

Pantheon Report

Generated at 2017-12-05 11:04:23 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

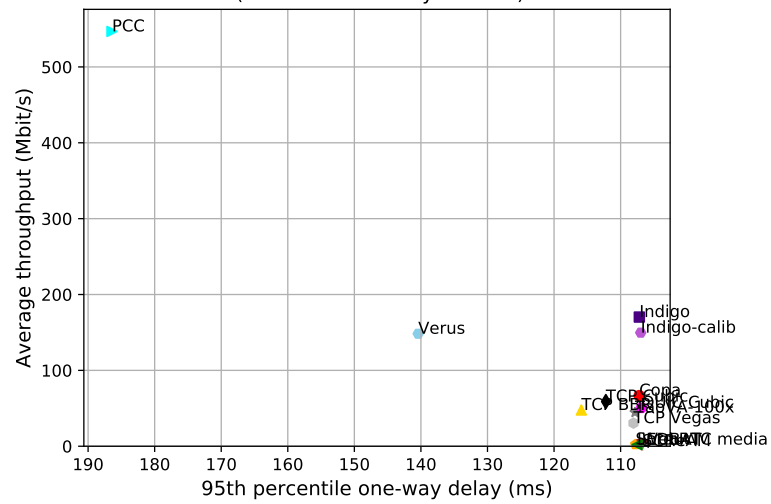
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

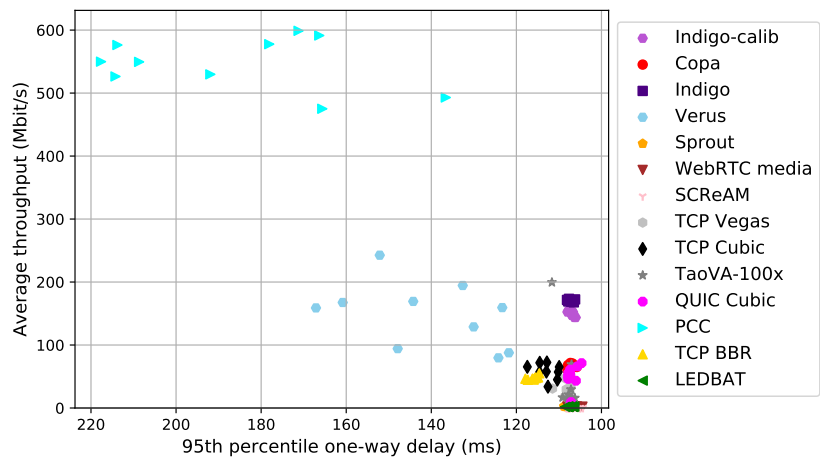
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabbb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
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/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE London Ethernet to GCE Tokyo 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	47.79	115.90	0.07
TCP Cubic	10	58.93	112.22	0.09
LEDBAT	10	1.96	107.54	0.39
PCC	10	546.79	186.41	1.48
QUIC Cubic	9	50.70	106.85	0.00
SCReAM	10	0.20	106.77	0.02
WebRTC media	10	2.14	106.78	0.00
Sprout	10	2.36	107.76	0.35
TaoVA-100x	10	44.47	107.84	0.00
TCP Vegas	10	30.42	108.07	0.04
Verus	10	148.26	140.42	0.24
Copa	10	66.70	107.21	0.00
Indigo	10	170.28	107.19	0.00
Indigo-calib	9	149.72	106.98	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-12-05 08:11:10

End at: 2017-12-05 08:11:40

Below is generated by plot.py at 2017-12-05 10:33:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.51 Mbit/s

95th percentile per-packet one-way delay: 115.557 ms

Loss rate: 0.14%

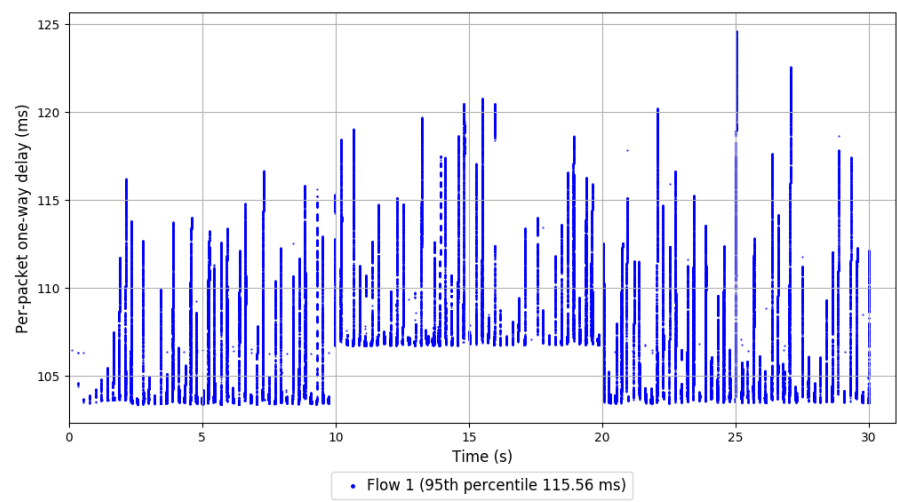
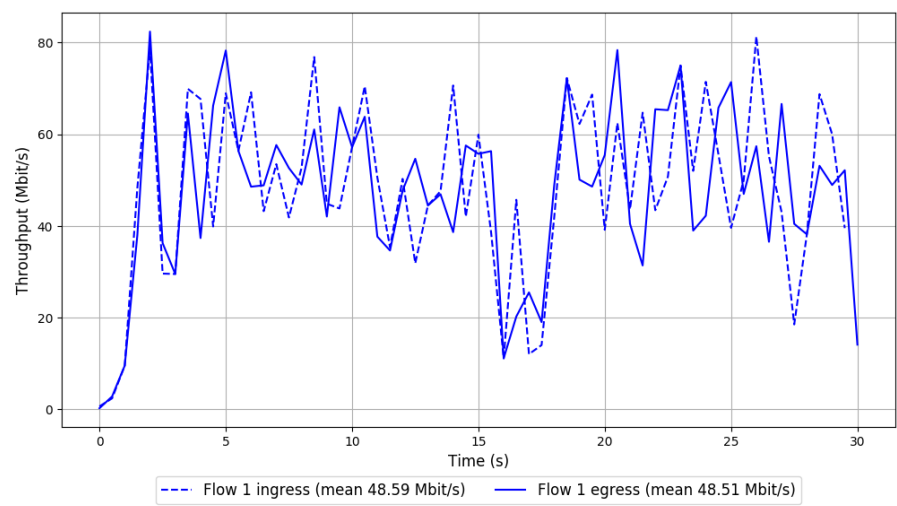
-- Flow 1:

Average throughput: 48.51 Mbit/s

95th percentile per-packet one-way delay: 115.557 ms

Loss rate: 0.14%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 08:22:14

End at: 2017-12-05 08:22:44

Below is generated by plot.py at 2017-12-05 10:33:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.05 Mbit/s

95th percentile per-packet one-way delay: 116.221 ms

Loss rate: 0.09%

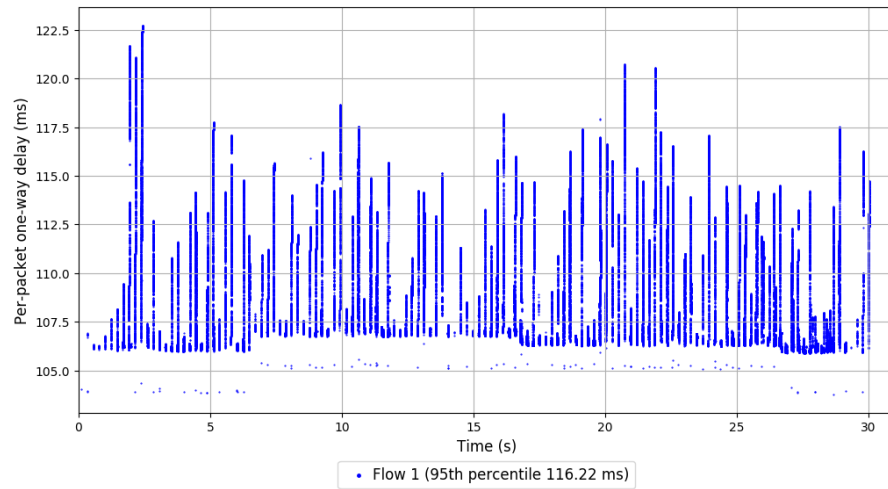
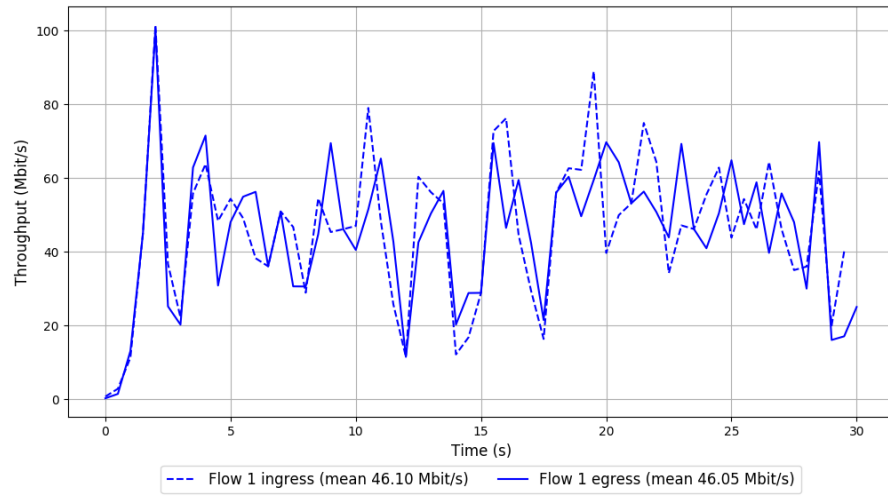
-- Flow 1:

Average throughput: 46.05 Mbit/s

95th percentile per-packet one-way delay: 116.221 ms

Loss rate: 0.09%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 08:33:09

End at: 2017-12-05 08:33:39

Below is generated by plot.py at 2017-12-05 10:33:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.73 Mbit/s

95th percentile per-packet one-way delay: 116.169 ms

Loss rate: 0.01%

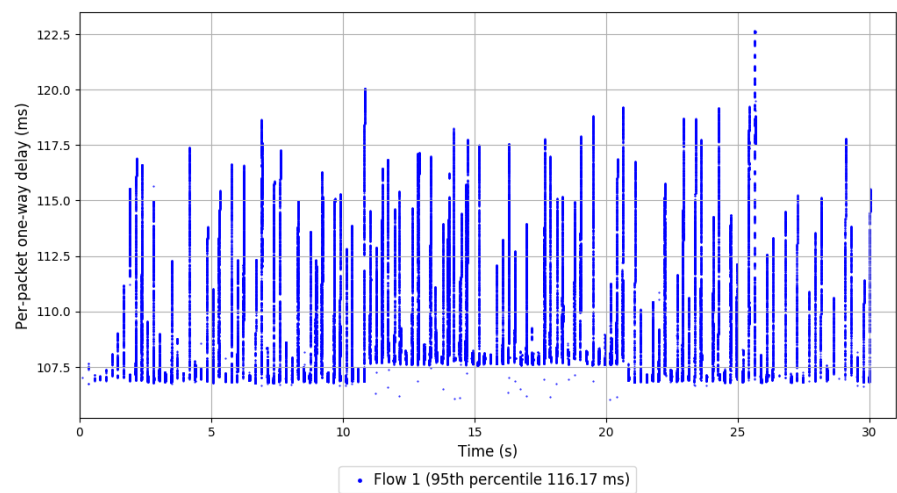
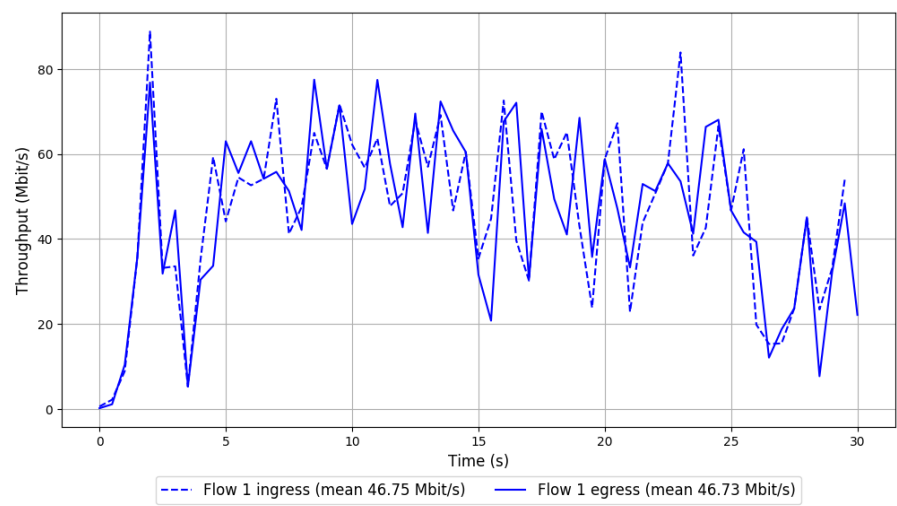
-- Flow 1:

Average throughput: 46.73 Mbit/s

95th percentile per-packet one-way delay: 116.169 ms

Loss rate: 0.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-05 08:44:00

End at: 2017-12-05 08:44:30

Below is generated by plot.py at 2017-12-05 10:33:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.51 Mbit/s

95th percentile per-packet one-way delay: 117.886 ms

Loss rate: 0.02%

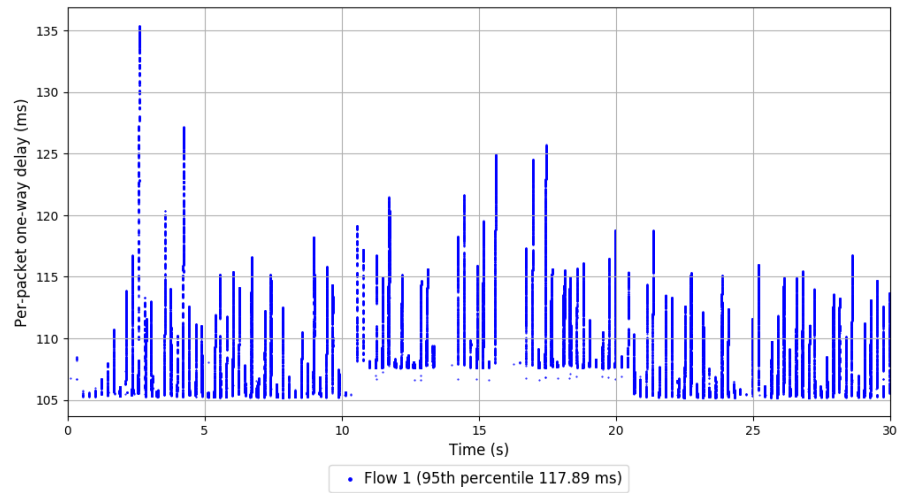
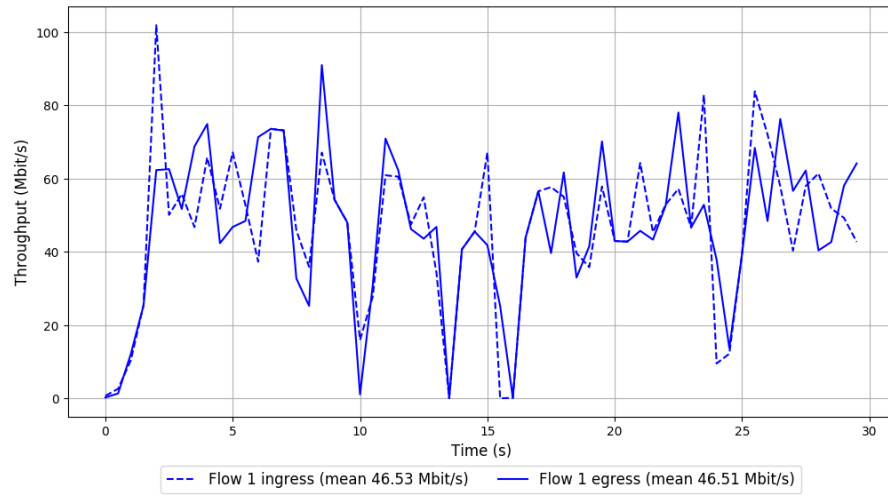
-- Flow 1:

Average throughput: 46.51 Mbit/s

95th percentile per-packet one-way delay: 117.886 ms

Loss rate: 0.02%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-05 08:55:18

End at: 2017-12-05 08:55:48

Below is generated by plot.py at 2017-12-05 10:33:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.84 Mbit/s

95th percentile per-packet one-way delay: 117.317 ms

Loss rate: 0.01%

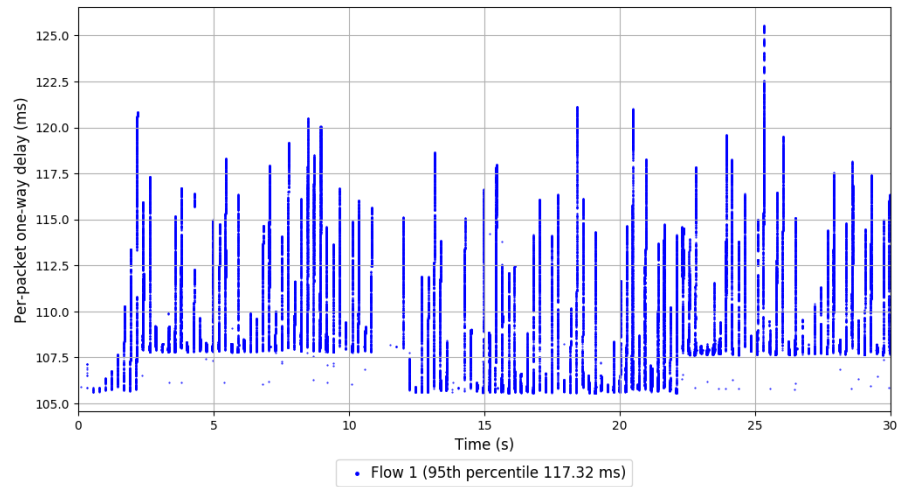
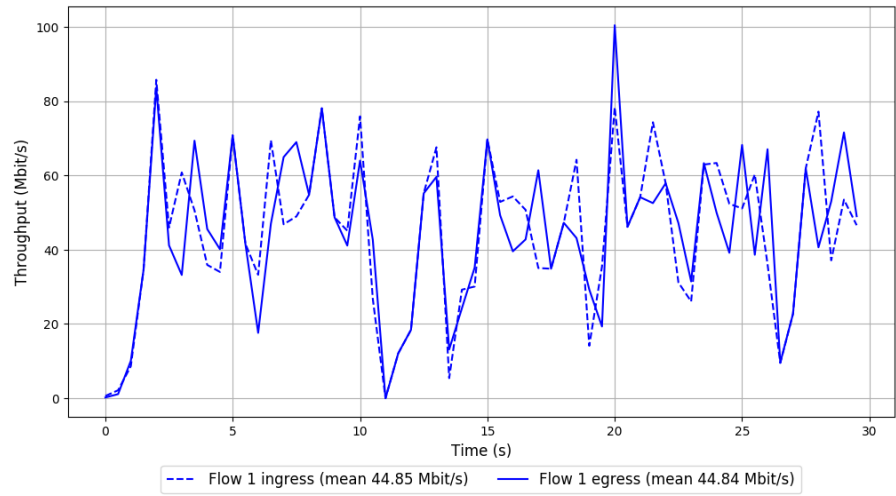
-- Flow 1:

Average throughput: 44.84 Mbit/s

95th percentile per-packet one-way delay: 117.317 ms

Loss rate: 0.01%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-05 09:06:15

End at: 2017-12-05 09:06:45

Below is generated by plot.py at 2017-12-05 10:33:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.18 Mbit/s

95th percentile per-packet one-way delay: 115.910 ms

Loss rate: 0.05%

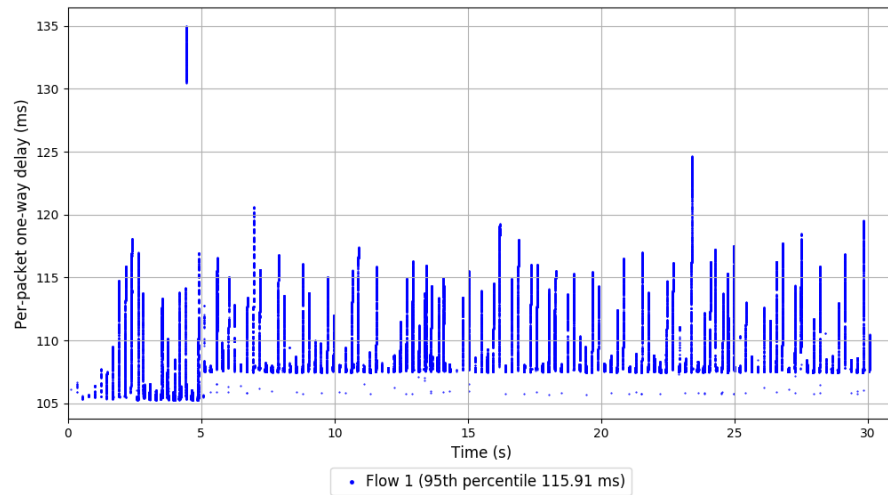
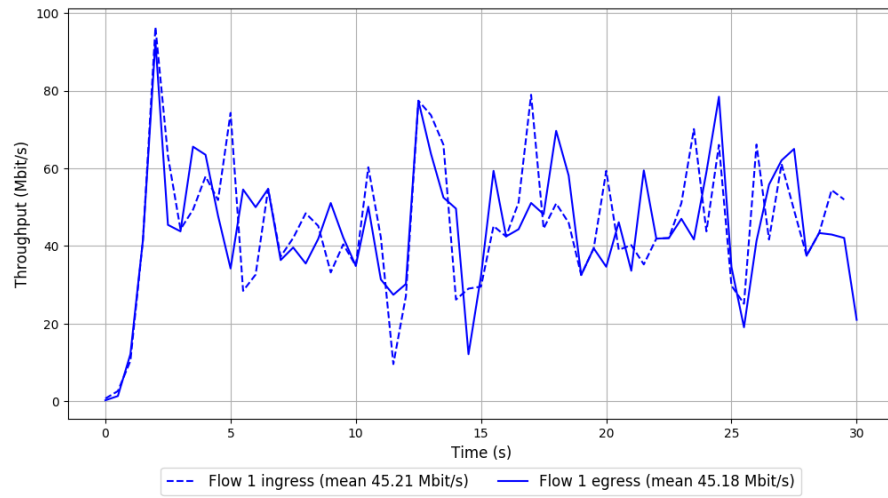
-- Flow 1:

Average throughput: 45.18 Mbit/s

95th percentile per-packet one-way delay: 115.910 ms

Loss rate: 0.05%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-05 09:17:09

End at: 2017-12-05 09:17:39

Below is generated by plot.py at 2017-12-05 10:33:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.71 Mbit/s

95th percentile per-packet one-way delay: 114.910 ms

Loss rate: 0.00%

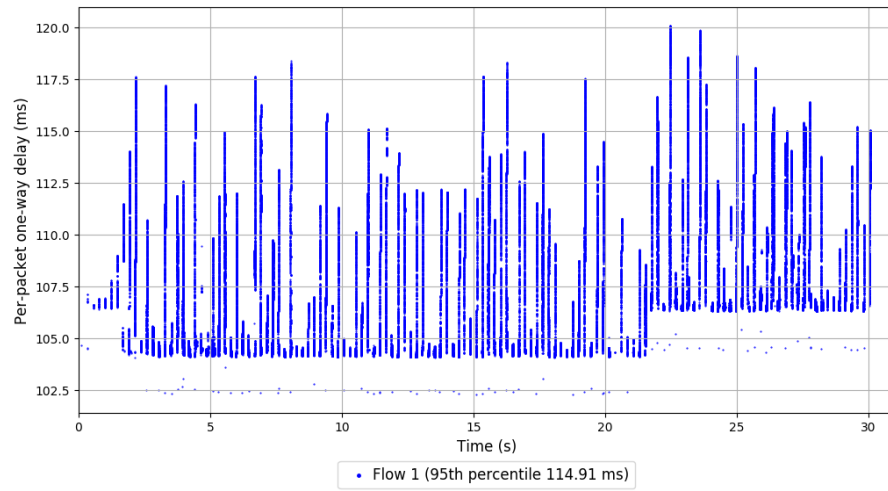
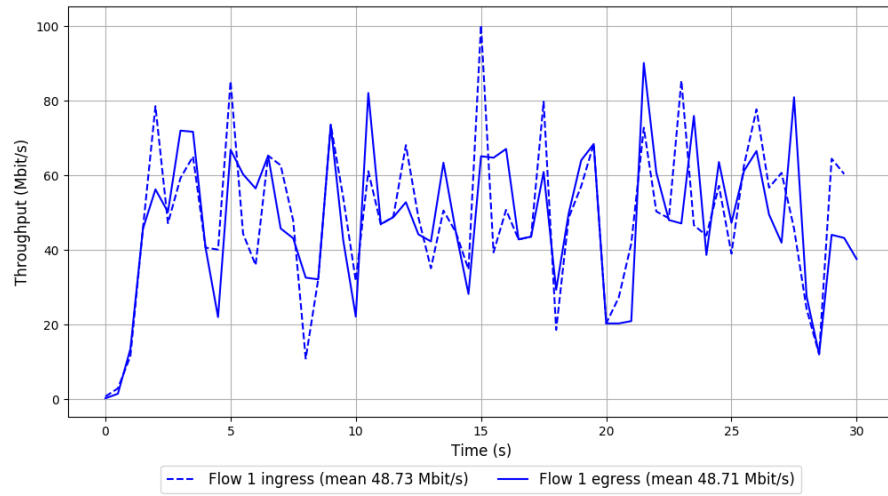
-- Flow 1:

Average throughput: 48.71 Mbit/s

95th percentile per-packet one-way delay: 114.910 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-05 09:28:08

End at: 2017-12-05 09:28:38

Below is generated by plot.py at 2017-12-05 10:34:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.03 Mbit/s

95th percentile per-packet one-way delay: 114.607 ms

Loss rate: 0.17%

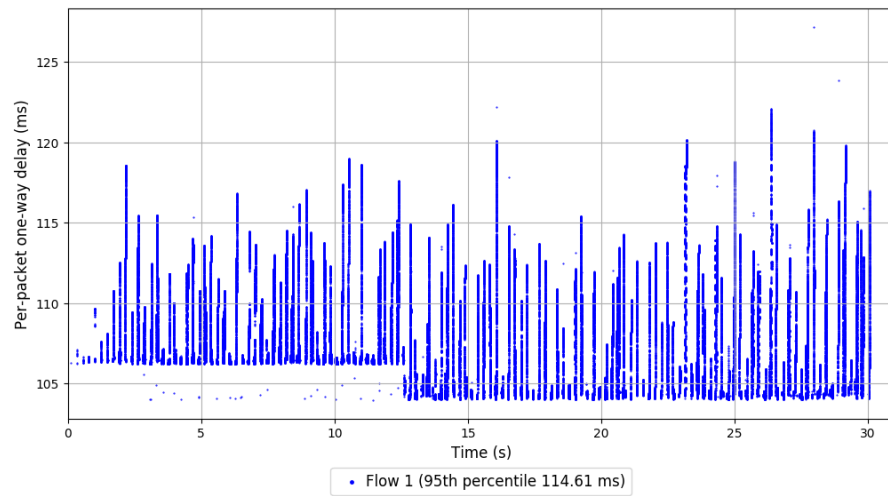
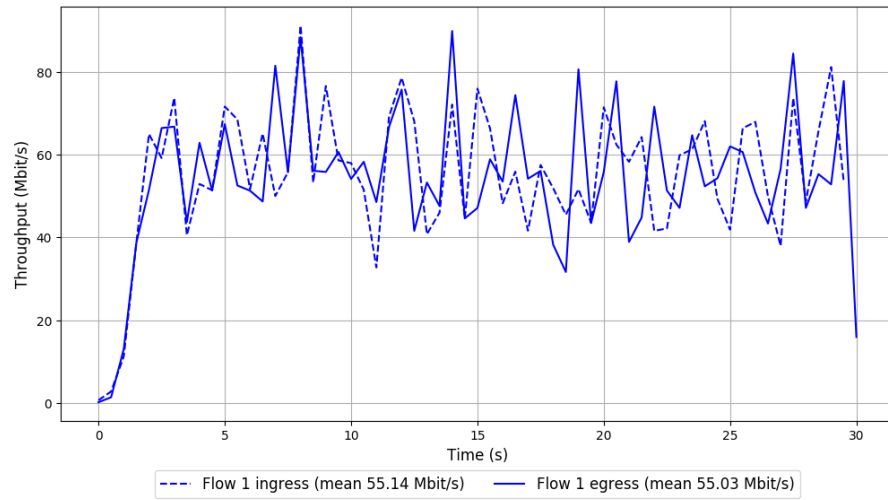
-- Flow 1:

Average throughput: 55.03 Mbit/s

95th percentile per-packet one-way delay: 114.607 ms

Loss rate: 0.17%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-05 09:39:10

End at: 2017-12-05 09:39:40

Below is generated by plot.py at 2017-12-05 10:34:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.77 Mbit/s

95th percentile per-packet one-way delay: 115.050 ms

Loss rate: 0.00%

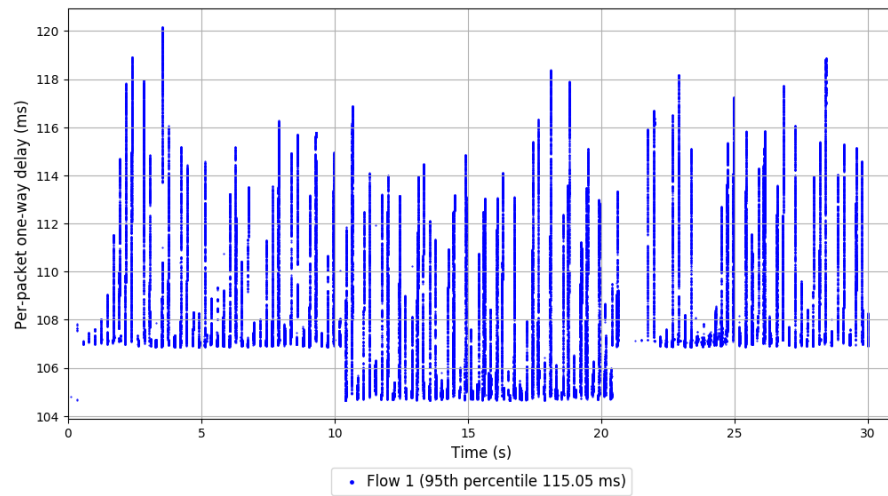
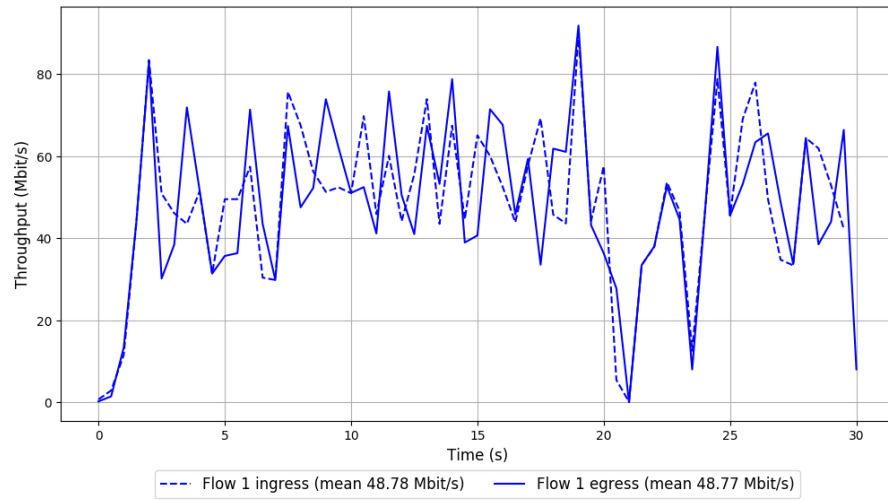
-- Flow 1:

Average throughput: 48.77 Mbit/s

95th percentile per-packet one-way delay: 115.050 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-05 09:49:58

End at: 2017-12-05 09:50:28

Below is generated by plot.py at 2017-12-05 10:34:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.53 Mbit/s

95th percentile per-packet one-way delay: 115.408 ms

Loss rate: 0.25%

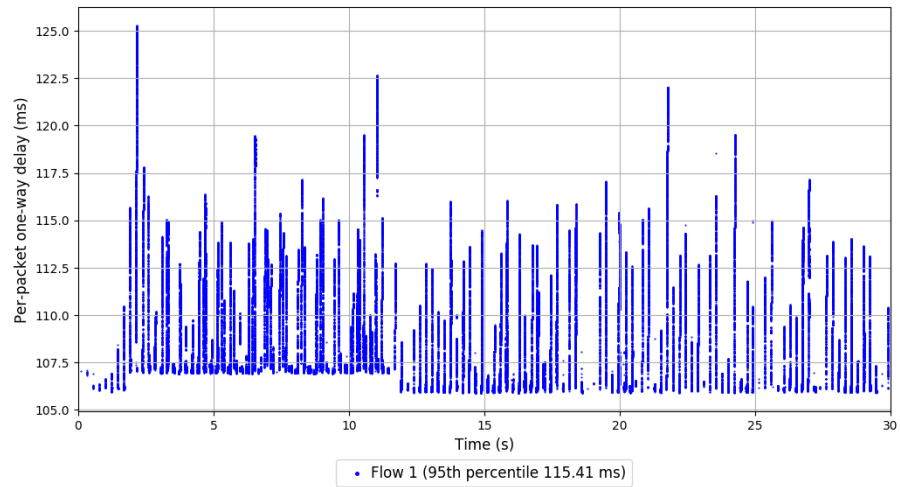
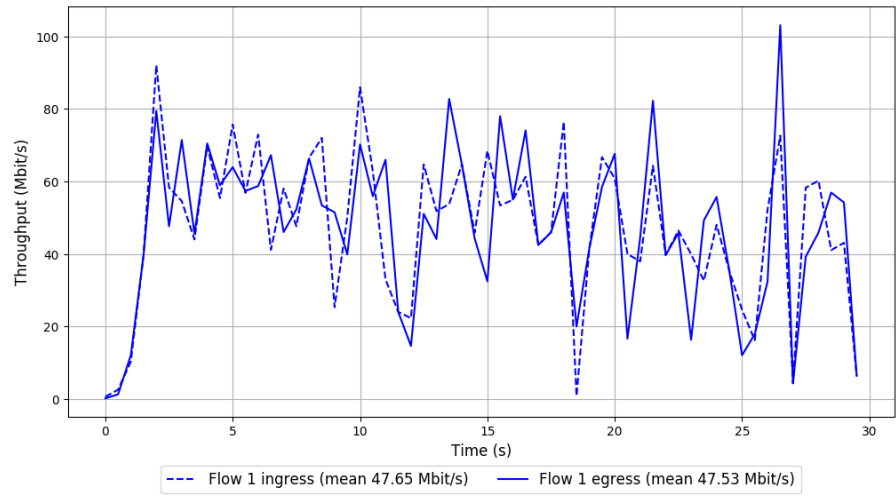
-- Flow 1:

Average throughput: 47.53 Mbit/s

95th percentile per-packet one-way delay: 115.408 ms

Loss rate: 0.25%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 08:17:59

End at: 2017-12-05 08:18:29

Below is generated by plot.py at 2017-12-05 10:35:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.34 Mbit/s

95th percentile per-packet one-way delay: 112.825 ms

Loss rate: 0.00%

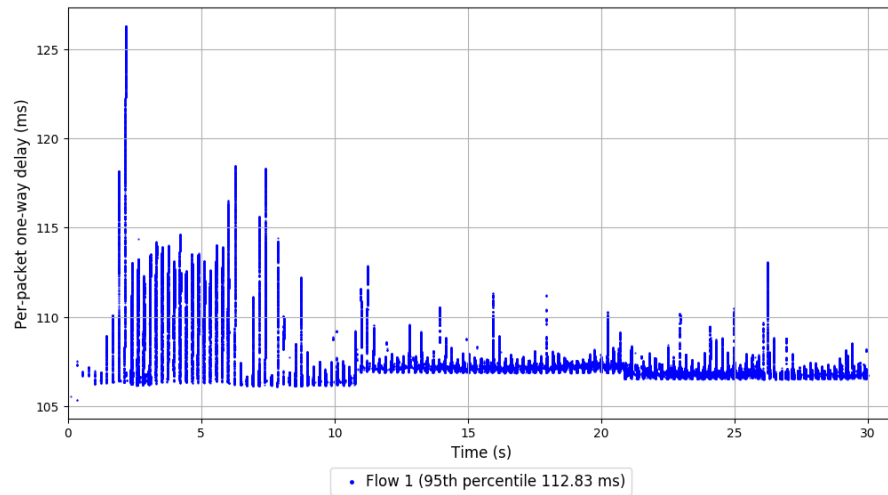
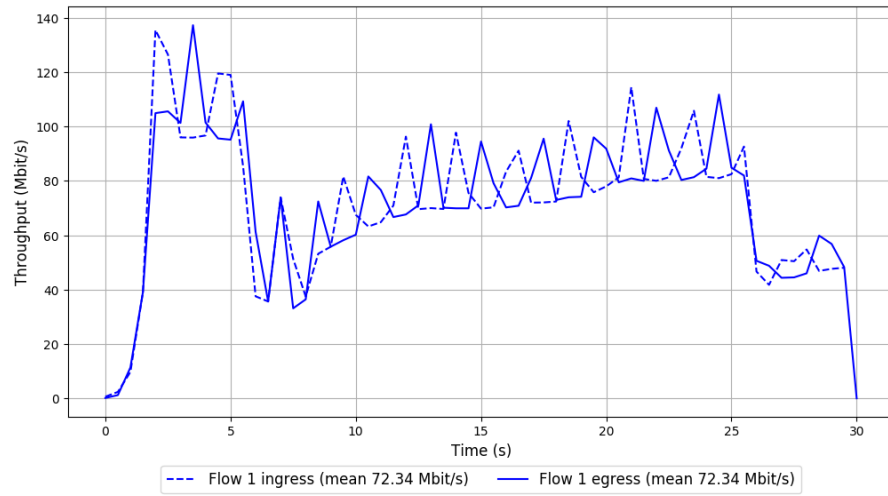
-- Flow 1:

Average throughput: 72.34 Mbit/s

95th percentile per-packet one-way delay: 112.825 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 08:28:59

End at: 2017-12-05 08:29:29

Below is generated by plot.py at 2017-12-05 10:35:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.86 Mbit/s

95th percentile per-packet one-way delay: 112.578 ms

Loss rate: 0.02%

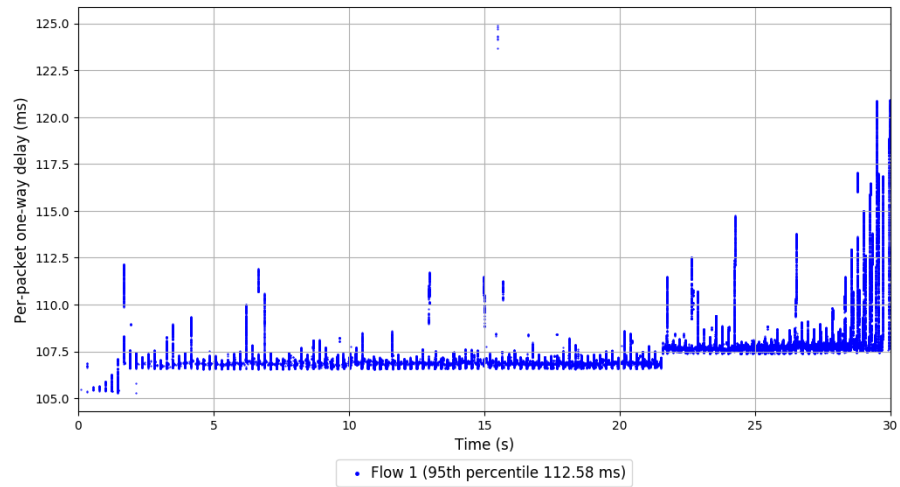
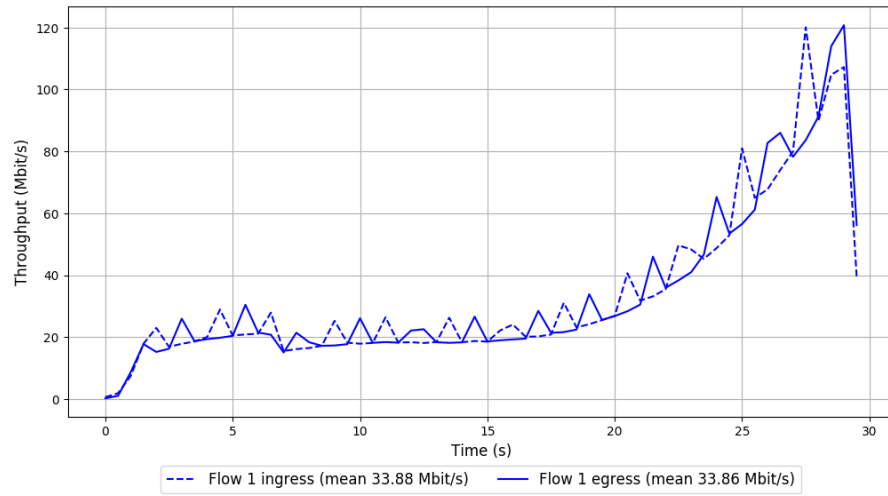
-- Flow 1:

Average throughput: 33.86 Mbit/s

95th percentile per-packet one-way delay: 112.578 ms

Loss rate: 0.02%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 08:39:49

End at: 2017-12-05 08:40:19

Below is generated by plot.py at 2017-12-05 10:35:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.38 Mbit/s

95th percentile per-packet one-way delay: 117.423 ms

Loss rate: 0.01%

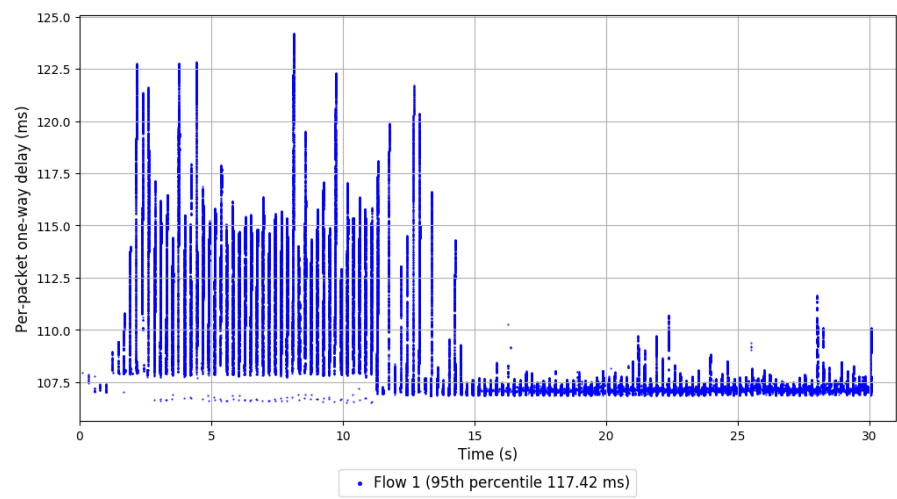
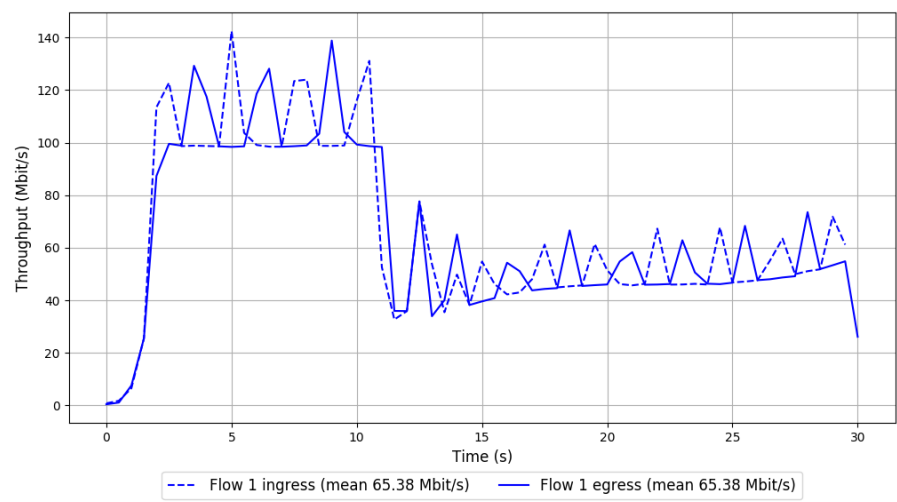
-- Flow 1:

Average throughput: 65.38 Mbit/s

95th percentile per-packet one-way delay: 117.423 ms

Loss rate: 0.01%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-05 08:51:09

End at: 2017-12-05 08:51:39

Below is generated by plot.py at 2017-12-05 10:35:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 110.160 ms

Loss rate: 0.34%

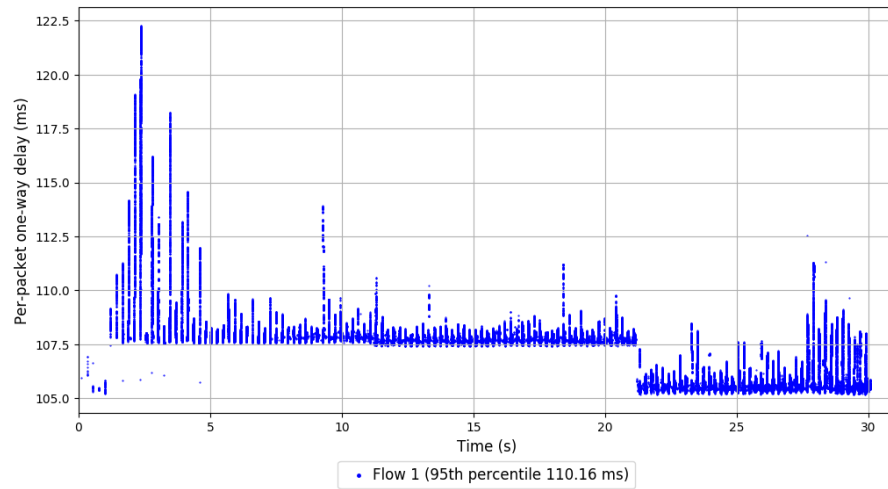
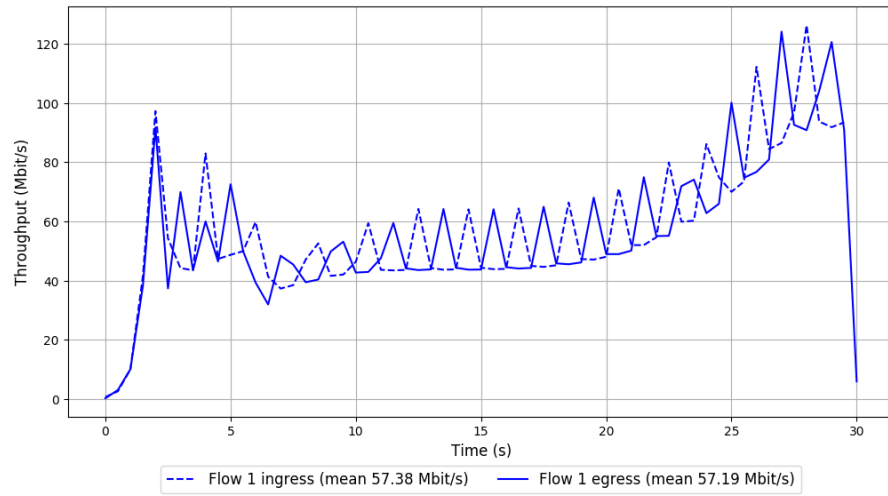
-- Flow 1:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 110.160 ms

Loss rate: 0.34%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-05 09:02:05

End at: 2017-12-05 09:02:35

Below is generated by plot.py at 2017-12-05 10:35:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.79 Mbit/s

95th percentile per-packet one-way delay: 112.935 ms

Loss rate: 0.01%

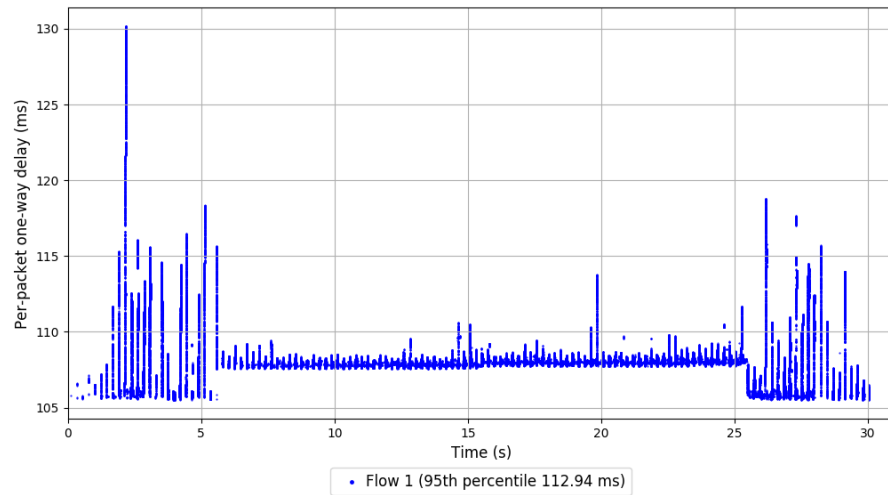
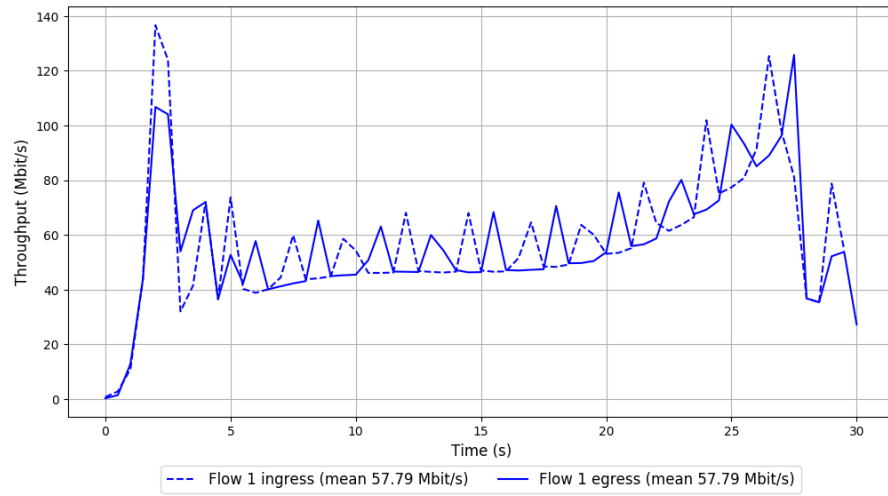
-- Flow 1:

Average throughput: 57.79 Mbit/s

95th percentile per-packet one-way delay: 112.935 ms

Loss rate: 0.01%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-05 09:12:57

End at: 2017-12-05 09:13:27

Below is generated by plot.py at 2017-12-05 10:35:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.06 Mbit/s

95th percentile per-packet one-way delay: 110.360 ms

Loss rate: 0.01%

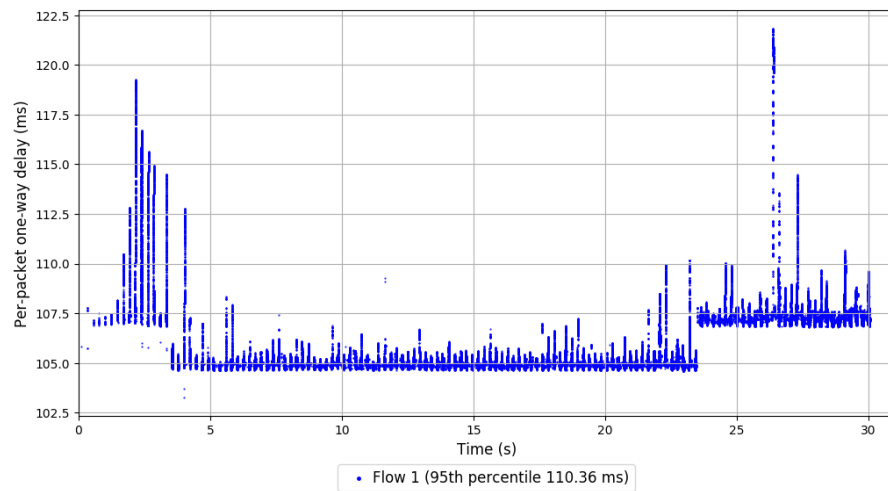
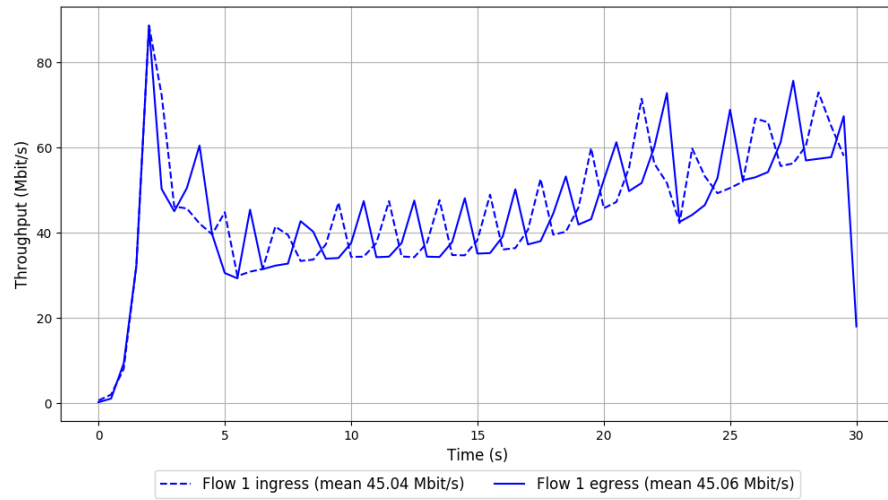
-- Flow 1:

Average throughput: 45.06 Mbit/s

95th percentile per-packet one-way delay: 110.360 ms

Loss rate: 0.01%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-05 09:24:02

End at: 2017-12-05 09:24:32

Below is generated by plot.py at 2017-12-05 10:35:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.12 Mbit/s

