

Pantheon Report

Generated at 2017-11-30 09:54:24 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

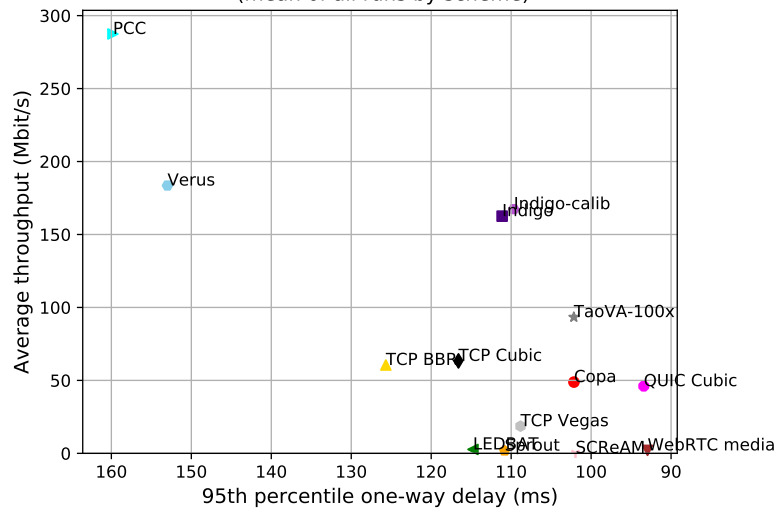
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

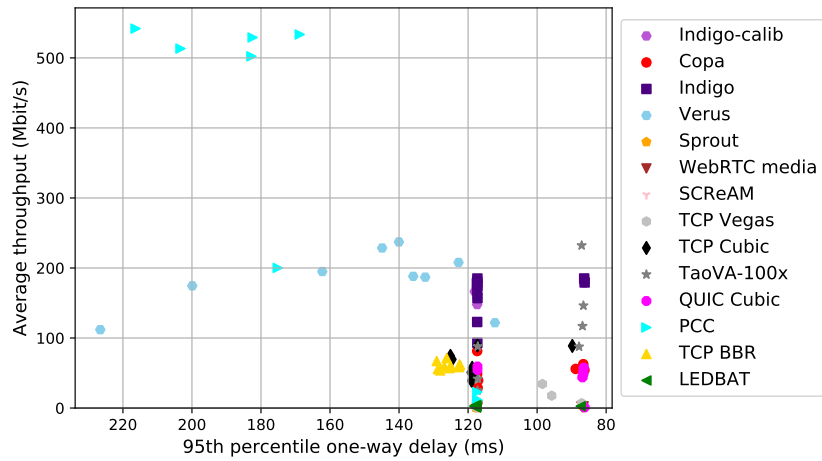
Git summary:

```
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 @ 03455460fd1a8ffbdad86fab936fdca204b80db
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 Iowa Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from GCE Iowa Ethernet to GCE Sydney 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	60.56	125.67	0.45
TCP Cubic	9	63.36	116.59	0.25
LEDBAT	10	2.69	114.78	0.59
PCC	10	287.43	159.80	0.65
QUIC Cubic	9	46.05	93.42	0.42
SCReAM	10	0.22	101.96	0.05
WebRTC media	10	2.02	92.95	0.02
Sprout	9	1.81	110.82	0.16
TaoVA-100x	8	93.38	102.16	0.02
TCP Vegas	8	18.63	108.83	0.02
Verus	9	183.55	152.99	0.50
Copa	10	48.84	102.15	0.05
Indigo	10	162.57	111.13	0.10
Indigo-calib	8	167.36	109.67	0.11

Run 1: Statistics of TCP BBR

Start at: 2017-11-30 07:10:06

End at: 2017-11-30 07:10:36

Below is generated by plot.py at 2017-11-30 09:30:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.62 Mbit/s

95th percentile per-packet one-way delay: 128.720 ms

Loss rate: 0.13%

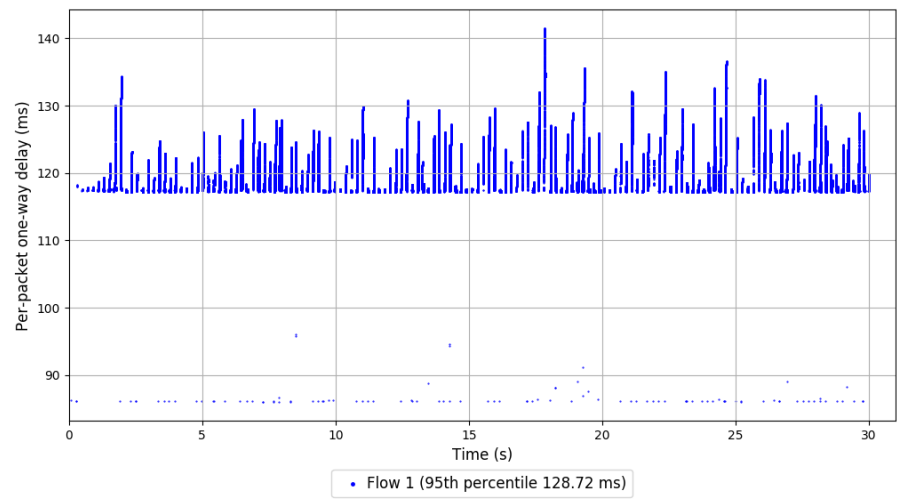
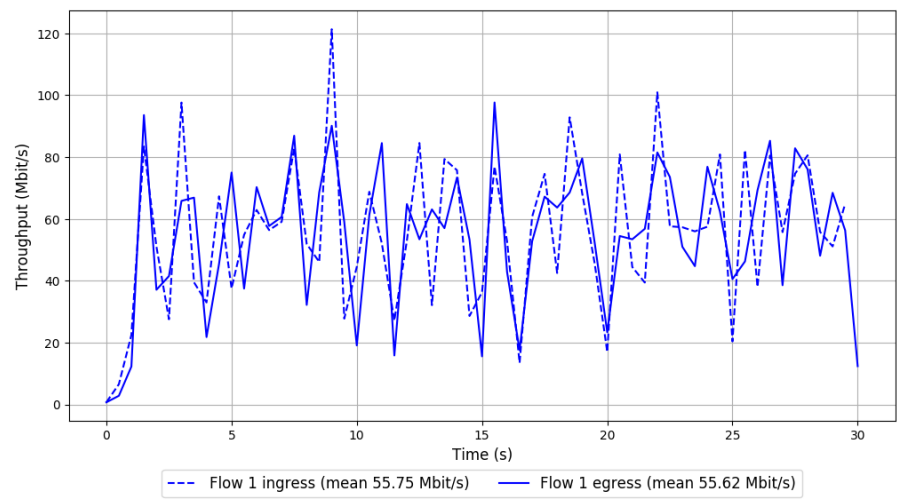
-- Flow 1:

Average throughput: 55.62 Mbit/s

95th percentile per-packet one-way delay: 128.720 ms

Loss rate: 0.13%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-30 07:20:20

End at: 2017-11-30 07:20:50

Below is generated by plot.py at 2017-11-30 09:30:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.12 Mbit/s

95th percentile per-packet one-way delay: 126.851 ms

Loss rate: 0.13%

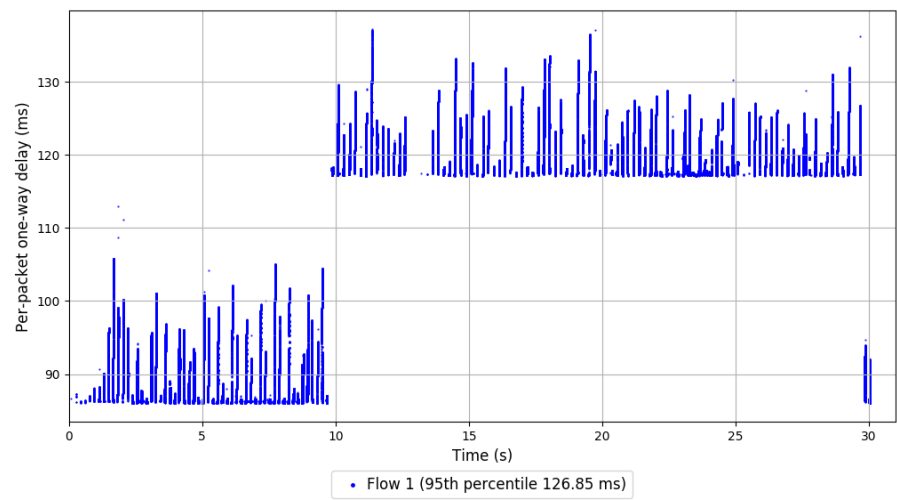
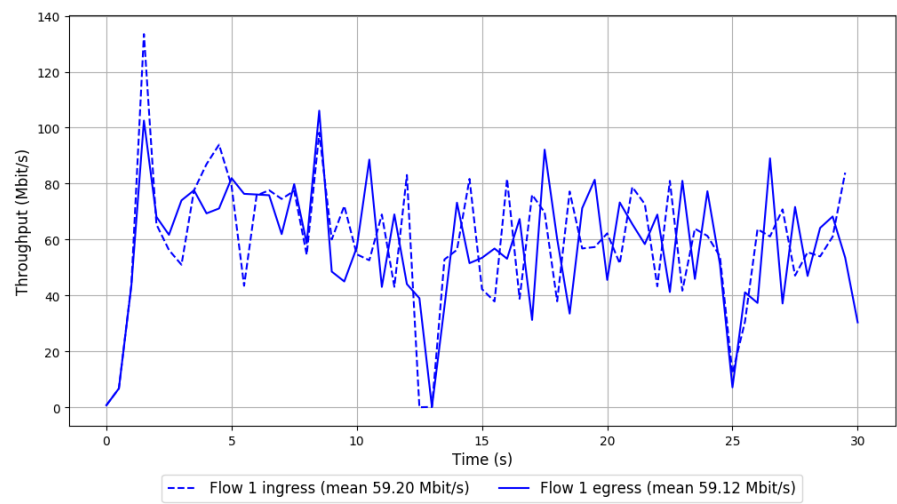
-- Flow 1:

Average throughput: 59.12 Mbit/s

95th percentile per-packet one-way delay: 126.851 ms

Loss rate: 0.13%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-30 07:30:16

End at: 2017-11-30 07:30:46

Below is generated by plot.py at 2017-11-30 09:30:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.09 Mbit/s

95th percentile per-packet one-way delay: 125.364 ms

Loss rate: 0.01%

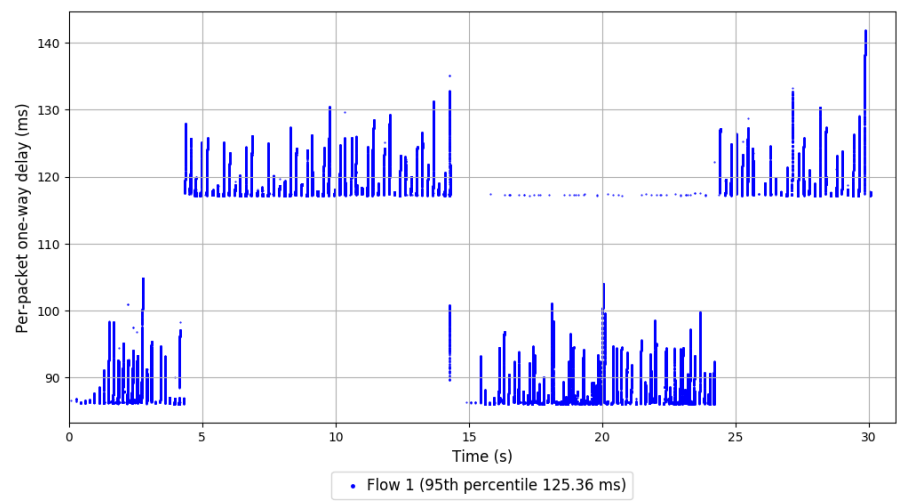
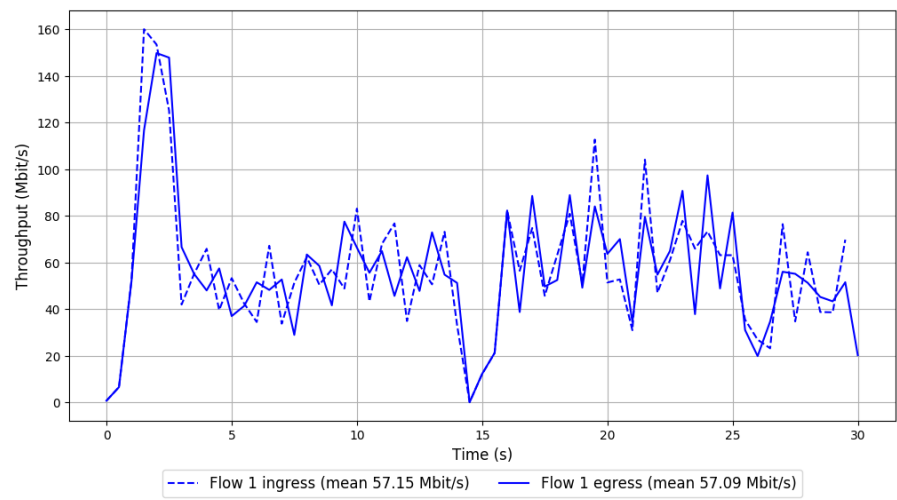
-- Flow 1:

Average throughput: 57.09 Mbit/s

95th percentile per-packet one-way delay: 125.364 ms

Loss rate: 0.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-30 07:40:53

End at: 2017-11-30 07:41:23

Below is generated by plot.py at 2017-11-30 09:30:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.30 Mbit/s

95th percentile per-packet one-way delay: 122.384 ms

Loss rate: 1.14%

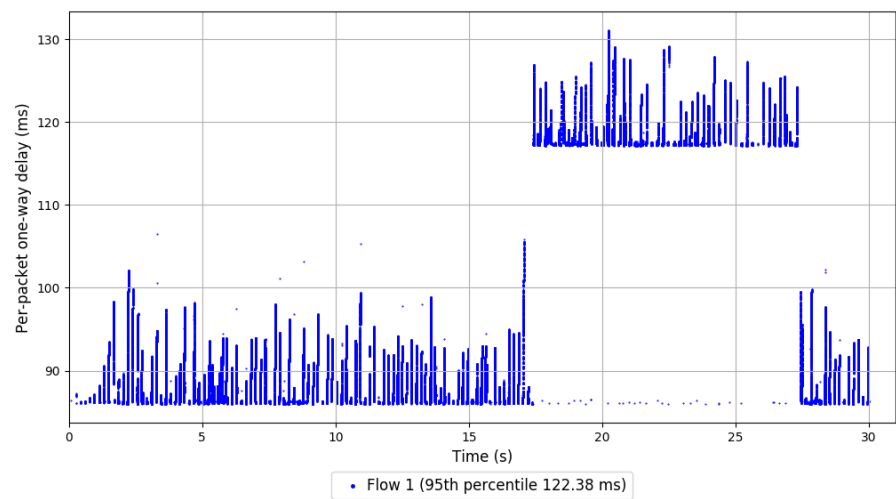
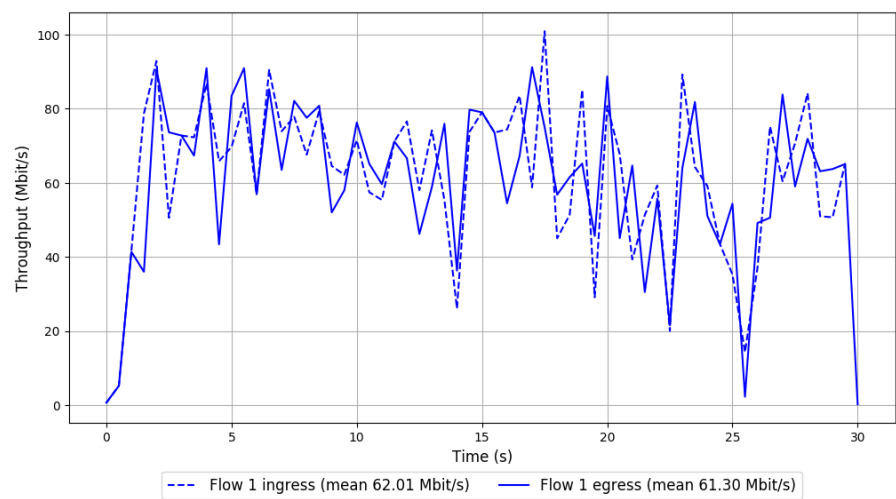
-- Flow 1:

Average throughput: 61.30 Mbit/s

95th percentile per-packet one-way delay: 122.384 ms

Loss rate: 1.14%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-30 07:51:19

End at: 2017-11-30 07:51:49

Below is generated by plot.py at 2017-11-30 09:30:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.74 Mbit/s

95th percentile per-packet one-way delay: 128.081 ms

Loss rate: 1.34%

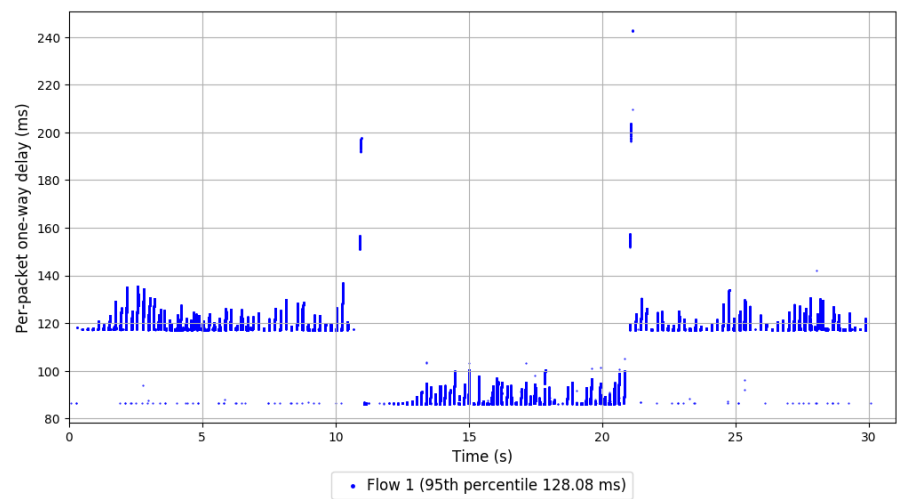
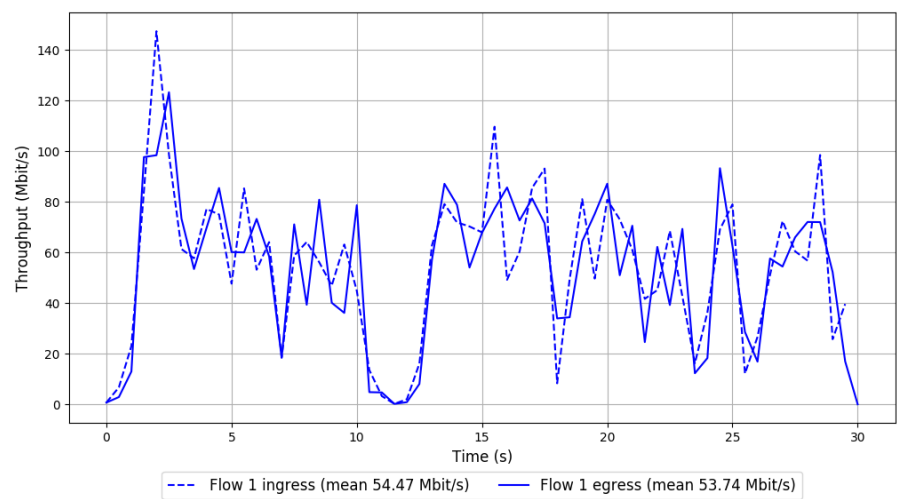
-- Flow 1:

Average throughput: 53.74 Mbit/s

95th percentile per-packet one-way delay: 128.081 ms

Loss rate: 1.34%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-30 08:01:22

End at: 2017-11-30 08:01:52

Below is generated by plot.py at 2017-11-30 09:30:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.13 Mbit/s

95th percentile per-packet one-way delay: 129.086 ms

Loss rate: 0.31%

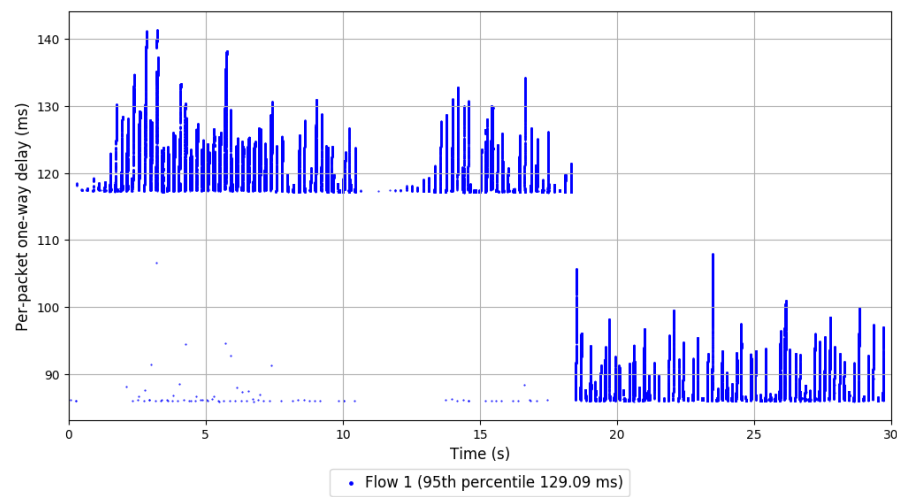
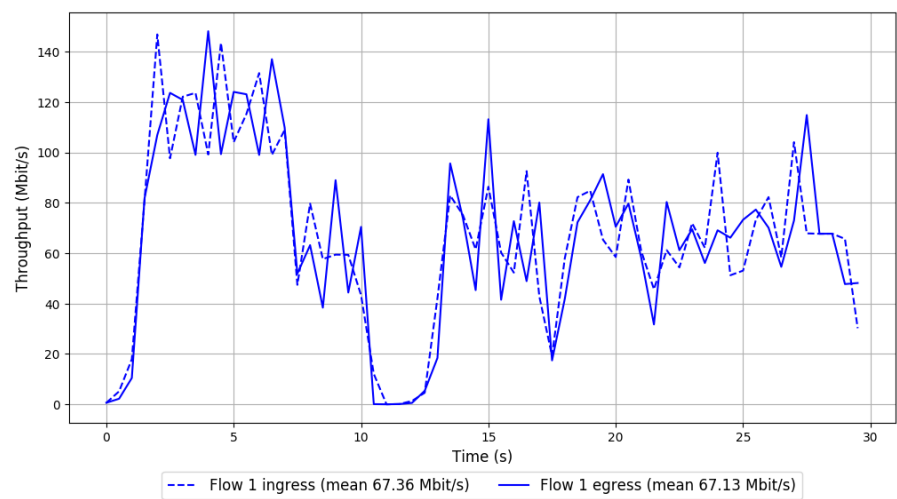
-- Flow 1:

Average throughput: 67.13 Mbit/s

95th percentile per-packet one-way delay: 129.086 ms

Loss rate: 0.31%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-30 08:11:23

End at: 2017-11-30 08:11:53

Below is generated by plot.py at 2017-11-30 09:30:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.48 Mbit/s

95th percentile per-packet one-way delay: 124.997 ms

Loss rate: 0.24%

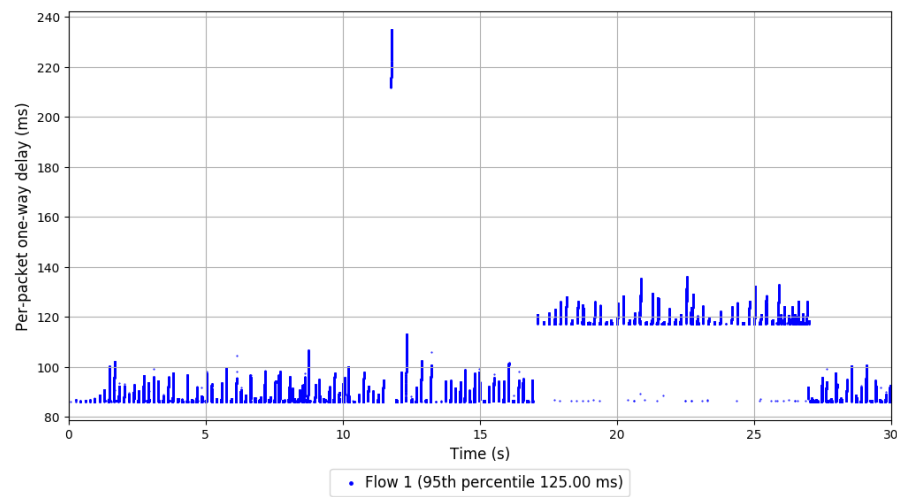
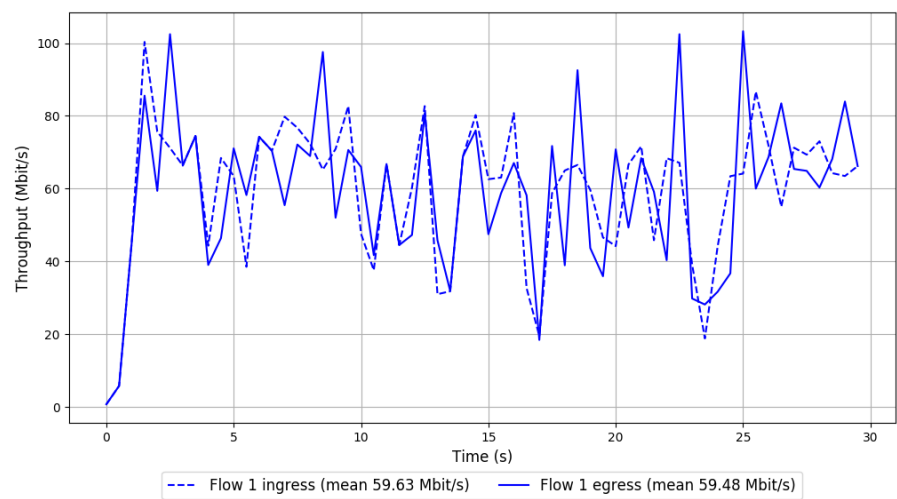
-- Flow 1:

Average throughput: 59.48 Mbit/s

95th percentile per-packet one-way delay: 124.997 ms

Loss rate: 0.24%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-30 08:22:01

End at: 2017-11-30 08:22:31

Below is generated by plot.py at 2017-11-30 09:30:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.39 Mbit/s

95th percentile per-packet one-way delay: 122.431 ms

Loss rate: 0.67%

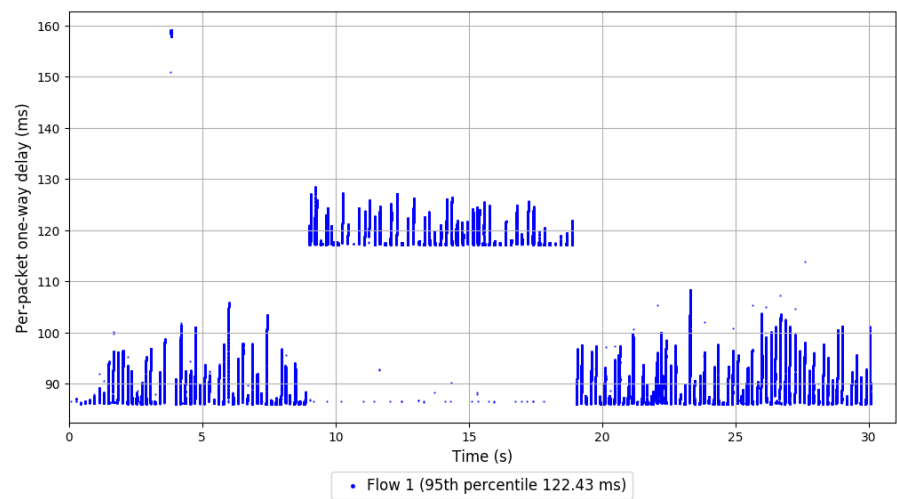
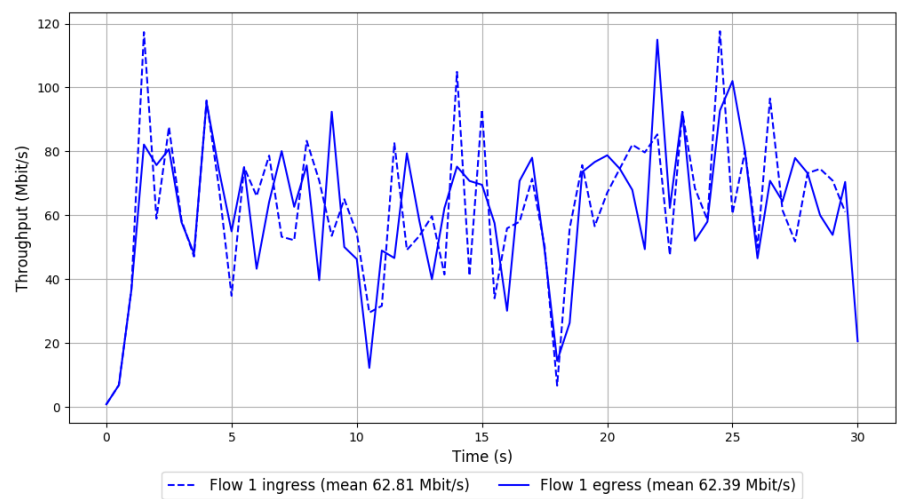
-- Flow 1:

Average throughput: 62.39 Mbit/s

95th percentile per-packet one-way delay: 122.431 ms

Loss rate: 0.67%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-30 08:32:25

End at: 2017-11-30 08:32:55

Below is generated by plot.py at 2017-11-30 09:31:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.45 Mbit/s

95th percentile per-packet one-way delay: 122.606 ms

Loss rate: 0.03%

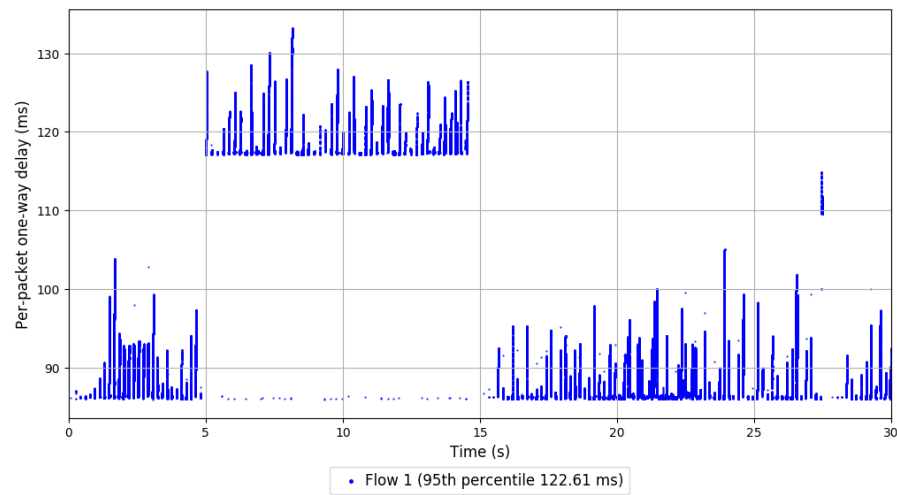
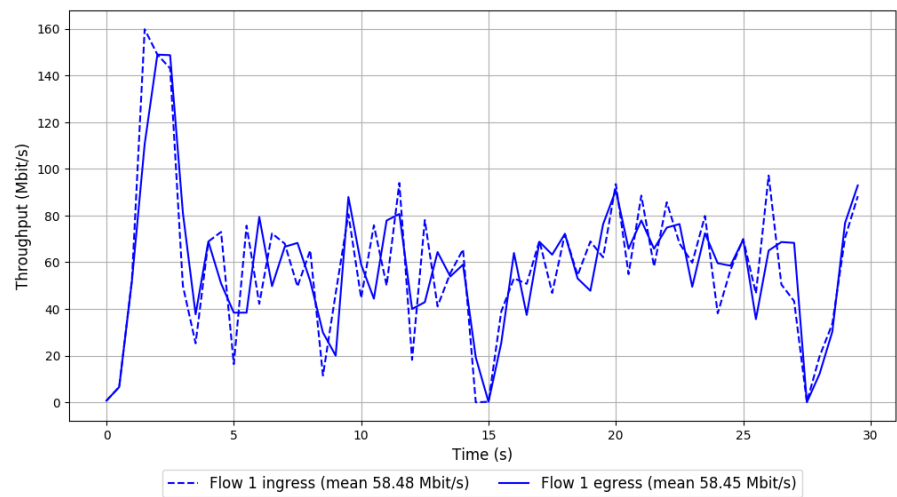
-- Flow 1:

Average throughput: 58.45 Mbit/s

95th percentile per-packet one-way delay: 122.606 ms

Loss rate: 0.03%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-30 08:42:55

End at: 2017-11-30 08:43:25

Below is generated by plot.py at 2017-11-30 09:31:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.31 Mbit/s

95th percentile per-packet one-way delay: 126.205 ms

Loss rate: 0.47%

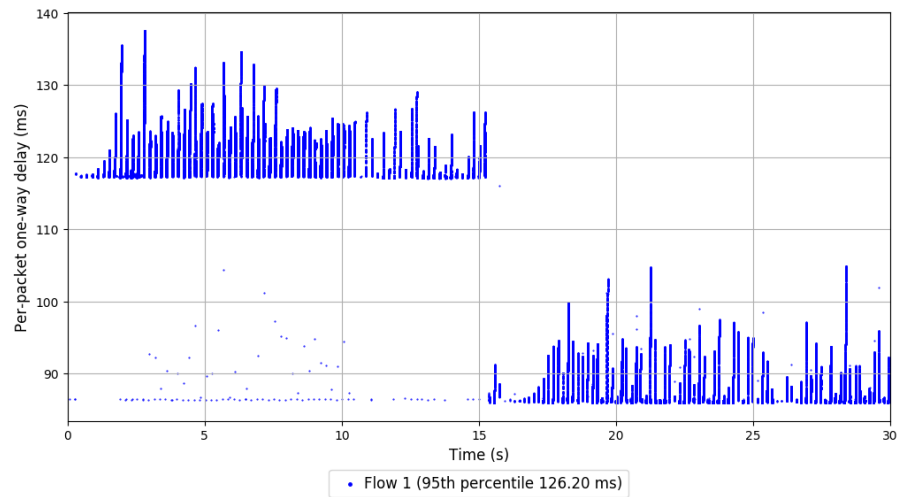
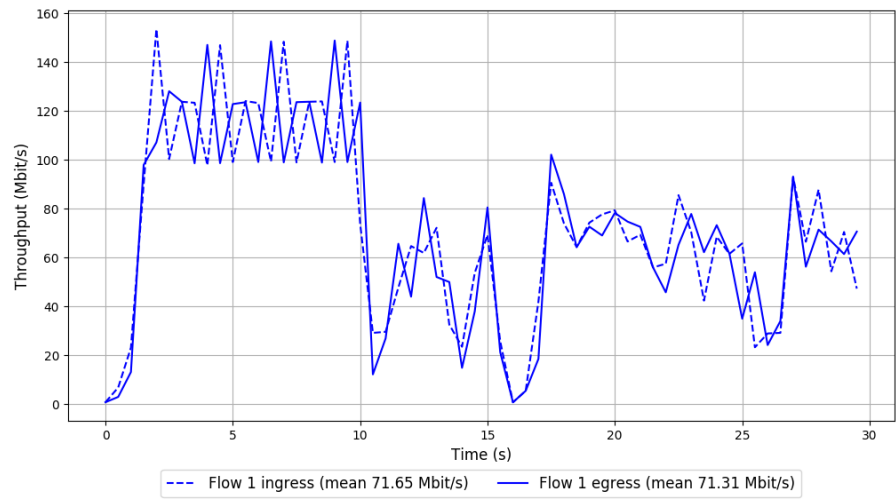
-- Flow 1:

Average throughput: 71.31 Mbit/s

95th percentile per-packet one-way delay: 126.205 ms

Loss rate: 0.47%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-30 07:06:41

End at: 2017-11-30 07:07:11

Below is generated by plot.py at 2017-11-30 09:31:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.41 Mbit/s

95th percentile per-packet one-way delay: 125.103 ms

Loss rate: 0.37%

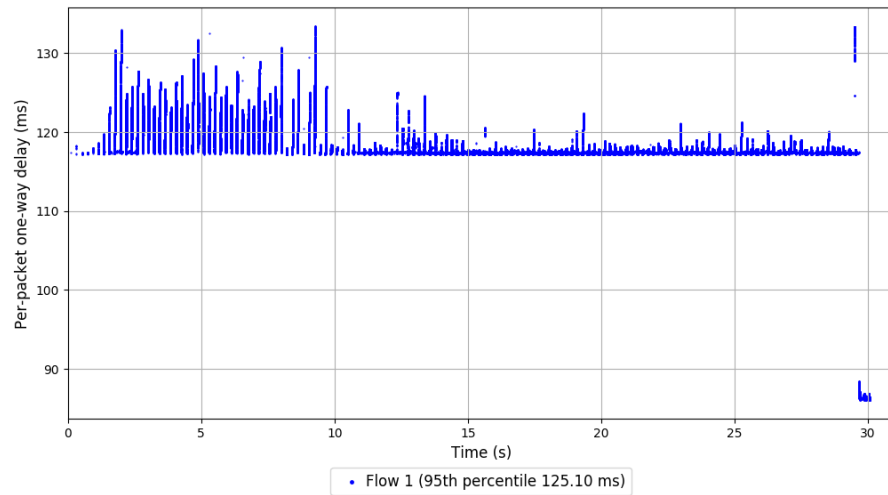
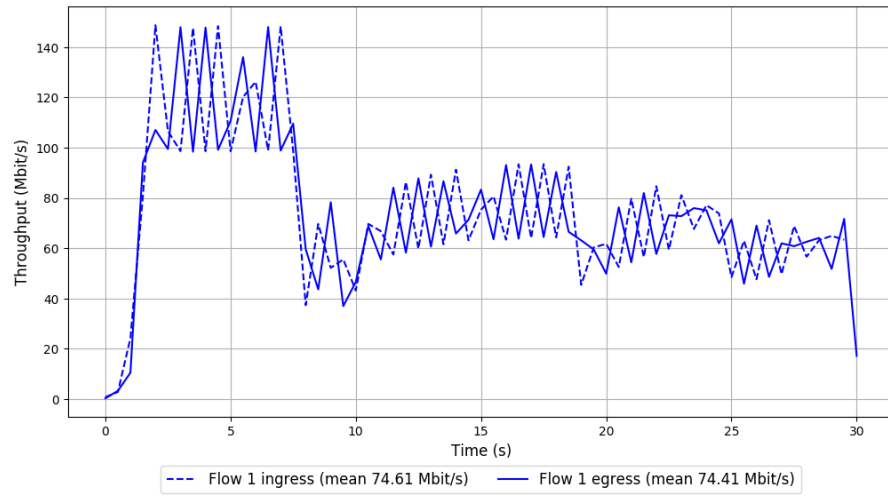
-- Flow 1:

Average throughput: 74.41 Mbit/s

95th percentile per-packet one-way delay: 125.103 ms

Loss rate: 0.37%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-30 07:17:01

End at: 2017-11-30 07:17:31

Below is generated by plot.py at 2017-11-30 09:31:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.11 Mbit/s

95th percentile per-packet one-way delay: 118.984 ms

Loss rate: 0.10%

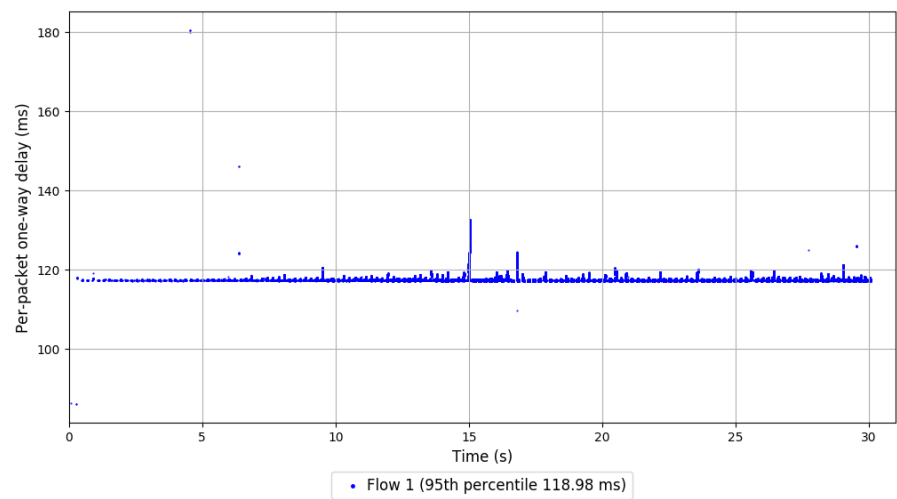
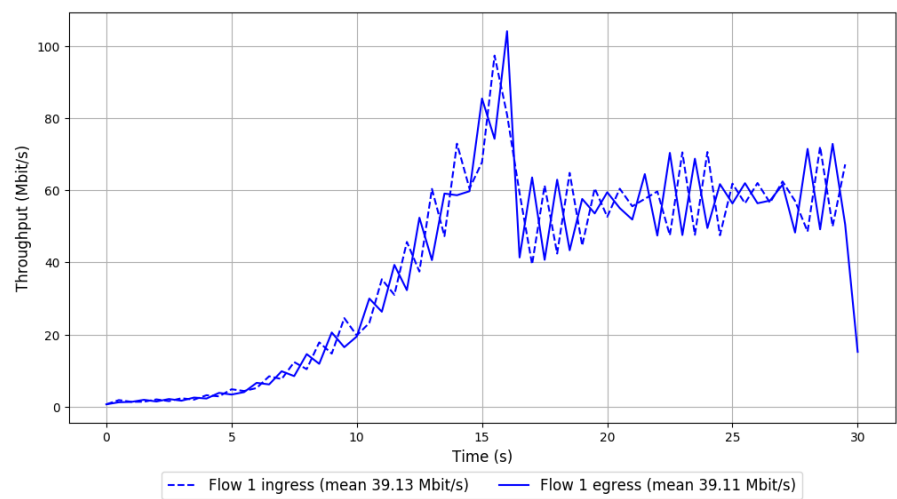
-- Flow 1:

Average throughput: 39.11 Mbit/s

95th percentile per-packet one-way delay: 118.984 ms

Loss rate: 0.10%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-30 07:26:53

End at: 2017-11-30 07:27:23

Below is generated by plot.py at 2017-11-30 09:31:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.42 Mbit/s

95th percentile per-packet one-way delay: 124.606 ms

Loss rate: 0.00%

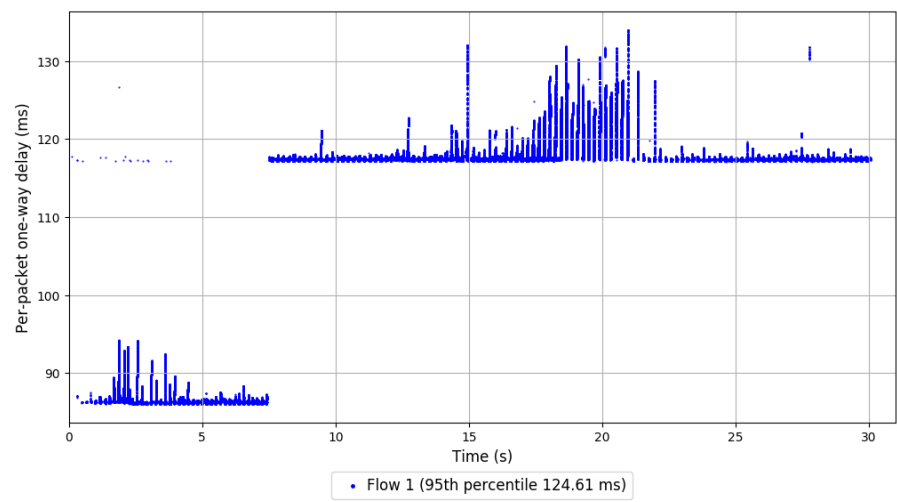
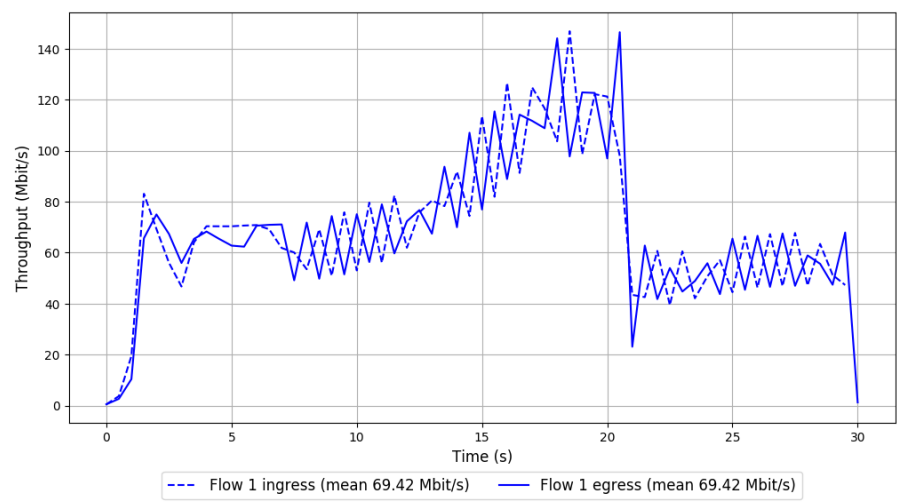
-- Flow 1:

Average throughput: 69.42 Mbit/s

95th percentile per-packet one-way delay: 124.606 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-30 07:37:22

End at: 2017-11-30 07:37:53

Below is generated by plot.py at 2017-11-30 09:31:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.88 Mbit/s

95th percentile per-packet one-way delay: 117.734 ms

Loss rate: 0.00%

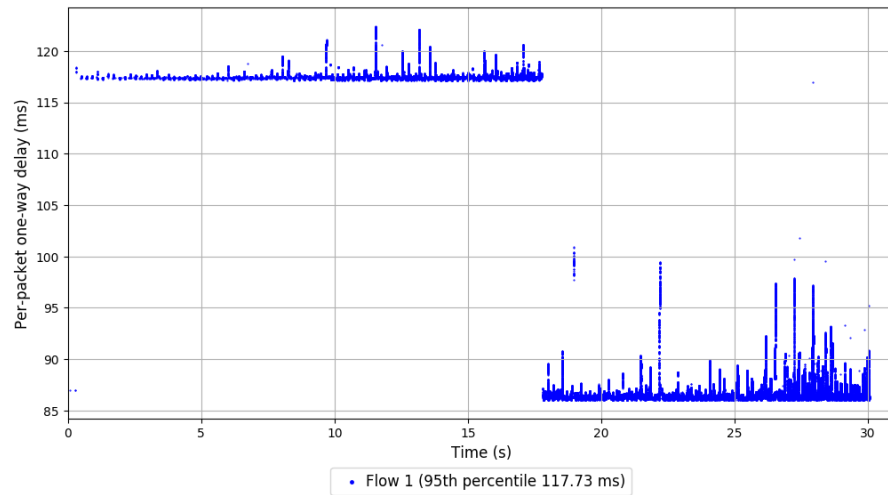
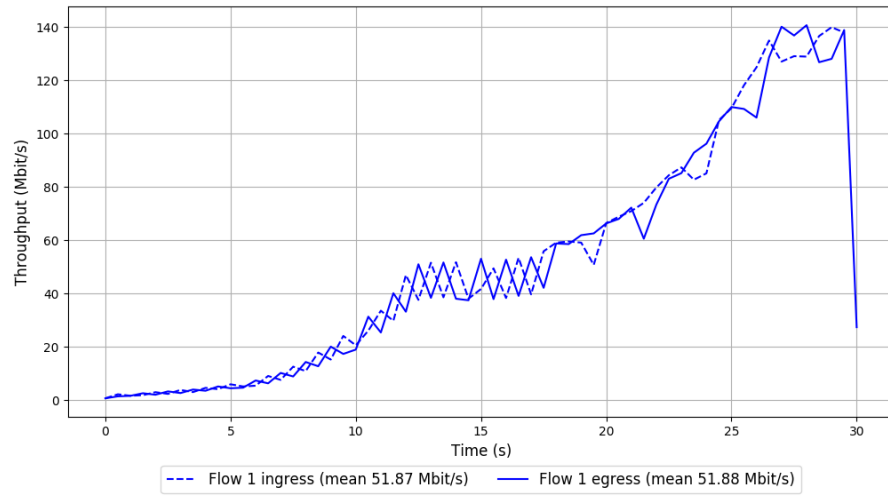
-- Flow 1:

Average throughput: 51.88 Mbit/s

95th percentile per-packet one-way delay: 117.734 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-30 07:47:52

End at: 2017-11-30 07:48:22

Below is generated by plot.py at 2017-11-30 09:31:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.06 Mbit/s

95th percentile per-packet one-way delay: 117.832 ms

Loss rate: 0.30%

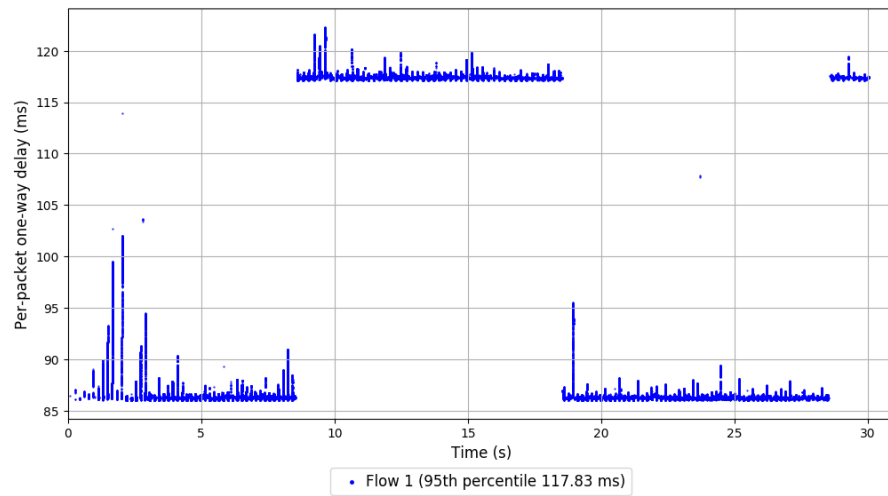
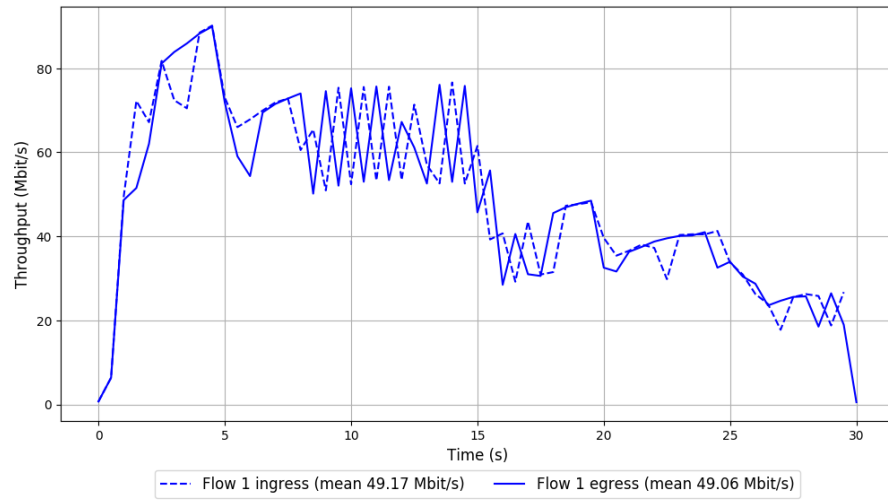
-- Flow 1:

Average throughput: 49.06 Mbit/s

95th percentile per-packet one-way delay: 117.832 ms

Loss rate: 0.30%

Run 5: Report of TCP Cubic — Data Link

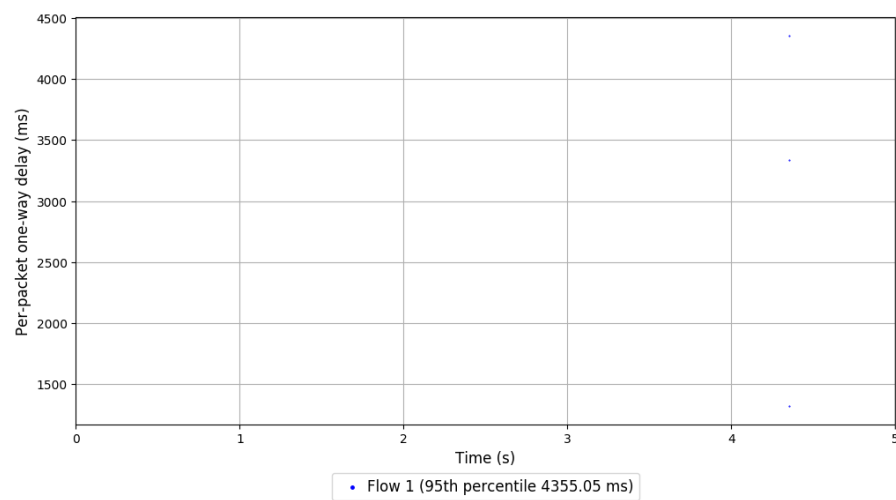
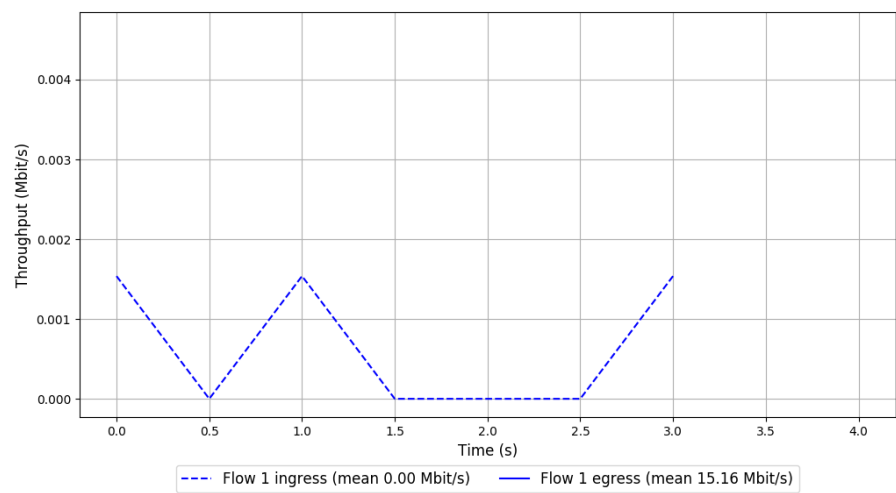


Run 6: Statistics of TCP Cubic

Start at: 2017-11-30 07:58:04

End at: 2017-11-30 07:58:34

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-30 08:07:56

End at: 2017-11-30 08:08:26

Below is generated by plot.py at 2017-11-30 09:31:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.85 Mbit/s

95th percentile per-packet one-way delay: 119.169 ms

Loss rate: 1.10%

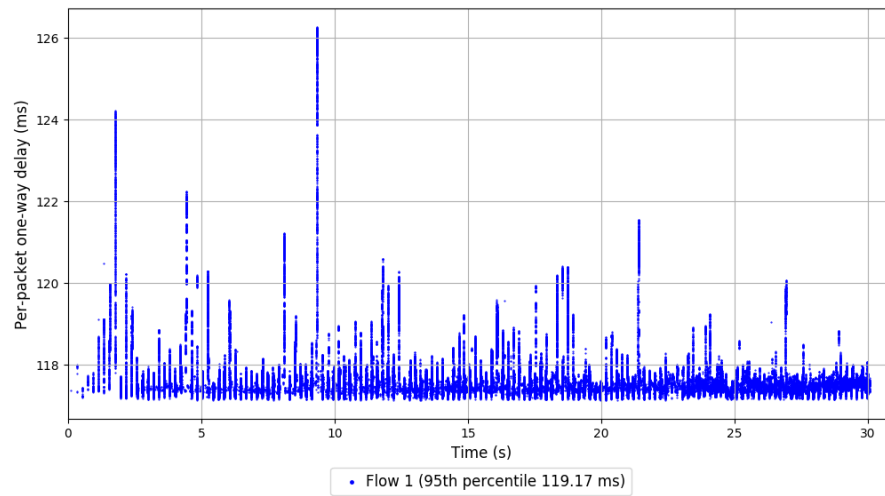
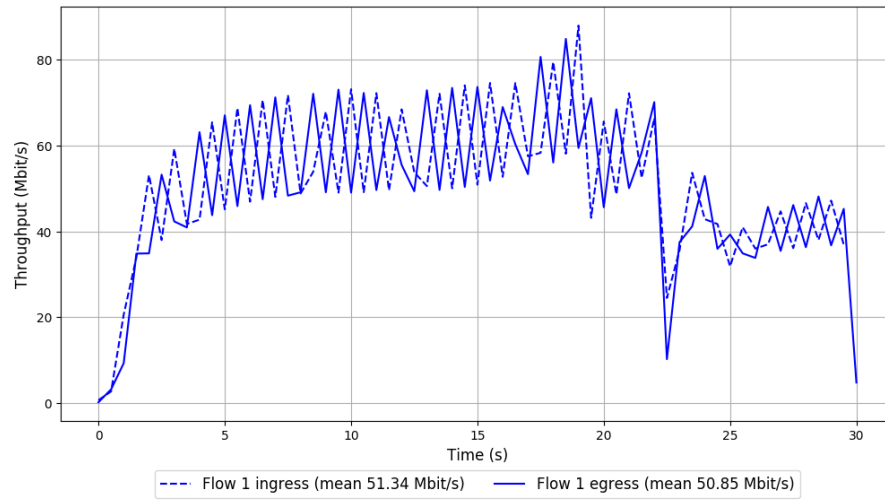
-- Flow 1:

Average throughput: 50.85 Mbit/s

95th percentile per-packet one-way delay: 119.169 ms

Loss rate: 1.10%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-30 08:18:27

End at: 2017-11-30 08:18:57

Below is generated by plot.py at 2017-11-30 09:32:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.71 Mbit/s

95th percentile per-packet one-way delay: 89.792 ms

Loss rate: 0.26%

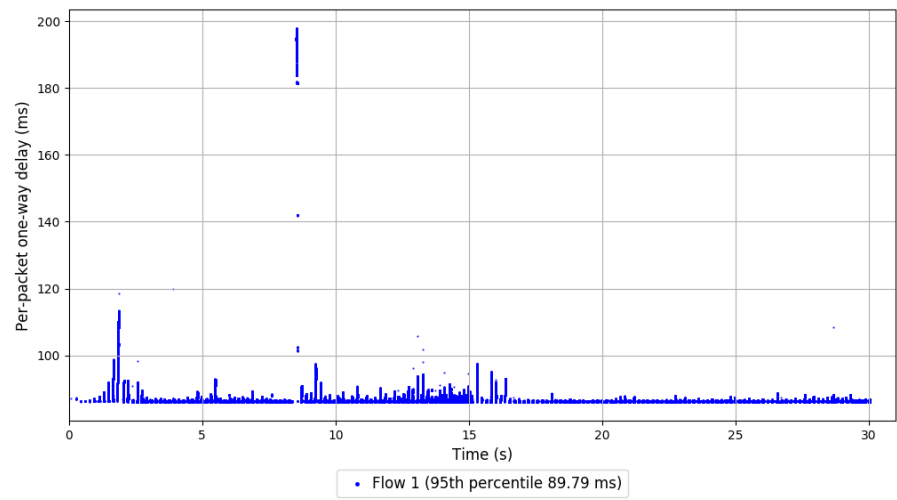
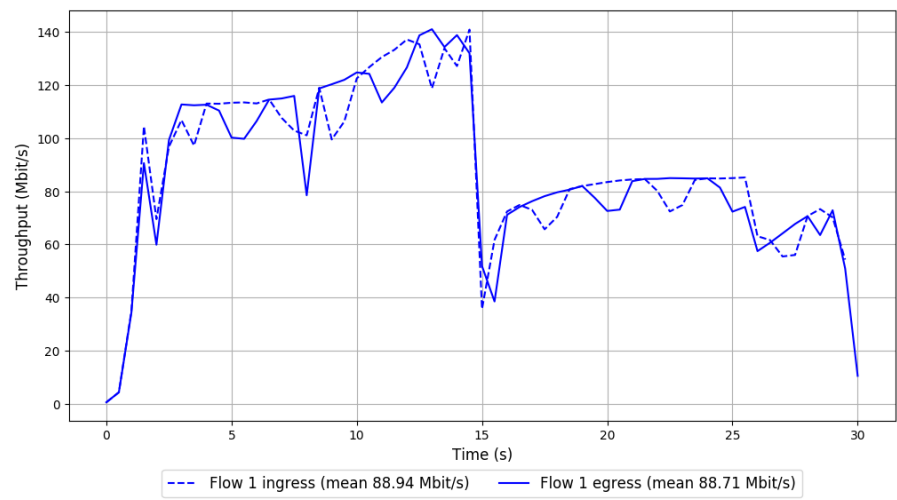
-- Flow 1:

Average throughput: 88.71 Mbit/s

95th percentile per-packet one-way delay: 89.792 ms

Loss rate: 0.26%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-30 08:28:45

End at: 2017-11-30 08:29:15

Below is generated by plot.py at 2017-11-30 09:32:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.37 Mbit/s

95th percentile per-packet one-way delay: 118.806 ms

Loss rate: 0.14%

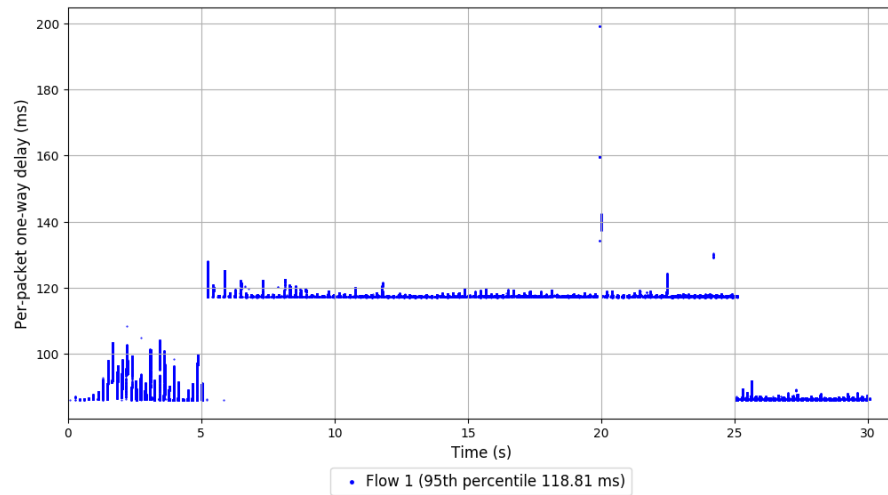
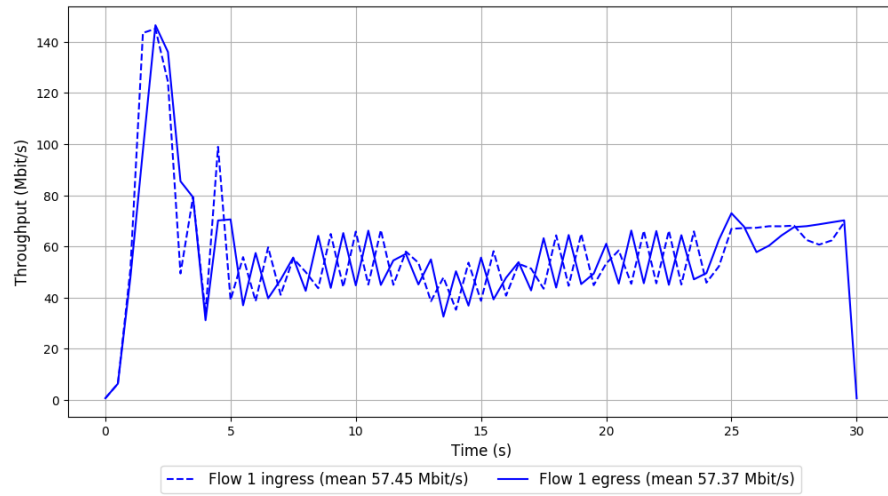
-- Flow 1:

Average throughput: 57.37 Mbit/s

95th percentile per-packet one-way delay: 118.806 ms

Loss rate: 0.14%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-30 08:39:33

End at: 2017-11-30 08:40:03

Below is generated by plot.py at 2017-11-30 09:32:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.43 Mbit/s

95th percentile per-packet one-way delay: 117.277 ms

Loss rate: 0.00%

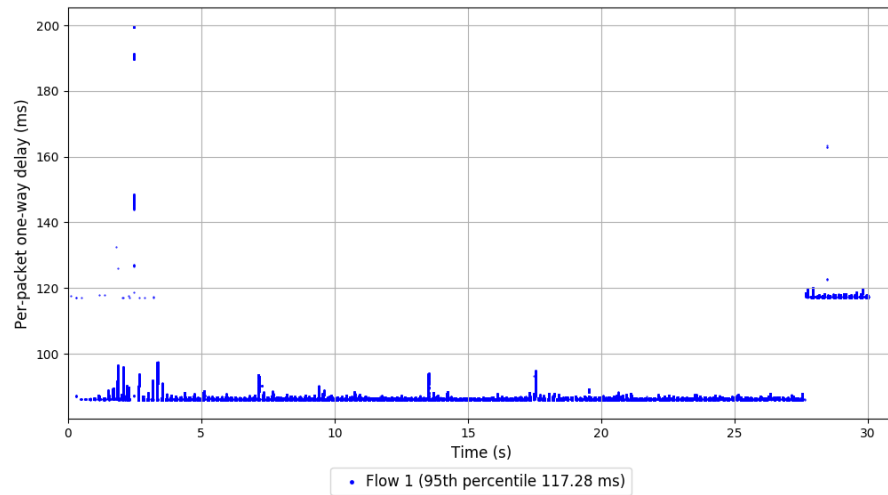
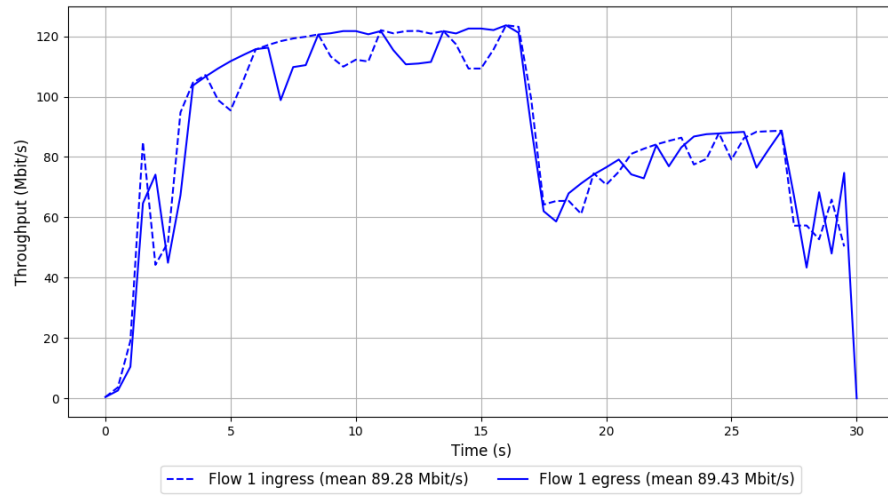
-- Flow 1:

Average throughput: 89.43 Mbit/s

95th percentile per-packet one-way delay: 117.277 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

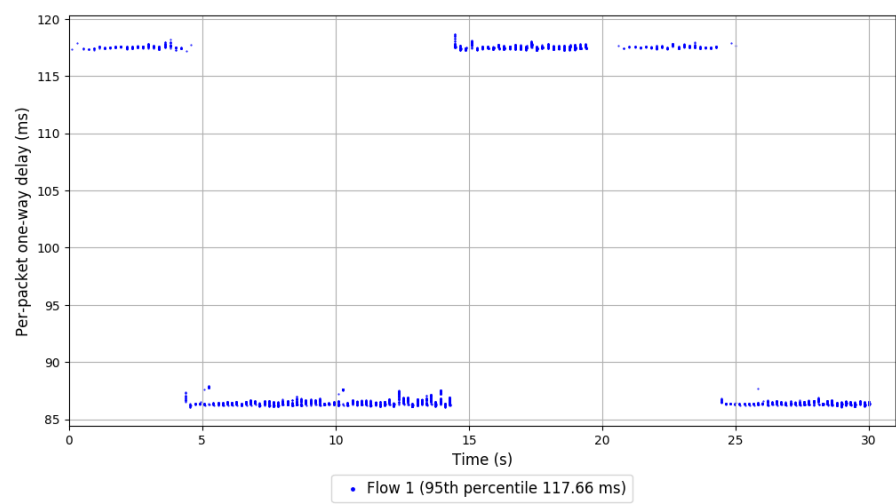
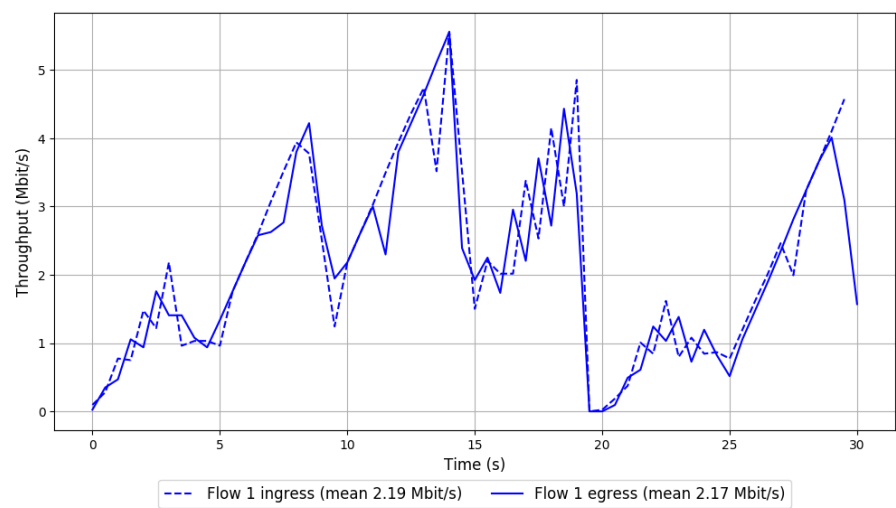


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-30 07:09:26
End at: 2017-11-30 07:09:56

# Below is generated by plot.py at 2017-11-30 09:32:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 117.659 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 117.659 ms
Loss rate: 1.27%
```

