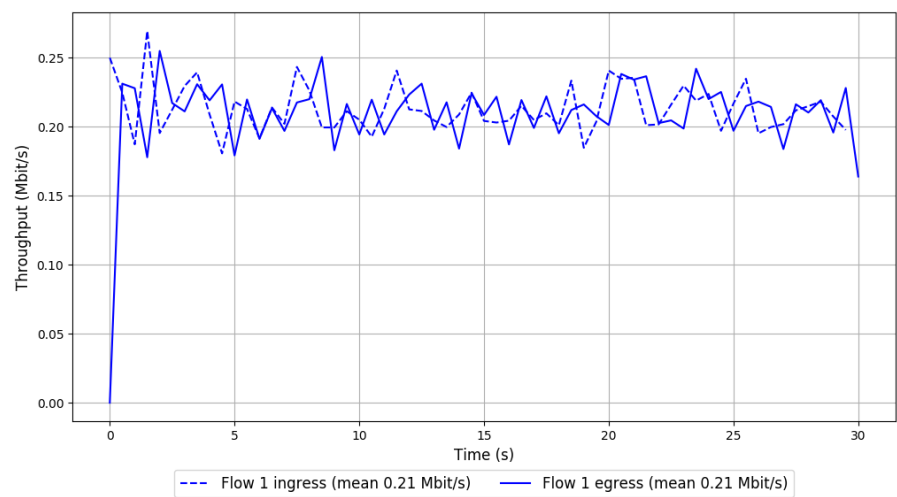

Flow 1 (95th percentile 50.51 ms)

```
Run 1: Statistics of SCReAM

Start at: 2018-06-01 16:59:06
End at: 2018-06-01 16:59:36
Local clock offset: -0.172 ms
Remote clock offset: -0.207 ms


# Below is generated by plot.py at 2018-06-01 21:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.975 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.975 ms
Loss rate: 0.39%
```

Run 1: Report of SCReAM — Data Link

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

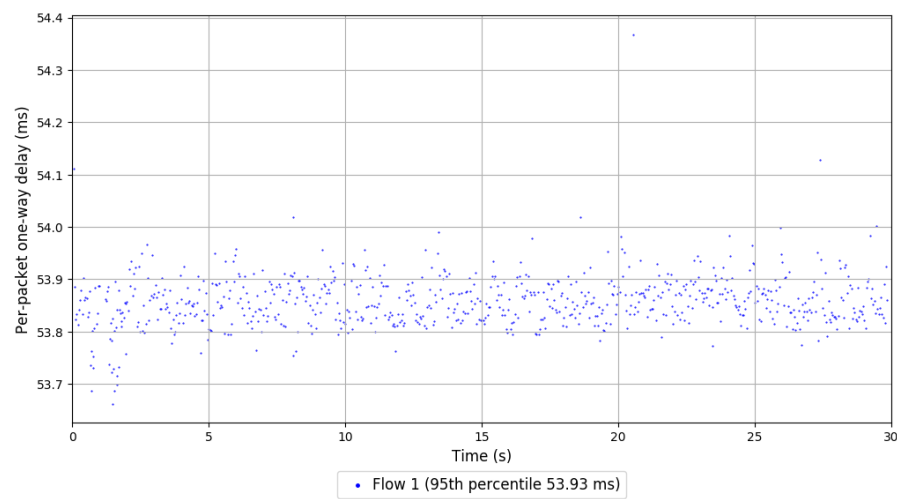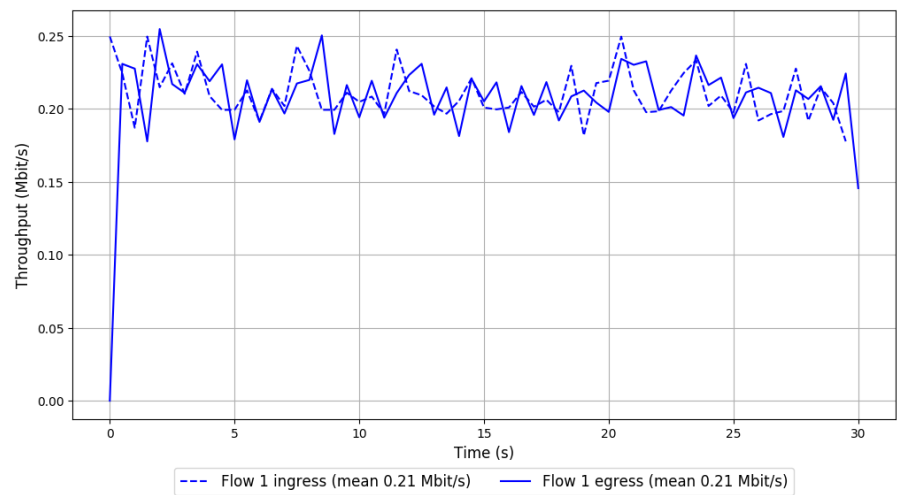Flow 1 (95th percentile 53.98 ms)

```
Run 2: Statistics of SCReAM

Start at: 2018-06-01 17:19:16
End at: 2018-06-01 17:19:46
Local clock offset: -0.287 ms
Remote clock offset: -0.244 ms


# Below is generated by plot.py at 2018-06-01 21:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.934 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.934 ms
Loss rate: 0.38%
```

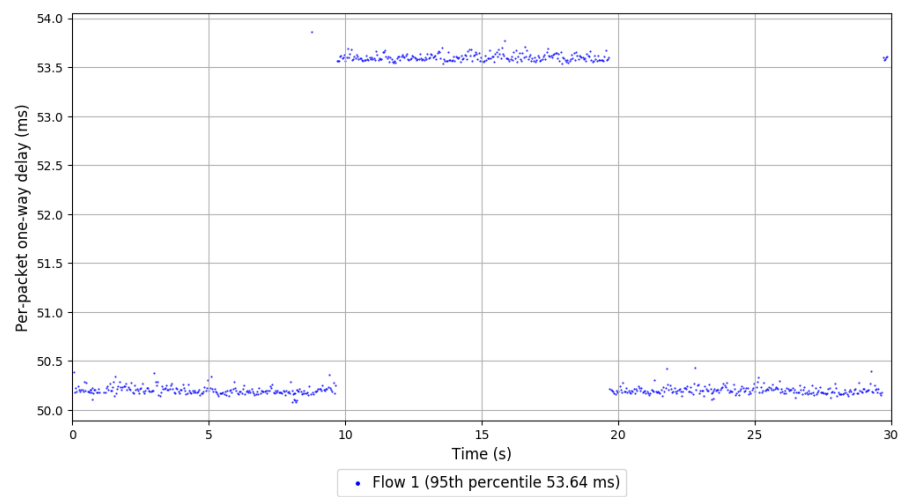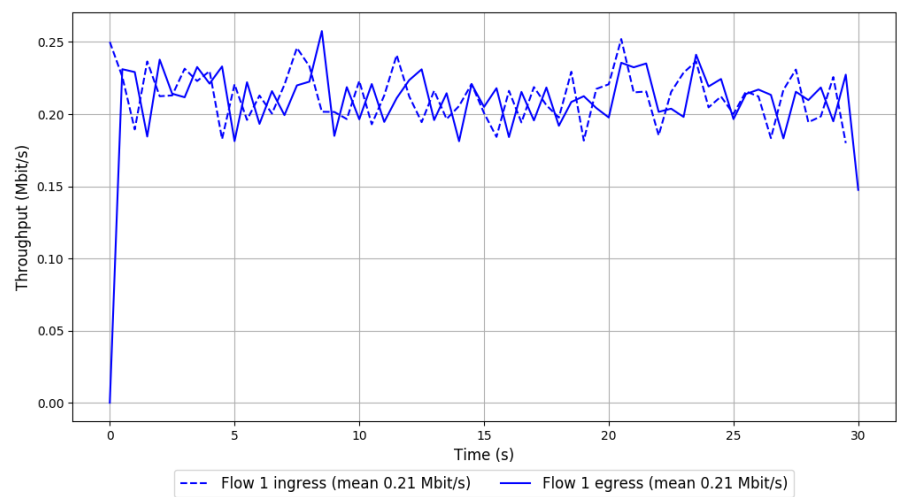Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-06-01 17:39:18
End at: 2018-06-01 17:39:48
Local clock offset: -0.19 ms
Remote clock offset: -0.225 ms

# Below is generated by plot.py at 2018-06-01 21:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.638 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.638 ms
Loss rate: 0.38%
```
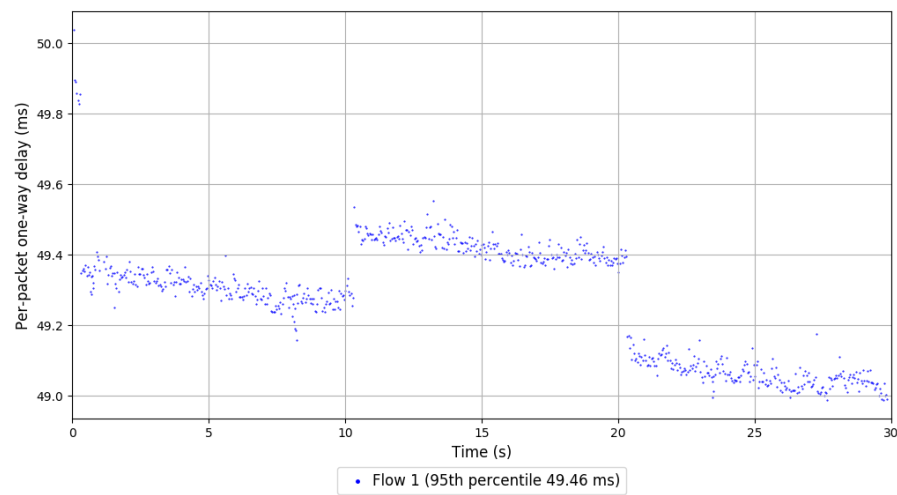
Run 3: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 53.64 ms)

```
Run 4: Statistics of SCReAM

Start at: 2018-06-01 17:59:48
End at: 2018-06-01 18:00:18
Local clock offset: 13.346 ms
Remote clock offset: 0.143 ms


# Below is generated by plot.py at 2018-06-01 21:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 49.464 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 49.464 ms
Loss rate: 0.38%
```
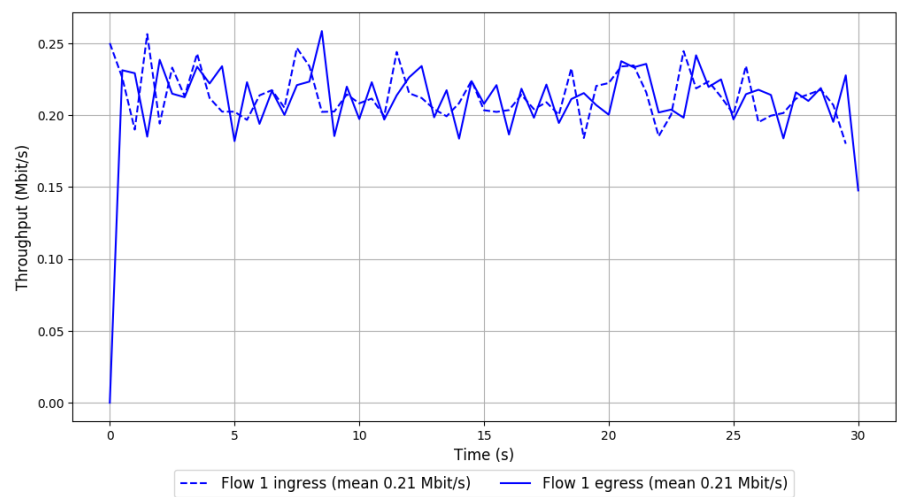
Run 4: Report of SCReAM — Data Link

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

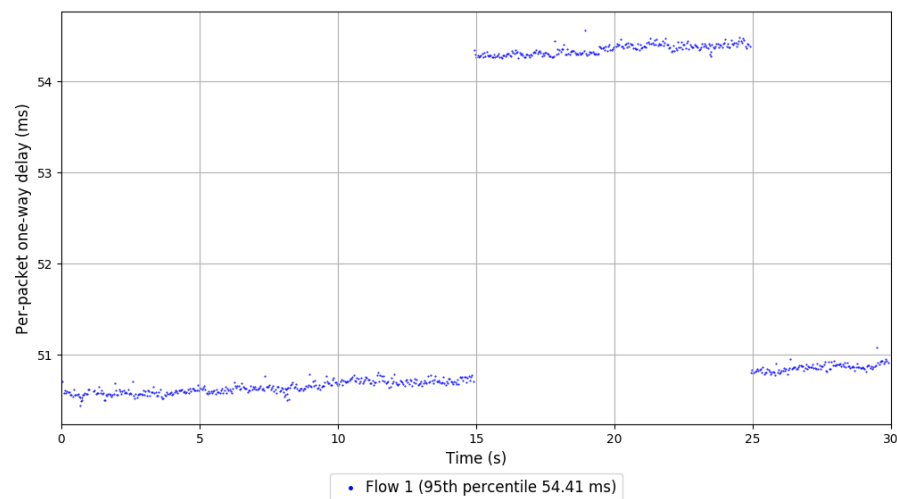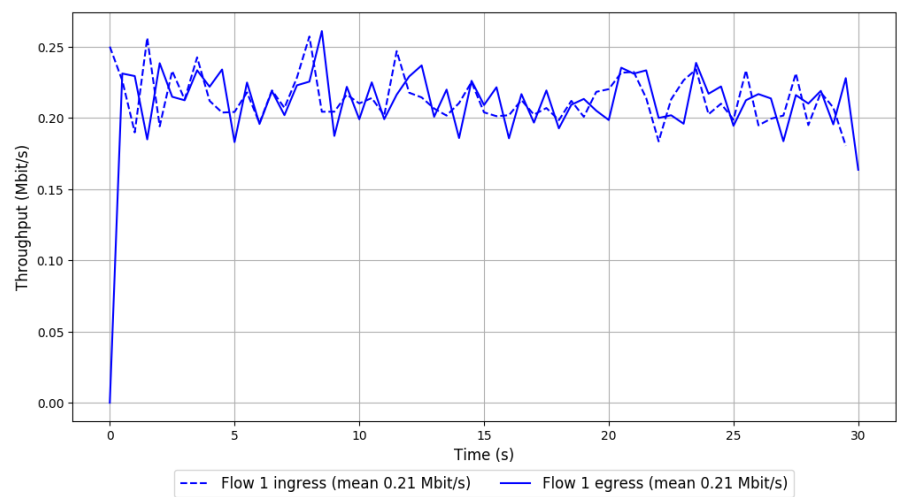Flow 1 (95th percentile 49.46 ms)

```
Run 5: Statistics of SCReAM

Start at: 2018-06-01 18:20:06
End at: 2018-06-01 18:20:36
Local clock offset: 11.67 ms
Remote clock offset: -0.042 ms


# Below is generated by plot.py at 2018-06-01 21:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.413 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.413 ms
Loss rate: 0.26%
```
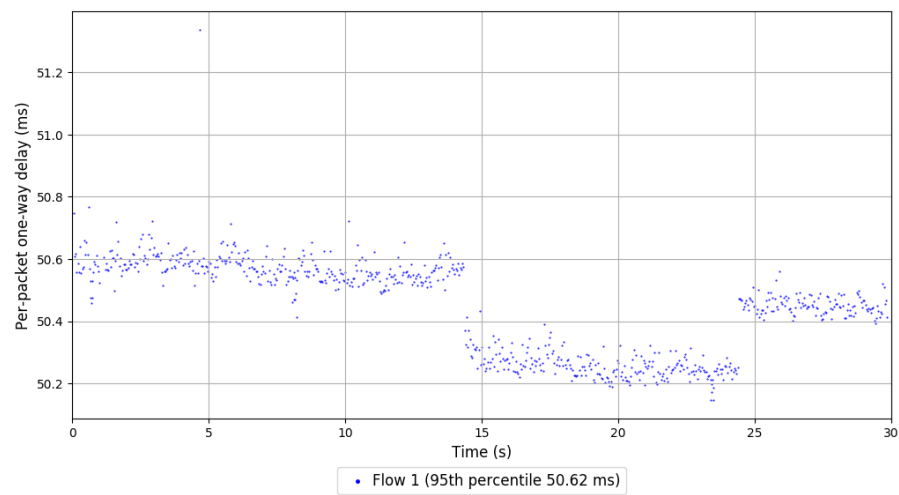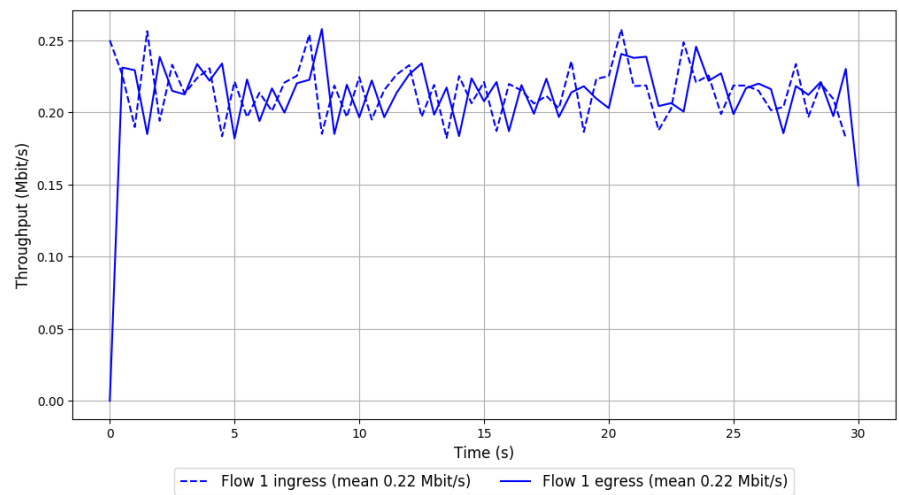
Run 5: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 54.41 ms)

```
Run 6: Statistics of SCReAM

Start at: 2018-06-01 18:40:43
End at: 2018-06-01 18:41:13
Local clock offset: 11.054 ms
Remote clock offset: -0.06 ms


# Below is generated by plot.py at 2018-06-01 21:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.625 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.625 ms
Loss rate: 0.38%
```

Run 6: Report of SCReAM — Data Link

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

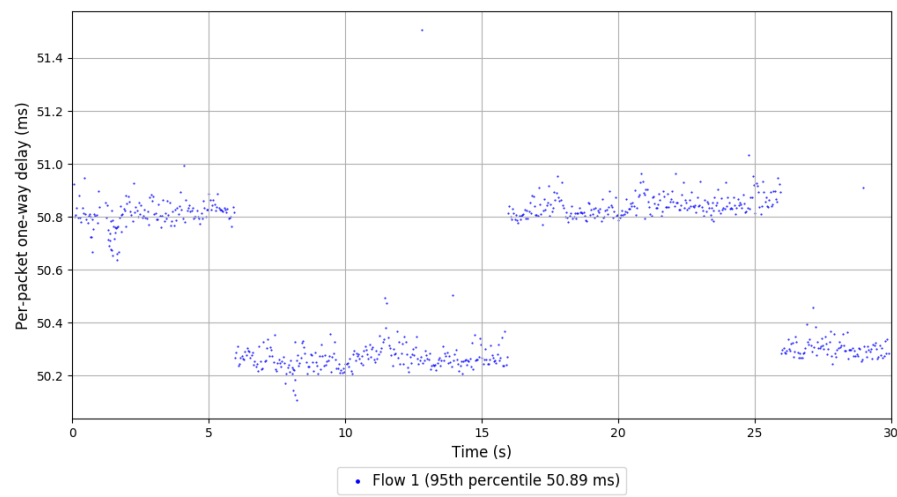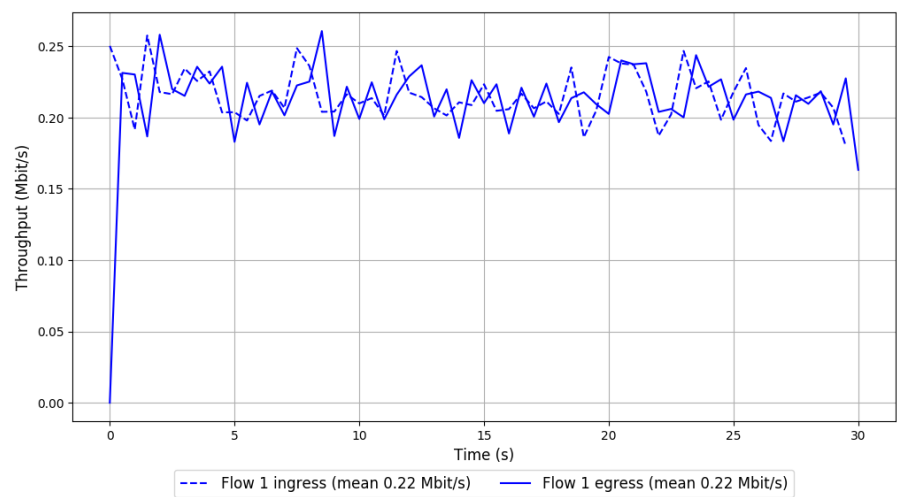Flow 1 (95th percentile 50.62 ms)

```
Run 7: Statistics of SCReAM

Start at: 2018-06-01 19:01:15
End at: 2018-06-01 19:01:45
Local clock offset: 5.634 ms
Remote clock offset: -0.114 ms


# Below is generated by plot.py at 2018-06-01 21:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.893 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.893 ms
Loss rate: 0.25%
```
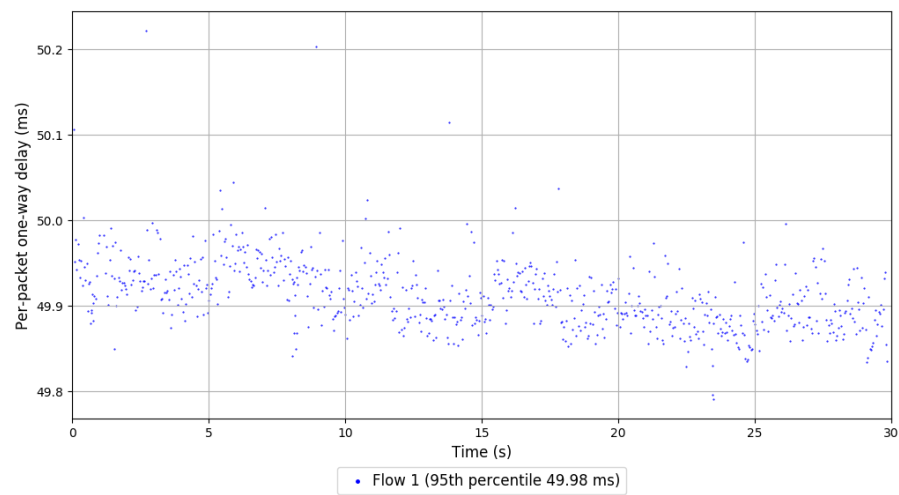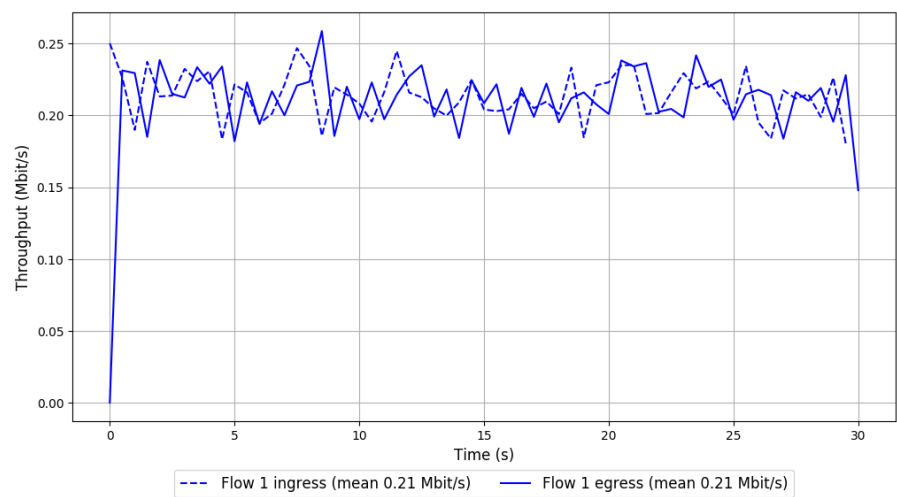
Run 7: Report of SCReAM — Data Link

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

• Flow 1 (95th percentile 50.89 ms)

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```
Run 8: Statistics of SCReAM

Start at: 2018-06-01 19:21:40
End at: 2018-06-01 19:22:10
Local clock offset: 6.456 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2018-06-01 21:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 49.978 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 49.978 ms
Loss rate: 0.38%
```
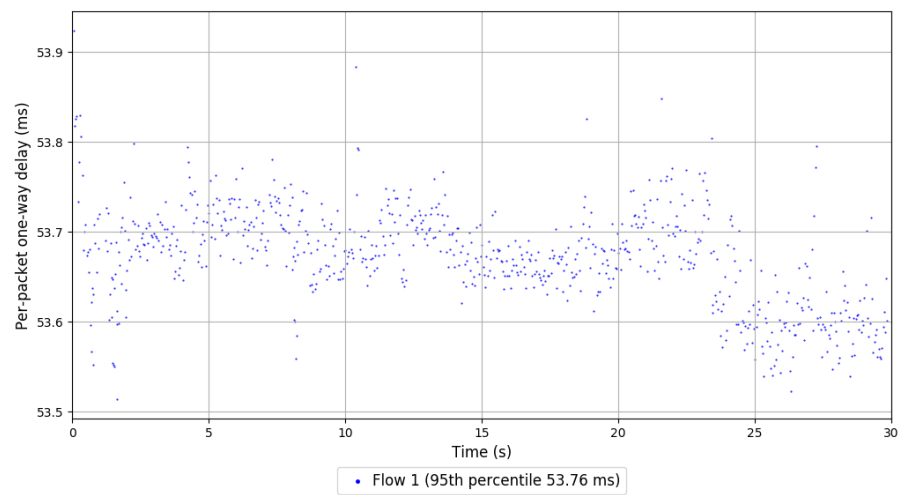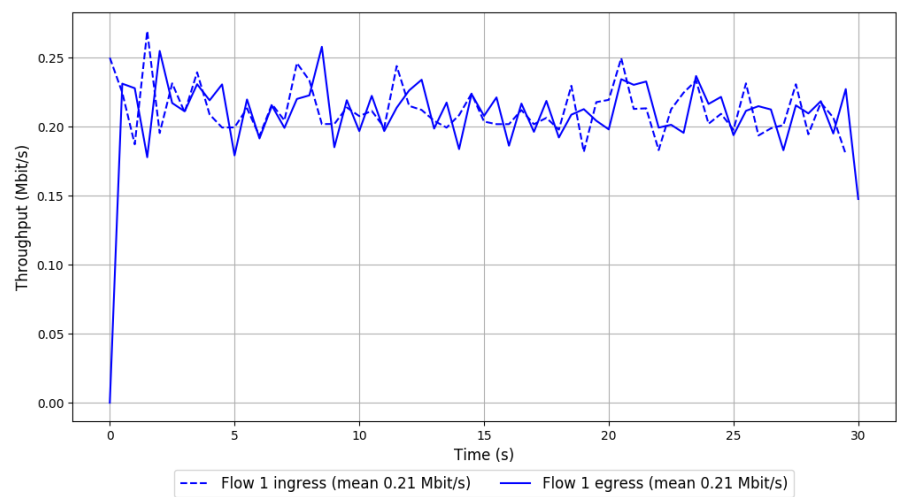
Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-06-01 19:42:24
End at: 2018-06-01 19:42:54
Local clock offset: 2.527 ms
Remote clock offset: 0.064 ms