95th percentile per-packet one-way delay: 106.921 ms

Loss rate: 0.48%

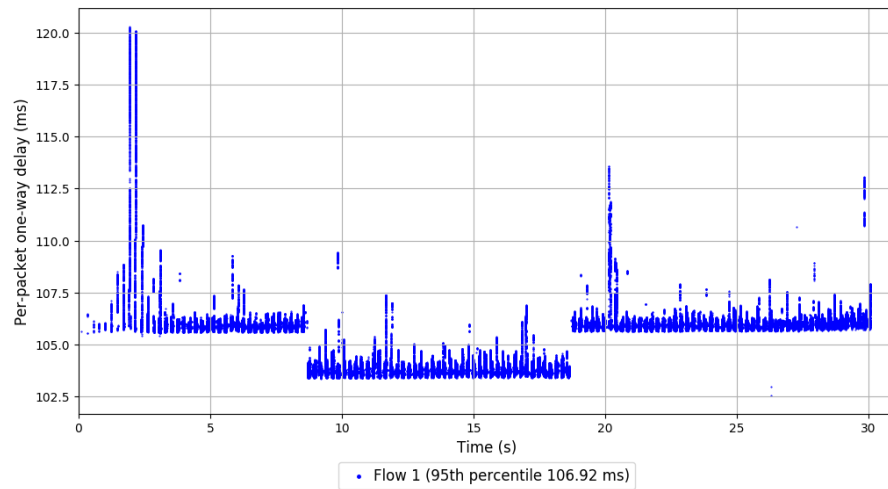
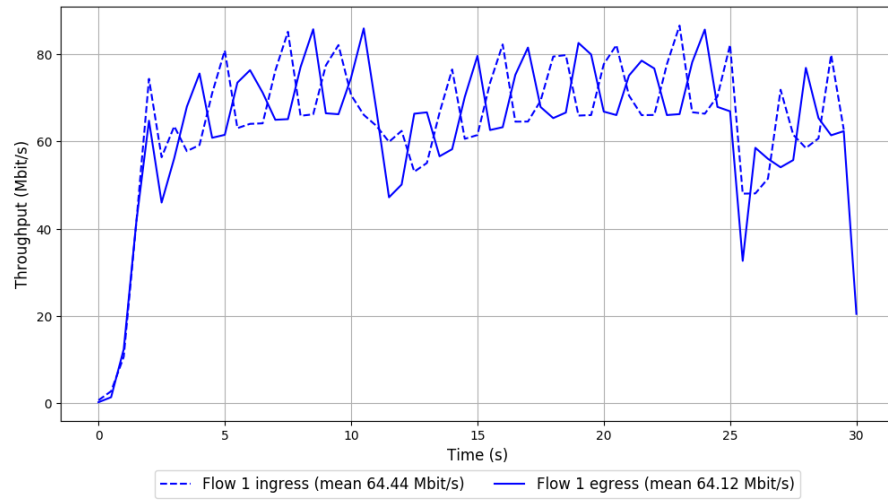
-- Flow 1:

Average throughput: 64.12 Mbit/s

95th percentile per-packet one-way delay: 106.921 ms

Loss rate: 0.48%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-05 09:34:58

End at: 2017-12-05 09:35:28

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.80 Mbit/s

95th percentile per-packet one-way delay: 114.509 ms

Loss rate: 0.01%

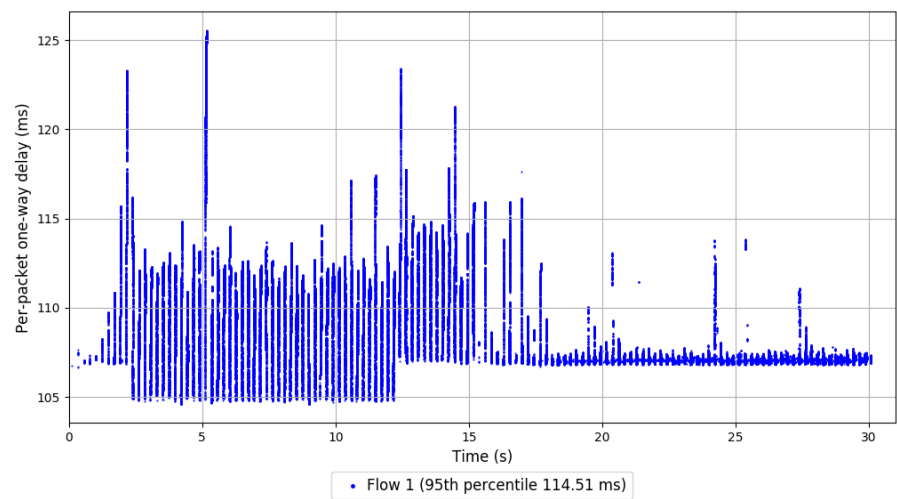
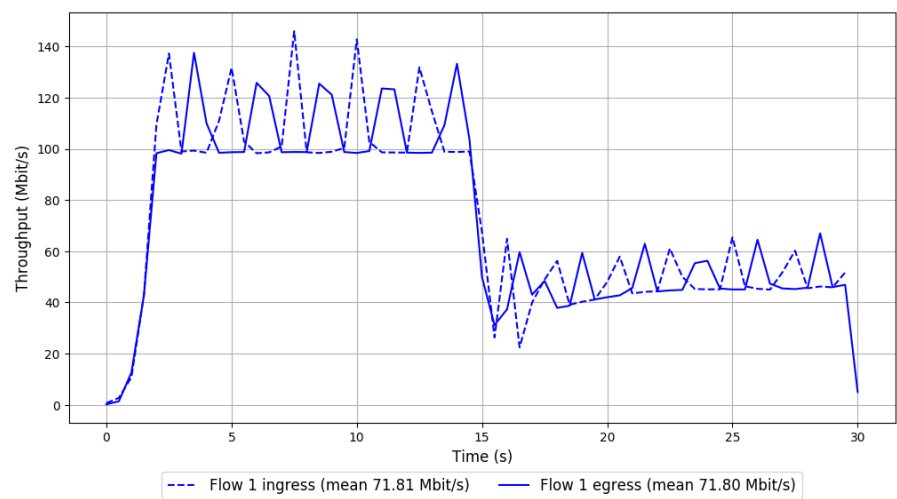
-- Flow 1:

Average throughput: 71.80 Mbit/s

95th percentile per-packet one-way delay: 114.509 ms

Loss rate: 0.01%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-05 09:45:51

End at: 2017-12-05 09:46:21

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.13 Mbit/s

95th percentile per-packet one-way delay: 109.937 ms

Loss rate: 0.01%

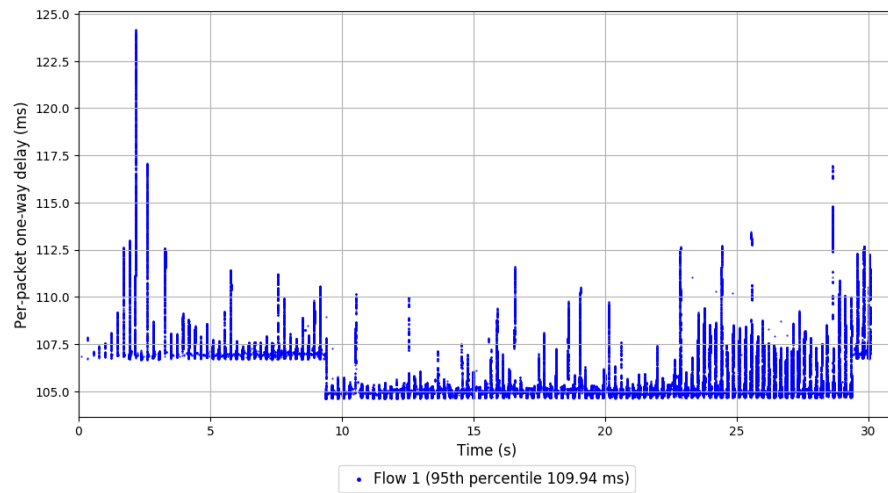
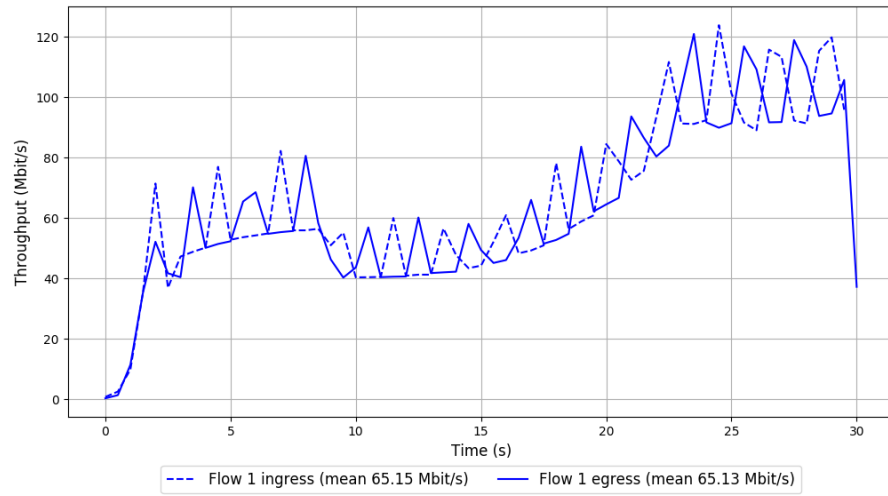
-- Flow 1:

Average throughput: 65.13 Mbit/s

95th percentile per-packet one-way delay: 109.937 ms

Loss rate: 0.01%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-05 09:56:44

End at: 2017-12-05 09:57:14

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.63 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 0.05%

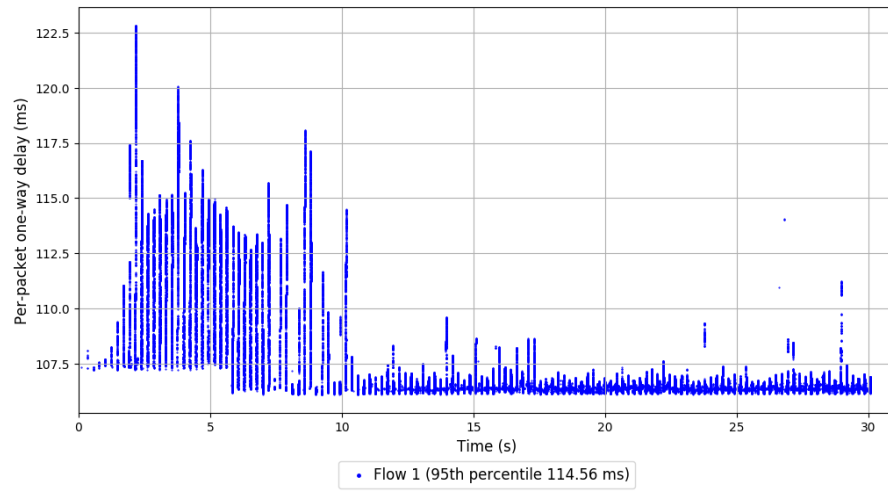
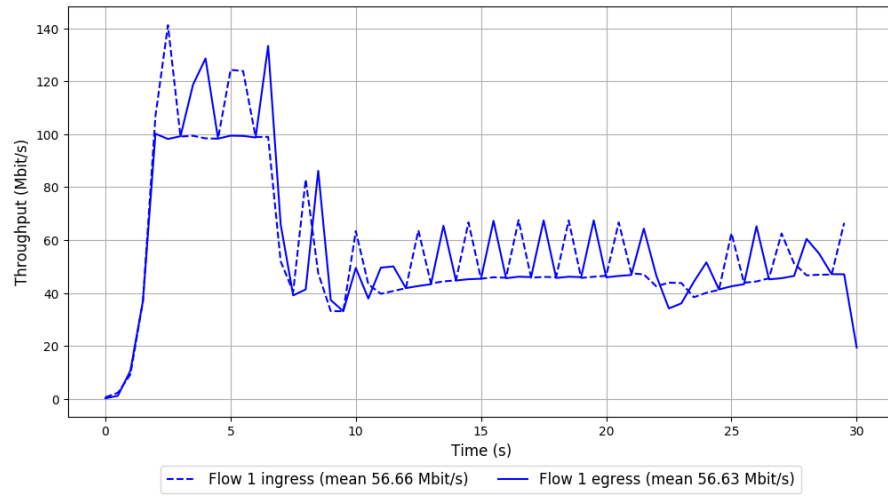
-- Flow 1:

Average throughput: 56.63 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 0.05%

Run 10: Report of TCP Cubic — Data Link

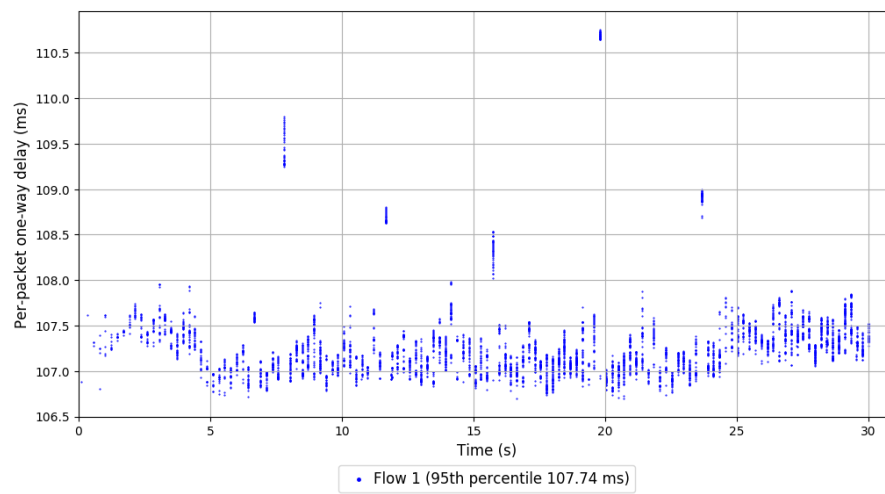
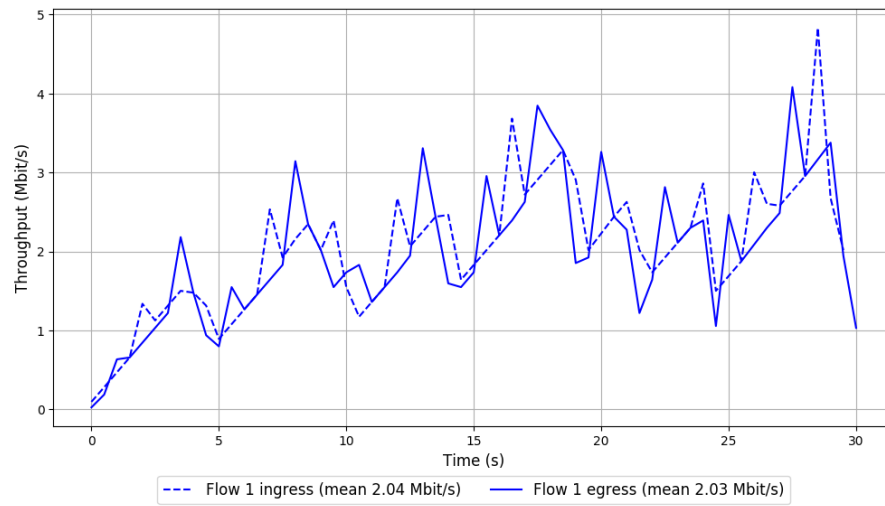


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 08:15:46
End at: 2017-12-05 08:16:16

# Below is generated by plot.py at 2017-12-05 10:35:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 107.744 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 107.744 ms
Loss rate: 0.60%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-05 08:26:46

End at: 2017-12-05 08:27:16

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 107.911 ms

Loss rate: 0.00%

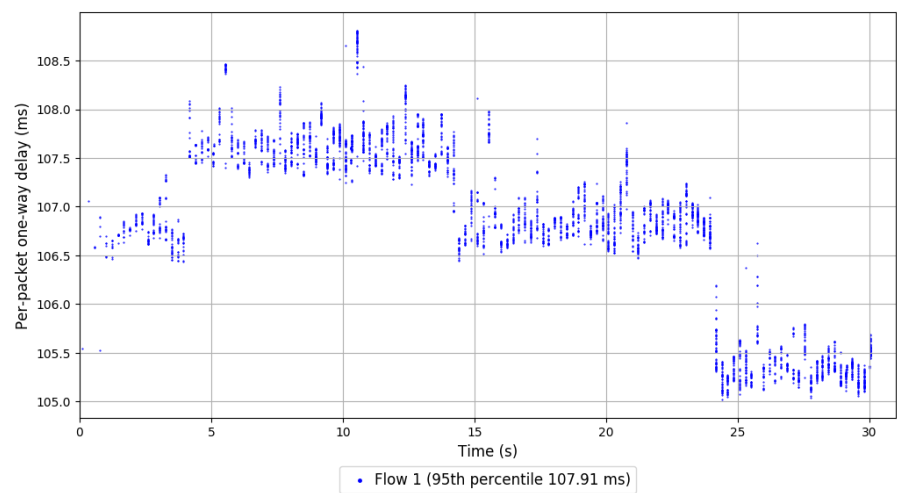
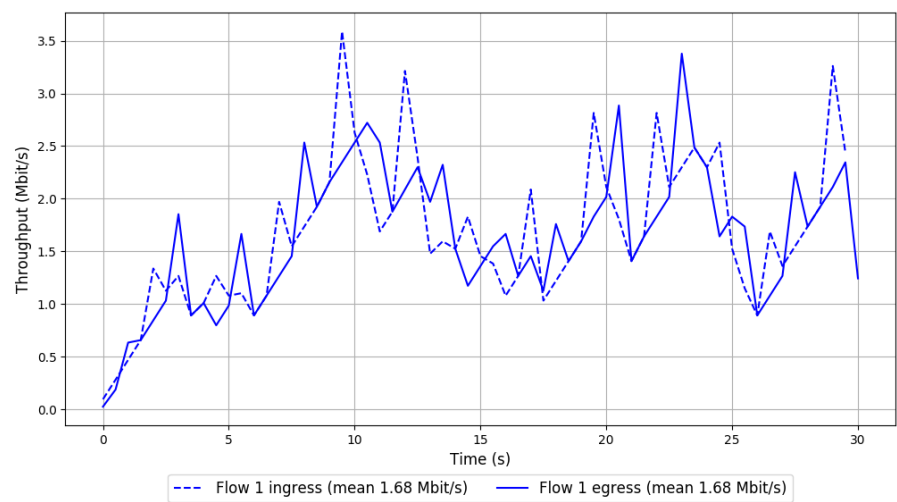
-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 107.911 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 08:37:38

End at: 2017-12-05 08:38:08

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 107.747 ms

Loss rate: 0.24%

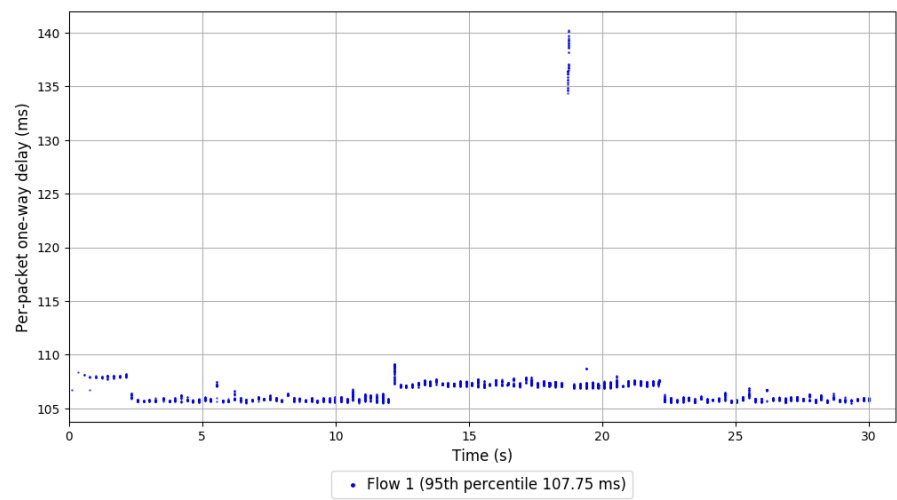
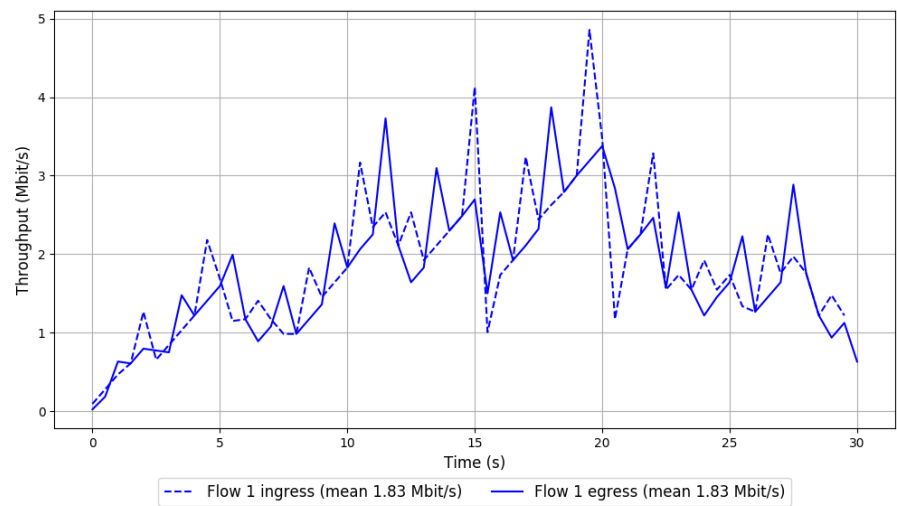
-- Flow 1:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 107.747 ms

Loss rate: 0.24%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-05 08:48:40

End at: 2017-12-05 08:49:10

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 107.935 ms

Loss rate: 0.86%

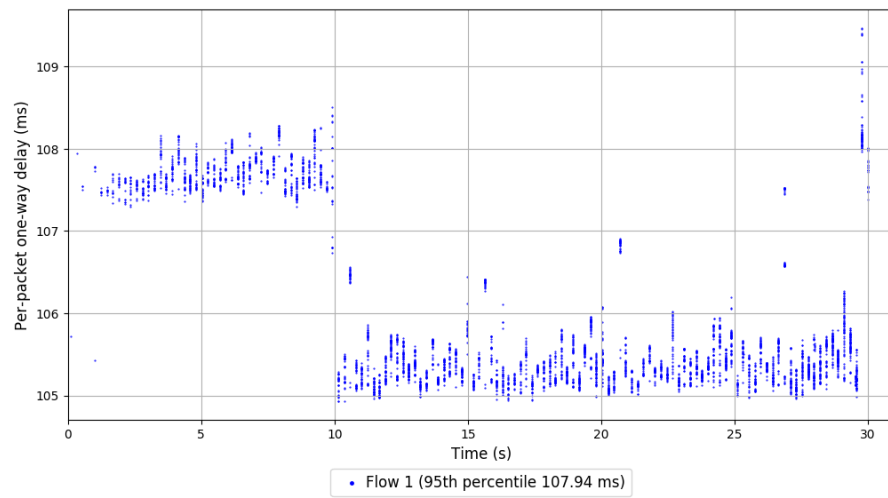
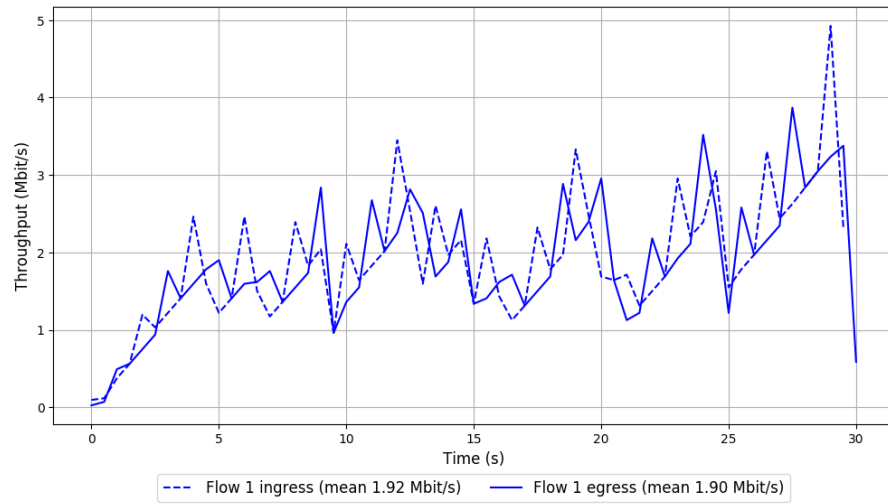
-- Flow 1:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 107.935 ms

Loss rate: 0.86%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-05 08:59:53

End at: 2017-12-05 09:00:23

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 108.577 ms

Loss rate: 0.53%

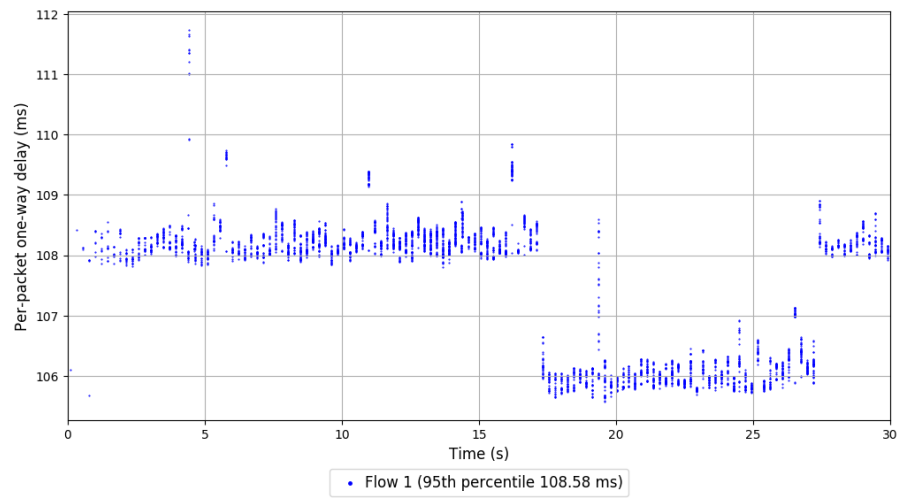
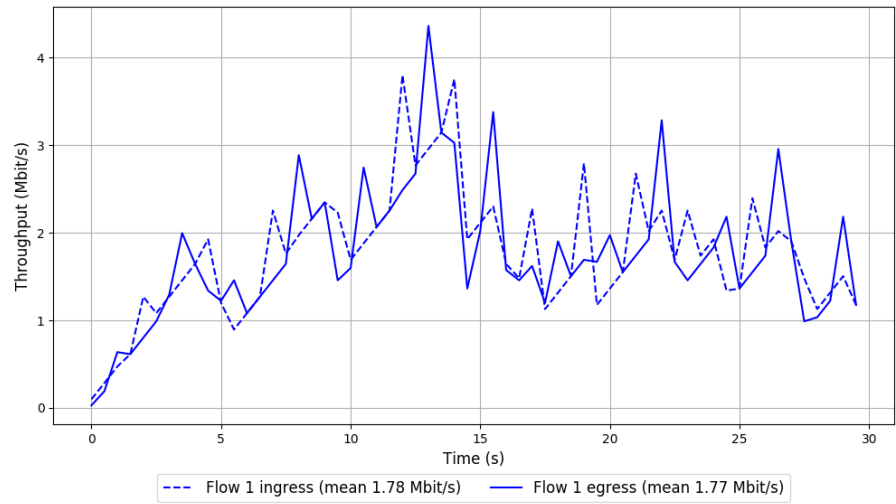
-- Flow 1:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 108.577 ms

Loss rate: 0.53%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-05 09:10:45

End at: 2017-12-05 09:11:15

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 107.796 ms

Loss rate: 0.14%

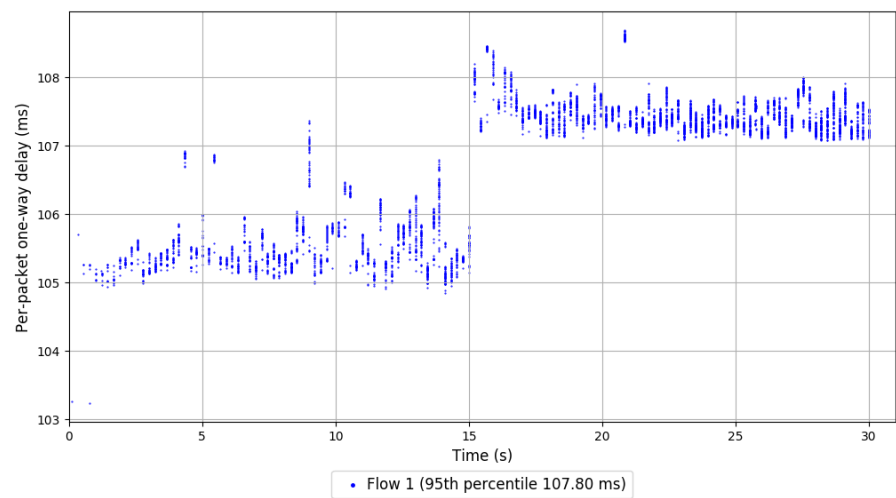
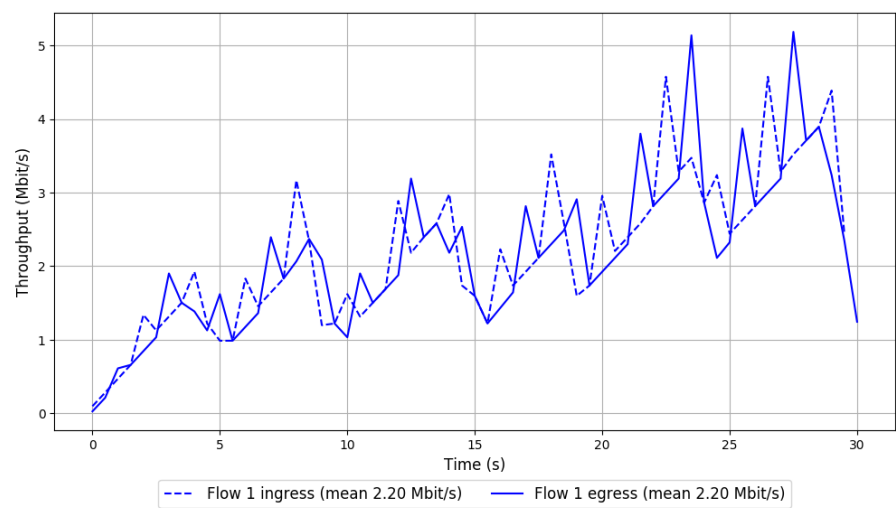
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 107.796 ms

Loss rate: 0.14%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-05 09:21:45

End at: 2017-12-05 09:22:16

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 106.373 ms

Loss rate: 0.26%

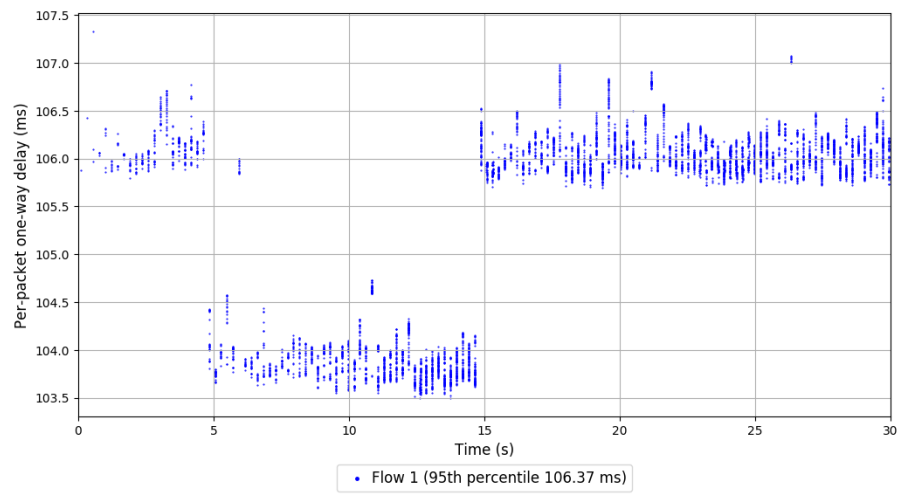
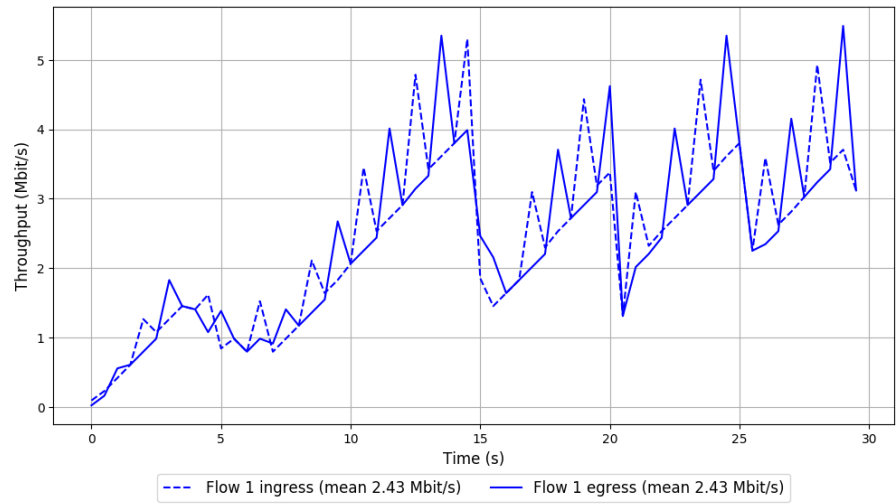
-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 106.373 ms

Loss rate: 0.26%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-05 09:32:44

End at: 2017-12-05 09:33:14

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 107.792 ms

Loss rate: 0.78%

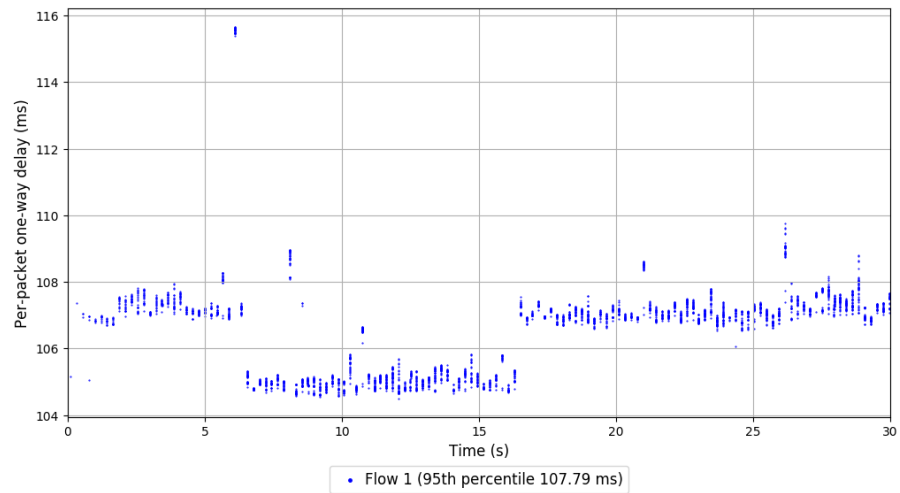
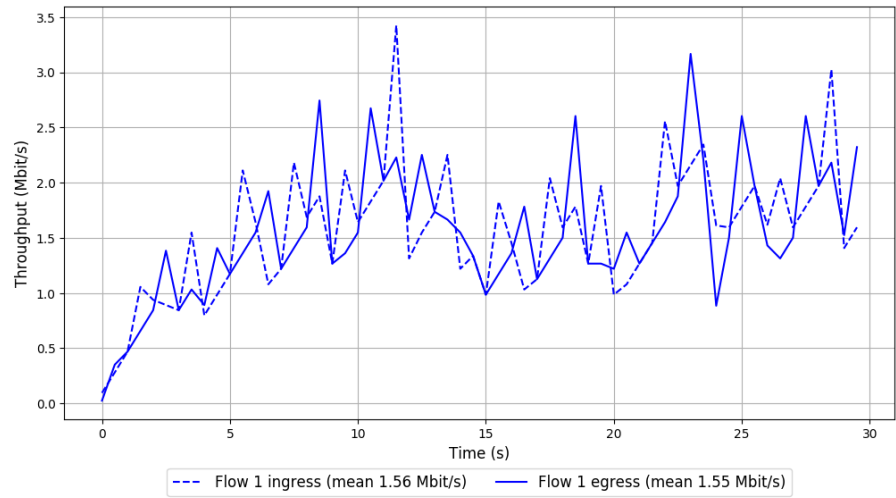
-- Flow 1:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 107.792 ms

Loss rate: 0.78%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-05 09:43:39

End at: 2017-12-05 09:44:09

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 106.904 ms

Loss rate: 0.24%

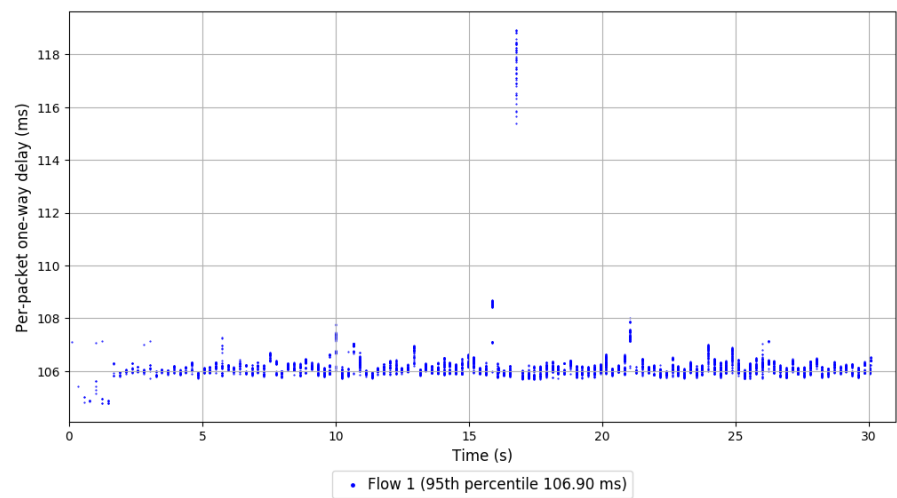
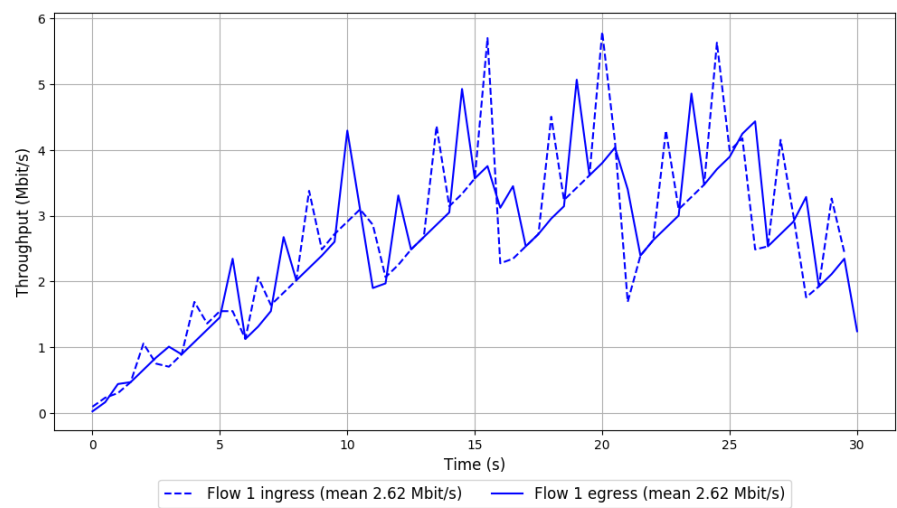
-- Flow 1:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 106.904 ms

Loss rate: 0.24%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-05 09:54:33

End at: 2017-12-05 09:55:03

Below is generated by plot.py at 2017-12-05 10:35:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 106.580 ms

Loss rate: 0.22%

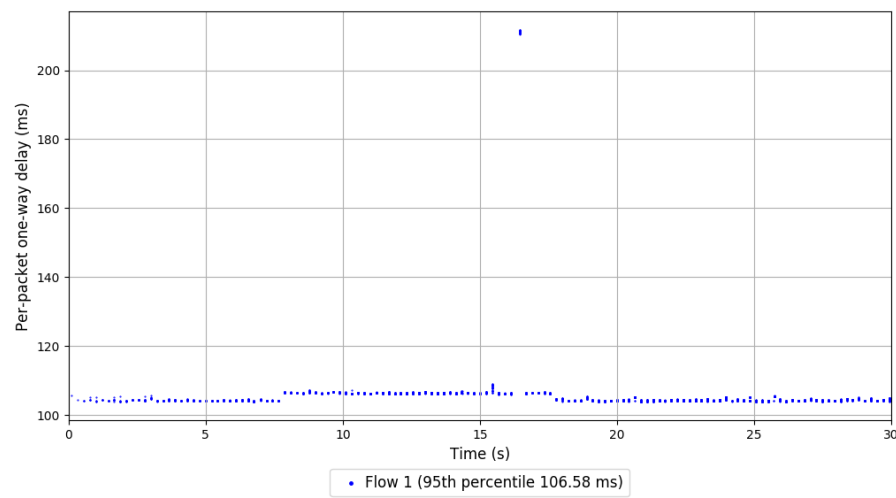
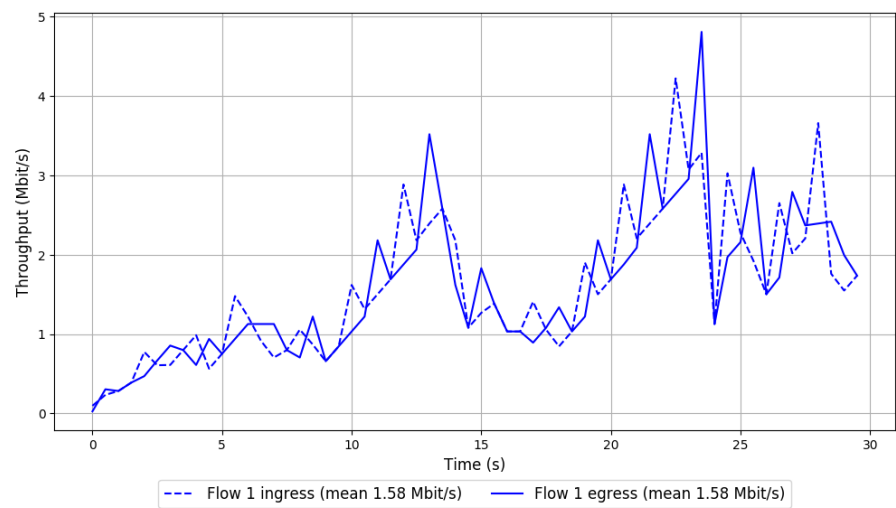
-- Flow 1:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 106.580 ms