Run 1: Report of LEDBAT — Data Link

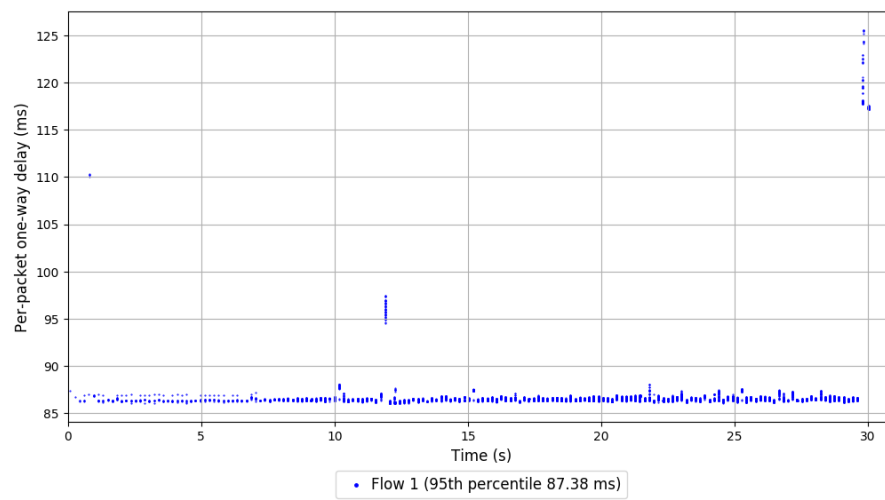
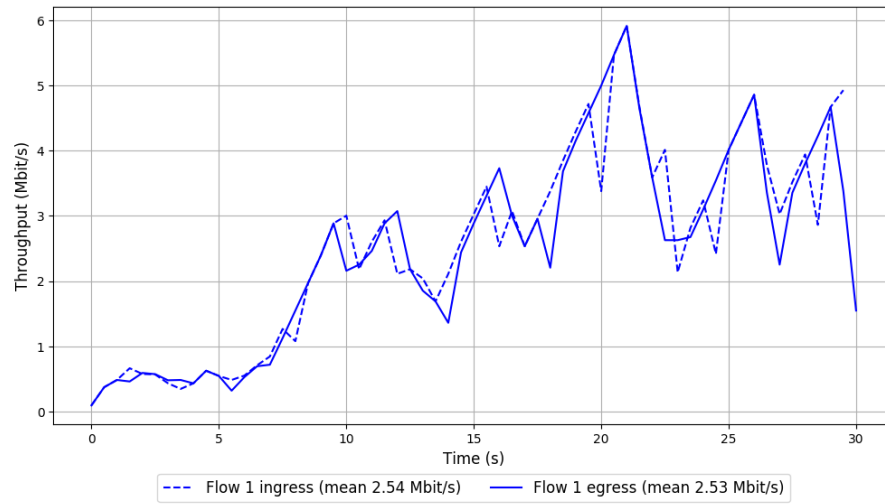


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-30 07:19:41
End at: 2017-11-30 07:20:11

# Below is generated by plot.py at 2017-11-30 09:32:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 87.384 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 87.384 ms
Loss rate: 0.31%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-30 07:29:36

End at: 2017-11-30 07:30:06

Below is generated by plot.py at 2017-11-30 09:32:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 117.784 ms

Loss rate: 0.13%

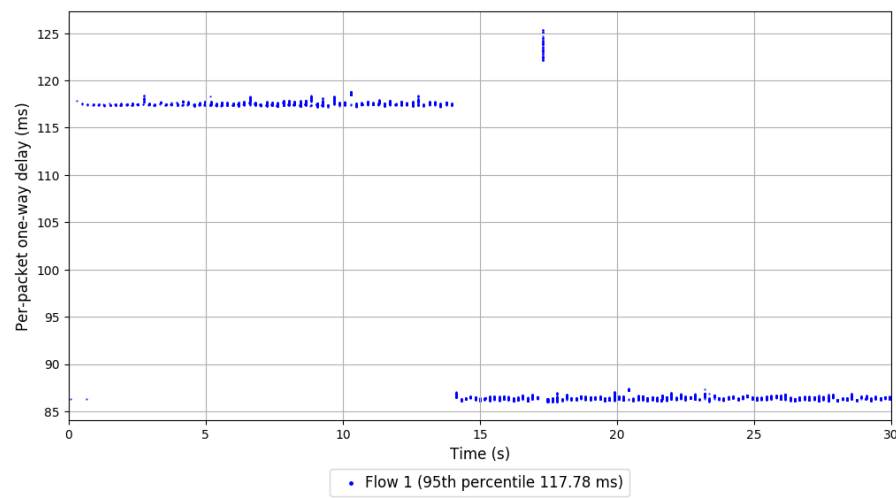
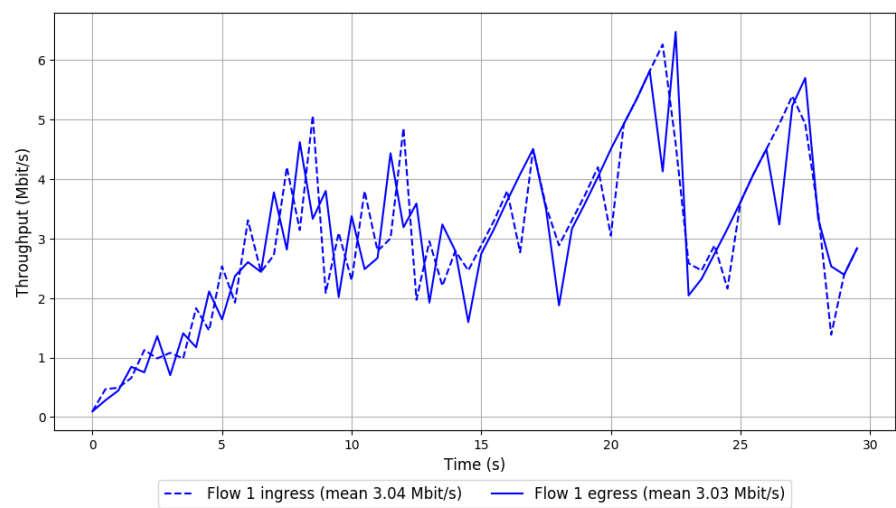
-- Flow 1:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 117.784 ms

Loss rate: 0.13%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-30 07:40:13

End at: 2017-11-30 07:40:43

Below is generated by plot.py at 2017-11-30 09:32:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 117.998 ms

Loss rate: 0.12%

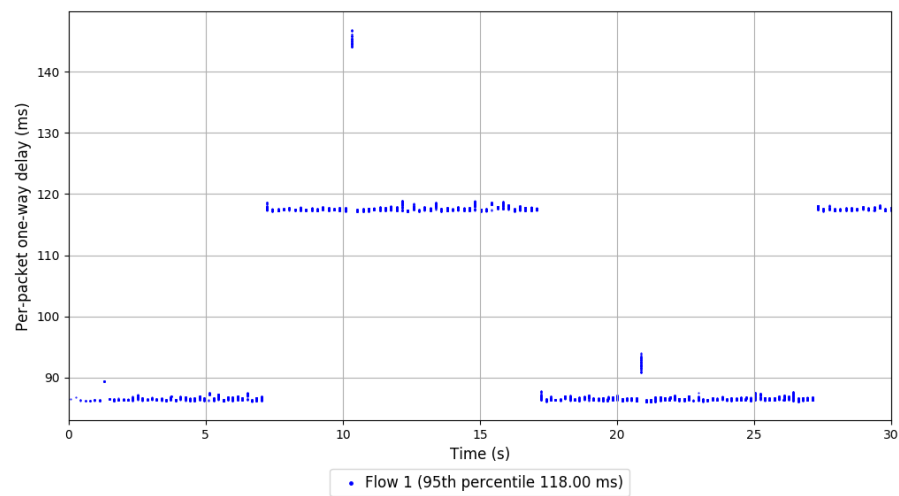
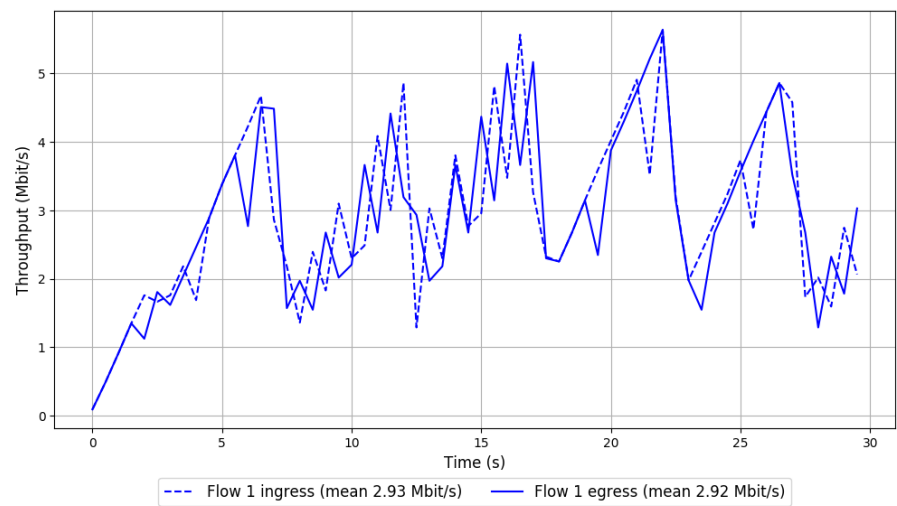
-- Flow 1:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 117.998 ms

Loss rate: 0.12%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-30 07:50:40

End at: 2017-11-30 07:51:10

Below is generated by plot.py at 2017-11-30 09:32:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 117.678 ms

Loss rate: 1.44%

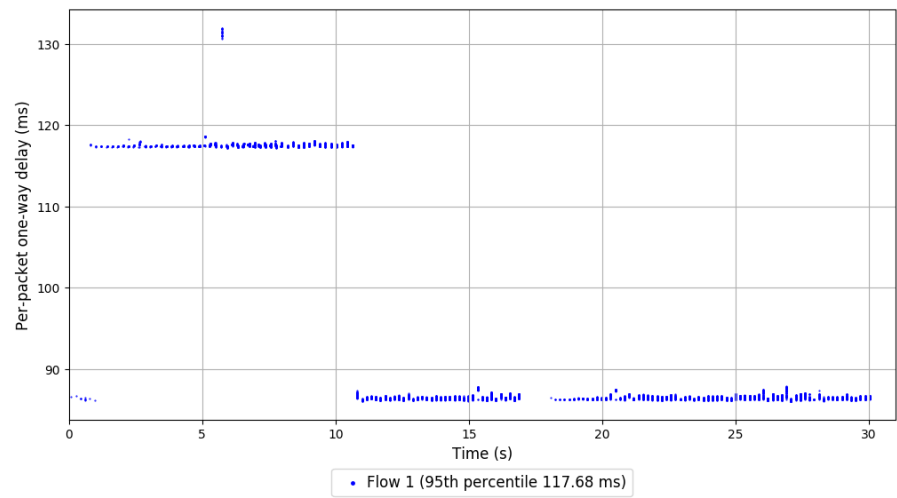
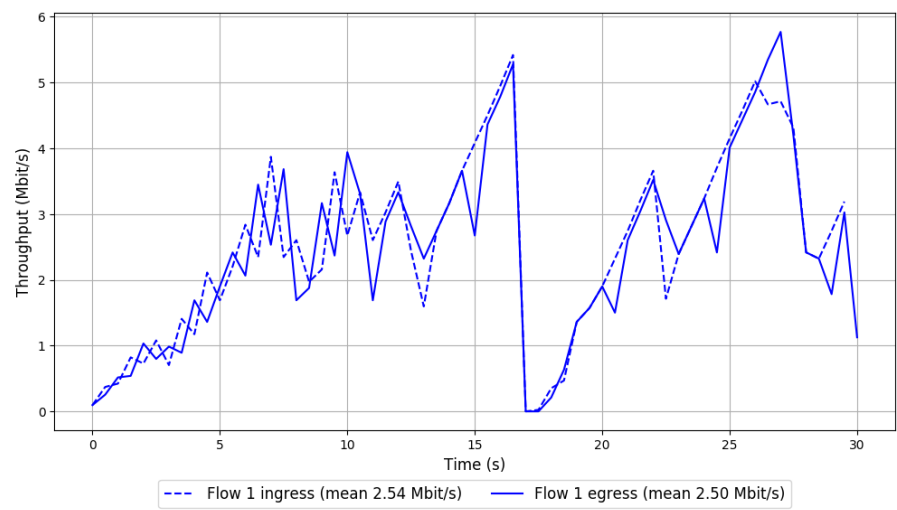
-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 117.678 ms

Loss rate: 1.44%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-30 08:00:42

End at: 2017-11-30 08:01:12

Below is generated by plot.py at 2017-11-30 09:32:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 117.722 ms

Loss rate: 0.93%

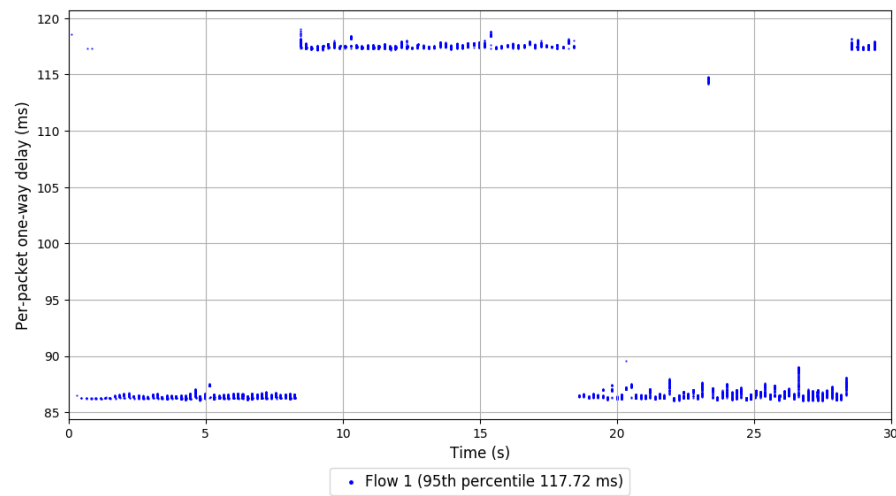
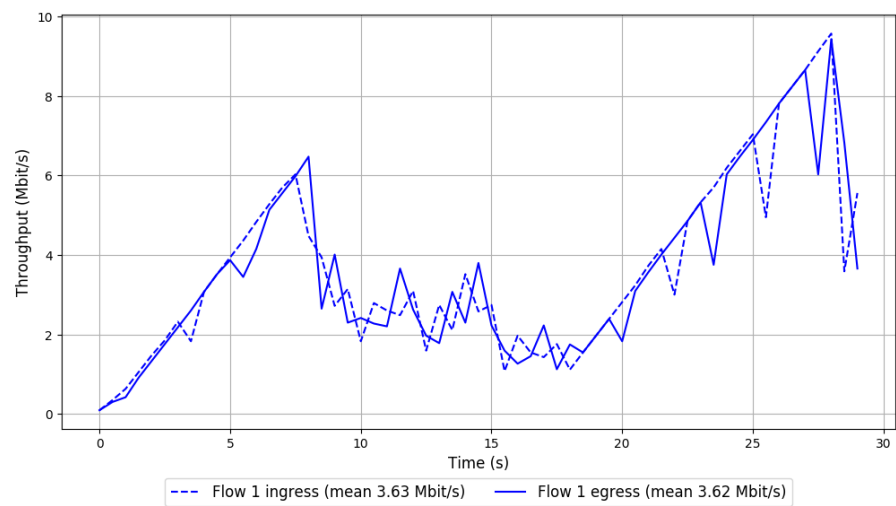
-- Flow 1:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 117.722 ms

Loss rate: 0.93%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-30 08:10:44

End at: 2017-11-30 08:11:14

Below is generated by plot.py at 2017-11-30 09:32:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 118.153 ms

Loss rate: 0.23%

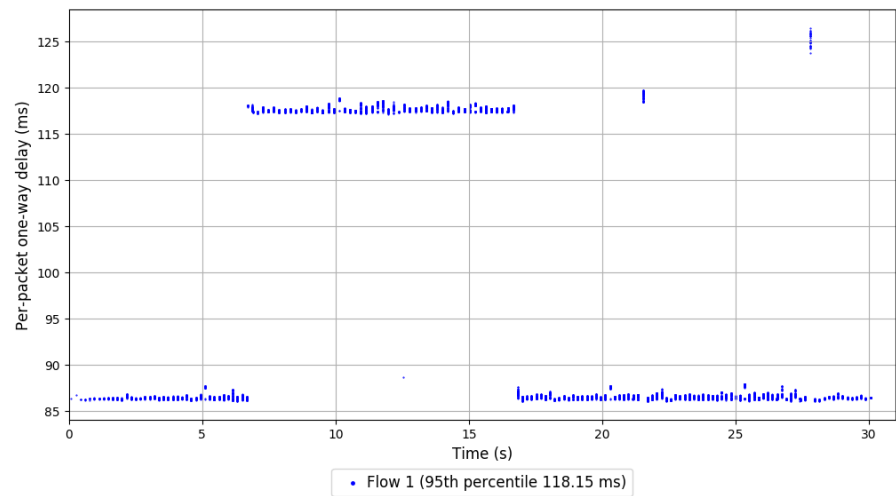
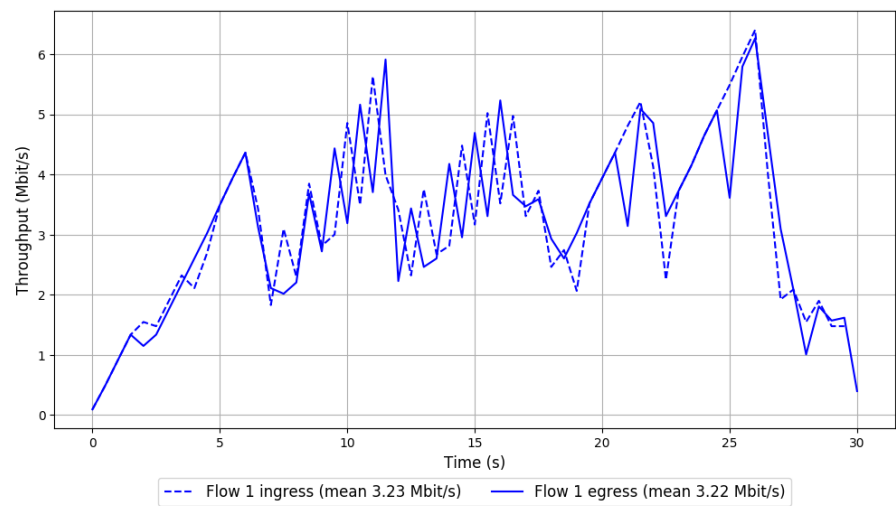
-- Flow 1:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 118.153 ms

Loss rate: 0.23%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-30 08:21:21

End at: 2017-11-30 08:21:51

Below is generated by plot.py at 2017-11-30 09:32:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 117.602 ms

Loss rate: 0.86%

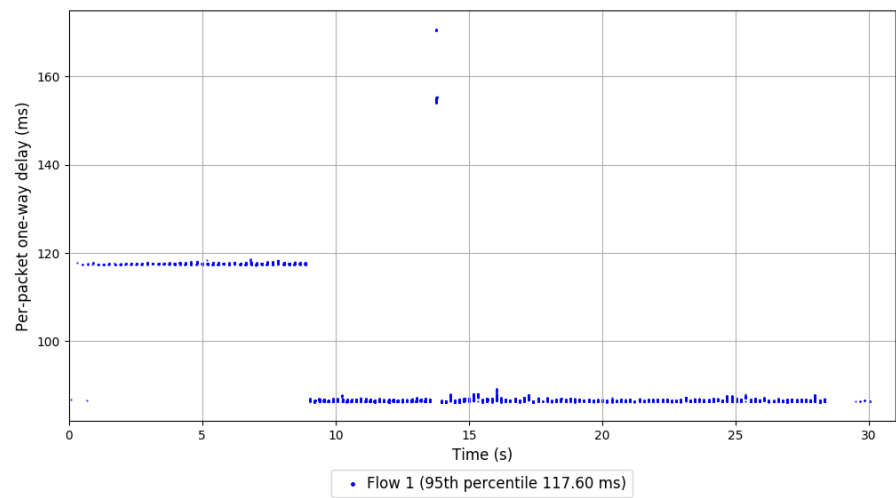
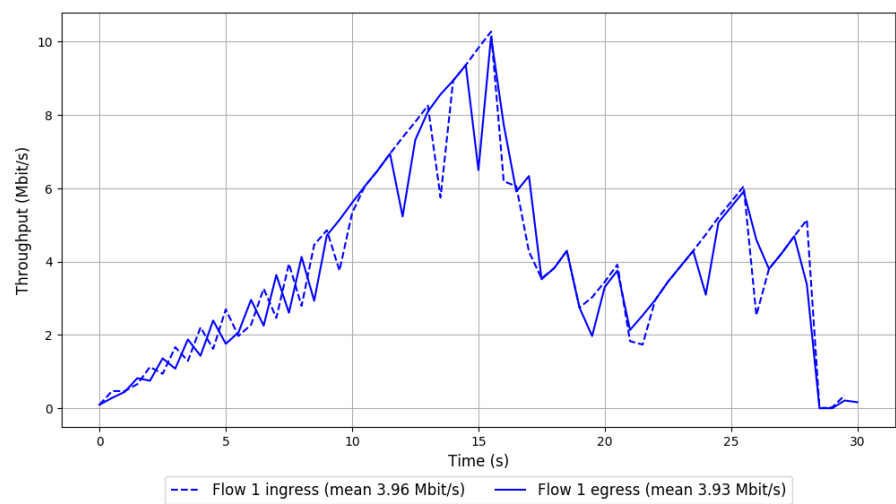
-- Flow 1:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 117.602 ms

Loss rate: 0.86%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-30 08:31:46

End at: 2017-11-30 08:32:16

Below is generated by plot.py at 2017-11-30 09:32:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 117.659 ms

Loss rate: 0.00%

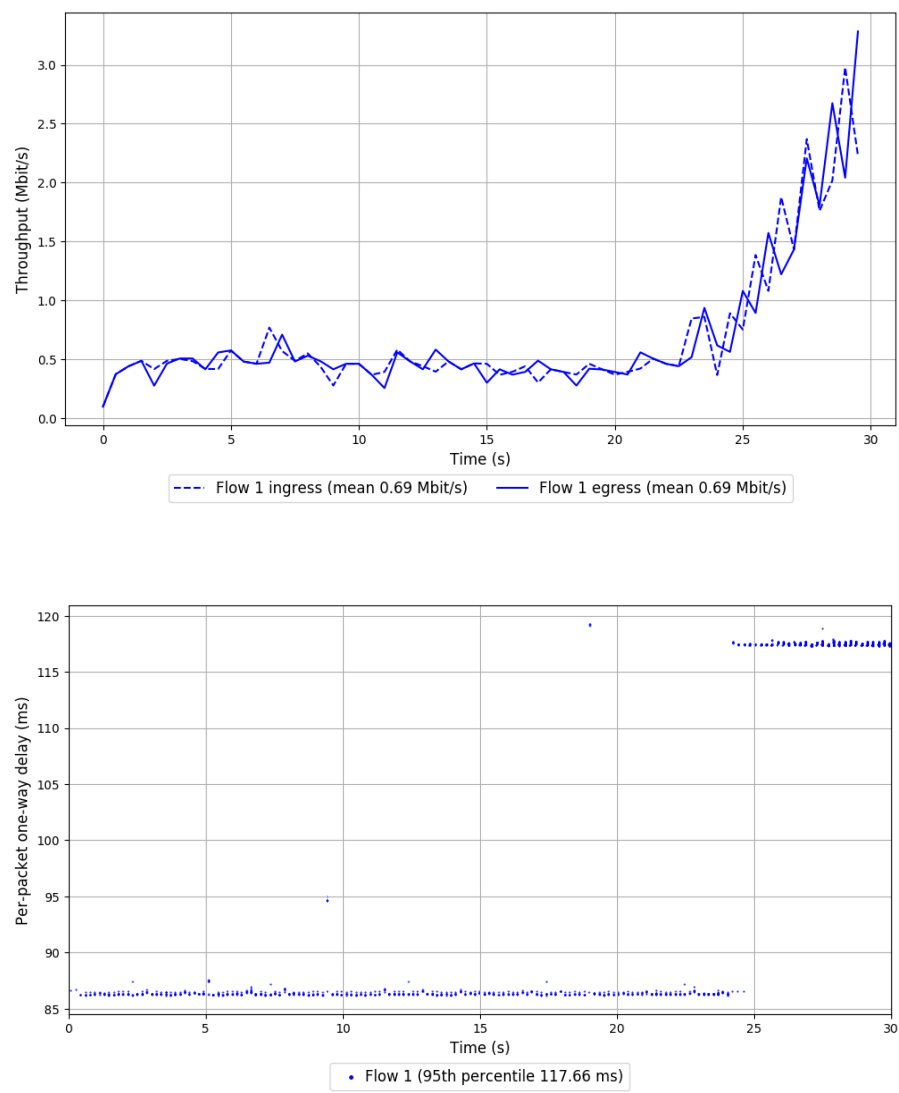
-- Flow 1:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 117.659 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-30 08:42:15

End at: 2017-11-30 08:42:45

Below is generated by plot.py at 2017-11-30 09:32:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 118.138 ms

Loss rate: 0.58%

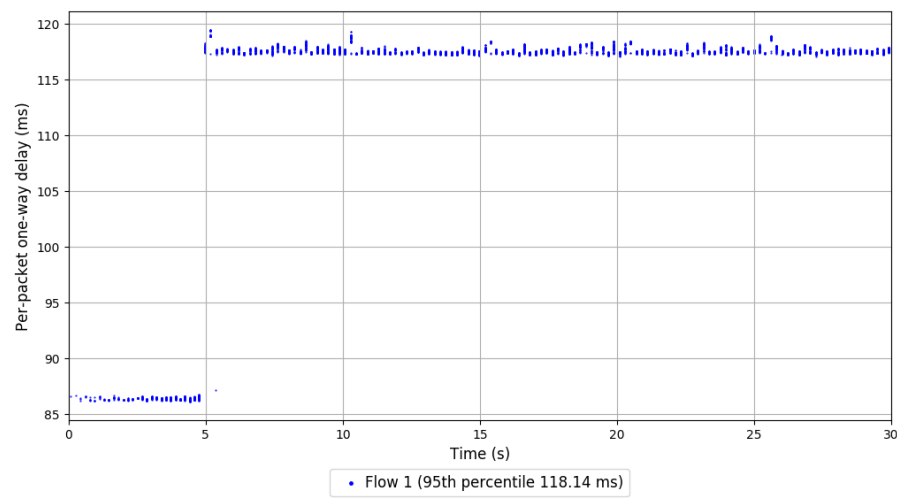
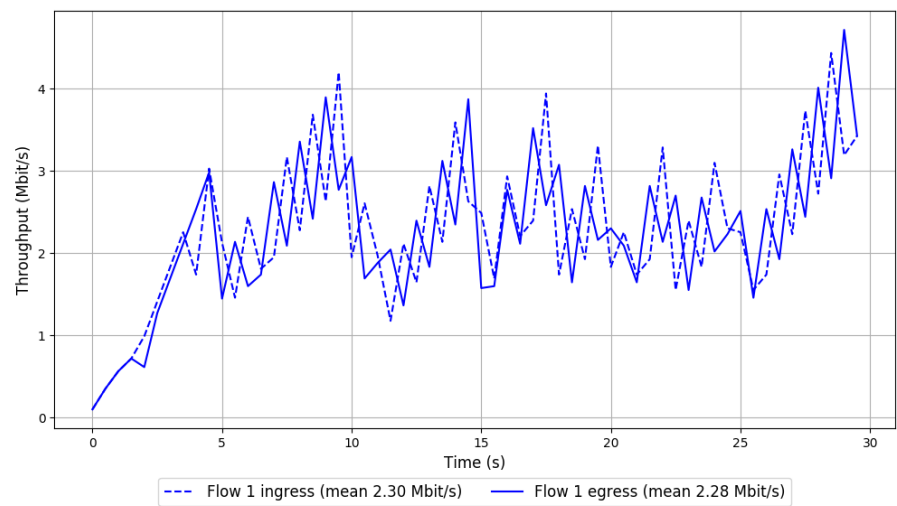
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 118.138 ms

