

Pantheon Report

Generated at 2017-10-10 22:04:38 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

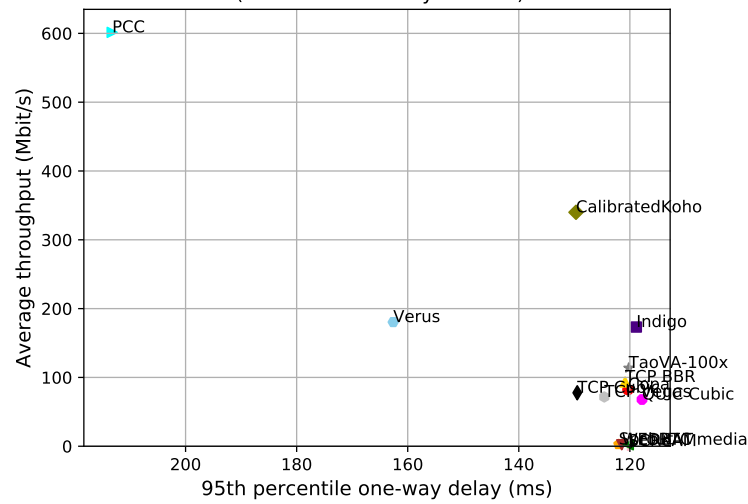
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

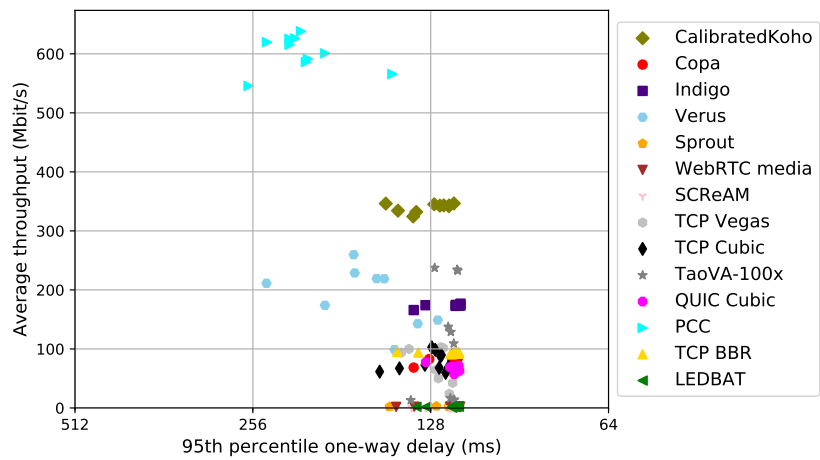
Git summary:

```
branch: indigos @ 45998d6404be7c5106956530acb9cfc43bd06e7d
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
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 Tokyo Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from GCE Tokyo Ethernet to GCE London 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	93.38	120.86	0.79
TCP Cubic	10	77.69	129.47	0.81
LEDBAT	8	2.08	120.28	1.15
PCC	10	601.45	213.22	3.09
QUIC Cubic	9	67.89	117.81	0.97
SCReAM	10	0.22	120.33	0.72
WebRTC media	10	2.14	121.46	0.87
Sprout	9	2.71	122.01	1.00
TaoVA-100x	10	113.76	120.21	0.82
TCP Vegas	10	71.64	124.60	0.67
Verus	10	180.42	162.61	1.12
Copa	9	82.26	120.34	0.82
CalibratedKoho	10	339.97	129.70	1.14
Indigo	10	173.23	118.84	0.80

Run 1: Statistics of TCP BBR

Start at: 2017-10-10 17:36:36

End at: 2017-10-10 17:37:06

Below is generated by plot.py at 2017-10-10 21:25:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.12 Mbit/s

95th percentile per-packet one-way delay: 145.854 ms

Loss rate: 0.77%

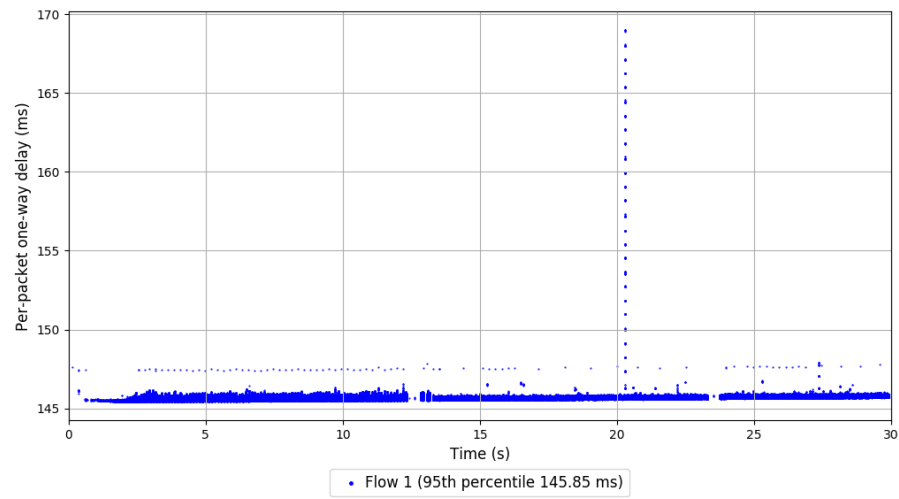
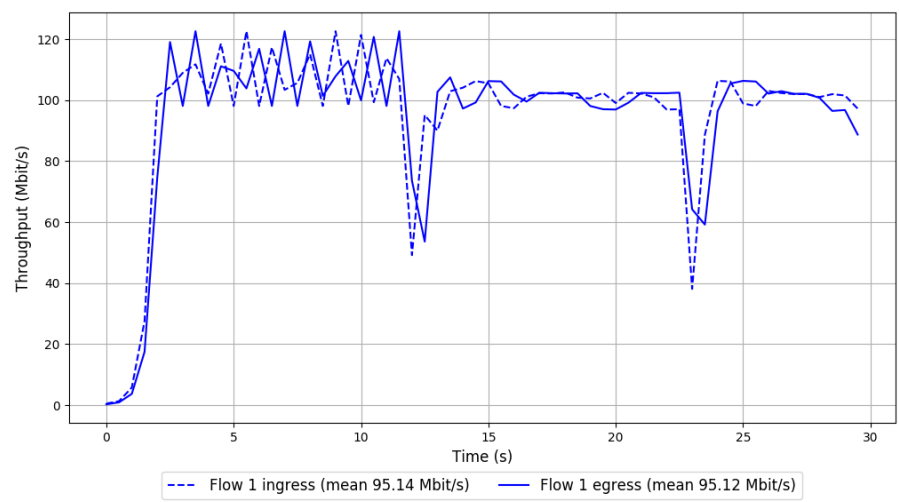
-- Flow 1:

Average throughput: 95.12 Mbit/s

95th percentile per-packet one-way delay: 145.854 ms

Loss rate: 0.77%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-10-10 17:47:48

End at: 2017-10-10 17:48:18

Below is generated by plot.py at 2017-10-10 21:25:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.94 Mbit/s

95th percentile per-packet one-way delay: 134.359 ms

Loss rate: 0.81%

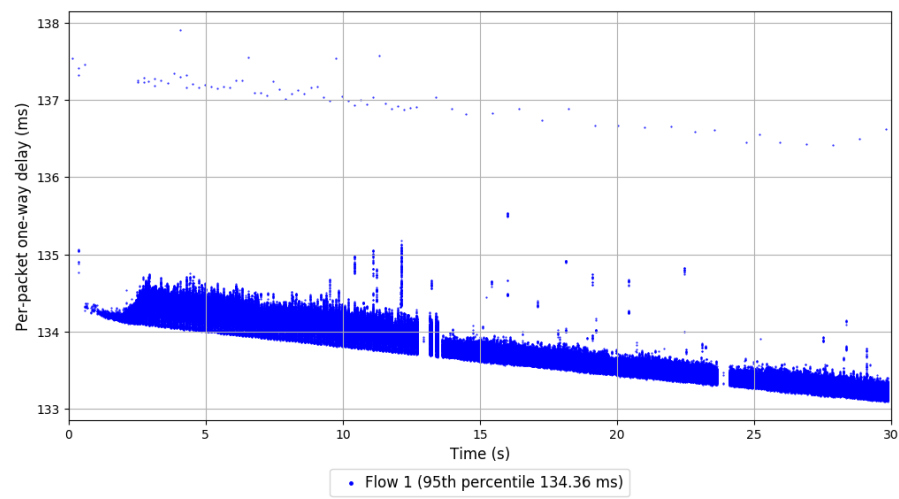
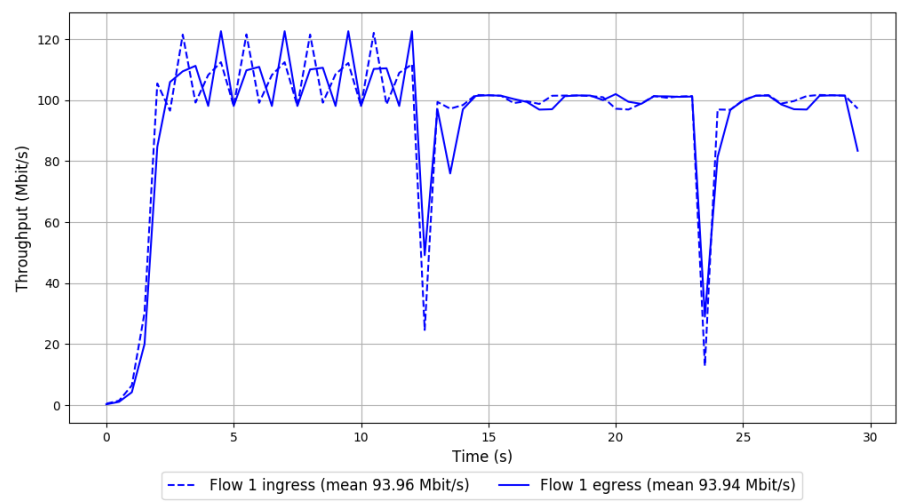
-- Flow 1:

Average throughput: 93.94 Mbit/s

95th percentile per-packet one-way delay: 134.359 ms

Loss rate: 0.81%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-10-10 17:59:34

End at: 2017-10-10 18:00:04

Below is generated by plot.py at 2017-10-10 21:25:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.34 Mbit/s

95th percentile per-packet one-way delay: 118.545 ms

Loss rate: 0.79%

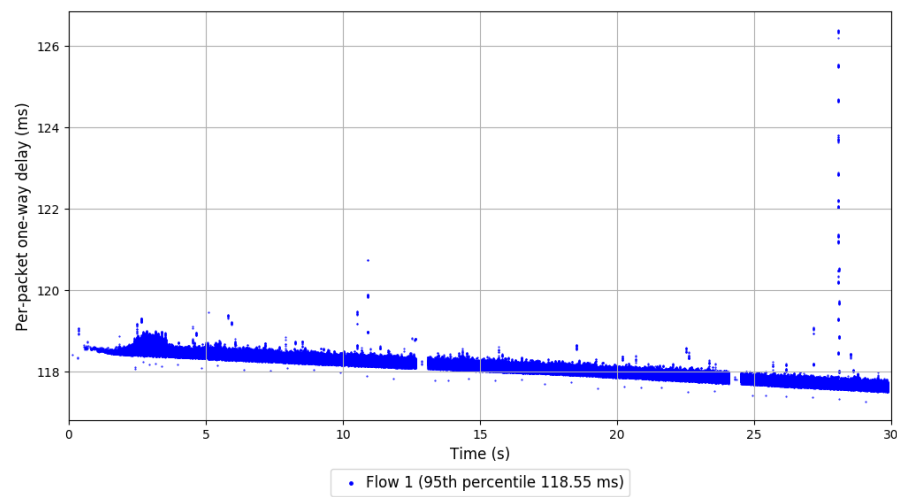
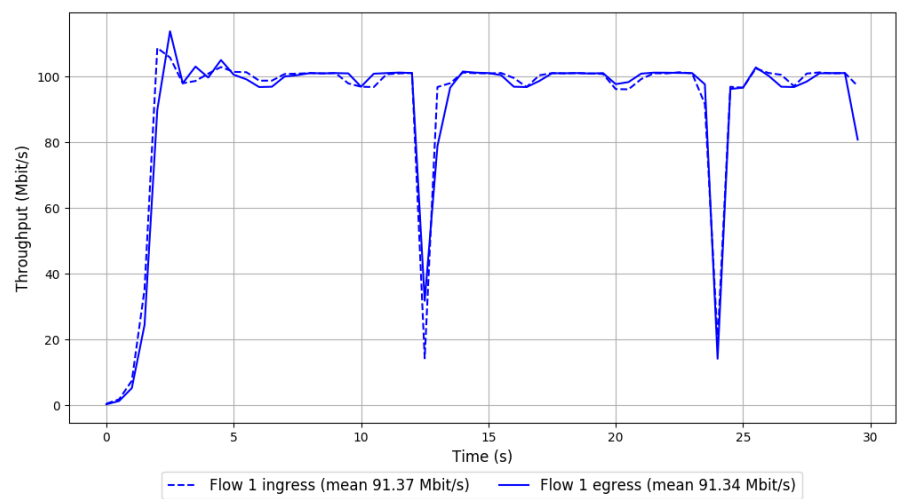
-- Flow 1:

Average throughput: 91.34 Mbit/s

95th percentile per-packet one-way delay: 118.545 ms

Loss rate: 0.79%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-10-10 18:11:11

End at: 2017-10-10 18:11:41

Below is generated by plot.py at 2017-10-10 21:25:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.66 Mbit/s

95th percentile per-packet one-way delay: 116.043 ms

Loss rate: 0.78%

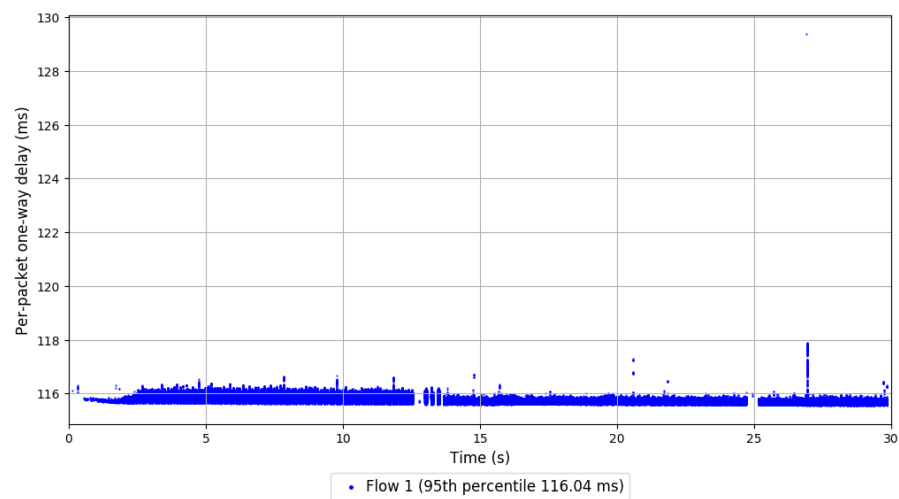
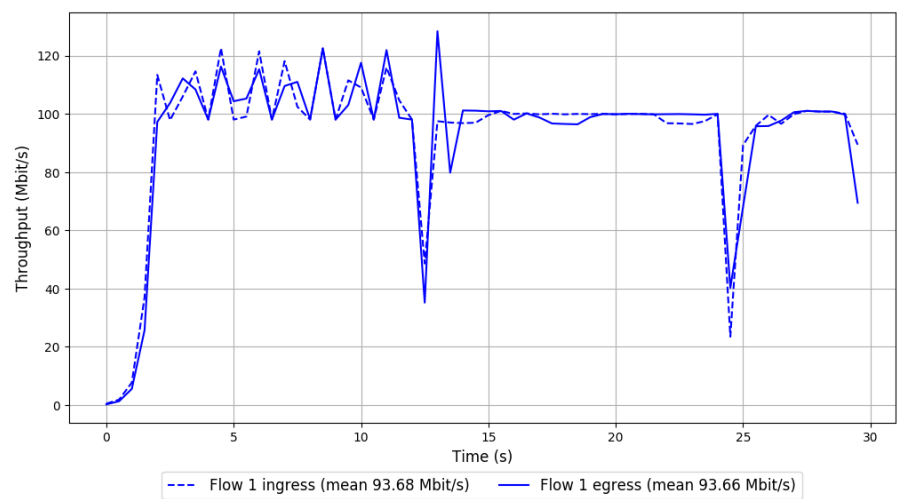
-- Flow 1:

Average throughput: 93.66 Mbit/s

95th percentile per-packet one-way delay: 116.043 ms

Loss rate: 0.78%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-10-10 18:22:33

End at: 2017-10-10 18:23:03

Below is generated by plot.py at 2017-10-10 21:25:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.98 Mbit/s

95th percentile per-packet one-way delay: 117.663 ms

Loss rate: 0.80%

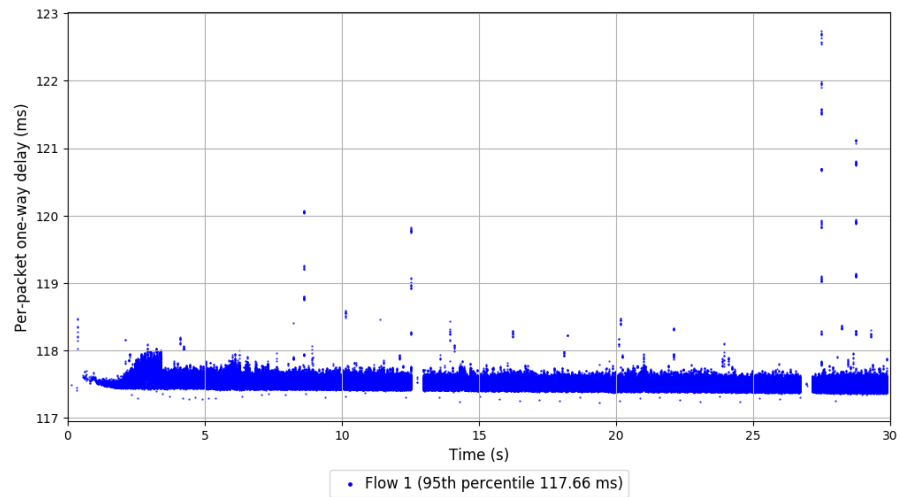
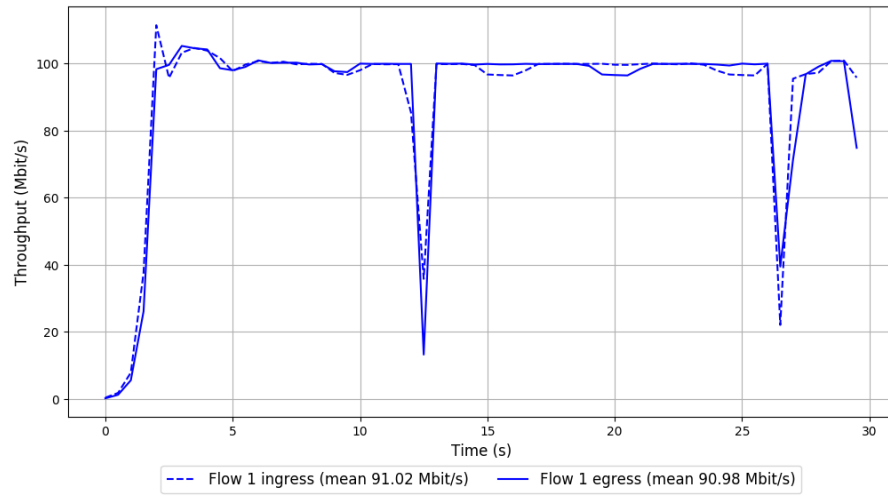
-- Flow 1:

Average throughput: 90.98 Mbit/s

95th percentile per-packet one-way delay: 117.663 ms

Loss rate: 0.80%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-10-10 18:33:55

End at: 2017-10-10 18:34:25

Below is generated by plot.py at 2017-10-10 21:25:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.83 Mbit/s

95th percentile per-packet one-way delay: 114.678 ms

Loss rate: 0.83%

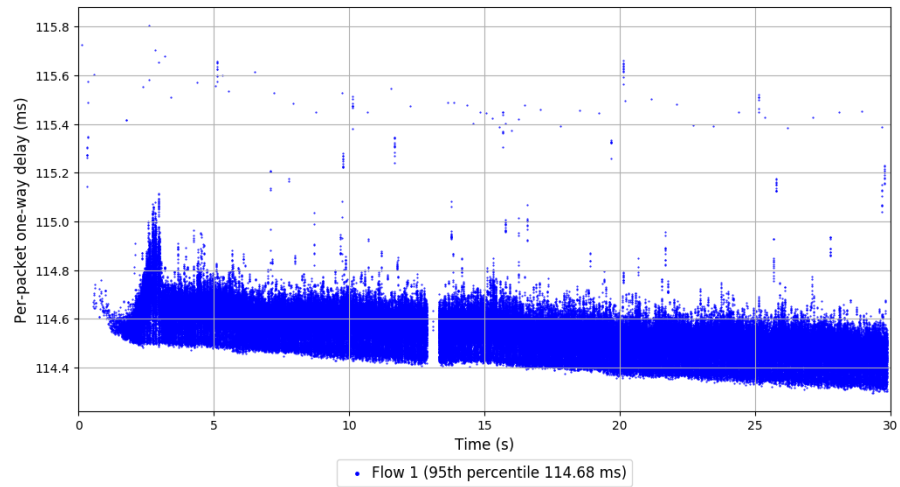
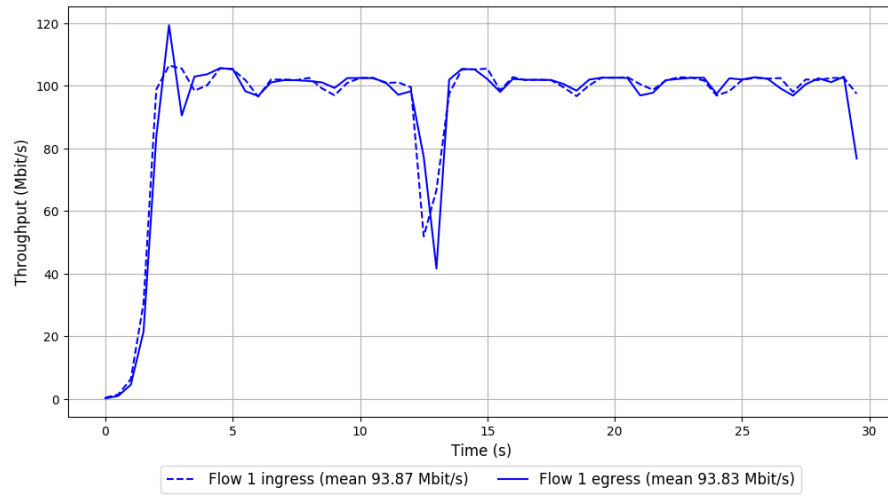
-- Flow 1:

Average throughput: 93.83 Mbit/s

95th percentile per-packet one-way delay: 114.678 ms

Loss rate: 0.83%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-10-10 18:45:14

End at: 2017-10-10 18:45:44

Below is generated by plot.py at 2017-10-10 21:25:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.48 Mbit/s

95th percentile per-packet one-way delay: 114.521 ms

Loss rate: 0.78%

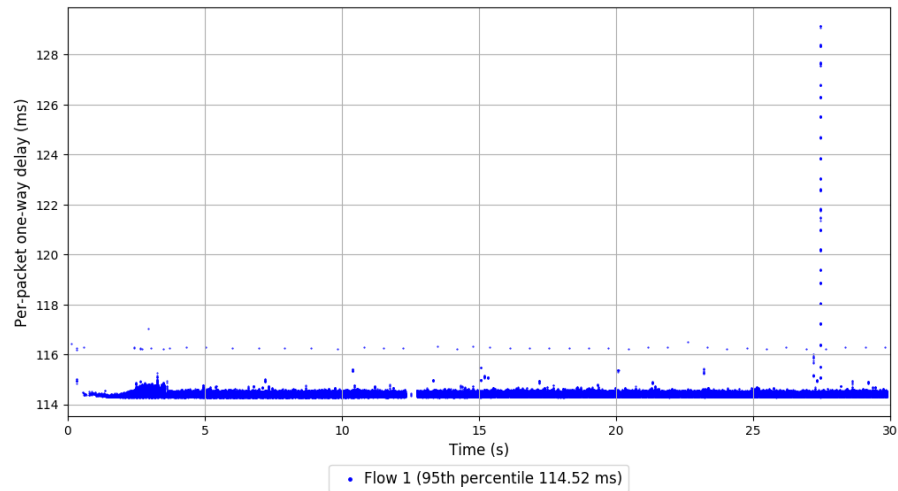
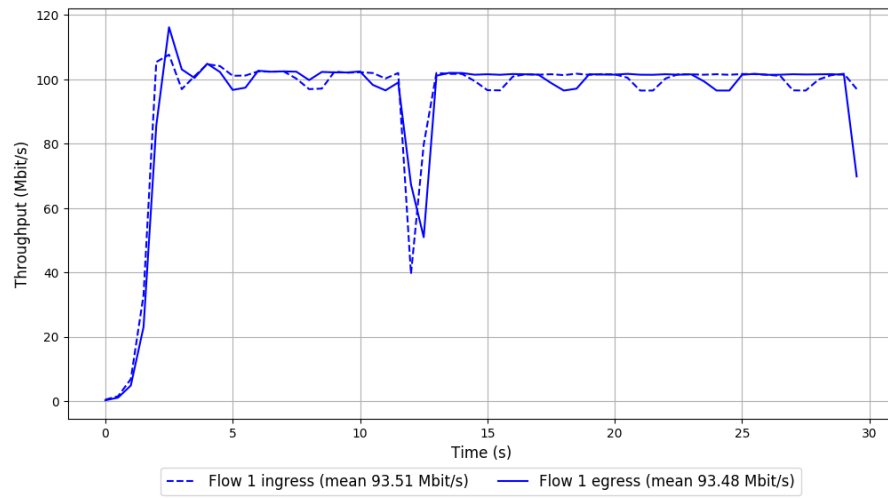
-- Flow 1:

Average throughput: 93.48 Mbit/s

95th percentile per-packet one-way delay: 114.521 ms

Loss rate: 0.78%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-10-10 18:56:27

End at: 2017-10-10 18:56:57

Below is generated by plot.py at 2017-10-10 21:25:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.84 Mbit/s

95th percentile per-packet one-way delay: 115.156 ms

Loss rate: 0.79%

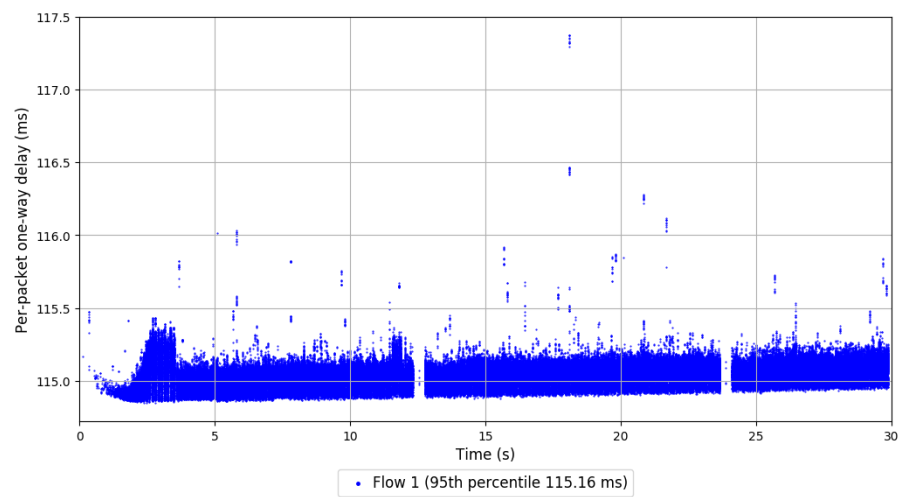
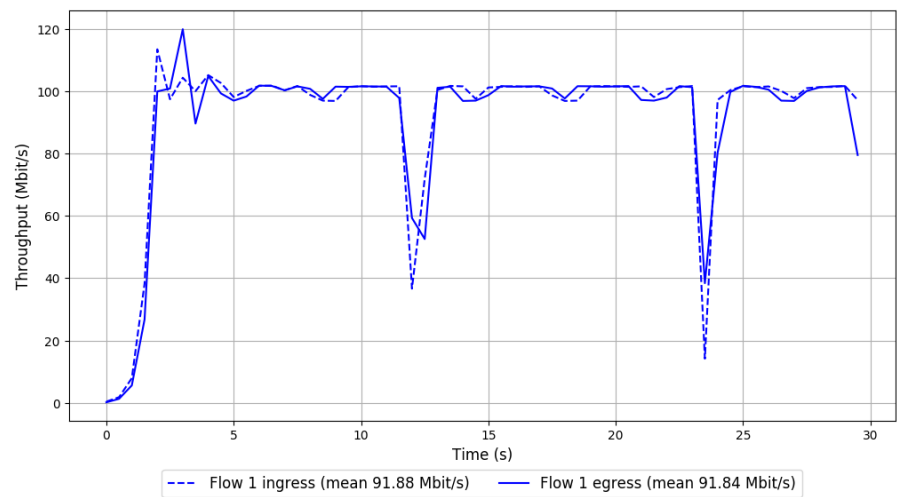
-- Flow 1:

Average throughput: 91.84 Mbit/s

95th percentile per-packet one-way delay: 115.156 ms

Loss rate: 0.79%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-10-10 19:07:58

End at: 2017-10-10 19:08:28

Below is generated by plot.py at 2017-10-10 21:27:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.66 Mbit/s

95th percentile per-packet one-way delay: 116.819 ms

Loss rate: 0.78%

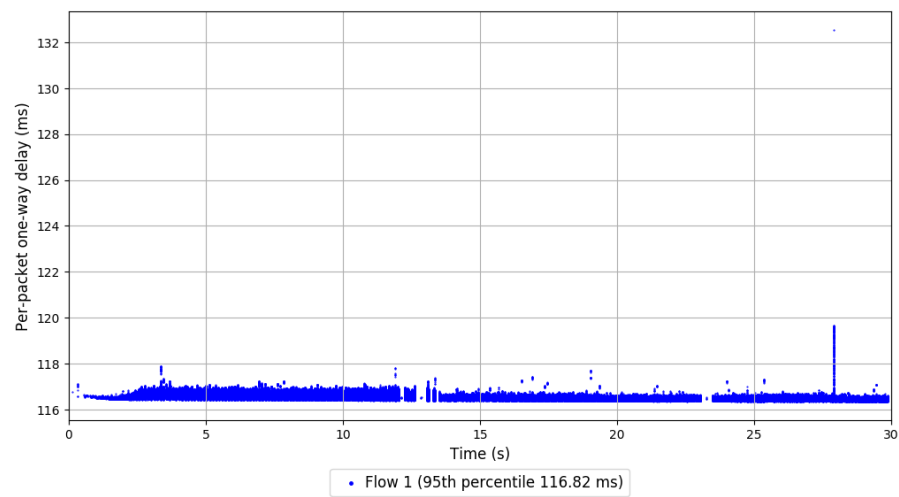
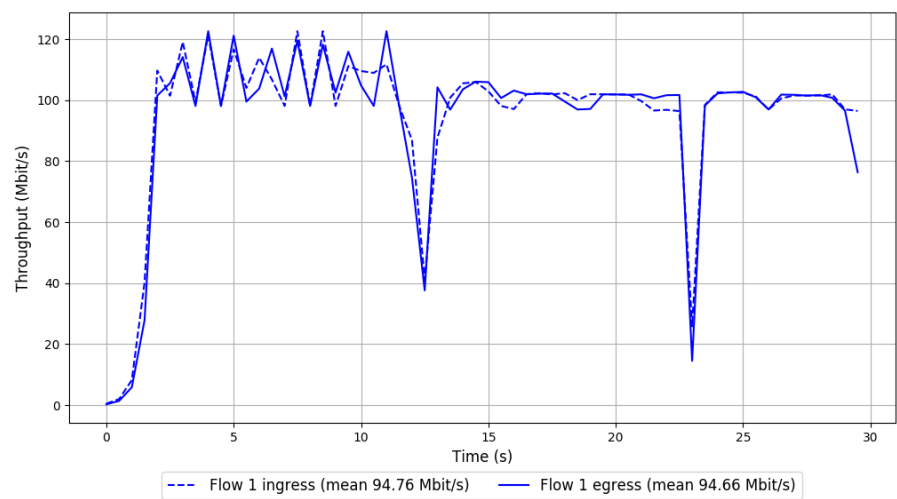
-- Flow 1:

Average throughput: 94.66 Mbit/s

95th percentile per-packet one-way delay: 116.819 ms

Loss rate: 0.78%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-10-10 19:19:38

End at: 2017-10-10 19:20:08

Below is generated by plot.py at 2017-10-10 21:27:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.97 Mbit/s

95th percentile per-packet one-way delay: 114.972 ms

Loss rate: 0.77%

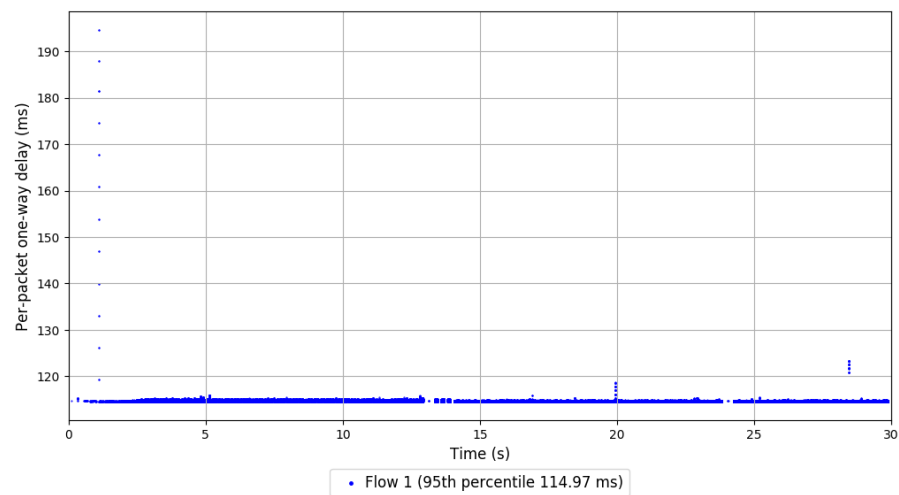
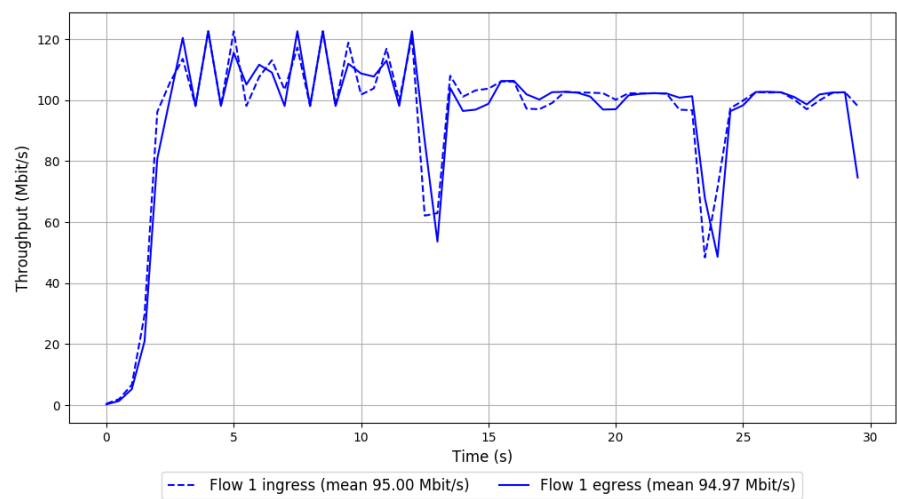
-- Flow 1:

Average throughput: 94.97 Mbit/s

95th percentile per-packet one-way delay: 114.972 ms

Loss rate: 0.77%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-10-10 17:33:48

End at: 2017-10-10 17:34:18

Below is generated by plot.py at 2017-10-10 21:27:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.50 Mbit/s

95th percentile per-packet one-way delay: 156.159 ms

Loss rate: 0.95%

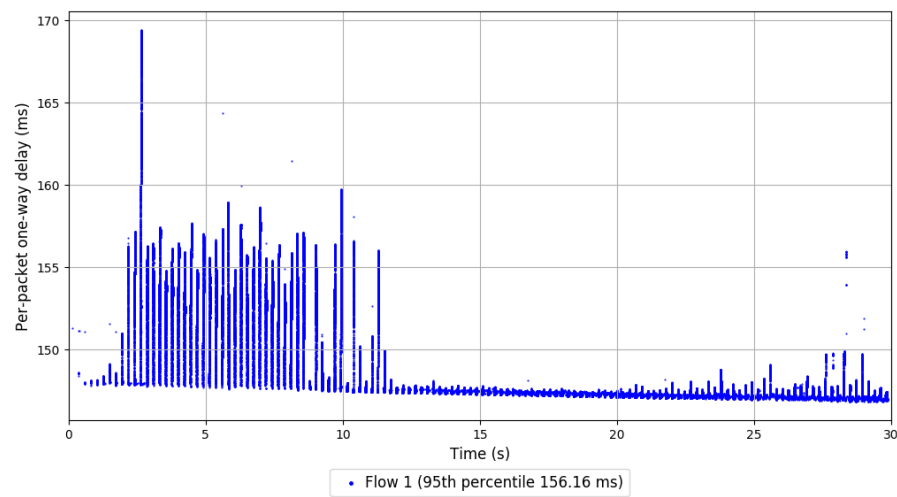
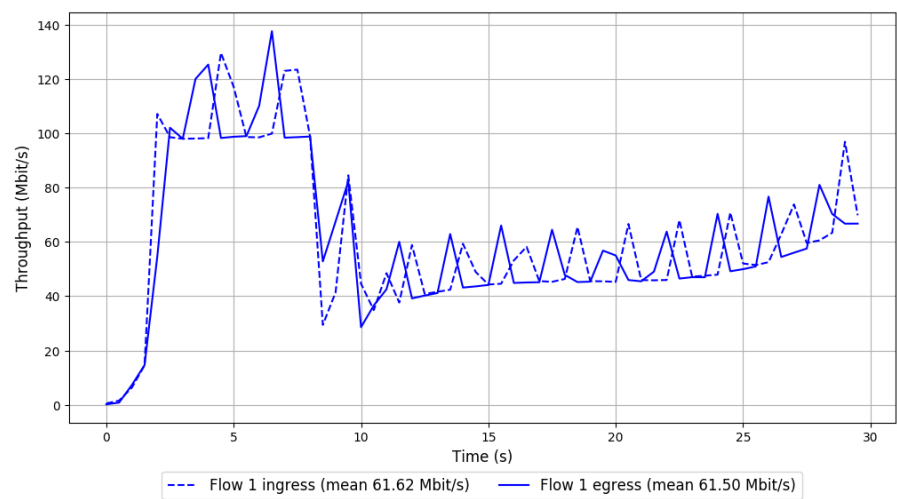
-- Flow 1:

Average throughput: 61.50 Mbit/s

95th percentile per-packet one-way delay: 156.159 ms

Loss rate: 0.95%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-10-10 17:44:59

End at: 2017-10-10 17:45:29

Below is generated by plot.py at 2017-10-10 21:27:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.06 Mbit/s

95th percentile per-packet one-way delay: 144.568 ms

Loss rate: 1.18%

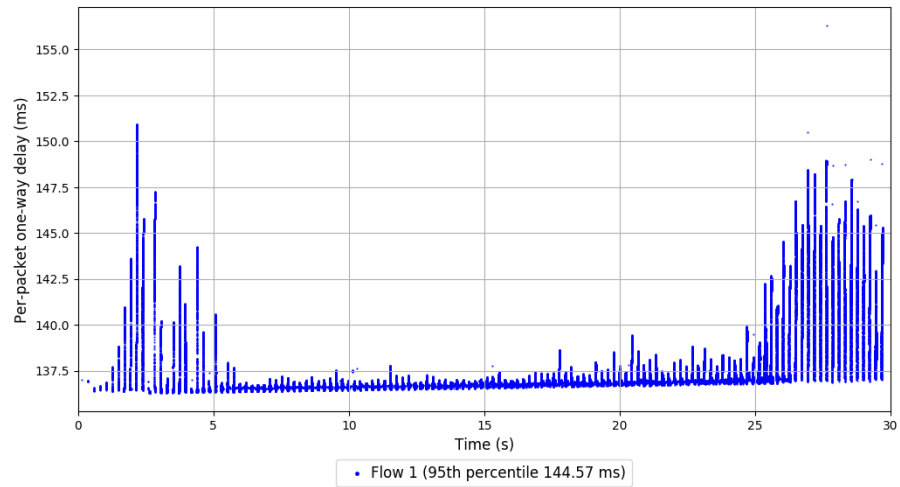
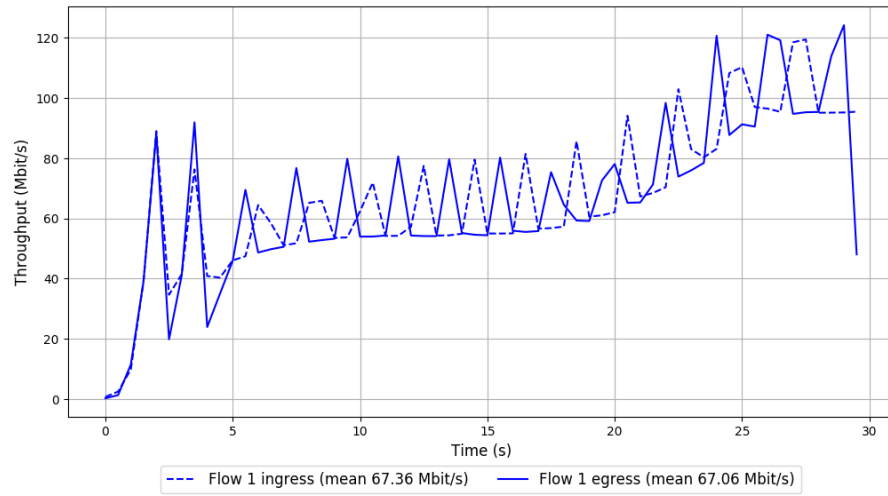
-- Flow 1:

Average throughput: 67.06 Mbit/s

95th percentile per-packet one-way delay: 144.568 ms

Loss rate: 1.18%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-10-10 17:56:43

End at: 2017-10-10 17:57:13

Below is generated by plot.py at 2017-10-10 21:27:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.09 Mbit/s

95th percentile per-packet one-way delay: 130.924 ms

Loss rate: 1.10%

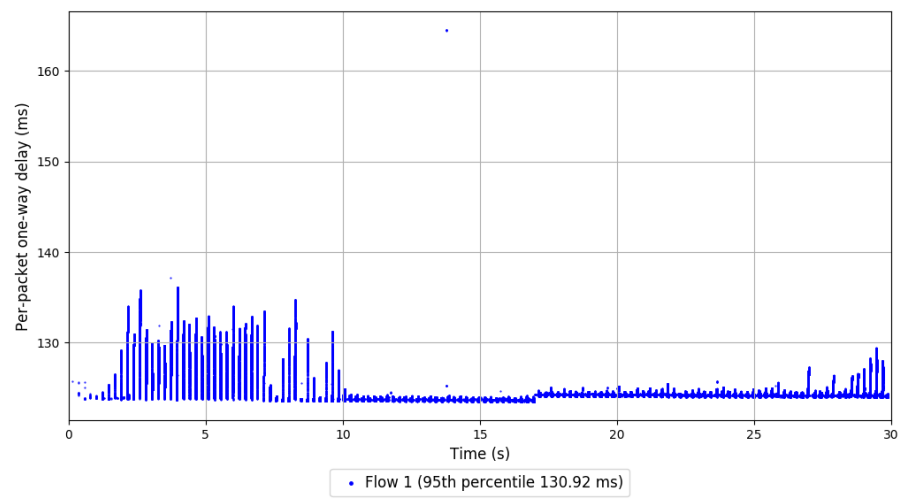
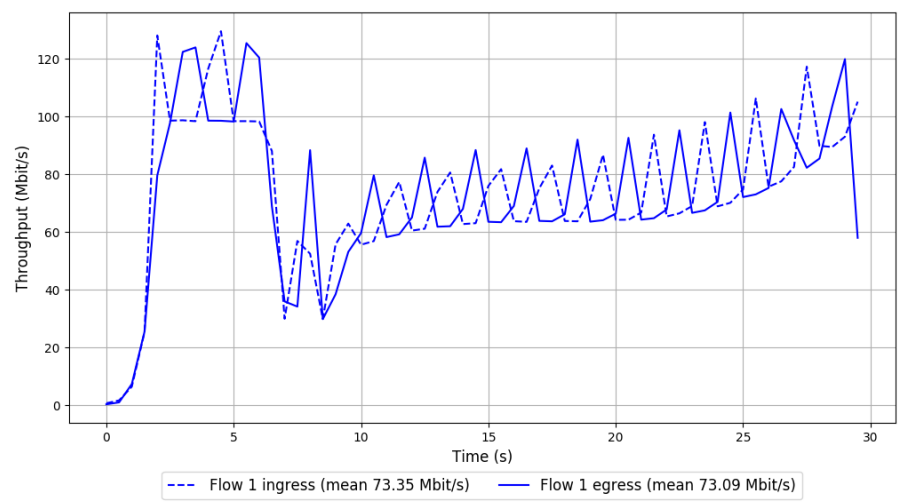
-- Flow 1:

Average throughput: 73.09 Mbit/s

95th percentile per-packet one-way delay: 130.924 ms

Loss rate: 1.10%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-10-10 18:08:27

End at: 2017-10-10 18:08:57

Below is generated by plot.py at 2017-10-10 21:27:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.26 Mbit/s

95th percentile per-packet one-way delay: 119.399 ms

Loss rate: 0.55%

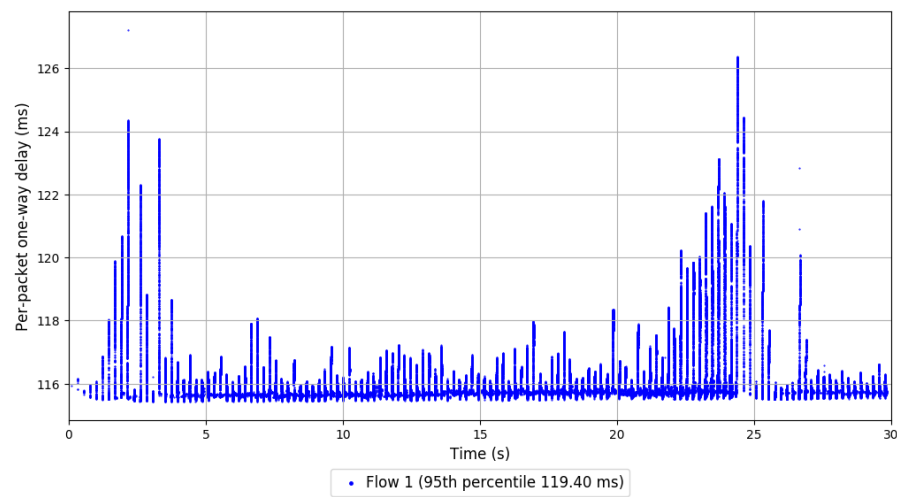
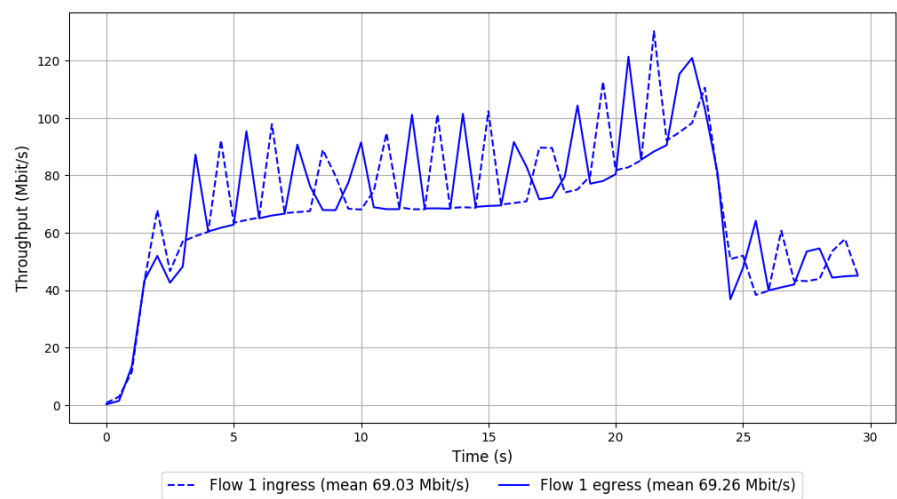
-- Flow 1:

Average throughput: 69.26 Mbit/s

95th percentile per-packet one-way delay: 119.399 ms

Loss rate: 0.55%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-10-10 18:19:50

End at: 2017-10-10 18:20:20

Below is generated by plot.py at 2017-10-10 21:27:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.70 Mbit/s

95th percentile per-packet one-way delay: 127.482 ms

Loss rate: 0.80%

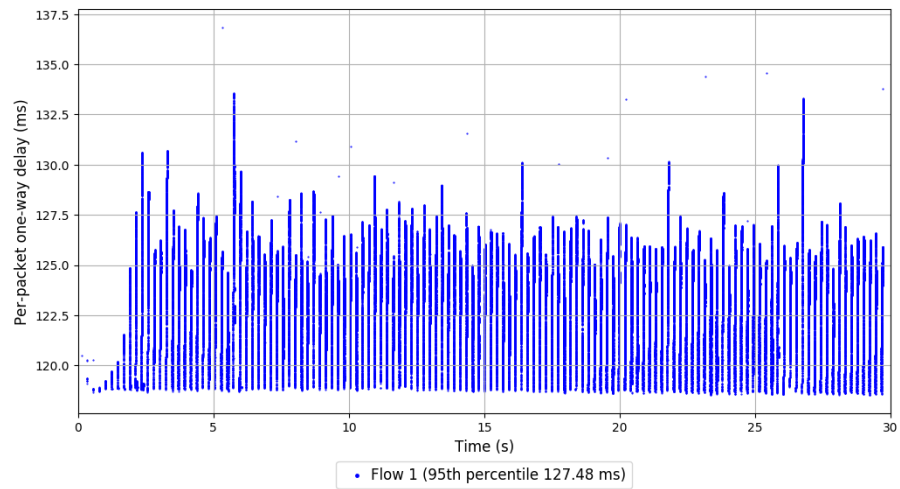
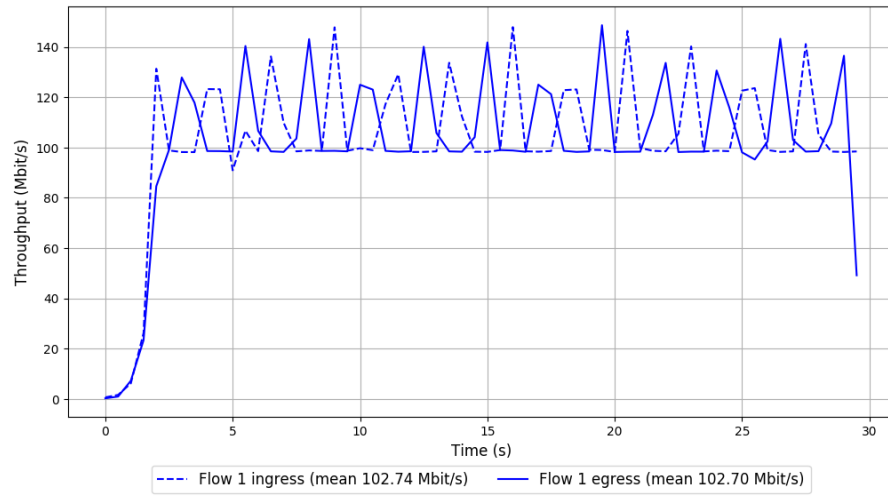
-- Flow 1:

Average throughput: 102.70 Mbit/s

95th percentile per-packet one-way delay: 127.482 ms

Loss rate: 0.80%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-10-10 18:31:06

End at: 2017-10-10 18:31:36

Below is generated by plot.py at 2017-10-10 21:27:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.04 Mbit/s

95th percentile per-packet one-way delay: 123.807 ms

Loss rate: 0.65%

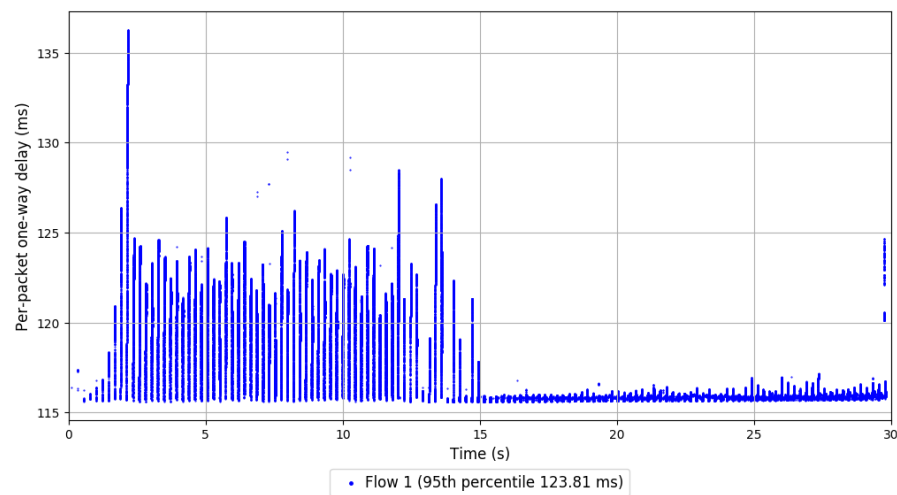
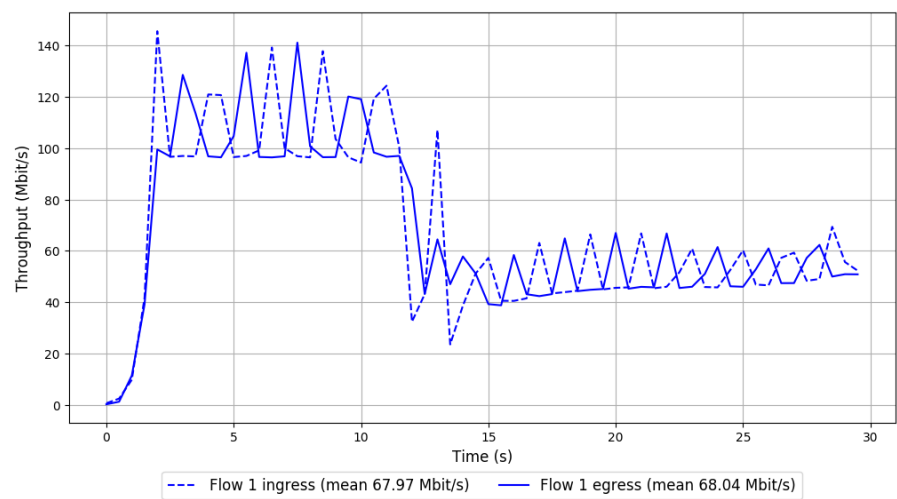
-- Flow 1:

Average throughput: 68.04 Mbit/s

95th percentile per-packet one-way delay: 123.807 ms

Loss rate: 0.65%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-10-10 18:42:27

End at: 2017-10-10 18:42:57

Below is generated by plot.py at 2017-10-10 21:27:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.47 Mbit/s

95th percentile per-packet one-way delay: 120.757 ms

Loss rate: 1.24%

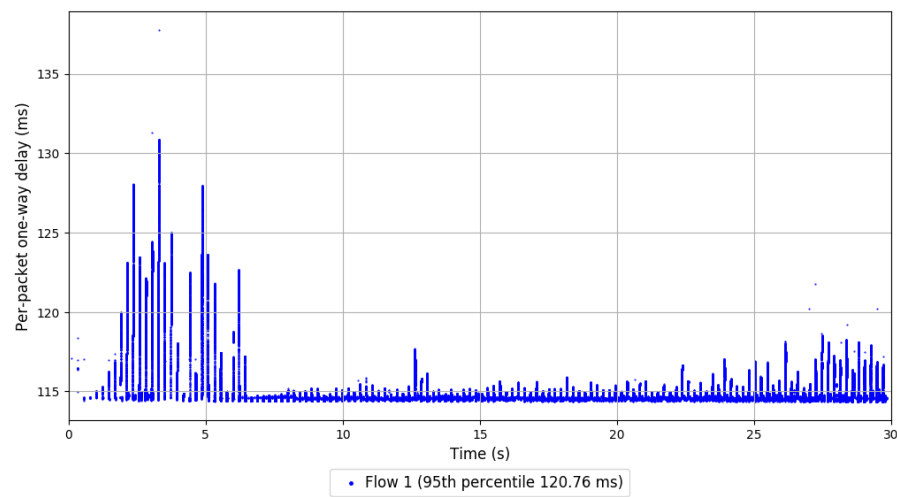
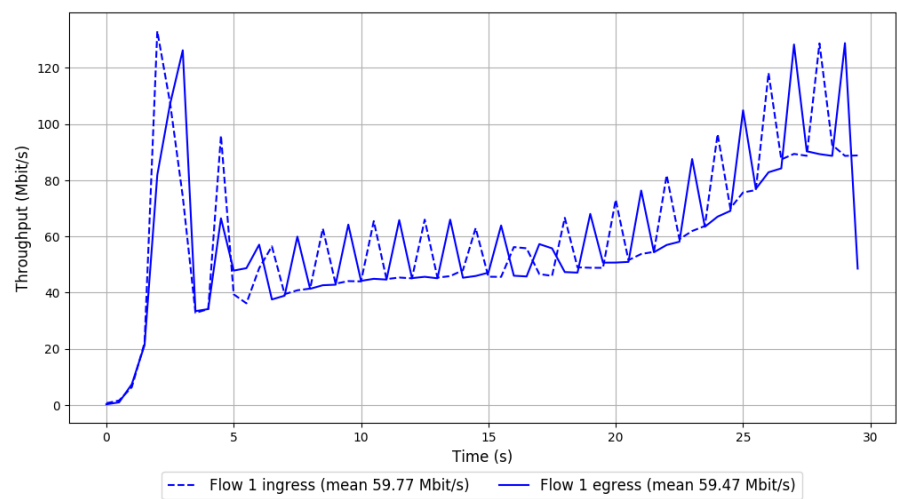
-- Flow 1:

Average throughput: 59.47 Mbit/s

95th percentile per-packet one-way delay: 120.757 ms

Loss rate: 1.24%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-10-10 18:53:47

End at: 2017-10-10 18:54:17

Below is generated by plot.py at 2017-10-10 21:28:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.67 Mbit/s

95th percentile per-packet one-way delay: 122.753 ms

Loss rate: 0.84%

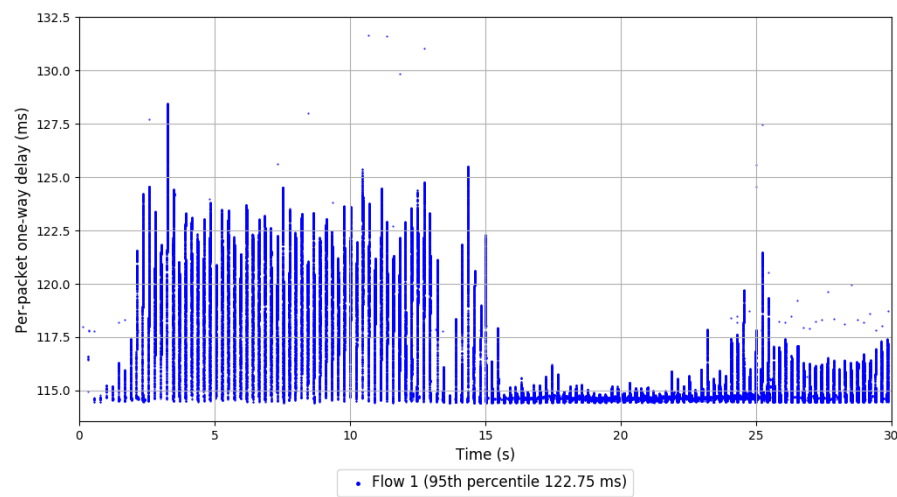
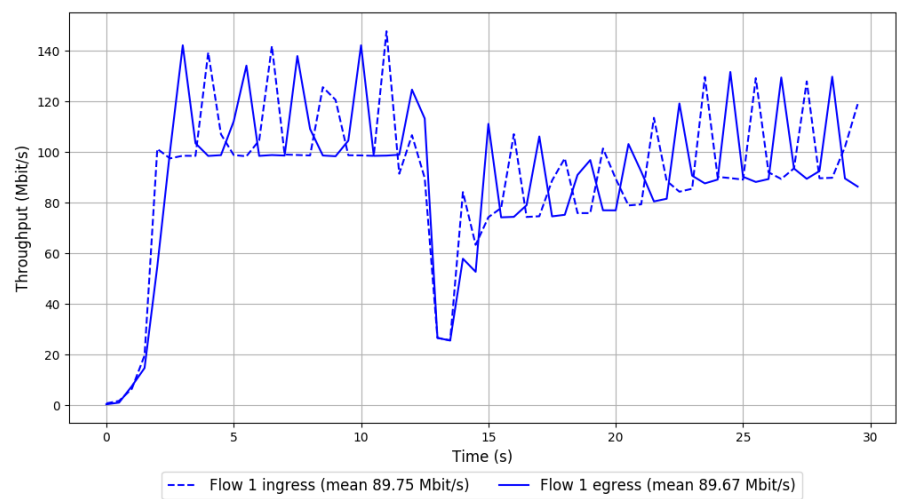
-- Flow 1:

Average throughput: 89.67 Mbit/s

95th percentile per-packet one-way delay: 122.753 ms

Loss rate: 0.84%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-10-10 19:05:12

End at: 2017-10-10 19:05:42

Below is generated by plot.py at 2017-10-10 21:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.40 Mbit/s

95th percentile per-packet one-way delay: 125.727 ms

Loss rate: 0.34%

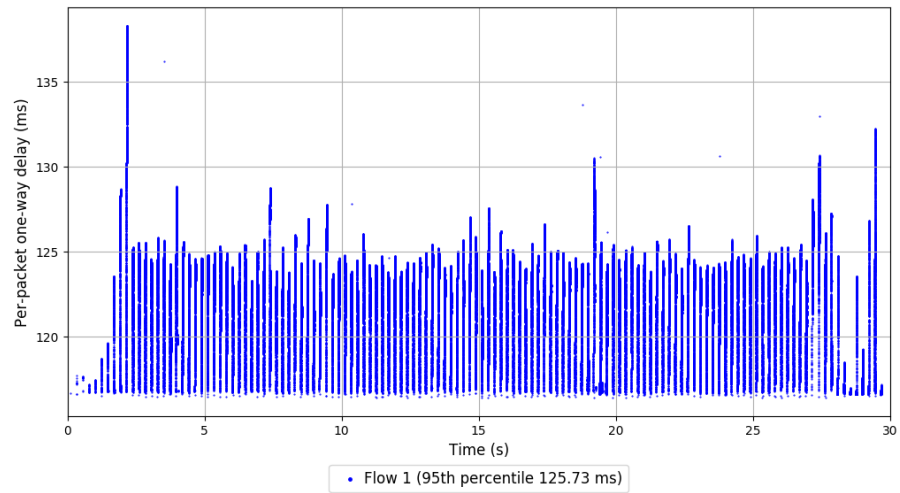
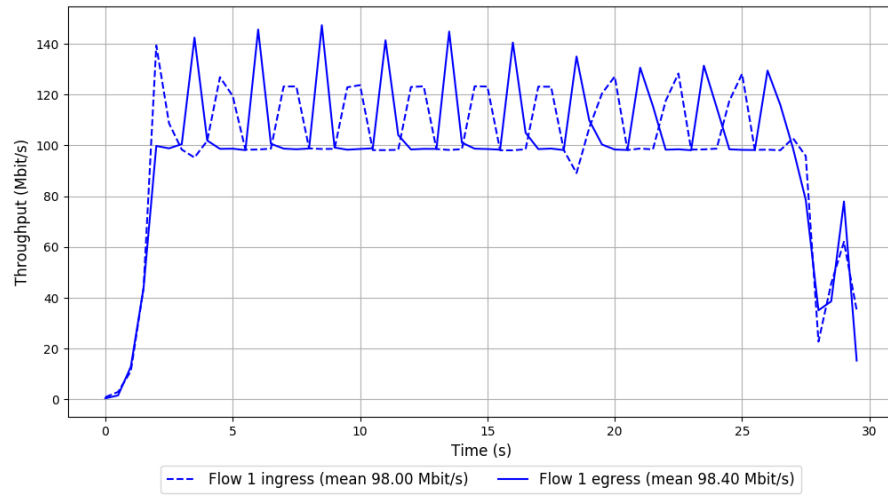
-- Flow 1:

Average throughput: 98.40 Mbit/s

95th percentile per-packet one-way delay: 125.727 ms

Loss rate: 0.34%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-10-10 19:16:48

End at: 2017-10-10 19:17:18

Below is generated by plot.py at 2017-10-10 21:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.73 Mbit/s

95th percentile per-packet one-way delay: 123.160 ms

Loss rate: 0.43%

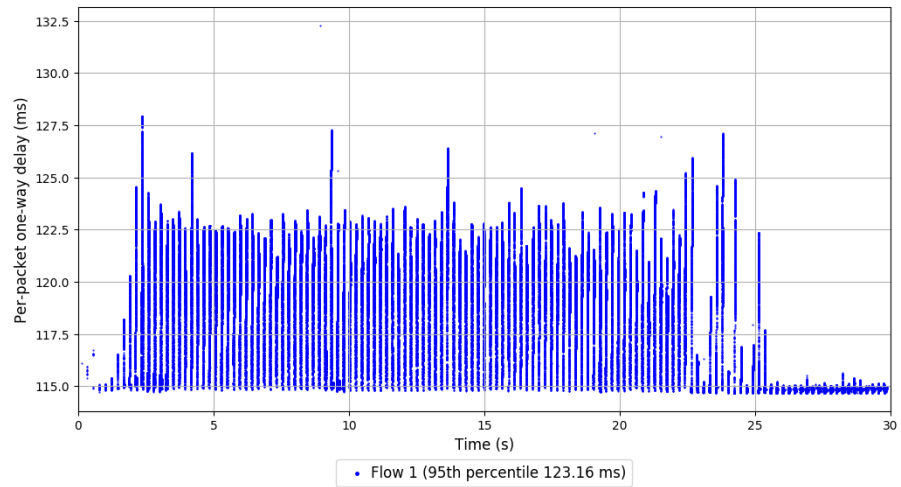
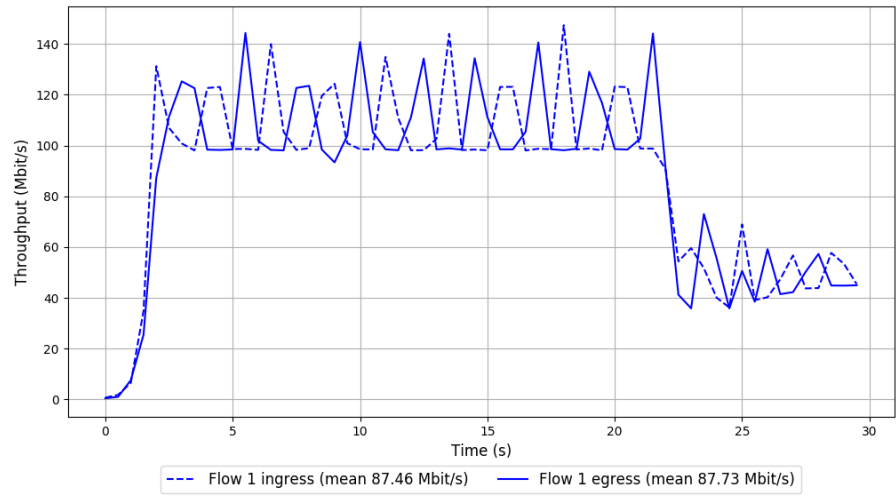
-- Flow 1:

Average throughput: 87.73 Mbit/s

95th percentile per-packet one-way delay: 123.160 ms

Loss rate: 0.43%

Run 10: Report of TCP Cubic — Data Link

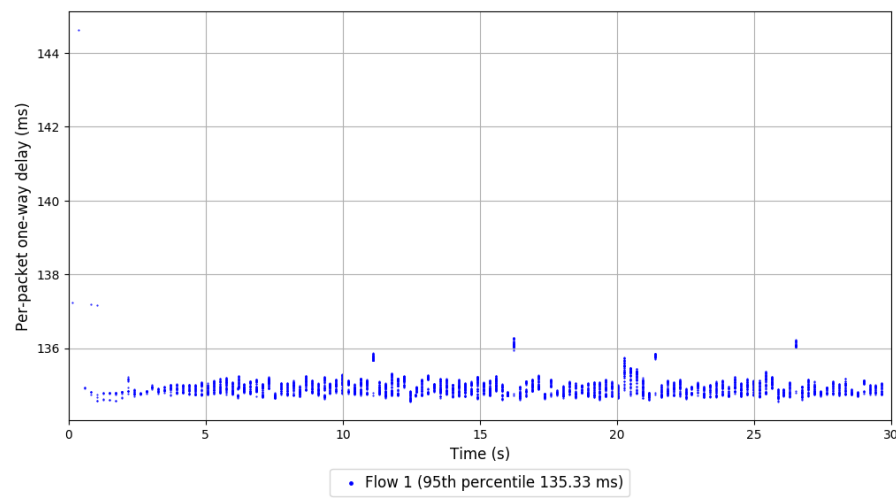
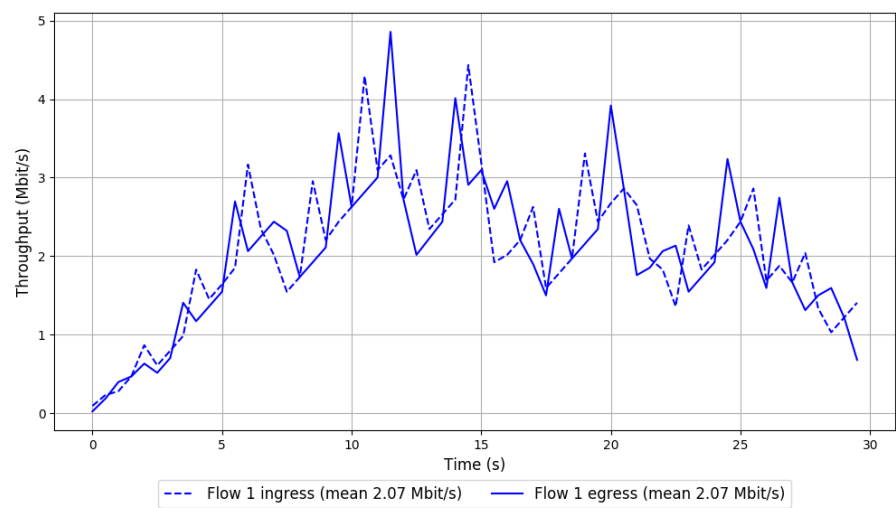