# Below is generated by plot.py at 2018-06-01 21:37:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.755 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.755 ms
Loss rate: 0.38%
```
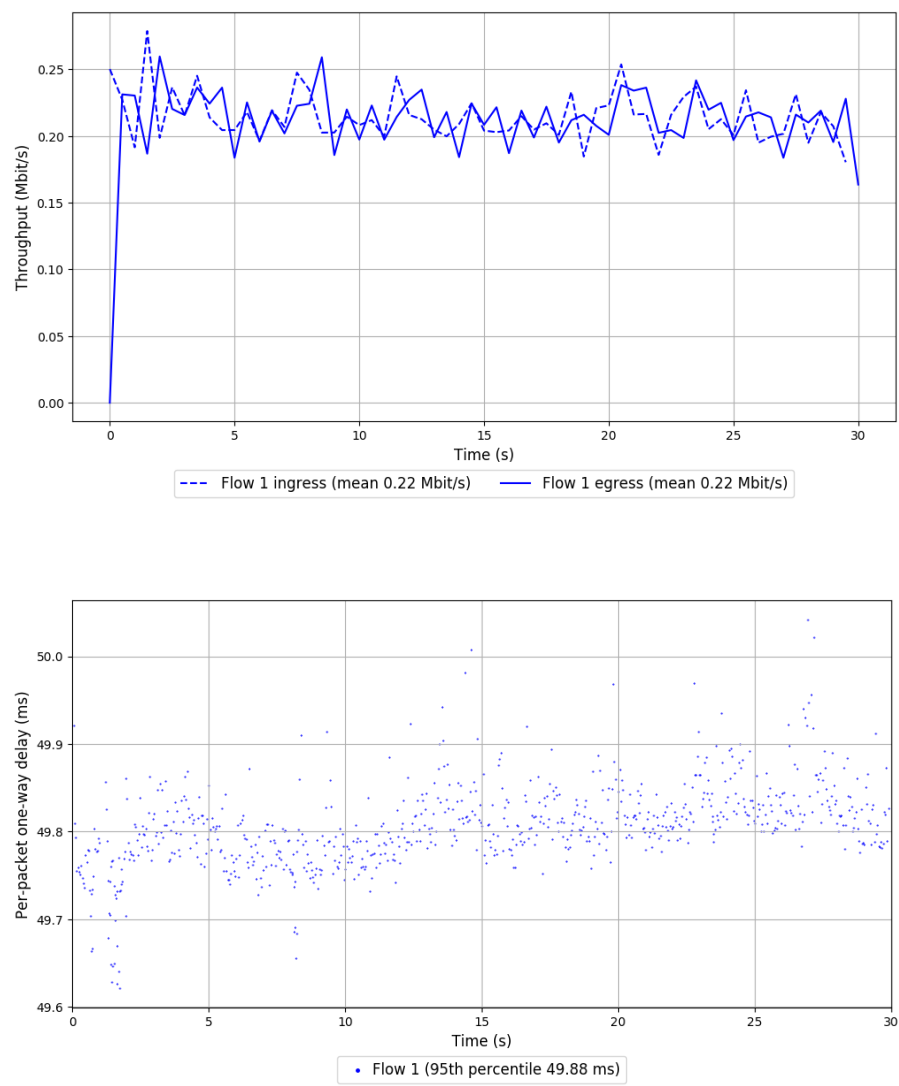
Run 9: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 53.76 ms)

```
Run 10: Statistics of SCReAM

Start at: 2018-06-01 20:02:33
End at: 2018-06-01 20:03:03
Local clock offset: 1.952 ms
Remote clock offset: 0.06 ms


# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.885 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.885 ms
Loss rate: 0.26%
```
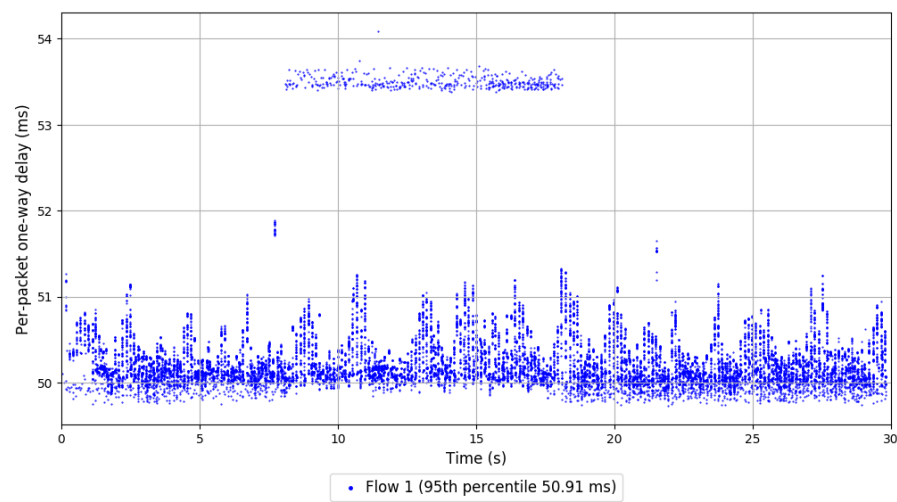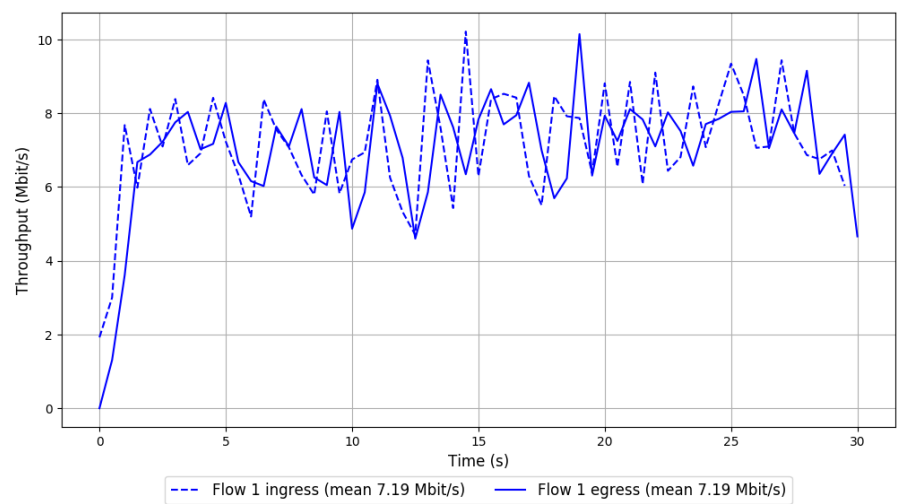
Run 10: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 49.88 ms)

```
Run 1: Statistics of Sprout

Start at: 2018-06-01 17:09:20
End at: 2018-06-01 17:09:50
Local clock offset: -0.308 ms
Remote clock offset: -0.18 ms


# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.19 Mbit/s
95th percentile per-packet one-way delay: 50.912 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 7.19 Mbit/s
95th percentile per-packet one-way delay: 50.912 ms
Loss rate: 0.37%
```

Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-06-01 17:29:11
End at: 2018-06-01 17:29:41
Local clock offset: -0.441 ms
Remote clock offset: -0.21 ms


# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.52 Mbit/s
95th percentile per-packet one-way delay: 53.458 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 6.52 Mbit/s
95th percentile per-packet one-way delay: 53.458 ms
Loss rate: 0.36%
```
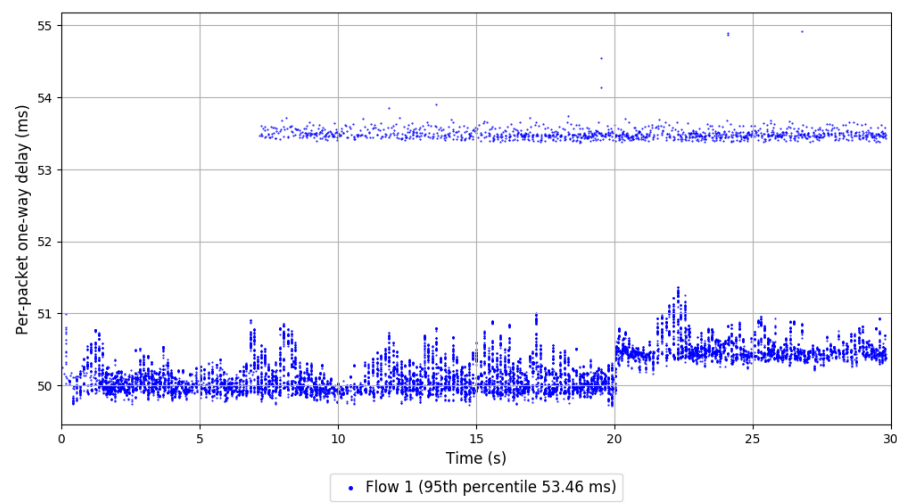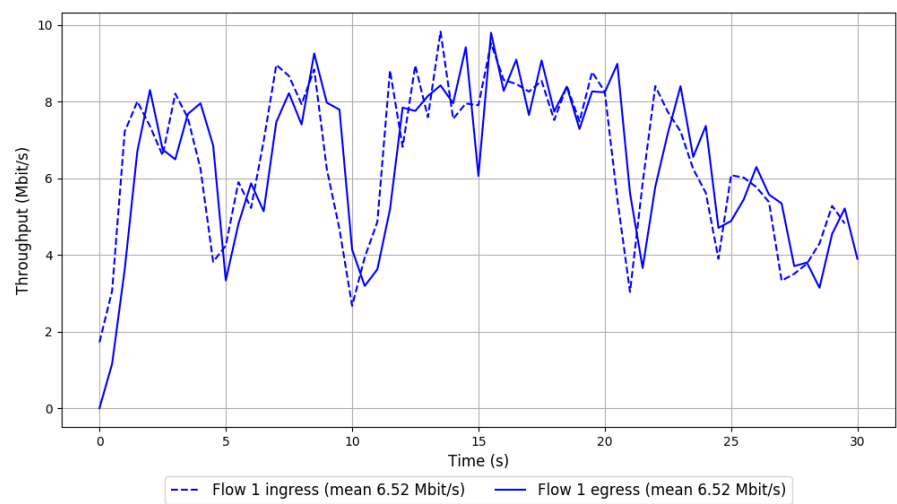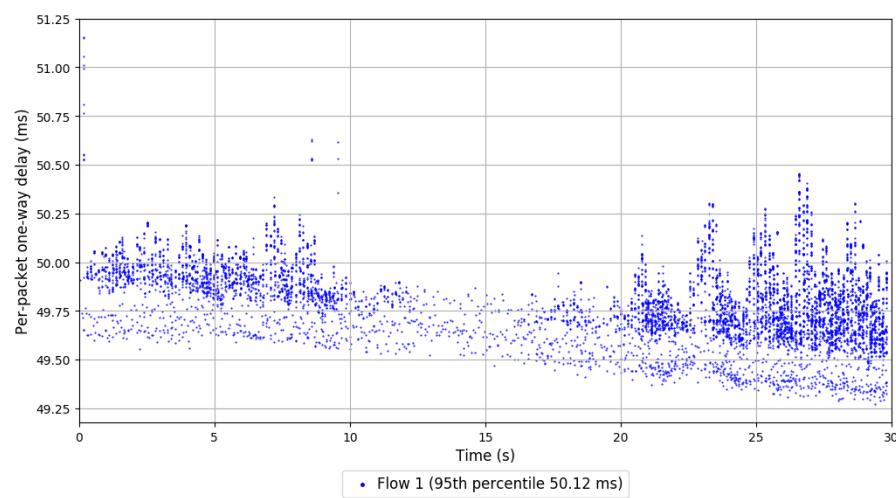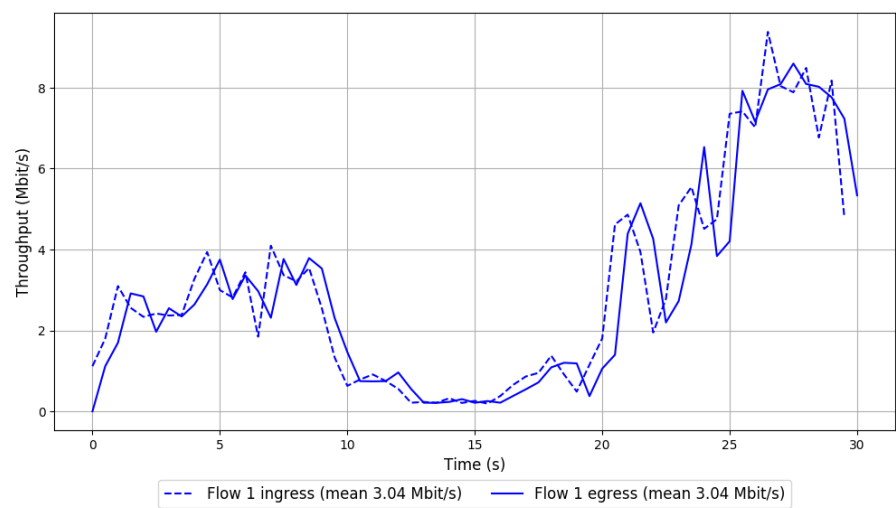
Run 2: Report of Sprout — Data Link

Flow 1 ingress (mean 6.52 Mbit/s)   Flow 1 egress (mean 6.52 Mbit/s)

• Flow 1 (95th percentile 53.46 ms)

```
Run 3: Statistics of Sprout

Start at: 2018-06-01 17:49:34
End at: 2018-06-01 17:50:04
Local clock offset: 5.68 ms
Remote clock offset: -0.081 ms


# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 50.115 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 50.115 ms
Loss rate: 0.21%
```
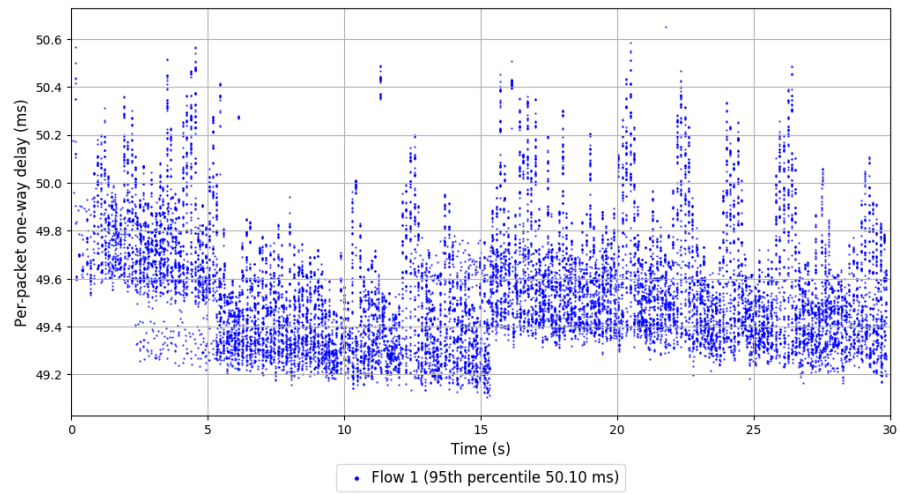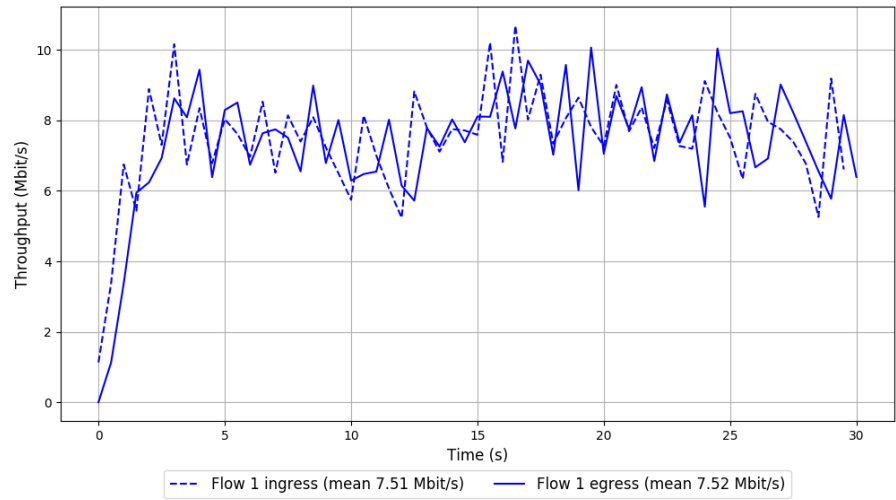
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-06-01 18:10:05
End at: 2018-06-01 18:10:35
Local clock offset: 21.287 ms
Remote clock offset: 0.173 ms


# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 50.105 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 50.105 ms
Loss rate: 0.28%
```
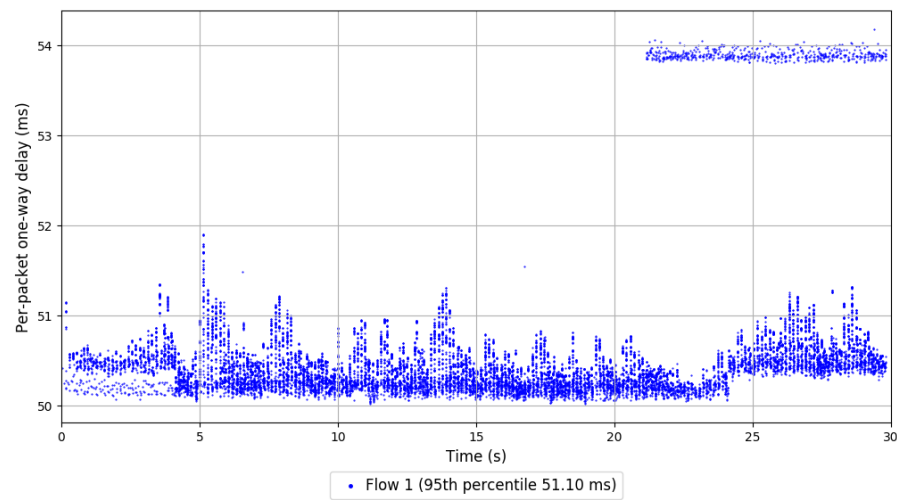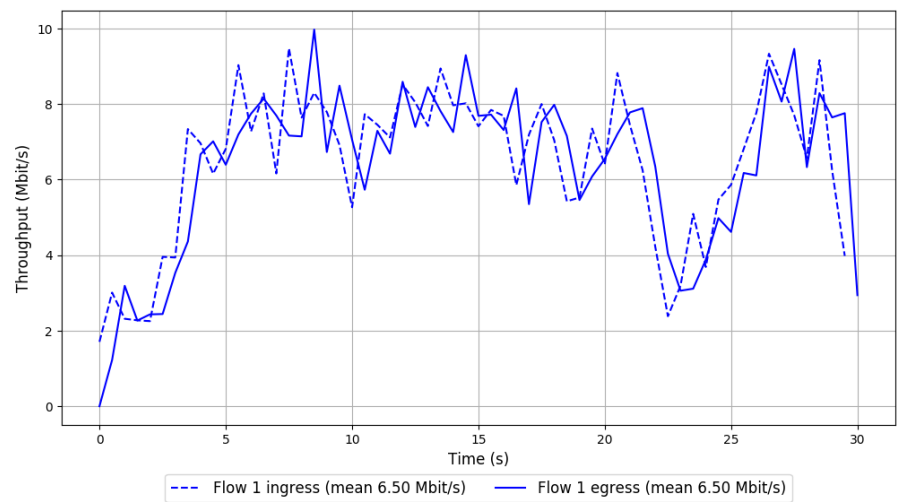
Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-06-01 18:30:27
End at: 2018-06-01 18:30:57
Local clock offset: 9.138 ms
Remote clock offset: 0.094 ms


# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.50 Mbit/s
95th percentile per-packet one-way delay: 51.101 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 6.50 Mbit/s
95th percentile per-packet one-way delay: 51.101 ms
Loss rate: 0.27%
```
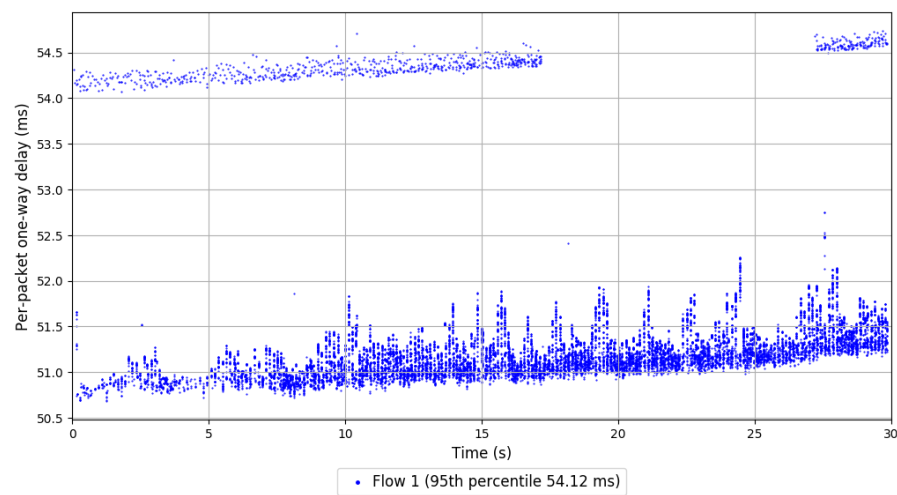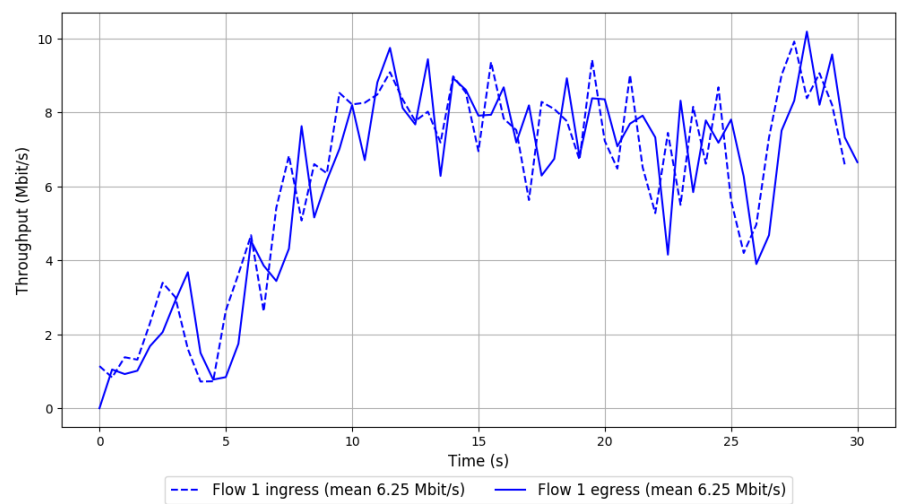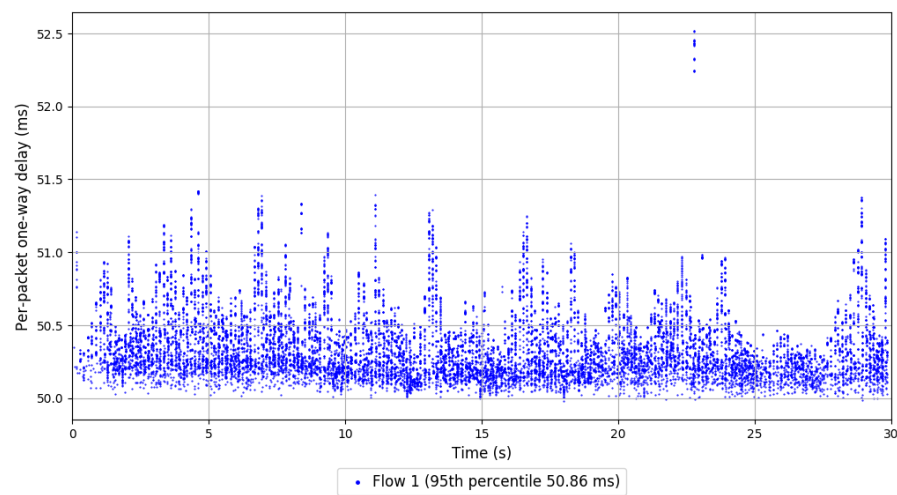
Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-06-01 18:50:54
End at: 2018-06-01 18:51:24
Local clock offset: 11.759 ms
Remote clock offset: 0.024 ms


# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.25 Mbit/s
95th percentile per-packet one-way delay: 54.116 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 6.25 Mbit/s
95th percentile per-packet one-way delay: 54.116 ms
Loss rate: 0.41%
```

Run 6: Report of Sprout — Data Link

Flow 1 ingress (mean 6.25 Mbit/s)   Flow 1 egress (mean 6.25 Mbit/s)

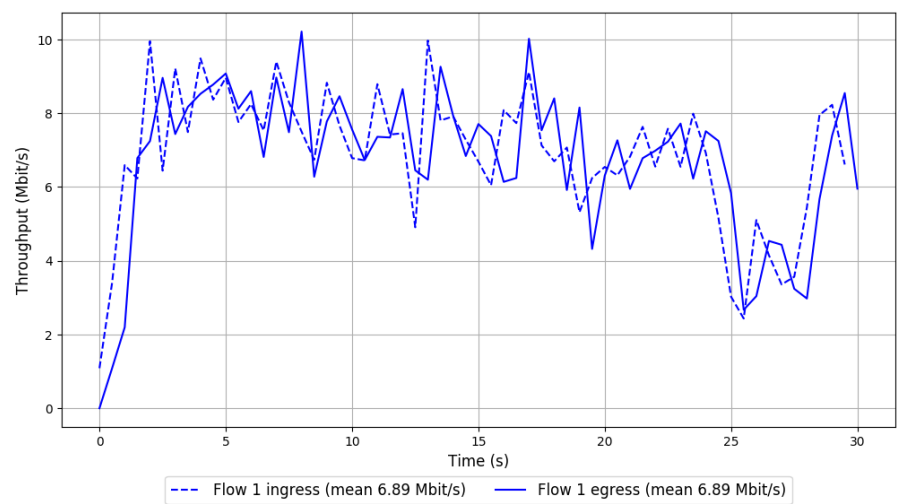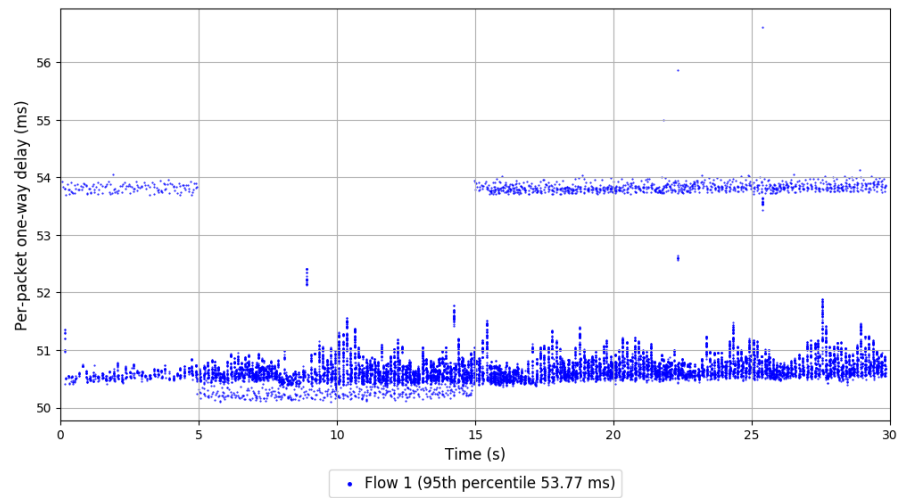Flow 1 (95th percentile 54.12 ms)

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```
Run 7: Statistics of Sprout

Start at: 2018-06-01 19:11:22
End at: 2018-06-01 19:11:52
Local clock offset: 5.153 ms
Remote clock offset: -0.045 ms


# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 50.860 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 50.860 ms
Loss rate: 0.40%
```