Loss rate: 0.58%

Run 10: Report of LEDBAT — Data Link

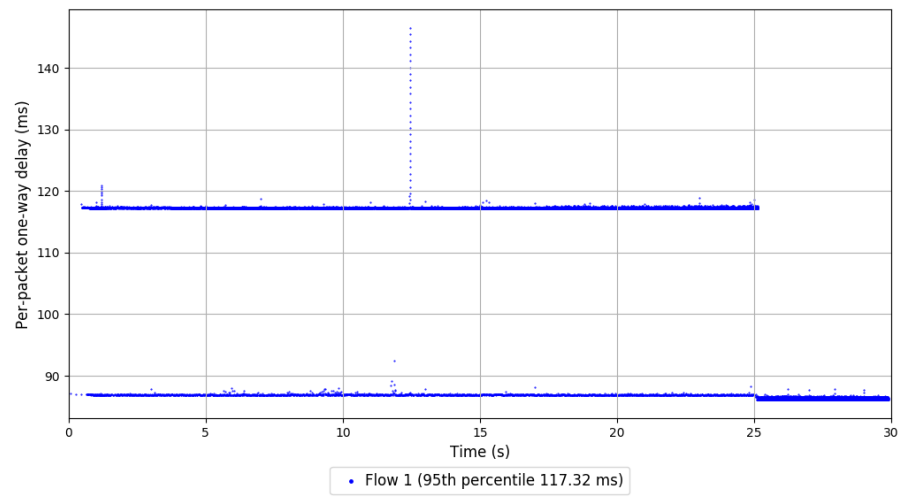
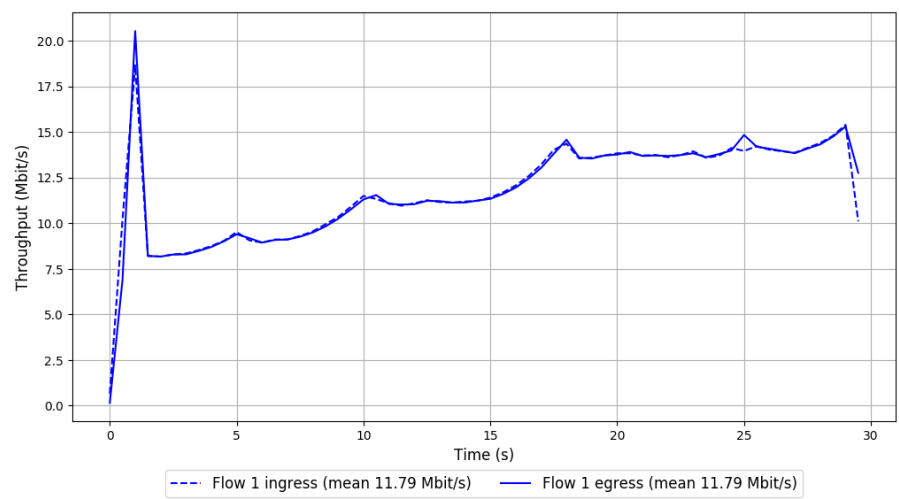


```
Run 1: Statistics of PCC

Start at: 2017-11-30 07:04:35
End at: 2017-11-30 07:05:05

# Below is generated by plot.py at 2017-11-30 09:32:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 117.316 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 117.316 ms
Loss rate: 0.00%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-30 07:14:31

End at: 2017-11-30 07:15:01

Below is generated by plot.py at 2017-11-30 09:40:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 502.22 Mbit/s

95th percentile per-packet one-way delay: 182.756 ms

Loss rate: 0.71%

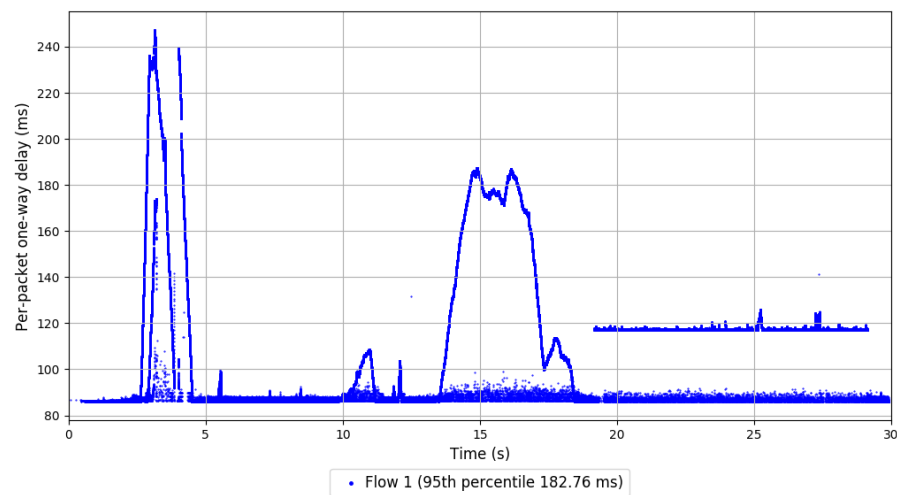
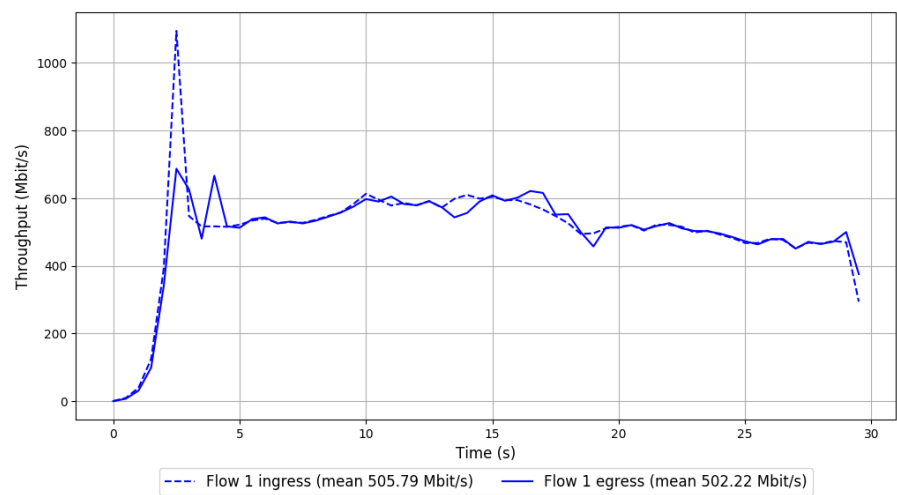
-- Flow 1:

Average throughput: 502.22 Mbit/s

95th percentile per-packet one-way delay: 182.756 ms

Loss rate: 0.71%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-30 07:24:41

End at: 2017-11-30 07:25:11

Below is generated by plot.py at 2017-11-30 09:40:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.48 Mbit/s

95th percentile per-packet one-way delay: 117.327 ms

Loss rate: 0.17%

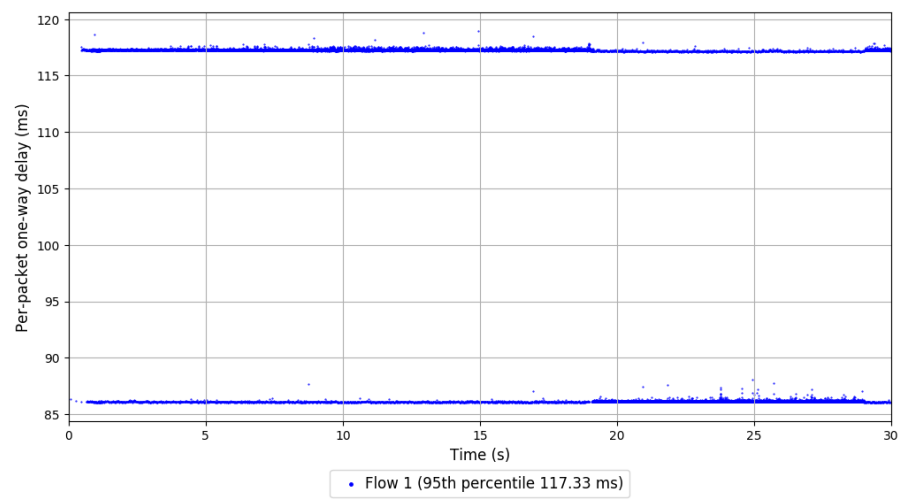
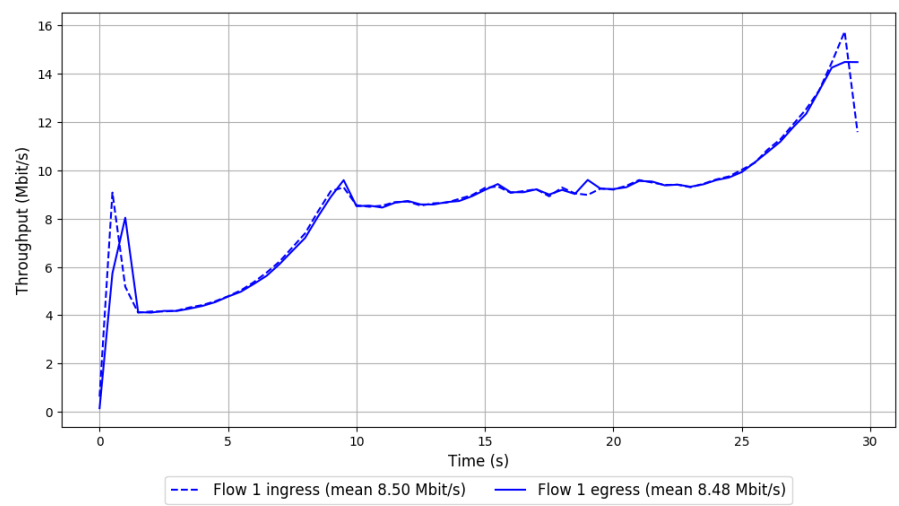
-- Flow 1:

Average throughput: 8.48 Mbit/s

95th percentile per-packet one-way delay: 117.327 ms

Loss rate: 0.17%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-30 07:34:51

End at: 2017-11-30 07:35:21

Below is generated by plot.py at 2017-11-30 09:41:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 541.85 Mbit/s

95th percentile per-packet one-way delay: 216.333 ms

Loss rate: 1.73%

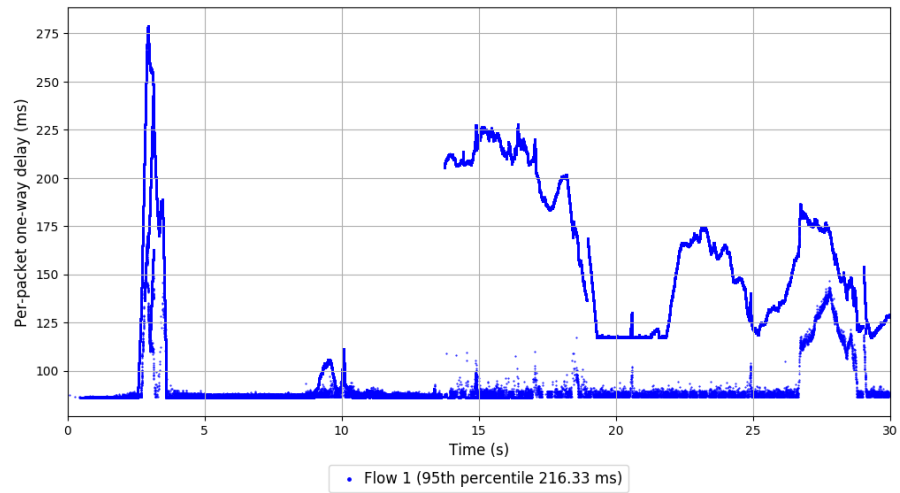
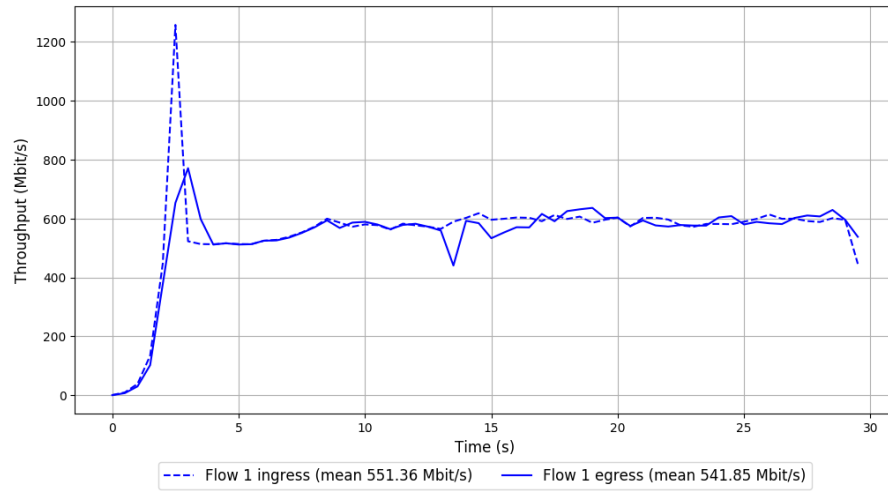
-- Flow 1:

Average throughput: 541.85 Mbit/s

95th percentile per-packet one-way delay: 216.333 ms

Loss rate: 1.73%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-30 07:45:24

End at: 2017-11-30 07:45:54

Below is generated by plot.py at 2017-11-30 09:41:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 533.47 Mbit/s

95th percentile per-packet one-way delay: 168.755 ms

Loss rate: 0.78%

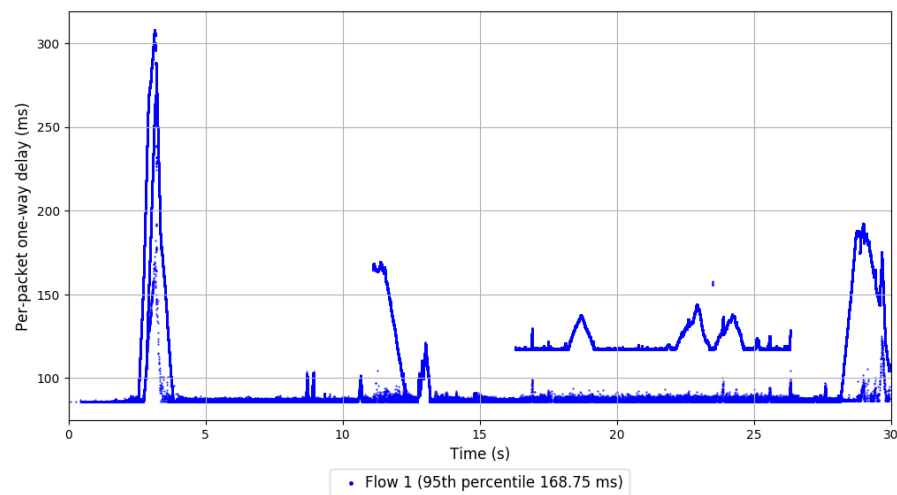
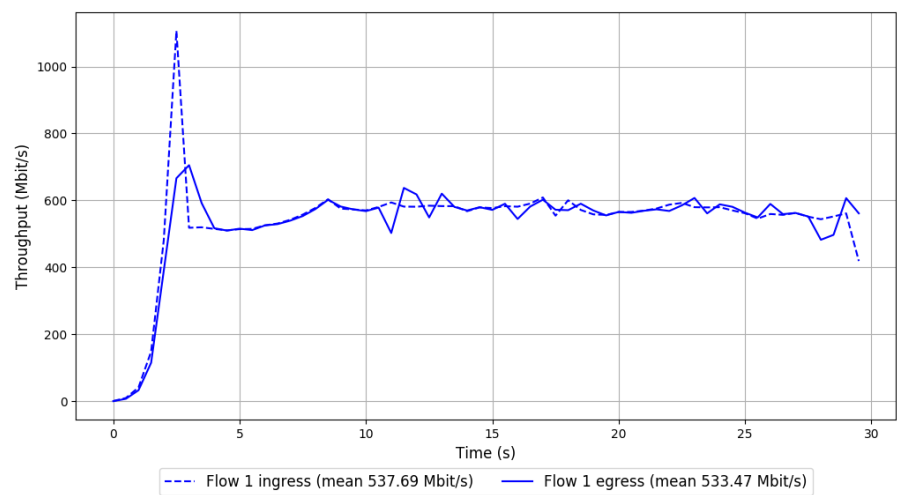
-- Flow 1:

Average throughput: 533.47 Mbit/s

95th percentile per-packet one-way delay: 168.755 ms

Loss rate: 0.78%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-30 07:55:45

End at: 2017-11-30 07:56:15

Below is generated by plot.py at 2017-11-30 09:41:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.12 Mbit/s

95th percentile per-packet one-way delay: 175.146 ms

Loss rate: 0.49%

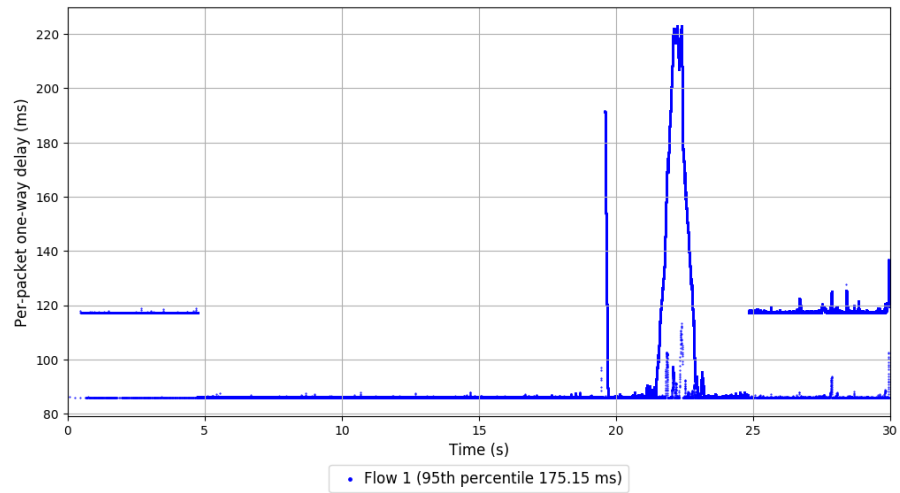
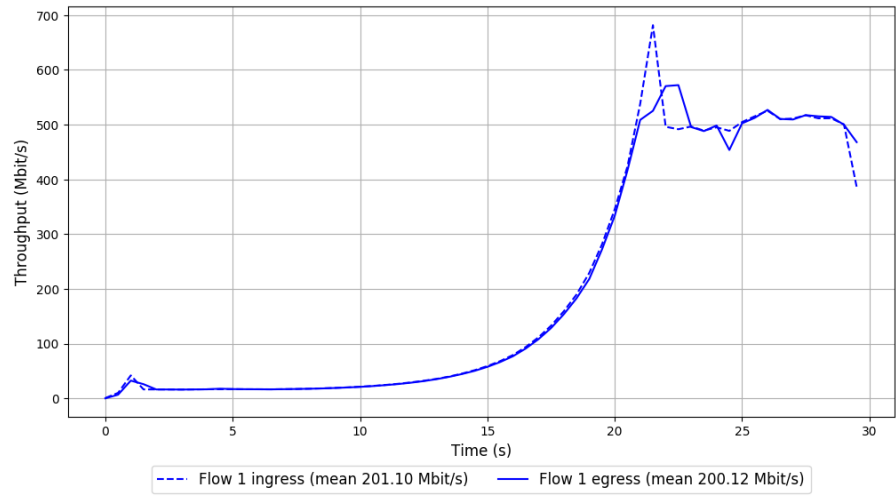
-- Flow 1:

Average throughput: 200.12 Mbit/s

95th percentile per-packet one-way delay: 175.146 ms

Loss rate: 0.49%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-30 08:05:45

End at: 2017-11-30 08:06:15

Below is generated by plot.py at 2017-11-30 09:41:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.81 Mbit/s

95th percentile per-packet one-way delay: 117.303 ms

Loss rate: 0.00%

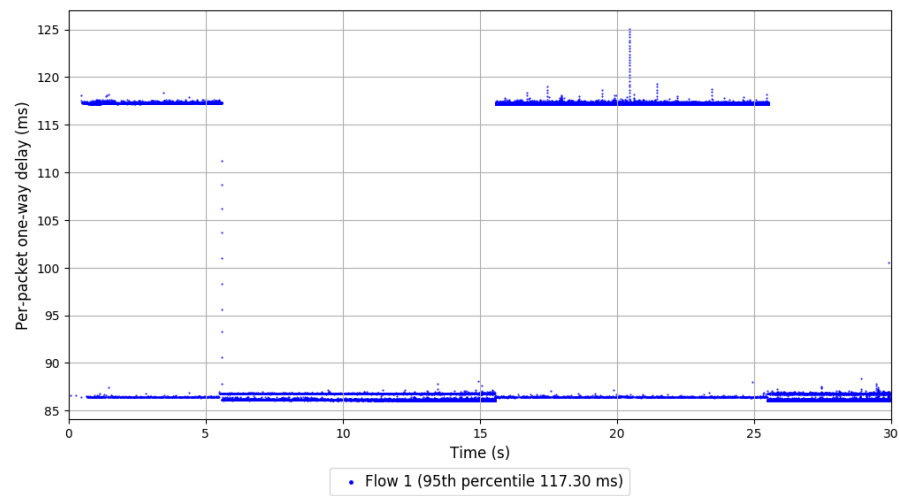
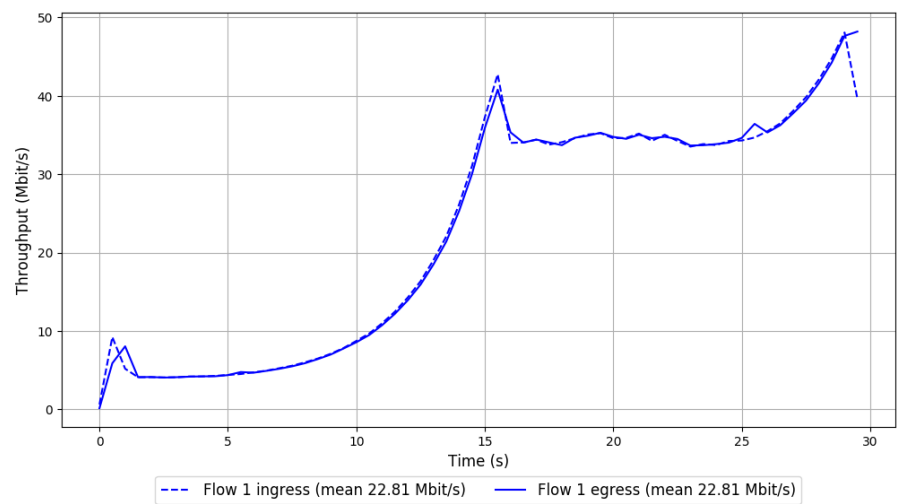
-- Flow 1:

Average throughput: 22.81 Mbit/s

95th percentile per-packet one-way delay: 117.303 ms

Loss rate: 0.00%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-30 08:15:58

End at: 2017-11-30 08:16:28

Below is generated by plot.py at 2017-11-30 09:41:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 513.29 Mbit/s

95th percentile per-packet one-way delay: 203.317 ms

Loss rate: 1.49%

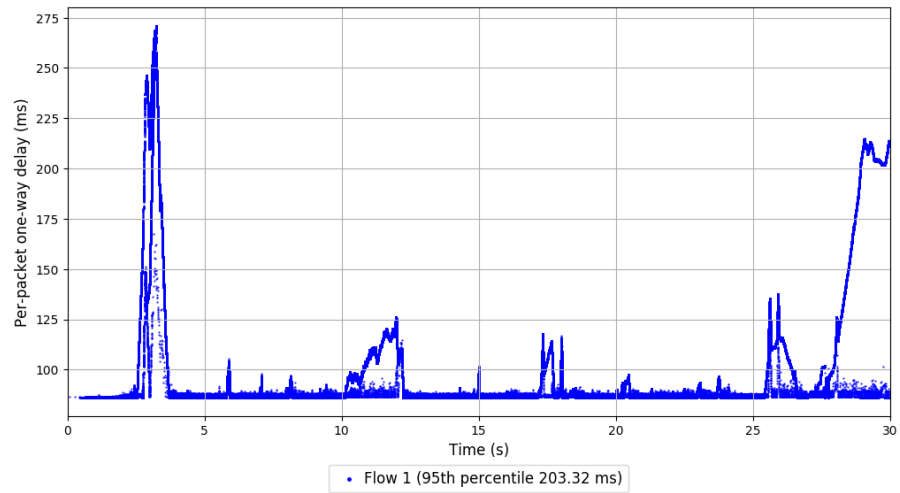
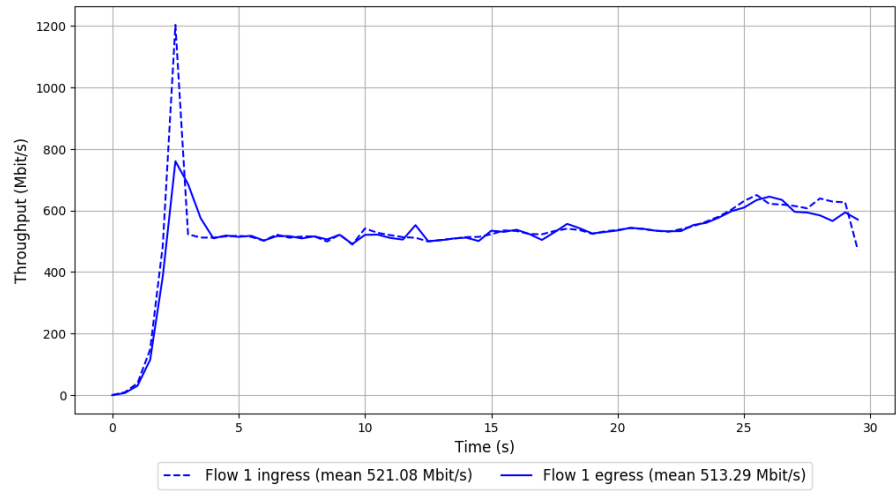
-- Flow 1:

Average throughput: 513.29 Mbit/s

95th percentile per-packet one-way delay: 203.317 ms

Loss rate: 1.49%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-30 08:26:34

End at: 2017-11-30 08:27:04

Below is generated by plot.py at 2017-11-30 09:41:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.05 Mbit/s

95th percentile per-packet one-way delay: 117.311 ms

Loss rate: 0.28%

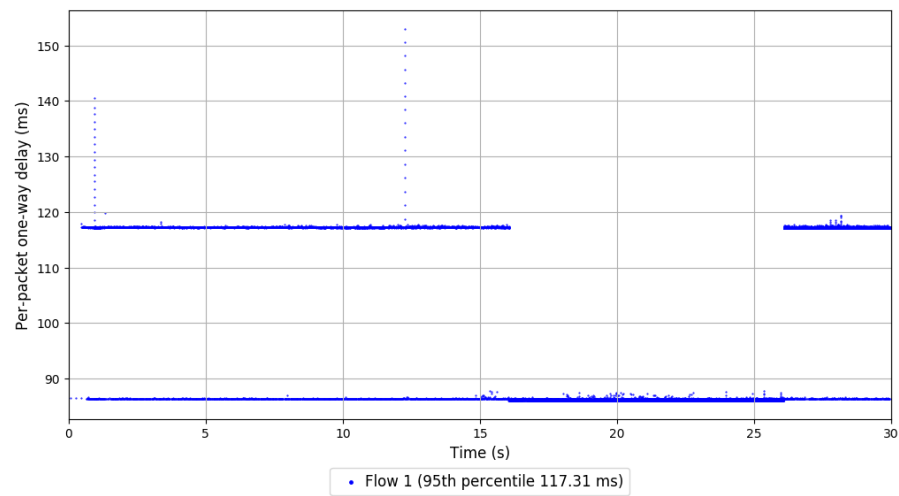
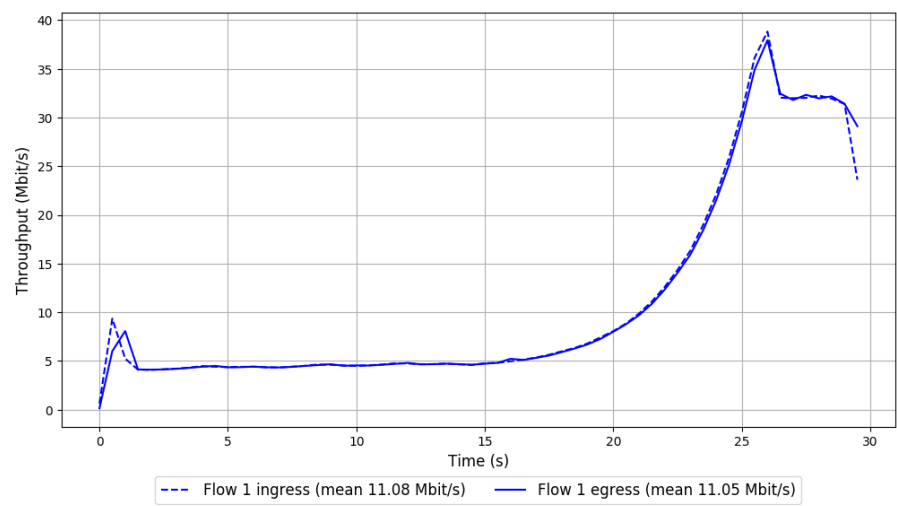
-- Flow 1:

Average throughput: 11.05 Mbit/s

95th percentile per-packet one-way delay: 117.311 ms

Loss rate: 0.28%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-30 08:37:02

End at: 2017-11-30 08:37:32

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 529.17 Mbit/s

95th percentile per-packet one-way delay: 182.417 ms

Loss rate: 0.88%

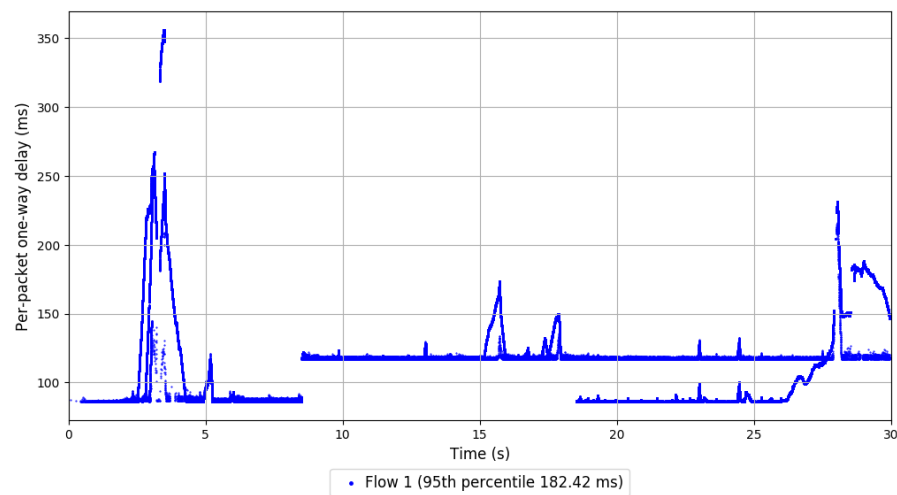
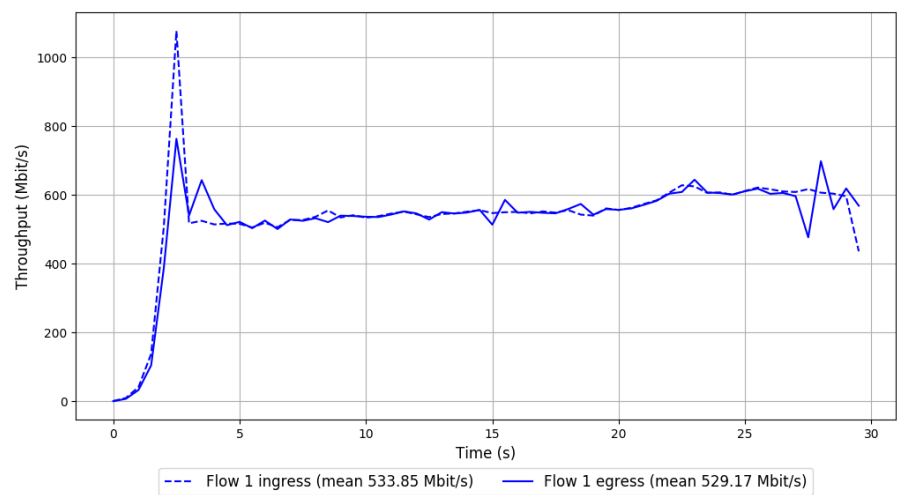
-- Flow 1:

Average throughput: 529.17 Mbit/s

95th percentile per-packet one-way delay: 182.417 ms

Loss rate: 0.88%

Run 10: Report of PCC — Data Link

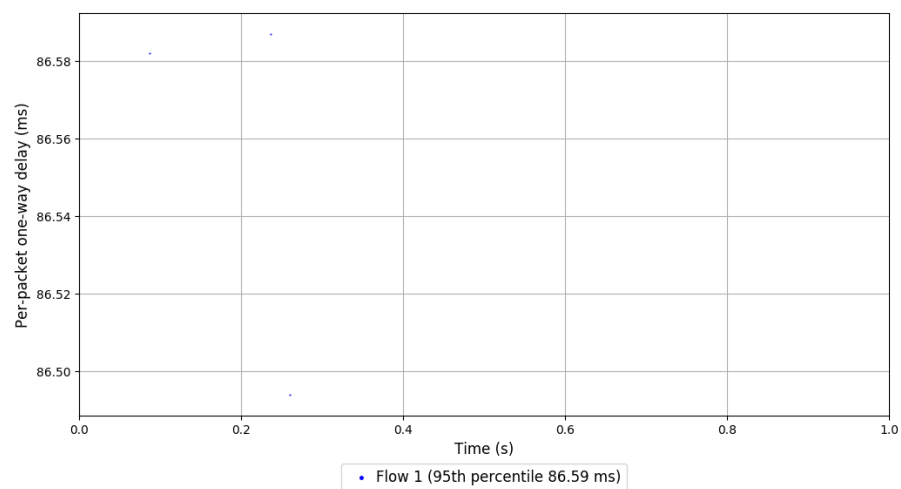
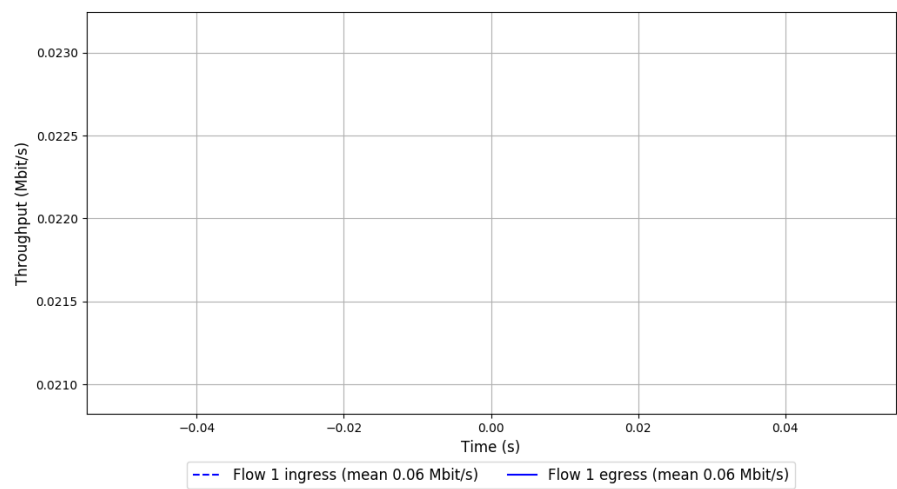


Run 1: Statistics of QUIC Cubic

Start at: 2017-11-30 07:10:49

End at: 2017-11-30 07:11:19

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-30 07:21:04

End at: 2017-11-30 07:21:34

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 86.207 ms

Loss rate: 3.61%

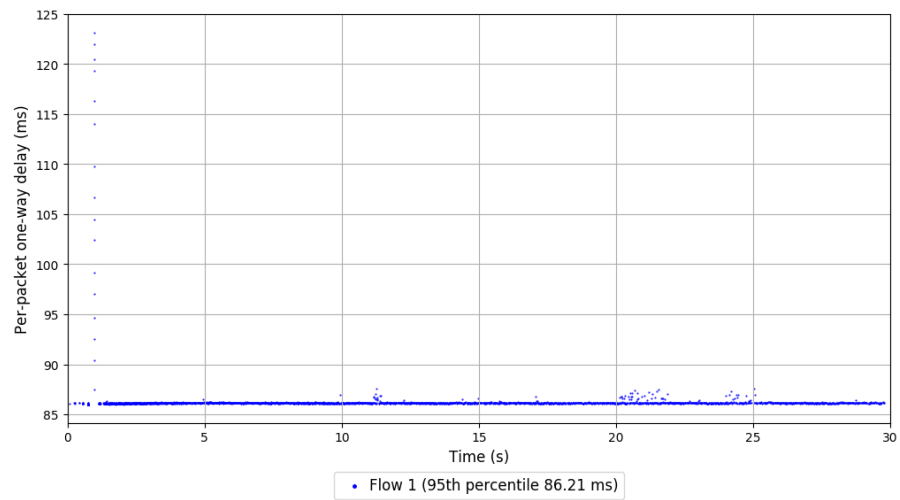
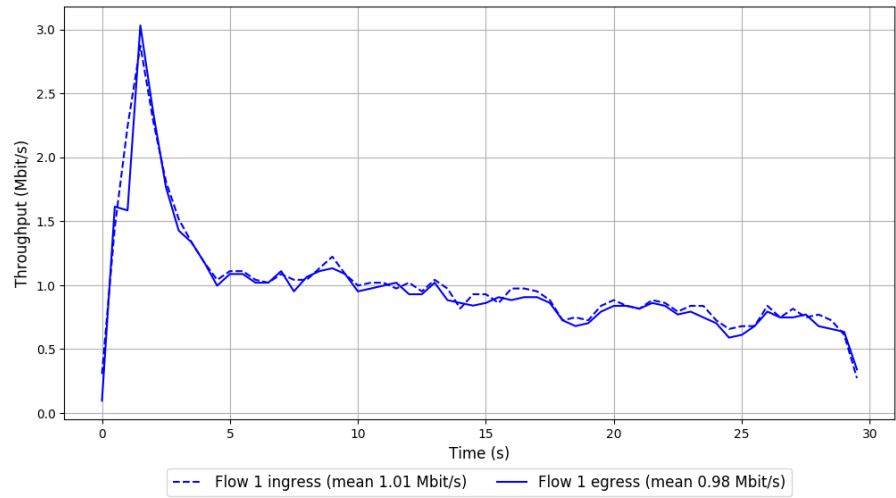
-- Flow 1:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 86.207 ms

Loss rate: 3.61%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-30 07:30:59

End at: 2017-11-30 07:31:29

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.40 Mbit/s

95th percentile per-packet one-way delay: 117.282 ms

Loss rate: 0.00%

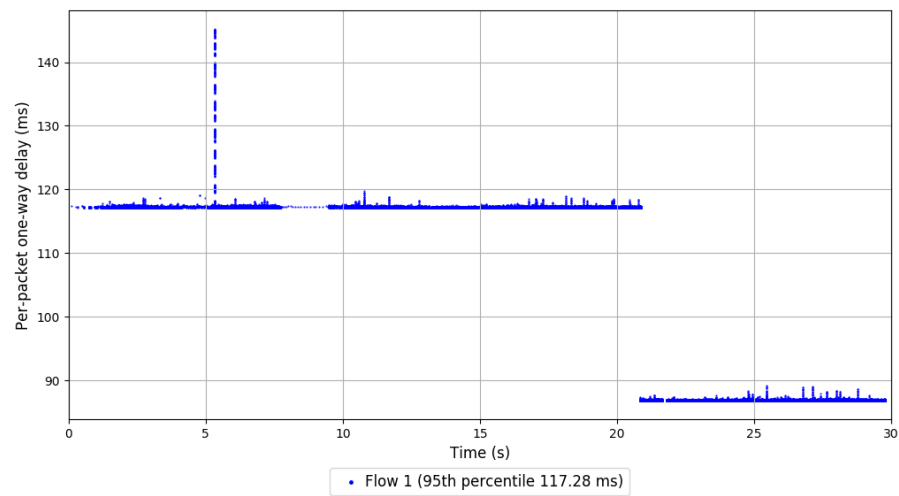
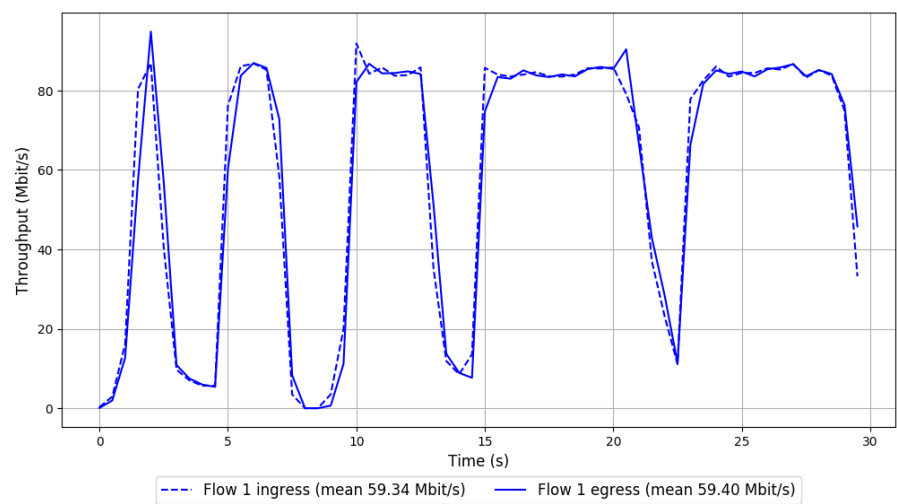
-- Flow 1:

Average throughput: 59.40 Mbit/s

95th percentile per-packet one-way delay: 117.282 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-30 07:41:36

End at: 2017-11-30 07:42:07

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.34 Mbit/s

95th percentile per-packet one-way delay: 117.281 ms

Loss rate: 0.15%

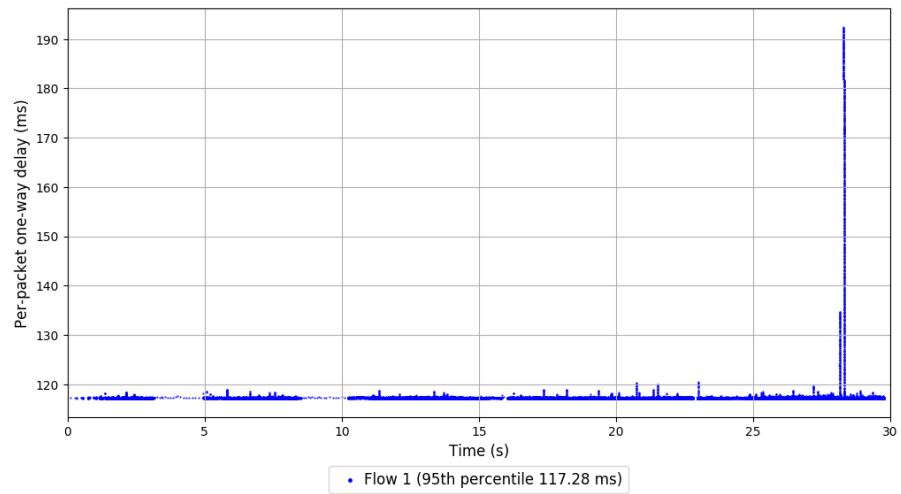
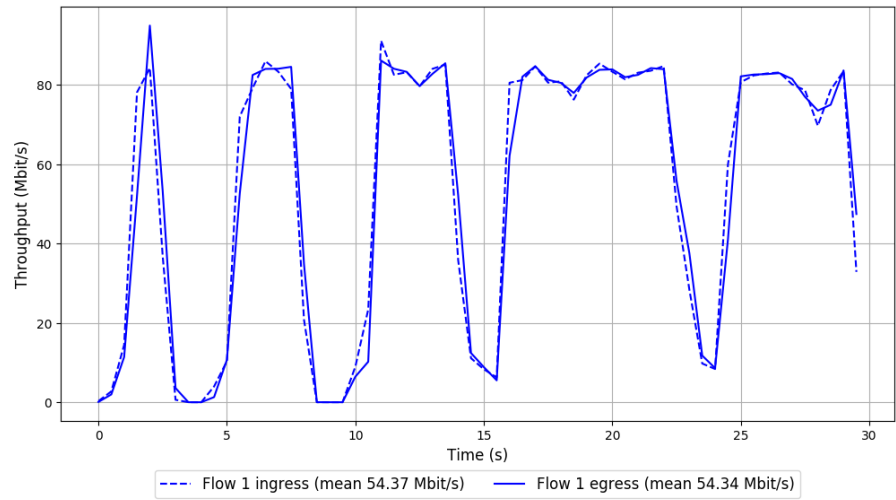
-- Flow 1:

Average throughput: 54.34 Mbit/s

95th percentile per-packet one-way delay: 117.281 ms

Loss rate: 0.15%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-30 07:52:02

End at: 2017-11-30 07:52:32

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.85 Mbit/s

95th percentile per-packet one-way delay: 86.559 ms

Loss rate: 0.00%

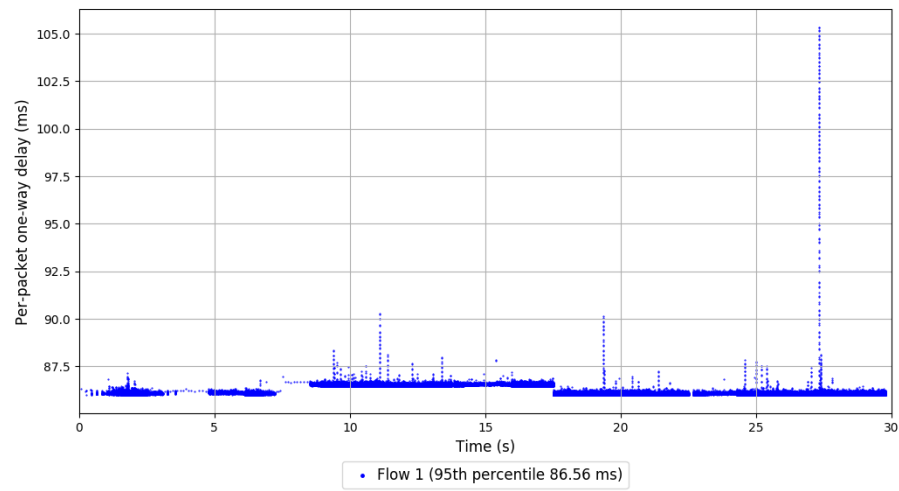
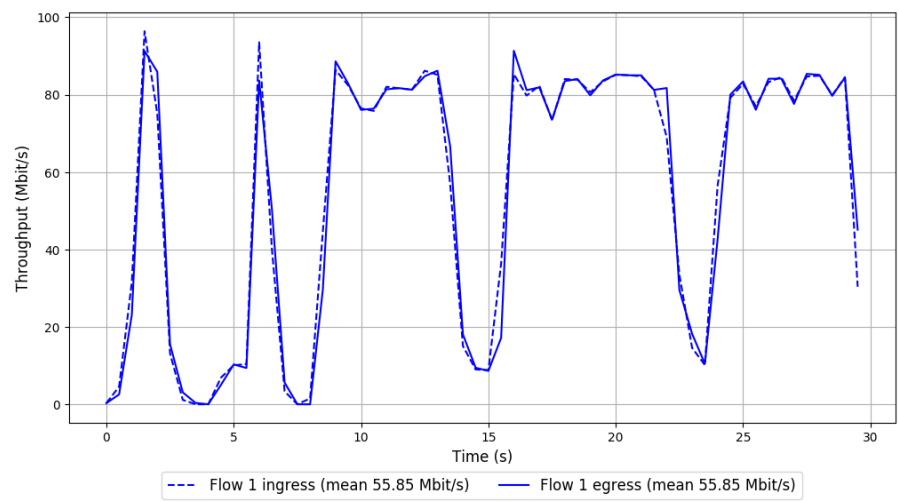
-- Flow 1:

Average throughput: 55.85 Mbit/s

95th percentile per-packet one-way delay: 86.559 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-30 08:02:06

End at: 2017-11-30 08:02:36

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.70 Mbit/s

95th percentile per-packet one-way delay: 86.610 ms

Loss rate: 0.00%

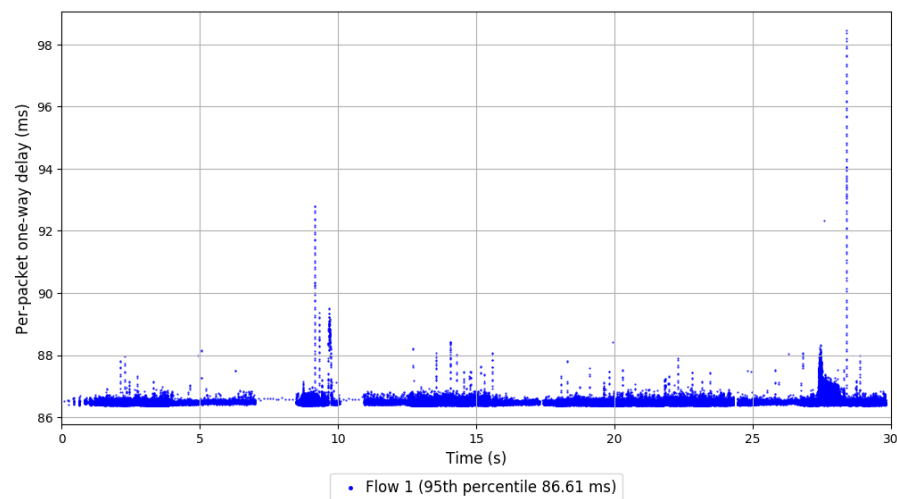
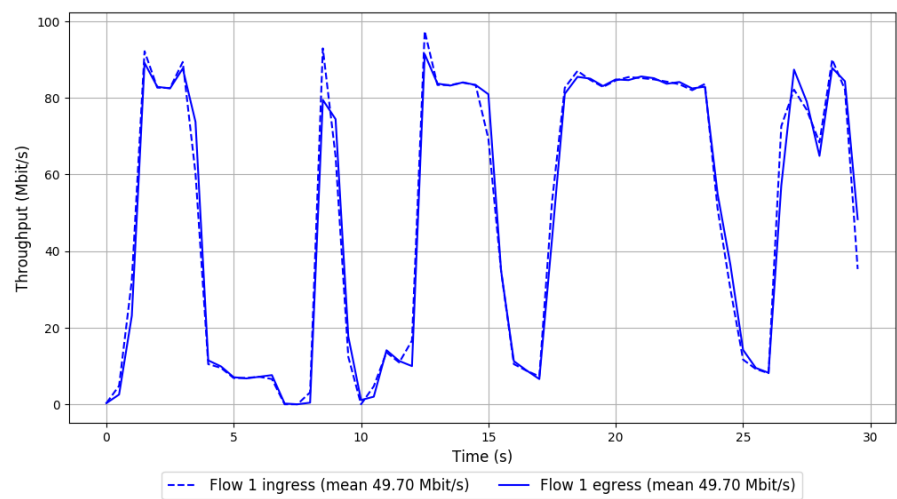
-- Flow 1:

Average throughput: 49.70 Mbit/s

95th percentile per-packet one-way delay: 86.610 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-30 08:12:07

End at: 2017-11-30 08:12:37

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.55 Mbit/s

95th percentile per-packet one-way delay: 86.594 ms

Loss rate: 0.00%

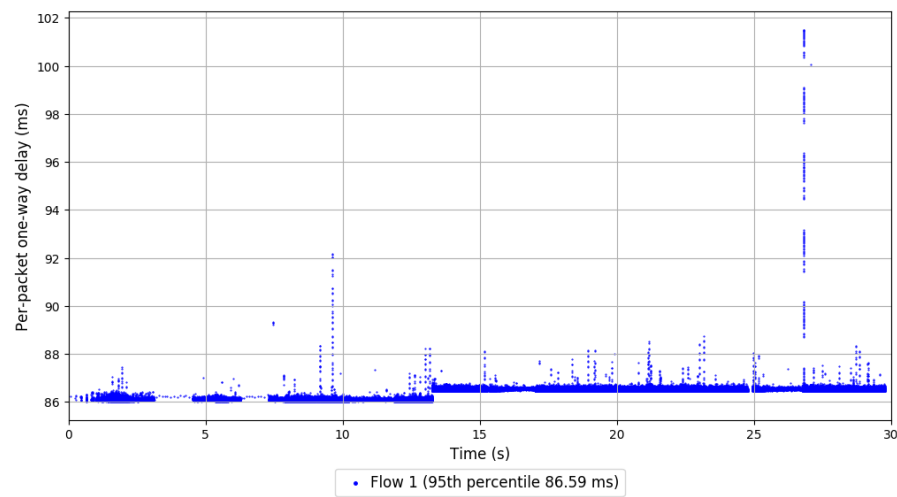
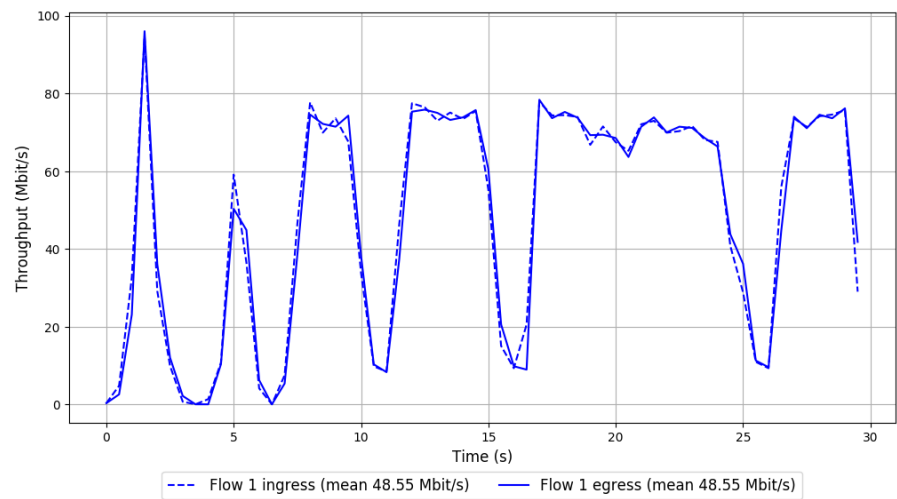
-- Flow 1:

Average throughput: 48.55 Mbit/s

95th percentile per-packet one-way delay: 86.594 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-30 08:22:45

End at: 2017-11-30 08:23:15

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.06 Mbit/s

95th percentile per-packet one-way delay: 86.876 ms

Loss rate: 0.00%

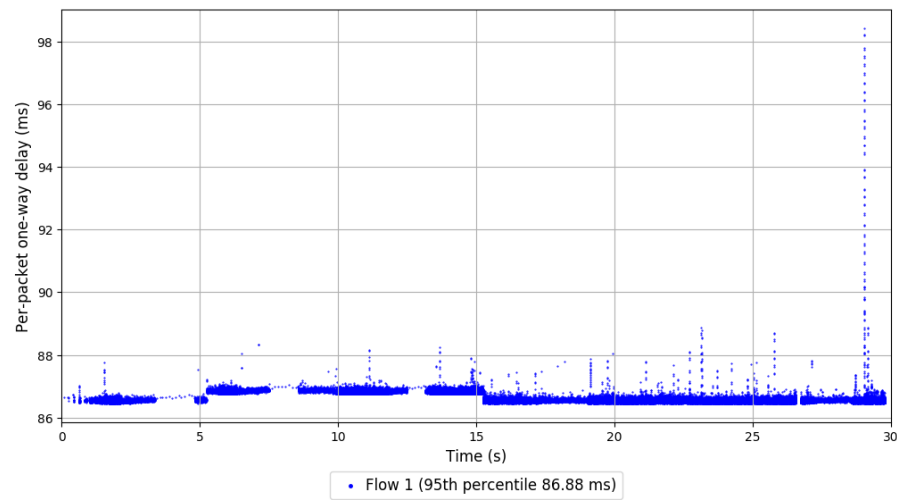
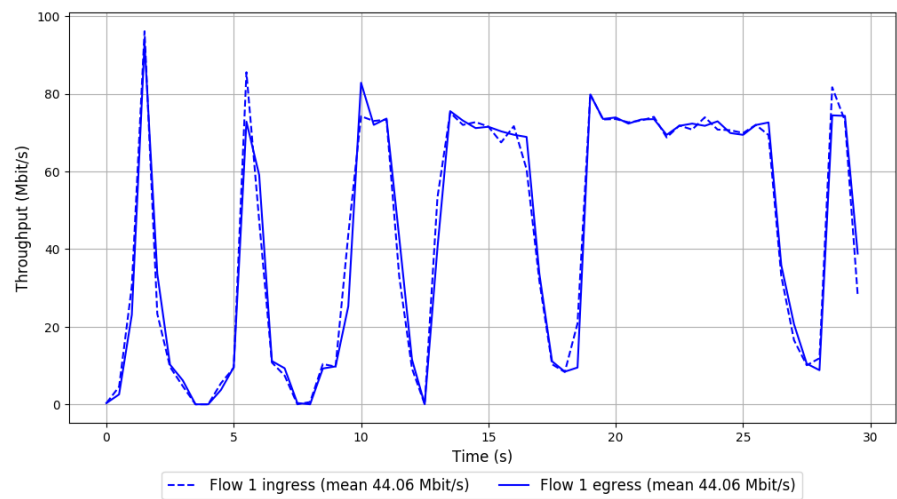
-- Flow 1:

Average throughput: 44.06 Mbit/s

95th percentile per-packet one-way delay: 86.876 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-30 08:33:09

End at: 2017-11-30 08:33:39

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.78 Mbit/s

95th percentile per-packet one-way delay: 86.490 ms

Loss rate: 0.00%

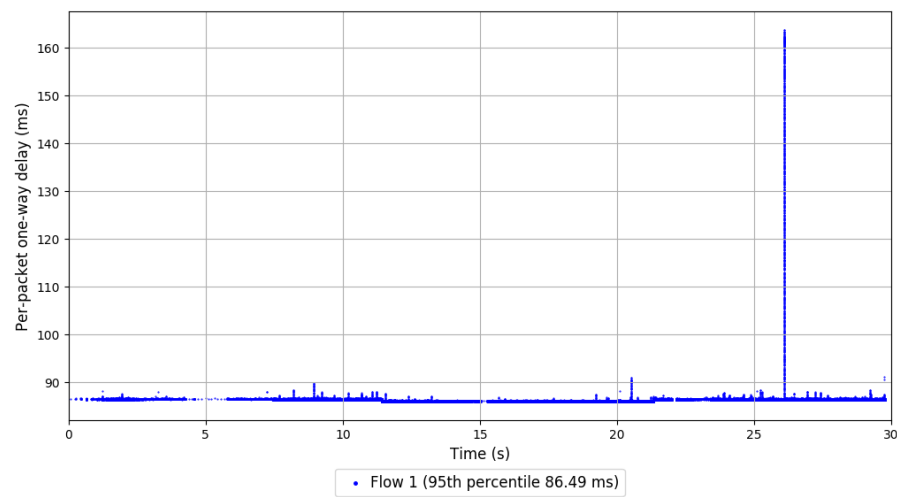
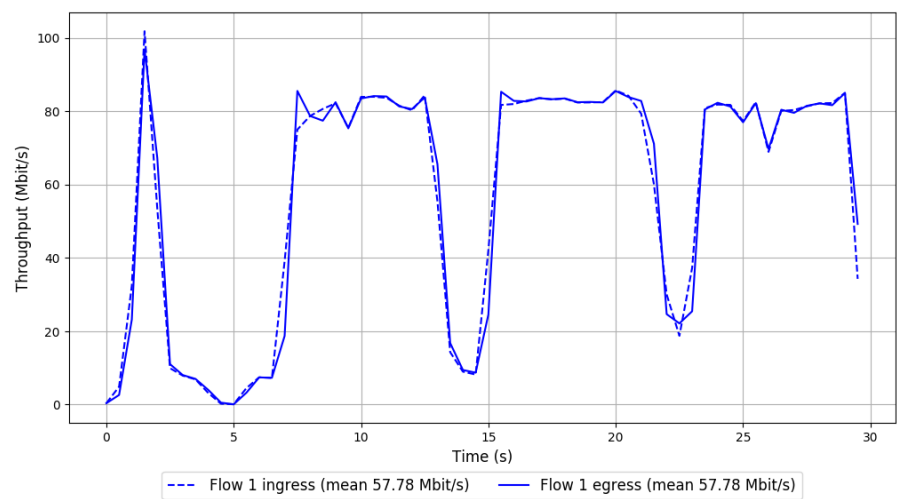
-- Flow 1:

Average throughput: 57.78 Mbit/s

95th percentile per-packet one-way delay: 86.490 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-30 08:43:39

End at: 2017-11-30 08:44:09

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.83 Mbit/s

95th percentile per-packet one-way delay: 86.846 ms

Loss rate: 0.00%

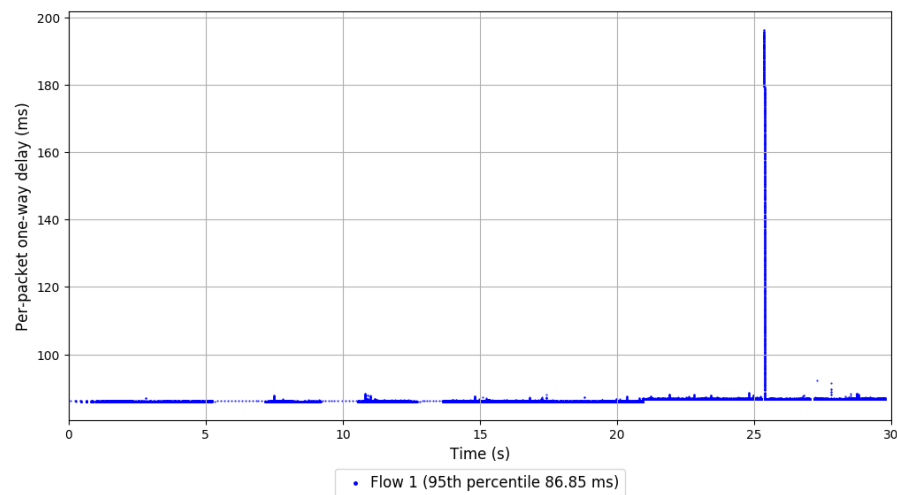
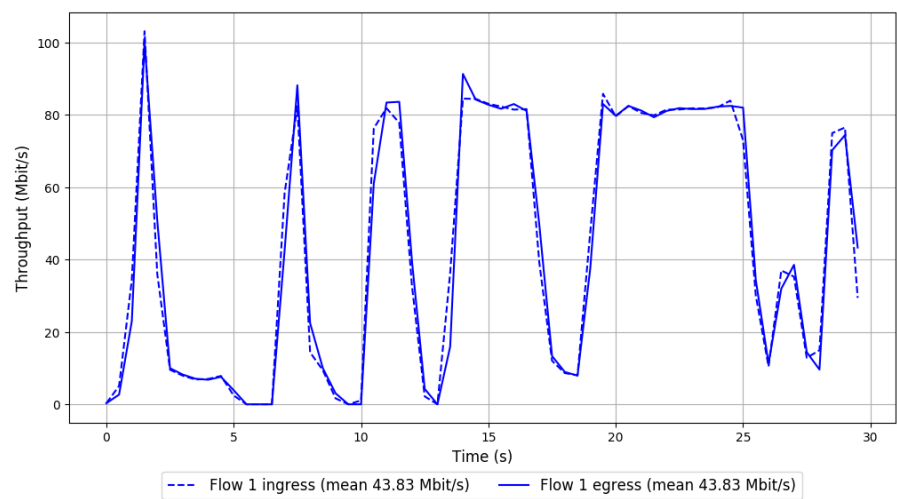
-- Flow 1:

Average throughput: 43.83 Mbit/s

95th percentile per-packet one-way delay: 86.846 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2017-11-30 07:08:47

End at: 2017-11-30 07:09:17

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.417 ms

Loss rate: 0.13%

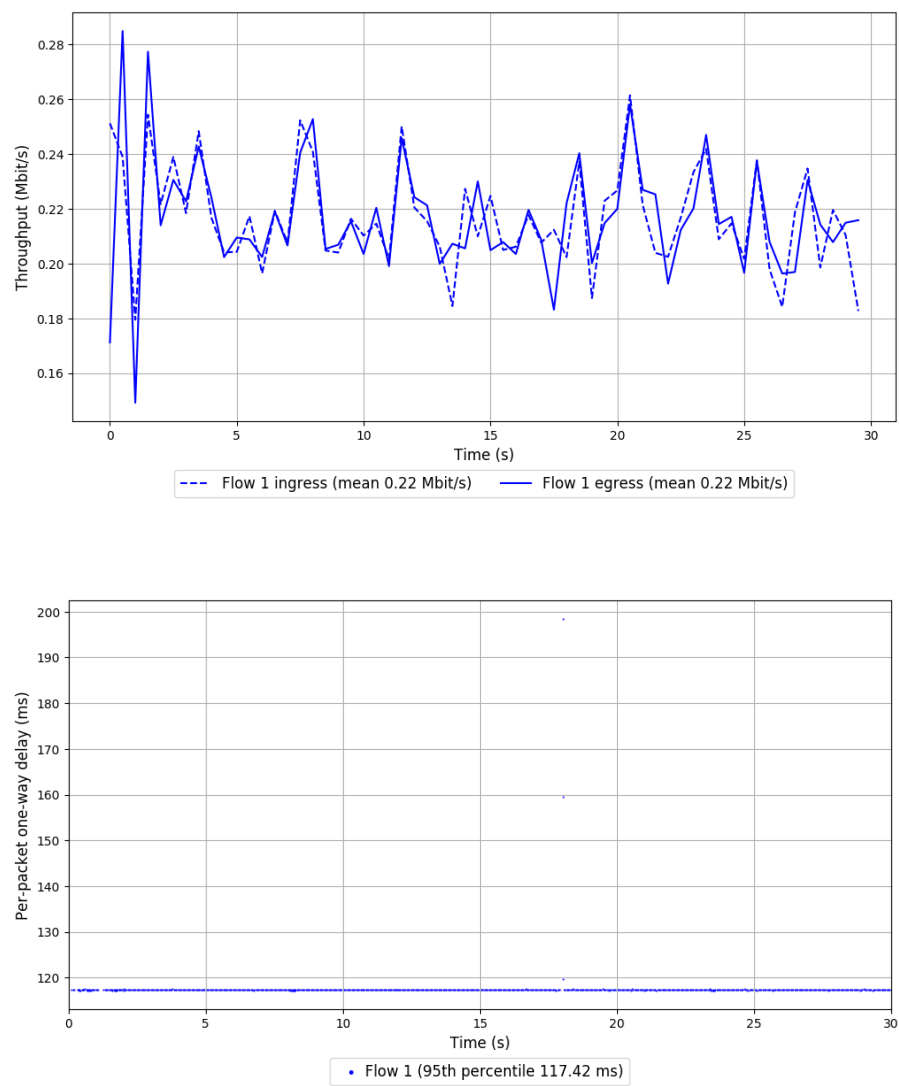
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.417 ms

Loss rate: 0.13%

Run 1: Report of SReAM — Data Link

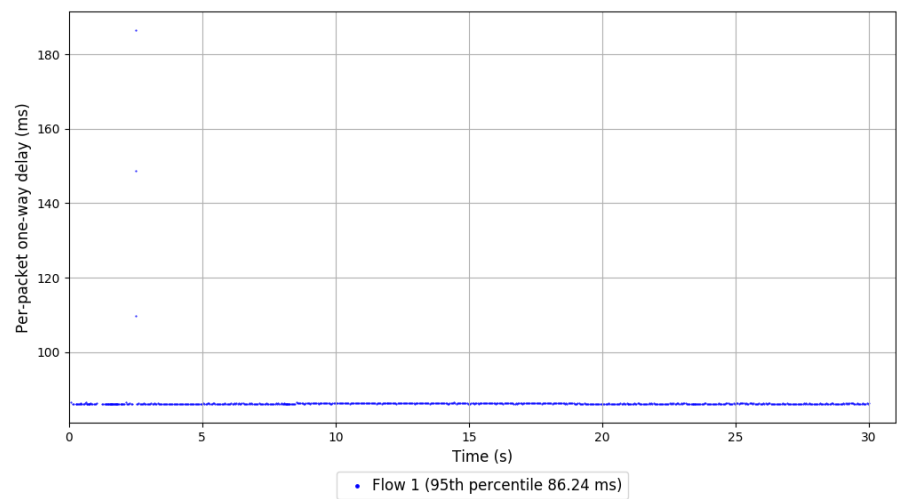
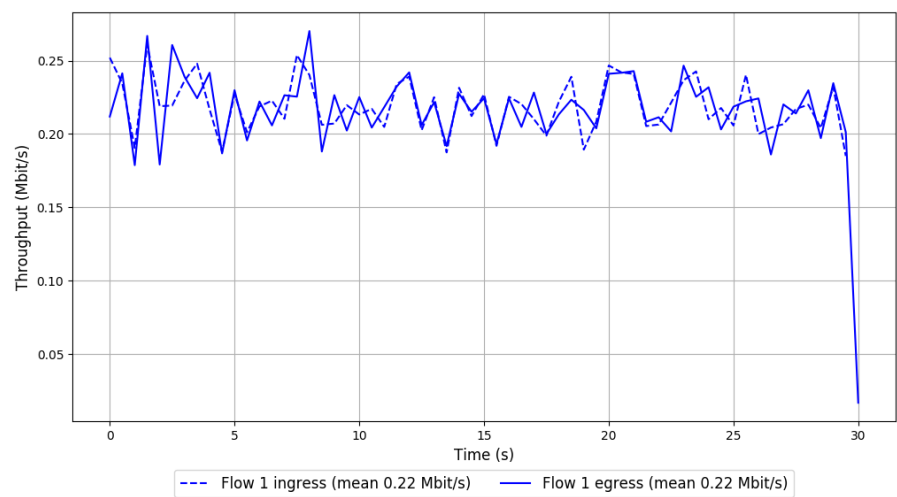