Loss rate: 0.22%

Run 10: Report of LEDBAT — Data Link

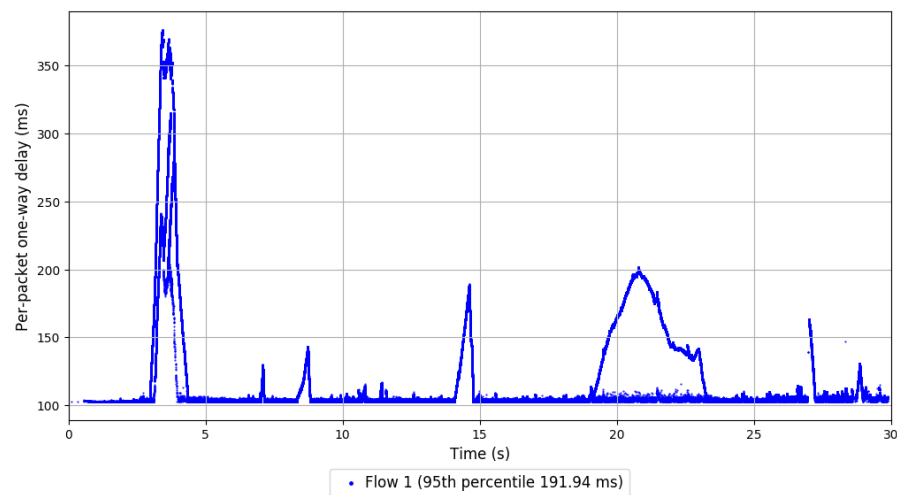
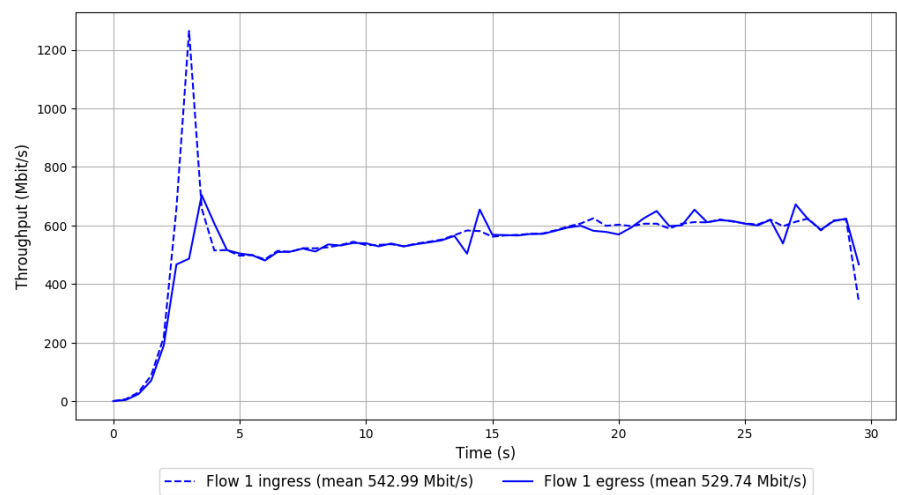


```
Run 1: Statistics of PCC

Start at: 2017-12-05 08:09:15
End at: 2017-12-05 08:09:45

# Below is generated by plot.py at 2017-12-05 10:44:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 529.74 Mbit/s
95th percentile per-packet one-way delay: 191.935 ms
Loss rate: 2.43%
-- Flow 1:
Average throughput: 529.74 Mbit/s
95th percentile per-packet one-way delay: 191.935 ms
Loss rate: 2.43%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-05 08:20:14

End at: 2017-12-05 08:20:44

Below is generated by plot.py at 2017-12-05 10:45:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 598.86 Mbit/s

95th percentile per-packet one-way delay: 171.198 ms

Loss rate: 1.55%

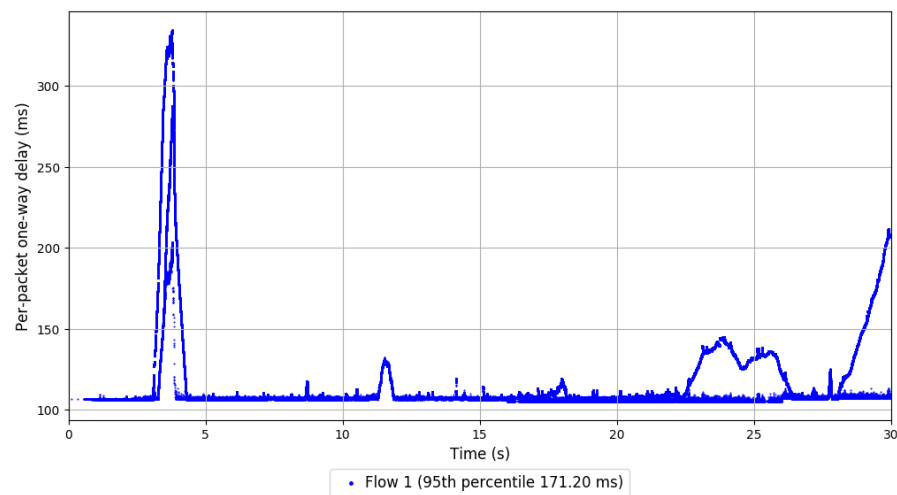
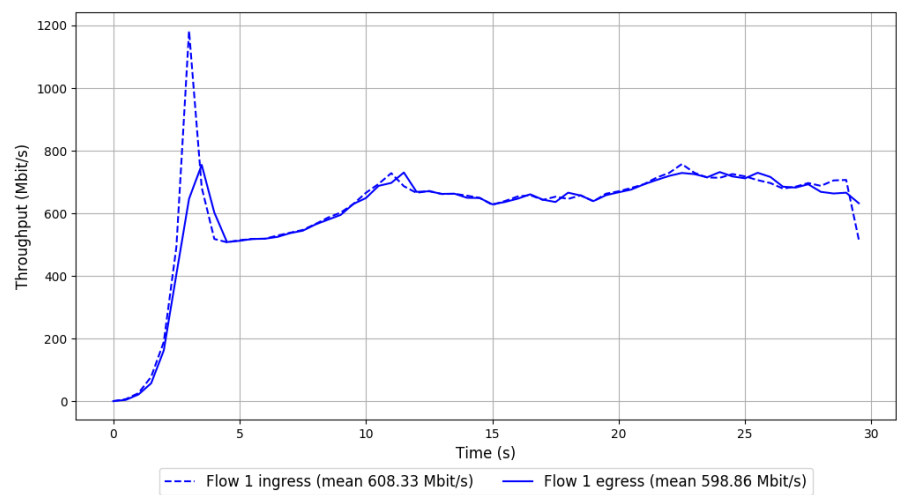
-- Flow 1:

Average throughput: 598.86 Mbit/s

95th percentile per-packet one-way delay: 171.198 ms

Loss rate: 1.55%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-05 08:31:11

End at: 2017-12-05 08:31:41

Below is generated by plot.py at 2017-12-05 10:45:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 576.33 Mbit/s

95th percentile per-packet one-way delay: 213.777 ms

Loss rate: 1.28%

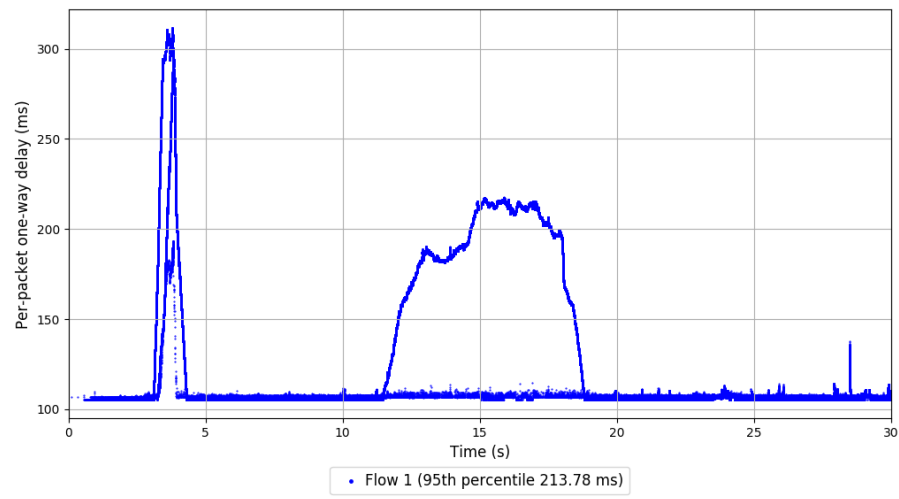
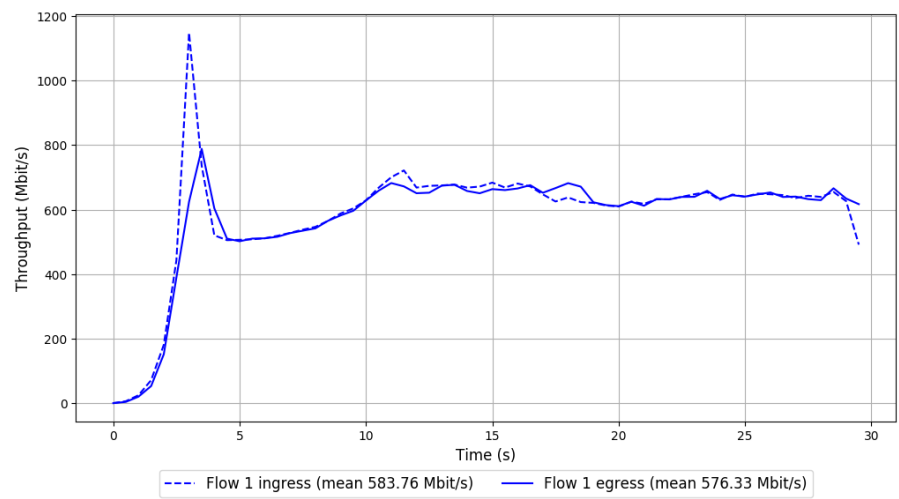
-- Flow 1:

Average throughput: 576.33 Mbit/s

95th percentile per-packet one-way delay: 213.777 ms

Loss rate: 1.28%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-05 08:42:02

End at: 2017-12-05 08:42:32

Below is generated by plot.py at 2017-12-05 10:45:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 549.89 Mbit/s

95th percentile per-packet one-way delay: 217.633 ms

Loss rate: 1.57%

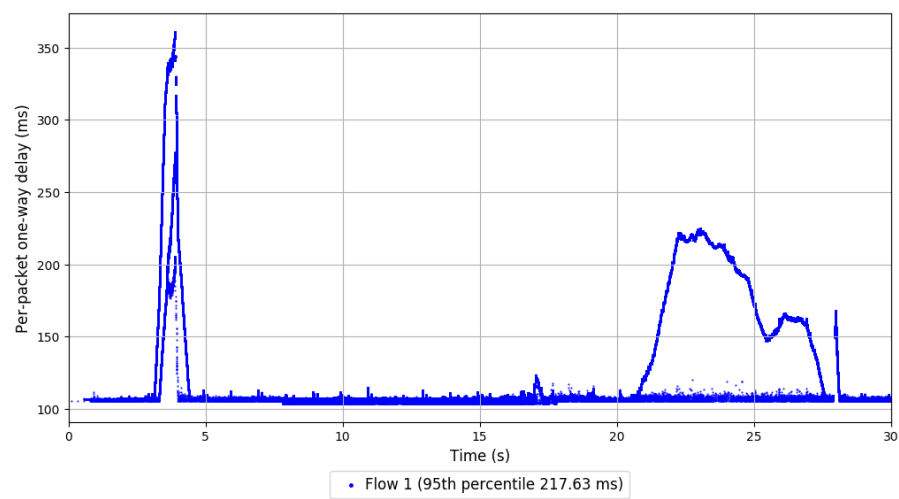
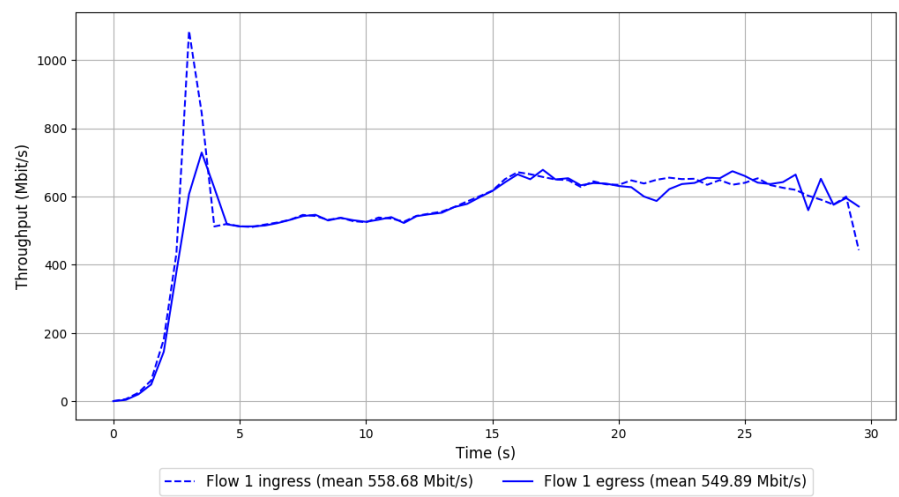
-- Flow 1:

Average throughput: 549.89 Mbit/s

95th percentile per-packet one-way delay: 217.633 ms

Loss rate: 1.57%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-05 08:53:25

End at: 2017-12-05 08:53:55

Below is generated by plot.py at 2017-12-05 10:45:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 492.96 Mbit/s

95th percentile per-packet one-way delay: 136.587 ms

Loss rate: 0.86%

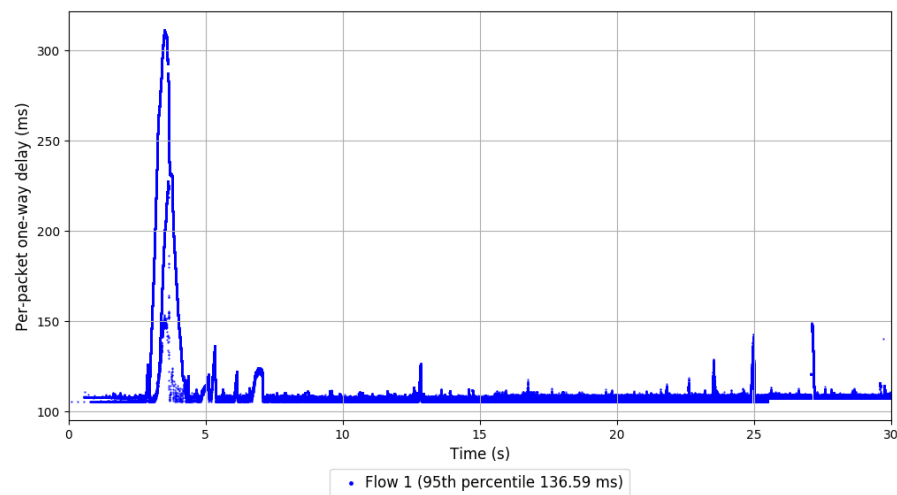
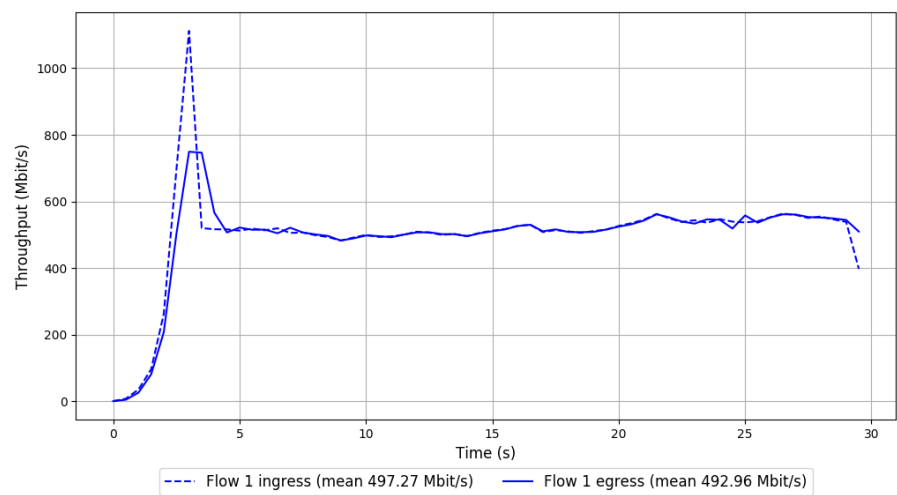
-- Flow 1:

Average throughput: 492.96 Mbit/s

95th percentile per-packet one-way delay: 136.587 ms

Loss rate: 0.86%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-05 09:04:17

End at: 2017-12-05 09:04:47

Below is generated by plot.py at 2017-12-05 10:46:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 577.65 Mbit/s

95th percentile per-packet one-way delay: 178.091 ms

Loss rate: 1.21%

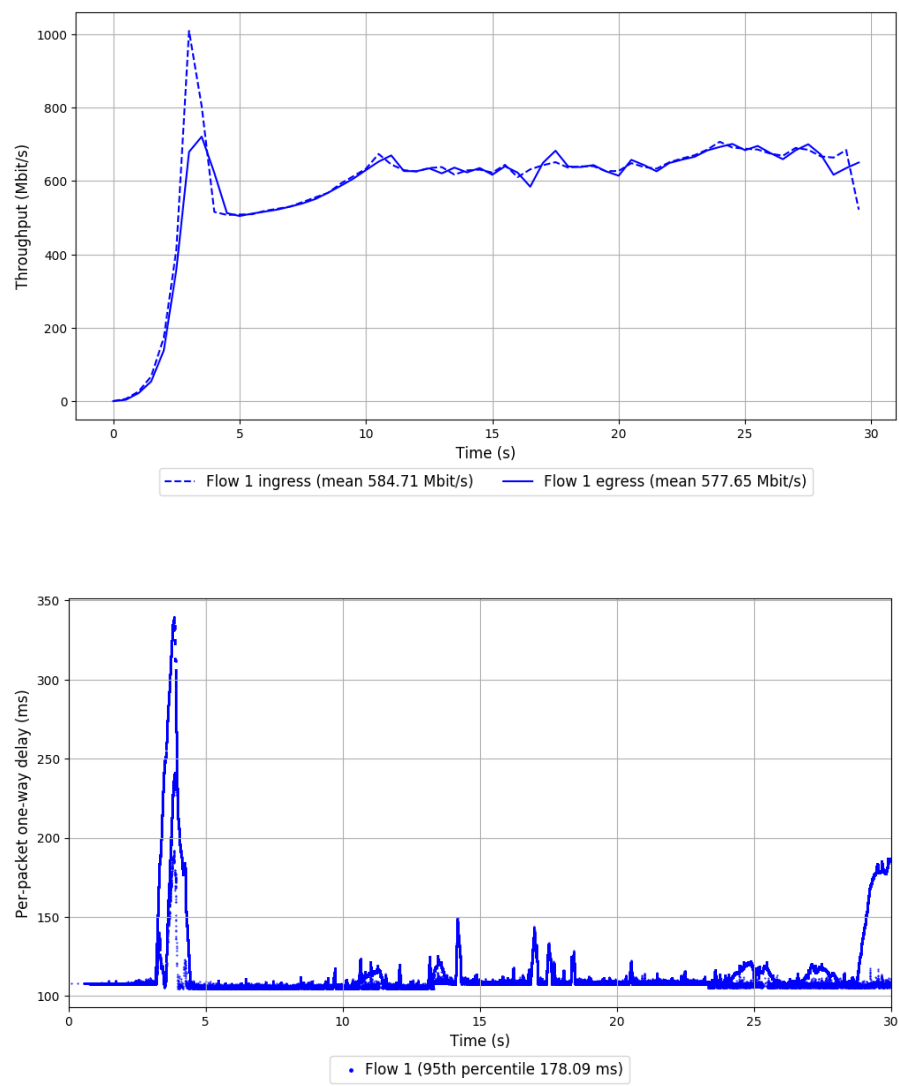
-- Flow 1:

Average throughput: 577.65 Mbit/s

95th percentile per-packet one-way delay: 178.091 ms

Loss rate: 1.21%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-05 09:15:08

End at: 2017-12-05 09:15:38

Below is generated by plot.py at 2017-12-05 10:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 591.41 Mbit/s

95th percentile per-packet one-way delay: 166.330 ms

Loss rate: 1.69%

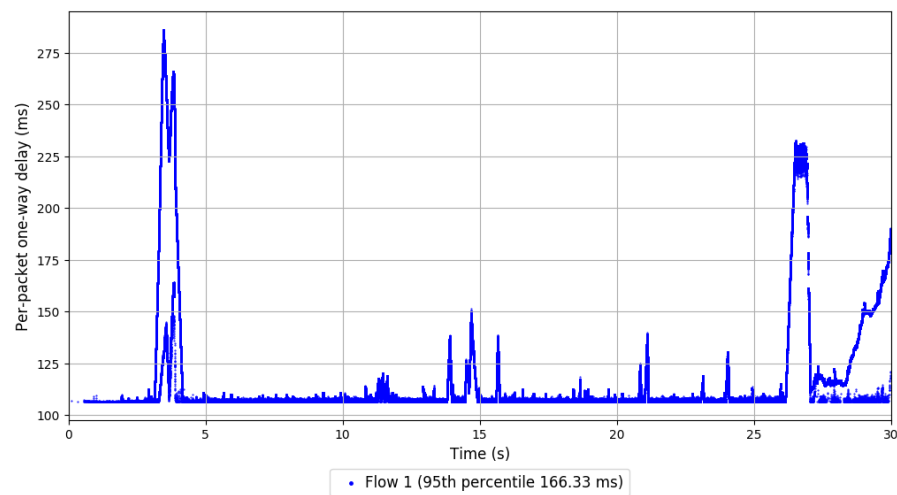
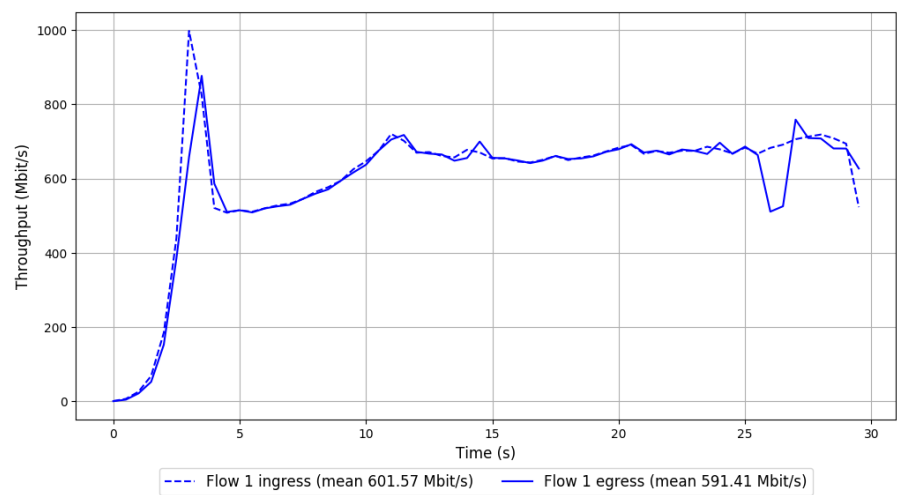
-- Flow 1:

Average throughput: 591.41 Mbit/s

95th percentile per-packet one-way delay: 166.330 ms

Loss rate: 1.69%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-05 09:26:13

End at: 2017-12-05 09:26:43

Below is generated by plot.py at 2017-12-05 10:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 475.10 Mbit/s

95th percentile per-packet one-way delay: 165.620 ms

Loss rate: 1.03%

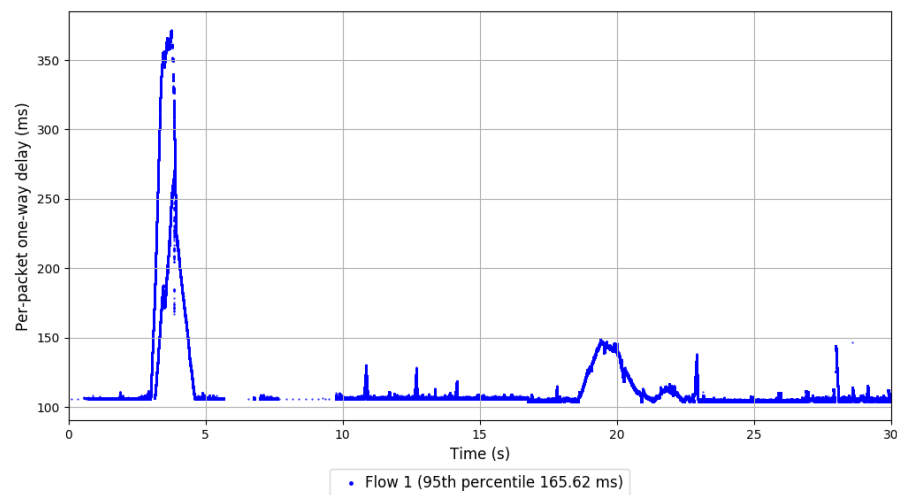
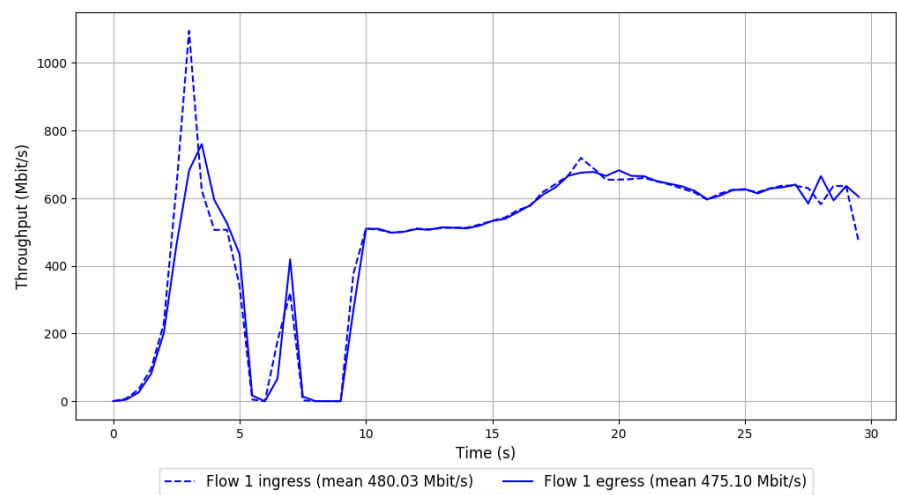
-- Flow 1:

Average throughput: 475.10 Mbit/s

95th percentile per-packet one-way delay: 165.620 ms

Loss rate: 1.03%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-05 09:37:13

End at: 2017-12-05 09:37:43

Below is generated by plot.py at 2017-12-05 10:54:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 526.39 Mbit/s

95th percentile per-packet one-way delay: 214.228 ms

Loss rate: 2.33%

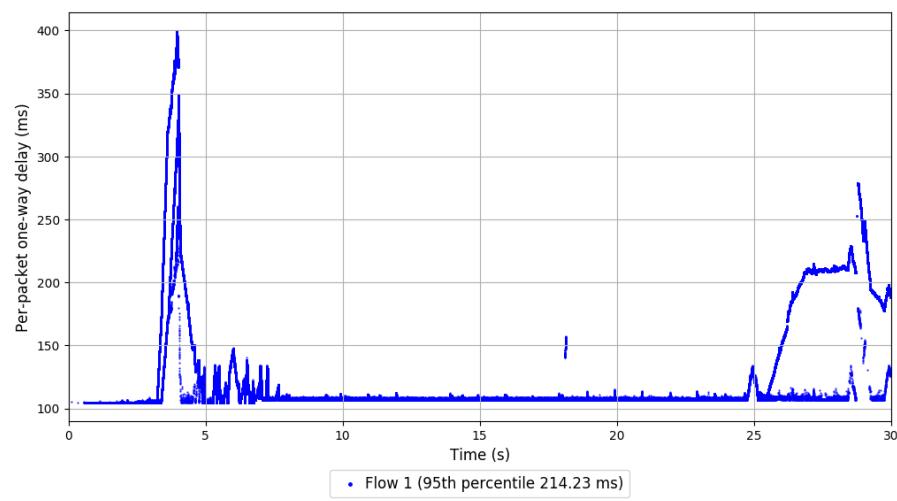
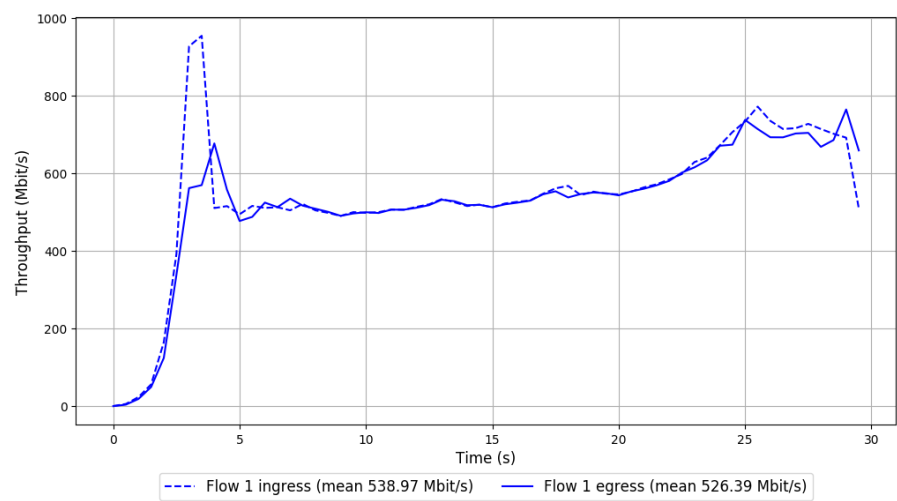
-- Flow 1:

Average throughput: 526.39 Mbit/s

95th percentile per-packet one-way delay: 214.228 ms

Loss rate: 2.33%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-05 09:48:01

End at: 2017-12-05 09:48:31

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 549.54 Mbit/s

95th percentile per-packet one-way delay: 208.683 ms

Loss rate: 0.87%

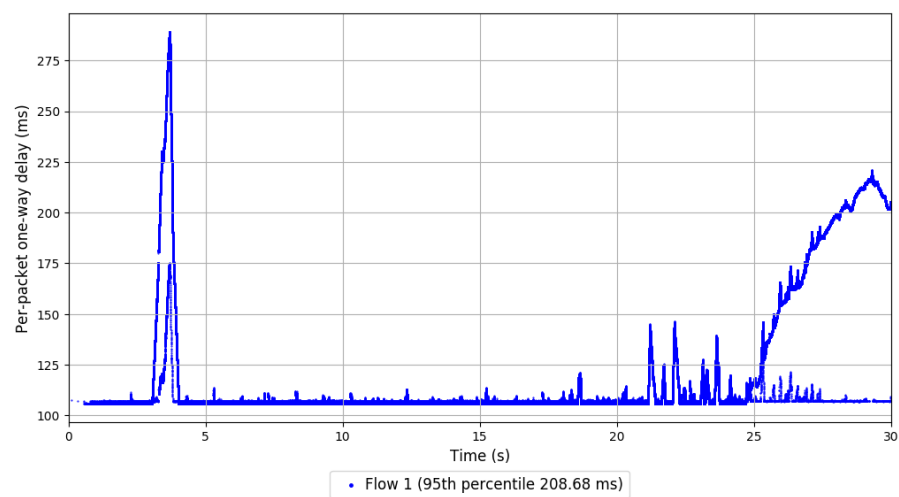
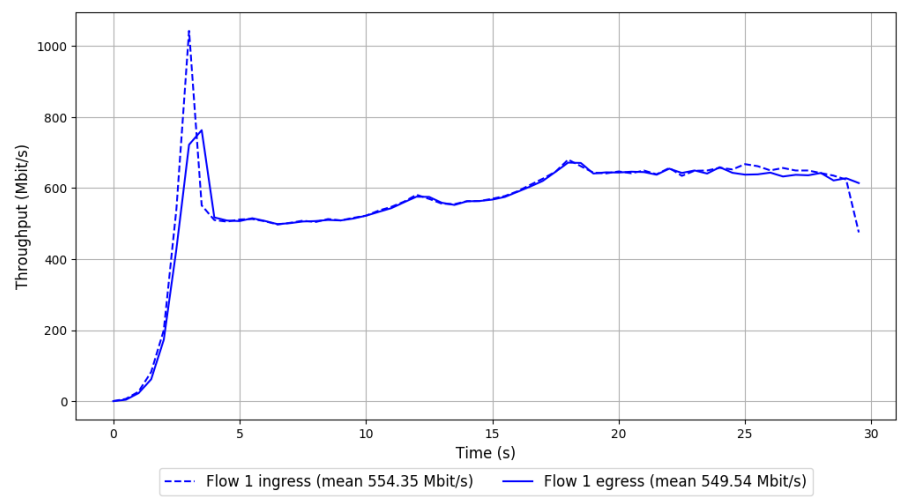
-- Flow 1:

Average throughput: 549.54 Mbit/s

95th percentile per-packet one-way delay: 208.683 ms

Loss rate: 0.87%

Run 10: Report of PCC — Data Link

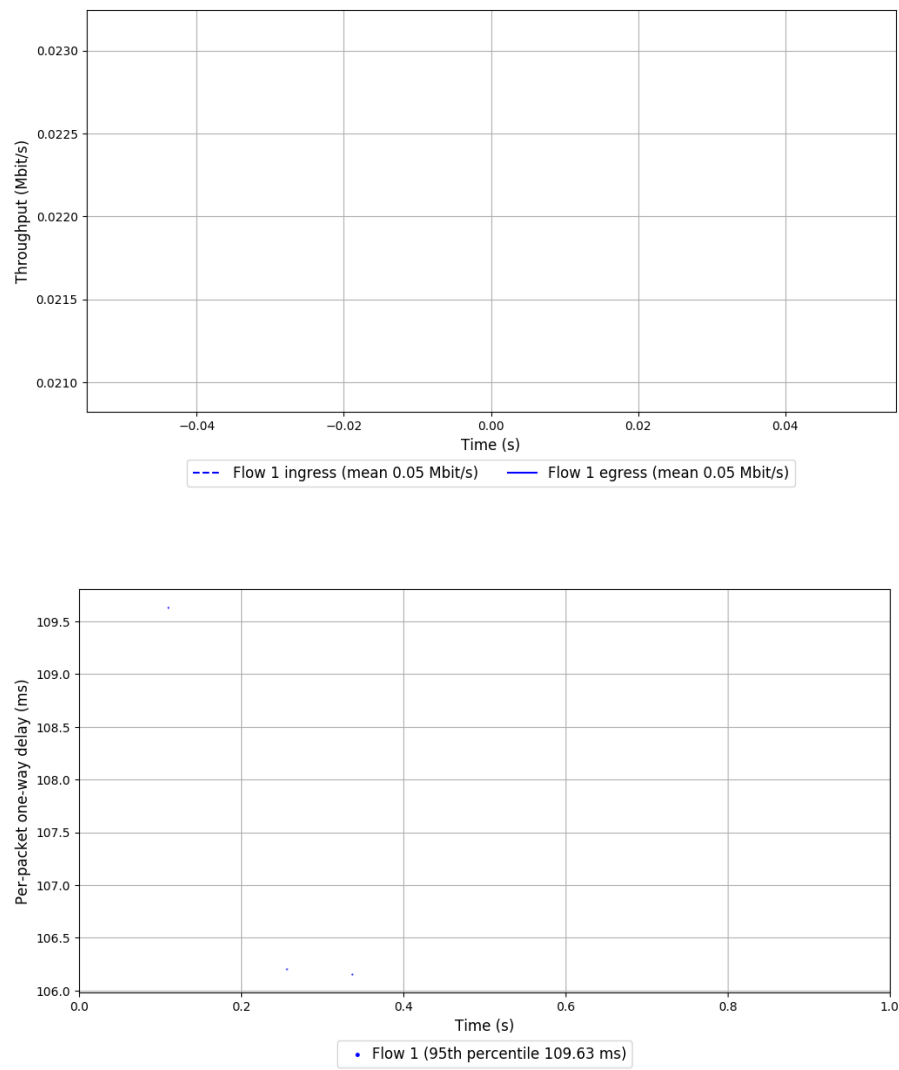


Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 08:08:34

End at: 2017-12-05 08:09:04

Run 1: Report of QUIC Cubic — Data Link

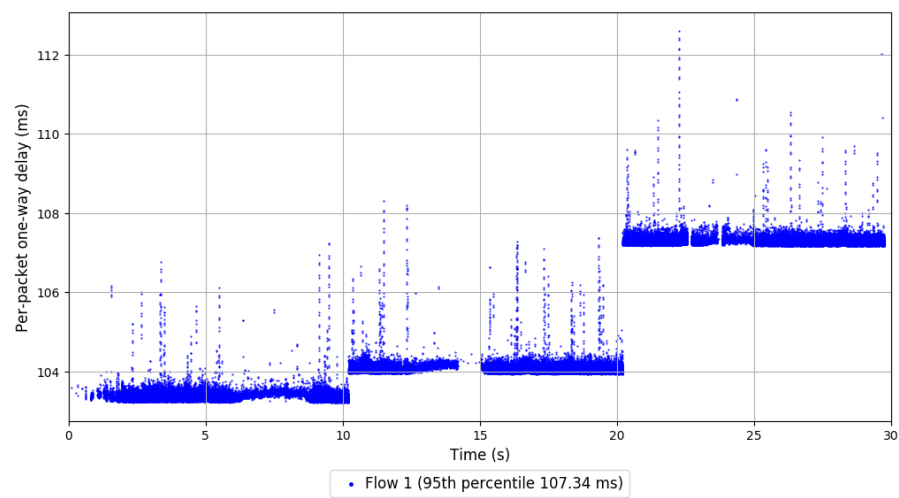
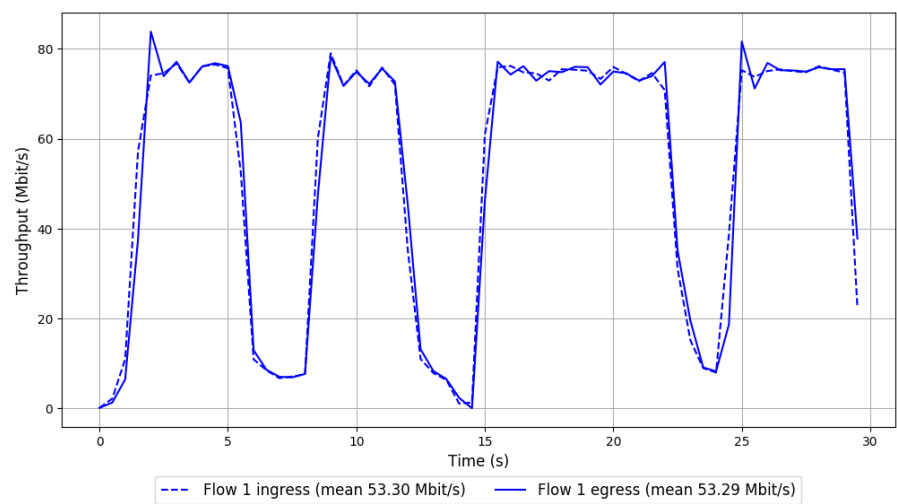


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 08:19:30
End at: 2017-12-05 08:20:00

# Below is generated by plot.py at 2017-12-05 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 107.345 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 107.345 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 08:30:26

End at: 2017-12-05 08:30:56

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.93 Mbit/s

95th percentile per-packet one-way delay: 107.363 ms

Loss rate: 0.00%

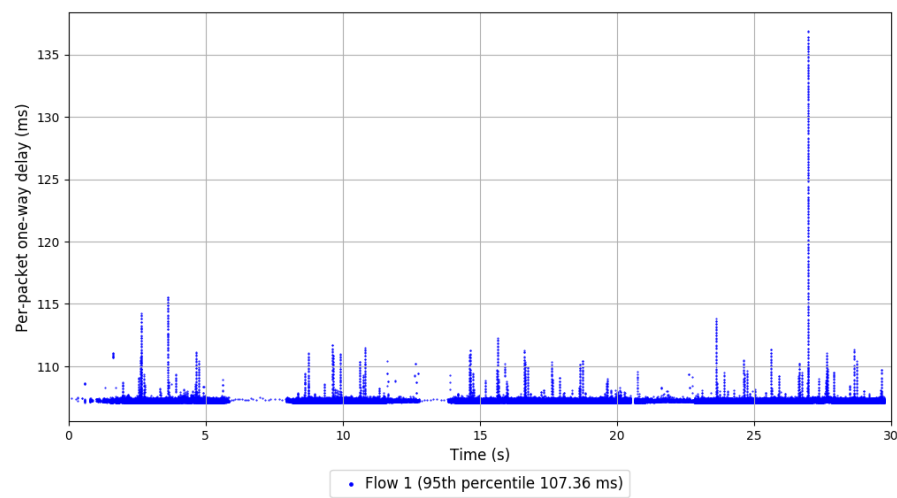
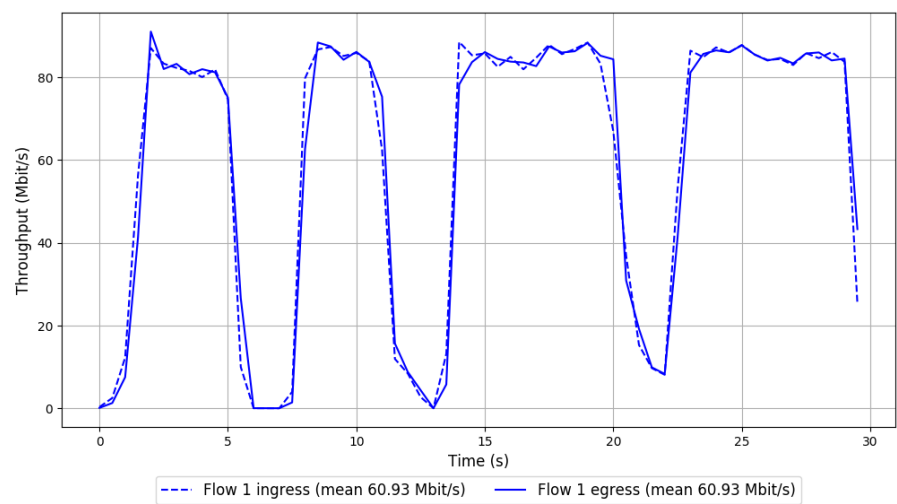
-- Flow 1:

Average throughput: 60.93 Mbit/s

95th percentile per-packet one-way delay: 107.363 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-05 08:41:18

End at: 2017-12-05 08:41:48

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.15 Mbit/s

95th percentile per-packet one-way delay: 107.821 ms

Loss rate: 0.00%

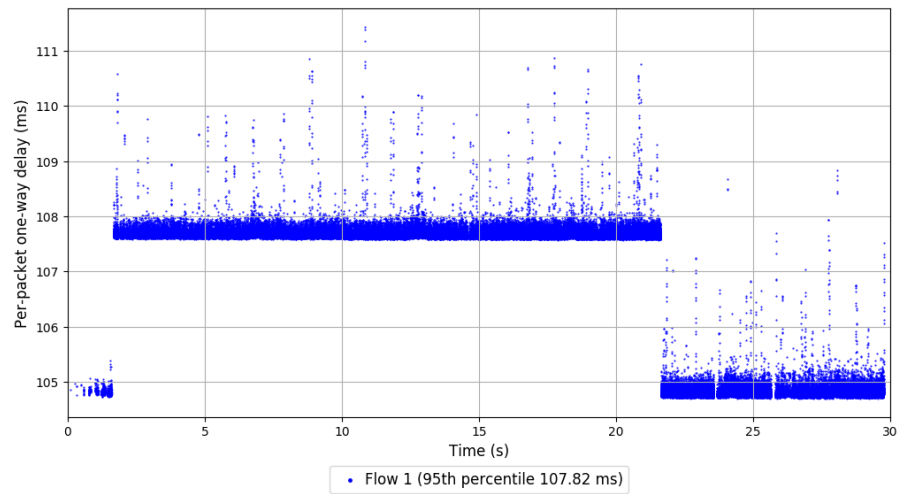
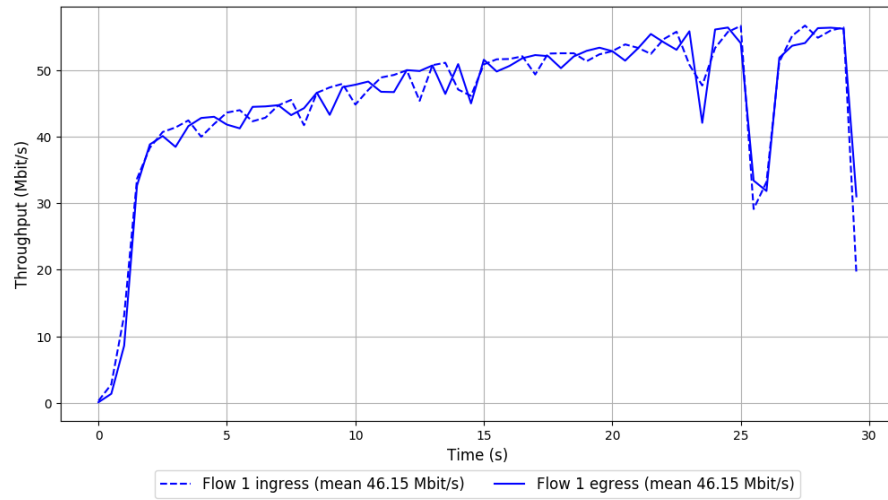
-- Flow 1:

Average throughput: 46.15 Mbit/s

95th percentile per-packet one-way delay: 107.821 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-05 08:52:40

End at: 2017-12-05 08:53:10

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 107.798 ms

Loss rate: 0.00%

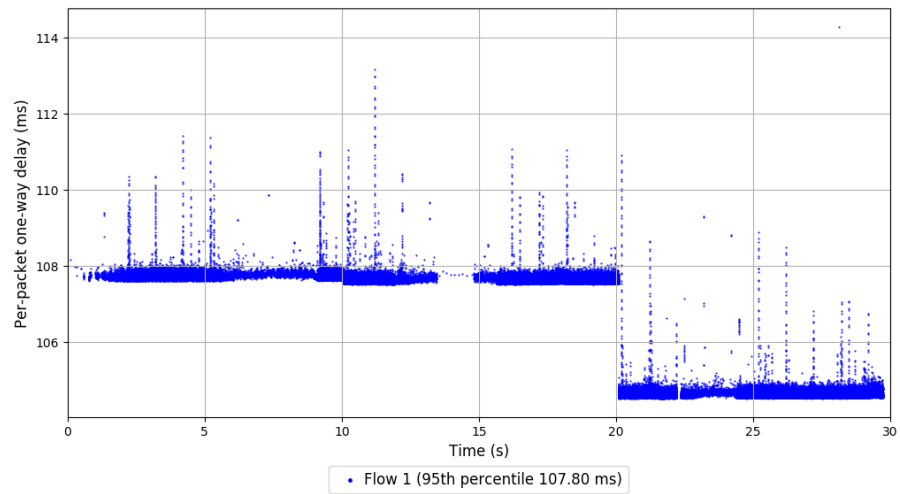
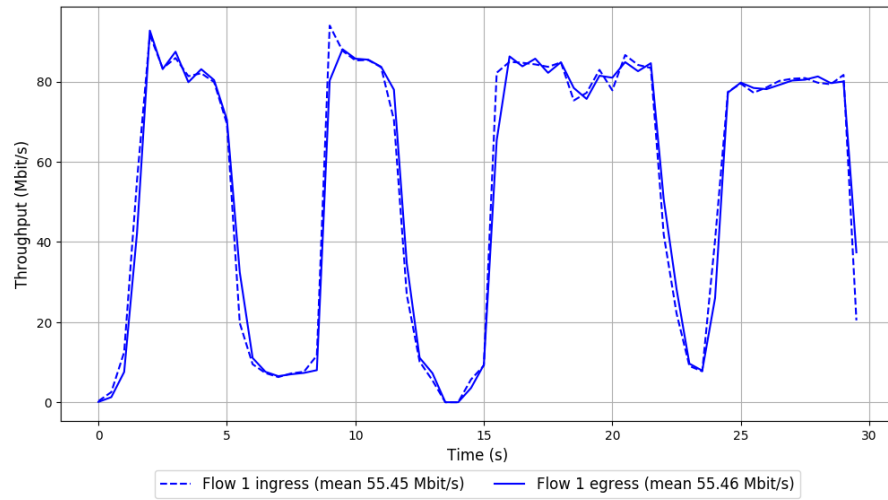
-- Flow 1:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 107.798 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-05 09:03:32

End at: 2017-12-05 09:04:02

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.46 Mbit/s

95th percentile per-packet one-way delay: 107.861 ms

Loss rate: 0.00%

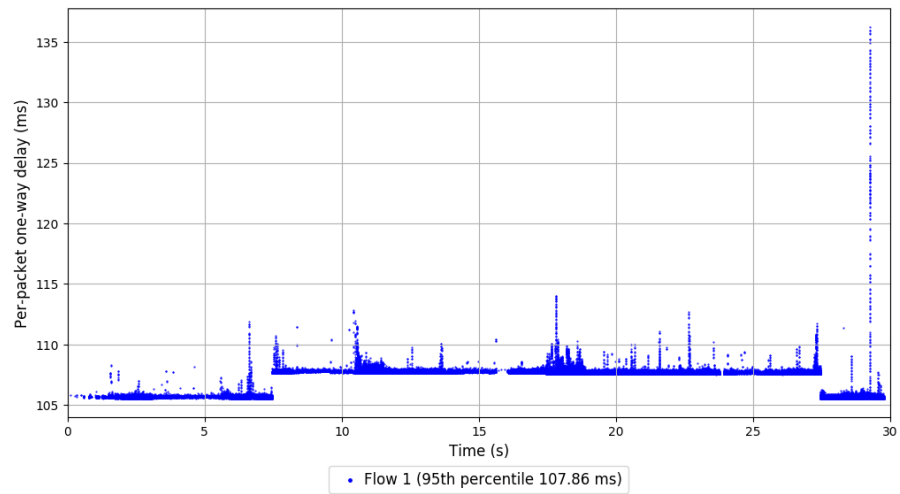
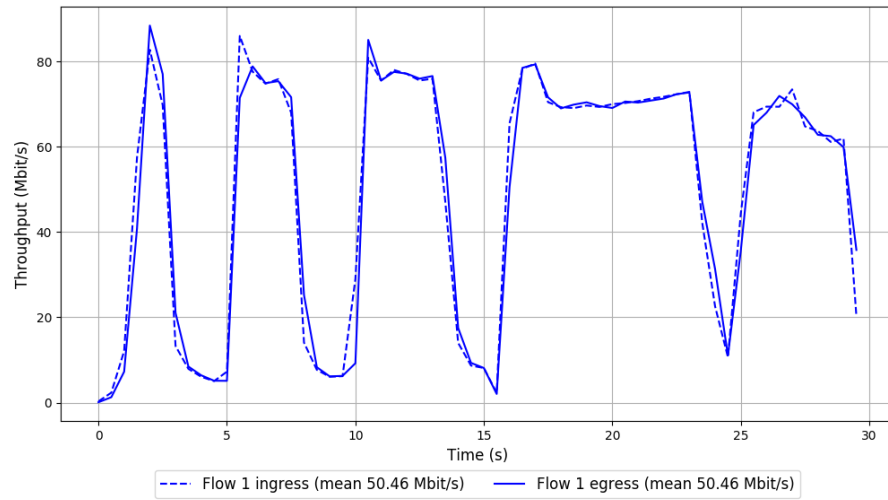
-- Flow 1:

Average throughput: 50.46 Mbit/s

95th percentile per-packet one-way delay: 107.861 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-05 09:14:23

End at: 2017-12-05 09:14:53

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.28 Mbit/s

95th percentile per-packet one-way delay: 104.672 ms

Loss rate: 0.00%

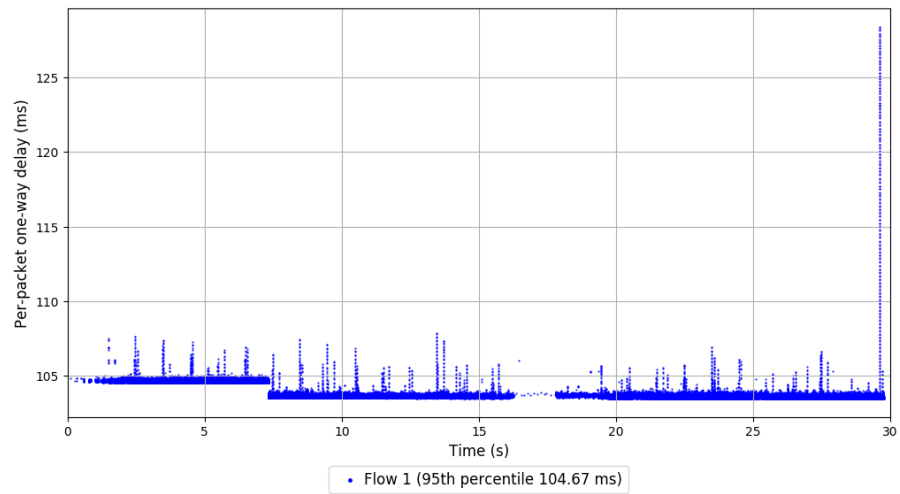
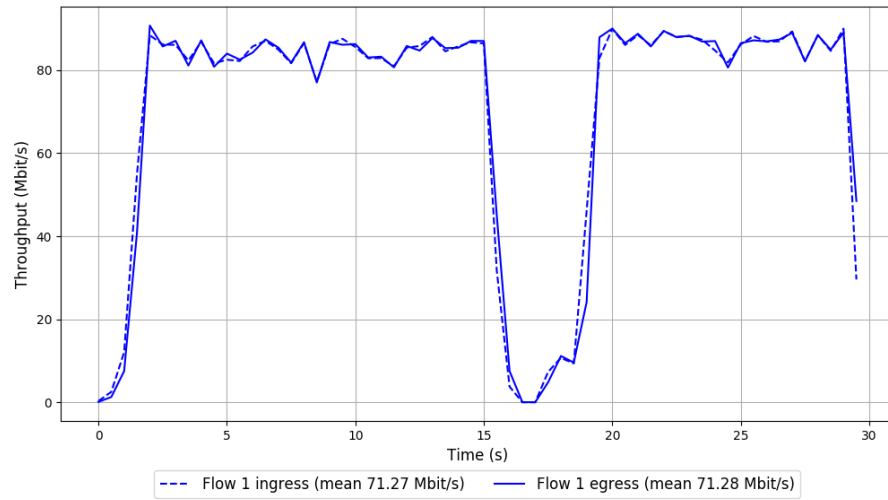
-- Flow 1:

Average throughput: 71.28 Mbit/s

95th percentile per-packet one-way delay: 104.672 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-05 09:25:30

End at: 2017-12-05 09:26:00

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.25 Mbit/s

95th percentile per-packet one-way delay: 106.007 ms

Loss rate: 0.01%

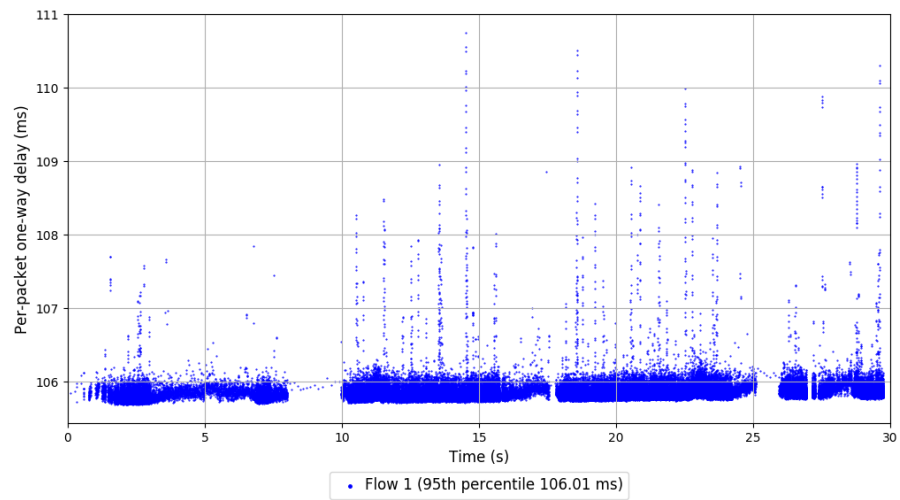
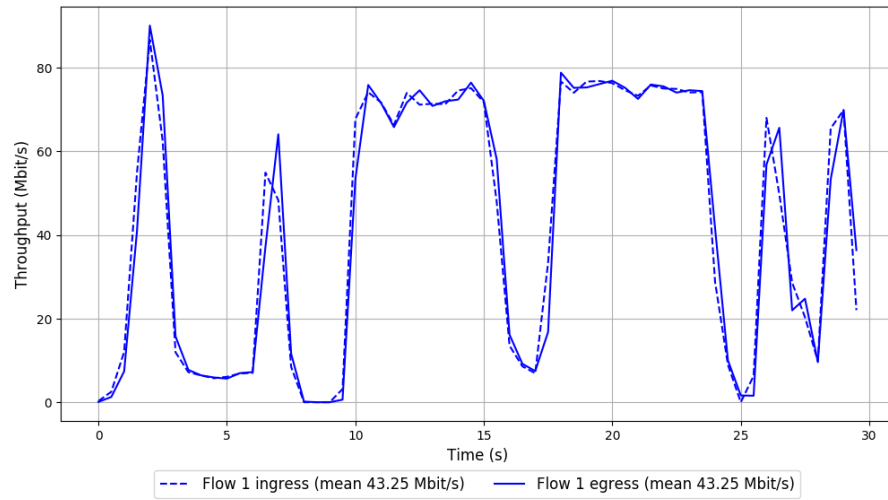
-- Flow 1:

Average throughput: 43.25 Mbit/s

95th percentile per-packet one-way delay: 106.007 ms

Loss rate: 0.01%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-05 09:36:28

End at: 2017-12-05 09:36:58

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.06 Mbit/s

95th percentile per-packet one-way delay: 105.650 ms

Loss rate: 0.00%

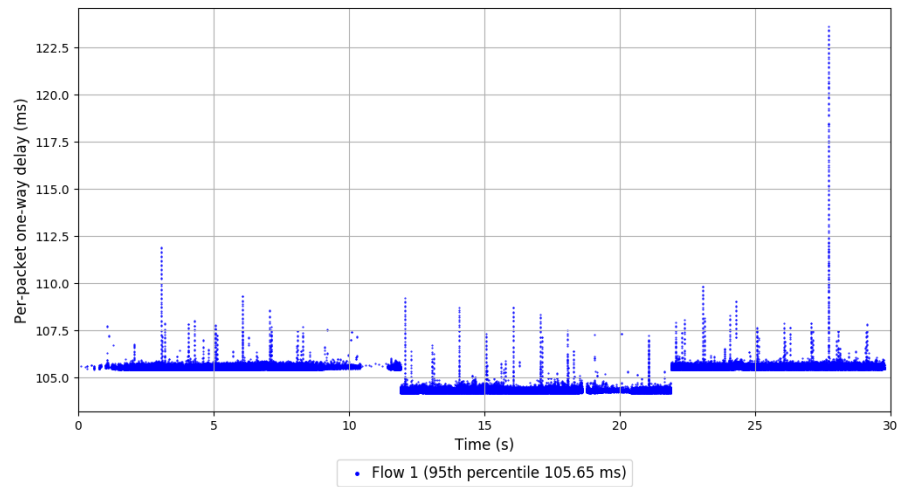
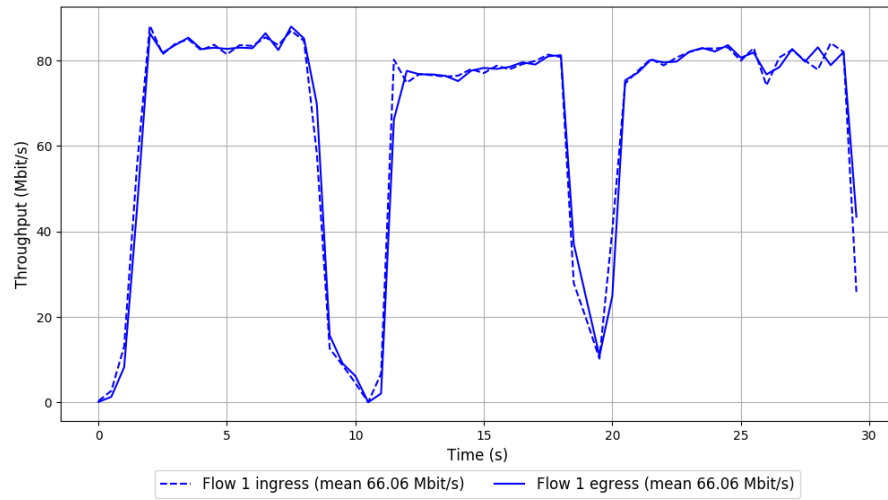
-- Flow 1:

Average throughput: 66.06 Mbit/s

95th percentile per-packet one-way delay: 105.650 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-05 09:47:19

End at: 2017-12-05 09:47:49

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.44 Mbit/s

95th percentile per-packet one-way delay: 107.162 ms

Loss rate: 0.00%

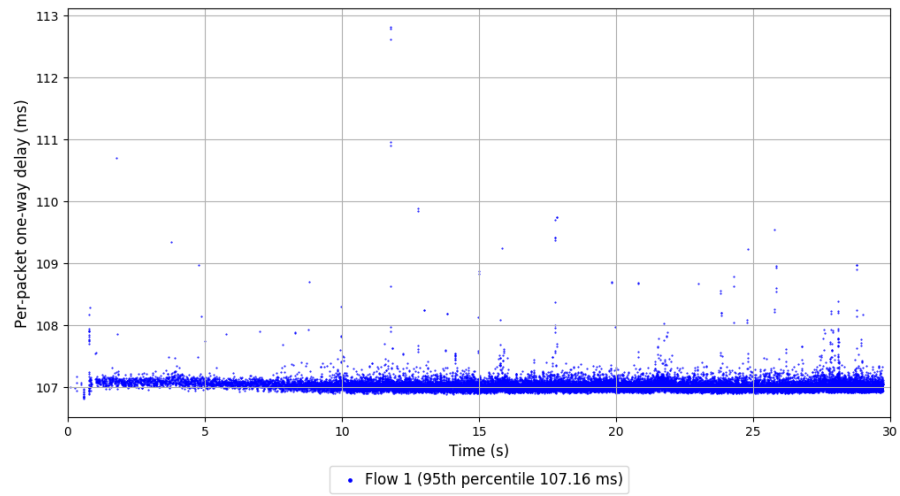
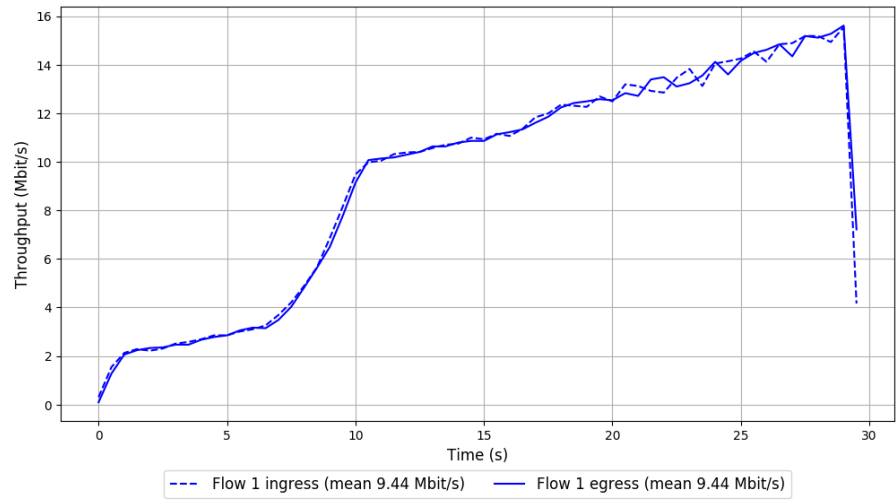
-- Flow 1:

Average throughput: 9.44 Mbit/s

95th percentile per-packet one-way delay: 107.162 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

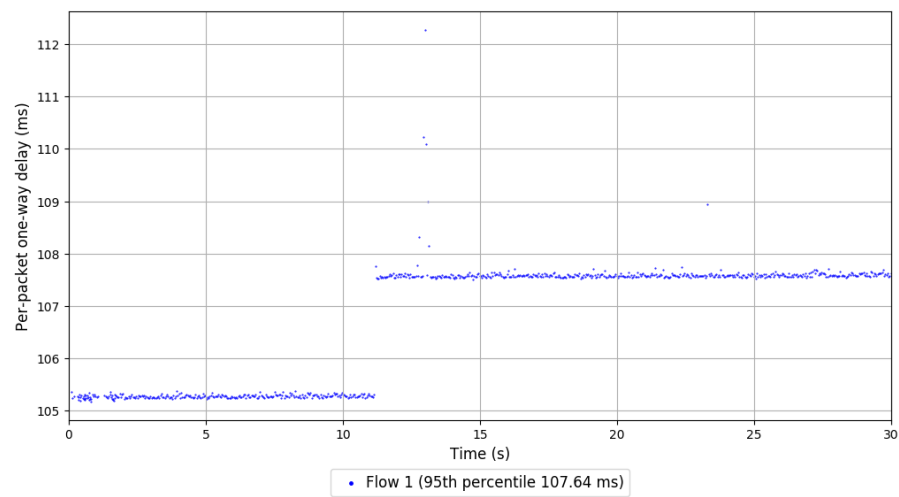
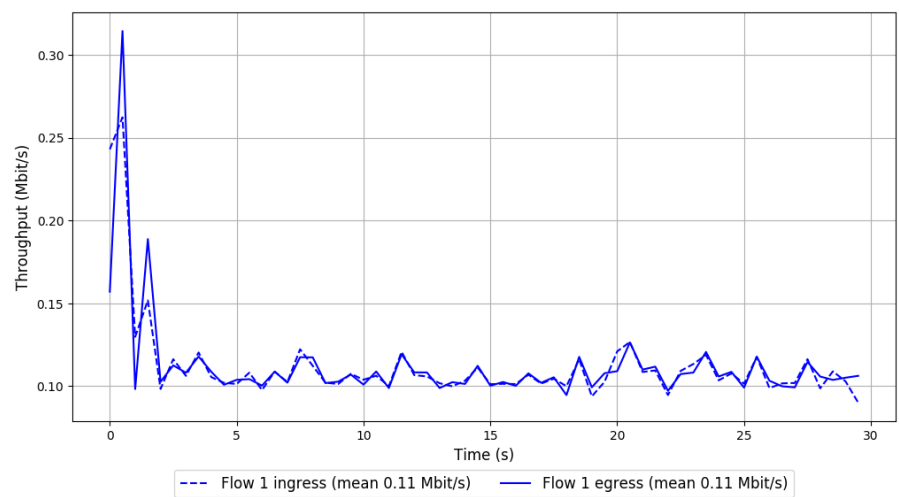


```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 08:12:49
End at: 2017-12-05 08:13:19