```
Run 1: Statistics of LEDBAT

Start at: 2017-10-10 17:42:07
End at: 2017-10-10 17:42:37

# Below is generated by plot.py at 2017-10-10 21:28:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 135.332 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 135.332 ms
Loss rate: 0.59%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-10-10 17:53:29

End at: 2017-10-10 17:53:59

Below is generated by plot.py at 2017-10-10 21:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 130.334 ms

Loss rate: 1.55%

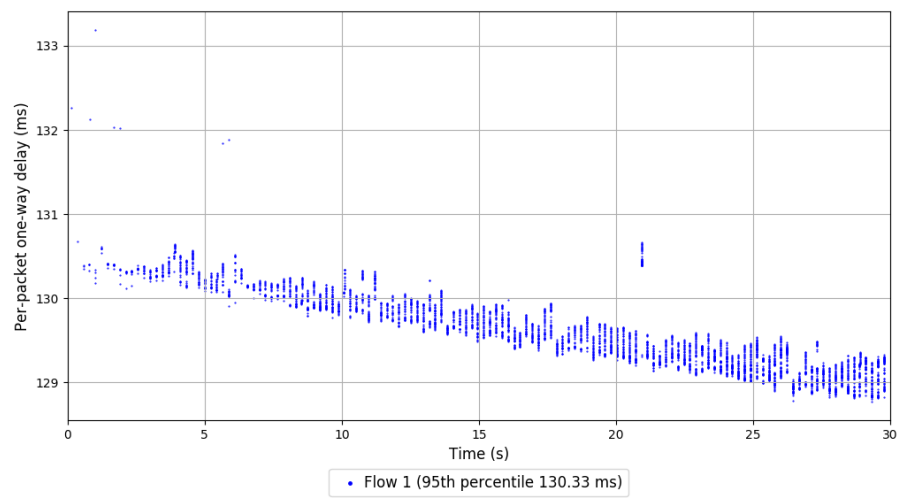
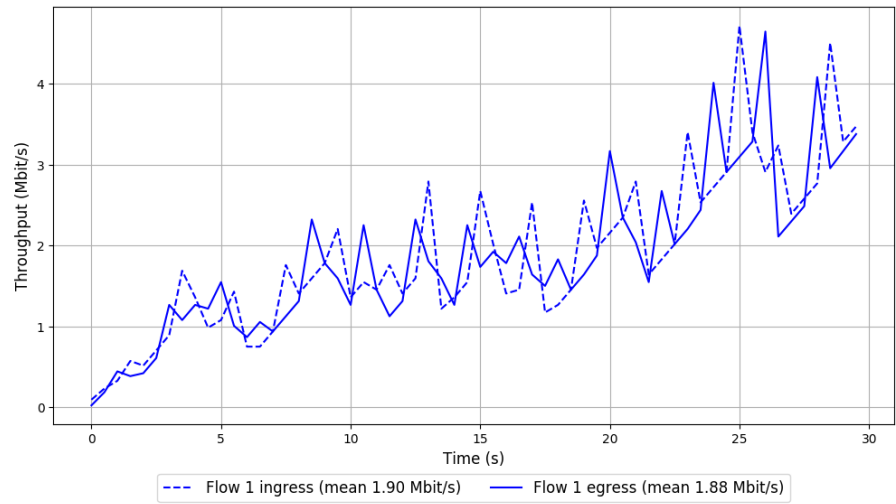
-- Flow 1:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 130.334 ms

Loss rate: 1.55%

Run 2: Report of LEDBAT — Data Link

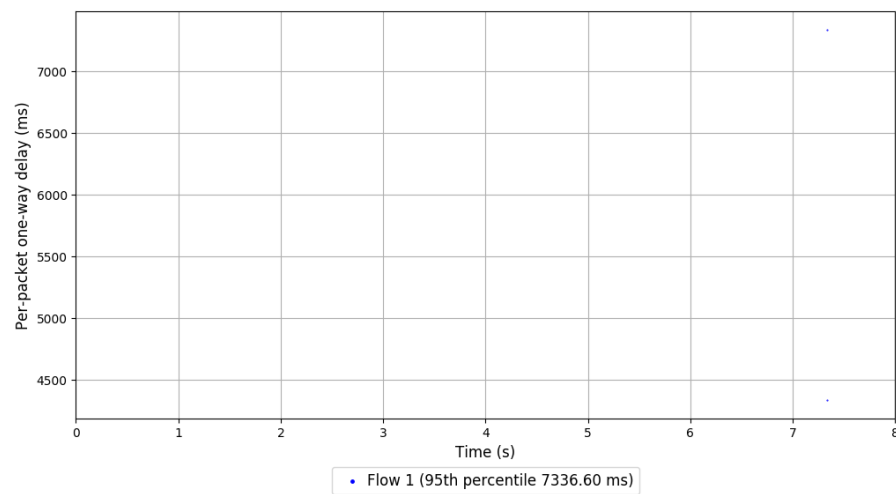
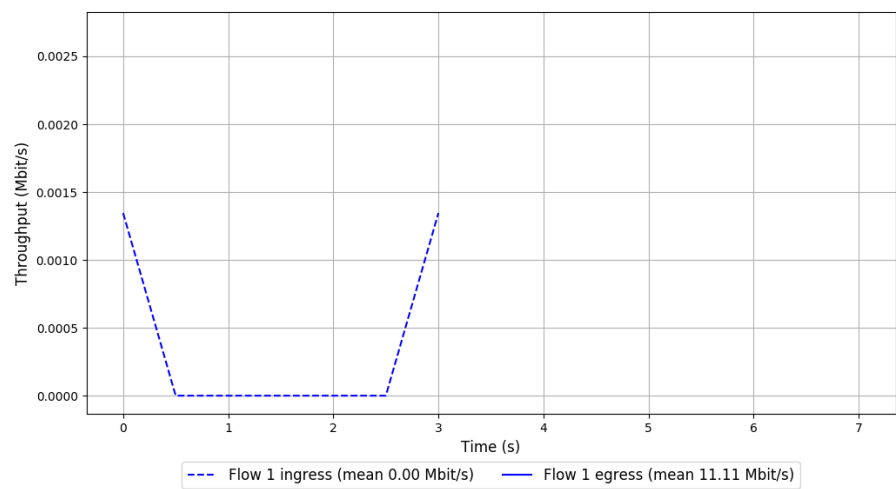


Run 3: Statistics of LEDBAT

Start at: 2017-10-10 18:05:13

End at: 2017-10-10 18:05:43

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-10-10 18:16:46

End at: 2017-10-10 18:17:16

Below is generated by plot.py at 2017-10-10 21:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 117.728 ms

Loss rate: 0.82%

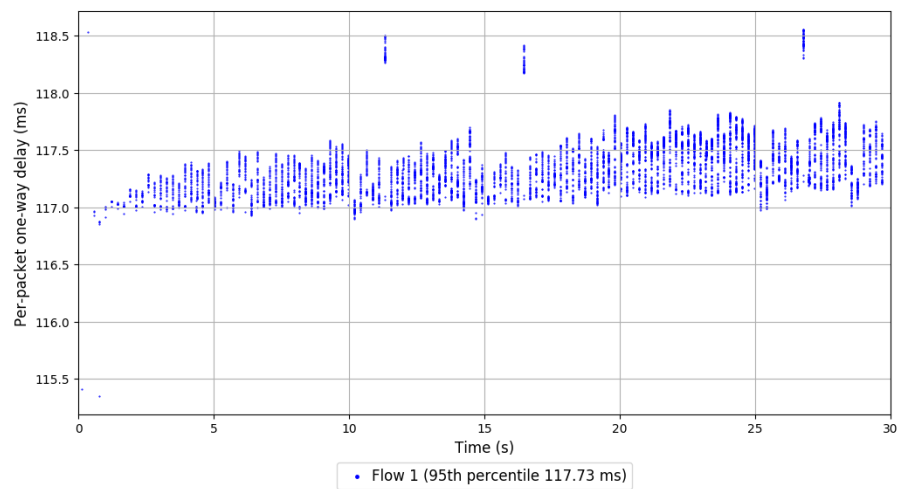
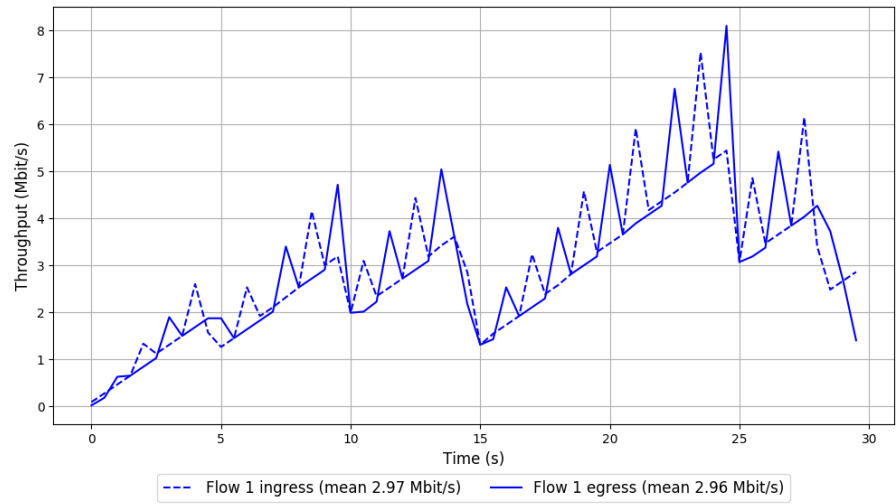
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 117.728 ms

Loss rate: 0.82%

Run 4: Report of LEDBAT — Data Link

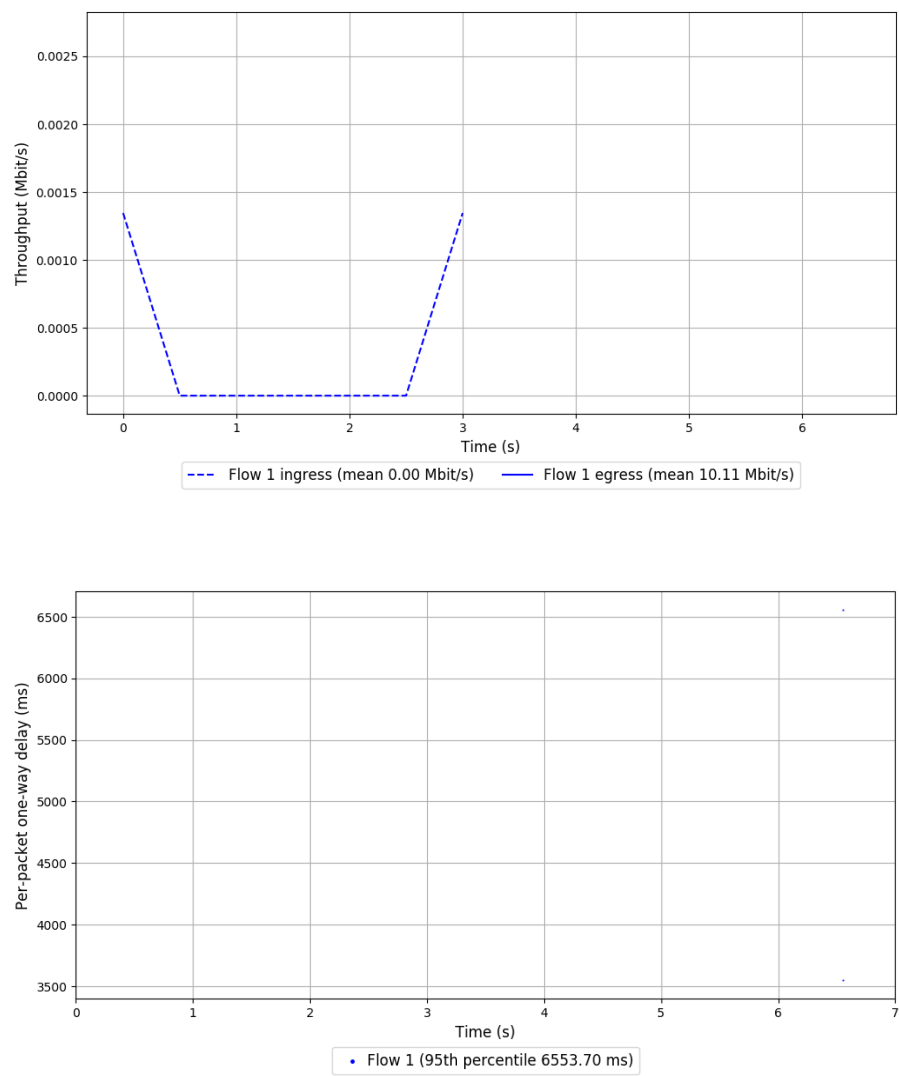


Run 5: Statistics of LEDBAT

Start at: 2017-10-10 18:28:12

End at: 2017-10-10 18:28:42

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-10-10 18:39:33

End at: 2017-10-10 18:40:03

Below is generated by plot.py at 2017-10-10 21:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 114.847 ms

Loss rate: 0.65%

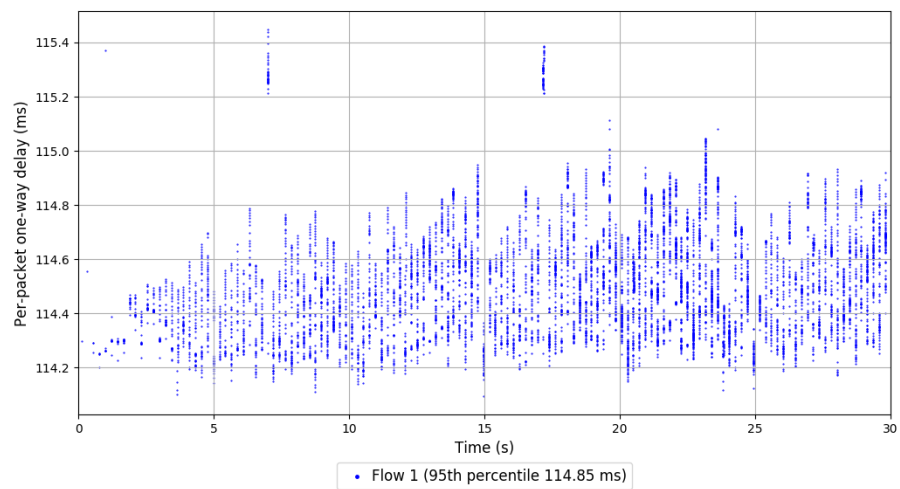
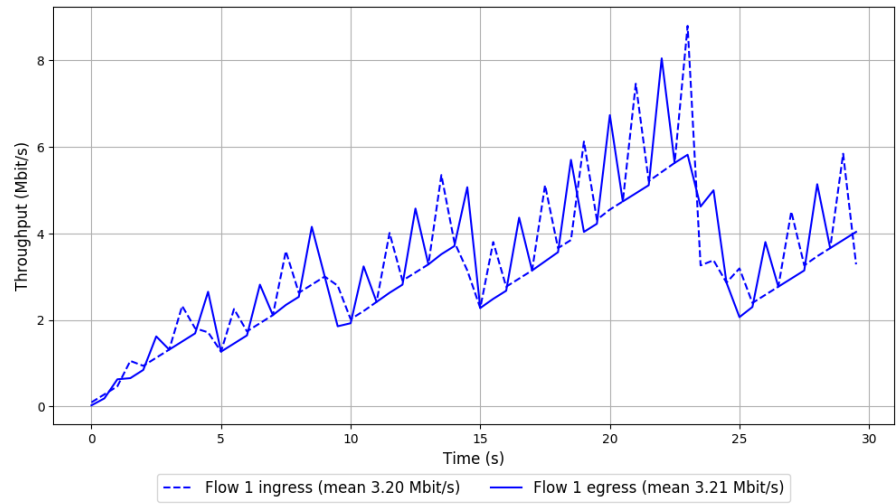
-- Flow 1:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 114.847 ms

Loss rate: 0.65%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-10-10 18:50:53

End at: 2017-10-10 18:51:23

Below is generated by plot.py at 2017-10-10 21:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 114.658 ms

Loss rate: 0.83%

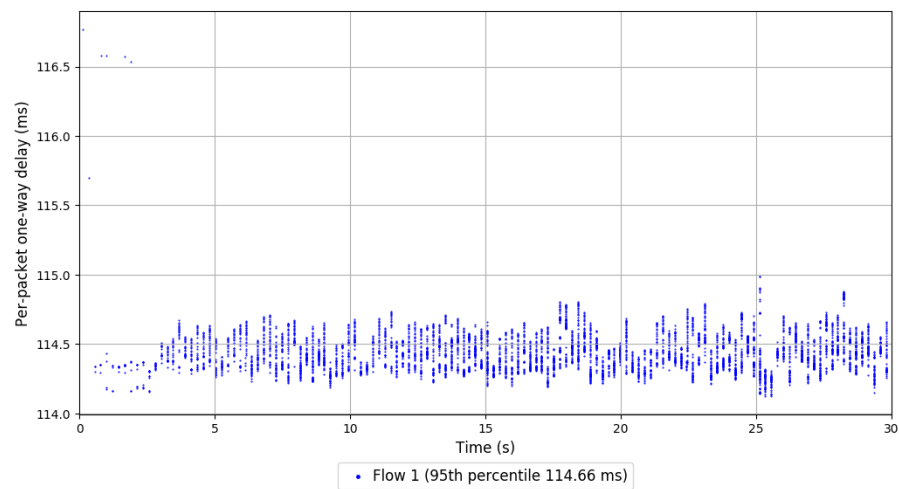
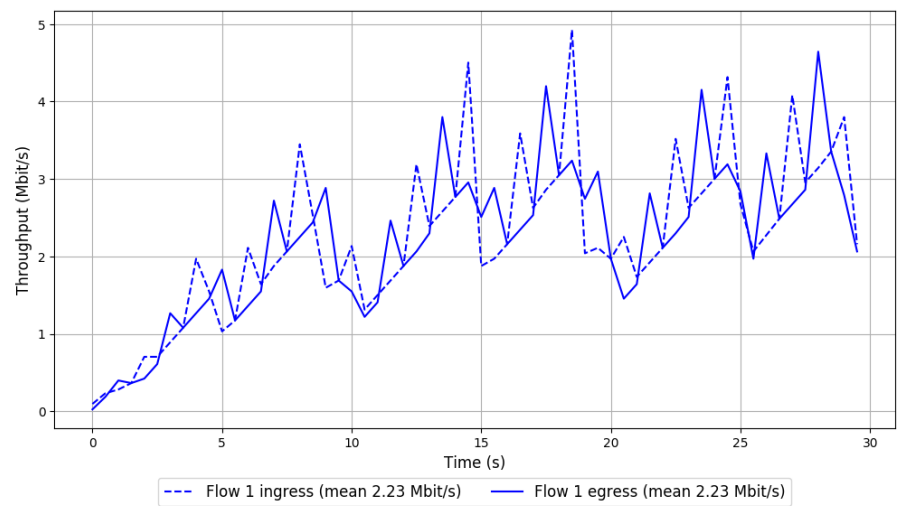
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 114.658 ms

Loss rate: 0.83%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-10-10 19:02:07

End at: 2017-10-10 19:02:37

Below is generated by plot.py at 2017-10-10 21:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 117.669 ms

Loss rate: 2.51%

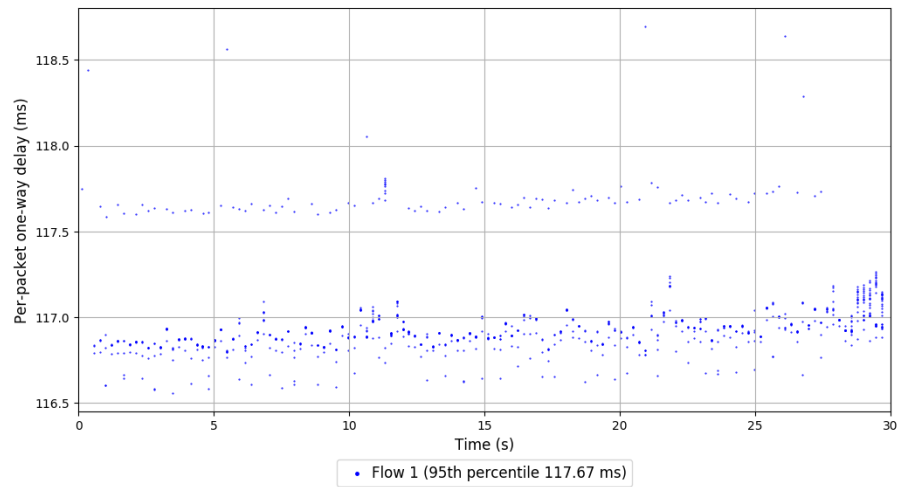
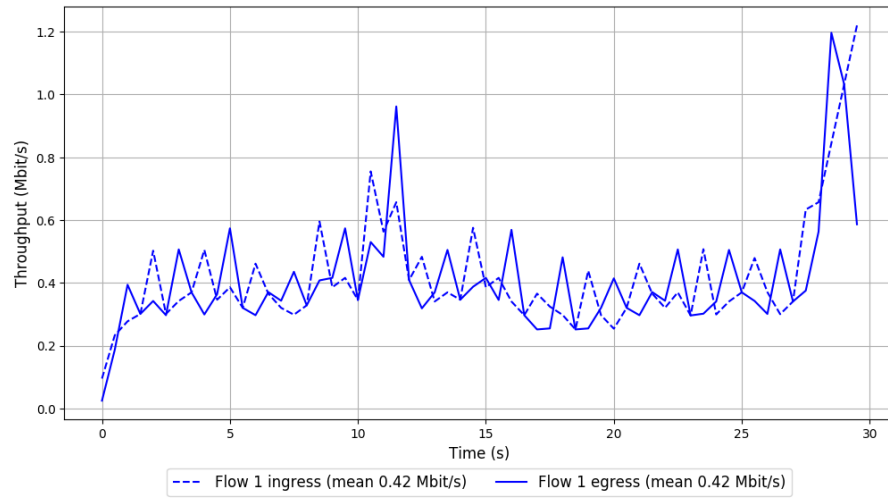
-- Flow 1:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 117.669 ms

Loss rate: 2.51%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-10-10 19:13:35

End at: 2017-10-10 19:14:05

Below is generated by plot.py at 2017-10-10 21:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 116.077 ms

Loss rate: 0.77%

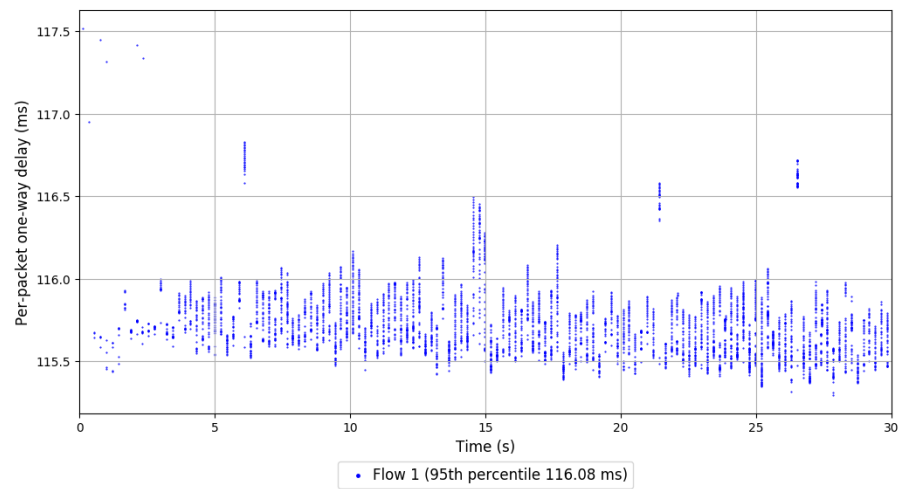
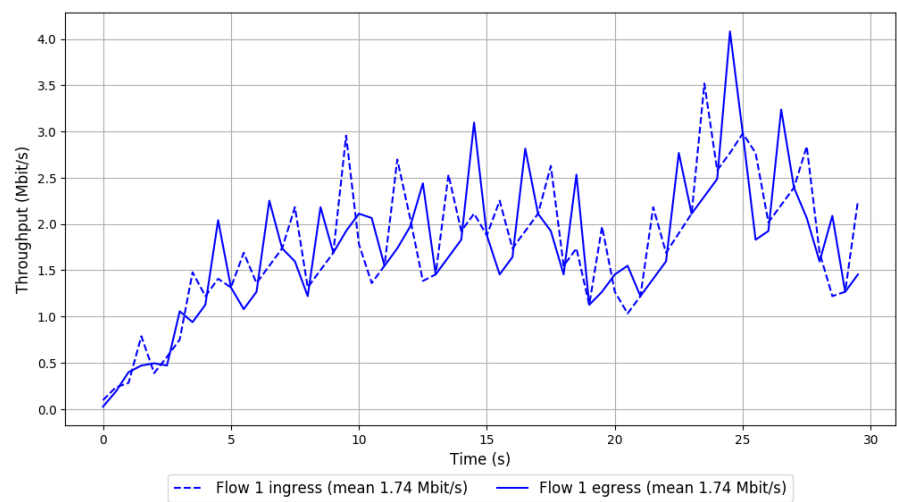
-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 116.077 ms

Loss rate: 0.77%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-10-10 19:25:15

End at: 2017-10-10 19:25:45

Below is generated by plot.py at 2017-10-10 21:28:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 115.589 ms

Loss rate: 1.44%

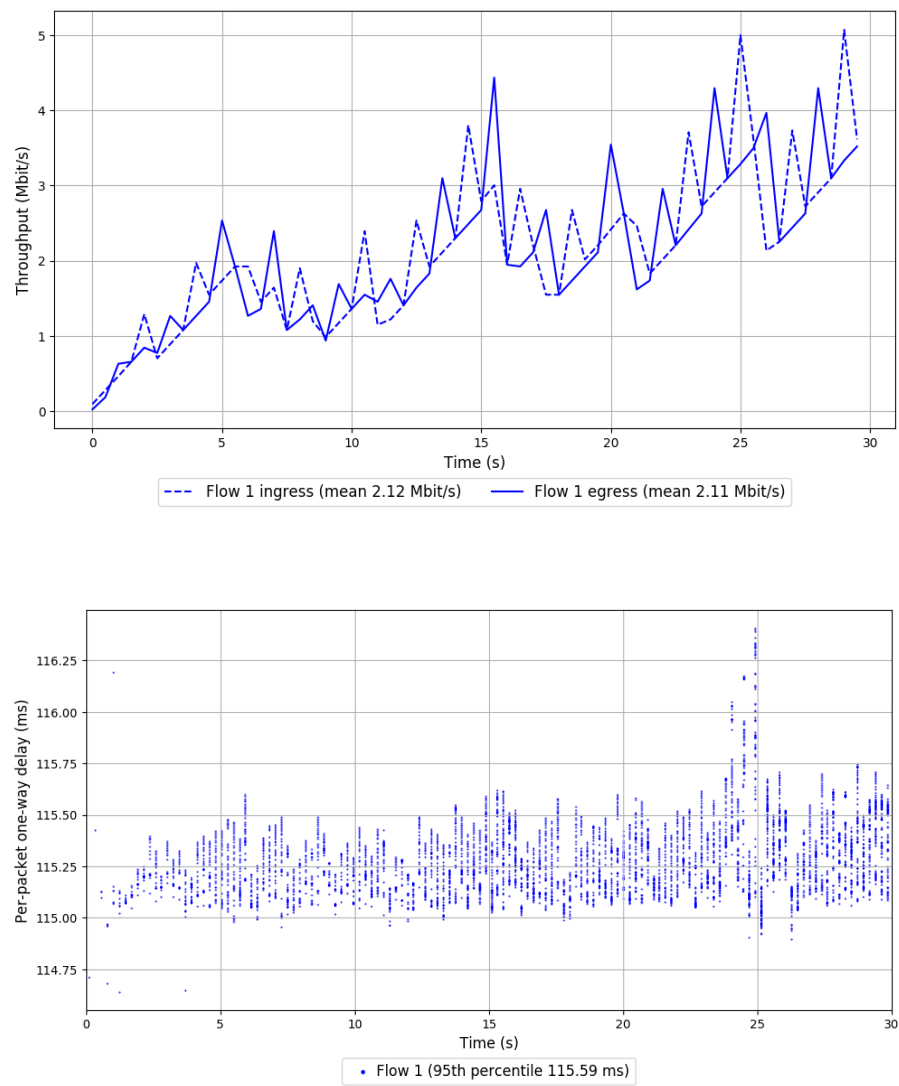
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 115.589 ms