```
Run 2: Statistics of SCReAM

Start at: 2017-11-30 07:19:02
End at: 2017-11-30 07:19:32

# Below is generated by plot.py at 2017-11-30 09:42:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.241 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.241 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-30 07:28:57

End at: 2017-11-30 07:29:27

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 86.641 ms

Loss rate: 0.00%

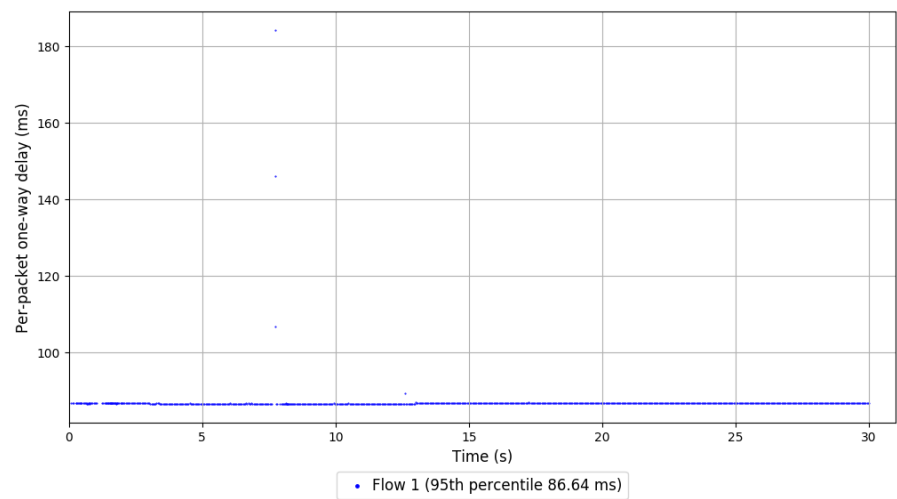
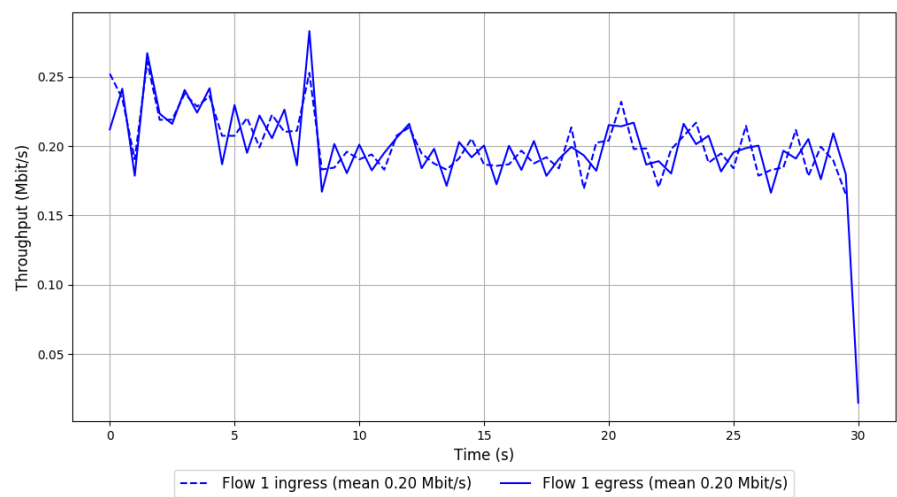
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 86.641 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-30 07:39:34

End at: 2017-11-30 07:40:04

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.358 ms

Loss rate: 0.11%

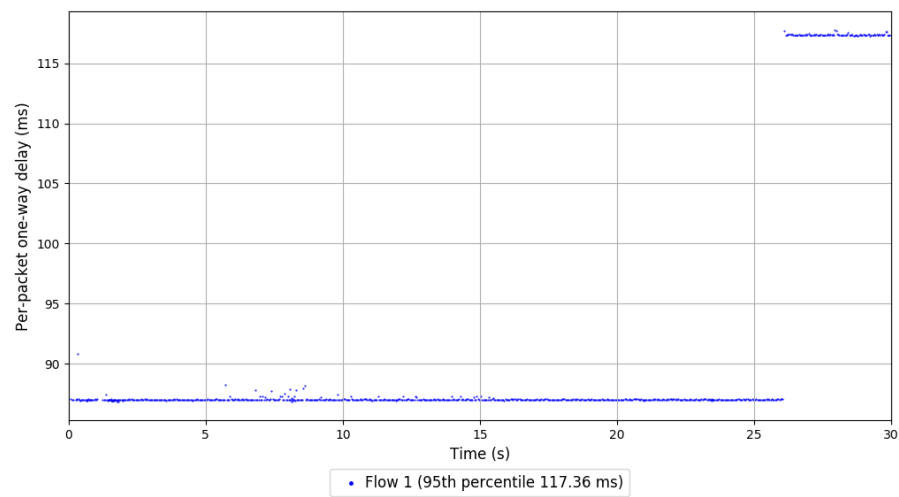
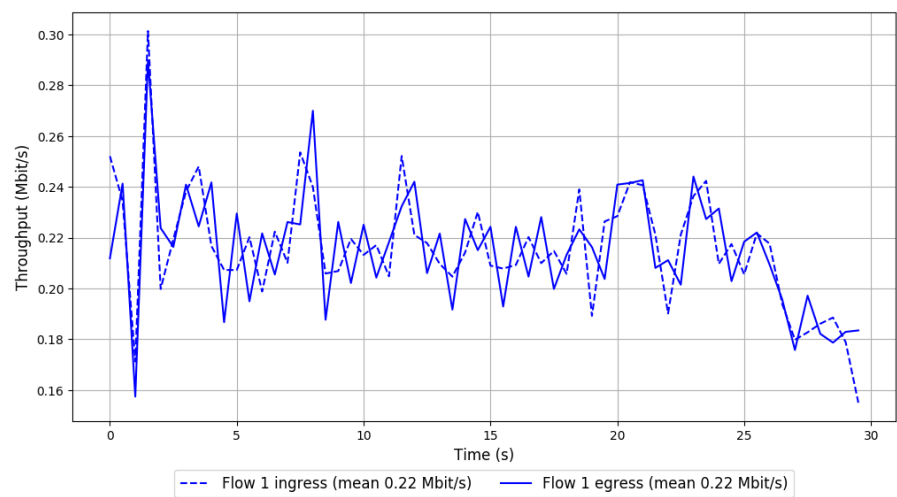
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.358 ms

Loss rate: 0.11%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-30 07:50:01

End at: 2017-11-30 07:50:31

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.452 ms

Loss rate: 0.13%

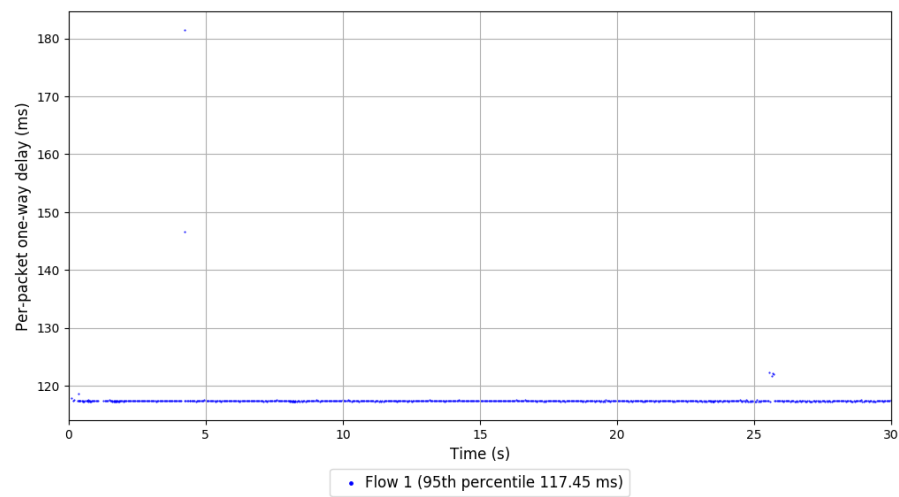
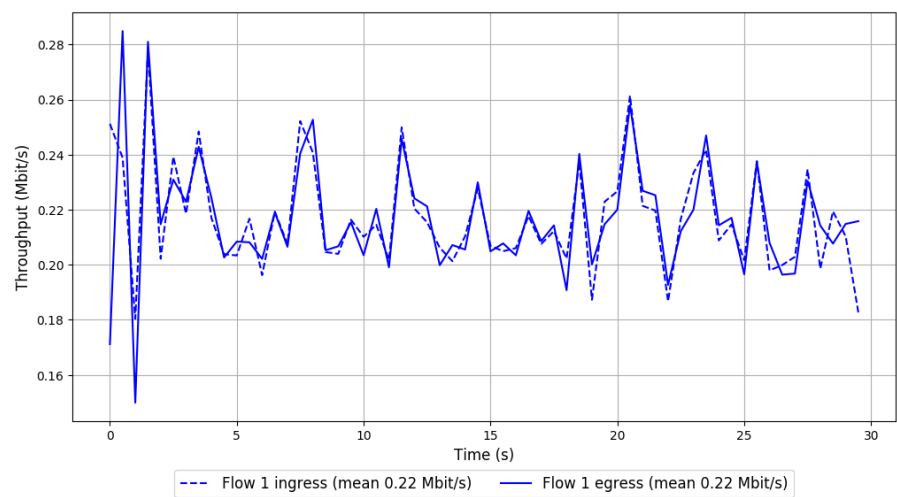
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.452 ms

Loss rate: 0.13%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-30 08:00:03

End at: 2017-11-30 08:00:33

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.729 ms

Loss rate: 0.00%

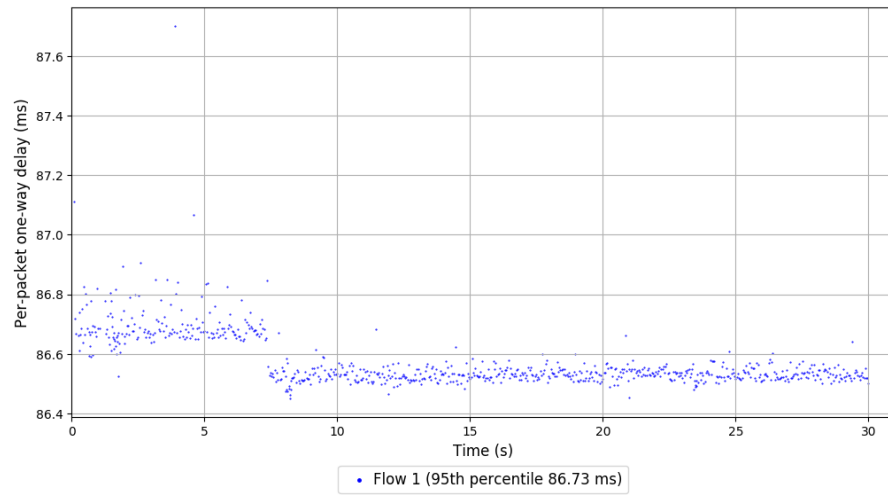
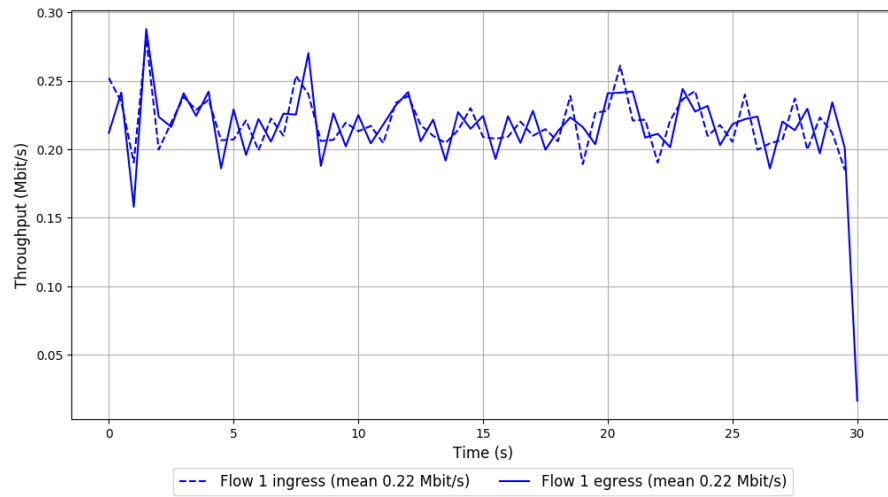
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.729 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-30 08:10:05

End at: 2017-11-30 08:10:35

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.444 ms

Loss rate: 0.13%

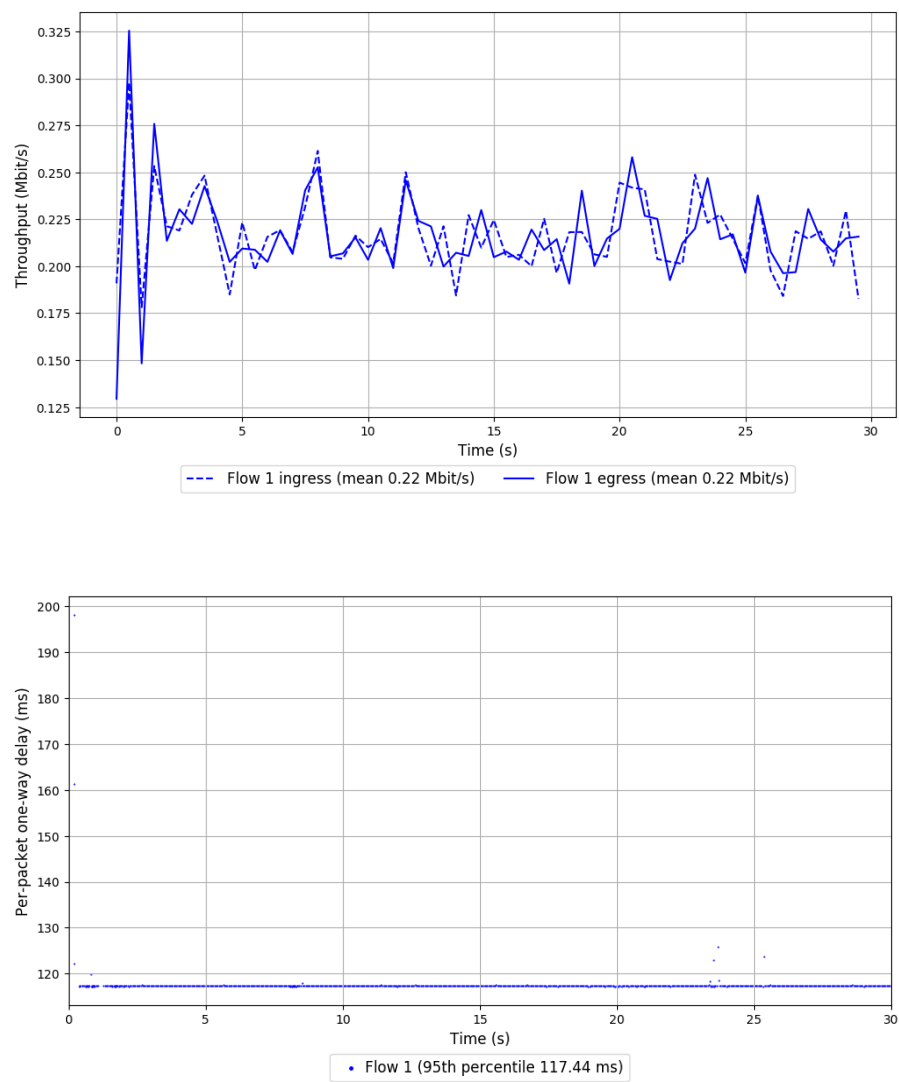
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.444 ms

Loss rate: 0.13%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-30 08:20:42

End at: 2017-11-30 08:21:12

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.284 ms

Loss rate: 0.00%

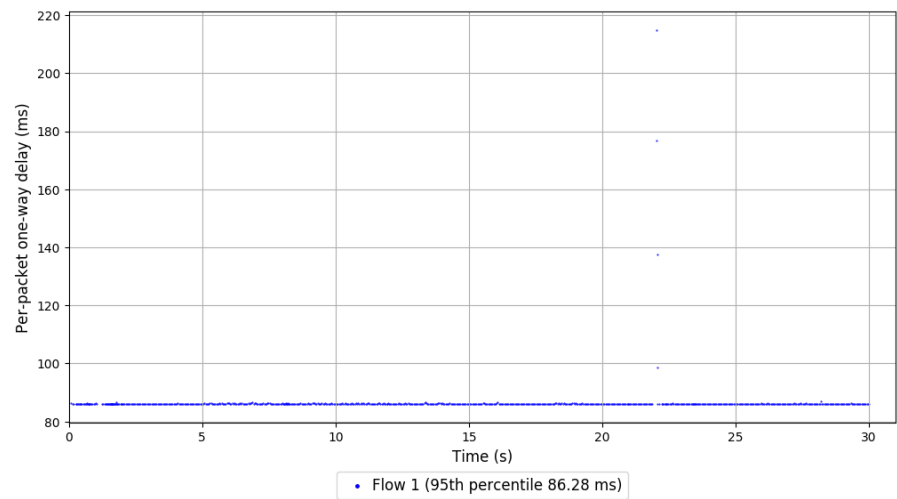
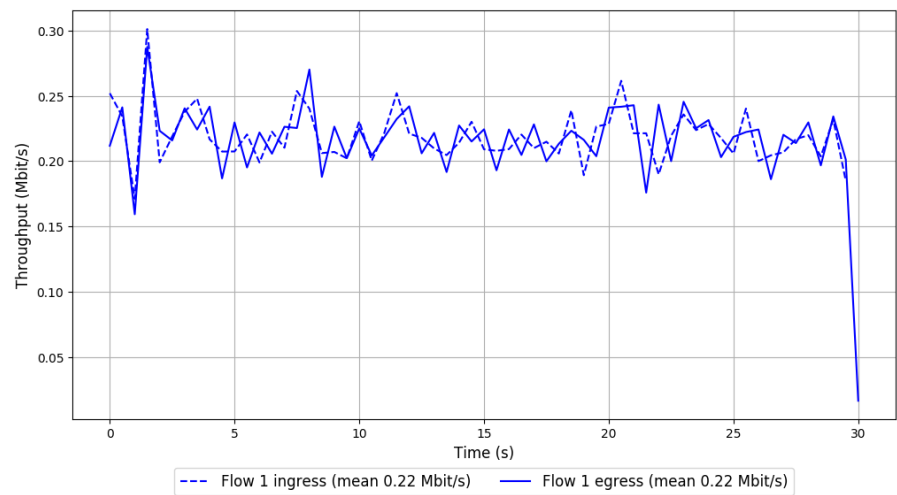
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.284 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-30 08:31:07

End at: 2017-11-30 08:31:37

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.359 ms

Loss rate: 0.00%

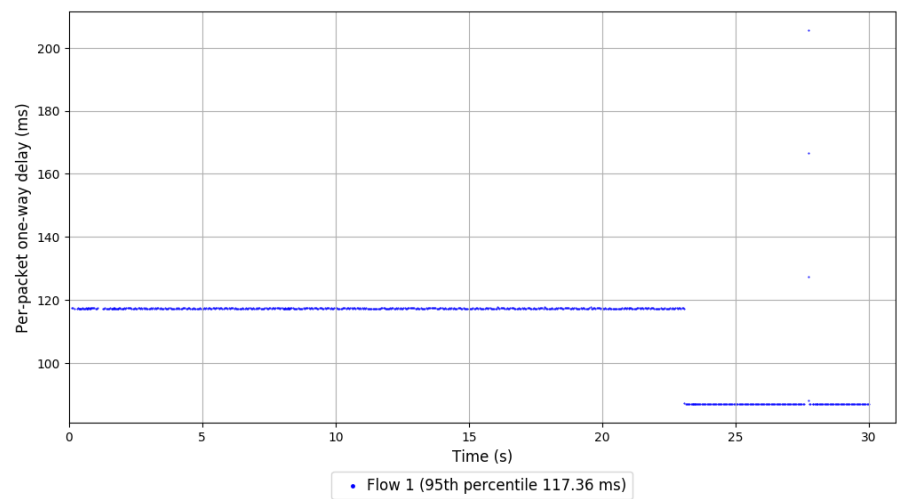
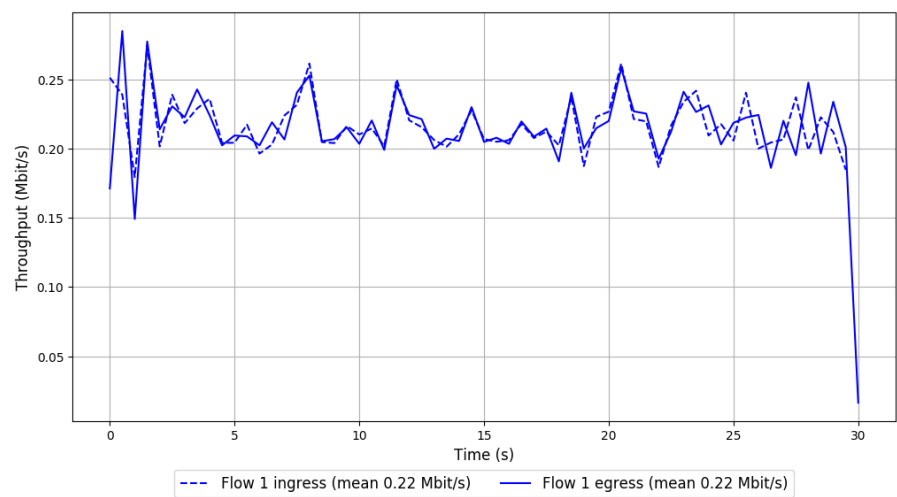
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.359 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-11-30 08:41:36

End at: 2017-11-30 08:42:06

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.639 ms

Loss rate: 0.00%

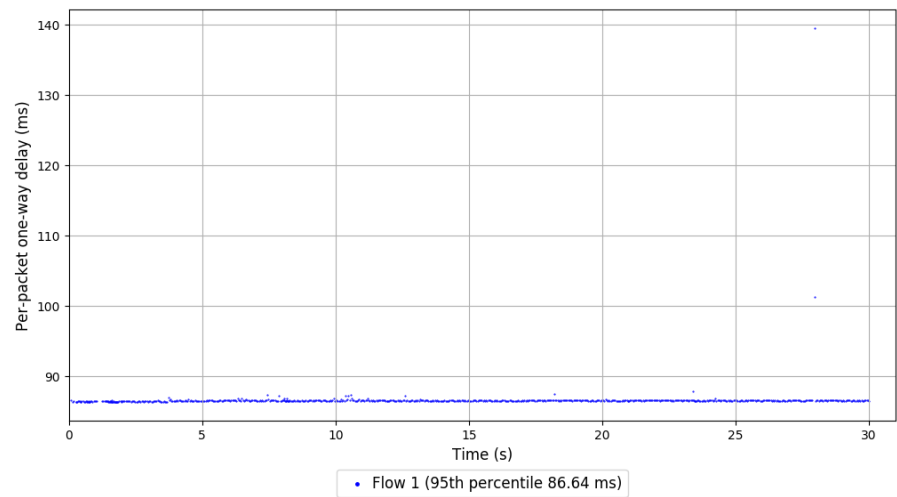
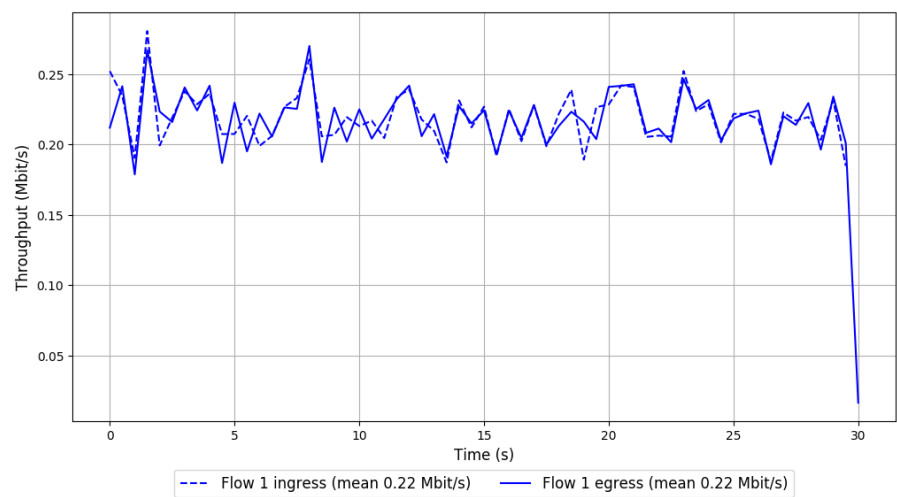
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.639 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

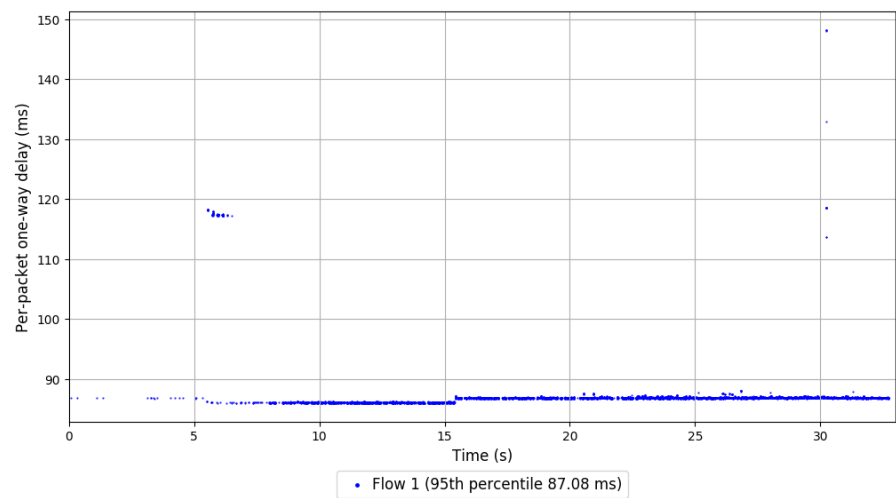
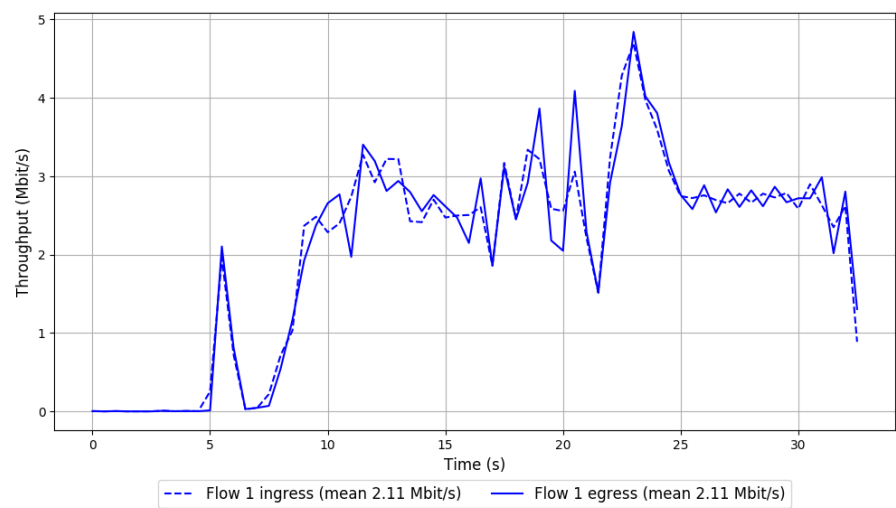


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-30 07:08:07
End at: 2017-11-30 07:08:37

# Below is generated by plot.py at 2017-11-30 09:42:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 87.076 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 87.076 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-30 07:18:22

End at: 2017-11-30 07:18:52

Below is generated by plot.py at 2017-11-30 09:42:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 117.400 ms

Loss rate: 0.00%

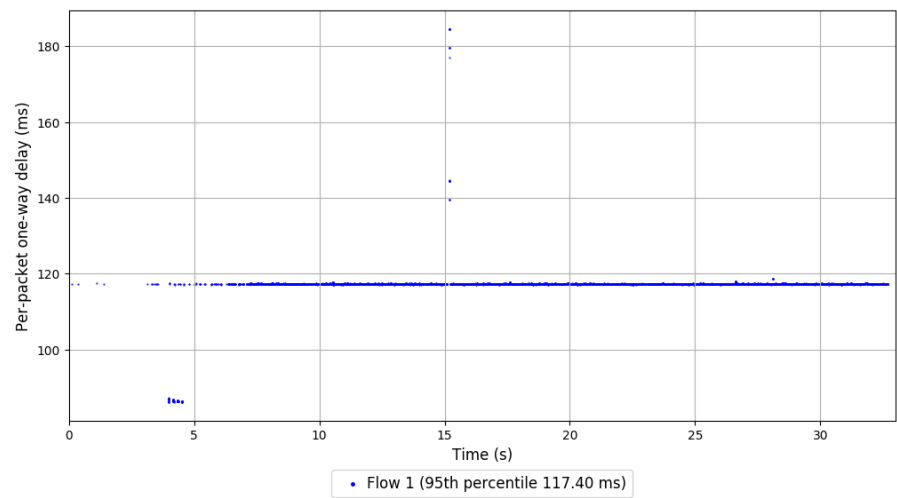
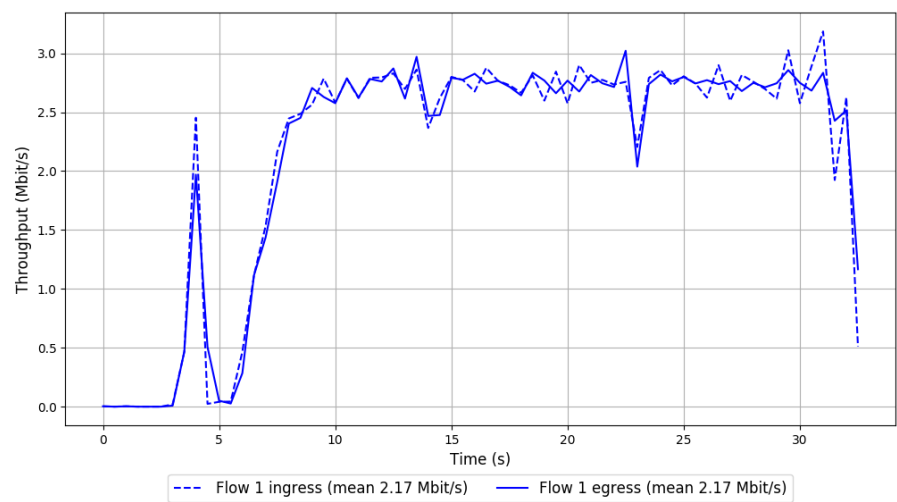
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 117.400 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-30 07:28:18

End at: 2017-11-30 07:28:48

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.552 ms

Loss rate: 0.00%

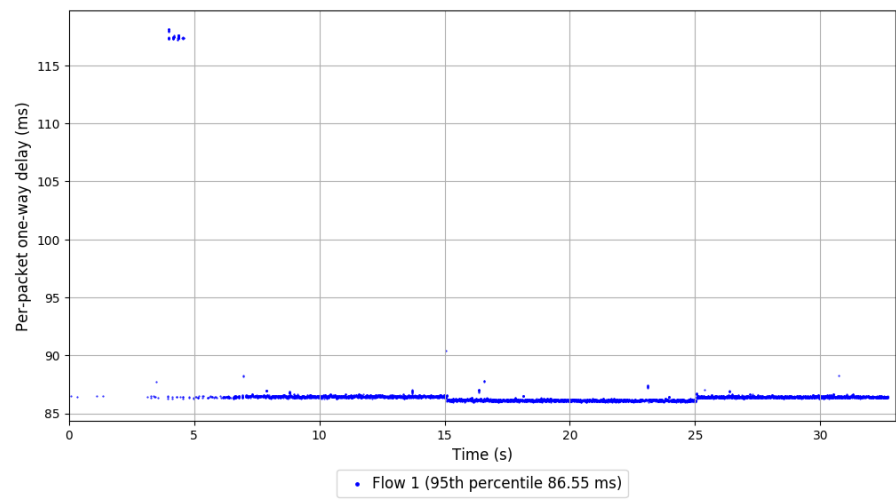
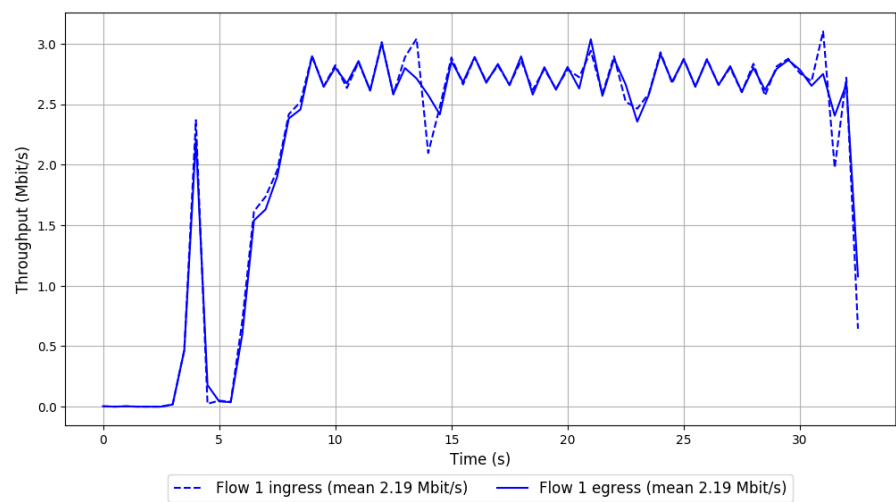
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.552 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-30 07:38:55

End at: 2017-11-30 07:39:25

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.966 ms

Loss rate: 0.00%

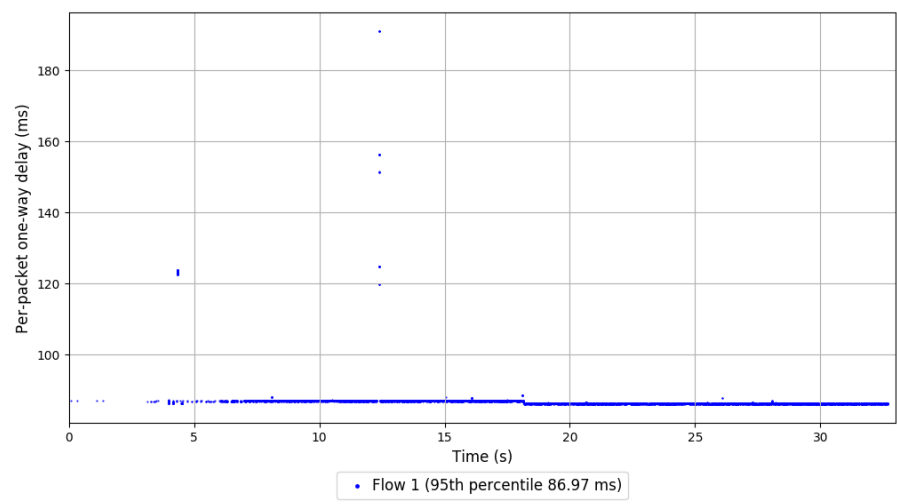
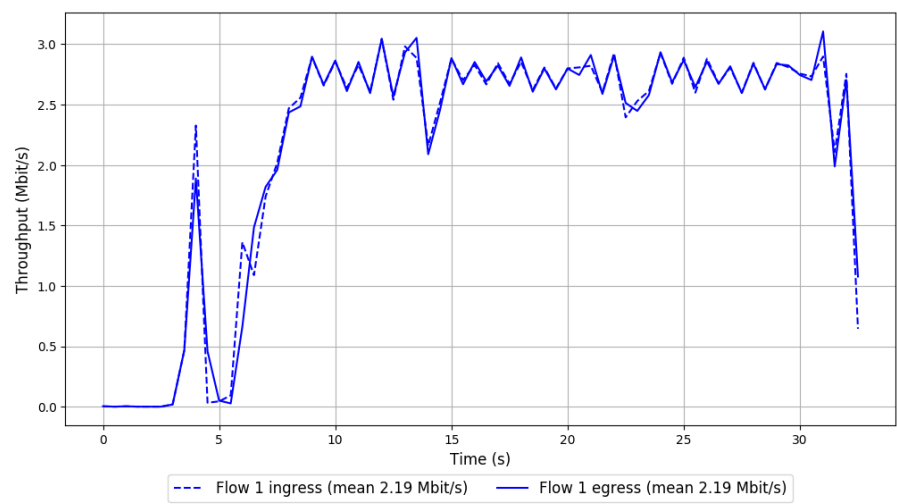
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.966 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-30 07:49:21

End at: 2017-11-30 07:49:51

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 86.611 ms

Loss rate: 0.08%

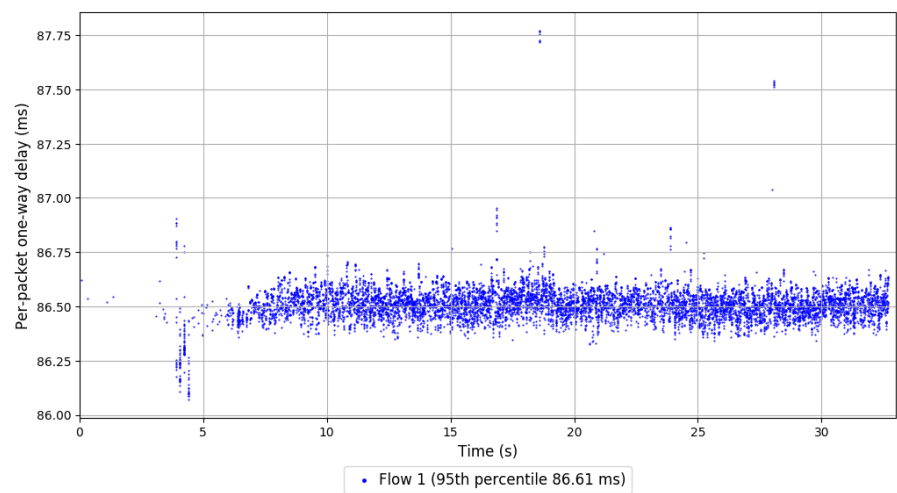
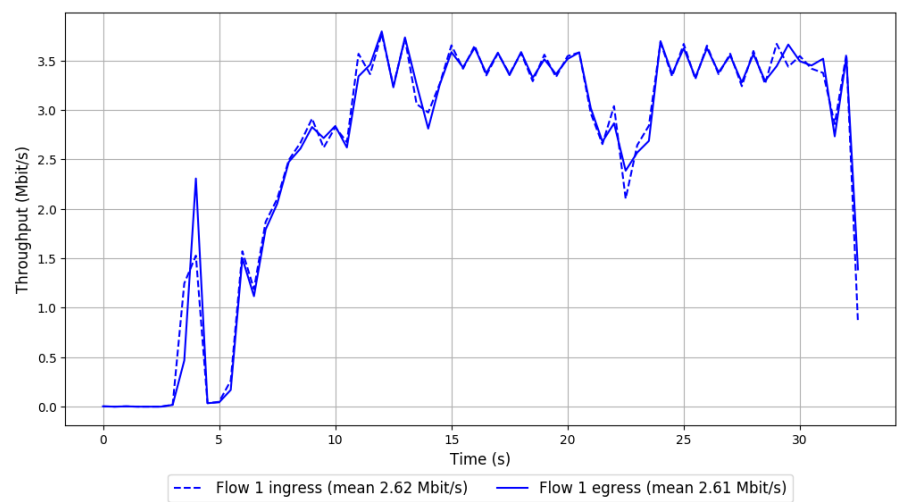
-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 86.611 ms

Loss rate: 0.08%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-30 07:59:23

End at: 2017-11-30 07:59:53

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 117.412 ms

Loss rate: 0.15%

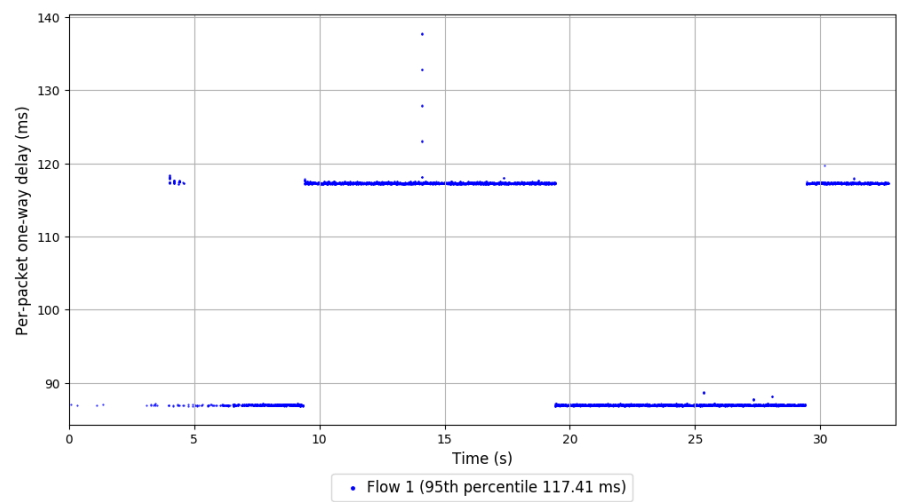
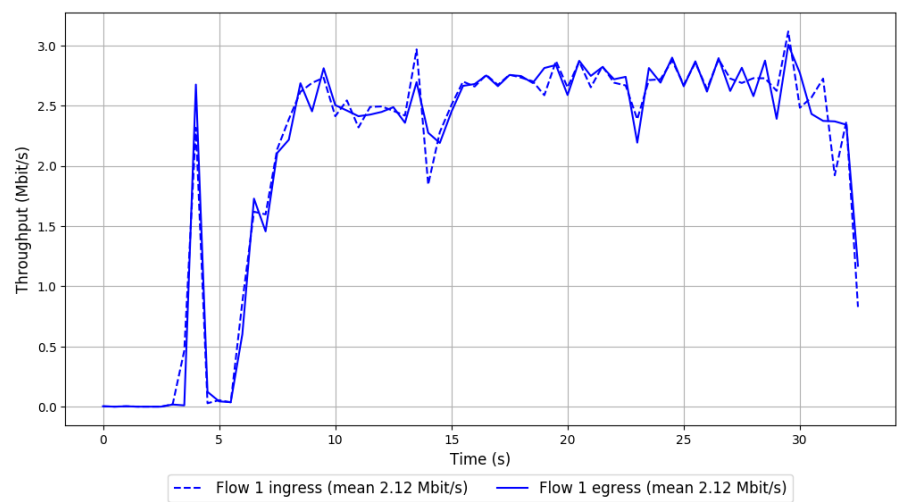
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 117.412 ms

Loss rate: 0.15%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-30 08:09:25

End at: 2017-11-30 08:09:55

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.794 ms

Loss rate: 0.00%

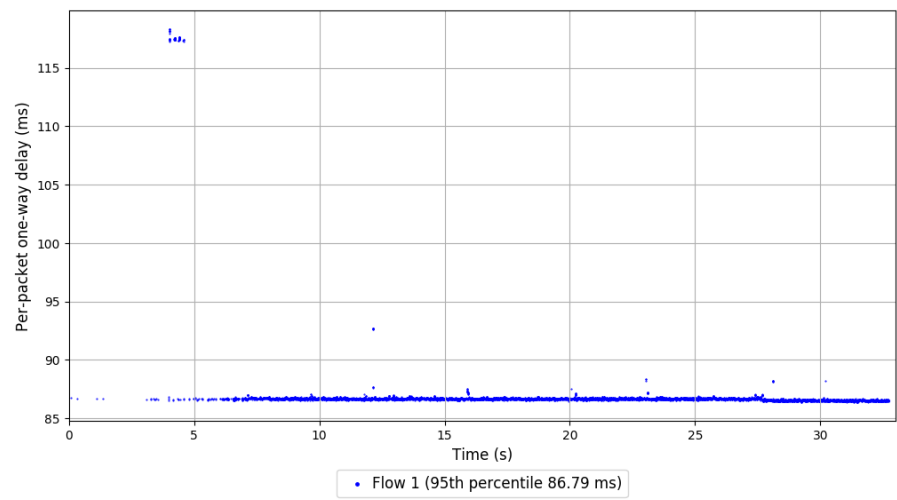
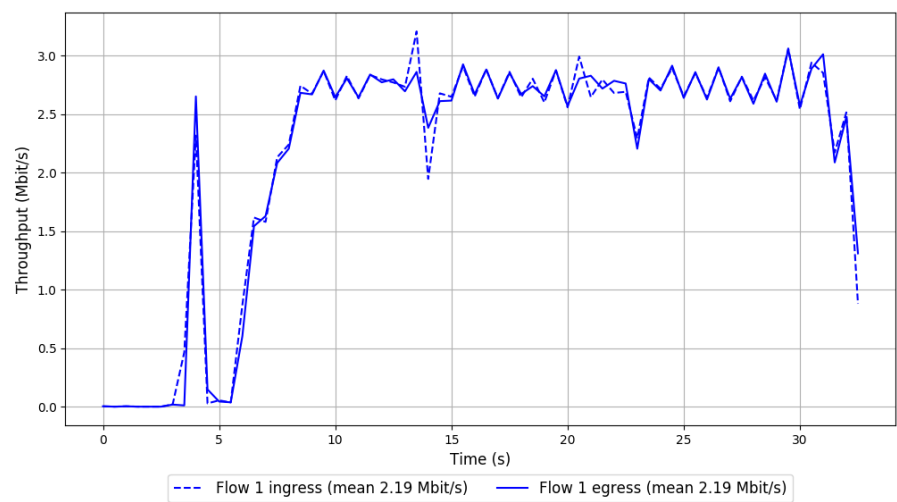
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.794 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-30 08:20:03

End at: 2017-11-30 08:20:33

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 86.721 ms

Loss rate: 0.00%

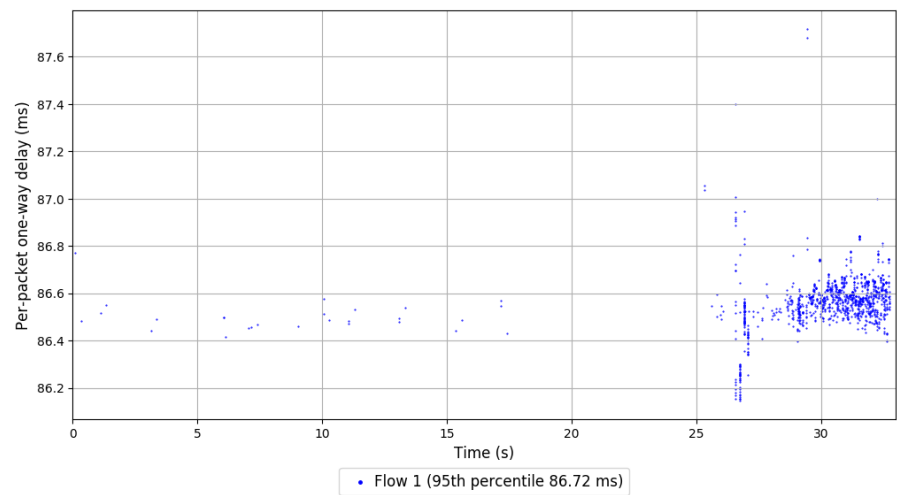
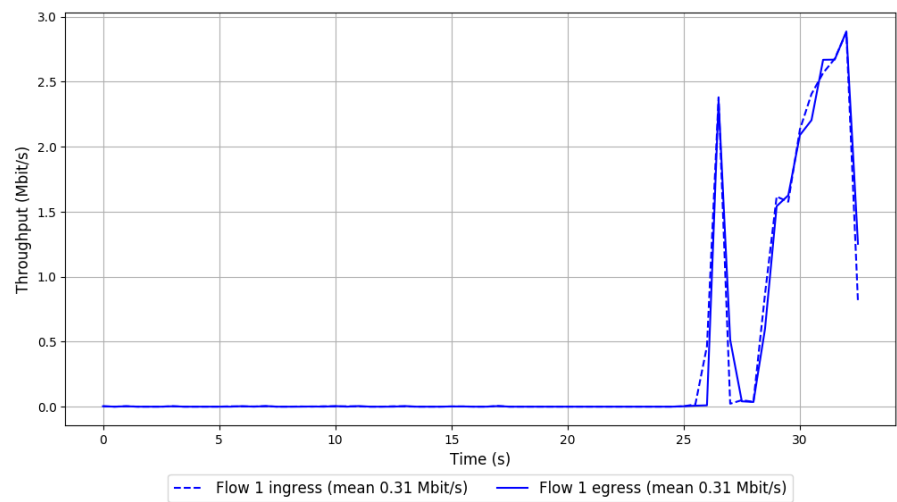
-- Flow 1:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 86.721 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-30 08:30:28

End at: 2017-11-30 08:30:58

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 87.100 ms

Loss rate: 0.00%

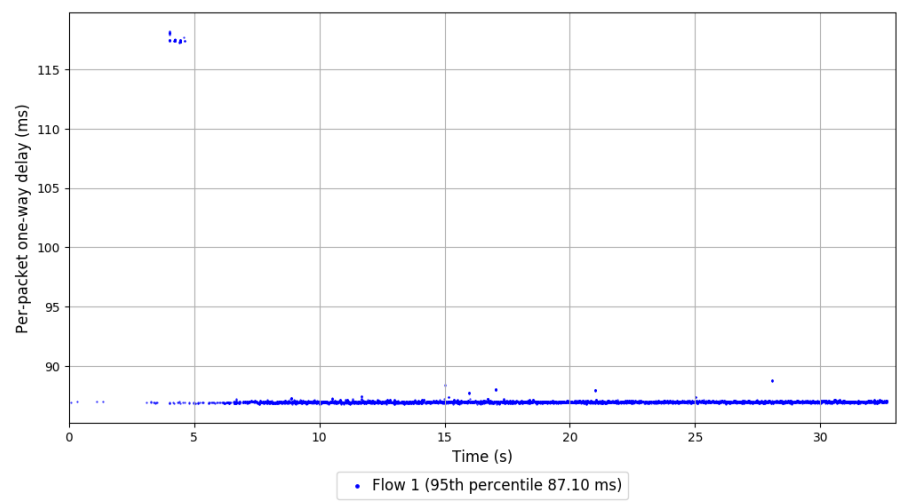
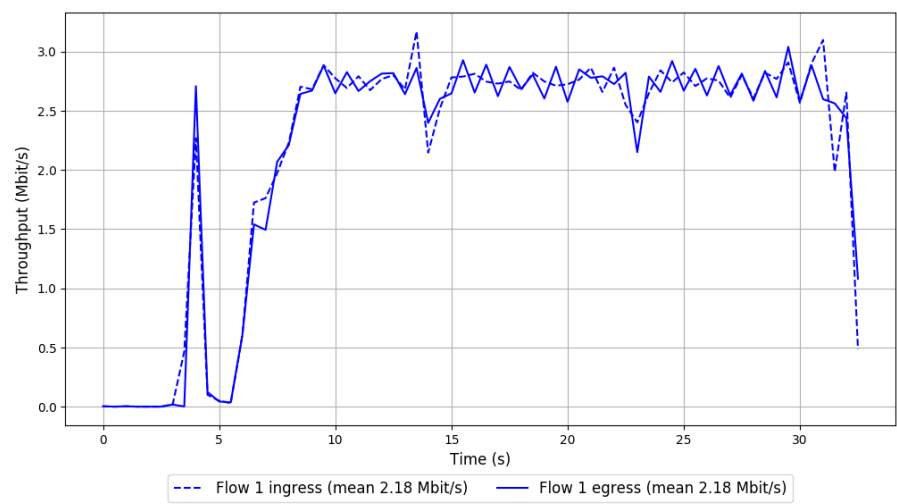
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 87.100 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-30 08:40:57