# Below is generated by plot.py at 2017-12-05 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 107.637 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 107.637 ms
Loss rate: 0.12%
```

Run 1: Report of SReAM — Data Link

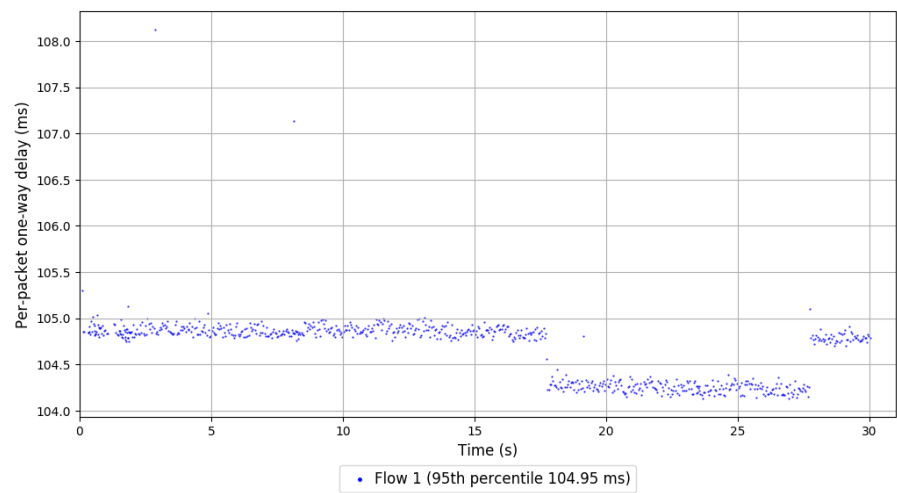
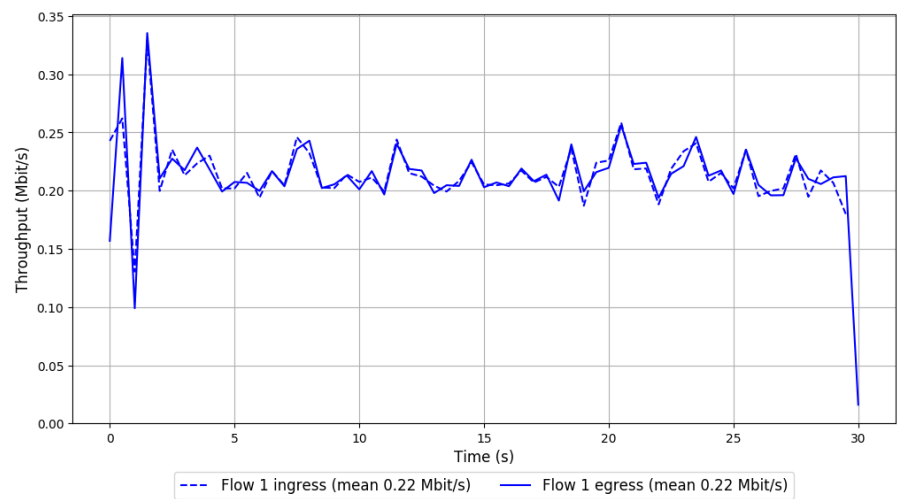


```
Run 2: Statistics of SCReAM

Start at: 2017-12-05 08:23:52
End at: 2017-12-05 08:24:22

# Below is generated by plot.py at 2017-12-05 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 104.951 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 104.951 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-05 08:34:48

End at: 2017-12-05 08:35:18

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 108.019 ms

Loss rate: 0.12%

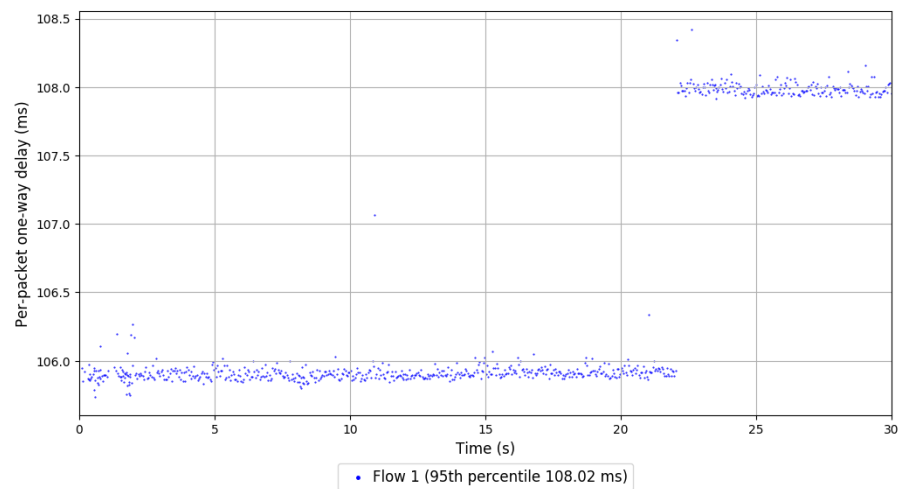
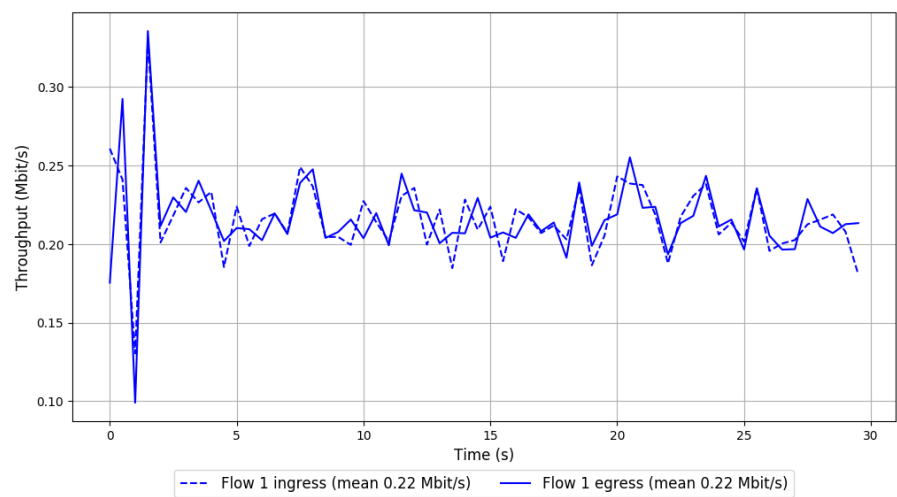
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 108.019 ms

Loss rate: 0.12%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-05 08:45:38

End at: 2017-12-05 08:46:08

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 107.543 ms

Loss rate: 0.00%

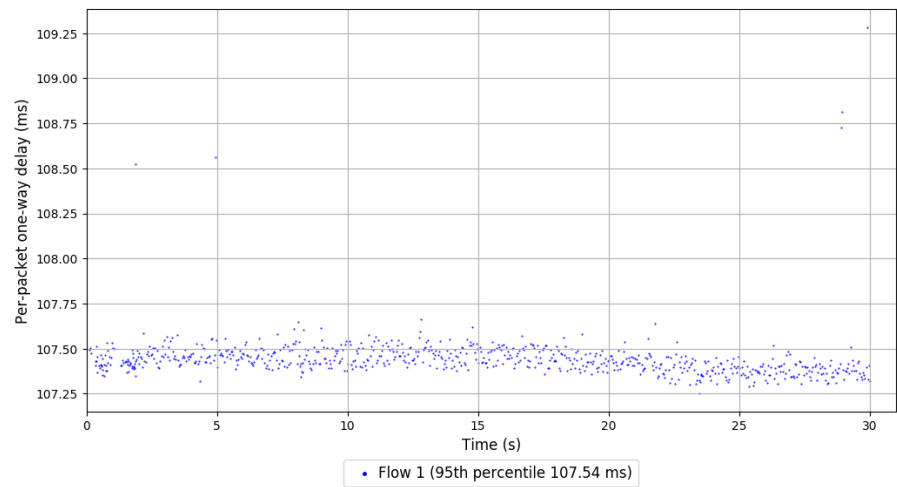
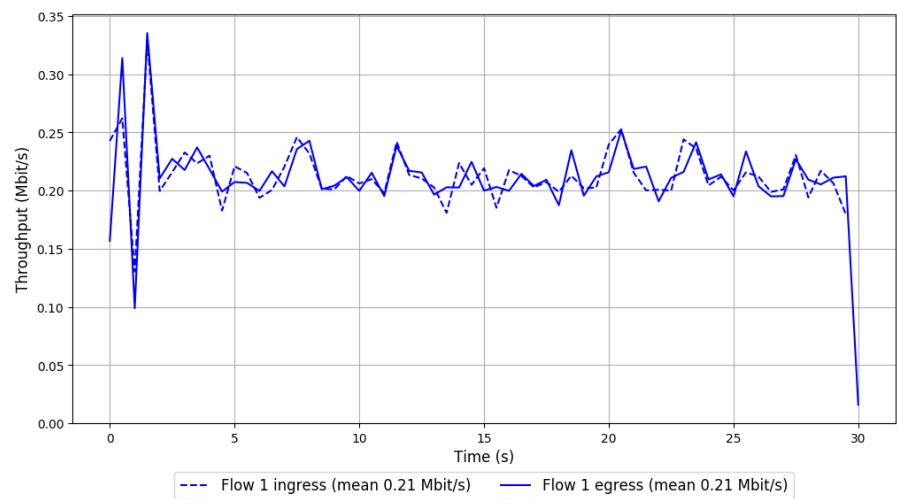
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 107.543 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-05 08:56:57

End at: 2017-12-05 08:57:27

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 108.250 ms

Loss rate: 0.00%

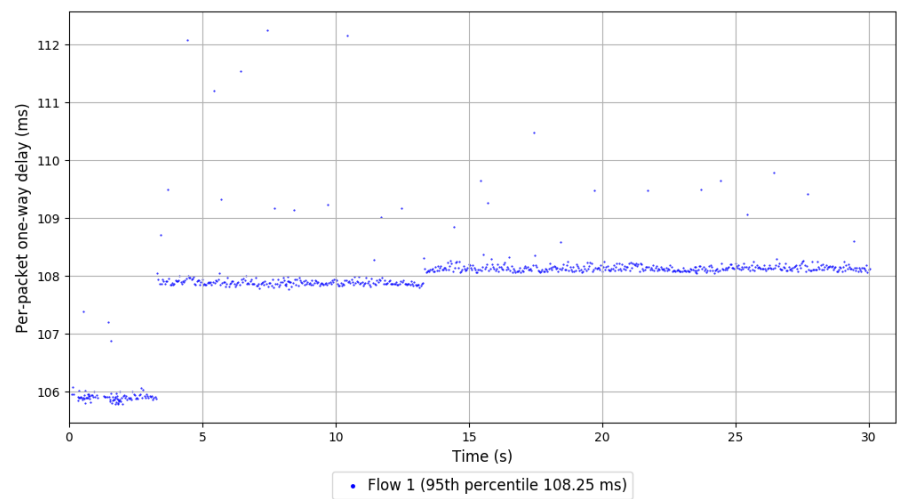
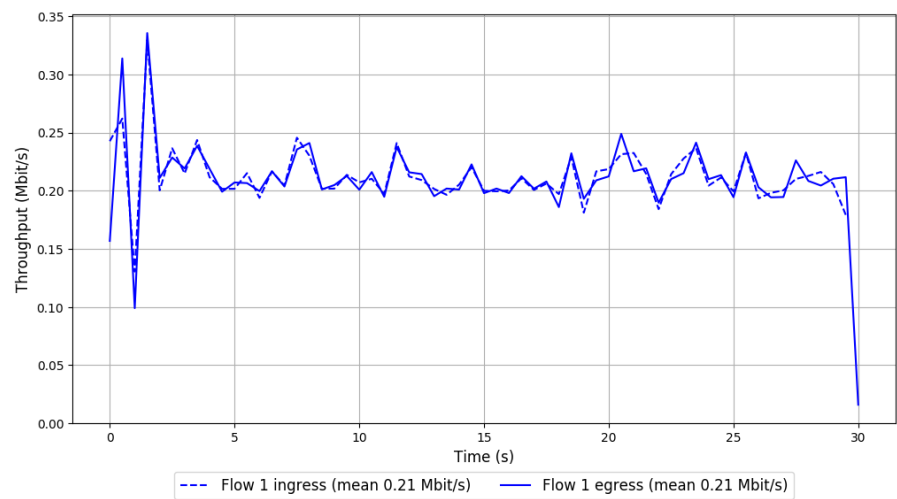
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 108.250 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-05 09:07:54

End at: 2017-12-05 09:08:24

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 107.544 ms

Loss rate: 0.00%

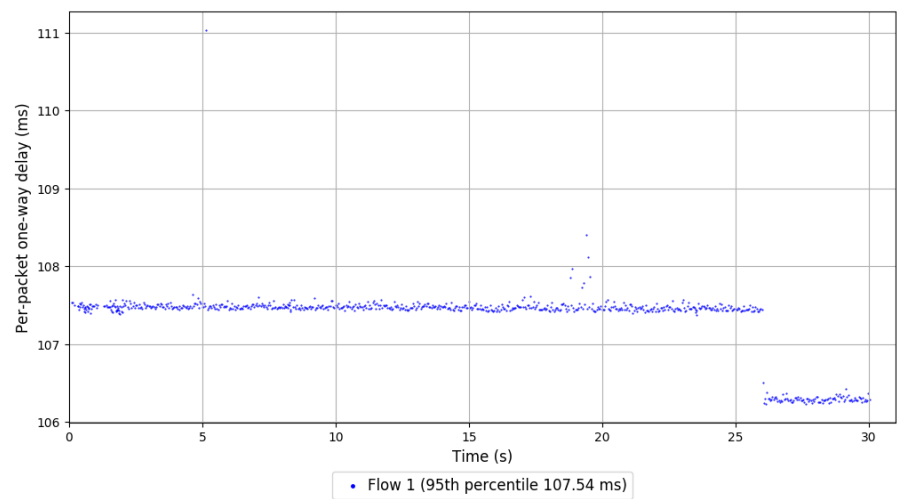
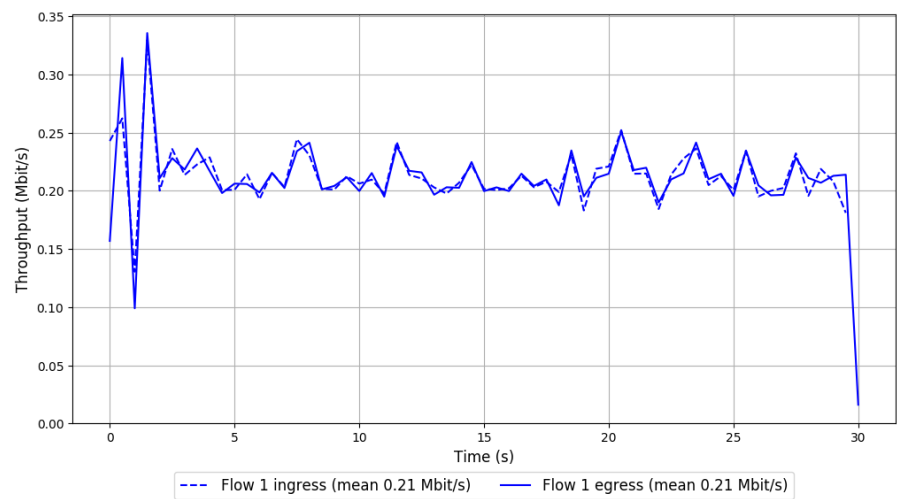
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 107.544 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

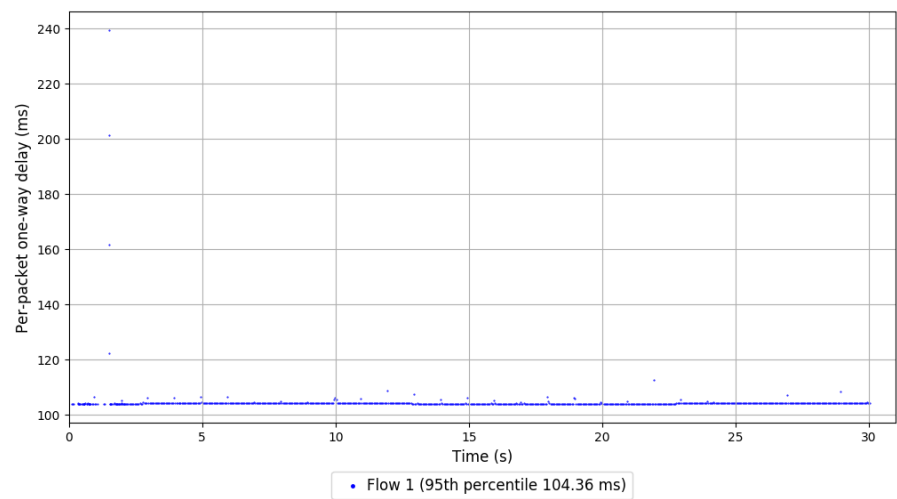
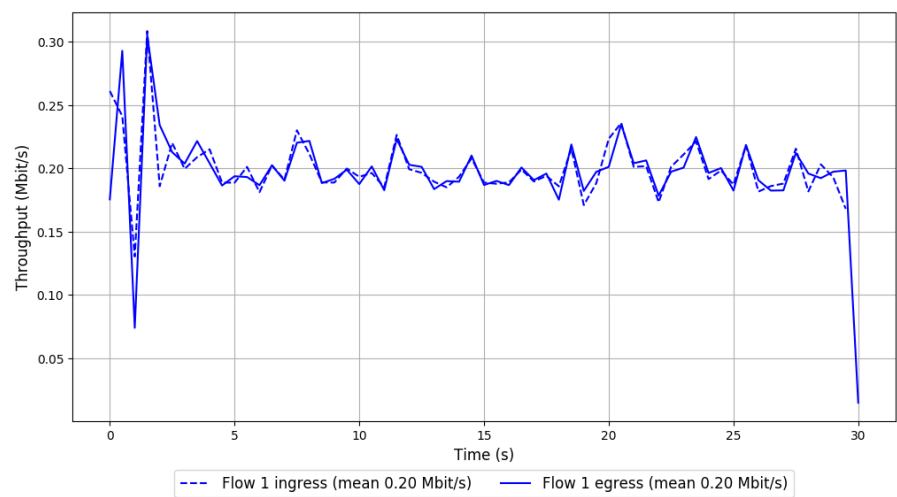


```
Run 7: Statistics of SCReAM

Start at: 2017-12-05 09:18:47
End at: 2017-12-05 09:19:17

# Below is generated by plot.py at 2017-12-05 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 104.355 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 104.355 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-05 09:29:47

End at: 2017-12-05 09:30:17

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 106.699 ms

Loss rate: 0.00%

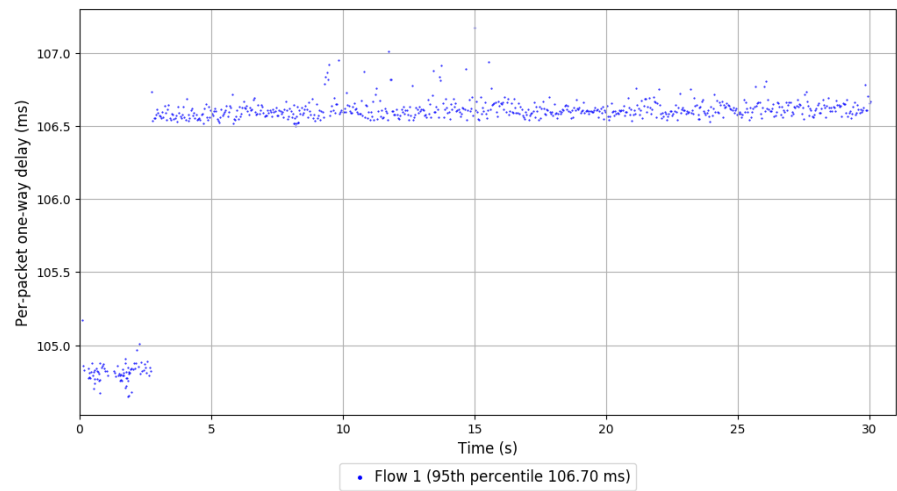
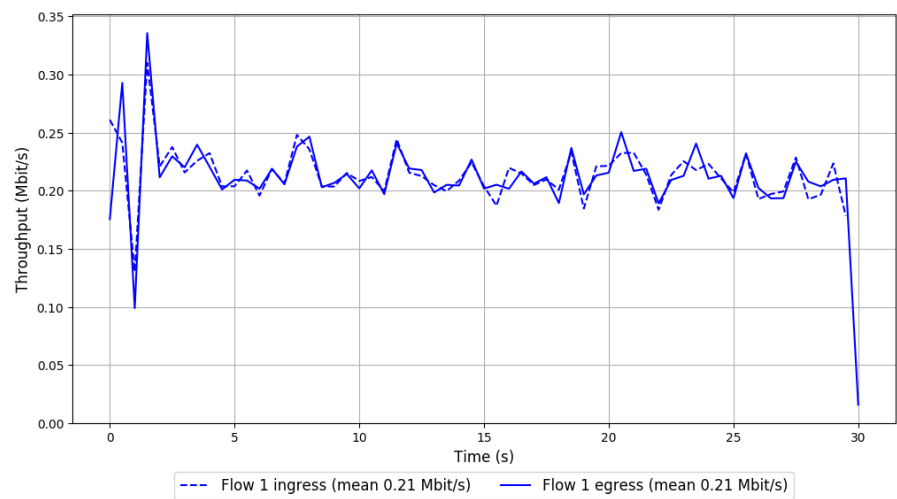
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 106.699 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-05 09:40:49

End at: 2017-12-05 09:41:19

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 105.073 ms

Loss rate: 0.00%

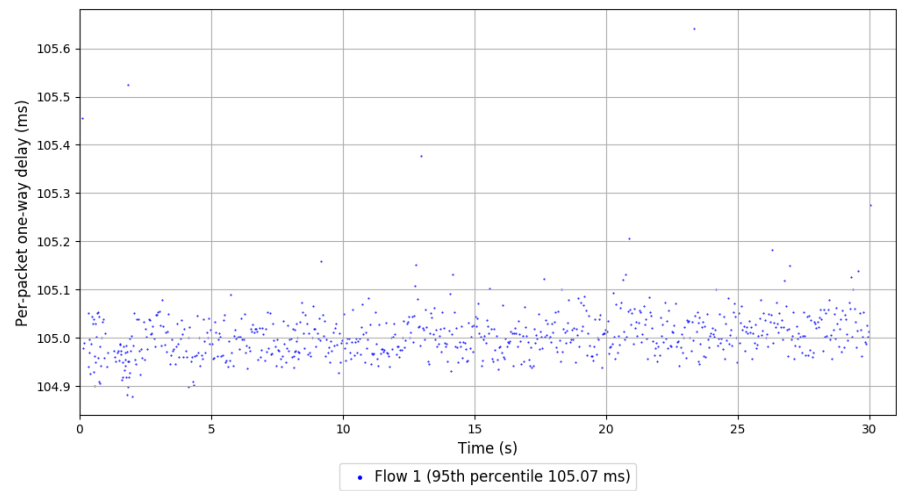
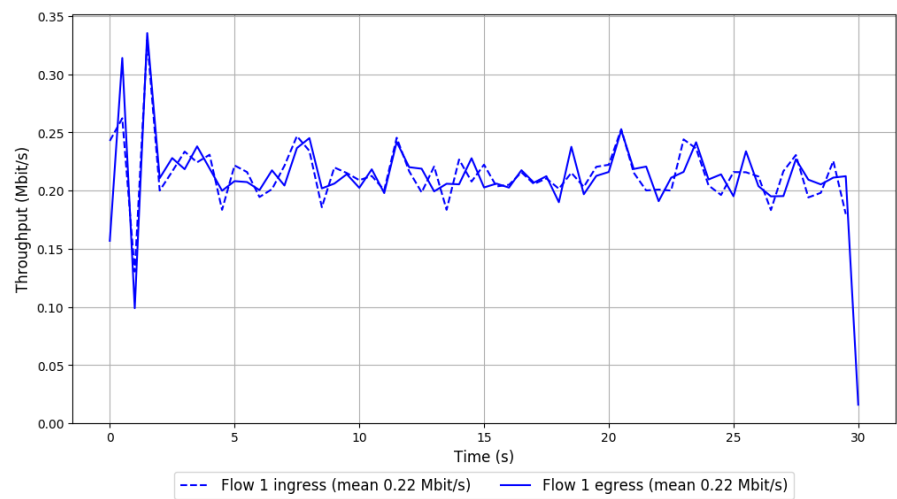
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 105.073 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-05 09:51:37

End at: 2017-12-05 09:52:07

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 107.582 ms

Loss rate: 0.00%

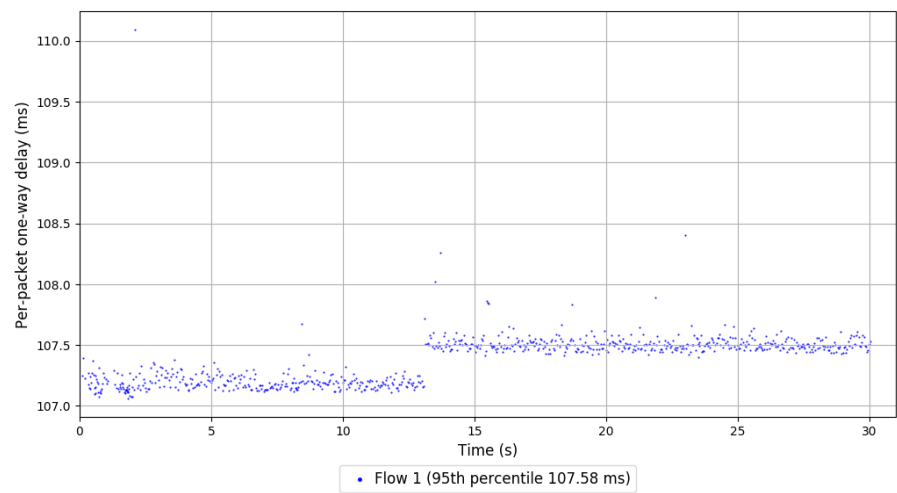
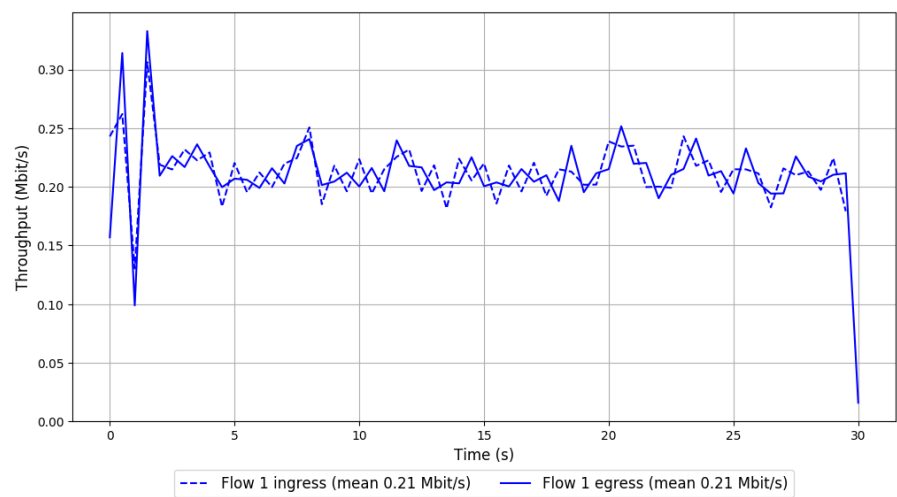
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 107.582 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

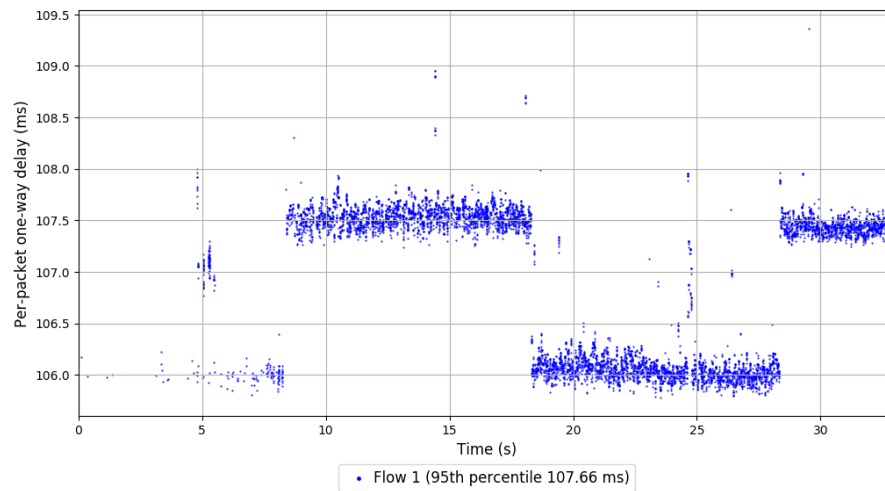
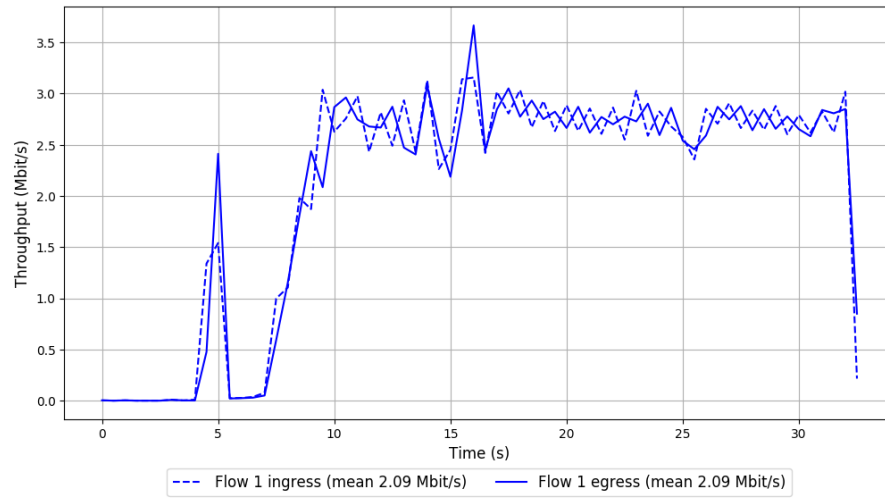


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 08:15:05
End at: 2017-12-05 08:15:35

# Below is generated by plot.py at 2017-12-05 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 107.656 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 107.656 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-05 08:26:05

End at: 2017-12-05 08:26:35

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 105.828 ms

Loss rate: 0.00%

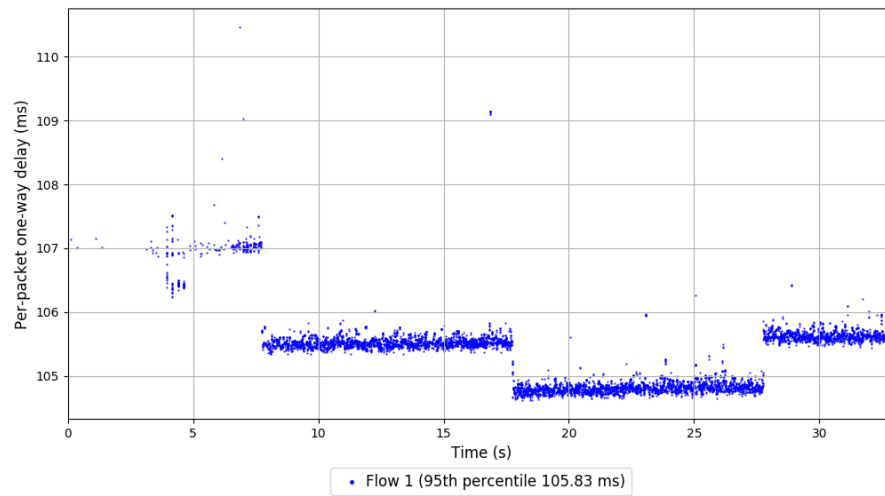
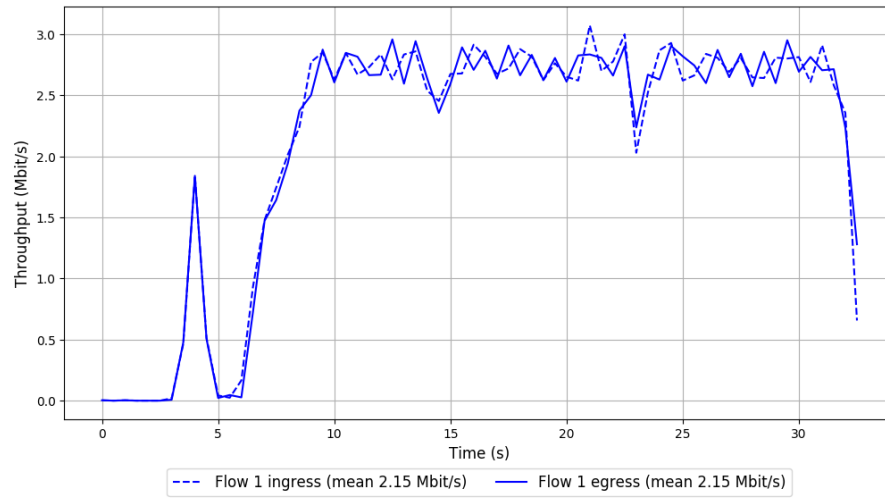
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 105.828 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-05 08:36:57

End at: 2017-12-05 08:37:27

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 107.960 ms

Loss rate: 0.00%

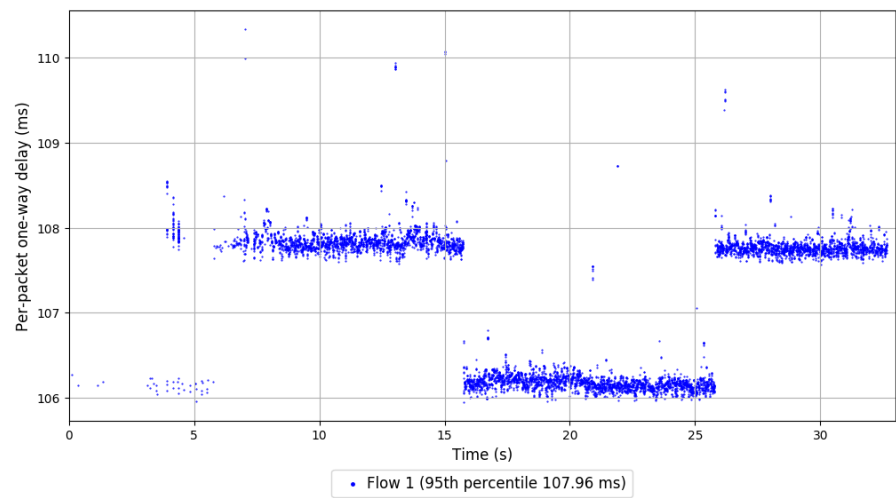
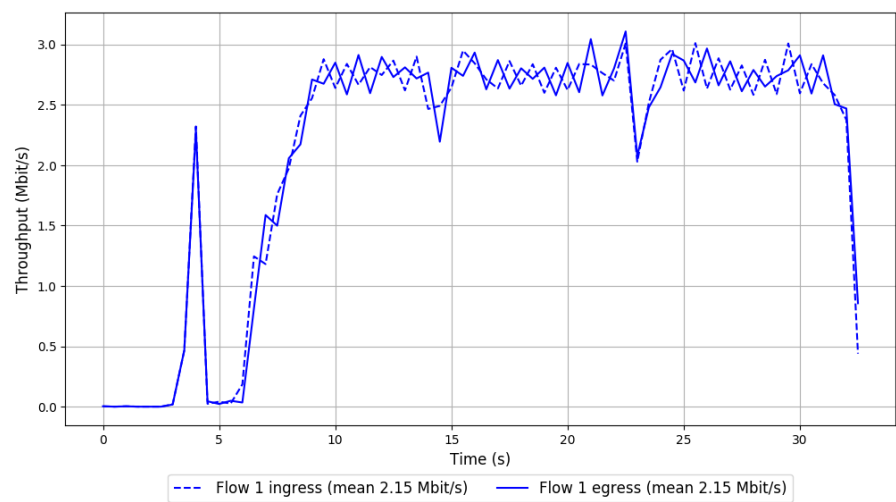
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 107.960 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-05 08:47:59

End at: 2017-12-05 08:48:29

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 105.707 ms

Loss rate: 0.00%

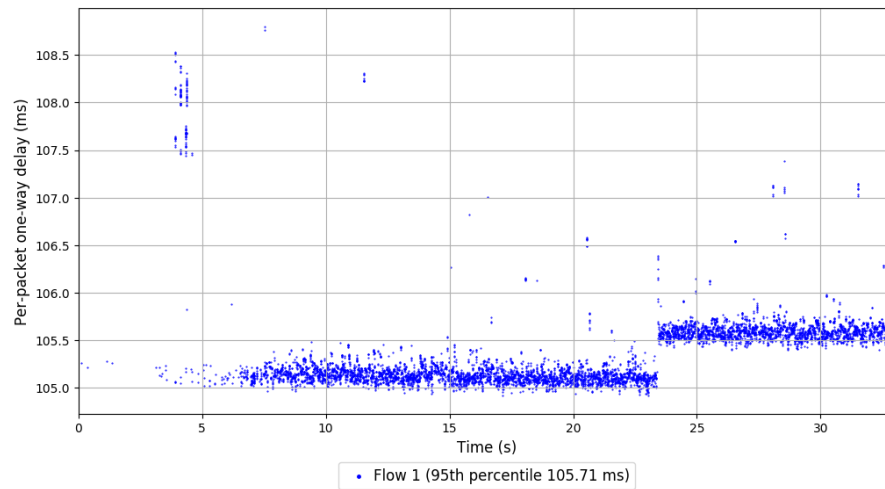
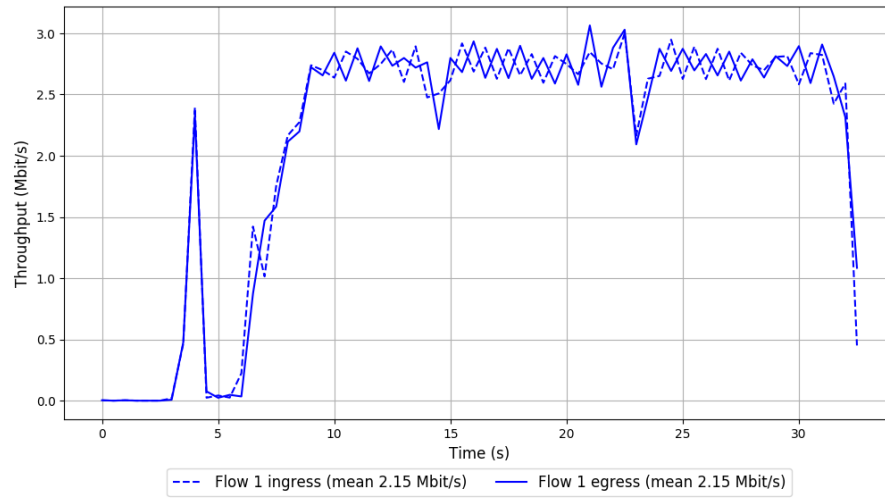
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 105.707 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-05 08:59:12

End at: 2017-12-05 08:59:42

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 107.994 ms

Loss rate: 0.00%

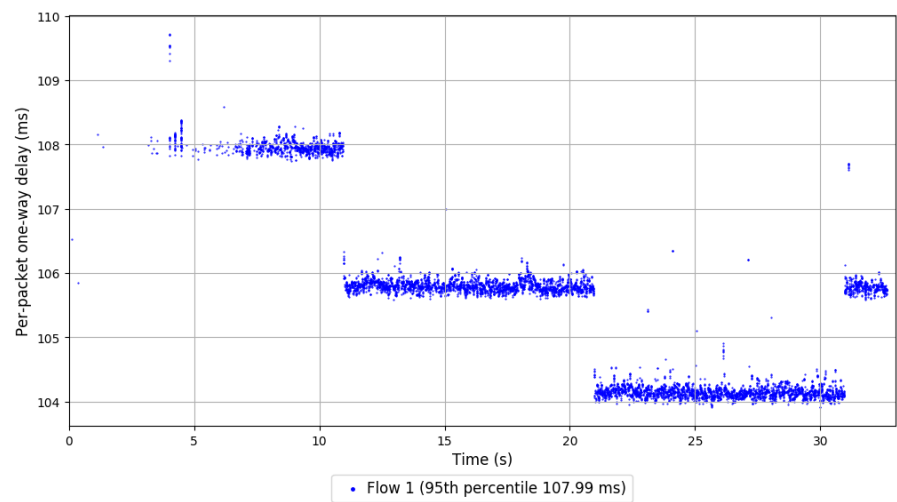
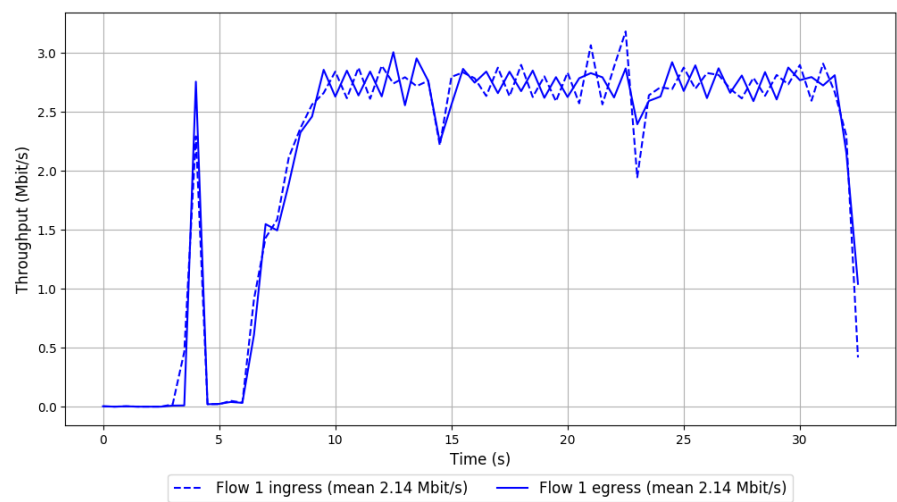
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 107.994 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-05 09:10:04

End at: 2017-12-05 09:10:34

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 107.348 ms

Loss rate: 0.00%

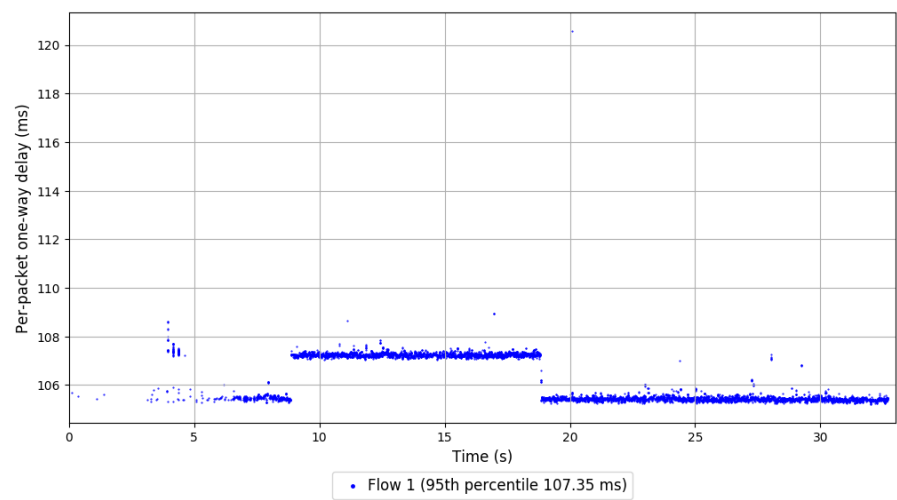
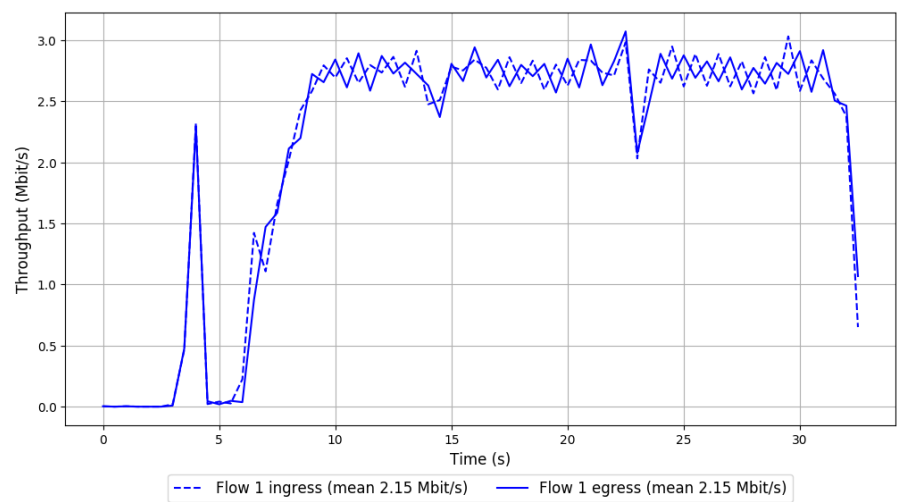
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 107.348 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-05 09:21:05

End at: 2017-12-05 09:21:35

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 104.473 ms

Loss rate: 0.00%

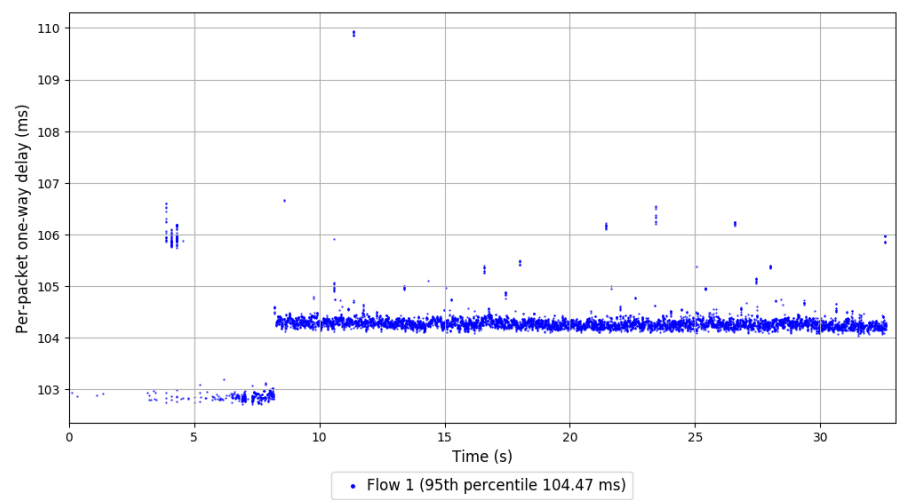
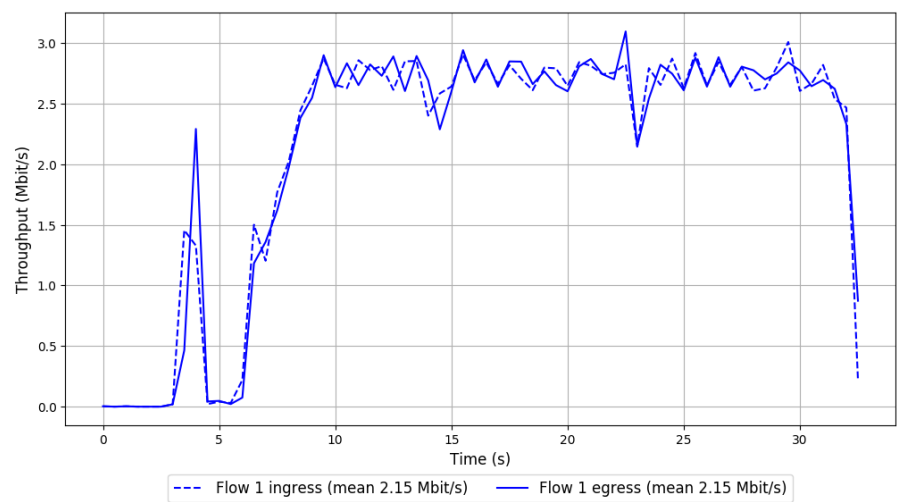
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 104.473 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-05 09:32:03

End at: 2017-12-05 09:32:33

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 106.530 ms

Loss rate: 0.00%

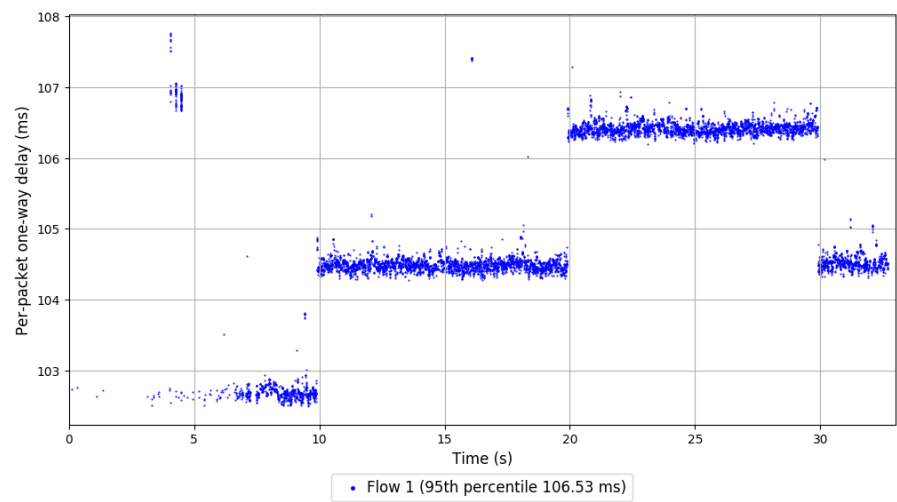
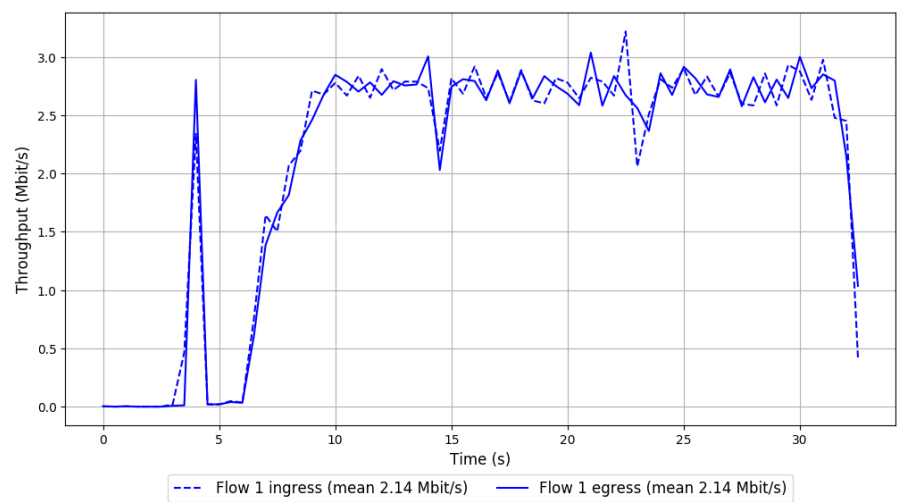
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 106.530 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-05 09:42:58

End at: 2017-12-05 09:43:28

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 107.025 ms

Loss rate: 0.00%

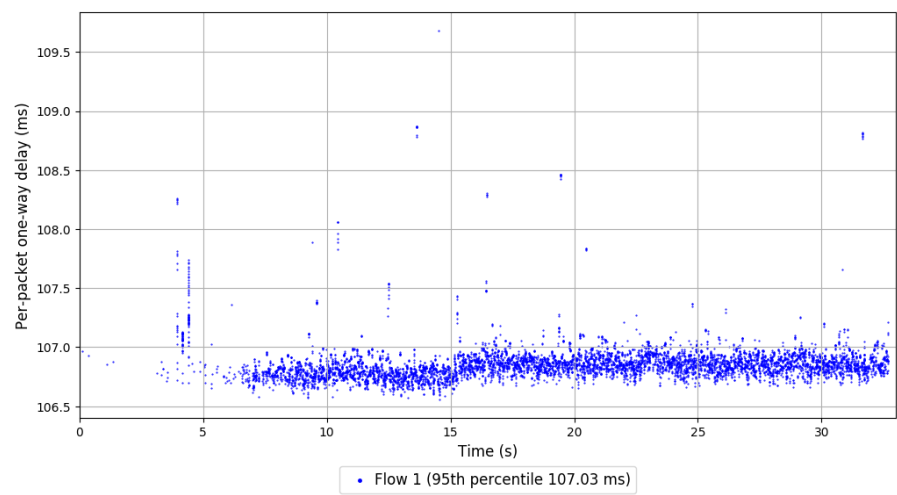
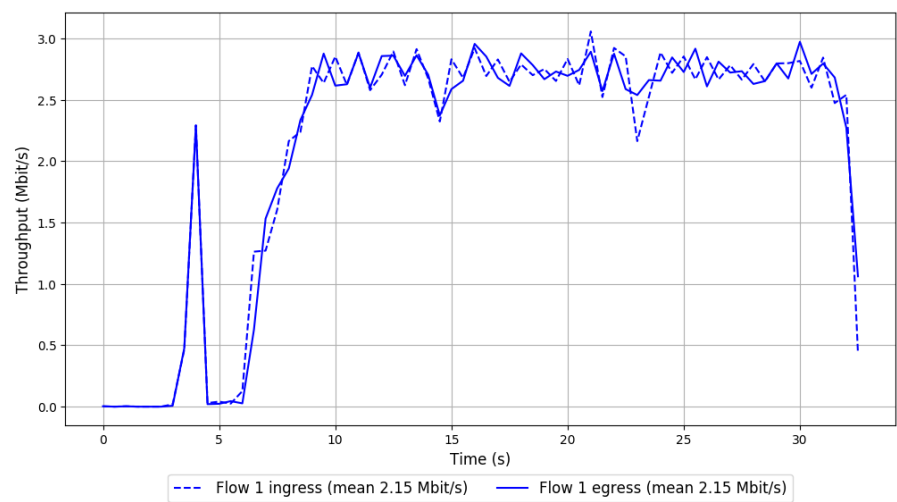
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 107.025 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-05 09:53:52

End at: 2017-12-05 09:54:22

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 107.321 ms

Loss rate: 0.00%

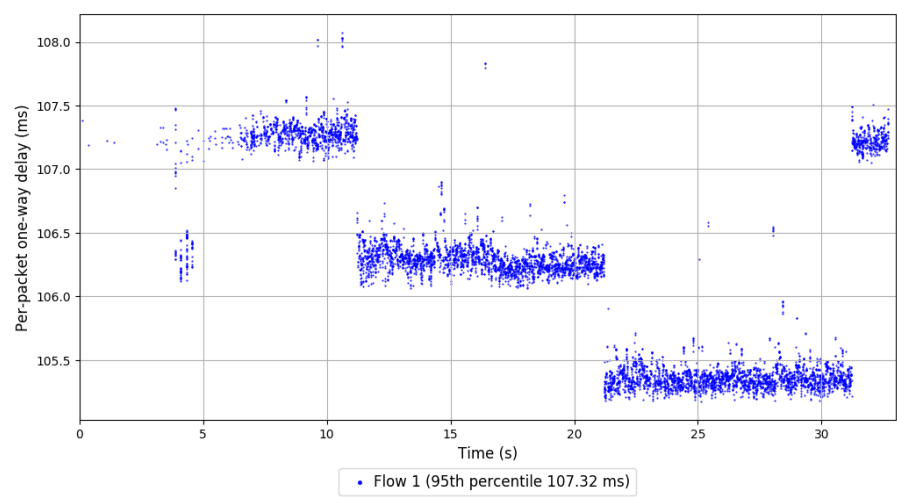
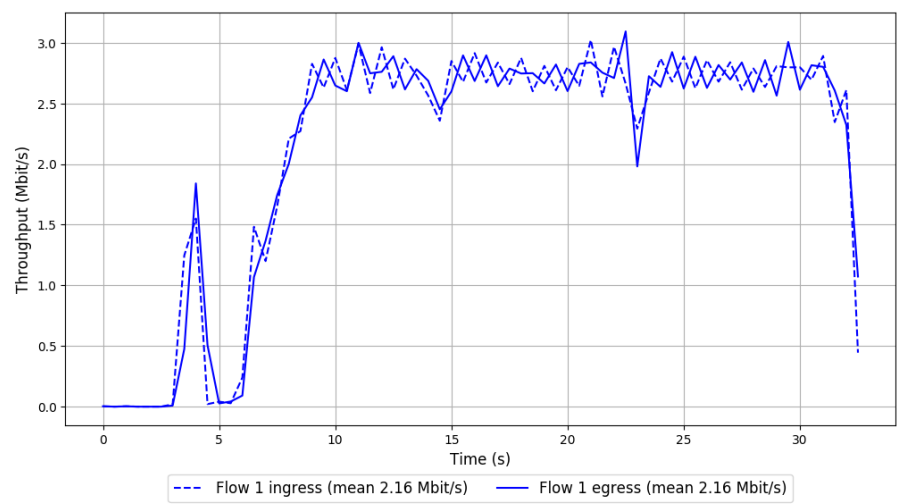
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 107.321 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-05 08:13:30

End at: 2017-12-05 08:14:00

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 107.819 ms

Loss rate: 0.73%

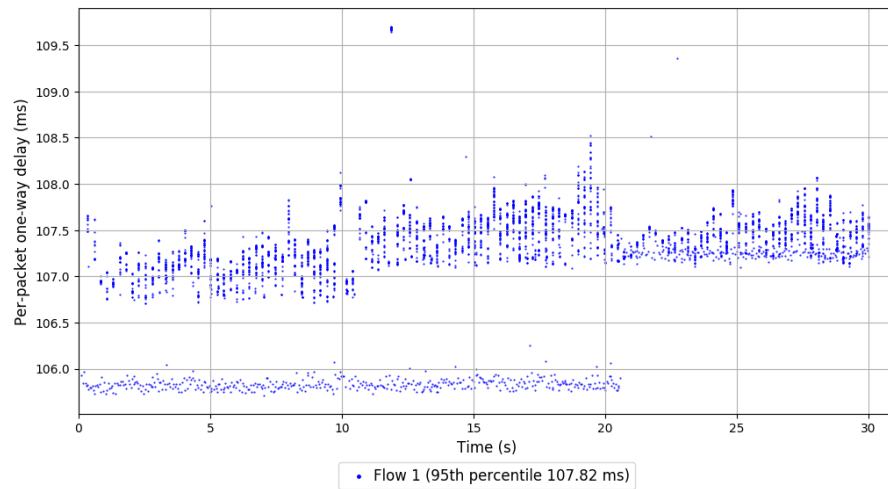
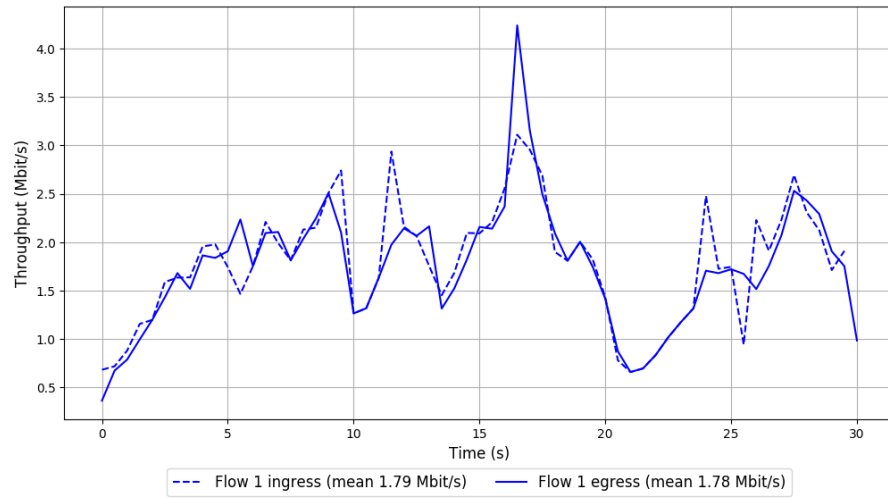
-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 107.819 ms

Loss rate: 0.73%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-05 08:24:33

End at: 2017-12-05 08:25:03

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.98 Mbit/s

95th percentile per-packet one-way delay: 106.726 ms

Loss rate: 0.00%

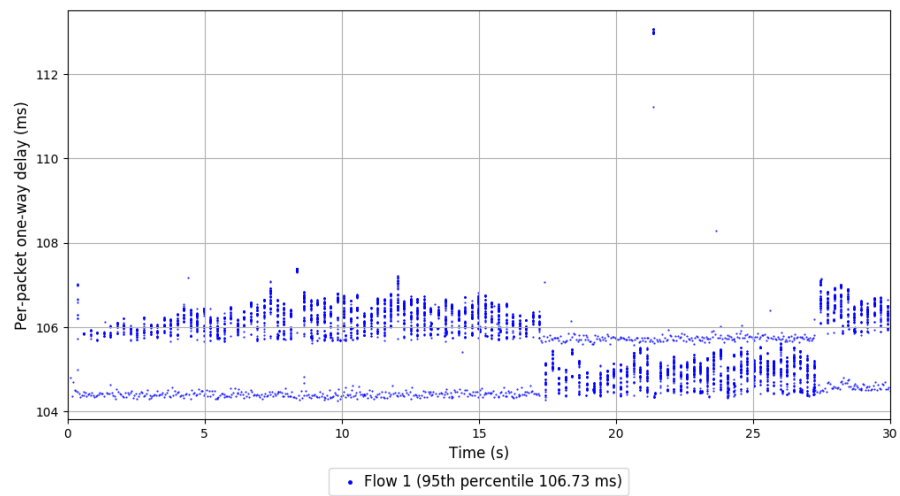
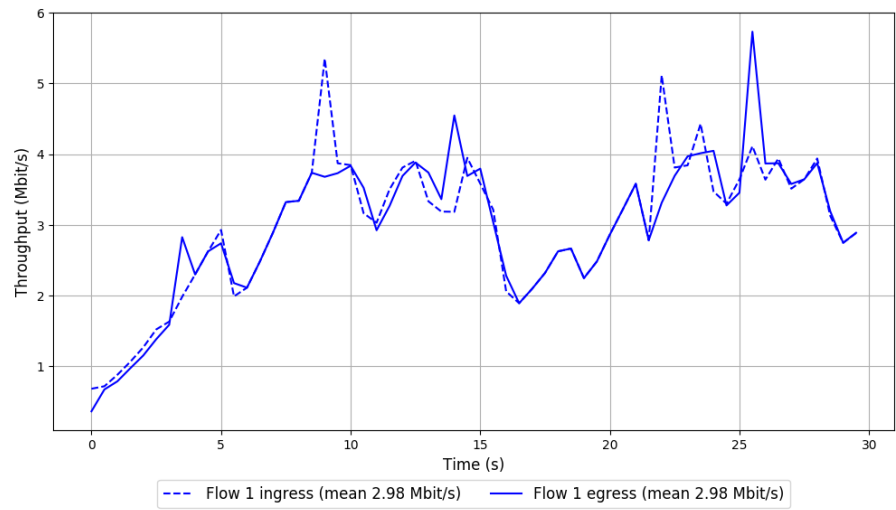
-- Flow 1:

Average throughput: 2.98 Mbit/s

95th percentile per-packet one-way delay: 106.726 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 08:35:29

End at: 2017-12-05 08:35:59

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 107.884 ms

Loss rate: 0.08%

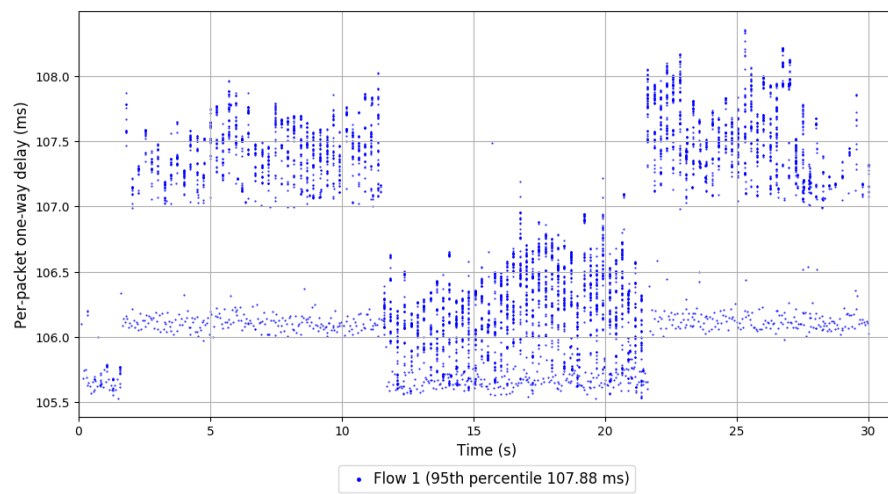
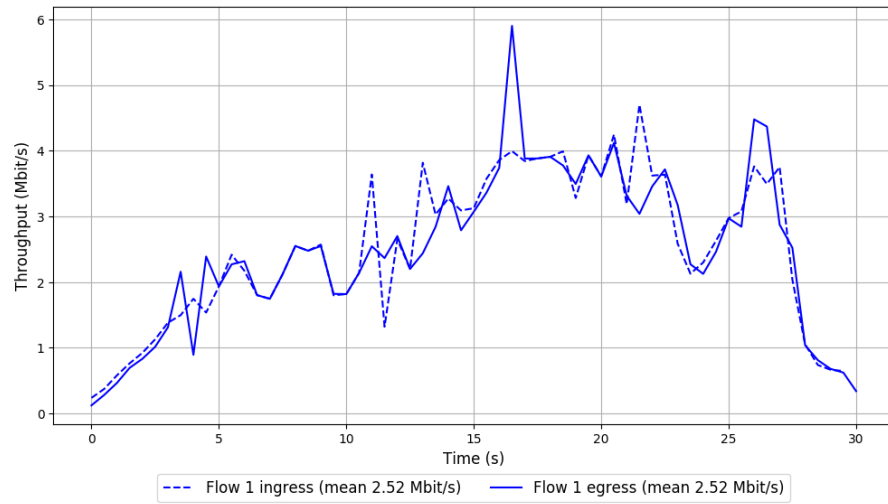
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 107.884 ms

Loss rate: 0.08%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-05 08:46:19

End at: 2017-12-05 08:46:49

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 108.497 ms

Loss rate: 0.00%

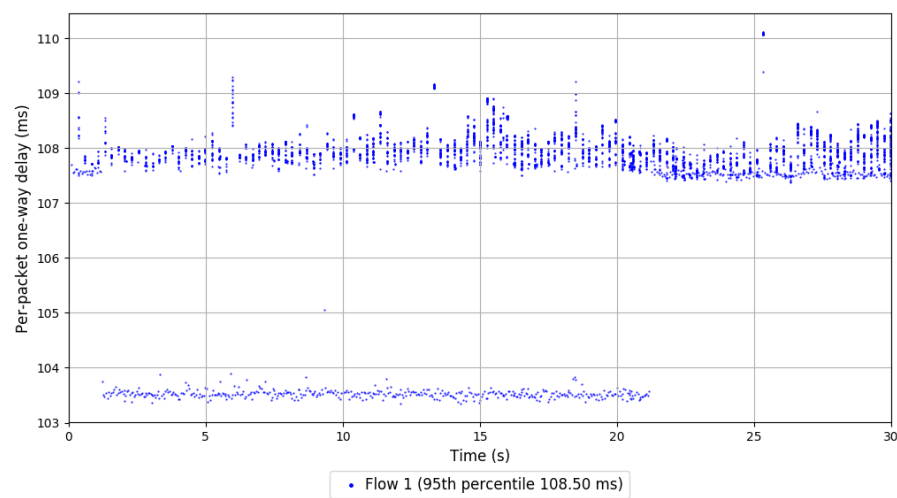
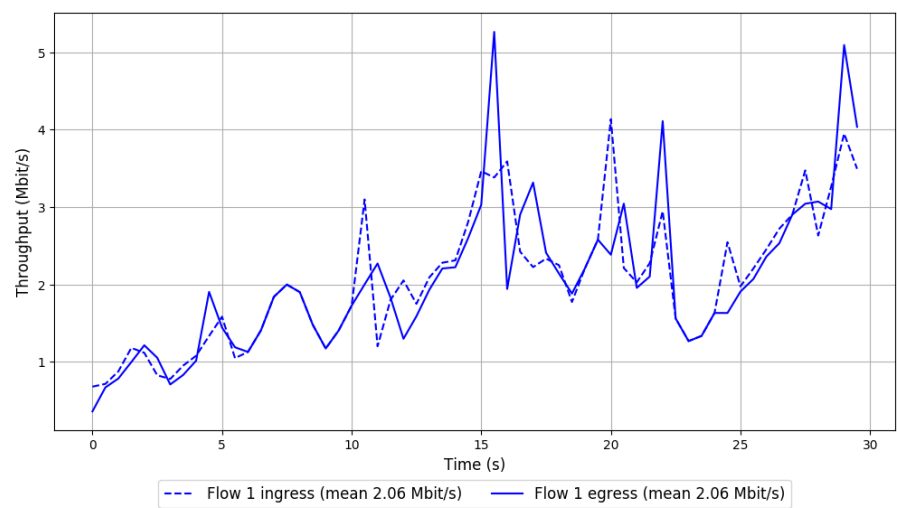
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 108.497 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-05 08:57:37

End at: 2017-12-05 08:58:07

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 108.826 ms

Loss rate: 0.26%

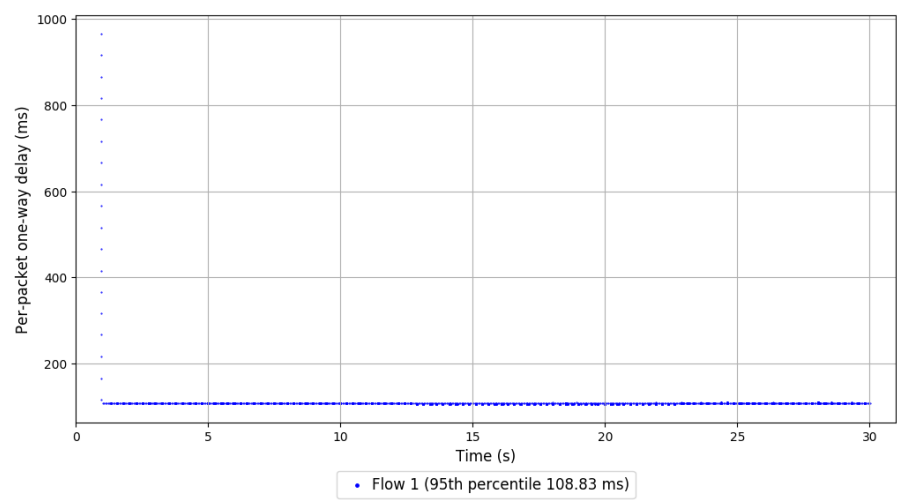
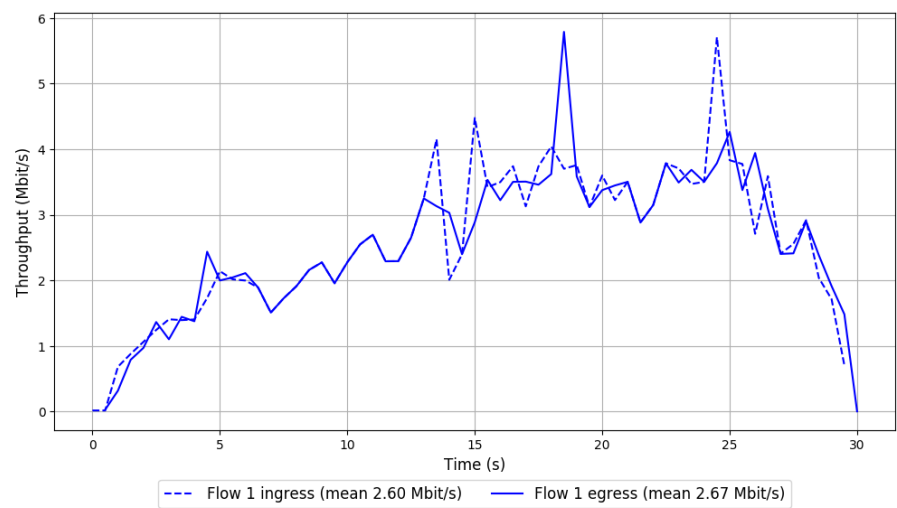
-- Flow 1:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 108.826 ms

Loss rate: 0.26%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-05 09:08:35

End at: 2017-12-05 09:09:05

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 108.165 ms

Loss rate: 0.07%

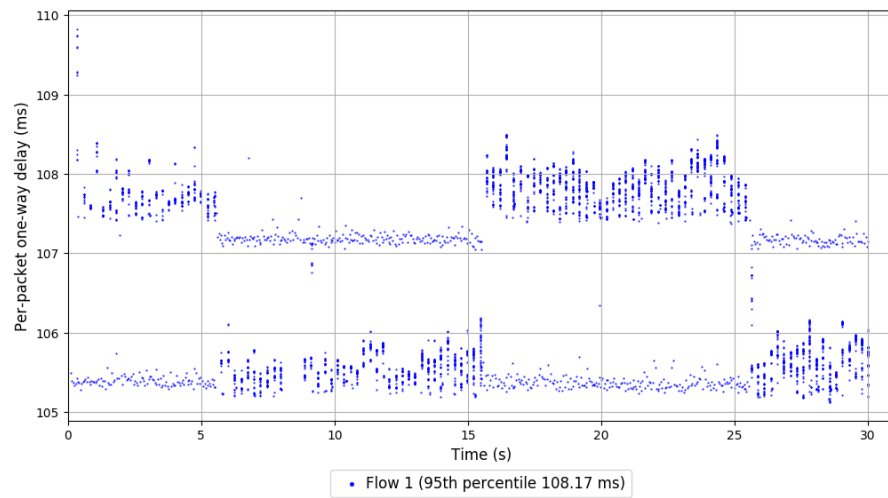
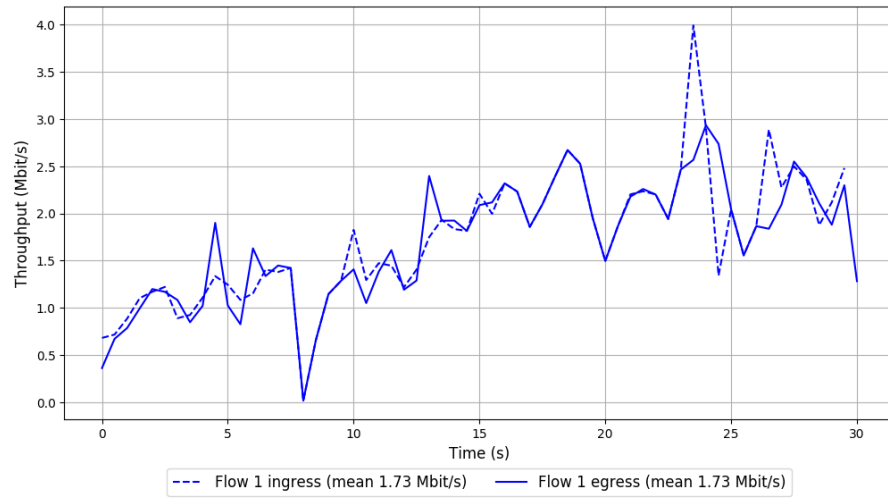
-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 108.165 ms

Loss rate: 0.07%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-05 09:19:28

End at: 2017-12-05 09:19:58

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 107.000 ms

Loss rate: 1.08%

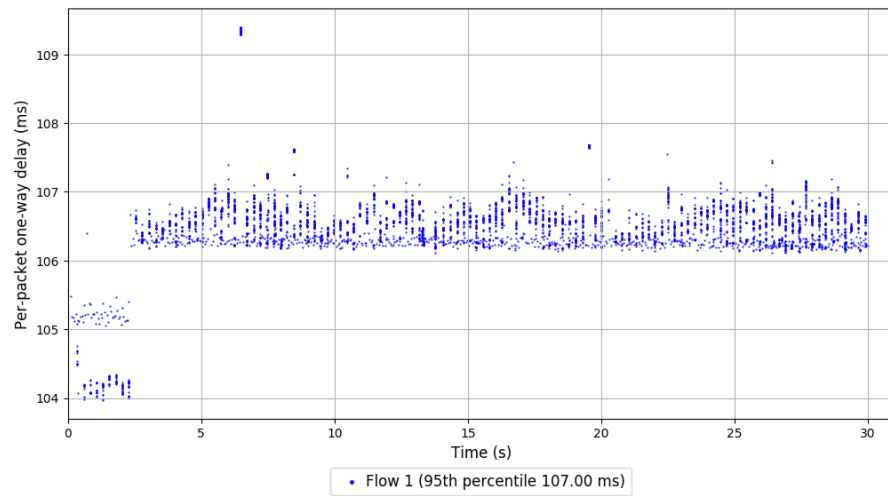
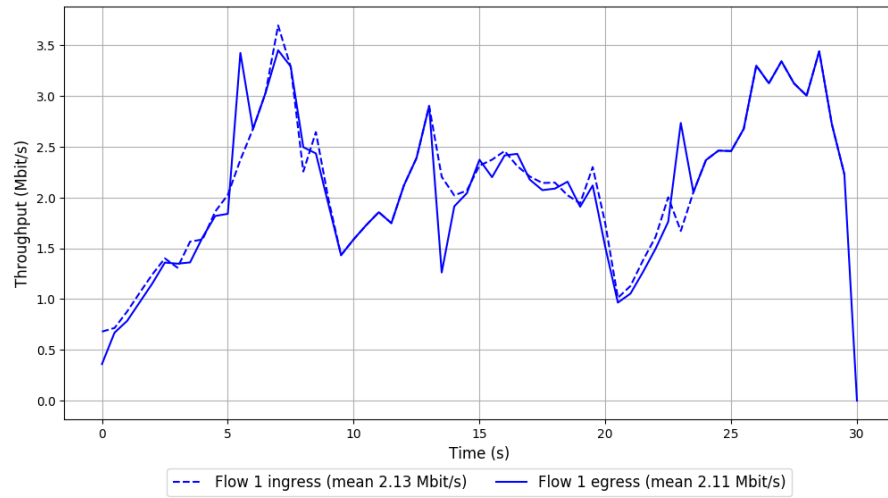
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 107.000 ms

Loss rate: 1.08%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-05 09:30:28

End at: 2017-12-05 09:30:58

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 107.759 ms

Loss rate: 0.74%

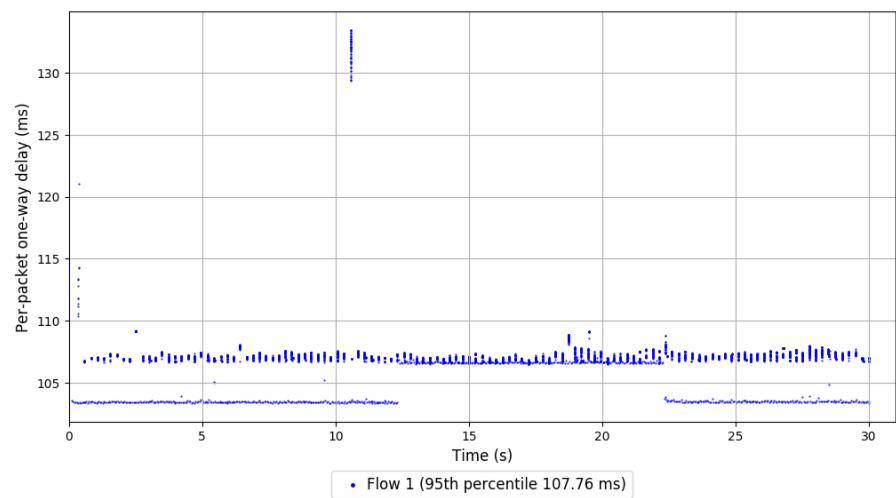
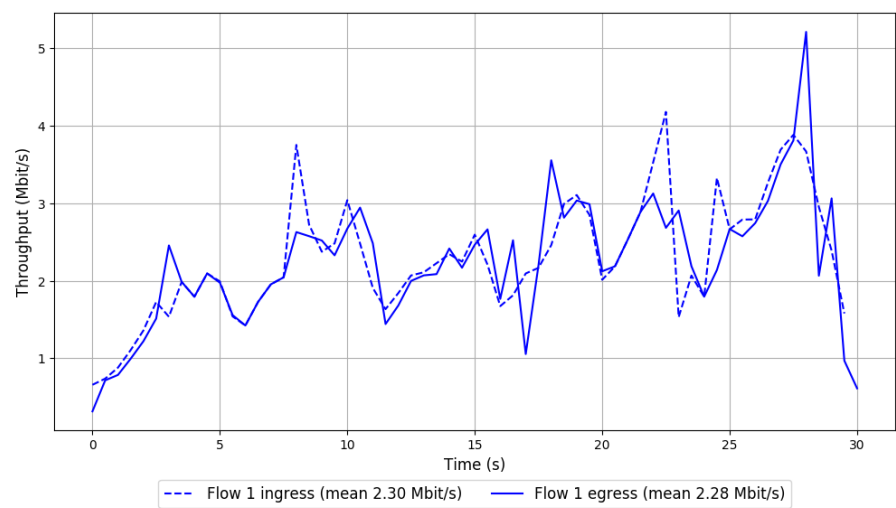
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 107.759 ms

Loss rate: 0.74%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-05 09:41:29

End at: 2017-12-05 09:41:59

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 107.606 ms

Loss rate: 0.53%

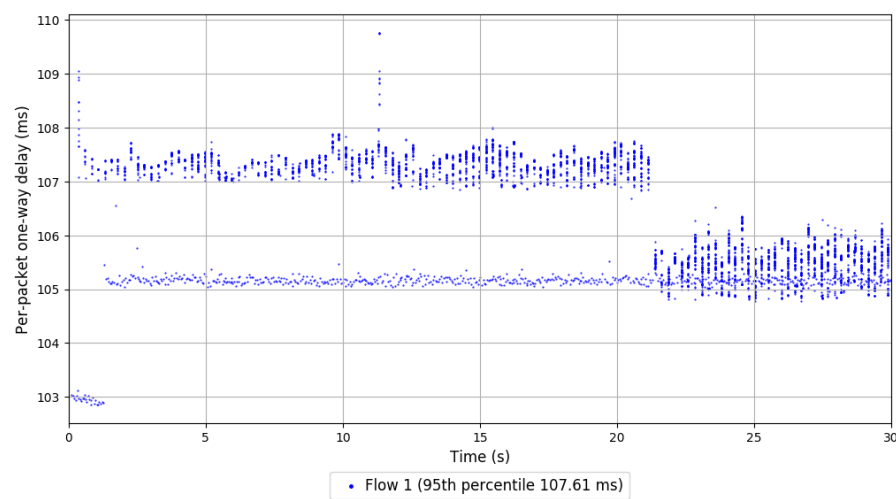
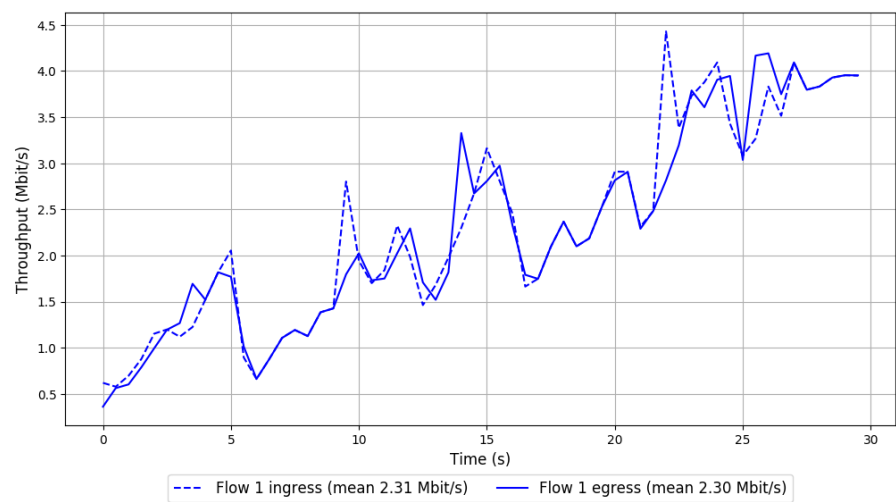
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 107.606 ms

Loss rate: 0.53%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-05 09:52:17

End at: 2017-12-05 09:52:48

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 107.324 ms

Loss rate: 0.01%

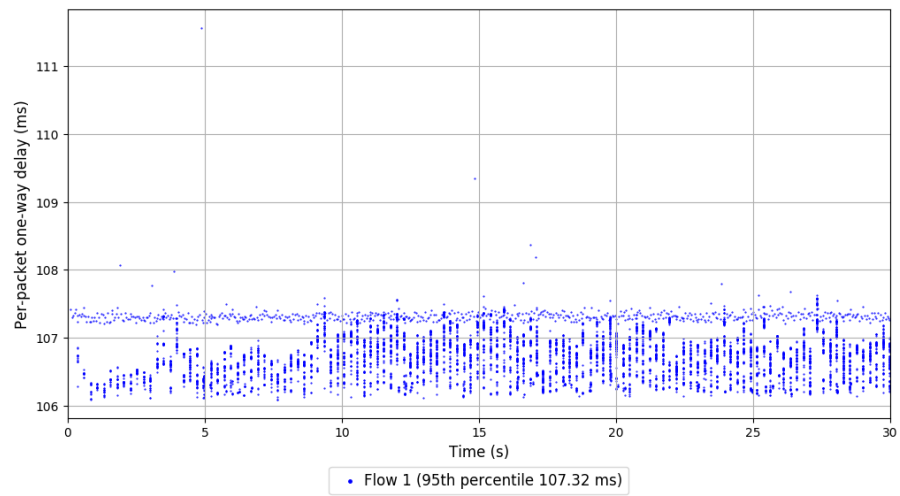
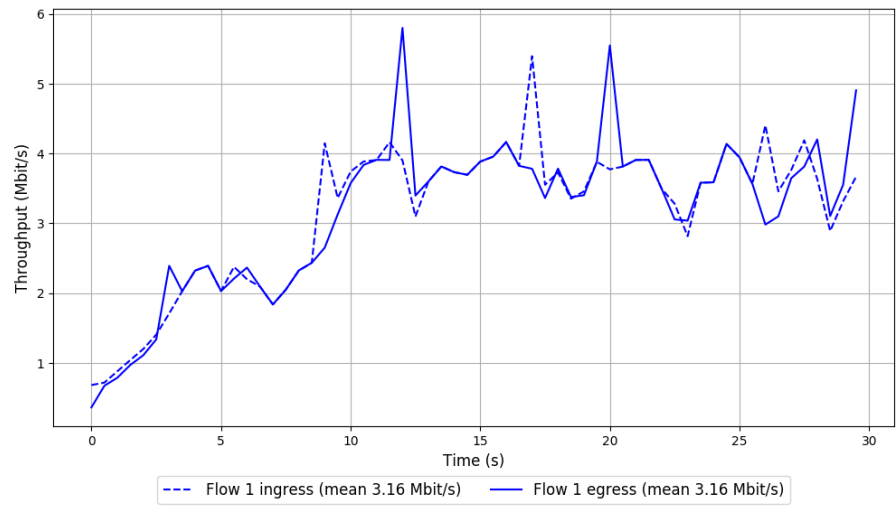
-- Flow 1:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 107.324 ms

Loss rate: 0.01%

Run 10: Report of Sprout — Data Link

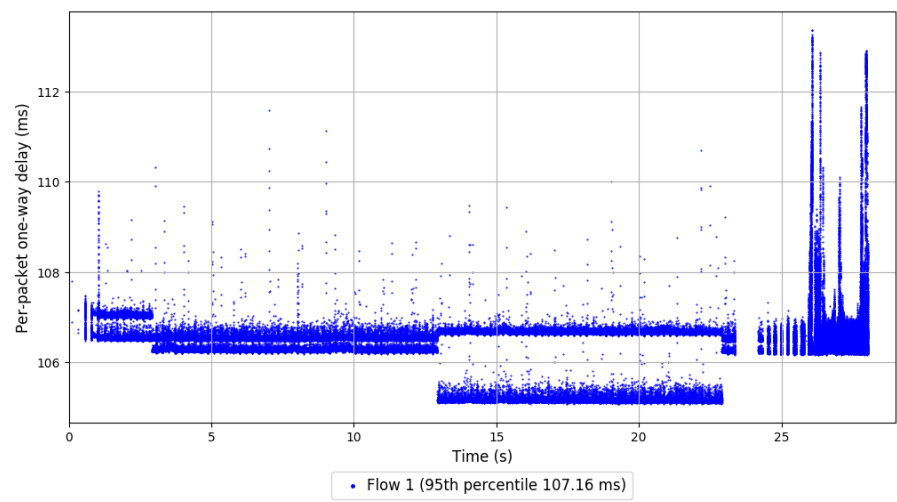
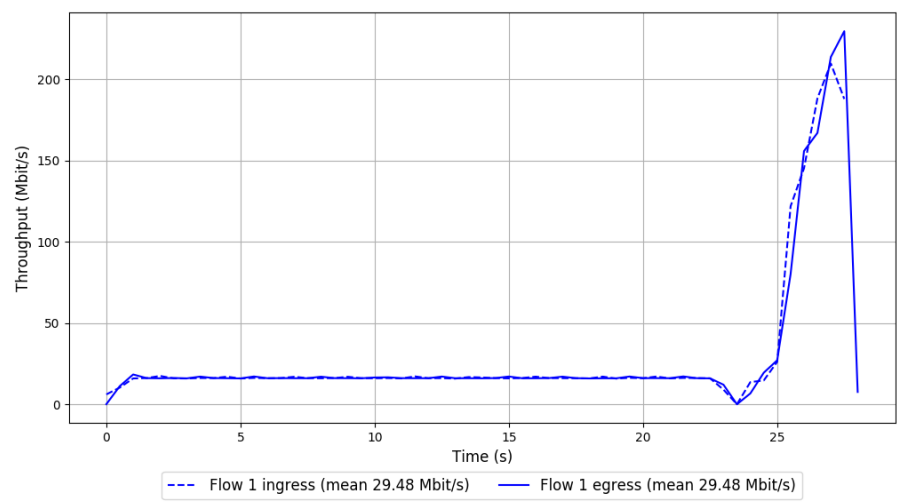


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 08:17:15
End at: 2017-12-05 08:17:45

# Below is generated by plot.py at 2017-12-05 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.48 Mbit/s
95th percentile per-packet one-way delay: 107.159 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 29.48 Mbit/s
95th percentile per-packet one-way delay: 107.159 ms
Loss rate: 0.03%
```