Loss rate: 1.44%

Run 10: Report of LEDBAT — Data Link

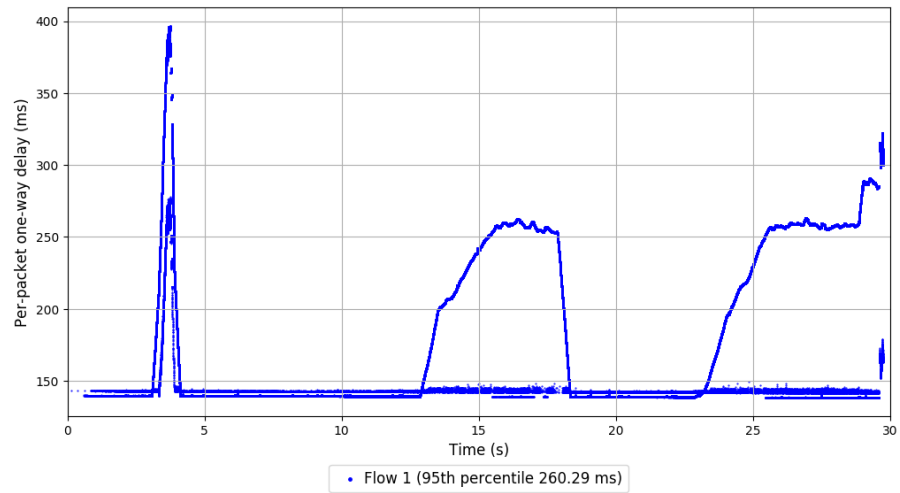
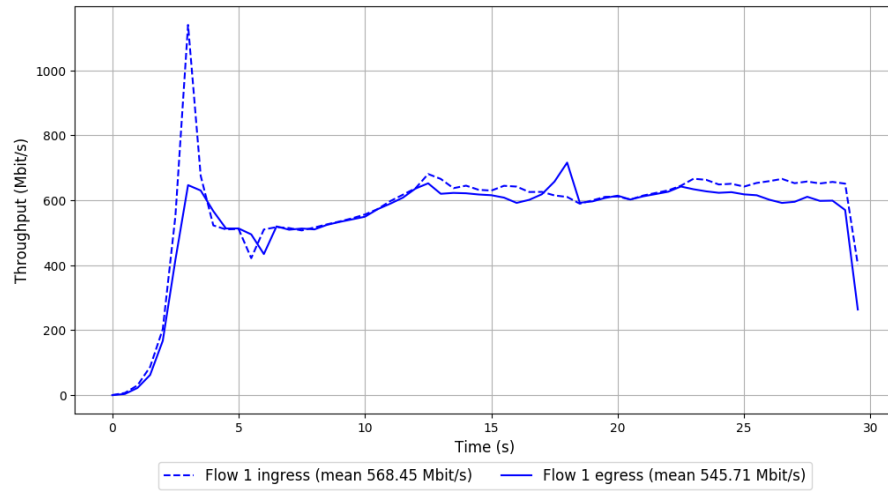


```
Run 1: Statistics of PCC

Start at: 2017-10-10 17:38:51
End at: 2017-10-10 17:39:21

# Below is generated by plot.py at 2017-10-10 21:37:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 545.71 Mbit/s
95th percentile per-packet one-way delay: 260.291 ms
Loss rate: 4.73%
-- Flow 1:
Average throughput: 545.71 Mbit/s
95th percentile per-packet one-way delay: 260.291 ms
Loss rate: 4.73%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-10-10 17:50:02

End at: 2017-10-10 17:50:32

Below is generated by plot.py at 2017-10-10 21:37:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 625.51 Mbit/s

95th percentile per-packet one-way delay: 221.910 ms

Loss rate: 1.49%

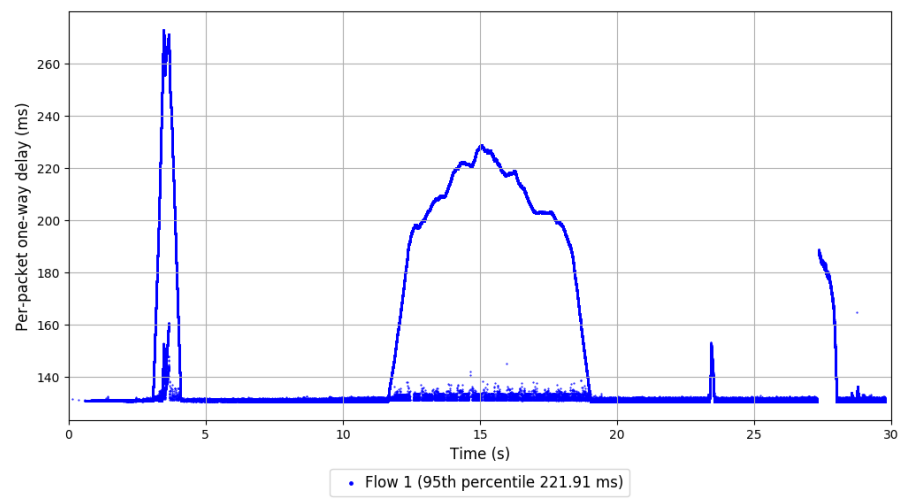
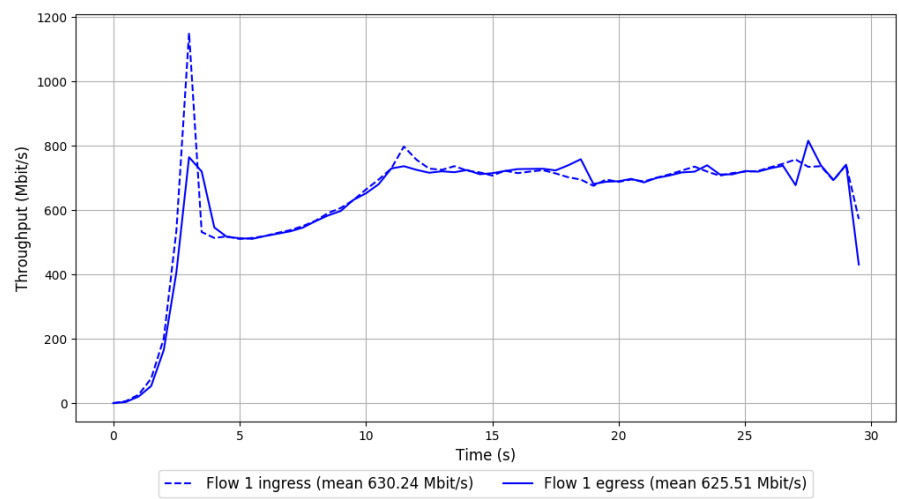
-- Flow 1:

Average throughput: 625.51 Mbit/s

95th percentile per-packet one-way delay: 221.910 ms

Loss rate: 1.49%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-10-10 18:01:47

End at: 2017-10-10 18:02:17

Below is generated by plot.py at 2017-10-10 21:37:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 626.10 Mbit/s

95th percentile per-packet one-way delay: 217.054 ms

Loss rate: 1.76%

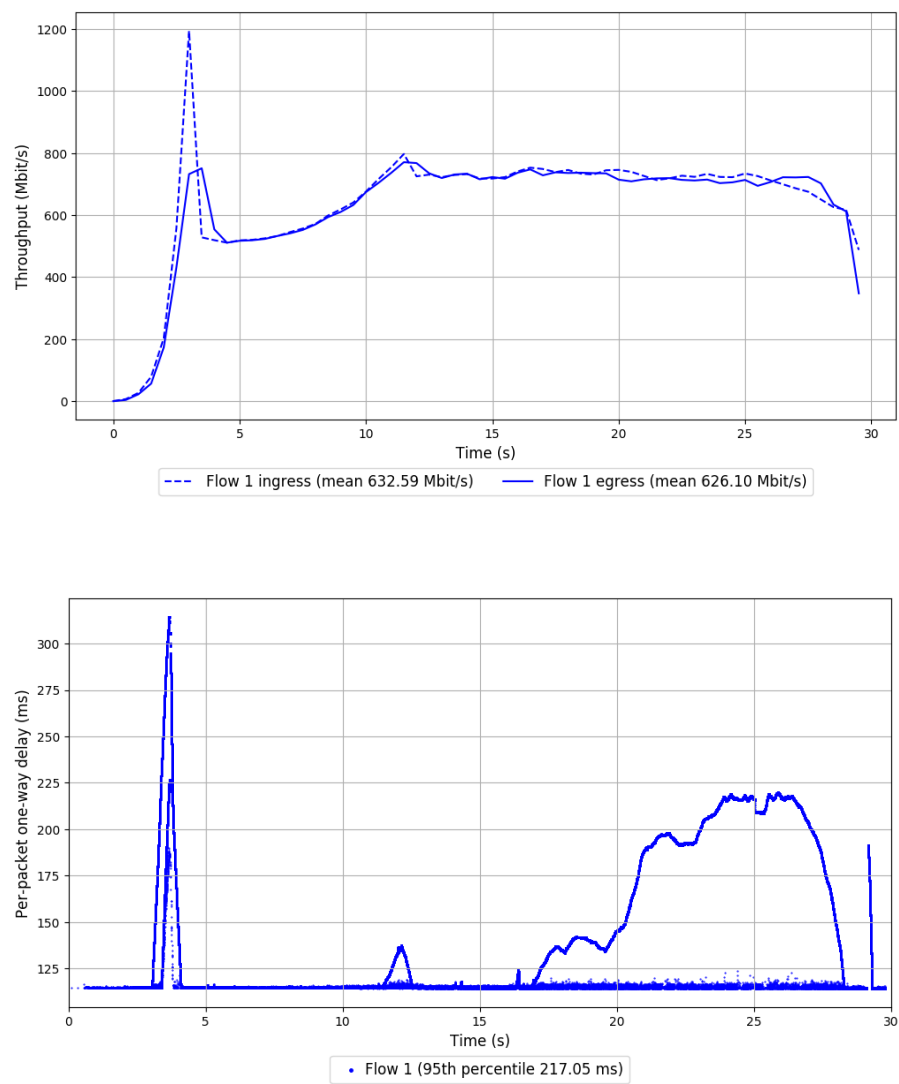
-- Flow 1:

Average throughput: 626.10 Mbit/s

95th percentile per-packet one-way delay: 217.054 ms

Loss rate: 1.76%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-10-10 18:13:22

End at: 2017-10-10 18:13:52

Below is generated by plot.py at 2017-10-10 21:37:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 565.73 Mbit/s

95th percentile per-packet one-way delay: 148.619 ms

Loss rate: 1.72%

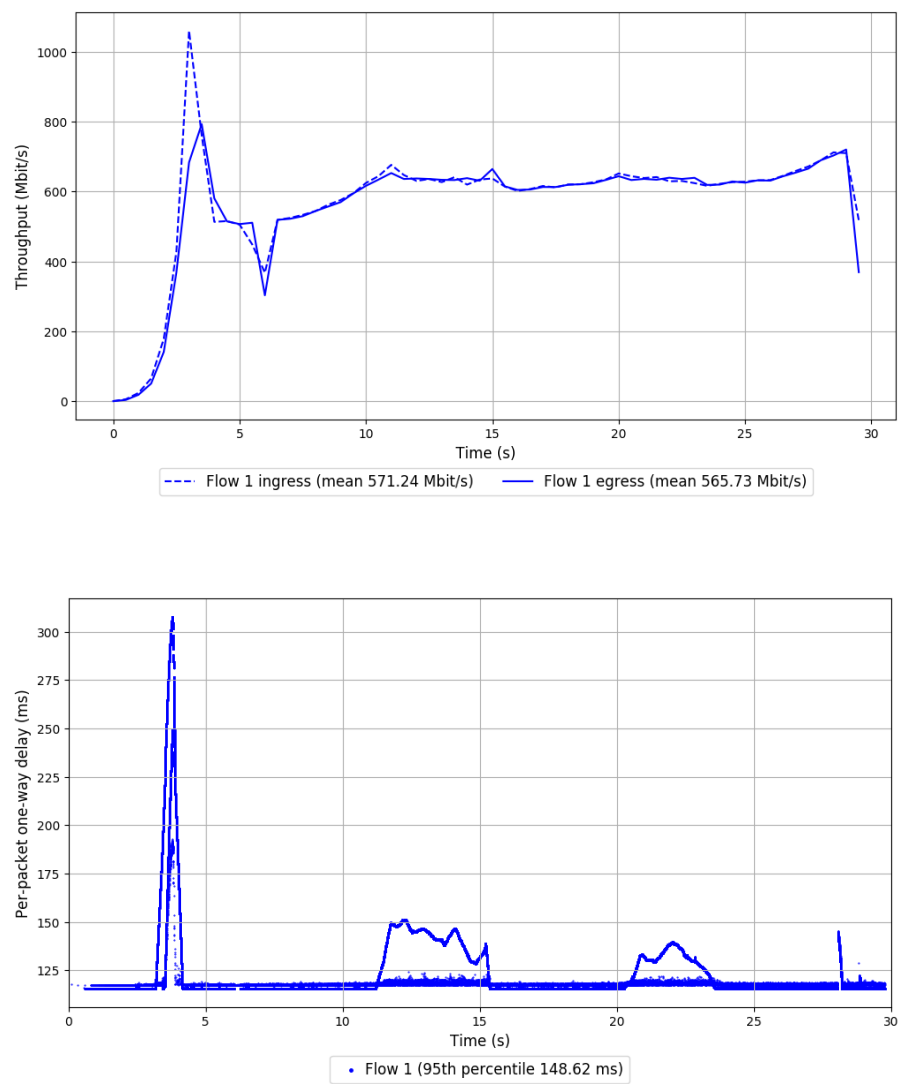
-- Flow 1:

Average throughput: 565.73 Mbit/s

95th percentile per-packet one-way delay: 148.619 ms

Loss rate: 1.72%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-10-10 18:24:45

End at: 2017-10-10 18:25:15

Below is generated by plot.py at 2017-10-10 21:38:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 619.82 Mbit/s

95th percentile per-packet one-way delay: 242.301 ms

Loss rate: 4.58%

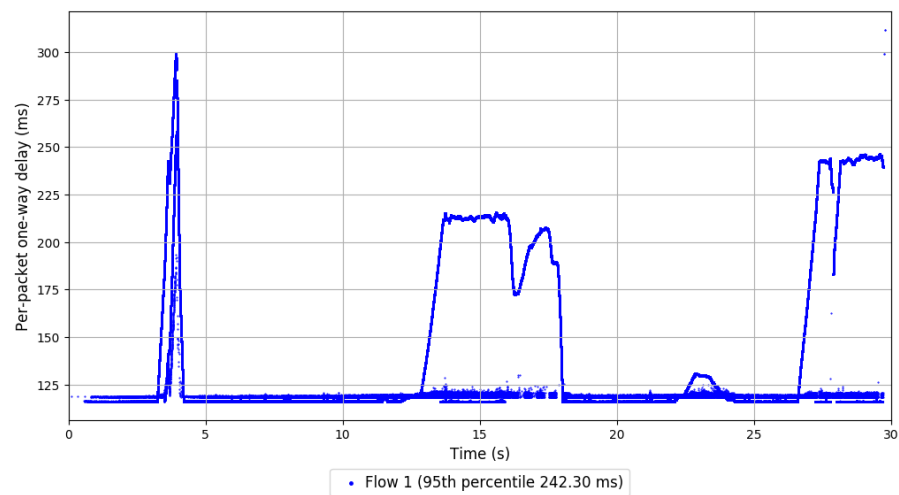
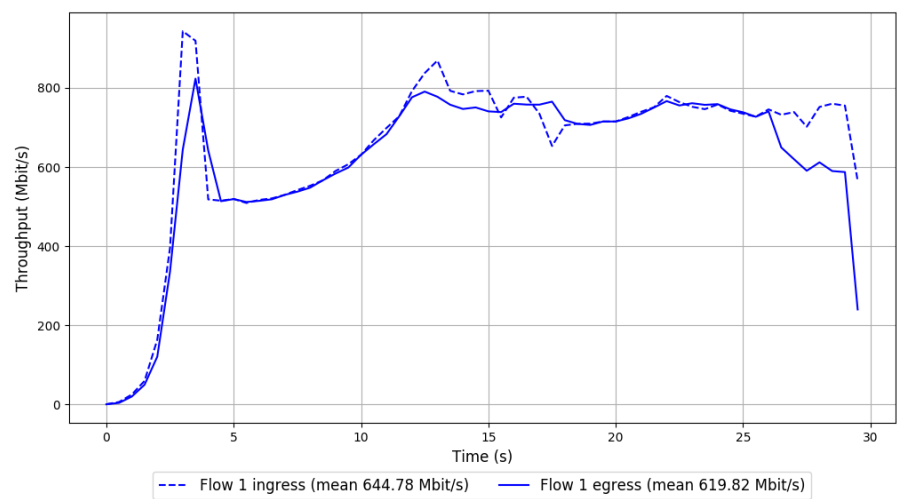
-- Flow 1:

Average throughput: 619.82 Mbit/s

95th percentile per-packet one-way delay: 242.301 ms

Loss rate: 4.58%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-10-10 18:36:06

End at: 2017-10-10 18:36:36

Below is generated by plot.py at 2017-10-10 21:38:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 638.18 Mbit/s

95th percentile per-packet one-way delay: 212.176 ms

Loss rate: 3.40%

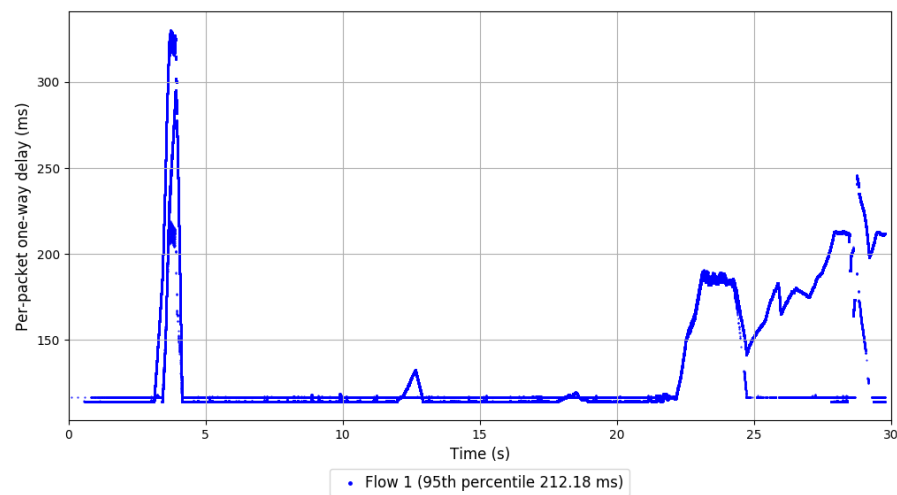
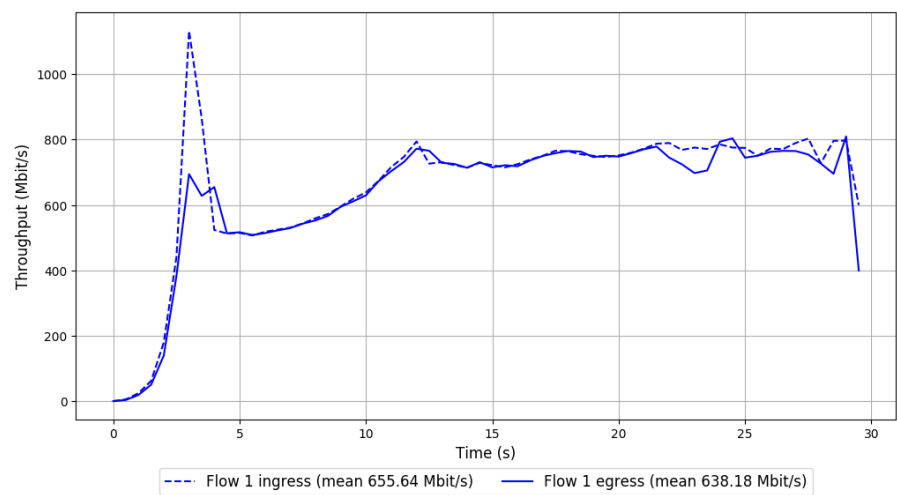
-- Flow 1:

Average throughput: 638.18 Mbit/s

95th percentile per-packet one-way delay: 212.176 ms

Loss rate: 3.40%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-10-10 18:47:28

End at: 2017-10-10 18:47:58

Below is generated by plot.py at 2017-10-10 21:38:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 591.40 Mbit/s

95th percentile per-packet one-way delay: 206.645 ms

Loss rate: 3.72%

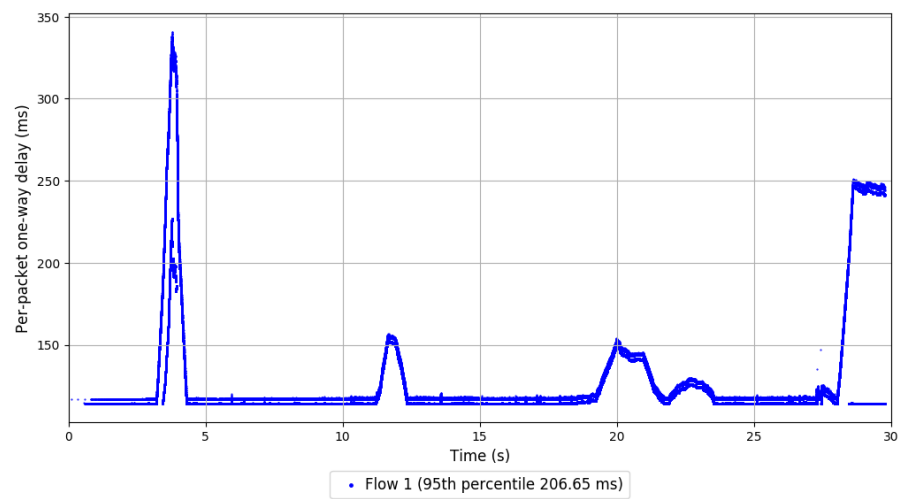
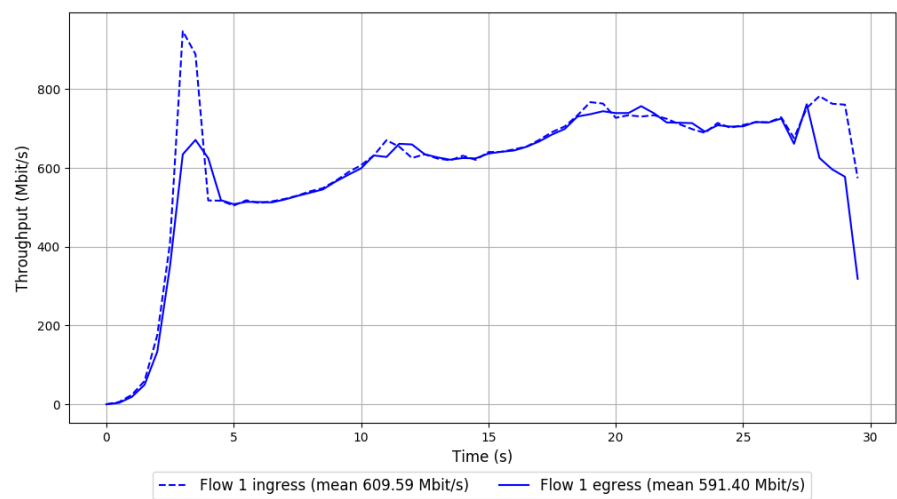
-- Flow 1:

Average throughput: 591.40 Mbit/s

95th percentile per-packet one-way delay: 206.645 ms

Loss rate: 3.72%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-10-10 18:58:42

End at: 2017-10-10 18:59:12

Below is generated by plot.py at 2017-10-10 21:38:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 615.23 Mbit/s

95th percentile per-packet one-way delay: 221.896 ms

Loss rate: 2.88%

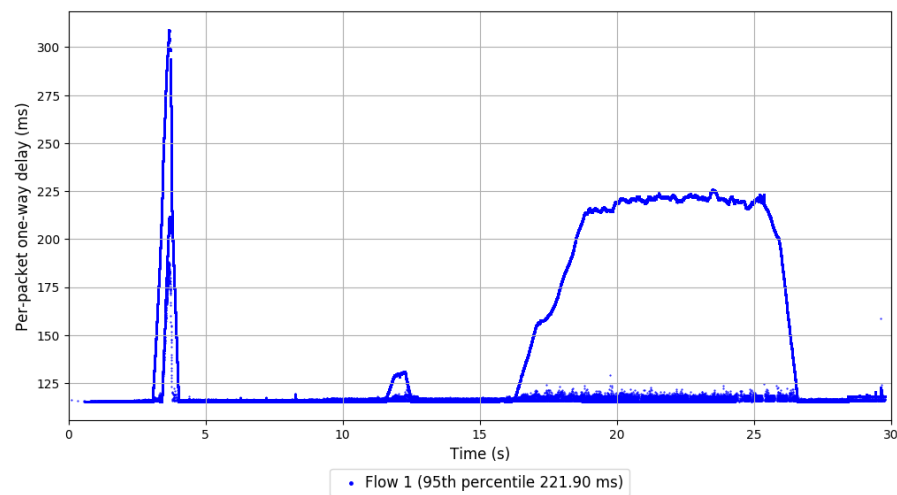
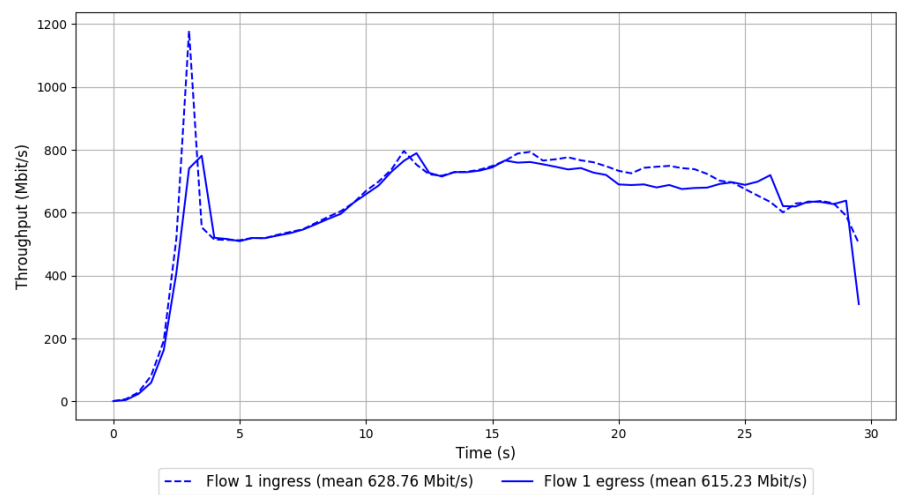
-- Flow 1:

Average throughput: 615.23 Mbit/s

95th percentile per-packet one-way delay: 221.896 ms

Loss rate: 2.88%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-10-10 19:10:09

End at: 2017-10-10 19:10:39

Below is generated by plot.py at 2017-10-10 21:47:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 600.86 Mbit/s

95th percentile per-packet one-way delay: 193.102 ms

Loss rate: 3.00%

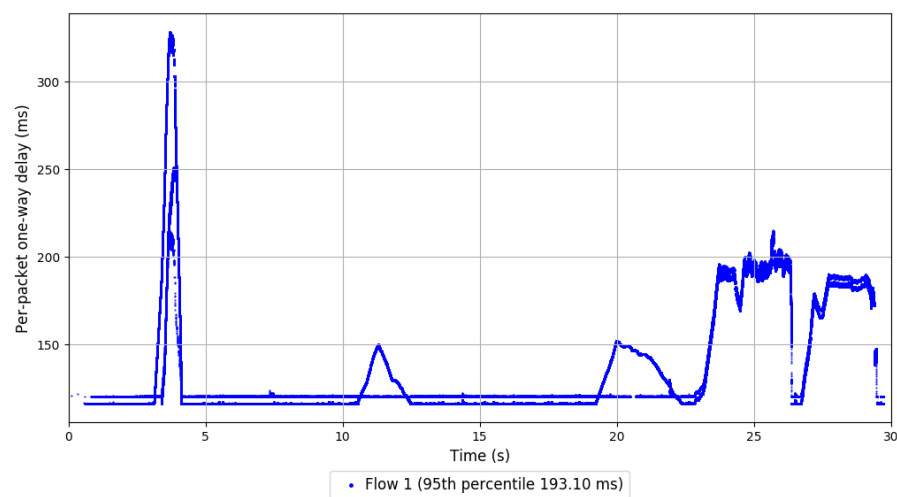
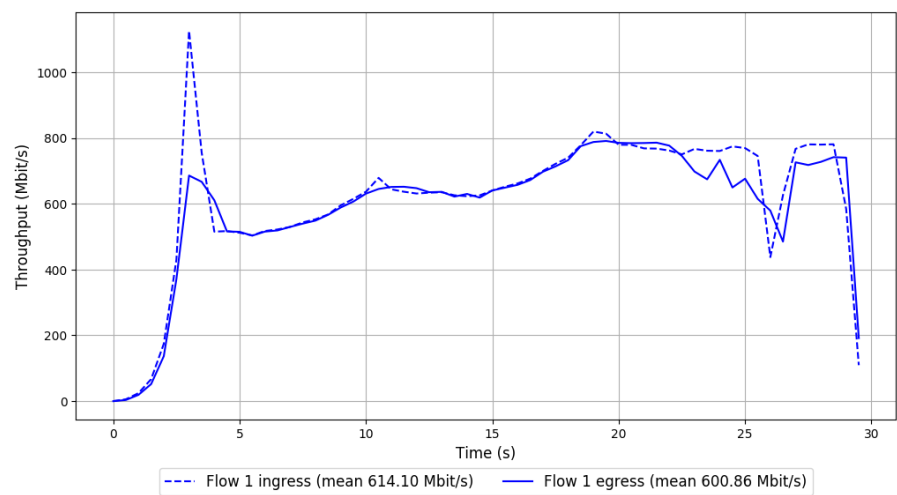
-- Flow 1:

Average throughput: 600.86 Mbit/s

95th percentile per-packet one-way delay: 193.102 ms

Loss rate: 3.00%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-10-10 19:21:50

End at: 2017-10-10 19:22:20

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 586.00 Mbit/s

95th percentile per-packet one-way delay: 208.176 ms

Loss rate: 3.63%

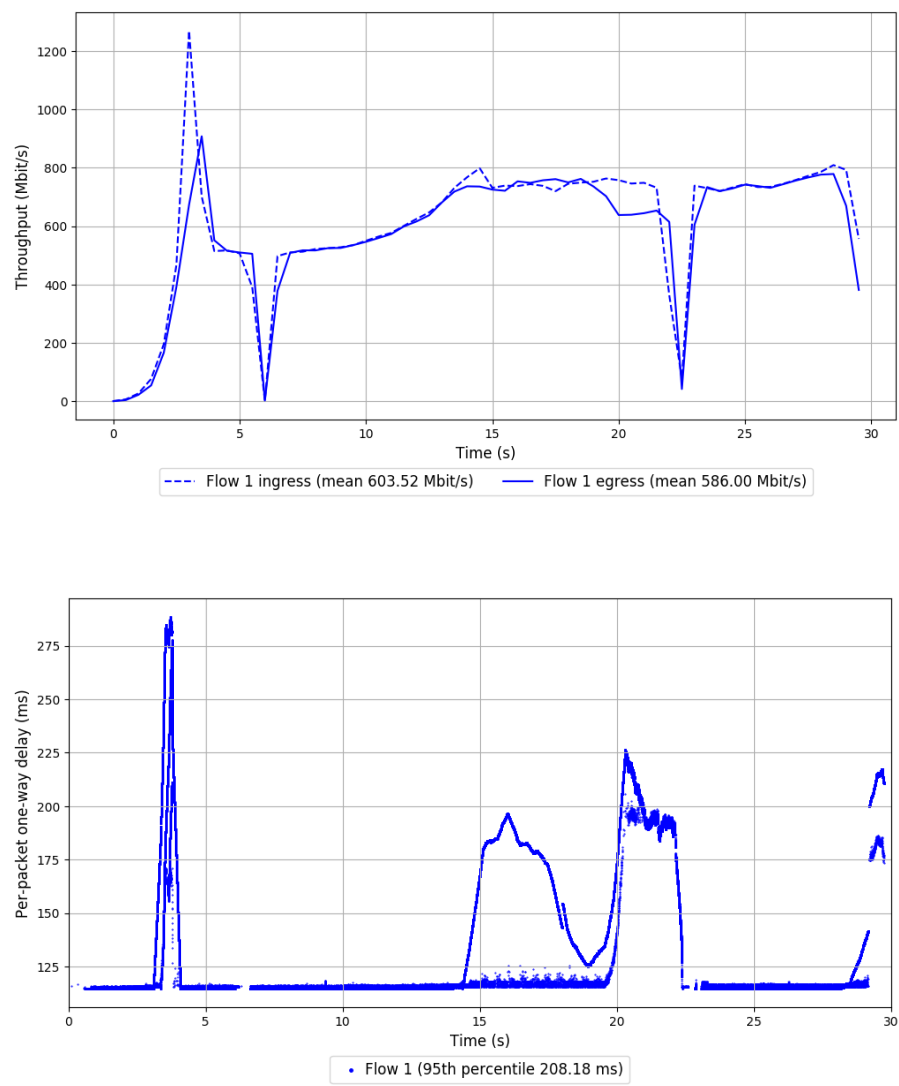
-- Flow 1:

Average throughput: 586.00 Mbit/s

95th percentile per-packet one-way delay: 208.176 ms

Loss rate: 3.63%

Run 10: Report of PCC — Data Link

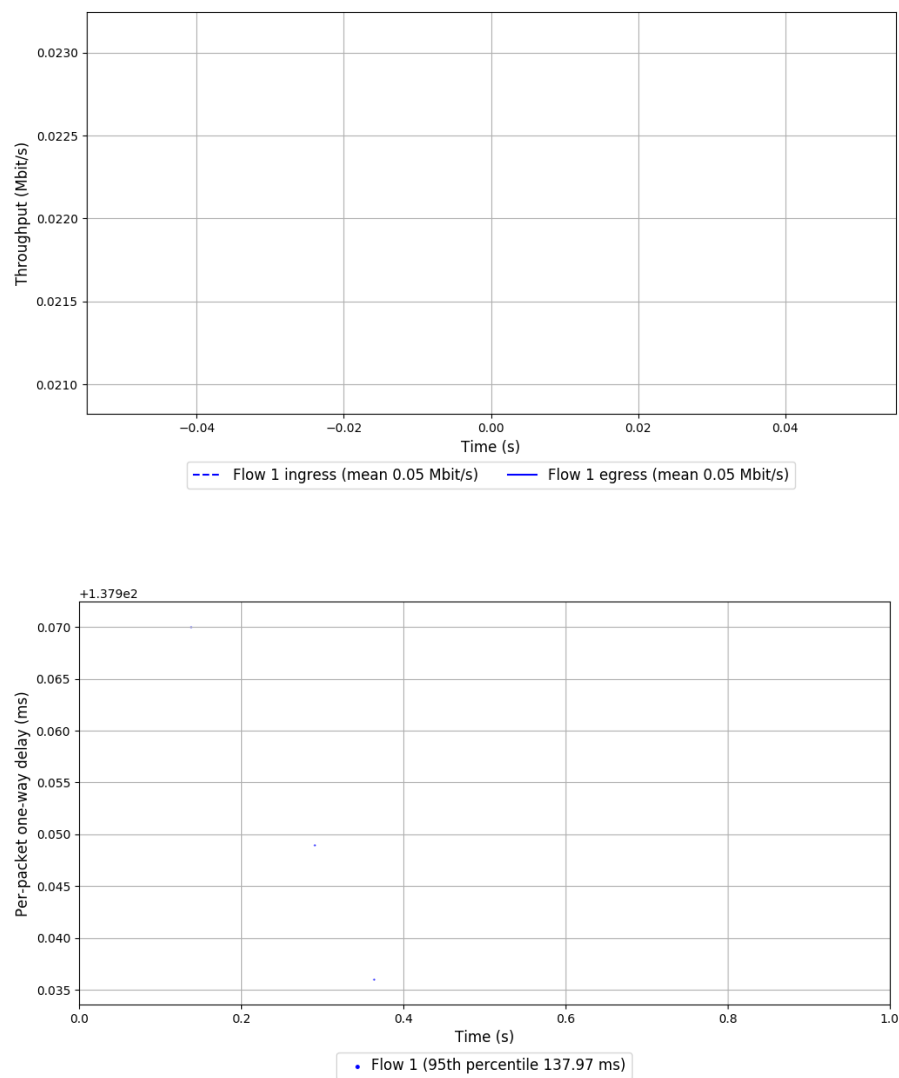


Run 1: Statistics of QUIC Cubic

Start at: 2017-10-10 17:40:46

End at: 2017-10-10 17:41:16

Run 1: Report of QUIC Cubic — Data Link

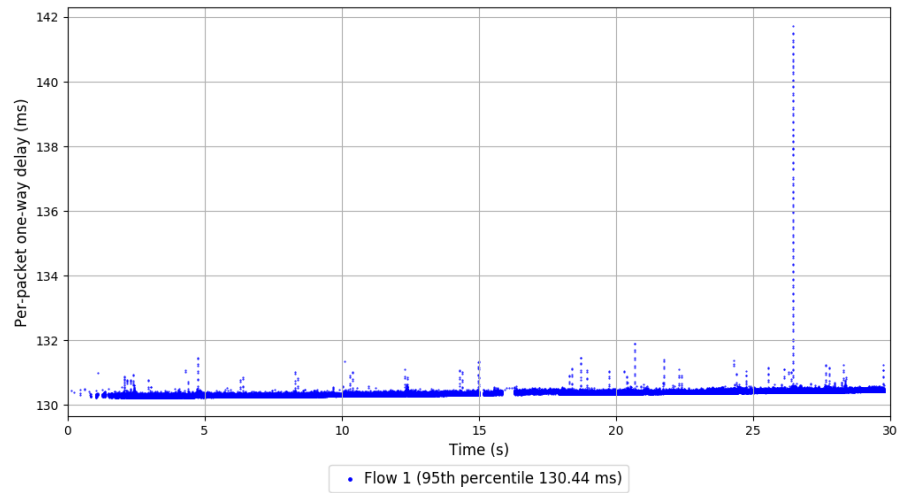
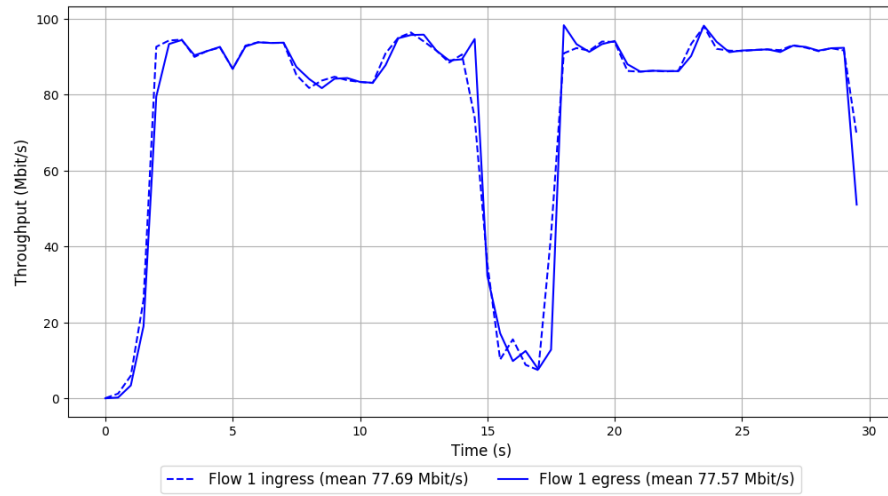


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-10-10 17:52:02
End at: 2017-10-10 17:52:32

# Below is generated by plot.py at 2017-10-10 21:47:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.57 Mbit/s
95th percentile per-packet one-way delay: 130.442 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 77.57 Mbit/s
95th percentile per-packet one-way delay: 130.442 ms
Loss rate: 0.90%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-10-10 18:03:47

End at: 2017-10-10 18:04:17

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.78 Mbit/s

95th percentile per-packet one-way delay: 115.722 ms

Loss rate: 1.00%

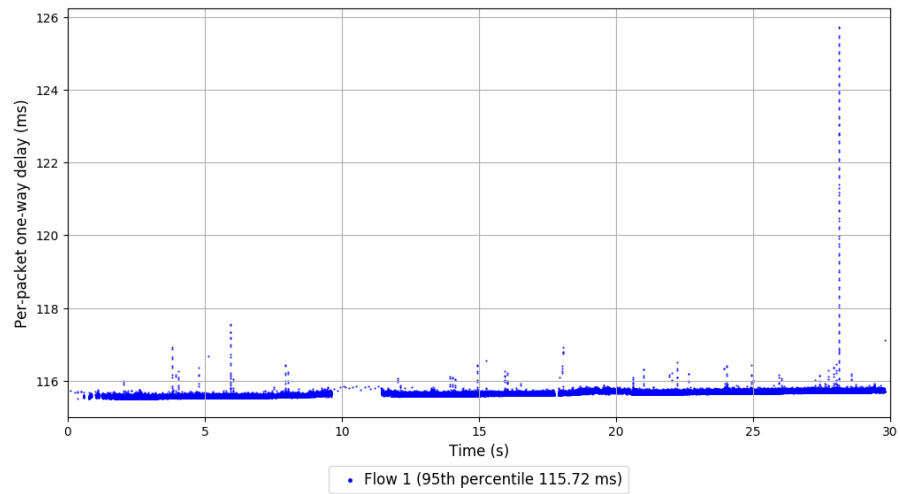
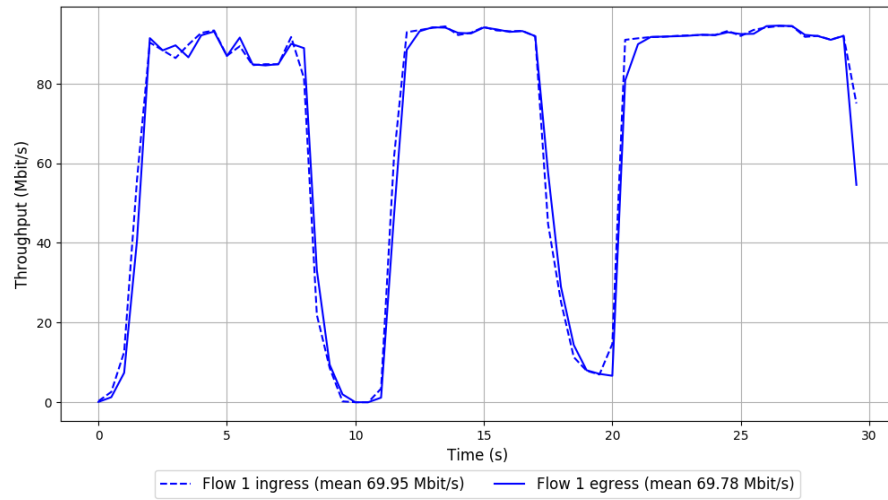
-- Flow 1:

Average throughput: 69.78 Mbit/s

95th percentile per-packet one-way delay: 115.722 ms

Loss rate: 1.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-10-10 18:15:20

End at: 2017-10-10 18:15:50

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.70 Mbit/s

95th percentile per-packet one-way delay: 114.730 ms

Loss rate: 0.94%

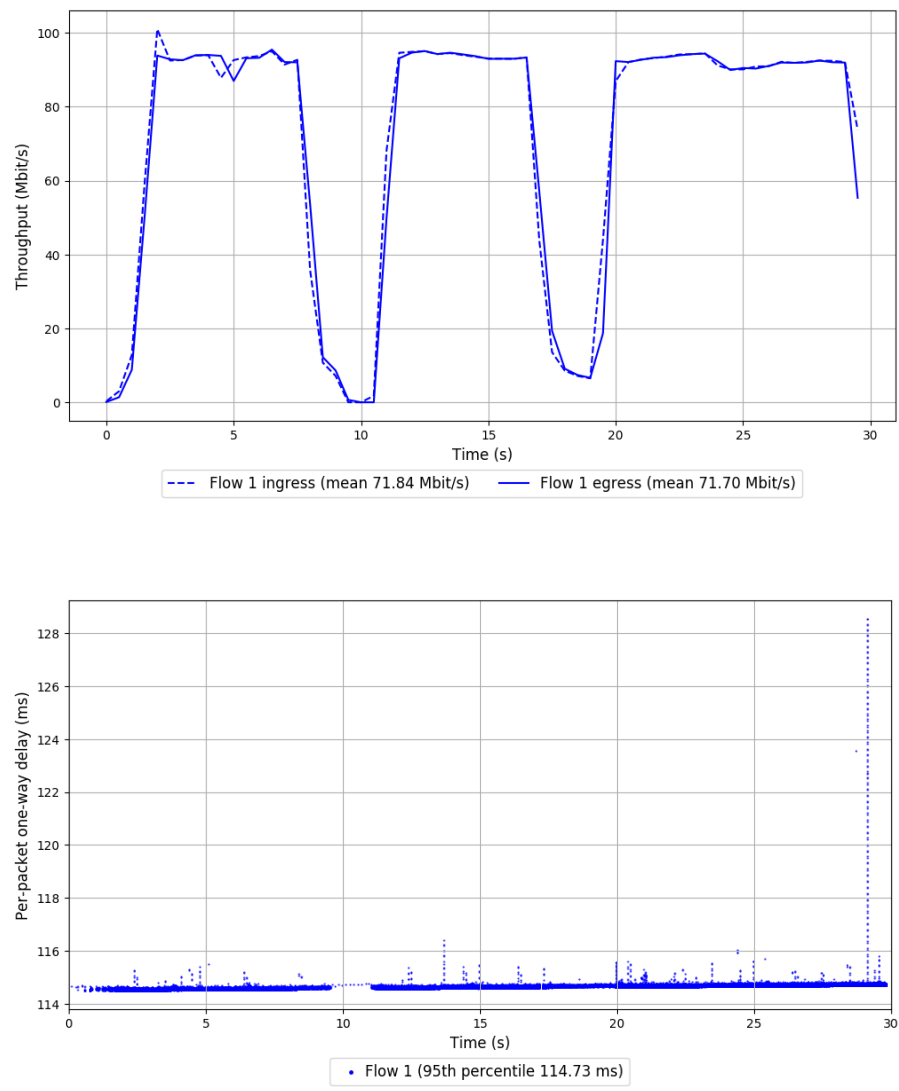
-- Flow 1:

Average throughput: 71.70 Mbit/s

95th percentile per-packet one-way delay: 114.730 ms

Loss rate: 0.94%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-10-10 18:26:46

End at: 2017-10-10 18:27:16

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.70 Mbit/s

95th percentile per-packet one-way delay: 117.433 ms

Loss rate: 0.97%

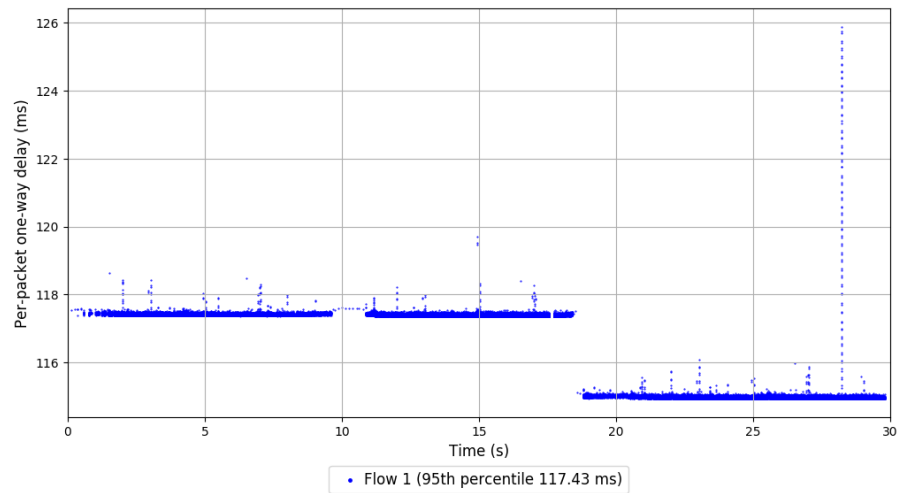
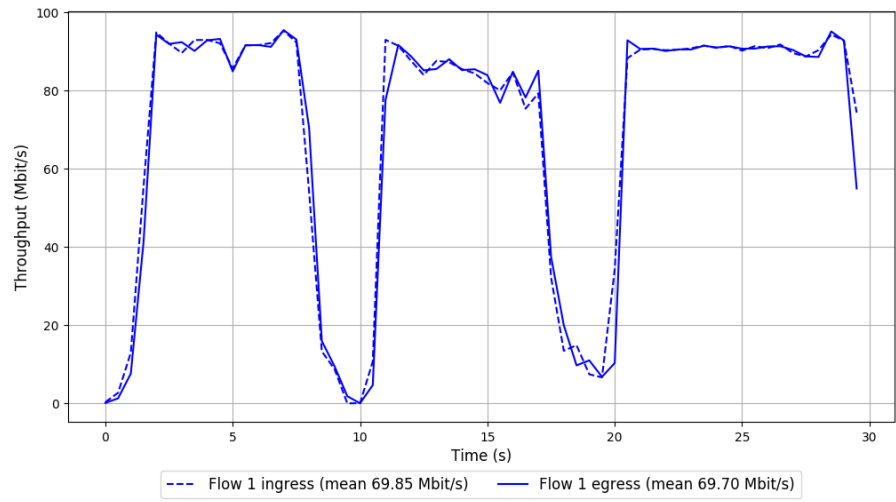
-- Flow 1:

Average throughput: 69.70 Mbit/s

95th percentile per-packet one-way delay: 117.433 ms

Loss rate: 0.97%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-10-10 18:38:07

End at: 2017-10-10 18:38:37

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.75 Mbit/s

95th percentile per-packet one-way delay: 115.779 ms

Loss rate: 0.95%

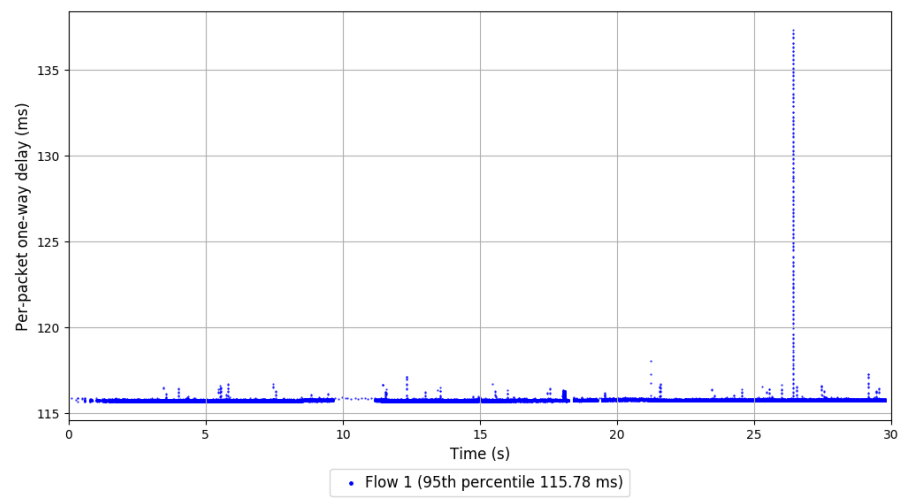
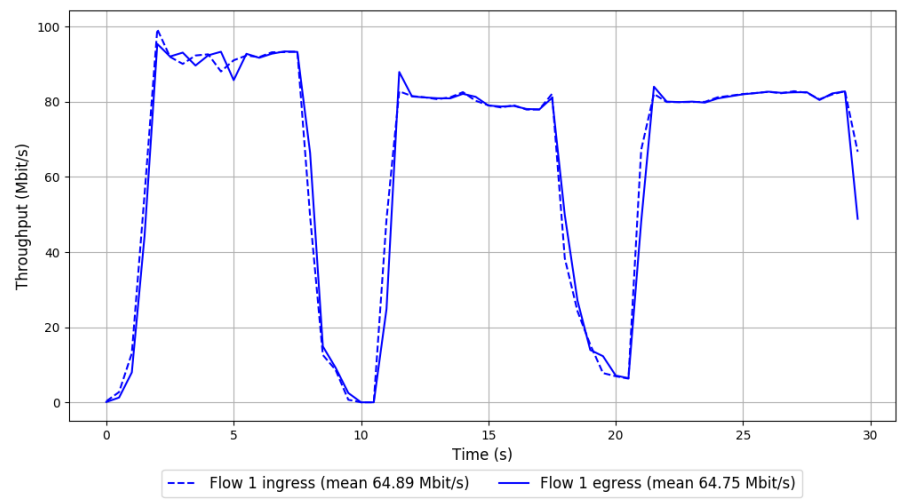
-- Flow 1:

Average throughput: 64.75 Mbit/s

95th percentile per-packet one-way delay: 115.779 ms

Loss rate: 0.95%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-10-10 18:49:28

End at: 2017-10-10 18:49:58

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.25 Mbit/s

95th percentile per-packet one-way delay: 116.772 ms

Loss rate: 1.00%

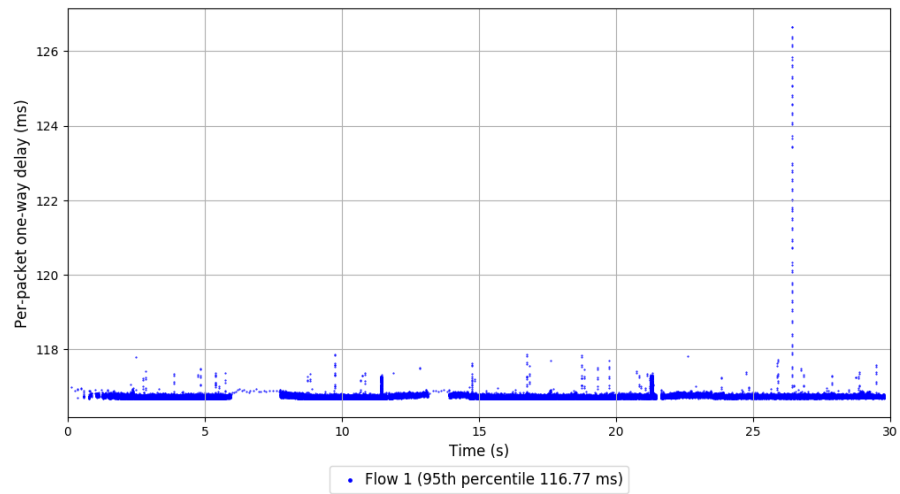
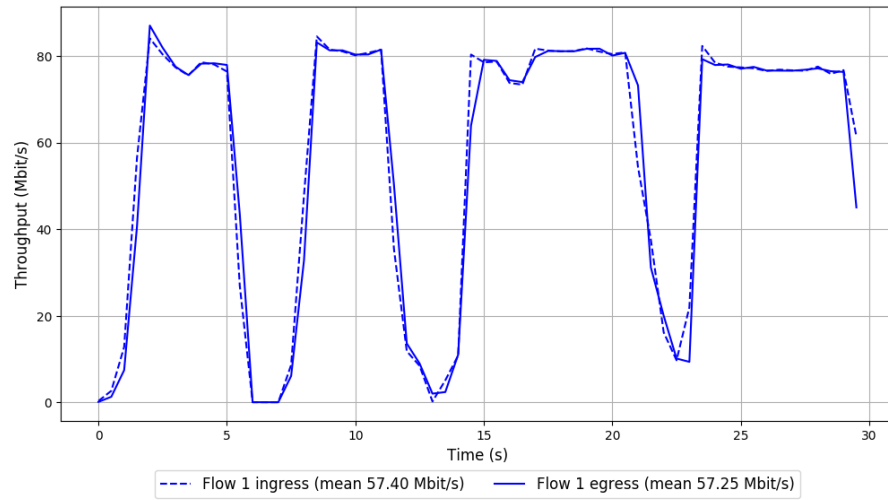
-- Flow 1:

Average throughput: 57.25 Mbit/s

95th percentile per-packet one-way delay: 116.772 ms

Loss rate: 1.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-10-10 19:00:41

End at: 2017-10-10 19:01:12

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.38 Mbit/s

95th percentile per-packet one-way delay: 116.252 ms

Loss rate: 0.86%

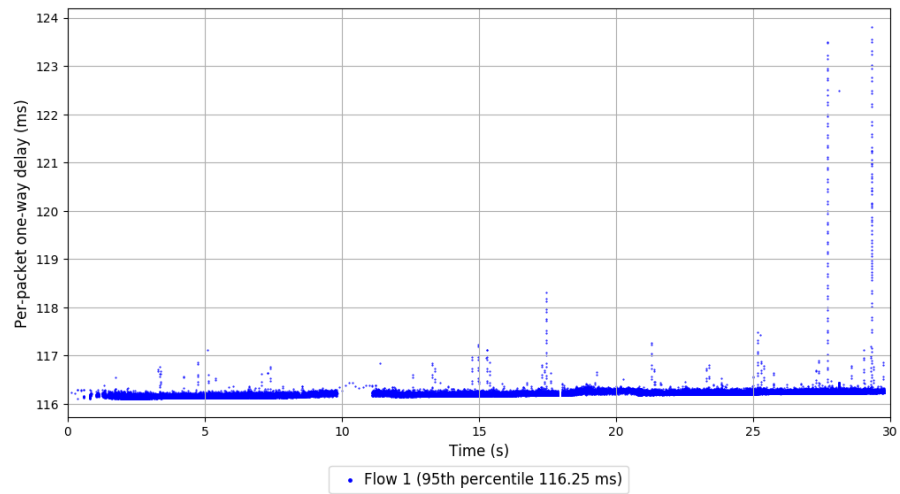
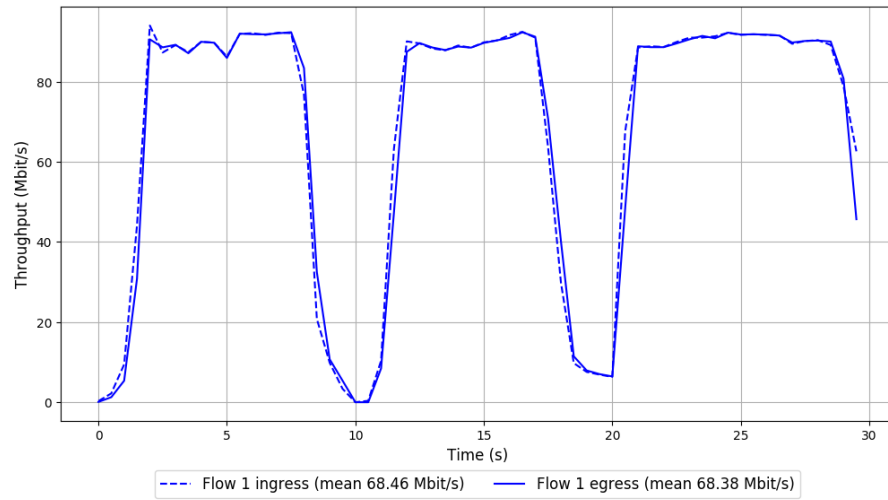
-- Flow 1:

Average throughput: 68.38 Mbit/s

95th percentile per-packet one-way delay: 116.252 ms

Loss rate: 0.86%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-10-10 19:12:09

End at: 2017-10-10 19:12:39

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.12 Mbit/s

95th percentile per-packet one-way delay: 118.782 ms

Loss rate: 1.02%

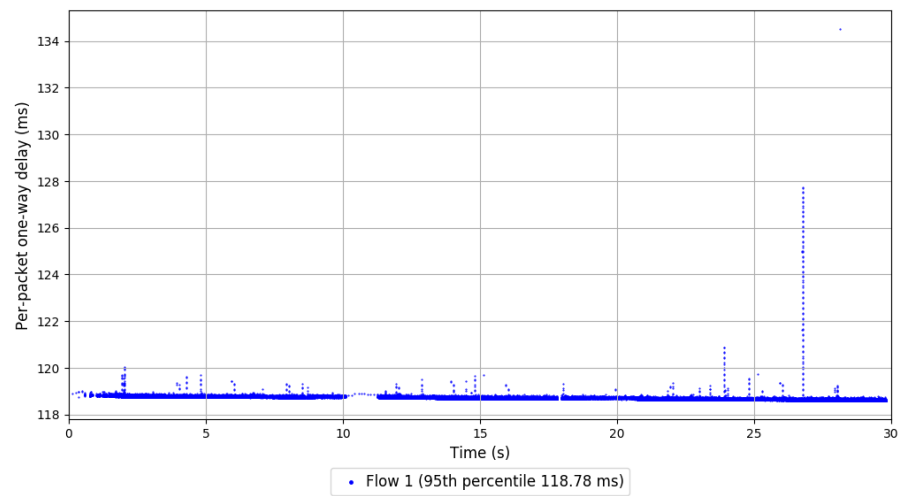
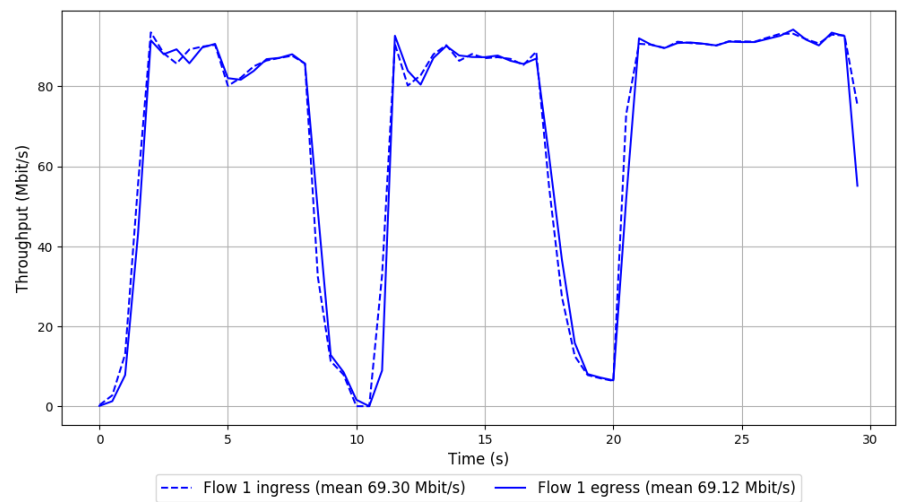
-- Flow 1:

Average throughput: 69.12 Mbit/s

95th percentile per-packet one-way delay: 118.782 ms

Loss rate: 1.02%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-10-10 19:23:49

End at: 2017-10-10 19:24:19

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.77 Mbit/s

95th percentile per-packet one-way delay: 114.422 ms

Loss rate: 1.09%

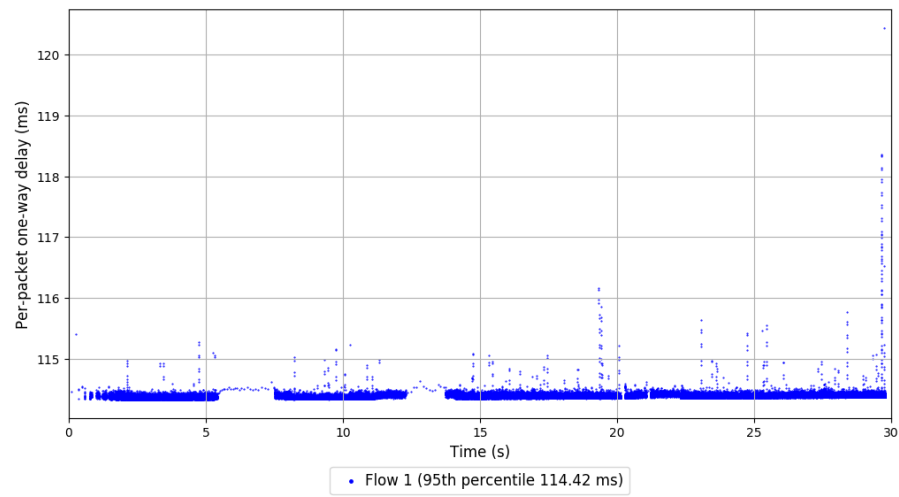
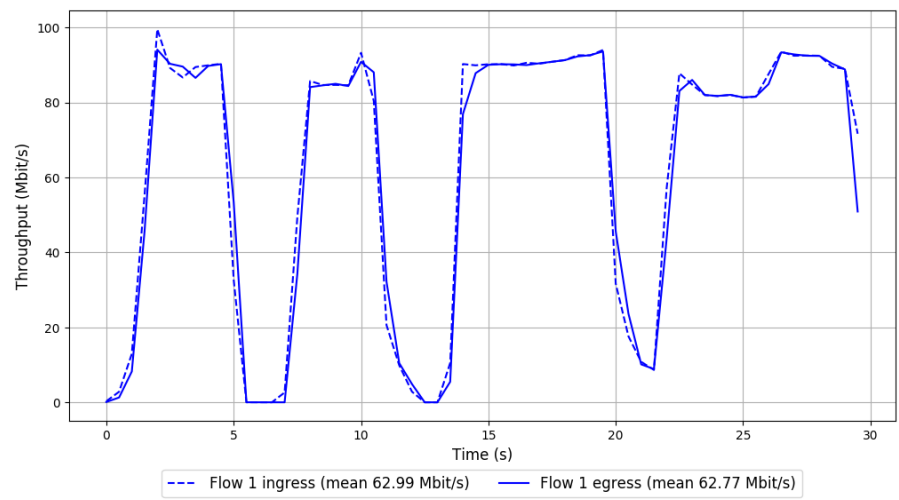
-- Flow 1:

Average throughput: 62.77 Mbit/s

95th percentile per-packet one-way delay: 114.422 ms

Loss rate: 1.09%

Run 10: Report of QUIC Cubic — Data Link

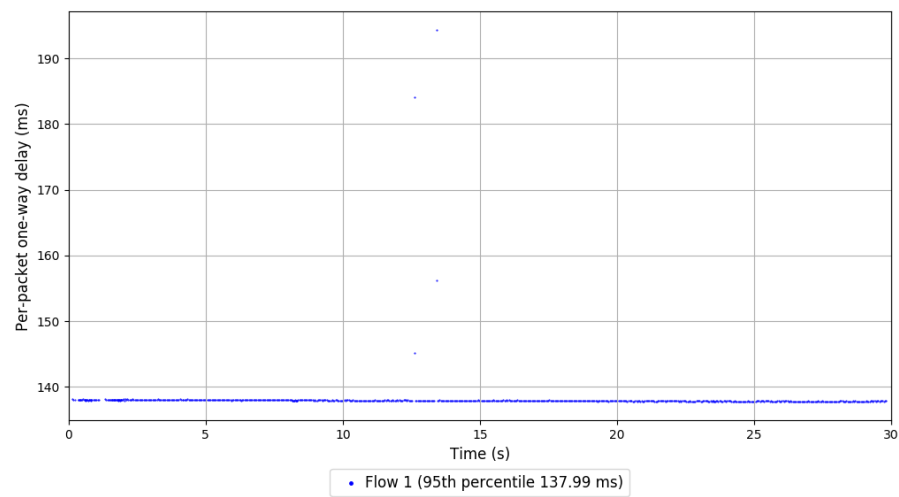
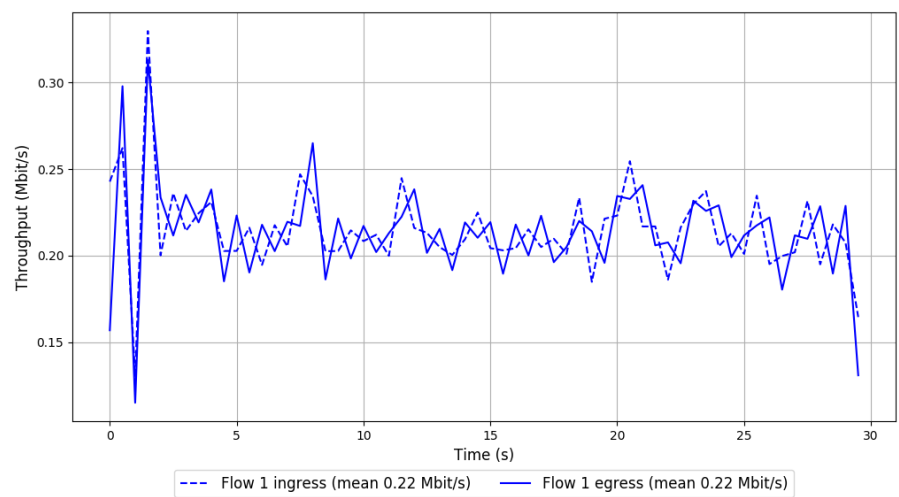


```
Run 1: Statistics of SCReAM

Start at: 2017-10-10 17:41:26
End at: 2017-10-10 17:41:56

# Below is generated by plot.py at 2017-10-10 21:47:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.985 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.985 ms
Loss rate: 0.64%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2017-10-10 17:52:48