End at: 2017-11-30 08:41:27

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 86.825 ms

Loss rate: 0.00%

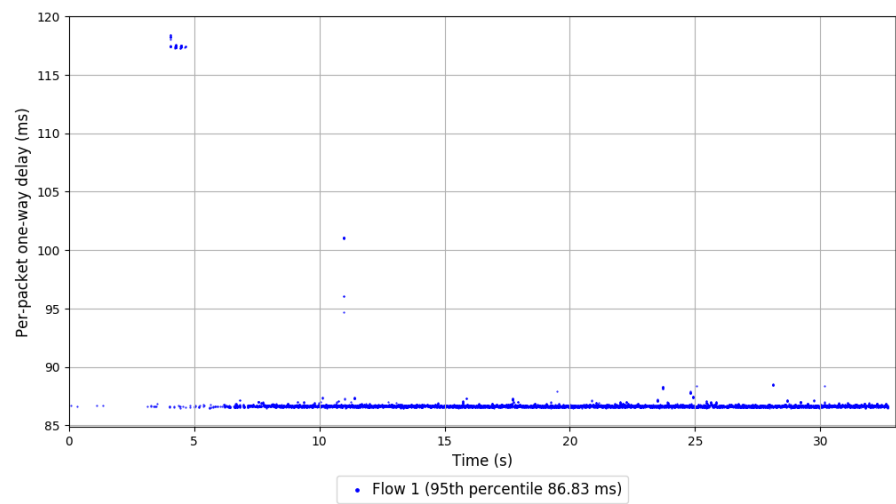
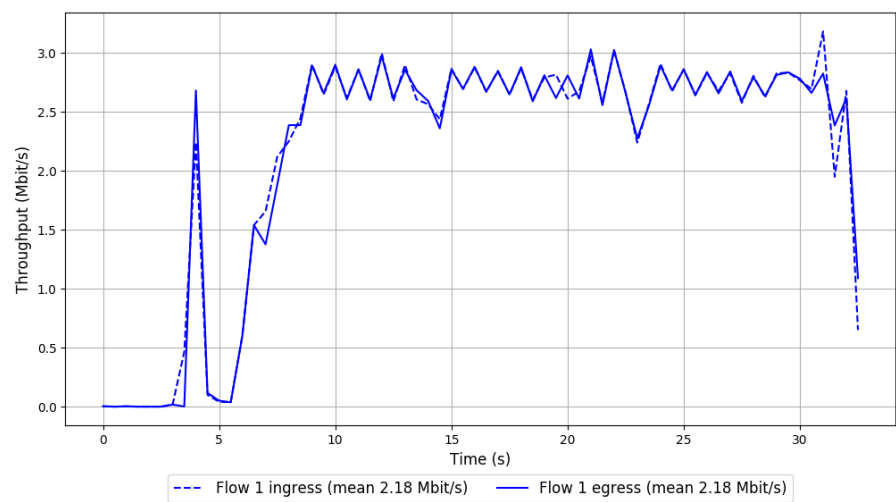
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 86.825 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

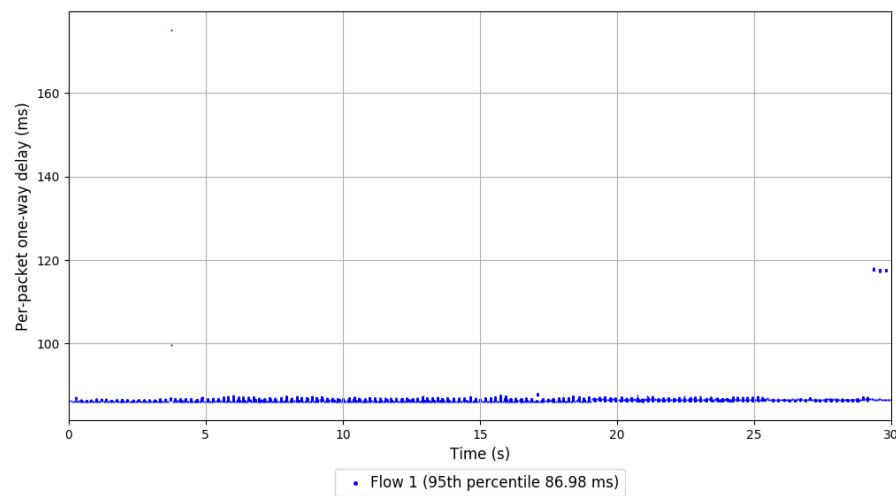
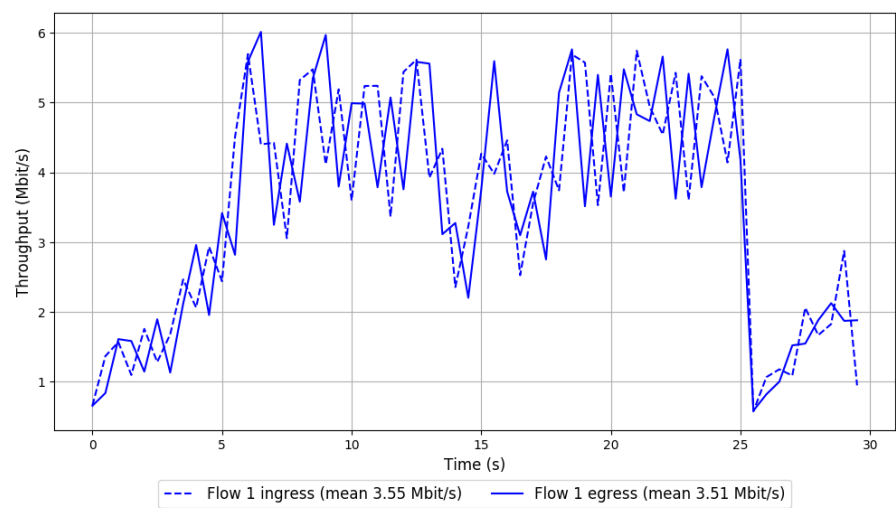


```
Run 1: Statistics of Sprout

Start at: 2017-11-30 07:06:01
End at: 2017-11-30 07:06:31

# Below is generated by plot.py at 2017-11-30 09:42:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 86.977 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 86.977 ms
Loss rate: 1.06%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-30 07:16:21

End at: 2017-11-30 07:16:51

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 117.640 ms

Loss rate: 0.00%

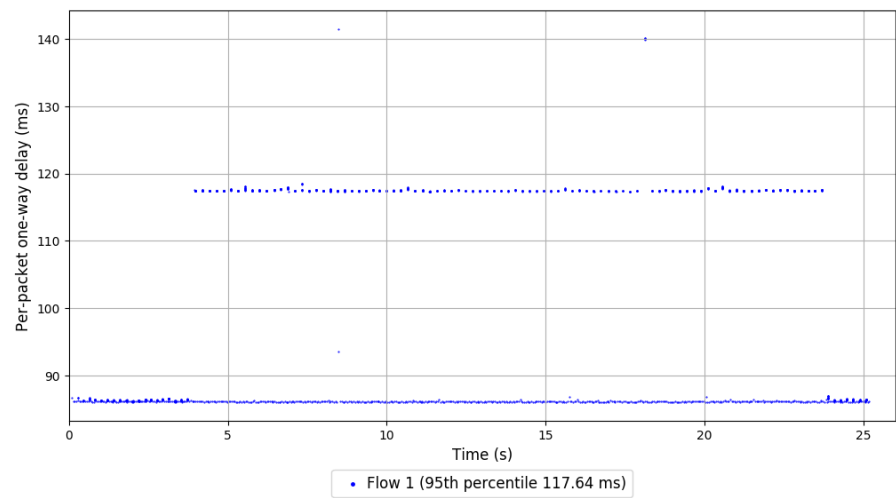
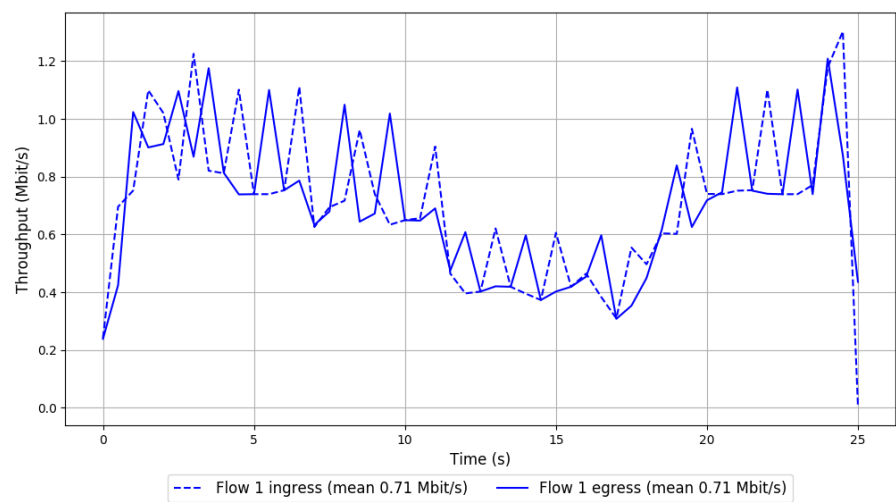
-- Flow 1:

Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 117.640 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-30 07:26:13

End at: 2017-11-30 07:26:43

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 86.991 ms

Loss rate: 0.07%

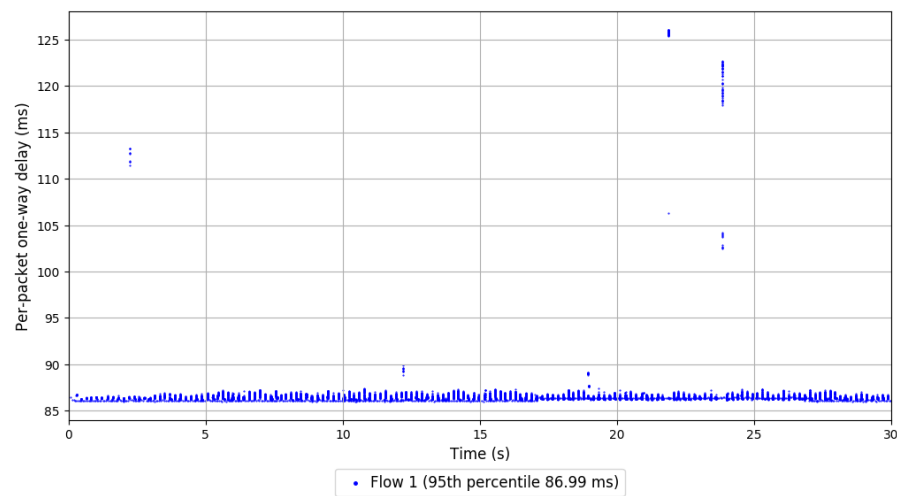
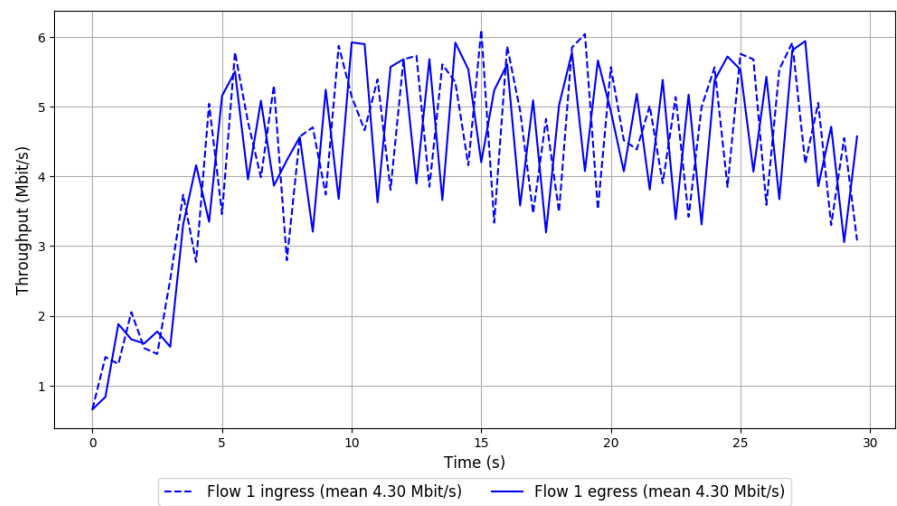
-- Flow 1:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 86.991 ms

Loss rate: 0.07%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-30 07:36:44

End at: 2017-11-30 07:37:14

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 117.593 ms

Loss rate: 0.00%

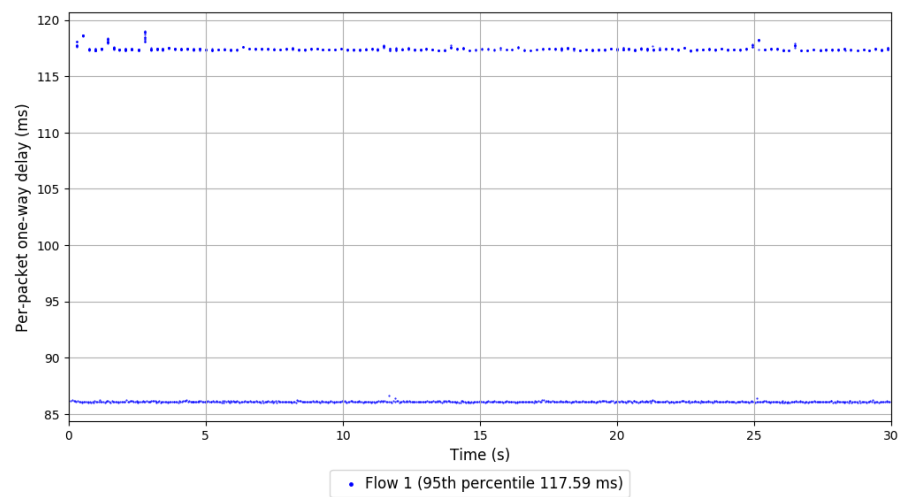
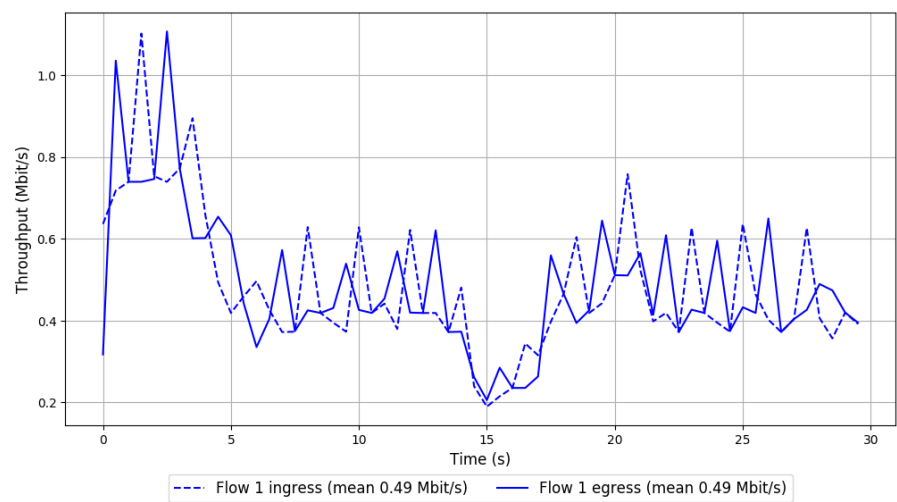
-- Flow 1:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 117.593 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

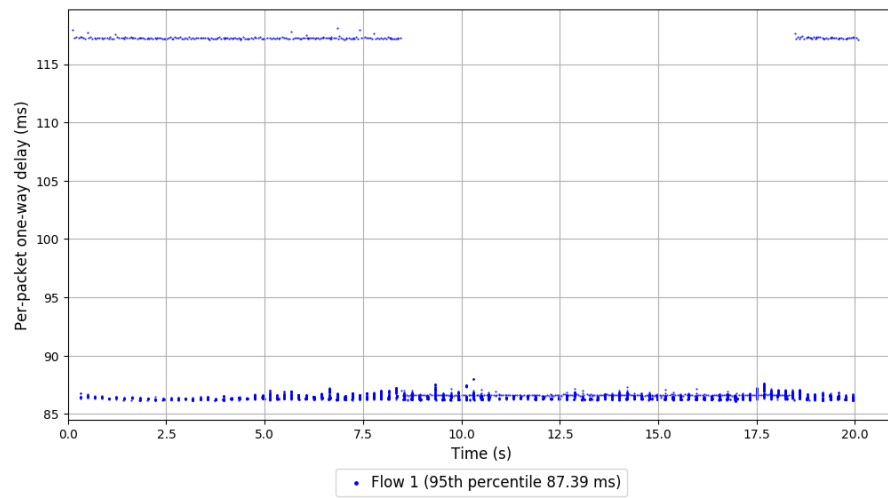
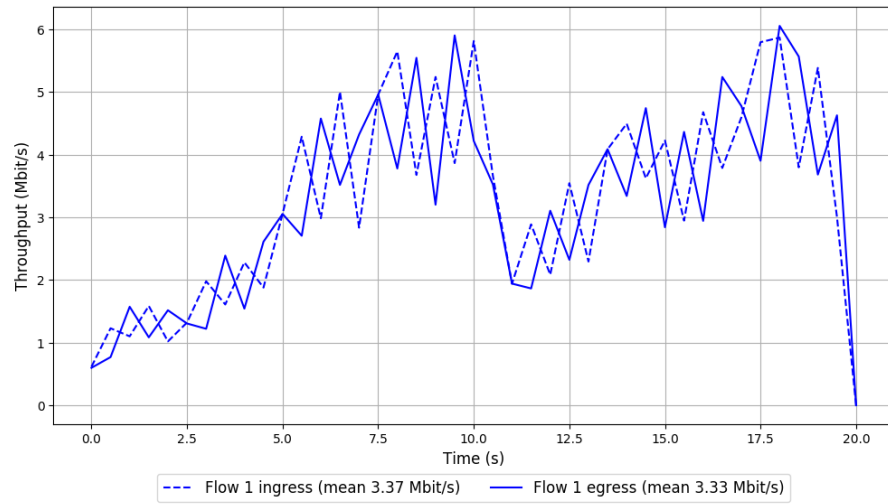


Run 5: Statistics of Sprout

Start at: 2017-11-30 07:47:12

End at: 2017-11-30 07:47:42

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-30 07:57:25

End at: 2017-11-30 07:57:55

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 117.524 ms

Loss rate: 0.00%

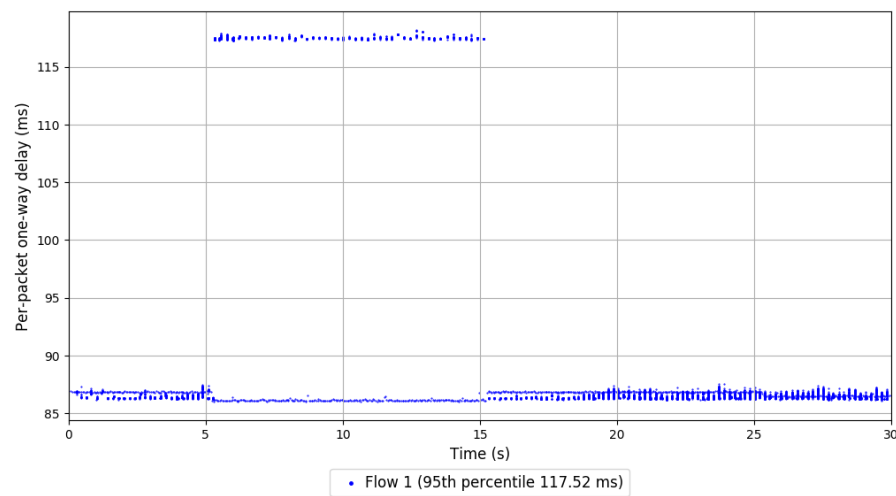
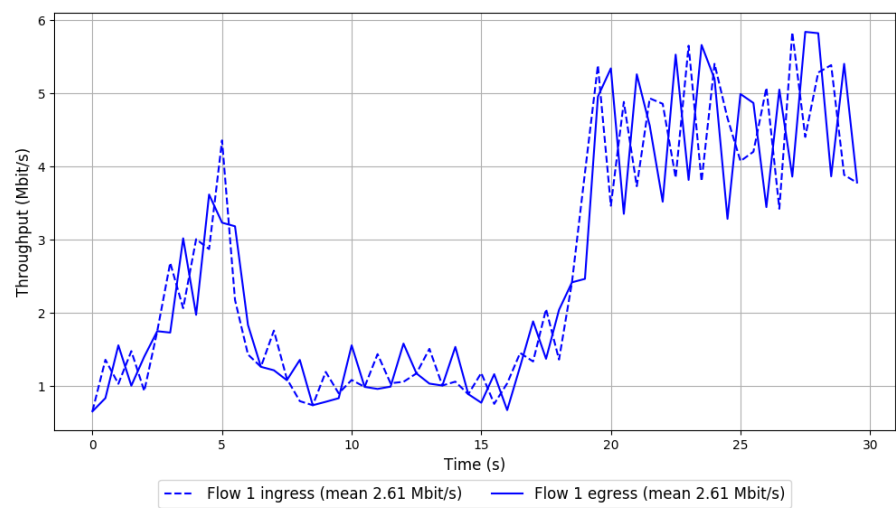
-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 117.524 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-30 08:07:17

End at: 2017-11-30 08:07:47

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 117.808 ms

Loss rate: 0.01%

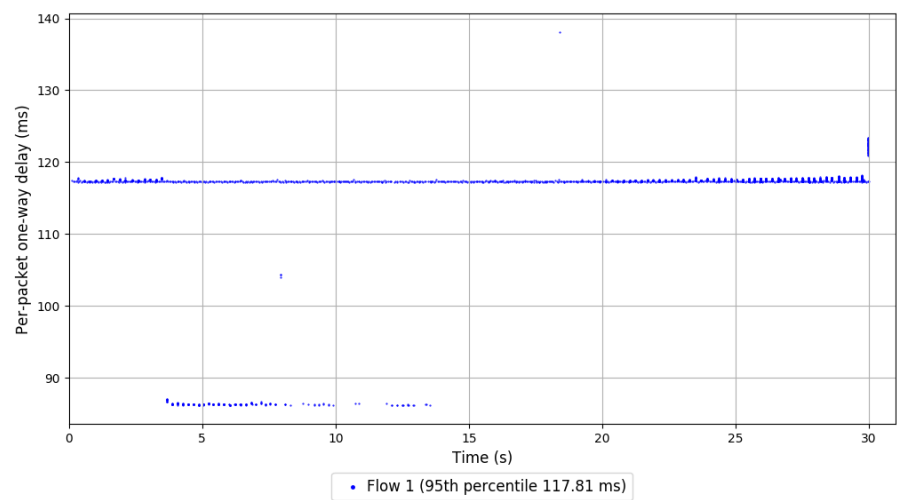
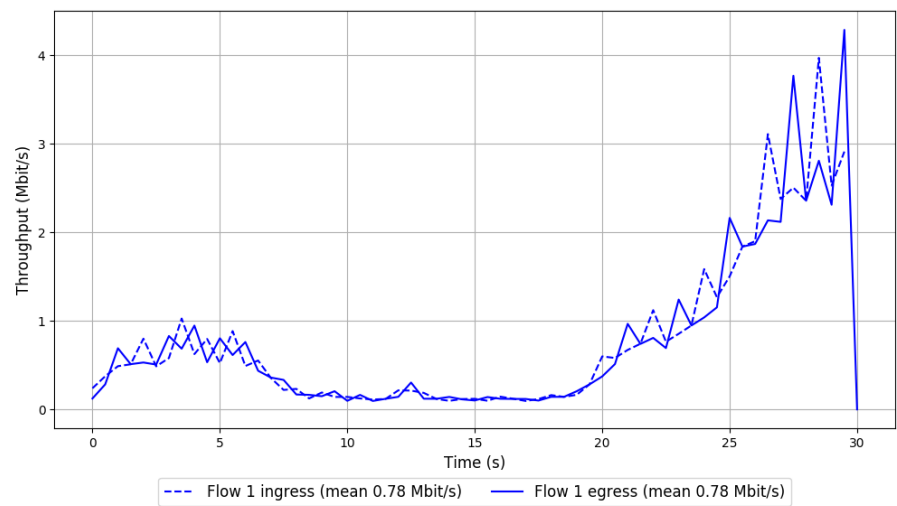
-- Flow 1:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 117.808 ms

Loss rate: 0.01%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-30 08:17:47

End at: 2017-11-30 08:18:17

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 117.414 ms

Loss rate: 0.00%

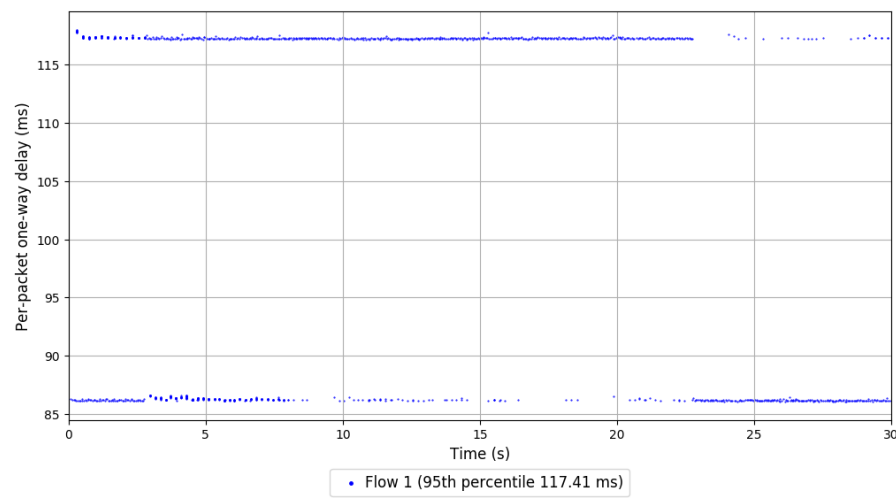
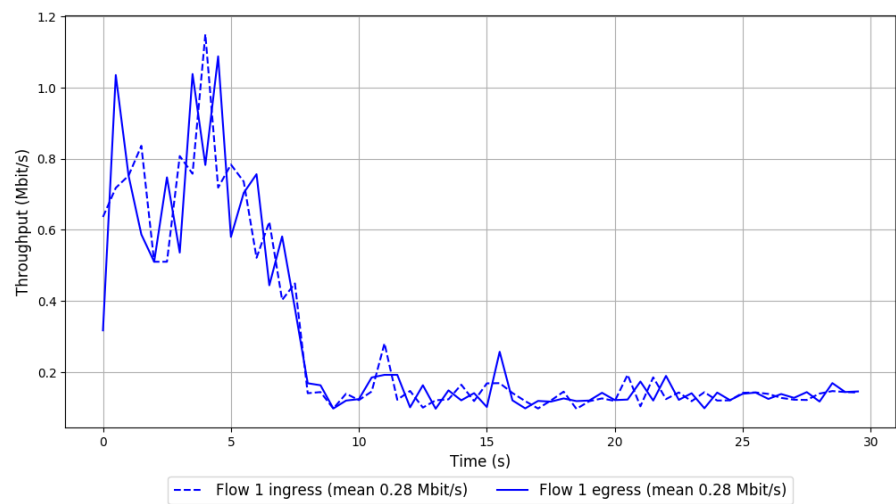
-- Flow 1:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 117.414 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-30 08:28:06

End at: 2017-11-30 08:28:36

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 117.771 ms

Loss rate: 0.33%

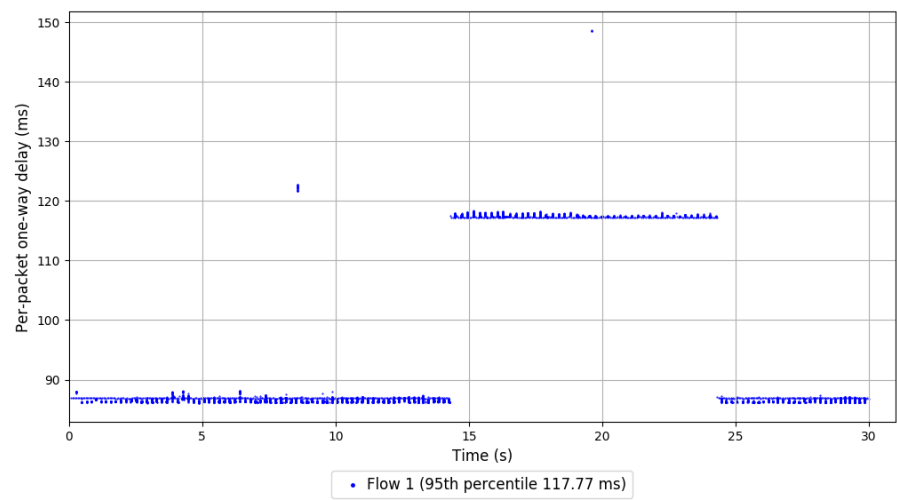
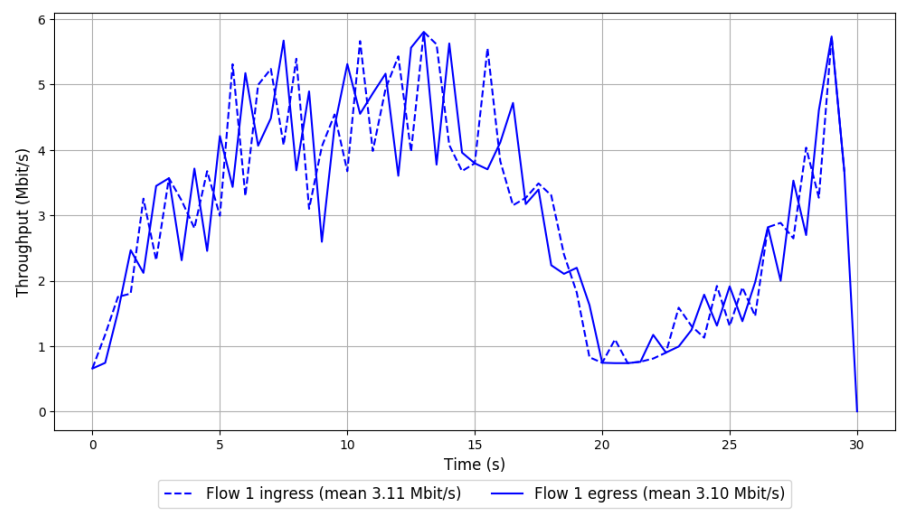
-- Flow 1:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 117.771 ms

Loss rate: 0.33%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-30 08:38:54

End at: 2017-11-30 08:39:24

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 117.648 ms

Loss rate: 0.00%

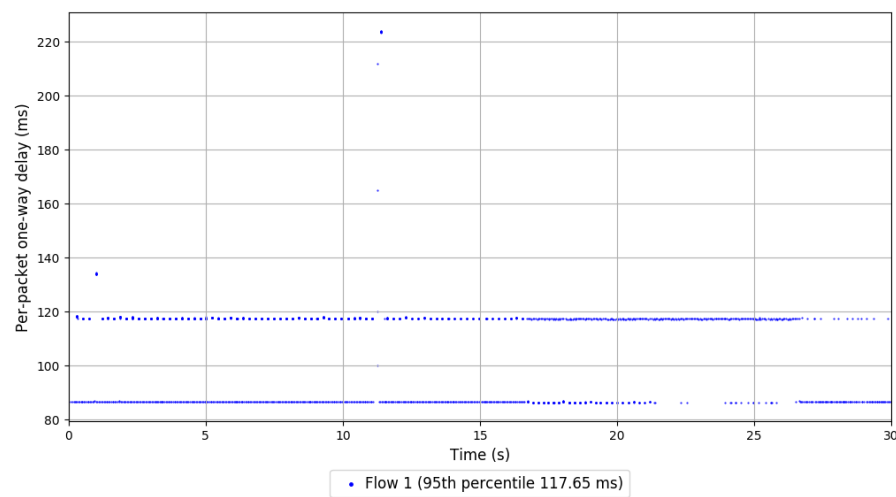
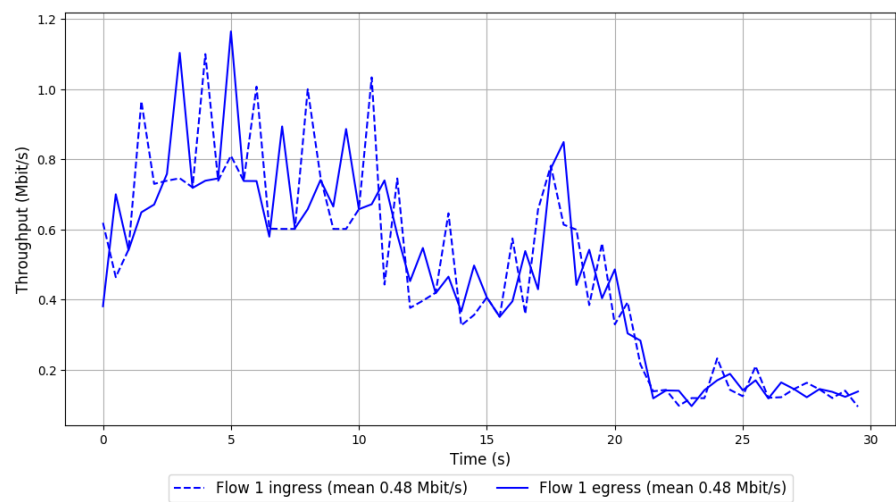
-- Flow 1:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 117.648 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

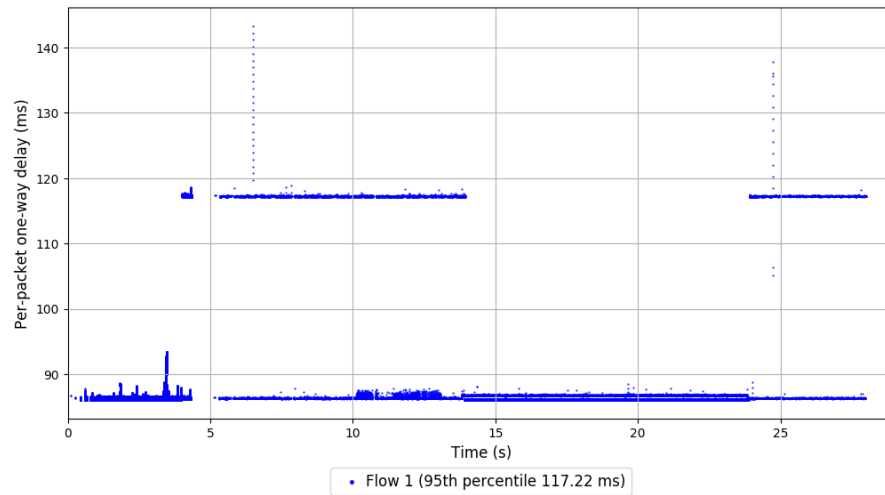
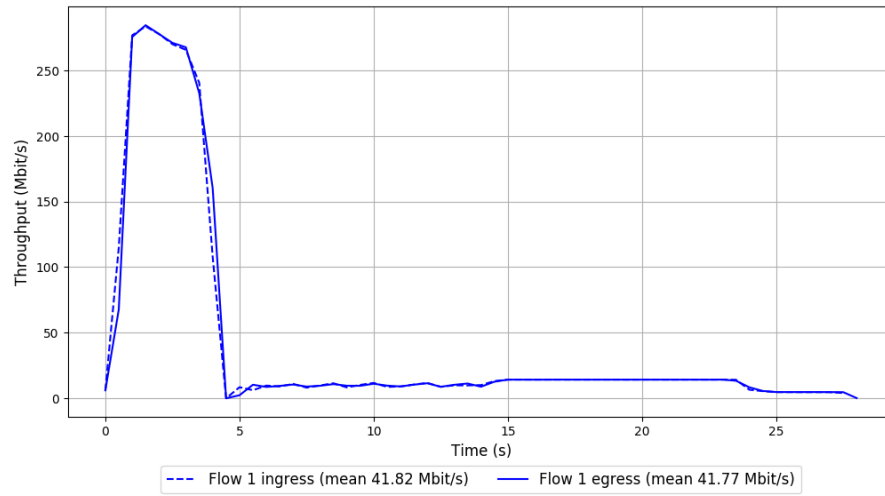


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-30 07:07:24
End at: 2017-11-30 07:07:54

# Below is generated by plot.py at 2017-11-30 09:42:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.77 Mbit/s
95th percentile per-packet one-way delay: 117.215 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.77 Mbit/s
95th percentile per-packet one-way delay: 117.215 ms
Loss rate: 0.00%
```

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

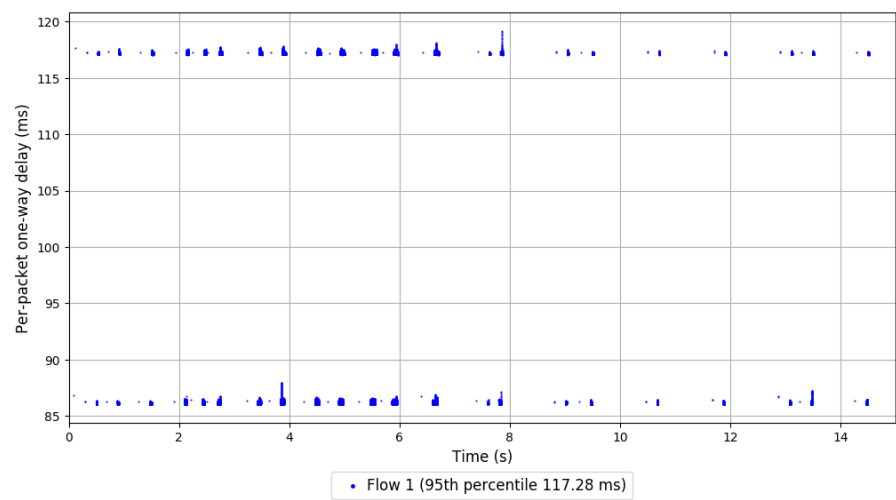
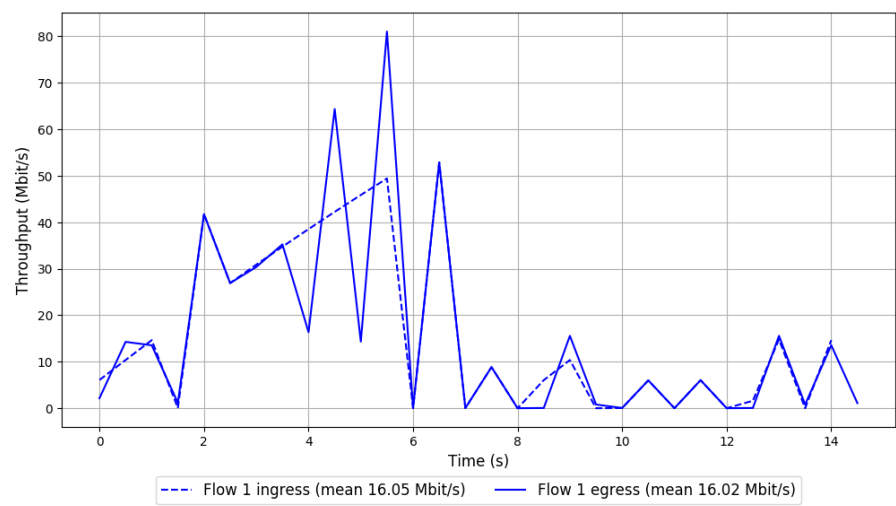


Run 2: Statistics of TaoVA-100x

Start at: 2017-11-30 07:17:42

End at: 2017-11-30 07:18:12

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-30 07:27:36

End at: 2017-11-30 07:28:06

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.10 Mbit/s

95th percentile per-packet one-way delay: 117.273 ms

Loss rate: 0.00%

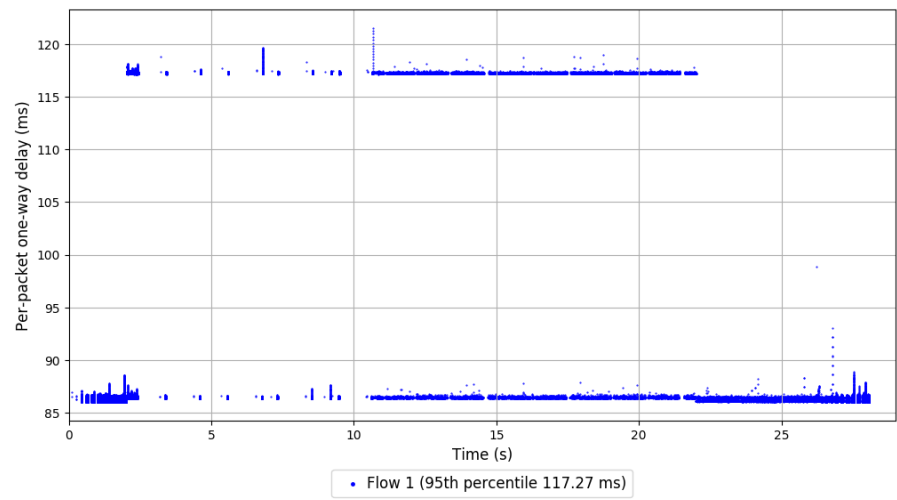
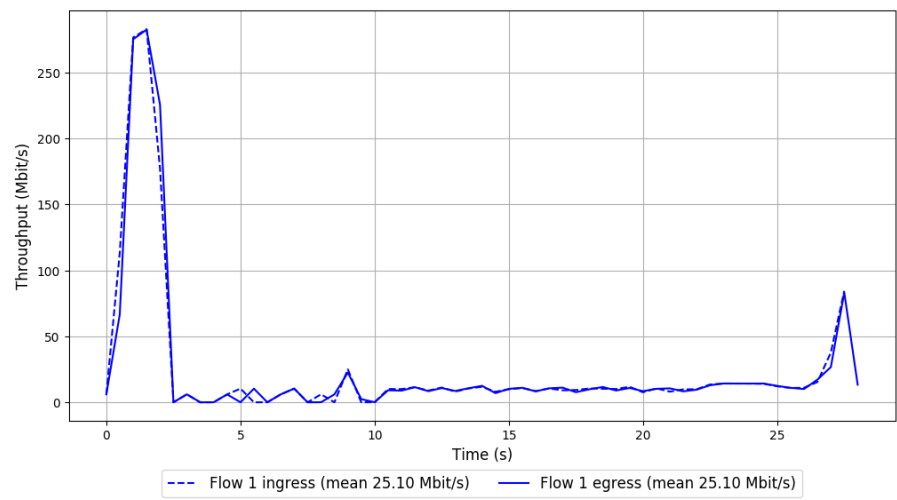
-- Flow 1:

Average throughput: 25.10 Mbit/s

95th percentile per-packet one-way delay: 117.273 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-30 07:38:05

End at: 2017-11-30 07:38:35

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.10 Mbit/s

95th percentile per-packet one-way delay: 86.849 ms

Loss rate: 0.00%

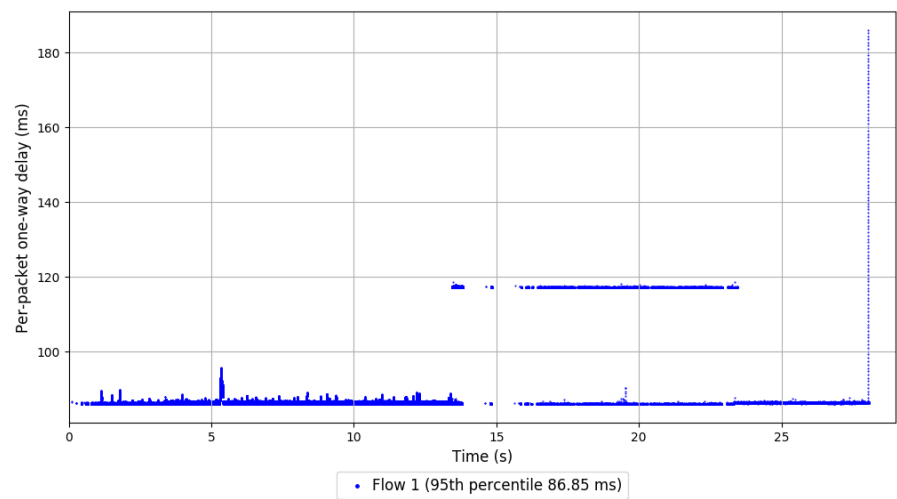
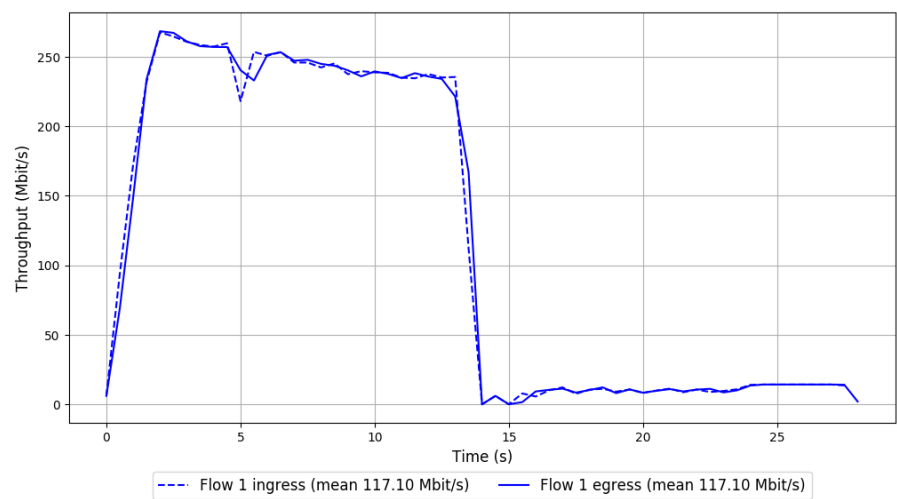
-- Flow 1:

Average throughput: 117.10 Mbit/s

95th percentile per-packet one-way delay: 86.849 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-30 07:48:34

End at: 2017-11-30 07:49:04

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.63 Mbit/s

95th percentile per-packet one-way delay: 87.844 ms

Loss rate: 0.13%

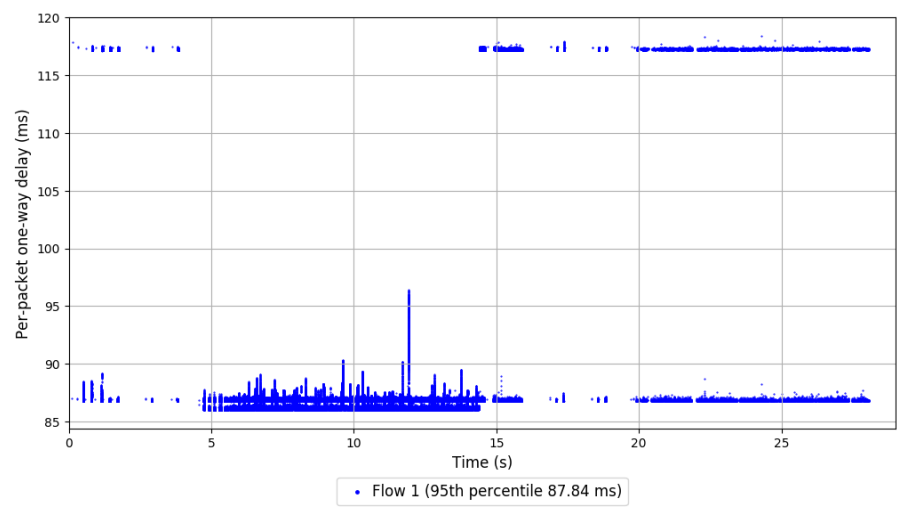
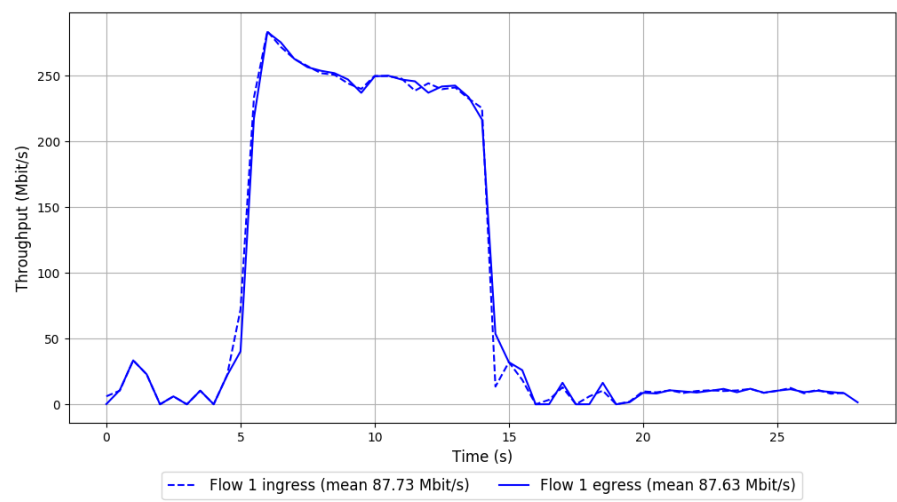
-- Flow 1:

Average throughput: 87.63 Mbit/s

95th percentile per-packet one-way delay: 87.844 ms

Loss rate: 0.13%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-30 07:58:43

End at: 2017-11-30 07:59:13

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.94 Mbit/s

95th percentile per-packet one-way delay: 117.265 ms

Loss rate: 0.00%

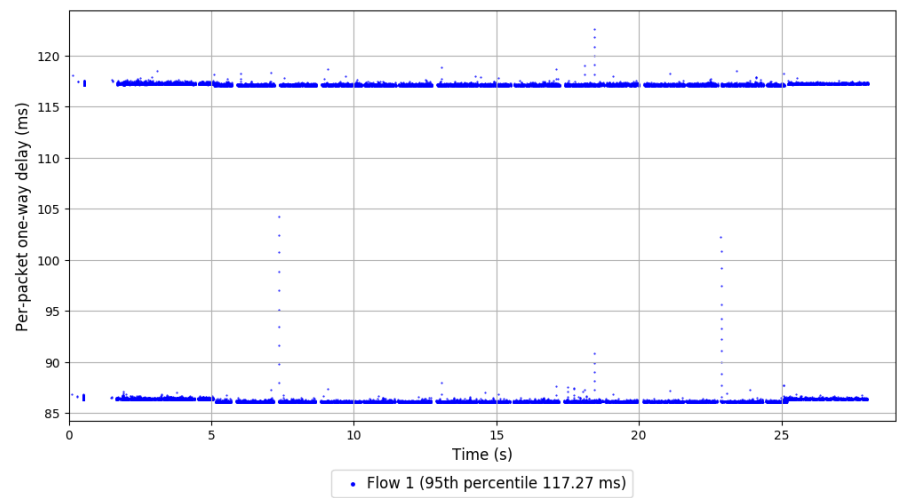
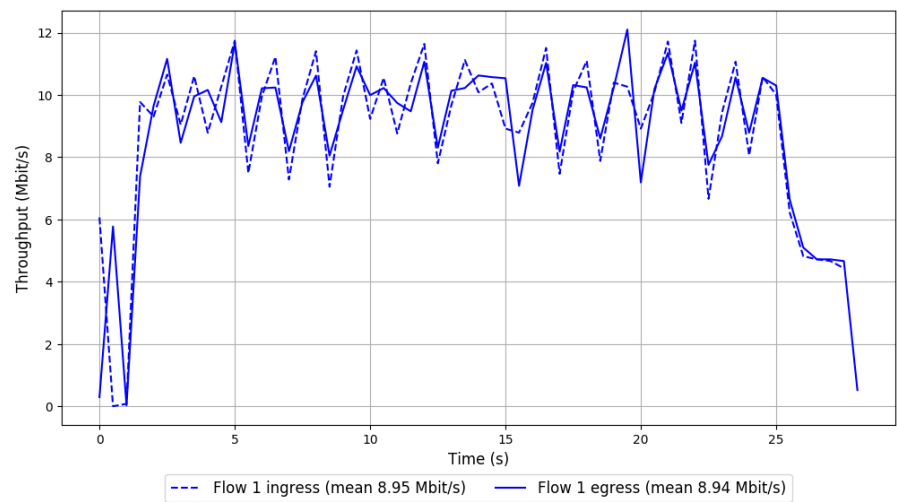
-- Flow 1:

Average throughput: 8.94 Mbit/s

95th percentile per-packet one-way delay: 117.265 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-30 08:08:38

End at: 2017-11-30 08:09:08

Below is generated by plot.py at 2017-11-30 09:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.96 Mbit/s

95th percentile per-packet one-way delay: 117.181 ms

Loss rate: 0.02%

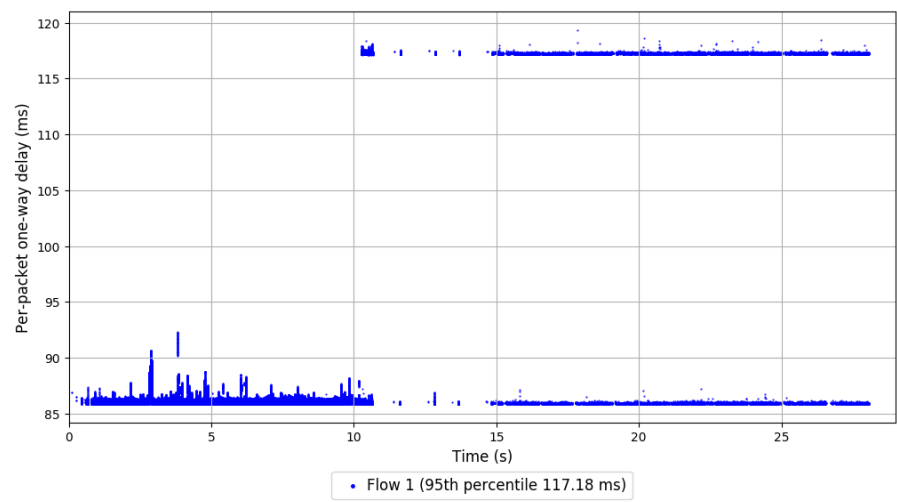
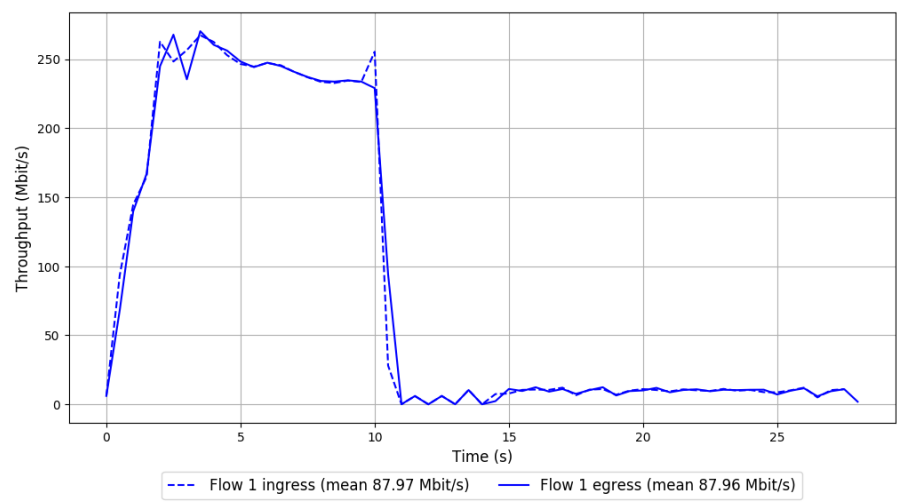
-- Flow 1:

Average throughput: 87.96 Mbit/s

95th percentile per-packet one-way delay: 117.181 ms

Loss rate: 0.02%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-30 08:19:11

End at: 2017-11-30 08:19:41

Below is generated by plot.py at 2017-11-30 09:44:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 146.30 Mbit/s

95th percentile per-packet one-way delay: 86.575 ms

Loss rate: 0.01%

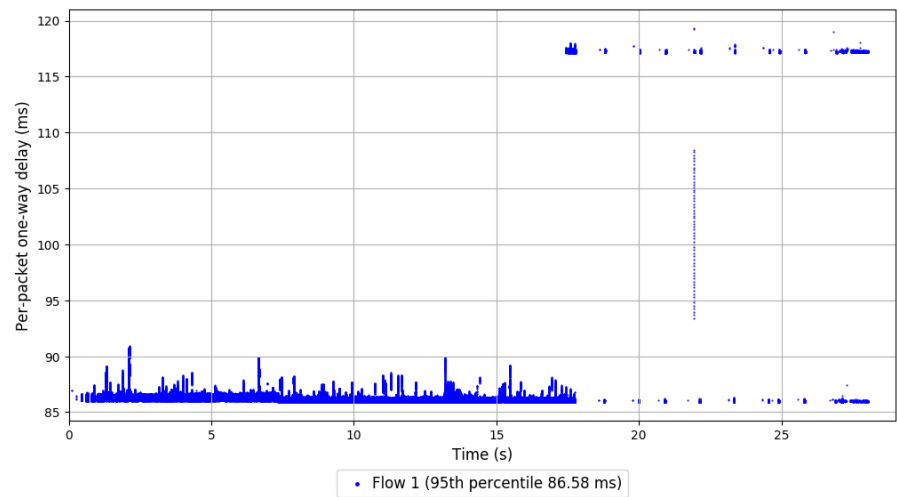
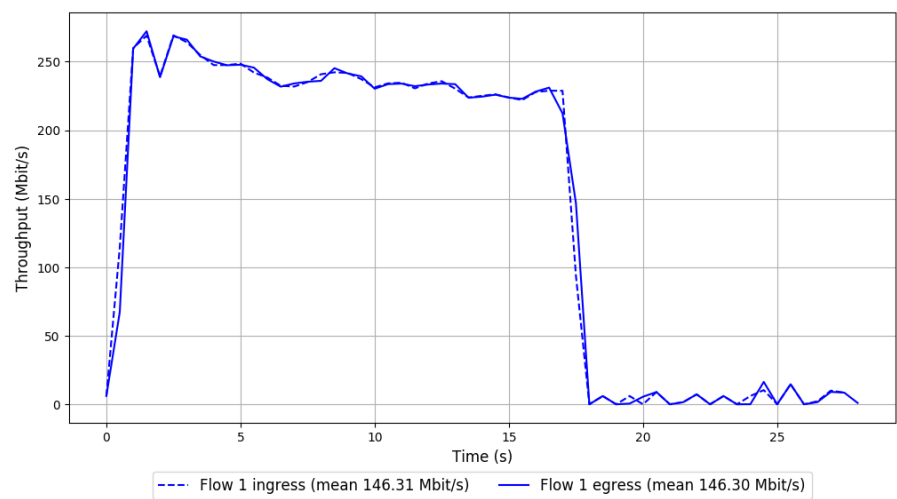
-- Flow 1:

Average throughput: 146.30 Mbit/s

95th percentile per-packet one-way delay: 86.575 ms

Loss rate: 0.01%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-30 08:29:28

End at: 2017-11-30 08:29:58

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 232.20 Mbit/s

95th percentile per-packet one-way delay: 87.097 ms

Loss rate: 0.00%

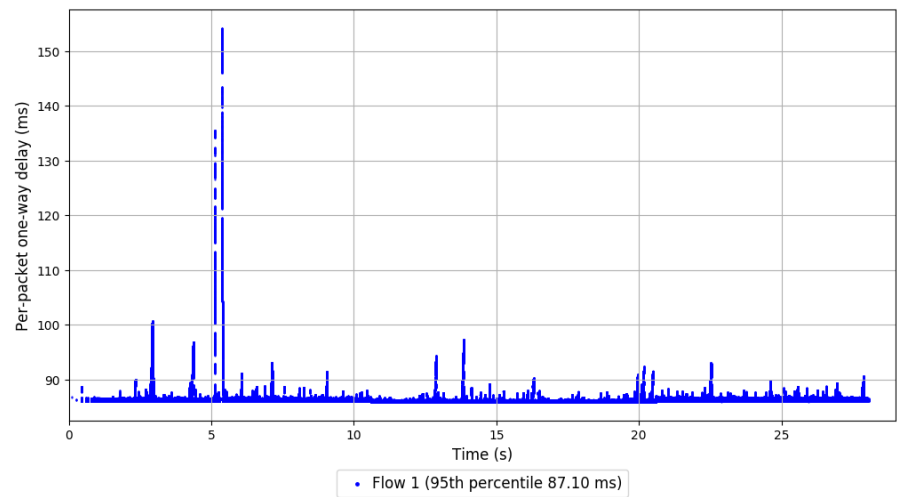
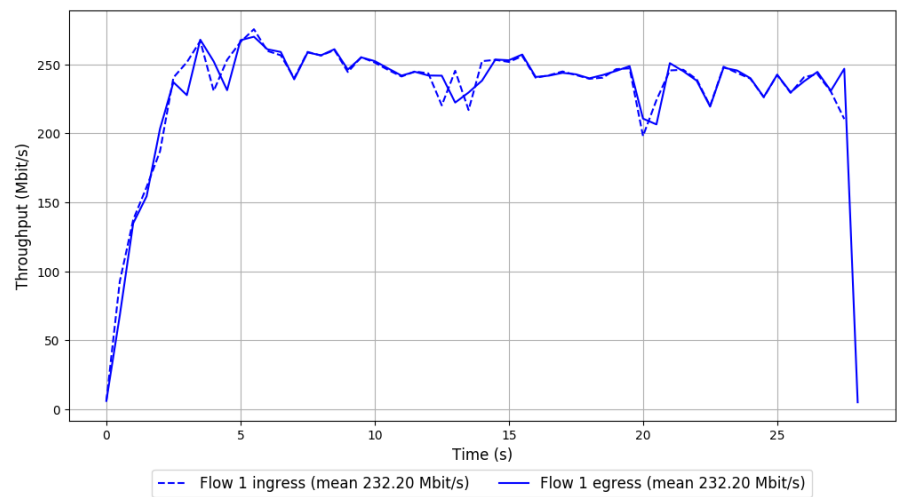
-- Flow 1:

Average throughput: 232.20 Mbit/s

95th percentile per-packet one-way delay: 87.097 ms

Loss rate: 0.00%

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

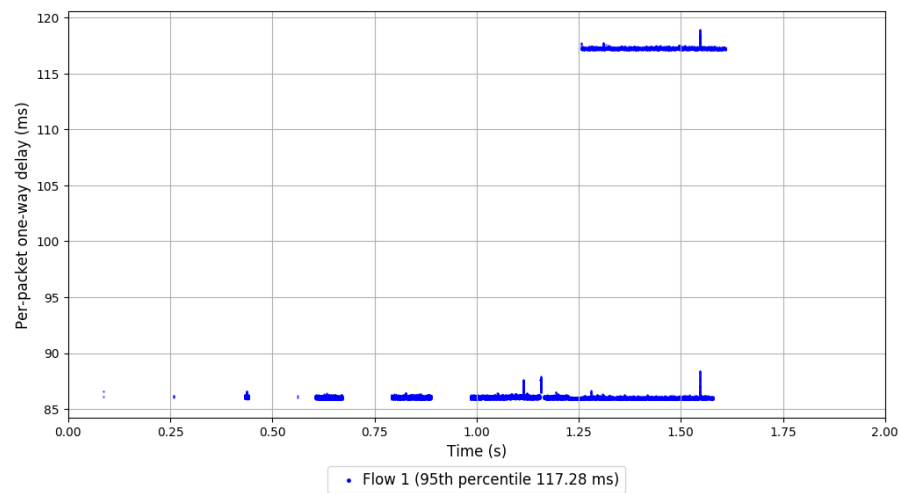
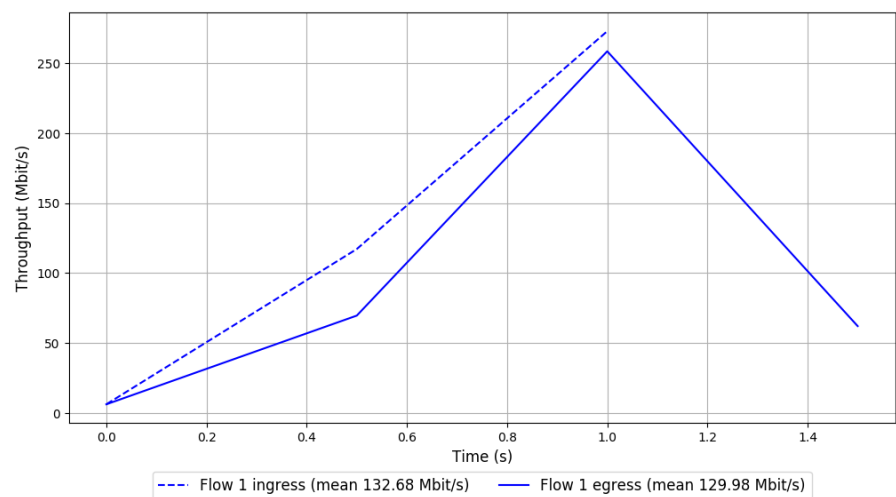


Run 10: Statistics of TaoVA-100x

Start at: 2017-11-30 08:40:17

End at: 2017-11-30 08:40:47

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-30 07:13:49

End at: 2017-11-30 07:14:19

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.98 Mbit/s

95th percentile per-packet one-way delay: 118.864 ms

Loss rate: 0.00%

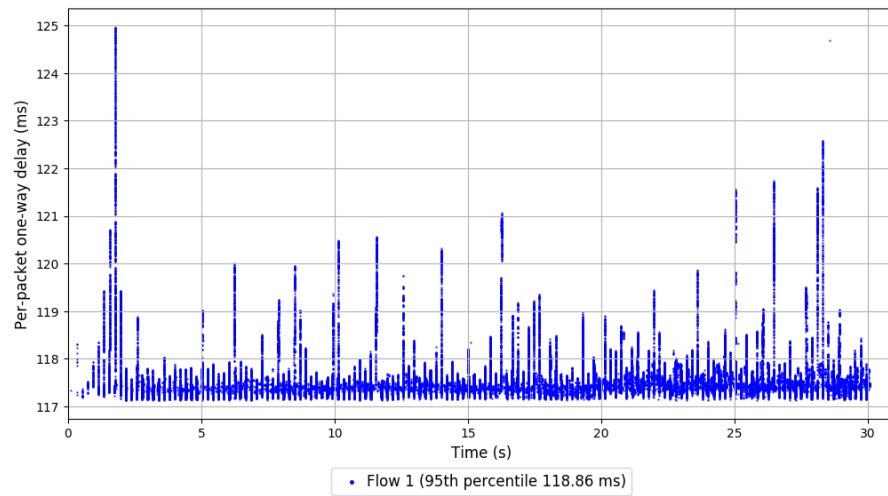
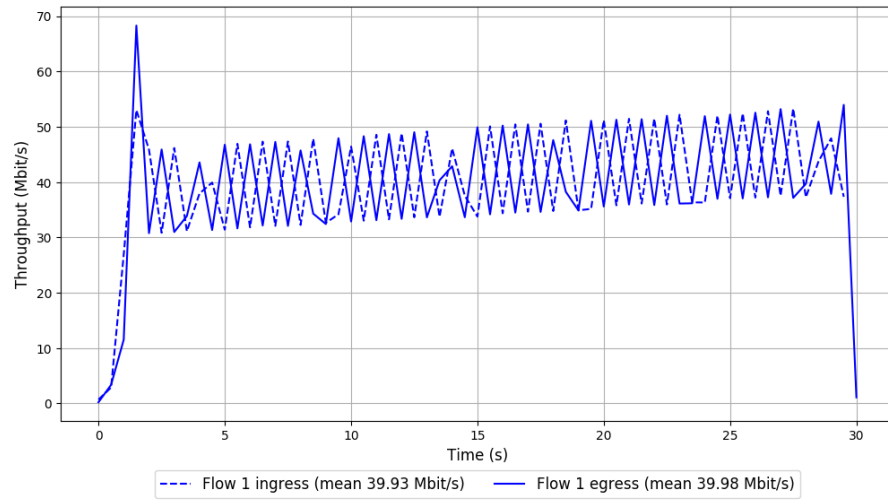
-- Flow 1:

Average throughput: 39.98 Mbit/s

95th percentile per-packet one-way delay: 118.864 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-30 07:24:00

End at: 2017-11-30 07:24:30

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.67 Mbit/s

95th percentile per-packet one-way delay: 95.772 ms

Loss rate: 0.10%

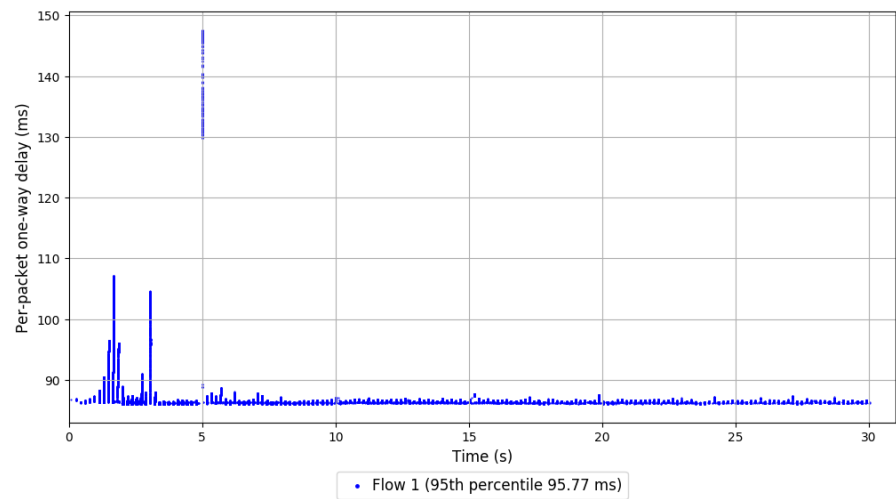
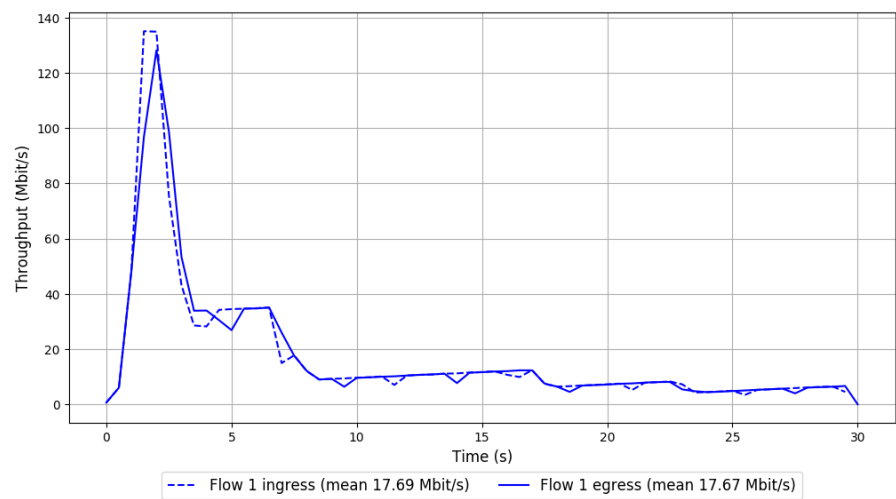
-- Flow 1:

Average throughput: 17.67 Mbit/s

95th percentile per-packet one-way delay: 95.772 ms

Loss rate: 0.10%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-30 07:34:09

End at: 2017-11-30 07:34:39

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.63 Mbit/s

95th percentile per-packet one-way delay: 117.784 ms

Loss rate: 0.00%

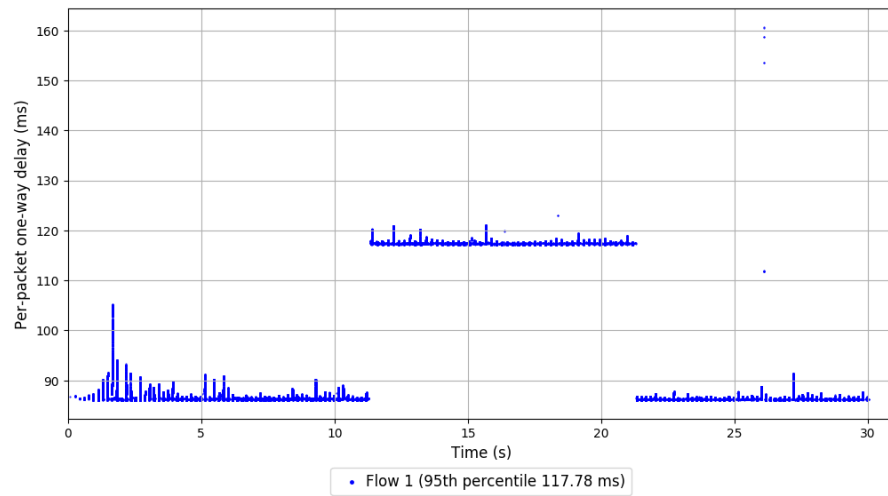
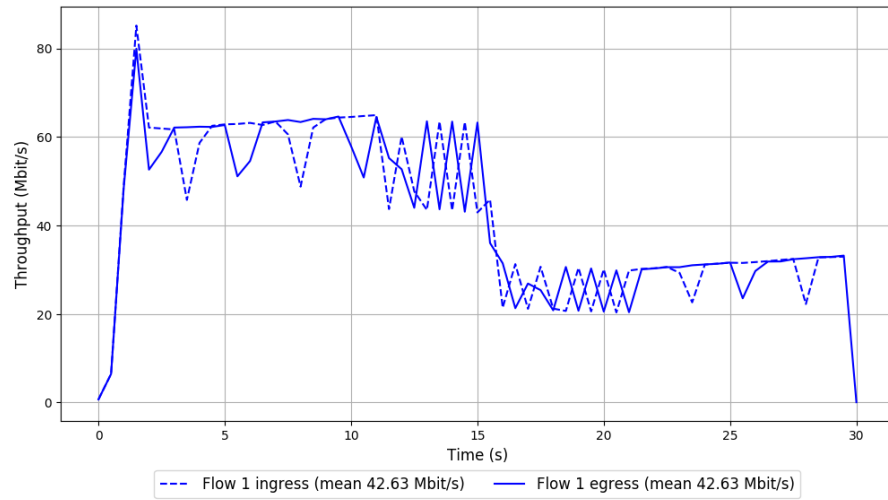
-- Flow 1:

Average throughput: 42.63 Mbit/s

95th percentile per-packet one-way delay: 117.784 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-30 07:44:42

End at: 2017-11-30 07:45:12

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.39 Mbit/s

95th percentile per-packet one-way delay: 98.464 ms

Loss rate: 0.09%

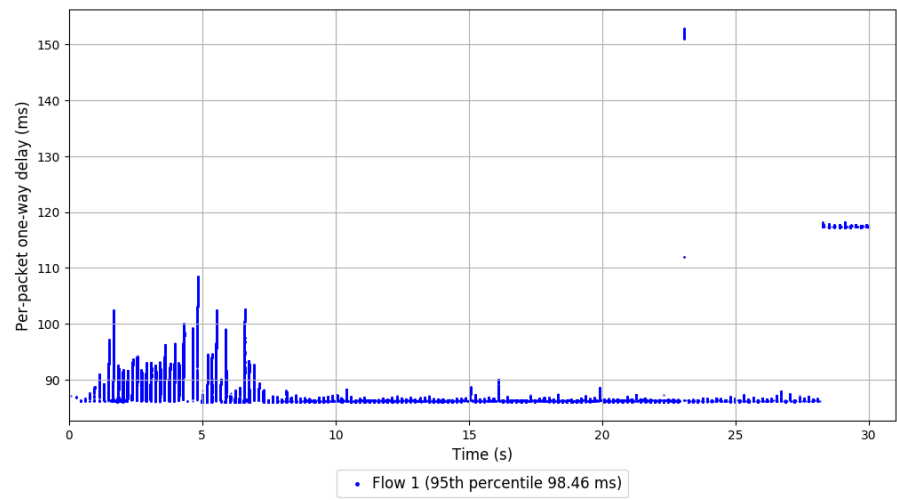
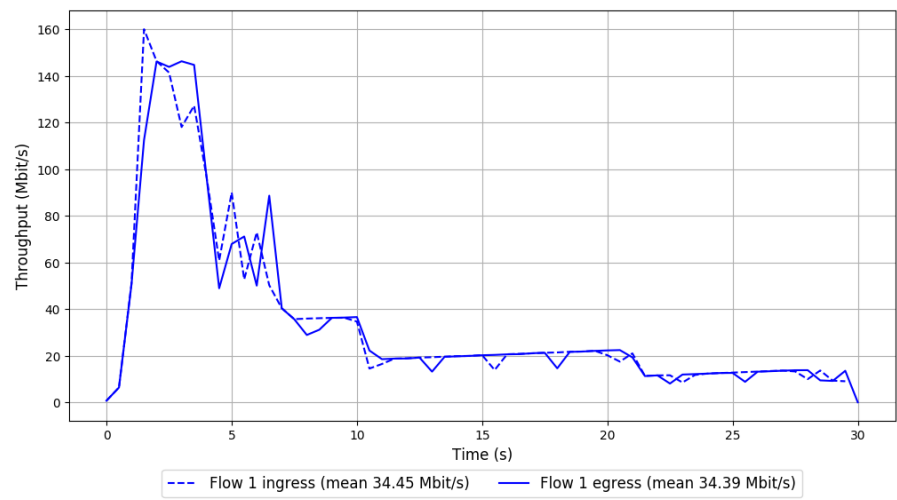
-- Flow 1:

Average throughput: 34.39 Mbit/s

95th percentile per-packet one-way delay: 98.464 ms

Loss rate: 0.09%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-30 07:55:06

End at: 2017-11-30 07:55:36

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 117.541 ms

Loss rate: 0.00%

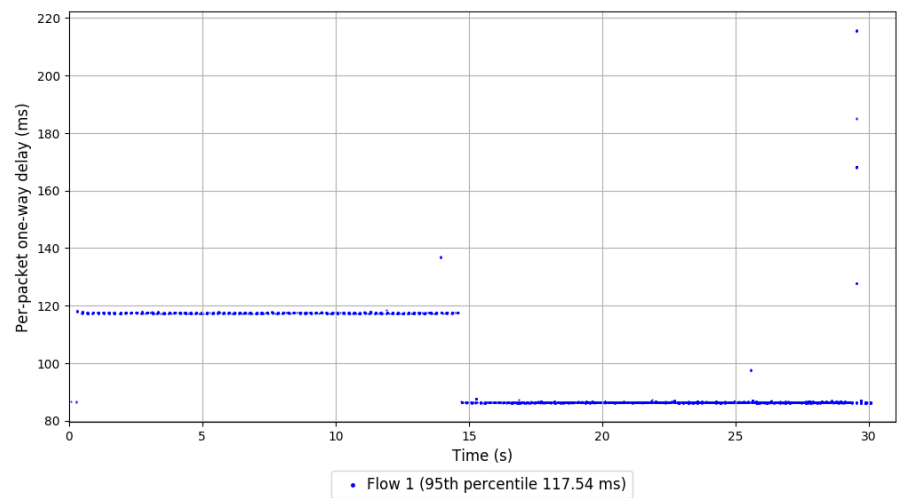
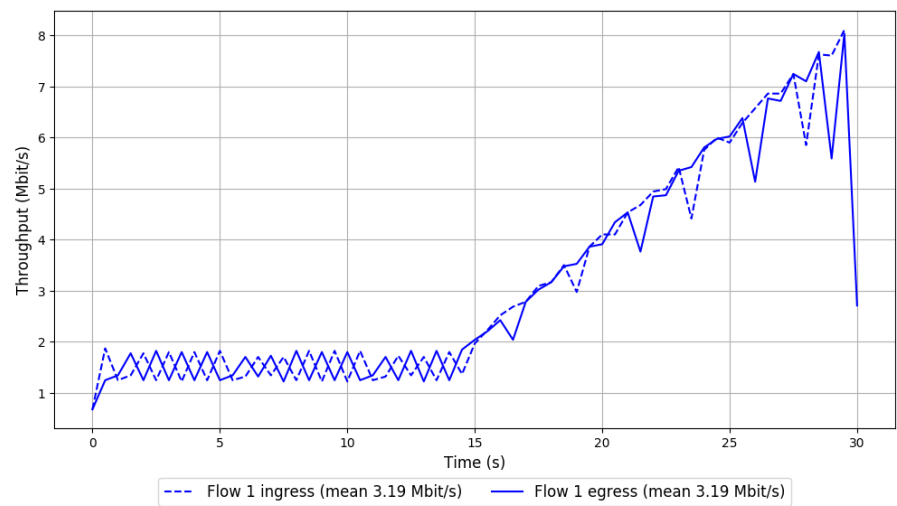
-- Flow 1:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 117.541 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-30 08:05:05

End at: 2017-11-30 08:05:35

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 117.588 ms

Loss rate: 0.00%

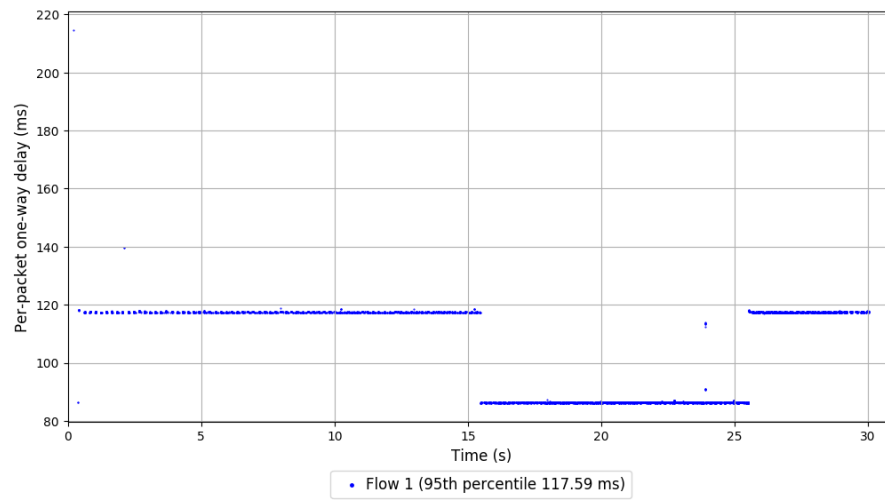
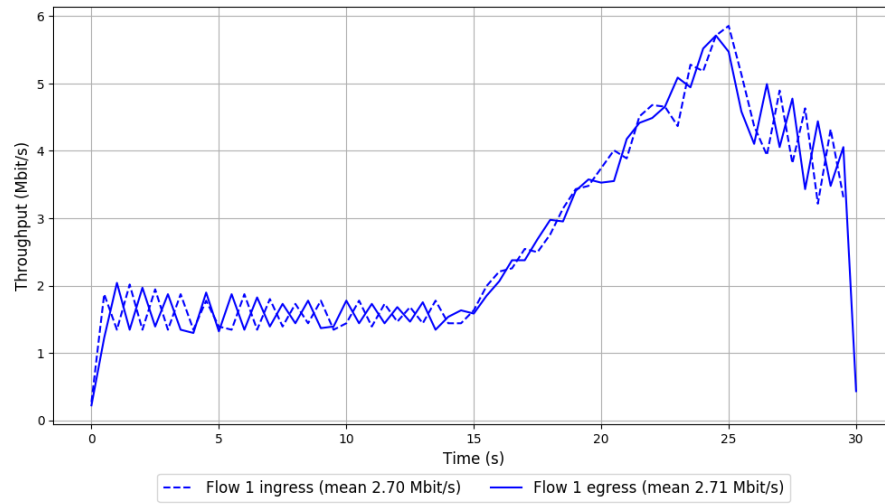
-- Flow 1:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 117.588 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link

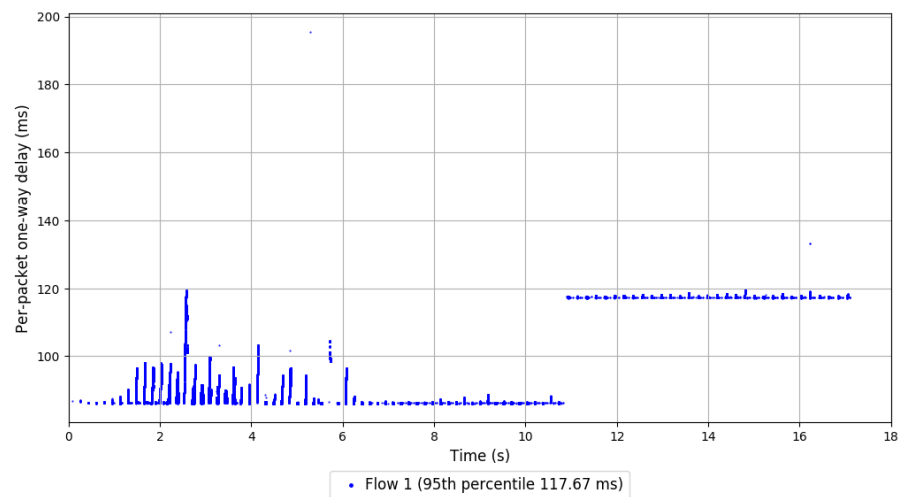
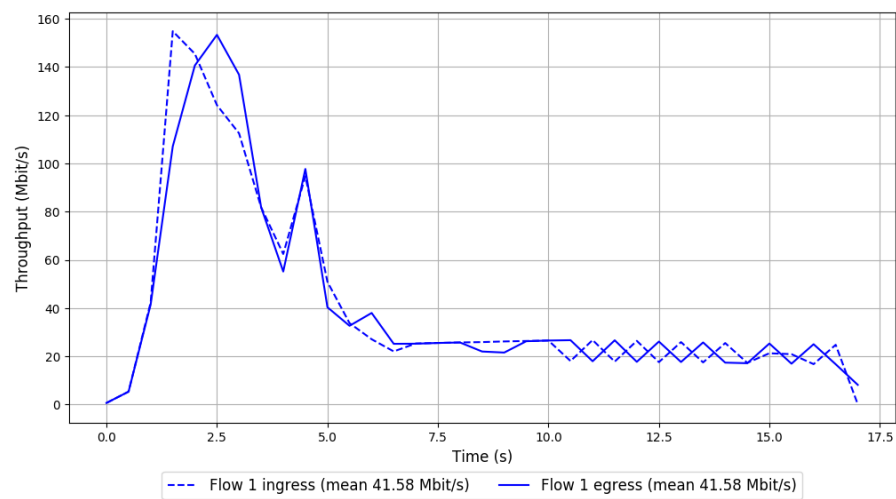


Run 7: Statistics of TCP Vegas

Start at: 2017-11-30 08:15:16

End at: 2017-11-30 08:15:46

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-30 08:25:55

End at: 2017-11-30 08:26:25

Run 8: Report of TCP Vegas — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of TCP Vegas

Start at: 2017-11-30 08:36:22

End at: 2017-11-30 08:36:52

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 117.533 ms

Loss rate: 0.00%

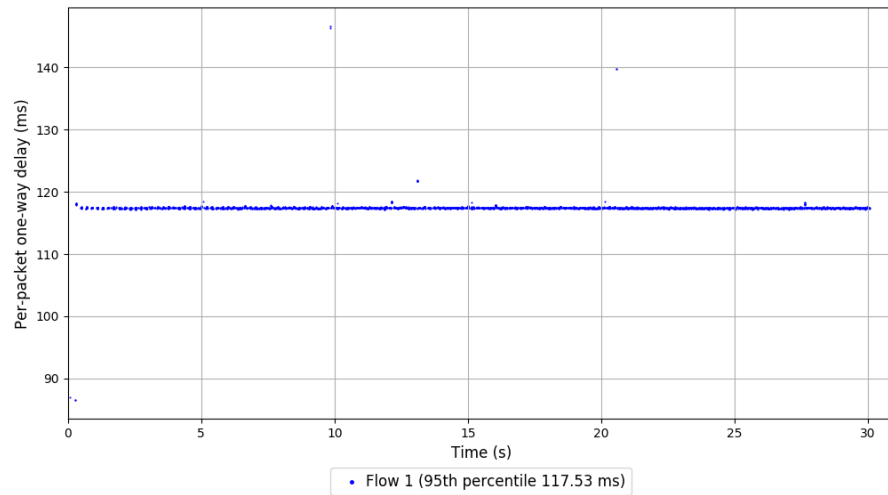
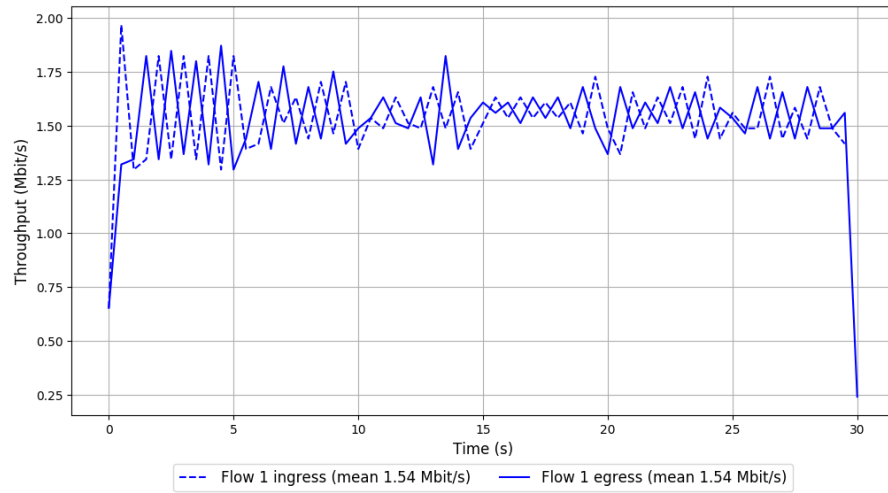
-- Flow 1:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 117.533 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-30 08:46:49

End at: 2017-11-30 08:47:19

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.91 Mbit/s

95th percentile per-packet one-way delay: 87.081 ms

Loss rate: 0.00%

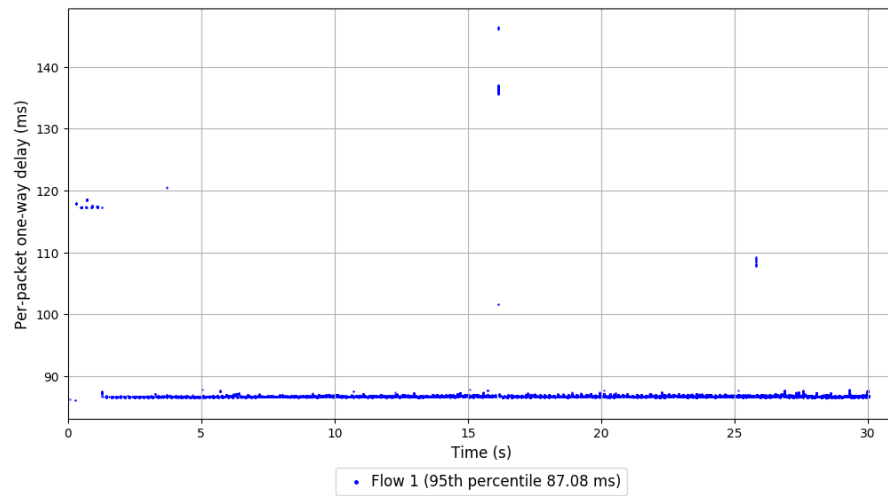
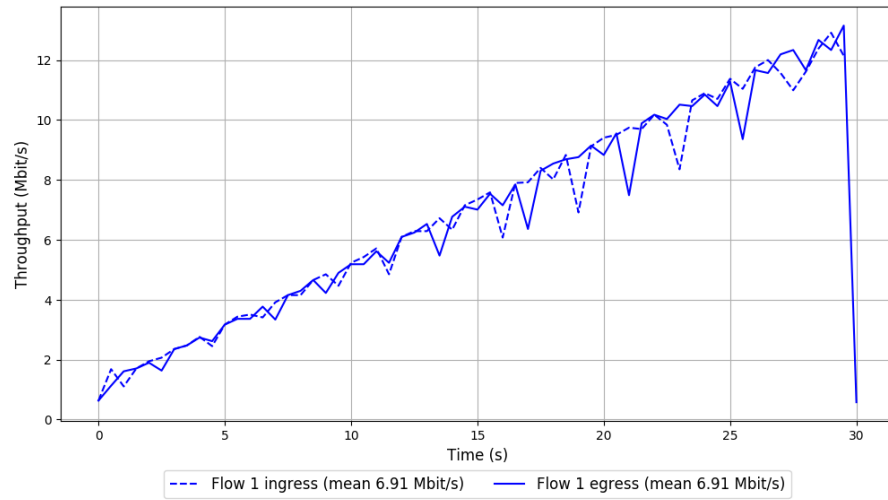
-- Flow 1:

Average throughput: 6.91 Mbit/s

95th percentile per-packet one-way delay: 87.081 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-30 07:11:27

End at: 2017-11-30 07:11:57

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.52 Mbit/s

95th percentile per-packet one-way delay: 199.909 ms

Loss rate: 0.54%

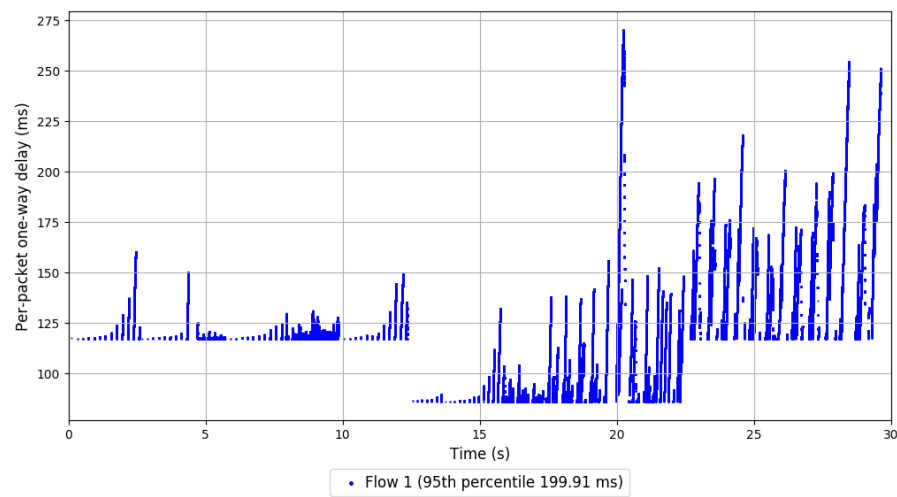
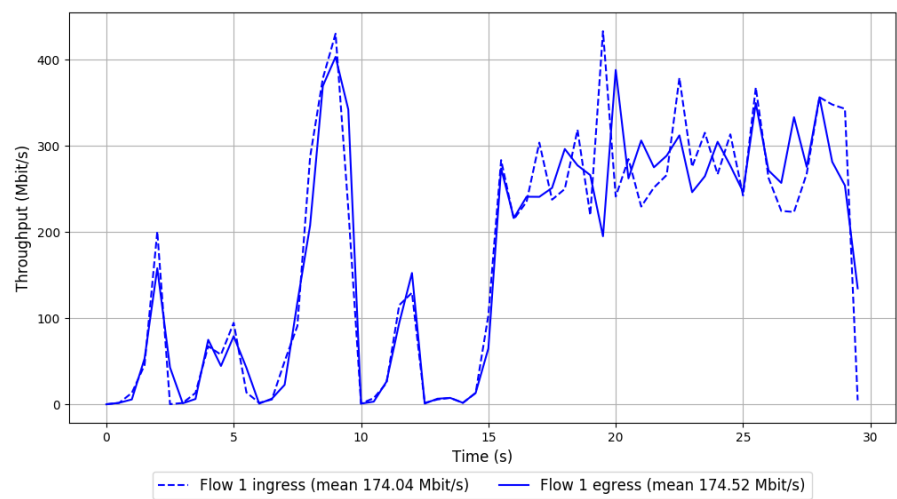
-- Flow 1:

Average throughput: 174.52 Mbit/s

95th percentile per-packet one-way delay: 199.909 ms

Loss rate: 0.54%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-30 07:21:43

End at: 2017-11-30 07:22:13

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.94 Mbit/s

95th percentile per-packet one-way delay: 122.755 ms

Loss rate: 0.13%

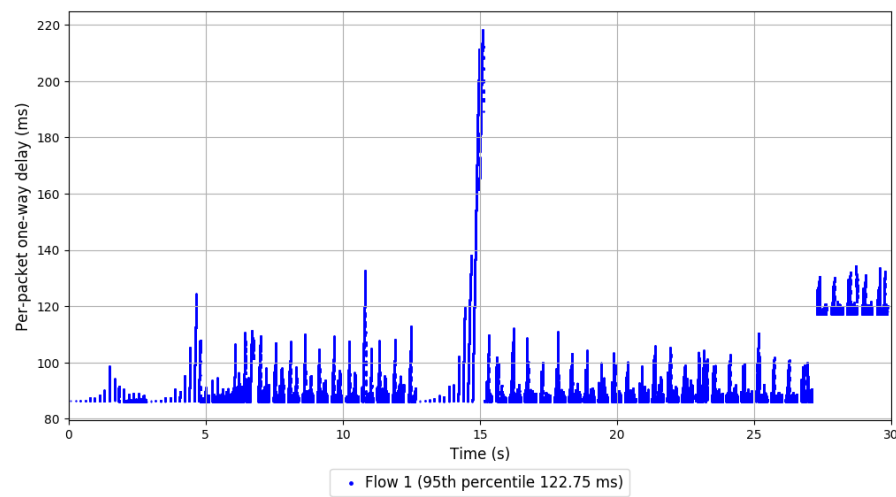
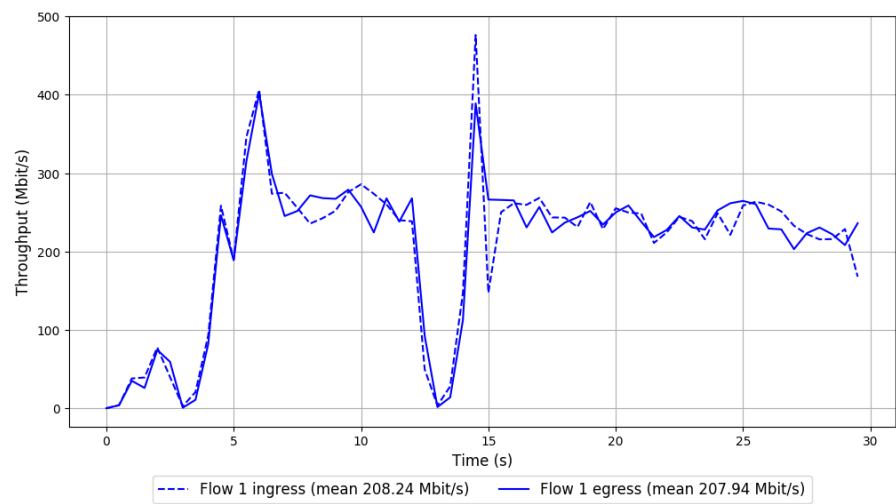
-- Flow 1:

Average throughput: 207.94 Mbit/s

95th percentile per-packet one-way delay: 122.755 ms

Loss rate: 0.13%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-30 07:31:42

End at: 2017-11-30 07:32:12

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.91 Mbit/s

95th percentile per-packet one-way delay: 226.555 ms

Loss rate: 2.01%

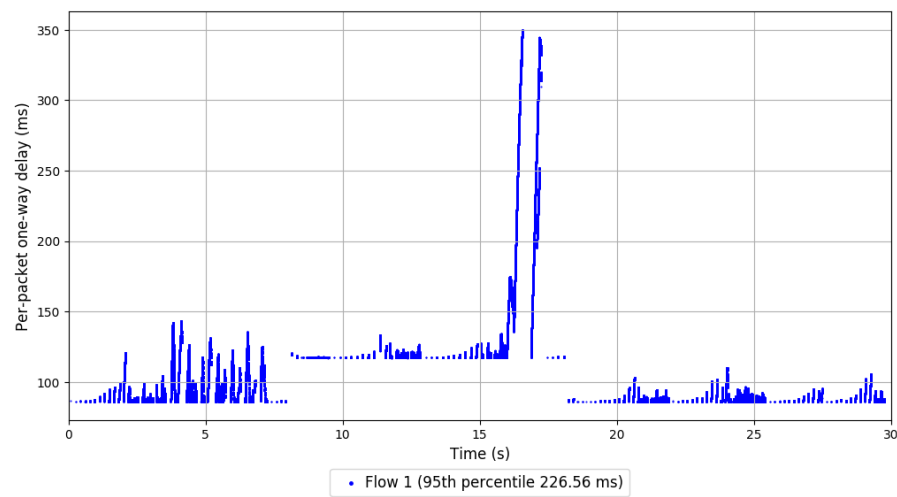
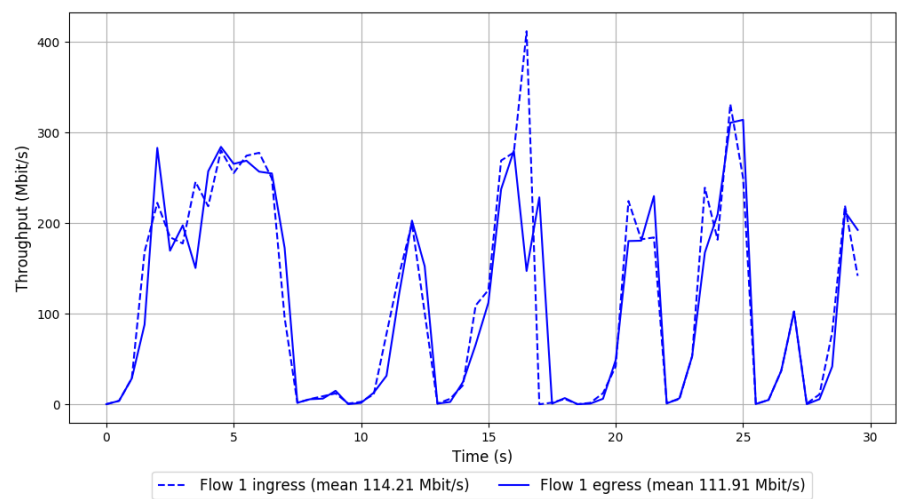
-- Flow 1:

Average throughput: 111.91 Mbit/s

95th percentile per-packet one-way delay: 226.555 ms

Loss rate: 2.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-30 07:42:19

End at: 2017-11-30 07:42:49

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.86 Mbit/s

95th percentile per-packet one-way delay: 112.212 ms

Loss rate: 0.01%

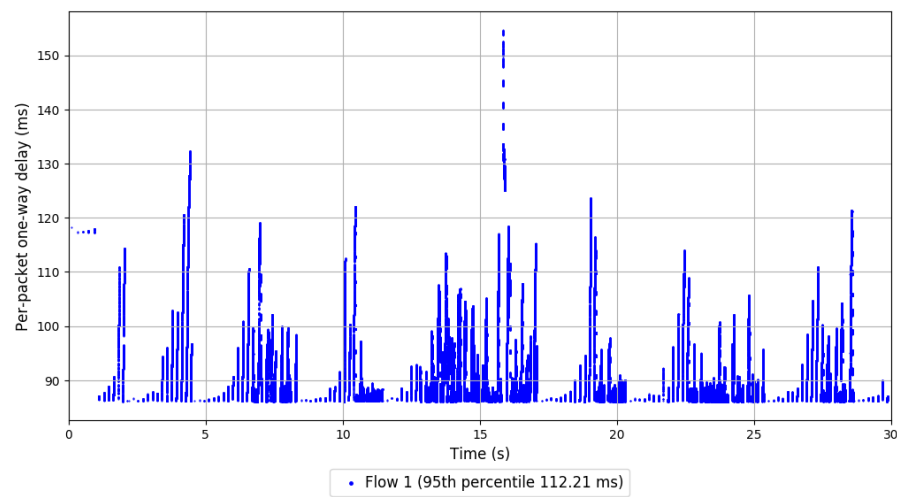
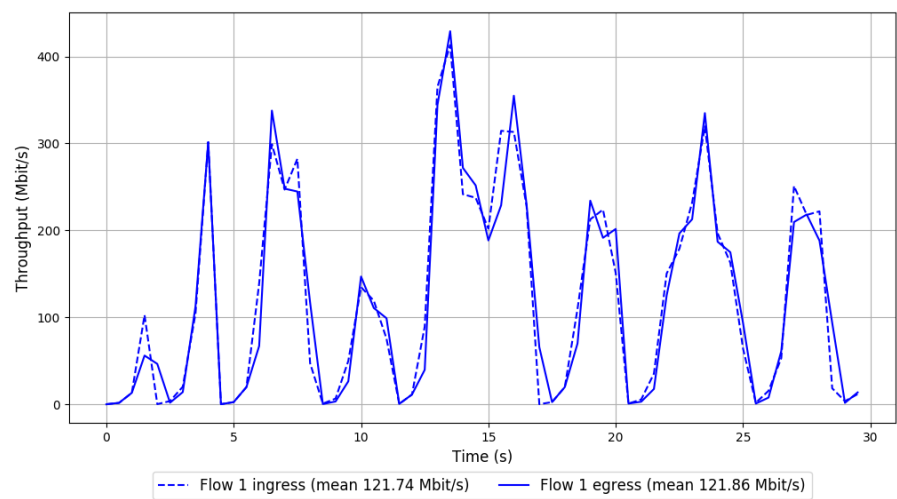
-- Flow 1:

Average throughput: 121.86 Mbit/s

95th percentile per-packet one-way delay: 112.212 ms

Loss rate: 0.01%

Run 4: Report of Verus — Data Link

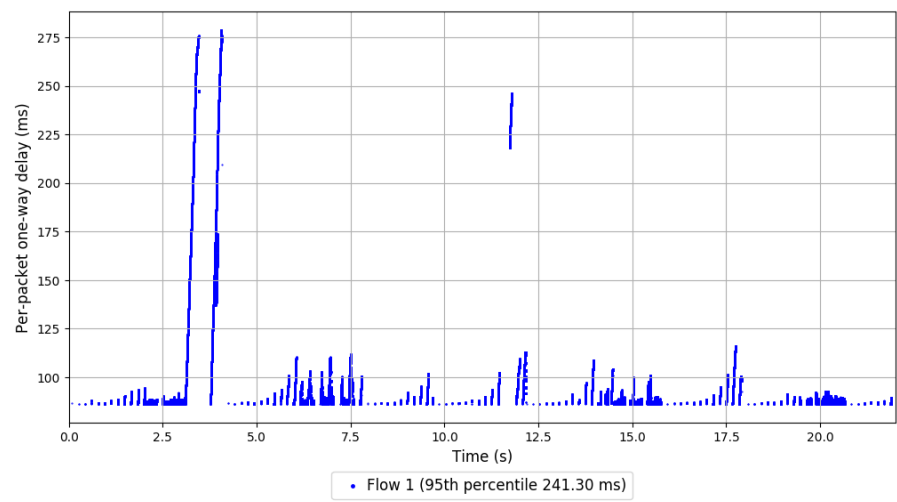
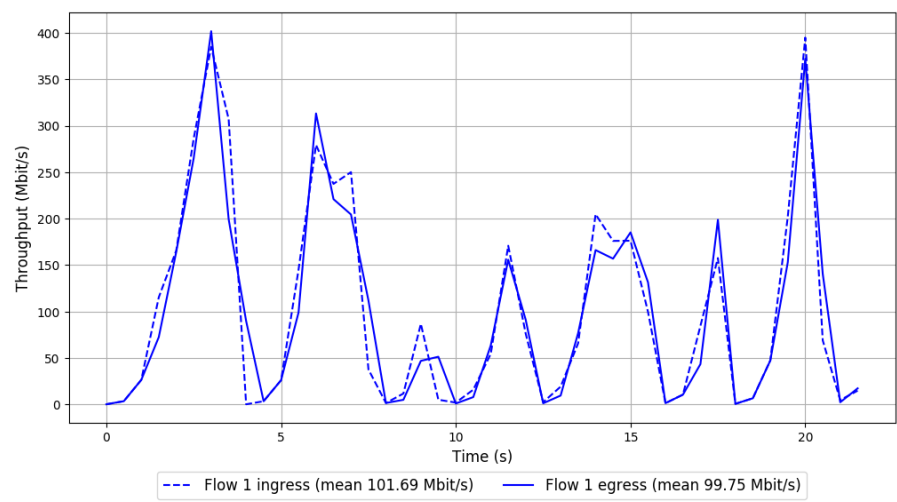


