Pantheon Report
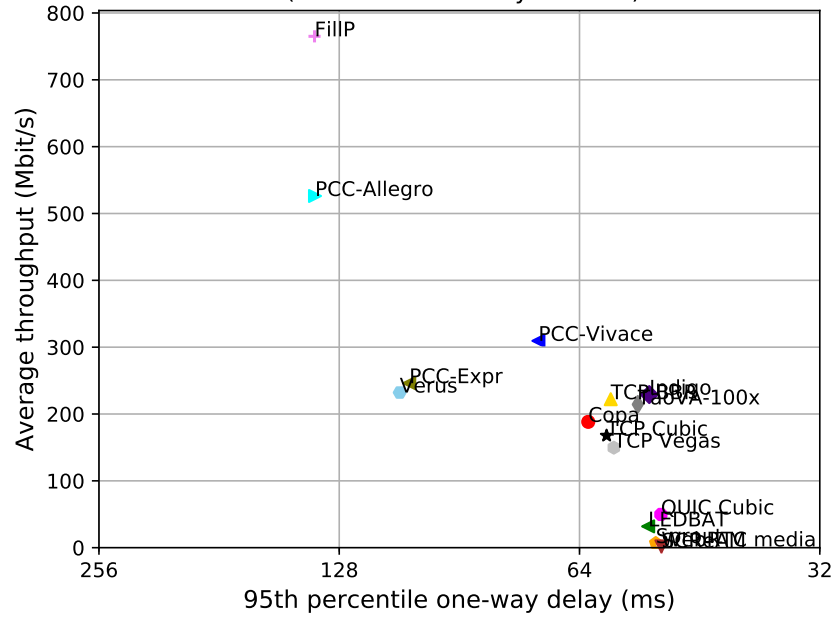
Generated at 2018-06-07 04:57:00 (UTC).

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

Repeated the test of 16 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

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

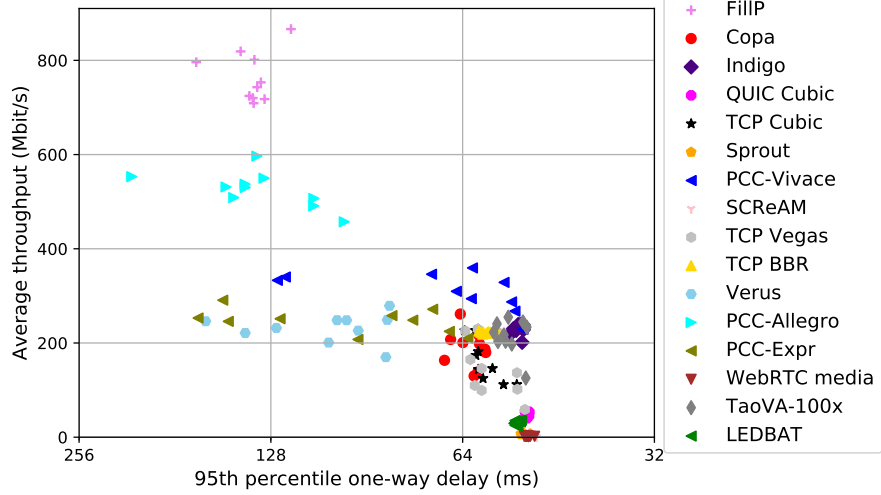NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

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

test from GCE London to GCE Iowa, 10 runs of 30s each per scheme

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	222.16	58.49	0.01
Copa	10	188.28	62.41	0.01
TCP Cubic	10	167.62	59.19	0.01
FillP	10	765.06	137.46	6.15
Indigo	10	229.06	52.34	0.00
LEDBAT	10	31.88	52.51	0.00
PCC-Allegro	10	526.19	137.26	0.98
PCC-Expr	10	246.15	104.61	0.21
QUIC Cubic	7	49.75	50.61	0.00
SCReAM	10	0.22	50.52	0.00
Sprout	10	7.00	51.37	0.00
TaoVA-100x	10	214.35	54.10	0.01
TCP Vegas	10	149.65	57.97	0.02
Verus	10	232.12	107.51	1.04
PCC-Vivace	10	309.48	72.06	0.10
WebRTC media	10	1.87	50.53	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2018-06-07 00:05:20
End at: 2018-06-07 00:05:50
Local clock offset: -0.038 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-06-07 03:37:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.85 Mbit/s
95th percentile per-packet one-way delay: 57.811 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 222.85 Mbit/s
95th percentile per-packet one-way delay: 57.811 ms
Loss rate: 0.07%
```
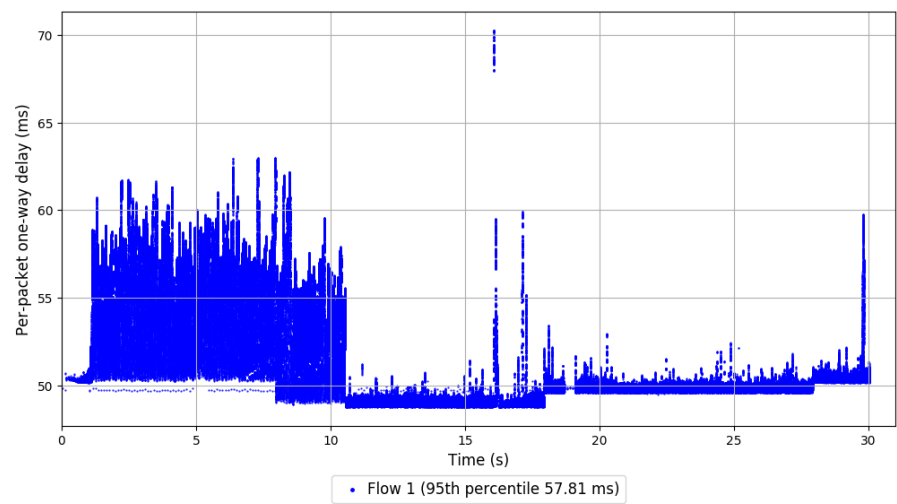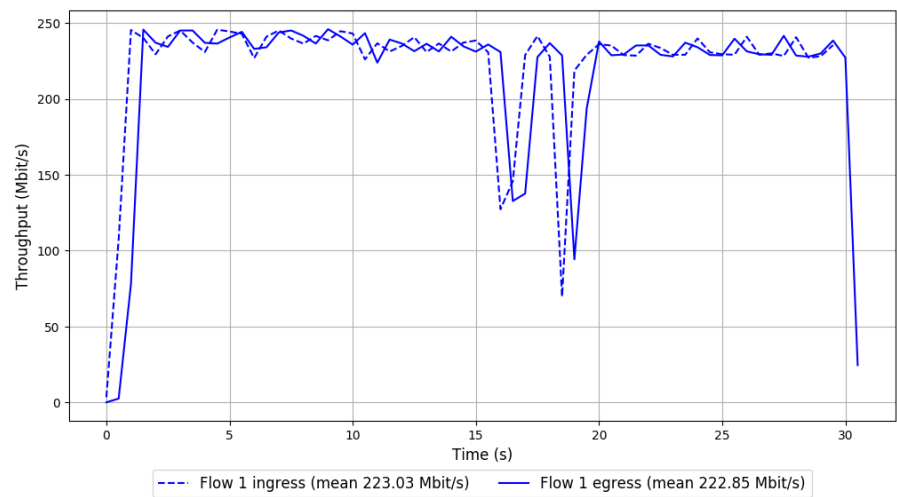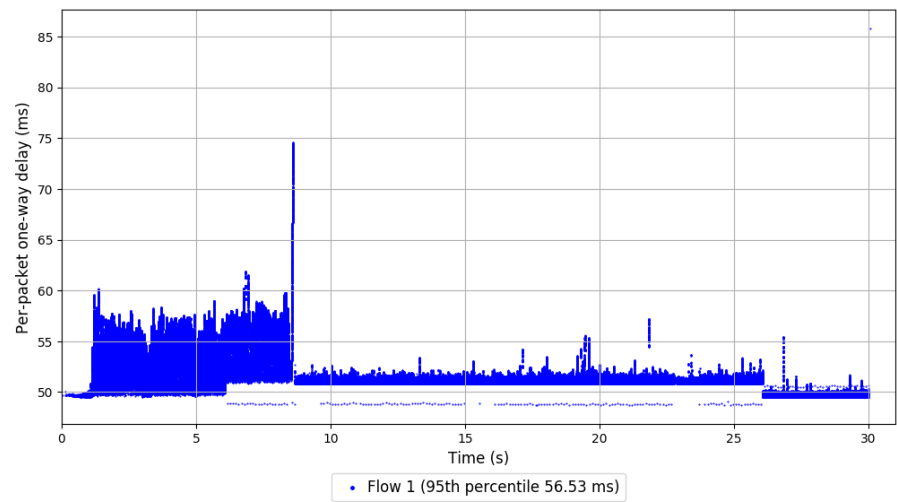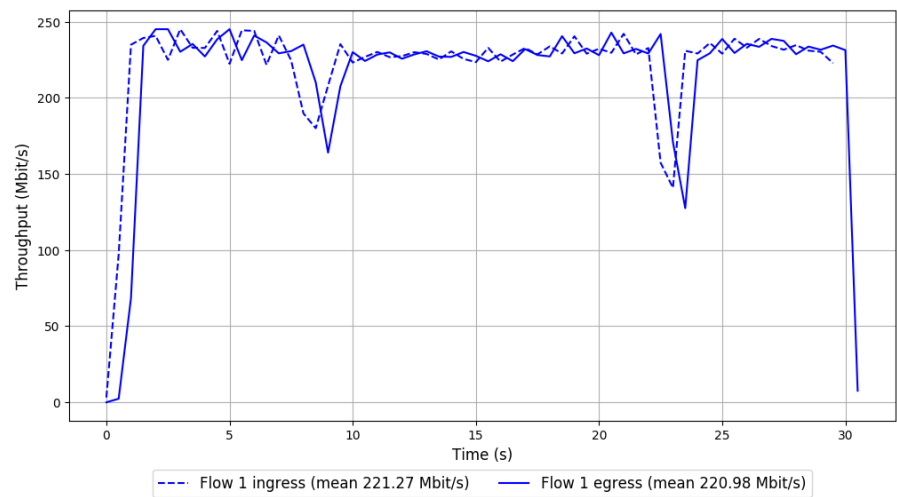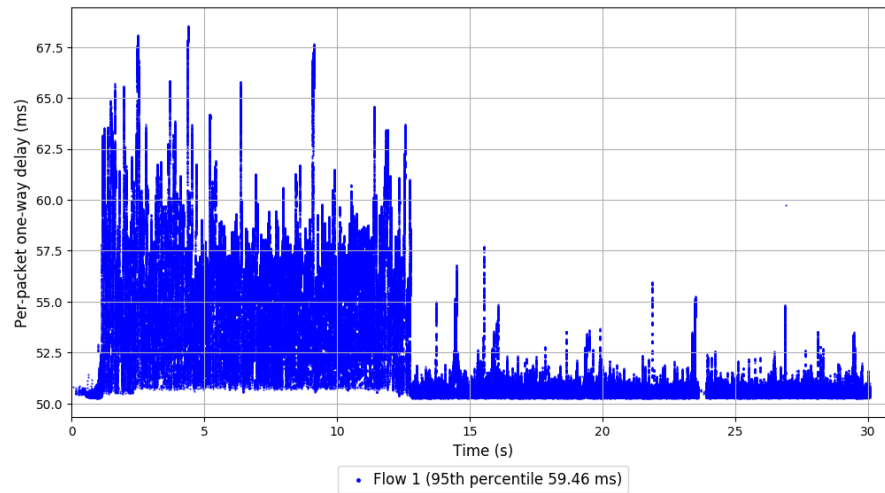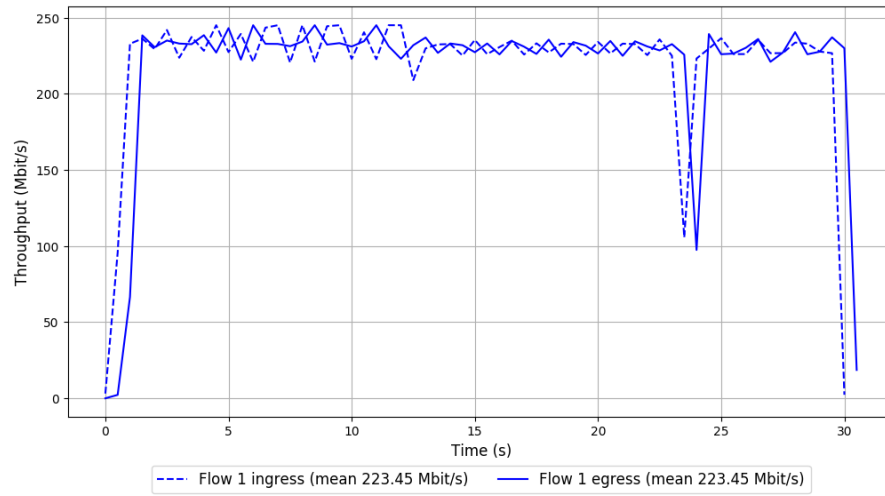
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-06-07 00:25:42
End at: 2018-06-07 00:26:12
Local clock offset: -0.045 ms
Remote clock offset: -0.066 ms


# Below is generated by plot.py at 2018-06-07 03:37:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.98 Mbit/s
95th percentile per-packet one-way delay: 56.532 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 220.98 Mbit/s
95th percentile per-packet one-way delay: 56.532 ms
Loss rate: 0.03%
```
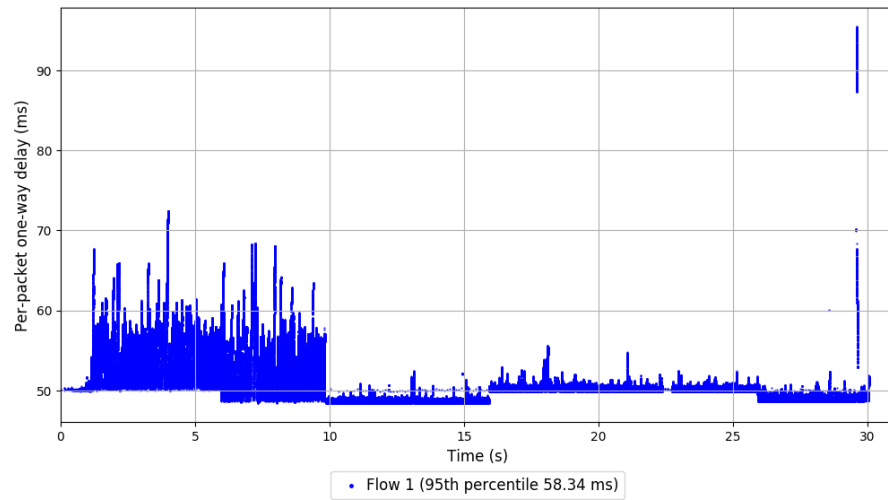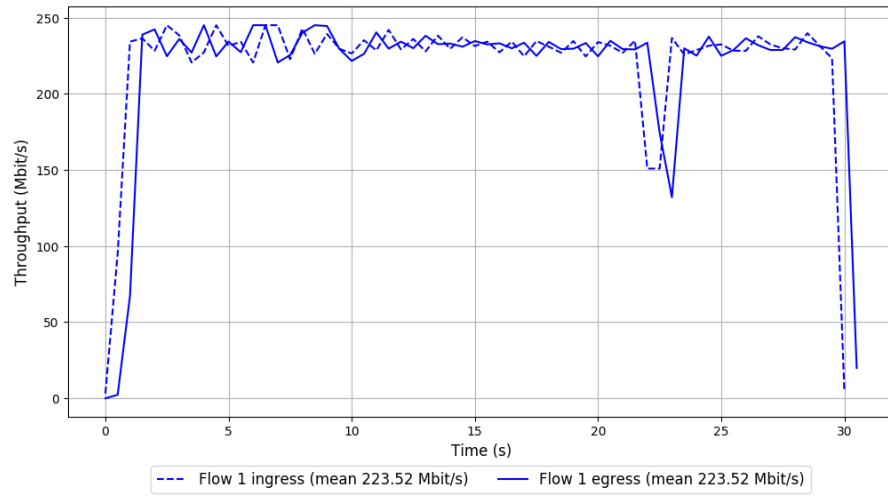
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 221.27 Mbit/s) — Flow 1 egress (mean 220.98 Mbit/s)

Flow 1 (95th percentile 56.53 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2018-06-07 00:45:45
End at: 2018-06-07 00:46:15
Local clock offset: -0.093 ms
Remote clock offset: -0.068 ms


# Below is generated by plot.py at 2018-06-07 03:37:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.45 Mbit/s
95th percentile per-packet one-way delay: 59.463 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 223.45 Mbit/s
95th percentile per-packet one-way delay: 59.463 ms
Loss rate: 0.00%
```

Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-06-07 01:06:12
End at: 2018-06-07 01:06:42
Local clock offset: 0.359 ms
Remote clock offset: -0.018 ms


# Below is generated by plot.py at 2018-06-07 03:37:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.52 Mbit/s
95th percentile per-packet one-way delay: 58.338 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 223.52 Mbit/s
95th percentile per-packet one-way delay: 58.338 ms
Loss rate: 0.00%
```
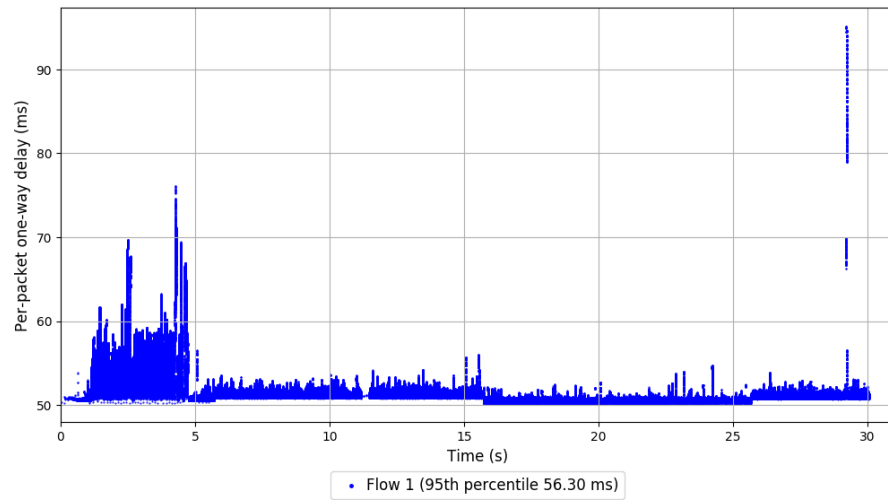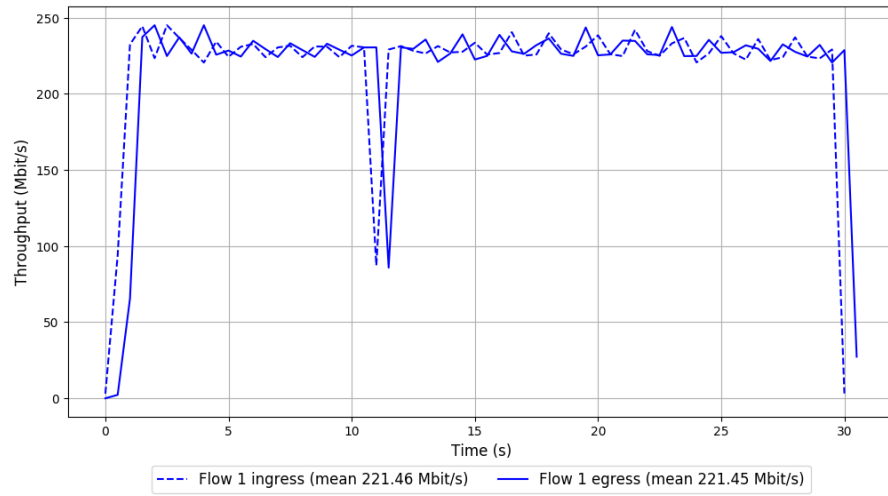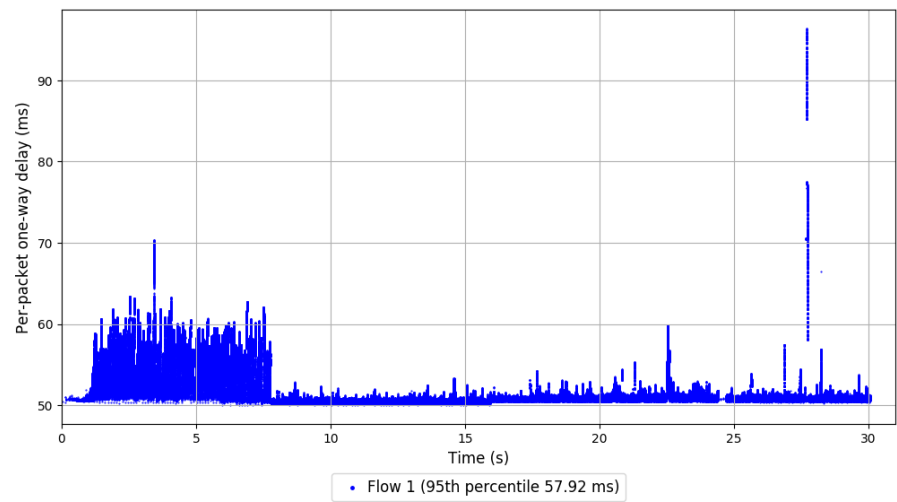
Run 4: Report of TCP BBR — Data Link

```
Run 5: Statistics of TCP BBR

Start at: 2018-06-07 01:26:51
End at: 2018-06-07 01:27:21
Local clock offset: 0.003 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2018-06-07 03:37:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.45 Mbit/s
95th percentile per-packet one-way delay: 56.301 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 221.45 Mbit/s
95th percentile per-packet one-way delay: 56.301 ms
Loss rate: 0.01%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 221.46 Mbit/s)   Flow 1 egress (mean 221.45 Mbit/s)
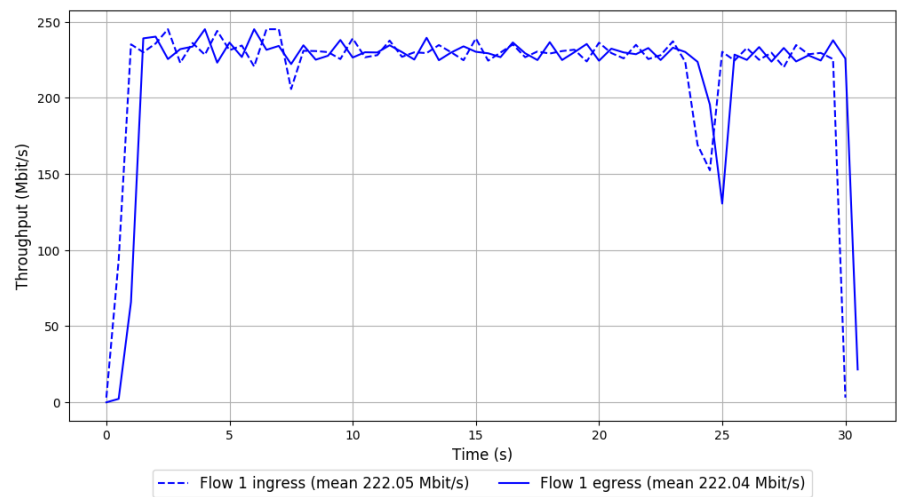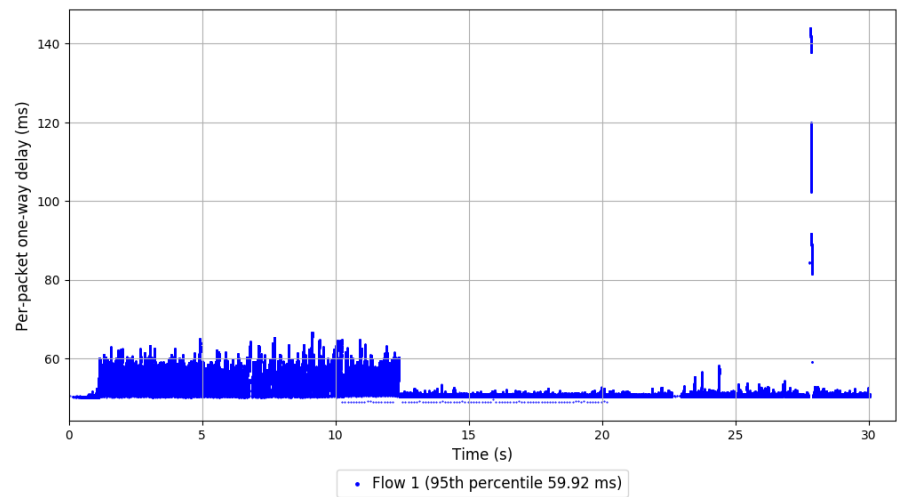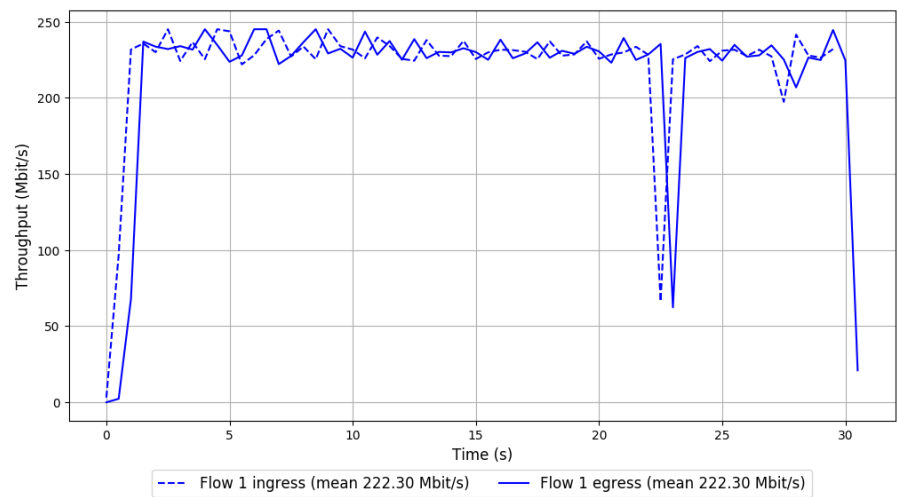

Flow 1 (95th percentile 56.30 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-06-07 01:47:11
End at: 2018-06-07 01:47:41
Local clock offset: -0.105 ms
Remote clock offset: -0.074 ms


# Below is generated by plot.py at 2018-06-07 03:37:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.04 Mbit/s
95th percentile per-packet one-way delay: 57.921 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 222.04 Mbit/s
95th percentile per-packet one-way delay: 57.921 ms
Loss rate: 0.01%
```

Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 222.05 Mbit/s) Flow 1 egress (mean 222.04 Mbit/s)

Flow 1 (95th percentile 57.92 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-06-07 02:07:37
End at: 2018-06-07 02:08:07
Local clock offset: -0.015 ms
Remote clock offset: -0.007 ms


# Below is generated by plot.py at 2018-06-07 03:37:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.30 Mbit/s
95th percentile per-packet one-way delay: 59.920 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 222.30 Mbit/s
95th percentile per-packet one-way delay: 59.920 ms
Loss rate: 0.00%
```

Run 7: Report of TCP BBR — Data Link

```
Run 8: Statistics of TCP BBR

Start at: 2018-06-07 02:28:06
End at: 2018-06-07 02:28:36
Local clock offset: 0.413 ms
Remote clock offset: 0.05 ms


# Below is generated by plot.py at 2018-06-07 03:37:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.38 Mbit/s
95th percentile per-packet one-way delay: 60.386 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.38 Mbit/s
95th percentile per-packet one-way delay: 60.386 ms
Loss rate: 0.00%
```
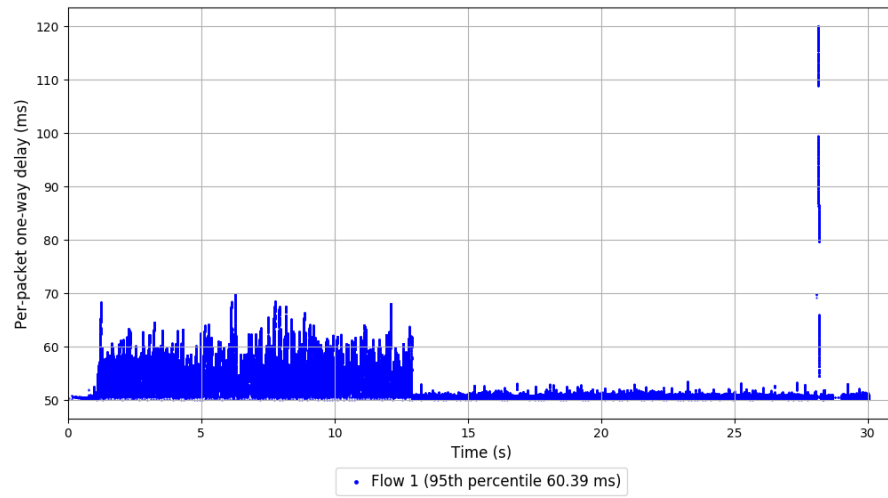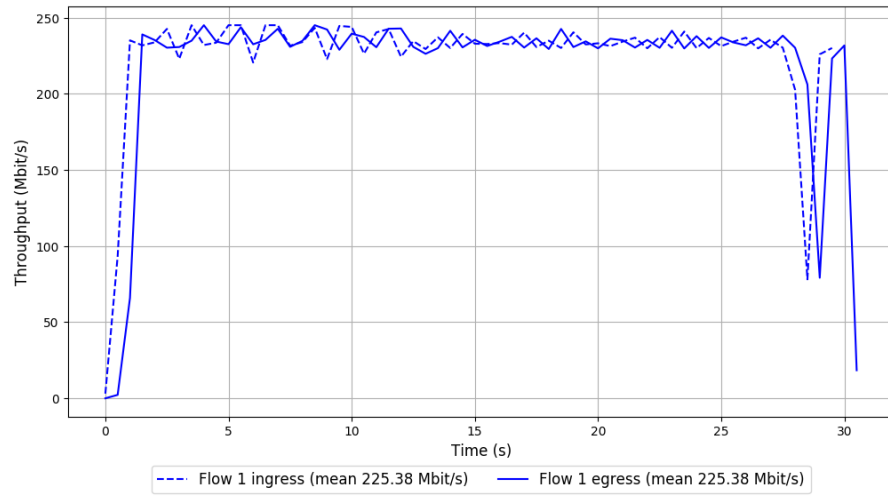
Run 8: Report of TCP BBR — Data Link

```
Run 9: Statistics of TCP BBR

Start at: 2018-06-07 02:48:15
End at: 2018-06-07 02:48:45
Local clock offset: -0.38 ms
Remote clock offset: -0.002 ms


# Below is generated by plot.py at 2018-06-07 03:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.87 Mbit/s
95th percentile per-packet one-way delay: 59.520 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 218.87 Mbit/s
95th percentile per-packet one-way delay: 59.520 ms
Loss rate: 0.02%
```
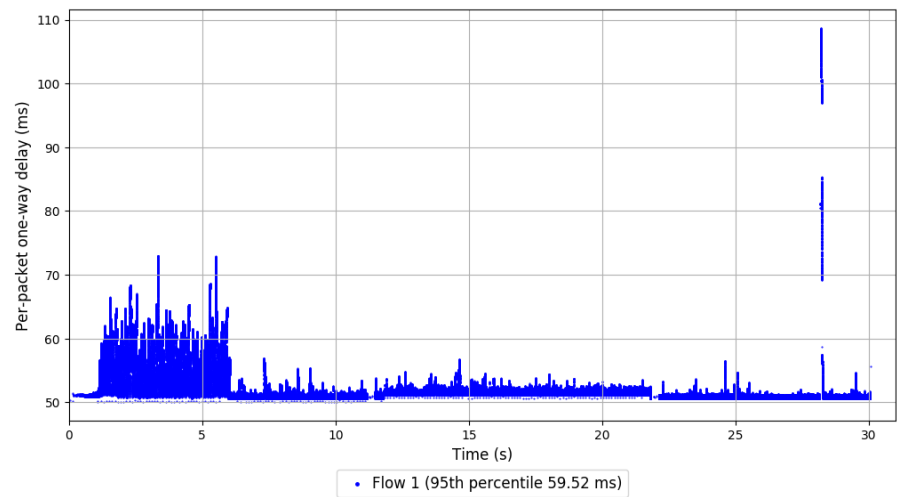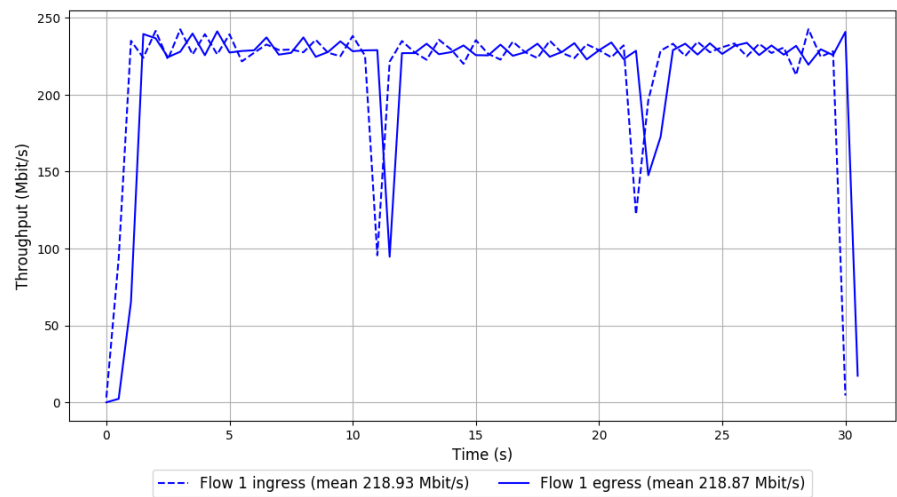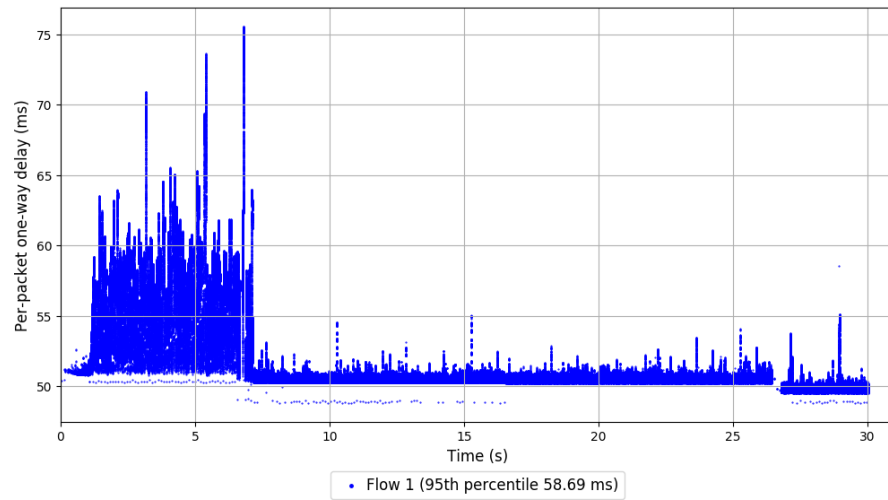
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 218.93 Mbit/s)   Flow 1 egress (mean 218.87 Mbit/s)

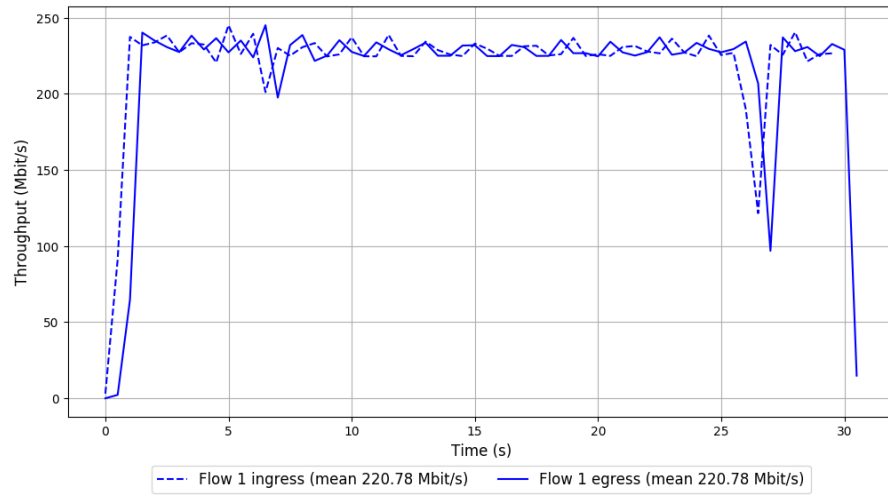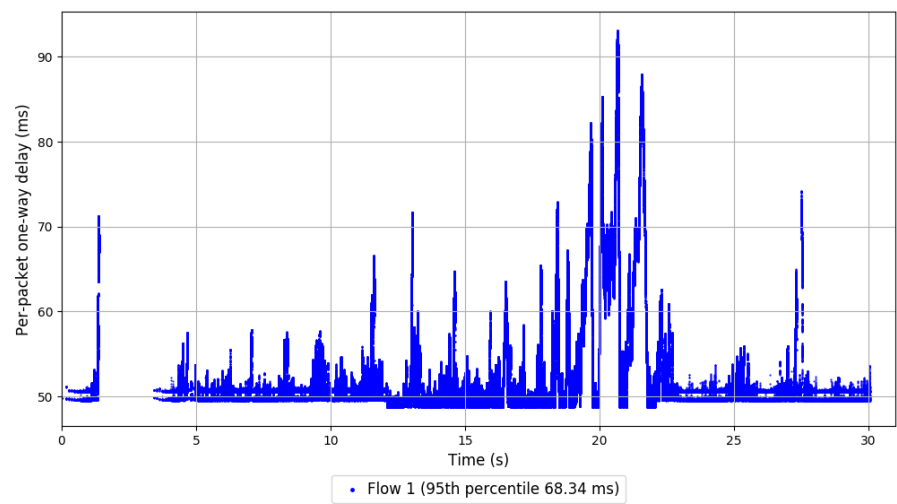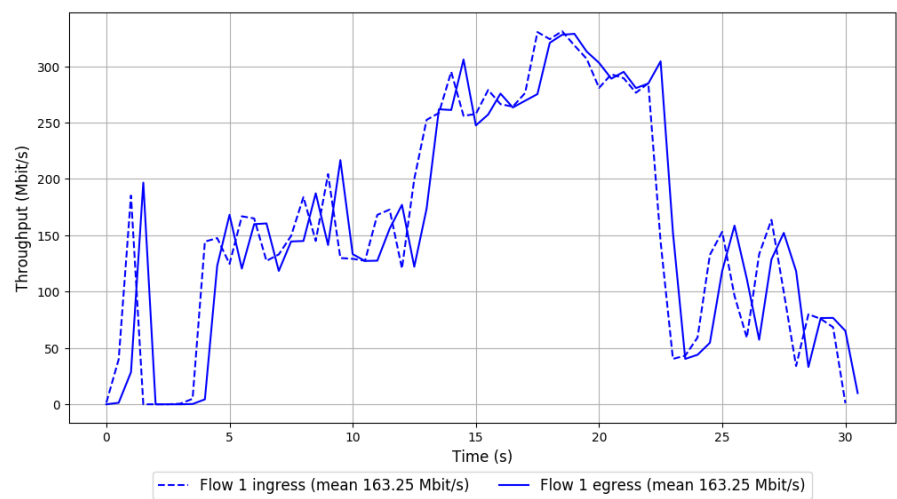
Flow 1 (95th percentile 59.52 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2018-06-07 03:08:41
End at: 2018-06-07 03:09:11
Local clock offset: -0.013 ms
Remote clock offset: -0.005 ms


# Below is generated by plot.py at 2018-06-07 03:40:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.78 Mbit/s
95th percentile per-packet one-way delay: 58.693 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 220.78 Mbit/s
95th percentile per-packet one-way delay: 58.693 ms
Loss rate: 0.00%
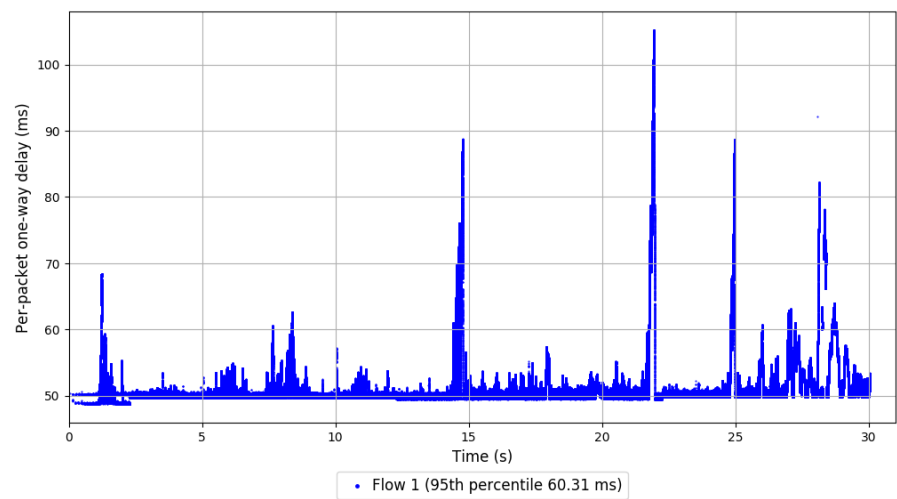```
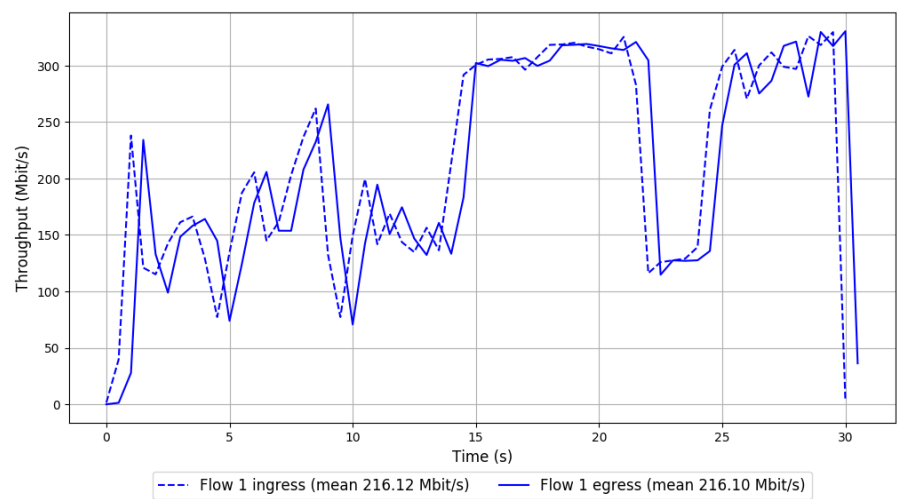
Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-06-07 00:09:06
End at: 2018-06-07 00:09:36
Local clock offset: -0.015 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2018-06-07 03:42:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 163.25 Mbit/s
95th percentile per-packet one-way delay: 68.336 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 163.25 Mbit/s
95th percentile per-packet one-way delay: 68.336 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link

Flow 1 ingress (mean 163.25 Mbit/s) — — — Flow 1 egress (mean 163.25 Mbit/s)

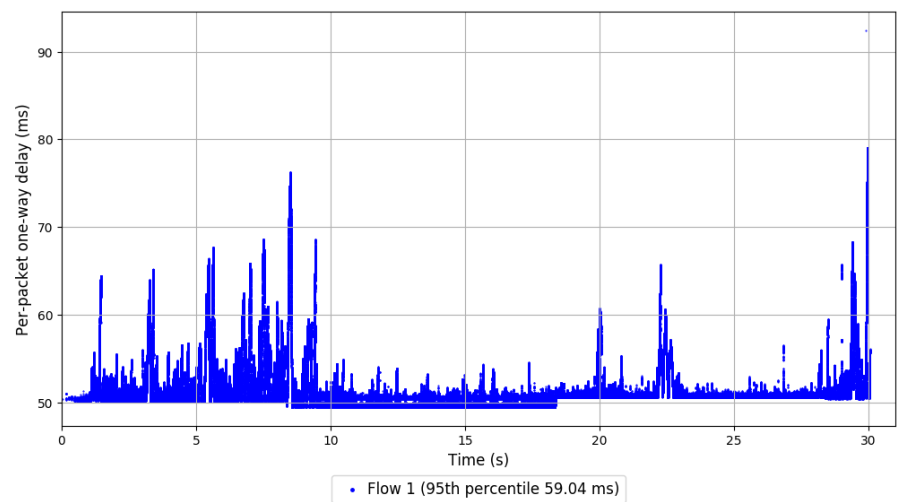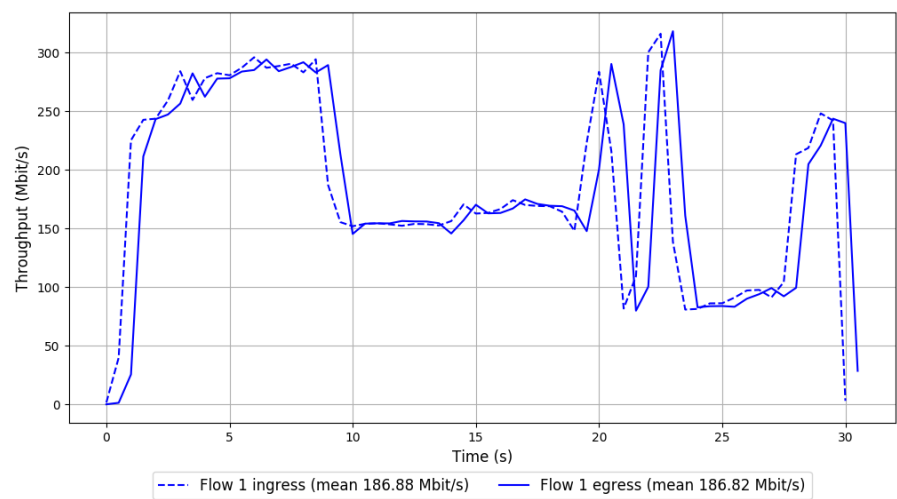• Flow 1 (95th percentile 68.34 ms)

```
Run 2: Statistics of Copa

Start at: 2018-06-07 00:29:25
End at: 2018-06-07 00:29:55
Local clock offset: -0.004 ms
Remote clock offset: -0.056 ms


# Below is generated by plot.py at 2018-06-07 03:43:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.10 Mbit/s
95th percentile per-packet one-way delay: 60.312 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 216.10 Mbit/s
95th percentile per-packet one-way delay: 60.312 ms
Loss rate: 0.01%
```

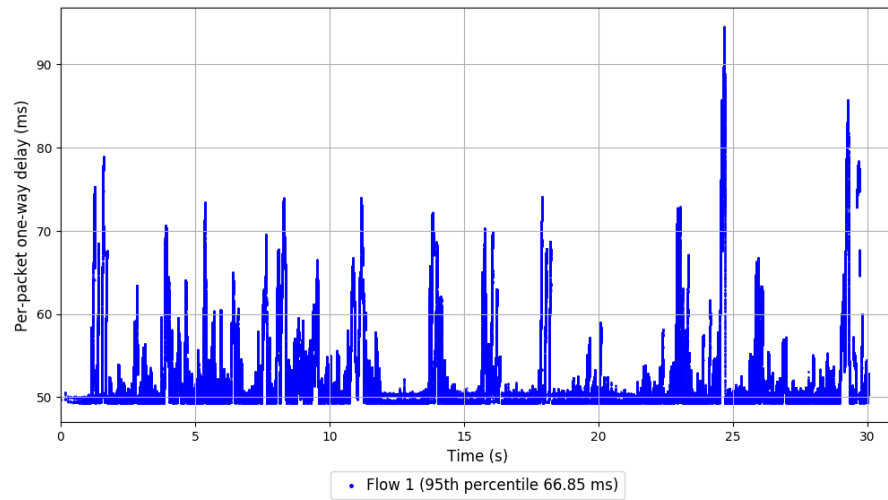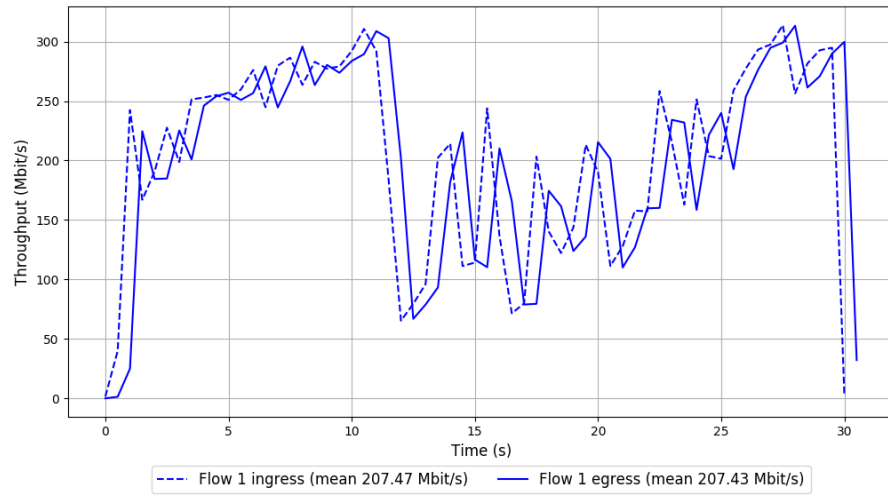Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-06-07 00:49:29
End at: 2018-06-07 00:49:59
Local clock offset: -0.044 ms
Remote clock offset: -0.117 ms


# Below is generated by plot.py at 2018-06-07 03:43:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.82 Mbit/s
95th percentile per-packet one-way delay: 59.038 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 186.82 Mbit/s
95th percentile per-packet one-way delay: 59.038 ms
Loss rate: 0.04%
```

Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 186.88 Mbit/s) Flow 1 egress (mean 186.82 Mbit/s)

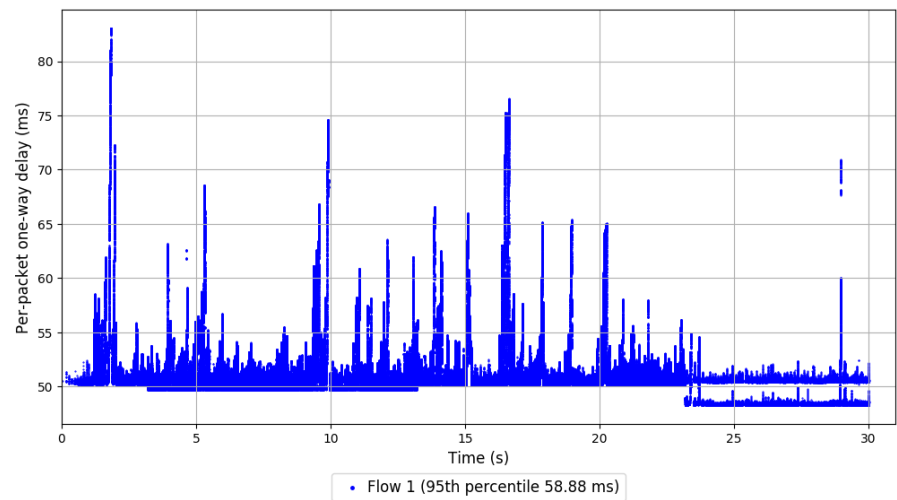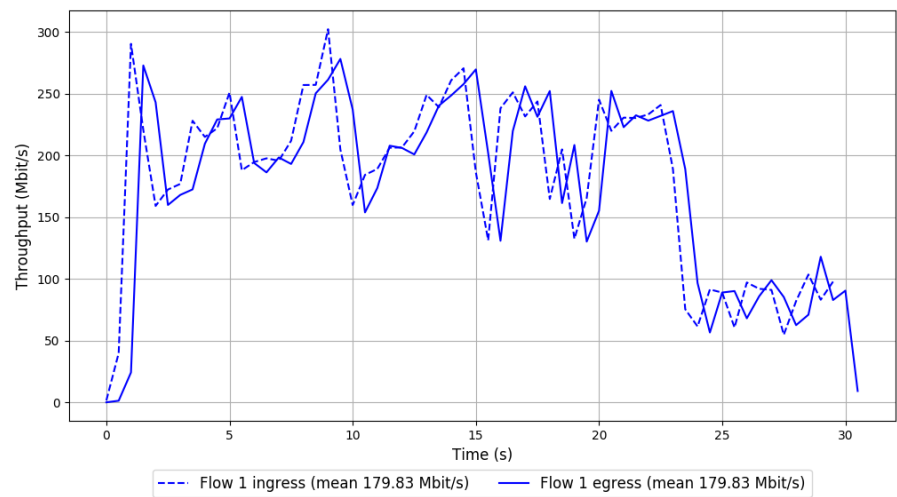Flow 1 (95th percentile 59.04 ms)

```
Run 4: Statistics of Copa

Start at: 2018-06-07 01:09:57
End at: 2018-06-07 01:10:27
Local clock offset: 0.391 ms
Remote clock offset: -0.038 ms


# Below is generated by plot.py at 2018-06-07 03:43:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.43 Mbit/s
95th percentile per-packet one-way delay: 66.846 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 207.43 Mbit/s
95th percentile per-packet one-way delay: 66.846 ms
Loss rate: 0.01%
```

Run 4: Report of Copa — Data Link

Flow 1 ingress (mean 207.47 Mbit/s)   Flow 1 egress (mean 207.43 Mbit/s)

Flow 1 (95th percentile 66.85 ms)

```
Run 5: Statistics of Copa

Start at: 2018-06-07 01:30:34
End at: 2018-06-07 01:31:04
Local clock offset: 0.364 ms
Remote clock offset: -0.076 ms


# Below is generated by plot.py at 2018-06-07 03:43:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.83 Mbit/s
95th percentile per-packet one-way delay: 58.875 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 179.83 Mbit/s
95th percentile per-packet one-way delay: 58.875 ms
Loss rate: 0.00%
```
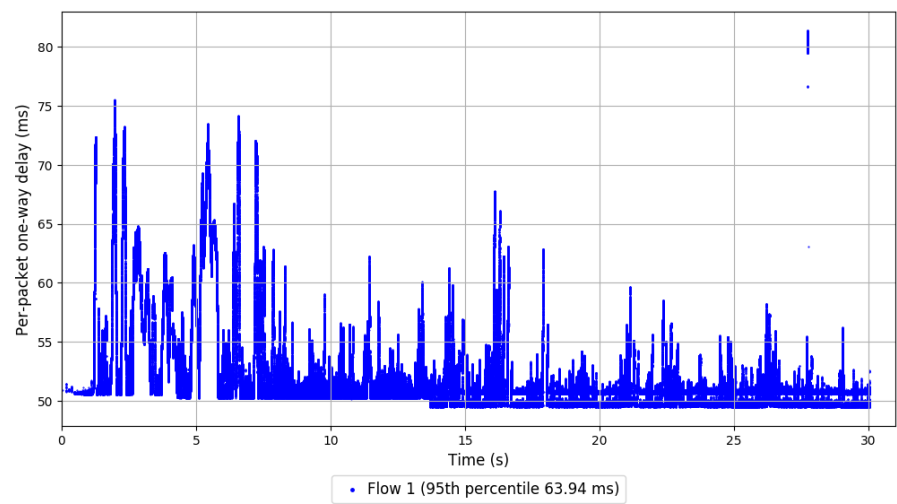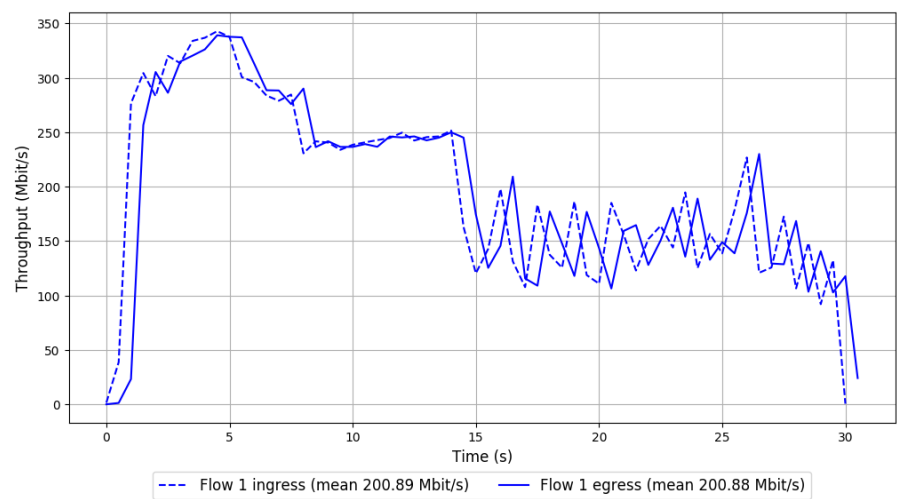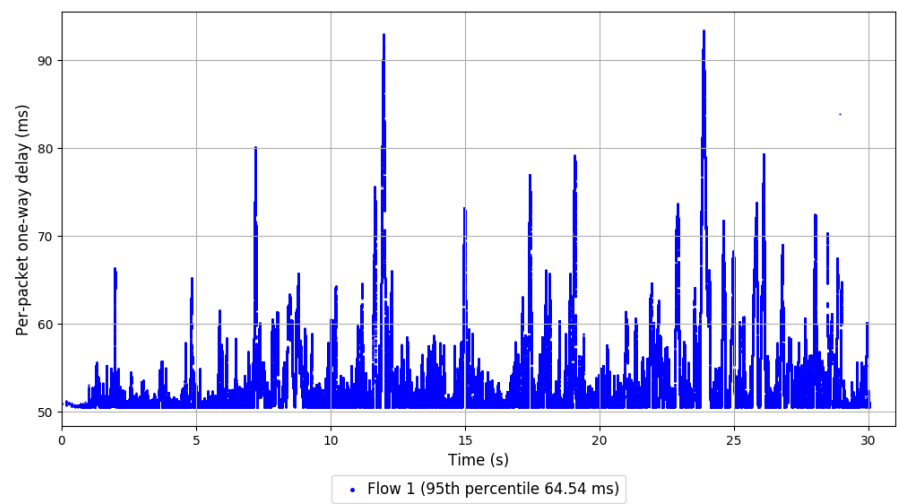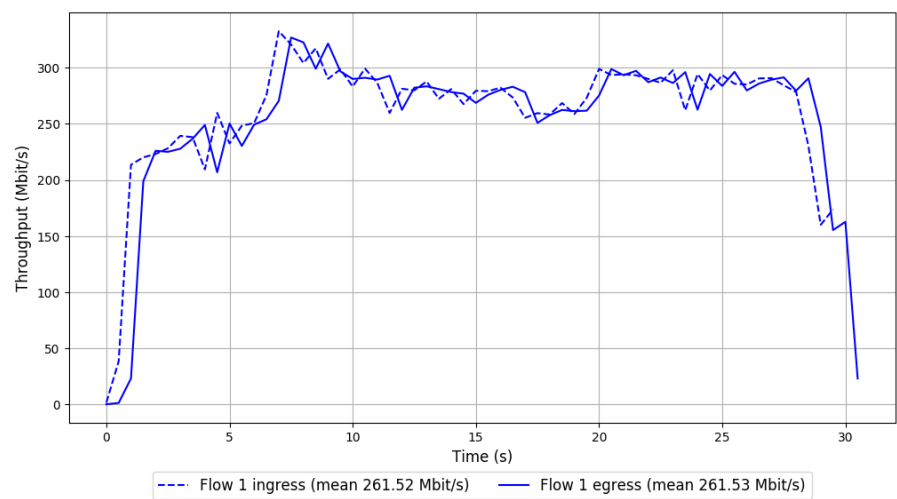
Run 5: Report of Copa — Data Link

Flow 1 ingress (mean 179.83 Mbit/s) --- Flow 1 egress (mean 179.83 Mbit/s)

Flow 1 (95th percentile 58.88 ms)

```
Run 6: Statistics of Copa

Start at: 2018-06-07 01:50:53
End at: 2018-06-07 01:51:23
Local clock offset: -0.107 ms
Remote clock offset: -0.06 ms


# Below is generated by plot.py at 2018-06-07 03:43:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.88 Mbit/s
95th percentile per-packet one-way delay: 63.941 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 200.88 Mbit/s
95th percentile per-packet one-way delay: 63.941 ms
Loss rate: 0.01%
```

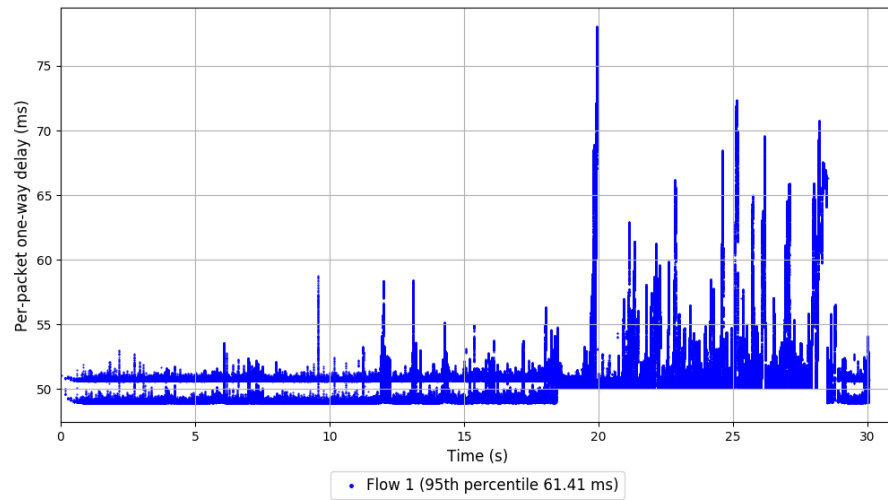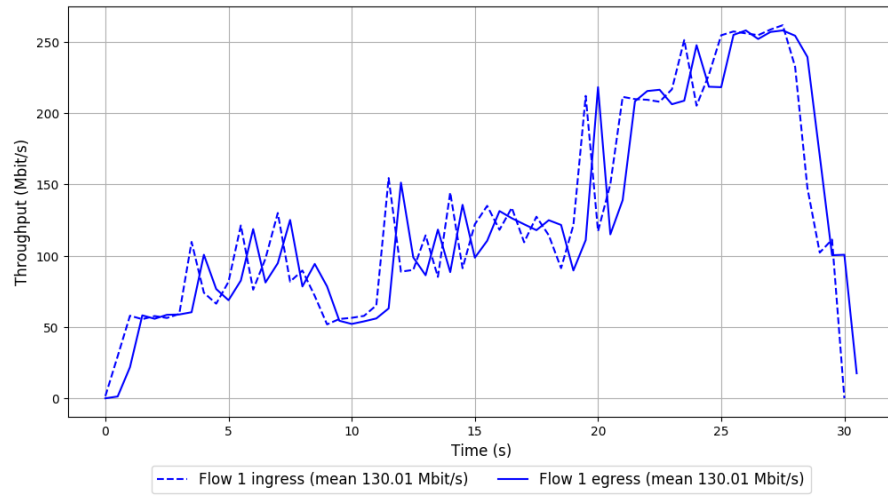## Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-06-07 02:11:20
End at: 2018-06-07 02:11:50
Local clock offset: 0.028 ms
Remote clock offset: -0.001 ms


# Below is generated by plot.py at 2018-06-07 03:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 261.53 Mbit/s
95th percentile per-packet one-way delay: 64.542 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 261.53 Mbit/s
95th percentile per-packet one-way delay: 64.542 ms
Loss rate: 0.00%
```

Run 7: Report of Copa — Data Link

```
Run 8: Statistics of Copa

Start at: 2018-06-07 02:31:49
End at: 2018-06-07 02:32:19
Local clock offset: 0.036 ms
Remote clock offset: -0.007 ms


# Below is generated by plot.py at 2018-06-07 03:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 130.01 Mbit/s
95th percentile per-packet one-way delay: 61.406 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 130.01 Mbit/s
95th percentile per-packet one-way delay: 61.406 ms
Loss rate: 0.00%
```
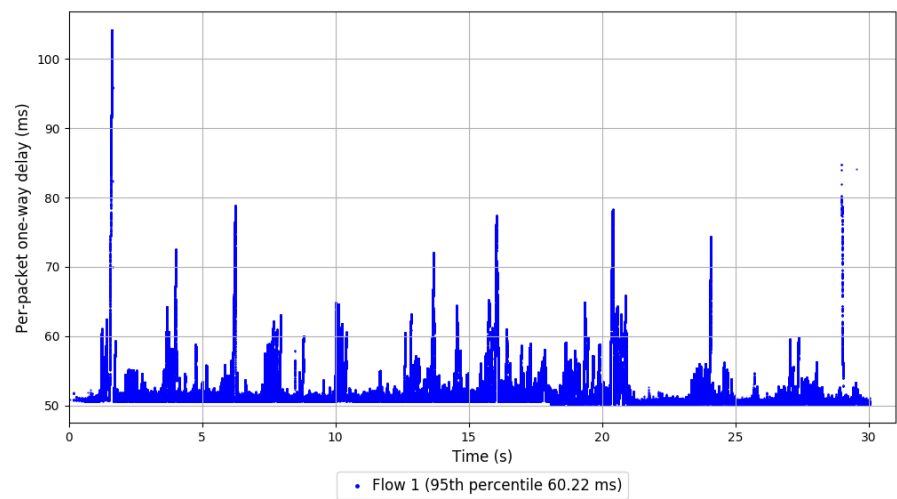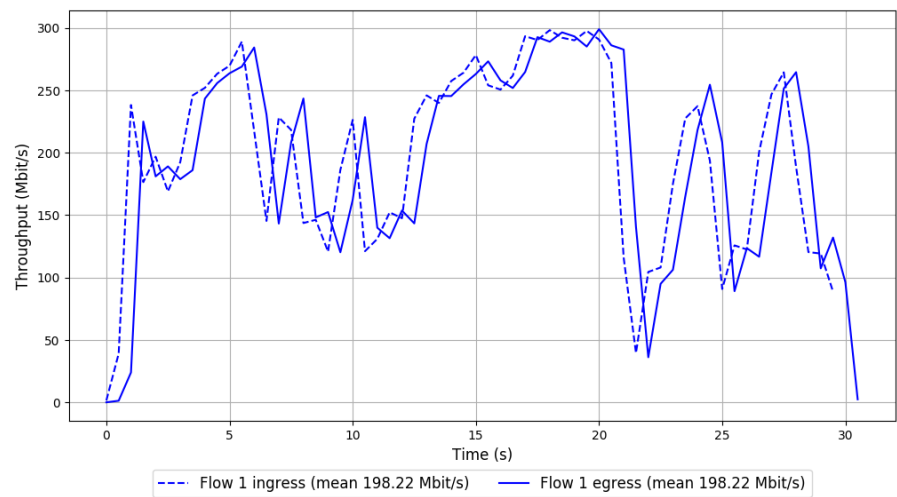
Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 130.01 Mbit/s)   Flow 1 egress (mean 130.01 Mbit/s)

• Flow 1 (95th percentile 61.41 ms)