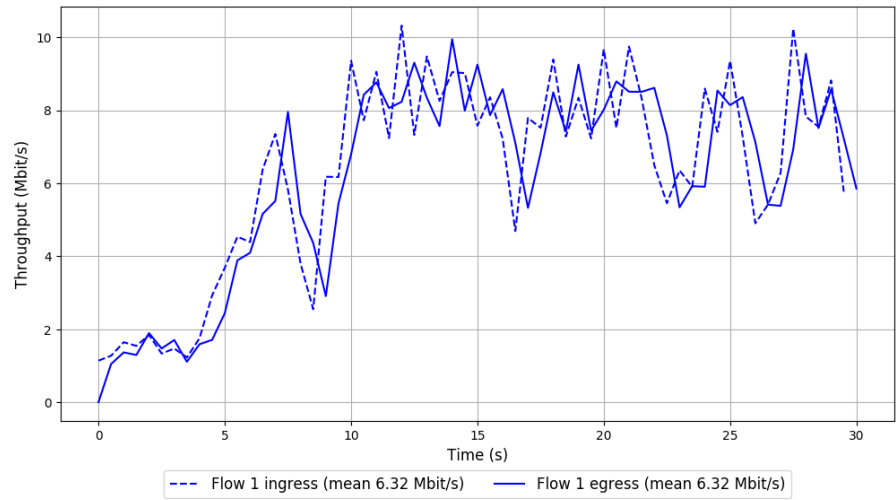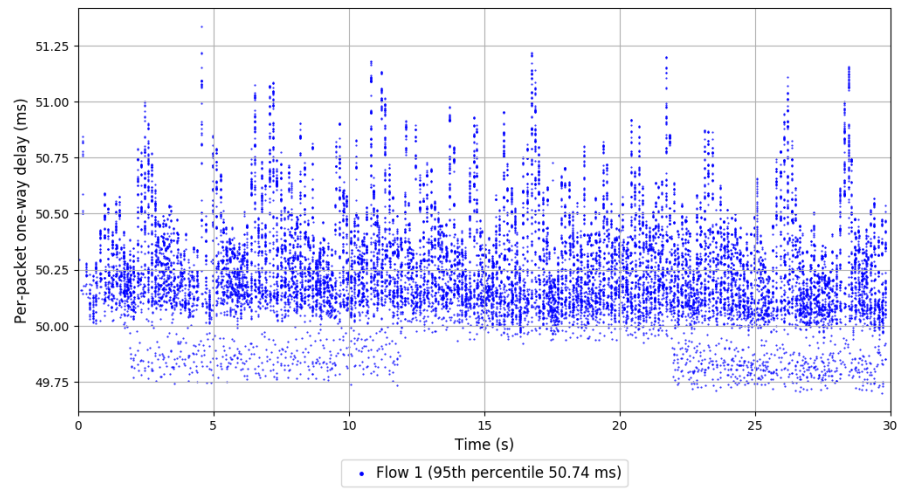## Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-06-01 19:32:03
End at: 2018-06-01 19:32:33
Local clock offset: 3.421 ms
Remote clock offset: -0.117 ms


# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.32 Mbit/s
95th percentile per-packet one-way delay: 53.766 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 6.32 Mbit/s
95th percentile per-packet one-way delay: 53.766 ms
Loss rate: 0.40%
```

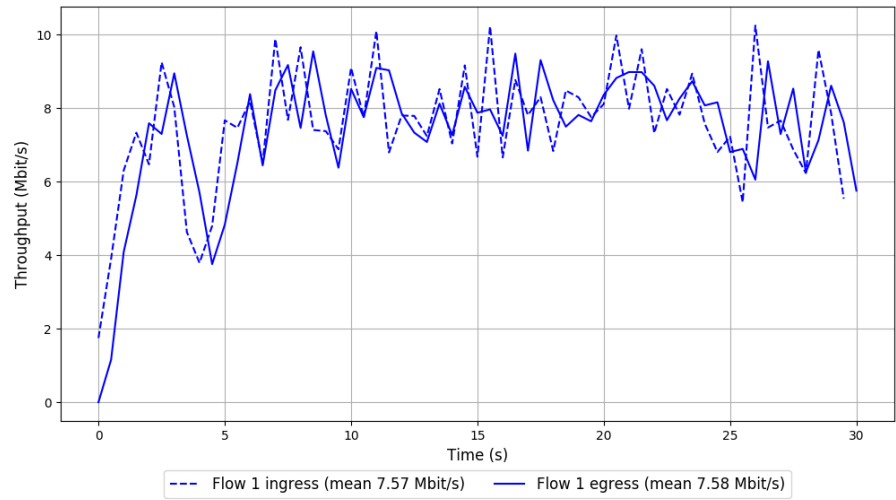## Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-06-01 19:52:26
End at: 2018-06-01 19:52:56
Local clock offset: 2.673 ms
Remote clock offset: -0.294 ms


# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.58 Mbit/s
95th percentile per-packet one-way delay: 50.743 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 7.58 Mbit/s
95th percentile per-packet one-way delay: 50.743 ms
Loss rate: 0.22%
```

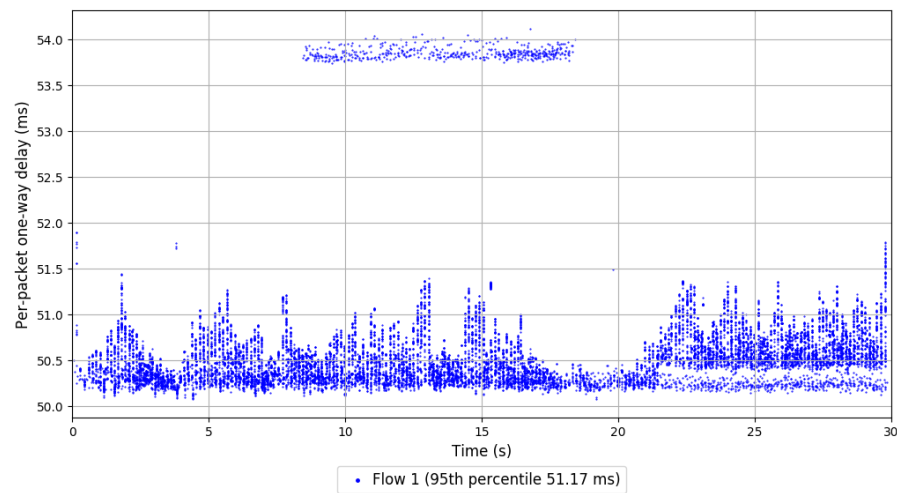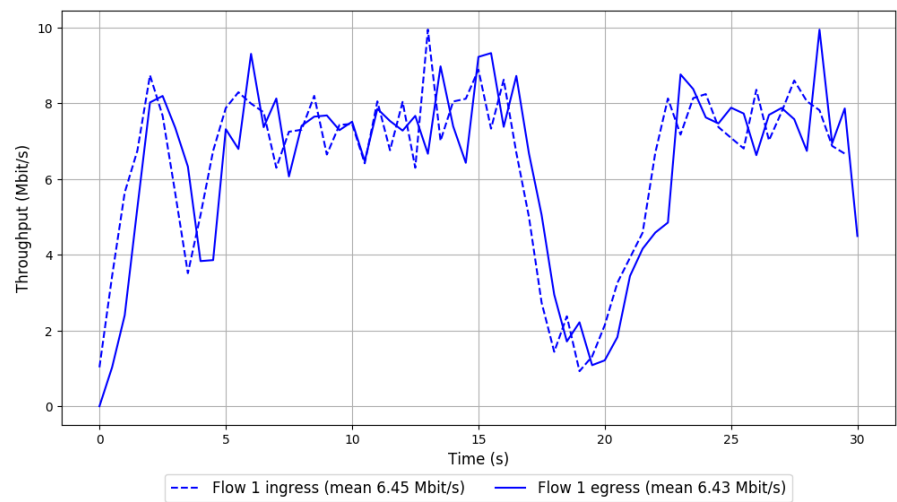Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-06-01 20:12:39
End at: 2018-06-01 20:13:09
Local clock offset: 1.55 ms
Remote clock offset: -0.112 ms

# Below is generated by plot.py at 2018-06-01 21:37:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.43 Mbit/s
95th percentile per-packet one-way delay: 51.174 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 6.43 Mbit/s
95th percentile per-packet one-way delay: 51.174 ms
Loss rate: 0.61%
```

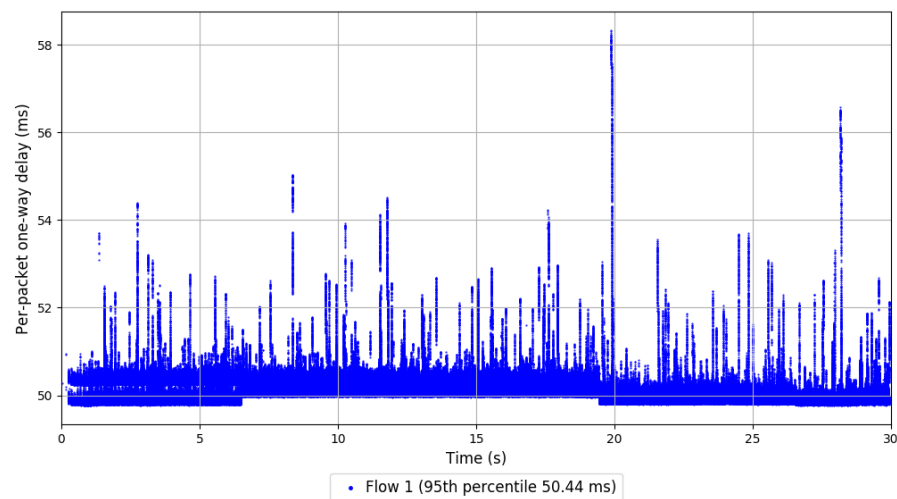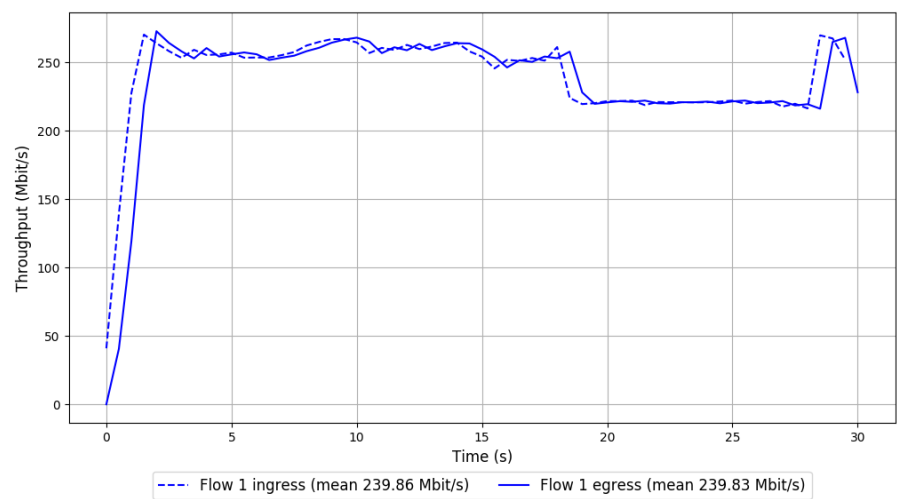## Run 10: Report of Sprout — Data Link

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

Start at: 2018-06-01 17:00:11
End at: 2018-06-01 17:00:41
Local clock offset: -0.211 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-06-01 21:39:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 239.83 Mbit/s
95th percentile per-packet one-way delay: 50.439 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 239.83 Mbit/s
95th percentile per-packet one-way delay: 50.439 ms
Loss rate: 0.35%
```

Run 1: Report of TaoVA-100x — Data Link
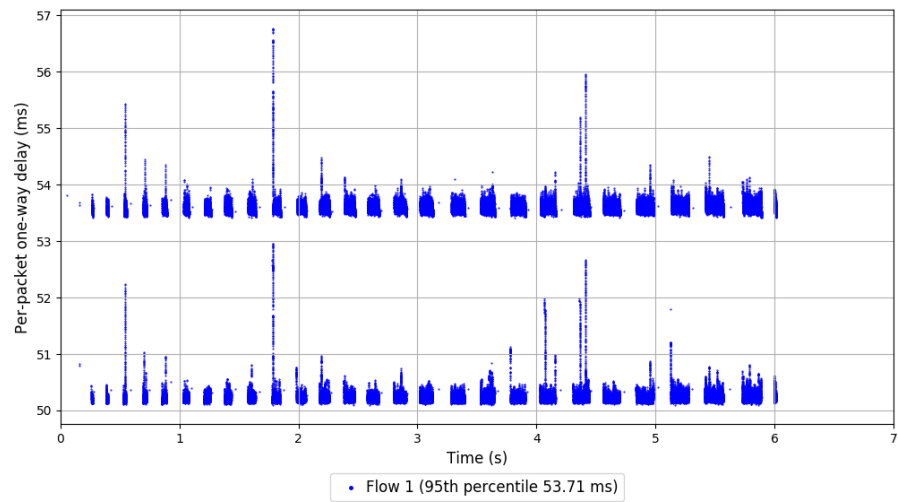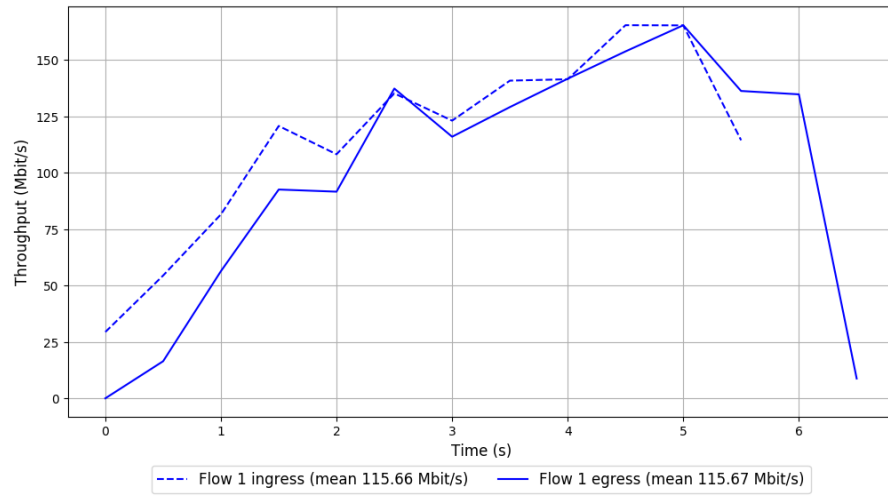
```
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-01 17:20:21
End at: 2018-06-01 17:20:51
Local clock offset: -0.329 ms
Remote clock offset: -0.037 ms
```

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

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

Start at: 2018-06-01 17:40:24
End at: 2018-06-01 17:40:54
Local clock offset: -0.462 ms
Remote clock offset: -0.179 ms


# Below is generated by plot.py at 2018-06-01 21:39:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 240.70 Mbit/s
95th percentile per-packet one-way delay: 50.232 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 240.70 Mbit/s
95th percentile per-packet one-way delay: 50.232 ms
Loss rate: 0.37%
```
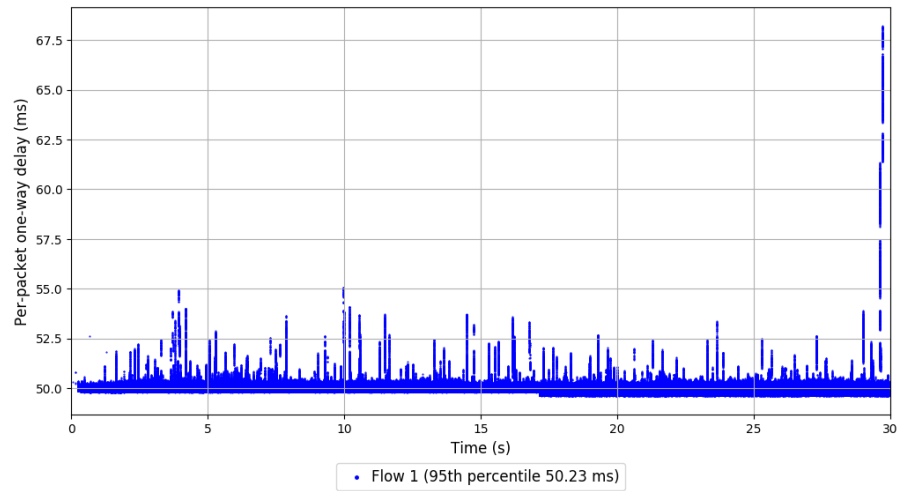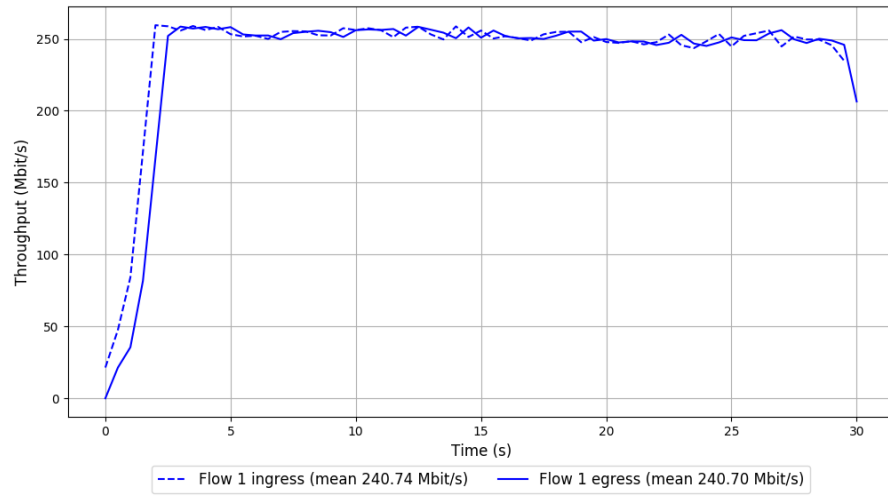
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-01 18:00:53
End at: 2018-06-01 18:01:23
Local clock offset: 14.253 ms
Remote clock offset: 0.024 ms


# Below is generated by plot.py at 2018-06-01 21:39:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 246.33 Mbit/s
95th percentile per-packet one-way delay: 49.723 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 246.33 Mbit/s
95th percentile per-packet one-way delay: 49.723 ms
Loss rate: 0.38%
```
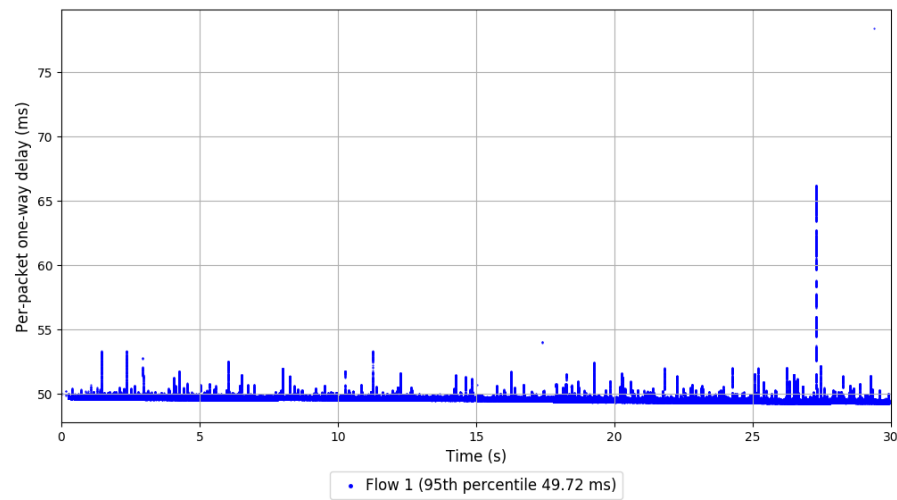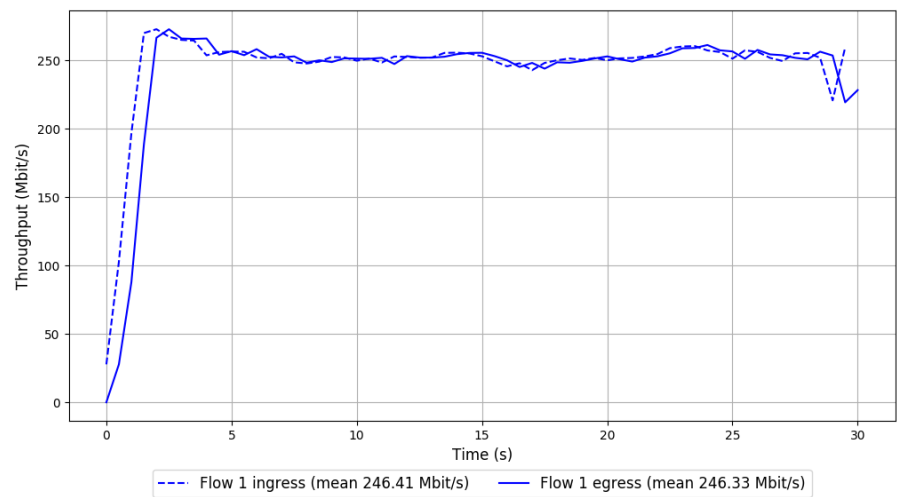
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 246.41 Mbit/s) — — — Flow 1 egress (mean 246.33 Mbit/s)
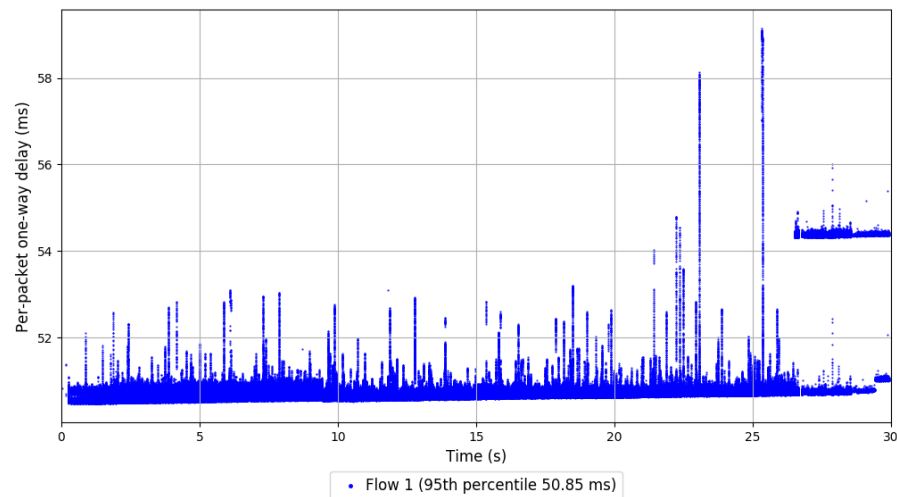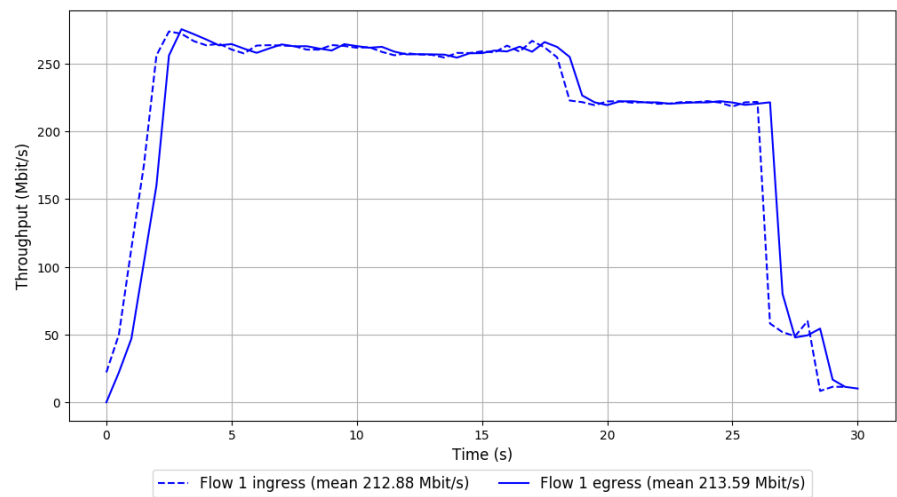

• Flow 1 (95th percentile 49.72 ms)

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

Start at: 2018-06-01 18:21:11
End at: 2018-06-01 18:21:41
Local clock offset: 11.226 ms
Remote clock offset: -0.151 ms


# Below is generated by plot.py at 2018-06-01 21:39:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.59 Mbit/s
95th percentile per-packet one-way delay: 50.850 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 213.59 Mbit/s
95th percentile per-packet one-way delay: 50.850 ms
Loss rate: 0.02%
```

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

Flow 1 ingress (mean 212.88 Mbit/s)   Flow 1 egress (mean 213.59 Mbit/s)
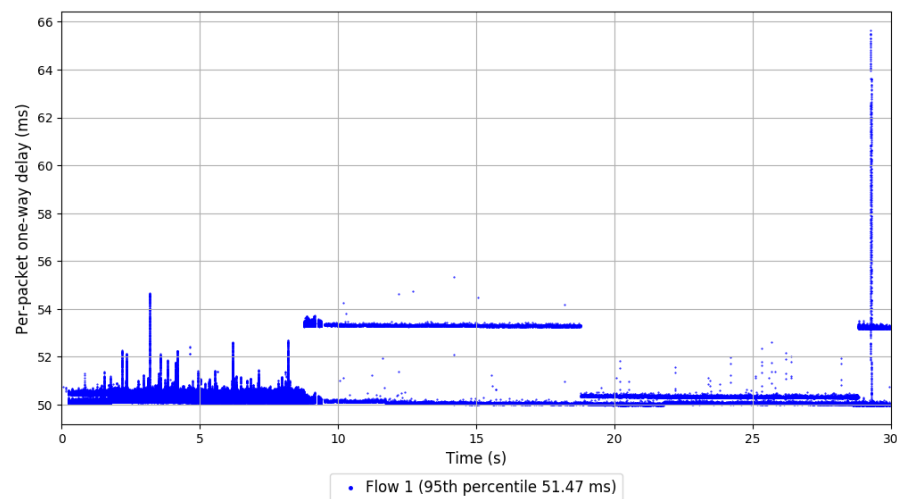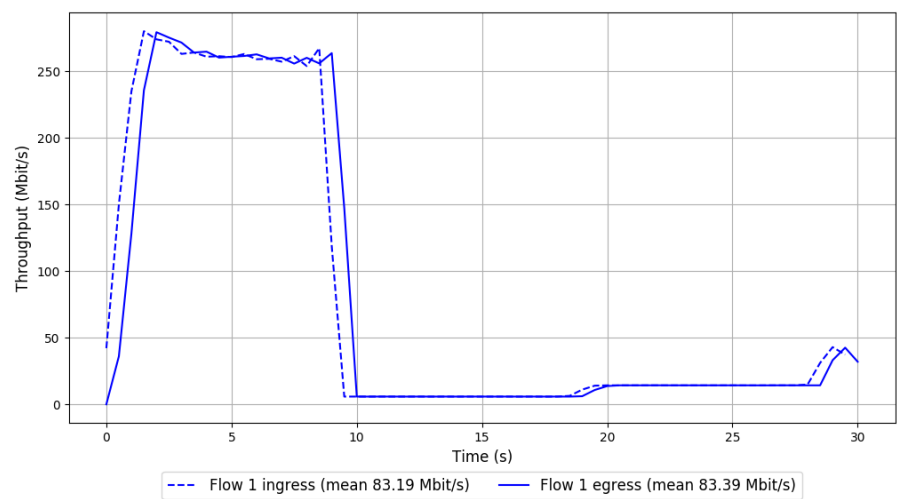

Flow 1 (95th percentile 50.85 ms)

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

Start at: 2018-06-01 18:41:49
End at: 2018-06-01 18:42:19
Local clock offset: 11.068 ms
Remote clock offset: -0.073 ms


# Below is generated by plot.py at 2018-06-01 21:39:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.39 Mbit/s
95th percentile per-packet one-way delay: 51.468 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 83.39 Mbit/s
95th percentile per-packet one-way delay: 51.468 ms
Loss rate: 0.12%
```

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

Flow 1 ingress (mean 83.19 Mbit/s) — Flow 1 egress (mean 83.39 Mbit/s)

Flow 1 (95th percentile 51.47 ms)

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

Start at: 2018-06-01 19:02:20
End at: 2018-06-01 19:02:50
Local clock offset: 5.448 ms
Remote clock offset: 0.175 ms