Run 5: Statistics of Verus

Start at: 2017-11-30 07:52:45

End at: 2017-11-30 07:53:15

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-30 08:02:48

End at: 2017-11-30 08:03:18

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.96 Mbit/s

95th percentile per-packet one-way delay: 162.225 ms

Loss rate: 0.61%

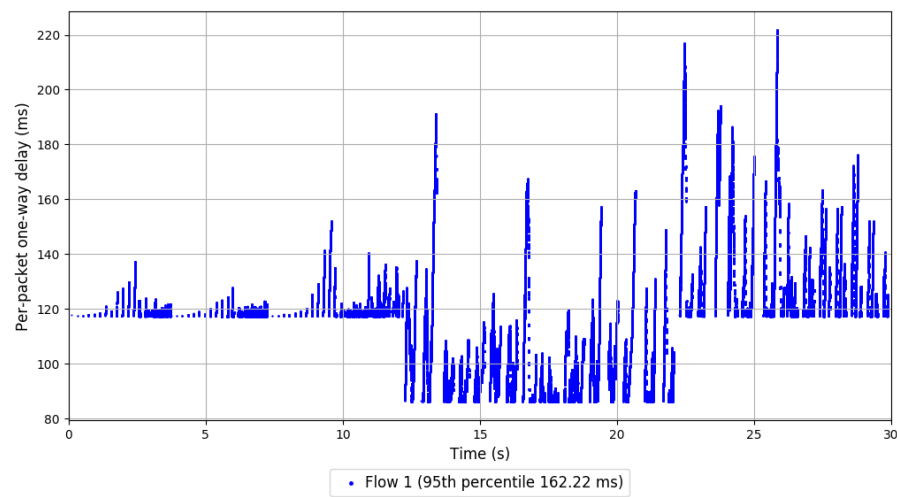
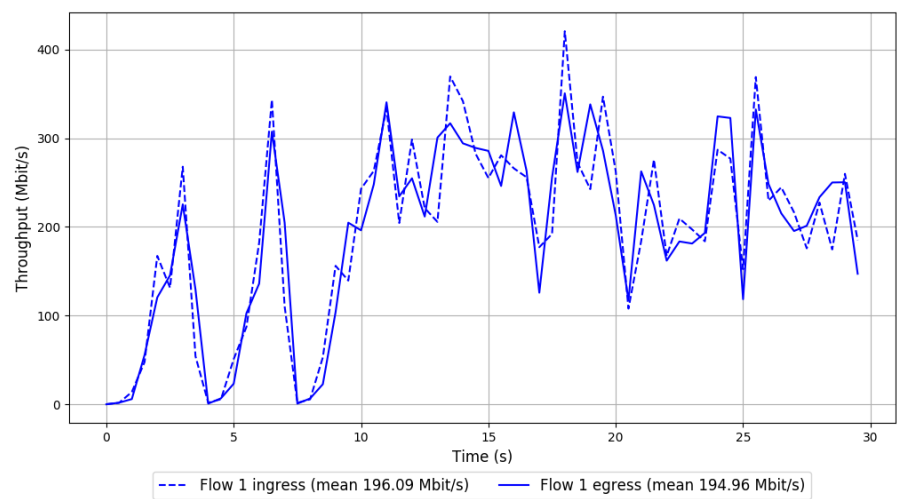
-- Flow 1:

Average throughput: 194.96 Mbit/s

95th percentile per-packet one-way delay: 162.225 ms

Loss rate: 0.61%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-30 08:12:49

End at: 2017-11-30 08:13:19

Below is generated by plot.py at 2017-11-30 09:47:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.12 Mbit/s

95th percentile per-packet one-way delay: 135.888 ms

Loss rate: 0.33%

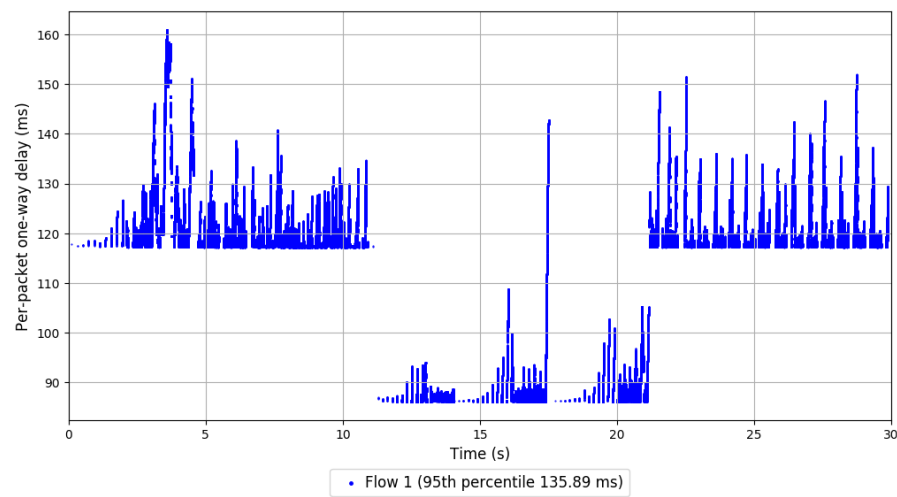
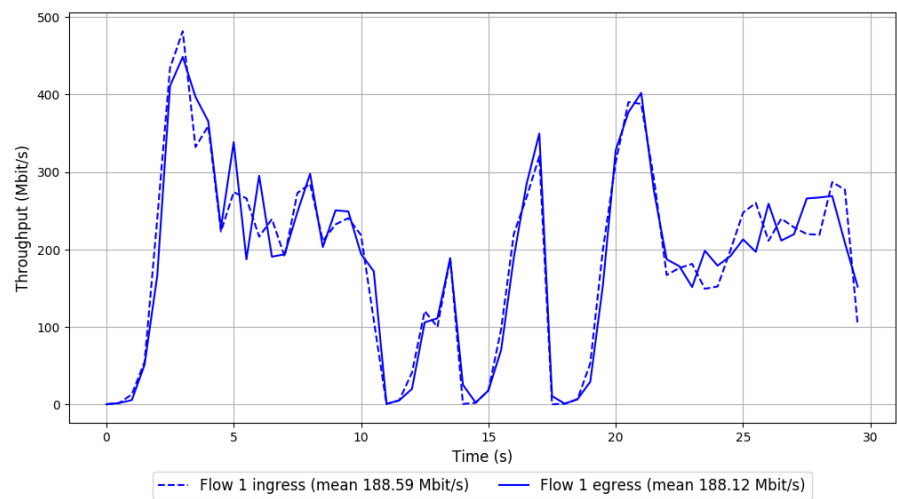
-- Flow 1:

Average throughput: 188.12 Mbit/s

95th percentile per-packet one-way delay: 135.888 ms

Loss rate: 0.33%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-30 08:23:27

End at: 2017-11-30 08:23:57

Below is generated by plot.py at 2017-11-30 09:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 228.56 Mbit/s

95th percentile per-packet one-way delay: 144.901 ms

Loss rate: 0.16%

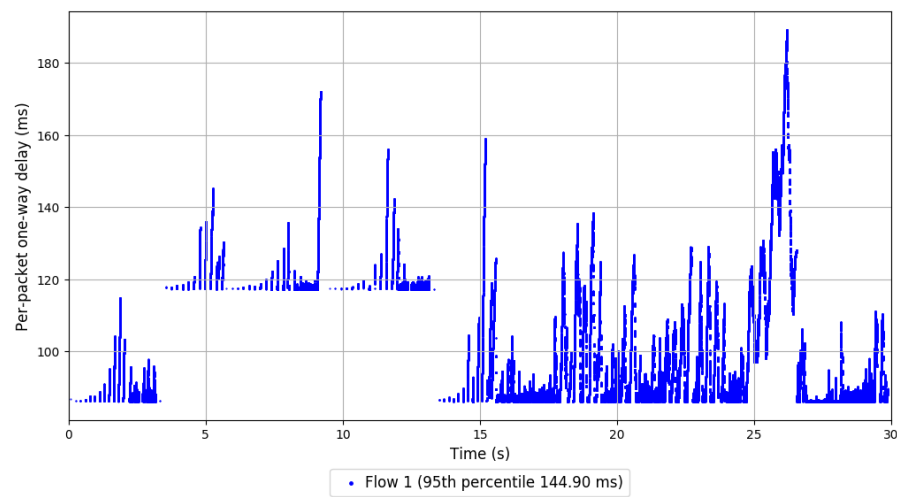
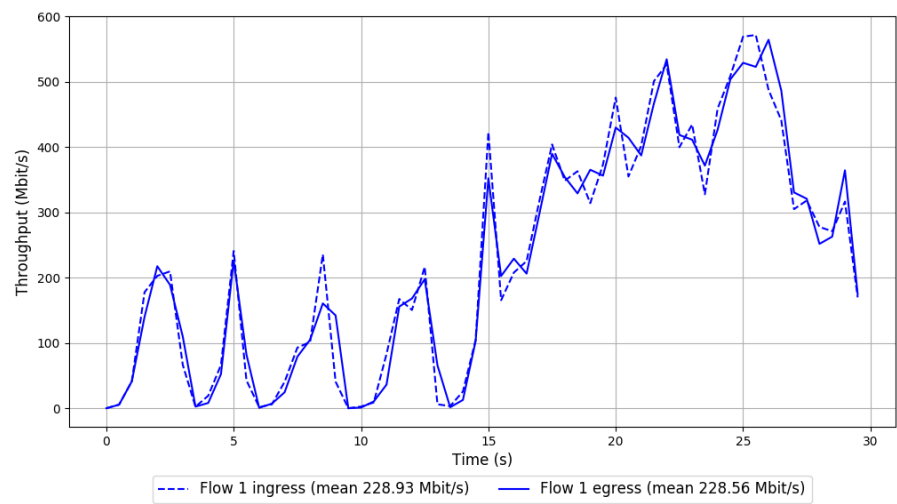
-- Flow 1:

Average throughput: 228.56 Mbit/s

95th percentile per-packet one-way delay: 144.901 ms

Loss rate: 0.16%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-30 08:33:51

End at: 2017-11-30 08:34:21

Below is generated by plot.py at 2017-11-30 09:47:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 237.16 Mbit/s

95th percentile per-packet one-way delay: 140.031 ms

Loss rate: 0.11%

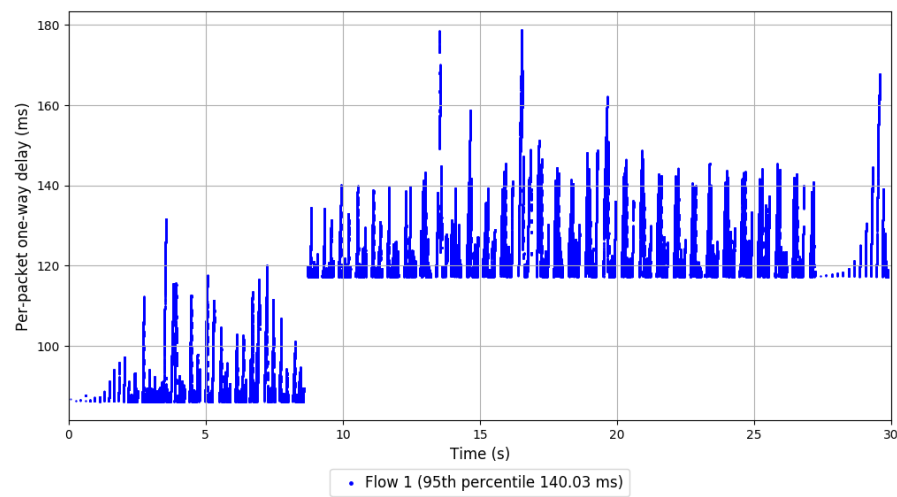
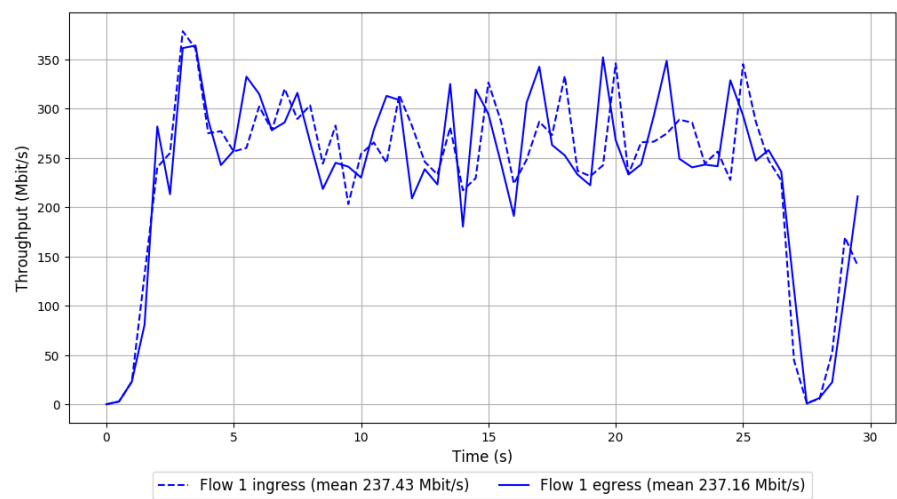
-- Flow 1:

Average throughput: 237.16 Mbit/s

95th percentile per-packet one-way delay: 140.031 ms

Loss rate: 0.11%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-30 08:44:21

End at: 2017-11-30 08:44:51

Below is generated by plot.py at 2017-11-30 09:47:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.90 Mbit/s

95th percentile per-packet one-way delay: 132.414 ms

Loss rate: 0.63%

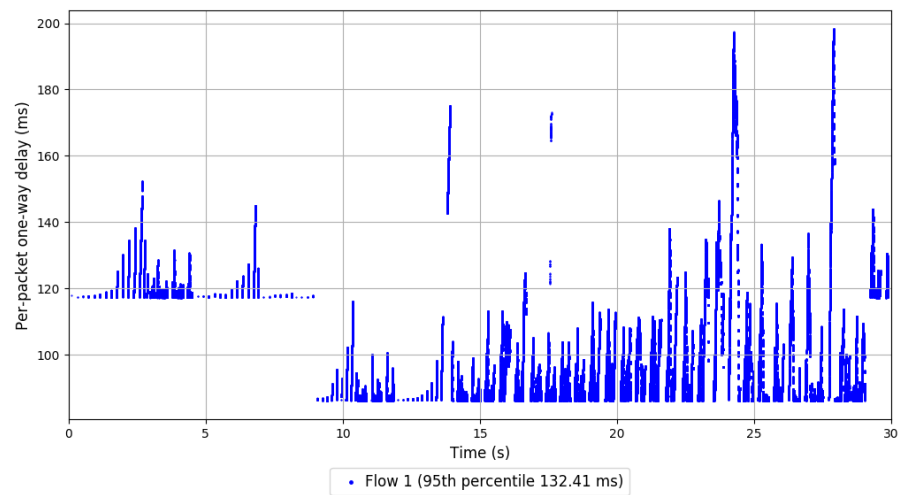
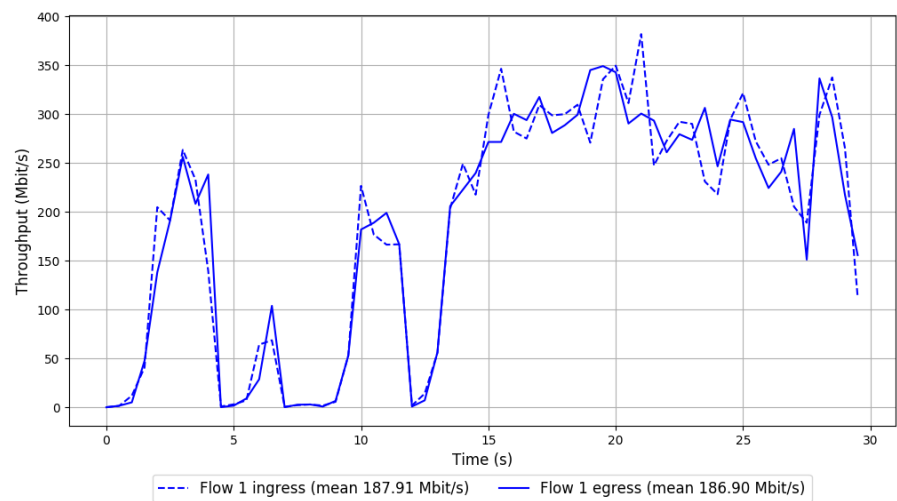
-- Flow 1:

Average throughput: 186.90 Mbit/s

95th percentile per-packet one-way delay: 132.414 ms

Loss rate: 0.63%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-11-30 07:13:09

End at: 2017-11-30 07:13:39

Below is generated by plot.py at 2017-11-30 09:47:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.48 Mbit/s

95th percentile per-packet one-way delay: 117.300 ms

Loss rate: 0.03%

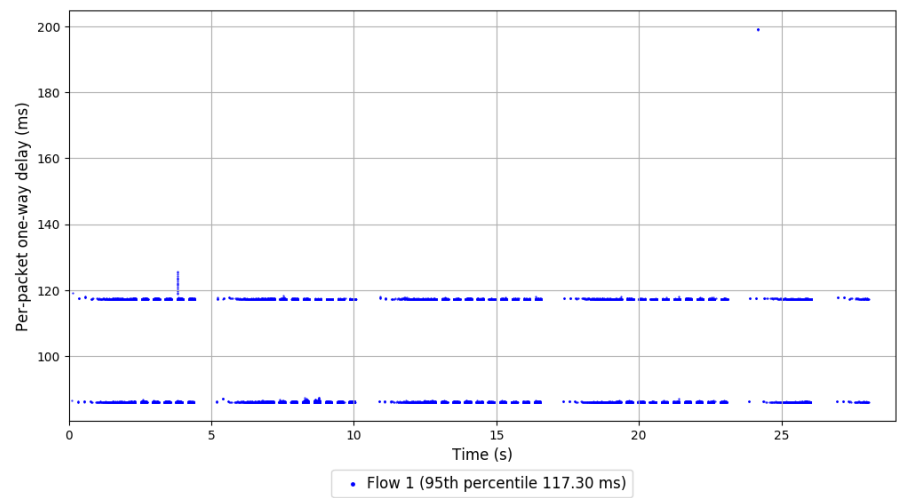
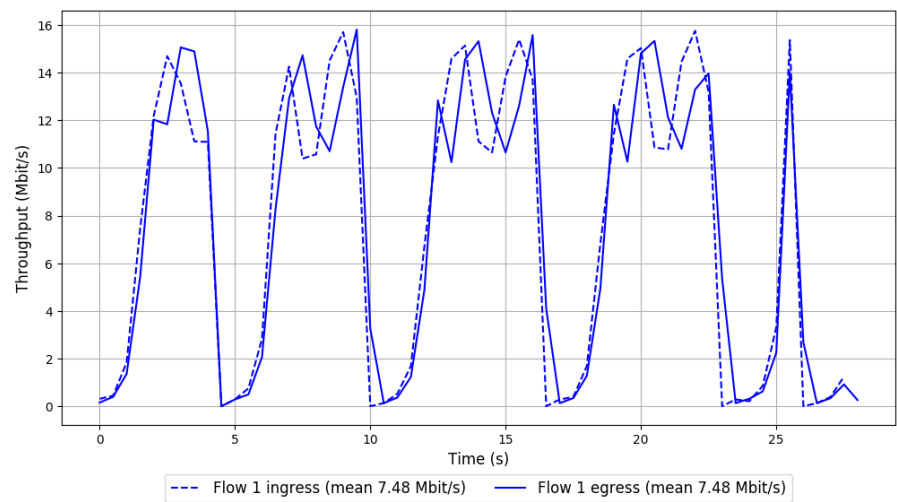
-- Flow 1:

Average throughput: 7.48 Mbit/s

95th percentile per-packet one-way delay: 117.300 ms

Loss rate: 0.03%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-30 07:23:16

End at: 2017-11-30 07:23:46

Below is generated by plot.py at 2017-11-30 09:47:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.79 Mbit/s

95th percentile per-packet one-way delay: 86.735 ms

Loss rate: 0.00%

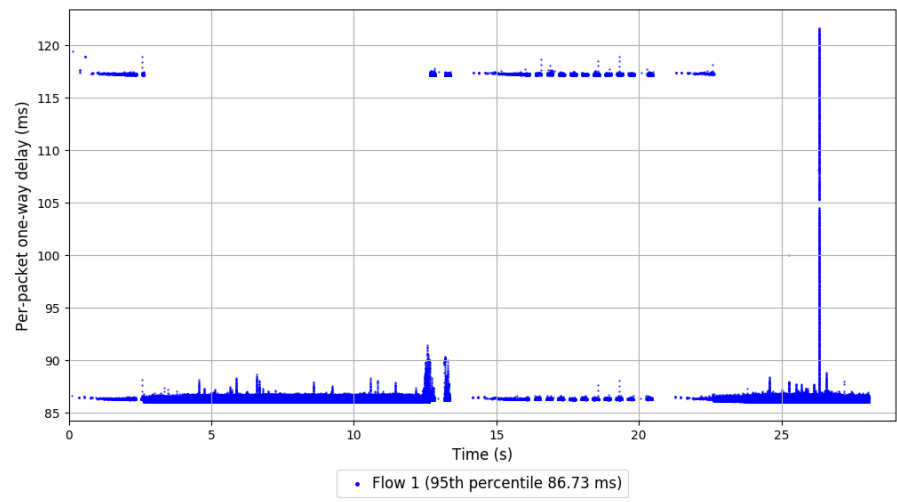
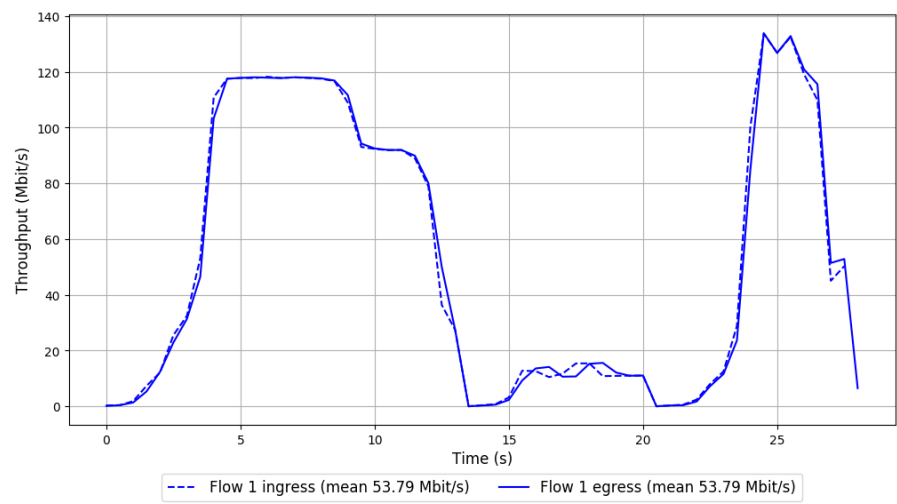
-- Flow 1:

Average throughput: 53.79 Mbit/s

95th percentile per-packet one-way delay: 86.735 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-30 07:33:22

End at: 2017-11-30 07:33:52

Below is generated by plot.py at 2017-11-30 09:47:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.38 Mbit/s

95th percentile per-packet one-way delay: 117.361 ms

Loss rate: 0.00%

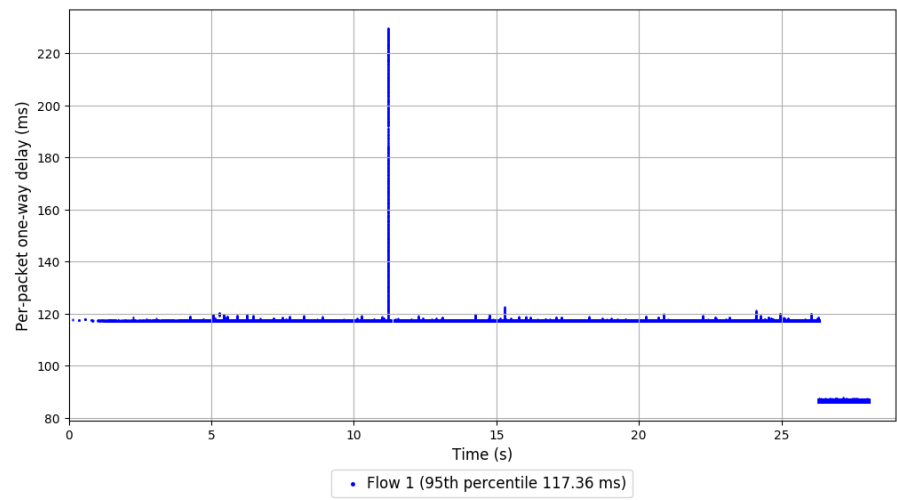
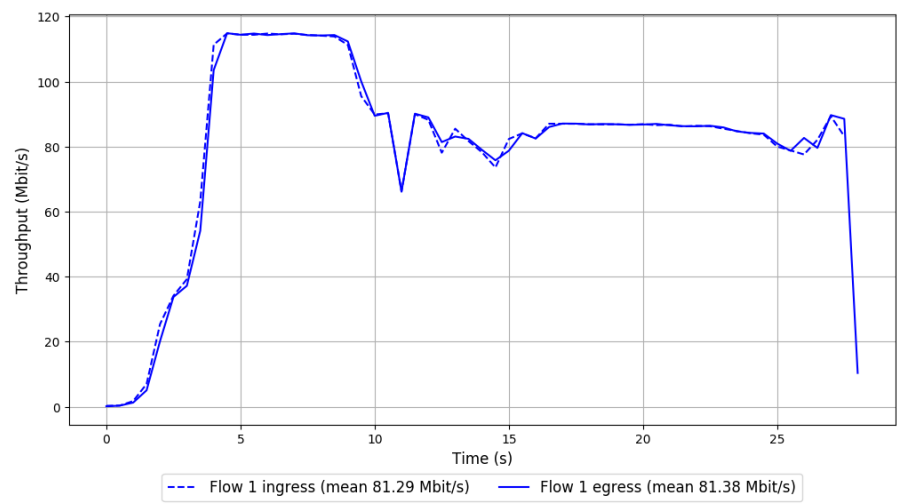
-- Flow 1:

Average throughput: 81.38 Mbit/s

95th percentile per-packet one-way delay: 117.361 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-30 07:43:59

End at: 2017-11-30 07:44:29

Below is generated by plot.py at 2017-11-30 09:47:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.46 Mbit/s

95th percentile per-packet one-way delay: 117.085 ms

Loss rate: 0.00%

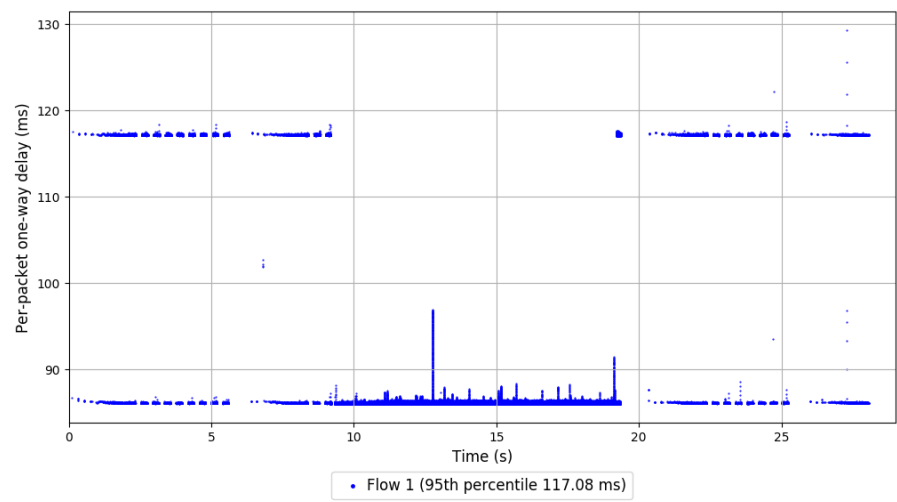
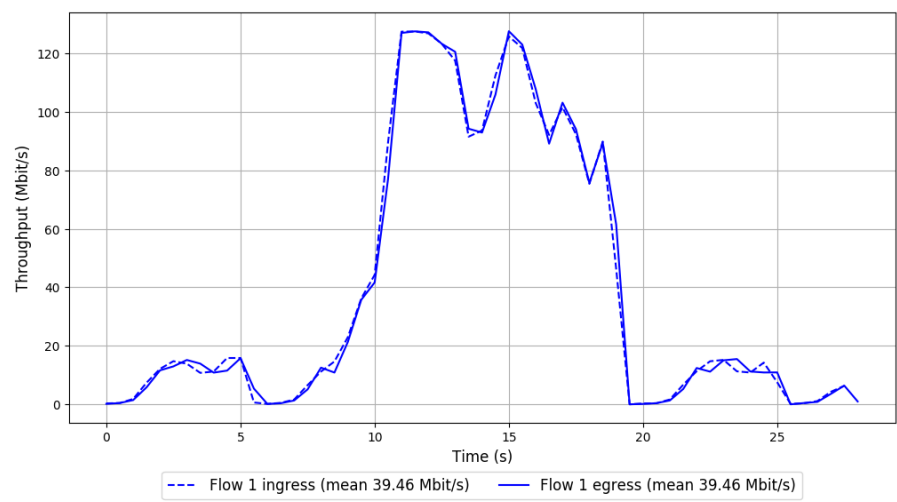
-- Flow 1:

Average throughput: 39.46 Mbit/s

95th percentile per-packet one-way delay: 117.085 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-30 07:54:21

End at: 2017-11-30 07:54:51

Below is generated by plot.py at 2017-11-30 09:48:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.31 Mbit/s

95th percentile per-packet one-way delay: 86.271 ms

Loss rate: 0.00%

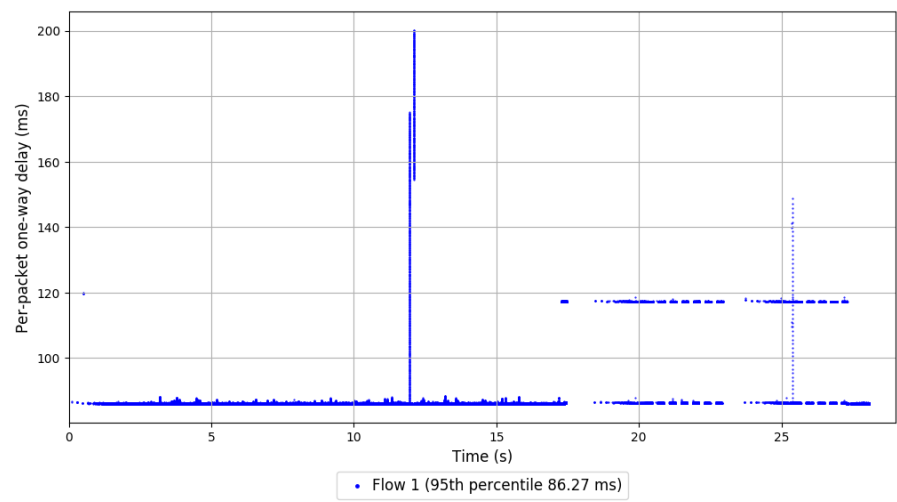
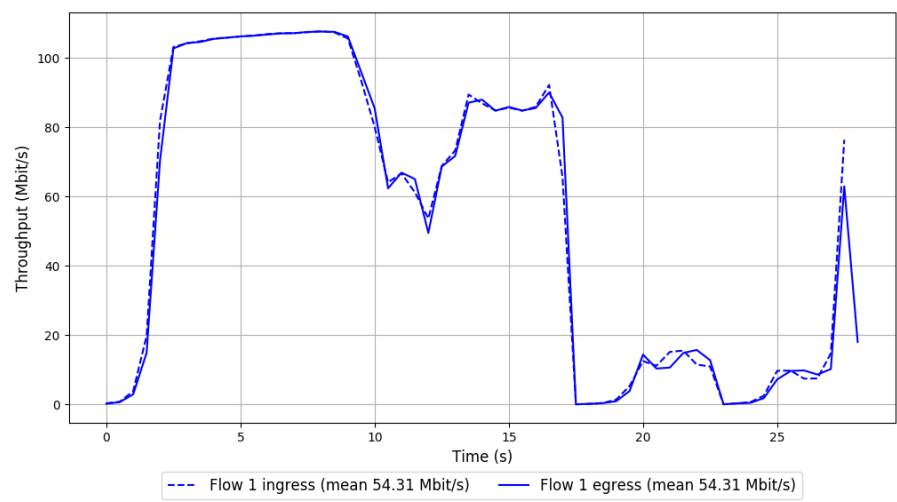
-- Flow 1:

Average throughput: 54.31 Mbit/s

95th percentile per-packet one-way delay: 86.271 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-30 08:04:20

End at: 2017-11-30 08:04:50

Below is generated by plot.py at 2017-11-30 09:48:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.66 Mbit/s

95th percentile per-packet one-way delay: 86.622 ms

Loss rate: 0.00%

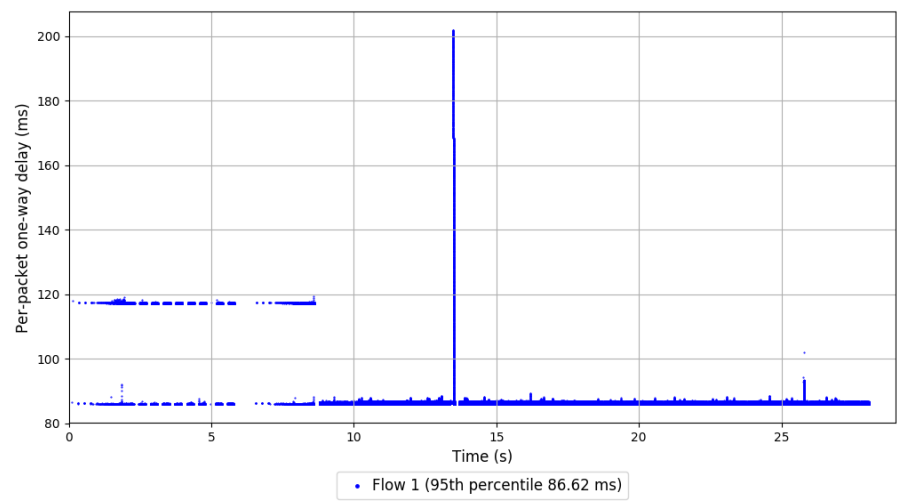
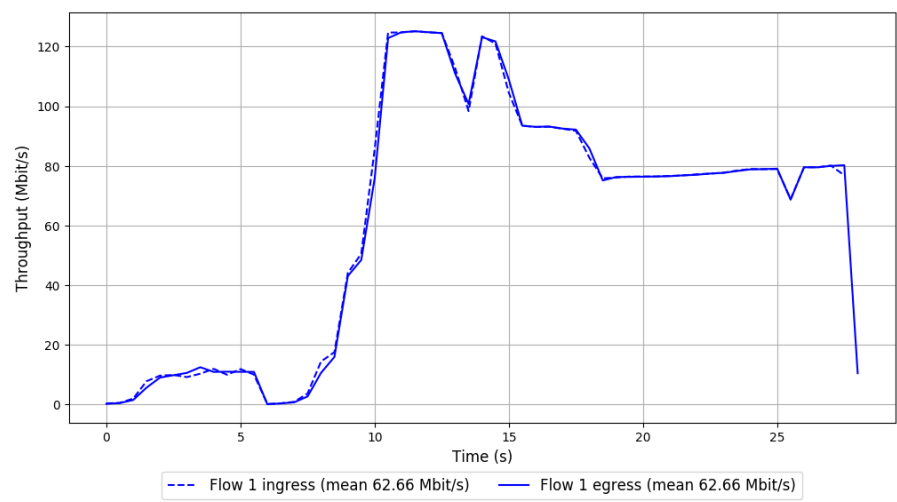
-- Flow 1:

Average throughput: 62.66 Mbit/s

95th percentile per-packet one-way delay: 86.622 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-30 08:14:32

End at: 2017-11-30 08:15:02

Below is generated by plot.py at 2017-11-30 09:48:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.88 Mbit/s

95th percentile per-packet one-way delay: 88.823 ms

Loss rate: 0.00%

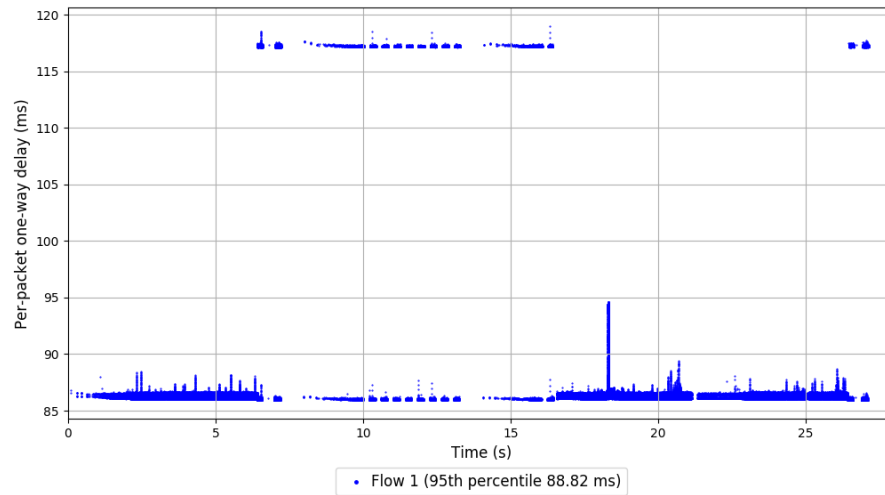
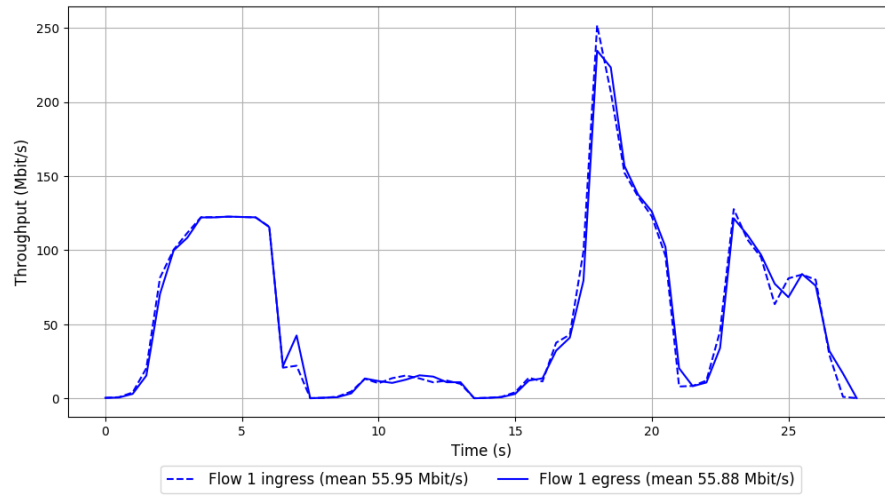
-- Flow 1:

Average throughput: 55.88 Mbit/s

95th percentile per-packet one-way delay: 88.823 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-30 08:25:13

End at: 2017-11-30 08:25:43

Below is generated by plot.py at 2017-11-30 09:48:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.82 Mbit/s

95th percentile per-packet one-way delay: 117.219 ms

Loss rate: 0.14%

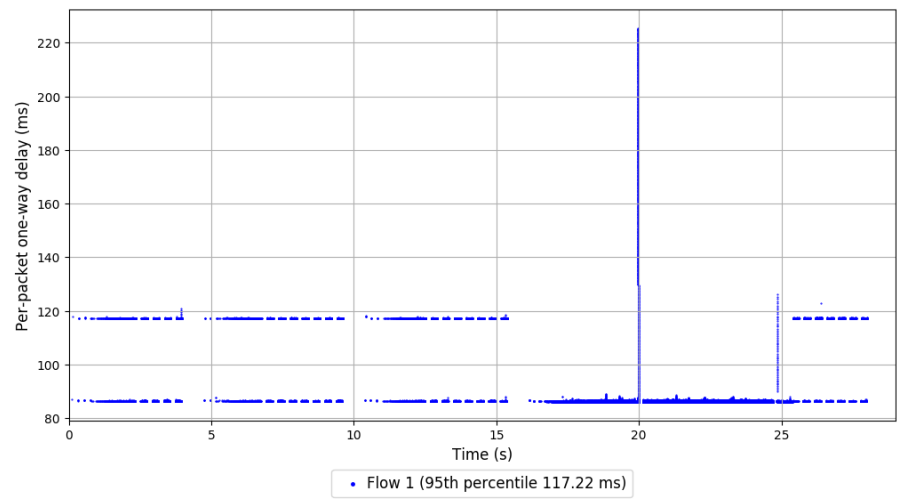
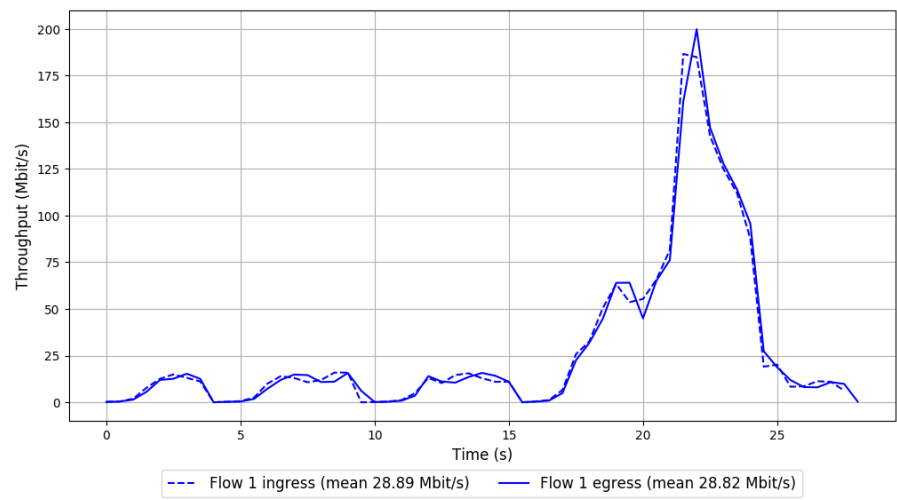
-- Flow 1:

Average throughput: 28.82 Mbit/s

95th percentile per-packet one-way delay: 117.219 ms

Loss rate: 0.14%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-30 08:35:38

End at: 2017-11-30 08:36:08

Below is generated by plot.py at 2017-11-30 09:49:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.70 Mbit/s

95th percentile per-packet one-way delay: 117.369 ms

Loss rate: 0.28%

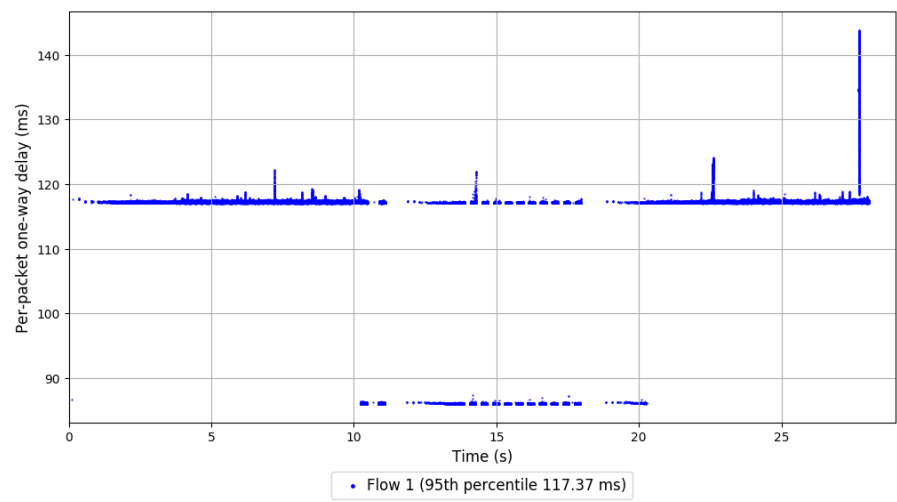
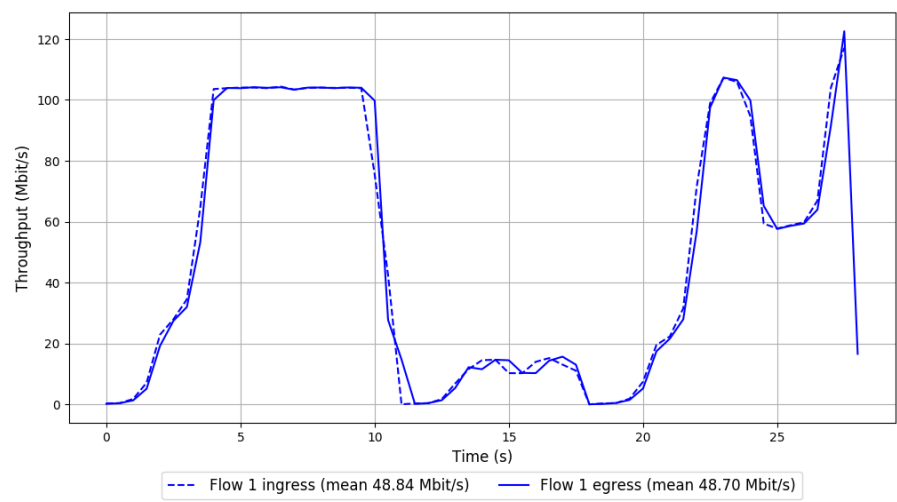
-- Flow 1:

Average throughput: 48.70 Mbit/s

95th percentile per-packet one-way delay: 117.369 ms

Loss rate: 0.28%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-30 08:46:04

End at: 2017-11-30 08:46:34

Below is generated by plot.py at 2017-11-30 09:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.93 Mbit/s

95th percentile per-packet one-way delay: 86.677 ms

Loss rate: 0.00%

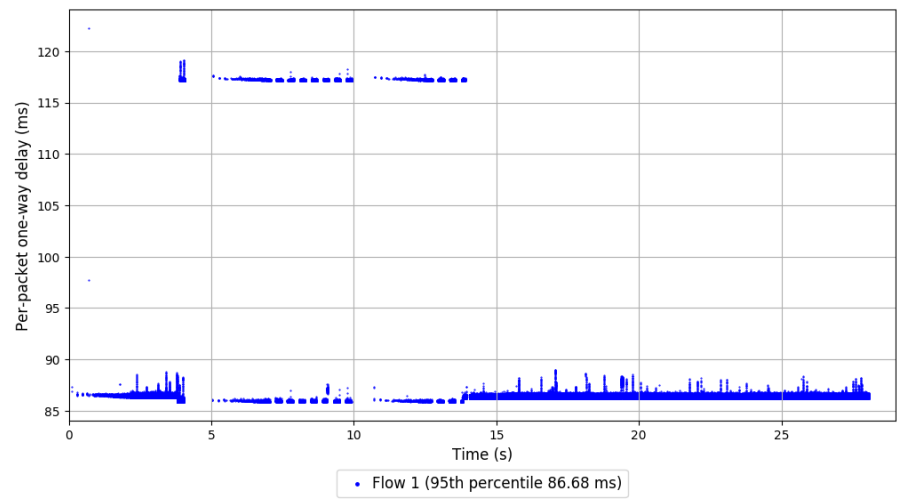
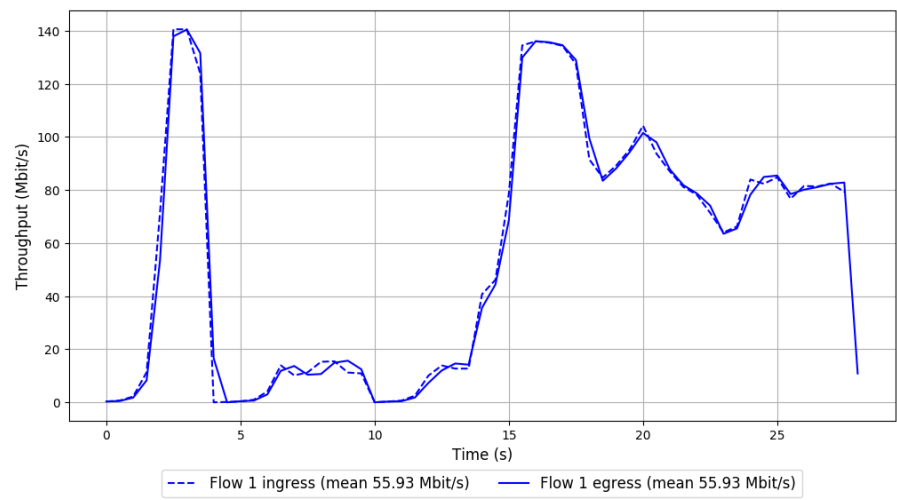
-- Flow 1:

Average throughput: 55.93 Mbit/s

95th percentile per-packet one-way delay: 86.677 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

