Pantheon Report

Generated at 2018-04-17 08:54:18 (UTC).

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

Repeated the test of 16 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

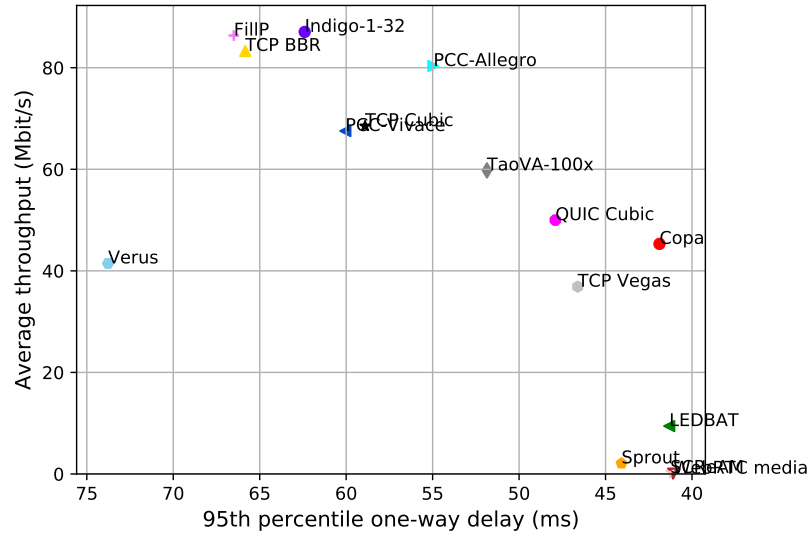Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).

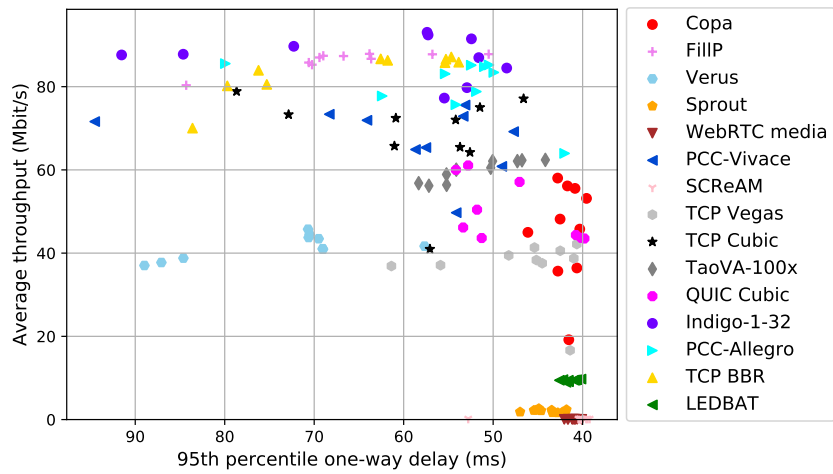NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ b3d6e7098641364fd3a292656a51aa81e316d0b4
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ d223989828276fa83a807da6e0341dc0c7b89aec
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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 @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ f271183af822eee5d0031620f4bebf38aedc5581
```

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

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

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	83.31	65.84	0.89
TCP Cubic	10	68.51	58.91	0.68
LEDBAT	10	9.43	41.32	1.30
PCC-Allegro	10	80.34	54.95	0.75
QUIC Cubic	9	49.99	47.90	0.93
SCReAM	10	0.22	41.26	0.64
WebRTC media	10	0.07	41.09	0.00
Sprout	10	2.09	44.08	0.87
TaoVA-100x	10	59.78	51.86	0.91
TCP Vegas	10	36.88	46.61	0.66
Verus	10	41.47	73.77	0.97
Copa	10	45.31	41.88	0.70
FillP	10	86.33	66.50	0.85
Indigo-1-32	10	87.06	62.40	0.93
PCC-Vivace	10	67.54	60.05	1.15
PCC-Expr	0	N/A	N/A	N/A

```
Run 1: Statistics of TCP BBR

Start at: 2018-04-17 01:43:52
End at: 2018-04-17 01:44:22
Local clock offset: 8.633 ms
Remote clock offset: -8.011 ms

# Below is generated by plot.py at 2018-04-17 08:39:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.33 Mbit/s
95th percentile per-packet one-way delay: 61.786 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 86.33 Mbit/s
95th percentile per-packet one-way delay: 61.786 ms
Loss rate: 0.45%
```
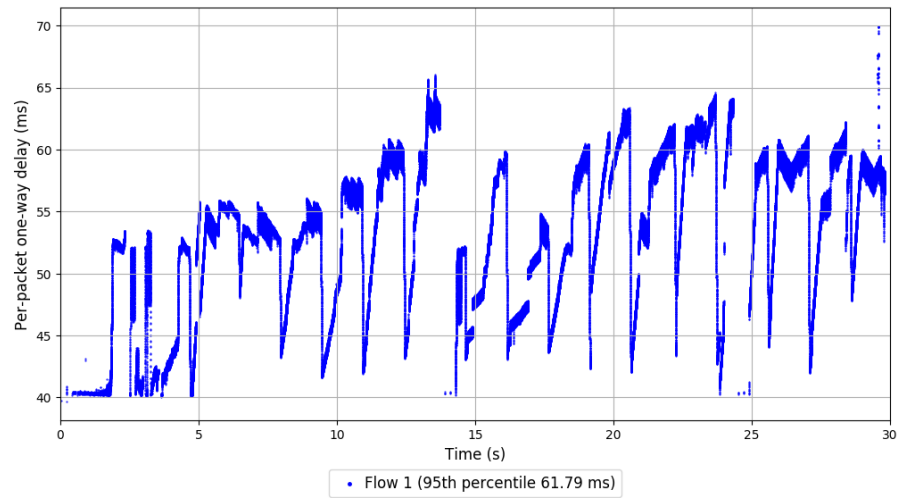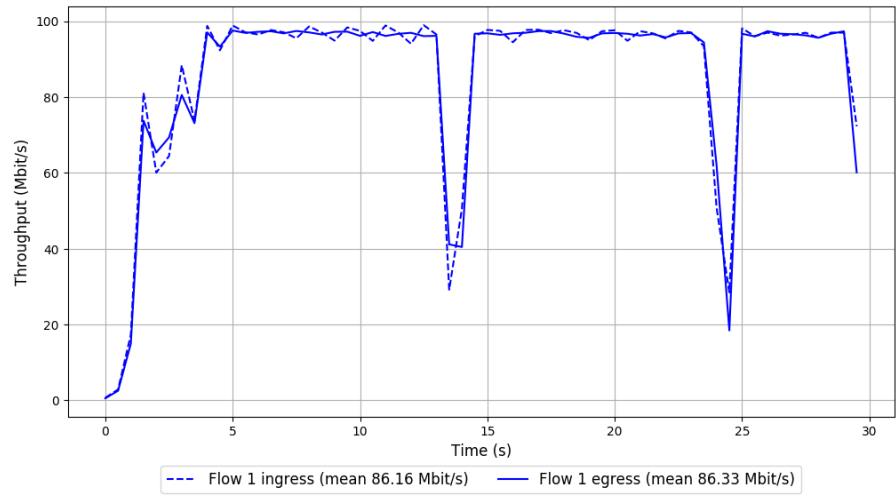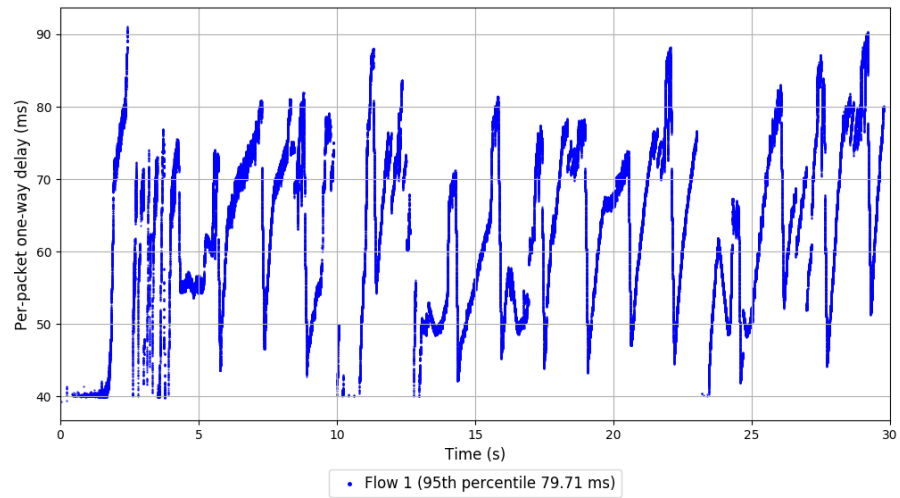
Run 1: Report of TCP BBR — Data Link

```
Run 2: Statistics of TCP BBR

Start at: 2018-04-17 02:05:01
End at: 2018-04-17 02:05:31
Local clock offset: 7.992 ms
Remote clock offset: 5.268 ms


# Below is generated by plot.py at 2018-04-17 08:39:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.20 Mbit/s
95th percentile per-packet one-way delay: 79.706 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 80.20 Mbit/s
95th percentile per-packet one-way delay: 79.706 ms
Loss rate: 0.91%
```
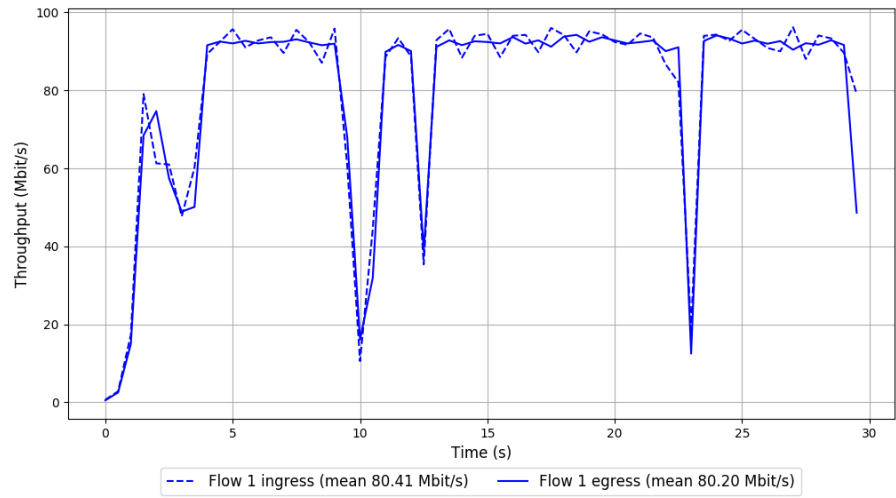
Run 2: Report of TCP BBR — Data Link

```
Run 3: Statistics of TCP BBR

Start at: 2018-04-17 02:26:13
End at: 2018-04-17 02:26:43
Local clock offset: 8.142 ms
Remote clock offset: 2.19 ms


# Below is generated by plot.py at 2018-04-17 08:39:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.55 Mbit/s
95th percentile per-packet one-way delay: 75.298 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 80.55 Mbit/s
95th percentile per-packet one-way delay: 75.298 ms
Loss rate: 0.72%
```
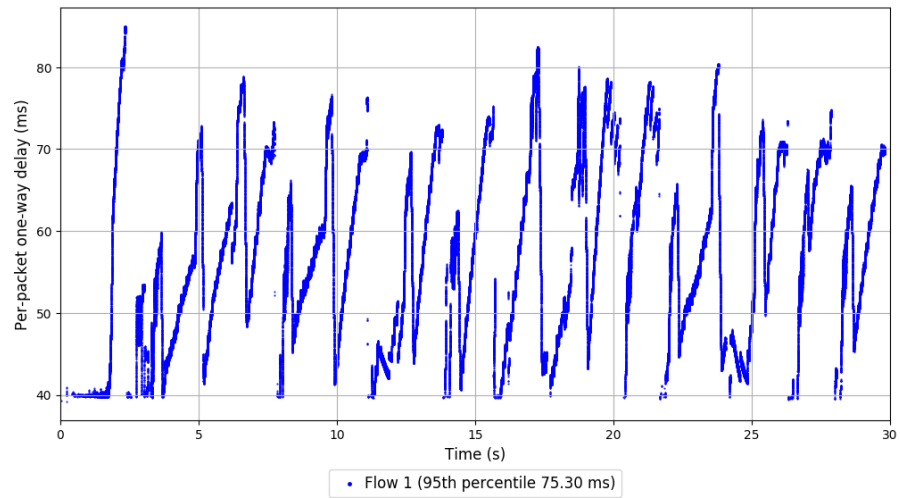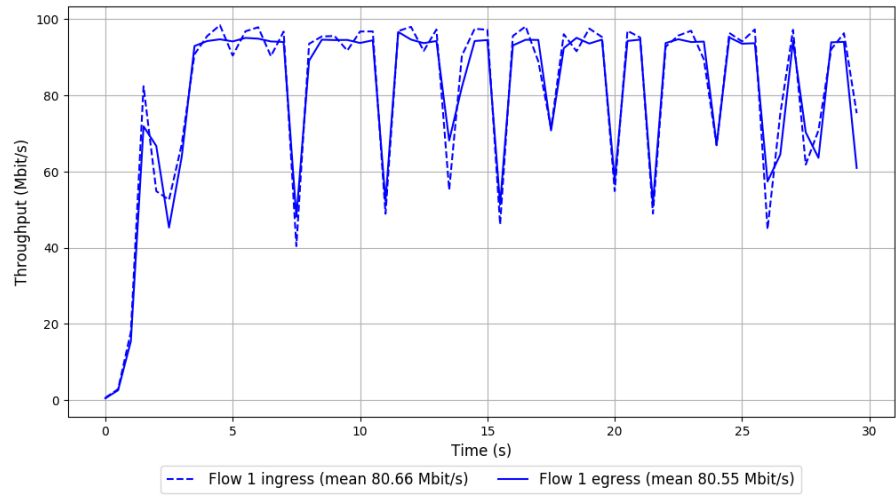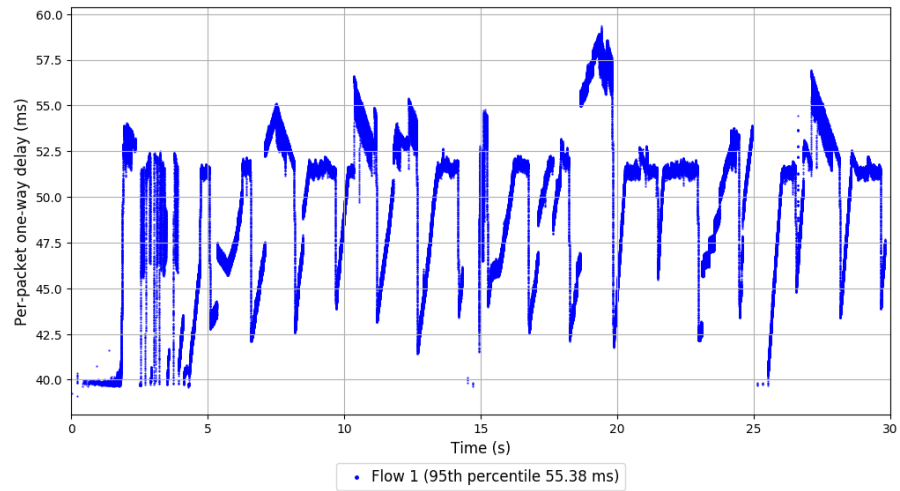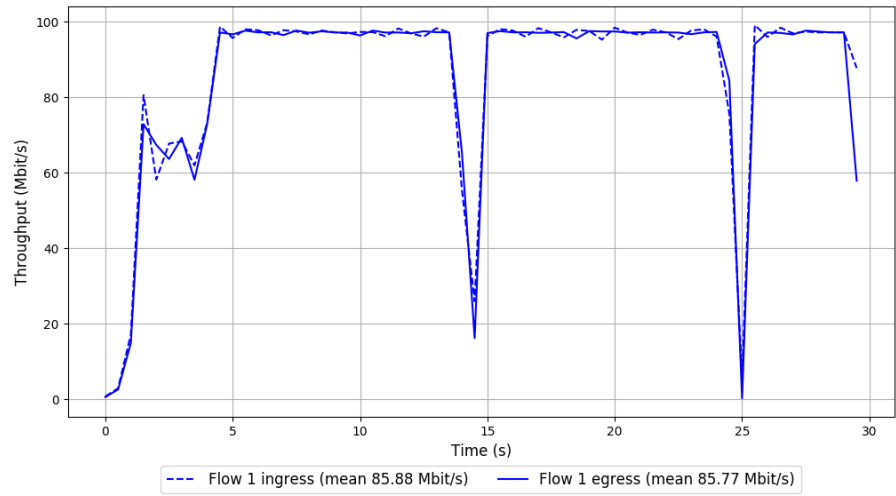
Run 3: Report of TCP BBR — Data Link

```
Run 4: Statistics of TCP BBR

Start at: 2018-04-17 02:47:30
End at: 2018-04-17 02:48:00
Local clock offset: 4.964 ms
Remote clock offset: -4.678 ms


# Below is generated by plot.py at 2018-04-17 08:39:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.77 Mbit/s
95th percentile per-packet one-way delay: 55.383 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 85.77 Mbit/s
95th percentile per-packet one-way delay: 55.383 ms
Loss rate: 0.77%
```
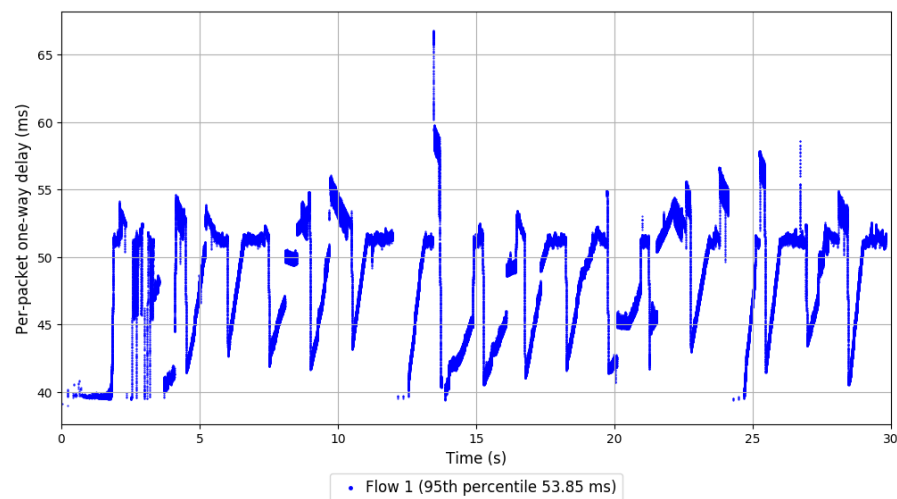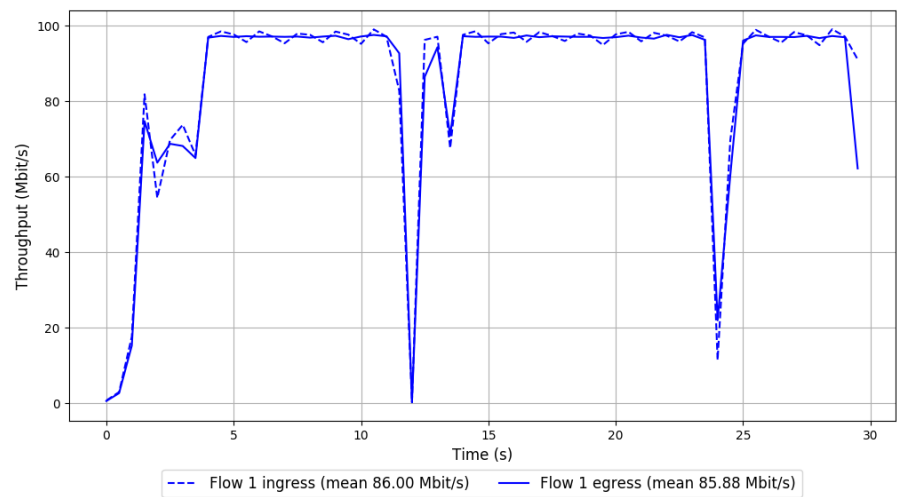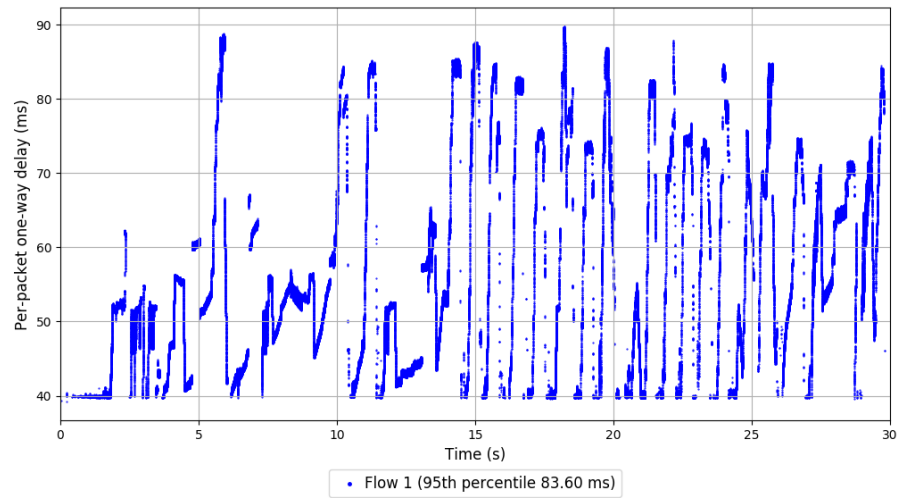
Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 85.88 Mbit/s)   Flow 1 egress (mean 85.77 Mbit/s)

Flow 1 (95th percentile 55.38 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2018-04-17 03:08:45
End at: 2018-04-17 03:09:15
Local clock offset: 4.826 ms
Remote clock offset: -1.491 ms


# Below is generated by plot.py at 2018-04-17 08:39:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.88 Mbit/s
95th percentile per-packet one-way delay: 53.851 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 85.88 Mbit/s
95th percentile per-packet one-way delay: 53.851 ms
Loss rate: 0.78%
```

Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 86.00 Mbit/s)   Flow 1 egress (mean 85.88 Mbit/s)

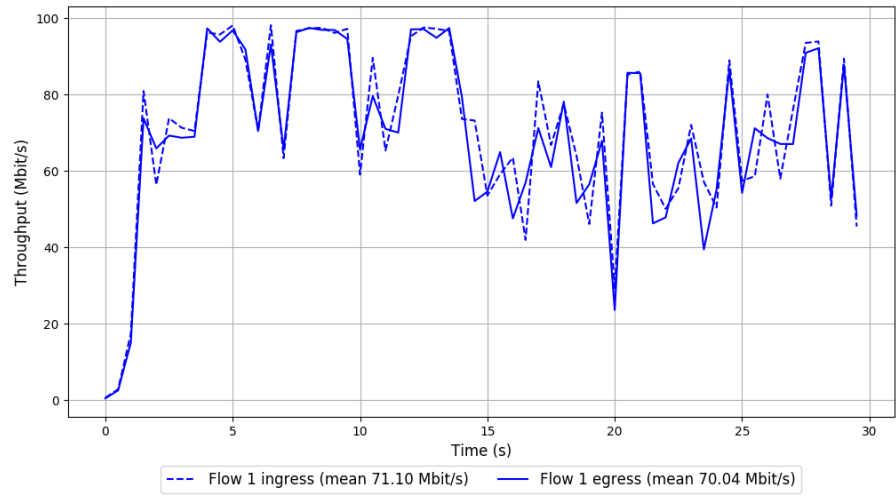• Flow 1 (95th percentile 53.85 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2018-04-17 03:30:02
End at: 2018-04-17 03:30:32
Local clock offset: 11.998 ms
Remote clock offset: -10.266 ms


# Below is generated by plot.py at 2018-04-17 08:39:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.04 Mbit/s
95th percentile per-packet one-way delay: 83.599 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 70.04 Mbit/s
95th percentile per-packet one-way delay: 83.599 ms
Loss rate: 2.15%
```
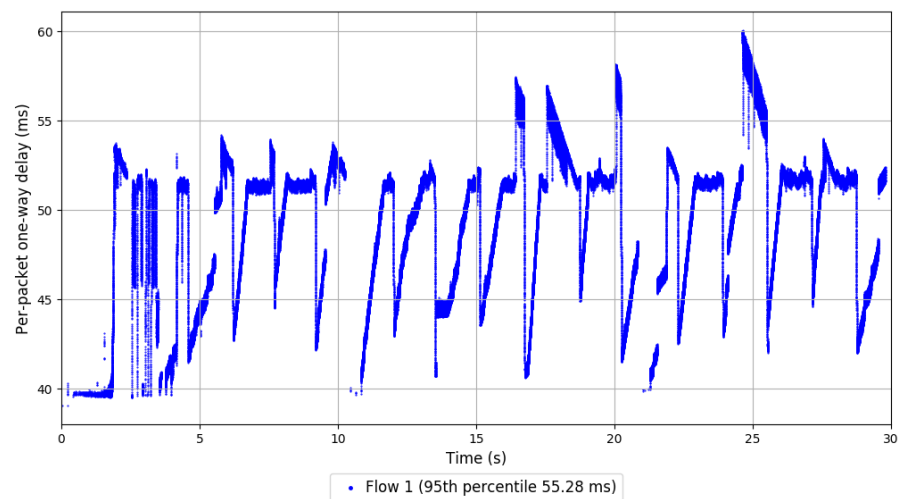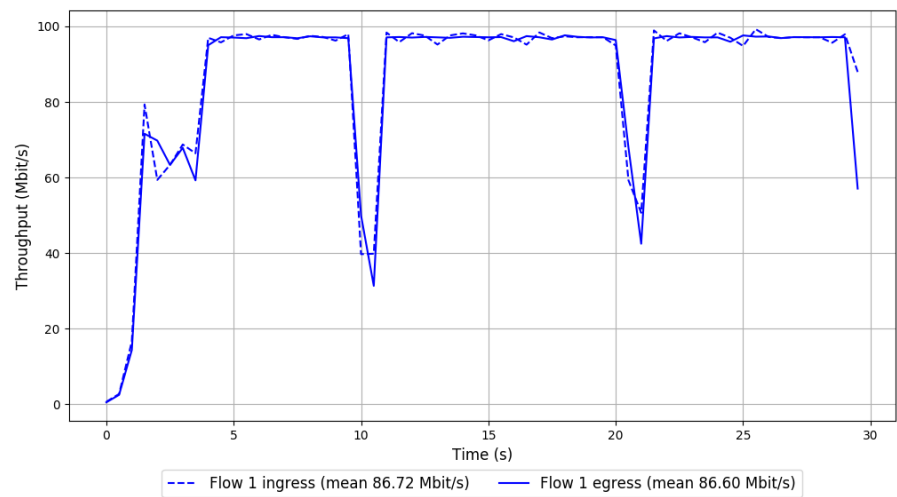
Run 6: Report of TCP BBR — Data Link

Flow 1 ingress (mean 71.10 Mbit/s) — Flow 1 egress (mean 70.04 Mbit/s)

• Flow 1 (95th percentile 83.60 ms)

```
Run 7: Statistics of TCP BBR

Start at: 2018-04-17 03:51:20
End at: 2018-04-17 03:51:50
Local clock offset: 7.313 ms
Remote clock offset: 2.945 ms


# Below is generated by plot.py at 2018-04-17 08:39:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.60 Mbit/s
95th percentile per-packet one-way delay: 55.277 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 86.60 Mbit/s
95th percentile per-packet one-way delay: 55.277 ms
Loss rate: 0.77%
```
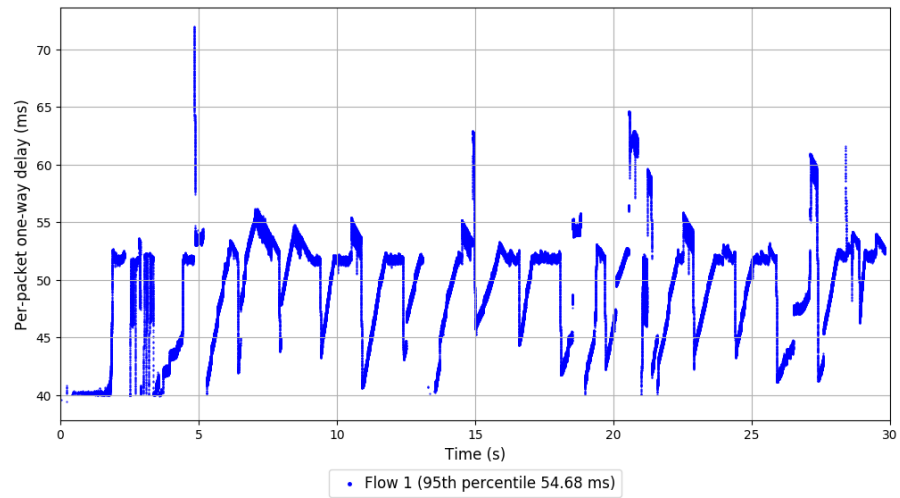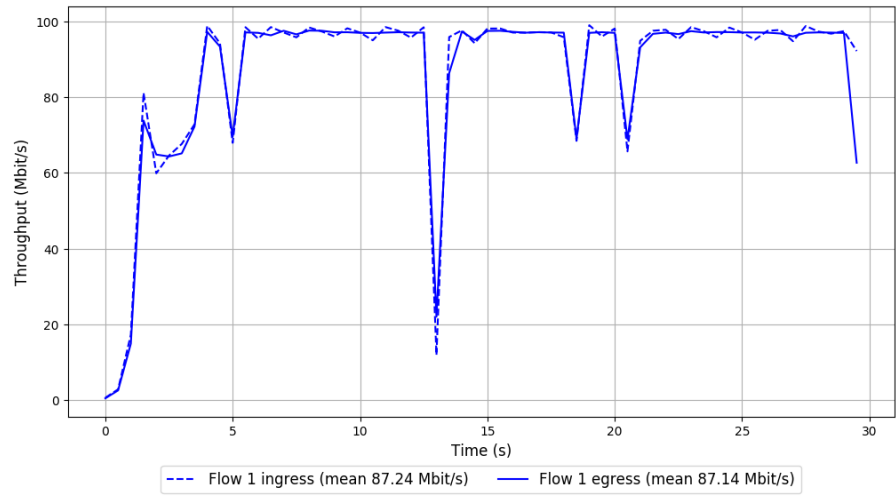
Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 86.72 Mbit/s) --- Flow 1 egress (mean 86.60 Mbit/s)

Flow 1 (95th percentile 55.28 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2018-04-17 04:12:35
End at: 2018-04-17 04:13:05
Local clock offset: 4.077 ms
Remote clock offset: 3.439 ms


# Below is generated by plot.py at 2018-04-17 08:39:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.14 Mbit/s
95th percentile per-packet one-way delay: 54.677 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 87.14 Mbit/s
95th percentile per-packet one-way delay: 54.677 ms
Loss rate: 0.78%
```

Run 8: Report of TCP BBR — Data Link

```
Run 9: Statistics of TCP BBR

Start at: 2018-04-17 04:33:54
End at: 2018-04-17 04:34:24
Local clock offset: 10.947 ms
Remote clock offset: 2.805 ms


# Below is generated by plot.py at 2018-04-17 08:40:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.94 Mbit/s
95th percentile per-packet one-way delay: 76.222 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 83.94 Mbit/s
95th percentile per-packet one-way delay: 76.222 ms
Loss rate: 0.83%
```
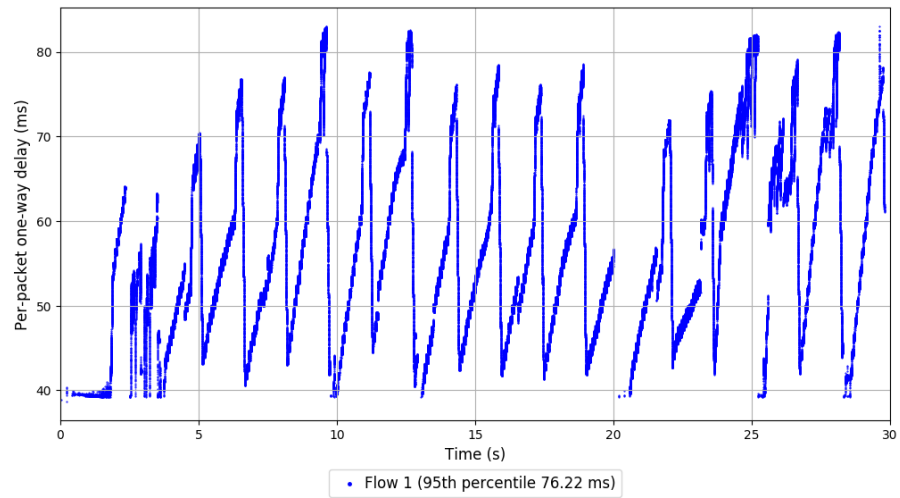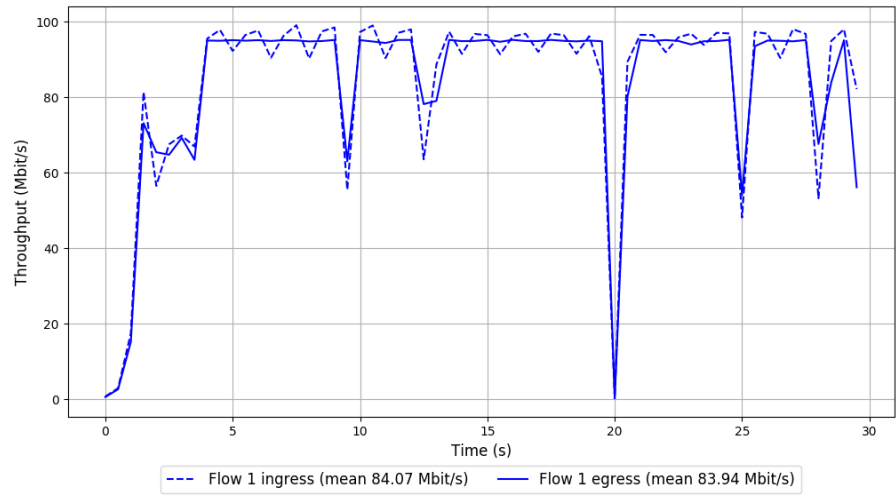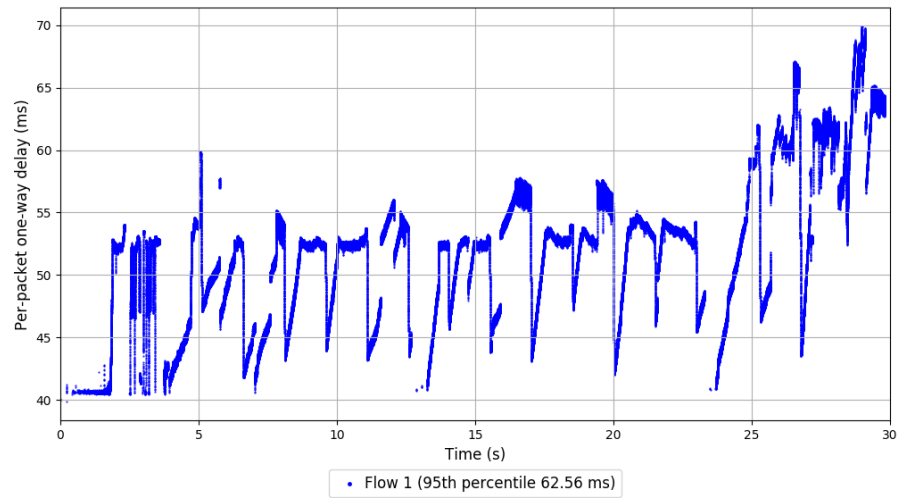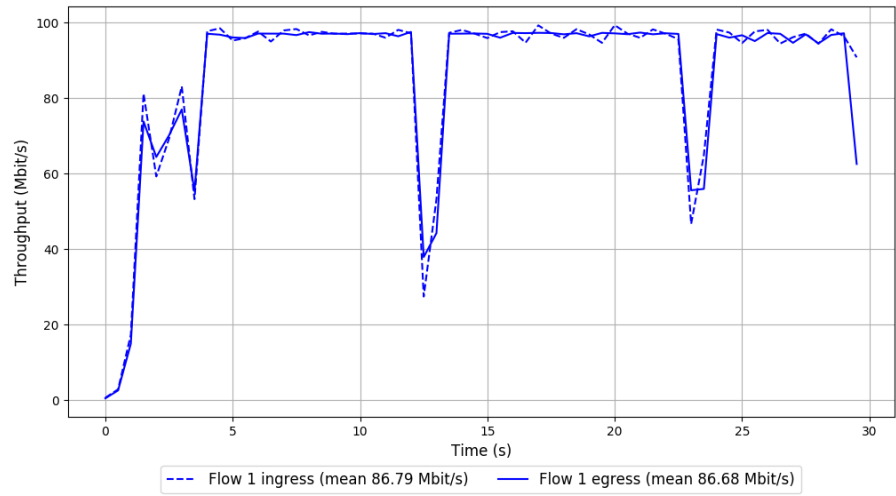
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 84.07 Mbit/s)   Flow 1 egress (mean 83.94 Mbit/s)

Flow 1 (95th percentile 76.22 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2018-04-17 04:55:06
End at: 2018-04-17 04:55:36
Local clock offset: 9.07 ms
Remote clock offset: -13.482 ms


# Below is generated by plot.py at 2018-04-17 08:40:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.68 Mbit/s
95th percentile per-packet one-way delay: 62.565 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 86.68 Mbit/s
95th percentile per-packet one-way delay: 62.565 ms
Loss rate: 0.78%
```

Run 10: Report of TCP BBR — Data Link

```
Run 1: Statistics of TCP Cubic

Start at: 2018-04-17 01:27:27
End at: 2018-04-17 01:27:57
Local clock offset: 15.519 ms
Remote clock offset: 9.417 ms


# Below is generated by plot.py at 2018-04-17 08:40:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.10 Mbit/s
95th percentile per-packet one-way delay: 46.599 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 77.10 Mbit/s
95th percentile per-packet one-way delay: 46.599 ms
Loss rate: 0.81%
```
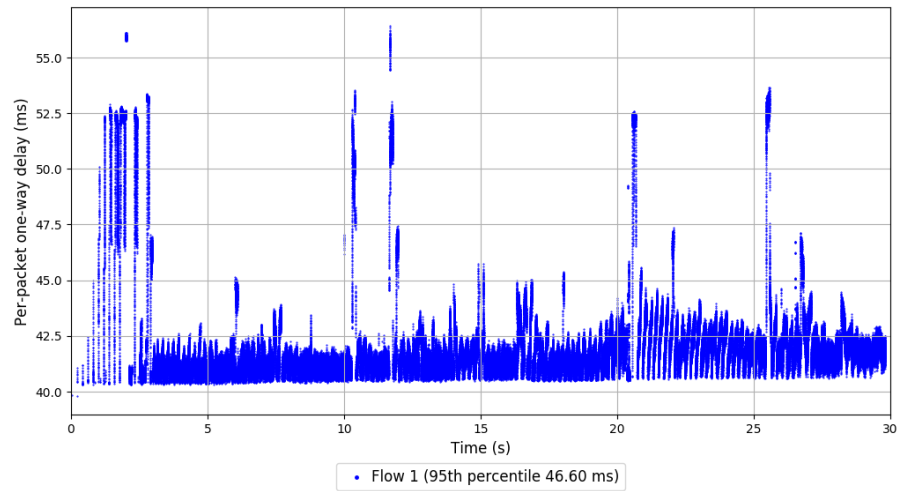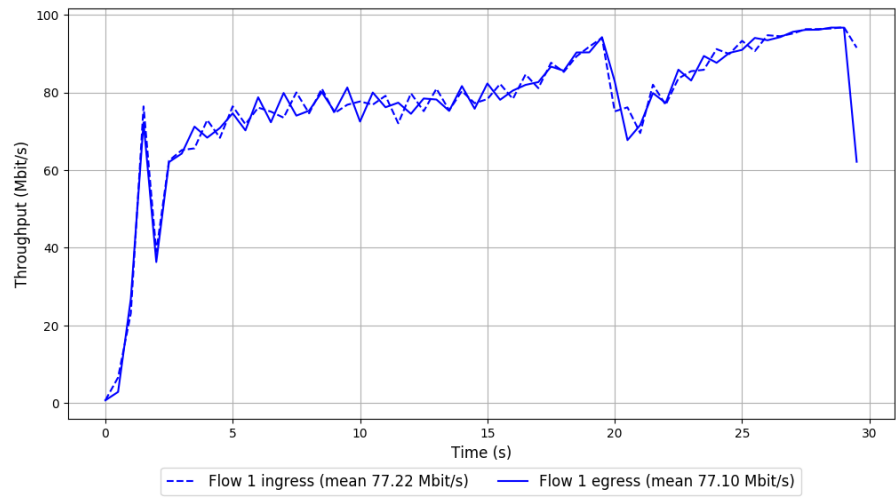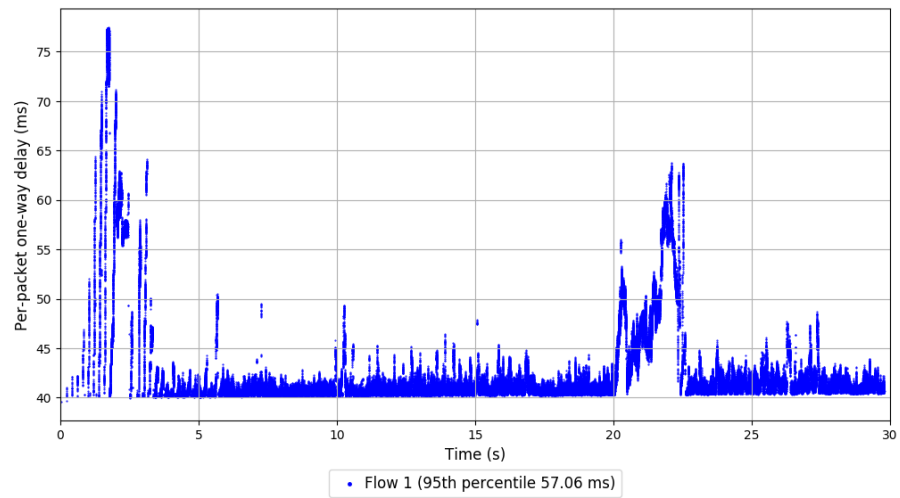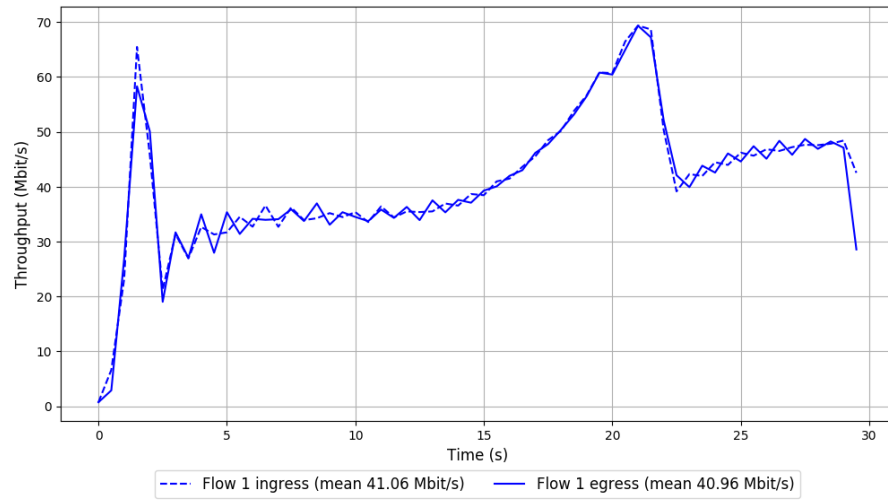
Run 1: Report of TCP Cubic — Data Link

```
Run 2: Statistics of TCP Cubic

Start at: 2018-04-17 01:48:46
End at: 2018-04-17 01:49:16
Local clock offset: 8.254 ms
Remote clock offset: -8.801 ms


# Below is generated by plot.py at 2018-04-17 08:40:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.96 Mbit/s
95th percentile per-packet one-way delay: 57.065 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 40.96 Mbit/s
95th percentile per-packet one-way delay: 57.065 ms
Loss rate: 0.87%
```
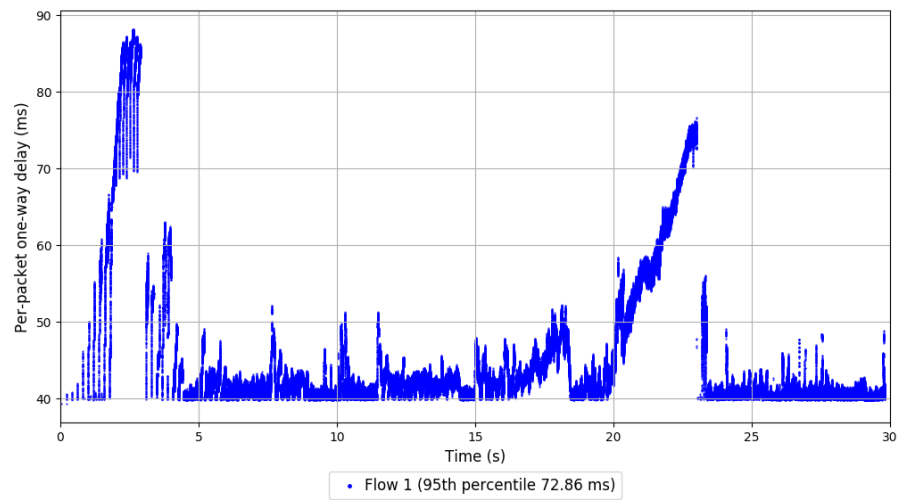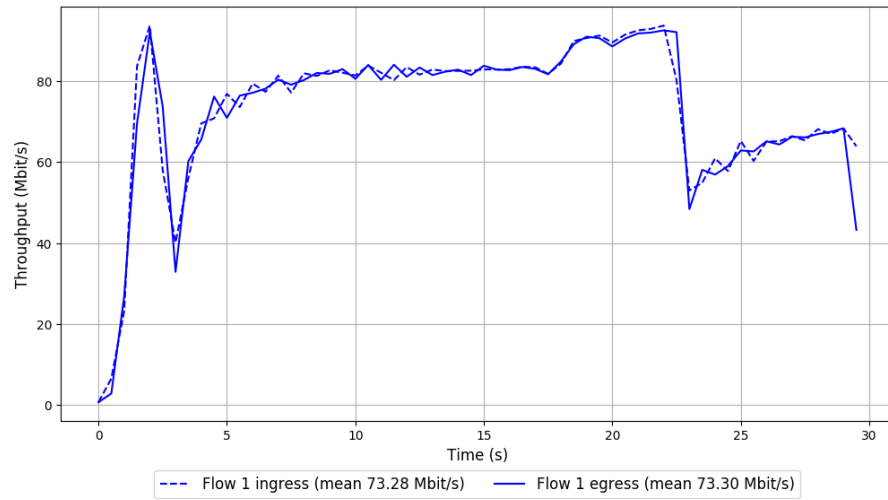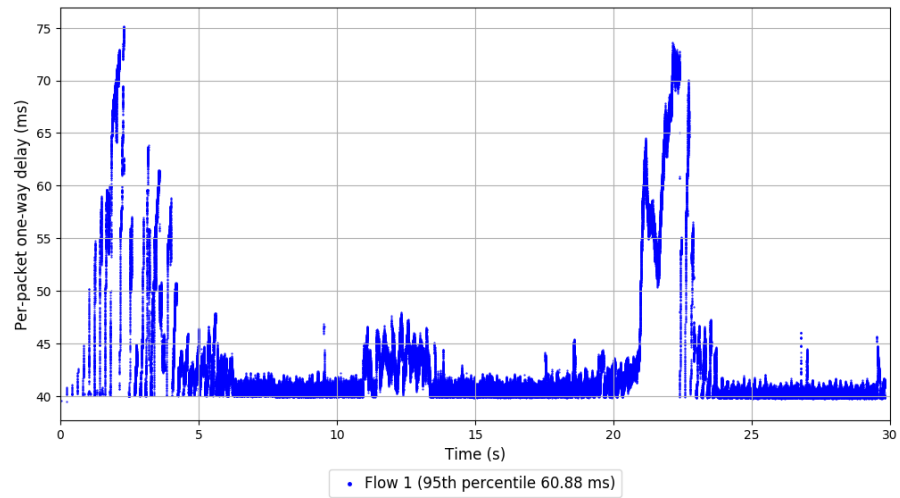
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 41.06 Mbit/s)   Flow 1 egress (mean 40.96 Mbit/s)

Flow 1 (95th percentile 57.06 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2018-04-17 02:09:55
End at: 2018-04-17 02:10:25
Local clock offset: 7.834 ms
Remote clock offset: 5.274 ms


# Below is generated by plot.py at 2018-04-17 08:40:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.30 Mbit/s
95th percentile per-packet one-way delay: 72.862 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 73.30 Mbit/s
95th percentile per-packet one-way delay: 72.862 ms
Loss rate: 0.61%
```

Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 73.28 Mbit/s)   Flow 1 egress (mean 73.30 Mbit/s)

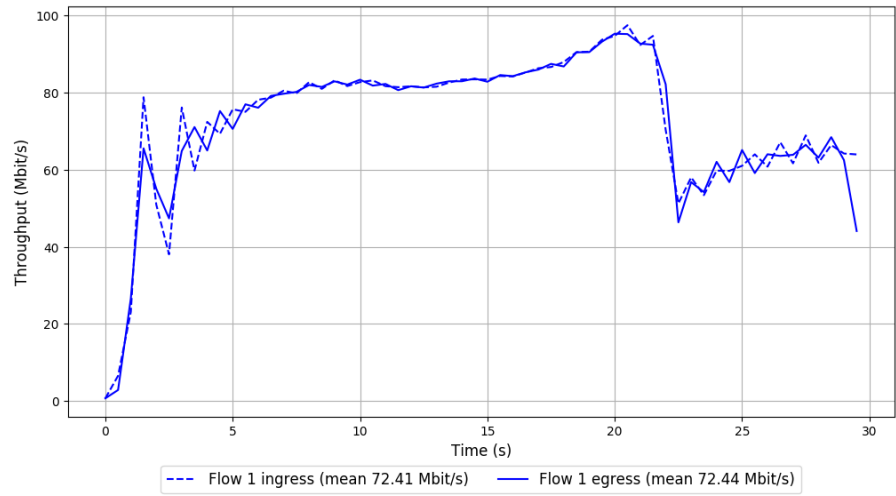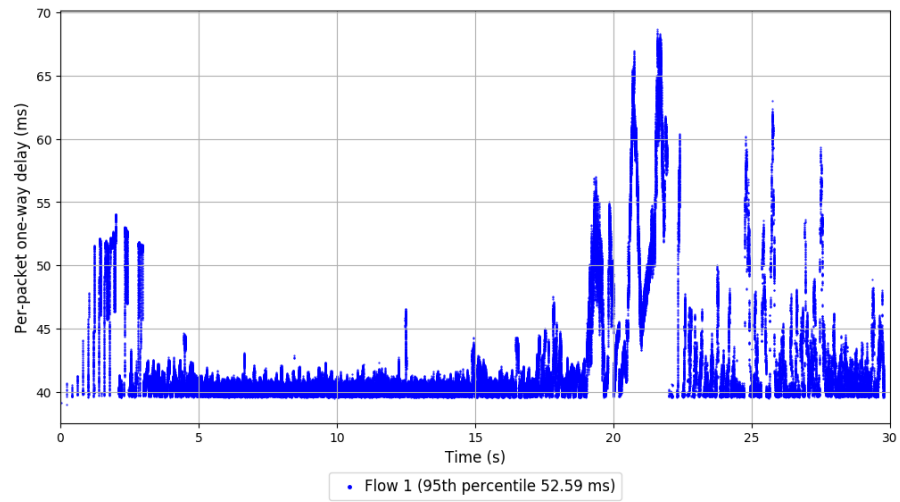
Flow 1 (95th percentile 72.86 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2018-04-17 02:31:08
End at: 2018-04-17 02:31:38
Local clock offset: 8.197 ms
Remote clock offset: -0.239 ms


# Below is generated by plot.py at 2018-04-17 08:40:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.44 Mbit/s
95th percentile per-packet one-way delay: 60.875 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 72.44 Mbit/s
95th percentile per-packet one-way delay: 60.875 ms
Loss rate: 0.59%
```

Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 72.41 Mbit/s) — — — Flow 1 egress (mean 72.44 Mbit/s)

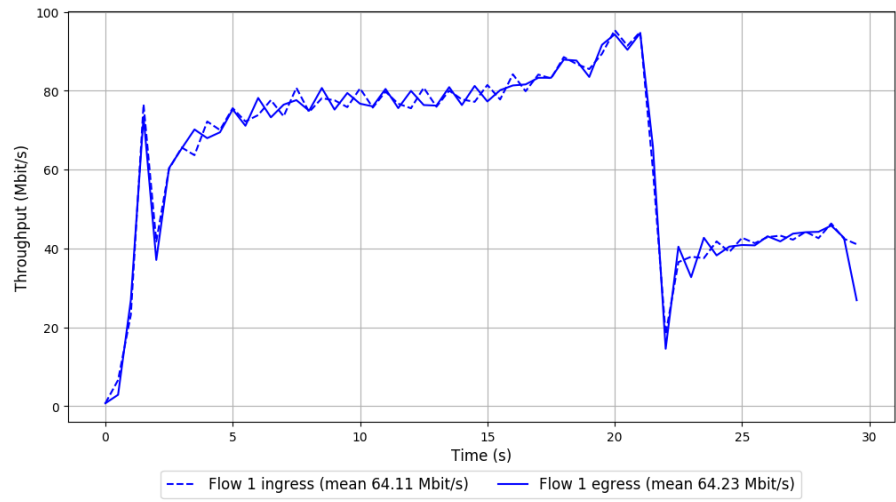

• Flow 1 (95th percentile 60.88 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2018-04-17 02:52:25
End at: 2018-04-17 02:52:55
Local clock offset: 4.577 ms
Remote clock offset: -5.458 ms


# Below is generated by plot.py at 2018-04-17 08:40:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.23 Mbit/s
95th percentile per-packet one-way delay: 52.589 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 64.23 Mbit/s
95th percentile per-packet one-way delay: 52.589 ms
Loss rate: 0.53%
```
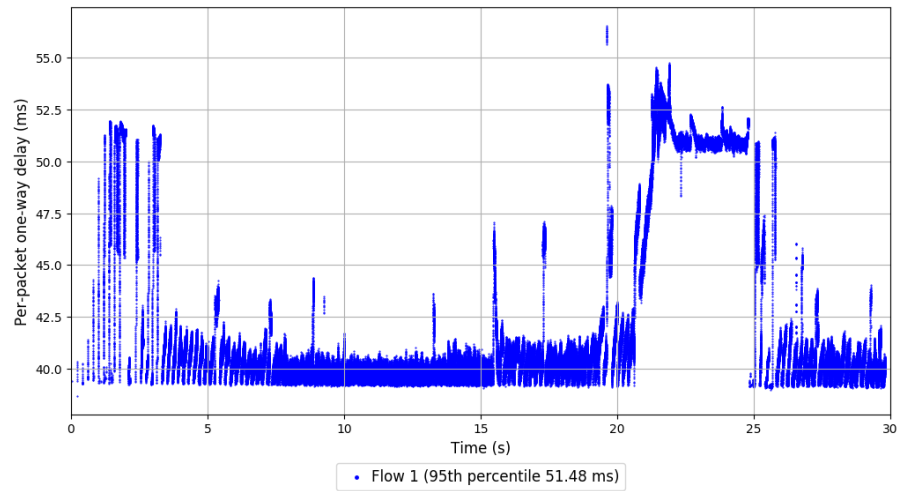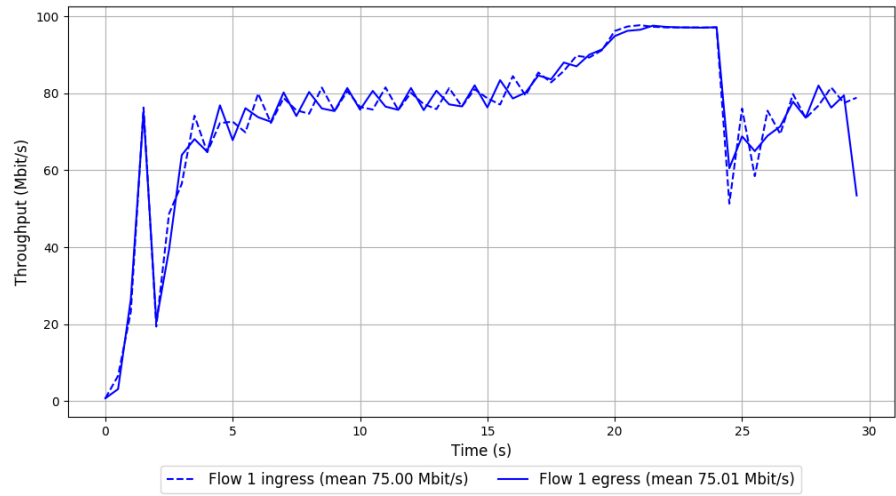
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 64.11 Mbit/s)   Flow 1 egress (mean 64.23 Mbit/s)

• Flow 1 (95th percentile 52.59 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2018-04-17 03:13:40
End at: 2018-04-17 03:14:10
Local clock offset: 7.568 ms
Remote clock offset: -0.87 ms


# Below is generated by plot.py at 2018-04-17 08:40:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.01 Mbit/s
95th percentile per-packet one-way delay: 51.476 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 75.01 Mbit/s
95th percentile per-packet one-way delay: 51.476 ms
Loss rate: 0.69%
```

Run 6: Report of TCP Cubic — Data Link

```
Run 7: Statistics of TCP Cubic

Start at: 2018-04-17 03:34:56
End at: 2018-04-17 03:35:26
Local clock offset: 12.724 ms
Remote clock offset: -5.44 ms


# Below is generated by plot.py at 2018-04-17 08:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.03 Mbit/s
95th percentile per-packet one-way delay: 54.184 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 72.03 Mbit/s
95th percentile per-packet one-way delay: 54.184 ms
Loss rate: 0.52%
```
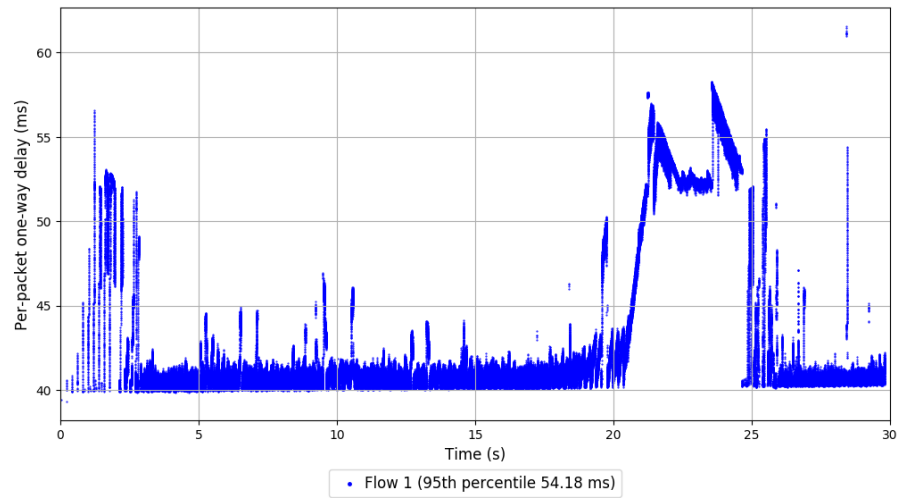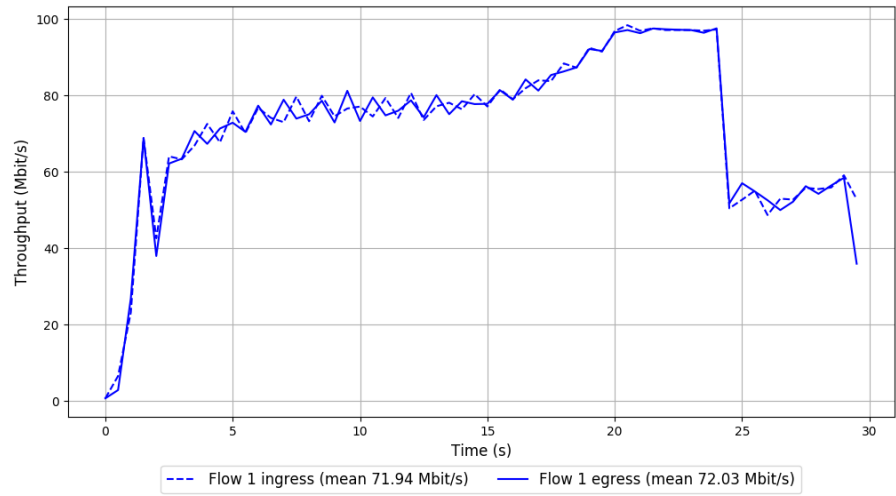
Run 7: Report of TCP Cubic — Data Link

```
Run 8: Statistics of TCP Cubic

Start at: 2018-04-17 03:56:14
End at: 2018-04-17 03:56:44
Local clock offset: 5.88 ms
Remote clock offset: 4.05 ms