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

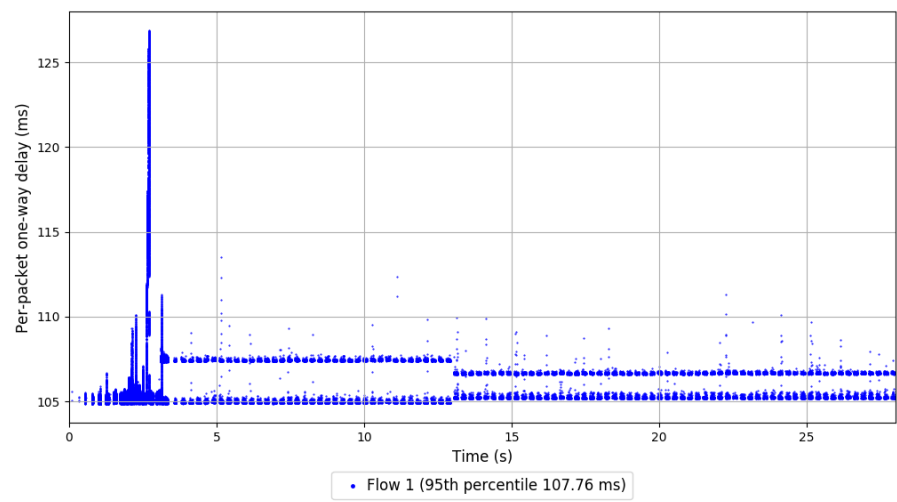
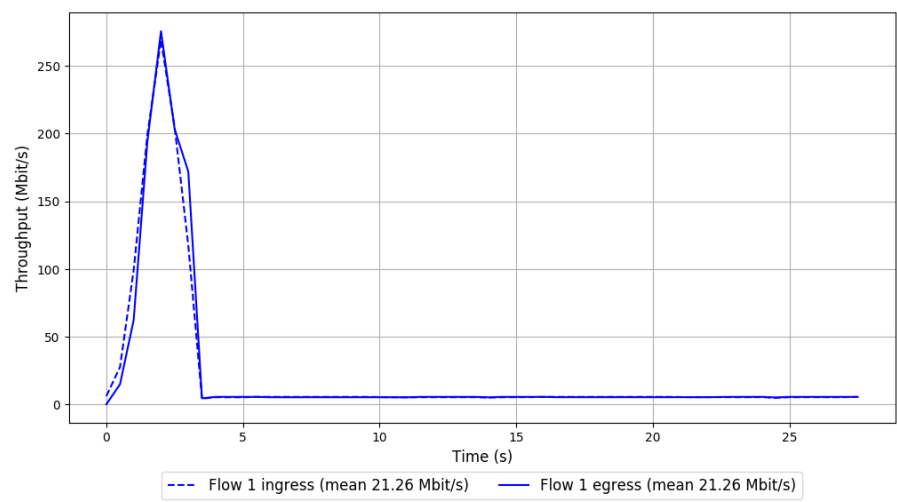


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 08:28:15
End at: 2017-12-05 08:28:45

# Below is generated by plot.py at 2017-12-05 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.26 Mbit/s
95th percentile per-packet one-way delay: 107.756 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 21.26 Mbit/s
95th percentile per-packet one-way delay: 107.756 ms
Loss rate: 0.00%
```

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

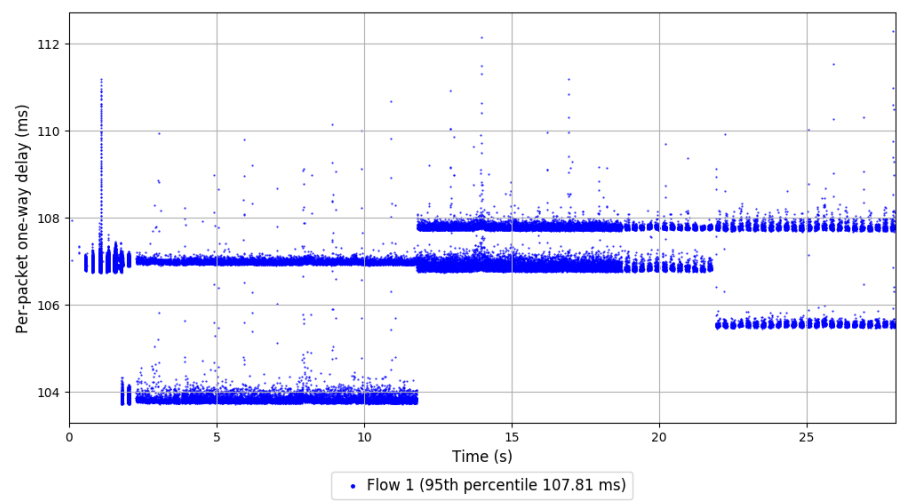
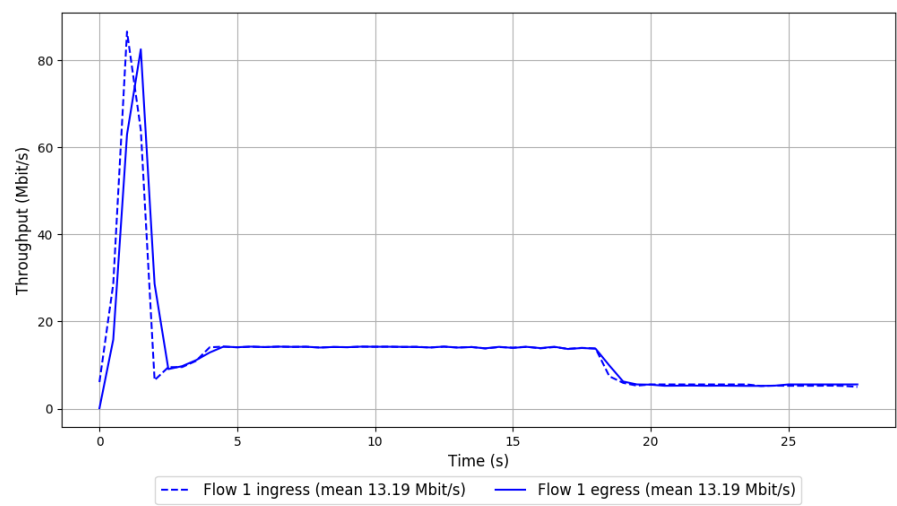


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 08:39:06
End at: 2017-12-05 08:39:36

# Below is generated by plot.py at 2017-12-05 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.19 Mbit/s
95th percentile per-packet one-way delay: 107.811 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.19 Mbit/s
95th percentile per-packet one-way delay: 107.811 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-05 08:50:09

End at: 2017-12-05 08:50:39

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.50 Mbit/s

95th percentile per-packet one-way delay: 111.649 ms

Loss rate: 0.00%

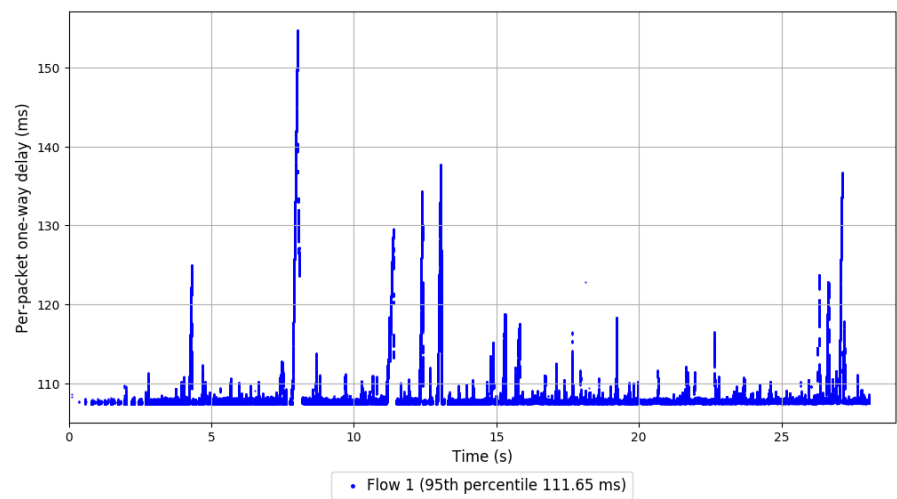
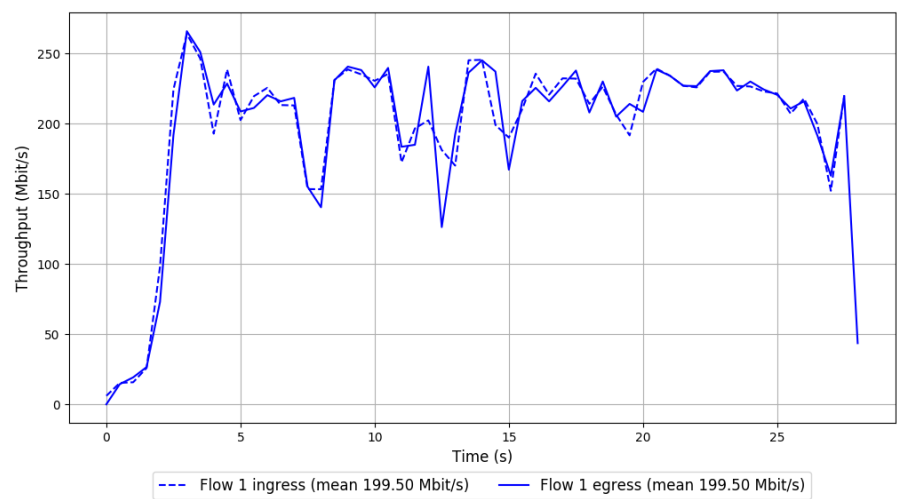
-- Flow 1:

Average throughput: 199.50 Mbit/s

95th percentile per-packet one-way delay: 111.649 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-05 09:01:22

End at: 2017-12-05 09:01:52

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.91 Mbit/s

95th percentile per-packet one-way delay: 107.869 ms

Loss rate: 0.01%

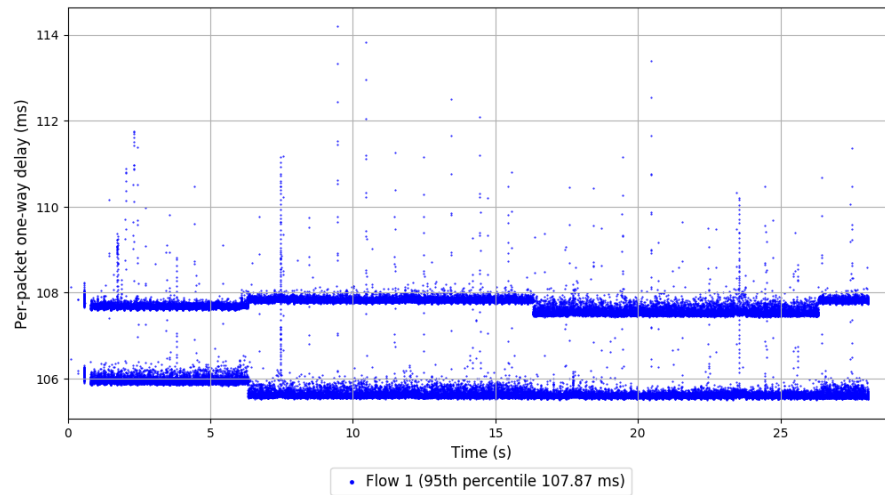
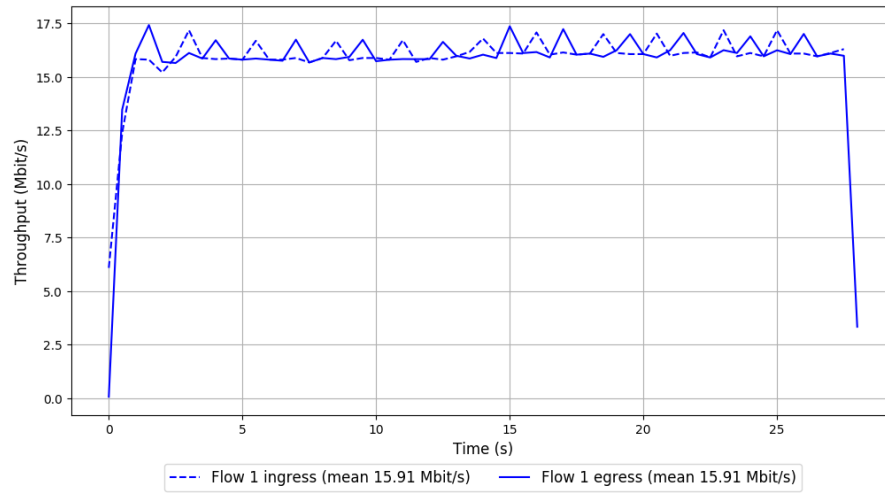
-- Flow 1:

Average throughput: 15.91 Mbit/s

95th percentile per-packet one-way delay: 107.869 ms

Loss rate: 0.01%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-05 09:12:14

End at: 2017-12-05 09:12:44

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.89 Mbit/s

95th percentile per-packet one-way delay: 107.011 ms

Loss rate: 0.00%

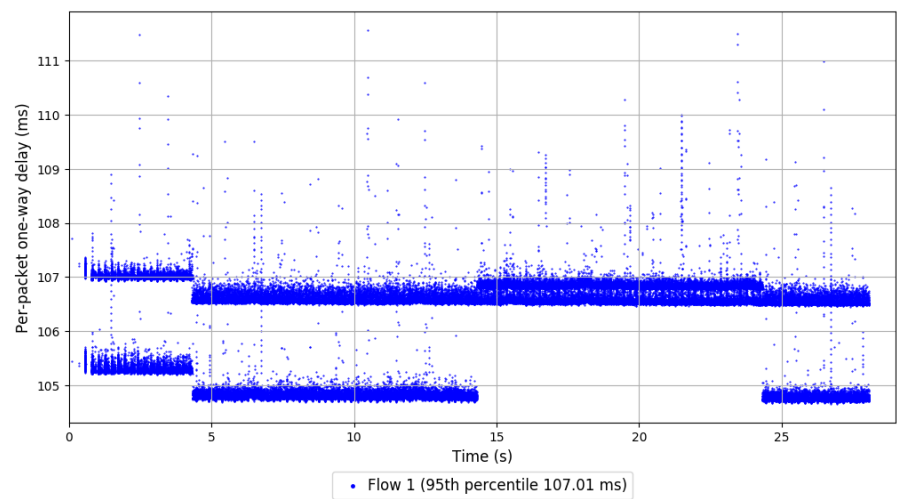
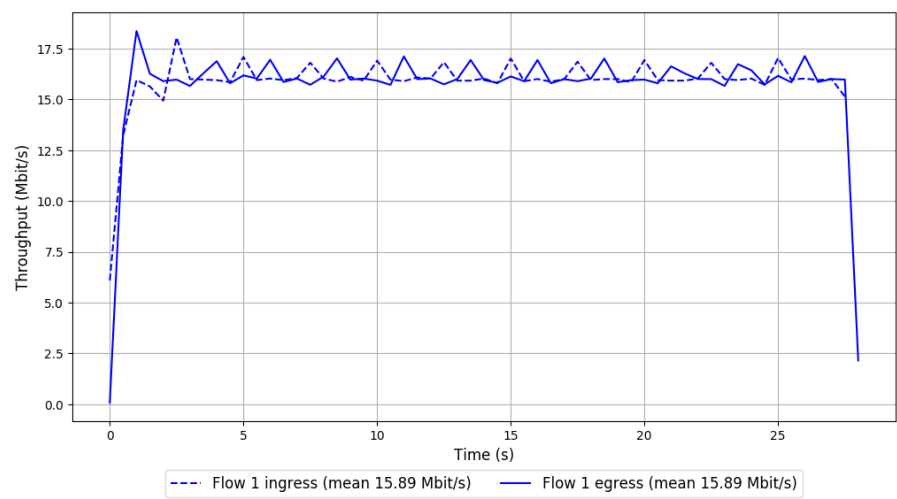
-- Flow 1:

Average throughput: 15.89 Mbit/s

95th percentile per-packet one-way delay: 107.011 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-05 09:23:14

End at: 2017-12-05 09:23:44

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.18 Mbit/s

95th percentile per-packet one-way delay: 107.032 ms

Loss rate: 0.00%

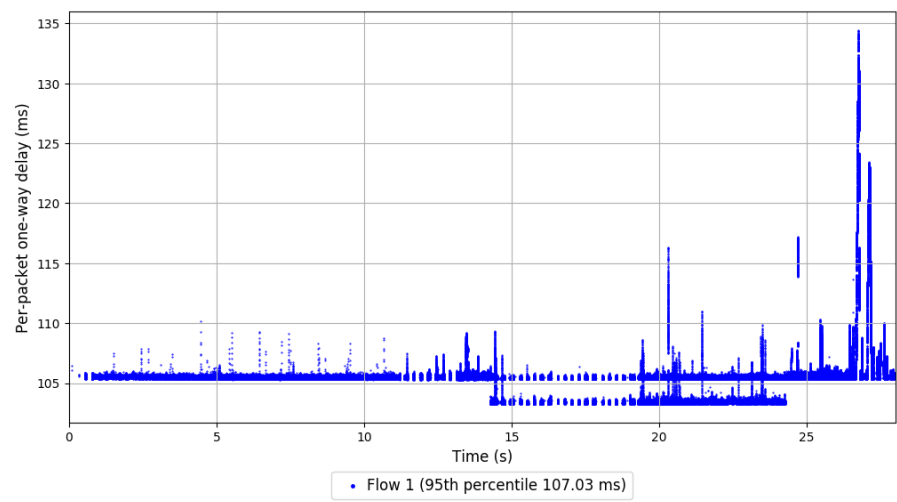
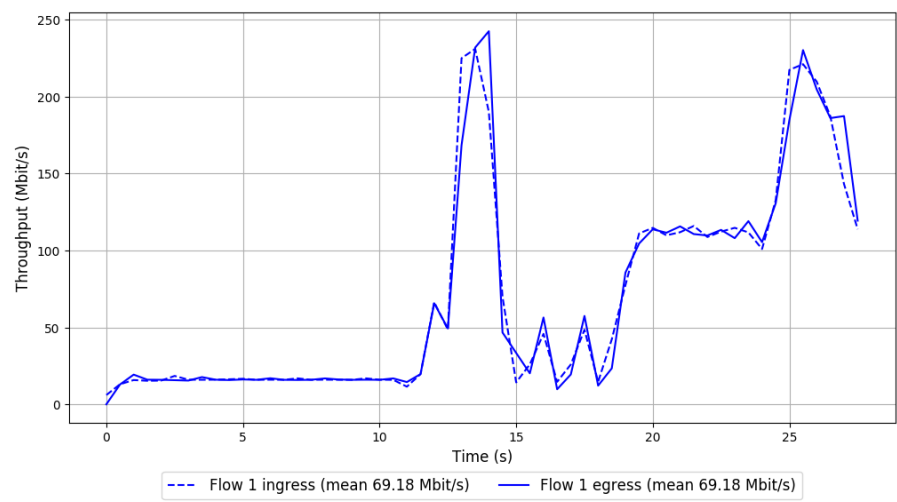
-- Flow 1:

Average throughput: 69.18 Mbit/s

95th percentile per-packet one-way delay: 107.032 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-05 09:34:12

End at: 2017-12-05 09:34:42

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.53 Mbit/s

95th percentile per-packet one-way delay: 106.731 ms

Loss rate: 0.00%

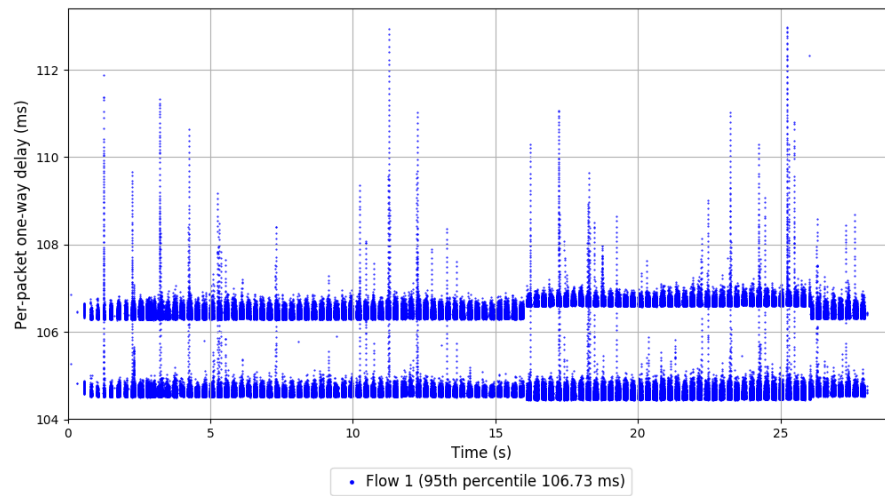
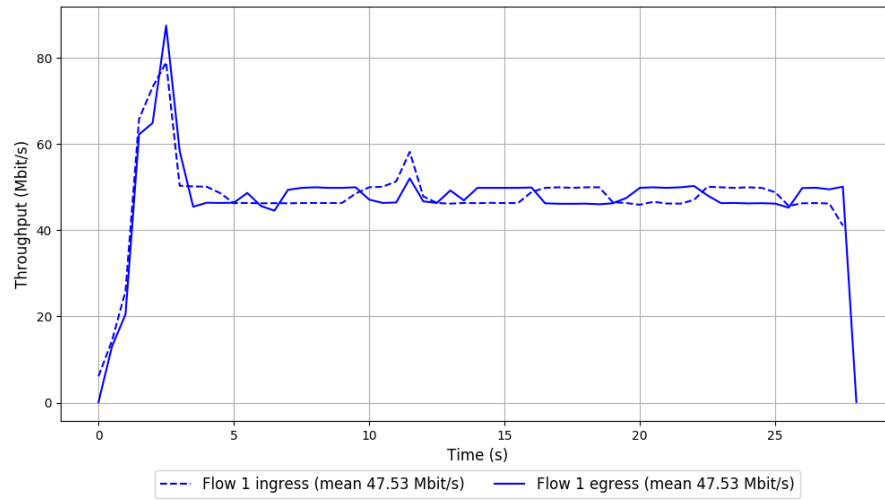
-- Flow 1:

Average throughput: 47.53 Mbit/s

95th percentile per-packet one-way delay: 106.731 ms

Loss rate: 0.00%

Run 8: Report of TaoVA-100x — Data Link



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-05 09:45:08

End at: 2017-12-05 09:45:38

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.69 Mbit/s

95th percentile per-packet one-way delay: 109.132 ms

Loss rate: 0.00%

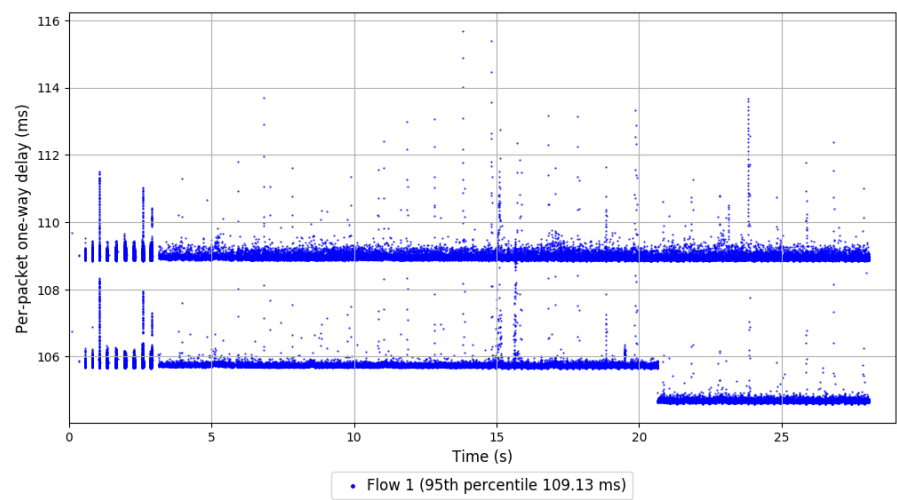
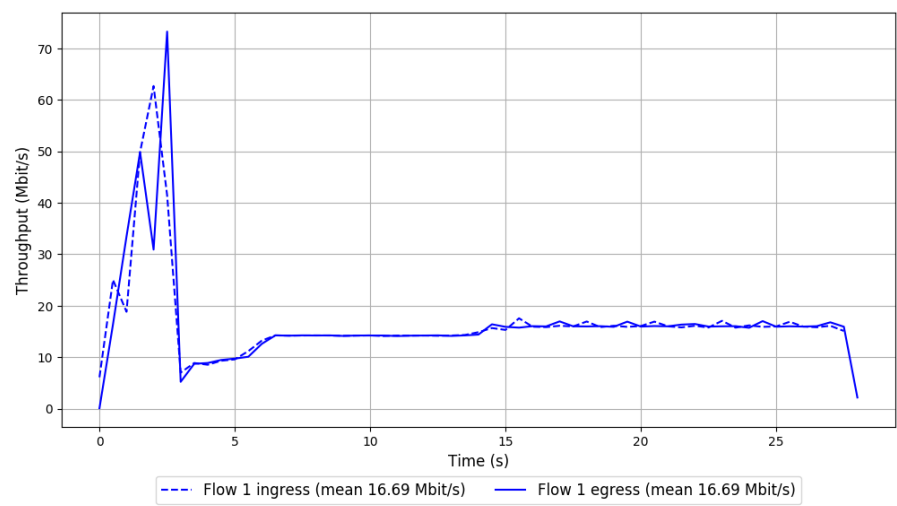
-- Flow 1:

Average throughput: 16.69 Mbit/s

95th percentile per-packet one-way delay: 109.132 ms

Loss rate: 0.00%

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

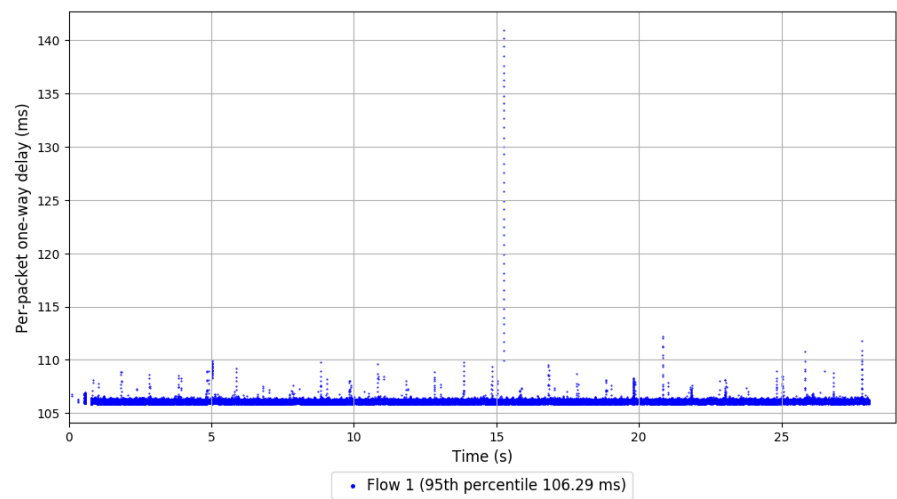
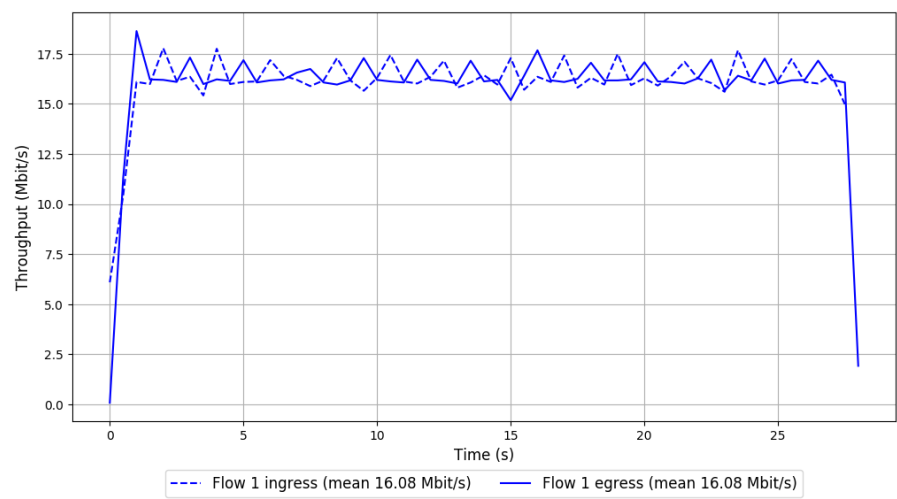


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-05 09:56:02
End at: 2017-12-05 09:56:32

# Below is generated by plot.py at 2017-12-05 10:54:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.08 Mbit/s
95th percentile per-packet one-way delay: 106.286 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 16.08 Mbit/s
95th percentile per-packet one-way delay: 106.286 ms
Loss rate: 0.00%
```