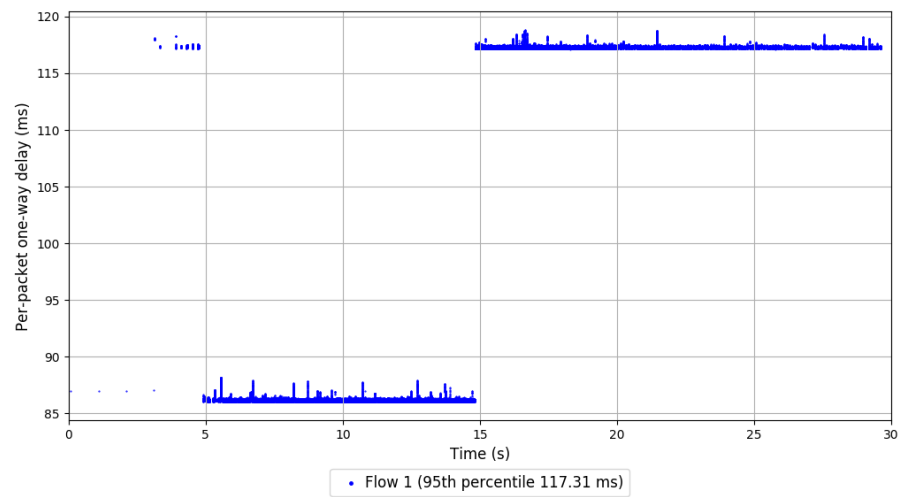
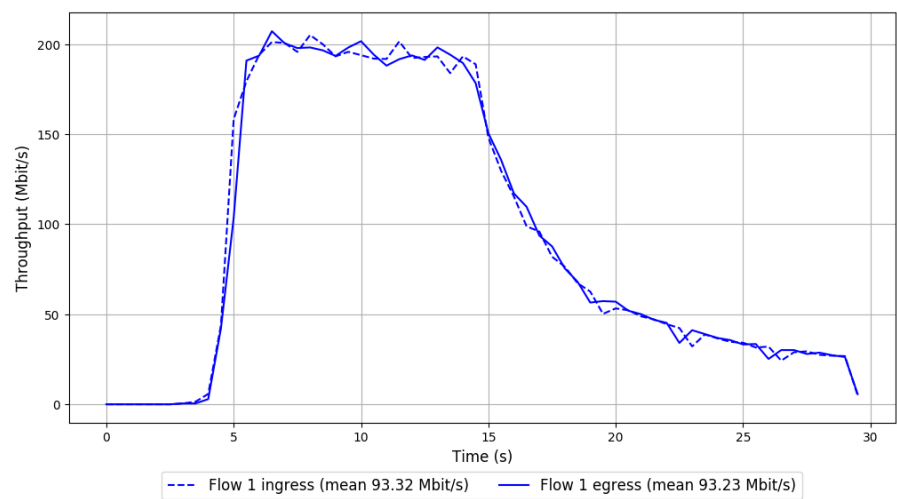


```
Run 1: Statistics of Indigo

Start at: 2017-11-30 07:05:15
End at: 2017-11-30 07:05:45

# Below is generated by plot.py at 2017-11-30 09:49:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.23 Mbit/s
95th percentile per-packet one-way delay: 117.315 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 93.23 Mbit/s
95th percentile per-packet one-way delay: 117.315 ms
Loss rate: 0.32%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-30 07:15:30

End at: 2017-11-30 07:16:00

Below is generated by plot.py at 2017-11-30 09:50:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.57 Mbit/s

95th percentile per-packet one-way delay: 117.437 ms

Loss rate: 0.02%

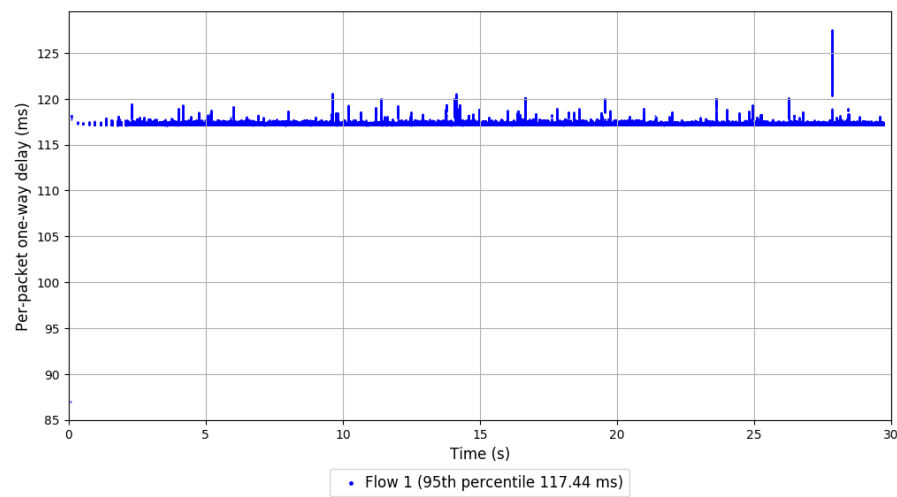
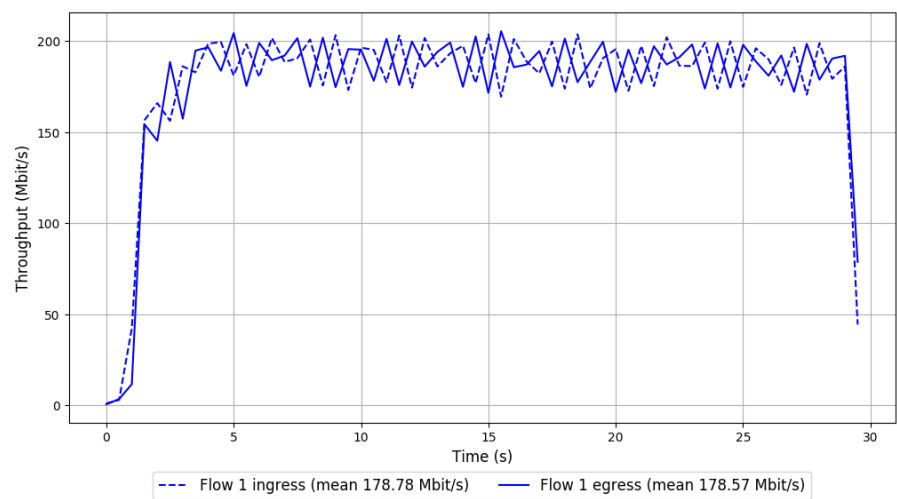
-- Flow 1:

Average throughput: 178.57 Mbit/s

95th percentile per-packet one-way delay: 117.437 ms

Loss rate: 0.02%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-30 07:25:21

End at: 2017-11-30 07:25:51

Below is generated by plot.py at 2017-11-30 09:51:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.03 Mbit/s

95th percentile per-packet one-way delay: 86.362 ms

Loss rate: 0.02%

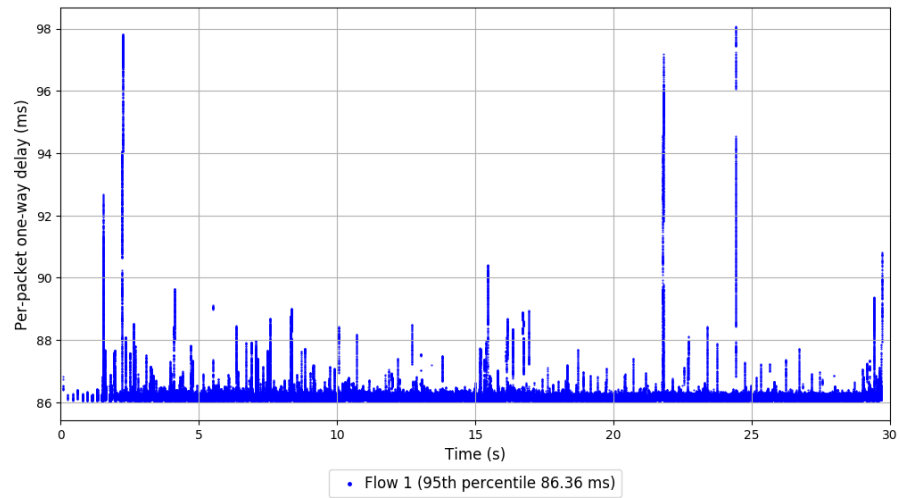
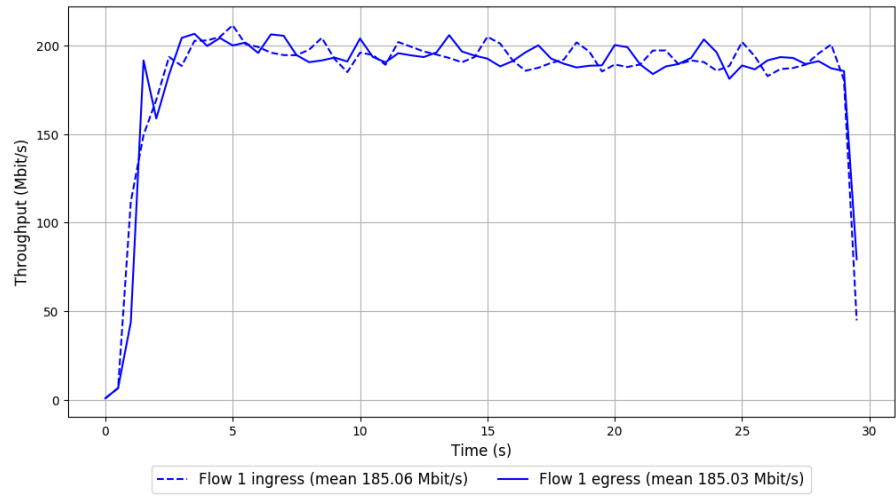
-- Flow 1:

Average throughput: 185.03 Mbit/s

95th percentile per-packet one-way delay: 86.362 ms

Loss rate: 0.02%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-30 07:35:52

End at: 2017-11-30 07:36:22

Below is generated by plot.py at 2017-11-30 09:51:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.36 Mbit/s

95th percentile per-packet one-way delay: 86.235 ms

Loss rate: 0.17%

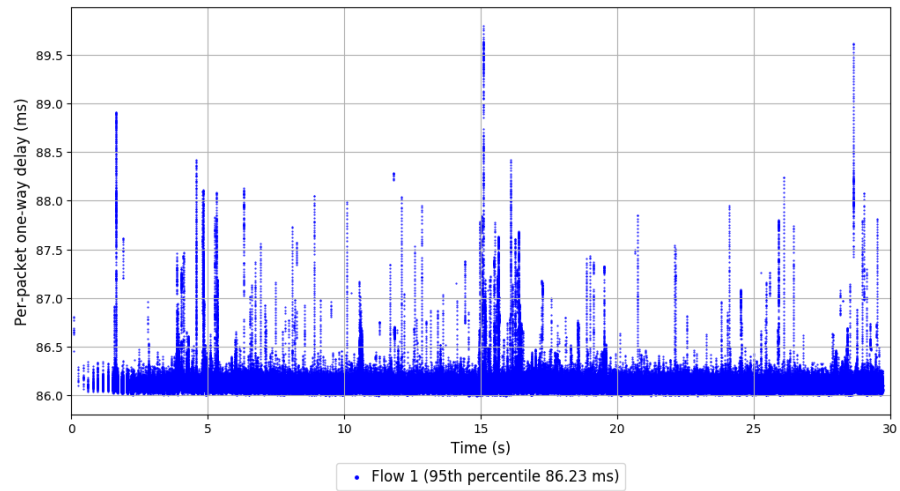
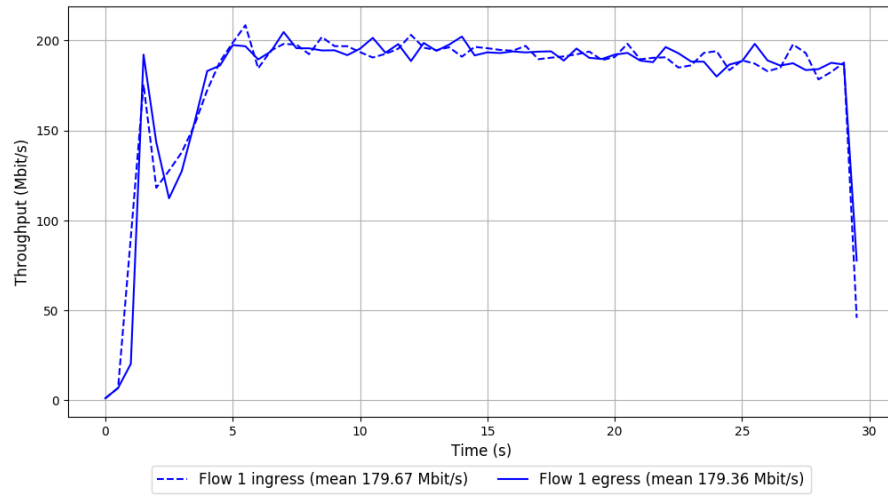
-- Flow 1:

Average throughput: 179.36 Mbit/s

95th percentile per-packet one-way delay: 86.235 ms

Loss rate: 0.17%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-30 07:46:24

End at: 2017-11-30 07:46:54

Below is generated by plot.py at 2017-11-30 09:51:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.88 Mbit/s

95th percentile per-packet one-way delay: 117.361 ms

Loss rate: 0.08%

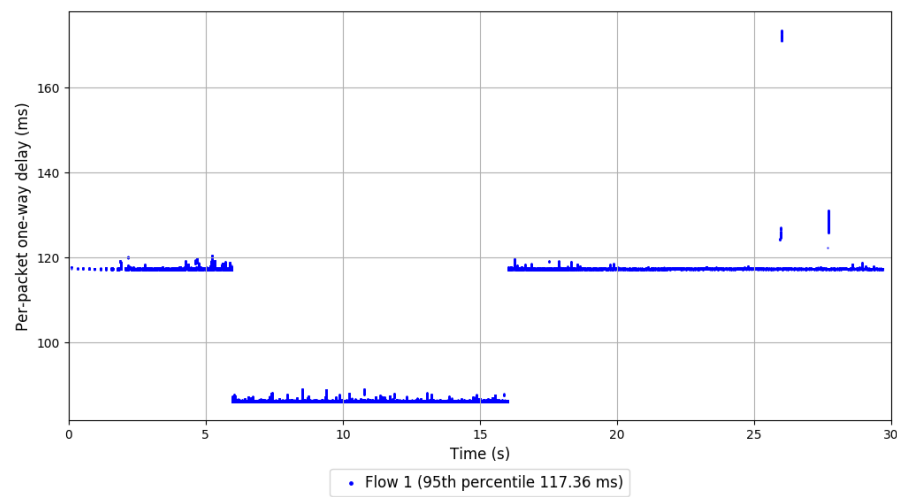
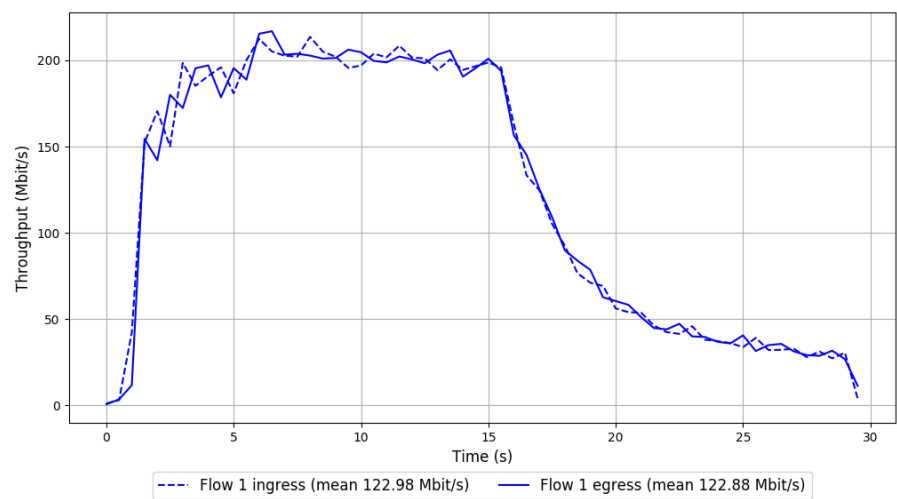
-- Flow 1:

Average throughput: 122.88 Mbit/s

95th percentile per-packet one-way delay: 117.361 ms

Loss rate: 0.08%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-30 07:56:33

End at: 2017-11-30 07:57:03

Below is generated by plot.py at 2017-11-30 09:51:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.97 Mbit/s

95th percentile per-packet one-way delay: 117.303 ms

Loss rate: 0.10%

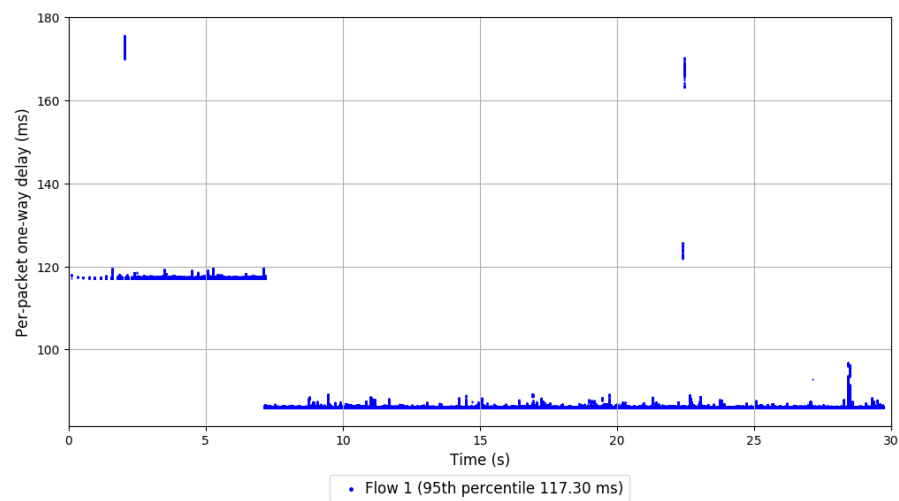
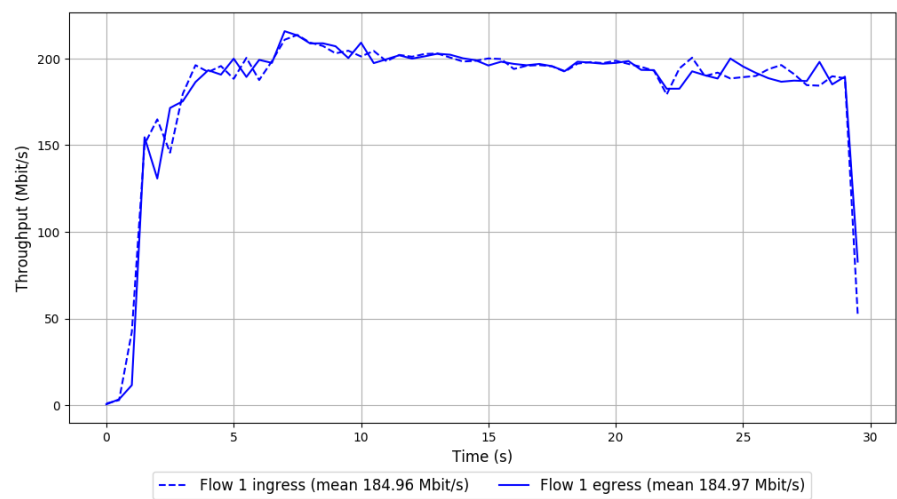
-- Flow 1:

Average throughput: 184.97 Mbit/s

95th percentile per-packet one-way delay: 117.303 ms

Loss rate: 0.10%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-30 08:06:25

End at: 2017-11-30 08:06:55

Below is generated by plot.py at 2017-11-30 09:51:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.81 Mbit/s

95th percentile per-packet one-way delay: 117.352 ms

Loss rate: 0.13%

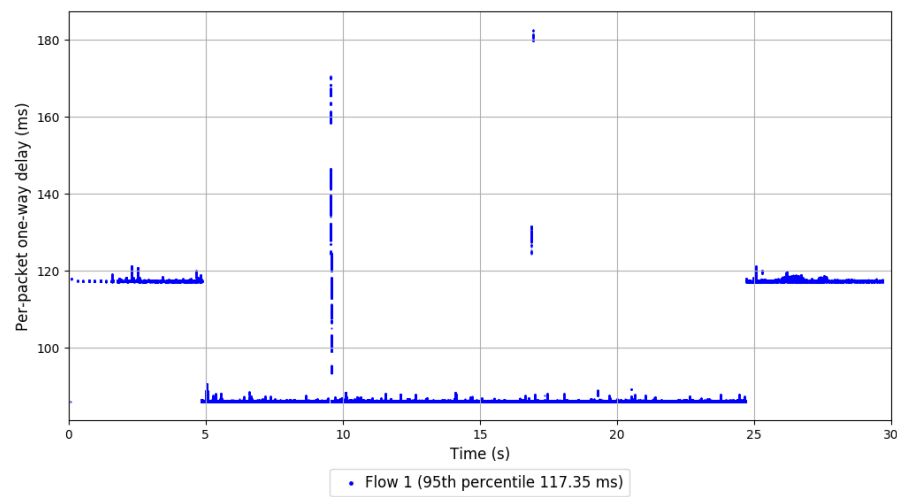
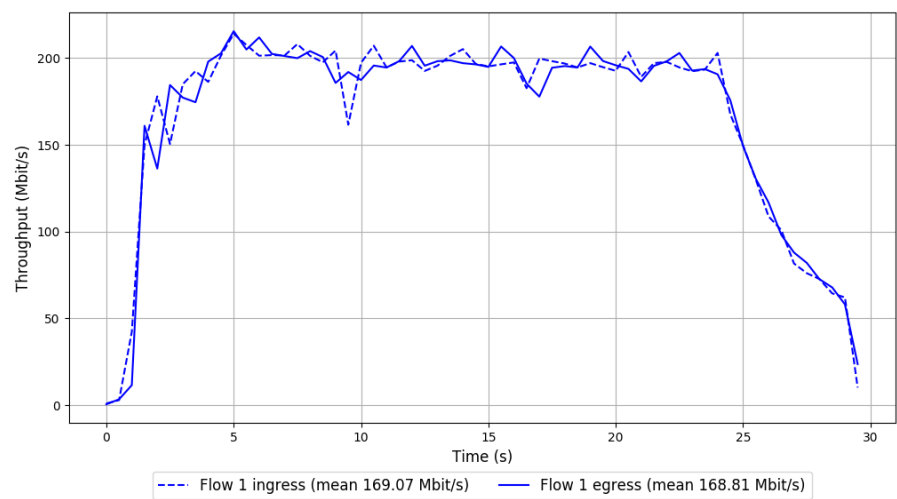
-- Flow 1:

Average throughput: 168.81 Mbit/s

95th percentile per-packet one-way delay: 117.352 ms

Loss rate: 0.13%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-30 08:16:57

End at: 2017-11-30 08:17:27

Below is generated by plot.py at 2017-11-30 09:51:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.99 Mbit/s

95th percentile per-packet one-way delay: 117.277 ms

Loss rate: 0.08%

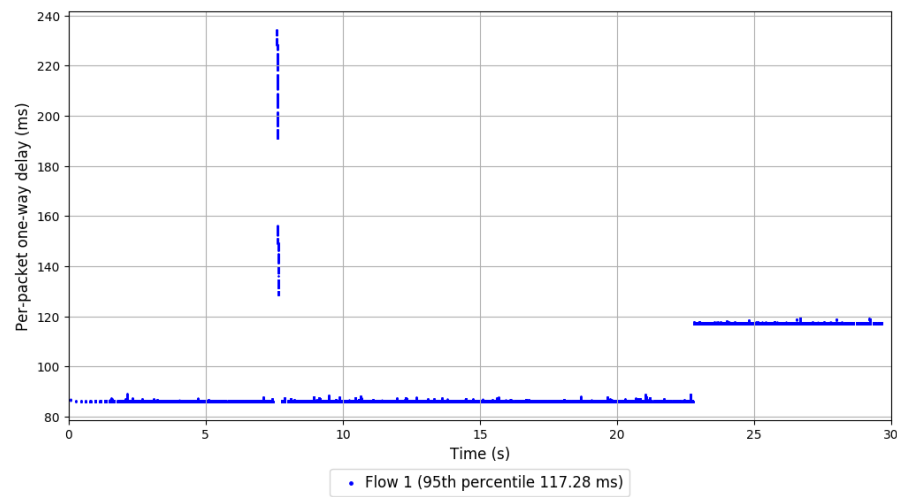
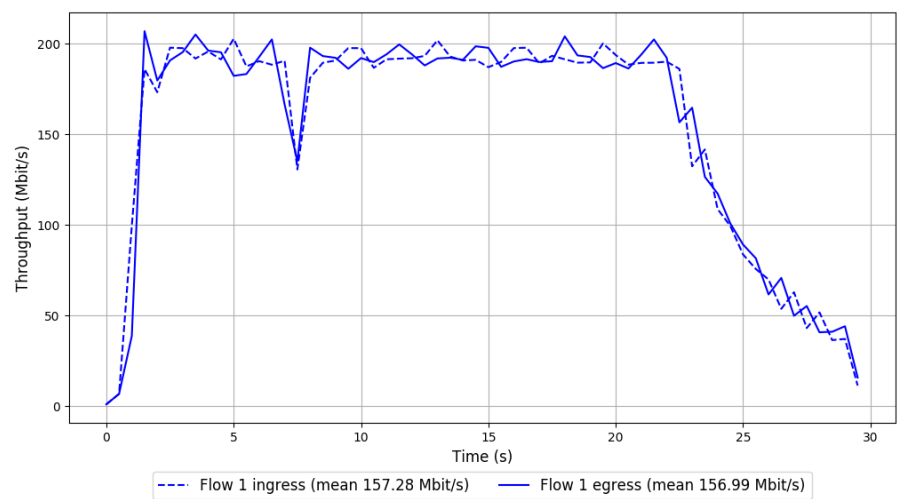
-- Flow 1:

Average throughput: 156.99 Mbit/s

95th percentile per-packet one-way delay: 117.277 ms

Loss rate: 0.08%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-30 08:27:14

End at: 2017-11-30 08:27:44

Below is generated by plot.py at 2017-11-30 09:52:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 175.39 Mbit/s

95th percentile per-packet one-way delay: 117.301 ms

Loss rate: 0.00%

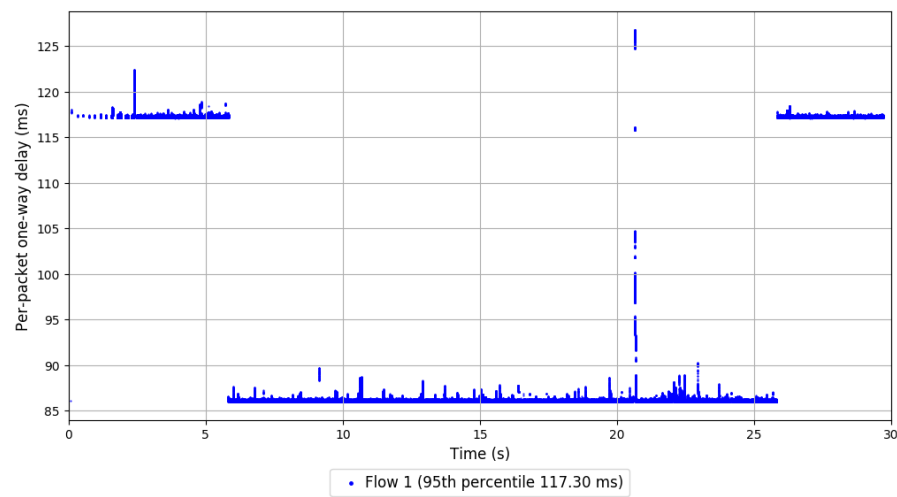
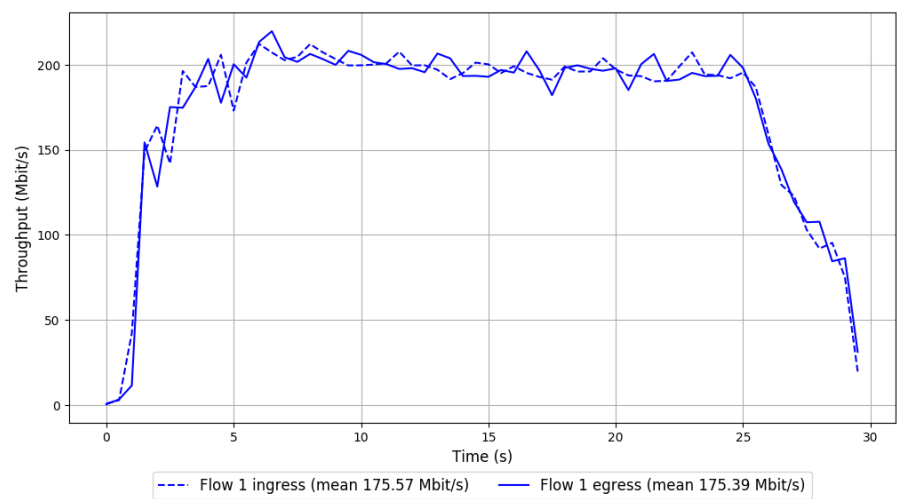
-- Flow 1:

Average throughput: 175.39 Mbit/s

95th percentile per-packet one-way delay: 117.301 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-30 08:38:02

End at: 2017-11-30 08:38:32

Below is generated by plot.py at 2017-11-30 09:53:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.44 Mbit/s

95th percentile per-packet one-way delay: 117.334 ms

Loss rate: 0.08%

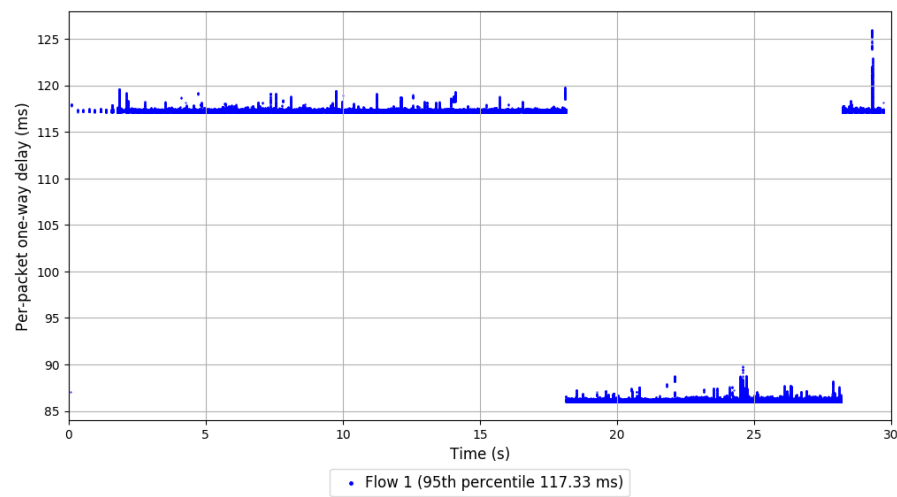
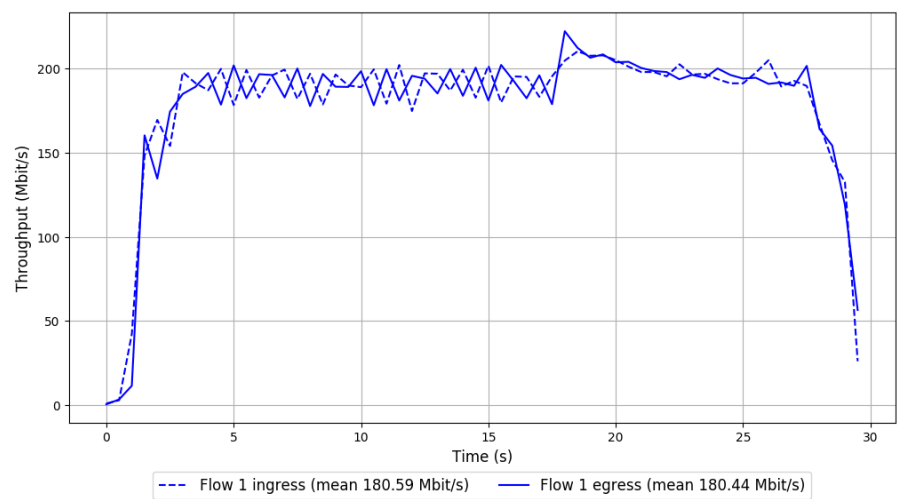
-- Flow 1:

Average throughput: 180.44 Mbit/s

95th percentile per-packet one-way delay: 117.334 ms

Loss rate: 0.08%

Run 10: Report of Indigo — Data Link

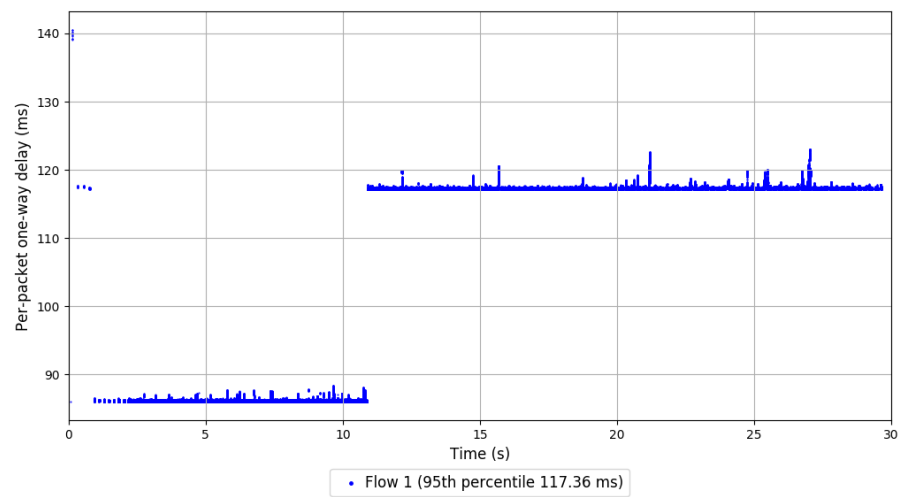
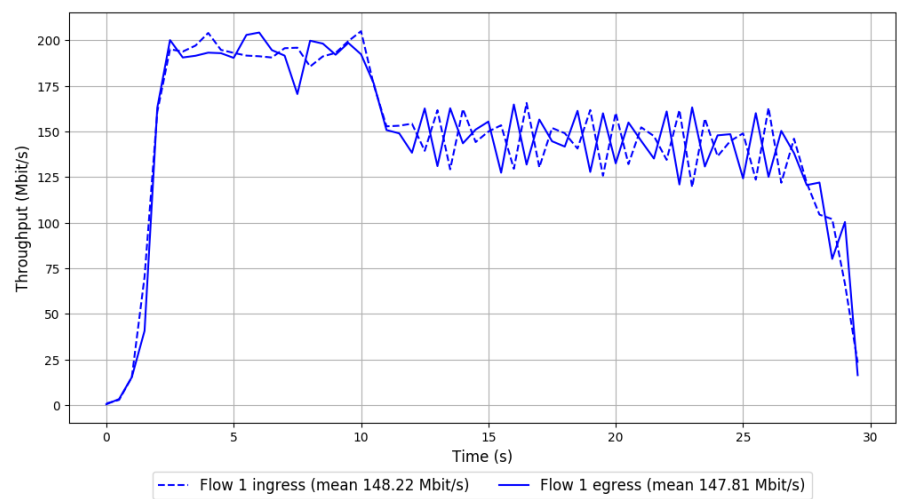


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-30 07:12:19
End at: 2017-11-30 07:12:49

# Below is generated by plot.py at 2017-11-30 09:53:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 147.81 Mbit/s
95th percentile per-packet one-way delay: 117.362 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 147.81 Mbit/s
95th percentile per-packet one-way delay: 117.362 ms
Loss rate: 0.28%
```

Run 1: Report of Indigo-calib — Data Link

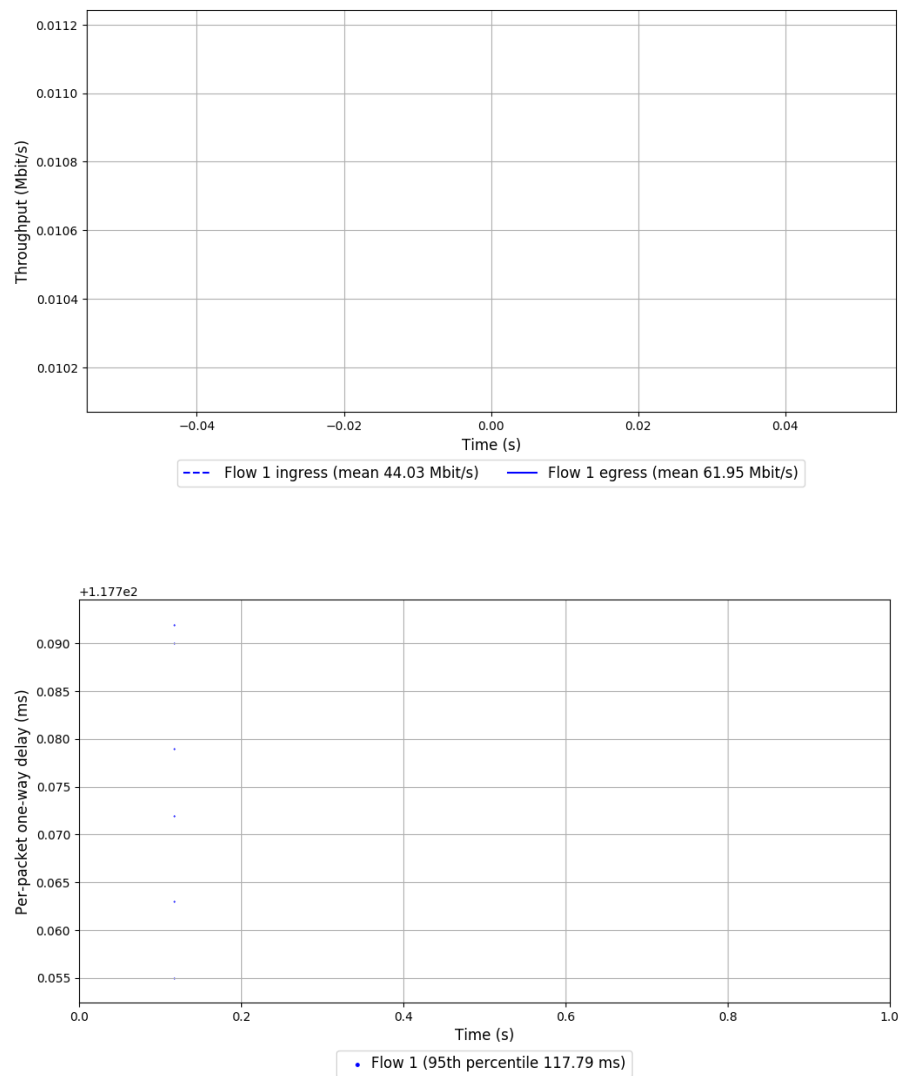


Run 2: Statistics of Indigo-calib

Start at: 2017-11-30 07:22:37

End at: 2017-11-30 07:23:07

Run 2: Report of Indigo-calib — Data Link

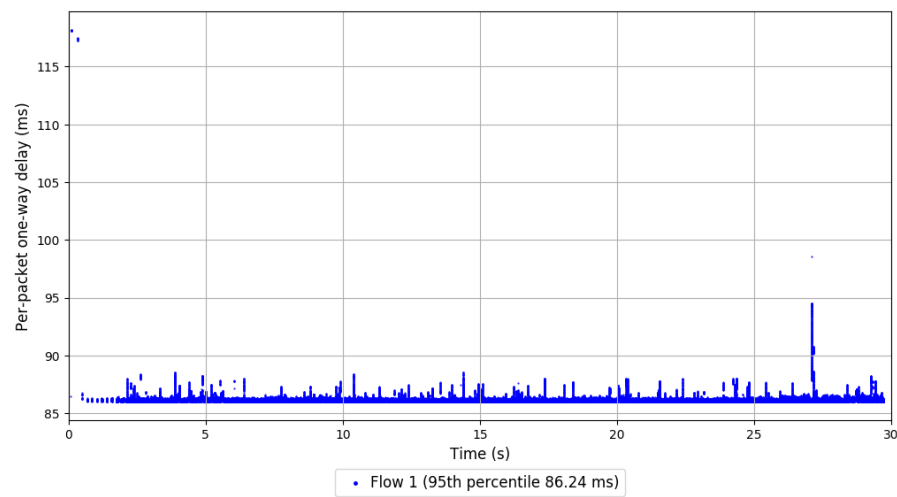
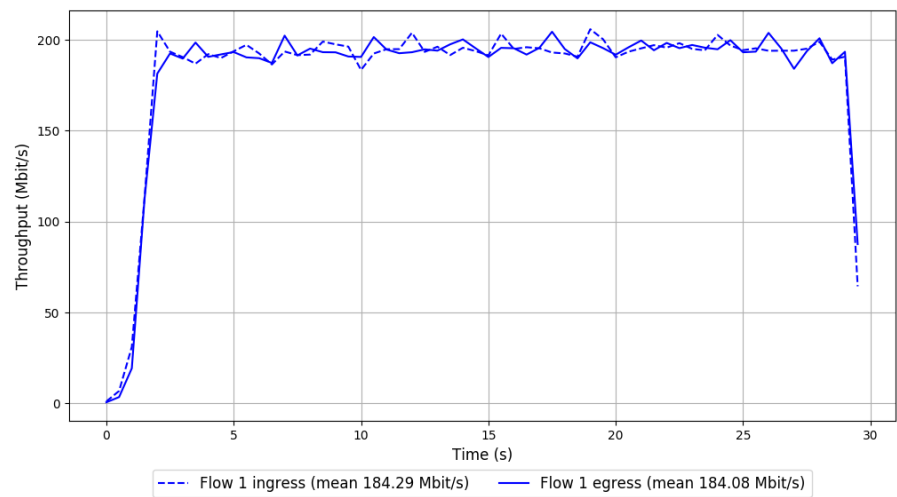


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-30 07:32:29
End at: 2017-11-30 07:32:59

# Below is generated by plot.py at 2017-11-30 09:54:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.08 Mbit/s
95th percentile per-packet one-way delay: 86.240 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 184.08 Mbit/s
95th percentile per-packet one-way delay: 86.240 ms
Loss rate: 0.12%
```

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-30 07:43:07

End at: 2017-11-30 07:43:37

Below is generated by plot.py at 2017-11-30 09:54:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 175.59 Mbit/s

95th percentile per-packet one-way delay: 117.312 ms

Loss rate: 0.00%

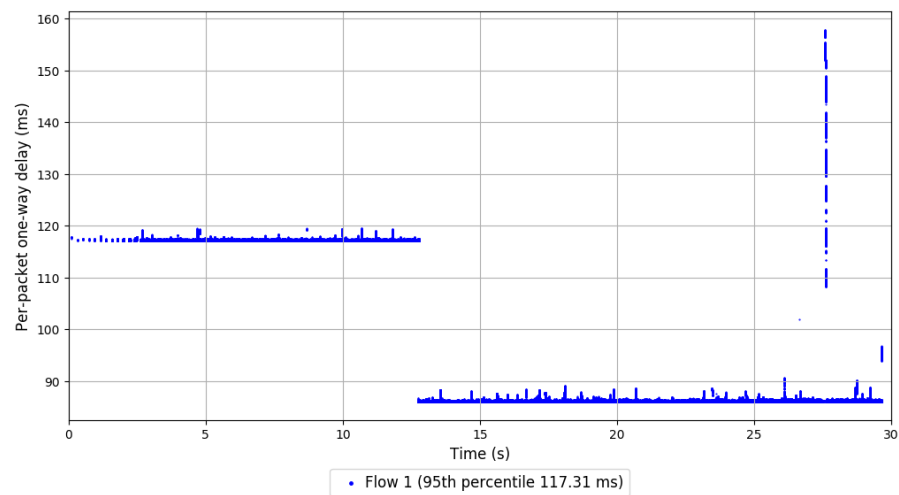
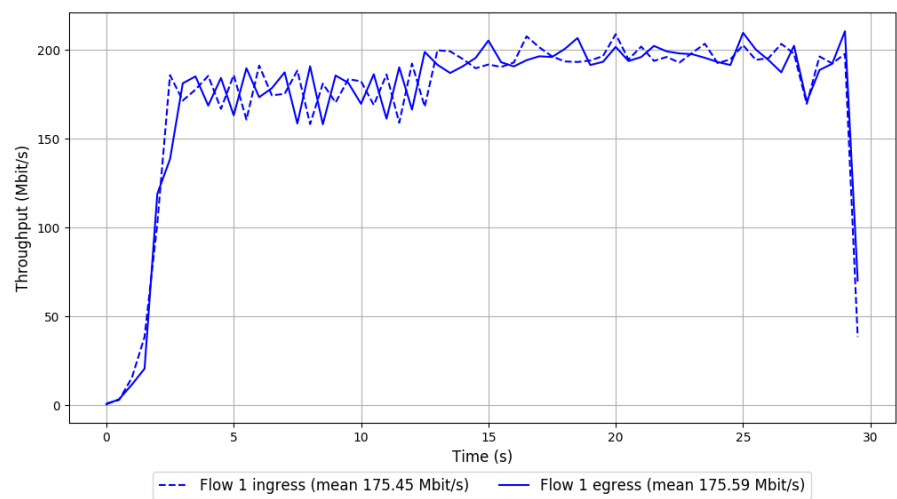
-- Flow 1:

Average throughput: 175.59 Mbit/s

95th percentile per-packet one-way delay: 117.312 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-30 07:53:30

End at: 2017-11-30 07:54:00

Below is generated by plot.py at 2017-11-30 09:54:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 167.51 Mbit/s

95th percentile per-packet one-way delay: 117.334 ms

Loss rate: 0.14%

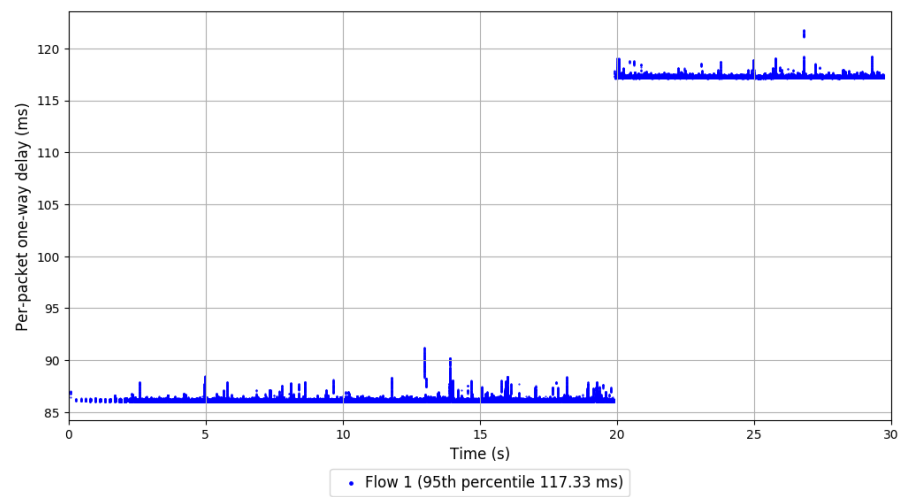
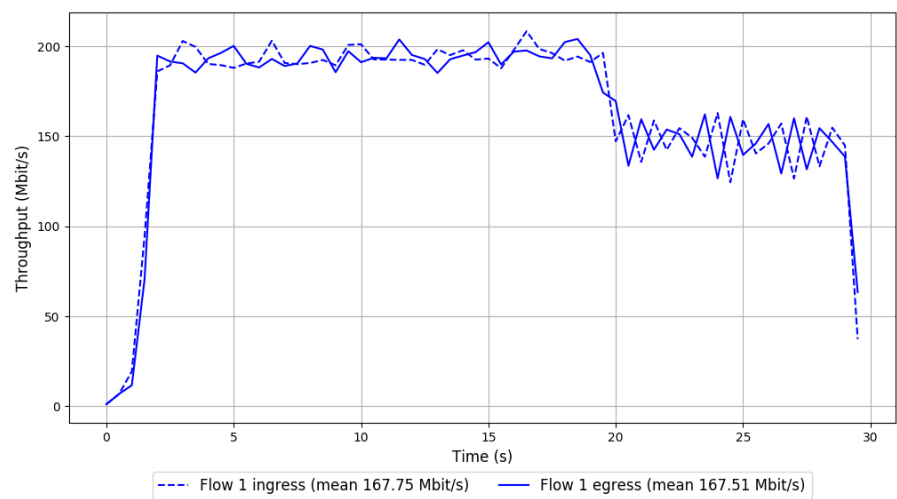
-- Flow 1:

Average throughput: 167.51 Mbit/s

95th percentile per-packet one-way delay: 117.334 ms

Loss rate: 0.14%

Run 5: Report of Indigo-calib — Data Link

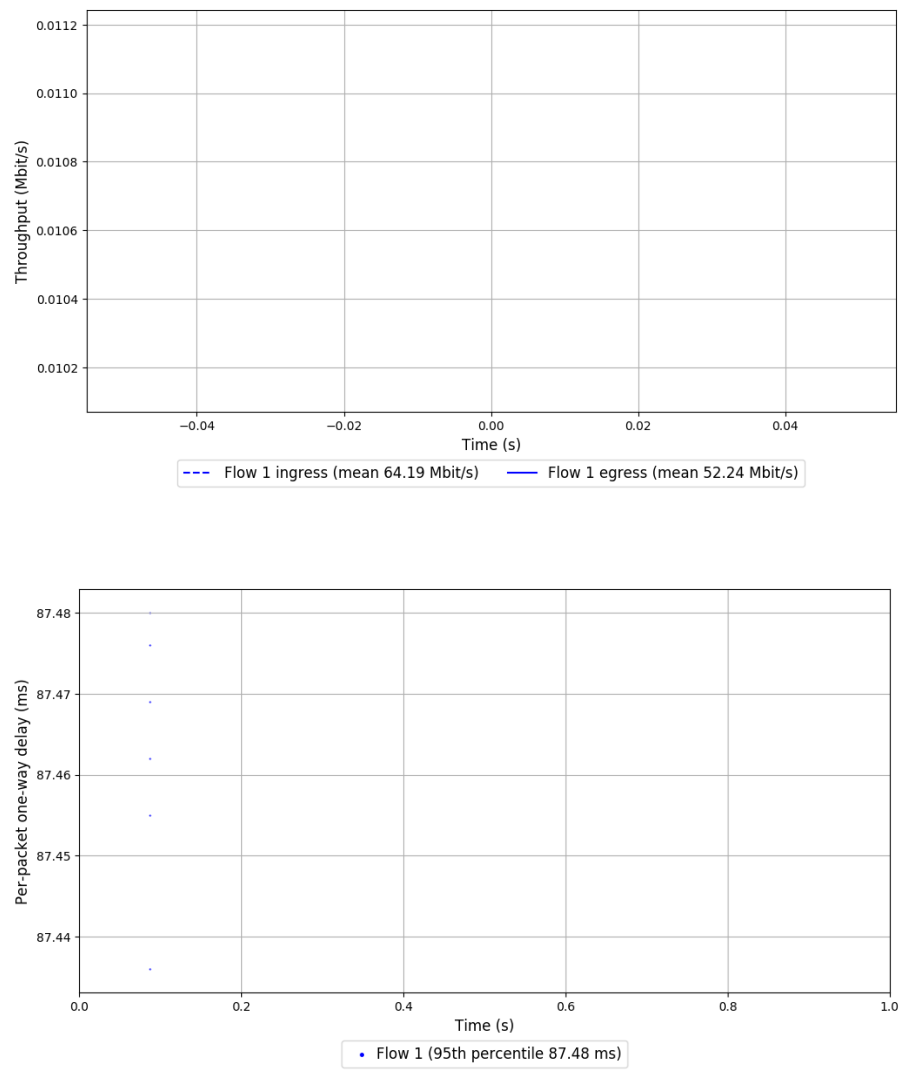


Run 6: Statistics of Indigo-calib

Start at: 2017-11-30 08:03:41

End at: 2017-11-30 08:04:11

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-30 08:13:41

End at: 2017-11-30 08:14:12

Below is generated by plot.py at 2017-11-30 09:54:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 157.17 Mbit/s

95th percentile per-packet one-way delay: 117.353 ms

Loss rate: 0.08%

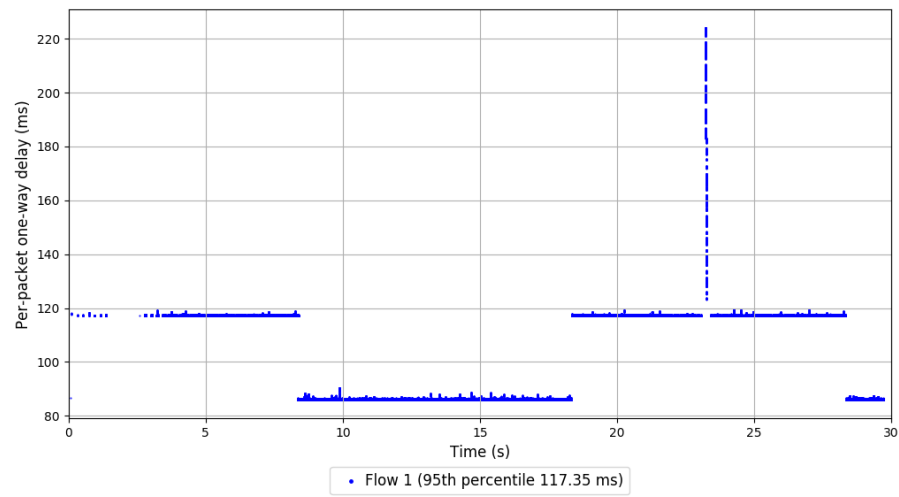
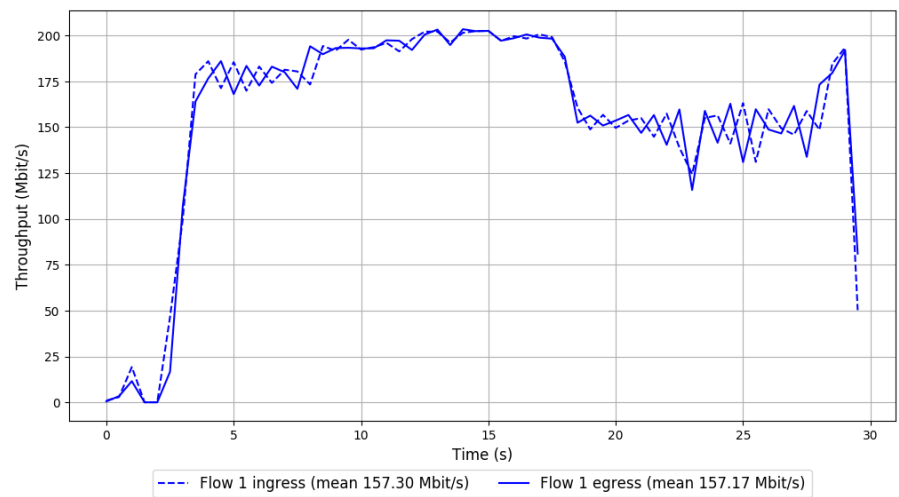
-- Flow 1:

Average throughput: 157.17 Mbit/s

95th percentile per-packet one-way delay: 117.353 ms

Loss rate: 0.08%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-30 08:24:22

End at: 2017-11-30 08:24:52

Below is generated by plot.py at 2017-11-30 09:54:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 161.77 Mbit/s

95th percentile per-packet one-way delay: 117.369 ms

Loss rate: 0.09%

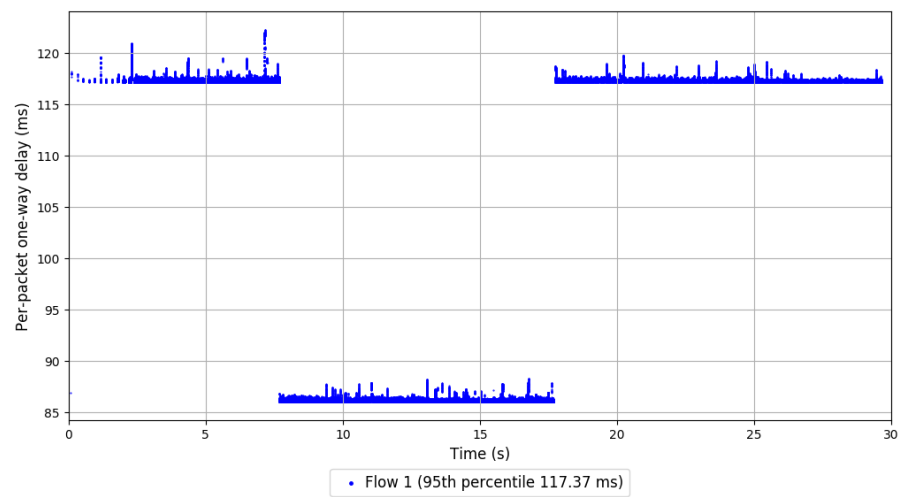
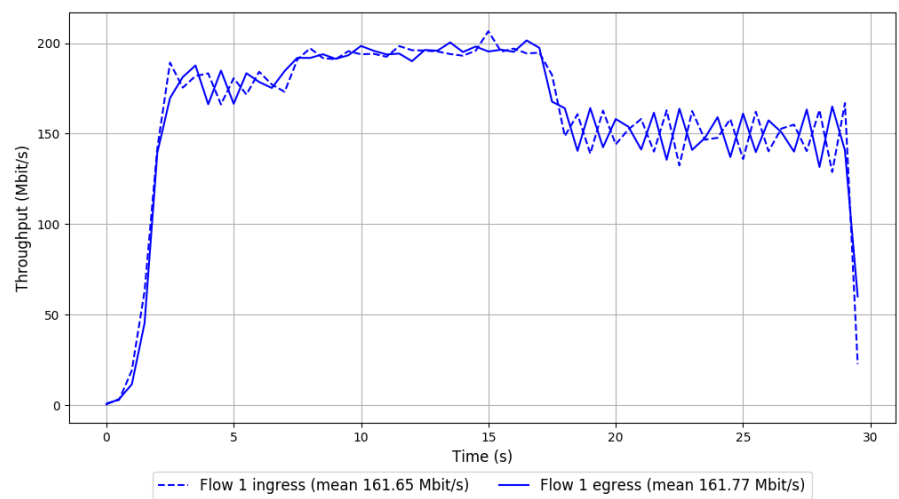
-- Flow 1:

Average throughput: 161.77 Mbit/s

95th percentile per-packet one-way delay: 117.369 ms

Loss rate: 0.09%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-30 08:34:47

End at: 2017-11-30 08:35:17

Below is generated by plot.py at 2017-11-30 09:54:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.57 Mbit/s

95th percentile per-packet one-way delay: 86.351 ms

Loss rate: 0.00%

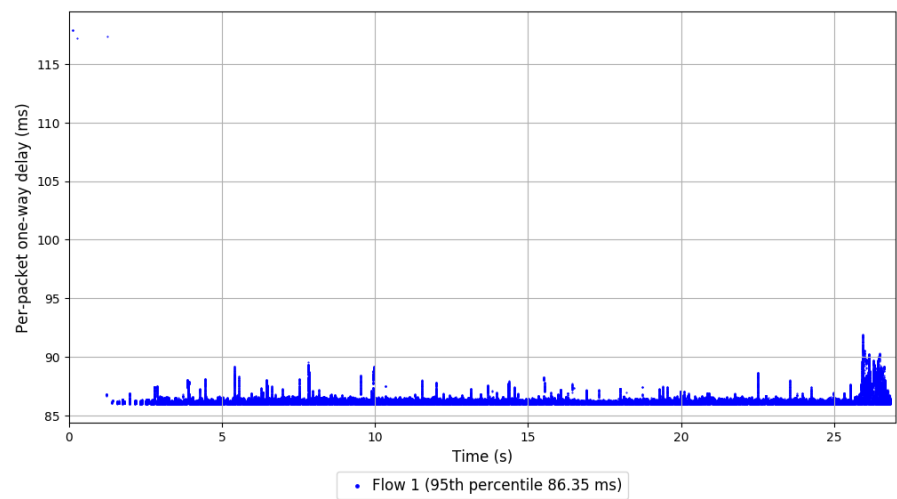
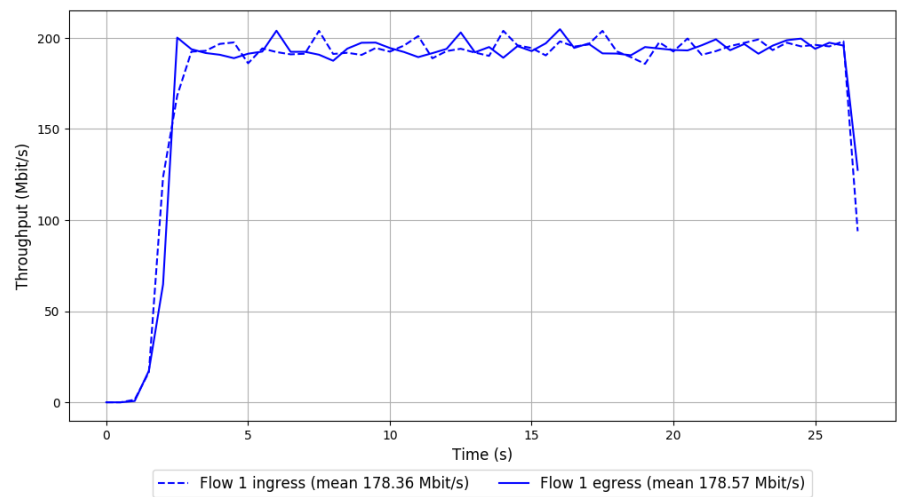
-- Flow 1:

Average throughput: 178.57 Mbit/s

95th percentile per-packet one-way delay: 86.351 ms

Loss rate: 0.00%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-30 08:45:14

End at: 2017-11-30 08:45:44

Below is generated by plot.py at 2017-11-30 09:54:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.41 Mbit/s

95th percentile per-packet one-way delay: 118.075 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 166.41 Mbit/s

95th percentile per-packet one-way delay: 118.075 ms

Loss rate: 0.17%

Run 10: Report of Indigo-calib — Data Link