# Below is generated by plot.py at 2018-04-17 08:41:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.46 Mbit/s
95th percentile per-packet one-way delay: 53.700 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 65.46 Mbit/s
95th percentile per-packet one-way delay: 53.700 ms
Loss rate: 0.67%
```
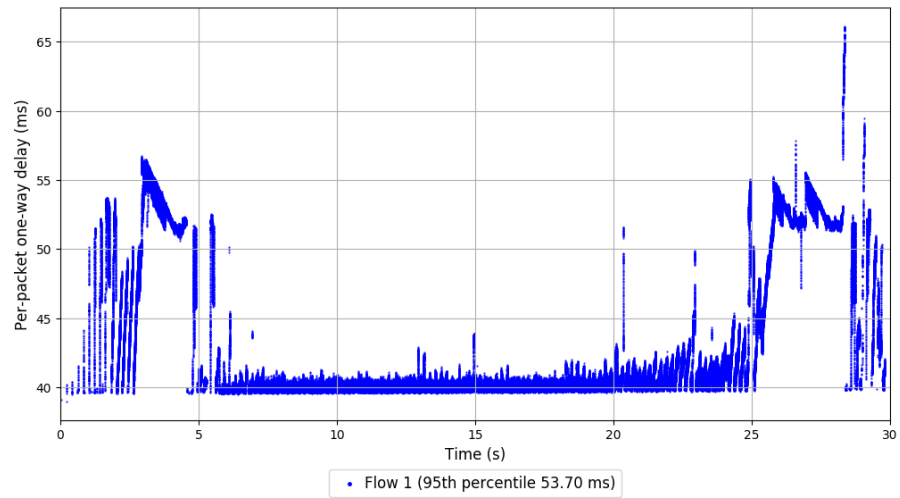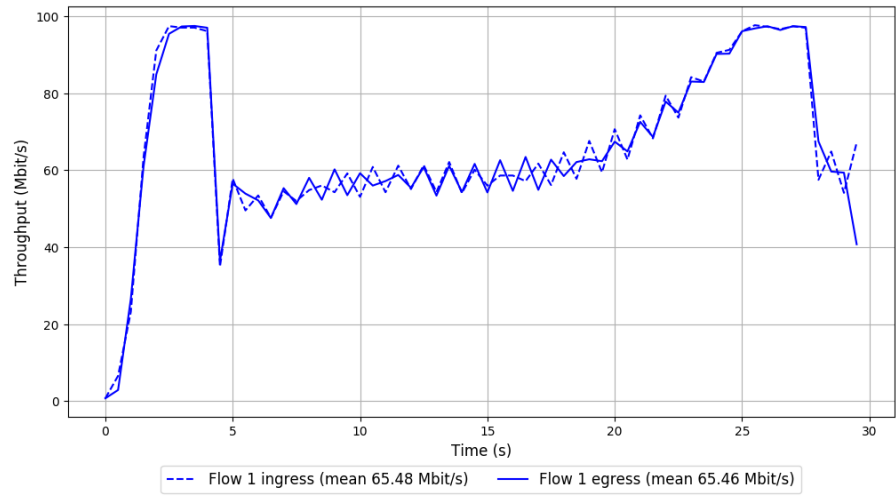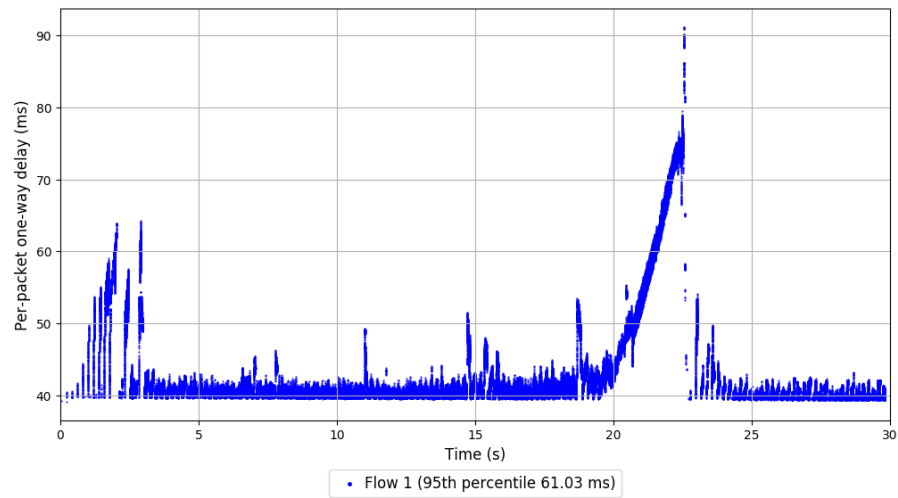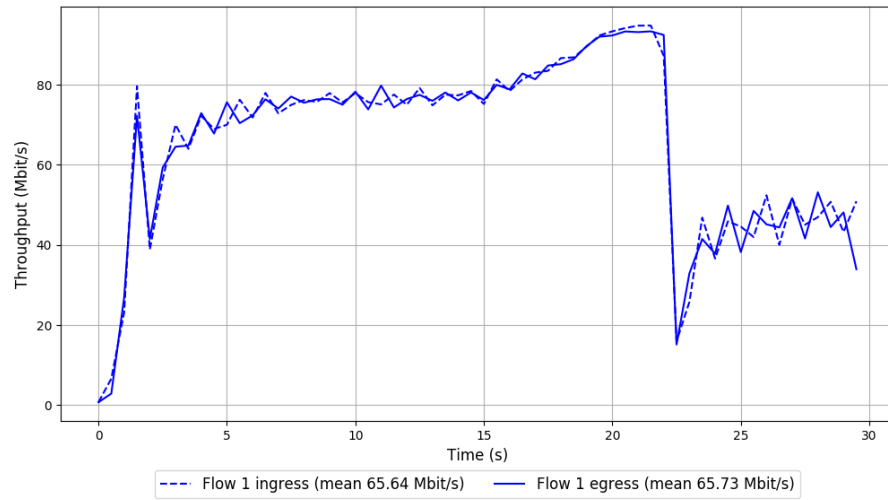
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 65.48 Mbit/s)   Flow 1 egress (mean 65.46 Mbit/s)

Flow 1 (95th percentile 53.70 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2018-04-17 04:17:30
End at: 2018-04-17 04:18:00
Local clock offset: 5.22 ms
Remote clock offset: 2.844 ms


# Below is generated by plot.py at 2018-04-17 08:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.73 Mbit/s
95th percentile per-packet one-way delay: 61.031 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 65.73 Mbit/s
95th percentile per-packet one-way delay: 61.031 ms
Loss rate: 0.51%
```
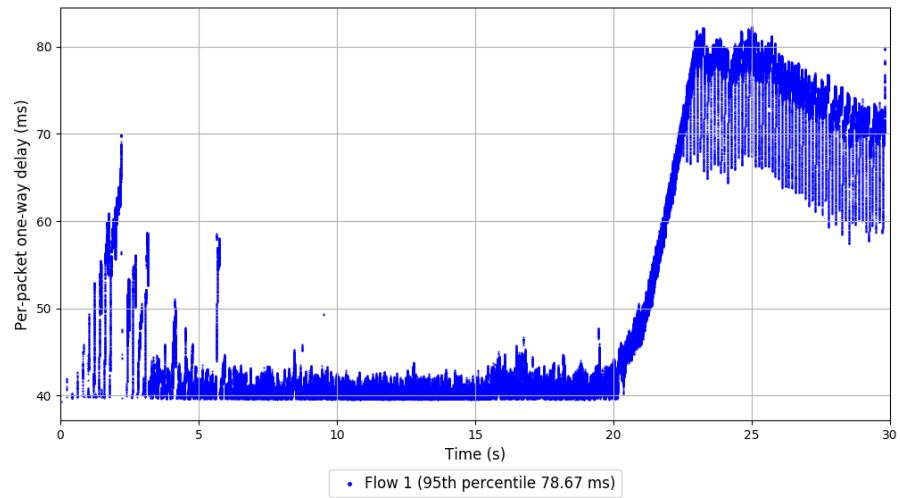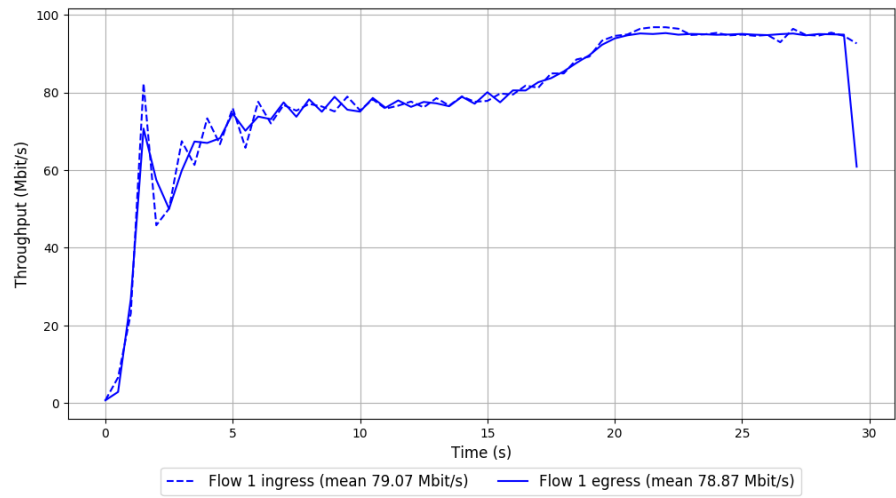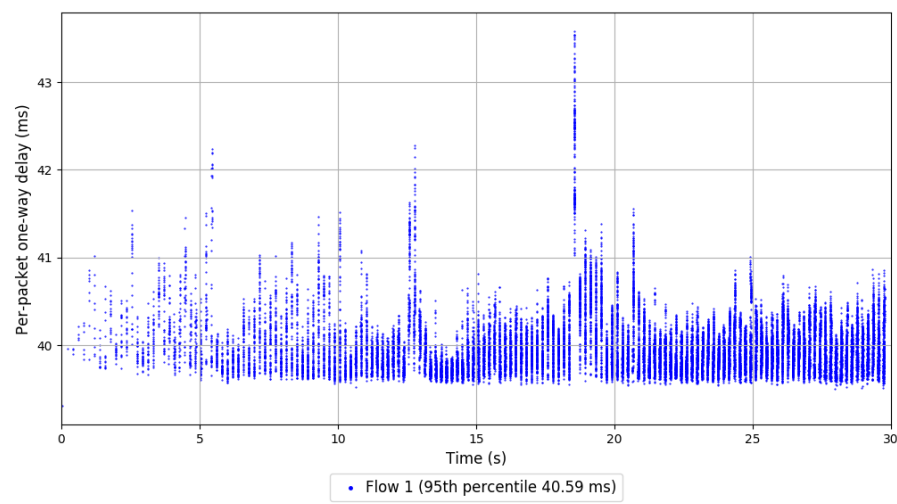
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 65.64 Mbit/s)   —— Flow 1 egress (mean 65.73 Mbit/s)

• Flow 1 (95th percentile 61.03 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2018-04-17 04:38:49
End at: 2018-04-17 04:39:19
Local clock offset: 11.789 ms
Remote clock offset: 2.935 ms


# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.87 Mbit/s
95th percentile per-packet one-way delay: 78.674 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 78.87 Mbit/s
95th percentile per-packet one-way delay: 78.674 ms
Loss rate: 0.95%
```

Run 10: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 79.07 Mbit/s)   Flow 1 egress (mean 78.87 Mbit/s)

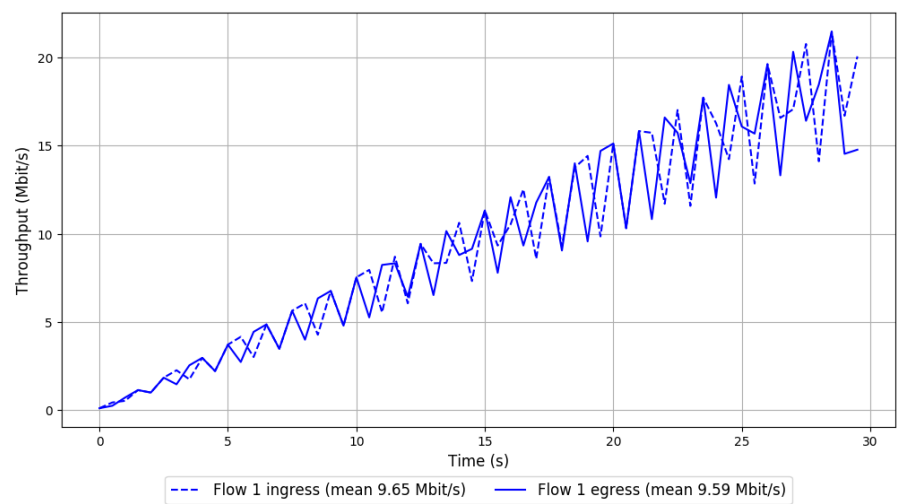
Flow 1 (95th percentile 78.67 ms)

43

```
Run 1: Statistics of LEDBAT

Start at: 2018-04-17 01:42:39
End at: 2018-04-17 01:43:09
Local clock offset: 8.687 ms
Remote clock offset: -7.635 ms

# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.59 Mbit/s
95th percentile per-packet one-way delay: 40.589 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 9.59 Mbit/s
95th percentile per-packet one-way delay: 40.589 ms
Loss rate: 1.29%
```

Run 1: Report of LEDBAT — Data Link

```
Run 2: Statistics of LEDBAT

Start at: 2018-04-17 02:03:48
End at: 2018-04-17 02:04:18
Local clock offset: 7.865 ms
Remote clock offset: 5.227 ms


# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.95 Mbit/s
95th percentile per-packet one-way delay: 41.857 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 8.95 Mbit/s
95th percentile per-packet one-way delay: 41.857 ms
Loss rate: 1.33%
```
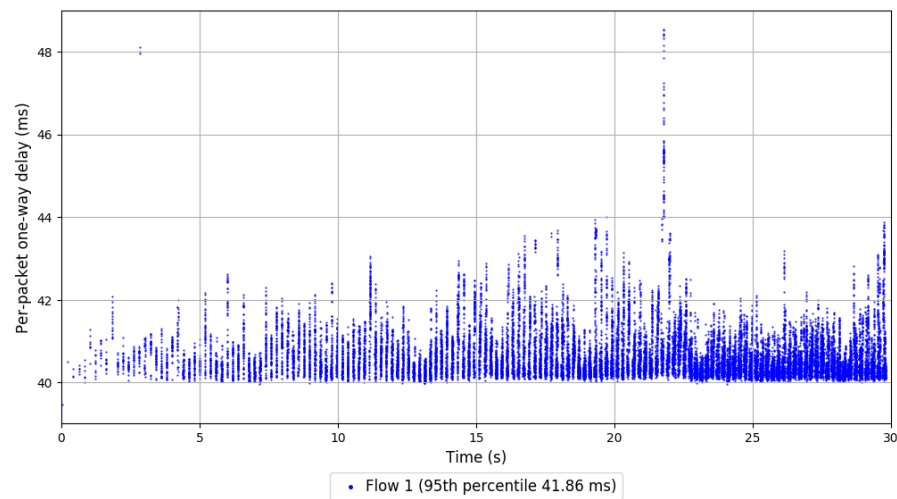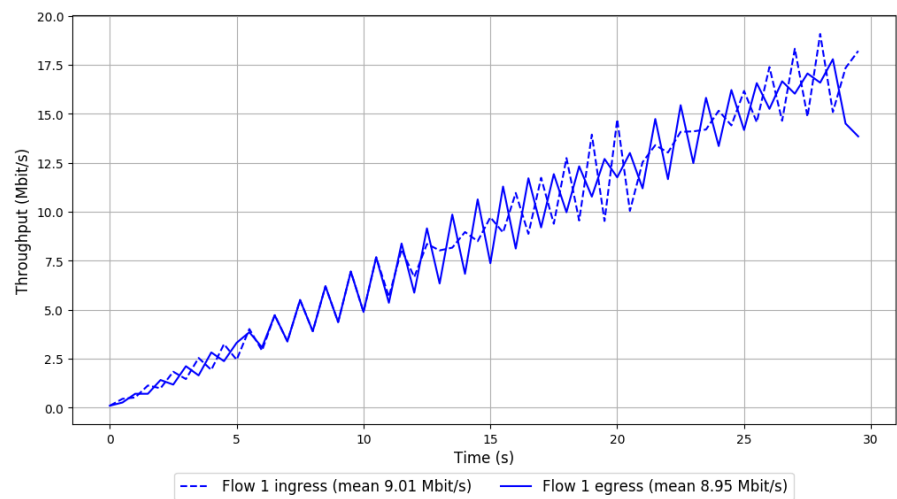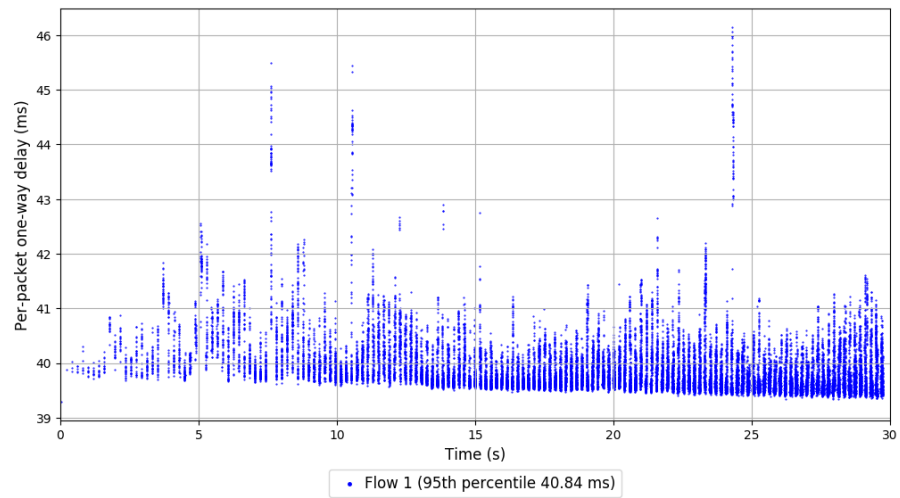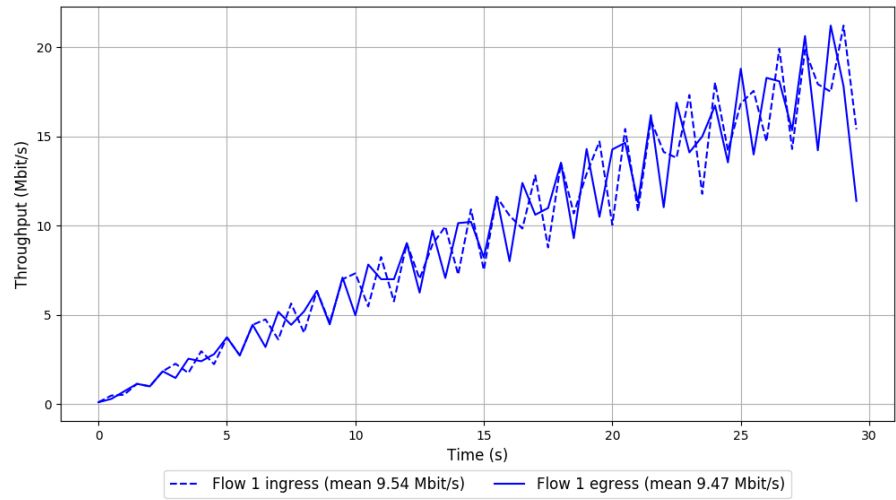
Run 2: Report of LEDBAT — Data Link

```
Run 3: Statistics of LEDBAT

Start at: 2018-04-17 02:24:59
End at: 2018-04-17 02:25:29
Local clock offset: 8.027 ms
Remote clock offset: 2.978 ms


# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 40.845 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 40.845 ms
Loss rate: 1.30%
```

Run 3: Report of LEDBAT — Data Link

Flow 1 ingress (mean 9.54 Mbit/s)   Flow 1 egress (mean 9.47 Mbit/s)

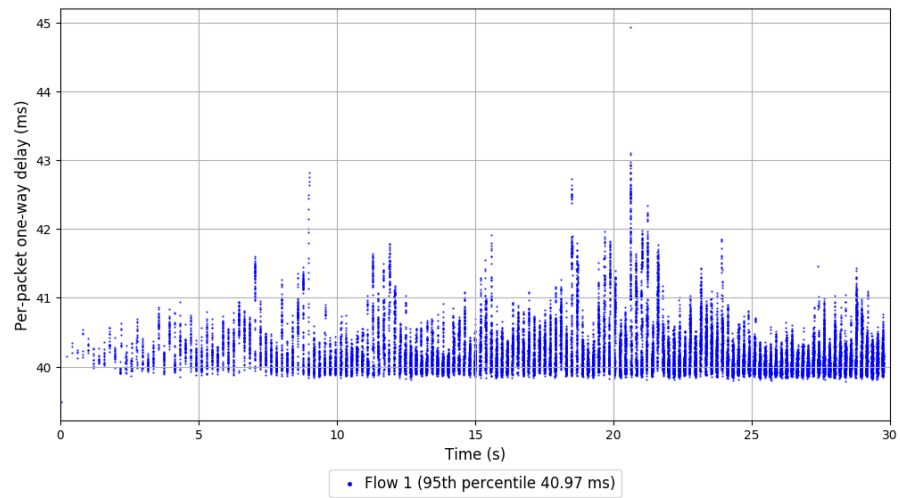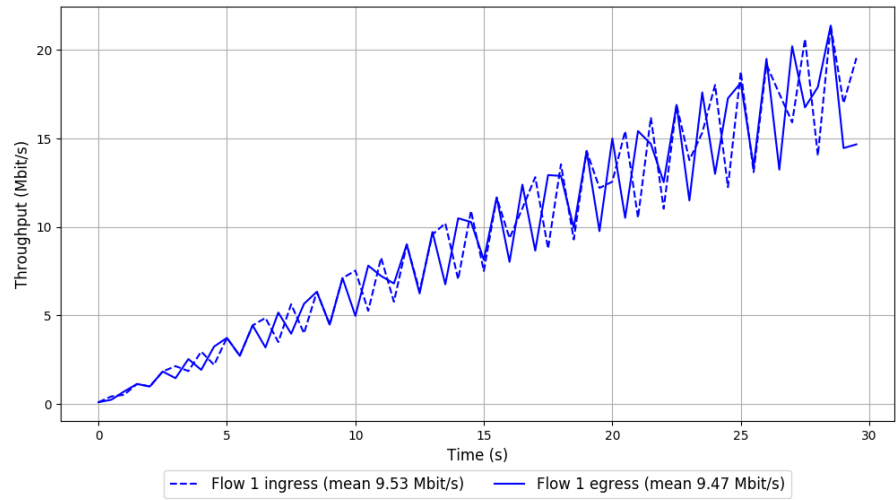Flow 1 (95th percentile 40.84 ms)

```
Run 4: Statistics of LEDBAT

Start at: 2018-04-17 02:46:17
End at: 2018-04-17 02:46:47
Local clock offset: 5.357 ms
Remote clock offset: -4.434 ms


# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 40.968 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 40.968 ms
Loss rate: 1.30%
```

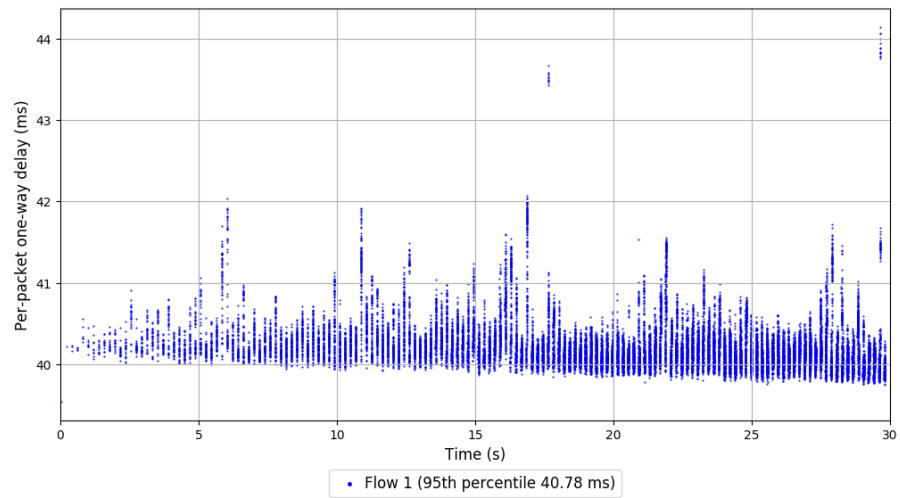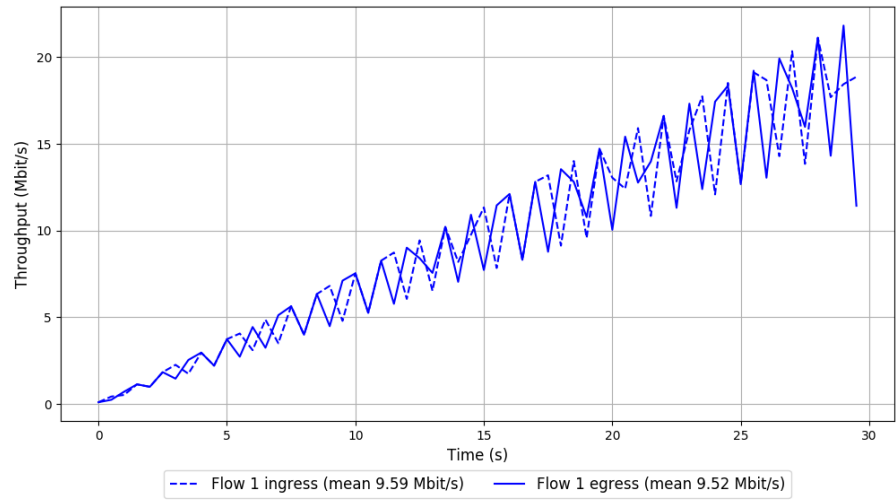# Run 4: Report of LEDBAT — Data Link

```
Run 5: Statistics of LEDBAT

Start at: 2018-04-17 03:07:32
End at: 2018-04-17 03:08:02
Local clock offset: 4.123 ms
Remote clock offset: -1.698 ms


# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 40.776 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 9.52 Mbit/s
95th percentile per-packet one-way delay: 40.776 ms
Loss rate: 1.29%
```

Run 5: Report of LEDBAT — Data Link

Flow 1 ingress (mean 9.59 Mbit/s) ——— Flow 1 egress (mean 9.52 Mbit/s)

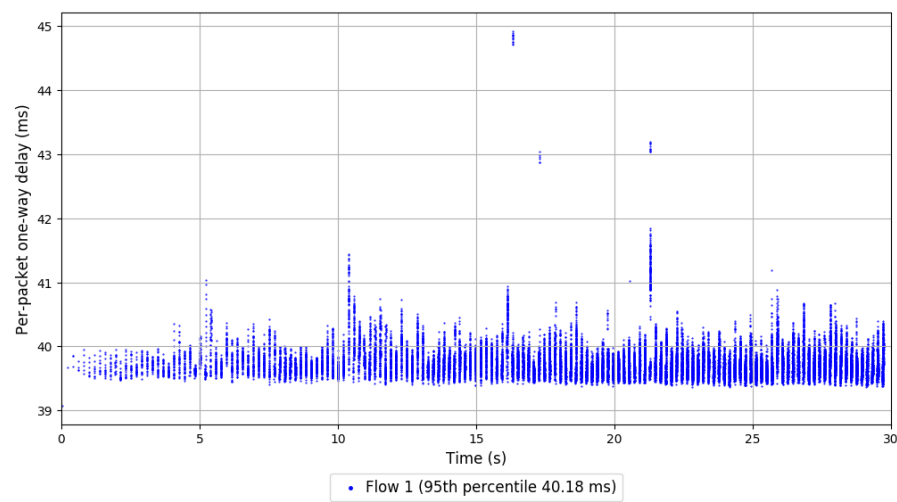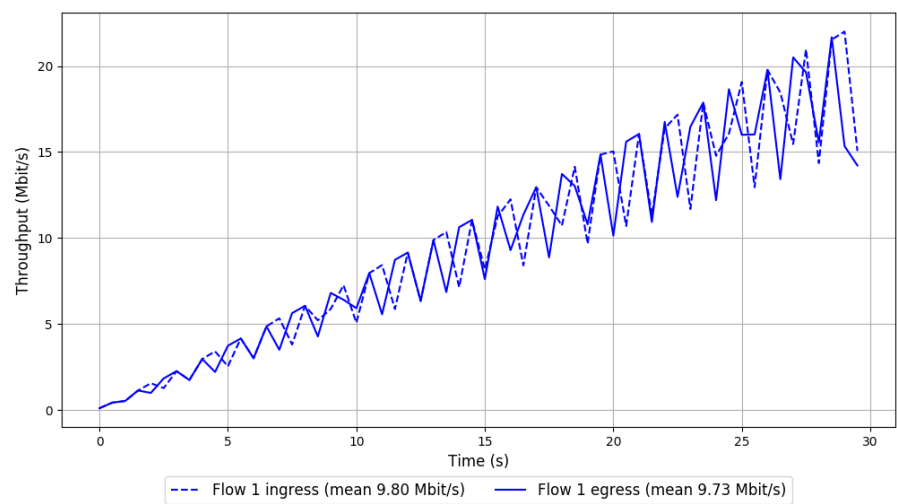• Flow 1 (95th percentile 40.78 ms)

```
Run 6: Statistics of LEDBAT

Start at: 2018-04-17 03:28:48
End at: 2018-04-17 03:29:18
Local clock offset: 11.785 ms
Remote clock offset: -10.271 ms


# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.73 Mbit/s
95th percentile per-packet one-way delay: 40.177 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 9.73 Mbit/s
95th percentile per-packet one-way delay: 40.177 ms
Loss rate: 1.28%
```
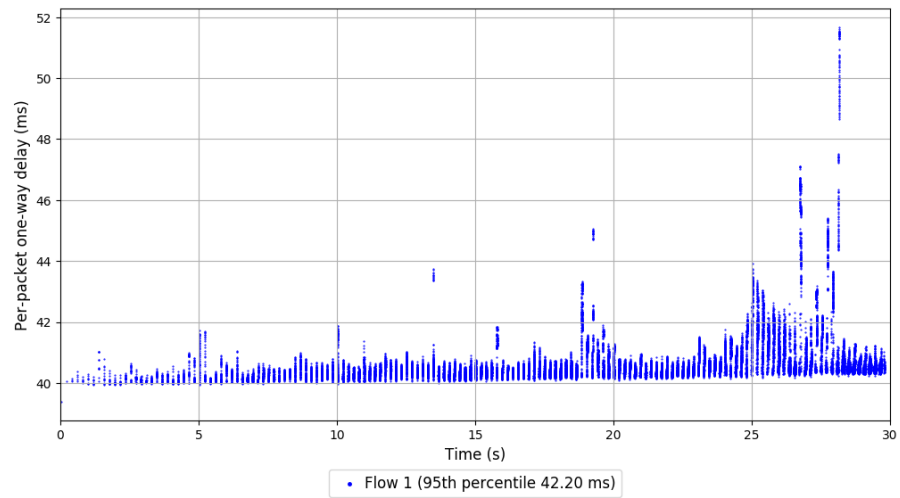
Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 9.80 Mbit/s) Flow 1 egress (mean 9.73 Mbit/s)

Flow 1 (95th percentile 40.18 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2018-04-17 03:50:06
End at: 2018-04-17 03:50:36
Local clock offset: 7.758 ms
Remote clock offset: 2.565 ms


# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.60 Mbit/s
95th percentile per-packet one-way delay: 42.198 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 9.60 Mbit/s
95th percentile per-packet one-way delay: 42.198 ms
Loss rate: 1.28%
```
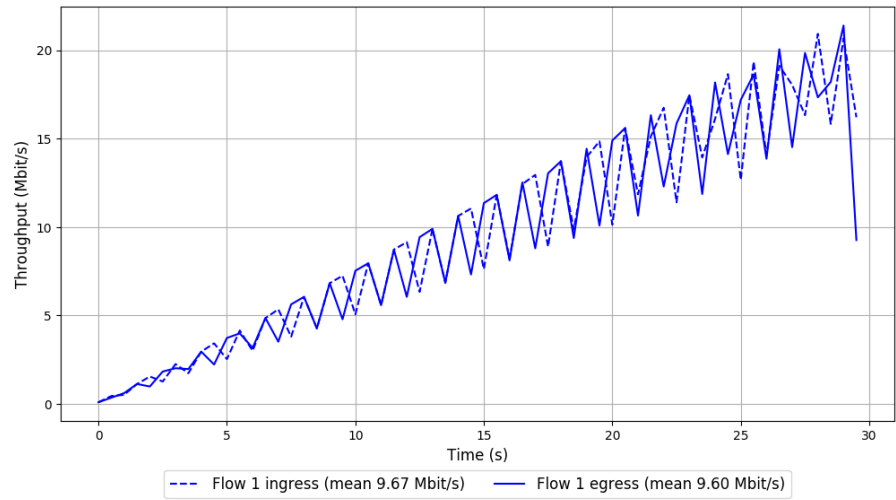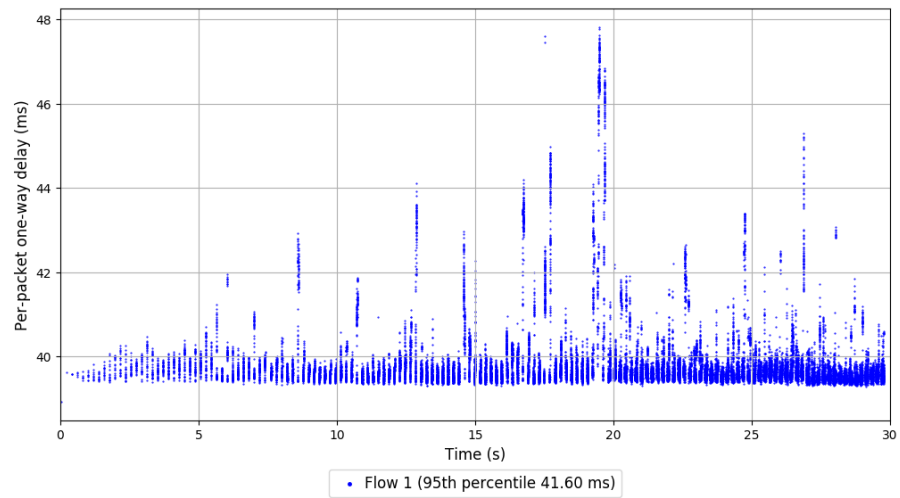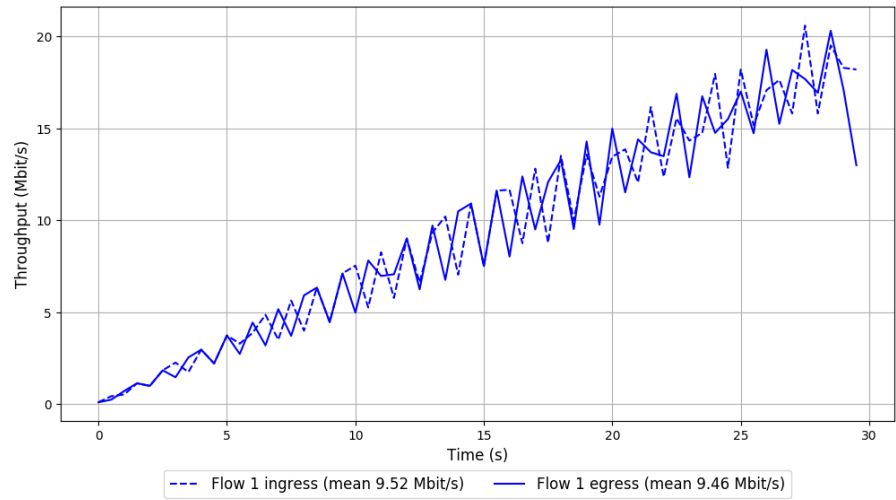
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 9.67 Mbit/s)   Flow 1 egress (mean 9.60 Mbit/s)

Flow 1 (95th percentile 42.20 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2018-04-17 04:11:21
End at: 2018-04-17 04:11:51
Local clock offset: 4.161 ms
Remote clock offset: 3.656 ms


# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.46 Mbit/s
95th percentile per-packet one-way delay: 41.596 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 9.46 Mbit/s
95th percentile per-packet one-way delay: 41.596 ms
Loss rate: 1.30%
```
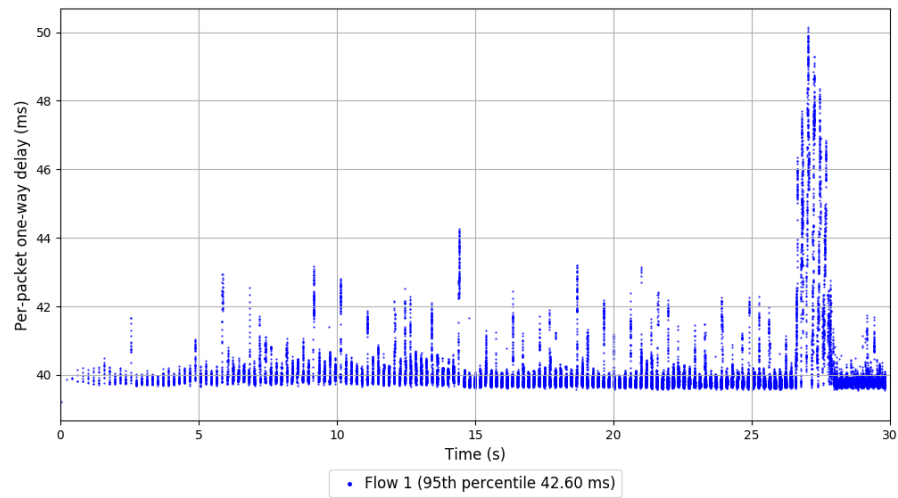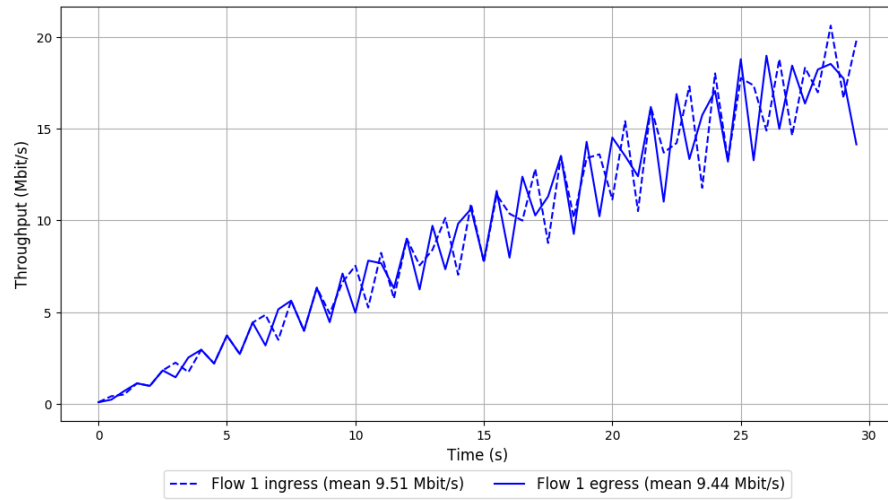
Run 8: Report of LEDBAT — Data Link

Flow 1 ingress (mean 9.52 Mbit/s) --- Flow 1 egress (mean 9.46 Mbit/s)

• Flow 1 (95th percentile 41.60 ms)

```
Run 9: Statistics of LEDBAT

Start at: 2018-04-17 04:32:40
End at: 2018-04-17 04:33:10
Local clock offset: 10.822 ms
Remote clock offset: 2.762 ms


# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.44 Mbit/s
95th percentile per-packet one-way delay: 42.597 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 9.44 Mbit/s
95th percentile per-packet one-way delay: 42.597 ms
Loss rate: 1.30%
```

Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 9.51 Mbit/s) Flow 1 egress (mean 9.44 Mbit/s)

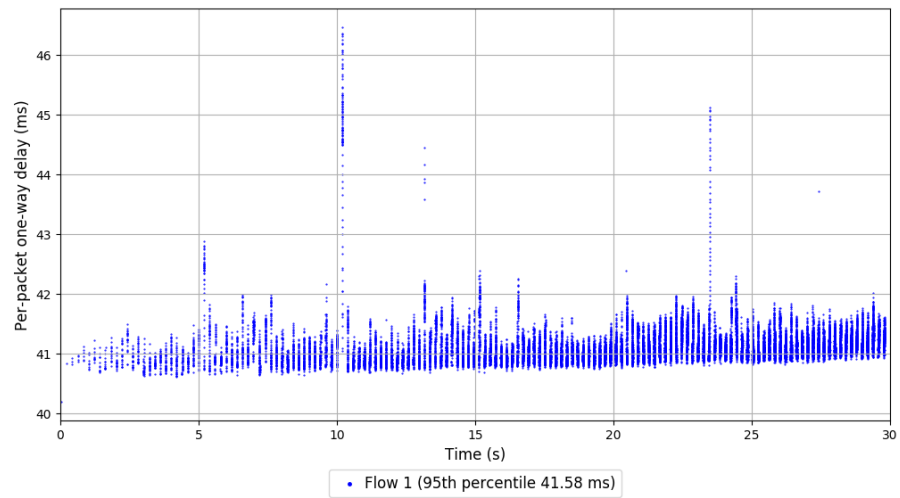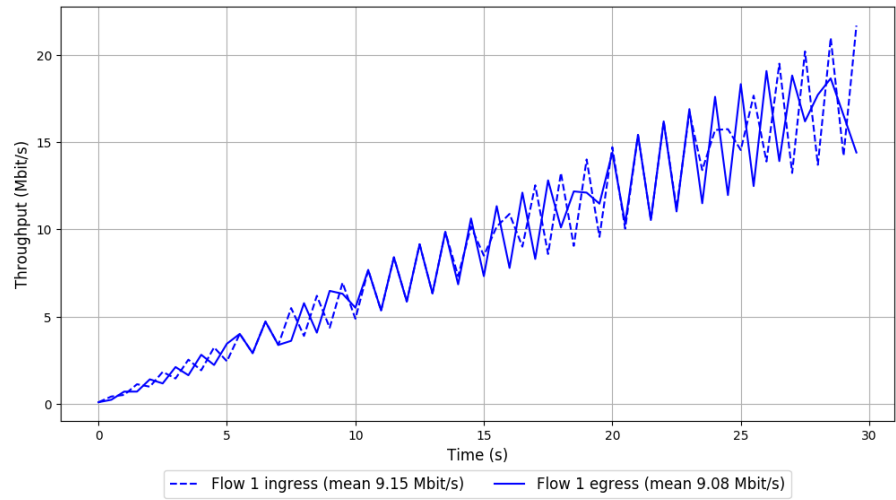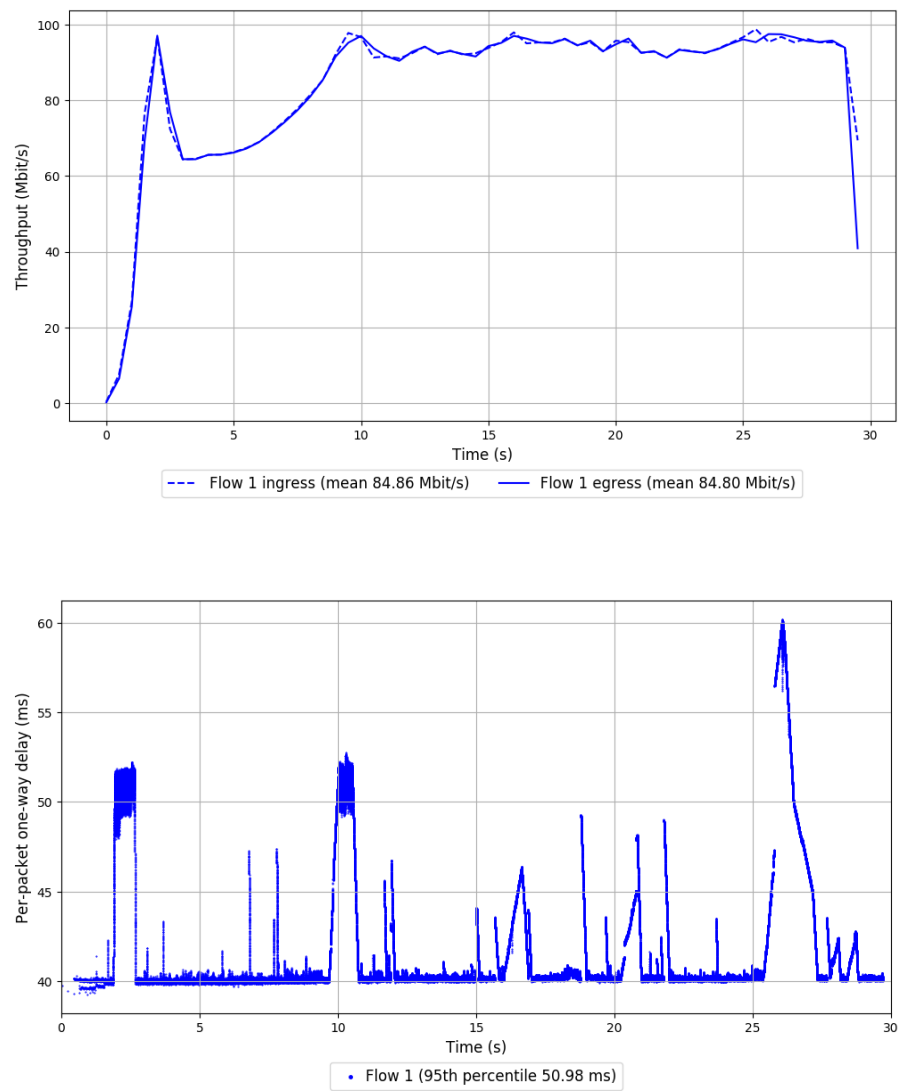Flow 1 (95th percentile 42.60 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2018-04-17 04:53:52
End at: 2018-04-17 04:54:22
Local clock offset: 10.139 ms
Remote clock offset: -13.319 ms


# Below is generated by plot.py at 2018-04-17 08:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.08 Mbit/s
95th percentile per-packet one-way delay: 41.576 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 9.08 Mbit/s
95th percentile per-packet one-way delay: 41.576 ms
Loss rate: 1.33%
```
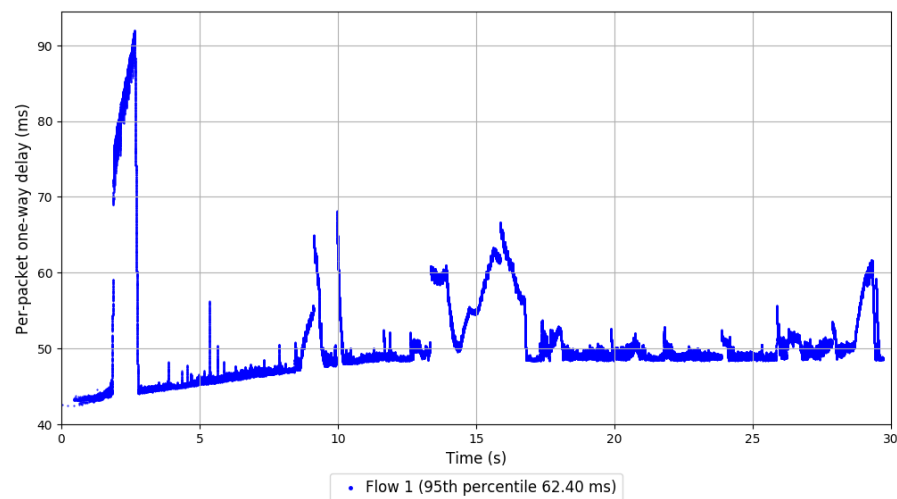
Run 10: Report of LEDBAT — Data Link

```
Run 1: Statistics of PCC-Allegro

Start at: 2018-04-17 01:32:25
End at: 2018-04-17 01:32:55
Local clock offset: 11.862 ms
Remote clock offset: -5.533 ms


# Below is generated by plot.py at 2018-04-17 08:41:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 50.982 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 50.982 ms
Loss rate: 0.71%
```
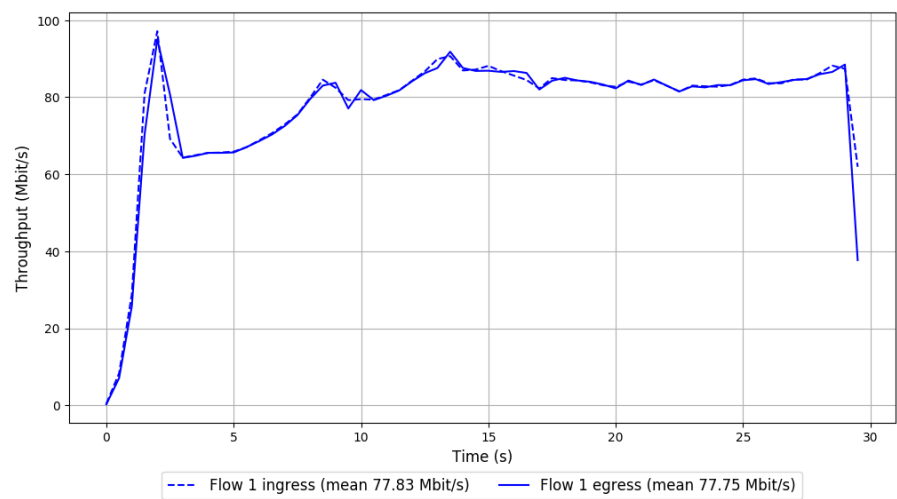
Run 1: Report of PCC-Allegro — Data Link

```
Run 2: Statistics of PCC-Allegro

Start at: 2018-04-17 01:53:41
End at: 2018-04-17 01:54:11
Local clock offset: 8.119 ms
Remote clock offset: -5.676 ms


# Below is generated by plot.py at 2018-04-17 08:41:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.75 Mbit/s
95th percentile per-packet one-way delay: 62.398 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 77.75 Mbit/s
95th percentile per-packet one-way delay: 62.398 ms
Loss rate: 0.72%
```
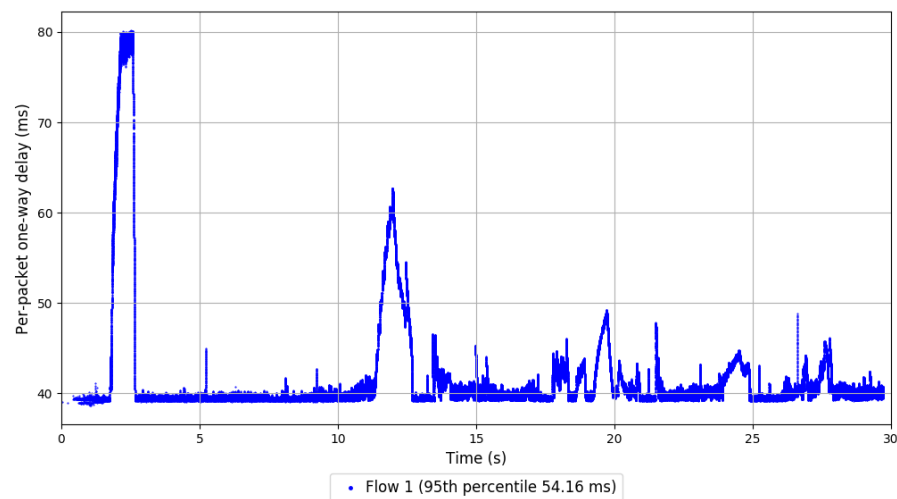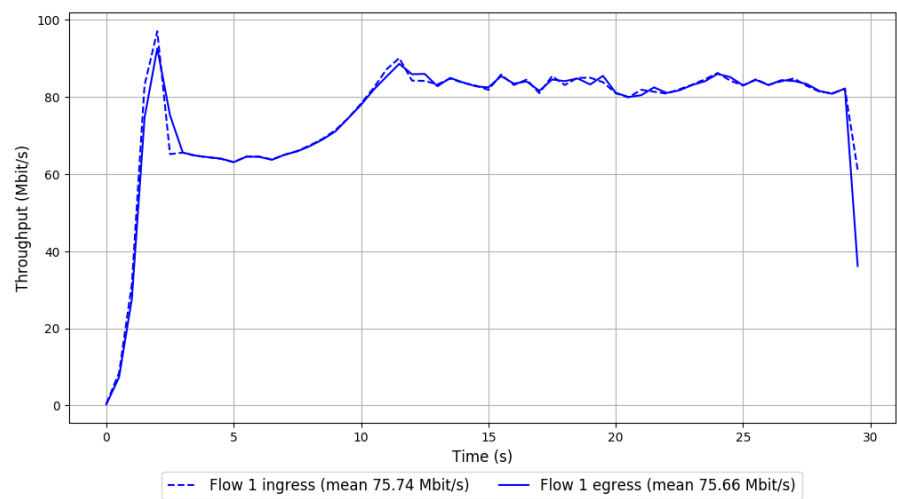
Run 2: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 77.83 Mbit/s) --- Flow 1 egress (mean 77.75 Mbit/s)

Flow 1 (95th percentile 62.40 ms)

```
Run 3: Statistics of PCC-Allegro

Start at: 2018-04-17 02:14:52
End at: 2018-04-17 02:15:22
Local clock offset: 7.796 ms
Remote clock offset: 5.318 ms


# Below is generated by plot.py at 2018-04-17 08:41:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.66 Mbit/s
95th percentile per-packet one-way delay: 54.164 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 75.66 Mbit/s
95th percentile per-packet one-way delay: 54.164 ms
Loss rate: 0.75%
```
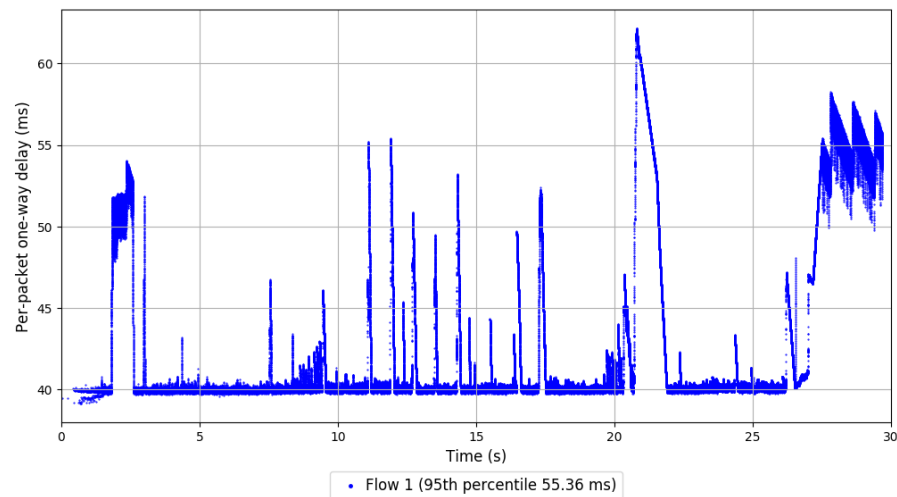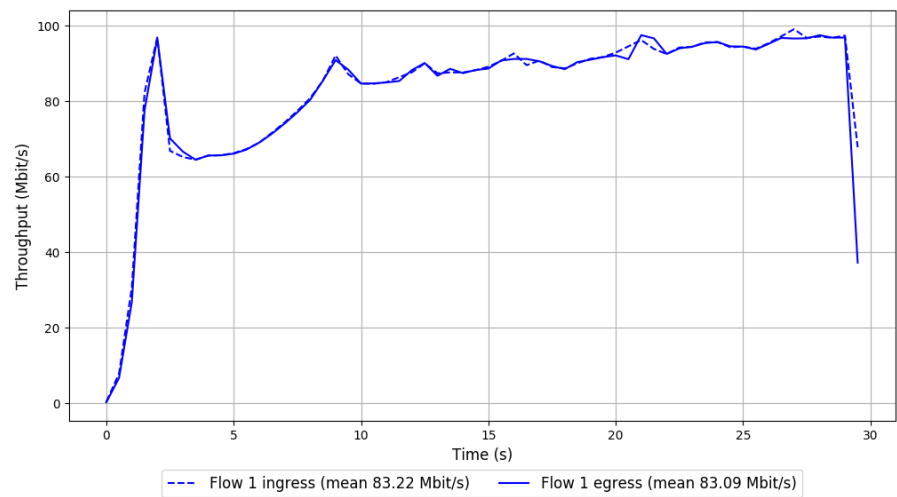
Run 3: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 75.74 Mbit/s)   Flow 1 egress (mean 75.66 Mbit/s)

Flow 1 (95th percentile 54.16 ms)

```
Run 4: Statistics of PCC-Allegro

Start at: 2018-04-17 02:36:05
End at: 2018-04-17 02:36:35
Local clock offset: 7.322 ms
Remote clock offset: -2.02 ms


# Below is generated by plot.py at 2018-04-17 08:42:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.09 Mbit/s
95th percentile per-packet one-way delay: 55.360 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 83.09 Mbit/s
95th percentile per-packet one-way delay: 55.360 ms
Loss rate: 0.83%
```
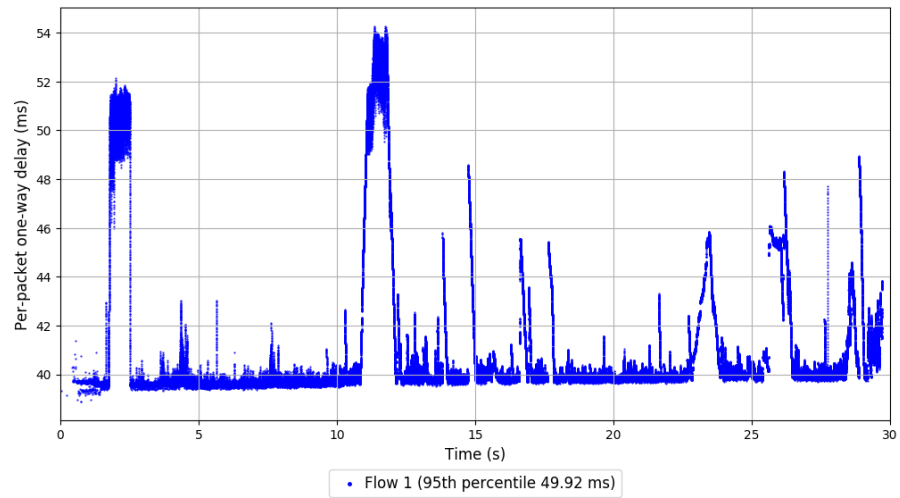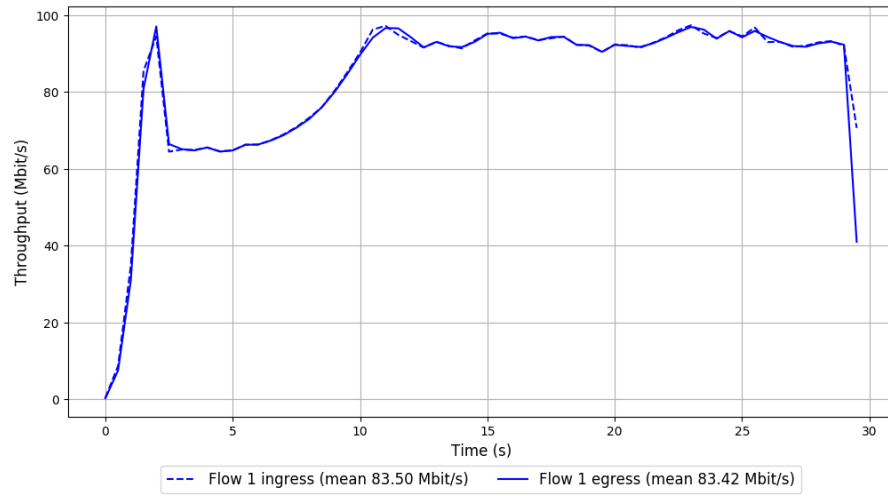
Run 4: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 83.22 Mbit/s)   Flow 1 egress (mean 83.09 Mbit/s)

Flow 1 (95th percentile 55.36 ms)

```
Run 5: Statistics of PCC-Allegro

Start at: 2018-04-17 02:57:20
End at: 2018-04-17 02:57:50
Local clock offset: 4.319 ms
Remote clock offset: -5.915 ms


# Below is generated by plot.py at 2018-04-17 08:42:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.42 Mbit/s
95th percentile per-packet one-way delay: 49.922 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 83.42 Mbit/s
95th percentile per-packet one-way delay: 49.922 ms
Loss rate: 0.75%
```
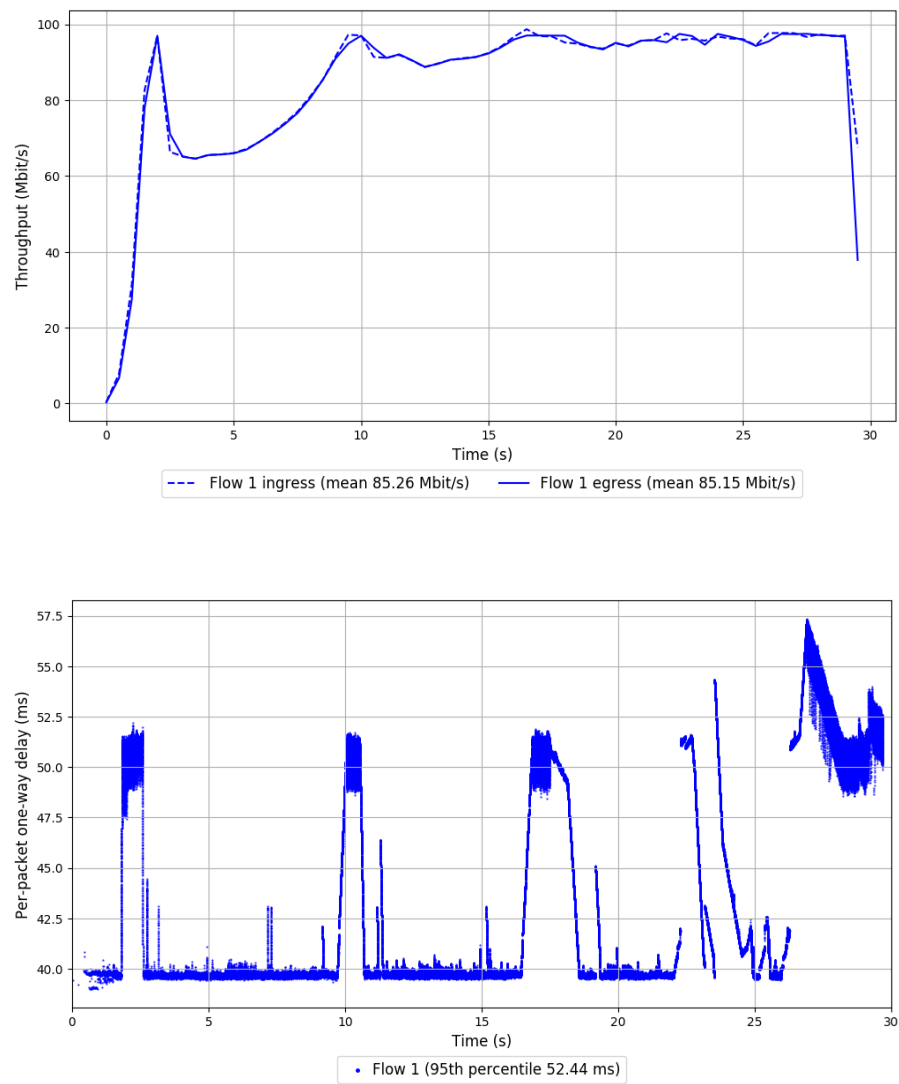
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 83.50 Mbit/s)   Flow 1 egress (mean 83.42 Mbit/s)