Run 10: Report of TaoVA-100x — Data Link



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 08:18:45

End at: 2017-12-05 08:19:15

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.54 Mbit/s

95th percentile per-packet one-way delay: 107.621 ms

Loss rate: 0.06%

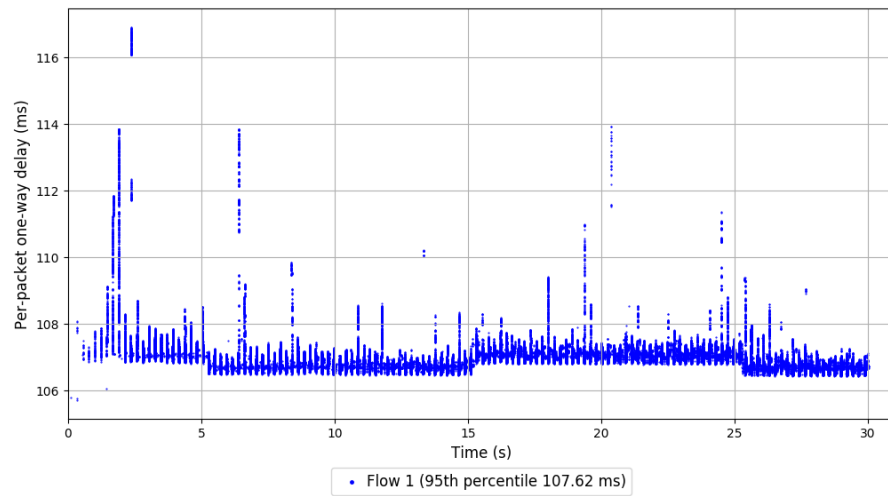
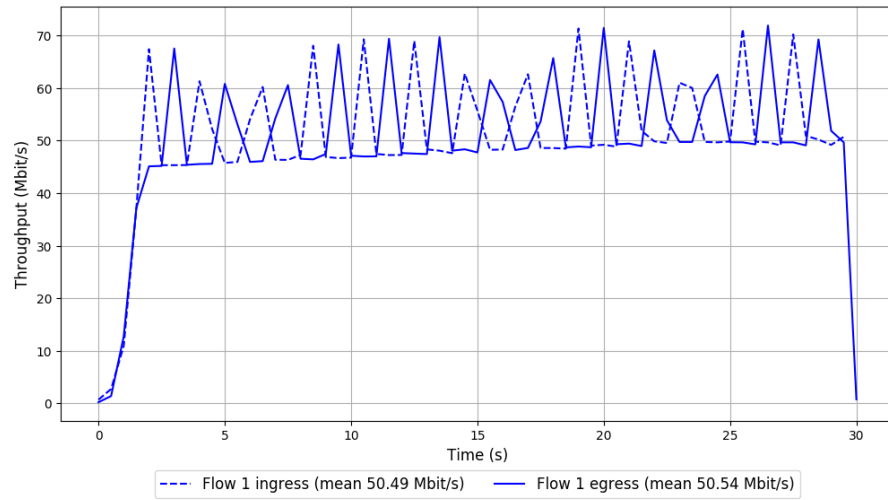
-- Flow 1:

Average throughput: 50.54 Mbit/s

95th percentile per-packet one-way delay: 107.621 ms

Loss rate: 0.06%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 08:29:42

End at: 2017-12-05 08:30:12

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.26 Mbit/s

95th percentile per-packet one-way delay: 108.574 ms

Loss rate: 0.05%

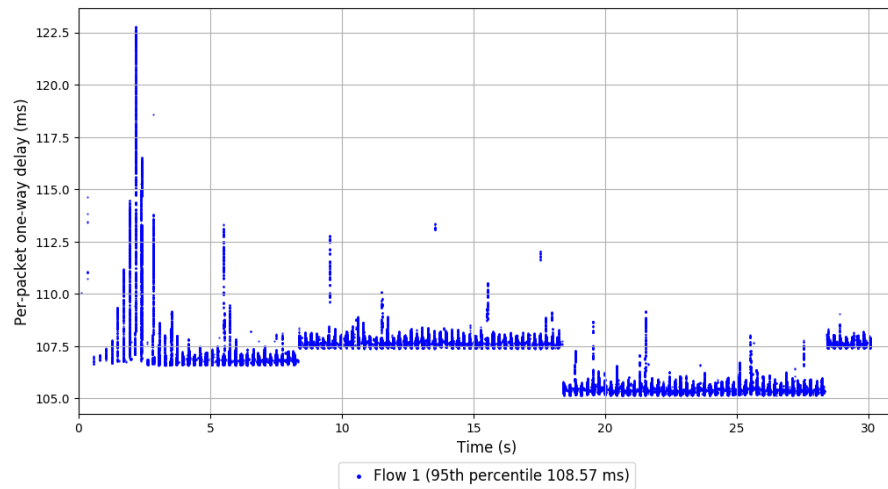
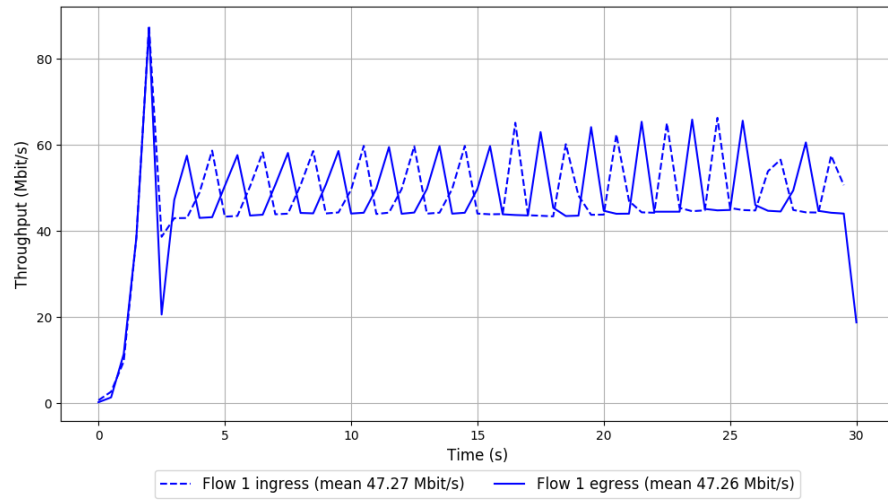
-- Flow 1:

Average throughput: 47.26 Mbit/s

95th percentile per-packet one-way delay: 108.574 ms

Loss rate: 0.05%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 08:40:34

End at: 2017-12-05 08:41:05

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.72 Mbit/s

95th percentile per-packet one-way delay: 108.277 ms

Loss rate: 0.00%

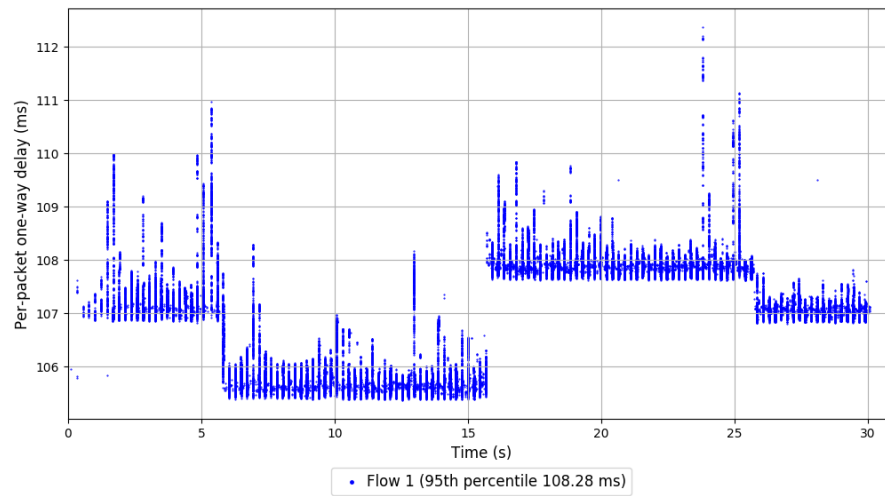
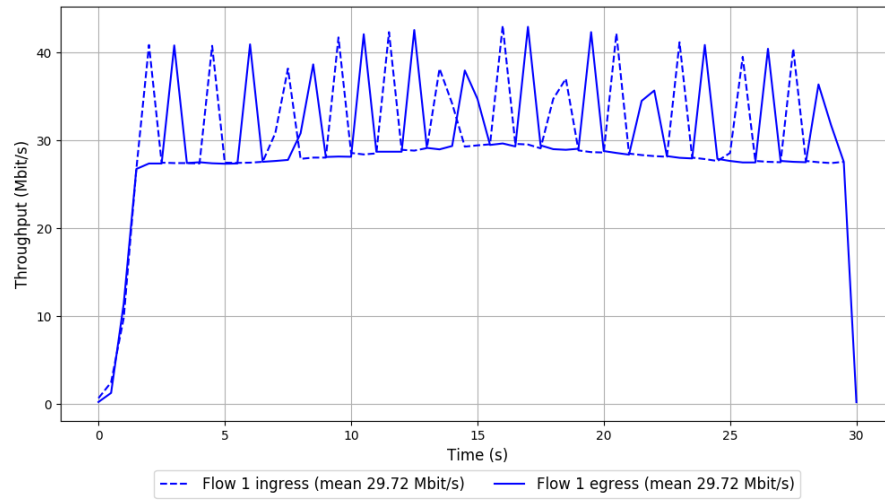
-- Flow 1:

Average throughput: 29.72 Mbit/s

95th percentile per-packet one-way delay: 108.277 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-05 08:51:56

End at: 2017-12-05 08:52:26

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.87 Mbit/s

95th percentile per-packet one-way delay: 111.514 ms

Loss rate: 0.01%

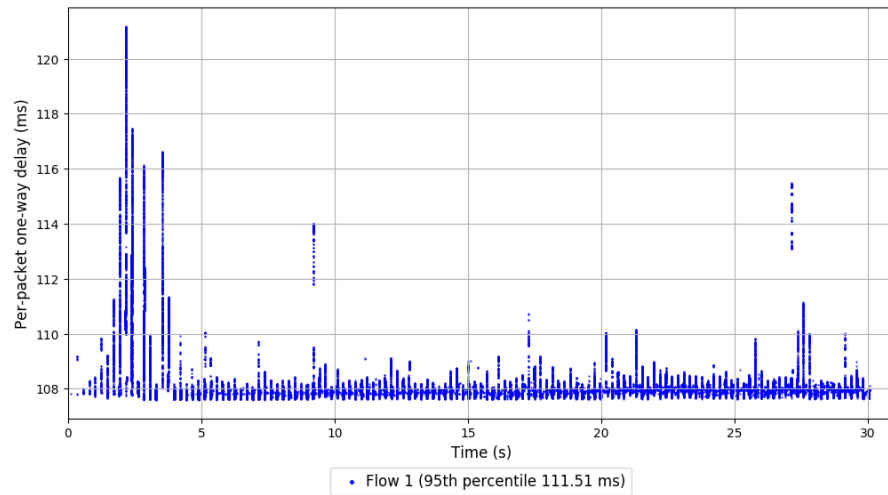
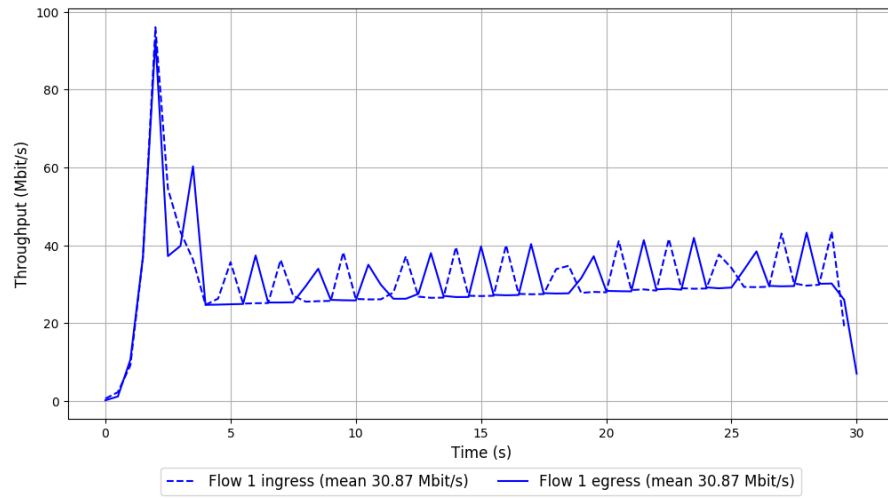
-- Flow 1:

Average throughput: 30.87 Mbit/s

95th percentile per-packet one-way delay: 111.514 ms

Loss rate: 0.01%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-05 09:02:49

End at: 2017-12-05 09:03:20

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.28 Mbit/s

95th percentile per-packet one-way delay: 108.550 ms

Loss rate: 0.04%

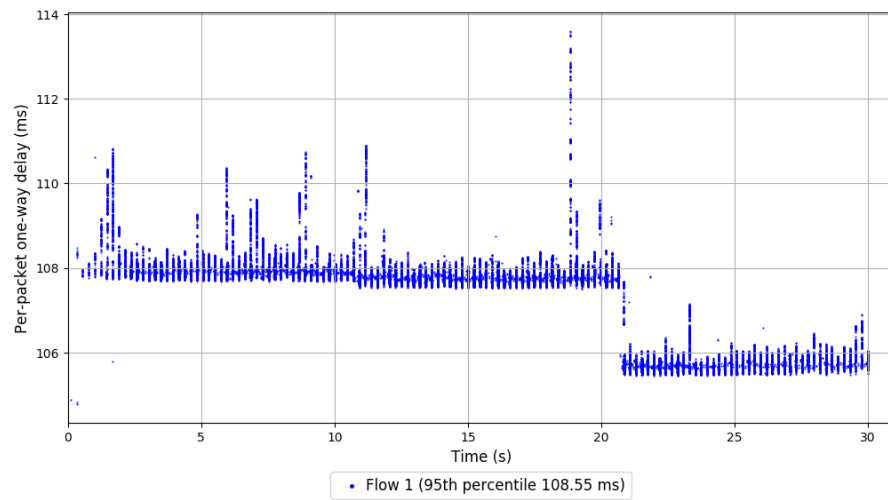
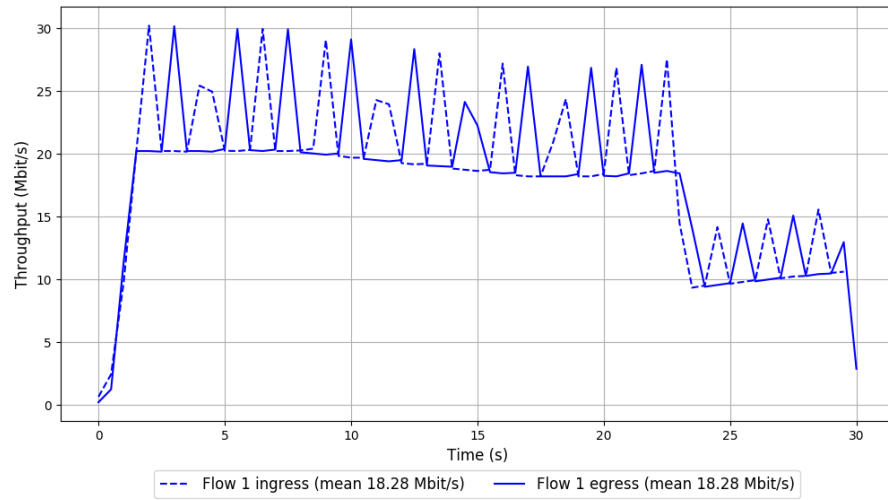
-- Flow 1:

Average throughput: 18.28 Mbit/s

95th percentile per-packet one-way delay: 108.550 ms

Loss rate: 0.04%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-05 09:13:41

End at: 2017-12-05 09:14:11

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 107.188 ms

Loss rate: 0.04%

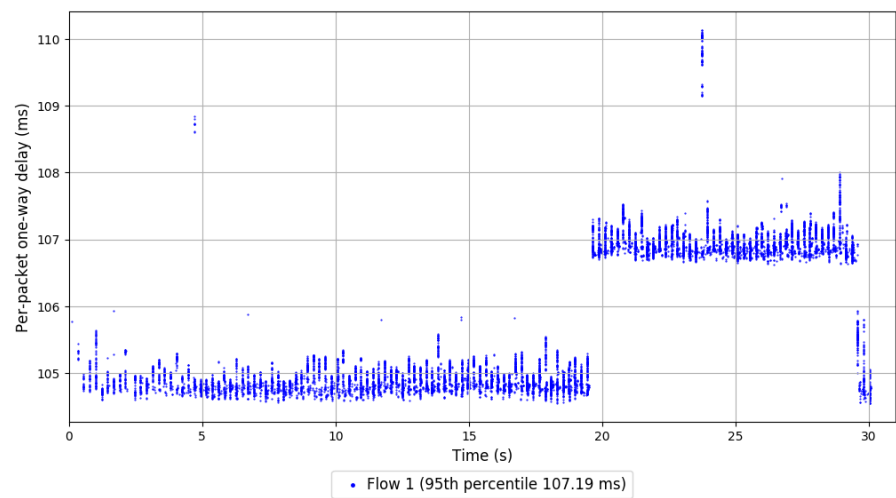
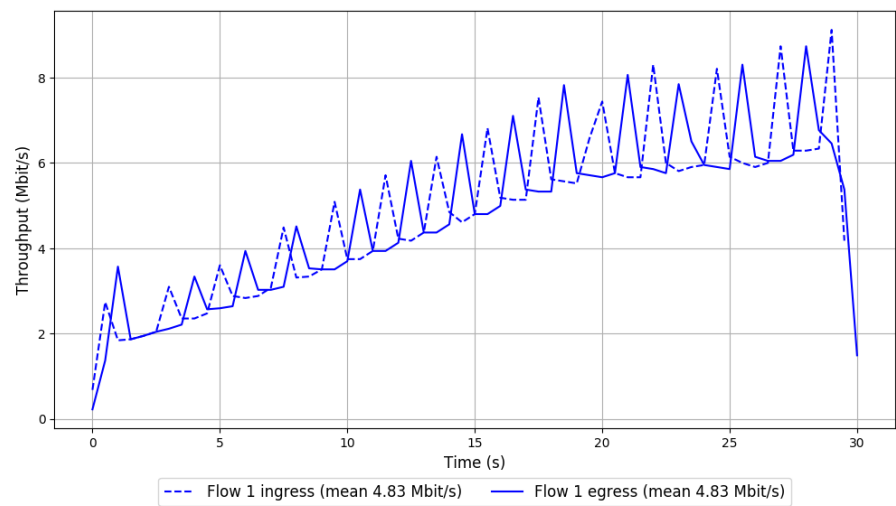
-- Flow 1:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 107.188 ms

Loss rate: 0.04%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-05 09:24:46

End at: 2017-12-05 09:25:16

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.47 Mbit/s

95th percentile per-packet one-way delay: 107.452 ms

Loss rate: 0.01%

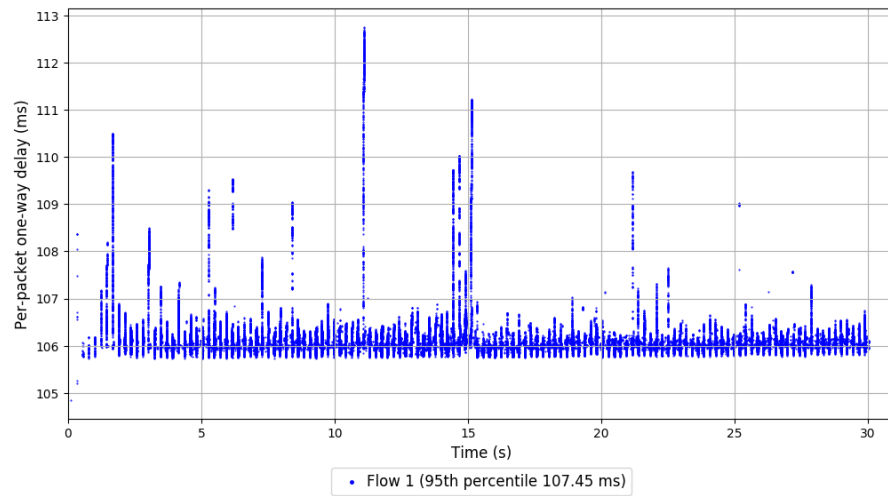
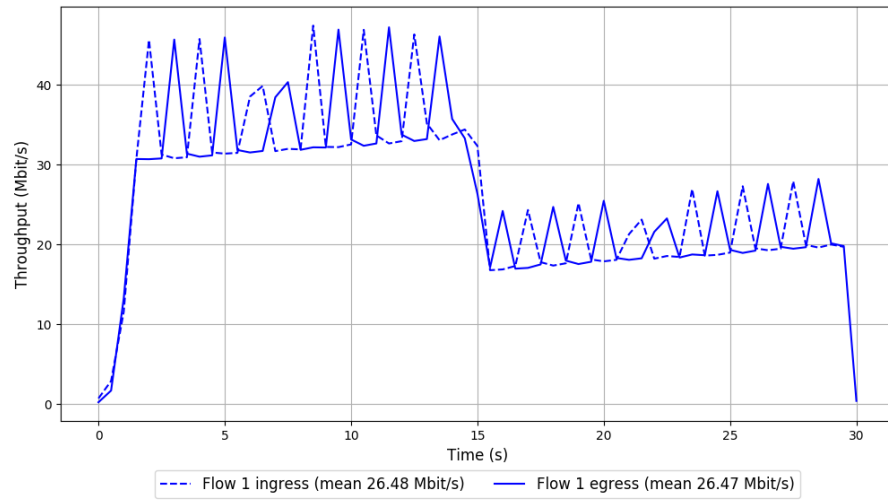
-- Flow 1:

Average throughput: 26.47 Mbit/s

95th percentile per-packet one-way delay: 107.452 ms

Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-05 09:35:43

End at: 2017-12-05 09:36:13

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.38 Mbit/s

95th percentile per-packet one-way delay: 107.215 ms

Loss rate: 0.00%

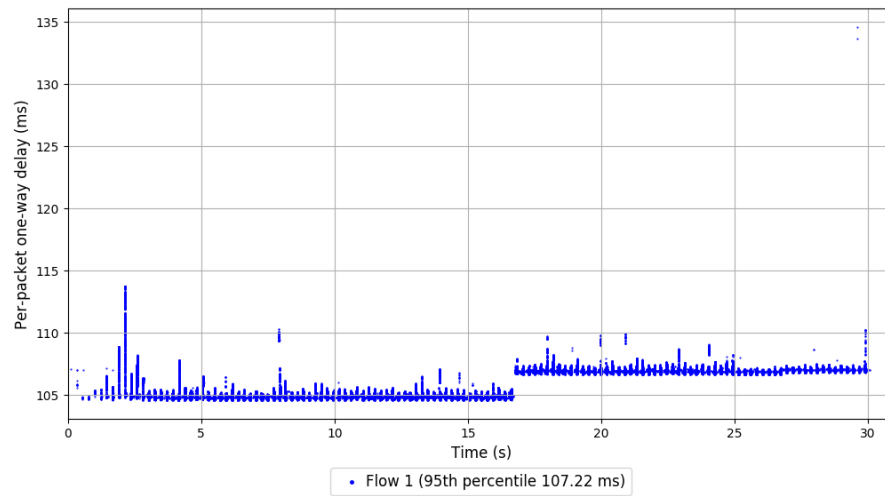
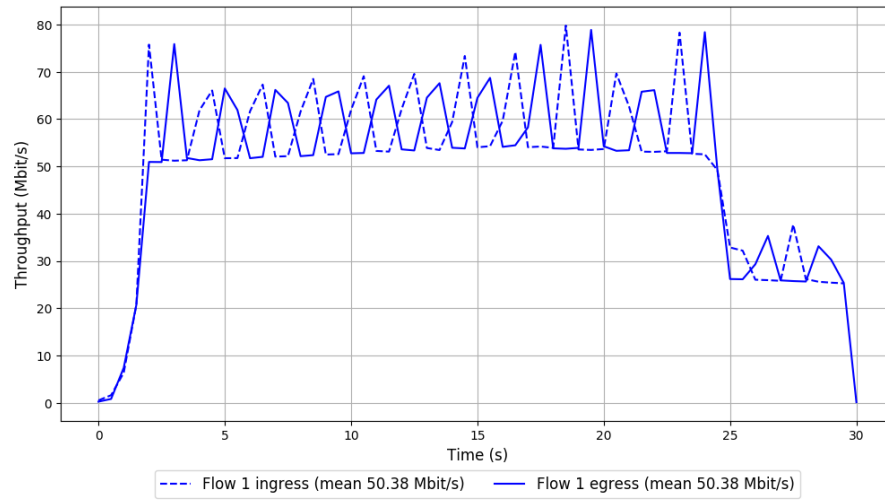
-- Flow 1:

Average throughput: 50.38 Mbit/s

95th percentile per-packet one-way delay: 107.215 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-05 09:46:36

End at: 2017-12-05 09:47:06

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.02 Mbit/s

95th percentile per-packet one-way delay: 107.172 ms

Loss rate: 0.01%

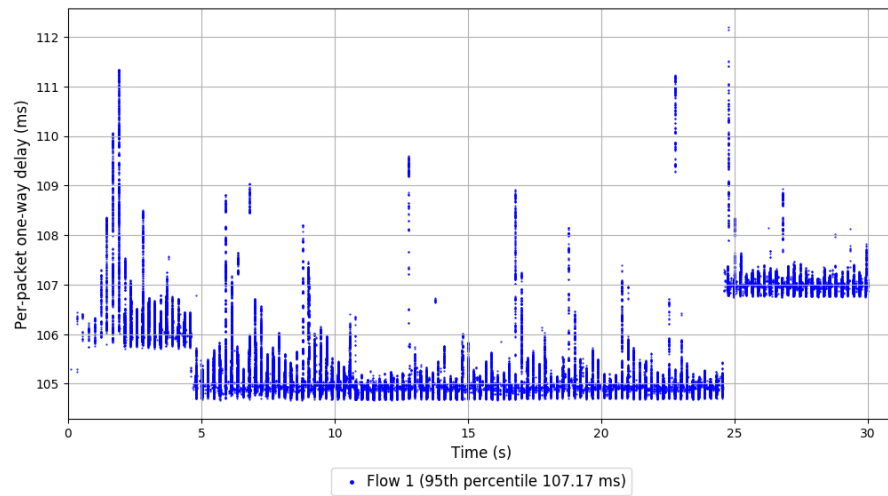
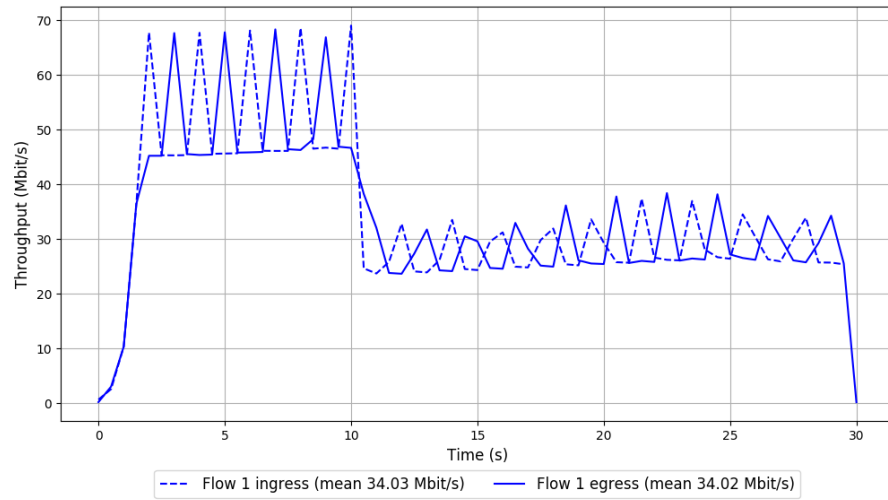
-- Flow 1:

Average throughput: 34.02 Mbit/s

95th percentile per-packet one-way delay: 107.172 ms

Loss rate: 0.01%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-05 09:57:29

End at: 2017-12-05 09:57:59

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.87 Mbit/s

95th percentile per-packet one-way delay: 107.141 ms

Loss rate: 0.14%

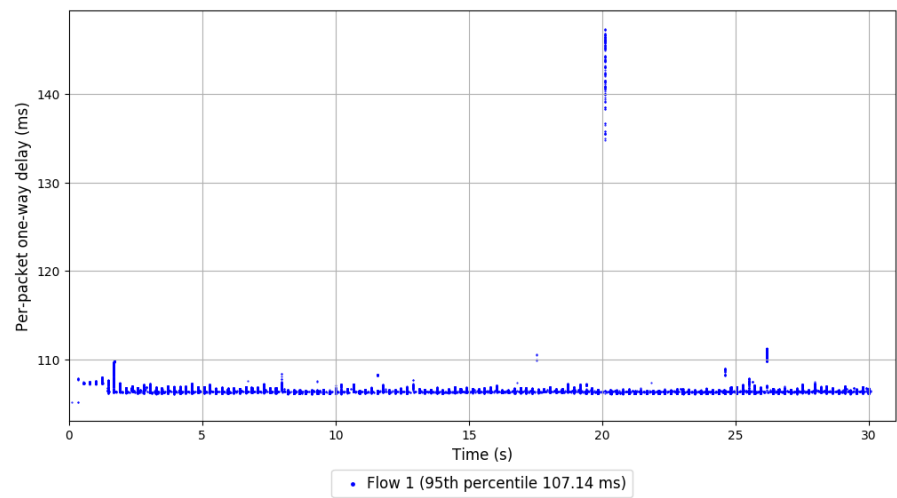
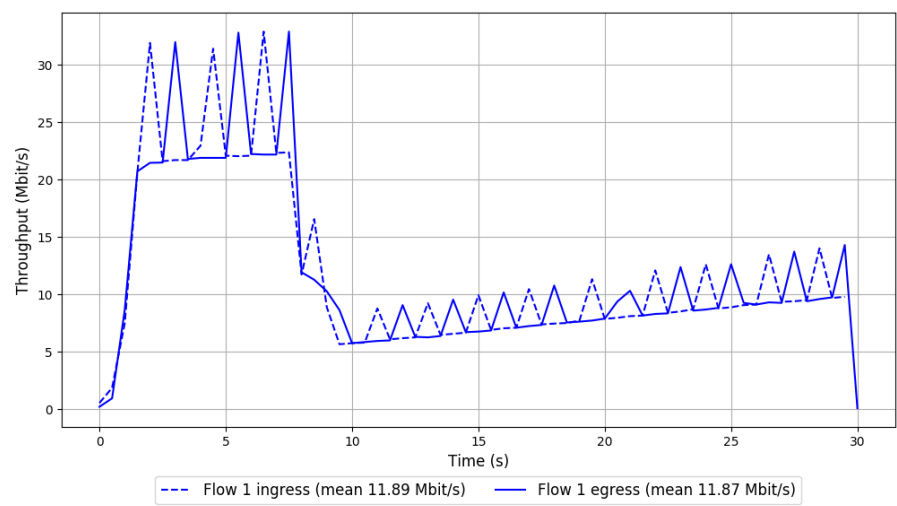
-- Flow 1:

Average throughput: 11.87 Mbit/s

95th percentile per-packet one-way delay: 107.141 ms

Loss rate: 0.14%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-05 08:14:10

End at: 2017-12-05 08:14:41

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 167.53 Mbit/s

95th percentile per-packet one-way delay: 160.822 ms

Loss rate: 0.04%

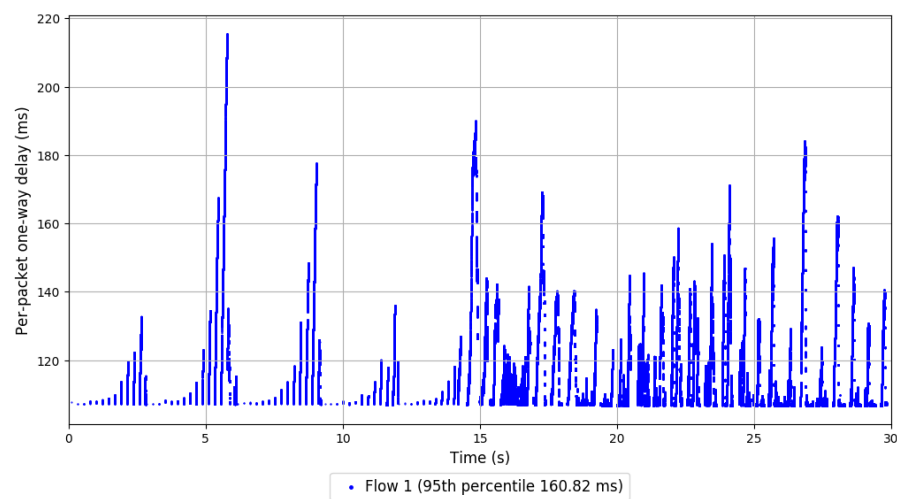
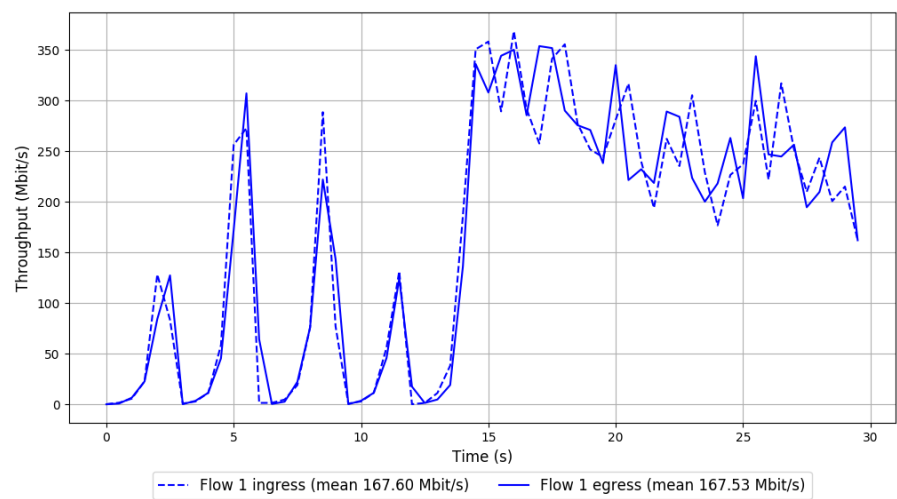
-- Flow 1:

Average throughput: 167.53 Mbit/s

95th percentile per-packet one-way delay: 160.822 ms

Loss rate: 0.04%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-05 08:25:14

End at: 2017-12-05 08:25:44

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 128.81 Mbit/s

95th percentile per-packet one-way delay: 130.040 ms

Loss rate: 0.04%

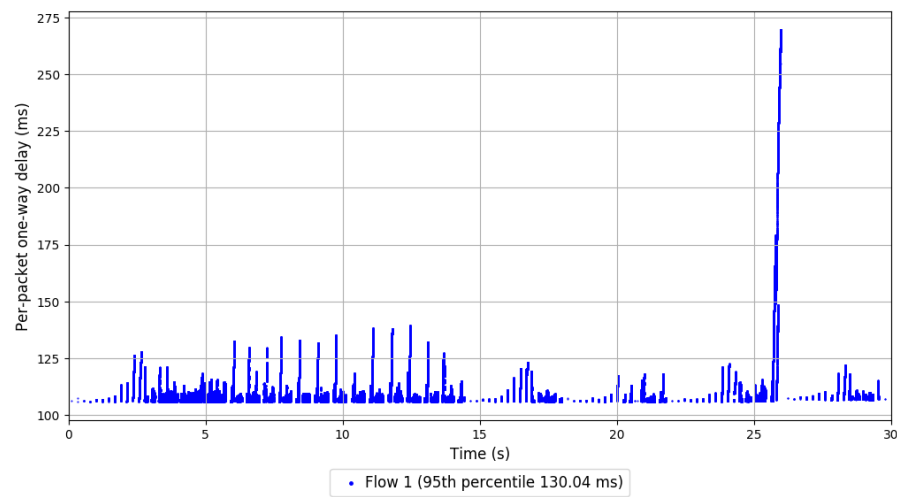
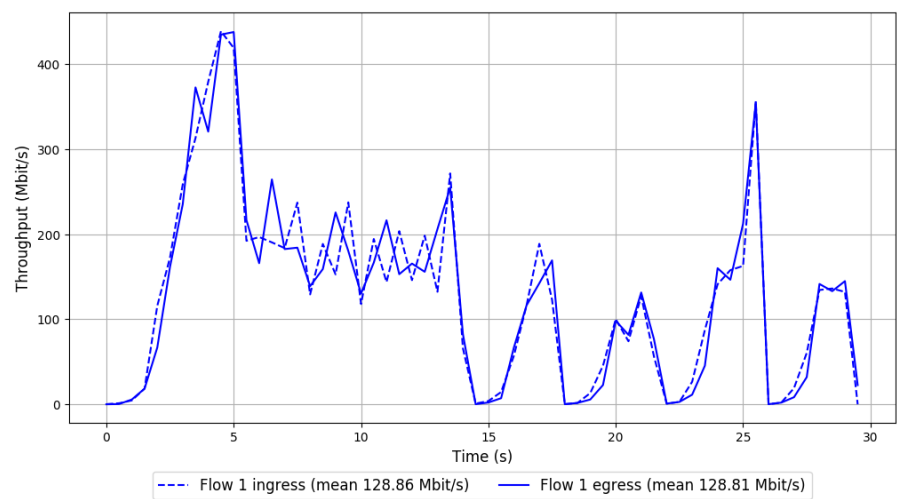
-- Flow 1:

Average throughput: 128.81 Mbit/s

95th percentile per-packet one-way delay: 130.040 ms

Loss rate: 0.04%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 08:36:10

End at: 2017-12-05 08:36:40

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.65 Mbit/s

95th percentile per-packet one-way delay: 124.220 ms

Loss rate: 0.38%

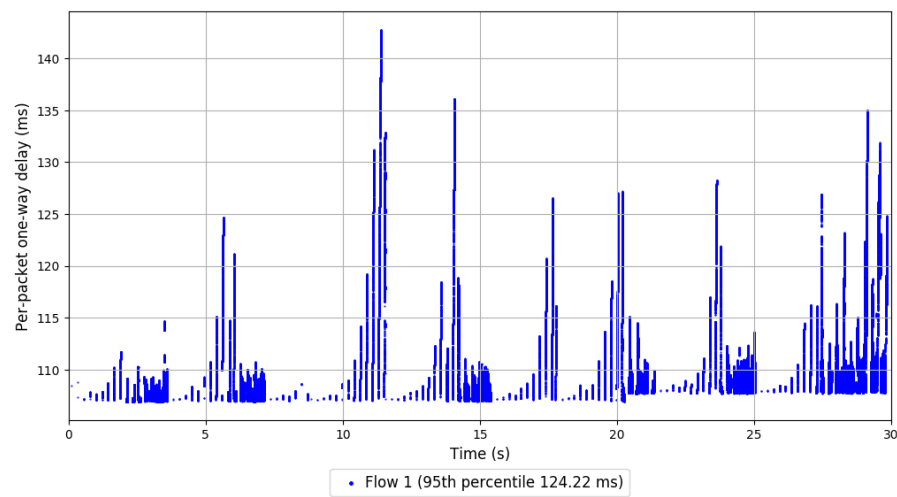
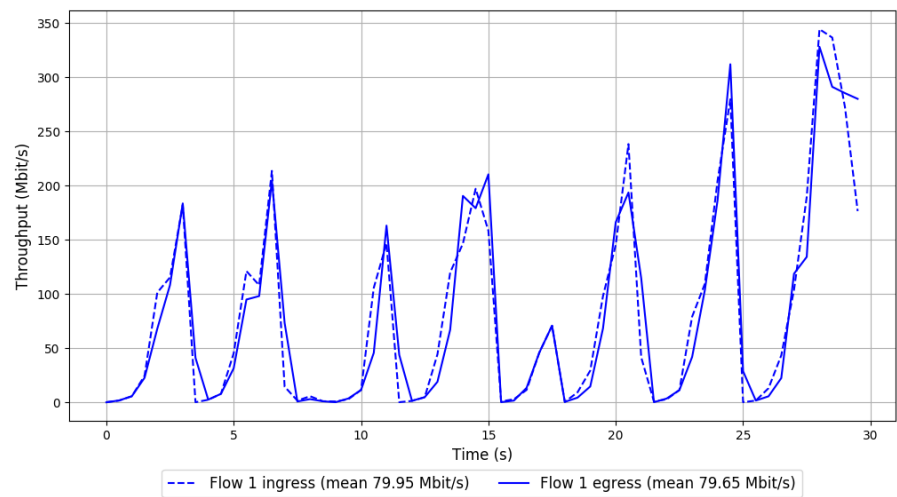
-- Flow 1:

Average throughput: 79.65 Mbit/s

95th percentile per-packet one-way delay: 124.220 ms

Loss rate: 0.38%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-05 08:47:00

End at: 2017-12-05 08:47:30

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.61 Mbit/s

95th percentile per-packet one-way delay: 152.119 ms

Loss rate: 0.01%

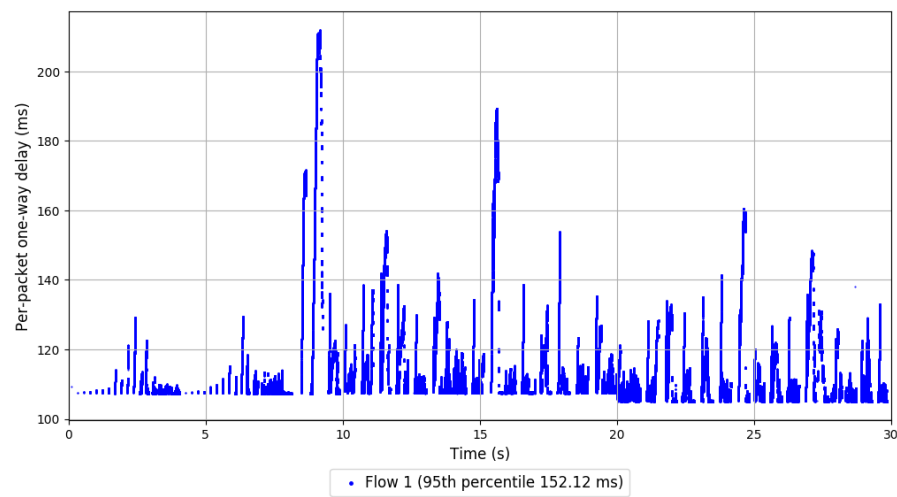
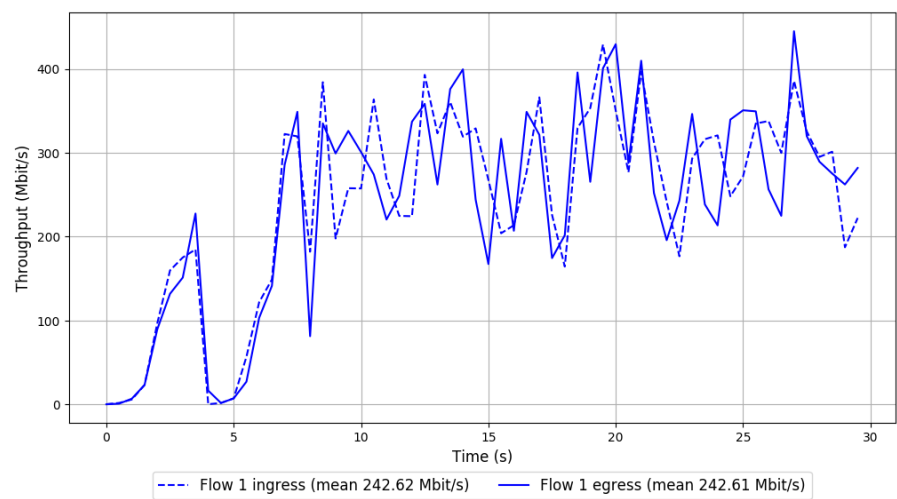
-- Flow 1:

Average throughput: 242.61 Mbit/s

95th percentile per-packet one-way delay: 152.119 ms

Loss rate: 0.01%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-05 08:58:18

End at: 2017-12-05 08:58:48

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 159.42 Mbit/s

95th percentile per-packet one-way delay: 123.318 ms

Loss rate: 0.01%

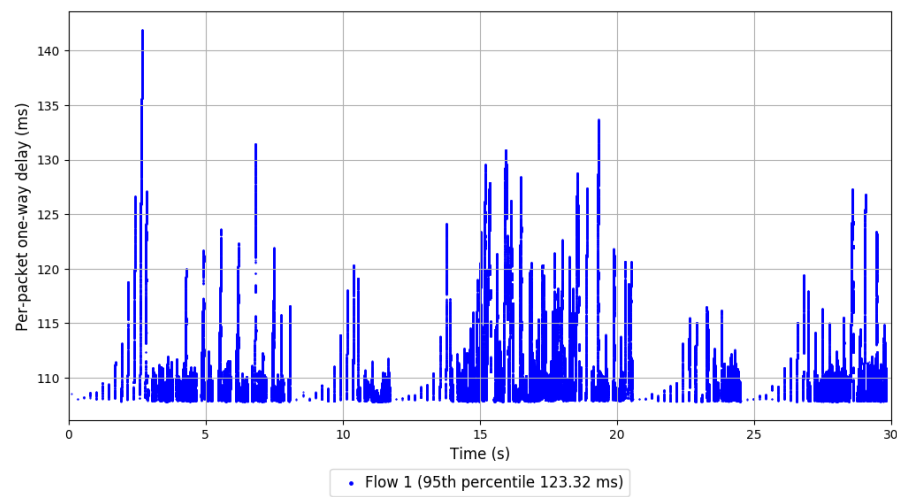
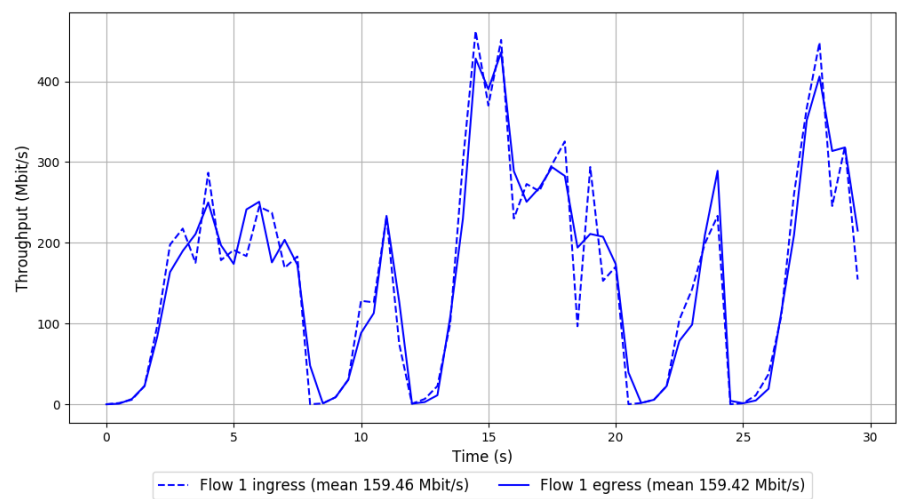
-- Flow 1:

Average throughput: 159.42 Mbit/s

95th percentile per-packet one-way delay: 123.318 ms

Loss rate: 0.01%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-05 09:09:16

End at: 2017-12-05 09:09:46

Below is generated by plot.py at 2017-12-05 10:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.26 Mbit/s