# Below is generated by plot.py at 2018-06-01 21:39:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 51.039 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 51.039 ms
Loss rate: 0.04%
```
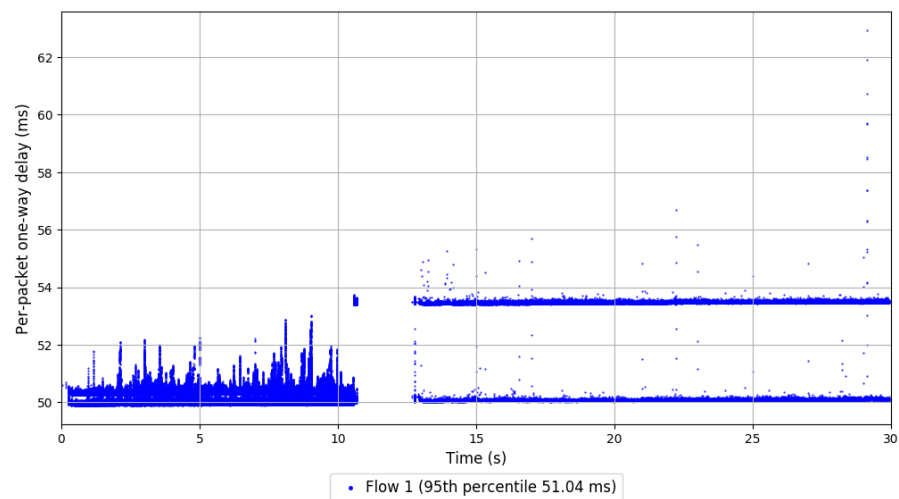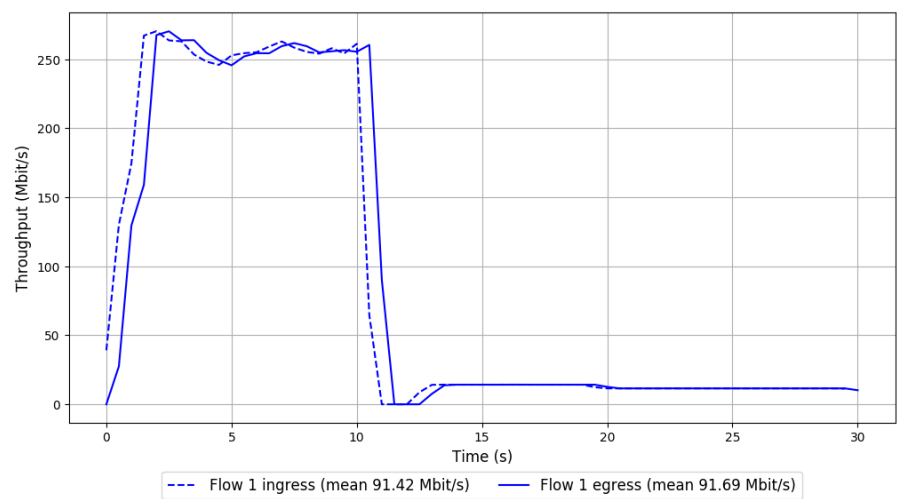
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 91.42 Mbit/s)   Flow 1 egress (mean 91.69 Mbit/s)

Flow 1 (95th percentile 51.04 ms)

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

Start at: 2018-06-01 19:22:45
End at: 2018-06-01 19:23:16
Local clock offset: 6.487 ms
Remote clock offset: -0.007 ms


# Below is generated by plot.py at 2018-06-01 21:41:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.79 Mbit/s
95th percentile per-packet one-way delay: 50.257 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 248.79 Mbit/s
95th percentile per-packet one-way delay: 50.257 ms
Loss rate: 0.37%
```
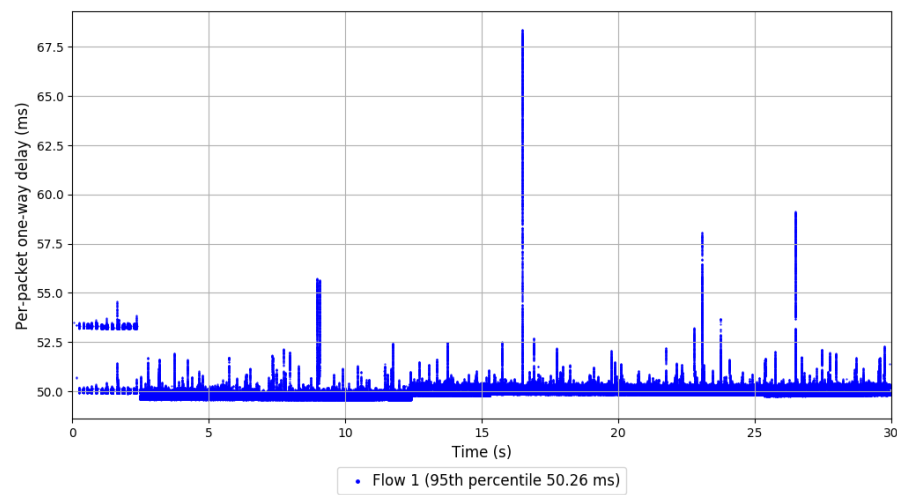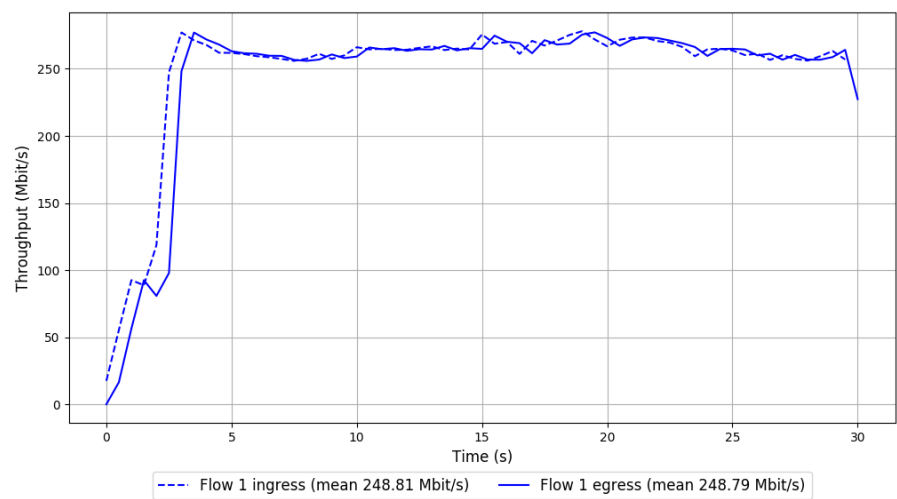
Run 8: Report of TaoVA-100x — Data Link
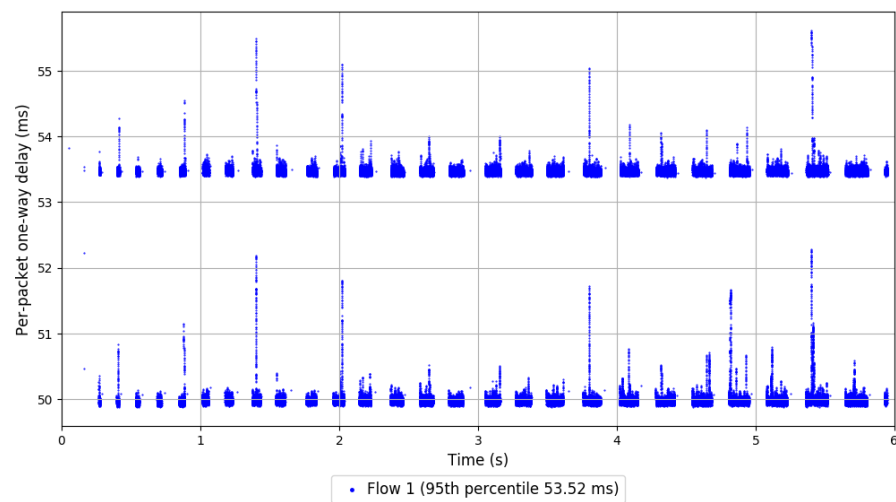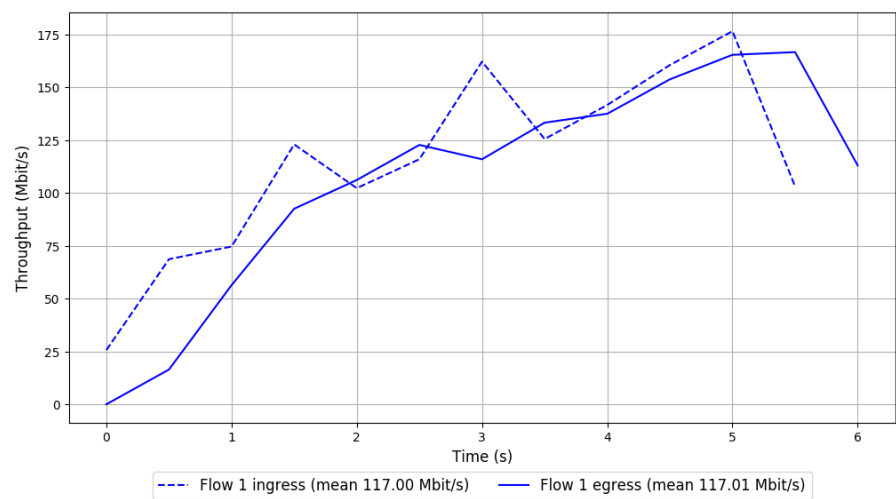
```
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-01 19:43:30
End at: 2018-06-01 19:44:00
Local clock offset: 2.53 ms
Remote clock offset: 0.048 ms
```

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

Flow 1 ingress (mean 117.00 Mbit/s) ---- Flow 1 egress (mean 117.01 Mbit/s)

• Flow 1 (95th percentile 53.52 ms)

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

Start at: 2018-06-01 20:03:38
End at: 2018-06-01 20:04:08
Local clock offset: 2.221 ms
Remote clock offset: 0.068 ms


# Below is generated by plot.py at 2018-06-01 21:41:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 113.48 Mbit/s
95th percentile per-packet one-way delay: 51.018 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 113.48 Mbit/s
95th percentile per-packet one-way delay: 51.018 ms
Loss rate: 0.02%
```
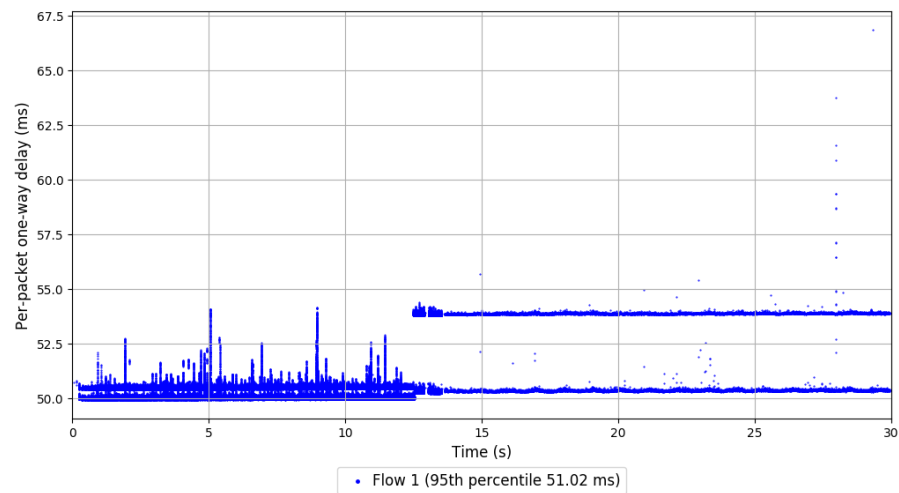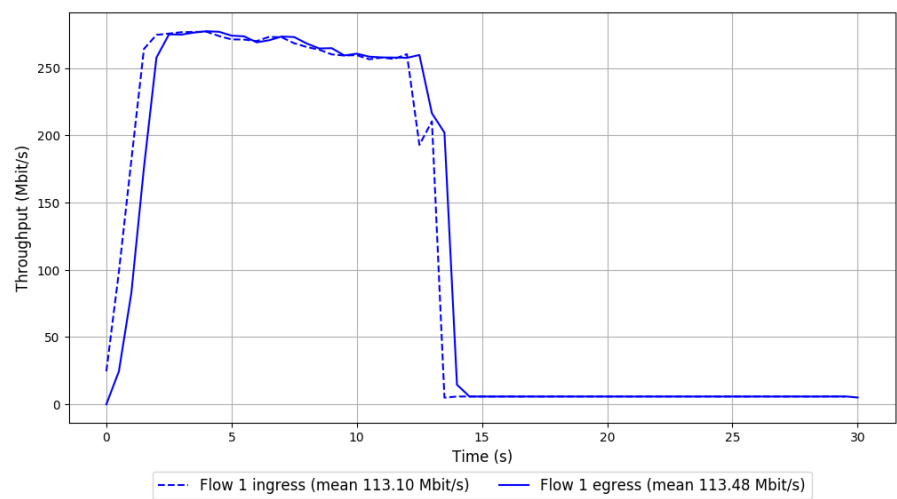
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 113.10 Mbit/s) --- Flow 1 egress (mean 113.48 Mbit/s)
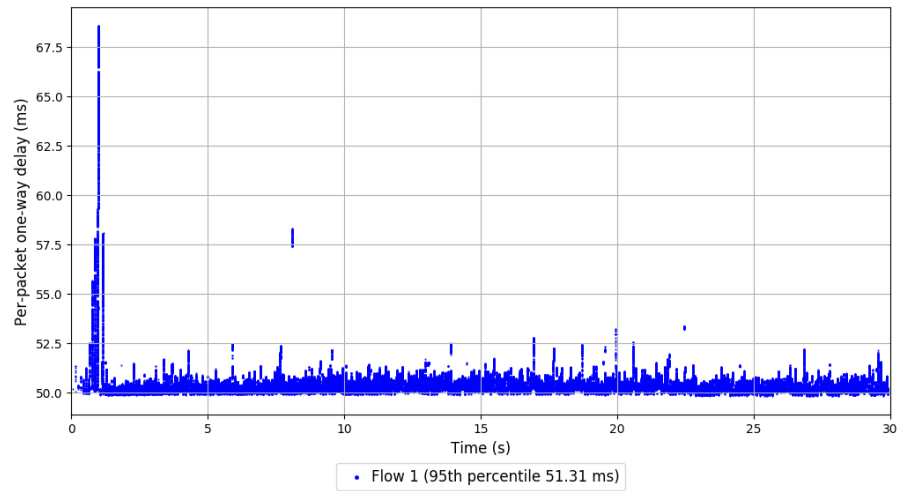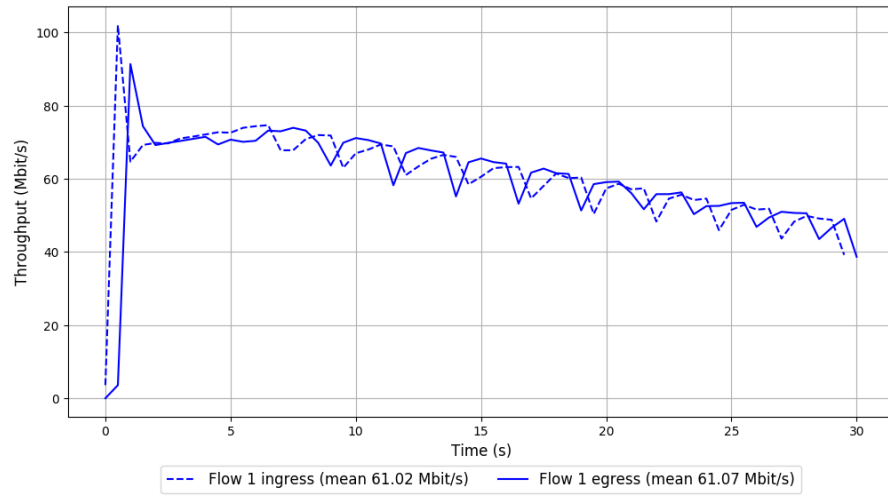

Flow 1 (95th percentile 51.02 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-06-01 17:12:43
End at: 2018-06-01 17:13:13
Local clock offset: -0.14 ms
Remote clock offset: -0.097 ms


# Below is generated by plot.py at 2018-06-01 21:41:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.07 Mbit/s
95th percentile per-packet one-way delay: 51.311 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 61.07 Mbit/s
95th percentile per-packet one-way delay: 51.311 ms
Loss rate: 0.26%
```

Run 1: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 61.02 Mbit/s) ---- Flow 1 egress (mean 61.07 Mbit/s)

• Flow 1 (95th percentile 51.31 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2018-06-01 17:32:50
End at: 2018-06-01 17:33:20
Local clock offset: -0.233 ms
Remote clock offset: 0.206 ms


# Below is generated by plot.py at 2018-06-01 21:41:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.12 Mbit/s
95th percentile per-packet one-way delay: 50.972 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 59.12 Mbit/s
95th percentile per-packet one-way delay: 50.972 ms
Loss rate: 0.43%
```
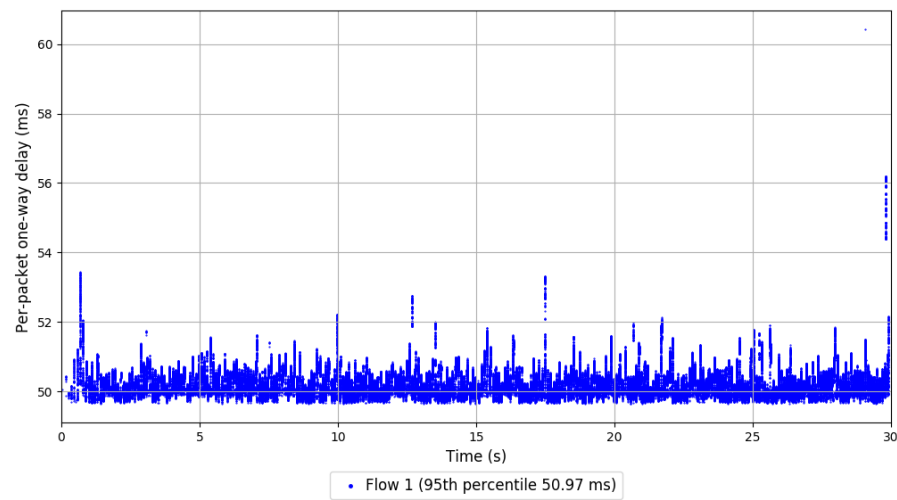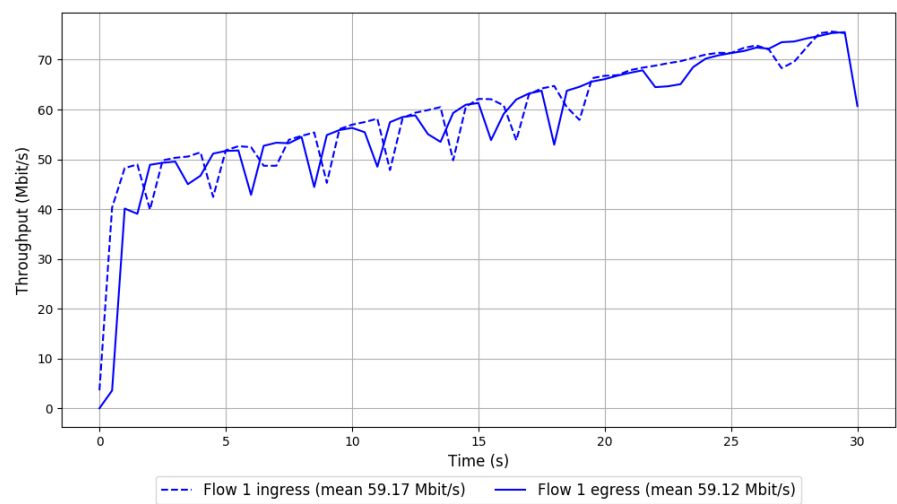
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-06-01 17:53:03
End at: 2018-06-01 17:53:34
Local clock offset: 8.5 ms
Remote clock offset: -0.11 ms


# Below is generated by plot.py at 2018-06-01 21:41:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.46 Mbit/s
95th percentile per-packet one-way delay: 57.463 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 225.46 Mbit/s
95th percentile per-packet one-way delay: 57.463 ms
Loss rate: 0.13%
```
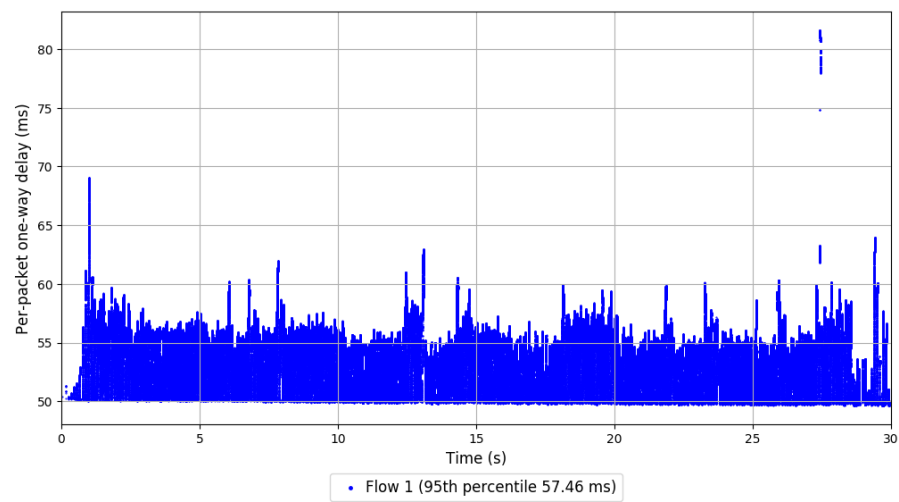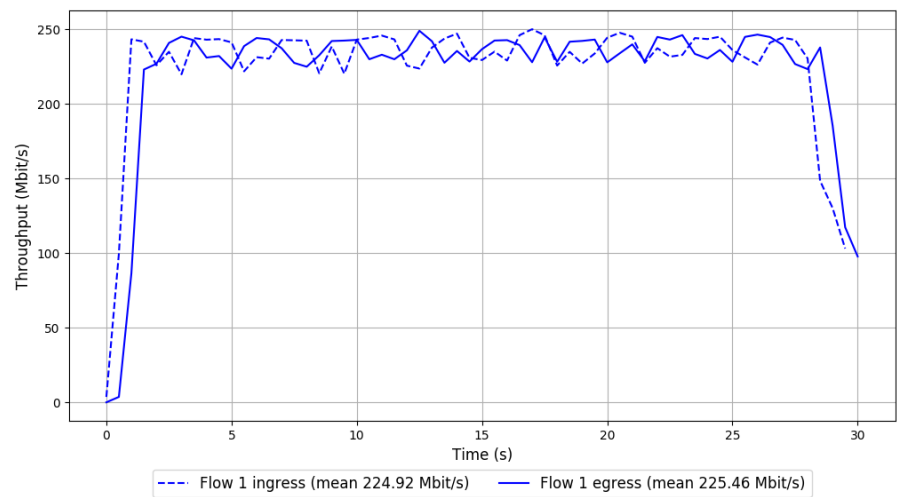
Run 3: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 224.92 Mbit/s) — Flow 1 egress (mean 225.46 Mbit/s)

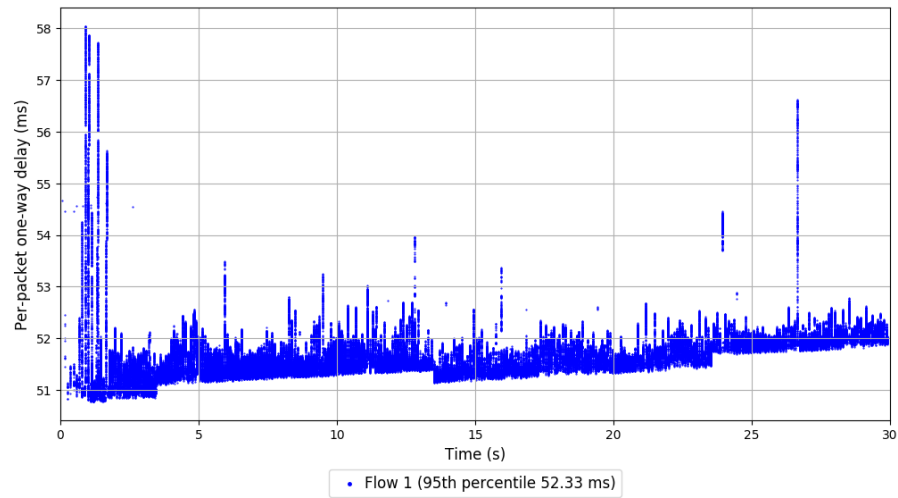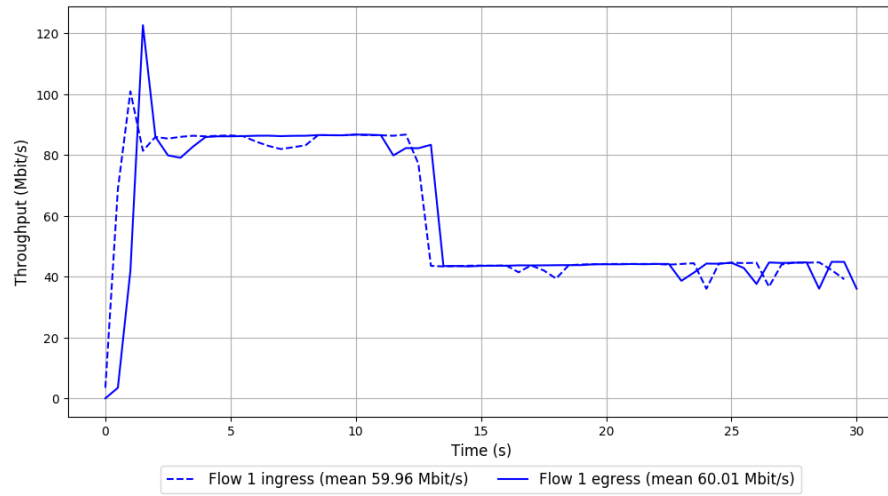Flow 1 (95th percentile 57.46 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2018-06-01 18:13:27
End at: 2018-06-01 18:13:57
Local clock offset: 20.418 ms
Remote clock offset: -0.184 ms


# Below is generated by plot.py at 2018-06-01 21:41:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.01 Mbit/s
95th percentile per-packet one-way delay: 52.333 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 60.01 Mbit/s
95th percentile per-packet one-way delay: 52.333 ms
Loss rate: 0.27%
```
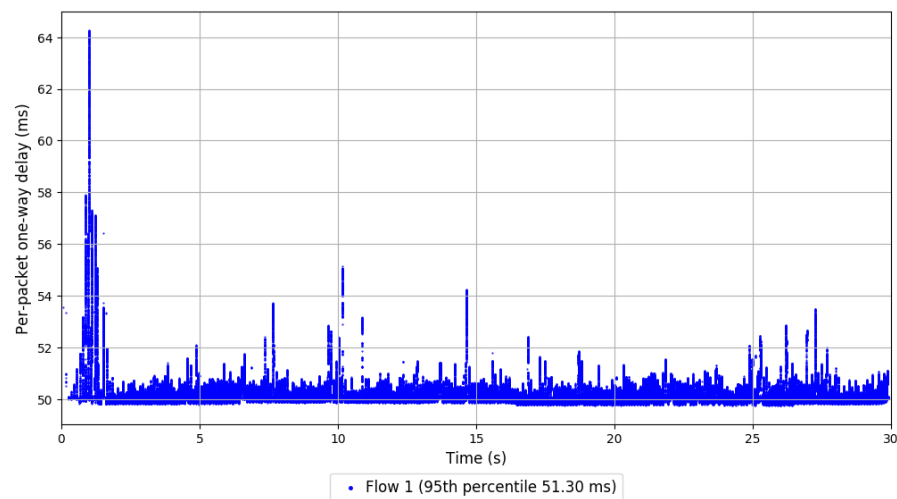
Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 59.96 Mbit/s)   Flow 1 egress (mean 60.01 Mbit/s)

Flow 1 (95th percentile 52.33 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2018-06-01 18:34:04
End at: 2018-06-01 18:34:34
Local clock offset: 9.172 ms
Remote clock offset: 0.14 ms


# Below is generated by plot.py at 2018-06-01 21:41:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 104.79 Mbit/s
95th percentile per-packet one-way delay: 51.304 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 104.79 Mbit/s
95th percentile per-packet one-way delay: 51.304 ms
Loss rate: 0.35%
```
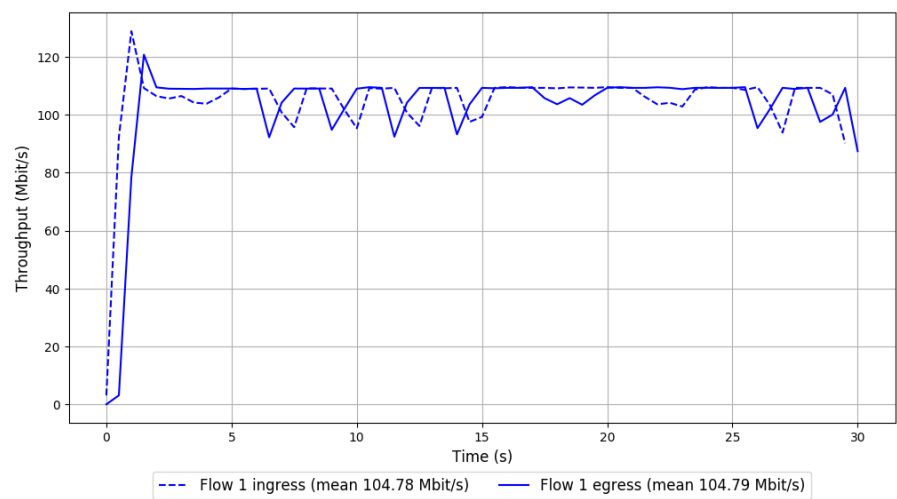
Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 104.78 Mbit/s) Flow 1 egress (mean 104.79 Mbit/s)

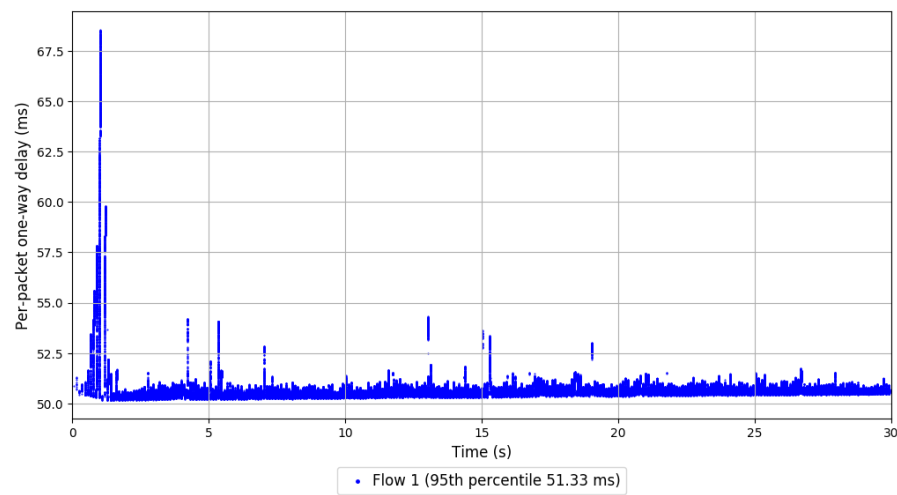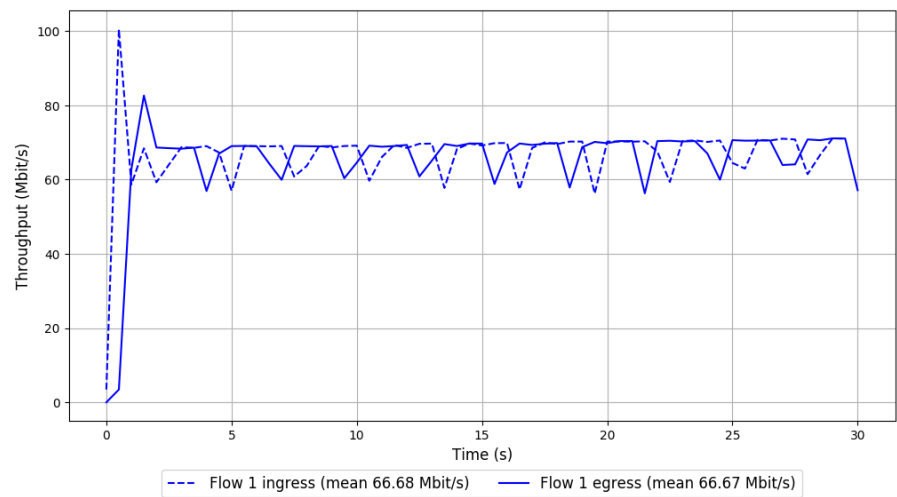
• Flow 1 (95th percentile 51.30 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2018-06-01 18:54:30
End at: 2018-06-01 18:55:00
Local clock offset: 8.218 ms
Remote clock offset: -0.089 ms


# Below is generated by plot.py at 2018-06-01 21:41:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.67 Mbit/s
95th percentile per-packet one-way delay: 51.325 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 66.67 Mbit/s
95th percentile per-packet one-way delay: 51.325 ms
Loss rate: 0.36%
```

Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 66.68 Mbit/s)   Flow 1 egress (mean 66.67 Mbit/s)

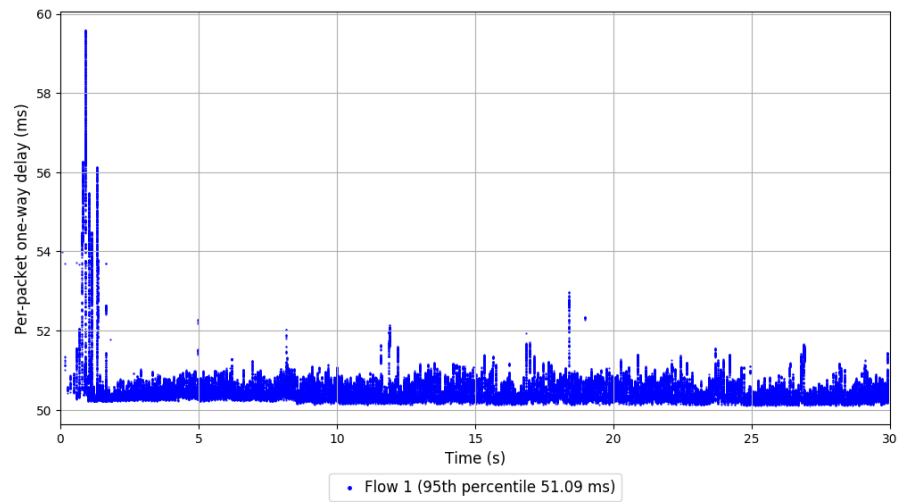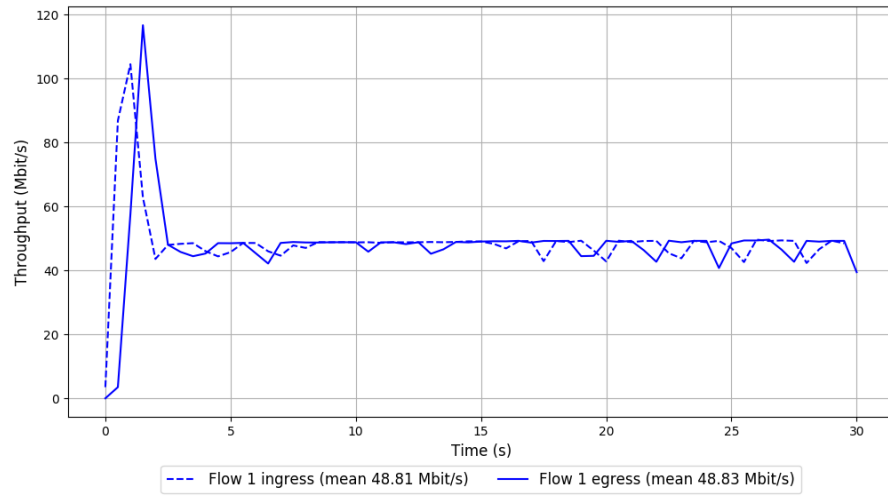
• Flow 1 (95th percentile 51.33 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2018-06-01 19:15:02
End at: 2018-06-01 19:15:32
Local clock offset: 5.512 ms
Remote clock offset: -0.228 ms


# Below is generated by plot.py at 2018-06-01 21:41:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.83 Mbit/s
95th percentile per-packet one-way delay: 51.087 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 48.83 Mbit/s
95th percentile per-packet one-way delay: 51.087 ms
Loss rate: 0.33%
```

Run 7: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 48.81 Mbit/s) --- Flow 1 egress (mean 48.83 Mbit/s)
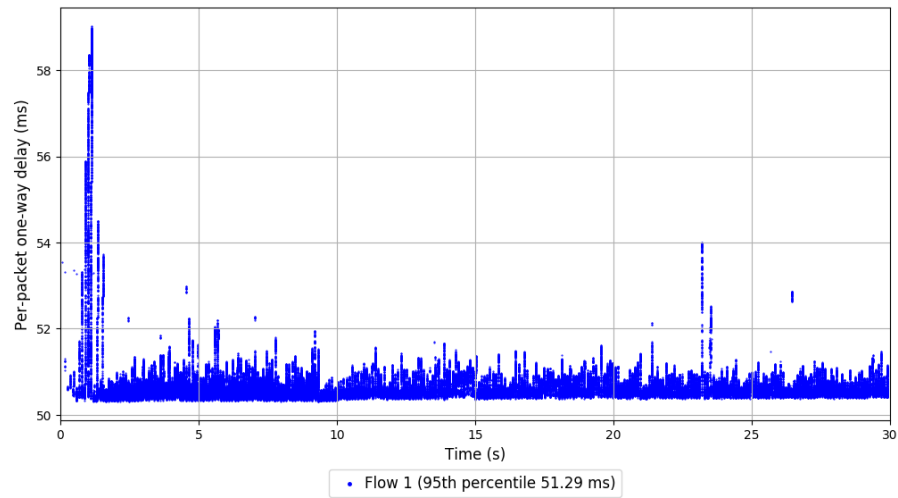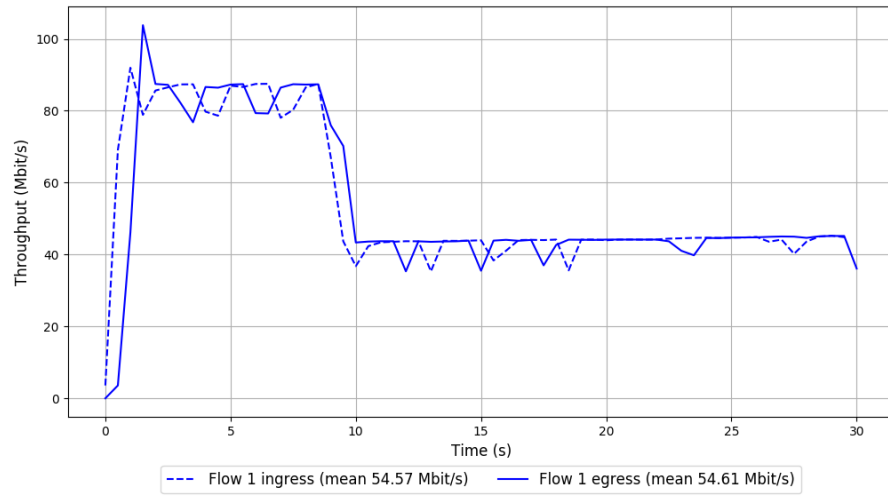

Flow 1 (95th percentile 51.09 ms)

```
Run 8: Statistics of TCP Vegas

Start at: 2018-06-01 19:35:41
End at: 2018-06-01 19:36:11
Local clock offset: 2.704 ms
Remote clock offset: -0.427 ms


# Below is generated by plot.py at 2018-06-01 21:41:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.61 Mbit/s
95th percentile per-packet one-way delay: 51.294 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 54.61 Mbit/s
95th percentile per-packet one-way delay: 51.294 ms
Loss rate: 0.28%
```
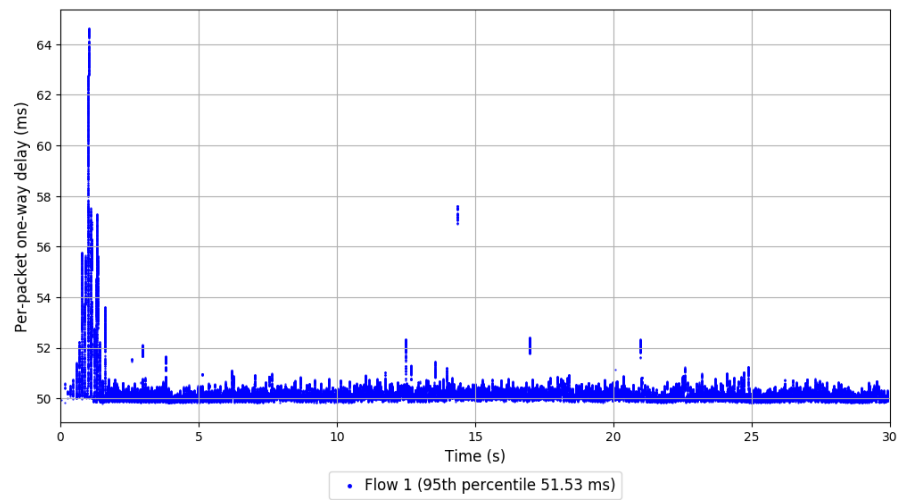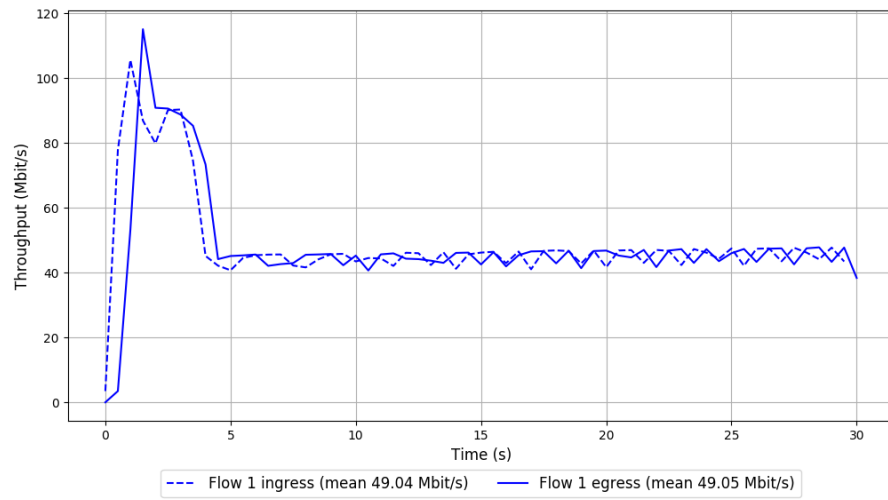
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-06-01 19:55:48
End at: 2018-06-01 19:56:18
Local clock offset: 3.113 ms
Remote clock offset: -0.021 ms


# Below is generated by plot.py at 2018-06-01 21:41:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 51.527 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 51.527 ms
Loss rate: 0.33%
```
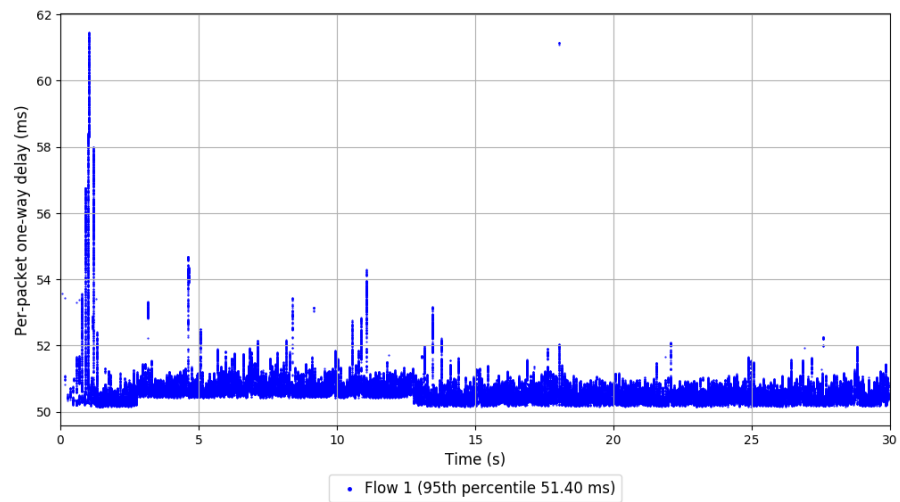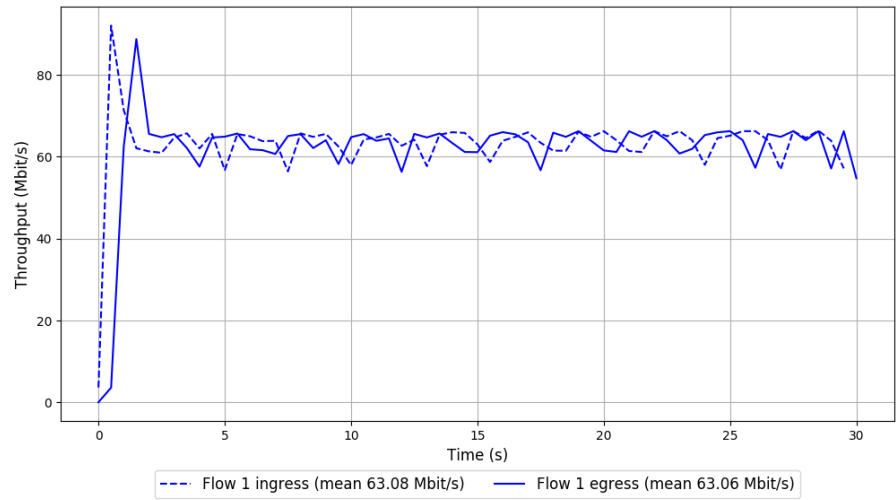
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 49.04 Mbit/s)   Flow 1 egress (mean 49.05 Mbit/s)

Flow 1 (95th percentile 51.53 ms)

```
Run 10: Statistics of TCP Vegas

Start at: 2018-06-01 20:16:08
End at: 2018-06-01 20:16:38
Local clock offset: 1.363 ms
Remote clock offset: -0.355 ms


# Below is generated by plot.py at 2018-06-01 21:41:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.06 Mbit/s
95th percentile per-packet one-way delay: 51.400 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 63.06 Mbit/s
95th percentile per-packet one-way delay: 51.400 ms
Loss rate: 0.30%
```
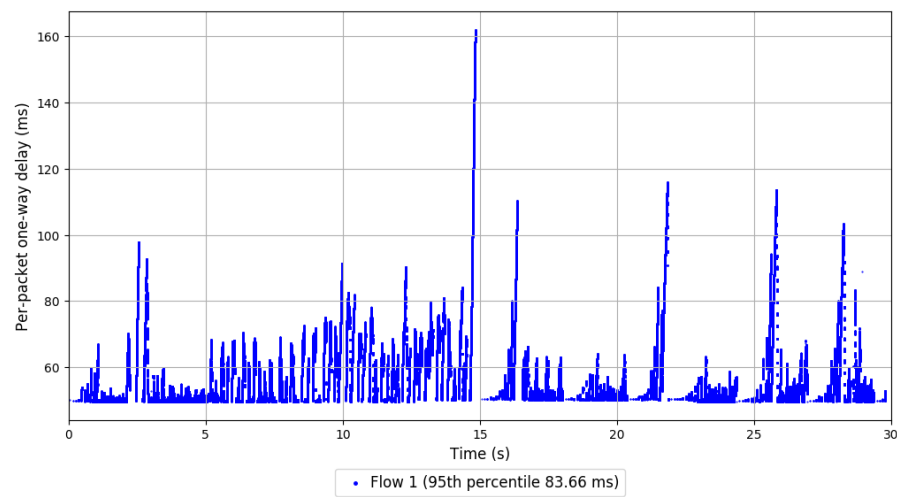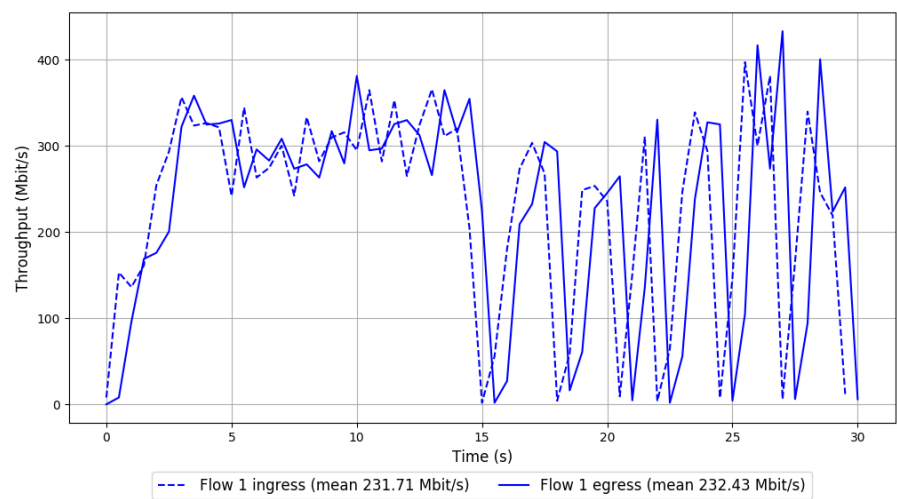
Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 63.08 Mbit/s)   Flow 1 egress (mean 63.06 Mbit/s)
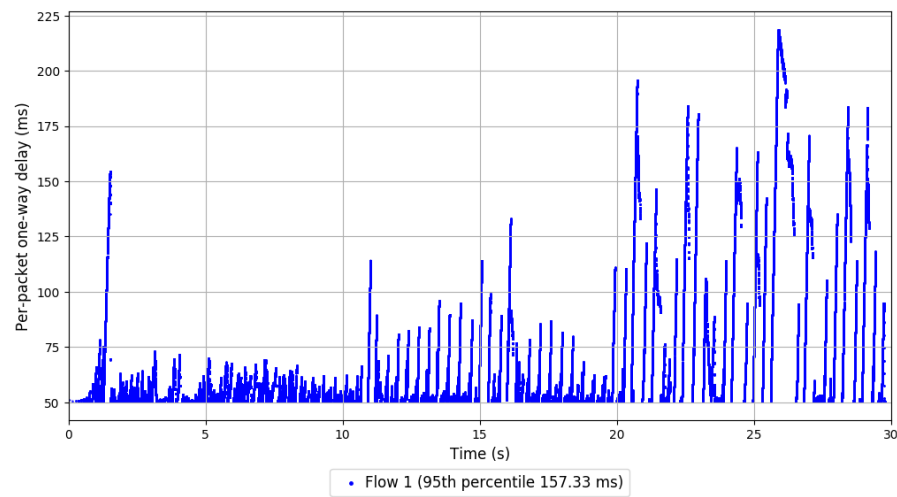

Flow 1 (95th percentile 51.40 ms)

```
Run 1: Statistics of Verus

Start at: 2018-06-01 17:14:58
End at: 2018-06-01 17:15:28
Local clock offset: -0.121 ms
Remote clock offset: 0.157 ms


# Below is generated by plot.py at 2018-06-01 21:44:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.43 Mbit/s
95th percentile per-packet one-way delay: 83.657 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 232.43 Mbit/s
95th percentile per-packet one-way delay: 83.657 ms
Loss rate: 0.04%
```

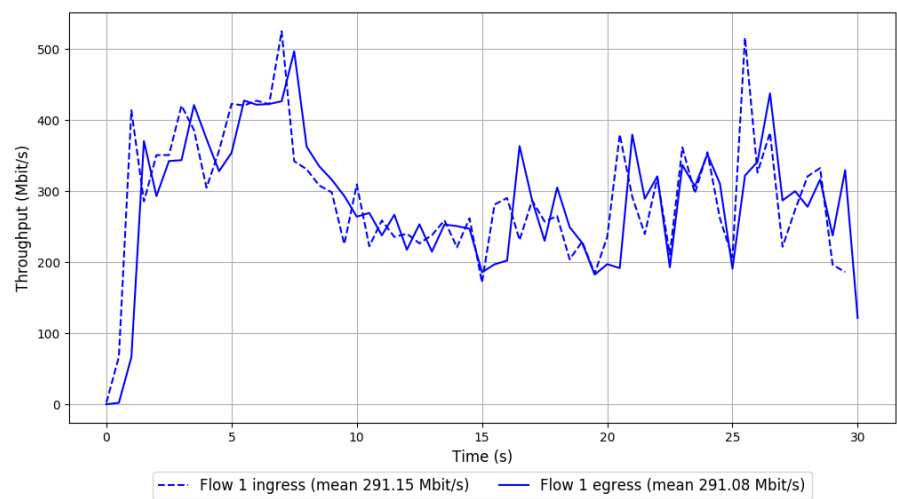Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-06-01 17:35:05
End at: 2018-06-01 17:35:35
Local clock offset: -0.126 ms
Remote clock offset: -0.288 ms

# Below is generated by plot.py at 2018-06-01 21:45:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 291.08 Mbit/s
95th percentile per-packet one-way delay: 157.331 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 291.08 Mbit/s
95th percentile per-packet one-way delay: 157.331 ms
Loss rate: 0.61%
```
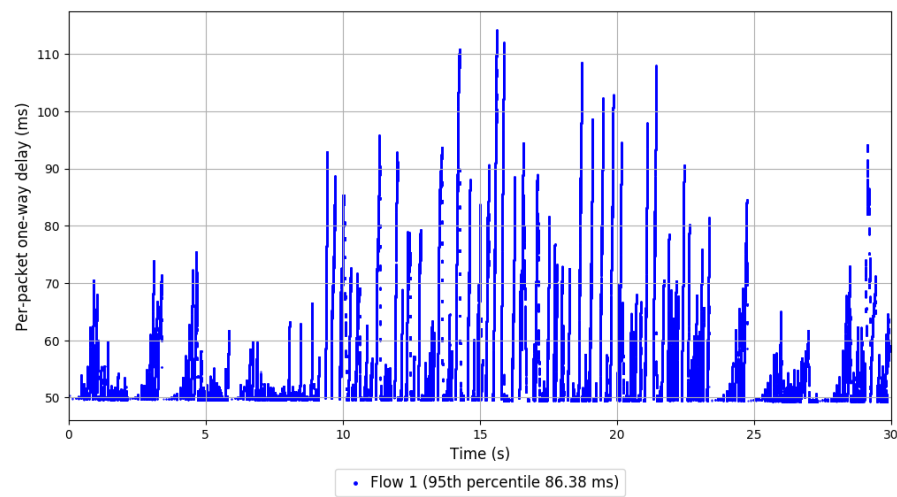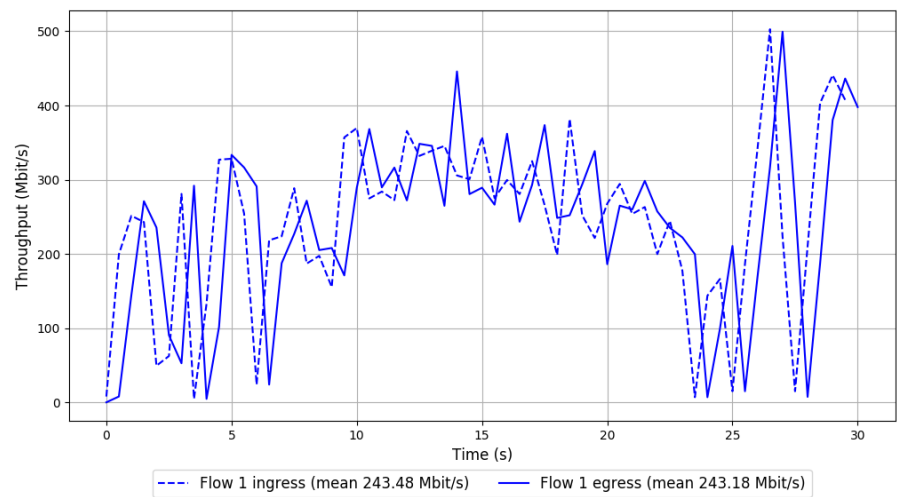
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-06-01 17:55:25
End at: 2018-06-01 17:55:55
Local clock offset: 9.911 ms
Remote clock offset: -0.206 ms