Flow 1 (95th percentile 49.92 ms)

```
Run 6: Statistics of PCC-Allegro

Start at: 2018-04-17 03:18:38
End at: 2018-04-17 03:19:08
Local clock offset: 9.478 ms
Remote clock offset: -10.582 ms


# Below is generated by plot.py at 2018-04-17 08:42:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.15 Mbit/s
95th percentile per-packet one-way delay: 52.443 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 85.15 Mbit/s
95th percentile per-packet one-way delay: 52.443 ms
Loss rate: 0.78%
```

Run 6: Report of PCC-Allegro — Data Link

```
Run 7: Statistics of PCC-Allegro

Start at: 2018-04-17 03:39:53
End at: 2018-04-17 03:40:23
Local clock offset: 13.37 ms
Remote clock offset: -1.749 ms


# Below is generated by plot.py at 2018-04-17 08:42:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.54 Mbit/s
95th percentile per-packet one-way delay: 79.928 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 85.54 Mbit/s
95th percentile per-packet one-way delay: 79.928 ms
Loss rate: 0.73%
```
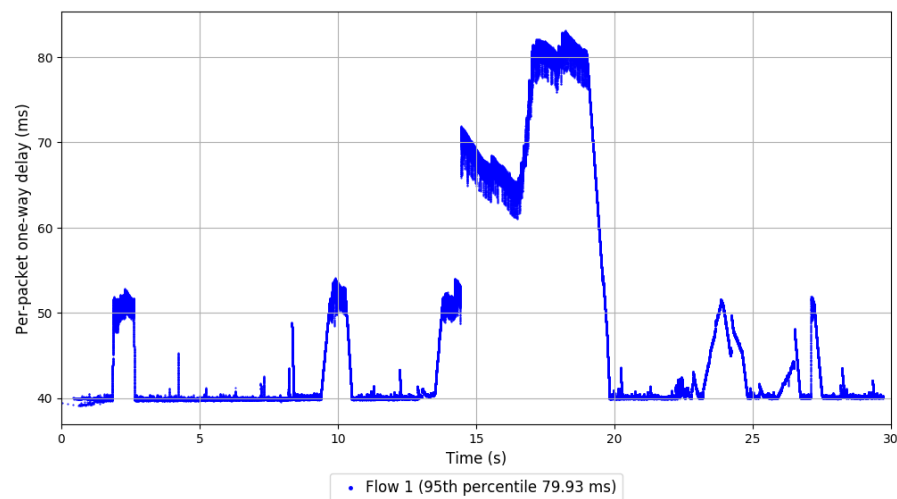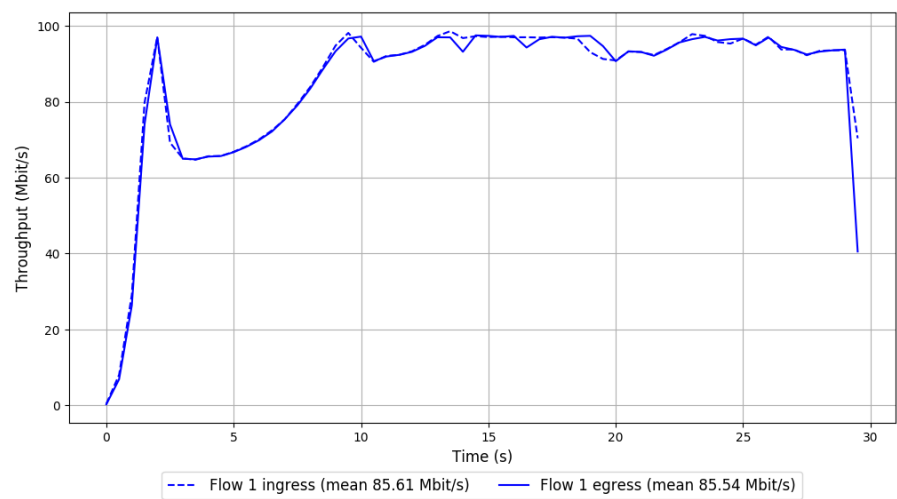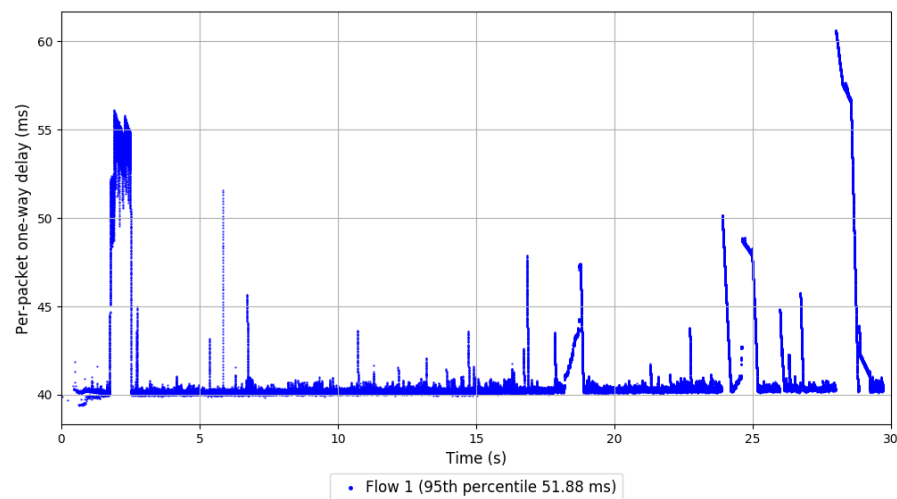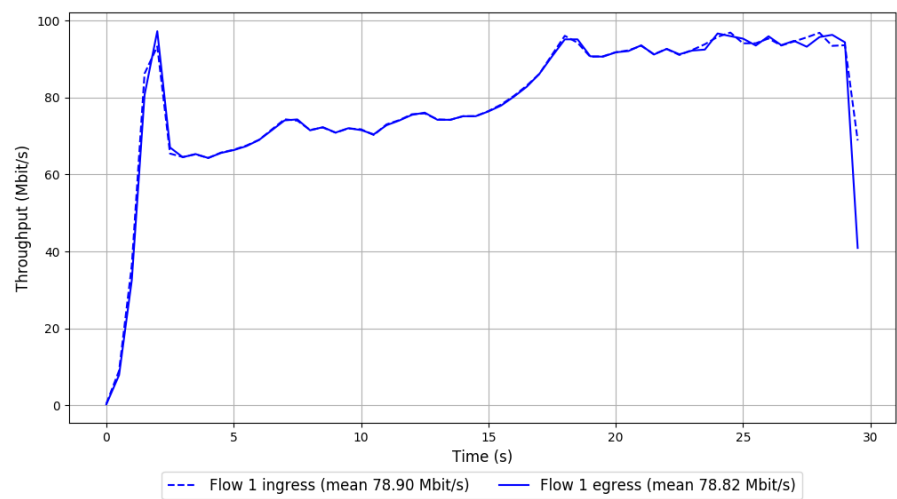
Run 7: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 85.61 Mbit/s) --- Flow 1 egress (mean 85.54 Mbit/s)

Flow 1 (95th percentile 79.93 ms)

```
Run 8: Statistics of PCC-Allegro

Start at: 2018-04-17 04:01:10
End at: 2018-04-17 04:01:41
Local clock offset: 4.983 ms
Remote clock offset: 5.013 ms


# Below is generated by plot.py at 2018-04-17 08:42:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.82 Mbit/s
95th percentile per-packet one-way delay: 51.875 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 78.82 Mbit/s
95th percentile per-packet one-way delay: 51.875 ms
Loss rate: 0.75%
```
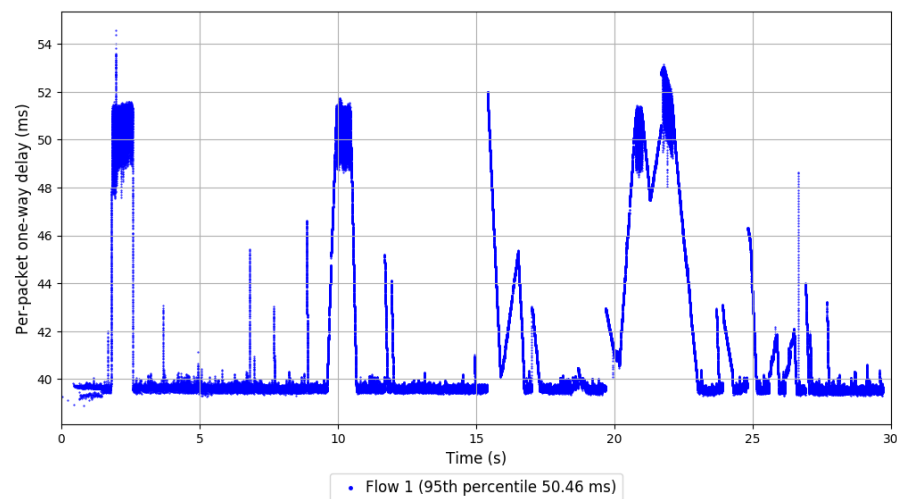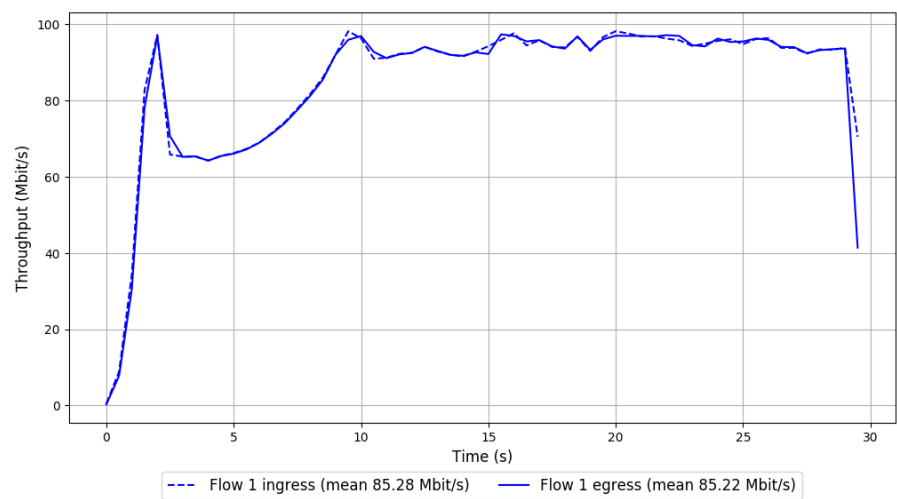
Run 8: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 78.90 Mbit/s)   Flow 1 egress (mean 78.82 Mbit/s)

Flow 1 (95th percentile 51.88 ms)

```
Run 9: Statistics of PCC-Allegro

Start at: 2018-04-17 04:22:26
End at: 2018-04-17 04:22:56
Local clock offset: 7.688 ms
Remote clock offset: 2.532 ms


# Below is generated by plot.py at 2018-04-17 08:43:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.22 Mbit/s
95th percentile per-packet one-way delay: 50.463 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 85.22 Mbit/s
95th percentile per-packet one-way delay: 50.463 ms
Loss rate: 0.72%
```
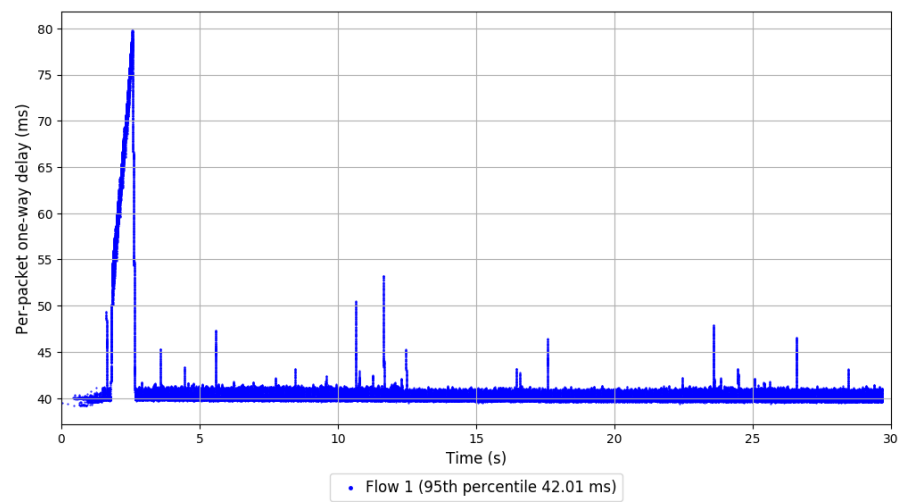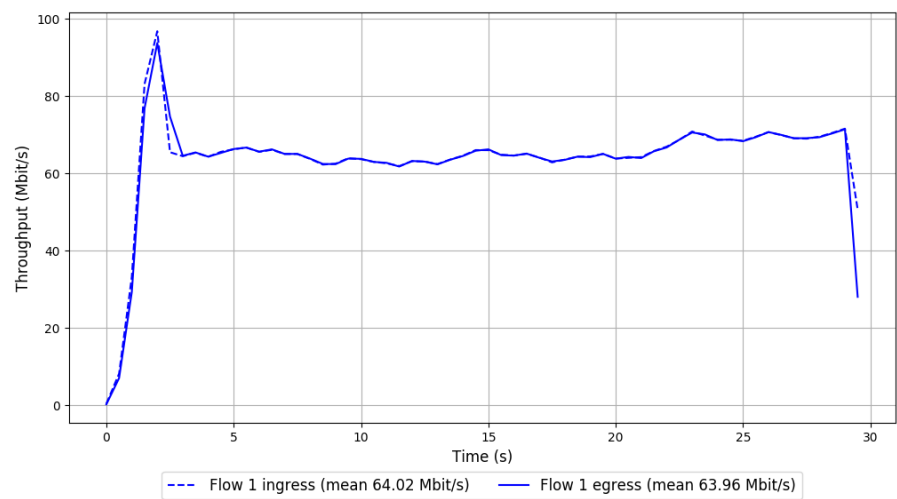
Run 9: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 85.28 Mbit/s)　　Flow 1 egress (mean 85.22 Mbit/s)

Flow 1 (95th percentile 50.46 ms)

```
Run 10: Statistics of PCC-Allegro

Start at: 2018-04-17 04:43:45
End at: 2018-04-17 04:44:15
Local clock offset: 12.536 ms
Remote clock offset: -11.722 ms


# Below is generated by plot.py at 2018-04-17 08:43:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.96 Mbit/s
95th percentile per-packet one-way delay: 42.008 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 63.96 Mbit/s
95th percentile per-packet one-way delay: 42.008 ms
Loss rate: 0.74%
```
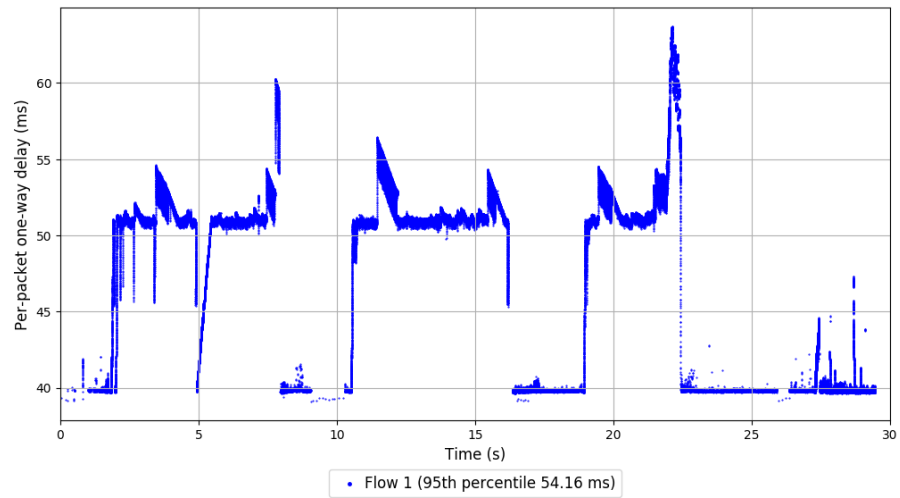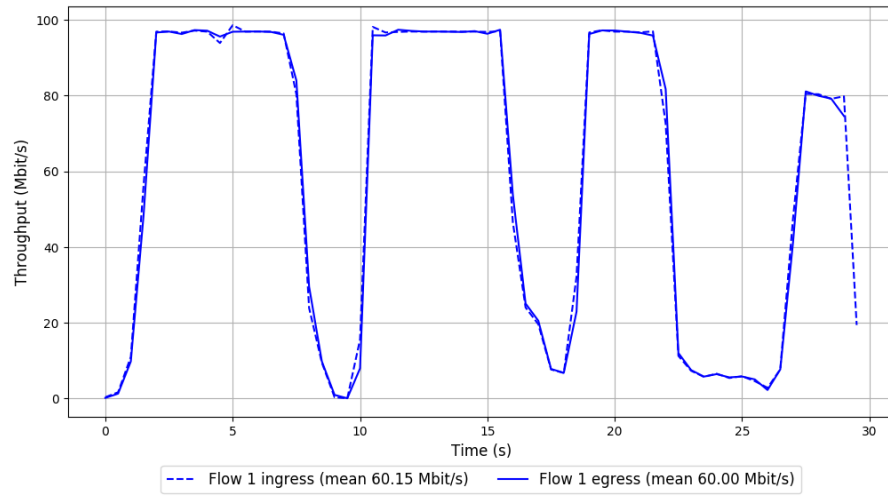
Run 10: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 64.02 Mbit/s) — Flow 1 egress (mean 63.96 Mbit/s)

• Flow 1 (95th percentile 42.01 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-17 01:40:05
End at: 2018-04-17 01:40:35
Local clock offset: 9.11 ms
Remote clock offset: -7.136 ms


# Below is generated by plot.py at 2018-04-17 08:43:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.00 Mbit/s
95th percentile per-packet one-way delay: 54.161 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 60.00 Mbit/s
95th percentile per-packet one-way delay: 54.161 ms
Loss rate: 0.89%
```
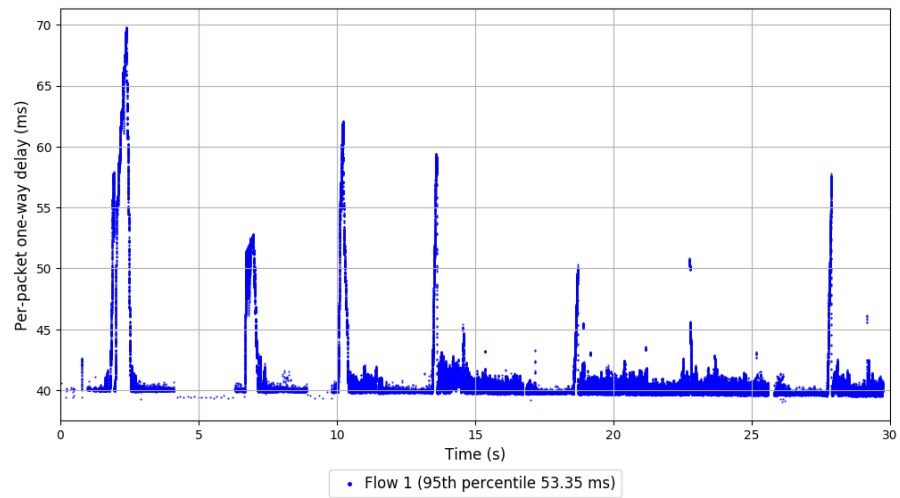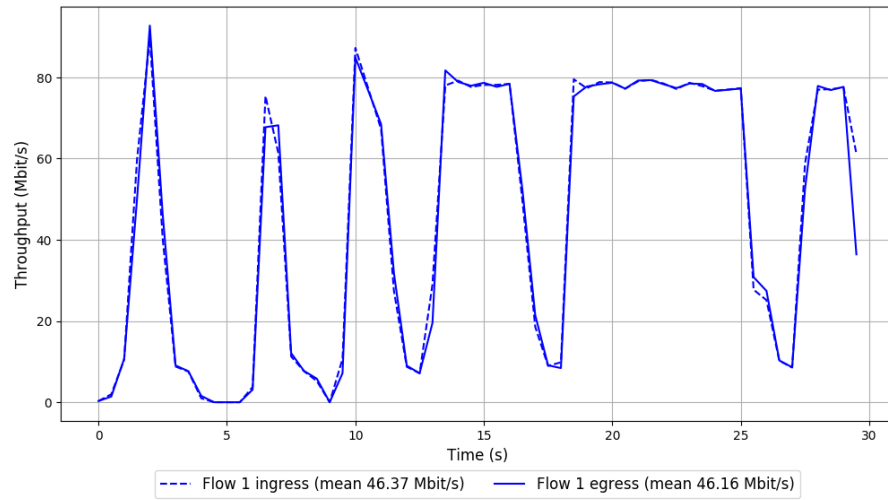
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-17 02:01:19
End at: 2018-04-17 02:01:49
Local clock offset: 7.898 ms
Remote clock offset: 4.93 ms
```

Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 0.03 Mbit/s)   Flow 1 egress (mean 0.03 Mbit/s)

Flow 1 (95th percentile 39.51 ms)

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```
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-17 02:22:28
End at: 2018-04-17 02:22:58
Local clock offset: 7.958 ms
Remote clock offset: 4.869 ms


# Below is generated by plot.py at 2018-04-17 08:43:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.16 Mbit/s
95th percentile per-packet one-way delay: 53.352 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 46.16 Mbit/s
95th percentile per-packet one-way delay: 53.352 ms
Loss rate: 1.11%
```
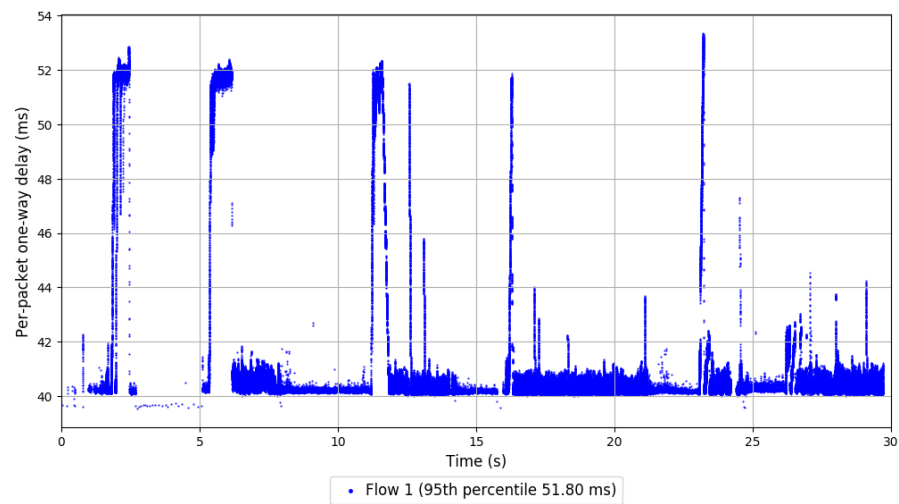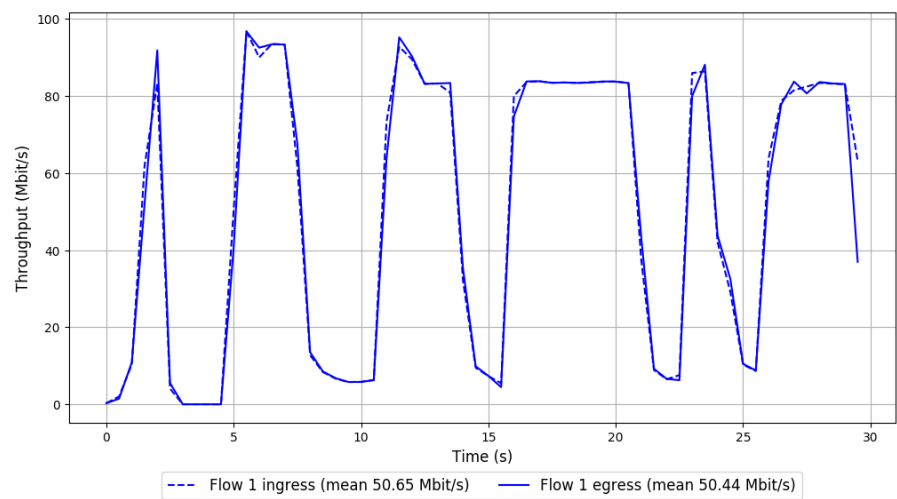
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 46.37 Mbit/s) — Flow 1 egress (mean 46.16 Mbit/s)

• Flow 1 (95th percentile 53.35 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2018-04-17 02:43:44
End at: 2018-04-17 02:44:14
Local clock offset: 5.46 ms
Remote clock offset: -4.022 ms


# Below is generated by plot.py at 2018-04-17 08:43:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.44 Mbit/s
95th percentile per-packet one-way delay: 51.798 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 50.44 Mbit/s
95th percentile per-packet one-way delay: 51.798 ms
Loss rate: 1.09%
```

Run 4: Report of QUIC Cubic — Data Link

```
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-17 03:04:56
End at: 2018-04-17 03:05:26
Local clock offset: 4.184 ms
Remote clock offset: -2.394 ms


# Below is generated by plot.py at 2018-04-17 08:43:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.67 Mbit/s
95th percentile per-packet one-way delay: 40.161 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 43.67 Mbit/s
95th percentile per-packet one-way delay: 40.161 ms
Loss rate: 0.79%
```
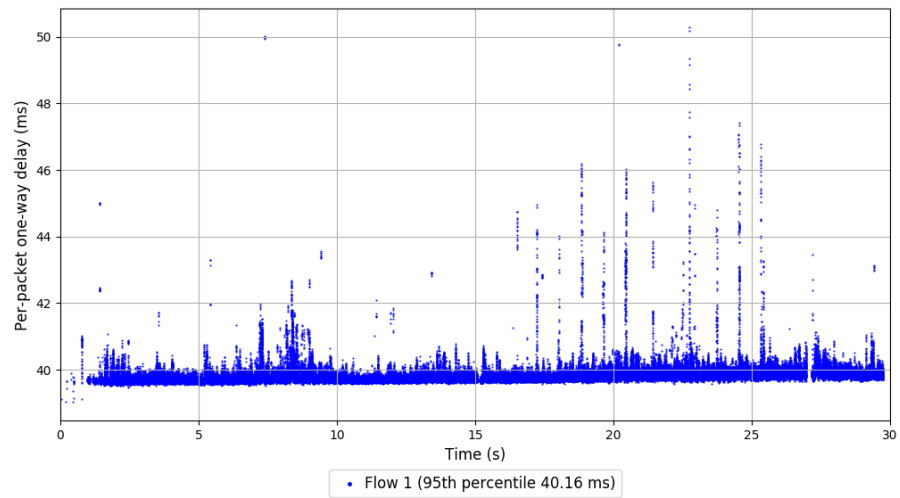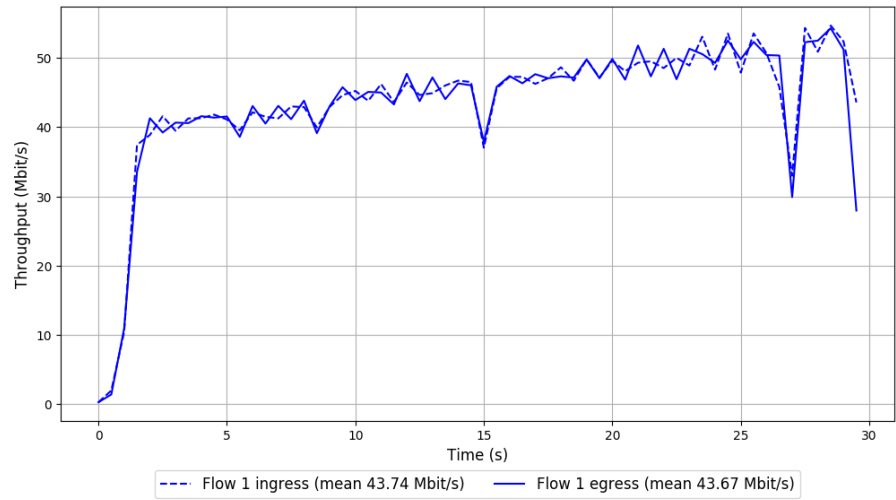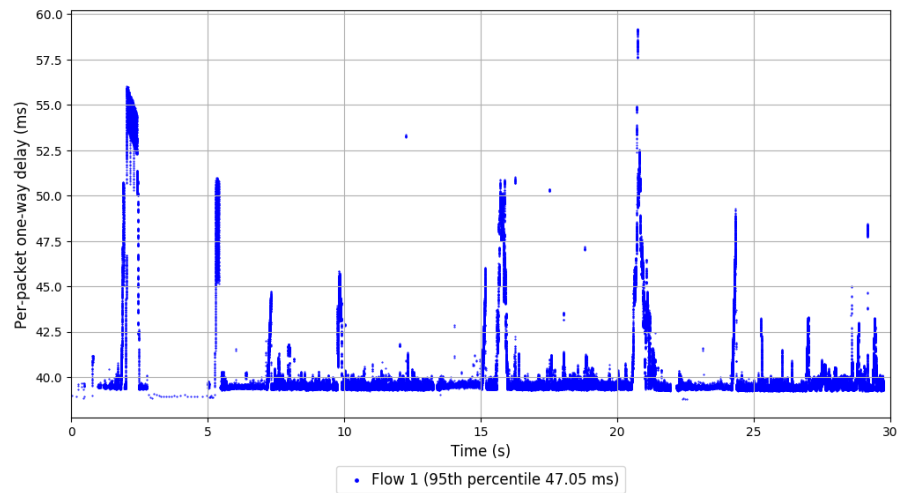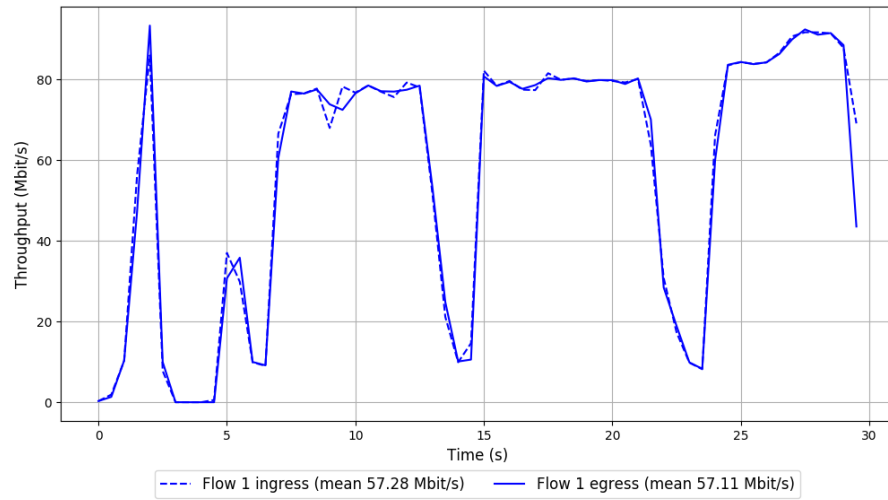
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 43.74 Mbit/s) ----- Flow 1 egress (mean 43.67 Mbit/s)

• Flow 1 (95th percentile 40.16 ms)

```
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-17 03:26:15
End at: 2018-04-17 03:26:45
Local clock offset: 11.076 ms
Remote clock offset: -10.284 ms


# Below is generated by plot.py at 2018-04-17 08:43:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.11 Mbit/s
95th percentile per-packet one-way delay: 47.046 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 57.11 Mbit/s
95th percentile per-packet one-way delay: 47.046 ms
Loss rate: 0.94%
```
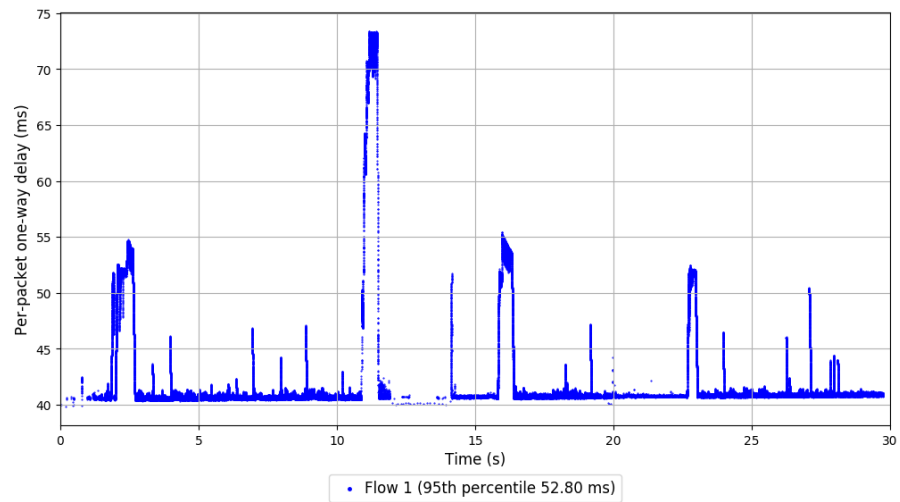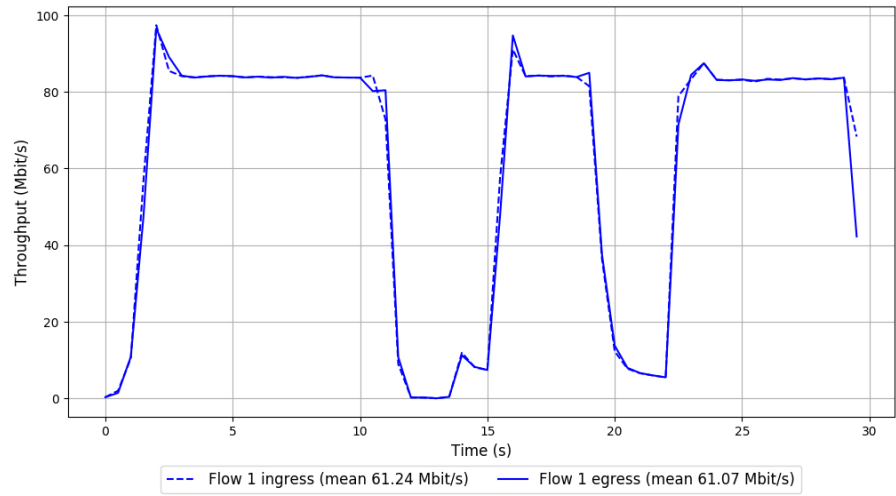
Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 57.28 Mbit/s)   Flow 1 egress (mean 57.11 Mbit/s)

Flow 1 (95th percentile 47.05 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-17 03:47:33
End at: 2018-04-17 03:48:03
Local clock offset: 9.118 ms
Remote clock offset: 1.718 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.07 Mbit/s
95th percentile per-packet one-way delay: 52.796 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 61.07 Mbit/s
95th percentile per-packet one-way delay: 52.796 ms
Loss rate: 0.94%
```

Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-17 04:08:49
End at: 2018-04-17 04:09:20
Local clock offset: 4.374 ms
Remote clock offset: 4.287 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.35 Mbit/s
95th percentile per-packet one-way delay: 40.750 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 44.35 Mbit/s
95th percentile per-packet one-way delay: 40.750 ms
Loss rate: 0.82%
```
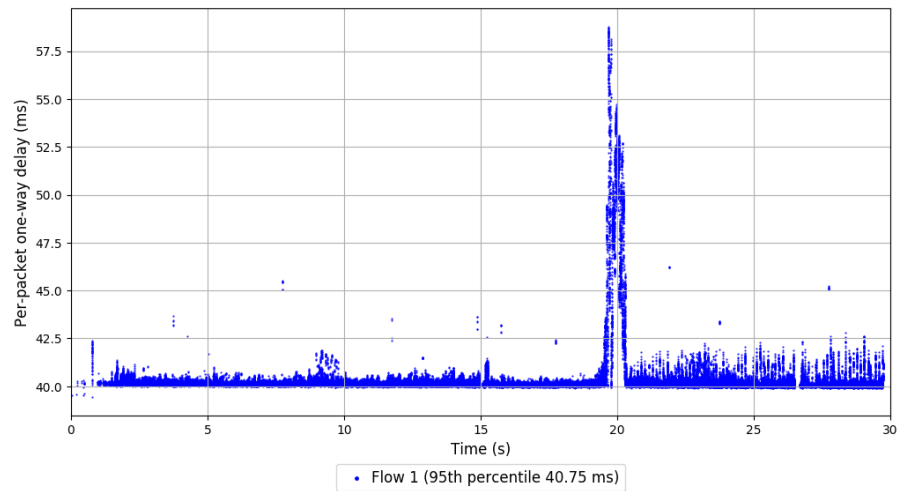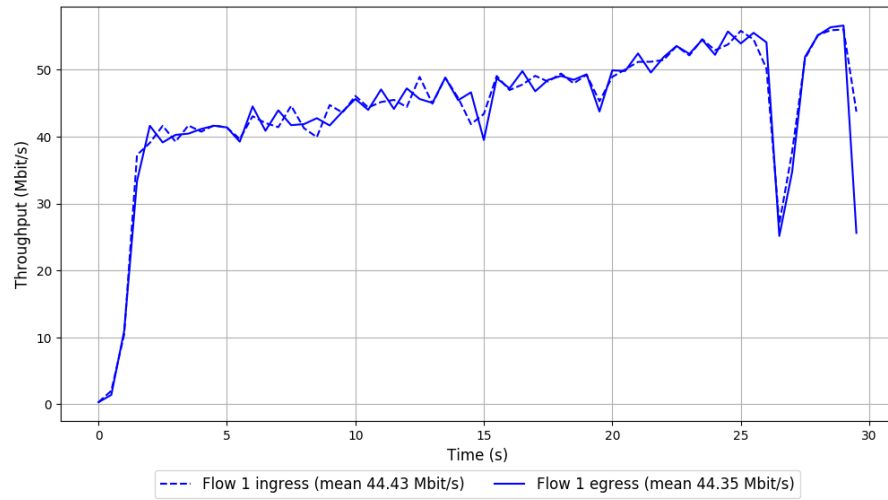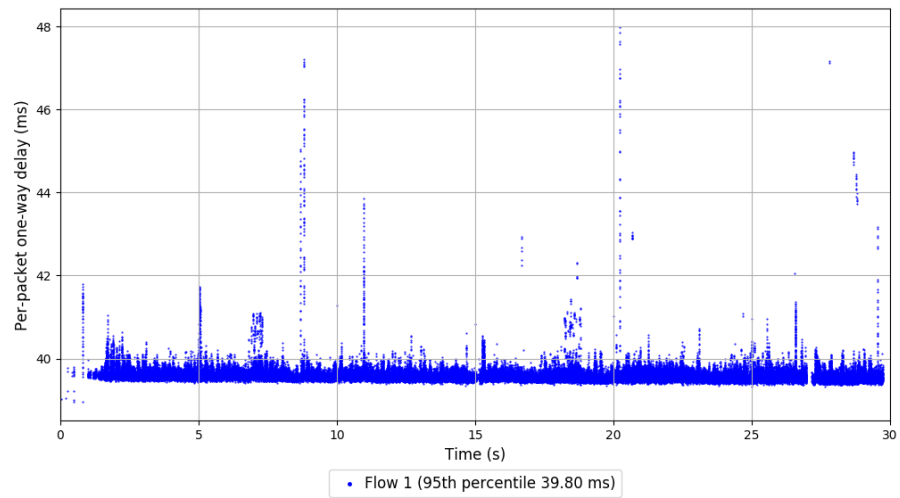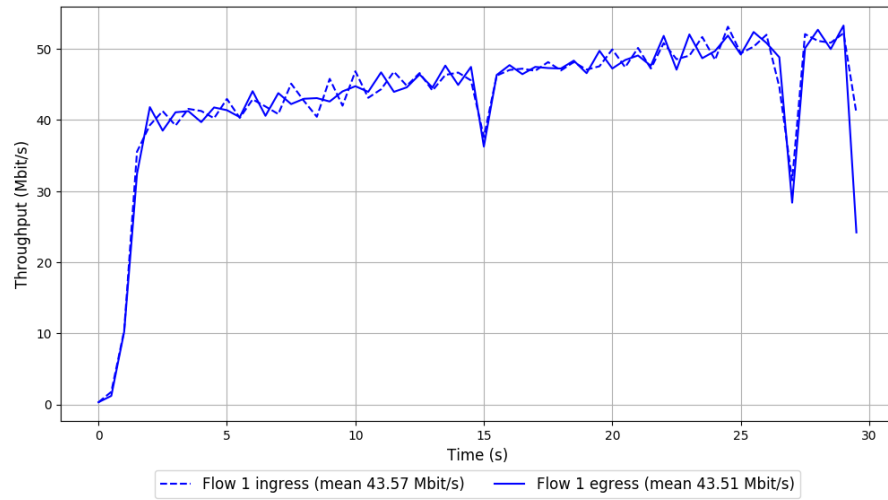
Run 8: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 44.43 Mbit/s) --- Flow 1 egress (mean 44.35 Mbit/s)

Flow 1 (95th percentile 40.75 ms)

```
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-17 04:30:09
End at: 2018-04-17 04:30:39
Local clock offset: 10.238 ms
Remote clock offset: 2.719 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.51 Mbit/s
95th percentile per-packet one-way delay: 39.799 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 43.51 Mbit/s
95th percentile per-packet one-way delay: 39.799 ms
Loss rate: 0.77%
```
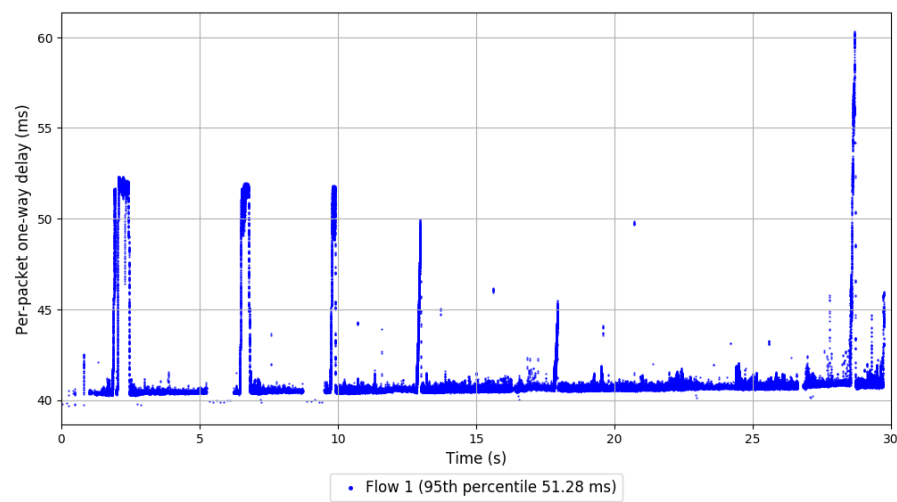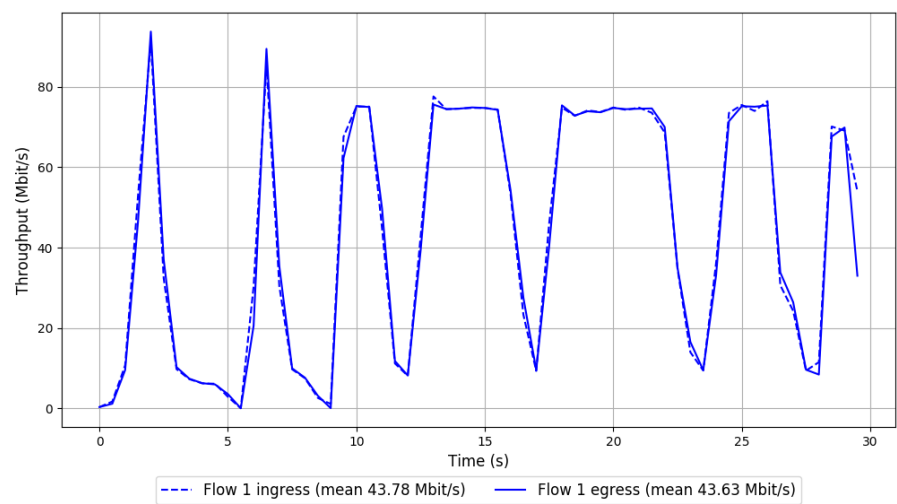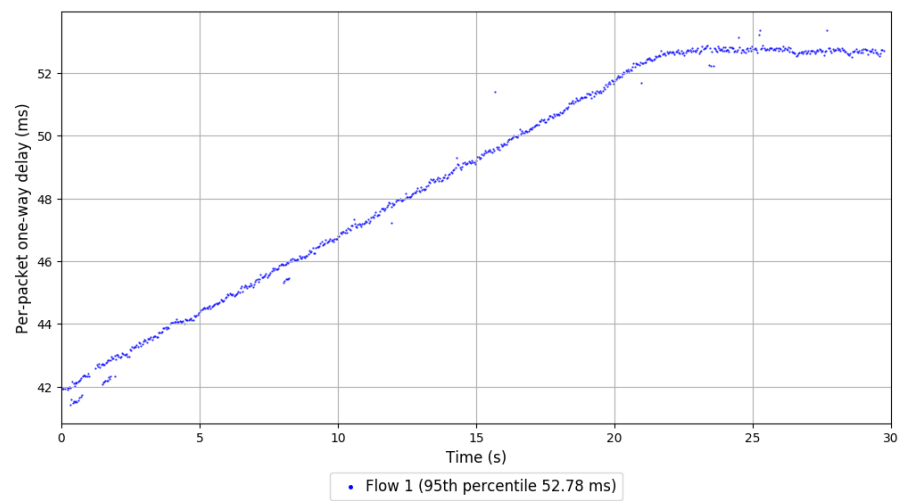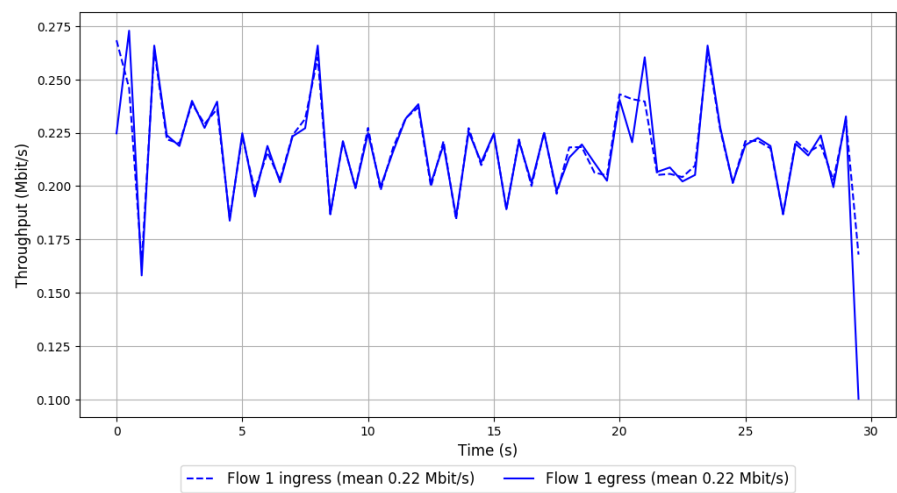
Run 9: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 43.57 Mbit/s) --- Flow 1 egress (mean 43.51 Mbit/s)

• Flow 1 (95th percentile 39.80 ms)

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-17 04:51:22
End at: 2018-04-17 04:51:52
Local clock offset: 12.392 ms
Remote clock offset: -12.999 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.63 Mbit/s
95th percentile per-packet one-way delay: 51.278 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 43.63 Mbit/s
95th percentile per-packet one-way delay: 51.278 ms
Loss rate: 1.01%
```
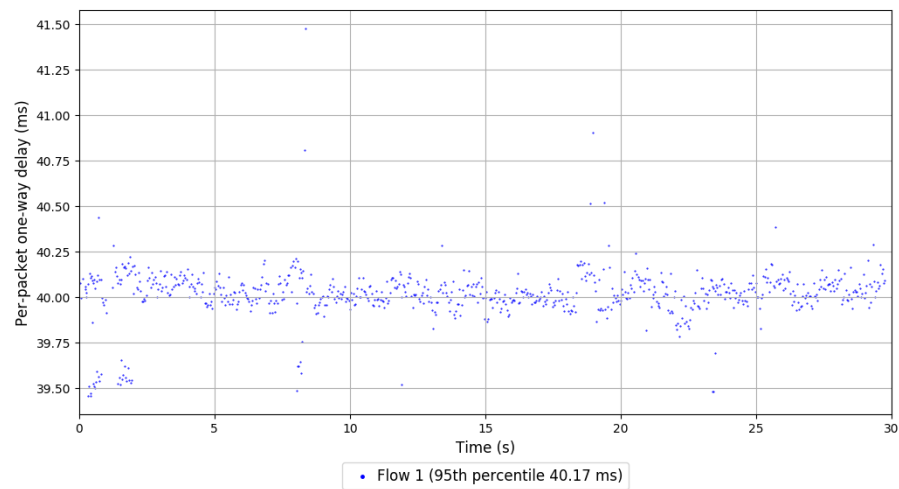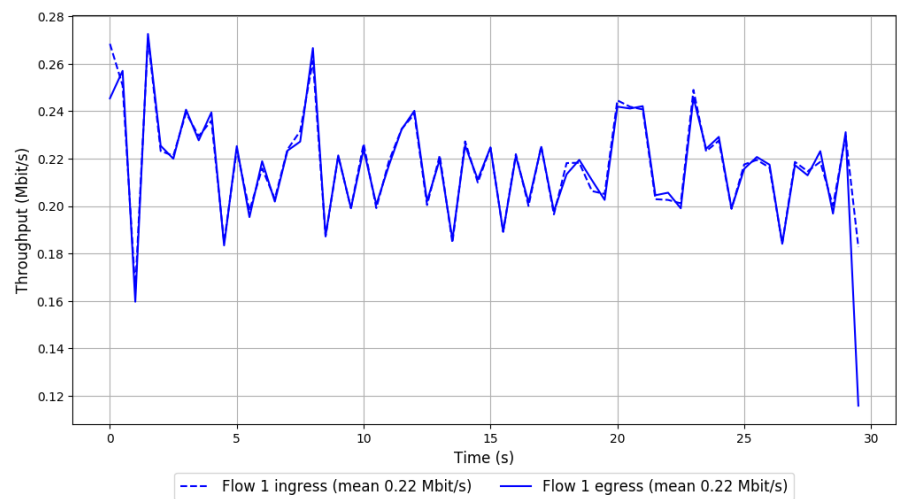
Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of SCReAM

Start at: 2018-04-17 01:23:49
End at: 2018-04-17 01:24:19
Local clock offset: 17.462 ms
Remote clock offset: -2.814 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.785 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.785 ms
Loss rate: 0.64%
```

Run 1: Report of SCReAM — Data Link

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

• Flow 1 (95th percentile 52.78 ms)

```
Run 2: Statistics of SCReAM

Start at: 2018-04-17 01:45:09
End at: 2018-04-17 01:45:39
Local clock offset: 8.427 ms
Remote clock offset: -8.199 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.166 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.166 ms
Loss rate: 0.64%
```
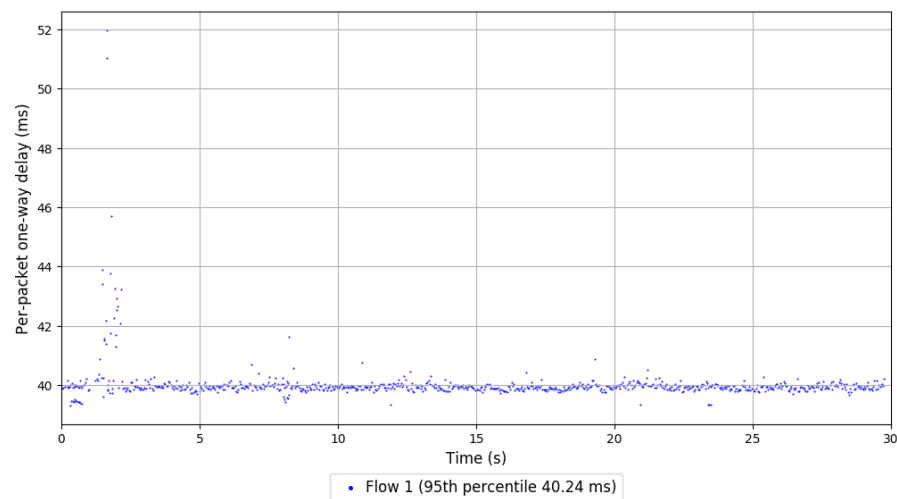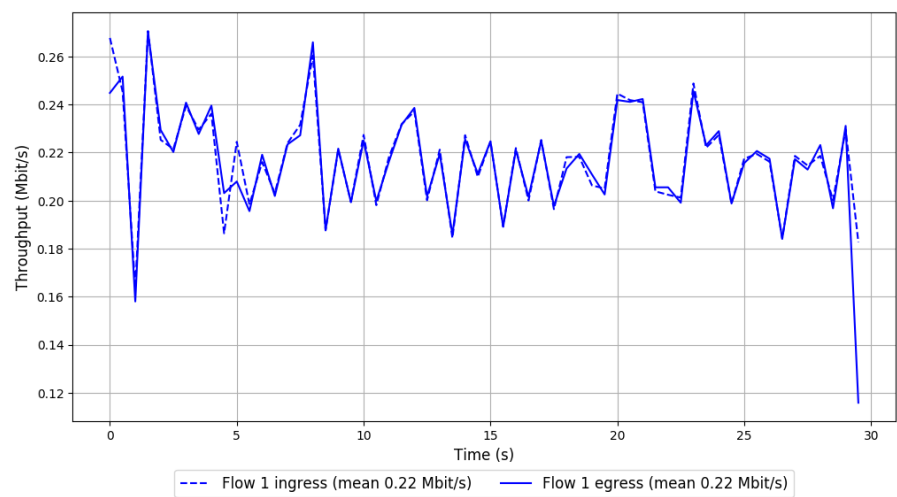
Run 2: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 40.17 ms)

```
Run 3: Statistics of SCReAM

Start at: 2018-04-17 02:06:18
End at: 2018-04-17 02:06:48
Local clock offset: 7.99 ms
Remote clock offset: 5.319 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.240 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.240 ms
Loss rate: 0.64%
```
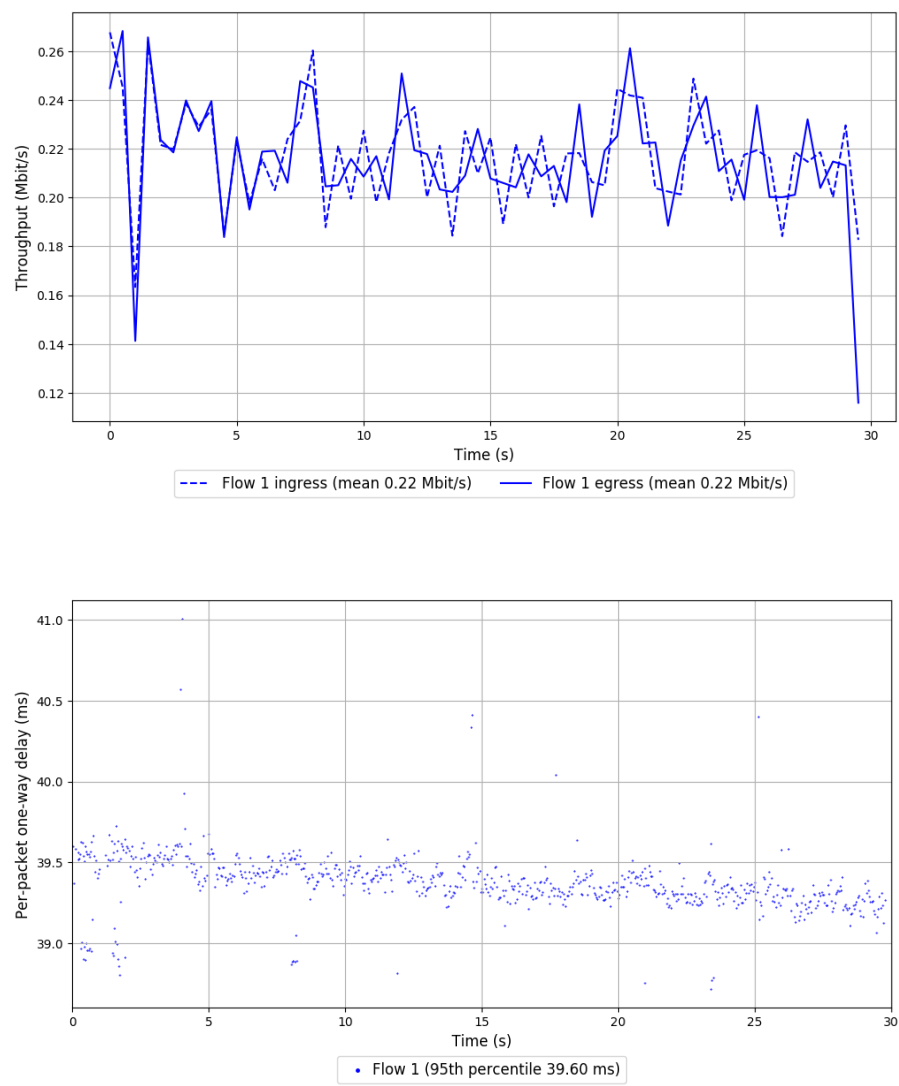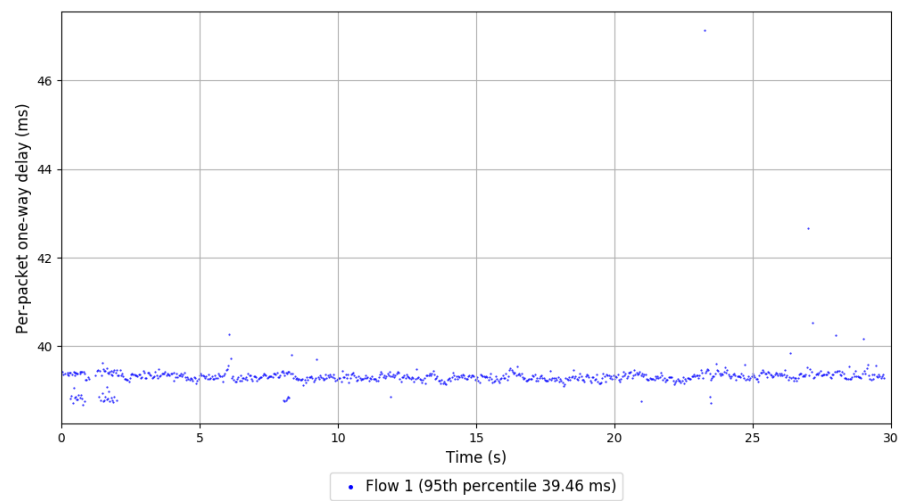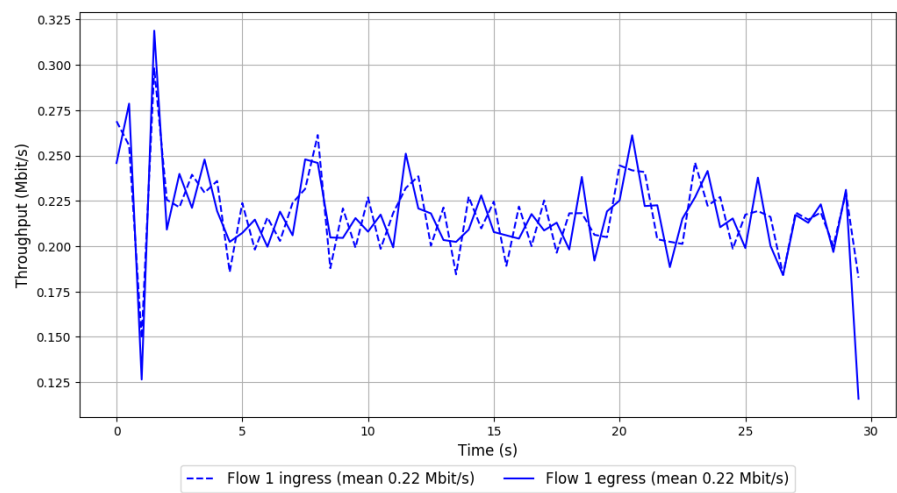
Run 3: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 40.24 ms)

```
Run 4: Statistics of SCReAM

Start at: 2018-04-17 02:27:30
End at: 2018-04-17 02:28:00
Local clock offset: 8.192 ms
Remote clock offset: 1.463 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.597 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.597 ms
Loss rate: 0.64%
```
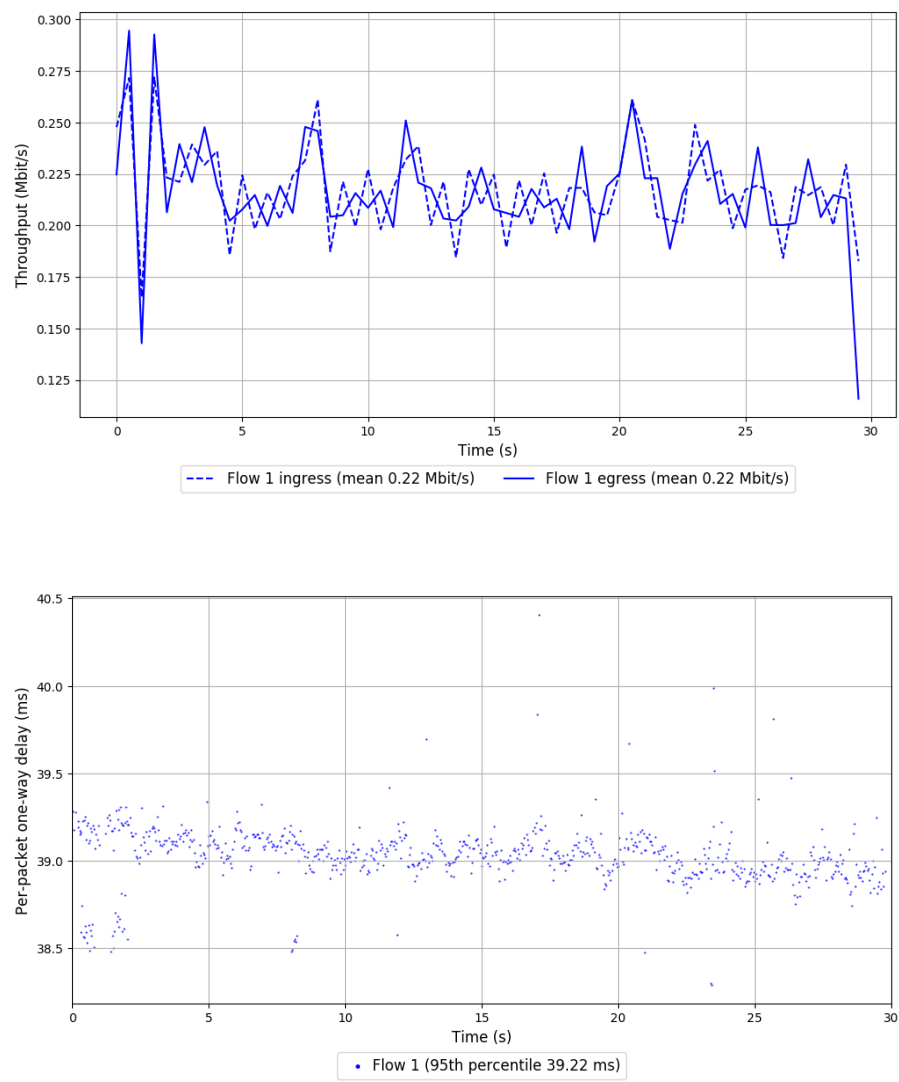
Run 4: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 39.60 ms)

```
Run 5: Statistics of SCReAM

Start at: 2018-04-17 02:48:47
End at: 2018-04-17 02:49:17
Local clock offset: 4.825 ms
Remote clock offset: -4.871 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.460 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.460 ms
Loss rate: 0.64%
```
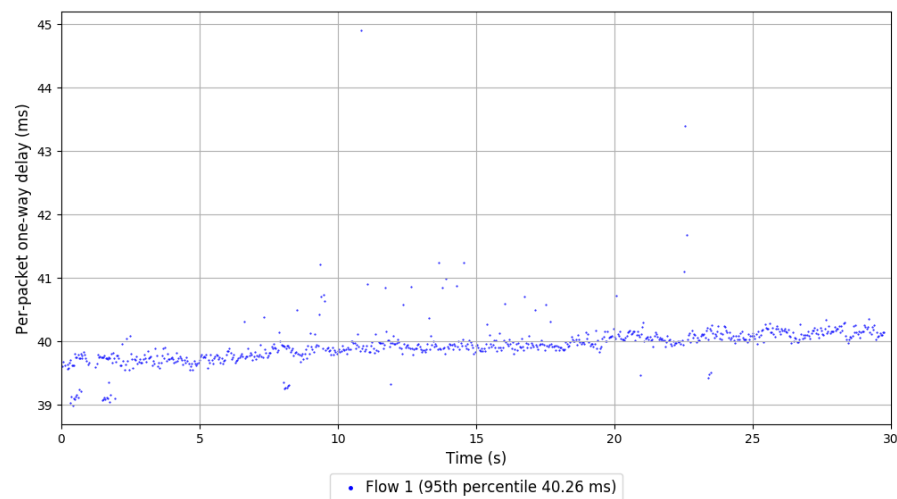
Run 5: Report of SCReAM — Data Link