95th percentile per-packet one-way delay: 147.899 ms

Loss rate: 0.25%

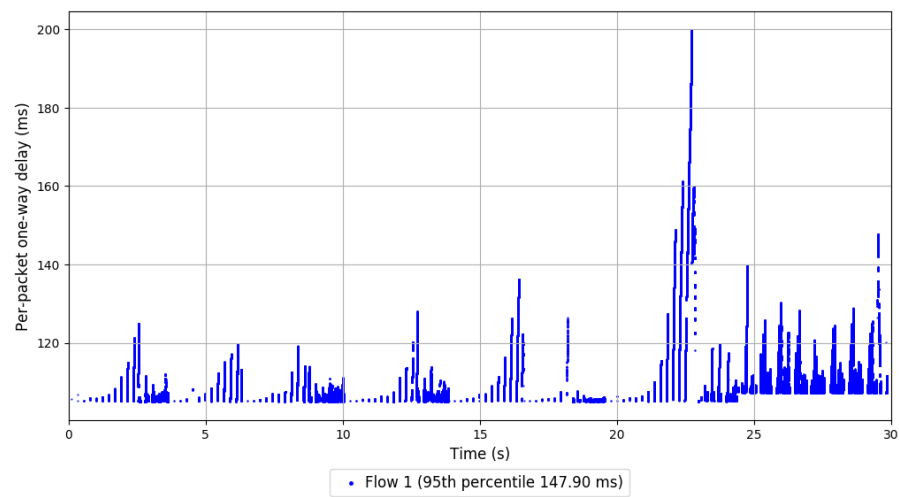
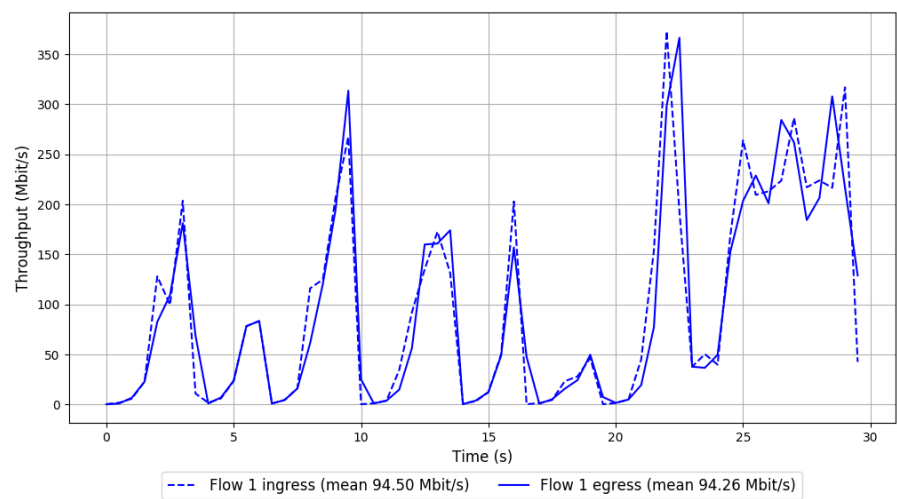
-- Flow 1:

Average throughput: 94.26 Mbit/s

95th percentile per-packet one-way delay: 147.899 ms

Loss rate: 0.25%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-05 09:20:09

End at: 2017-12-05 09:20:39

Below is generated by plot.py at 2017-12-05 10:55:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.51 Mbit/s

95th percentile per-packet one-way delay: 132.608 ms

Loss rate: 0.00%

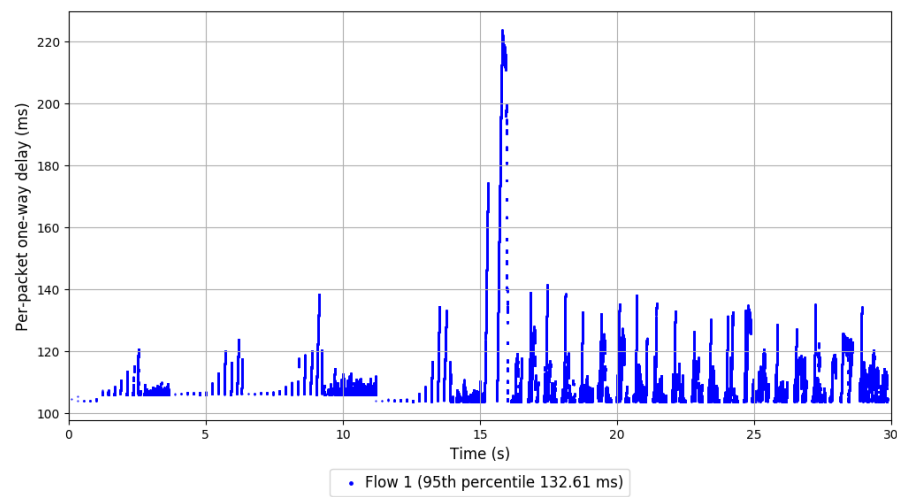
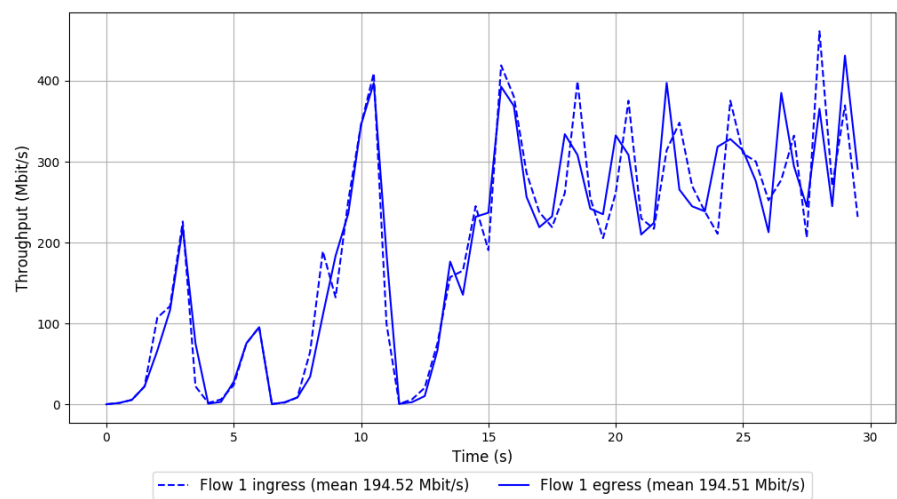
-- Flow 1:

Average throughput: 194.51 Mbit/s

95th percentile per-packet one-way delay: 132.608 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-05 09:31:09

End at: 2017-12-05 09:31:39

Below is generated by plot.py at 2017-12-05 10:56:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.24 Mbit/s

95th percentile per-packet one-way delay: 144.247 ms

Loss rate: 1.59%

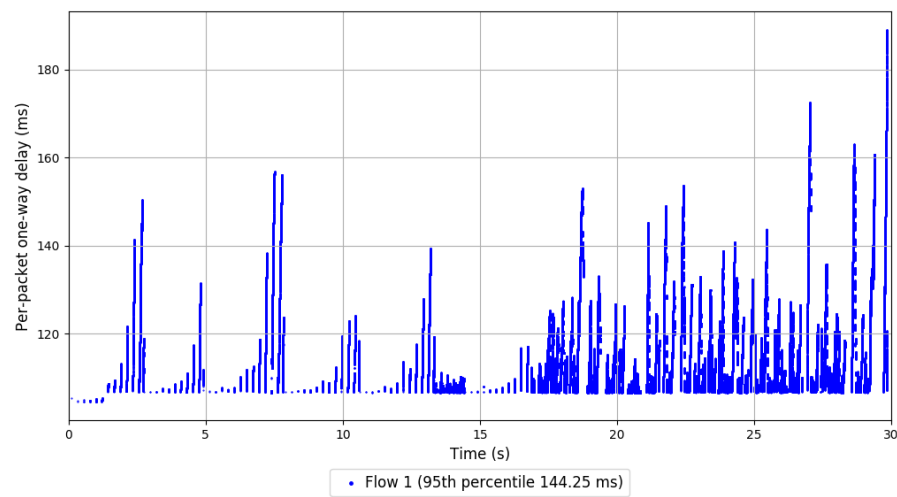
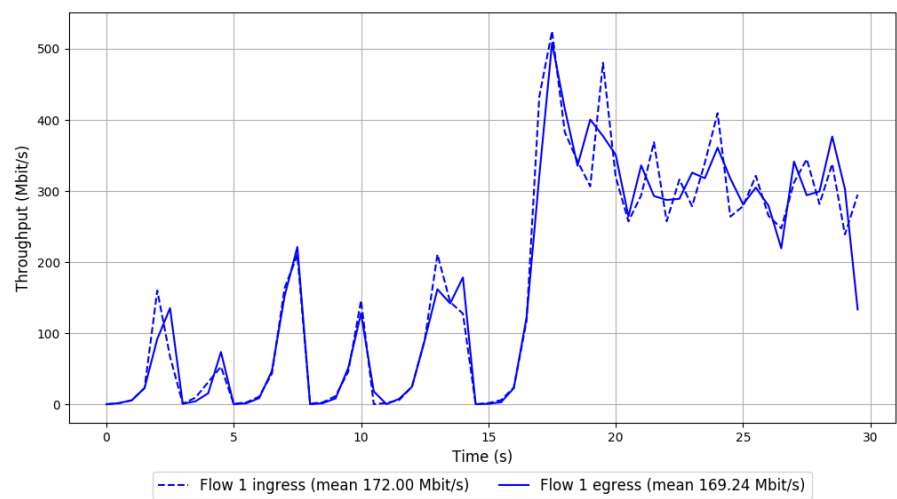
-- Flow 1:

Average throughput: 169.24 Mbit/s

95th percentile per-packet one-way delay: 144.247 ms

Loss rate: 1.59%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-05 09:42:10

End at: 2017-12-05 09:42:40

Below is generated by plot.py at 2017-12-05 10:56:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.67 Mbit/s

95th percentile per-packet one-way delay: 121.770 ms

Loss rate: 0.01%

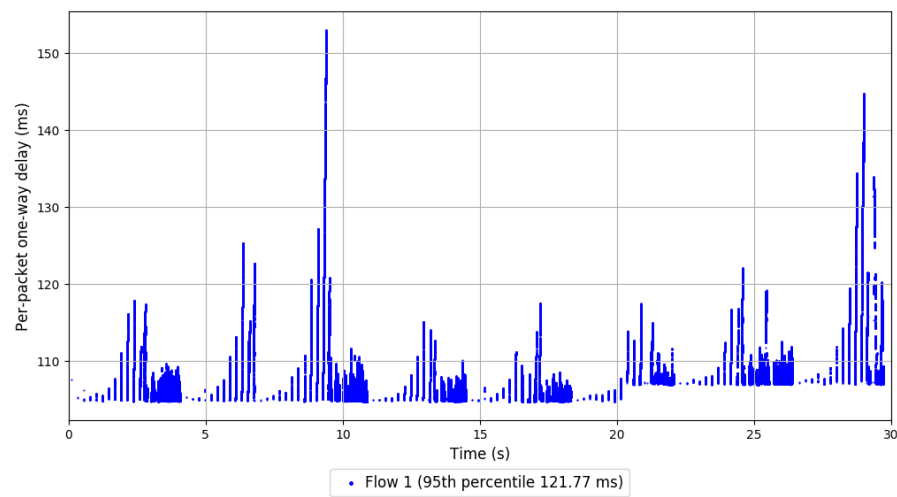
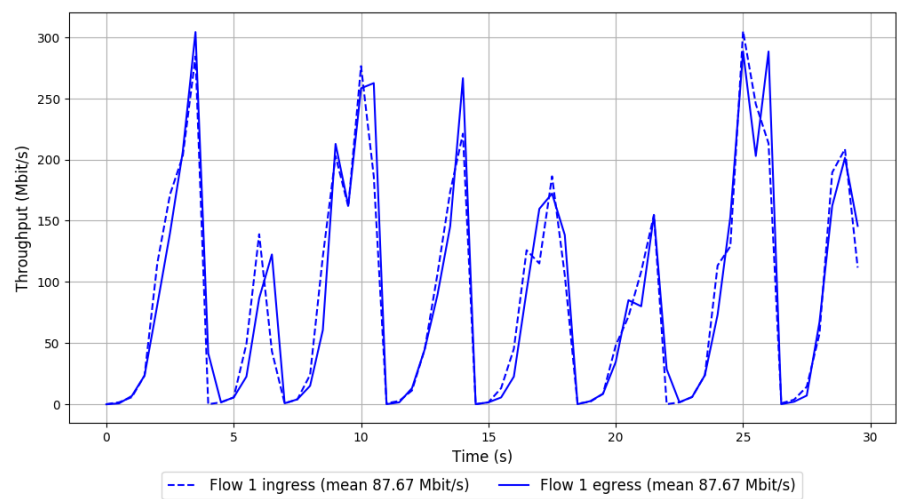
-- Flow 1:

Average throughput: 87.67 Mbit/s

95th percentile per-packet one-way delay: 121.770 ms

Loss rate: 0.01%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-05 09:52:58

End at: 2017-12-05 09:53:28

Below is generated by plot.py at 2017-12-05 10:56:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.94 Mbit/s

95th percentile per-packet one-way delay: 167.112 ms

Loss rate: 0.05%

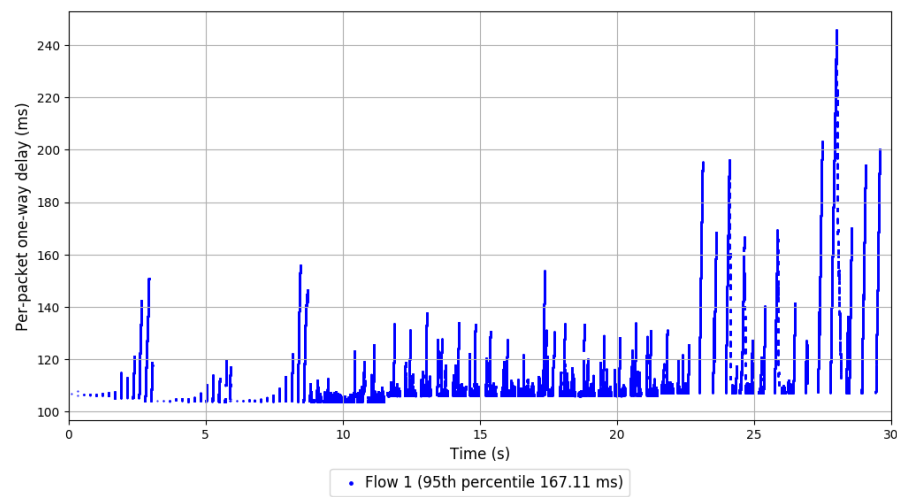
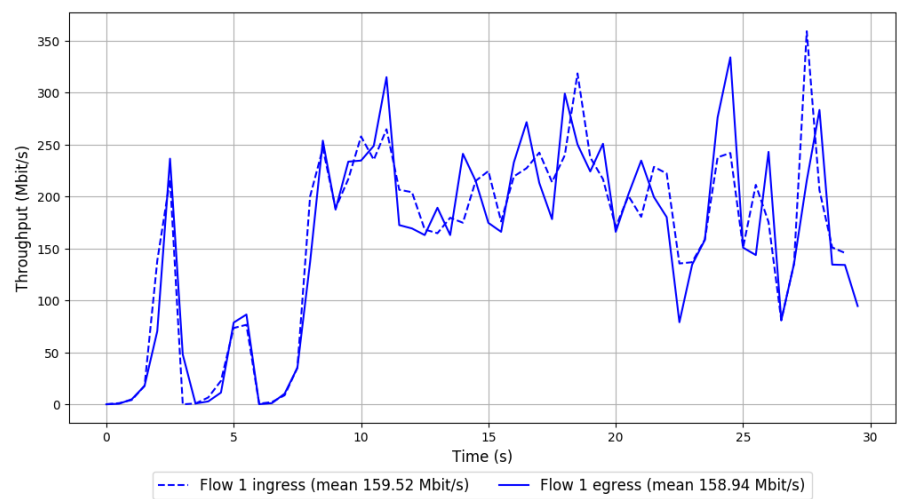
-- Flow 1:

Average throughput: 158.94 Mbit/s

95th percentile per-packet one-way delay: 167.112 ms

Loss rate: 0.05%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-05 08:16:27

End at: 2017-12-05 08:16:57

Below is generated by plot.py at 2017-12-05 10:56:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.54 Mbit/s

95th percentile per-packet one-way delay: 107.268 ms

Loss rate: 0.00%

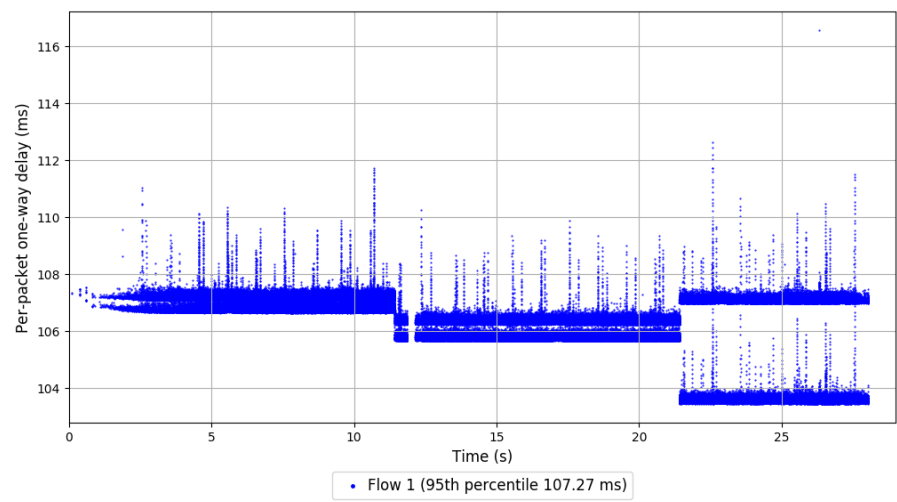
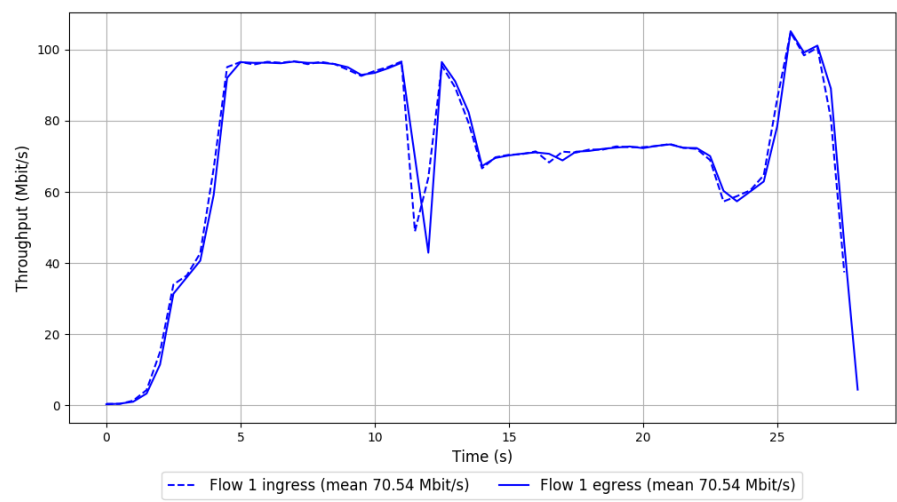
-- Flow 1:

Average throughput: 70.54 Mbit/s

95th percentile per-packet one-way delay: 107.268 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-05 08:27:27

End at: 2017-12-05 08:27:57

Below is generated by plot.py at 2017-12-05 10:56:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.10 Mbit/s

95th percentile per-packet one-way delay: 107.512 ms

Loss rate: 0.00%

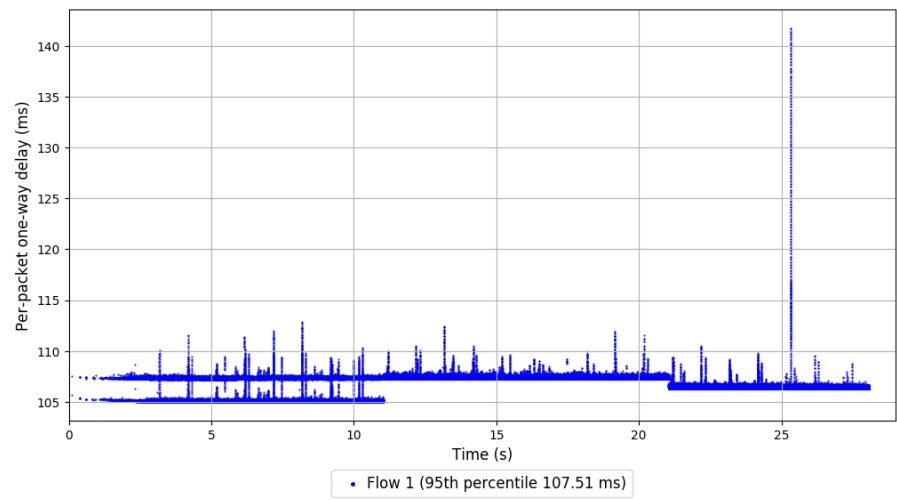
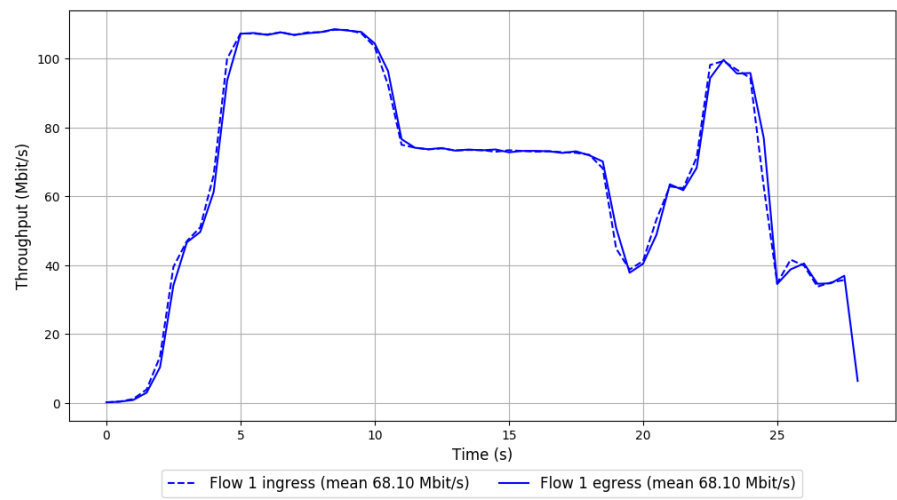
-- Flow 1:

Average throughput: 68.10 Mbit/s

95th percentile per-packet one-way delay: 107.512 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-05 08:38:19

End at: 2017-12-05 08:38:49

Below is generated by plot.py at 2017-12-05 10:56:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.60 Mbit/s

95th percentile per-packet one-way delay: 107.990 ms

Loss rate: 0.00%

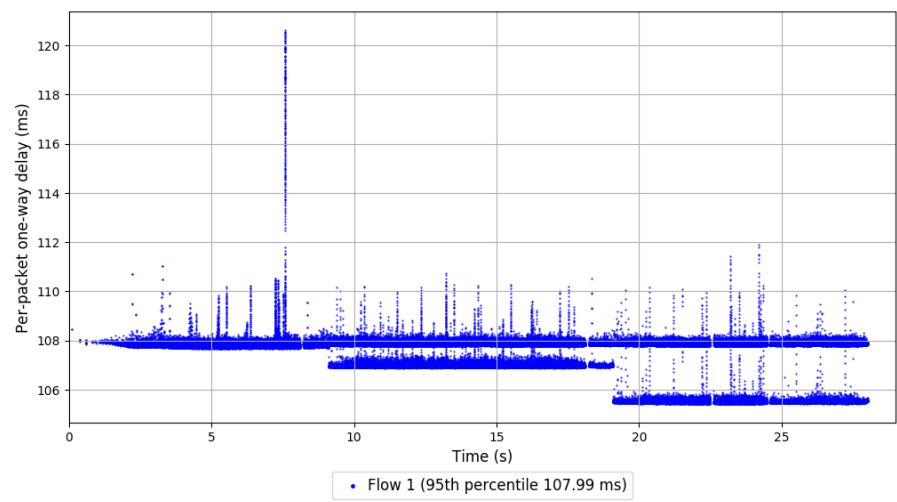
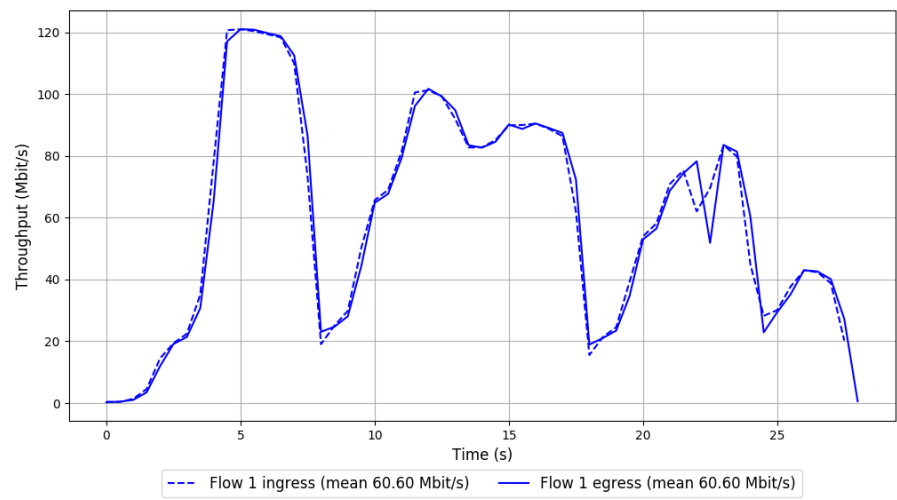
-- Flow 1:

Average throughput: 60.60 Mbit/s

95th percentile per-packet one-way delay: 107.990 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-05 08:49:21

End at: 2017-12-05 08:49:51

Below is generated by plot.py at 2017-12-05 10:56:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 107.590 ms

Loss rate: 0.00%

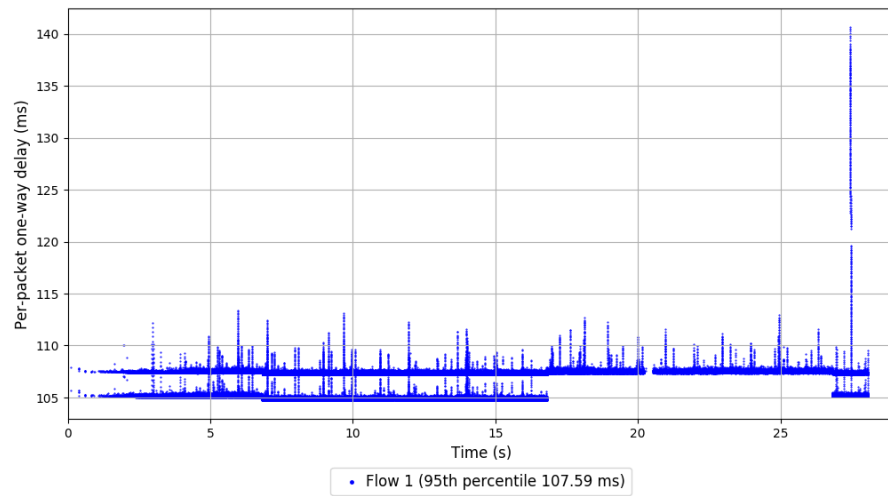
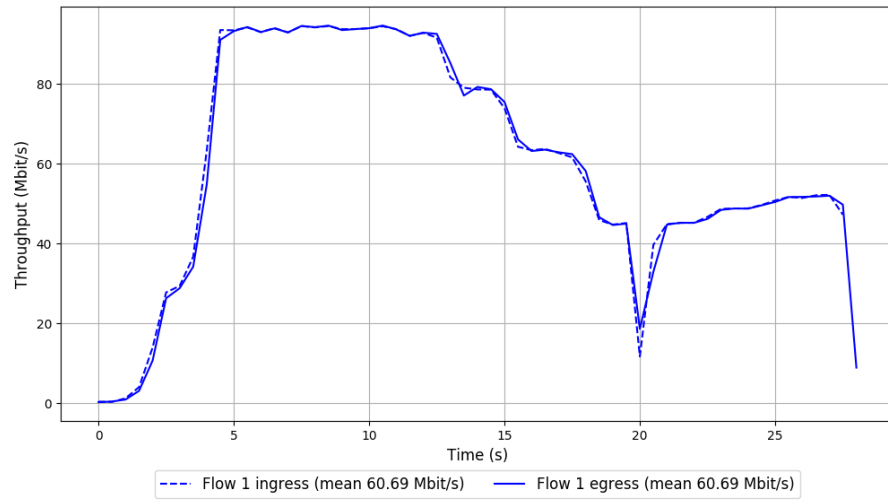
-- Flow 1:

Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 107.590 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-05 09:00:34

End at: 2017-12-05 09:01:04

Below is generated by plot.py at 2017-12-05 10:56:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.20 Mbit/s

95th percentile per-packet one-way delay: 107.864 ms

Loss rate: 0.00%

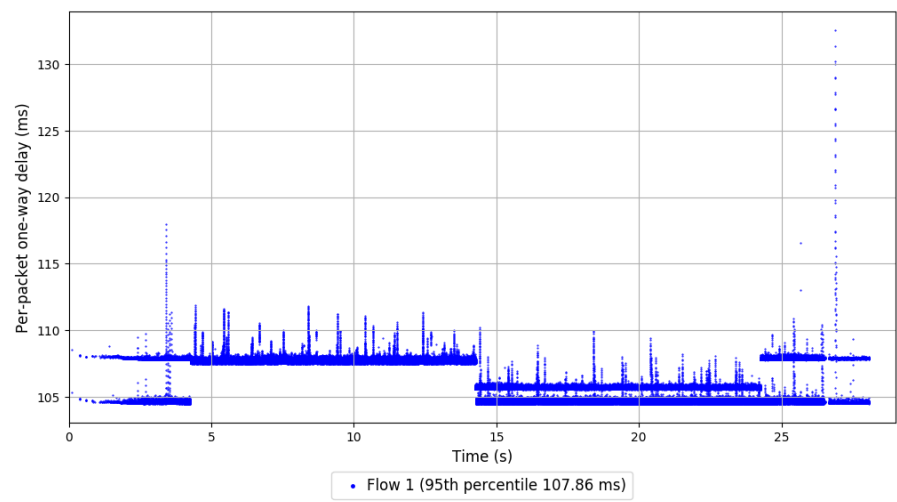
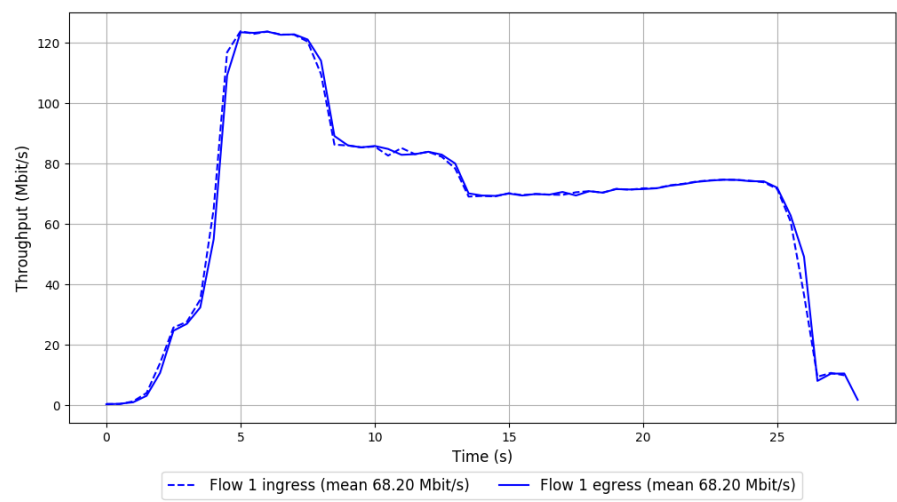
-- Flow 1:

Average throughput: 68.20 Mbit/s

95th percentile per-packet one-way delay: 107.864 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-05 09:11:26

End at: 2017-12-05 09:11:56

Below is generated by plot.py at 2017-12-05 10:57:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.69 Mbit/s

95th percentile per-packet one-way delay: 107.227 ms

Loss rate: 0.00%

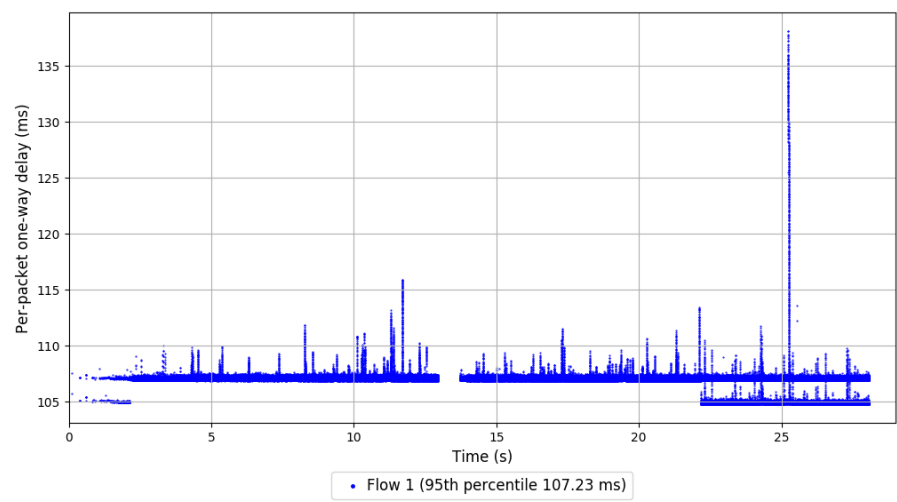
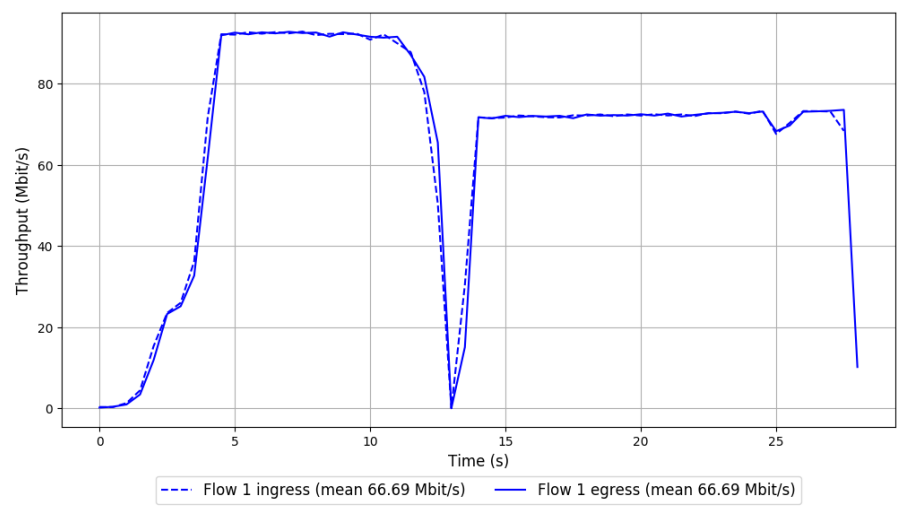
-- Flow 1:

Average throughput: 66.69 Mbit/s

95th percentile per-packet one-way delay: 107.227 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-05 09:22:26

End at: 2017-12-05 09:22:56

Below is generated by plot.py at 2017-12-05 10:57:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.15 Mbit/s

95th percentile per-packet one-way delay: 105.805 ms

Loss rate: 0.01%

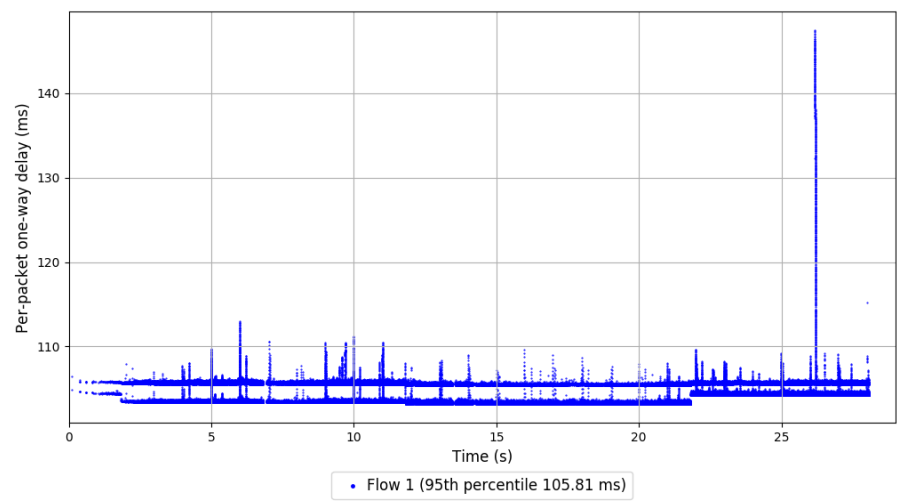
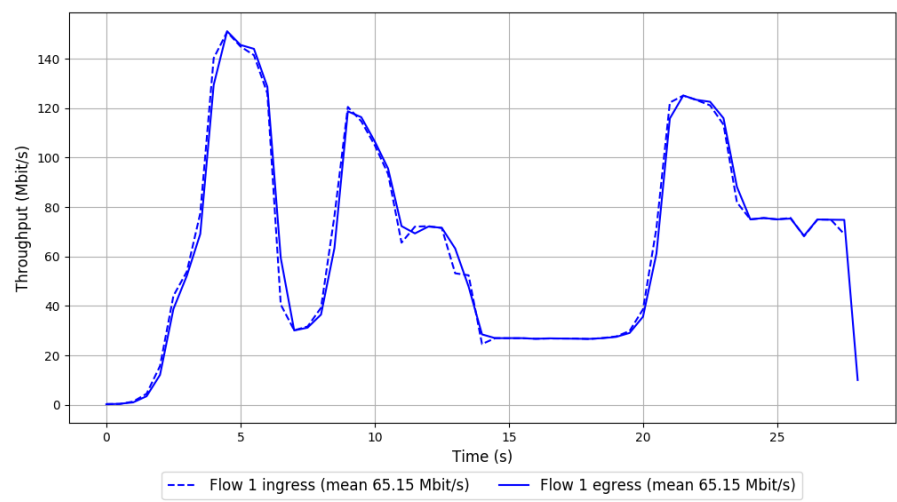
-- Flow 1:

Average throughput: 65.15 Mbit/s

95th percentile per-packet one-way delay: 105.805 ms

Loss rate: 0.01%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-05 09:33:25

End at: 2017-12-05 09:33:55

Below is generated by plot.py at 2017-12-05 10:58:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.95 Mbit/s

95th percentile per-packet one-way delay: 106.721 ms

Loss rate: 0.00%

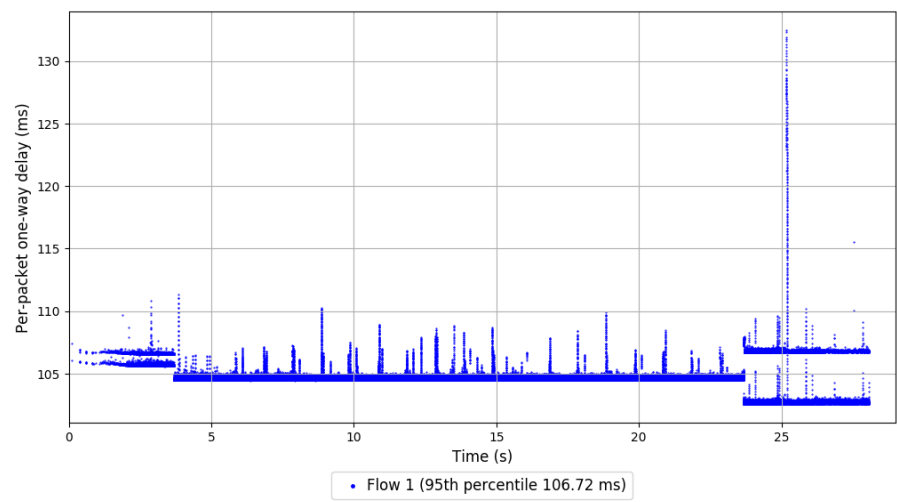
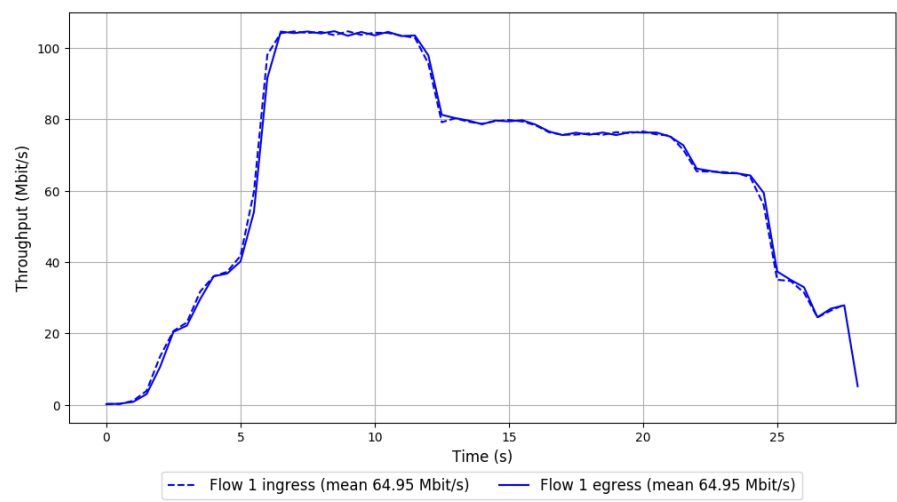
-- Flow 1:

Average throughput: 64.95 Mbit/s

95th percentile per-packet one-way delay: 106.721 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-05 09:44:20

End at: 2017-12-05 09:44:50

Below is generated by plot.py at 2017-12-05 10:58:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.65 Mbit/s

95th percentile per-packet one-way delay: 106.808 ms

Loss rate: 0.00%

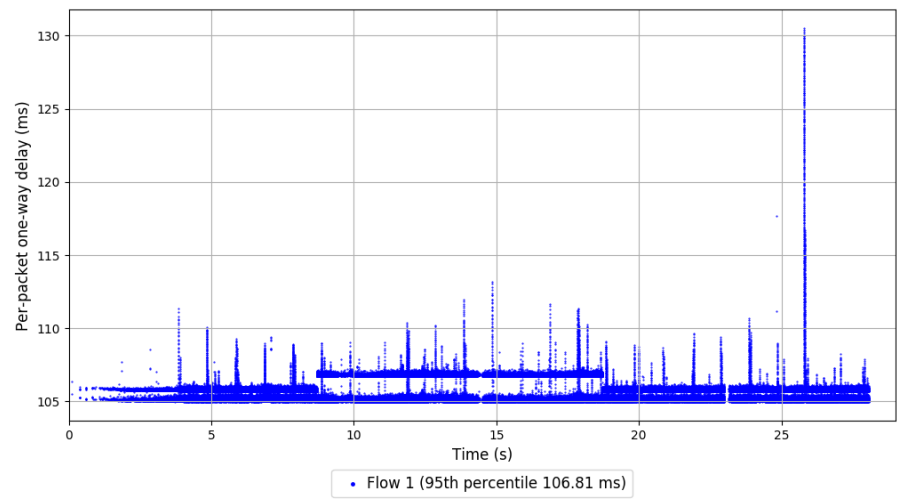
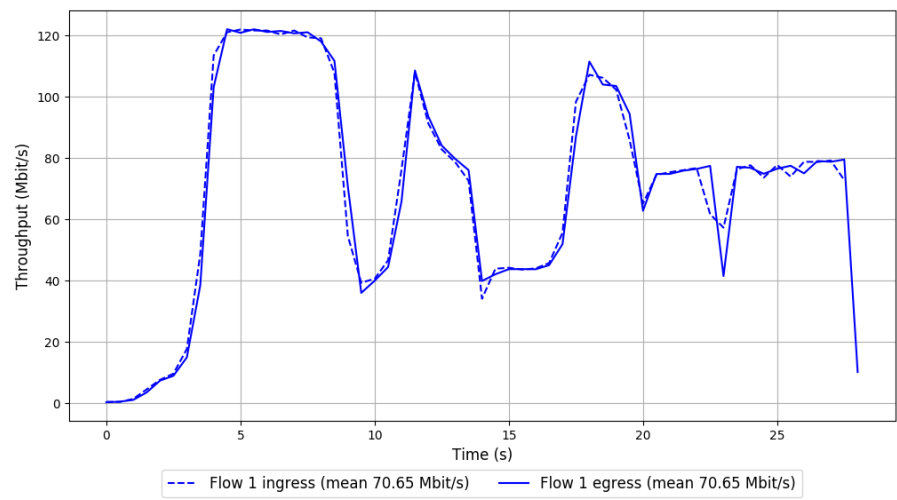
-- Flow 1:

Average throughput: 70.65 Mbit/s

95th percentile per-packet one-way delay: 106.808 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-05 09:55:13

End at: 2017-12-05 09:55:43

Below is generated by plot.py at 2017-12-05 10:58:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.46 Mbit/s

95th percentile per-packet one-way delay: 107.309 ms

Loss rate: 0.00%

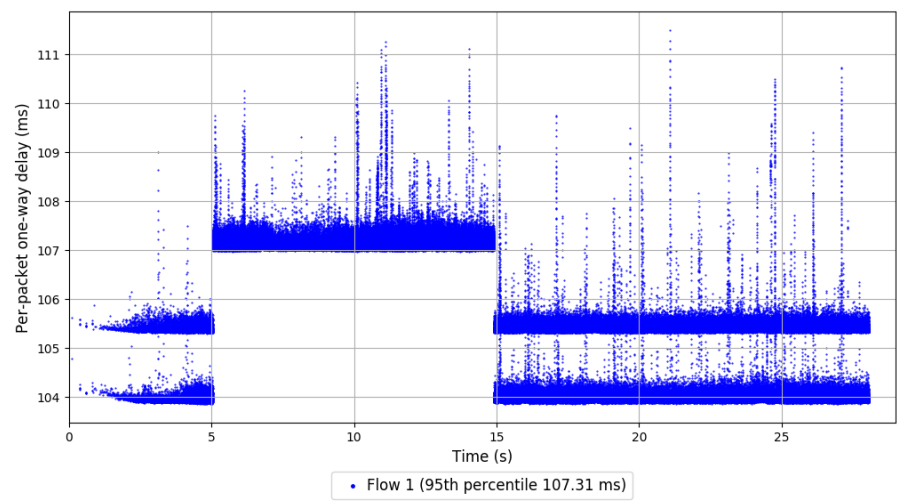
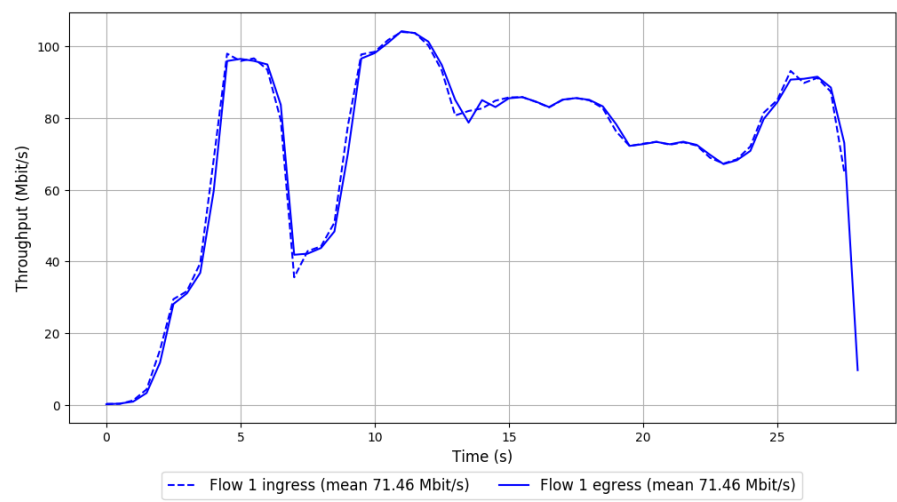
-- Flow 1:

Average throughput: 71.46 Mbit/s

95th percentile per-packet one-way delay: 107.309 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