```
Run 9: Statistics of Copa

Start at: 2018-06-07 02:51:59
End at: 2018-06-07 02:52:29
Local clock offset: -0.035 ms
Remote clock offset: 0.066 ms


# Below is generated by plot.py at 2018-06-07 03:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 198.22 Mbit/s
95th percentile per-packet one-way delay: 60.216 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 198.22 Mbit/s
95th percentile per-packet one-way delay: 60.216 ms
Loss rate: 0.00%
```
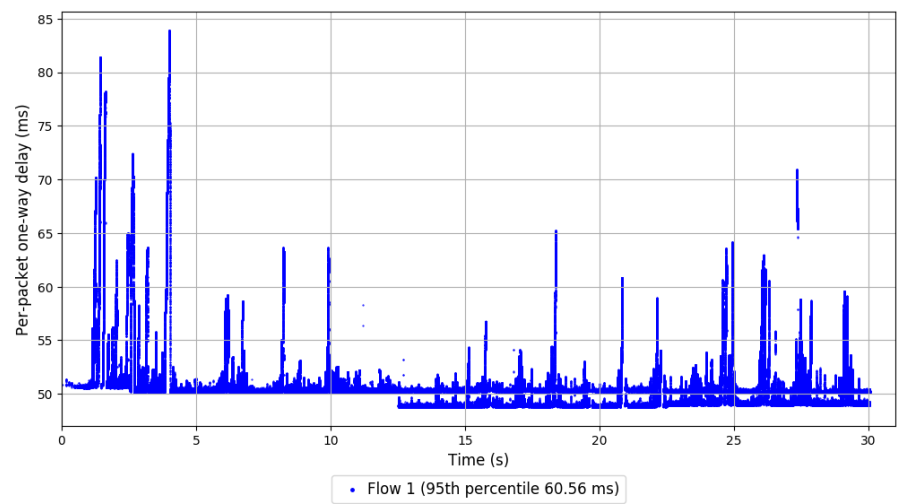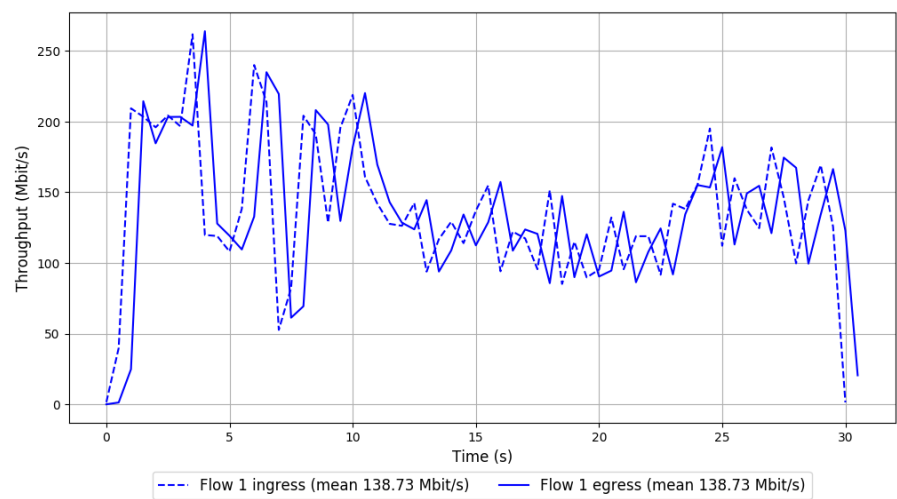
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-06-07 03:12:25
End at: 2018-06-07 03:12:55
Local clock offset: -0.014 ms
Remote clock offset: -0.01 ms


# Below is generated by plot.py at 2018-06-07 03:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 138.73 Mbit/s
95th percentile per-packet one-way delay: 60.564 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 138.73 Mbit/s
95th percentile per-packet one-way delay: 60.564 ms
Loss rate: 0.00%
```

Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-06-07 00:10:24
End at: 2018-06-07 00:10:54
Local clock offset: 0.34 ms
Remote clock offset: -0.025 ms


# Below is generated by plot.py at 2018-06-07 03:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 145.91 Mbit/s
95th percentile per-packet one-way delay: 57.459 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 145.91 Mbit/s
95th percentile per-packet one-way delay: 57.459 ms
Loss rate: 0.00%
```
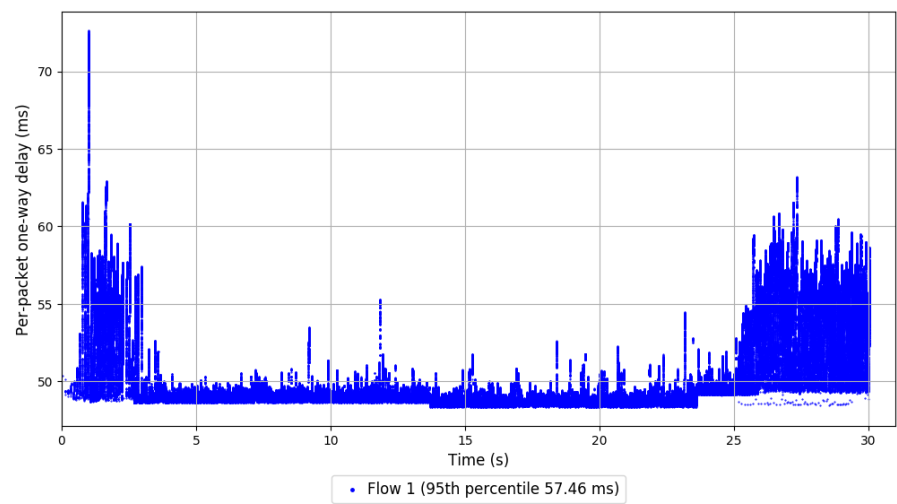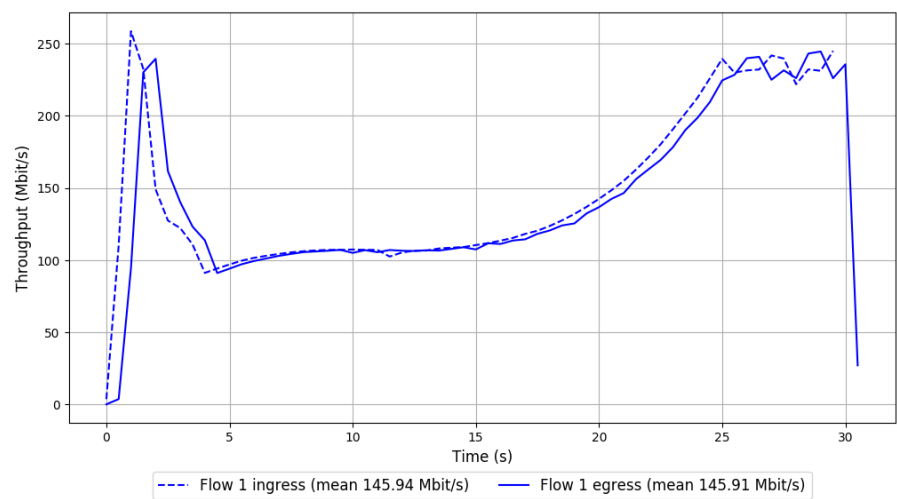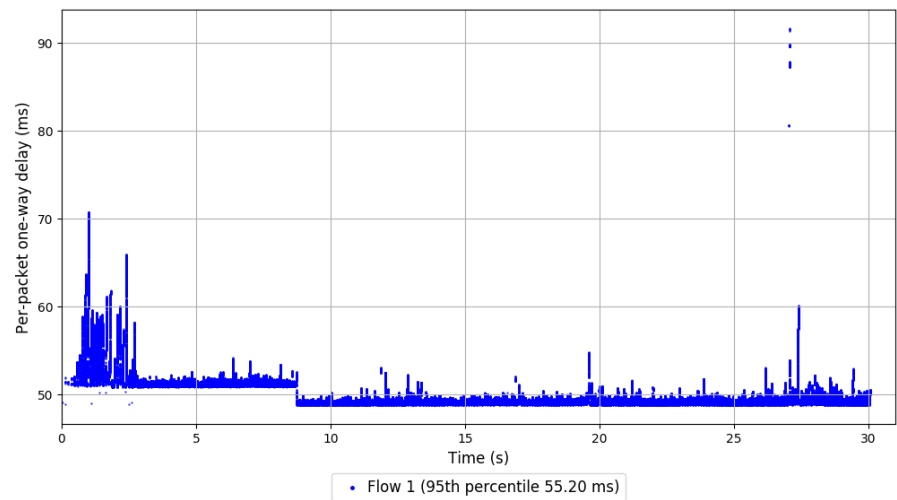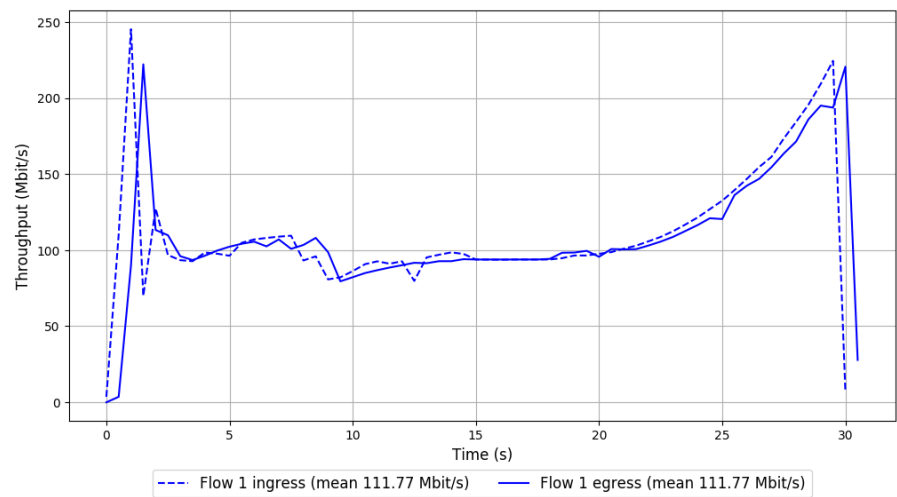
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 145.94 Mbit/s)   Flow 1 egress (mean 145.91 Mbit/s)
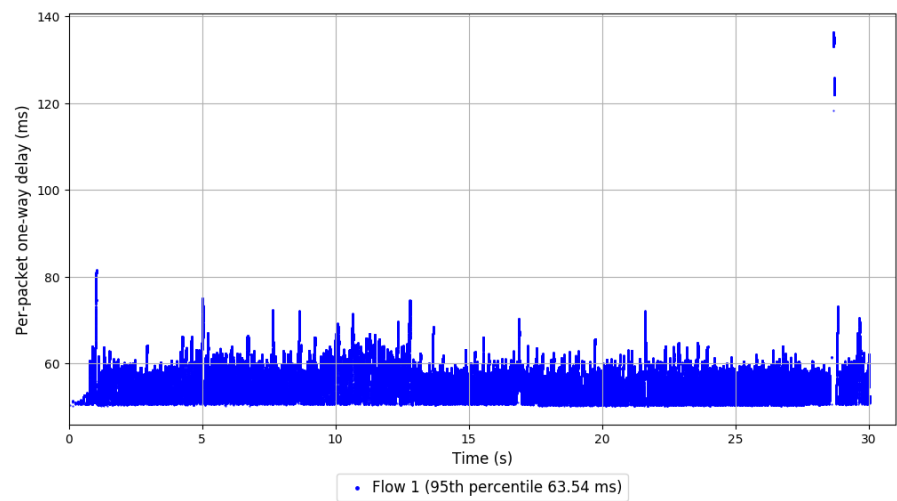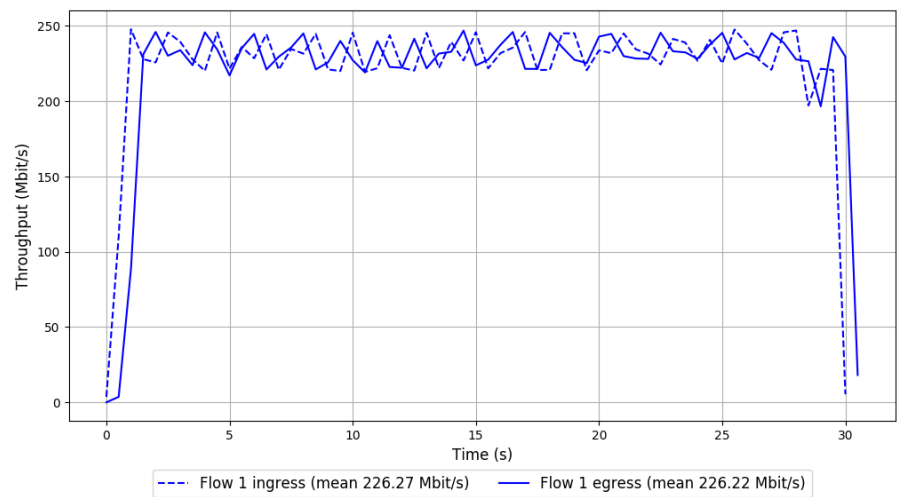

Flow 1 (95th percentile 57.46 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2018-06-07 00:30:49
End at: 2018-06-07 00:31:19
Local clock offset: -0.042 ms
Remote clock offset: -0.041 ms


# Below is generated by plot.py at 2018-06-07 03:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.77 Mbit/s
95th percentile per-packet one-way delay: 55.203 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 111.77 Mbit/s
95th percentile per-packet one-way delay: 55.203 ms
Loss rate: 0.00%
```

Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 111.77 Mbit/s)   Flow 1 egress (mean 111.77 Mbit/s)

Flow 1 (95th percentile 55.20 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2018-06-07 00:50:50
End at: 2018-06-07 00:51:20
Local clock offset: -0.037 ms
Remote clock offset: -0.102 ms


# Below is generated by plot.py at 2018-06-07 03:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.22 Mbit/s
95th percentile per-packet one-way delay: 63.536 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 226.22 Mbit/s
95th percentile per-packet one-way delay: 63.536 ms
Loss rate: 0.02%
```
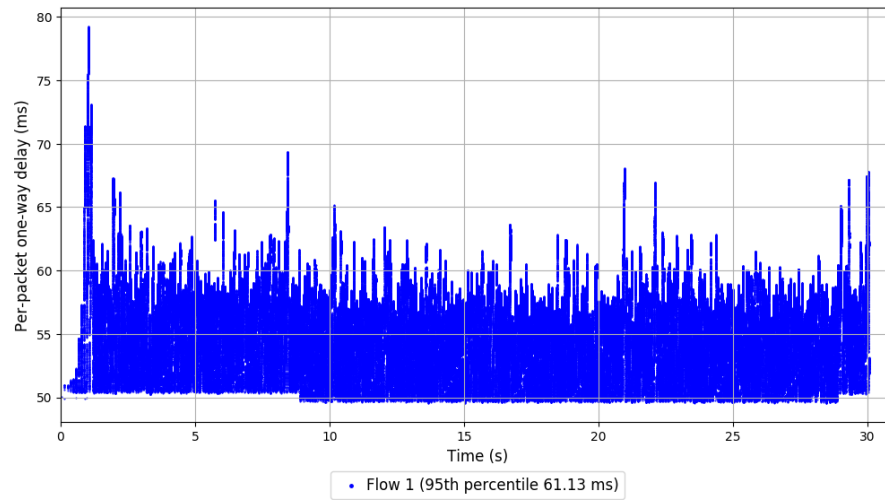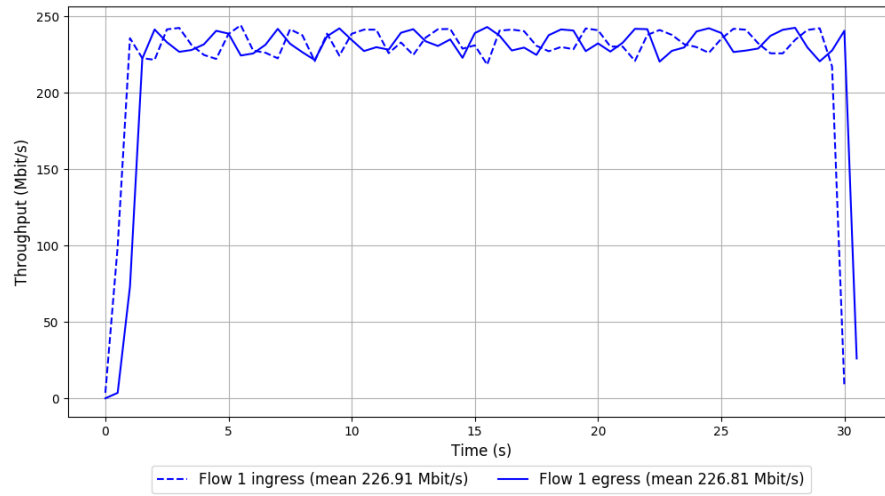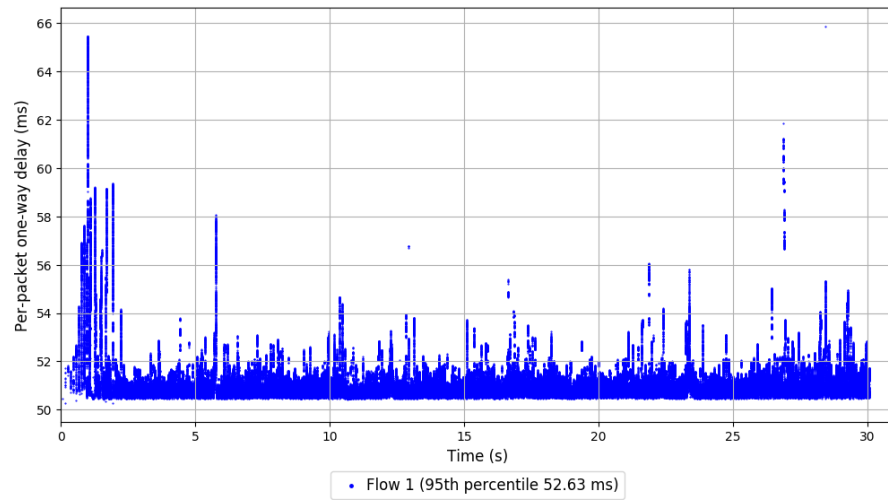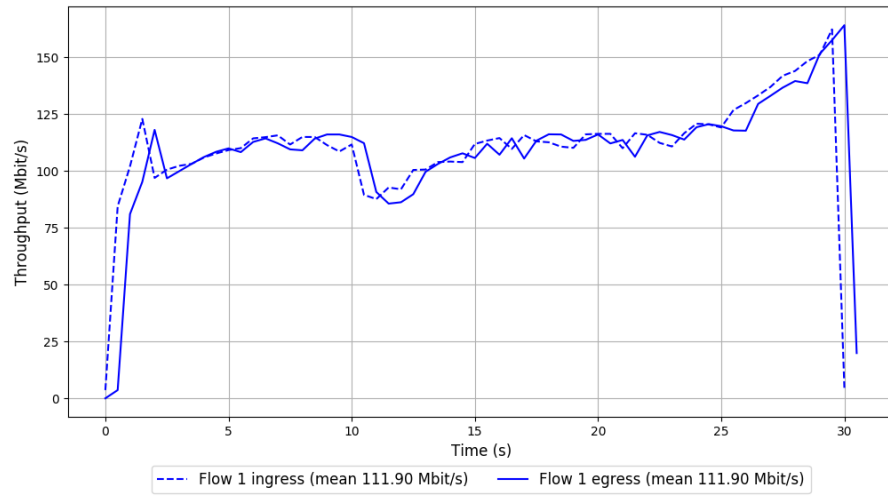
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 226.27 Mbit/s) — Flow 1 egress (mean 226.22 Mbit/s)

• Flow 1 (95th percentile 63.54 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-06-07 01:11:19
End at: 2018-06-07 01:11:49
Local clock offset: 0.045 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2018-06-07 03:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.81 Mbit/s
95th percentile per-packet one-way delay: 61.130 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 226.81 Mbit/s
95th percentile per-packet one-way delay: 61.130 ms
Loss rate: 0.04%
```
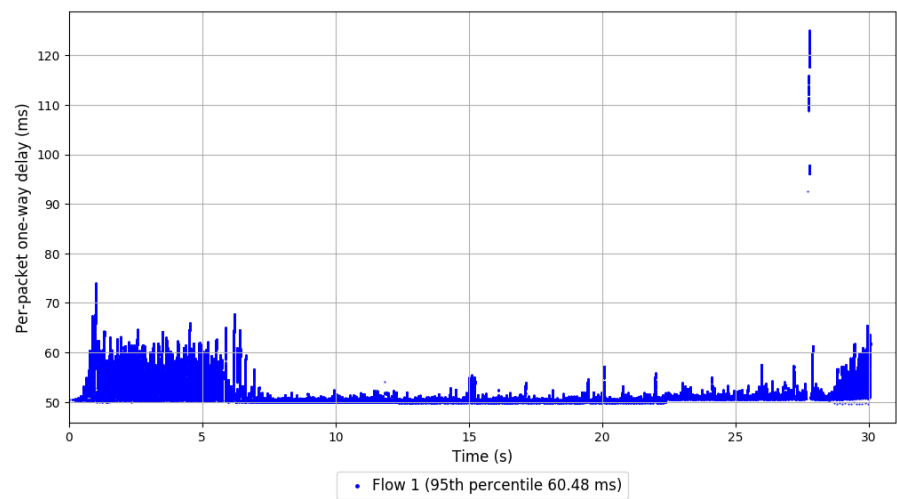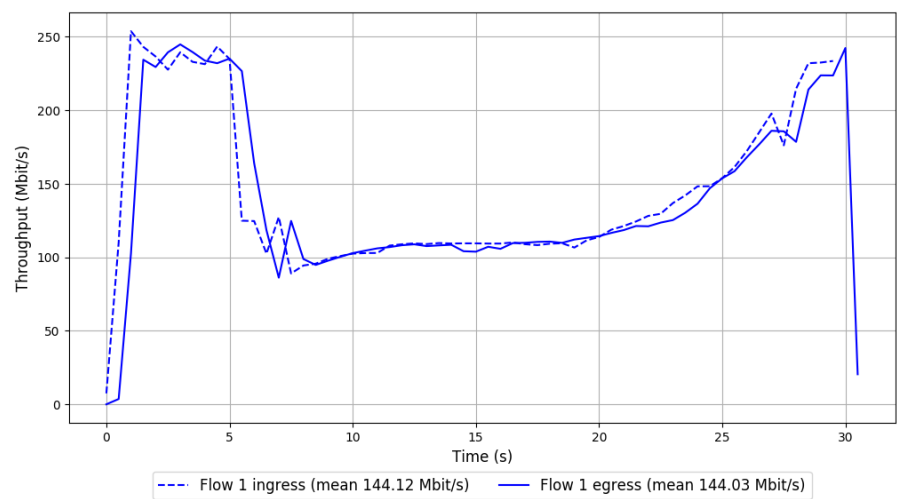
Run 4: Report of TCP Cubic — Data Link

```
Run 5: Statistics of TCP Cubic

Start at: 2018-06-07 01:31:53
End at: 2018-06-07 01:32:24
Local clock offset: 0.331 ms
Remote clock offset: -0.036 ms


# Below is generated by plot.py at 2018-06-07 03:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.90 Mbit/s
95th percentile per-packet one-way delay: 52.626 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 111.90 Mbit/s
95th percentile per-packet one-way delay: 52.626 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 111.90 Mbit/s)   Flow 1 egress (mean 111.90 Mbit/s)
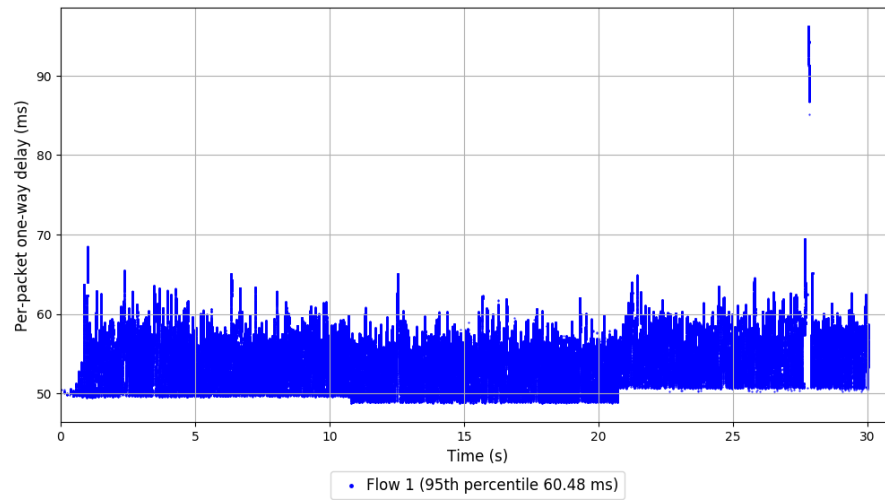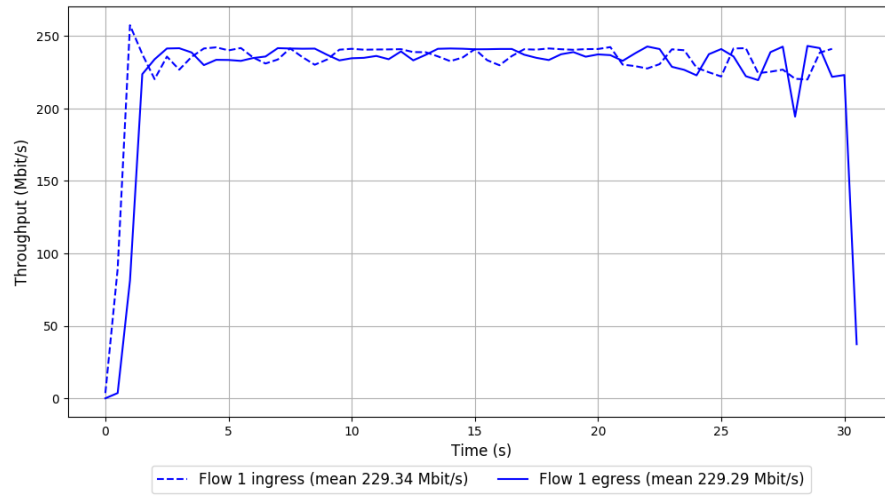

Flow 1 (95th percentile 52.63 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-06-07 01:52:15
End at: 2018-06-07 01:52:45
Local clock offset: -0.113 ms
Remote clock offset: -0.054 ms


# Below is generated by plot.py at 2018-06-07 03:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 144.03 Mbit/s
95th percentile per-packet one-way delay: 60.478 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 144.03 Mbit/s
95th percentile per-packet one-way delay: 60.478 ms
Loss rate: 0.04%
```

Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2018-06-07 02:12:46
End at: 2018-06-07 02:13:16
Local clock offset: -0.012 ms
Remote clock offset: -0.039 ms


# Below is generated by plot.py at 2018-06-07 03:49:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 229.29 Mbit/s
95th percentile per-packet one-way delay: 60.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 229.29 Mbit/s
95th percentile per-packet one-way delay: 60.479 ms
Loss rate: 0.00%
```
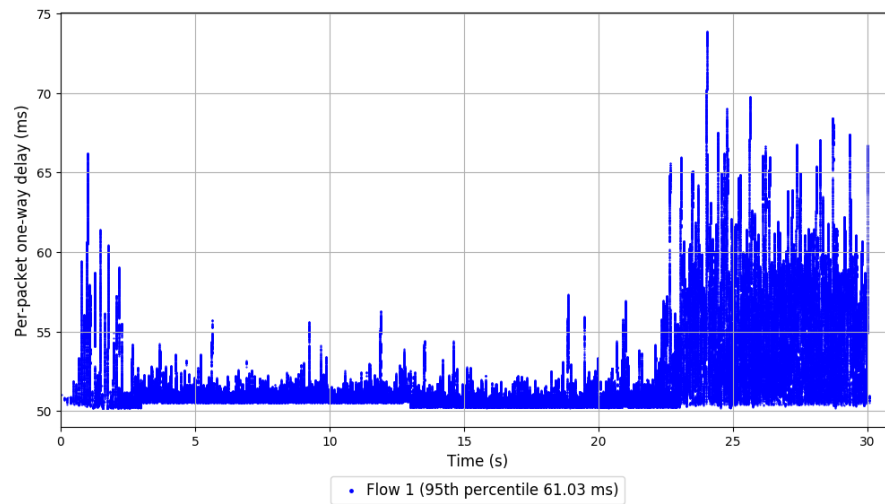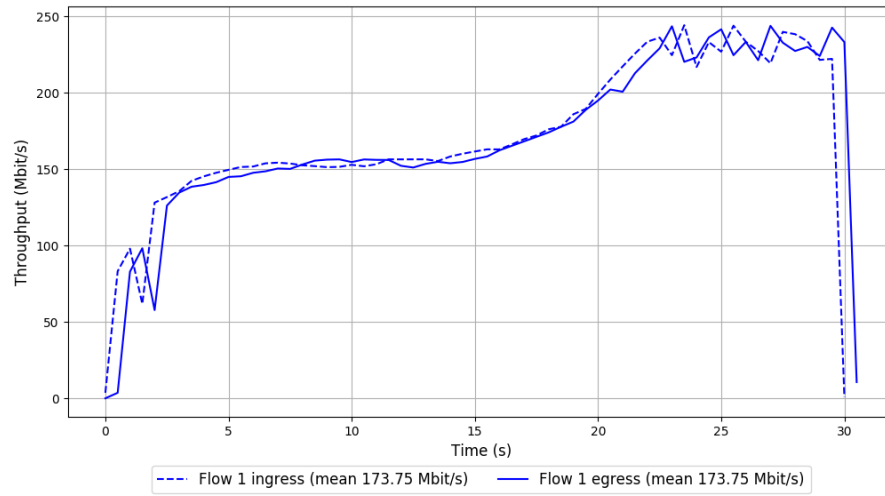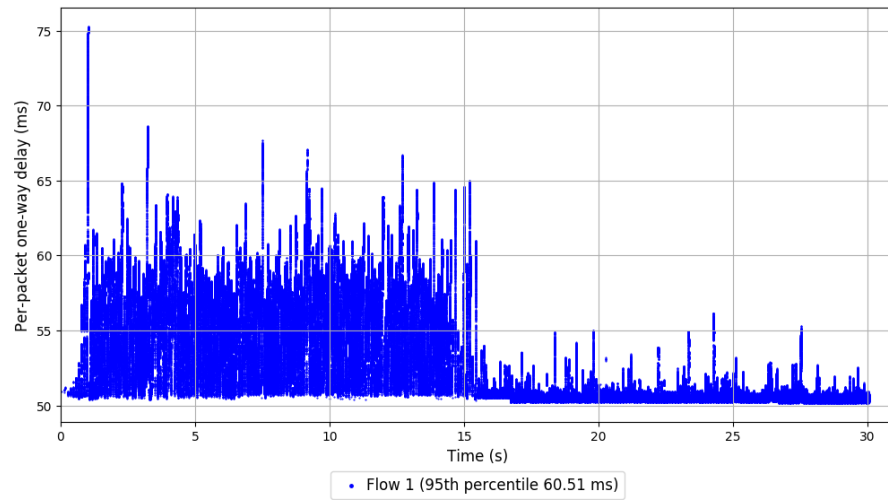
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 229.34 Mbit/s) — Flow 1 egress (mean 229.29 Mbit/s)
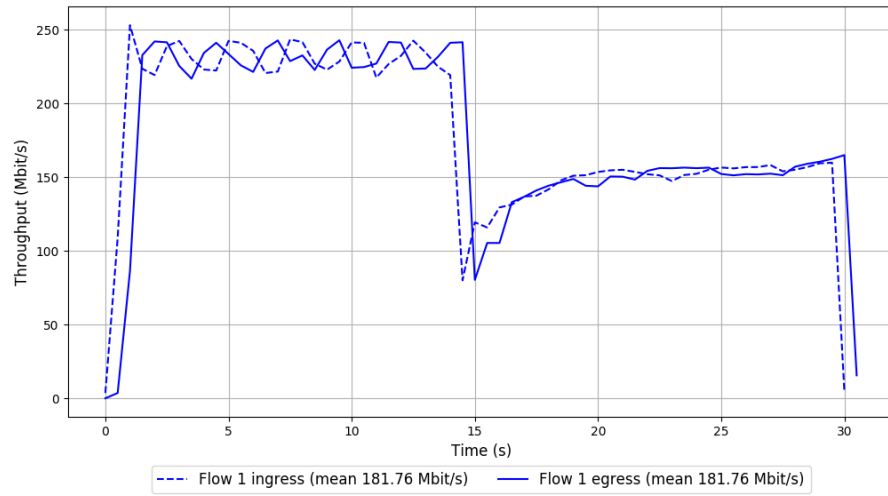

Flow 1 (95th percentile 60.48 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2018-06-07 02:33:04
End at: 2018-06-07 02:33:34
Local clock offset: 0.071 ms
Remote clock offset: 0.042 ms


# Below is generated by plot.py at 2018-06-07 03:49:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 173.75 Mbit/s
95th percentile per-packet one-way delay: 61.028 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 173.75 Mbit/s
95th percentile per-packet one-way delay: 61.028 ms
Loss rate: 0.00%
```
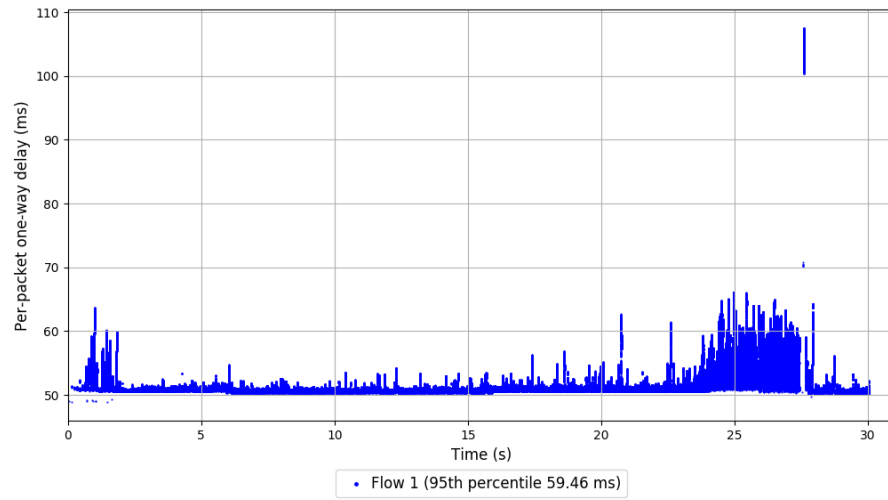
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 173.75 Mbit/s)   Flow 1 egress (mean 173.75 Mbit/s)
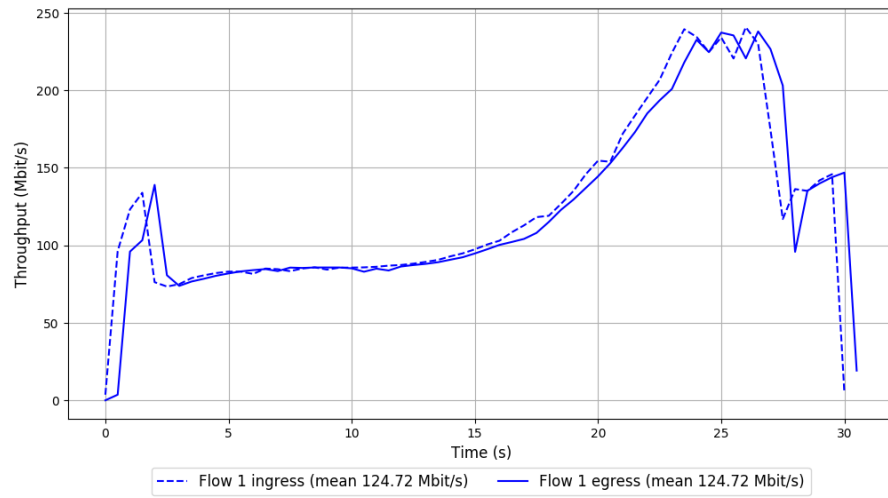

Flow 1 (95th percentile 61.03 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2018-06-07 02:53:21
End at: 2018-06-07 02:53:51
Local clock offset: -0.013 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2018-06-07 03:49:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.76 Mbit/s
95th percentile per-packet one-way delay: 60.506 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.76 Mbit/s
95th percentile per-packet one-way delay: 60.506 ms
Loss rate: 0.00%
```
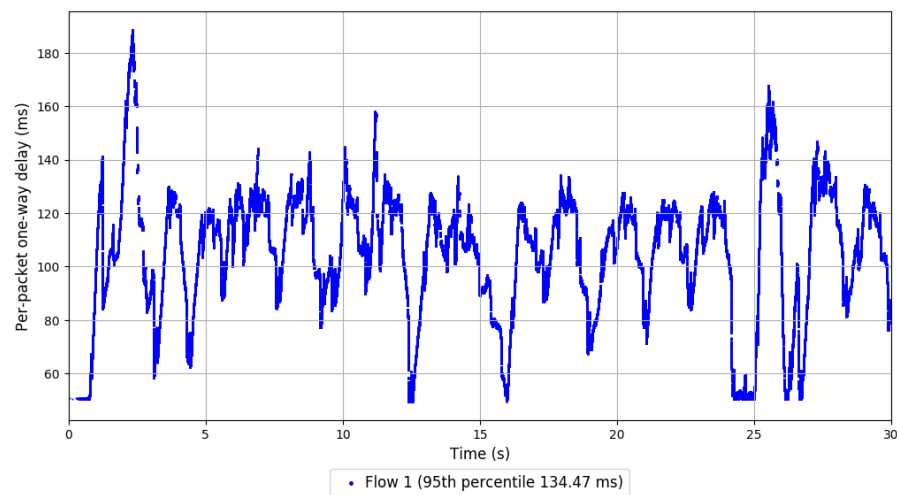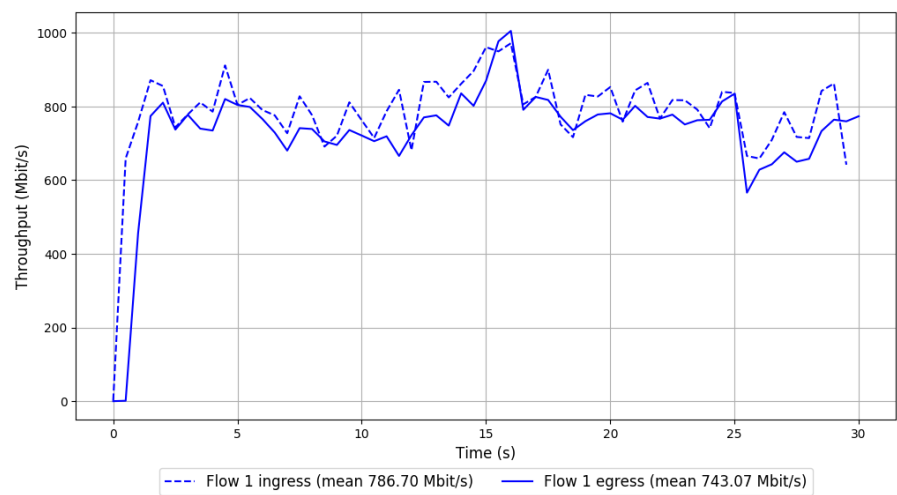
Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2018-06-07 03:13:41
End at: 2018-06-07 03:14:11
Local clock offset: -0.022 ms
Remote clock offset: -0.003 ms


# Below is generated by plot.py at 2018-06-07 03:49:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 124.72 Mbit/s
95th percentile per-packet one-way delay: 59.459 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 124.72 Mbit/s
95th percentile per-packet one-way delay: 59.459 ms
Loss rate: 0.00%
```
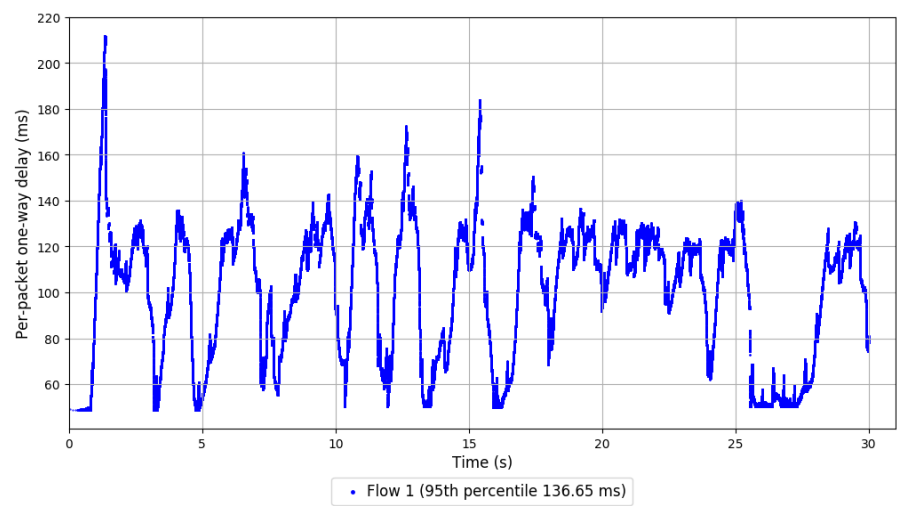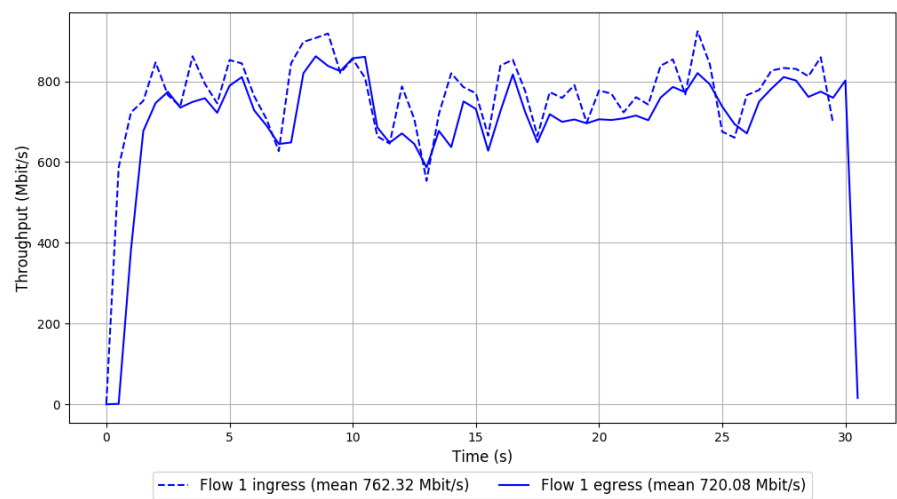
Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-06-07 00:01:21
End at: 2018-06-07 00:01:51
Local clock offset: 0.015 ms
Remote clock offset: -0.007 ms


# Below is generated by plot.py at 2018-06-07 04:02:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 743.07 Mbit/s
95th percentile per-packet one-way delay: 134.468 ms
Loss rate: 5.55%
-- Flow 1:
Average throughput: 743.07 Mbit/s
95th percentile per-packet one-way delay: 134.468 ms
Loss rate: 5.55%
```
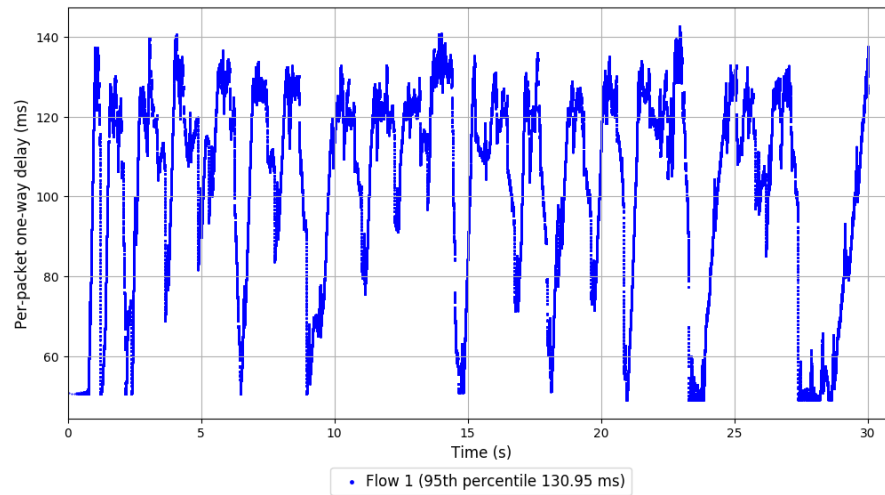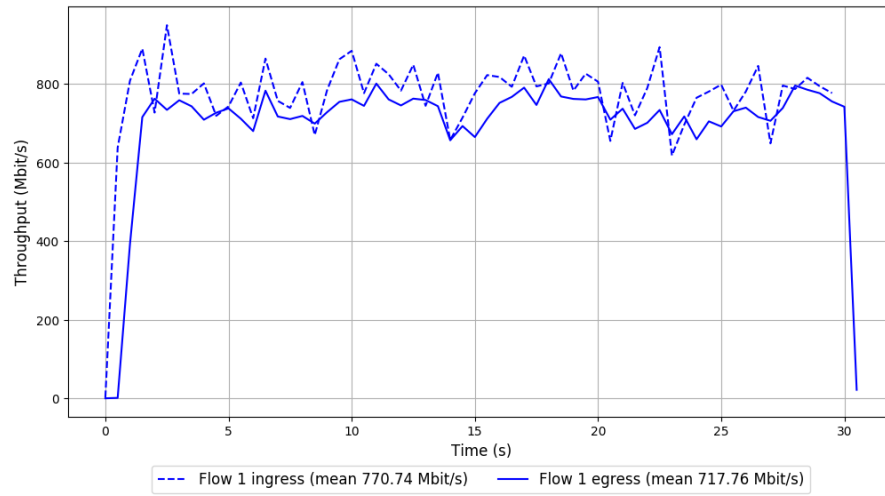
Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-06-07 00:21:42
End at: 2018-06-07 00:22:12
Local clock offset: -0.042 ms
Remote clock offset: -0.019 ms


# Below is generated by plot.py at 2018-06-07 04:02:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 720.08 Mbit/s
95th percentile per-packet one-way delay: 136.650 ms
Loss rate: 5.53%
-- Flow 1:
Average throughput: 720.08 Mbit/s
95th percentile per-packet one-way delay: 136.650 ms
Loss rate: 5.53%
```
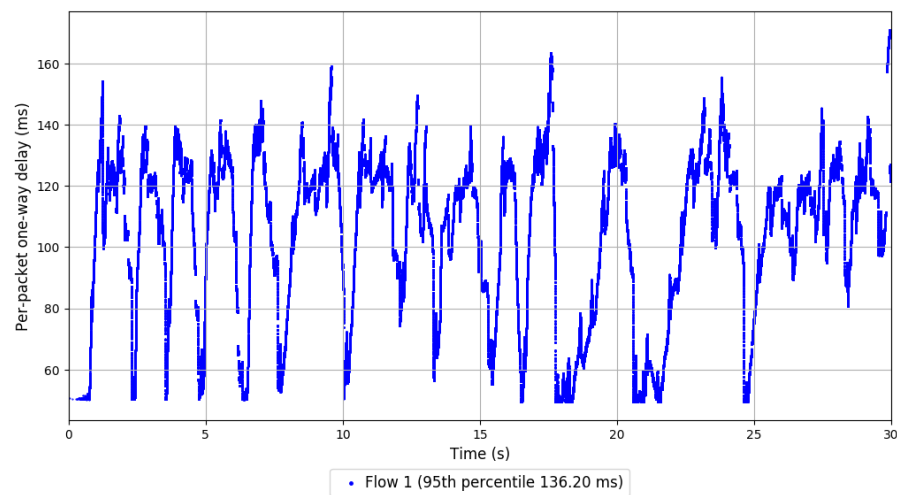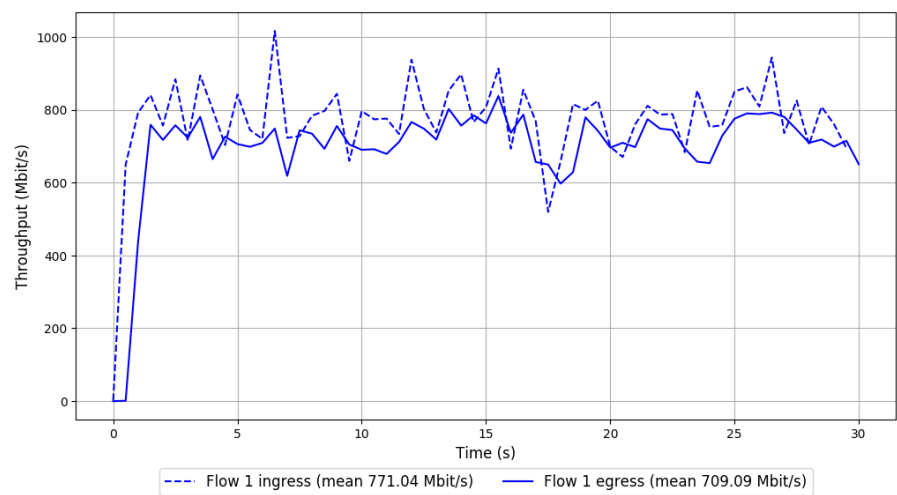
Run 2: Report of FillP — Data Link

```
Run 3: Statistics of FillP

Start at: 2018-06-07 00:41:48
End at: 2018-06-07 00:42:18
Local clock offset: -0.413 ms
Remote clock offset: -0.115 ms


# Below is generated by plot.py at 2018-06-07 04:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 717.76 Mbit/s
95th percentile per-packet one-way delay: 130.948 ms
Loss rate: 6.87%
-- Flow 1:
Average throughput: 717.76 Mbit/s
95th percentile per-packet one-way delay: 130.948 ms
Loss rate: 6.87%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 770.74 Mbit/s) Flow 1 egress (mean 717.76 Mbit/s)

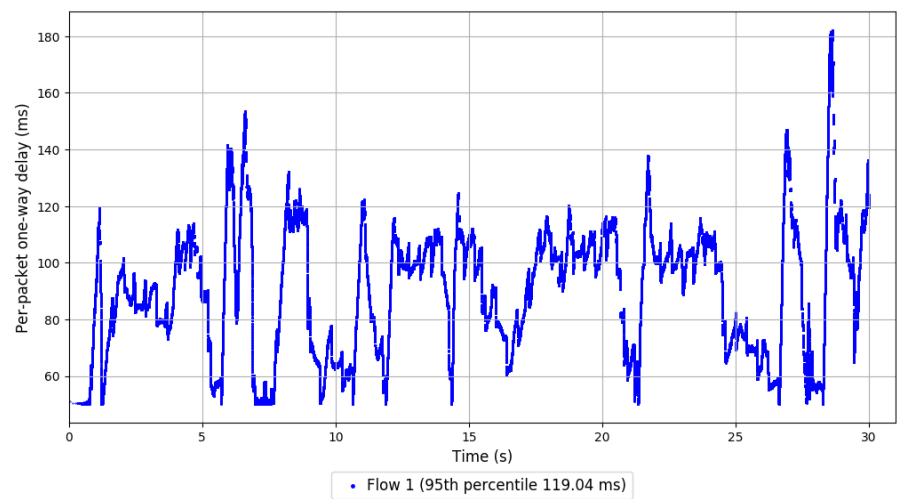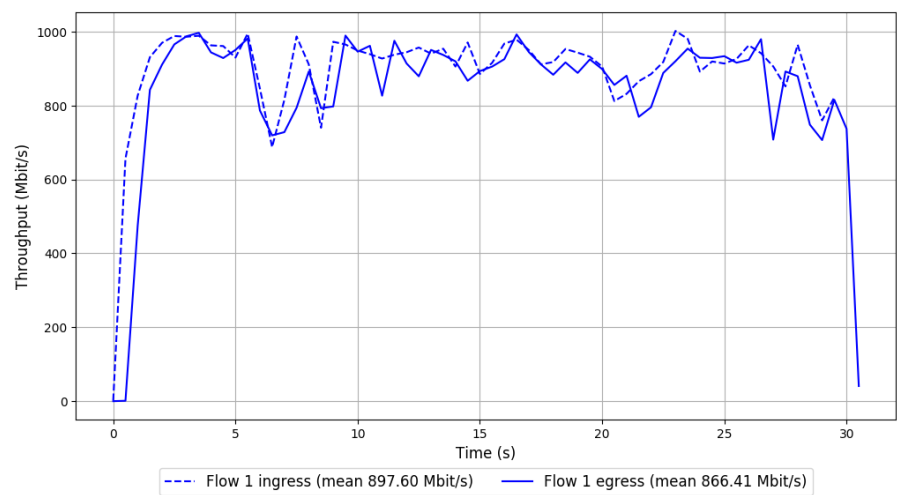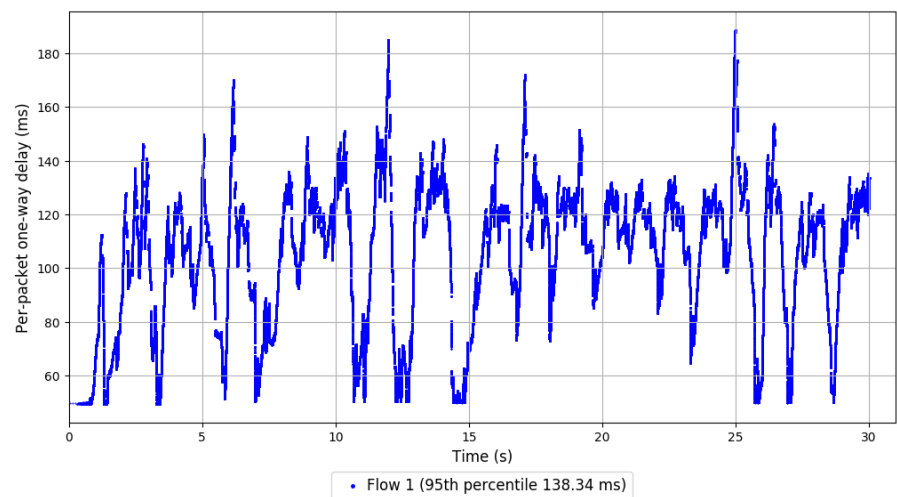Flow 1 (95th percentile 130.95 ms)

```
Run 4: Statistics of FillP

Start at: 2018-06-07 01:02:12
End at: 2018-06-07 01:02:42
Local clock offset: -0.002 ms
Remote clock offset: -0.049 ms


# Below is generated by plot.py at 2018-06-07 04:02:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 709.09 Mbit/s
95th percentile per-packet one-way delay: 136.204 ms
Loss rate: 8.03%
-- Flow 1:
Average throughput: 709.09 Mbit/s
95th percentile per-packet one-way delay: 136.204 ms
Loss rate: 8.03%
```

Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 771.04 Mbit/s)   Flow 1 egress (mean 709.09 Mbit/s)

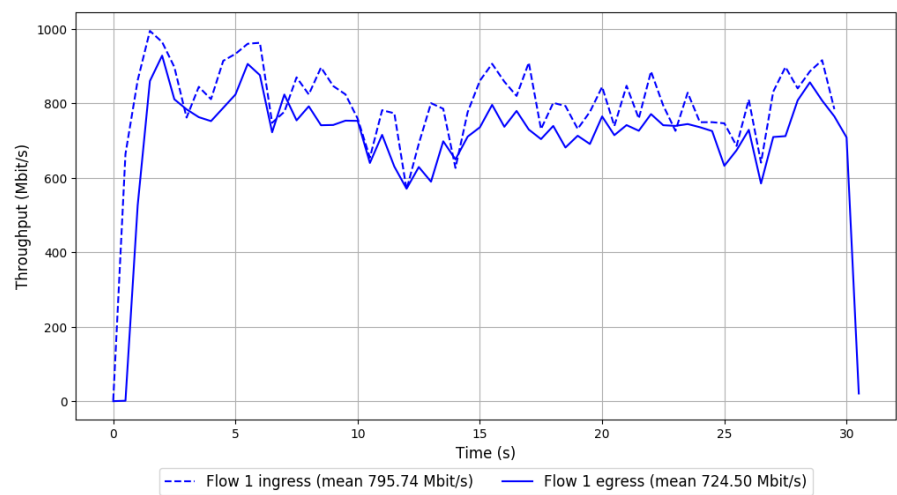
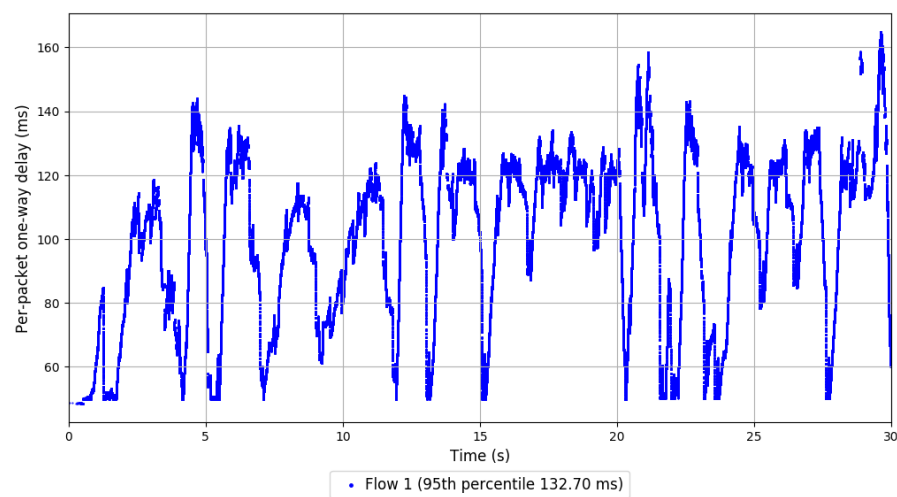Flow 1 (95th percentile 136.20 ms)

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```
Run 5: Statistics of FillP

Start at: 2018-06-07 01:22:47
End at: 2018-06-07 01:23:17
Local clock offset: 0.399 ms
Remote clock offset: -0.013 ms


# Below is generated by plot.py at 2018-06-07 04:05:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 866.41 Mbit/s
95th percentile per-packet one-way delay: 119.040 ms
Loss rate: 3.48%
-- Flow 1:
Average throughput: 866.41 Mbit/s
95th percentile per-packet one-way delay: 119.040 ms
Loss rate: 3.48%
```

Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 897.60 Mbit/s)   Flow 1 egress (mean 866.41 Mbit/s)

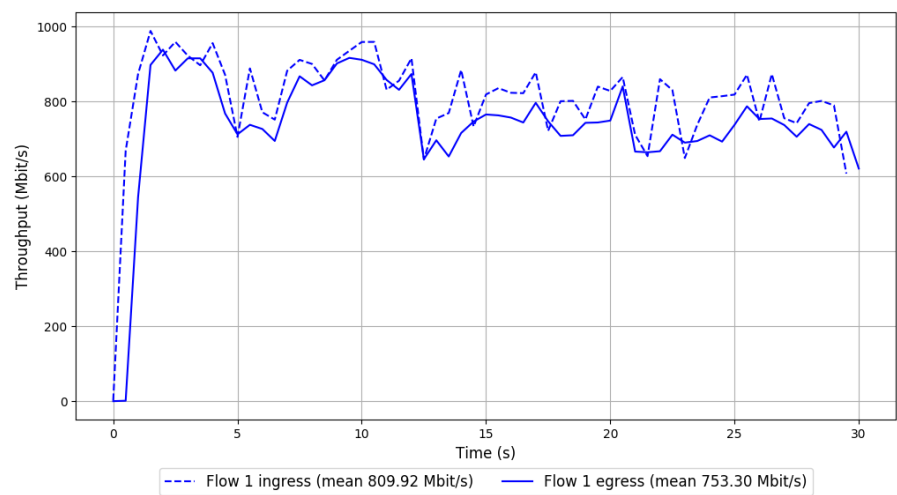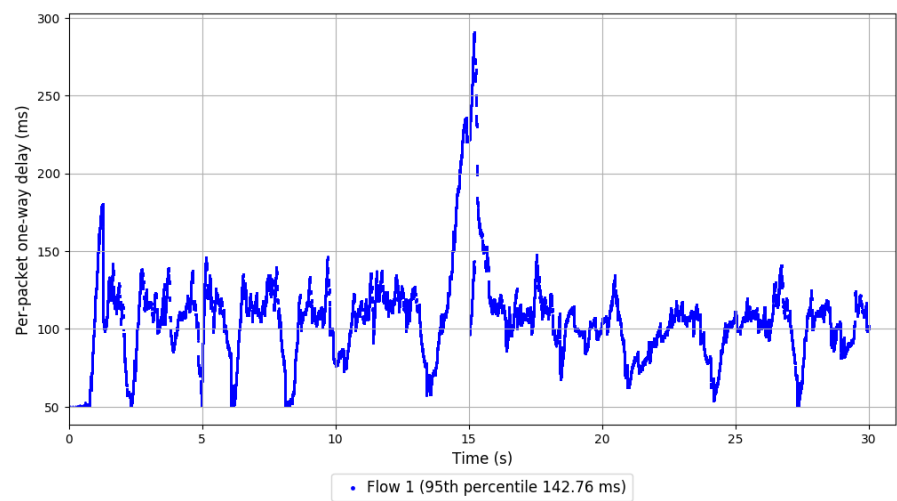• Flow 1 (95th percentile 119.04 ms)

```
Run 6: Statistics of FillP

Start at: 2018-06-07 01:43:13
End at: 2018-06-07 01:43:43
Local clock offset: 0.283 ms
Remote clock offset: -0.062 ms


# Below is generated by plot.py at 2018-06-07 04:05:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 724.50 Mbit/s
95th percentile per-packet one-way delay: 138.341 ms
Loss rate: 8.95%
-- Flow 1:
Average throughput: 724.50 Mbit/s
95th percentile per-packet one-way delay: 138.341 ms
Loss rate: 8.95%
```
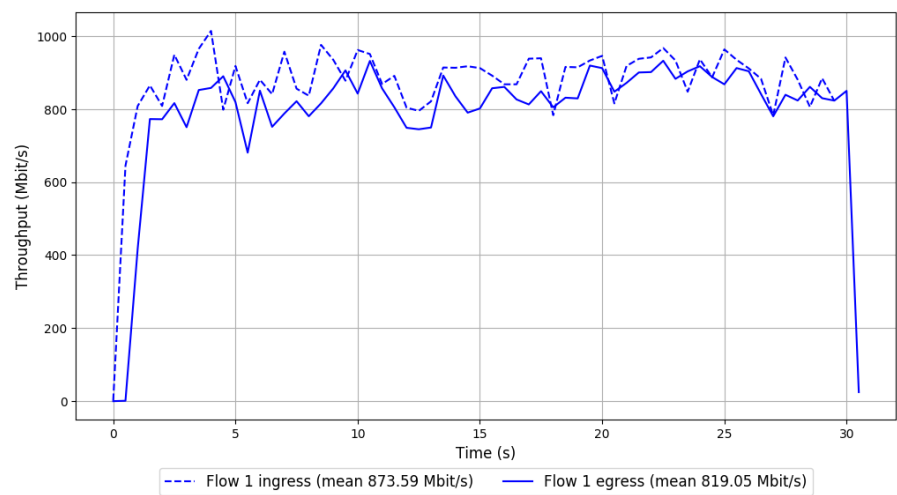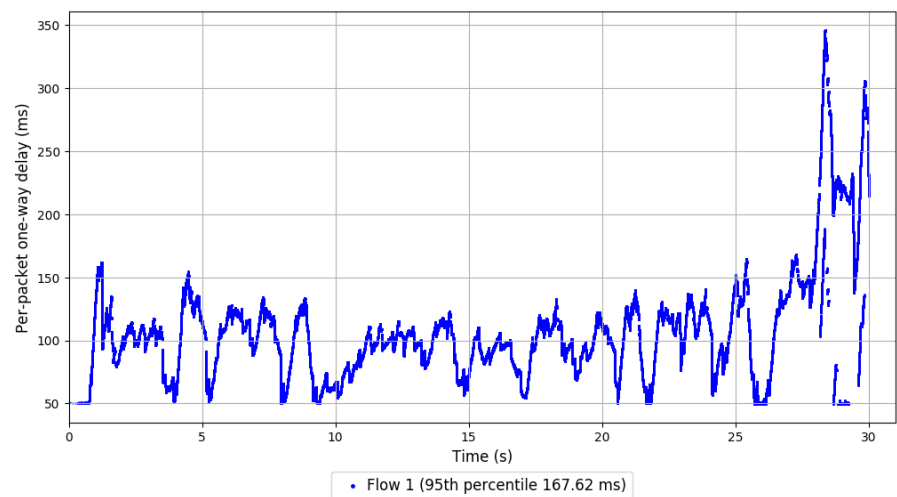
Run 6: Report of FillP — Data Link

```
Run 7: Statistics of FillP

Start at: 2018-06-07 02:03:37
End at: 2018-06-07 02:04:07
Local clock offset: 0.379 ms
Remote clock offset: -0.043 ms


# Below is generated by plot.py at 2018-06-07 04:05:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 753.30 Mbit/s
95th percentile per-packet one-way delay: 132.700 ms
Loss rate: 6.99%
-- Flow 1:
Average throughput: 753.30 Mbit/s
95th percentile per-packet one-way delay: 132.700 ms
Loss rate: 6.99%
```

Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 809.92 Mbit/s) --- Flow 1 egress (mean 753.30 Mbit/s)

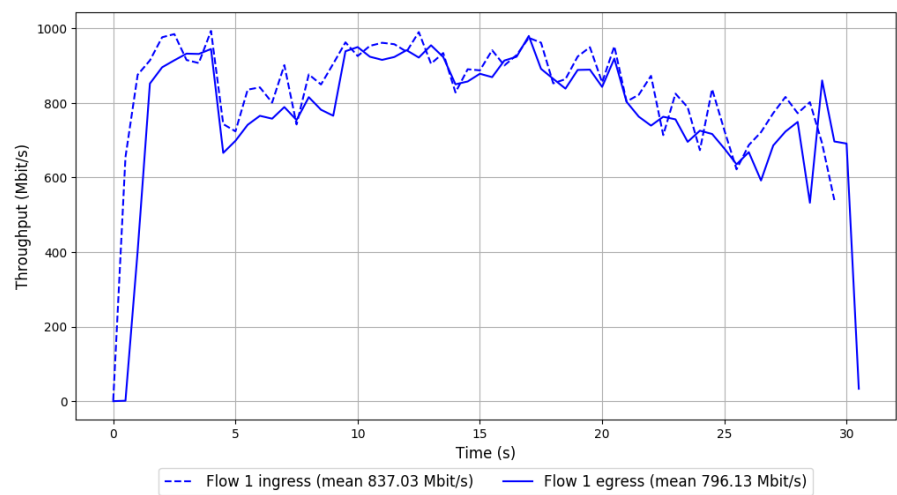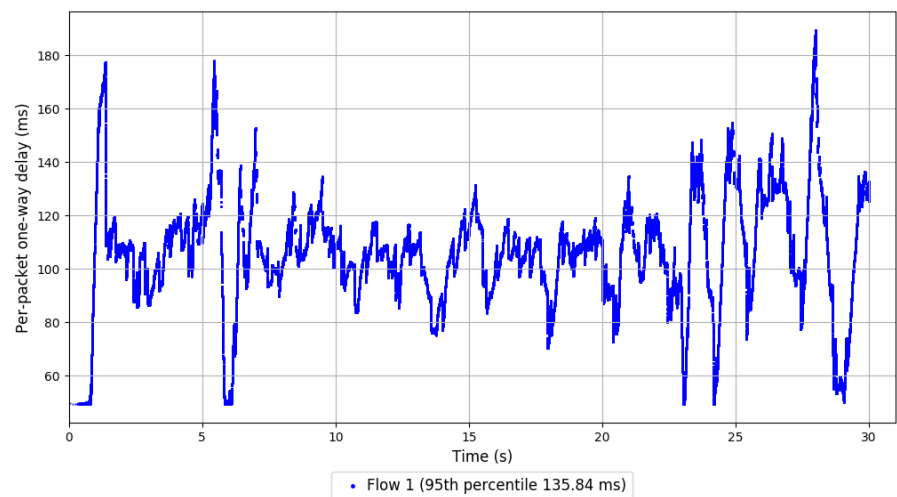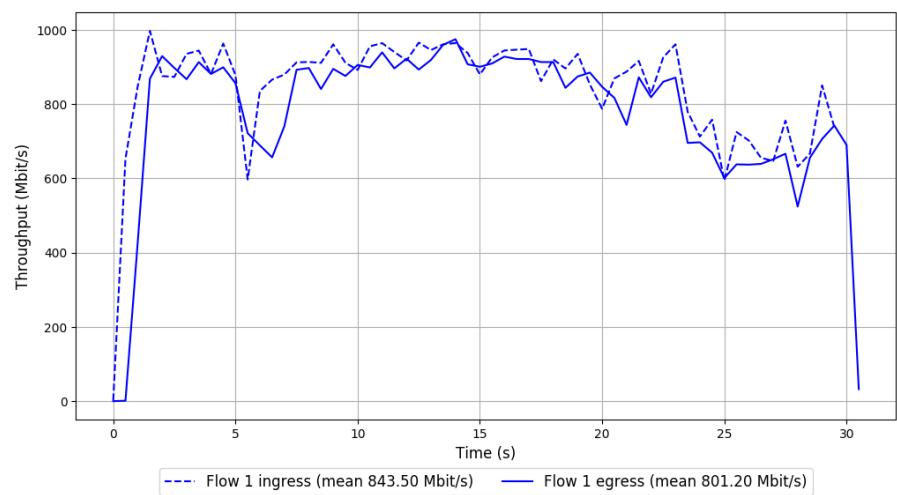Flow 1 (95th percentile 132.70 ms)

```
Run 8: Statistics of FillP

Start at: 2018-06-07 02:24:02
End at: 2018-06-07 02:24:32
Local clock offset: 0.031 ms
Remote clock offset: -0.009 ms


# Below is generated by plot.py at 2018-06-07 04:05:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 819.05 Mbit/s
95th percentile per-packet one-way delay: 142.763 ms
Loss rate: 6.24%
-- Flow 1:
Average throughput: 819.05 Mbit/s
95th percentile per-packet one-way delay: 142.763 ms
Loss rate: 6.24%
```

Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 873.59 Mbit/s)   Flow 1 egress (mean 819.05 Mbit/s)

Flow 1 (95th percentile 142.76 ms)

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```
Run 9: Statistics of FillP

Start at: 2018-06-07 02:44:13
End at: 2018-06-07 02:44:43
Local clock offset: -0.005 ms
Remote clock offset: -0.022 ms


# Below is generated by plot.py at 2018-06-07 04:17:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 796.13 Mbit/s
95th percentile per-packet one-way delay: 167.619 ms
Loss rate: 4.89%
-- Flow 1:
Average throughput: 796.13 Mbit/s
95th percentile per-packet one-way delay: 167.619 ms
Loss rate: 4.89%
```
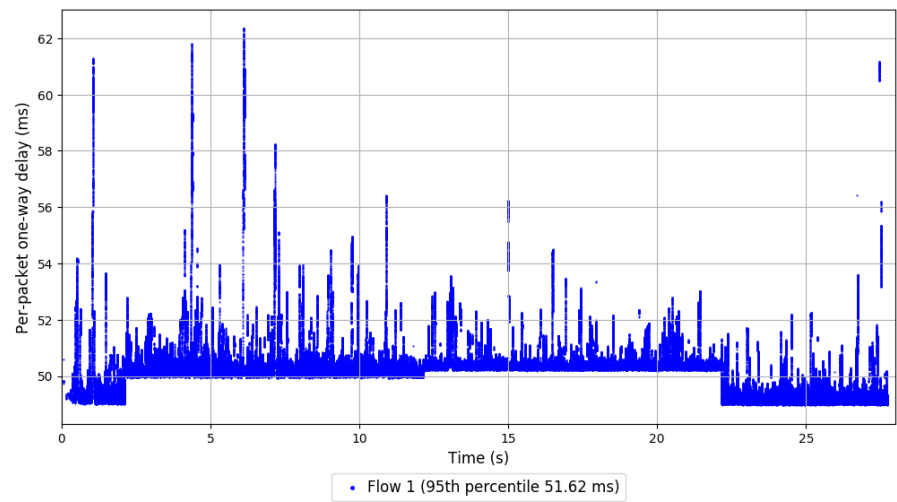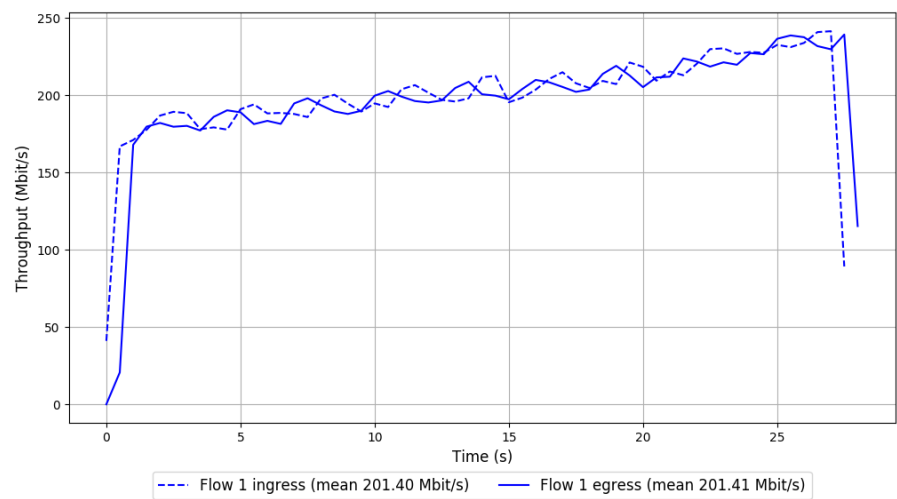
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 837.03 Mbit/s)   Flow 1 egress (mean 796.13 Mbit/s)

Flow 1 (95th percentile 167.62 ms)

```
Run 10: Statistics of FillP

Start at: 2018-06-07 03:04:39
End at: 2018-06-07 03:05:09
Local clock offset: -0.007 ms
Remote clock offset: -0.001 ms


# Below is generated by plot.py at 2018-06-07 04:18:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 801.20 Mbit/s
95th percentile per-packet one-way delay: 135.842 ms
Loss rate: 5.01%
-- Flow 1:
Average throughput: 801.20 Mbit/s
95th percentile per-packet one-way delay: 135.842 ms
Loss rate: 5.01%
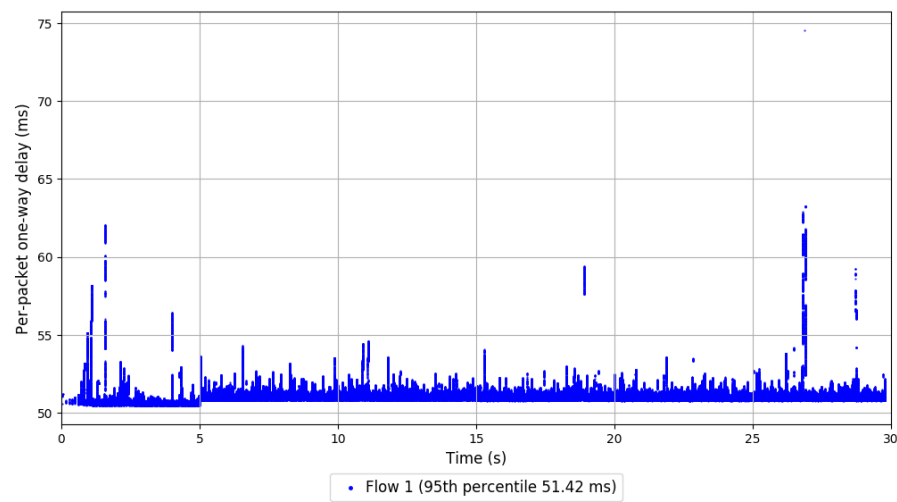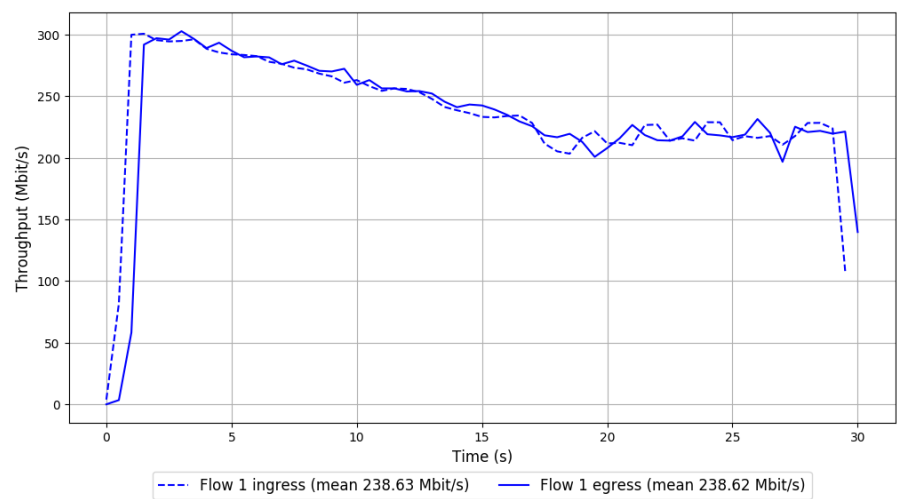```
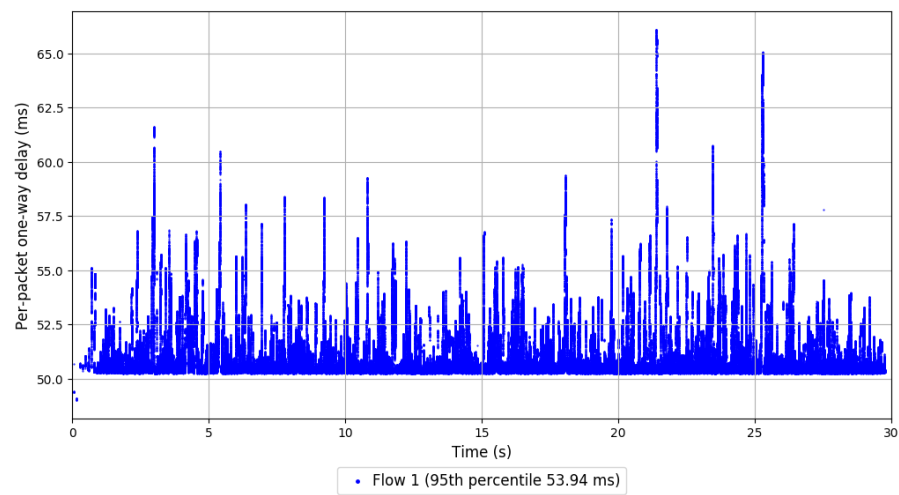
Run 10: Report of FillP — Data Link

```
Run 1: Statistics of Indigo

Start at: 2018-06-07 00:04:03
End at: 2018-06-07 00:04:33
Local clock offset: -0.046 ms
Remote clock offset: -0.018 ms

Below is generated by plot.py at 2018-06-07 04:18:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 201.41 Mbit/s
95th percentile per-packet one-way delay: 51.623 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 201.41 Mbit/s
95th percentile per-packet one-way delay: 51.623 ms
Loss rate: 0.00%
```
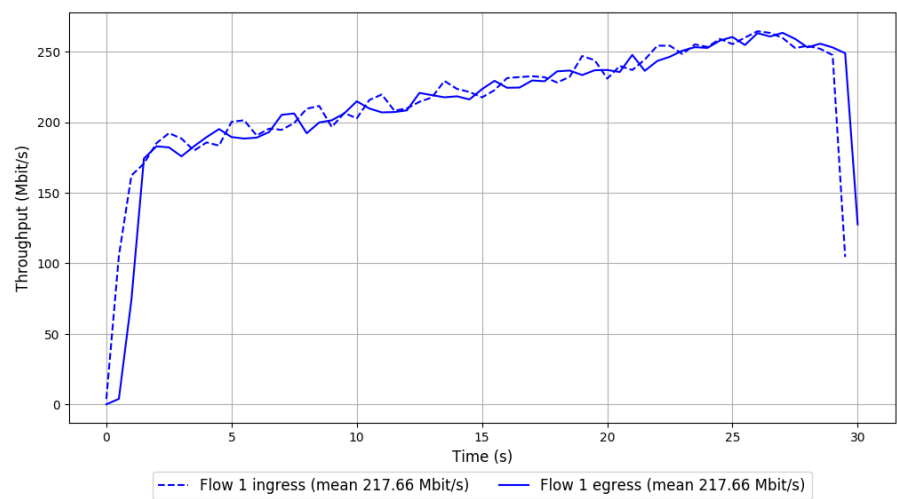
Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-06-07 00:24:22
End at: 2018-06-07 00:24:52
Local clock offset: -0.044 ms
Remote clock offset: -0.069 ms

Below is generated by plot.py at 2018-06-07 04:18:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 238.62 Mbit/s
95th percentile per-packet one-way delay: 51.425 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 238.62 Mbit/s
95th percentile per-packet one-way delay: 51.425 ms
Loss rate: 0.01%
```
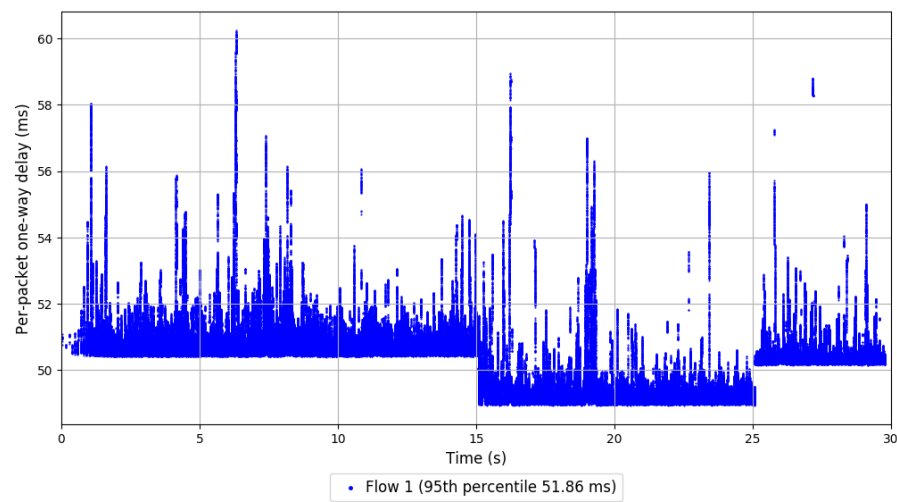
Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-06-07 00:44:27
End at: 2018-06-07 00:44:57
Local clock offset: -0.072 ms
Remote clock offset: -0.062 ms

Below is generated by plot.py at 2018-06-07 04:18:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 217.66 Mbit/s
95th percentile per-packet one-way delay: 53.944 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.66 Mbit/s
95th percentile per-packet one-way delay: 53.944 ms
Loss rate: 0.00%
```
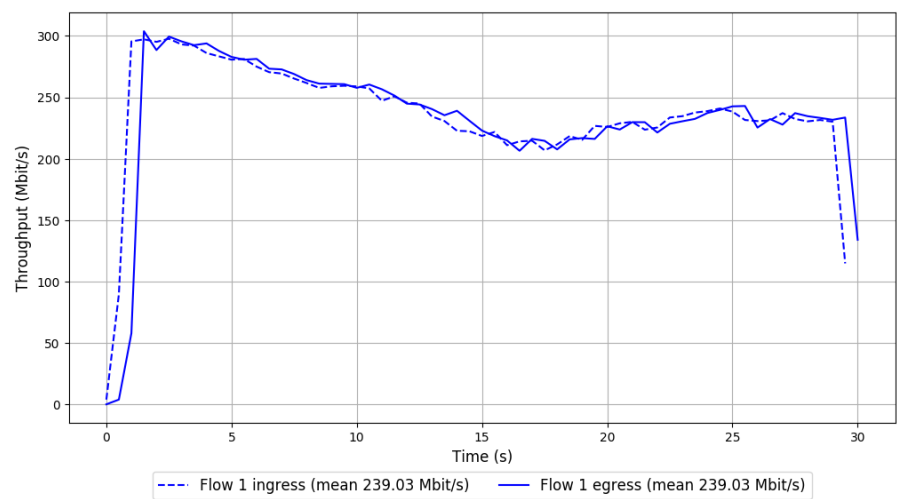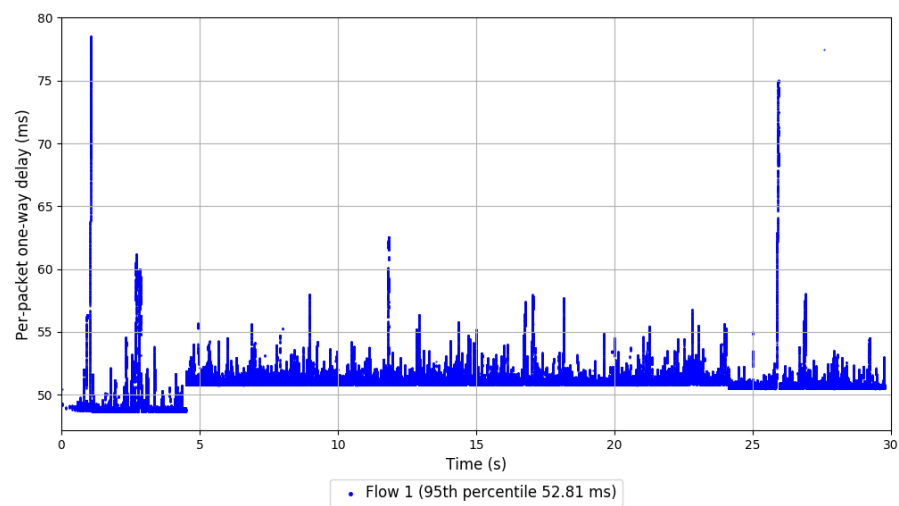
Run 3: Report of Indigo — Data Link

```
Run 4: Statistics of Indigo

Start at: 2018-06-07 01:04:52
End at: 2018-06-07 01:05:22
Local clock offset: 0.003 ms
Remote clock offset: -0.048 ms

Below is generated by plot.py at 2018-06-07 04:18:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 239.03 Mbit/s
95th percentile per-packet one-way delay: 51.858 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 239.03 Mbit/s
95th percentile per-packet one-way delay: 51.858 ms
Loss rate: 0.00%
```
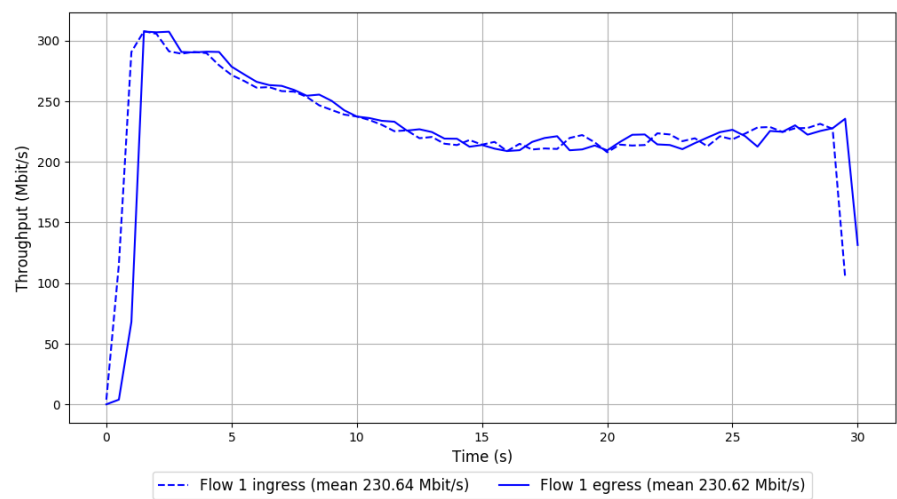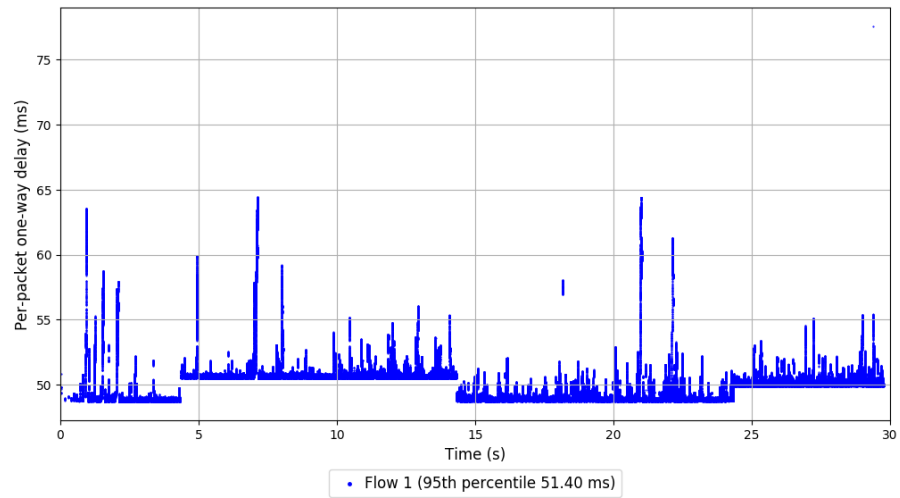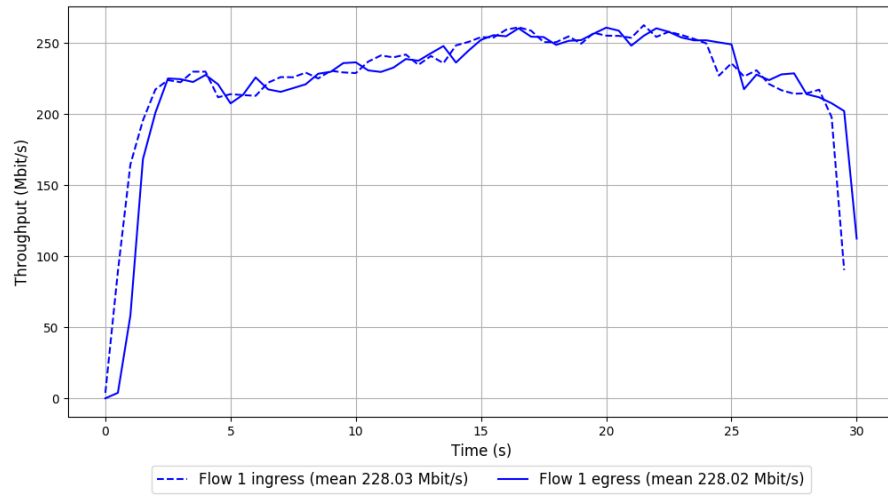
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2018-06-07 01:25:33
End at: 2018-06-07 01:26:03
Local clock offset: 0.045 ms
Remote clock offset: -0.024 ms

Below is generated by plot.py at 2018-06-07 04:18:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 230.62 Mbit/s
95th percentile per-packet one-way delay: 52.813 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 230.62 Mbit/s
95th percentile per-packet one-way delay: 52.813 ms
Loss rate: 0.00%
```
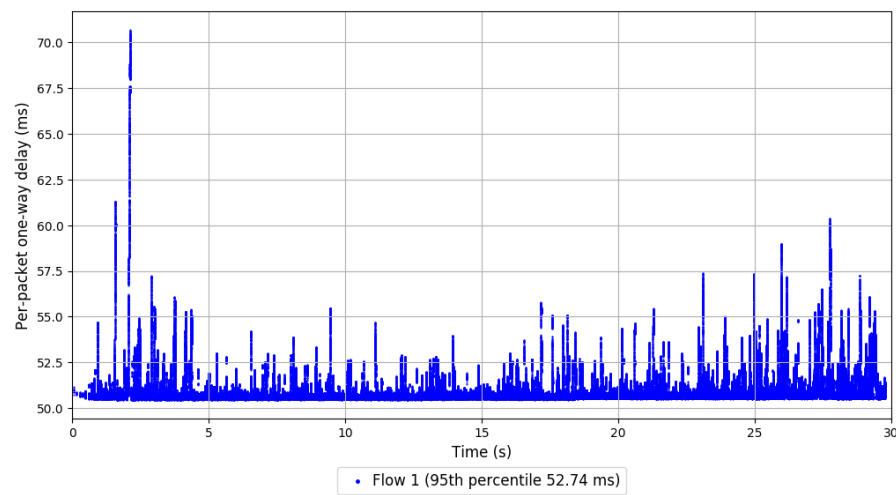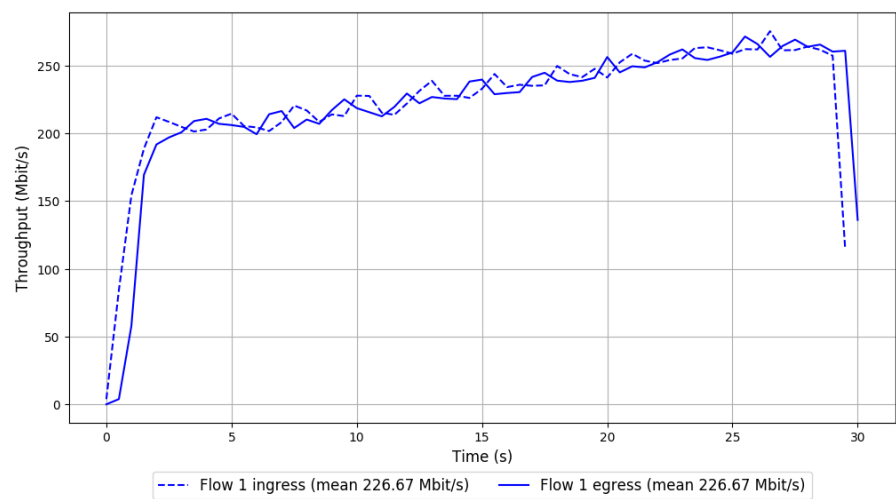
Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2018-06-07 01:45:53
End at: 2018-06-07 01:46:23
Local clock offset: -0.099 ms
Remote clock offset: -0.083 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.02 Mbit/s
95th percentile per-packet one-way delay: 51.403 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 228.02 Mbit/s
95th percentile per-packet one-way delay: 51.403 ms
Loss rate: 0.00%
```

Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2018-06-07 02:06:18
End at: 2018-06-07 02:06:48
Local clock offset: -0.027 ms
Remote clock offset: -0.048 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.67 Mbit/s
95th percentile per-packet one-way delay: 52.741 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 226.67 Mbit/s
95th percentile per-packet one-way delay: 52.741 ms
Loss rate: 0.00%
```

Run 7: Report of Indigo — Data Link

```
Run 8: Statistics of Indigo

Start at: 2018-06-07 02:26:47
End at: 2018-06-07 02:27:17
Local clock offset: 0.052 ms
Remote clock offset: 0.01 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 230.25 Mbit/s
95th percentile per-packet one-way delay: 53.261 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 230.25 Mbit/s
95th percentile per-packet one-way delay: 53.261 ms
Loss rate: 0.00%
```
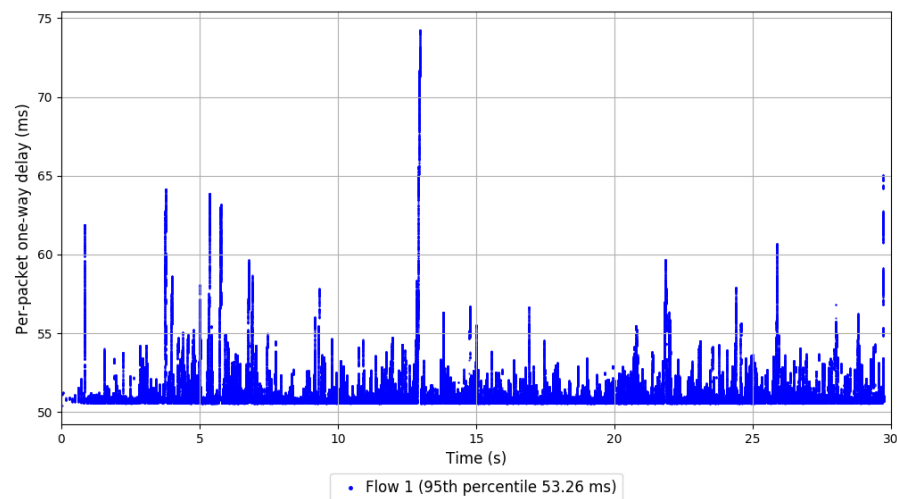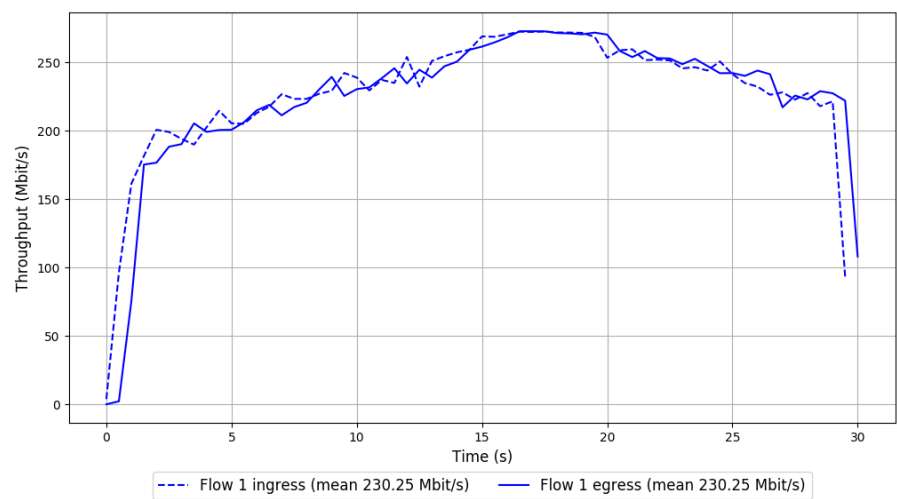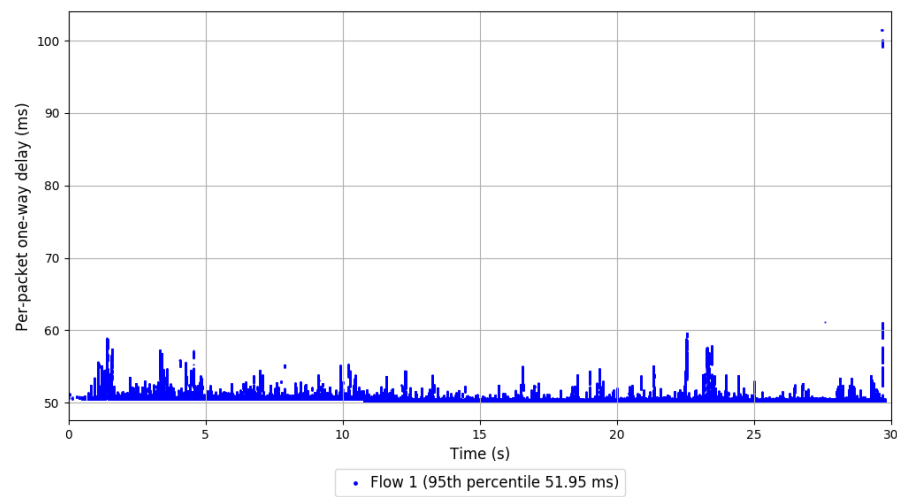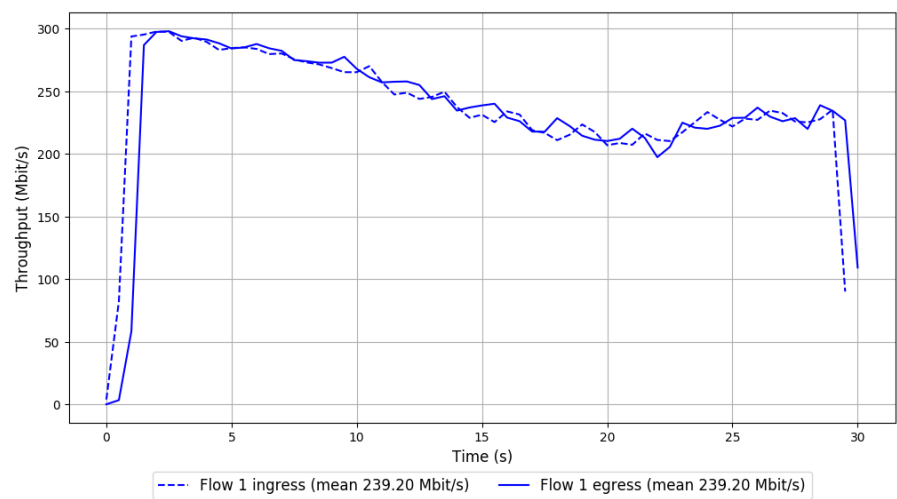
Run 8: Report of Indigo — Data Link

```
Run 9: Statistics of Indigo

Start at: 2018-06-07 02:46:56
End at: 2018-06-07 02:47:26
Local clock offset: -0.008 ms
Remote clock offset: -0.013 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 239.20 Mbit/s
95th percentile per-packet one-way delay: 51.947 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 239.20 Mbit/s
95th percentile per-packet one-way delay: 51.947 ms
Loss rate: 0.00%
```
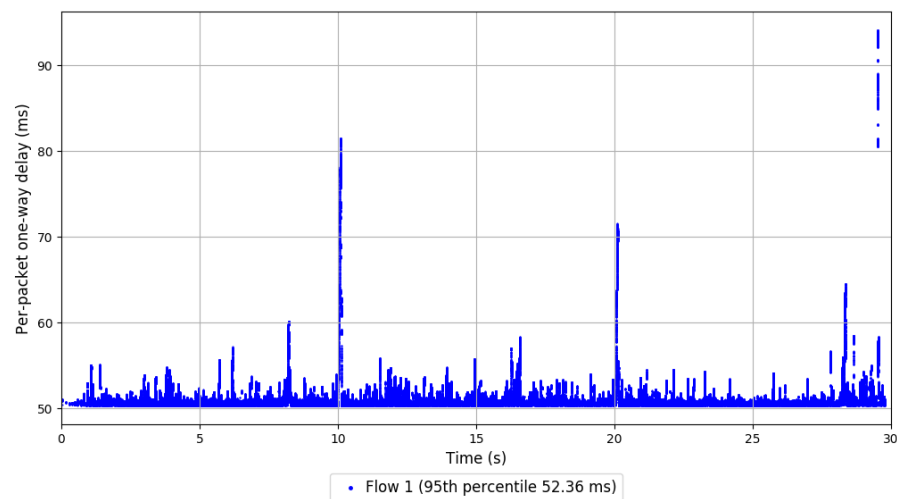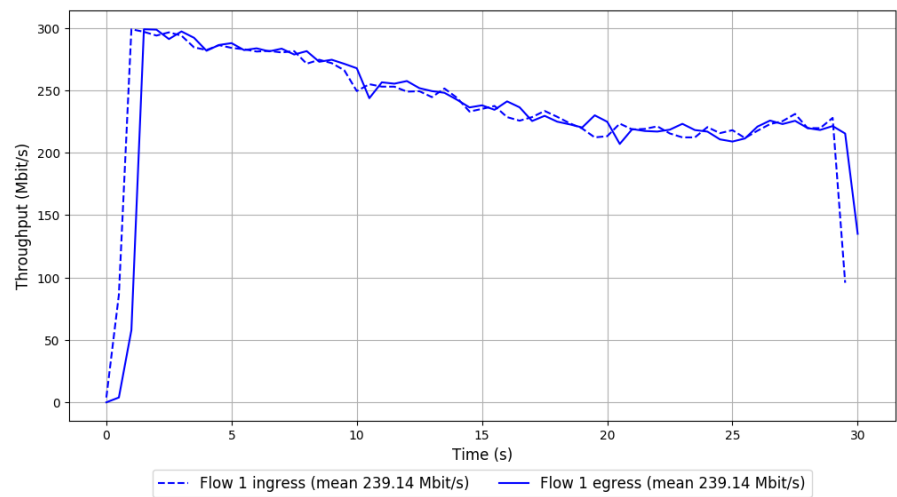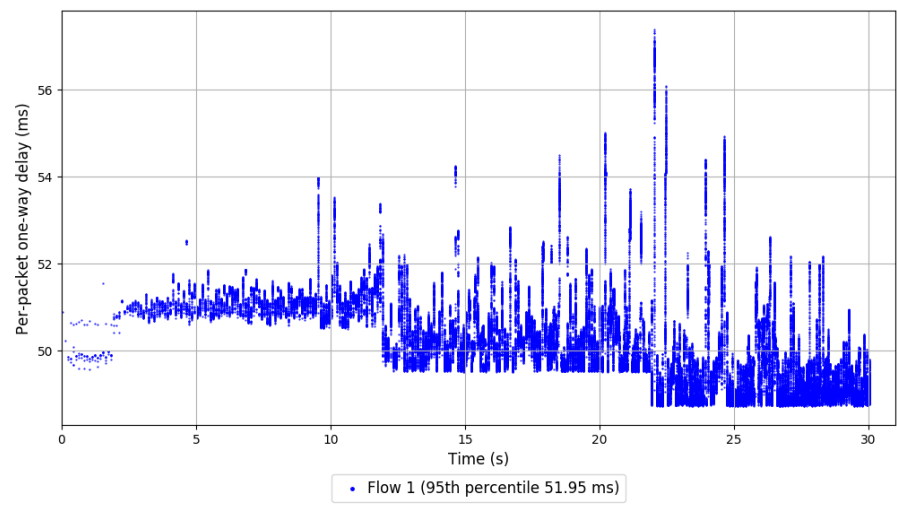
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-06-07 03:07:21
End at: 2018-06-07 03:07:51
Local clock offset: 0.017 ms
Remote clock offset: -0.024 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 239.14 Mbit/s
95th percentile per-packet one-way delay: 52.359 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 239.14 Mbit/s
95th percentile per-packet one-way delay: 52.359 ms
Loss rate: 0.00%
```
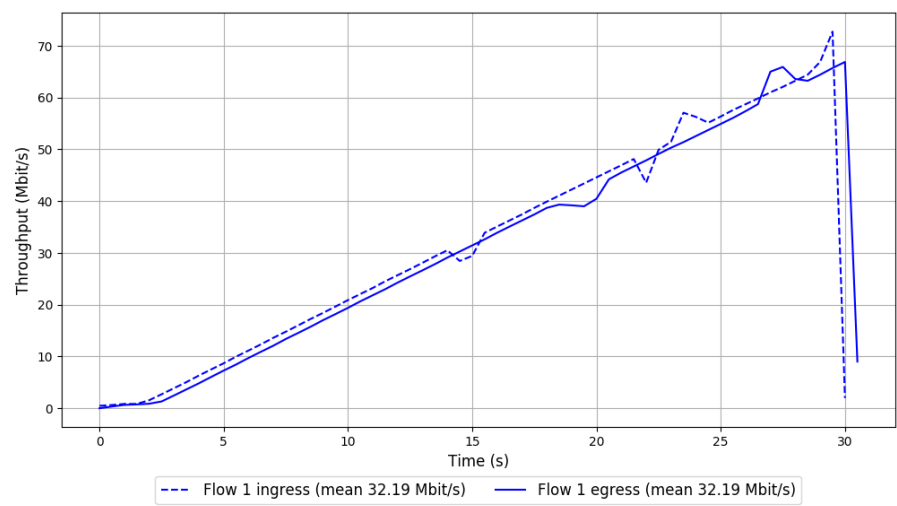
Run 10: Report of Indigo — Data Link

```
Run 1: Statistics of LEDBAT

Start at: 2018-06-07 00:02:56
End at: 2018-06-07 00:03:26
Local clock offset: -0.02 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 51.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 51.952 ms
Loss rate: 0.00%
```

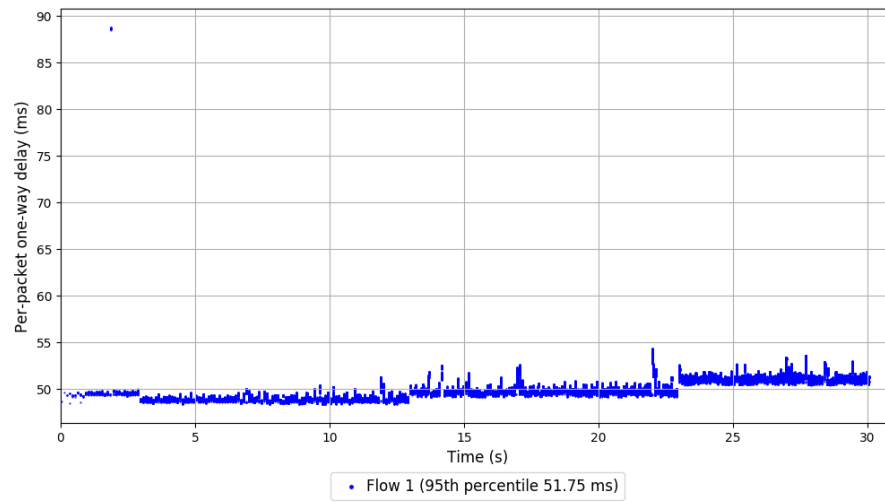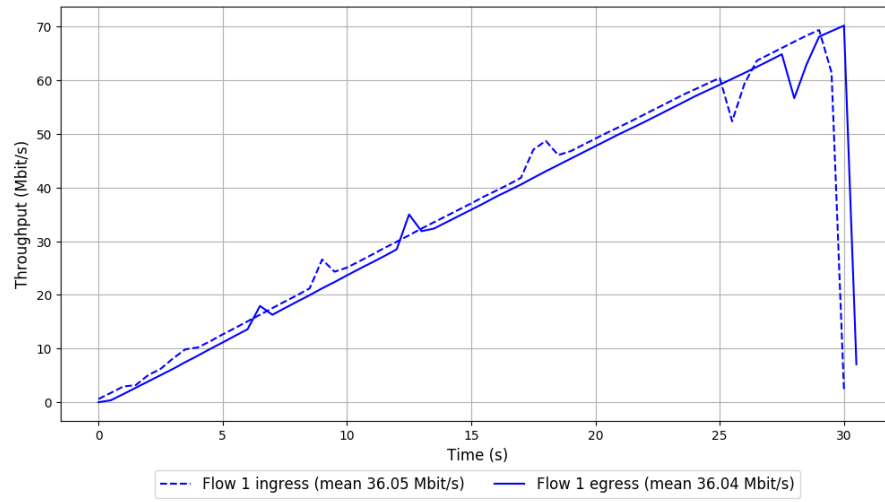# Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-06-07 00:23:15
End at: 2018-06-07 00:23:45
Local clock offset: 0.338 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.04 Mbit/s
95th percentile per-packet one-way delay: 51.753 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 36.04 Mbit/s
95th percentile per-packet one-way delay: 51.753 ms
Loss rate: 0.02%
```

Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 36.05 Mbit/s)   Flow 1 egress (mean 36.04 Mbit/s)

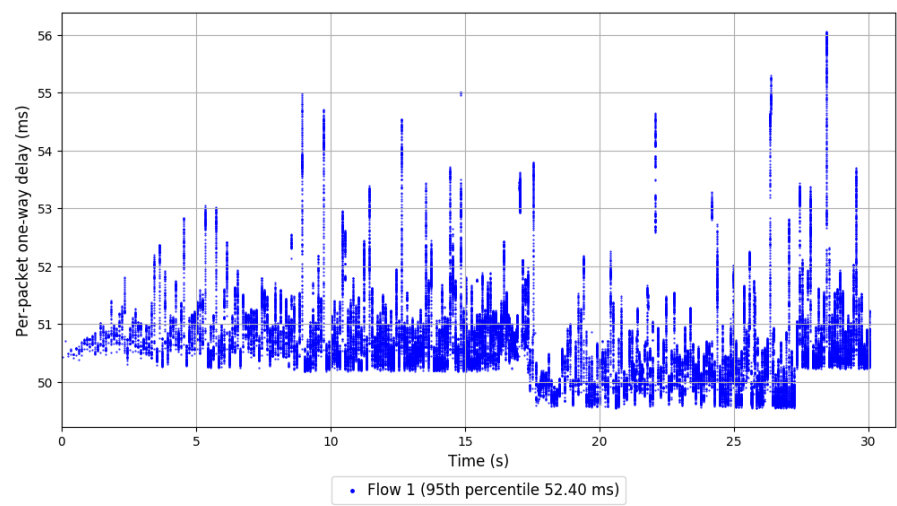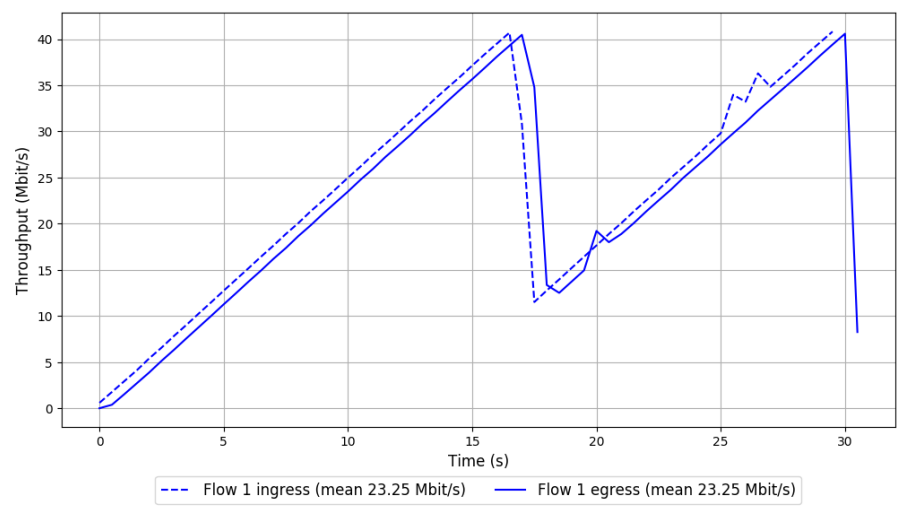• Flow 1 (95th percentile 51.75 ms)

```
Run 3: Statistics of LEDBAT

Start at: 2018-06-07 00:43:20
End at: 2018-06-07 00:43:50
Local clock offset: -0.059 ms
Remote clock offset: -0.062 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.25 Mbit/s
95th percentile per-packet one-way delay: 52.397 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.25 Mbit/s
95th percentile per-packet one-way delay: 52.397 ms
Loss rate: 0.00%
```

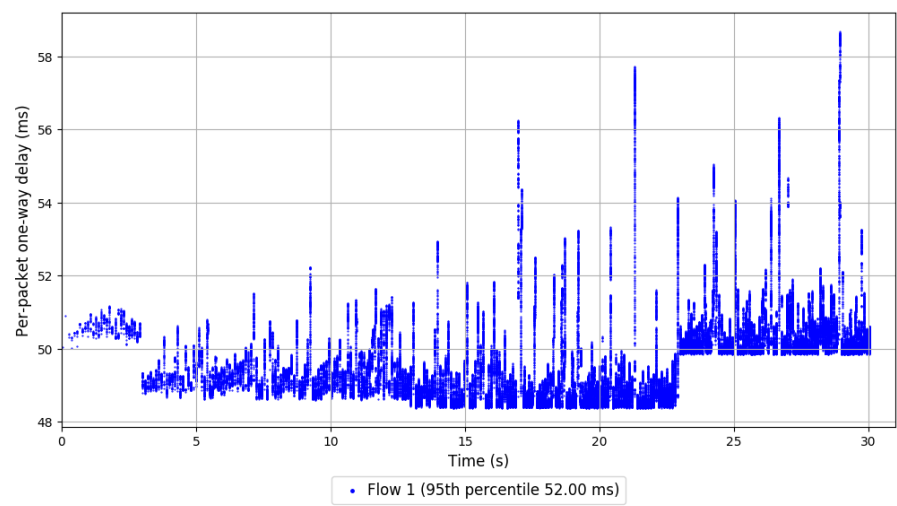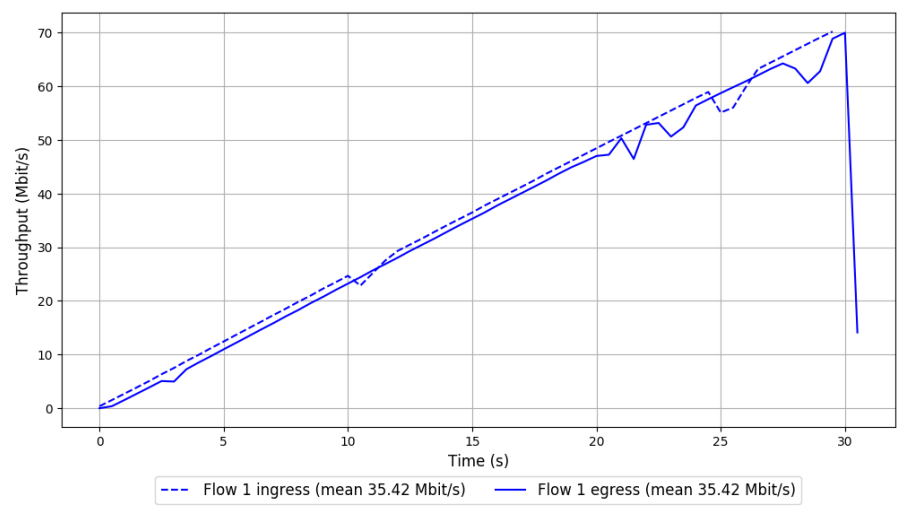# Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2018-06-07 01:03:45
End at: 2018-06-07 01:04:15
Local clock offset: 0.369 ms
Remote clock offset: -0.014 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.42 Mbit/s
95th percentile per-packet one-way delay: 52.000 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.42 Mbit/s
95th percentile per-packet one-way delay: 52.000 ms
Loss rate: 0.00%
```
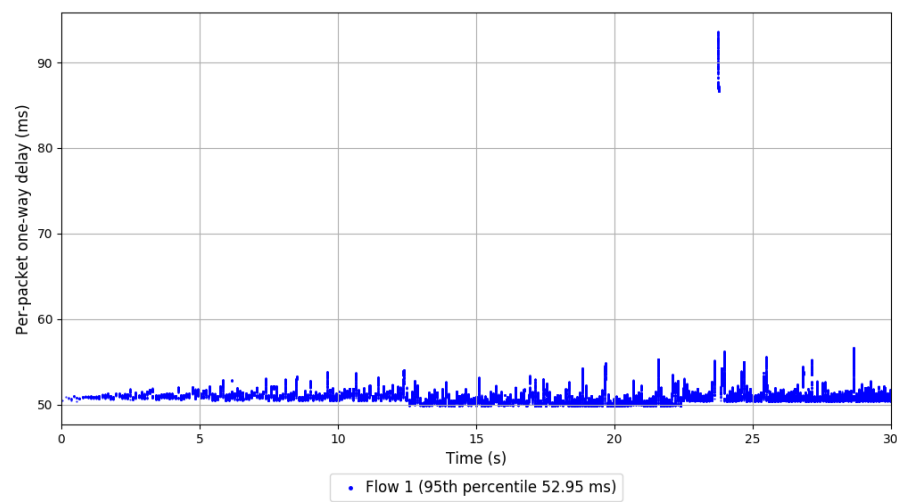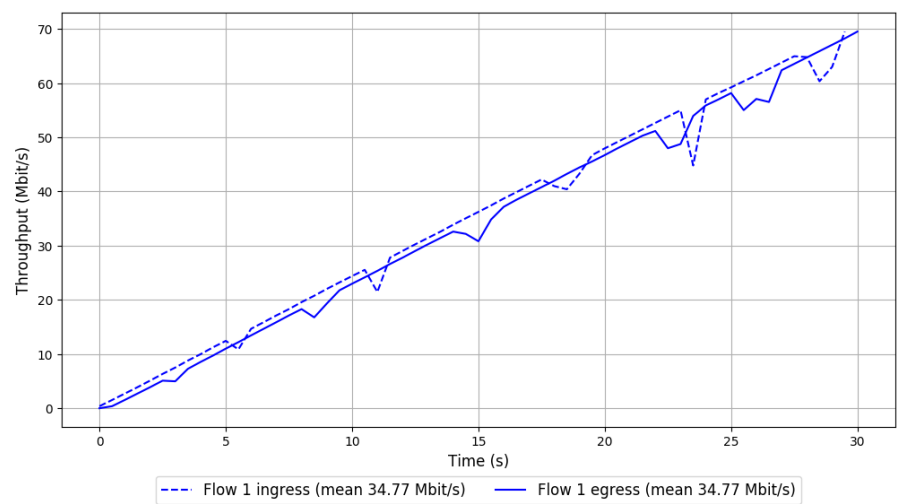
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 35.42 Mbit/s)   Flow 1 egress (mean 35.42 Mbit/s)

Flow 1 (95th percentile 52.00 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2018-06-07 01:24:25
End at: 2018-06-07 01:24:55
Local clock offset: 0.406 ms
Remote clock offset: 0.022 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.77 Mbit/s
95th percentile per-packet one-way delay: 52.950 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.77 Mbit/s
95th percentile per-packet one-way delay: 52.950 ms
Loss rate: 0.00%
```

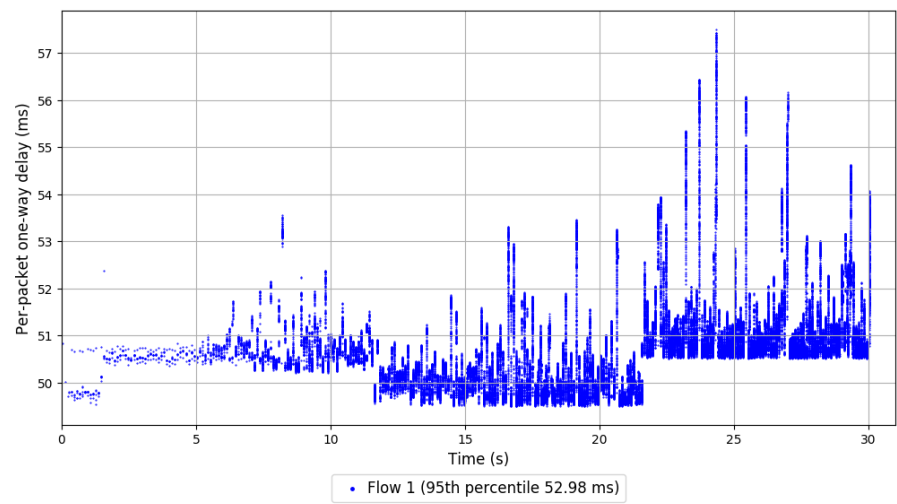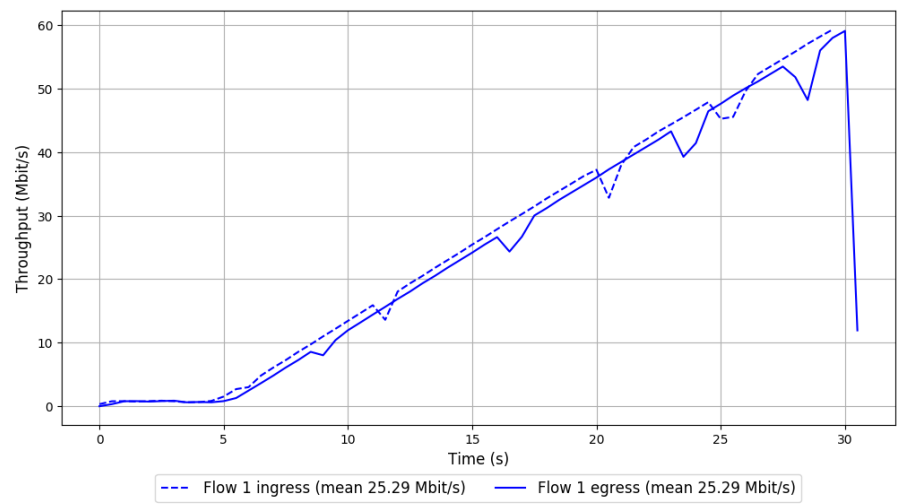# Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2018-06-07 01:44:46
End at: 2018-06-07 01:45:16
Local clock offset: -0.063 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.29 Mbit/s
95th percentile per-packet one-way delay: 52.977 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.29 Mbit/s
95th percentile per-packet one-way delay: 52.977 ms
Loss rate: 0.00%
```

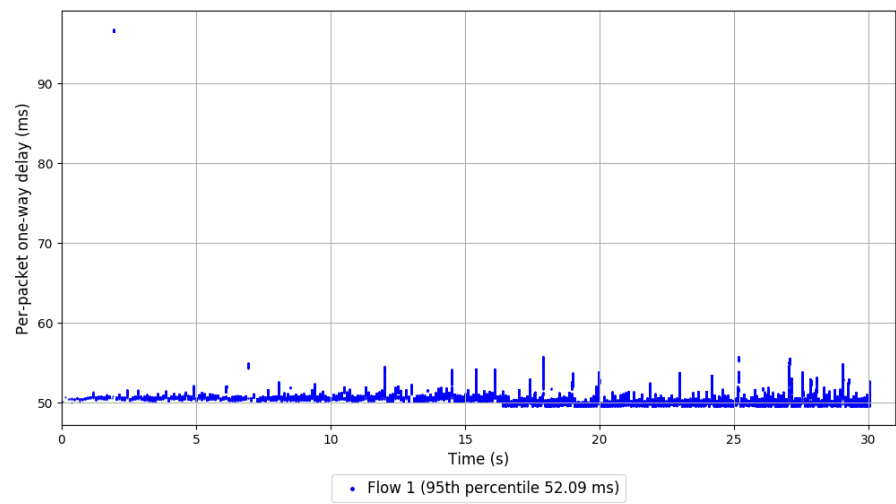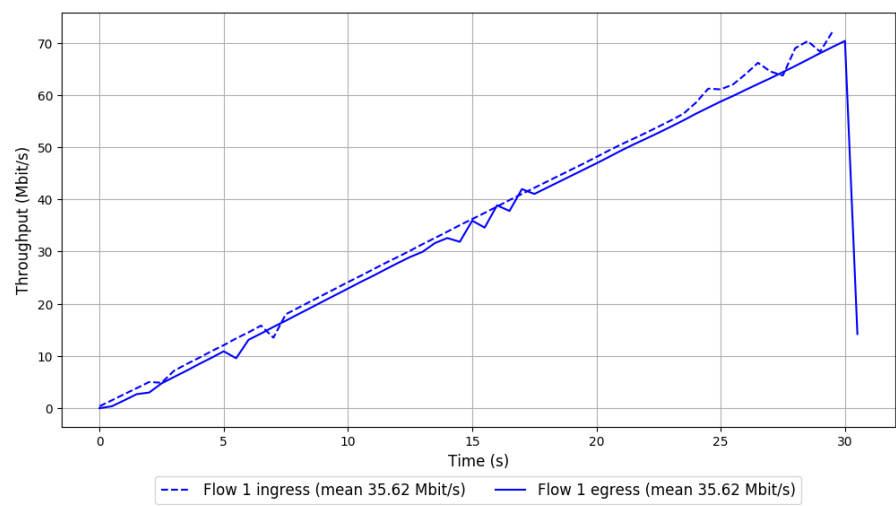## Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-06-07 02:05:11
End at: 2018-06-07 02:05:41
Local clock offset: 0.341 ms
Remote clock offset: -0.001 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.62 Mbit/s
95th percentile per-packet one-way delay: 52.095 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.62 Mbit/s
95th percentile per-packet one-way delay: 52.095 ms
Loss rate: 0.00%
```

Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 35.62 Mbit/s)   Flow 1 egress (mean 35.62 Mbit/s)

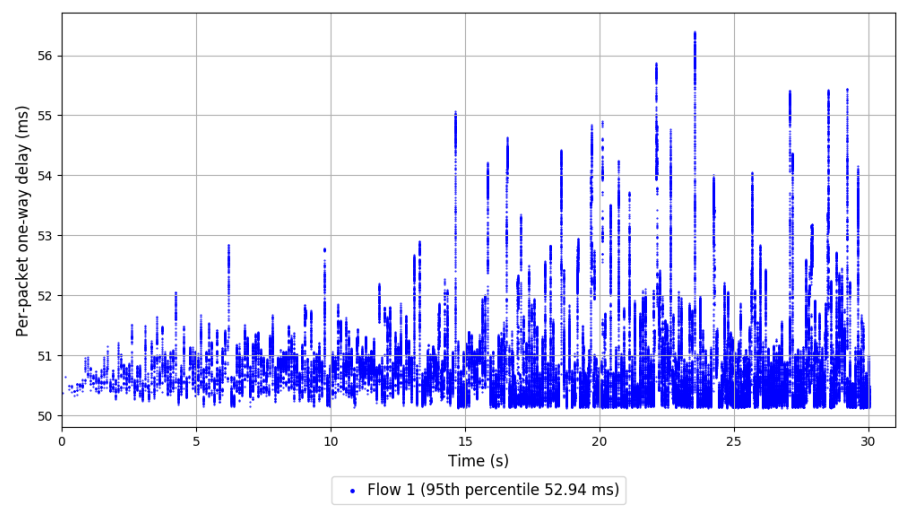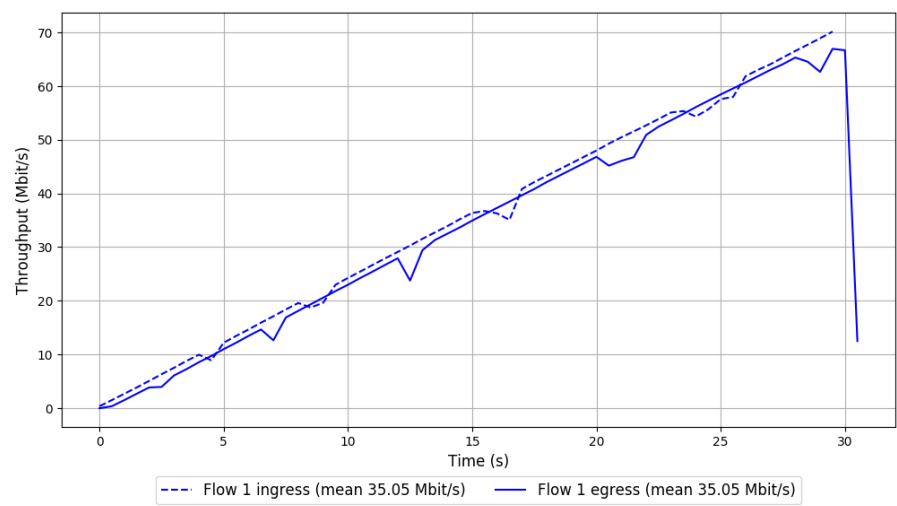• Flow 1 (95th percentile 52.09 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-06-07 02:25:39
End at: 2018-06-07 02:26:09
Local clock offset: 0.407 ms
Remote clock offset: -0.034 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.05 Mbit/s
95th percentile per-packet one-way delay: 52.944 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.05 Mbit/s
95th percentile per-packet one-way delay: 52.944 ms
Loss rate: 0.00%
```
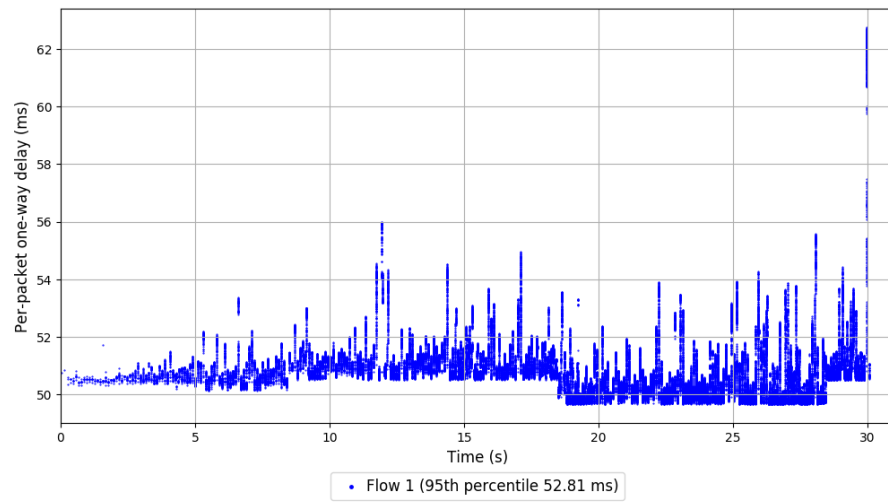
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2018-06-07 02:45:49
End at: 2018-06-07 02:46:19
Local clock offset: 0.0 ms
Remote clock offset: 0.028 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 52.806 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 52.806 ms
Loss rate: 0.00%
```
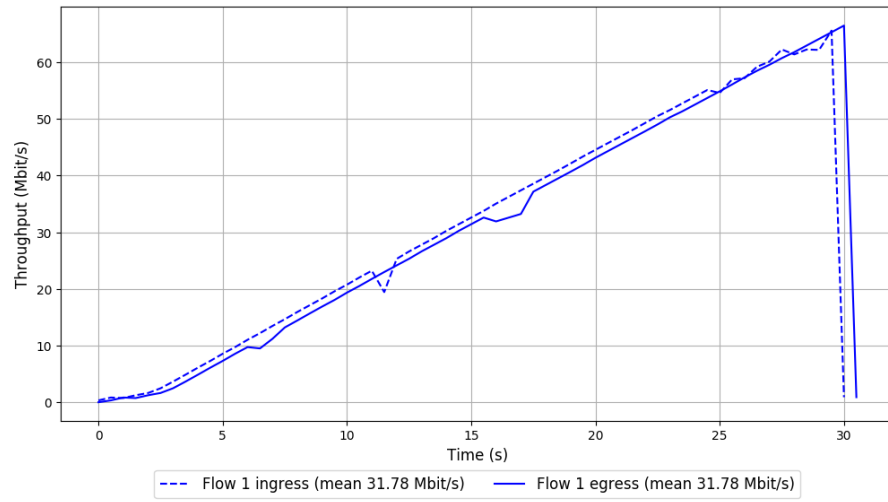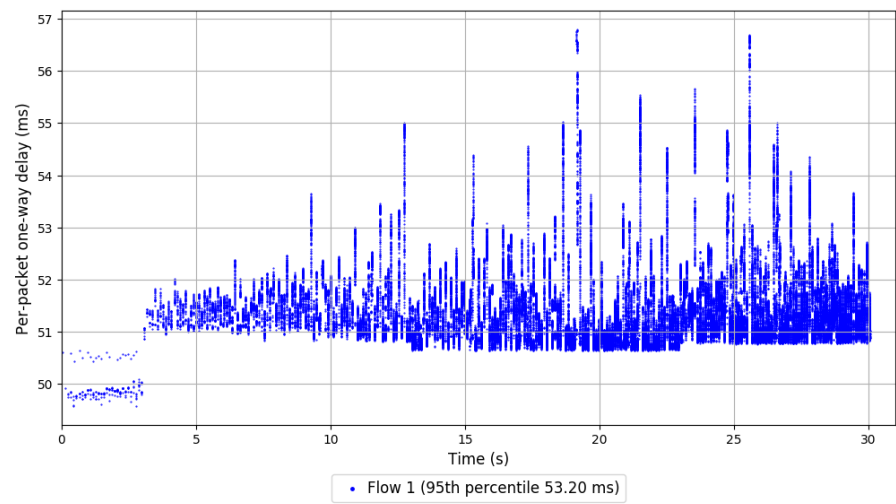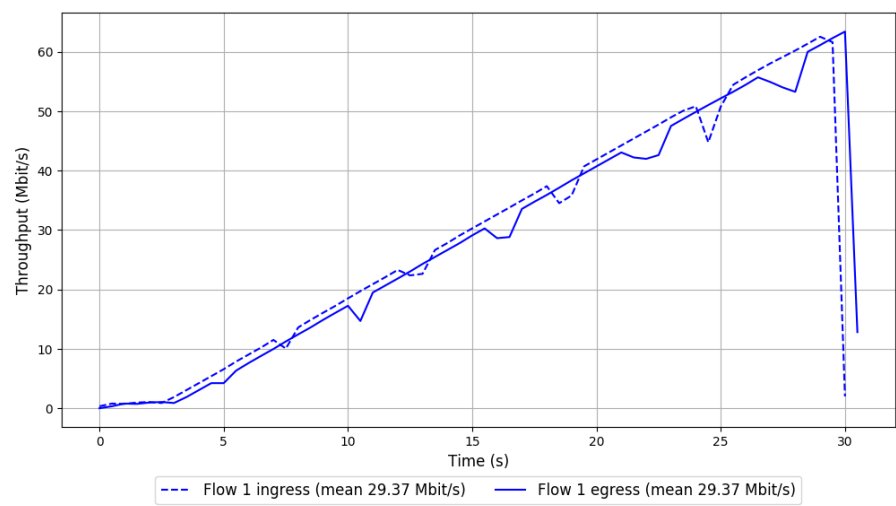
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 31.78 Mbit/s)   Flow 1 egress (mean 31.78 Mbit/s)

Flow 1 (95th percentile 52.81 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2018-06-07 03:06:14
End at: 2018-06-07 03:06:44
Local clock offset: -0.034 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2018-06-07 04:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.37 Mbit/s
95th percentile per-packet one-way delay: 53.204 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 29.37 Mbit/s
95th percentile per-packet one-way delay: 53.204 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-07 00:06:35
End at: 2018-06-07 00:07:05
Local clock offset: 0.005 ms
Remote clock offset: 0.014 ms


# Below is generated by plot.py at 2018-06-07 04:20:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 596.67 Mbit/s
95th percentile per-packet one-way delay: 134.636 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 596.67 Mbit/s
95th percentile per-packet one-way delay: 134.636 ms
Loss rate: 0.83%
```
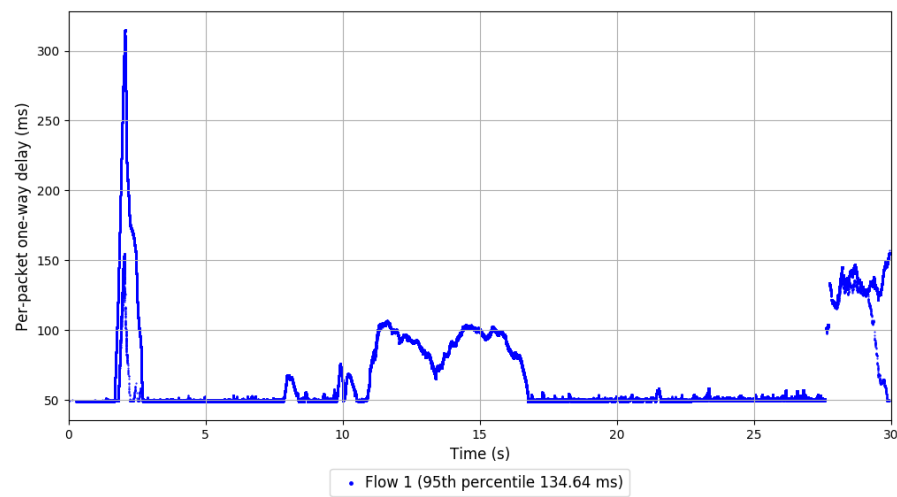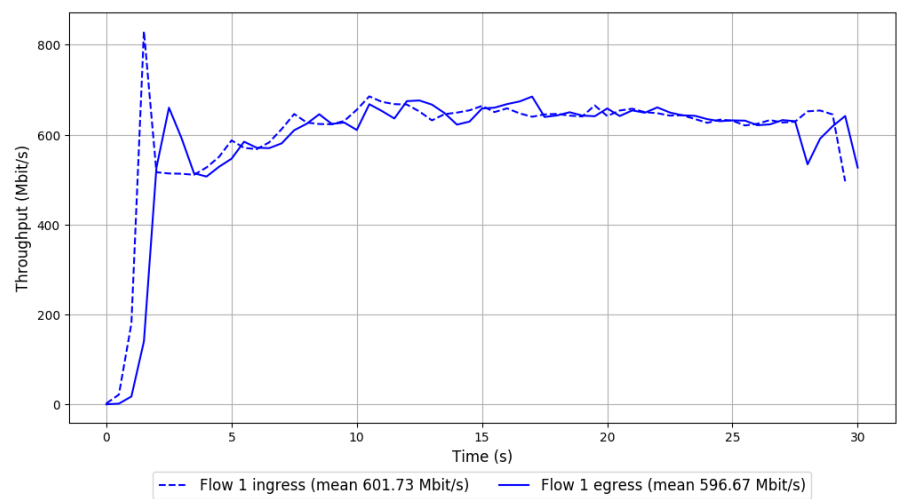
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-07 00:26:57
End at: 2018-06-07 00:27:27
Local clock offset: -0.01 ms
Remote clock offset: -0.087 ms


# Below is generated by plot.py at 2018-06-07 04:20:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 537.17 Mbit/s
95th percentile per-packet one-way delay: 140.500 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 537.17 Mbit/s
95th percentile per-packet one-way delay: 140.500 ms
Loss rate: 1.48%
```
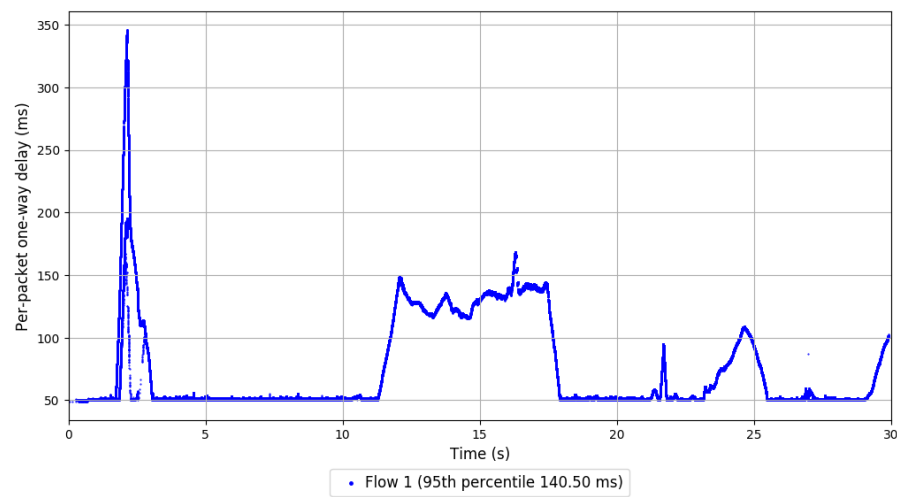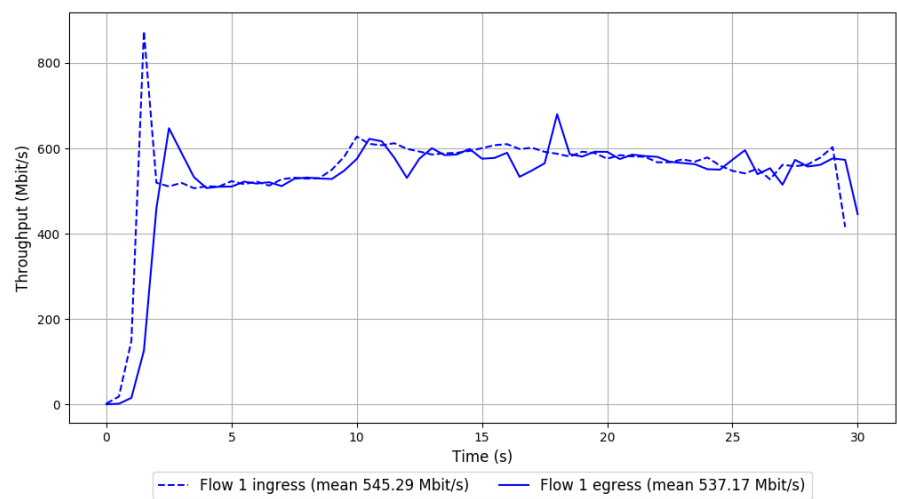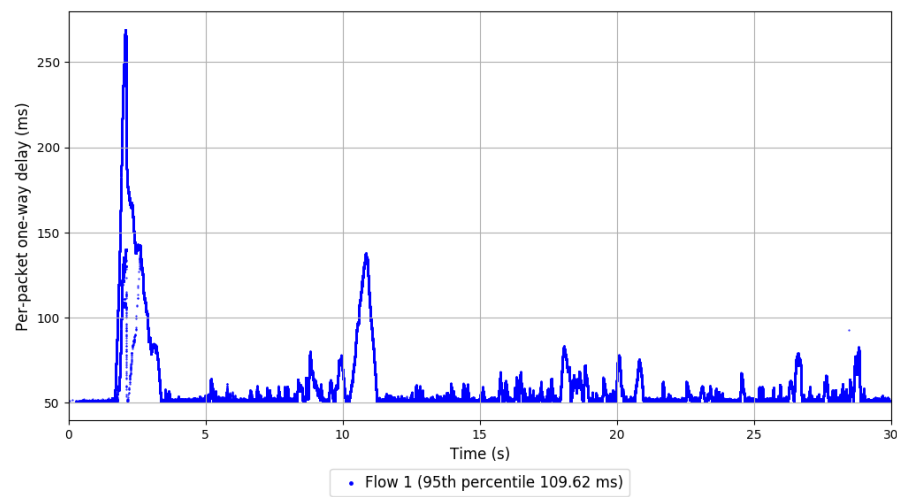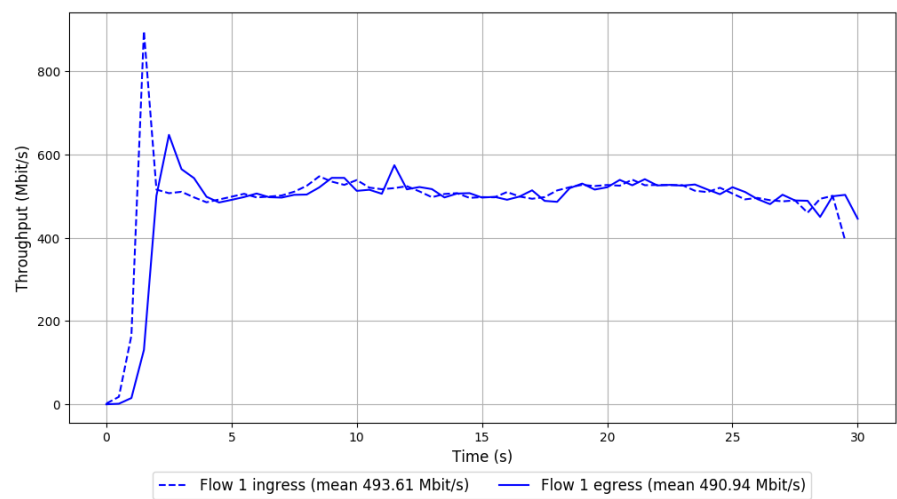
Run 2: Report of PCC-Allegro — Data Link

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-07 00:47:01
End at: 2018-06-07 00:47:31
Local clock offset: -0.435 ms
Remote clock offset: -0.078 ms


# Below is generated by plot.py at 2018-06-07 04:20:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 490.94 Mbit/s
95th percentile per-packet one-way delay: 109.618 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 490.94 Mbit/s
95th percentile per-packet one-way delay: 109.618 ms
Loss rate: 0.54%
```

Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 493.61 Mbit/s)   Flow 1 egress (mean 490.94 Mbit/s)

• Flow 1 (95th percentile 109.62 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-07 01:07:27
End at: 2018-06-07 01:07:57
Local clock offset: 0.012 ms
Remote clock offset: -0.032 ms


# Below is generated by plot.py at 2018-06-07 04:20:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 553.14 Mbit/s
95th percentile per-packet one-way delay: 211.605 ms
Loss rate: 3.05%
-- Flow 1:
Average throughput: 553.14 Mbit/s
95th percentile per-packet one-way delay: 211.605 ms
Loss rate: 3.05%
```
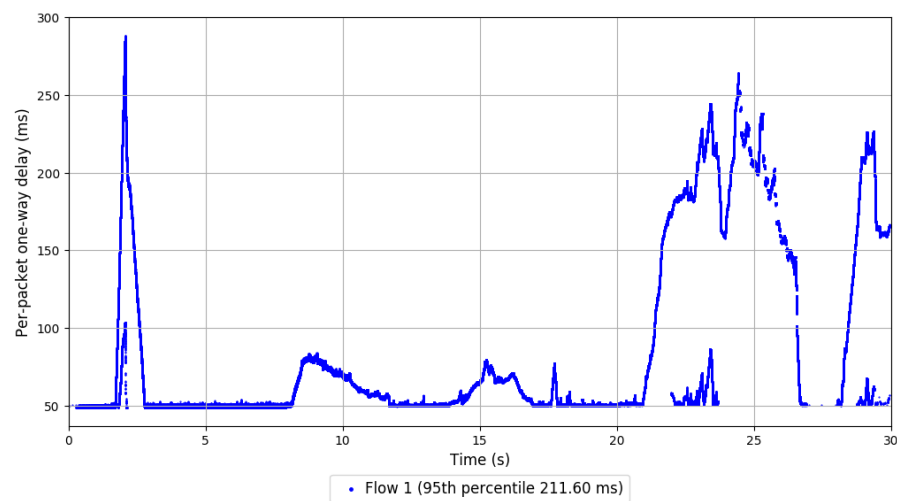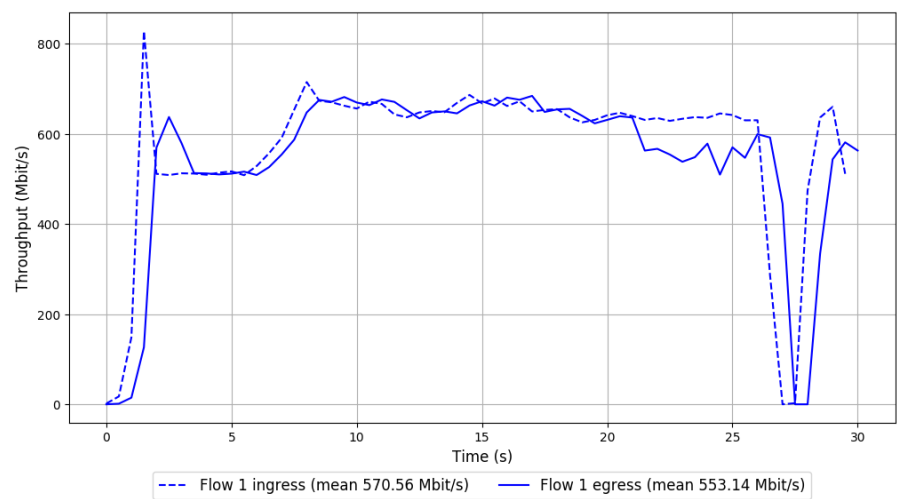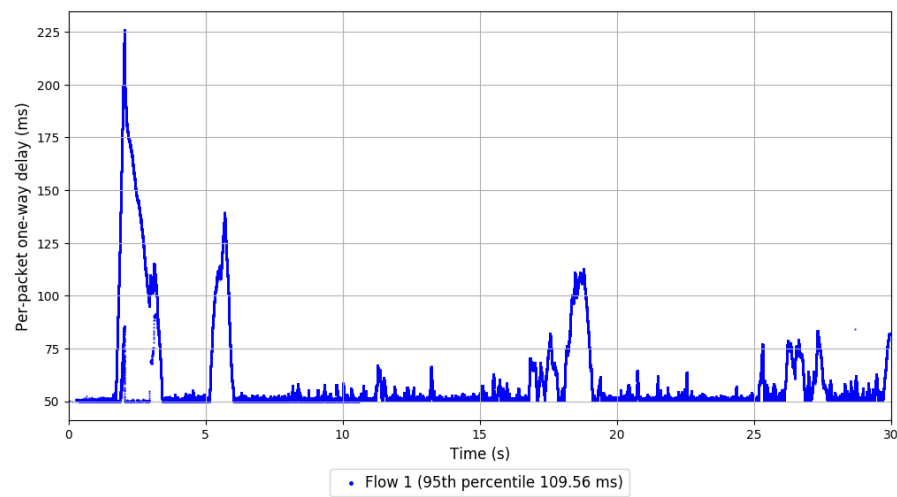
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 570.56 Mbit/s) — — — Flow 1 egress (mean 553.14 Mbit/s)

Flow 1 (95th percentile 211.60 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-07 01:28:06
End at: 2018-06-07 01:28:36
Local clock offset: 0.357 ms
Remote clock offset: -0.034 ms


# Below is generated by plot.py at 2018-06-07 04:20:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 506.84 Mbit/s
95th percentile per-packet one-way delay: 109.555 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 506.84 Mbit/s
95th percentile per-packet one-way delay: 109.555 ms
Loss rate: 0.37%
```
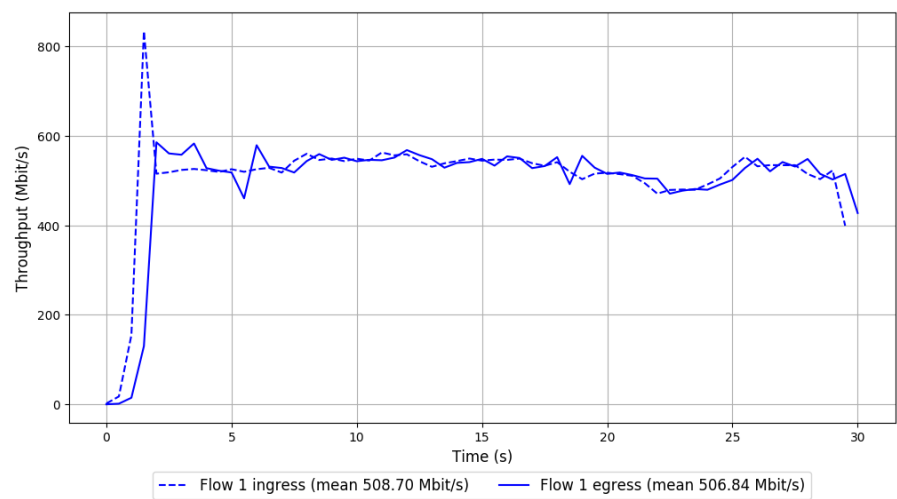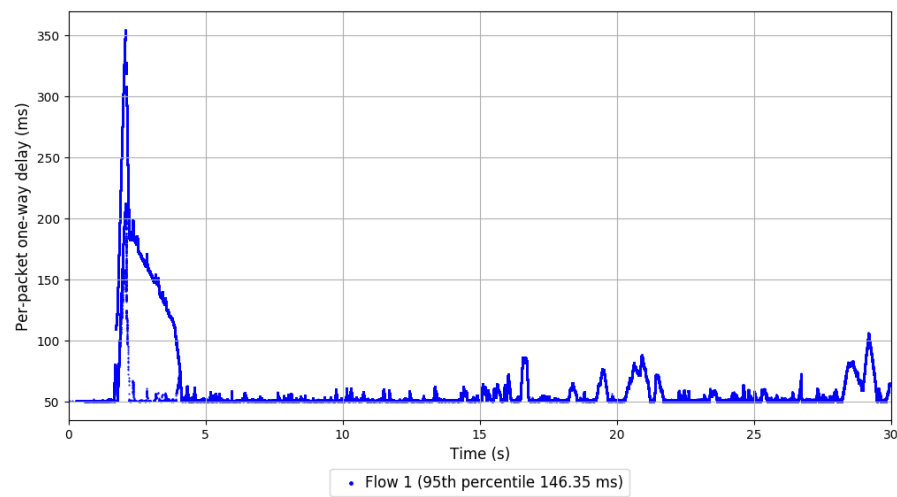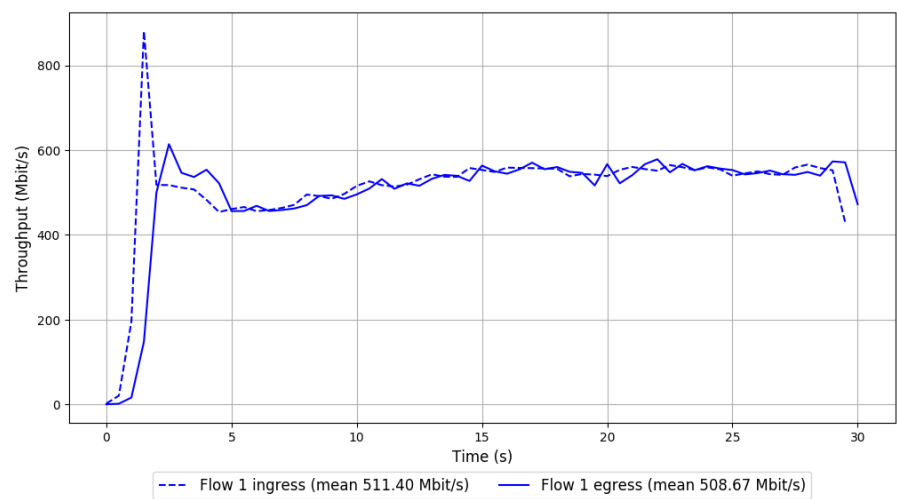
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 508.70 Mbit/s) — Flow 1 egress (mean 506.84 Mbit/s)

• Flow 1 (95th percentile 109.56 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-07 01:48:26
End at: 2018-06-07 01:48:56
Local clock offset: -0.082 ms
Remote clock offset: -0.058 ms


# Below is generated by plot.py at 2018-06-07 04:20:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 508.67 Mbit/s
95th percentile per-packet one-way delay: 146.355 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 508.67 Mbit/s
95th percentile per-packet one-way delay: 146.355 ms
Loss rate: 0.53%
```
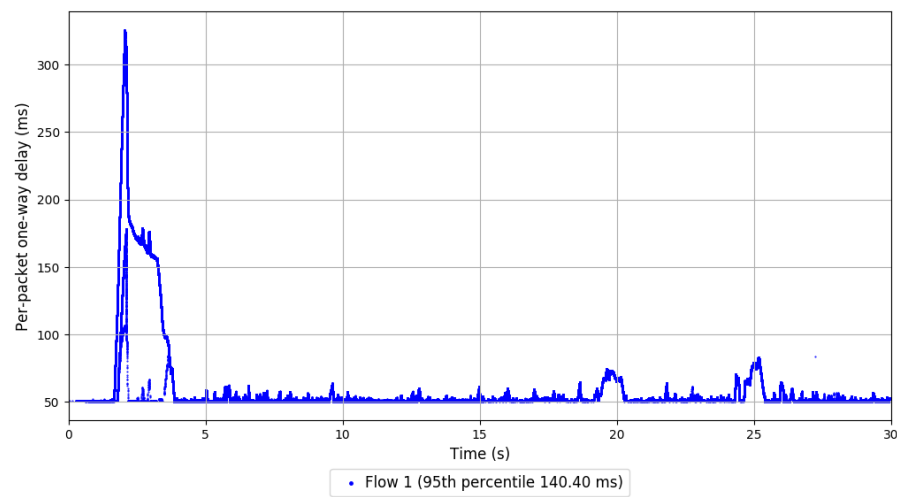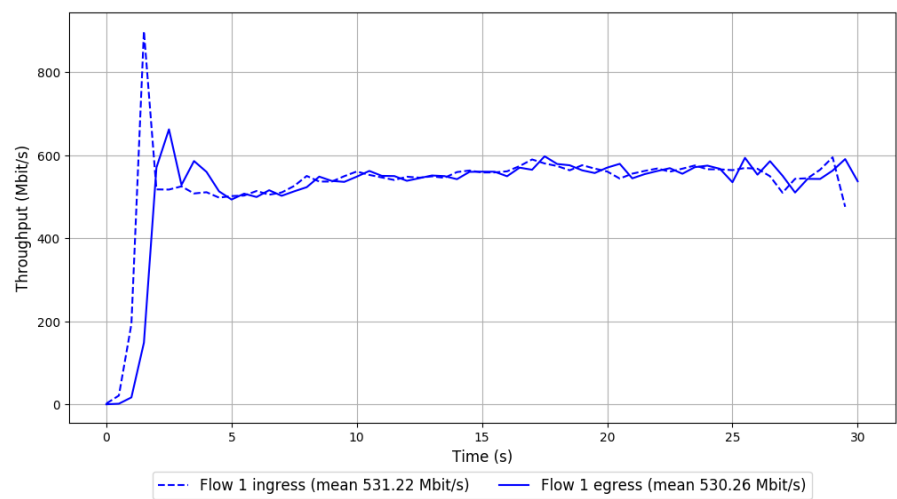
Run 6: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 511.40 Mbit/s)   Flow 1 egress (mean 508.67 Mbit/s)

Flow 1 (95th percentile 146.35 ms)

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-07 02:08:52
End at: 2018-06-07 02:09:22
Local clock offset: -0.008 ms
Remote clock offset: -0.035 ms


# Below is generated by plot.py at 2018-06-07 04:26:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 530.26 Mbit/s
95th percentile per-packet one-way delay: 140.401 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 530.26 Mbit/s
95th percentile per-packet one-way delay: 140.401 ms
Loss rate: 0.18%
```
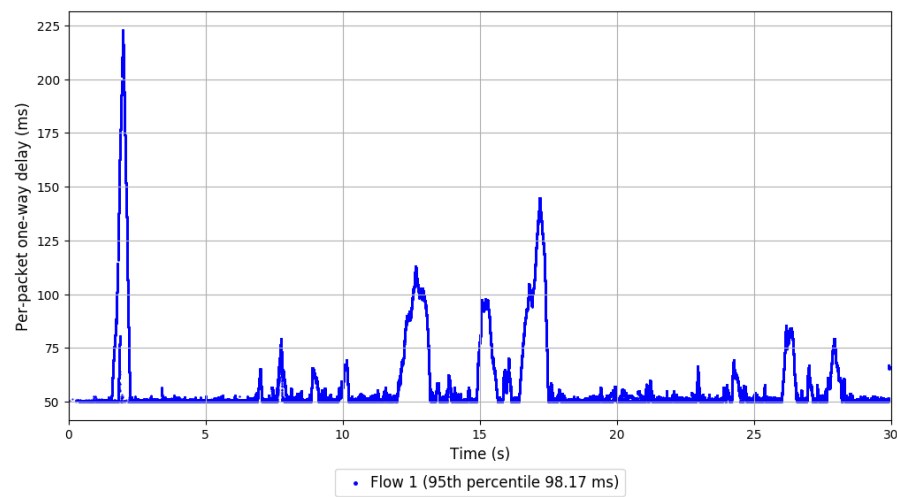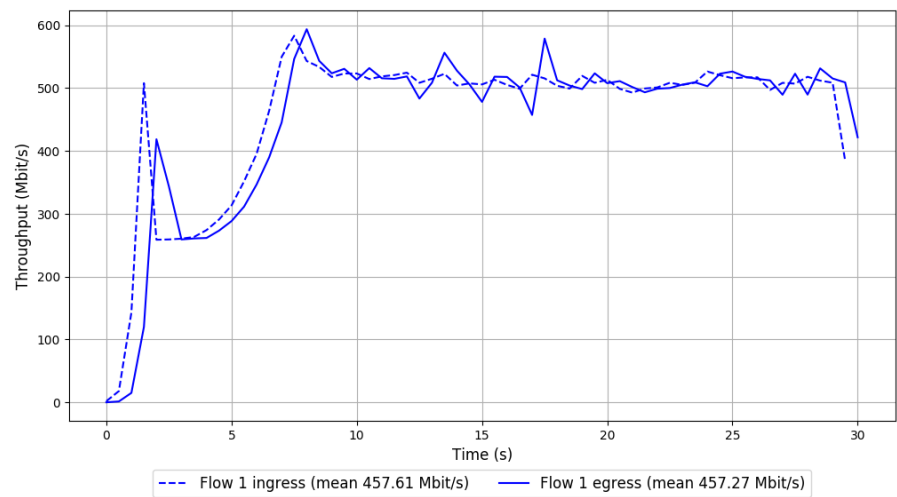
Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 531.22 Mbit/s)   Flow 1 egress (mean 530.26 Mbit/s)
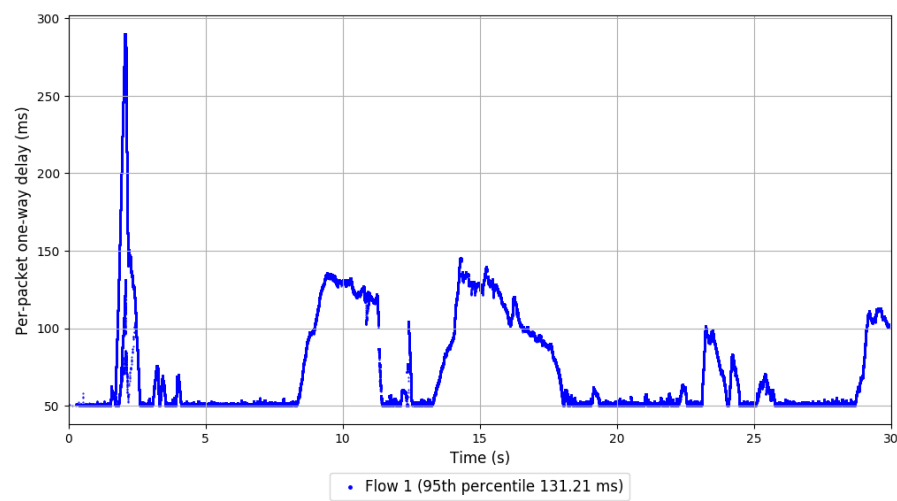

Flow 1 (95th percentile 140.40 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-07 02:29:22
End at: 2018-06-07 02:29:52
Local clock offset: 0.022 ms
Remote clock offset: -0.059 ms


# Below is generated by plot.py at 2018-06-07 04:26:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 457.27 Mbit/s
95th percentile per-packet one-way delay: 98.175 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 457.27 Mbit/s
95th percentile per-packet one-way delay: 98.175 ms
Loss rate: 0.07%
```

Run 8: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 457.61 Mbit/s)   Flow 1 egress (mean 457.27 Mbit/s)
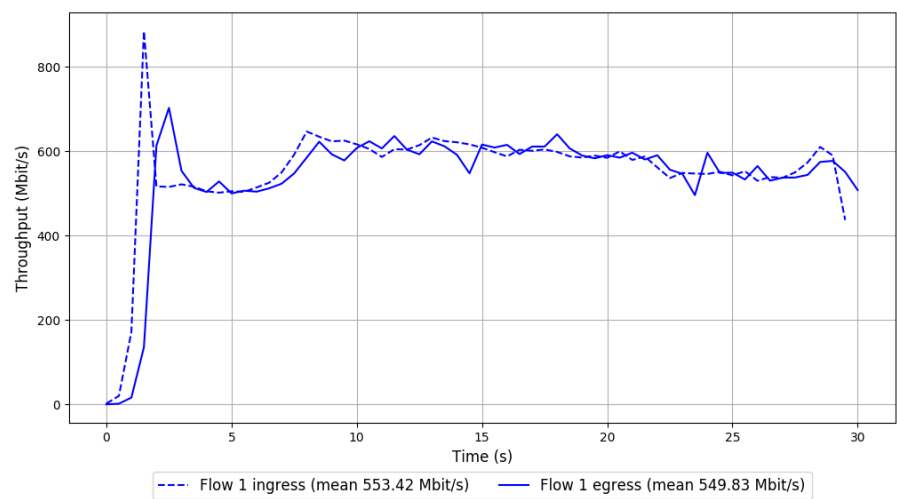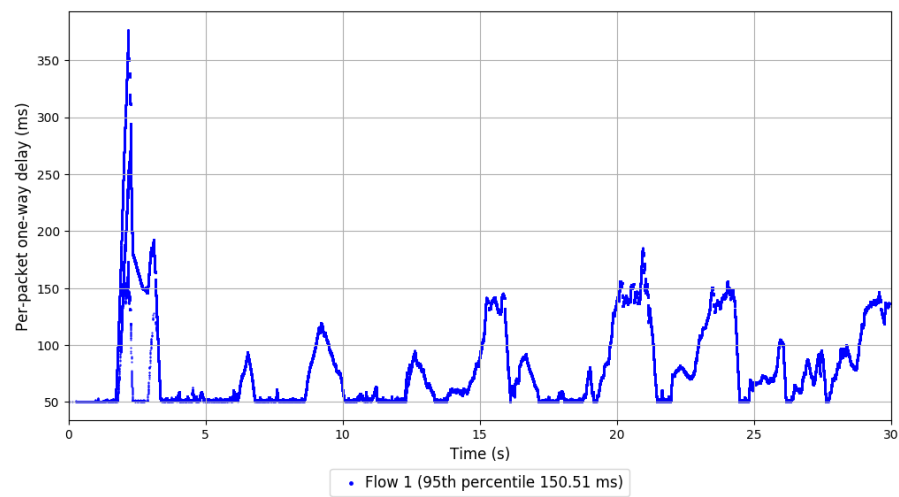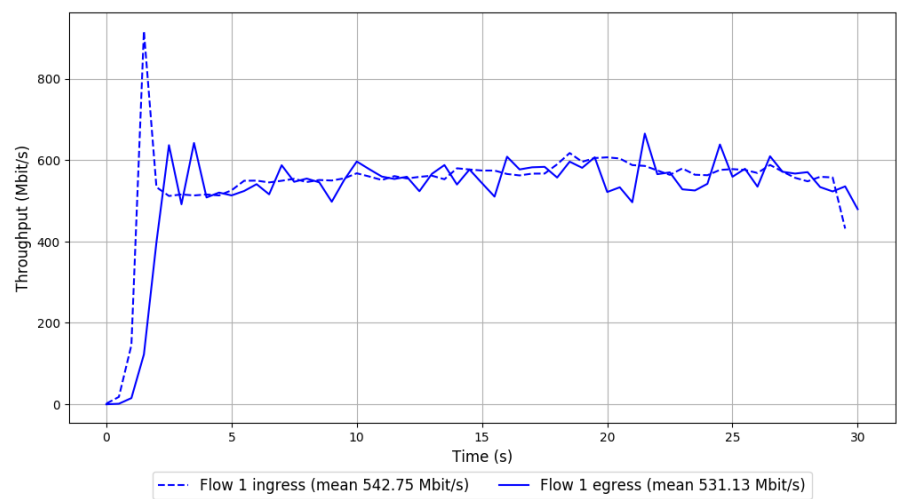

Flow 1 (95th percentile 98.17 ms)

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-07 02:49:30
End at: 2018-06-07 02:50:00
Local clock offset: 0.008 ms
Remote clock offset: -0.029 ms


# Below is generated by plot.py at 2018-06-07 04:27:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 549.83 Mbit/s
95th percentile per-packet one-way delay: 131.209 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 549.83 Mbit/s
95th percentile per-packet one-way delay: 131.209 ms
Loss rate: 0.65%
```

Run 9: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 553.42 Mbit/s) --- Flow 1 egress (mean 549.83 Mbit/s)
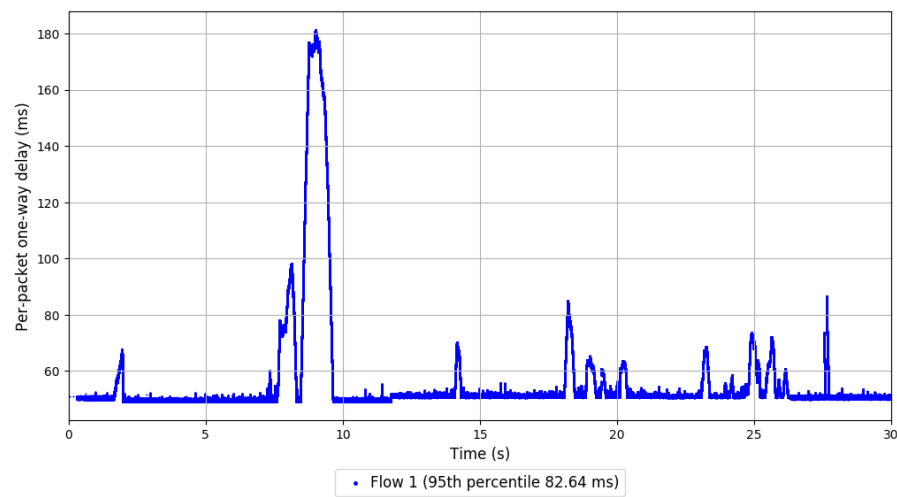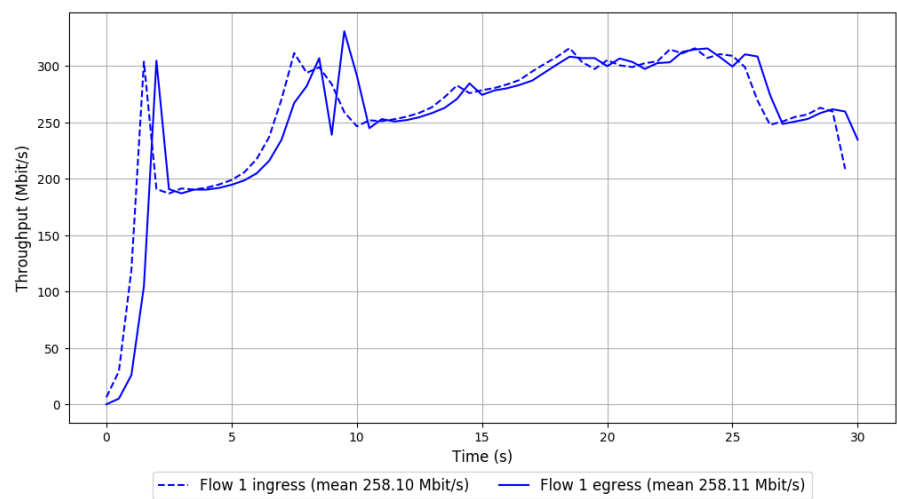

• Flow 1 (95th percentile 131.21 ms)

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-07 03:09:56
End at: 2018-06-07 03:10:26
Local clock offset: -0.009 ms
Remote clock offset: -0.049 ms


# Below is generated by plot.py at 2018-06-07 04:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 531.13 Mbit/s
95th percentile per-packet one-way delay: 150.511 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 531.13 Mbit/s
95th percentile per-packet one-way delay: 150.511 ms
Loss rate: 2.14%
```

Run 10: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 542.75 Mbit/s)   Flow 1 egress (mean 531.13 Mbit/s)
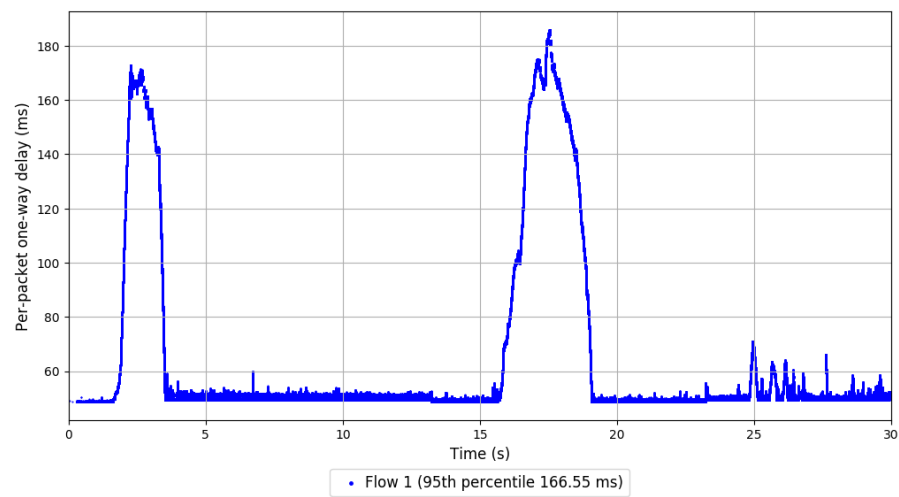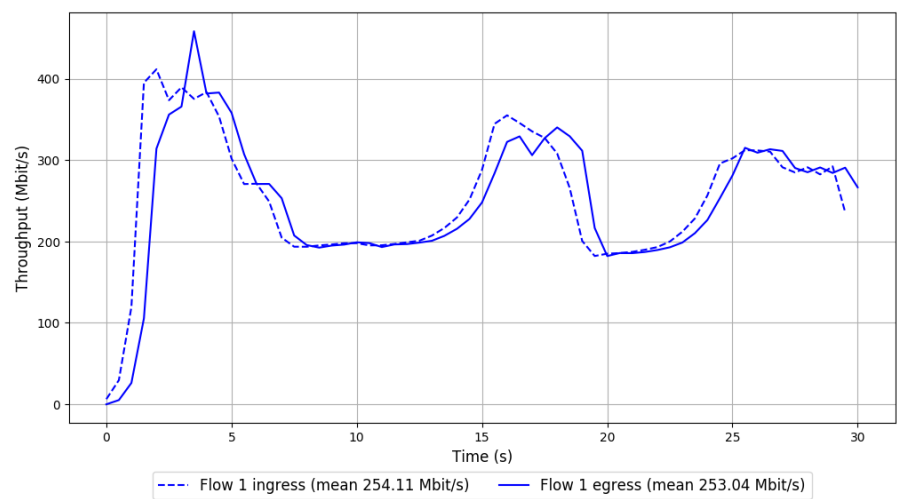

• Flow 1 (95th percentile 150.51 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-07 00:12:56
End at: 2018-06-07 00:13:26
Local clock offset: -0.412 ms
Remote clock offset: 0.011 ms


# Below is generated by plot.py at 2018-06-07 04:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.11 Mbit/s
95th percentile per-packet one-way delay: 82.636 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 258.11 Mbit/s
95th percentile per-packet one-way delay: 82.636 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 258.10 Mbit/s)   Flow 1 egress (mean 258.11 Mbit/s)

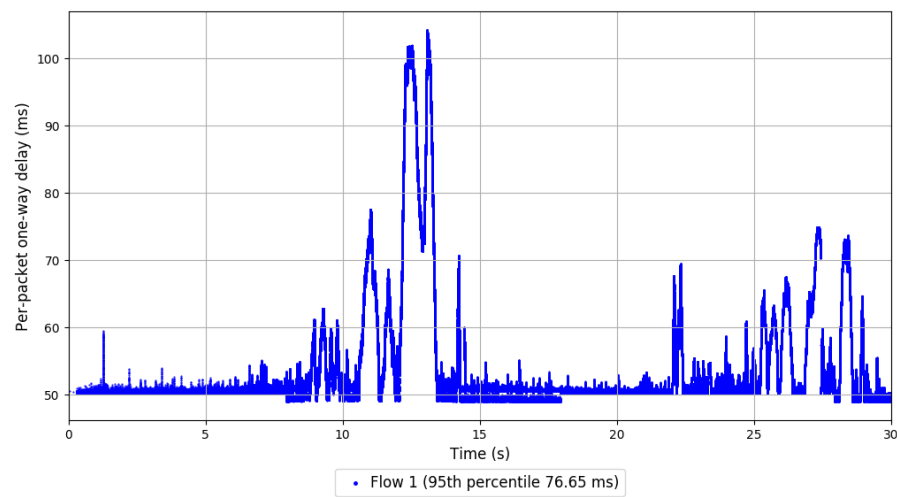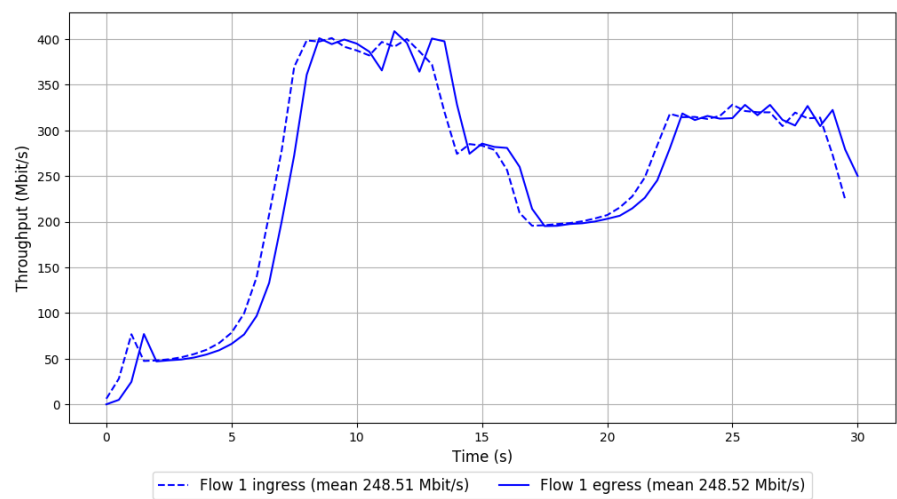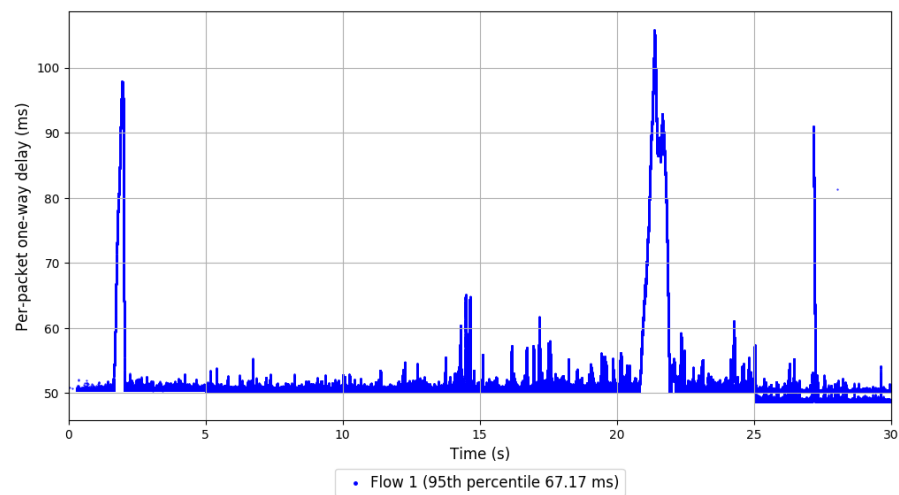
• Flow 1 (95th percentile 82.64 ms)

```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-07 00:33:24
End at: 2018-06-07 00:33:54
Local clock offset: -0.034 ms
Remote clock offset: -0.066 ms


# Below is generated by plot.py at 2018-06-07 04:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 253.04 Mbit/s
95th percentile per-packet one-way delay: 166.548 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 253.04 Mbit/s
95th percentile per-packet one-way delay: 166.548 ms
Loss rate: 0.42%
```

Run 2: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 254.11 Mbit/s) ---- Flow 1 egress (mean 253.04 Mbit/s)
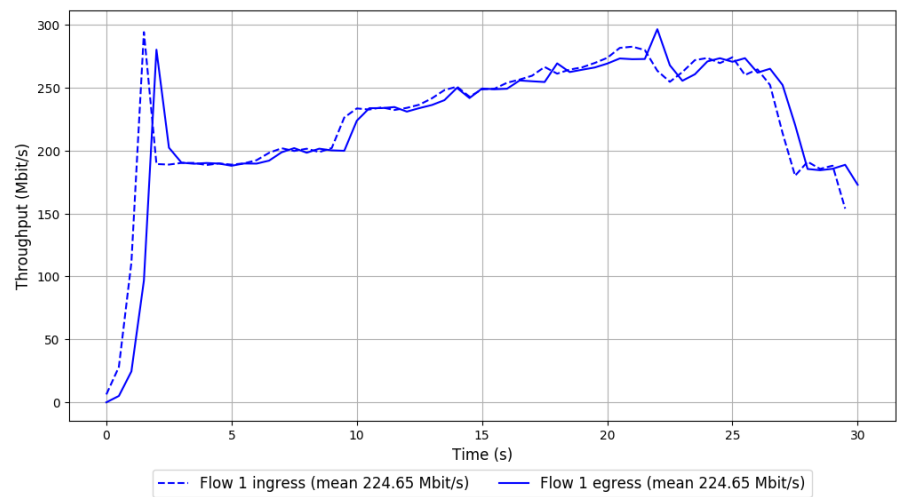

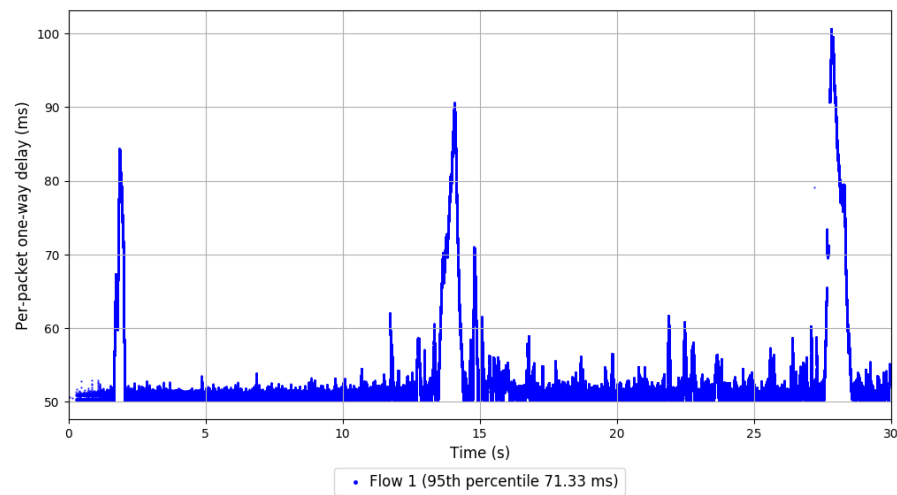
• Flow 1 (95th percentile 166.55 ms)

```
Run 3: Statistics of PCC-Expr

Start at: 2018-06-07 00:53:30
End at: 2018-06-07 00:54:00
Local clock offset: -0.025 ms
Remote clock offset: -0.076 ms


# Below is generated by plot.py at 2018-06-07 04:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.52 Mbit/s
95th percentile per-packet one-way delay: 76.650 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 248.52 Mbit/s
95th percentile per-packet one-way delay: 76.650 ms
Loss rate: 0.00%
```
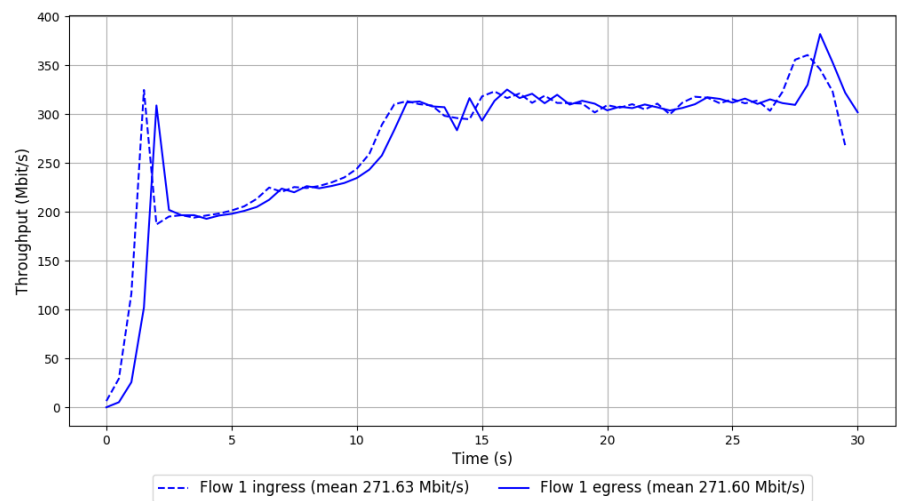
Run 3: Report of PCC-Expr — Data Link

```
Run 4: Statistics of PCC-Expr

Start at: 2018-06-07 01:14:03
End at: 2018-06-07 01:14:33
Local clock offset: 0.017 ms
Remote clock offset: -0.047 ms


# Below is generated by plot.py at 2018-06-07 04:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.65 Mbit/s
95th percentile per-packet one-way delay: 67.171 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 224.65 Mbit/s
95th percentile per-packet one-way delay: 67.171 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Expr — Data Link

```
Run 5: Statistics of PCC-Expr

Start at: 2018-06-07 01:34:30
End at: 2018-06-07 01:35:00
Local clock offset: -0.076 ms
Remote clock offset: -0.074 ms


# Below is generated by plot.py at 2018-06-07 04:34:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 271.60 Mbit/s
95th percentile per-packet one-way delay: 71.328 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 271.60 Mbit/s
95th percentile per-packet one-way delay: 71.328 ms
Loss rate: 0.01%
```
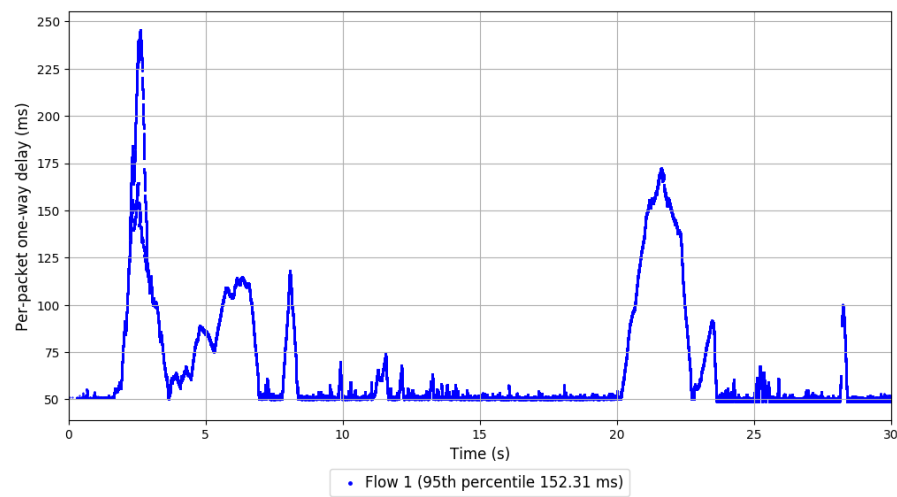
Run 5: Report of PCC-Expr — Data Link

```
Run 6: Statistics of PCC-Expr

Start at: 2018-06-07 01:54:54
End at: 2018-06-07 01:55:24
Local clock offset: -0.102 ms
Remote clock offset: 0.013 ms


# Below is generated by plot.py at 2018-06-07 04:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 290.86 Mbit/s
95th percentile per-packet one-way delay: 152.315 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 290.86 Mbit/s
95th percentile per-packet one-way delay: 152.315 ms
Loss rate: 0.59%
```
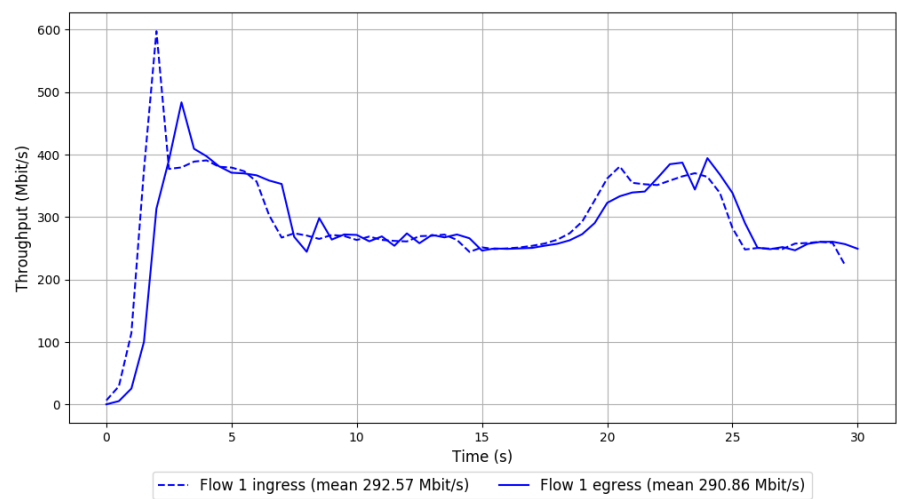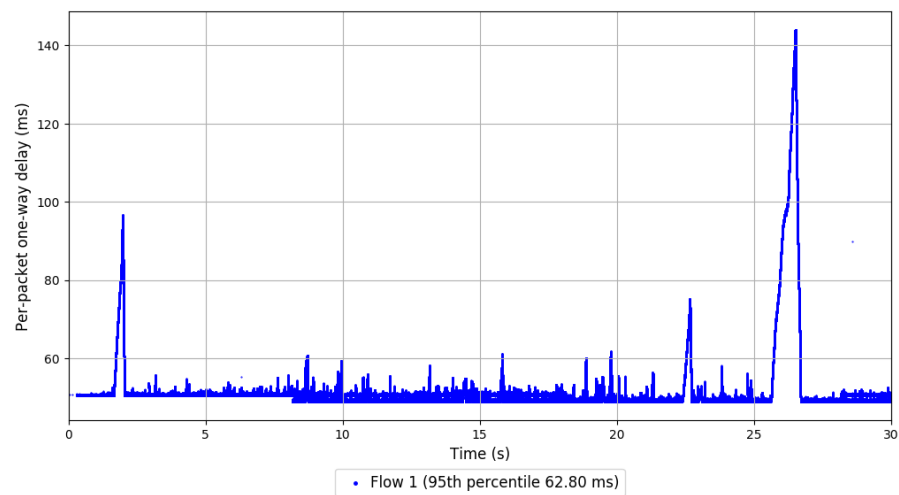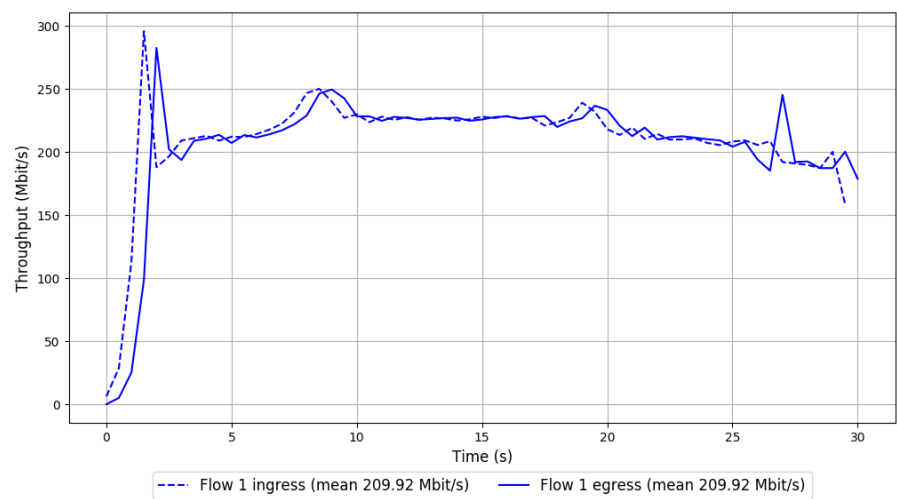
Run 6: Report of PCC-Expr — Data Link

```
Run 7: Statistics of PCC-Expr

Start at: 2018-06-07 02:15:29
End at: 2018-06-07 02:15:59
Local clock offset: 0.022 ms
Remote clock offset: -0.014 ms


# Below is generated by plot.py at 2018-06-07 04:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 209.92 Mbit/s
95th percentile per-packet one-way delay: 62.805 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.92 Mbit/s
95th percentile per-packet one-way delay: 62.805 ms
Loss rate: 0.00%
```
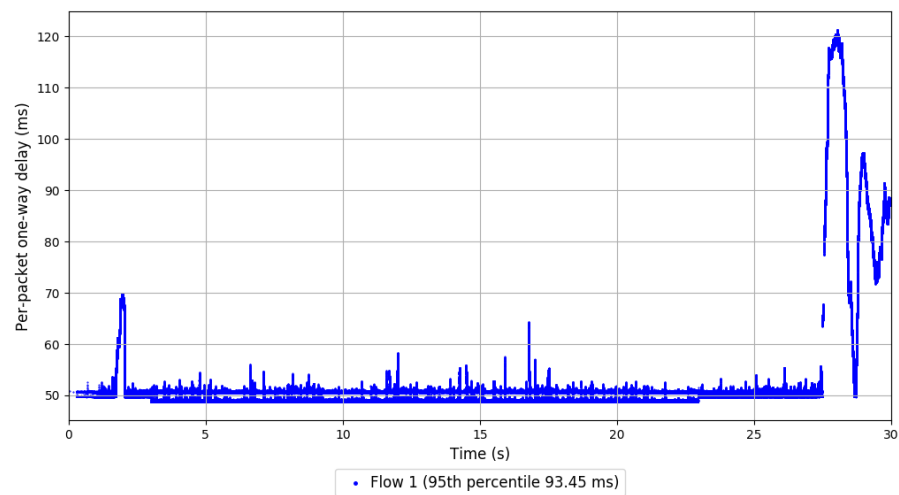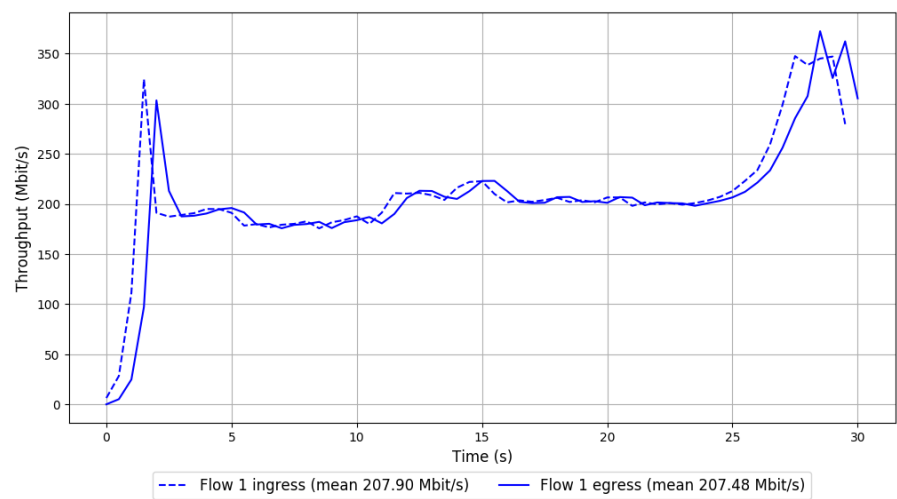
Run 7: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 209.92 Mbit/s) --- Flow 1 egress (mean 209.92 Mbit/s)

• Flow 1 (95th percentile 62.80 ms)

```
Run 8: Statistics of PCC-Expr

Start at: 2018-06-07 02:35:44
End at: 2018-06-07 02:36:14
Local clock offset: 0.032 ms
Remote clock offset: 0.011 ms


# Below is generated by plot.py at 2018-06-07 04:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.48 Mbit/s
95th percentile per-packet one-way delay: 93.449 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 207.48 Mbit/s
95th percentile per-packet one-way delay: 93.449 ms
Loss rate: 0.20%
```
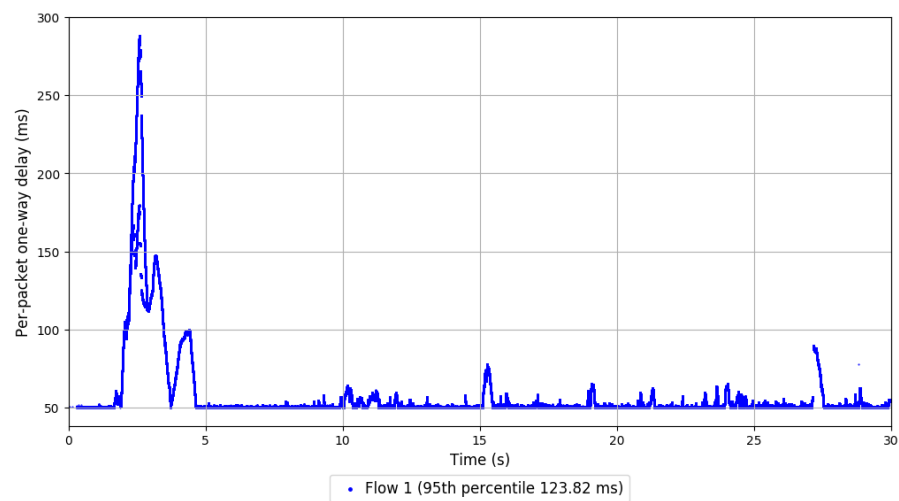
Run 8: Report of PCC-Expr — Data Link

```
Run 9: Statistics of PCC-Expr

Start at: 2018-06-07 02:55:58
End at: 2018-06-07 02:56:28
Local clock offset: 0.033 ms
Remote clock offset: 0.041 ms


# Below is generated by plot.py at 2018-06-07 04:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 251.47 Mbit/s
95th percentile per-packet one-way delay: 123.822 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 251.47 Mbit/s
95th percentile per-packet one-way delay: 123.822 ms
Loss rate: 0.66%
```
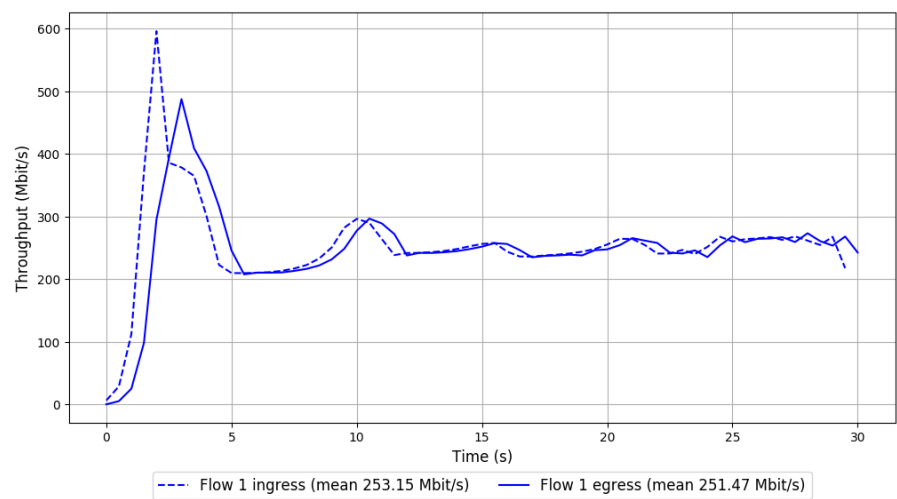
Run 9: Report of PCC-Expr — Data Link

```
Run 10: Statistics of PCC-Expr

Start at: 2018-06-07 03:16:15
End at: 2018-06-07 03:16:45
Local clock offset: 0.026 ms
Remote clock offset: -0.007 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 245.88 Mbit/s
95th percentile per-packet one-way delay: 149.331 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 245.88 Mbit/s
95th percentile per-packet one-way delay: 149.331 ms
Loss rate: 0.26%
```
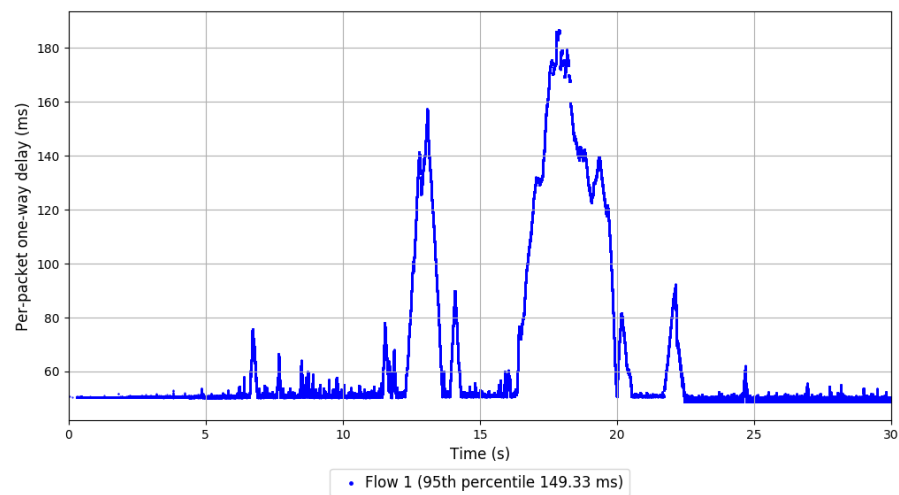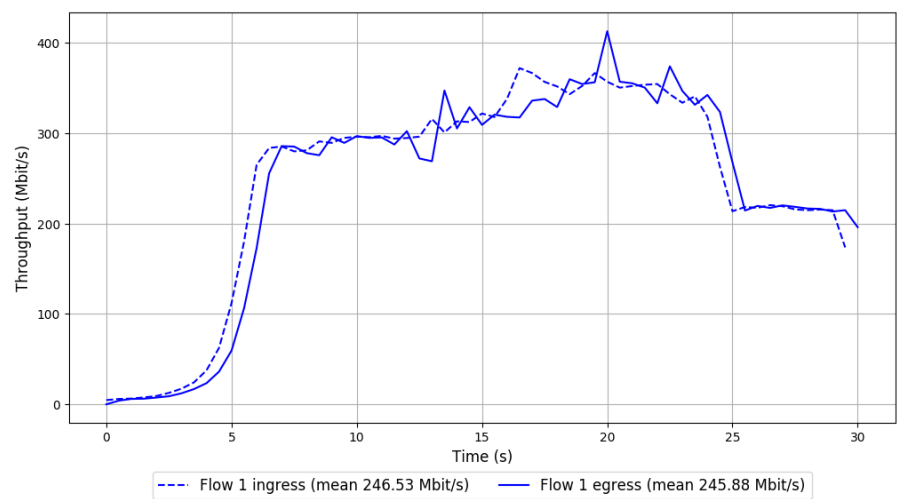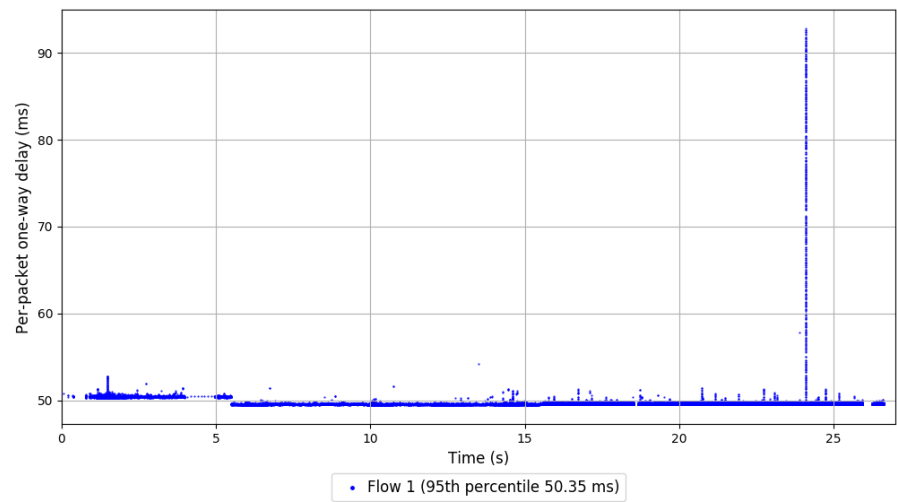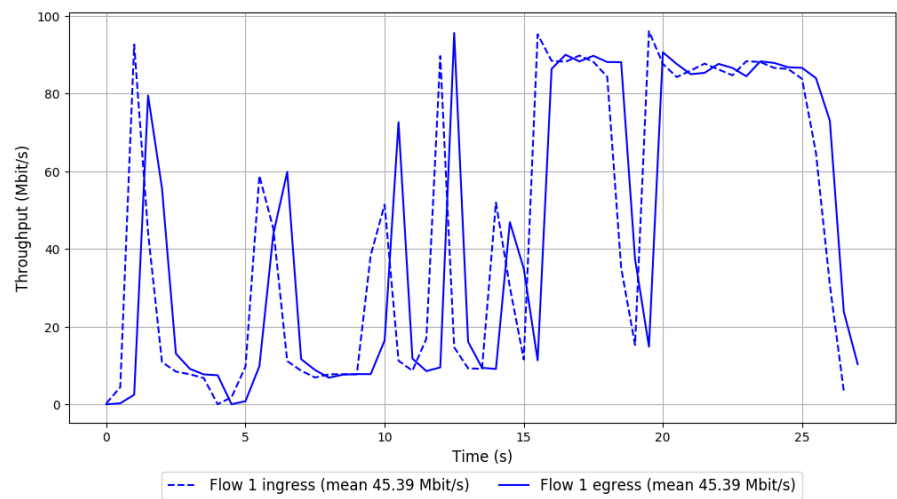
Run 10: Report of PCC-Expr — Data Link

Flow 1 ingress (mean 246.53 Mbit/s)   Flow 1 egress (mean 245.88 Mbit/s)

• Flow 1 (95th percentile 149.33 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-07 00:16:59
End at: 2018-06-07 00:17:29
Local clock offset: -0.031 ms
Remote clock offset: -0.051 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.39 Mbit/s
95th percentile per-packet one-way delay: 50.347 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.39 Mbit/s
95th percentile per-packet one-way delay: 50.347 ms
Loss rate: 0.00%
```
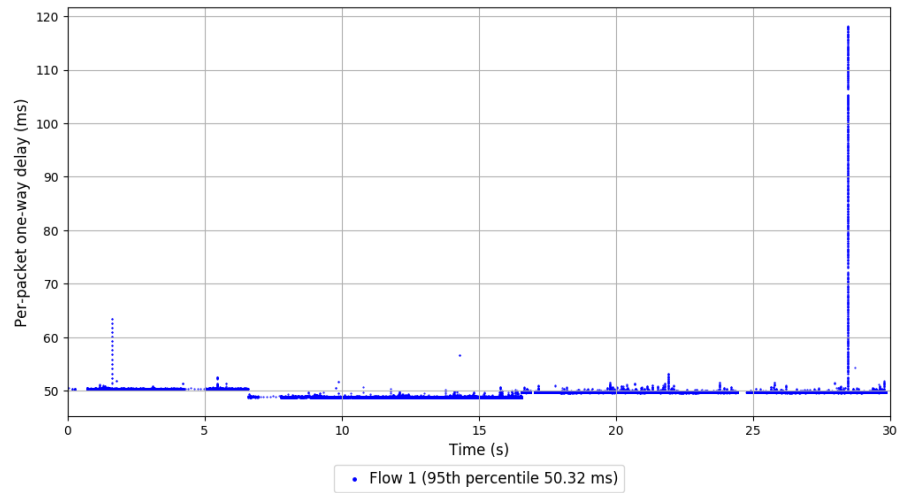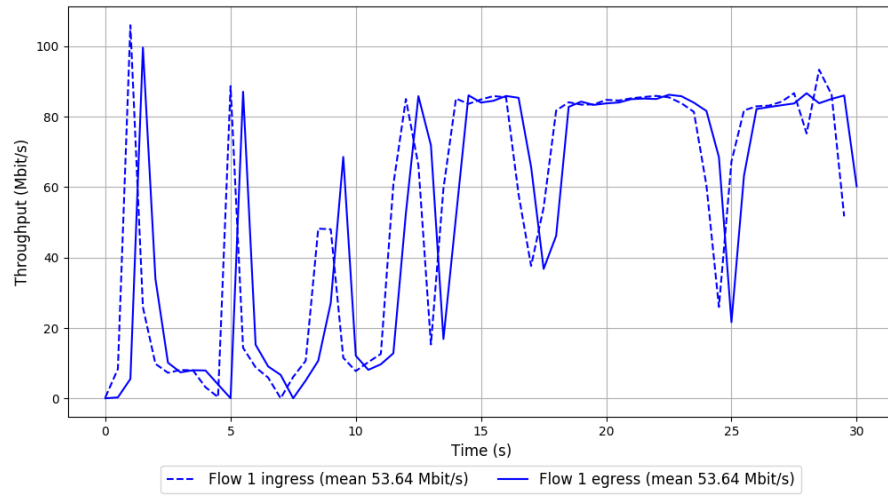
Run 1: Report of QUIC Cubic — Data Link

Run 2: Statistics of QUIC Cubic

Start at: 2018-06-07 00:37:16
End at: 2018-06-07 00:37:46
Local clock offset: -0.417 ms
Remote clock offset: -0.08 ms

Run 2: Report of QUIC Cubic — Data Link

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-07 00:57:31
End at: 2018-06-07 00:58:01
Local clock offset: -0.02 ms
Remote clock offset: -0.033 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.64 Mbit/s
95th percentile per-packet one-way delay: 50.318 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.64 Mbit/s
95th percentile per-packet one-way delay: 50.318 ms
Loss rate: 0.00%
```
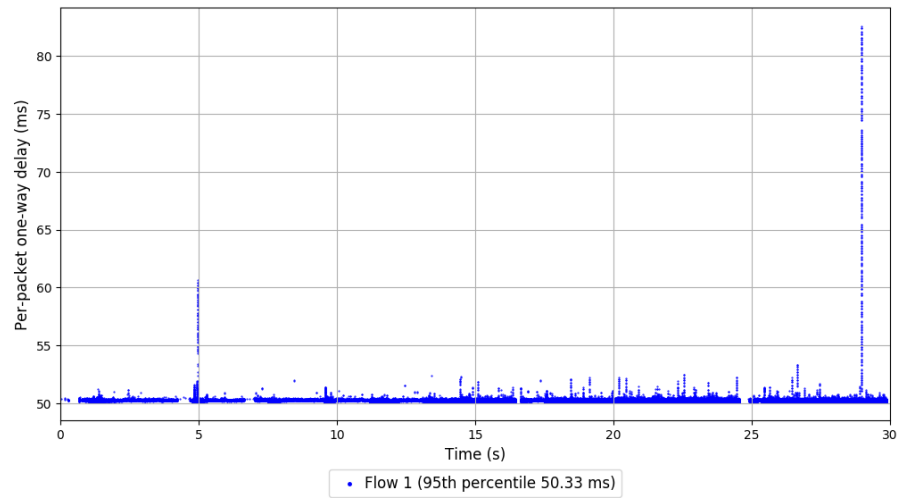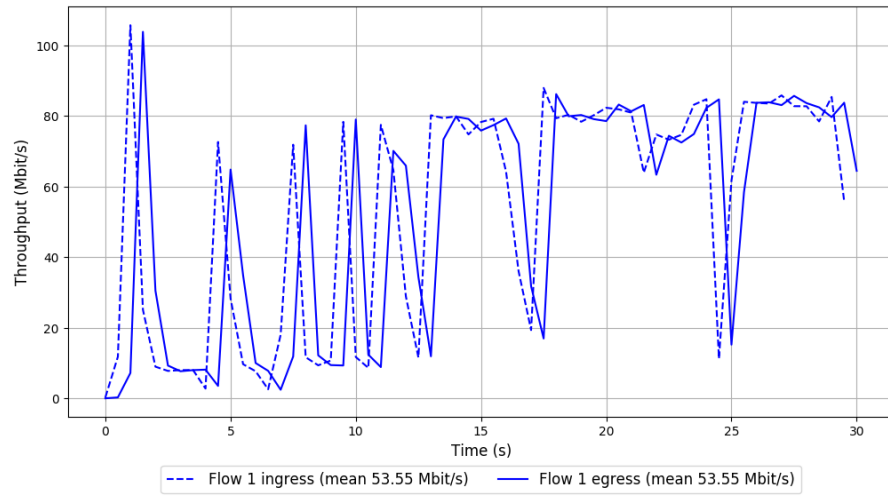
Run 3: Report of QUIC Cubic — Data Link

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-07 01:18:02
End at: 2018-06-07 01:18:32
Local clock offset: 0.073 ms
Remote clock offset: -0.017 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.55 Mbit/s
95th percentile per-packet one-way delay: 50.325 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.55 Mbit/s
95th percentile per-packet one-way delay: 50.325 ms
Loss rate: 0.00%
```

Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-07 01:38:28
End at: 2018-06-07 01:38:58
Local clock offset: -0.115 ms
Remote clock offset: -0.029 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.26 Mbit/s
95th percentile per-packet one-way delay: 51.091 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.26 Mbit/s
95th percentile per-packet one-way delay: 51.091 ms
Loss rate: 0.00%
```
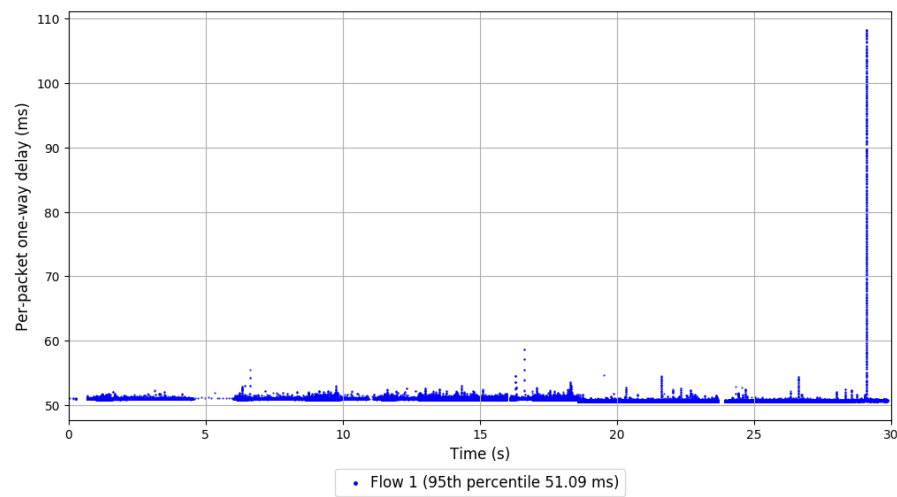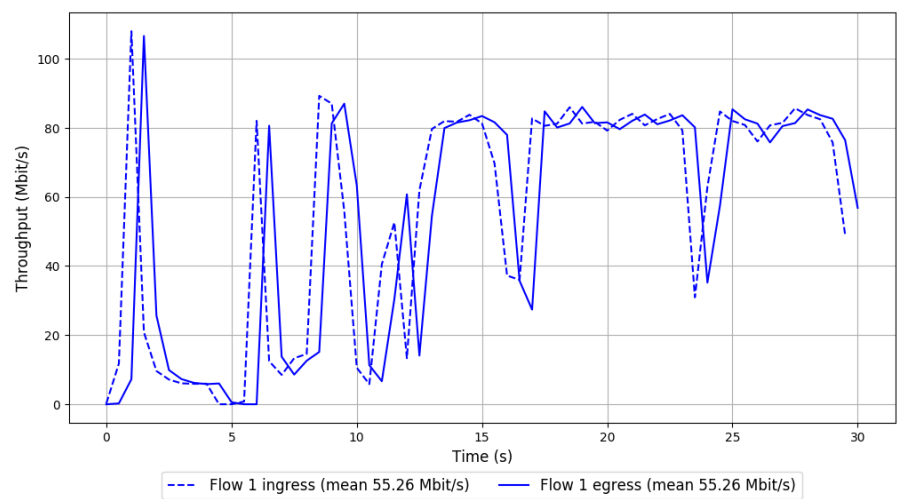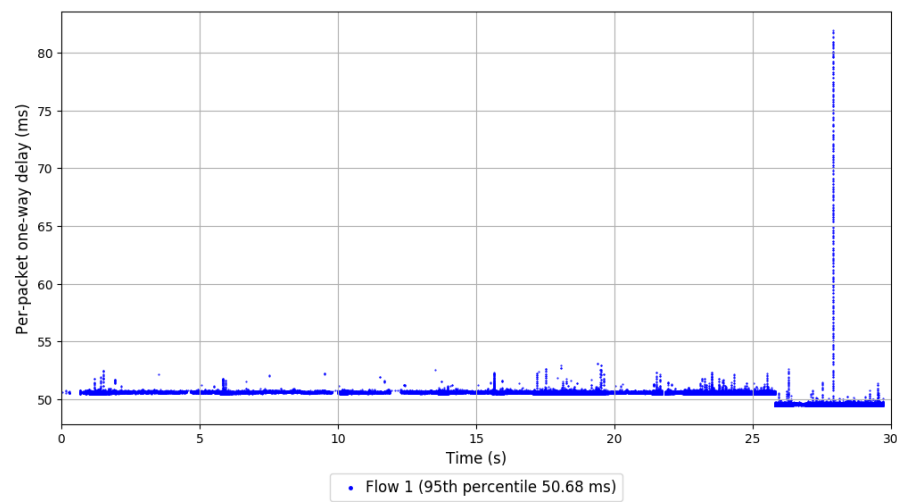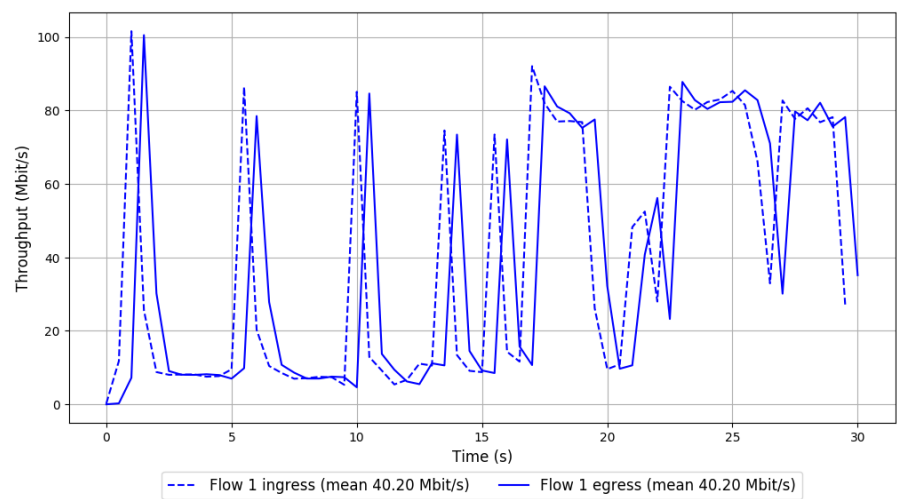
Run 5: Report of QUIC Cubic — Data Link

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-07 01:58:51
End at: 2018-06-07 01:59:21
Local clock offset: -0.093 ms
Remote clock offset: -0.066 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.20 Mbit/s
95th percentile per-packet one-way delay: 50.677 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 40.20 Mbit/s
95th percentile per-packet one-way delay: 50.677 ms
Loss rate: 0.01%
```

Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 40.20 Mbit/s) — — — Flow 1 egress (mean 40.20 Mbit/s)

• Flow 1 (95th percentile 50.68 ms)
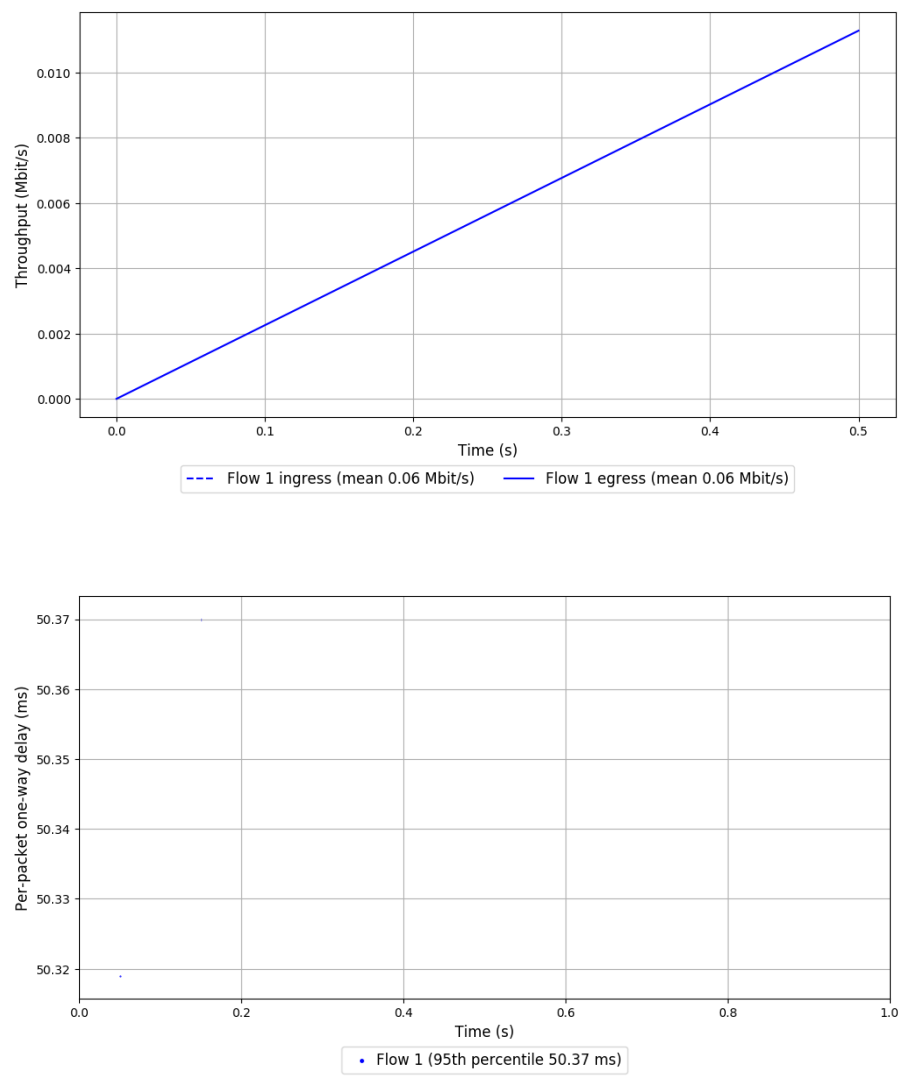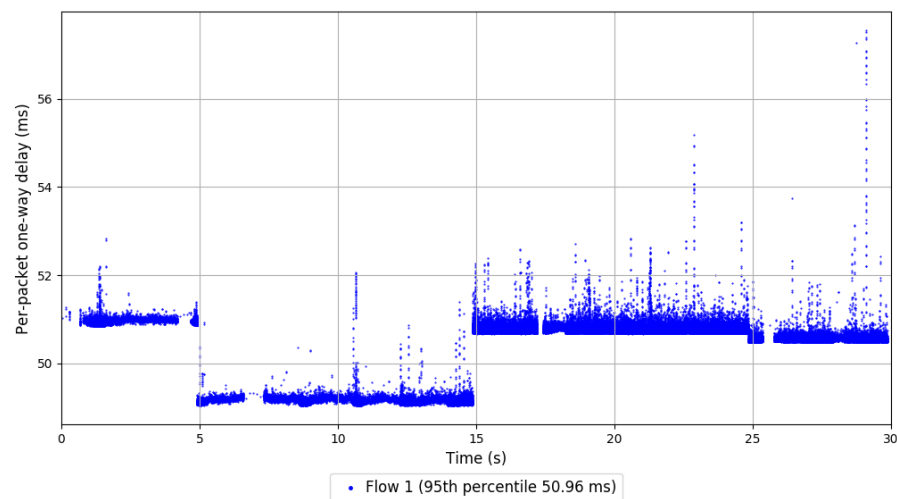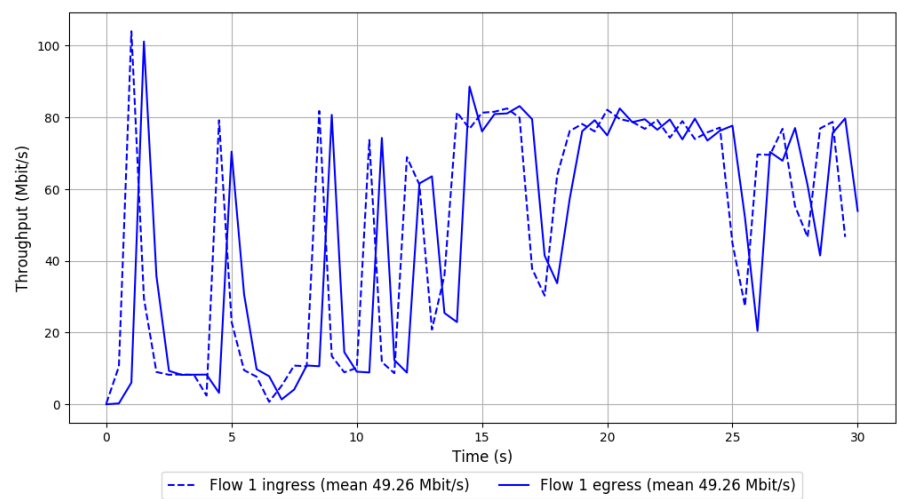
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-07 02:19:22
End at: 2018-06-07 02:19:52
Local clock offset: -0.002 ms
Remote clock offset: -0.033 ms

Run 7: Report of QUIC Cubic — Data Link

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

Flow 1 (95th percentile 50.37 ms)

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```
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-07 02:39:32
End at: 2018-06-07 02:40:02
Local clock offset: -0.351 ms
Remote clock offset: -0.02 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.26 Mbit/s
95th percentile per-packet one-way delay: 50.964 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.26 Mbit/s
95th percentile per-packet one-way delay: 50.964 ms
Loss rate: 0.00%
```
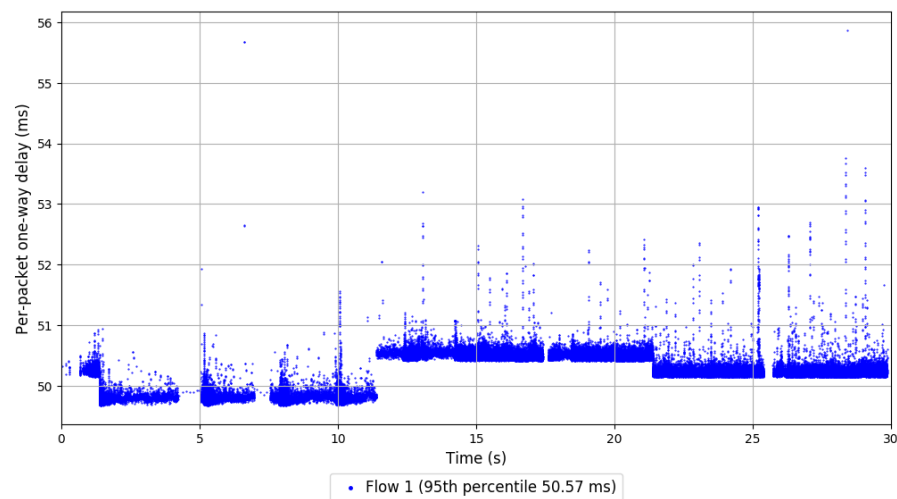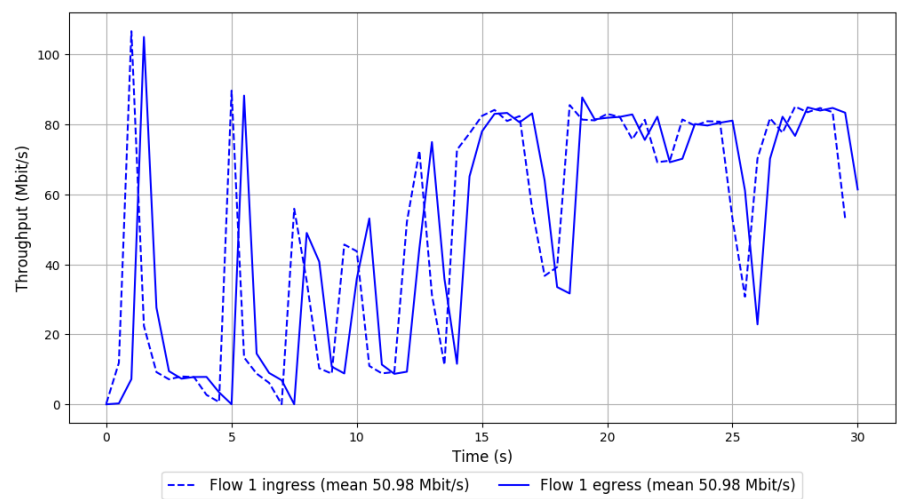
Run 8: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 49.26 Mbit/s)   Flow 1 egress (mean 49.26 Mbit/s)

Flow 1 (95th percentile 50.96 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-07 02:59:56
End at: 2018-06-07 03:00:26
Local clock offset: 0.043 ms
Remote clock offset: 0.021 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.98 Mbit/s
95th percentile per-packet one-way delay: 50.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.98 Mbit/s
95th percentile per-packet one-way delay: 50.571 ms
Loss rate: 0.00%
```

Run 9: Report of QUIC Cubic — Data Link
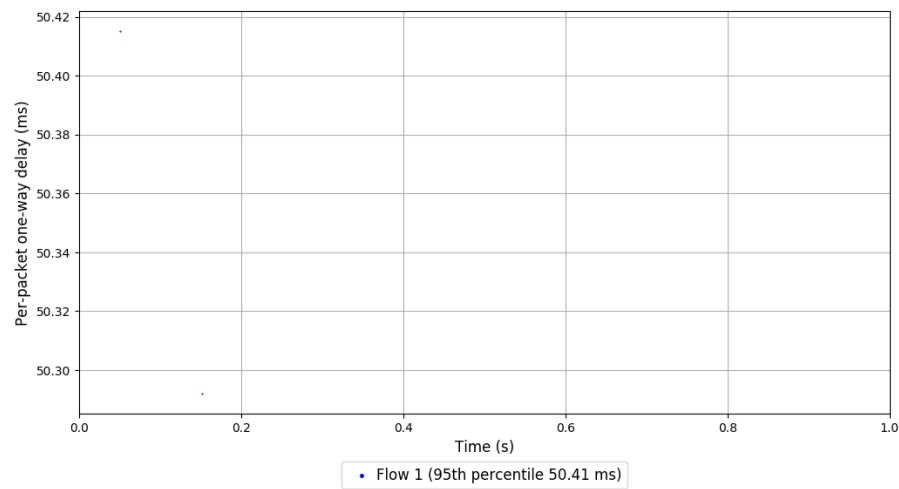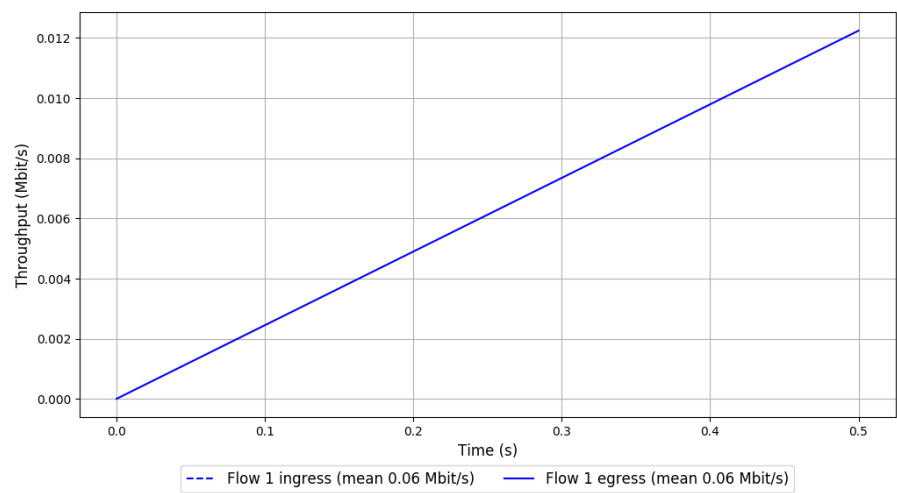
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-07 03:20:14
End at: 2018-06-07 03:20:44
Local clock offset: -0.015 ms
Remote clock offset: -0.02 ms

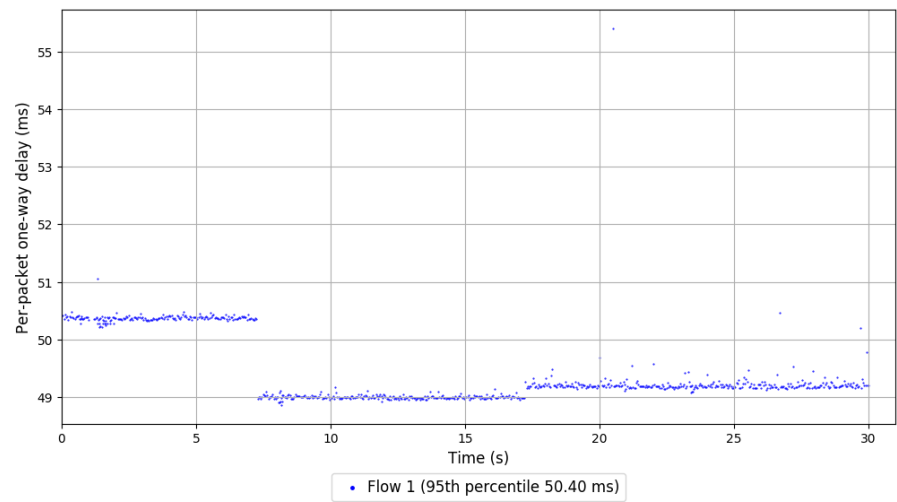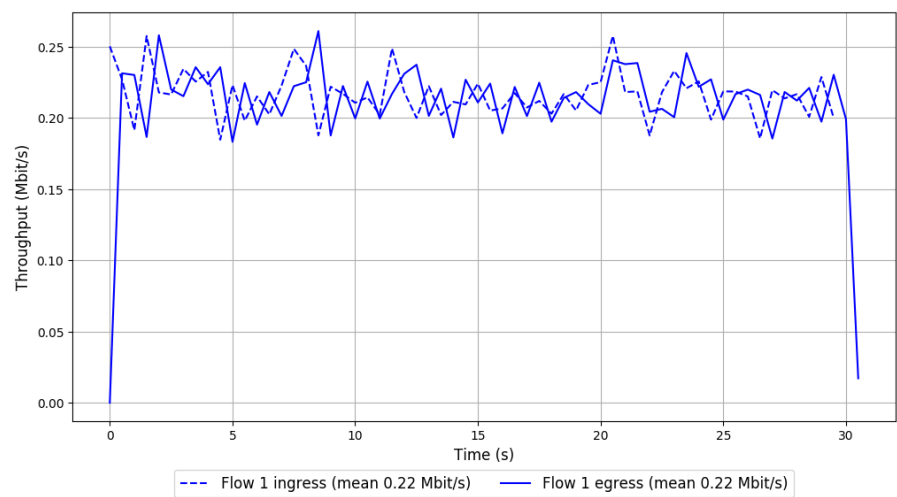## Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-06-07 00:08:00
End at: 2018-06-07 00:08:30
Local clock offset: -0.021 ms
Remote clock offset: 0.027 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.396 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.396 ms
Loss rate: 0.00%
```

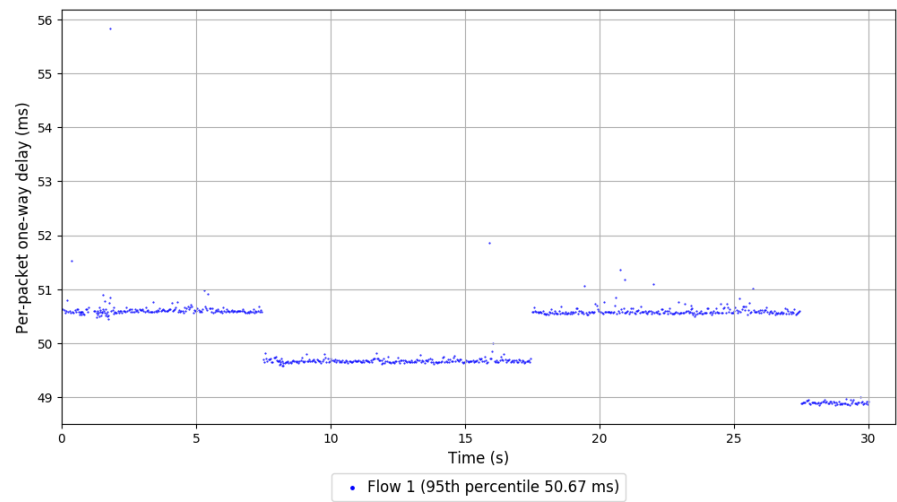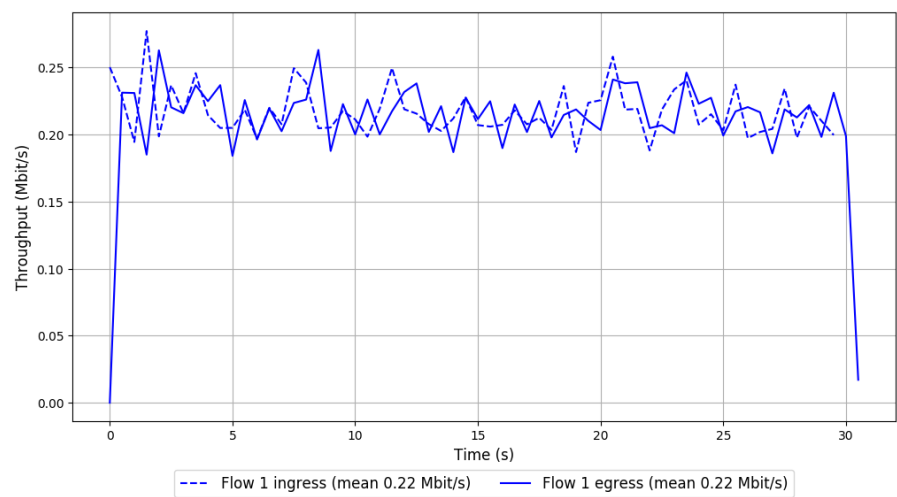Run 1: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 50.40 ms)

```
Run 2: Statistics of SCReAM

Start at: 2018-06-07 00:28:20
End at: 2018-06-07 00:28:50
Local clock offset: -0.016 ms
Remote clock offset: -0.053 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.672 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.672 ms
Loss rate: 0.00%
```

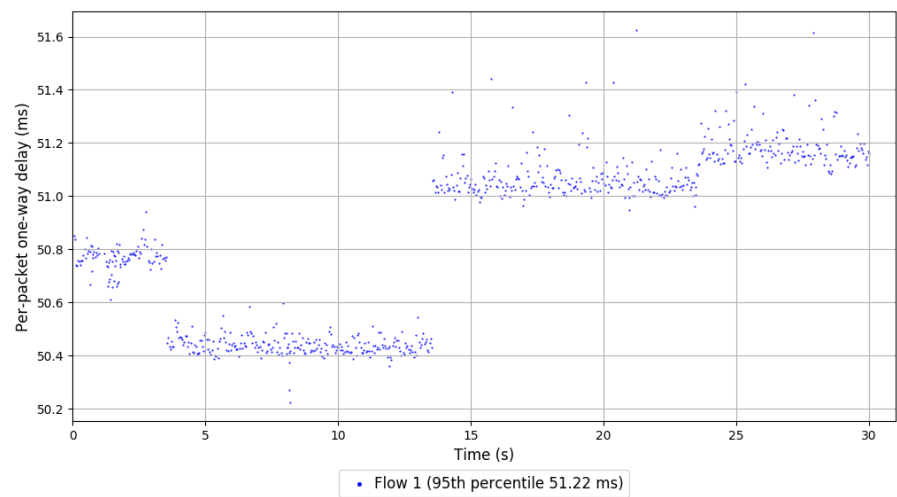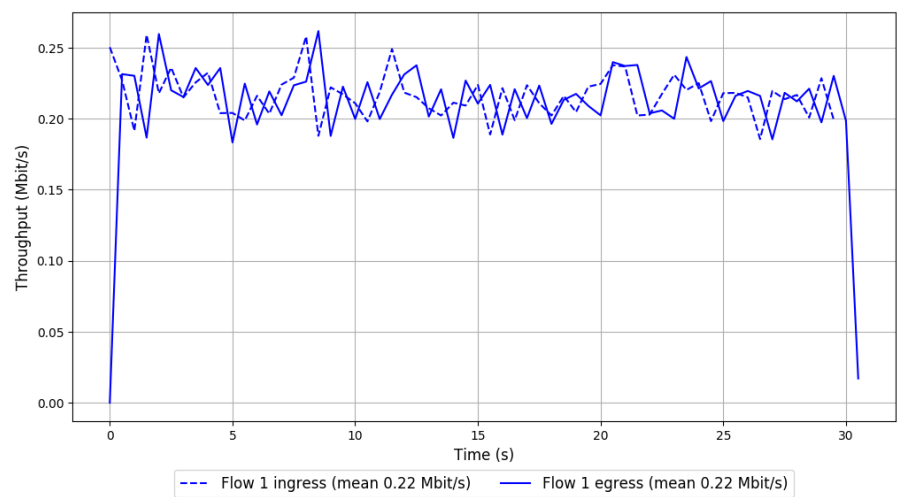Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-06-07 00:48:24
End at: 2018-06-07 00:48:54
Local clock offset: -0.052 ms
Remote clock offset: -0.073 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.218 ms
Loss rate: 0.00%
```

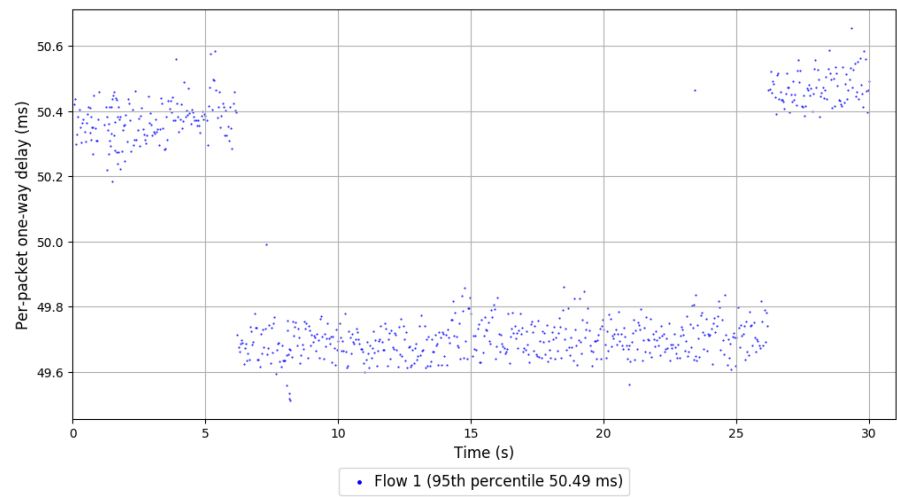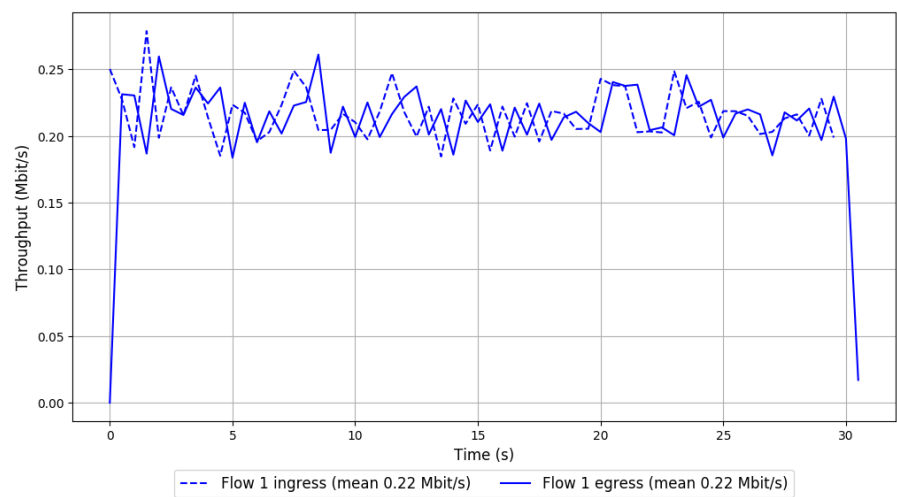Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-06-07 01:08:51
End at: 2018-06-07 01:09:21
Local clock offset: 0.019 ms
Remote clock offset: -0.047 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.488 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.488 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

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

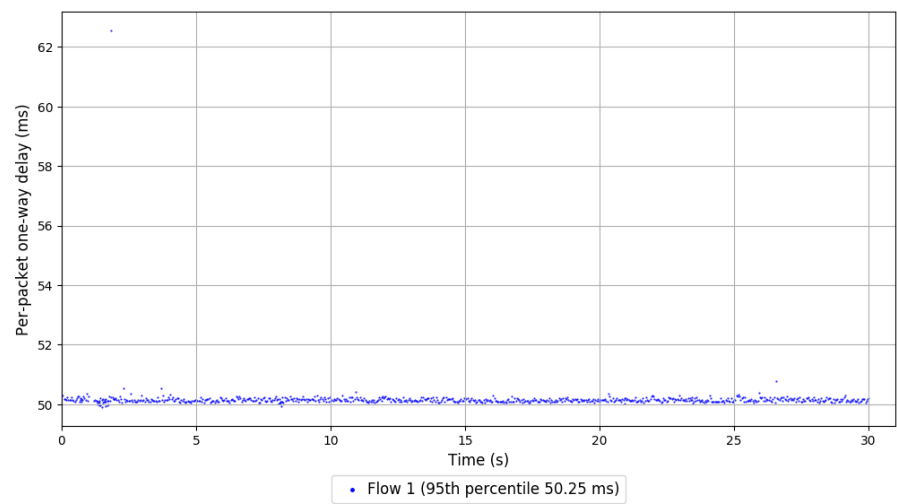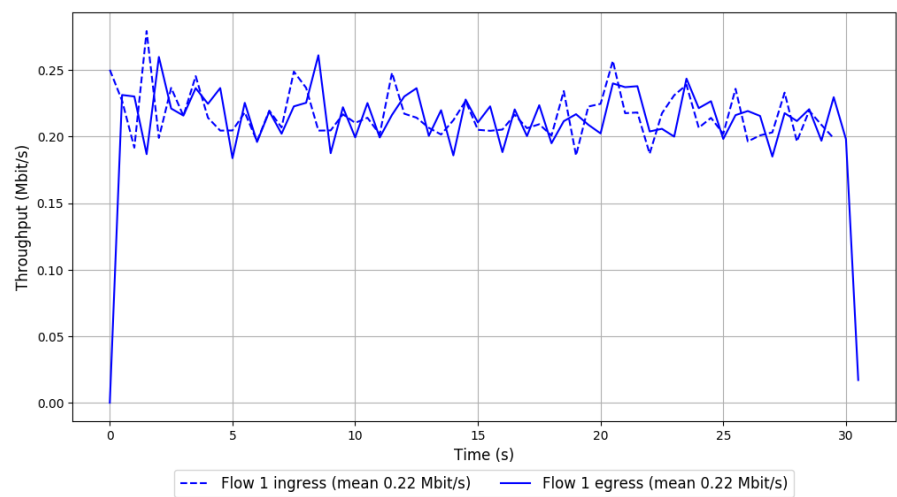Flow 1 (95th percentile 50.49 ms)

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```
Run 5: Statistics of SCReAM

Start at: 2018-06-07 01:29:29
End at: 2018-06-07 01:29:59
Local clock offset: 0.337 ms
Remote clock offset: -0.002 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.250 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.250 ms
Loss rate: 0.00%
```

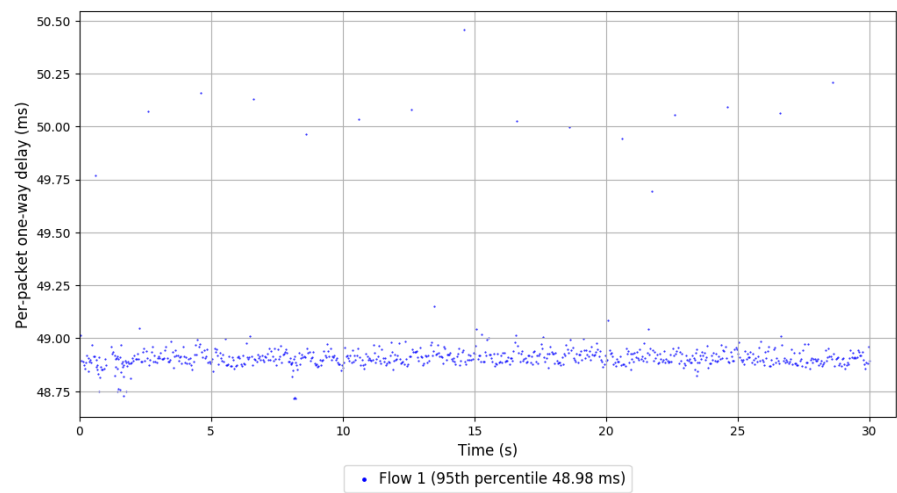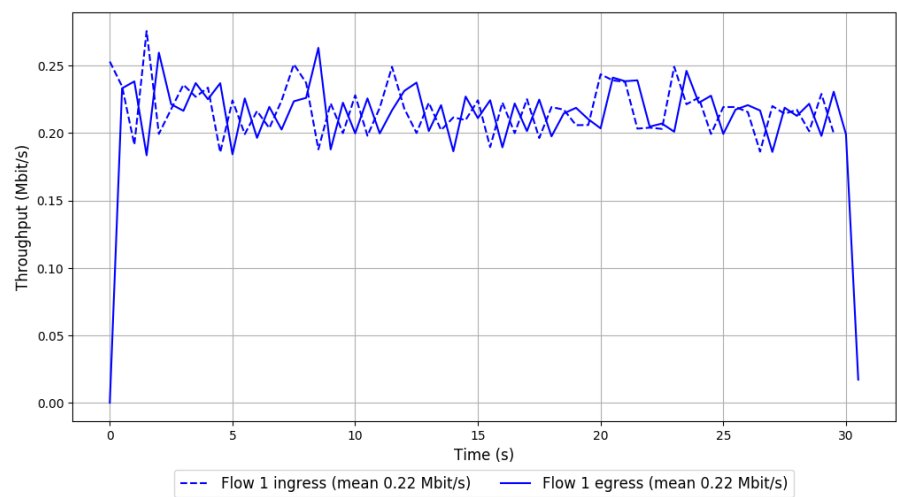## Run 5: Report of SCReAM — Data Link

```
Run 6: Statistics of SCReAM

Start at: 2018-06-07 01:49:48
End at: 2018-06-07 01:50:18
Local clock offset: -0.075 ms
Remote clock offset: -0.067 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.980 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.980 ms
Loss rate: 0.00%
```

Run 6: Report of SCReAM — Data Link

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

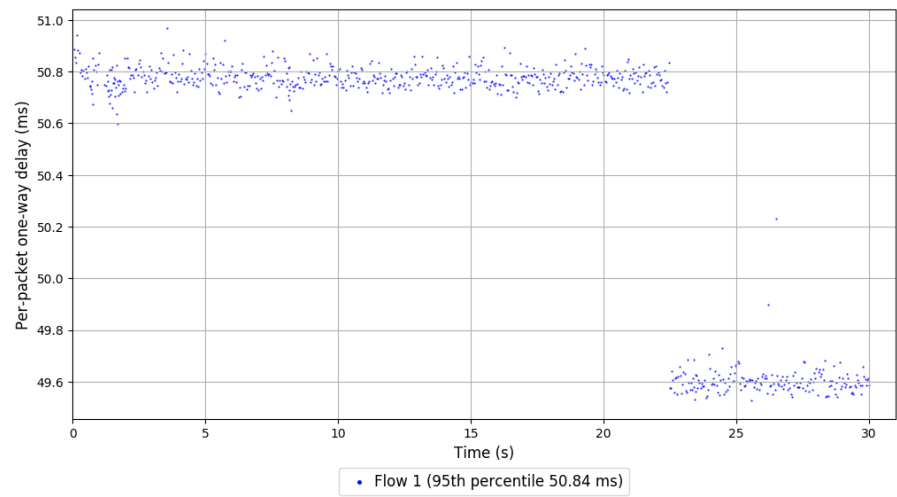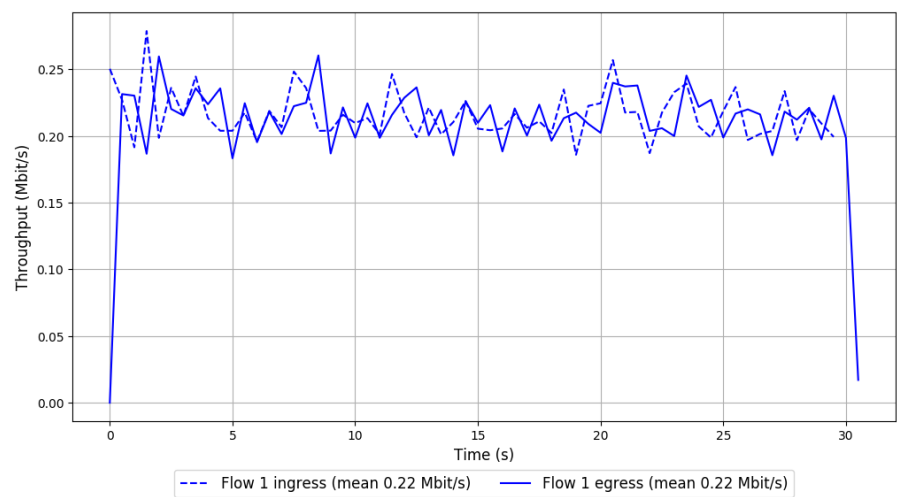Flow 1 (95th percentile 48.98 ms)

```
Run 7: Statistics of SCReAM

Start at: 2018-06-07 02:10:15
End at: 2018-06-07 02:10:45
Local clock offset: 0.097 ms
Remote clock offset: -0.011 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.842 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.842 ms
Loss rate: 0.00%
```

Run 7: Report of SCReAM — Data Link

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

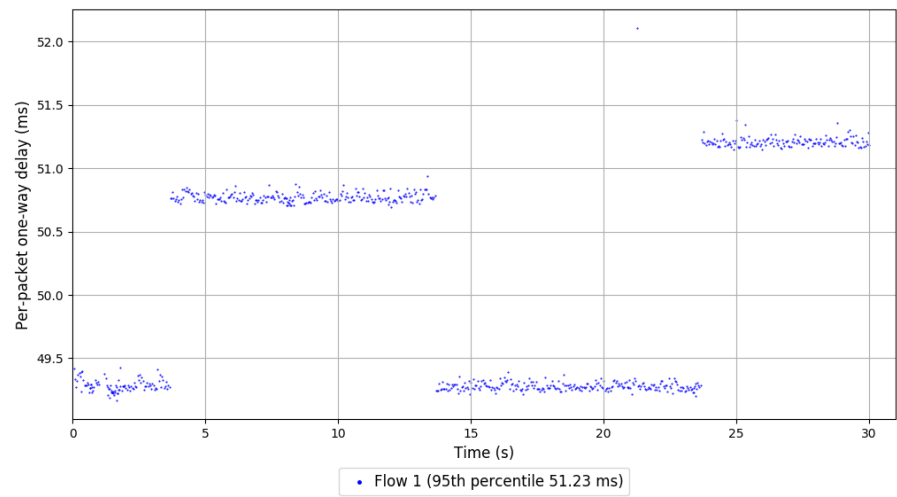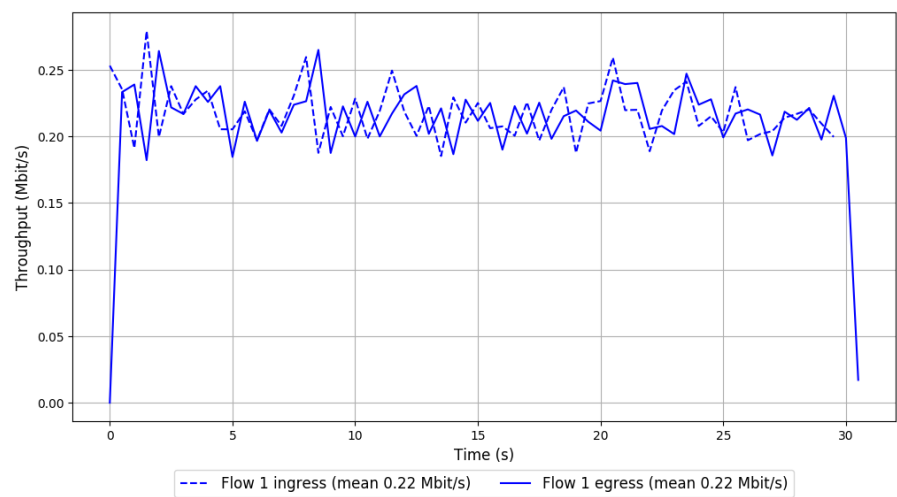Flow 1 (95th percentile 50.84 ms)

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```
Run 8: Statistics of SCReAM

Start at: 2018-06-07 02:30:43
End at: 2018-06-07 02:31:13
Local clock offset: -0.331 ms
Remote clock offset: -0.005 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.225 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.225 ms
Loss rate: 0.00%
```

Run 8: Report of SCReAM — Data Link

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

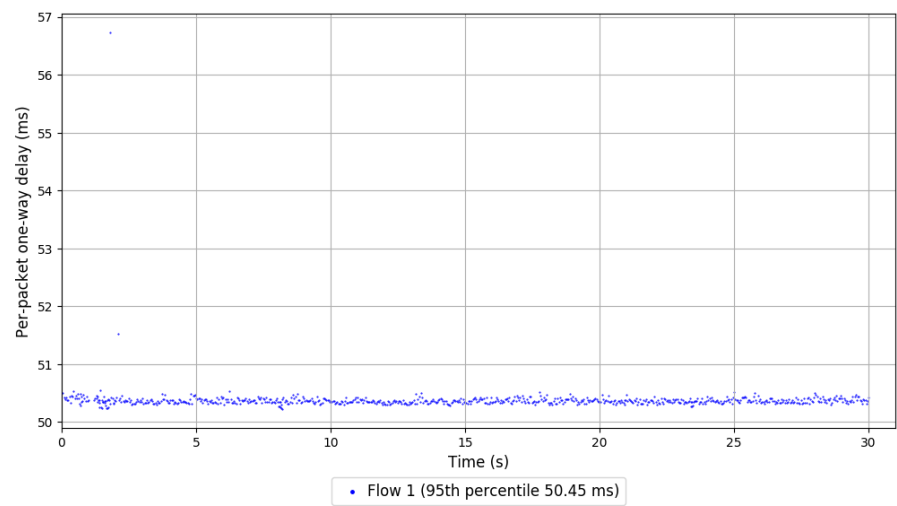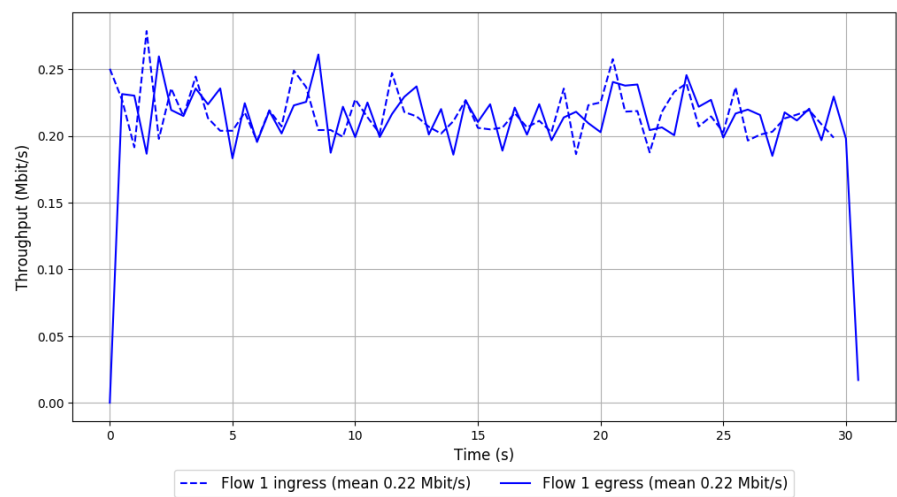• Flow 1 (95th percentile 51.23 ms)

```
Run 9: Statistics of SCReAM

Start at: 2018-06-07 02:50:54
End at: 2018-06-07 02:51:24
Local clock offset: -0.003 ms
Remote clock offset: -0.015 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.450 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.450 ms
Loss rate: 0.00%
```

Run 9: Report of SCReAM — Data Link

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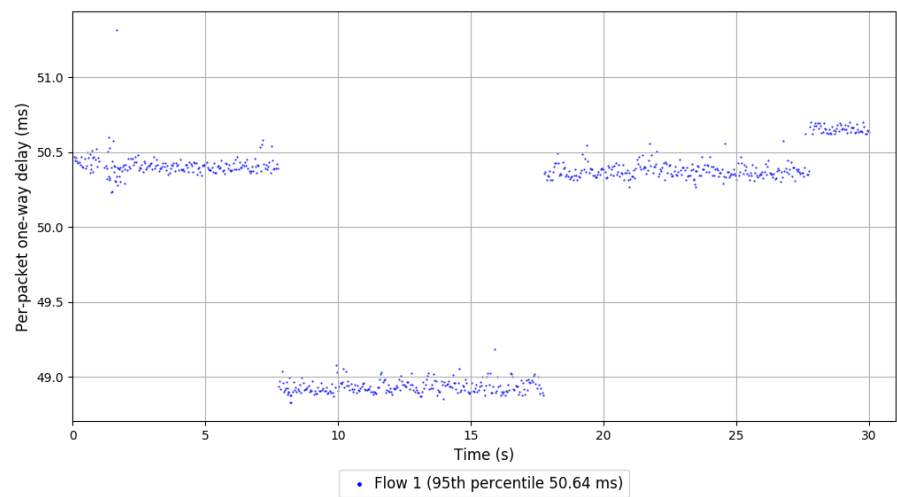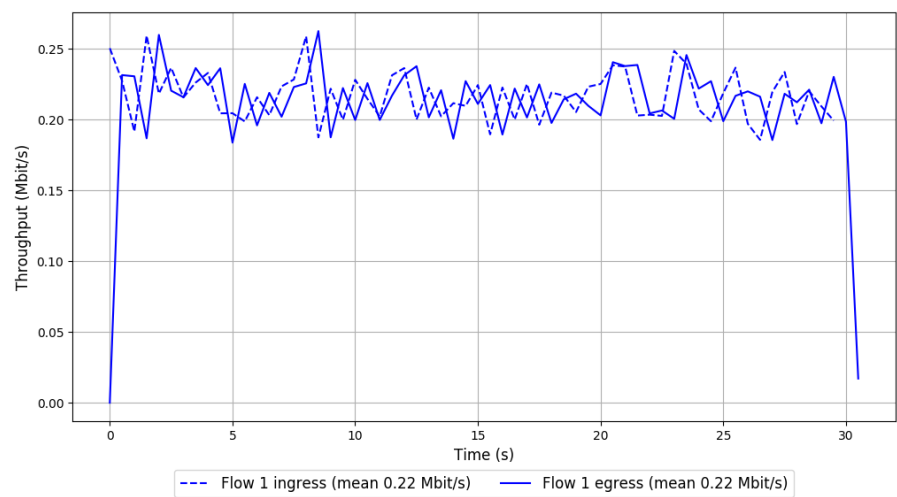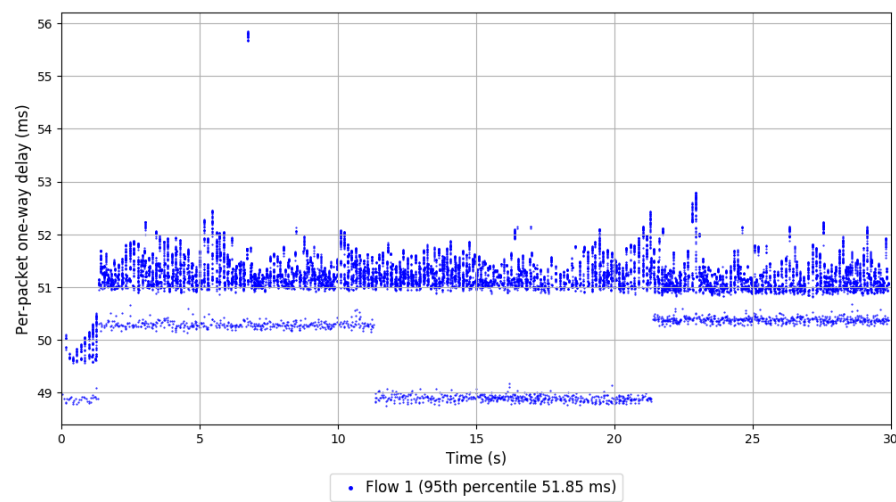

Flow 1 (95th percentile 50.45 ms)

```
Run 10: Statistics of SCReAM

Start at: 2018-06-07 03:11:19
End at: 2018-06-07 03:11:49
Local clock offset: -0.018 ms
Remote clock offset: -0.038 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.638 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.638 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

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

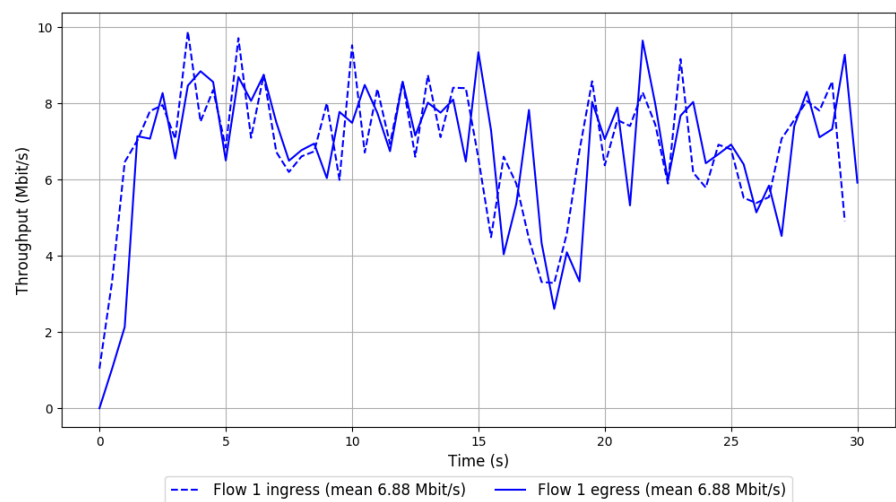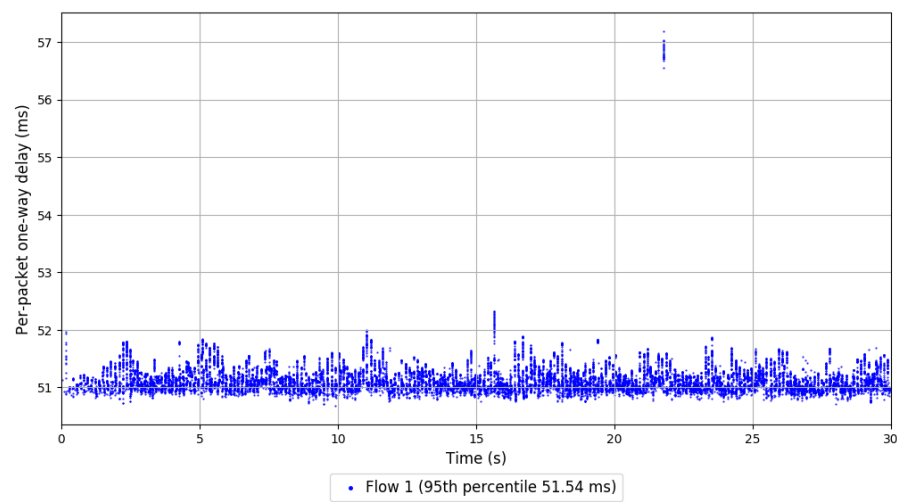• Flow 1 (95th percentile 50.64 ms)

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```
Run 1: Statistics of Sprout

Start at: 2018-06-07 00:18:06
End at: 2018-06-07 00:18:36
Local clock offset: -0.038 ms
Remote clock offset: -0.038 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 51.853 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 51.853 ms
Loss rate: 0.00%
```

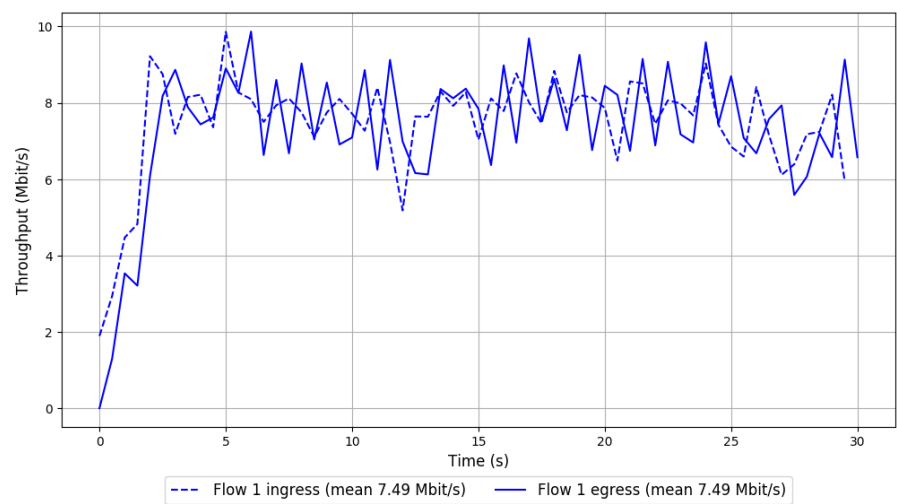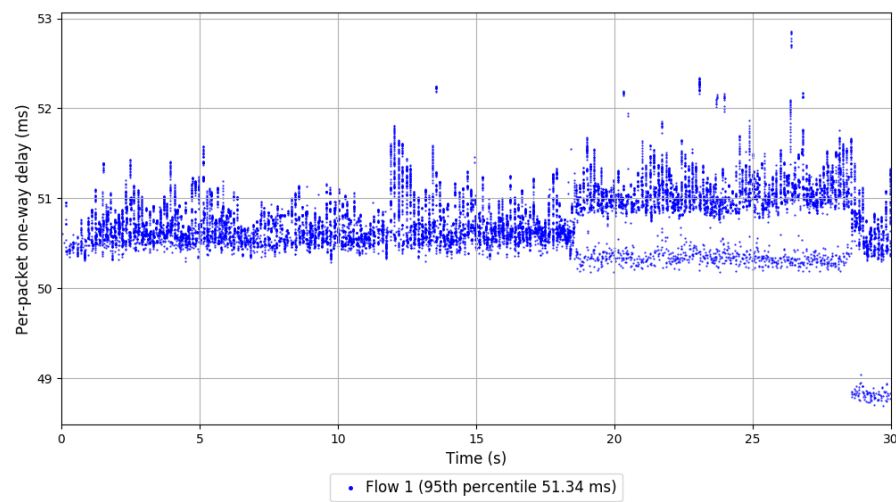Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-06-07 00:38:21
End at: 2018-06-07 00:38:51
Local clock offset: -0.083 ms
Remote clock offset: -0.079 ms


# Below is generated by plot.py at 2018-06-07 04:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 51.538 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 51.538 ms
Loss rate: 0.00%
```

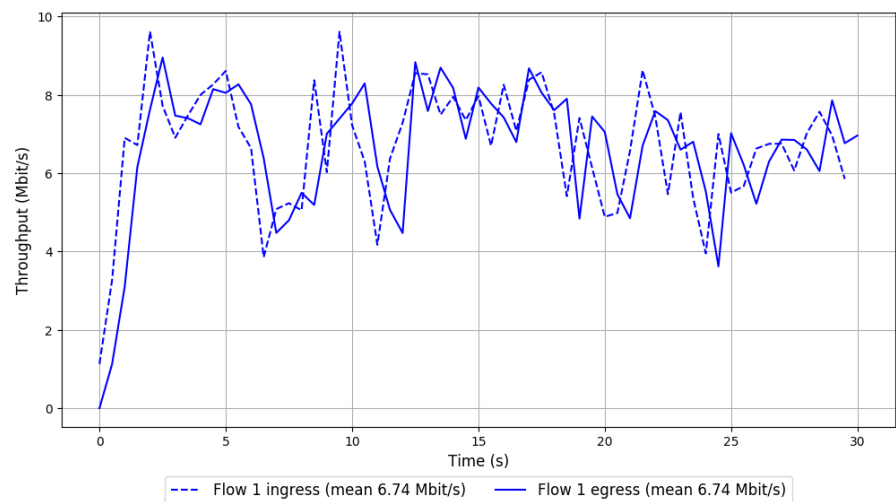Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-06-07 00:58:39
End at: 2018-06-07 00:59:09
Local clock offset: -0.016 ms
Remote clock offset: -0.039 ms


# Below is generated by plot.py at 2018-06-07 04:35:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 51.344 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 51.344 ms
Loss rate: 0.00%
```

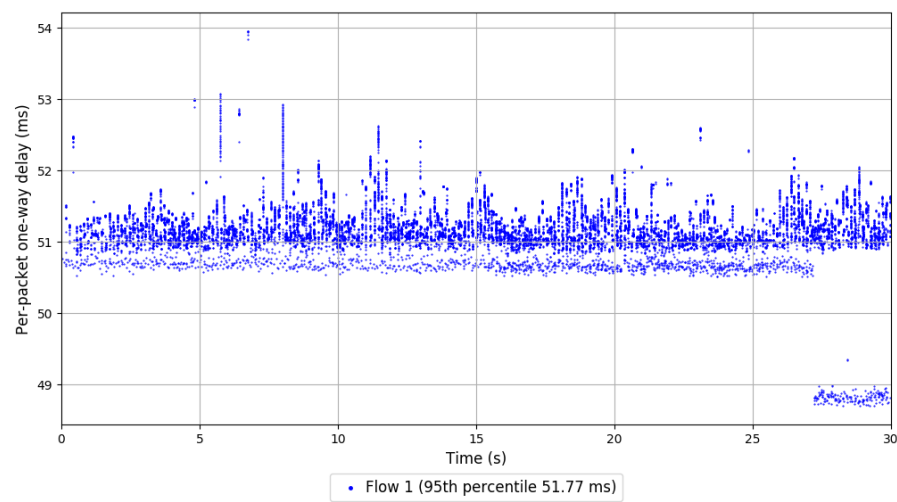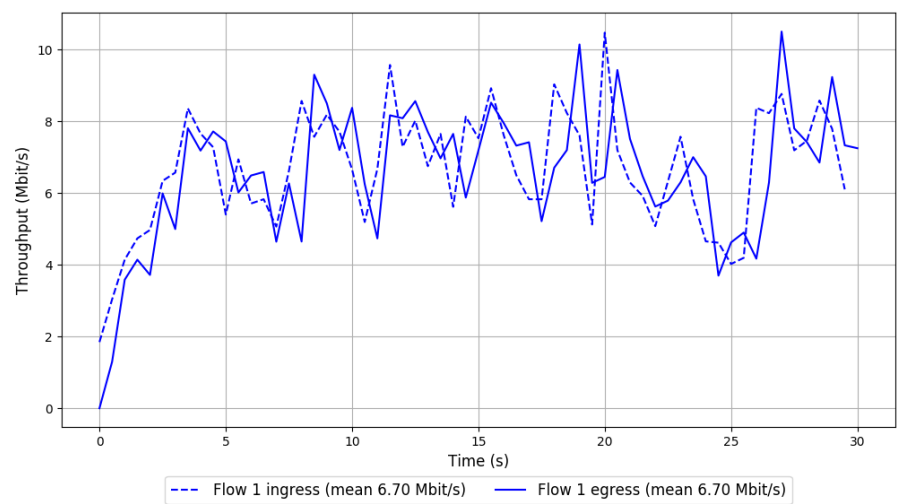Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-06-07 01:19:10
End at: 2018-06-07 01:19:40
Local clock offset: 0.009 ms
Remote clock offset: -0.058 ms


# Below is generated by plot.py at 2018-06-07 04:35:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 51.772 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 51.772 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

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

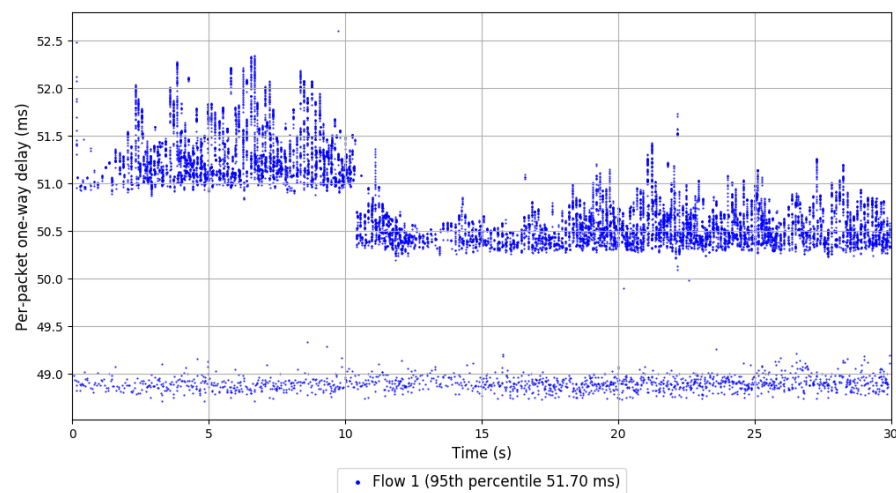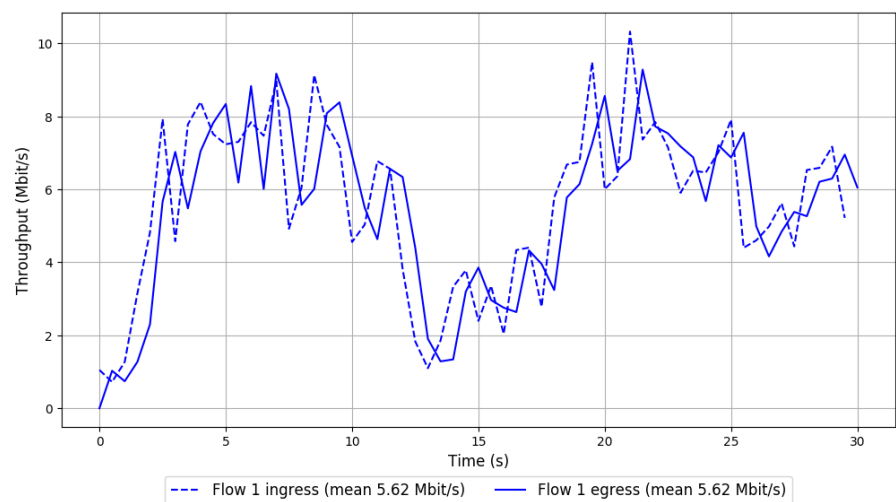Flow 1 (95th percentile 51.77 ms)

```
Run 5: Statistics of Sprout

Start at: 2018-06-07 01:39:37
End at: 2018-06-07 01:40:07
Local clock offset: -0.07 ms
Remote clock offset: -0.082 ms


# Below is generated by plot.py at 2018-06-07 04:35:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 51.705 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 51.705 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-06-07 01:59:59
End at: 2018-06-07 02:00:29
Local clock offset: -0.061 ms
Remote clock offset: -0.06 ms


# Below is generated by plot.py at 2018-06-07 04:35:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 51.349 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 51.349 ms
Loss rate: 0.00%
```
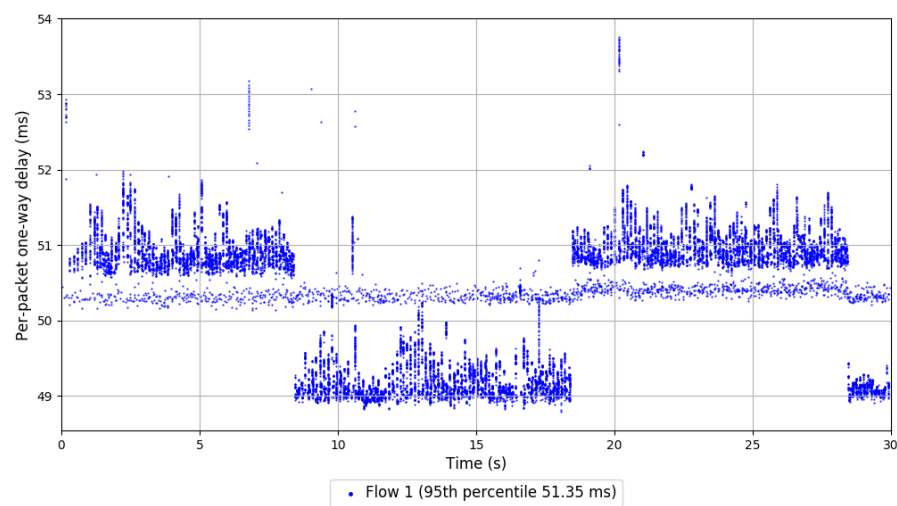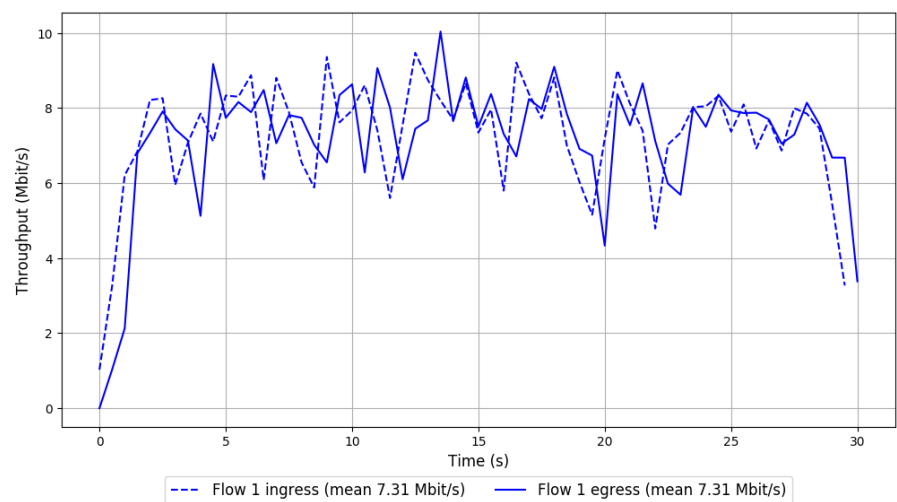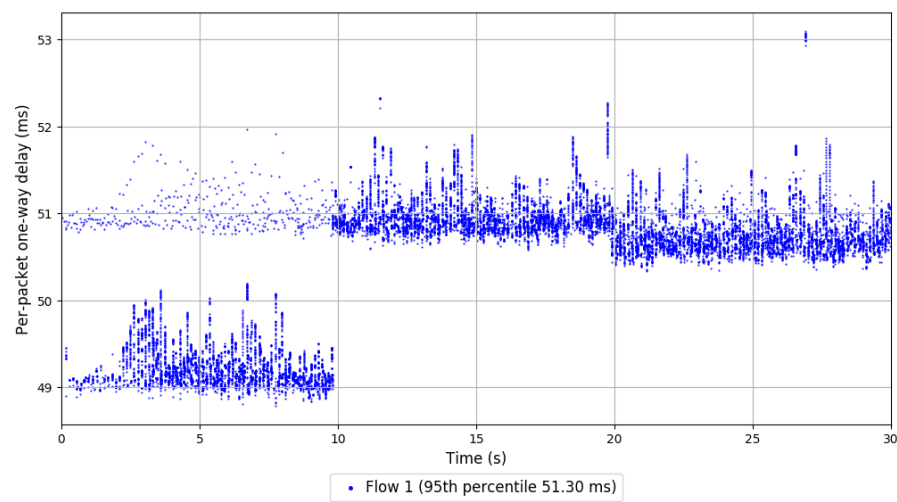
Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-06-07 02:20:27
End at: 2018-06-07 02:20:57
Local clock offset: 0.014 ms
Remote clock offset: 0.018 ms


# Below is generated by plot.py at 2018-06-07 04:35:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 51.302 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 51.302 ms
Loss rate: 0.00%
```
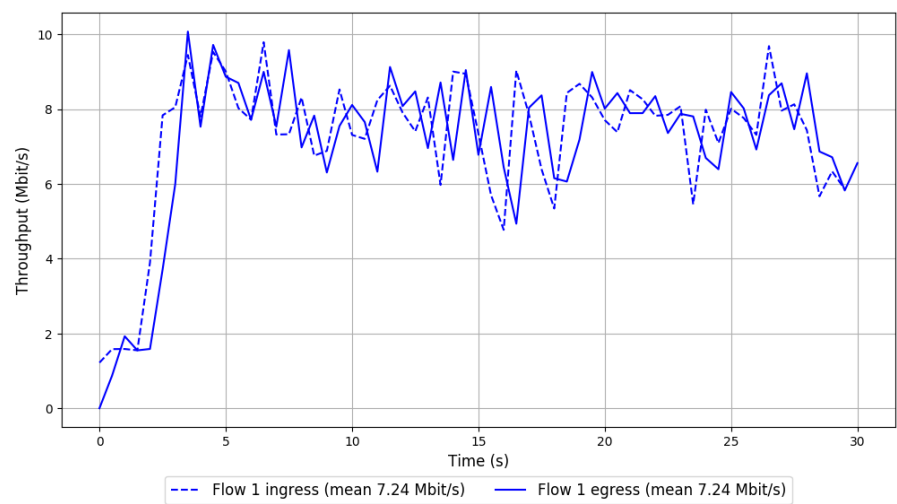
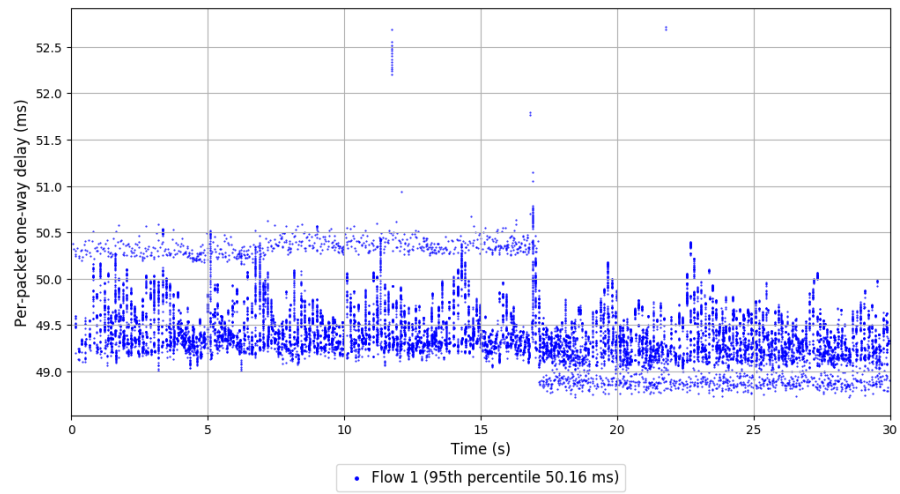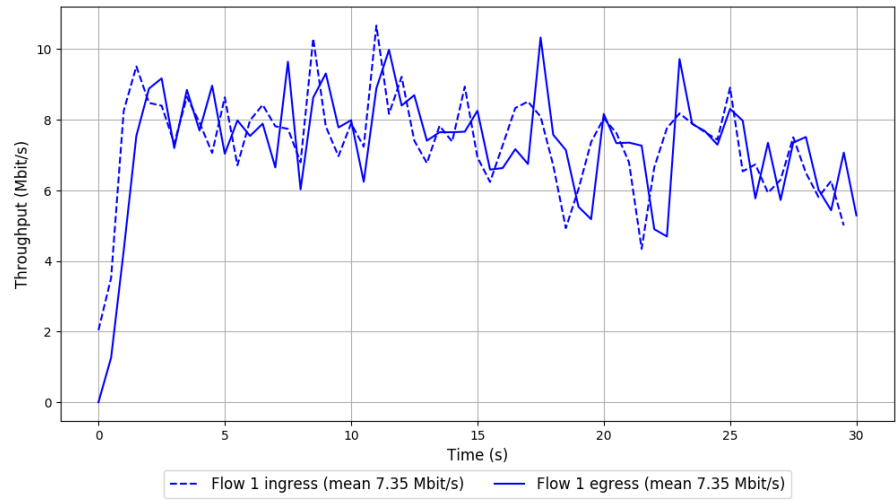## Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-06-07 02:40:40
End at: 2018-06-07 02:41:10
Local clock offset: -0.014 ms
Remote clock offset: -0.007 ms


# Below is generated by plot.py at 2018-06-07 04:35:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.35 Mbit/s
95th percentile per-packet one-way delay: 50.163 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.35 Mbit/s
95th percentile per-packet one-way delay: 50.163 ms
Loss rate: 0.00%
```

Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-06-07 03:01:04
End at: 2018-06-07 03:01:34
Local clock offset: -0.009 ms
Remote clock offset: 0.007 ms


# Below is generated by plot.py at 2018-06-07 04:35:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 51.378 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 51.378 ms
Loss rate: 0.00%
```
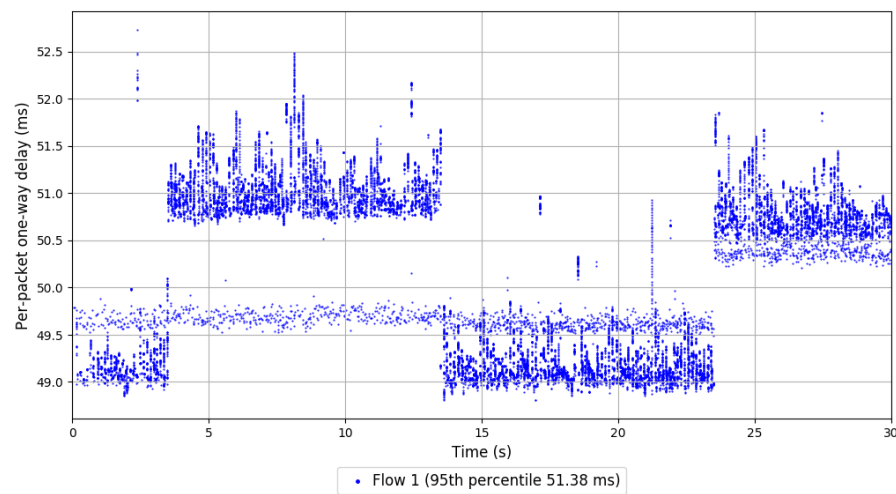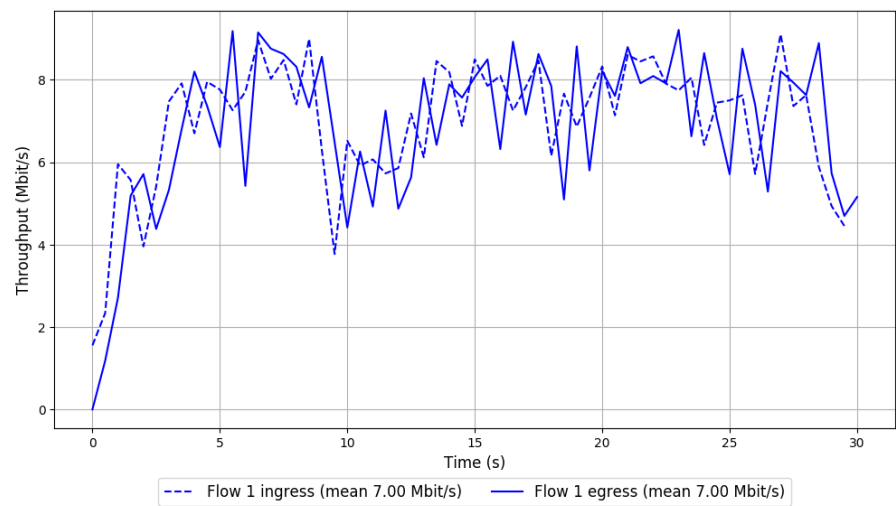
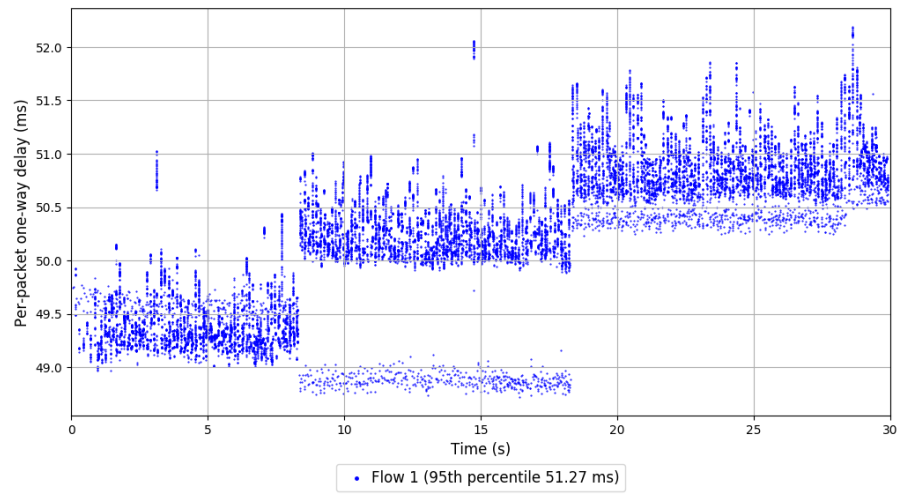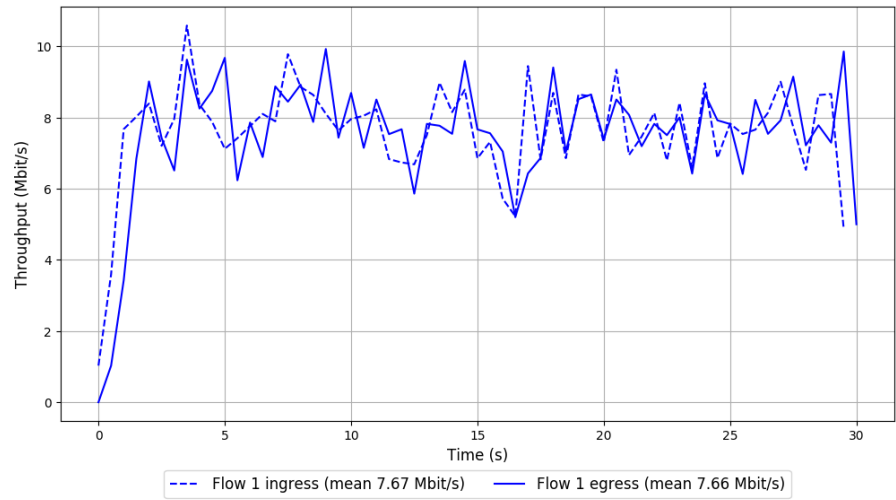Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-06-07 03:21:19
End at: 2018-06-07 03:21:49
Local clock offset: 0.006 ms
Remote clock offset: -0.065 ms


# Below is generated by plot.py at 2018-06-07 04:35:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 51.269 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 51.269 ms
Loss rate: 0.00%
```

Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 7.67 Mbit/s)   Flow 1 egress (mean 7.66 Mbit/s)

Flow 1 (95th percentile 51.27 ms)

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

Start at: 2018-06-07 00:19:12
End at: 2018-06-07 00:19:42
Local clock offset: 0.316 ms
Remote clock offset: -0.036 ms


# Below is generated by plot.py at 2018-06-07 04:38:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 233.63 Mbit/s
95th percentile per-packet one-way delay: 50.757 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 233.63 Mbit/s
95th percentile per-packet one-way delay: 50.757 ms
Loss rate: 0.00%
```
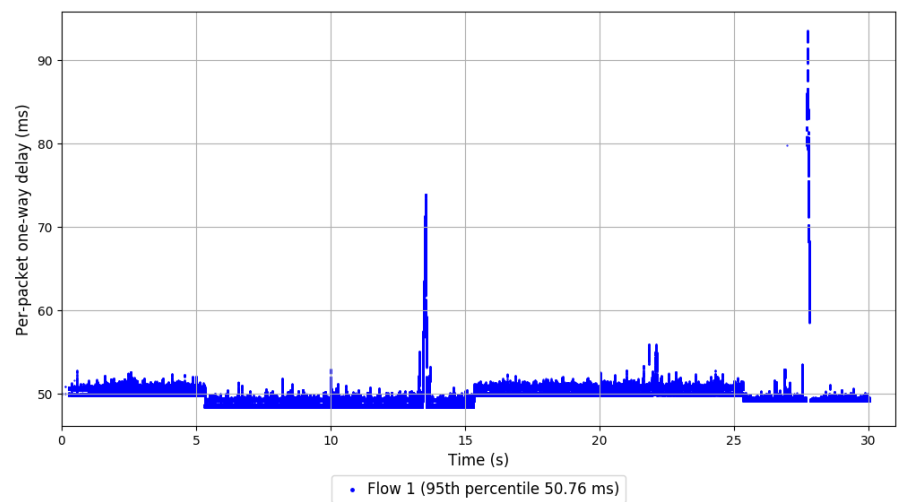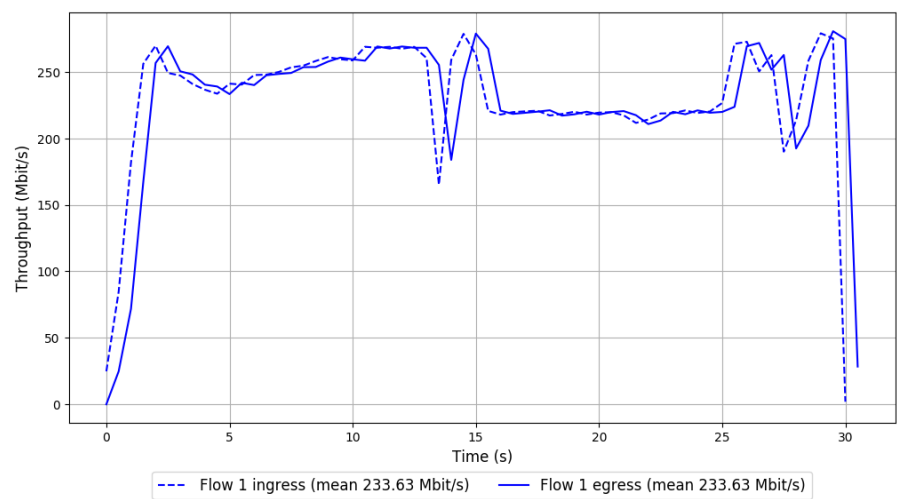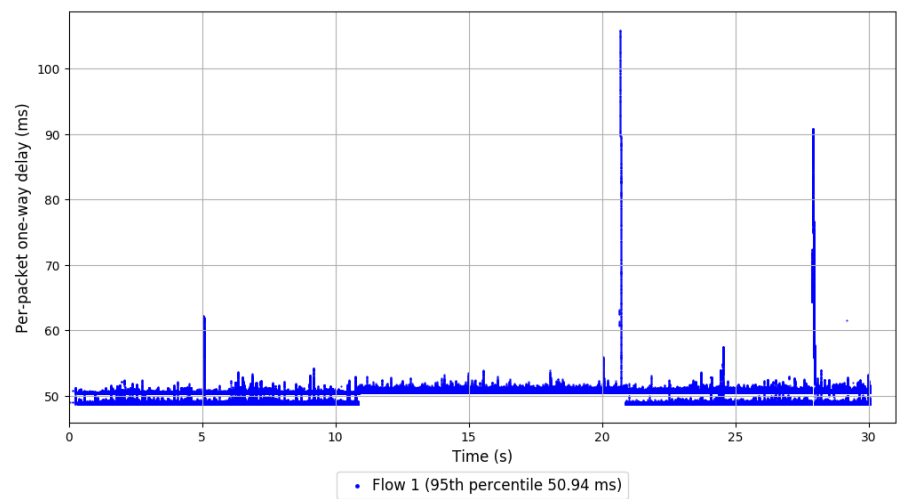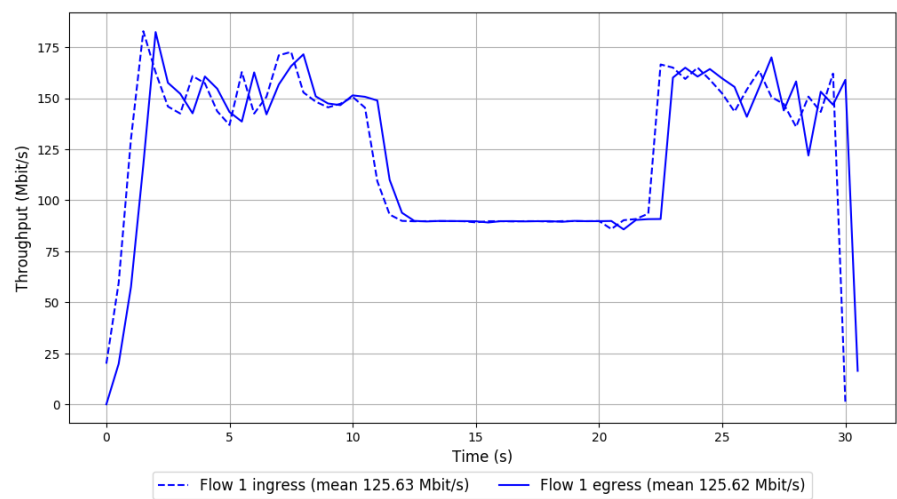
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-07 00:39:27
End at: 2018-06-07 00:39:57
Local clock offset: -0.091 ms
Remote clock offset: -0.088 ms


# Below is generated by plot.py at 2018-06-07 04:38:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 125.62 Mbit/s
95th percentile per-packet one-way delay: 50.942 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 125.62 Mbit/s
95th percentile per-packet one-way delay: 50.942 ms
Loss rate: 0.00%
```

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

Flow 1 ingress (mean 125.63 Mbit/s)   Flow 1 egress (mean 125.62 Mbit/s)
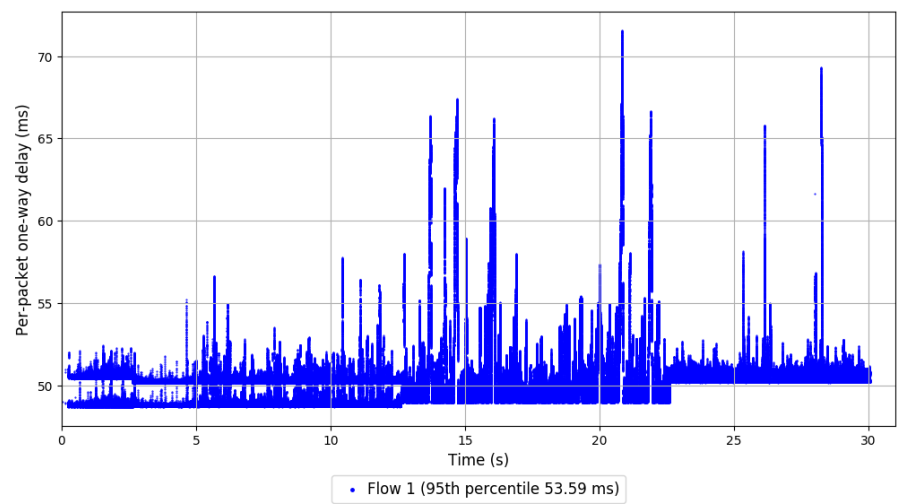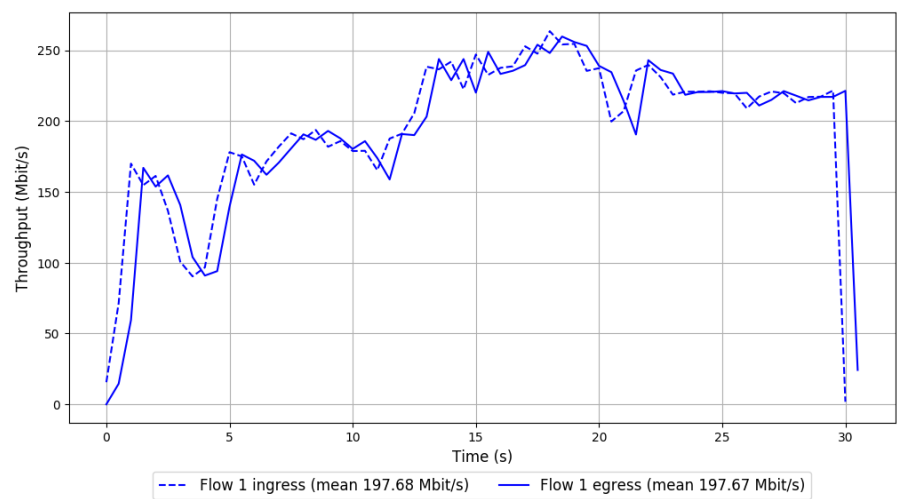

Flow 1 (95th percentile 50.94 ms)

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

Start at: 2018-06-07 00:59:45
End at: 2018-06-07 01:00:15
Local clock offset: -0.003 ms
Remote clock offset: -0.054 ms


# Below is generated by plot.py at 2018-06-07 04:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.67 Mbit/s
95th percentile per-packet one-way delay: 53.586 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 197.67 Mbit/s
95th percentile per-packet one-way delay: 53.586 ms
Loss rate: 0.00%
```

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

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

Start at: 2018-06-07 01:20:16
End at: 2018-06-07 01:20:46
Local clock offset: -0.008 ms
Remote clock offset: 0.04 ms


# Below is generated by plot.py at 2018-06-07 04:41:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 244.71 Mbit/s
95th percentile per-packet one-way delay: 51.458 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 244.71 Mbit/s
95th percentile per-packet one-way delay: 51.458 ms
Loss rate: 0.00%
```
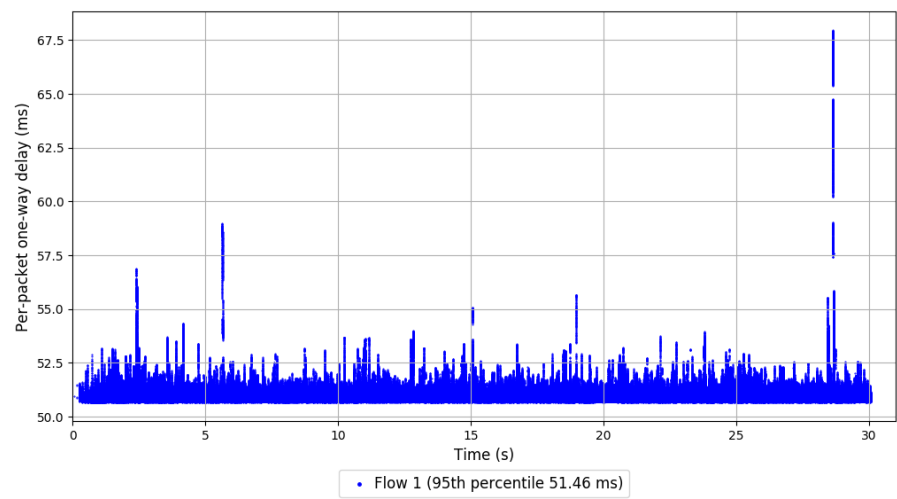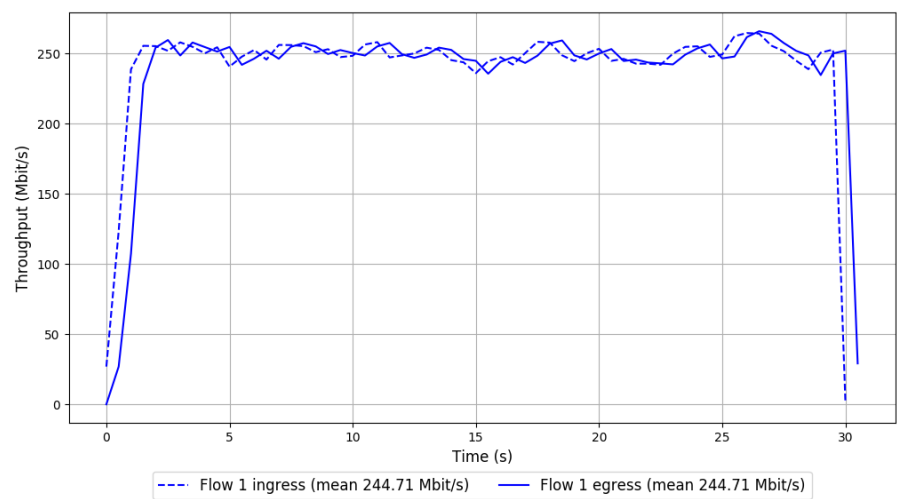
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 244.71 Mbit/s)   Flow 1 egress (mean 244.71 Mbit/s)
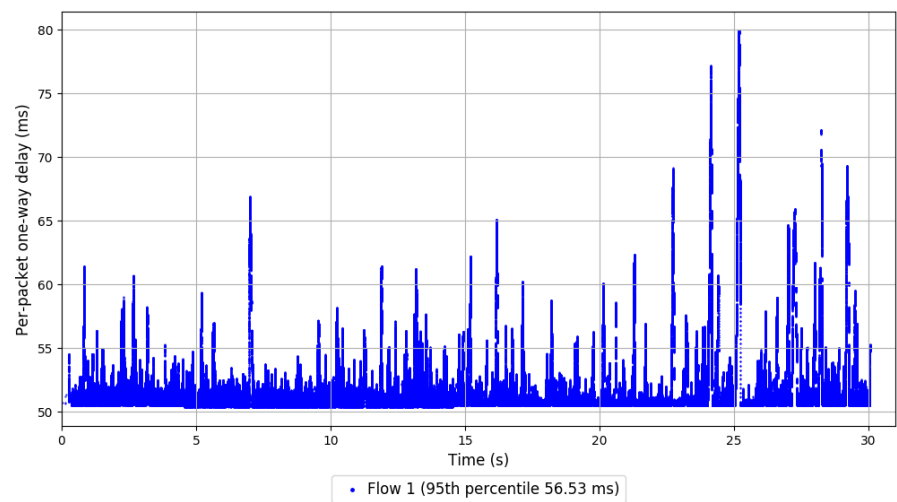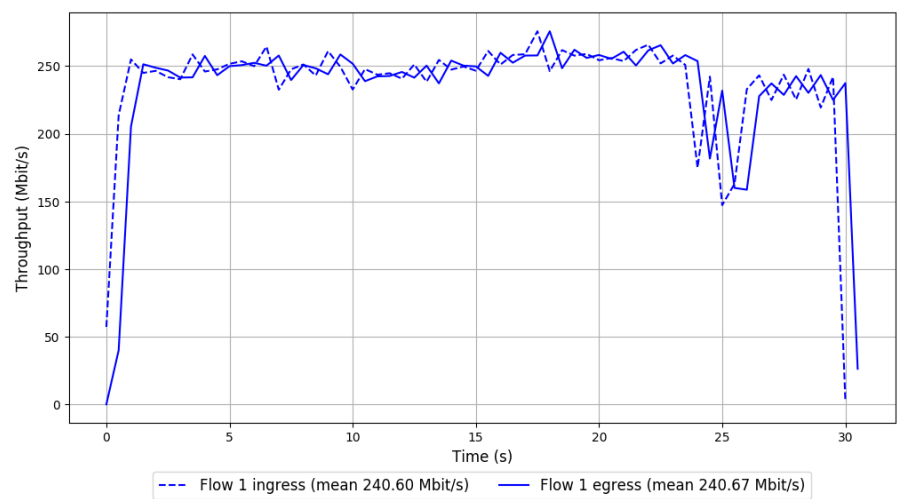

Flow 1 (95th percentile 51.46 ms)

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

Start at: 2018-06-07 01:40:43
End at: 2018-06-07 01:41:13
Local clock offset: -0.083 ms
Remote clock offset: -0.064 ms


# Below is generated by plot.py at 2018-06-07 04:41:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 240.67 Mbit/s
95th percentile per-packet one-way delay: 56.527 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 240.67 Mbit/s
95th percentile per-packet one-way delay: 56.527 ms
Loss rate: 0.01%
```
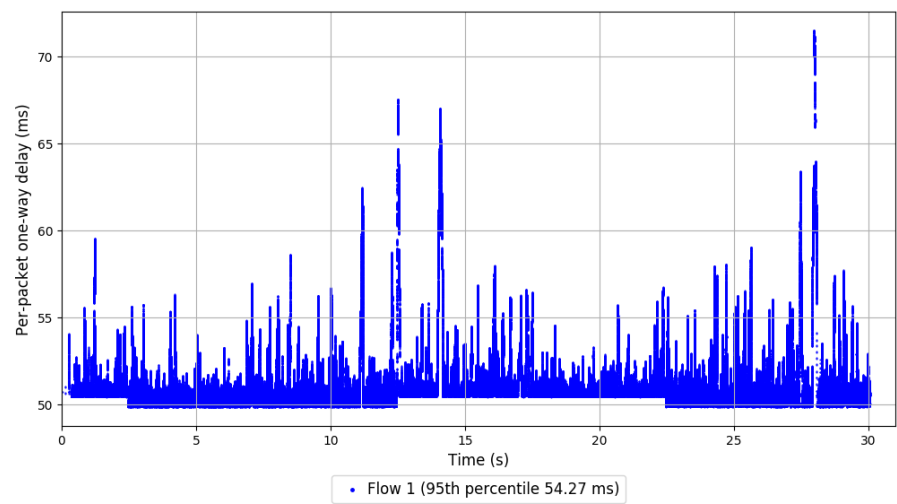
Run 5: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 240.60 Mbit/s)   Flow 1 egress (mean 240.67 Mbit/s)

Flow 1 (95th percentile 56.53 ms)

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

Start at: 2018-06-07 02:01:05
End at: 2018-06-07 02:01:35
Local clock offset: -0.068 ms
Remote clock offset: -0.077 ms


# Below is generated by plot.py at 2018-06-07 04:42:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 254.79 Mbit/s
95th percentile per-packet one-way delay: 54.269 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 254.79 Mbit/s
95th percentile per-packet one-way delay: 54.269 ms
Loss rate: 0.00%
```
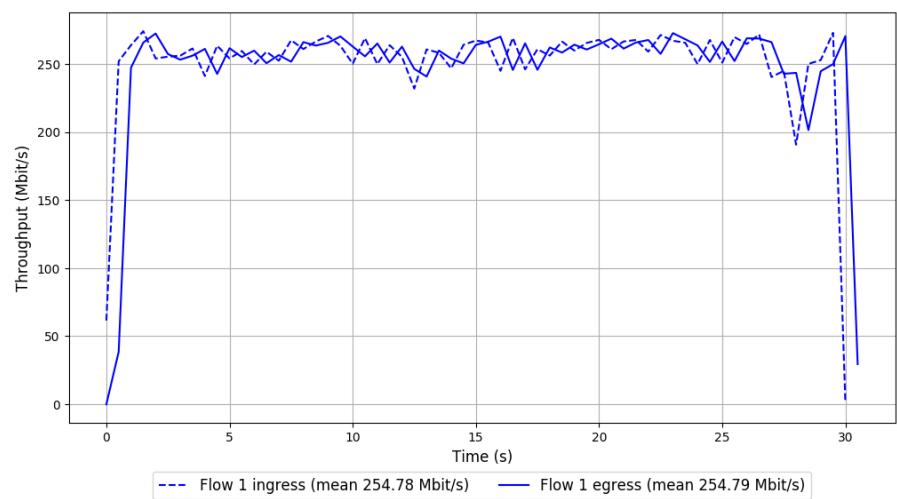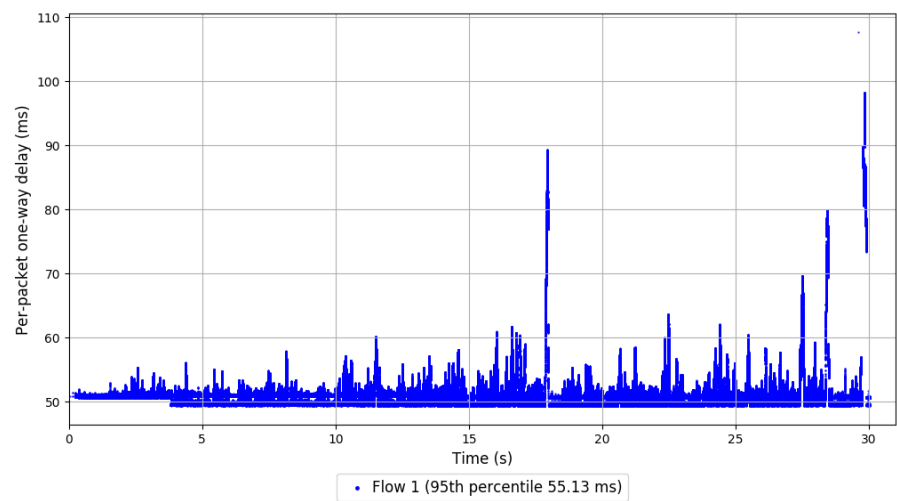
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 254.78 Mbit/s) Flow 1 egress (mean 254.79 Mbit/s)

Flow 1 (95th percentile 54.27 ms)

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

Start at: 2018-06-07 02:21:33
End at: 2018-06-07 02:22:03
Local clock offset: -0.342 ms
Remote clock offset: 0.011 ms


# Below is generated by plot.py at 2018-06-07 04:42:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.11 Mbit/s
95th percentile per-packet one-way delay: 55.127 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.11 Mbit/s
95th percentile per-packet one-way delay: 55.127 ms
Loss rate: 0.00%
```
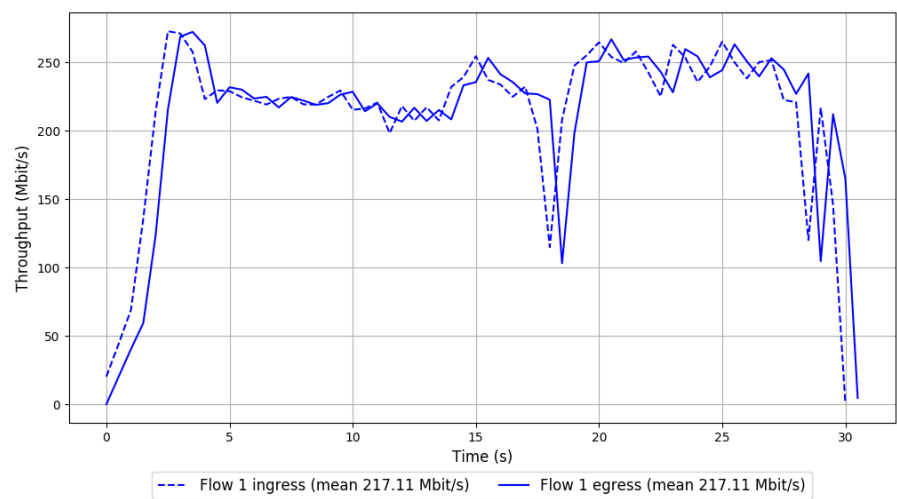
Run 7: Report of TaoVA-100x — Data Link

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

Start at: 2018-06-07 02:41:46
End at: 2018-06-07 02:42:16
Local clock offset: 0.04 ms
Remote clock offset: -0.021 ms


# Below is generated by plot.py at 2018-06-07 04:42:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.04 Mbit/s
95th percentile per-packet one-way delay: 56.328 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.04 Mbit/s
95th percentile per-packet one-way delay: 56.328 ms
Loss rate: 0.00%
```
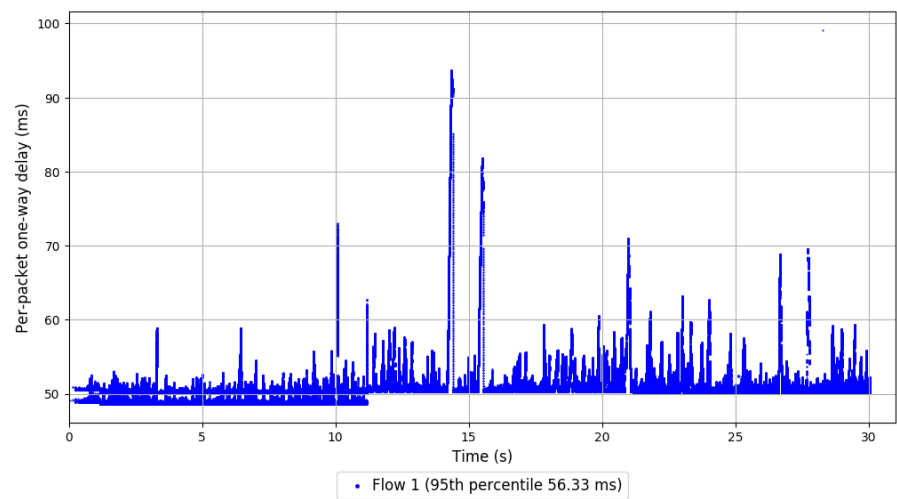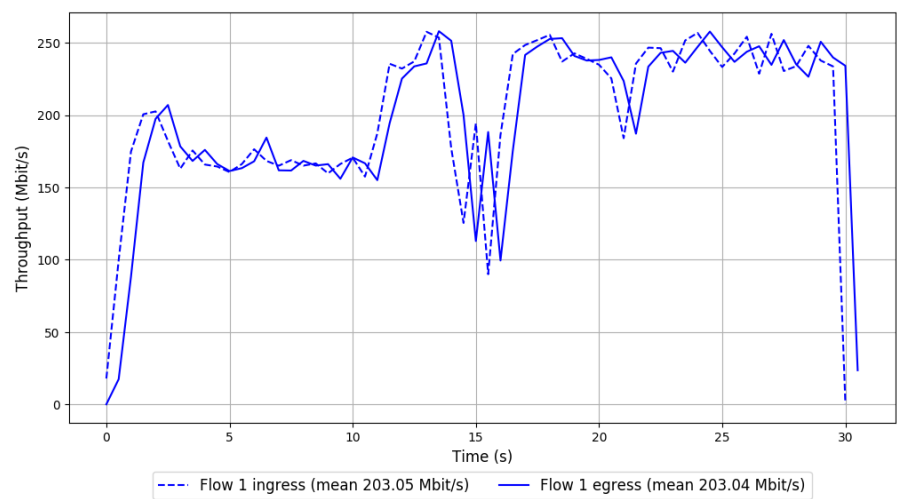
Run 8: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 203.05 Mbit/s) Flow 1 egress (mean 203.04 Mbit/s)
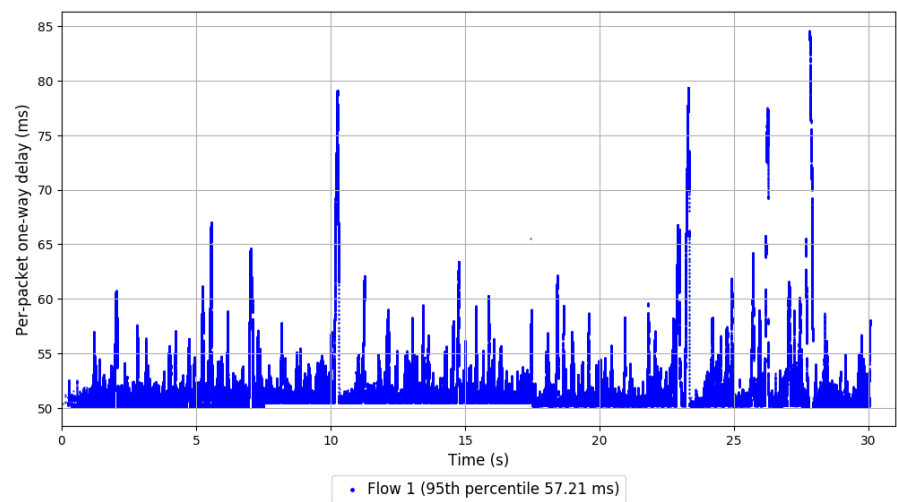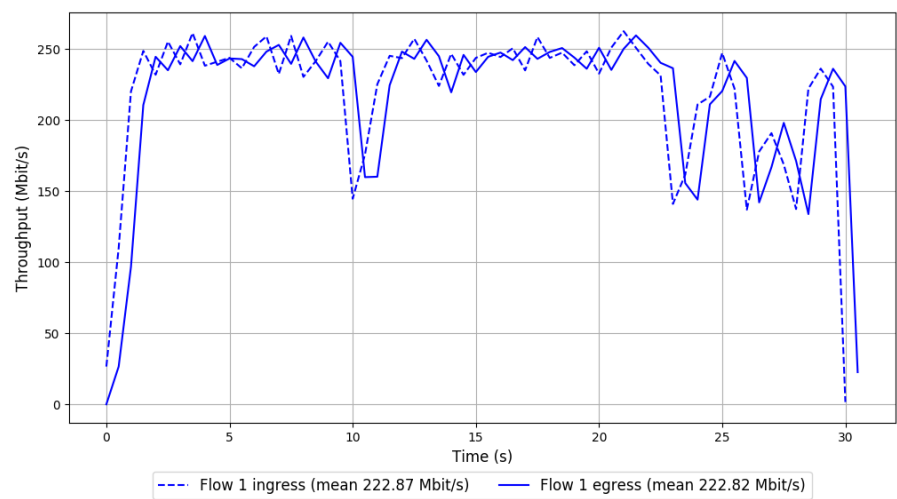

Flow 1 (95th percentile 56.33 ms)

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

Start at: 2018-06-07 03:02:10
End at: 2018-06-07 03:02:40
Local clock offset: 0.028 ms
Remote clock offset: -0.017 ms


# Below is generated by plot.py at 2018-06-07 04:42:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.82 Mbit/s
95th percentile per-packet one-way delay: 57.206 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 222.82 Mbit/s
95th percentile per-packet one-way delay: 57.206 ms
Loss rate: 0.02%
```
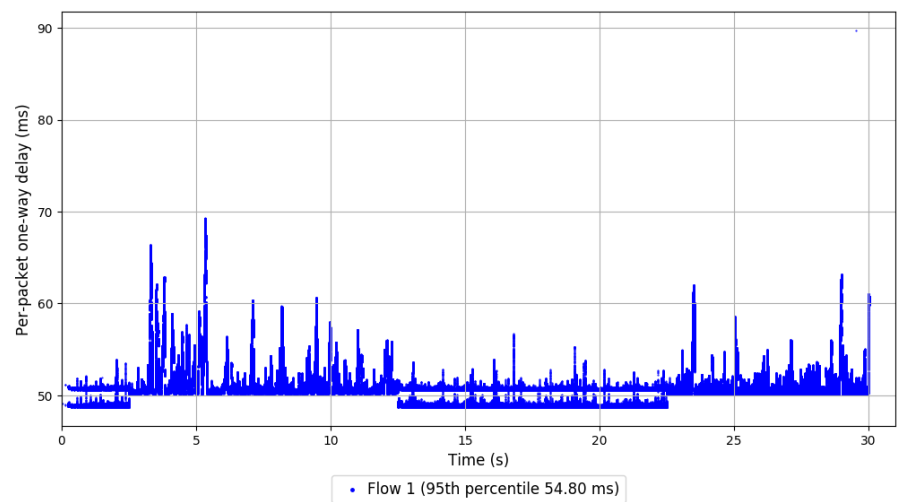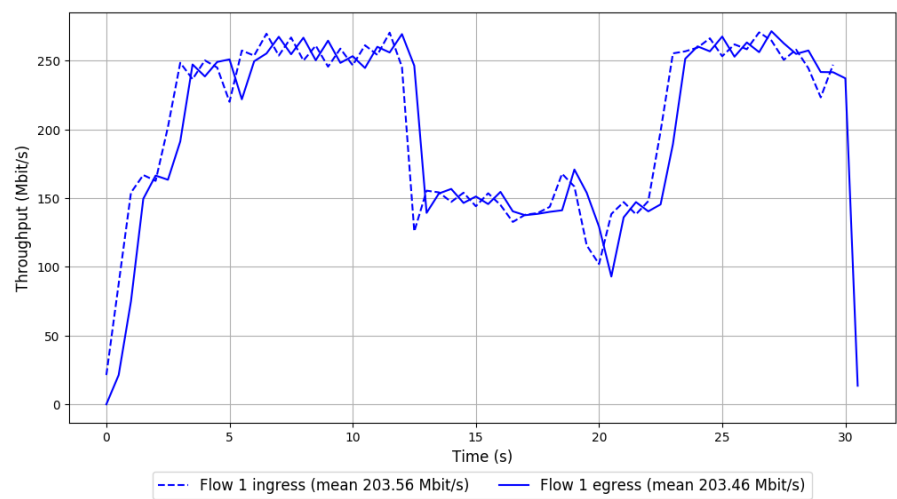
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 222.87 Mbit/s)   Flow 1 egress (mean 222.82 Mbit/s)

Flow 1 (95th percentile 57.21 ms)

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

Start at: 2018-06-07 03:22:25
End at: 2018-06-07 03:22:55
Local clock offset: -0.008 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2018-06-07 04:45:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.46 Mbit/s
95th percentile per-packet one-way delay: 54.798 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 203.46 Mbit/s
95th percentile per-packet one-way delay: 54.798 ms
Loss rate: 0.05%
```
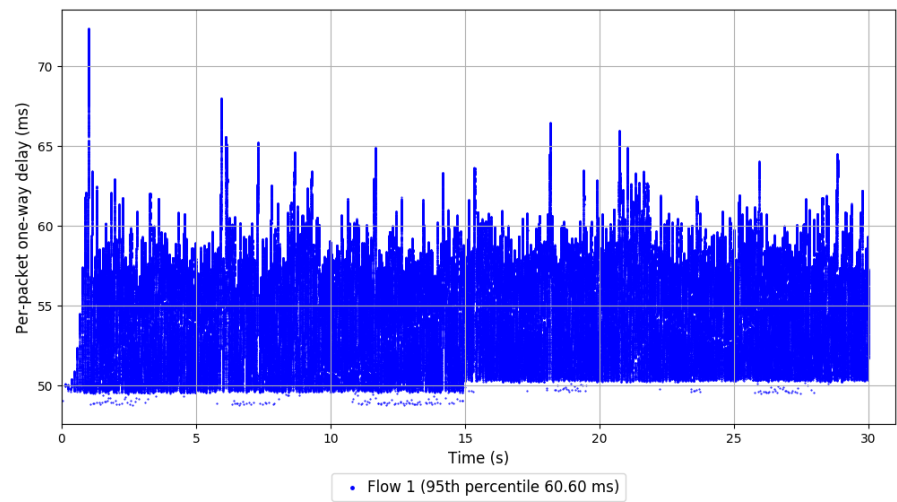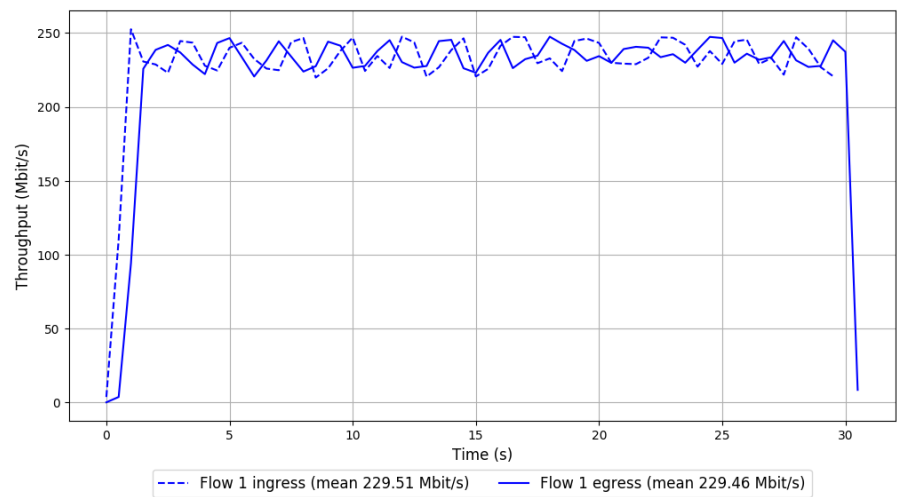
Run 10: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2018-06-07 00:15:43
End at: 2018-06-07 00:16:13
Local clock offset: -0.01 ms
Remote clock offset: -0.011 ms


# Below is generated by plot.py at 2018-06-07 04:45:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 229.46 Mbit/s
95th percentile per-packet one-way delay: 60.601 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 229.46 Mbit/s
95th percentile per-packet one-way delay: 60.601 ms
Loss rate: 0.00%
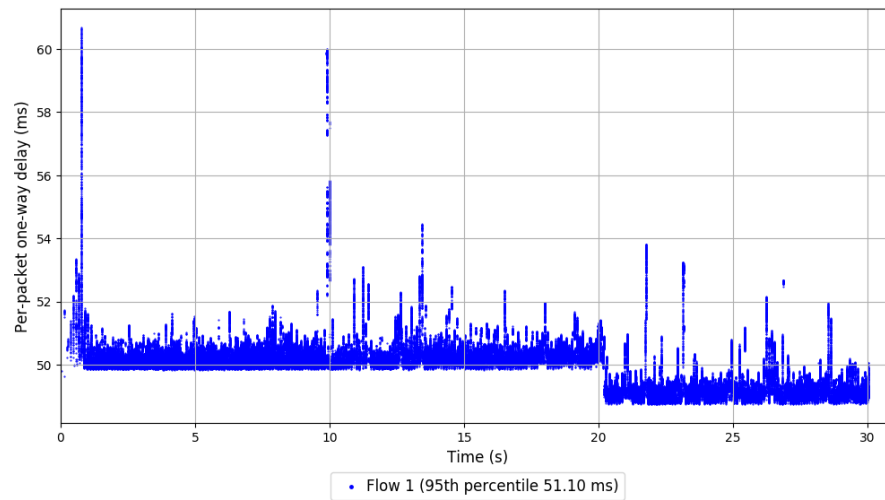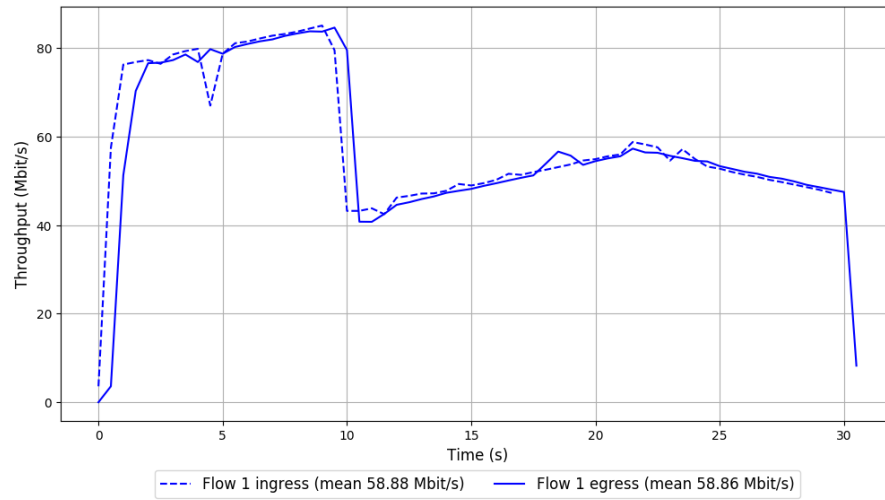```

Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-06-07 00:36:07
End at: 2018-06-07 00:36:37
Local clock offset: -0.069 ms
Remote clock offset: -0.058 ms

Below is generated by plot.py at 2018-06-07 04:45:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 58.86 Mbit/s
95th percentile per-packet one-way delay: 51.098 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 58.86 Mbit/s
95th percentile per-packet one-way delay: 51.098 ms
Loss rate: 0.04%
```
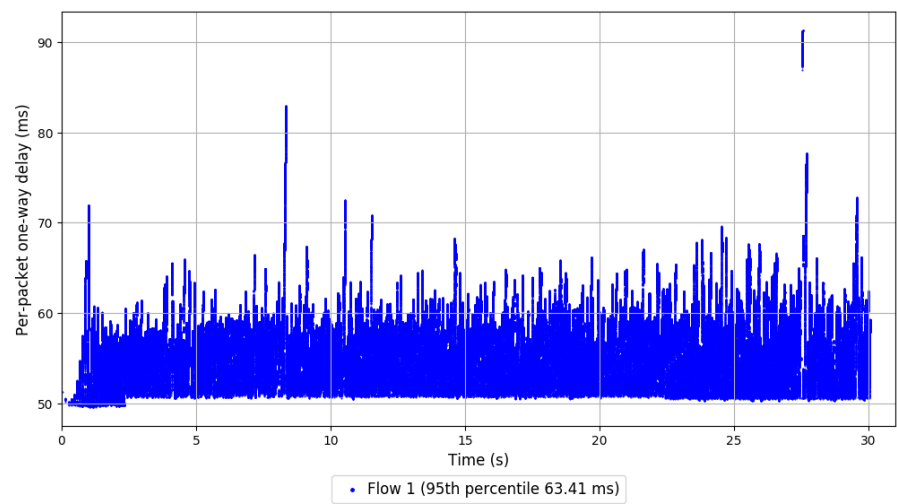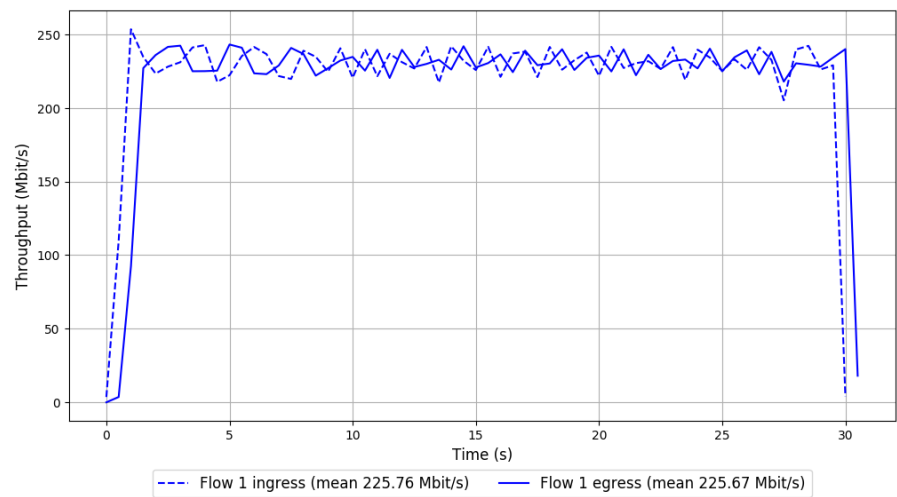
Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-06-07 00:56:15
End at: 2018-06-07 00:56:45
Local clock offset: -0.027 ms
Remote clock offset: -0.012 ms

Below is generated by plot.py at 2018-06-07 04:45:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 225.67 Mbit/s
95th percentile per-packet one-way delay: 63.405 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 225.67 Mbit/s
95th percentile per-packet one-way delay: 63.405 ms
Loss rate: 0.04%
```
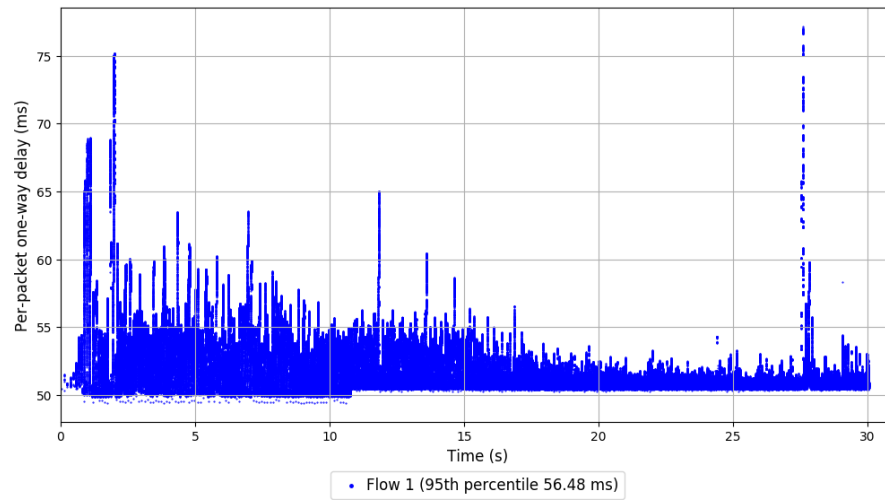
## Run 3: Report of TCP Vegas — Data Link



Flow 1 ingress (mean 225.76 Mbit/s)    Flow 1 egress (mean 225.67 Mbit/s)



Flow 1 (95th percentile 63.41 ms)

```
Run 4: Statistics of TCP Vegas

Start at: 2018-06-07 01:16:47
End at: 2018-06-07 01:17:17
Local clock offset: 0.383 ms
Remote clock offset: 0.001 ms

Below is generated by plot.py at 2018-06-07 04:45:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 223.81 Mbit/s
95th percentile per-packet one-way delay: 56.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 223.81 Mbit/s
95th percentile per-packet one-way delay: 56.479 ms
Loss rate: 0.00%
```
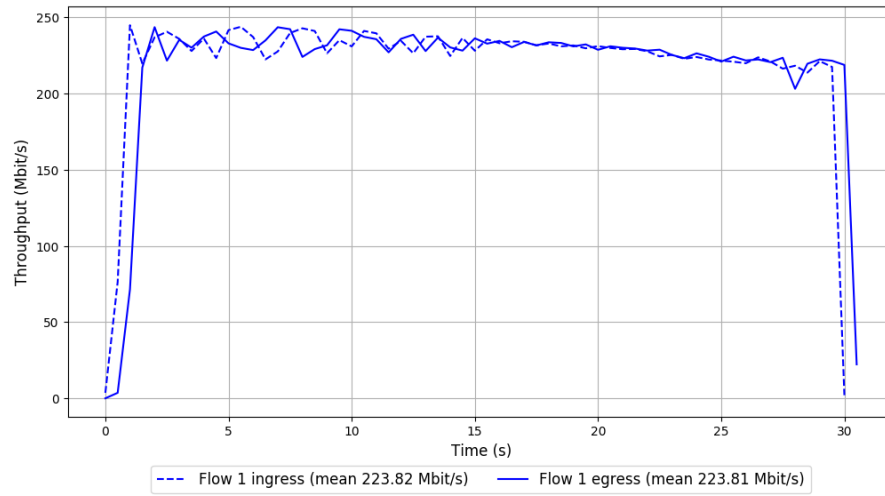
## Run 4: Report of TCP Vegas — Data Link



Flow 1 ingress (mean 223.82 Mbit/s) --- Flow 1 egress (mean 223.81 Mbit/s)
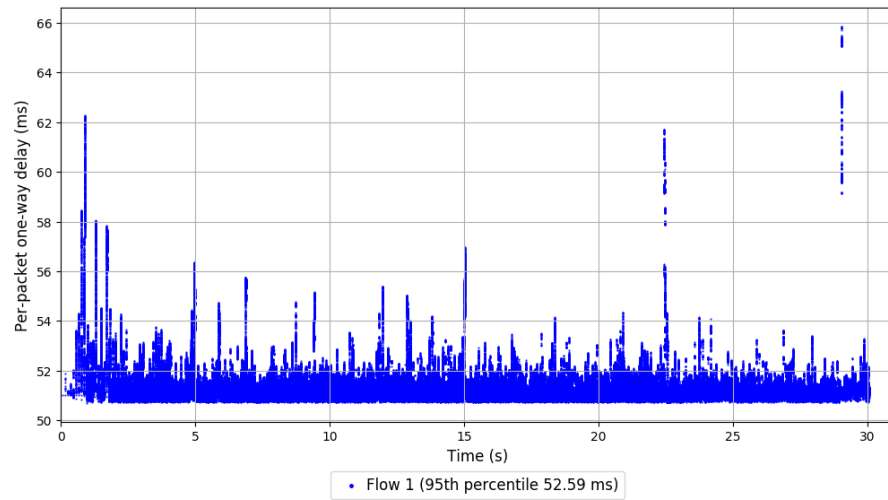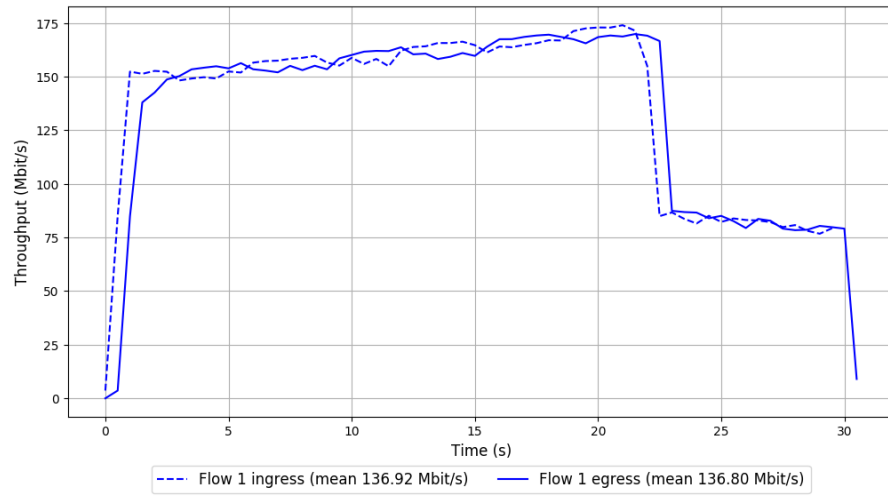


• Flow 1 (95th percentile 56.48 ms)

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```
Run 5: Statistics of TCP Vegas

Start at: 2018-06-07 01:37:17
End at: 2018-06-07 01:37:47
Local clock offset: -0.079 ms
Remote clock offset: -0.092 ms


# Below is generated by plot.py at 2018-06-07 04:45:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 136.80 Mbit/s
95th percentile per-packet one-way delay: 52.592 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 136.80 Mbit/s
95th percentile per-packet one-way delay: 52.592 ms
Loss rate: 0.08%
```

Run 5: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 136.92 Mbit/s)   Flow 1 egress (mean 136.80 Mbit/s)
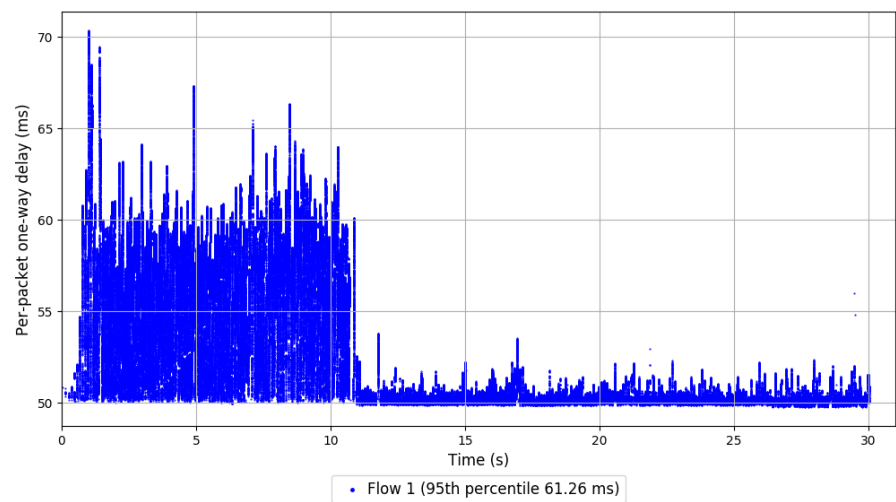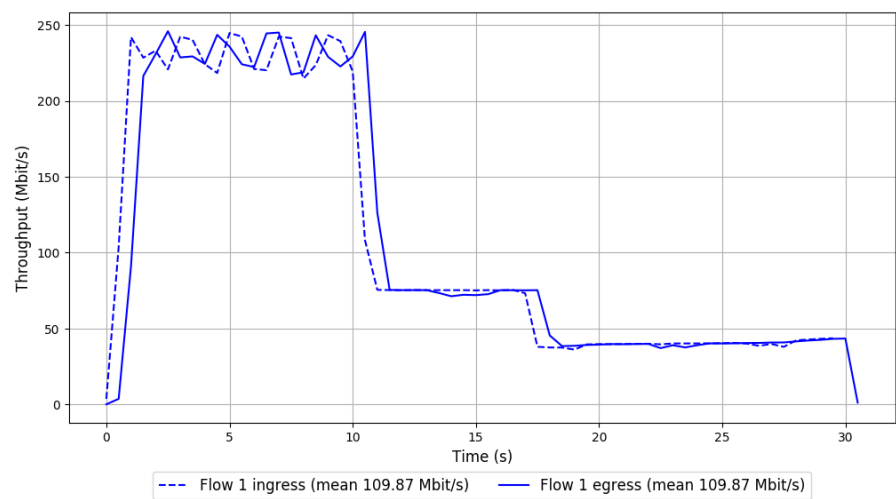

Flow 1 (95th percentile 52.59 ms)

```
Run 6: Statistics of TCP Vegas

Start at: 2018-06-07 01:57:41
End at: 2018-06-07 01:58:11
Local clock offset: -0.086 ms
Remote clock offset: -0.088 ms


# Below is generated by plot.py at 2018-06-07 04:45:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 109.87 Mbit/s
95th percentile per-packet one-way delay: 61.261 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 109.87 Mbit/s
95th percentile per-packet one-way delay: 61.261 ms
Loss rate: 0.00%
```
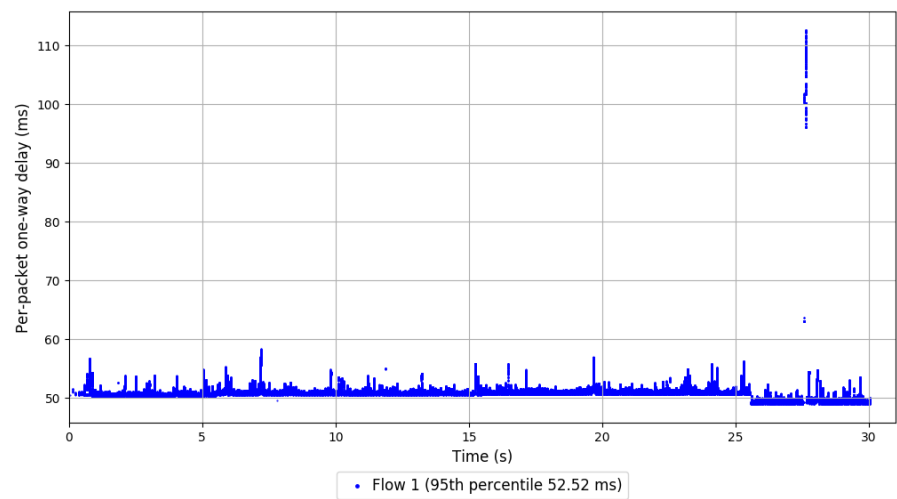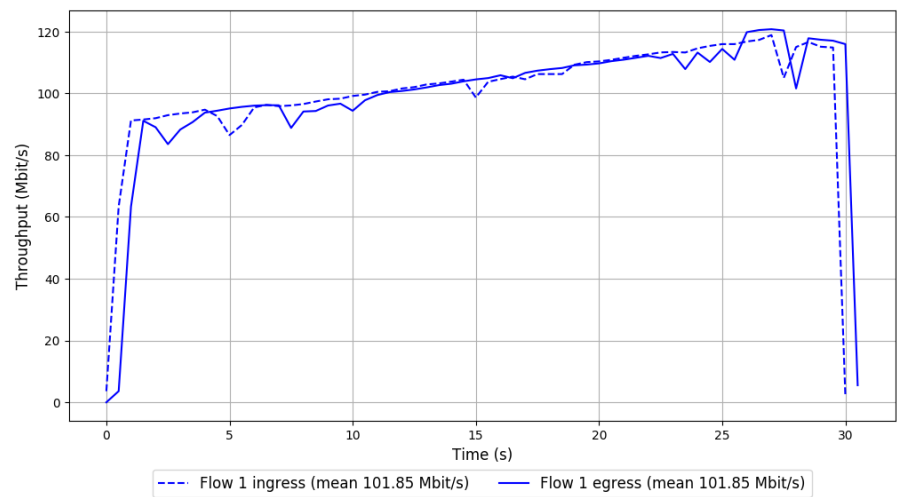
Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2018-06-07 02:18:12
End at: 2018-06-07 02:18:42
Local clock offset: 0.052 ms
Remote clock offset: 0.003 ms


# Below is generated by plot.py at 2018-06-07 04:45:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 101.85 Mbit/s
95th percentile per-packet one-way delay: 52.515 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 101.85 Mbit/s
95th percentile per-packet one-way delay: 52.515 ms
Loss rate: 0.00%
```

Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2018-06-07 02:38:22
End at: 2018-06-07 02:38:52
Local clock offset: 0.048 ms
Remote clock offset: 0.014 ms


# Below is generated by plot.py at 2018-06-07 04:45:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 99.36 Mbit/s
95th percentile per-packet one-way delay: 59.750 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 99.36 Mbit/s
95th percentile per-packet one-way delay: 59.750 ms
Loss rate: 0.01%
```
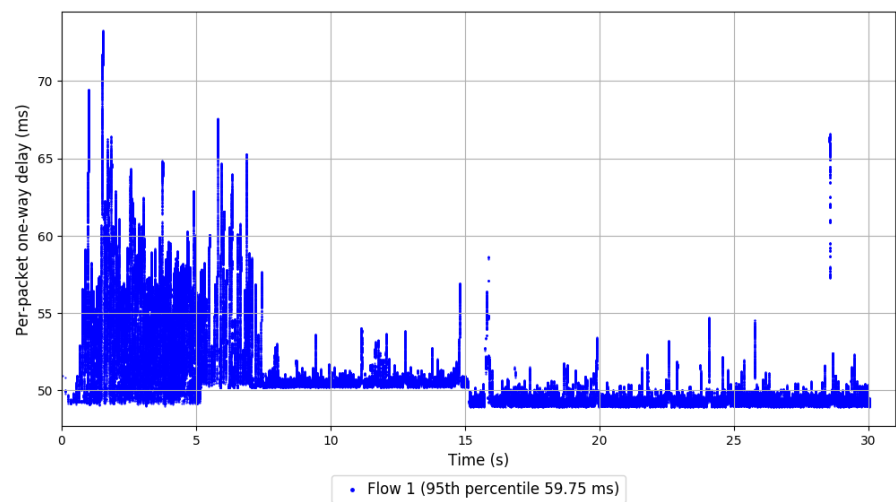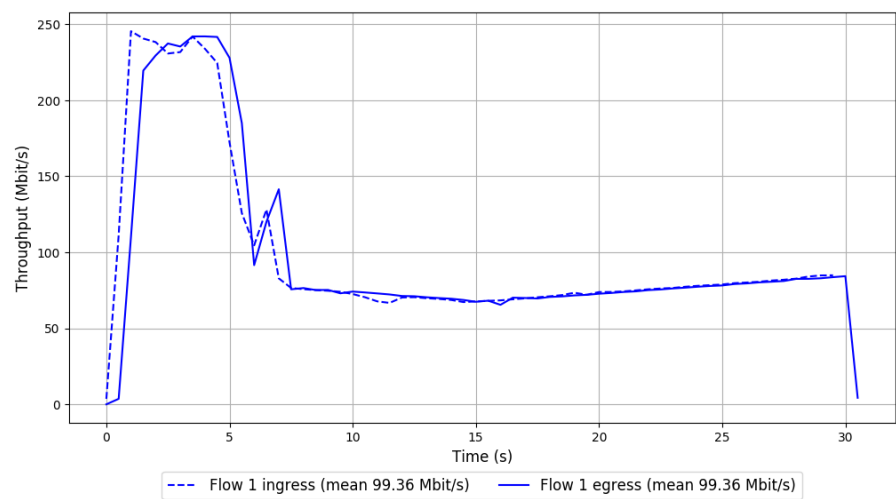
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-06-07 02:58:43
End at: 2018-06-07 02:59:13
Local clock offset: -0.023 ms
Remote clock offset: 0.017 ms


# Below is generated by plot.py at 2018-06-07 04:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 164.84 Mbit/s
95th percentile per-packet one-way delay: 62.245 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 164.84 Mbit/s
95th percentile per-packet one-way delay: 62.245 ms
Loss rate: 0.00%
```
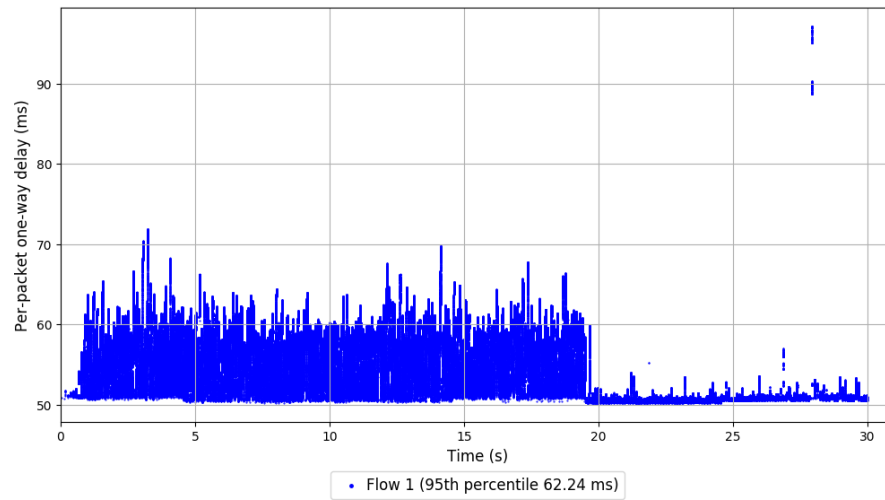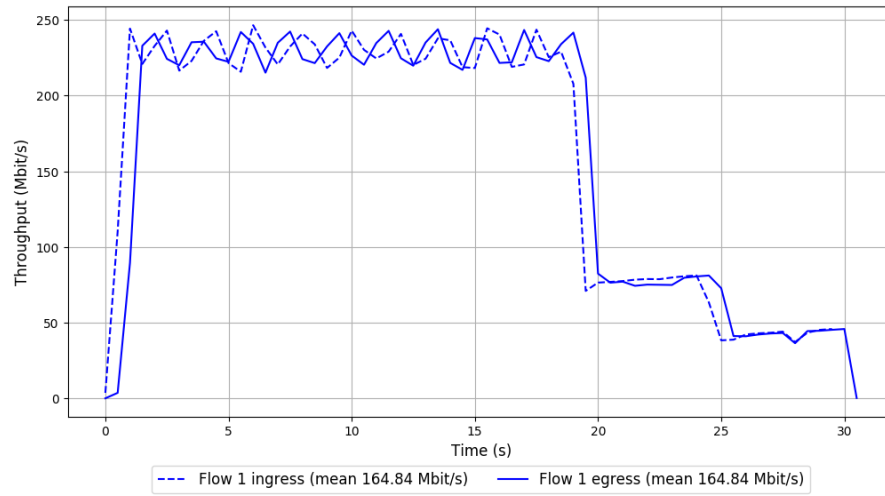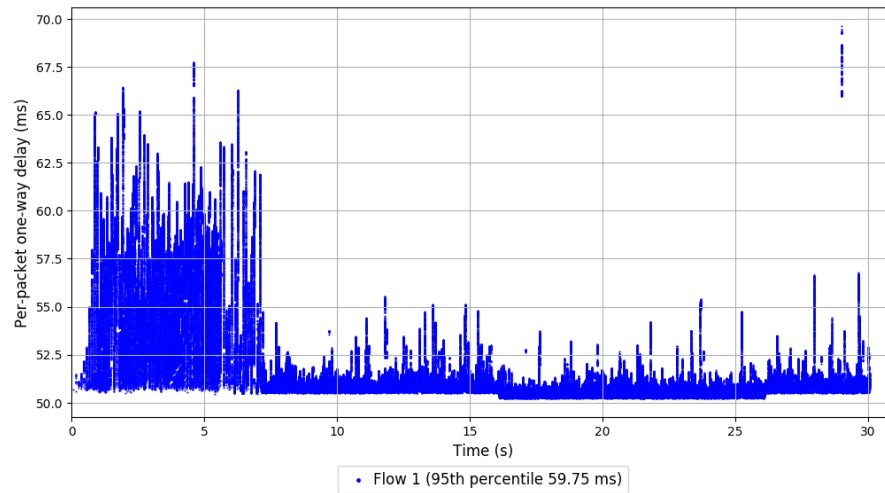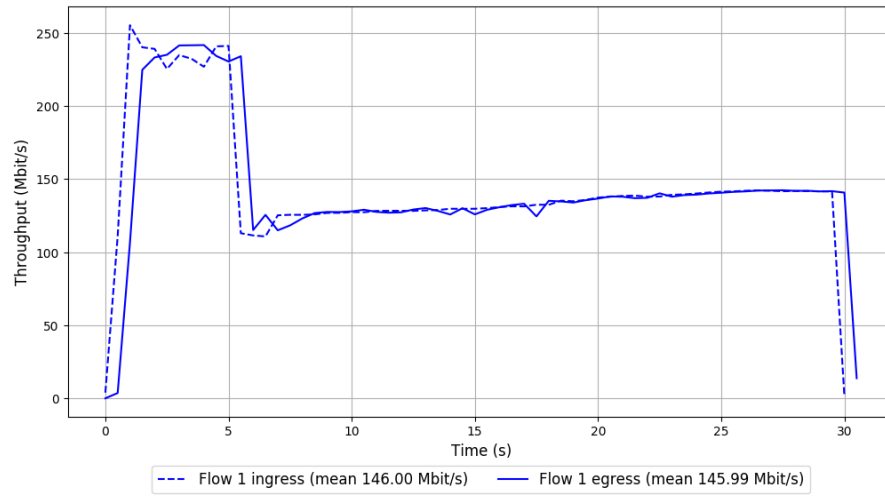
Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2018-06-07 03:19:01
End at: 2018-06-07 03:19:31
Local clock offset: -0.015 ms
Remote clock offset: -0.025 ms


# Below is generated by plot.py at 2018-06-07 04:46:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 145.99 Mbit/s
95th percentile per-packet one-way delay: 59.752 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 145.99 Mbit/s
95th percentile per-packet one-way delay: 59.752 ms
Loss rate: 0.00%
```
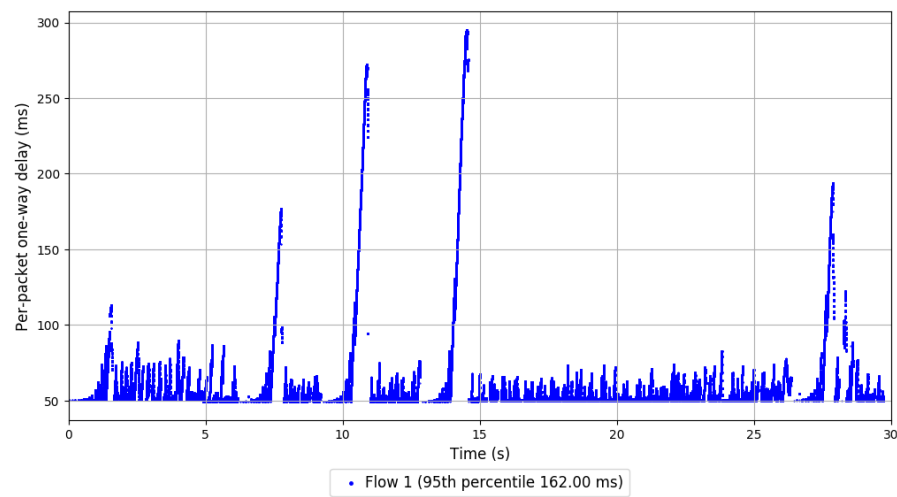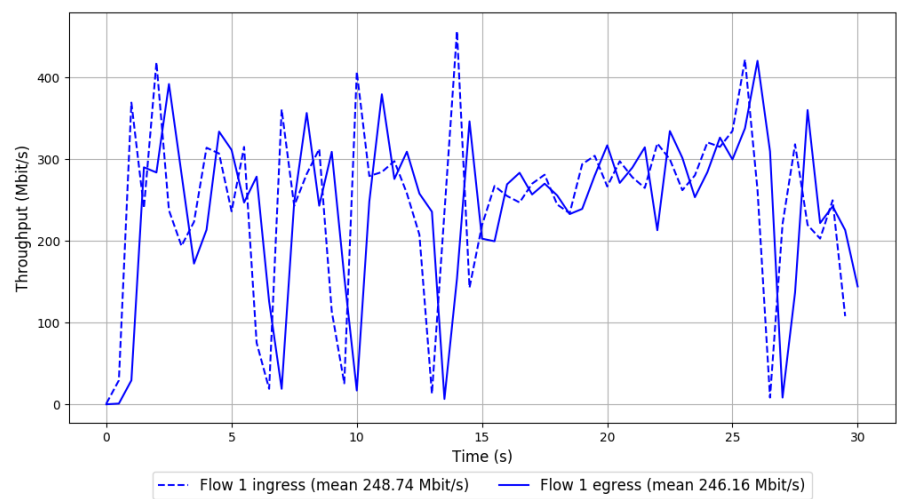
Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2018-06-07 00:14:22
End at: 2018-06-07 00:14:52
Local clock offset: 0.309 ms
Remote clock offset: -0.042 ms


# Below is generated by plot.py at 2018-06-07 04:48:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 246.16 Mbit/s
95th percentile per-packet one-way delay: 161.997 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 246.16 Mbit/s
95th percentile per-packet one-way delay: 161.997 ms
Loss rate: 1.05%
```
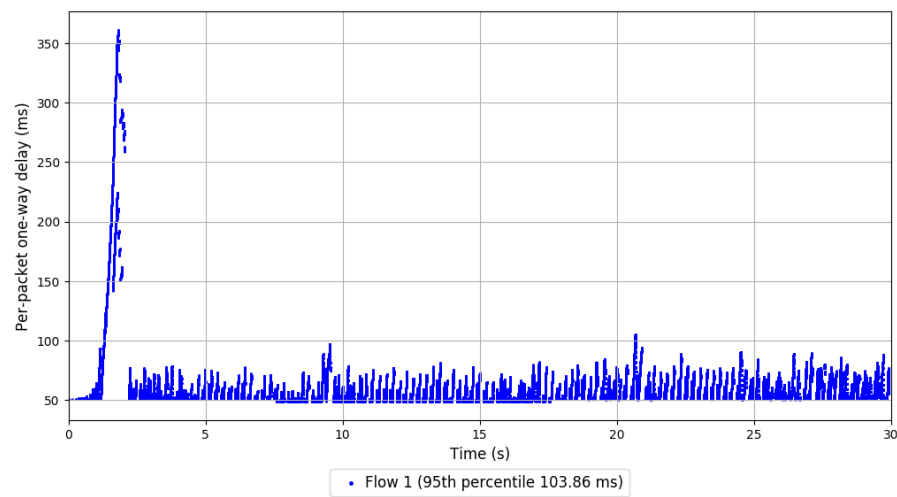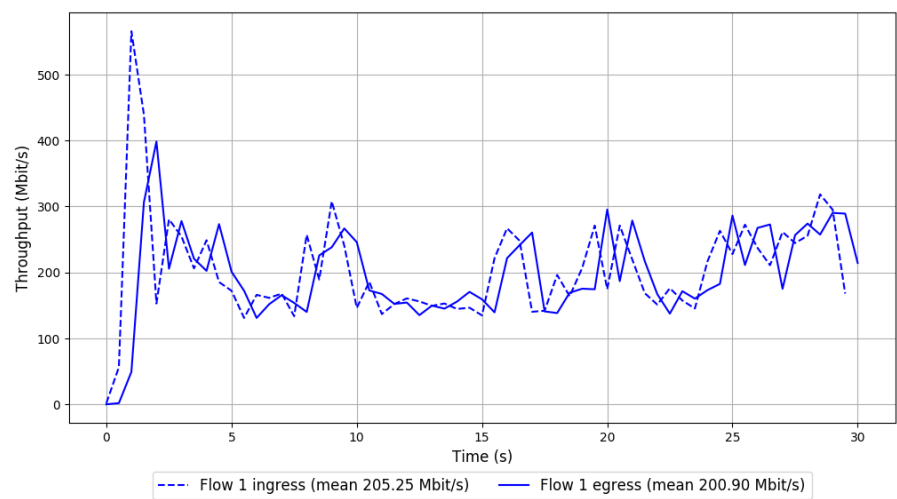
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-06-07 00:34:50
End at: 2018-06-07 00:35:20
Local clock offset: -0.062 ms
Remote clock offset: -0.051 ms


# Below is generated by plot.py at 2018-06-07 04:48:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.90 Mbit/s
95th percentile per-packet one-way delay: 103.859 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 200.90 Mbit/s
95th percentile per-packet one-way delay: 103.859 ms
Loss rate: 2.12%
```
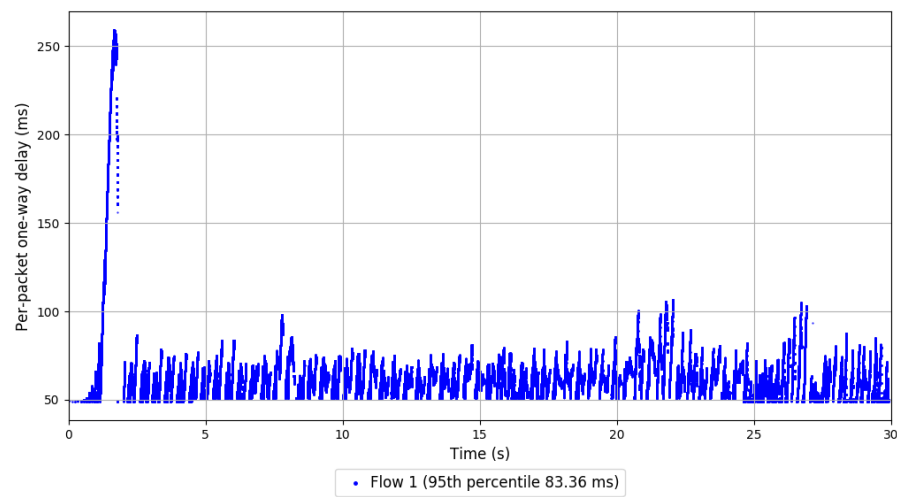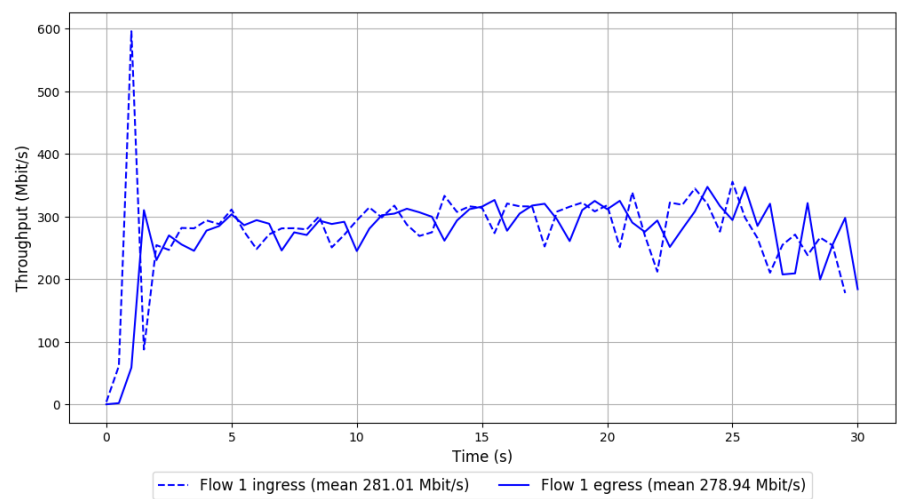
Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2018-06-07 00:54:53
End at: 2018-06-07 00:55:23
Local clock offset: 0.001 ms
Remote clock offset: -0.065 ms


# Below is generated by plot.py at 2018-06-07 04:49:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 278.94 Mbit/s
95th percentile per-packet one-way delay: 83.362 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 278.94 Mbit/s
95th percentile per-packet one-way delay: 83.362 ms
Loss rate: 0.73%
```

Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-06-07 01:15:26
End at: 2018-06-07 01:15:56
Local clock offset: 0.019 ms
Remote clock offset: -0.06 ms


# Below is generated by plot.py at 2018-06-07 04:49:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 249.05 Mbit/s
95th percentile per-packet one-way delay: 84.040 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 249.05 Mbit/s
95th percentile per-packet one-way delay: 84.040 ms
Loss rate: 0.37%
```
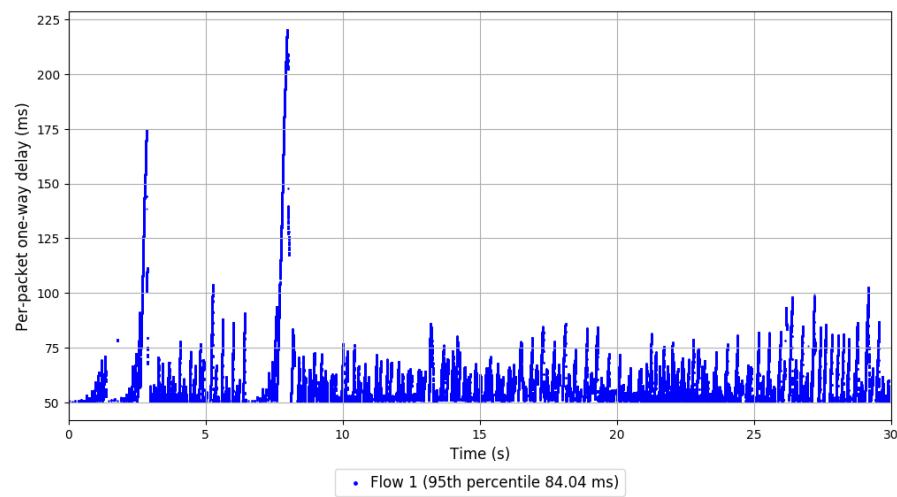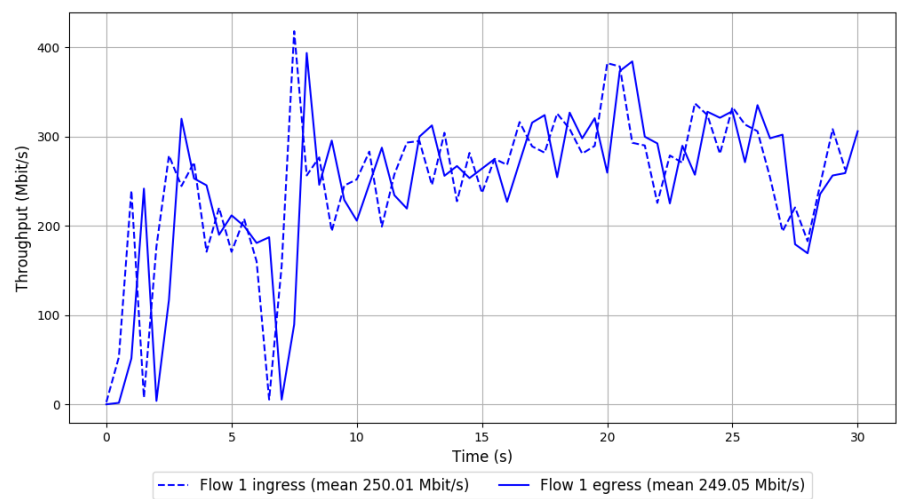
Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 250.01 Mbit/s)   Flow 1 egress (mean 249.05 Mbit/s)

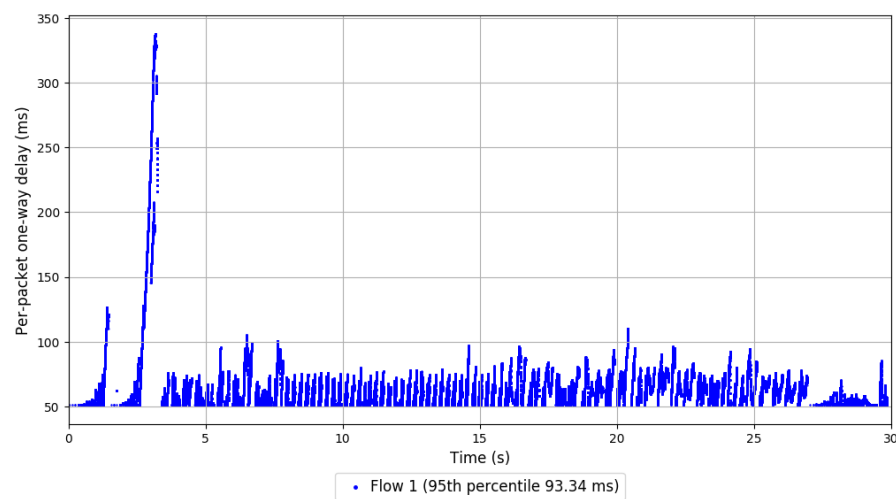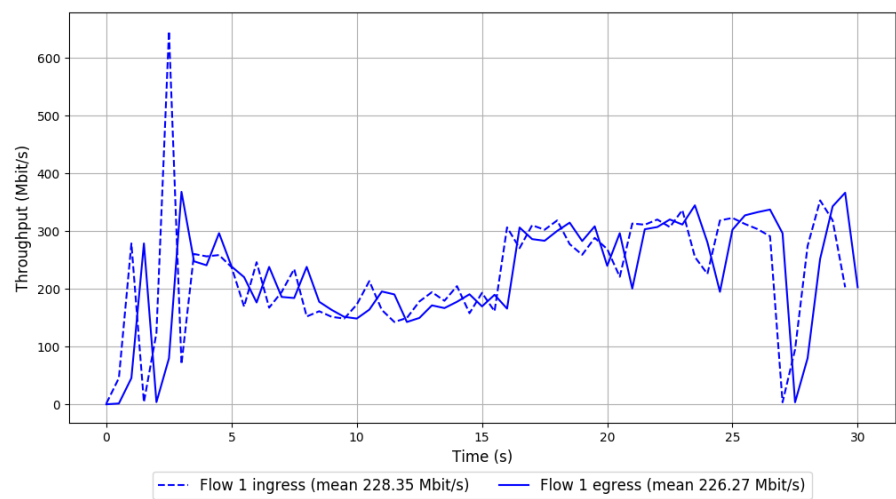Flow 1 (95th percentile 84.04 ms)

```
Run 5: Statistics of Verus

Start at: 2018-06-07 01:35:58
End at: 2018-06-07 01:36:28
Local clock offset: -0.064 ms
Remote clock offset: -0.084 ms


# Below is generated by plot.py at 2018-06-07 04:49:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.27 Mbit/s
95th percentile per-packet one-way delay: 93.341 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 226.27 Mbit/s
95th percentile per-packet one-way delay: 93.341 ms
Loss rate: 0.90%
```
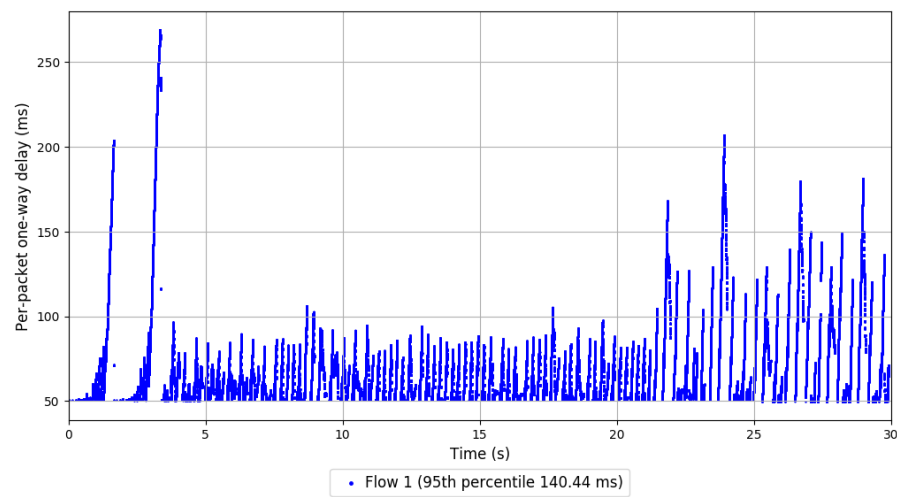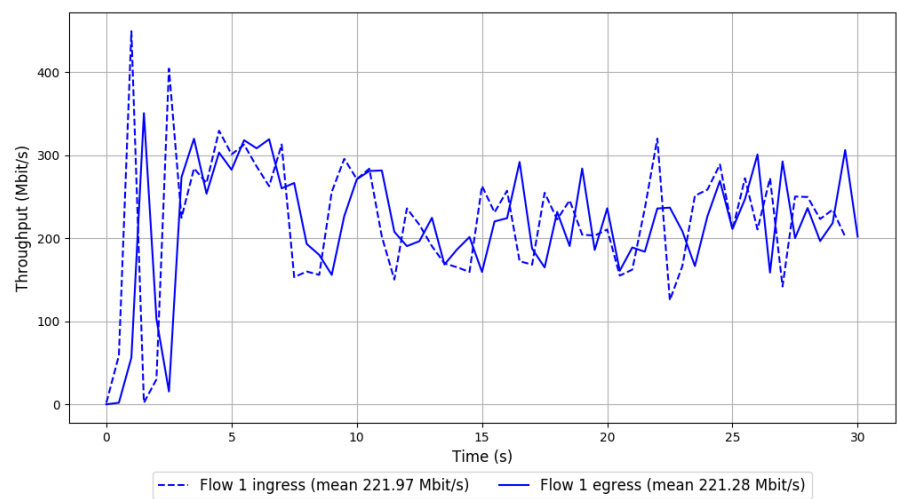
Run 5: Report of Verus — Data Link

```
Run 6: Statistics of Verus

Start at: 2018-06-07 01:56:22
End at: 2018-06-07 01:56:52
Local clock offset: -0.095 ms
Remote clock offset: -0.058 ms


# Below is generated by plot.py at 2018-06-07 04:49:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.28 Mbit/s
95th percentile per-packet one-way delay: 140.437 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 221.28 Mbit/s
95th percentile per-packet one-way delay: 140.437 ms
Loss rate: 0.26%
```
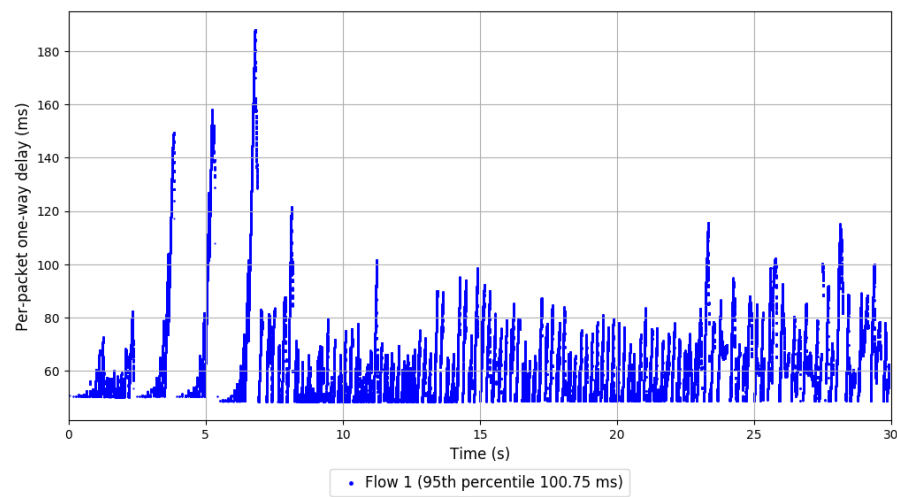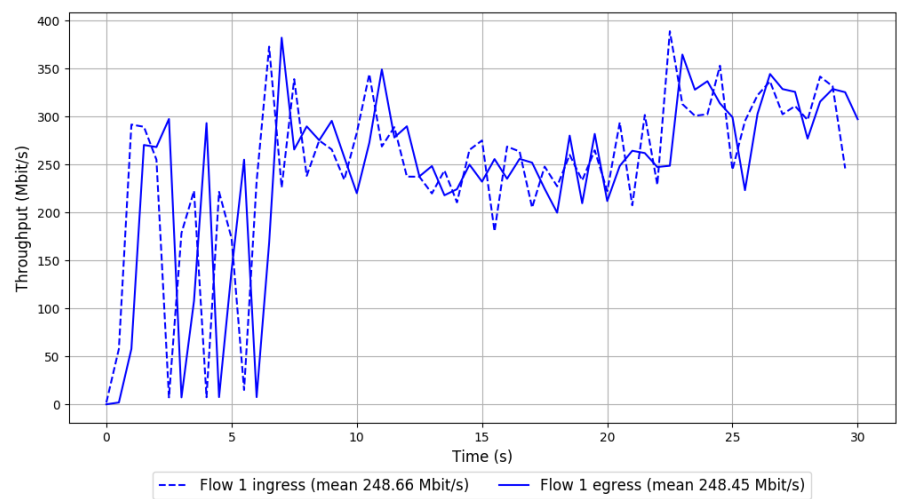
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-06-07 02:16:52
End at: 2018-06-07 02:17:22
Local clock offset: 0.387 ms
Remote clock offset: -0.014 ms


# Below is generated by plot.py at 2018-06-07 04:50:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.45 Mbit/s
95th percentile per-packet one-way delay: 100.753 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 248.45 Mbit/s
95th percentile per-packet one-way delay: 100.753 ms
Loss rate: 0.09%
```

Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2018-06-07 02:37:06
End at: 2018-06-07 02:37:36
Local clock offset: 0.015 ms
Remote clock offset: 0.039 ms


# Below is generated by plot.py at 2018-06-07 04:50:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.91 Mbit/s
95th percentile per-packet one-way delay: 84.466 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 169.91 Mbit/s
95th percentile per-packet one-way delay: 84.466 ms
Loss rate: 0.56%
```
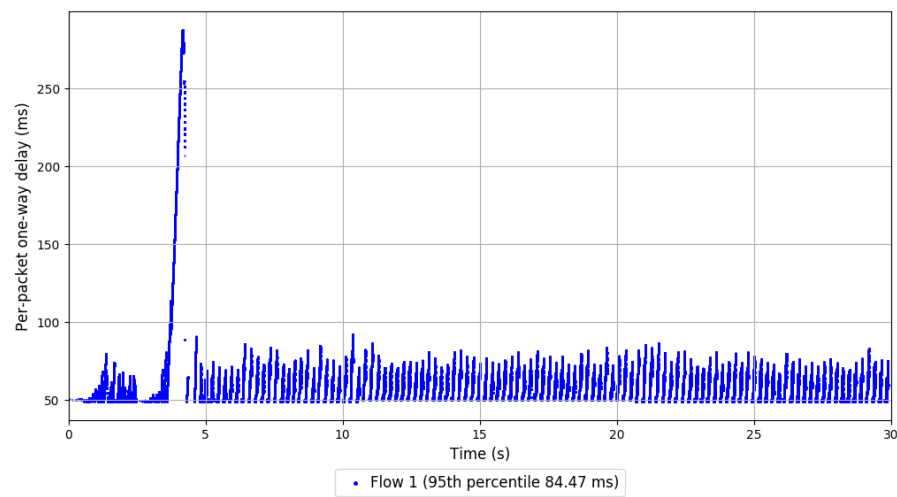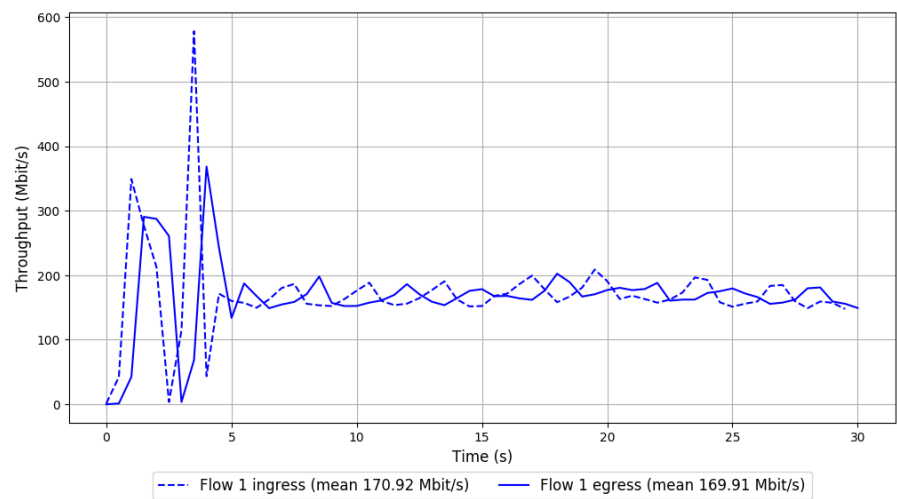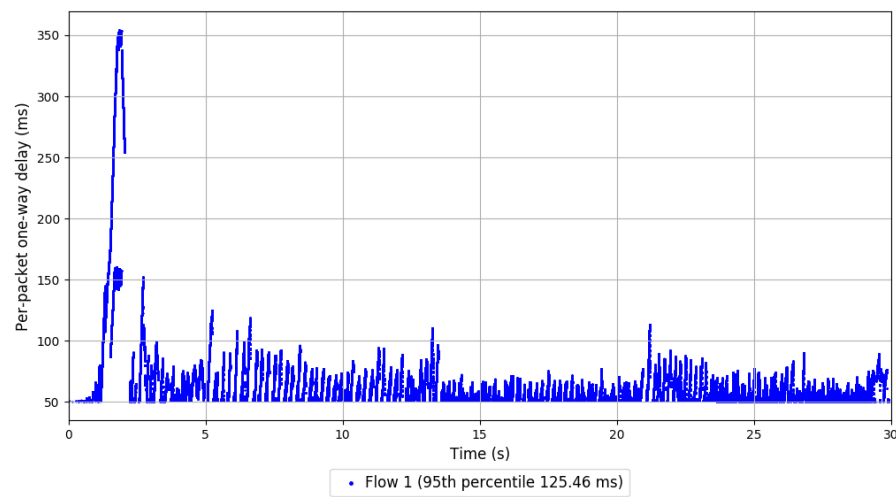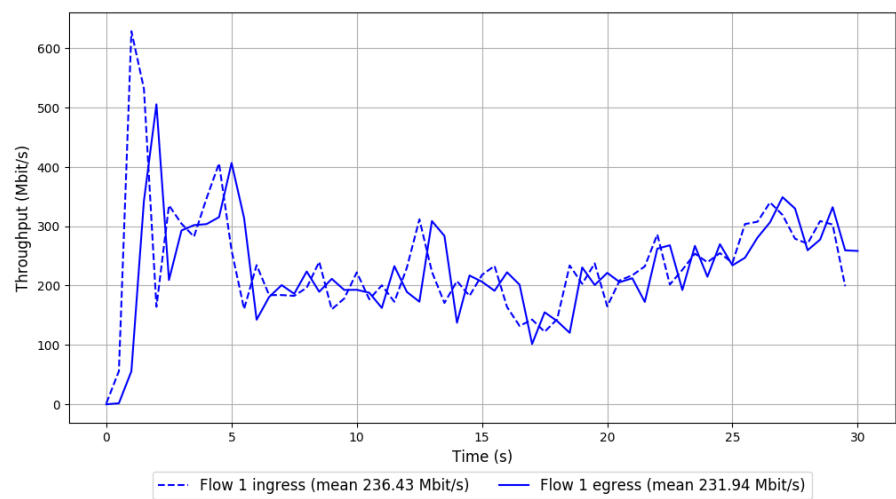
Run 8: Report of Verus — Data Link

```
Run 9: Statistics of Verus

Start at: 2018-06-07 02:57:23
End at: 2018-06-07 02:57:53
Local clock offset: 0.02 ms
Remote clock offset: -0.009 ms


# Below is generated by plot.py at 2018-06-07 04:51:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 231.94 Mbit/s
95th percentile per-packet one-way delay: 125.463 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 231.94 Mbit/s
95th percentile per-packet one-way delay: 125.463 ms
Loss rate: 1.89%
```

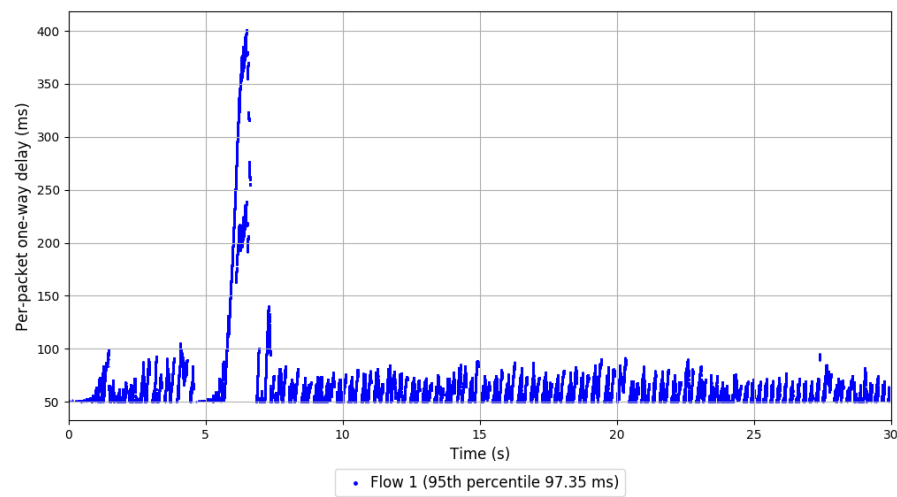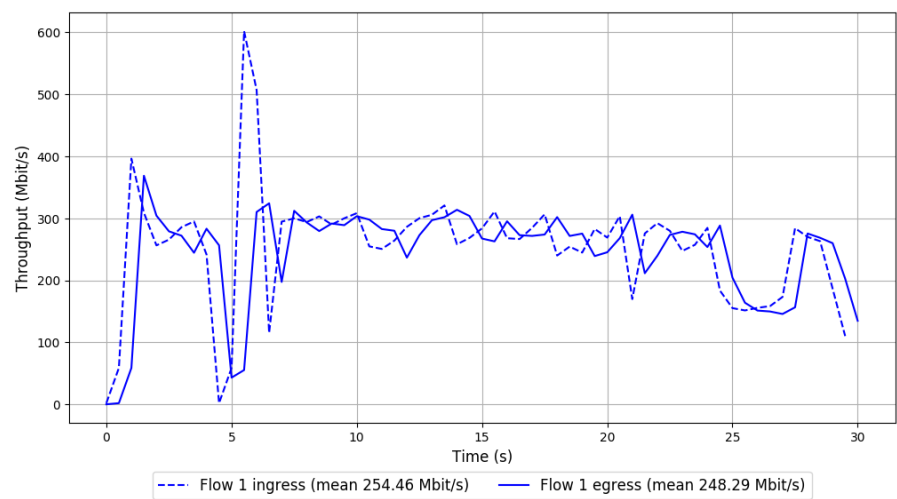## Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2018-06-07 03:17:40
End at: 2018-06-07 03:18:10
Local clock offset: -0.011 ms
Remote clock offset: -0.014 ms


# Below is generated by plot.py at 2018-06-07 04:52:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.29 Mbit/s
95th percentile per-packet one-way delay: 97.353 ms
Loss rate: 2.43%
-- Flow 1:
Average throughput: 248.29 Mbit/s
95th percentile per-packet one-way delay: 97.353 ms
Loss rate: 2.43%
```

Run 10: Report of Verus — Data Link

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-07 00:11:36
End at: 2018-06-07 00:12:06
Local clock offset: -0.042 ms
Remote clock offset: 0.011 ms


# Below is generated by plot.py at 2018-06-07 04:52:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 229.16 Mbit/s
95th percentile per-packet one-way delay: 51.472 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 229.16 Mbit/s
95th percentile per-packet one-way delay: 51.472 ms
Loss rate: 0.00%
```
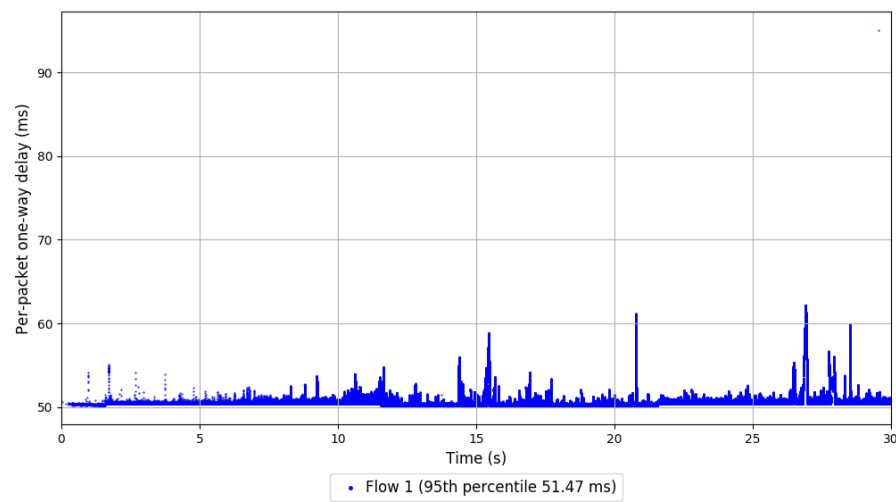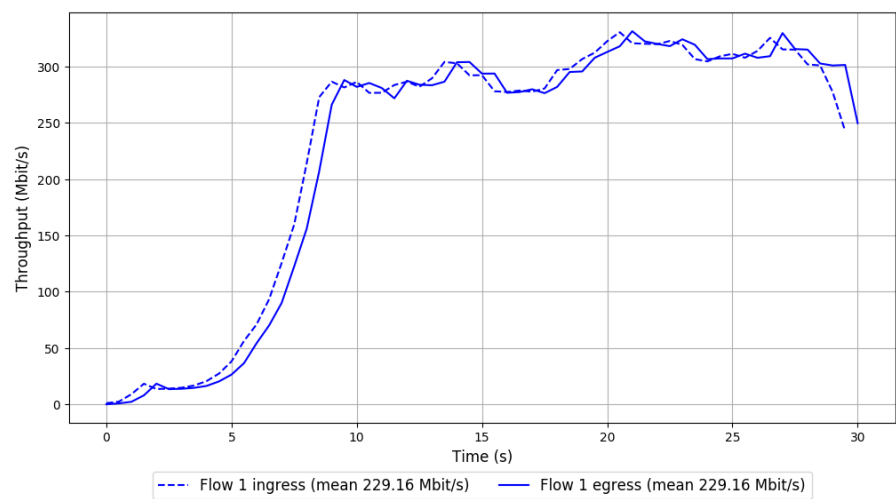
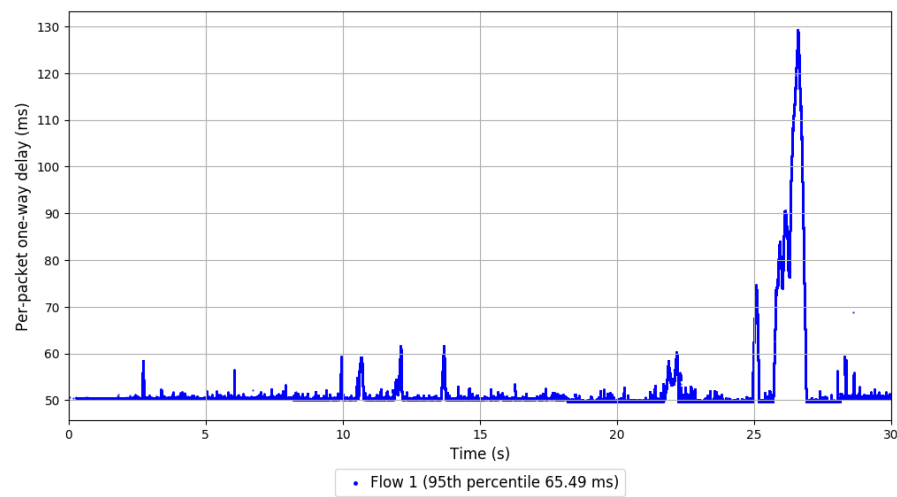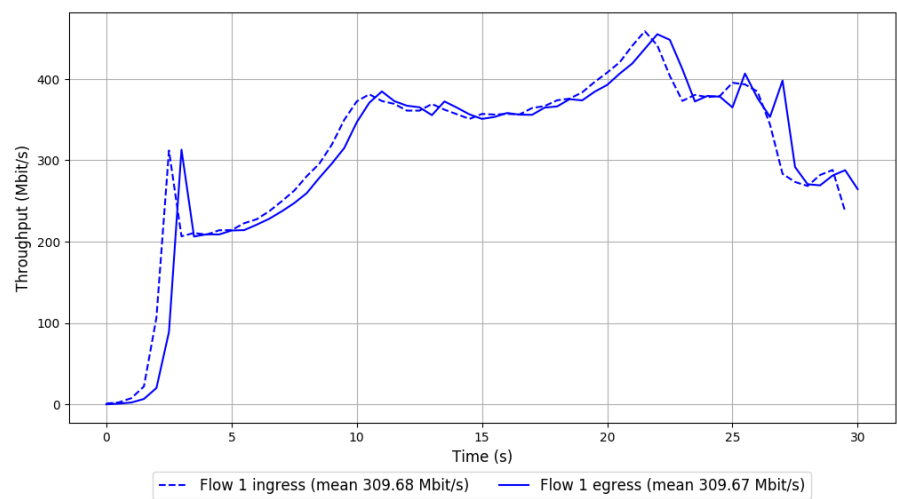# Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-07 00:31:59
End at: 2018-06-07 00:32:29
Local clock offset: -0.064 ms
Remote clock offset: -0.036 ms


# Below is generated by plot.py at 2018-06-07 04:54:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 309.67 Mbit/s
95th percentile per-packet one-way delay: 65.487 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 309.67 Mbit/s
95th percentile per-packet one-way delay: 65.487 ms
Loss rate: 0.00%
```

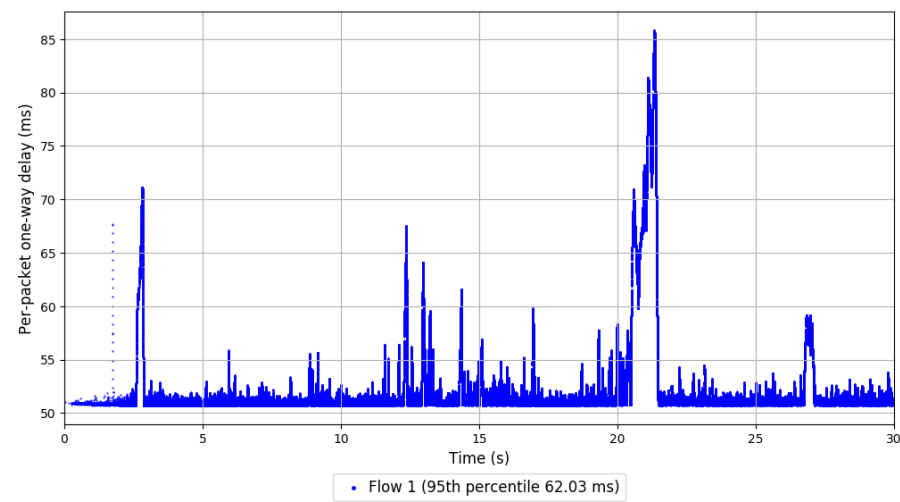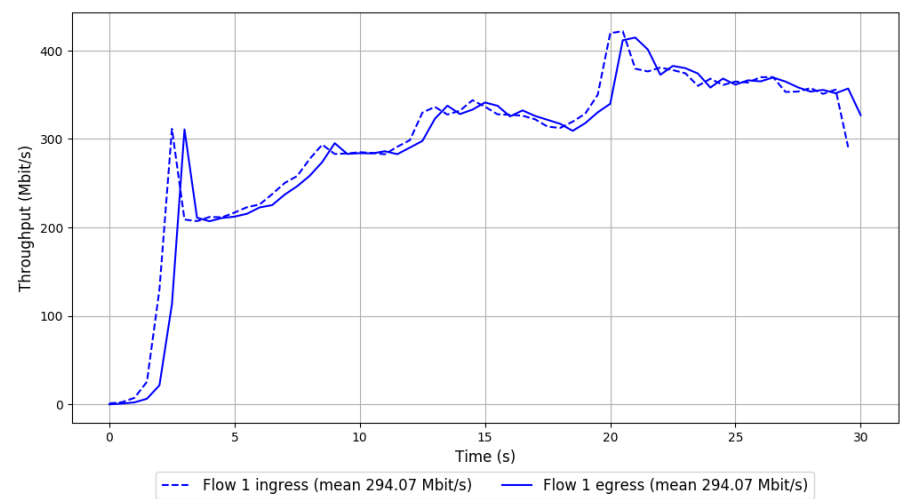Run 2: Report of PCC-Vivace — Data Link

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-07 00:52:06
End at: 2018-06-07 00:52:36
Local clock offset: -0.025 ms
Remote clock offset: -0.095 ms


# Below is generated by plot.py at 2018-06-07 04:54:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 294.07 Mbit/s
95th percentile per-packet one-way delay: 62.033 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 294.07 Mbit/s
95th percentile per-packet one-way delay: 62.033 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 294.07 Mbit/s) — Flow 1 egress (mean 294.07 Mbit/s)

Flow 1 (95th percentile 62.03 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-07 01:12:34
End at: 2018-06-07 01:13:04
Local clock offset: 0.011 ms
Remote clock offset: -0.001 ms


# Below is generated by plot.py at 2018-06-07 04:55:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 359.34 Mbit/s
95th percentile per-packet one-way delay: 61.776 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 359.34 Mbit/s
95th percentile per-packet one-way delay: 61.776 ms
Loss rate: 0.00%
```
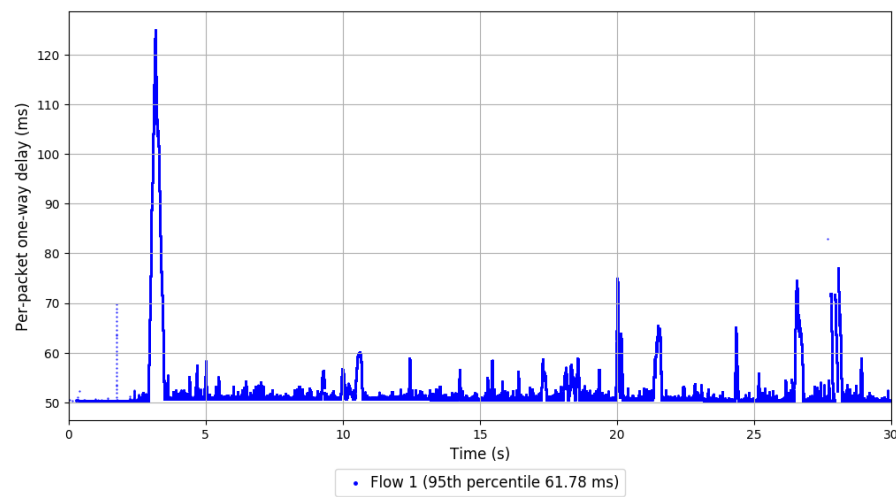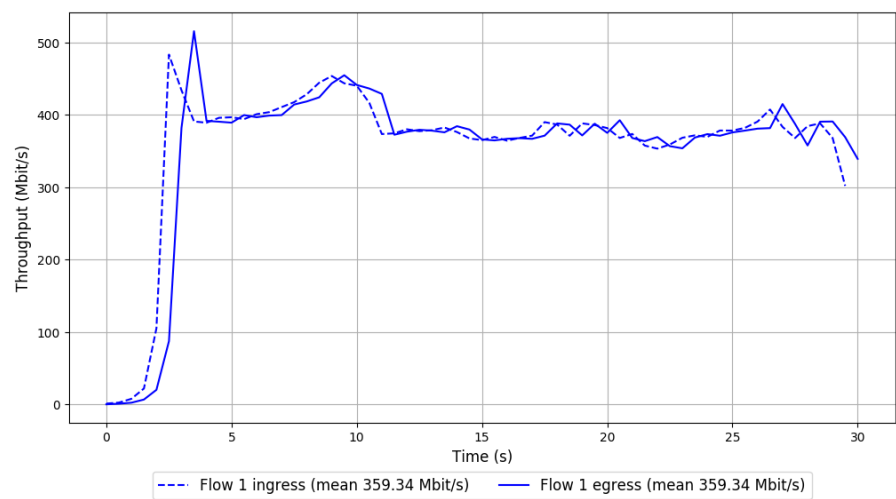
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 359.34 Mbit/s) --- Flow 1 egress (mean 359.34 Mbit/s)

Flow 1 (95th percentile 61.78 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-07 01:33:04
End at: 2018-06-07 01:33:34
Local clock offset: -0.034 ms
Remote clock offset: 0.003 ms


# Below is generated by plot.py at 2018-06-07 04:55:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 328.67 Mbit/s
95th percentile per-packet one-way delay: 55.112 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 328.67 Mbit/s
95th percentile per-packet one-way delay: 55.112 ms
Loss rate: 0.00%
```
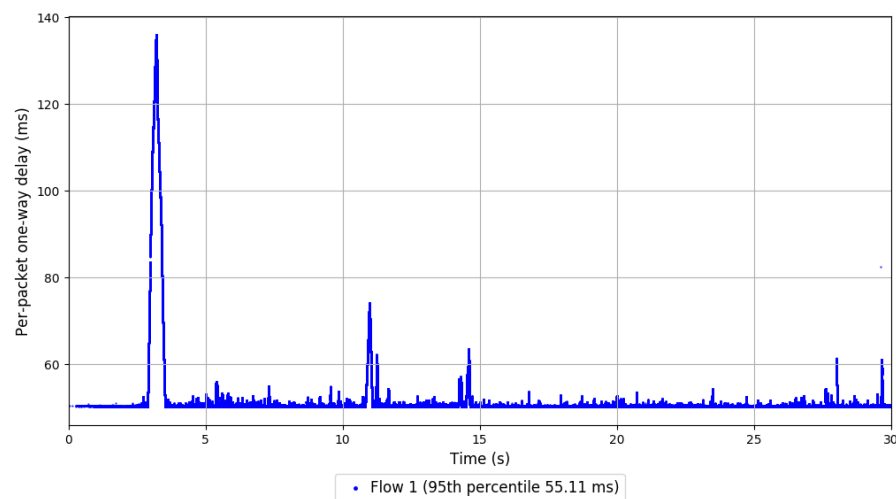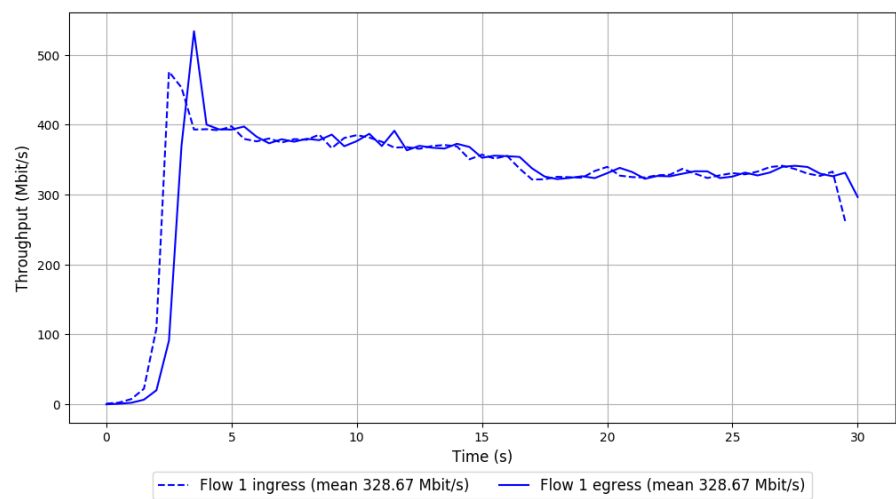
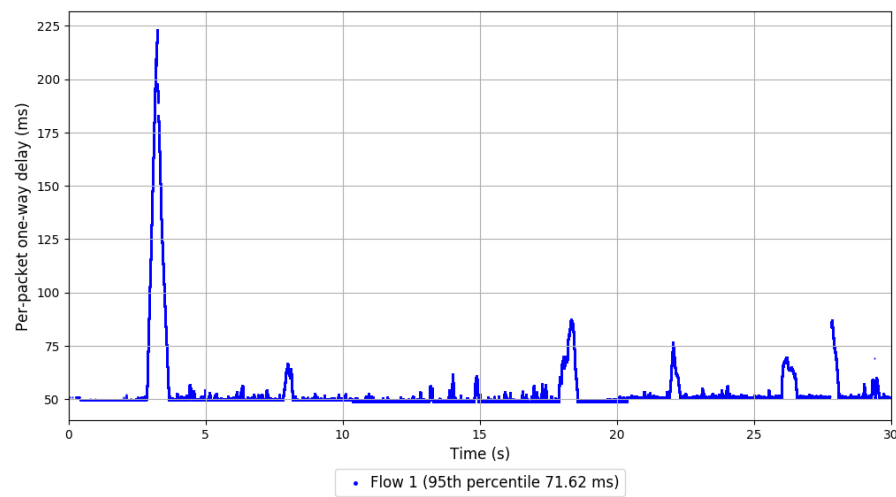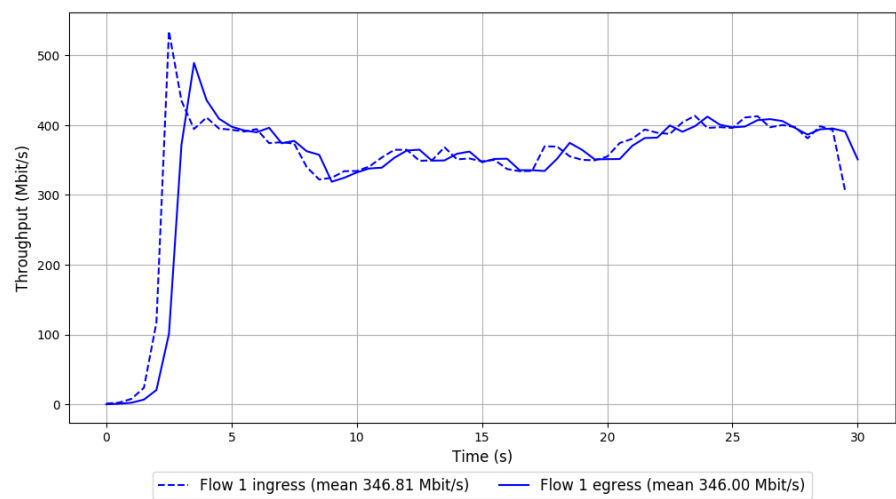# Run 5: Report of PCC-Vivace — Data Link

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-07 01:53:27
End at: 2018-06-07 01:53:57
Local clock offset: -0.096 ms
Remote clock offset: -0.061 ms


# Below is generated by plot.py at 2018-06-07 04:56:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 346.00 Mbit/s
95th percentile per-packet one-way delay: 71.625 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 346.00 Mbit/s
95th percentile per-packet one-way delay: 71.625 ms
Loss rate: 0.23%
```

Run 6: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 346.81 Mbit/s)   Flow 1 egress (mean 346.00 Mbit/s)

Flow 1 (95th percentile 71.62 ms)

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-07 02:14:02
End at: 2018-06-07 02:14:32
Local clock offset: 0.007 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2018-06-07 04:56:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 340.10 Mbit/s
95th percentile per-packet one-way delay: 121.495 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 340.10 Mbit/s
95th percentile per-packet one-way delay: 121.495 ms
Loss rate: 0.68%
```
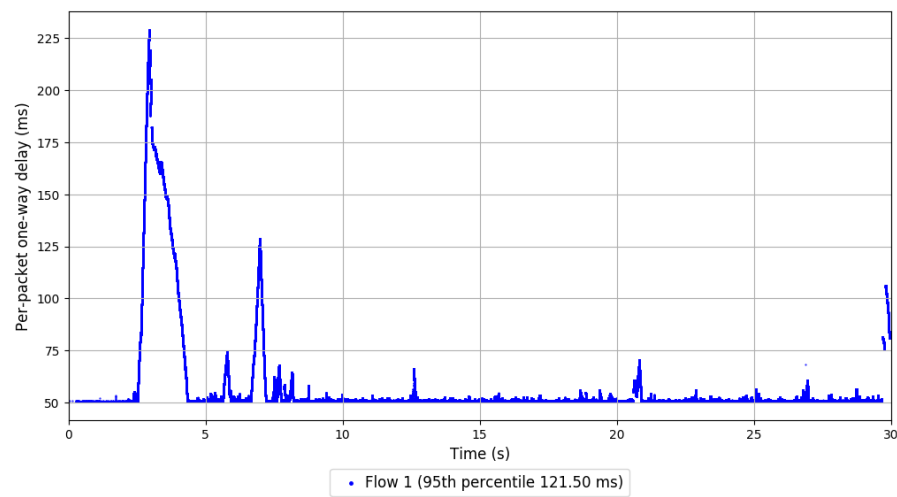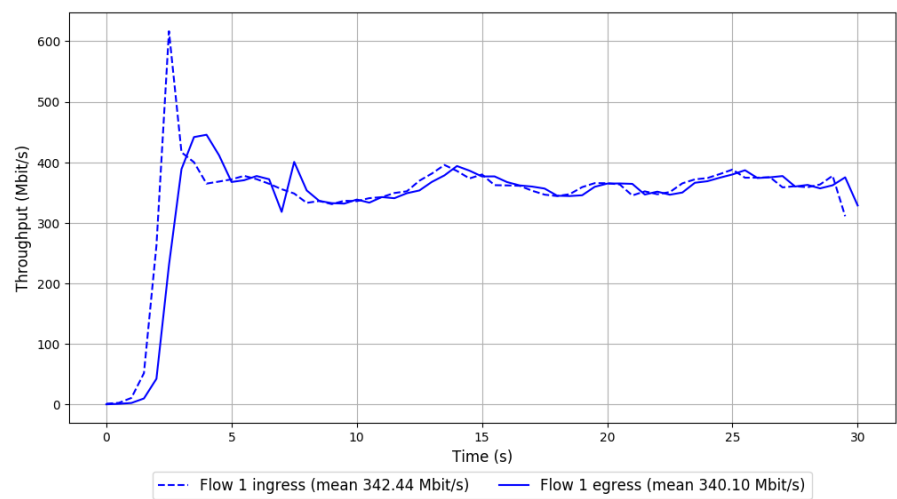
Run 7: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 342.44 Mbit/s)   Flow 1 egress (mean 340.10 Mbit/s)

Flow 1 (95th percentile 121.50 ms)

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-07 02:34:17
End at: 2018-06-07 02:34:47
Local clock offset: 0.058 ms
Remote clock offset: 0.002 ms


# Below is generated by plot.py at 2018-06-07 04:56:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 333.01 Mbit/s
95th percentile per-packet one-way delay: 125.032 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 333.01 Mbit/s
95th percentile per-packet one-way delay: 125.032 ms
Loss rate: 0.06%
```
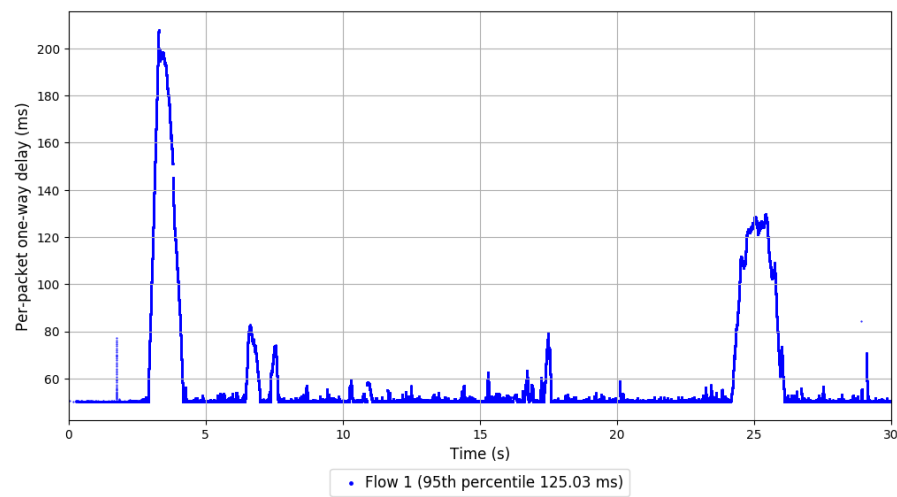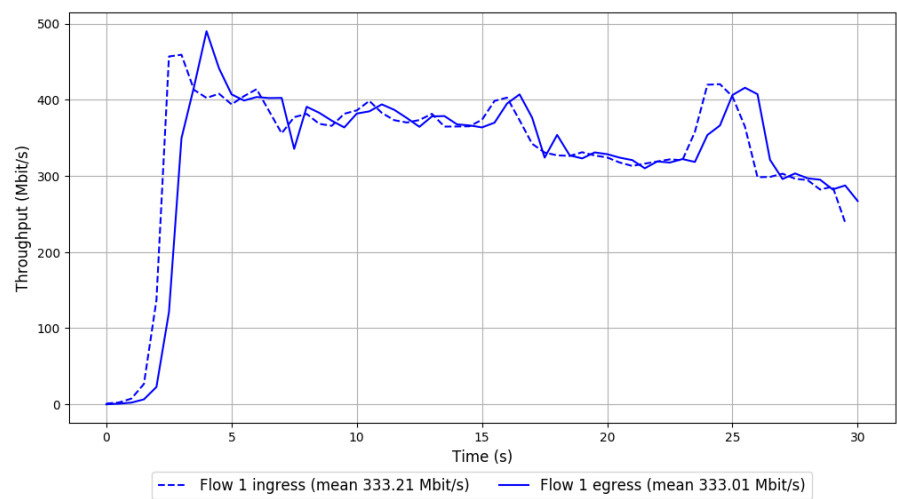
Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 333.21 Mbit/s) --- Flow 1 egress (mean 333.01 Mbit/s)

• Flow 1 (95th percentile 125.03 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-07 02:54:34
End at: 2018-06-07 02:55:04
Local clock offset: -0.005 ms
Remote clock offset: 0.007 ms


# Below is generated by plot.py at 2018-06-07 04:56:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 287.19 Mbit/s
95th percentile per-packet one-way delay: 53.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 287.19 Mbit/s
95th percentile per-packet one-way delay: 53.629 ms
Loss rate: 0.00%
```
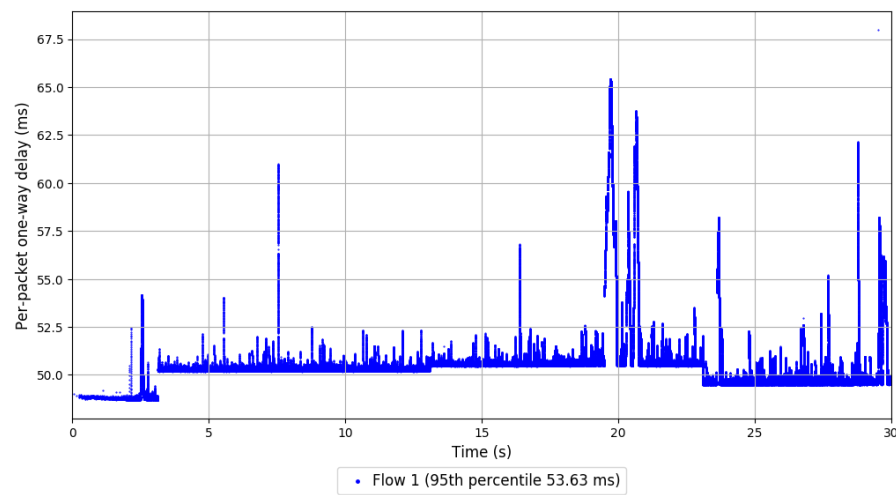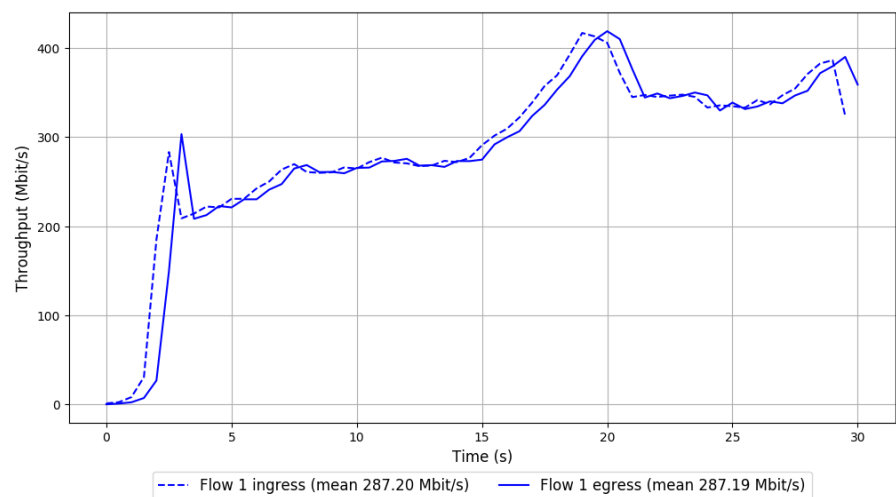
Run 9: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 287.20 Mbit/s)   Flow 1 egress (mean 287.19 Mbit/s)

Flow 1 (95th percentile 53.63 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-07 03:14:52
End at: 2018-06-07 03:15:22
Local clock offset: 0.38 ms
Remote clock offset: -0.022 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 267.59 Mbit/s
95th percentile per-packet one-way delay: 52.982 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 267.59 Mbit/s
95th percentile per-packet one-way delay: 52.982 ms
Loss rate: 0.00%
```
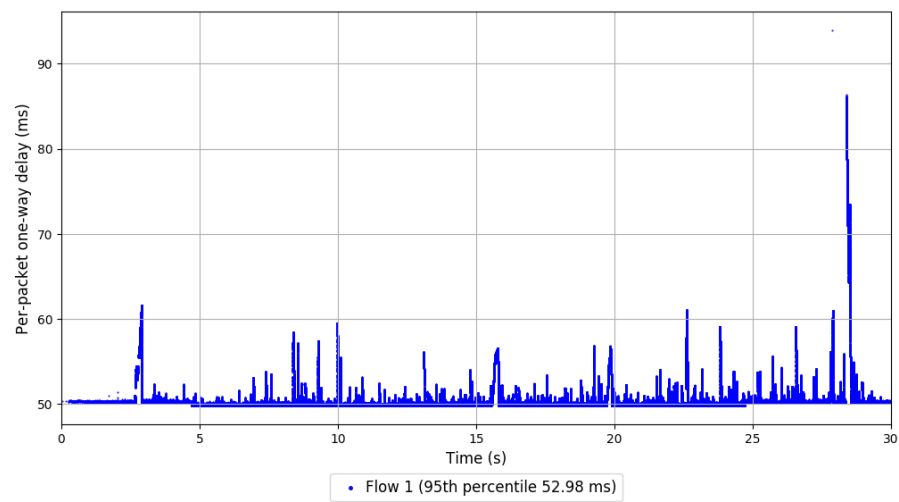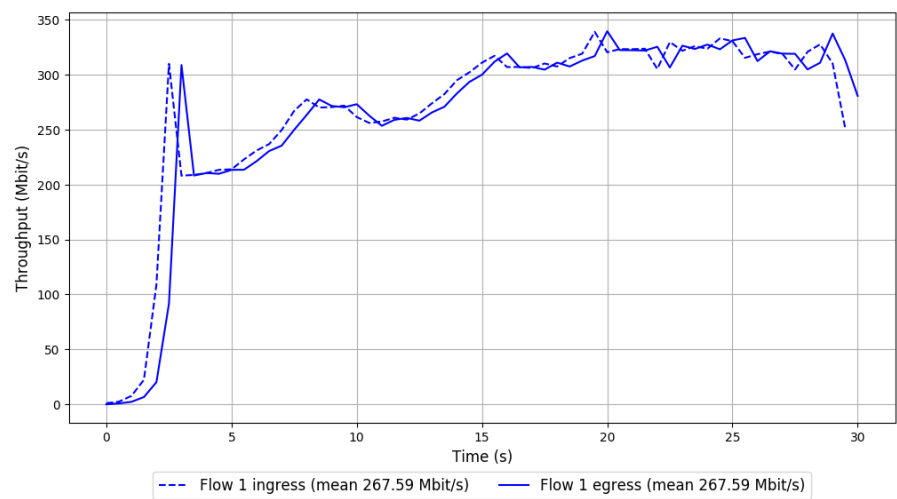
Run 10: Report of PCC-Vivace — Data Link

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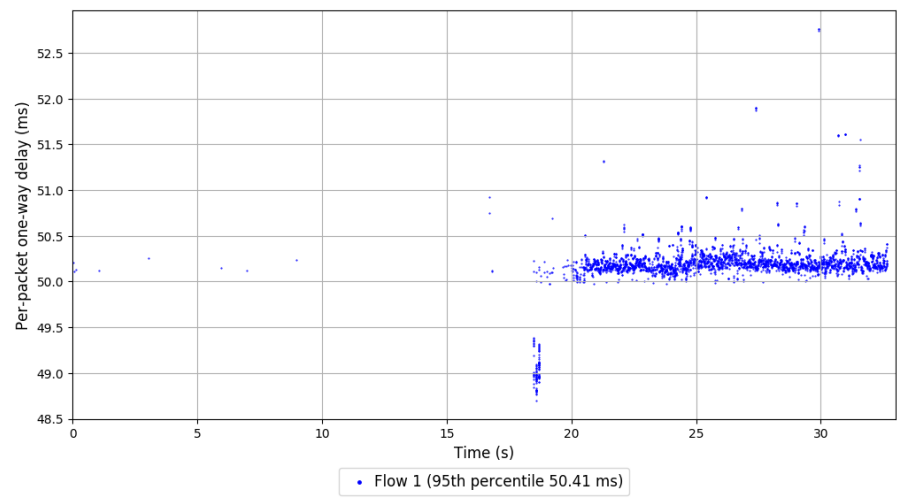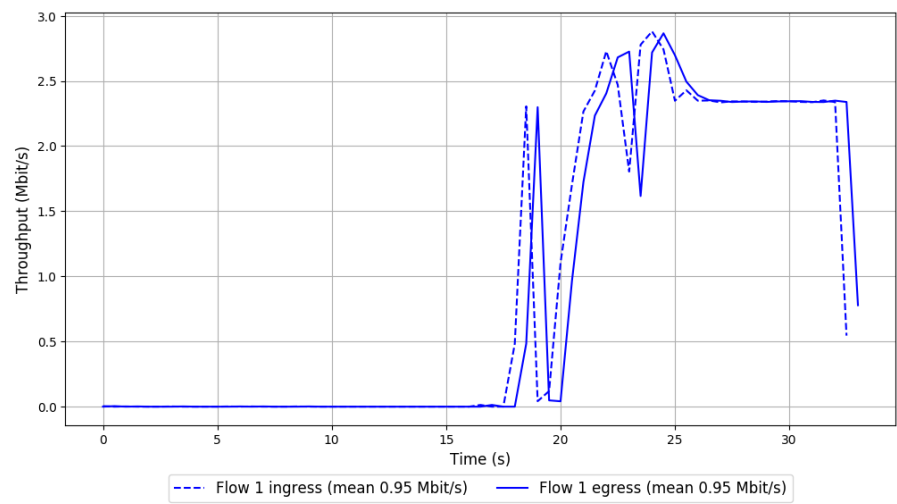

Flow 1 (95th percentile 52.98 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2018-06-07 00:00:16
End at: 2018-06-07 00:00:46
Local clock offset: -0.014 ms
Remote clock offset: 0.001 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 50.405 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 50.405 ms
Loss rate: 0.00%
```
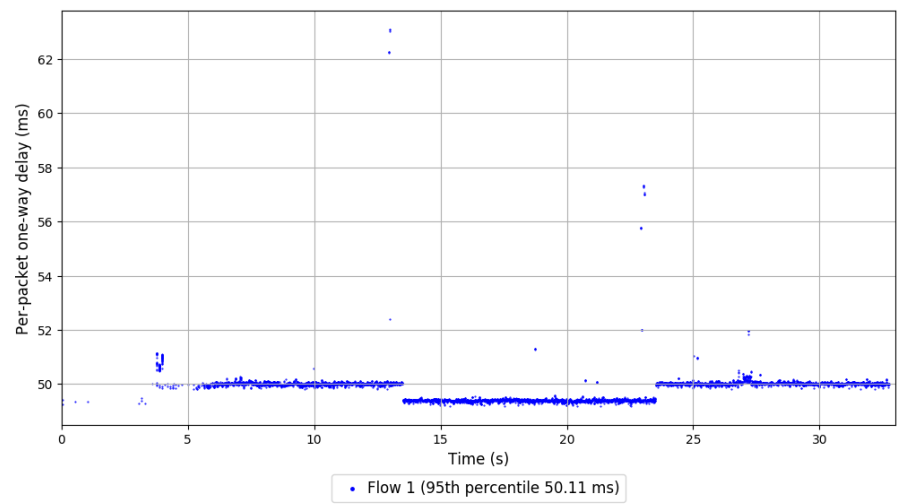
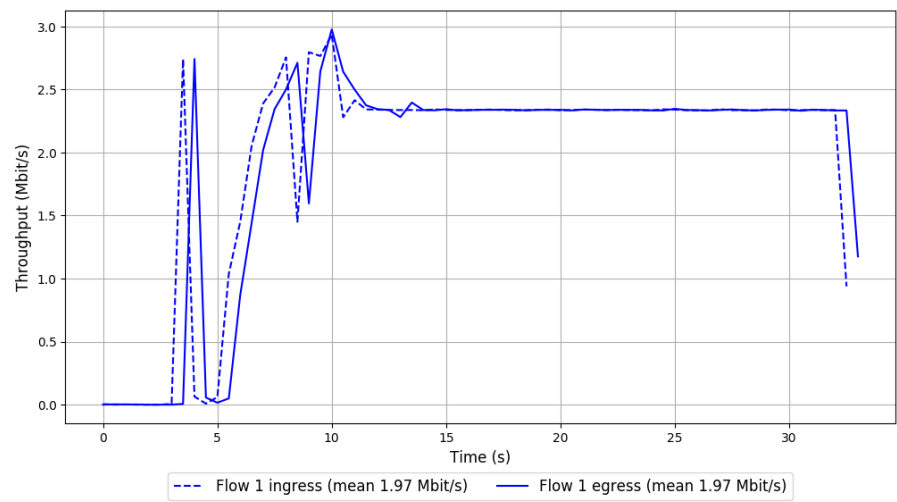Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-06-07 00:20:37
End at: 2018-06-07 00:21:07
Local clock offset: 0.31 ms
Remote clock offset: -0.035 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 50.112 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 50.112 ms
Loss rate: 0.00%
```
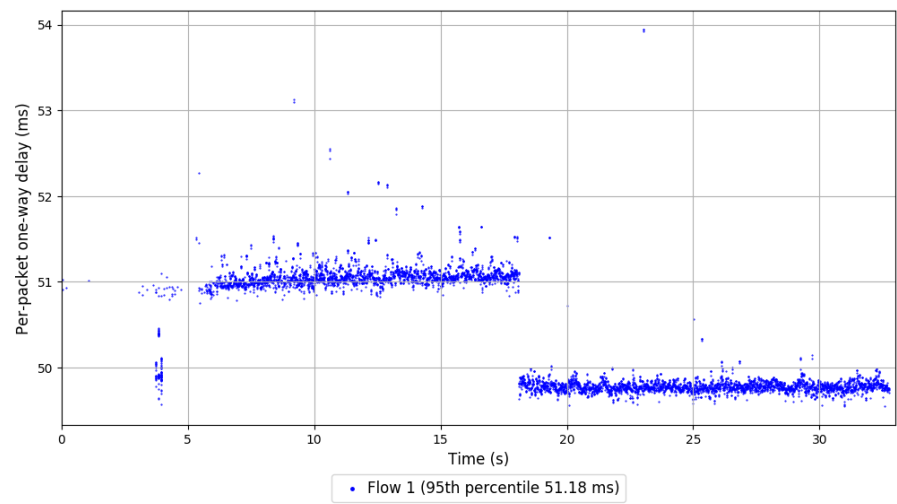
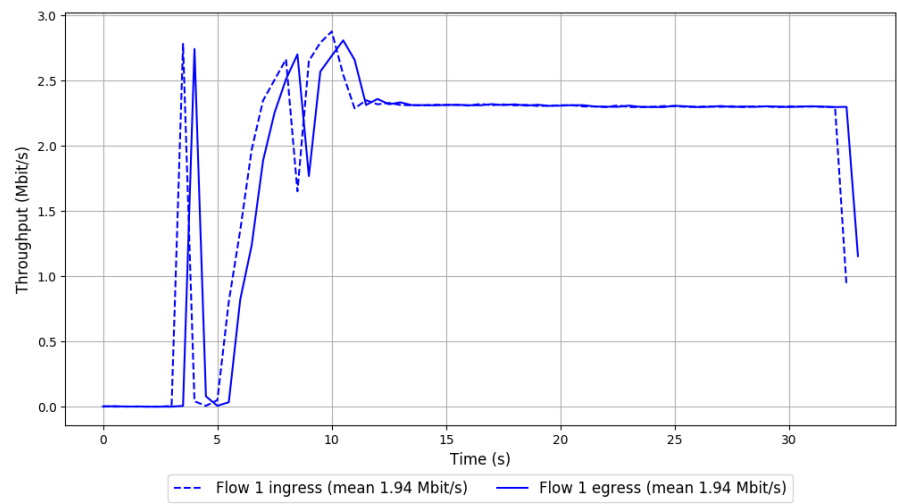## Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-06-07 00:40:42
End at: 2018-06-07 00:41:12
Local clock offset: -0.058 ms
Remote clock offset: -0.079 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 51.177 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 51.177 ms
Loss rate: 0.00%
```
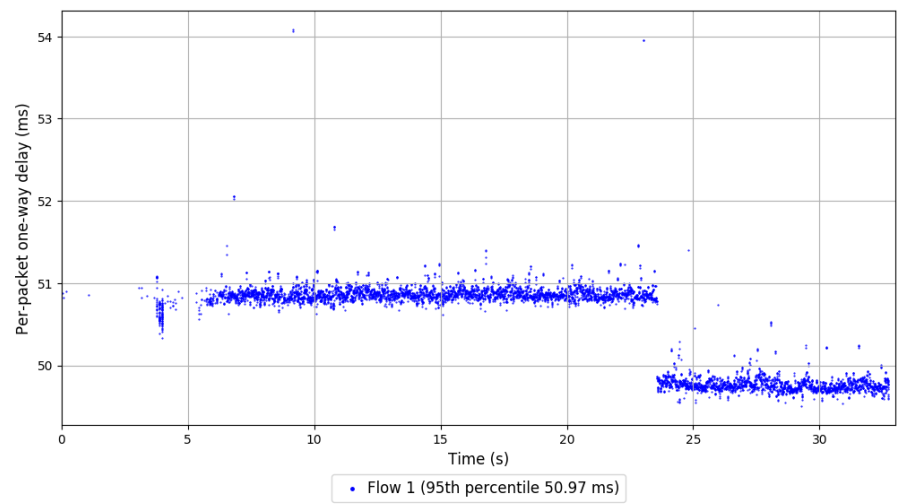
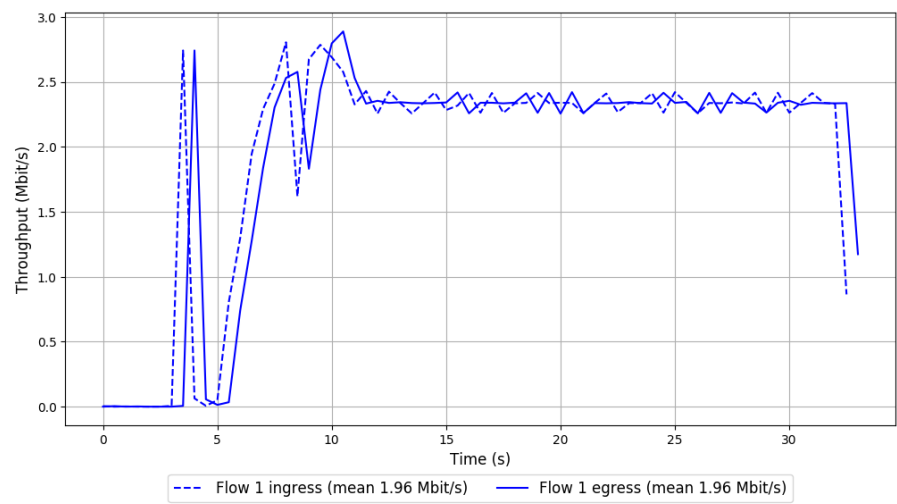Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-06-07 01:01:07
End at: 2018-06-07 01:01:37
Local clock offset: -0.025 ms
Remote clock offset: -0.038 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.974 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.974 ms
Loss rate: 0.00%
```

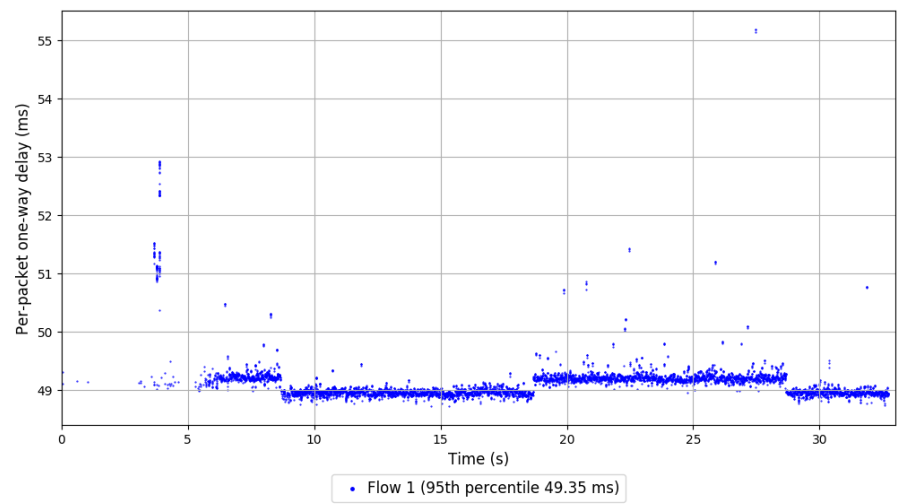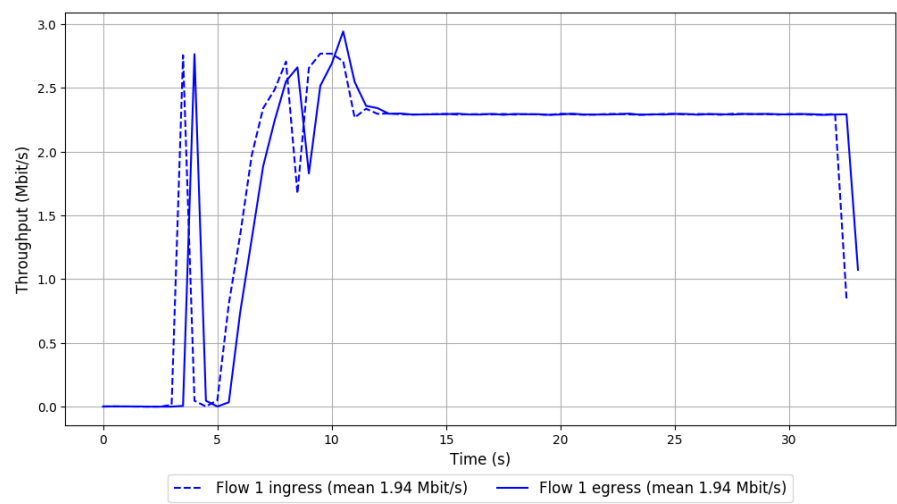Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-06-07 01:21:42
End at: 2018-06-07 01:22:12
Local clock offset: 0.031 ms
Remote clock offset: -0.022 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 49.347 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 49.347 ms
Loss rate: 0.00%
```

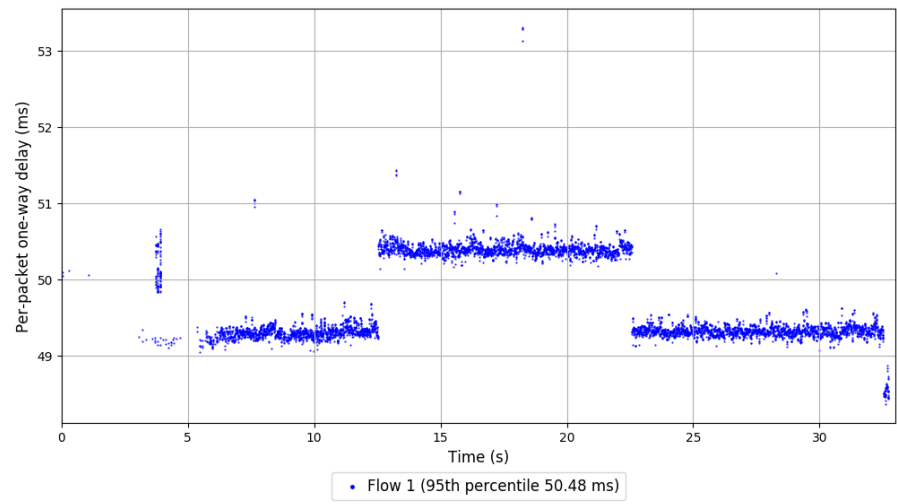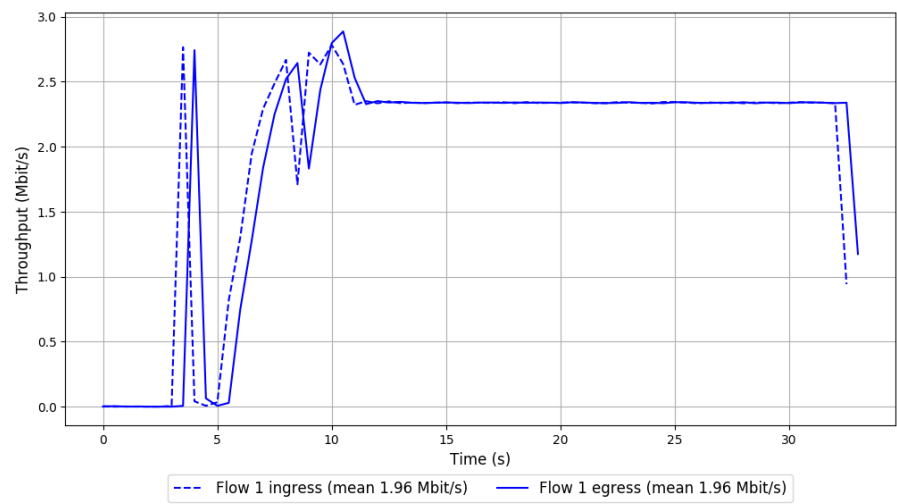Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-06-07 01:42:07
End at: 2018-06-07 01:42:37
Local clock offset: 0.294 ms
Remote clock offset: -0.112 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.477 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 50.477 ms
Loss rate: 0.00%
```

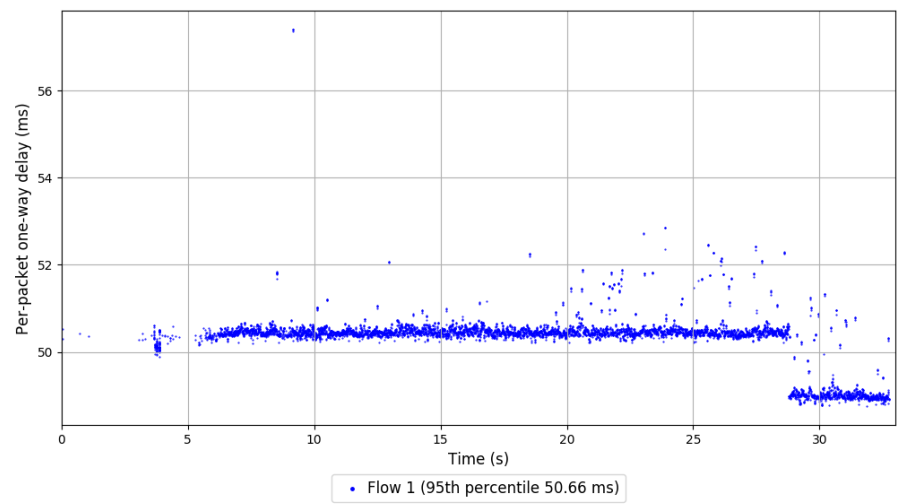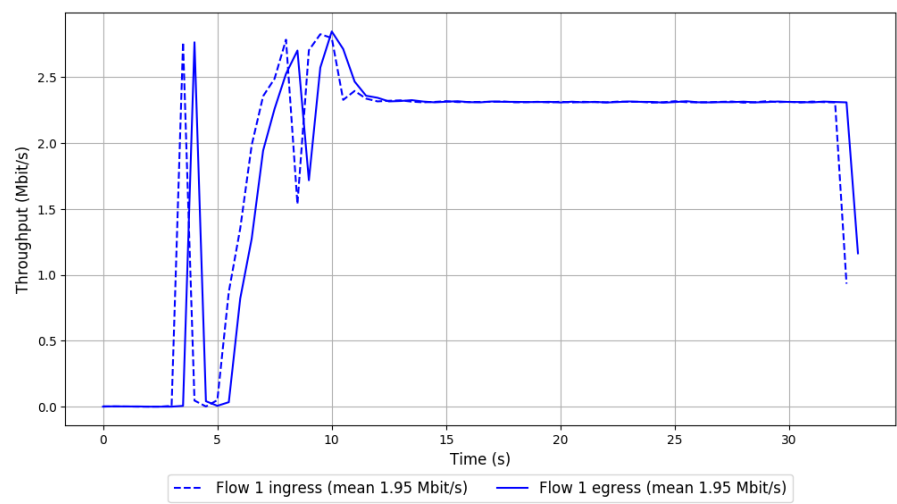Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-06-07 02:02:31
End at: 2018-06-07 02:03:01
Local clock offset: -0.038 ms
Remote clock offset: -0.068 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 50.663 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 50.663 ms
Loss rate: 0.00%
```

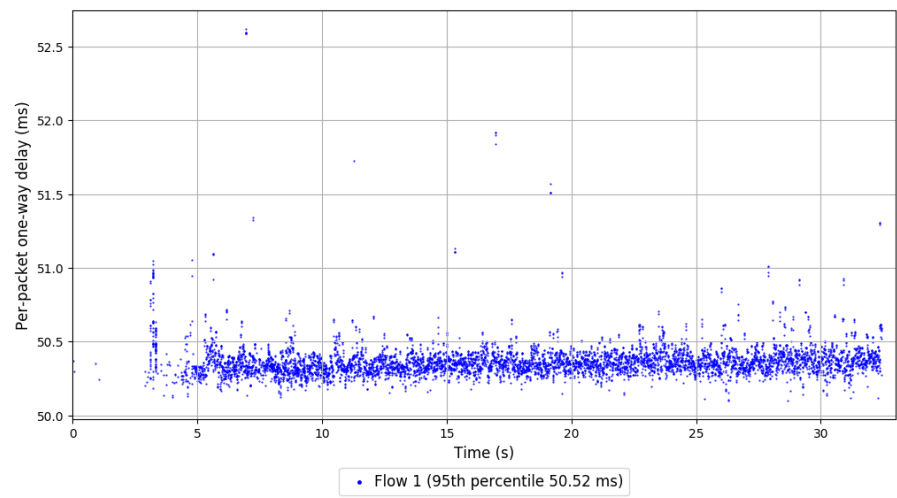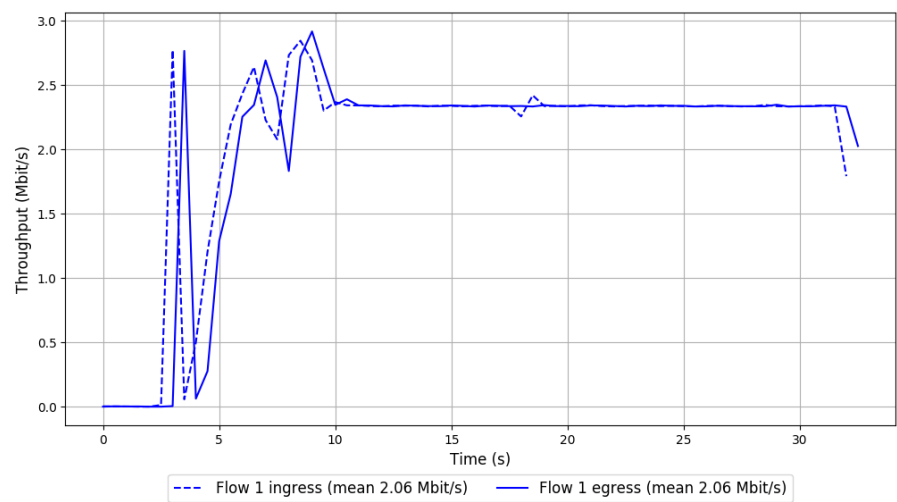Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-06-07 02:22:57
End at: 2018-06-07 02:23:27
Local clock offset: 0.397 ms
Remote clock offset: -0.027 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 50.516 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 50.516 ms
Loss rate: 0.00%
```

Run 8: Report of WebRTC media — Data Link

Flow 1 ingress (mean 2.06 Mbit/s) — — — — Flow 1 egress (mean 2.06 Mbit/s)

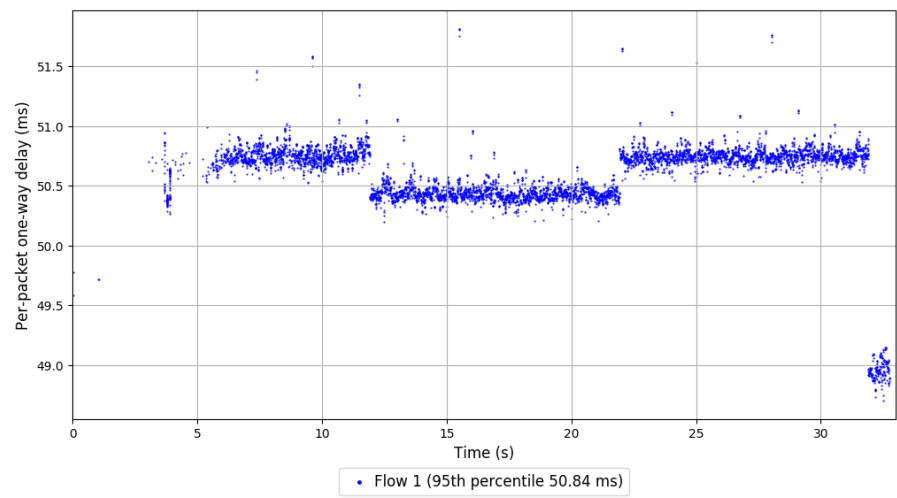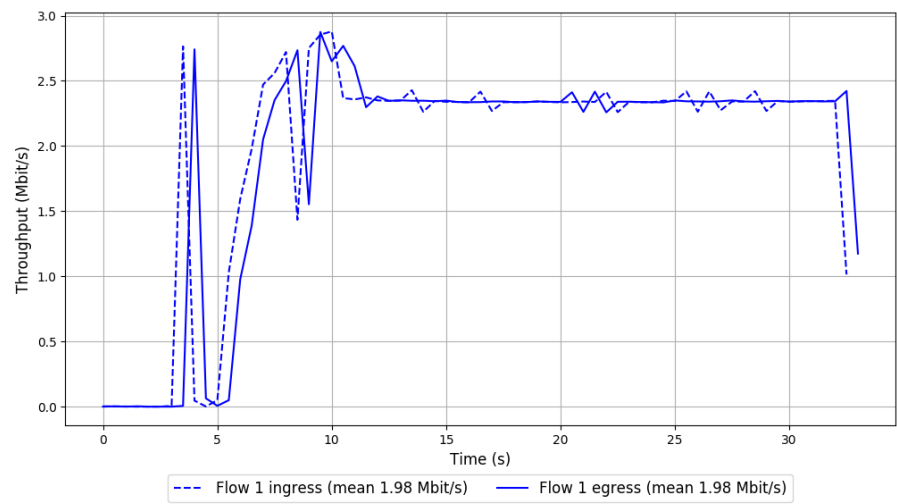

• Flow 1 (95th percentile 50.52 ms)

```
Run 9: Statistics of WebRTC media

Start at: 2018-06-07 02:43:08
End at: 2018-06-07 02:43:38
Local clock offset: 0.005 ms
Remote clock offset: -0.018 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 50.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 50.844 ms
Loss rate: 0.00%
```

Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-06-07 03:03:33
End at: 2018-06-07 03:04:03
Local clock offset: -0.018 ms
Remote clock offset: 0.004 ms


# Below is generated by plot.py at 2018-06-07 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 50.827 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 50.827 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link