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```
Run 6: Statistics of SCReAM

Start at: 2018-04-17 03:10:02
End at: 2018-04-17 03:10:32
Local clock offset: 5.492 ms
Remote clock offset: -1.266 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.220 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.220 ms
Loss rate: 0.64%
```
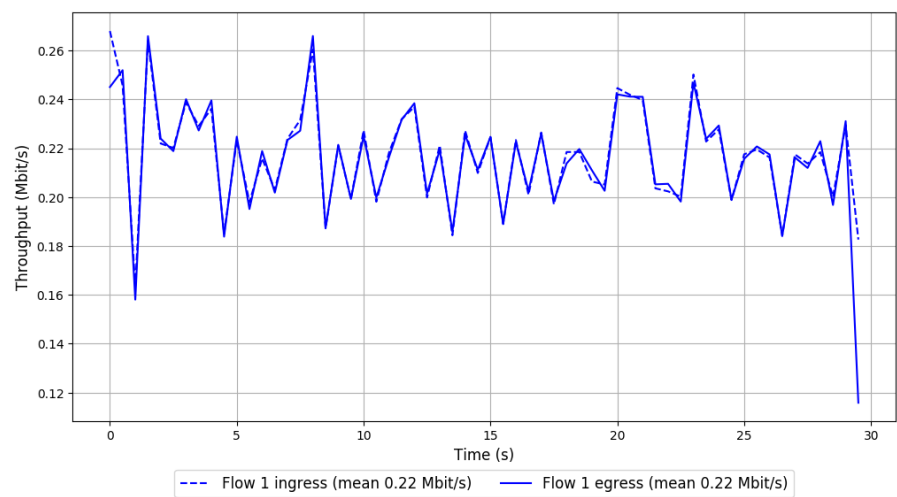
Run 6: Report of SCReAM — Data Link

```
Run 7: Statistics of SCReAM

Start at: 2018-04-17 03:31:18
End at: 2018-04-17 03:31:48
Local clock offset: 12.114 ms
Remote clock offset: -9.59 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.256 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.256 ms
Loss rate: 0.64%
```
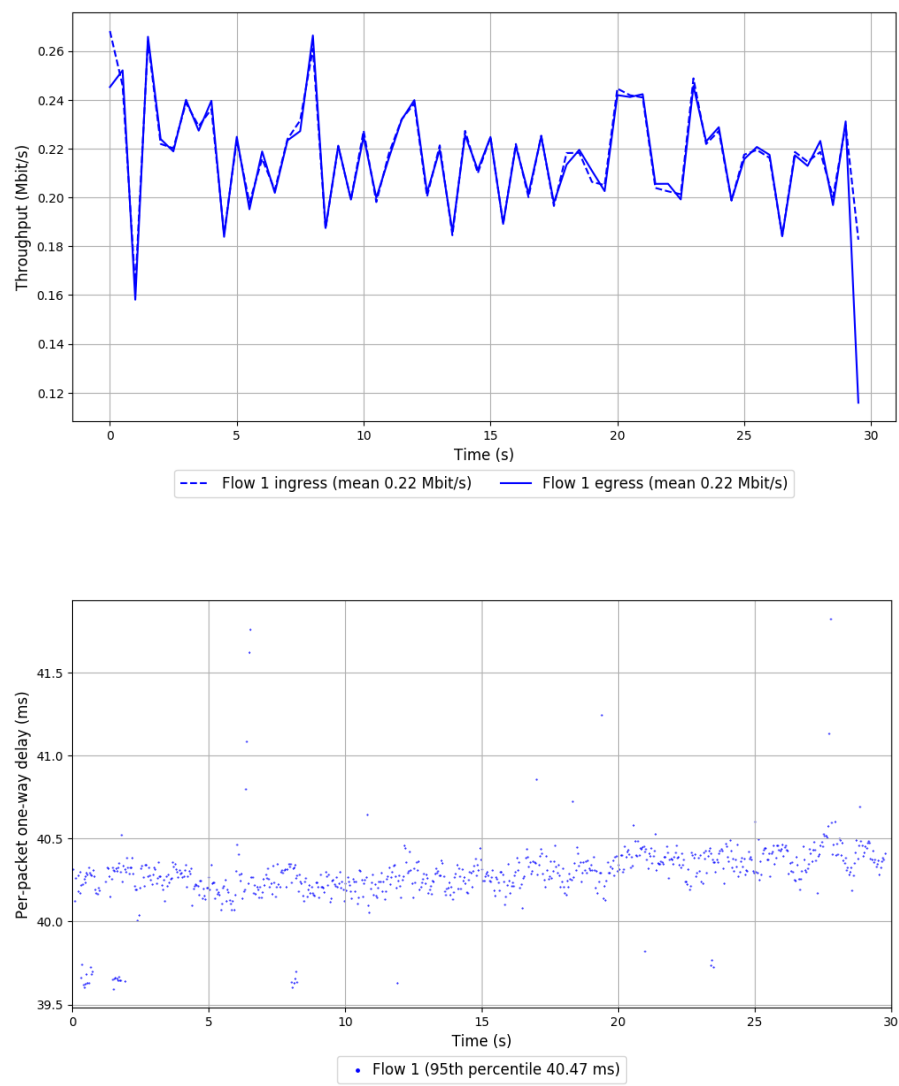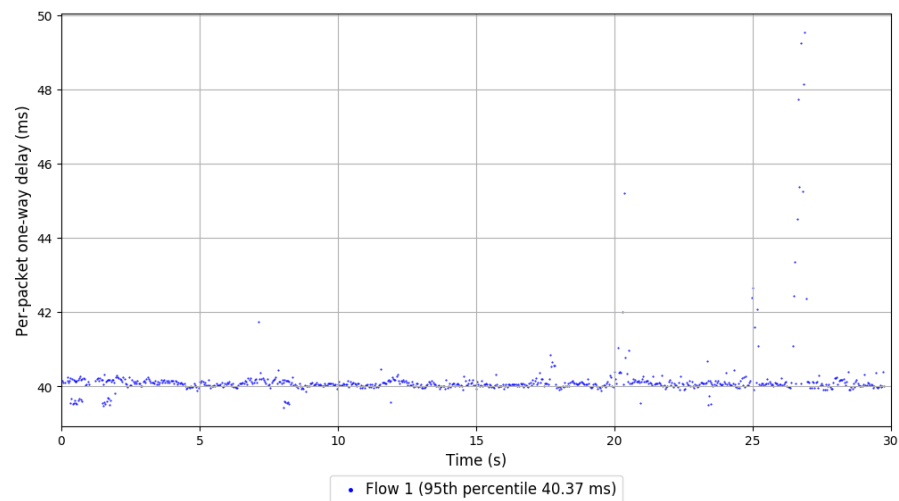
Run 7: Report of SCReAM — Data Link

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```
Run 8: Statistics of SCReAM

Start at: 2018-04-17 03:52:37
End at: 2018-04-17 03:53:07
Local clock offset: 6.978 ms
Remote clock offset: 3.215 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.466 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.466 ms
Loss rate: 0.64%
```
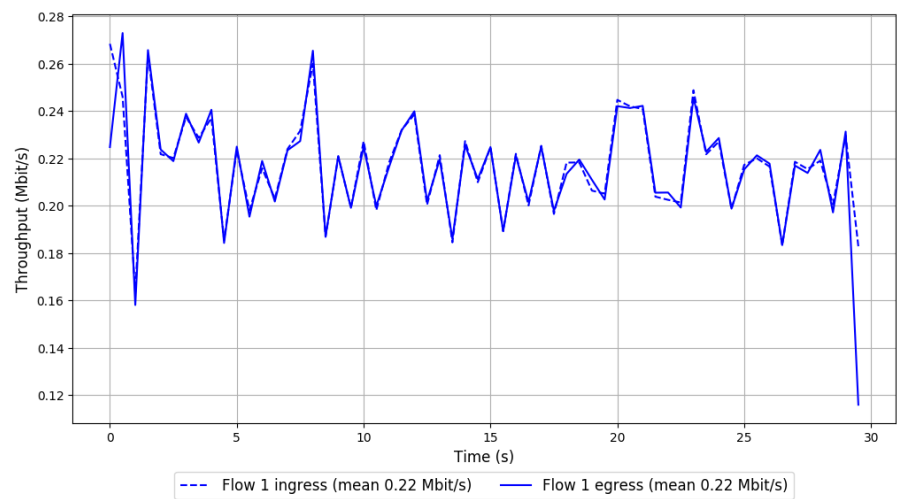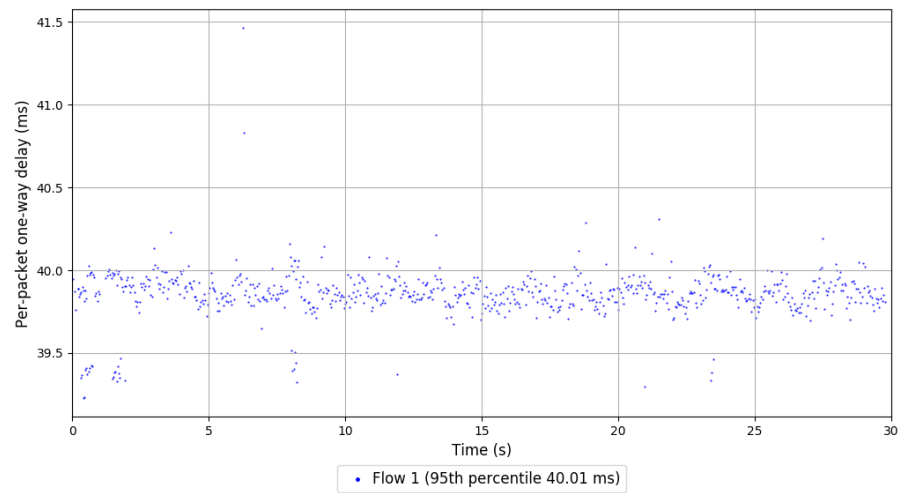
Run 8: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 40.47 ms)

```
Run 9: Statistics of SCReAM

Start at: 2018-04-17 04:13:52
End at: 2018-04-17 04:14:22
Local clock offset: 4.057 ms
Remote clock offset: 3.233 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.373 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.373 ms
Loss rate: 0.64%
```
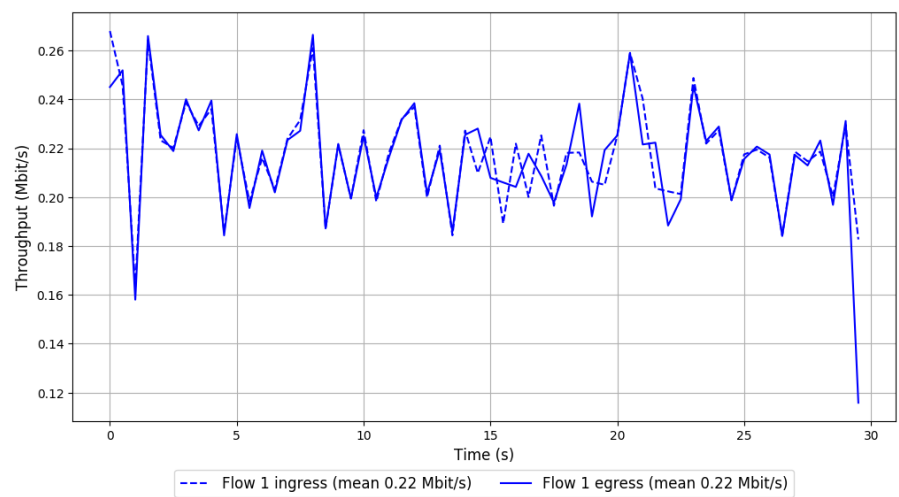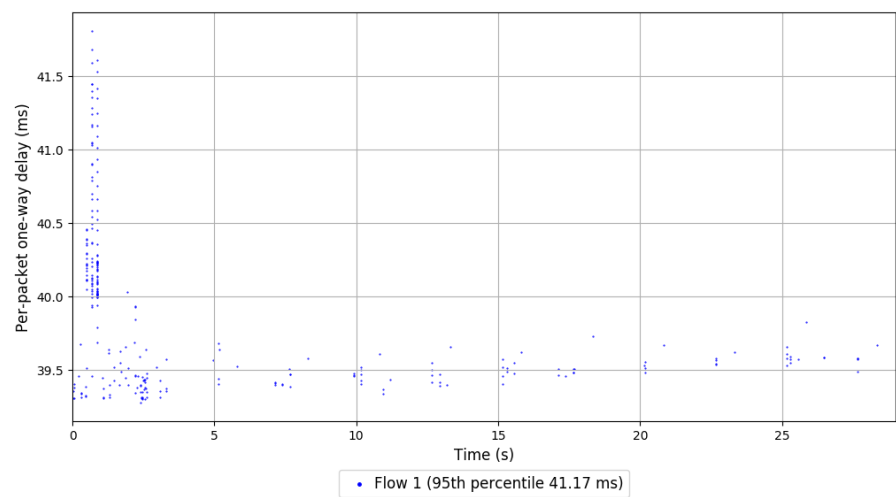
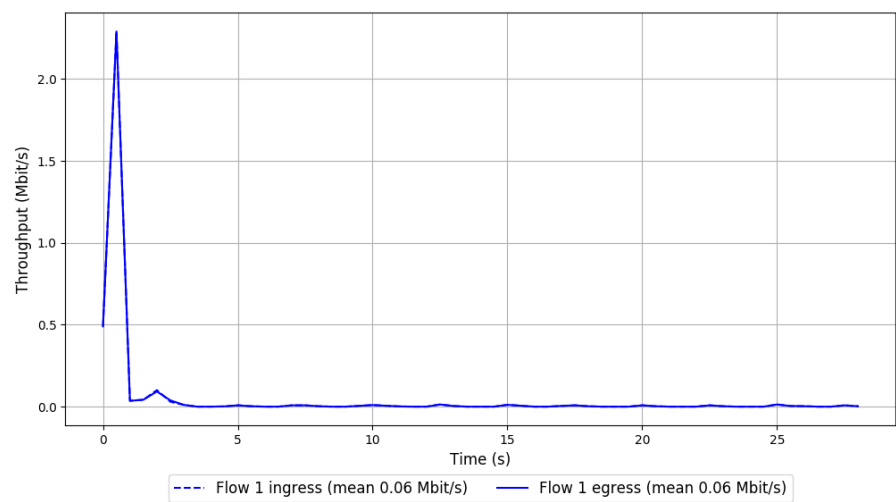# Run 9: Report of SCReAM — Data Link

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

Flow 1 (95th percentile 40.37 ms)

```
Run 10: Statistics of SCReAM

Start at: 2018-04-17 04:35:11
End at: 2018-04-17 04:35:41
Local clock offset: 11.13 ms
Remote clock offset: 2.81 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.014 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.014 ms
Loss rate: 0.64%
```

Run 10: Report of SCReAM — Data Link

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

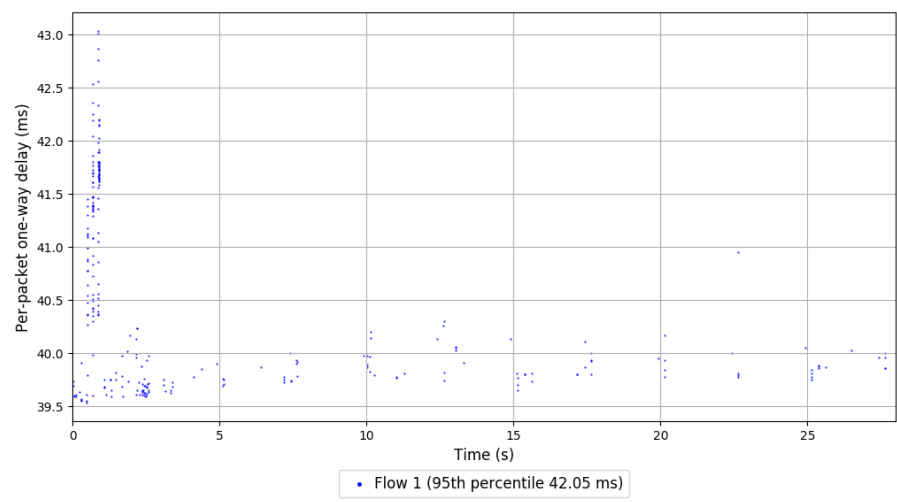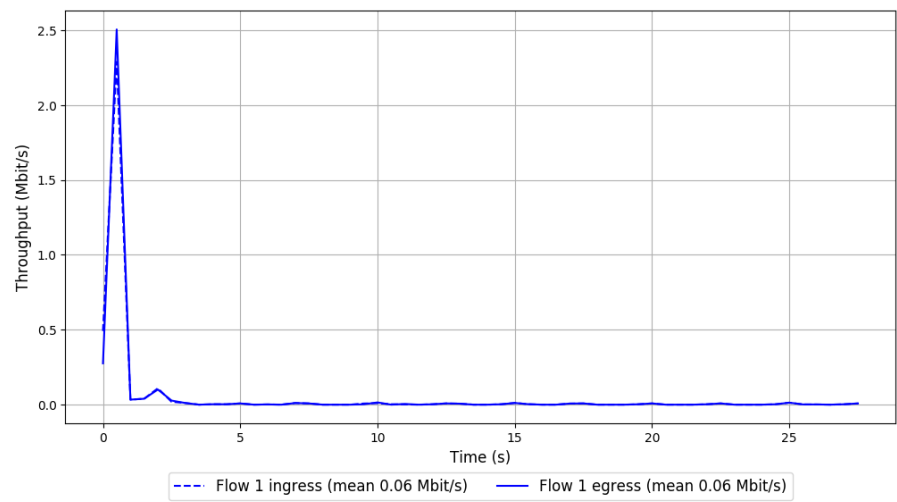Flow 1 (95th percentile 40.01 ms)

```
Run 1: Statistics of WebRTC media

Start at: 2018-04-17 01:31:14
End at: 2018-04-17 01:31:44
Local clock offset: 12.47 ms
Remote clock offset: -5.193 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 41.167 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 41.167 ms
Loss rate: 0.00%
```
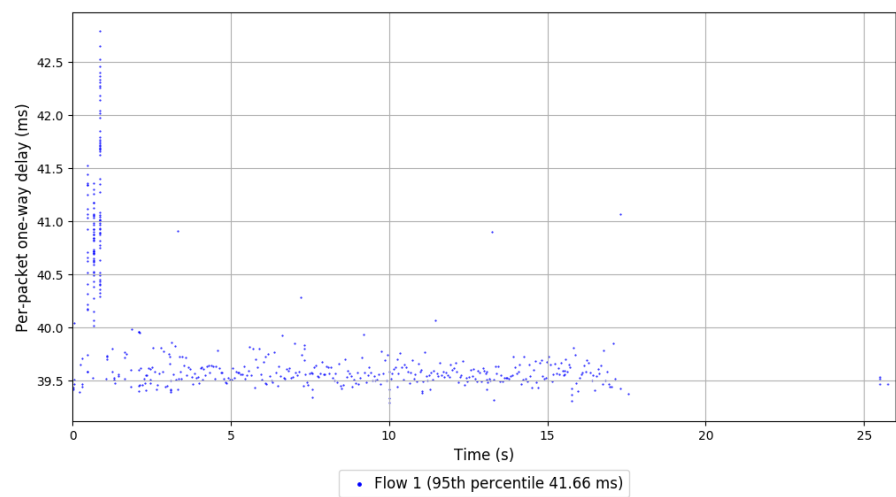
Run 1: Report of WebRTC media — Data Link

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

Flow 1 (95th percentile 41.17 ms)

```
Run 2: Statistics of WebRTC media

Start at: 2018-04-17 01:52:30
End at: 2018-04-17 01:53:00
Local clock offset: 8.061 ms
Remote clock offset: -6.313 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 42.045 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 42.045 ms
Loss rate: 0.00%
```
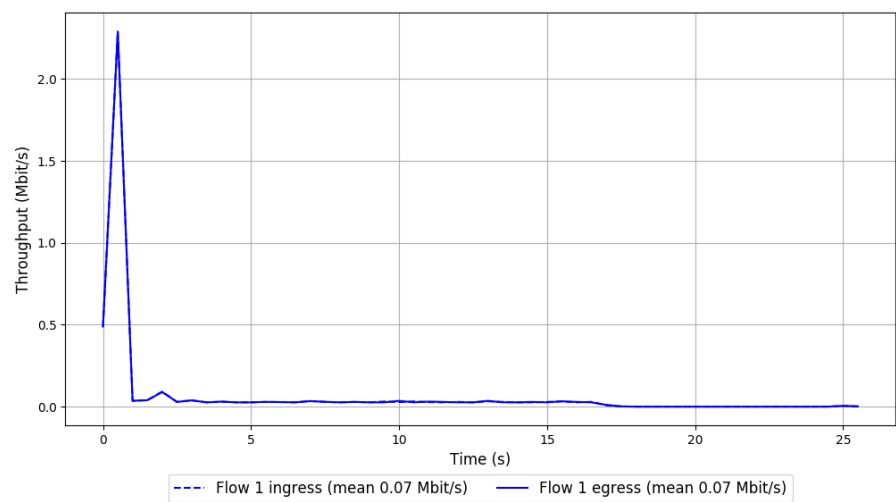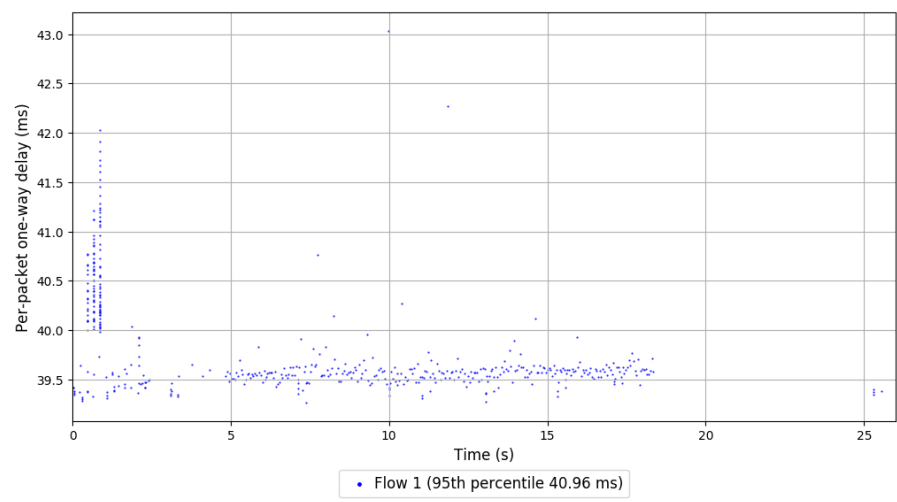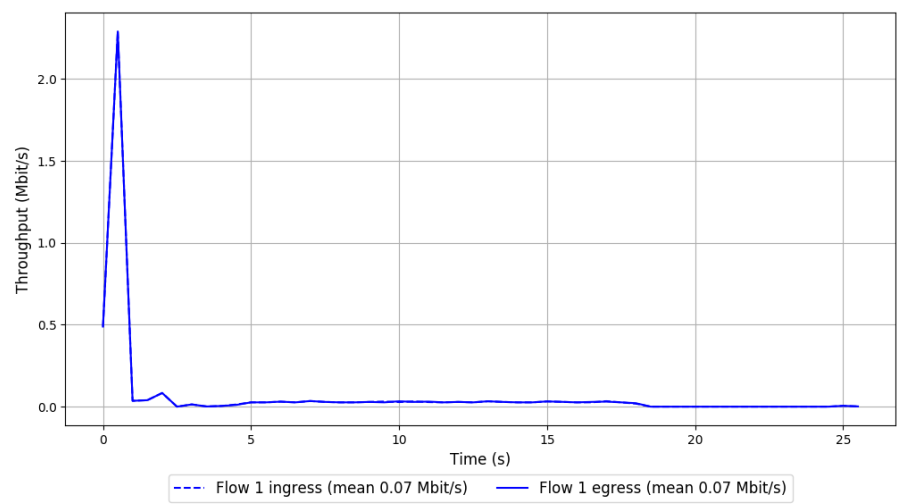
Run 2: Report of WebRTC media — Data Link

```
Run 3: Statistics of WebRTC media

Start at: 2018-04-17 02:13:40
End at: 2018-04-17 02:14:10
Local clock offset: 8.043 ms
Remote clock offset: 5.225 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 41.658 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 41.658 ms
Loss rate: 0.00%
```
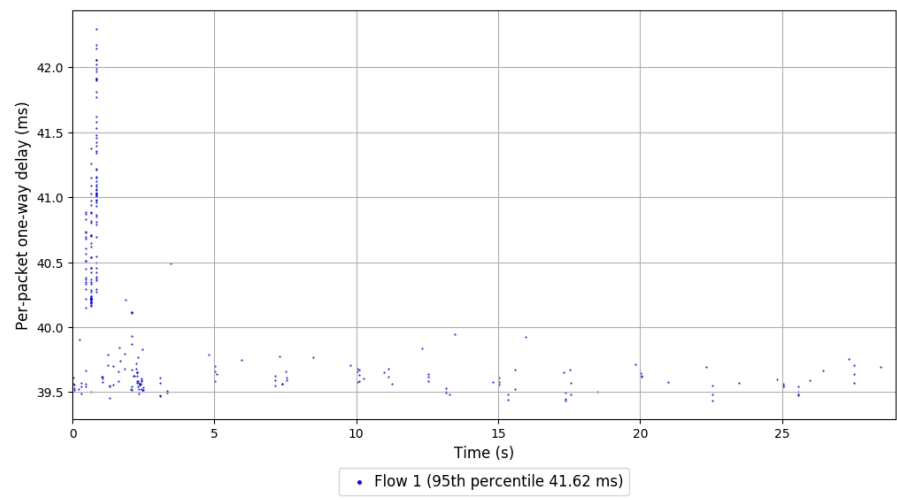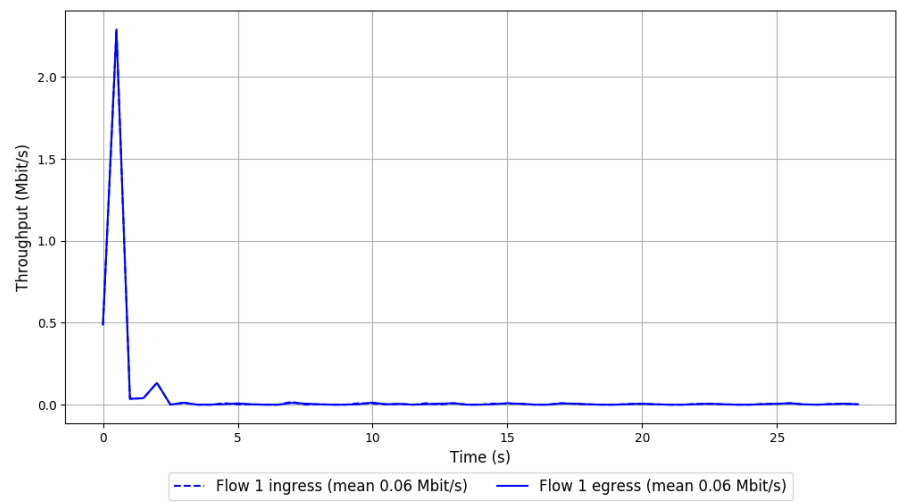
Run 3: Report of WebRTC media — Data Link

```
Run 4: Statistics of WebRTC media

Start at: 2018-04-17 02:34:53
End at: 2018-04-17 02:35:23
Local clock offset: 7.807 ms
Remote clock offset: -1.661 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 40.960 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 40.960 ms
Loss rate: 0.00%
```
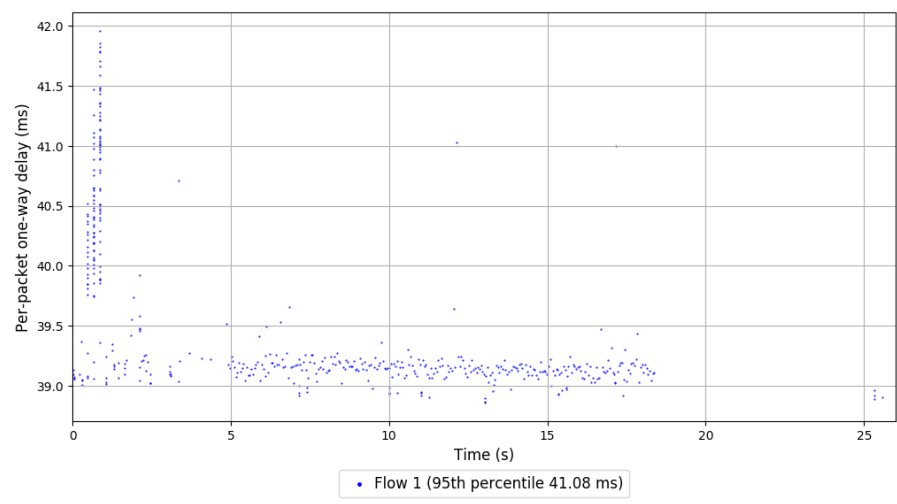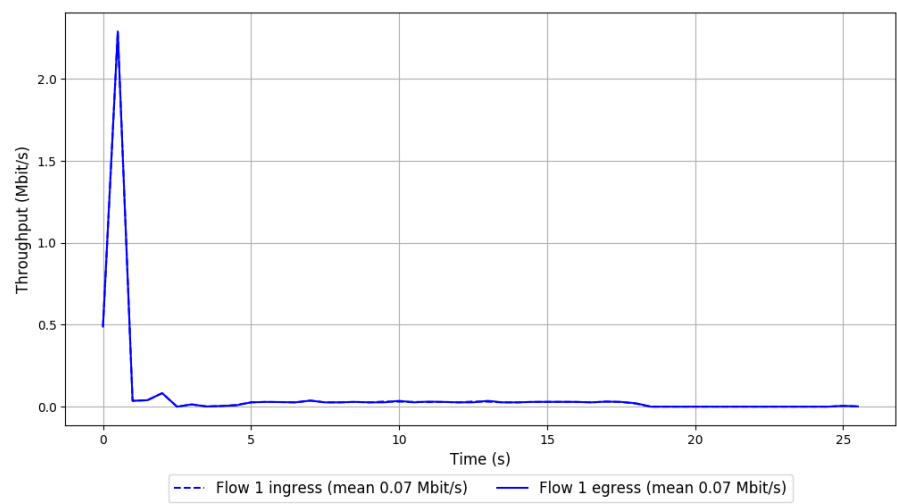
Run 4: Report of WebRTC media — Data Link

```
Run 5: Statistics of WebRTC media

Start at: 2018-04-17 02:56:08
End at: 2018-04-17 02:56:38
Local clock offset: 4.475 ms
Remote clock offset: -6.331 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 41.623 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 41.623 ms
Loss rate: 0.00%
```
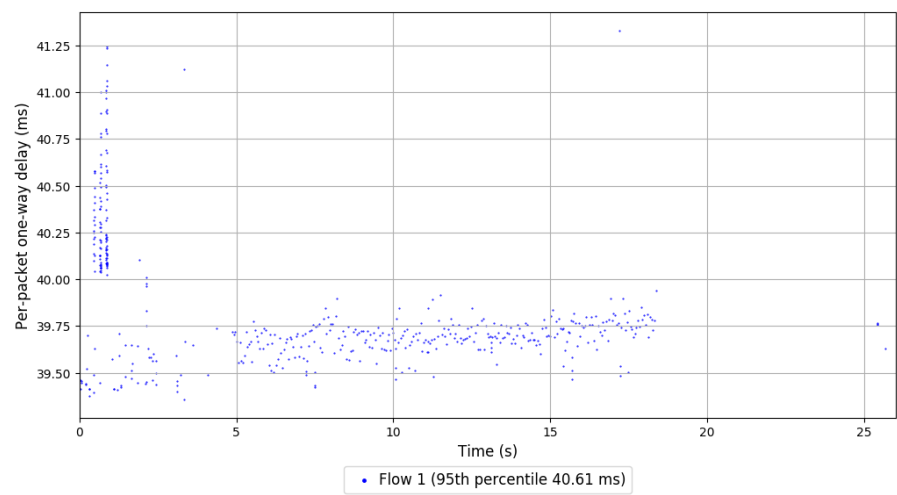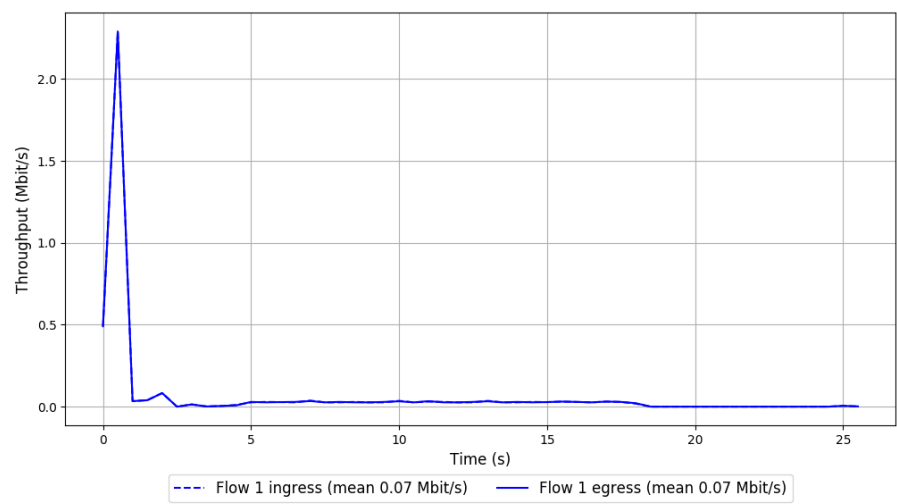
Run 5: Report of WebRTC media — Data Link

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

· Flow 1 (95th percentile 41.62 ms)

```
Run 6: Statistics of WebRTC media

Start at: 2018-04-17 03:17:26
End at: 2018-04-17 03:17:56
Local clock offset: 9.065 ms
Remote clock offset: -10.579 ms

# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 41.077 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 41.077 ms
Loss rate: 0.00%
```

Run 6: Report of WebRTC media — Data Link

```
Run 7: Statistics of WebRTC media

Start at: 2018-04-17 03:38:41
End at: 2018-04-17 03:39:11
Local clock offset: 13.37 ms
Remote clock offset: -2.459 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 40.608 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 40.608 ms
Loss rate: 0.00%
```
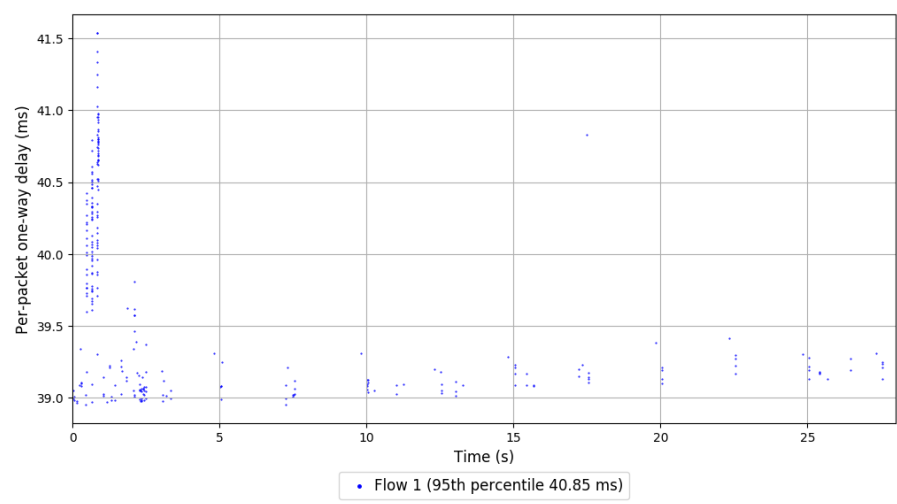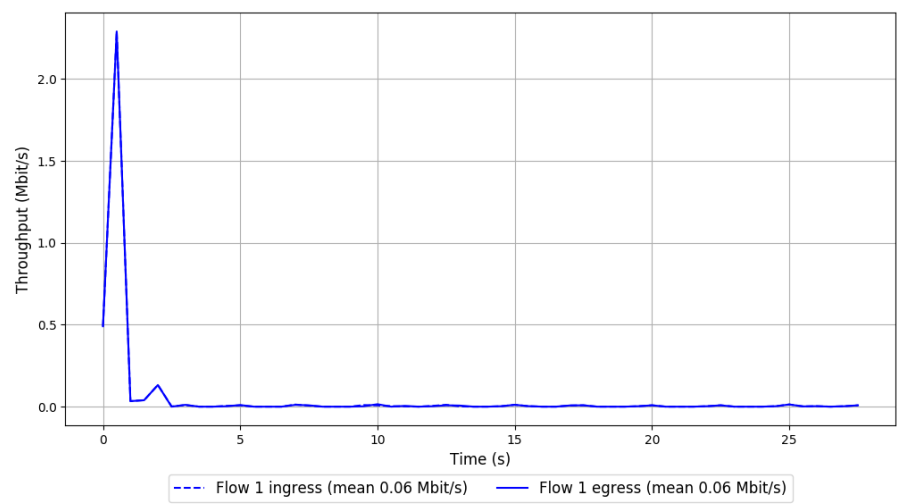
Run 7: Report of WebRTC media — Data Link

```
Run 8: Statistics of WebRTC media

Start at: 2018-04-17 03:59:59
End at: 2018-04-17 04:00:29
Local clock offset: 5.301 ms
Remote clock offset: 4.785 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 40.852 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 40.852 ms
Loss rate: 0.00%
```
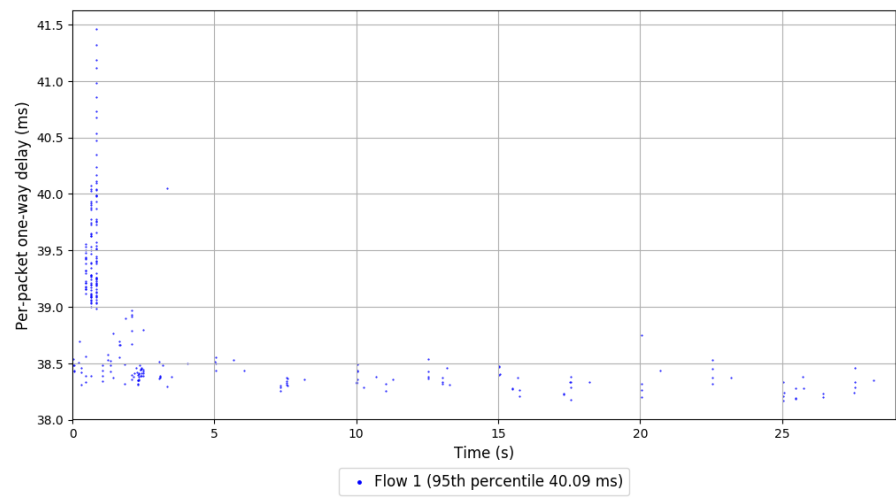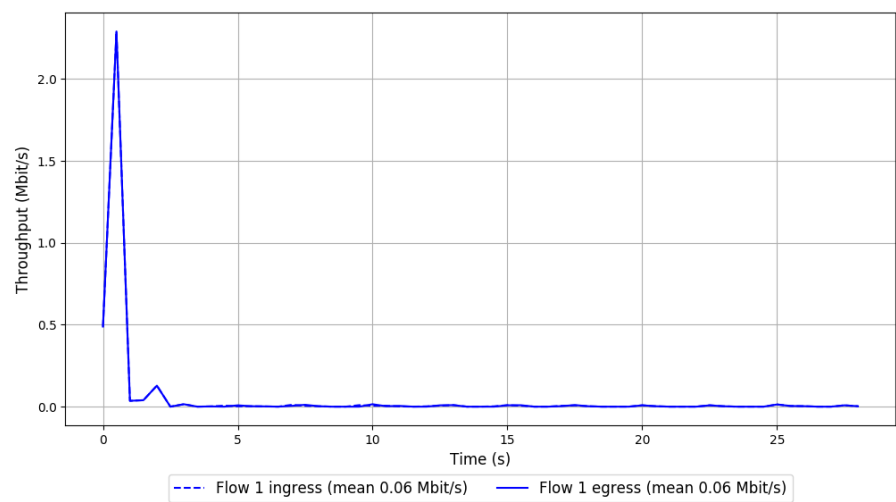
Run 8: Report of WebRTC media — Data Link

```
Run 9: Statistics of WebRTC media

Start at: 2018-04-17 04:21:14
End at: 2018-04-17 04:21:44
Local clock offset: 7.069 ms
Remote clock offset: 2.702 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 40.094 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 40.094 ms
Loss rate: 0.00%
```
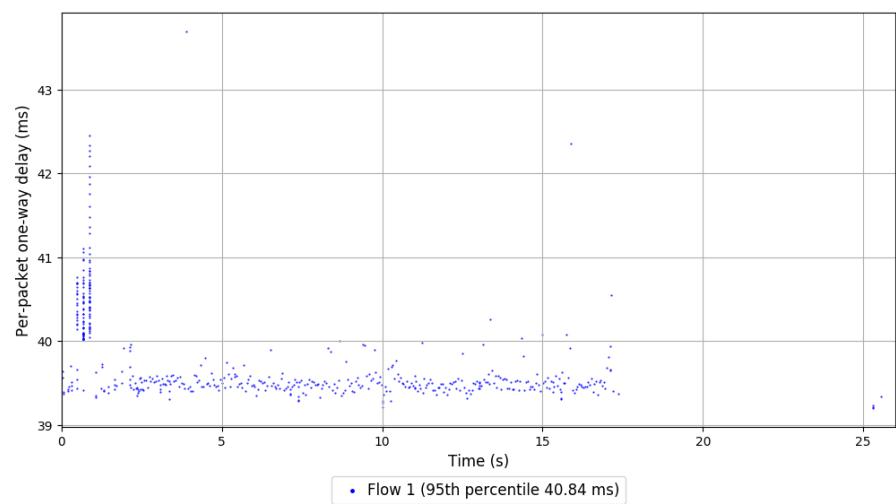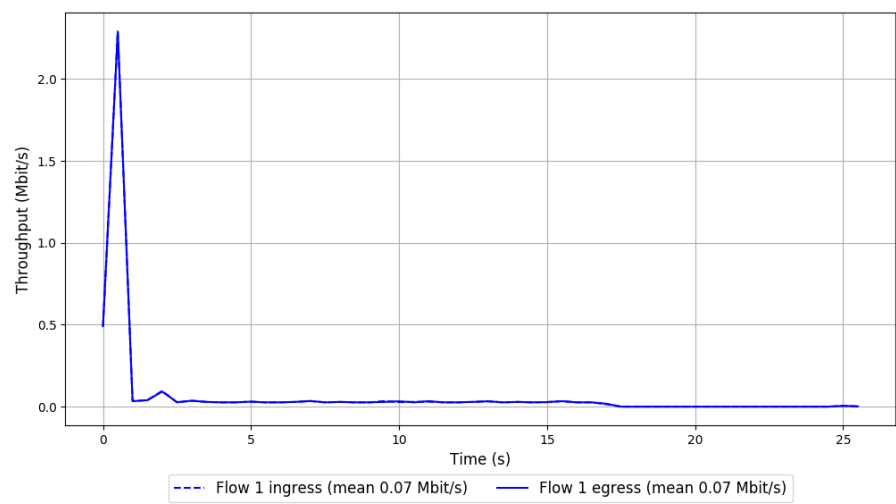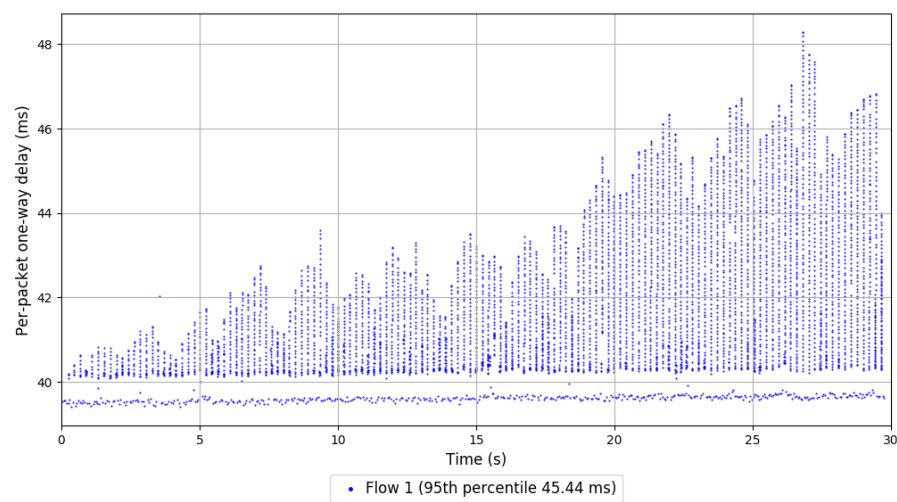
Run 9: Report of WebRTC media — Data Link

```
Run 10: Statistics of WebRTC media

Start at: 2018-04-17 04:42:33
End at: 2018-04-17 04:43:03
Local clock offset: 12.393 ms
Remote clock offset: 1.742 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 40.837 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 40.837 ms
Loss rate: 0.00%
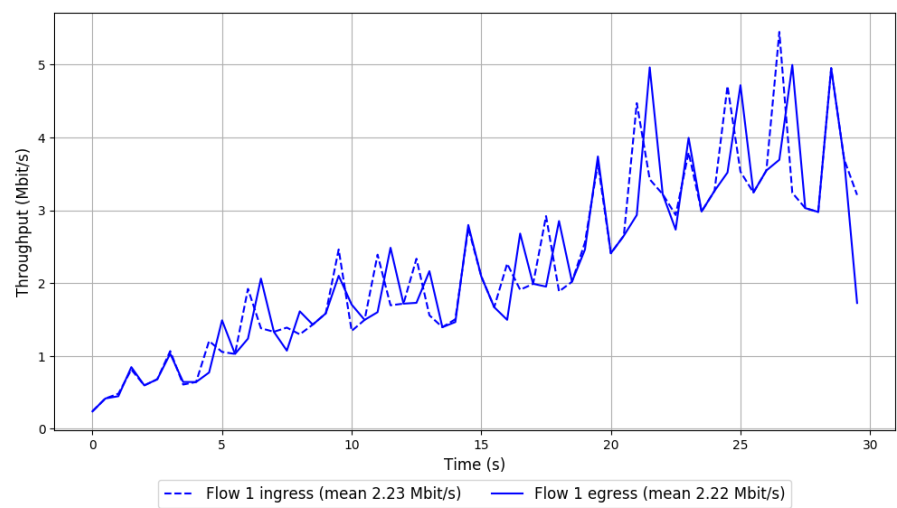```

Run 10: Report of WebRTC media — Data Link

```
Run 1: Statistics of Sprout

Start at: 2018-04-17 01:30:02
End at: 2018-04-17 01:30:32
Local clock offset: 13.385 ms
Remote clock offset: -4.887 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 45.443 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 45.443 ms
Loss rate: 1.11%
```

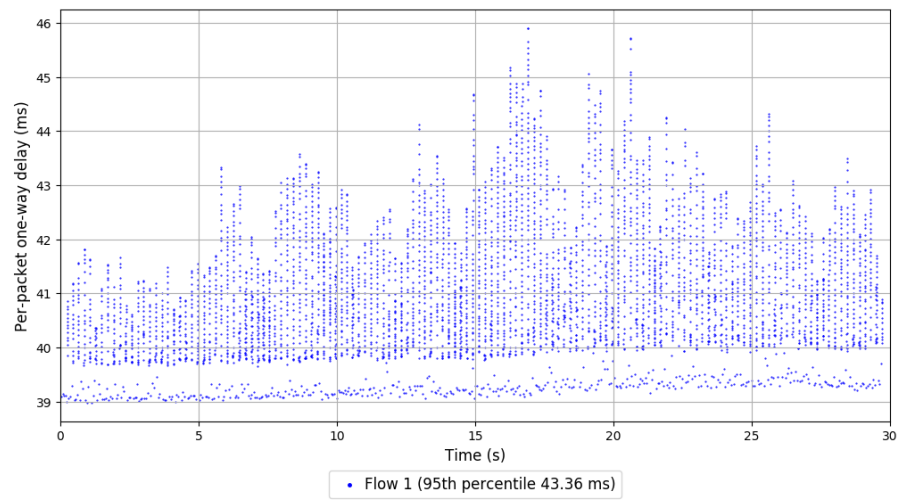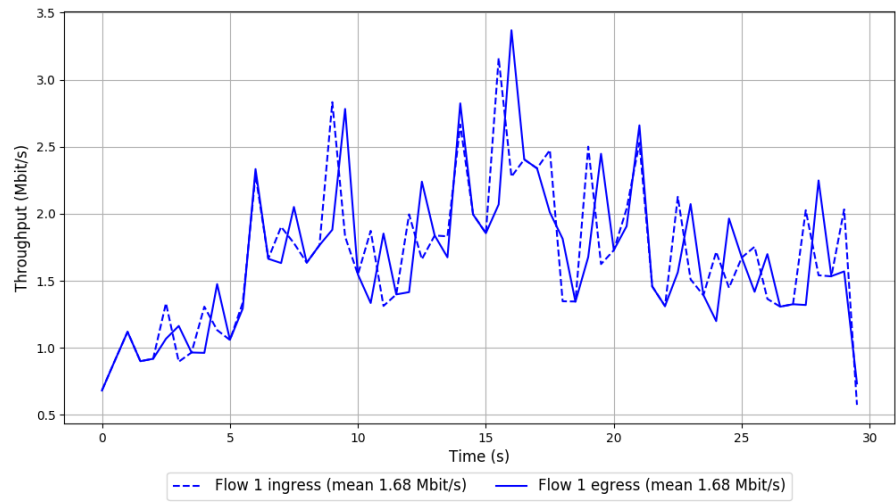Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2018-04-17 01:51:18
End at: 2018-04-17 01:51:48
Local clock offset: 8.087 ms
Remote clock offset: -7.007 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 43.360 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 43.360 ms
Loss rate: 0.30%
```

Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2018-04-17 02:12:28
End at: 2018-04-17 02:12:58
Local clock offset: 7.837 ms
Remote clock offset: 5.44 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 44.644 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 44.644 ms
Loss rate: 0.88%
```
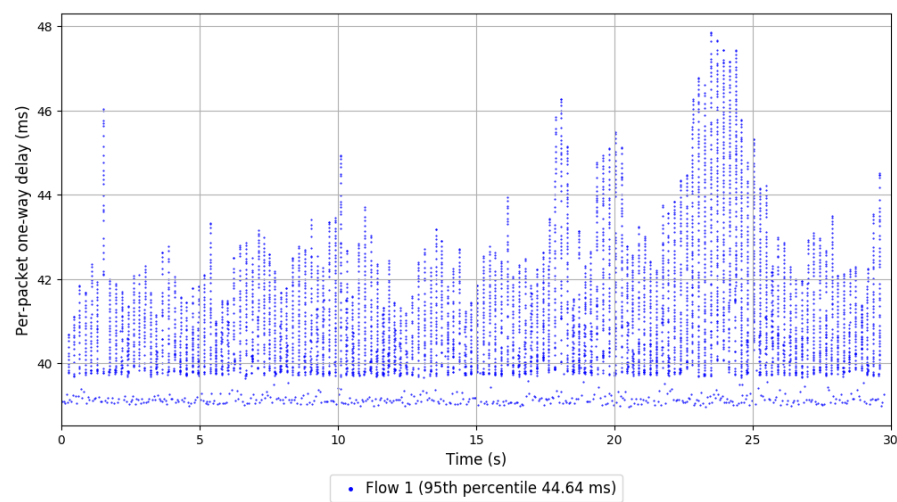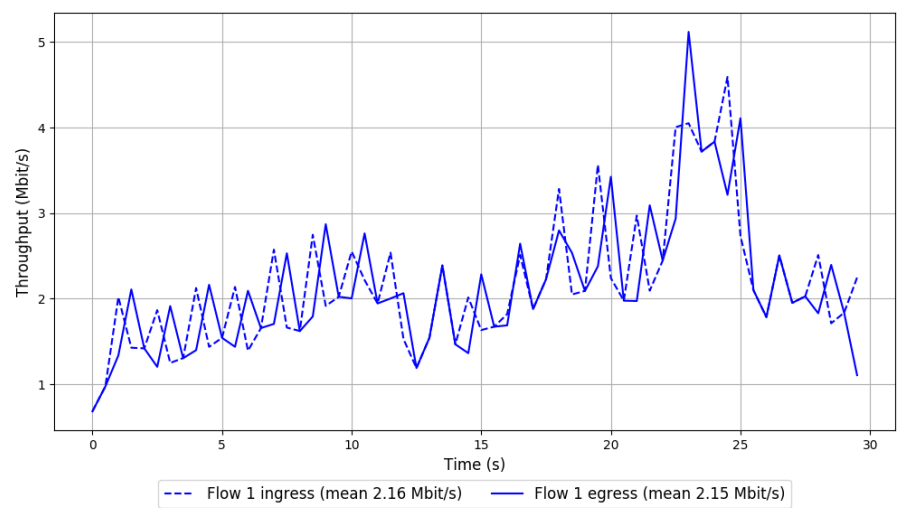
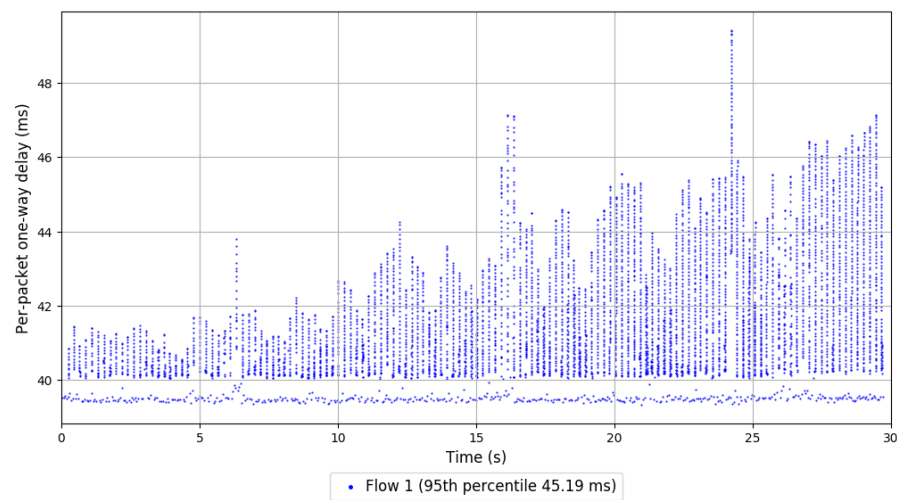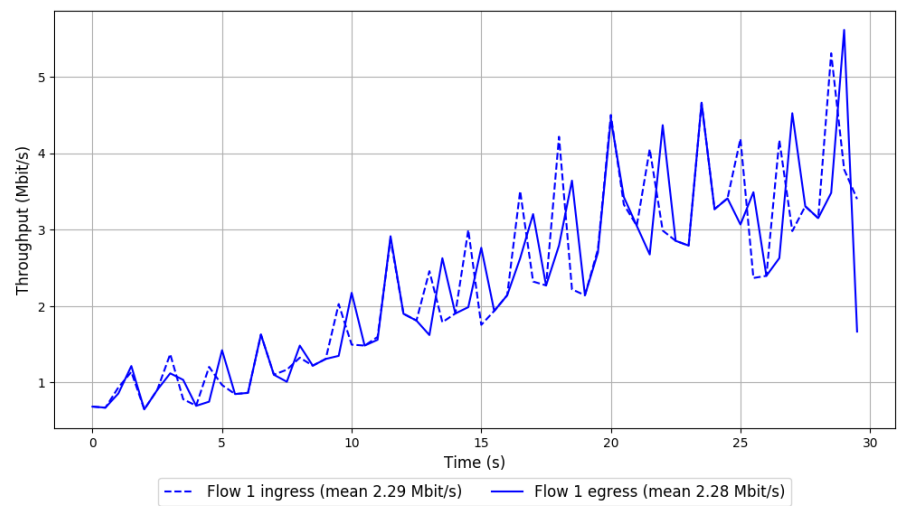Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2018-04-17 02:33:41
End at: 2018-04-17 02:34:11
Local clock offset: 8.259 ms
Remote clock offset: -1.253 ms

# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 45.186 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 45.186 ms
Loss rate: 1.27%
```

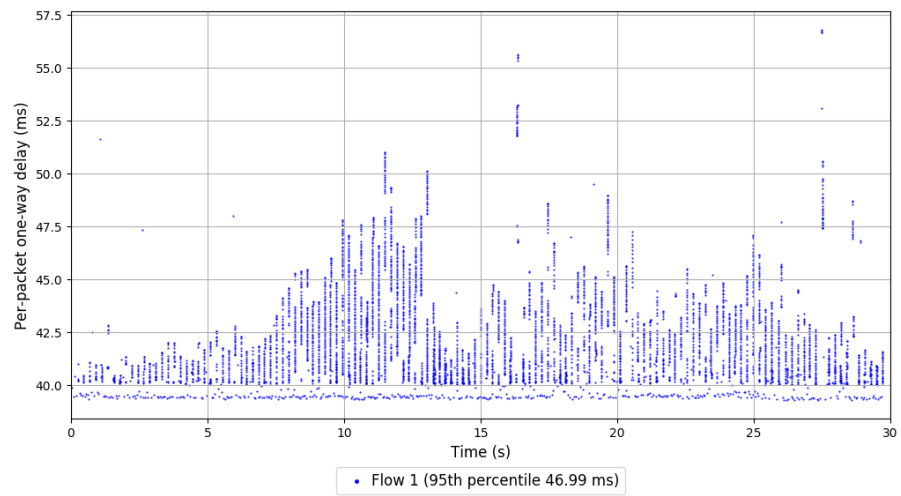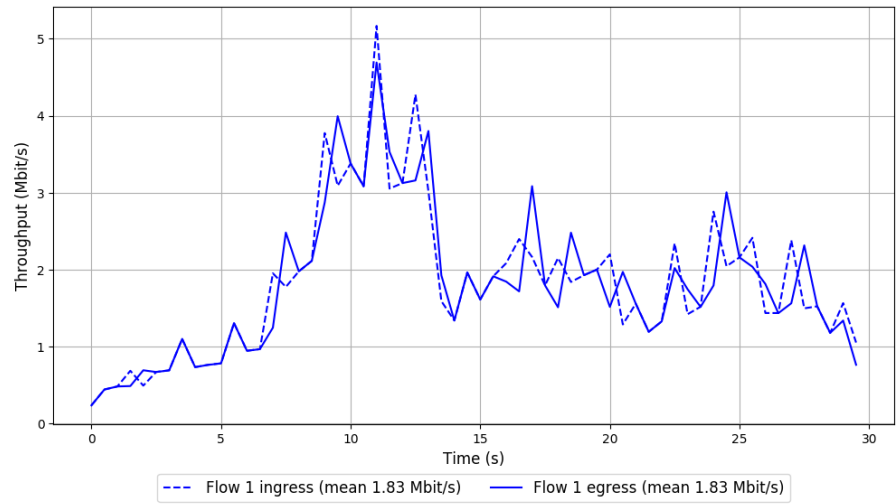Run 4: Report of Sprout — Data Link

```
Run 5: Statistics of Sprout

Start at: 2018-04-17 02:54:55
End at: 2018-04-17 02:55:25
Local clock offset: 4.456 ms
Remote clock offset: -6.003 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 46.986 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 46.986 ms
Loss rate: 0.47%
```