End at: 2017-10-10 17:53:18

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 130.505 ms

Loss rate: 0.64%

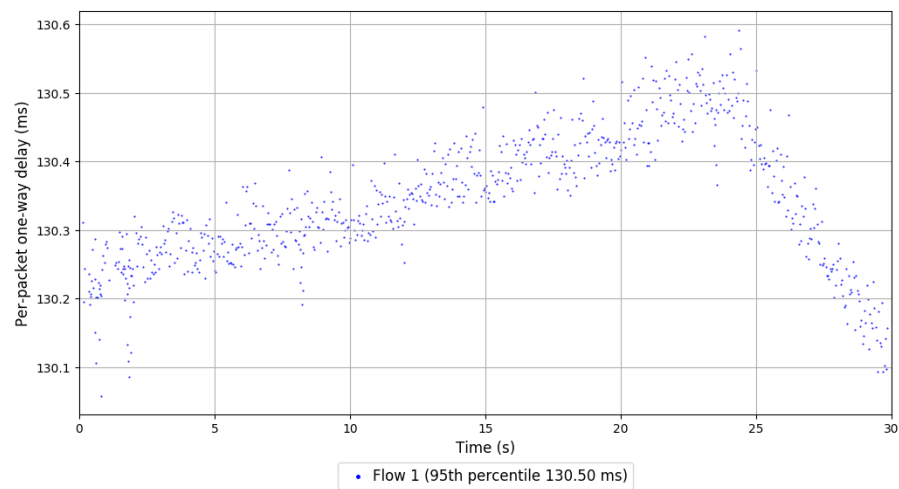
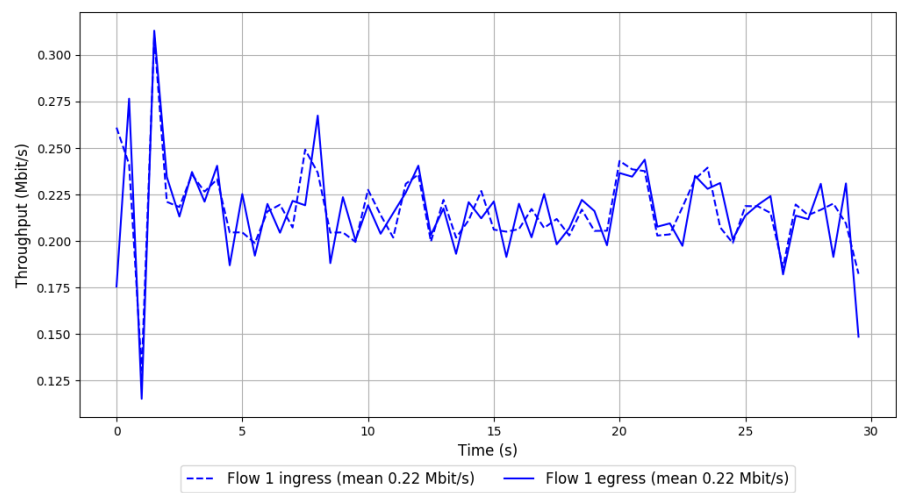
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 130.505 ms

Loss rate: 0.64%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-10-10 18:04:32

End at: 2017-10-10 18:05:02

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 116.497 ms

Loss rate: 0.76%

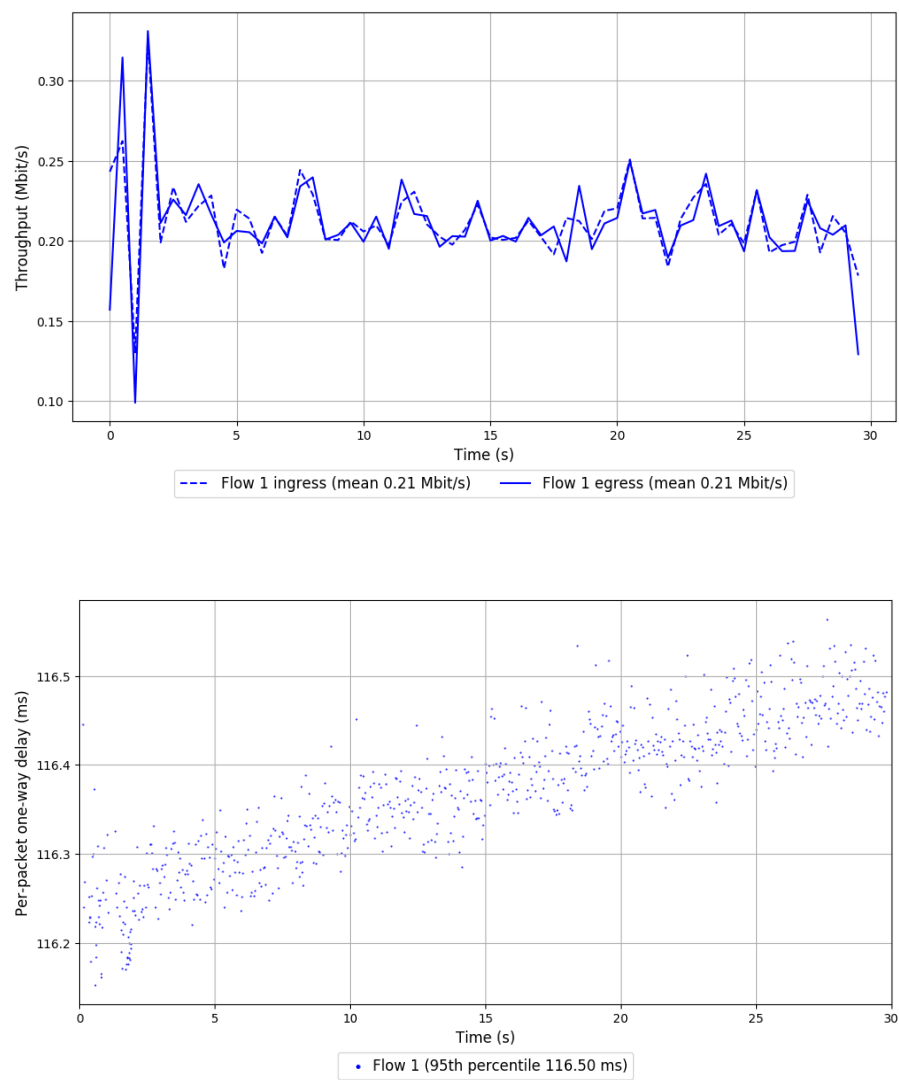
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 116.497 ms

Loss rate: 0.76%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-10-10 18:16:06

End at: 2017-10-10 18:16:36

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.148 ms

Loss rate: 0.76%

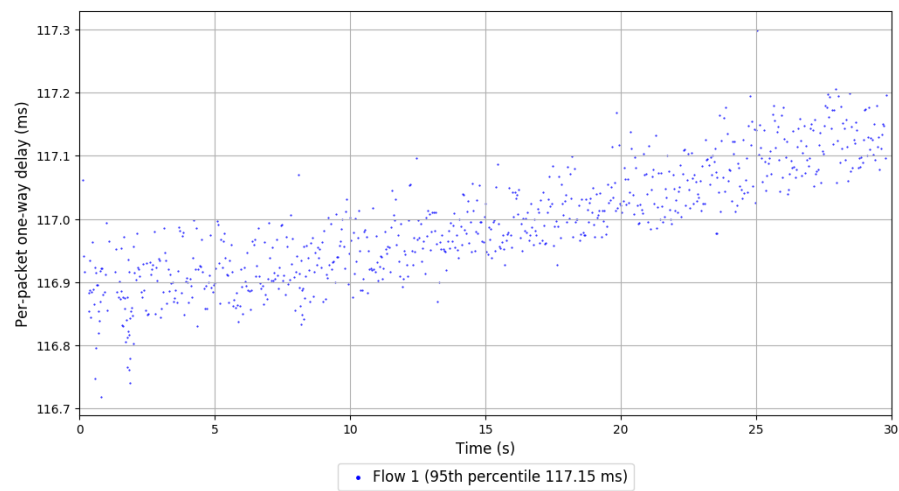
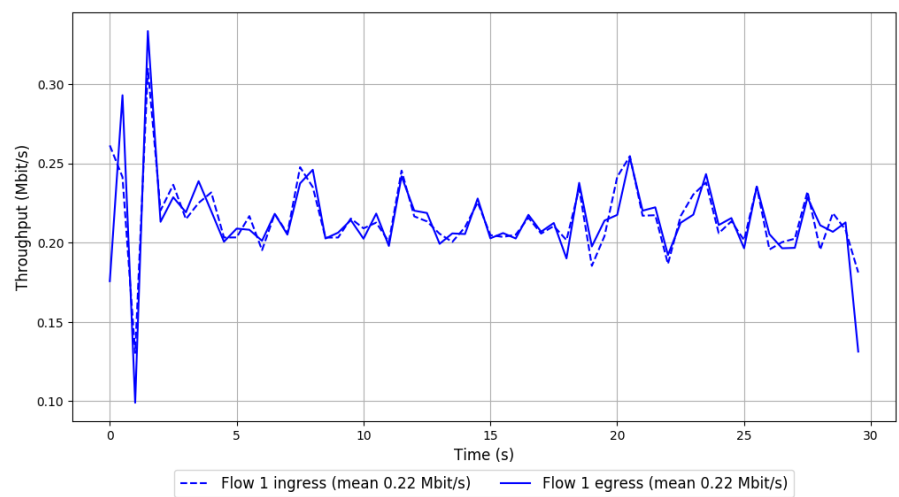
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.148 ms

Loss rate: 0.76%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-10-10 18:27:31

End at: 2017-10-10 18:28:01

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 117.633 ms

Loss rate: 0.76%

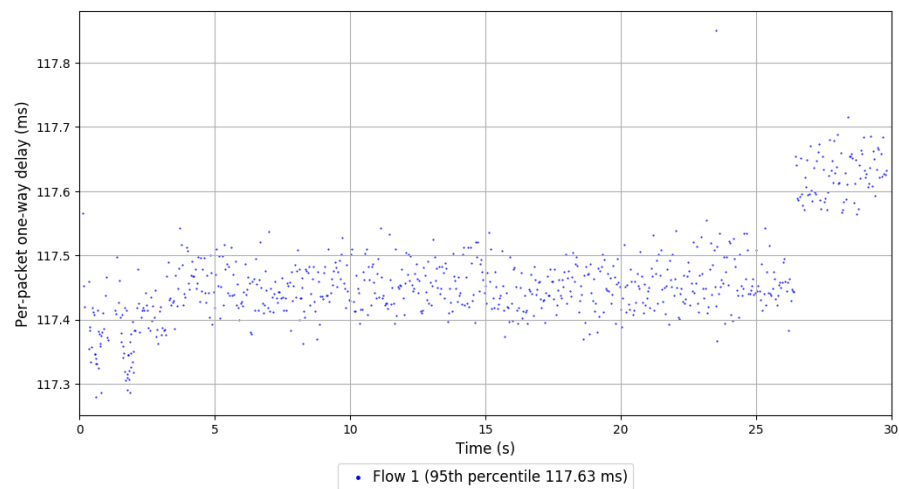
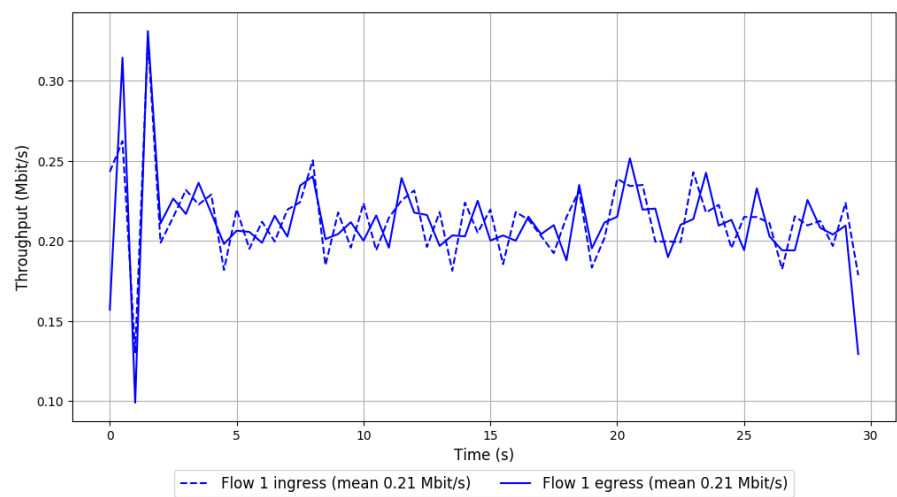
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 117.633 ms

Loss rate: 0.76%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-10-10 18:38:52

End at: 2017-10-10 18:39:22

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 116.186 ms

Loss rate: 0.76%

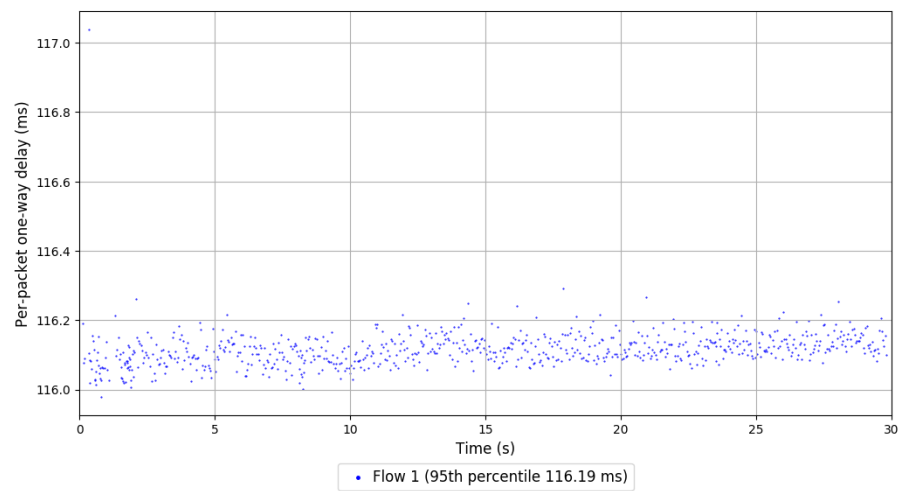
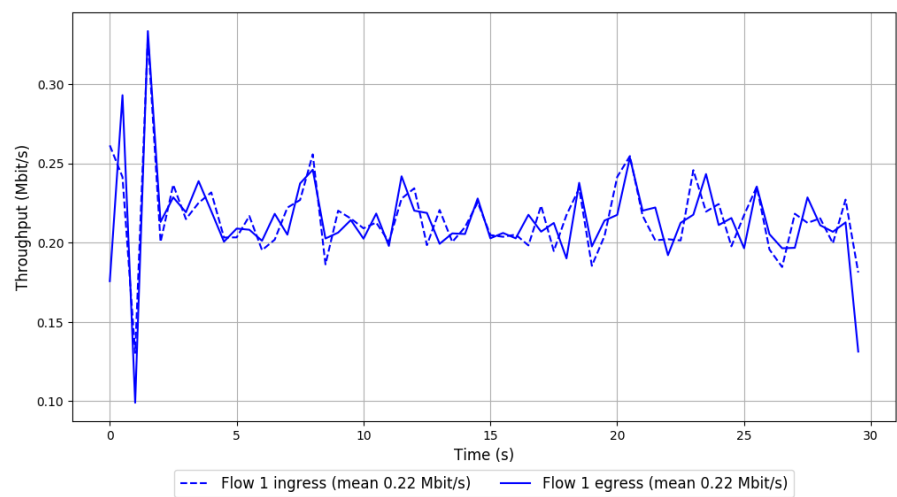
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 116.186 ms

Loss rate: 0.76%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-10-10 18:50:13

End at: 2017-10-10 18:50:43

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 116.110 ms

Loss rate: 0.76%

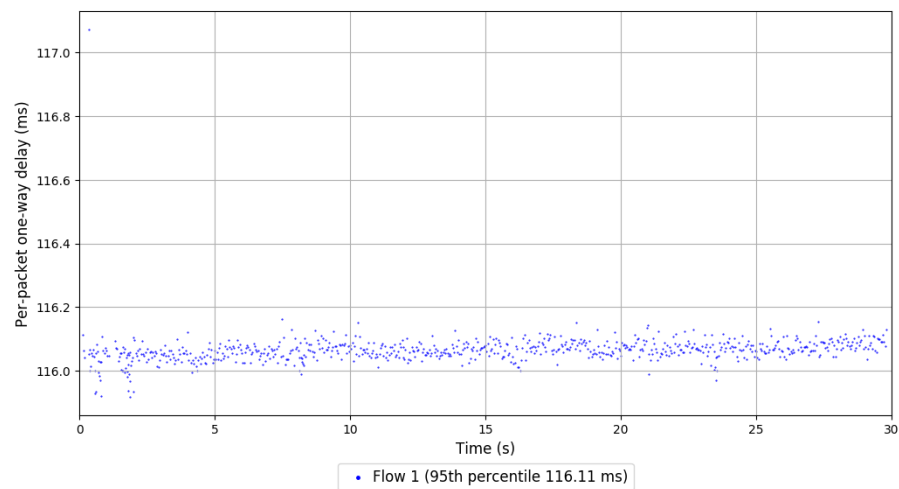
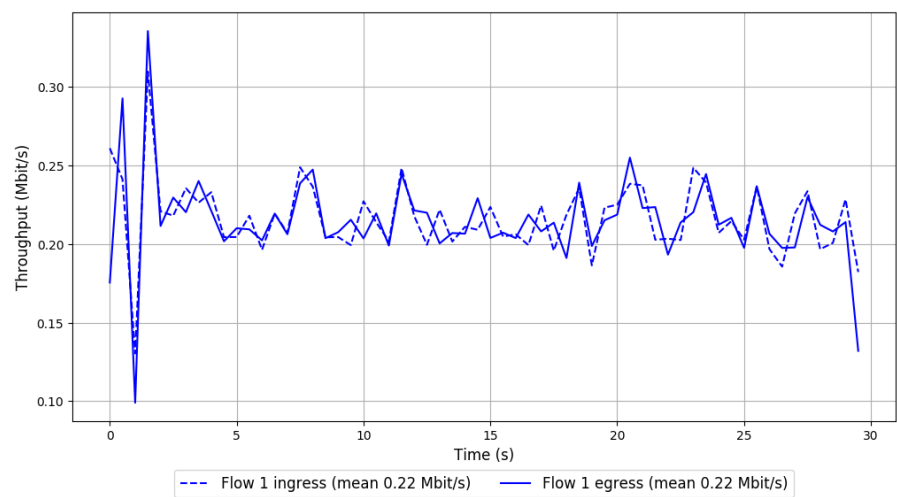
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 116.110 ms

Loss rate: 0.76%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-10-10 19:01:27

End at: 2017-10-10 19:01:57

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 118.983 ms

Loss rate: 0.76%

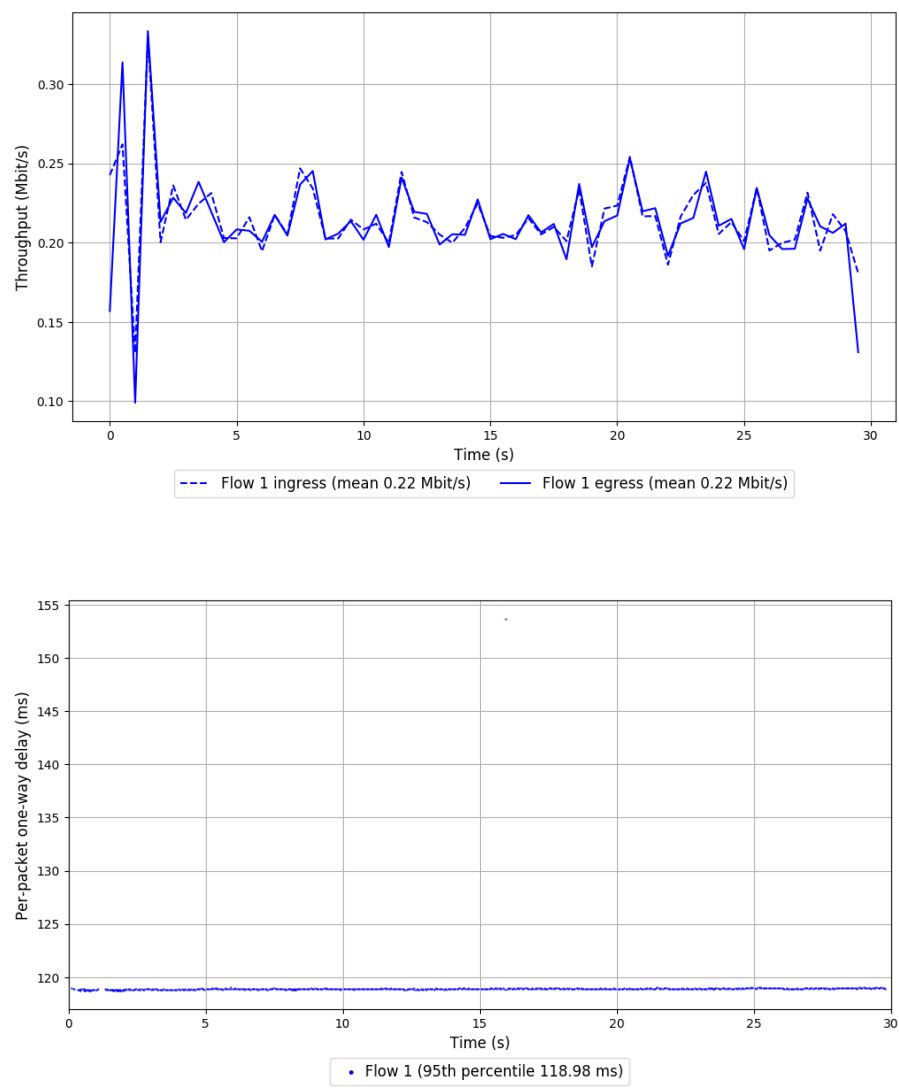
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 118.983 ms

Loss rate: 0.76%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-10-10 19:12:54

End at: 2017-10-10 19:13:24

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 118.146 ms

Loss rate: 0.76%

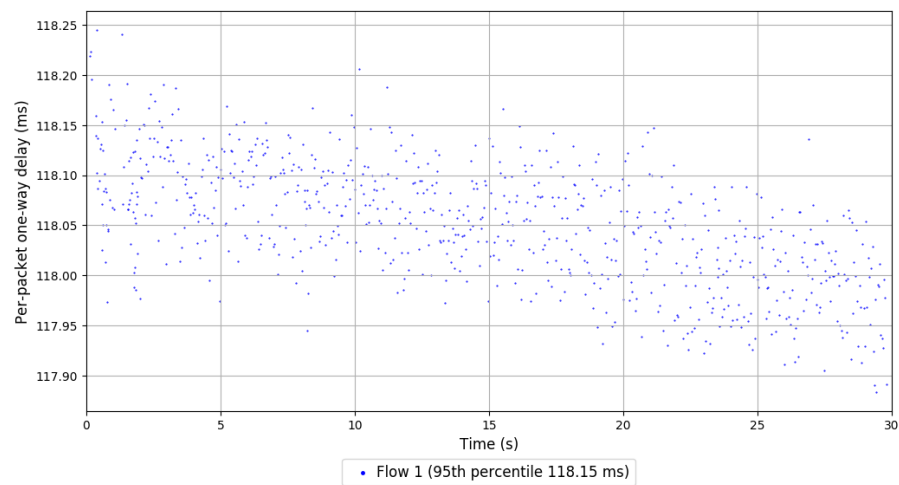
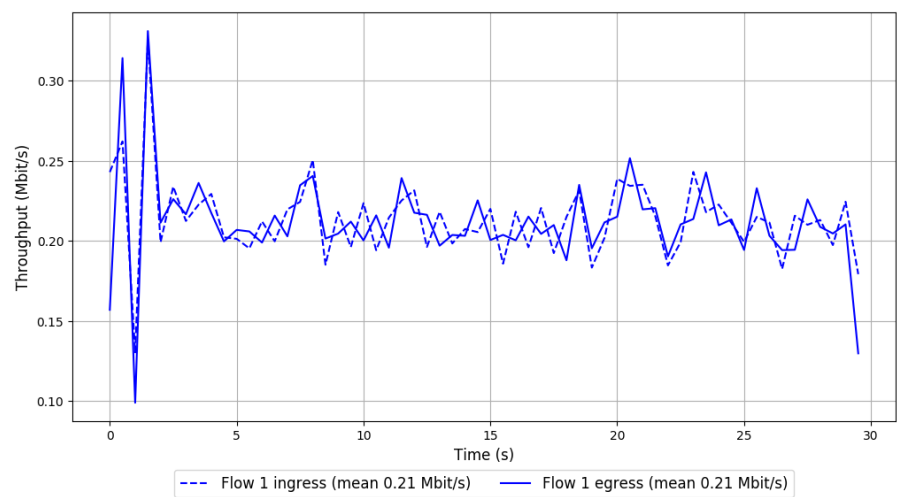
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 118.146 ms

Loss rate: 0.76%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-10-10 19:24:34

End at: 2017-10-10 19:25:04

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.088 ms

Loss rate: 0.64%

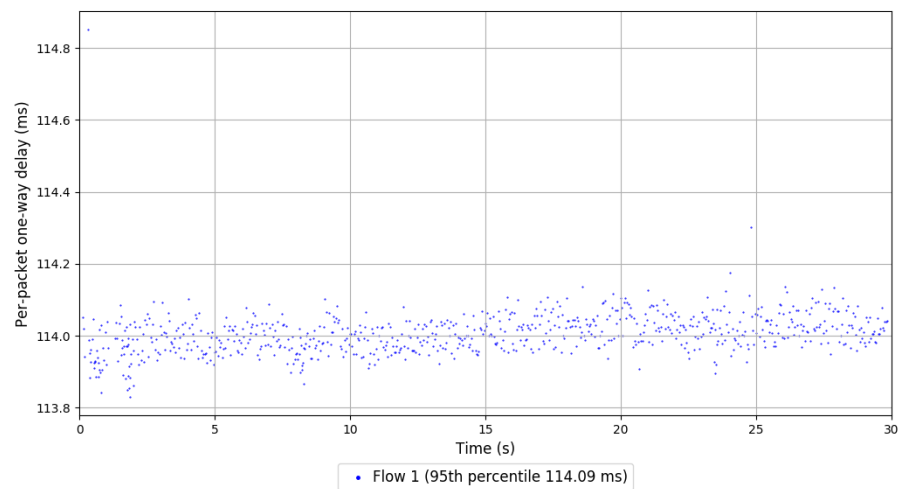
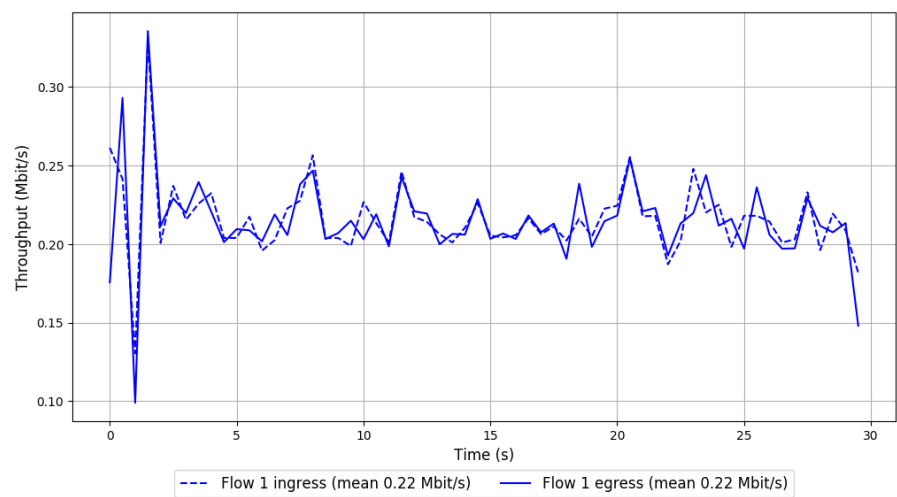
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.088 ms

Loss rate: 0.64%

Run 10: Report of SCRaM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2017-10-10 17:37:23

End at: 2017-10-10 17:37:53

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 146.435 ms

Loss rate: 1.18%

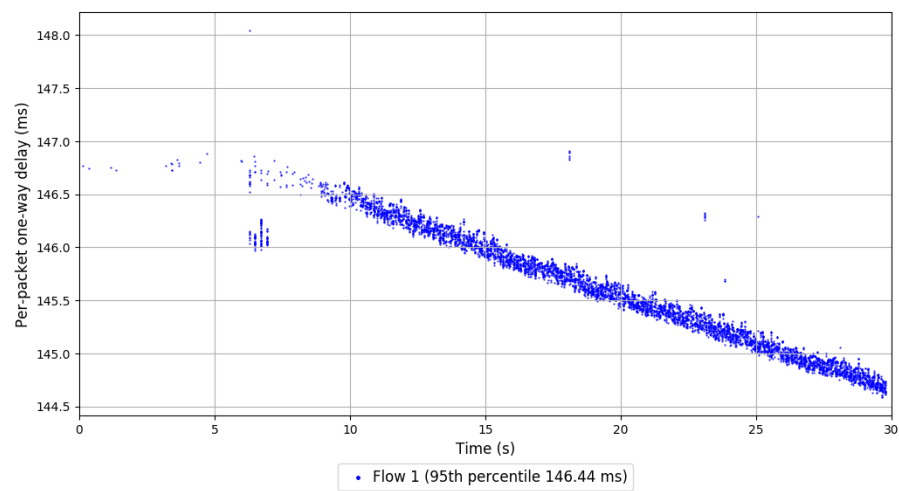
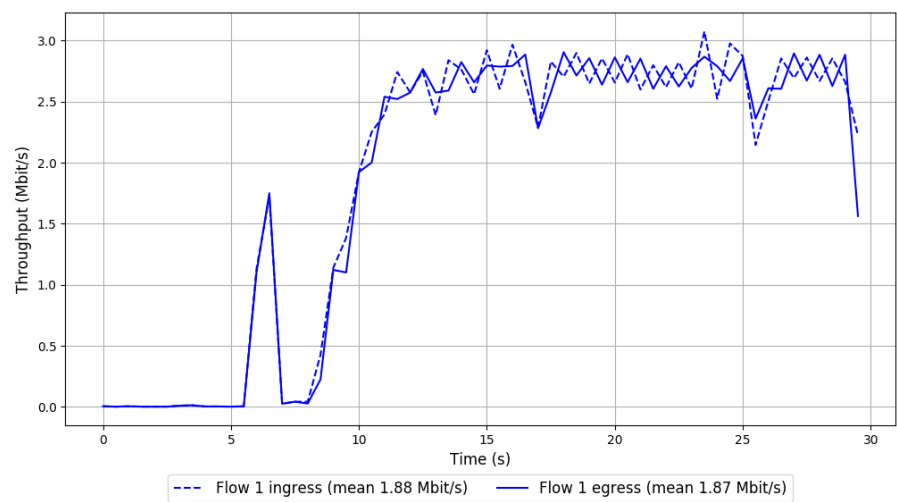
-- Flow 1:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 146.435 ms

Loss rate: 1.18%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-10-10 17:48:34

End at: 2017-10-10 17:49:04

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 136.461 ms

Loss rate: 0.94%

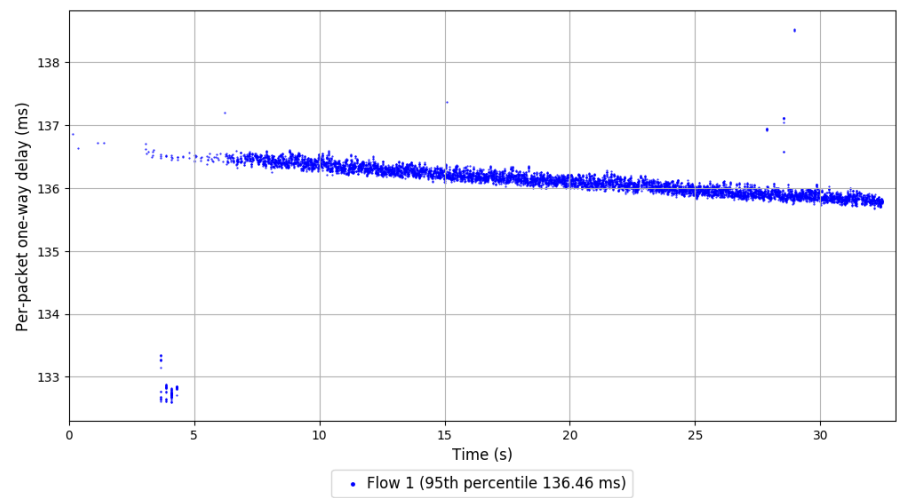
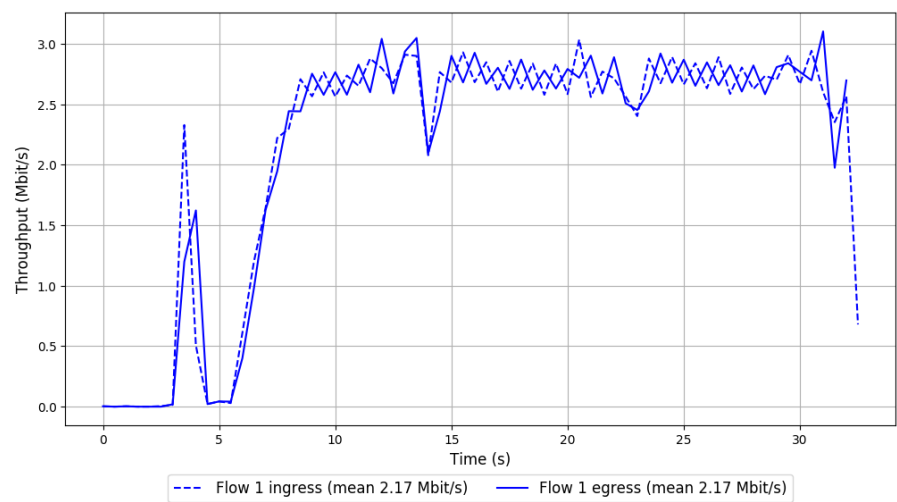
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 136.461 ms

Loss rate: 0.94%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-10-10 18:00:21

End at: 2017-10-10 18:00:51

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 116.719 ms

Loss rate: 0.77%

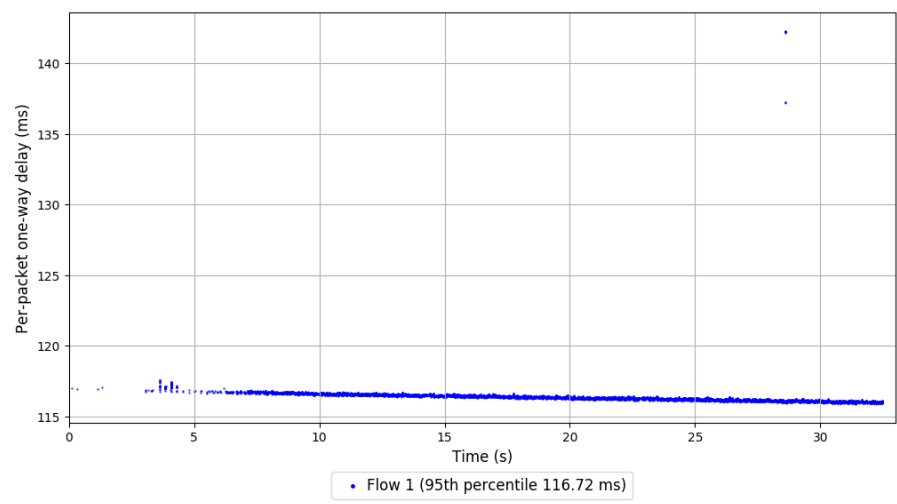
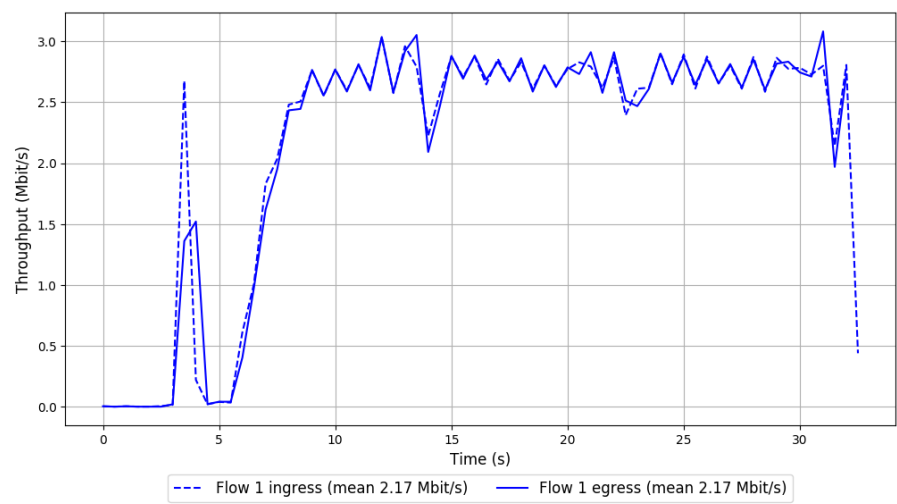
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 116.719 ms

Loss rate: 0.77%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-10-10 18:11:58

End at: 2017-10-10 18:12:28

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 114.654 ms

Loss rate: 0.89%

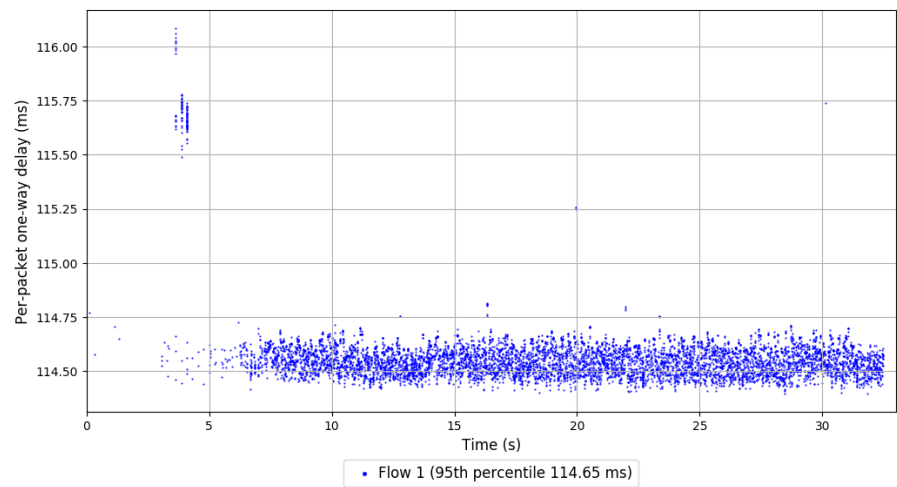
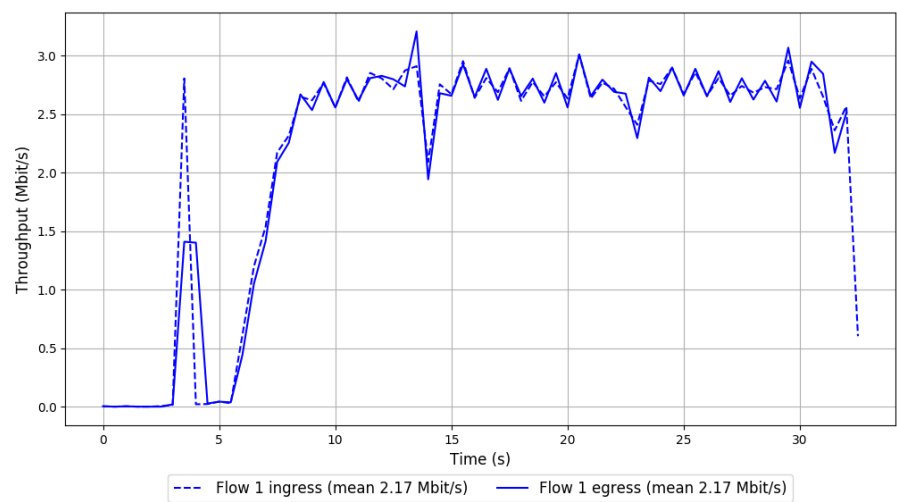
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 114.654 ms

Loss rate: 0.89%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-10-10 18:23:19

End at: 2017-10-10 18:23:49

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 117.240 ms

Loss rate: 0.91%

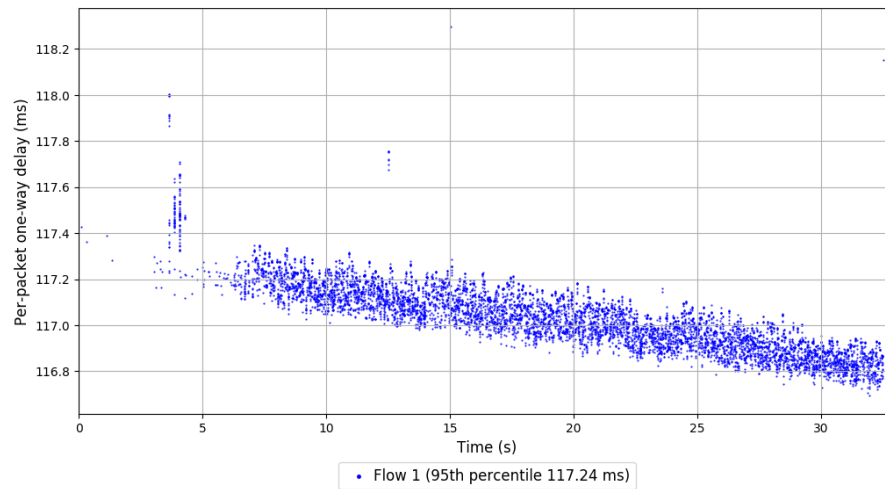
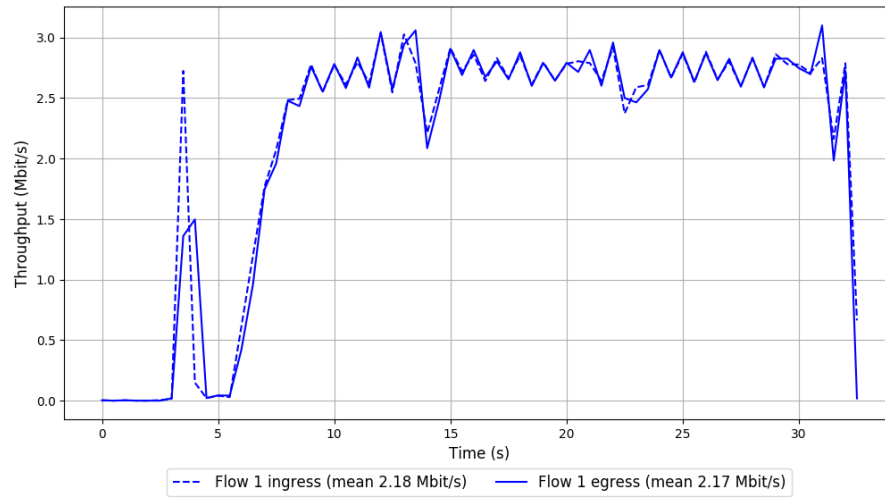
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 117.240 ms

Loss rate: 0.91%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-10-10 18:34:42

End at: 2017-10-10 18:35:12

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 116.736 ms

Loss rate: 0.79%

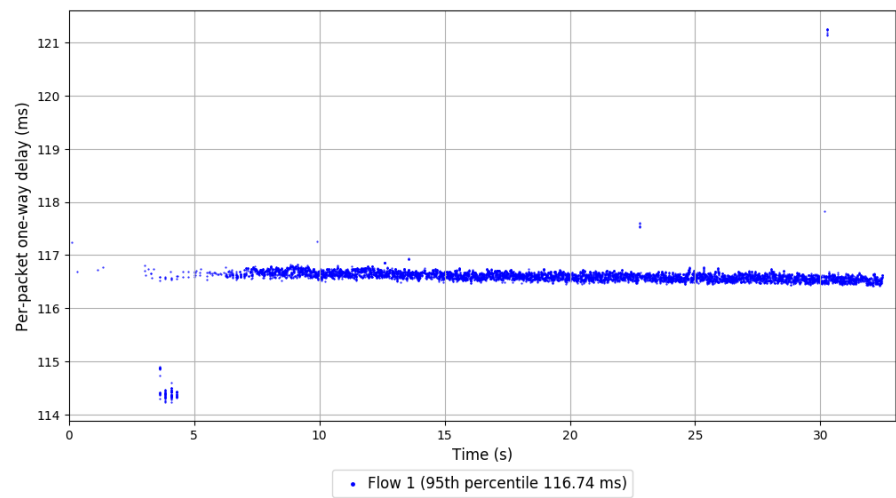
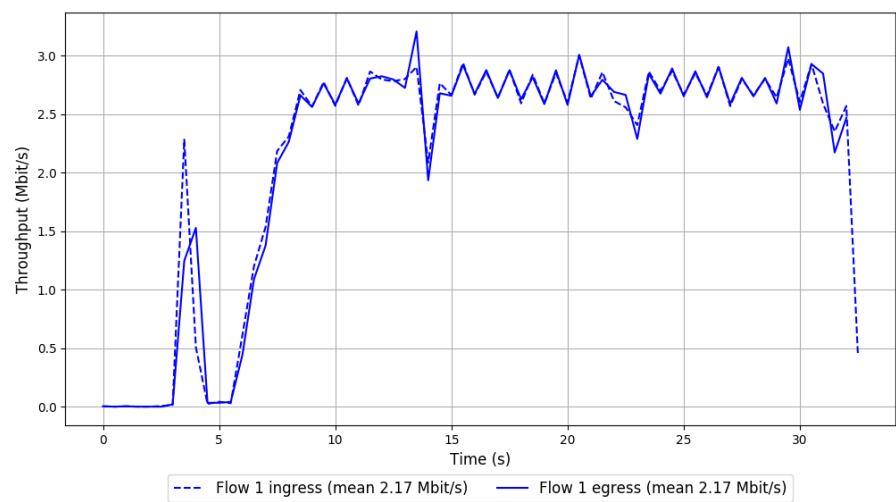
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 116.736 ms

Loss rate: 0.79%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-10-10 18:46:00

End at: 2017-10-10 18:46:30

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 115.284 ms

Loss rate: 0.93%

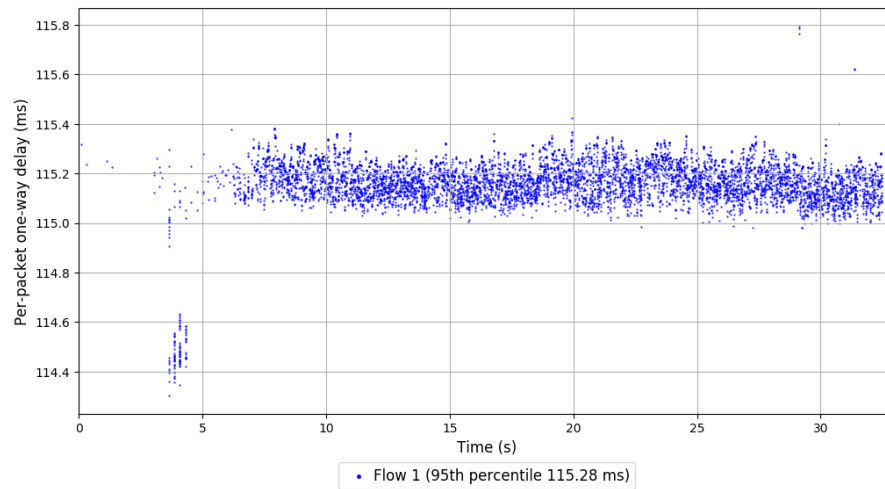
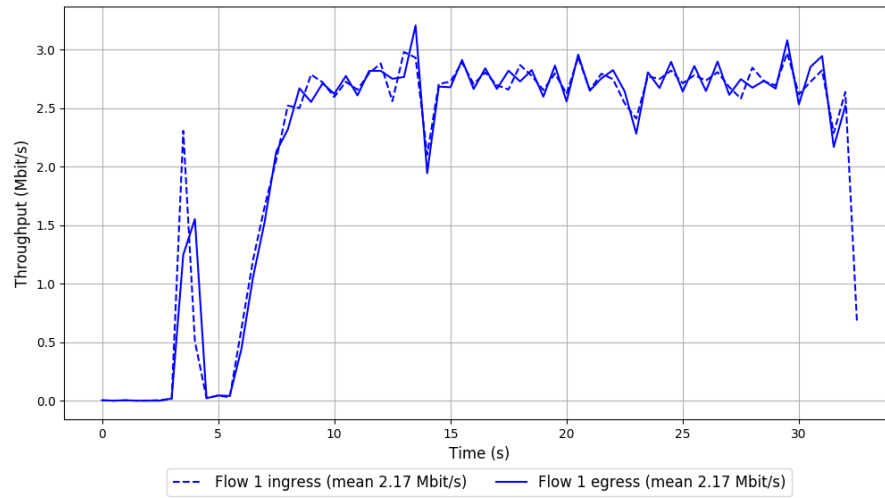
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 115.284 ms

Loss rate: 0.93%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-10-10 18:57:14

End at: 2017-10-10 18:57:44

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 118.640 ms

Loss rate: 0.77%

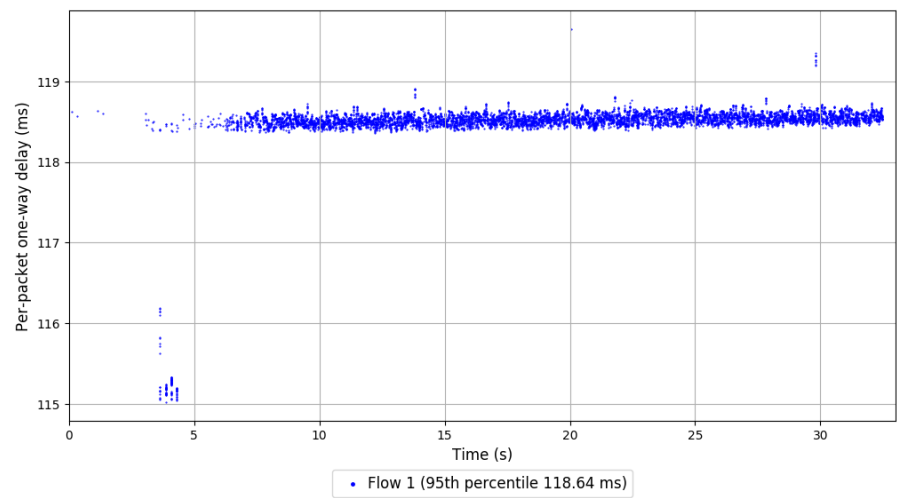
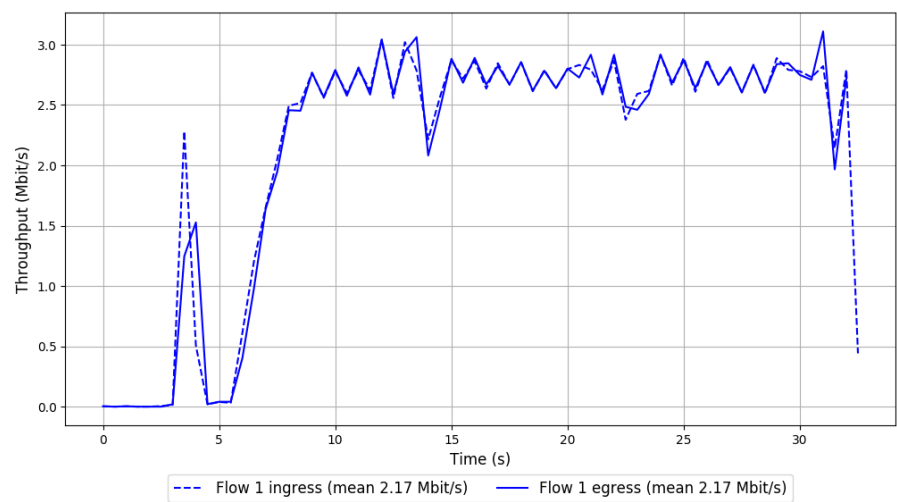
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 118.640 ms

Loss rate: 0.77%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-10-10 19:08:44

End at: 2017-10-10 19:09:14

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 118.347 ms

Loss rate: 0.75%

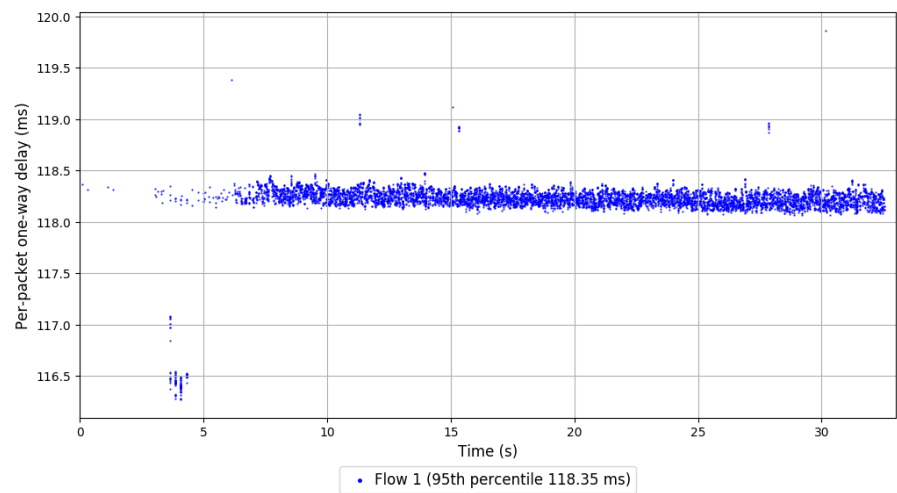
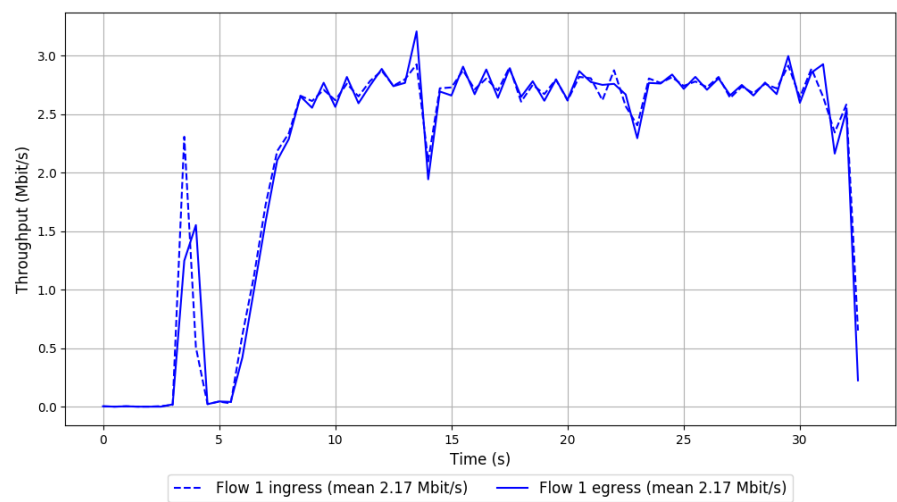
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 118.347 ms

Loss rate: 0.75%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-10-10 19:20:25

End at: 2017-10-10 19:20:55

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 114.115 ms

Loss rate: 0.76%

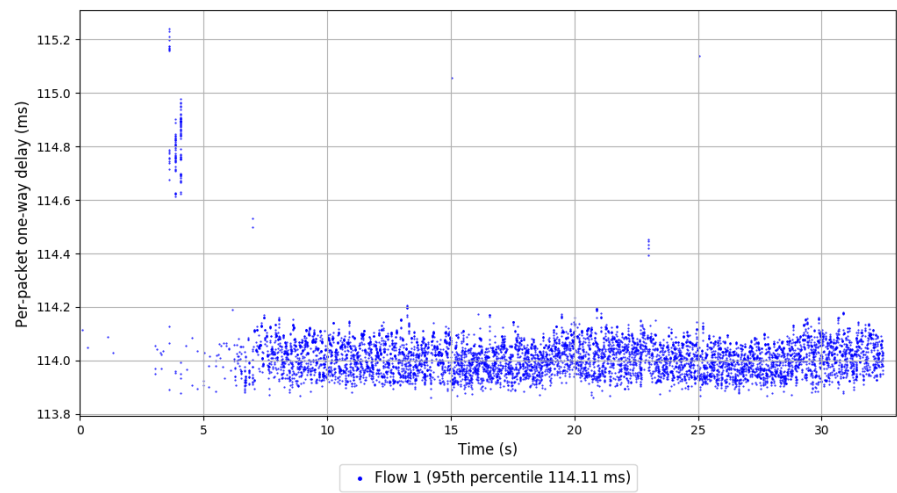
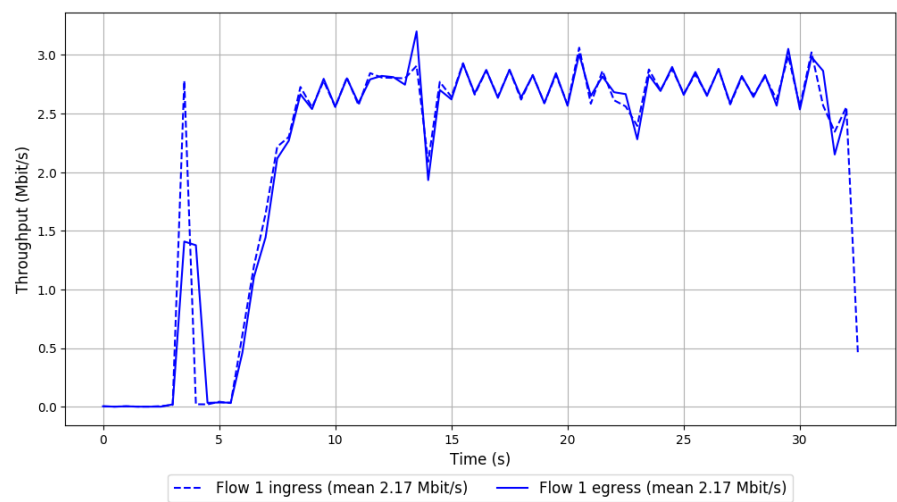
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 114.115 ms

Loss rate: 0.76%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-10-10 17:33:07

End at: 2017-10-10 17:33:37

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 150.237 ms

Loss rate: 0.73%

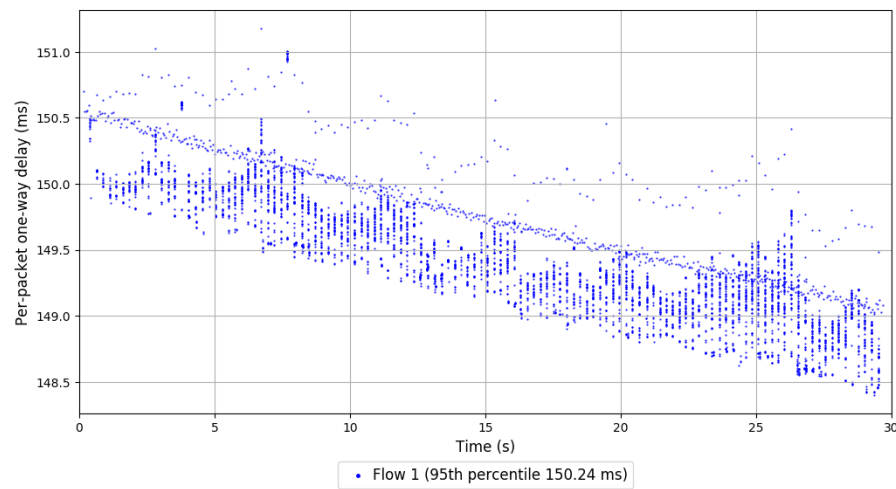
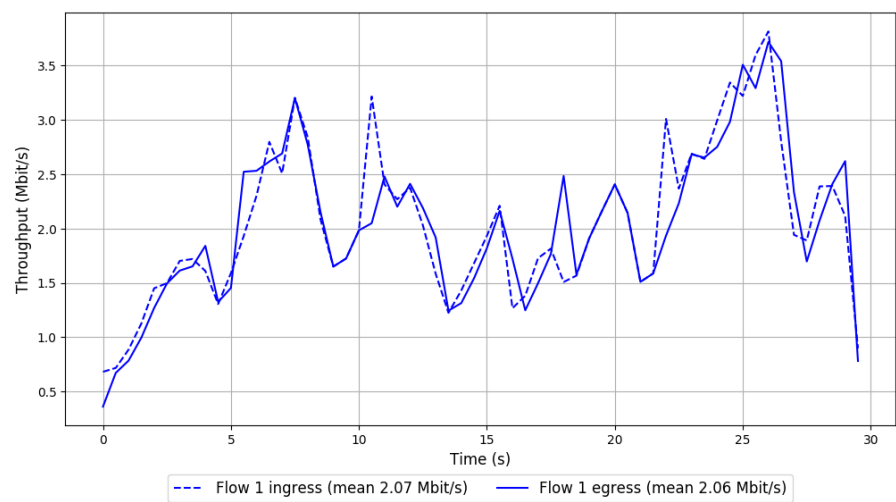
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 150.237 ms

Loss rate: 0.73%

Run 1: Report of Sprout — Data Link

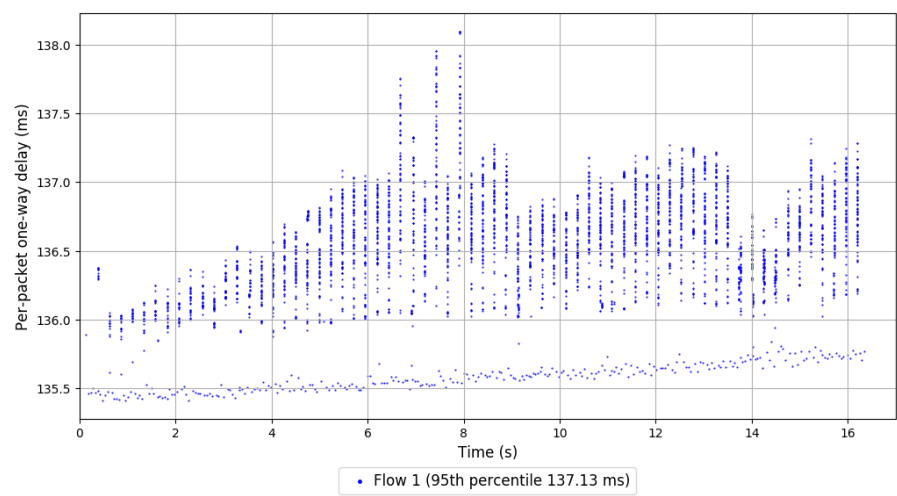
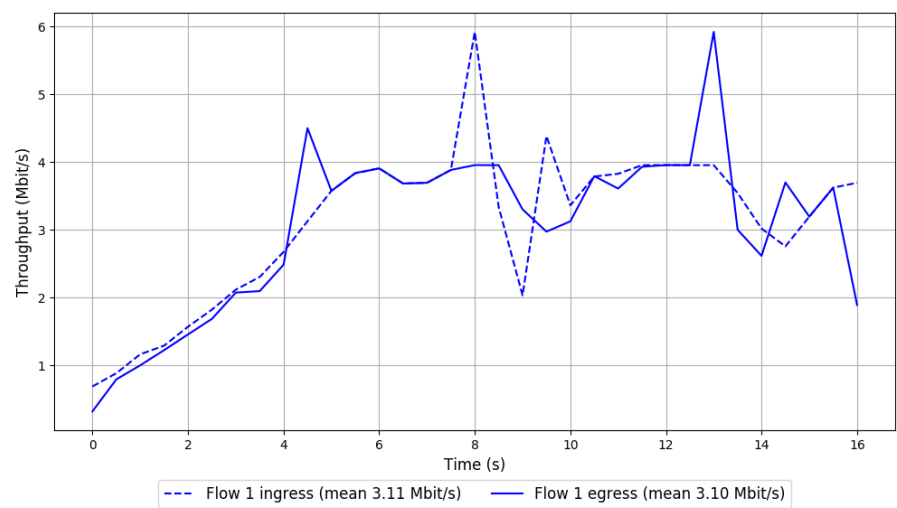


Run 2: Statistics of Sprout

Start at: 2017-10-10 17:44:18

End at: 2017-10-10 17:44:48

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-10-10 17:56:02

End at: 2017-10-10 17:56:32

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 125.197 ms

Loss rate: 1.01%

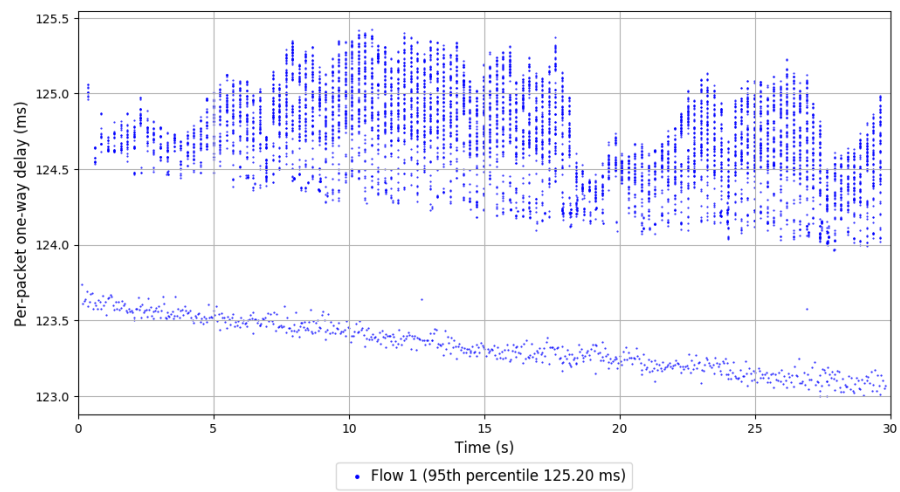
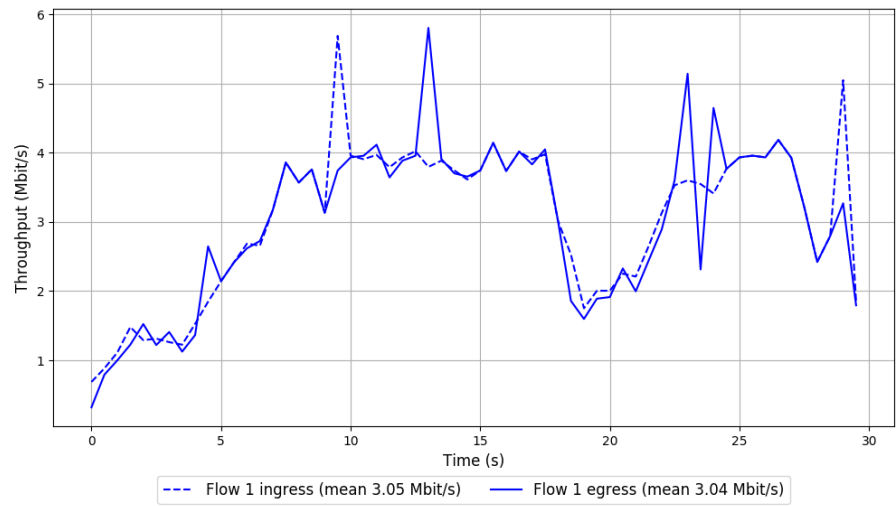
-- Flow 1:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 125.197 ms

Loss rate: 1.01%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-10-10 18:07:46

End at: 2017-10-10 18:08:16

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 119.113 ms

Loss rate: 1.37%

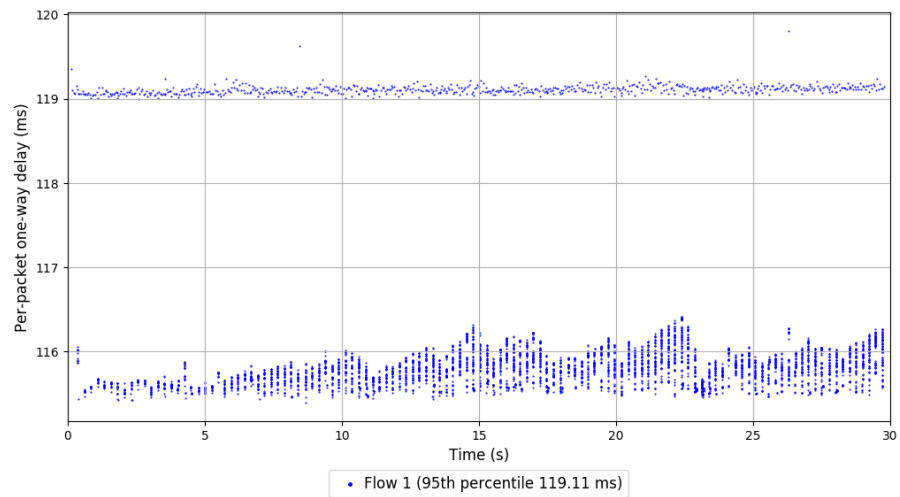
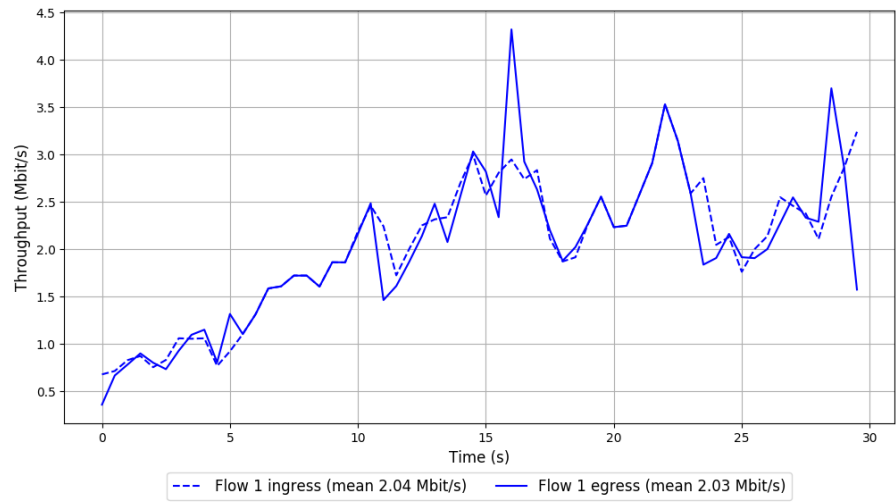
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 119.113 ms

Loss rate: 1.37%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-10-10 18:19:09

End at: 2017-10-10 18:19:39

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 119.397 ms

Loss rate: 0.81%

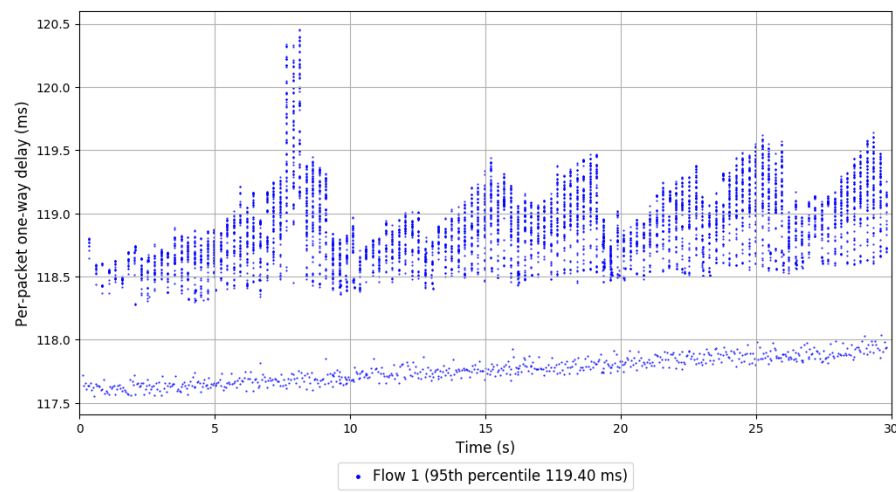
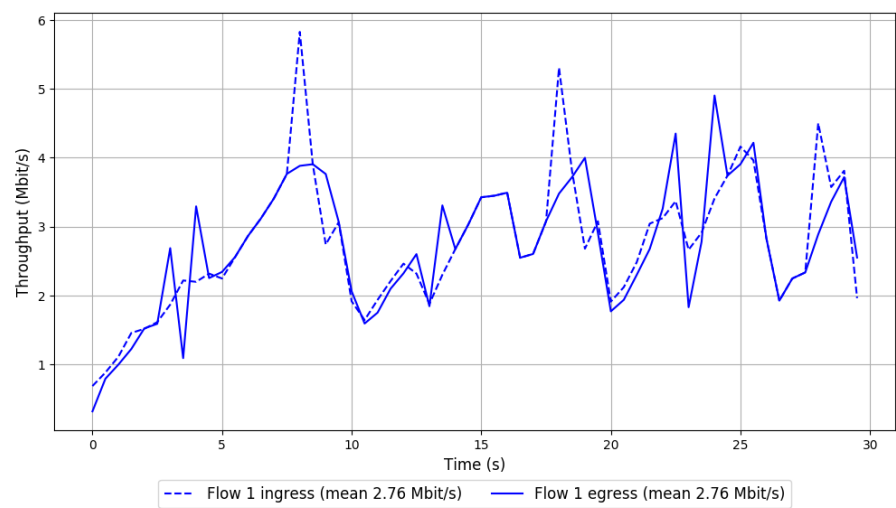
-- Flow 1:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 119.397 ms

Loss rate: 0.81%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-10-10 18:30:24

End at: 2017-10-10 18:30:54

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 117.449 ms

Loss rate: 1.06%

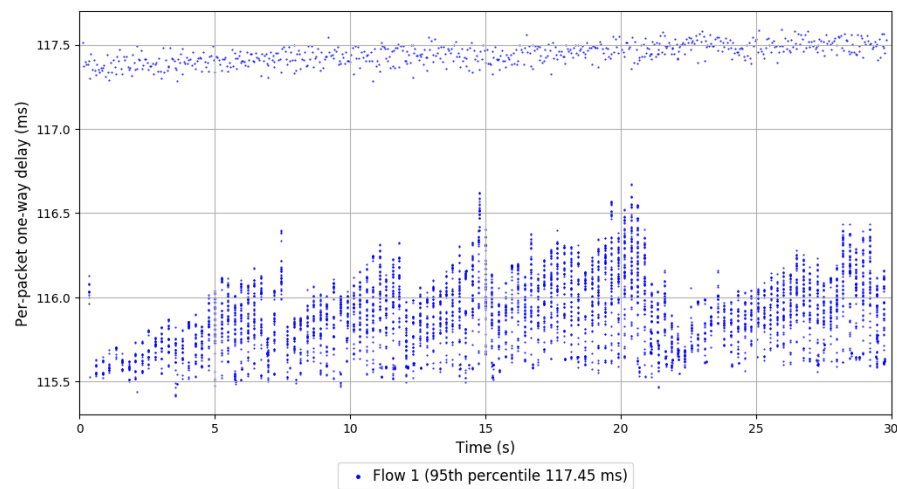
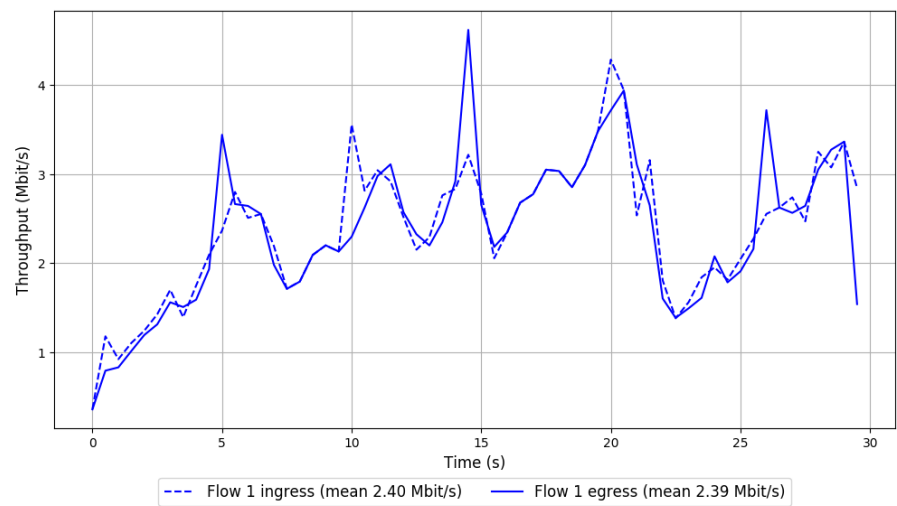
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 117.449 ms

Loss rate: 1.06%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-10-10 18:41:46

End at: 2017-10-10 18:42:16

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.25 Mbit/s

95th percentile per-packet one-way delay: 116.390 ms

Loss rate: 0.81%

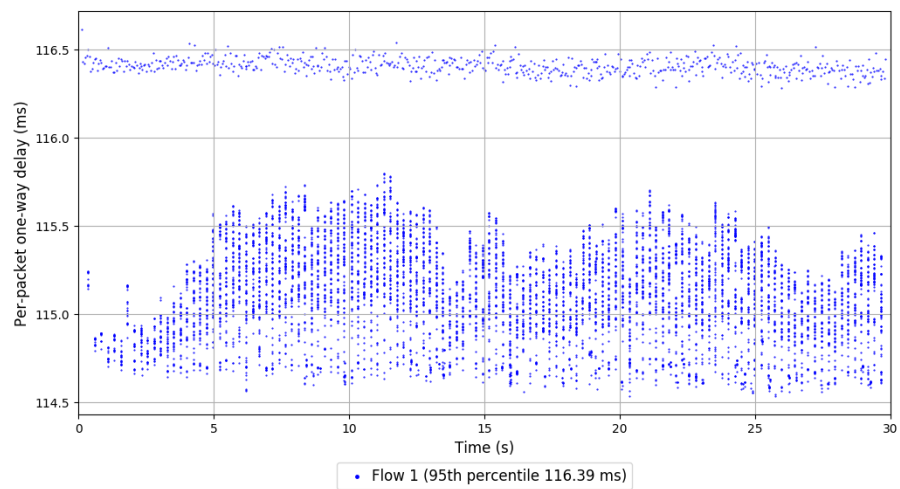
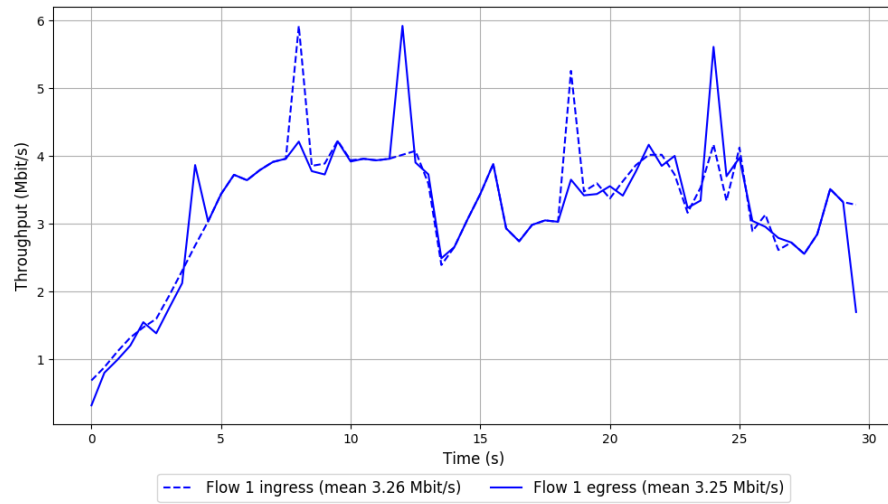
-- Flow 1:

Average throughput: 3.25 Mbit/s

95th percentile per-packet one-way delay: 116.390 ms

Loss rate: 0.81%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-10-10 18:53:05

End at: 2017-10-10 18:53:36

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 115.352 ms

Loss rate: 1.23%

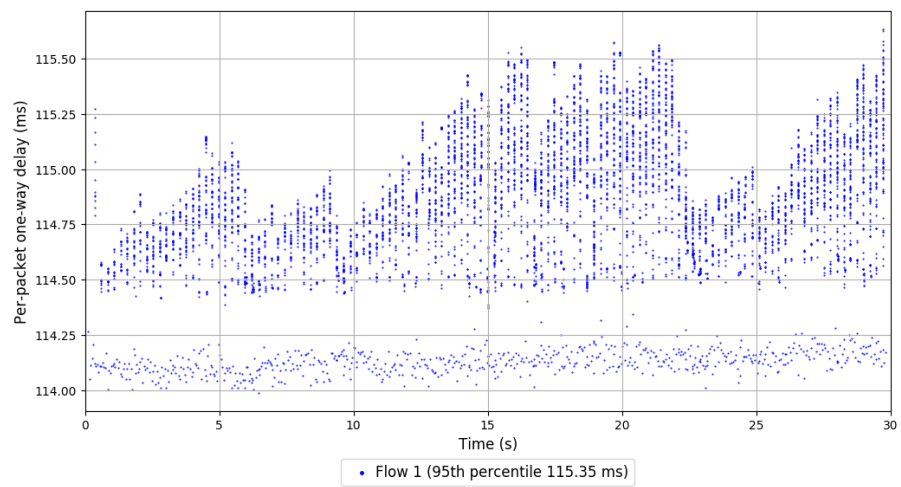
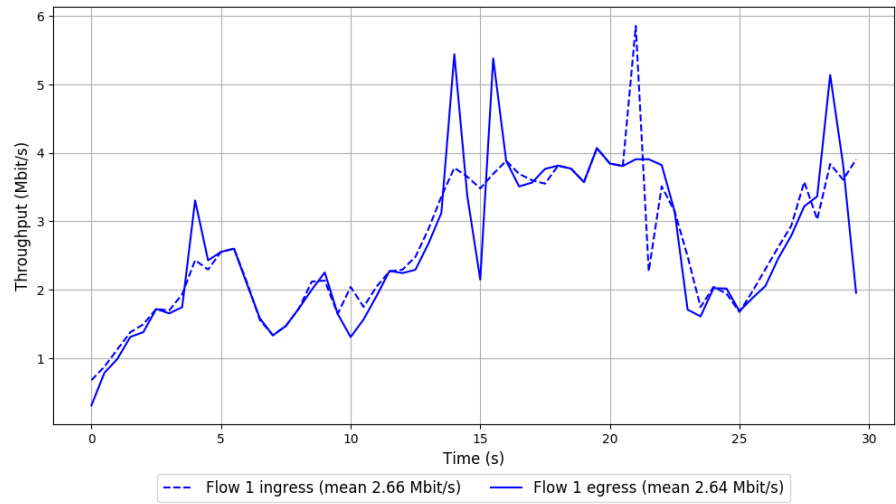
-- Flow 1:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 115.352 ms

Loss rate: 1.23%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-10-10 19:04:31

End at: 2017-10-10 19:05:01

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 117.762 ms

Loss rate: 1.07%

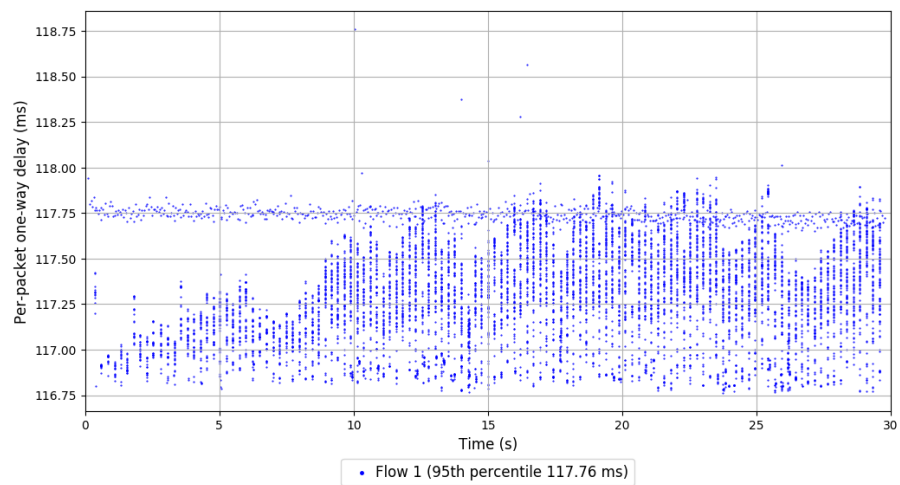
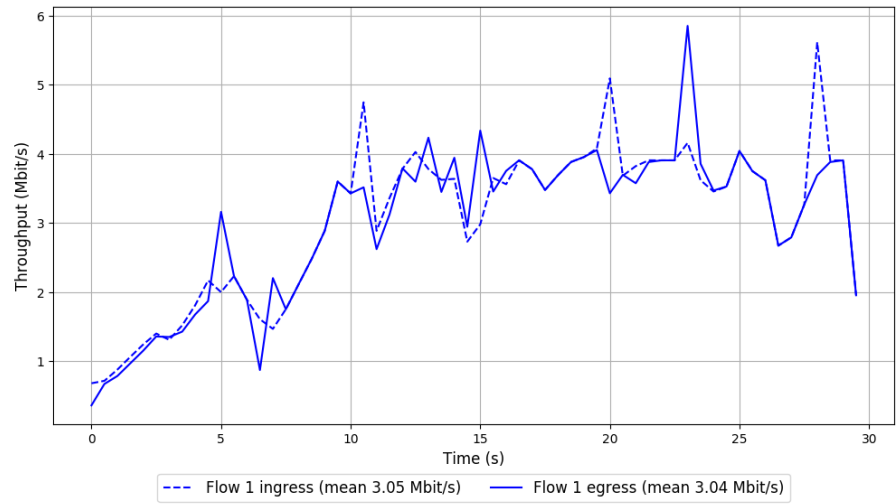
-- Flow 1:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 117.762 ms

Loss rate: 1.07%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-10-10 19:16:07

End at: 2017-10-10 19:16:37

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 117.171 ms

Loss rate: 0.88%

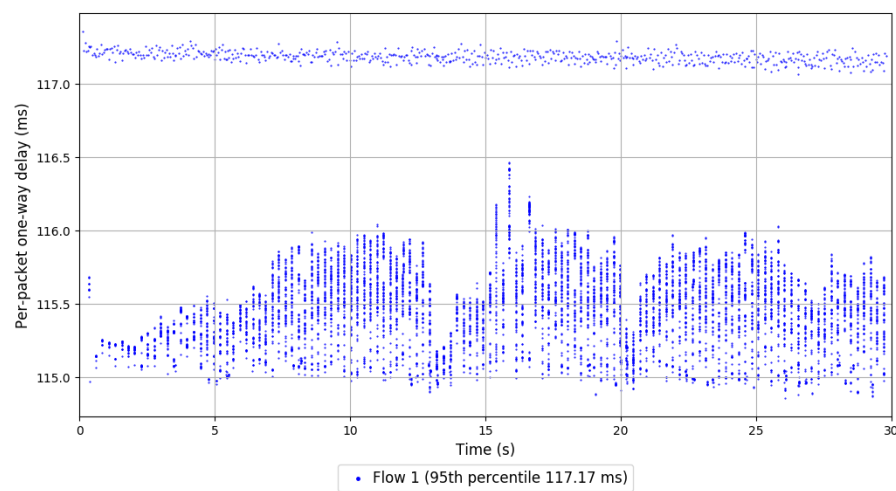
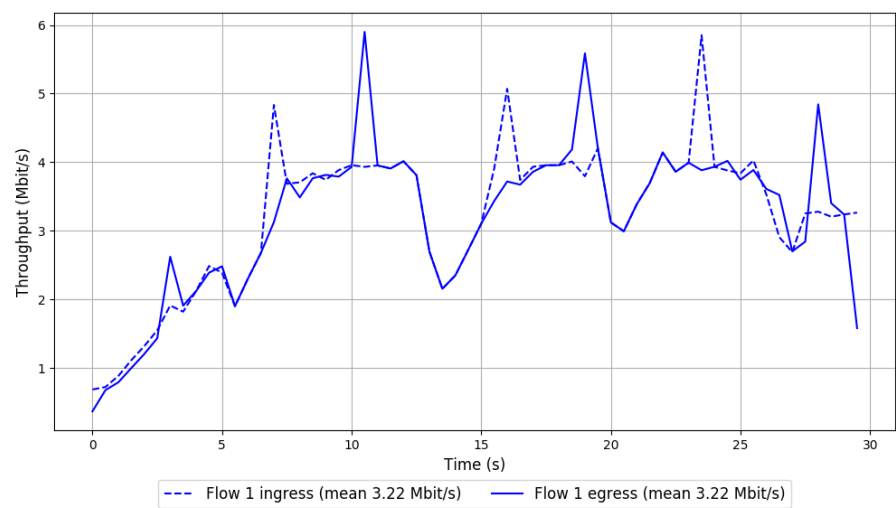
-- Flow 1:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 117.171 ms

Loss rate: 0.88%

Run 10: Report of Sprout — Data Link

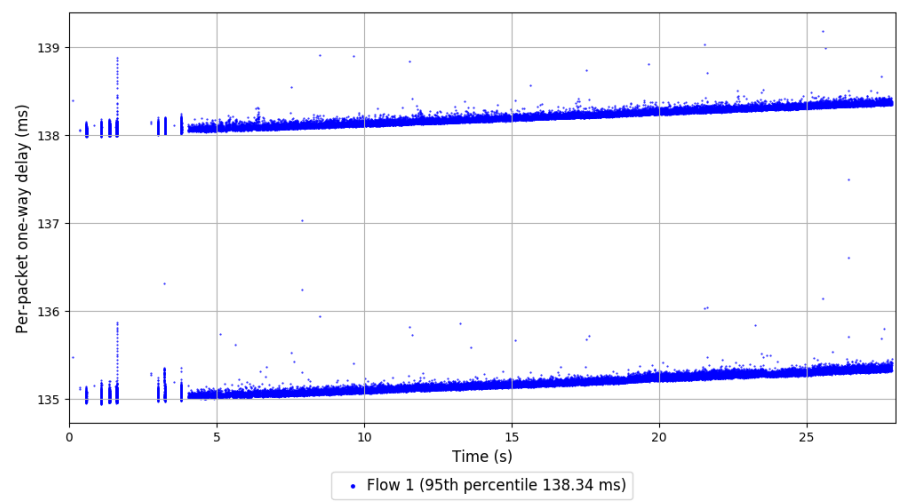
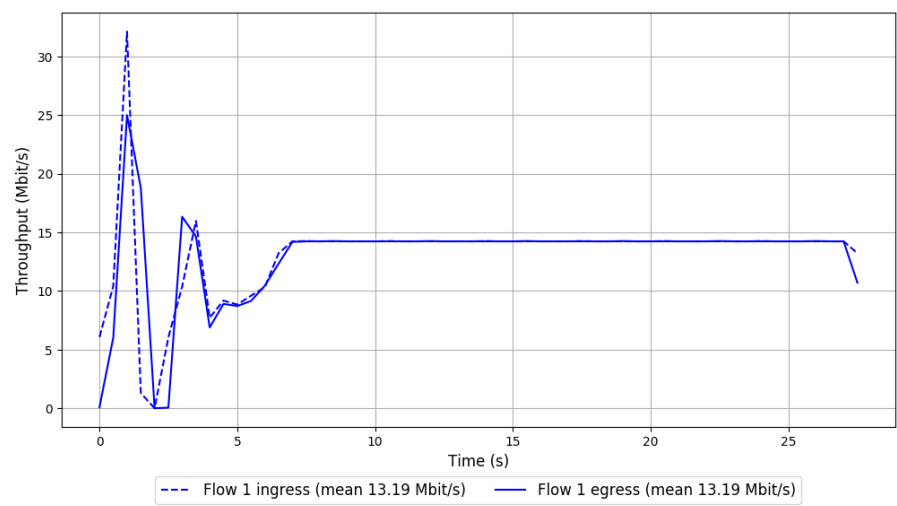


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-10-10 17:43:35
End at: 2017-10-10 17:44:05

# Below is generated by plot.py at 2017-10-10 21:47:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.19 Mbit/s
95th percentile per-packet one-way delay: 138.339 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 13.19 Mbit/s
95th percentile per-packet one-way delay: 138.339 ms
Loss rate: 0.86%
```


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

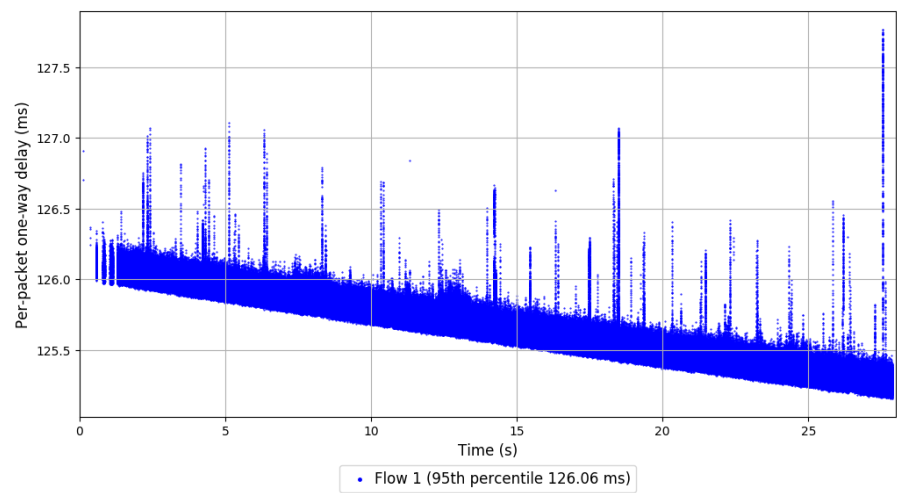
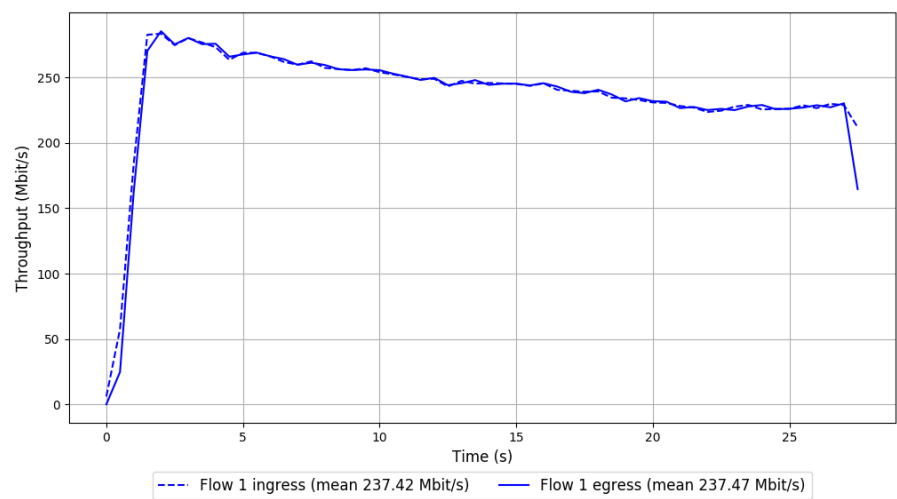


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-10-10 17:54:59
End at: 2017-10-10 17:55:29

# Below is generated by plot.py at 2017-10-10 21:47:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 237.47 Mbit/s
95th percentile per-packet one-way delay: 126.060 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 237.47 Mbit/s
95th percentile per-packet one-way delay: 126.060 ms
Loss rate: 0.78%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-10-10 18:06:42

End at: 2017-10-10 18:07:12

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 234.43 Mbit/s

95th percentile per-packet one-way delay: 115.447 ms

Loss rate: 0.84%

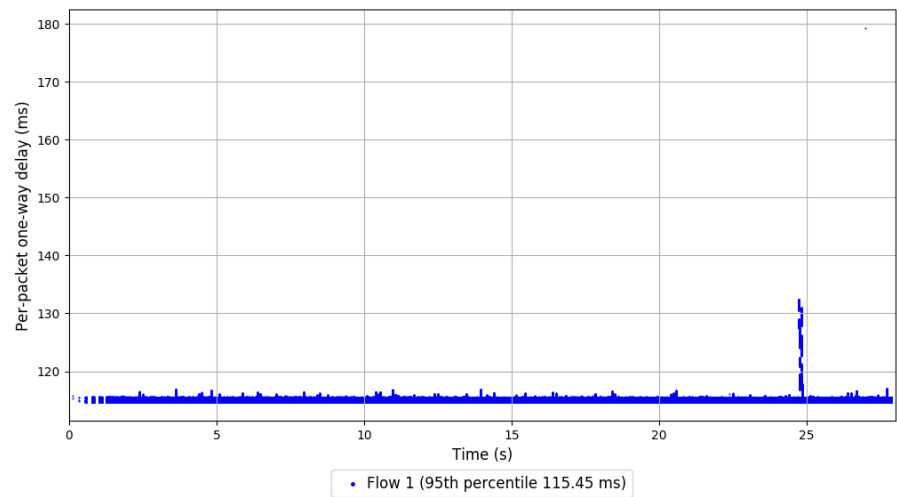
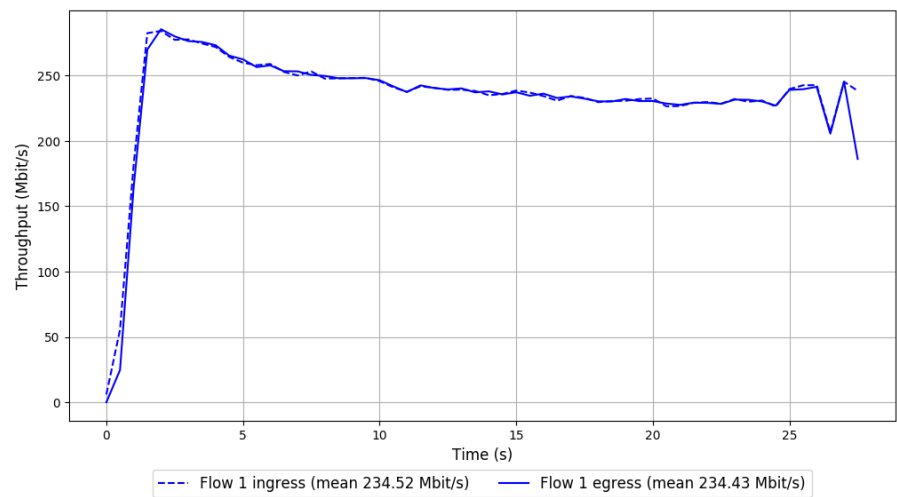
-- Flow 1:

Average throughput: 234.43 Mbit/s

95th percentile per-packet one-way delay: 115.447 ms

Loss rate: 0.84%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-10-10 18:18:17

End at: 2017-10-10 18:18:47

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 137.56 Mbit/s

95th percentile per-packet one-way delay: 119.545 ms

Loss rate: 0.43%

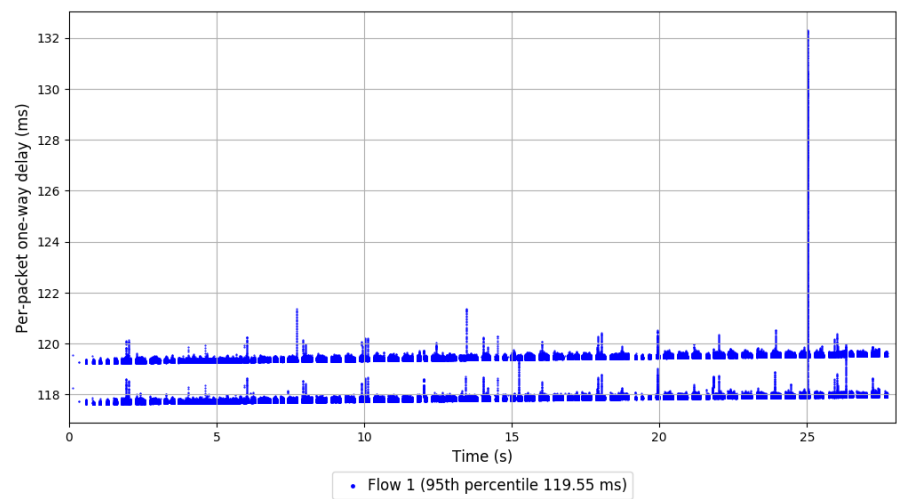
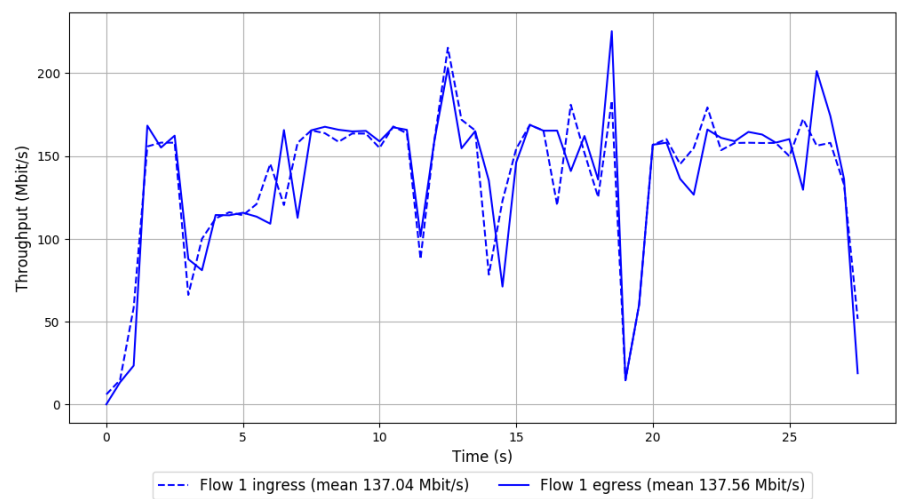
-- Flow 1:

Average throughput: 137.56 Mbit/s

95th percentile per-packet one-way delay: 119.545 ms

Loss rate: 0.43%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-10-10 18:29:41

End at: 2017-10-10 18:30:11

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.57 Mbit/s

95th percentile per-packet one-way delay: 118.552 ms

Loss rate: 0.78%

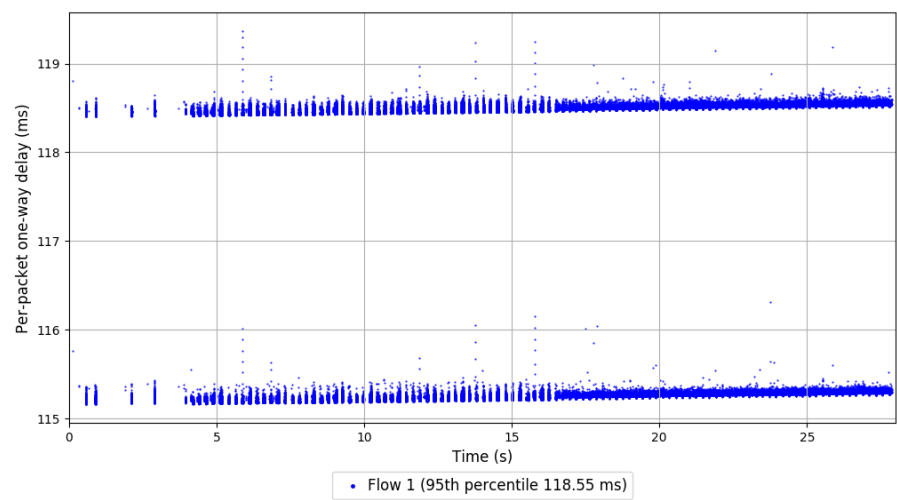
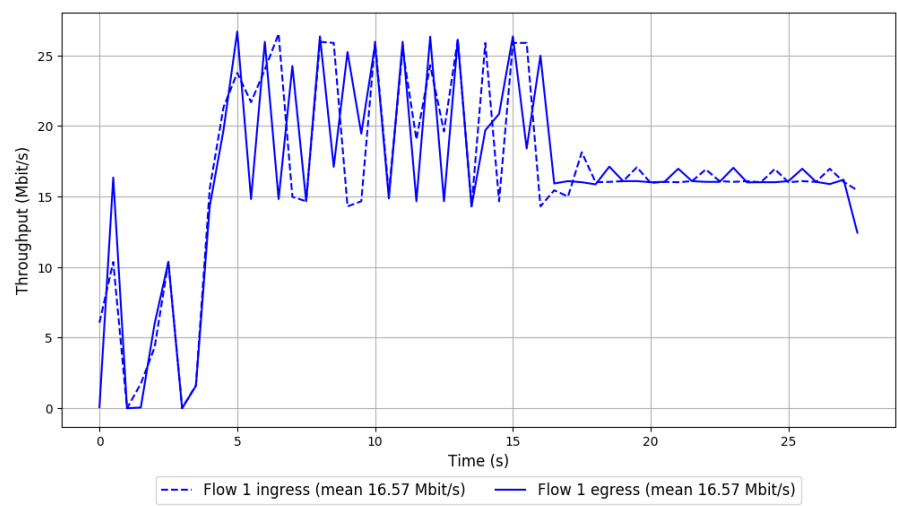
-- Flow 1:

Average throughput: 16.57 Mbit/s

95th percentile per-packet one-way delay: 118.552 ms

Loss rate: 0.78%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-10-10 18:41:03

End at: 2017-10-10 18:41:33

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.90 Mbit/s

95th percentile per-packet one-way delay: 116.809 ms

Loss rate: 0.82%

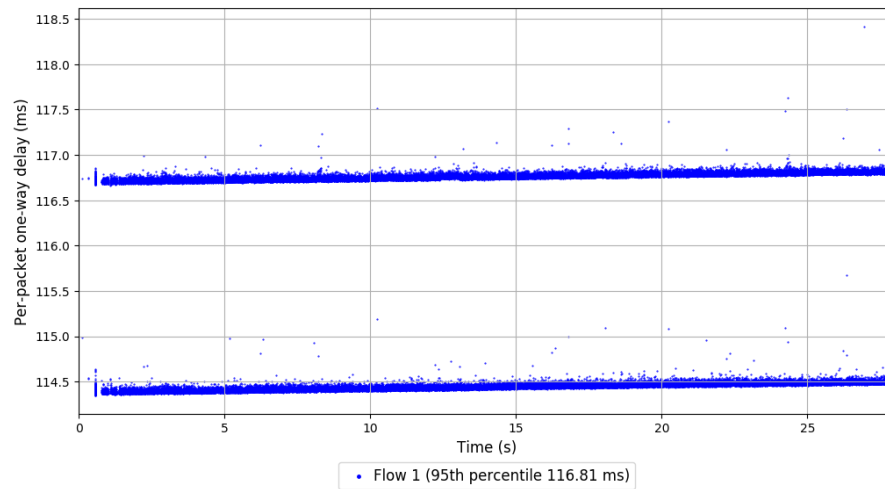
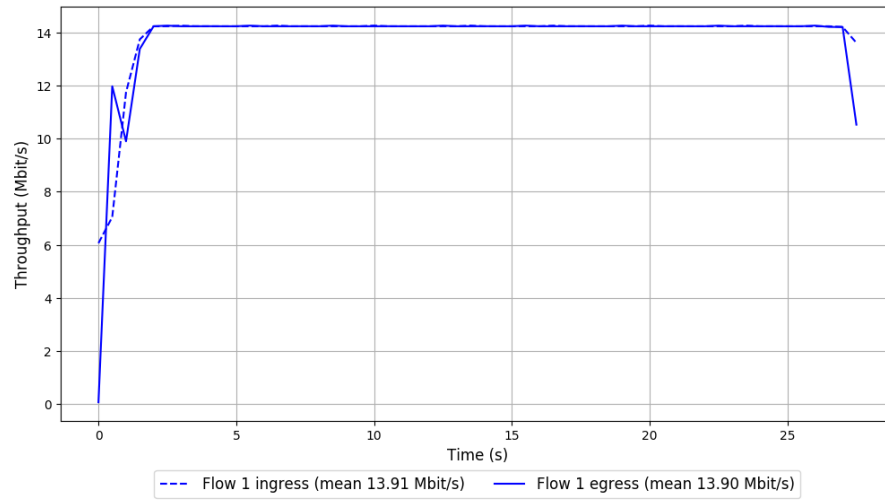
-- Flow 1:

Average throughput: 13.90 Mbit/s

95th percentile per-packet one-way delay: 116.809 ms

Loss rate: 0.82%

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

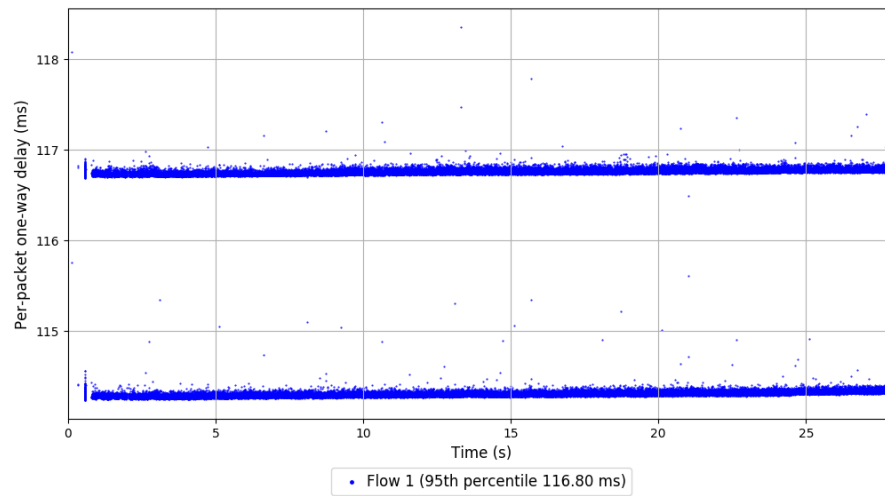
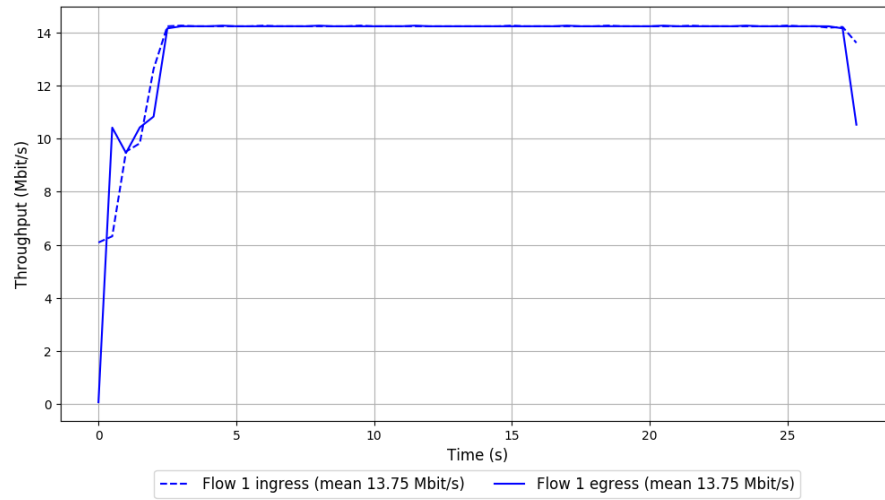


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-10-10 18:52:22
End at: 2017-10-10 18:52:52

# Below is generated by plot.py at 2017-10-10 21:47:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.75 Mbit/s
95th percentile per-packet one-way delay: 116.802 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 13.75 Mbit/s
95th percentile per-packet one-way delay: 116.802 ms
Loss rate: 0.83%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-10-10 19:03:37

End at: 2017-10-10 19:04:07

Below is generated by plot.py at 2017-10-10 21:47:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 128.82 Mbit/s

95th percentile per-packet one-way delay: 118.352 ms

Loss rate: 1.15%

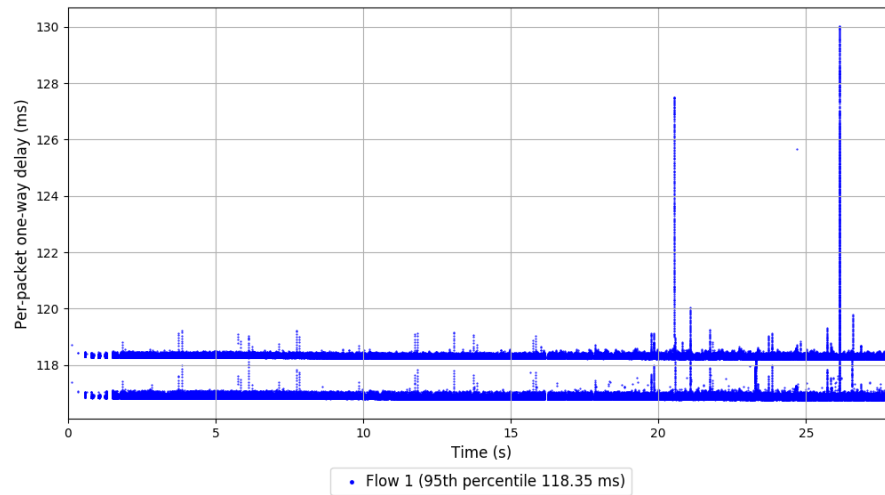
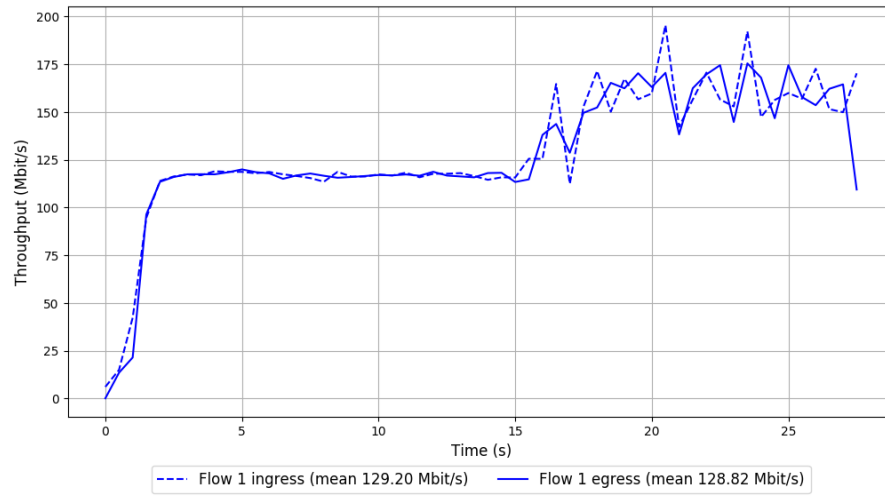
-- Flow 1:

Average throughput: 128.82 Mbit/s

95th percentile per-packet one-way delay: 118.352 ms

Loss rate: 1.15%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-10-10 19:15:05

End at: 2017-10-10 19:15:35

Below is generated by plot.py at 2017-10-10 21:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 232.67 Mbit/s

95th percentile per-packet one-way delay: 115.182 ms

Loss rate: 0.86%

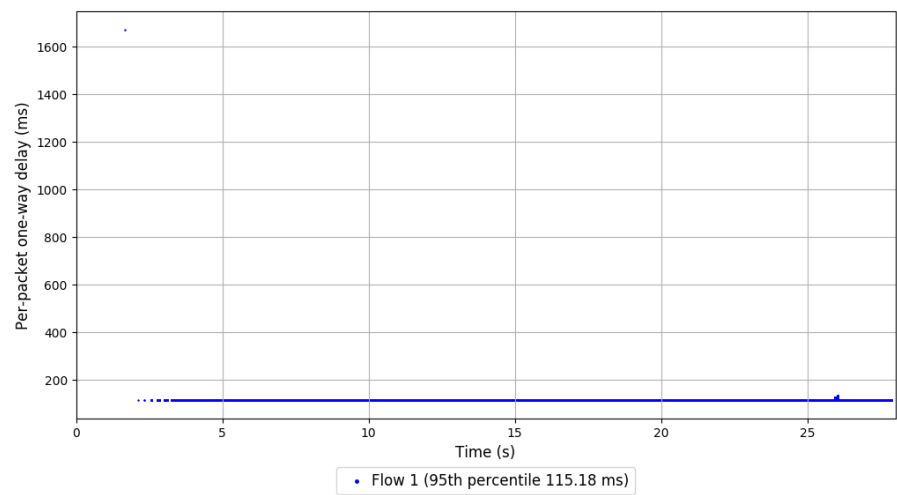
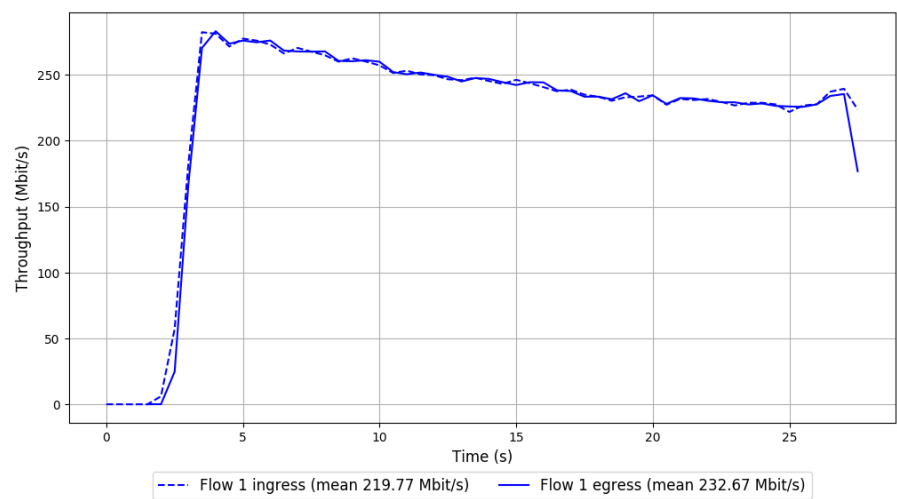
-- Flow 1:

Average throughput: 232.67 Mbit/s

95th percentile per-packet one-way delay: 115.182 ms

Loss rate: 0.86%

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

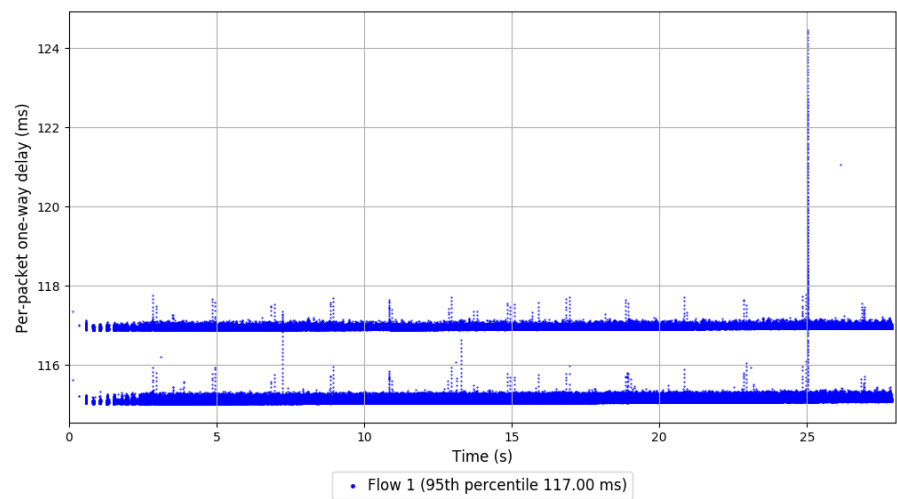
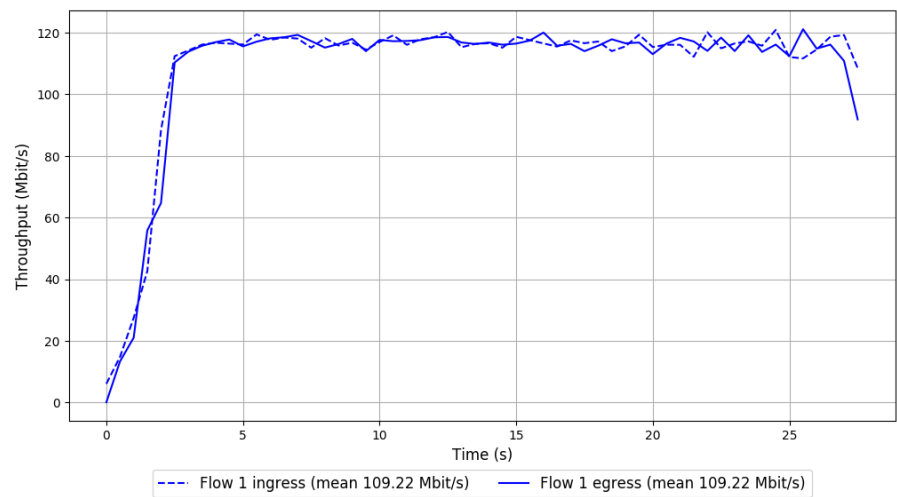


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-10-10 19:26:36
End at: 2017-10-10 19:27:06

# Below is generated by plot.py at 2017-10-10 21:47:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 109.22 Mbit/s
95th percentile per-packet one-way delay: 117.001 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 109.22 Mbit/s
95th percentile per-packet one-way delay: 117.001 ms
Loss rate: 0.80%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-10-10 17:38:04

End at: 2017-10-10 17:38:34

Below is generated by plot.py at 2017-10-10 21:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.73 Mbit/s

95th percentile per-packet one-way delay: 143.569 ms

Loss rate: 0.81%

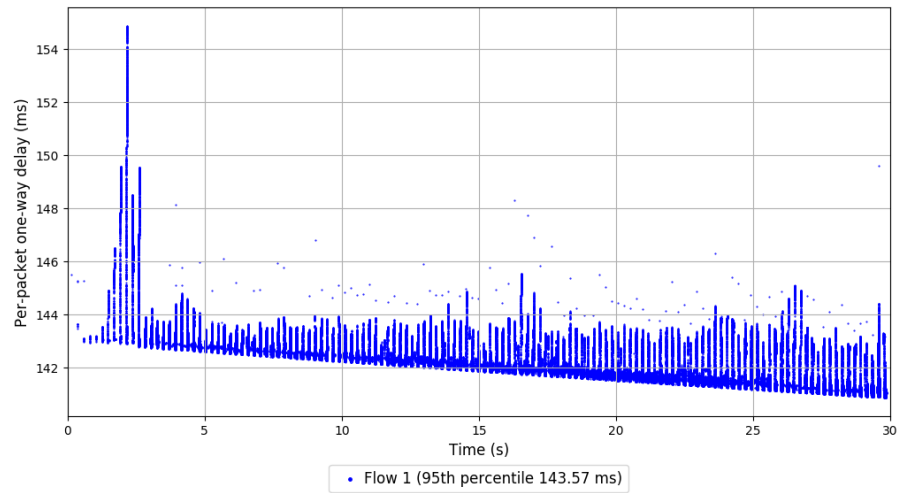
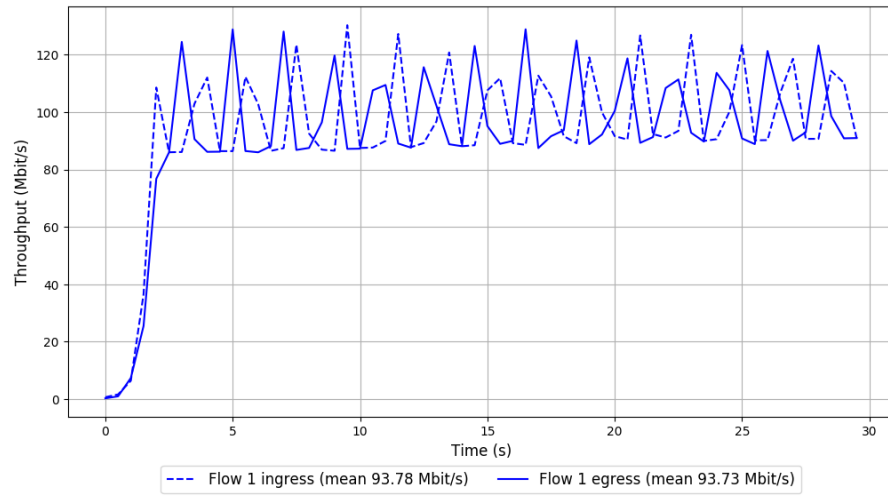
-- Flow 1:

Average throughput: 93.73 Mbit/s

95th percentile per-packet one-way delay: 143.569 ms

Loss rate: 0.81%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-10-10 17:49:15

End at: 2017-10-10 17:49:45

Below is generated by plot.py at 2017-10-10 21:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 99.93 Mbit/s

95th percentile per-packet one-way delay: 139.329 ms

Loss rate: 0.36%

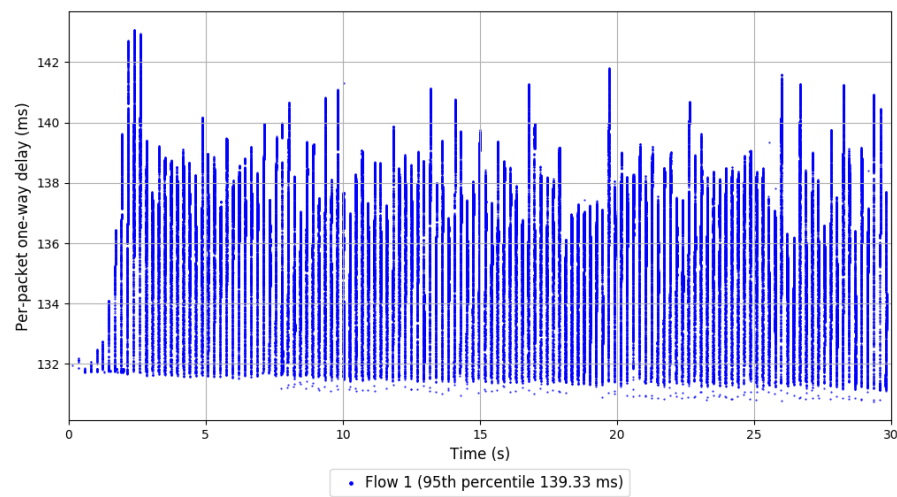
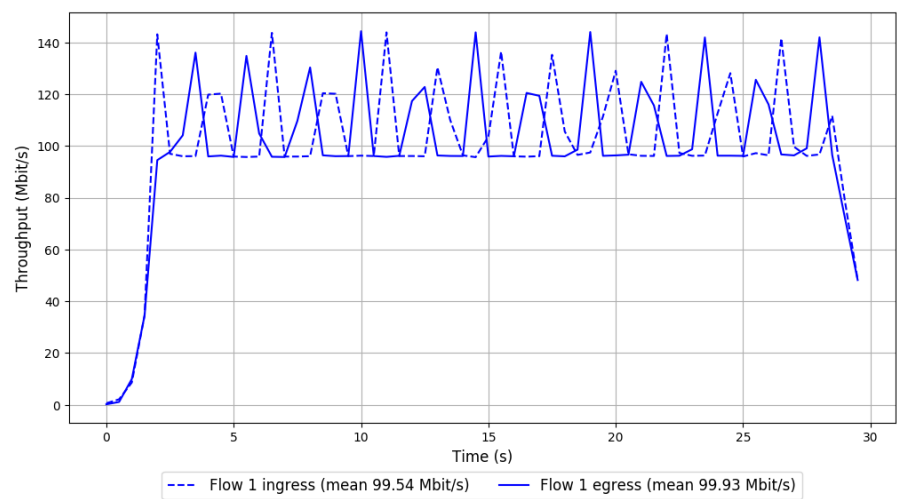
-- Flow 1:

Average throughput: 99.93 Mbit/s

95th percentile per-packet one-way delay: 139.329 ms

Loss rate: 0.36%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-10-10 18:01:02

End at: 2017-10-10 18:01:32

Below is generated by plot.py at 2017-10-10 21:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.01 Mbit/s

95th percentile per-packet one-way delay: 116.650 ms

Loss rate: 0.82%

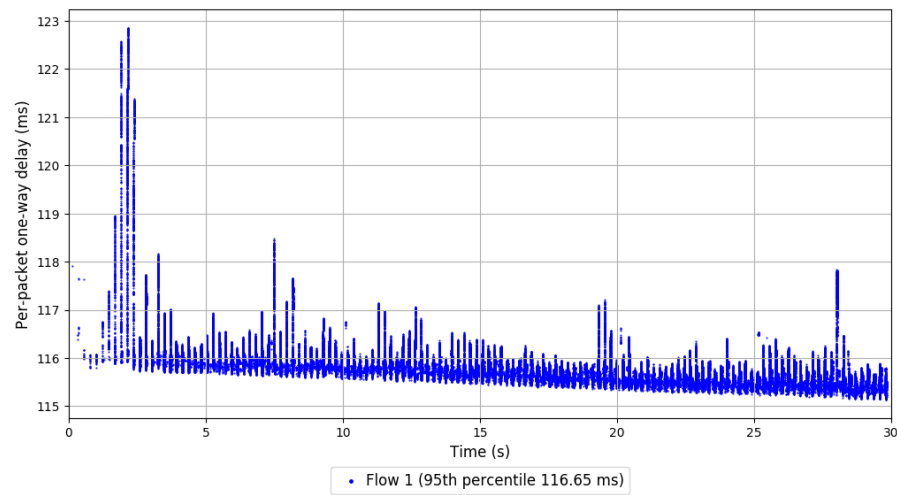
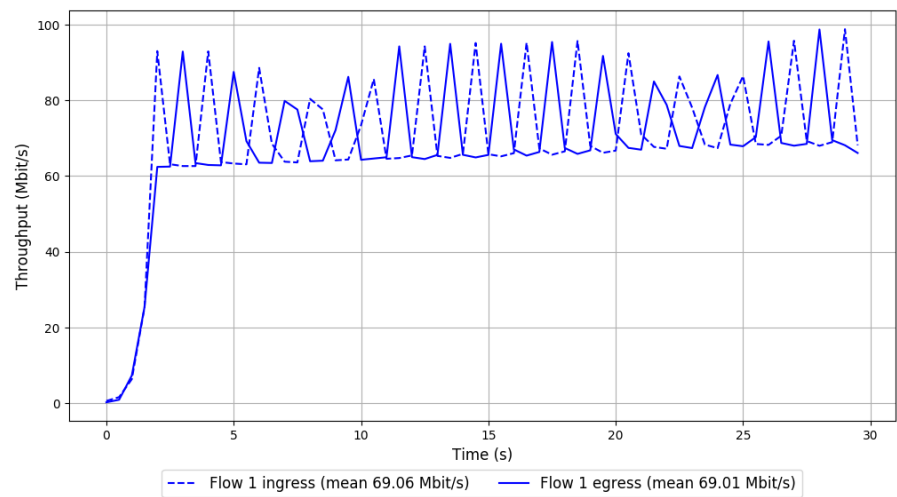
-- Flow 1:

Average throughput: 69.01 Mbit/s

95th percentile per-packet one-way delay: 116.650 ms

Loss rate: 0.82%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-10-10 18:12:39

End at: 2017-10-10 18:13:09

Below is generated by plot.py at 2017-10-10 21:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.45 Mbit/s

95th percentile per-packet one-way delay: 117.509 ms

Loss rate: 0.83%

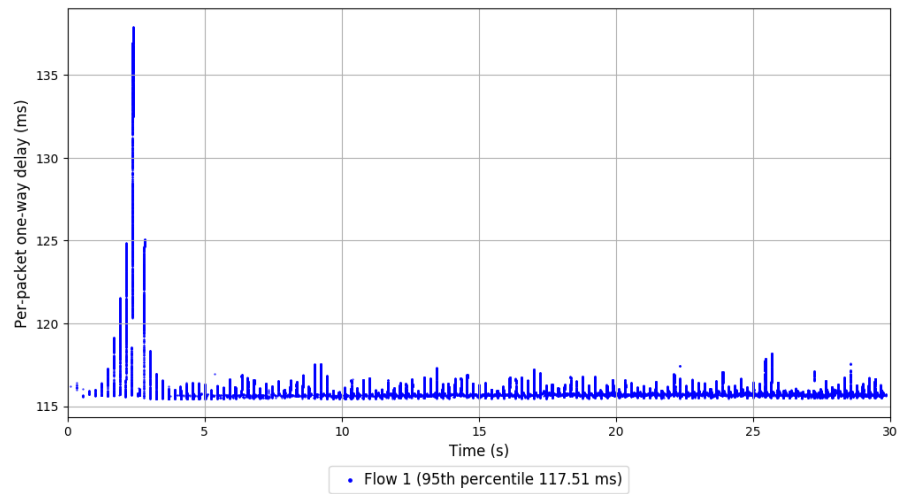
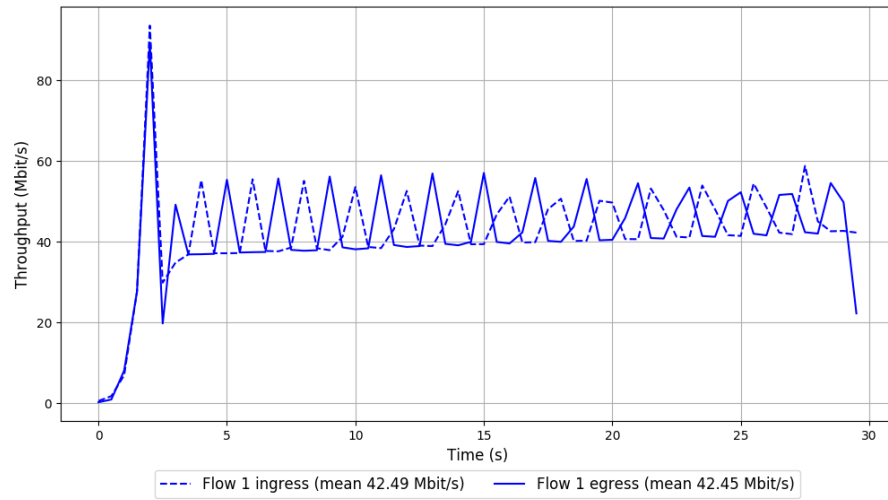
-- Flow 1:

Average throughput: 42.45 Mbit/s

95th percentile per-packet one-way delay: 117.509 ms

Loss rate: 0.83%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-10-10 18:24:00

End at: 2017-10-10 18:24:30

Below is generated by plot.py at 2017-10-10 21:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.59 Mbit/s

95th percentile per-packet one-way delay: 125.496 ms

Loss rate: 0.48%

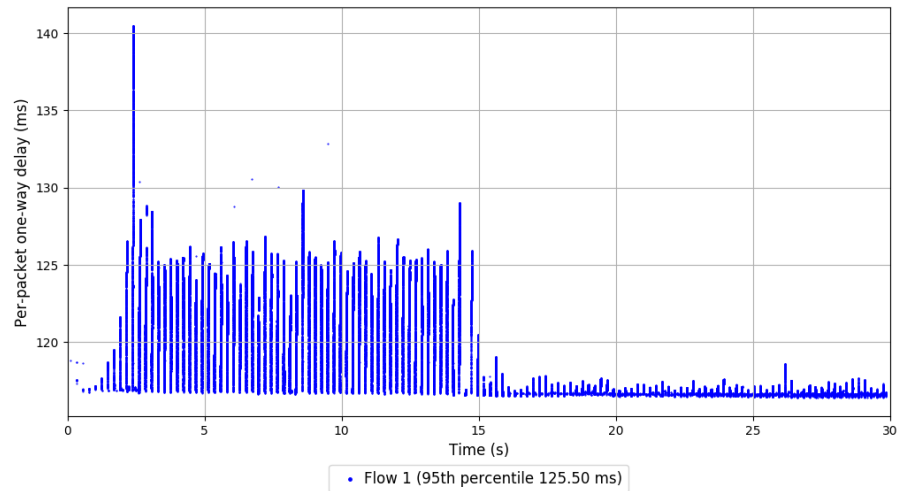
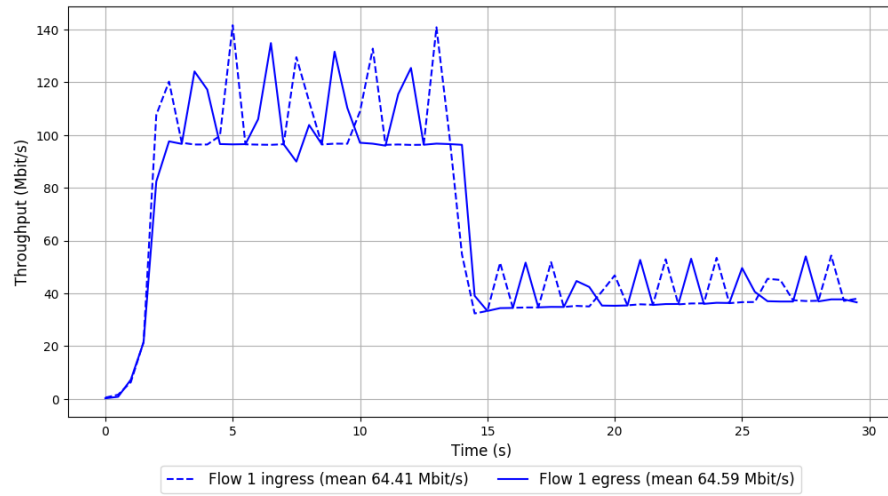
-- Flow 1:

Average throughput: 64.59 Mbit/s

95th percentile per-packet one-way delay: 125.496 ms

Loss rate: 0.48%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-10-10 18:35:23

End at: 2017-10-10 18:35:53

Below is generated by plot.py at 2017-10-10 21:47:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.96 Mbit/s

95th percentile per-packet one-way delay: 119.045 ms

Loss rate: 0.61%

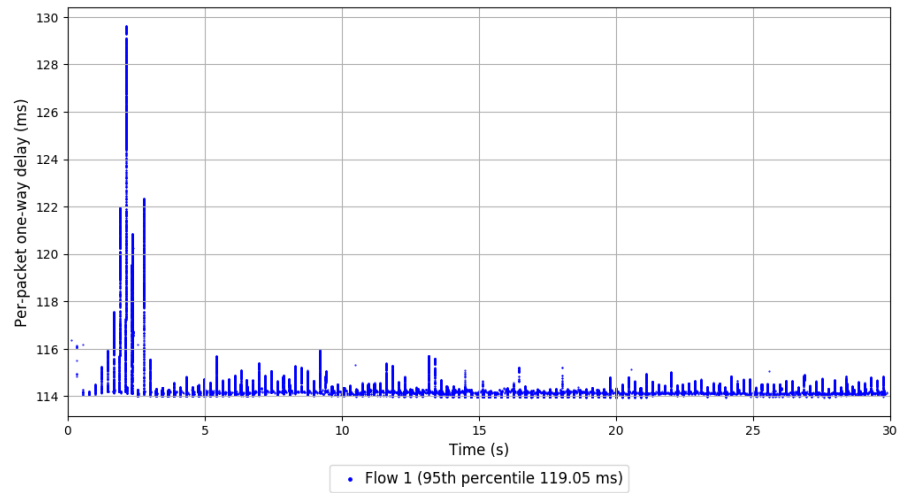
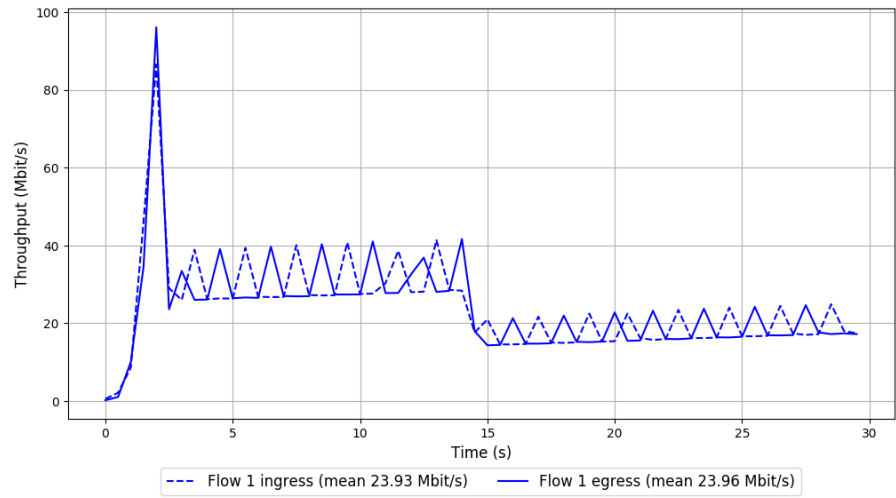
-- Flow 1:

Average throughput: 23.96 Mbit/s

95th percentile per-packet one-way delay: 119.045 ms

Loss rate: 0.61%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-10-10 18:46:41

End at: 2017-10-10 18:47:11

Below is generated by plot.py at 2017-10-10 21:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.73 Mbit/s

95th percentile per-packet one-way delay: 121.923 ms

Loss rate: 0.79%

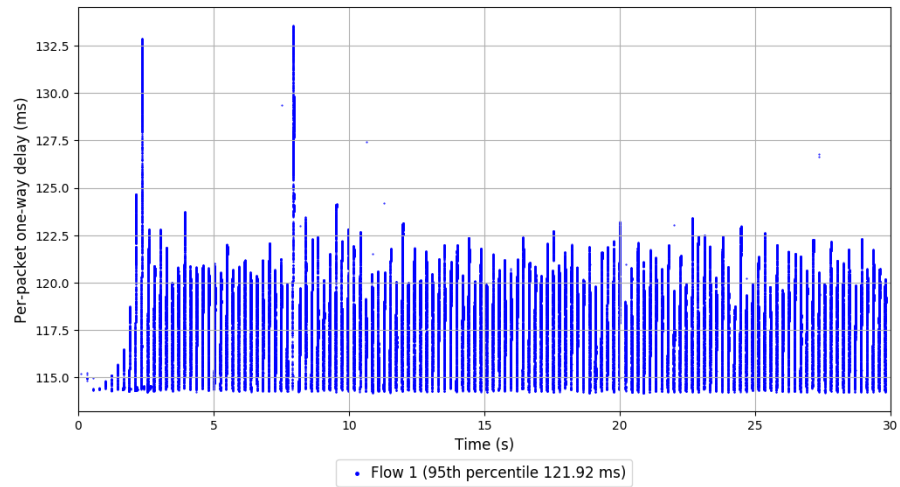
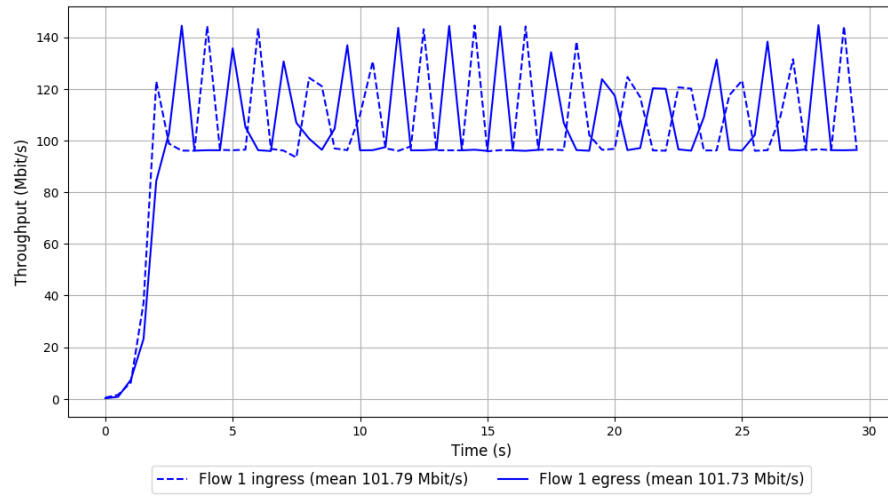
-- Flow 1:

Average throughput: 101.73 Mbit/s

95th percentile per-packet one-way delay: 121.923 ms

Loss rate: 0.79%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-10-10 18:57:55

End at: 2017-10-10 18:58:25

Below is generated by plot.py at 2017-10-10 21:48:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.82 Mbit/s

95th percentile per-packet one-way delay: 122.984 ms

Loss rate: 0.78%

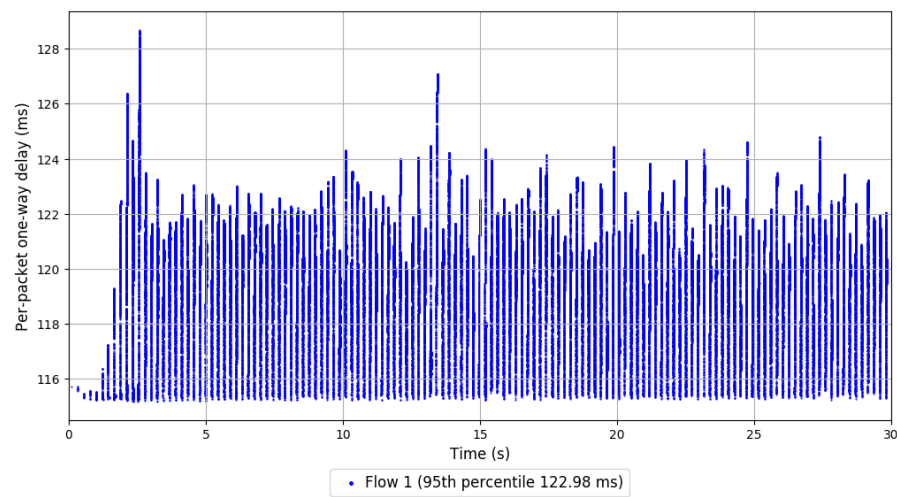
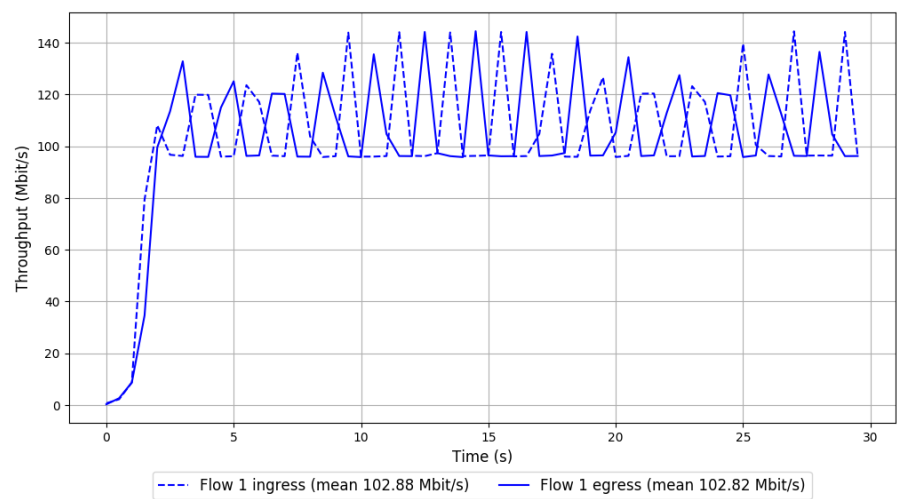
-- Flow 1:

Average throughput: 102.82 Mbit/s

95th percentile per-packet one-way delay: 122.984 ms

Loss rate: 0.78%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-10-10 19:09:25

End at: 2017-10-10 19:09:55

Below is generated by plot.py at 2017-10-10 21:48:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.16 Mbit/s

95th percentile per-packet one-way delay: 124.235 ms

Loss rate: 0.43%

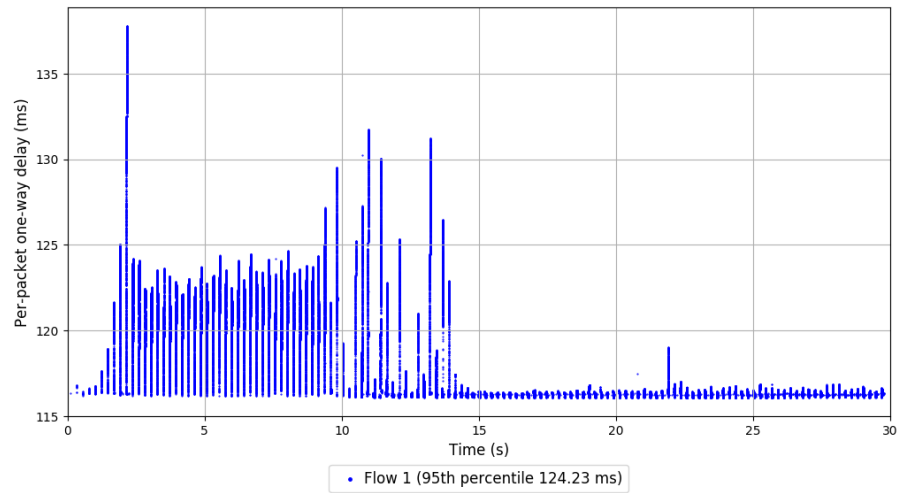
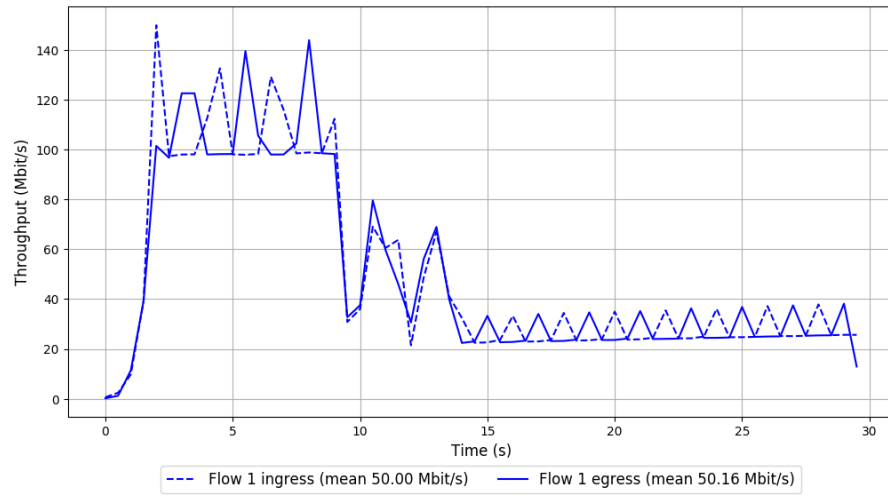
-- Flow 1:

Average throughput: 50.16 Mbit/s

95th percentile per-packet one-way delay: 124.235 ms

Loss rate: 0.43%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-10-10 19:21:06

End at: 2017-10-10 19:21:36

Below is generated by plot.py at 2017-10-10 21:48:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.97 Mbit/s

95th percentile per-packet one-way delay: 115.296 ms

Loss rate: 0.81%

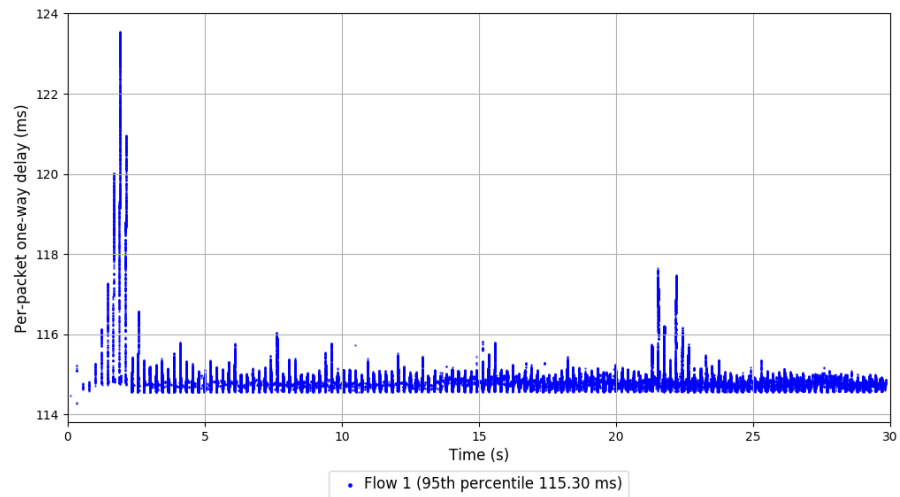
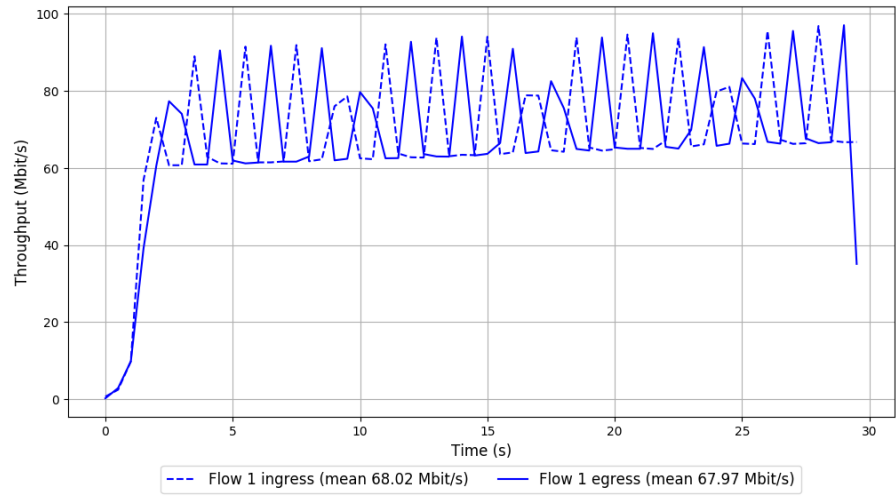
-- Flow 1:

Average throughput: 67.97 Mbit/s

95th percentile per-packet one-way delay: 115.296 ms

Loss rate: 0.81%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-10-10 17:34:33

End at: 2017-10-10 17:35:03

Below is generated by plot.py at 2017-10-10 21:50:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.19 Mbit/s

95th percentile per-packet one-way delay: 242.733 ms

Loss rate: 2.93%

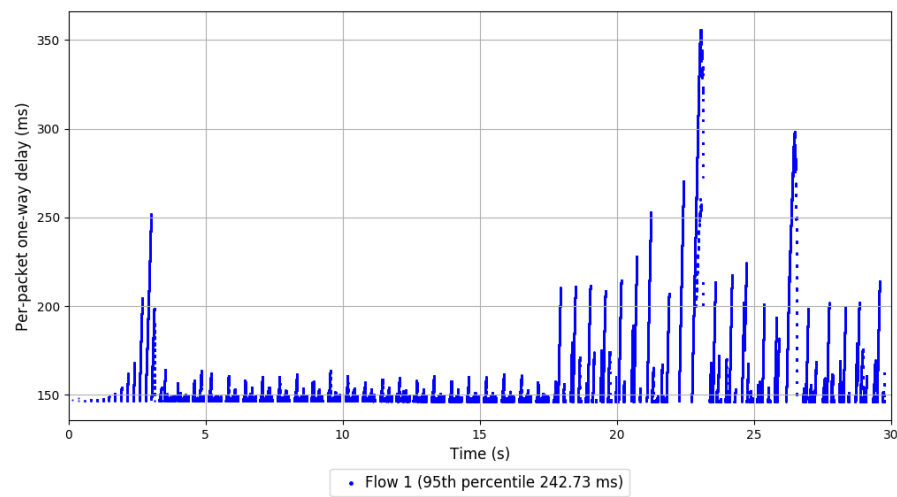
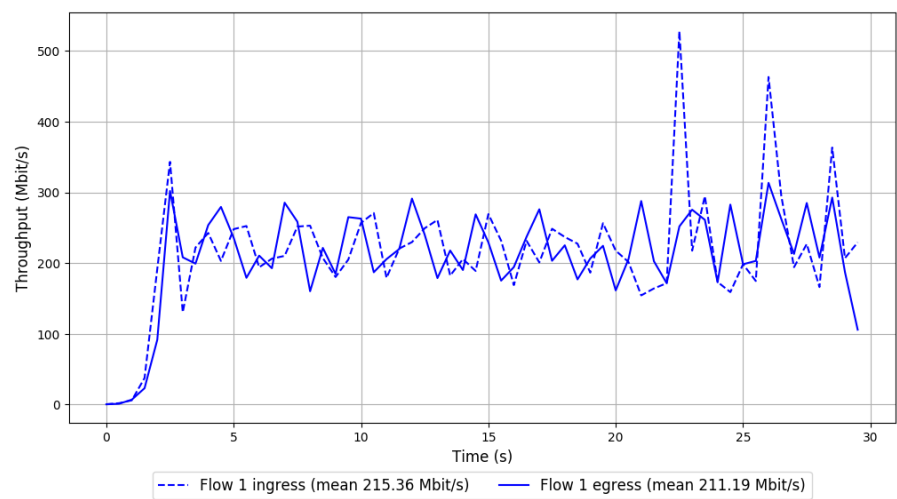
-- Flow 1:

Average throughput: 211.19 Mbit/s

95th percentile per-packet one-way delay: 242.733 ms

Loss rate: 2.93%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-10-10 17:45:44

End at: 2017-10-10 17:46:14

Below is generated by plot.py at 2017-10-10 21:51:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 228.78 Mbit/s

95th percentile per-packet one-way delay: 172.118 ms

Loss rate: 1.23%

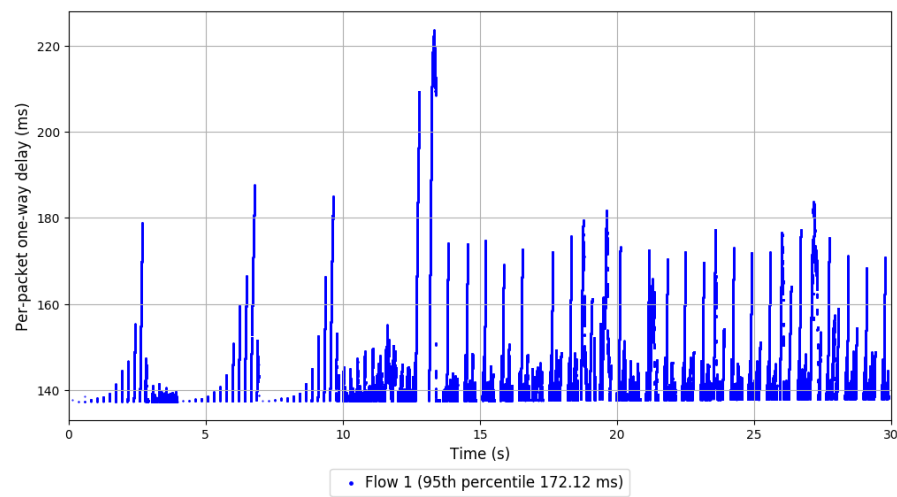
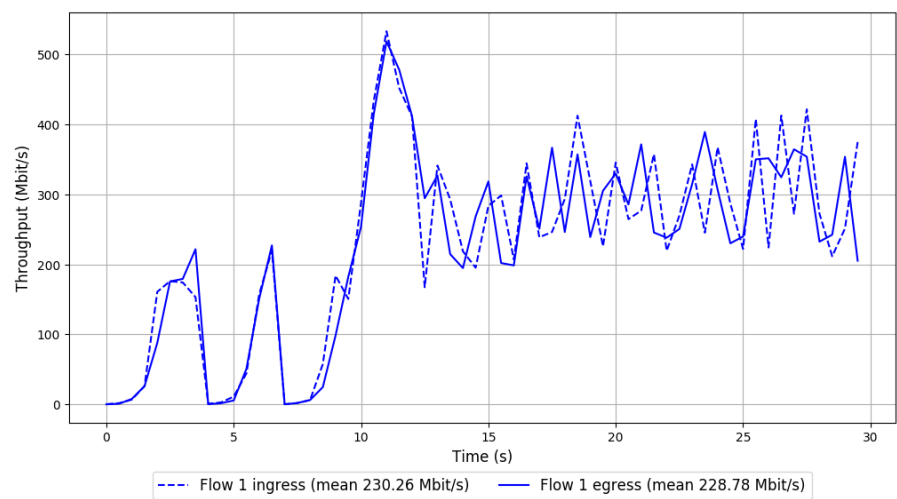
-- Flow 1:

Average throughput: 228.78 Mbit/s

95th percentile per-packet one-way delay: 172.118 ms

Loss rate: 1.23%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-10-10 17:57:29

End at: 2017-10-10 17:57:59

Below is generated by plot.py at 2017-10-10 21:51:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 259.63 Mbit/s

95th percentile per-packet one-way delay: 172.810 ms

Loss rate: 1.23%

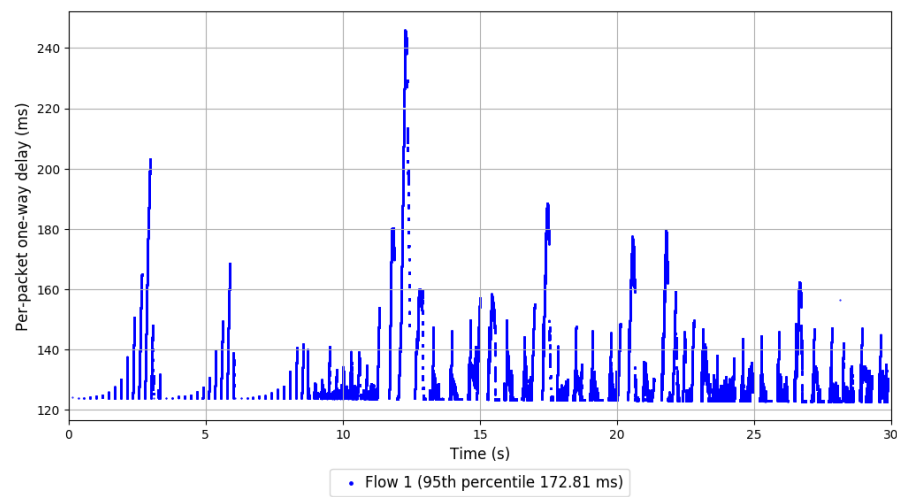
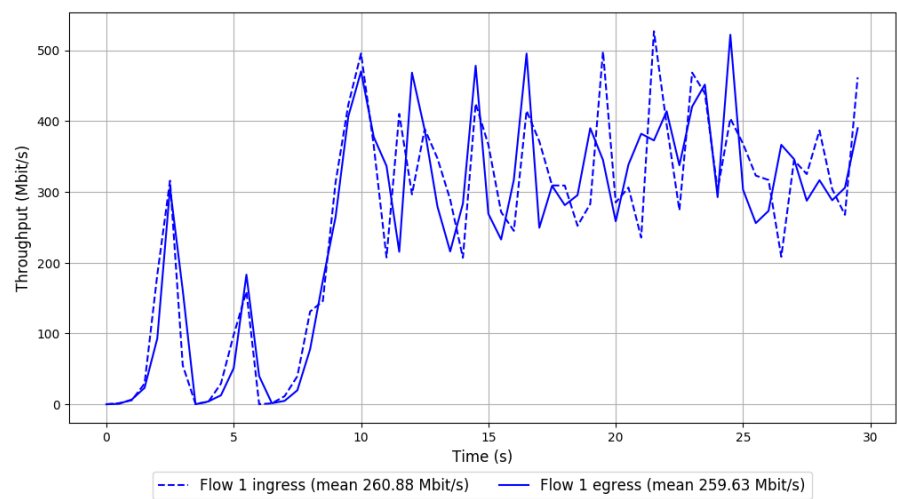
-- Flow 1:

Average throughput: 259.63 Mbit/s

95th percentile per-packet one-way delay: 172.810 ms

Loss rate: 1.23%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-10-10 18:09:12

End at: 2017-10-10 18:09:42

Below is generated by plot.py at 2017-10-10 21:51:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.88 Mbit/s

95th percentile per-packet one-way delay: 124.501 ms

Loss rate: 1.41%

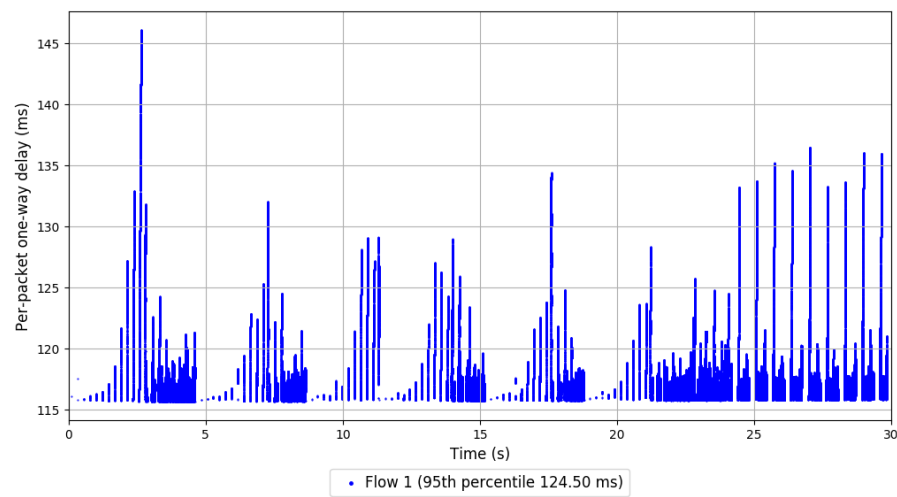
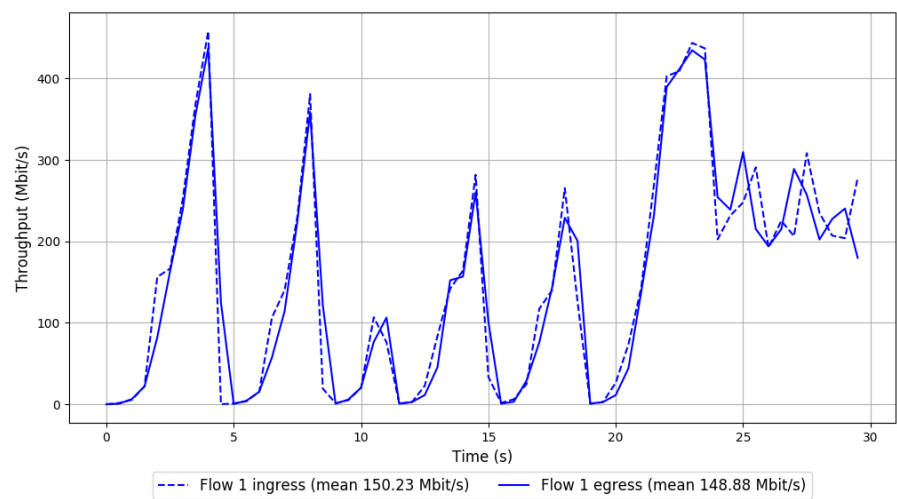
-- Flow 1:

Average throughput: 148.88 Mbit/s

95th percentile per-packet one-way delay: 124.501 ms

Loss rate: 1.41%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-10-10 18:20:37

End at: 2017-10-10 18:21:07

Below is generated by plot.py at 2017-10-10 21:51:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.72 Mbit/s

95th percentile per-packet one-way delay: 147.365 ms

Loss rate: 0.26%

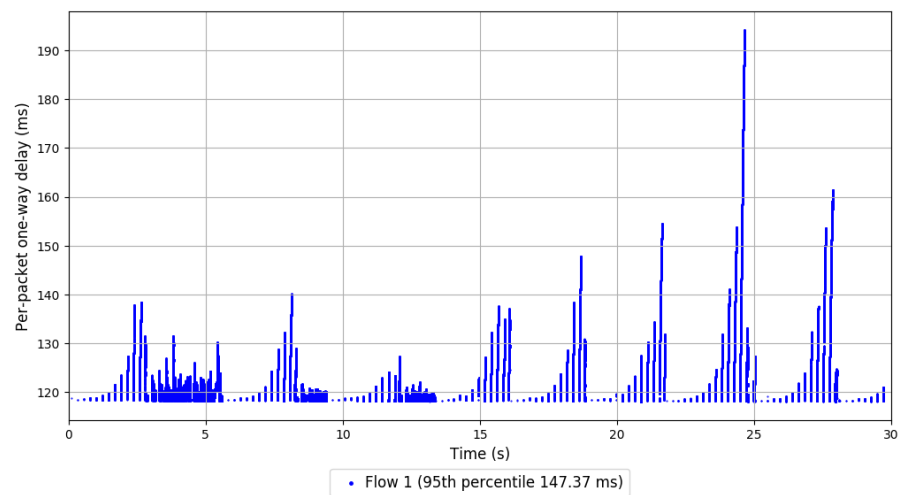
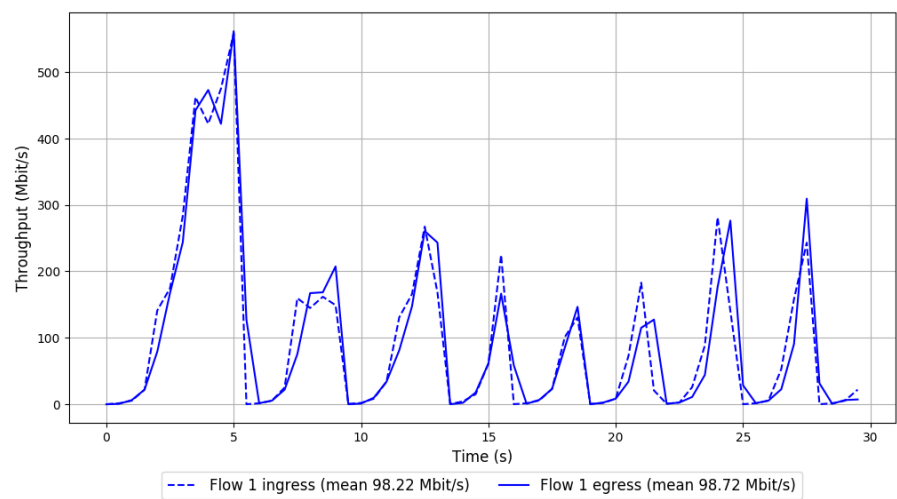
-- Flow 1:

Average throughput: 98.72 Mbit/s

95th percentile per-packet one-way delay: 147.365 ms

Loss rate: 0.26%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-10-10 18:31:51

End at: 2017-10-10 18:32:21

Below is generated by plot.py at 2017-10-10 21:51:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.84 Mbit/s

95th percentile per-packet one-way delay: 153.405 ms

Loss rate: 1.25%

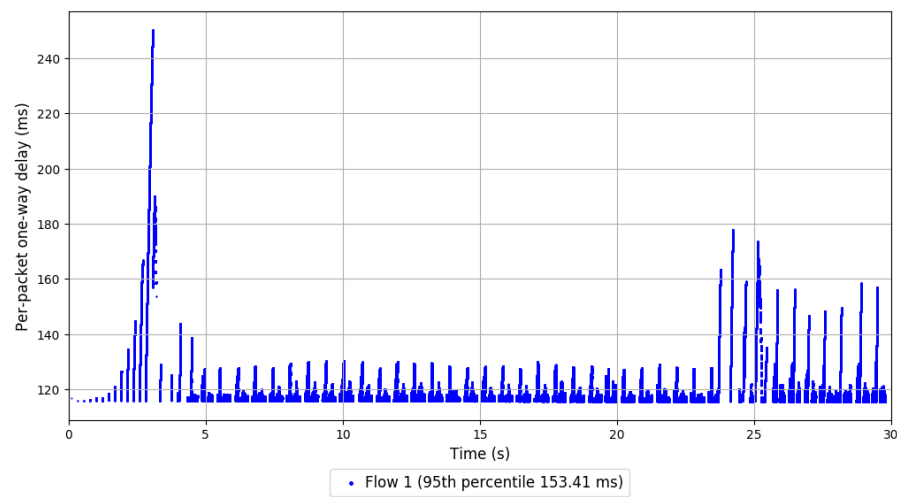
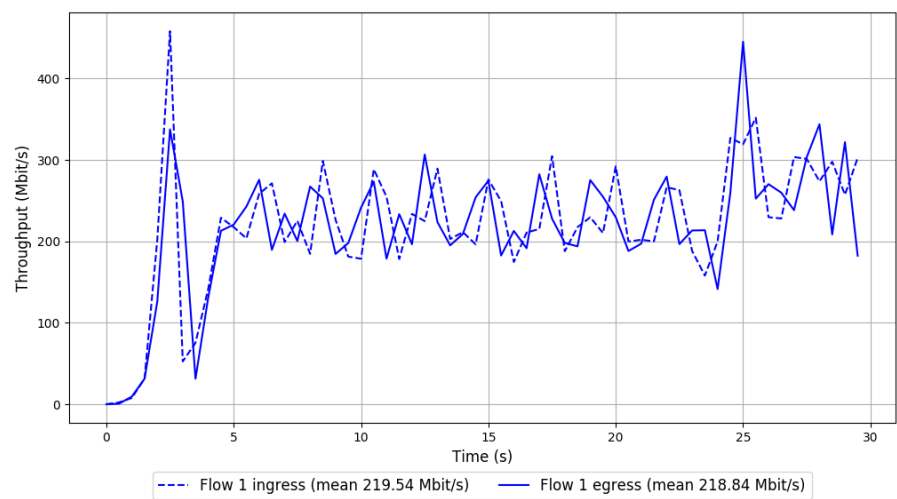
-- Flow 1:

Average throughput: 218.84 Mbit/s

95th percentile per-packet one-way delay: 153.405 ms

Loss rate: 1.25%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-10-10 18:43:12

End at: 2017-10-10 18:43:42

Below is generated by plot.py at 2017-10-10 21:51:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.92 Mbit/s

95th percentile per-packet one-way delay: 193.300 ms

Loss rate: 0.87%

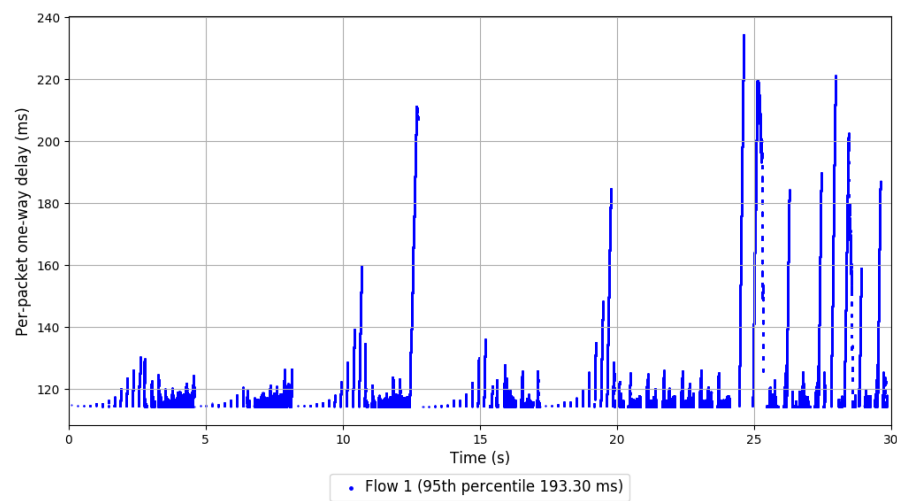
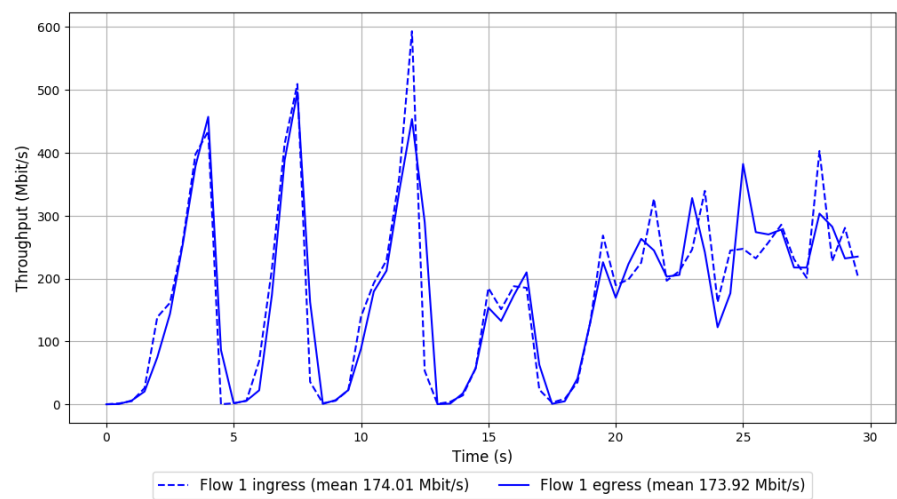
-- Flow 1:

Average throughput: 173.92 Mbit/s

95th percentile per-packet one-way delay: 193.300 ms

Loss rate: 0.87%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-10-10 18:54:33

End at: 2017-10-10 18:55:03

Below is generated by plot.py at 2017-10-10 21:51:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.40 Mbit/s

95th percentile per-packet one-way delay: 127.260 ms

Loss rate: 0.77%

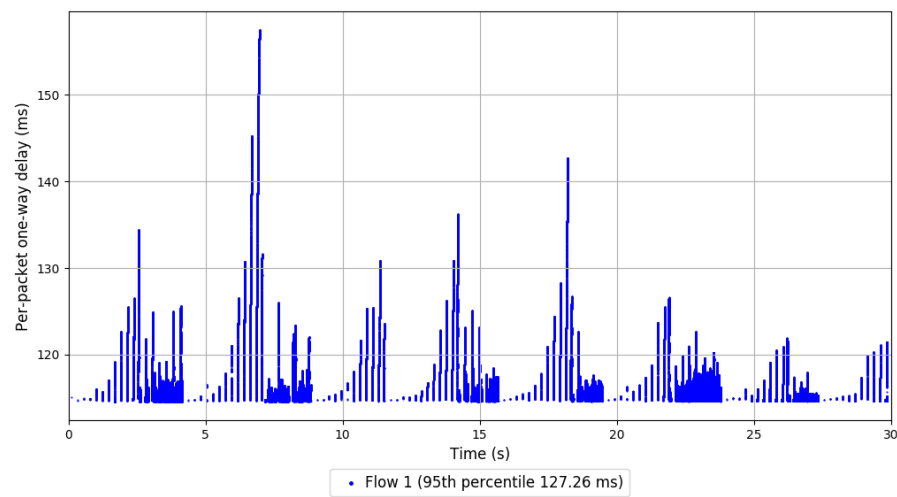
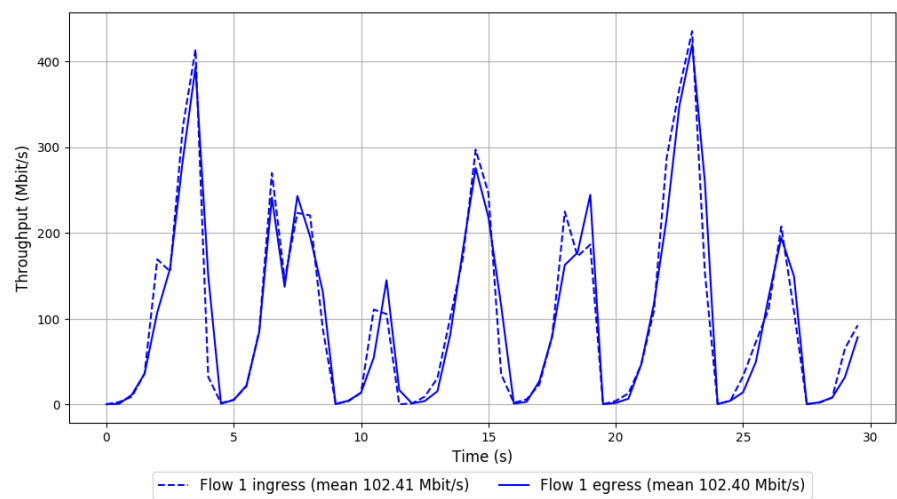
-- Flow 1:

Average throughput: 102.40 Mbit/s

95th percentile per-packet one-way delay: 127.260 ms

Loss rate: 0.77%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-10-10 19:05:59

End at: 2017-10-10 19:06:29

Below is generated by plot.py at 2017-10-10 21:51:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 142.66 Mbit/s

95th percentile per-packet one-way delay: 134.634 ms

Loss rate: 0.29%

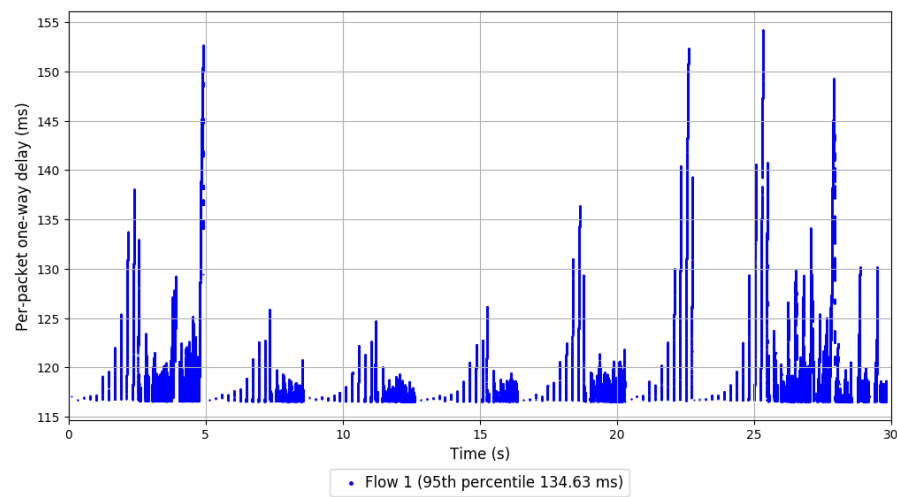
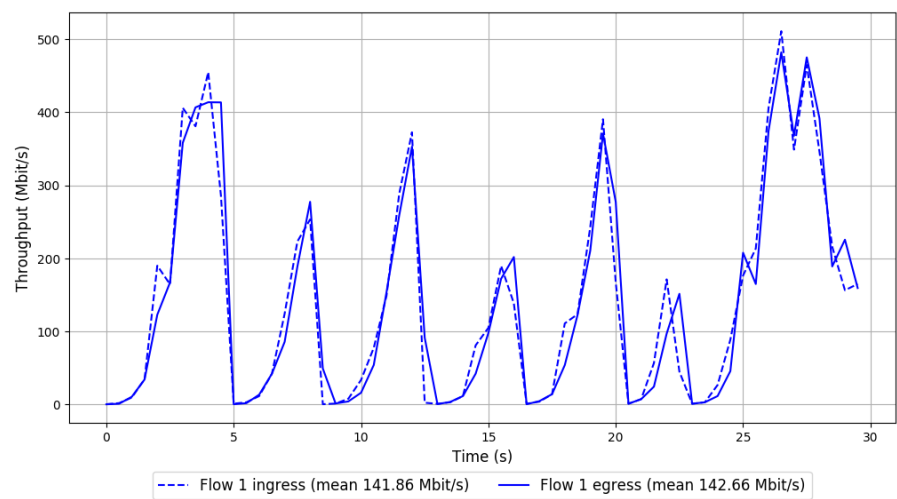
-- Flow 1:

Average throughput: 142.66 Mbit/s

95th percentile per-packet one-way delay: 134.634 ms

Loss rate: 0.29%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-10-10 19:17:34

End at: 2017-10-10 19:18:04

Below is generated by plot.py at 2017-10-10 21:53:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.19 Mbit/s

95th percentile per-packet one-way delay: 158.005 ms

Loss rate: 0.96%

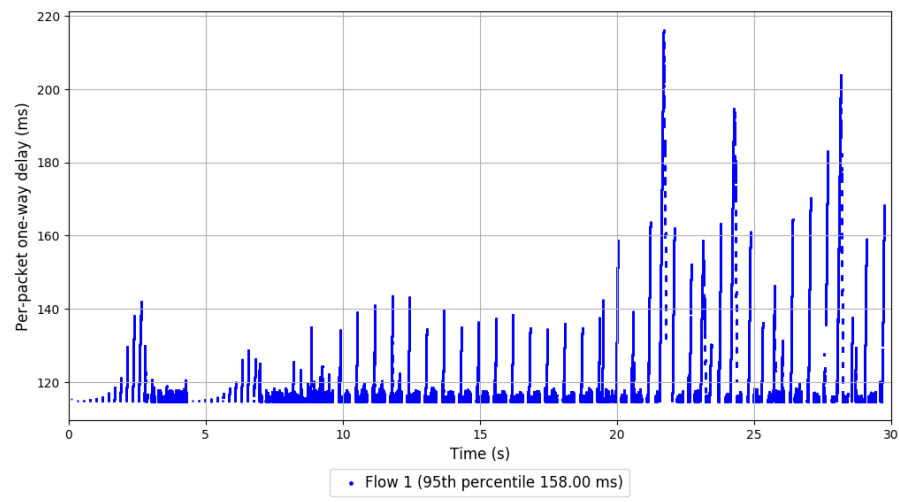
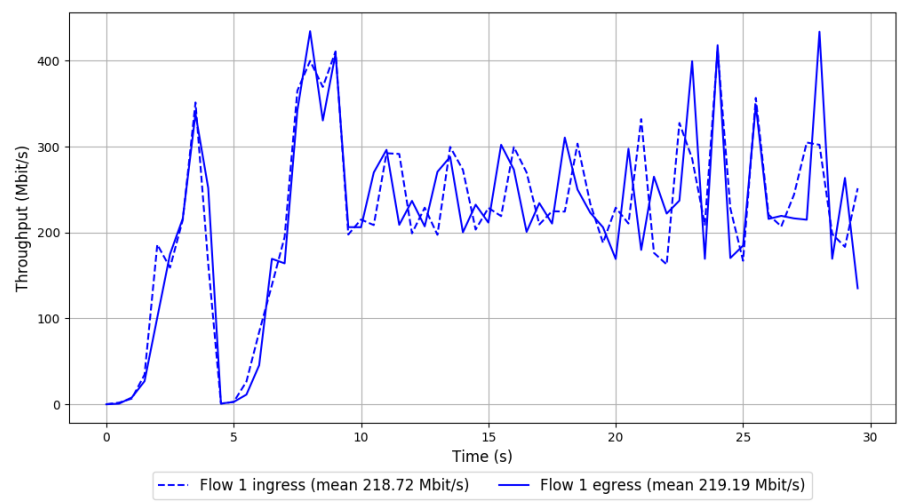
-- Flow 1:

Average throughput: 219.19 Mbit/s

95th percentile per-packet one-way delay: 158.005 ms

Loss rate: 0.96%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-10-10 17:42:48

End at: 2017-10-10 17:43:18

Below is generated by plot.py at 2017-10-10 21:53:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.42 Mbit/s

95th percentile per-packet one-way delay: 136.791 ms

Loss rate: 1.14%

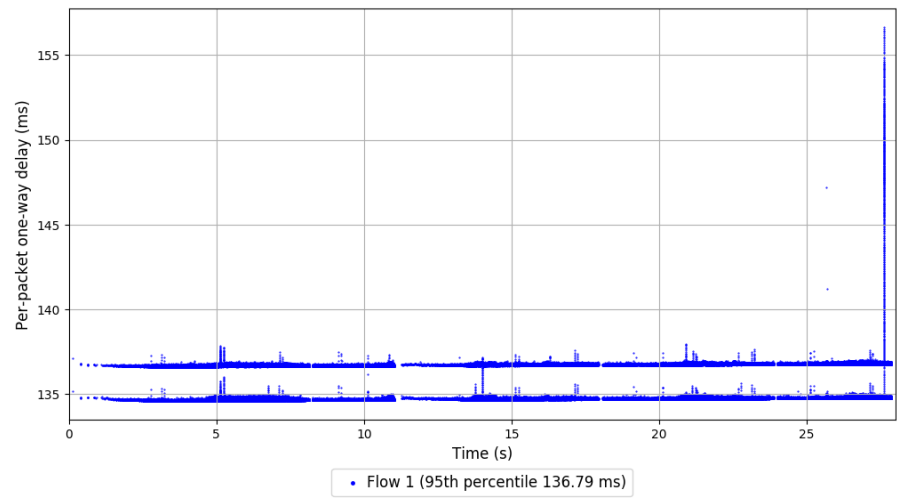
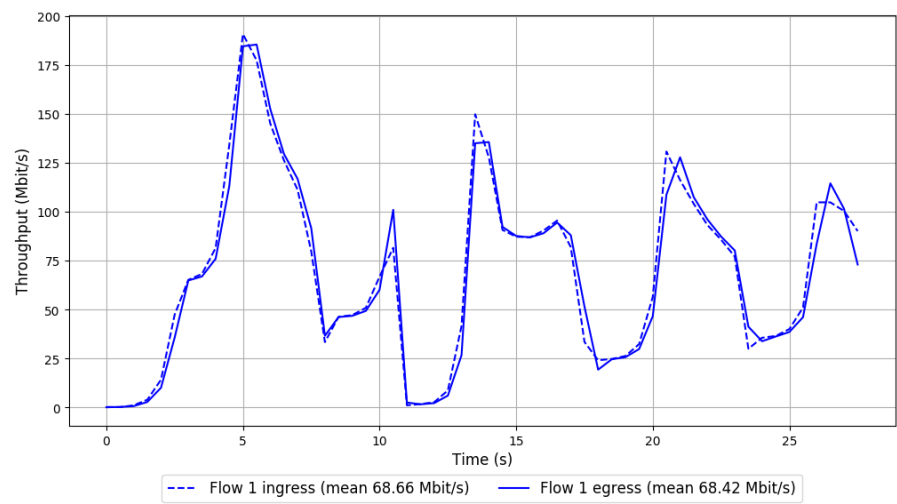
-- Flow 1:

Average throughput: 68.42 Mbit/s

95th percentile per-packet one-way delay: 136.791 ms

Loss rate: 1.14%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-10-10 17:54:10

End at: 2017-10-10 17:54:40

Below is generated by plot.py at 2017-10-10 21:53:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.81 Mbit/s

95th percentile per-packet one-way delay: 128.732 ms

Loss rate: 0.82%

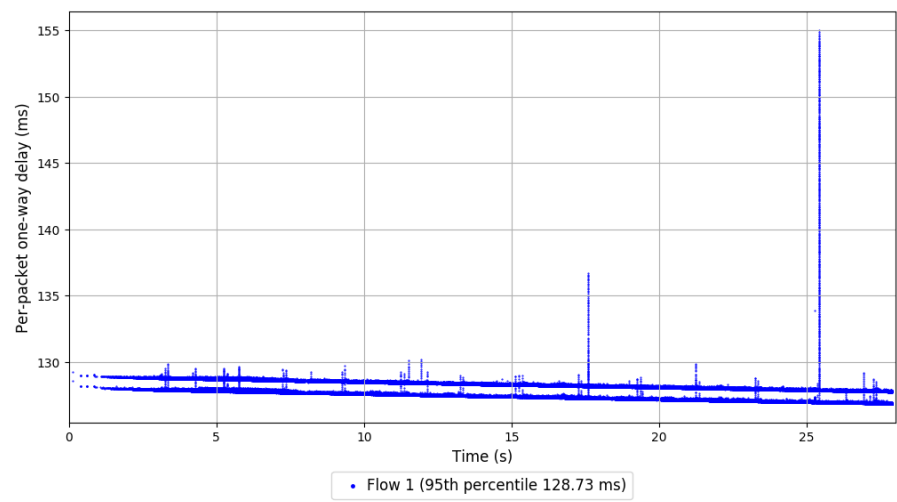
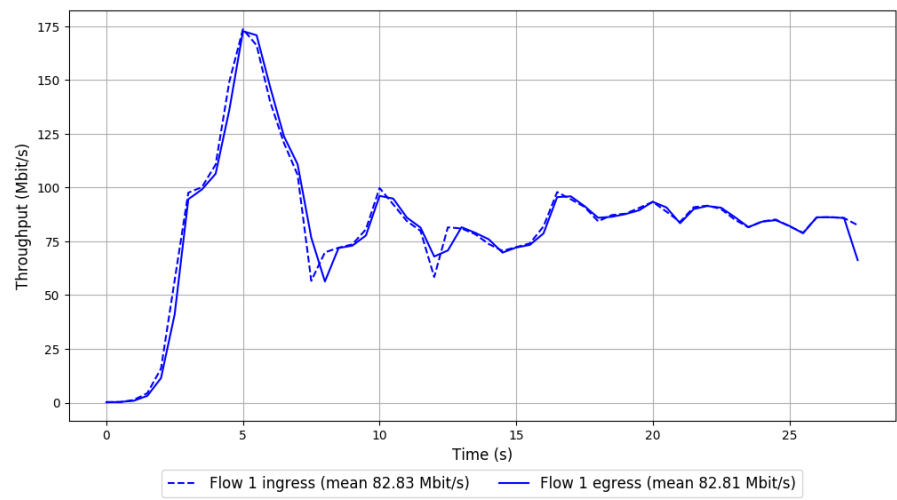
-- Flow 1:

Average throughput: 82.81 Mbit/s

95th percentile per-packet one-way delay: 128.732 ms

Loss rate: 0.82%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-10-10 18:05:53

End at: 2017-10-10 18:06:23

Below is generated by plot.py at 2017-10-10 21:53:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.95 Mbit/s

95th percentile per-packet one-way delay: 115.191 ms

Loss rate: 0.73%

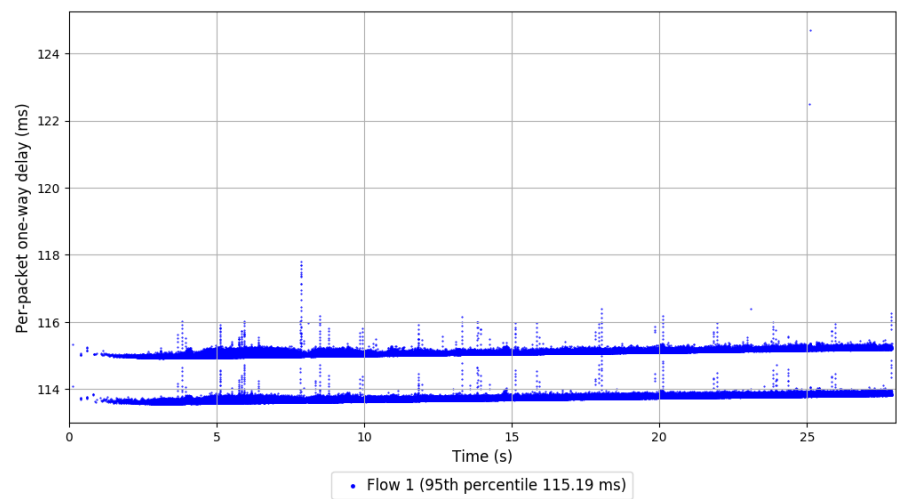
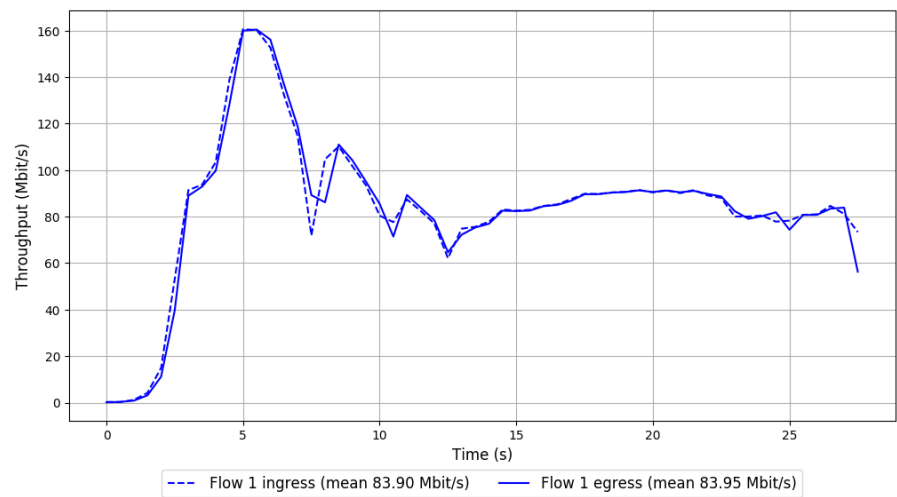
-- Flow 1:

Average throughput: 83.95 Mbit/s

95th percentile per-packet one-way delay: 115.191 ms

Loss rate: 0.73%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-10-10 18:17:28

End at: 2017-10-10 18:17:58

Below is generated by plot.py at 2017-10-10 21:53:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.59 Mbit/s

95th percentile per-packet one-way delay: 117.411 ms

Loss rate: 0.83%

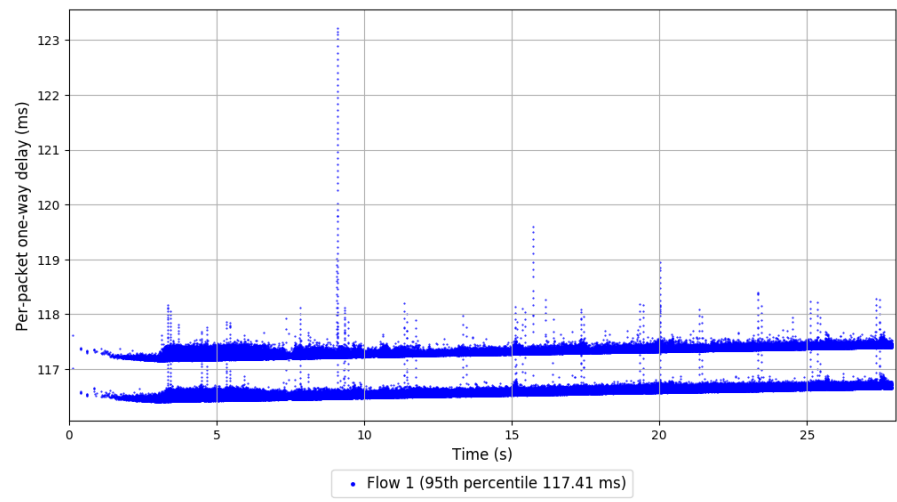
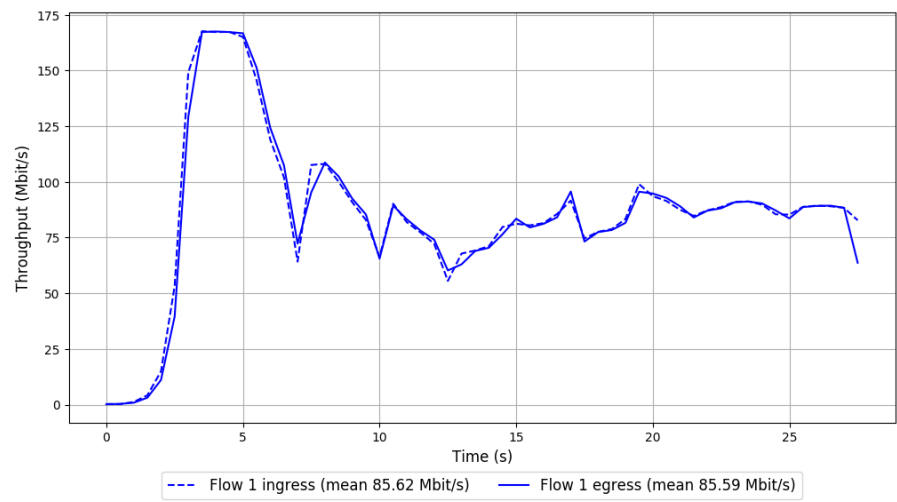
-- Flow 1:

Average throughput: 85.59 Mbit/s

95th percentile per-packet one-way delay: 117.411 ms

Loss rate: 0.83%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-10-10 18:28:52

End at: 2017-10-10 18:29:22

Below is generated by plot.py at 2017-10-10 21:54:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.97 Mbit/s

95th percentile per-packet one-way delay: 117.690 ms

Loss rate: 0.84%

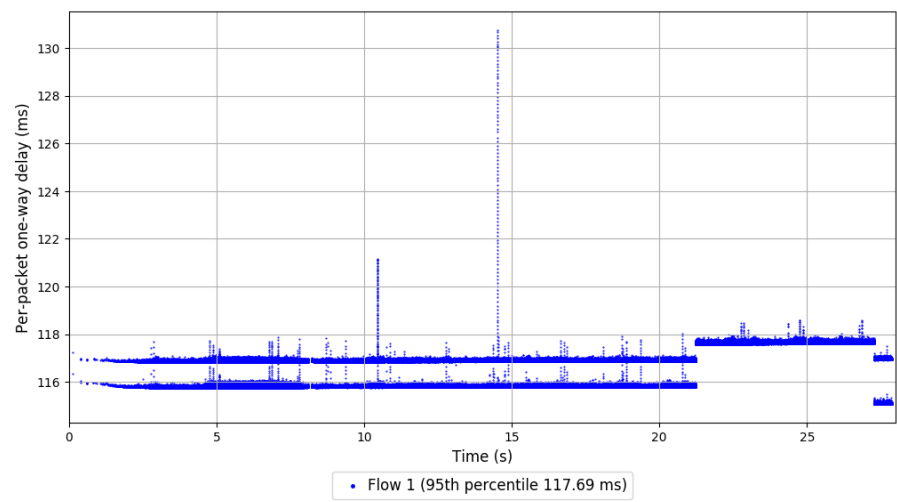
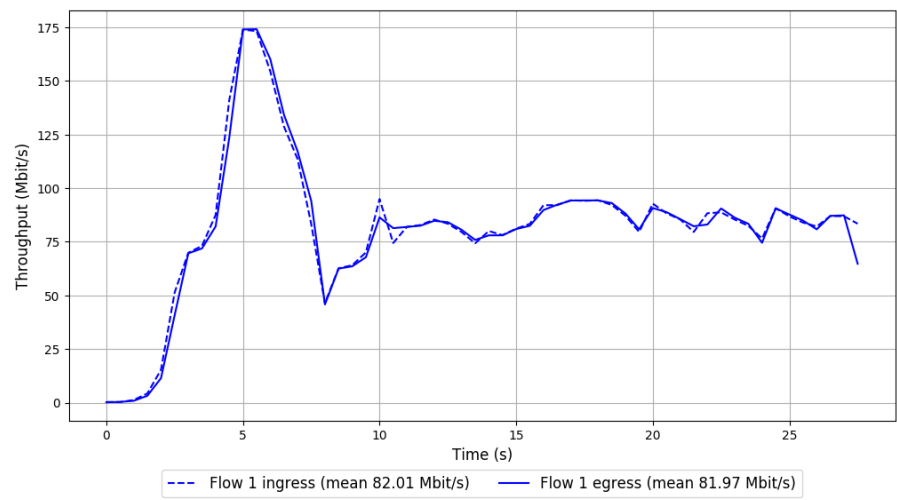
-- Flow 1:

Average throughput: 81.97 Mbit/s

95th percentile per-packet one-way delay: 117.690 ms

Loss rate: 0.84%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-10-10 18:40:14

End at: 2017-10-10 18:40:44

Below is generated by plot.py at 2017-10-10 21:54:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.25 Mbit/s

95th percentile per-packet one-way delay: 116.152 ms

Loss rate: 0.92%

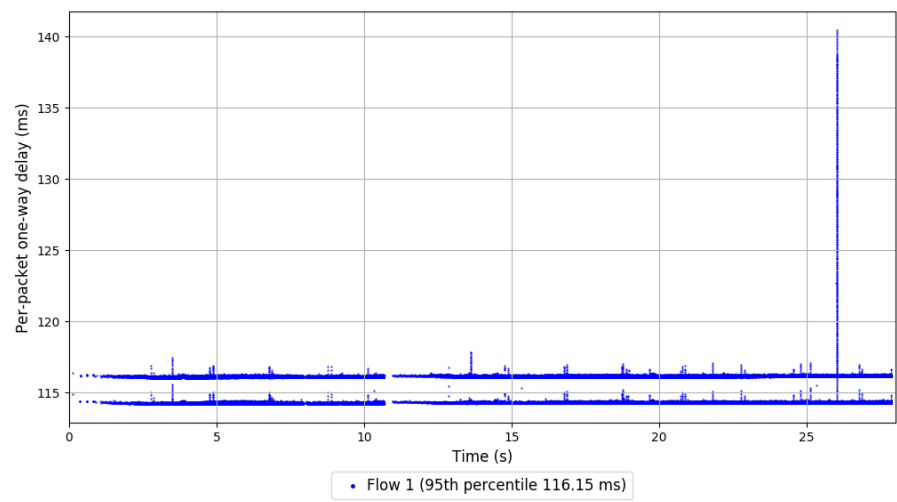
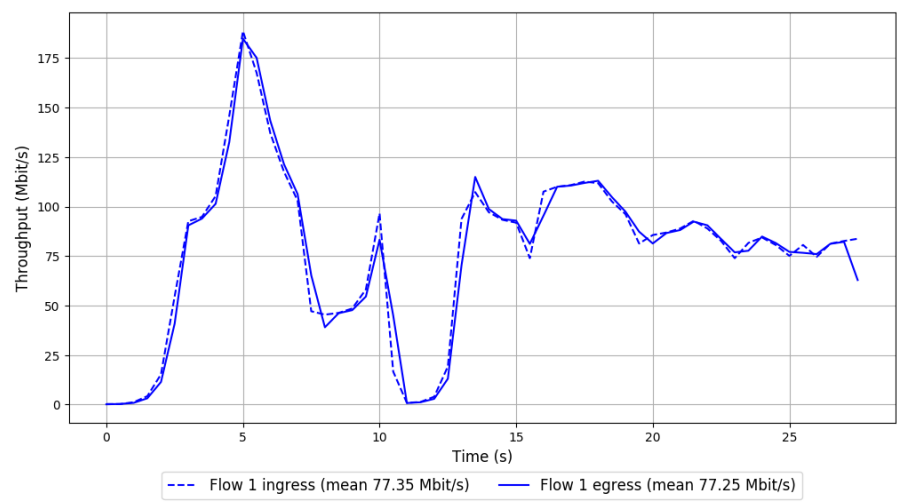
-- Flow 1:

Average throughput: 77.25 Mbit/s

95th percentile per-packet one-way delay: 116.152 ms

Loss rate: 0.92%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-10-10 18:51:34

End at: 2017-10-10 18:52:04

Below is generated by plot.py at 2017-10-10 21:54:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.75 Mbit/s

95th percentile per-packet one-way delay: 116.867 ms

Loss rate: 0.53%

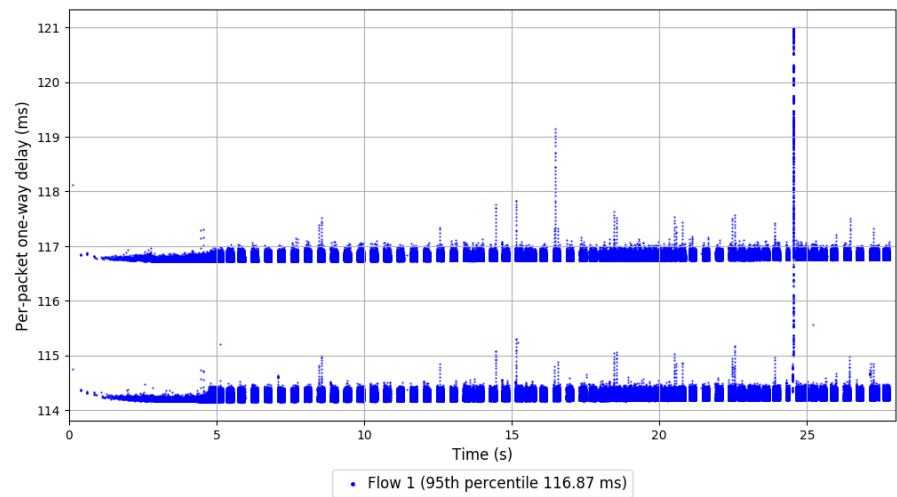
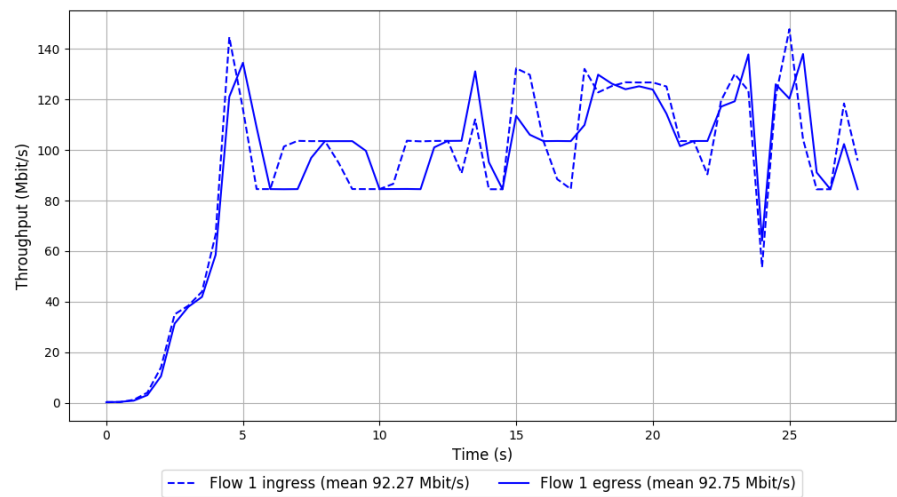
-- Flow 1:

Average throughput: 92.75 Mbit/s

95th percentile per-packet one-way delay: 116.867 ms

Loss rate: 0.53%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-10-10 19:02:48

End at: 2017-10-10 19:03:18

Below is generated by plot.py at 2017-10-10 21:54:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.98 Mbit/s

95th percentile per-packet one-way delay: 116.875 ms

Loss rate: 0.74%

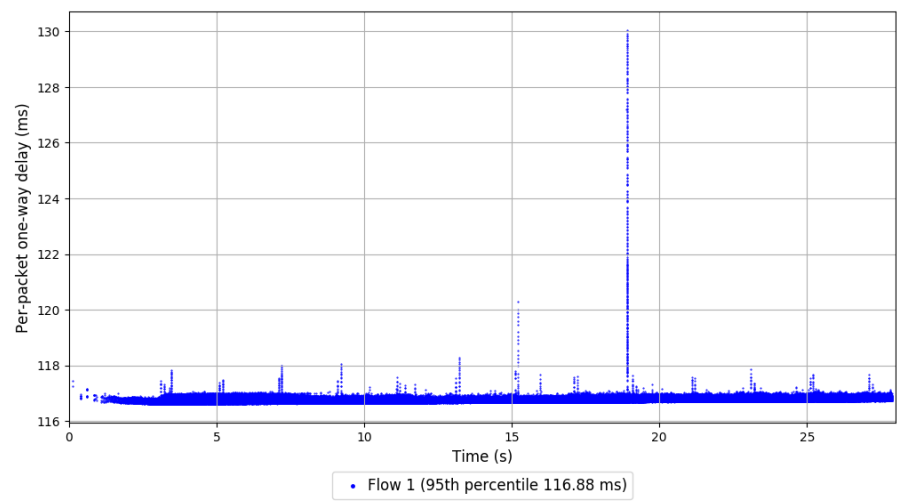
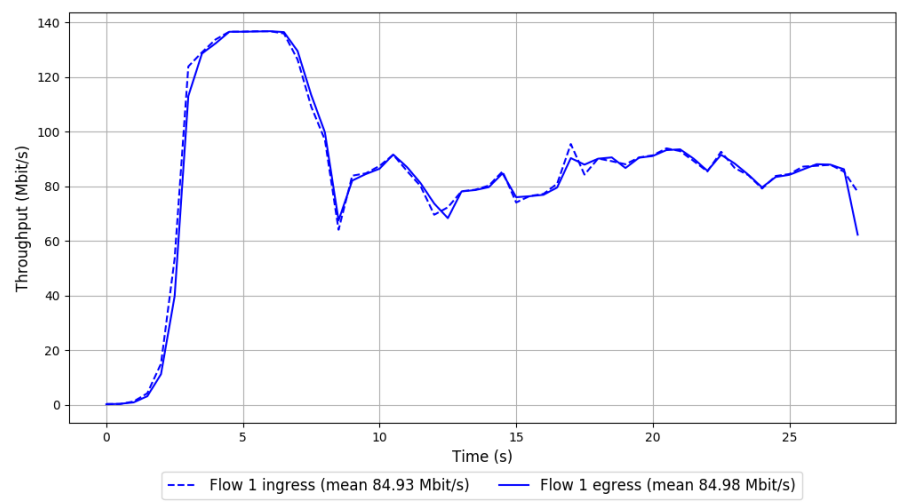
-- Flow 1:

Average throughput: 84.98 Mbit/s

95th percentile per-packet one-way delay: 116.875 ms

Loss rate: 0.74%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-10-10 19:14:16

End at: 2017-10-10 19:14:46

Below is generated by plot.py at 2017-10-10 21:55:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.62 Mbit/s

95th percentile per-packet one-way delay: 117.375 ms

Loss rate: 0.82%

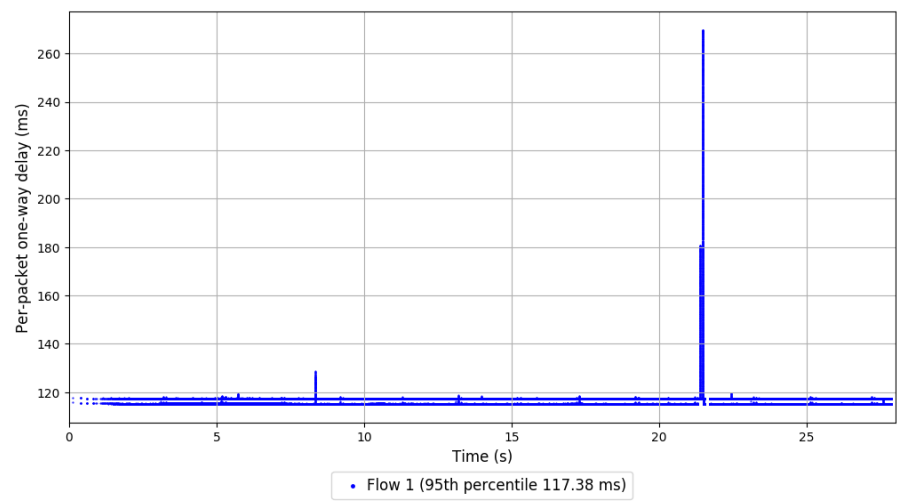
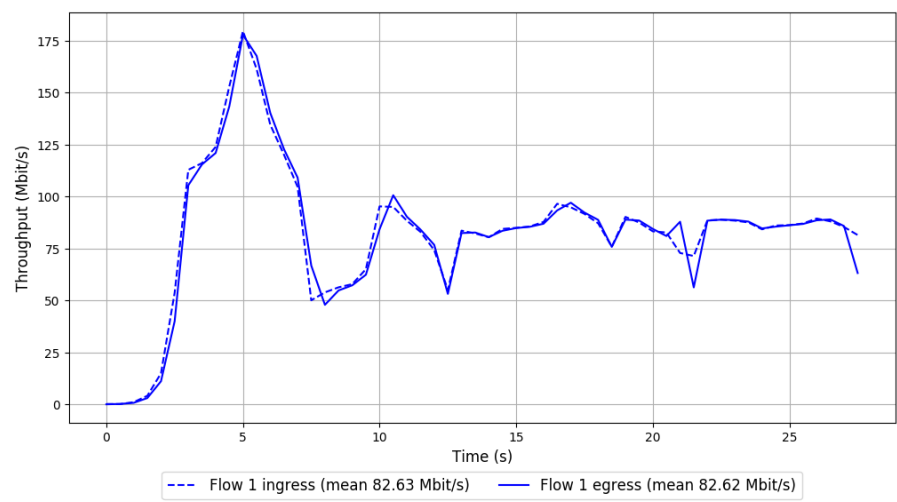
-- Flow 1:

Average throughput: 82.62 Mbit/s

95th percentile per-packet one-way delay: 117.375 ms

Loss rate: 0.82%

Run 9: Report of Copa — Data Link

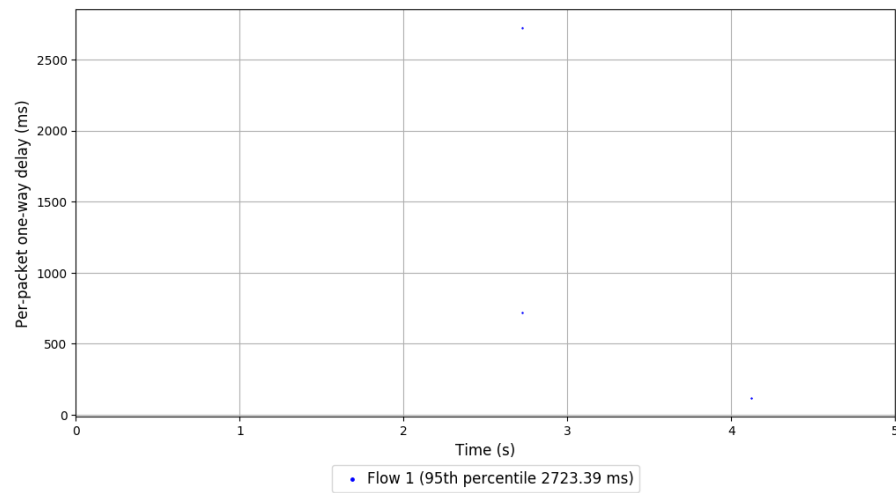
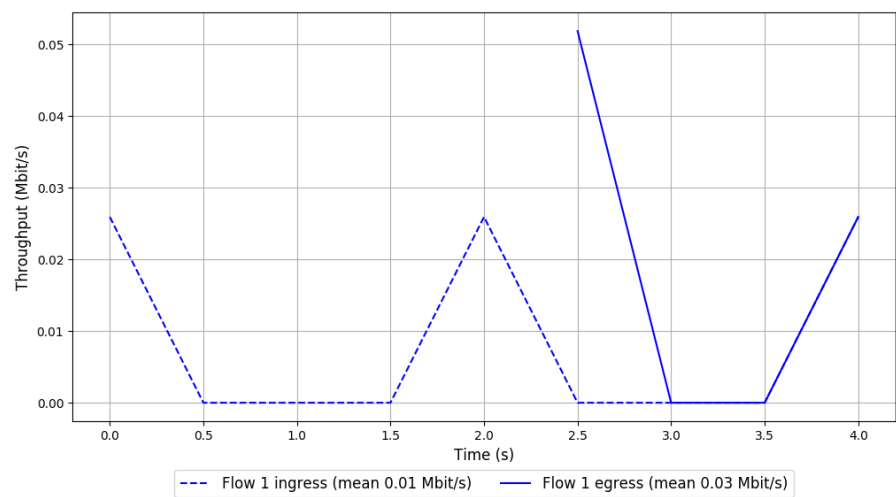


Run 10: Statistics of Copa

Start at: 2017-10-10 19:25:56

End at: 2017-10-10 19:26:26

Run 10: Report of Copa — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-10-10 17:35:30

End at: 2017-10-10 17:36:00

Below is generated by plot.py at 2017-10-10 21:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 346.26 Mbit/s

95th percentile per-packet one-way delay: 152.487 ms

Loss rate: 1.05%

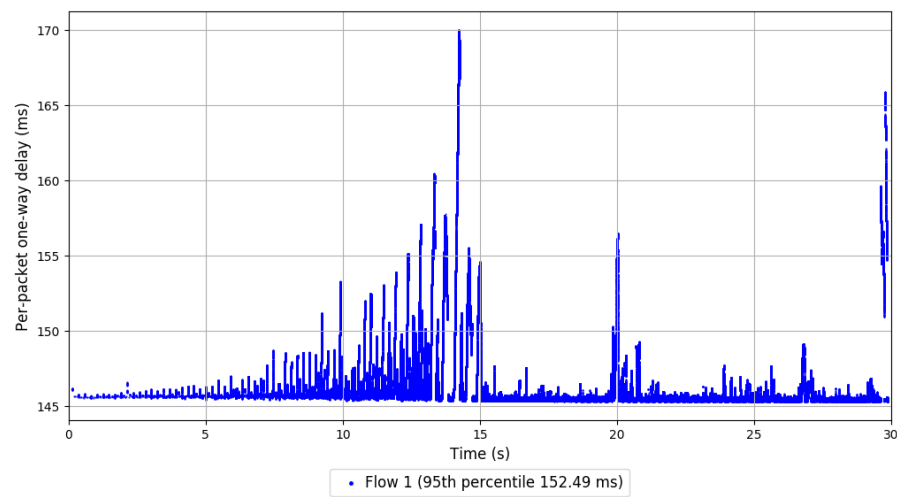
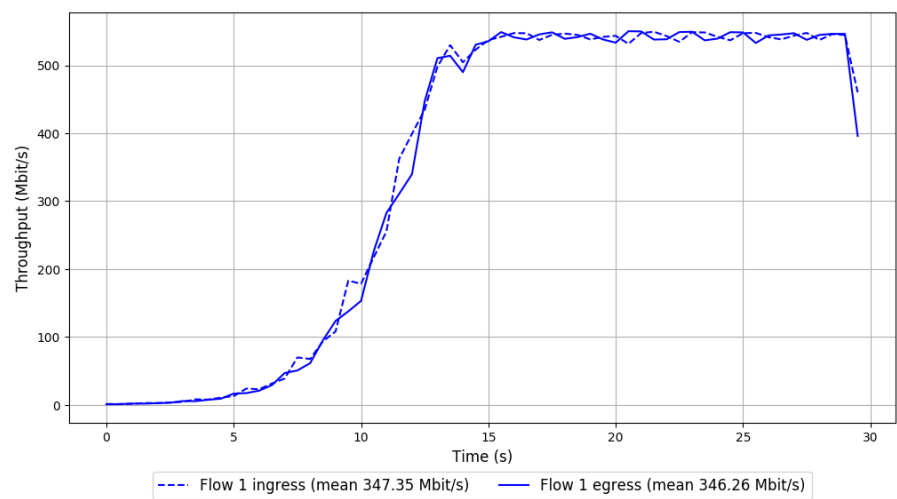
-- Flow 1:

Average throughput: 346.26 Mbit/s

95th percentile per-packet one-way delay: 152.487 ms

Loss rate: 1.05%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-10-10 17:46:42

End at: 2017-10-10 17:47:12

Below is generated by plot.py at 2017-10-10 21:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 334.26 Mbit/s

95th percentile per-packet one-way delay: 145.409 ms

Loss rate: 1.19%

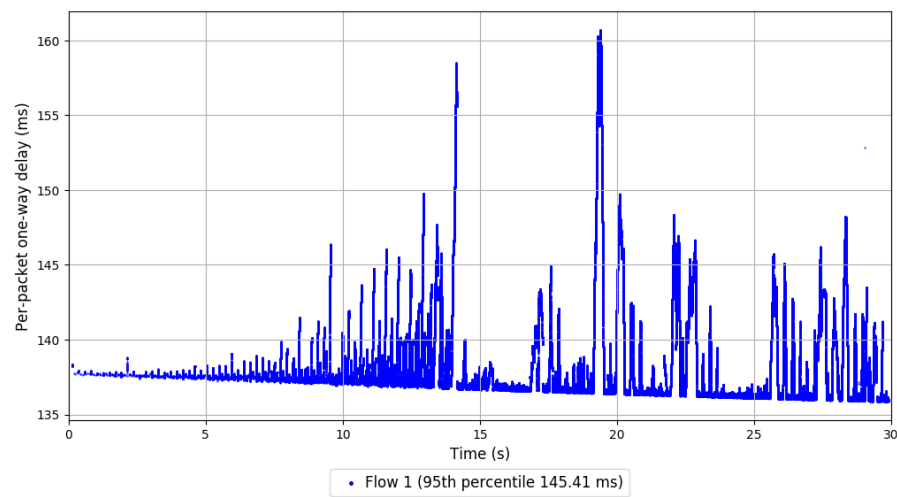
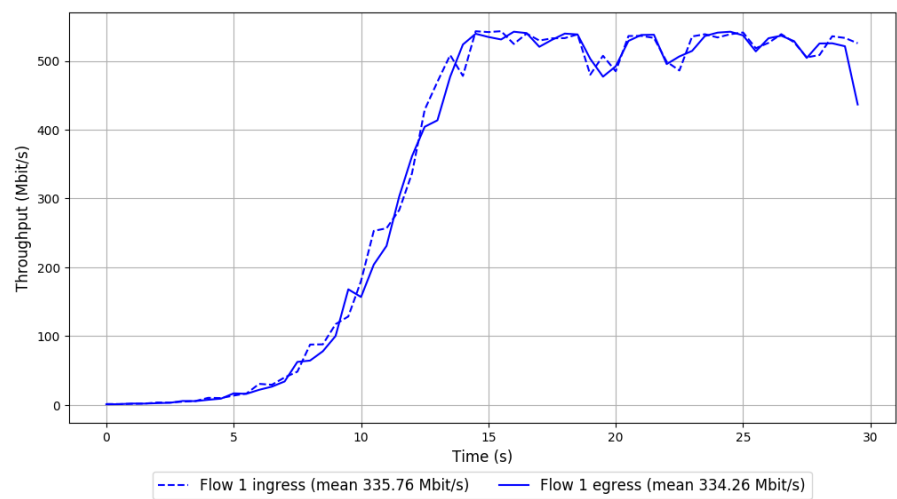
-- Flow 1:

Average throughput: 334.26 Mbit/s

95th percentile per-packet one-way delay: 145.409 ms

Loss rate: 1.19%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-10-10 17:58:29

End at: 2017-10-10 17:58:59

Below is generated by plot.py at 2017-10-10 21:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 332.15 Mbit/s

95th percentile per-packet one-way delay: 135.424 ms

Loss rate: 1.07%

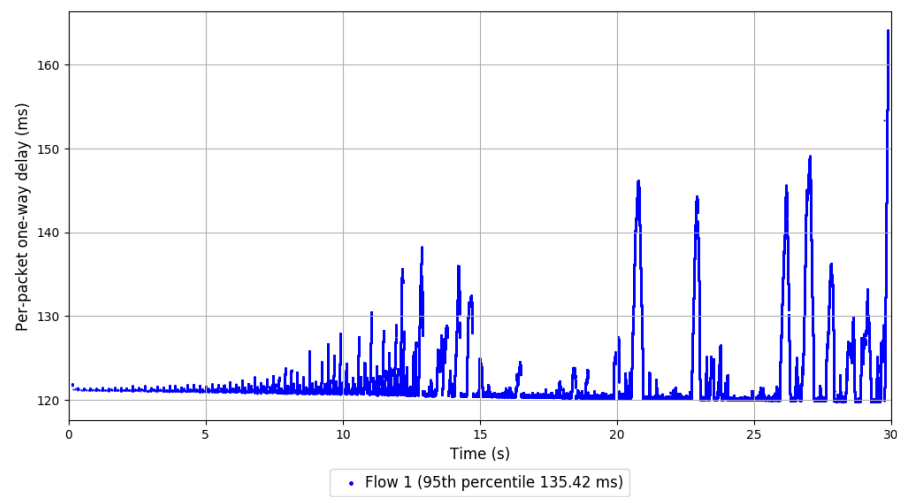
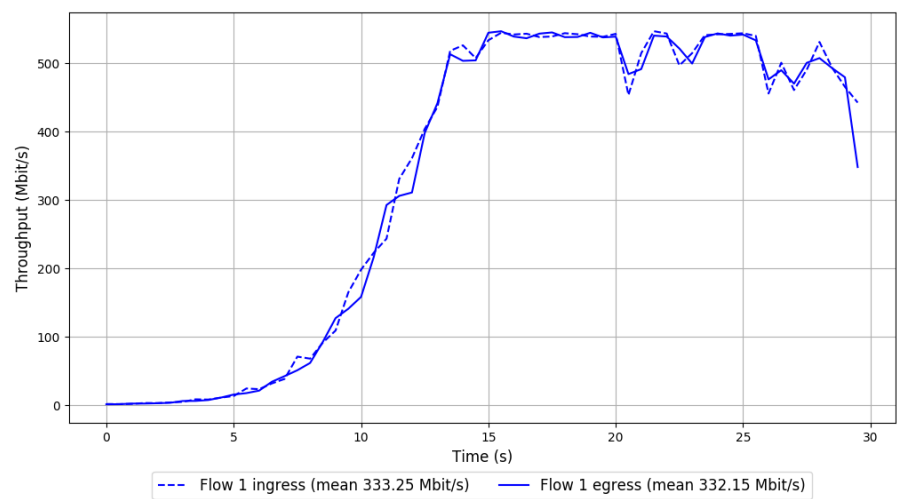
-- Flow 1:

Average throughput: 332.15 Mbit/s

95th percentile per-packet one-way delay: 135.424 ms

Loss rate: 1.07%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-10-10 18:10:05

End at: 2017-10-10 18:10:35

Below is generated by plot.py at 2017-10-10 21:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 341.89 Mbit/s

95th percentile per-packet one-way delay: 119.254 ms

Loss rate: 1.17%

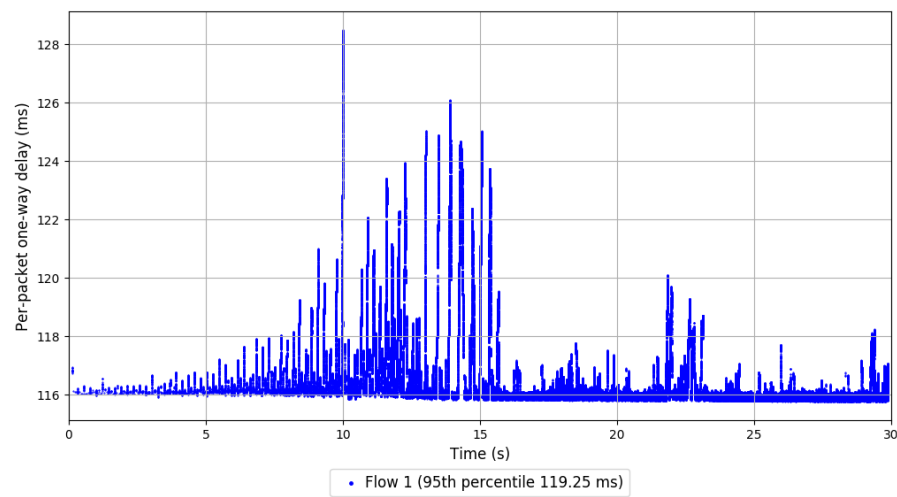
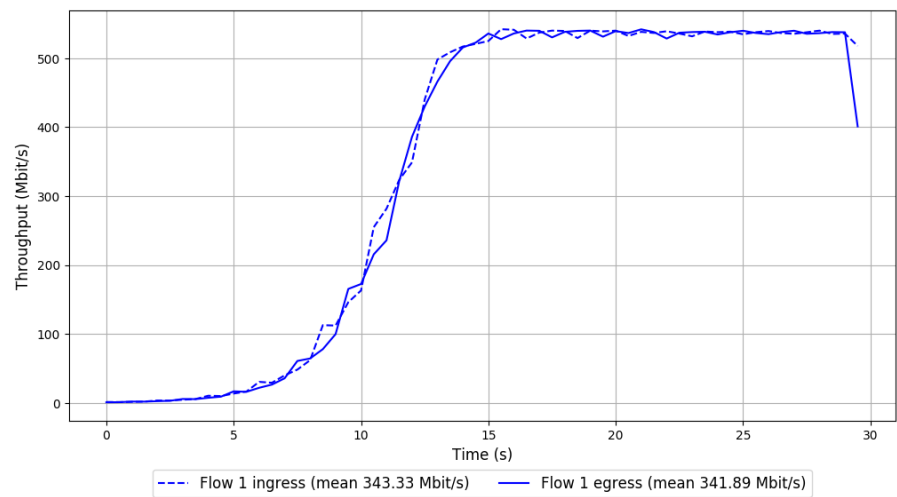
-- Flow 1:

Average throughput: 341.89 Mbit/s

95th percentile per-packet one-way delay: 119.254 ms

Loss rate: 1.17%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-10-10 18:21:26

End at: 2017-10-10 18:21:56

Below is generated by plot.py at 2017-10-10 21:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 343.26 Mbit/s

95th percentile per-packet one-way delay: 121.636 ms

Loss rate: 1.16%

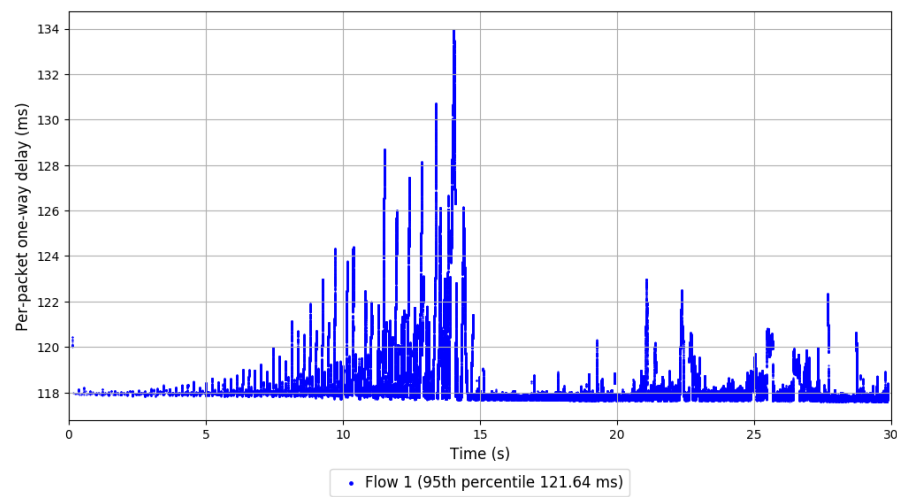
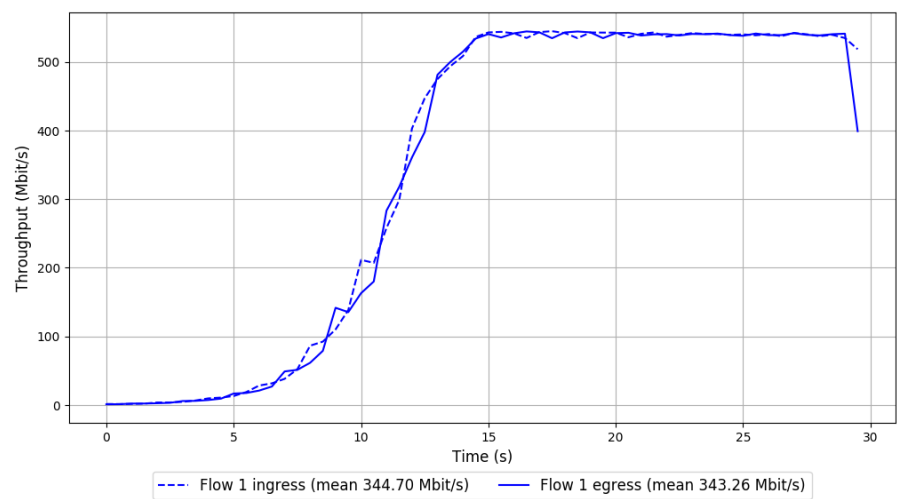
-- Flow 1:

Average throughput: 343.26 Mbit/s

95th percentile per-packet one-way delay: 121.636 ms

Loss rate: 1.16%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-10-10 18:32:48

End at: 2017-10-10 18:33:18

Below is generated by plot.py at 2017-10-10 22:00:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 346.50 Mbit/s

95th percentile per-packet one-way delay: 116.945 ms

Loss rate: 1.15%

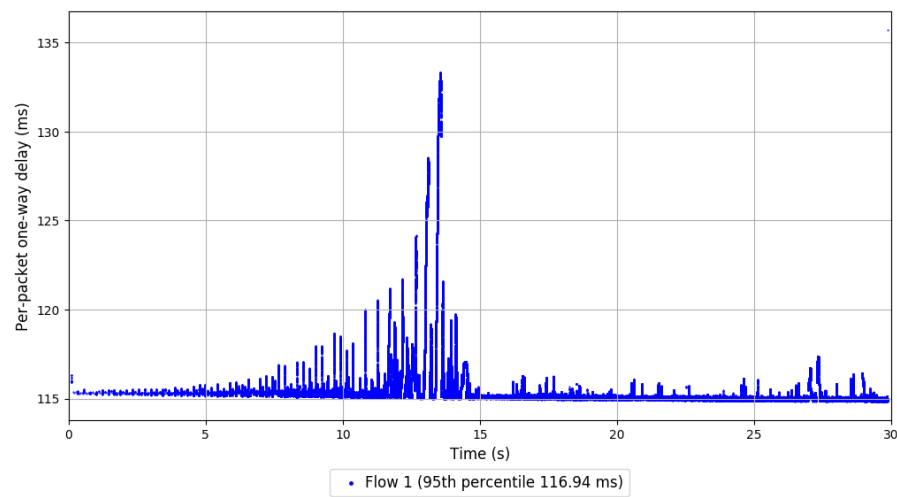
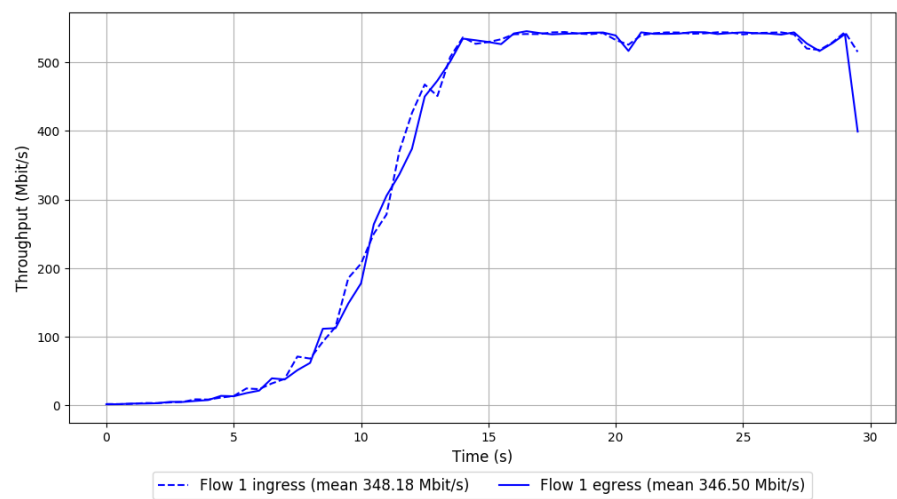
-- Flow 1:

Average throughput: 346.50 Mbit/s

95th percentile per-packet one-way delay: 116.945 ms

Loss rate: 1.15%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-10-10 18:44:06

End at: 2017-10-10 18:44:36

Below is generated by plot.py at 2017-10-10 22:00:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 345.05 Mbit/s

95th percentile per-packet one-way delay: 126.249 ms

Loss rate: 1.14%

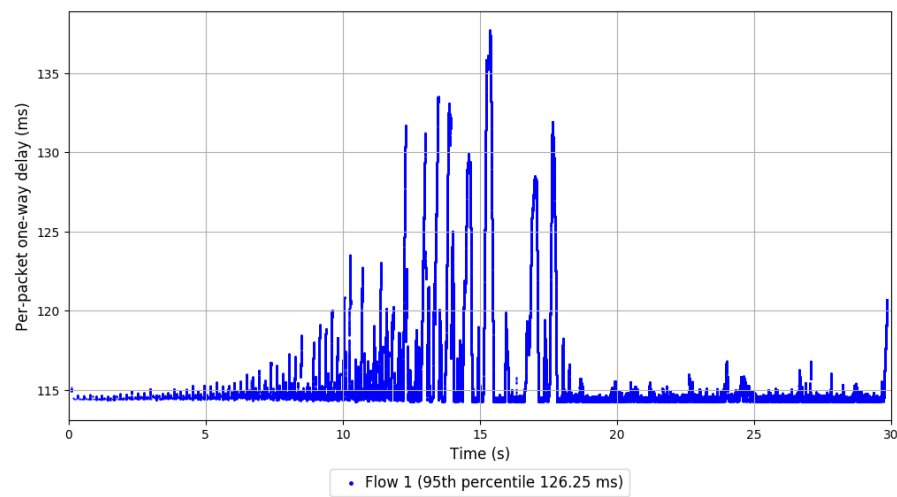
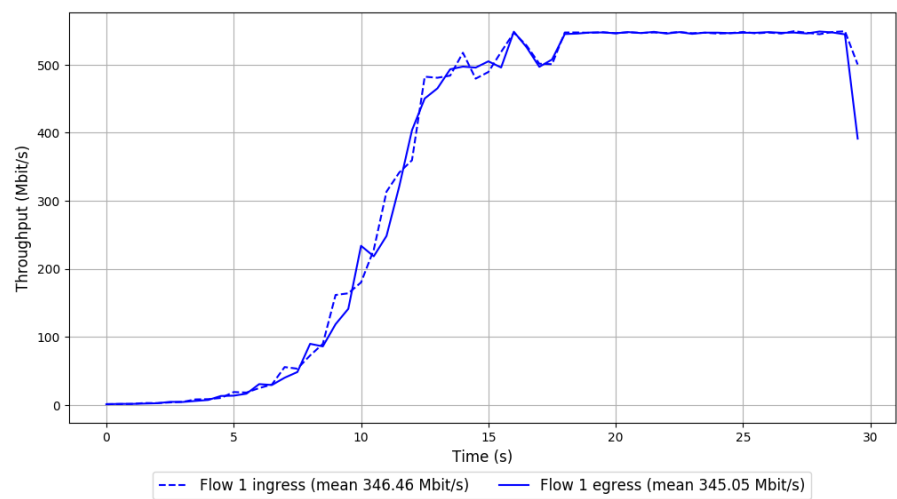
-- Flow 1:

Average throughput: 345.05 Mbit/s

95th percentile per-packet one-way delay: 126.249 ms

Loss rate: 1.14%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-10-10 18:55:22

End at: 2017-10-10 18:55:52

Below is generated by plot.py at 2017-10-10 22:01:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 324.42 Mbit/s

95th percentile per-packet one-way delay: 137.045 ms

Loss rate: 1.23%

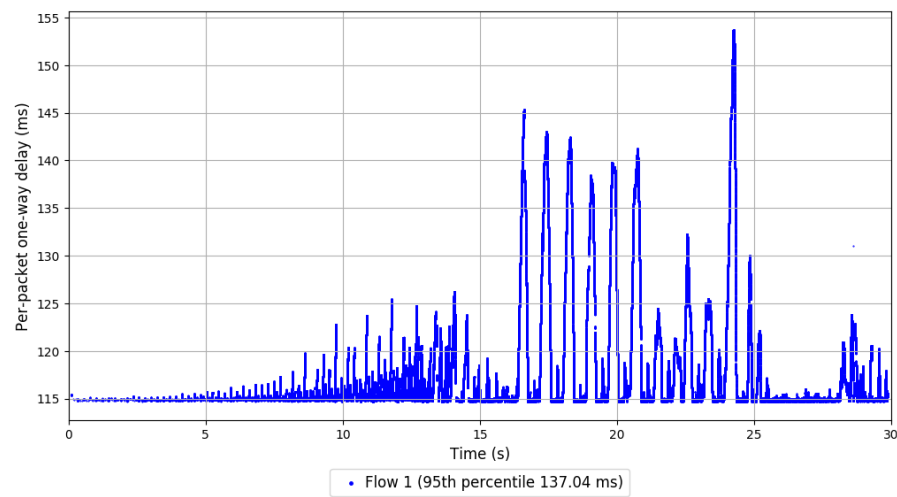
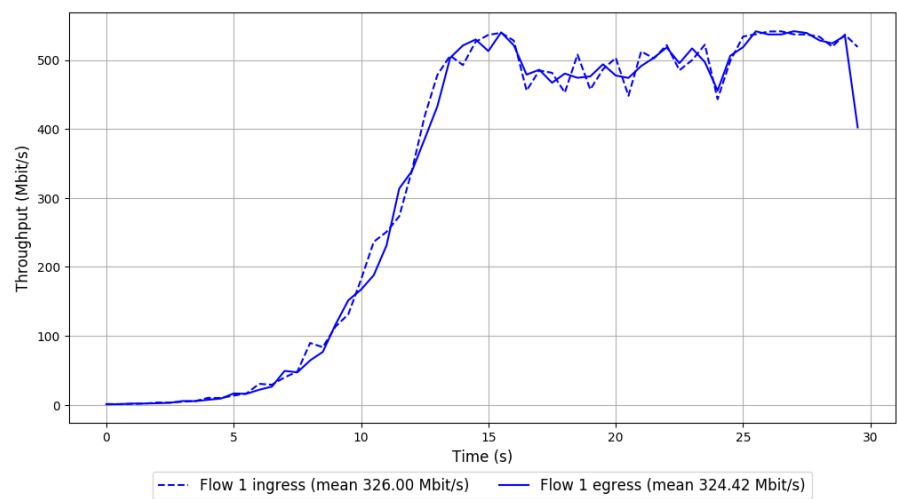
-- Flow 1:

Average throughput: 324.42 Mbit/s

95th percentile per-packet one-way delay: 137.045 ms

Loss rate: 1.23%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-10-10 19:06:50

End at: 2017-10-10 19:07:20

Below is generated by plot.py at 2017-10-10 22:04:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 342.75 Mbit/s

95th percentile per-packet one-way delay: 123.491 ms

Loss rate: 1.13%

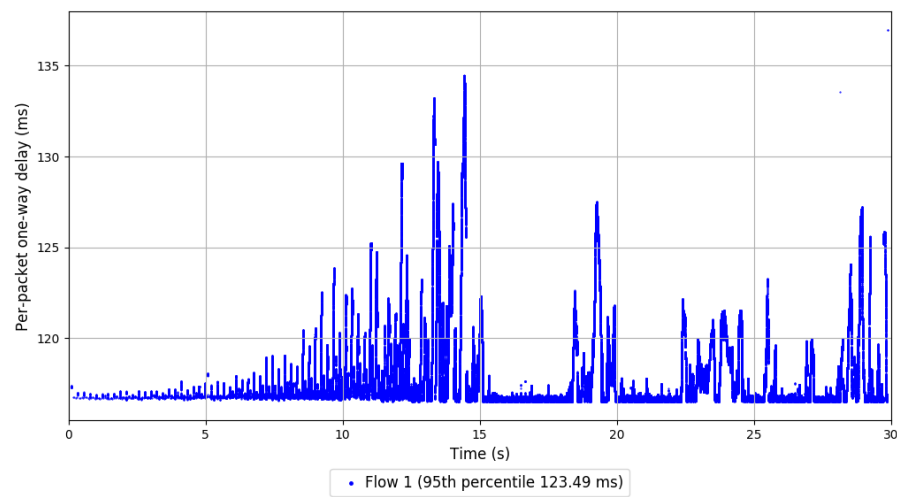
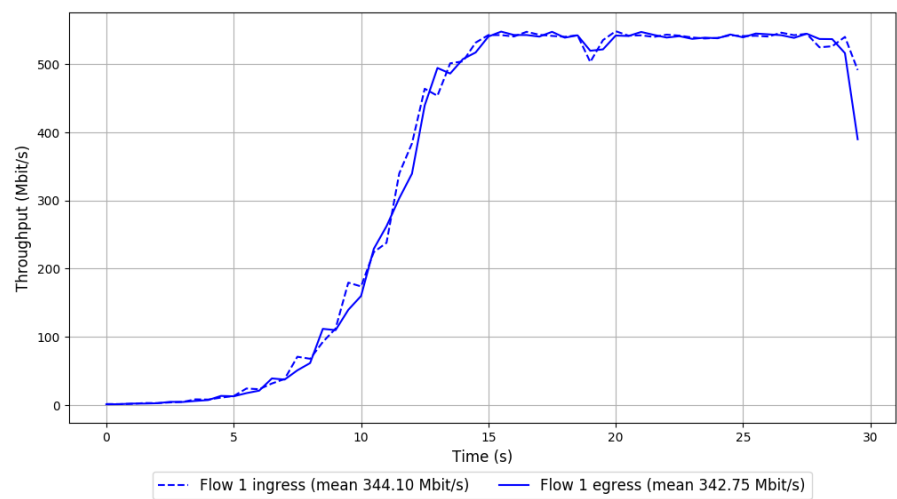
-- Flow 1:

Average throughput: 342.75 Mbit/s

95th percentile per-packet one-way delay: 123.491 ms

Loss rate: 1.13%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-10-10 19:18:31

End at: 2017-10-10 19:19:01

Below is generated by plot.py at 2017-10-10 22:04:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 343.17 Mbit/s

95th percentile per-packet one-way delay: 119.094 ms

Loss rate: 1.08%

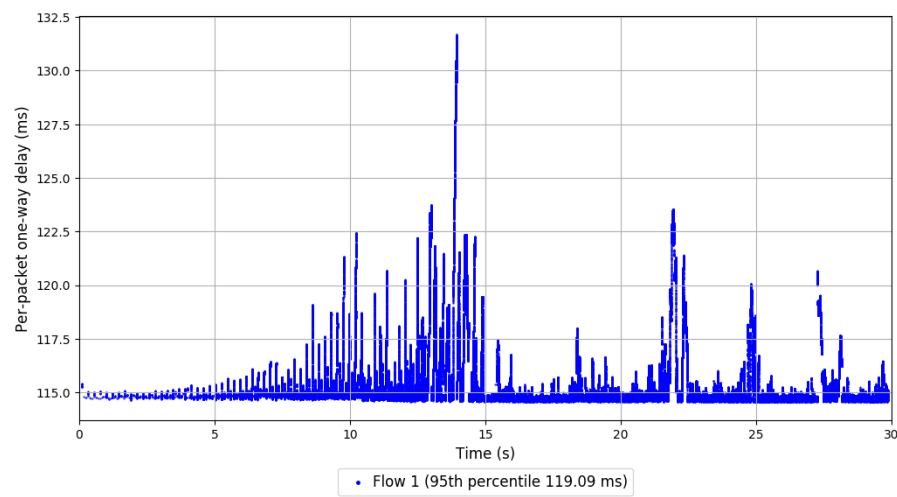
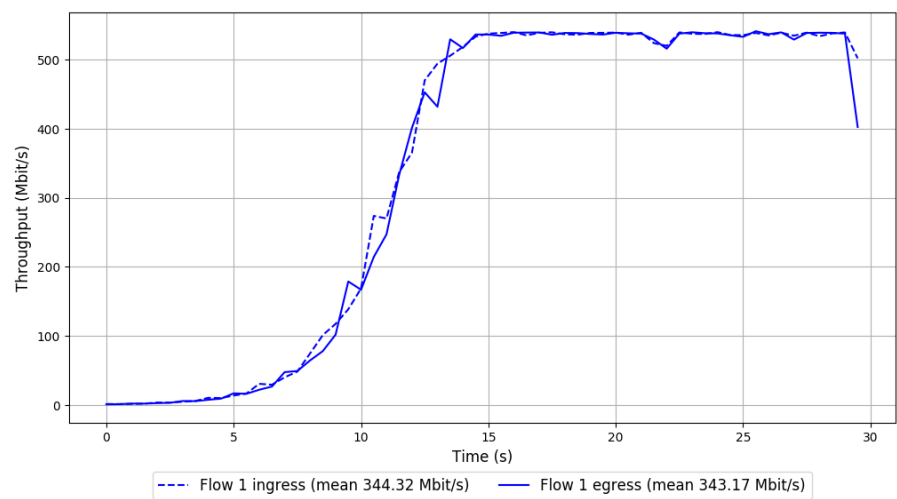
-- Flow 1:

Average throughput: 343.17 Mbit/s

95th percentile per-packet one-way delay: 119.094 ms

Loss rate: 1.08%

Run 10: Report of CalibratedKoho — Data Link

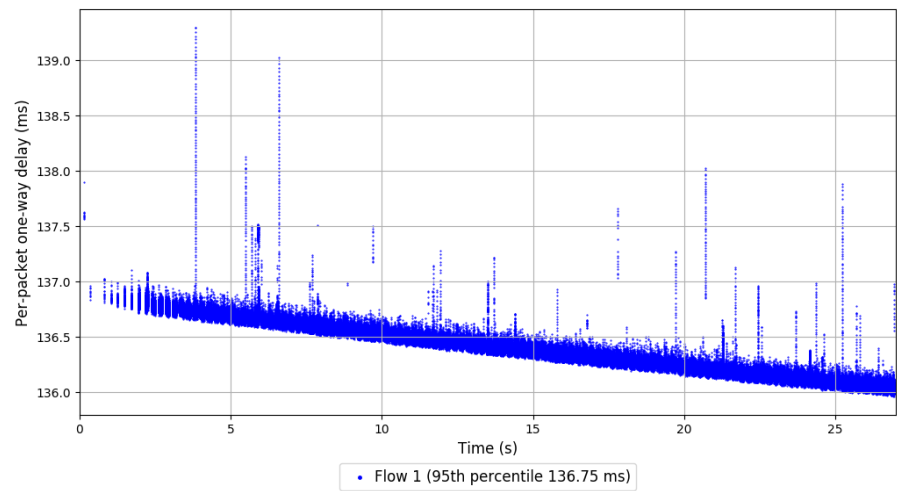
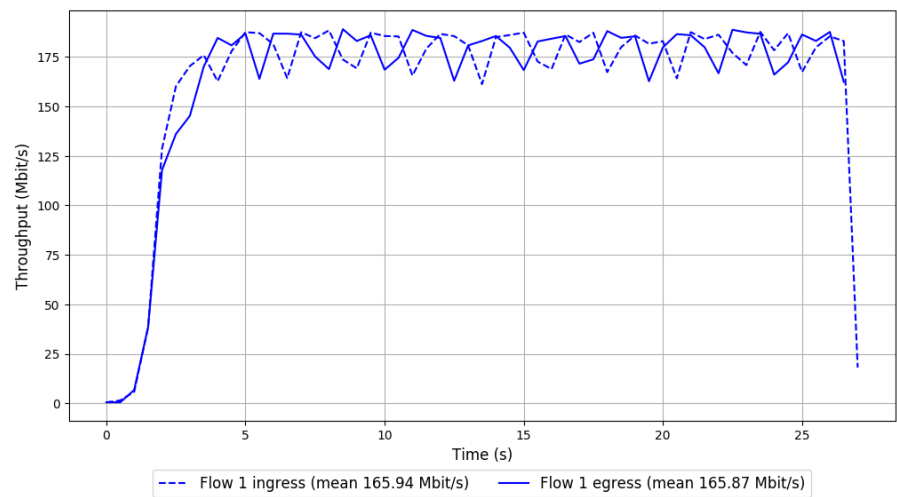


```
Run 1: Statistics of Indigo

Start at: 2017-10-10 17:39:54
End at: 2017-10-10 17:40:24

# Below is generated by plot.py at 2017-10-10 22:04:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 165.87 Mbit/s
95th percentile per-packet one-way delay: 136.750 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 165.87 Mbit/s
95th percentile per-packet one-way delay: 136.750 ms
Loss rate: 0.88%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-10-10 17:51:09

End at: 2017-10-10 17:51:39

Below is generated by plot.py at 2017-10-10 22:04:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.11 Mbit/s

95th percentile per-packet one-way delay: 130.616 ms

Loss rate: 0.78%

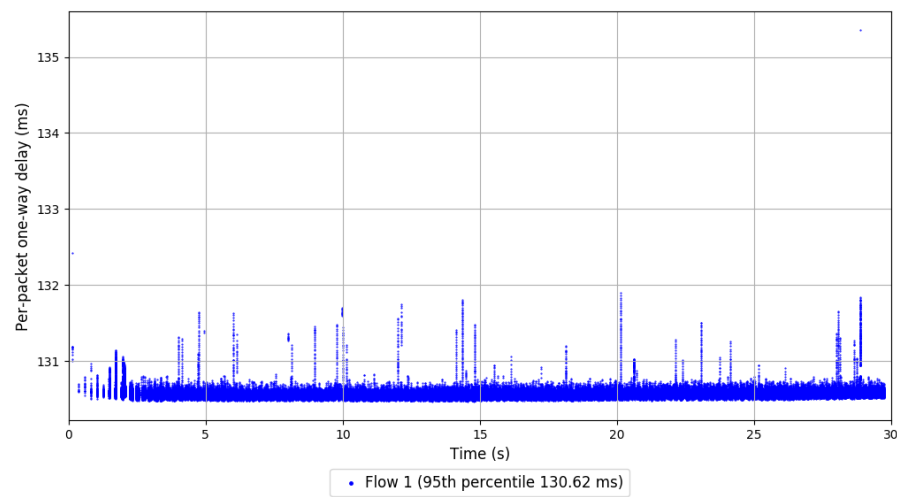
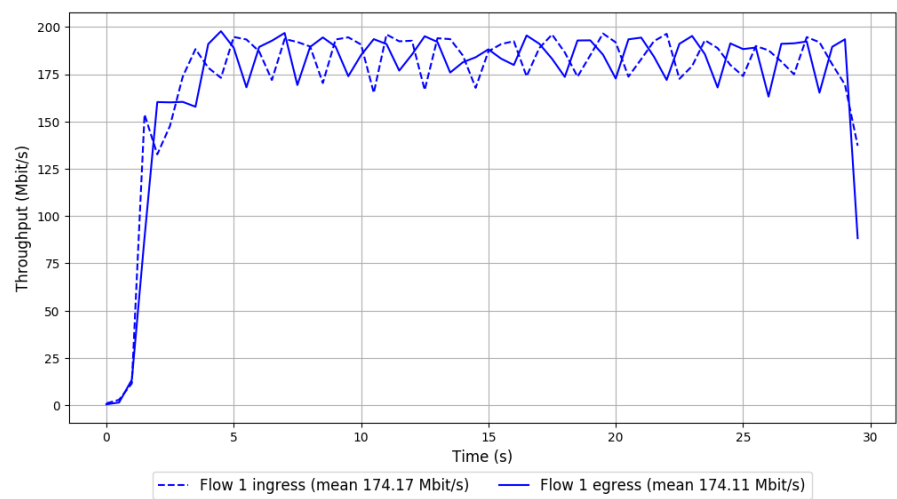
-- Flow 1:

Average throughput: 174.11 Mbit/s

95th percentile per-packet one-way delay: 130.616 ms

Loss rate: 0.78%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-10-10 18:02:53

End at: 2017-10-10 18:03:23

Below is generated by plot.py at 2017-10-10 22:04:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.59 Mbit/s

95th percentile per-packet one-way delay: 113.994 ms

Loss rate: 0.79%

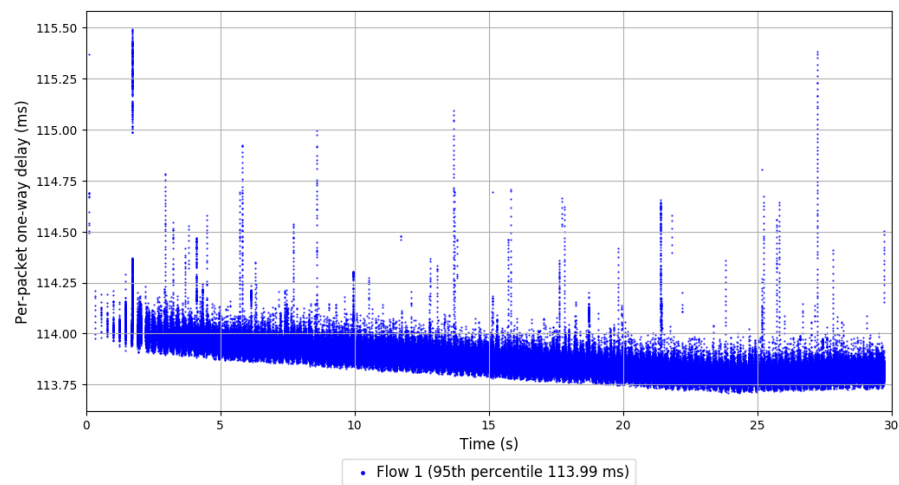
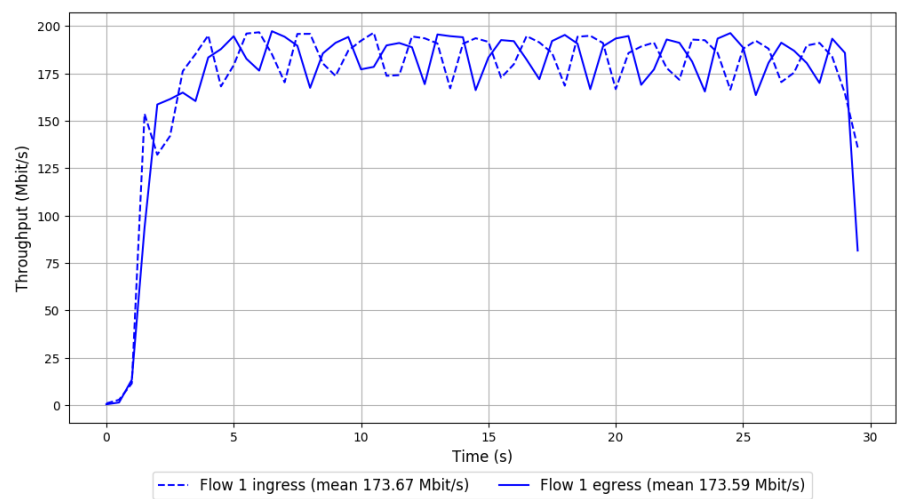
-- Flow 1:

Average throughput: 173.59 Mbit/s

95th percentile per-packet one-way delay: 113.994 ms

Loss rate: 0.79%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-10-10 18:14:26

End at: 2017-10-10 18:14:56

Below is generated by plot.py at 2017-10-10 22:04:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.00 Mbit/s

95th percentile per-packet one-way delay: 115.988 ms

Loss rate: 0.79%

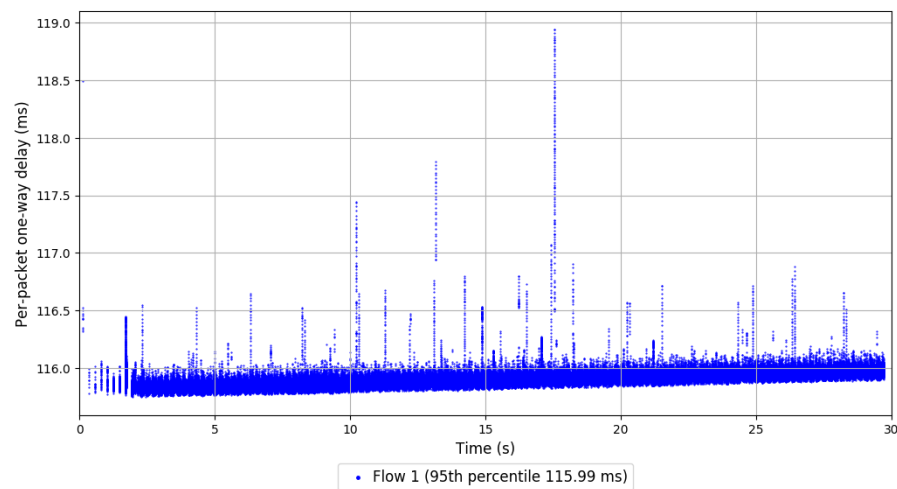
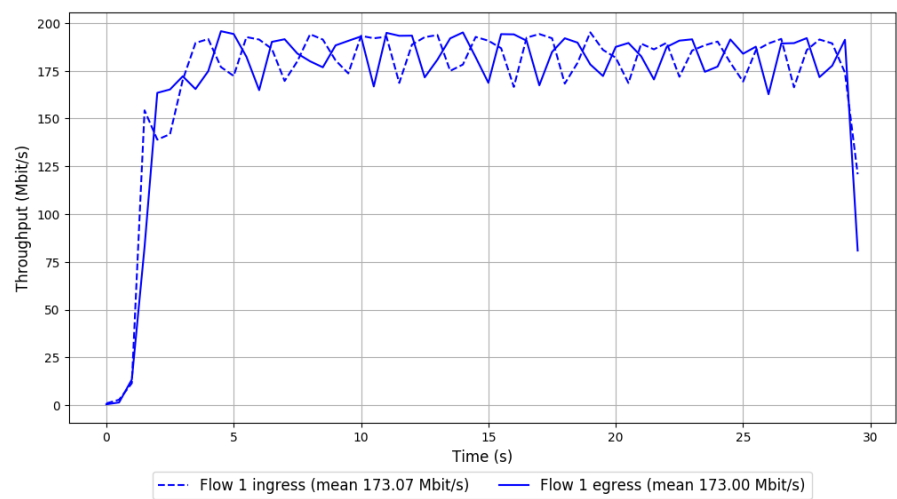
-- Flow 1:

Average throughput: 173.00 Mbit/s

95th percentile per-packet one-way delay: 115.988 ms

Loss rate: 0.79%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-10-10 18:25:52

End at: 2017-10-10 18:26:22

Below is generated by plot.py at 2017-10-10 22:04:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.41 Mbit/s

95th percentile per-packet one-way delay: 115.915 ms

Loss rate: 0.80%

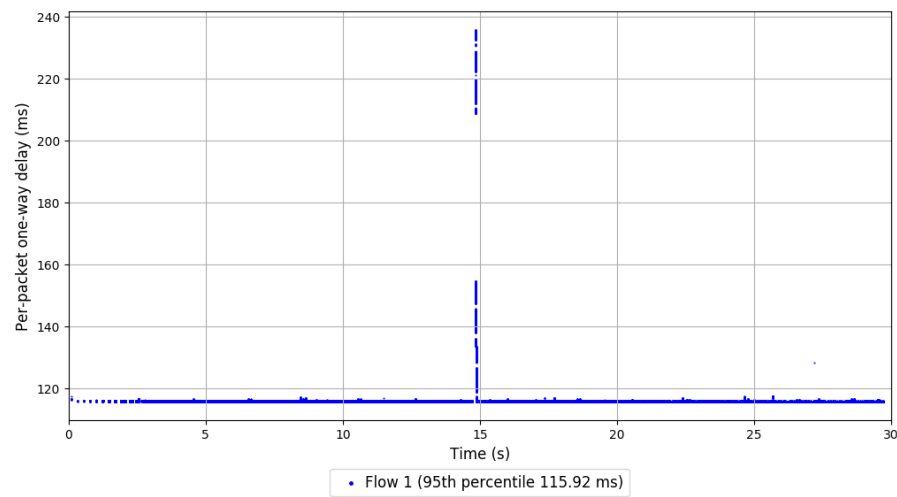
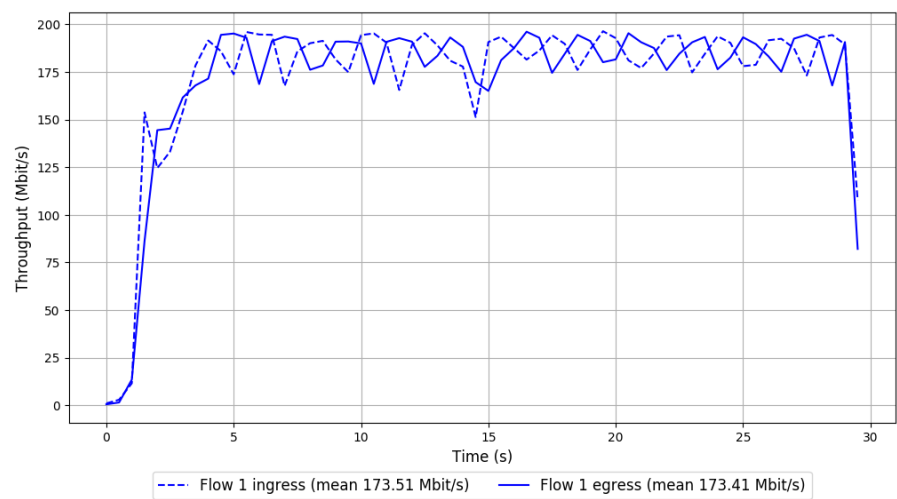
-- Flow 1:

Average throughput: 173.41 Mbit/s

95th percentile per-packet one-way delay: 115.915 ms

Loss rate: 0.80%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-10-10 18:37:13

End at: 2017-10-10 18:37:43

Below is generated by plot.py at 2017-10-10 22:04:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.69 Mbit/s

95th percentile per-packet one-way delay: 113.952 ms

Loss rate: 0.80%

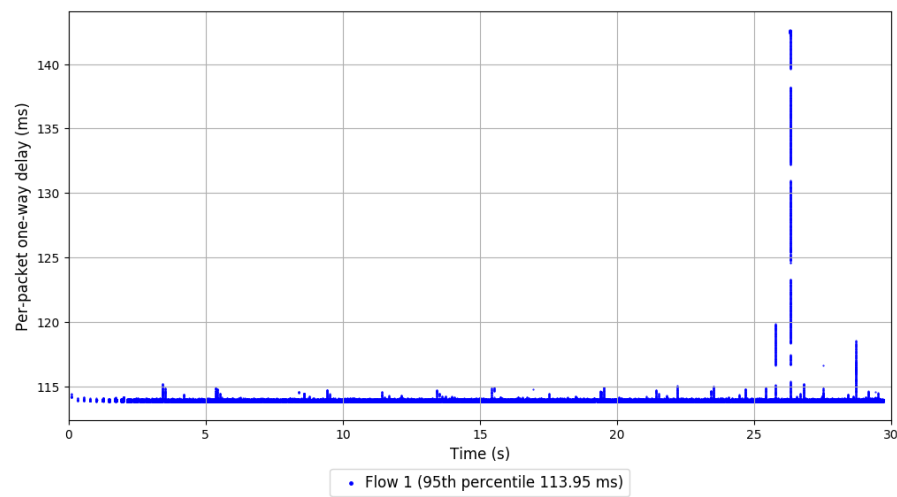
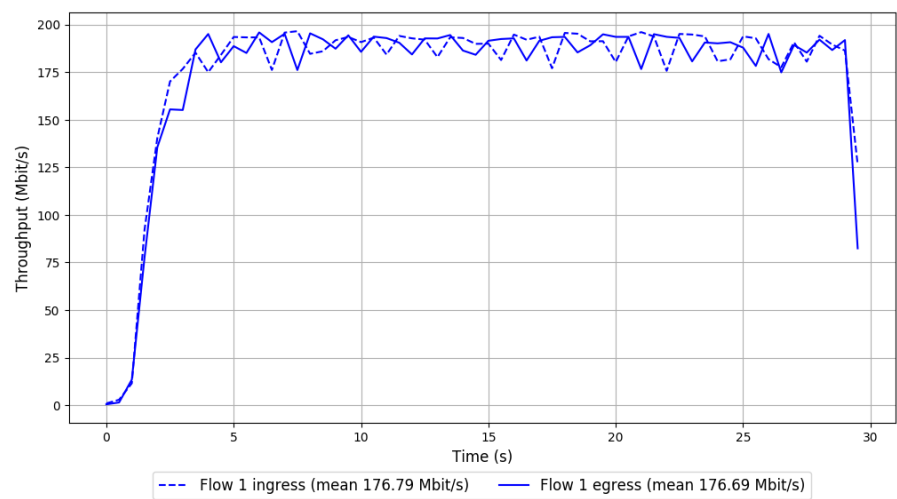
-- Flow 1:

Average throughput: 176.69 Mbit/s

95th percentile per-packet one-way delay: 113.952 ms

Loss rate: 0.80%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-10-10 18:48:34

End at: 2017-10-10 18:49:04

Below is generated by plot.py at 2017-10-10 22:04:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.39 Mbit/s

95th percentile per-packet one-way delay: 114.185 ms

Loss rate: 0.80%

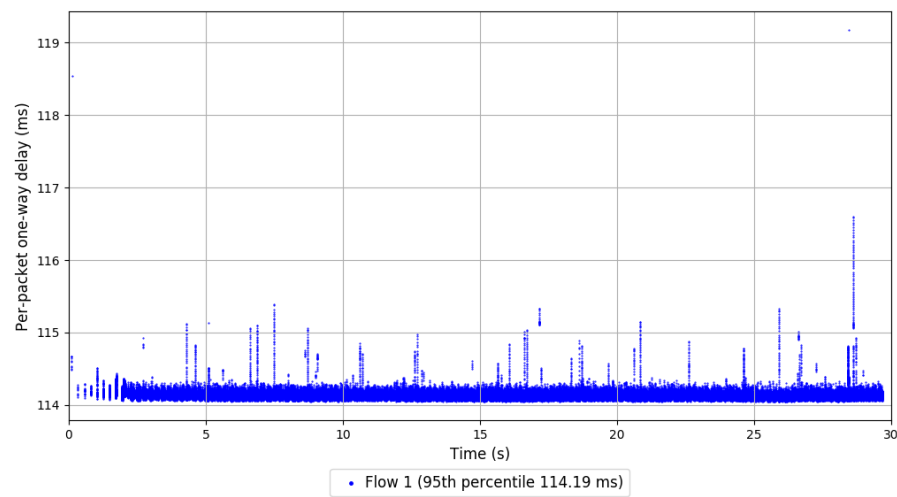
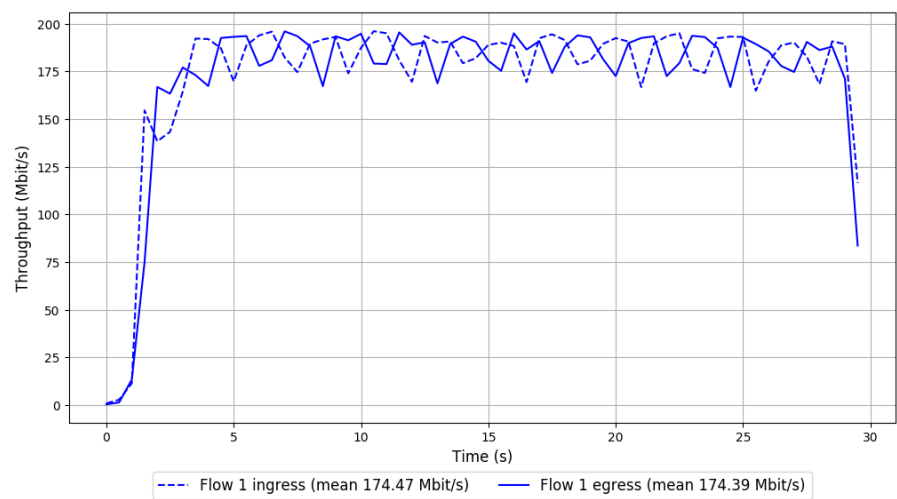
-- Flow 1:

Average throughput: 174.39 Mbit/s

95th percentile per-packet one-way delay: 114.185 ms

Loss rate: 0.80%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-10-10 18:59:48

End at: 2017-10-10 19:00:18

Below is generated by plot.py at 2017-10-10 22:04:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.04 Mbit/s

95th percentile per-packet one-way delay: 116.154 ms

Loss rate: 0.80%

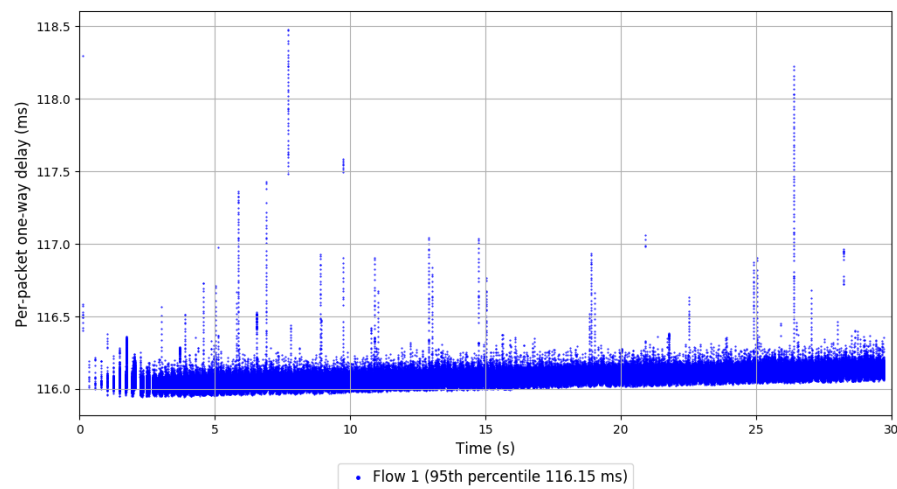
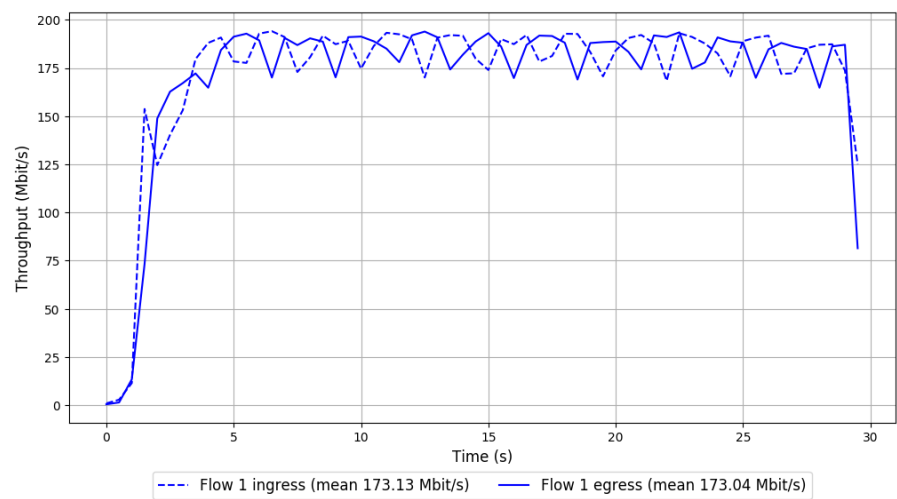
-- Flow 1:

Average throughput: 173.04 Mbit/s

95th percentile per-packet one-way delay: 116.154 ms

Loss rate: 0.80%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-10-10 19:11:15

End at: 2017-10-10 19:11:45

Below is generated by plot.py at 2017-10-10 22:04:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.64 Mbit/s

95th percentile per-packet one-way delay: 116.046 ms

Loss rate: 0.79%

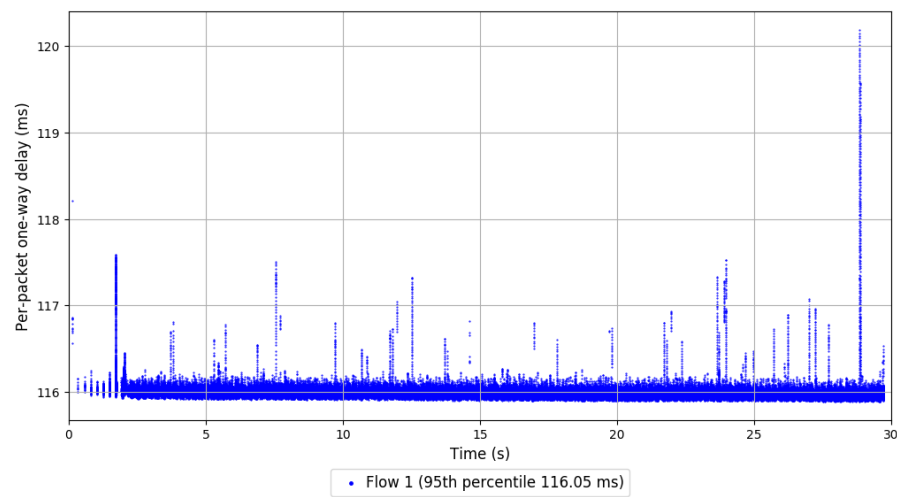
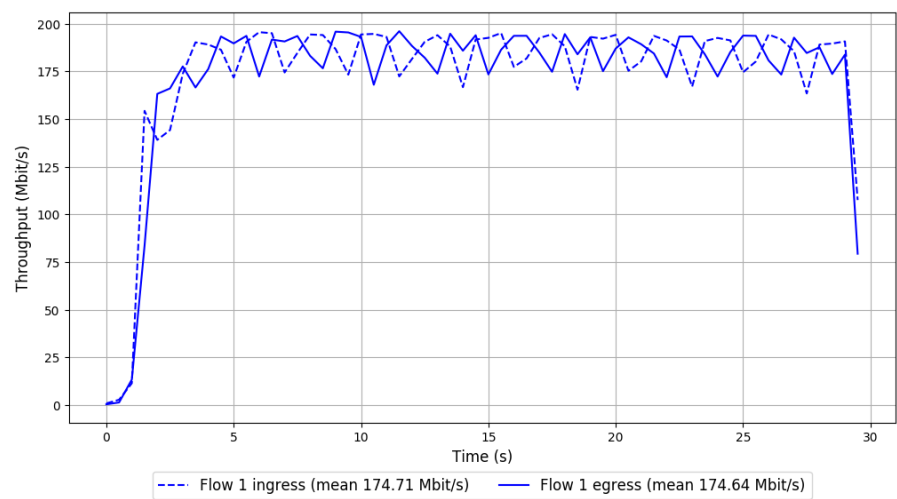
-- Flow 1:

Average throughput: 174.64 Mbit/s

95th percentile per-packet one-way delay: 116.046 ms

Loss rate: 0.79%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-10-10 19:22:56

End at: 2017-10-10 19:23:26

Below is generated by plot.py at 2017-10-10 22:04:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.53 Mbit/s

95th percentile per-packet one-way delay: 114.783 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 173.53 Mbit/s

95th percentile per-packet one-way delay: 114.783 ms

Loss rate: 0.79%

Run 10: Report of Indigo — Data Link