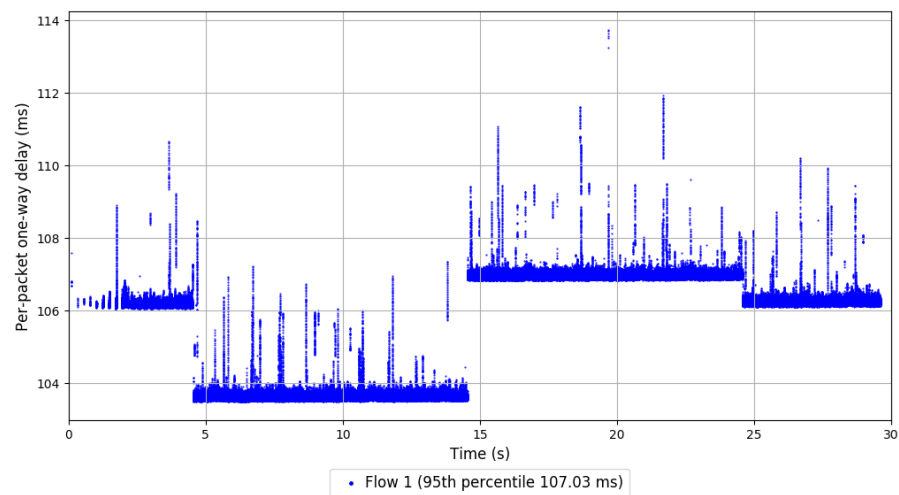
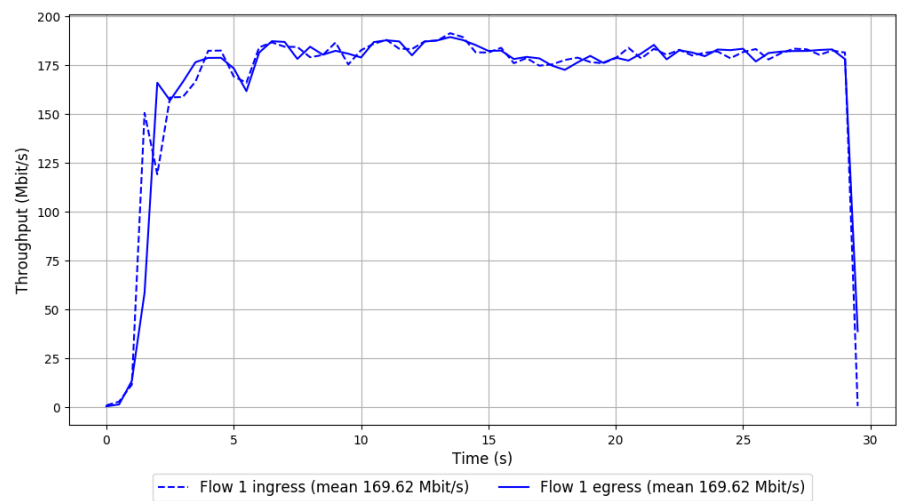


```
Run 1: Statistics of Indigo

Start at: 2017-12-05 08:11:55
End at: 2017-12-05 08:12:25

# Below is generated by plot.py at 2017-12-05 10:59:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.62 Mbit/s
95th percentile per-packet one-way delay: 107.026 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 169.62 Mbit/s
95th percentile per-packet one-way delay: 107.026 ms
Loss rate: 0.01%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-05 08:22:58

End at: 2017-12-05 08:23:28

Below is generated by plot.py at 2017-12-05 10:59:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.41 Mbit/s

95th percentile per-packet one-way delay: 106.198 ms

Loss rate: 0.00%

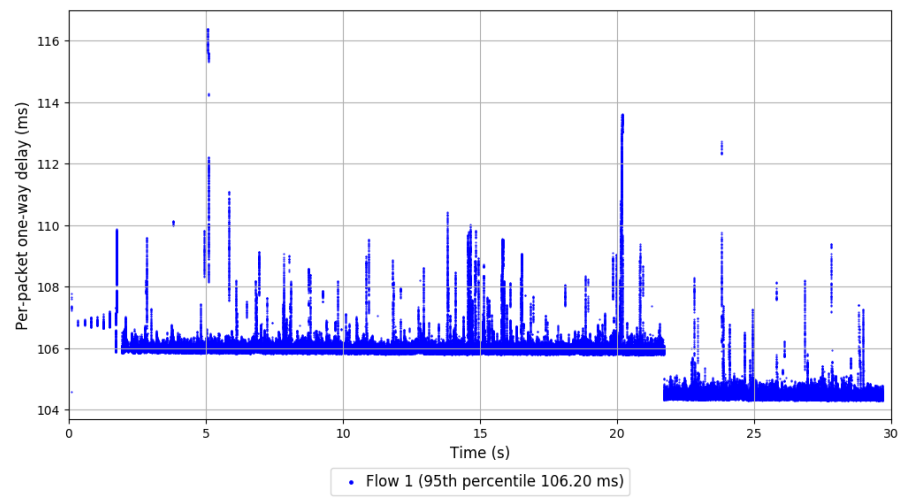
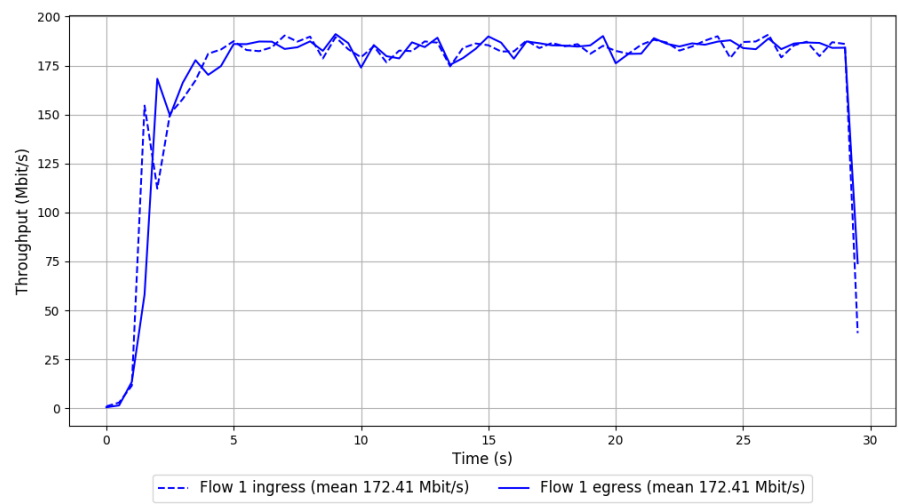
-- Flow 1:

Average throughput: 172.41 Mbit/s

95th percentile per-packet one-way delay: 106.198 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-05 08:33:54

End at: 2017-12-05 08:34:24

Below is generated by plot.py at 2017-12-05 10:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.74 Mbit/s

95th percentile per-packet one-way delay: 107.763 ms

Loss rate: 0.00%

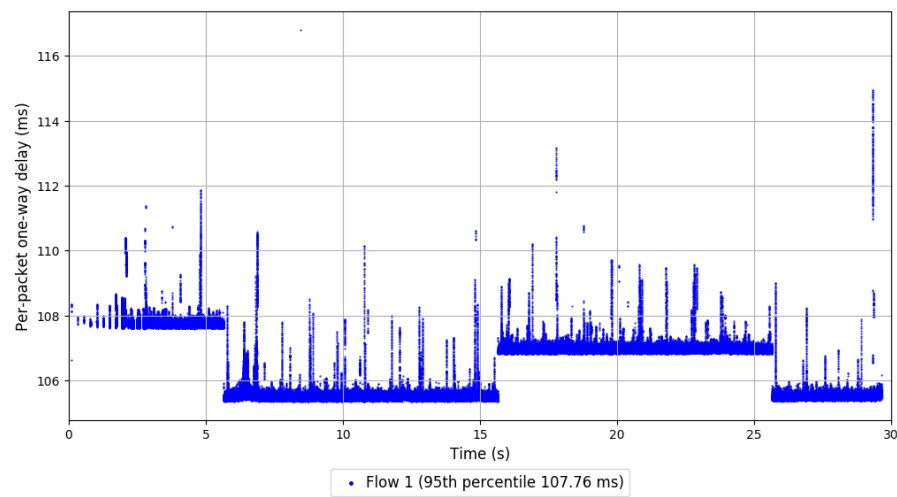
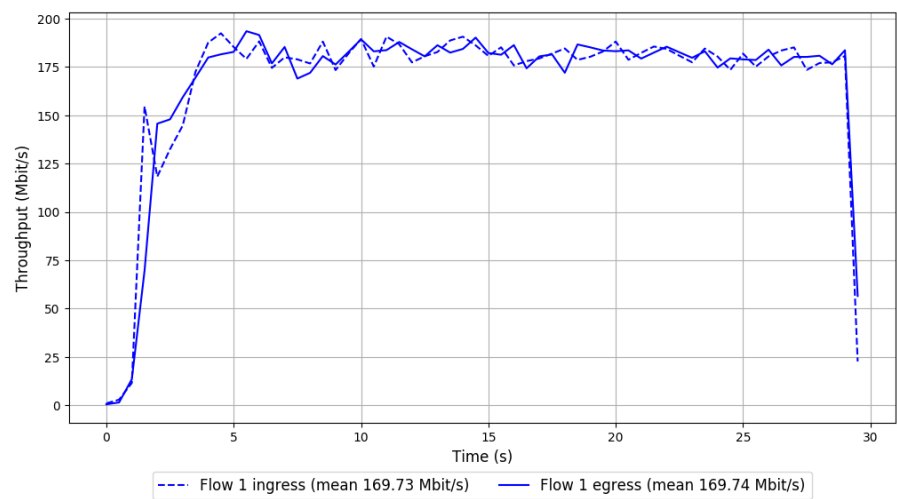
-- Flow 1:

Average throughput: 169.74 Mbit/s

95th percentile per-packet one-way delay: 107.763 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-05 08:44:45

End at: 2017-12-05 08:45:15

Below is generated by plot.py at 2017-12-05 11:00:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.35 Mbit/s

95th percentile per-packet one-way delay: 107.798 ms

Loss rate: 0.00%

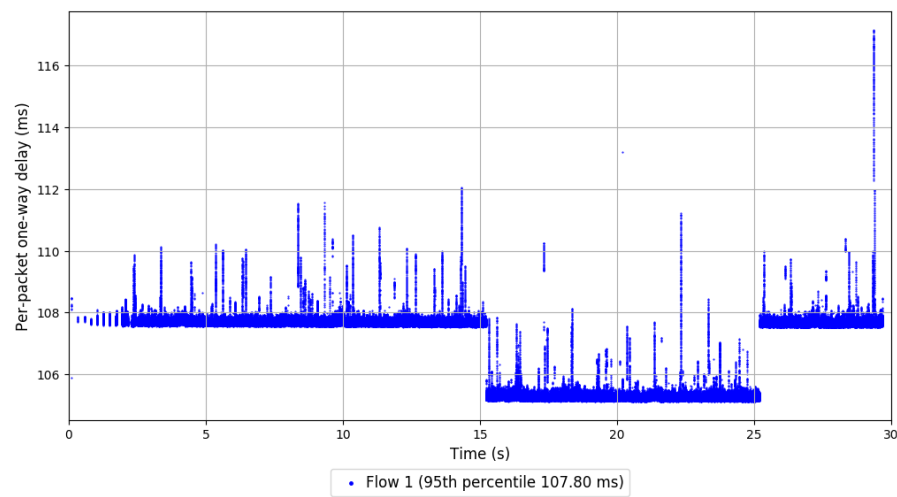
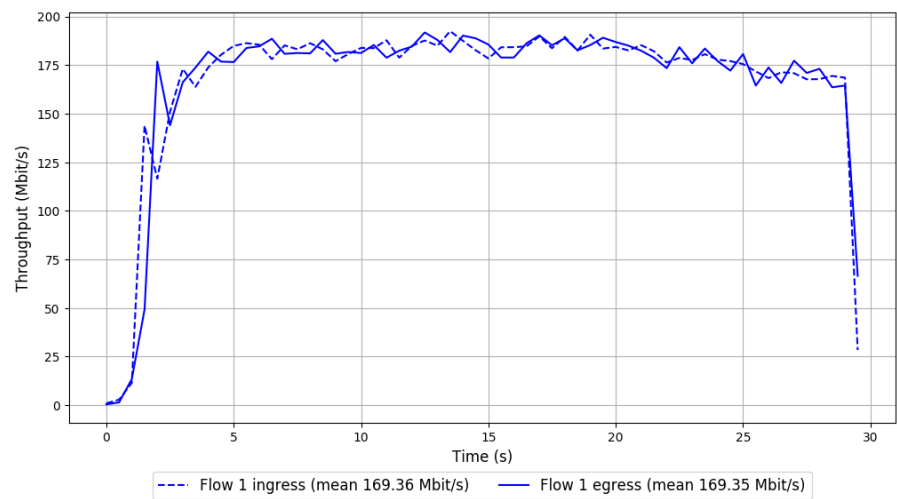
-- Flow 1:

Average throughput: 169.35 Mbit/s

95th percentile per-packet one-way delay: 107.798 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-05 08:56:03

End at: 2017-12-05 08:56:33

Below is generated by plot.py at 2017-12-05 11:00:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.57 Mbit/s

95th percentile per-packet one-way delay: 108.099 ms

Loss rate: 0.00%

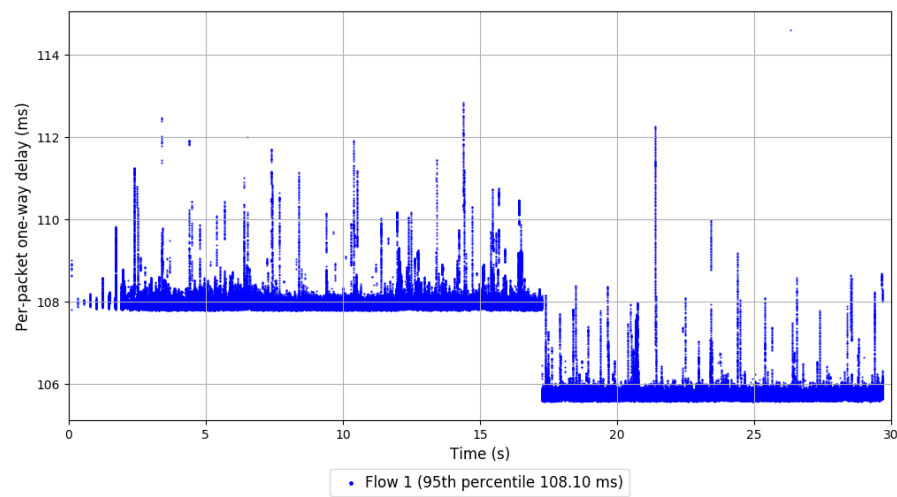
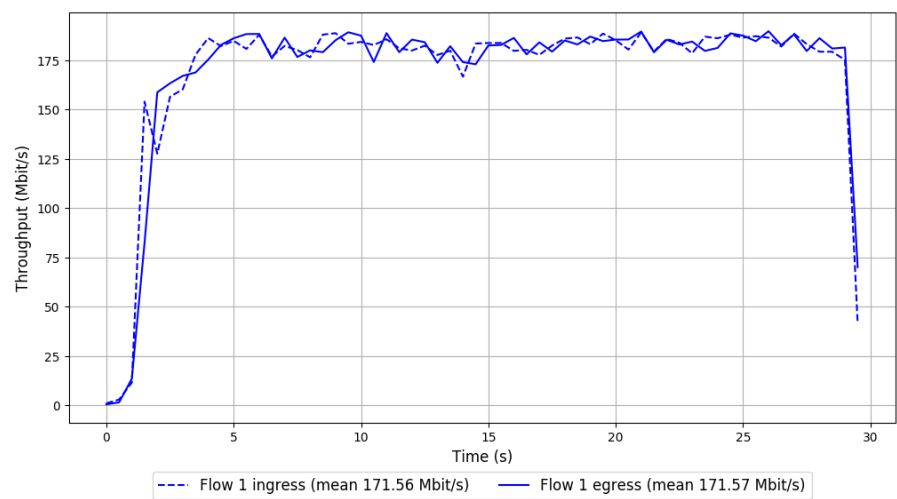
-- Flow 1:

Average throughput: 171.57 Mbit/s

95th percentile per-packet one-way delay: 108.099 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-05 09:07:00

End at: 2017-12-05 09:07:30

Below is generated by plot.py at 2017-12-05 11:01:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.33 Mbit/s

95th percentile per-packet one-way delay: 107.637 ms

Loss rate: 0.00%

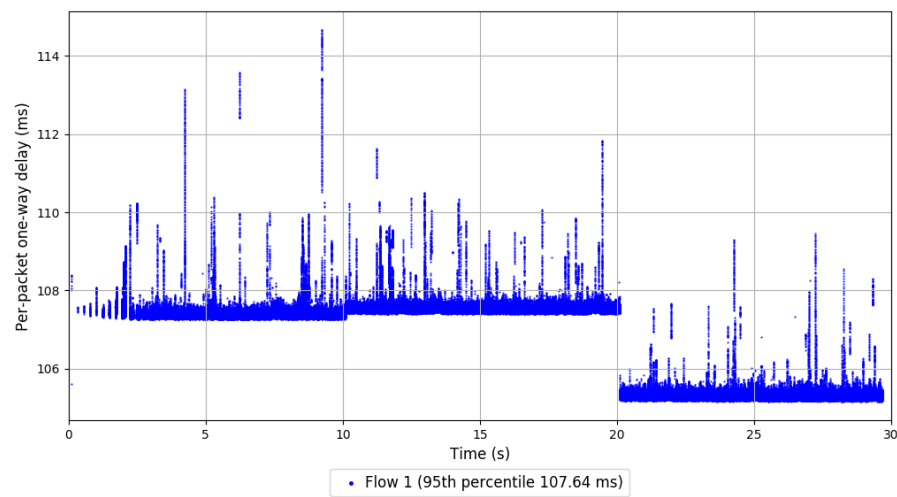
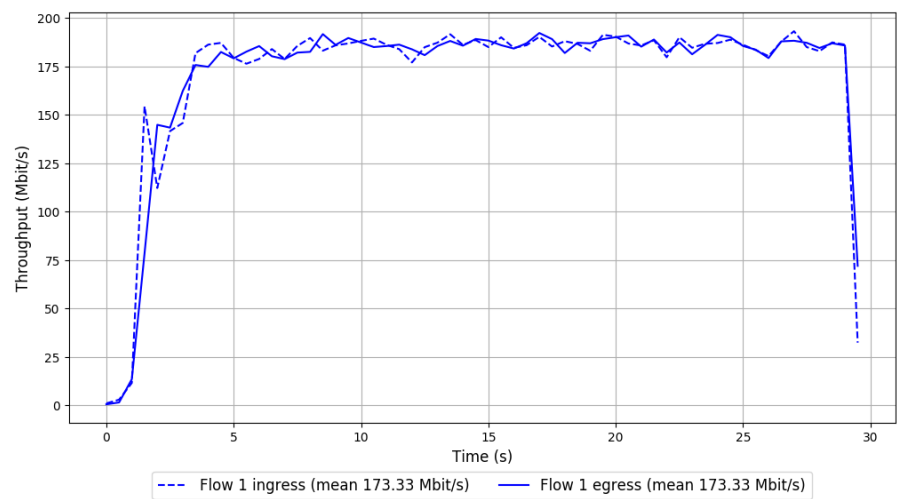
-- Flow 1:

Average throughput: 173.33 Mbit/s

95th percentile per-packet one-way delay: 107.637 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-05 09:17:53

End at: 2017-12-05 09:18:23

Below is generated by plot.py at 2017-12-05 11:01:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 167.74 Mbit/s

95th percentile per-packet one-way delay: 106.502 ms

Loss rate: 0.00%

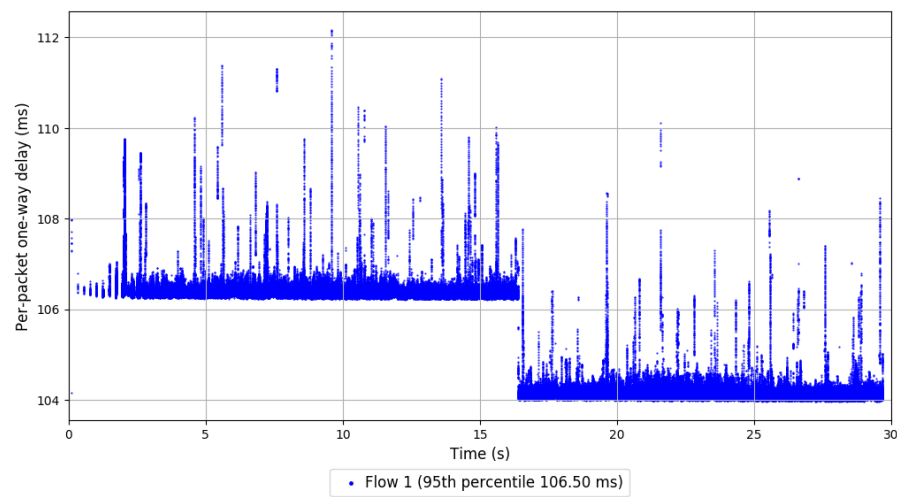
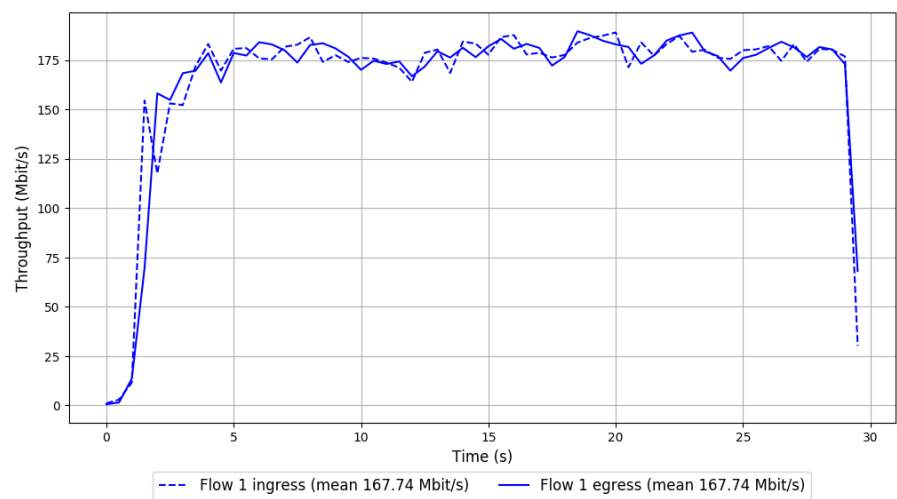
-- Flow 1:

Average throughput: 167.74 Mbit/s

95th percentile per-packet one-way delay: 106.502 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-05 09:28:53

End at: 2017-12-05 09:29:23

Below is generated by plot.py at 2017-12-05 11:01:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.92 Mbit/s

95th percentile per-packet one-way delay: 106.619 ms

Loss rate: 0.00%

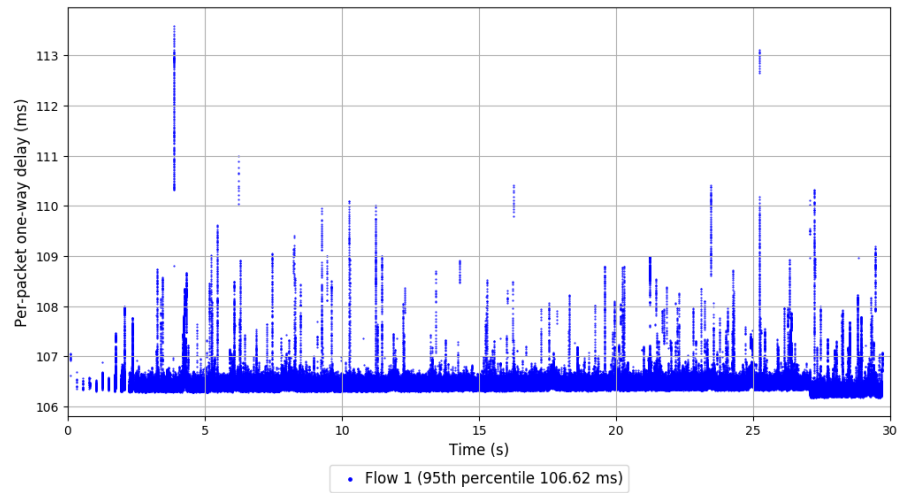
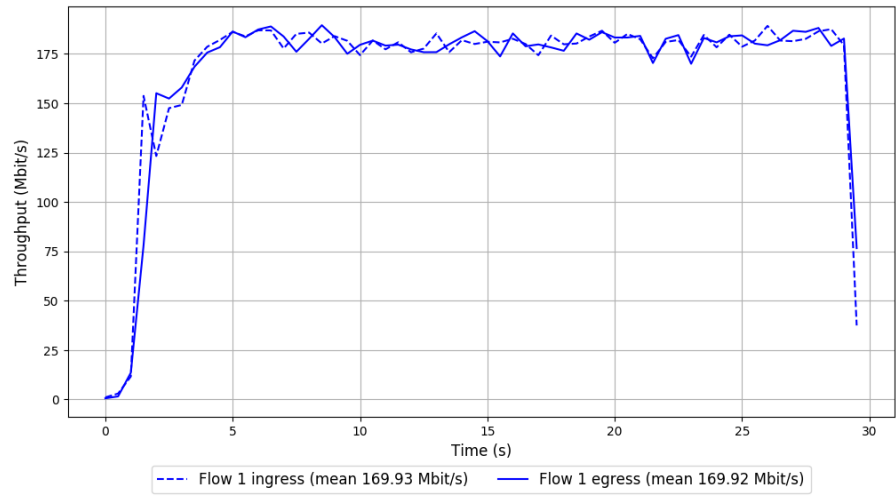
-- Flow 1:

Average throughput: 169.92 Mbit/s

95th percentile per-packet one-way delay: 106.619 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-05 09:39:55

End at: 2017-12-05 09:40:25

Below is generated by plot.py at 2017-12-05 11:02:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.62 Mbit/s

95th percentile per-packet one-way delay: 107.099 ms

Loss rate: 0.00%

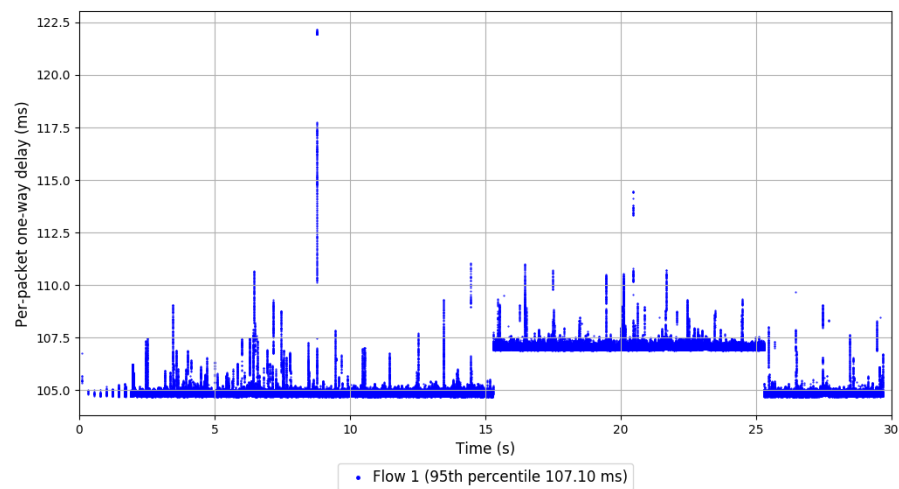
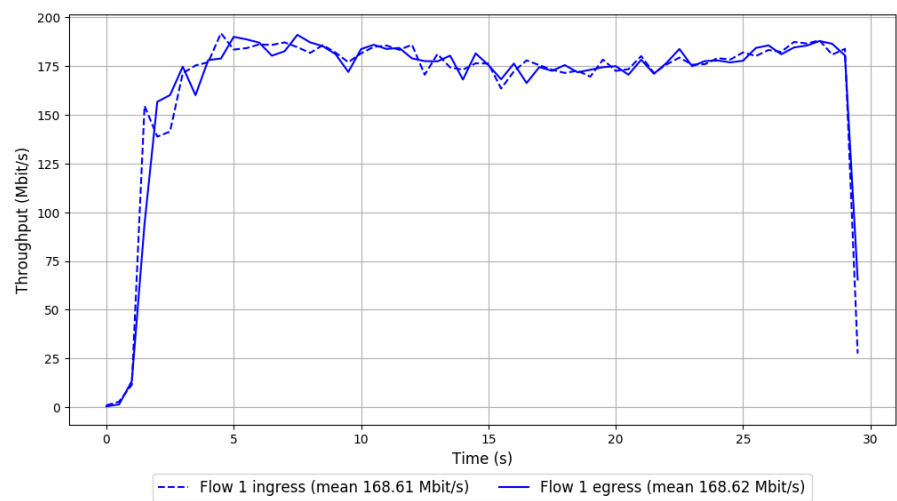
-- Flow 1:

Average throughput: 168.62 Mbit/s

95th percentile per-packet one-way delay: 107.099 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-05 09:50:43

End at: 2017-12-05 09:51:13

Below is generated by plot.py at 2017-12-05 11:02:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.47 Mbit/s

95th percentile per-packet one-way delay: 107.140 ms

Loss rate: 0.00%

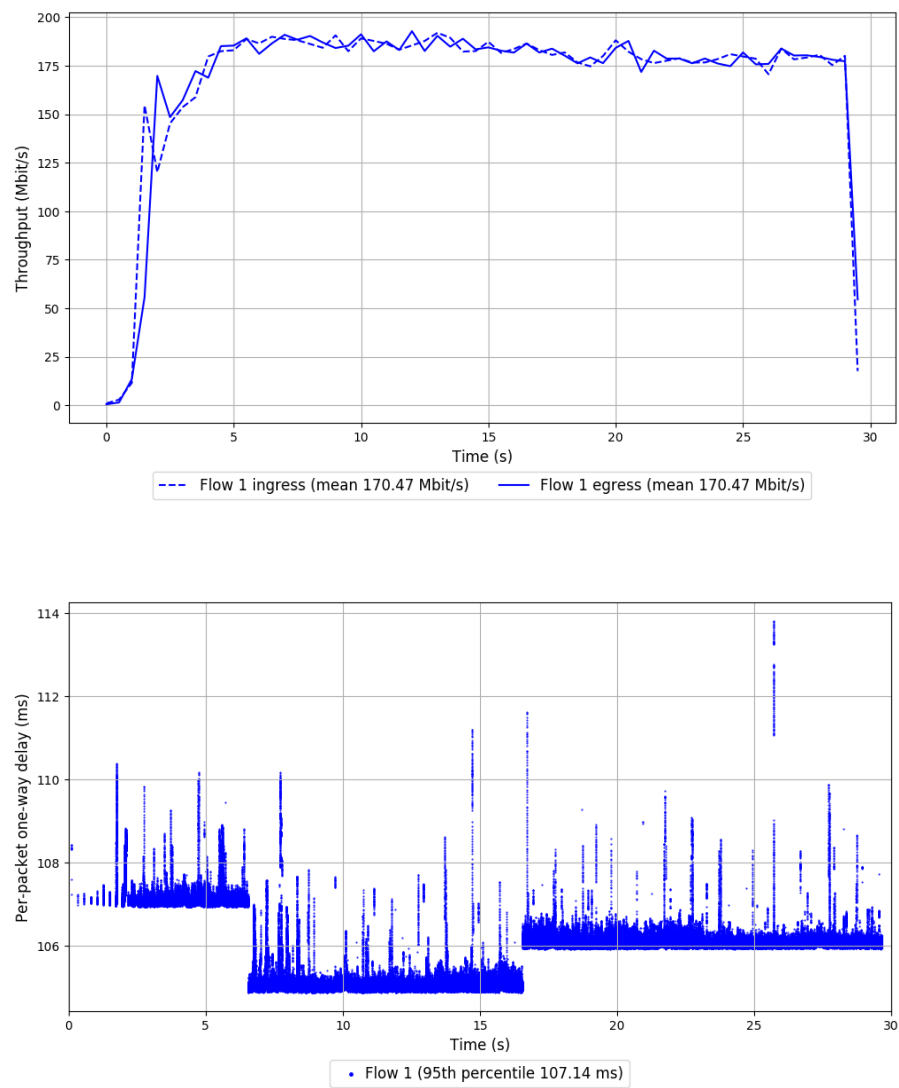
-- Flow 1:

Average throughput: 170.47 Mbit/s

95th percentile per-packet one-way delay: 107.140 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

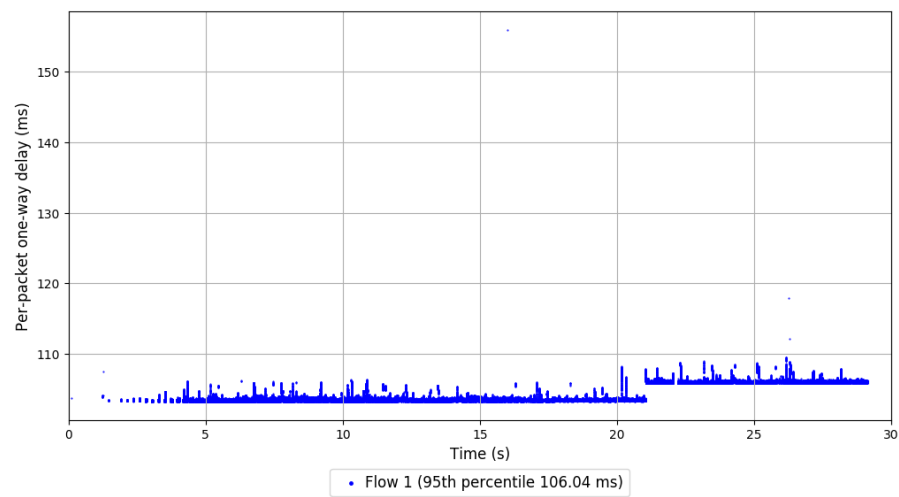
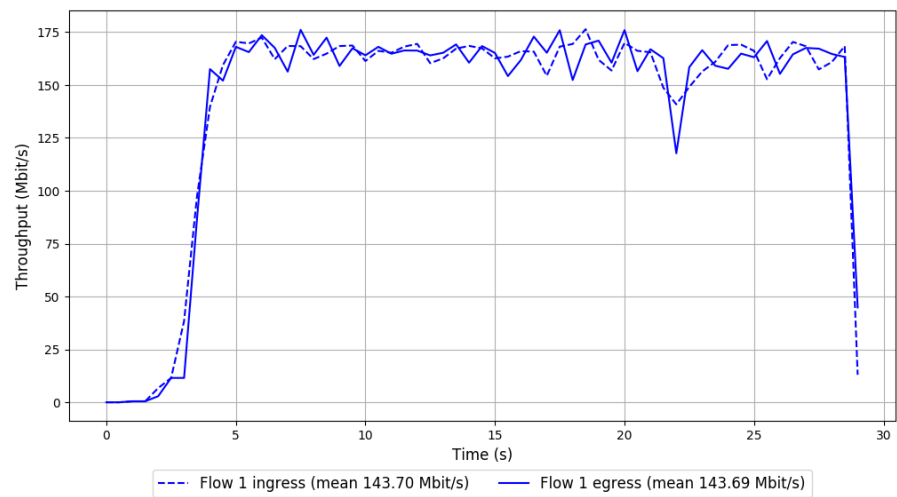


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 08:10:18
End at: 2017-12-05 08:10:48

# Below is generated by plot.py at 2017-12-05 11:02:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 143.69 Mbit/s
95th percentile per-packet one-way delay: 106.042 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 143.69 Mbit/s
95th percentile per-packet one-way delay: 106.042 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

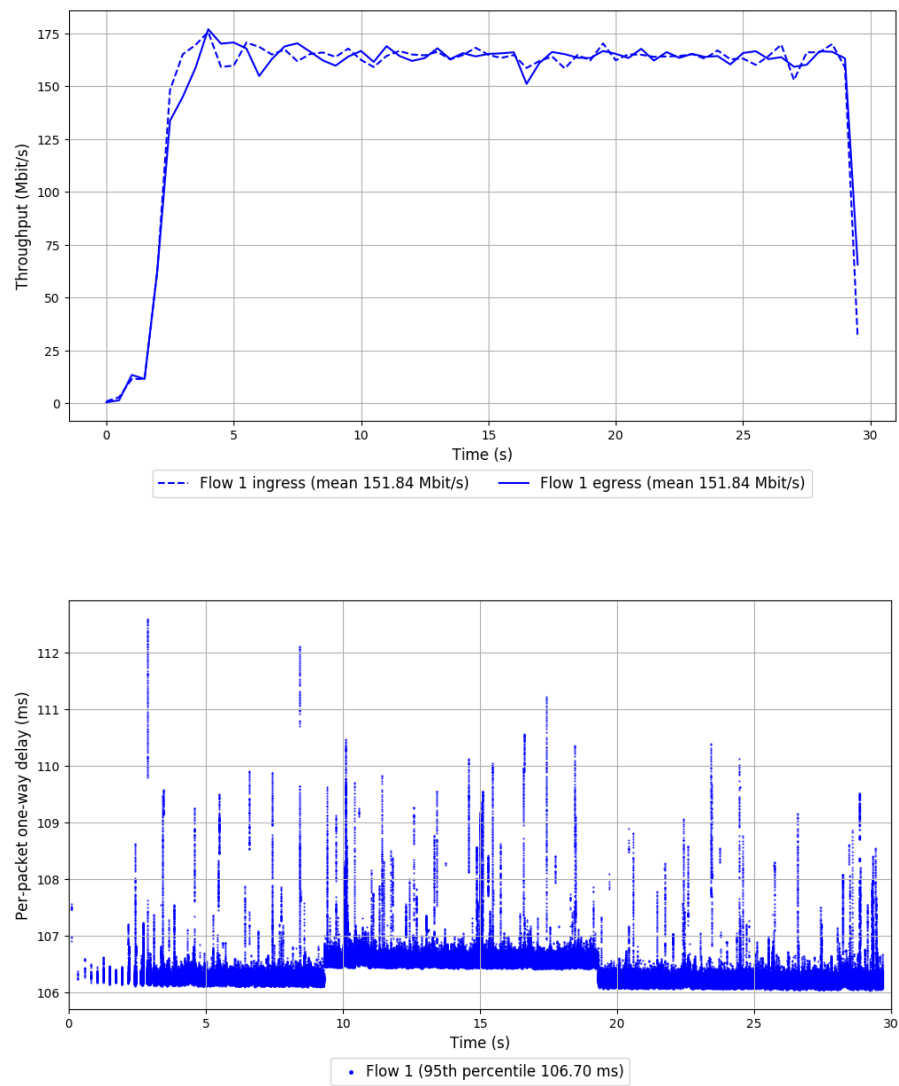


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 08:21:20
End at: 2017-12-05 08:21:51

# Below is generated by plot.py at 2017-12-05 11:03:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 151.84 Mbit/s
95th percentile per-packet one-way delay: 106.697 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 151.84 Mbit/s
95th percentile per-packet one-way delay: 106.697 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

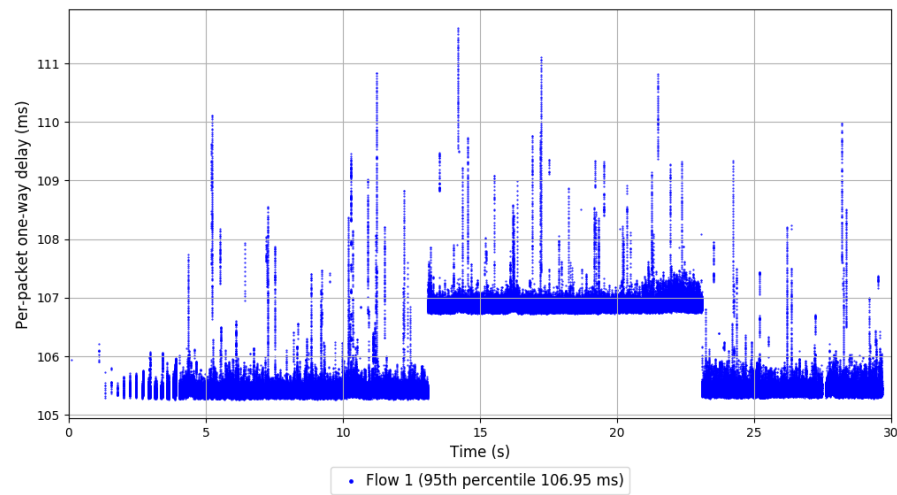
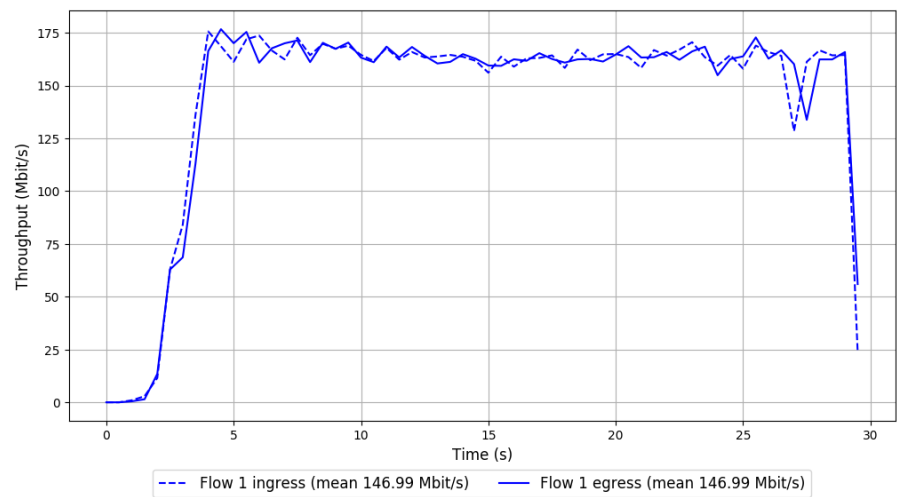


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 08:32:17
End at: 2017-12-05 08:32:47

# Below is generated by plot.py at 2017-12-05 11:03:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 146.99 Mbit/s
95th percentile per-packet one-way delay: 106.948 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 146.99 Mbit/s
95th percentile per-packet one-way delay: 106.948 ms
Loss rate: 0.00%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-05 08:43:07

End at: 2017-12-05 08:43:37

Below is generated by plot.py at 2017-12-05 11:03:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.32 Mbit/s

95th percentile per-packet one-way delay: 107.990 ms

Loss rate: 0.00%

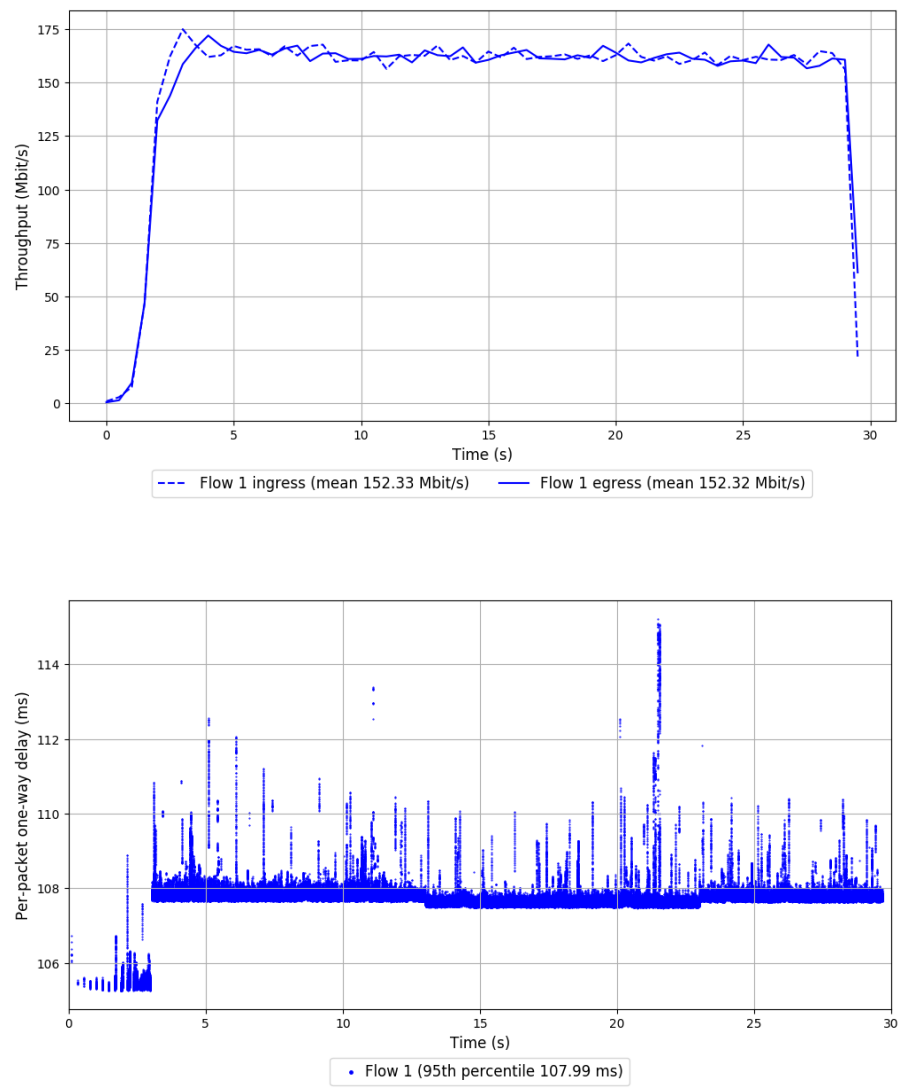
-- Flow 1:

Average throughput: 152.32 Mbit/s

95th percentile per-packet one-way delay: 107.990 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link

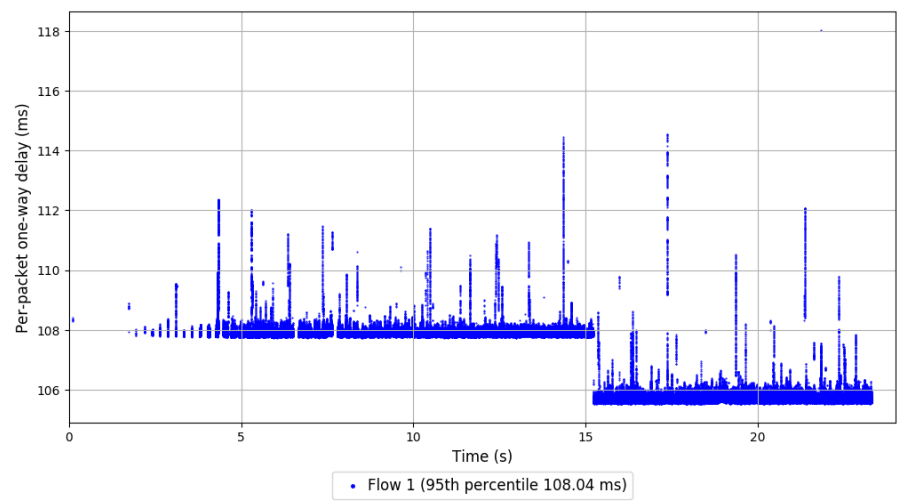
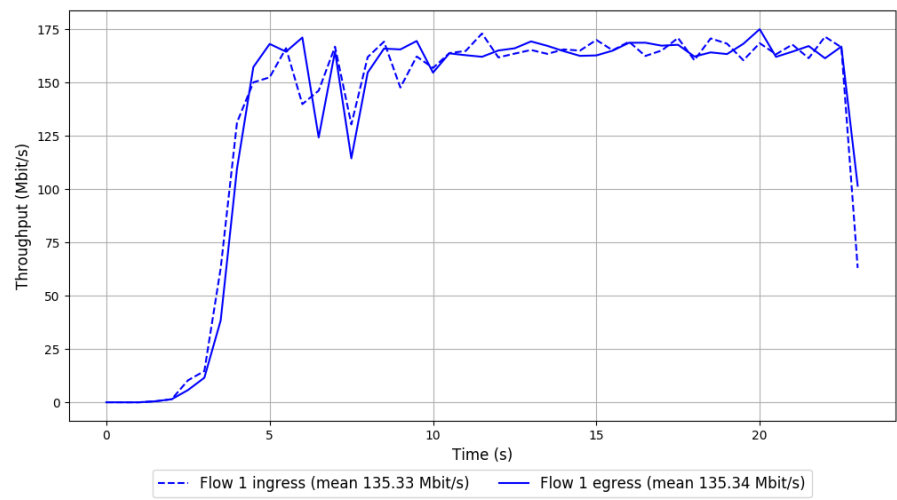


Run 5: Statistics of Indigo-calib

Start at: 2017-12-05 08:54:28

End at: 2017-12-05 08:54:58

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-05 09:05:22

End at: 2017-12-05 09:05:52

Below is generated by plot.py at 2017-12-05 11:04:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.84 Mbit/s

95th percentile per-packet one-way delay: 107.882 ms

Loss rate: 0.01%

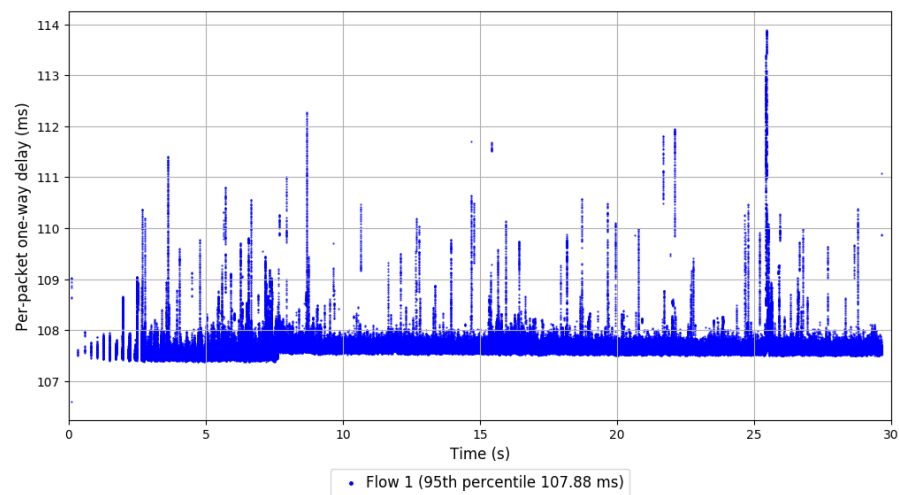
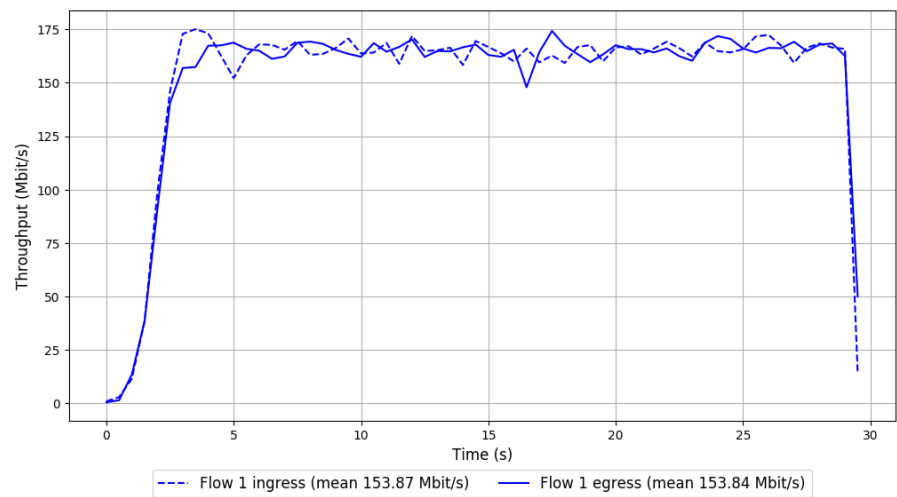
-- Flow 1:

Average throughput: 153.84 Mbit/s

95th percentile per-packet one-way delay: 107.882 ms

Loss rate: 0.01%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-05 09:16:16

End at: 2017-12-05 09:16:46

Below is generated by plot.py at 2017-12-05 11:04:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.18 Mbit/s

95th percentile per-packet one-way delay: 106.685 ms

Loss rate: 0.00%

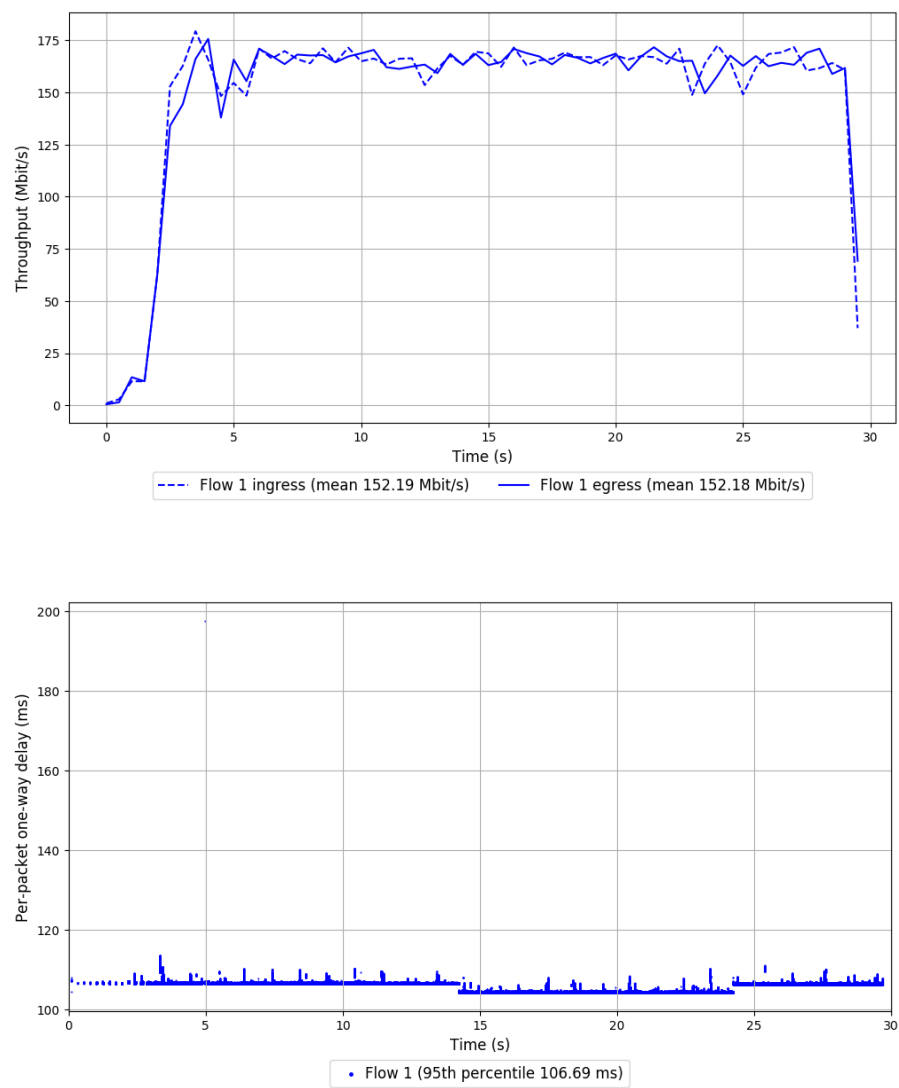
-- Flow 1:

Average throughput: 152.18 Mbit/s

95th percentile per-packet one-way delay: 106.685 ms

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-05 09:27:15

End at: 2017-12-05 09:27:45

Below is generated by plot.py at 2017-12-05 11:04:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 143.78 Mbit/s

95th percentile per-packet one-way delay: 106.378 ms

Loss rate: 0.00%

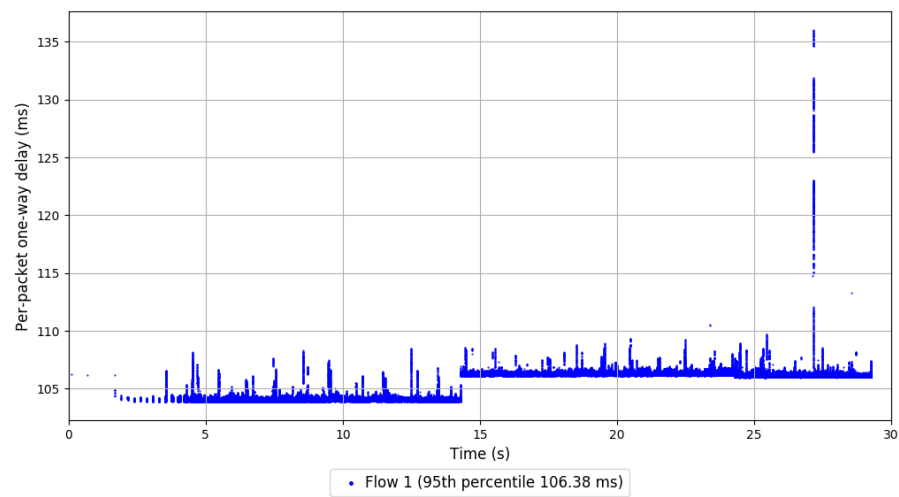
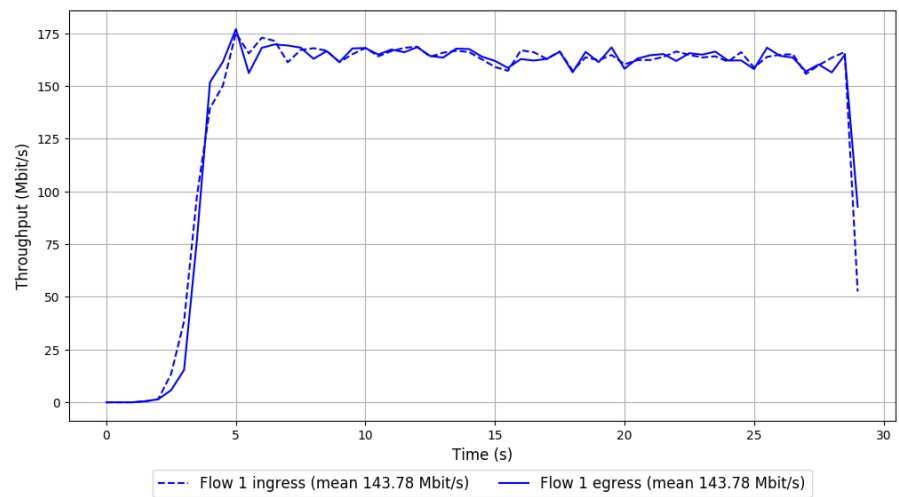
-- Flow 1:

Average throughput: 143.78 Mbit/s

95th percentile per-packet one-way delay: 106.378 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link

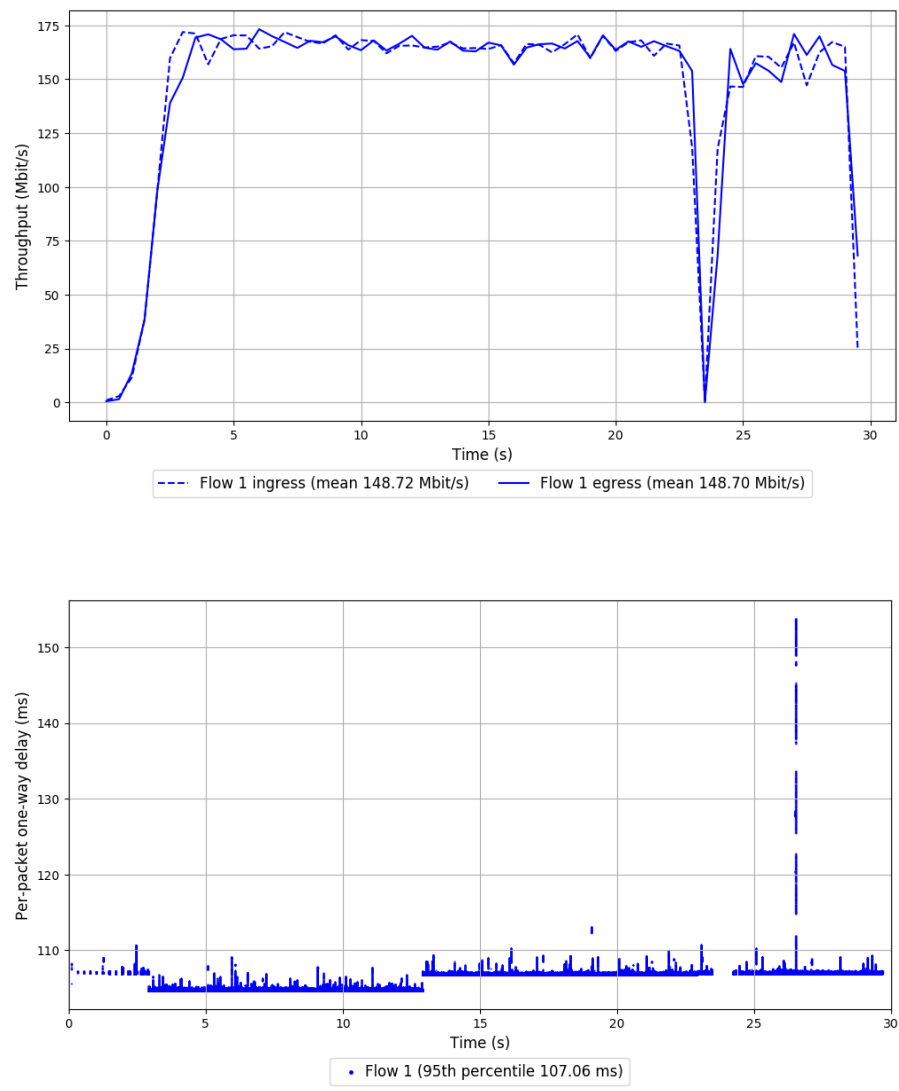


```
Run 9: Statistics of Indigo-calib

Start at: 2017-12-05 09:38:17
End at: 2017-12-05 09:38:47

# Below is generated by plot.py at 2017-12-05 11:04:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 148.70 Mbit/s
95th percentile per-packet one-way delay: 107.065 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 148.70 Mbit/s
95th percentile per-packet one-way delay: 107.065 ms
Loss rate: 0.01%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-05 09:49:05

End at: 2017-12-05 09:49:35

Below is generated by plot.py at 2017-12-05 11:04:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 154.10 Mbit/s

95th percentile per-packet one-way delay: 107.131 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 154.10 Mbit/s

95th percentile per-packet one-way delay: 107.131 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