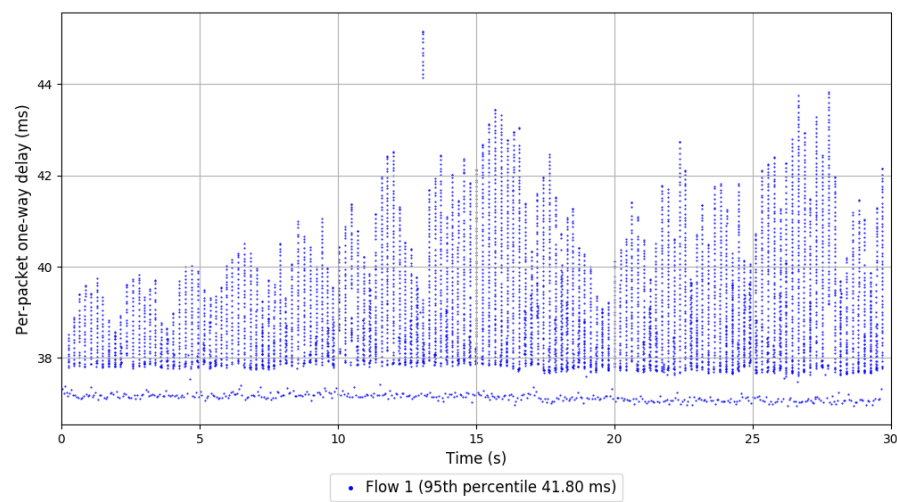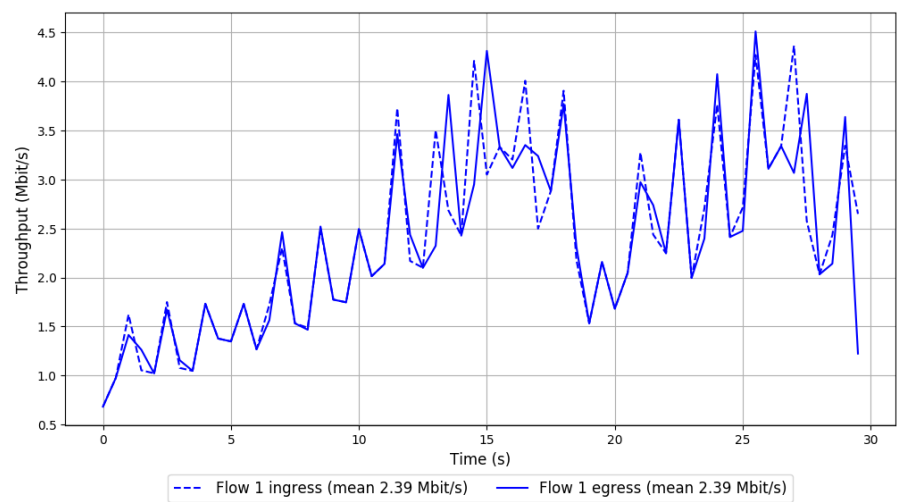# Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2018-04-17 03:16:14
End at: 2018-04-17 03:16:44
Local clock offset: 8.588 ms
Remote clock offset: -9.066 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 41.804 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 41.804 ms
Loss rate: 1.00%
```

Run 6: Report of Sprout — Data Link

```
Run 7: Statistics of Sprout

Start at: 2018-04-17 03:37:29
End at: 2018-04-17 03:37:59
Local clock offset: 12.995 ms
Remote clock offset: -3.39 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 43.458 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 43.458 ms
Loss rate: 0.88%
```
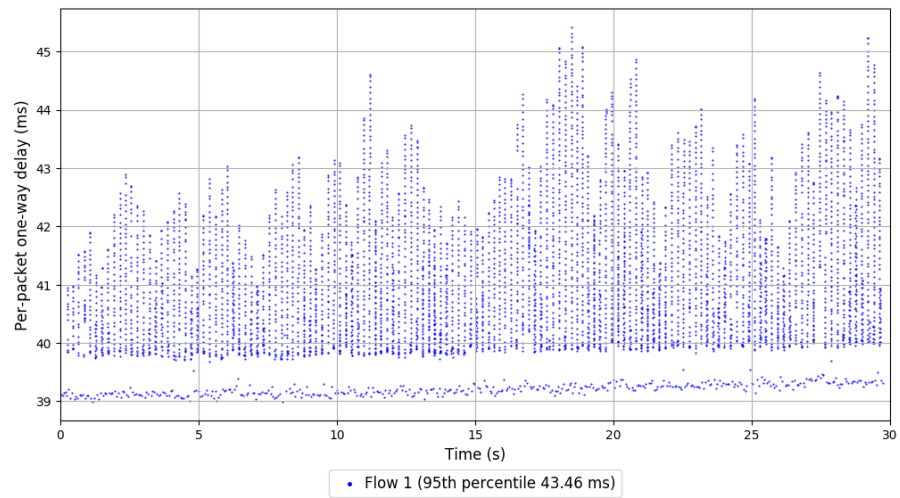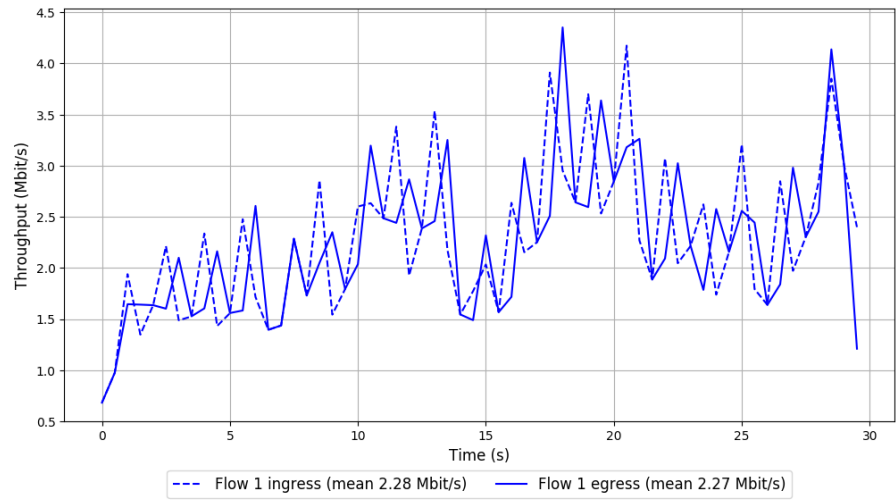
Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2018-04-17 03:58:47
End at: 2018-04-17 03:59:17
Local clock offset: 5.382 ms
Remote clock offset: 4.586 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 42.774 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 42.774 ms
Loss rate: 0.95%
```
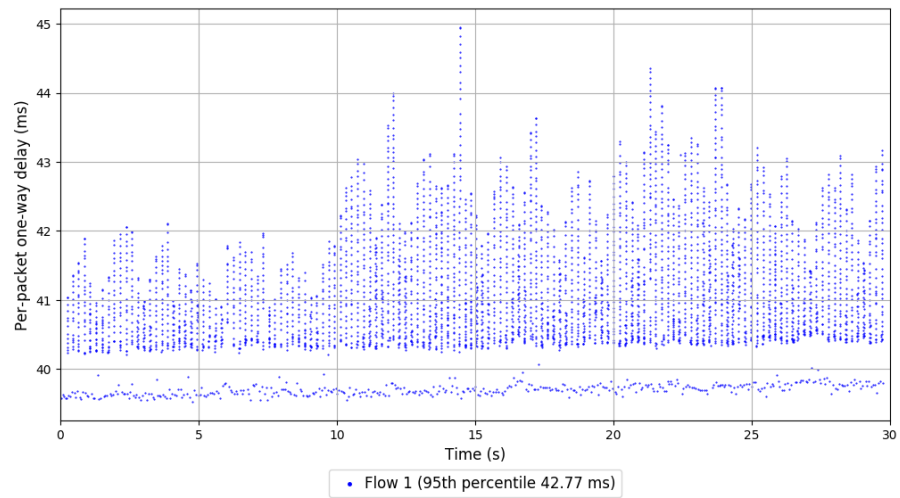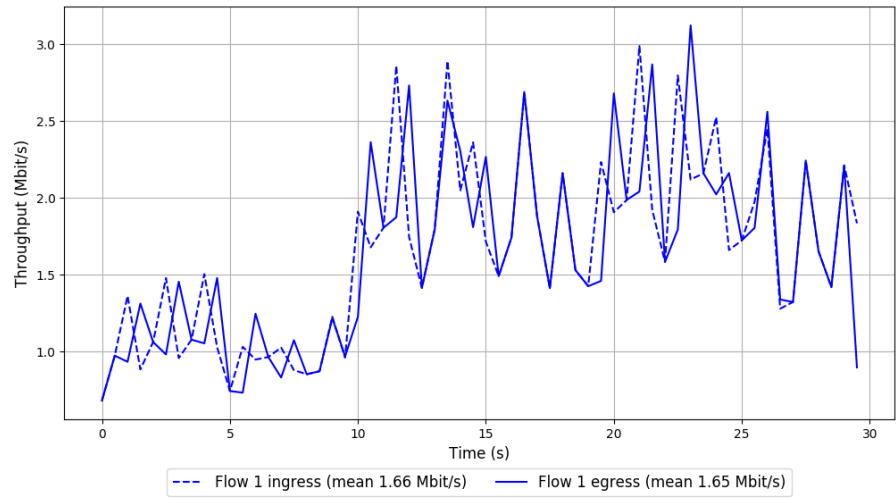
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2018-04-17 04:20:02
End at: 2018-04-17 04:20:32
Local clock offset: 6.511 ms
Remote clock offset: 2.642 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 44.893 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 44.893 ms
Loss rate: 0.77%
```
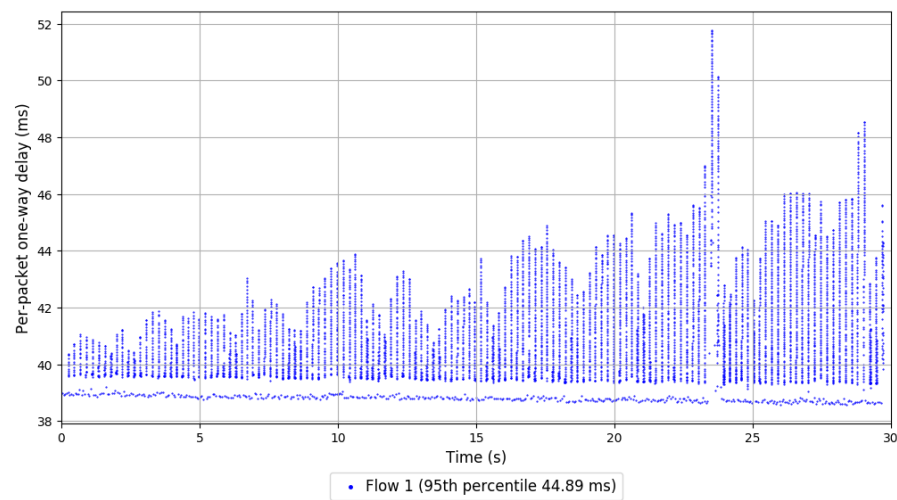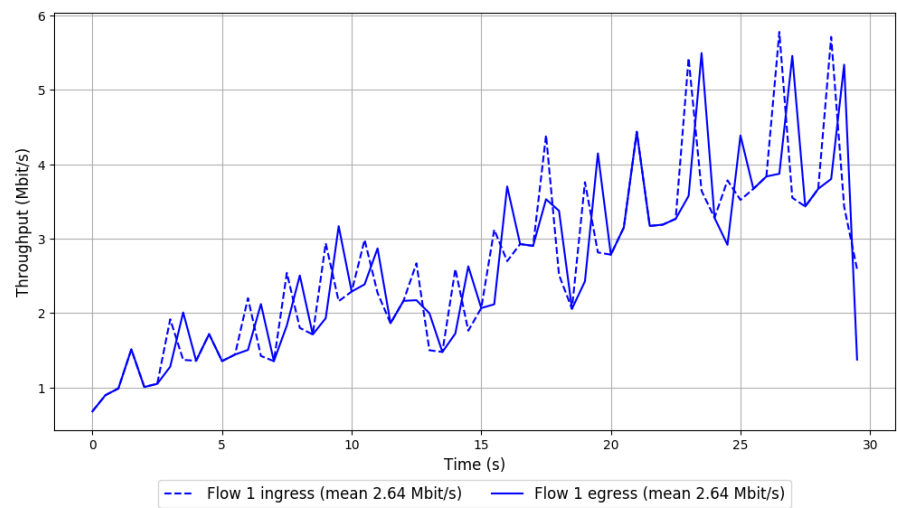
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2018-04-17 04:41:21
End at: 2018-04-17 04:41:51
Local clock offset: 12.433 ms
Remote clock offset: 2.222 ms


# Below is generated by plot.py at 2018-04-17 08:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 42.226 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 42.226 ms
Loss rate: 1.09%
```
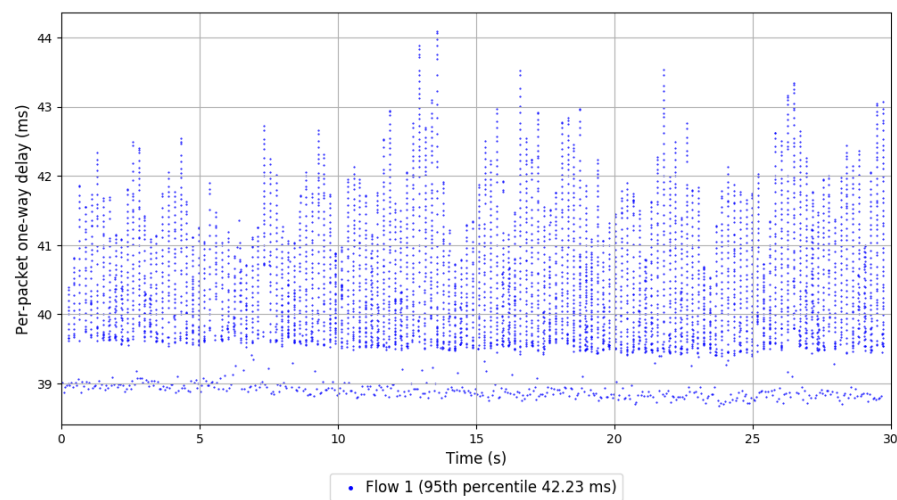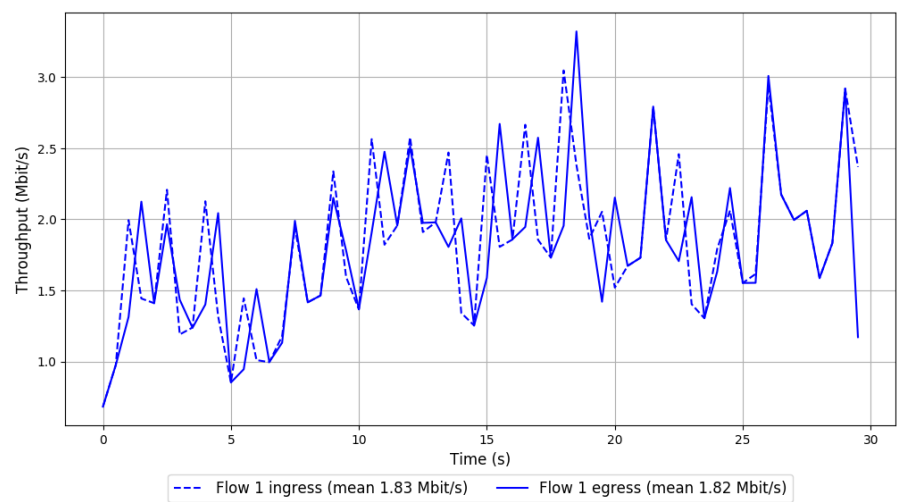
Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 1.83 Mbit/s) Flow 1 egress (mean 1.82 Mbit/s)

Flow 1 (95th percentile 42.23 ms)

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

Start at: 2018-04-17 01:34:58
End at: 2018-04-17 01:35:28
Local clock offset: 10.856 ms
Remote clock offset: -6.044 ms

# Below is generated by plot.py at 2018-04-17 08:45:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.41 Mbit/s
95th percentile per-packet one-way delay: 44.163 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 62.41 Mbit/s
95th percentile per-packet one-way delay: 44.163 ms
Loss rate: 0.67%
```
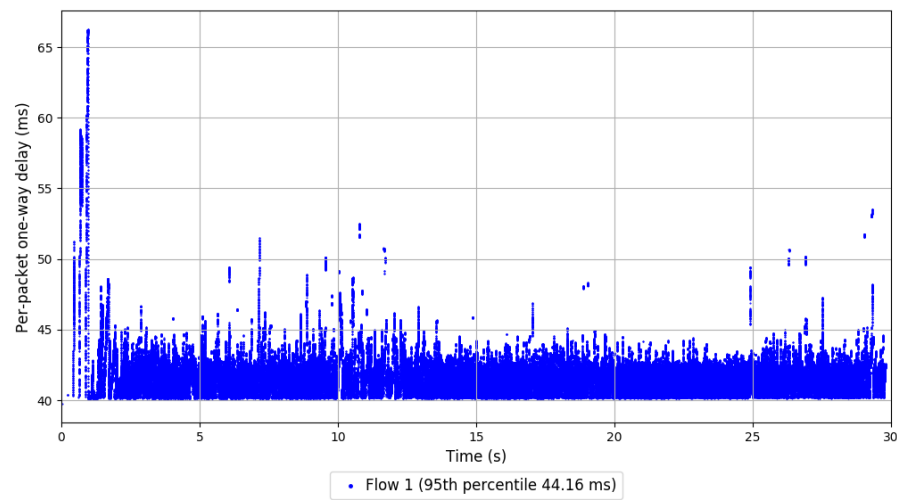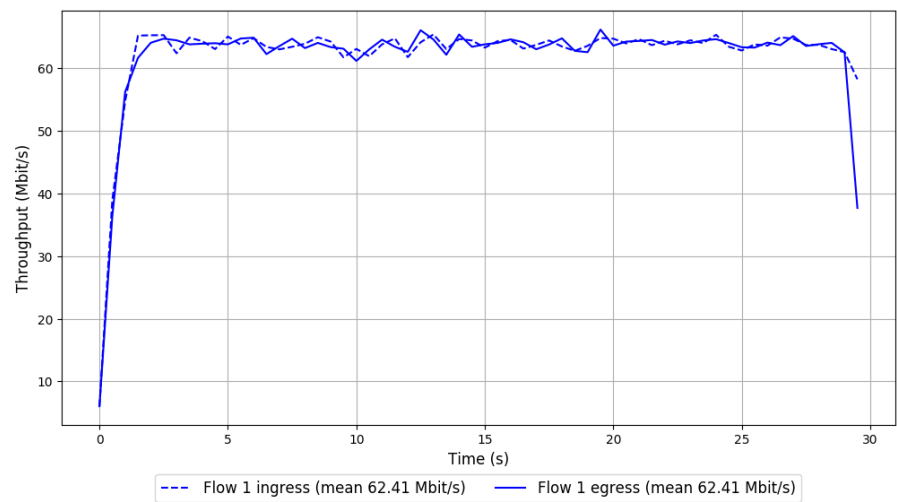
Run 1: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-17 01:56:12
End at: 2018-04-17 01:56:42
Local clock offset: 8.086 ms
Remote clock offset: 3.77 ms


# Below is generated by plot.py at 2018-04-17 08:45:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.19 Mbit/s
95th percentile per-packet one-way delay: 57.179 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 56.19 Mbit/s
95th percentile per-packet one-way delay: 57.179 ms
Loss rate: 1.16%
```
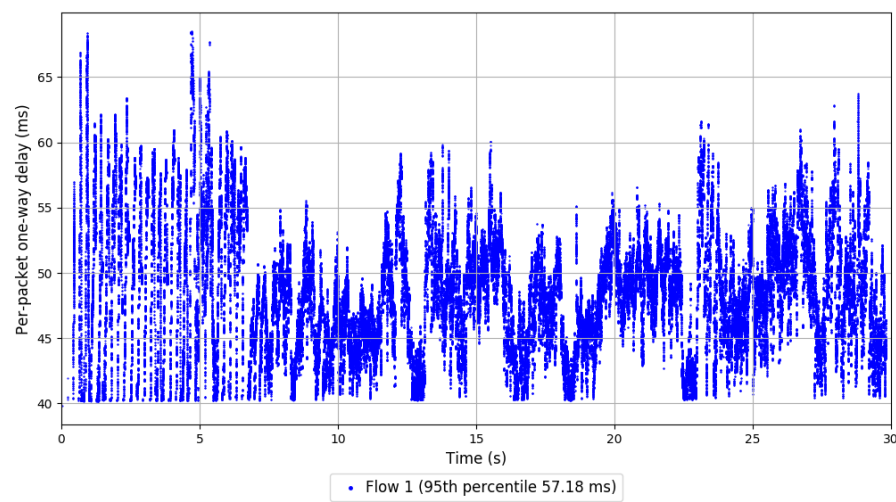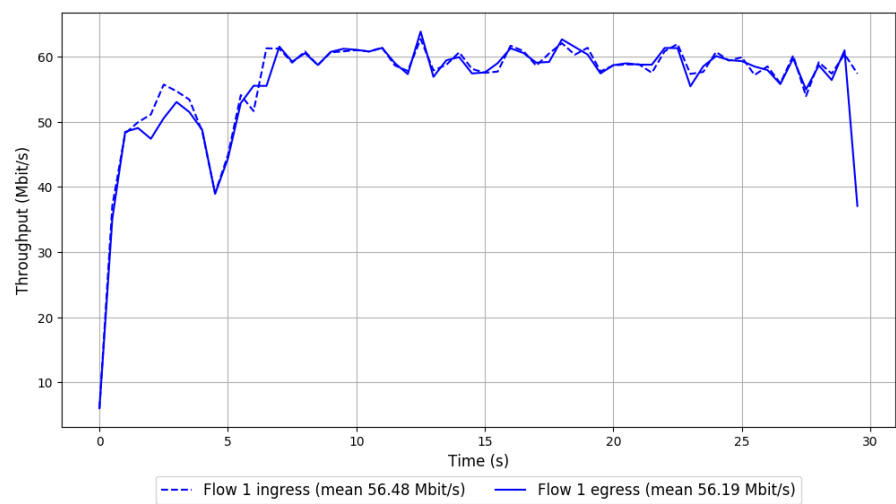
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-17 02:17:23
End at: 2018-04-17 02:17:53
Local clock offset: 7.992 ms
Remote clock offset: 5.051 ms


# Below is generated by plot.py at 2018-04-17 08:45:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.51 Mbit/s
95th percentile per-packet one-way delay: 50.271 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 60.51 Mbit/s
95th percentile per-packet one-way delay: 50.271 ms
Loss rate: 0.83%
```
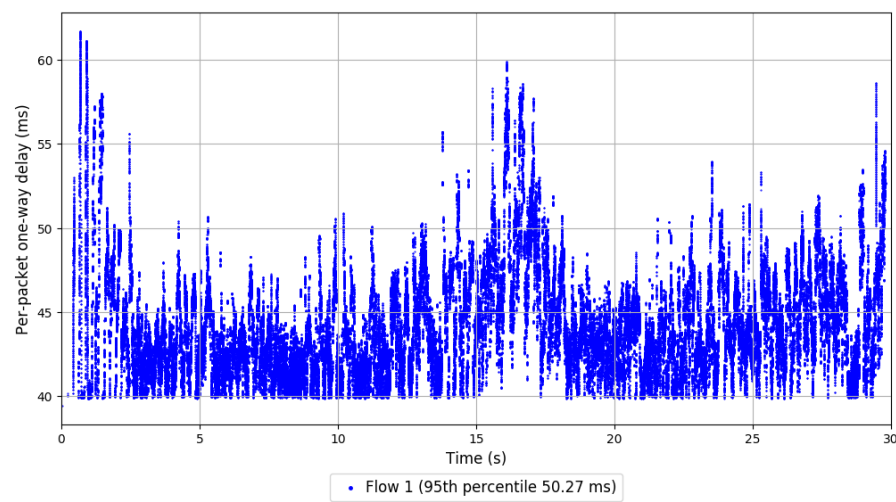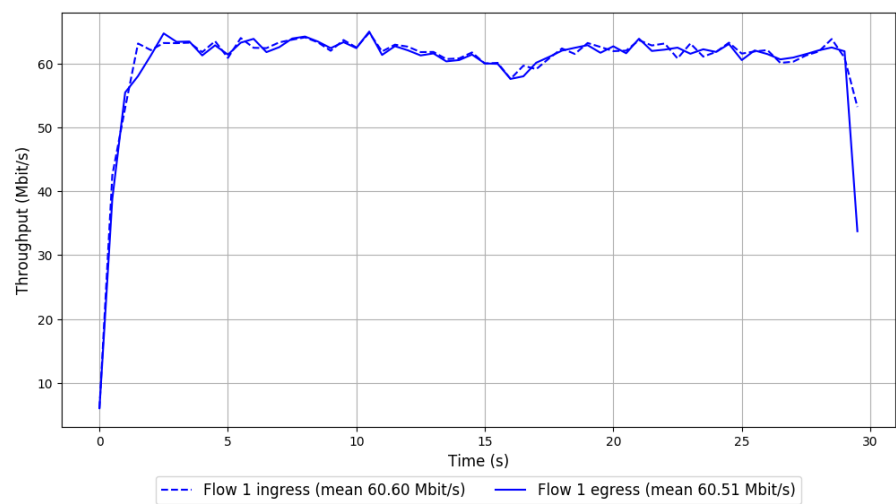
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-17 02:38:37
End at: 2018-04-17 02:39:07
Local clock offset: 6.5 ms
Remote clock offset: -2.795 ms


# Below is generated by plot.py at 2018-04-17 08:45:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.90 Mbit/s
95th percentile per-packet one-way delay: 55.215 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 58.90 Mbit/s
95th percentile per-packet one-way delay: 55.215 ms
Loss rate: 0.85%
```
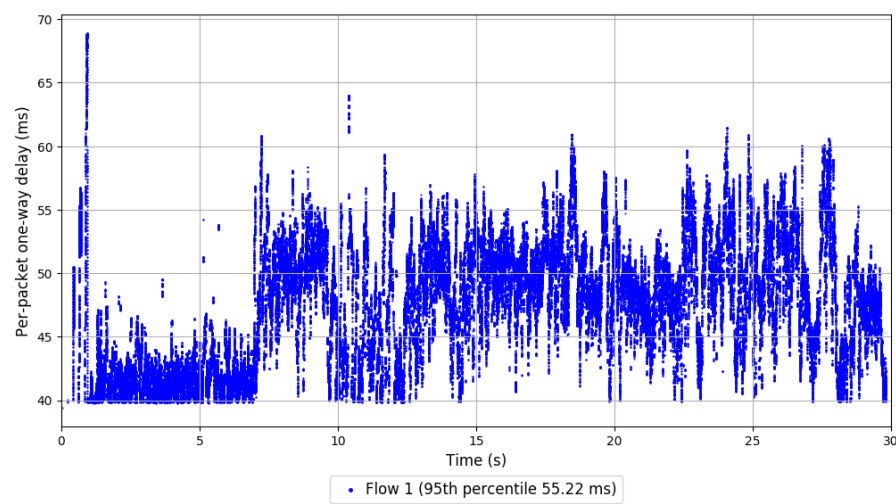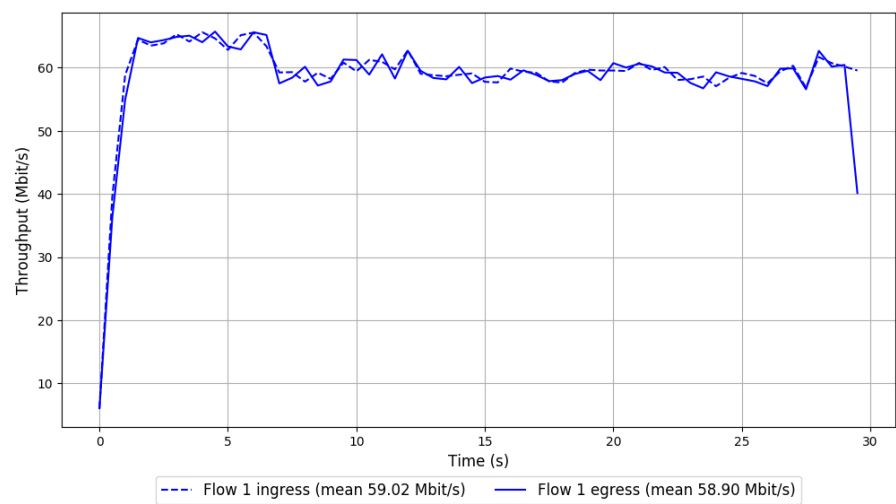
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 59.02 Mbit/s)   Flow 1 egress (mean 58.90 Mbit/s)

• Flow 1 (95th percentile 55.22 ms)

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

Start at: 2018-04-17 02:59:49
End at: 2018-04-17 03:00:19
Local clock offset: 4.174 ms
Remote clock offset: -4.527 ms


# Below is generated by plot.py at 2018-04-17 08:45:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.40 Mbit/s
95th percentile per-packet one-way delay: 55.200 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 56.40 Mbit/s
95th percentile per-packet one-way delay: 55.200 ms
Loss rate: 1.13%
```

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

Flow 1 ingress (mean 56.67 Mbit/s) ---- Flow 1 egress (mean 56.40 Mbit/s) ——

Flow 1 (95th percentile 55.20 ms) •

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

Start at: 2018-04-17 03:21:10
End at: 2018-04-17 03:21:40
Local clock offset: 10.057 ms
Remote clock offset: -10.468 ms


# Below is generated by plot.py at 2018-04-17 08:45:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.80 Mbit/s
95th percentile per-packet one-way delay: 58.325 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 56.80 Mbit/s
95th percentile per-packet one-way delay: 58.325 ms
Loss rate: 1.28%
```
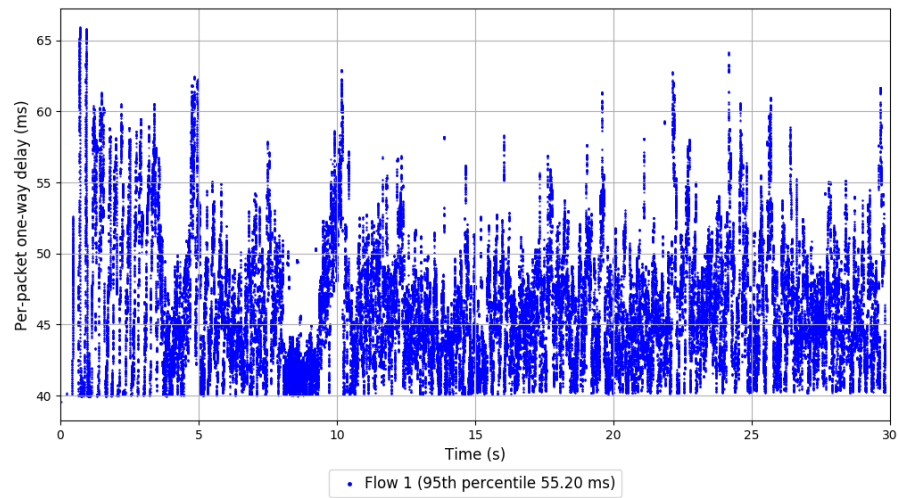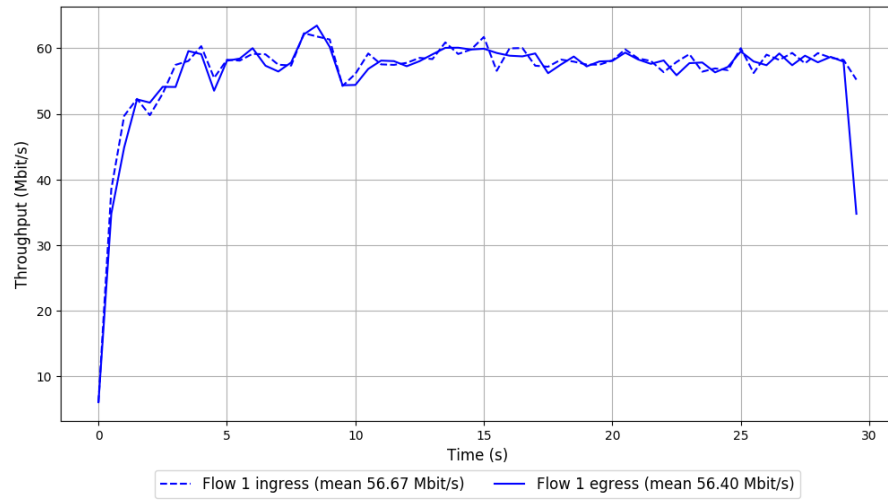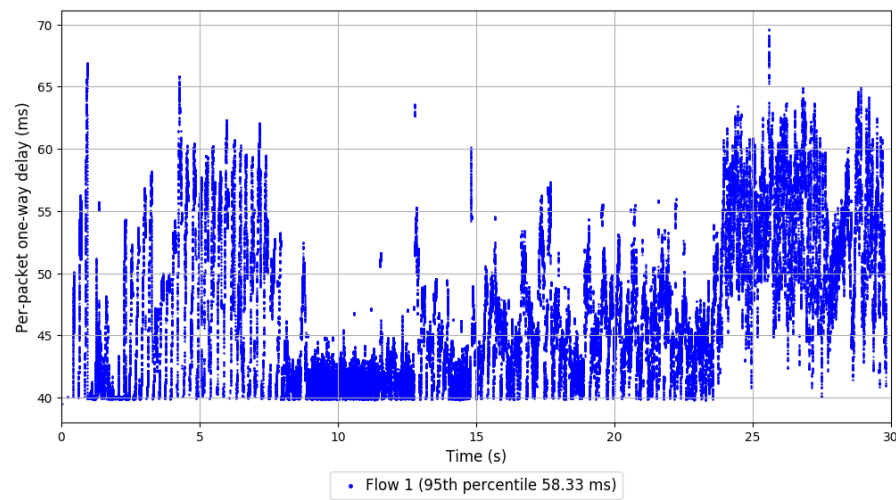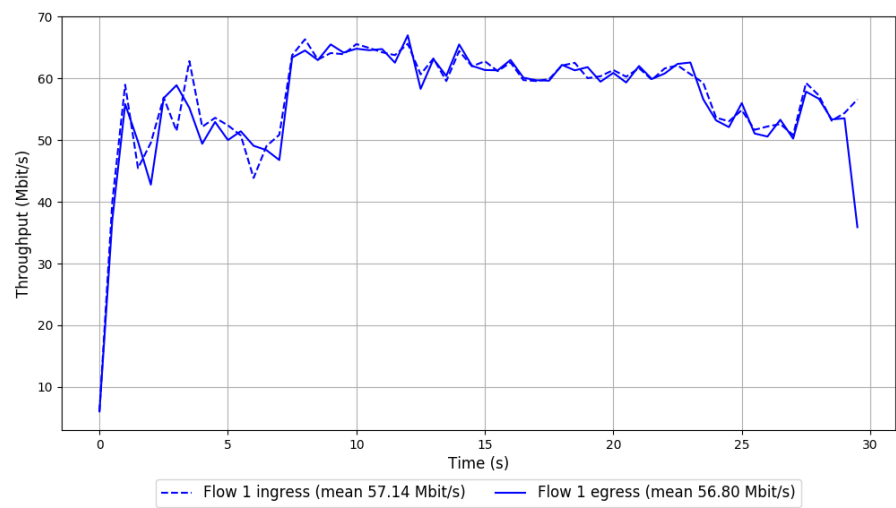
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 57.14 Mbit/s) --- Flow 1 egress (mean 56.80 Mbit/s)
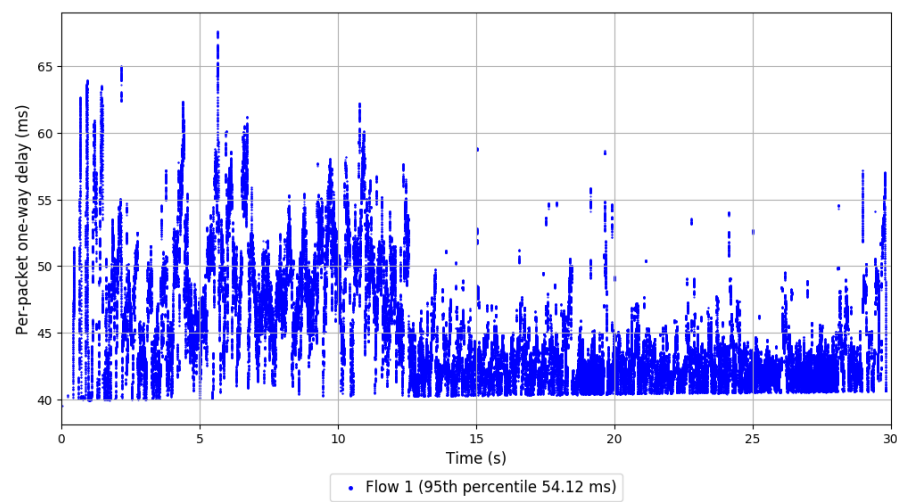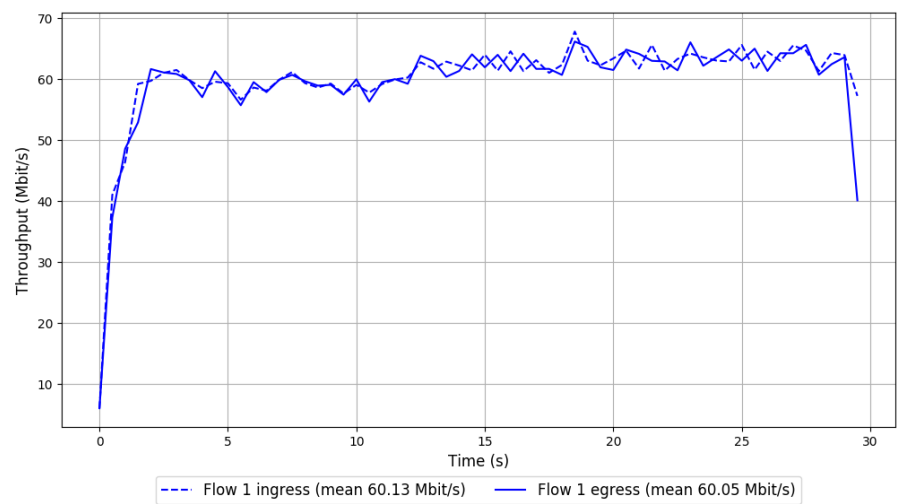

Flow 1 (95th percentile 58.33 ms)

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

Start at: 2018-04-17 03:42:26
End at: 2018-04-17 03:42:56
Local clock offset: 13.081 ms
Remote clock offset: -0.347 ms


# Below is generated by plot.py at 2018-04-17 08:45:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.05 Mbit/s
95th percentile per-packet one-way delay: 54.117 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 60.05 Mbit/s
95th percentile per-packet one-way delay: 54.117 ms
Loss rate: 0.82%
```

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

Flow 1 ingress (mean 60.13 Mbit/s) —— Flow 1 egress (mean 60.05 Mbit/s)

• Flow 1 (95th percentile 54.12 ms)

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

Start at: 2018-04-17 04:03:43
End at: 2018-04-17 04:04:13
Local clock offset: 4.856 ms
Remote clock offset: 5.541 ms


# Below is generated by plot.py at 2018-04-17 08:45:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.10 Mbit/s
95th percentile per-packet one-way delay: 50.057 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 62.10 Mbit/s
95th percentile per-packet one-way delay: 50.057 ms
Loss rate: 0.87%
```
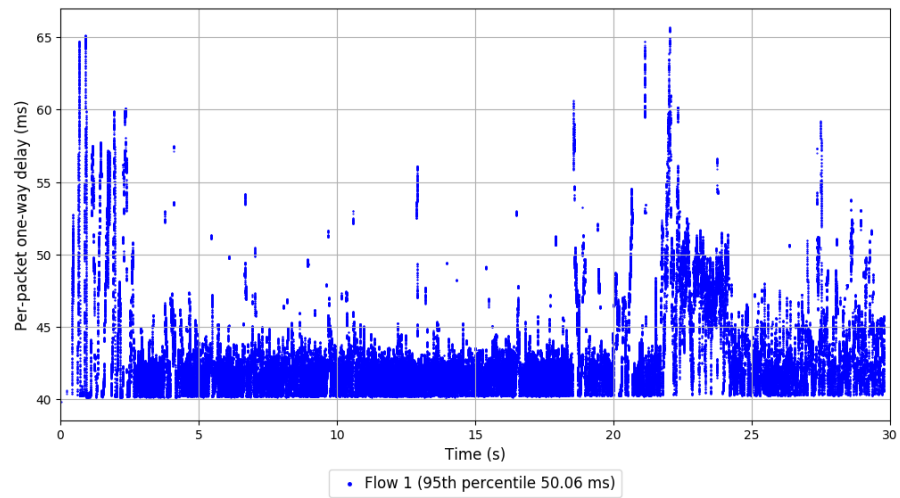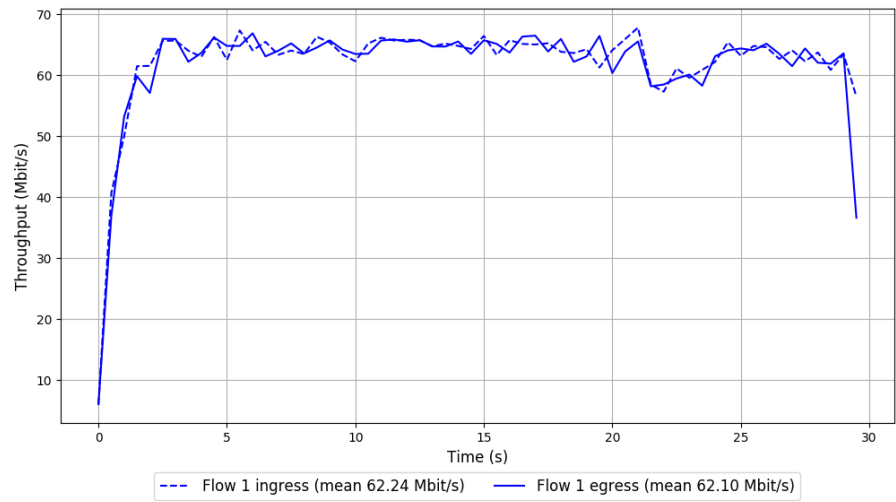
Run 8: Report of TaoVA-100x — Data Link

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

Start at: 2018-04-17 04:24:58
End at: 2018-04-17 04:25:28
Local clock offset: 8.742 ms
Remote clock offset: 2.457 ms


# Below is generated by plot.py at 2018-04-17 08:47:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.31 Mbit/s
95th percentile per-packet one-way delay: 46.774 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 62.31 Mbit/s
95th percentile per-packet one-way delay: 46.774 ms
Loss rate: 0.75%
```

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

Flow 1 ingress (mean 62.37 Mbit/s) --- Flow 1 egress (mean 62.31 Mbit/s)

Flow 1 (95th percentile 46.77 ms)

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

Start at: 2018-04-17 04:46:16
End at: 2018-04-17 04:46:46
Local clock offset: 12.999 ms
Remote clock offset: -12.341 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.11 Mbit/s
95th percentile per-packet one-way delay: 47.290 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 62.11 Mbit/s
95th percentile per-packet one-way delay: 47.290 ms
Loss rate: 0.77%
```
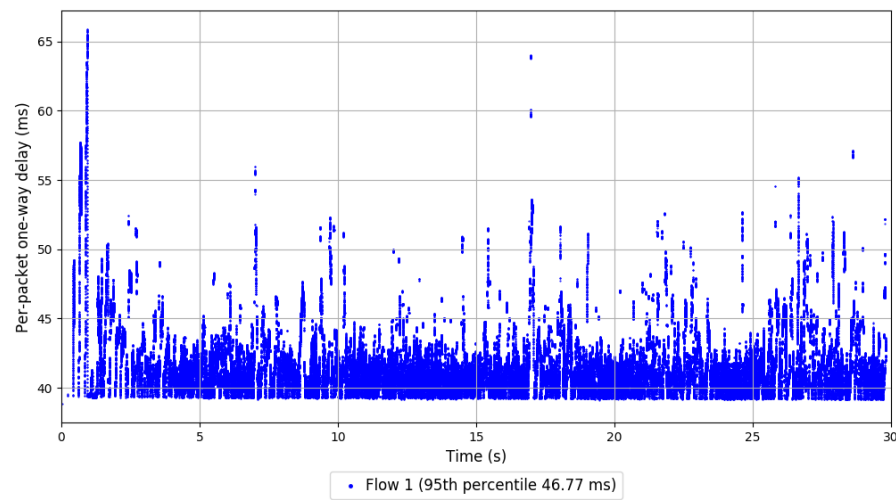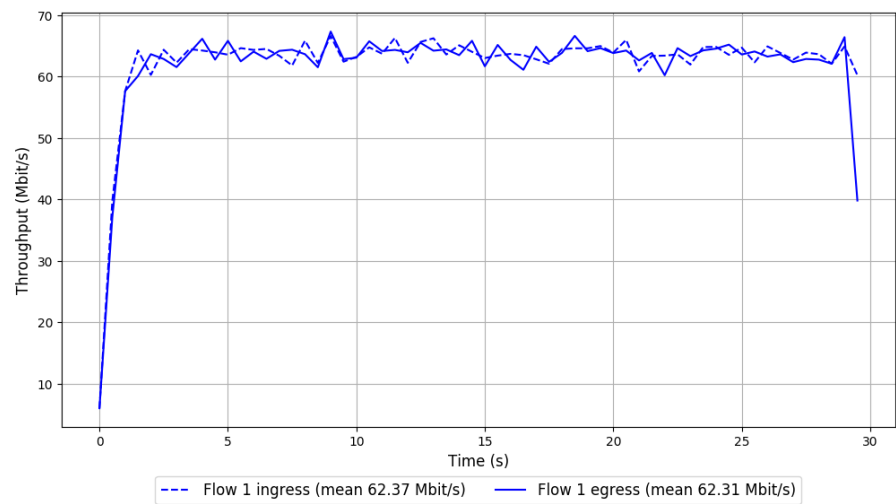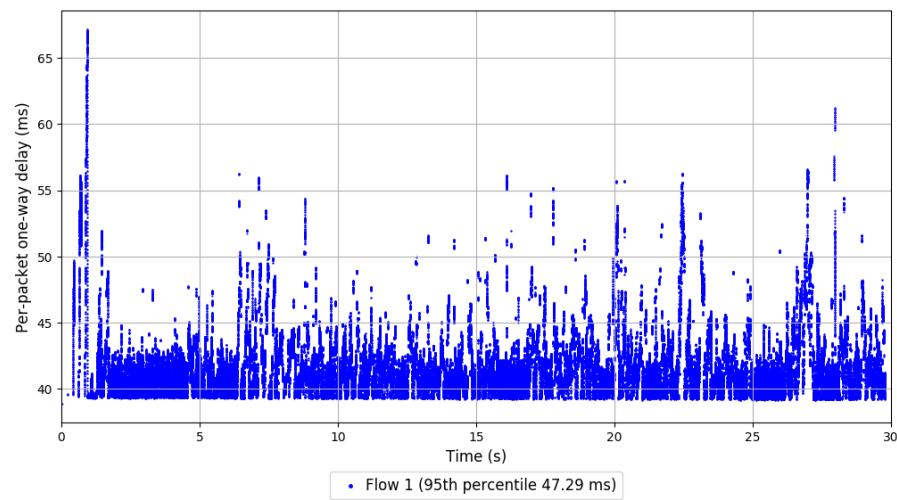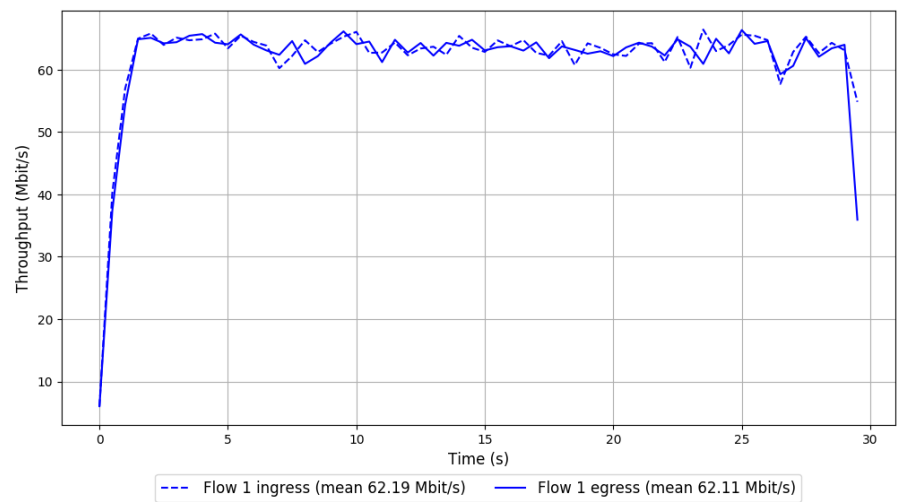
Run 10: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 62.19 Mbit/s) --- Flow 1 egress (mean 62.11 Mbit/s)

Flow 1 (95th percentile 47.29 ms)

```
Run 1: Statistics of TCP Vegas

Start at: 2018-04-17 01:25:01
End at: 2018-04-17 01:25:31
Local clock offset: 17.949 ms
Remote clock offset: 9.992 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.73 Mbit/s
95th percentile per-packet one-way delay: 40.985 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 38.73 Mbit/s
95th percentile per-packet one-way delay: 40.985 ms
Loss rate: 0.66%
```
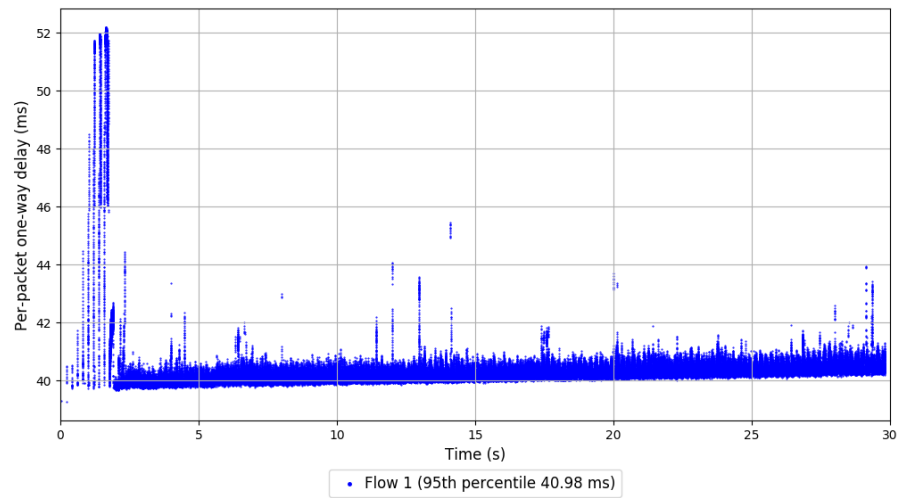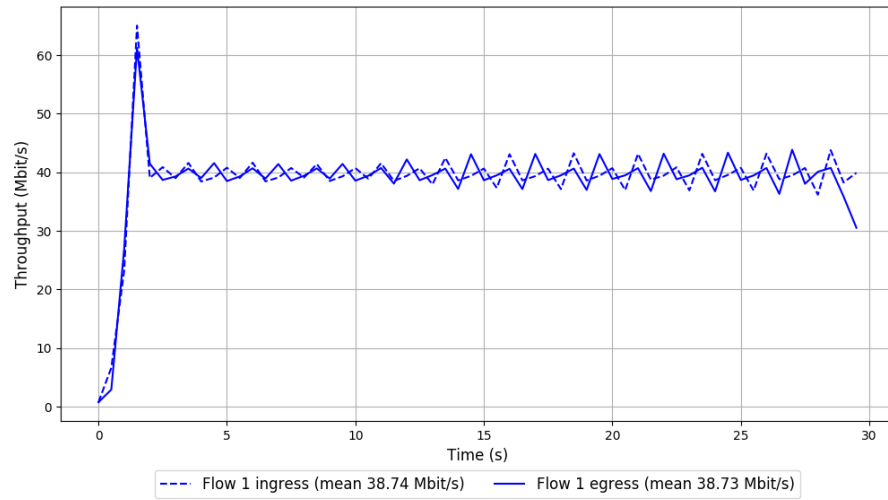
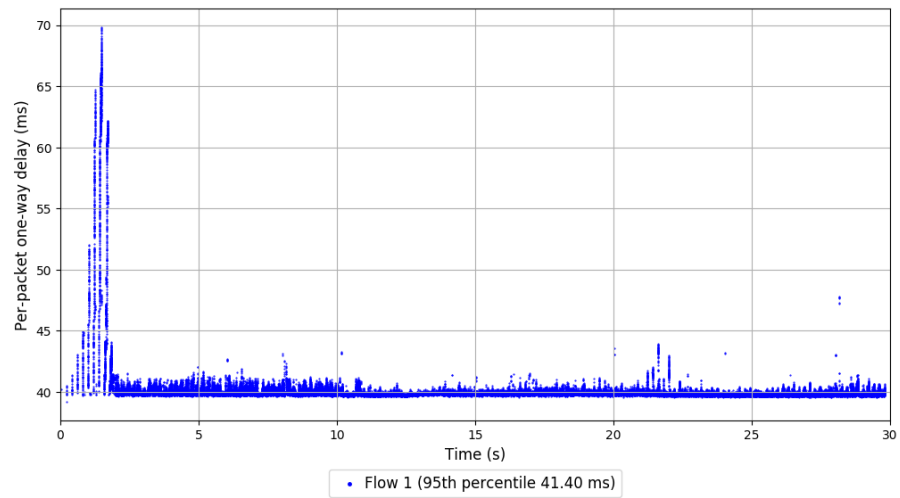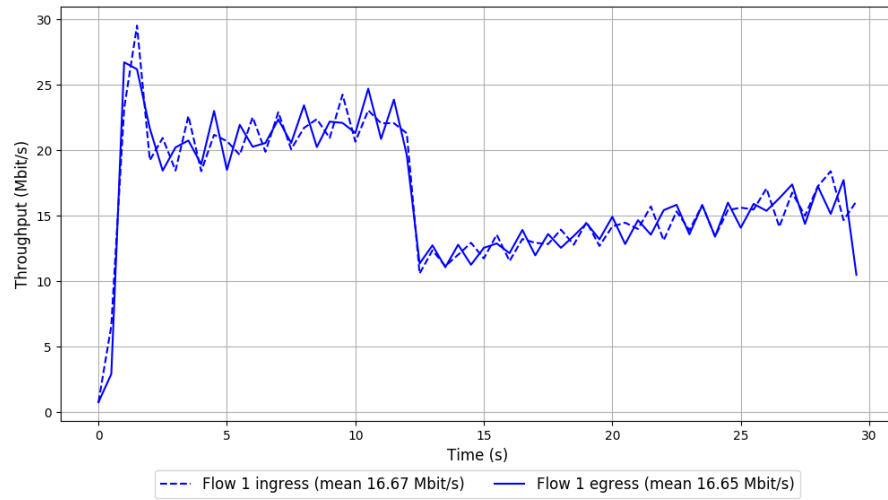Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2018-04-17 01:46:21
End at: 2018-04-17 01:46:51
Local clock offset: 8.341 ms
Remote clock offset: -8.442 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.65 Mbit/s
95th percentile per-packet one-way delay: 41.400 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 16.65 Mbit/s
95th percentile per-packet one-way delay: 41.400 ms
Loss rate: 0.76%
```

Run 2: Report of TCP Vegas — Data Link

```
Run 3: Statistics of TCP Vegas

Start at: 2018-04-17 02:07:29
End at: 2018-04-17 02:08:00
Local clock offset: 7.799 ms
Remote clock offset: 5.38 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.89 Mbit/s
95th percentile per-packet one-way delay: 61.369 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 36.89 Mbit/s
95th percentile per-packet one-way delay: 61.369 ms
Loss rate: 0.45%
```
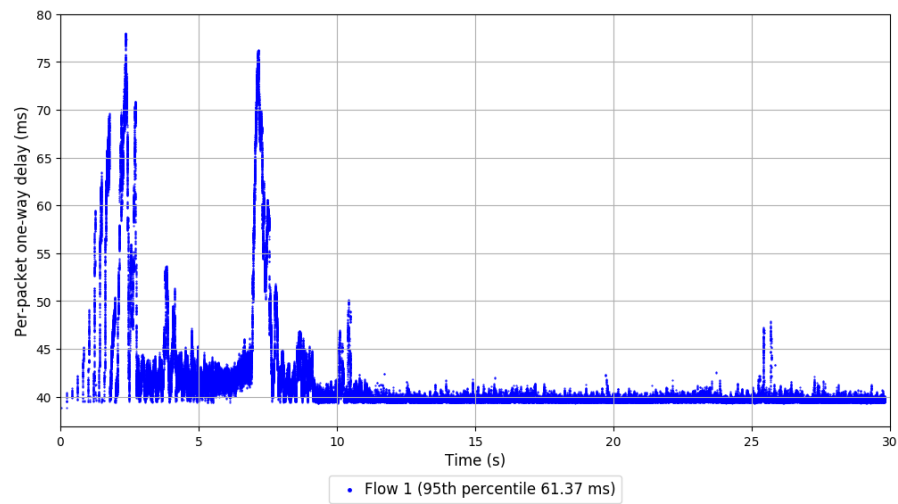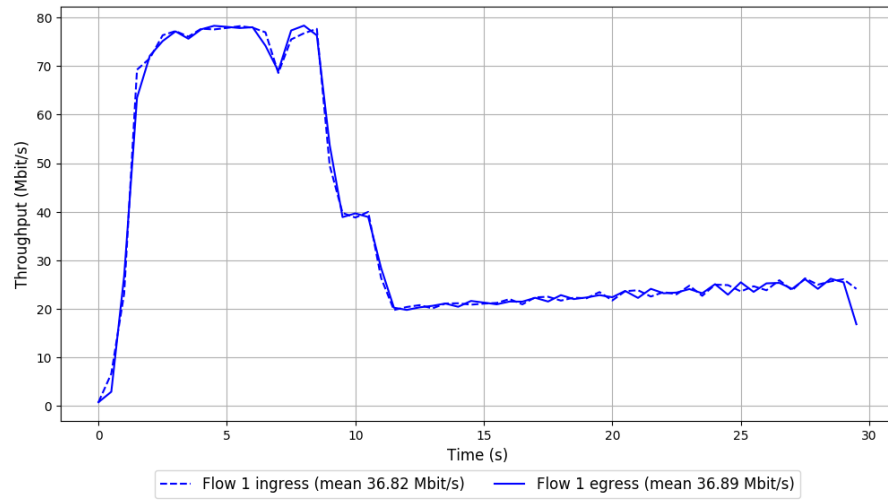
Run 3: Report of TCP Vegas — Data Link

Run 4: Statistics of TCP Vegas

Start at: 2018-04-17 02:28:42
End at: 2018-04-17 02:29:12
Local clock offset: 7.972 ms
Remote clock offset: 0.839 ms

Below is generated by plot.py at 2018-04-17 08:47:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 40.56 Mbit/s
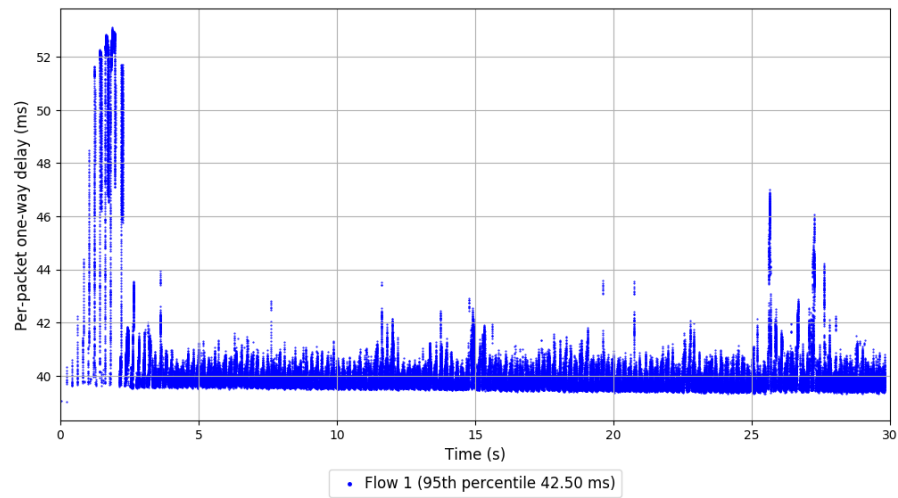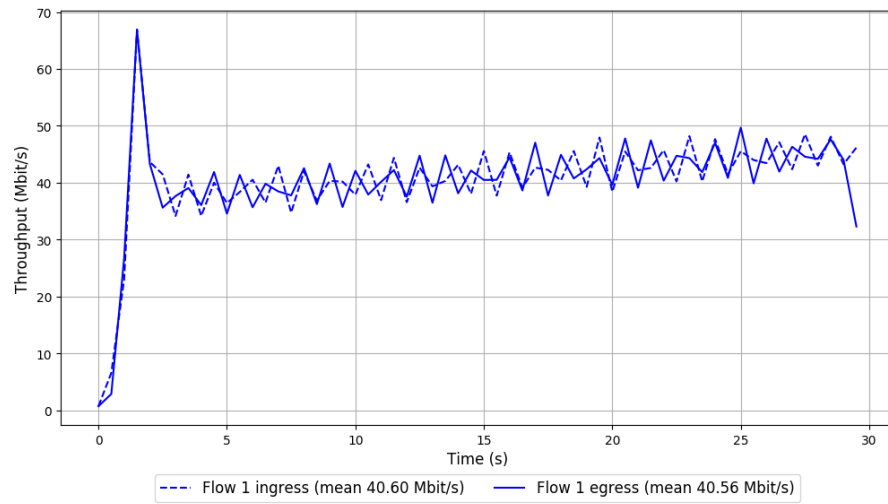95th percentile per-packet one-way delay: 42.499 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 40.56 Mbit/s
95th percentile per-packet one-way delay: 42.499 ms
Loss rate: 0.74%

Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2018-04-17 02:49:59
End at: 2018-04-17 02:50:29
Local clock offset: 4.794 ms
Remote clock offset: -5.173 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.18 Mbit/s
95th percentile per-packet one-way delay: 40.649 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 42.18 Mbit/s
95th percentile per-packet one-way delay: 40.649 ms
Loss rate: 0.73%
```
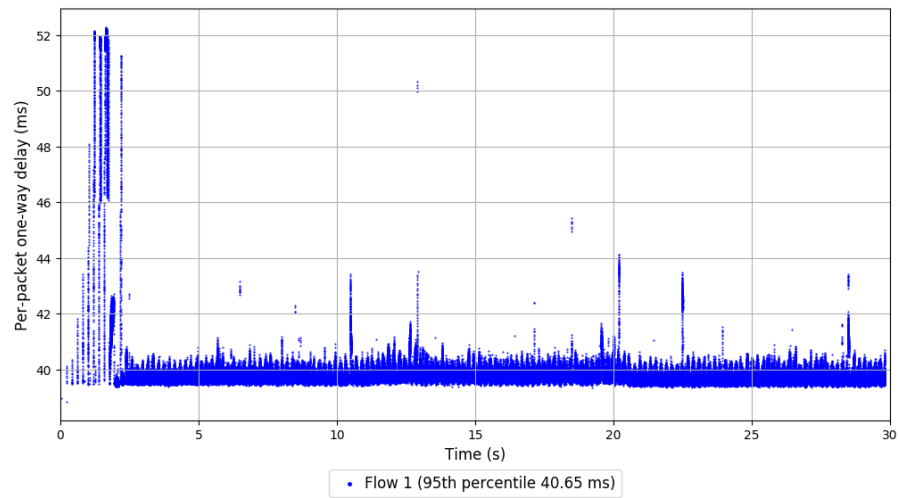
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2018-04-17 03:11:14
End at: 2018-04-17 03:11:44
Local clock offset: 6.441 ms
Remote clock offset: -1.13 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.34 Mbit/s
95th percentile per-packet one-way delay: 45.379 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 41.34 Mbit/s
95th percentile per-packet one-way delay: 45.379 ms
Loss rate: 0.74%
```
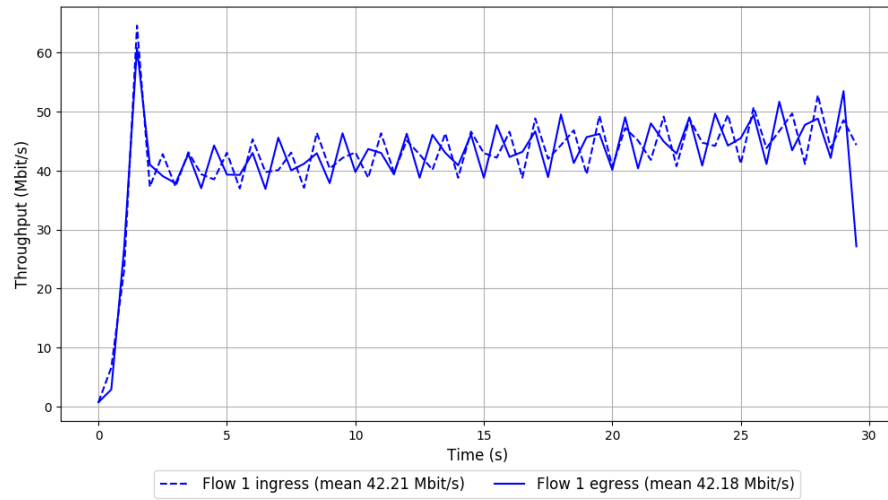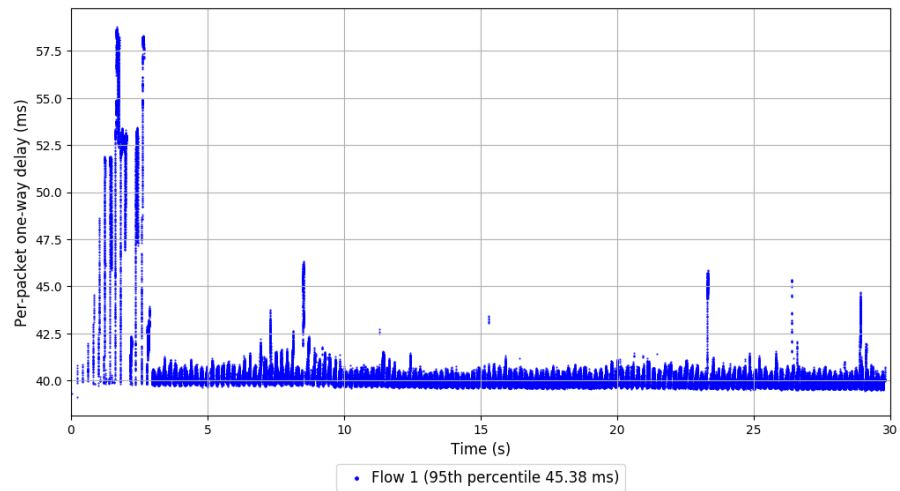
Run 6: Report of TCP Vegas — Data Link