# Below is generated by plot.py at 2018-06-01 21:45:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 243.18 Mbit/s
95th percentile per-packet one-way delay: 86.376 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 243.18 Mbit/s
95th percentile per-packet one-way delay: 86.376 ms
Loss rate: 0.46%
```

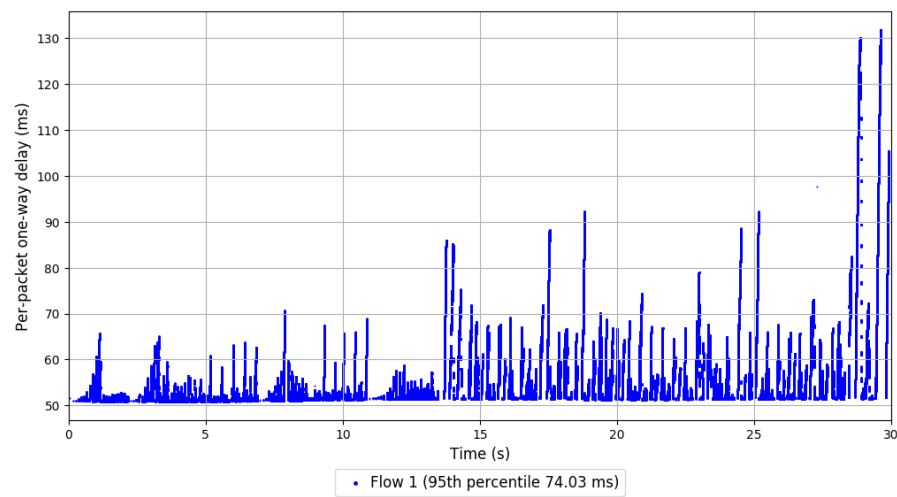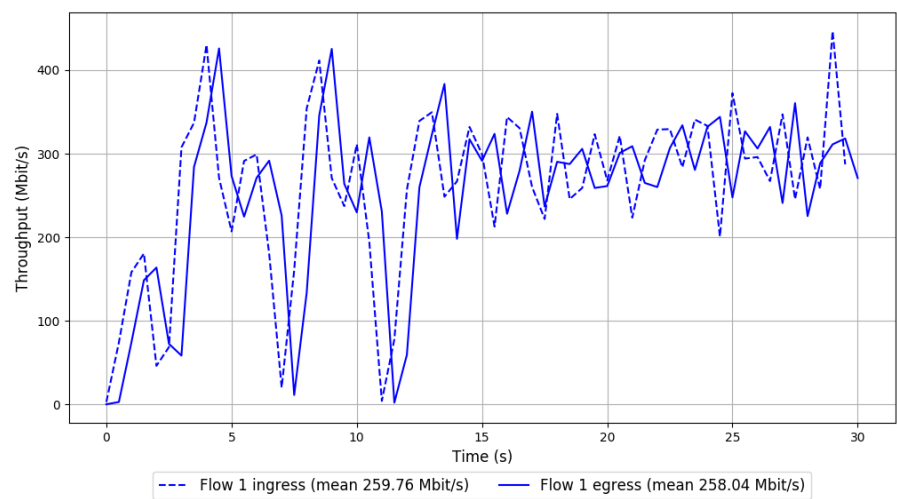Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-06-01 18:15:42
End at: 2018-06-01 18:16:12
Local clock offset: 16.951 ms
Remote clock offset: -0.117 ms


# Below is generated by plot.py at 2018-06-01 21:45:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.04 Mbit/s
95th percentile per-packet one-way delay: 74.029 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 258.04 Mbit/s
95th percentile per-packet one-way delay: 74.029 ms
Loss rate: 1.01%
```
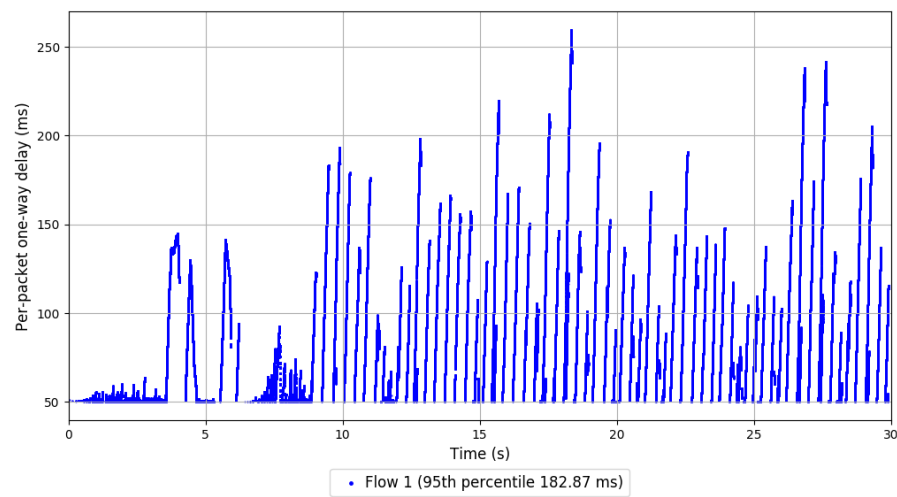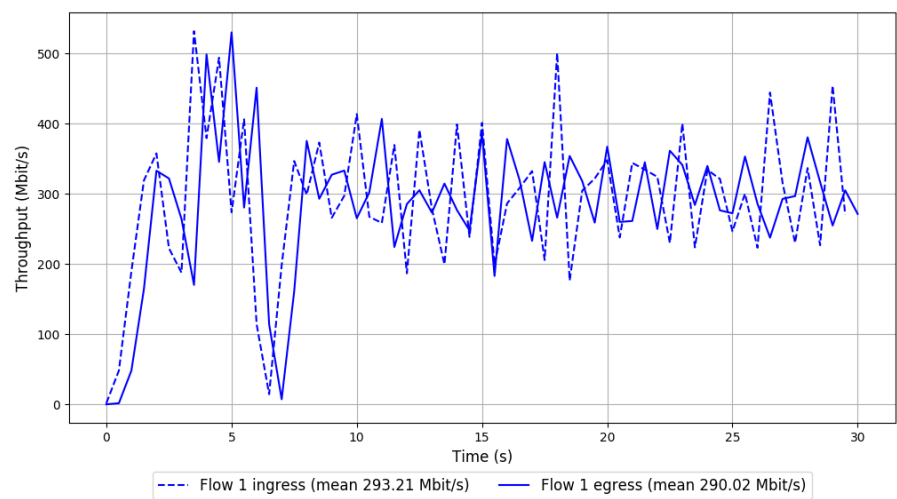
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2018-06-01 18:36:21
End at: 2018-06-01 18:36:51
Local clock offset: 9.662 ms
Remote clock offset: -0.075 ms


# Below is generated by plot.py at 2018-06-01 21:45:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 290.02 Mbit/s
95th percentile per-packet one-way delay: 182.872 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 290.02 Mbit/s
95th percentile per-packet one-way delay: 182.872 ms
Loss rate: 1.07%
```
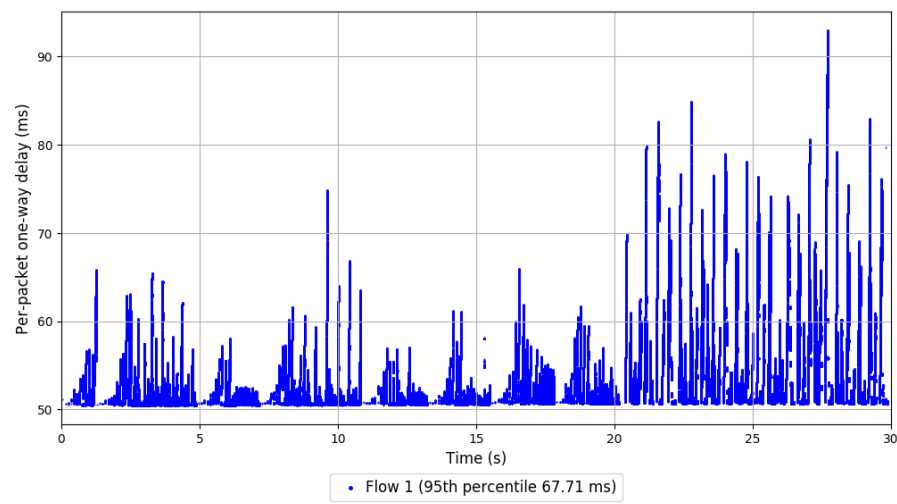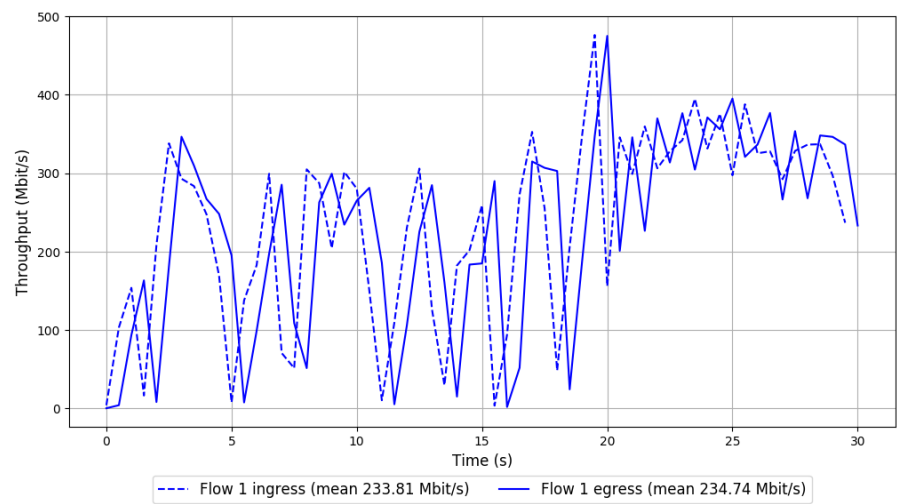
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-06-01 18:56:45
End at: 2018-06-01 18:57:15
Local clock offset: 7.269 ms
Remote clock offset: -0.086 ms


# Below is generated by plot.py at 2018-06-01 21:45:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.74 Mbit/s
95th percentile per-packet one-way delay: 67.709 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 234.74 Mbit/s
95th percentile per-packet one-way delay: 67.709 ms
Loss rate: 0.03%
```

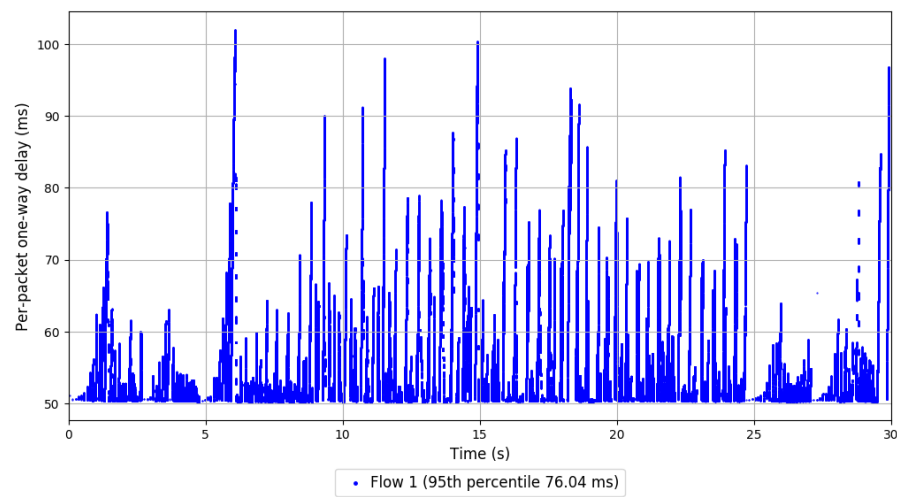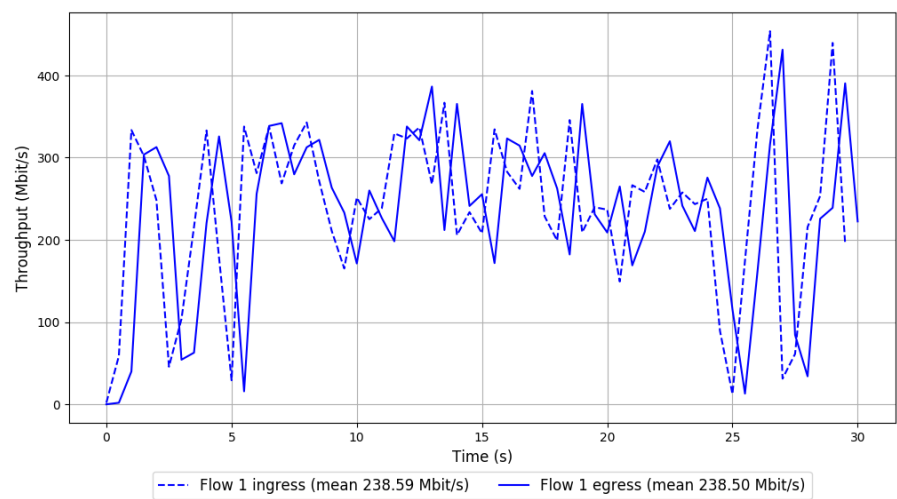Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-06-01 19:17:16
End at: 2018-06-01 19:17:46
Local clock offset: 5.833 ms
Remote clock offset: -0.266 ms


# Below is generated by plot.py at 2018-06-01 21:45:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 238.50 Mbit/s
95th percentile per-packet one-way delay: 76.042 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 238.50 Mbit/s
95th percentile per-packet one-way delay: 76.042 ms
Loss rate: 0.38%
```

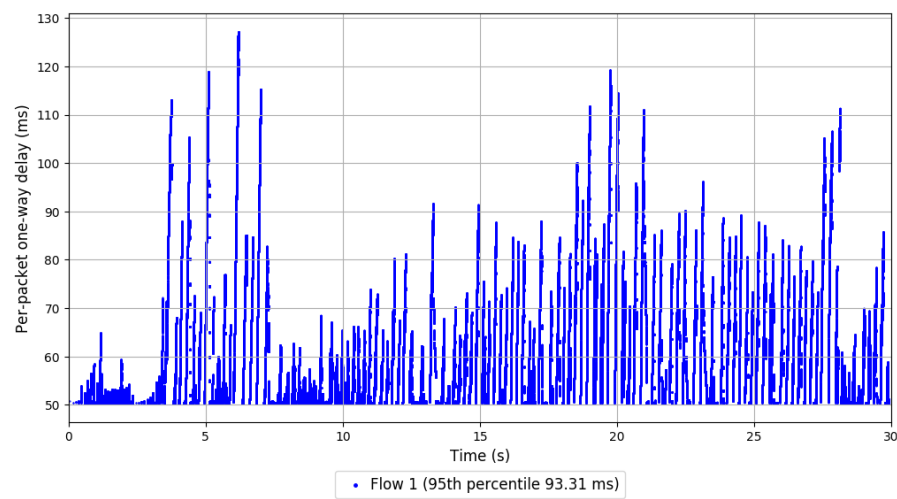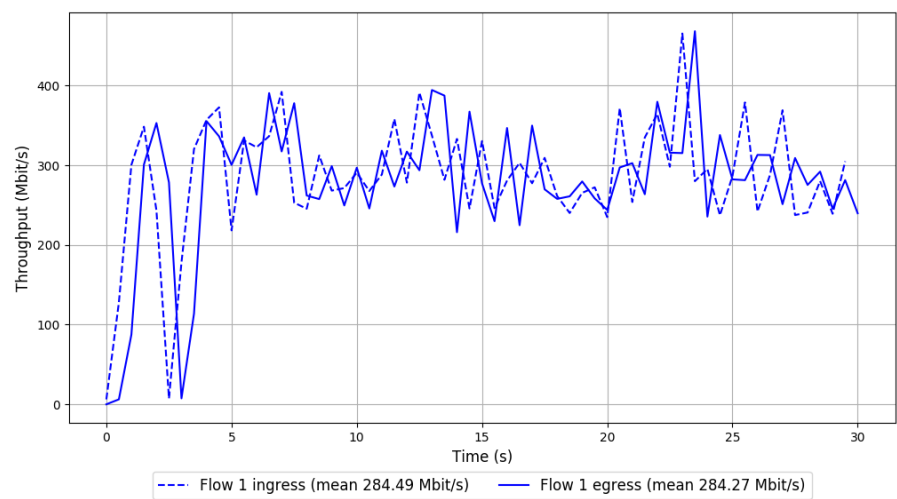Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-06-01 19:37:55
End at: 2018-06-01 19:38:25
Local clock offset: 2.78 ms
Remote clock offset: -0.128 ms


# Below is generated by plot.py at 2018-06-01 21:46:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 284.27 Mbit/s
95th percentile per-packet one-way delay: 93.309 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 284.27 Mbit/s
95th percentile per-packet one-way delay: 93.309 ms
Loss rate: 0.43%
```

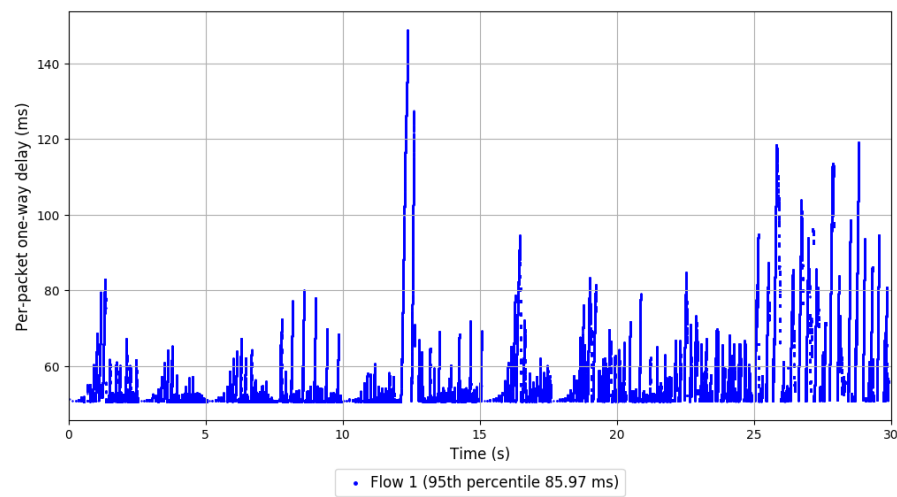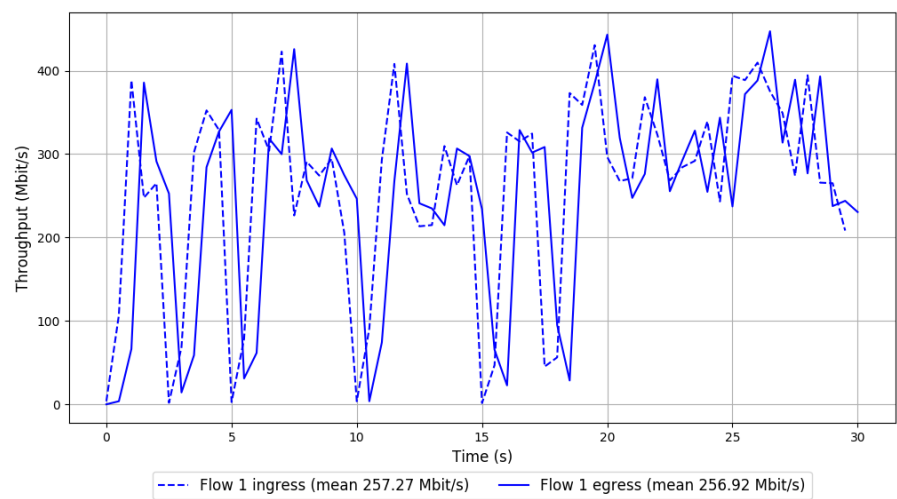## Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2018-06-01 19:58:03
End at: 2018-06-01 19:58:33
Local clock offset: 3.302 ms
Remote clock offset: -0.424 ms

# Below is generated by plot.py at 2018-06-01 21:47:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.92 Mbit/s
95th percentile per-packet one-way delay: 85.974 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 256.92 Mbit/s
95th percentile per-packet one-way delay: 85.974 ms
Loss rate: 0.47%
```

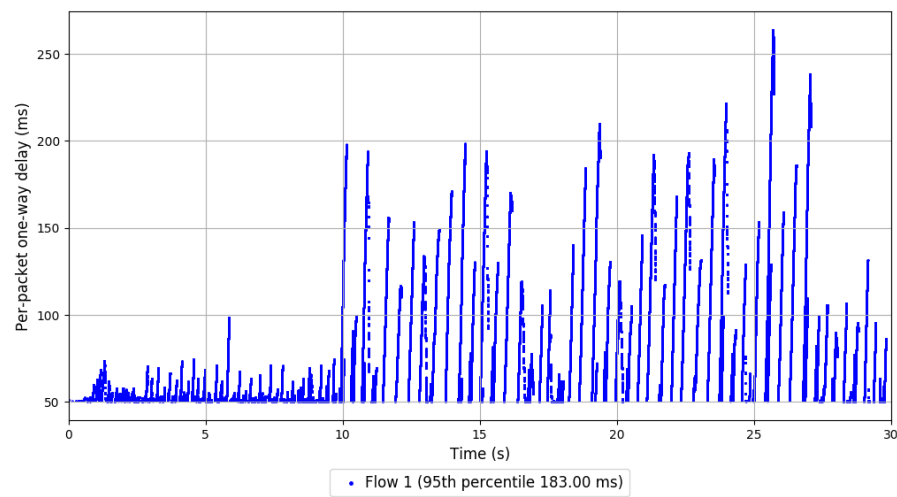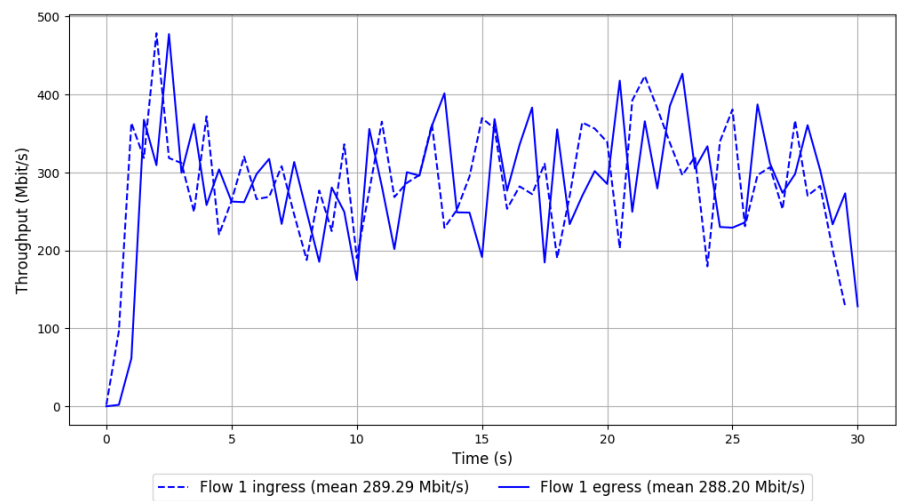# Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2018-06-01 20:18:23
End at: 2018-06-01 20:18:53
Local clock offset: 1.221 ms
Remote clock offset: -0.226 ms


# Below is generated by plot.py at 2018-06-01 21:49:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 288.20 Mbit/s
95th percentile per-packet one-way delay: 183.003 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 288.20 Mbit/s
95th percentile per-packet one-way delay: 183.003 ms
Loss rate: 0.26%
```

Run 10: Report of Verus — Data Link

Flow 1 ingress (mean 289.29 Mbit/s)   Flow 1 egress (mean 288.20 Mbit/s)

Flow 1 (95th percentile 183.00 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-01 17:02:46
End at: 2018-06-01 17:03:16
Local clock offset: -0.13 ms
Remote clock offset: -0.309 ms

# Below is generated by plot.py at 2018-06-01 21:50:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 327.42 Mbit/s
95th percentile per-packet one-way delay: 53.381 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 327.42 Mbit/s
95th percentile per-packet one-way delay: 53.381 ms
Loss rate: 0.38%
```
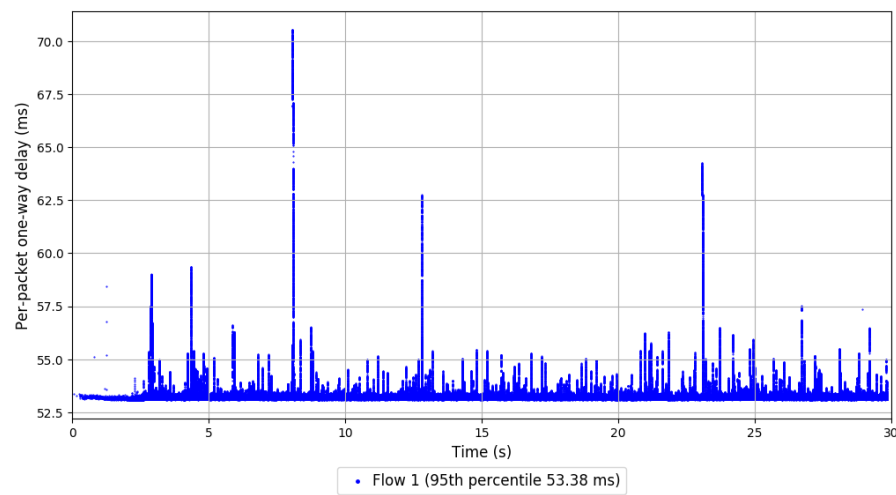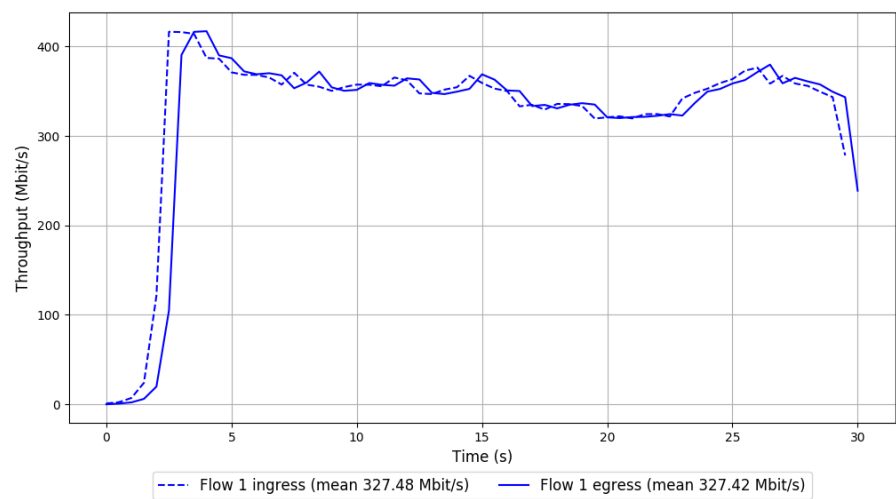
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-01 17:22:37
End at: 2018-06-01 17:23:07
Local clock offset: 0.1 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2018-06-01 21:50:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 324.98 Mbit/s
95th percentile per-packet one-way delay: 54.316 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 324.98 Mbit/s
95th percentile per-packet one-way delay: 54.316 ms
Loss rate: 0.41%
```
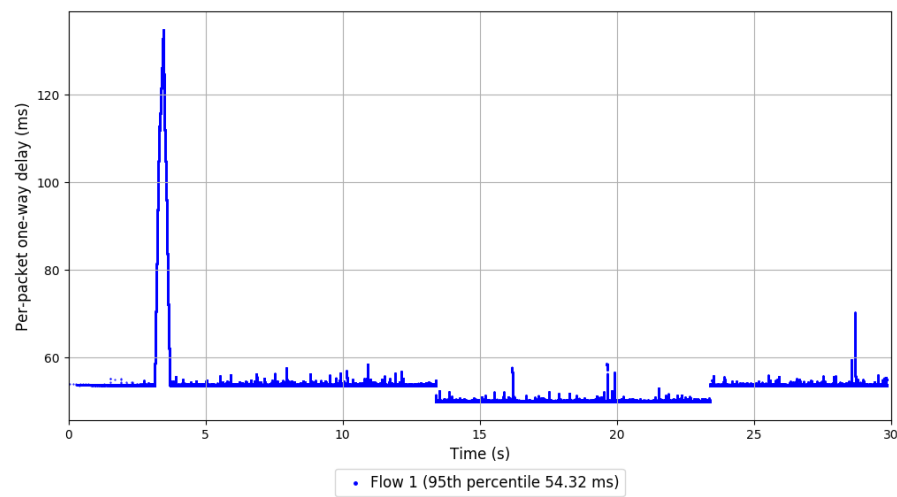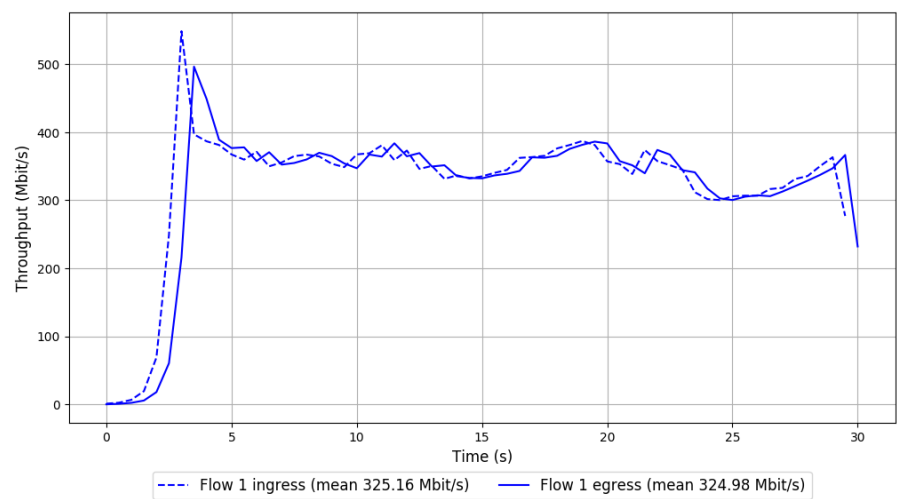
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 325.16 Mbit/s)   Flow 1 egress (mean 324.98 Mbit/s)
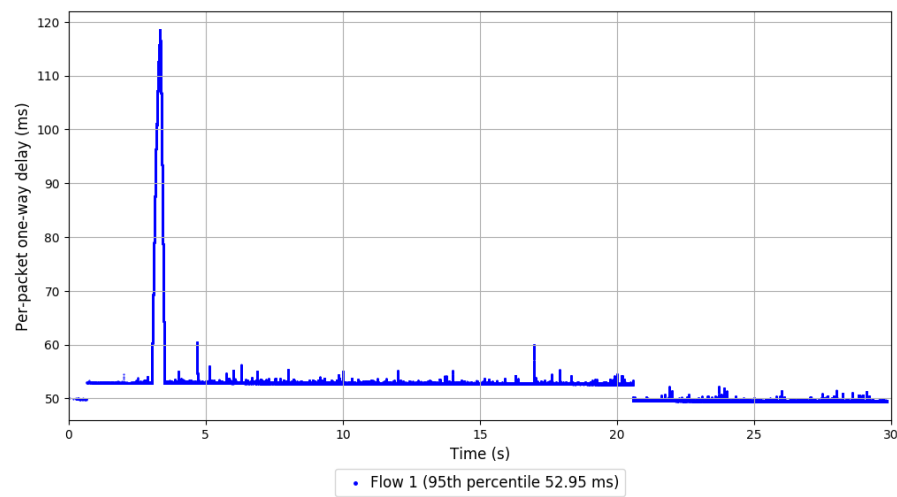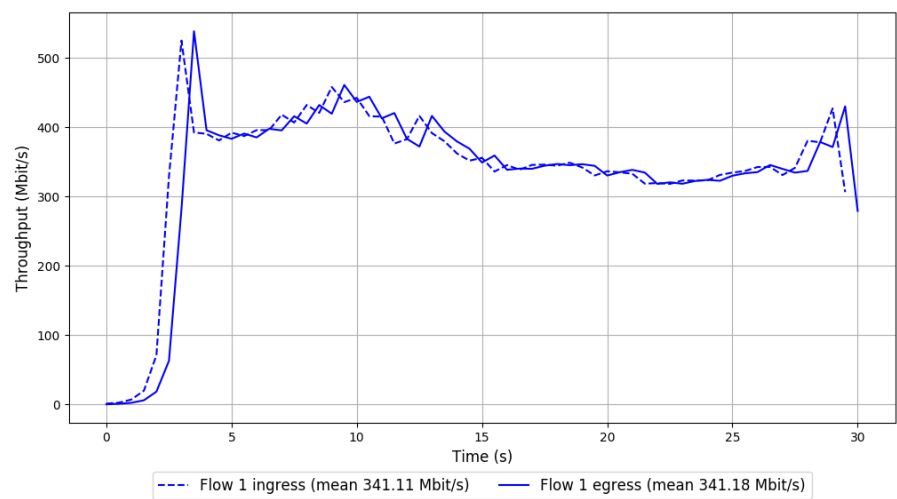

Flow 1 (95th percentile 54.32 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-01 17:42:57
End at: 2018-06-01 17:43:27
Local clock offset: 0.17 ms
Remote clock offset: -0.084 ms


# Below is generated by plot.py at 2018-06-01 21:50:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 341.18 Mbit/s
95th percentile per-packet one-way delay: 52.949 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 341.18 Mbit/s
95th percentile per-packet one-way delay: 52.949 ms
Loss rate: 0.34%
```

Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 341.11 Mbit/s) — Flow 1 egress (mean 341.18 Mbit/s)

Flow 1 (95th percentile 52.95 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-01 18:03:28
End at: 2018-06-01 18:03:58
Local clock offset: 16.1 ms
Remote clock offset: -0.123 ms


# Below is generated by plot.py at 2018-06-01 21:50:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 318.62 Mbit/s
95th percentile per-packet one-way delay: 53.047 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 318.62 Mbit/s
95th percentile per-packet one-way delay: 53.047 ms
Loss rate: 0.39%
```
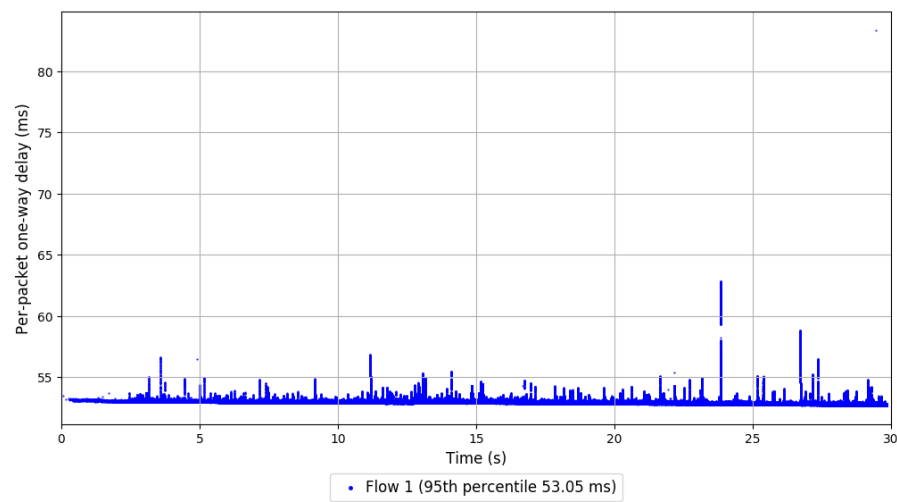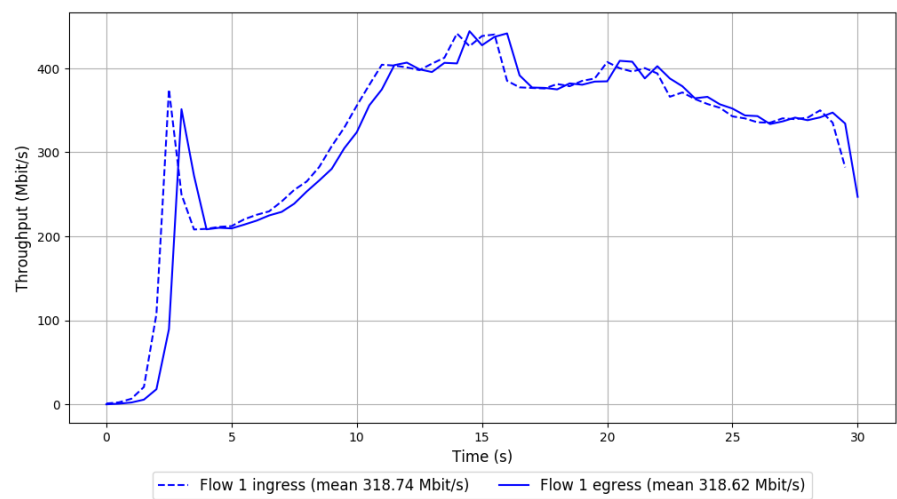
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 318.74 Mbit/s) — — — Flow 1 egress (mean 318.62 Mbit/s)
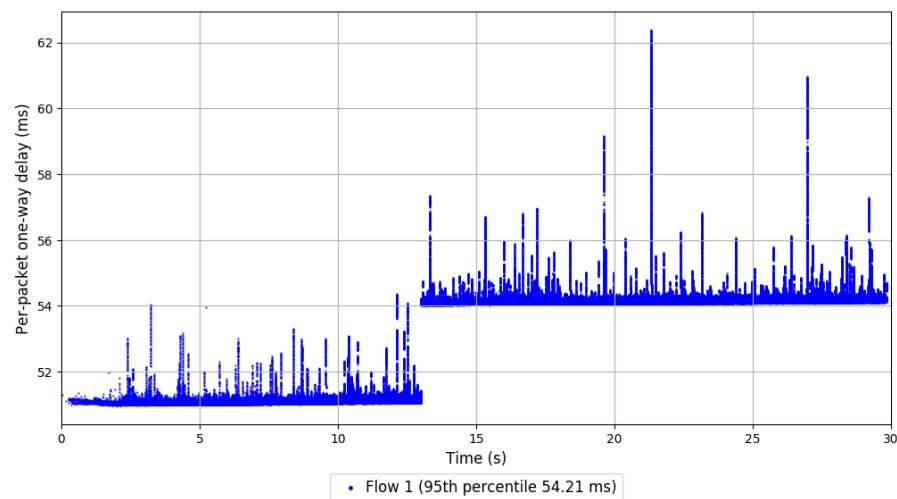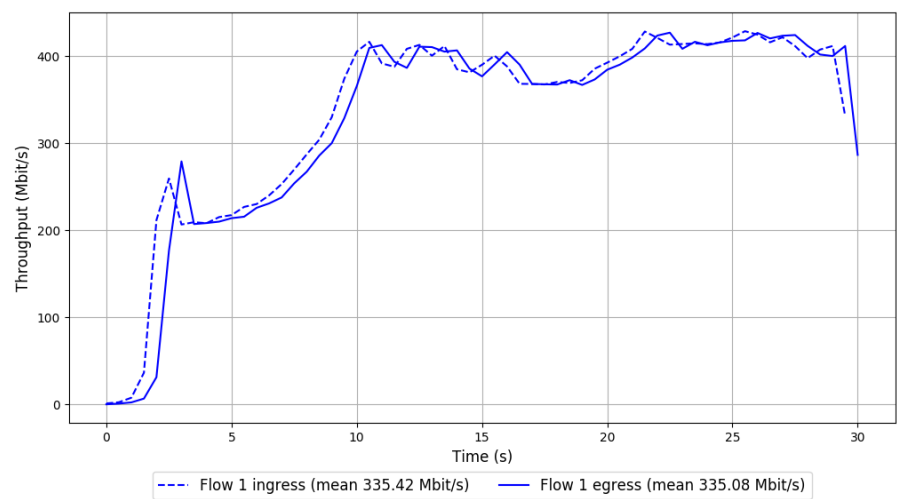

• Flow 1 (95th percentile 53.05 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-01 18:23:45
End at: 2018-06-01 18:24:15
Local clock offset: 10.275 ms
Remote clock offset: -0.109 ms


# Below is generated by plot.py at 2018-06-01 21:51:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 335.08 Mbit/s
95th percentile per-packet one-way delay: 54.214 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 335.08 Mbit/s
95th percentile per-packet one-way delay: 54.214 ms
Loss rate: 0.45%
```

Run 5: Report of PCC-Vivace — Data Link

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-01 18:44:11
End at: 2018-06-01 18:44:41
Local clock offset: 11.858 ms
Remote clock offset: 0.36 ms


# Below is generated by plot.py at 2018-06-01 21:52:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 377.67 Mbit/s
95th percentile per-packet one-way delay: 50.346 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 377.67 Mbit/s
95th percentile per-packet one-way delay: 50.346 ms
Loss rate: 0.39%
```
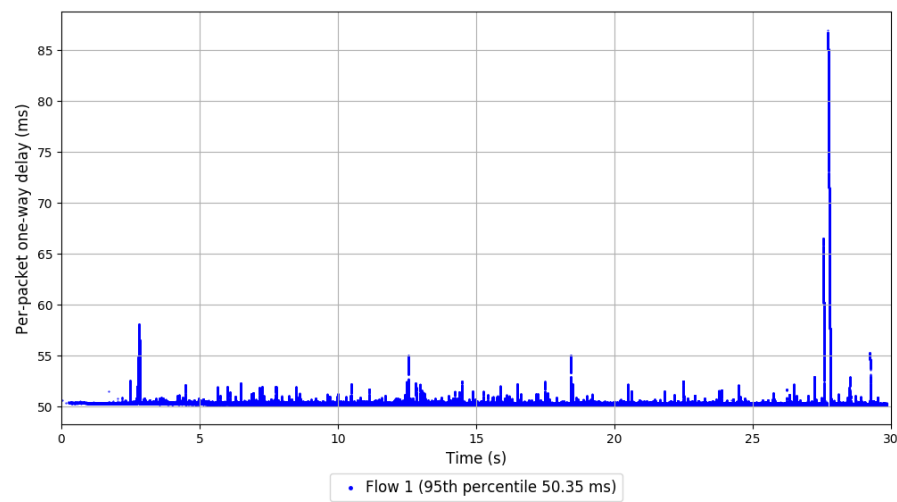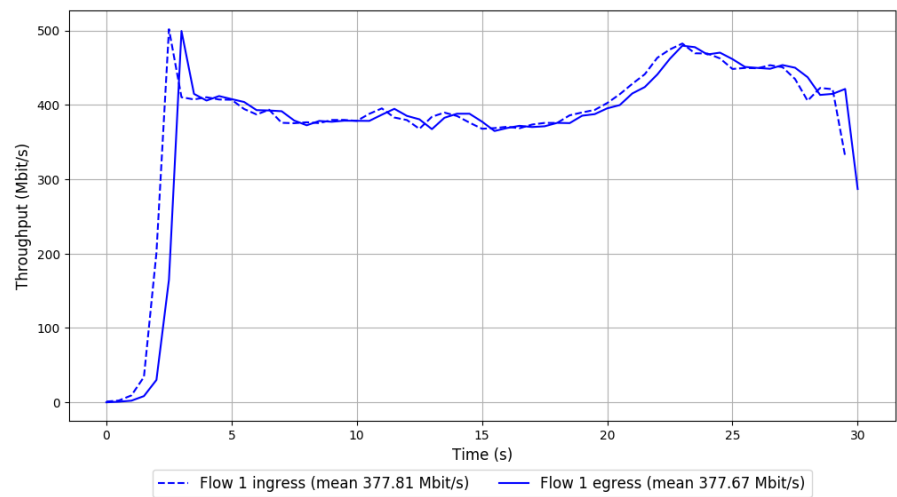
Run 6: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 377.81 Mbit/s) --- Flow 1 egress (mean 377.67 Mbit/s)
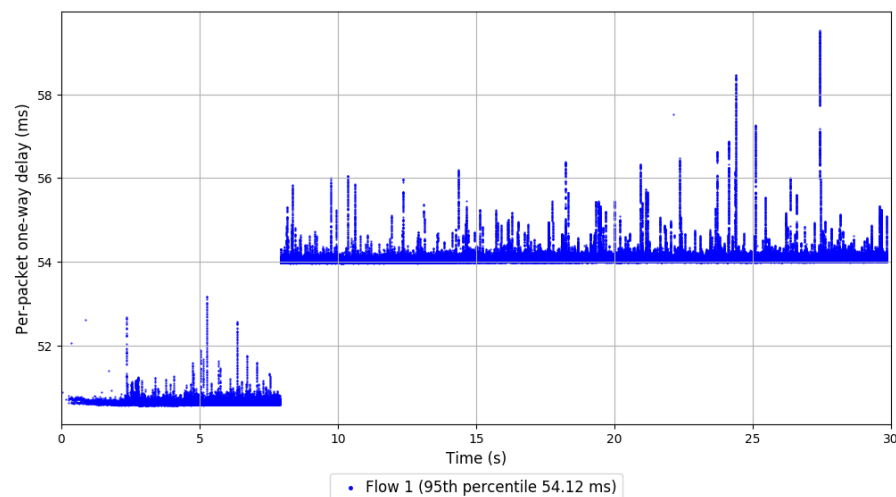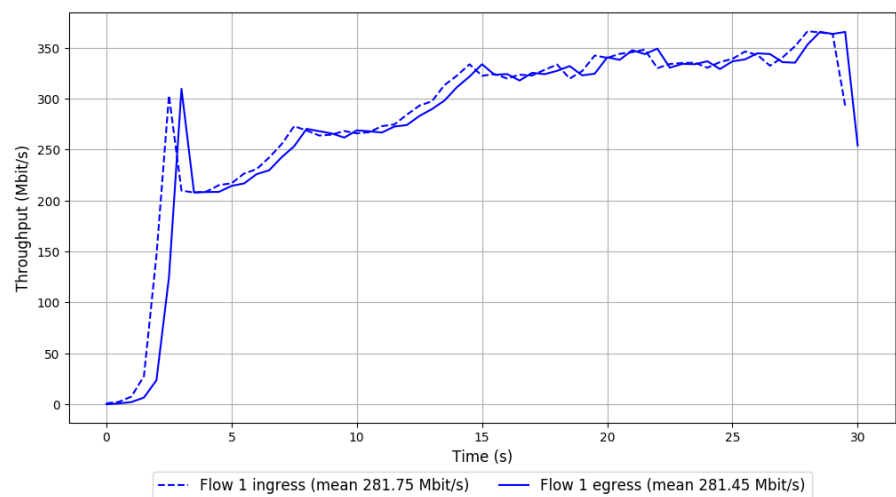

• Flow 1 (95th percentile 50.35 ms)

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-01 19:04:43
End at: 2018-06-01 19:05:13
Local clock offset: 5.397 ms
Remote clock offset: -0.263 ms


# Below is generated by plot.py at 2018-06-01 21:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 281.45 Mbit/s
95th percentile per-packet one-way delay: 54.118 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 281.45 Mbit/s
95th percentile per-packet one-way delay: 54.118 ms
Loss rate: 0.46%
```

Run 7: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 281.75 Mbit/s) — Flow 1 egress (mean 281.45 Mbit/s)
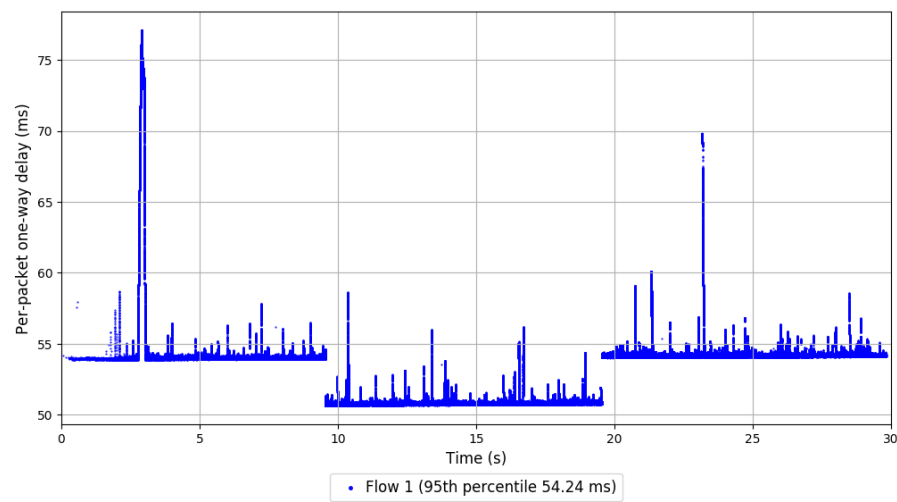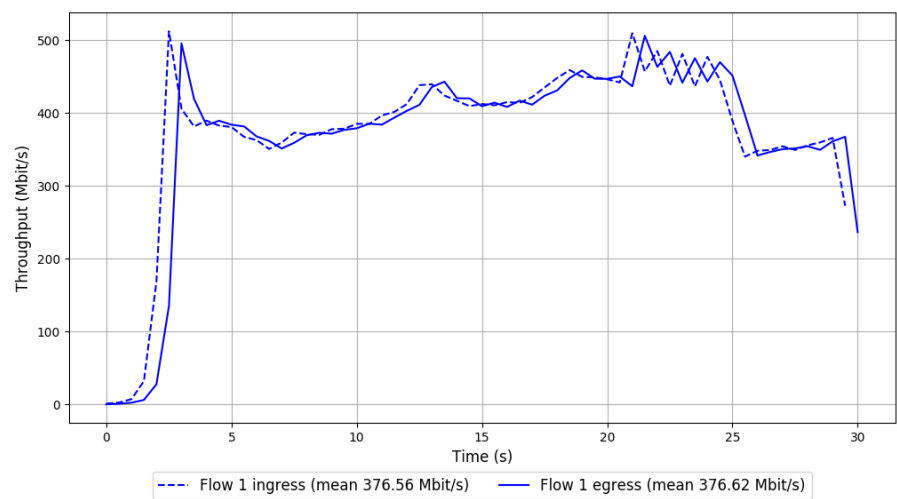

Flow 1 (95th percentile 54.12 ms)

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-01 19:25:21
End at: 2018-06-01 19:25:51
Local clock offset: 5.851 ms
Remote clock offset: -0.035 ms


# Below is generated by plot.py at 2018-06-01 21:53:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 376.62 Mbit/s
95th percentile per-packet one-way delay: 54.239 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 376.62 Mbit/s
95th percentile per-packet one-way delay: 54.239 ms
Loss rate: 0.33%
```

Run 8: Report of PCC-Vivace — Data Link

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-01 19:45:46
End at: 2018-06-01 19:46:16
Local clock offset: 2.813 ms
Remote clock offset: -0.151 ms


# Below is generated by plot.py at 2018-06-01 21:53:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 315.99 Mbit/s
95th percentile per-packet one-way delay: 53.760 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 315.99 Mbit/s
95th percentile per-packet one-way delay: 53.760 ms
Loss rate: 0.42%
```
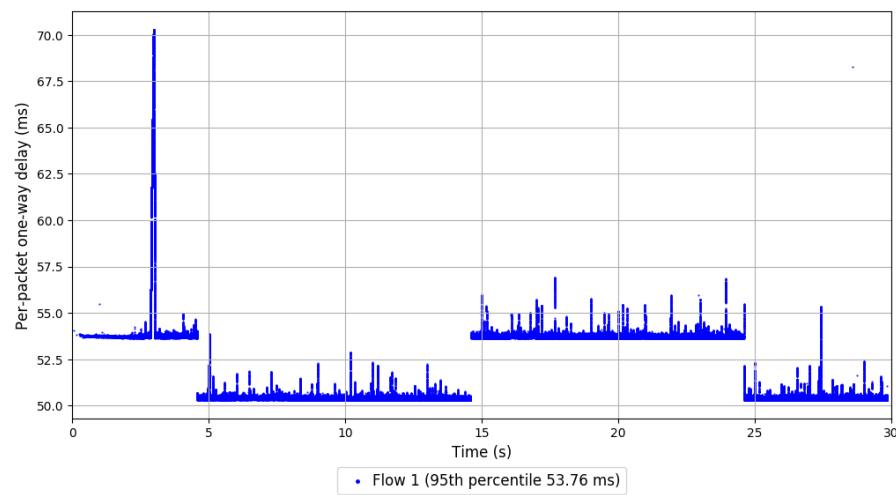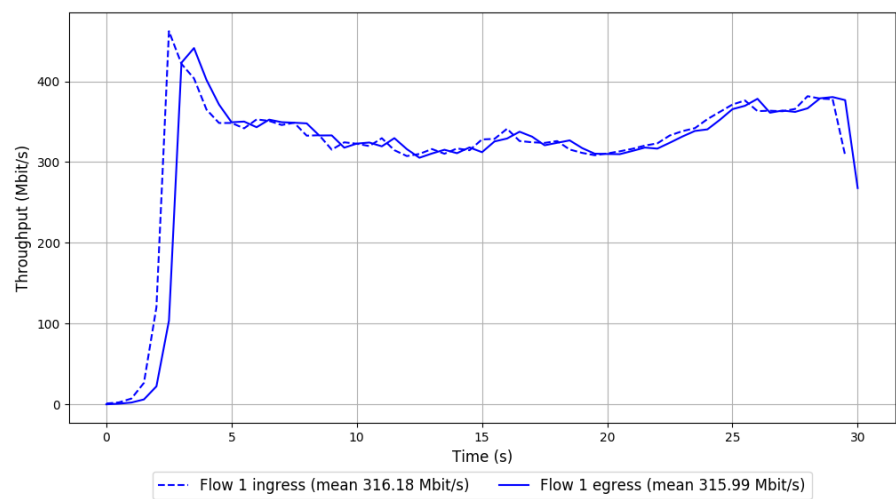
Run 9: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 316.18 Mbit/s) ———— Flow 1 egress (mean 315.99 Mbit/s)

• Flow 1 (95th percentile 53.76 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-01 20:06:02
End at: 2018-06-01 20:06:32
Local clock offset: 1.853 ms
Remote clock offset: -0.096 ms


# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 325.12 Mbit/s
95th percentile per-packet one-way delay: 53.984 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 325.12 Mbit/s
95th percentile per-packet one-way delay: 53.984 ms
Loss rate: 0.36%
```
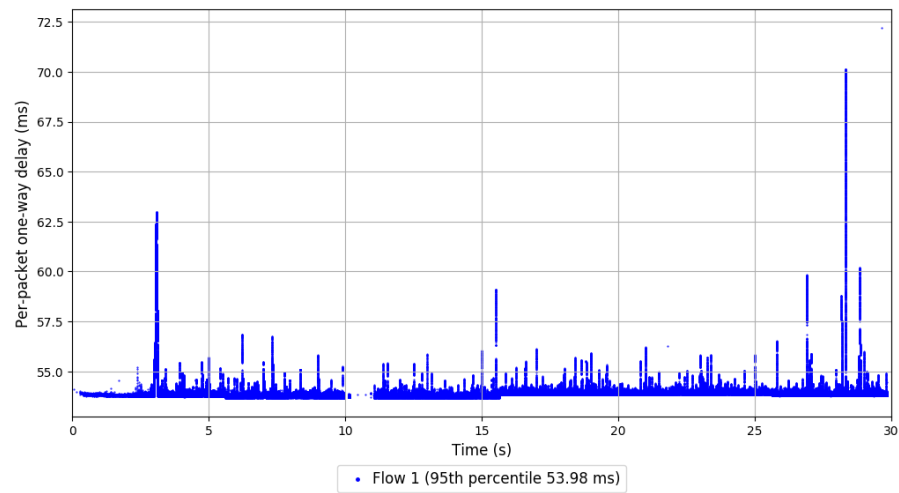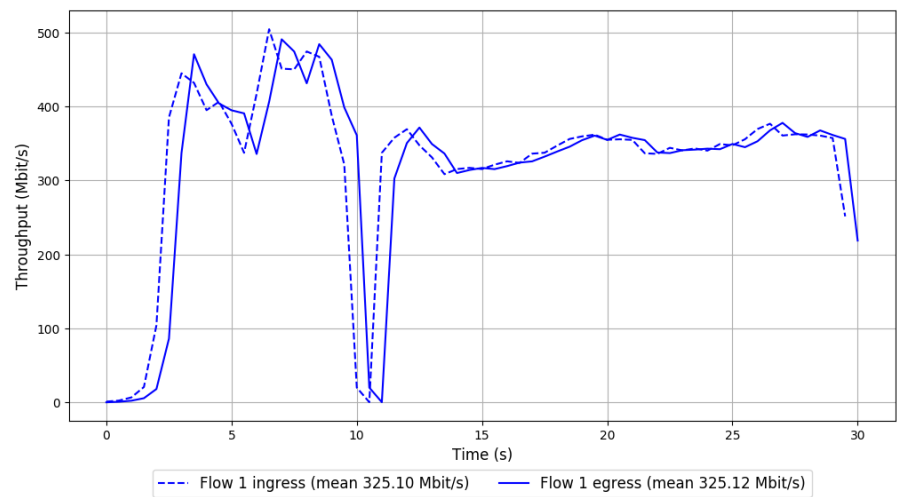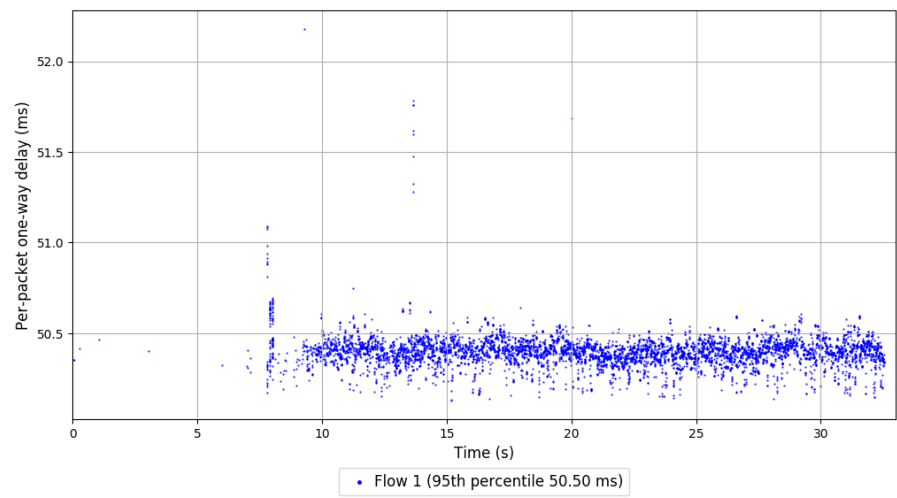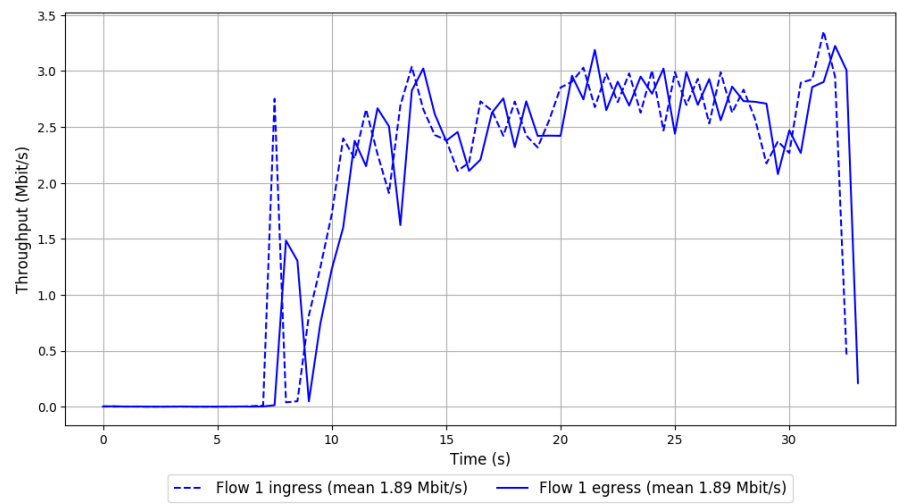
Run 10: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-06-01 17:13:52
End at: 2018-06-01 17:14:22
Local clock offset: -0.042 ms
Remote clock offset: -0.274 ms

# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 50.502 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 50.502 ms
Loss rate: 0.47%
```

Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-06-01 17:33:59
End at: 2018-06-01 17:34:29
Local clock offset: 0.196 ms
Remote clock offset: -0.15 ms


# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 54.233 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 54.233 ms
Loss rate: 0.46%
```
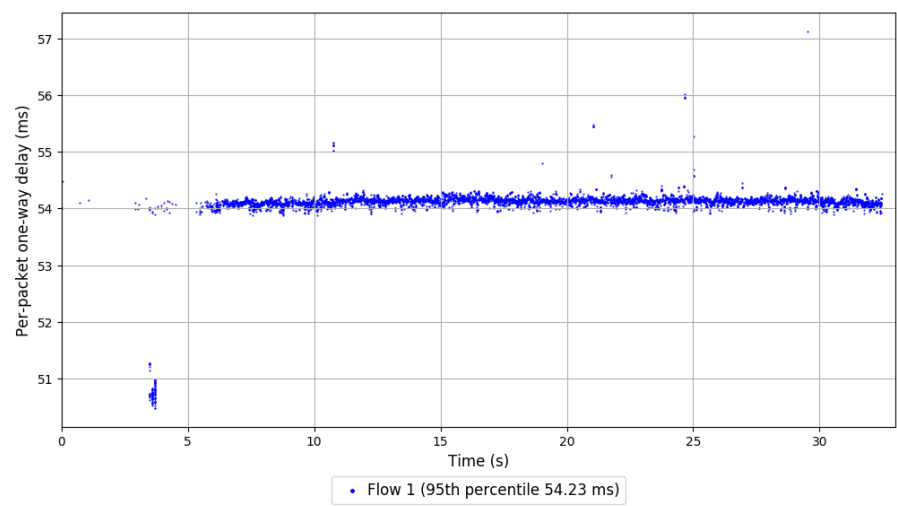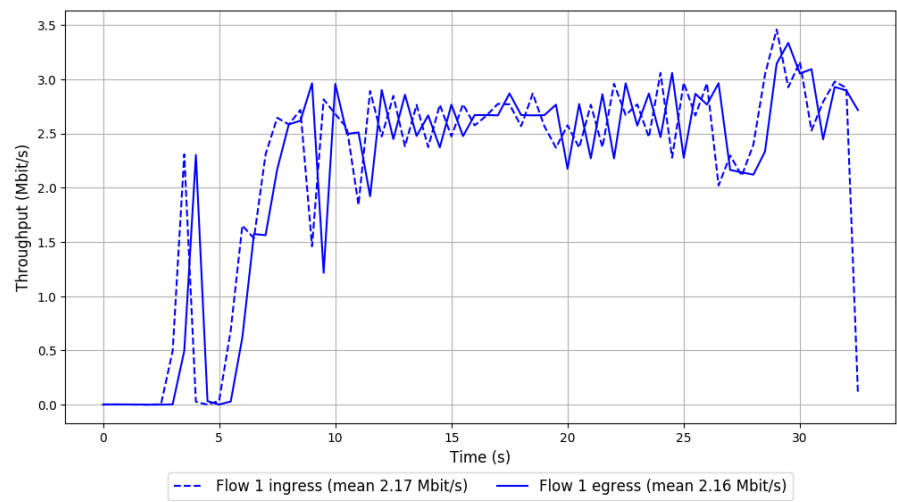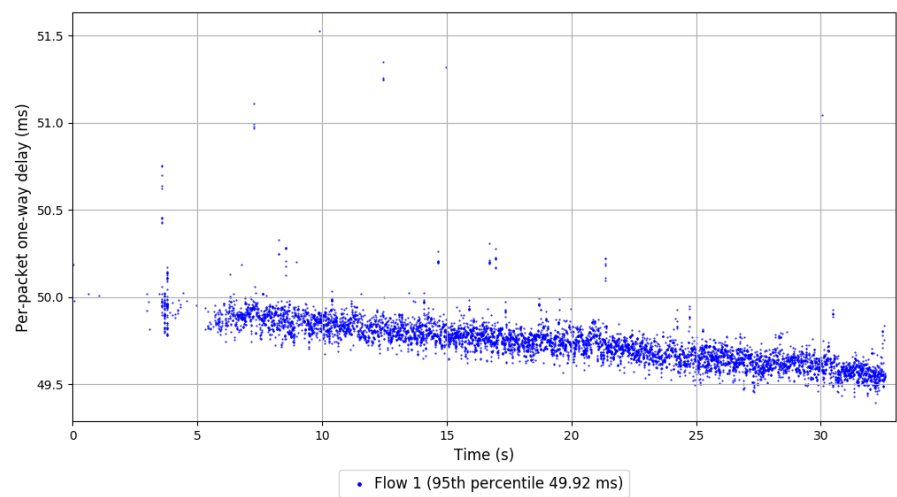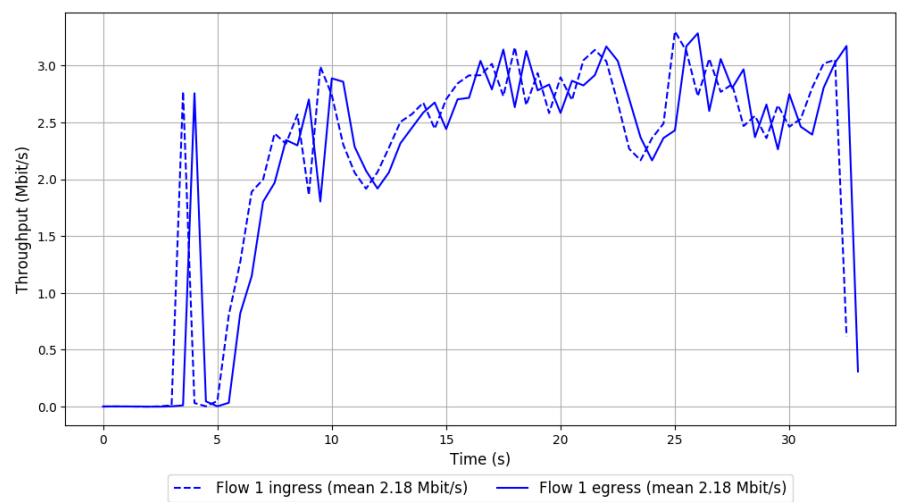
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-06-01 17:54:20
End at: 2018-06-01 17:54:50
Local clock offset: 9.107 ms
Remote clock offset: -0.161 ms


# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 49.922 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 49.922 ms
Loss rate: 0.36%
```
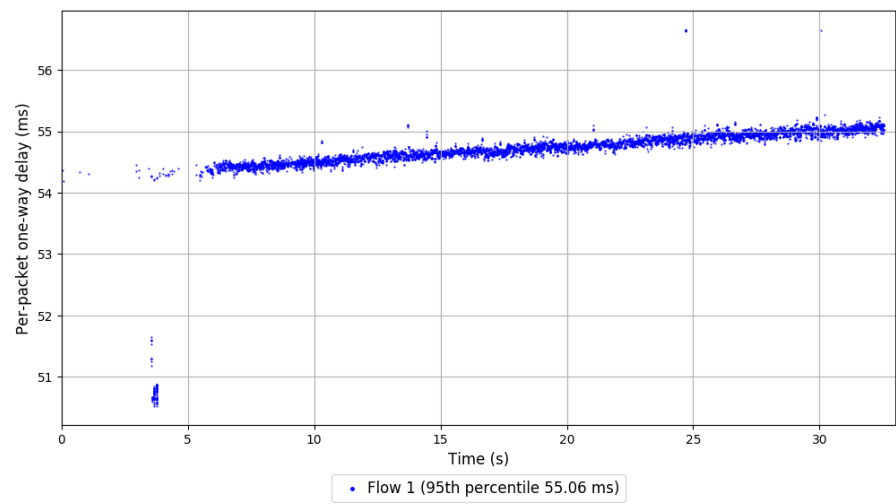
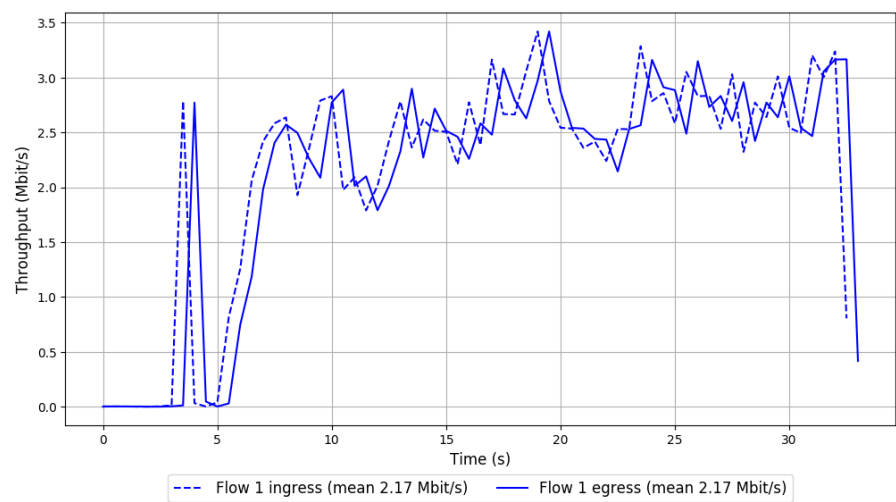Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-06-01 18:14:37
End at: 2018-06-01 18:15:07
Local clock offset: 18.361 ms
Remote clock offset: -0.053 ms


# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 55.057 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 55.057 ms
Loss rate: 0.49%
```

Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-06-01 18:35:15
End at: 2018-06-01 18:35:45
Local clock offset: 9.33 ms
Remote clock offset: 0.18 ms


# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 53.123 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 53.123 ms
Loss rate: 0.49%
```
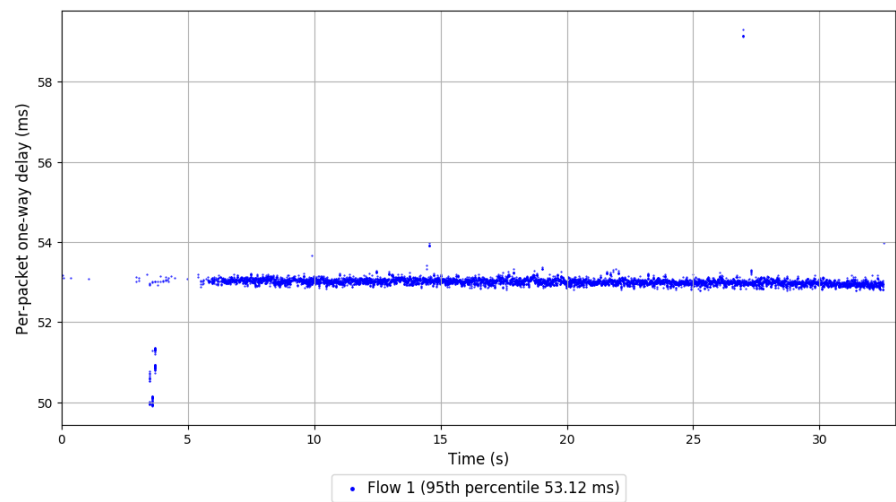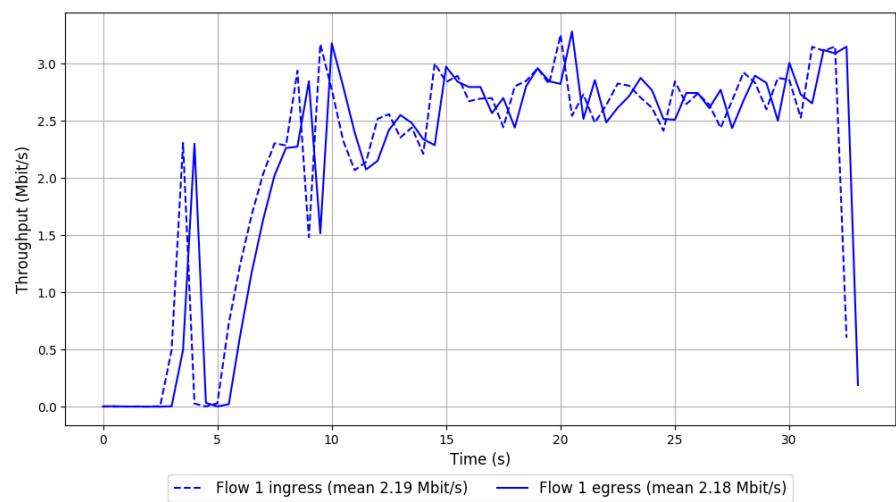
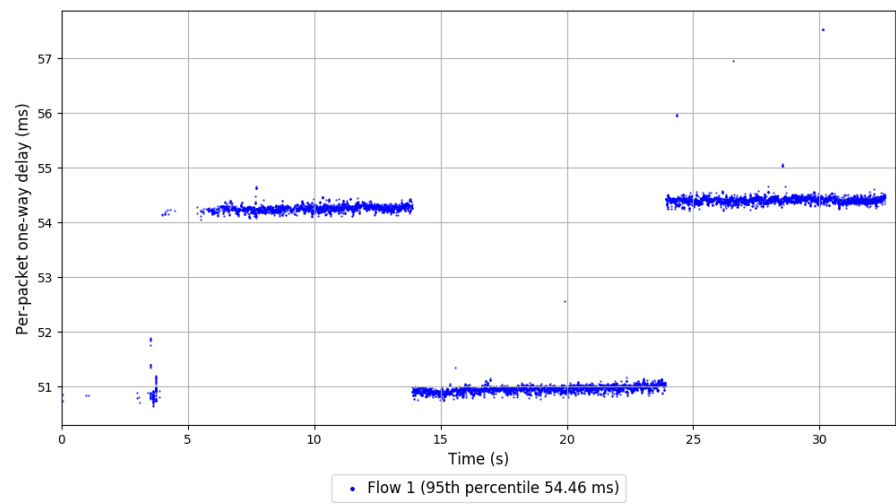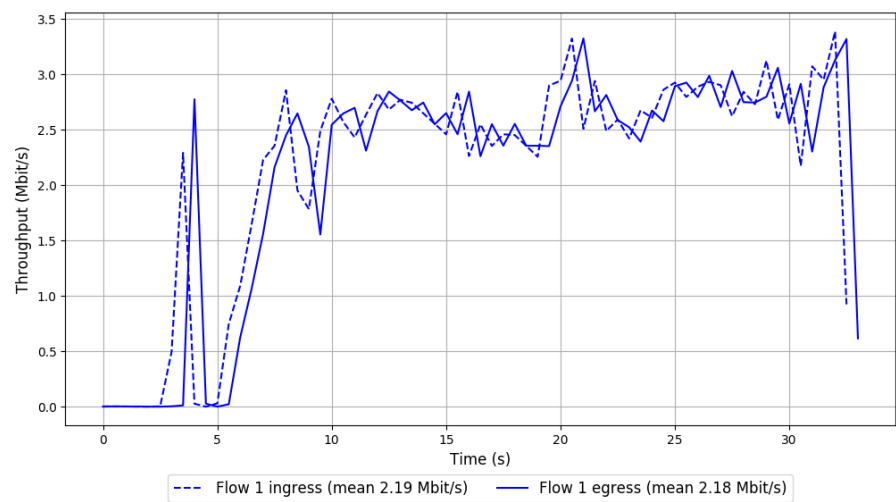Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-06-01 18:55:40
End at: 2018-06-01 18:56:10
Local clock offset: 7.791 ms
Remote clock offset: -0.281 ms


# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 54.457 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 54.457 ms
Loss rate: 0.43%
```

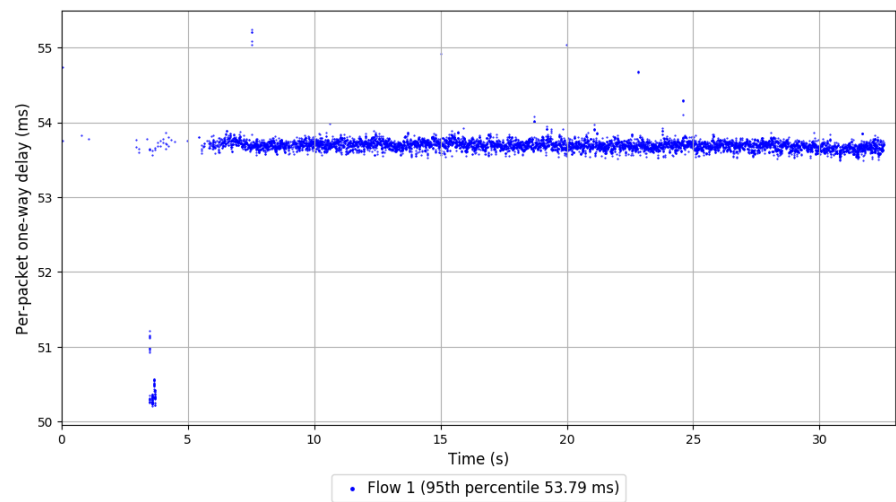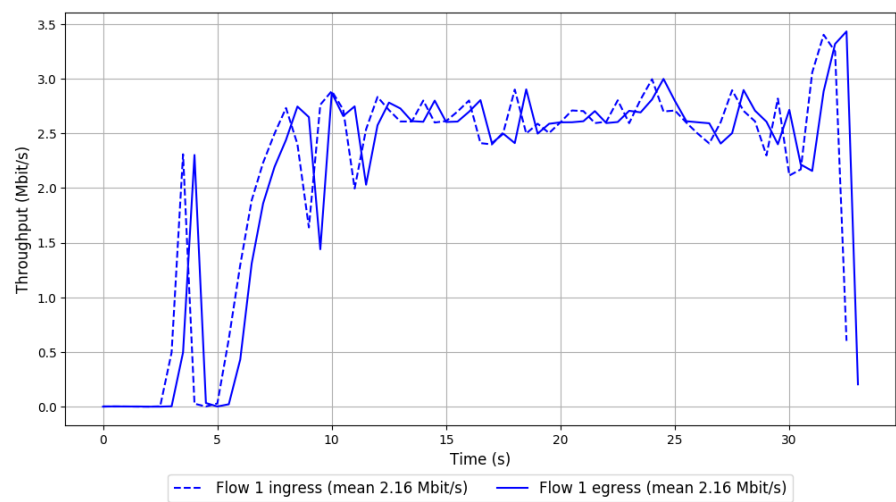Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-06-01 19:16:10
End at: 2018-06-01 19:16:40
Local clock offset: 5.58 ms
Remote clock offset: -0.257 ms


# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 53.791 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 53.791 ms
Loss rate: 0.49%
```

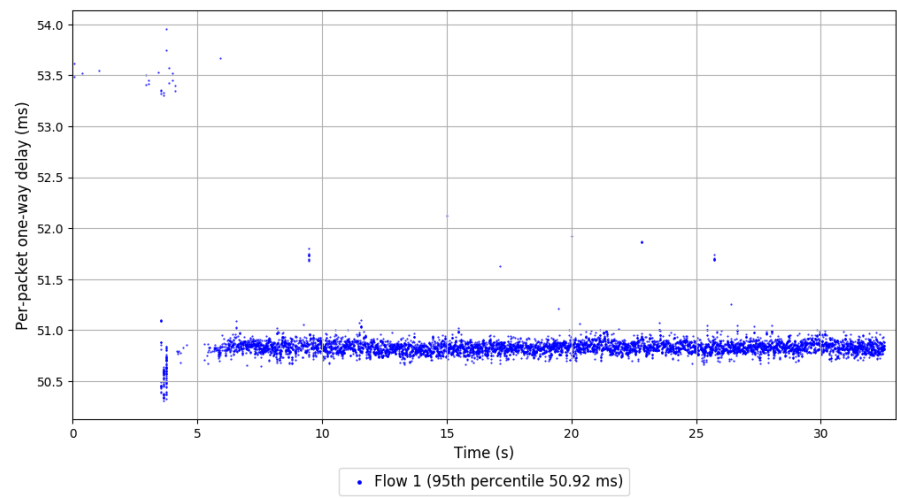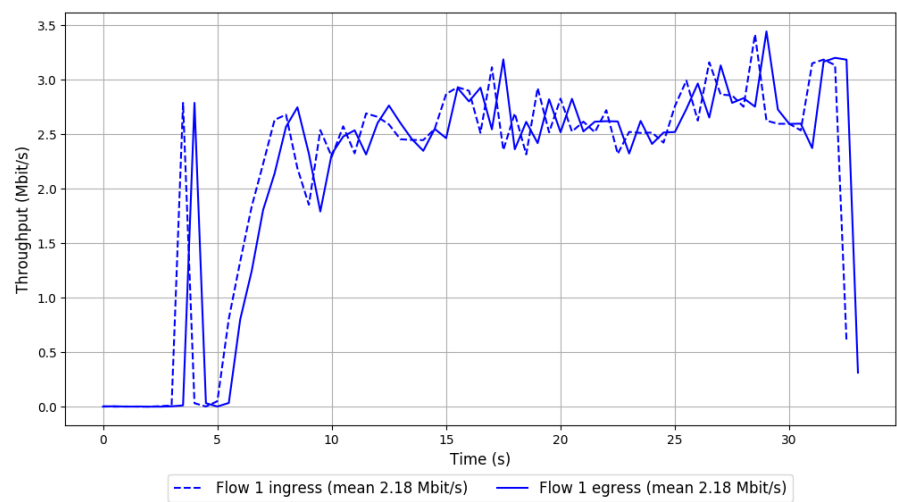## Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-06-01 19:36:49
End at: 2018-06-01 19:37:19
Local clock offset: 2.669 ms
Remote clock offset: -0.319 ms


# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 50.920 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 50.920 ms
Loss rate: 0.42%
```

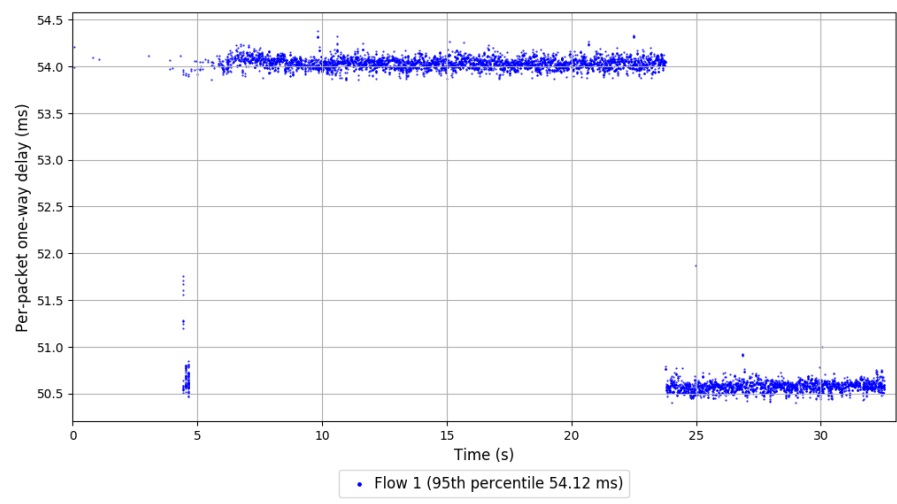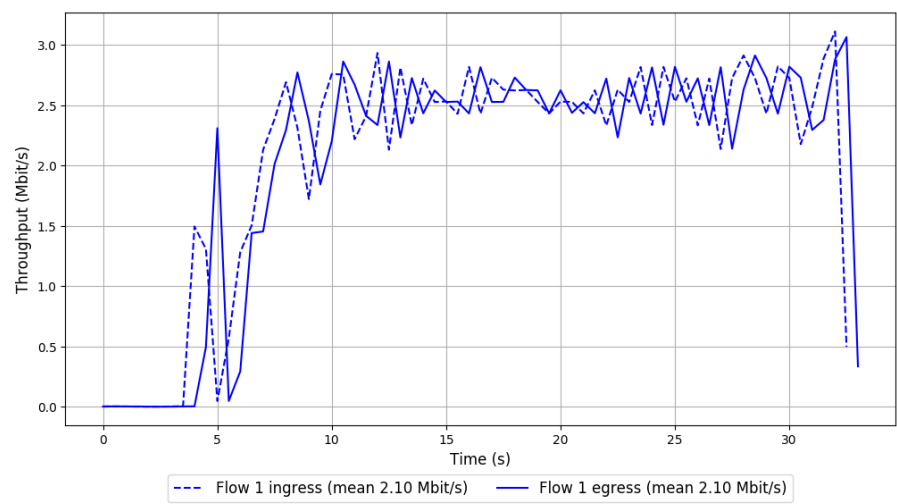Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-06-01 19:56:57
End at: 2018-06-01 19:57:27
Local clock offset: 3.365 ms
Remote clock offset: -0.383 ms


# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 54.115 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 54.115 ms
Loss rate: 0.36%
```

Run 9: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.10 Mbit/s)   Flow 1 egress (mean 2.10 Mbit/s)

Flow 1 (95th percentile 54.12 ms)

```
Run 10: Statistics of WebRTC media

Start at: 2018-06-01 20:17:17
End at: 2018-06-01 20:17:47
Local clock offset: 1.313 ms
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2018-06-01 21:53:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 53.813 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 53.813 ms
Loss rate: 0.43%
```

Run 10: Report of WebRTC media — Data Link