Pantheon Report

Generated at 2018-05-24 07:07:35 (UTC).

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

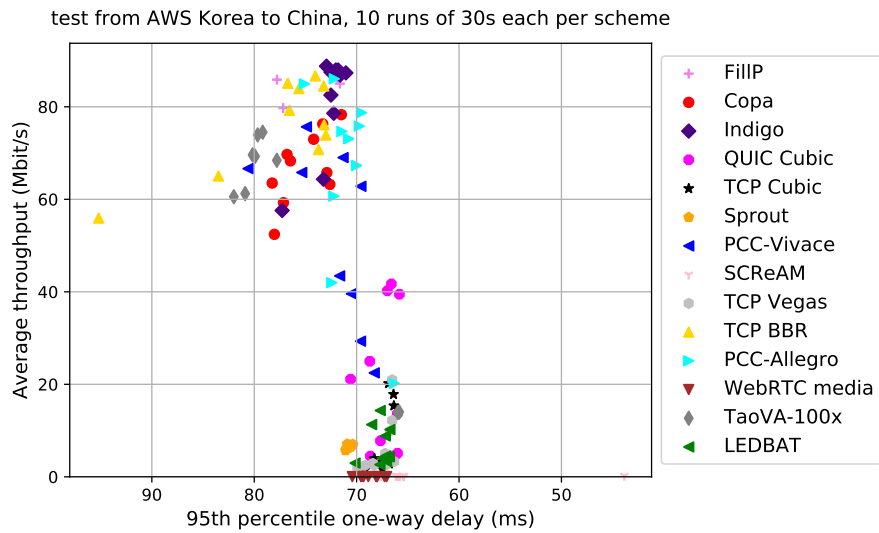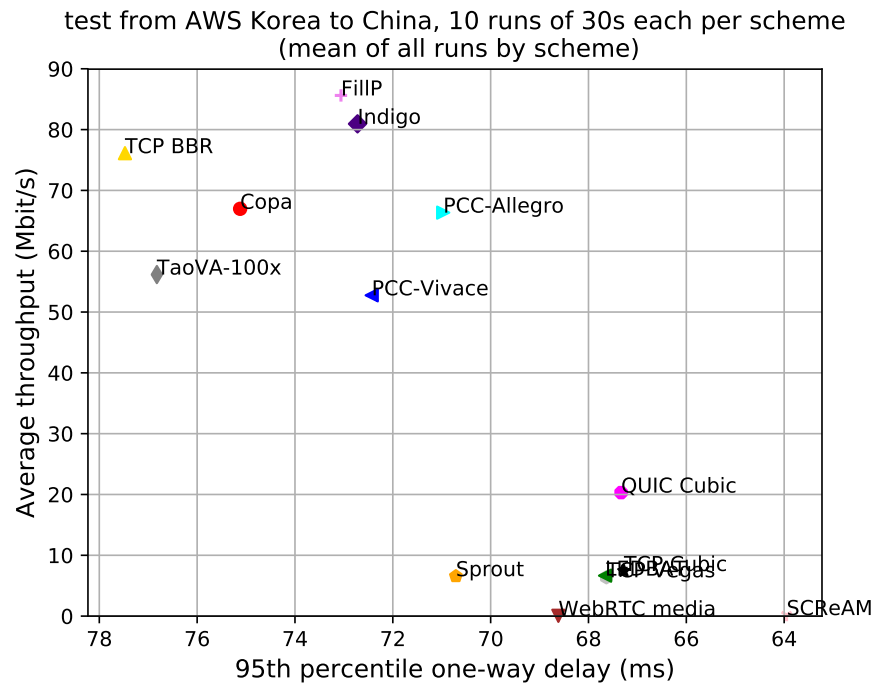Repeated the test of 16 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

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

NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 0088822873ea99180f63545a341ef069f40efe59
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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

test from AWS Korea to China, 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	76.12	77.48	5.08
Copa	10	66.97	75.12	2.32
TCP Cubic	10	7.42	67.27	1.08
FillP	10	85.62	73.06	11.14
Indigo	10	80.95	72.72	4.47
LEDBAT	10	6.65	67.66	0.70
PCC-Allegro	10	66.34	70.97	1.56
PCC-Expr	0	N/A	N/A	N/A
QUIC Cubic	10	20.31	67.33	0.93
SCReAM	10	0.17	63.95	0.21
Sprout	10	6.57	70.71	3.01
TaoVA-100x	9	56.16	76.82	2.86
TCP Vegas	10	6.38	67.63	1.32
Verus	0	N/A	N/A	N/A
PCC-Vivace	9	52.75	72.43	1.21
WebRTC media	10	0.05	68.62	1.22

```
Run 1: Statistics of TCP BBR

Start at: 2018-05-24 03:29:37
End at: 2018-05-24 03:30:07
Local clock offset: 3.598 ms
Remote clock offset: 0.347 ms


# Below is generated by plot.py at 2018-05-24 06:56:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.68 Mbit/s
95th percentile per-packet one-way delay: 74.038 ms
Loss rate: 4.44%
-- Flow 1:
Average throughput: 86.68 Mbit/s
95th percentile per-packet one-way delay: 74.038 ms
Loss rate: 4.44%
```
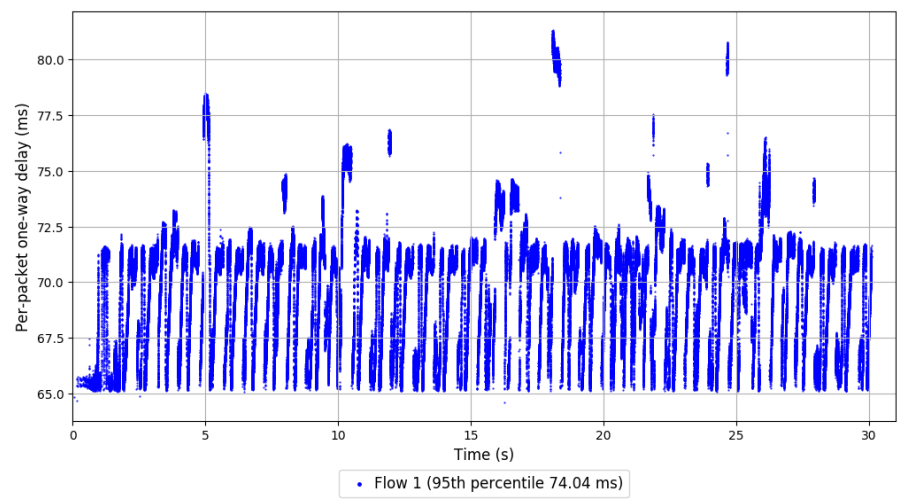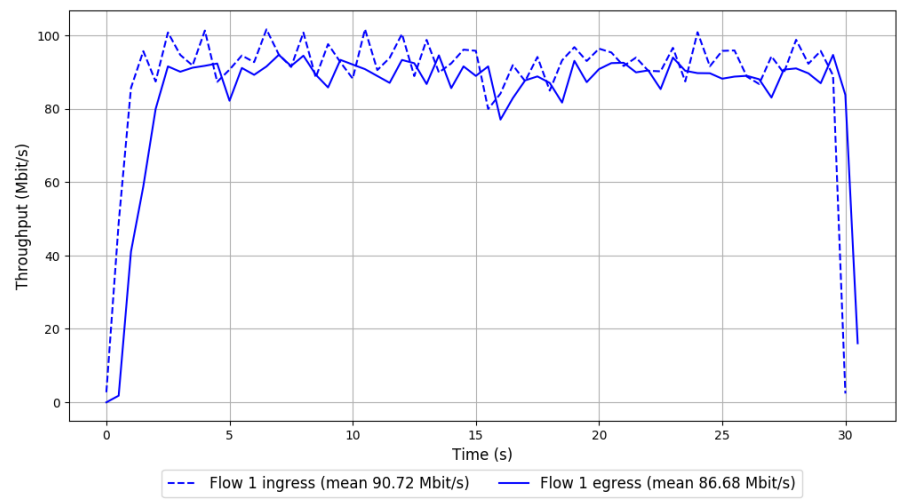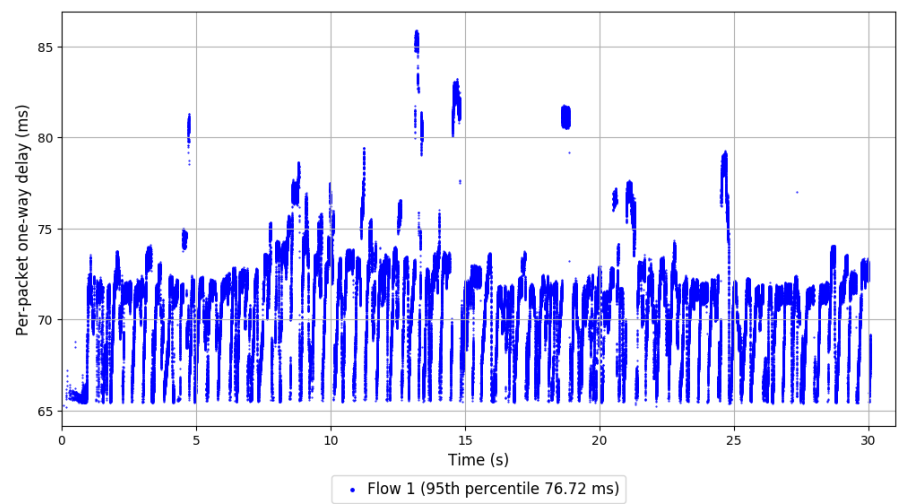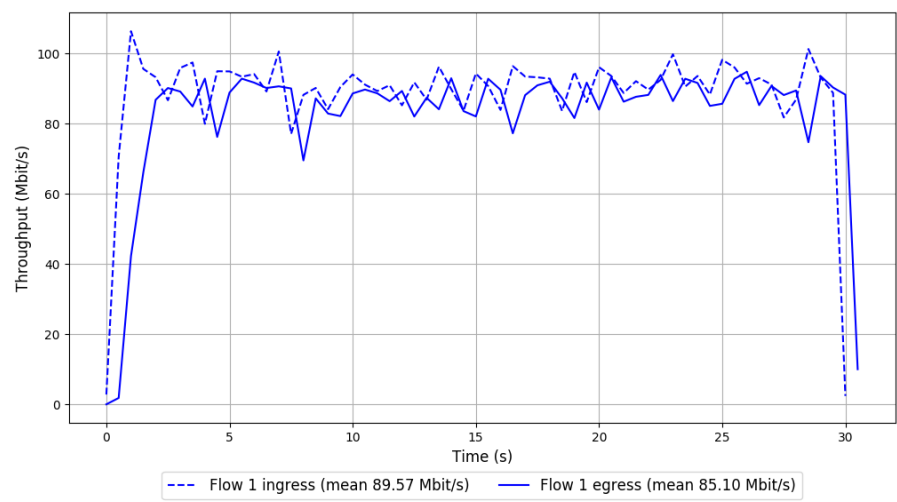
Run 1: Report of TCP BBR — Data Link

Flow 1 ingress (mean 90.72 Mbit/s)   Flow 1 egress (mean 86.68 Mbit/s)

Flow 1 (95th percentile 74.04 ms)

```
Run 2: Statistics of TCP BBR

Start at: 2018-05-24 03:50:08
End at: 2018-05-24 03:50:38
Local clock offset: 2.462 ms
Remote clock offset: -0.059 ms


# Below is generated by plot.py at 2018-05-24 06:56:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.10 Mbit/s
95th percentile per-packet one-way delay: 76.724 ms
Loss rate: 4.98%
-- Flow 1:
Average throughput: 85.10 Mbit/s
95th percentile per-packet one-way delay: 76.724 ms
Loss rate: 4.98%
```
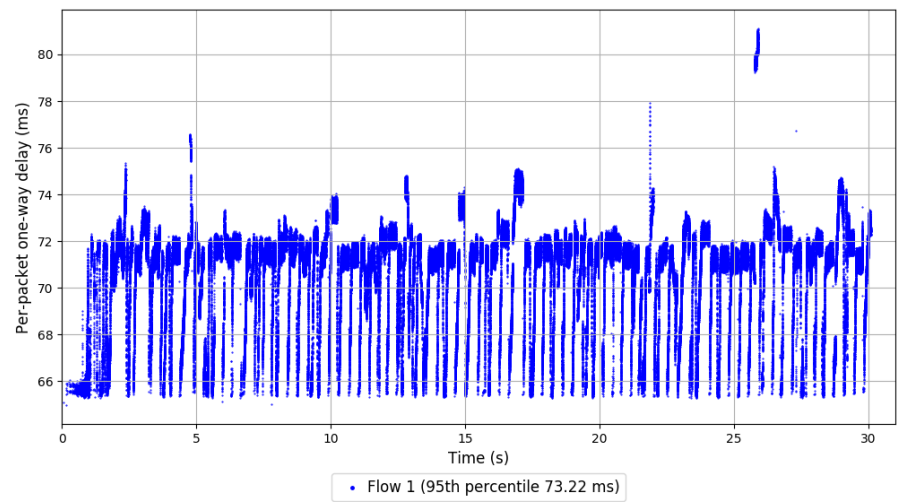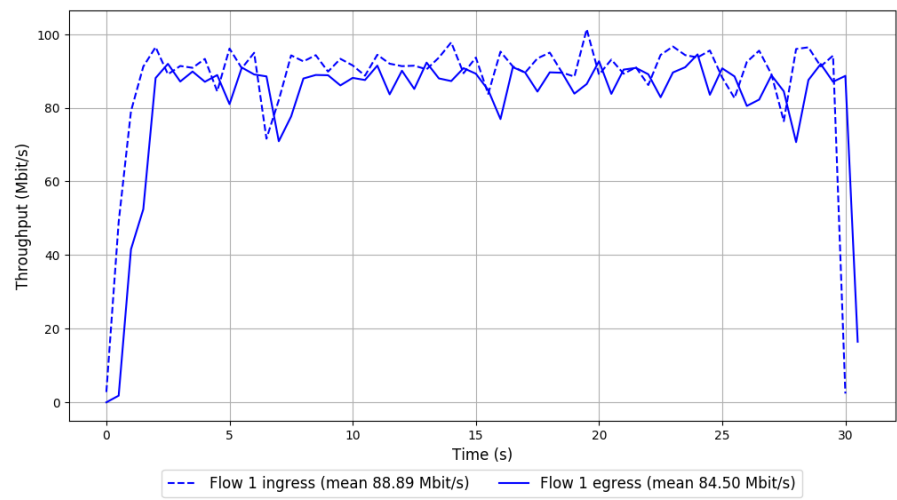
Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 89.57 Mbit/s) --- Flow 1 egress (mean 85.10 Mbit/s)

Flow 1 (95th percentile 76.72 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2018-05-24 04:10:44
End at: 2018-05-24 04:11:14
Local clock offset: 1.178 ms
Remote clock offset: 0.232 ms


# Below is generated by plot.py at 2018-05-24 06:56:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.50 Mbit/s
95th percentile per-packet one-way delay: 73.217 ms
Loss rate: 4.92%
-- Flow 1:
Average throughput: 84.50 Mbit/s
95th percentile per-packet one-way delay: 73.217 ms
Loss rate: 4.92%
```
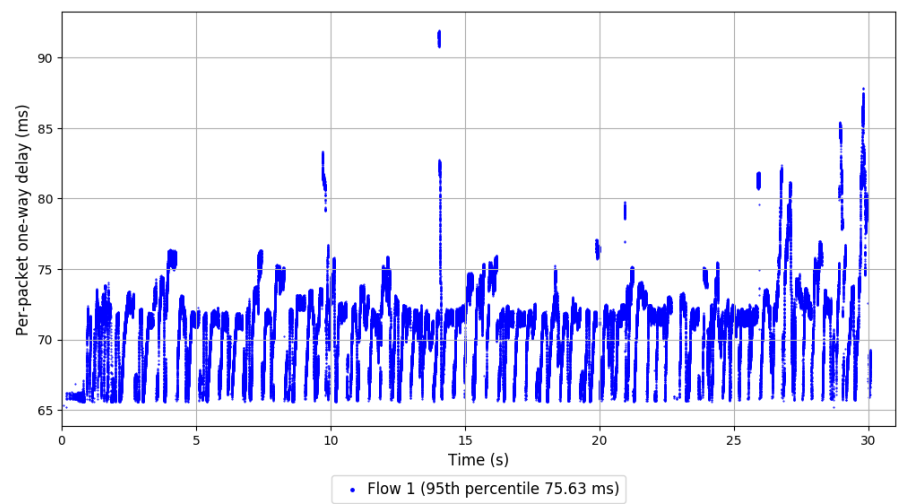
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-05-24 04:31:49
End at: 2018-05-24 04:32:19
Local clock offset: 0.615 ms
Remote clock offset: 0.274 ms


# Below is generated by plot.py at 2018-05-24 06:56:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.95 Mbit/s
95th percentile per-packet one-way delay: 75.634 ms
Loss rate: 4.79%
-- Flow 1:
Average throughput: 83.95 Mbit/s
95th percentile per-packet one-way delay: 75.634 ms
Loss rate: 4.79%
```
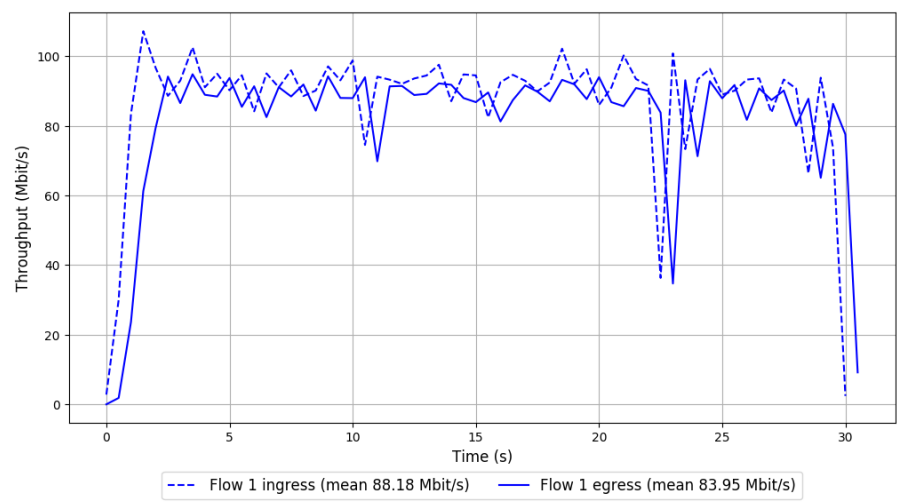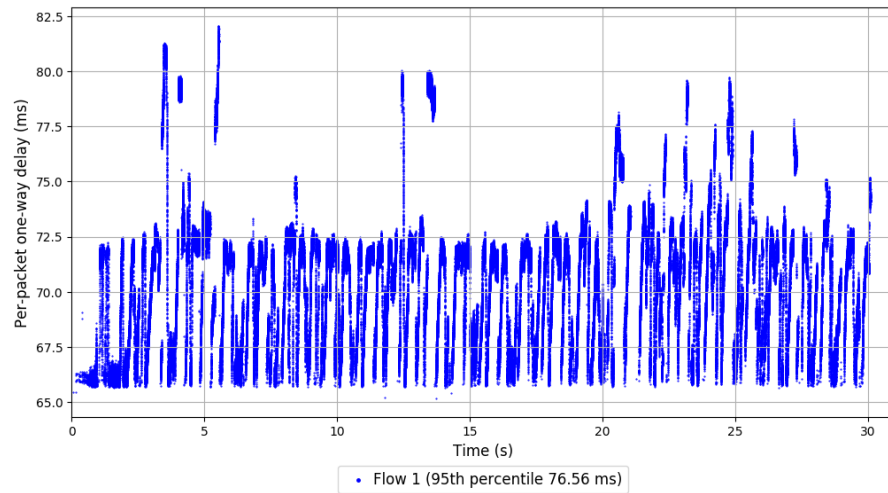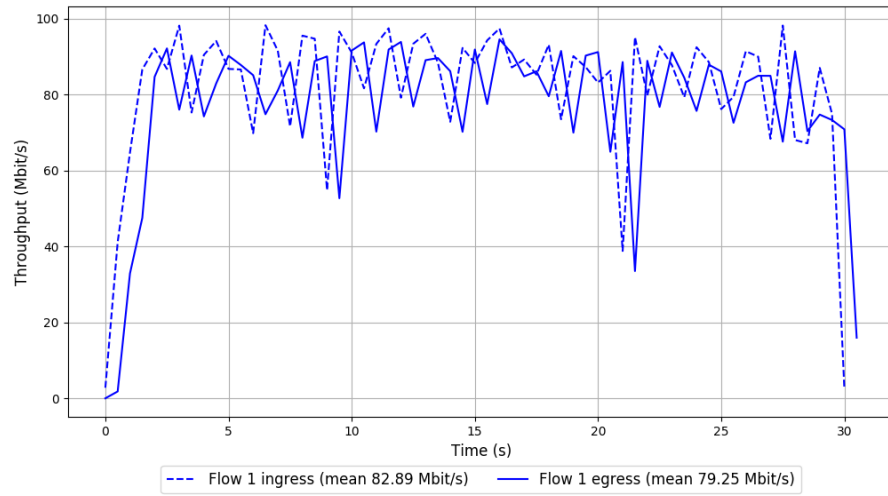
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 88.18 Mbit/s)   Flow 1 egress (mean 83.95 Mbit/s)

Flow 1 (95th percentile 75.63 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2018-05-24 04:52:56
End at: 2018-05-24 04:53:26
Local clock offset: 0.405 ms
Remote clock offset: -0.193 ms


# Below is generated by plot.py at 2018-05-24 06:56:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.25 Mbit/s
95th percentile per-packet one-way delay: 76.561 ms
Loss rate: 4.36%
-- Flow 1:
Average throughput: 79.25 Mbit/s
95th percentile per-packet one-way delay: 76.561 ms
Loss rate: 4.36%
```
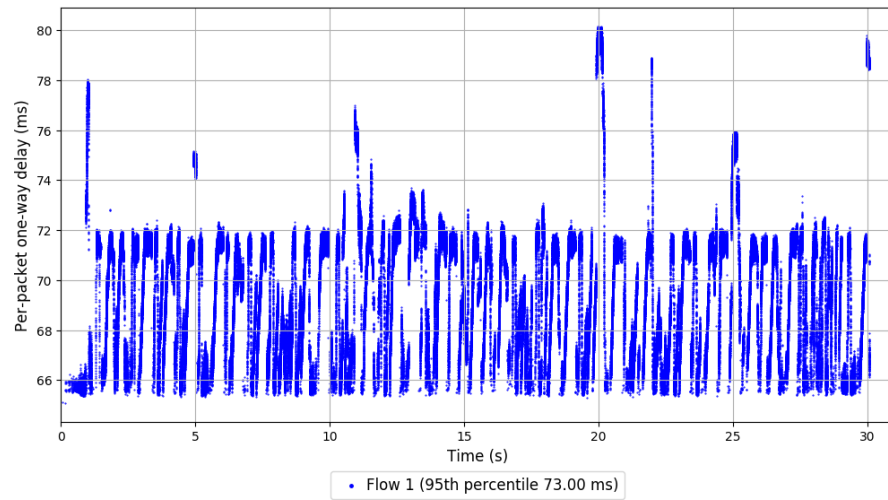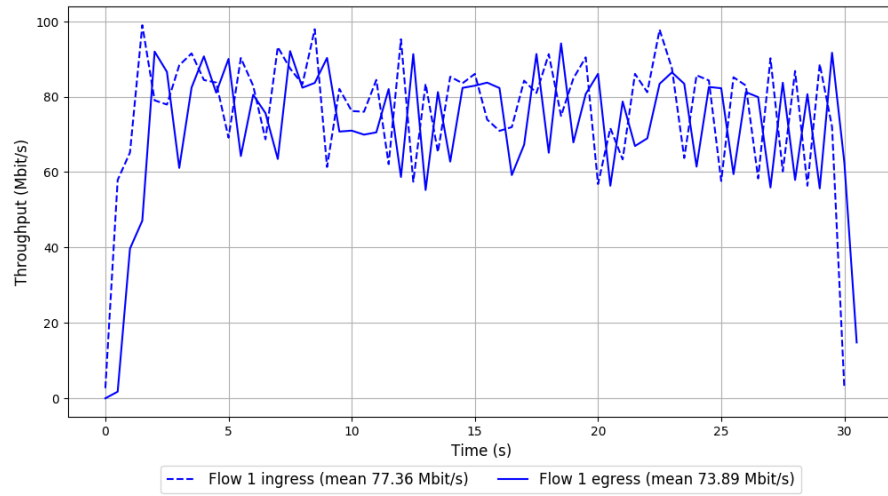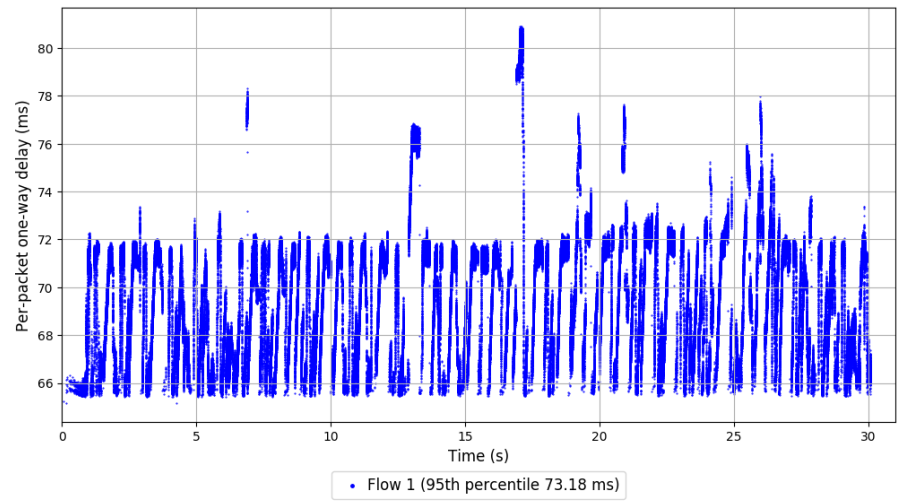
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 82.89 Mbit/s)   Flow 1 egress (mean 79.25 Mbit/s)

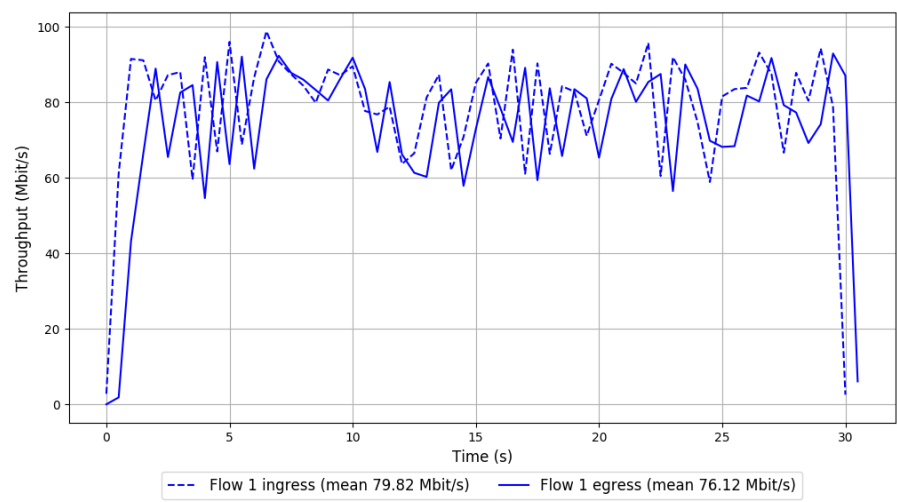Flow 1 (95th percentile 76.56 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-05-24 05:13:28
End at: 2018-05-24 05:13:58
Local clock offset: 3.087 ms
Remote clock offset: -0.649 ms


# Below is generated by plot.py at 2018-05-24 06:56:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.89 Mbit/s
95th percentile per-packet one-way delay: 72.999 ms
Loss rate: 4.49%
-- Flow 1:
Average throughput: 73.89 Mbit/s
95th percentile per-packet one-way delay: 72.999 ms
Loss rate: 4.49%
```
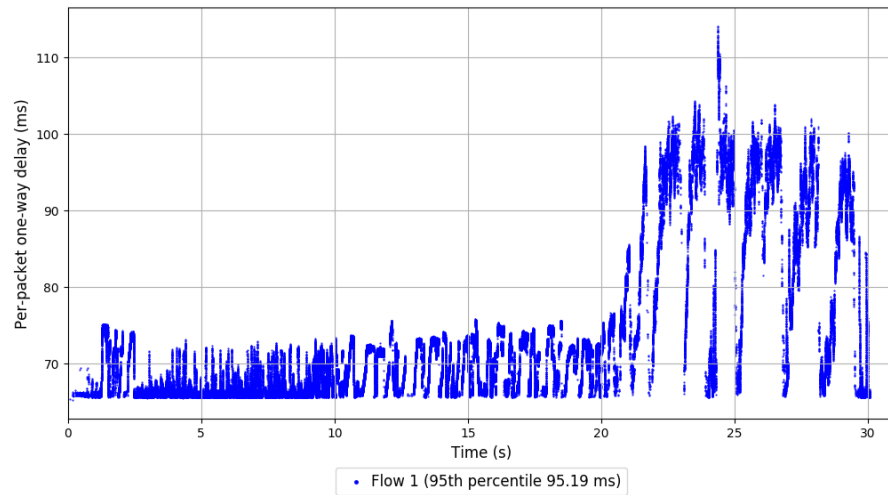
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 77.36 Mbit/s)   Flow 1 egress (mean 73.89 Mbit/s)

Flow 1 (95th percentile 73.00 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-05-24 05:33:56
End at: 2018-05-24 05:34:26
Local clock offset: 3.587 ms
Remote clock offset: -0.735 ms


# Below is generated by plot.py at 2018-05-24 06:56:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.12 Mbit/s
95th percentile per-packet one-way delay: 73.179 ms
Loss rate: 4.62%
-- Flow 1:
Average throughput: 76.12 Mbit/s
95th percentile per-packet one-way delay: 73.179 ms
Loss rate: 4.62%
```
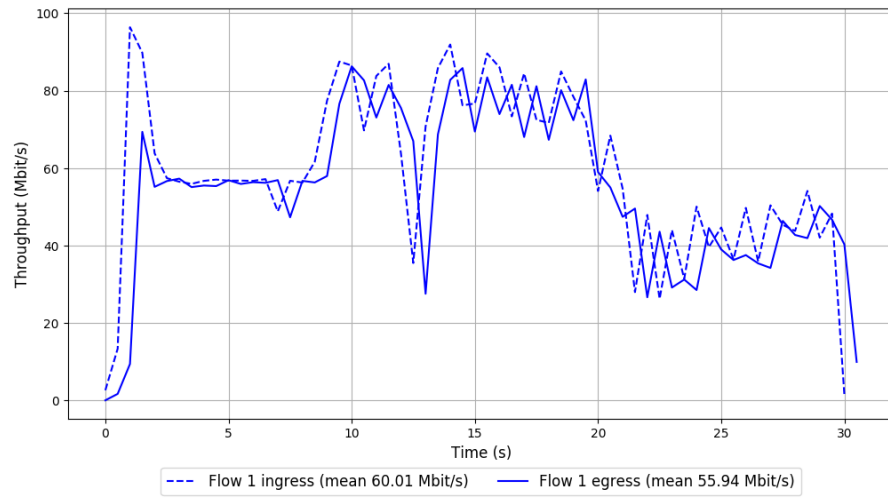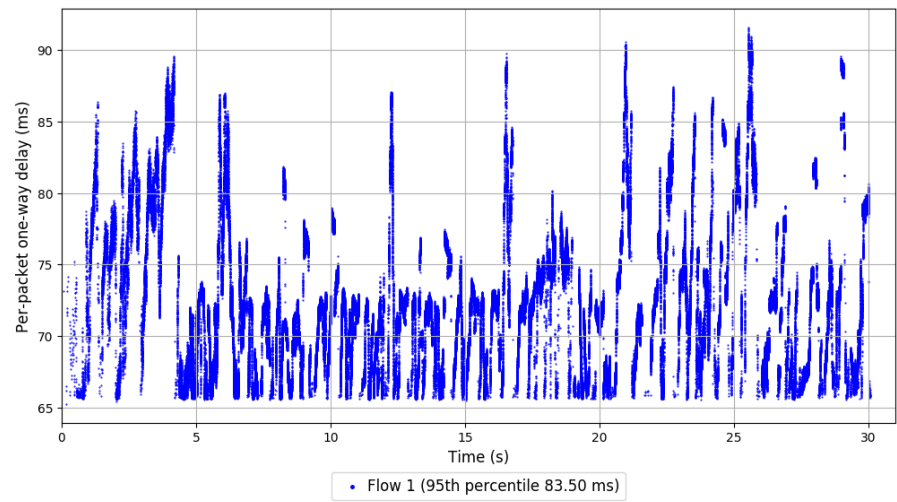
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 79.82 Mbit/s) —— Flow 1 egress (mean 76.12 Mbit/s)

• Flow 1 (95th percentile 73.18 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2018-05-24 05:54:25
End at: 2018-05-24 05:54:55
Local clock offset: 4.181 ms
Remote clock offset: 0.327 ms


# Below is generated by plot.py at 2018-05-24 06:56:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.94 Mbit/s
95th percentile per-packet one-way delay: 95.188 ms
Loss rate: 6.77%
-- Flow 1:
Average throughput: 55.94 Mbit/s
95th percentile per-packet one-way delay: 95.188 ms
Loss rate: 6.77%
```
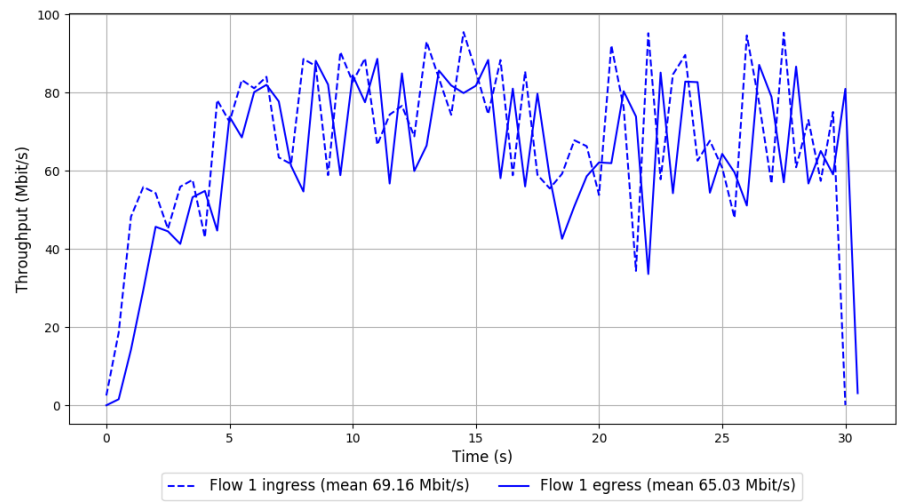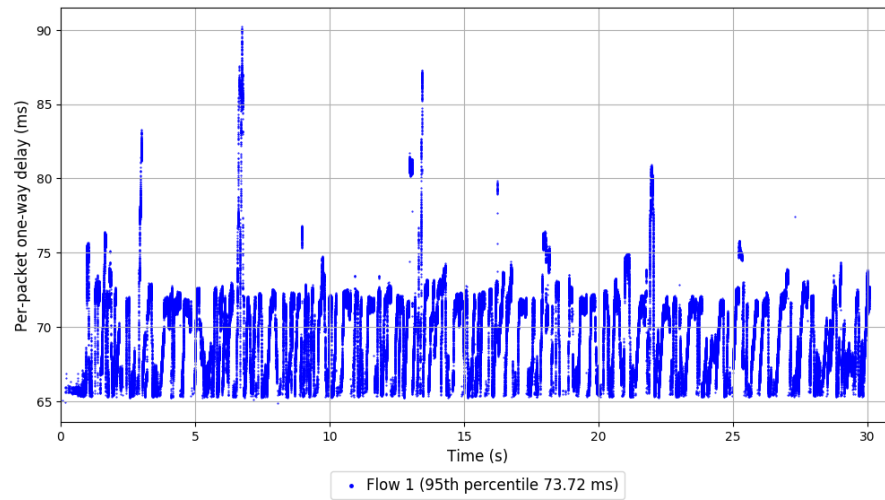
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 60.01 Mbit/s)   Flow 1 egress (mean 55.94 Mbit/s)

Flow 1 (95th percentile 95.19 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2018-05-24 06:14:55
End at: 2018-05-24 06:15:25
Local clock offset: 2.486 ms
Remote clock offset: 0.864 ms


# Below is generated by plot.py at 2018-05-24 06:57:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.03 Mbit/s
95th percentile per-packet one-way delay: 83.497 ms
Loss rate: 6.00%
-- Flow 1:
Average throughput: 65.03 Mbit/s
95th percentile per-packet one-way delay: 83.497 ms
Loss rate: 6.00%
```
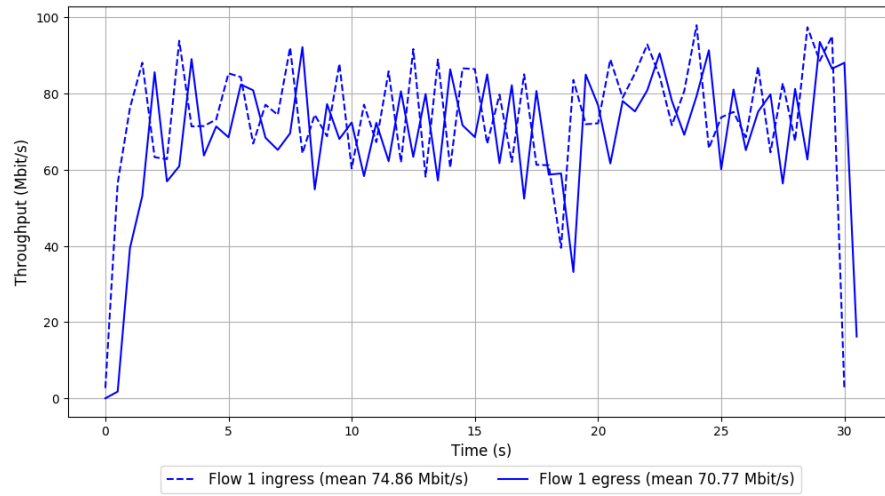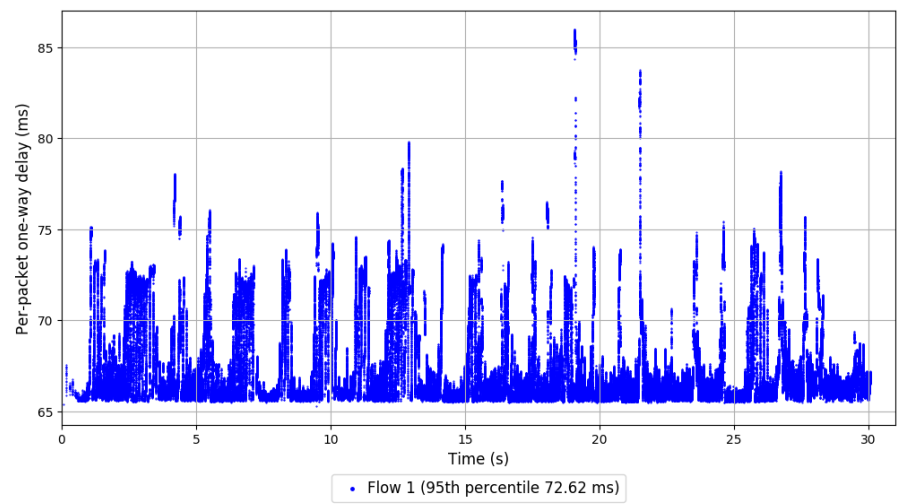
Run 9: Report of TCP BBR — Data Link

```
Run 10: Statistics of TCP BBR

Start at: 2018-05-24 06:35:24
End at: 2018-05-24 06:35:54
Local clock offset: 3.583 ms
Remote clock offset: 1.379 ms


# Below is generated by plot.py at 2018-05-24 06:57:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.77 Mbit/s
95th percentile per-packet one-way delay: 73.716 ms
Loss rate: 5.45%
-- Flow 1:
Average throughput: 70.77 Mbit/s
95th percentile per-packet one-way delay: 73.716 ms
Loss rate: 5.45%
```
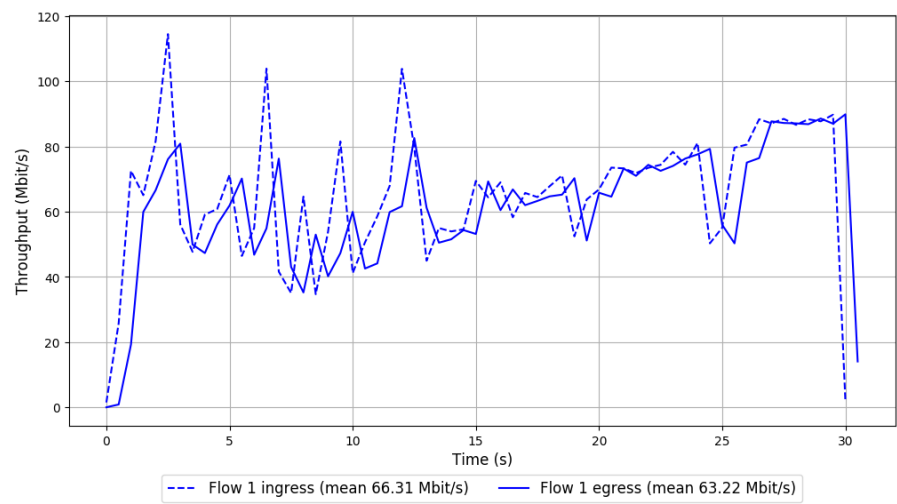
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 74.86 Mbit/s)   Flow 1 egress (mean 70.77 Mbit/s)
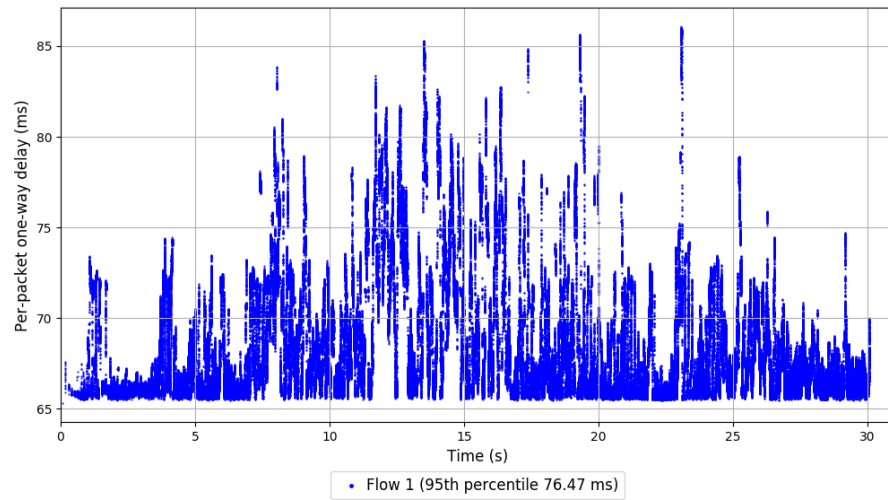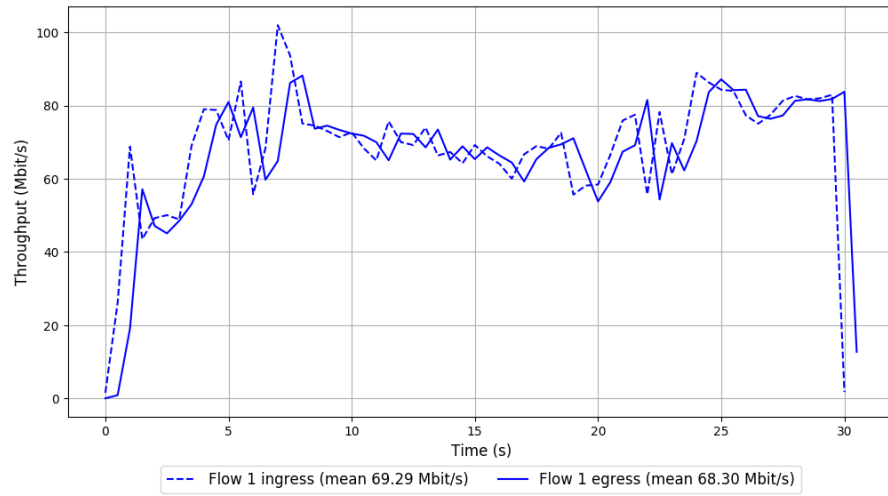

Flow 1 (95th percentile 73.72 ms)

```
Run 1: Statistics of Copa

Start at: 2018-05-24 03:33:35
End at: 2018-05-24 03:34:05
Local clock offset: 2.973 ms
Remote clock offset: 0.216 ms


# Below is generated by plot.py at 2018-05-24 06:58:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.22 Mbit/s
95th percentile per-packet one-way delay: 72.616 ms
Loss rate: 4.65%
-- Flow 1:
Average throughput: 63.22 Mbit/s
95th percentile per-packet one-way delay: 72.616 ms
Loss rate: 4.65%
```
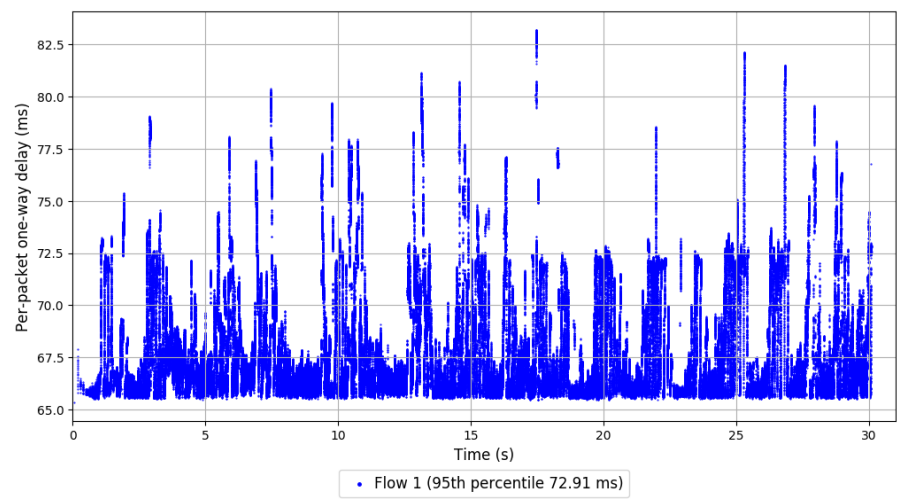
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-05-24 03:54:07
End at: 2018-05-24 03:54:37
Local clock offset: 2.402 ms
Remote clock offset: -0.004 ms


# Below is generated by plot.py at 2018-05-24 06:58:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.30 Mbit/s
95th percentile per-packet one-way delay: 76.466 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 68.30 Mbit/s
95th percentile per-packet one-way delay: 76.466 ms
Loss rate: 1.42%
```
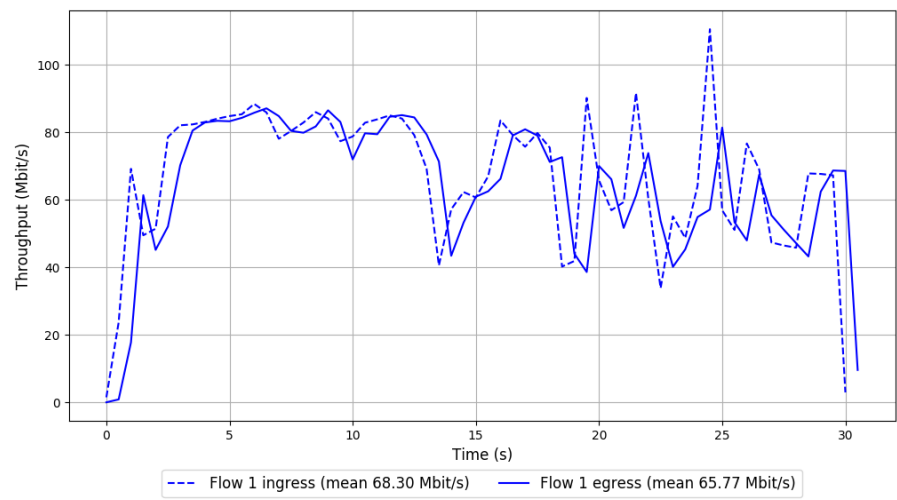
Run 2: Report of Copa — Data Link

```
Run 3: Statistics of Copa

Start at: 2018-05-24 04:14:42
End at: 2018-05-24 04:15:12
Local clock offset: 0.87 ms
Remote clock offset: 0.366 ms


# Below is generated by plot.py at 2018-05-24 06:58:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.77 Mbit/s
95th percentile per-packet one-way delay: 72.907 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 65.77 Mbit/s
95th percentile per-packet one-way delay: 72.907 ms
Loss rate: 3.69%
```
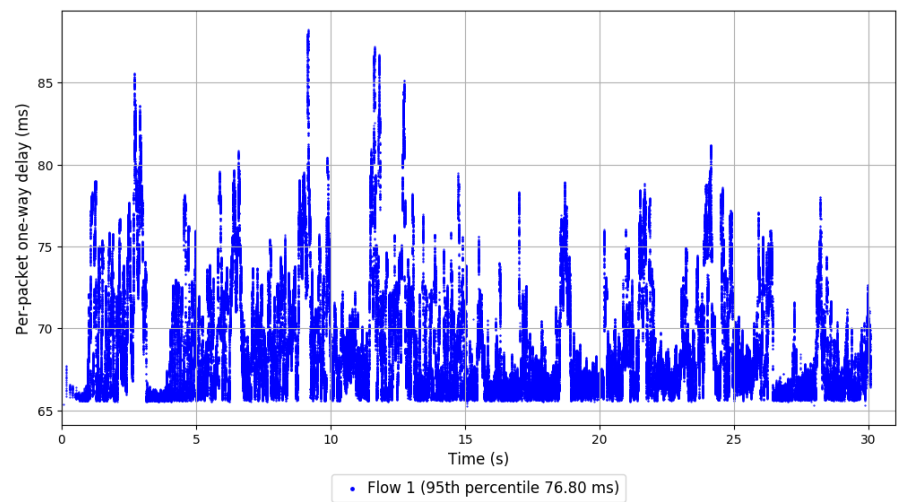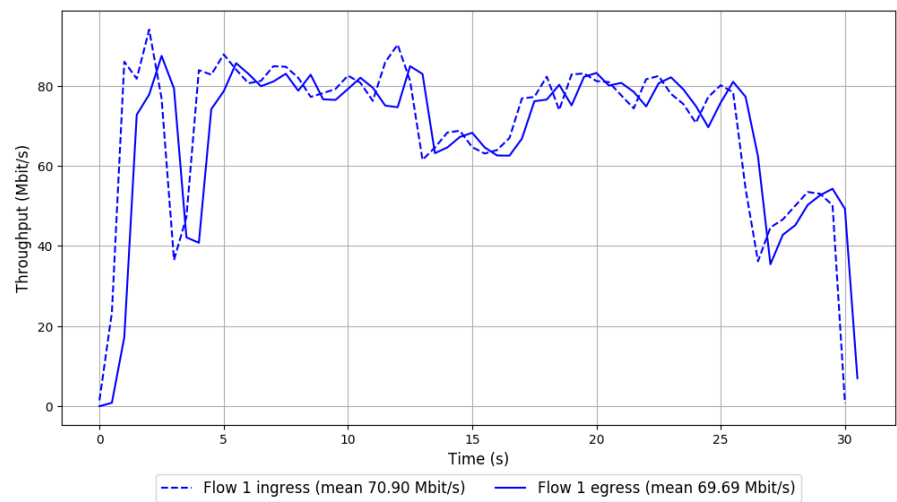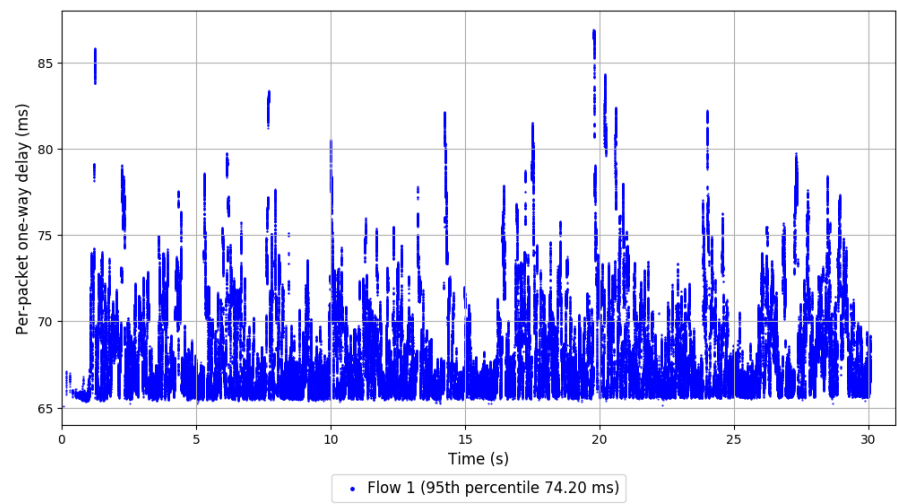
Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 68.30 Mbit/s) ——— Flow 1 egress (mean 65.77 Mbit/s)

• Flow 1 (95th percentile 72.91 ms)

```
Run 4: Statistics of Copa

Start at: 2018-05-24 04:35:47
End at: 2018-05-24 04:36:17
Local clock offset: 0.596 ms
Remote clock offset: 0.061 ms


# Below is generated by plot.py at 2018-05-24 06:58:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.69 Mbit/s
95th percentile per-packet one-way delay: 76.797 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 69.69 Mbit/s
95th percentile per-packet one-way delay: 76.797 ms
Loss rate: 1.70%
```
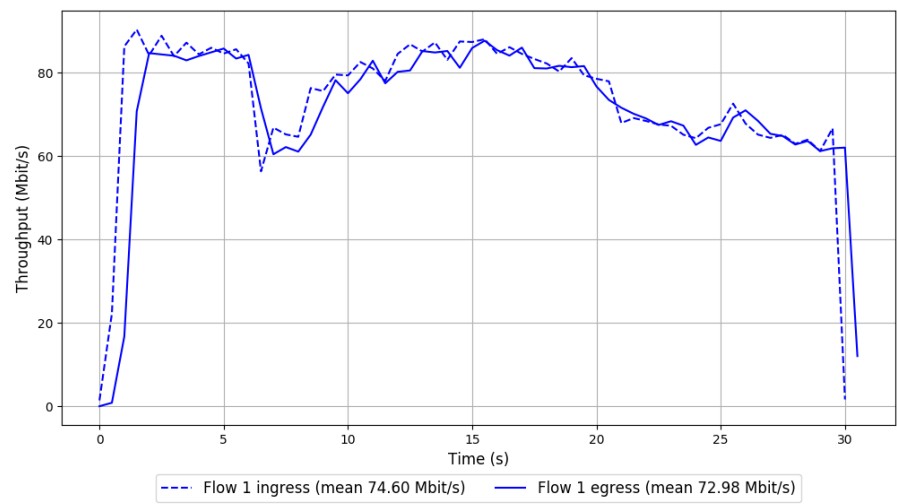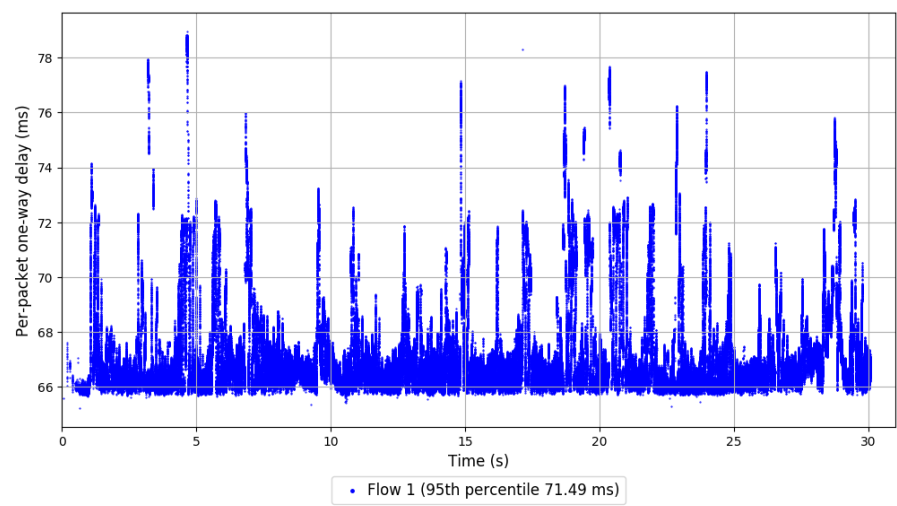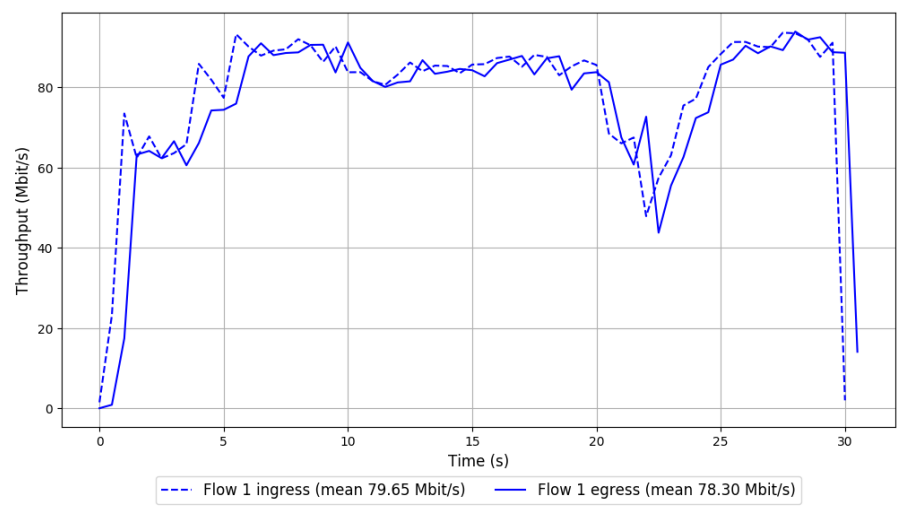
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-05-24 04:56:54
End at: 2018-05-24 04:57:25
Local clock offset: 0.621 ms
Remote clock offset: -0.299 ms


# Below is generated by plot.py at 2018-05-24 06:58:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.98 Mbit/s
95th percentile per-packet one-way delay: 74.197 ms
Loss rate: 2.17%
-- Flow 1:
Average throughput: 72.98 Mbit/s
95th percentile per-packet one-way delay: 74.197 ms
Loss rate: 2.17%
```

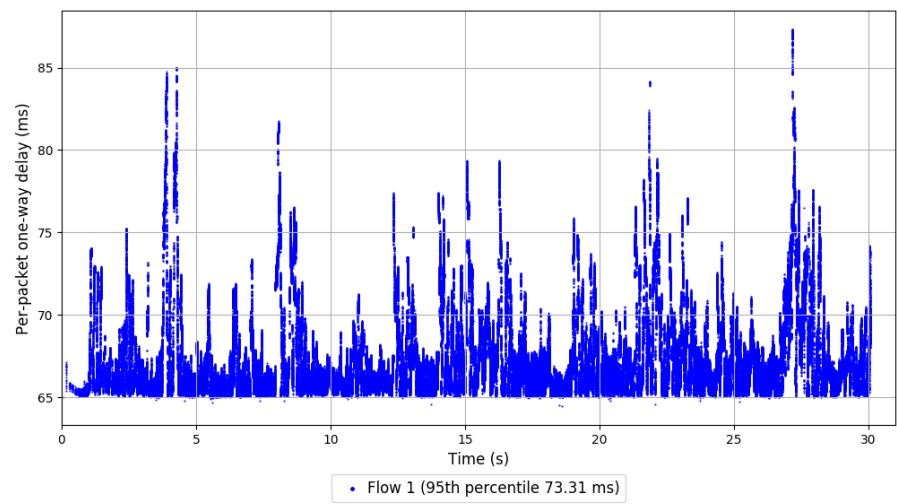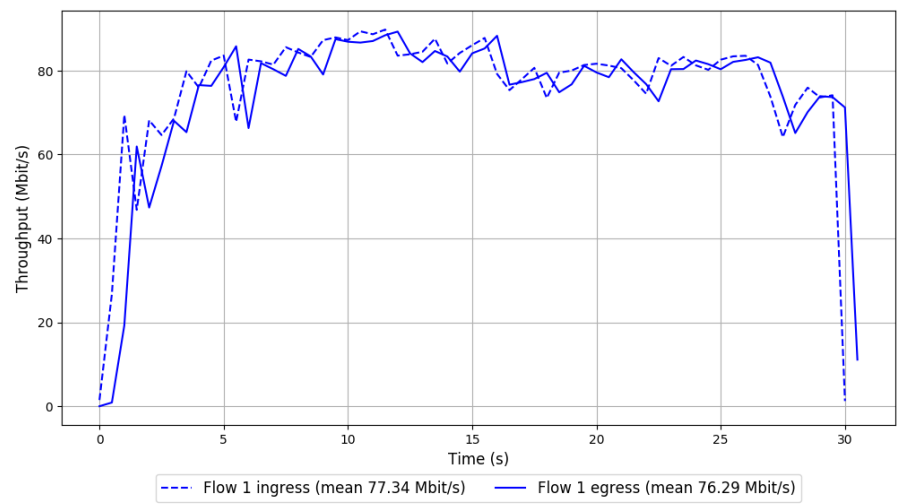Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2018-05-24 05:17:26
End at: 2018-05-24 05:17:56
Local clock offset: 3.101 ms
Remote clock offset: -0.581 ms


# Below is generated by plot.py at 2018-05-24 06:58:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.30 Mbit/s
95th percentile per-packet one-way delay: 71.492 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 78.30 Mbit/s
95th percentile per-packet one-way delay: 71.492 ms
Loss rate: 1.69%
```

Run 6: Report of Copa — Data Link

```
Run 7: Statistics of Copa

Start at: 2018-05-24 05:37:54
End at: 2018-05-24 05:38:24
Local clock offset: 3.941 ms
Remote clock offset: -0.904 ms


# Below is generated by plot.py at 2018-05-24 06:59:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.29 Mbit/s
95th percentile per-packet one-way delay: 73.311 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 76.29 Mbit/s
95th percentile per-packet one-way delay: 73.311 ms
Loss rate: 1.35%
```
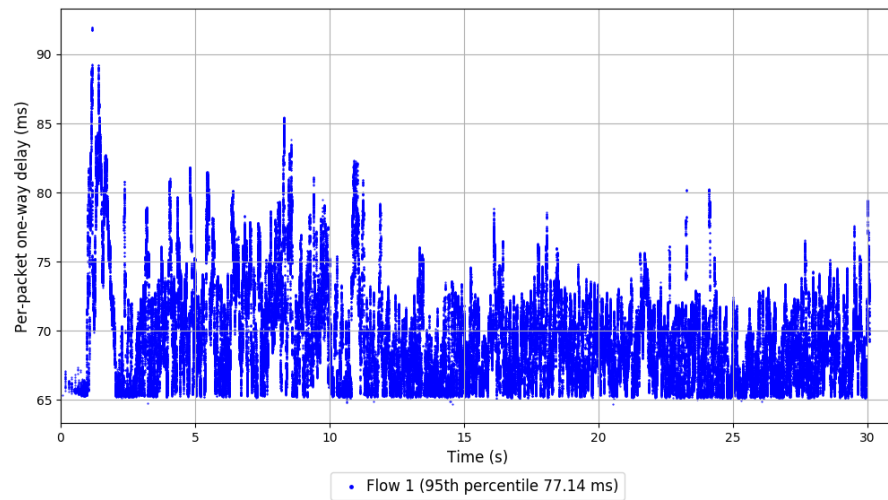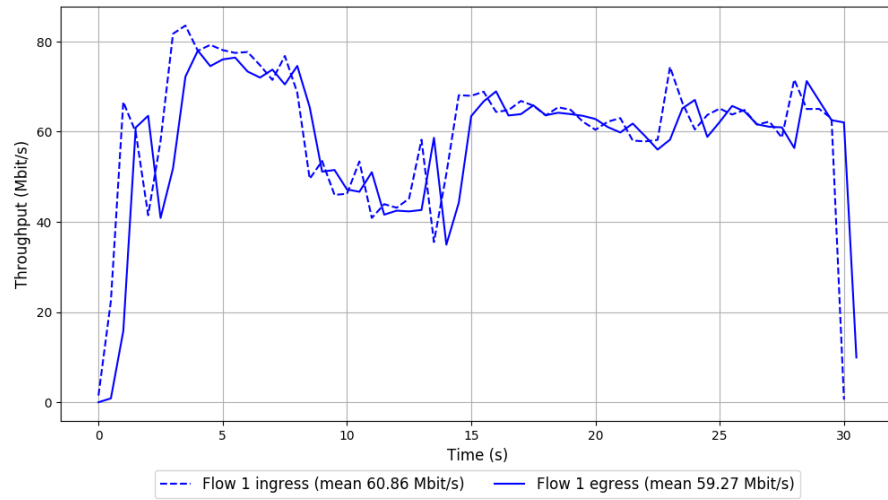
Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 77.34 Mbit/s) ----- Flow 1 egress (mean 76.29 Mbit/s)

Flow 1 (95th percentile 73.31 ms)

```
Run 8: Statistics of Copa

Start at: 2018-05-24 05:58:21
End at: 2018-05-24 05:58:52
Local clock offset: 3.898 ms
Remote clock offset: 0.249 ms


# Below is generated by plot.py at 2018-05-24 06:59:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.27 Mbit/s
95th percentile per-packet one-way delay: 77.145 ms
Loss rate: 2.59%
-- Flow 1:
Average throughput: 59.27 Mbit/s
95th percentile per-packet one-way delay: 77.145 ms
Loss rate: 2.59%
```

Run 8: Report of Copa — Data Link

```
Run 9: Statistics of Copa

Start at: 2018-05-24 06:18:50
End at: 2018-05-24 06:19:20
Local clock offset: 2.396 ms
Remote clock offset: 1.12 ms


# Below is generated by plot.py at 2018-05-24 06:59:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.42 Mbit/s
95th percentile per-packet one-way delay: 78.031 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 52.42 Mbit/s
95th percentile per-packet one-way delay: 78.031 ms
Loss rate: 2.32%
```
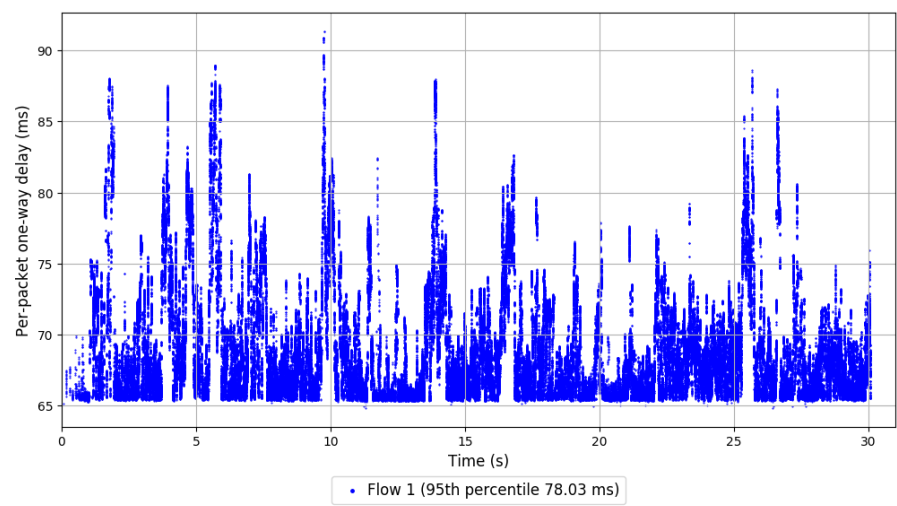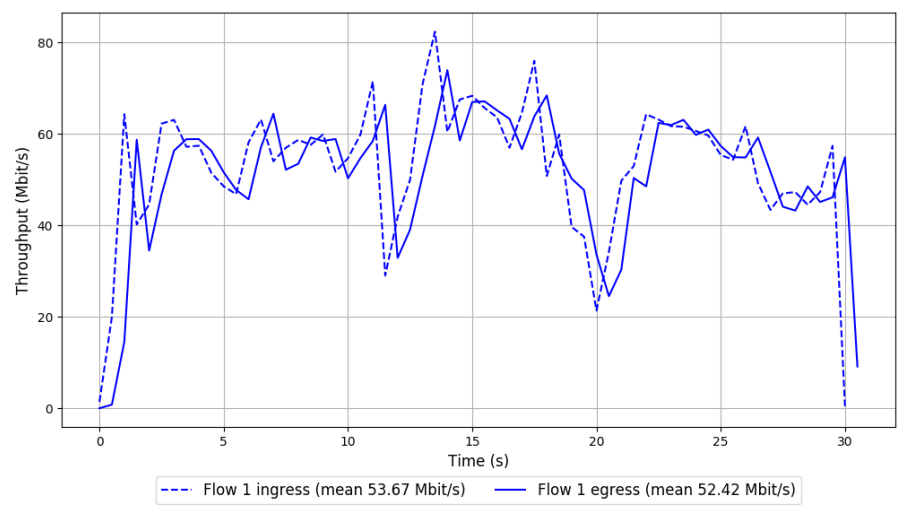
Run 9: Report of Copa — Data Link

```
Run 10: Statistics of Copa

Start at: 2018-05-24 06:39:20
End at: 2018-05-24 06:39:51
Local clock offset: 3.93 ms
Remote clock offset: 1.526 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.51 Mbit/s
95th percentile per-packet one-way delay: 78.249 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 63.51 Mbit/s
95th percentile per-packet one-way delay: 78.249 ms
Loss rate: 1.57%
```
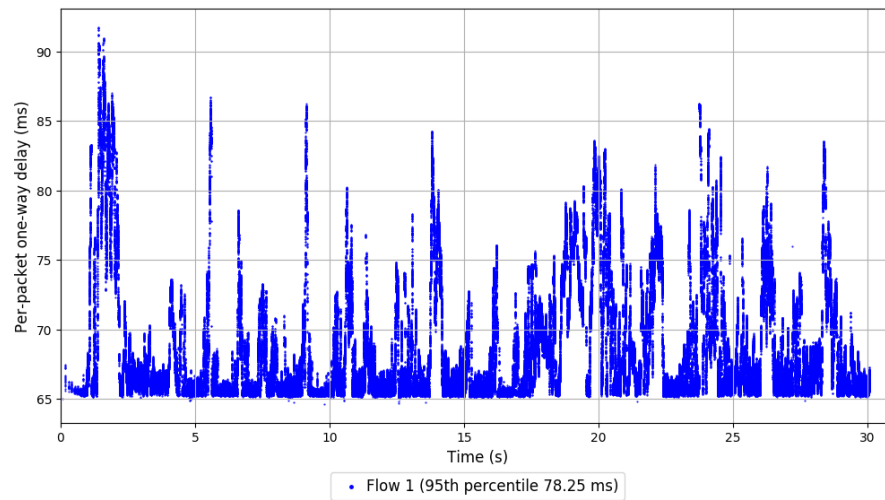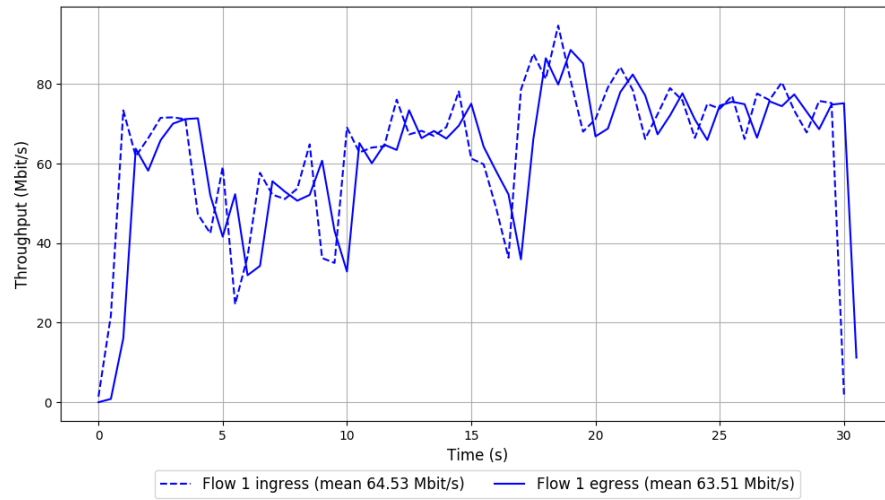
Run 10: Report of Copa — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-05-24 03:36:12
End at: 2018-05-24 03:36:42
Local clock offset: 2.846 ms
Remote clock offset: 0.155 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.17 Mbit/s
95th percentile per-packet one-way delay: 66.883 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 20.17 Mbit/s
95th percentile per-packet one-way delay: 66.883 ms
Loss rate: 0.26%
```
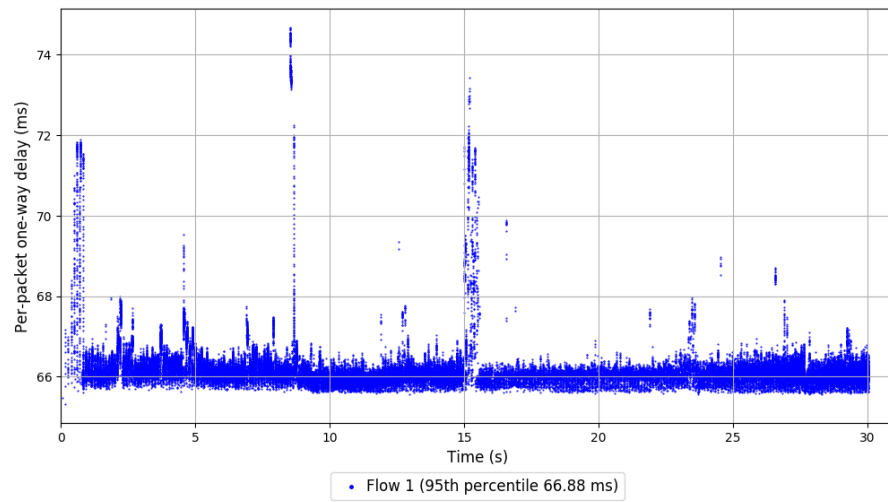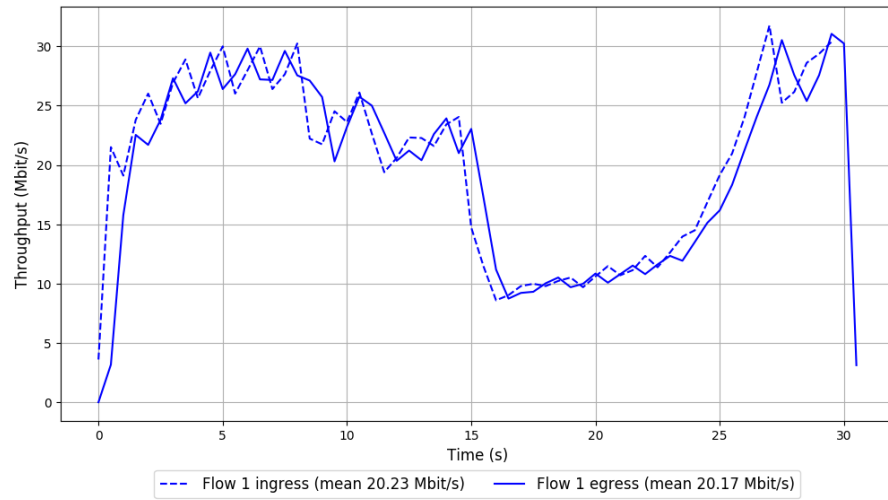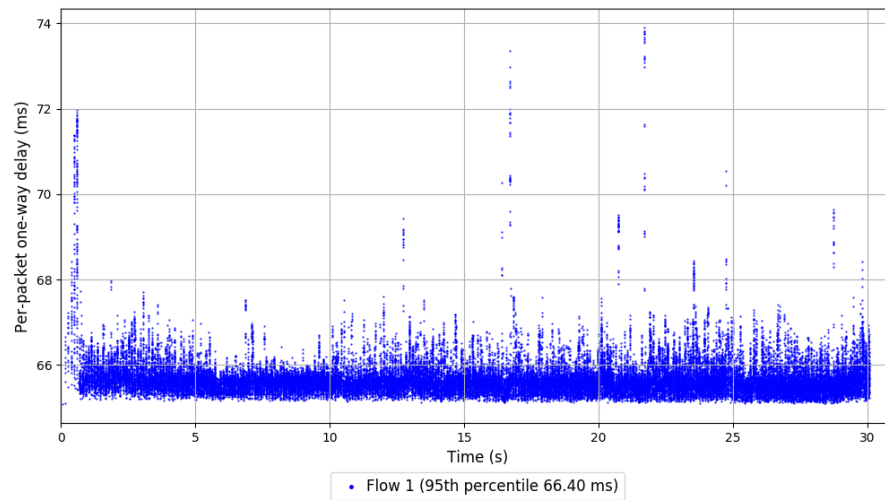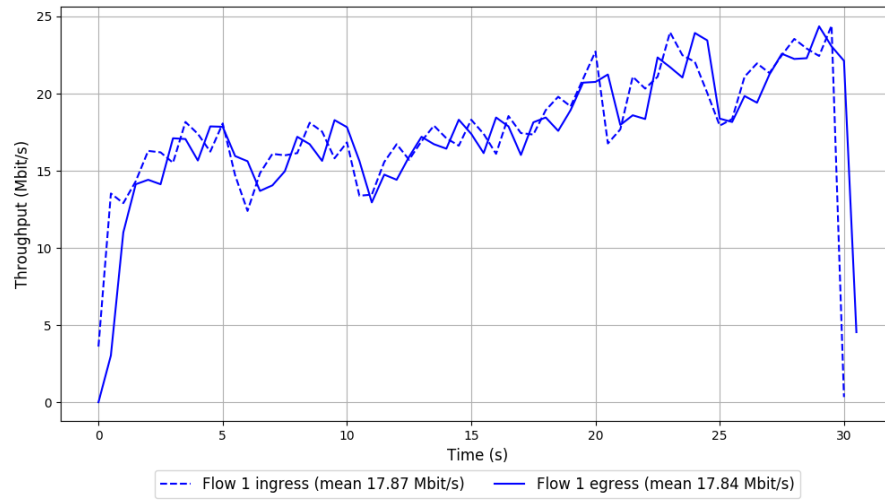
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-05-24 03:56:44
End at: 2018-05-24 03:57:14
Local clock offset: 2.291 ms
Remote clock offset: 0.025 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.84 Mbit/s
95th percentile per-packet one-way delay: 66.399 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 17.84 Mbit/s
95th percentile per-packet one-way delay: 66.399 ms
Loss rate: 0.12%
```
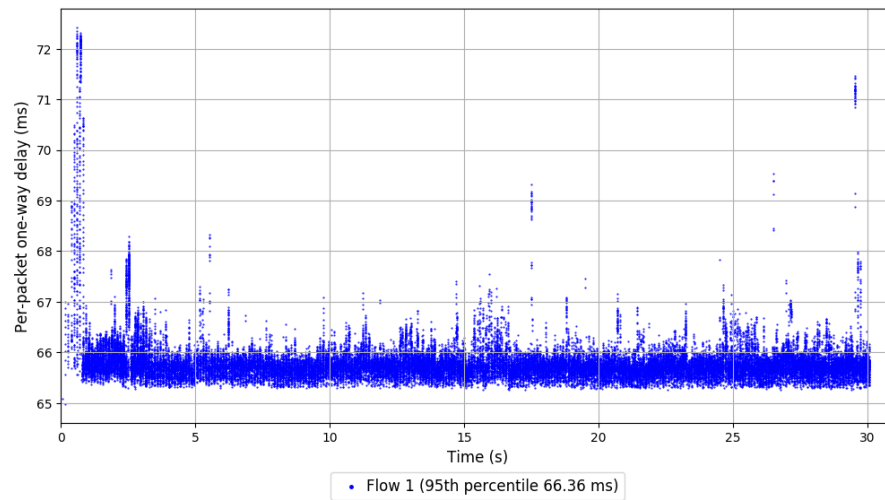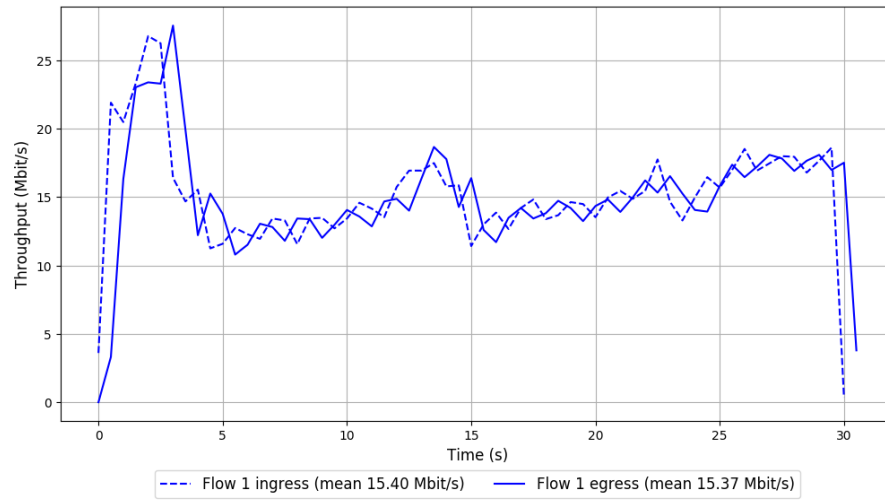
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 17.87 Mbit/s) ---- Flow 1 egress (mean 17.84 Mbit/s)

• Flow 1 (95th percentile 66.40 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2018-05-24 04:17:19
End at: 2018-05-24 04:17:49
Local clock offset: 0.649 ms
Remote clock offset: 0.309 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.37 Mbit/s
95th percentile per-packet one-way delay: 66.363 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 15.37 Mbit/s
95th percentile per-packet one-way delay: 66.363 ms
Loss rate: 0.19%
```
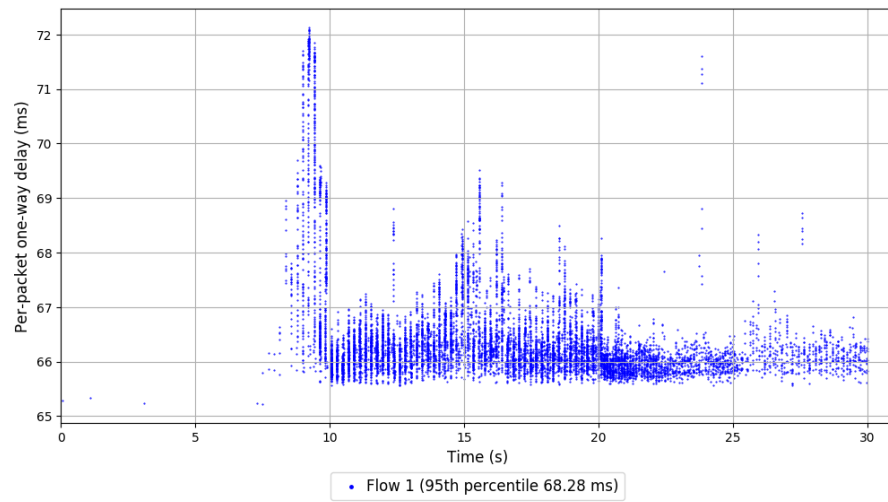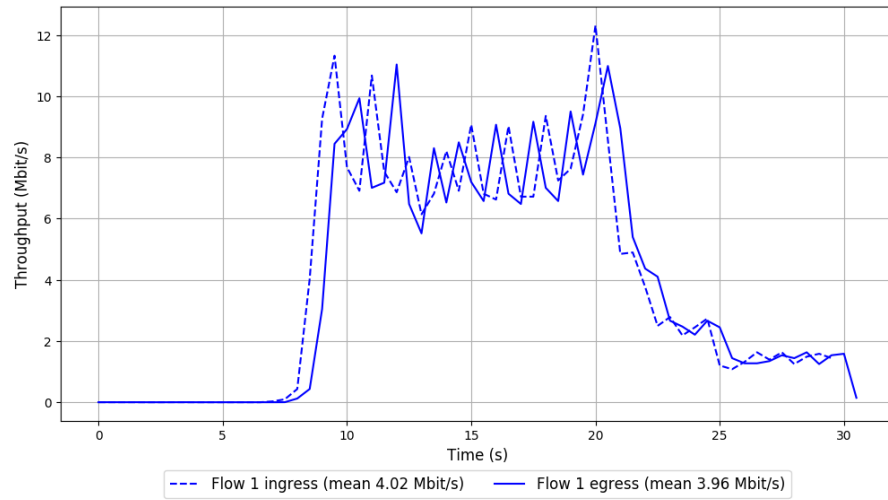
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 15.40 Mbit/s)   —— Flow 1 egress (mean 15.37 Mbit/s)

• Flow 1 (95th percentile 66.36 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-05-24 04:38:25
End at: 2018-05-24 04:38:55
Local clock offset: 0.7 ms
Remote clock offset: 0.094 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.96 Mbit/s
95th percentile per-packet one-way delay: 68.275 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 3.96 Mbit/s
95th percentile per-packet one-way delay: 68.275 ms
Loss rate: 1.45%
```
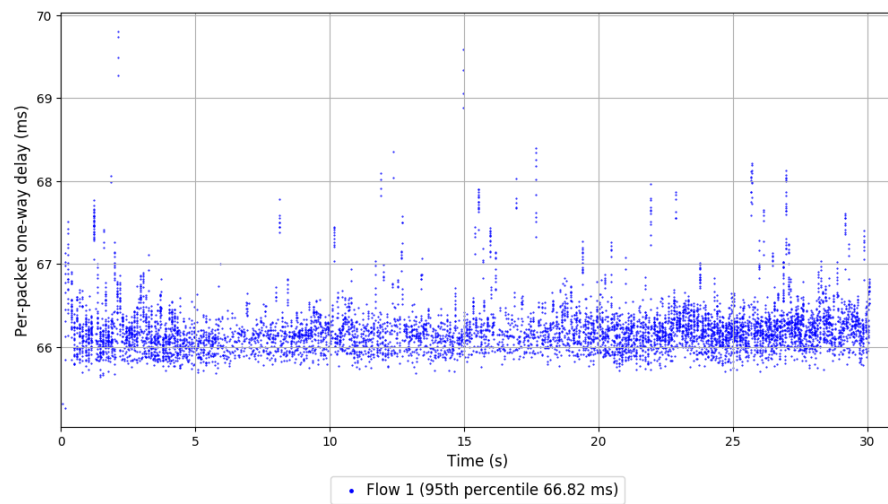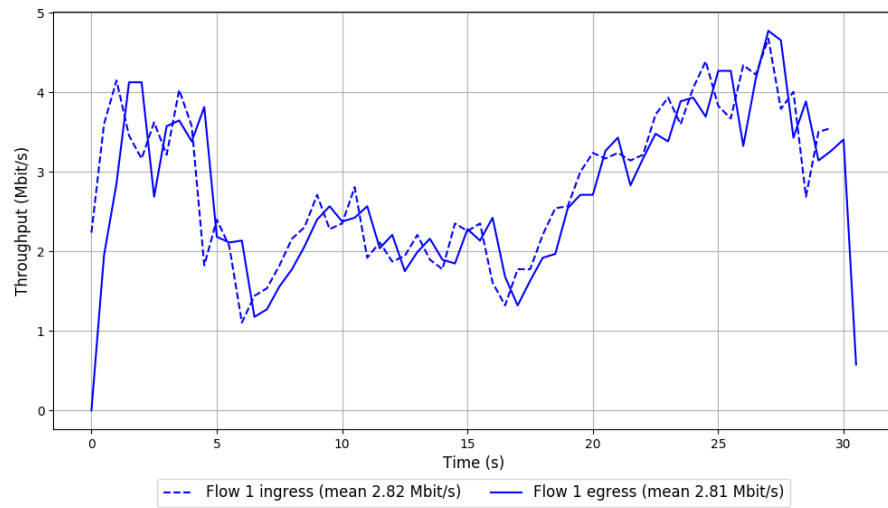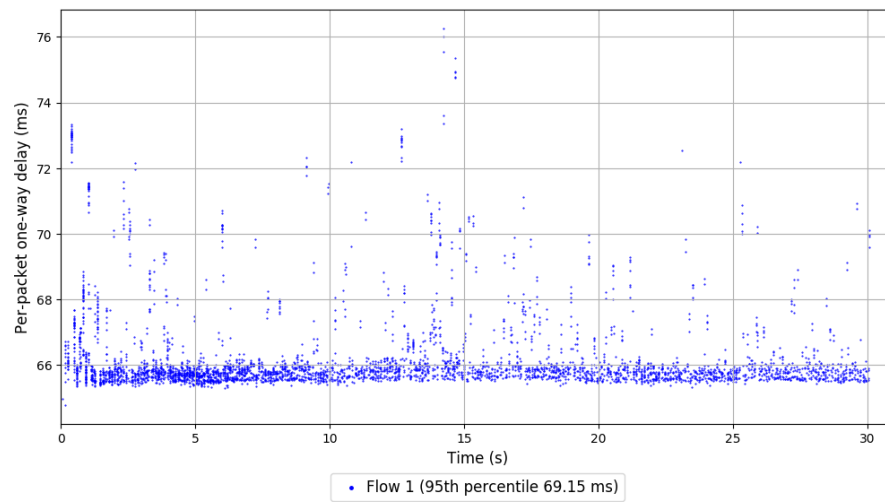
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 4.02 Mbit/s)   Flow 1 egress (mean 3.96 Mbit/s)

Flow 1 (95th percentile 68.28 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-05-24 04:59:31
End at: 2018-05-24 05:00:01
Local clock offset: 1.209 ms
Remote clock offset: -0.43 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 66.816 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 66.816 ms
Loss rate: 0.64%
```

Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 2.82 Mbit/s) — — —   Flow 1 egress (mean 2.81 Mbit/s) ———
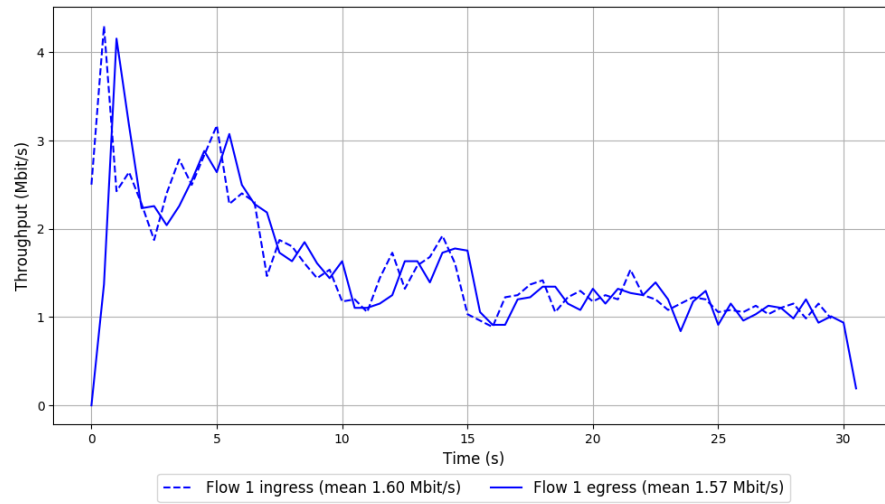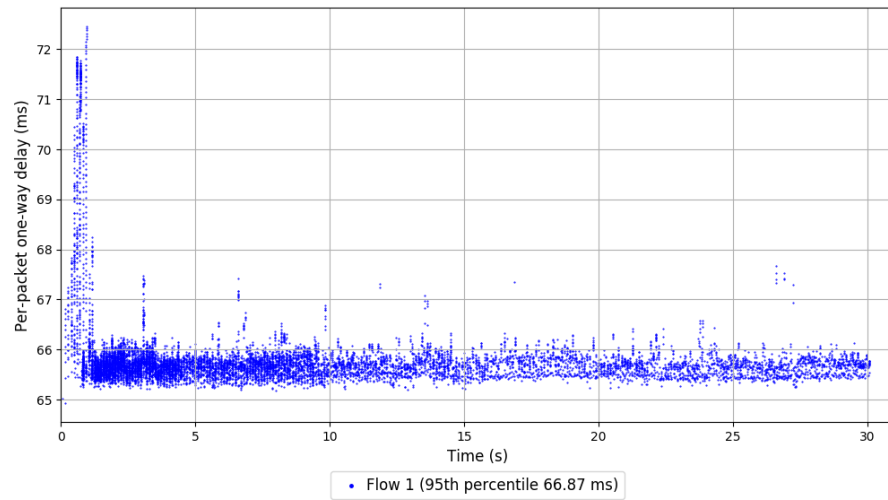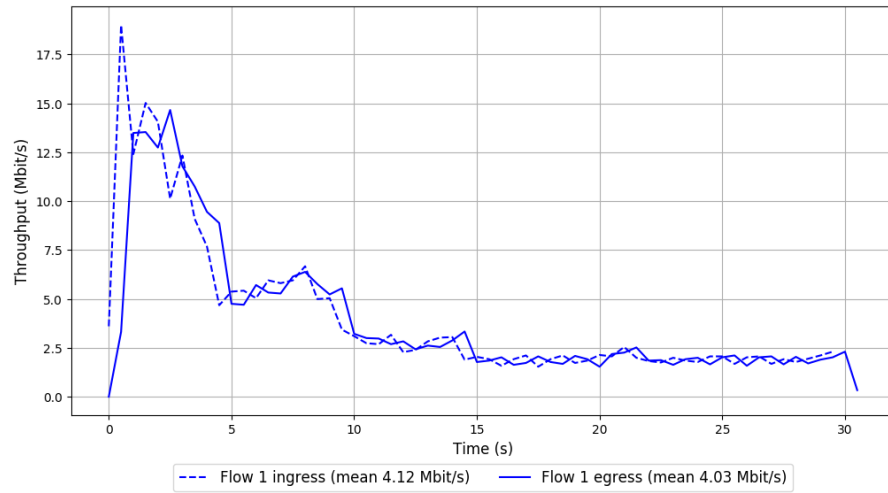

• Flow 1 (95th percentile 66.82 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-05-24 05:20:03
End at: 2018-05-24 05:20:33
Local clock offset: 3.487 ms
Remote clock offset: -0.674 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 69.154 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 69.154 ms
Loss rate: 1.93%
```

Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2018-05-24 05:40:30
End at: 2018-05-24 05:41:00
Local clock offset: 3.867 ms
Remote clock offset: -0.537 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 66.872 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 66.872 ms
Loss rate: 2.22%
```
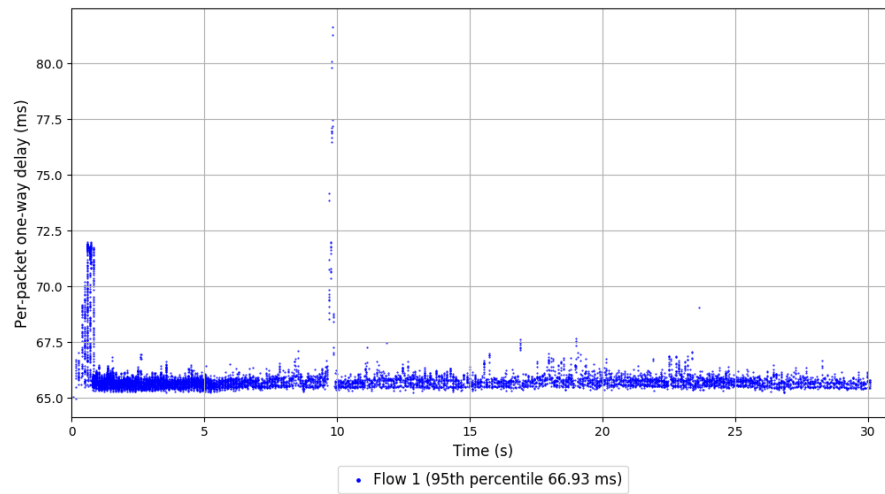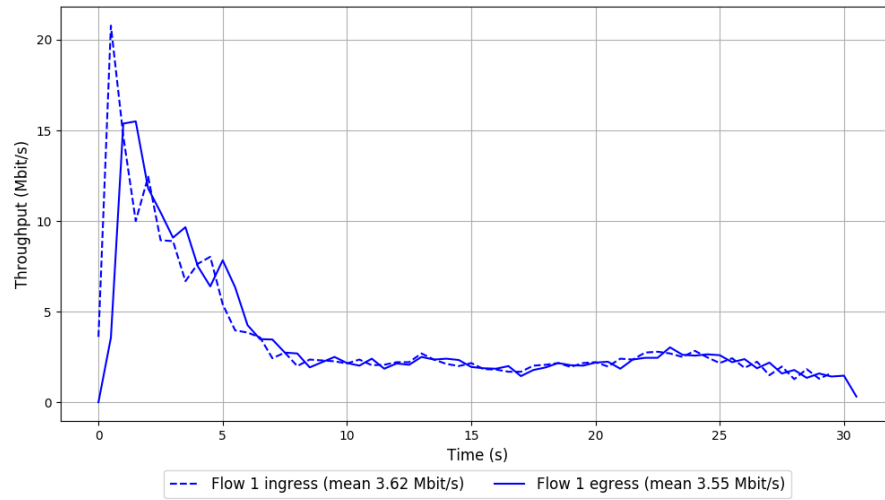
Run 7: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 4.12 Mbit/s) --- Flow 1 egress (mean 4.03 Mbit/s)

Flow 1 (95th percentile 66.87 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2018-05-24 06:00:57
End at: 2018-05-24 06:01:27
Local clock offset: 3.4 ms
Remote clock offset: 0.48 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 66.931 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 66.931 ms
Loss rate: 1.96%
```

Run 8: Report of TCP Cubic — Data Link

```
Run 9: Statistics of TCP Cubic

Start at: 2018-05-24 06:21:25
End at: 2018-05-24 06:21:55
Local clock offset: 2.348 ms
Remote clock offset: 1.015 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 67.477 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 67.477 ms
Loss rate: 1.29%
```
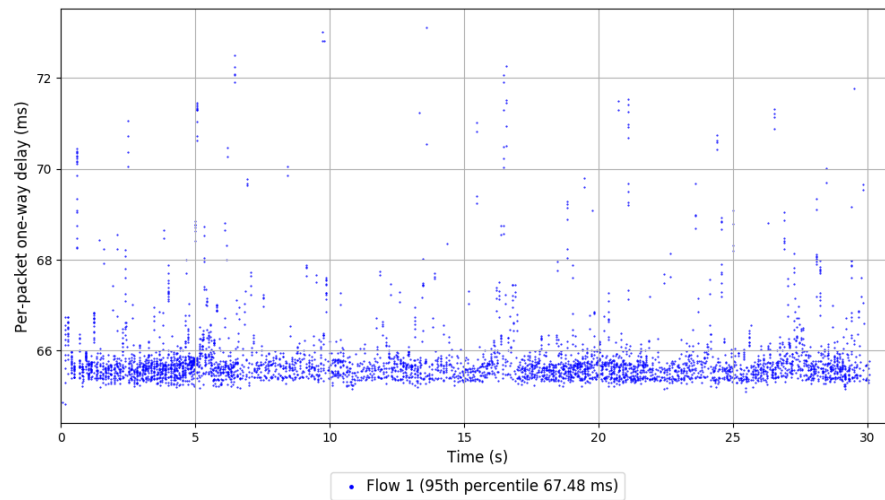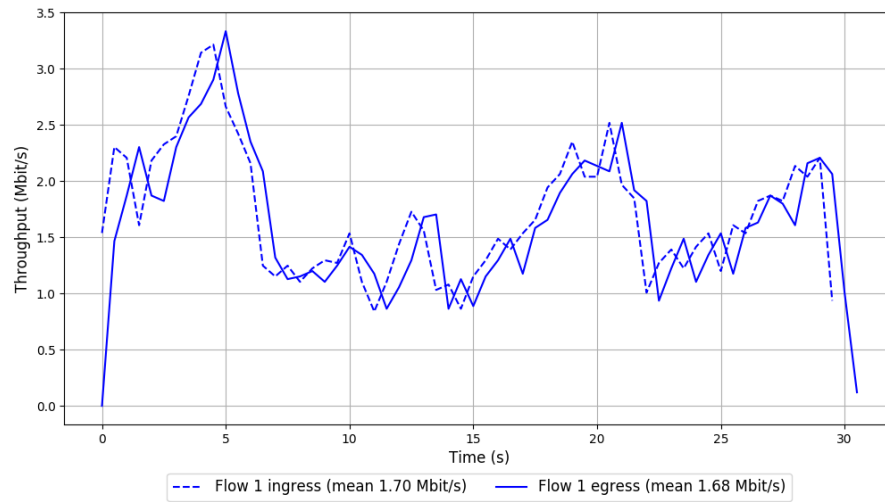
Run 9: Report of TCP Cubic — Data Link

```
Run 10: Statistics of TCP Cubic

Start at: 2018-05-24 06:41:57
End at: 2018-05-24 06:42:27
Local clock offset: 4.035 ms
Remote clock offset: 1.056 ms


# Below is generated by plot.py at 2018-05-24 06:59:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 67.577 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 67.577 ms
Loss rate: 0.73%
```
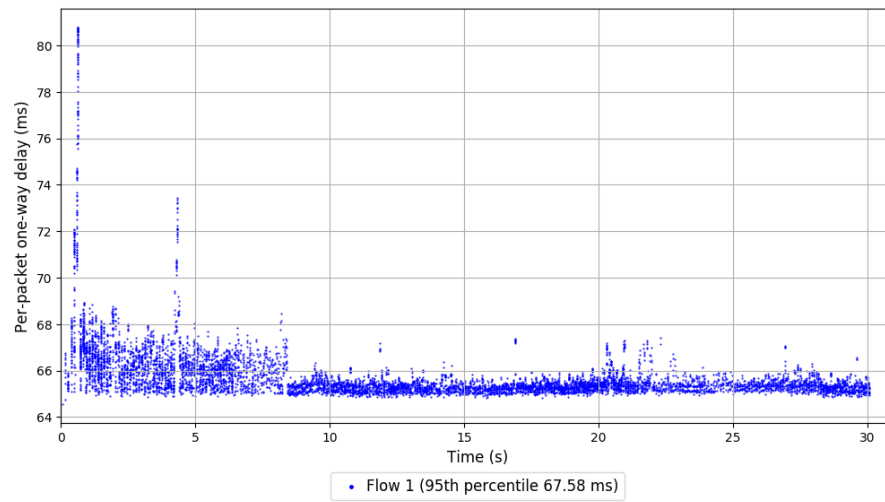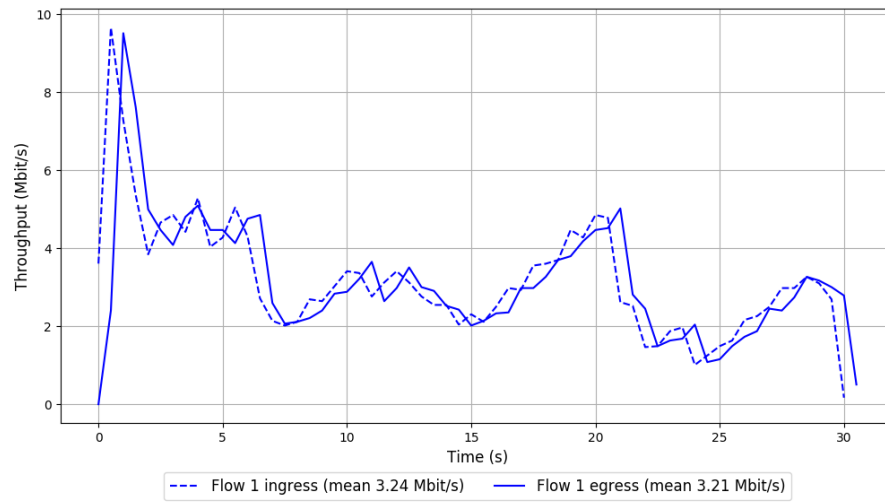
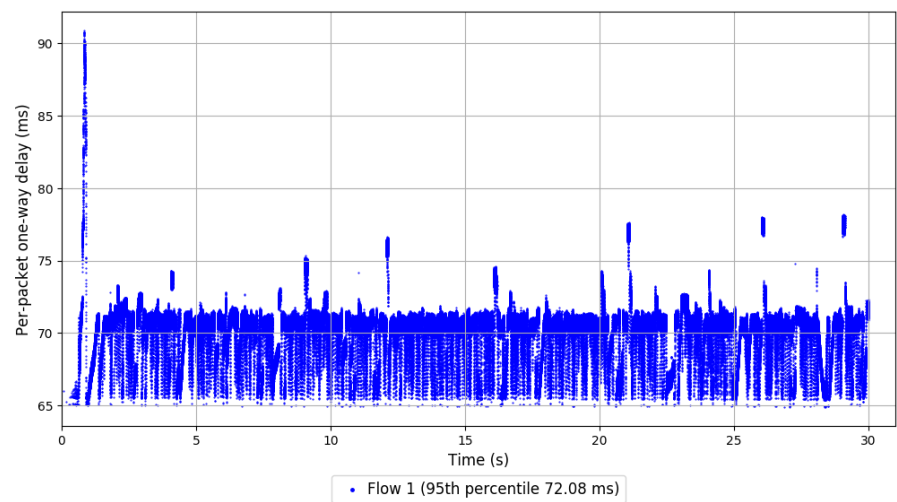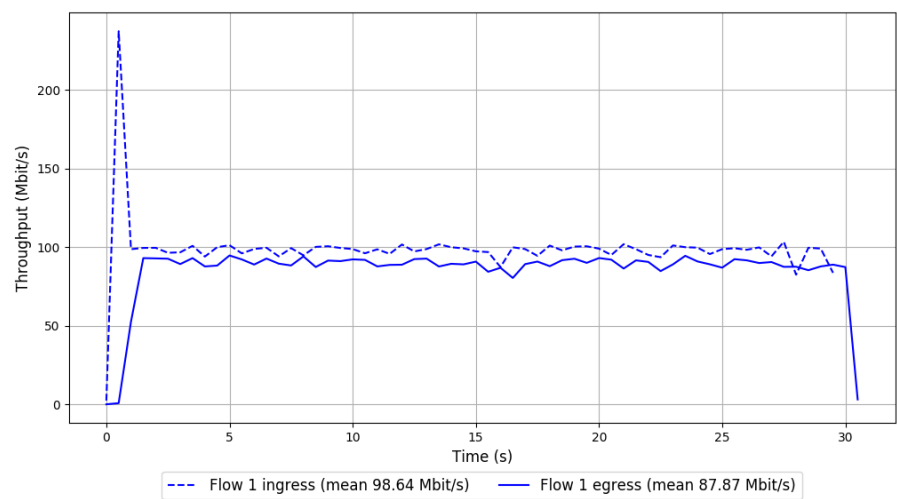Run 10: Report of TCP Cubic — Data Link

```
Run 1: Statistics of FillP

Start at: 2018-05-24 03:32:17
End at: 2018-05-24 03:32:47
Local clock offset: 3.192 ms
Remote clock offset: 0.252 ms


# Below is generated by plot.py at 2018-05-24 07:00:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.87 Mbit/s
95th percentile per-packet one-way delay: 72.082 ms
Loss rate: 10.90%
-- Flow 1:
Average throughput: 87.87 Mbit/s
95th percentile per-packet one-way delay: 72.082 ms
Loss rate: 10.90%
```

Run 1: Report of FillP — Data Link

Flow 1 ingress (mean 98.64 Mbit/s)   Flow 1 egress (mean 87.87 Mbit/s)

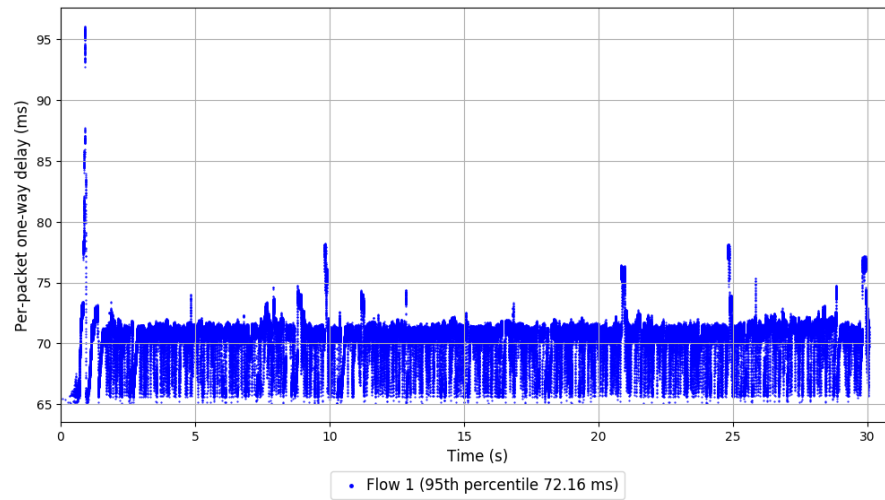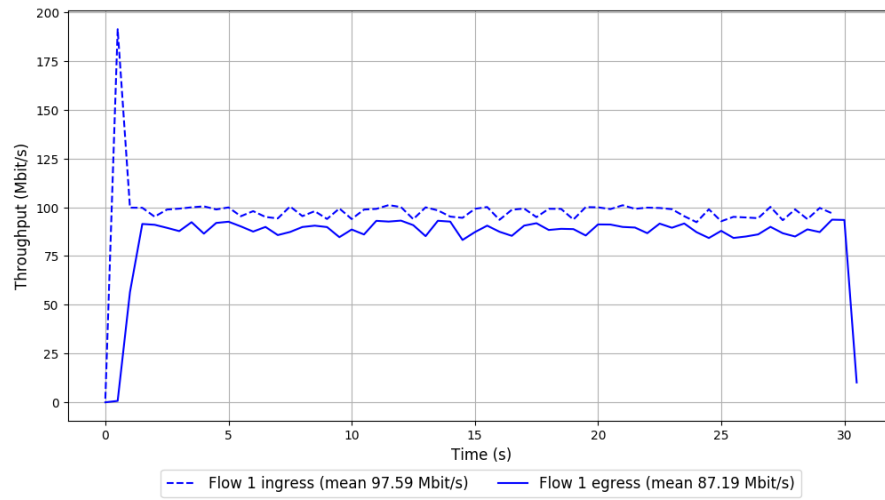Flow 1 (95th percentile 72.08 ms)

```
Run 2: Statistics of FillP

Start at: 2018-05-24 03:52:48
End at: 2018-05-24 03:53:18
Local clock offset: 2.274 ms
Remote clock offset: -0.009 ms


# Below is generated by plot.py at 2018-05-24 07:00:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: 72.155 ms
Loss rate: 10.64%
-- Flow 1:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: 72.155 ms
Loss rate: 10.64%
```
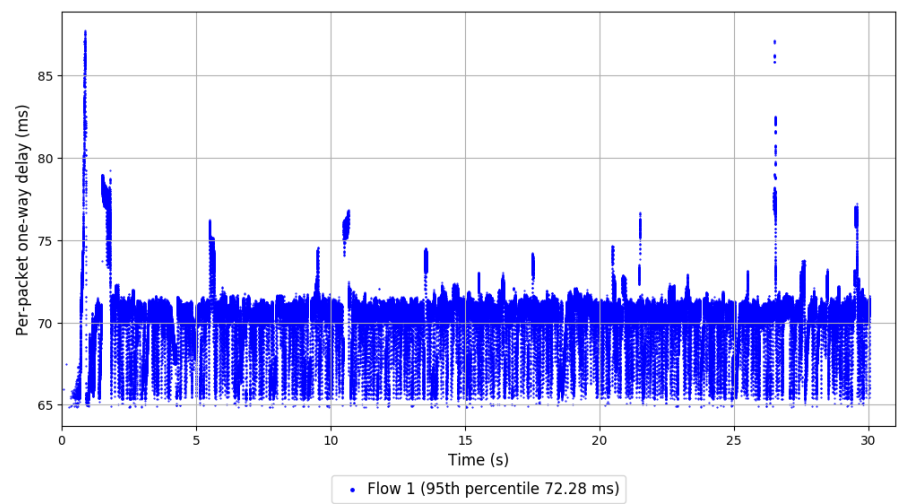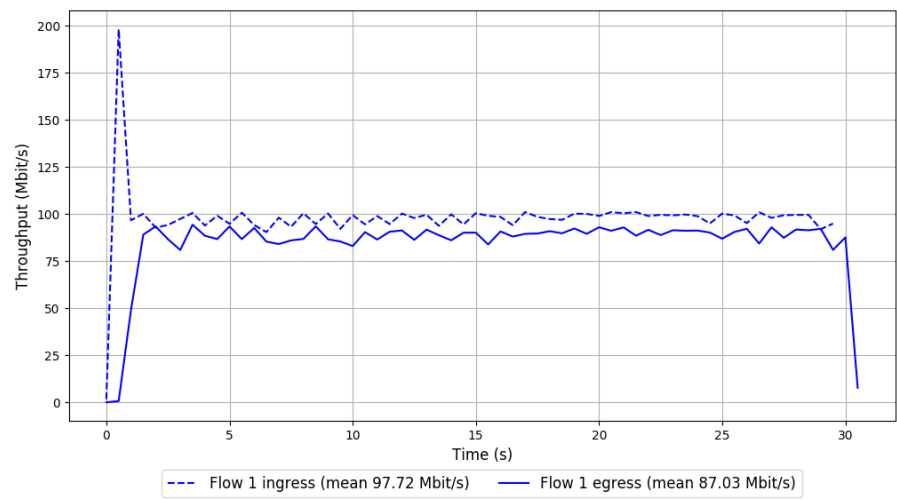
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 97.59 Mbit/s)   Flow 1 egress (mean 87.19 Mbit/s)

Flow 1 (95th percentile 72.16 ms)

```
Run 3: Statistics of FillP

Start at: 2018-05-24 04:13:23
End at: 2018-05-24 04:13:53
Local clock offset: 0.929 ms
Remote clock offset: 0.291 ms


# Below is generated by plot.py at 2018-05-24 07:00:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.03 Mbit/s
95th percentile per-packet one-way delay: 72.279 ms
Loss rate: 10.93%
-- Flow 1:
Average throughput: 87.03 Mbit/s
95th percentile per-packet one-way delay: 72.279 ms
Loss rate: 10.93%
```
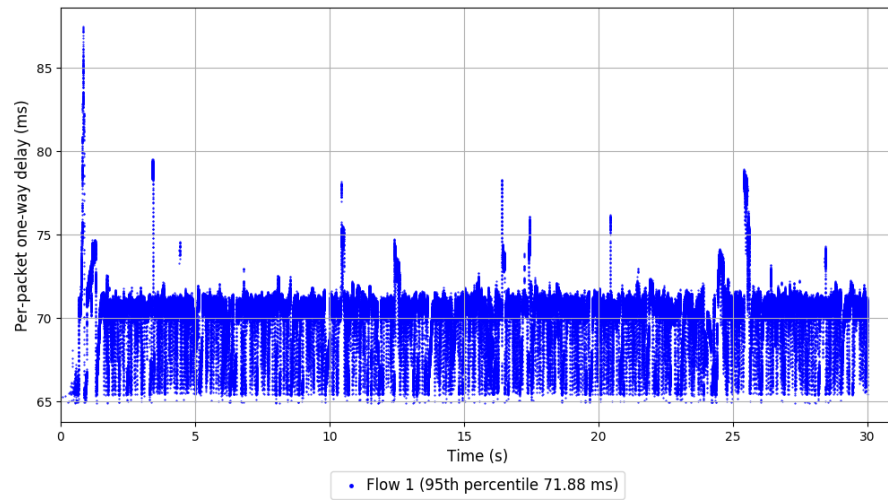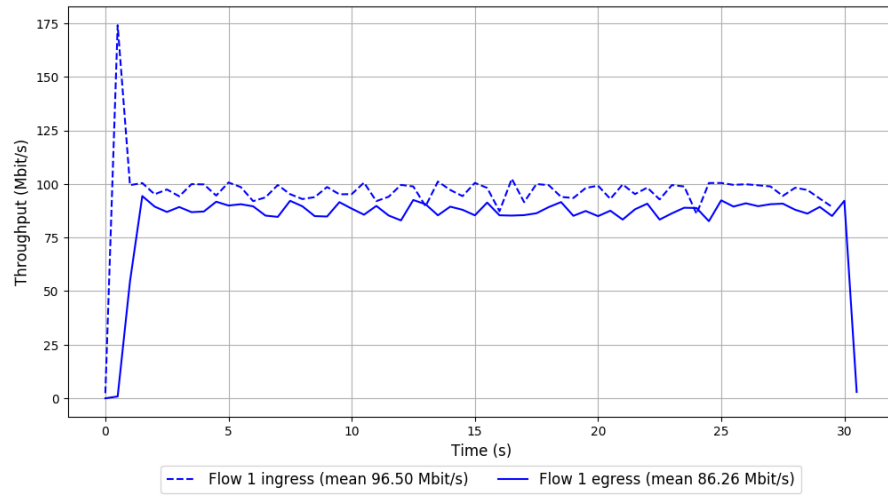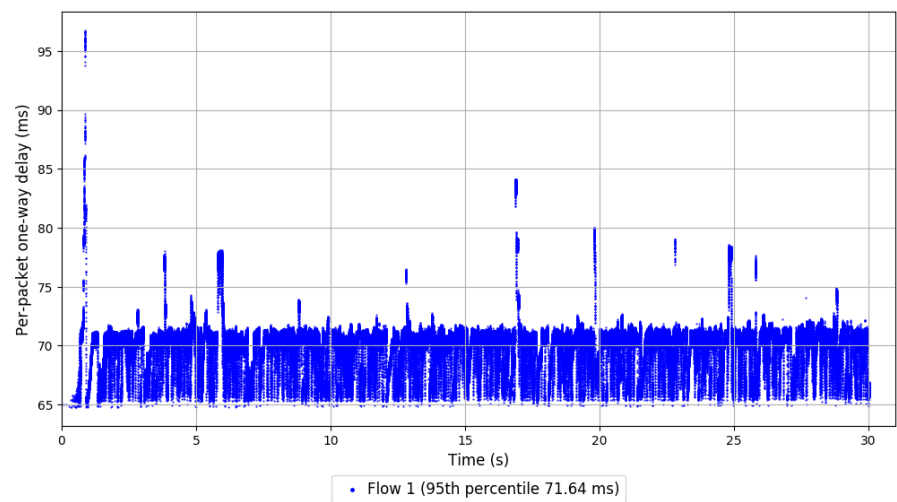
Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 97.72 Mbit/s)   Flow 1 egress (mean 87.03 Mbit/s)

Flow 1 (95th percentile 72.28 ms)

```
Run 4: Statistics of FillP

Start at: 2018-05-24 04:34:28
End at: 2018-05-24 04:34:58
Local clock offset: 0.6 ms
Remote clock offset: 0.078 ms


# Below is generated by plot.py at 2018-05-24 07:00:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.26 Mbit/s
95th percentile per-packet one-way delay: 71.882 ms
Loss rate: 10.59%
-- Flow 1:
Average throughput: 86.26 Mbit/s
95th percentile per-packet one-way delay: 71.882 ms
Loss rate: 10.59%
```

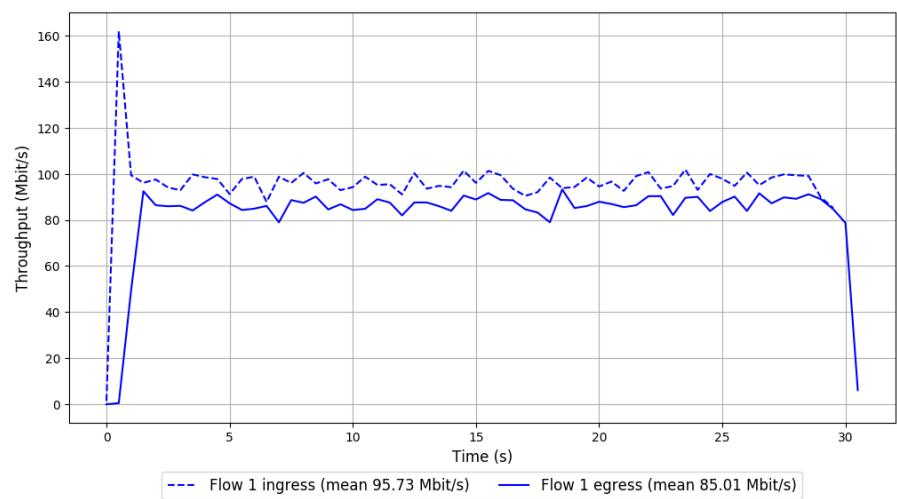Run 4: Report of FillP — Data Link

```
Run 5: Statistics of FillP

Start at: 2018-05-24 04:55:36
End at: 2018-05-24 04:56:06
Local clock offset: 0.477 ms
Remote clock offset: -0.451 ms


# Below is generated by plot.py at 2018-05-24 07:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.01 Mbit/s
95th percentile per-packet one-way delay: 71.636 ms
Loss rate: 11.20%
-- Flow 1:
Average throughput: 85.01 Mbit/s
95th percentile per-packet one-way delay: 71.636 ms
Loss rate: 11.20%
```

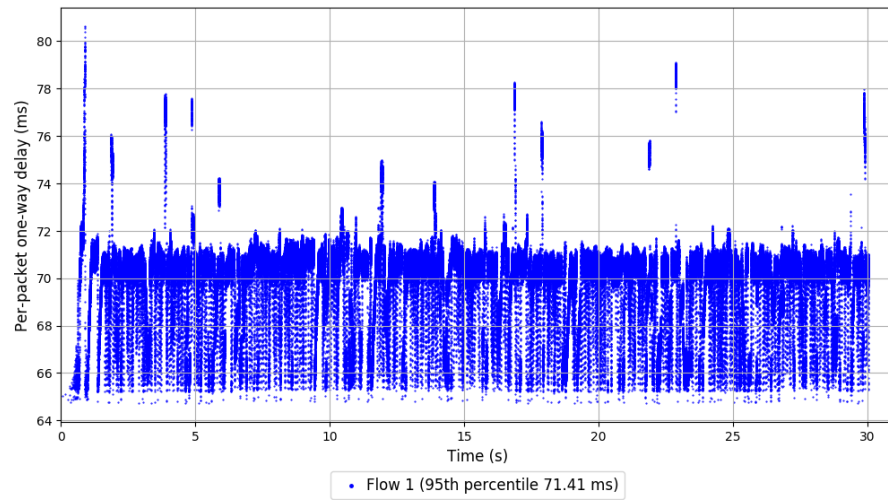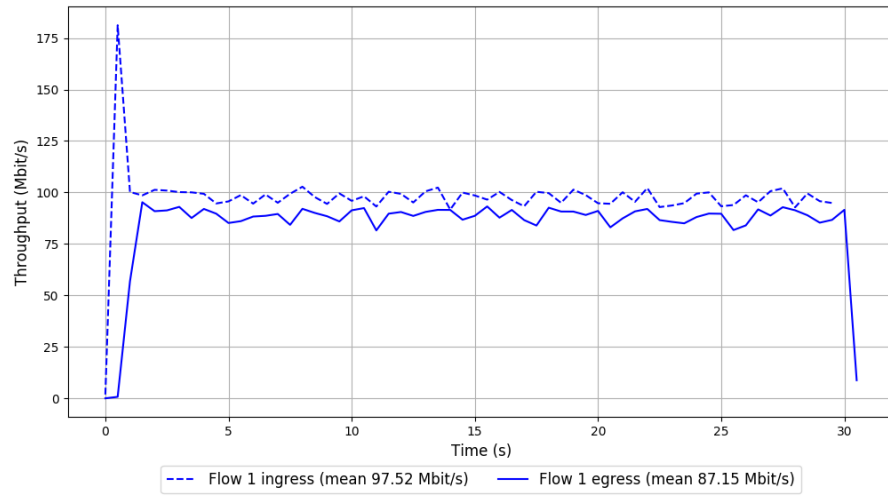Run 5: Report of FillP — Data Link

```
Run 6: Statistics of FillP

Start at: 2018-05-24 05:16:07
End at: 2018-05-24 05:16:37
Local clock offset: 3.176 ms
Remote clock offset: -0.558 ms


# Below is generated by plot.py at 2018-05-24 07:00:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.15 Mbit/s
95th percentile per-packet one-way delay: 71.410 ms
Loss rate: 10.61%
-- Flow 1:
Average throughput: 87.15 Mbit/s
95th percentile per-packet one-way delay: 71.410 ms
Loss rate: 10.61%
```

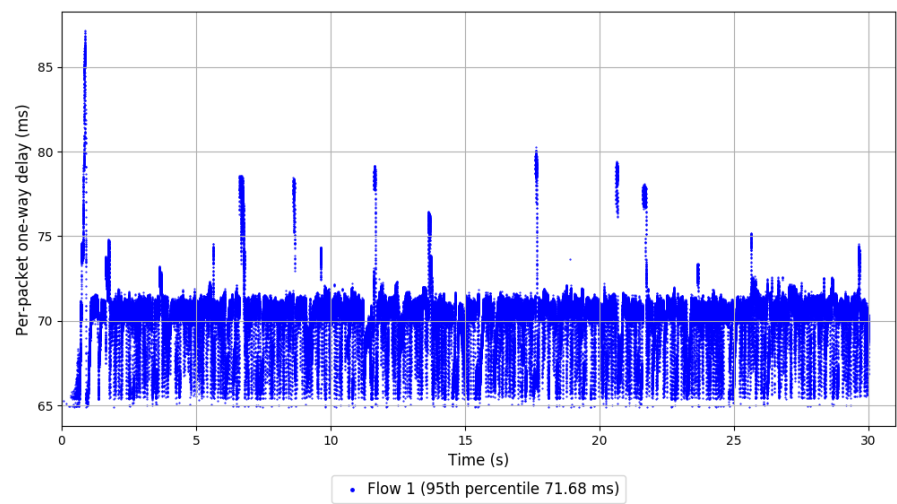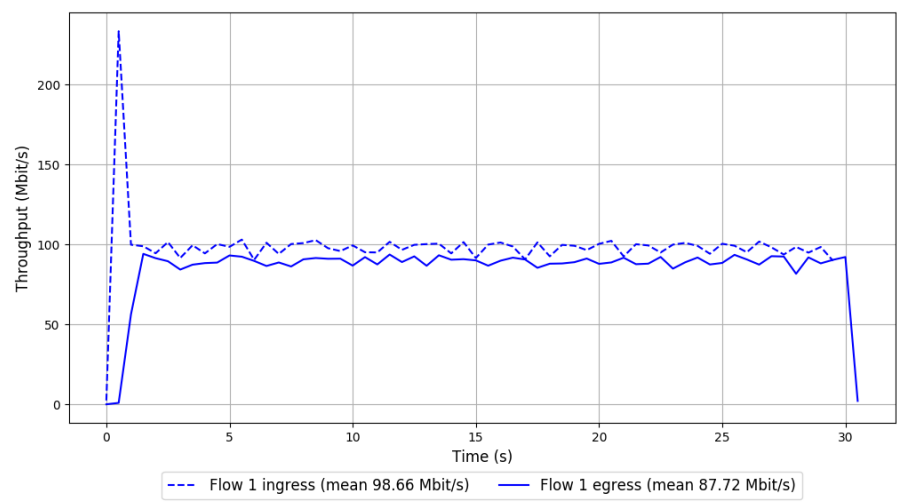Run 6: Report of FillP — Data Link

```
Run 7: Statistics of FillP

Start at: 2018-05-24 05:36:35
End at: 2018-05-24 05:37:05
Local clock offset: 3.779 ms
Remote clock offset: -0.787 ms


# Below is generated by plot.py at 2018-05-24 07:01:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.72 Mbit/s
95th percentile per-packet one-way delay: 71.682 ms
Loss rate: 11.07%
-- Flow 1:
Average throughput: 87.72 Mbit/s
95th percentile per-packet one-way delay: 71.682 ms
Loss rate: 11.07%
```
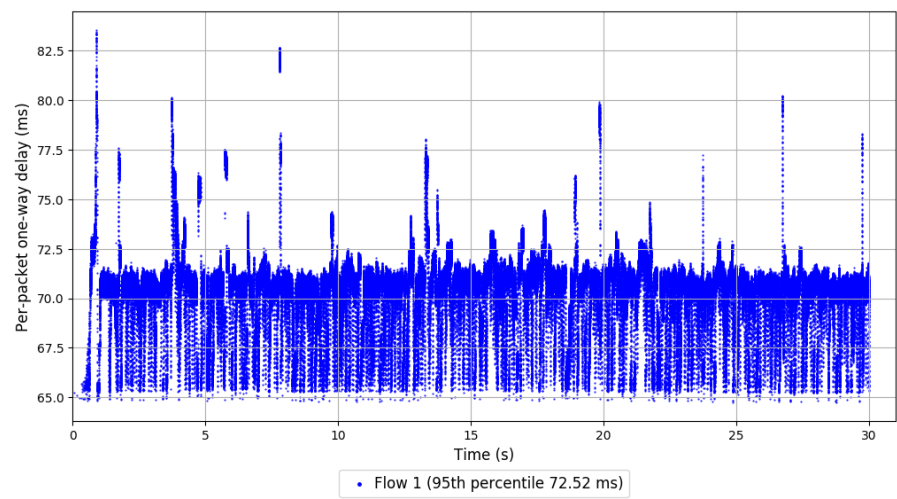
Run 7: Report of FillP — Data Link

Flow 1 ingress (mean 98.66 Mbit/s)   Flow 1 egress (mean 87.72 Mbit/s)

Flow 1 (95th percentile 71.68 ms)

```
Run 8: Statistics of FillP

Start at: 2018-05-24 05:57:03
End at: 2018-05-24 05:57:33
Local clock offset: 4.01 ms
Remote clock offset: 0.338 ms


# Below is generated by plot.py at 2018-05-24 07:01:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.32 Mbit/s
95th percentile per-packet one-way delay: 72.516 ms
Loss rate: 12.10%
-- Flow 1:
Average throughput: 82.32 Mbit/s
95th percentile per-packet one-way delay: 72.516 ms
Loss rate: 12.10%
```
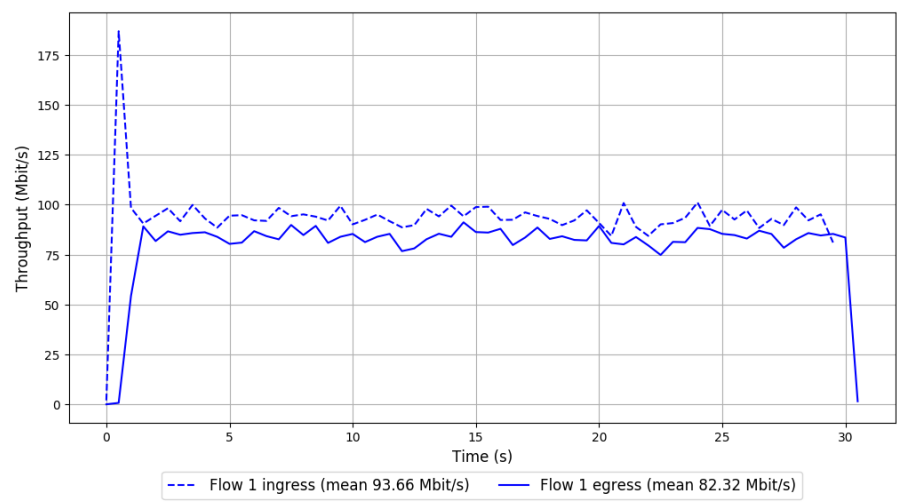
Run 8: Report of FillP — Data Link

```
Run 9: Statistics of FillP

Start at: 2018-05-24 06:17:32
End at: 2018-05-24 06:18:02
Local clock offset: 2.288 ms
Remote clock offset: 0.951 ms


# Below is generated by plot.py at 2018-05-24 07:01:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.74 Mbit/s
95th percentile per-packet one-way delay: 77.178 ms
Loss rate: 12.13%
-- Flow 1:
Average throughput: 79.74 Mbit/s
95th percentile per-packet one-way delay: 77.178 ms
Loss rate: 12.13%
```
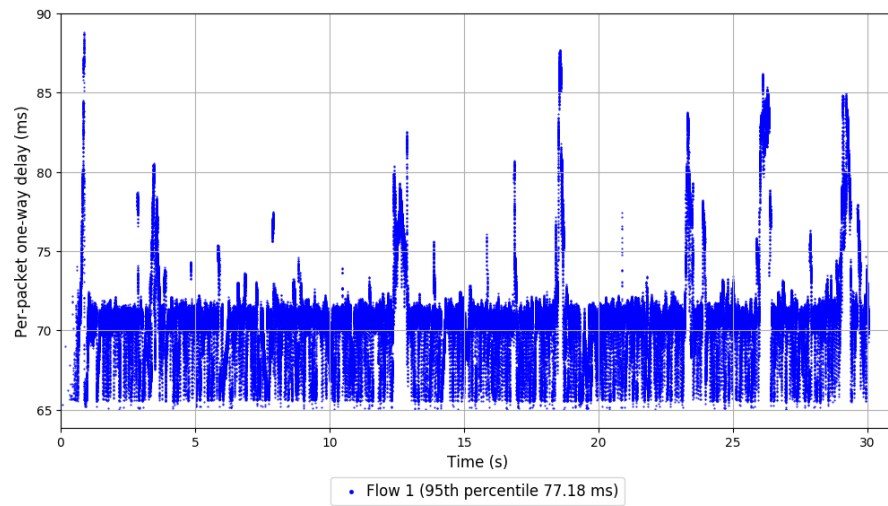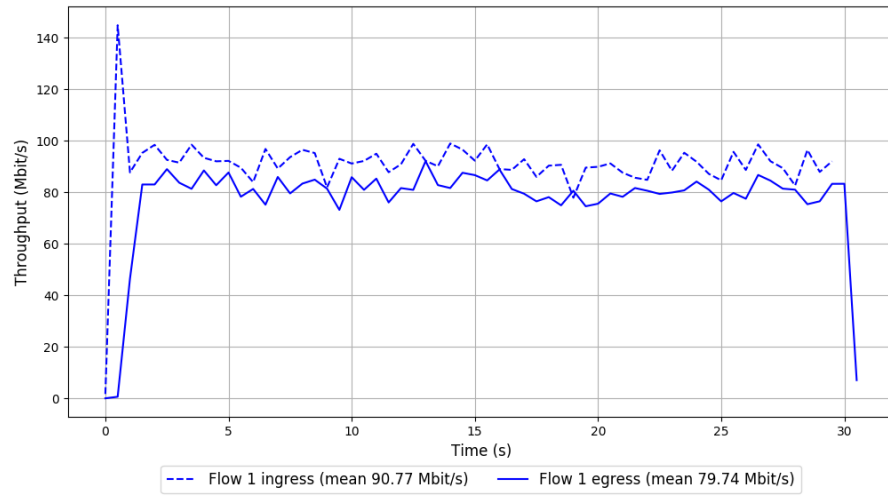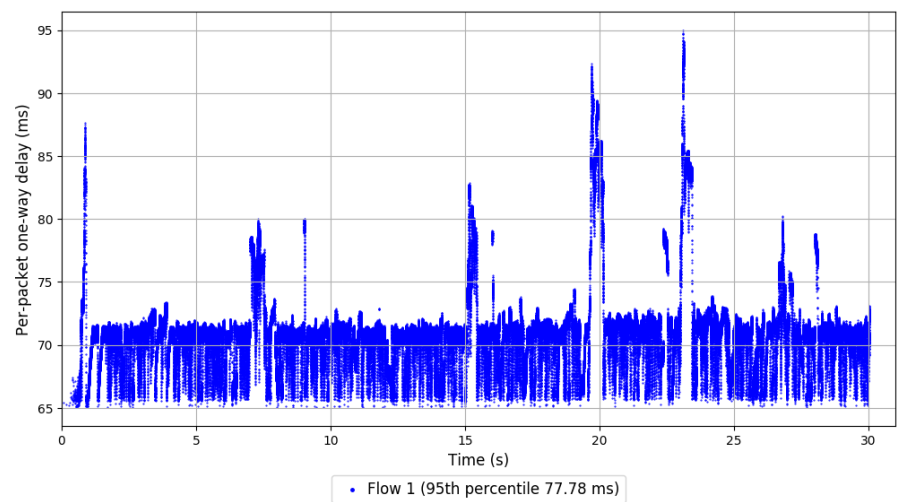
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 90.77 Mbit/s)   Flow 1 egress (mean 79.74 Mbit/s)

Flow 1 (95th percentile 77.18 ms)

```
Run 10: Statistics of FillP

Start at: 2018-05-24 06:38:02
End at: 2018-05-24 06:38:32
Local clock offset: 3.849 ms
Remote clock offset: 1.575 ms


# Below is generated by plot.py at 2018-05-24 07:01:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.87 Mbit/s
95th percentile per-packet one-way delay: 77.780 ms
Loss rate: 11.24%
-- Flow 1:
Average throughput: 85.87 Mbit/s
95th percentile per-packet one-way delay: 77.780 ms
Loss rate: 11.24%
```
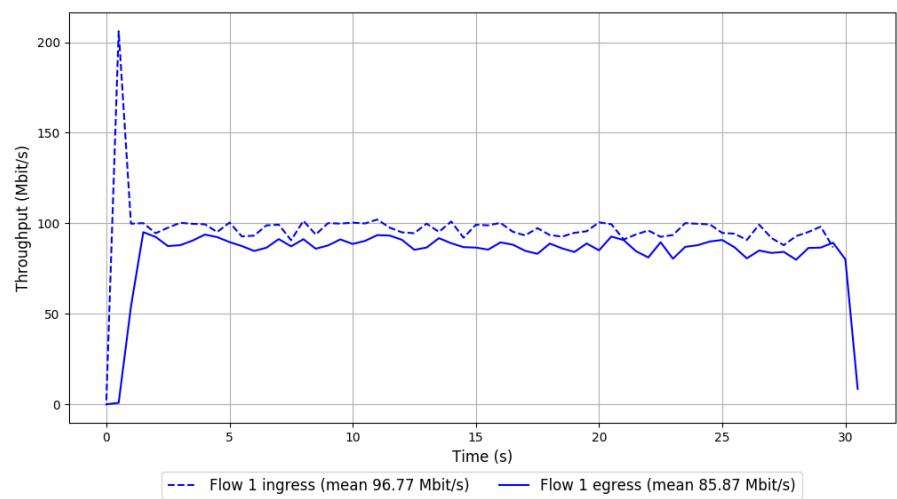
Run 10: Report of FillP — Data Link

```
Run 1: Statistics of Indigo

Start at: 2018-05-24 03:30:57
End at: 2018-05-24 03:31:27
Local clock offset: 3.462 ms
Remote clock offset: 0.253 ms


# Below is generated by plot.py at 2018-05-24 07:01:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 71.809 ms
Loss rate: 5.98%
-- Flow 1:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 71.809 ms
Loss rate: 5.98%
```
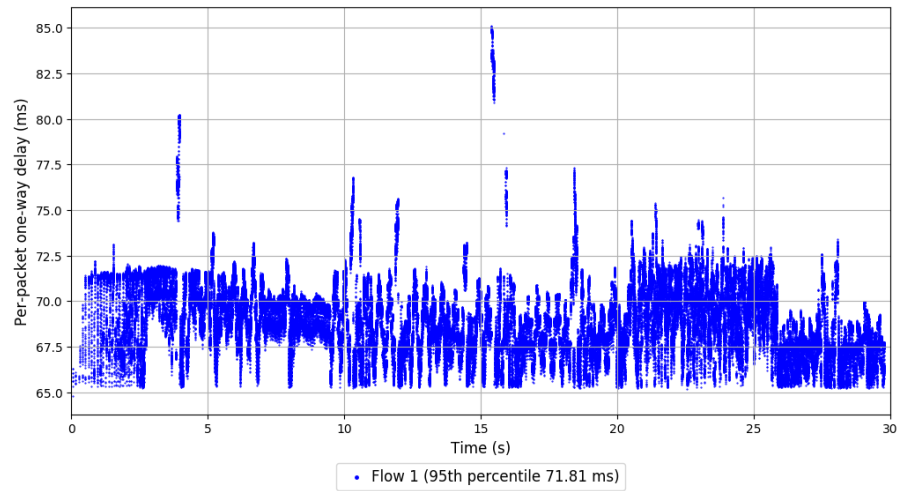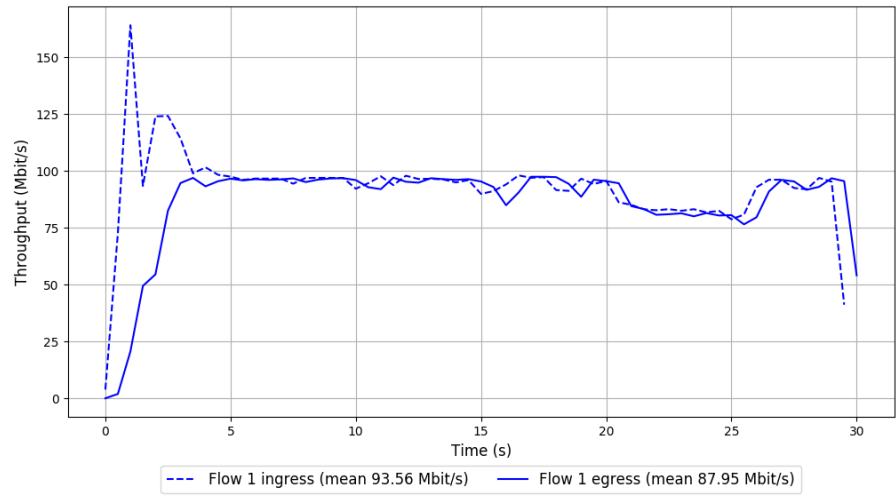
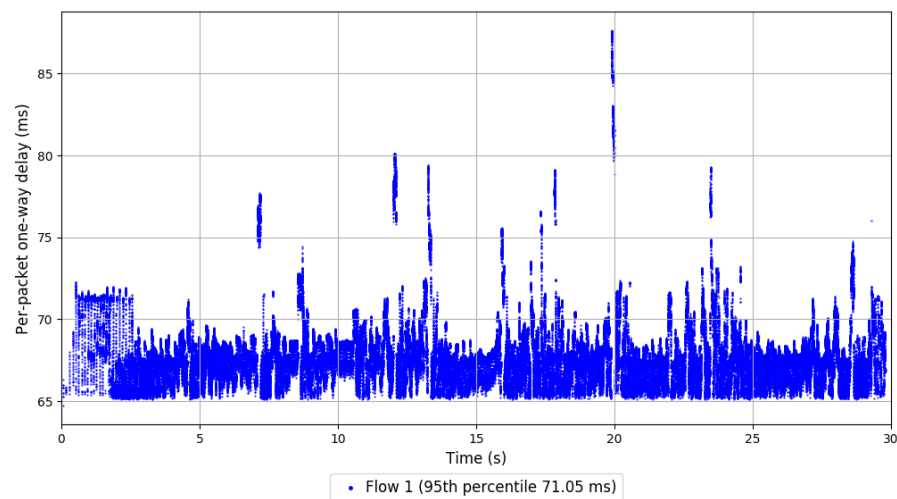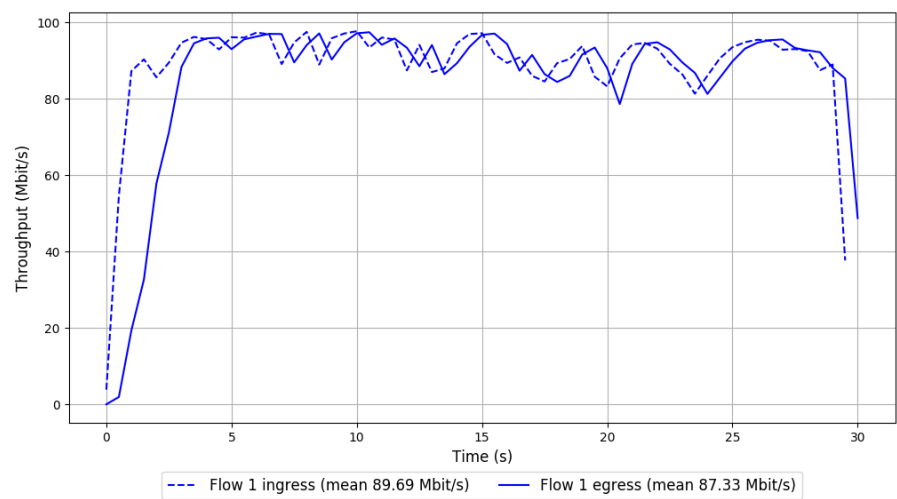Run 1: Report of Indigo — Data Link

```
Run 2: Statistics of Indigo

Start at: 2018-05-24 03:51:28
End at: 2018-05-24 03:51:58
Local clock offset: 2.557 ms
Remote clock offset: -0.026 ms


# Below is generated by plot.py at 2018-05-24 07:01:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.33 Mbit/s
95th percentile per-packet one-way delay: 71.051 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 87.33 Mbit/s
95th percentile per-packet one-way delay: 71.051 ms
Loss rate: 2.62%
```

Run 2: Report of Indigo — Data Link

```
Run 3: Statistics of Indigo

Start at: 2018-05-24 04:12:04
End at: 2018-05-24 04:12:34
Local clock offset: 1.103 ms
Remote clock offset: 0.244 ms


# Below is generated by plot.py at 2018-05-24 07:01:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.60 Mbit/s
95th percentile per-packet one-way delay: 72.234 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 78.60 Mbit/s
95th percentile per-packet one-way delay: 72.234 ms
Loss rate: 2.56%
```
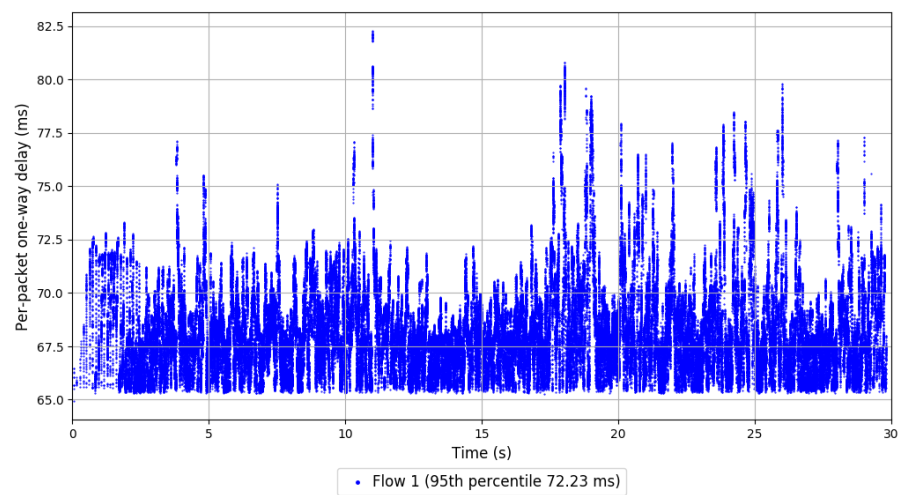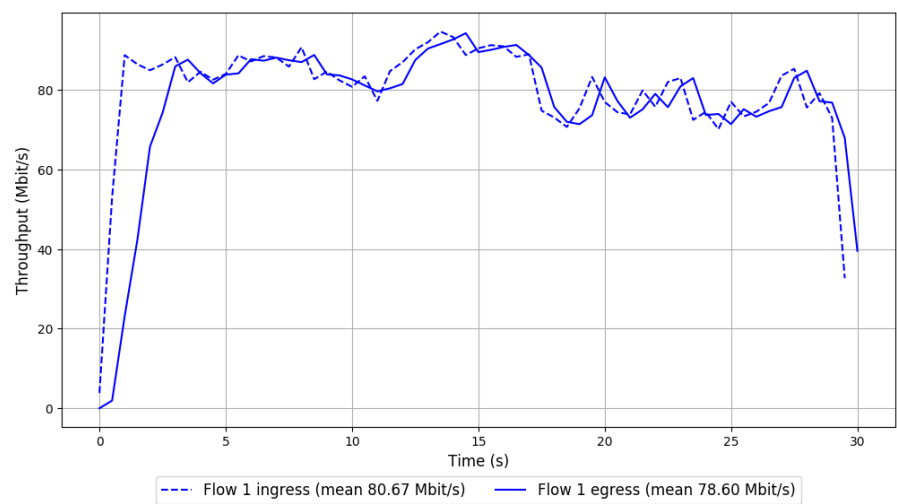
Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 80.67 Mbit/s) ---- Flow 1 egress (mean 78.60 Mbit/s)

Flow 1 (95th percentile 72.23 ms)

```
Run 4: Statistics of Indigo

Start at: 2018-05-24 04:33:08
End at: 2018-05-24 04:33:39
Local clock offset: 0.525 ms
Remote clock offset: 0.194 ms


# Below is generated by plot.py at 2018-05-24 07:01:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.53 Mbit/s
95th percentile per-packet one-way delay: 72.510 ms
Loss rate: 4.23%
-- Flow 1:
Average throughput: 82.53 Mbit/s
95th percentile per-packet one-way delay: 72.510 ms
Loss rate: 4.23%
```
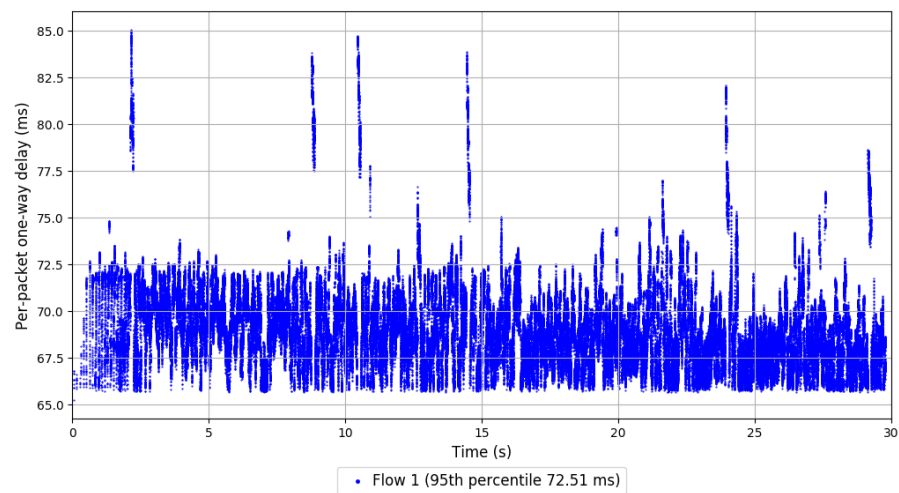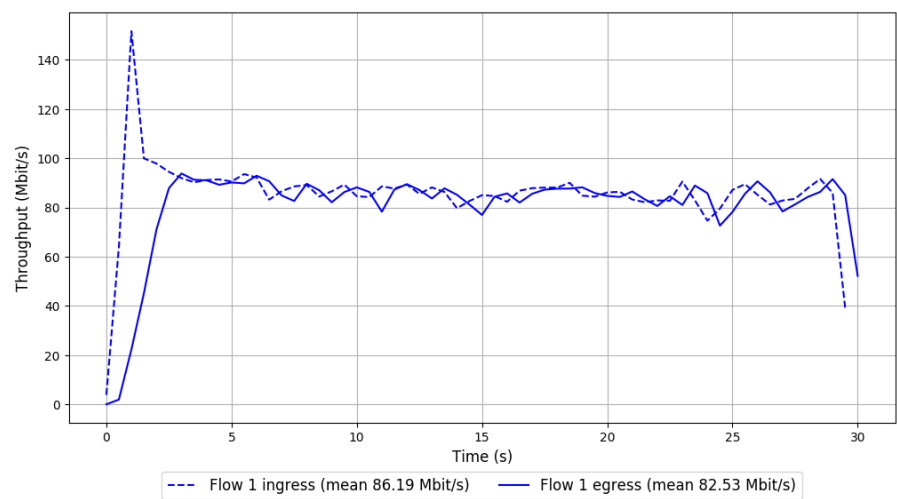
Run 4: Report of Indigo — Data Link

Flow 1 ingress (mean 86.19 Mbit/s)   Flow 1 egress (mean 82.53 Mbit/s)

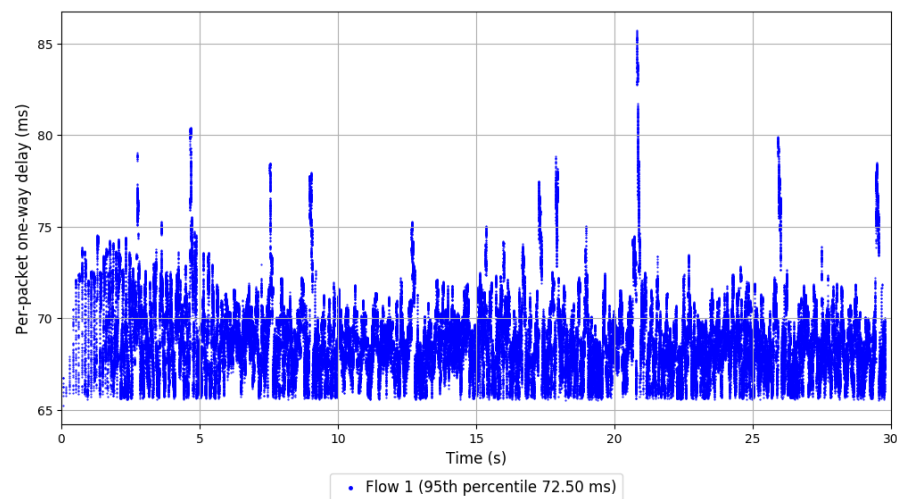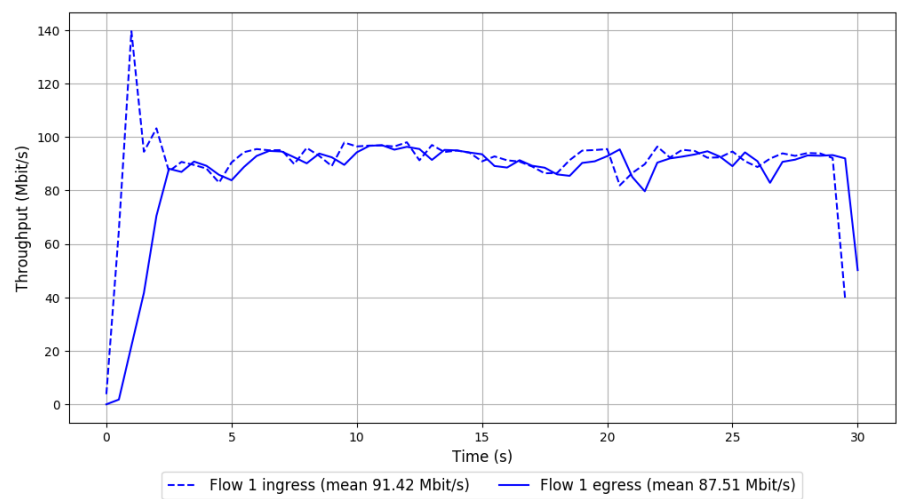Flow 1 (95th percentile 72.51 ms)

```
Run 5: Statistics of Indigo

Start at: 2018-05-24 04:54:16
End at: 2018-05-24 04:54:46
Local clock offset: 0.393 ms
Remote clock offset: -0.285 ms


# Below is generated by plot.py at 2018-05-24 07:02:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.51 Mbit/s
95th percentile per-packet one-way delay: 72.503 ms
Loss rate: 4.27%
-- Flow 1:
Average throughput: 87.51 Mbit/s
95th percentile per-packet one-way delay: 72.503 ms
Loss rate: 4.27%
```

Run 5: Report of Indigo — Data Link

Flow 1 ingress (mean 91.42 Mbit/s) ---- Flow 1 egress (mean 87.51 Mbit/s) ——

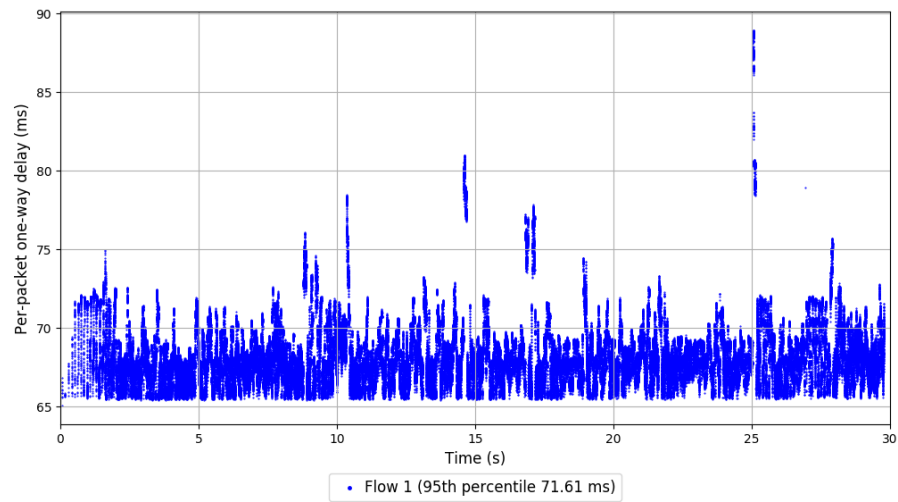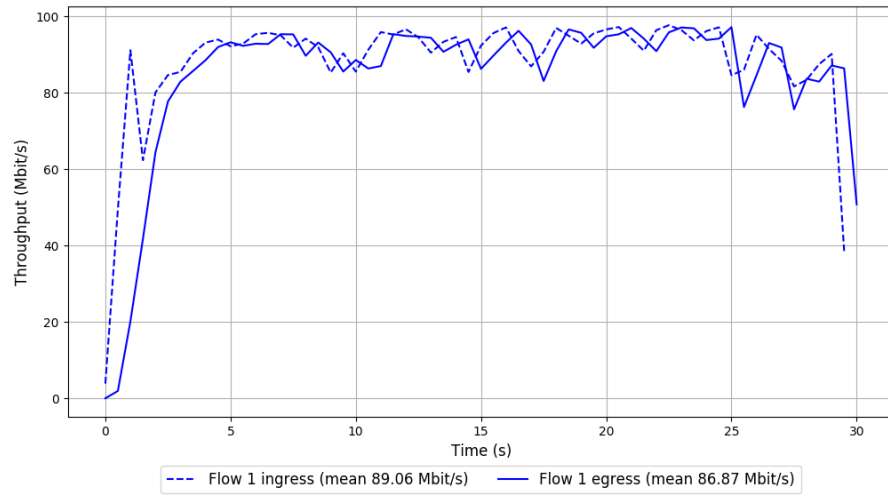Flow 1 (95th percentile 72.50 ms)

```
Run 6: Statistics of Indigo

Start at: 2018-05-24 05:14:47
End at: 2018-05-24 05:15:17
Local clock offset: 3.225 ms
Remote clock offset: -0.628 ms


# Below is generated by plot.py at 2018-05-24 07:02:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.87 Mbit/s
95th percentile per-packet one-way delay: 71.613 ms
Loss rate: 2.45%
-- Flow 1:
Average throughput: 86.87 Mbit/s
95th percentile per-packet one-way delay: 71.613 ms
Loss rate: 2.45%
```

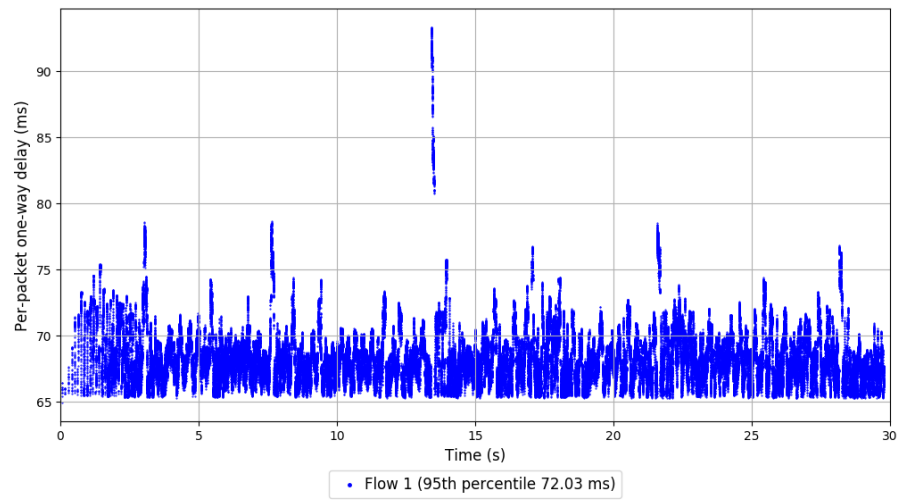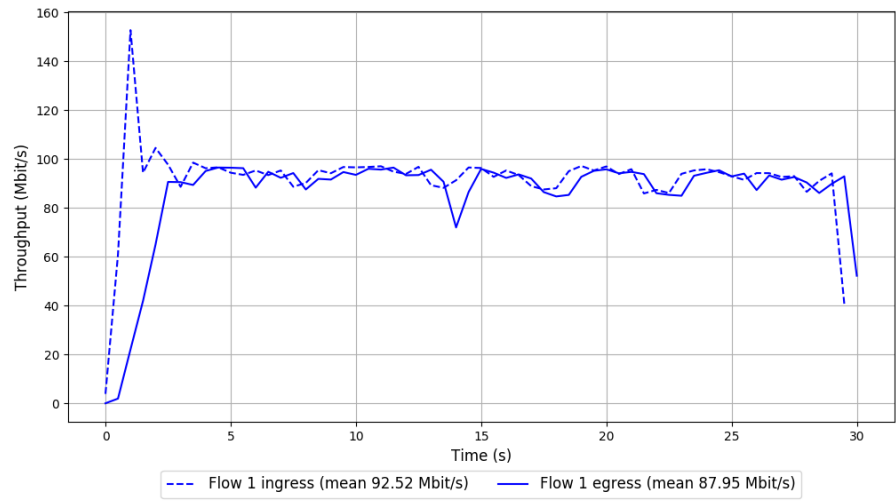Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2018-05-24 05:35:15
End at: 2018-05-24 05:35:45
Local clock offset: 3.635 ms
Remote clock offset: -0.863 ms


# Below is generated by plot.py at 2018-05-24 07:02:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 72.035 ms
Loss rate: 4.93%
-- Flow 1:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 72.035 ms
Loss rate: 4.93%
```

Run 7: Report of Indigo — Data Link

Flow 1 ingress (mean 92.52 Mbit/s)　　Flow 1 egress (mean 87.95 Mbit/s)

Flow 1 (95th percentile 72.03 ms)

```
Run 8: Statistics of Indigo

Start at: 2018-05-24 05:55:43
End at: 2018-05-24 05:56:13
Local clock offset: 4.349 ms
Remote clock offset: 0.292 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.79 Mbit/s
95th percentile per-packet one-way delay: 72.945 ms
Loss rate: 4.77%
-- Flow 1:
Average throughput: 88.79 Mbit/s
95th percentile per-packet one-way delay: 72.945 ms
Loss rate: 4.77%
```
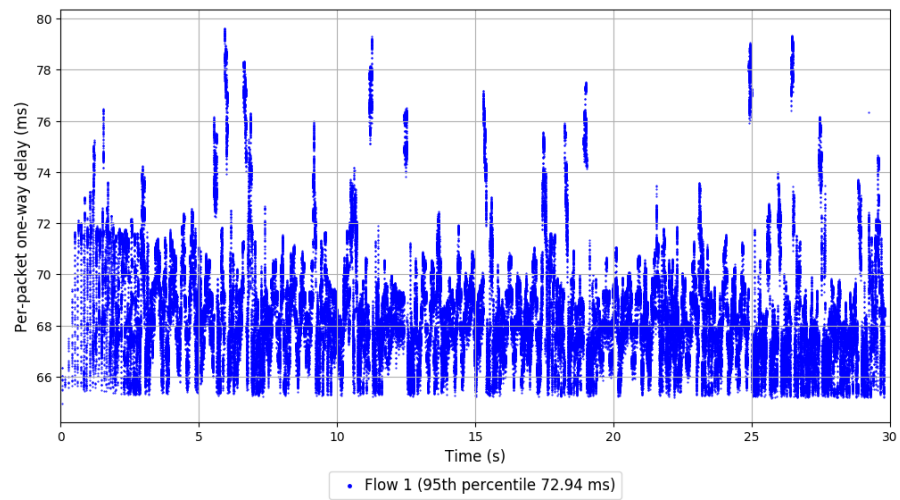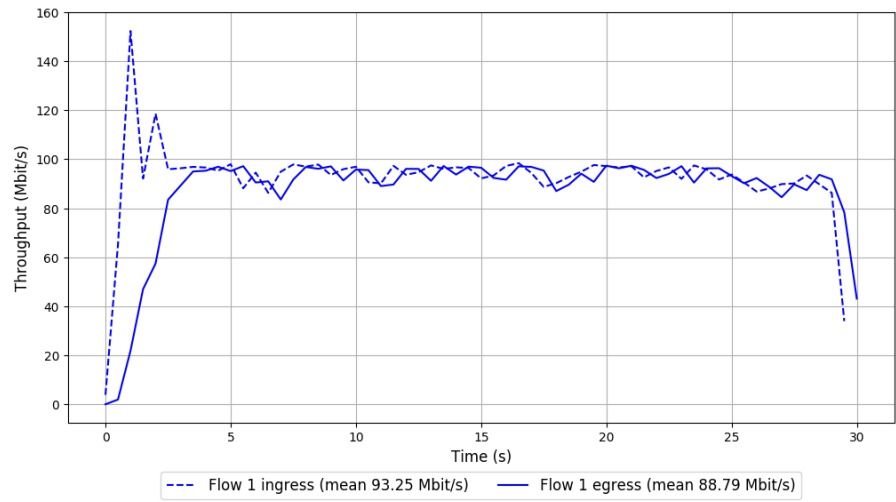
Run 8: Report of Indigo — Data Link

```
Run 9: Statistics of Indigo

Start at: 2018-05-24 06:16:13
End at: 2018-05-24 06:16:43
Local clock offset: 2.572 ms
Remote clock offset: 0.762 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.58 Mbit/s
95th percentile per-packet one-way delay: 77.276 ms
Loss rate: 4.57%
-- Flow 1:
Average throughput: 57.58 Mbit/s
95th percentile per-packet one-way delay: 77.276 ms
Loss rate: 4.57%
```
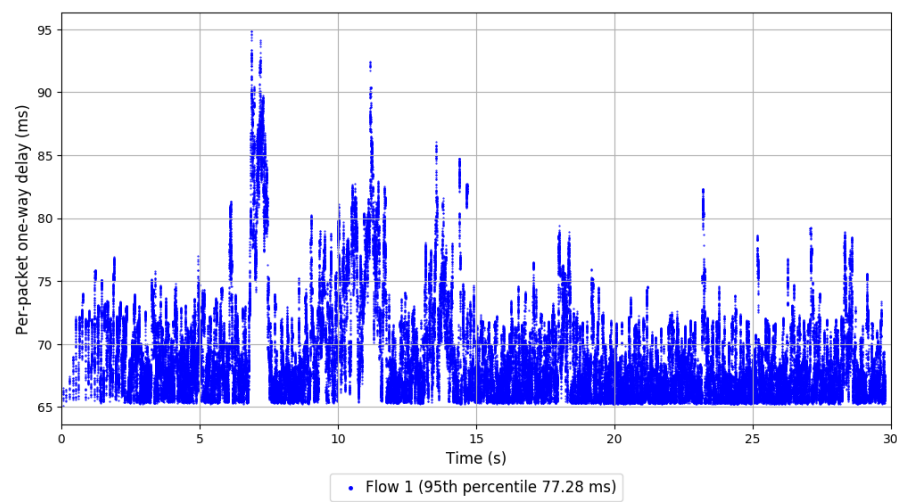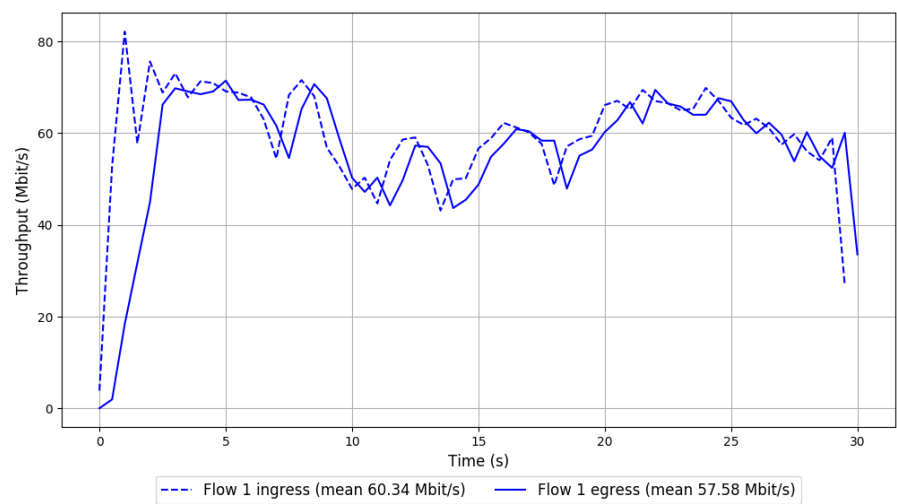
Run 9: Report of Indigo — Data Link

```
Run 10: Statistics of Indigo

Start at: 2018-05-24 06:36:43
End at: 2018-05-24 06:37:13
Local clock offset: 3.718 ms
Remote clock offset: 1.386 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.35 Mbit/s
95th percentile per-packet one-way delay: 73.239 ms
Loss rate: 8.30%
-- Flow 1:
Average throughput: 64.35 Mbit/s
95th percentile per-packet one-way delay: 73.239 ms
Loss rate: 8.30%
```
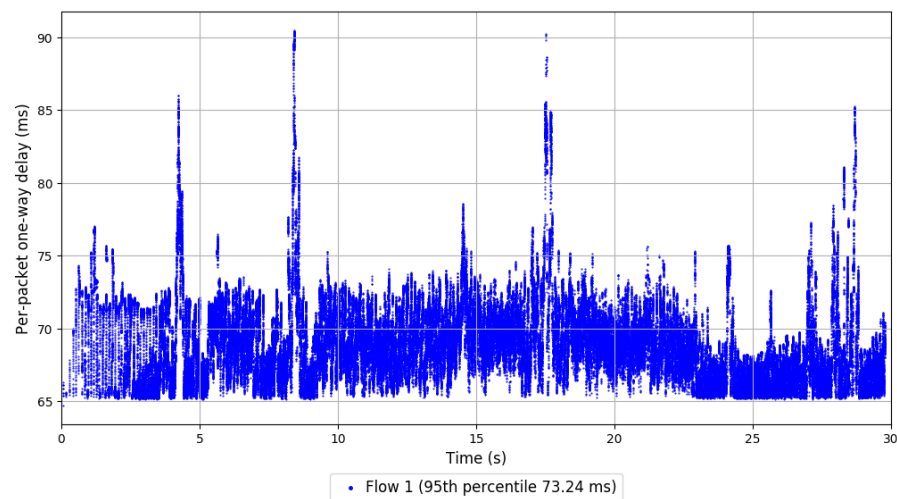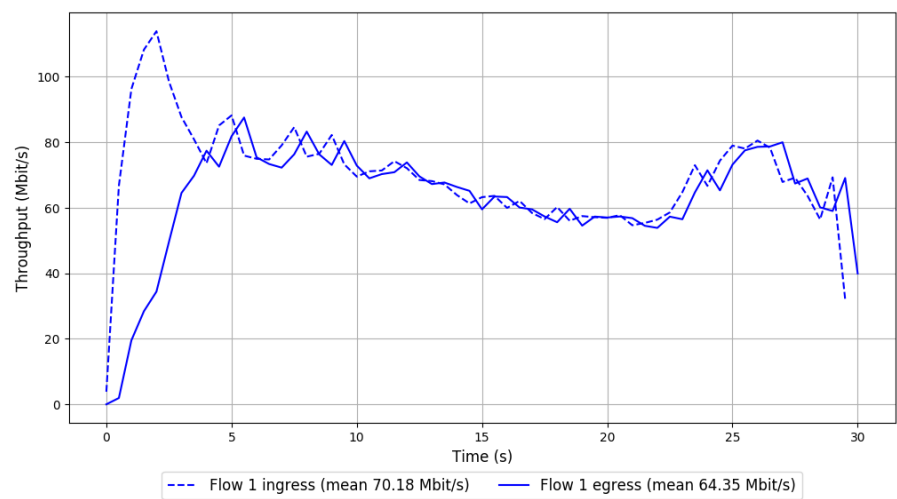
Run 10: Report of Indigo — Data Link

Flow 1 ingress (mean 70.18 Mbit/s)   —— Flow 1 egress (mean 64.35 Mbit/s)

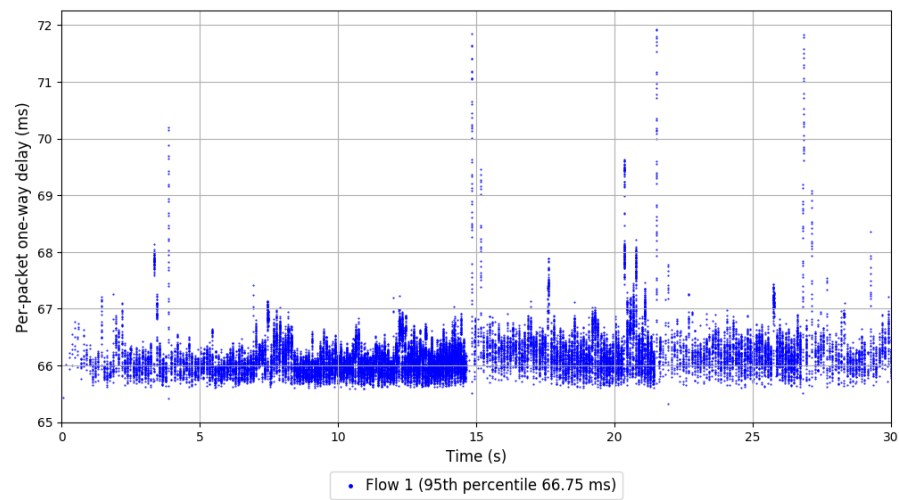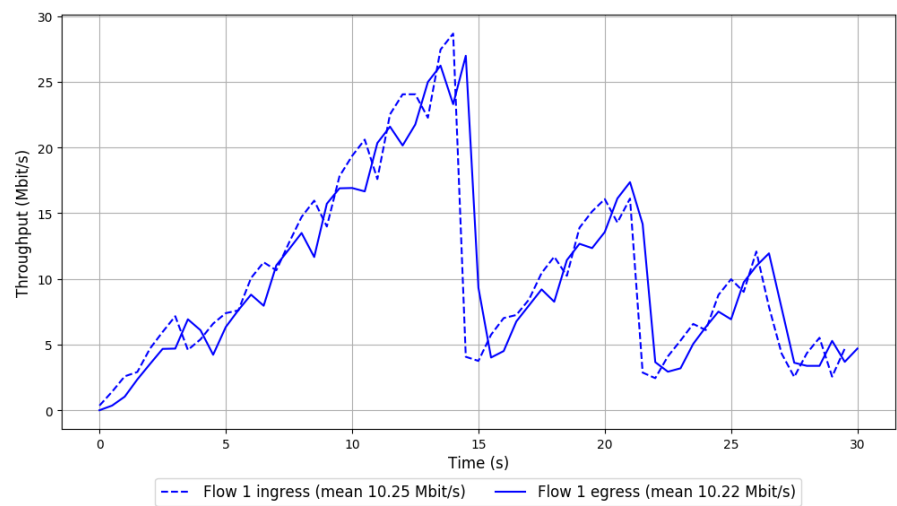• Flow 1 (95th percentile 73.24 ms)

103

```
Run 1: Statistics of LEDBAT

Start at: 2018-05-24 03:37:28
End at: 2018-05-24 03:37:58
Local clock offset: 2.691 ms
Remote clock offset: 0.111 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.22 Mbit/s
95th percentile per-packet one-way delay: 66.754 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 10.22 Mbit/s
95th percentile per-packet one-way delay: 66.754 ms
Loss rate: 0.21%
```

Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 10.25 Mbit/s) --- Flow 1 egress (mean 10.22 Mbit/s)

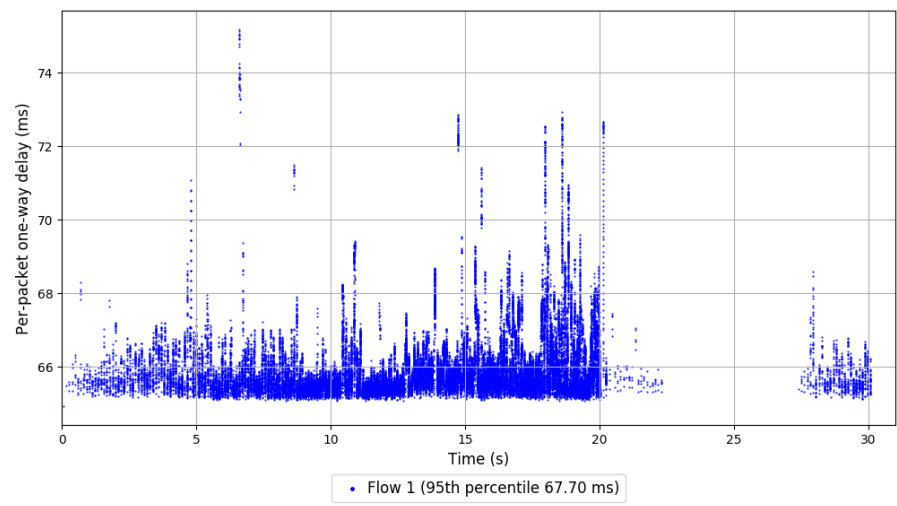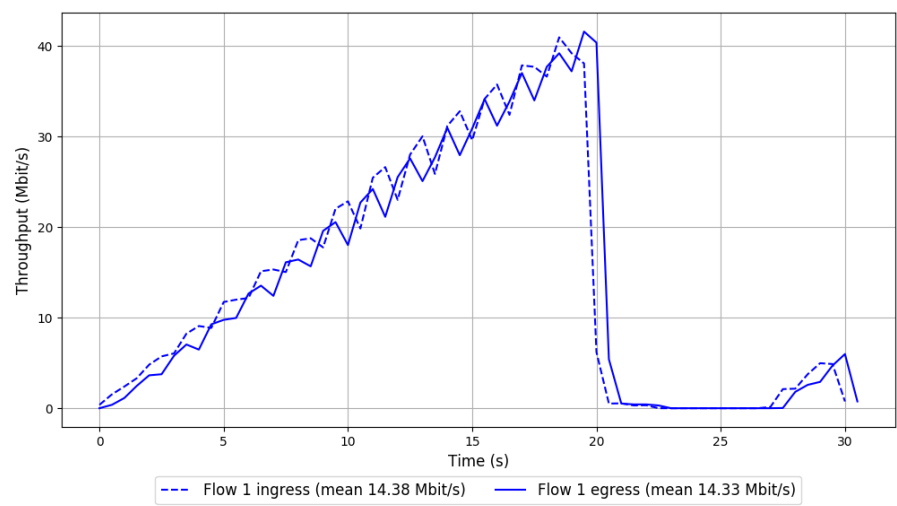Flow 1 (95th percentile 66.75 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2018-05-24 03:58:00
End at: 2018-05-24 03:58:30
Local clock offset: 2.072 ms
Remote clock offset: -0.033 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.33 Mbit/s
95th percentile per-packet one-way delay: 67.703 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 14.33 Mbit/s
95th percentile per-packet one-way delay: 67.703 ms
Loss rate: 0.35%
```

Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-05-24 04:18:35
End at: 2018-05-24 04:19:05
Local clock offset: 0.615 ms
Remote clock offset: 0.366 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 67.204 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 67.204 ms
Loss rate: 0.20%
```
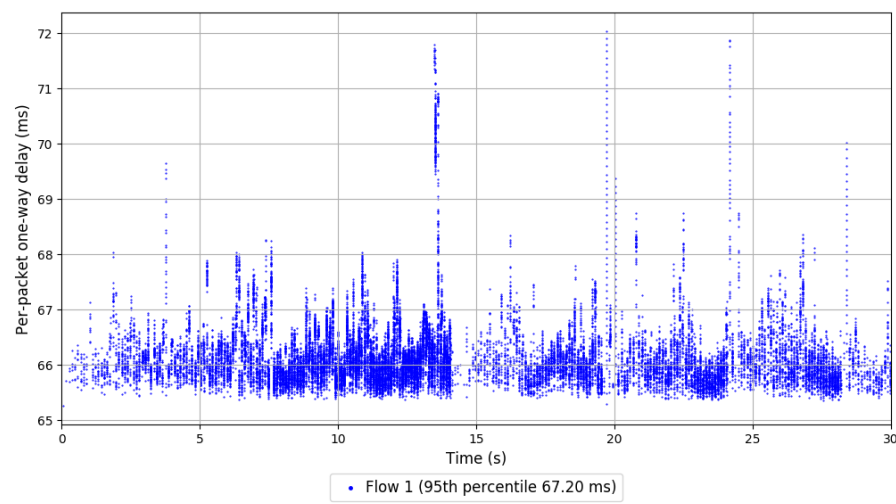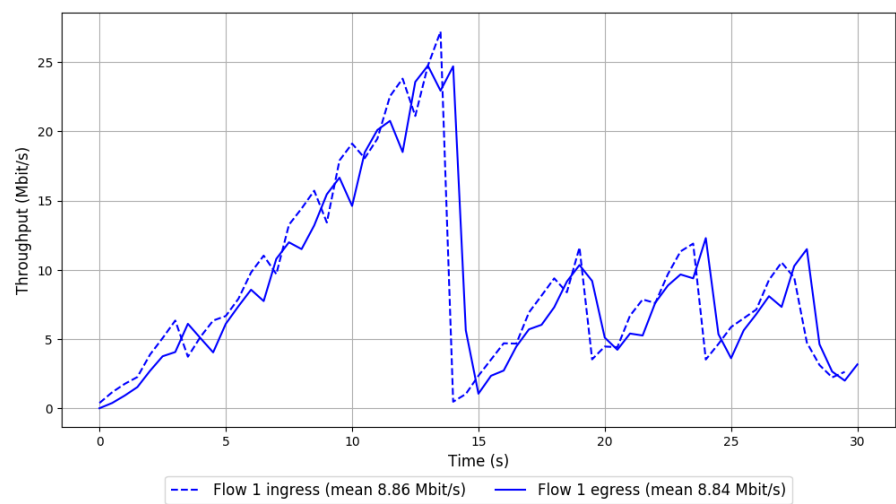
Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 8.86 Mbit/s) — — — Flow 1 egress (mean 8.84 Mbit/s)

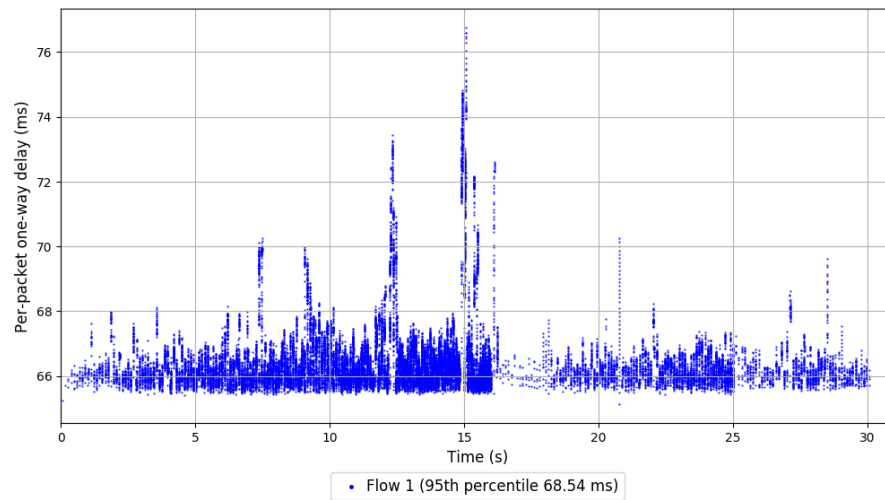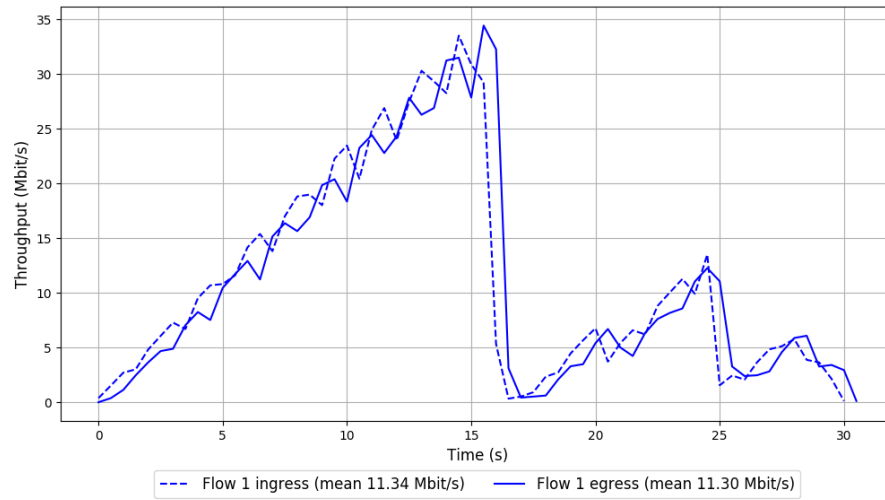Flow 1 (95th percentile 67.20 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2018-05-24 04:40:05
End at: 2018-05-24 04:40:35
Local clock offset: 0.469 ms
Remote clock offset: -0.013 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.30 Mbit/s
95th percentile per-packet one-way delay: 68.538 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 11.30 Mbit/s
95th percentile per-packet one-way delay: 68.538 ms
Loss rate: 0.39%
```

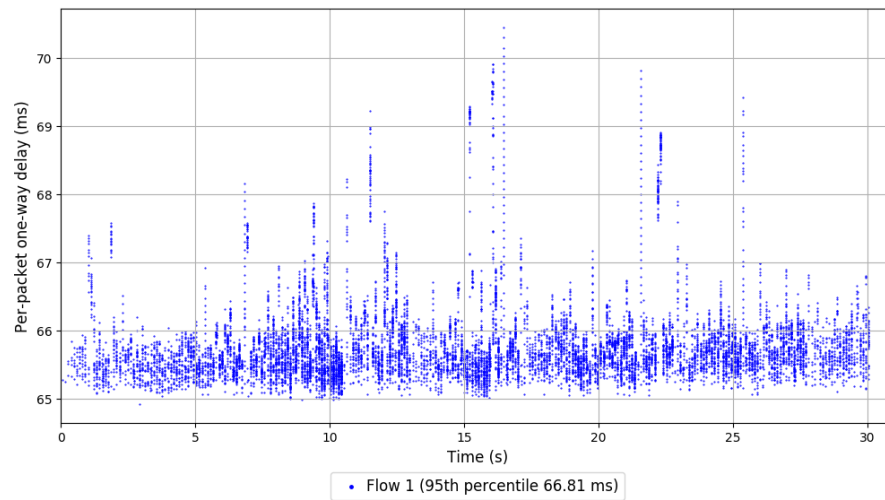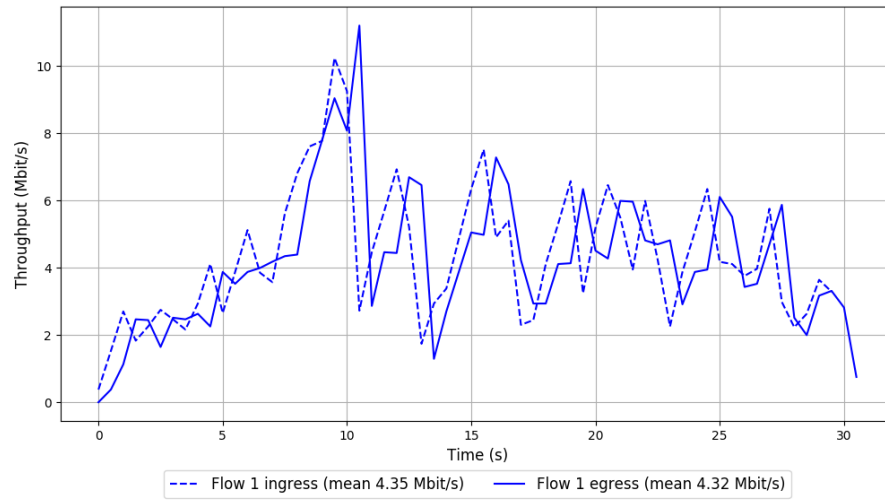# Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-05-24 05:00:46
End at: 2018-05-24 05:01:16
Local clock offset: 1.344 ms
Remote clock offset: -1.209 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 66.807 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 66.807 ms
Loss rate: 0.54%
```

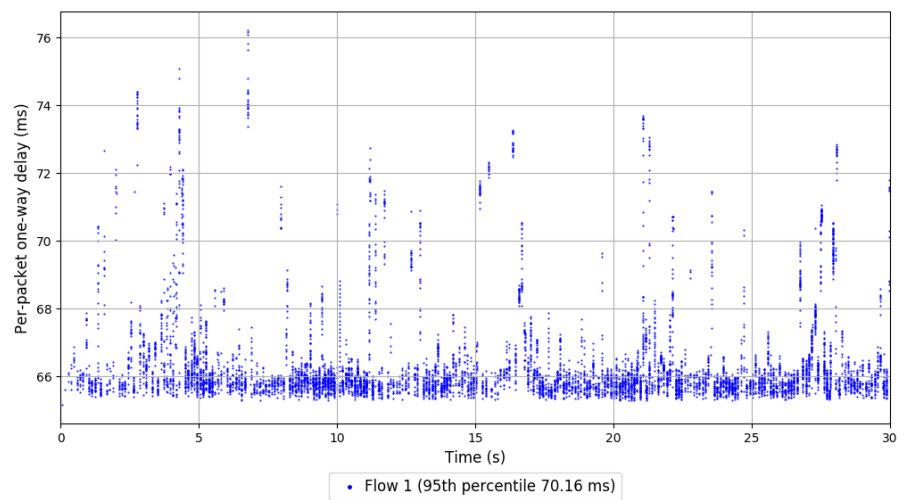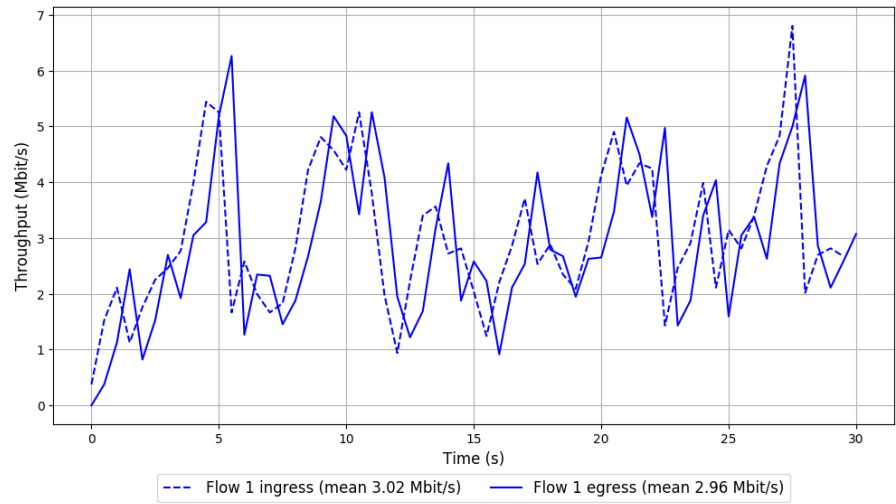Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2018-05-24 05:21:18
End at: 2018-05-24 05:21:48
Local clock offset: 3.395 ms
Remote clock offset: -0.611 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 70.158 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 70.158 ms
Loss rate: 2.01%
```

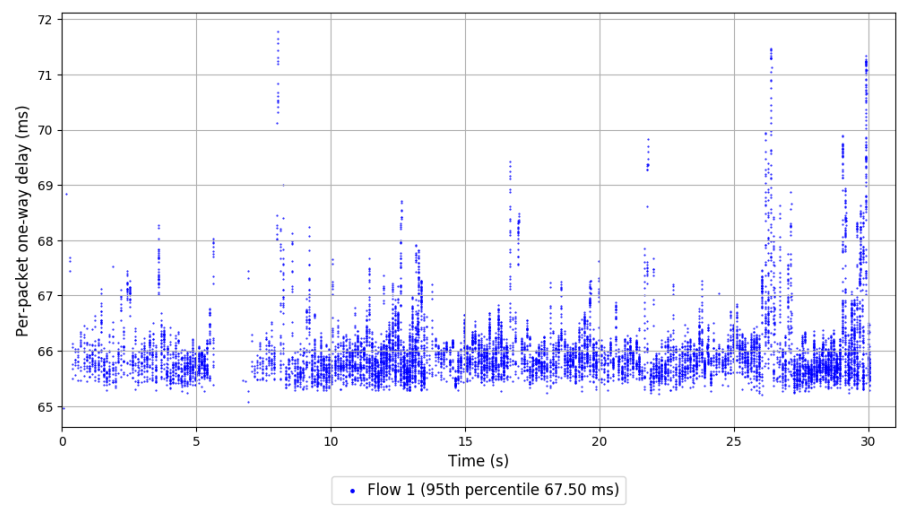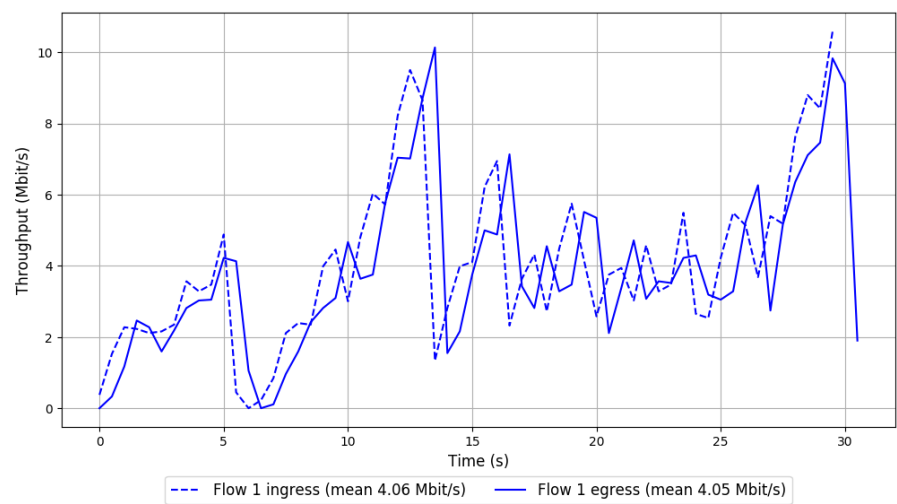Run 6: Report of LEDBAT — Data Link

```
Run 7: Statistics of LEDBAT

Start at: 2018-05-24 05:41:46
End at: 2018-05-24 05:42:16
Local clock offset: 3.875 ms
Remote clock offset: -0.315 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 67.505 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 67.505 ms
Loss rate: 0.45%
```

Run 7: Report of LEDBAT — Data Link

```
Run 8: Statistics of LEDBAT

Start at: 2018-05-24 06:02:12
End at: 2018-05-24 06:02:42
Local clock offset: 3.122 ms
Remote clock offset: 0.45 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.33 Mbit/s
95th percentile per-packet one-way delay: 67.078 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 3.33 Mbit/s
95th percentile per-packet one-way delay: 67.078 ms
Loss rate: 0.93%
```
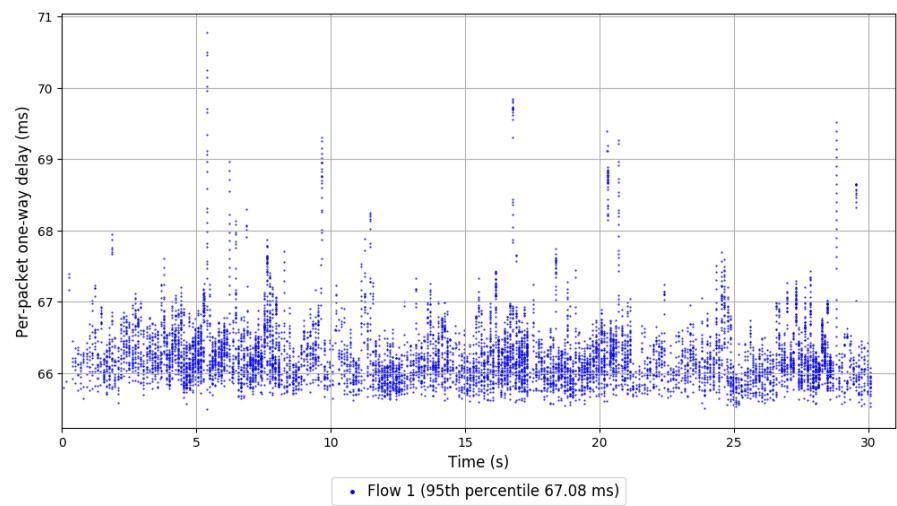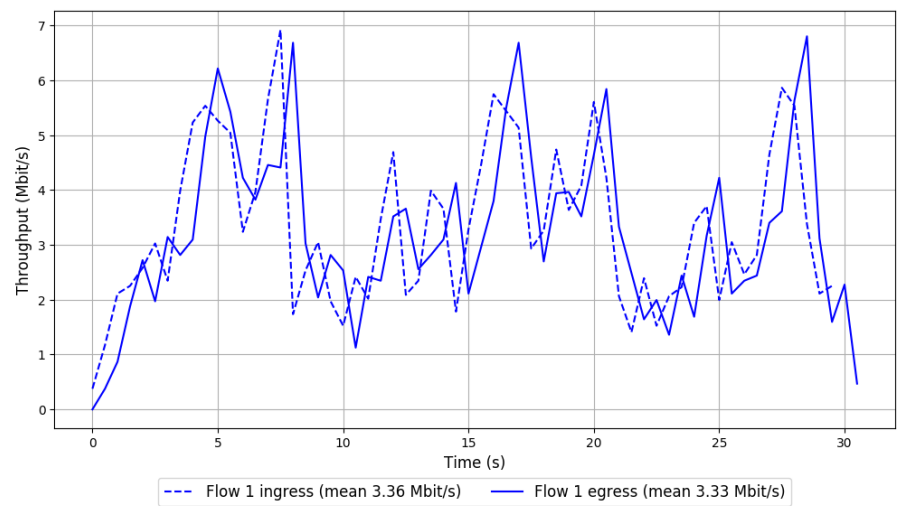
Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 3.36 Mbit/s)   Flow 1 egress (mean 3.33 Mbit/s)

Flow 1 (95th percentile 67.08 ms)

```
Run 9: Statistics of LEDBAT

Start at: 2018-05-24 06:22:40
End at: 2018-05-24 06:23:10
Local clock offset: 2.459 ms
Remote clock offset: 1.115 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 67.729 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 67.729 ms
Loss rate: 1.43%
```
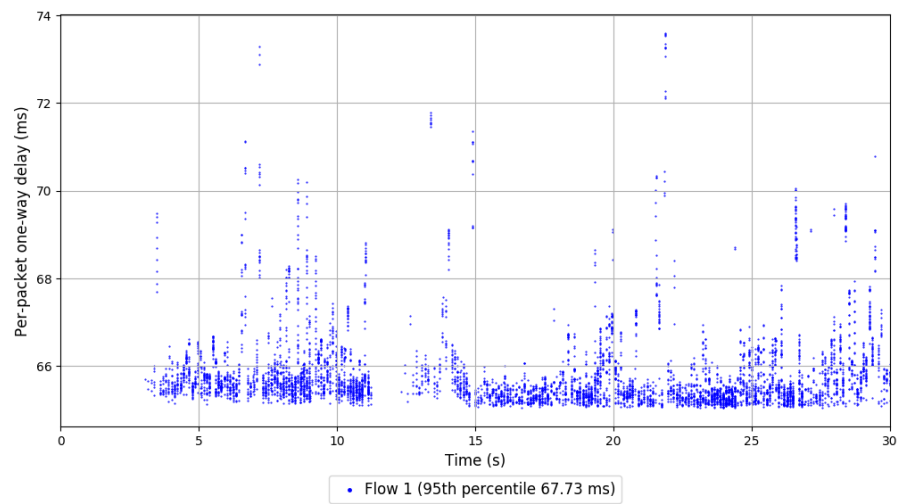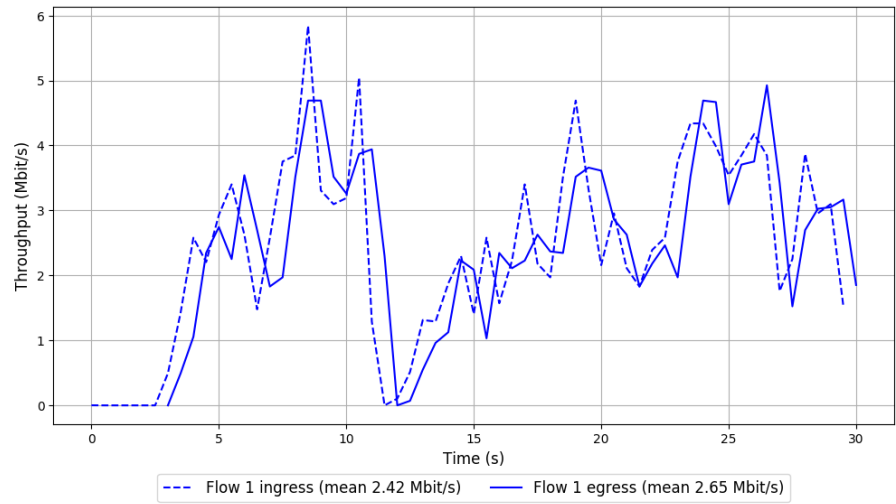
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 2.42 Mbit/s)   Flow 1 egress (mean 2.65 Mbit/s)

• Flow 1 (95th percentile 67.73 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2018-05-24 06:43:12
End at: 2018-05-24 06:43:42
Local clock offset: 4.111 ms
Remote clock offset: 1.554 ms


# Below is generated by plot.py at 2018-05-24 07:02:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 67.138 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 67.138 ms
Loss rate: 0.54%
```
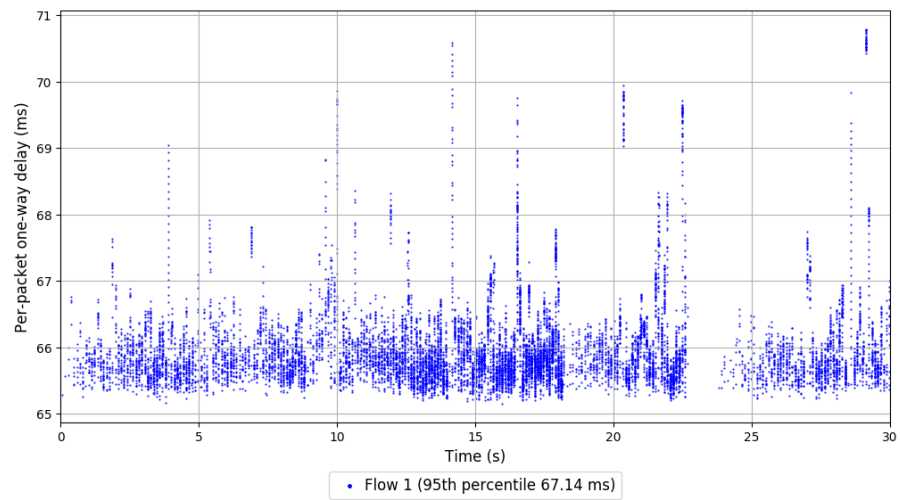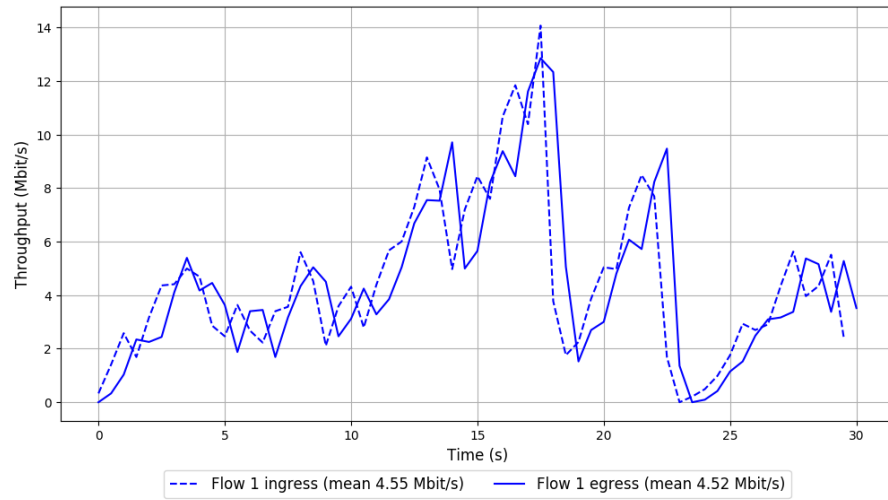
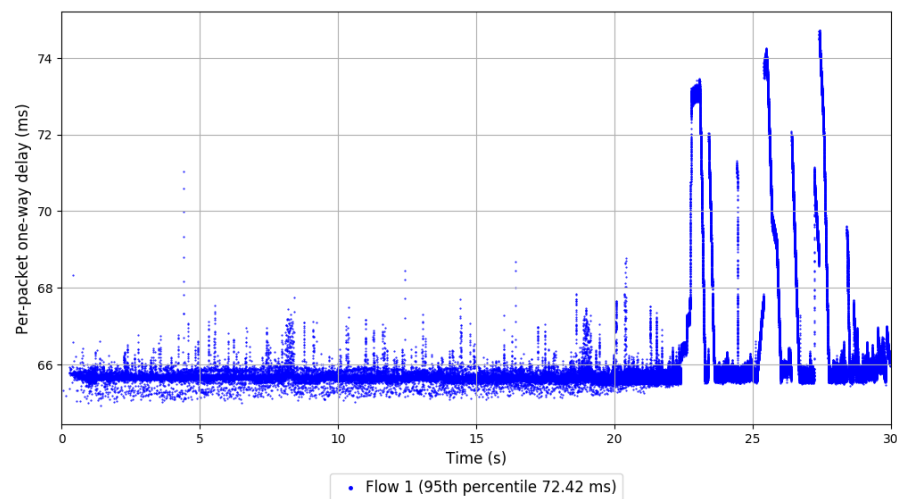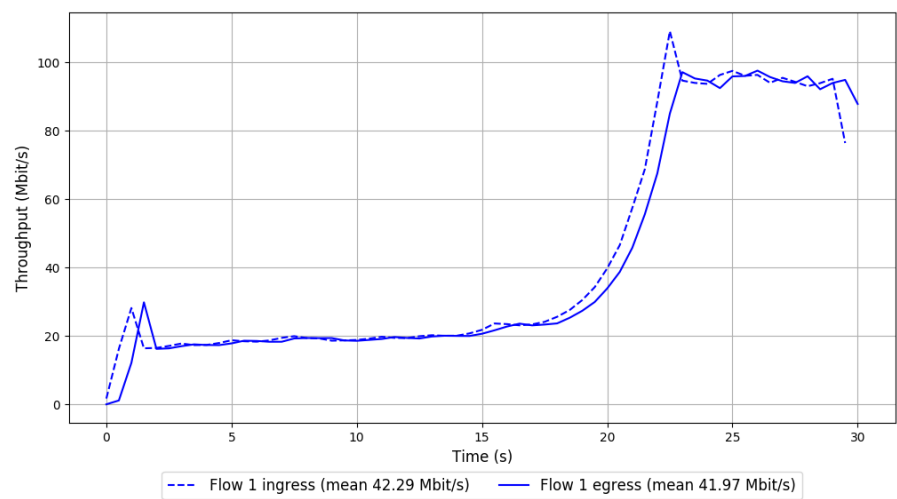# Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-05-24 03:38:44
End at: 2018-05-24 03:39:14
Local clock offset: 2.706 ms
Remote clock offset: 0.082 ms


# Below is generated by plot.py at 2018-05-24 07:03:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.97 Mbit/s
95th percentile per-packet one-way delay: 72.424 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 41.97 Mbit/s
95th percentile per-packet one-way delay: 72.424 ms
Loss rate: 0.75%
```

Run 1: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 42.29 Mbit/s)   Flow 1 egress (mean 41.97 Mbit/s)

• Flow 1 (95th percentile 72.42 ms)

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-05-24 03:59:16
End at: 2018-05-24 03:59:46
Local clock offset: 1.94 ms
Remote clock offset: 0.075 ms


# Below is generated by plot.py at 2018-05-24 07:03:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.82 Mbit/s
95th percentile per-packet one-way delay: 69.737 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 75.82 Mbit/s
95th percentile per-packet one-way delay: 69.737 ms
Loss rate: 1.07%
```
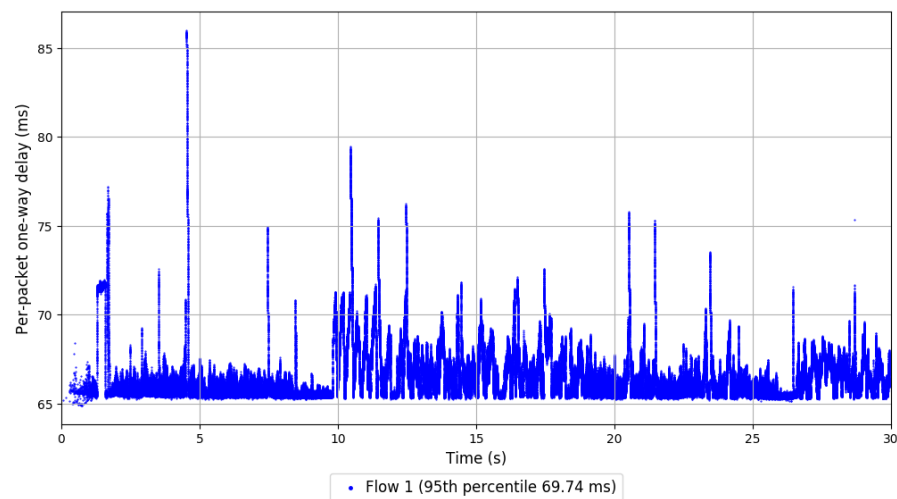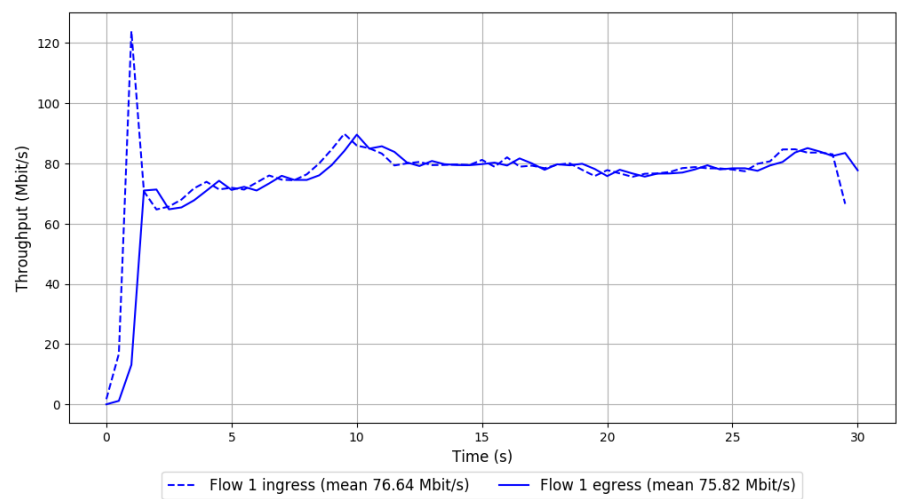
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 76.64 Mbit/s)   Flow 1 egress (mean 75.82 Mbit/s)

Flow 1 (95th percentile 69.74 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-05-24 04:19:51
End at: 2018-05-24 04:20:21
Local clock offset: 0.69 ms
Remote clock offset: 0.39 ms


# Below is generated by plot.py at 2018-05-24 07:03:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.96 Mbit/s
95th percentile per-packet one-way delay: 75.092 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 84.96 Mbit/s
95th percentile per-packet one-way delay: 75.092 ms
Loss rate: 1.26%
```
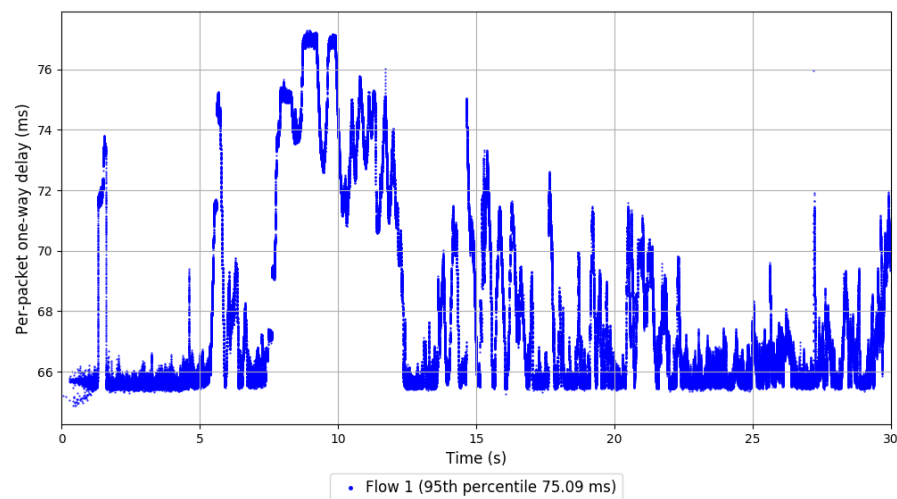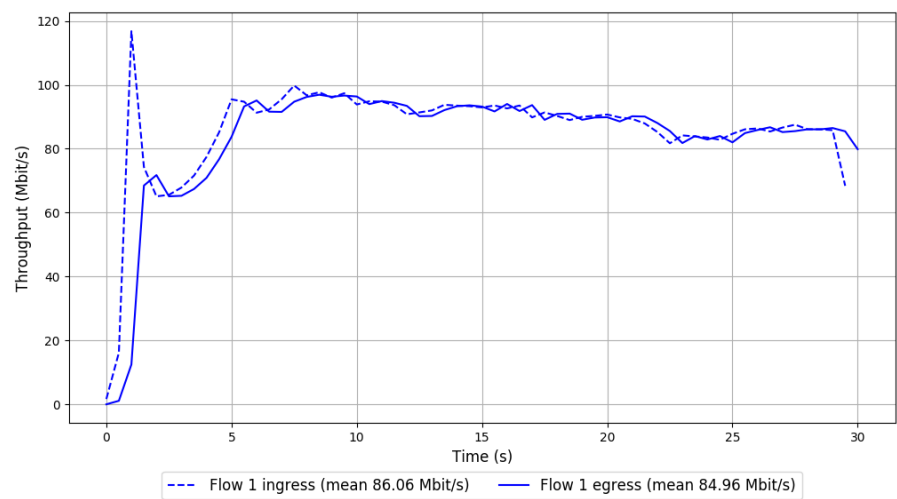
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 86.06 Mbit/s)   Flow 1 egress (mean 84.96 Mbit/s)

Flow 1 (95th percentile 75.09 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-05-24 04:41:25
End at: 2018-05-24 04:41:55
Local clock offset: 0.461 ms
Remote clock offset: -0.111 ms


# Below is generated by plot.py at 2018-05-24 07:03:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.72 Mbit/s
95th percentile per-packet one-way delay: 69.523 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 78.72 Mbit/s
95th percentile per-packet one-way delay: 69.523 ms
Loss rate: 1.40%
```
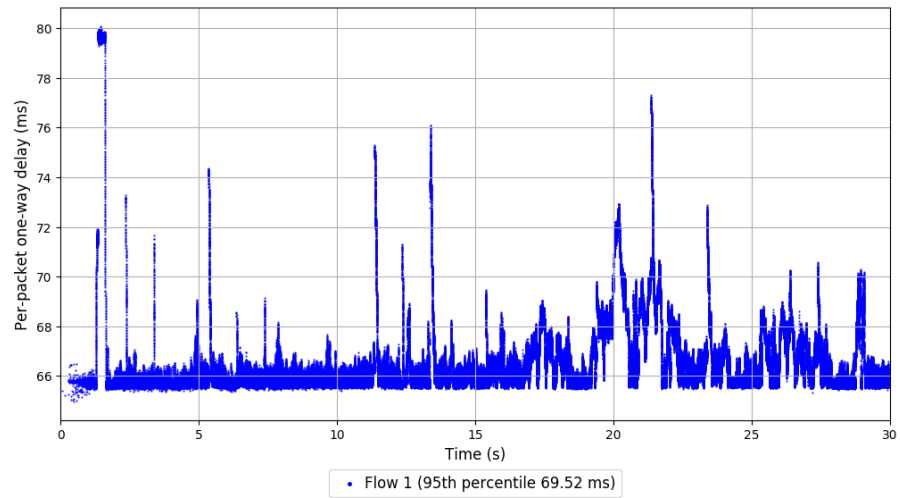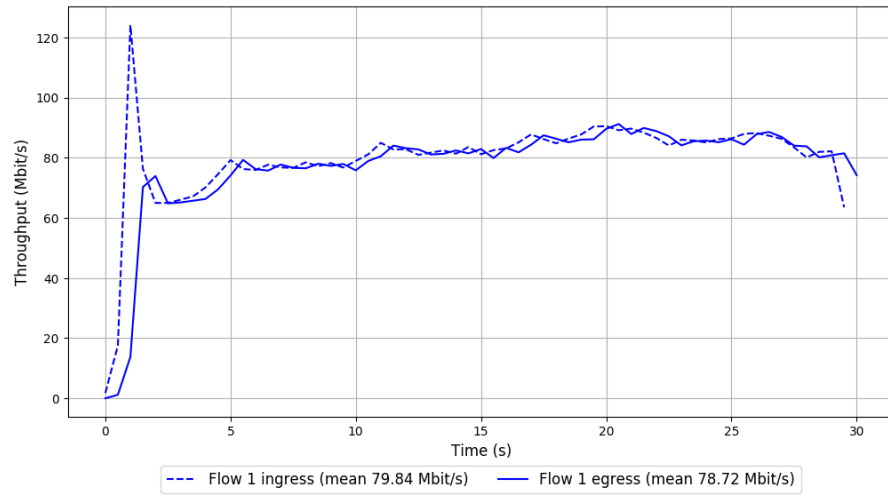
Run 4: Report of PCC-Allegro — Data Link

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-05-24 05:02:01
End at: 2018-05-24 05:02:31
Local clock offset: 1.919 ms
Remote clock offset: -0.368 ms


# Below is generated by plot.py at 2018-05-24 07:03:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.04 Mbit/s
95th percentile per-packet one-way delay: 72.178 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 86.04 Mbit/s
95th percentile per-packet one-way delay: 72.178 ms
Loss rate: 1.74%
```
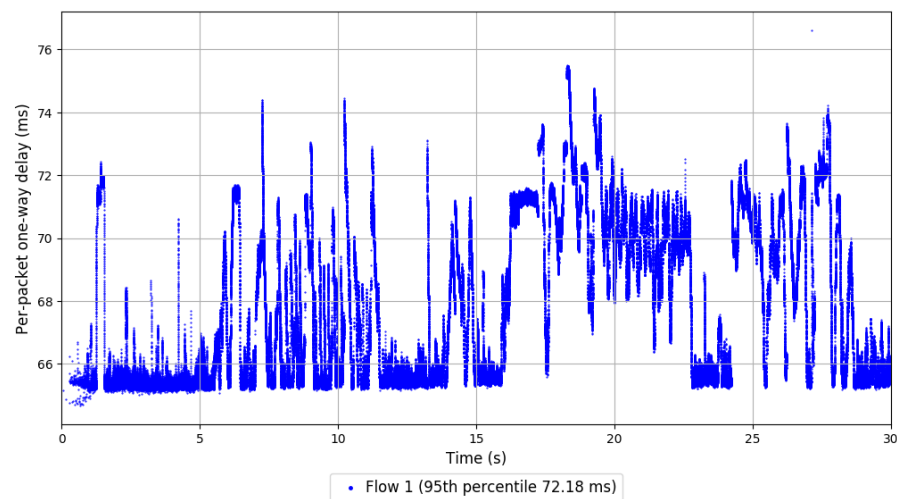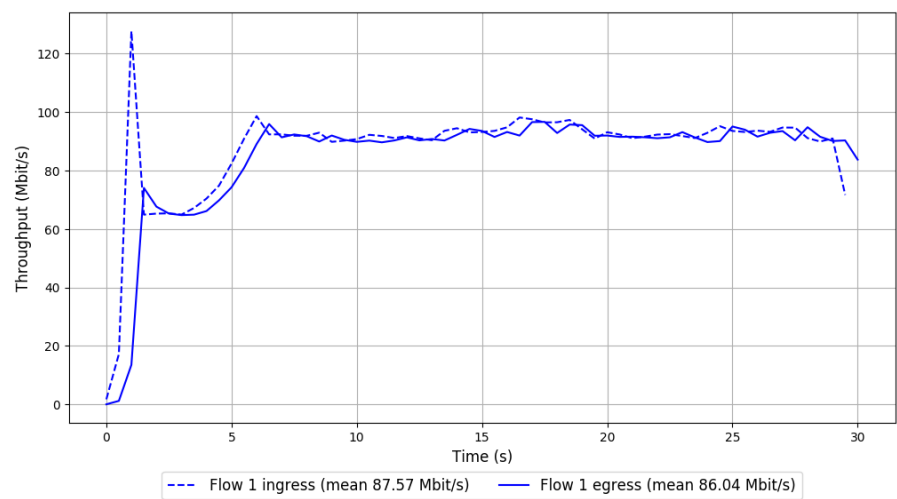
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 87.57 Mbit/s) — — — Flow 1 egress (mean 86.04 Mbit/s)

Flow 1 (95th percentile 72.18 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-05-24 05:22:33
End at: 2018-05-24 05:23:03
Local clock offset: 3.547 ms
Remote clock offset: -0.765 ms


# Below is generated by plot.py at 2018-05-24 07:03:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.30 Mbit/s
95th percentile per-packet one-way delay: 69.997 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 67.30 Mbit/s
95th percentile per-packet one-way delay: 69.997 ms
Loss rate: 2.28%
```
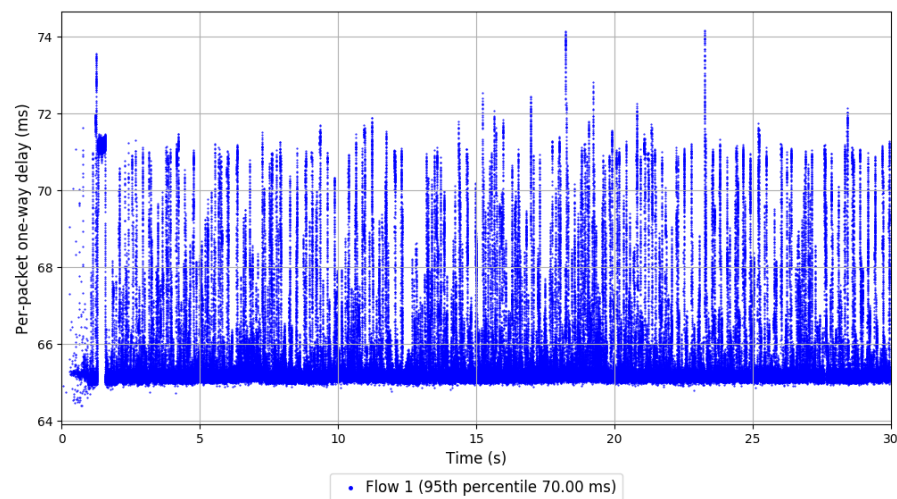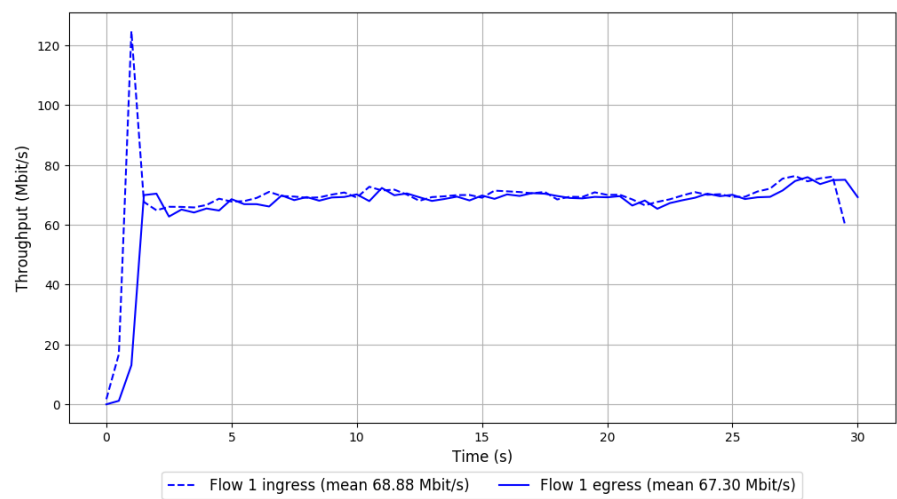
Run 6: Report of PCC-Allegro — Data Link

135

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-05-24 05:43:01
End at: 2018-05-24 05:43:31
Local clock offset: 3.92 ms
Remote clock offset: -0.34 ms


# Below is generated by plot.py at 2018-05-24 07:03:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.21 Mbit/s
95th percentile per-packet one-way delay: 66.314 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 20.21 Mbit/s
95th percentile per-packet one-way delay: 66.314 ms
Loss rate: 1.02%
```
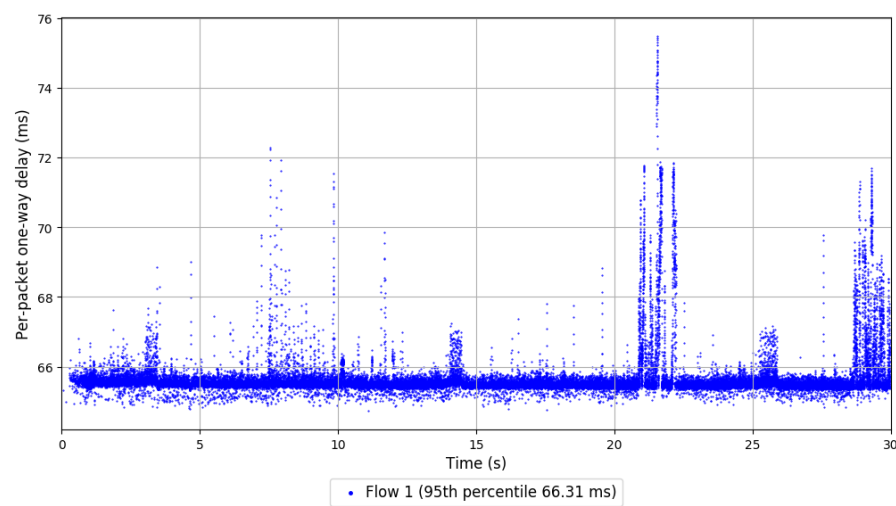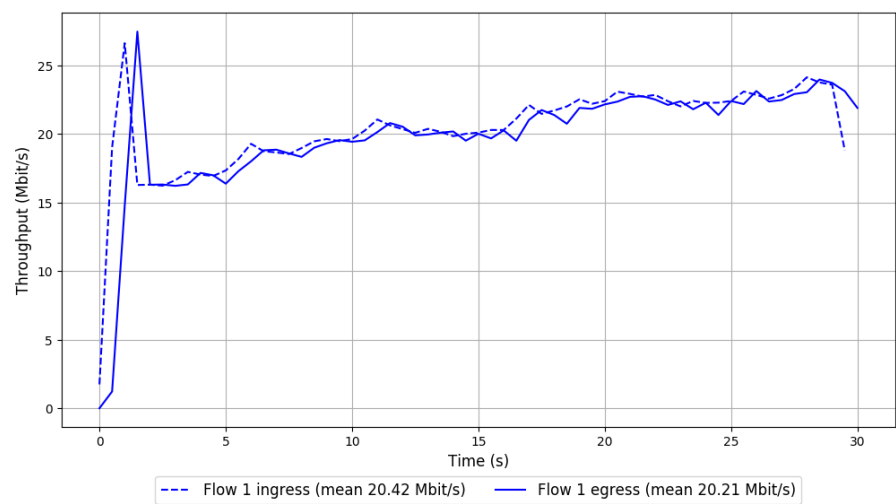
Run 7: Report of PCC-Allegro — Data Link

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-05-24 06:03:28
End at: 2018-05-24 06:03:58
Local clock offset: 3.1 ms
Remote clock offset: 0.452 ms


# Below is generated by plot.py at 2018-05-24 07:03:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.67 Mbit/s
95th percentile per-packet one-way delay: 71.438 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 74.67 Mbit/s
95th percentile per-packet one-way delay: 71.438 ms
Loss rate: 2.06%
```
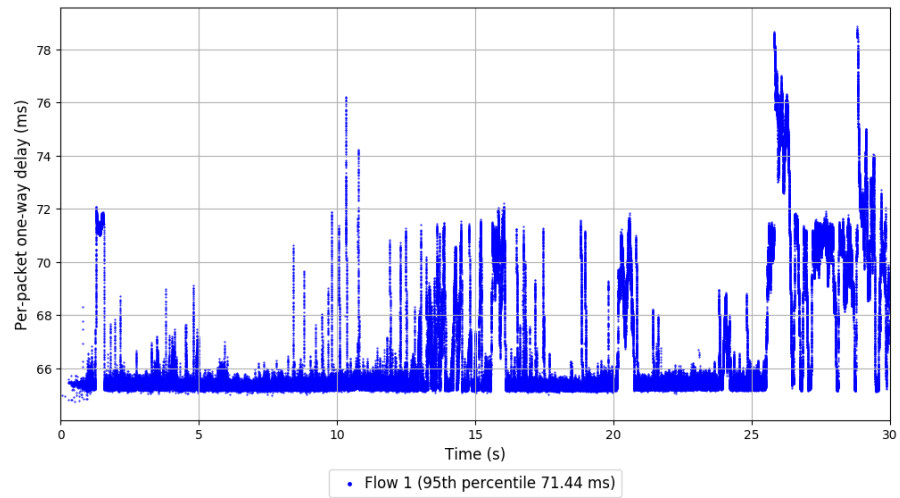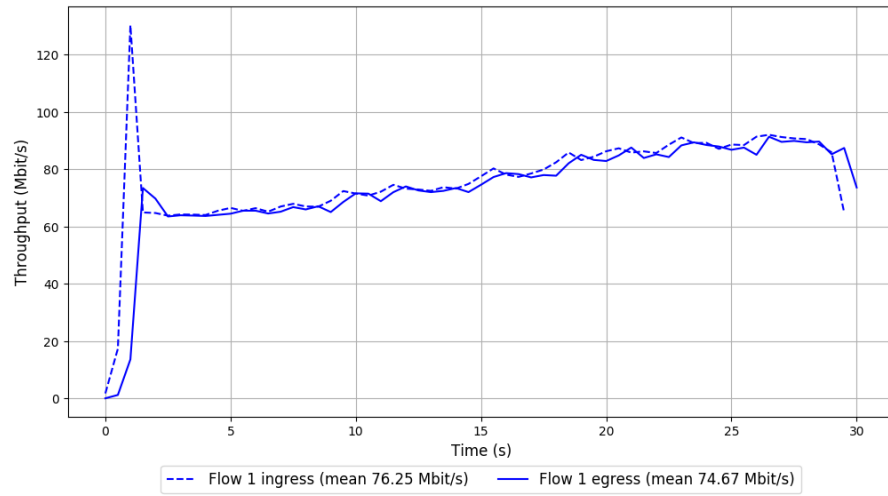
Run 8: Report of PCC-Allegro — Data Link

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-05-24 06:23:56
End at: 2018-05-24 06:24:26
Local clock offset: 2.439 ms
Remote clock offset: 1.129 ms


# Below is generated by plot.py at 2018-05-24 07:04:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.09 Mbit/s
95th percentile per-packet one-way delay: 70.766 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 73.09 Mbit/s
95th percentile per-packet one-way delay: 70.766 ms
Loss rate: 2.18%
```
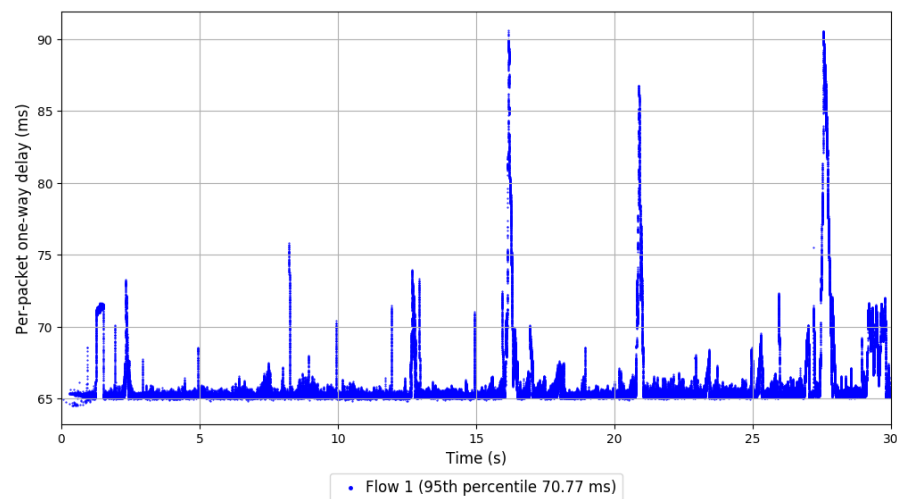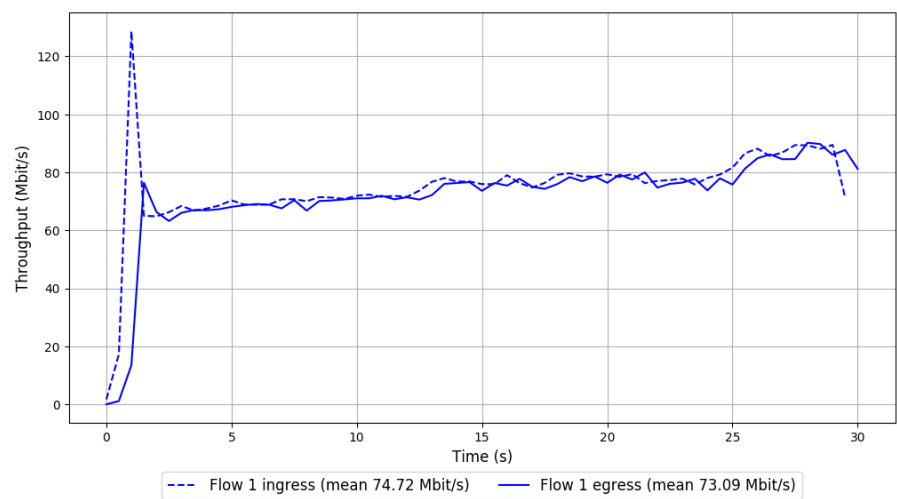
Run 9: Report of PCC-Allegro — Data Link

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-05-24 06:44:28
End at: 2018-05-24 06:44:58
Local clock offset: 4.311 ms
Remote clock offset: 1.814 ms


# Below is generated by plot.py at 2018-05-24 07:04:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.67 Mbit/s
95th percentile per-packet one-way delay: 72.225 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 60.67 Mbit/s
95th percentile per-packet one-way delay: 72.225 ms
Loss rate: 1.88%
```
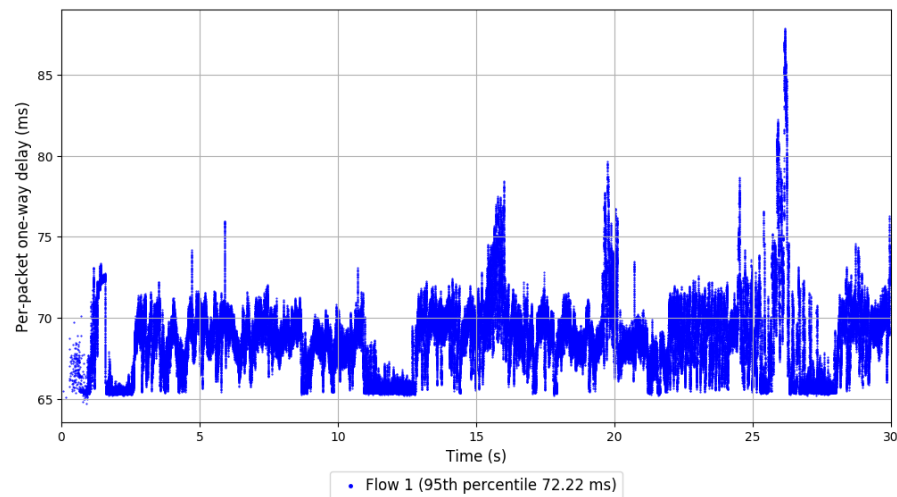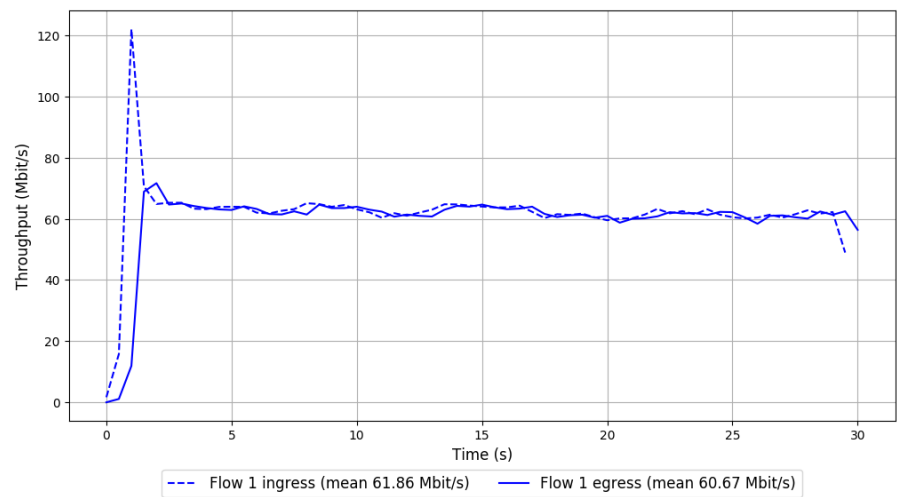
Run 10: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 61.86 Mbit/s)   Flow 1 egress (mean 60.67 Mbit/s)

• Flow 1 (95th percentile 72.22 ms)
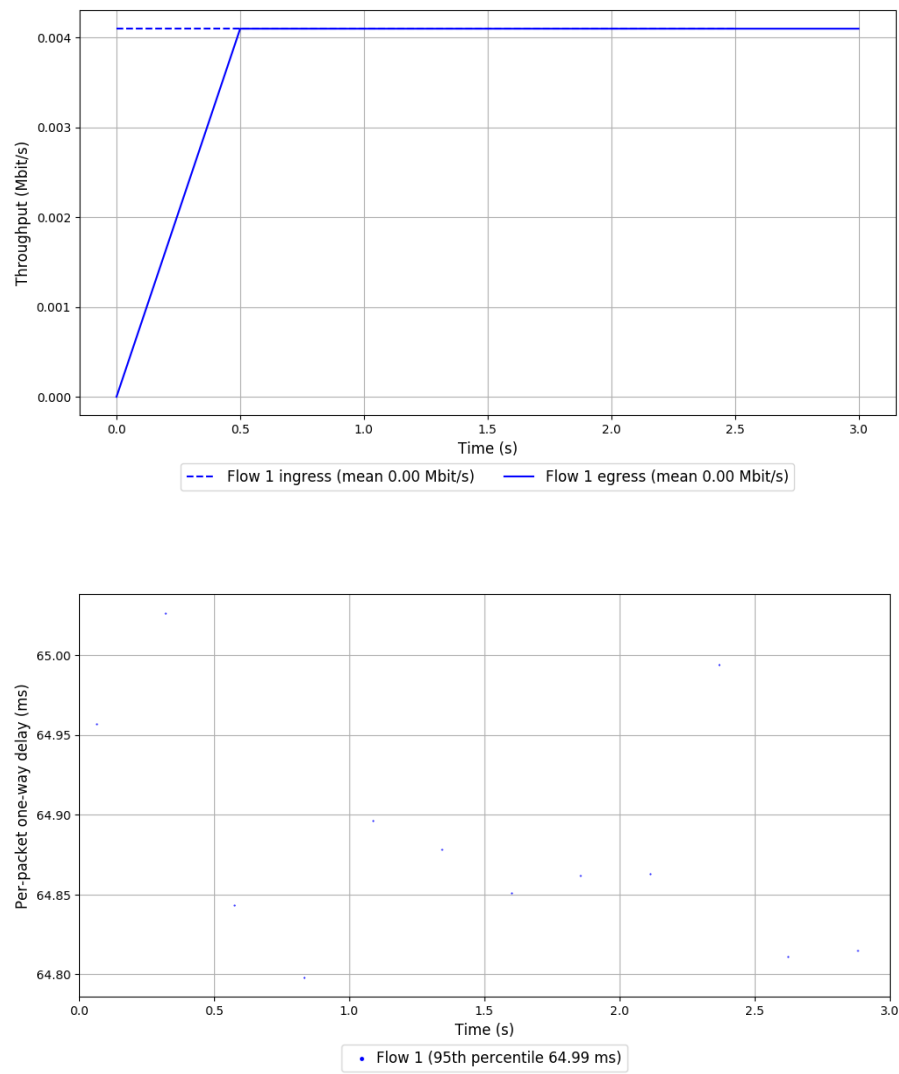
Run 1: Statistics of PCC-Expr

Start at: 2018-05-24 03:45:02
End at: 2018-05-24 03:45:32
Local clock offset: 2.557 ms
Remote clock offset: 0.069 ms

Run 1: Report of PCC-Expr — Data Link

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

• Flow 1 (95th percentile 64.99 ms)
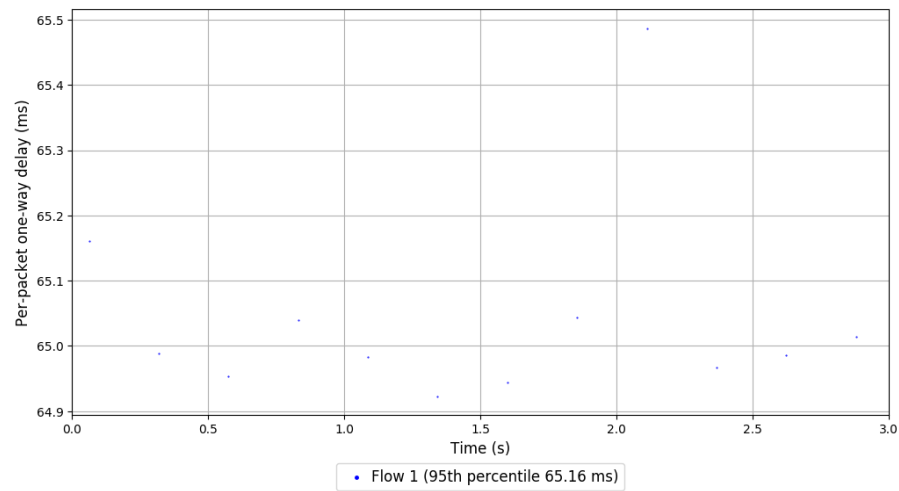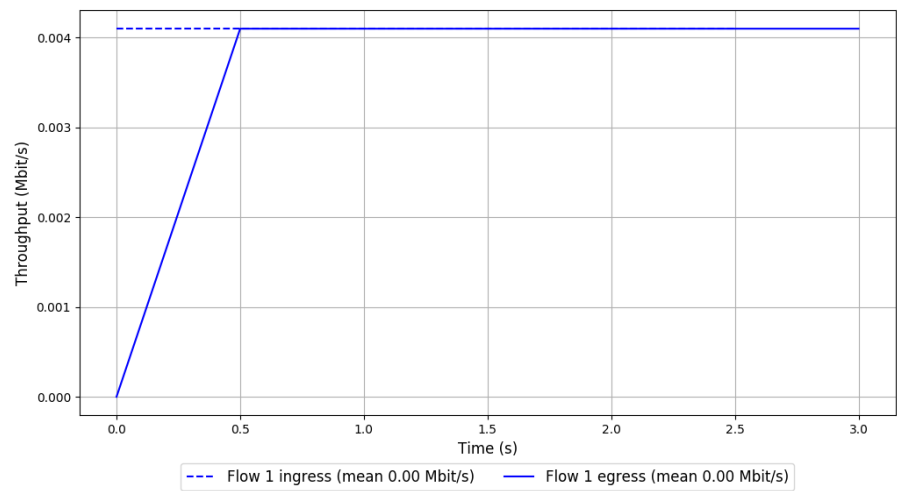
```
Run 2: Statistics of PCC-Expr

Start at: 2018-05-24 04:05:34
End at: 2018-05-24 04:06:04
Local clock offset: 1.462 ms
Remote clock offset: 0.194 ms
```

Run 2: Report of PCC-Expr — Data Link

```
Run 3: Statistics of PCC-Expr

Start at: 2018-05-24 04:26:09
End at: 2018-05-24 04:26:39
Local clock offset: 0.398 ms
Remote clock offset: 0.383 ms
```
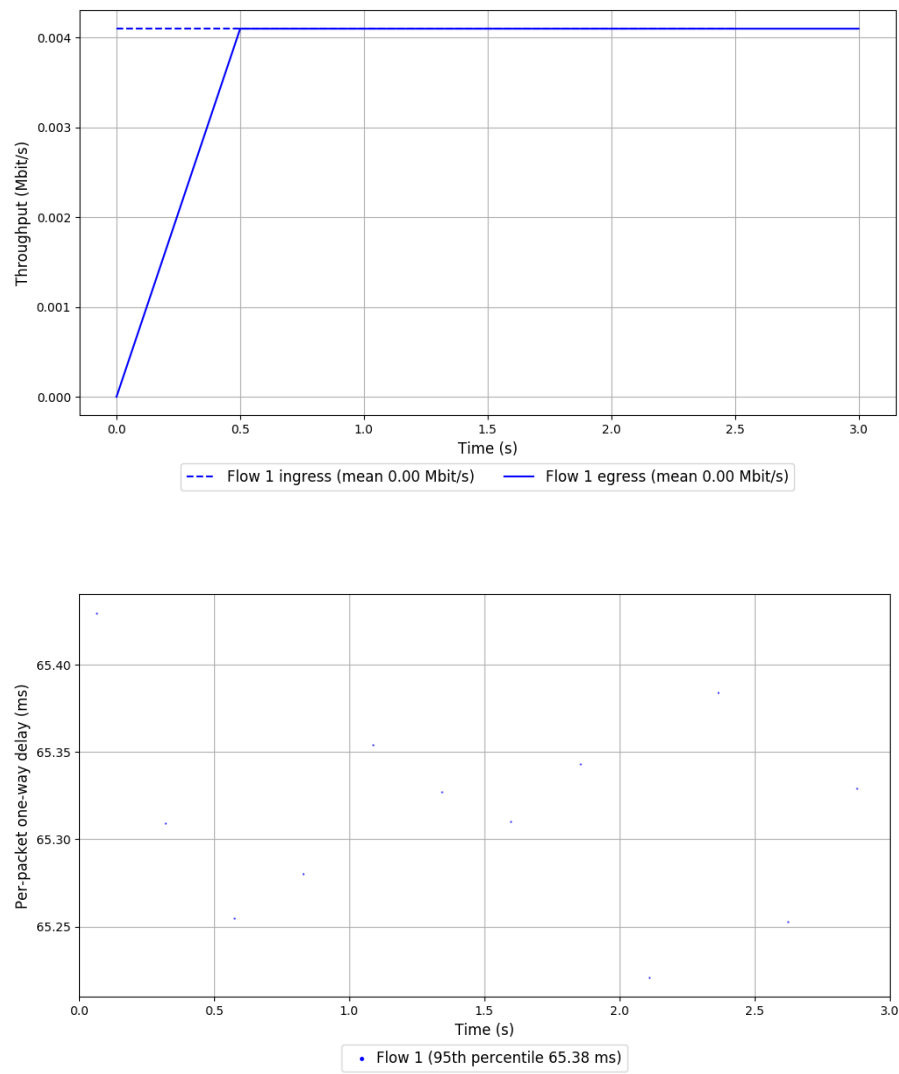
Run 3: Report of PCC-Expr — Data Link

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

Flow 1 (95th percentile 65.38 ms)
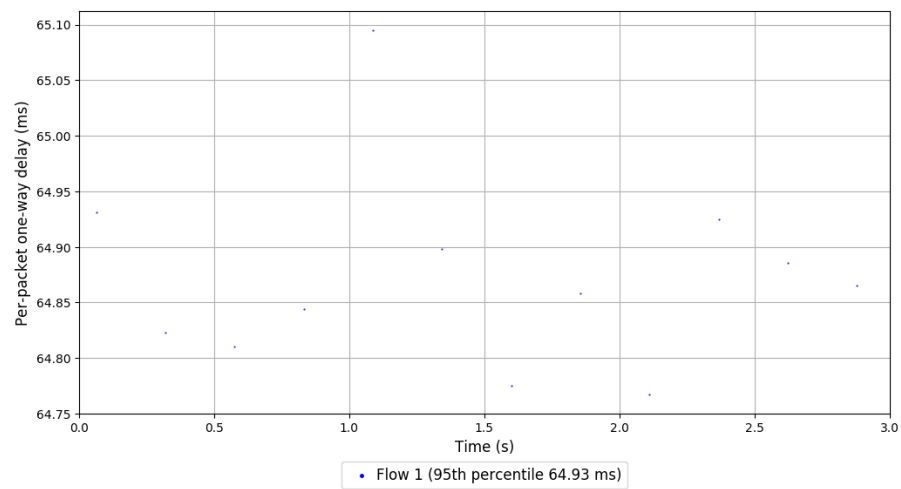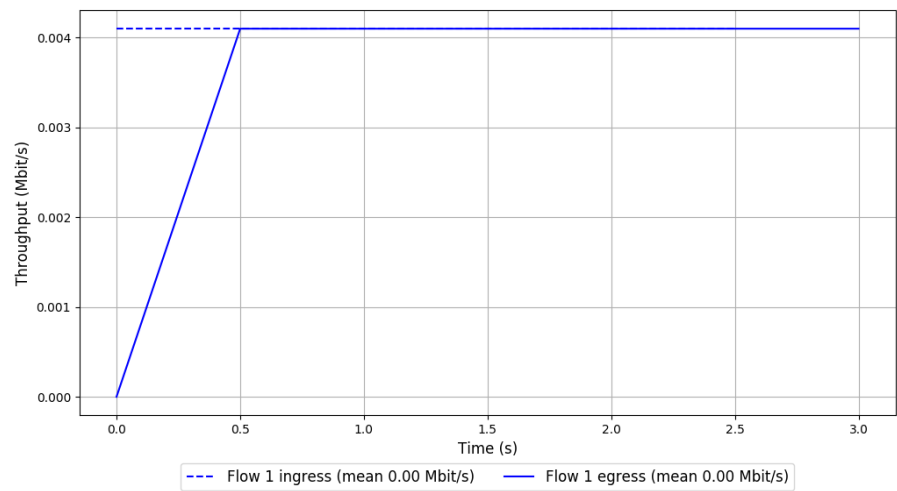
```
Run 4: Statistics of PCC-Expr

Start at: 2018-05-24 04:47:45
End at: 2018-05-24 04:48:15
Local clock offset: 0.616 ms
Remote clock offset: -0.214 ms
```

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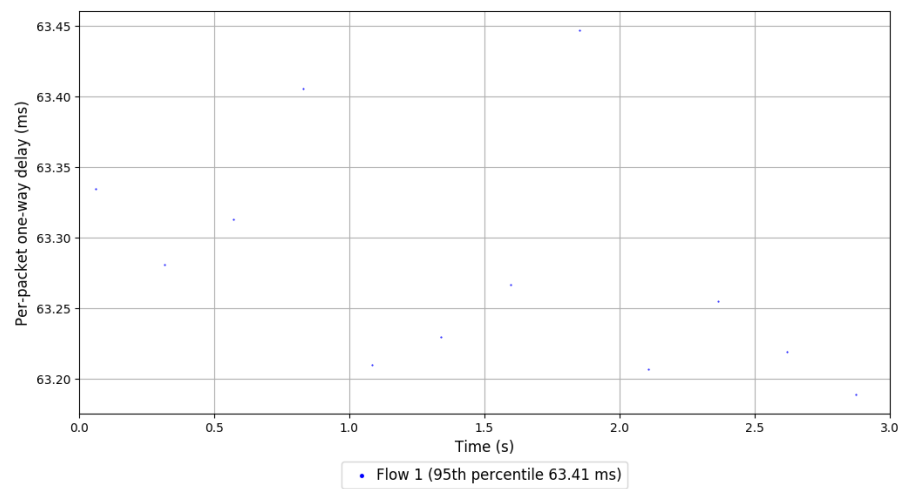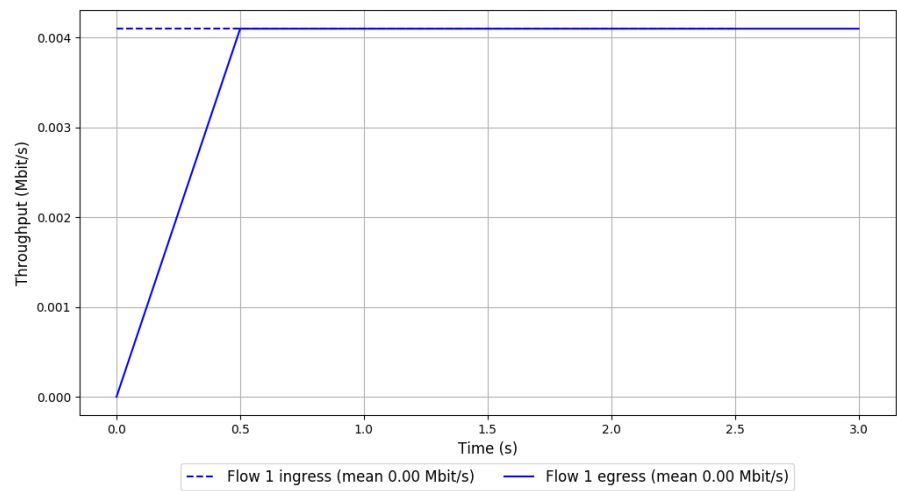
```
Run 5: Statistics of PCC-Expr

Start at: 2018-05-24 05:08:20
End at: 2018-05-24 05:08:50
Local clock offset: 2.61 ms
Remote clock offset: -2.556 ms
```

Run 5: Report of PCC-Expr — Data Link

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

• Flow 1 (95th percentile 63.41 ms)
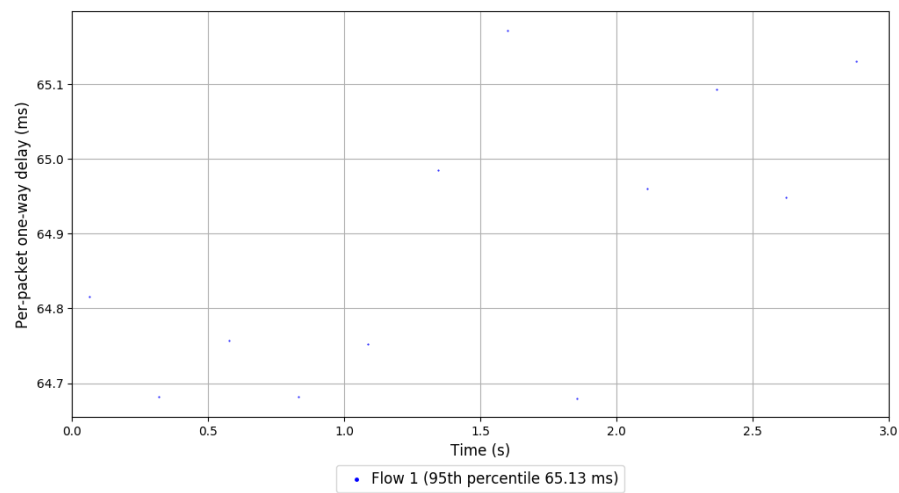
```
Run 6: Statistics of PCC-Expr

Start at: 2018-05-24 05:28:51
End at: 2018-05-24 05:29:21
Local clock offset: 3.626 ms
Remote clock offset: -0.851 ms
```
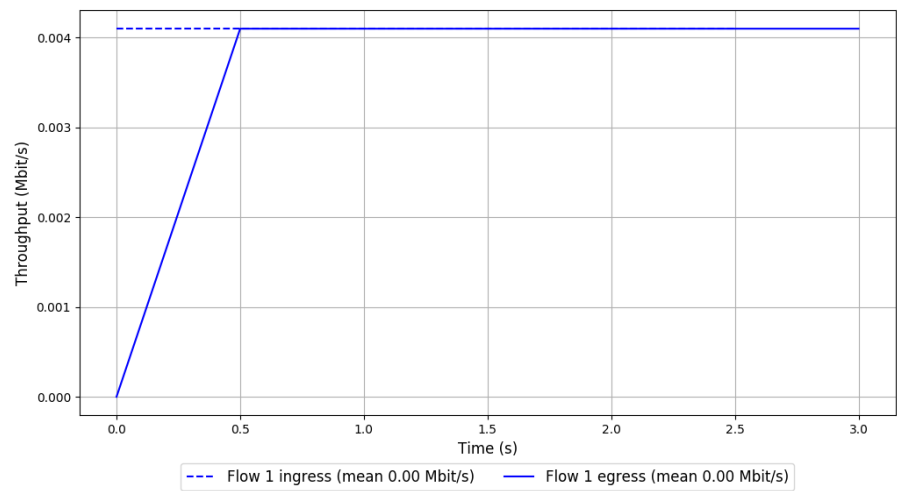
Run 6: Report of PCC-Expr — Data Link

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

Flow 1 (95th percentile 65.13 ms)

```
Run 7: Statistics of PCC-Expr

Start at: 2018-05-24 05:49:18
End at: 2018-05-24 05:49:48
Local clock offset: 3.934 ms
Remote clock offset: 0.147 ms
```
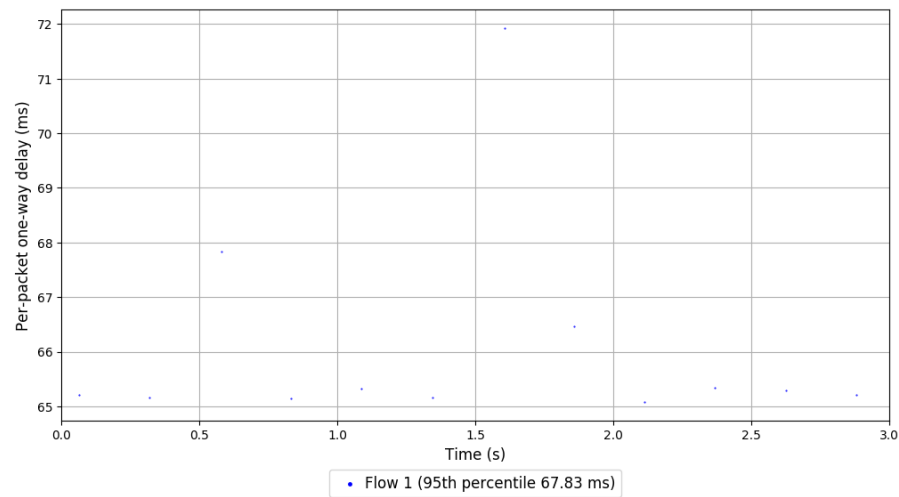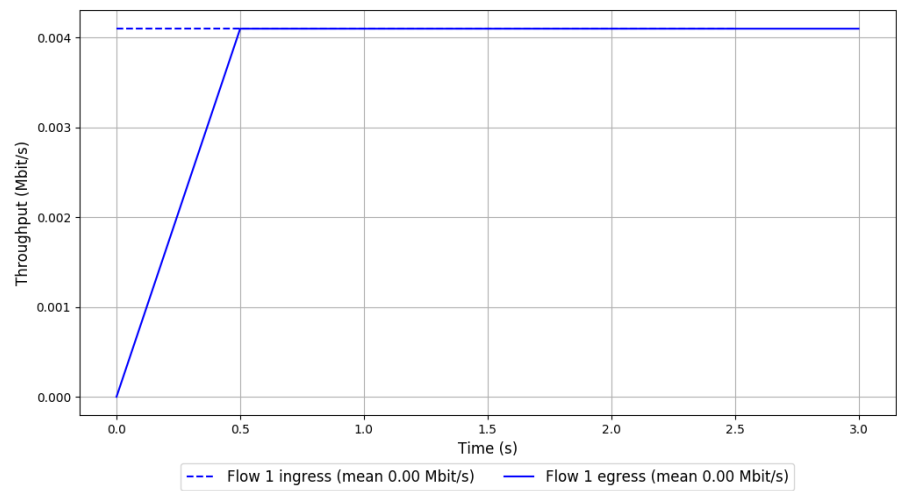
Run 7: Report of PCC-Expr — Data Link
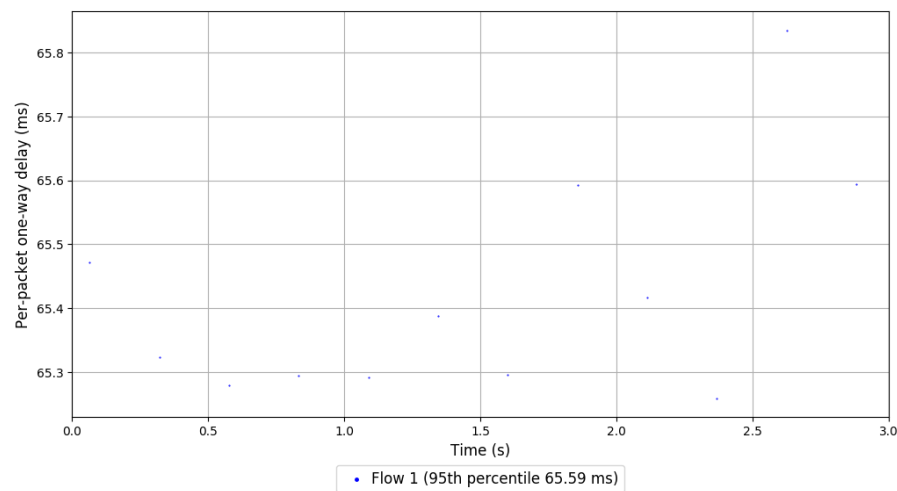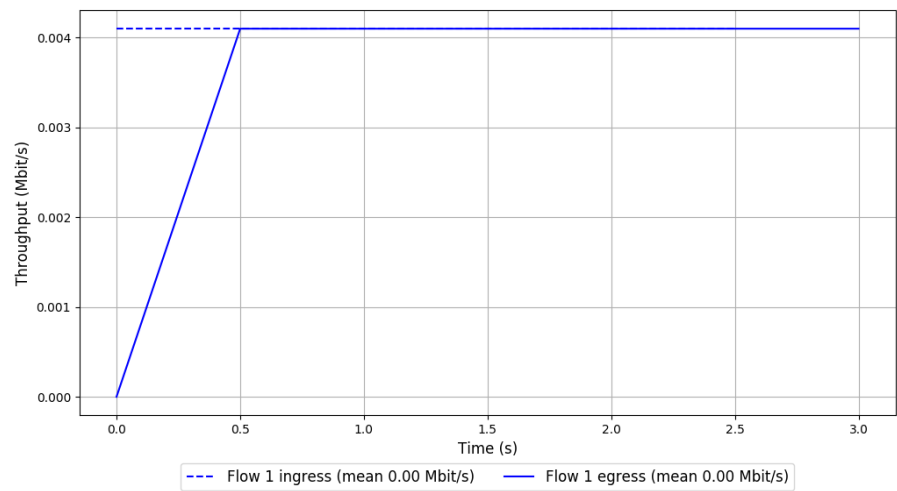
```
Run 8: Statistics of PCC-Expr

Start at: 2018-05-24 06:09:46
End at: 2018-05-24 06:10:16
Local clock offset: 2.565 ms
Remote clock offset: 0.534 ms
```

Run 8: Report of PCC-Expr — Data Link

```
Run 9: Statistics of PCC-Expr

Start at: 2018-05-24 06:30:13
End at: 2018-05-24 06:30:43
Local clock offset: 3.028 ms
Remote clock offset: 1.177 ms
```
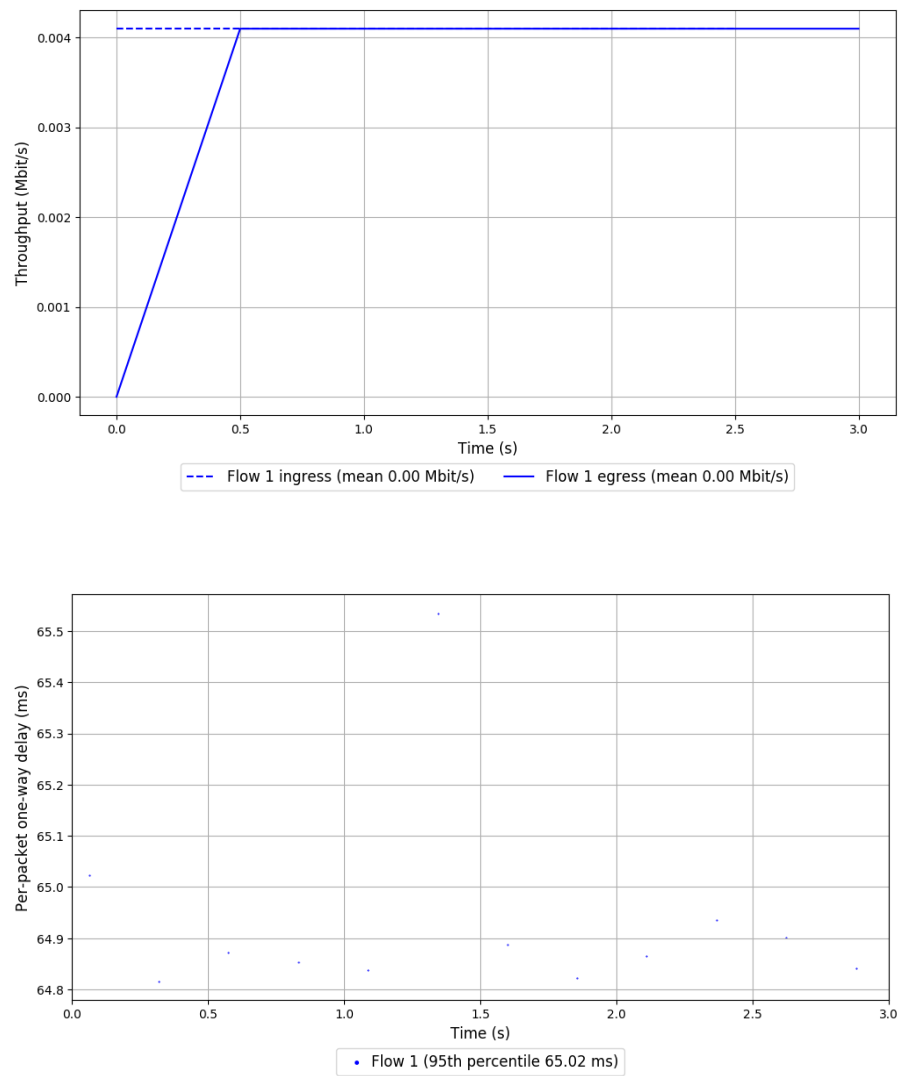
Run 9: Report of PCC-Expr — Data Link
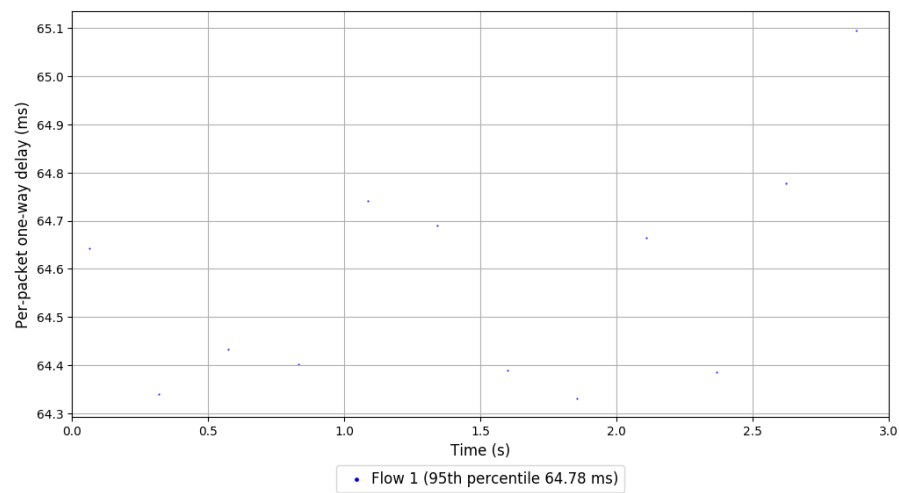
```
Run 10: Statistics of PCC-Expr

Start at: 2018-05-24 06:50:46
End at: 2018-05-24 06:51:16
Local clock offset: 4.412 ms
Remote clock offset: 0.534 ms
```

Run 10: Report of PCC-Expr — Data Link

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-05-24 03:34:55
End at: 2018-05-24 03:35:25
Local clock offset: 3.015 ms
Remote clock offset: 0.166 ms


# Below is generated by plot.py at 2018-05-24 07:04:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 65.822 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 65.822 ms
Loss rate: 1.07%
```

Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-05-24 03:55:27
End at: 2018-05-24 03:55:57
Local clock offset: 2.277 ms
Remote clock offset: -0.059 ms


# Below is generated by plot.py at 2018-05-24 07:04:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.23 Mbit/s
95th percentile per-packet one-way delay: 66.999 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 40.23 Mbit/s
95th percentile per-packet one-way delay: 66.999 ms
Loss rate: 0.64%
```

Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 40.49 Mbit/s) ----- Flow 1 egress (mean 40.23 Mbit/s)

• Flow 1 (95th percentile 67.00 ms)

167

```
Run 3: Statistics of QUIC Cubic

Start at: 2018-05-24 04:16:02
End at: 2018-05-24 04:16:32
Local clock offset: 0.969 ms
Remote clock offset: 0.365 ms


# Below is generated by plot.py at 2018-05-24 07:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.71 Mbit/s
95th percentile per-packet one-way delay: 66.606 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 41.71 Mbit/s
95th percentile per-packet one-way delay: 66.606 ms
Loss rate: 1.05%
```
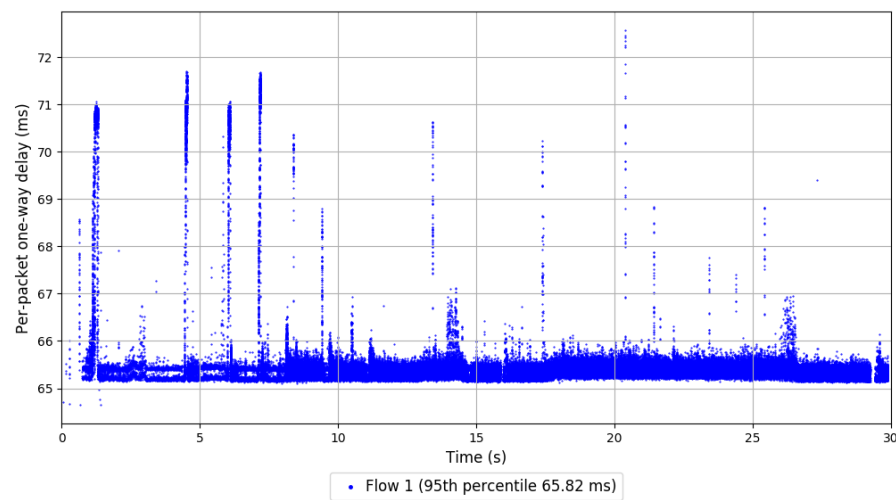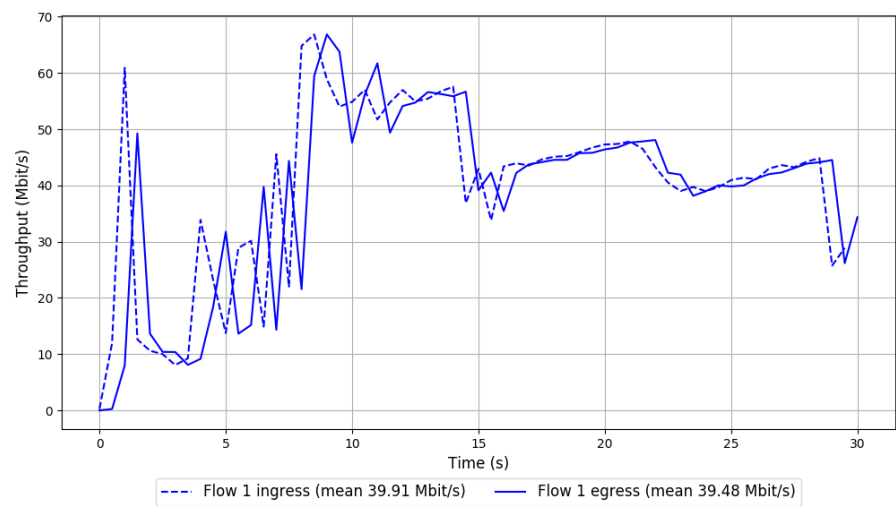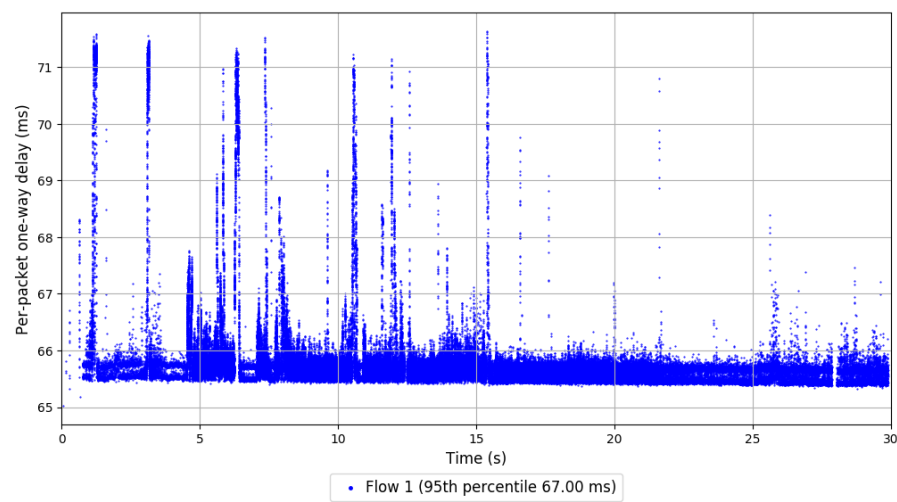
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 42.15 Mbit/s)   Flow 1 egress (mean 41.71 Mbit/s)

Flow 1 (95th percentile 66.61 ms)

169

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-05-24 04:37:07
End at: 2018-05-24 04:37:37
Local clock offset: 0.713 ms
Remote clock offset: -0.007 ms


# Below is generated by plot.py at 2018-05-24 07:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 68.717 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 68.717 ms
Loss rate: 0.95%
```
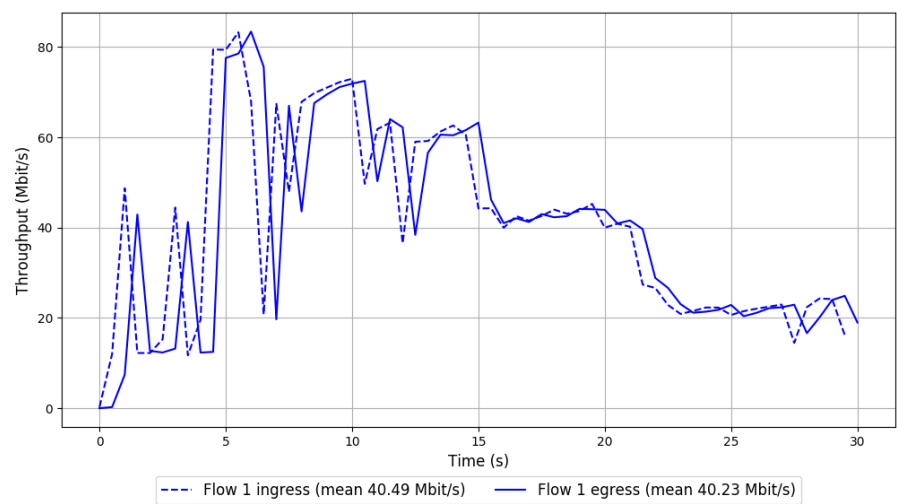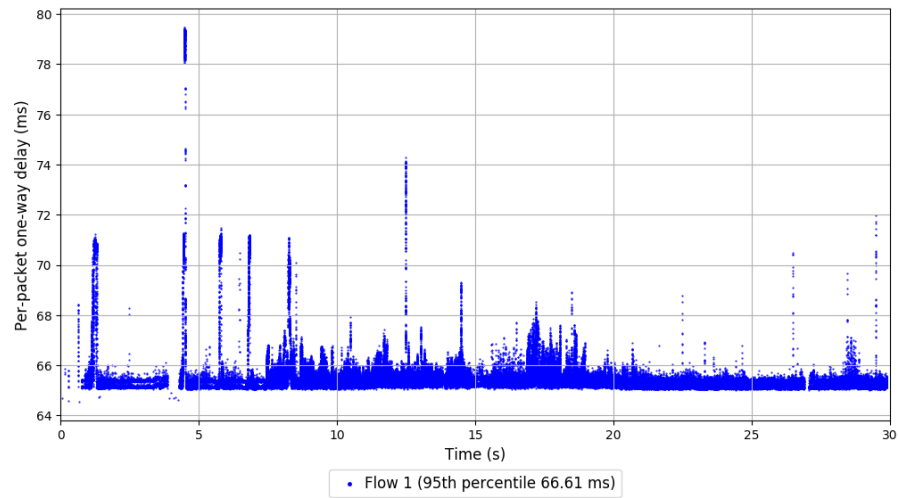
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 25.22 Mbit/s) --- Flow 1 egress (mean 24.98 Mbit/s)

Flow 1 (95th percentile 68.72 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-05-24 04:58:15
End at: 2018-05-24 04:58:45
Local clock offset: 0.846 ms
Remote clock offset: -0.346 ms


# Below is generated by plot.py at 2018-05-24 07:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 66.231 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 66.231 ms
Loss rate: 1.09%
```
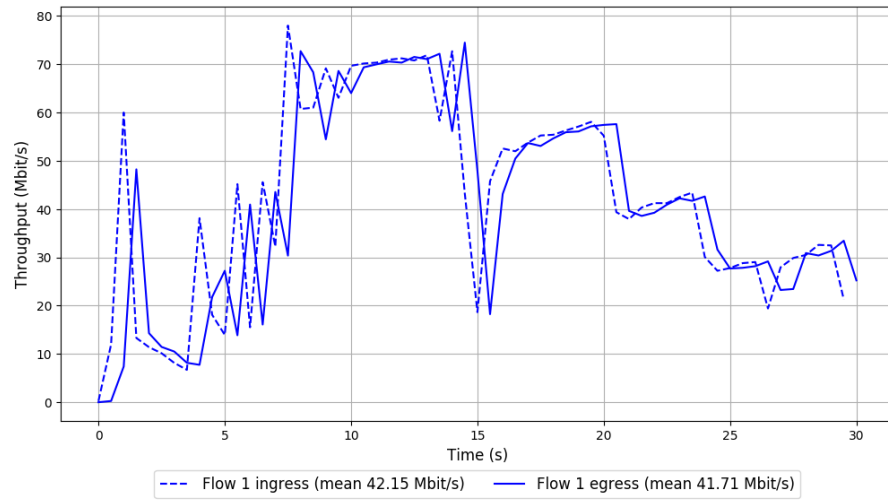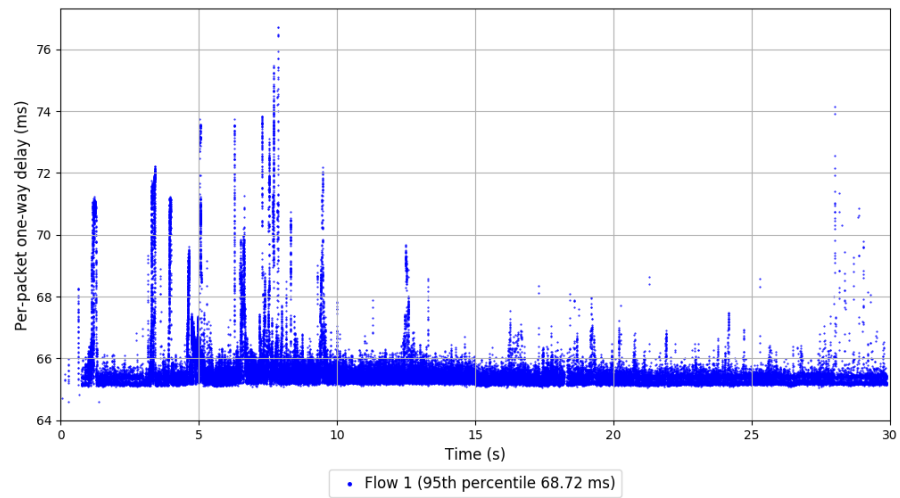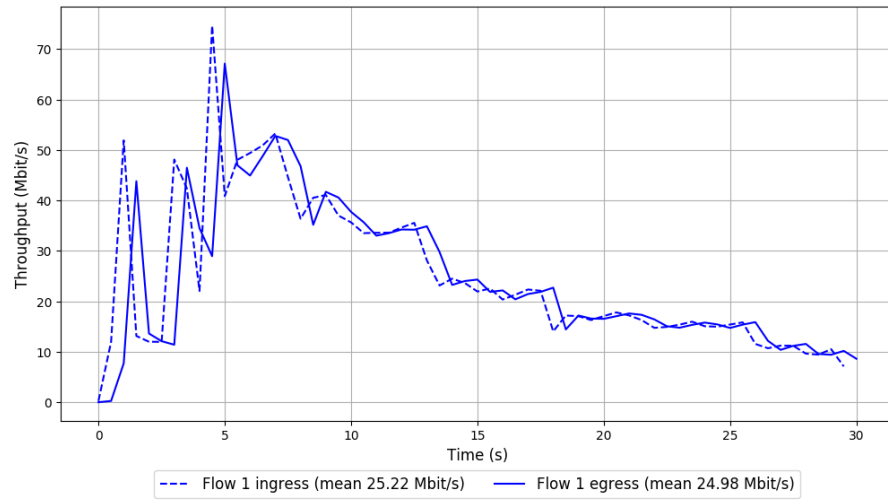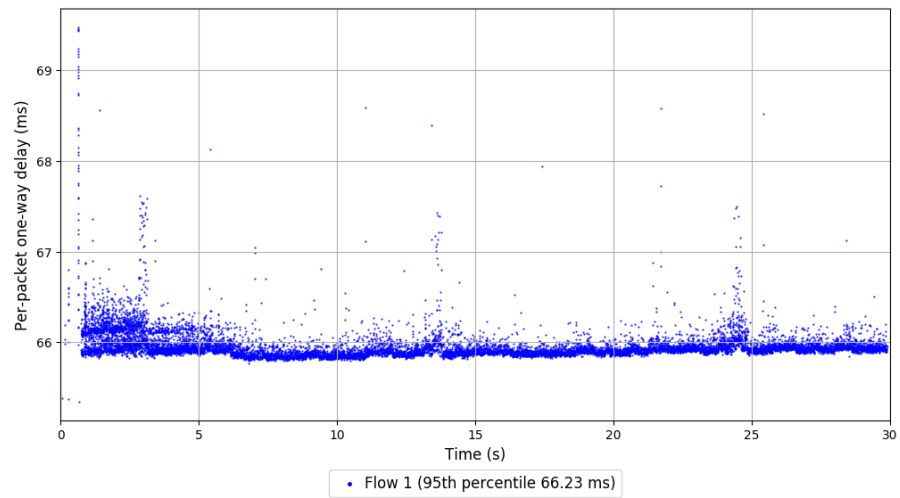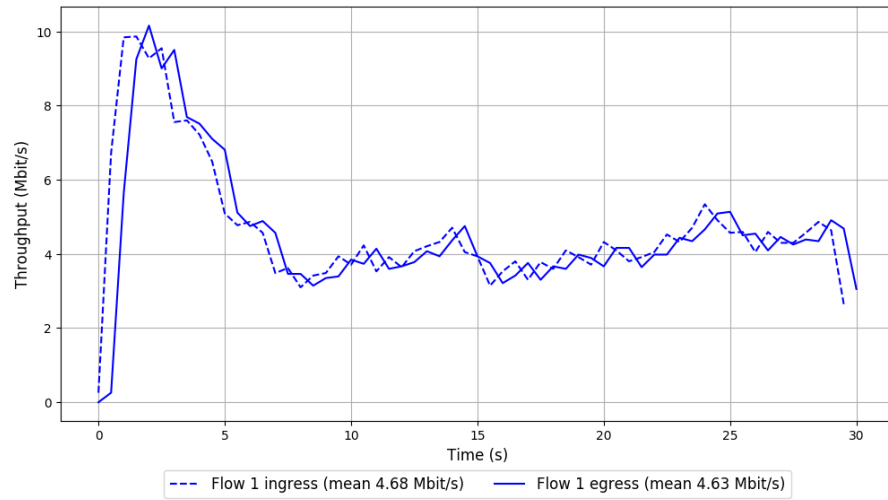
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 4.68 Mbit/s)   Flow 1 egress (mean 4.63 Mbit/s)

Flow 1 (95th percentile 66.23 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-05-24 05:18:47
End at: 2018-05-24 05:19:17
Local clock offset: 3.237 ms
Remote clock offset: -0.636 ms


# Below is generated by plot.py at 2018-05-24 07:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.60 Mbit/s
95th percentile per-packet one-way delay: 66.030 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 13.60 Mbit/s
95th percentile per-packet one-way delay: 66.030 ms
Loss rate: 0.56%
```

Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 13.68 Mbit/s)   Flow 1 egress (mean 13.60 Mbit/s)

Flow 1 (95th percentile 66.03 ms)

175

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-05-24 05:39:15
End at: 2018-05-24 05:39:45
Local clock offset: 3.719 ms
Remote clock offset: -0.587 ms


# Below is generated by plot.py at 2018-05-24 07:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.09 Mbit/s
95th percentile per-packet one-way delay: 66.006 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 5.09 Mbit/s
95th percentile per-packet one-way delay: 66.006 ms
Loss rate: 0.86%
```
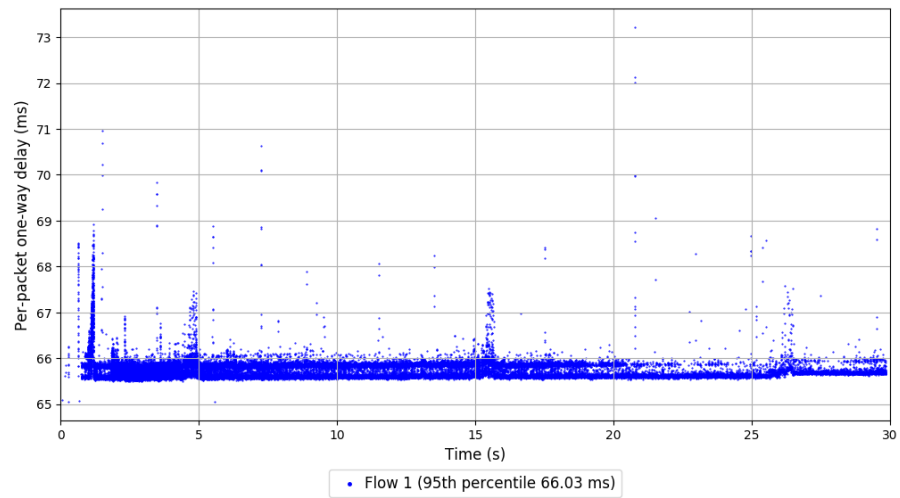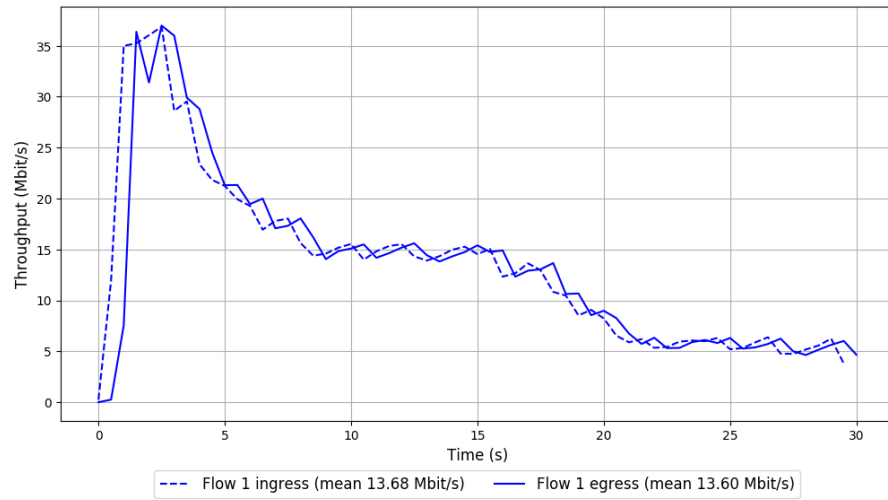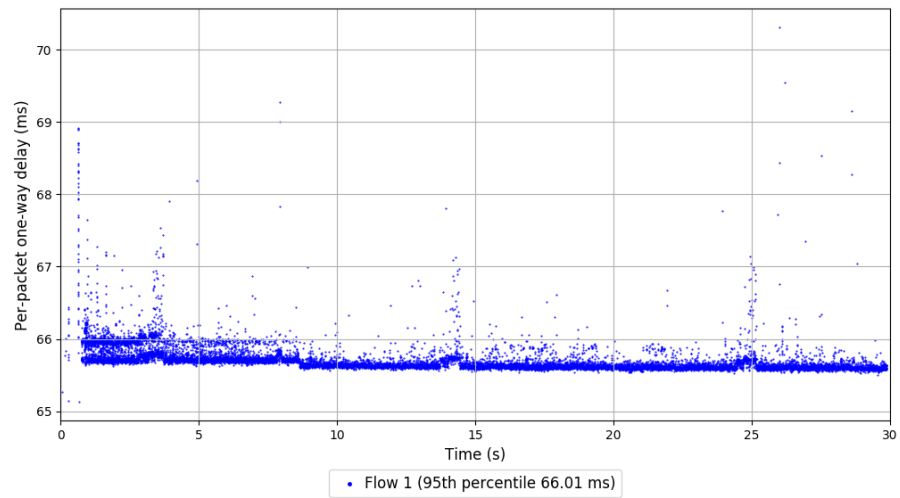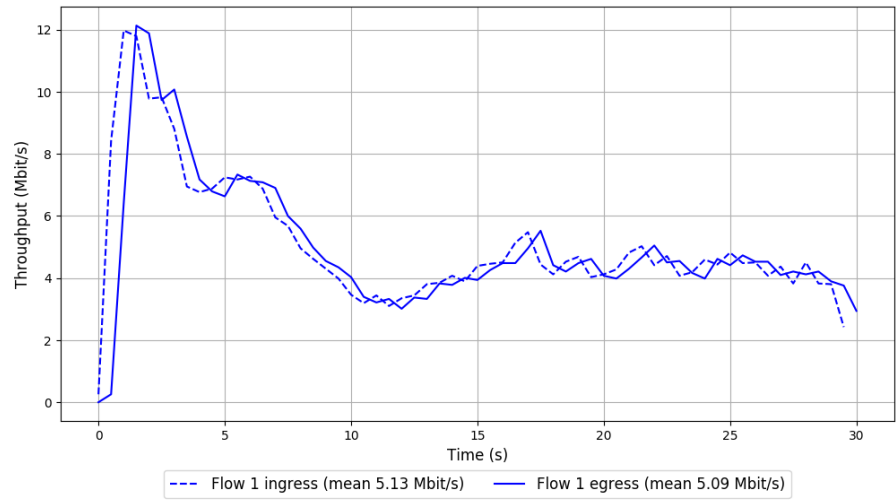
Run 7: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 5.13 Mbit/s)   Flow 1 egress (mean 5.09 Mbit/s)

Flow 1 (95th percentile 66.01 ms)

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-05-24 05:59:41
End at: 2018-05-24 06:00:11
Local clock offset: 3.41 ms
Remote clock offset: 0.514 ms


# Below is generated by plot.py at 2018-05-24 07:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.79 Mbit/s
95th percentile per-packet one-way delay: 67.674 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 7.79 Mbit/s
95th percentile per-packet one-way delay: 67.674 ms
Loss rate: 0.47%
```
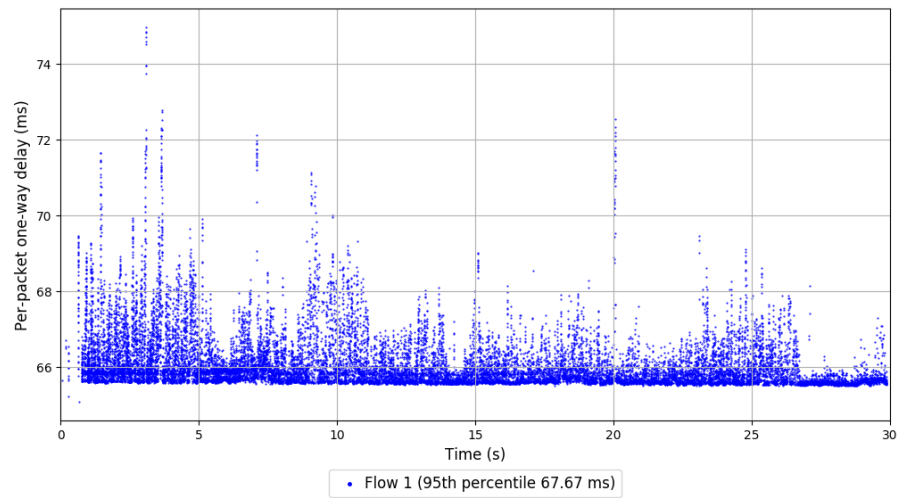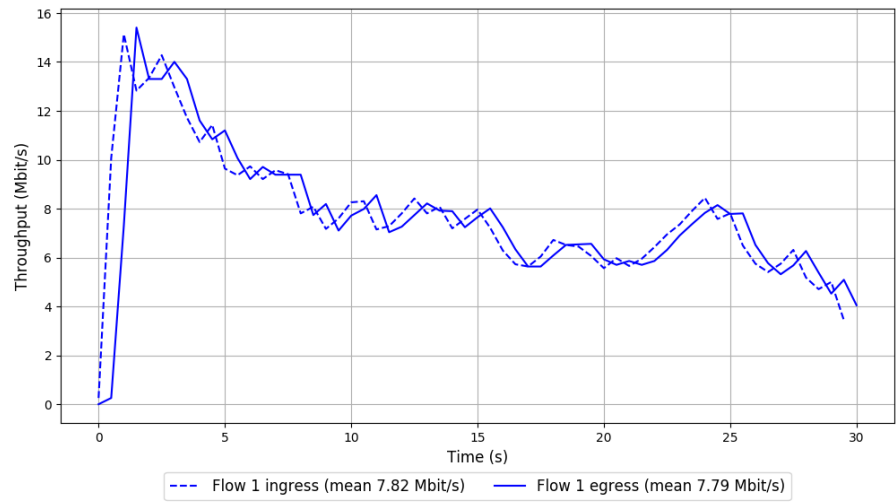
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-05-24 06:20:10
End at: 2018-05-24 06:20:40
Local clock offset: 2.247 ms
Remote clock offset: 0.924 ms


# Below is generated by plot.py at 2018-05-24 07:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 68.657 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 68.657 ms
Loss rate: 1.06%
```
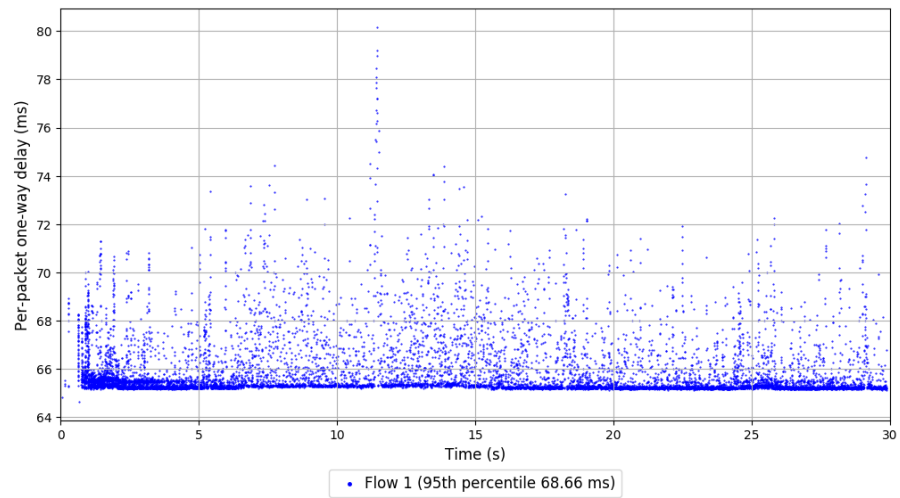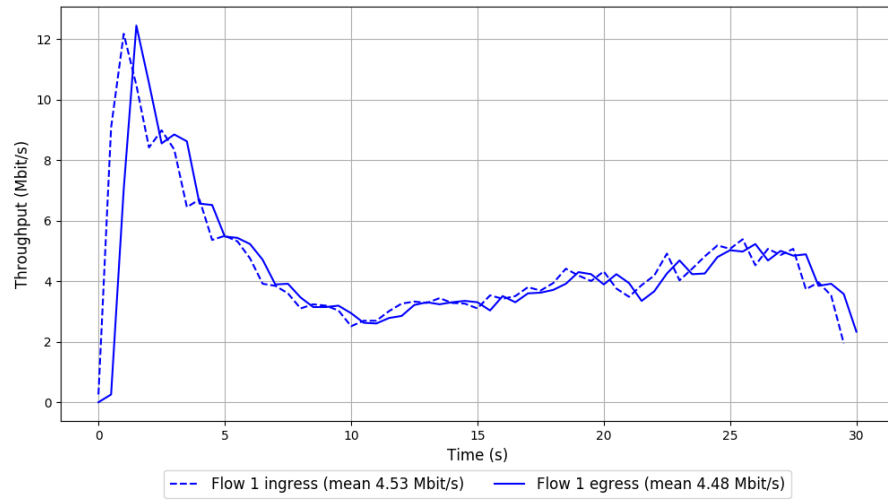
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 4.53 Mbit/s) ——— Flow 1 egress (mean 4.48 Mbit/s)

• Flow 1 (95th percentile 68.66 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-05-24 06:40:41
End at: 2018-05-24 06:41:11
Local clock offset: 4.122 ms
Remote clock offset: 1.491 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.10 Mbit/s
95th percentile per-packet one-way delay: 70.591 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 21.10 Mbit/s
95th percentile per-packet one-way delay: 70.591 ms
Loss rate: 1.59%
```
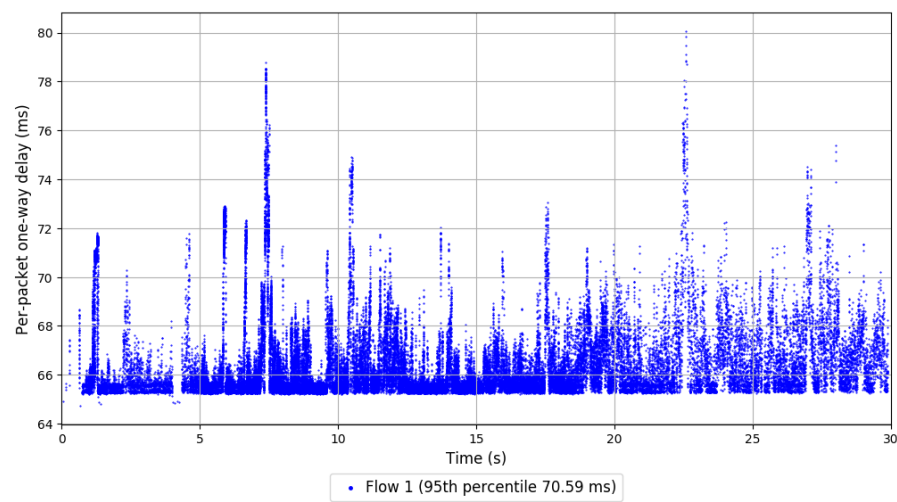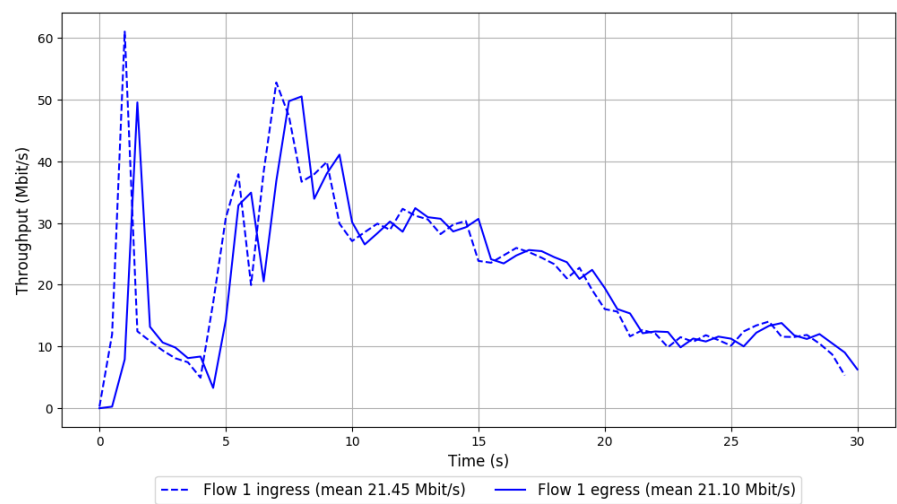
Run 10: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 21.45 Mbit/s) ----   Flow 1 egress (mean 21.10 Mbit/s) ——

• Flow 1 (95th percentile 70.59 ms)

```
Run 1: Statistics of SCReAM

Start at: 2018-05-24 03:42:31
End at: 2018-05-24 03:43:01
Local clock offset: 2.76 ms
Remote clock offset: 0.066 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 65.379 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 65.379 ms
Loss rate: 0.18%
```

Run 1: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.15 Mbit/s)   Flow 1 egress (mean 0.15 Mbit/s)

Flow 1 (95th percentile 65.38 ms)

```
Run 2: Statistics of SCReAM

Start at: 2018-05-24 04:03:04
End at: 2018-05-24 04:03:34
Local clock offset: 1.409 ms
Remote clock offset: 0.199 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 66.140 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 66.140 ms
Loss rate: 0.00%
```
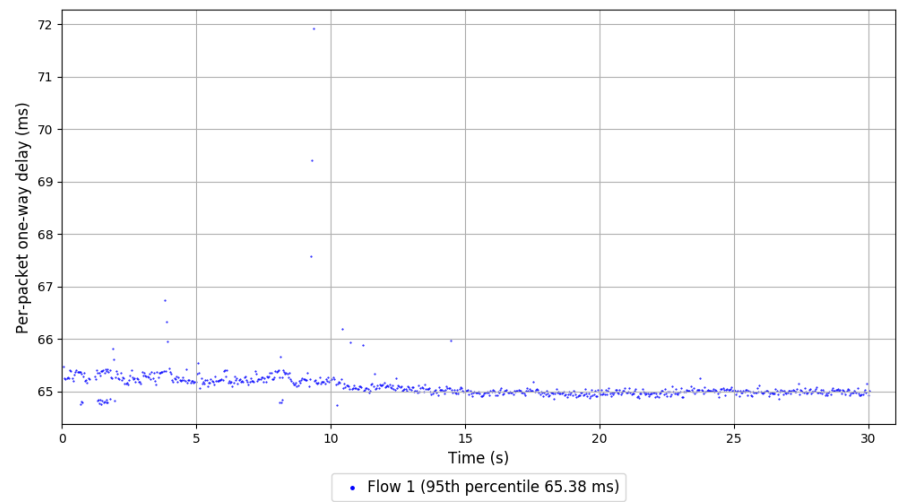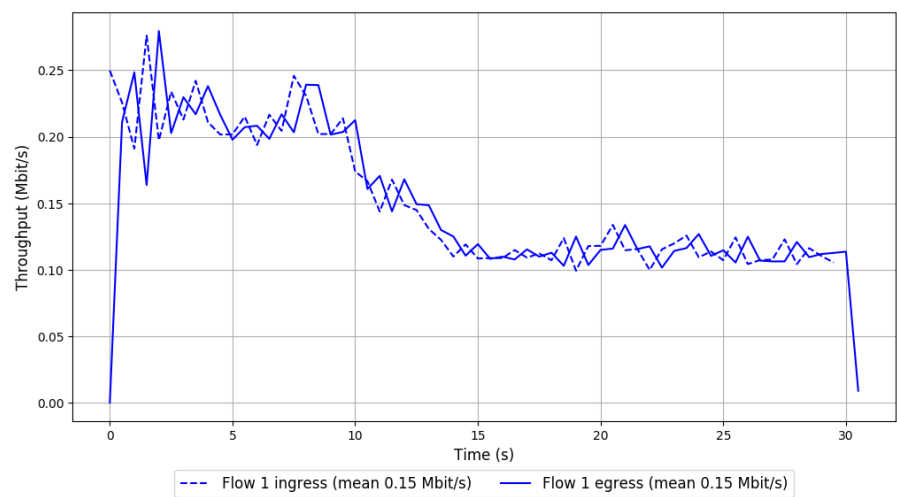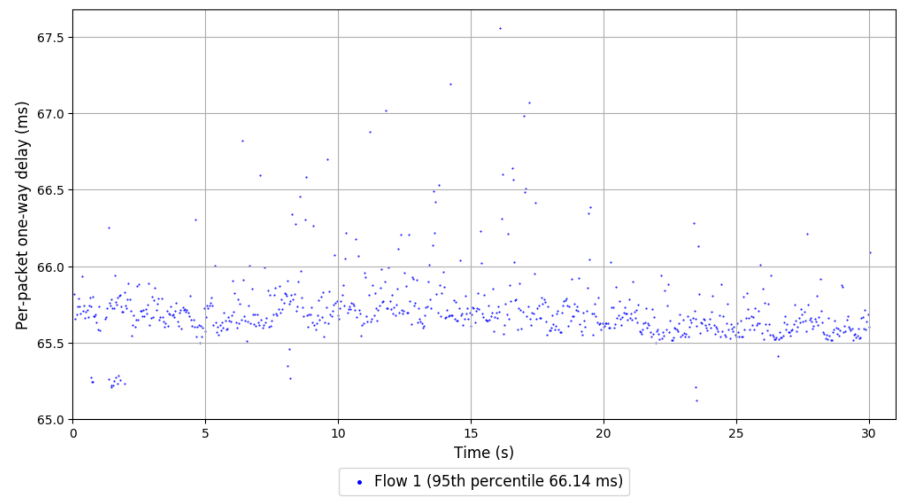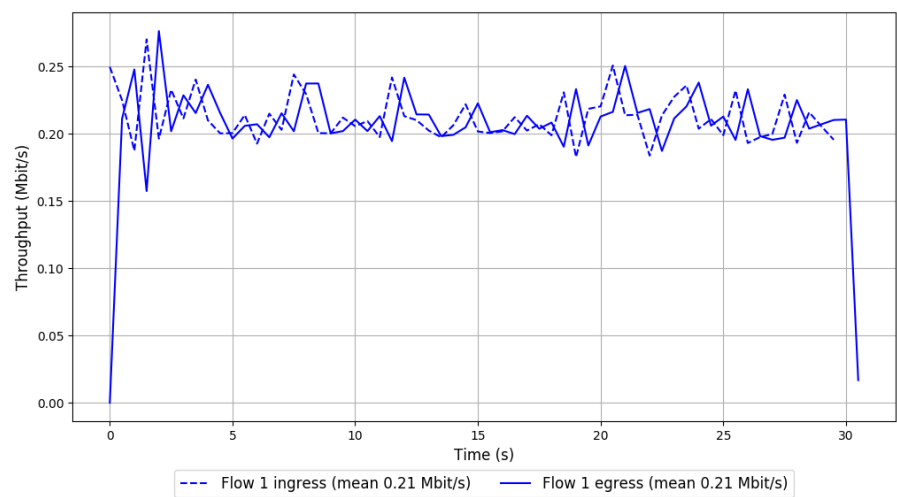
Run 2: Report of SCReAM — Data Link

```
Run 3: Statistics of SCReAM

Start at: 2018-05-24 04:23:39
End at: 2018-05-24 04:24:09
Local clock offset: 0.581 ms
Remote clock offset: 0.408 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 65.384 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 65.384 ms
Loss rate: 0.25%
```
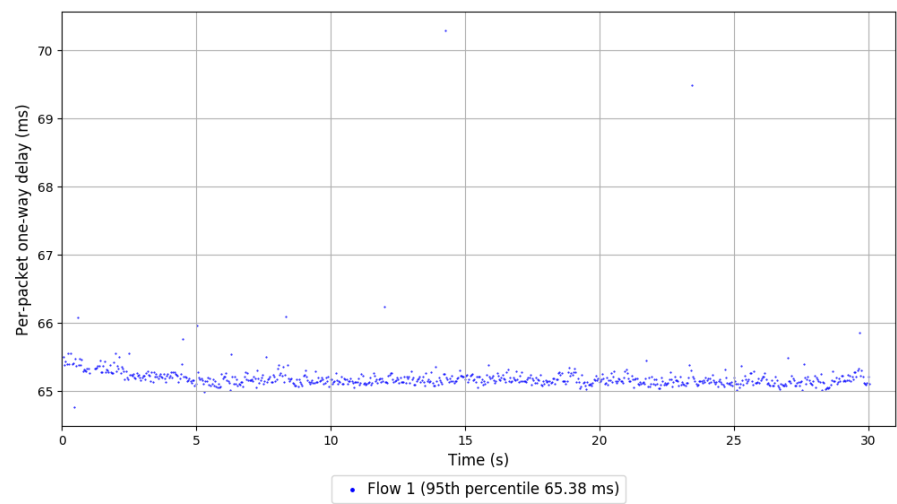
Run 3: Report of SCReAM — Data Link

```
Run 4: Statistics of SCReAM

Start at: 2018-05-24 04:45:15
End at: 2018-05-24 04:45:45
Local clock offset: 0.528 ms
Remote clock offset: -0.186 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 66.166 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 66.166 ms
Loss rate: 0.23%
```
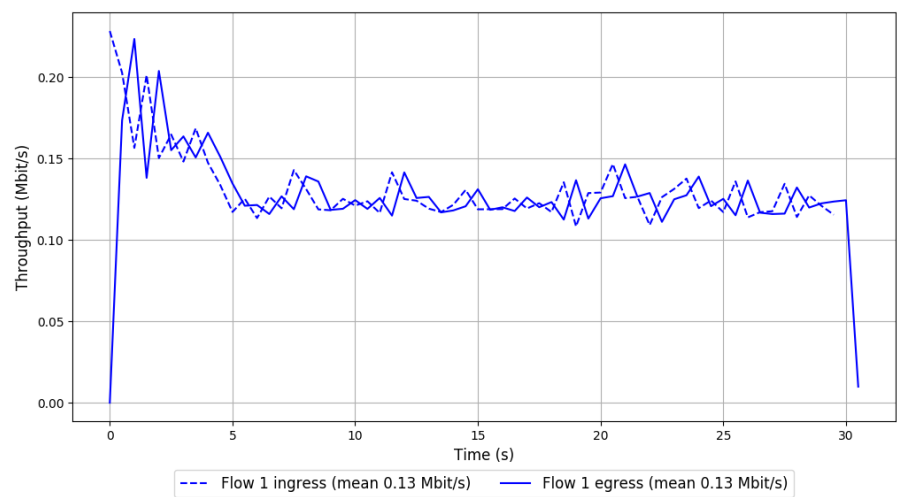
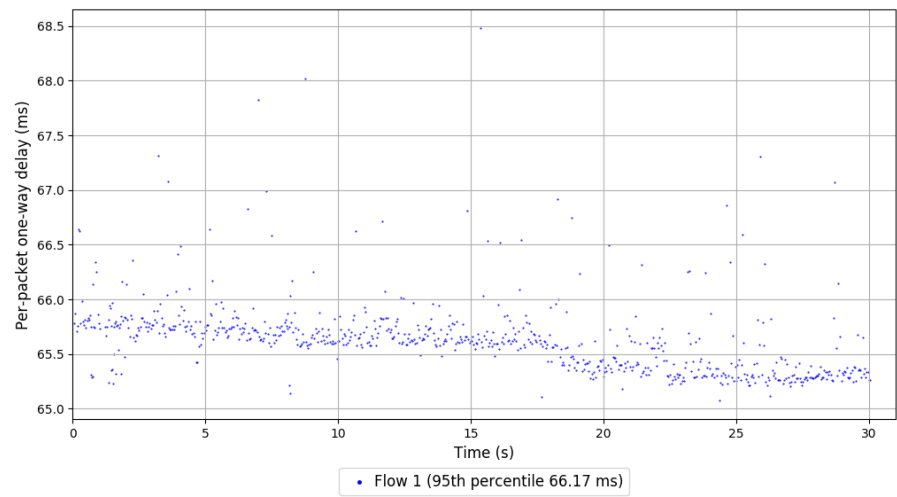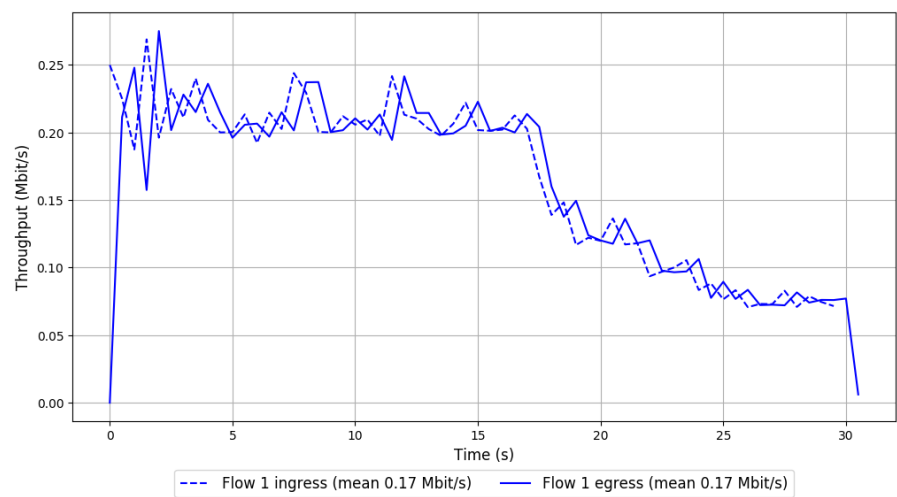# Run 4: Report of SCReAM — Data Link

```
Run 5: Statistics of SCReAM

Start at: 2018-05-24 05:05:49
End at: 2018-05-24 05:06:19
Local clock offset: 2.478 ms
Remote clock offset: -0.402 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.484 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 65.484 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

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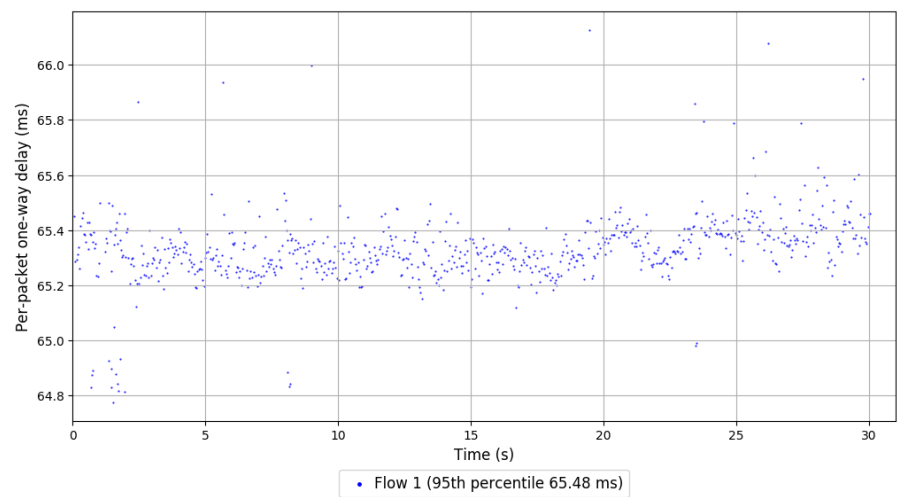

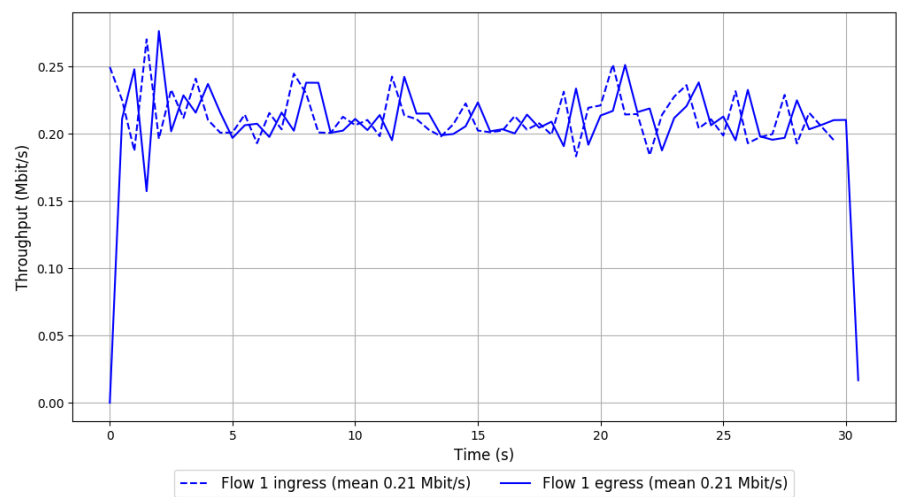Flow 1 (95th percentile 65.48 ms)

193

```
Run 6: Statistics of SCReAM

Start at: 2018-05-24 05:26:21
End at: 2018-05-24 05:26:51
Local clock offset: 3.547 ms
Remote clock offset: -0.887 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 67.632 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 67.632 ms
Loss rate: 0.54%
```

Run 6: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.18 Mbit/s)　　Flow 1 egress (mean 0.18 Mbit/s)
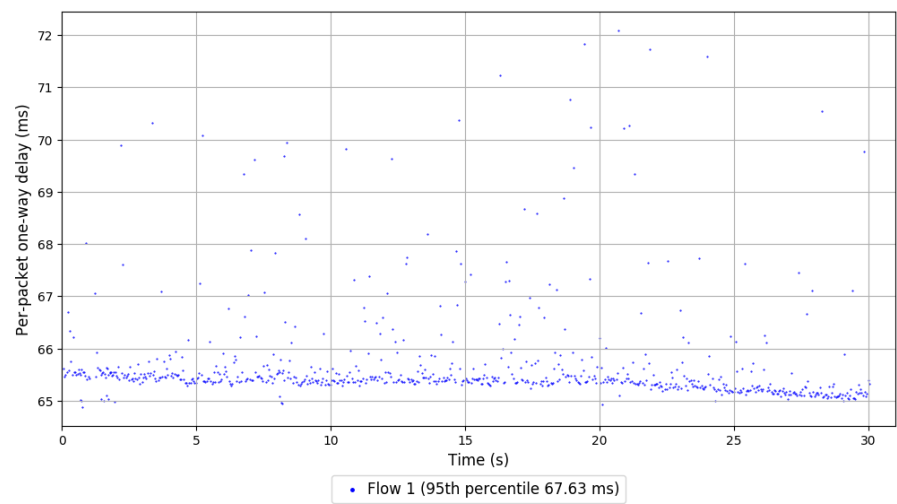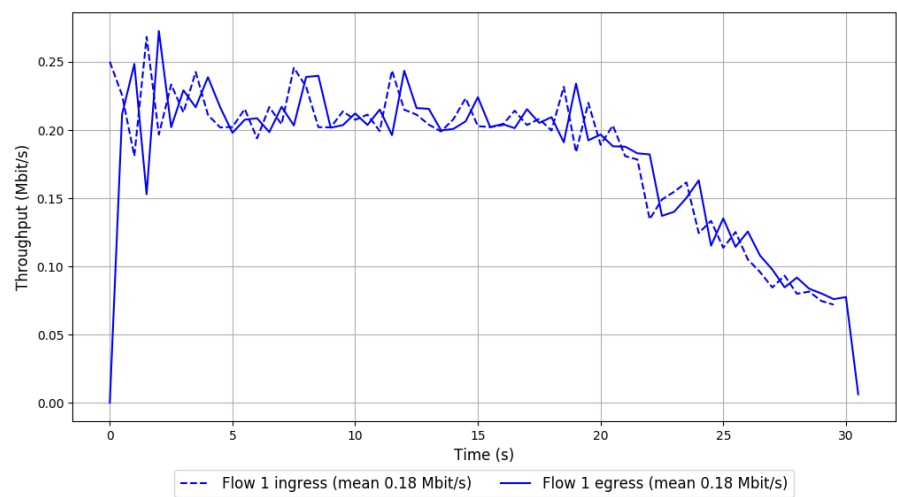

Flow 1 (95th percentile 67.63 ms)

```
Run 7: Statistics of SCReAM

Start at: 2018-05-24 05:46:47
End at: 2018-05-24 05:47:17
Local clock offset: 4.019 ms
Remote clock offset: 0.051 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 67.703 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 67.703 ms
Loss rate: 0.23%
```

Run 7: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.19 Mbit/s) — — — Flow 1 egress (mean 0.19 Mbit/s)

Flow 1 (95th percentile 67.70 ms)

```
Run 8: Statistics of SCReAM

Start at: 2018-05-24 06:07:15
End at: 2018-05-24 06:07:45
Local clock offset: 2.84 ms
Remote clock offset: 0.43 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 65.787 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 65.787 ms
Loss rate: 0.42%
```
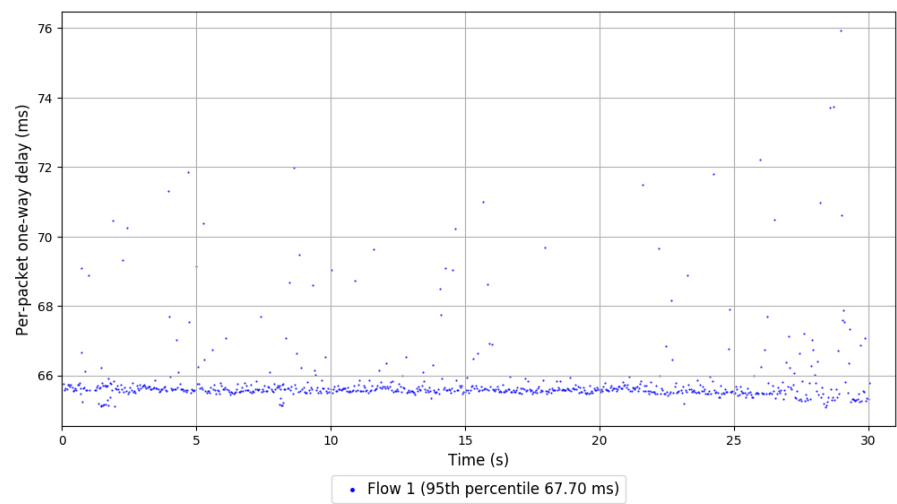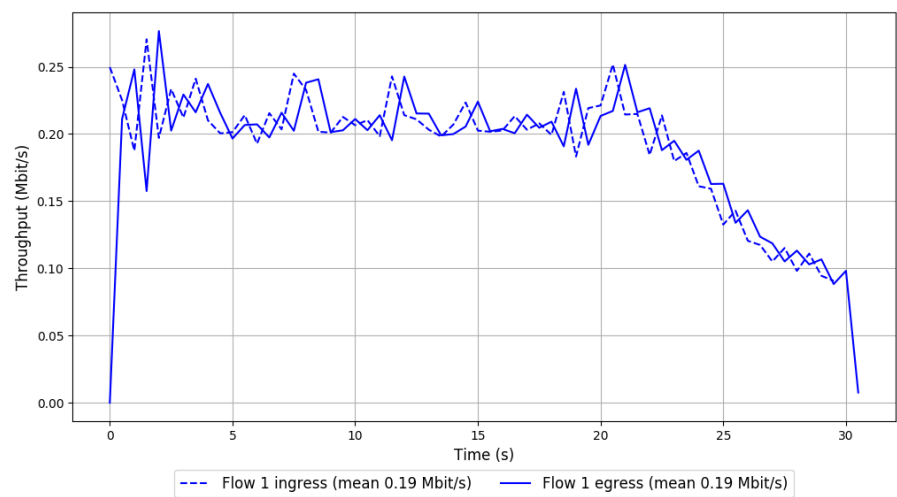
Run 8: Report of SCReAM — Data Link

```
Run 9: Statistics of SCReAM

Start at: 2018-05-24 06:27:43
End at: 2018-05-24 06:28:13
Local clock offset: 2.625 ms
Remote clock offset: -21.03 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 43.859 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 43.859 ms
Loss rate: 0.00%
```

Run 9: Report of SCReAM — Data Link

```
Run 10: Statistics of SCReAM

Start at: 2018-05-24 06:48:15
End at: 2018-05-24 06:48:45
Local clock offset: 4.194 ms
Remote clock offset: 0.961 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 65.974 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 65.974 ms
Loss rate: 0.24%
```
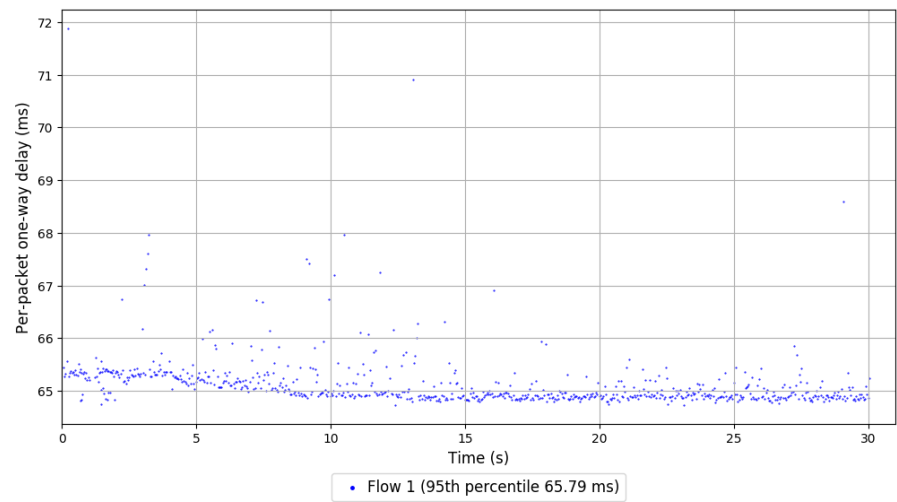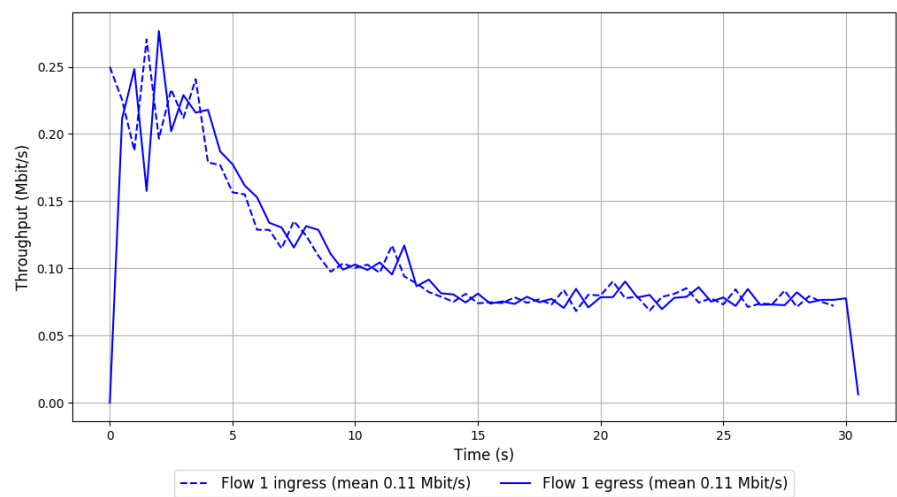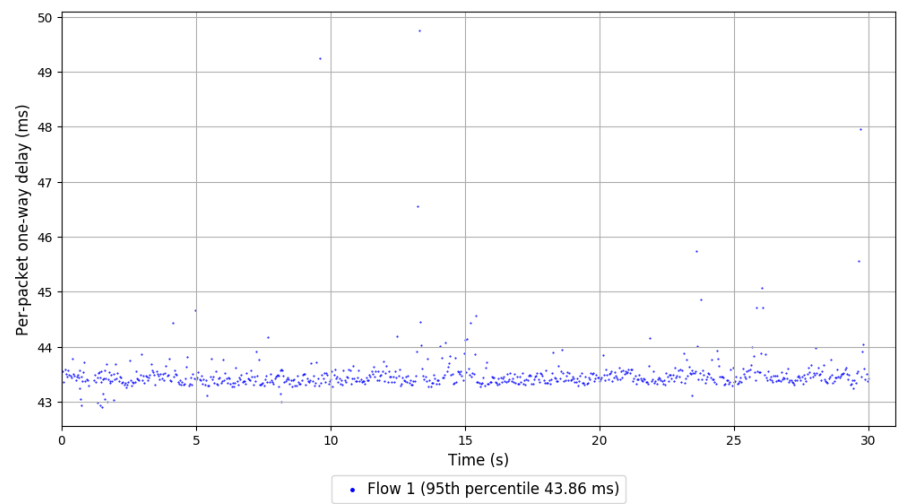
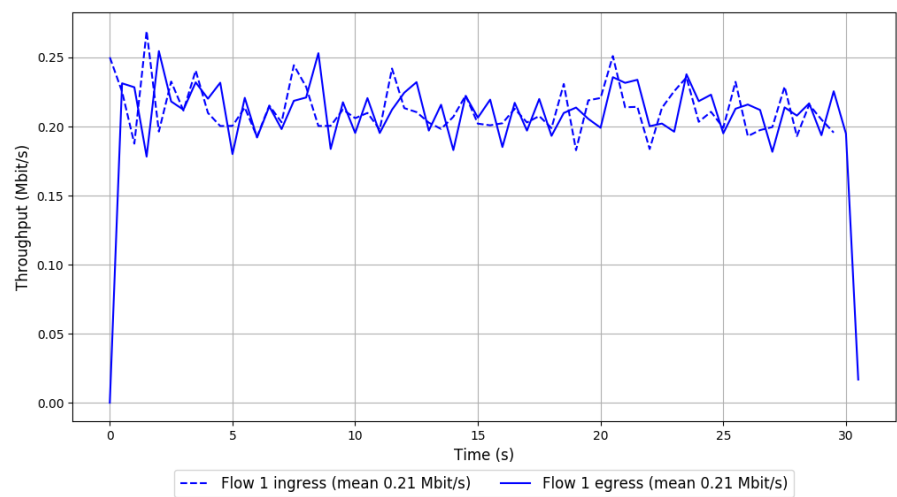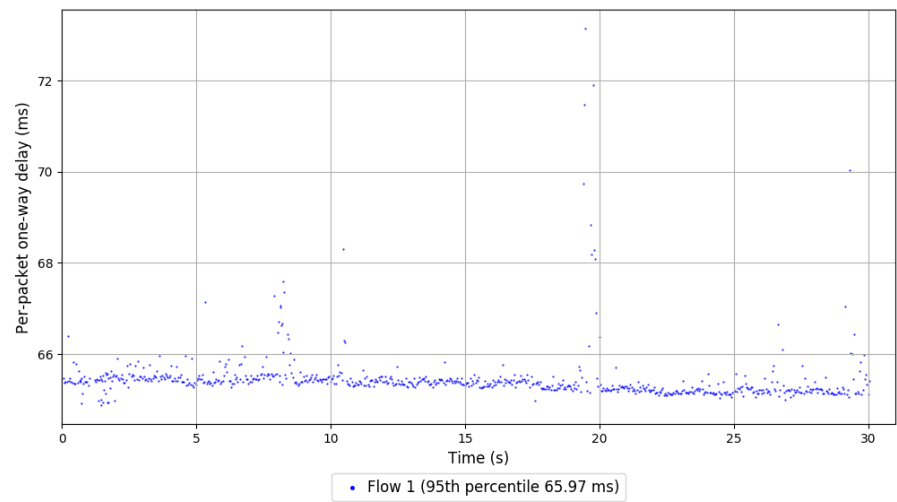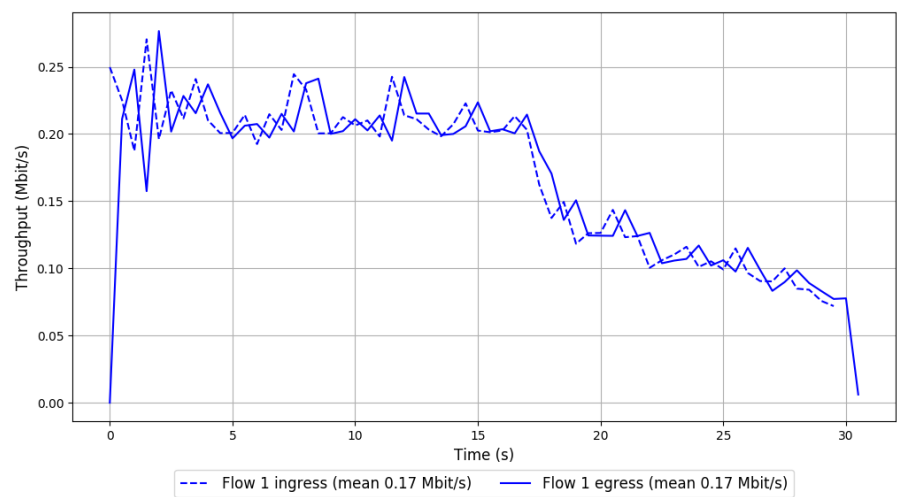Run 10: Report of SCReAM — Data Link

Flow 1 ingress (mean 0.17 Mbit/s) —— Flow 1 egress (mean 0.17 Mbit/s)

• Flow 1 (95th percentile 65.97 ms)

```
Run 1: Statistics of Sprout

Start at: 2018-05-24 03:28:21
End at: 2018-05-24 03:28:51
Local clock offset: 3.665 ms
Remote clock offset: 0.42 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 70.685 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 70.685 ms
Loss rate: 1.80%
```
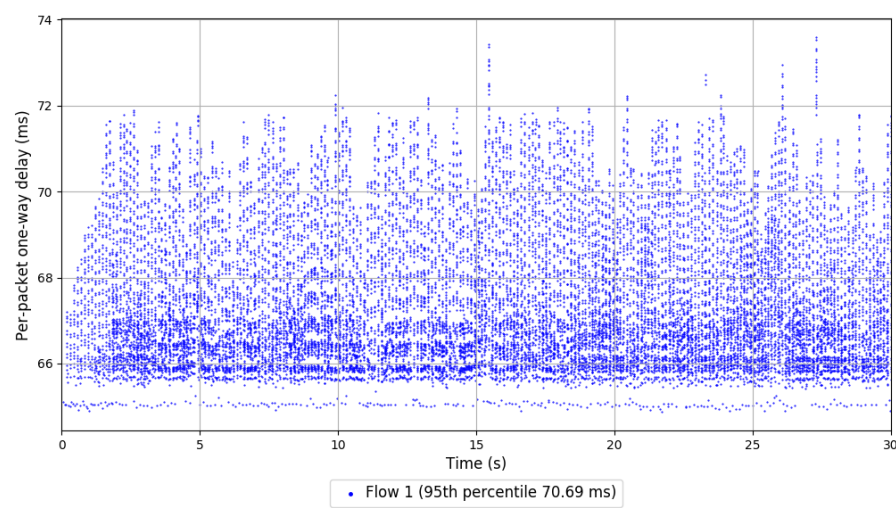
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-05-24 03:48:53
End at: 2018-05-24 03:49:23
Local clock offset: 2.588 ms
Remote clock offset: -0.045 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 70.398 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 70.398 ms
Loss rate: 1.80%
```
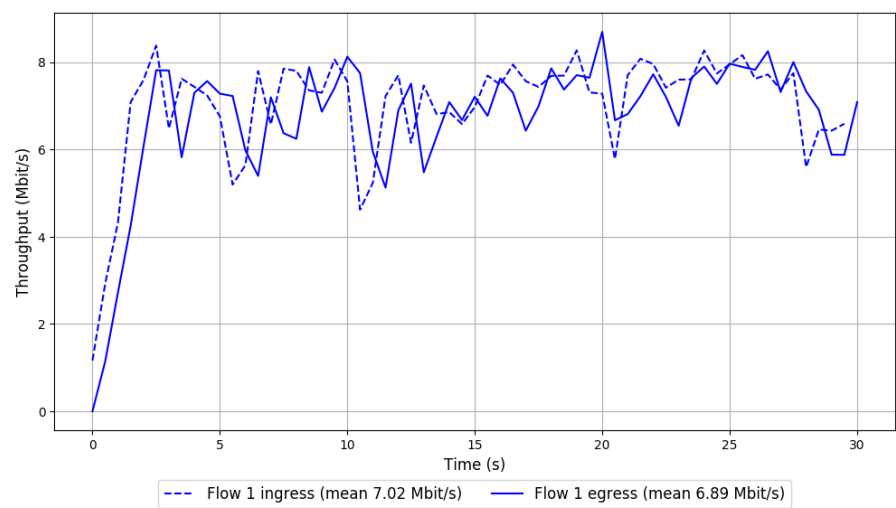
Run 2: Report of Sprout — Data Link

Flow 1 ingress (mean 7.14 Mbit/s) — — — Flow 1 egress (mean 7.01 Mbit/s) ———

• Flow 1 (95th percentile 70.40 ms)

```
Run 3: Statistics of Sprout

Start at: 2018-05-24 04:09:28
End at: 2018-05-24 04:09:58
Local clock offset: 1.245 ms
Remote clock offset: 0.326 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 70.342 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 70.342 ms
Loss rate: 1.76%
```
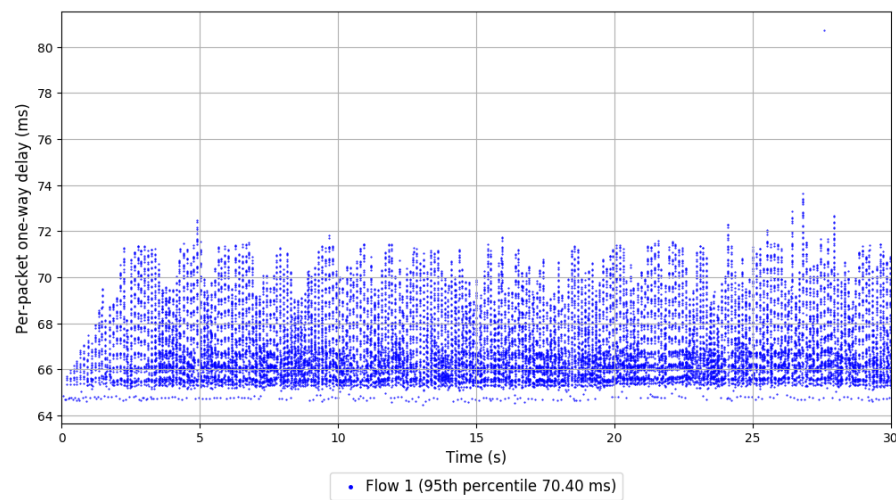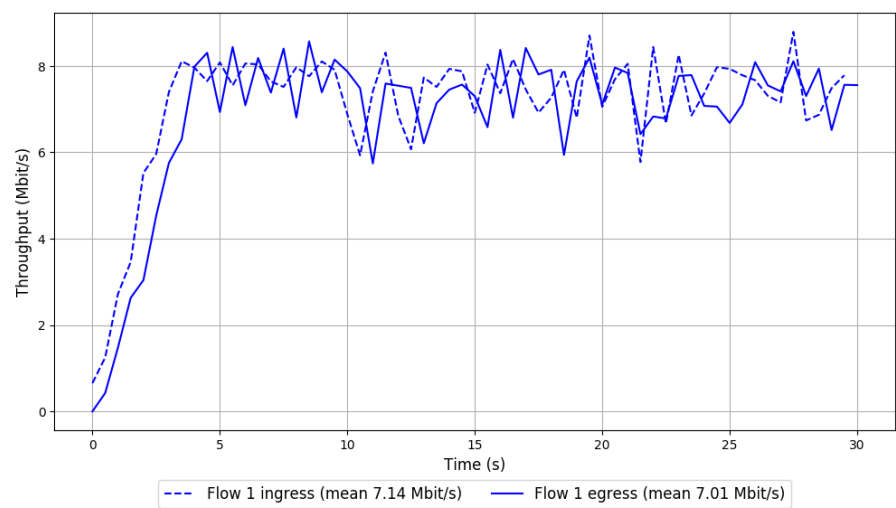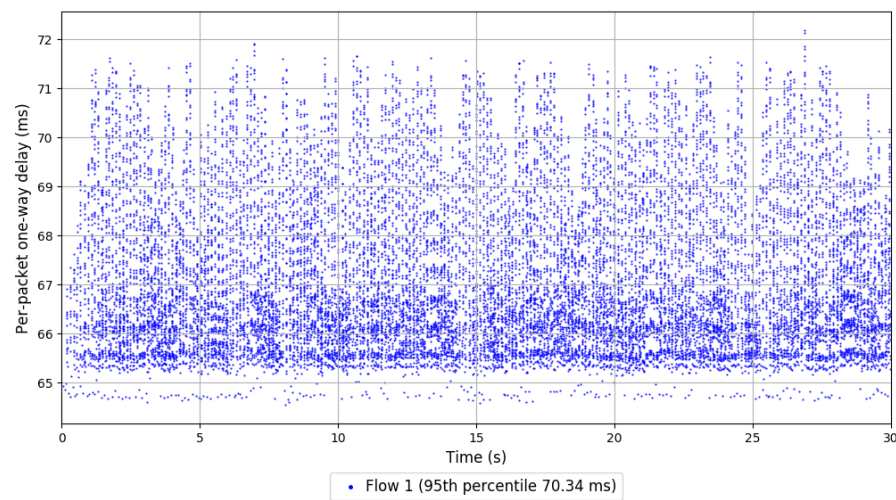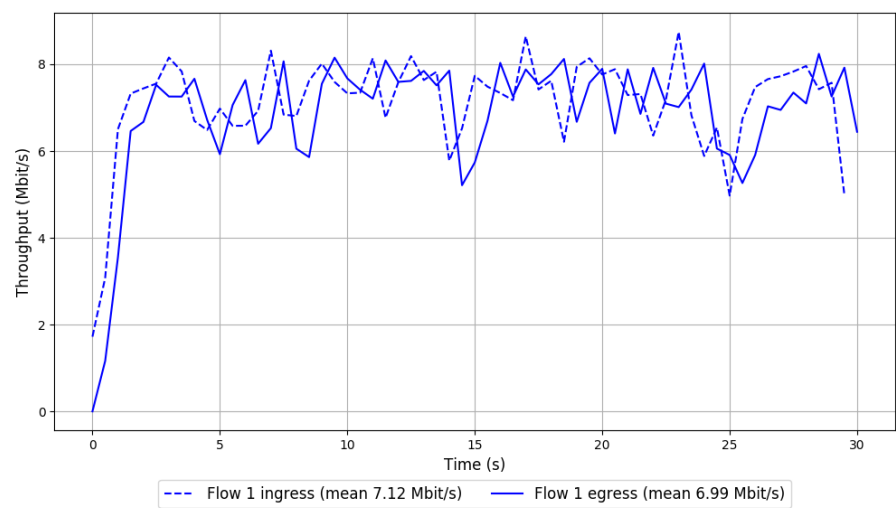
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-05-24 04:30:33
End at: 2018-05-24 04:31:03
Local clock offset: 0.468 ms
Remote clock offset: 0.241 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 70.933 ms
Loss rate: 2.23%
-- Flow 1:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 70.933 ms
Loss rate: 2.23%
```
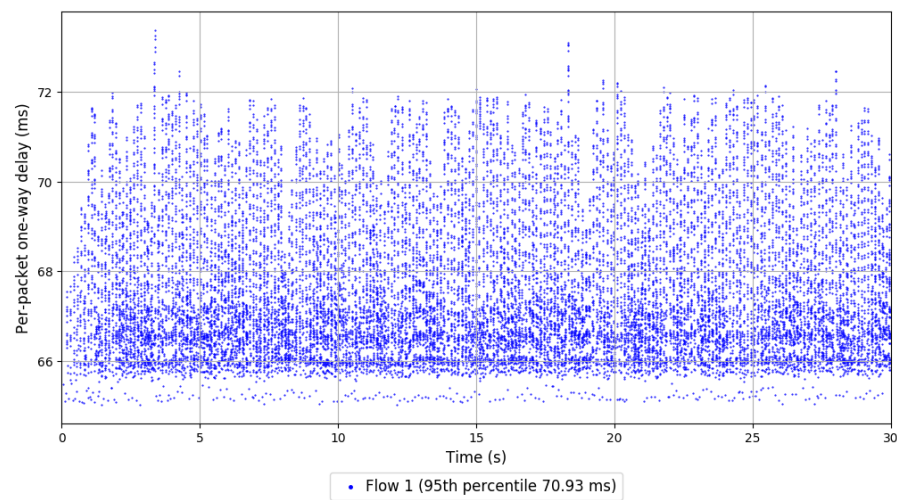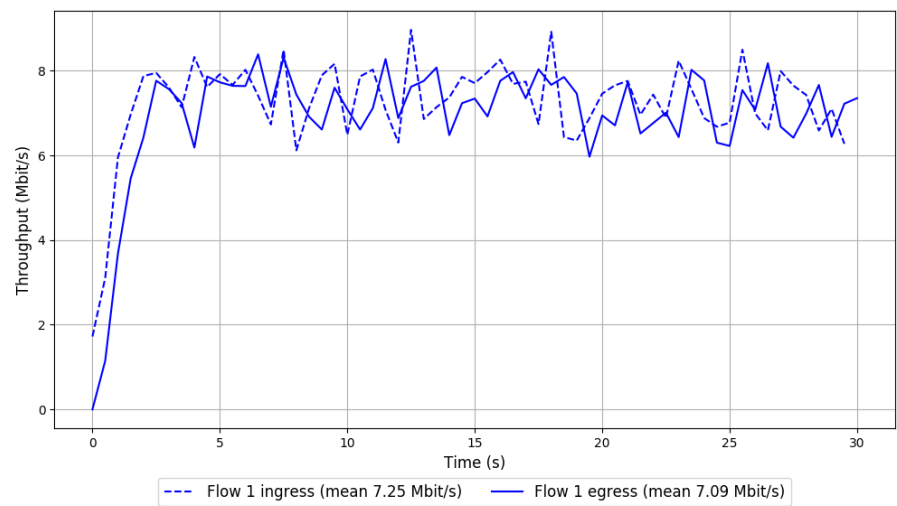
Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 7.25 Mbit/s)   Flow 1 egress (mean 7.09 Mbit/s)

Flow 1 (95th percentile 70.93 ms)

```
Run 5: Statistics of Sprout

Start at: 2018-05-24 04:51:41
End at: 2018-05-24 04:52:11
Local clock offset: 0.437 ms
Remote clock offset: -0.298 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 70.520 ms
Loss rate: 3.20%
-- Flow 1:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 70.520 ms
Loss rate: 3.20%
```

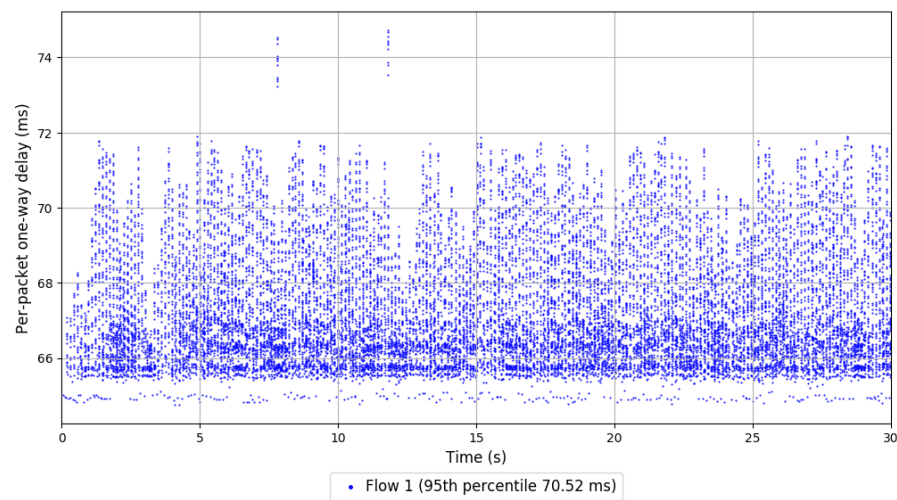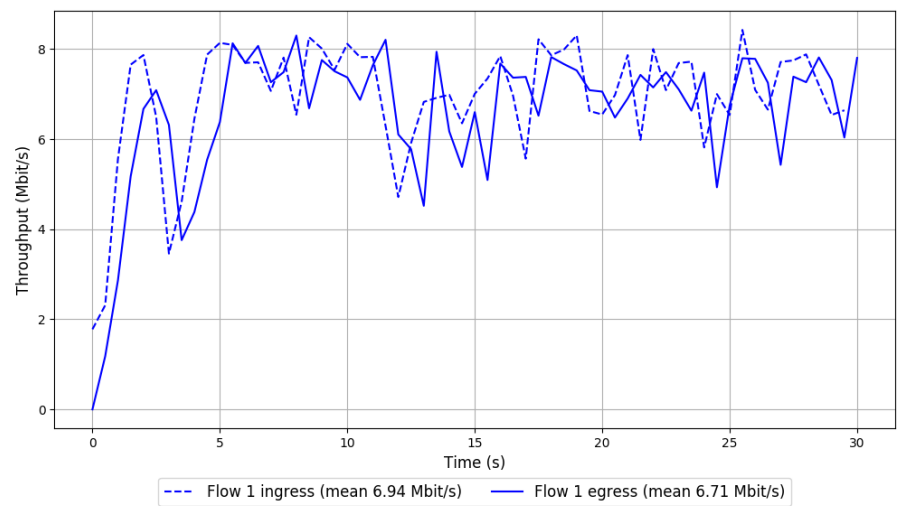## Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-05-24 05:12:12
End at: 2018-05-24 05:12:42
Local clock offset: 2.933 ms
Remote clock offset: -0.637 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 70.686 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 70.686 ms
Loss rate: 2.66%
```

Run 6: Report of Sprout — Data Link

Flow 1 ingress (mean 6.71 Mbit/s) Flow 1 egress (mean 6.53 Mbit/s)

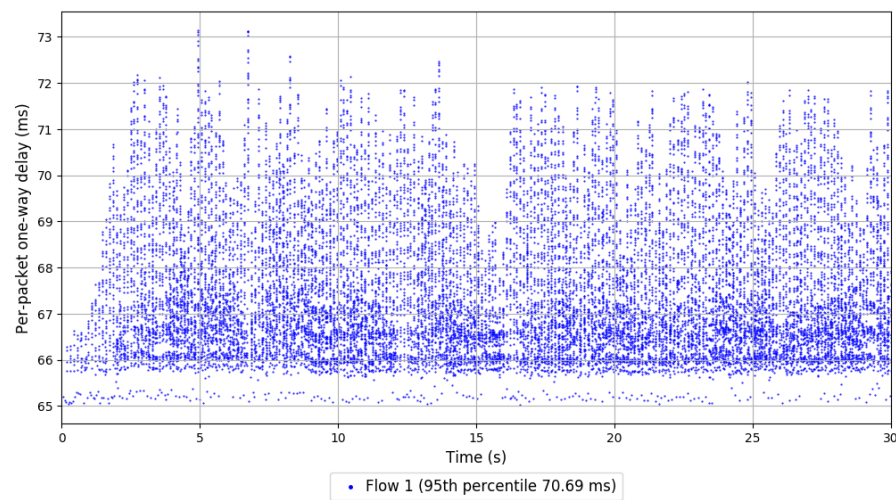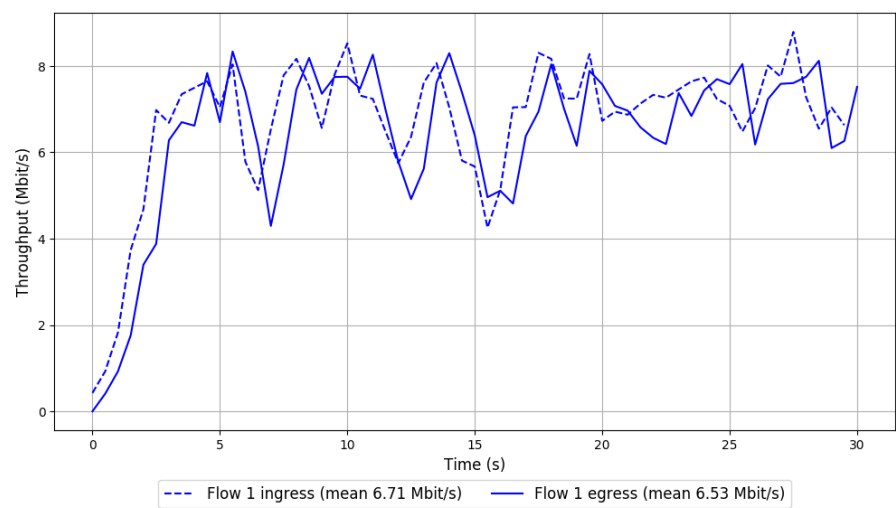

• Flow 1 (95th percentile 70.69 ms)

```
Run 7: Statistics of Sprout

Start at: 2018-05-24 05:32:40
End at: 2018-05-24 05:33:10
Local clock offset: 3.819 ms
Remote clock offset: -0.591 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.69 Mbit/s
95th percentile per-packet one-way delay: 71.084 ms
Loss rate: 4.74%
-- Flow 1:
Average throughput: 5.69 Mbit/s
95th percentile per-packet one-way delay: 71.084 ms
Loss rate: 4.74%
```

Run 7: Report of Sprout — Data Link

Flow 1 ingress (mean 5.98 Mbit/s) --- Flow 1 egress (mean 5.69 Mbit/s)

• Flow 1 (95th percentile 71.08 ms)

```
Run 8: Statistics of Sprout

Start at: 2018-05-24 05:53:09
End at: 2018-05-24 05:53:39
Local clock offset: 4.137 ms
Remote clock offset: 0.287 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.22 Mbit/s
95th percentile per-packet one-way delay: 70.832 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 6.22 Mbit/s
95th percentile per-packet one-way delay: 70.832 ms
Loss rate: 3.69%
```
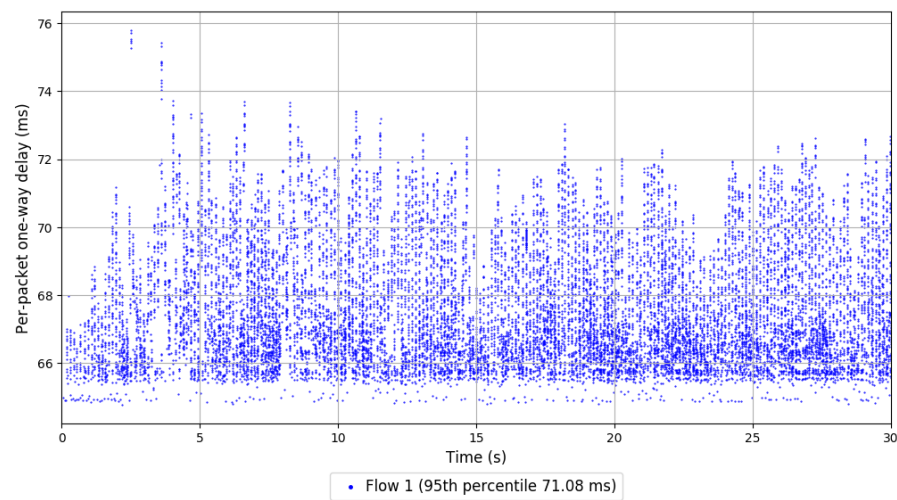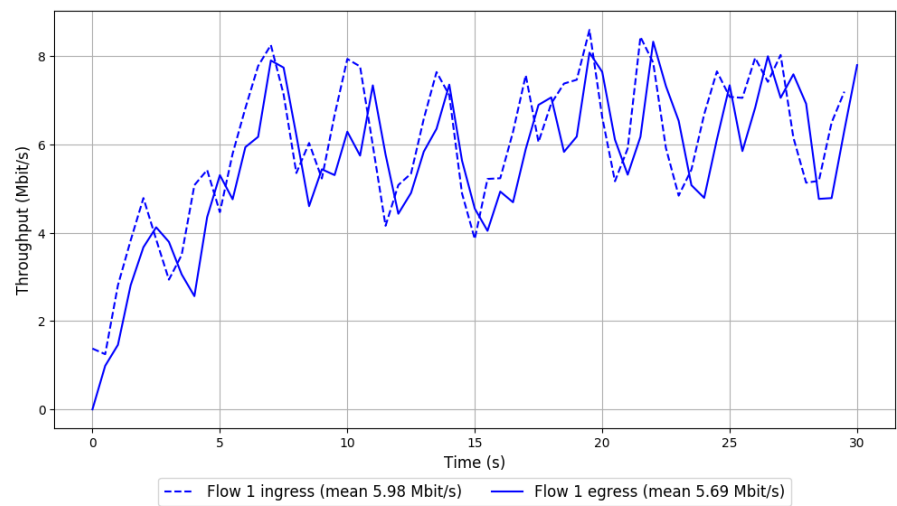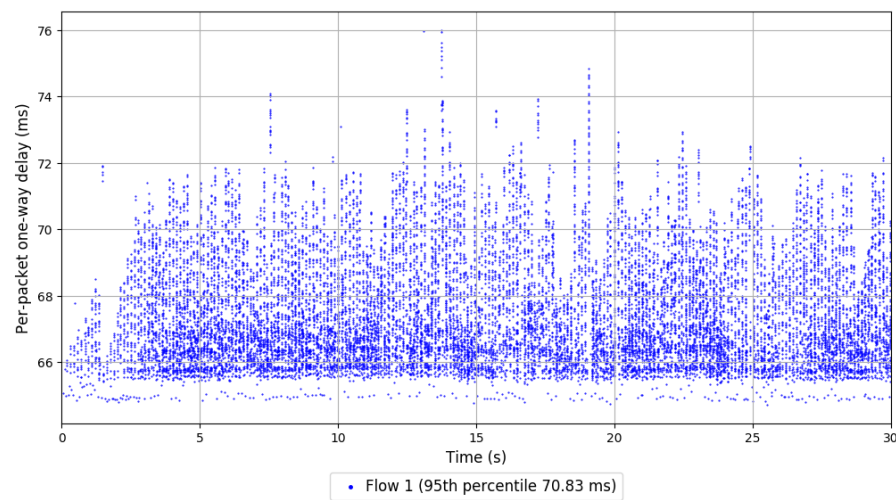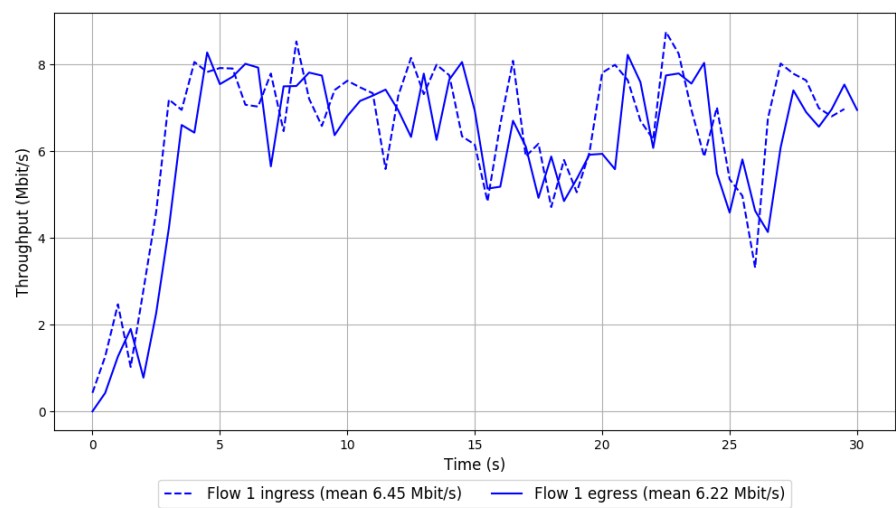
Run 8: Report of Sprout — Data Link

Flow 1 ingress (mean 6.45 Mbit/s)　　Flow 1 egress (mean 6.22 Mbit/s)

• Flow 1 (95th percentile 70.83 ms)

```
Run 9: Statistics of Sprout

Start at: 2018-05-24 06:13:39
End at: 2018-05-24 06:14:09
Local clock offset: 2.53 ms
Remote clock offset: 0.612 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.09 Mbit/s
95th percentile per-packet one-way delay: 71.007 ms
Loss rate: 4.56%
-- Flow 1:
Average throughput: 6.09 Mbit/s
95th percentile per-packet one-way delay: 71.007 ms
Loss rate: 4.56%
```
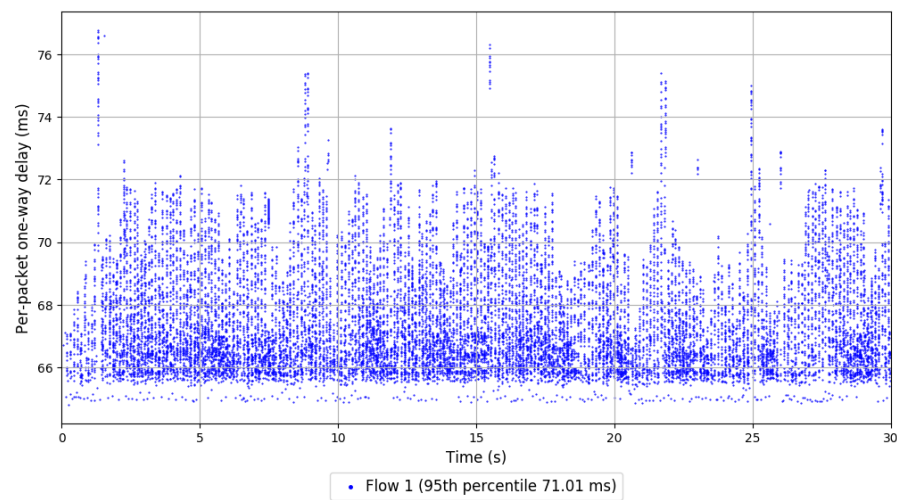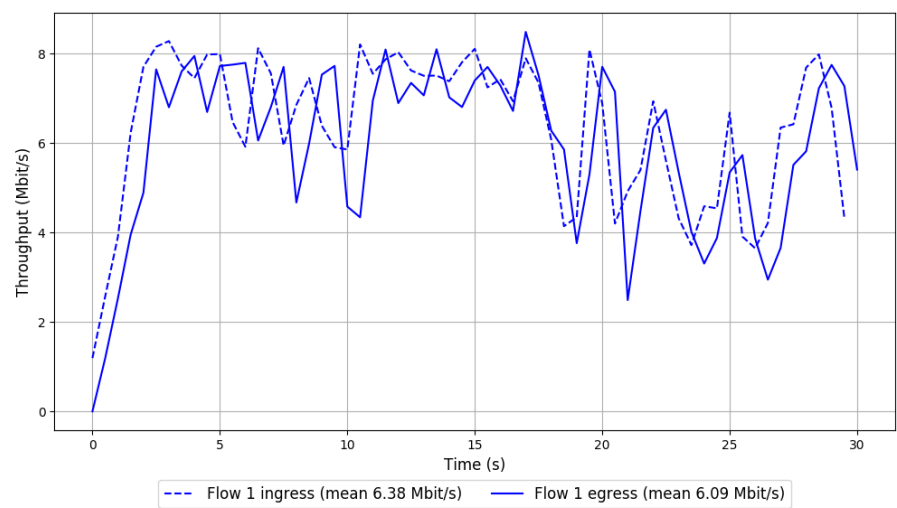
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-05-24 06:34:08
End at: 2018-05-24 06:34:38
Local clock offset: 3.618 ms
Remote clock offset: 1.361 ms


# Below is generated by plot.py at 2018-05-24 07:04:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 70.624 ms
Loss rate: 3.63%
-- Flow 1:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 70.624 ms
Loss rate: 3.63%
```
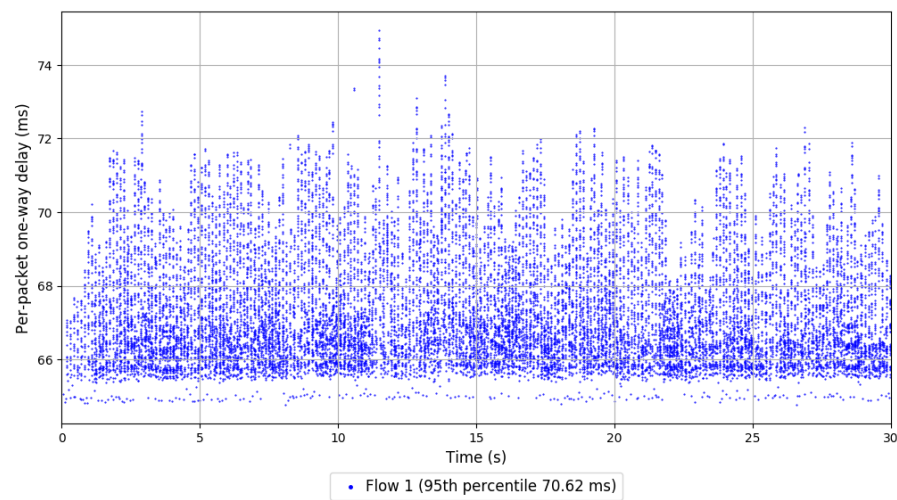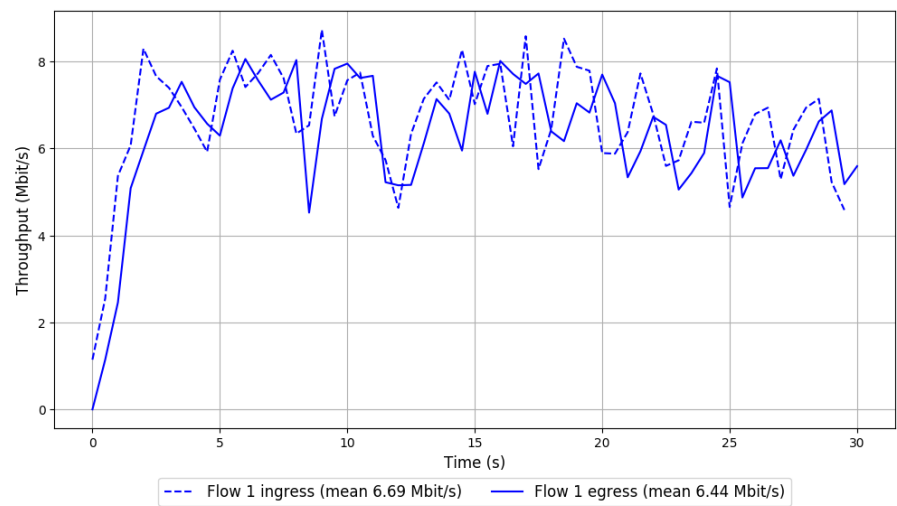
Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 6.69 Mbit/s) ——— Flow 1 egress (mean 6.44 Mbit/s)

• Flow 1 (95th percentile 70.62 ms)

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

Start at: 2018-05-24 03:47:36
End at: 2018-05-24 03:48:06
Local clock offset: 2.376 ms
Remote clock offset: -0.006 ms


# Below is generated by plot.py at 2018-05-24 07:04:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.01 Mbit/s
95th percentile per-packet one-way delay: 65.838 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 14.01 Mbit/s
95th percentile per-packet one-way delay: 65.838 ms
Loss rate: 0.91%
```

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

Flow 1 ingress (mean 14.14 Mbit/s) Flow 1 egress (mean 14.01 Mbit/s)
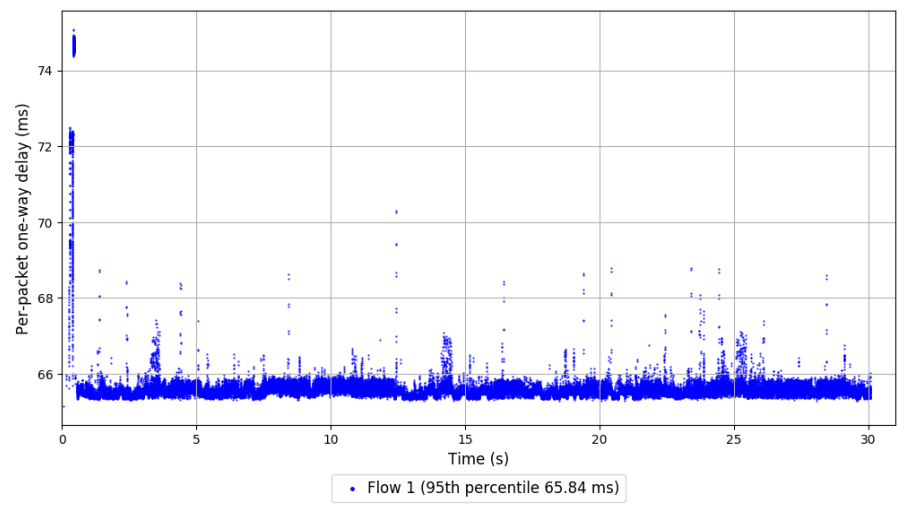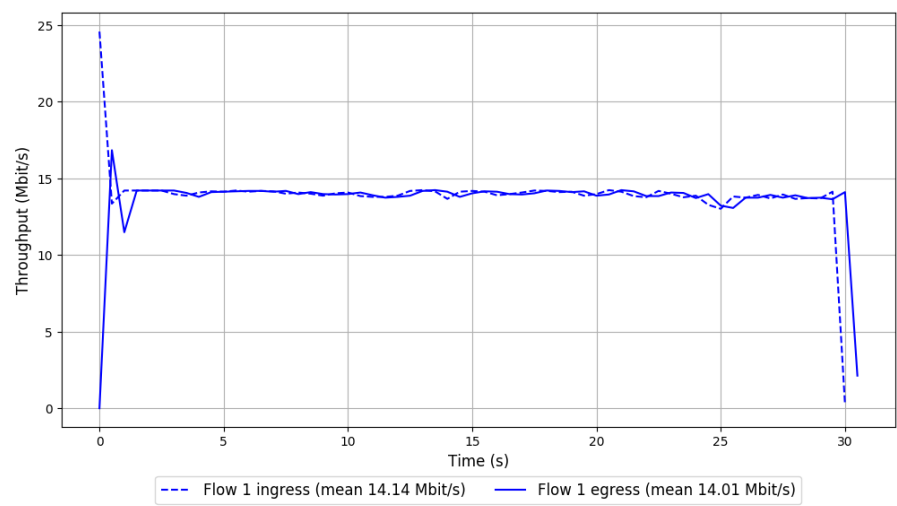

Flow 1 (95th percentile 65.84 ms)

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

Start at: 2018-05-24 04:08:08
End at: 2018-05-24 04:08:38
Local clock offset: 1.187 ms
Remote clock offset: 0.233 ms


# Below is generated by plot.py at 2018-05-24 07:06:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.60 Mbit/s
95th percentile per-packet one-way delay: 80.164 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 69.60 Mbit/s
95th percentile per-packet one-way delay: 80.164 ms
Loss rate: 2.38%
```
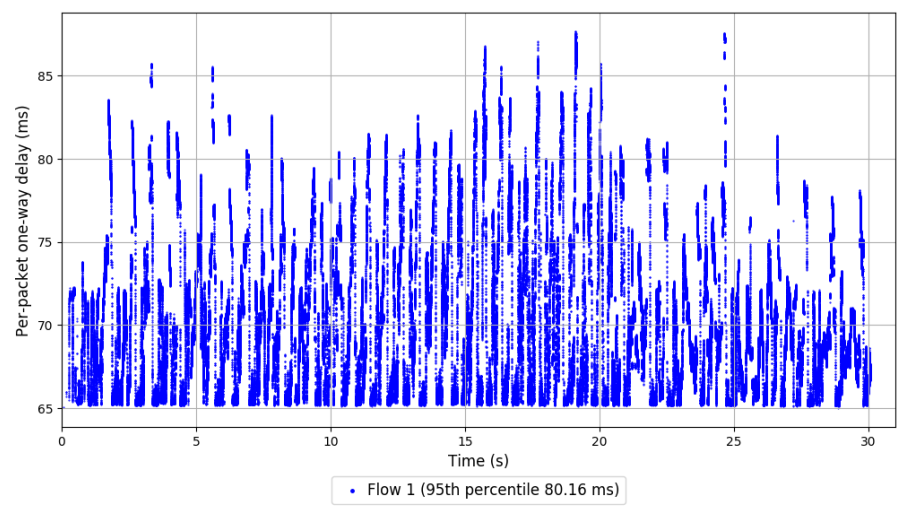
Run 2: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 71.30 Mbit/s)   Flow 1 egress (mean 69.60 Mbit/s)

• Flow 1 (95th percentile 80.16 ms)

Run 3: Statistics of TaoVA-100x

/home/ubuntu/pantheon/data/2018-05-24T03-27-AWS-Korea-to-China-10-runs/taova_stats_run3.log

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

Figure is missing

Figure is missing

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

Start at: 2018-05-24 04:50:20
End at: 2018-05-24 04:50:50
Local clock offset: 0.477 ms
Remote clock offset: -0.296 ms


# Below is generated by plot.py at 2018-05-24 07:06:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.43 Mbit/s
95th percentile per-packet one-way delay: 77.792 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 68.43 Mbit/s
95th percentile per-packet one-way delay: 77.792 ms
Loss rate: 2.47%
```
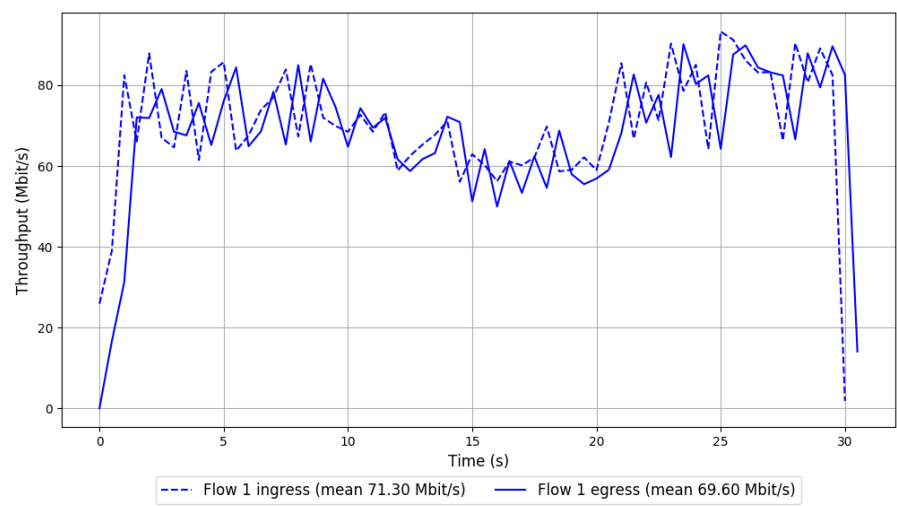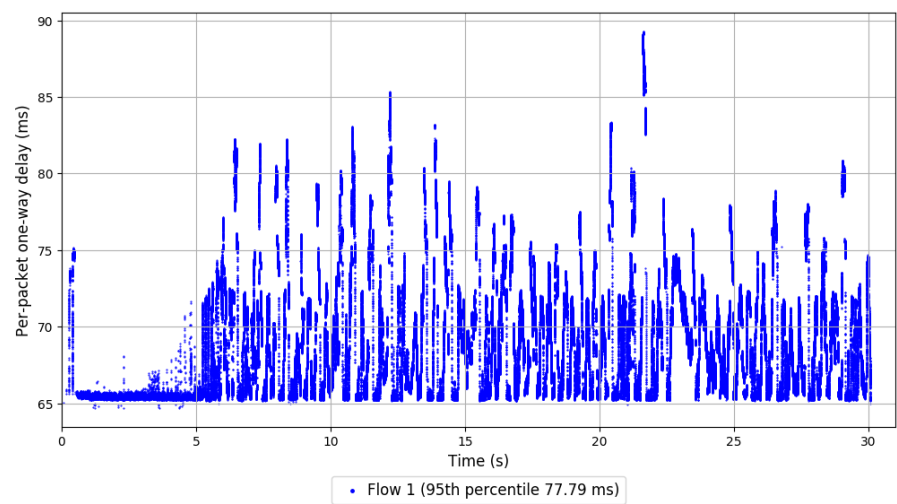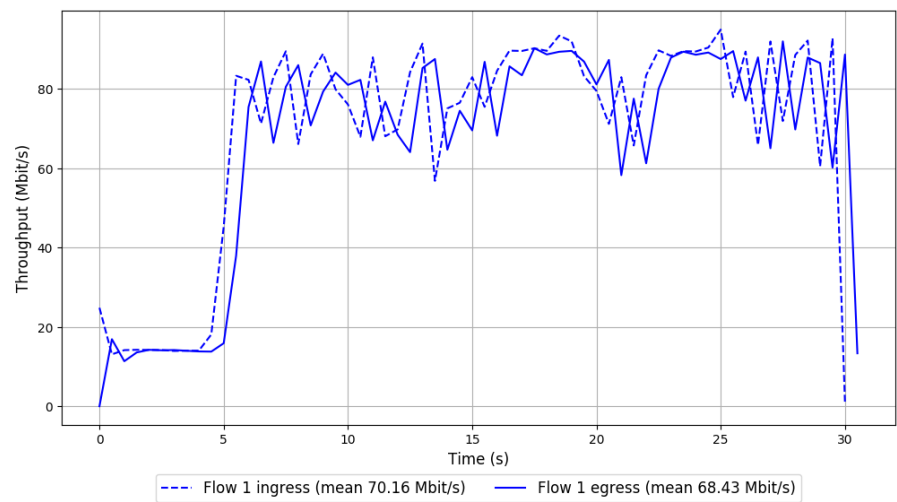
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 70.16 Mbit/s)   Flow 1 egress (mean 68.43 Mbit/s)

Flow 1 (95th percentile 77.79 ms)

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

Start at: 2018-05-24 05:10:52
End at: 2018-05-24 05:11:22
Local clock offset: 2.833 ms
Remote clock offset: -0.552 ms


# Below is generated by plot.py at 2018-05-24 07:06:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.50 Mbit/s
95th percentile per-packet one-way delay: 79.174 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 74.50 Mbit/s
95th percentile per-packet one-way delay: 79.174 ms
Loss rate: 2.77%
```
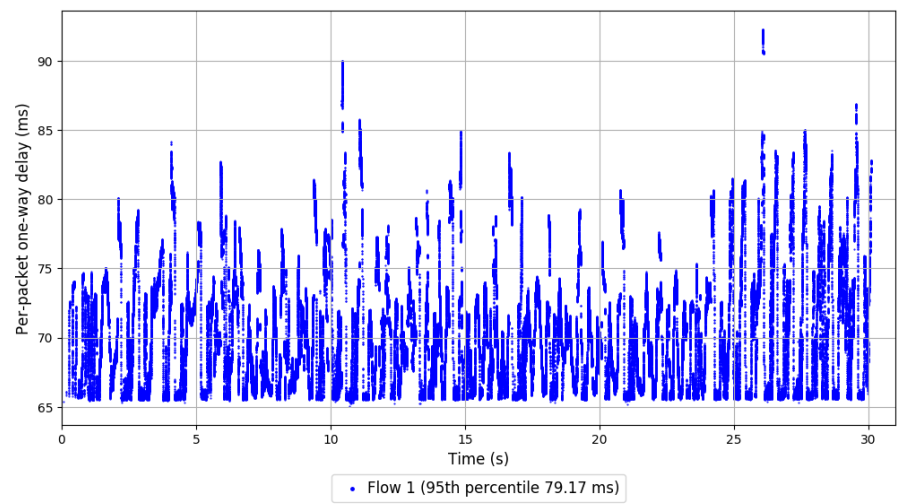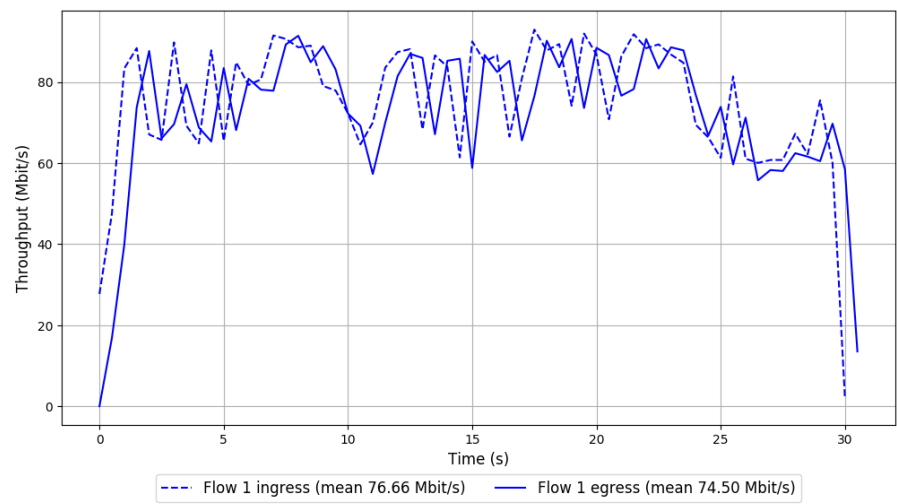
Run 5: Report of TaoVA-100x — Data Link

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

Start at: 2018-05-24 05:31:24
End at: 2018-05-24 05:31:54
Local clock offset: 3.773 ms
Remote clock offset: -0.677 ms


# Below is generated by plot.py at 2018-05-24 07:06:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.91 Mbit/s
95th percentile per-packet one-way delay: 65.976 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 13.91 Mbit/s
95th percentile per-packet one-way delay: 65.976 ms
Loss rate: 1.60%
```
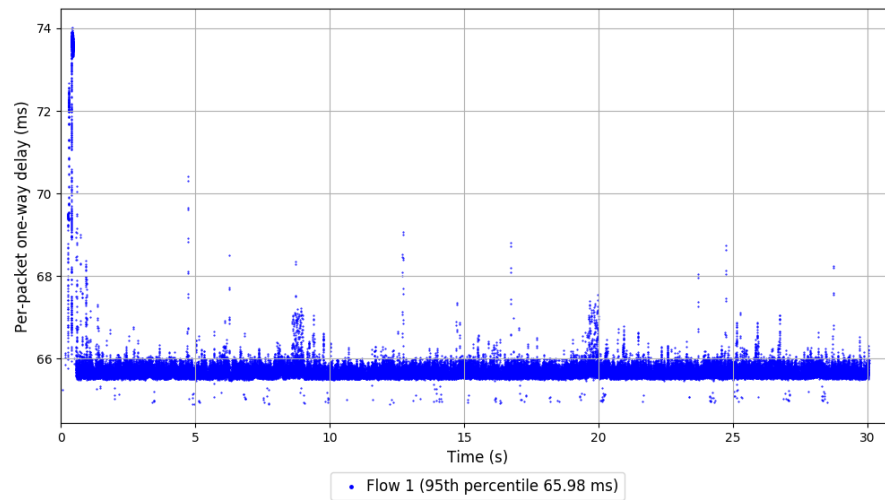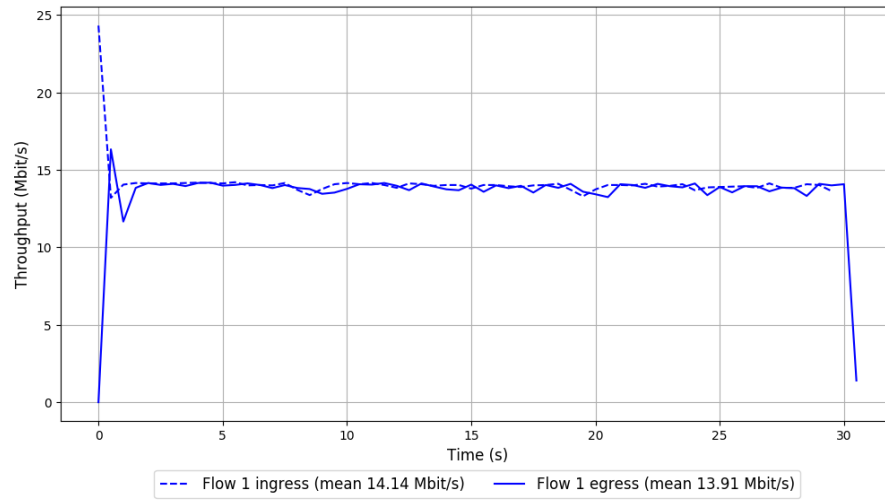
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 14.14 Mbit/s) ----   Flow 1 egress (mean 13.91 Mbit/s) ——

• Flow 1 (95th percentile 65.98 ms)

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

Start at: 2018-05-24 05:51:49
End at: 2018-05-24 05:52:19
Local clock offset: 4.001 ms
Remote clock offset: 0.124 ms


# Below is generated by plot.py at 2018-05-24 07:06:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 80.888 ms
Loss rate: 4.67%
-- Flow 1:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 80.888 ms
Loss rate: 4.67%
```
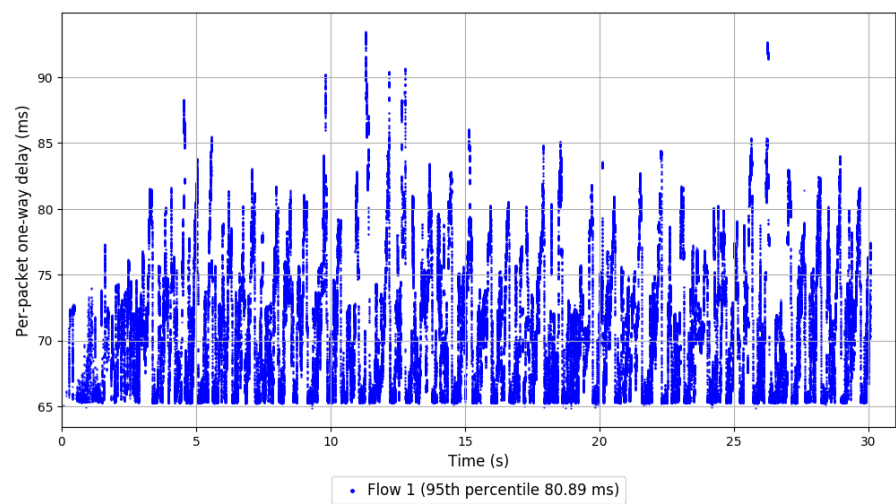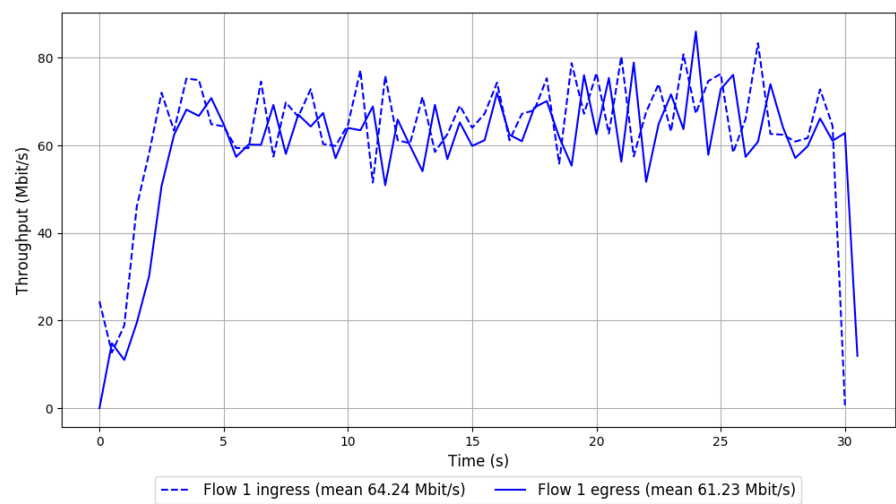
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 64.24 Mbit/s)   Flow 1 egress (mean 61.23 Mbit/s)

Flow 1 (95th percentile 80.89 ms)

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

Start at: 2018-05-24 06:12:19
End at: 2018-05-24 06:12:49
Local clock offset: 2.699 ms
Remote clock offset: 0.648 ms


# Below is generated by plot.py at 2018-05-24 07:06:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.56 Mbit/s
95th percentile per-packet one-way delay: 81.994 ms
Loss rate: 5.34%
-- Flow 1:
Average throughput: 60.56 Mbit/s
95th percentile per-packet one-way delay: 81.994 ms
Loss rate: 5.34%
```
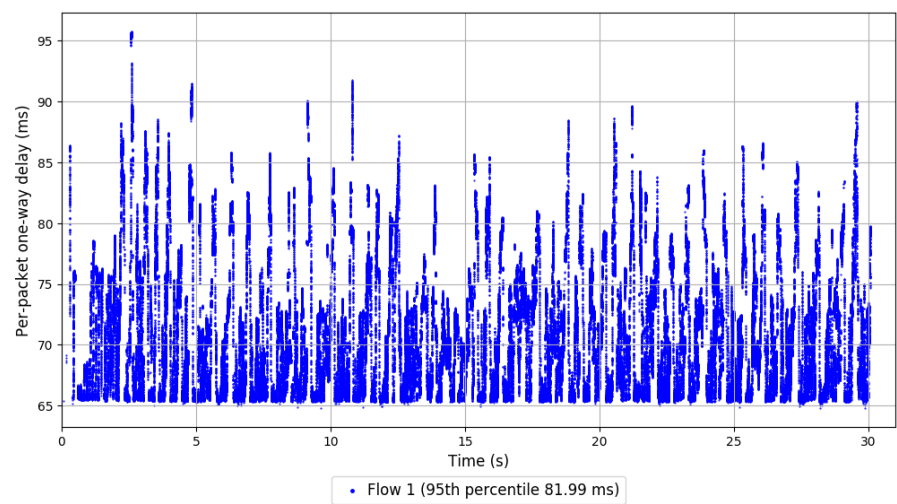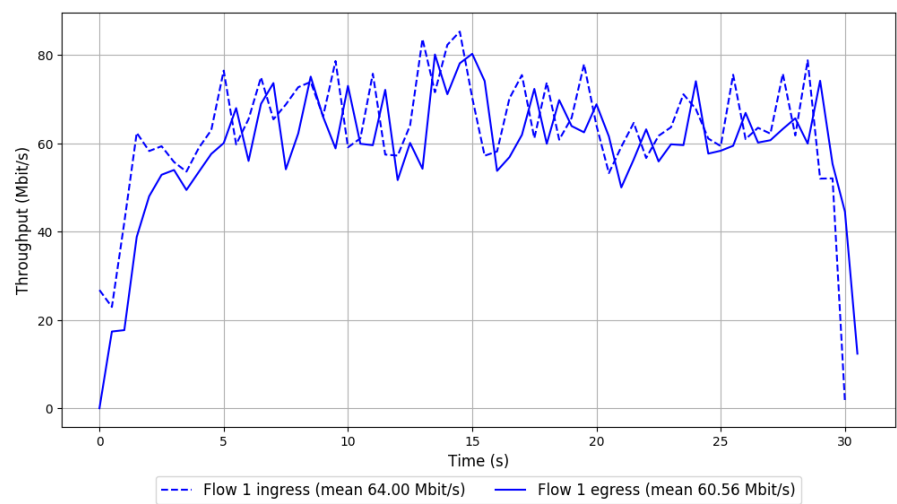
Run 8: Report of TaoVA-100x — Data Link

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

Start at: 2018-05-24 06:32:47
End at: 2018-05-24 06:33:17
Local clock offset: 3.223 ms
Remote clock offset: 1.381 ms


# Below is generated by plot.py at 2018-05-24 07:06:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.92 Mbit/s
95th percentile per-packet one-way delay: 79.665 ms
Loss rate: 2.67%
-- Flow 1:
Average throughput: 73.92 Mbit/s
95th percentile per-packet one-way delay: 79.665 ms
Loss rate: 2.67%
```
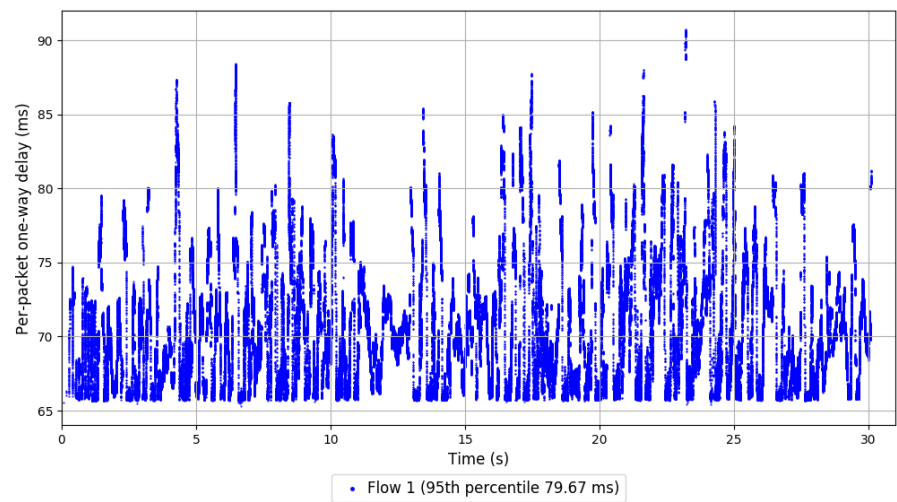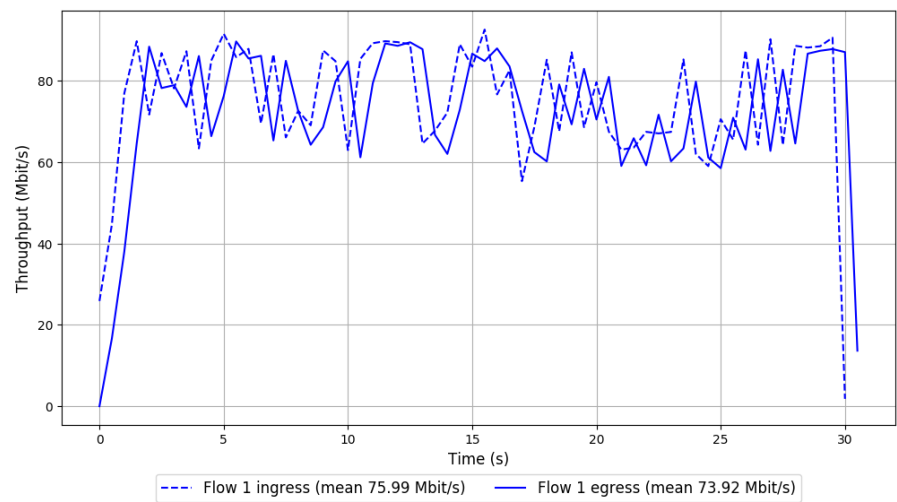
Run 9: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 75.99 Mbit/s) ----- Flow 1 egress (mean 73.92 Mbit/s) ——

• Flow 1 (95th percentile 79.67 ms)

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

Start at: 2018-05-24 06:53:20
End at: 2018-05-24 06:53:50
Local clock offset: 4.466 ms
Remote clock offset: 0.739 ms


# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.29 Mbit/s
95th percentile per-packet one-way delay: 79.918 ms
Loss rate: 2.89%
-- Flow 1:
Average throughput: 69.29 Mbit/s
95th percentile per-packet one-way delay: 79.918 ms
Loss rate: 2.89%
```
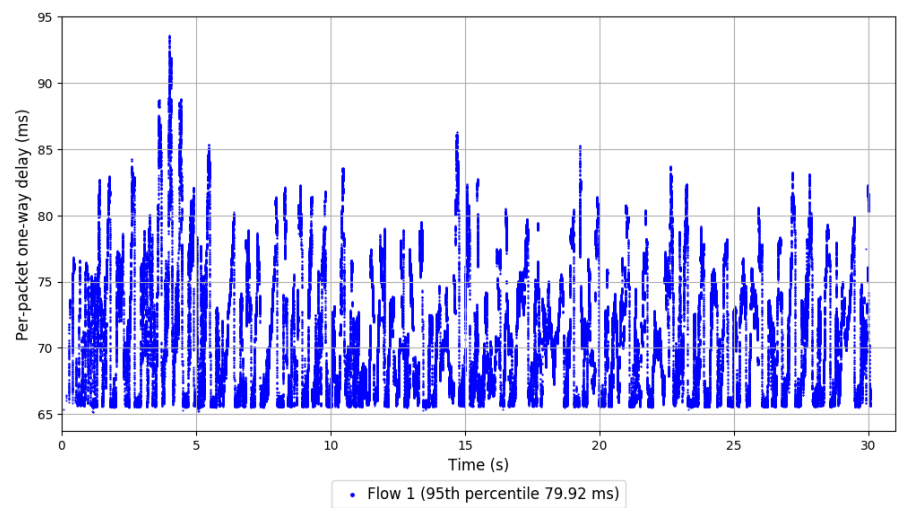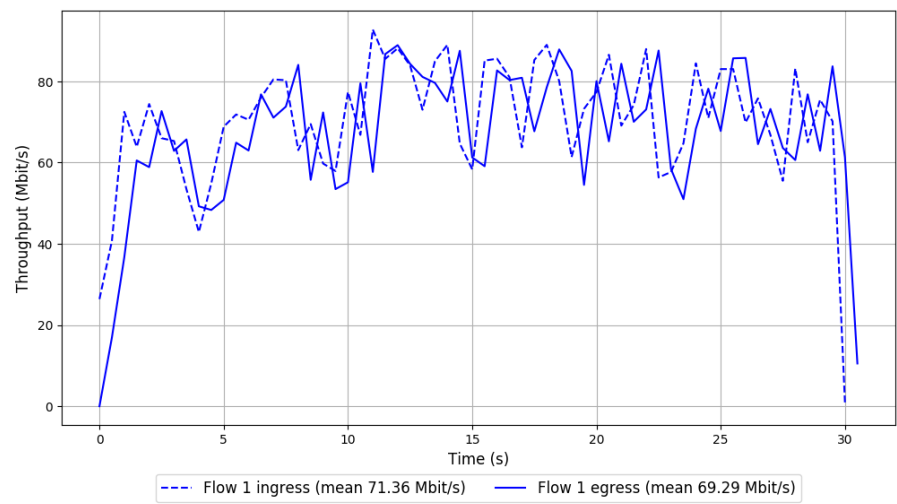
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 71.36 Mbit/s) — Flow 1 egress (mean 69.29 Mbit/s)

Flow 1 (95th percentile 79.92 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-05-24 03:43:46
End at: 2018-05-24 03:44:16
Local clock offset: 2.6 ms
Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.99 Mbit/s
95th percentile per-packet one-way delay: 66.525 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 20.99 Mbit/s
95th percentile per-packet one-way delay: 66.525 ms
Loss rate: 0.21%
```

Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-05-24 04:04:19
End at: 2018-05-24 04:04:49
Local clock offset: 1.441 ms
Remote clock offset: 0.236 ms


# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 66.528 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 66.528 ms
Loss rate: 0.06%
```
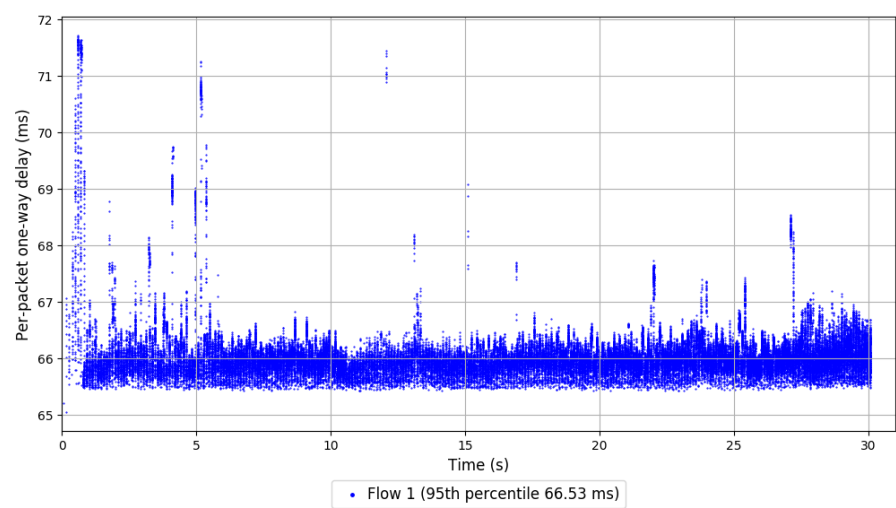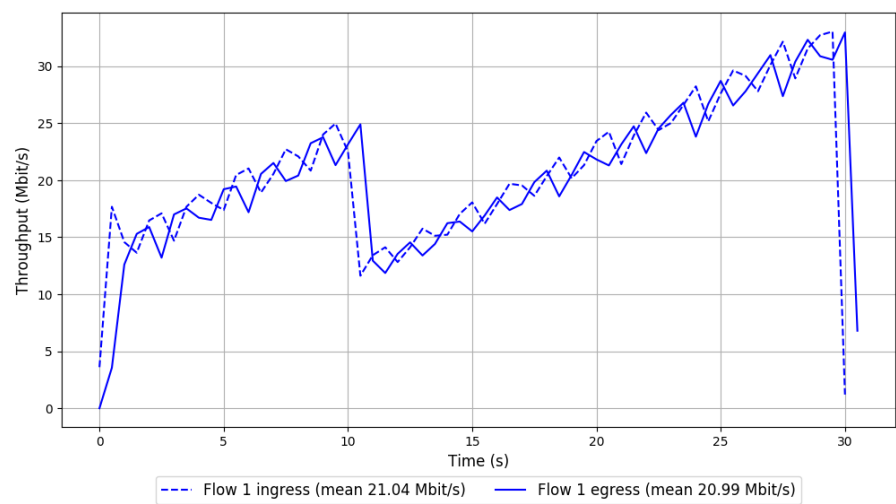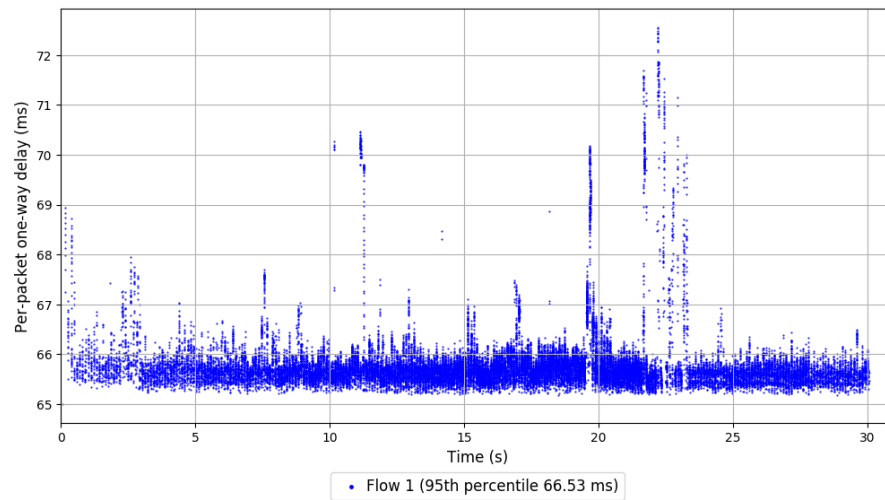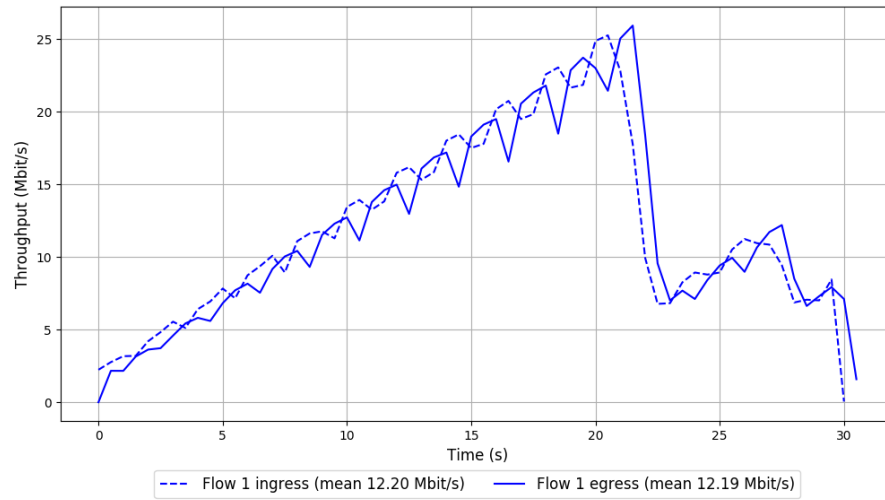
Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 12.20 Mbit/s) --- Flow 1 egress (mean 12.19 Mbit/s)

Flow 1 (95th percentile 66.53 ms)

```
Run 3: Statistics of TCP Vegas

Start at: 2018-05-24 04:24:54
End at: 2018-05-24 04:25:24
Local clock offset: 0.551 ms
Remote clock offset: 0.459 ms


# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.90 Mbit/s
95th percentile per-packet one-way delay: 66.743 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 9.90 Mbit/s
95th percentile per-packet one-way delay: 66.743 ms
Loss rate: 0.51%
```
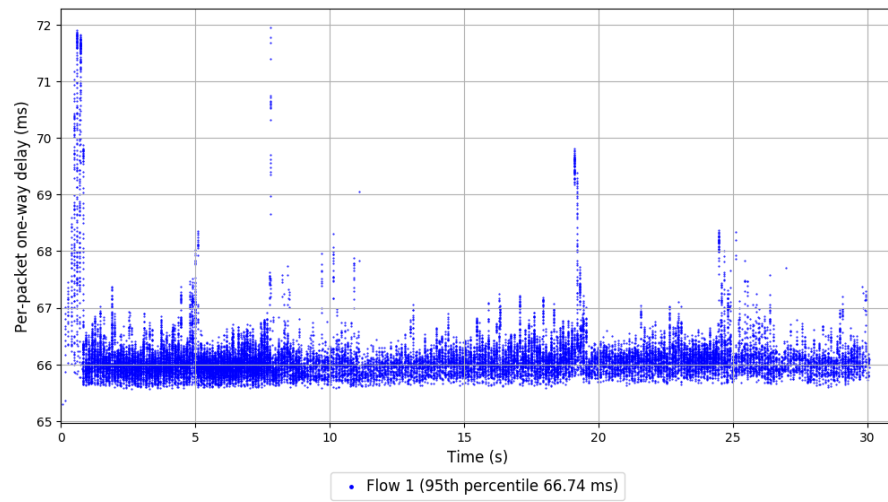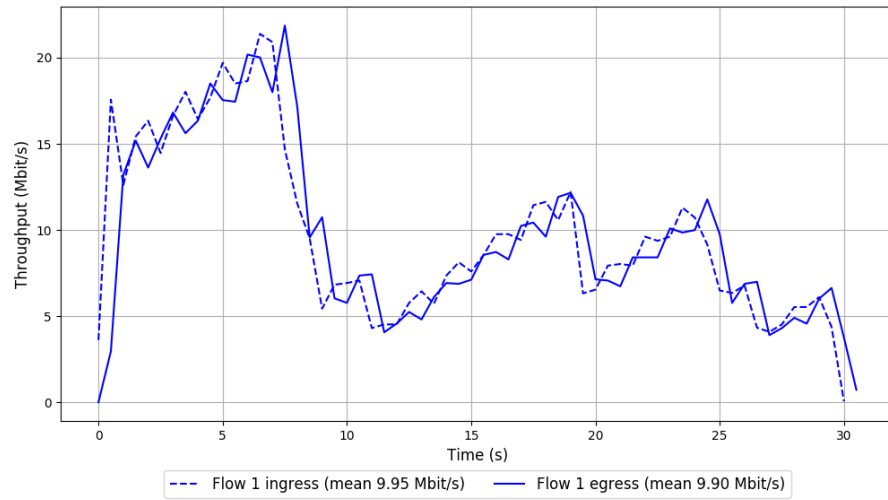
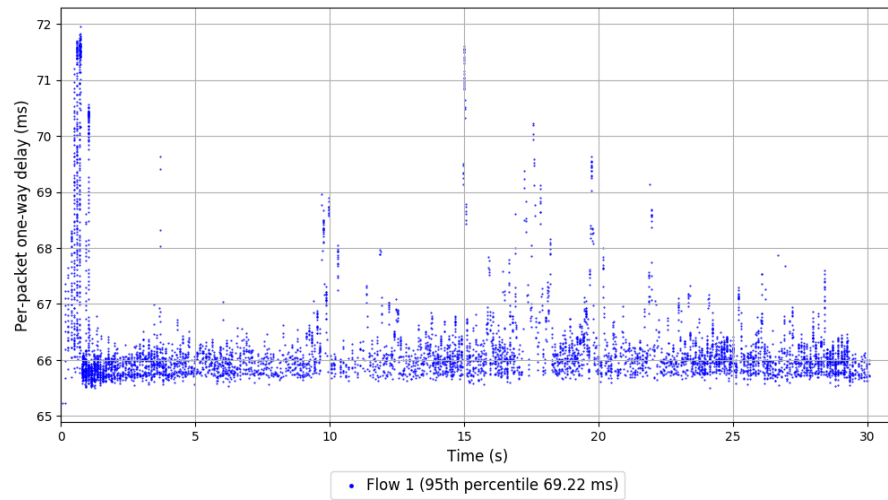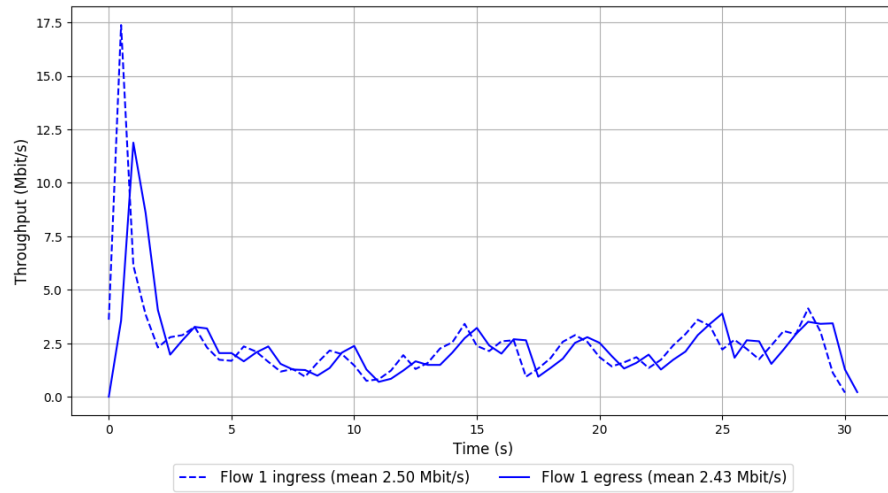# Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2018-05-24 04:46:30
End at: 2018-05-24 04:47:00
Local clock offset: 0.62 ms
Remote clock offset: -0.088 ms


# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 69.221 ms
Loss rate: 2.65%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 69.221 ms
Loss rate: 2.65%
```

Run 4: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 2.50 Mbit/s)   Flow 1 egress (mean 2.43 Mbit/s)
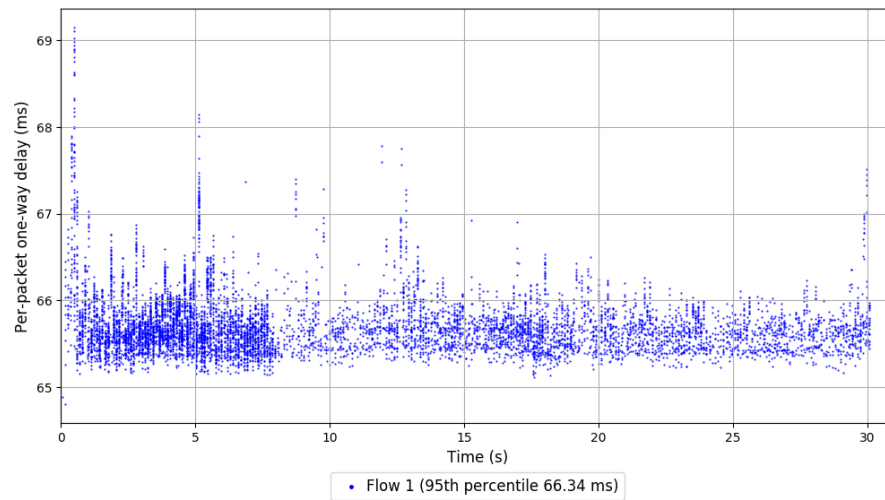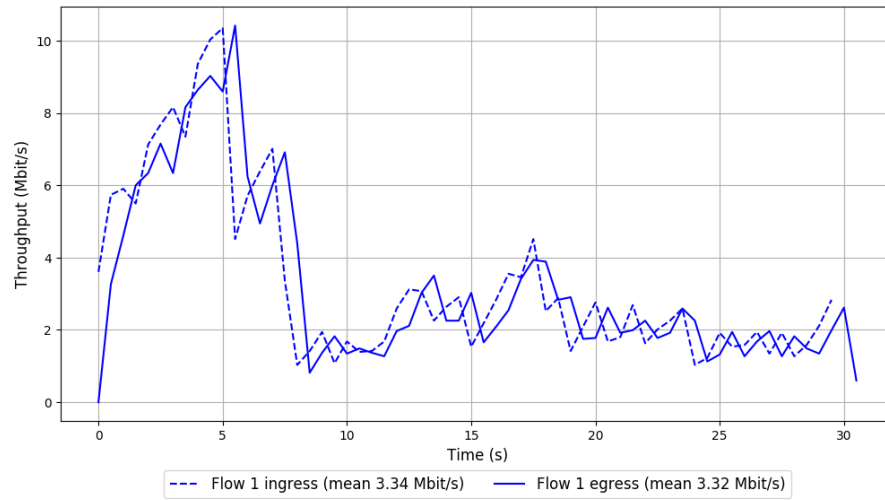

Flow 1 (95th percentile 69.22 ms)

```
Run 5: Statistics of TCP Vegas

Start at: 2018-05-24 05:07:04
End at: 2018-05-24 05:07:34
Local clock offset: 2.655 ms
Remote clock offset: -0.543 ms


# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.32 Mbit/s
95th percentile per-packet one-way delay: 66.339 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 3.32 Mbit/s
95th percentile per-packet one-way delay: 66.339 ms
Loss rate: 0.74%
```

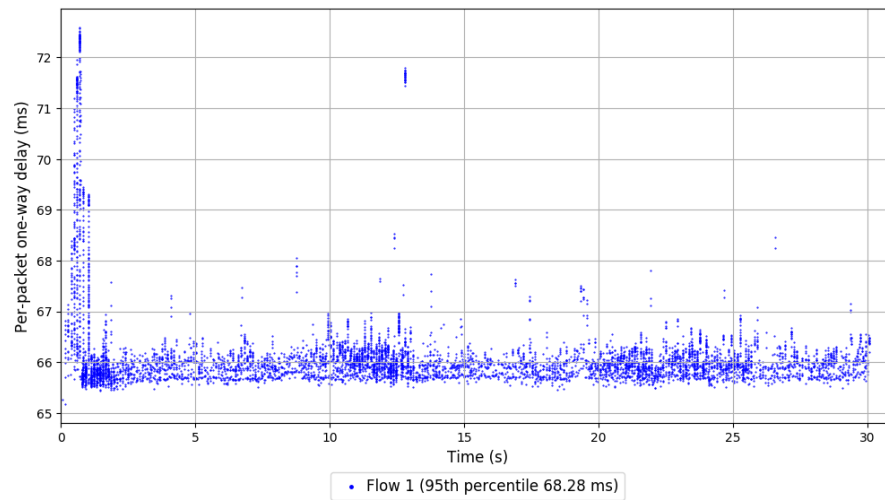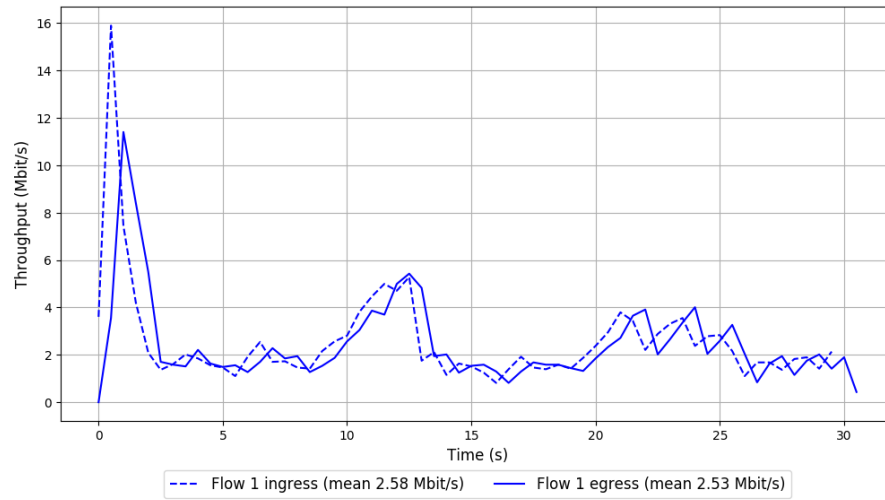Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-05-24 05:27:36
End at: 2018-05-24 05:28:06
Local clock offset: 3.712 ms
Remote clock offset: -0.632 ms


# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 68.283 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 68.283 ms
Loss rate: 2.09%
```

Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 2.58 Mbit/s) — — —   Flow 1 egress (mean 2.53 Mbit/s) ———

• Flow 1 (95th percentile 68.28 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2018-05-24 05:48:02
End at: 2018-05-24 05:48:32
Local clock offset: 4.06 ms
Remote clock offset: 0.101 ms


# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 68.412 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 68.412 ms
Loss rate: 1.52%
```
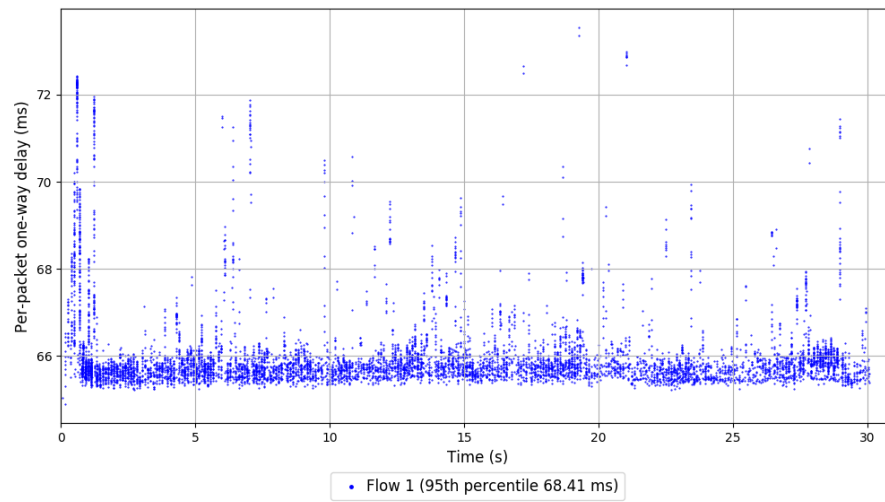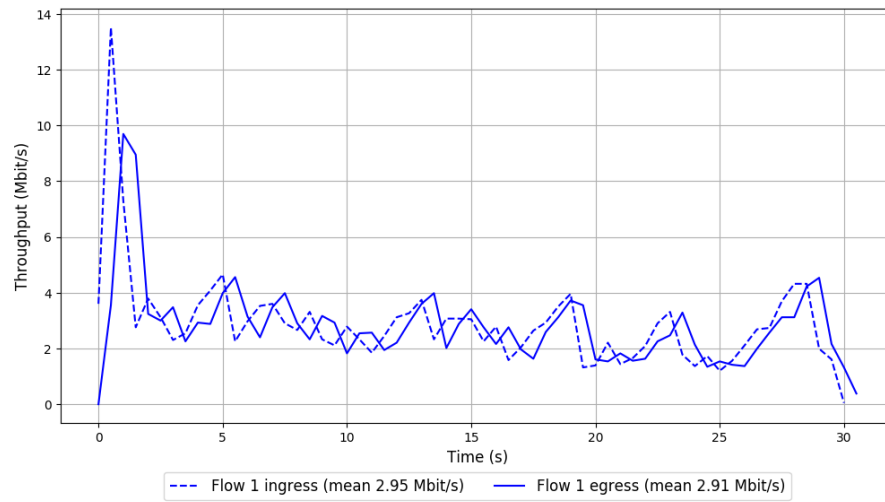
Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2018-05-24 06:08:30
End at: 2018-05-24 06:09:00
Local clock offset: 2.715 ms
Remote clock offset: 0.593 ms


# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 69.934 ms
Loss rate: 3.82%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 69.934 ms
Loss rate: 3.82%
```
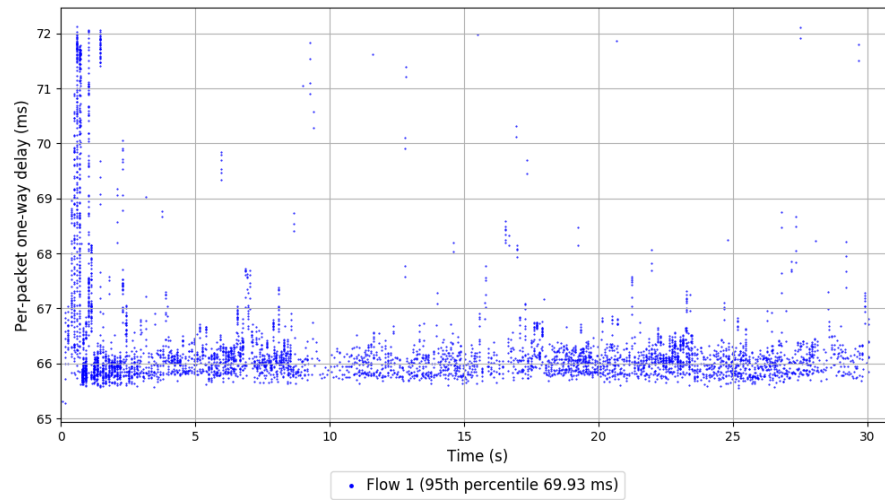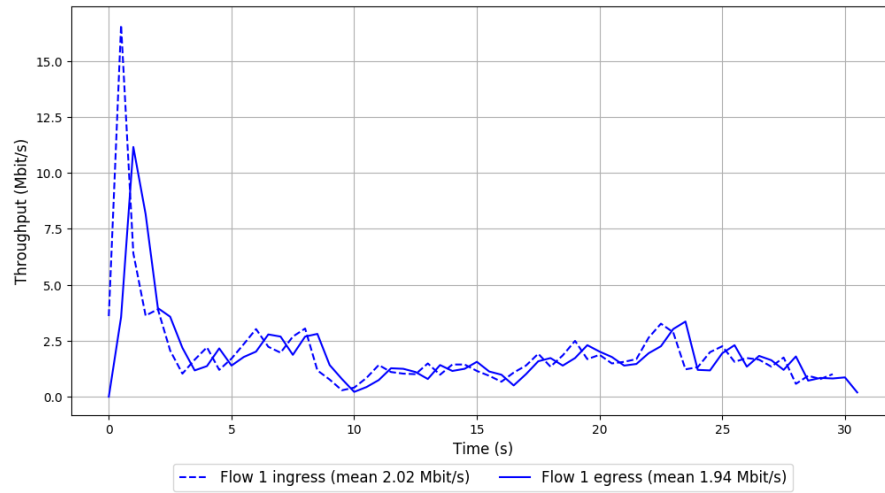
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-05-24 06:28:58
End at: 2018-05-24 06:29:28
Local clock offset: 2.704 ms
Remote clock offset: 1.29 ms


# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 67.143 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 67.143 ms
Loss rate: 0.72%
```
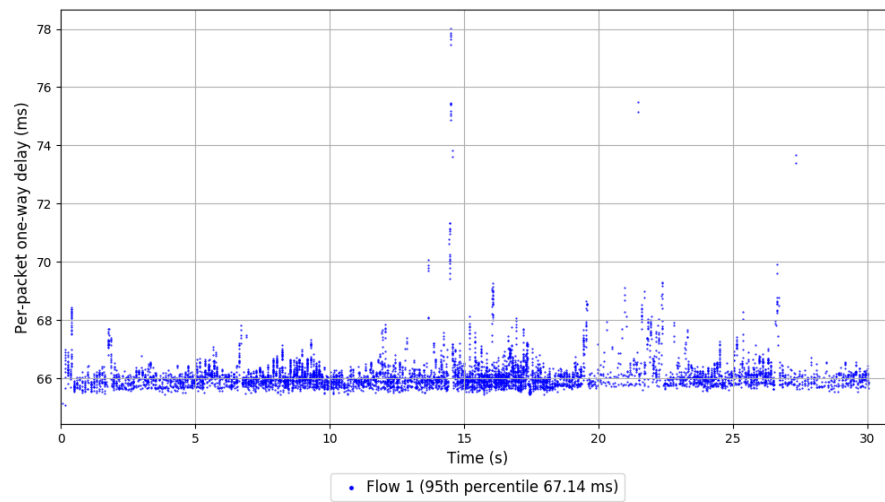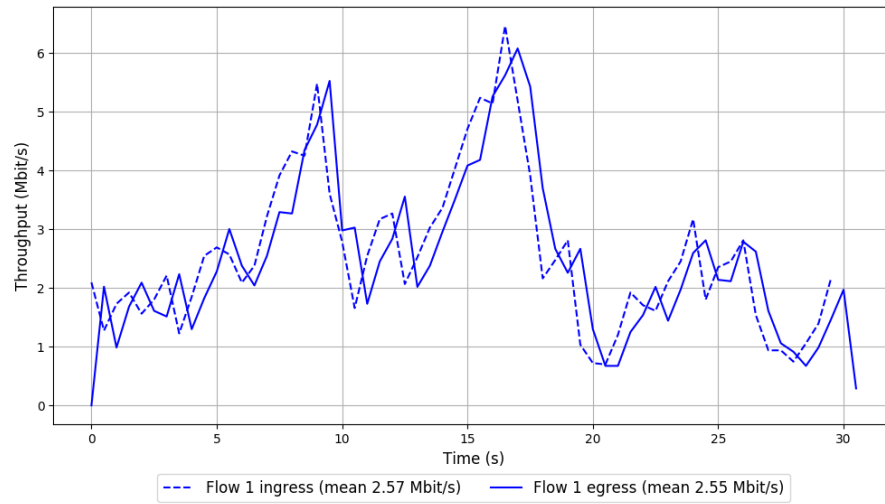
Run 9: Report of TCP Vegas — Data Link

```
Run 10: Statistics of TCP Vegas

Start at: 2018-05-24 06:49:30
End at: 2018-05-24 06:50:00
Local clock offset: 4.49 ms
Remote clock offset: 1.143 ms


# Below is generated by plot.py at 2018-05-24 07:06:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.07 Mbit/s
95th percentile per-packet one-way delay: 67.210 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 5.07 Mbit/s
95th percentile per-packet one-way delay: 67.210 ms
Loss rate: 0.93%
```
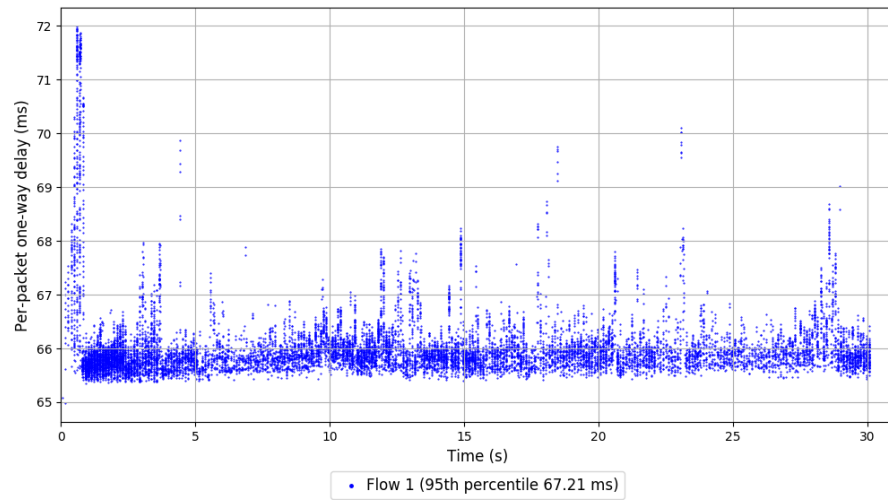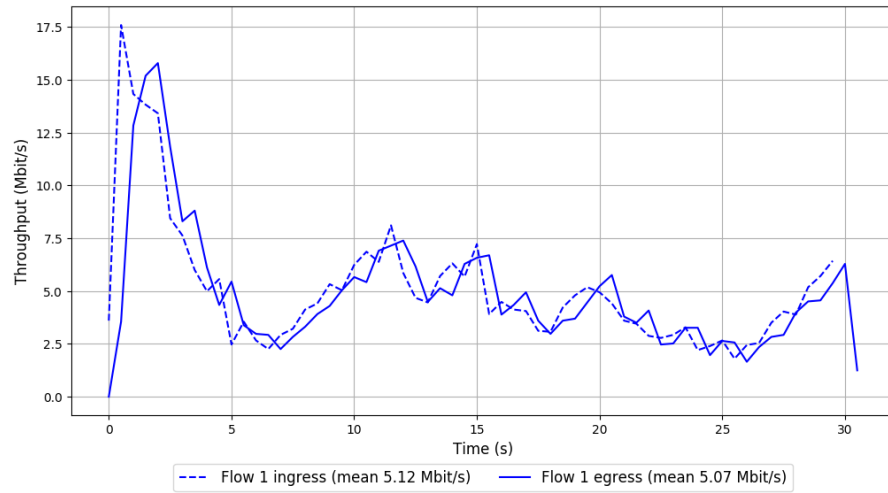
Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2018-05-24 03:40:01
End at: 2018-05-24 03:40:31
Local clock offset: 2.6 ms
Remote clock offset: 0.127 ms
```

Run 1: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 2: Statistics of Verus

Start at: 2018-05-24 04:00:34
End at: 2018-05-24 04:01:04
Local clock offset: 1.733 ms
Remote clock offset: 0.173 ms
```

Run 2: Report of Verus — Data Link

Figure is missing

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```
Run 3: Statistics of Verus

Start at: 2018-05-24 04:21:09
End at: 2018-05-24 04:21:39
Local clock offset: 0.639 ms
Remote clock offset: 0.341 ms
```

Run 3: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 4: Statistics of Verus

Start at: 2018-05-24 04:42:45
End at: 2018-05-24 04:43:15
Local clock offset: 0.428 ms
Remote clock offset: -0.126 ms
```

Run 4: Report of Verus — Data Link

Figure is missing

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```
Run 5: Statistics of Verus

Start at: 2018-05-24 05:03:19
End at: 2018-05-24 05:03:49
Local clock offset: 2.059 ms
Remote clock offset: -1.307 ms
```

Run 5: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 6: Statistics of Verus

Start at: 2018-05-24 05:23:51
End at: 2018-05-24 05:24:21
Local clock offset: 3.599 ms
Remote clock offset: -0.688 ms
```

Run 6: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 7: Statistics of Verus

Start at: 2018-05-24 05:44:17
End at: 2018-05-24 05:44:47
Local clock offset: 3.948 ms
Remote clock offset: -0.294 ms
```

Run 7: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 8: Statistics of Verus

Start at: 2018-05-24 06:04:46
End at: 2018-05-24 06:05:16
Local clock offset: 2.934 ms
Remote clock offset: 0.495 ms
```

Run 8: Report of Verus — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of Verus

Start at: 2018-05-24 06:25:13
End at: 2018-05-24 06:25:43
Local clock offset: 2.296 ms
Remote clock offset: 1.17 ms

Run 9: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 10: Statistics of Verus

Start at: 2018-05-24 06:45:45
End at: 2018-05-24 06:46:16
Local clock offset: 4.169 ms
Remote clock offset: 1.386 ms
```

Run 10: Report of Verus — Data Link

Figure is missing

Figure is missing

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-05-24 03:46:17
End at: 2018-05-24 03:46:47
Local clock offset: 2.568 ms
Remote clock offset: 0.058 ms


# Below is generated by plot.py at 2018-05-24 07:07:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.66 Mbit/s
95th percentile per-packet one-way delay: 74.909 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 75.66 Mbit/s
95th percentile per-packet one-way delay: 74.909 ms
Loss rate: 1.17%
```
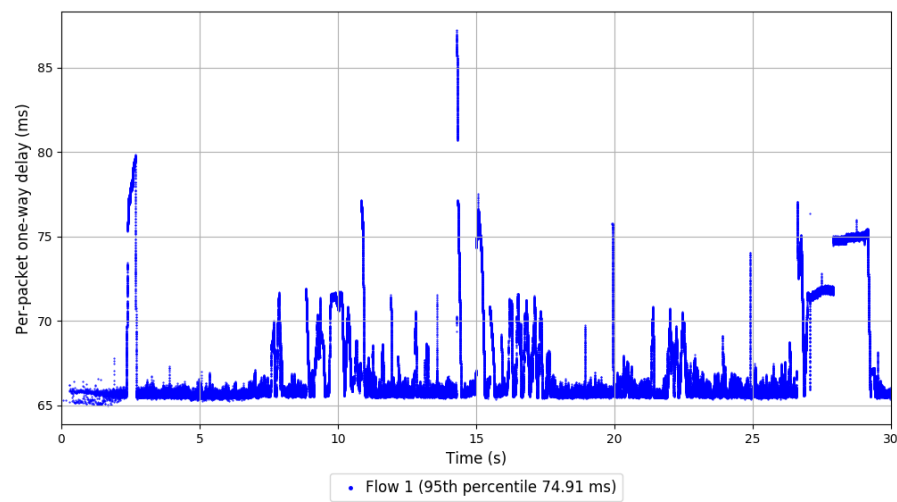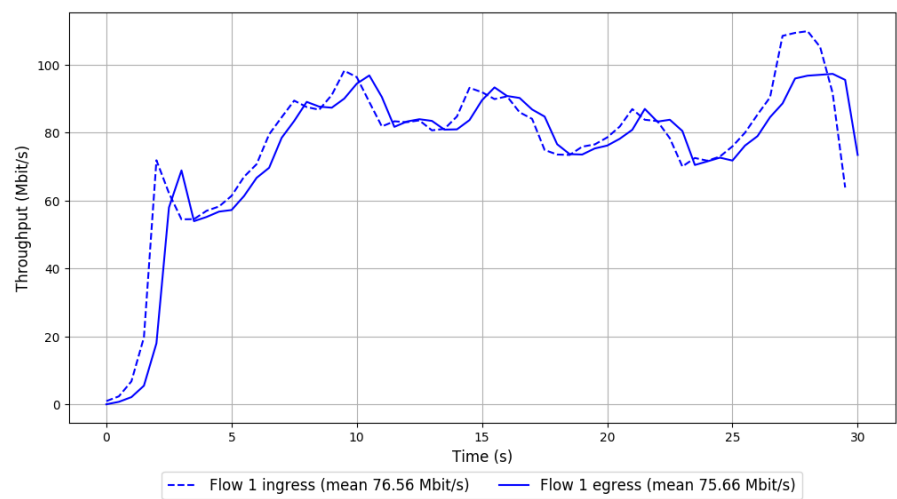
Run 1: Report of PCC-Vivace — Data Link

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-05-24 04:06:49
End at: 2018-05-24 04:07:19
Local clock offset: 1.275 ms
Remote clock offset: 0.3 ms


# Below is generated by plot.py at 2018-05-24 07:07:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.81 Mbit/s
95th percentile per-packet one-way delay: 69.585 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 62.81 Mbit/s
95th percentile per-packet one-way delay: 69.585 ms
Loss rate: 0.13%
```
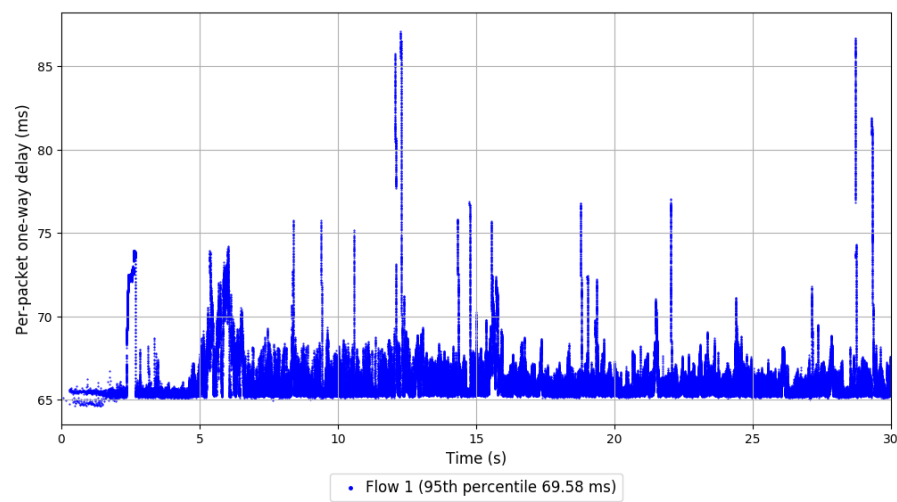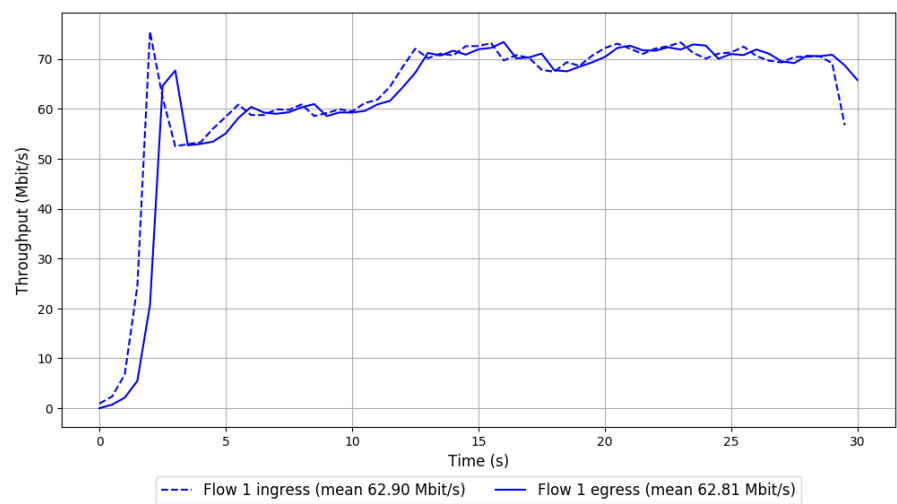
Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 62.90 Mbit/s) ——— Flow 1 egress (mean 62.81 Mbit/s)

• Flow 1 (95th percentile 69.58 ms)
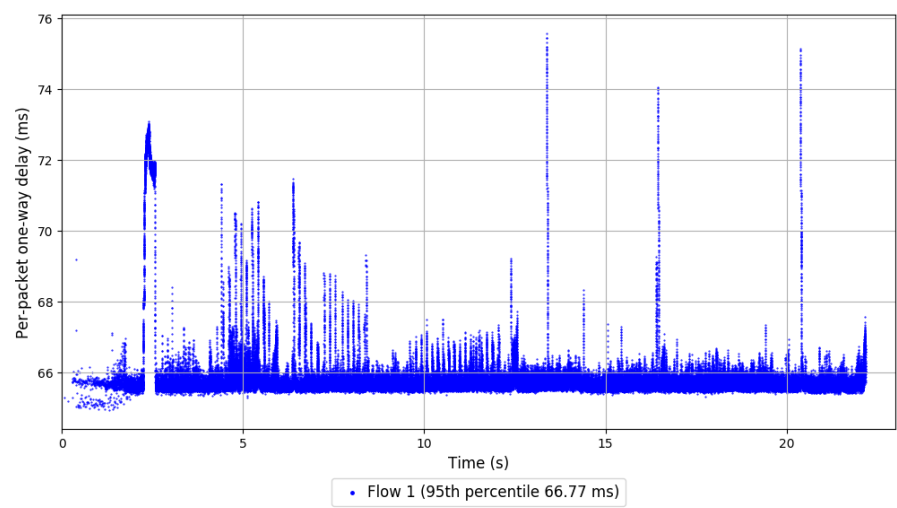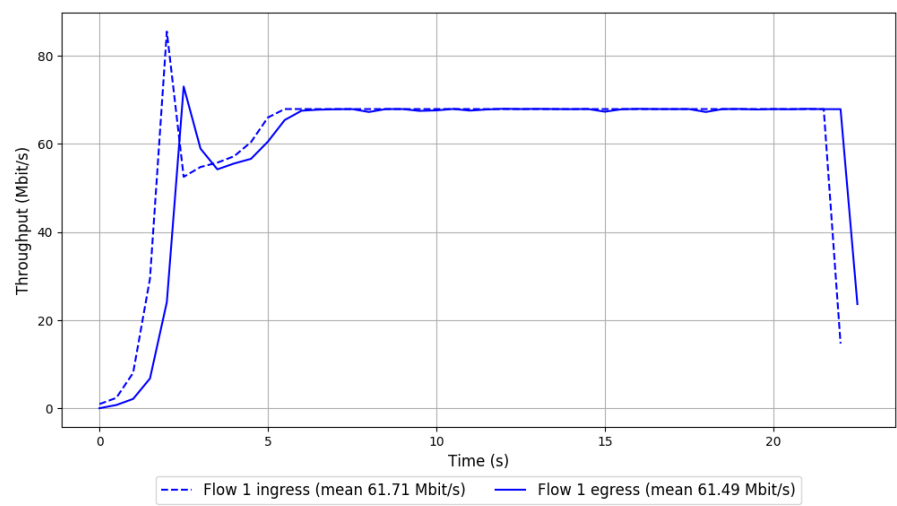
```
Run 3: Statistics of PCC-Vivace

Start at: 2018-05-24 04:27:24
End at: 2018-05-24 04:27:54
Local clock offset: 0.545 ms
Remote clock offset: 0.42 ms
```

Run 3: Report of PCC-Vivace — Data Link

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-05-24 04:49:00
End at: 2018-05-24 04:49:30
Local clock offset: 0.441 ms
Remote clock offset: -0.219 ms


# Below is generated by plot.py at 2018-05-24 07:07:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.02 Mbit/s
95th percentile per-packet one-way delay: 71.326 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 69.02 Mbit/s
95th percentile per-packet one-way delay: 71.326 ms
Loss rate: 0.75%
```
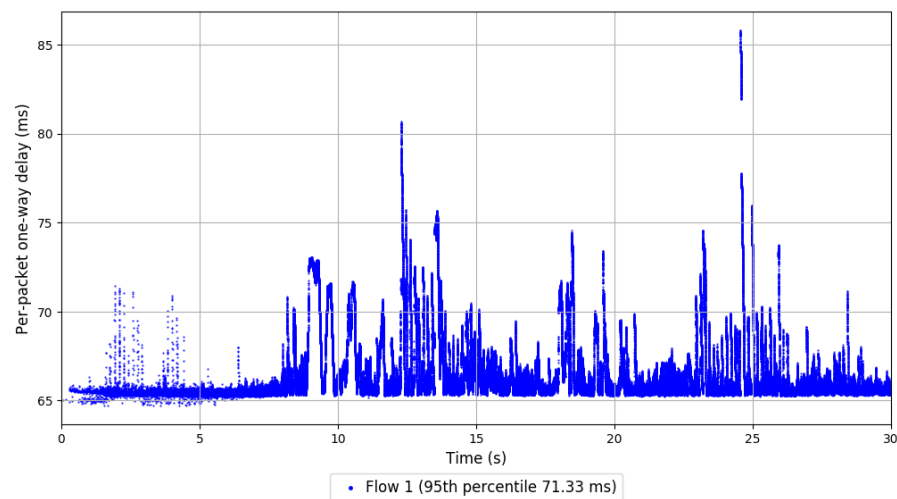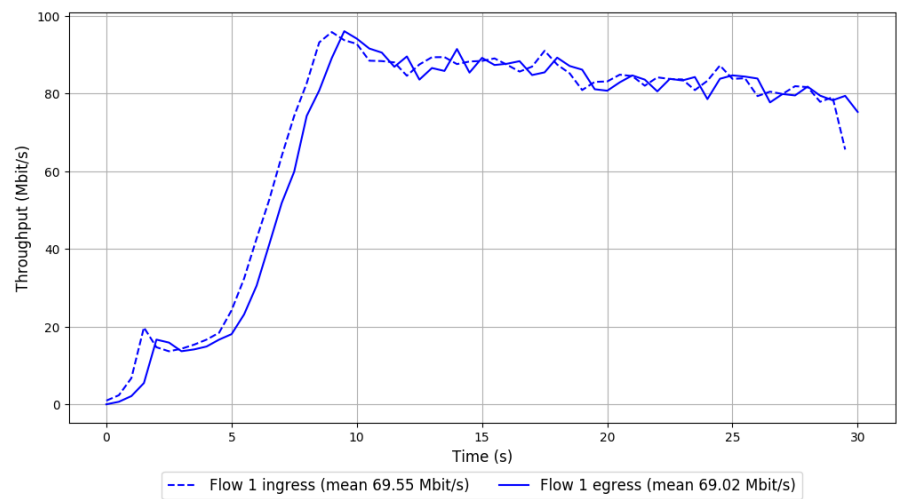
Run 4: Report of PCC-Vivace — Data Link

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-05-24 05:09:35
End at: 2018-05-24 05:10:05
Local clock offset: 2.718 ms
Remote clock offset: -0.464 ms


# Below is generated by plot.py at 2018-05-24 07:07:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.32 Mbit/s
95th percentile per-packet one-way delay: 69.623 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 29.32 Mbit/s
95th percentile per-packet one-way delay: 69.623 ms
Loss rate: 0.95%
```
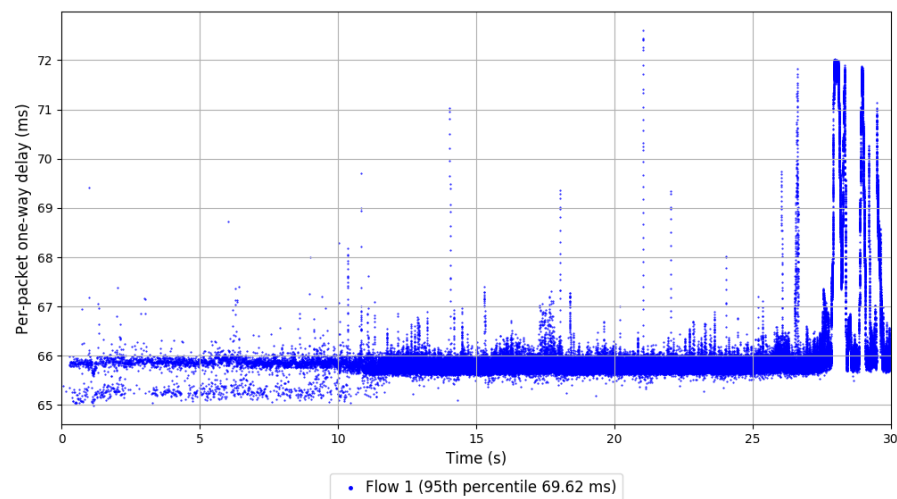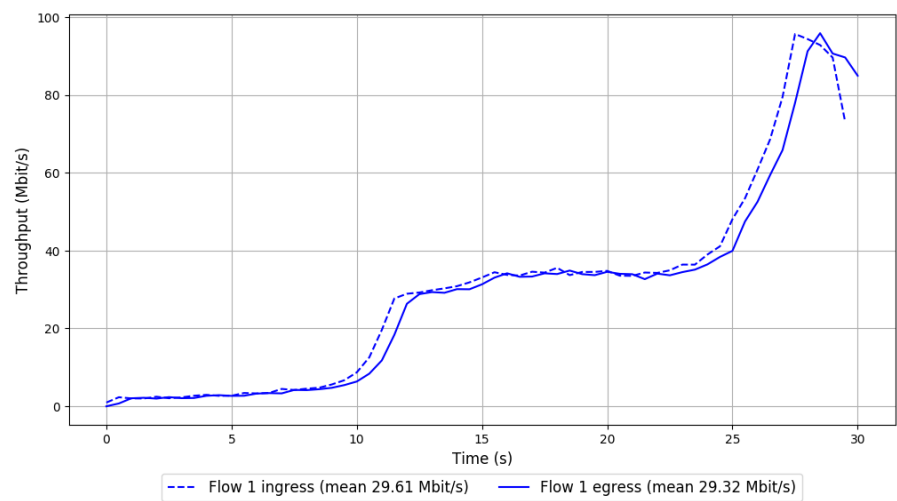
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 29.61 Mbit/s) — Flow 1 egress (mean 29.32 Mbit/s)

Flow 1 (95th percentile 69.62 ms)

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-05-24 05:30:06
End at: 2018-05-24 05:30:36
Local clock offset: 3.627 ms
Remote clock offset: -0.896 ms


# Below is generated by plot.py at 2018-05-24 07:07:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.59 Mbit/s
95th percentile per-packet one-way delay: 70.524 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 39.59 Mbit/s
95th percentile per-packet one-way delay: 70.524 ms
Loss rate: 1.08%
```
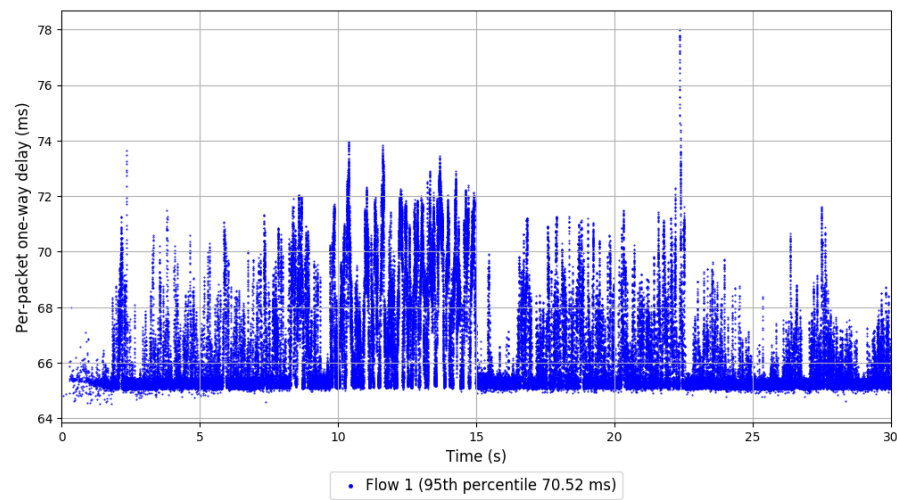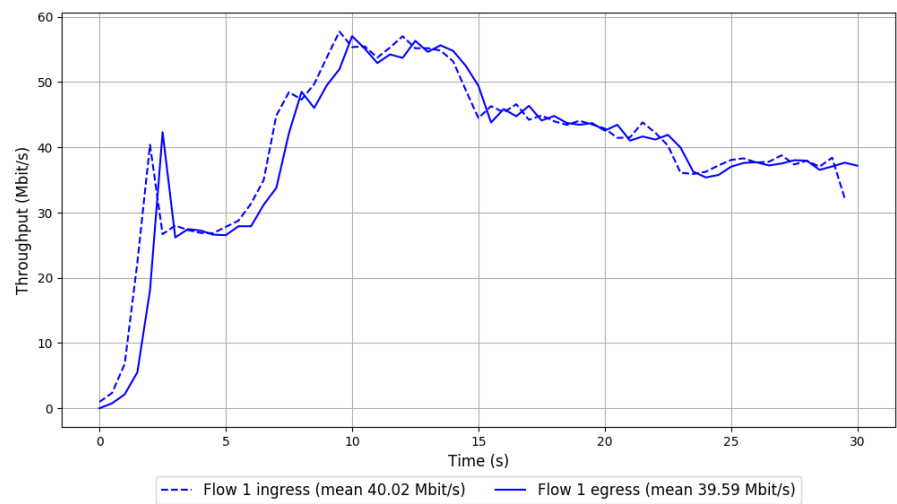
Run 6: Report of PCC-Vivace — Data Link

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-05-24 05:50:33
End at: 2018-05-24 05:51:03
Local clock offset: 4.109 ms
Remote clock offset: 0.12 ms


# Below is generated by plot.py at 2018-05-24 07:07:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.47 Mbit/s
95th percentile per-packet one-way delay: 68.284 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 22.47 Mbit/s
95th percentile per-packet one-way delay: 68.284 ms
Loss rate: 0.73%
```
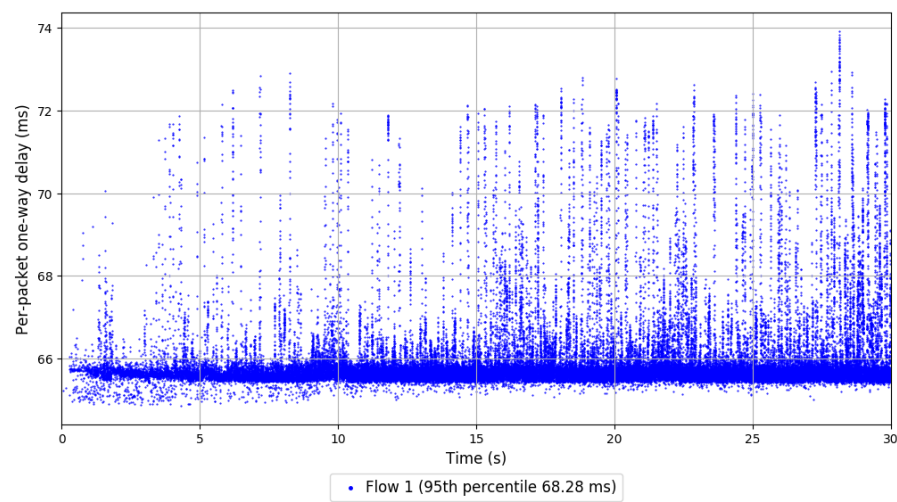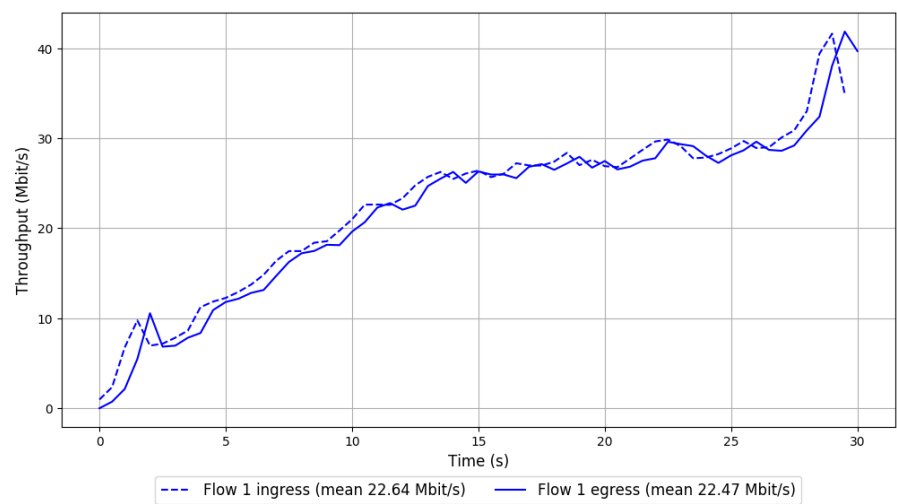
Run 7: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 22.64 Mbit/s) ——— Flow 1 egress (mean 22.47 Mbit/s)

• Flow 1 (95th percentile 68.28 ms)

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-05-24 06:11:01
End at: 2018-05-24 06:11:31
Local clock offset: 2.628 ms
Remote clock offset: 0.681 ms


# Below is generated by plot.py at 2018-05-24 07:07:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.44 Mbit/s
95th percentile per-packet one-way delay: 71.663 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 43.44 Mbit/s
95th percentile per-packet one-way delay: 71.663 ms
Loss rate: 2.44%
```
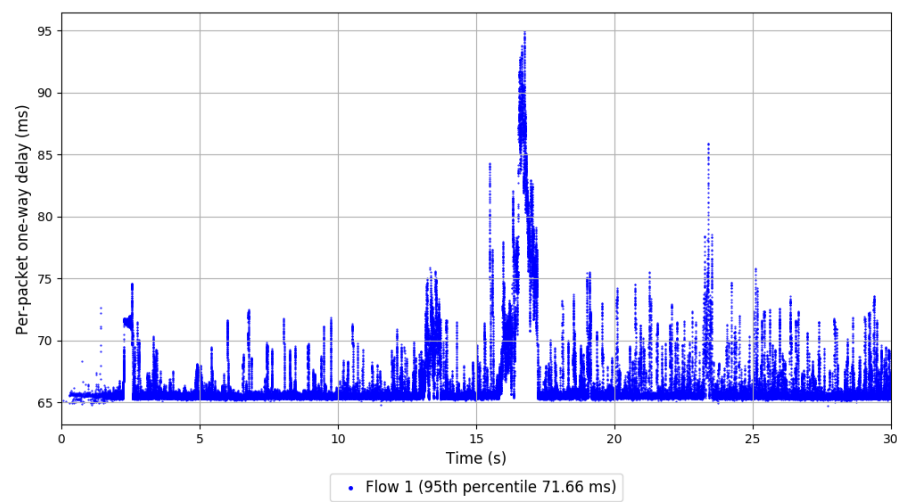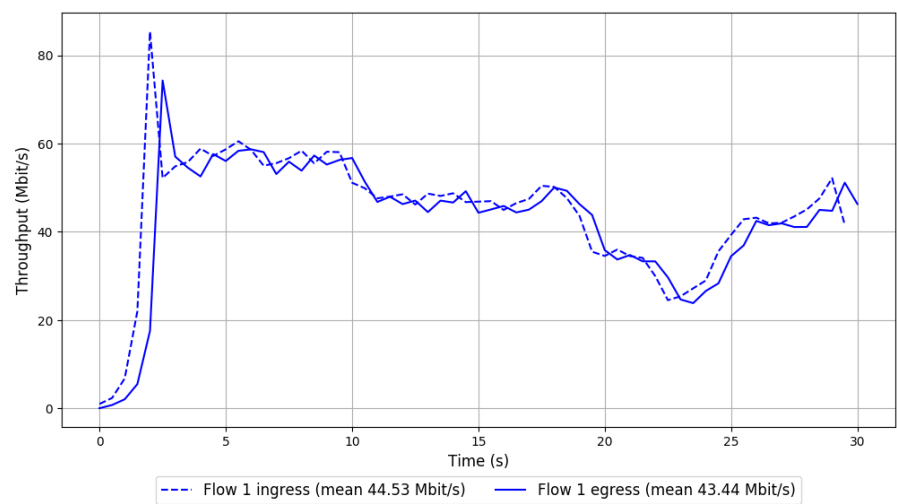
Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 44.53 Mbit/s)　　Flow 1 egress (mean 43.44 Mbit/s)

Flow 1 (95th percentile 71.66 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-05-24 06:31:28
End at: 2018-05-24 06:31:58
Local clock offset: 3.093 ms
Remote clock offset: 1.358 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.80 Mbit/s
95th percentile per-packet one-way delay: 75.362 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 65.80 Mbit/s
95th percentile per-packet one-way delay: 75.362 ms
Loss rate: 2.70%
```
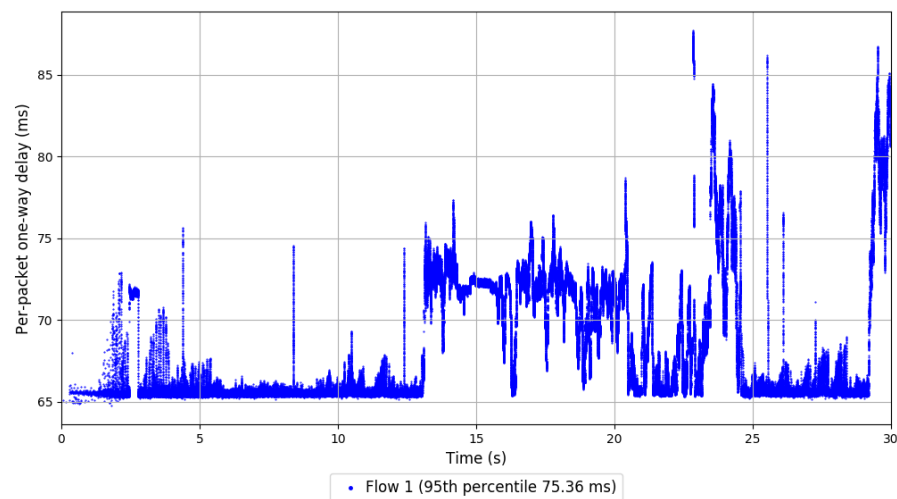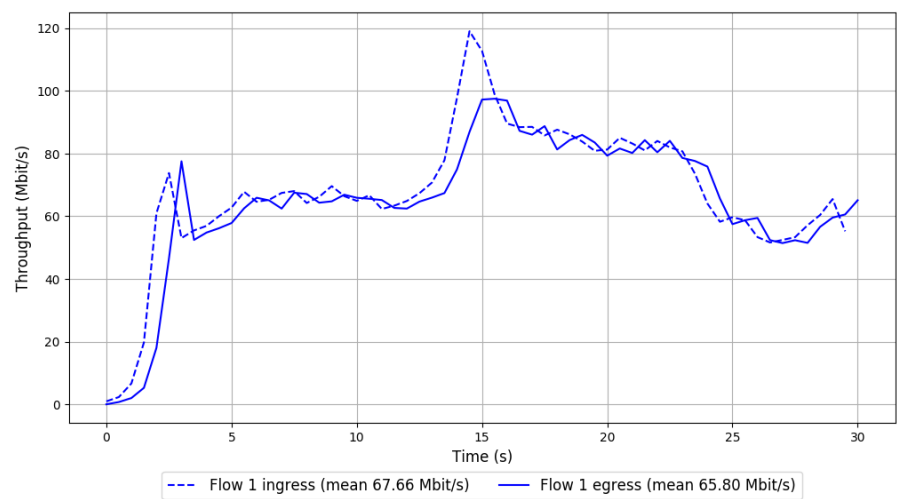
Run 9: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 67.66 Mbit/s)   Flow 1 egress (mean 65.80 Mbit/s)

Flow 1 (95th percentile 75.36 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-05-24 06:52:01
End at: 2018-05-24 06:52:31
Local clock offset: 4.584 ms
Remote clock offset: 1.078 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.63 Mbit/s
95th percentile per-packet one-way delay: 80.611 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 66.63 Mbit/s
95th percentile per-packet one-way delay: 80.611 ms
Loss rate: 0.96%
```
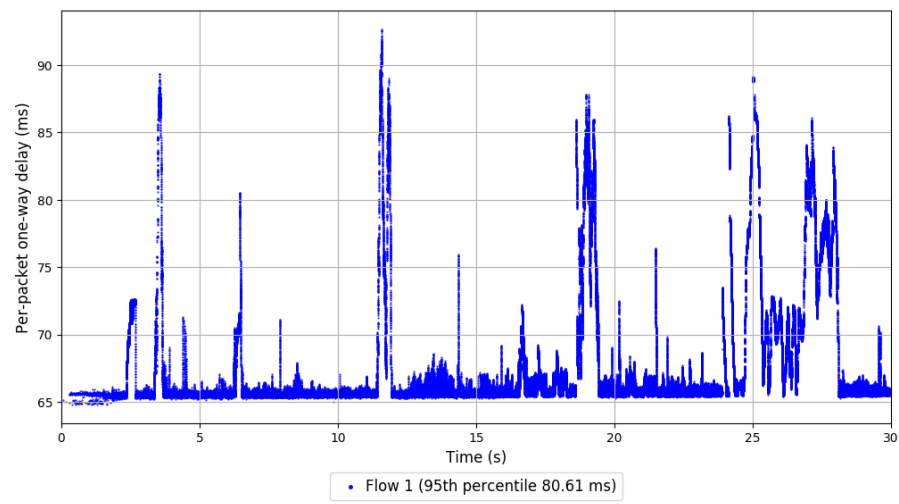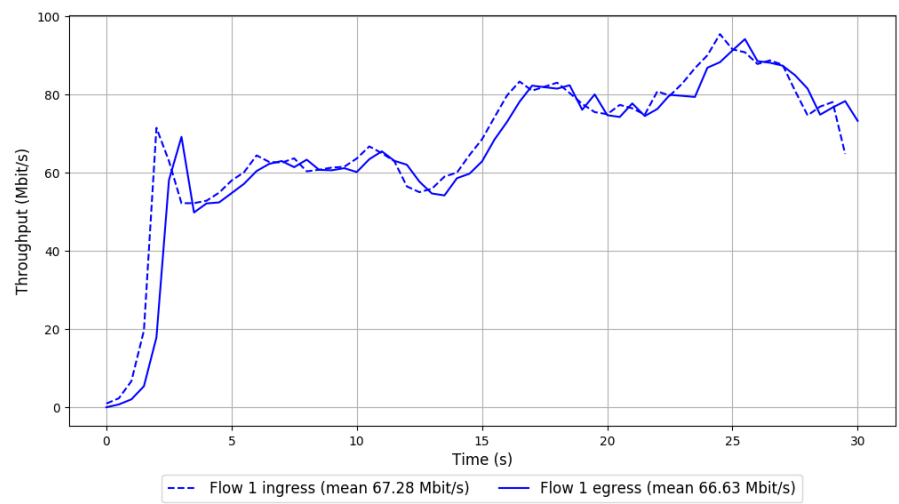
Run 10: Report of PCC-Vivace — Data Link

```
Run 1: Statistics of WebRTC media

Start at: 2018-05-24 03:41:16
End at: 2018-05-24 03:41:46
Local clock offset: 2.681 ms
Remote clock offset: 0.127 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 69.580 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 69.580 ms
Loss rate: 0.00%
```
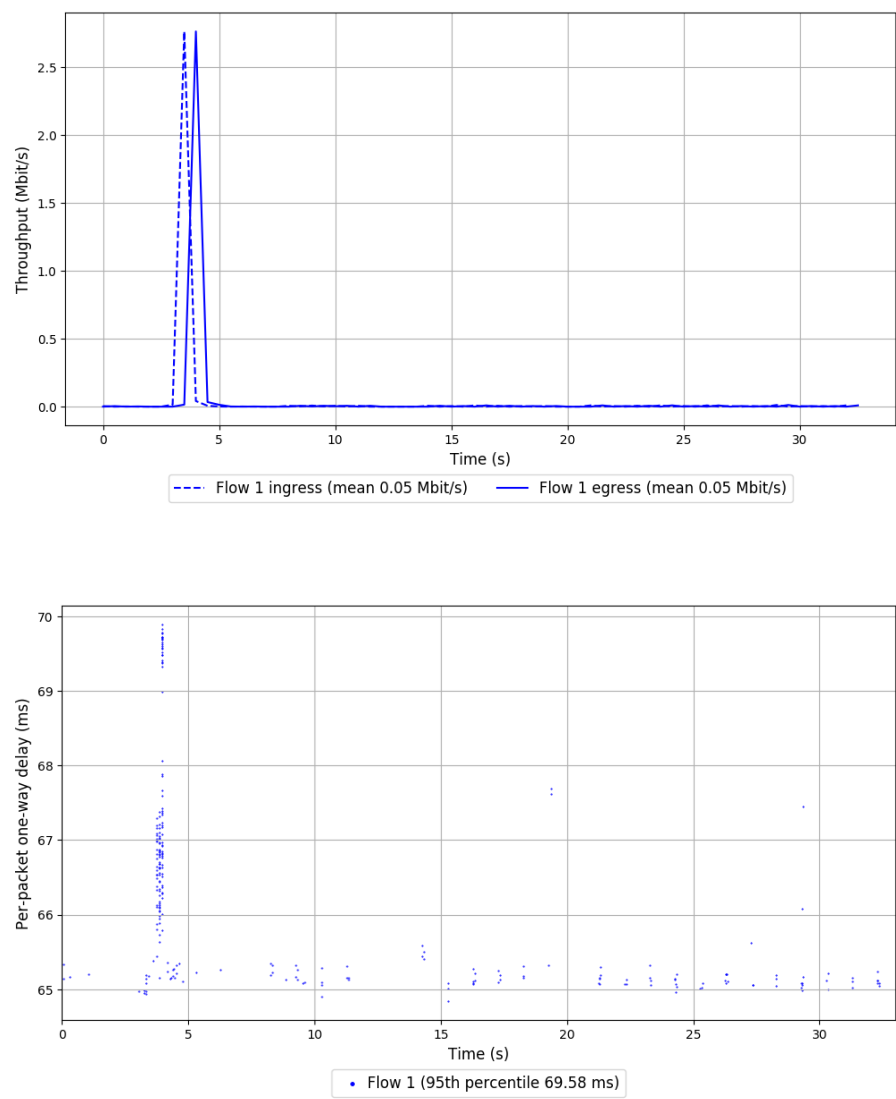
Run 1: Report of WebRTC media — Data Link

```
Run 2: Statistics of WebRTC media

Start at: 2018-05-24 04:01:49
End at: 2018-05-24 04:02:19
Local clock offset: 1.623 ms
Remote clock offset: 0.192 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 69.326 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 69.326 ms
Loss rate: 0.00%
```
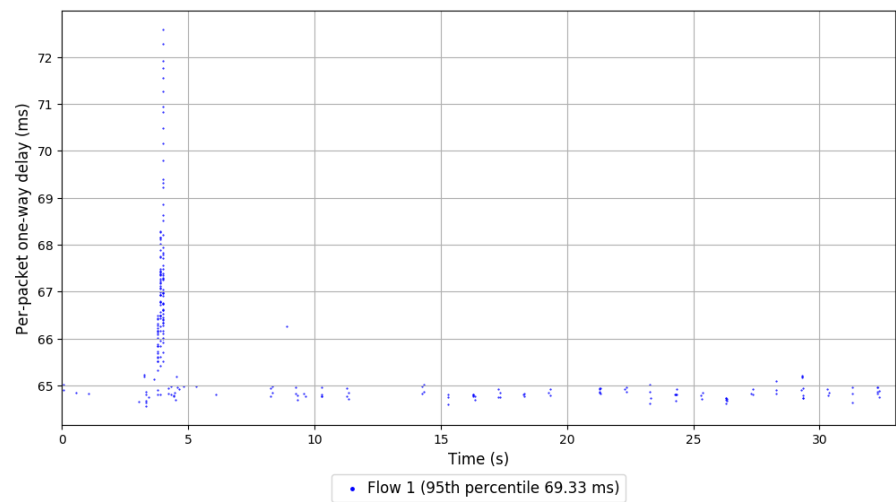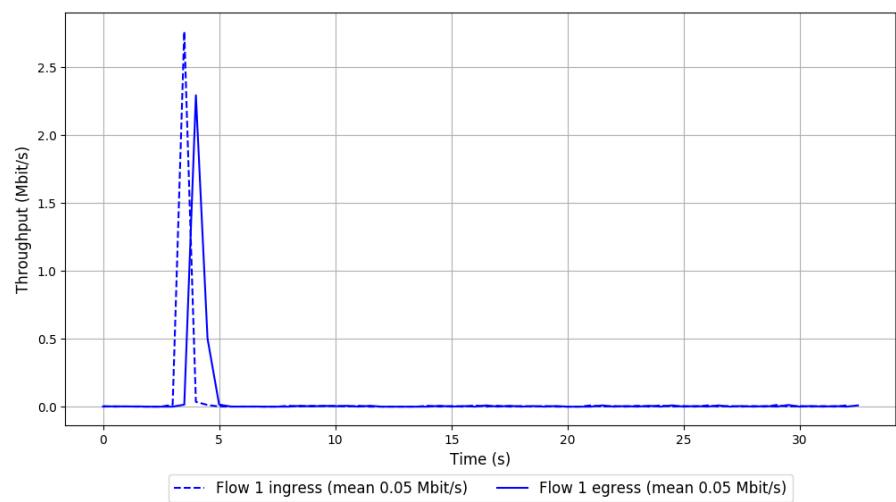
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-05-24 04:22:24
End at: 2018-05-24 04:22:54
Local clock offset: 0.608 ms
Remote clock offset: 0.259 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.988 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.988 ms
Loss rate: 0.00%
```
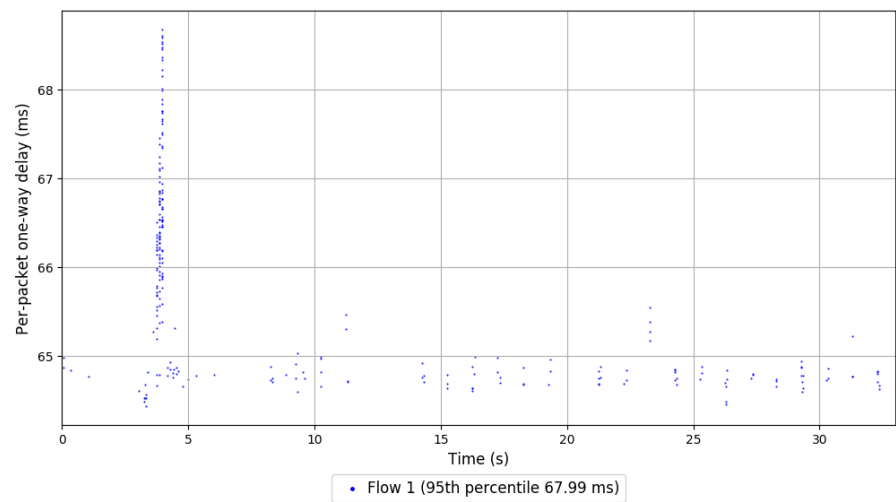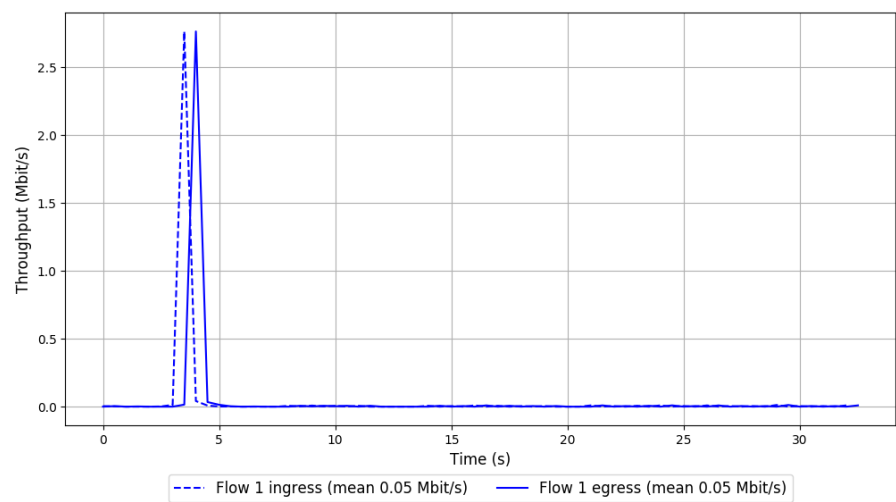
Run 3: Report of WebRTC media — Data Link

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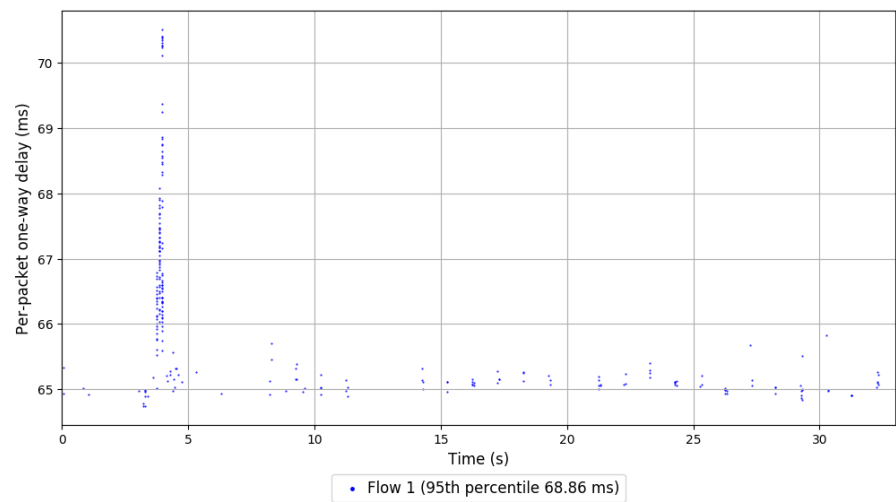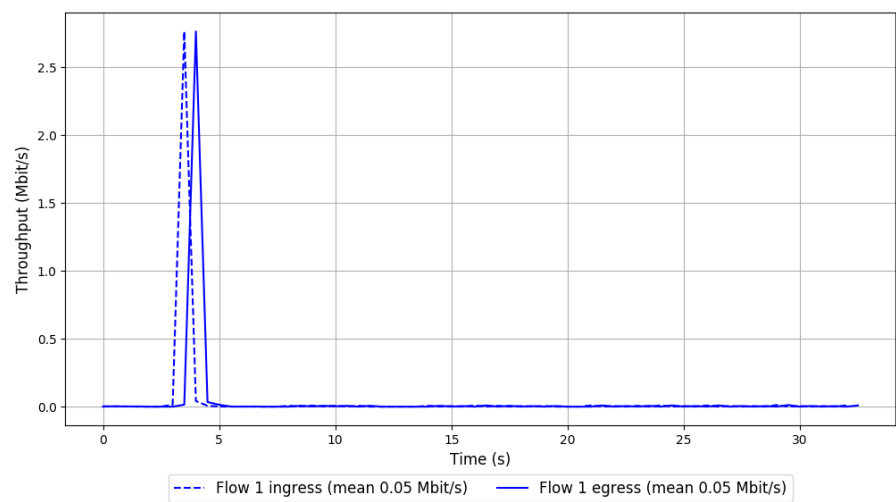

Flow 1 (95th percentile 67.99 ms)

```
Run 4: Statistics of WebRTC media

Start at: 2018-05-24 04:44:00
End at: 2018-05-24 04:44:30
Local clock offset: 0.468 ms
Remote clock offset: -0.149 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.861 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.861 ms
Loss rate: 0.00%
```
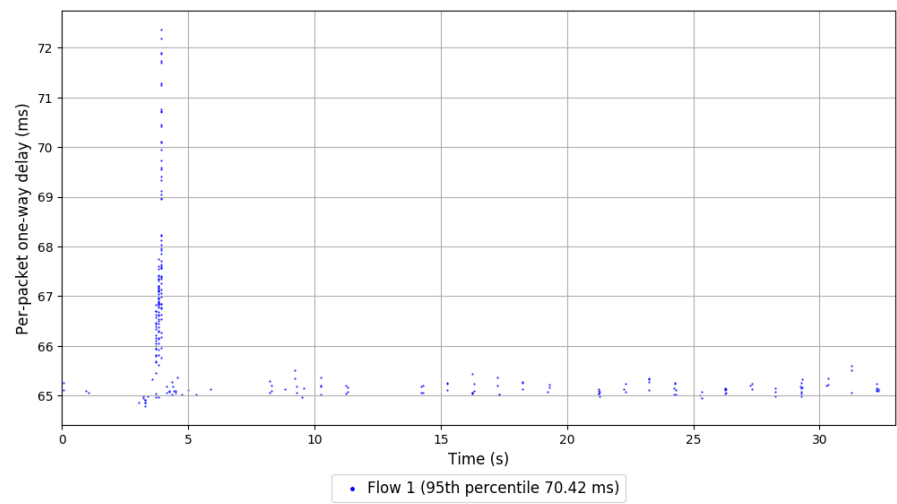
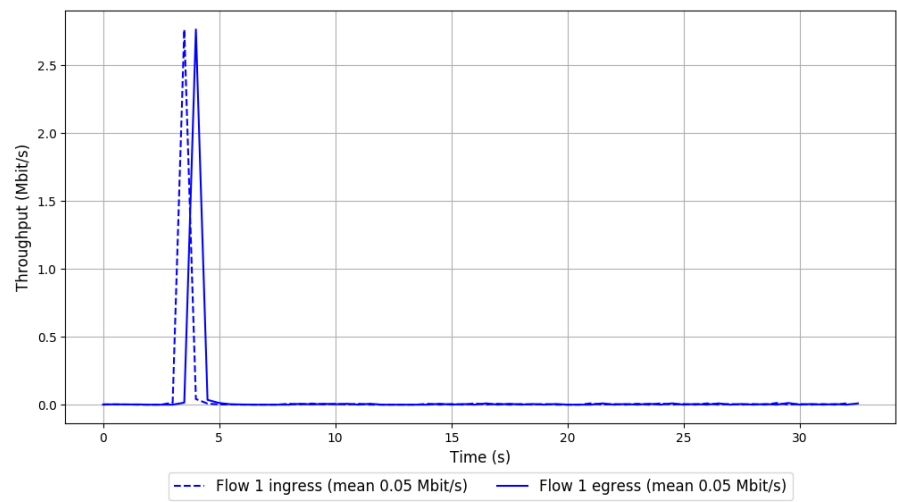Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-05-24 05:04:34
End at: 2018-05-24 05:05:04
Local clock offset: 2.21 ms
Remote clock offset: -0.312 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 70.420 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 70.420 ms
Loss rate: 0.00%
```

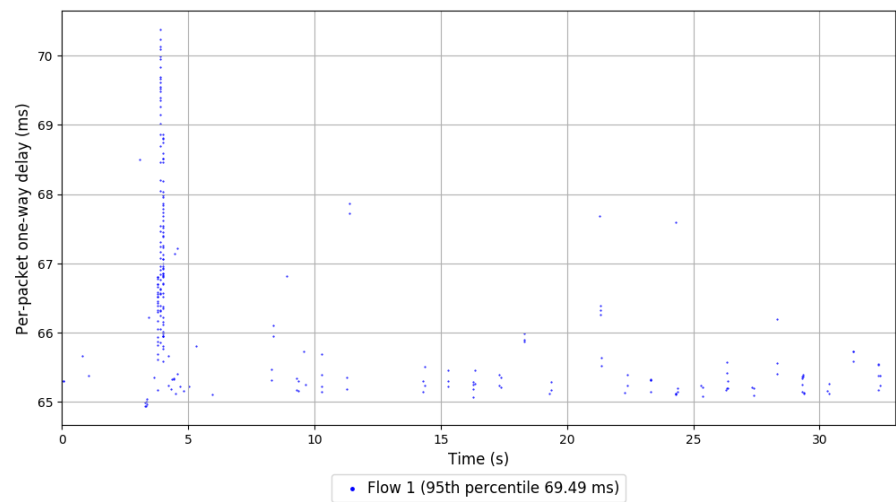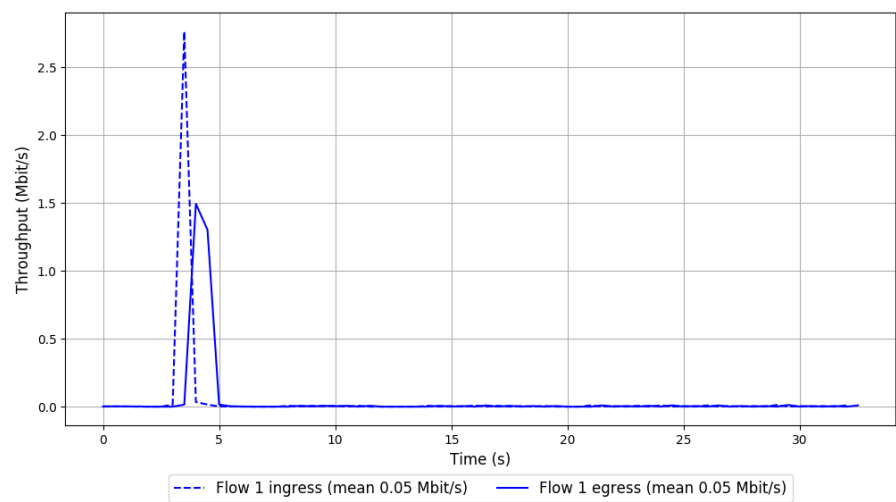Run 5: Report of WebRTC media — Data Link

```
Run 6: Statistics of WebRTC media

Start at: 2018-05-24 05:25:06
End at: 2018-05-24 05:25:36
Local clock offset: 3.421 ms
Remote clock offset: -0.565 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 69.487 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 69.487 ms
Loss rate: 0.00%
```

Run 6: Report of WebRTC media — Data Link

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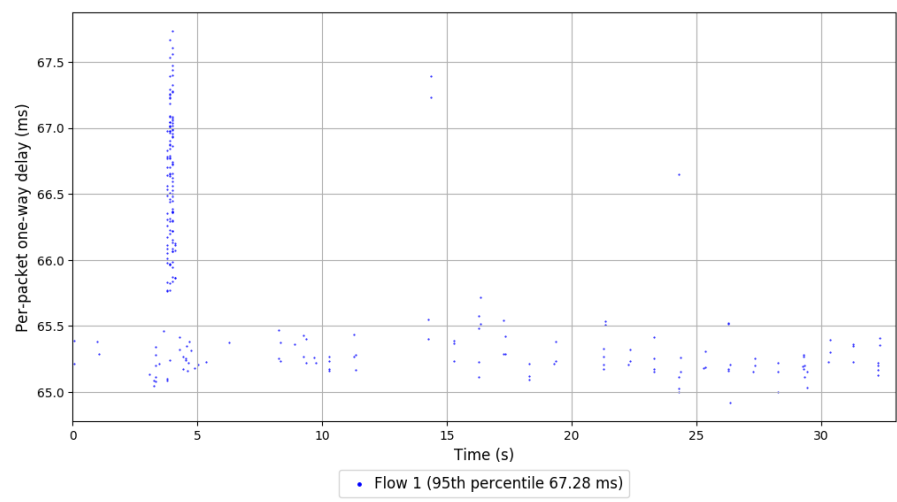
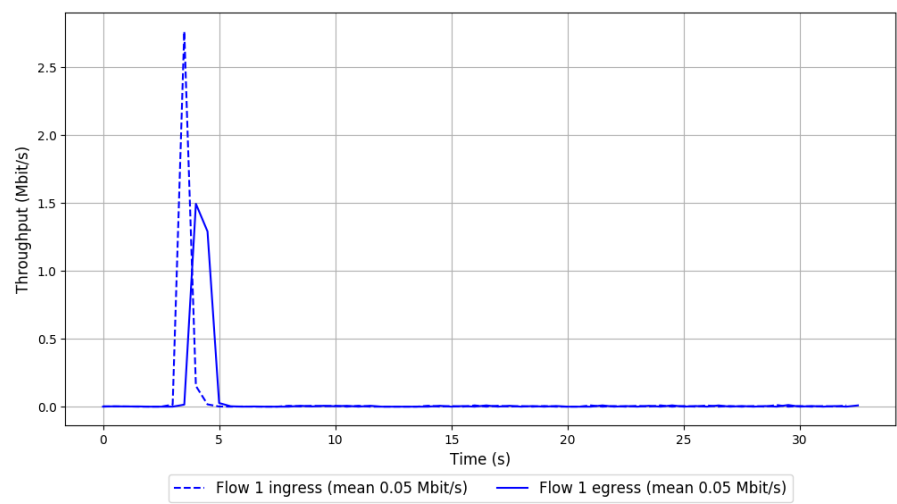

• Flow 1 (95th percentile 69.49 ms)

```
Run 7: Statistics of WebRTC media

Start at: 2018-05-24 05:45:32
End at: 2018-05-24 05:46:02
Local clock offset: 3.976 ms
Remote clock offset: -0.047 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.277 ms
Loss rate: 3.86%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.277 ms
Loss rate: 3.86%
```

Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-05-24 06:06:00
End at: 2018-05-24 06:06:30
Local clock offset: 2.751 ms
Remote clock offset: 0.561 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.099 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.099 ms
Loss rate: 0.12%
```
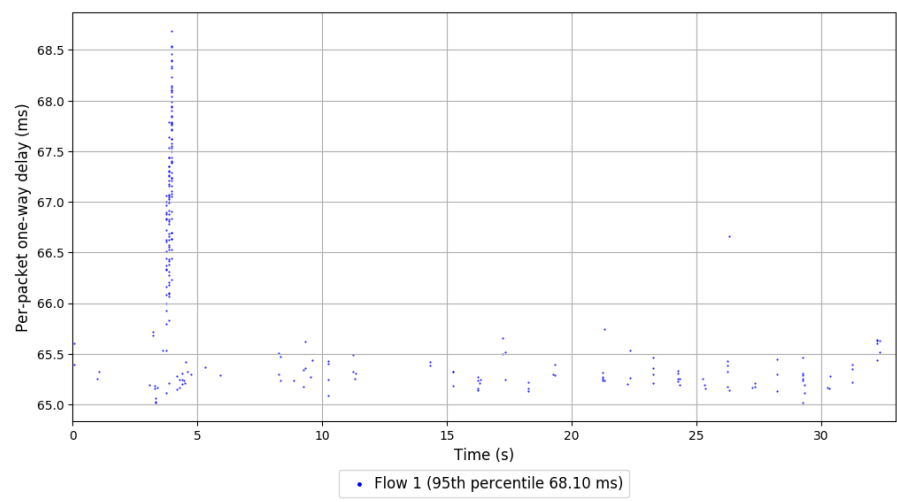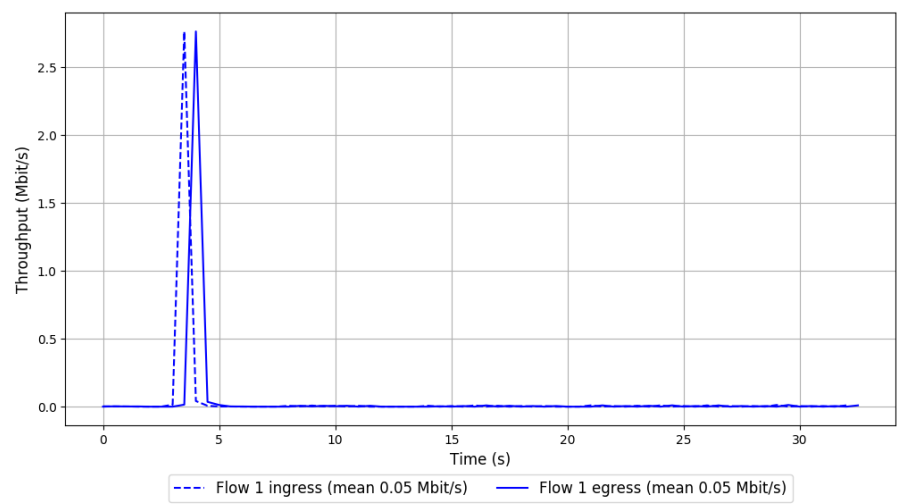
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-05-24 06:26:28
End at: 2018-05-24 06:26:58
Local clock offset: 2.436 ms
Remote clock offset: 1.117 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.072 ms
Loss rate: 8.16%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 67.072 ms
Loss rate: 8.16%
```
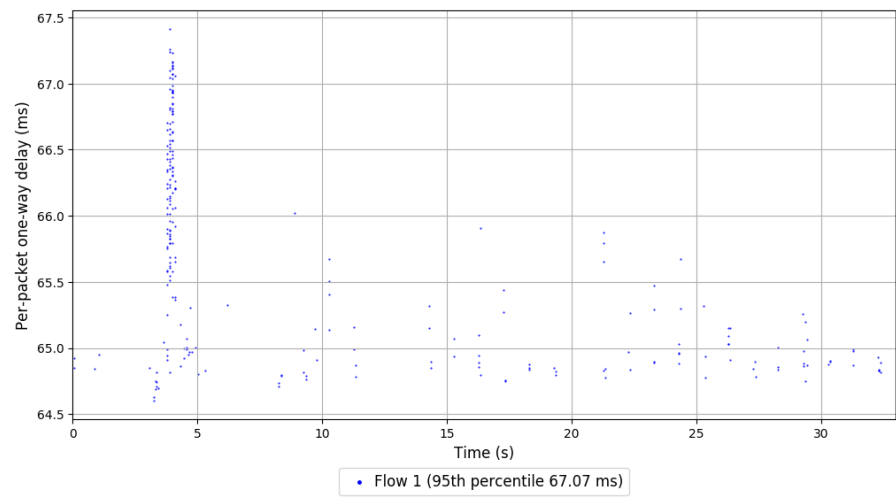
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-05-24 06:47:00
End at: 2018-05-24 06:47:30
Local clock offset: 4.412 ms
Remote clock offset: 1.179 ms


# Below is generated by plot.py at 2018-05-24 07:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.049 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 68.049 ms
Loss rate: 0.05%
```
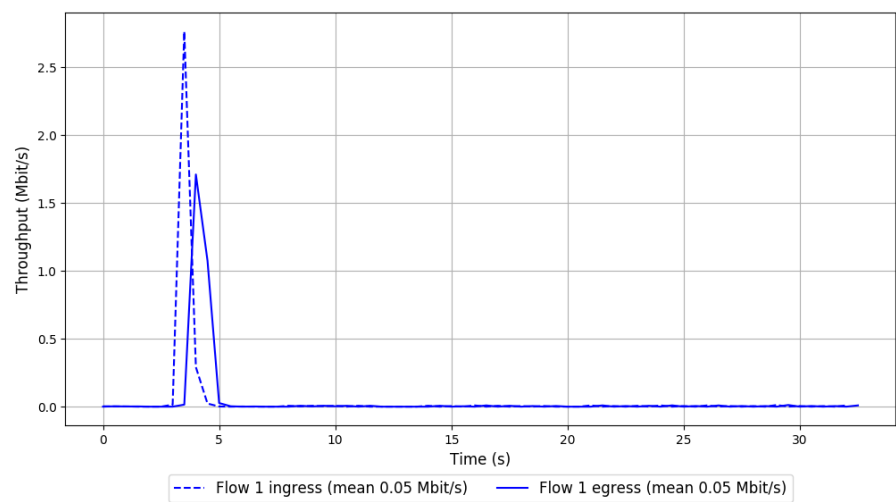
Run 10: Report of WebRTC media — Data Link