```
Run 7: Statistics of TCP Vegas

Start at: 2018-04-17 03:32:30
End at: 2018-04-17 03:33:00
Local clock offset: 12.303 ms
Remote clock offset: -8.08 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.10 Mbit/s
95th percentile per-packet one-way delay: 55.881 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 37.10 Mbit/s
95th percentile per-packet one-way delay: 55.881 ms
Loss rate: 0.44%
```

Run 7: Report of TCP Vegas — Data Link

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```
Run 8: Statistics of TCP Vegas

Start at: 2018-04-17 03:53:49
End at: 2018-04-17 03:54:19
Local clock offset: 6.523 ms
Remote clock offset: 3.559 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.57 Mbit/s
95th percentile per-packet one-way delay: 44.516 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 37.57 Mbit/s
95th percentile per-packet one-way delay: 44.516 ms
Loss rate: 0.65%
```
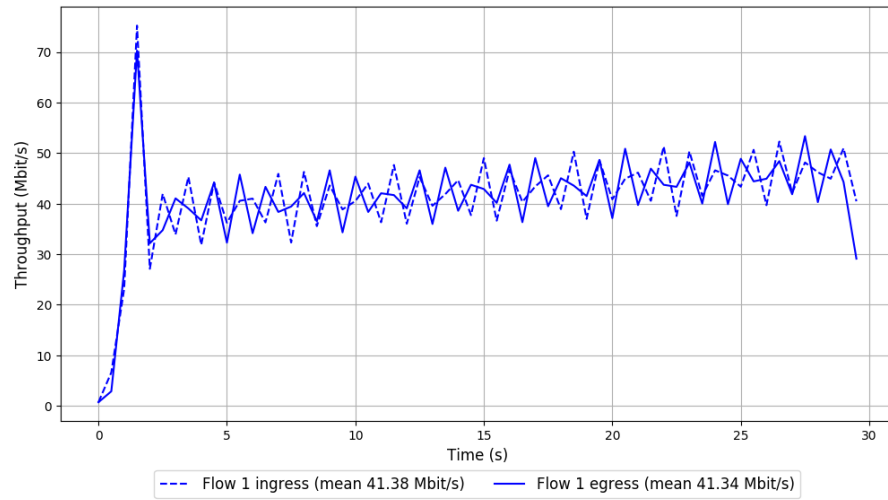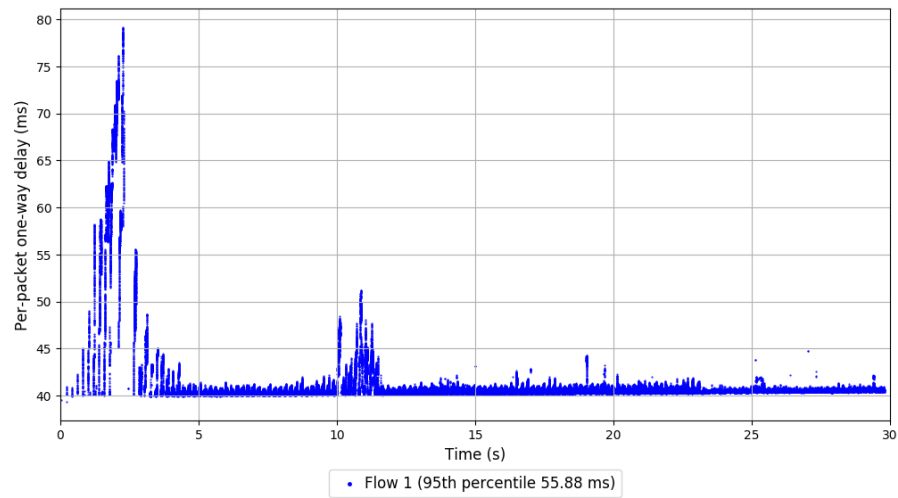
Run 8: Report of TCP Vegas — Data Link

```
Run 9: Statistics of TCP Vegas

Start at: 2018-04-17 04:15:04
End at: 2018-04-17 04:15:34
Local clock offset: 4.008 ms
Remote clock offset: 3.06 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.45 Mbit/s
95th percentile per-packet one-way delay: 48.260 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 39.45 Mbit/s
95th percentile per-packet one-way delay: 48.260 ms
Loss rate: 0.71%
```
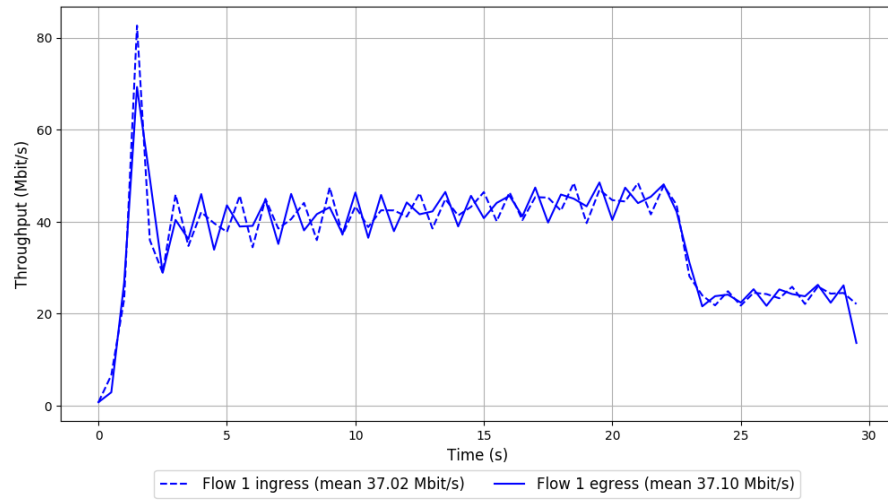
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 39.47 Mbit/s) —— Flow 1 egress (mean 39.45 Mbit/s)

• Flow 1 (95th percentile 48.26 ms)

```
Run 10: Statistics of TCP Vegas

Start at: 2018-04-17 04:36:23
End at: 2018-04-17 04:36:53
Local clock offset: 11.508 ms
Remote clock offset: 2.921 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 45.169 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 45.169 ms
Loss rate: 0.67%
```
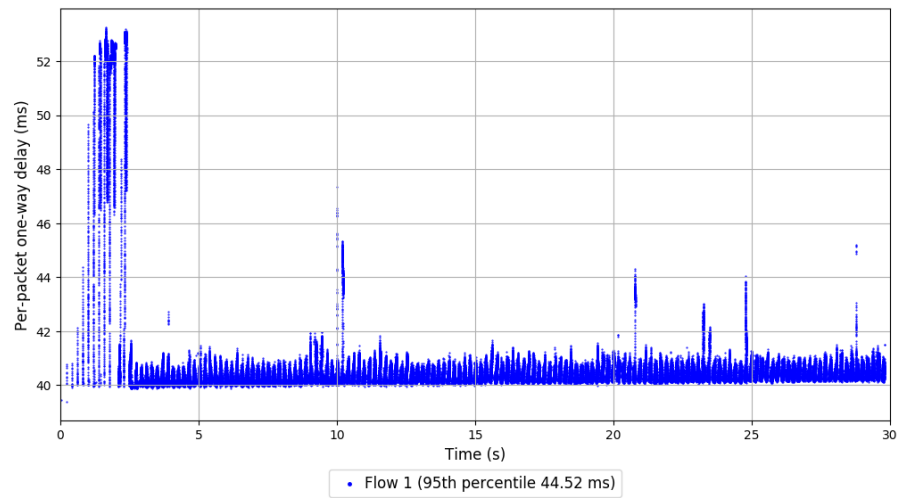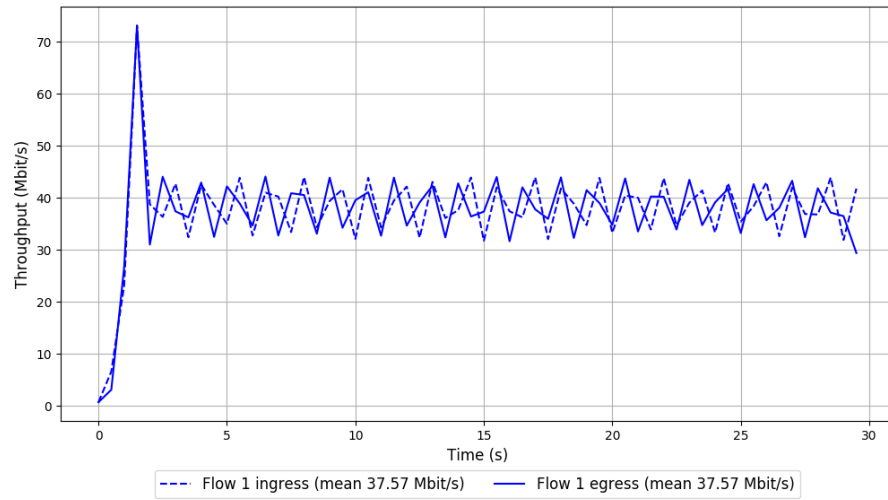
Run 10: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 38.34 Mbit/s) --- Flow 1 egress (mean 38.33 Mbit/s)

Flow 1 (95th percentile 45.17 ms)

```
Run 1: Statistics of Verus

Start at: 2018-04-17 01:36:16
End at: 2018-04-17 01:36:46
Local clock offset: 10.158 ms
Remote clock offset: -6.377 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.74 Mbit/s
95th percentile per-packet one-way delay: 70.684 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 45.74 Mbit/s
95th percentile per-packet one-way delay: 70.684 ms
Loss rate: 1.16%
```
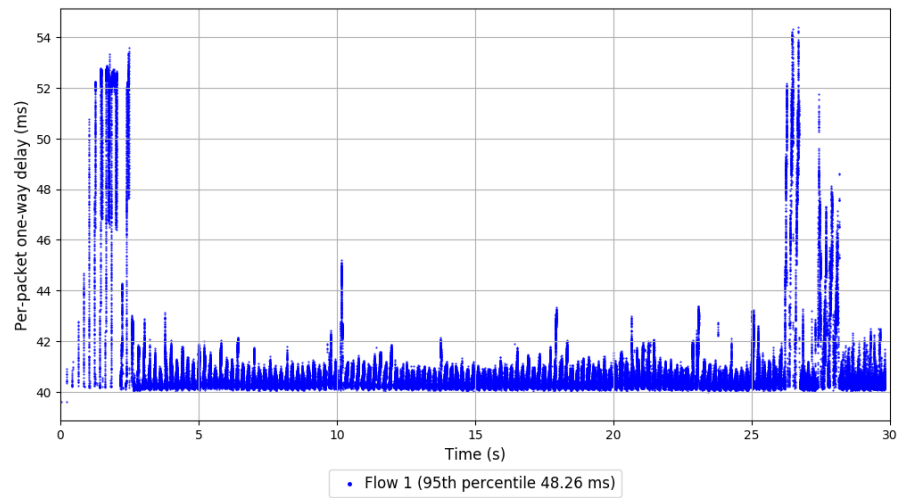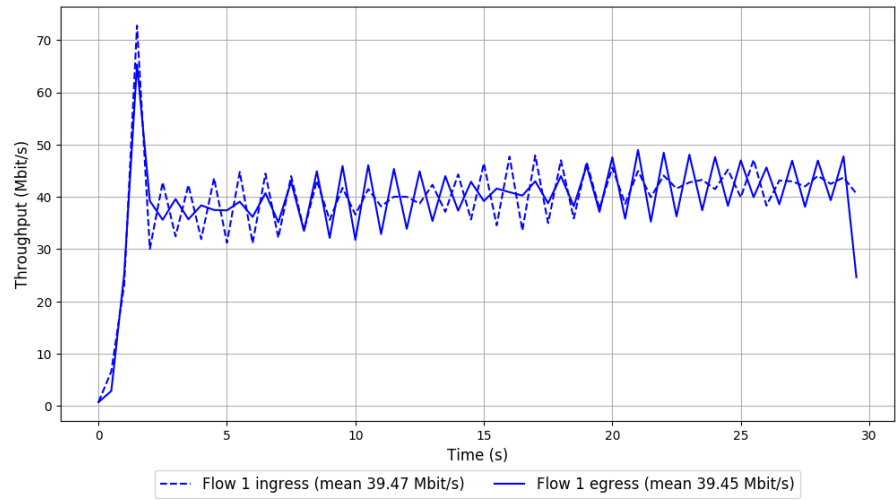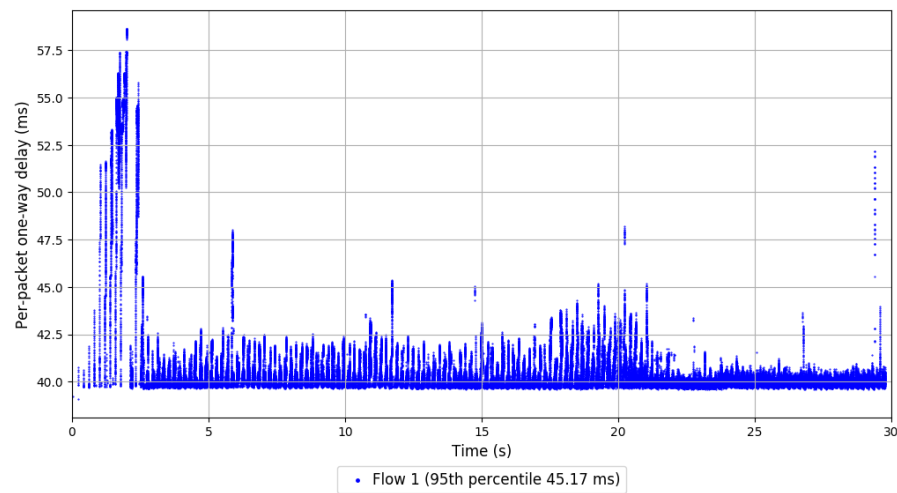
Run 1: Report of Verus — Data Link

```
Run 2: Statistics of Verus

Start at: 2018-04-17 01:57:30
End at: 2018-04-17 01:58:00
Local clock offset: 8.056 ms
Remote clock offset: 4.123 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.75 Mbit/s
95th percentile per-packet one-way delay: 87.076 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 37.75 Mbit/s
95th percentile per-packet one-way delay: 87.076 ms
Loss rate: 0.59%
```
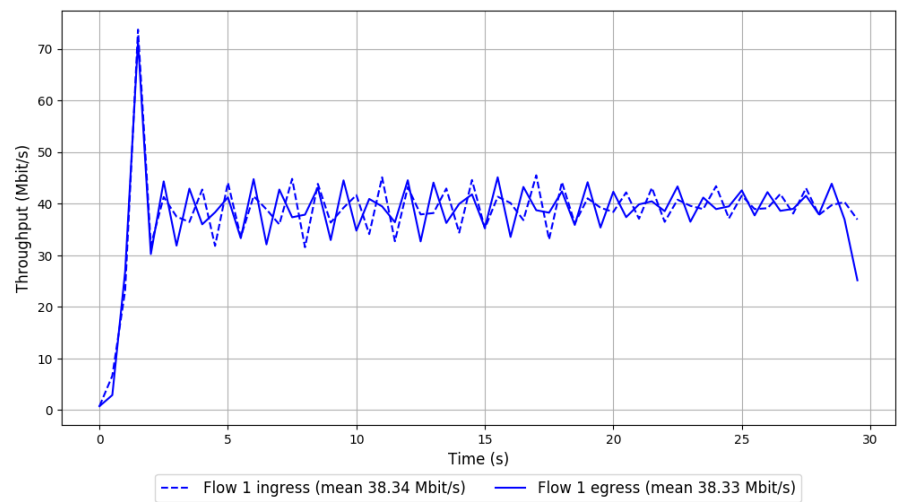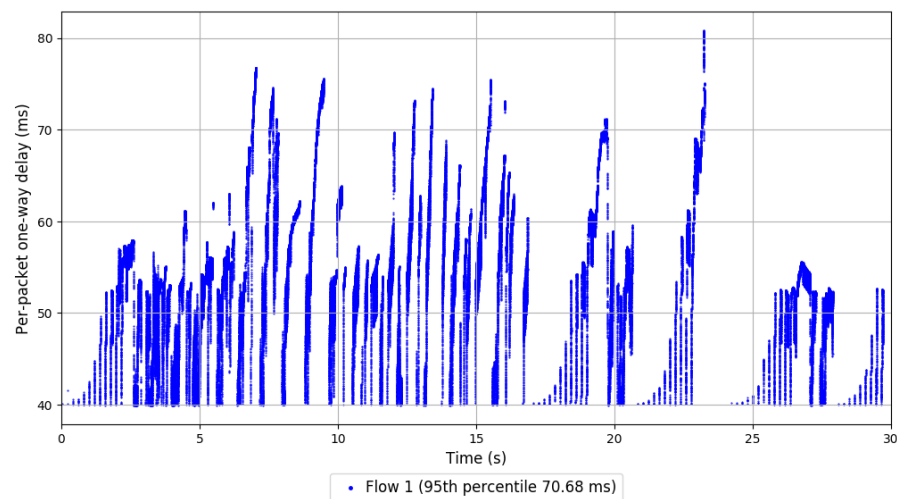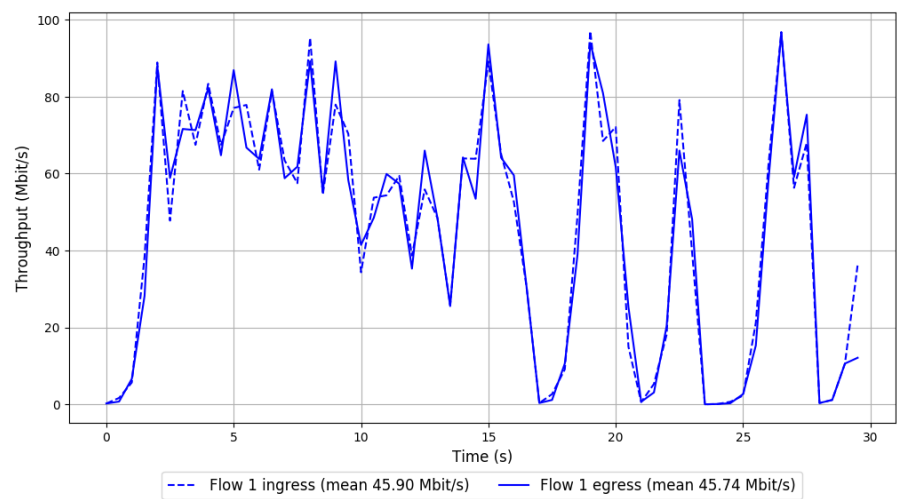
Run 2: Report of Verus — Data Link

Flow 1 ingress (mean 37.73 Mbit/s)   Flow 1 egress (mean 37.75 Mbit/s)

Flow 1 (95th percentile 87.08 ms)

```
Run 3: Statistics of Verus

Start at: 2018-04-17 02:18:40
End at: 2018-04-17 02:19:10
Local clock offset: 8.018 ms
Remote clock offset: 5.052 ms


# Below is generated by plot.py at 2018-04-17 08:47:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.03 Mbit/s
95th percentile per-packet one-way delay: 88.973 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 37.03 Mbit/s
95th percentile per-packet one-way delay: 88.973 ms
Loss rate: 0.65%
```
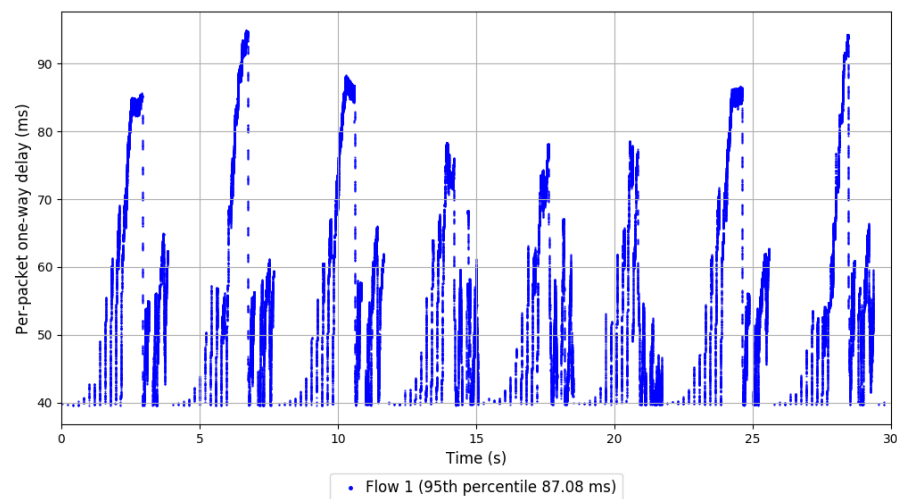
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2018-04-17 02:39:55
End at: 2018-04-17 02:40:25
Local clock offset: 6.431 ms
Remote clock offset: -3.076 ms


# Below is generated by plot.py at 2018-04-17 08:47:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.49 Mbit/s
95th percentile per-packet one-way delay: 70.517 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 44.49 Mbit/s
95th percentile per-packet one-way delay: 70.517 ms
Loss rate: 1.84%
```
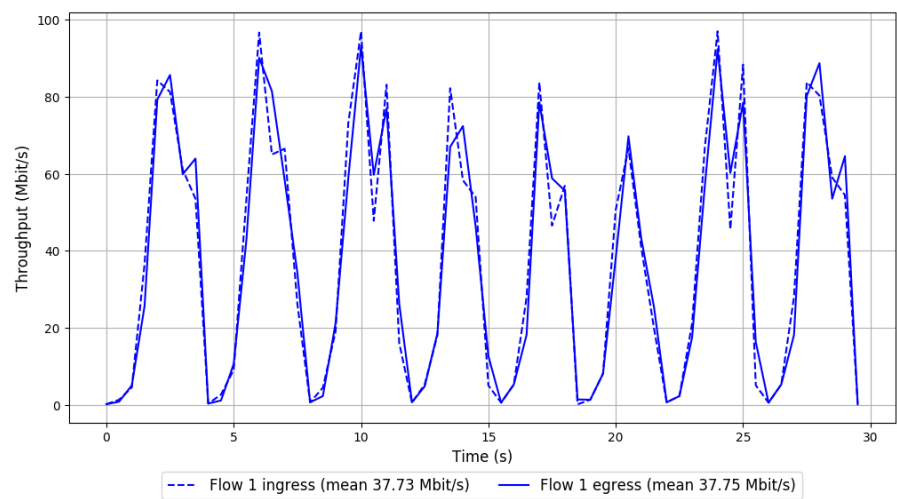
Run 4: Report of Verus — Data Link

Flow 1 ingress (mean 44.86 Mbit/s)   Flow 1 egress (mean 44.49 Mbit/s)

Flow 1 (95th percentile 70.52 ms)

```
Run 5: Statistics of Verus

Start at: 2018-04-17 03:01:07
End at: 2018-04-17 03:01:37
Local clock offset: 4.027 ms
Remote clock offset: -3.791 ms


# Below is generated by plot.py at 2018-04-17 08:47:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.06 Mbit/s
95th percentile per-packet one-way delay: 69.052 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 41.06 Mbit/s
95th percentile per-packet one-way delay: 69.052 ms
Loss rate: 2.30%
```
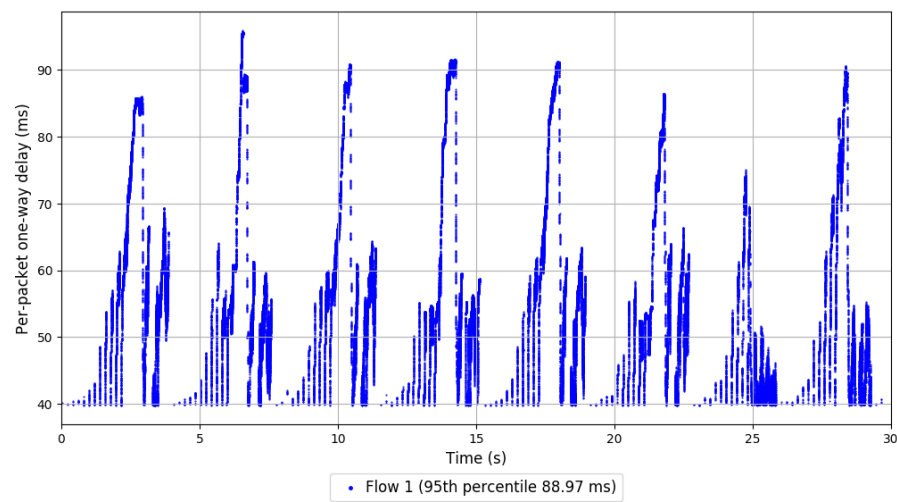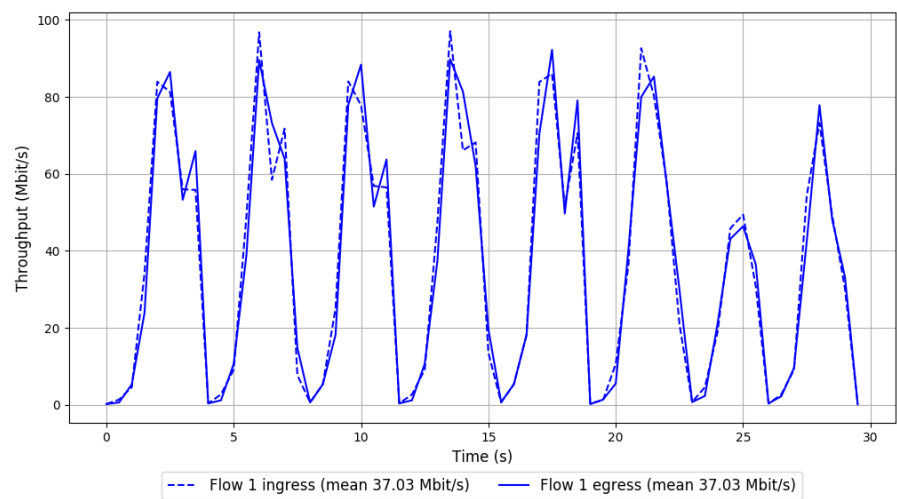
Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 41.46 Mbit/s) —— Flow 1 egress (mean 41.06 Mbit/s)

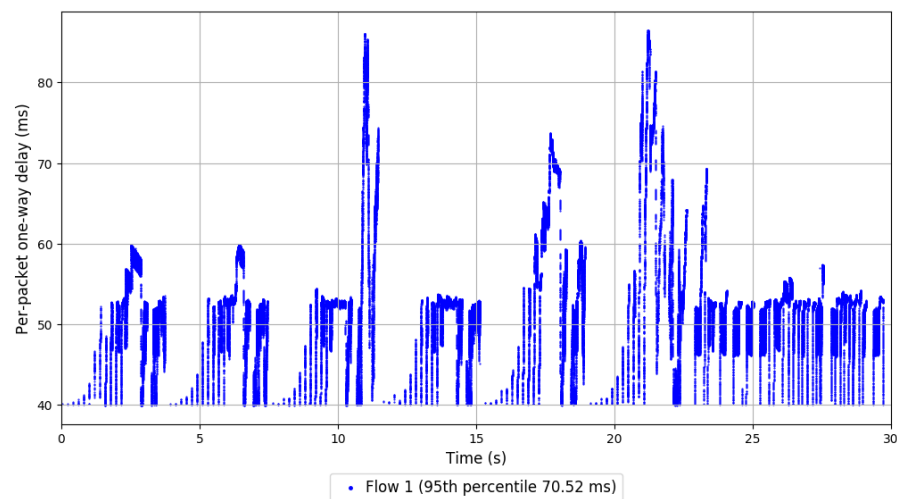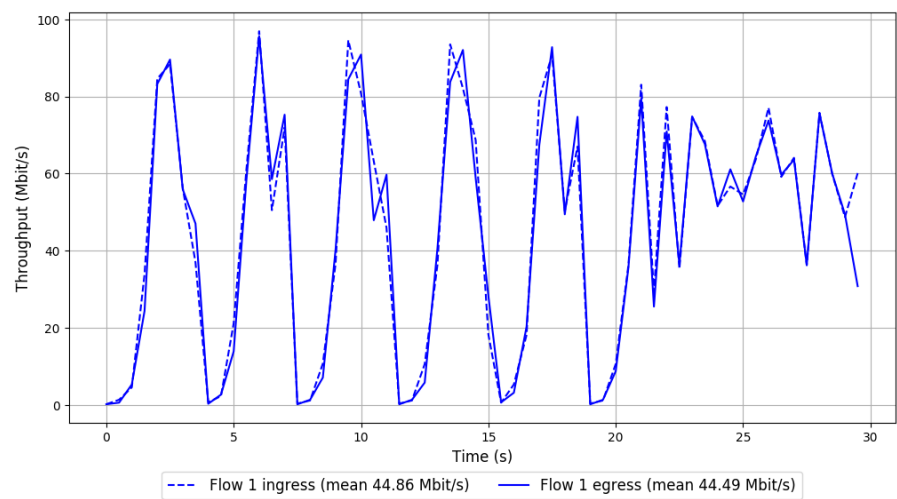• Flow 1 (95th percentile 69.05 ms)

```
Run 6: Statistics of Verus

Start at: 2018-04-17 03:22:27
End at: 2018-04-17 03:22:57
Local clock offset: 10.632 ms
Remote clock offset: -10.439 ms


# Below is generated by plot.py at 2018-04-17 08:47:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.80 Mbit/s
95th percentile per-packet one-way delay: 84.616 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 38.80 Mbit/s
95th percentile per-packet one-way delay: 84.616 ms
Loss rate: 0.60%
```

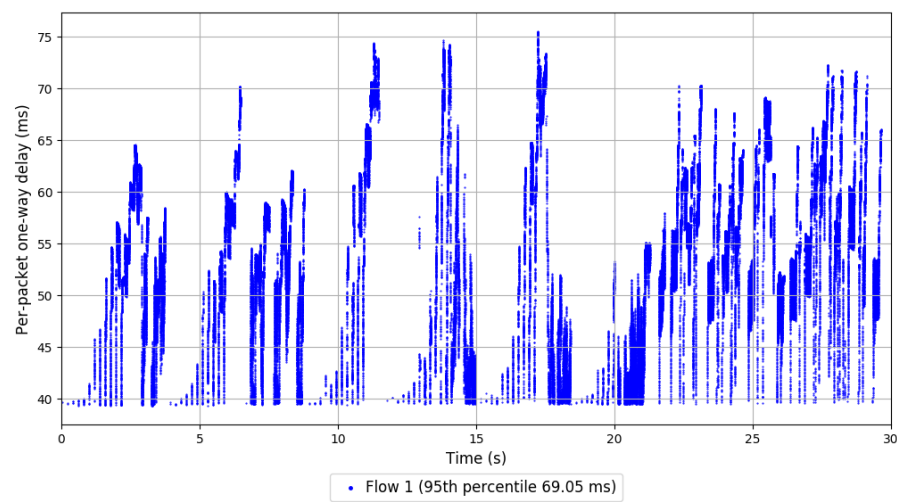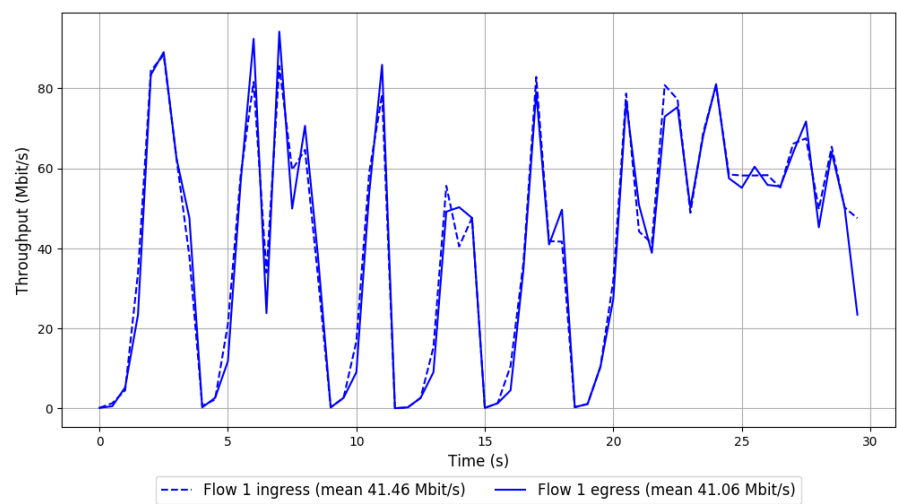Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2018-04-17 03:43:44
End at: 2018-04-17 03:44:14
Local clock offset: 11.953 ms
Remote clock offset: 0.239 ms


# Below is generated by plot.py at 2018-04-17 08:47:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.68 Mbit/s
95th percentile per-packet one-way delay: 57.668 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.68 Mbit/s
95th percentile per-packet one-way delay: 57.668 ms
Loss rate: 0.00%
```
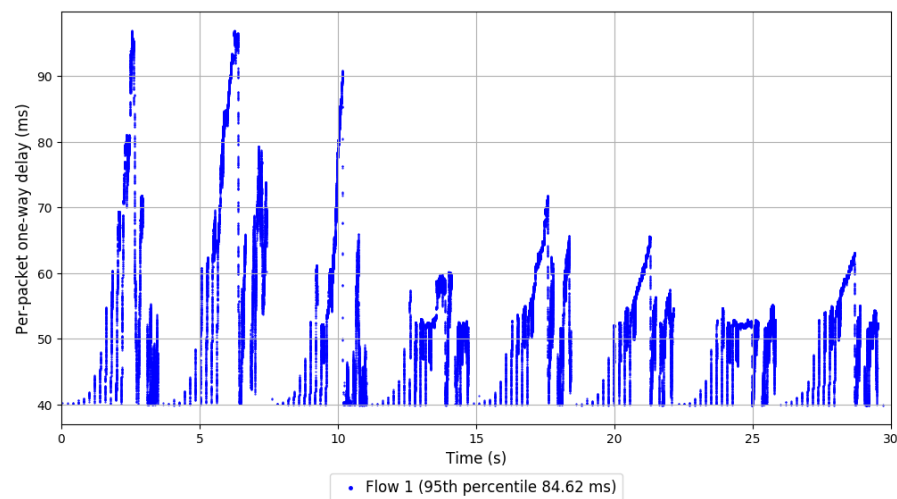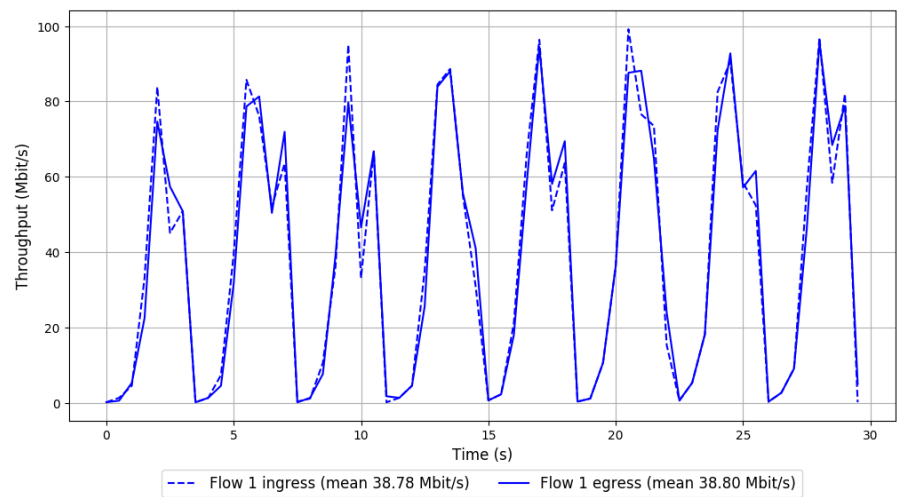
Run 7: Report of Verus — Data Link

Flow 1 ingress (mean 41.41 Mbit/s)   Flow 1 egress (mean 41.68 Mbit/s)

• Flow 1 (95th percentile 57.67 ms)

```
Run 8: Statistics of Verus

Start at: 2018-04-17 04:05:01
End at: 2018-04-17 04:05:31
Local clock offset: 4.709 ms
Remote clock offset: 5.739 ms


# Below is generated by plot.py at 2018-04-17 08:47:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 69.015 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 69.015 ms
Loss rate: 1.57%
```

Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 41.32 Mbit/s) ----   Flow 1 egress (mean 40.94 Mbit/s) ——

• Flow 1 (95th percentile 69.02 ms)

```
Run 9: Statistics of Verus

Start at: 2018-04-17 04:26:16
End at: 2018-04-17 04:26:46
Local clock offset: 9.016 ms
Remote clock offset: 2.597 ms


# Below is generated by plot.py at 2018-04-17 08:47:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.75 Mbit/s
95th percentile per-packet one-way delay: 70.626 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 43.75 Mbit/s
95th percentile per-packet one-way delay: 70.626 ms
Loss rate: 0.21%
```
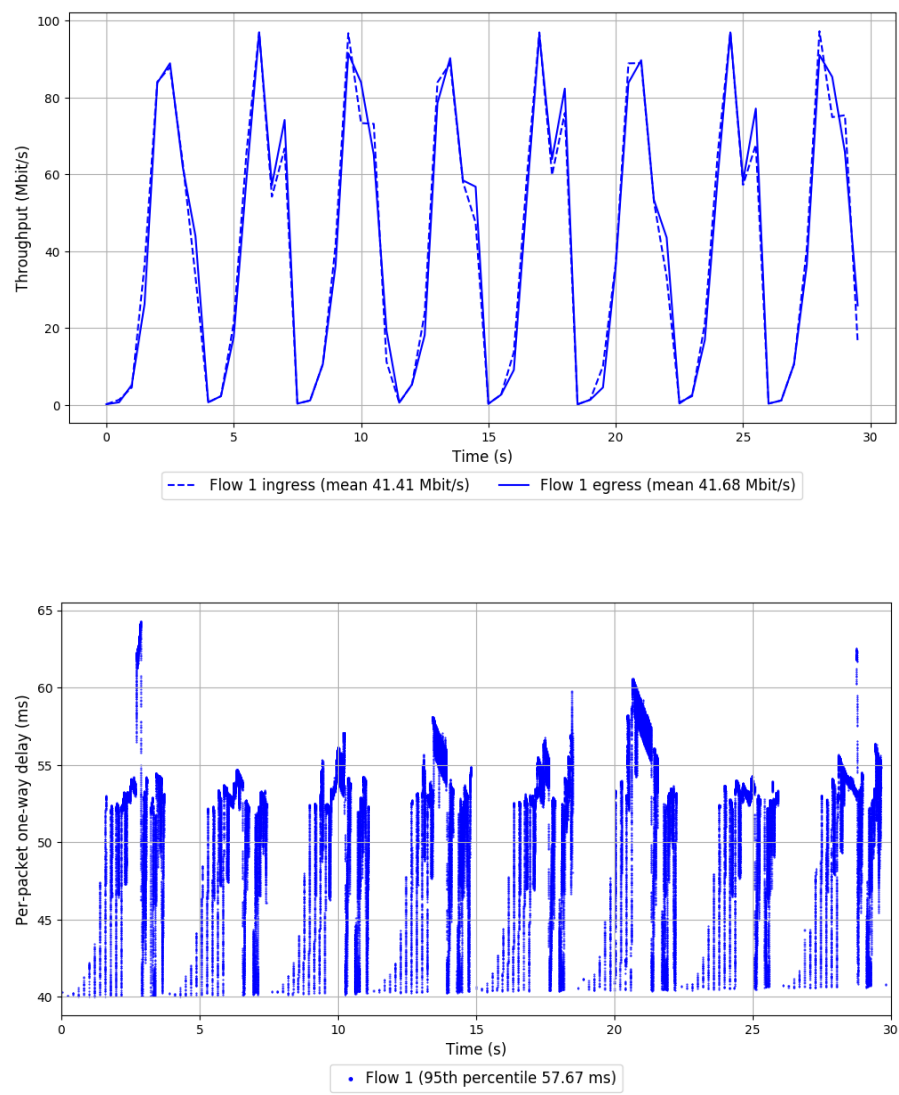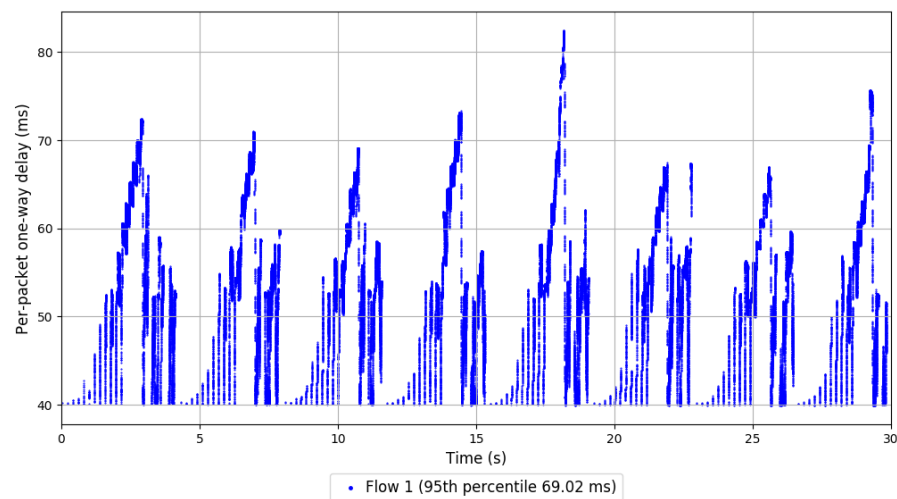
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2018-04-17 04:47:34
End at: 2018-04-17 04:48:04
Local clock offset: 13.08 ms
Remote clock offset: -12.666 ms


# Below is generated by plot.py at 2018-04-17 08:47:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.46 Mbit/s
95th percentile per-packet one-way delay: 69.497 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 43.46 Mbit/s
95th percentile per-packet one-way delay: 69.497 ms
Loss rate: 0.80%
```
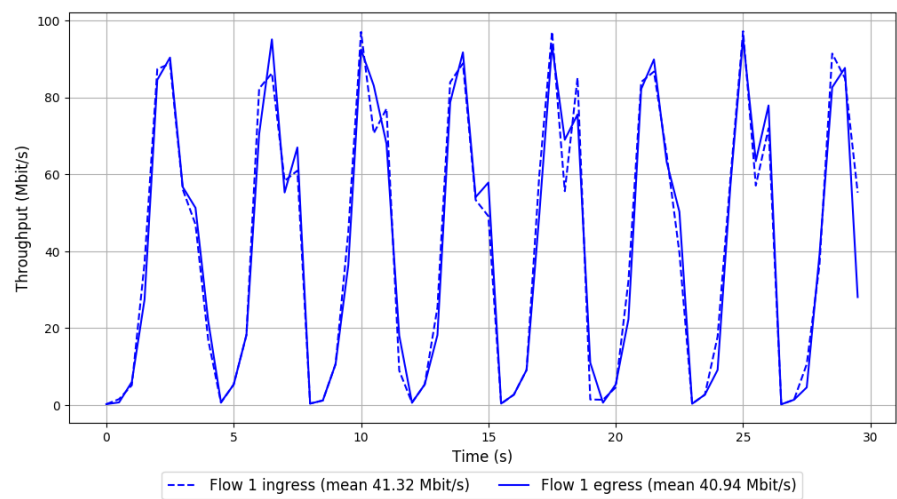
Run 10: Report of Verus — Data Link

```
Run 1: Statistics of Copa

Start at: 2018-04-17 01:33:41
End at: 2018-04-17 01:34:11
Local clock offset: 11.212 ms
Remote clock offset: -5.771 ms


# Below is generated by plot.py at 2018-04-17 08:48:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.15 Mbit/s
95th percentile per-packet one-way delay: 41.699 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 56.15 Mbit/s
95th percentile per-packet one-way delay: 41.699 ms
Loss rate: 0.70%
```
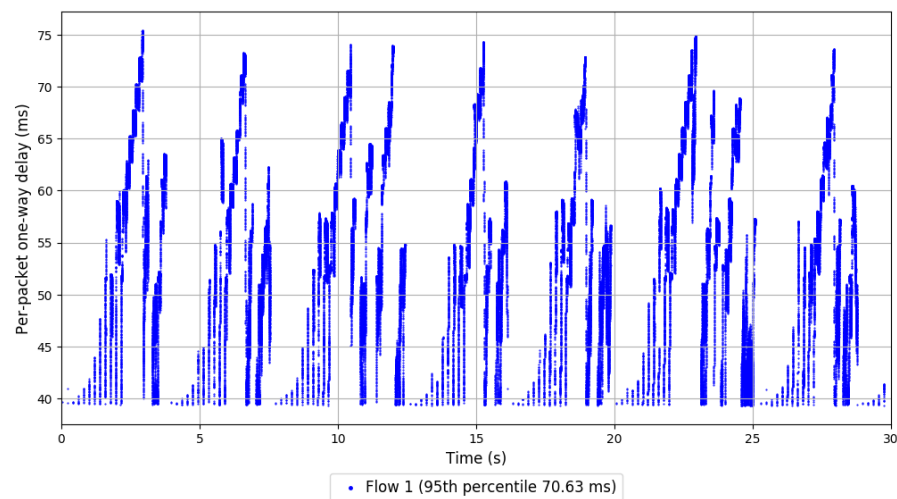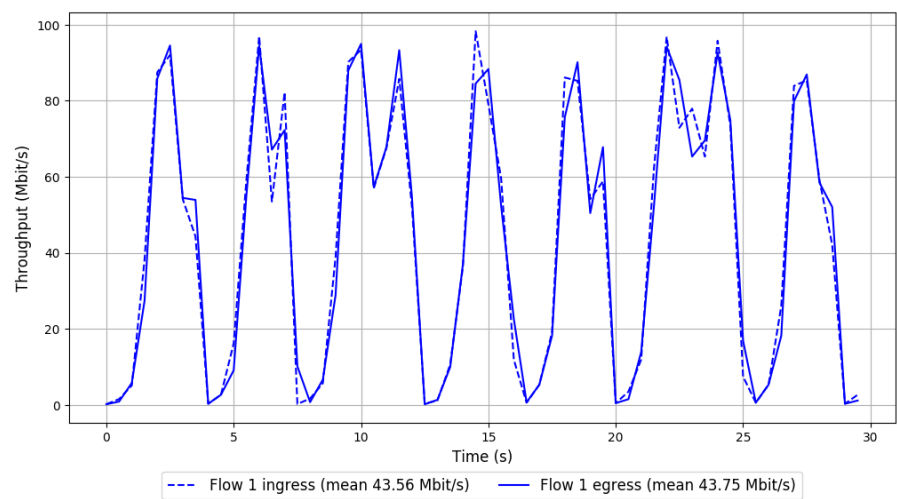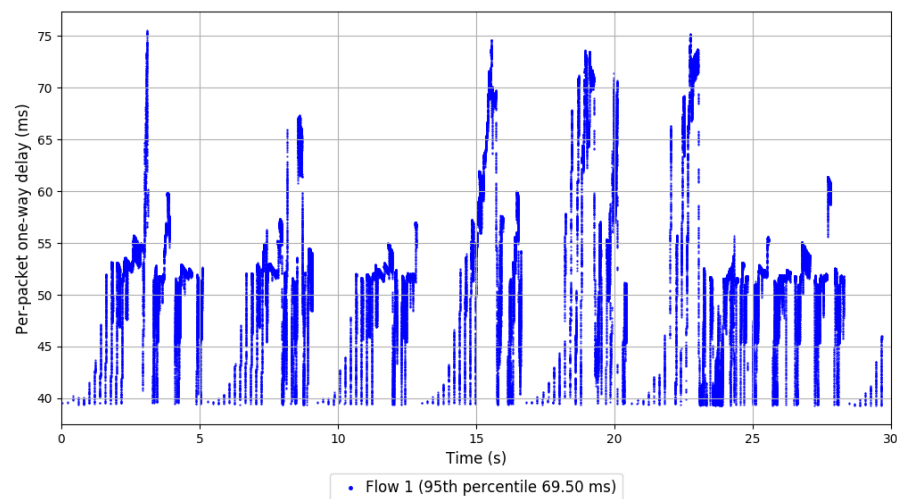
Run 1: Report of Copa — Data Link

```
Run 2: Statistics of Copa

Start at: 2018-04-17 01:54:57
End at: 2018-04-17 01:55:27
Local clock offset: 7.999 ms
Remote clock offset: 3.384 ms


# Below is generated by plot.py at 2018-04-17 08:48:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.67 Mbit/s
95th percentile per-packet one-way delay: 42.765 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 35.67 Mbit/s
95th percentile per-packet one-way delay: 42.765 ms
Loss rate: 0.70%
```
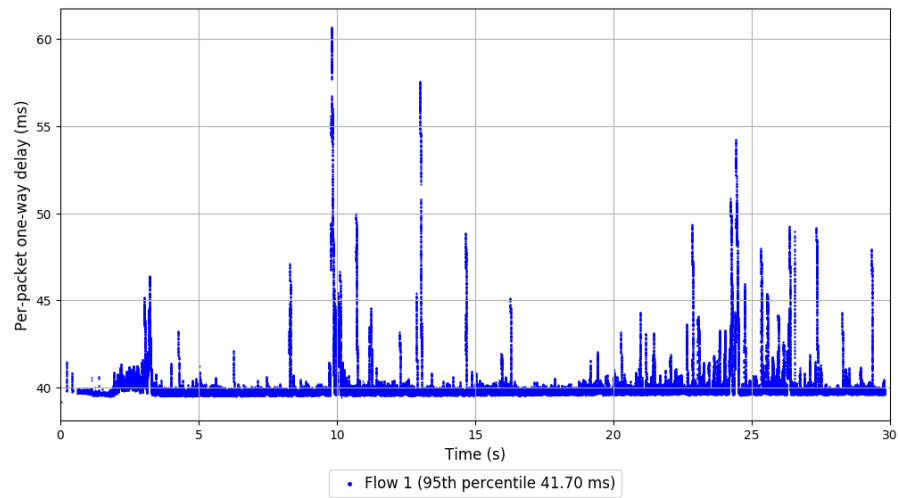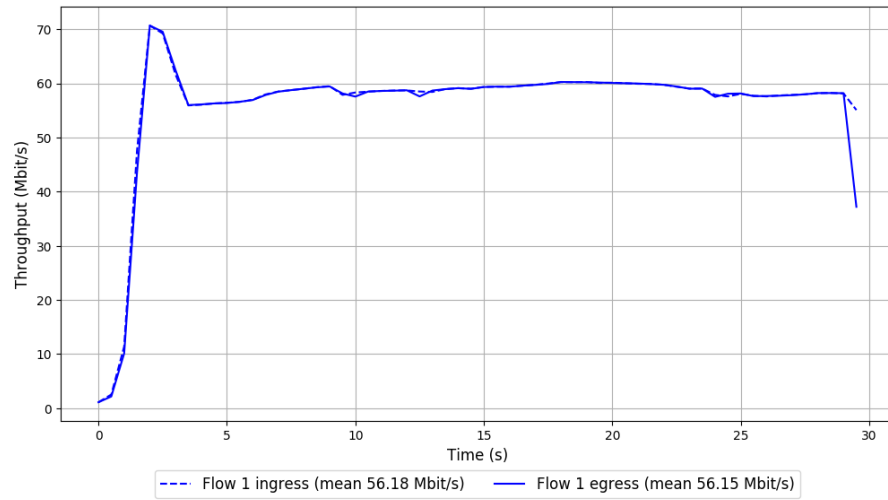
Run 2: Report of Copa — Data Link

Flow 1 ingress (mean 35.69 Mbit/s) — — — — Flow 1 egress (mean 35.67 Mbit/s)

Flow 1 (95th percentile 42.77 ms)

```
Run 3: Statistics of Copa

Start at: 2018-04-17 02:16:07
End at: 2018-04-17 02:16:37
Local clock offset: 8.067 ms
Remote clock offset: 5.219 ms


# Below is generated by plot.py at 2018-04-17 08:48:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.43 Mbit/s
95th percentile per-packet one-way delay: 40.644 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 36.43 Mbit/s
95th percentile per-packet one-way delay: 40.644 ms
Loss rate: 0.71%
```

Run 3: Report of Copa — Data Link

Flow 1 ingress (mean 36.46 Mbit/s) --- Flow 1 egress (mean 36.43 Mbit/s)

• Flow 1 (95th percentile 40.64 ms)

```
Run 4: Statistics of Copa

Start at: 2018-04-17 02:37:20
End at: 2018-04-17 02:37:50
Local clock offset: 7.023 ms
Remote clock offset: -2.464 ms


# Below is generated by plot.py at 2018-04-17 08:48:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.18 Mbit/s
95th percentile per-packet one-way delay: 42.517 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 48.18 Mbit/s
95th percentile per-packet one-way delay: 42.517 ms
Loss rate: 0.70%
```
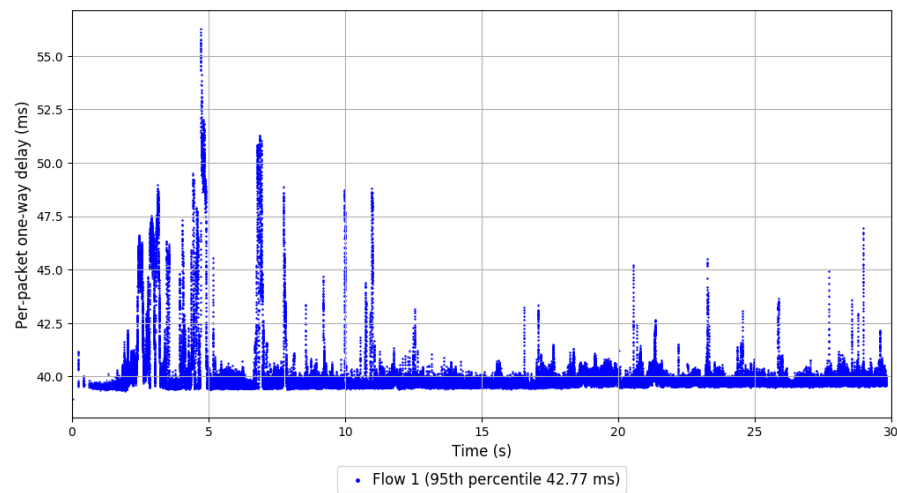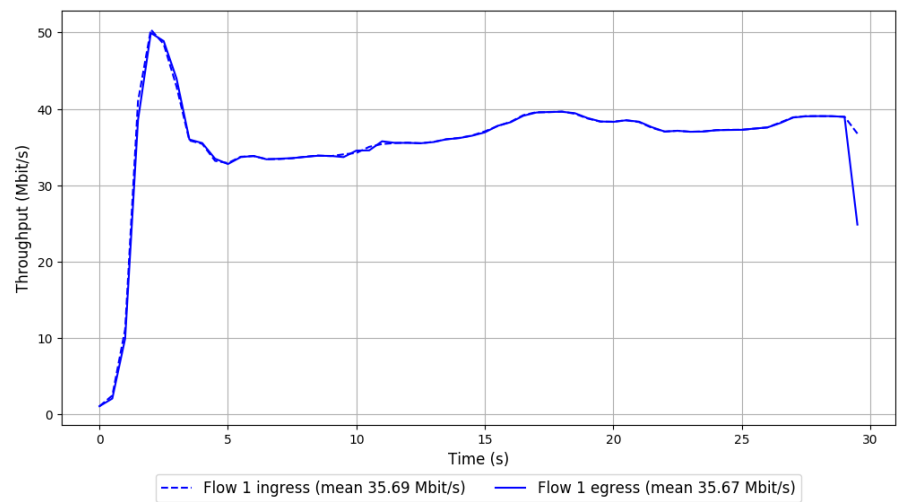
Run 4: Report of Copa — Data Link

```
Run 5: Statistics of Copa

Start at: 2018-04-17 02:58:35
End at: 2018-04-17 02:59:05
Local clock offset: 4.443 ms
Remote clock offset: -5.118 ms


# Below is generated by plot.py at 2018-04-17 08:48:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.19 Mbit/s
95th percentile per-packet one-way delay: 41.545 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 19.19 Mbit/s
95th percentile per-packet one-way delay: 41.545 ms
Loss rate: 0.79%
```
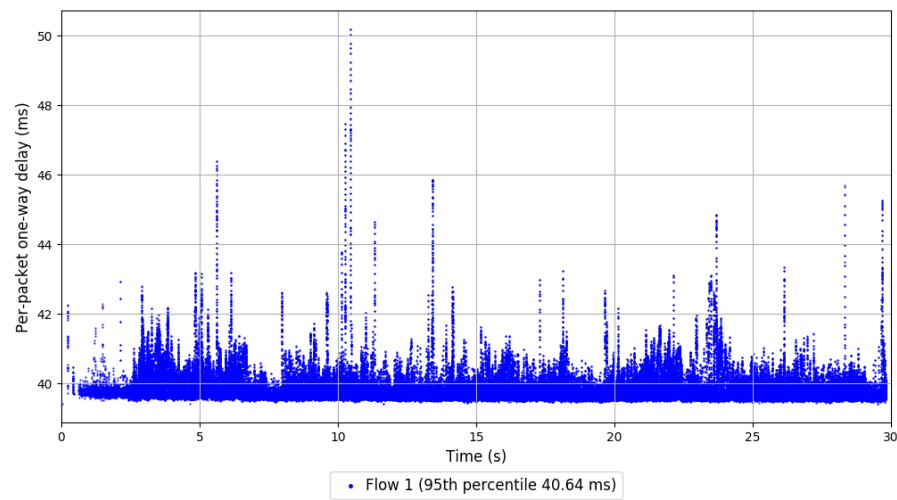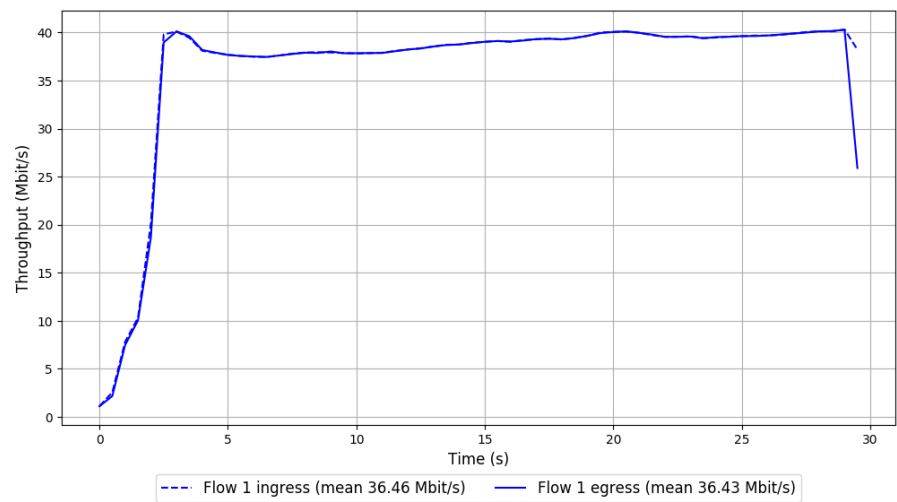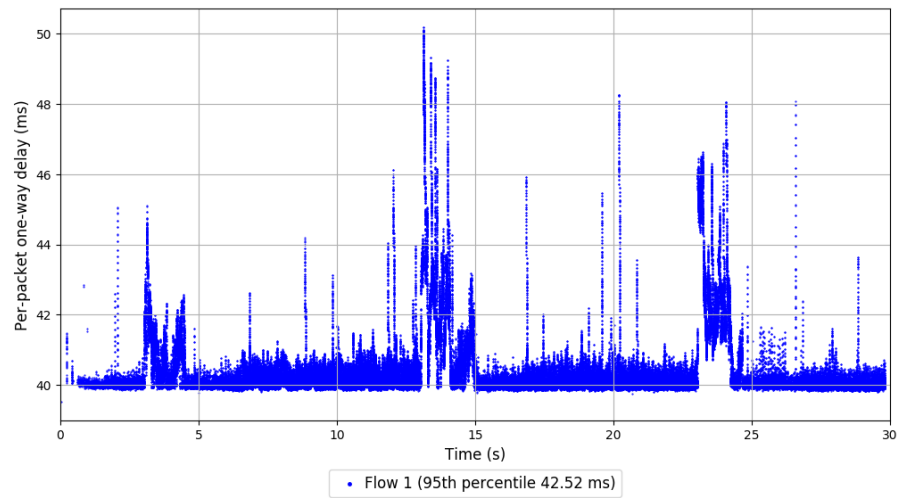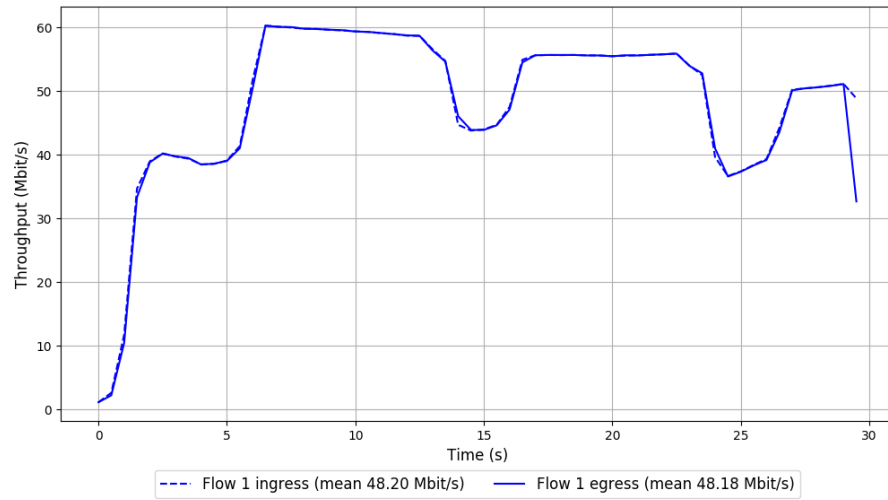
Run 5: Report of Copa — Data Link

```
Run 6: Statistics of Copa

Start at: 2018-04-17 03:19:53
End at: 2018-04-17 03:20:23
Local clock offset: 9.82 ms
Remote clock offset: -10.516 ms


# Below is generated by plot.py at 2018-04-17 08:49:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.99 Mbit/s
95th percentile per-packet one-way delay: 46.118 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 44.99 Mbit/s
95th percentile per-packet one-way delay: 46.118 ms
Loss rate: 0.48%
```
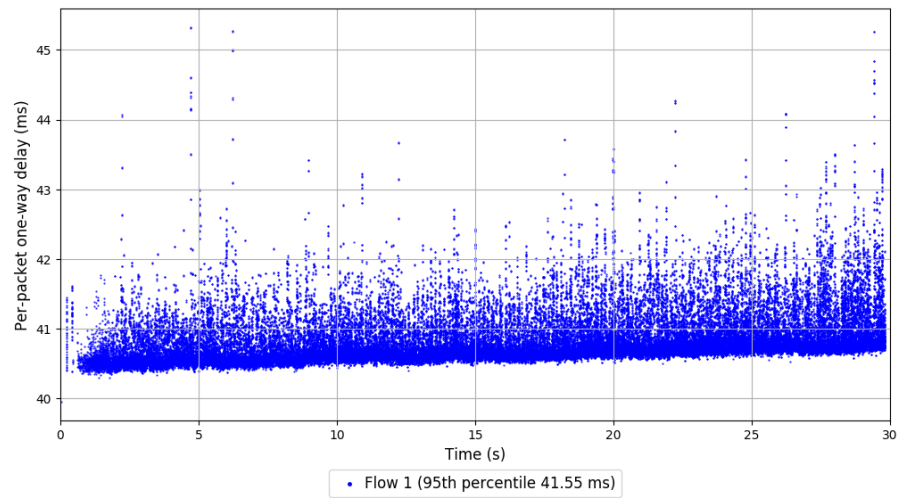
Run 6: Report of Copa — Data Link

Flow 1 ingress (mean 44.92 Mbit/s)   —— Flow 1 egress (mean 44.99 Mbit/s)

• Flow 1 (95th percentile 46.12 ms)

```
Run 7: Statistics of Copa

Start at: 2018-04-17 03:41:09
End at: 2018-04-17 03:41:39
Local clock offset: 13.51 ms
Remote clock offset: -1.055 ms


# Below is generated by plot.py at 2018-04-17 08:49:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.03 Mbit/s
95th percentile per-packet one-way delay: 42.789 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 58.03 Mbit/s
95th percentile per-packet one-way delay: 42.789 ms
Loss rate: 0.69%
```

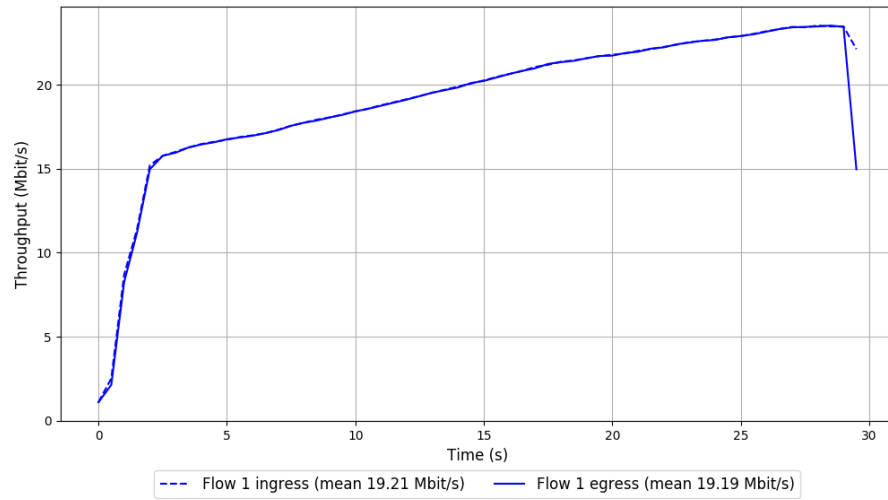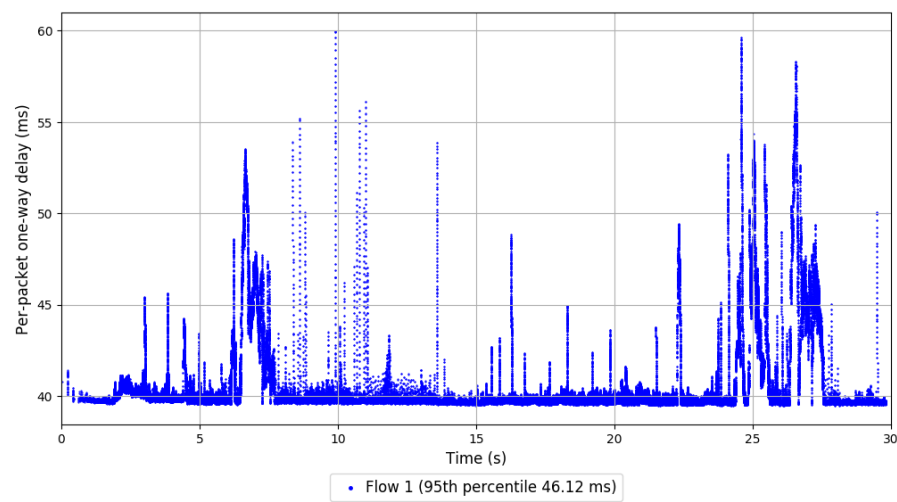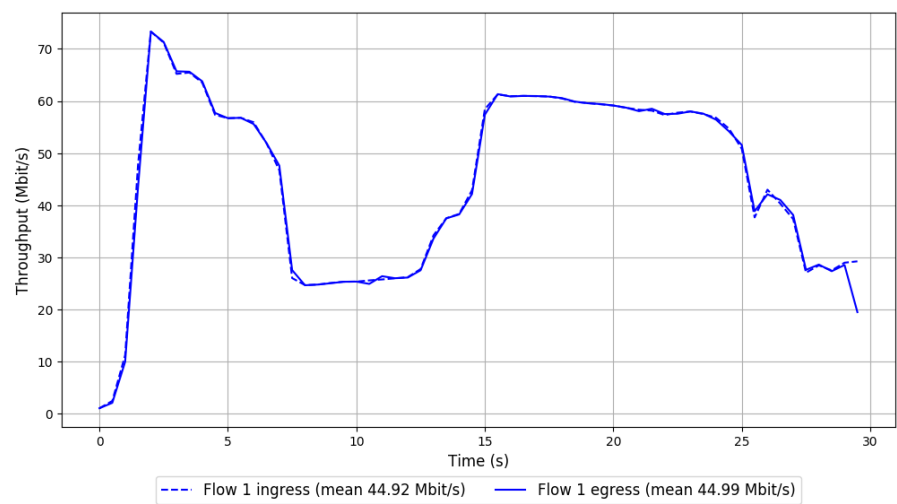## Run 7: Report of Copa — Data Link

Flow 1 ingress (mean 58.05 Mbit/s) --- Flow 1 egress (mean 58.03 Mbit/s)

Flow 1 (95th percentile 42.79 ms)

```
Run 8: Statistics of Copa

Start at: 2018-04-17 04:02:26
End at: 2018-04-17 04:02:56
Local clock offset: 4.786 ms
Remote clock offset: 5.27 ms


# Below is generated by plot.py at 2018-04-17 08:49:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.56 Mbit/s
95th percentile per-packet one-way delay: 40.850 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 55.56 Mbit/s
95th percentile per-packet one-way delay: 40.850 ms
Loss rate: 0.73%
```

Run 8: Report of Copa — Data Link

Flow 1 ingress (mean 55.60 Mbit/s)   Flow 1 egress (mean 55.56 Mbit/s)

Flow 1 (95th percentile 40.85 ms)

```
Run 9: Statistics of Copa

Start at: 2018-04-17 04:23:41
End at: 2018-04-17 04:24:11
Local clock offset: 8.204 ms
Remote clock offset: 2.559 ms


# Below is generated by plot.py at 2018-04-17 08:49:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.15 Mbit/s
95th percentile per-packet one-way delay: 39.564 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 53.15 Mbit/s
95th percentile per-packet one-way delay: 39.564 ms
Loss rate: 0.75%
```
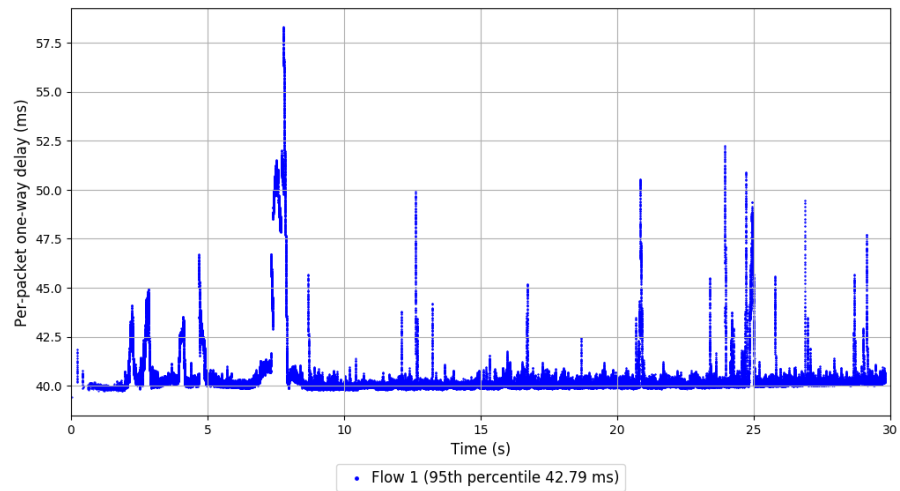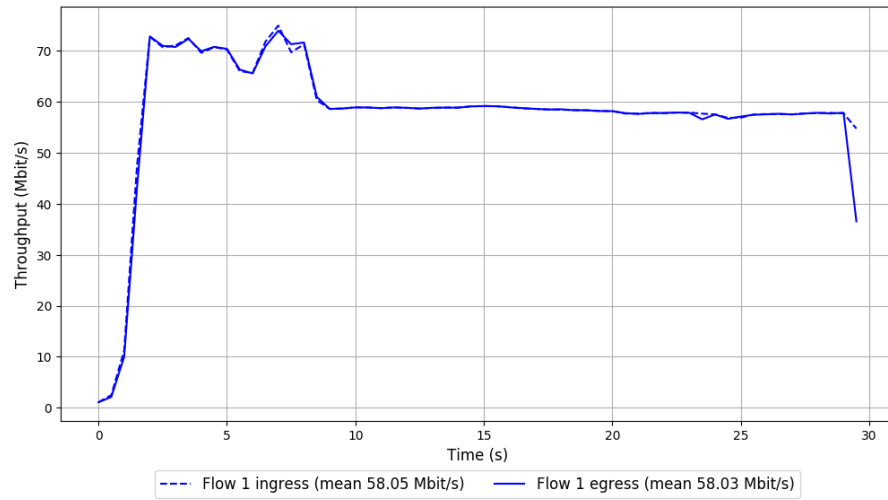
Run 9: Report of Copa — Data Link

Flow 1 ingress (mean 53.21 Mbit/s)   Flow 1 egress (mean 53.15 Mbit/s)

Flow 1 (95th percentile 39.56 ms)

```
Run 10: Statistics of Copa

Start at: 2018-04-17 04:44:59
End at: 2018-04-17 04:45:29
Local clock offset: 12.969 ms
Remote clock offset: -12.008 ms


# Below is generated by plot.py at 2018-04-17 08:49:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.77 Mbit/s
95th percentile per-packet one-way delay: 40.319 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 45.77 Mbit/s
95th percentile per-packet one-way delay: 40.319 ms
Loss rate: 0.72%
```
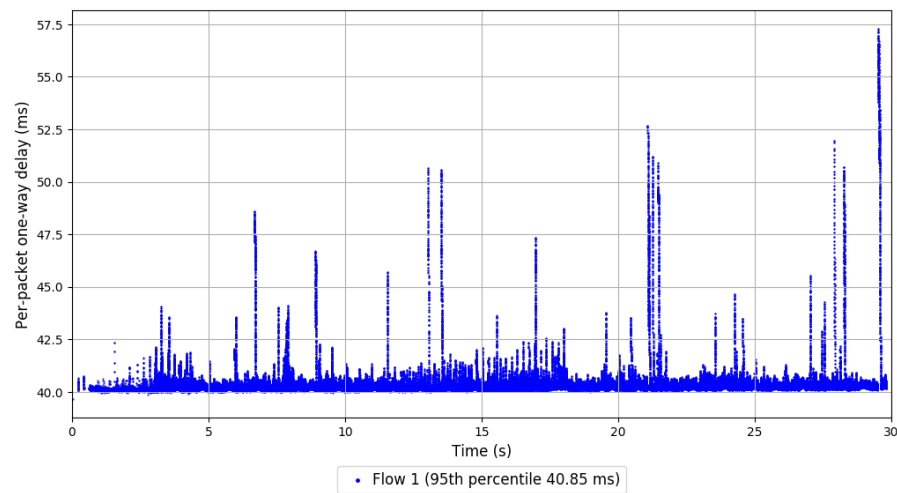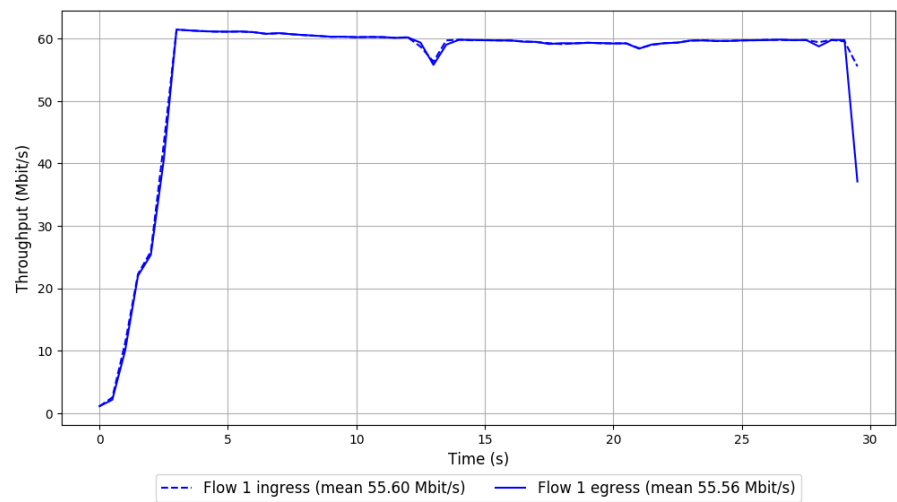
Run 10: Report of Copa — Data Link

Flow 1 ingress (mean 45.80 Mbit/s)   Flow 1 egress (mean 45.77 Mbit/s)

Flow 1 (95th percentile 40.32 ms)

```
Run 1: Statistics of FillP

Start at: 2018-04-17 01:37:32
End at: 2018-04-17 01:38:02
Local clock offset: 9.695 ms
Remote clock offset: -6.612 ms


# Below is generated by plot.py at 2018-04-17 08:49:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.34 Mbit/s
95th percentile per-packet one-way delay: 84.303 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 80.34 Mbit/s
95th percentile per-packet one-way delay: 84.303 ms
Loss rate: 0.78%
```
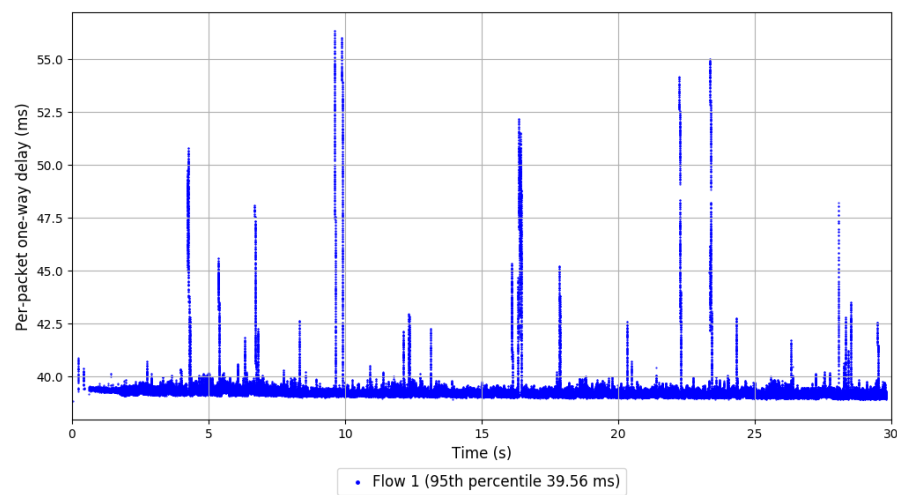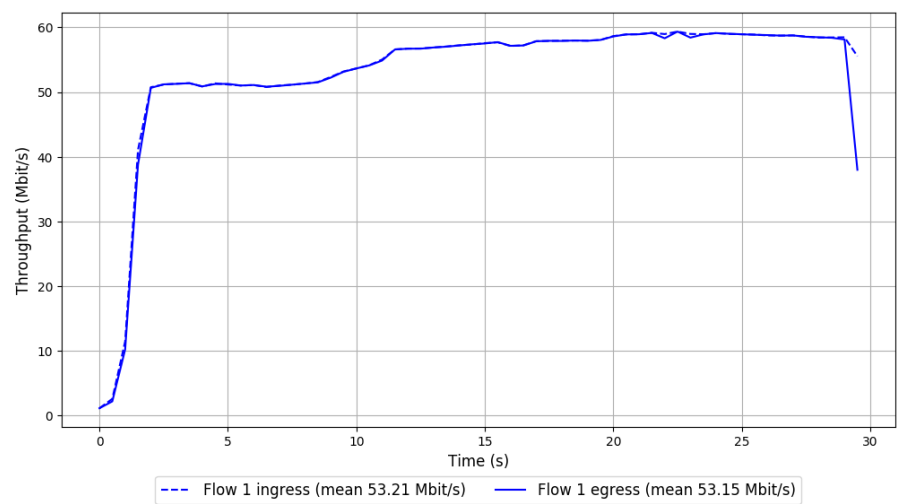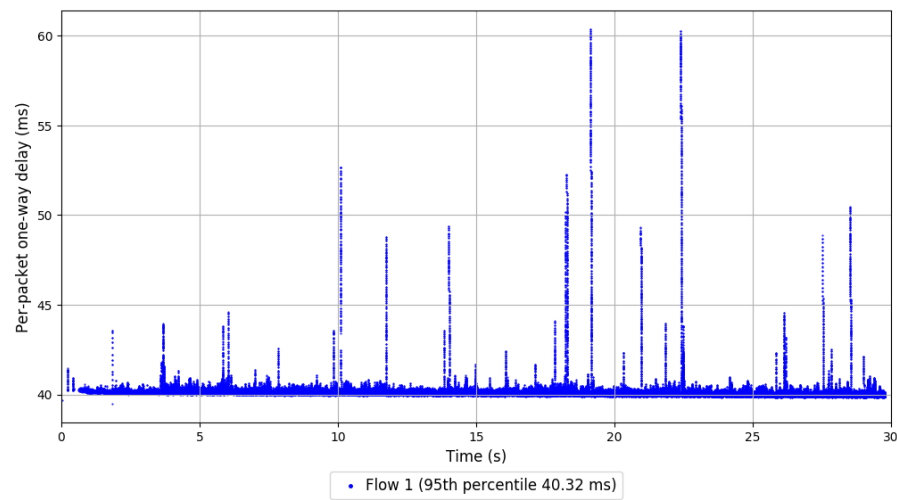
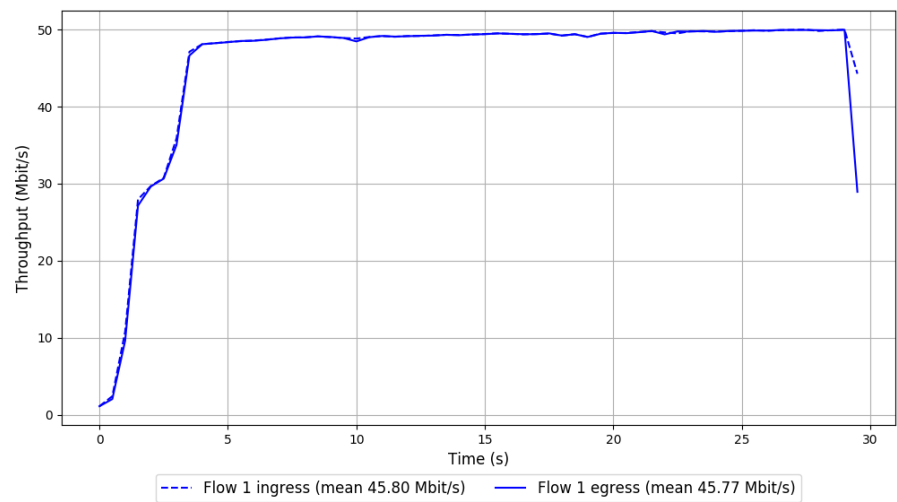Run 1: Report of FillP — Data Link

```
Run 2: Statistics of FillP

Start at: 2018-04-17 01:58:45
End at: 2018-04-17 01:59:15
Local clock offset: 8.029 ms
Remote clock offset: 4.401 ms


# Below is generated by plot.py at 2018-04-17 08:50:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.79 Mbit/s
95th percentile per-packet one-way delay: 70.603 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 85.79 Mbit/s
95th percentile per-packet one-way delay: 70.603 ms
Loss rate: 0.94%
```
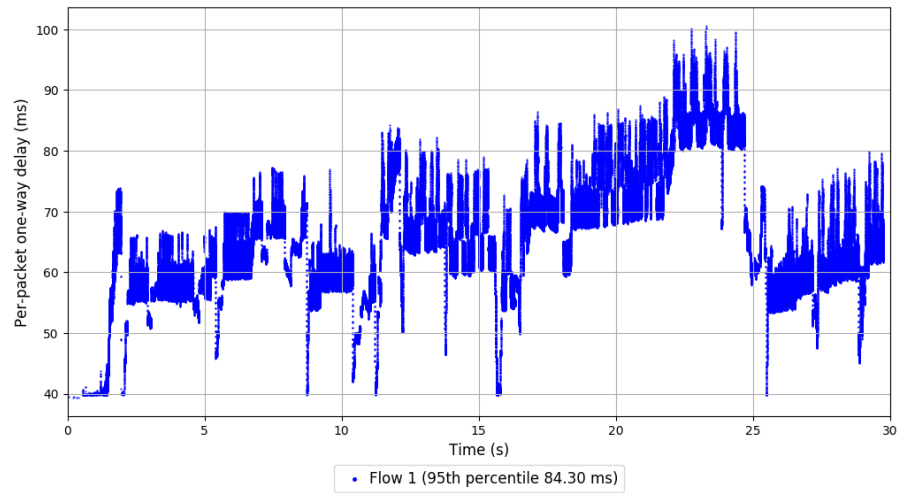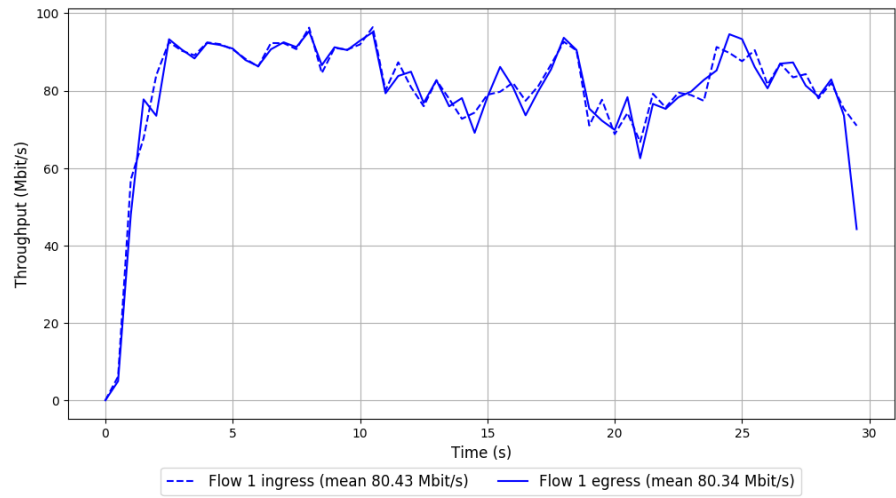
Run 2: Report of FillP — Data Link

Flow 1 ingress (mean 86.05 Mbit/s)   Flow 1 egress (mean 85.79 Mbit/s)

Flow 1 (95th percentile 70.60 ms)

```
Run 3: Statistics of FillP

Start at: 2018-04-17 02:19:55
End at: 2018-04-17 02:20:25
Local clock offset: 8.11 ms
Remote clock offset: 5.029 ms


# Below is generated by plot.py at 2018-04-17 08:50:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.28 Mbit/s
95th percentile per-packet one-way delay: 70.239 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 85.28 Mbit/s
95th percentile per-packet one-way delay: 70.239 ms
Loss rate: 0.91%
```

Run 3: Report of FillP — Data Link

Flow 1 ingress (mean 85.49 Mbit/s) --- Flow 1 egress (mean 85.28 Mbit/s)

Flow 1 (95th percentile 70.24 ms)

```
Run 4: Statistics of FillP

Start at: 2018-04-17 02:41:10
End at: 2018-04-17 02:41:40
Local clock offset: 5.872 ms
Remote clock offset: -3.367 ms


# Below is generated by plot.py at 2018-04-17 08:50:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.69 Mbit/s
95th percentile per-packet one-way delay: 63.632 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 86.69 Mbit/s
95th percentile per-packet one-way delay: 63.632 ms
Loss rate: 0.79%
```
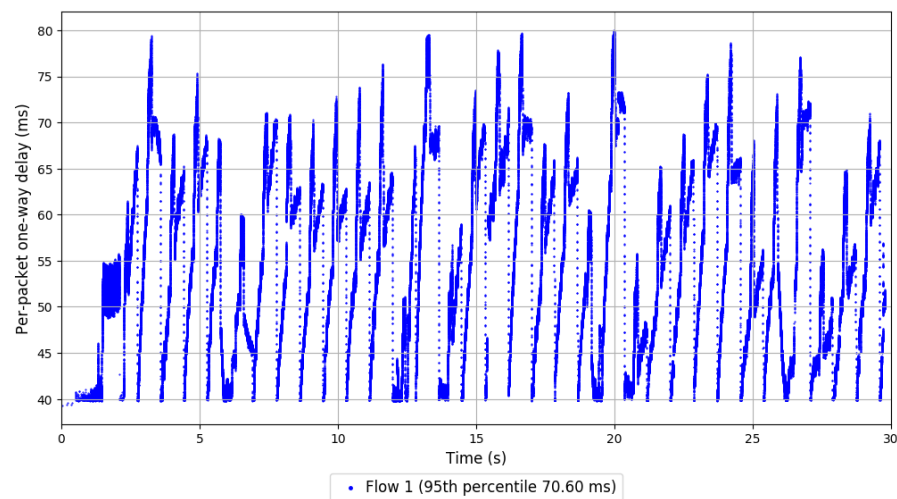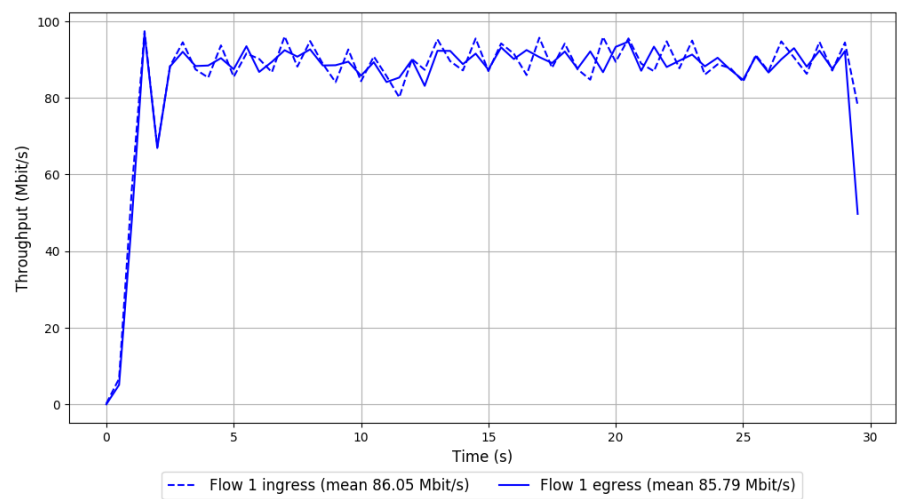
Run 4: Report of FillP — Data Link

Flow 1 ingress (mean 86.80 Mbit/s) --- Flow 1 egress (mean 86.69 Mbit/s)

Flow 1 (95th percentile 63.63 ms)

```
Run 5: Statistics of FillP

Start at: 2018-04-17 03:02:22
End at: 2018-04-17 03:02:52
Local clock offset: 4.146 ms
Remote clock offset: -3.256 ms


# Below is generated by plot.py at 2018-04-17 08:51:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.78 Mbit/s
95th percentile per-packet one-way delay: 56.788 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 87.78 Mbit/s
95th percentile per-packet one-way delay: 56.788 ms
Loss rate: 0.75%
```
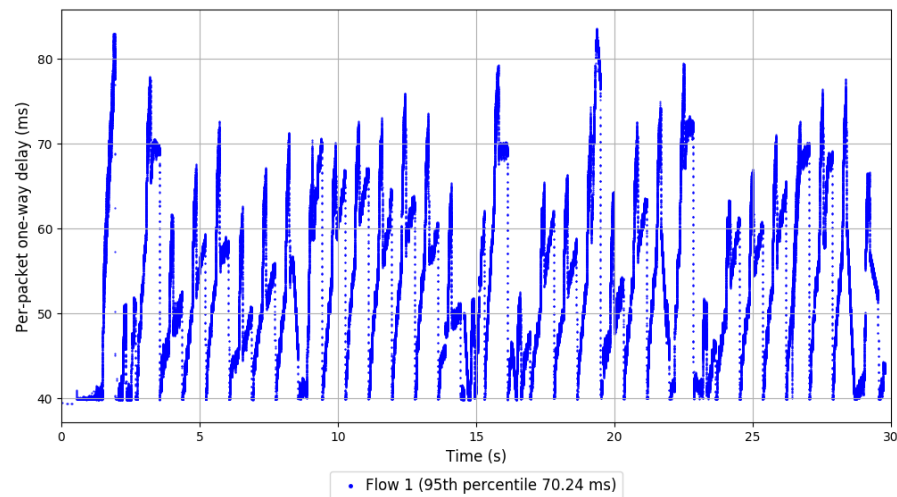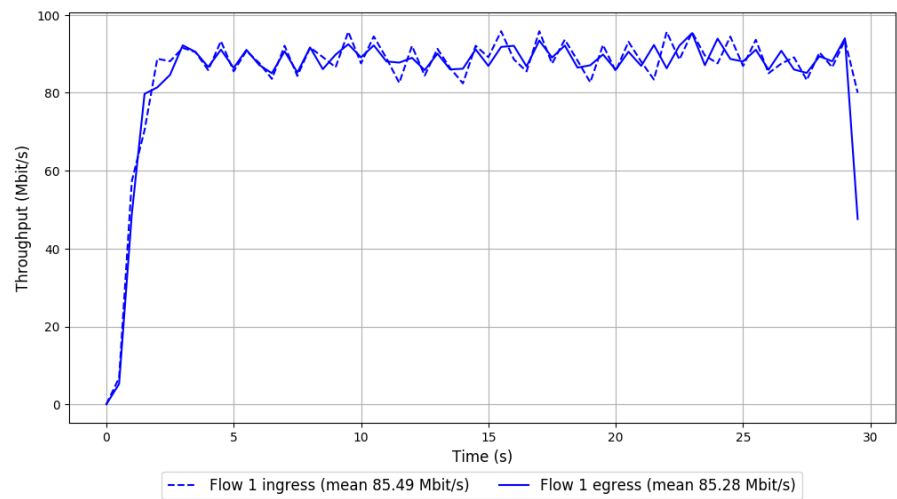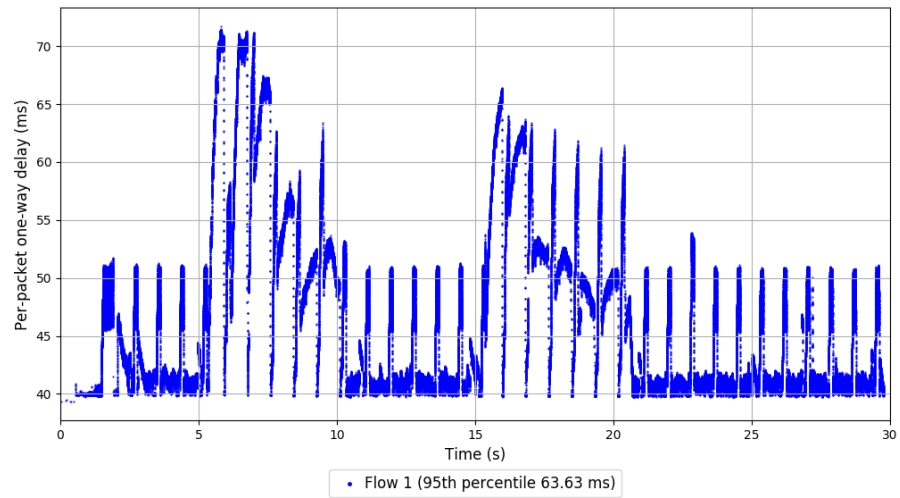
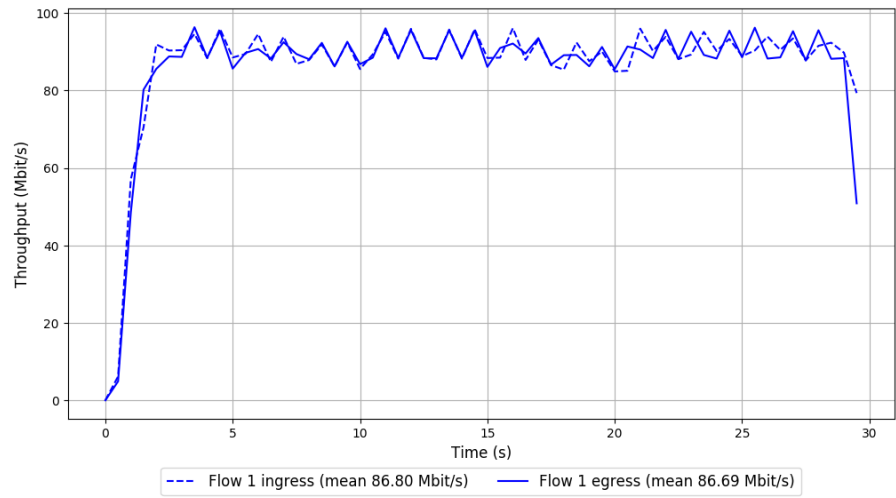Run 5: Report of FillP — Data Link

Flow 1 ingress (mean 87.87 Mbit/s)   Flow 1 egress (mean 87.78 Mbit/s)

Flow 1 (95th percentile 56.79 ms)

```
Run 6: Statistics of FillP

Start at: 2018-04-17 03:23:42
End at: 2018-04-17 03:24:12
Local clock offset: 10.88 ms
Remote clock offset: -10.413 ms

# Below is generated by plot.py at 2018-04-17 08:51:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.88 Mbit/s
95th percentile per-packet one-way delay: 63.816 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 87.88 Mbit/s
95th percentile per-packet one-way delay: 63.816 ms
Loss rate: 0.87%
```

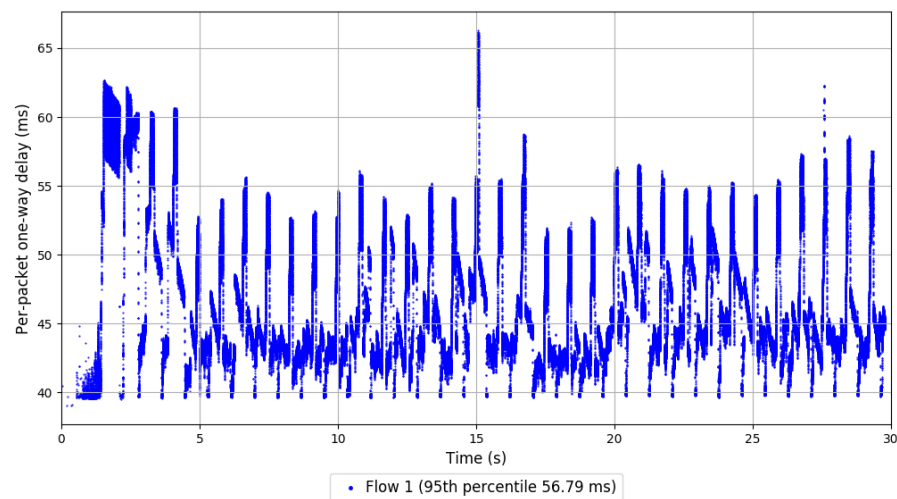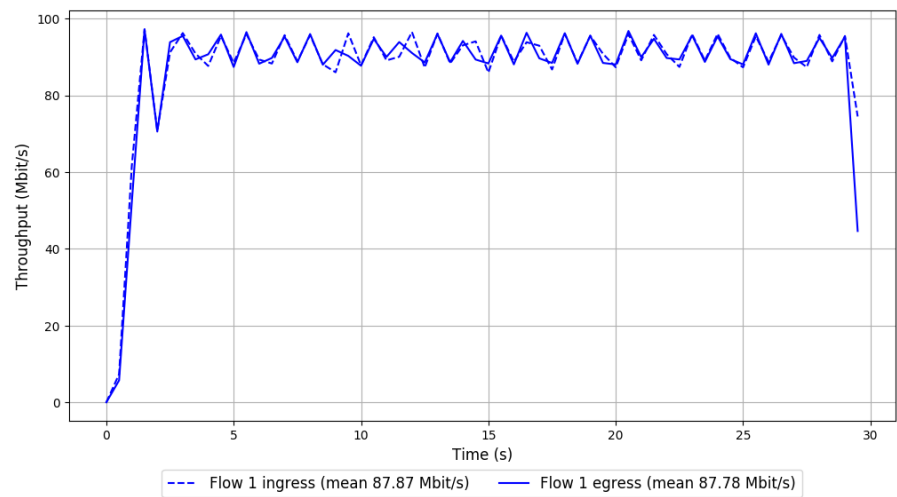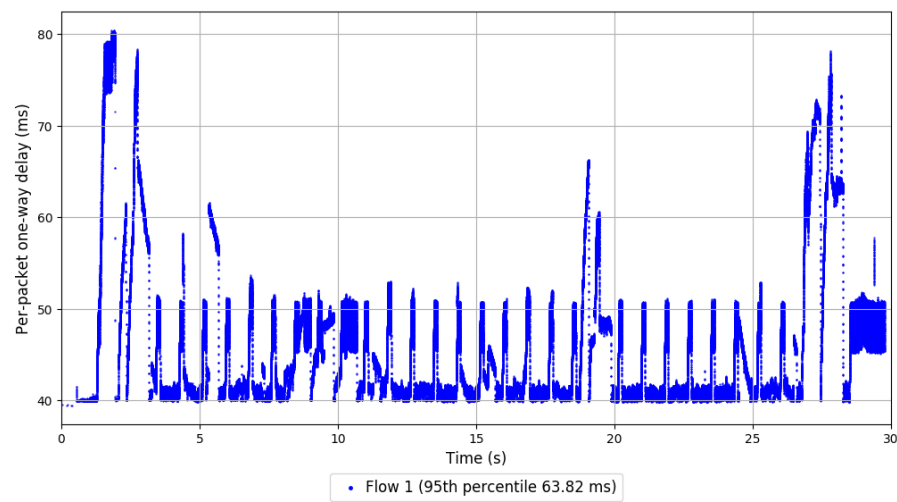# Run 6: Report of FillP — Data Link

```
Run 7: Statistics of FillP

Start at: 2018-04-17 03:44:59
End at: 2018-04-17 03:45:29
Local clock offset: 10.882 ms
Remote clock offset: 0.794 ms


# Below is generated by plot.py at 2018-04-17 08:51:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.35 Mbit/s
95th percentile per-packet one-way delay: 66.720 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 87.35 Mbit/s
95th percentile per-packet one-way delay: 66.720 ms
Loss rate: 0.84%
```
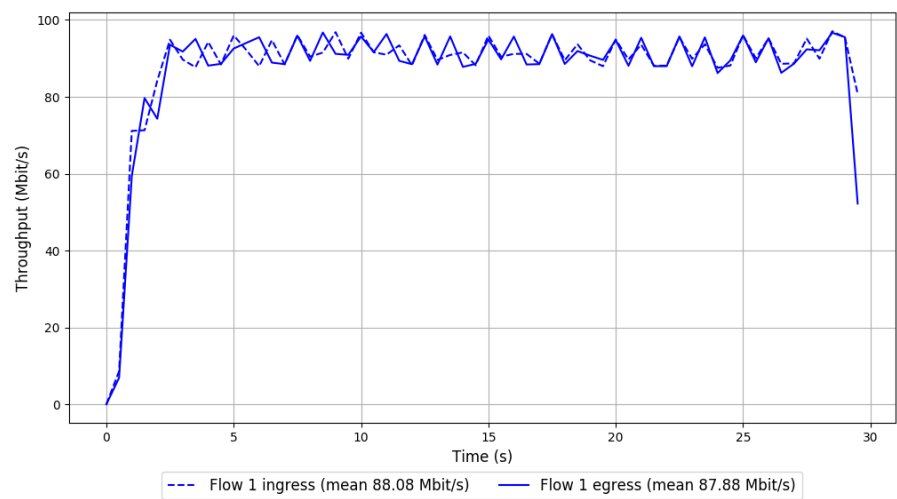
Run 7: Report of FillP — Data Link

```
Run 8: Statistics of FillP

Start at: 2018-04-17 04:06:16
End at: 2018-04-17 04:06:46
Local clock offset: 4.605 ms
Remote clock offset: 5.185 ms


# Below is generated by plot.py at 2018-04-17 08:51:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.42 Mbit/s
95th percentile per-packet one-way delay: 68.983 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 87.42 Mbit/s
95th percentile per-packet one-way delay: 68.983 ms
Loss rate: 0.91%
```

Run 8: Report of FillP — Data Link

Flow 1 ingress (mean 87.65 Mbit/s)   Flow 1 egress (mean 87.42 Mbit/s)

Flow 1 (95th percentile 68.98 ms)

259

```
Run 9: Statistics of FillP

Start at: 2018-04-17 04:27:31
End at: 2018-04-17 04:28:01
Local clock offset: 9.783 ms
Remote clock offset: 2.577 ms


# Below is generated by plot.py at 2018-04-17 08:51:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.01 Mbit/s
95th percentile per-packet one-way delay: 69.408 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 87.01 Mbit/s
95th percentile per-packet one-way delay: 69.408 ms
Loss rate: 1.04%
```
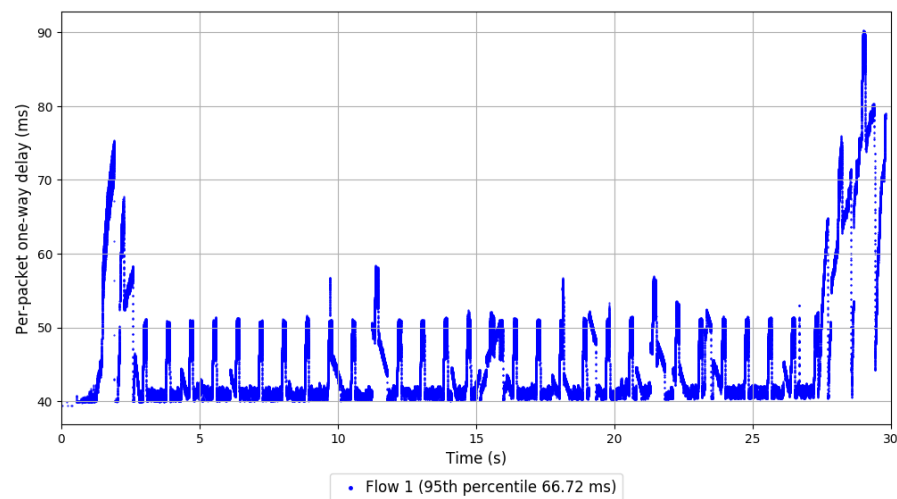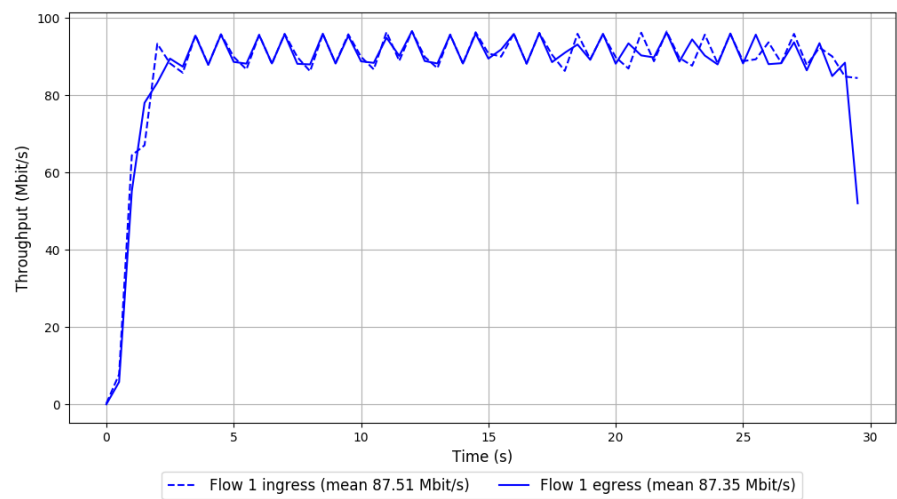
Run 9: Report of FillP — Data Link

Flow 1 ingress (mean 87.35 Mbit/s)   Flow 1 egress (mean 87.01 Mbit/s)

Flow 1 (95th percentile 69.41 ms)

```
Run 10: Statistics of FillP

Start at: 2018-04-17 04:48:49
End at: 2018-04-17 04:49:19
Local clock offset: 13.391 ms
Remote clock offset: -12.786 ms


# Below is generated by plot.py at 2018-04-17 08:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.81 Mbit/s
95th percentile per-packet one-way delay: 50.498 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 87.81 Mbit/s
95th percentile per-packet one-way delay: 50.498 ms
Loss rate: 0.64%
```
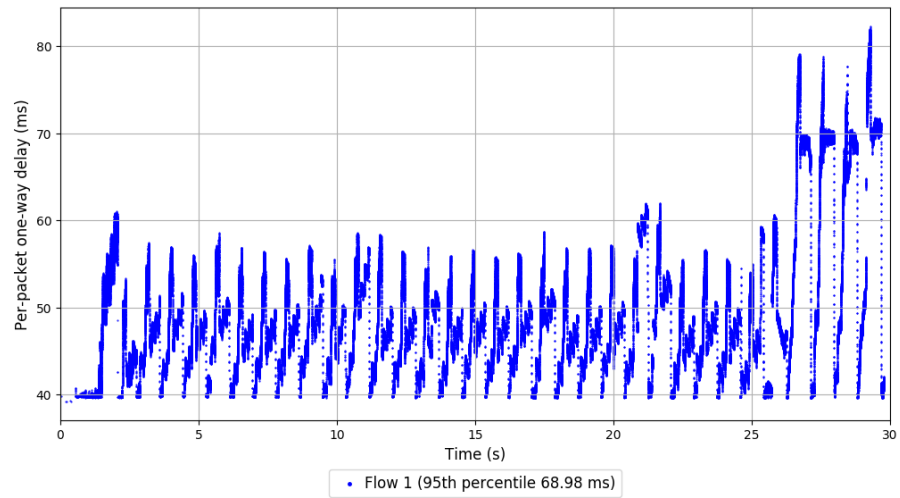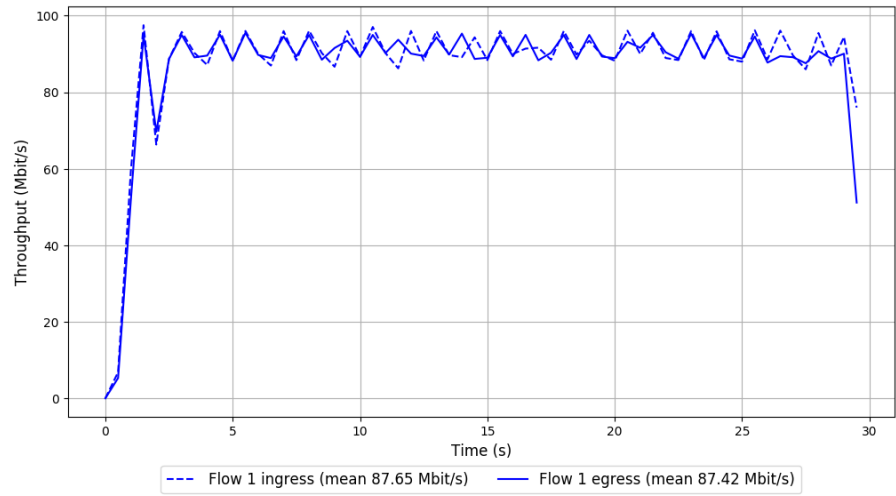
Run 10: Report of FillP — Data Link

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

Flow 1 (95th percentile 50.50 ms)

```
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-17 01:38:48
End at: 2018-04-17 01:39:18
Local clock offset: 9.404 ms
Remote clock offset: -6.862 ms


# Below is generated by plot.py at 2018-04-17 08:51:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.48 Mbit/s
95th percentile per-packet one-way delay: 48.485 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 84.48 Mbit/s
95th percentile per-packet one-way delay: 48.485 ms
Loss rate: 0.67%
```
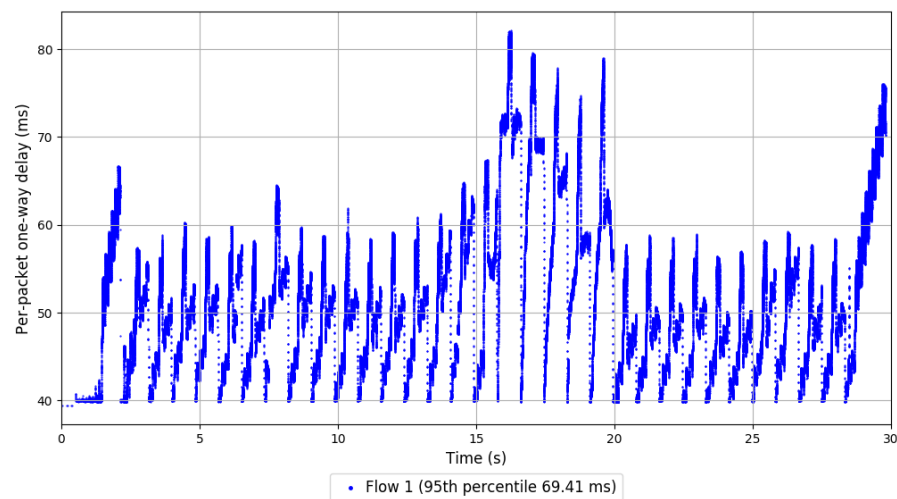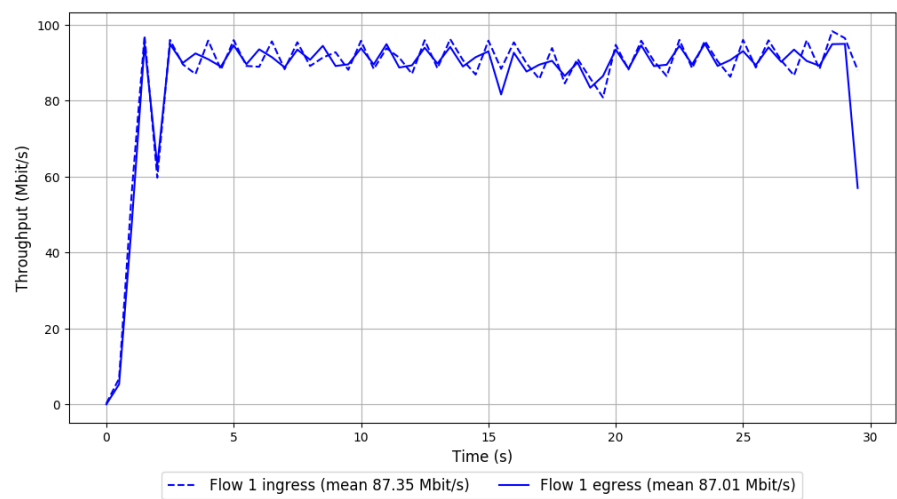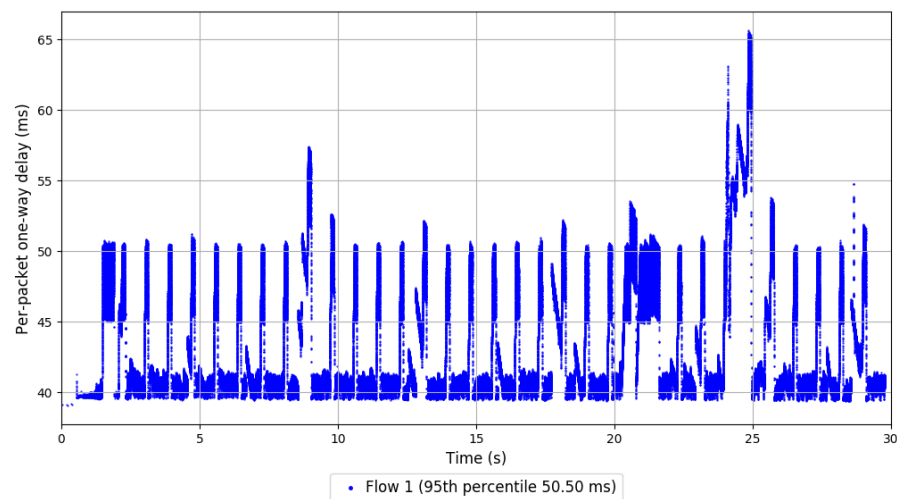
Run 1: Report of Indigo-1-32 — Data Link

```
Run 2: Statistics of Indigo-1-32

Start at: 2018-04-17 02:00:01
End at: 2018-04-17 02:00:31
Local clock offset: 7.864 ms
Remote clock offset: 4.576 ms

# Below is generated by plot.py at 2018-04-17 08:51:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.62 Mbit/s
95th percentile per-packet one-way delay: 91.523 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 87.62 Mbit/s
95th percentile per-packet one-way delay: 91.523 ms
Loss rate: 1.28%
```

Run 2: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 88.15 Mbit/s) ---- Flow 1 egress (mean 87.62 Mbit/s) ——
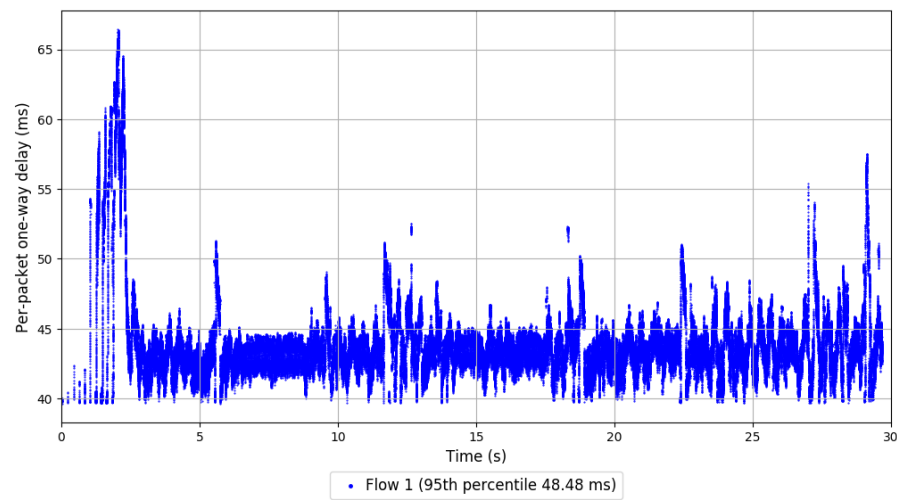

· Flow 1 (95th percentile 91.52 ms)

267

```
Run 3: Statistics of Indigo-1-32

Start at: 2018-04-17 02:21:11
End at: 2018-04-17 02:21:41
Local clock offset: 8.073 ms
Remote clock offset: 4.971 ms


# Below is generated by plot.py at 2018-04-17 08:52:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.25 Mbit/s
95th percentile per-packet one-way delay: 55.457 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 77.25 Mbit/s
95th percentile per-packet one-way delay: 55.457 ms
Loss rate: 0.81%
```
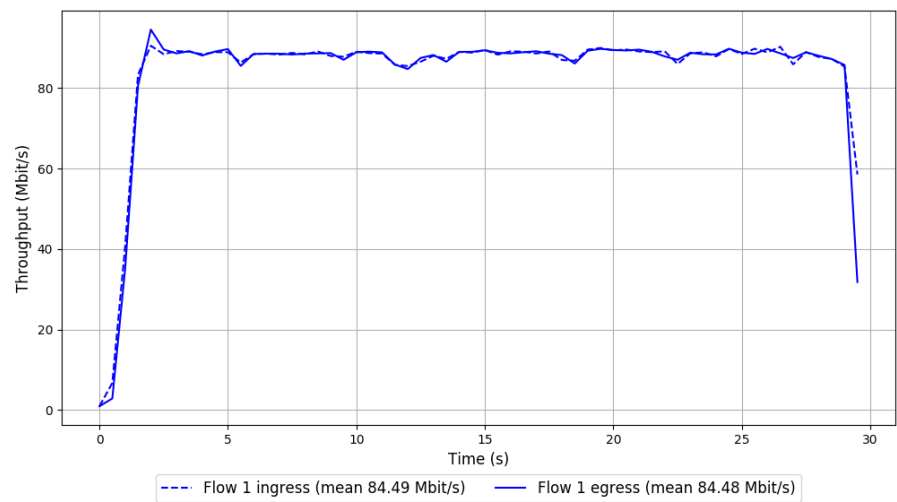
Run 3: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 77.38 Mbit/s)   Flow 1 egress (mean 77.25 Mbit/s)

Flow 1 (95th percentile 55.46 ms)

```
Run 4: Statistics of Indigo-1-32

Start at: 2018-04-17 02:42:26
End at: 2018-04-17 02:42:56
Local clock offset: 5.695 ms
Remote clock offset: -3.631 ms


# Below is generated by plot.py at 2018-04-17 08:52:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.70 Mbit/s
95th percentile per-packet one-way delay: 72.283 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 89.70 Mbit/s
95th percentile per-packet one-way delay: 72.283 ms
Loss rate: 1.13%
```
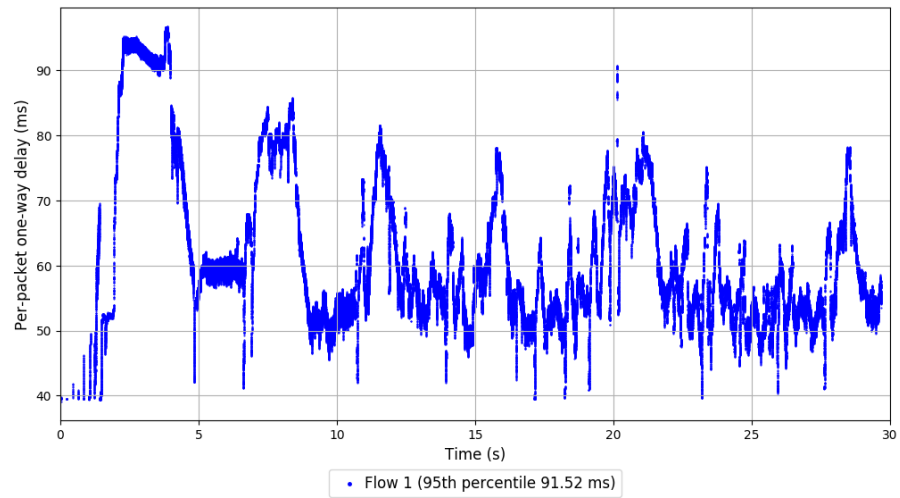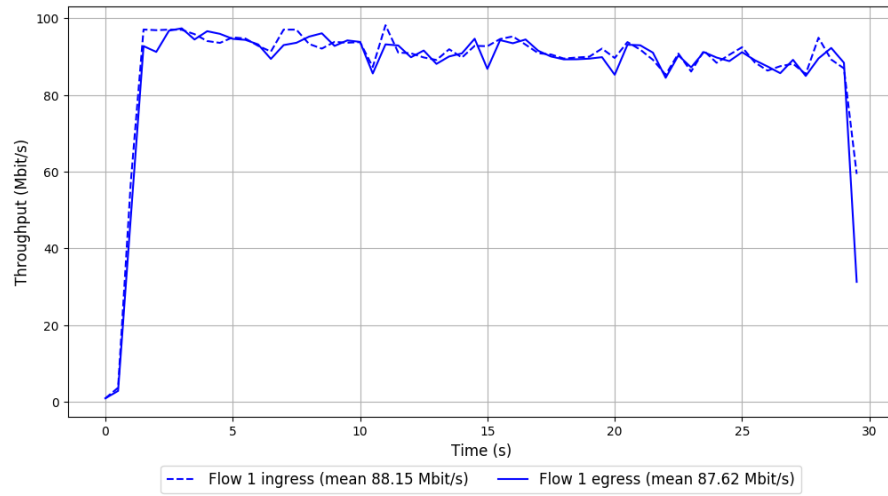
Run 4: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 90.15 Mbit/s) —— Flow 1 egress (mean 89.70 Mbit/s)

· Flow 1 (95th percentile 72.28 ms)

```
Run 5: Statistics of Indigo-1-32

Start at: 2018-04-17 03:03:38
End at: 2018-04-17 03:04:08
Local clock offset: 4.257 ms
Remote clock offset: -2.821 ms


# Below is generated by plot.py at 2018-04-17 08:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.43 Mbit/s
95th percentile per-packet one-way delay: 57.271 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 92.43 Mbit/s
95th percentile per-packet one-way delay: 57.271 ms
Loss rate: 0.82%
```
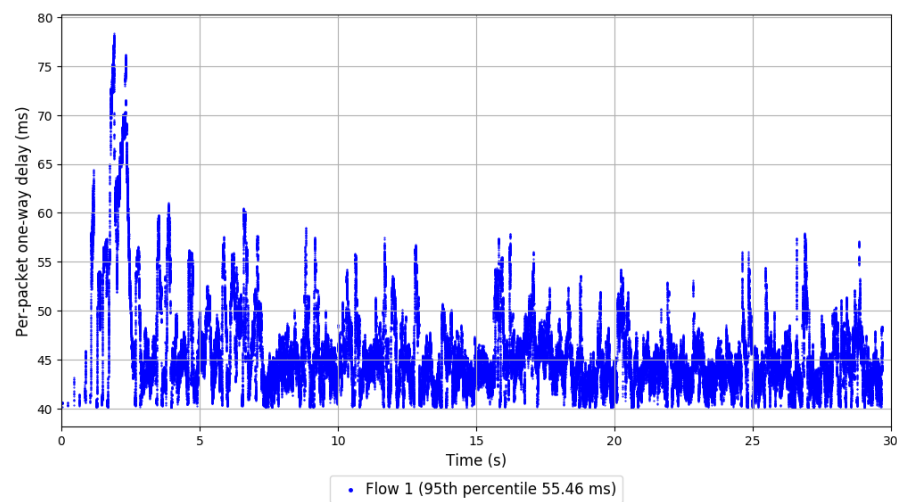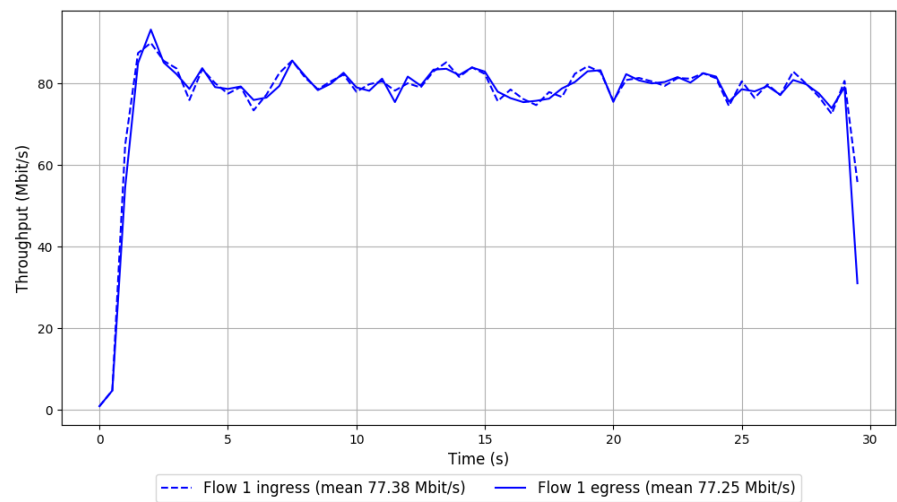
Run 5: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 92.58 Mbit/s)   Flow 1 egress (mean 92.43 Mbit/s)

Flow 1 (95th percentile 57.27 ms)

```
Run 6: Statistics of Indigo-1-32

Start at: 2018-04-17 03:24:58
End at: 2018-04-17 03:25:28
Local clock offset: 11.011 ms
Remote clock offset: -10.335 ms


# Below is generated by plot.py at 2018-04-17 08:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.98 Mbit/s
95th percentile per-packet one-way delay: 51.604 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 86.98 Mbit/s
95th percentile per-packet one-way delay: 51.604 ms
Loss rate: 0.73%
```
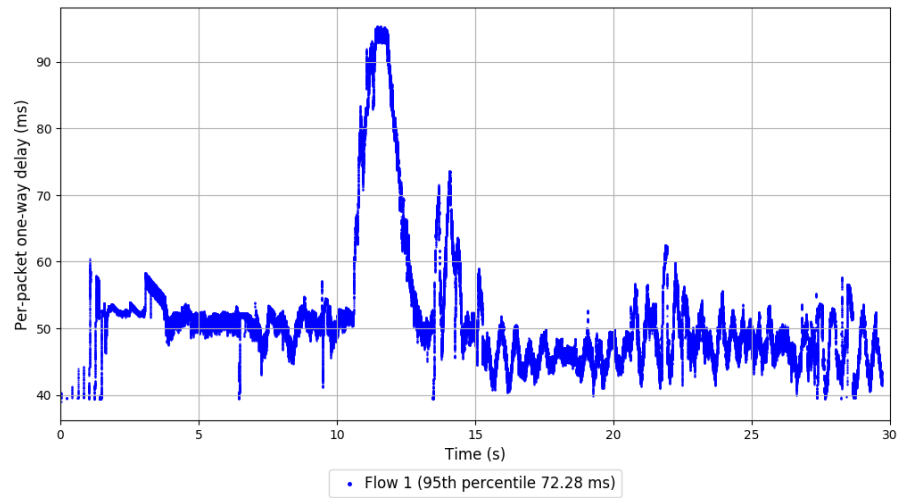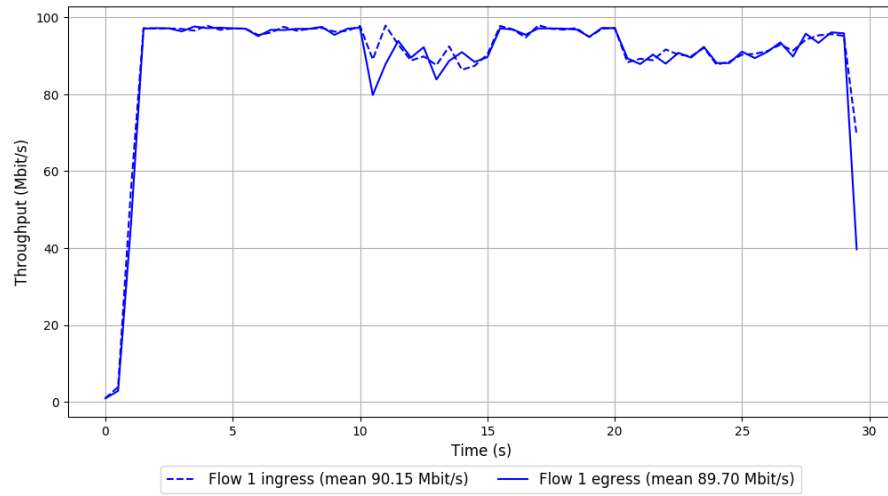
Run 6: Report of Indigo-1-32 — Data Link

```
Run 7: Statistics of Indigo-1-32

Start at: 2018-04-17 03:46:15
End at: 2018-04-17 03:46:45
Local clock offset: 9.966 ms
Remote clock offset: 1.277 ms


# Below is generated by plot.py at 2018-04-17 08:52:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.79 Mbit/s
95th percentile per-packet one-way delay: 84.635 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 87.79 Mbit/s
95th percentile per-packet one-way delay: 84.635 ms
Loss rate: 1.68%
```
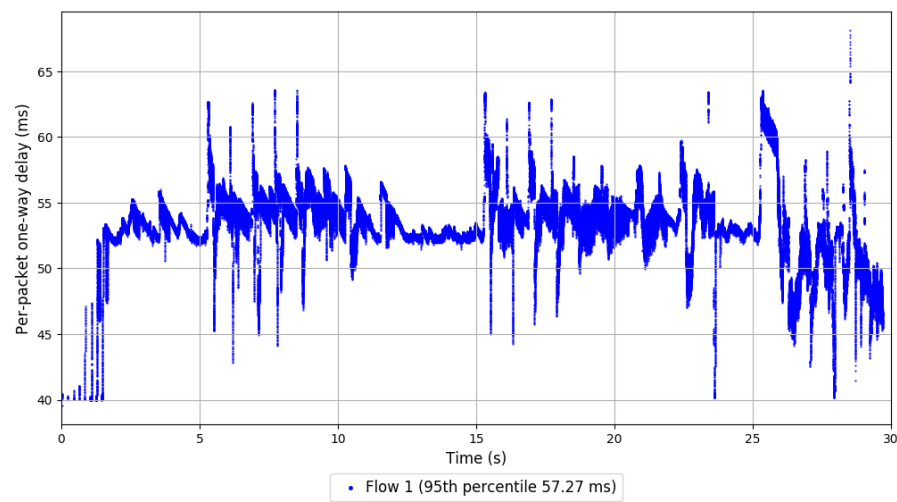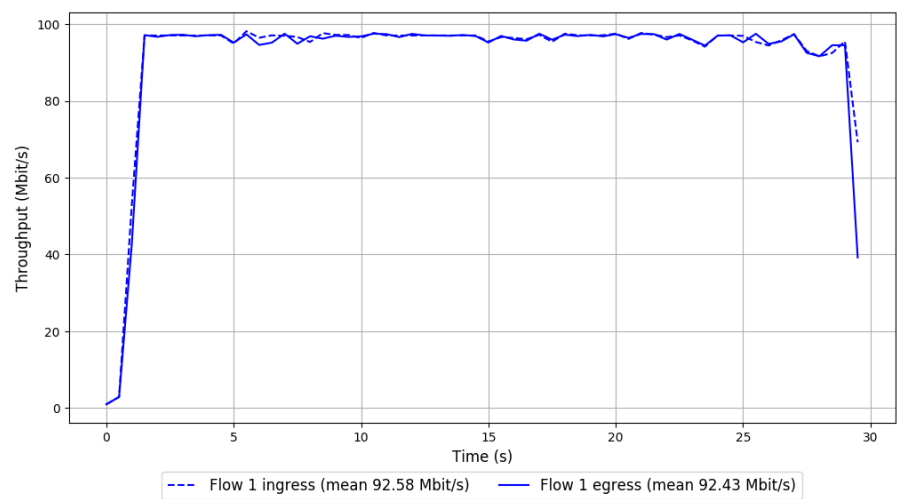
Run 7: Report of Indigo-1-32 — Data Link

```
Run 8: Statistics of Indigo-1-32

Start at: 2018-04-17 04:07:31
End at: 2018-04-17 04:08:01
Local clock offset: 4.34 ms
Remote clock offset: 4.705 ms


# Below is generated by plot.py at 2018-04-17 08:53:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.06 Mbit/s
95th percentile per-packet one-way delay: 57.380 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 93.06 Mbit/s
95th percentile per-packet one-way delay: 57.380 ms
Loss rate: 0.75%
```
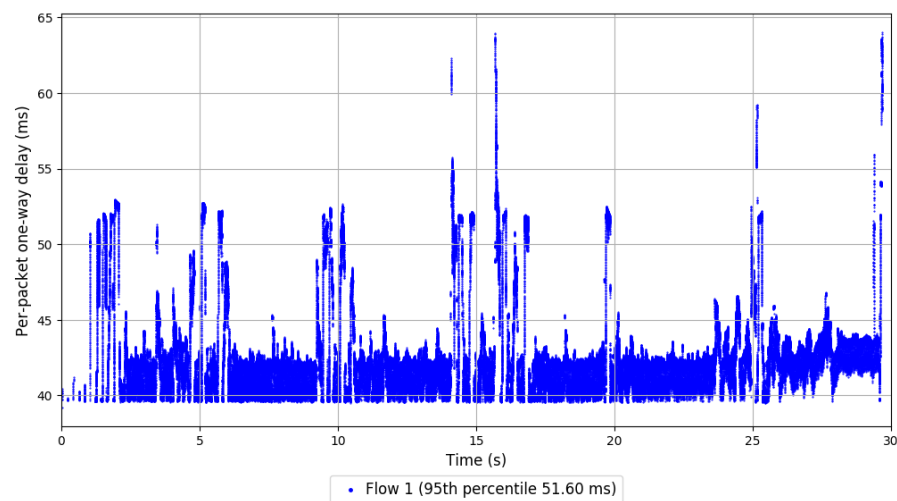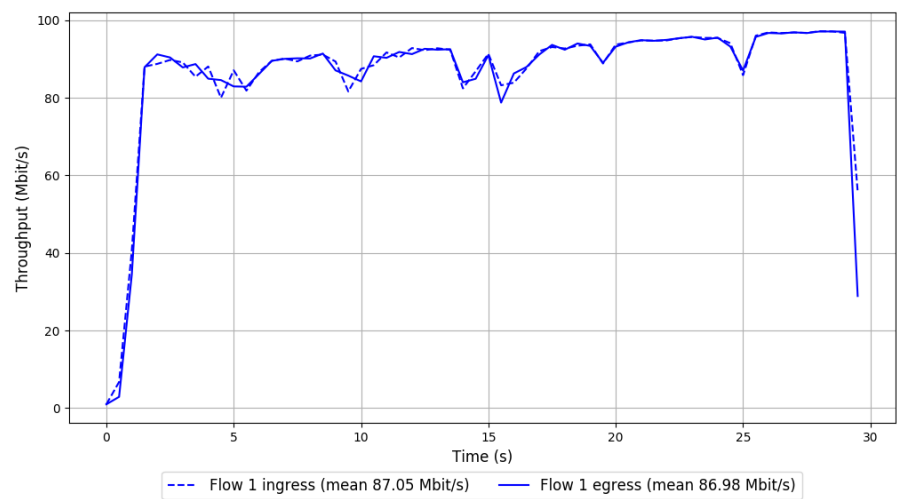
Run 8: Report of Indigo-1-32 — Data Link

```
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-17 04:28:51
End at: 2018-04-17 04:29:21
Local clock offset: 9.875 ms
Remote clock offset: 2.554 ms

# Below is generated by plot.py at 2018-04-17 08:53:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 52.427 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 52.427 ms
Loss rate: 0.72%
```
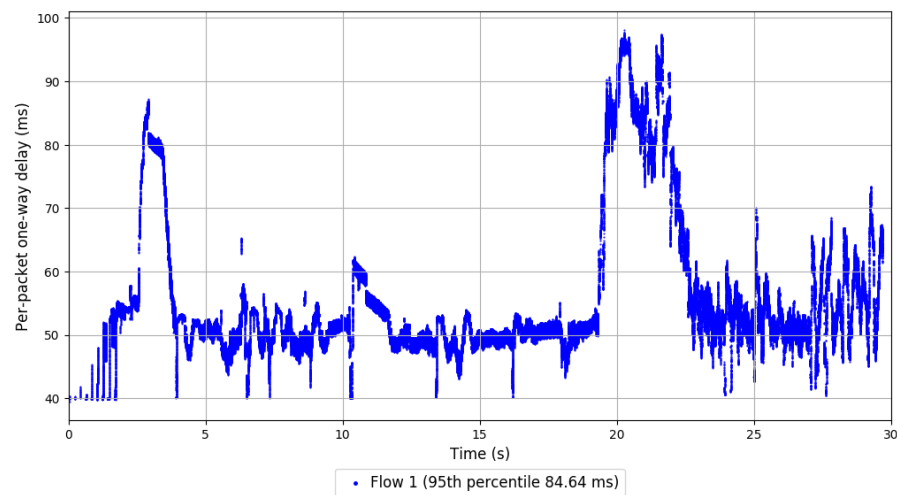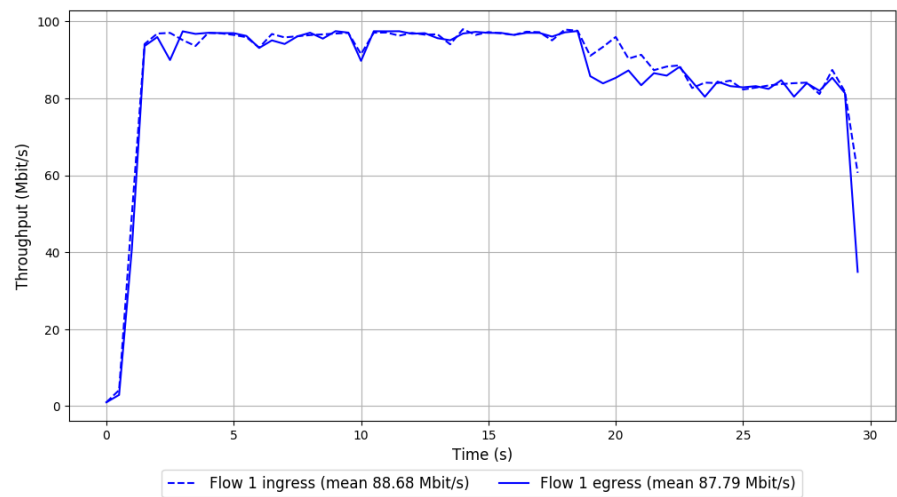
Run 9: Report of Indigo-1-32 — Data Link

```
Run 10: Statistics of Indigo-1-32

Start at: 2018-04-17 04:50:04
End at: 2018-04-17 04:50:34
Local clock offset: 13.513 ms
Remote clock offset: -13.067 ms


# Below is generated by plot.py at 2018-04-17 08:53:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.76 Mbit/s
95th percentile per-packet one-way delay: 52.928 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 79.76 Mbit/s
95th percentile per-packet one-way delay: 52.928 ms
Loss rate: 0.70%
```
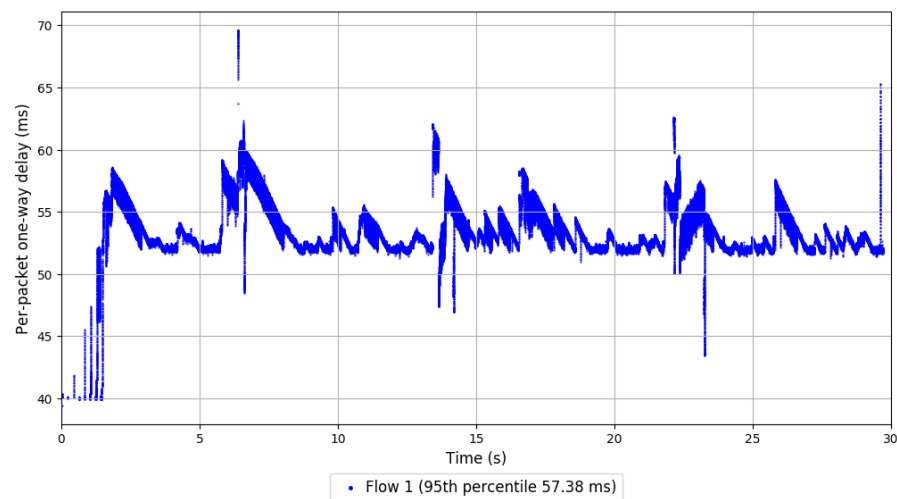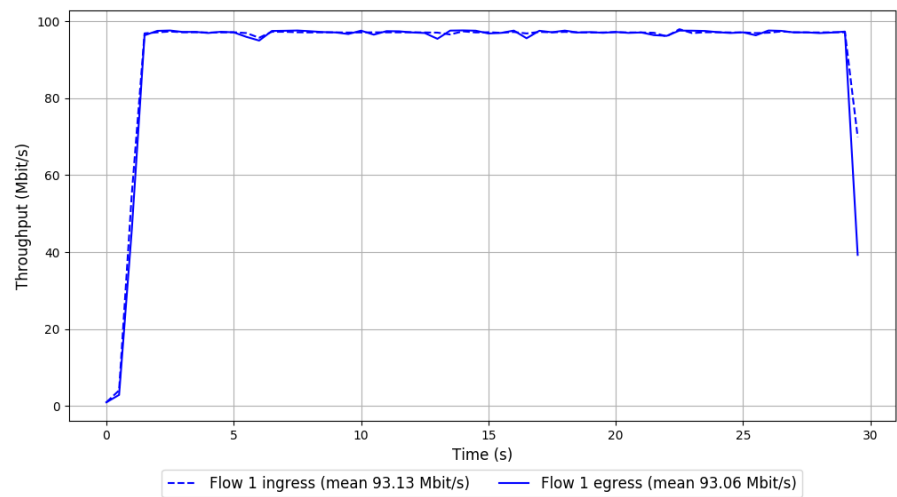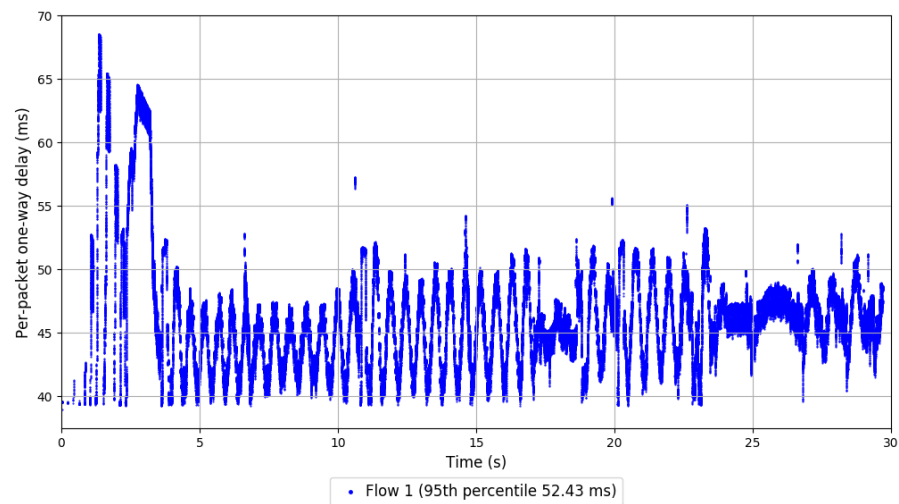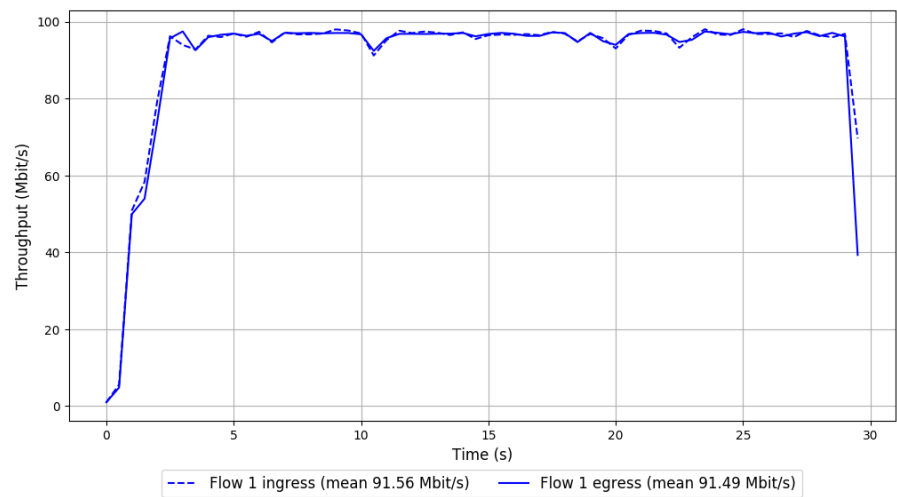
Run 10: Report of Indigo-1-32 — Data Link

Flow 1 ingress (mean 79.81 Mbit/s) --- Flow 1 egress (mean 79.76 Mbit/s)

• Flow 1 (95th percentile 52.93 ms)

```
Run 1: Statistics of PCC-Vivace

Start at: 2018-04-17 01:41:21
End at: 2018-04-17 01:41:51
Local clock offset: 9.148 ms
Remote clock offset: -7.435 ms


# Below is generated by plot.py at 2018-04-17 08:53:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.37 Mbit/s
95th percentile per-packet one-way delay: 68.313 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 73.37 Mbit/s
95th percentile per-packet one-way delay: 68.313 ms
Loss rate: 1.13%
```

Run 1: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 73.72 Mbit/s) --- Flow 1 egress (mean 73.37 Mbit/s)

• Flow 1 (95th percentile 68.31 ms)

```
Run 2: Statistics of PCC-Vivace

Start at: 2018-04-17 02:02:31
End at: 2018-04-17 02:03:01
Local clock offset: 7.882 ms
Remote clock offset: 5.042 ms


# Below is generated by plot.py at 2018-04-17 08:53:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.37 Mbit/s
95th percentile per-packet one-way delay: 57.518 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 65.37 Mbit/s
95th percentile per-packet one-way delay: 57.518 ms
Loss rate: 0.94%
```

Run 2: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 65.53 Mbit/s) ----- Flow 1 egress (mean 65.37 Mbit/s)
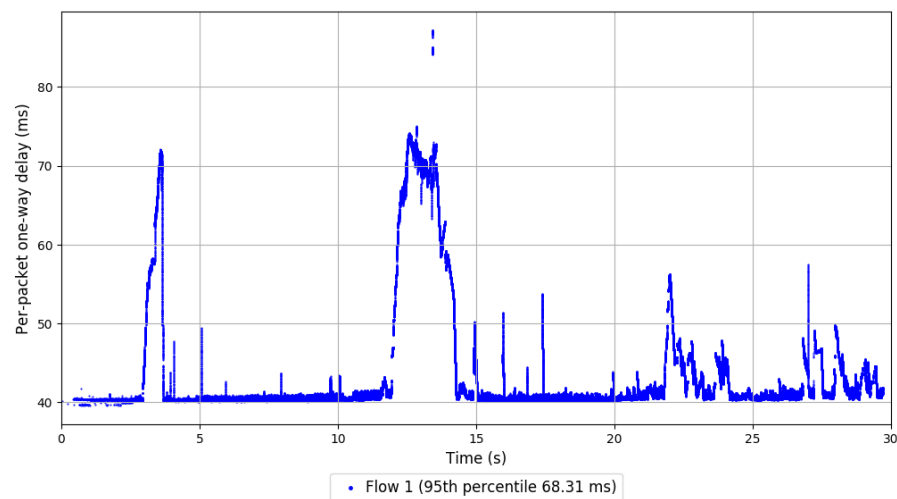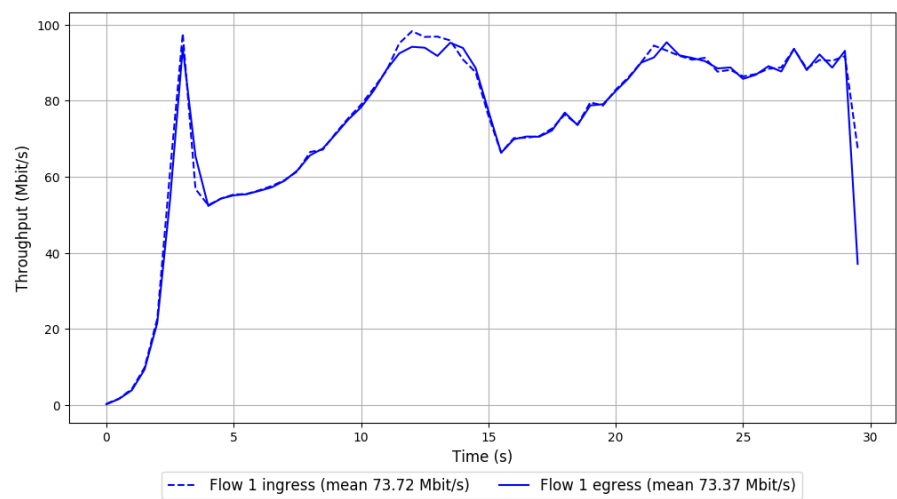

Flow 1 (95th percentile 57.52 ms)

```
Run 3: Statistics of PCC-Vivace

Start at: 2018-04-17 02:23:43
End at: 2018-04-17 02:24:13
Local clock offset: 8.012 ms
Remote clock offset: 3.88 ms


# Below is generated by plot.py at 2018-04-17 08:53:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.84 Mbit/s
95th percentile per-packet one-way delay: 49.030 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 60.84 Mbit/s
95th percentile per-packet one-way delay: 49.030 ms
Loss rate: 0.81%
```

Run 3: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 60.93 Mbit/s)   Flow 1 egress (mean 60.84 Mbit/s)

• Flow 1 (95th percentile 49.03 ms)

```
Run 4: Statistics of PCC-Vivace

Start at: 2018-04-17 02:44:59
End at: 2018-04-17 02:45:29
Local clock offset: 5.267 ms
Remote clock offset: -4.248 ms


# Below is generated by plot.py at 2018-04-17 08:53:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.92 Mbit/s
95th percentile per-packet one-way delay: 64.103 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 71.92 Mbit/s
95th percentile per-packet one-way delay: 64.103 ms
Loss rate: 1.18%
```
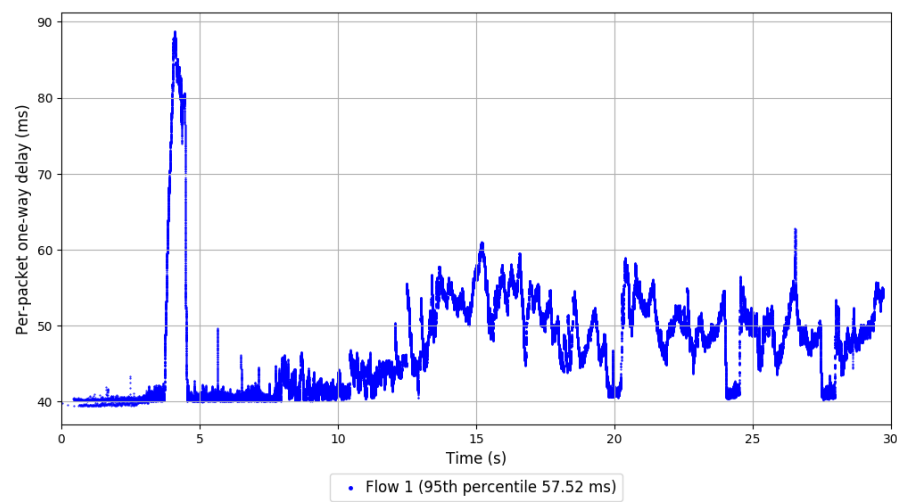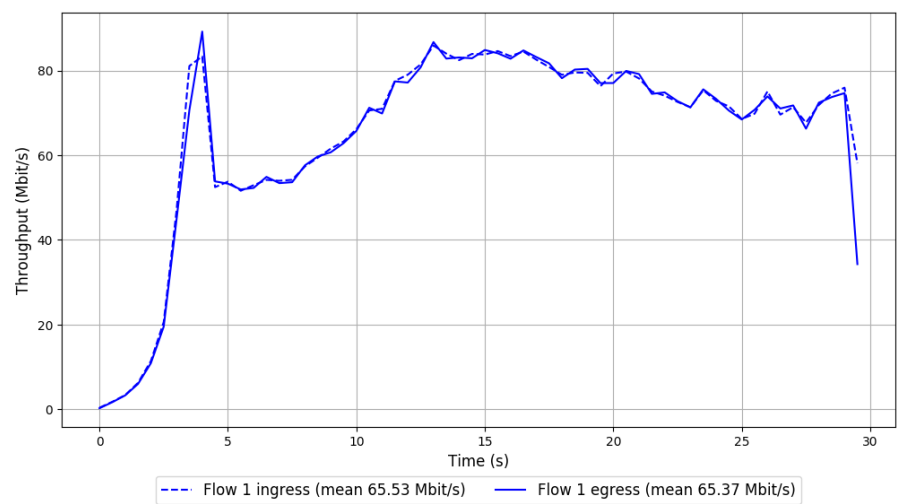
Run 4: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 72.26 Mbit/s) --- Flow 1 egress (mean 71.92 Mbit/s)

• Flow 1 (95th percentile 64.10 ms)

```
Run 5: Statistics of PCC-Vivace

Start at: 2018-04-17 03:06:14
End at: 2018-04-17 03:06:44
Local clock offset: 4.203 ms
Remote clock offset: -1.991 ms


# Below is generated by plot.py at 2018-04-17 08:53:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.88 Mbit/s
95th percentile per-packet one-way delay: 53.345 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 72.88 Mbit/s
95th percentile per-packet one-way delay: 53.345 ms
Loss rate: 1.20%
```
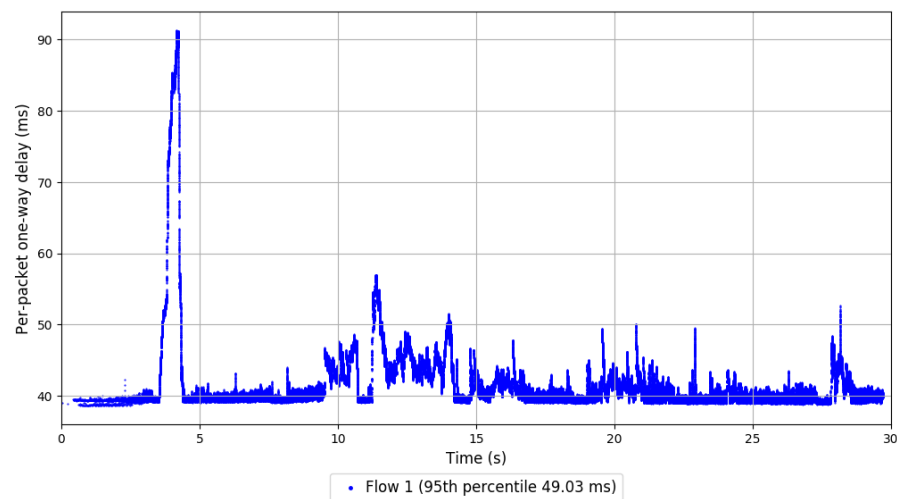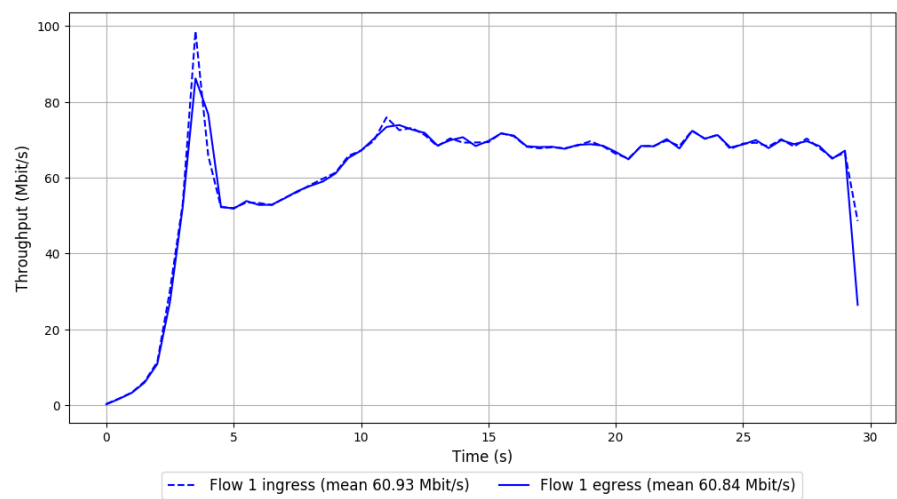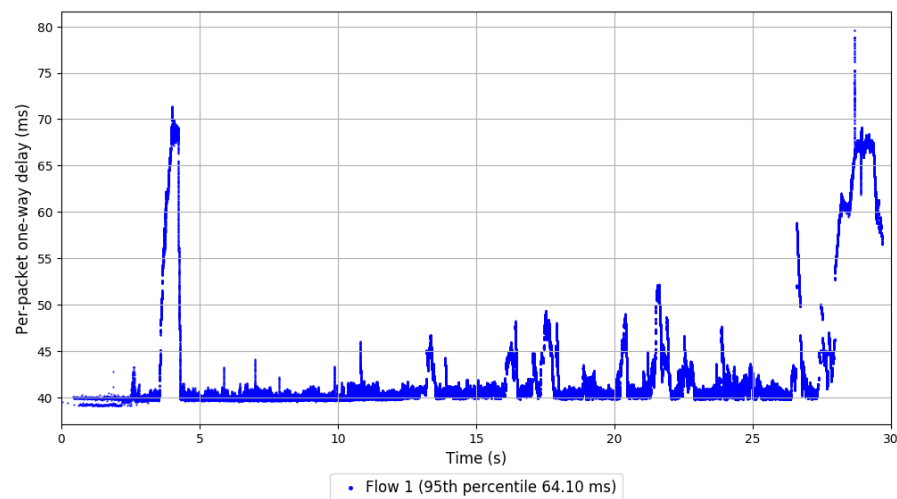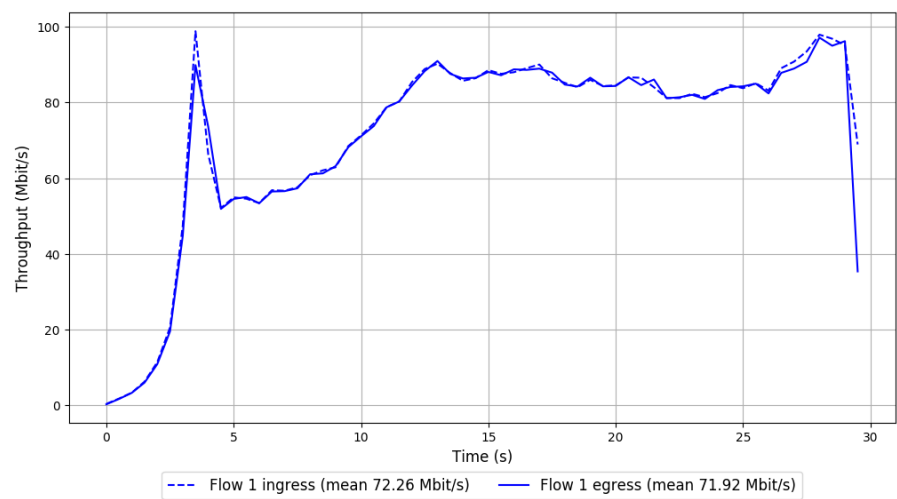
Run 5: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 73.28 Mbit/s)   Flow 1 egress (mean 72.88 Mbit/s)

Flow 1 (95th percentile 53.34 ms)

```
Run 6: Statistics of PCC-Vivace

Start at: 2018-04-17 03:27:31
End at: 2018-04-17 03:28:01
Local clock offset: 11.579 ms
Remote clock offset: -10.26 ms


# Below is generated by plot.py at 2018-04-17 08:54:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.58 Mbit/s
95th percentile per-packet one-way delay: 53.138 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 75.58 Mbit/s
95th percentile per-packet one-way delay: 53.138 ms
Loss rate: 0.74%
```

Run 6: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 75.65 Mbit/s) --- Flow 1 egress (mean 75.58 Mbit/s)

Flow 1 (95th percentile 53.14 ms)

```
Run 7: Statistics of PCC-Vivace

Start at: 2018-04-17 03:48:49
End at: 2018-04-17 03:49:19
Local clock offset: 8.441 ms
Remote clock offset: 2.081 ms


# Below is generated by plot.py at 2018-04-17 08:54:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.90 Mbit/s
95th percentile per-packet one-way delay: 58.684 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 64.90 Mbit/s
95th percentile per-packet one-way delay: 58.684 ms
Loss rate: 1.37%
```
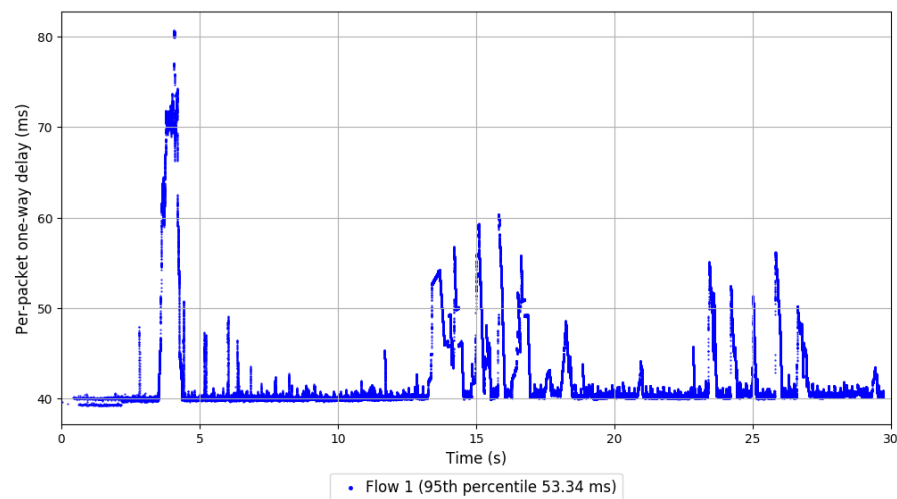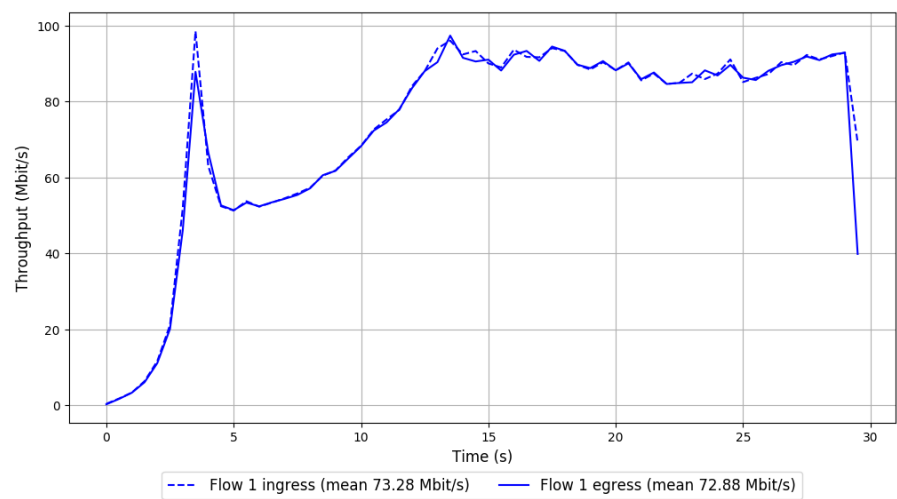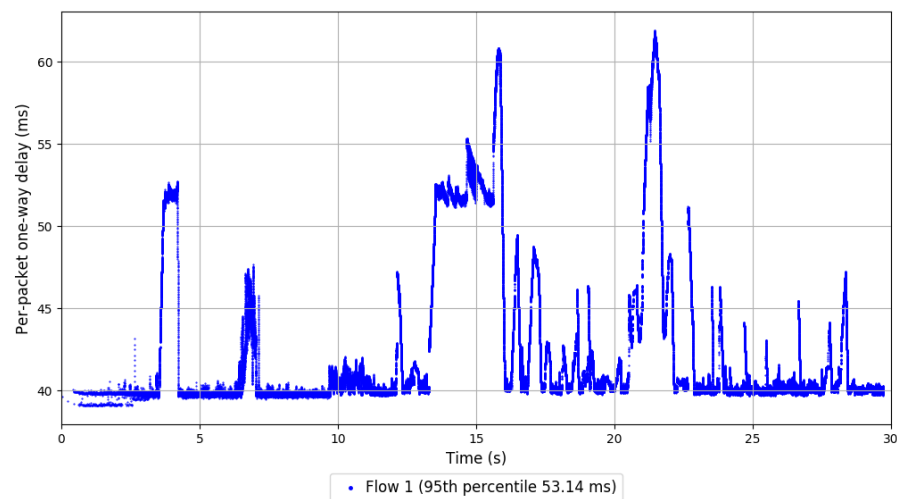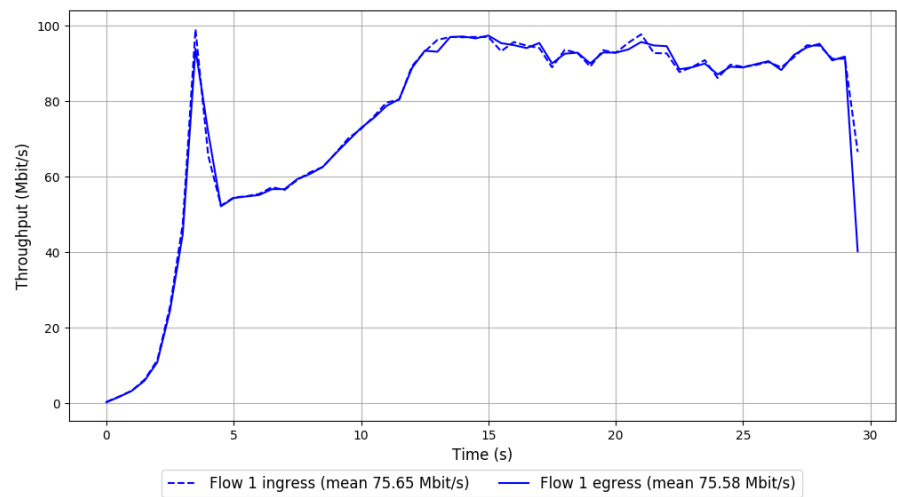
Run 7: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 65.37 Mbit/s) --- Flow 1 egress (mean 64.90 Mbit/s)

Flow 1 (95th percentile 58.68 ms)

```
Run 8: Statistics of PCC-Vivace

Start at: 2018-04-17 04:10:04
End at: 2018-04-17 04:10:34
Local clock offset: 4.152 ms
Remote clock offset: 3.959 ms


# Below is generated by plot.py at 2018-04-17 08:54:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.61 Mbit/s
95th percentile per-packet one-way delay: 94.530 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 71.61 Mbit/s
95th percentile per-packet one-way delay: 94.530 ms
Loss rate: 2.02%
```

Run 8: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 72.62 Mbit/s) --- Flow 1 egress (mean 71.61 Mbit/s)

Flow 1 (95th percentile 94.53 ms)

```
Run 9: Statistics of PCC-Vivace

Start at: 2018-04-17 04:31:23
End at: 2018-04-17 04:31:53
Local clock offset: 10.454 ms
Remote clock offset: 2.678 ms


# Below is generated by plot.py at 2018-04-17 08:54:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.20 Mbit/s
95th percentile per-packet one-way delay: 47.711 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 69.20 Mbit/s
95th percentile per-packet one-way delay: 47.711 ms
Loss rate: 1.04%
```
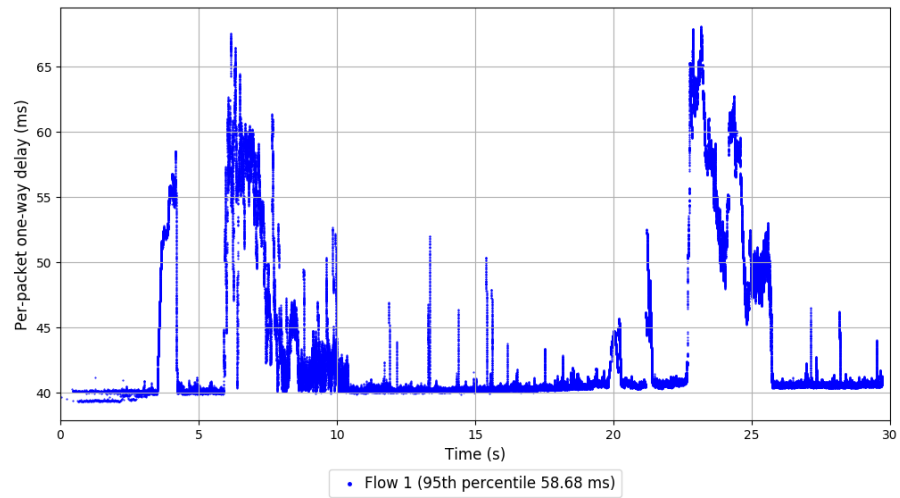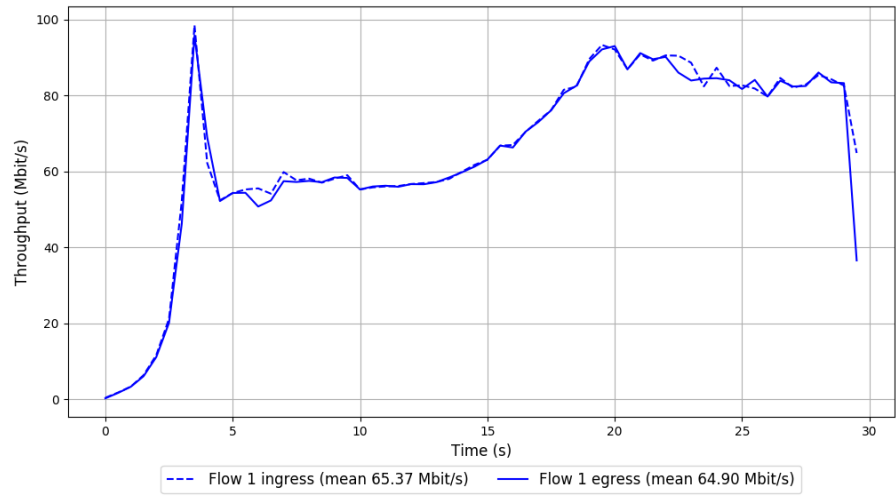
Run 9: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 69.46 Mbit/s)   Flow 1 egress (mean 69.20 Mbit/s)

Flow 1 (95th percentile 47.71 ms)

```
Run 10: Statistics of PCC-Vivace

Start at: 2018-04-17 04:52:36
End at: 2018-04-17 04:53:06
Local clock offset: 10.948 ms
Remote clock offset: -13.209 ms


# Below is generated by plot.py at 2018-04-17 08:54:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.71 Mbit/s
95th percentile per-packet one-way delay: 54.128 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 49.71 Mbit/s
95th percentile per-packet one-way delay: 54.128 ms
Loss rate: 1.05%
```
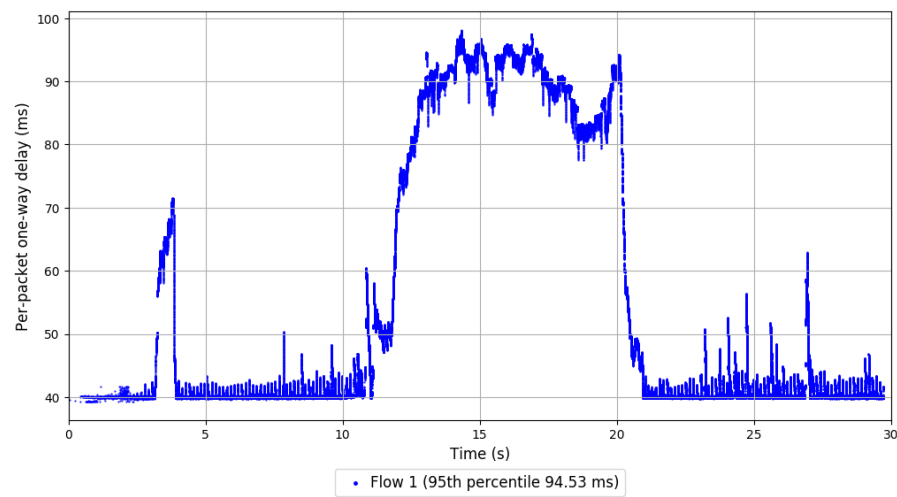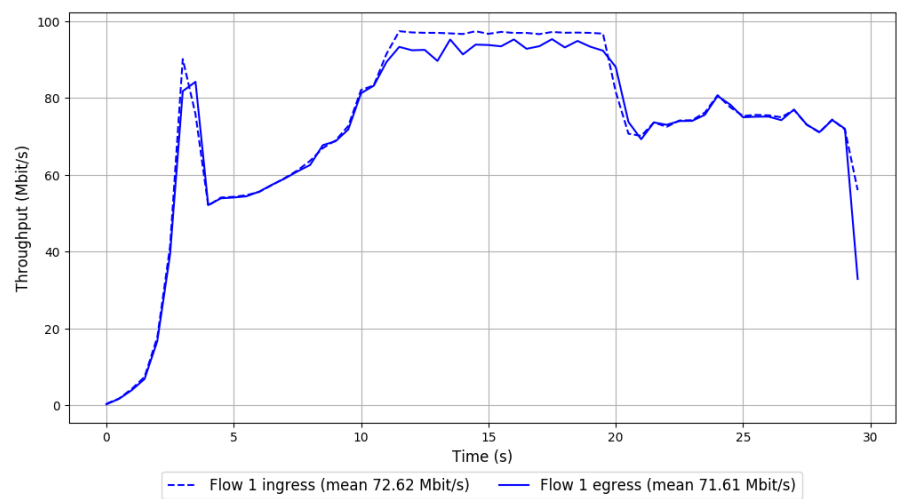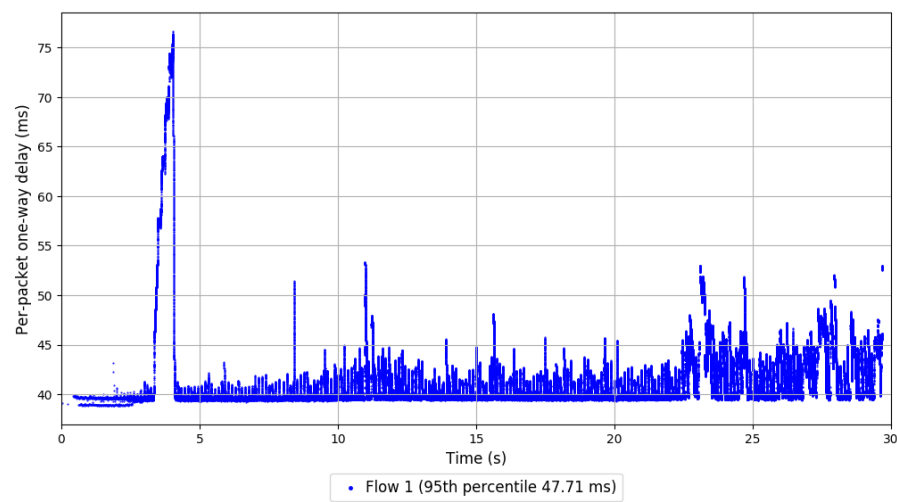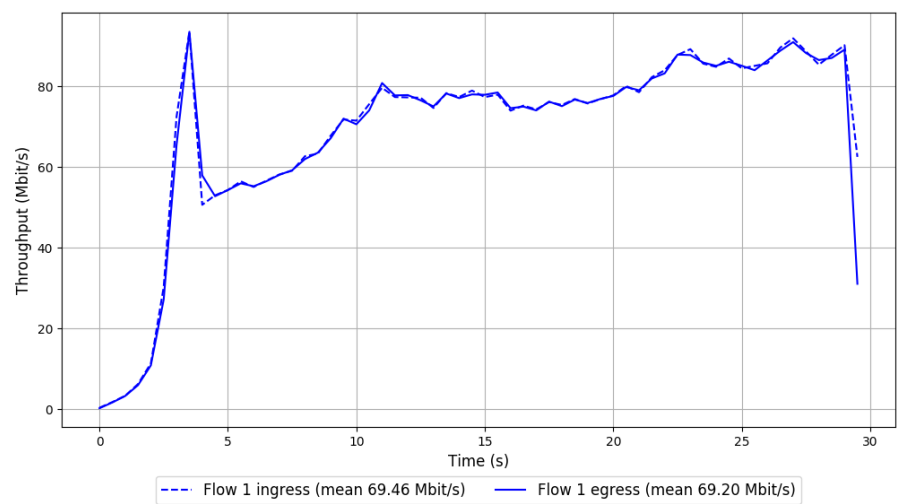
Run 10: Report of PCC-Vivace — Data Link

Flow 1 ingress (mean 49.92 Mbit/s) ---- Flow 1 egress (mean 49.71 Mbit/s) ——

• Flow 1 (95th percentile 54.13 ms)

```
Run 1: Statistics of PCC-Expr

Start at: 2018-04-17 01:26:16
End at: 2018-04-17 01:26:46
Local clock offset: 17.053 ms
Remote clock offset: 9.628 ms
```

Run 1: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 2: Statistics of PCC-Expr

Start at: 2018-04-17 01:47:35
End at: 2018-04-17 01:48:05
Local clock offset: 8.126 ms
Remote clock offset: -8.864 ms
```

Run 2: Report of PCC-Expr — Data Link

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Figure is missing

```
Run 3: Statistics of PCC-Expr

Start at: 2018-04-17 02:08:44
End at: 2018-04-17 02:09:14
Local clock offset: 7.909 ms
Remote clock offset: 5.354 ms
```

Run 3: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 4: Statistics of PCC-Expr

Start at: 2018-04-17 02:29:56
End at: 2018-04-17 02:30:26
Local clock offset: 8.156 ms
Remote clock offset: 0.264 ms
```

Run 4: Report of PCC-Expr — Data Link

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Figure is missing

```
Run 5: Statistics of PCC-Expr

Start at: 2018-04-17 02:51:13
End at: 2018-04-17 02:51:43
Local clock offset: 4.75 ms
Remote clock offset: -5.401 ms
```

Run 5: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

```
Run 6: Statistics of PCC-Expr

Start at: 2018-04-17 03:12:28
End at: 2018-04-17 03:12:58
Local clock offset: 6.933 ms
Remote clock offset: -1.021 ms
```

Run 6: Report of PCC-Expr — Data Link

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Figure is missing

```
Run 7: Statistics of PCC-Expr

Start at: 2018-04-17 03:33:45
End at: 2018-04-17 03:34:15
Local clock offset: 12.363 ms
Remote clock offset: -6.708 ms
```

Run 7: Report of PCC-Expr — Data Link

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```
Run 8: Statistics of PCC-Expr

Start at: 2018-04-17 03:55:03
End at: 2018-04-17 03:55:33
Local clock offset: 6.277 ms
Remote clock offset: 3.845 ms
```

Run 8: Report of PCC-Expr — Data Link

Figure is missing

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```
Run 9: Statistics of PCC-Expr

Start at: 2018-04-17 04:16:18
End at: 2018-04-17 04:16:48
Local clock offset: 4.249 ms
Remote clock offset: 2.976 ms
```

Run 9: Report of PCC-Expr — Data Link

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```
Run 10: Statistics of PCC-Expr

Start at: 2018-04-17 04:37:37
End at: 2018-04-17 04:38:07
Local clock offset: 11.554 ms
Remote clock offset: 2.926 ms
```

Run 10: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing