

Pantheon Report

Generated at 2017-10-10 22:38:46 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

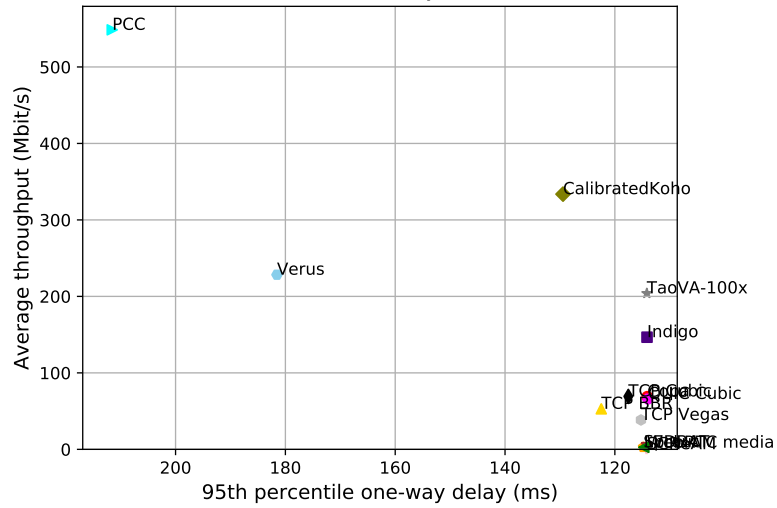
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

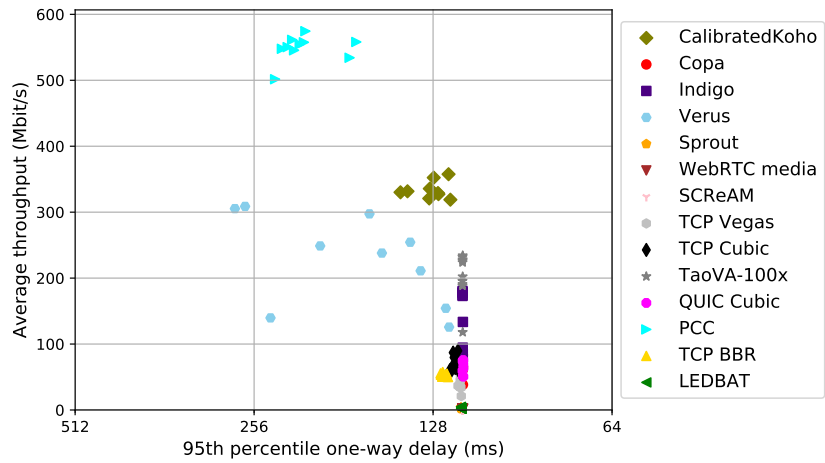
Git summary:

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



test from GCE Iowa Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	52.99	122.47	0.03
TCP Cubic	10	69.20	117.55	0.01
LEDBAT	10	2.63	114.73	0.04
PCC	10	548.54	211.53	1.08
QUIC Cubic	9	65.93	113.98	0.00
SCReAM	8	0.21	114.23	0.00
WebRTC media	10	2.16	114.21	0.00
Sprout	10	2.80	114.82	0.12
TaoVA-100x	10	203.95	114.18	0.01
TCP Vegas	10	38.41	115.25	0.00
Verus	10	228.34	181.54	0.65
Copa	9	68.86	114.10	0.00
CalibratedKoho	9	333.71	129.44	0.01
Indigo	10	146.65	114.14	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-10-10 19:30:24

End at: 2017-10-10 19:30:54

Below is generated by plot.py at 2017-10-10 21:55:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.34 Mbit/s

95th percentile per-packet one-way delay: 121.589 ms

Loss rate: 0.00%

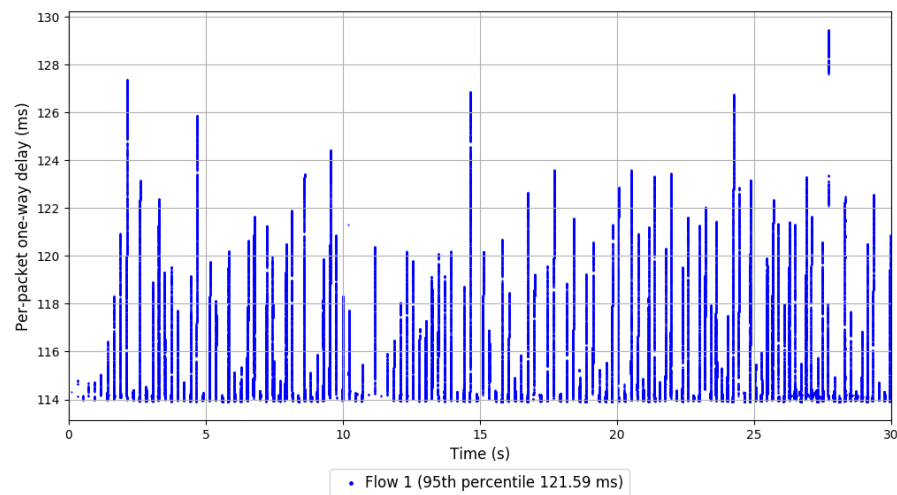
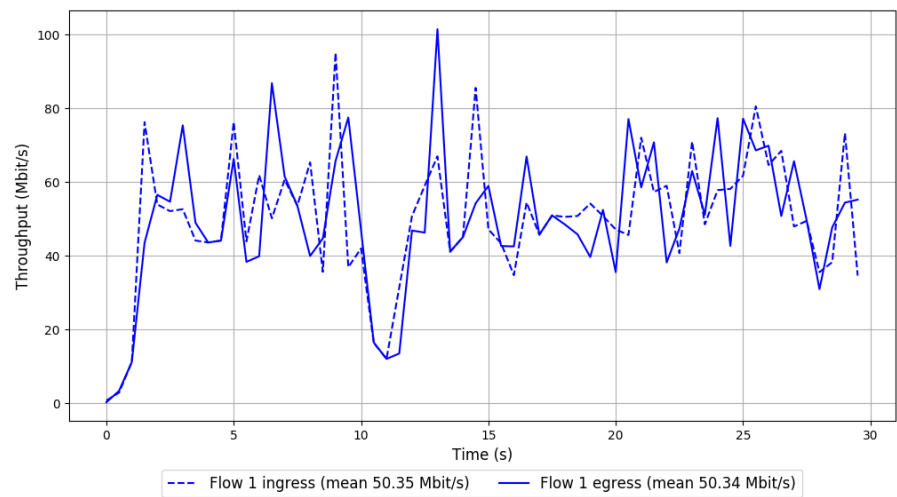
-- Flow 1:

Average throughput: 50.34 Mbit/s

95th percentile per-packet one-way delay: 121.589 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-10-10 19:41:46

End at: 2017-10-10 19:42:16

Below is generated by plot.py at 2017-10-10 21:55:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.34 Mbit/s

95th percentile per-packet one-way delay: 122.296 ms

Loss rate: 0.00%

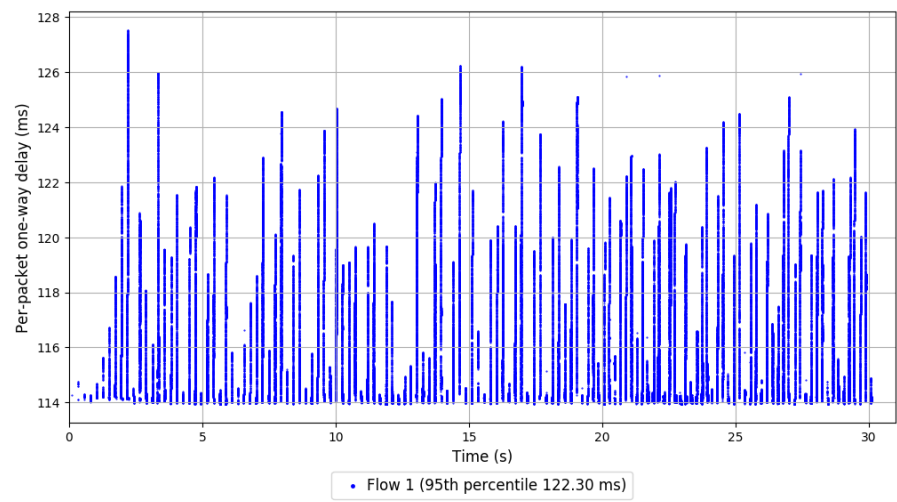
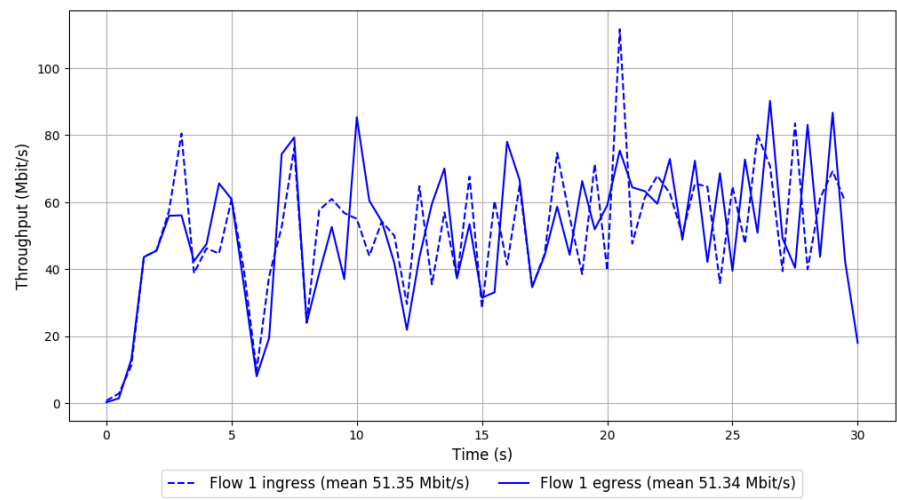
-- Flow 1:

Average throughput: 51.34 Mbit/s

95th percentile per-packet one-way delay: 122.296 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-10-10 19:53:04

End at: 2017-10-10 19:53:34

Below is generated by plot.py at 2017-10-10 21:55:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.44 Mbit/s

95th percentile per-packet one-way delay: 123.572 ms

Loss rate: 0.00%

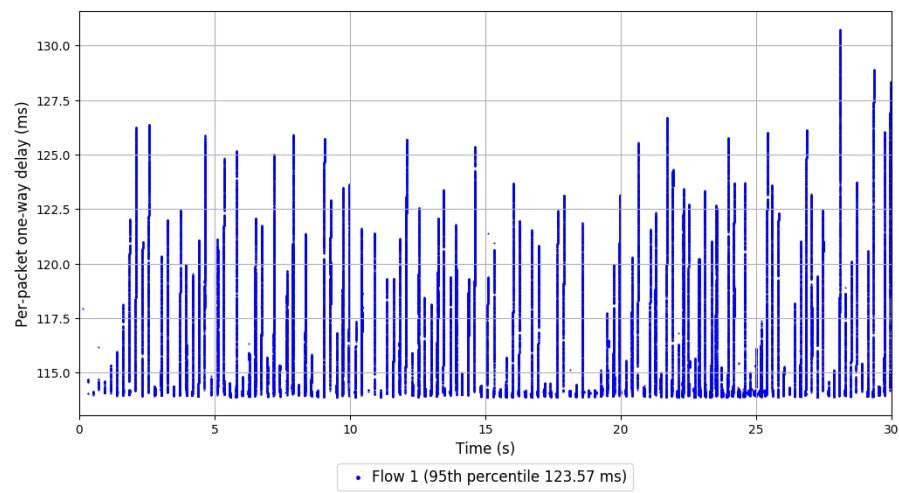
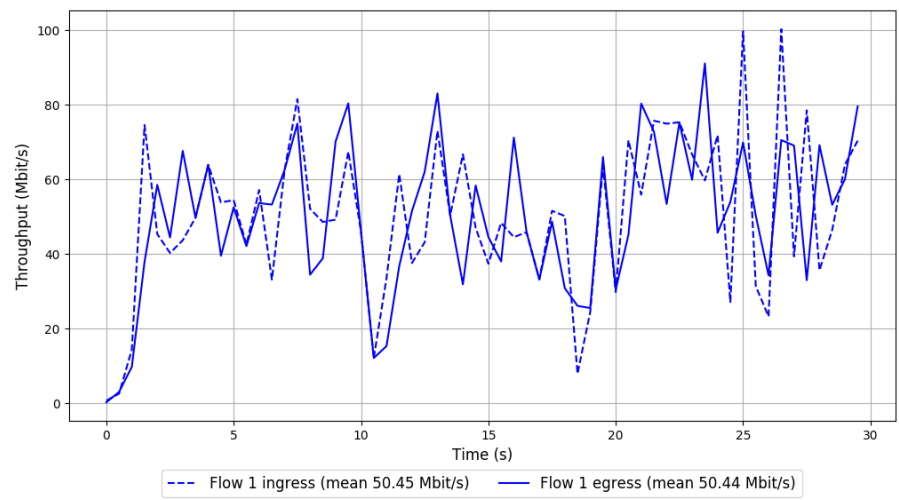
-- Flow 1:

Average throughput: 50.44 Mbit/s

95th percentile per-packet one-way delay: 123.572 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-10-10 20:04:15

End at: 2017-10-10 20:04:45

Below is generated by plot.py at 2017-10-10 21:55:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.22 Mbit/s

95th percentile per-packet one-way delay: 121.334 ms

Loss rate: 0.00%

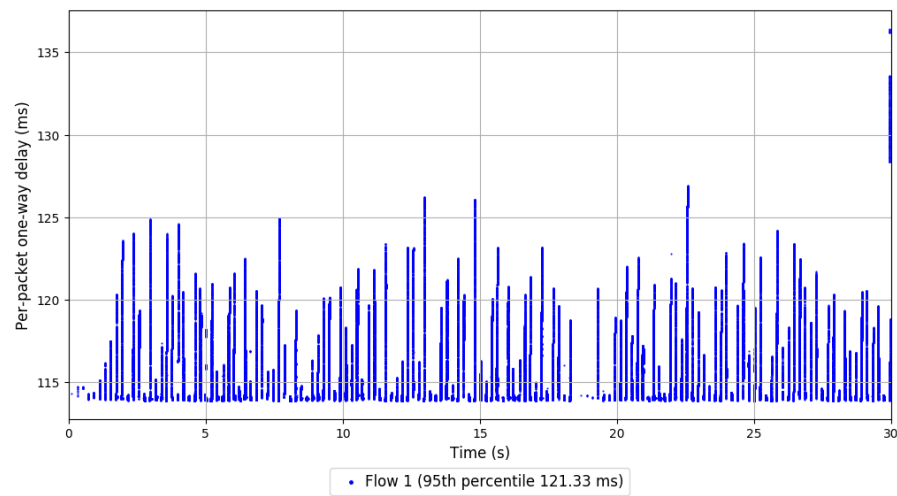
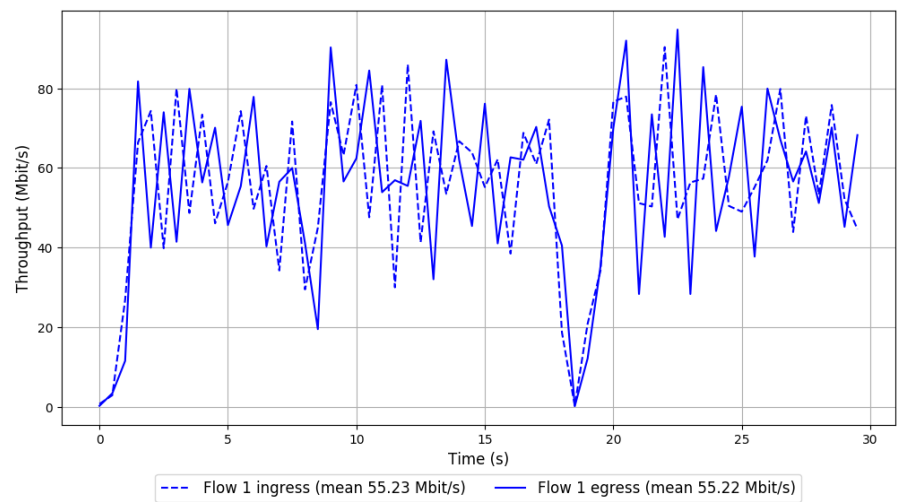
-- Flow 1:

Average throughput: 55.22 Mbit/s

95th percentile per-packet one-way delay: 121.334 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-10-10 20:15:36

End at: 2017-10-10 20:16:06

Below is generated by plot.py at 2017-10-10 21:55:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.55 Mbit/s

95th percentile per-packet one-way delay: 123.317 ms

Loss rate: 0.00%

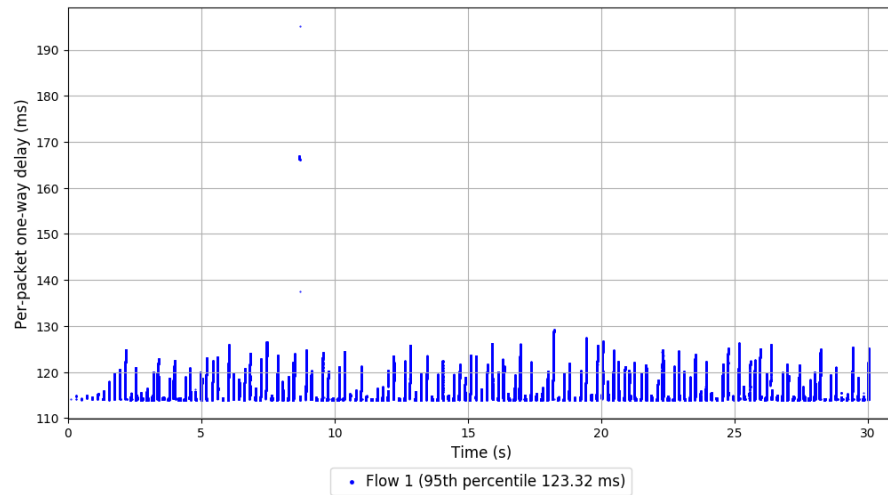
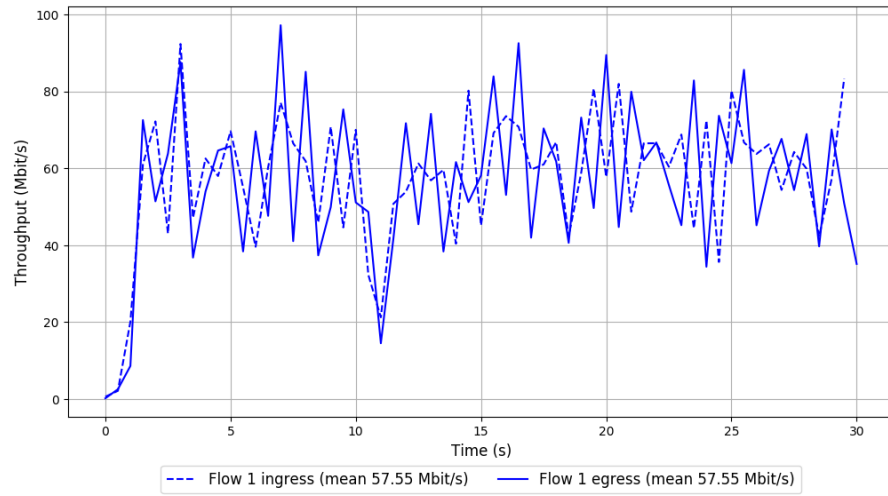
-- Flow 1:

Average throughput: 57.55 Mbit/s

95th percentile per-packet one-way delay: 123.317 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-10-10 20:26:49

End at: 2017-10-10 20:27:19

Below is generated by plot.py at 2017-10-10 21:55:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.40 Mbit/s

95th percentile per-packet one-way delay: 121.512 ms

Loss rate: 0.00%

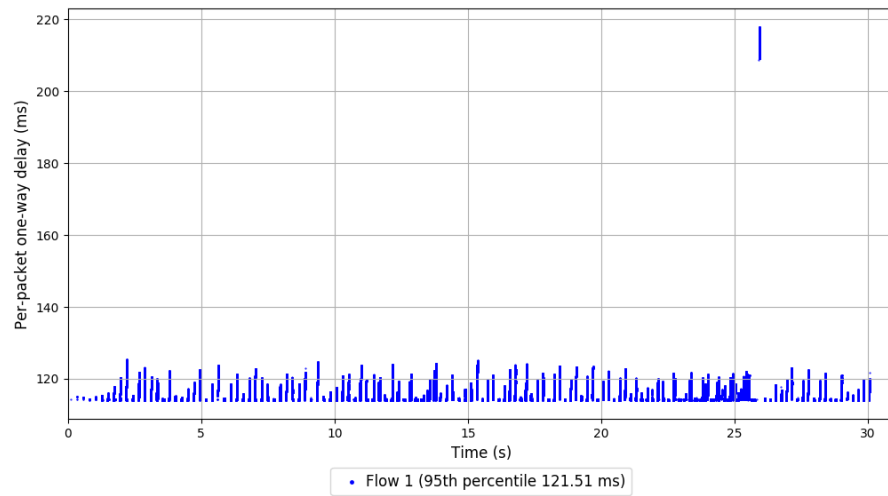
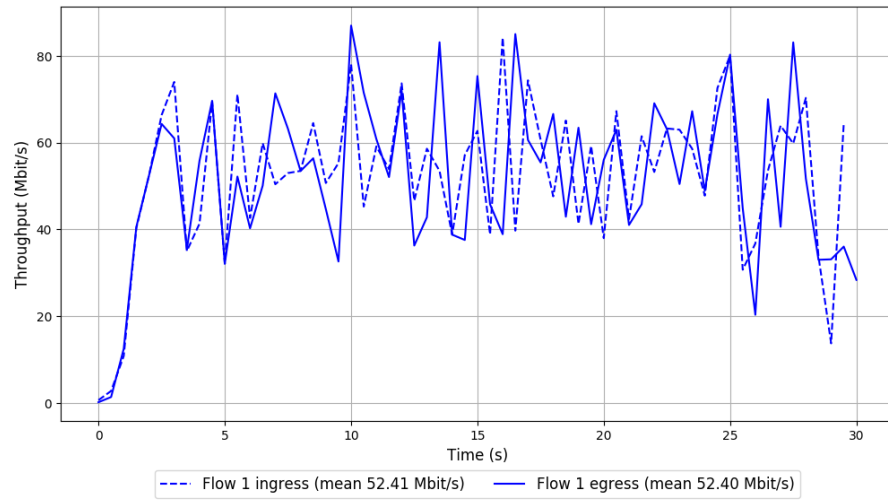
-- Flow 1:

Average throughput: 52.40 Mbit/s

95th percentile per-packet one-way delay: 121.512 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-10-10 20:38:15

End at: 2017-10-10 20:38:45

Below is generated by plot.py at 2017-10-10 21:55:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.58 Mbit/s

95th percentile per-packet one-way delay: 124.339 ms

Loss rate: 0.00%

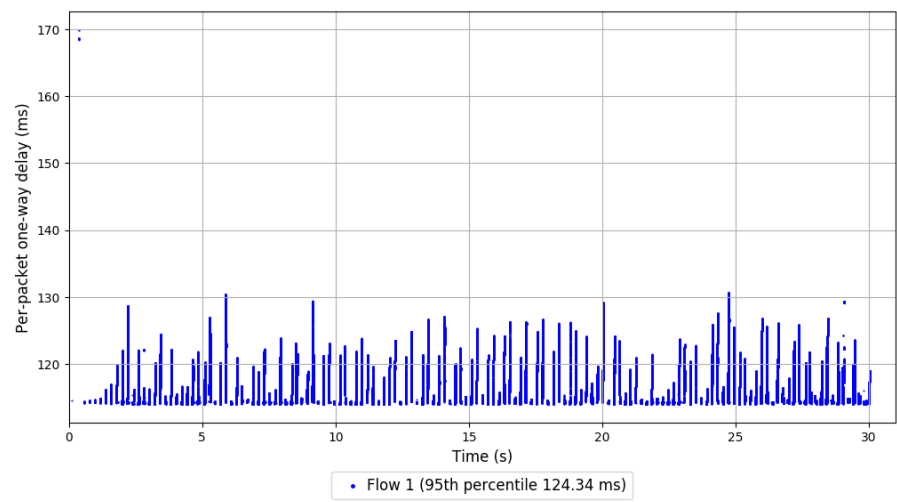
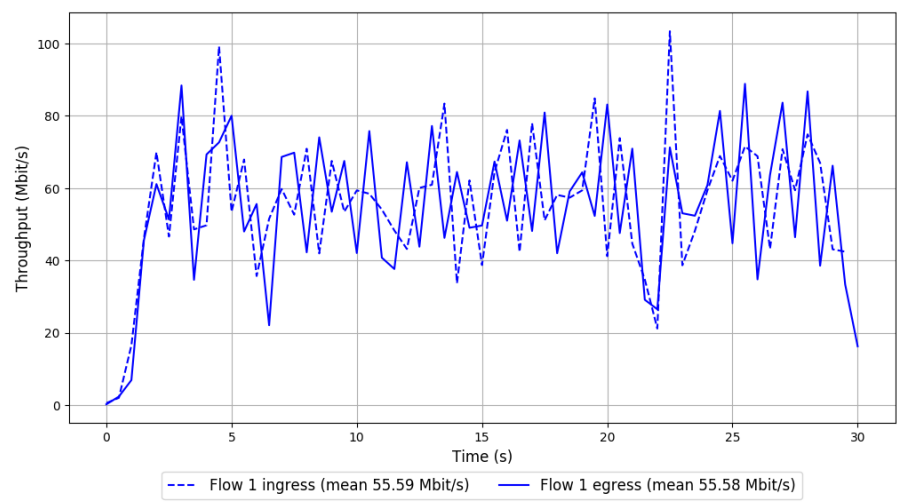
-- Flow 1:

Average throughput: 55.58 Mbit/s

95th percentile per-packet one-way delay: 124.339 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-10-10 20:49:36

End at: 2017-10-10 20:50:06

Below is generated by plot.py at 2017-10-10 21:55:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.97 Mbit/s

95th percentile per-packet one-way delay: 120.821 ms

Loss rate: 0.01%

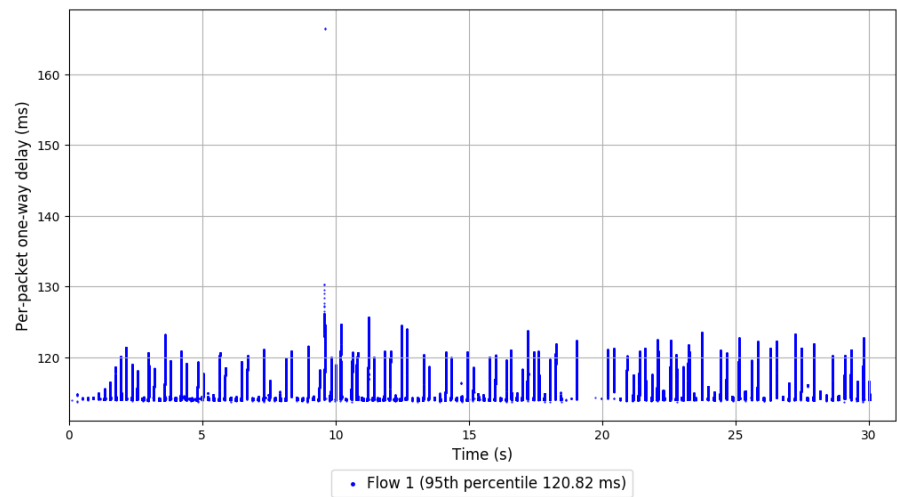
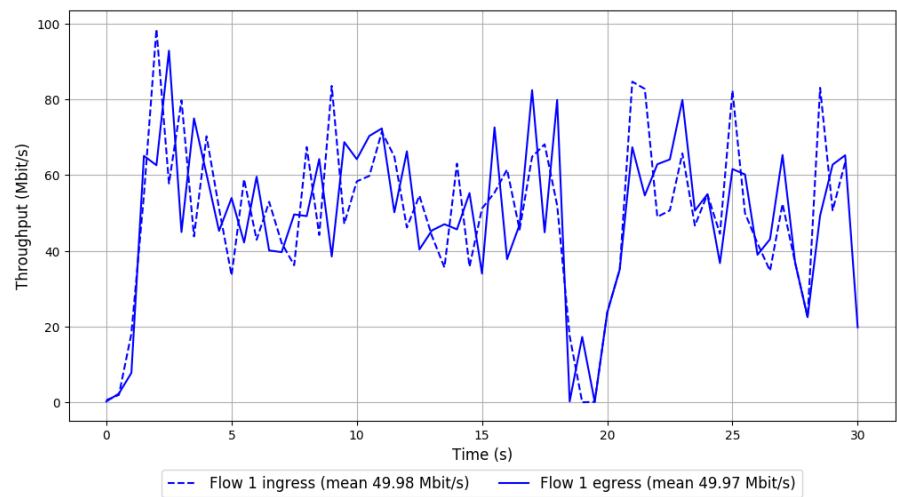
-- Flow 1:

Average throughput: 49.97 Mbit/s

95th percentile per-packet one-way delay: 120.821 ms

Loss rate: 0.01%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-10-10 21:01:08

End at: 2017-10-10 21:01:38

Below is generated by plot.py at 2017-10-10 21:56:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.67 Mbit/s

95th percentile per-packet one-way delay: 121.789 ms

Loss rate: 0.20%

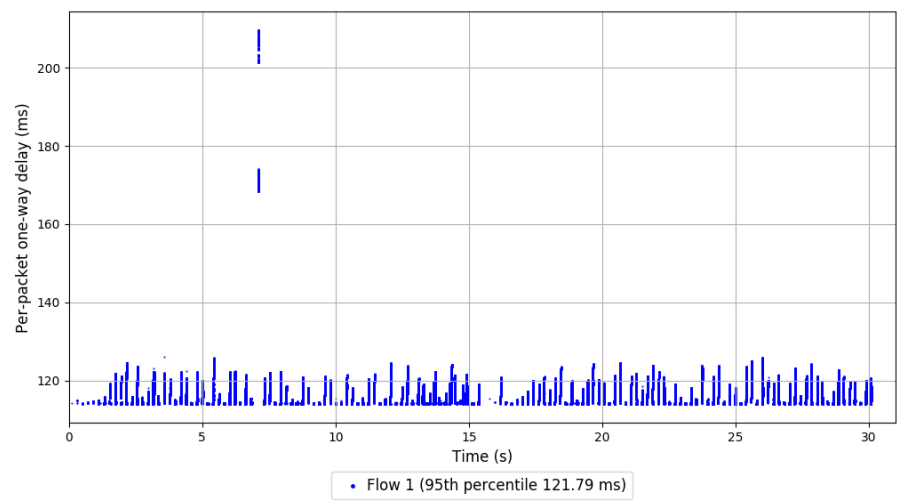
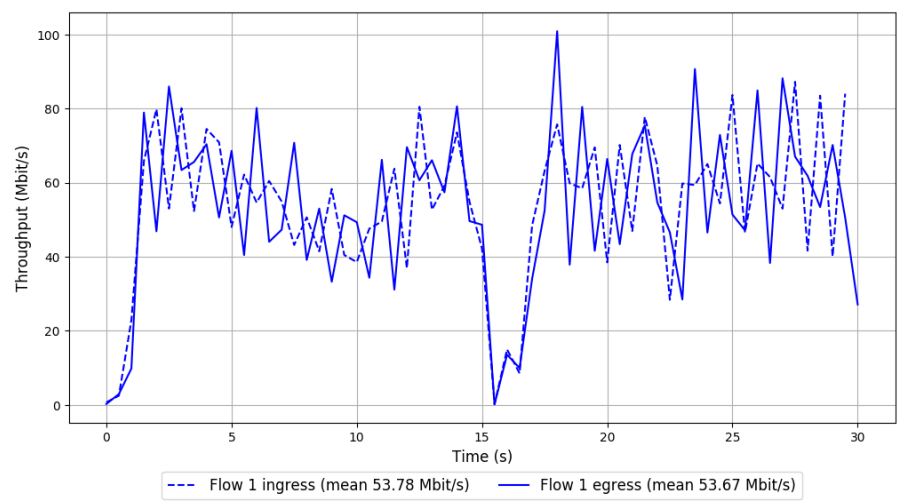
-- Flow 1:

Average throughput: 53.67 Mbit/s

95th percentile per-packet one-way delay: 121.789 ms

Loss rate: 0.20%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-10-10 21:12:07

End at: 2017-10-10 21:12:37

Below is generated by plot.py at 2017-10-10 21:56:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.38 Mbit/s

95th percentile per-packet one-way delay: 124.157 ms

Loss rate: 0.04%

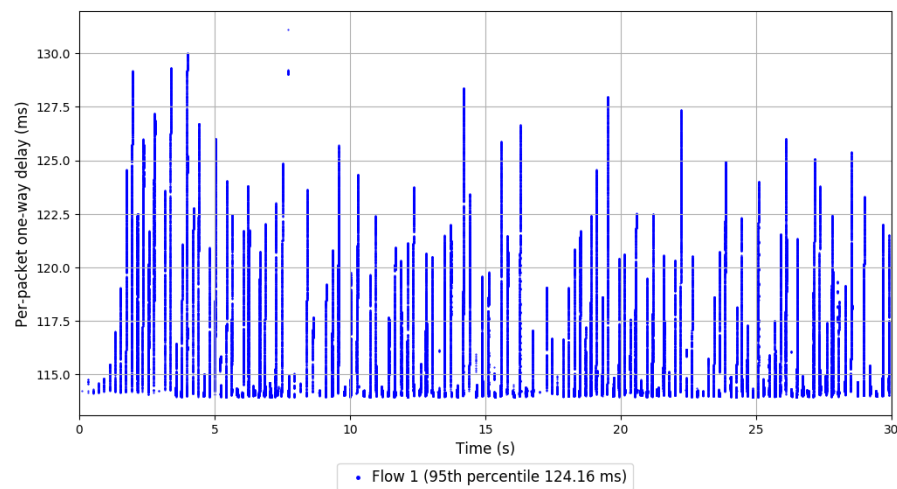
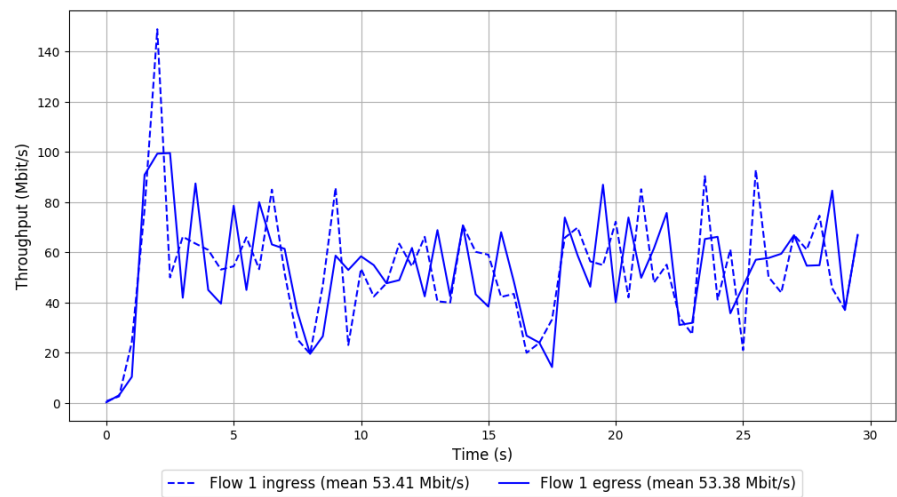
-- Flow 1:

Average throughput: 53.38 Mbit/s

95th percentile per-packet one-way delay: 124.157 ms

Loss rate: 0.04%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-10-10 19:27:53

End at: 2017-10-10 19:28:23

Below is generated by plot.py at 2017-10-10 21:57:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.75 Mbit/s

95th percentile per-packet one-way delay: 116.284 ms

Loss rate: 0.00%

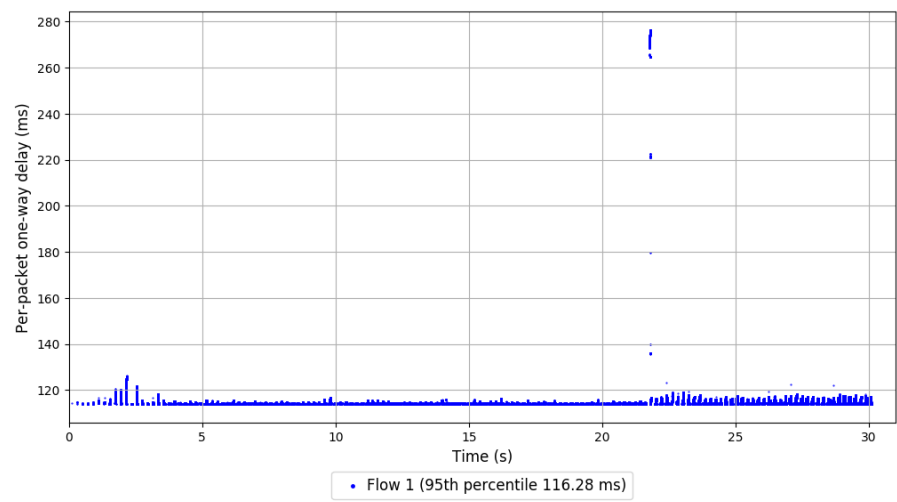
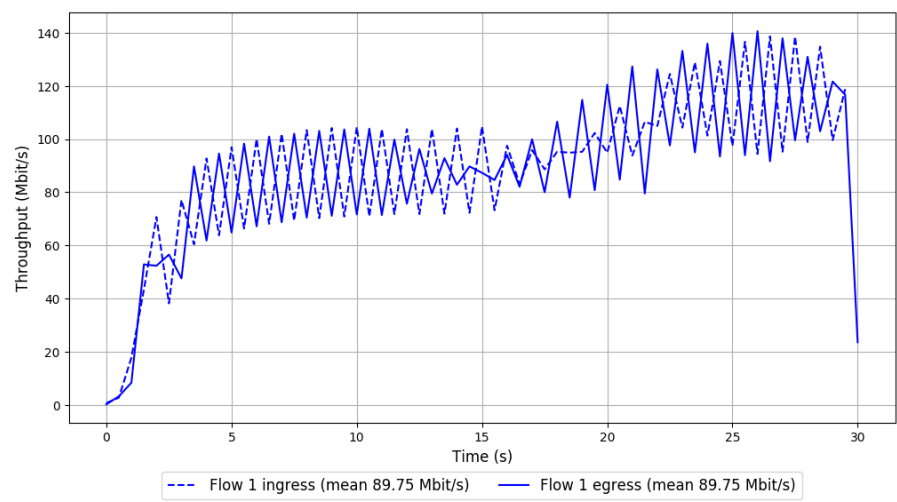
-- Flow 1:

Average throughput: 89.75 Mbit/s

95th percentile per-packet one-way delay: 116.284 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-10-10 19:39:16

End at: 2017-10-10 19:39:46

Below is generated by plot.py at 2017-10-10 21:57:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.69 Mbit/s

95th percentile per-packet one-way delay: 118.030 ms

Loss rate: 0.00%

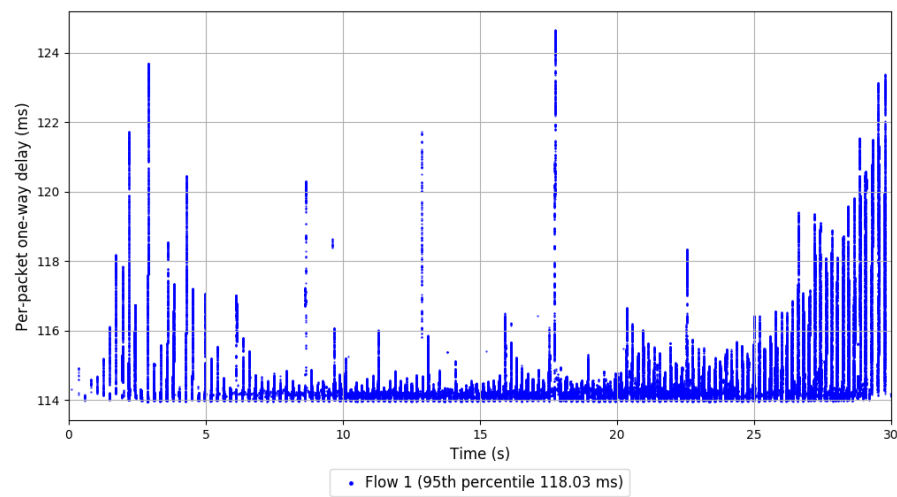
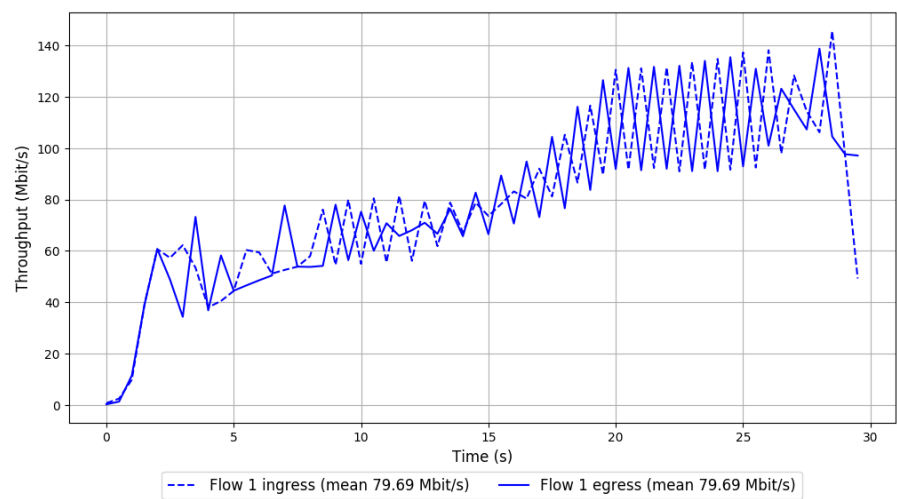
-- Flow 1:

Average throughput: 79.69 Mbit/s

95th percentile per-packet one-way delay: 118.030 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-10-10 19:50:36

End at: 2017-10-10 19:51:06

Below is generated by plot.py at 2017-10-10 21:57:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.28 Mbit/s

95th percentile per-packet one-way delay: 118.515 ms

Loss rate: 0.00%

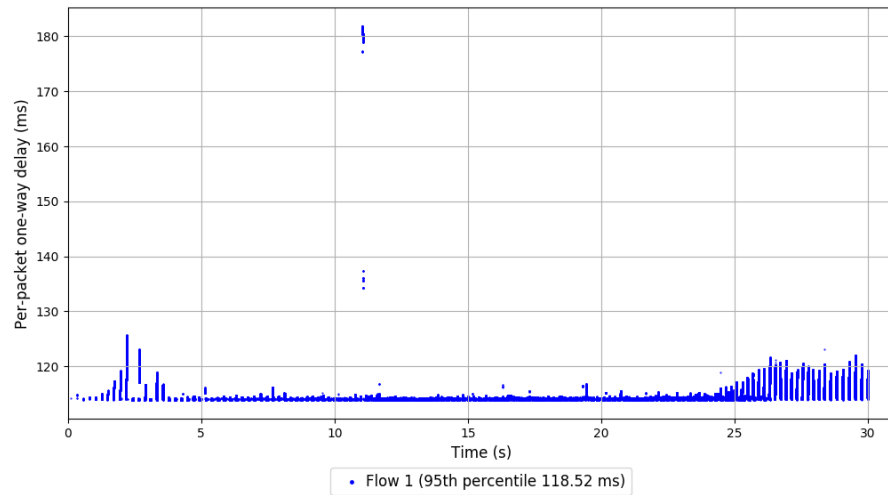
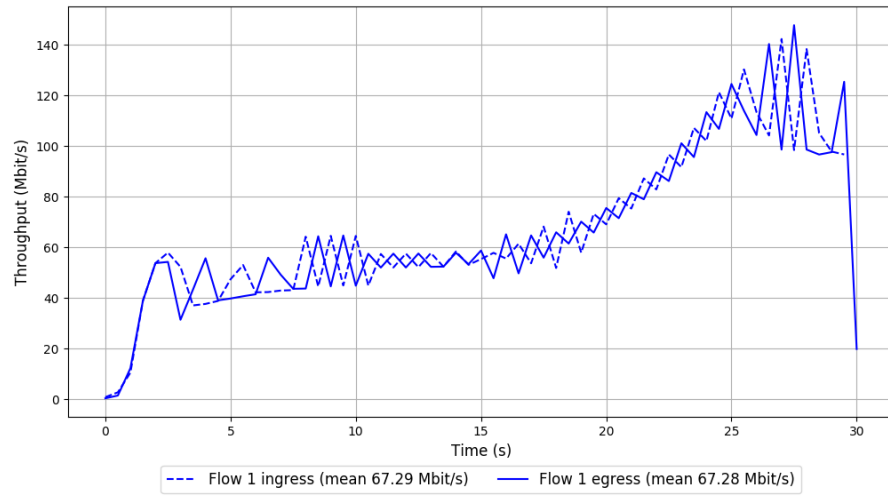
-- Flow 1:

Average throughput: 67.28 Mbit/s

95th percentile per-packet one-way delay: 118.515 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-10-10 20:01:54

End at: 2017-10-10 20:02:24

Below is generated by plot.py at 2017-10-10 21:57:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.04 Mbit/s

95th percentile per-packet one-way delay: 118.419 ms

Loss rate: 0.00%

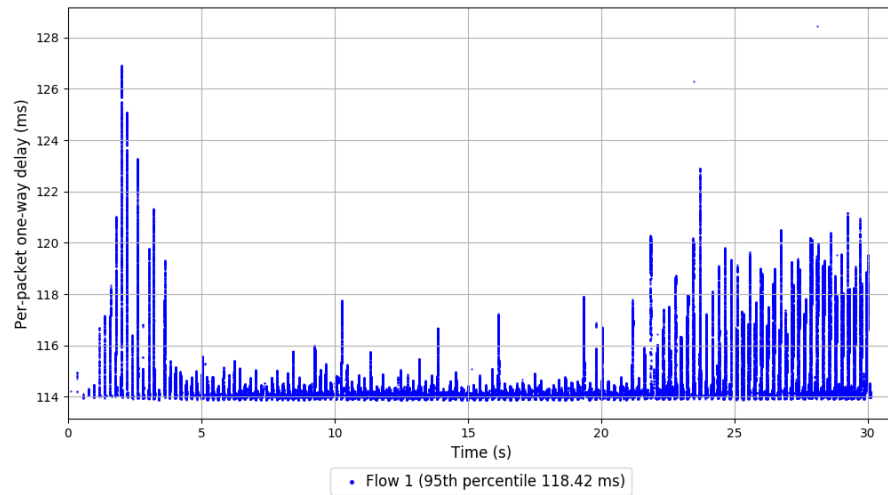
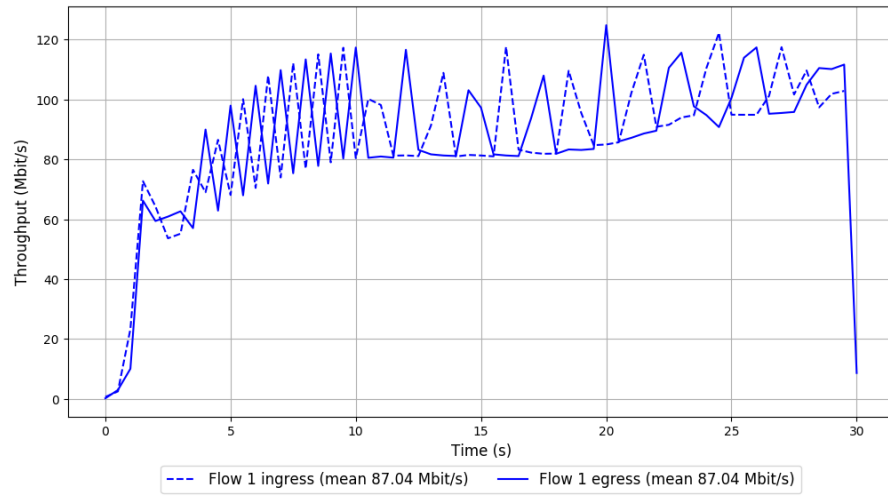
-- Flow 1:

Average throughput: 87.04 Mbit/s

95th percentile per-packet one-way delay: 118.419 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-10-10 20:13:07

End at: 2017-10-10 20:13:38

Below is generated by plot.py at 2017-10-10 21:57:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.45 Mbit/s

95th percentile per-packet one-way delay: 119.891 ms

Loss rate: 0.00%

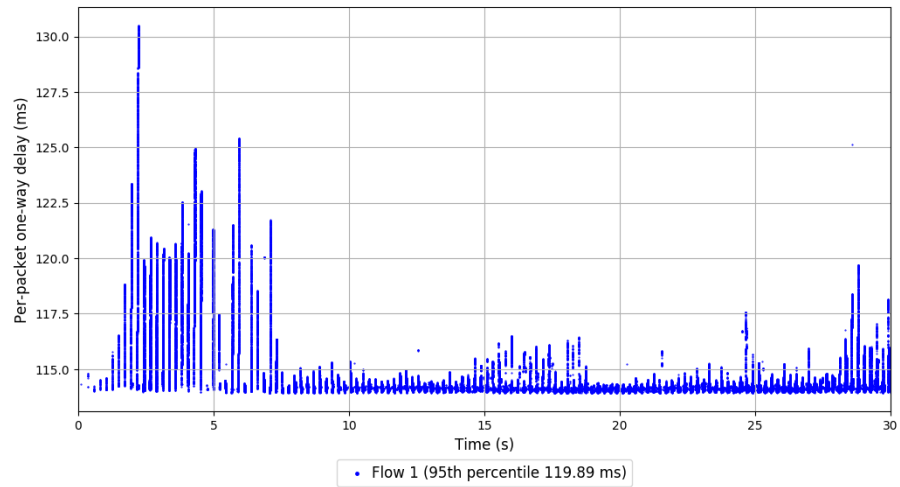
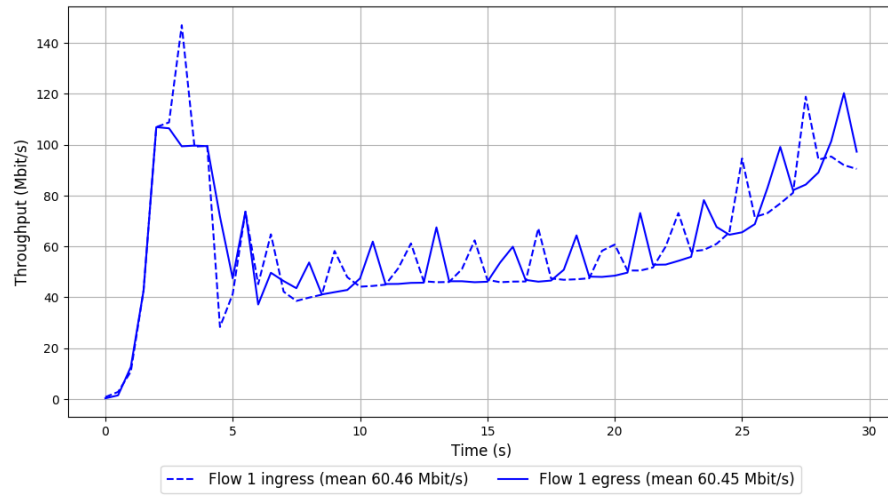
-- Flow 1:

Average throughput: 60.45 Mbit/s

95th percentile per-packet one-way delay: 119.891 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-10-10 20:24:24

End at: 2017-10-10 20:24:54

Below is generated by plot.py at 2017-10-10 21:57:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.91 Mbit/s

95th percentile per-packet one-way delay: 115.805 ms

Loss rate: 0.08%

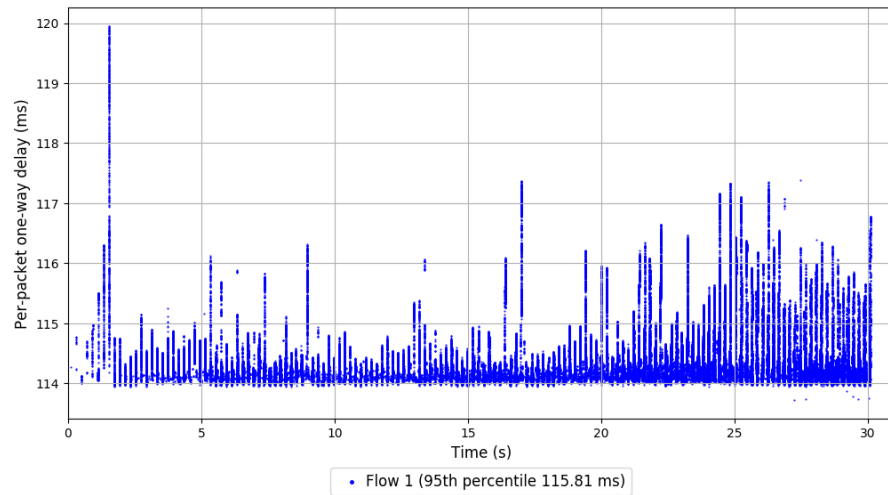
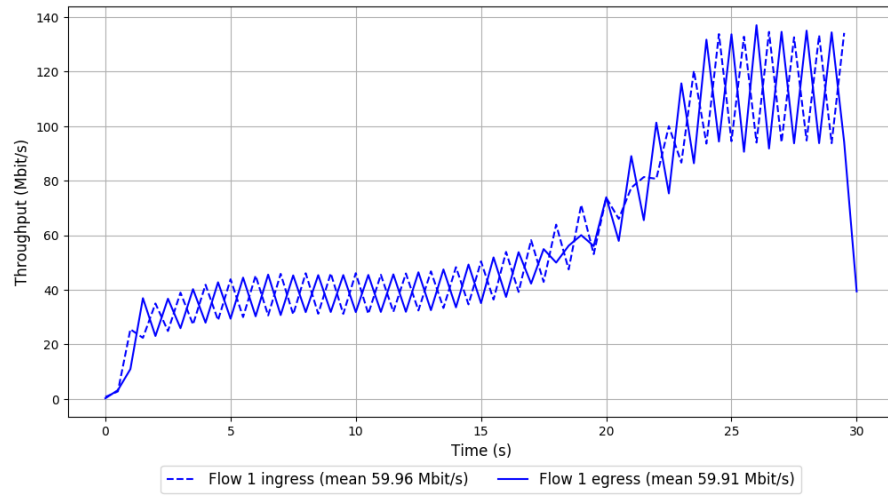
-- Flow 1:

Average throughput: 59.91 Mbit/s

95th percentile per-packet one-way delay: 115.805 ms

Loss rate: 0.08%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-10-10 20:35:48

End at: 2017-10-10 20:36:18

Below is generated by plot.py at 2017-10-10 21:57:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.77 Mbit/s

95th percentile per-packet one-way delay: 119.526 ms

Loss rate: 0.00%

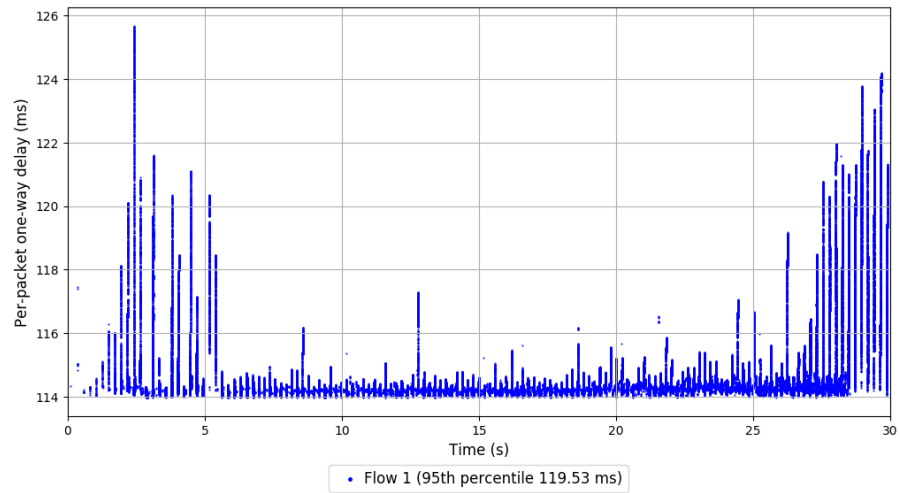
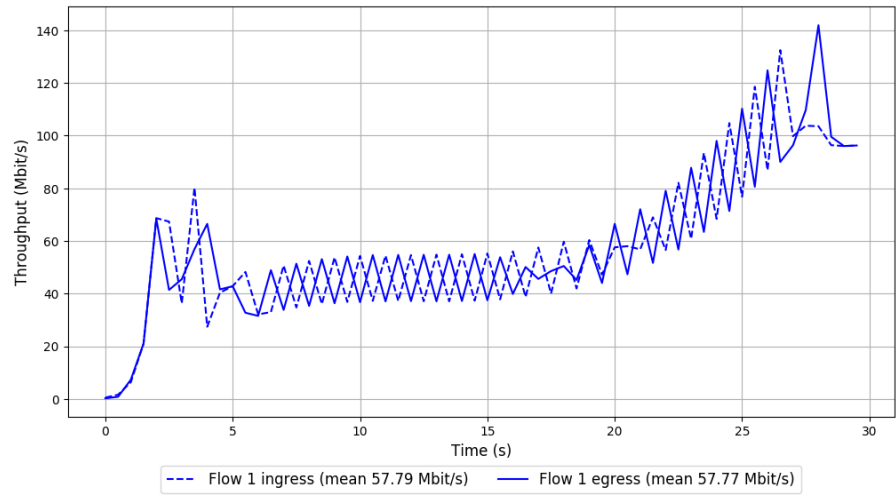
-- Flow 1:

Average throughput: 57.77 Mbit/s

95th percentile per-packet one-way delay: 119.526 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-10-10 20:47:11

End at: 2017-10-10 20:47:41

Below is generated by plot.py at 2017-10-10 21:57:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 115.198 ms

Loss rate: 0.00%

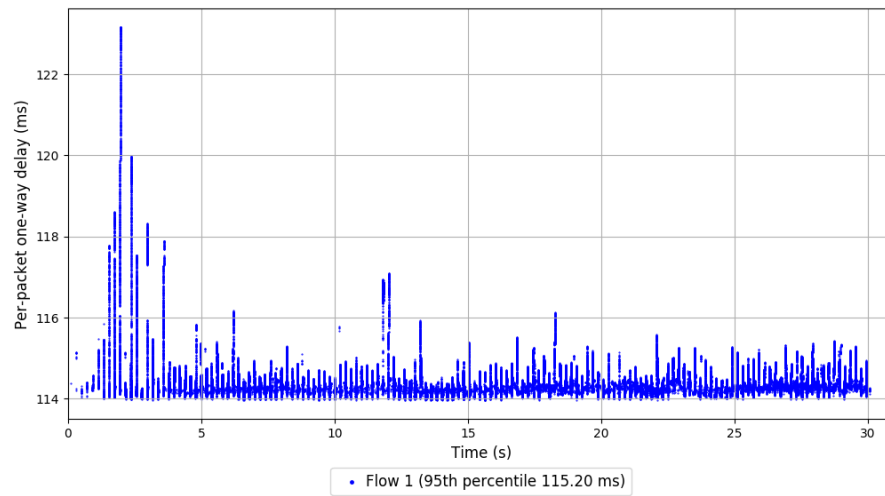
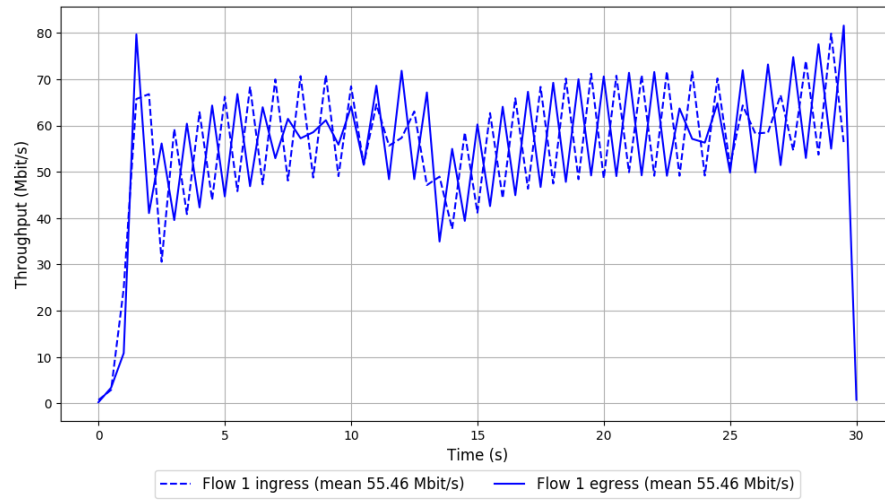
-- Flow 1:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 115.198 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-10-10 20:58:38

End at: 2017-10-10 20:59:08

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.04 Mbit/s

95th percentile per-packet one-way delay: 116.322 ms

Loss rate: 0.00%

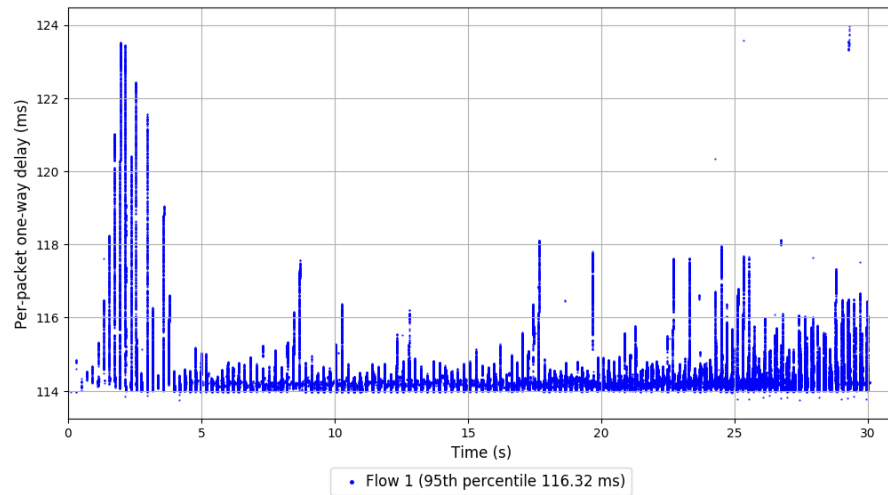
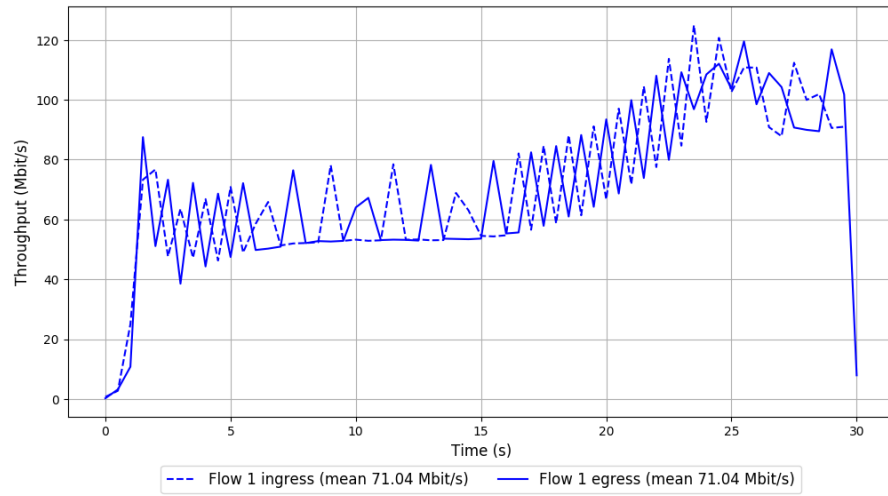
-- Flow 1:

Average throughput: 71.04 Mbit/s

95th percentile per-packet one-way delay: 116.322 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-10-10 21:09:36

End at: 2017-10-10 21:10:06

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.66 Mbit/s

95th percentile per-packet one-way delay: 117.482 ms

Loss rate: 0.00%

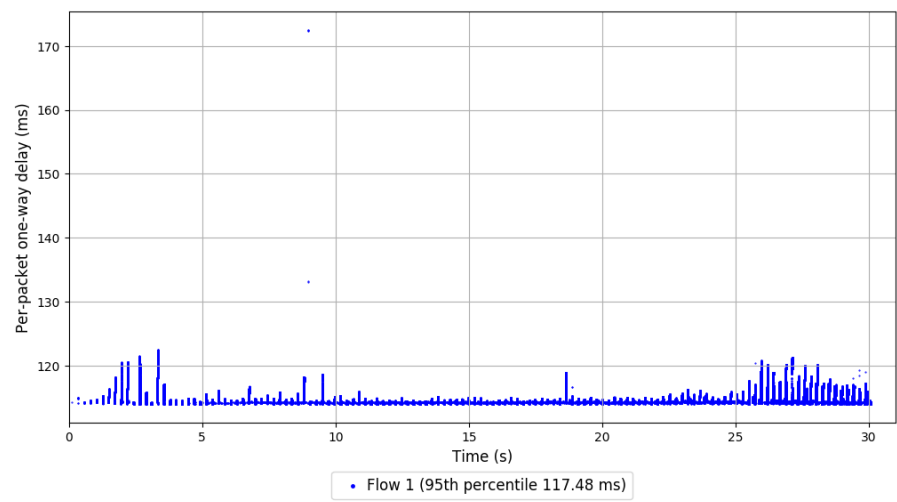
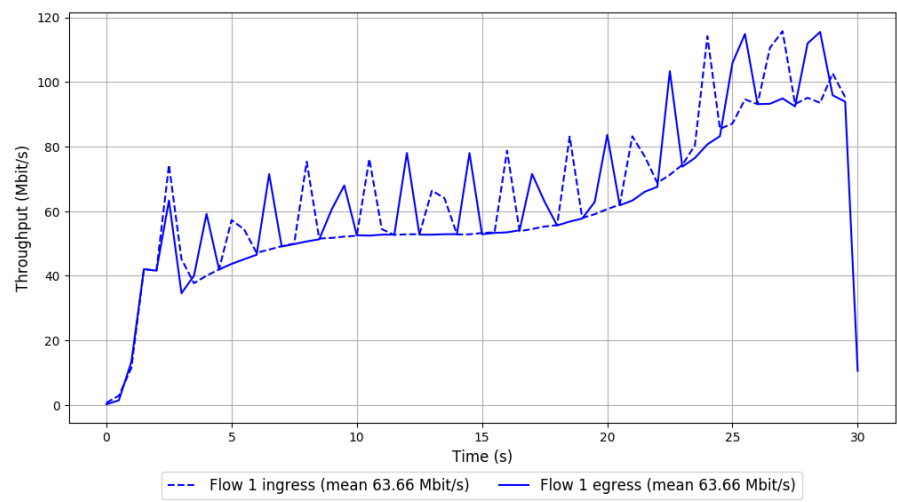
-- Flow 1:

Average throughput: 63.66 Mbit/s

95th percentile per-packet one-way delay: 117.482 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

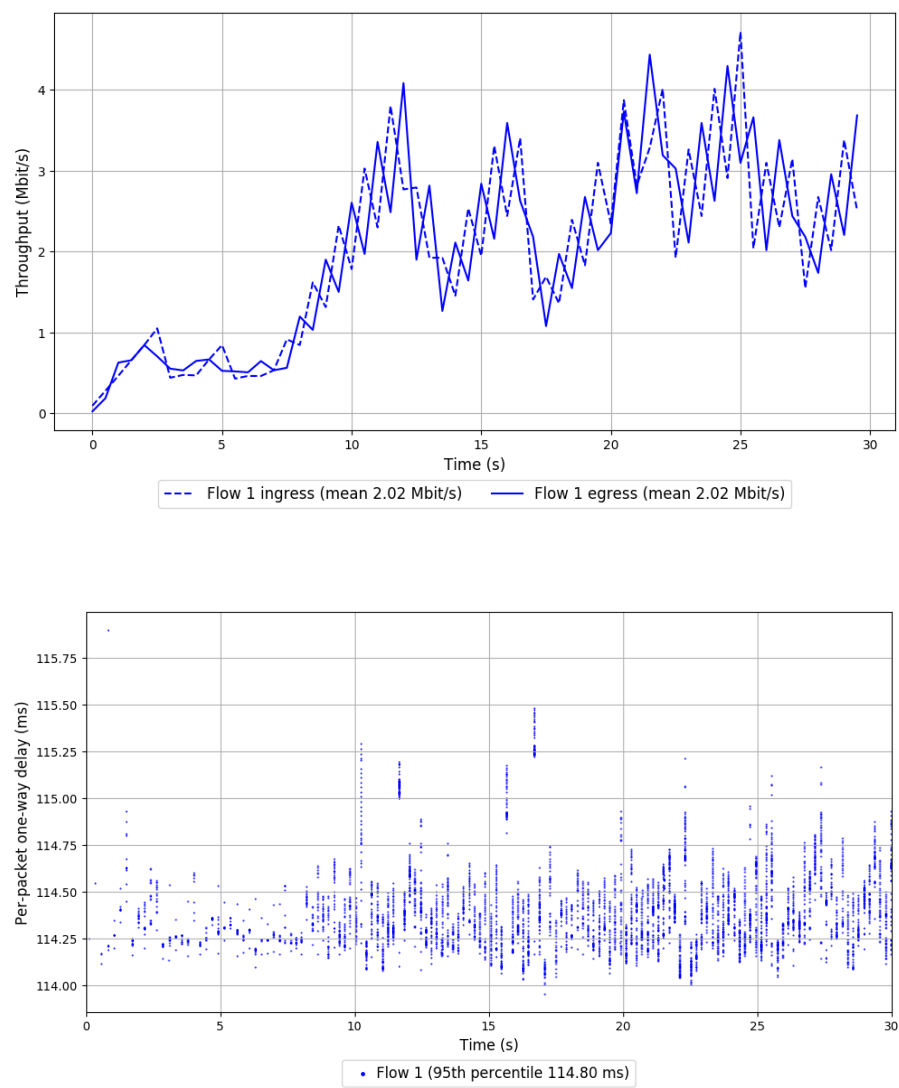


```
Run 1: Statistics of LEDBAT

Start at: 2017-10-10 19:31:47
End at: 2017-10-10 19:32:17

# Below is generated by plot.py at 2017-10-10 21:57:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 114.802 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 114.802 ms
Loss rate: 0.06%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-10-10 19:43:15

End at: 2017-10-10 19:43:45

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 114.620 ms

Loss rate: 0.02%

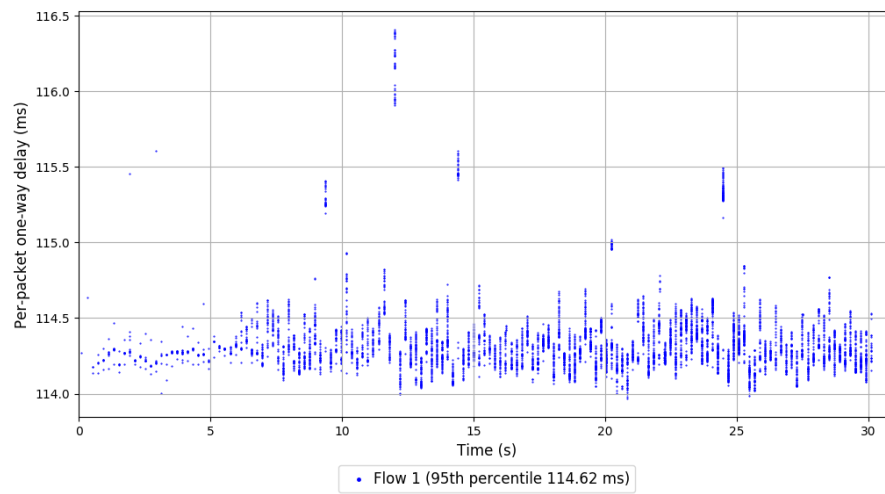
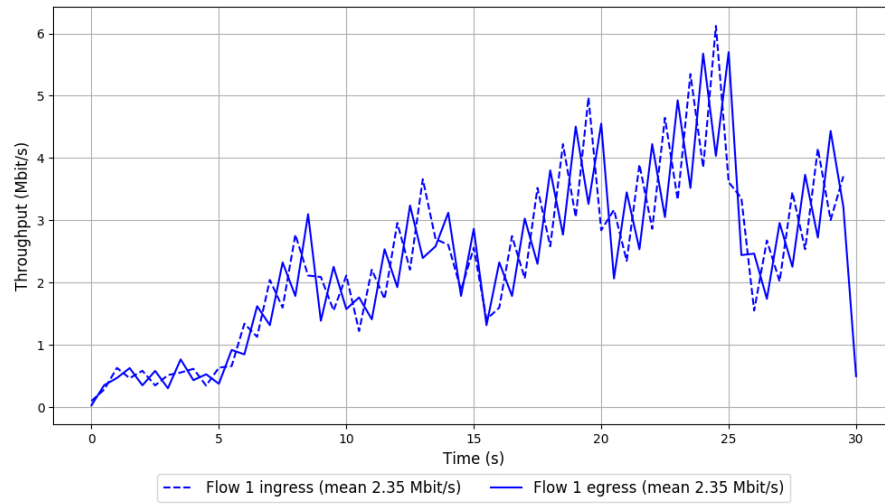
-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 114.620 ms

Loss rate: 0.02%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-10-10 19:54:33

End at: 2017-10-10 19:55:03

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 114.727 ms

Loss rate: 0.03%

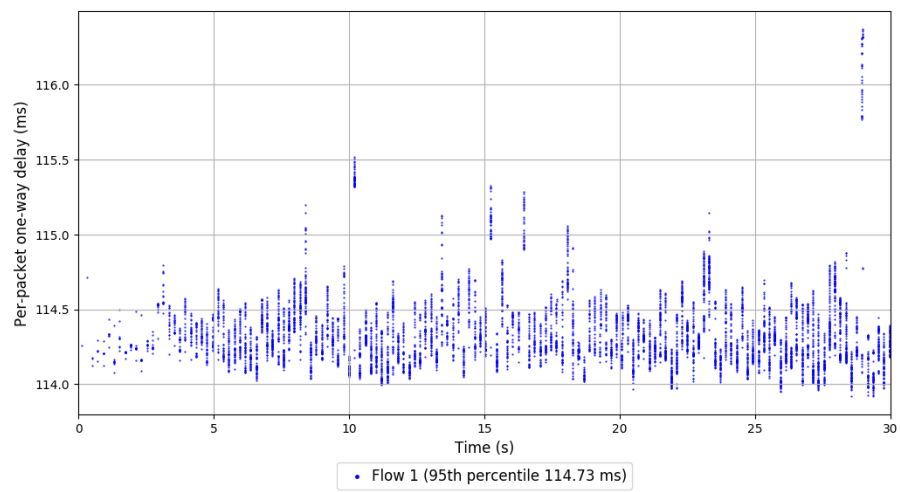
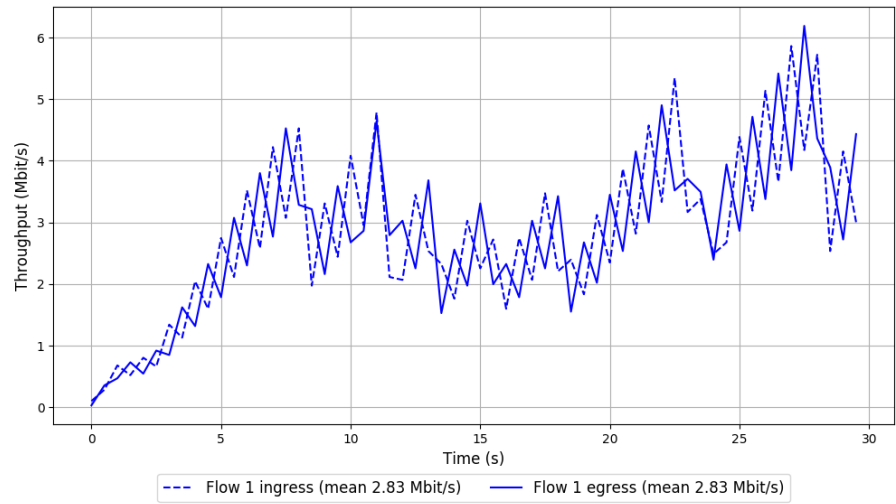
-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 114.727 ms

Loss rate: 0.03%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-10-10 20:05:44

End at: 2017-10-10 20:06:14

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.35 Mbit/s

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

Loss rate: 0.07%

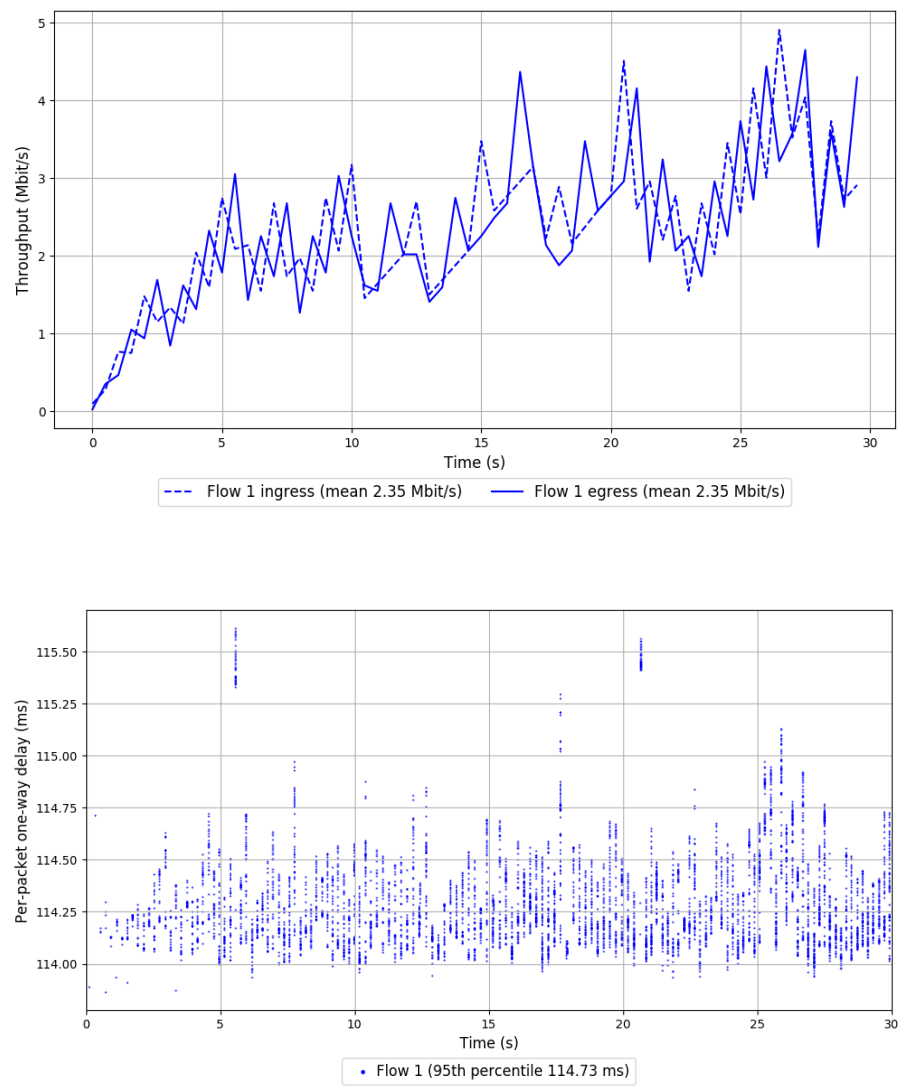
-- Flow 1:

Average throughput: 2.35 Mbit/s

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

Loss rate: 0.07%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-10-10 20:17:05

End at: 2017-10-10 20:17:36

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 114.721 ms

Loss rate: 0.00%

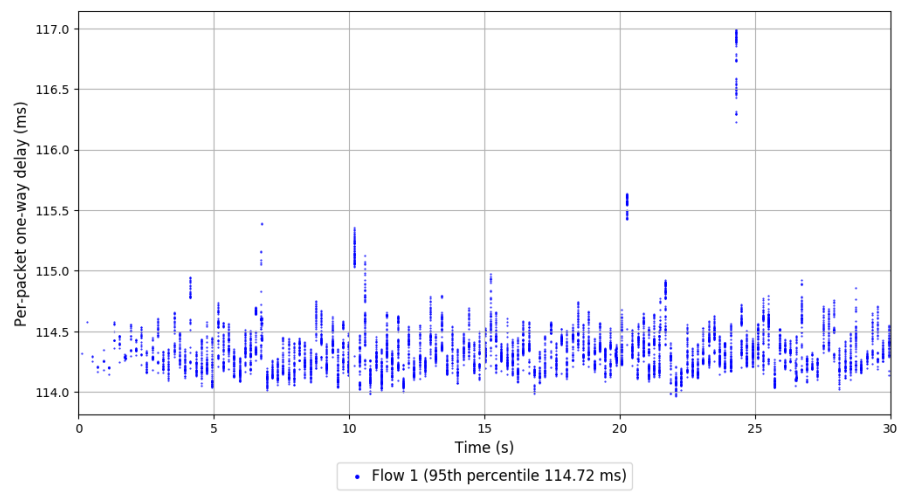
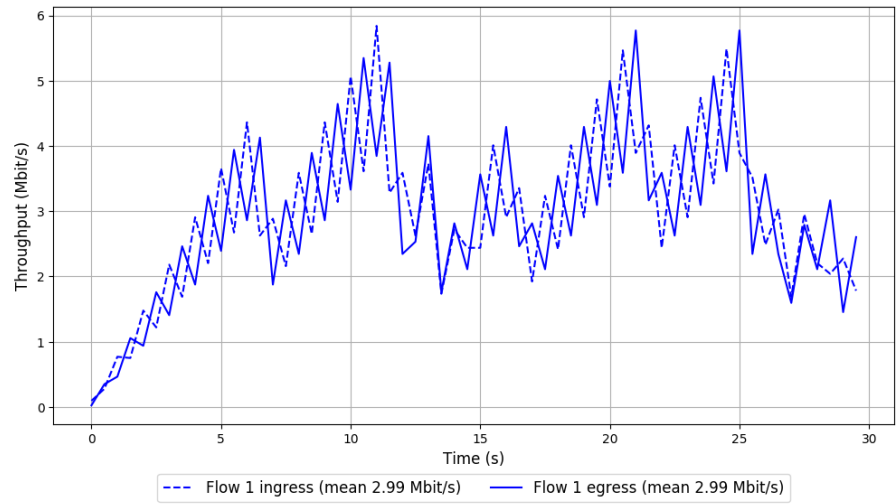
-- Flow 1:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 114.721 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-10-10 20:28:19

End at: 2017-10-10 20:28:49

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 114.692 ms

Loss rate: 0.00%

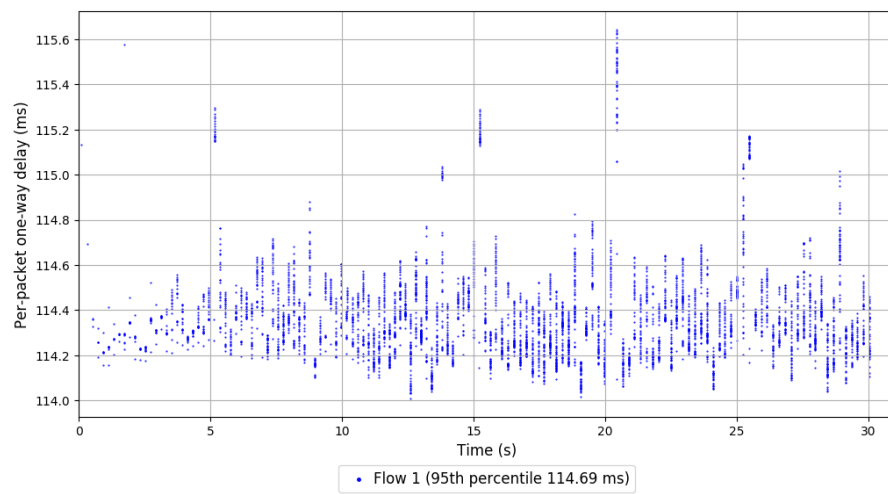
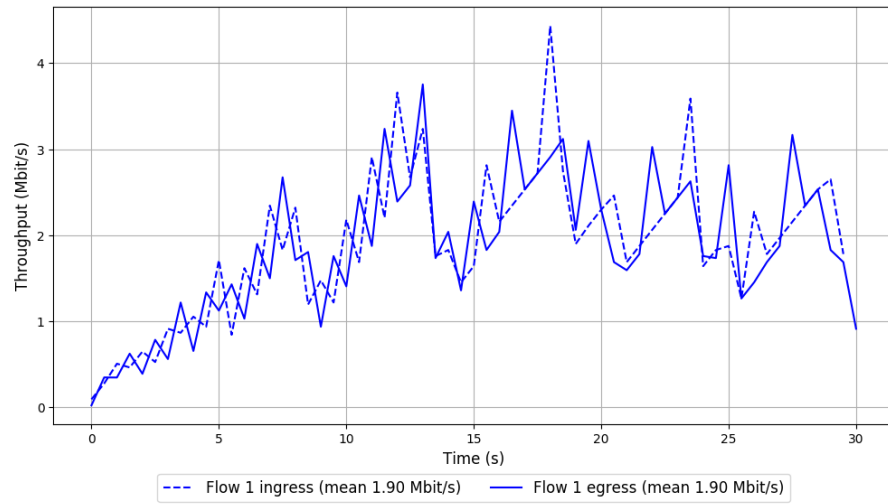
-- Flow 1:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 114.692 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-10-10 20:39:43

End at: 2017-10-10 20:40:14

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 114.651 ms

Loss rate: 0.10%

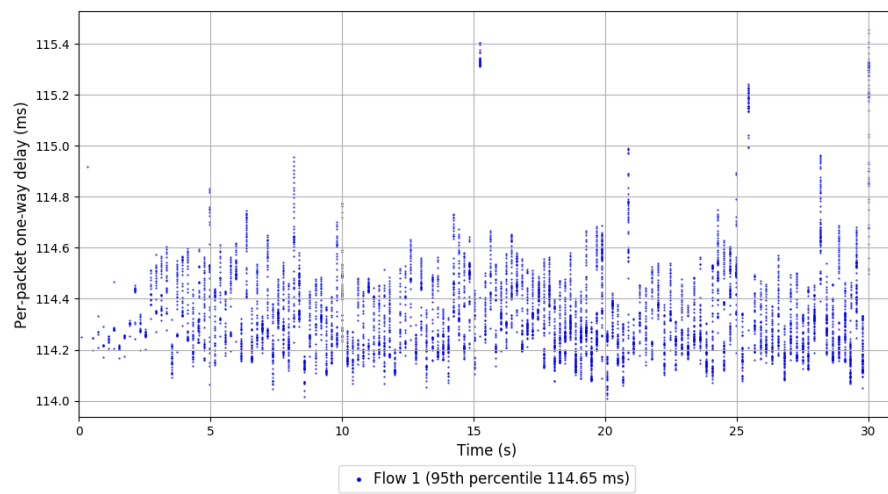
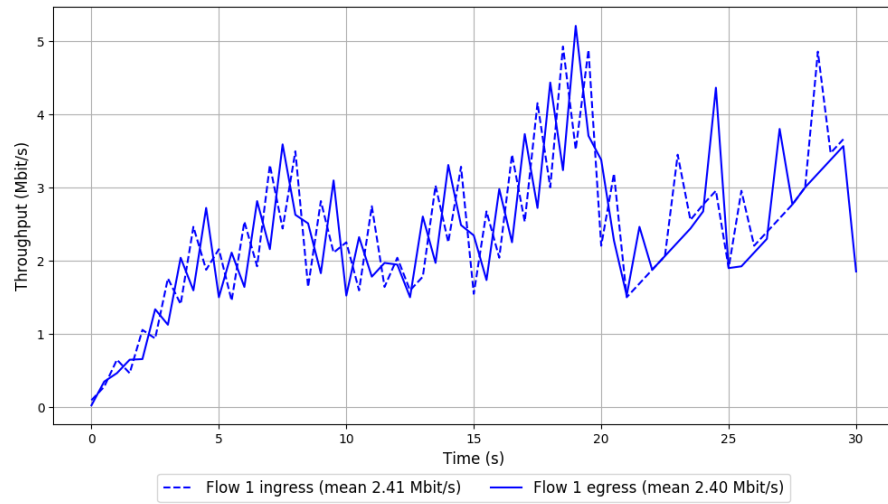
-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 114.651 ms

Loss rate: 0.10%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-10-10 20:51:04

End at: 2017-10-10 20:51:34

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 114.911 ms

Loss rate: 0.00%

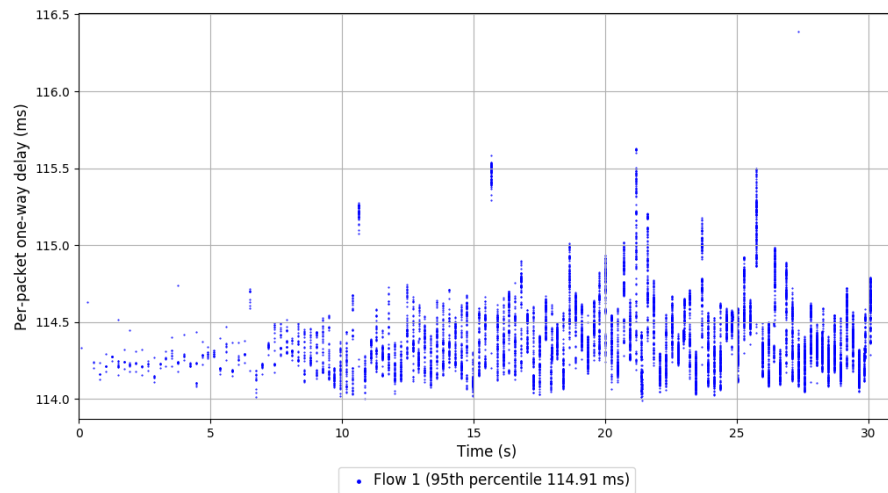
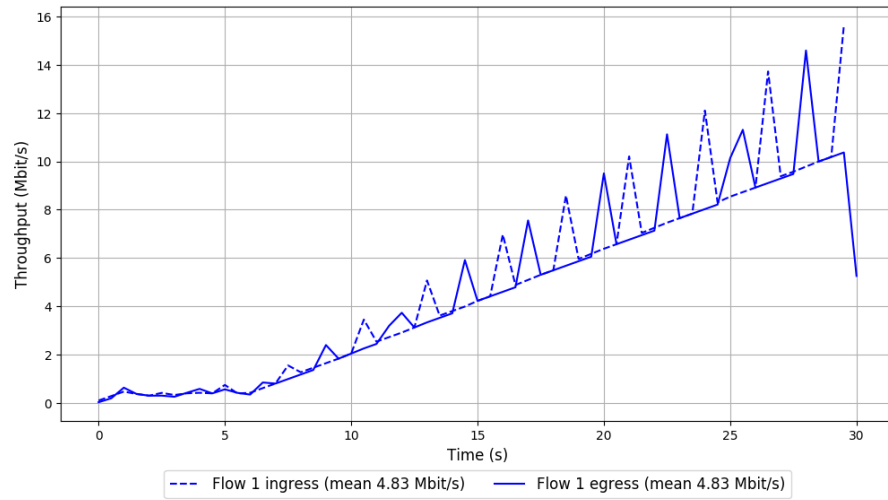
-- Flow 1:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 114.911 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-10-10 21:02:38

End at: 2017-10-10 21:03:08

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 114.602 ms

Loss rate: 0.12%

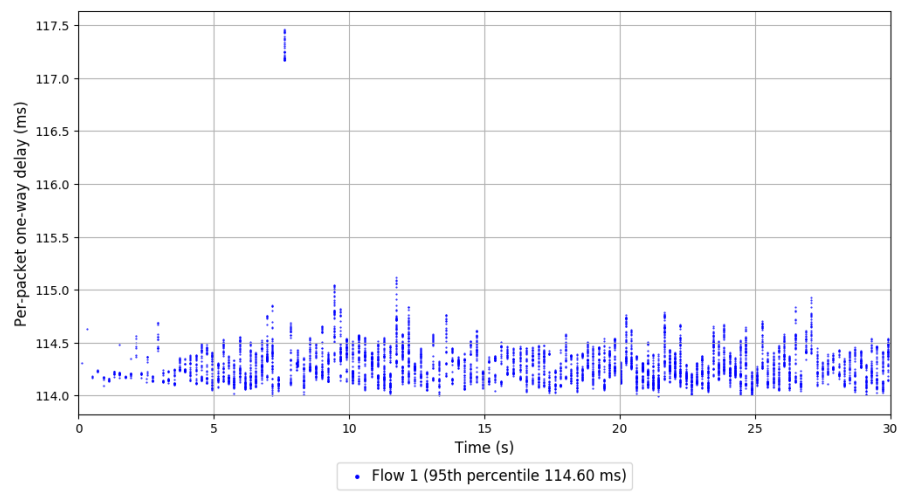
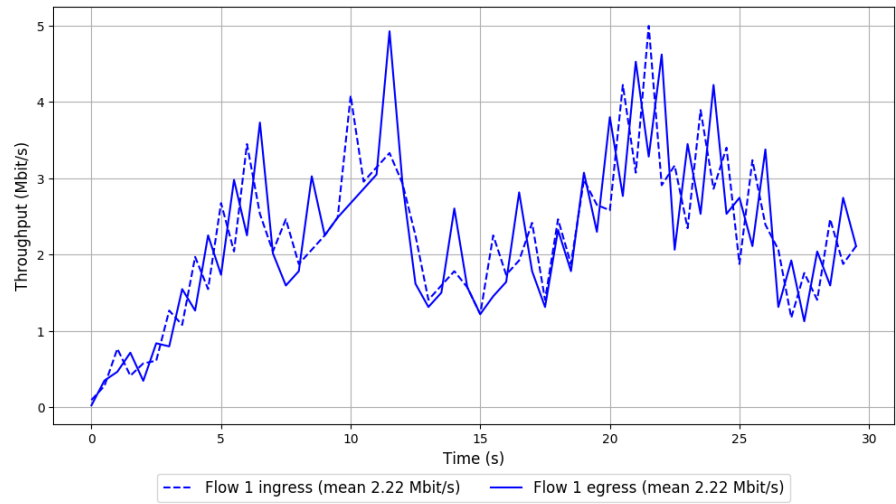
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 114.602 ms

Loss rate: 0.12%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-10-10 21:13:38

End at: 2017-10-10 21:14:08

Below is generated by plot.py at 2017-10-10 21:57:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 114.849 ms

Loss rate: 0.02%

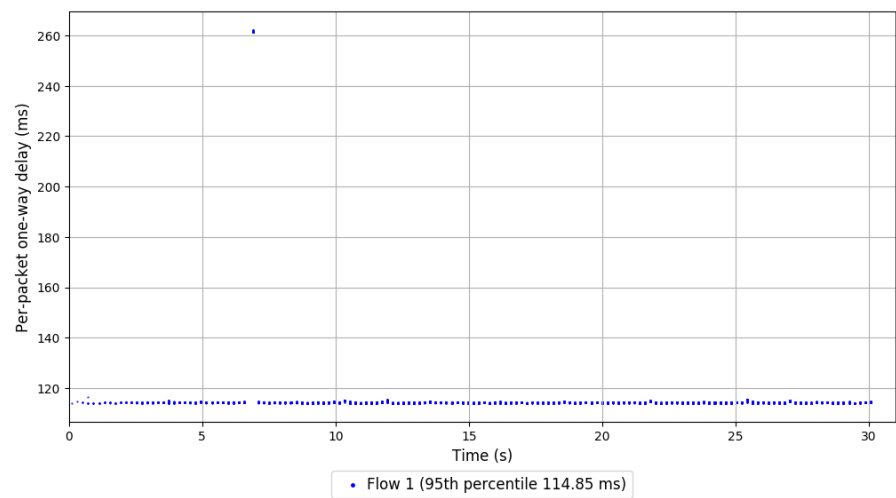
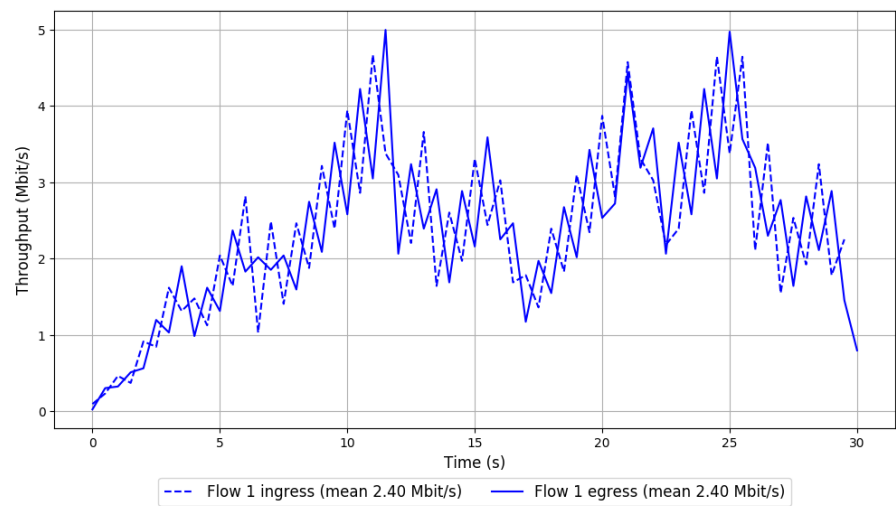
-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 114.849 ms

Loss rate: 0.02%

Run 10: Report of LEDBAT — Data Link

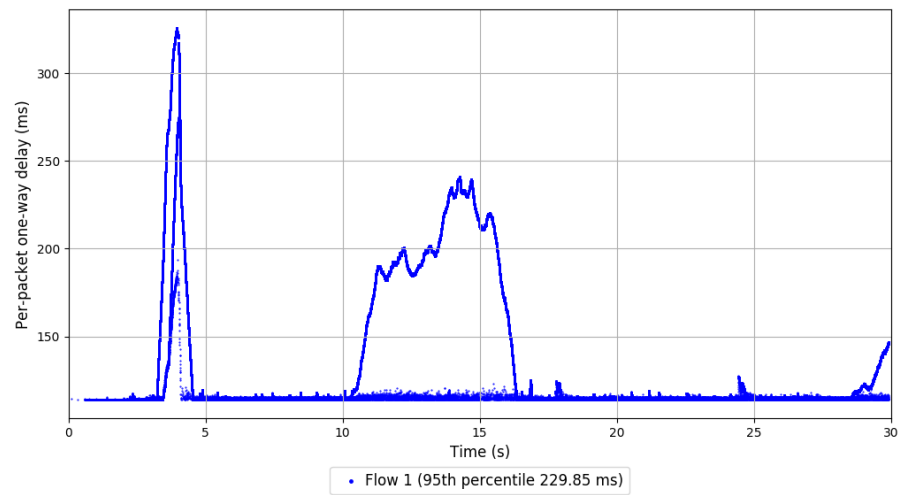
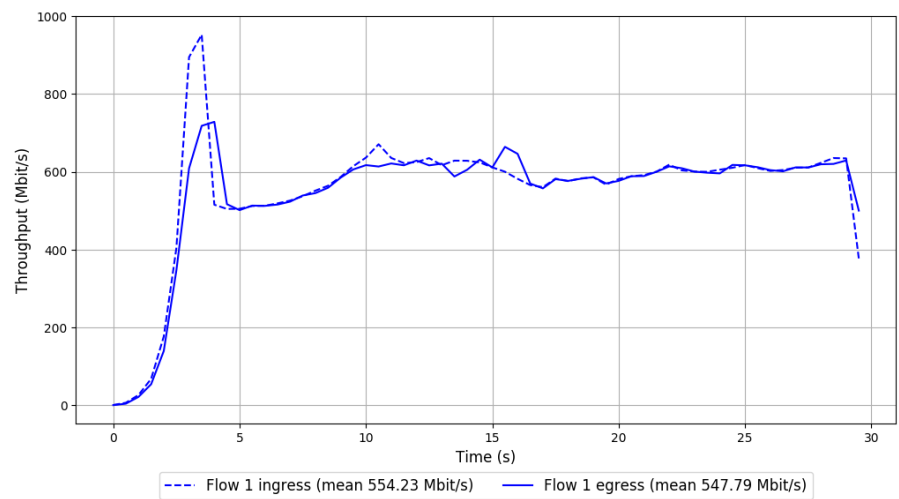


```
Run 1: Statistics of PCC

Start at: 2017-10-10 19:26:51
End at: 2017-10-10 19:27:21

# Below is generated by plot.py at 2017-10-10 22:07:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 547.79 Mbit/s
95th percentile per-packet one-way delay: 229.855 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 547.79 Mbit/s
95th percentile per-packet one-way delay: 229.855 ms
Loss rate: 1.16%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-10-10 19:38:15

End at: 2017-10-10 19:38:45

Below is generated by plot.py at 2017-10-10 22:07:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 501.60 Mbit/s

95th percentile per-packet one-way delay: 235.977 ms

Loss rate: 2.46%

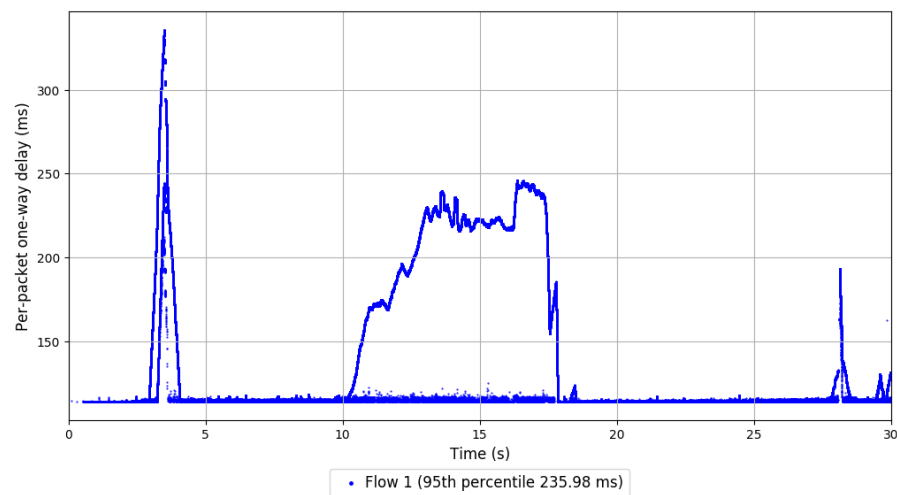
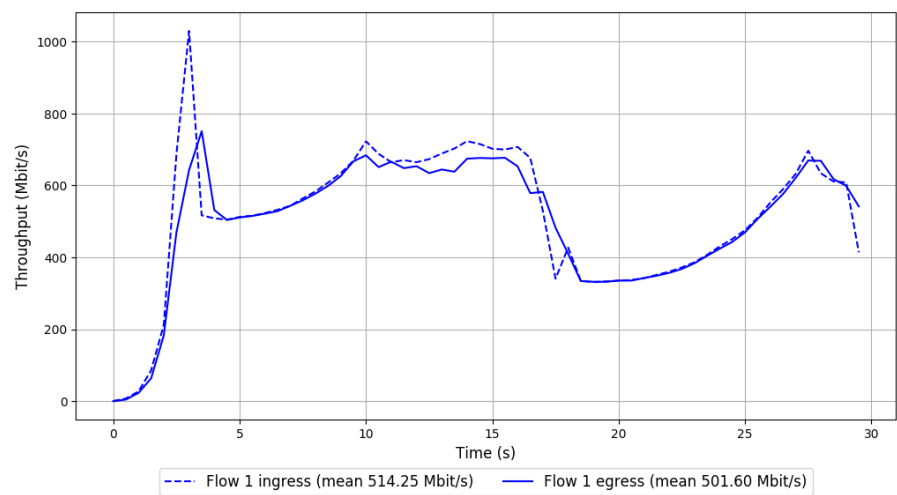
-- Flow 1:

Average throughput: 501.60 Mbit/s

95th percentile per-packet one-way delay: 235.977 ms

Loss rate: 2.46%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-10-10 19:49:33

End at: 2017-10-10 19:50:03

Below is generated by plot.py at 2017-10-10 22:07:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 550.31 Mbit/s

95th percentile per-packet one-way delay: 224.766 ms

Loss rate: 0.91%

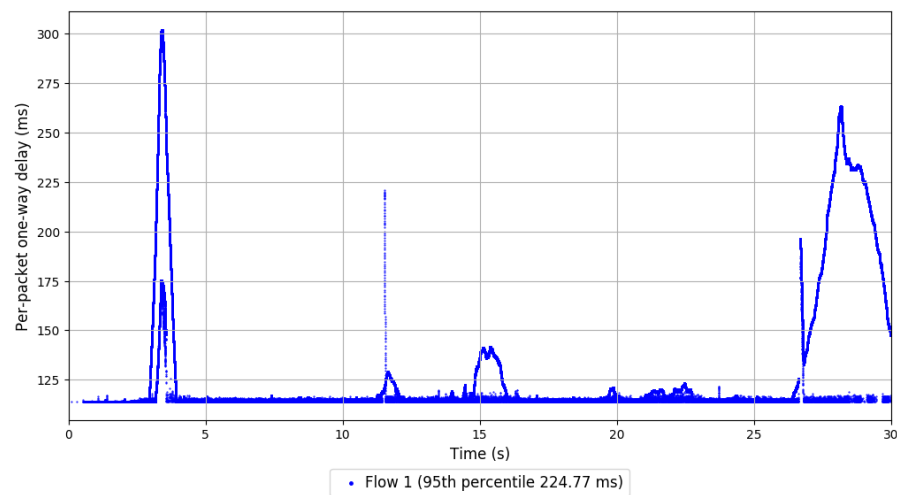
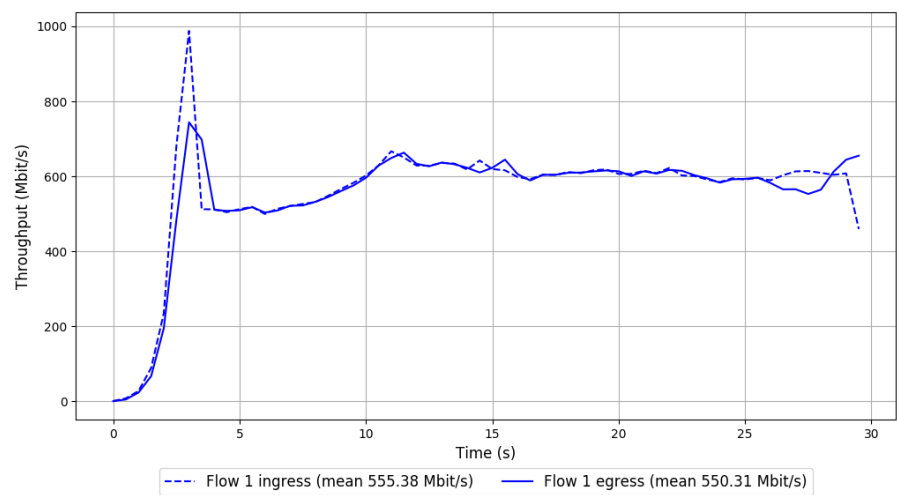
-- Flow 1:

Average throughput: 550.31 Mbit/s

95th percentile per-packet one-way delay: 224.766 ms

Loss rate: 0.91%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-10-10 20:00:51

End at: 2017-10-10 20:01:21

Below is generated by plot.py at 2017-10-10 22:07:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 545.48 Mbit/s

95th percentile per-packet one-way delay: 219.275 ms

Loss rate: 0.77%

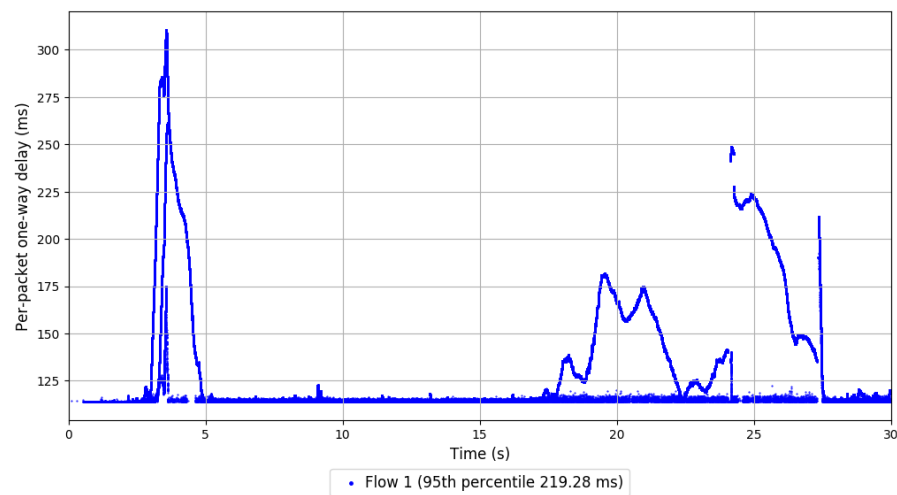
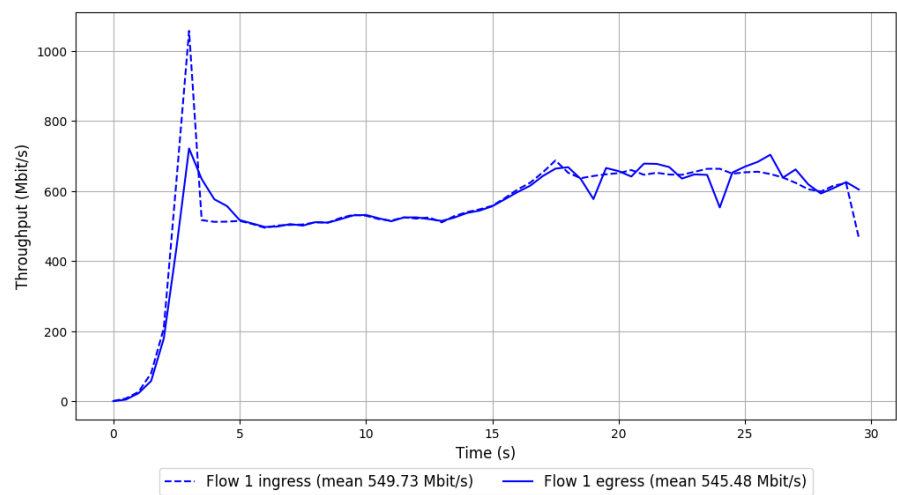
-- Flow 1:

Average throughput: 545.48 Mbit/s

95th percentile per-packet one-way delay: 219.275 ms

Loss rate: 0.77%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-10-10 20:12:04

End at: 2017-10-10 20:12:34

Below is generated by plot.py at 2017-10-10 22:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 557.59 Mbit/s

95th percentile per-packet one-way delay: 211.077 ms

Loss rate: 0.93%

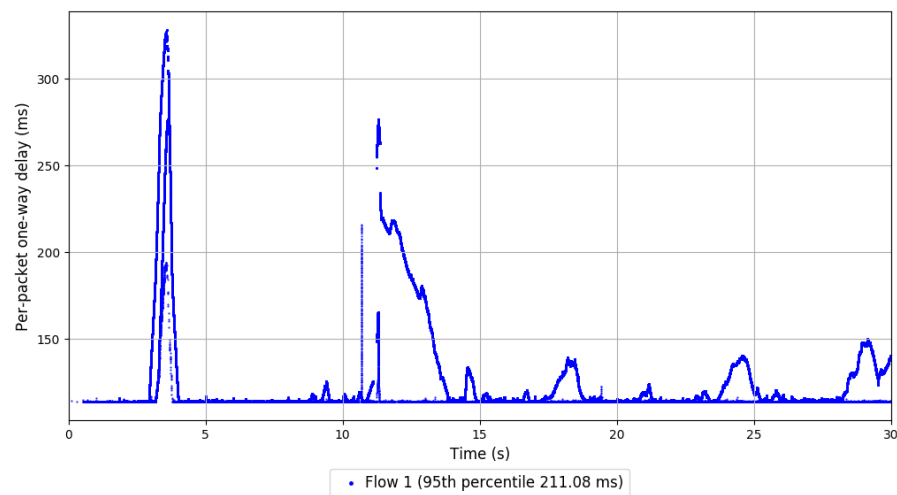
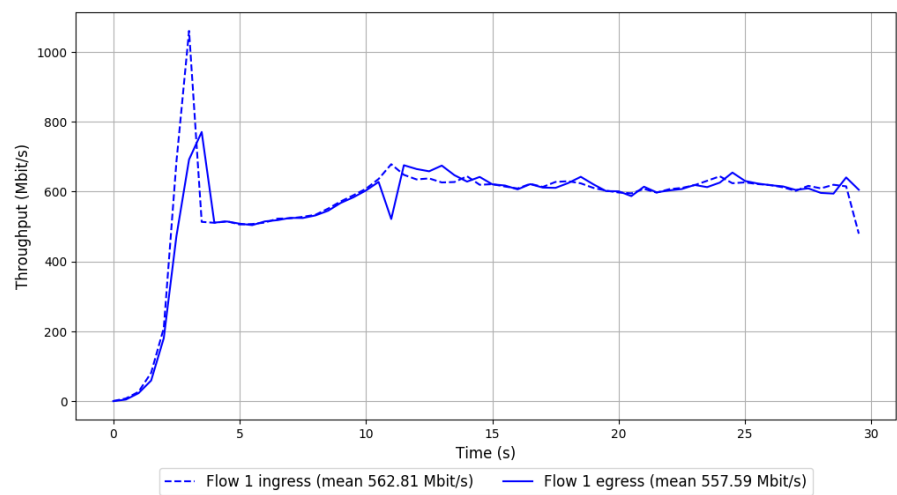
-- Flow 1:

Average throughput: 557.59 Mbit/s

95th percentile per-packet one-way delay: 211.077 ms

Loss rate: 0.93%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-10-10 20:23:20

End at: 2017-10-10 20:23:50

Below is generated by plot.py at 2017-10-10 22:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 554.50 Mbit/s

95th percentile per-packet one-way delay: 214.500 ms

Loss rate: 0.90%

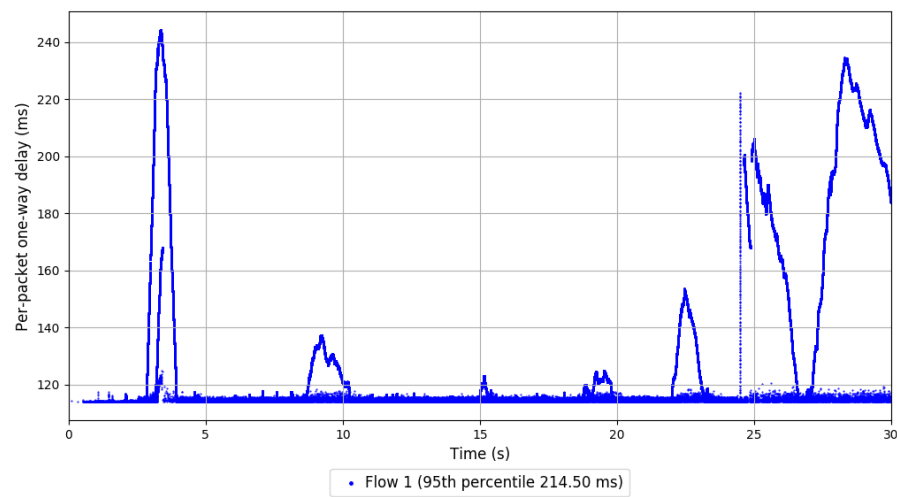
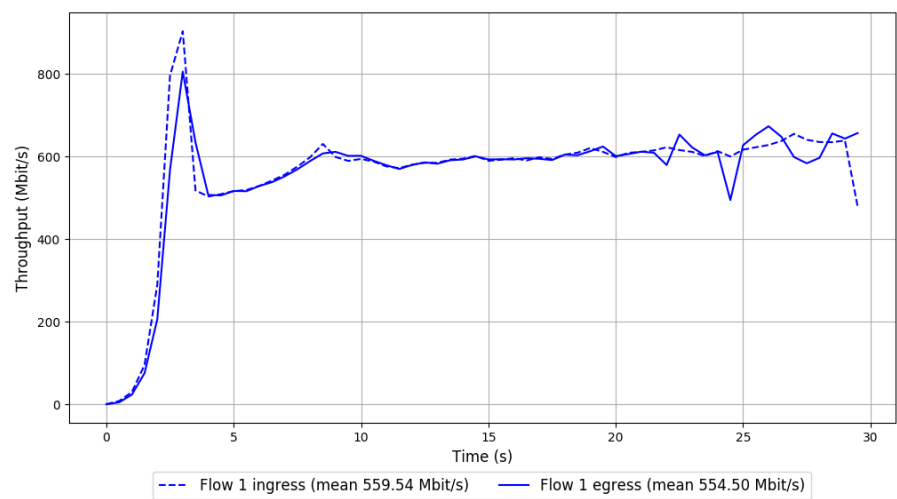
-- Flow 1:

Average throughput: 554.50 Mbit/s

95th percentile per-packet one-way delay: 214.500 ms

Loss rate: 0.90%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-10-10 20:34:45

End at: 2017-10-10 20:35:15

Below is generated by plot.py at 2017-10-10 22:08:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 561.31 Mbit/s

95th percentile per-packet one-way delay: 220.882 ms

Loss rate: 1.00%

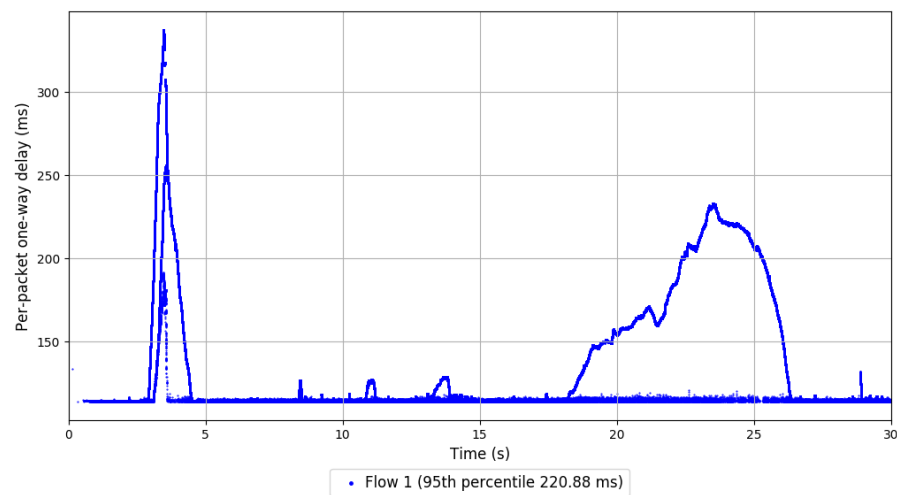
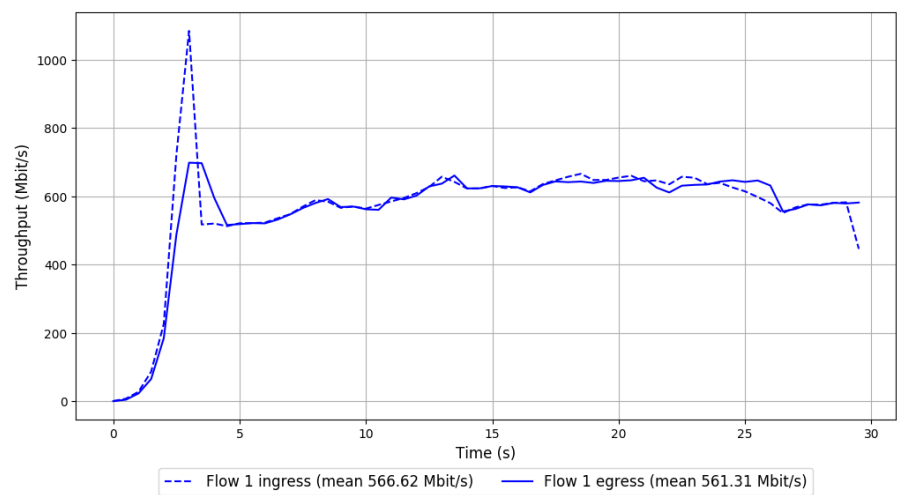
-- Flow 1:

Average throughput: 561.31 Mbit/s

95th percentile per-packet one-way delay: 220.882 ms

Loss rate: 1.00%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-10-10 20:46:08

End at: 2017-10-10 20:46:38

Below is generated by plot.py at 2017-10-10 22:08:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 534.18 Mbit/s

95th percentile per-packet one-way delay: 176.838 ms

Loss rate: 0.86%

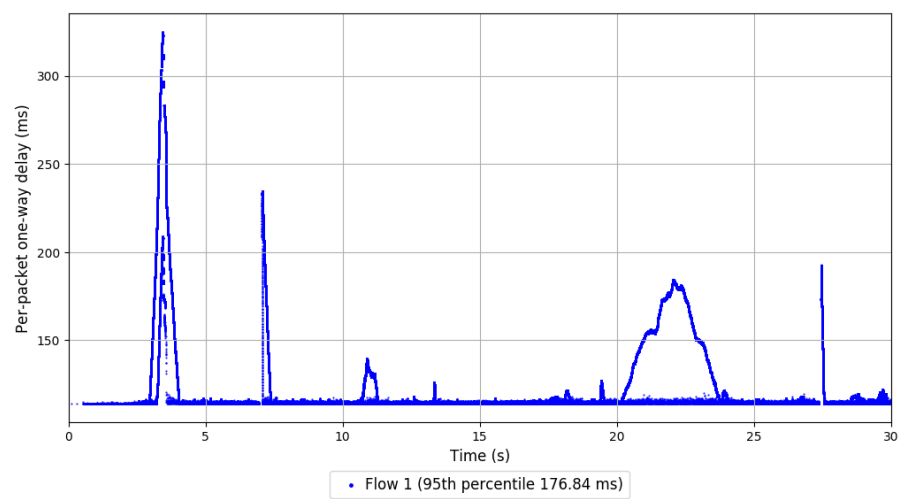
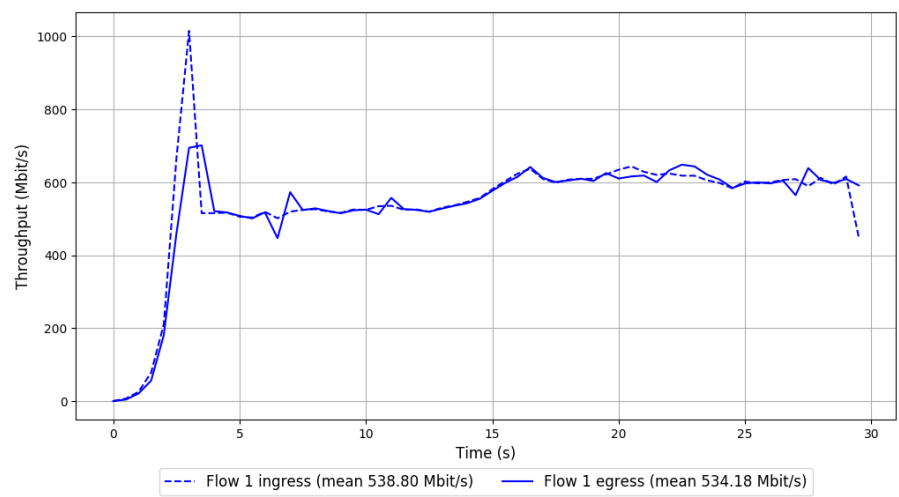
-- Flow 1:

Average throughput: 534.18 Mbit/s

95th percentile per-packet one-way delay: 176.838 ms

Loss rate: 0.86%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-10-10 20:57:35

End at: 2017-10-10 20:58:05

Below is generated by plot.py at 2017-10-10 22:17:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 558.12 Mbit/s

95th percentile per-packet one-way delay: 172.296 ms

Loss rate: 0.90%

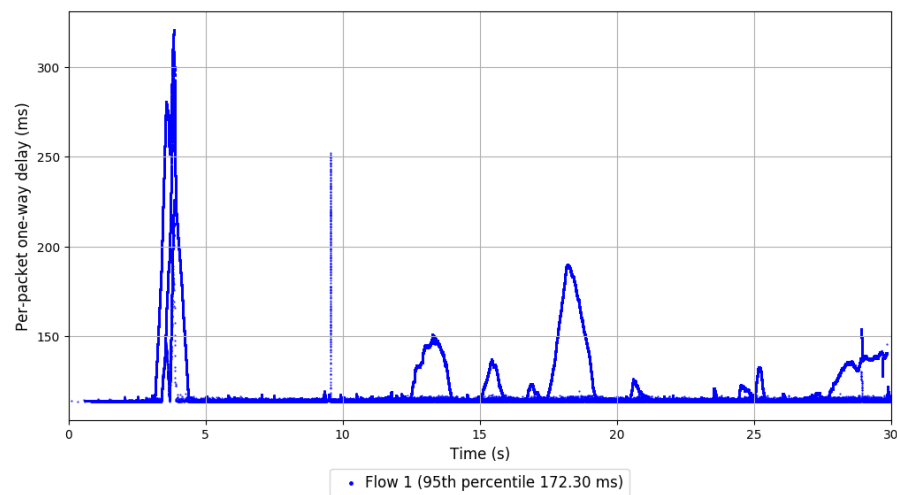
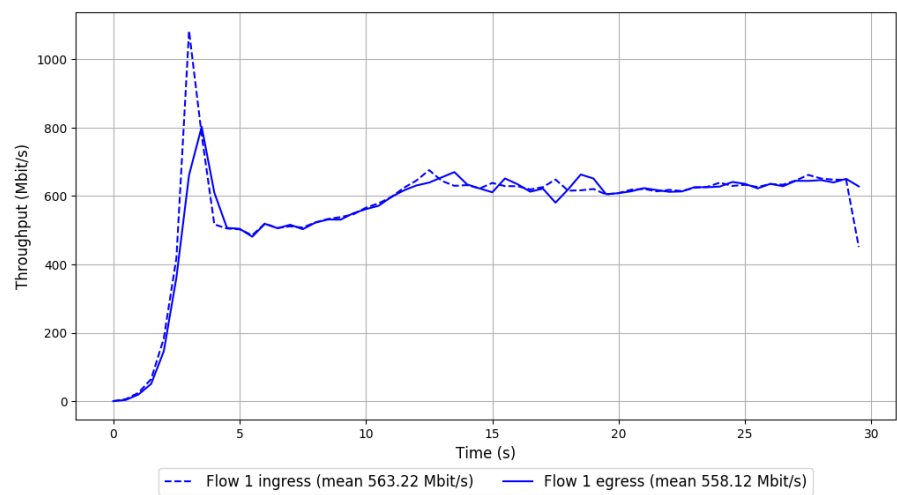
-- Flow 1:

Average throughput: 558.12 Mbit/s

95th percentile per-packet one-way delay: 172.296 ms

Loss rate: 0.90%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-10-10 21:08:31

End at: 2017-10-10 21:09:01

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 574.47 Mbit/s

95th percentile per-packet one-way delay: 209.855 ms

Loss rate: 0.93%

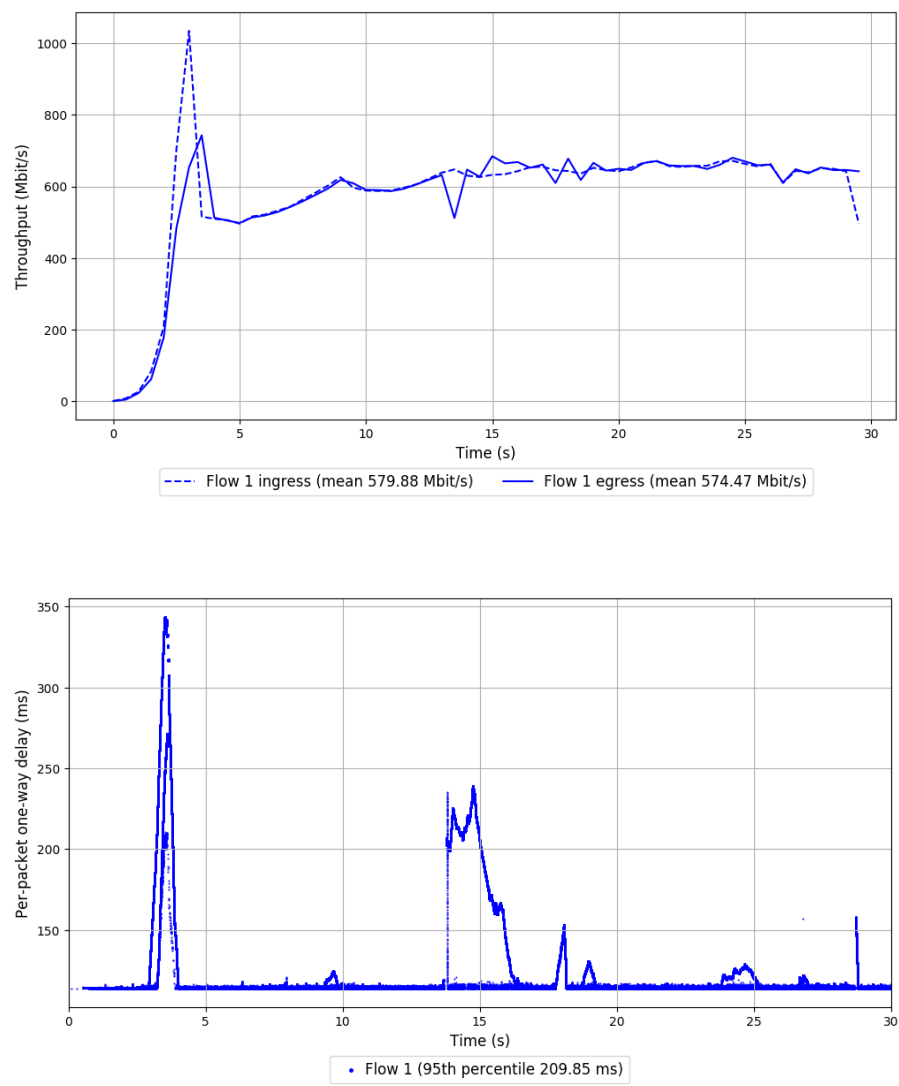
-- Flow 1:

Average throughput: 574.47 Mbit/s

95th percentile per-packet one-way delay: 209.855 ms

Loss rate: 0.93%

Run 10: Report of PCC — Data Link

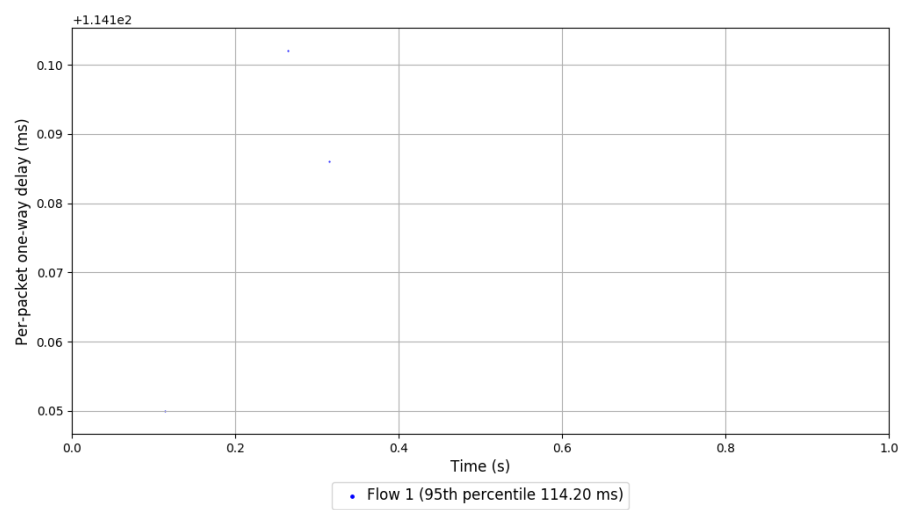
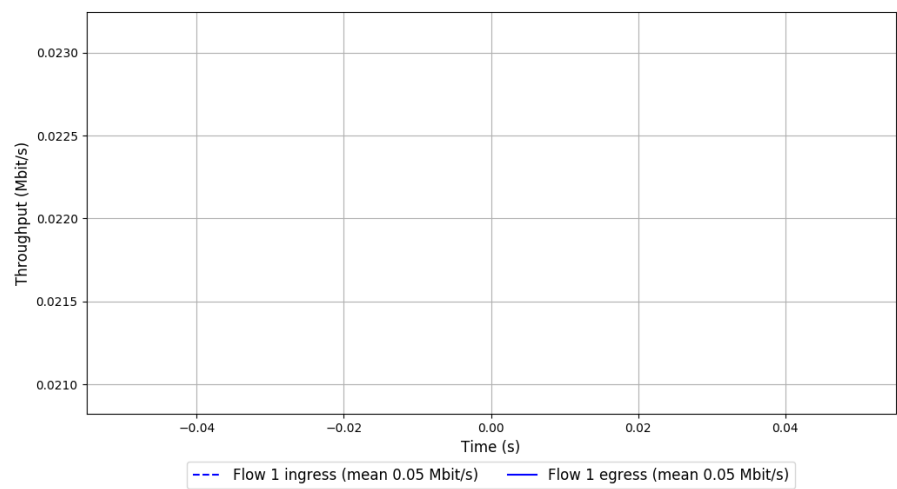


Run 1: Statistics of QUIC Cubic

Start at: 2017-10-10 19:31:08

End at: 2017-10-10 19:31:38

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-10-10 19:42:30

End at: 2017-10-10 19:43:00

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.72 Mbit/s

95th percentile per-packet one-way delay: 114.054 ms

Loss rate: 0.00%

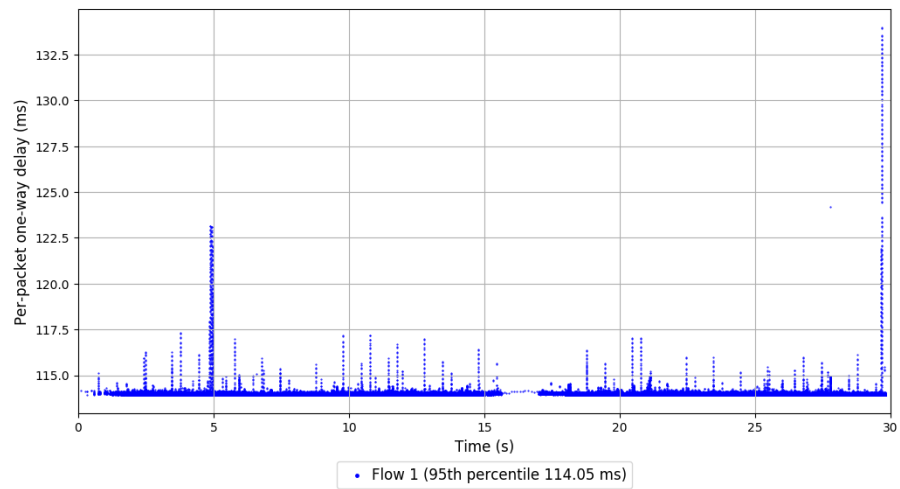
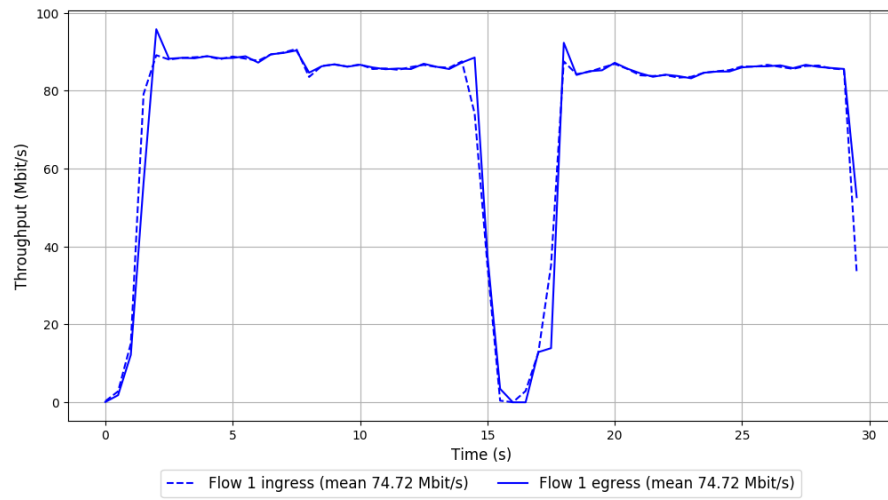
-- Flow 1:

Average throughput: 74.72 Mbit/s

95th percentile per-packet one-way delay: 114.054 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-10-10 19:53:48

End at: 2017-10-10 19:54:18

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.29 Mbit/s

95th percentile per-packet one-way delay: 113.987 ms

Loss rate: 0.00%

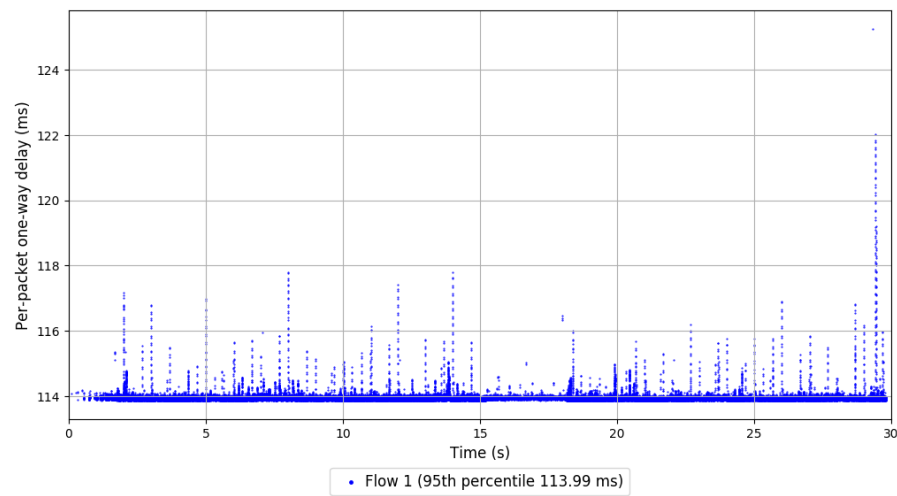
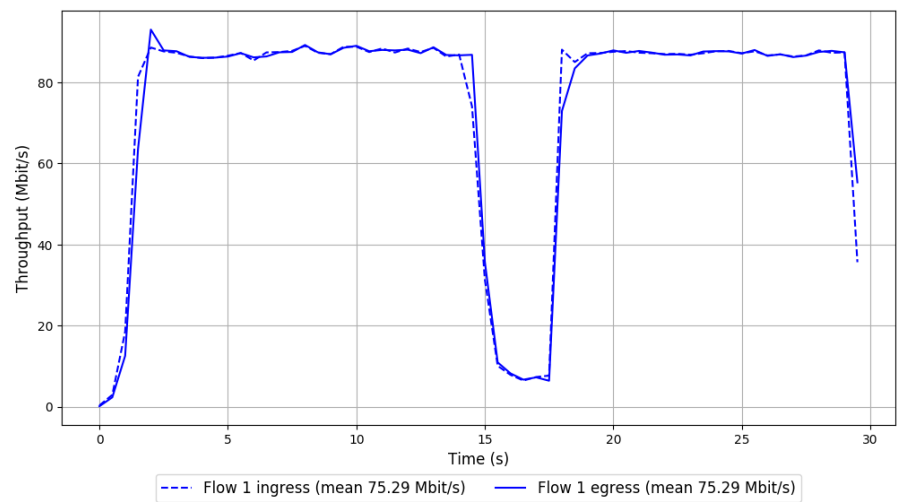
-- Flow 1:

Average throughput: 75.29 Mbit/s

95th percentile per-packet one-way delay: 113.987 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-10-10 20:04:59

End at: 2017-10-10 20:05:29

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.53 Mbit/s

95th percentile per-packet one-way delay: 114.042 ms

Loss rate: 0.00%

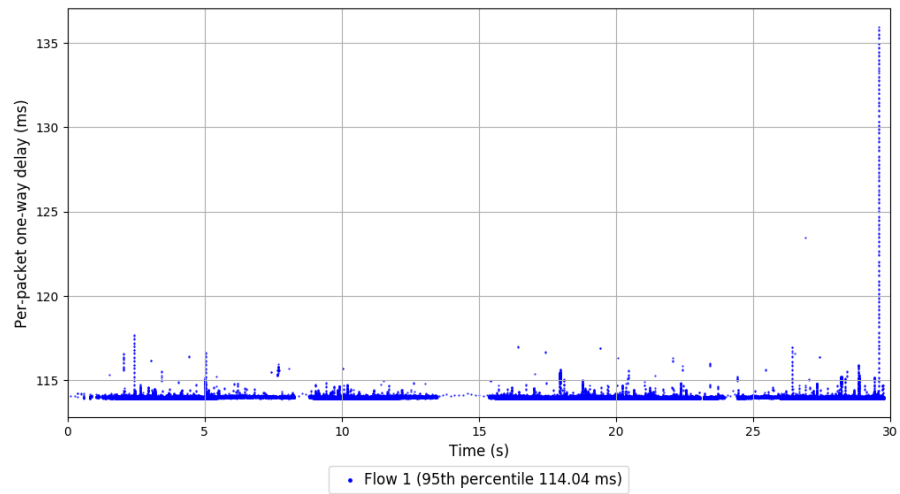
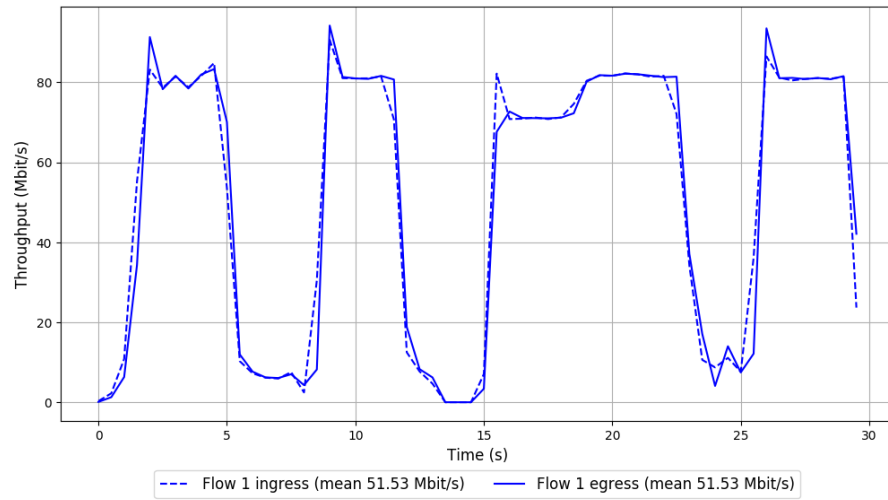
-- Flow 1:

Average throughput: 51.53 Mbit/s

95th percentile per-packet one-way delay: 114.042 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-10-10 20:16:21

End at: 2017-10-10 20:16:51

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.19 Mbit/s

95th percentile per-packet one-way delay: 113.810 ms

Loss rate: 0.00%

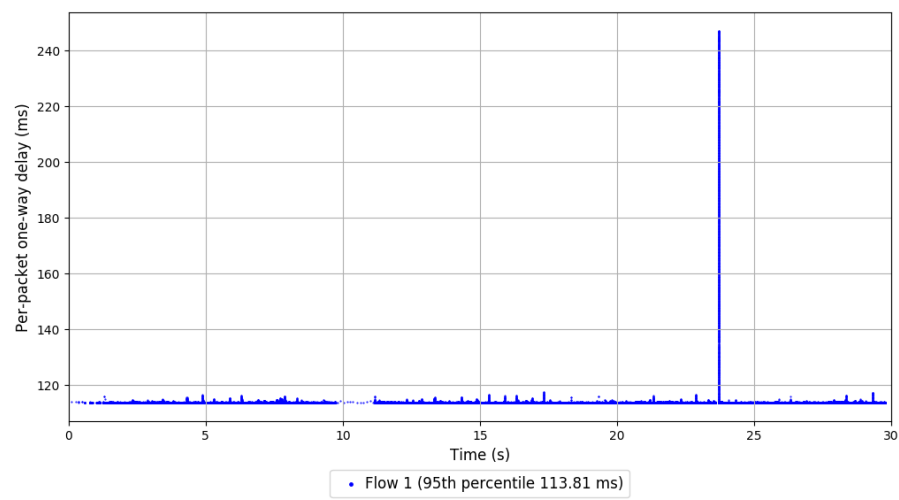
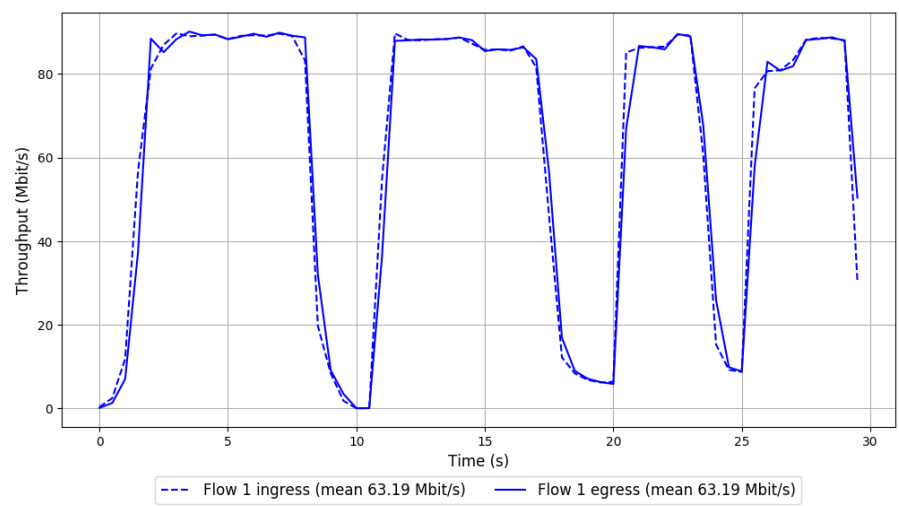
-- Flow 1:

Average throughput: 63.19 Mbit/s

95th percentile per-packet one-way delay: 113.810 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-10-10 20:27:34

End at: 2017-10-10 20:28:04

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.61 Mbit/s

95th percentile per-packet one-way delay: 113.862 ms

Loss rate: 0.00%

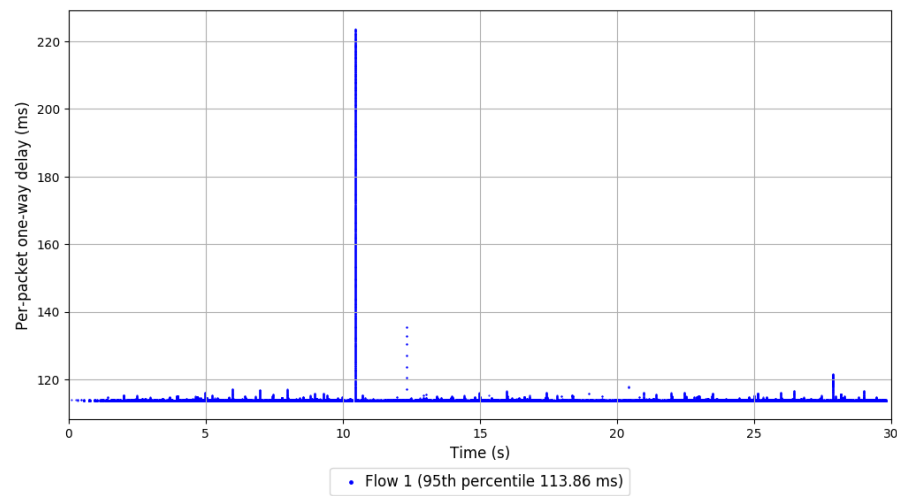
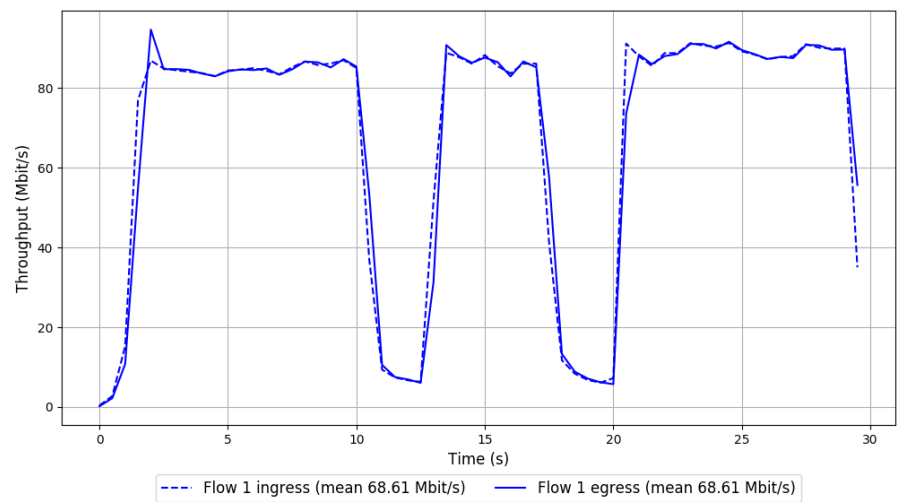
-- Flow 1:

Average throughput: 68.61 Mbit/s

95th percentile per-packet one-way delay: 113.862 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-10-10 20:39:00

End at: 2017-10-10 20:39:30

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.44 Mbit/s

95th percentile per-packet one-way delay: 113.836 ms

Loss rate: 0.00%

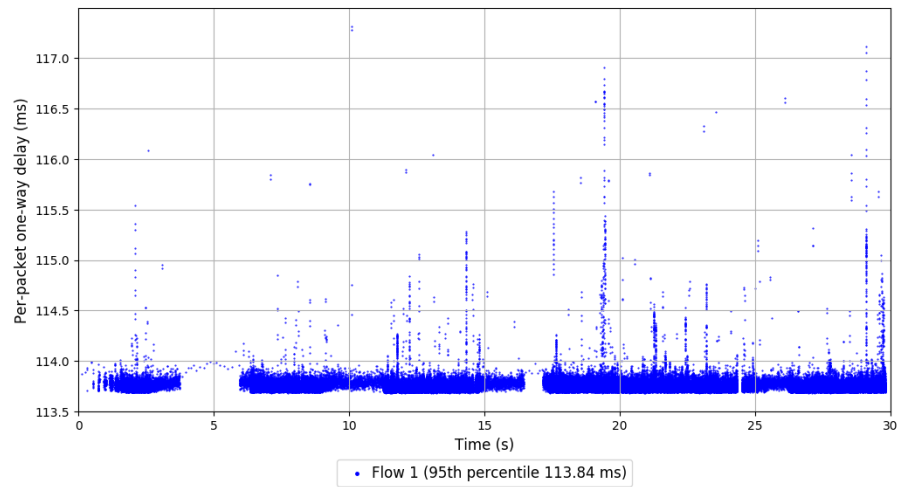
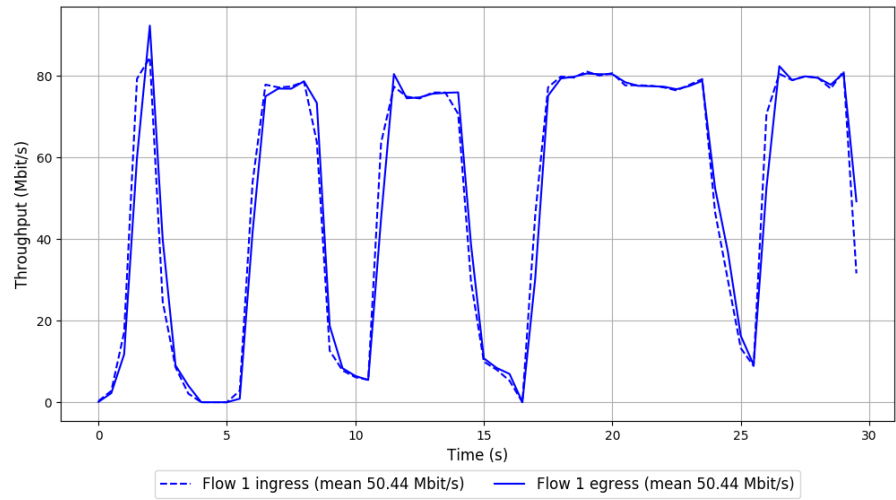
-- Flow 1:

Average throughput: 50.44 Mbit/s

95th percentile per-packet one-way delay: 113.836 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-10-10 20:50:20

End at: 2017-10-10 20:50:50

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.57 Mbit/s

95th percentile per-packet one-way delay: 114.221 ms

Loss rate: 0.00%

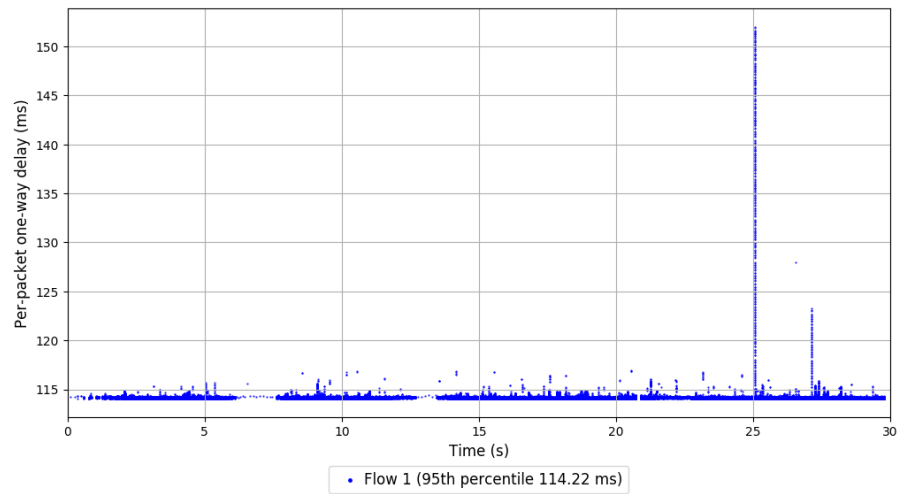
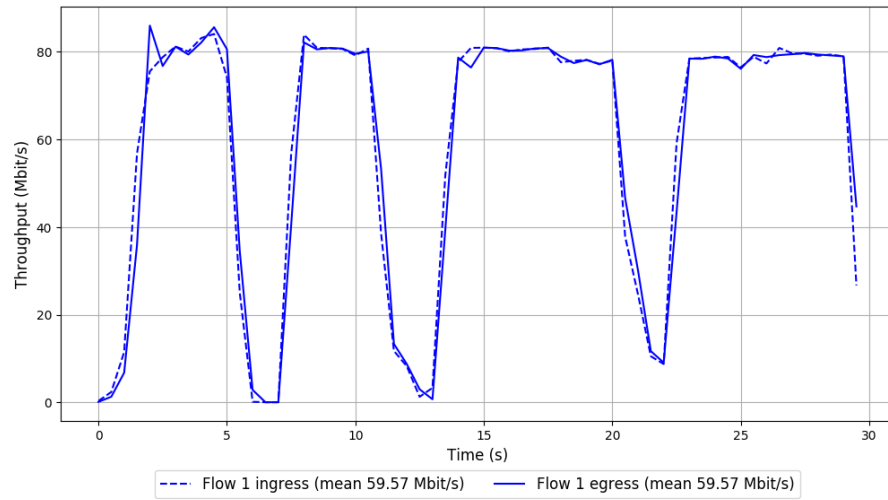
-- Flow 1:

Average throughput: 59.57 Mbit/s

95th percentile per-packet one-way delay: 114.221 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-10-10 21:01:52

End at: 2017-10-10 21:02:22

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.54 Mbit/s

95th percentile per-packet one-way delay: 113.837 ms

Loss rate: 0.00%

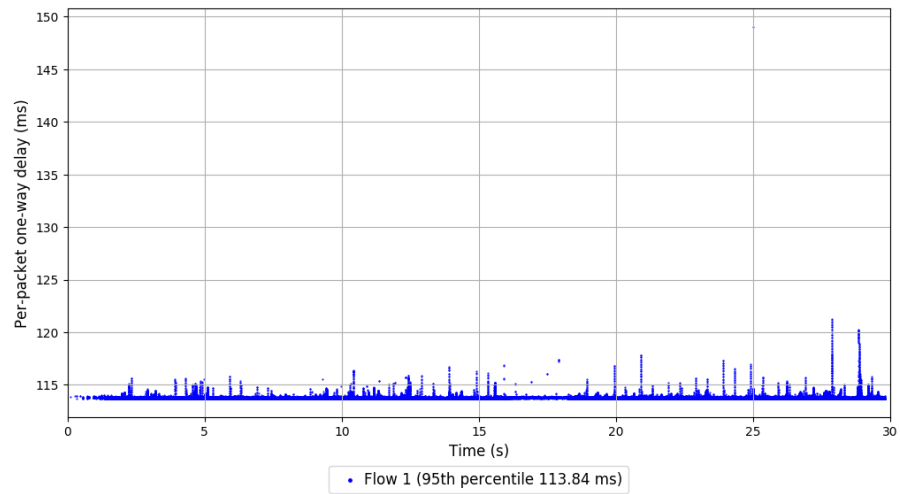
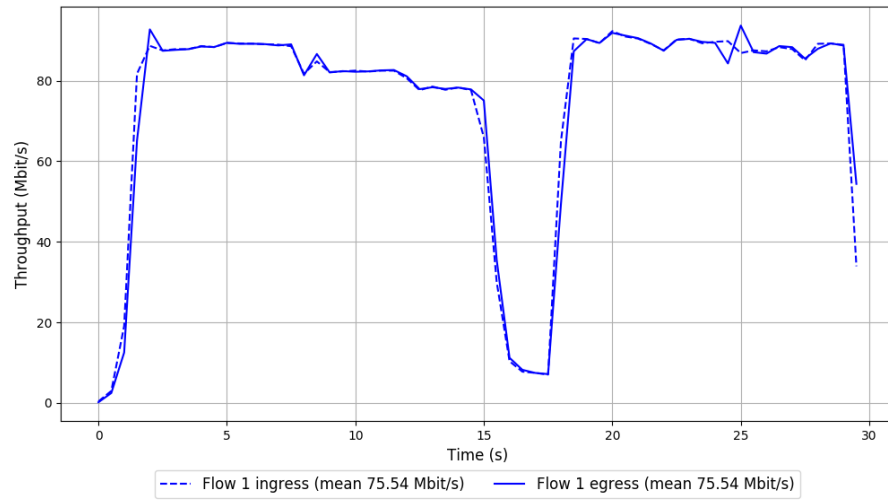
-- Flow 1:

Average throughput: 75.54 Mbit/s

95th percentile per-packet one-way delay: 113.837 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-10-10 21:12:52

End at: 2017-10-10 21:13:22

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.48 Mbit/s

95th percentile per-packet one-way delay: 114.134 ms

Loss rate: 0.00%

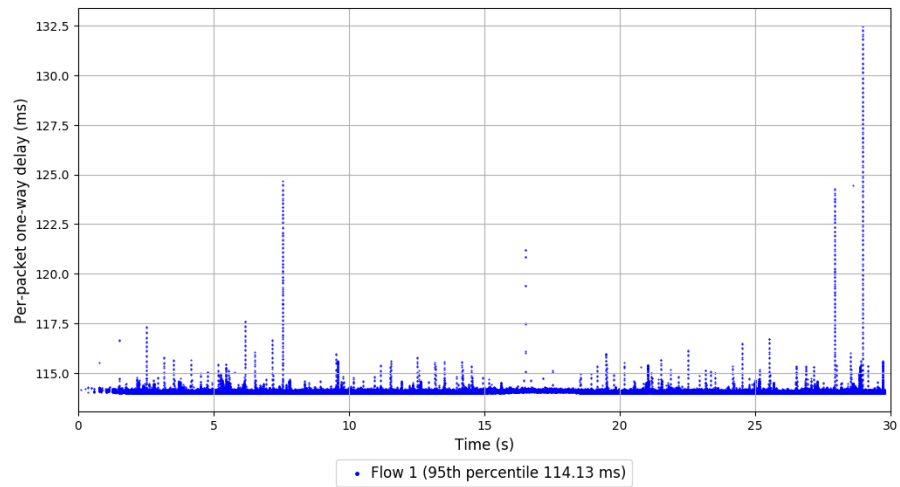
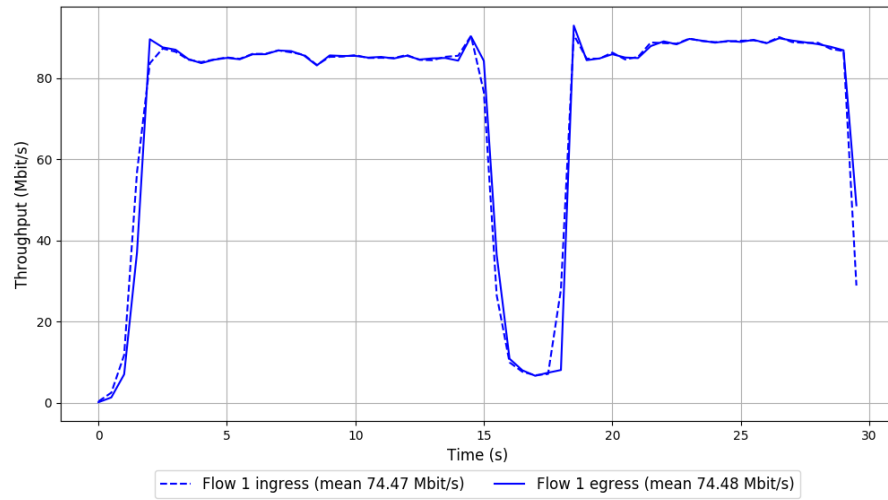
-- Flow 1:

Average throughput: 74.48 Mbit/s

95th percentile per-packet one-way delay: 114.134 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

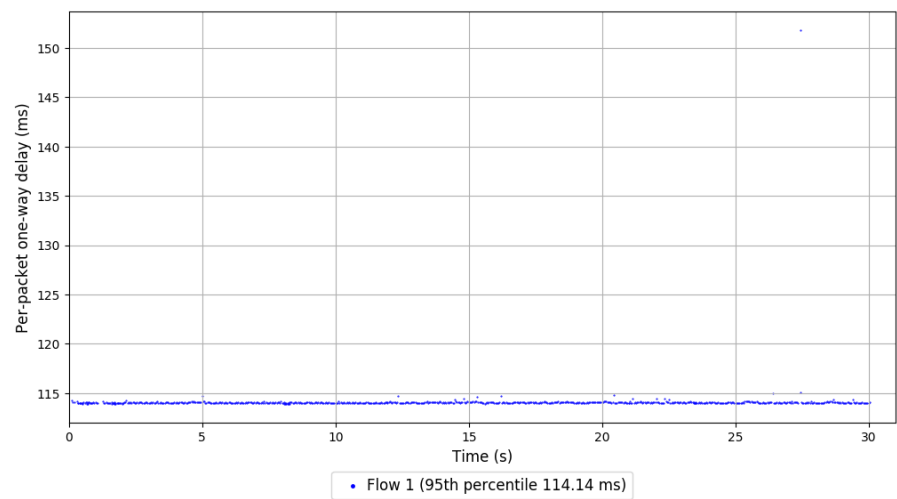
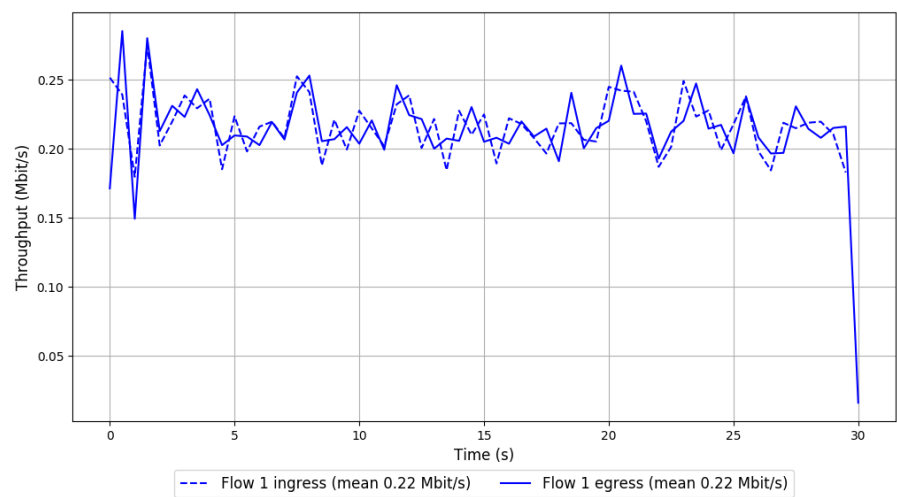


```
Run 1: Statistics of SCReAM

Start at: 2017-10-10 19:21:48
End at: 2017-10-10 19:22:18

# Below is generated by plot.py at 2017-10-10 22:18:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.141 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.141 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

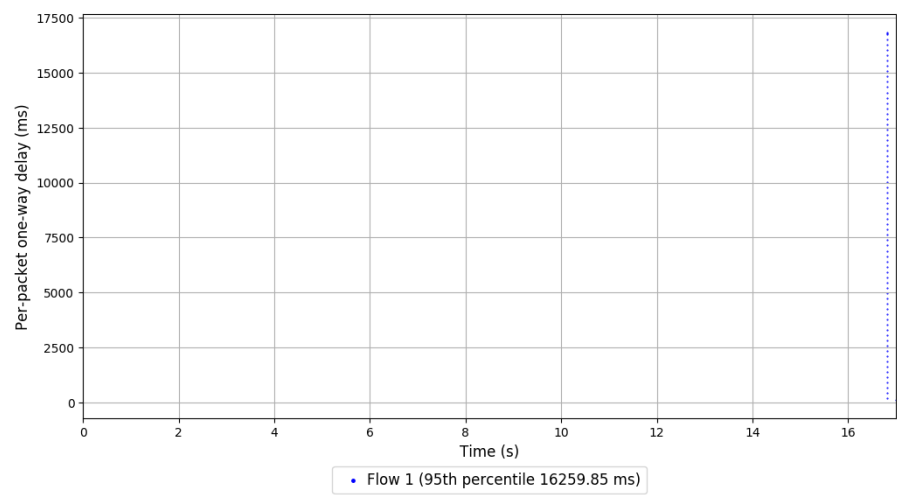
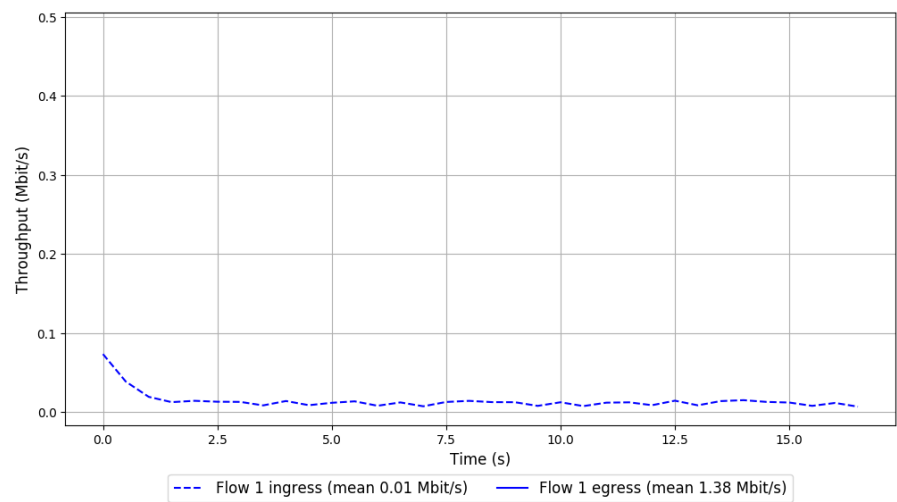


Run 2: Statistics of SReAM

Start at: 2017-10-10 19:33:09

End at: 2017-10-10 19:33:39

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-10-10 19:44:36

End at: 2017-10-10 19:45:06

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.229 ms

Loss rate: 0.00%

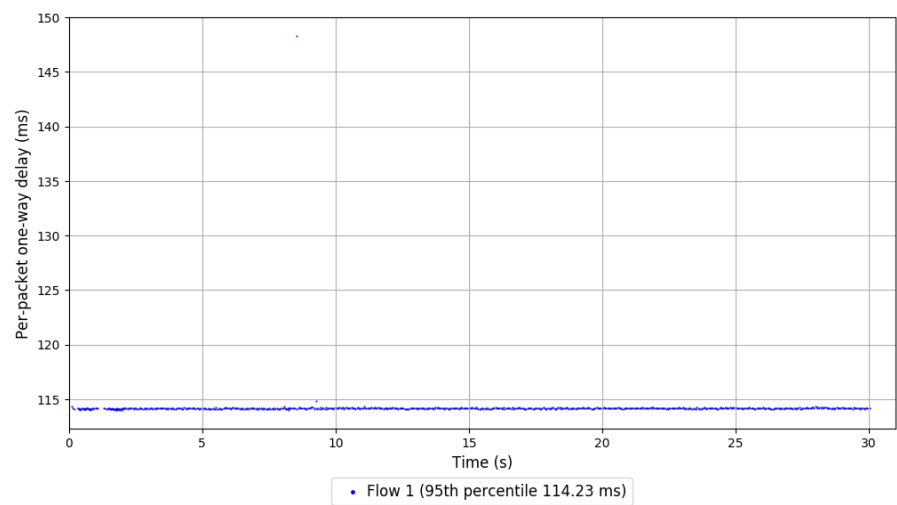
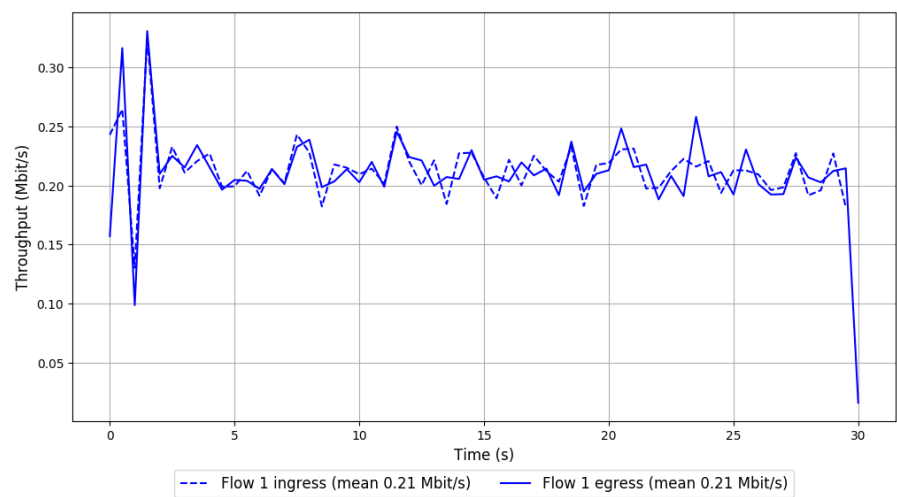
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.229 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-10-10 19:55:54

End at: 2017-10-10 19:56:24

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.235 ms

Loss rate: 0.00%

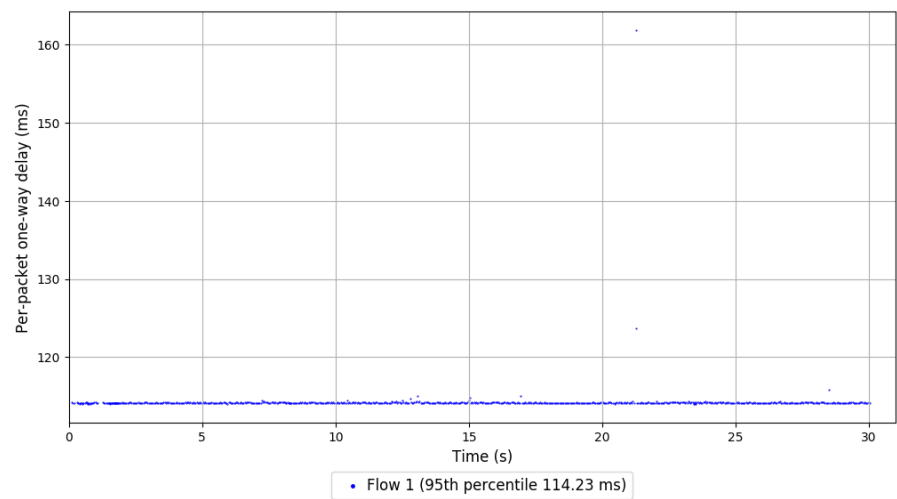
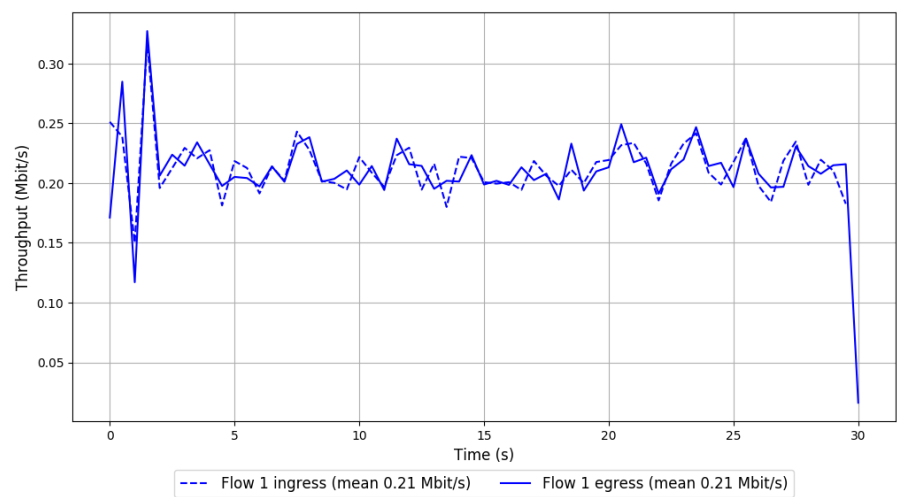
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.235 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-10-10 20:07:06

End at: 2017-10-10 20:07:36

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.955 ms

Loss rate: 0.00%

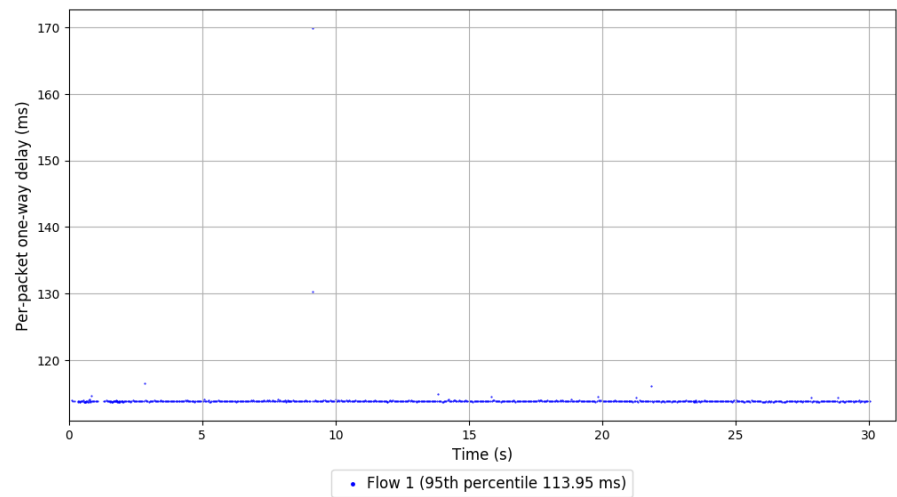
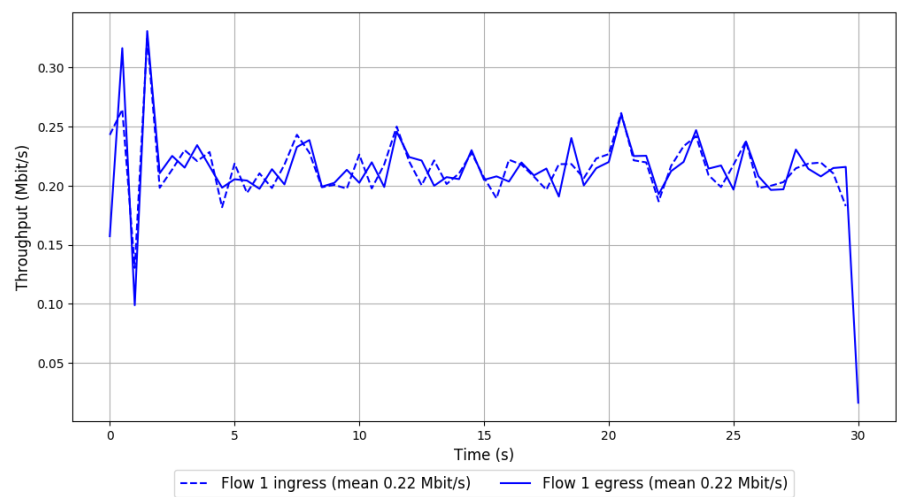
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.955 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-10-10 20:18:27

End at: 2017-10-10 20:18:57

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.216 ms

Loss rate: 0.00%

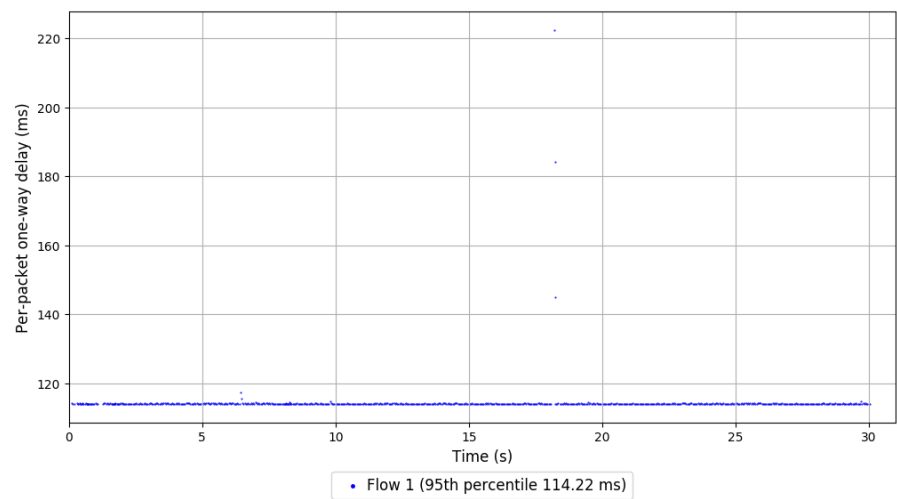
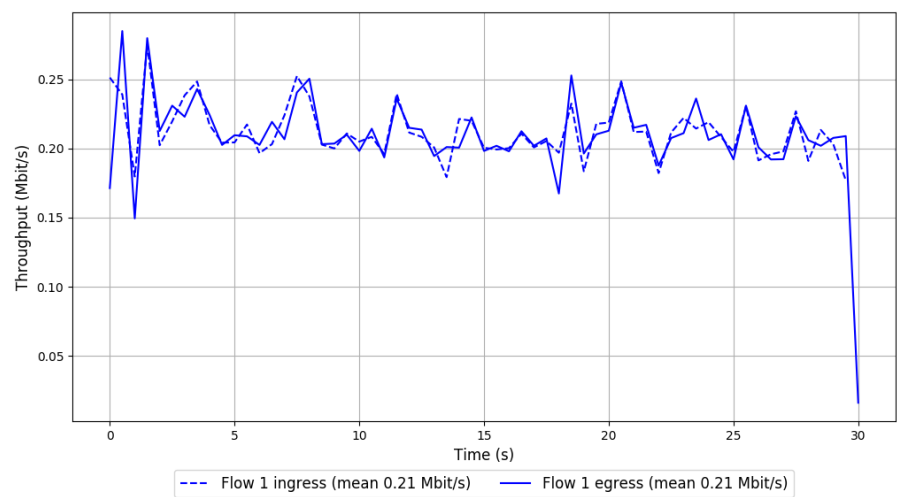
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.216 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-10-10 20:29:41

End at: 2017-10-10 20:30:11

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.378 ms

Loss rate: 0.00%

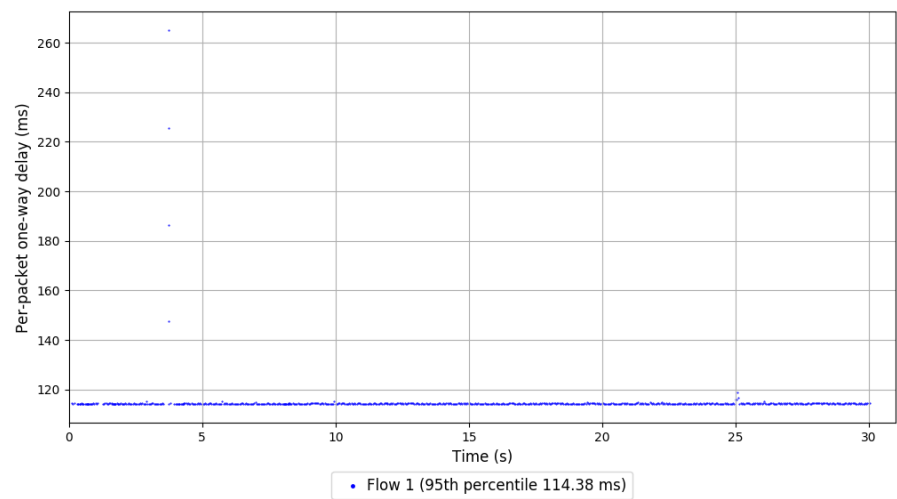
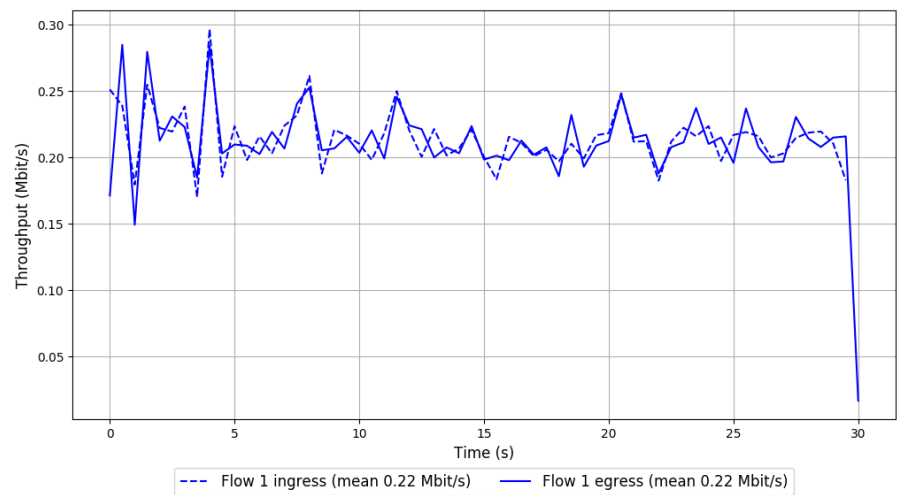
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.378 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-10-10 20:41:06

End at: 2017-10-10 20:41:36

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.305 ms

Loss rate: 0.00%

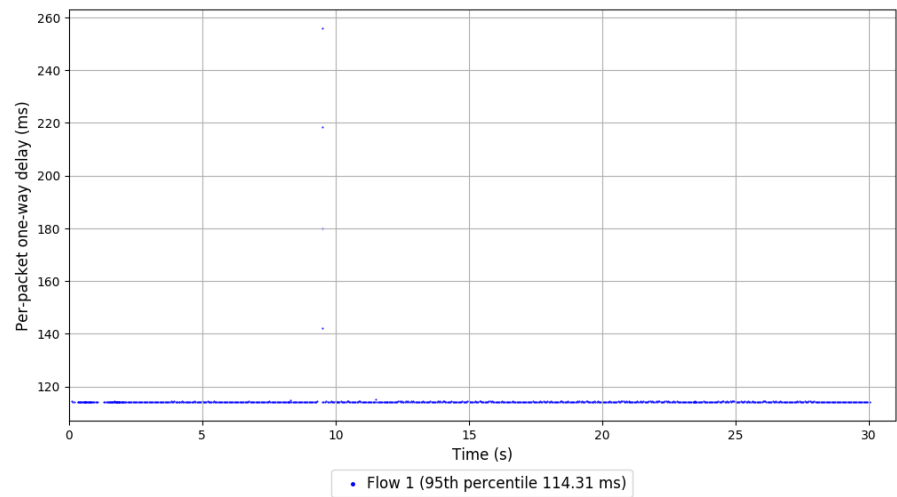
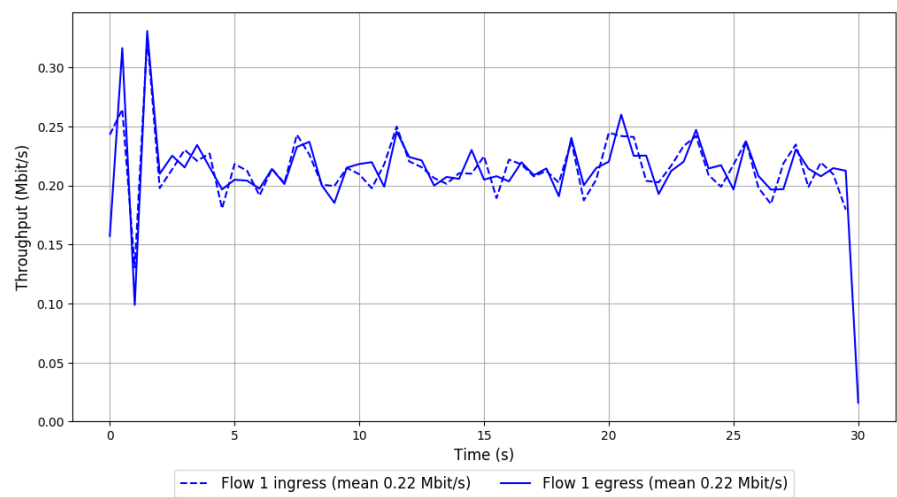
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.305 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

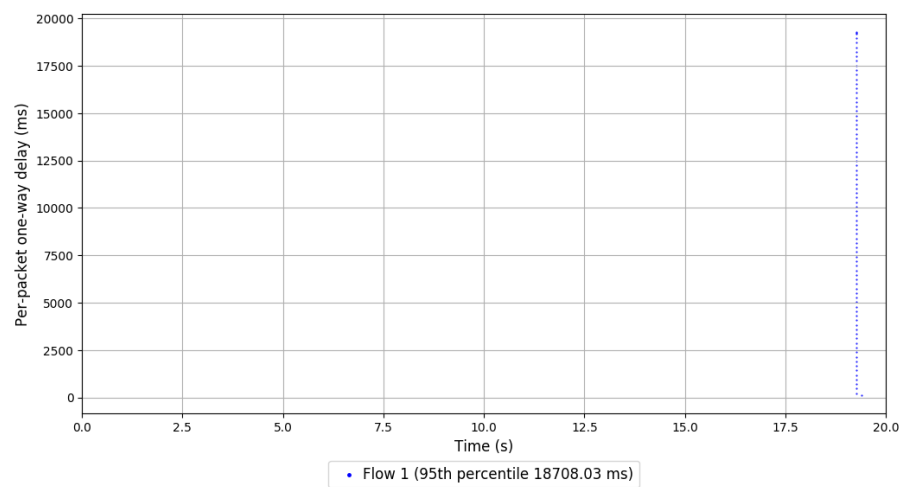
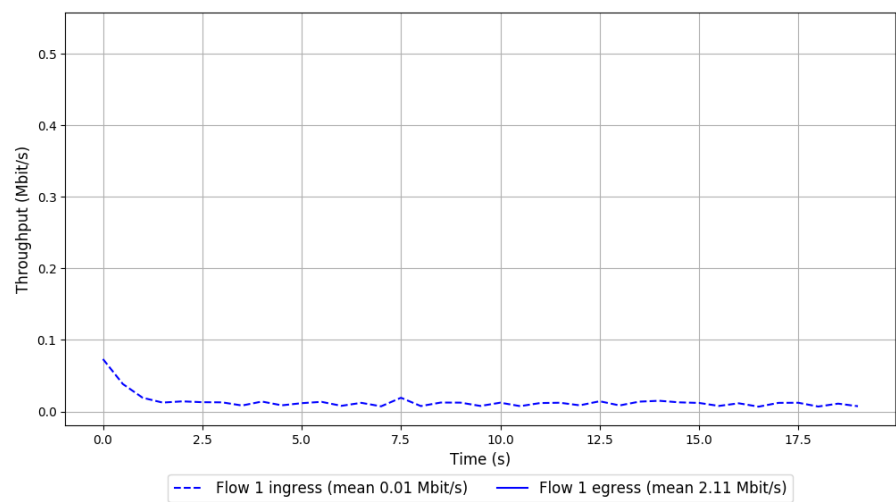


Run 9: Statistics of SReAM

Start at: 2017-10-10 20:52:26

End at: 2017-10-10 20:52:56

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-10-10 21:03:59

End at: 2017-10-10 21:04:29

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.342 ms

Loss rate: 0.00%

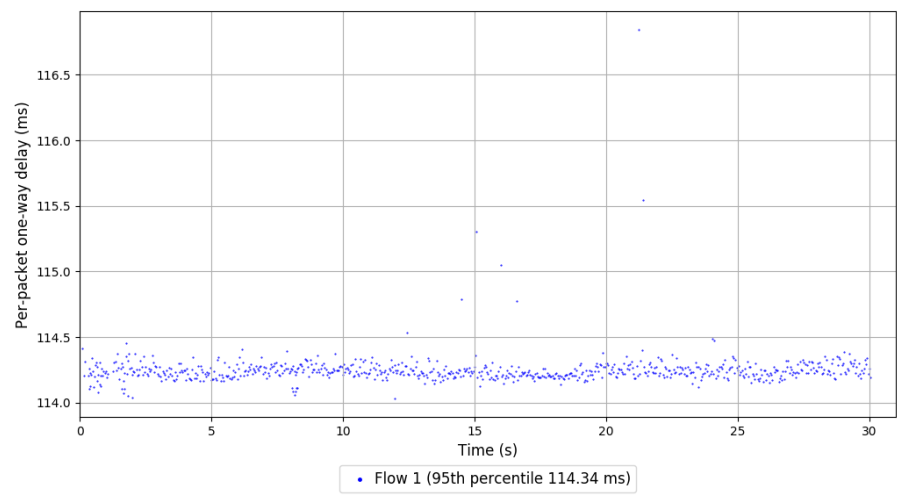
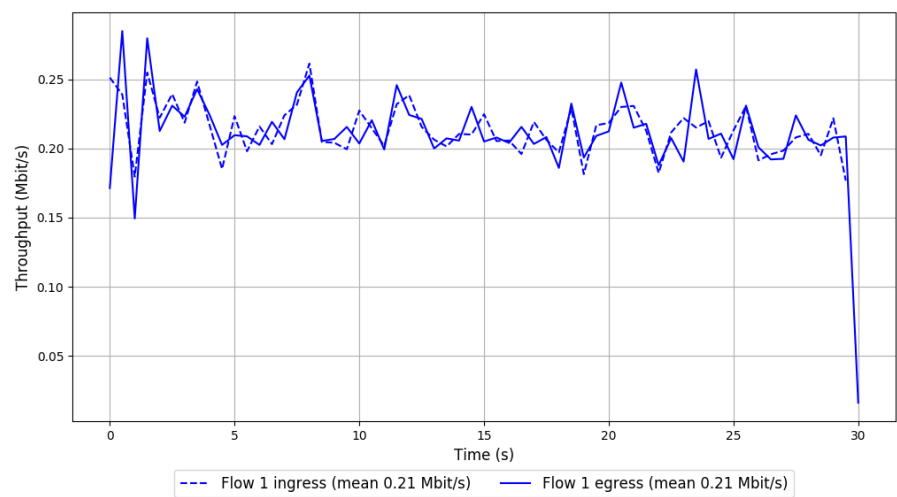
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.342 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

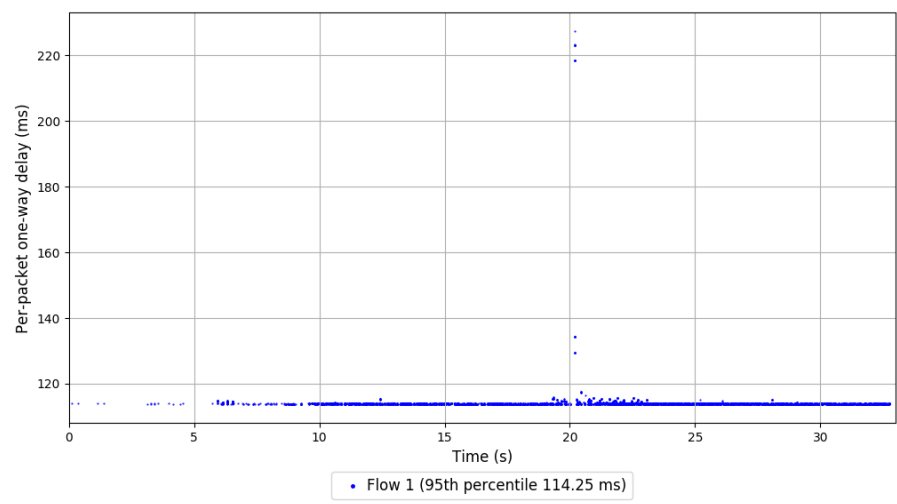
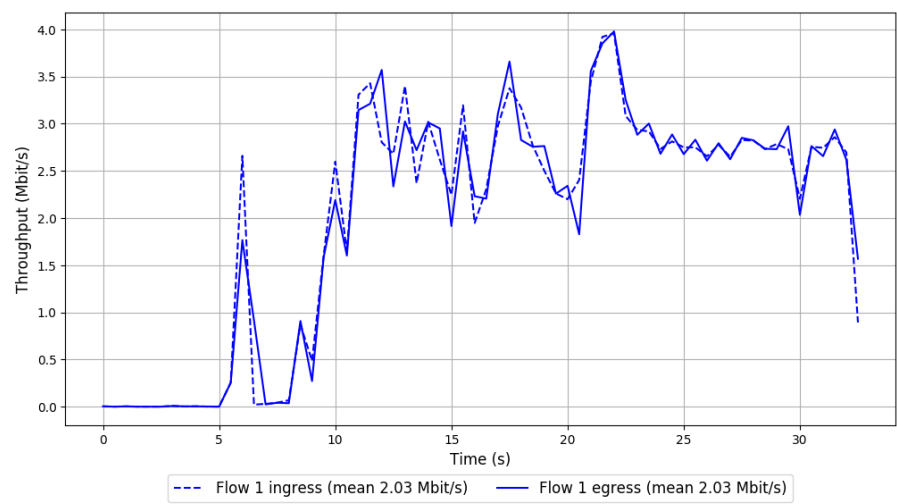


```
Run 1: Statistics of WebRTC media

Start at: 2017-10-10 19:22:28
End at: 2017-10-10 19:22:58

# Below is generated by plot.py at 2017-10-10 22:18:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 114.247 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 114.247 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-10-10 19:33:48

End at: 2017-10-10 19:34:18

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

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

Loss rate: 0.00%

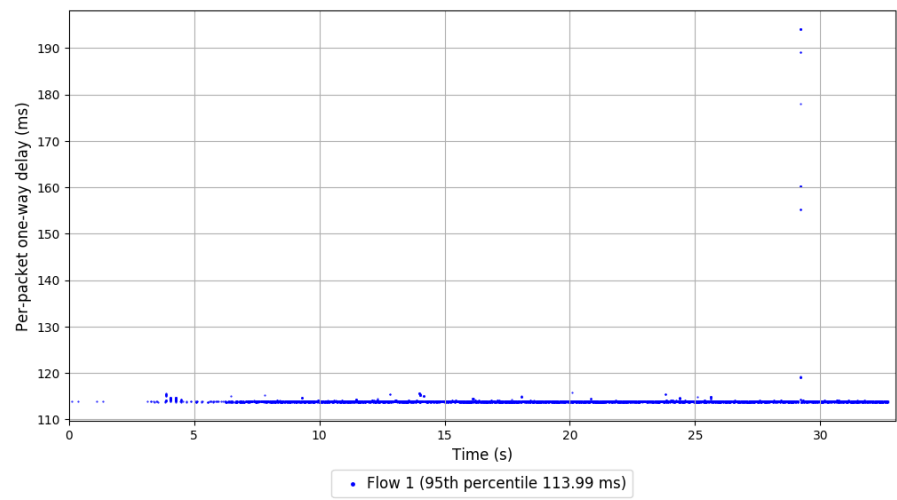
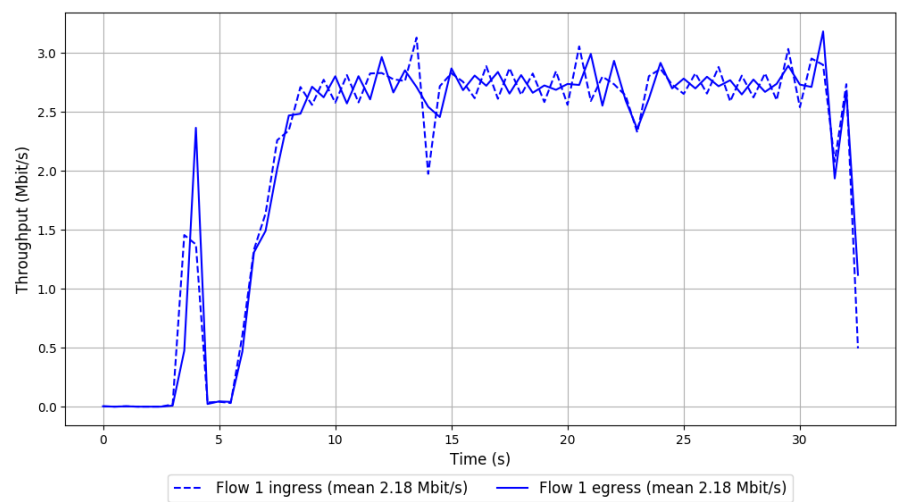
-- Flow 1:

Average throughput: 2.18 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-10-10 19:45:16

End at: 2017-10-10 19:45:46

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 113.974 ms

Loss rate: 0.00%

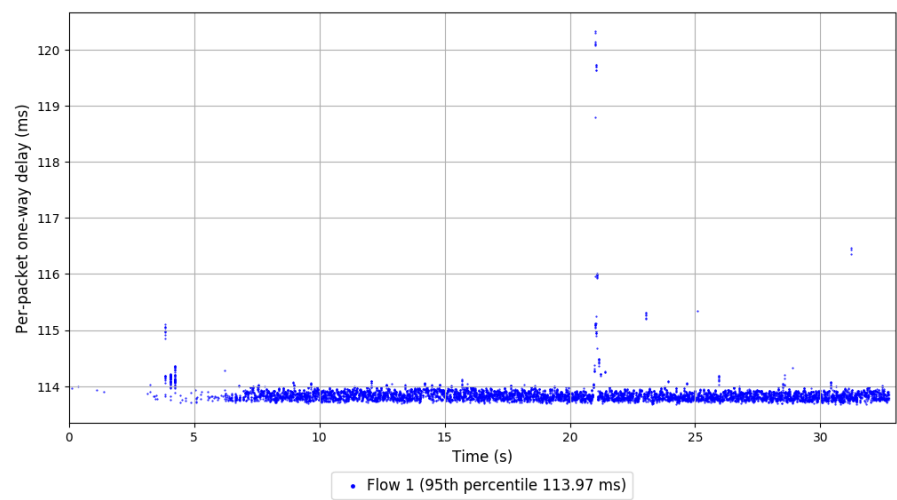
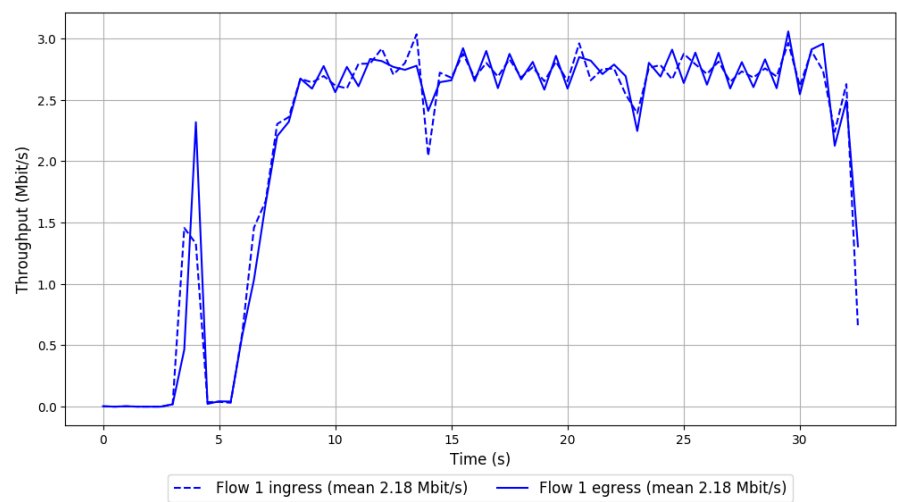
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 113.974 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-10-10 19:56:34

End at: 2017-10-10 19:57:04

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 113.947 ms

Loss rate: 0.00%

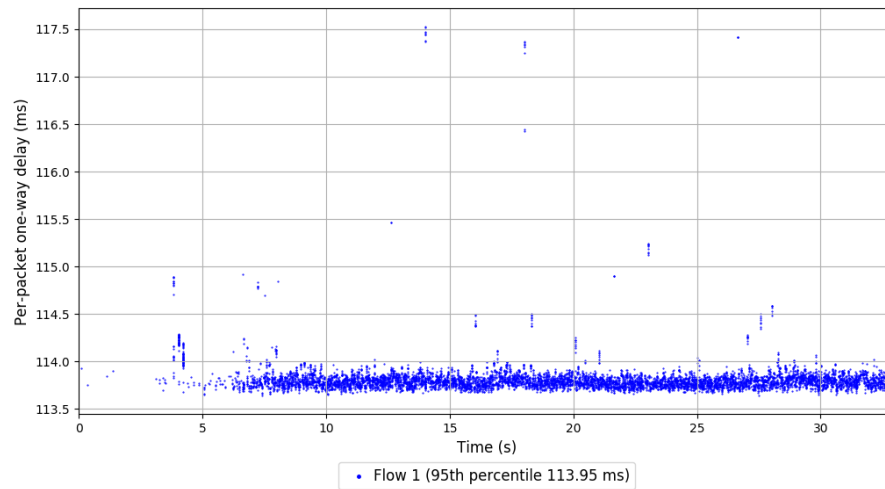
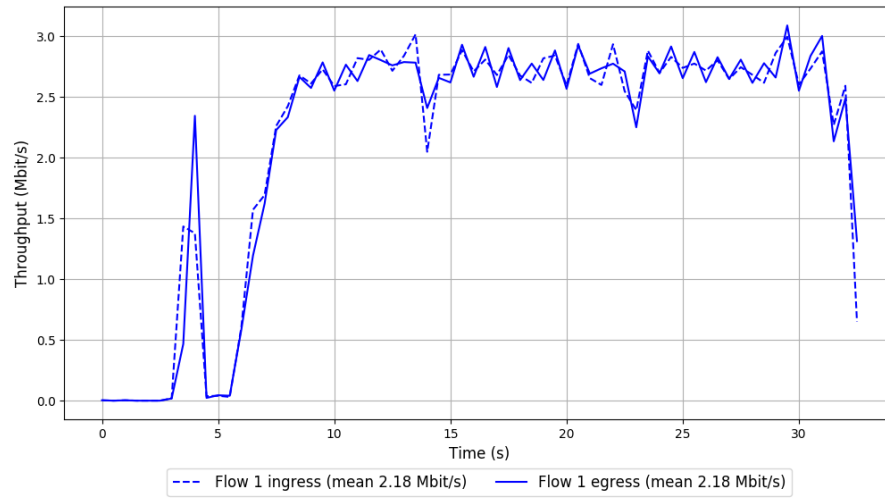
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 113.947 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-10-10 20:07:46

End at: 2017-10-10 20:08:16

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.177 ms

Loss rate: 0.00%

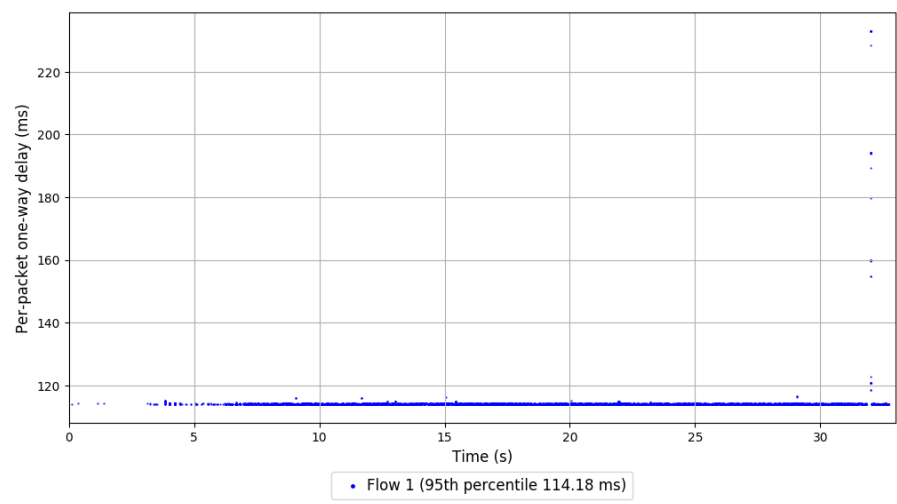
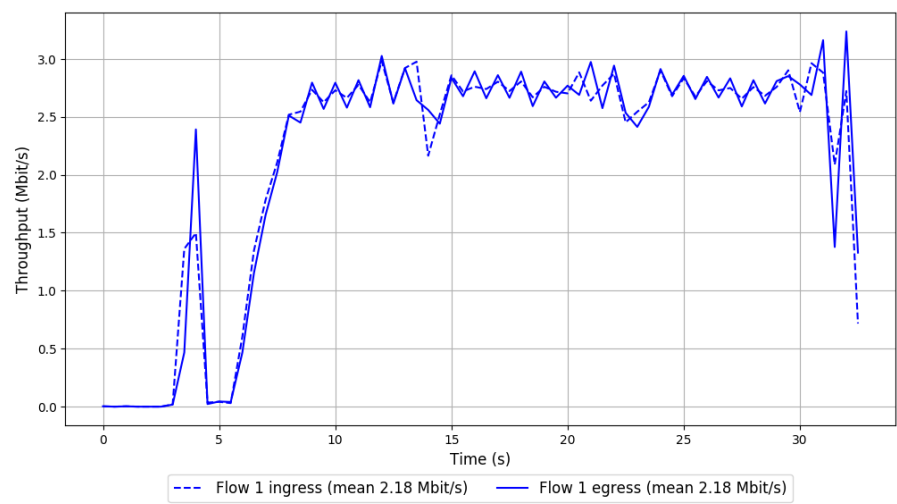
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.177 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

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

End at: 2017-10-10 20:19:37

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 114.328 ms

Loss rate: 0.00%

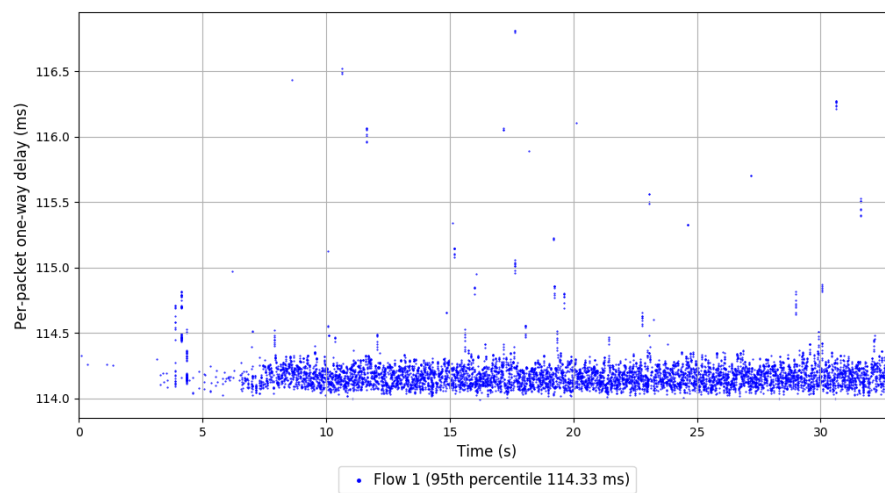
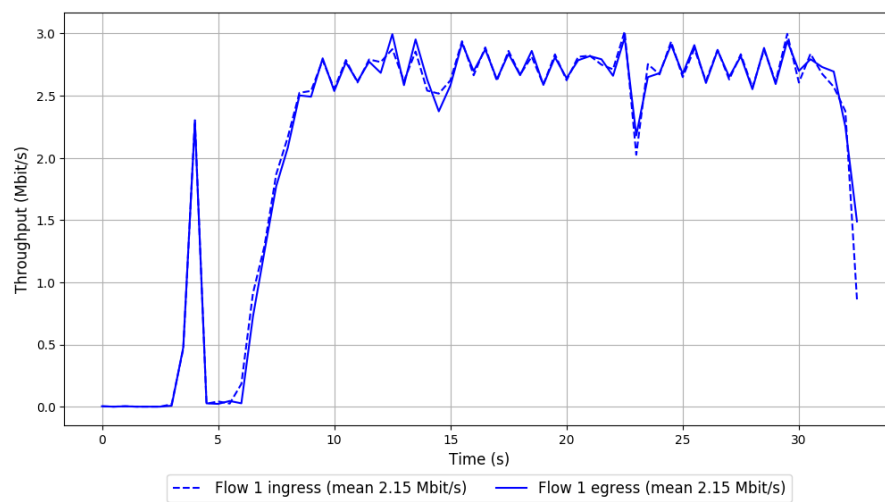
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 114.328 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-10-10 20:30:21

End at: 2017-10-10 20:30:51

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 114.391 ms

Loss rate: 0.00%

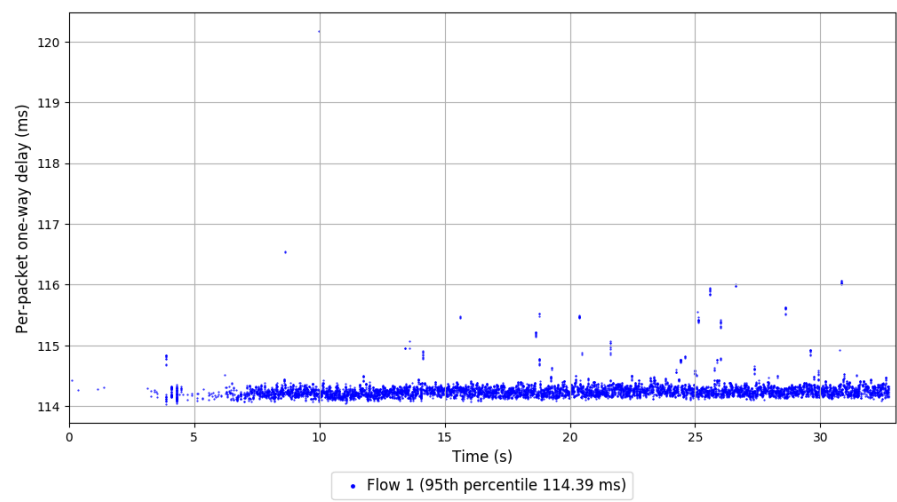
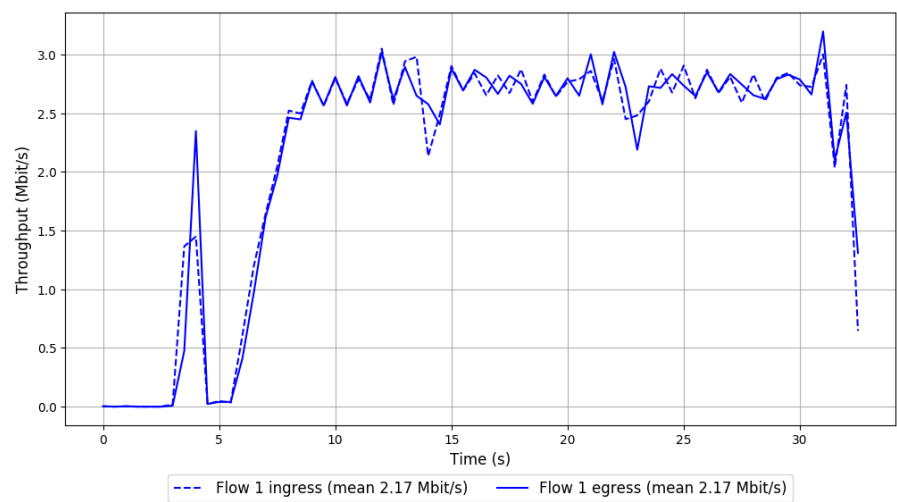
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 114.391 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-10-10 20:41:46

End at: 2017-10-10 20:42:16

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.377 ms

Loss rate: 0.00%

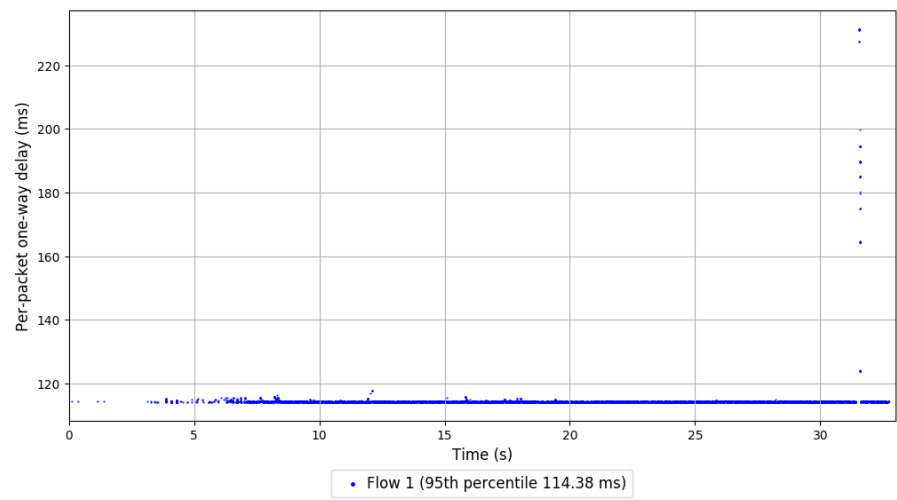
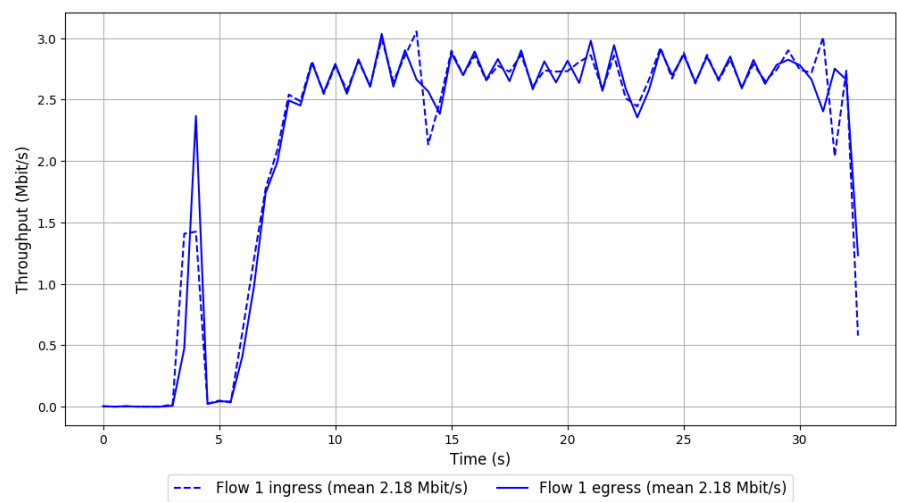
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.377 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-10-10 20:53:05

End at: 2017-10-10 20:53:36

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.353 ms

Loss rate: 0.00%

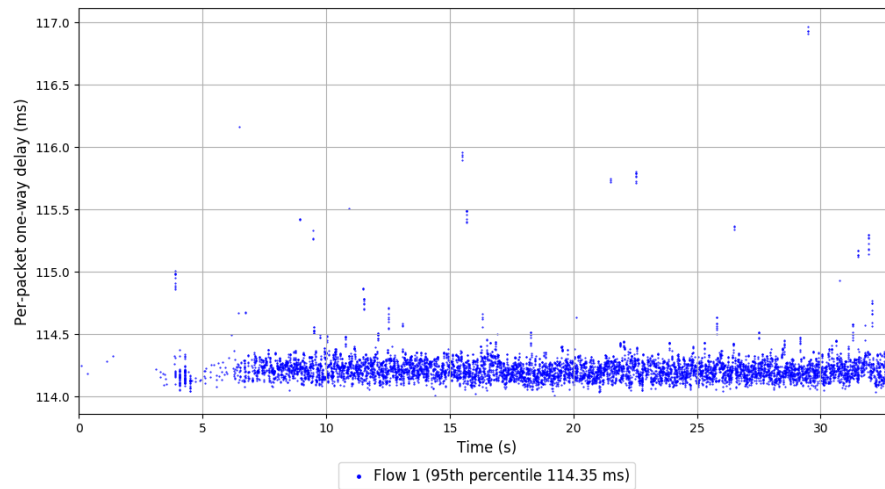
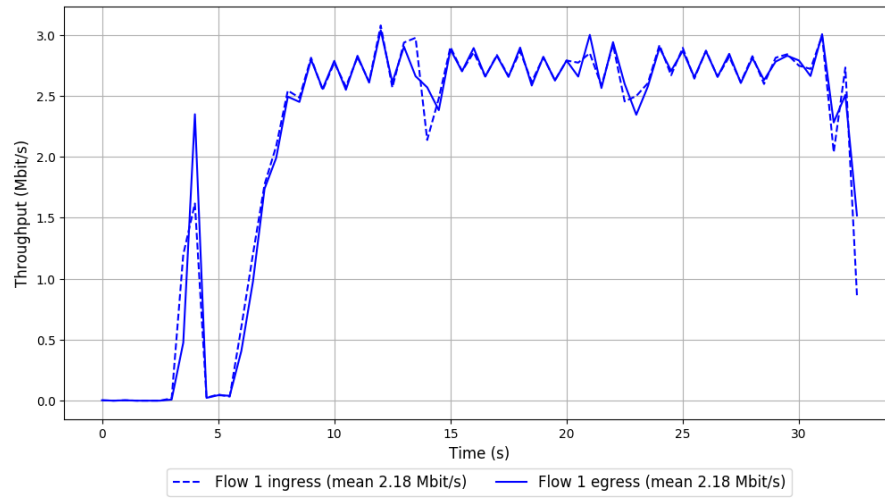
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.353 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-10-10 21:04:38

End at: 2017-10-10 21:05:08

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 114.314 ms

Loss rate: 0.00%

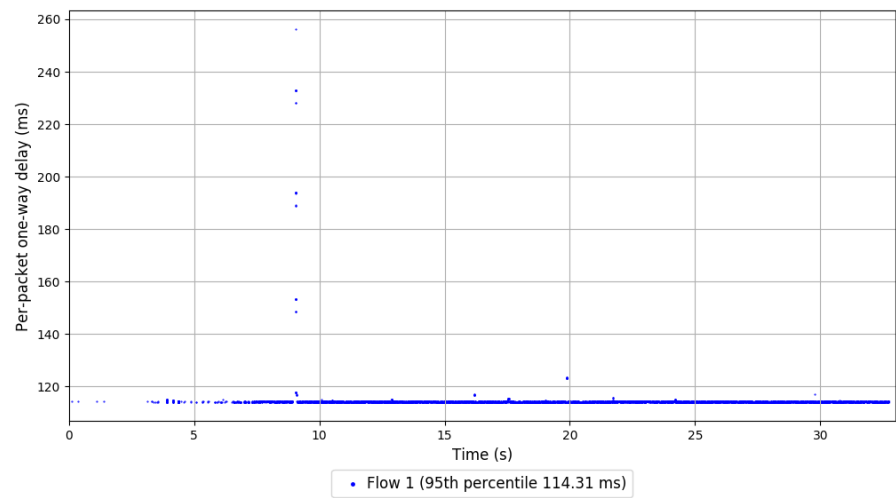
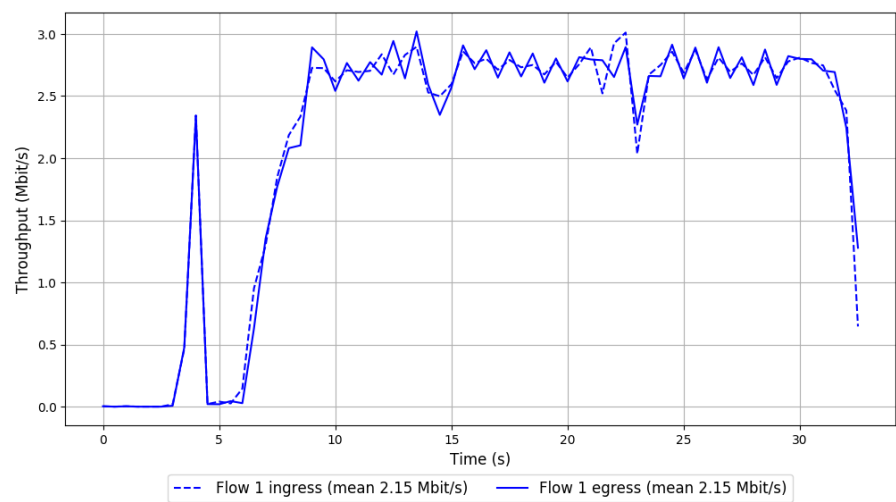
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 114.314 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-10-10 19:32:28

End at: 2017-10-10 19:32:58

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.47 Mbit/s

95th percentile per-packet one-way delay: 114.889 ms

Loss rate: 0.10%

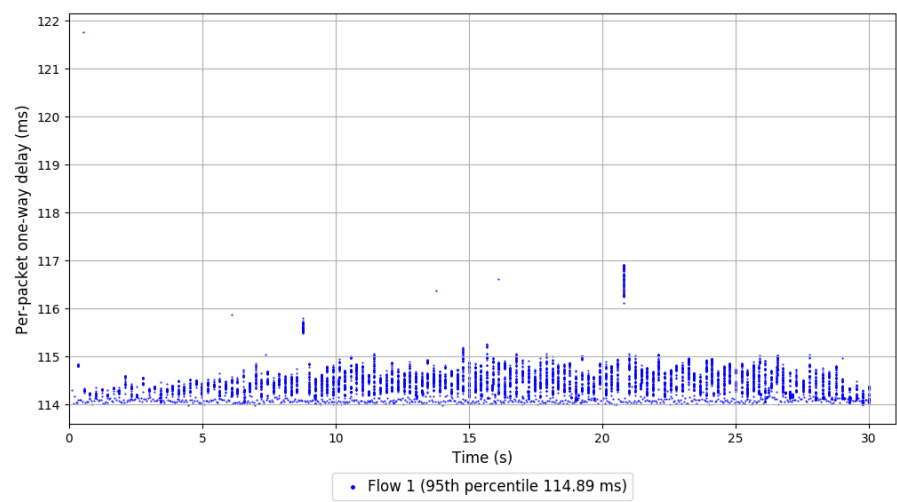
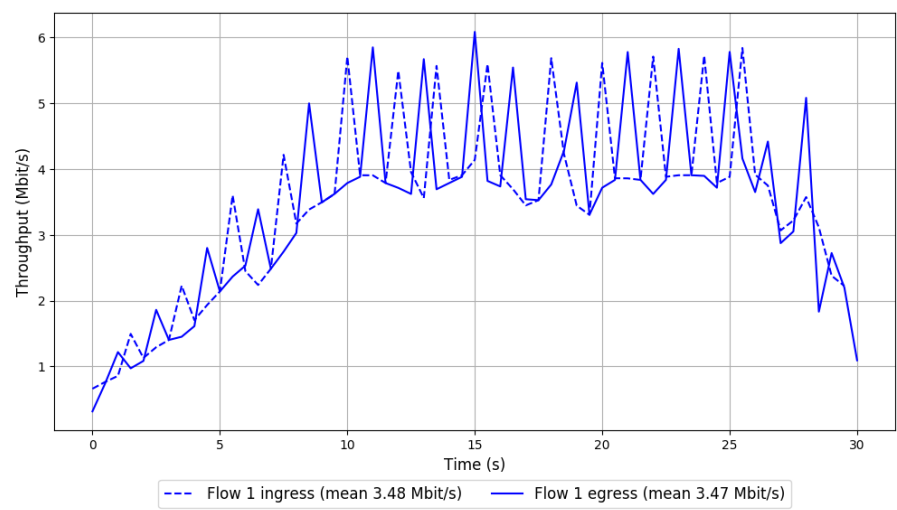
-- Flow 1:

Average throughput: 3.47 Mbit/s

95th percentile per-packet one-way delay: 114.889 ms

Loss rate: 0.10%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-10-10 19:43:56

End at: 2017-10-10 19:44:26

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.88 Mbit/s

95th percentile per-packet one-way delay: 114.846 ms

Loss rate: 0.07%

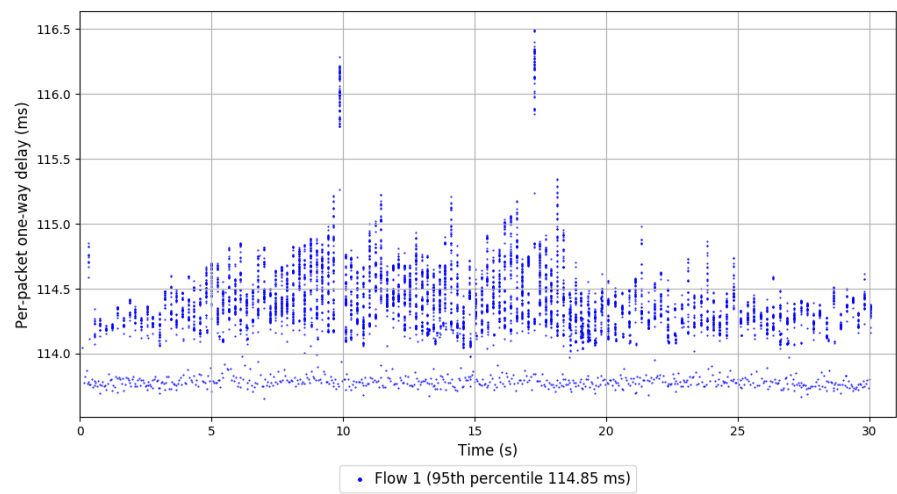
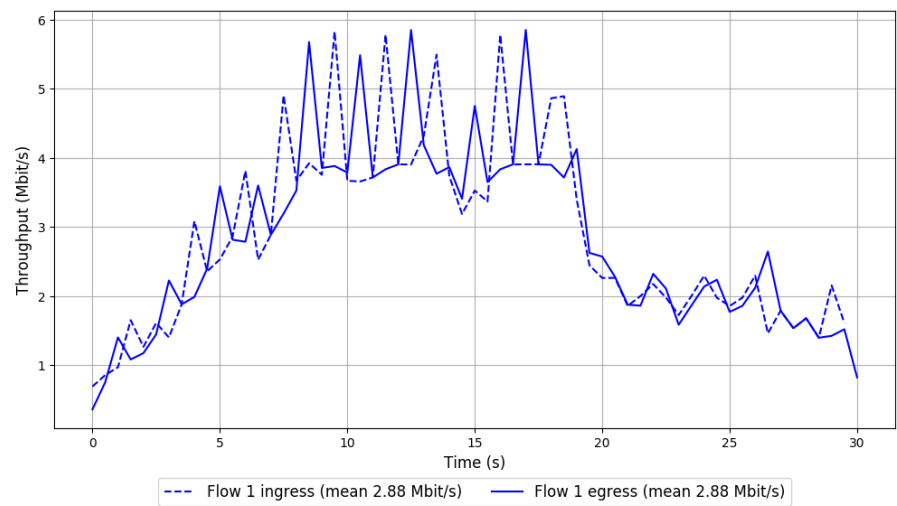
-- Flow 1:

Average throughput: 2.88 Mbit/s

95th percentile per-packet one-way delay: 114.846 ms

Loss rate: 0.07%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-10-10 19:55:13

End at: 2017-10-10 19:55:43

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 114.666 ms

Loss rate: 0.16%

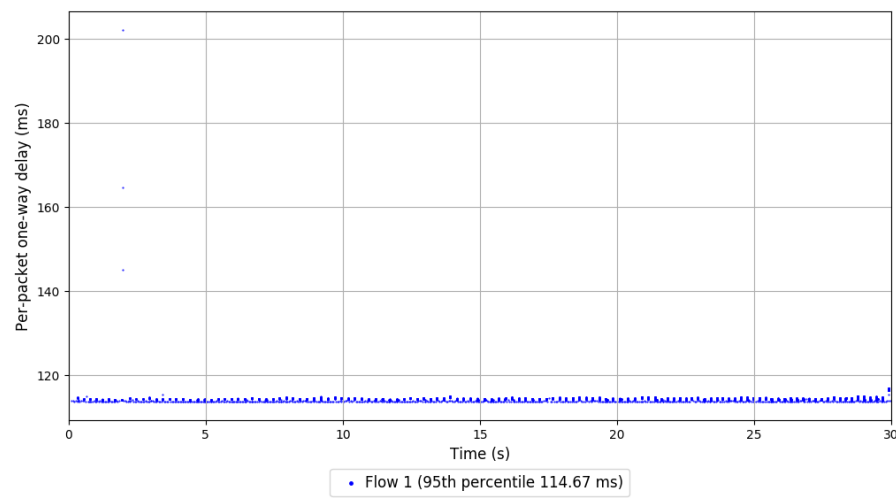
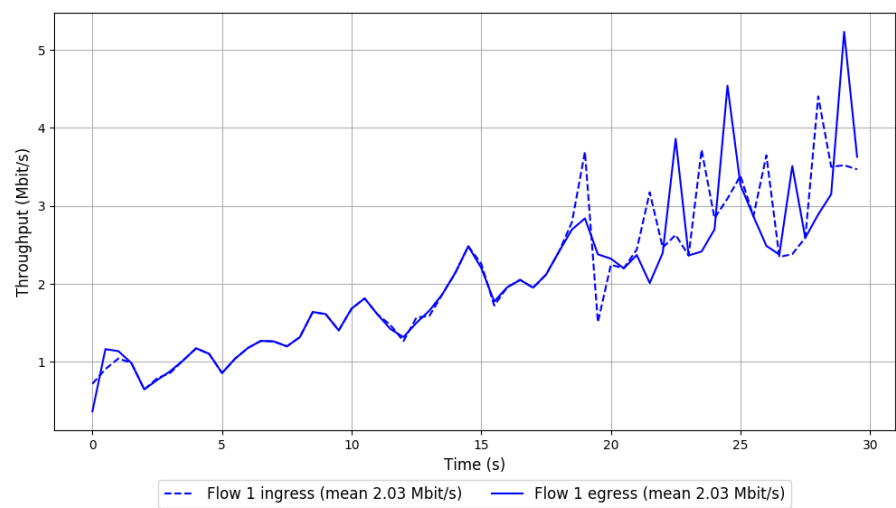
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 114.666 ms

Loss rate: 0.16%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-10-10 20:06:24

End at: 2017-10-10 20:06:54

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 114.821 ms

Loss rate: 0.03%

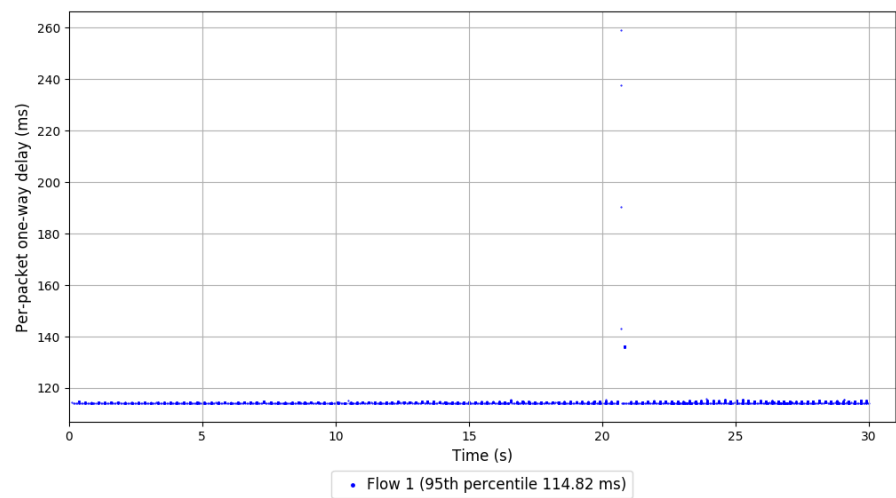
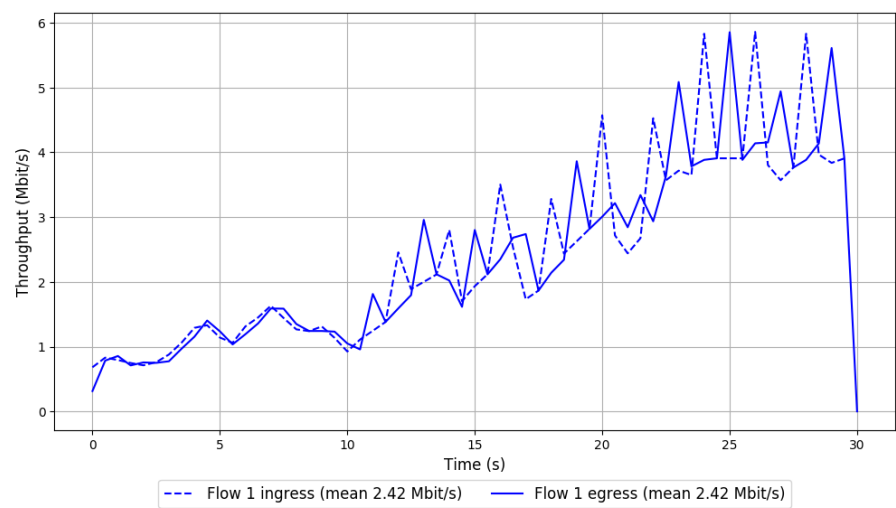
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 114.821 ms

Loss rate: 0.03%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-10-10 20:17:46

End at: 2017-10-10 20:18:16

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 114.938 ms

Loss rate: 0.03%

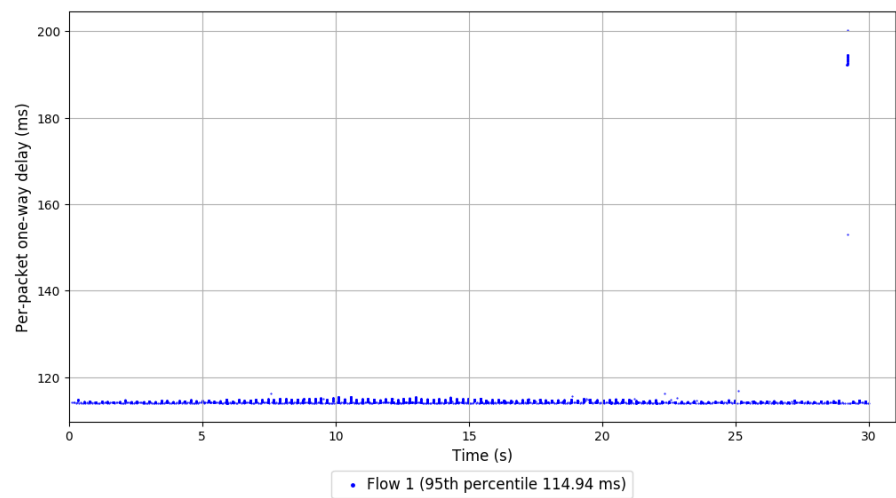
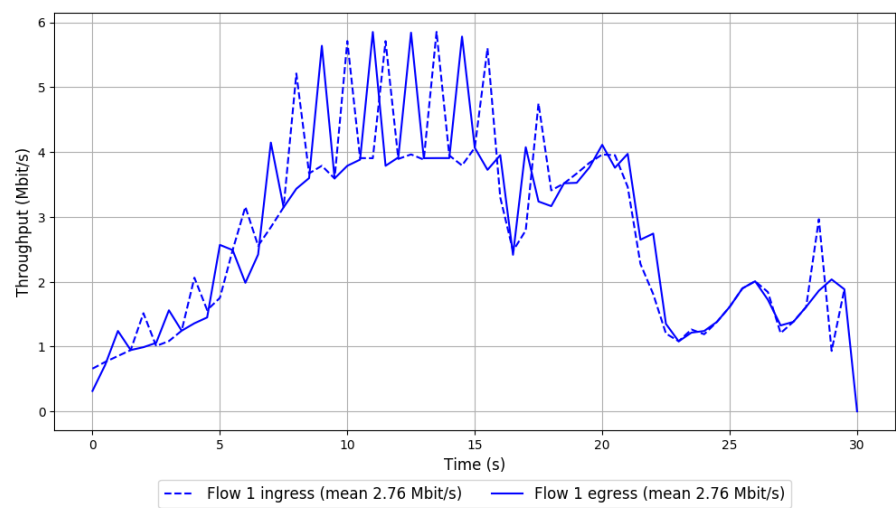
-- Flow 1:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 114.938 ms

Loss rate: 0.03%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-10-10 20:29:00

End at: 2017-10-10 20:29:30

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 114.858 ms

Loss rate: 0.02%

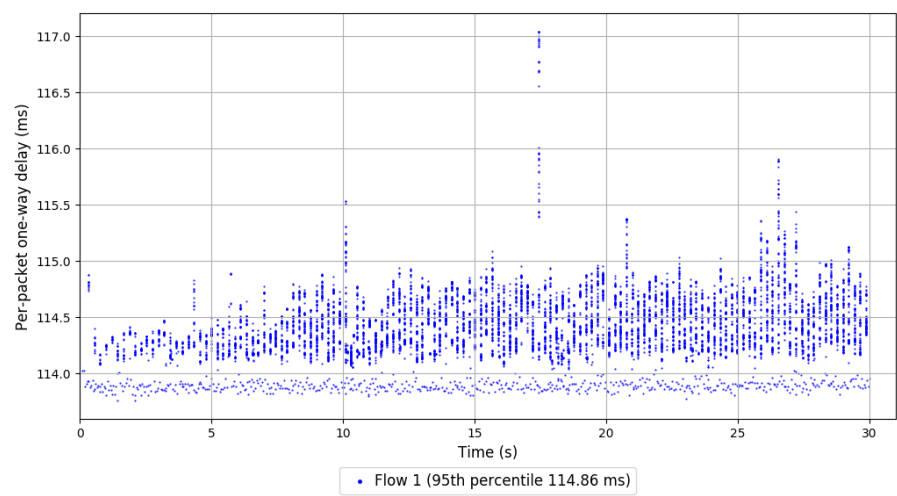
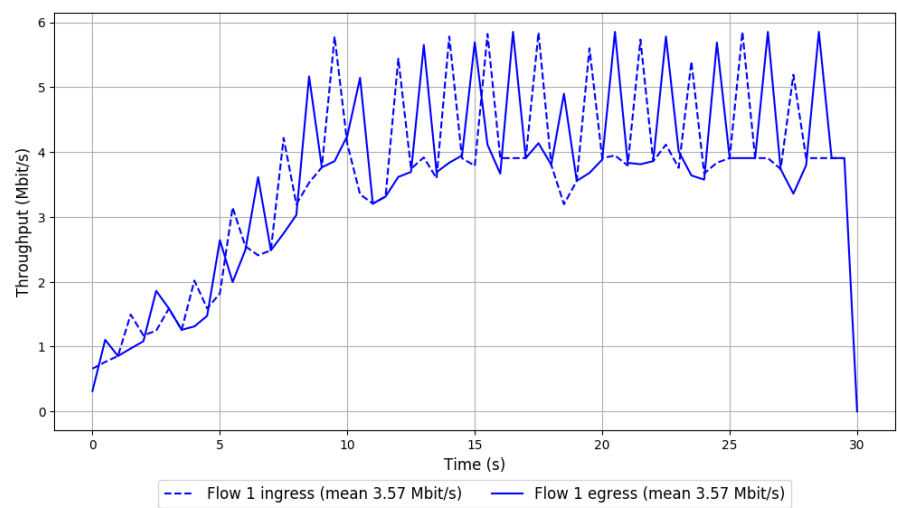
-- Flow 1:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 114.858 ms

Loss rate: 0.02%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-10-10 20:40:25

End at: 2017-10-10 20:40:55

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 114.844 ms

Loss rate: 0.33%

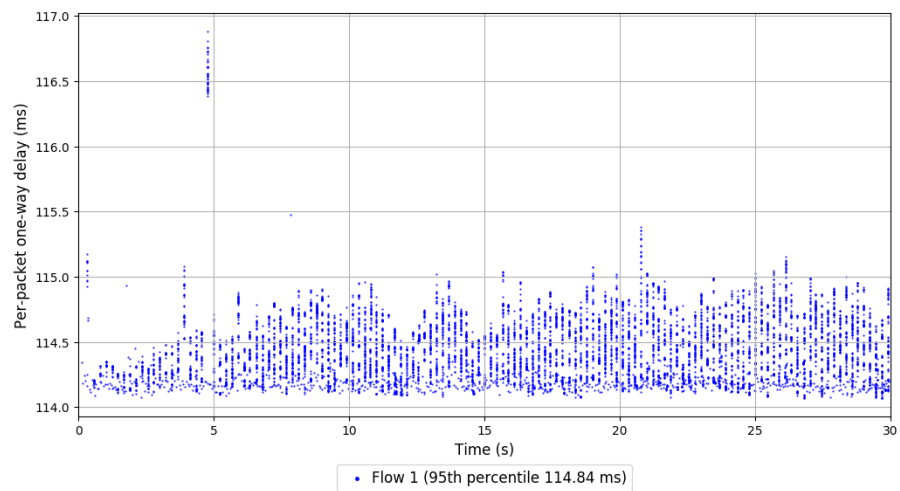
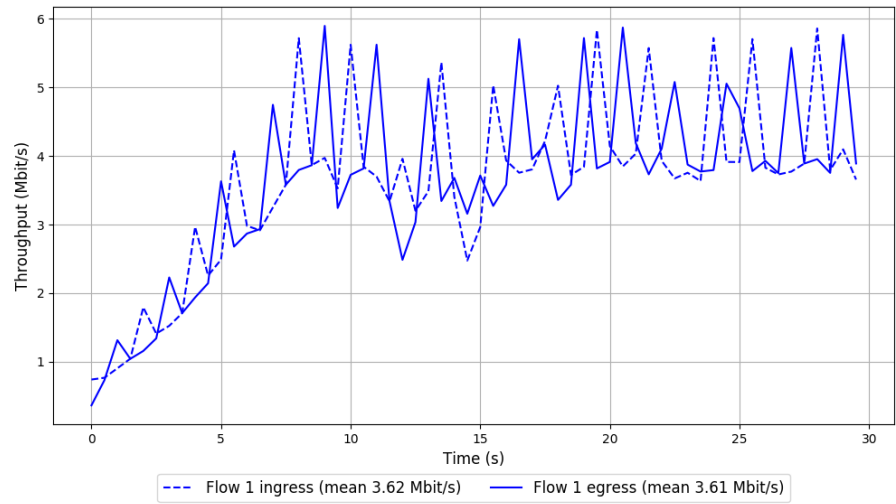
-- Flow 1:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 114.844 ms

Loss rate: 0.33%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-10-10 20:51:45

End at: 2017-10-10 20:52:15

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 114.777 ms

Loss rate: 0.03%

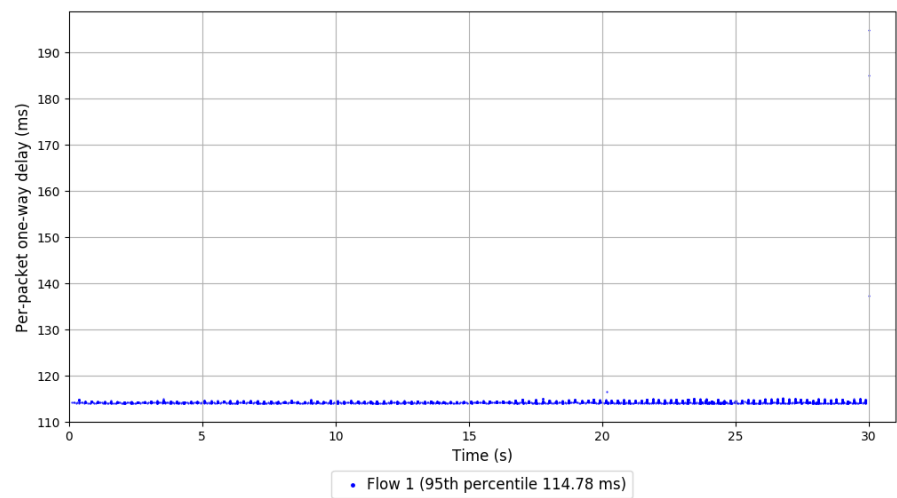
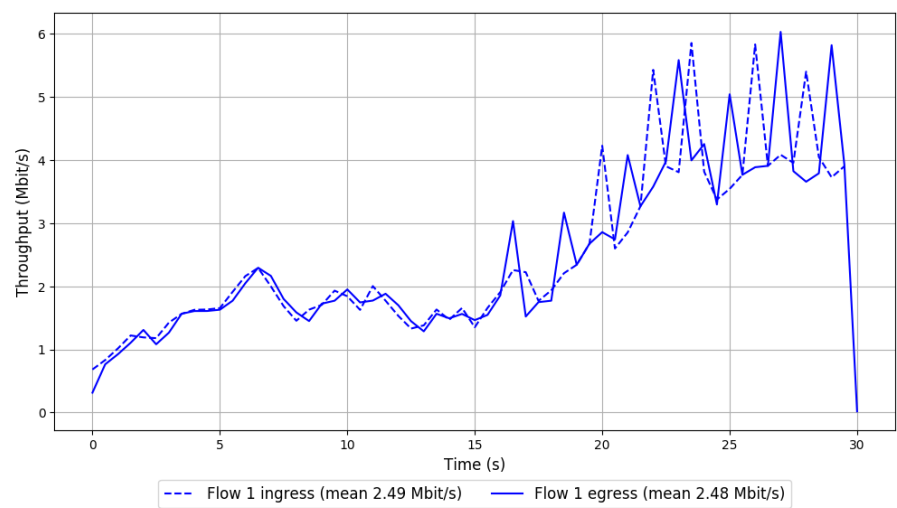
-- Flow 1:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 114.777 ms

Loss rate: 0.03%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-10-10 21:03:18

End at: 2017-10-10 21:03:48

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 114.586 ms

Loss rate: 0.34%

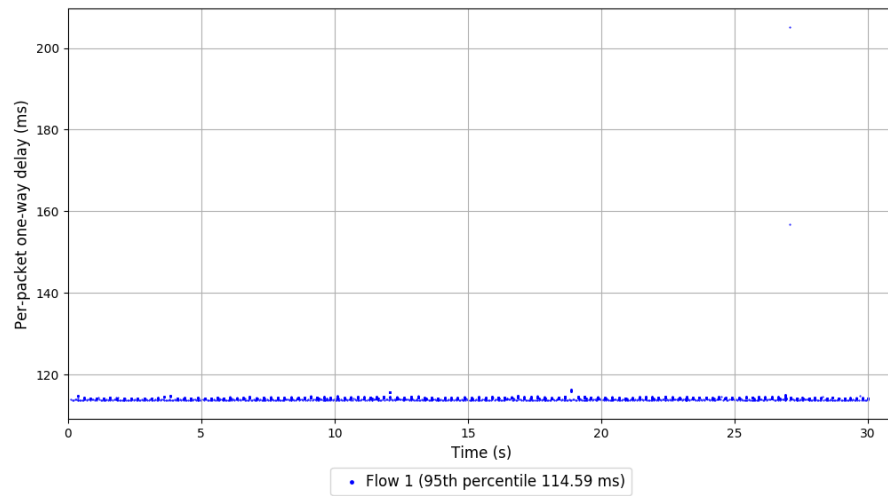
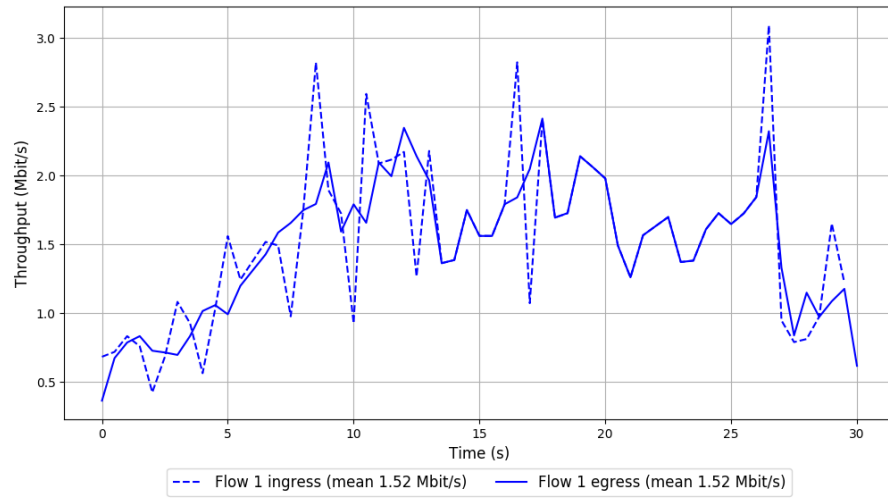
-- Flow 1:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 114.586 ms

Loss rate: 0.34%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-10-10 21:14:19

End at: 2017-10-10 21:14:49

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 114.945 ms

Loss rate: 0.11%

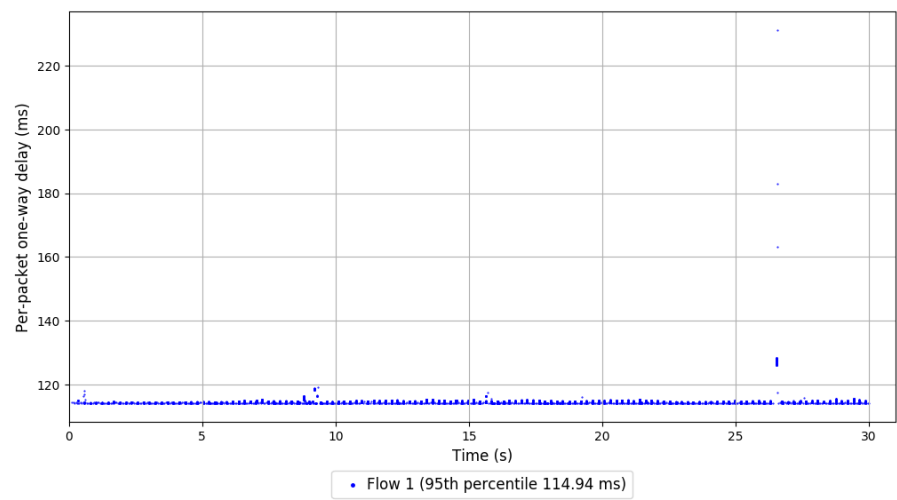
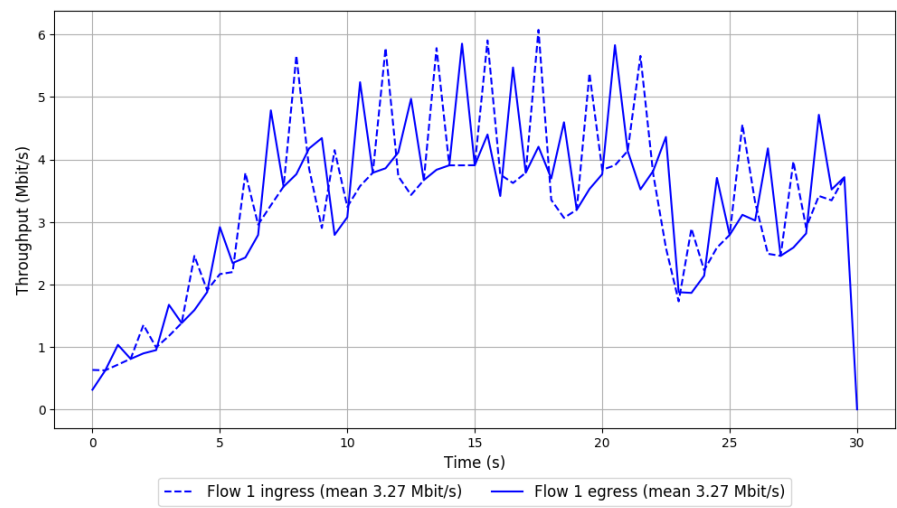
-- Flow 1:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 114.945 ms

Loss rate: 0.11%

Run 10: Report of Sprout — Data Link

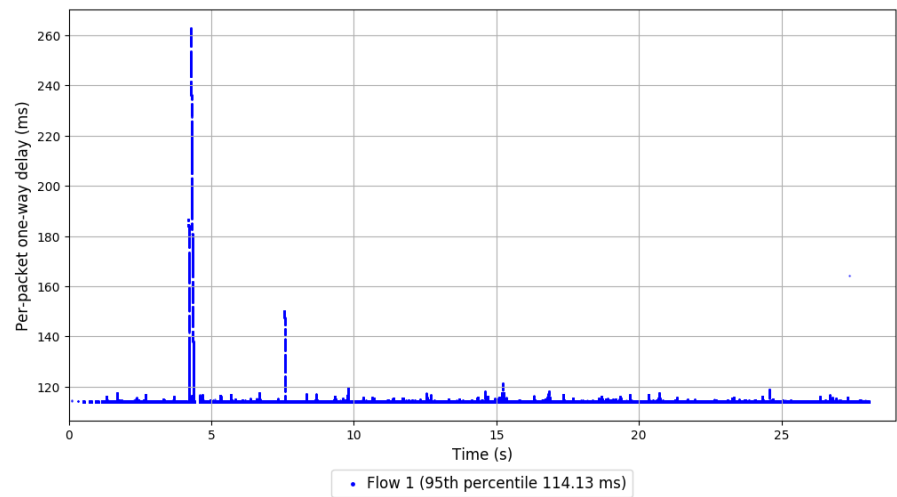
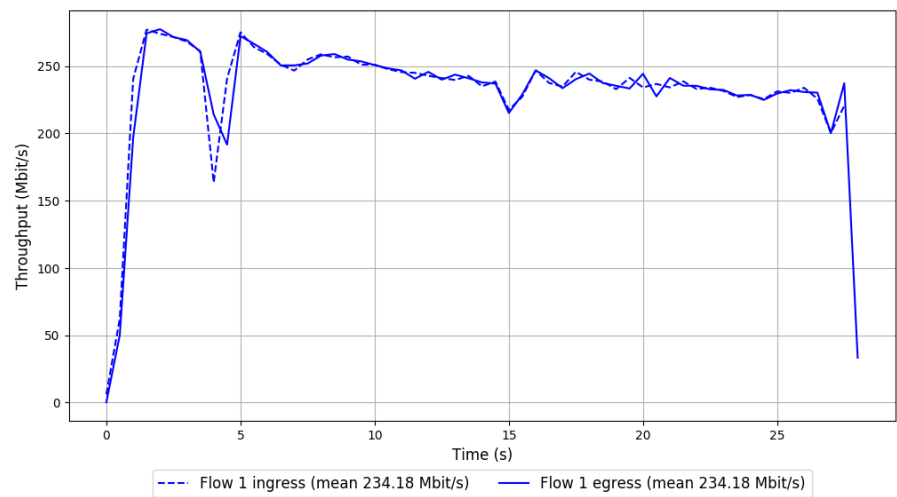


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-10-10 19:28:39
End at: 2017-10-10 19:29:09

# Below is generated by plot.py at 2017-10-10 22:18:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.18 Mbit/s
95th percentile per-packet one-way delay: 114.126 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.18 Mbit/s
95th percentile per-packet one-way delay: 114.126 ms
Loss rate: 0.00%
```

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

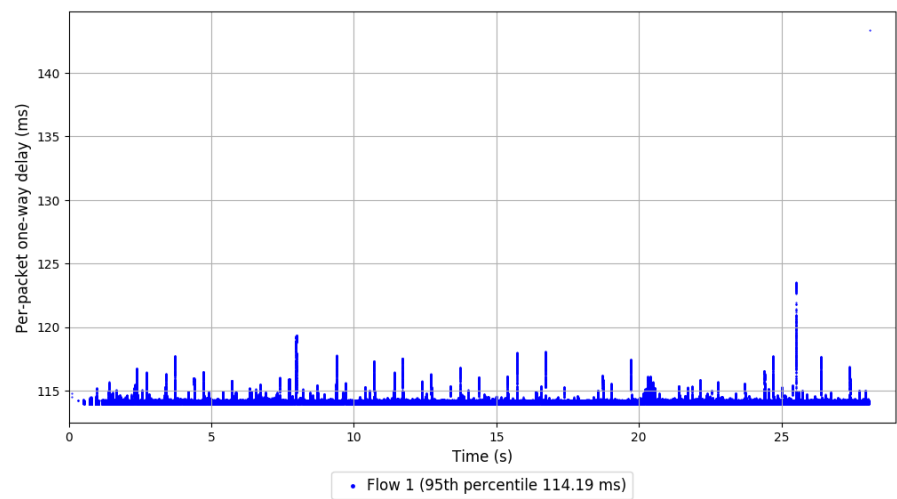
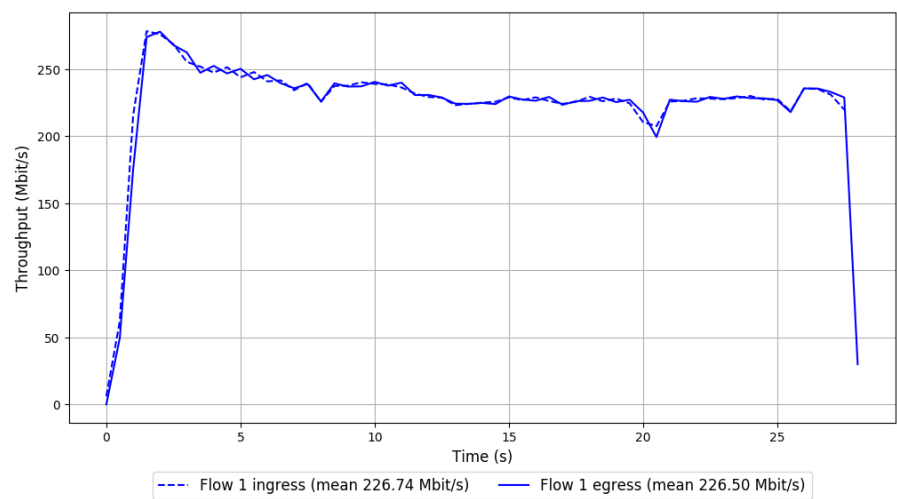


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-10-10 19:40:01
End at: 2017-10-10 19:40:31

# Below is generated by plot.py at 2017-10-10 22:18:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.50 Mbit/s
95th percentile per-packet one-way delay: 114.185 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 226.50 Mbit/s
95th percentile per-packet one-way delay: 114.185 ms
Loss rate: 0.09%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-10-10 19:51:21

End at: 2017-10-10 19:51:51

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.29 Mbit/s

95th percentile per-packet one-way delay: 114.146 ms

Loss rate: 0.00%

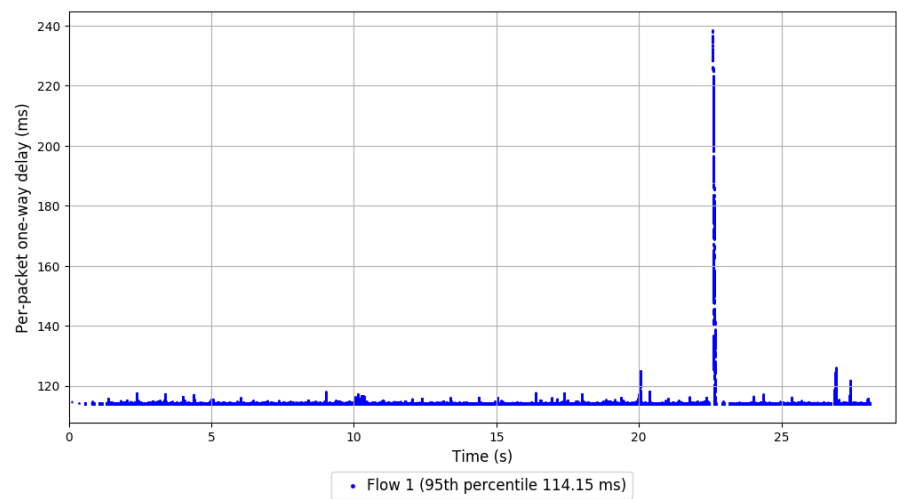
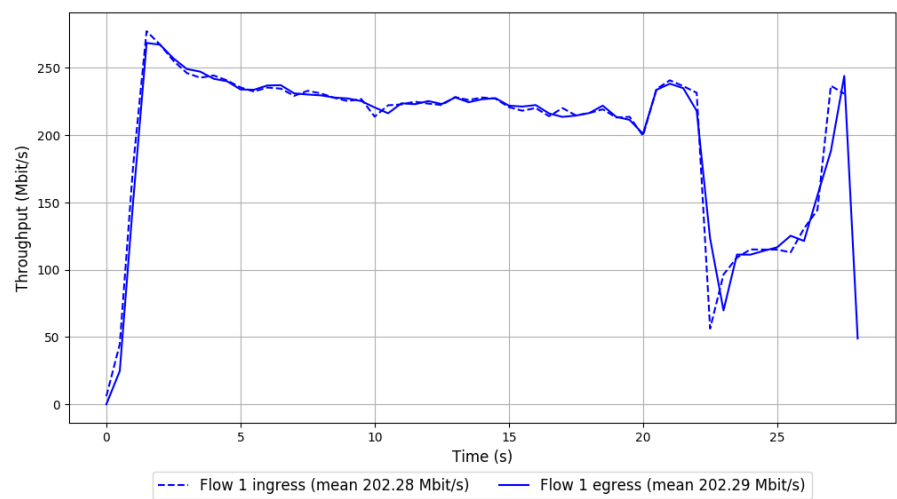
-- Flow 1:

Average throughput: 202.29 Mbit/s

95th percentile per-packet one-way delay: 114.146 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-10-10 20:02:39

End at: 2017-10-10 20:03:09

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.99 Mbit/s

95th percentile per-packet one-way delay: 114.129 ms

Loss rate: 0.00%

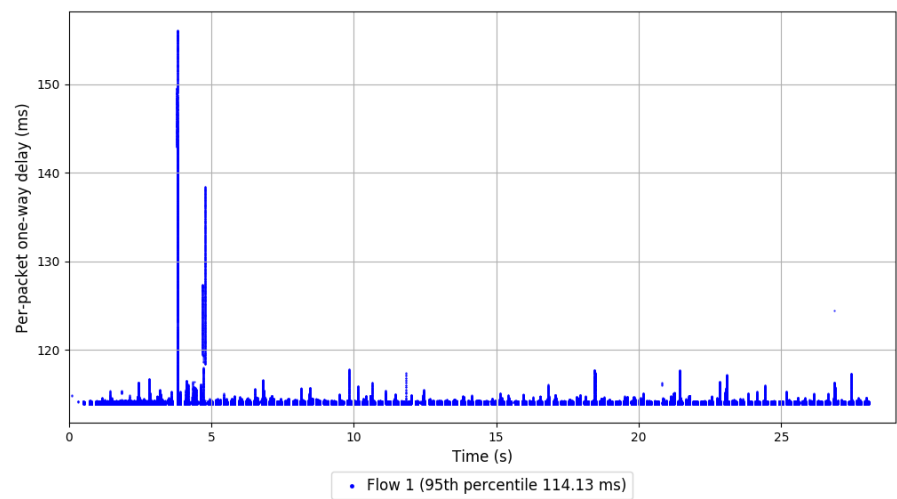
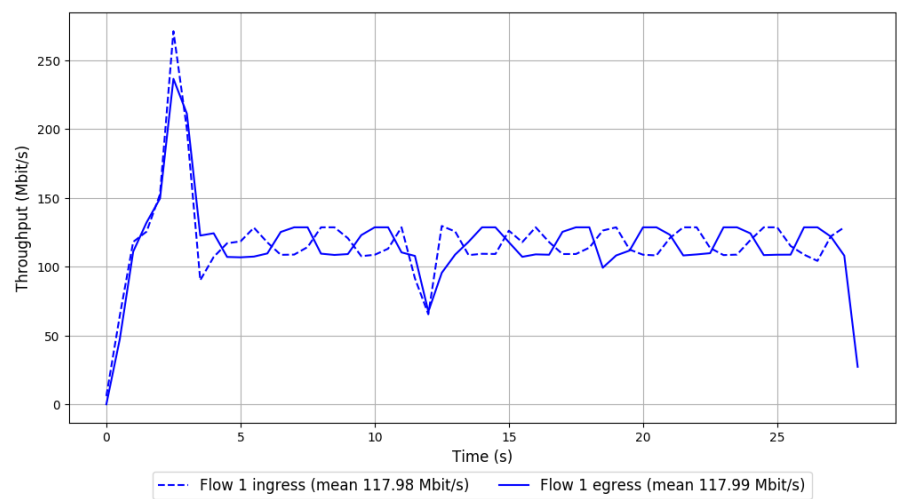
-- Flow 1:

Average throughput: 117.99 Mbit/s

95th percentile per-packet one-way delay: 114.129 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-10-10 20:13:52

End at: 2017-10-10 20:14:22

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.78 Mbit/s

95th percentile per-packet one-way delay: 114.170 ms

Loss rate: 0.00%

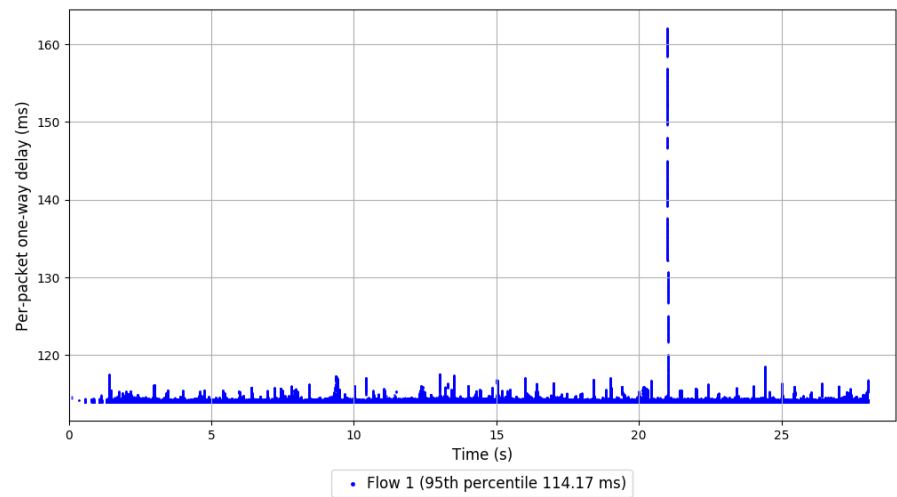
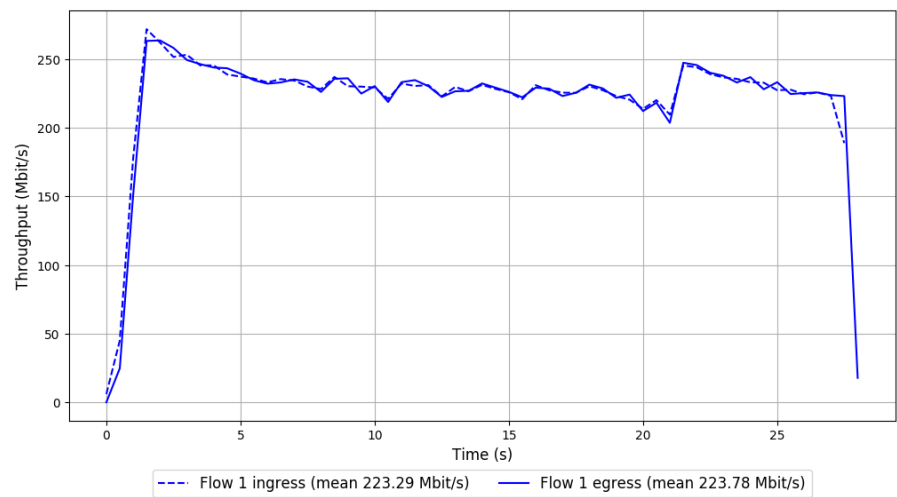
-- Flow 1:

Average throughput: 223.78 Mbit/s

95th percentile per-packet one-way delay: 114.170 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-10-10 20:25:07

End at: 2017-10-10 20:25:38

Below is generated by plot.py at 2017-10-10 22:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.56 Mbit/s

95th percentile per-packet one-way delay: 114.223 ms

Loss rate: 0.01%

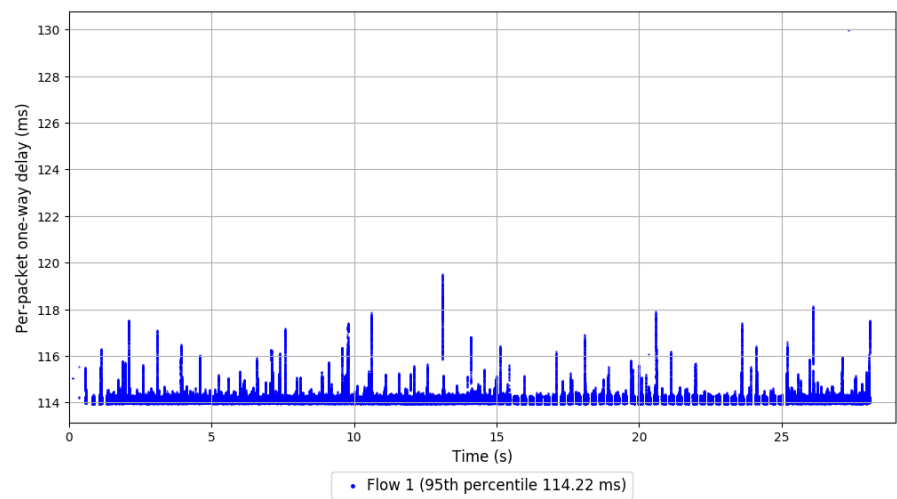
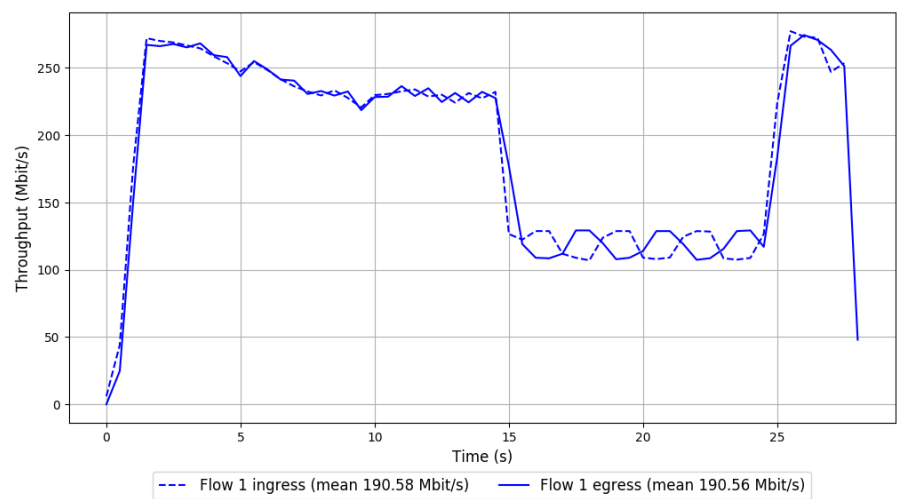
-- Flow 1:

Average throughput: 190.56 Mbit/s

95th percentile per-packet one-way delay: 114.223 ms

Loss rate: 0.01%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-10-10 20:36:32

End at: 2017-10-10 20:37:02

Below is generated by plot.py at 2017-10-10 22:19:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.39 Mbit/s

95th percentile per-packet one-way delay: 114.227 ms

Loss rate: 0.00%

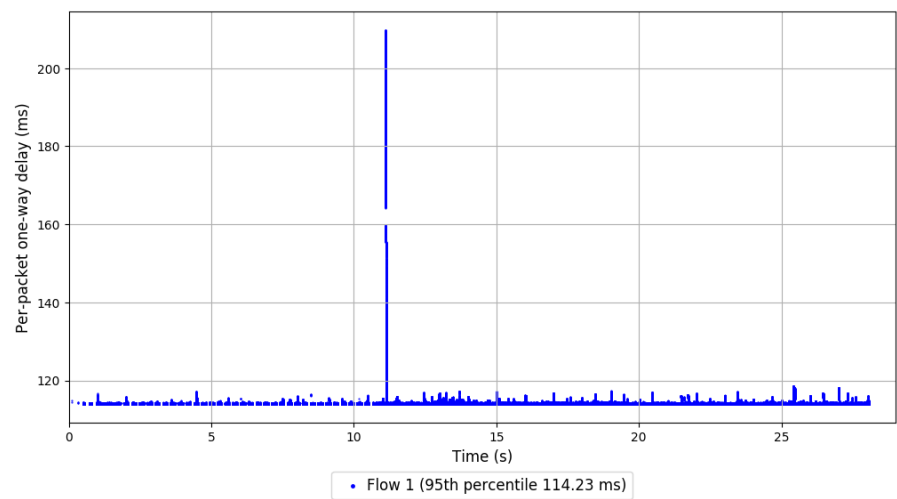
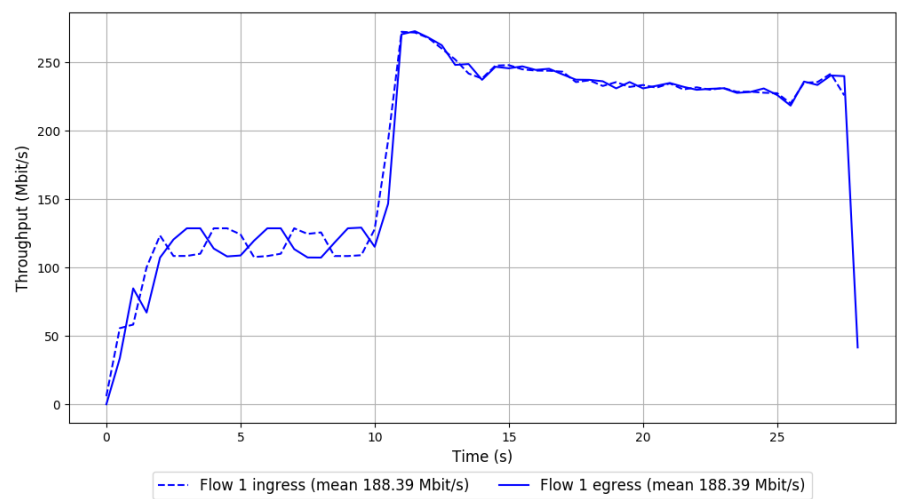
-- Flow 1:

Average throughput: 188.39 Mbit/s

95th percentile per-packet one-way delay: 114.227 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-10-10 20:47:54

End at: 2017-10-10 20:48:24

Below is generated by plot.py at 2017-10-10 22:22:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.64 Mbit/s

95th percentile per-packet one-way delay: 114.224 ms

Loss rate: 0.00%

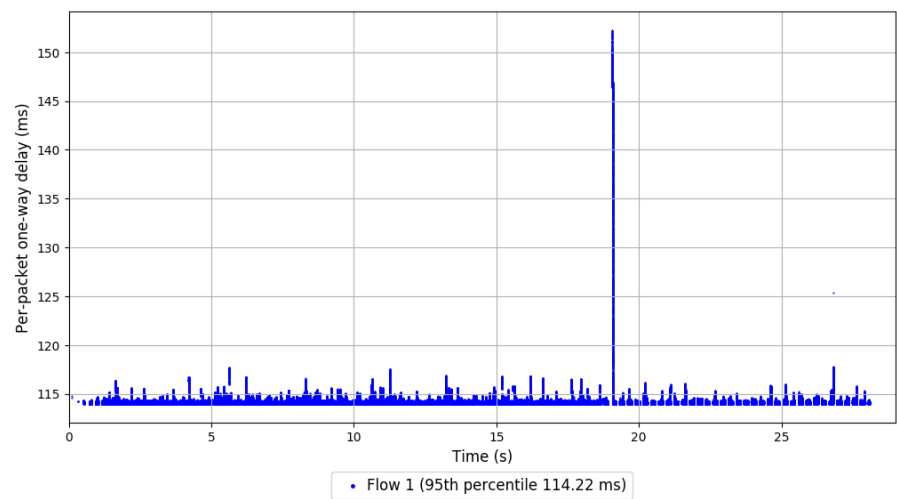
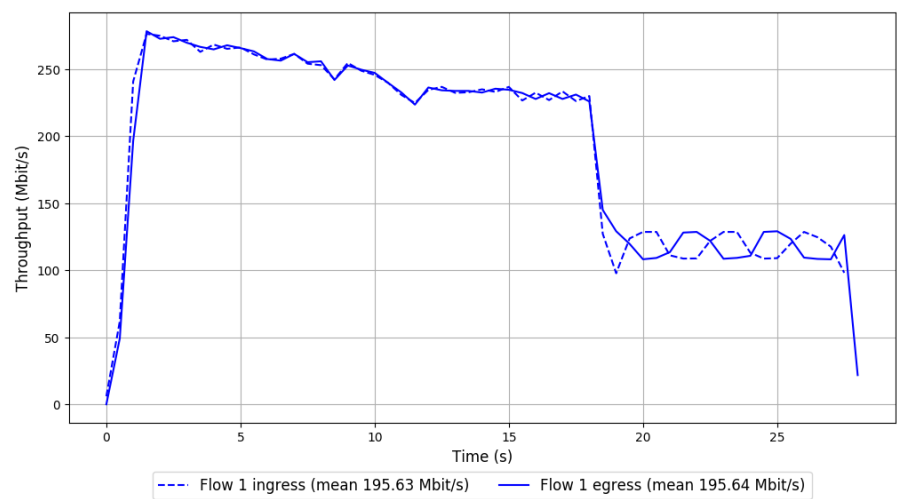
-- Flow 1:

Average throughput: 195.64 Mbit/s

95th percentile per-packet one-way delay: 114.224 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-10-10 20:59:23

End at: 2017-10-10 20:59:53

Below is generated by plot.py at 2017-10-10 22:23:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 228.13 Mbit/s

95th percentile per-packet one-way delay: 114.151 ms

Loss rate: 0.00%

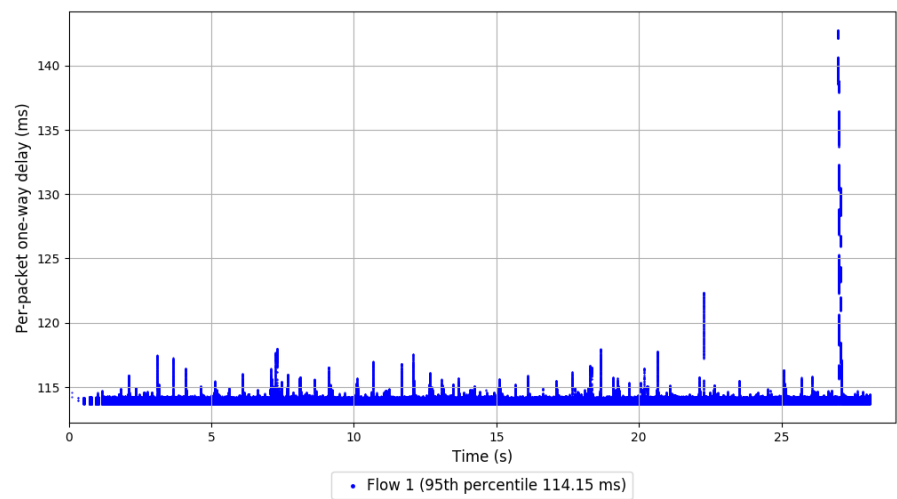
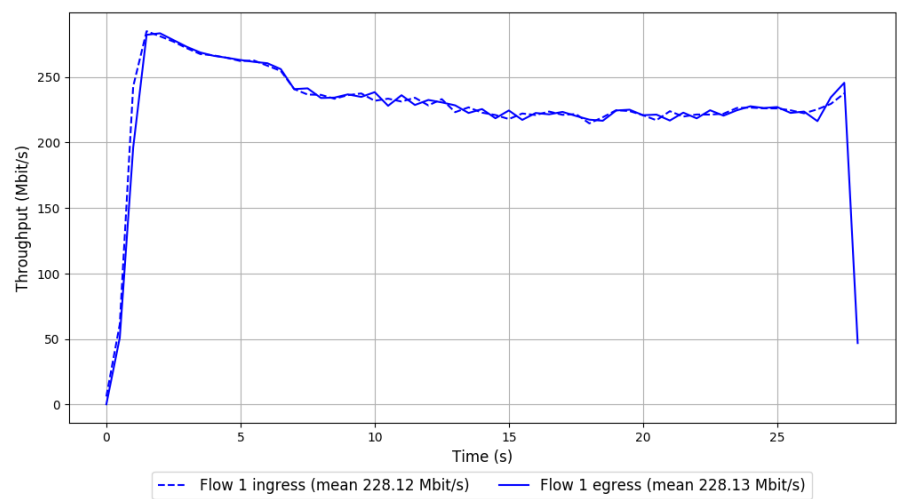
-- Flow 1:

Average throughput: 228.13 Mbit/s

95th percentile per-packet one-way delay: 114.151 ms

Loss rate: 0.00%

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

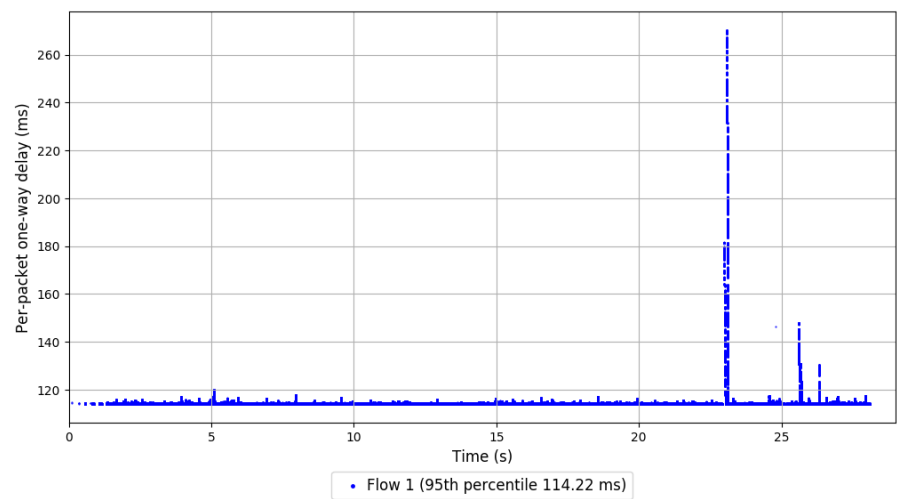
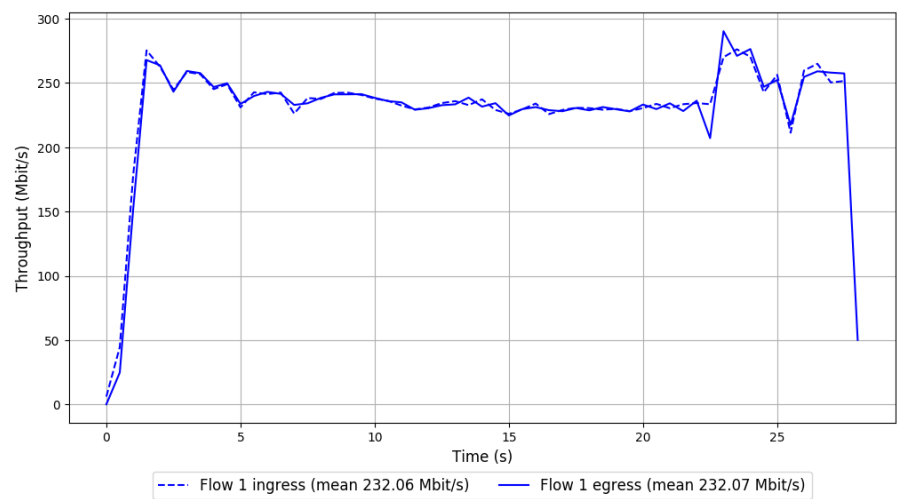


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-10-10 21:10:20
End at: 2017-10-10 21:10:50

# Below is generated by plot.py at 2017-10-10 22:24:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.07 Mbit/s
95th percentile per-packet one-way delay: 114.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 232.07 Mbit/s
95th percentile per-packet one-way delay: 114.218 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-10-10 19:29:41

End at: 2017-10-10 19:30:11

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.32 Mbit/s

95th percentile per-packet one-way delay: 115.458 ms

Loss rate: 0.00%

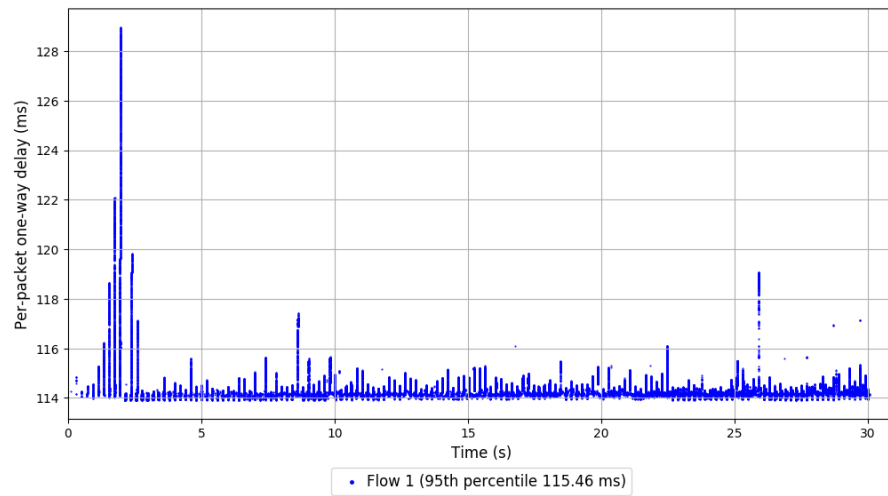
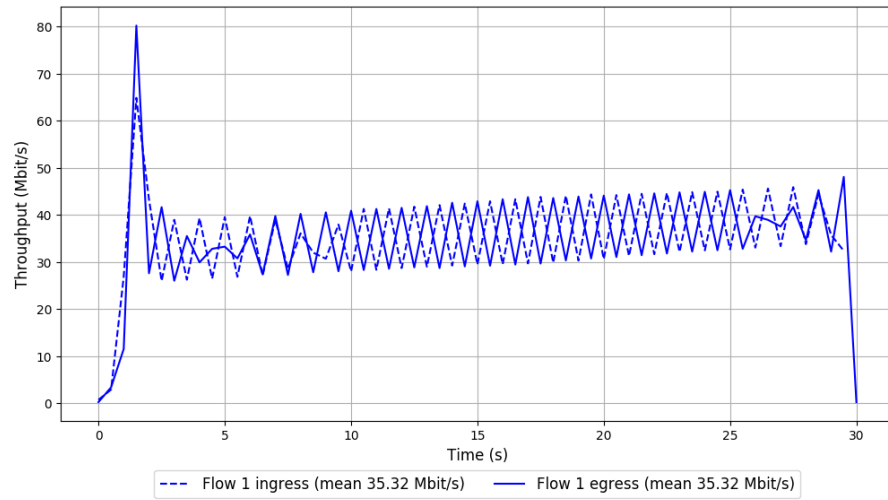
-- Flow 1:

Average throughput: 35.32 Mbit/s

95th percentile per-packet one-way delay: 115.458 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-10-10 19:41:03

End at: 2017-10-10 19:41:33

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.78 Mbit/s

95th percentile per-packet one-way delay: 116.219 ms

Loss rate: 0.00%

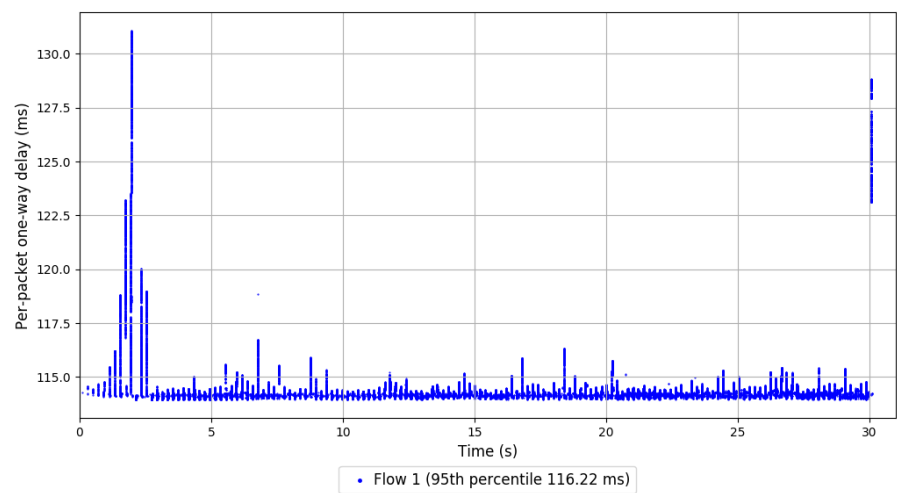
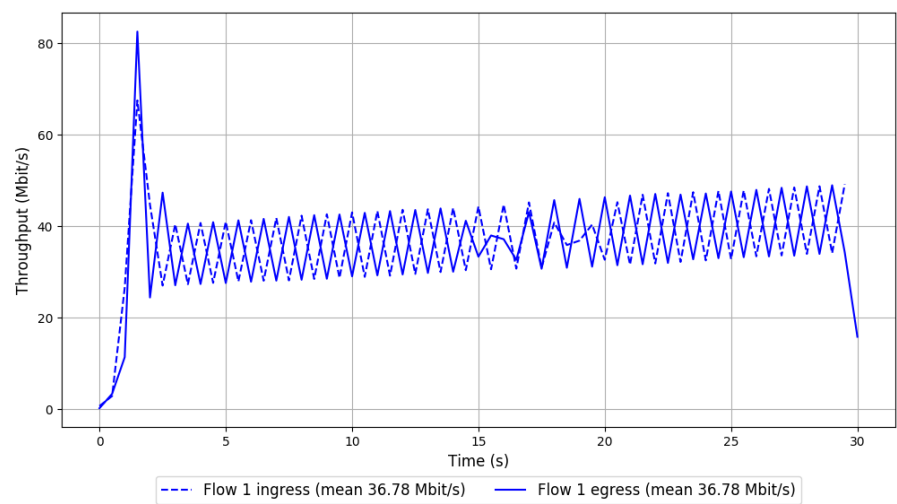
-- Flow 1:

Average throughput: 36.78 Mbit/s

95th percentile per-packet one-way delay: 116.219 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-10-10 19:52:20

End at: 2017-10-10 19:52:50

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.29 Mbit/s

95th percentile per-packet one-way delay: 115.241 ms

Loss rate: 0.00%

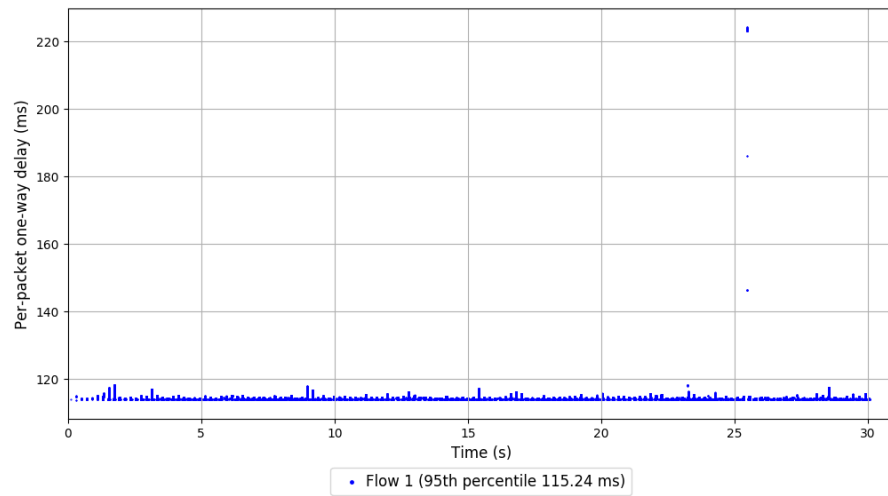
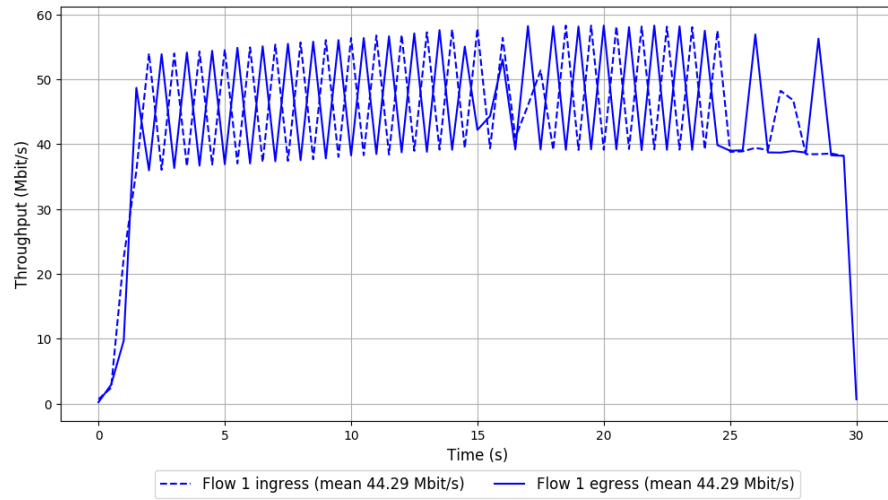
-- Flow 1:

Average throughput: 44.29 Mbit/s

95th percentile per-packet one-way delay: 115.241 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-10-10 20:03:31

End at: 2017-10-10 20:04:01

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.76 Mbit/s

95th percentile per-packet one-way delay: 114.858 ms

Loss rate: 0.00%

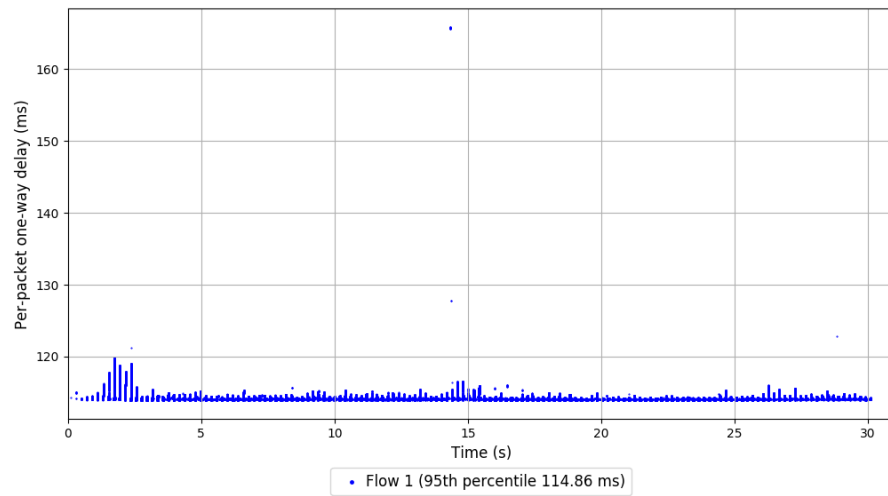
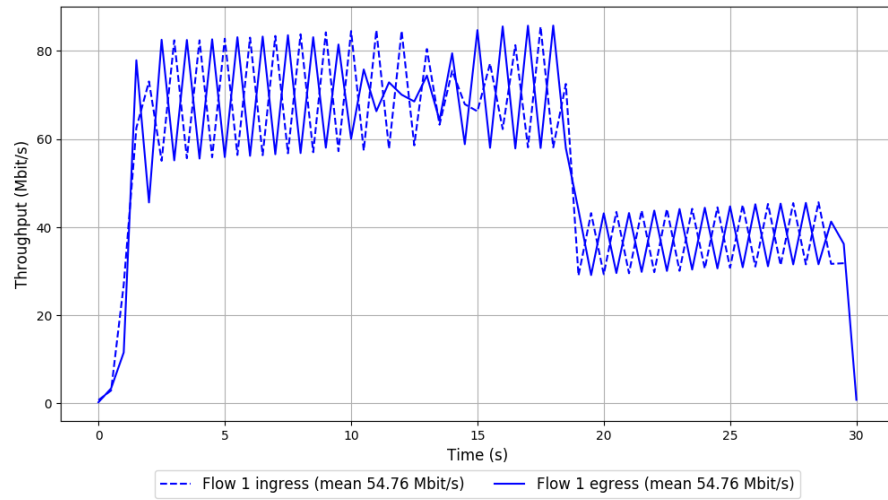
-- Flow 1:

Average throughput: 54.76 Mbit/s

95th percentile per-packet one-way delay: 114.858 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-10-10 20:14:53

End at: 2017-10-10 20:15:24

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.01 Mbit/s

95th percentile per-packet one-way delay: 115.184 ms

Loss rate: 0.00%

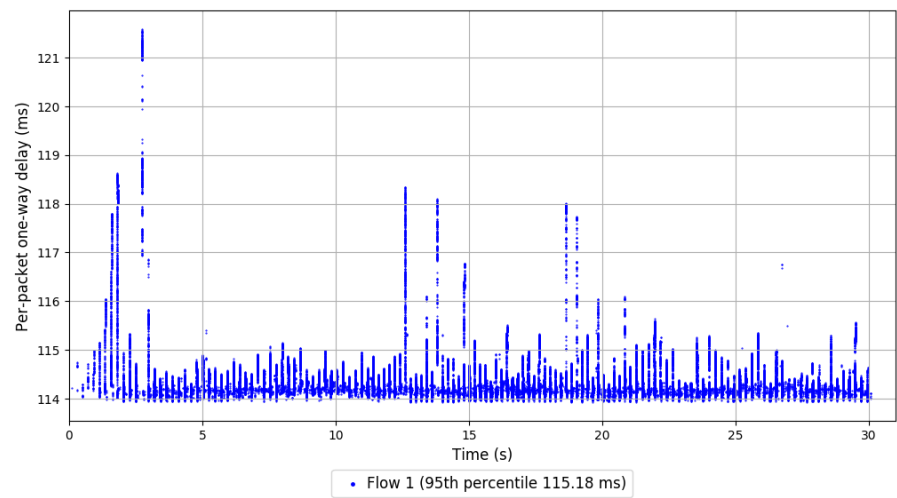
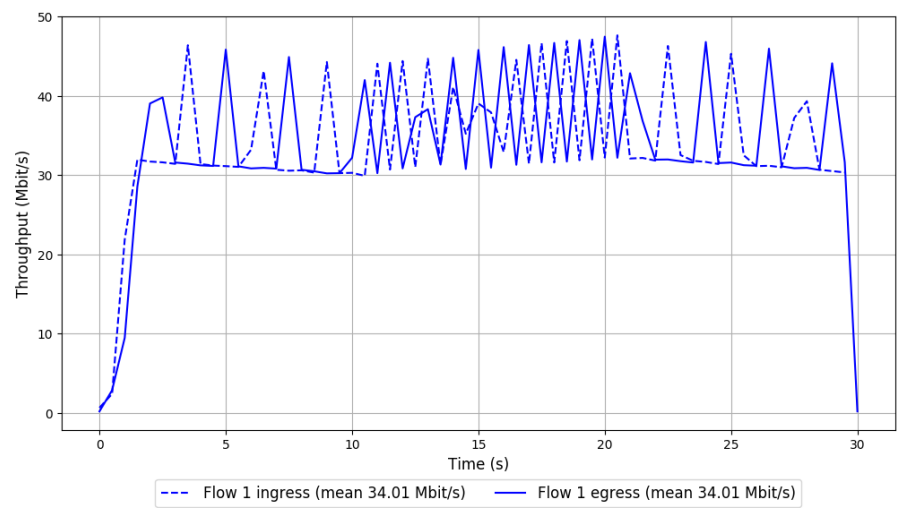
-- Flow 1:

Average throughput: 34.01 Mbit/s

95th percentile per-packet one-way delay: 115.184 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-10-10 20:26:06

End at: 2017-10-10 20:26:36

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.23 Mbit/s

95th percentile per-packet one-way delay: 115.303 ms

Loss rate: 0.00%

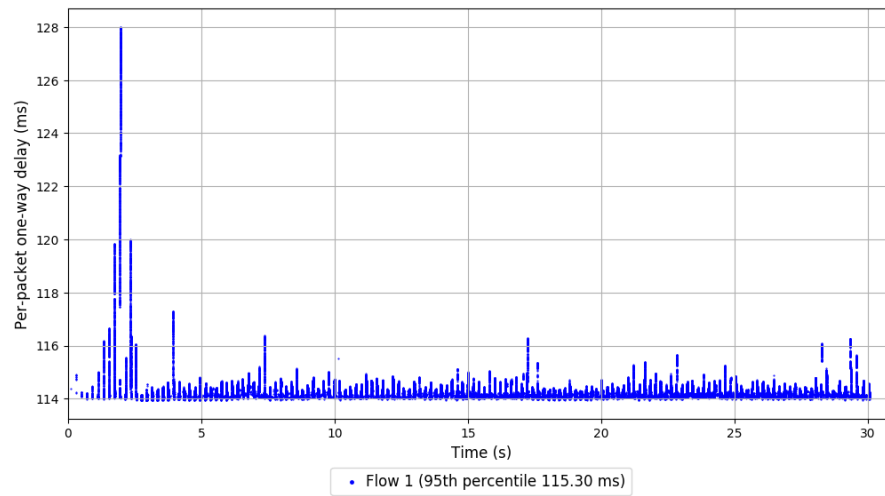
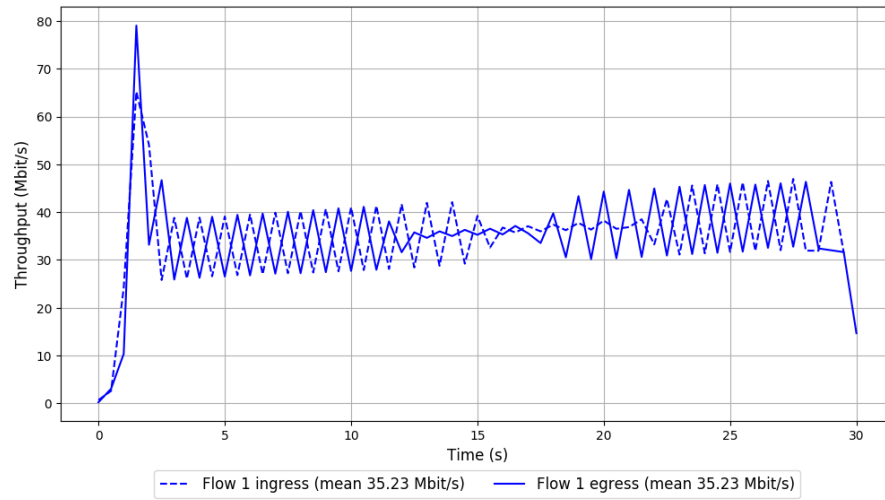
-- Flow 1:

Average throughput: 35.23 Mbit/s

95th percentile per-packet one-way delay: 115.303 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-10-10 20:37:31

End at: 2017-10-10 20:38:01

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.83 Mbit/s

95th percentile per-packet one-way delay: 115.123 ms

Loss rate: 0.00%

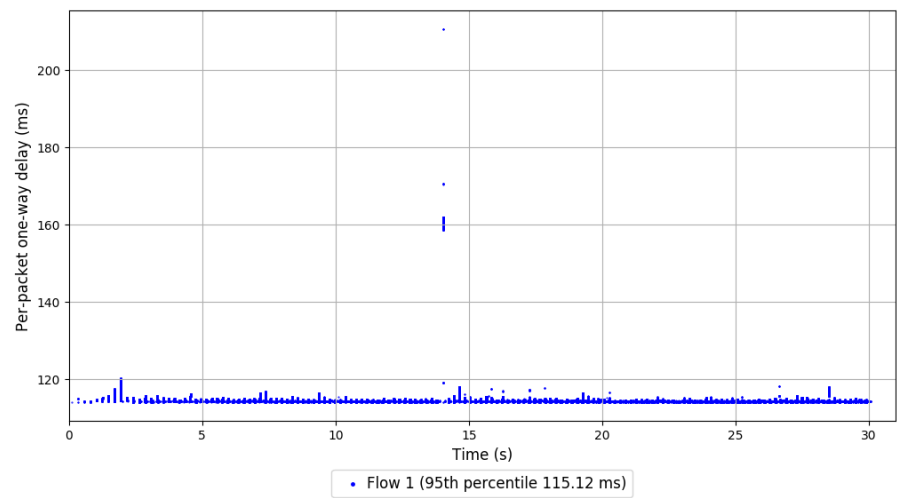
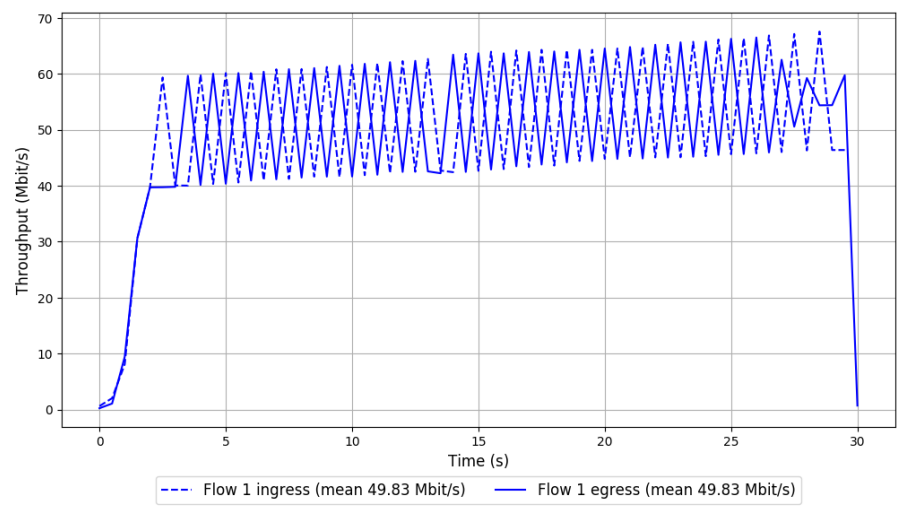
-- Flow 1:

Average throughput: 49.83 Mbit/s

95th percentile per-packet one-way delay: 115.123 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-10-10 20:48:53

End at: 2017-10-10 20:49:23

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.09 Mbit/s

95th percentile per-packet one-way delay: 114.749 ms

Loss rate: 0.00%

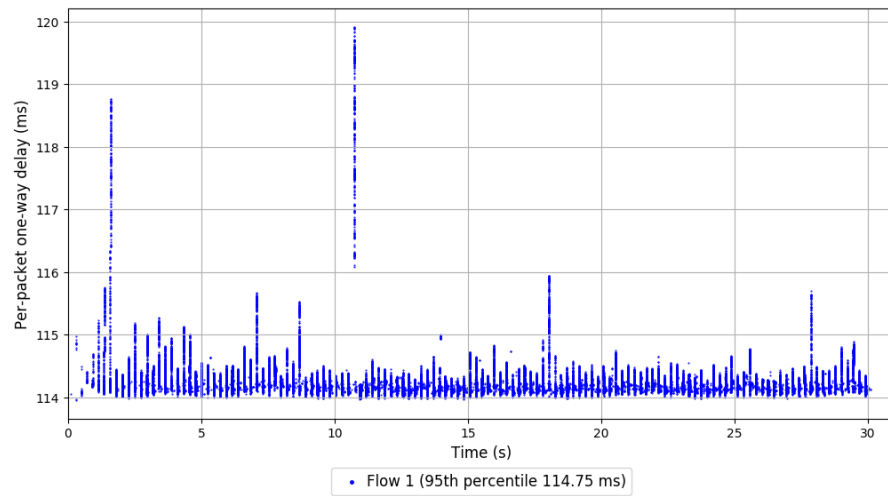
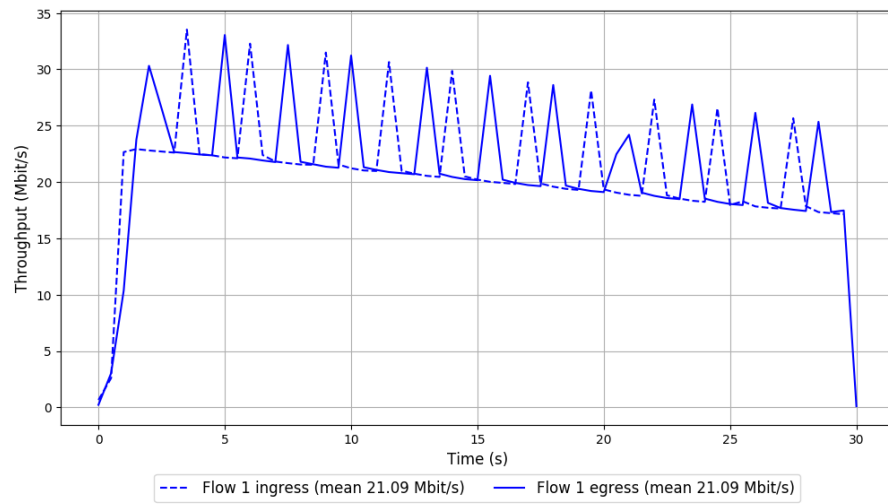
-- Flow 1:

Average throughput: 21.09 Mbit/s

95th percentile per-packet one-way delay: 114.749 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-10-10 21:00:25

End at: 2017-10-10 21:00:55

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.90 Mbit/s

95th percentile per-packet one-way delay: 115.423 ms

Loss rate: 0.00%

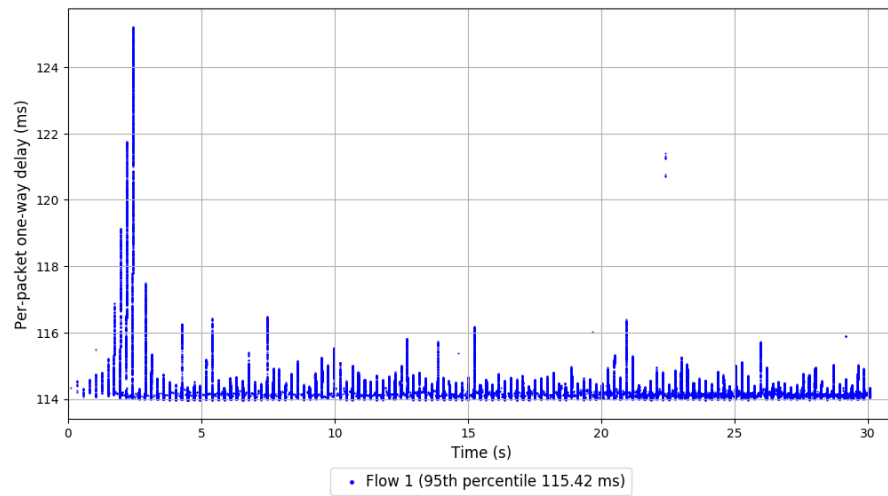
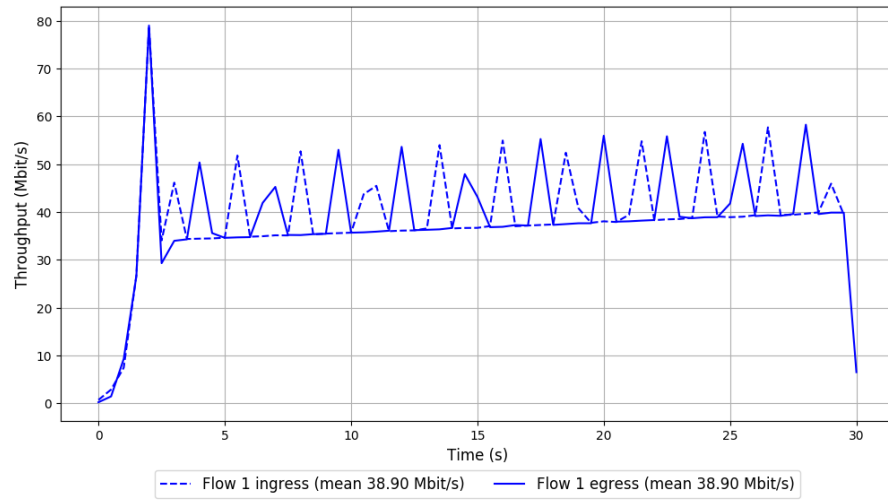
-- Flow 1:

Average throughput: 38.90 Mbit/s

95th percentile per-packet one-way delay: 115.423 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-10-10 21:11:25

End at: 2017-10-10 21:11:55

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.93 Mbit/s

95th percentile per-packet one-way delay: 114.914 ms

Loss rate: 0.00%

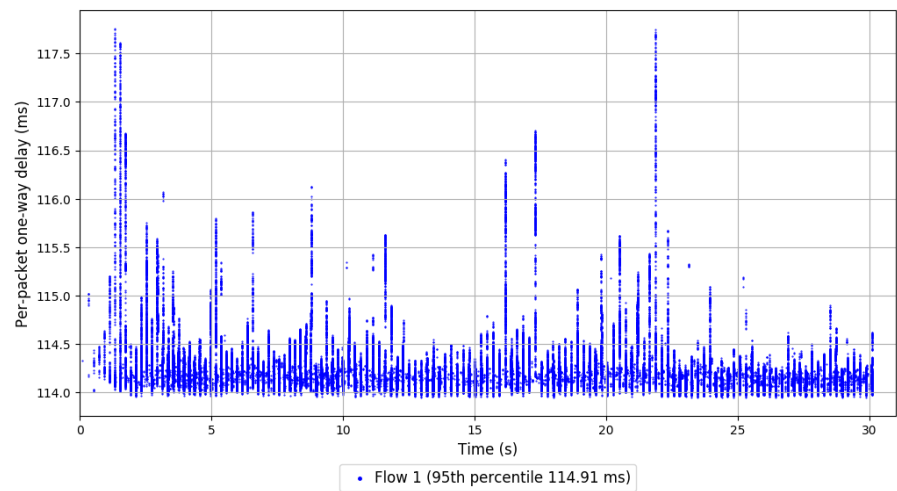
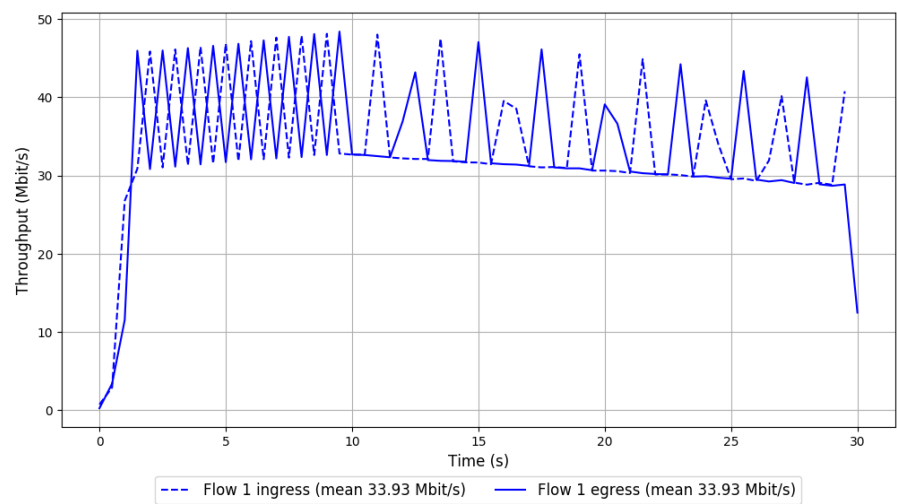
-- Flow 1:

Average throughput: 33.93 Mbit/s

95th percentile per-packet one-way delay: 114.914 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-10-10 19:25:53

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

Below is generated by plot.py at 2017-10-10 22:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 237.97 Mbit/s

95th percentile per-packet one-way delay: 156.048 ms

Loss rate: 0.00%

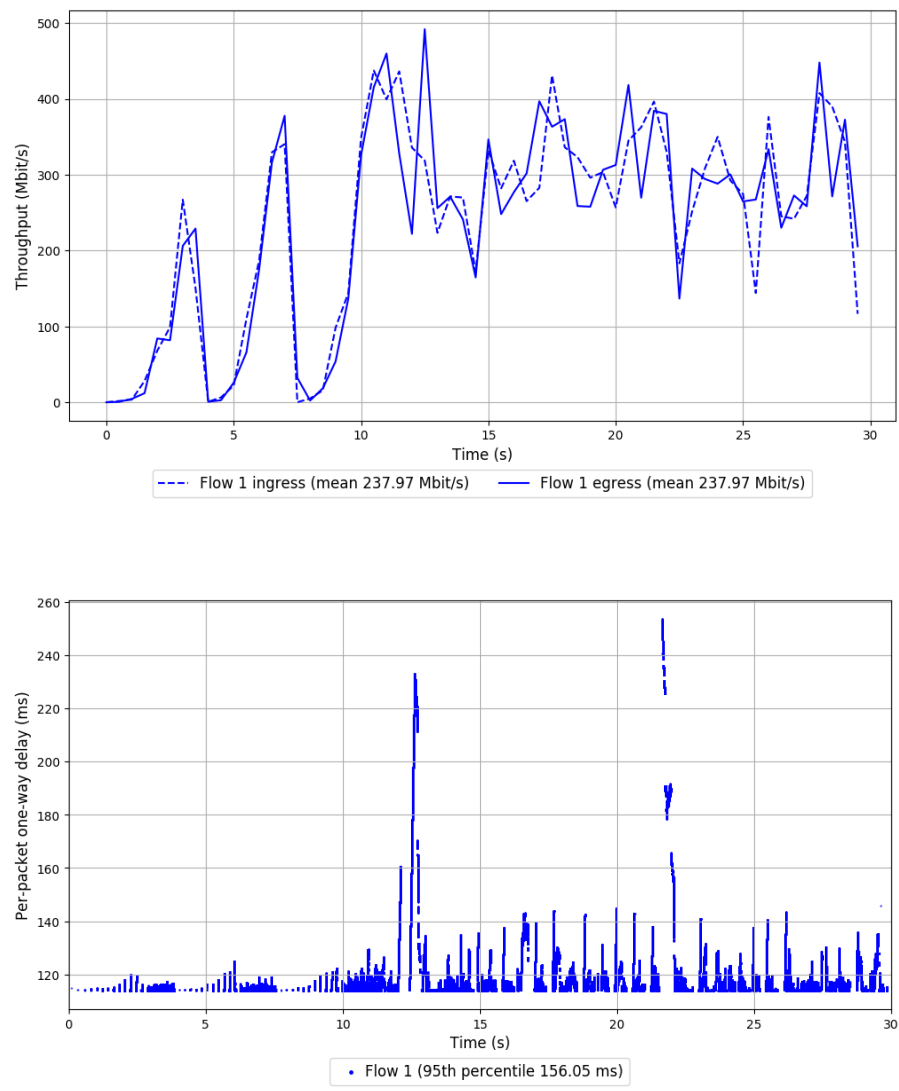
-- Flow 1:

Average throughput: 237.97 Mbit/s

95th percentile per-packet one-way delay: 156.048 ms

Loss rate: 0.00%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-10-10 19:37:12

End at: 2017-10-10 19:37:42

Below is generated by plot.py at 2017-10-10 22:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 308.75 Mbit/s

95th percentile per-packet one-way delay: 265.081 ms

Loss rate: 0.68%

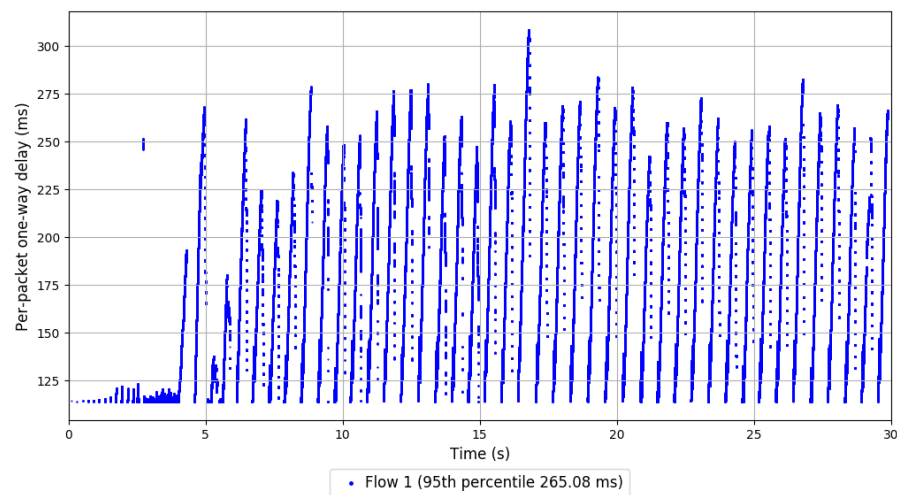
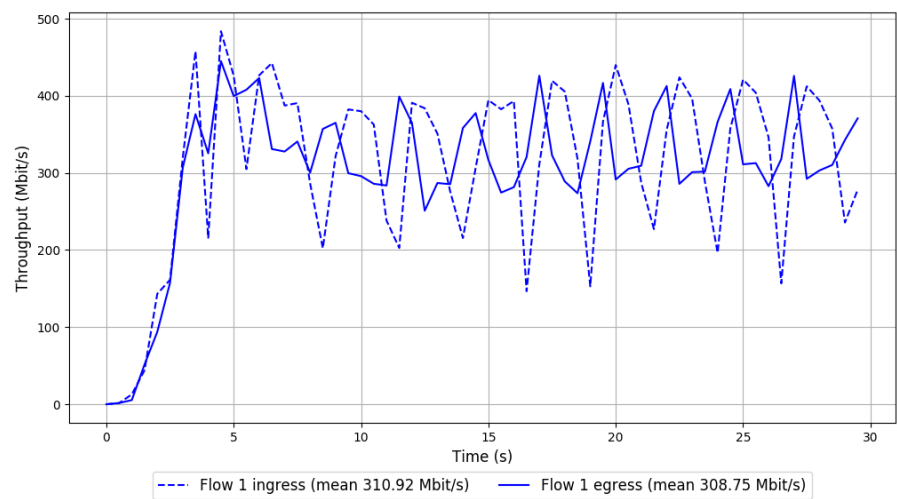
-- Flow 1:

Average throughput: 308.75 Mbit/s

95th percentile per-packet one-way delay: 265.081 ms

Loss rate: 0.68%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-10-10 19:48:34

End at: 2017-10-10 19:49:04

Below is generated by plot.py at 2017-10-10 22:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 248.81 Mbit/s

95th percentile per-packet one-way delay: 198.194 ms

Loss rate: 0.77%

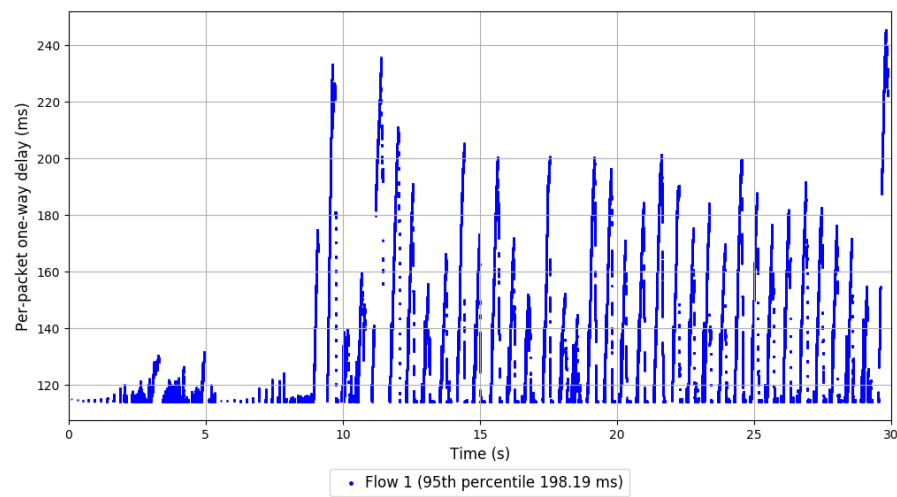
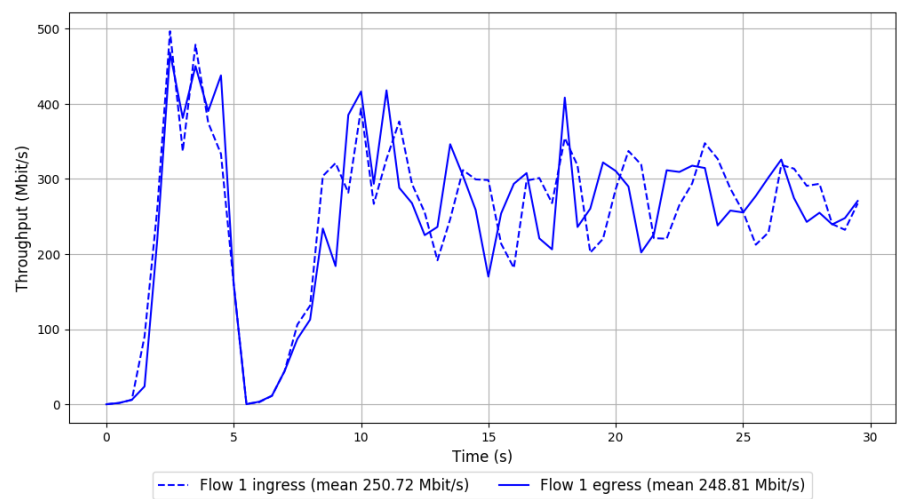
-- Flow 1:

Average throughput: 248.81 Mbit/s

95th percentile per-packet one-way delay: 198.194 ms

Loss rate: 0.77%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-10-10 19:59:52

End at: 2017-10-10 20:00:22

Below is generated by plot.py at 2017-10-10 22:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 254.41 Mbit/s

95th percentile per-packet one-way delay: 139.847 ms

Loss rate: 0.00%

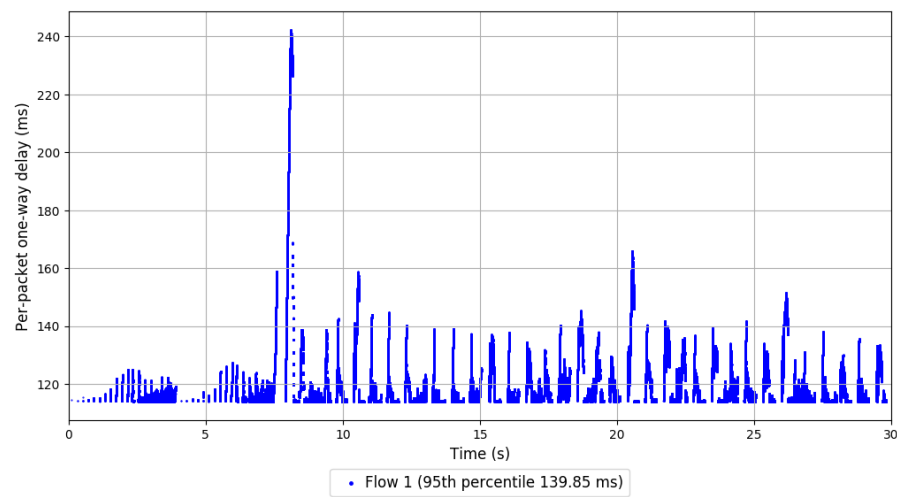
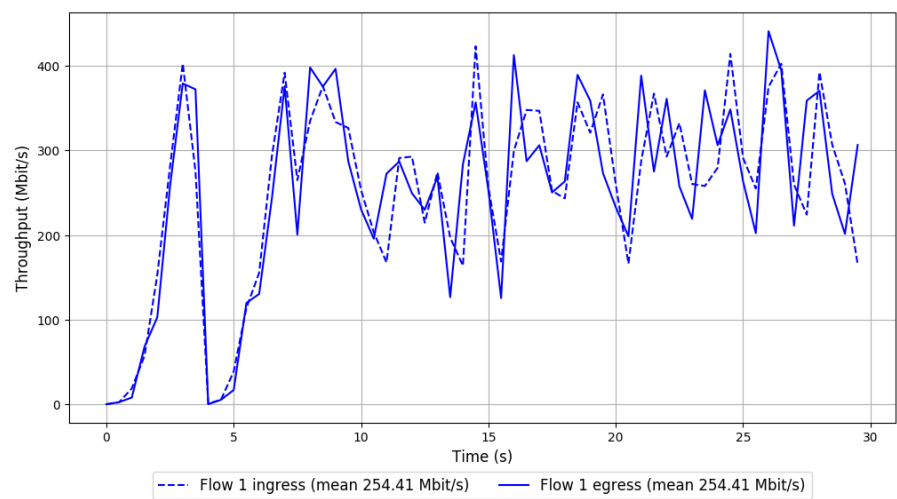
-- Flow 1:

Average throughput: 254.41 Mbit/s

95th percentile per-packet one-way delay: 139.847 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-10-10 20:11:14

End at: 2017-10-10 20:11:44

Below is generated by plot.py at 2017-10-10 22:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 125.72 Mbit/s

95th percentile per-packet one-way delay: 120.289 ms

Loss rate: 0.00%

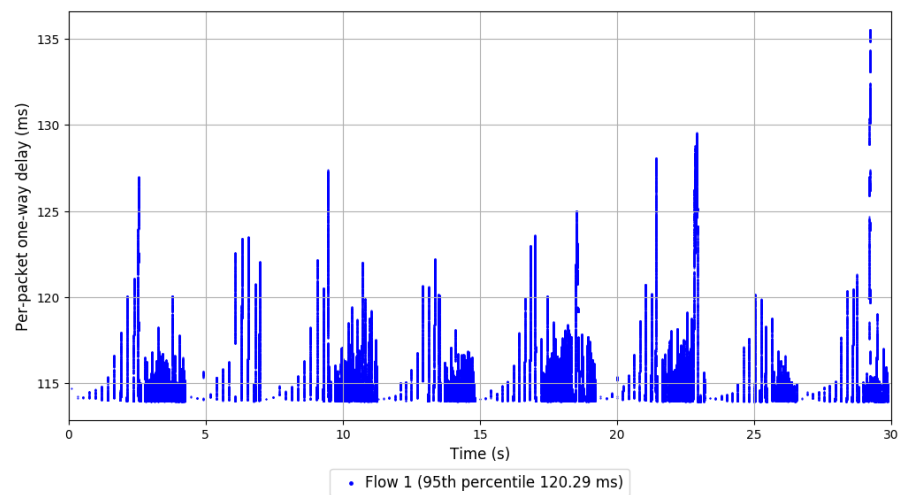
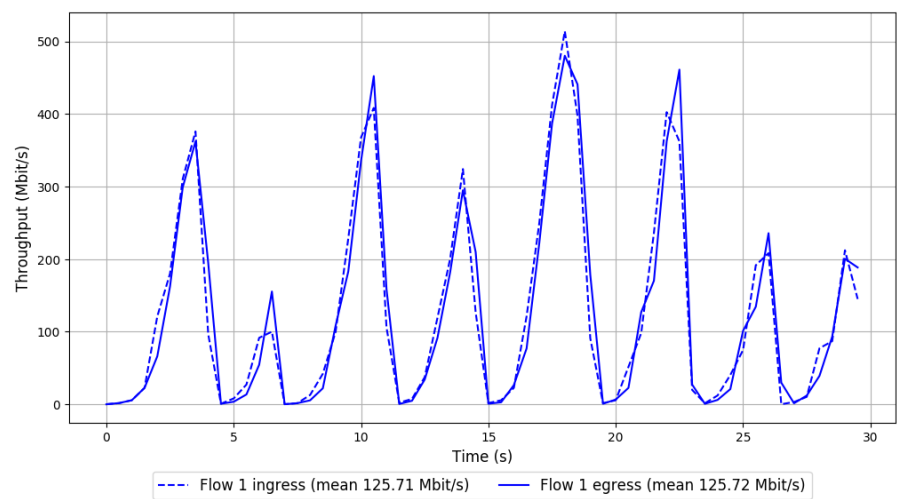
-- Flow 1:

Average throughput: 125.72 Mbit/s

95th percentile per-packet one-way delay: 120.289 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-10-10 20:22:28

End at: 2017-10-10 20:22:58

Below is generated by plot.py at 2017-10-10 22:25:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 154.27 Mbit/s

95th percentile per-packet one-way delay: 121.831 ms

Loss rate: 0.00%

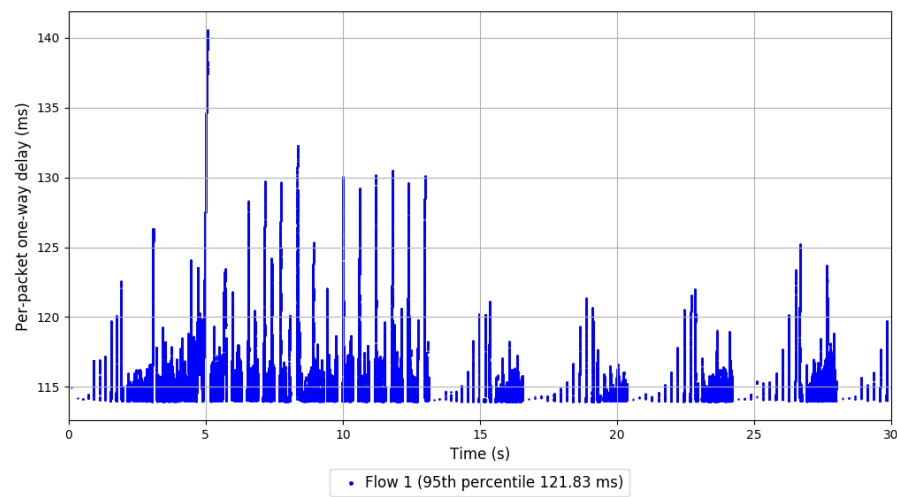
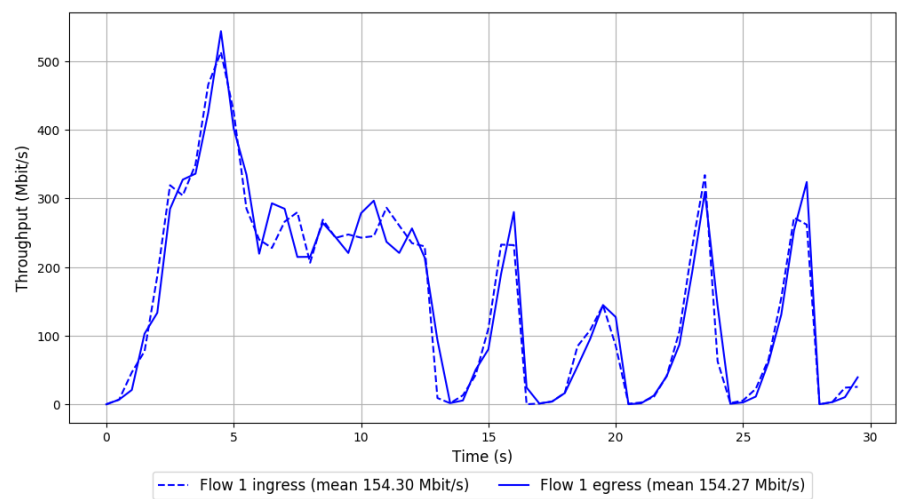
-- Flow 1:

Average throughput: 154.27 Mbit/s

95th percentile per-packet one-way delay: 121.831 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-10-10 20:33:48

End at: 2017-10-10 20:34:18

Below is generated by plot.py at 2017-10-10 22:26:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.04 Mbit/s

95th percentile per-packet one-way delay: 134.329 ms

Loss rate: 0.01%

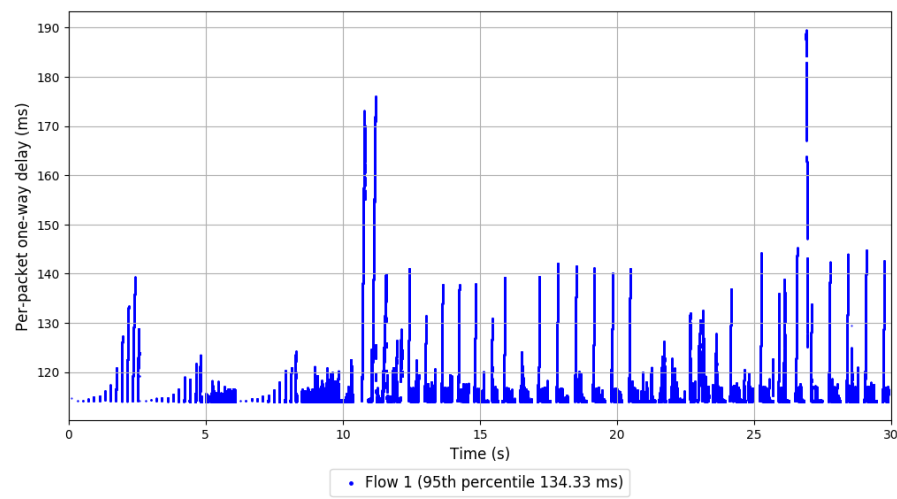
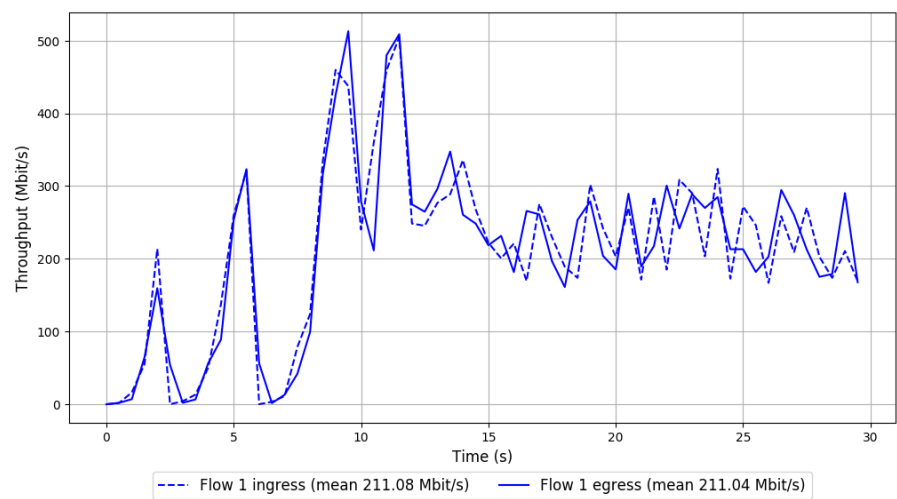
-- Flow 1:

Average throughput: 211.04 Mbit/s

95th percentile per-packet one-way delay: 134.329 ms

Loss rate: 0.01%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-10-10 20:45:06

End at: 2017-10-10 20:45:36

Below is generated by plot.py at 2017-10-10 22:28:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 297.42 Mbit/s

95th percentile per-packet one-way delay: 163.747 ms

Loss rate: 0.00%

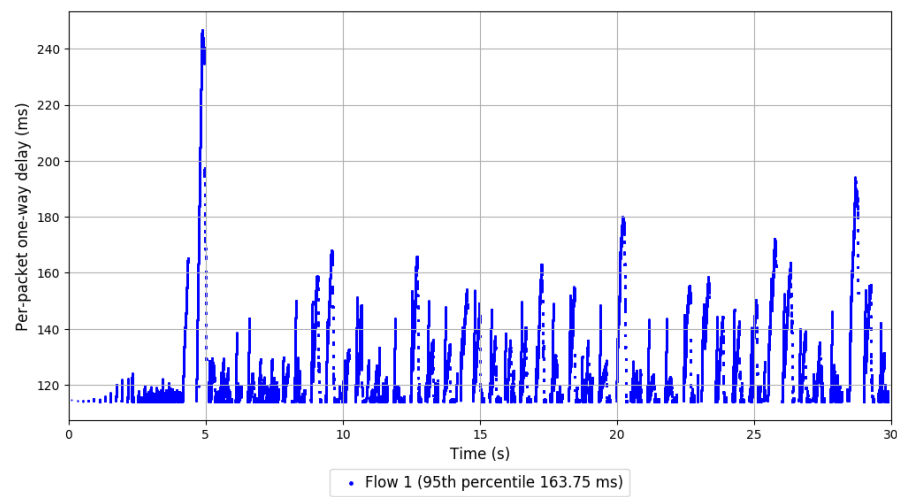
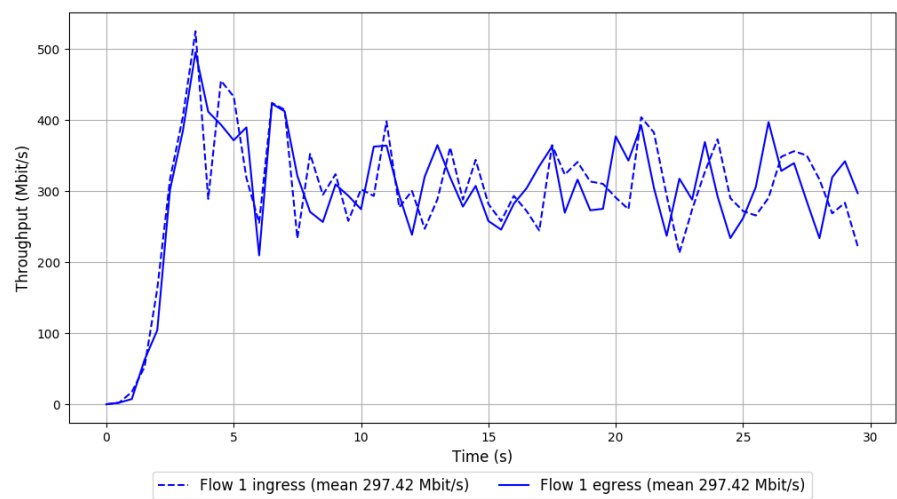
-- Flow 1:

Average throughput: 297.42 Mbit/s

95th percentile per-packet one-way delay: 163.747 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-10-10 20:56:33

End at: 2017-10-10 20:57:03

Below is generated by plot.py at 2017-10-10 22:29:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 305.35 Mbit/s

95th percentile per-packet one-way delay: 275.767 ms

Loss rate: 2.82%

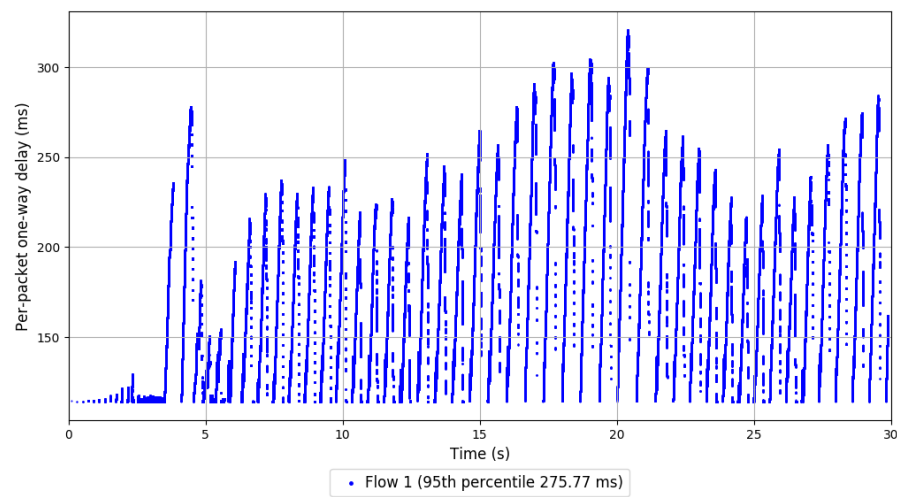
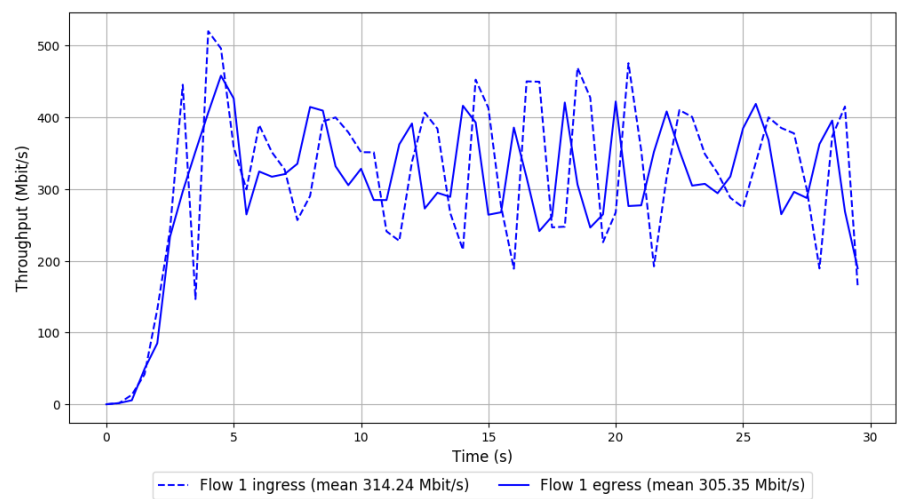
-- Flow 1:

Average throughput: 305.35 Mbit/s

95th percentile per-packet one-way delay: 275.767 ms

Loss rate: 2.82%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-10-10 21:07:40

End at: 2017-10-10 21:08:11

Below is generated by plot.py at 2017-10-10 22:29:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.67 Mbit/s

95th percentile per-packet one-way delay: 240.242 ms

Loss rate: 2.17%

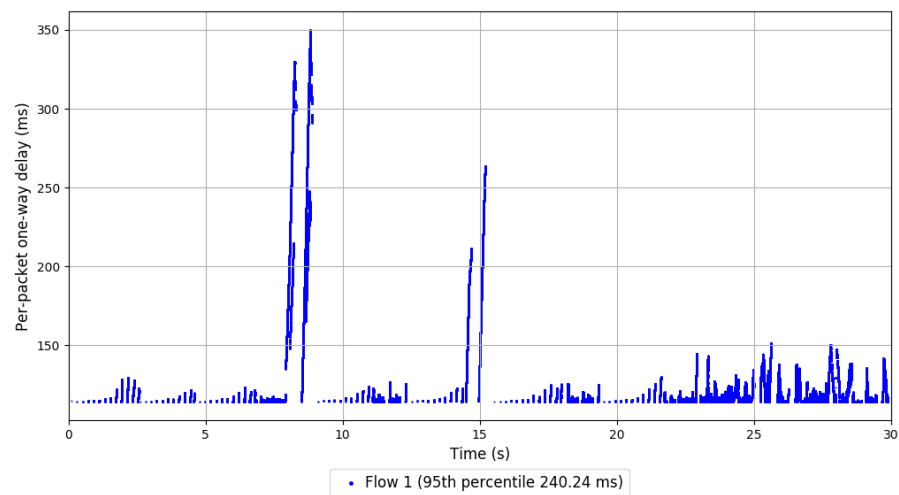
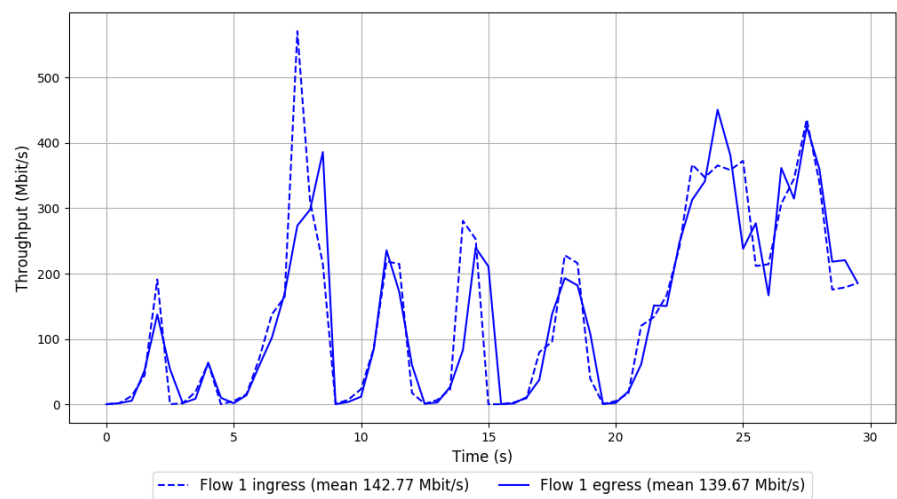
-- Flow 1:

Average throughput: 139.67 Mbit/s

95th percentile per-packet one-way delay: 240.242 ms

Loss rate: 2.17%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-10-10 19:25:05

End at: 2017-10-10 19:25:35

Below is generated by plot.py at 2017-10-10 22:29:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.30 Mbit/s

95th percentile per-packet one-way delay: 114.056 ms

Loss rate: 0.00%

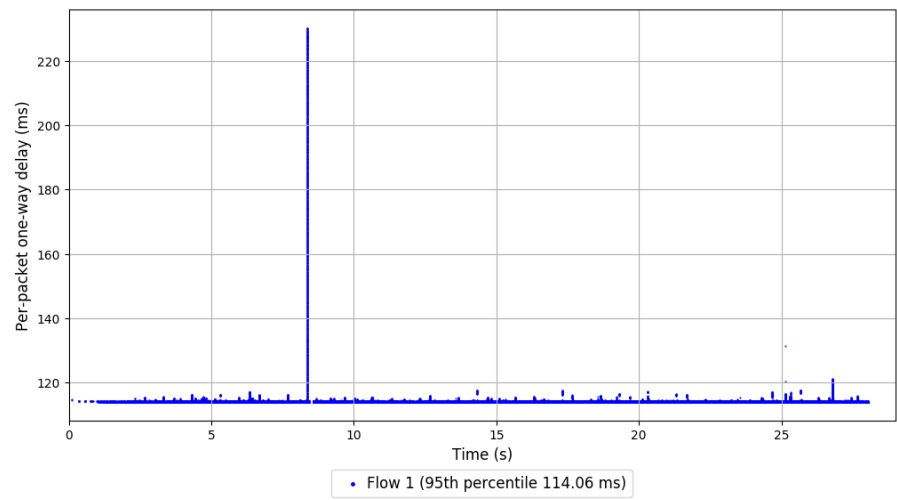
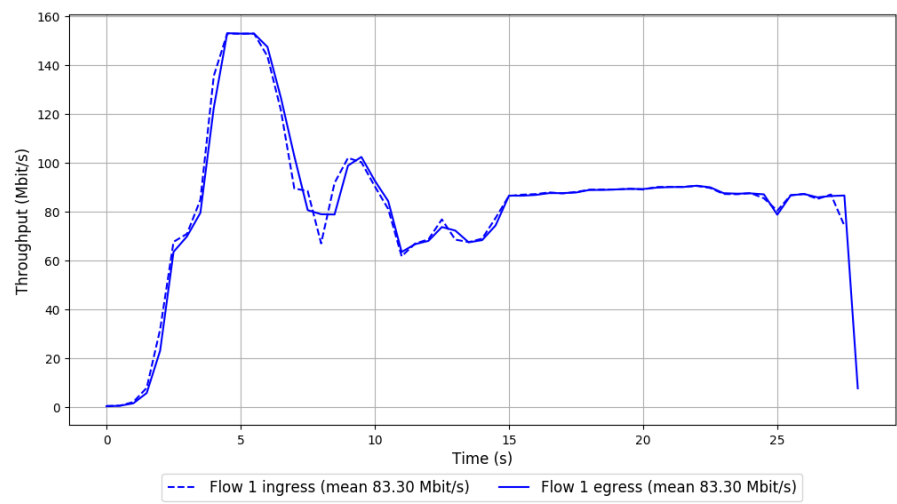
-- Flow 1:

Average throughput: 83.30 Mbit/s

95th percentile per-packet one-way delay: 114.056 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-10-10 19:36:26

End at: 2017-10-10 19:36:56

Below is generated by plot.py at 2017-10-10 22:29:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.67 Mbit/s

95th percentile per-packet one-way delay: 114.153 ms

Loss rate: 0.00%

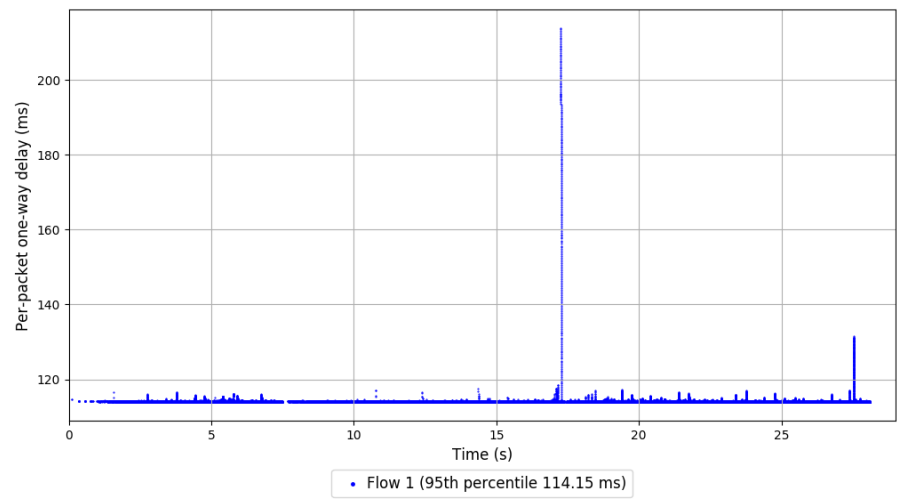
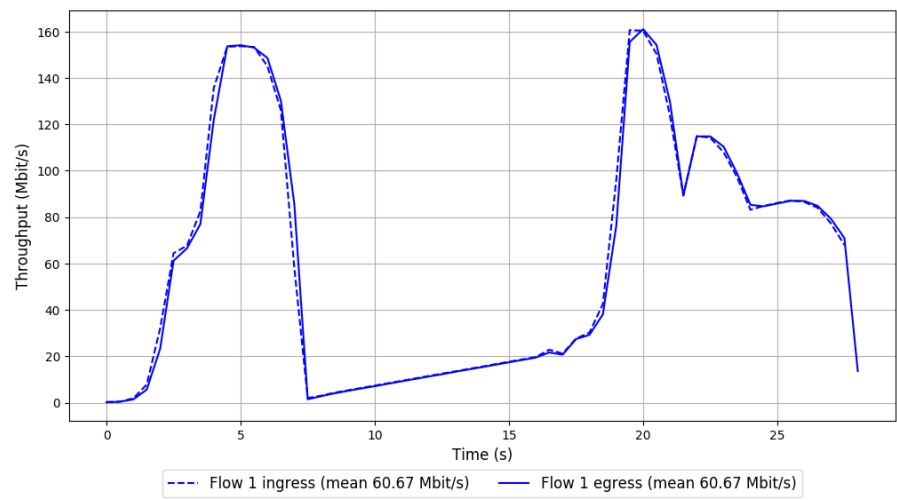
-- Flow 1:

Average throughput: 60.67 Mbit/s

95th percentile per-packet one-way delay: 114.153 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-10-10 19:47:49

End at: 2017-10-10 19:48:19

Below is generated by plot.py at 2017-10-10 22:29:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.41 Mbit/s

95th percentile per-packet one-way delay: 114.020 ms

Loss rate: 0.00%

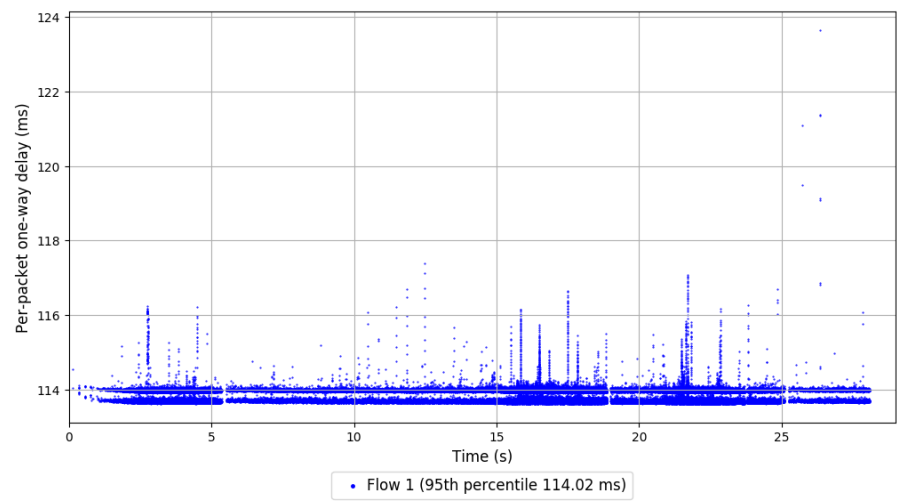
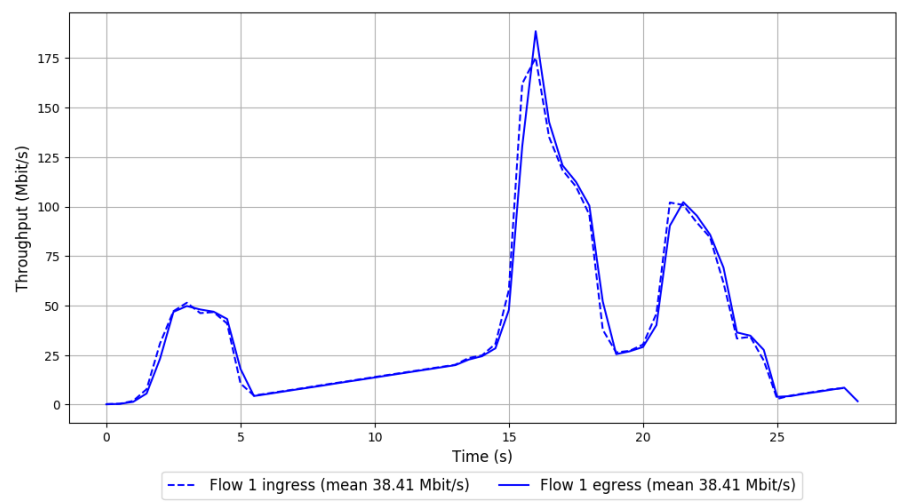
-- Flow 1:

Average throughput: 38.41 Mbit/s

95th percentile per-packet one-way delay: 114.020 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

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

End at: 2017-10-10 19:59:35

Below is generated by plot.py at 2017-10-10 22:29:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.94 Mbit/s

95th percentile per-packet one-way delay: 114.038 ms

Loss rate: 0.00%

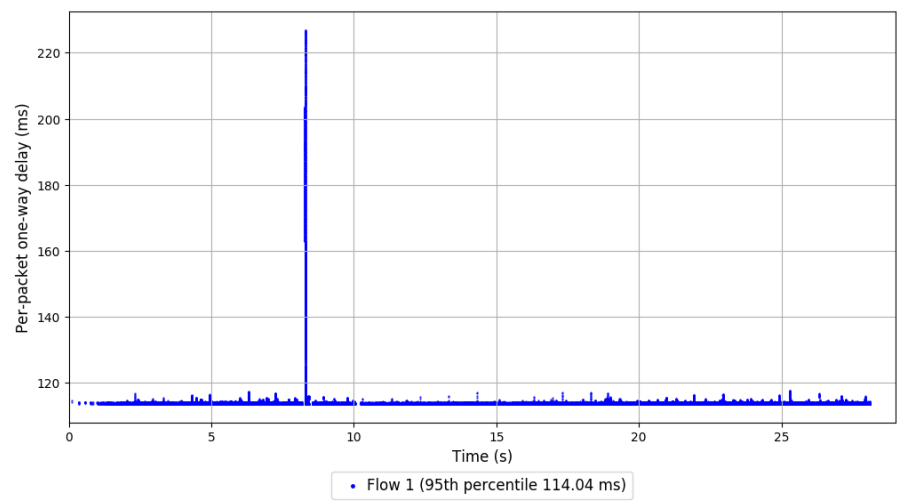
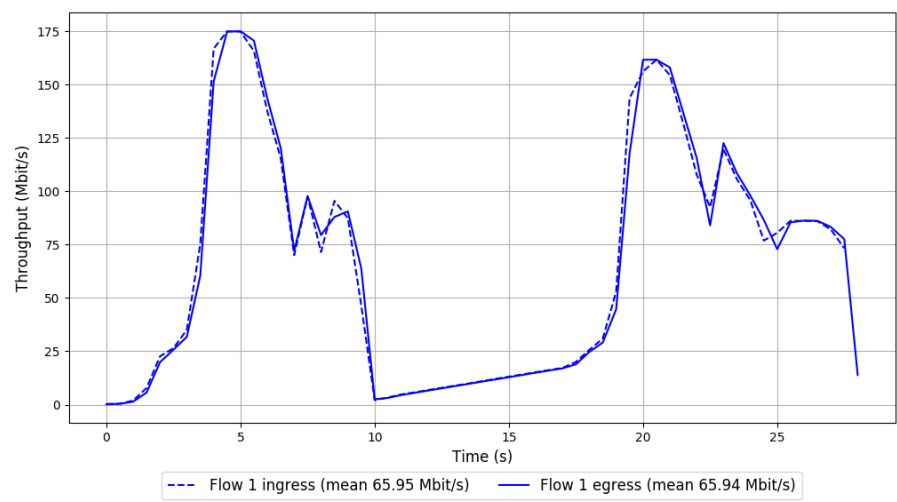
-- Flow 1:

Average throughput: 65.94 Mbit/s

95th percentile per-packet one-way delay: 114.038 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-10-10 20:10:27

End at: 2017-10-10 20:10:57

Below is generated by plot.py at 2017-10-10 22:29:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.06 Mbit/s

95th percentile per-packet one-way delay: 114.044 ms

Loss rate: 0.02%

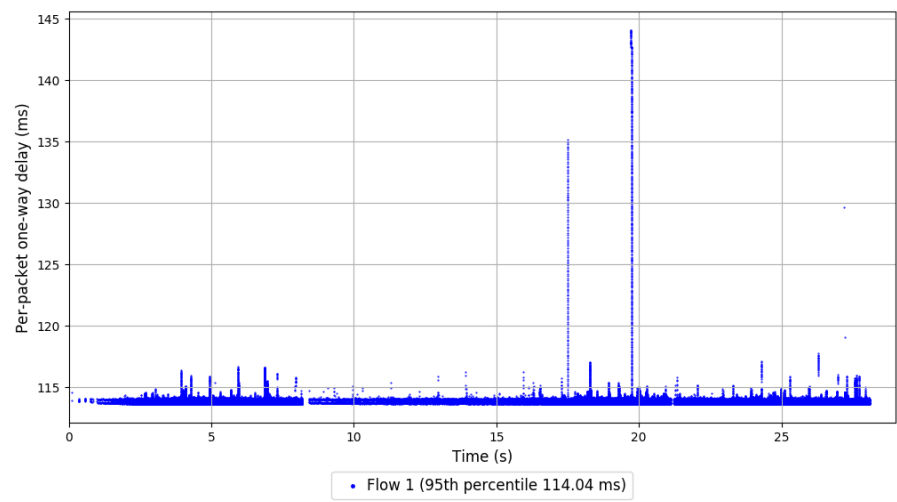
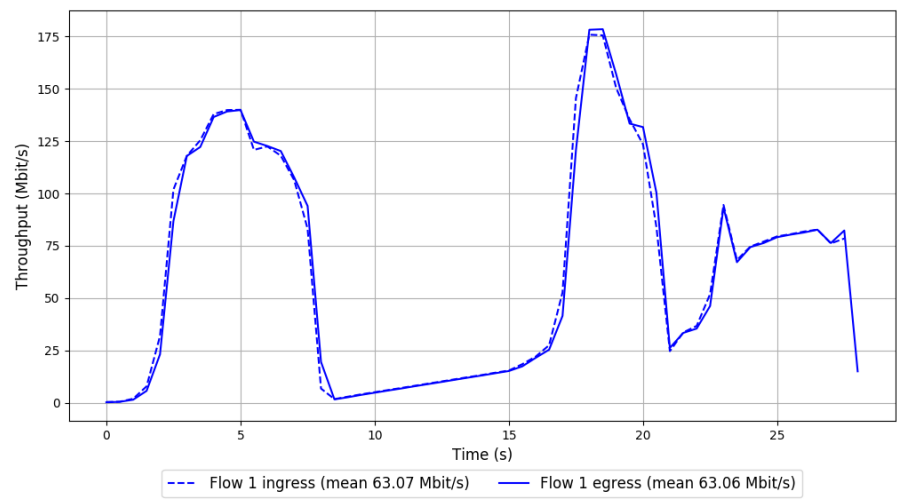
-- Flow 1:

Average throughput: 63.06 Mbit/s

95th percentile per-packet one-way delay: 114.044 ms

Loss rate: 0.02%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-10-10 20:21:40

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

Below is generated by plot.py at 2017-10-10 22:29:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.45 Mbit/s

95th percentile per-packet one-way delay: 114.151 ms

Loss rate: 0.00%

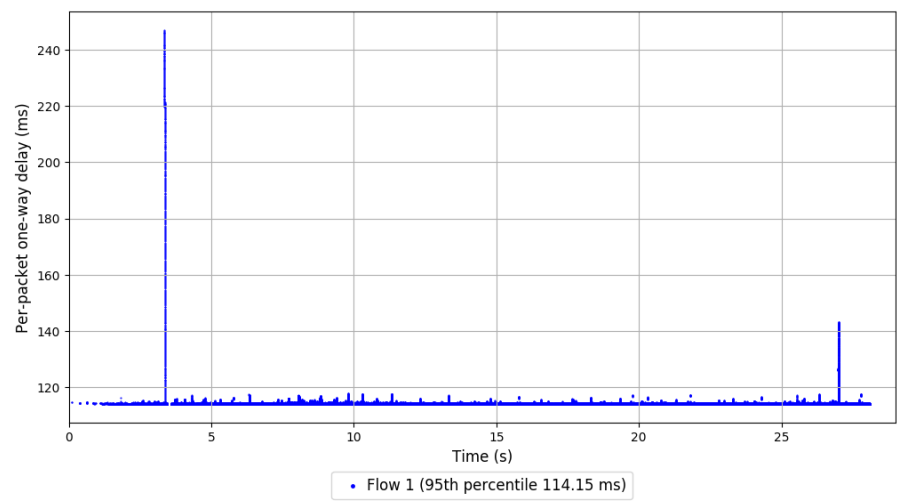
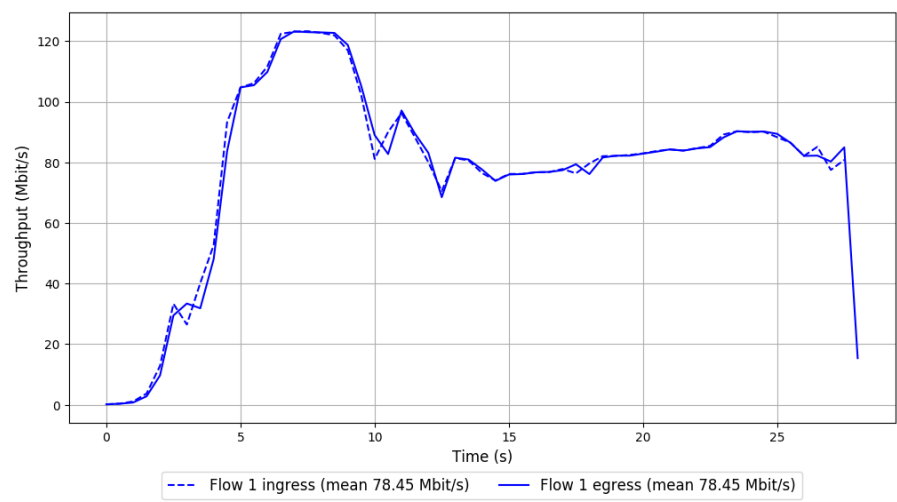
-- Flow 1:

Average throughput: 78.45 Mbit/s

95th percentile per-packet one-way delay: 114.151 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-10-10 20:33:01

End at: 2017-10-10 20:33:31

Below is generated by plot.py at 2017-10-10 22:29:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.91 Mbit/s

95th percentile per-packet one-way delay: 114.146 ms

Loss rate: 0.00%

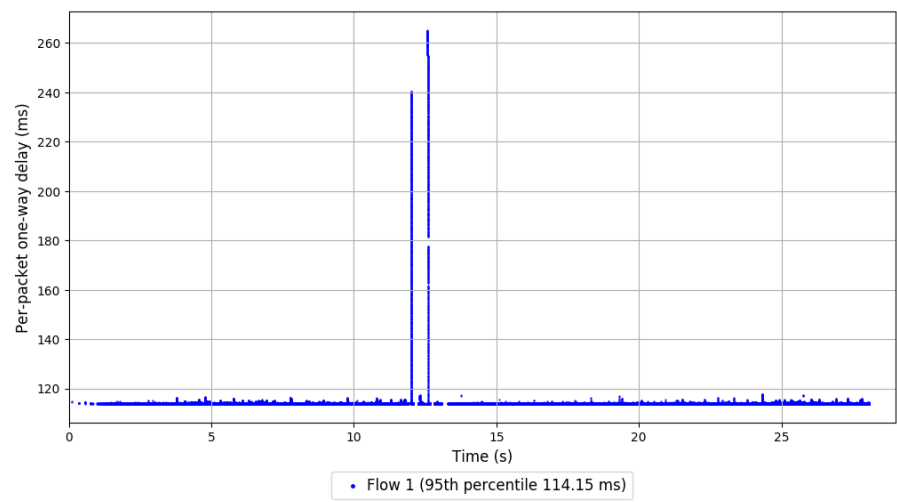
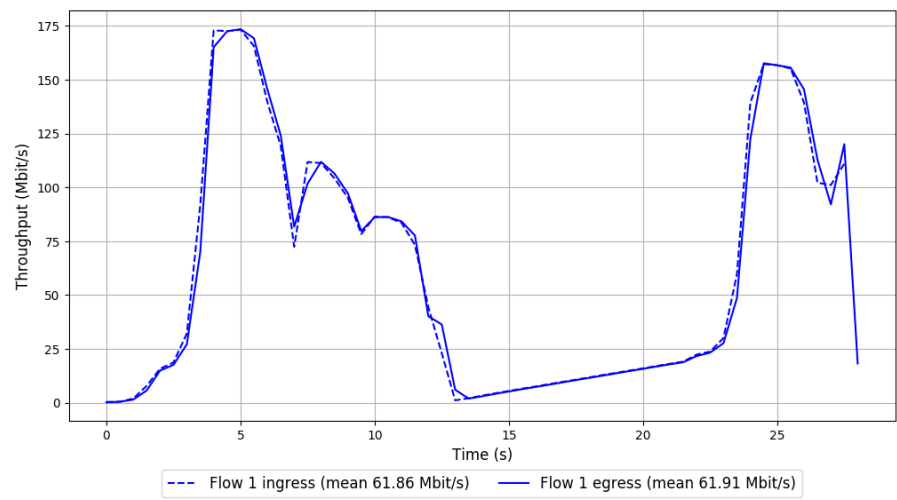
-- Flow 1:

Average throughput: 61.91 Mbit/s

95th percentile per-packet one-way delay: 114.146 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link

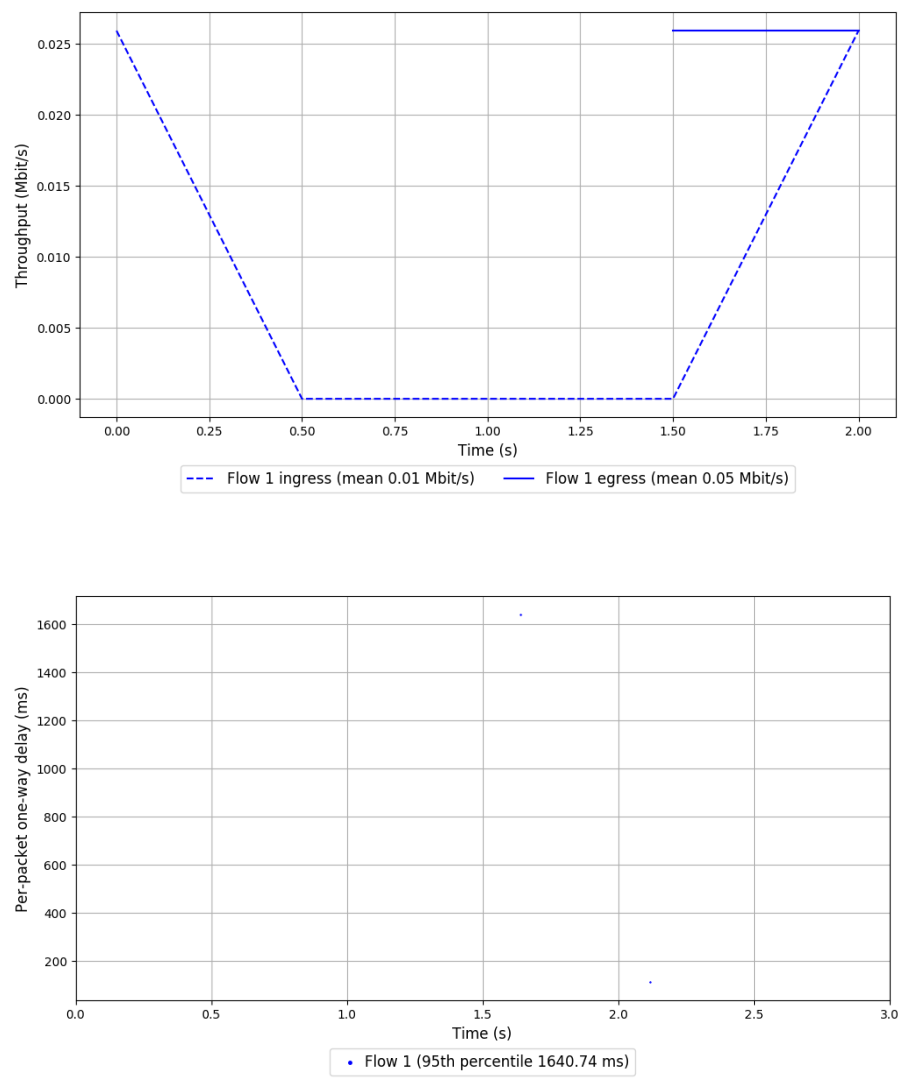


Run 8: Statistics of Copa

Start at: 2017-10-10 20:44:26

End at: 2017-10-10 20:44:56

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-10-10 20:55:44

End at: 2017-10-10 20:56:14

Below is generated by plot.py at 2017-10-10 22:29:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.99 Mbit/s

95th percentile per-packet one-way delay: 114.139 ms

Loss rate: 0.00%

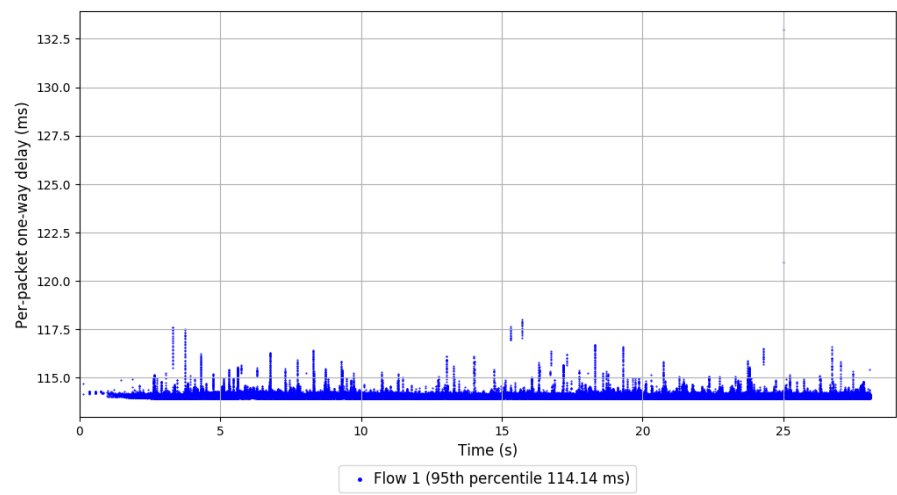
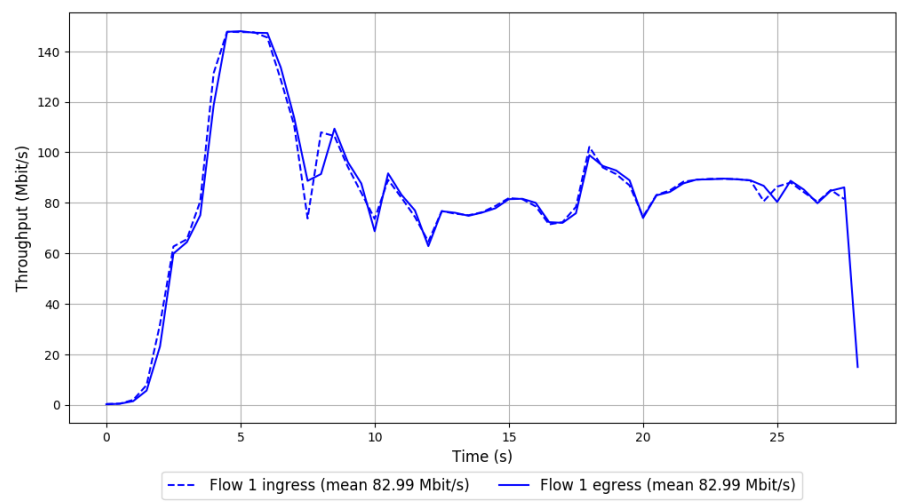
-- Flow 1:

Average throughput: 82.99 Mbit/s

95th percentile per-packet one-way delay: 114.139 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-10-10 21:06:51

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

Below is generated by plot.py at 2017-10-10 22:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.04 Mbit/s

95th percentile per-packet one-way delay: 114.165 ms

Loss rate: 0.00%

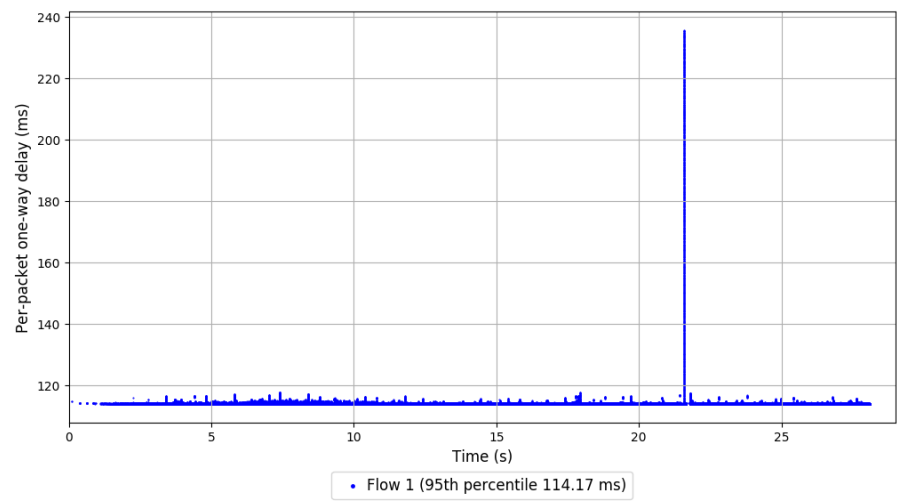
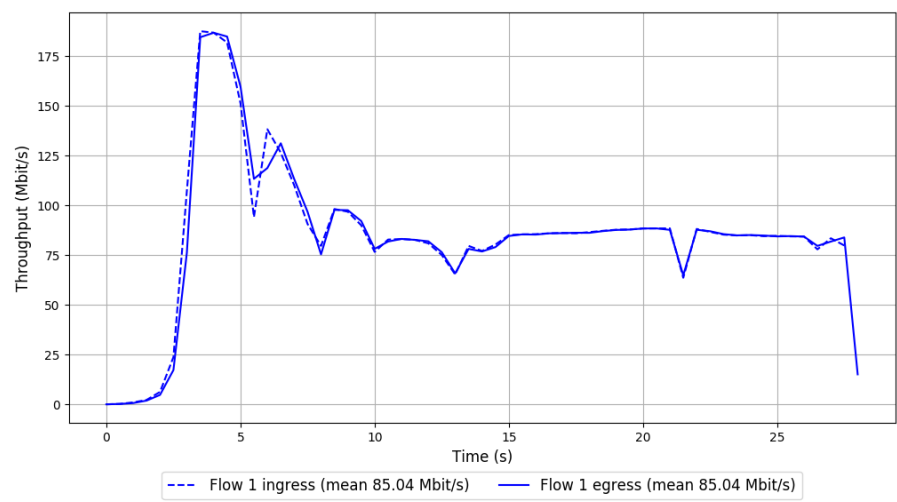
-- Flow 1:

Average throughput: 85.04 Mbit/s

95th percentile per-packet one-way delay: 114.165 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-10-10 19:23:58

End at: 2017-10-10 19:24:28

Below is generated by plot.py at 2017-10-10 22:34:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 357.55 Mbit/s

95th percentile per-packet one-way delay: 120.552 ms

Loss rate: 0.00%

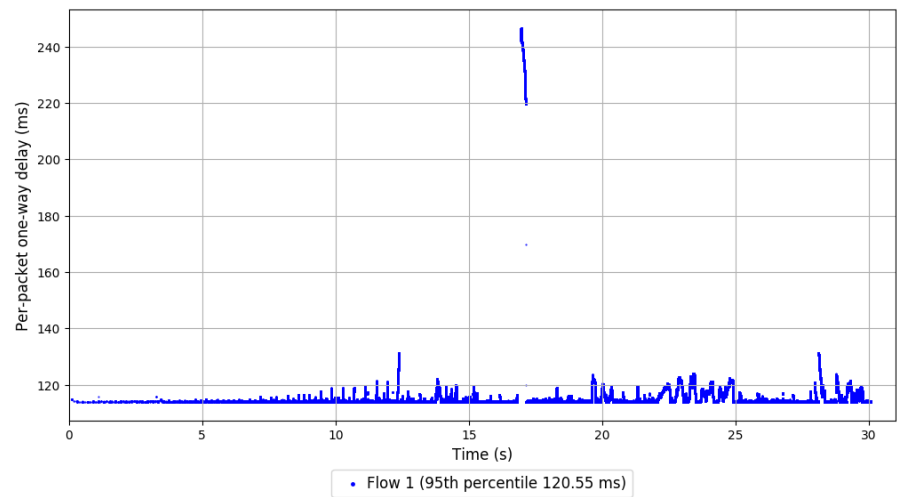
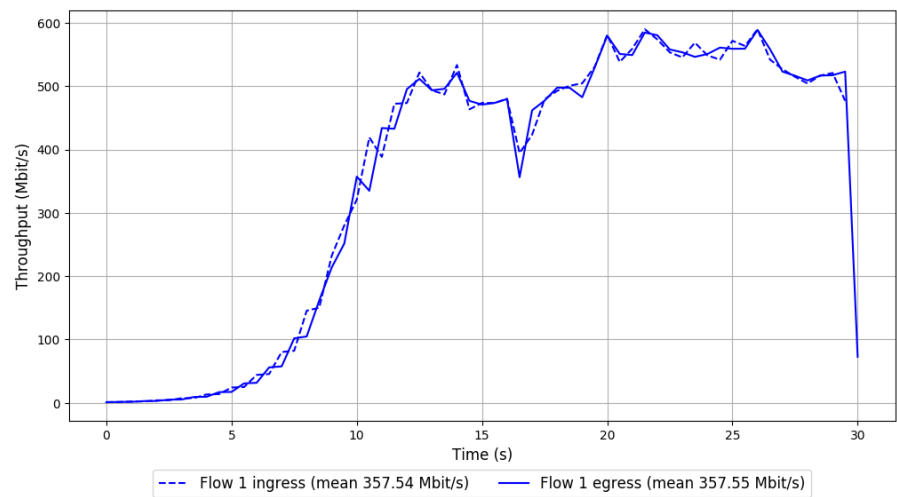
-- Flow 1:

Average throughput: 357.55 Mbit/s

95th percentile per-packet one-way delay: 120.552 ms

Loss rate: 0.00%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-10-10 19:35:22

End at: 2017-10-10 19:35:52

Below is generated by plot.py at 2017-10-10 22:34:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 318.91 Mbit/s

95th percentile per-packet one-way delay: 119.705 ms

Loss rate: 0.01%

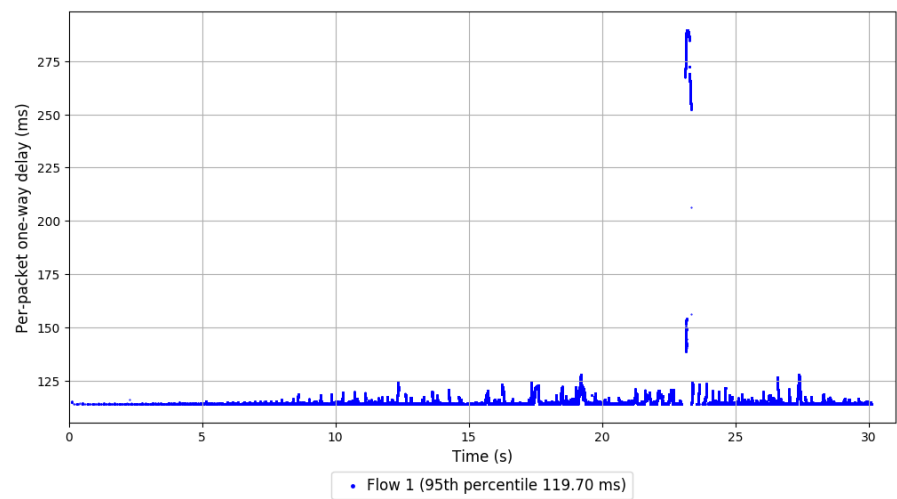
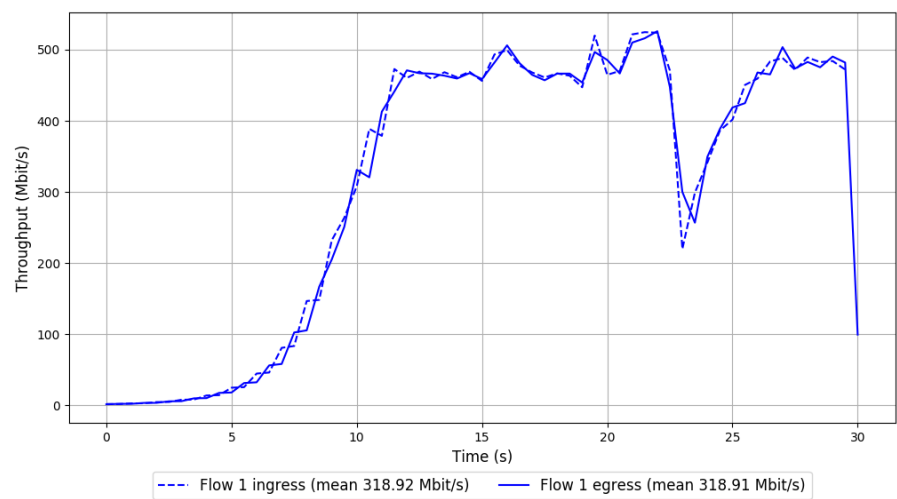
-- Flow 1:

Average throughput: 318.91 Mbit/s

95th percentile per-packet one-way delay: 119.705 ms

Loss rate: 0.01%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-10-10 19:46:44

End at: 2017-10-10 19:47:14

Below is generated by plot.py at 2017-10-10 22:34:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 335.67 Mbit/s

95th percentile per-packet one-way delay: 129.638 ms

Loss rate: 0.00%

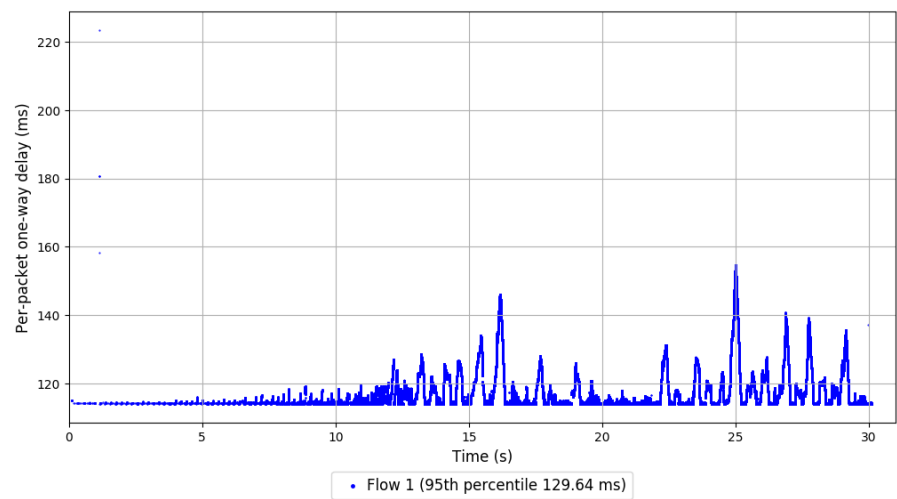
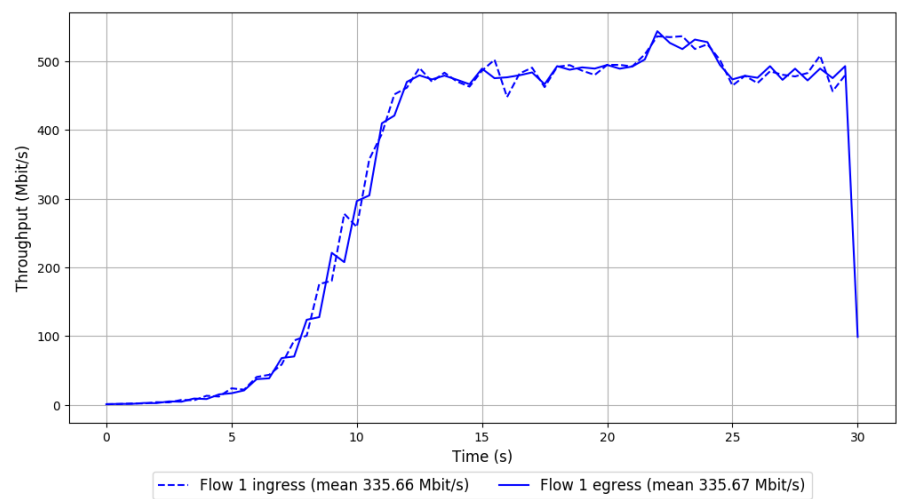
-- Flow 1:

Average throughput: 335.67 Mbit/s

95th percentile per-packet one-way delay: 129.638 ms

Loss rate: 0.00%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-10-10 19:58:01

End at: 2017-10-10 19:58:31

Below is generated by plot.py at 2017-10-10 22:34:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 327.31 Mbit/s

95th percentile per-packet one-way delay: 125.360 ms

Loss rate: 0.00%

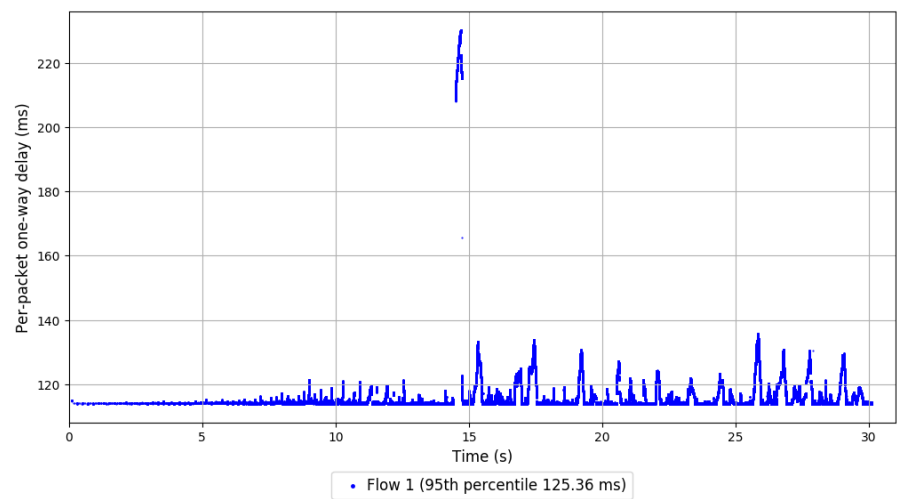
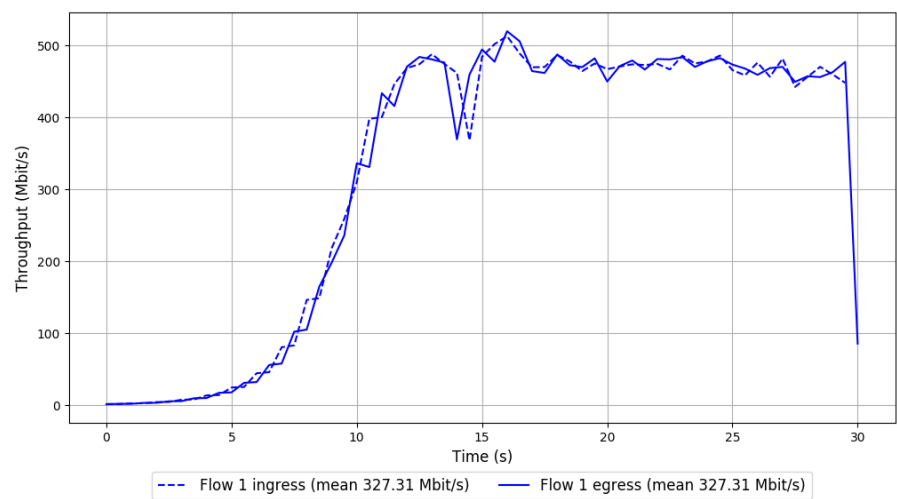
-- Flow 1:

Average throughput: 327.31 Mbit/s

95th percentile per-packet one-way delay: 125.360 ms

Loss rate: 0.00%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-10-10 20:09:20

End at: 2017-10-10 20:09:50

Below is generated by plot.py at 2017-10-10 22:35:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 352.37 Mbit/s

95th percentile per-packet one-way delay: 127.670 ms

Loss rate: 0.04%

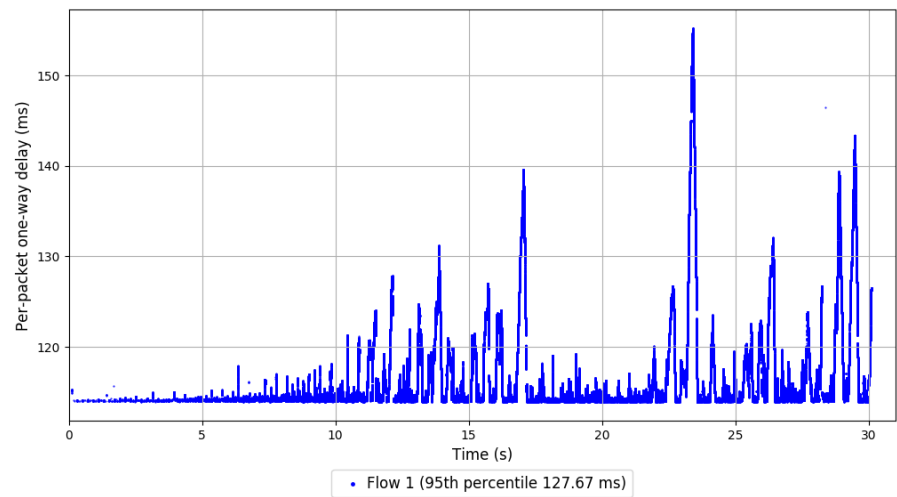
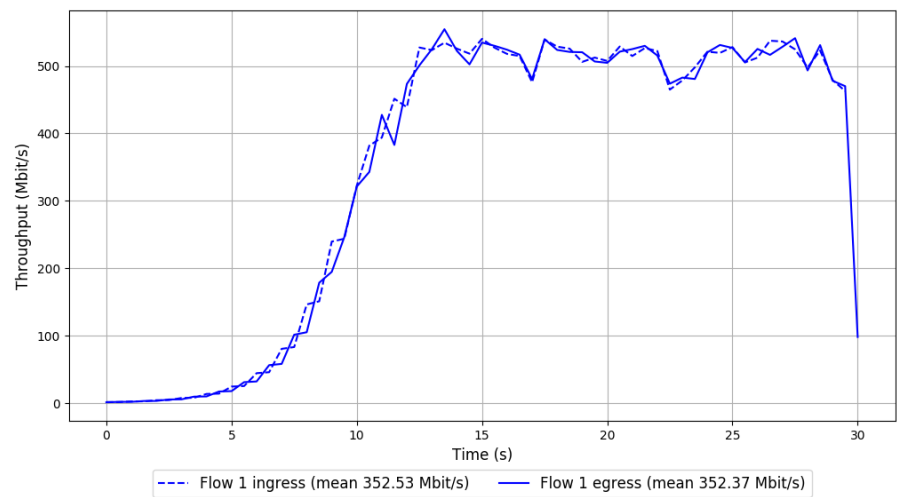
-- Flow 1:

Average throughput: 352.37 Mbit/s

95th percentile per-packet one-way delay: 127.670 ms

Loss rate: 0.04%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-10-10 20:20:34

End at: 2017-10-10 20:21:04

Below is generated by plot.py at 2017-10-10 22:35:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 329.00 Mbit/s

95th percentile per-packet one-way delay: 125.593 ms

Loss rate: 0.00%

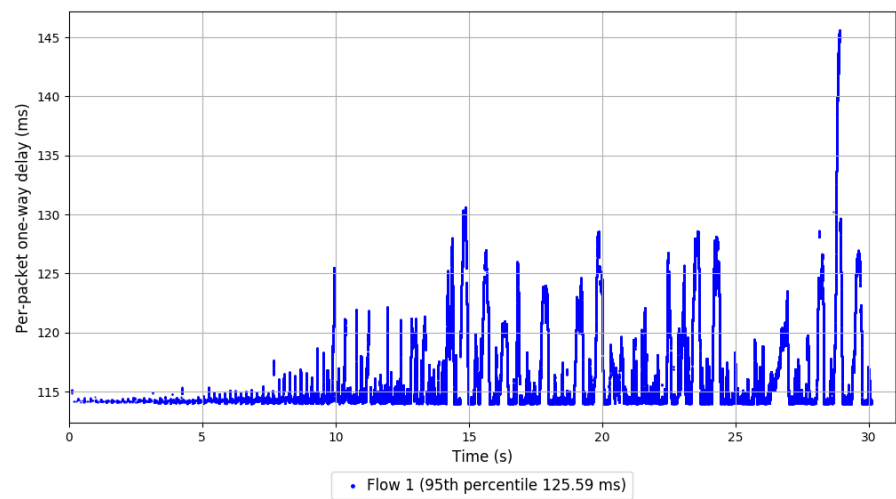
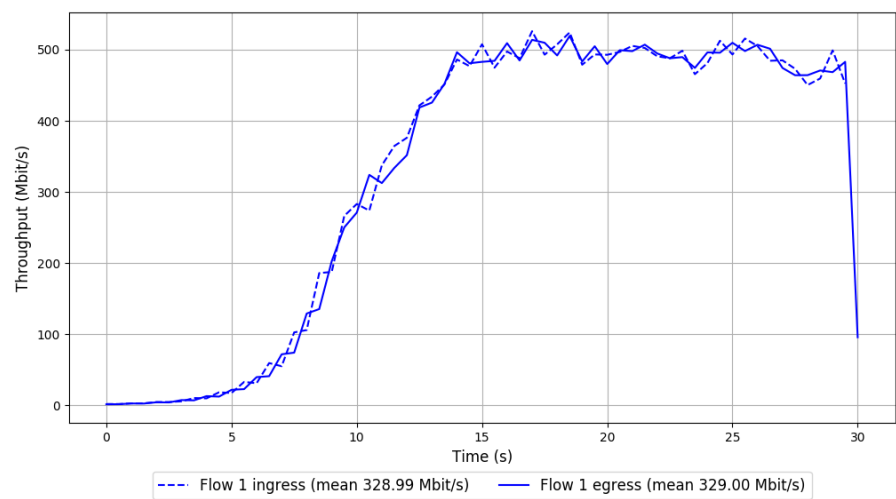
-- Flow 1:

Average throughput: 329.00 Mbit/s

95th percentile per-packet one-way delay: 125.593 ms

Loss rate: 0.00%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-10-10 20:31:56

End at: 2017-10-10 20:32:26

Below is generated by plot.py at 2017-10-10 22:35:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 331.66 Mbit/s

95th percentile per-packet one-way delay: 141.327 ms

Loss rate: 0.04%

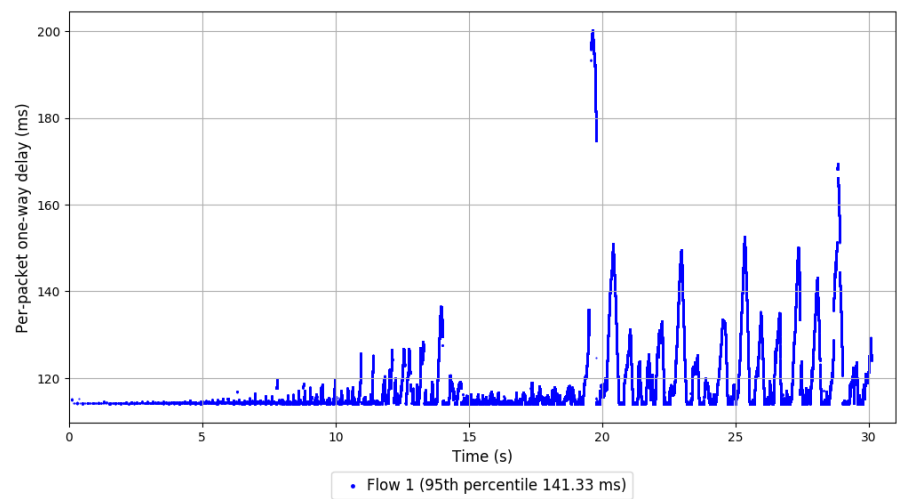
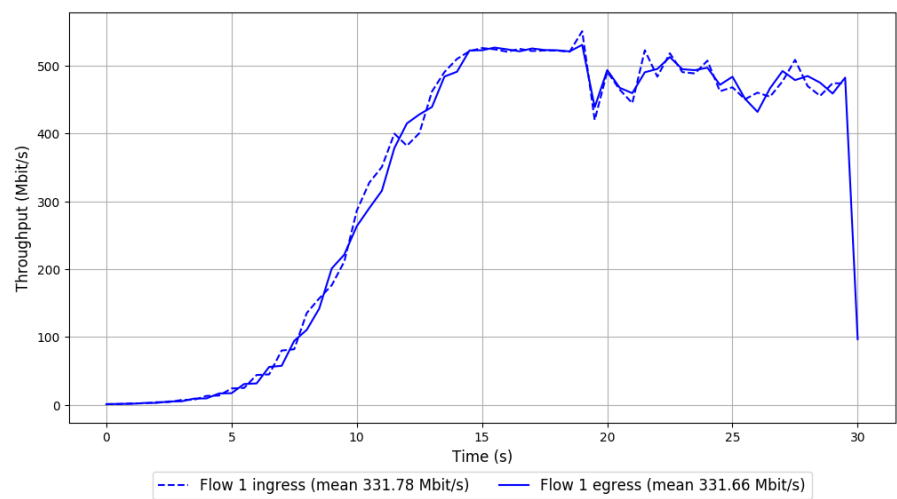
-- Flow 1:

Average throughput: 331.66 Mbit/s

95th percentile per-packet one-way delay: 141.327 ms

Loss rate: 0.04%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-10-10 20:43:20

End at: 2017-10-10 20:43:50

Below is generated by plot.py at 2017-10-10 22:35:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 330.13 Mbit/s

95th percentile per-packet one-way delay: 145.215 ms

Loss rate: 0.00%

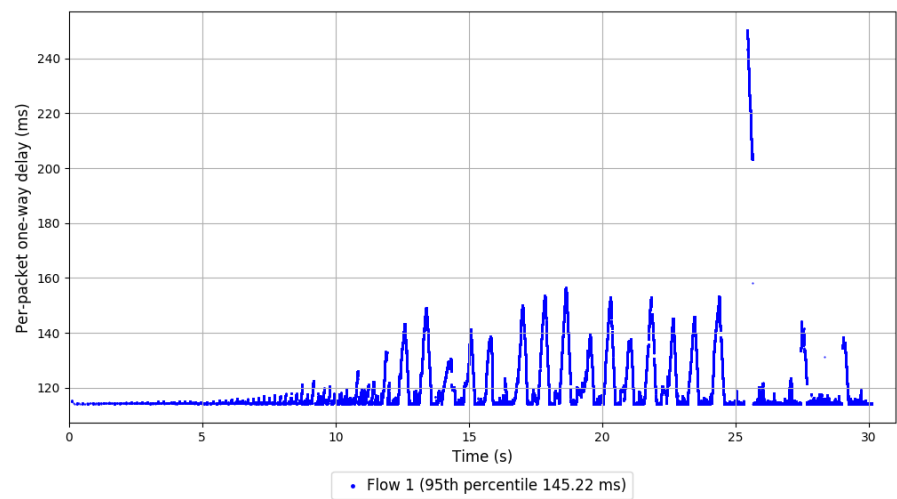
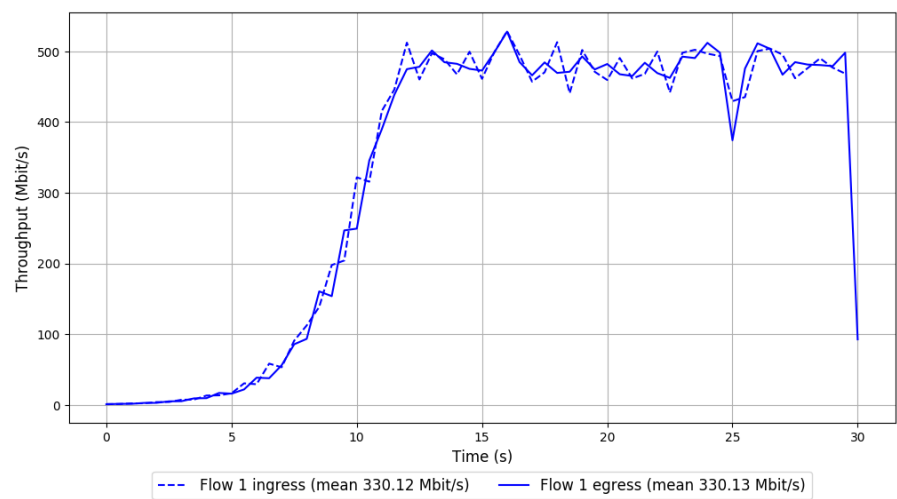
-- Flow 1:

Average throughput: 330.13 Mbit/s

95th percentile per-packet one-way delay: 145.215 ms

Loss rate: 0.00%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-10-10 20:54:40

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

Below is generated by plot.py at 2017-10-10 22:38:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 320.77 Mbit/s

95th percentile per-packet one-way delay: 129.918 ms

Loss rate: 0.00%

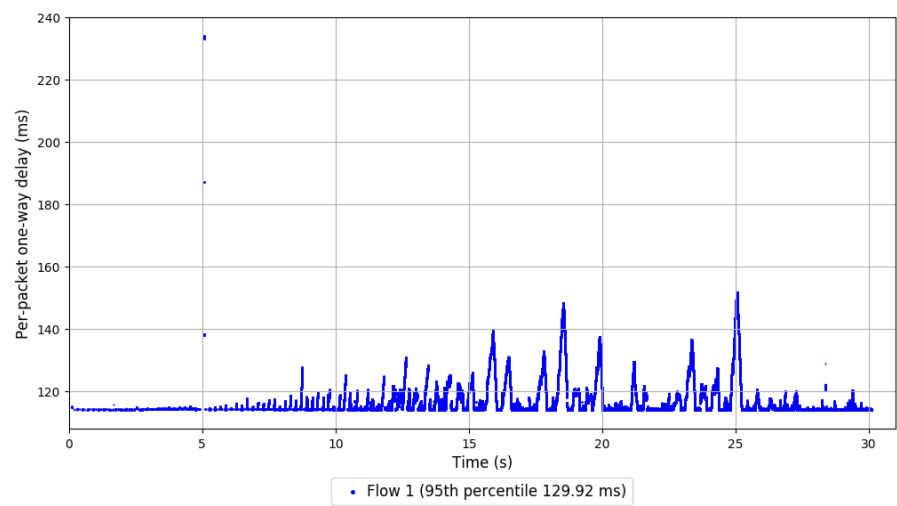
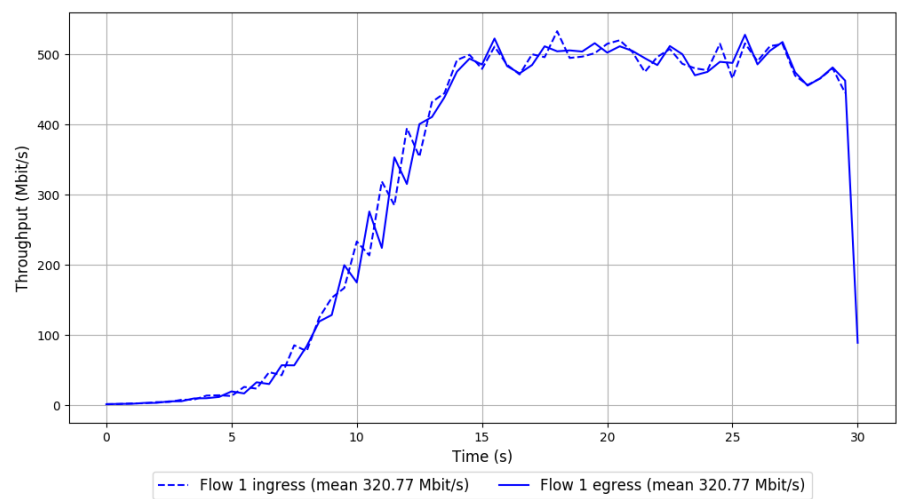
-- Flow 1:

Average throughput: 320.77 Mbit/s

95th percentile per-packet one-way delay: 129.918 ms

Loss rate: 0.00%

Run 9: Report of CalibratedKoho — Data Link

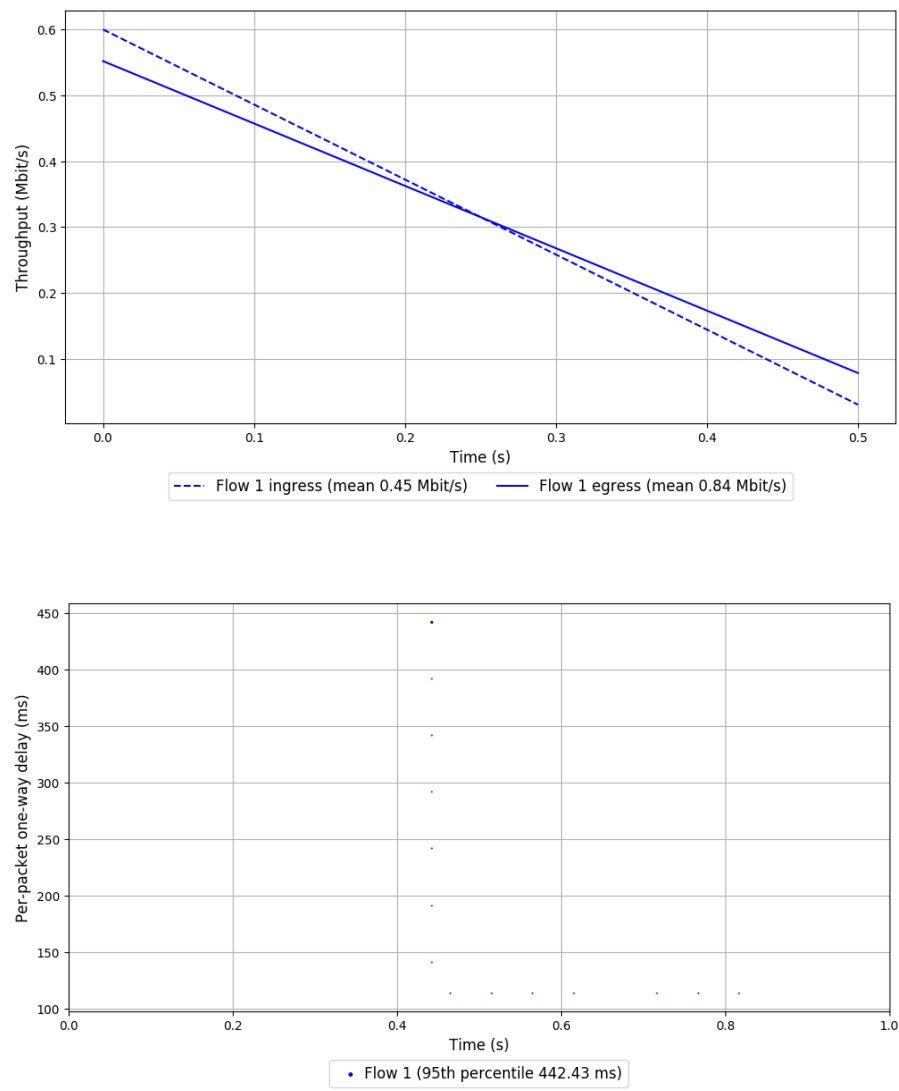


Run 10: Statistics of CalibratedKoho

Start at: 2017-10-10 21:06:12

End at: 2017-10-10 21:06:42

Run 10: Report of CalibratedKoho — Data Link

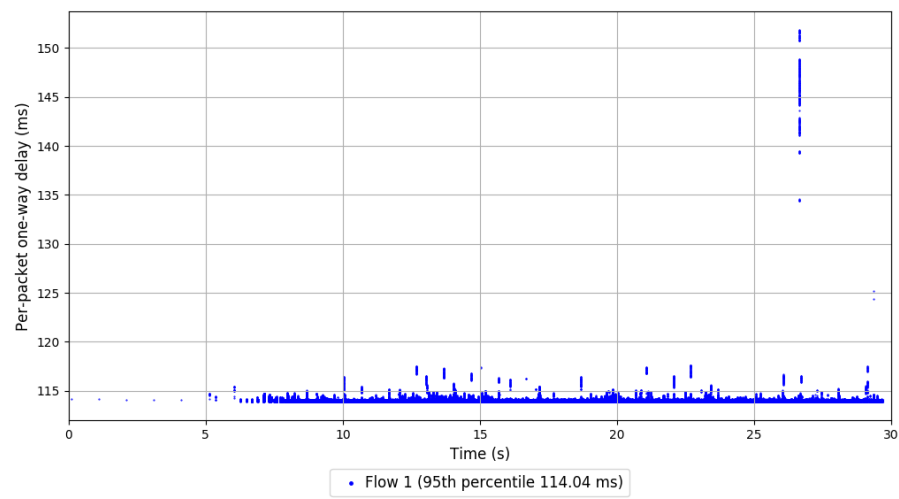
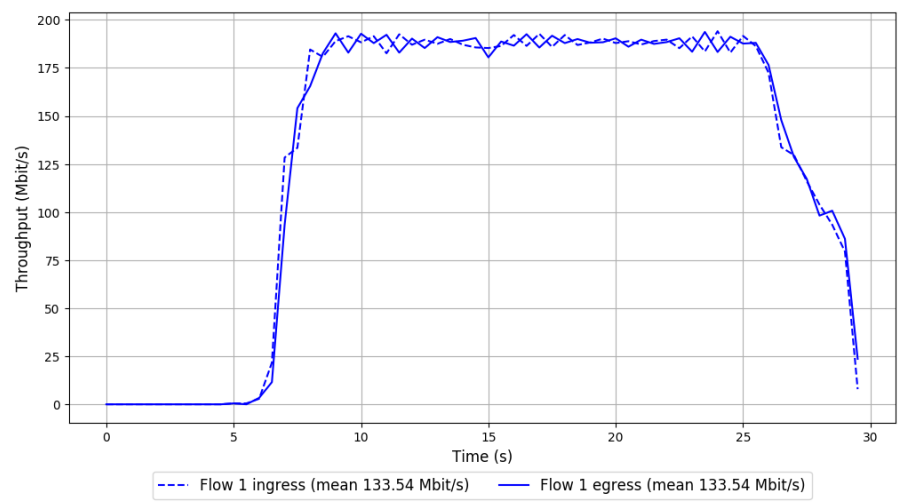


```
Run 1: Statistics of Indigo

Start at: 2017-10-10 19:23:08
End at: 2017-10-10 19:23:38

# Below is generated by plot.py at 2017-10-10 22:38:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 133.54 Mbit/s
95th percentile per-packet one-way delay: 114.043 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 133.54 Mbit/s
95th percentile per-packet one-way delay: 114.043 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-10-10 19:34:29

End at: 2017-10-10 19:34:59

Below is generated by plot.py at 2017-10-10 22:38:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.25 Mbit/s

95th percentile per-packet one-way delay: 114.106 ms

Loss rate: 0.00%

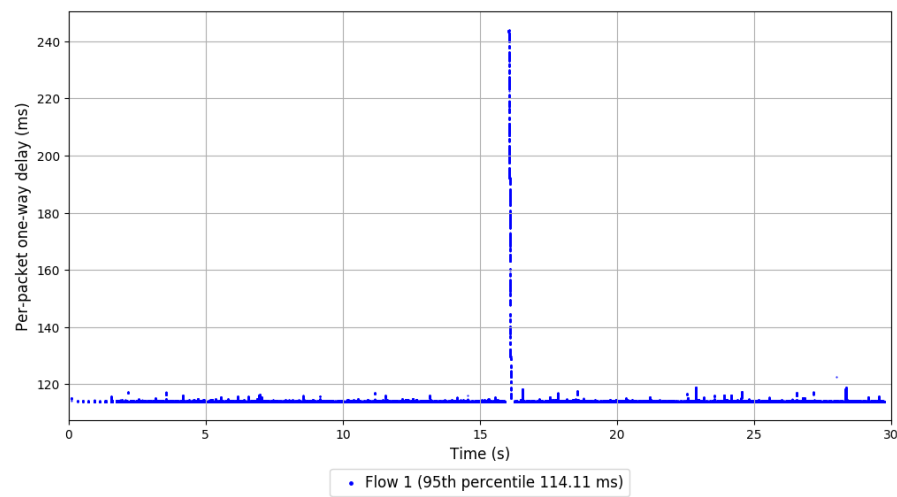
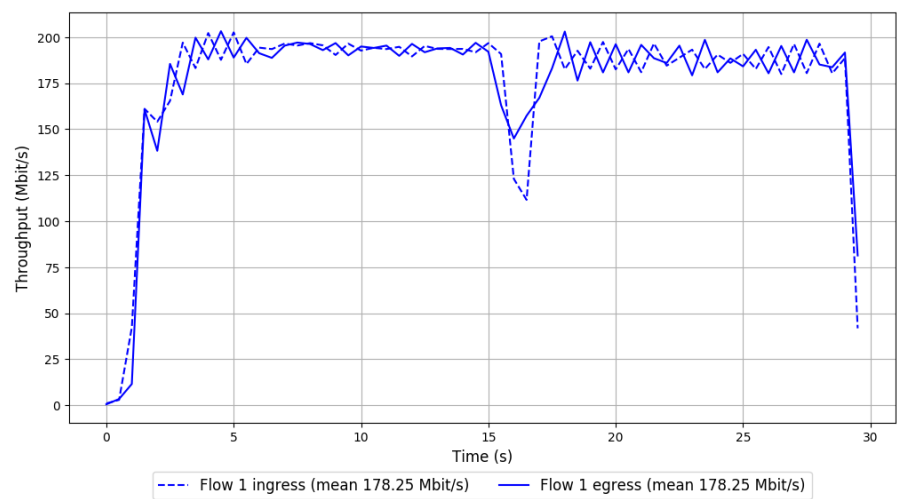
-- Flow 1:

Average throughput: 178.25 Mbit/s

95th percentile per-packet one-way delay: 114.106 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-10-10 19:45:57

End at: 2017-10-10 19:46:27

Below is generated by plot.py at 2017-10-10 22:38:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.54 Mbit/s

95th percentile per-packet one-way delay: 114.113 ms

Loss rate: 0.00%

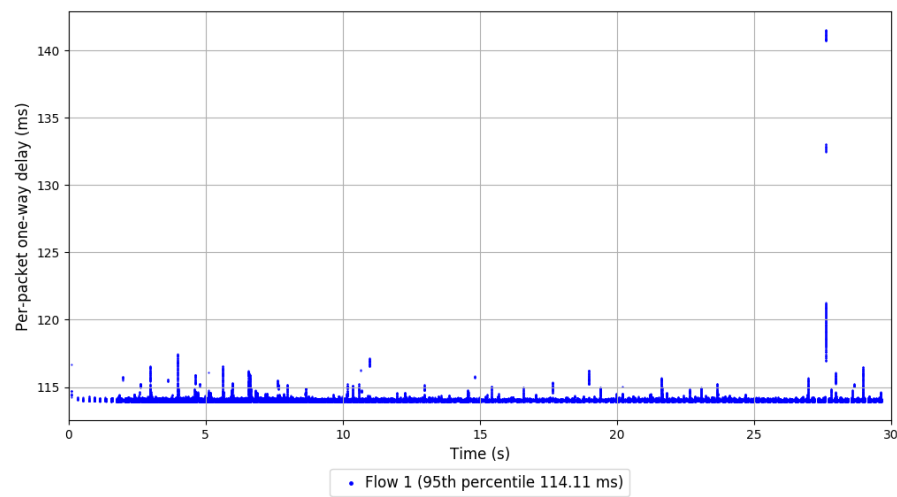
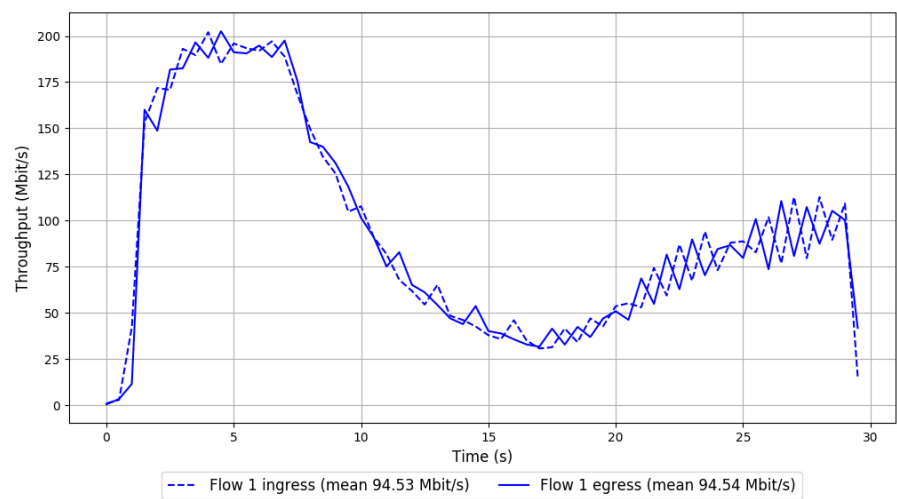
-- Flow 1:

Average throughput: 94.54 Mbit/s

95th percentile per-packet one-way delay: 114.113 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-10-10 19:57:14

End at: 2017-10-10 19:57:44

Below is generated by plot.py at 2017-10-10 22:38:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.93 Mbit/s

95th percentile per-packet one-way delay: 114.091 ms

Loss rate: 0.00%

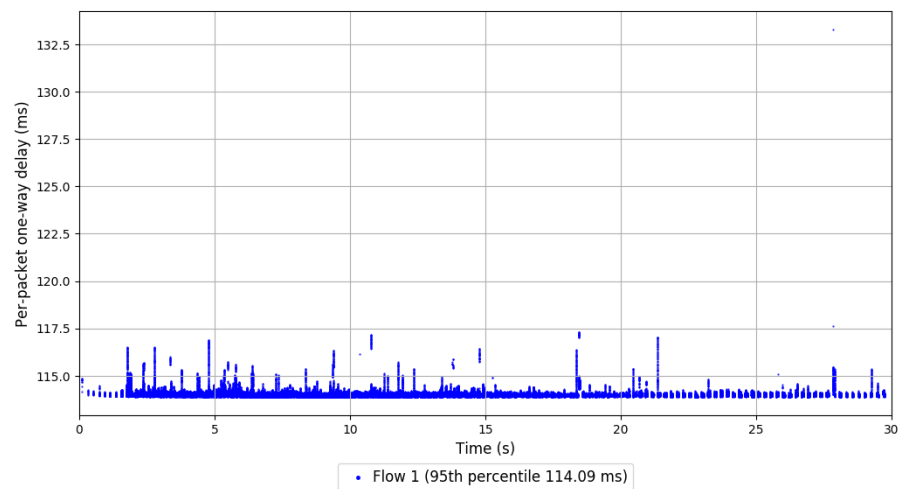
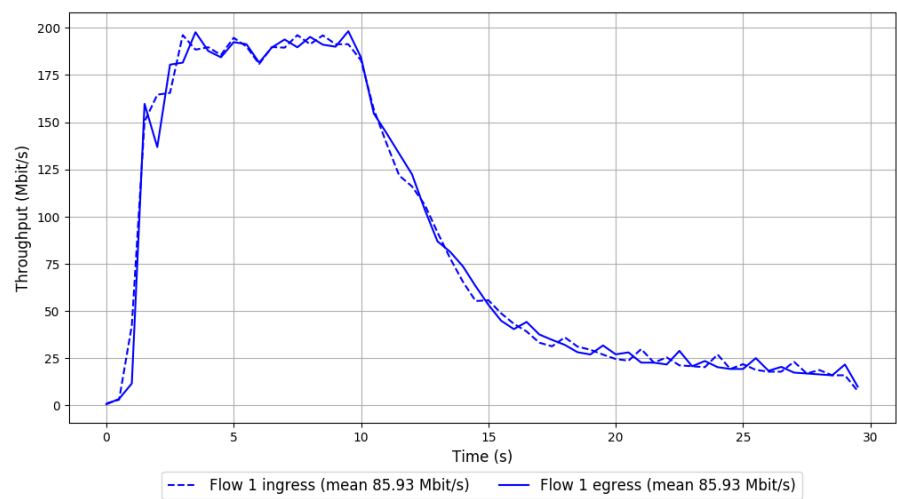
-- Flow 1:

Average throughput: 85.93 Mbit/s

95th percentile per-packet one-way delay: 114.091 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-10-10 20:08:26

End at: 2017-10-10 20:08:56

Below is generated by plot.py at 2017-10-10 22:38:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.55 Mbit/s

95th percentile per-packet one-way delay: 114.130 ms

Loss rate: 0.00%

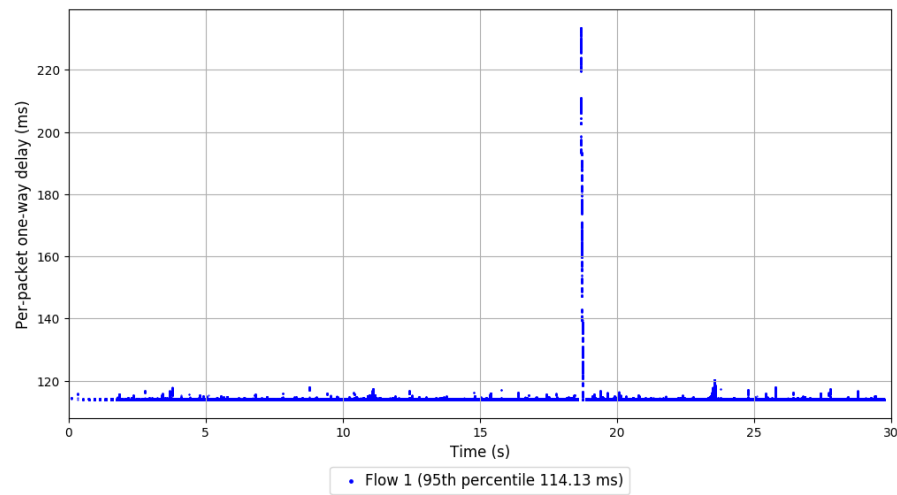
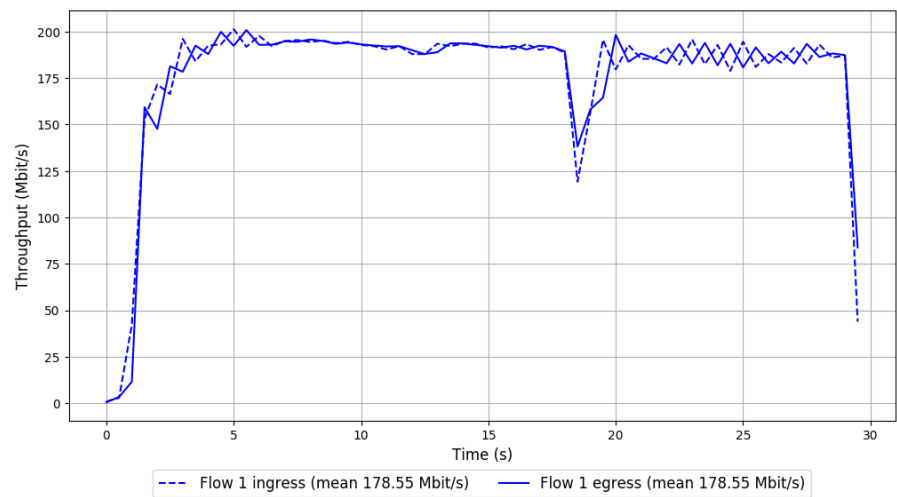
-- Flow 1:

Average throughput: 178.55 Mbit/s

95th percentile per-packet one-way delay: 114.130 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-10-10 20:19:47

End at: 2017-10-10 20:20:17

Below is generated by plot.py at 2017-10-10 22:38:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.91 Mbit/s

95th percentile per-packet one-way delay: 114.165 ms

Loss rate: 0.00%

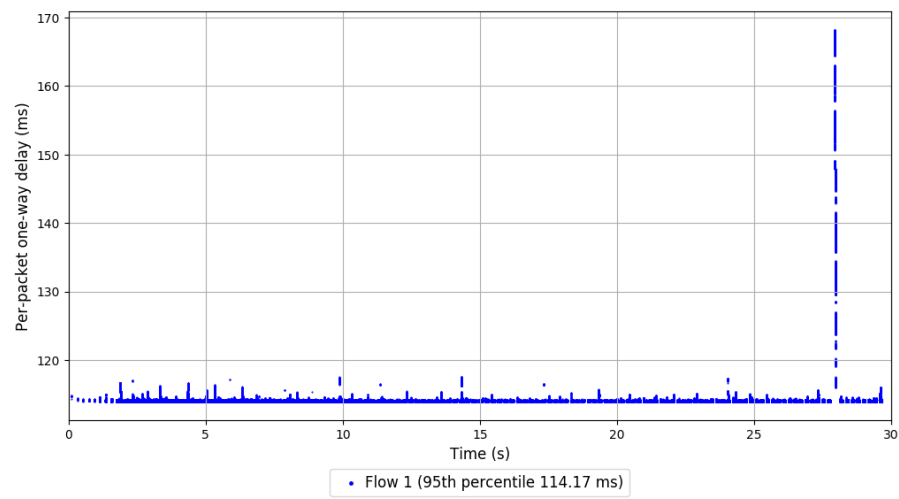
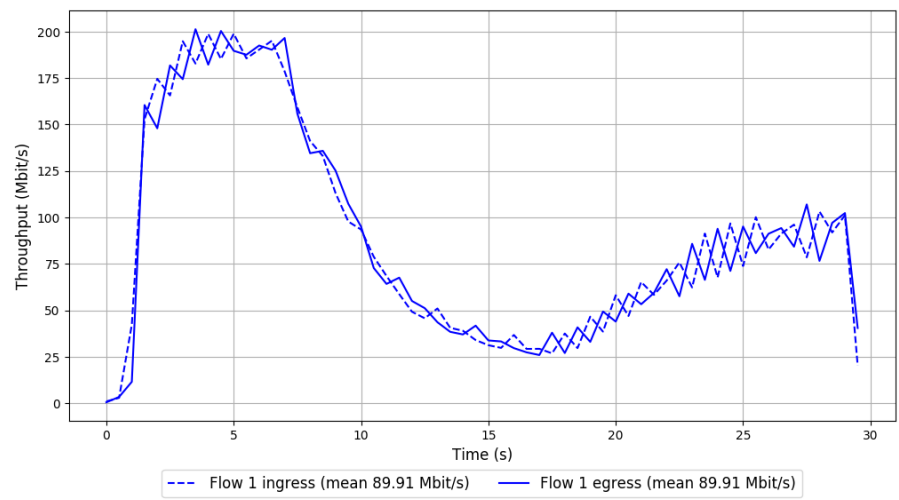
-- Flow 1:

Average throughput: 89.91 Mbit/s

95th percentile per-packet one-way delay: 114.165 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-10-10 20:31:02

End at: 2017-10-10 20:31:32

Below is generated by plot.py at 2017-10-10 22:38:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.76 Mbit/s

95th percentile per-packet one-way delay: 114.197 ms

Loss rate: 0.00%

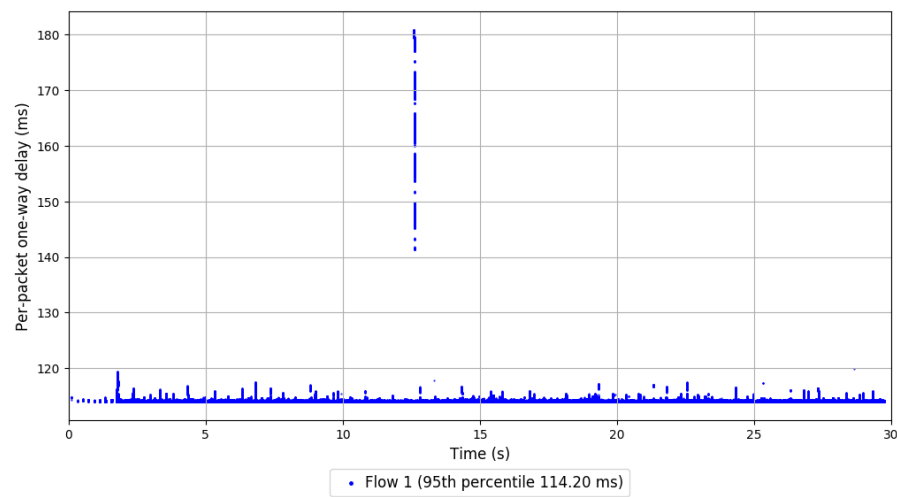
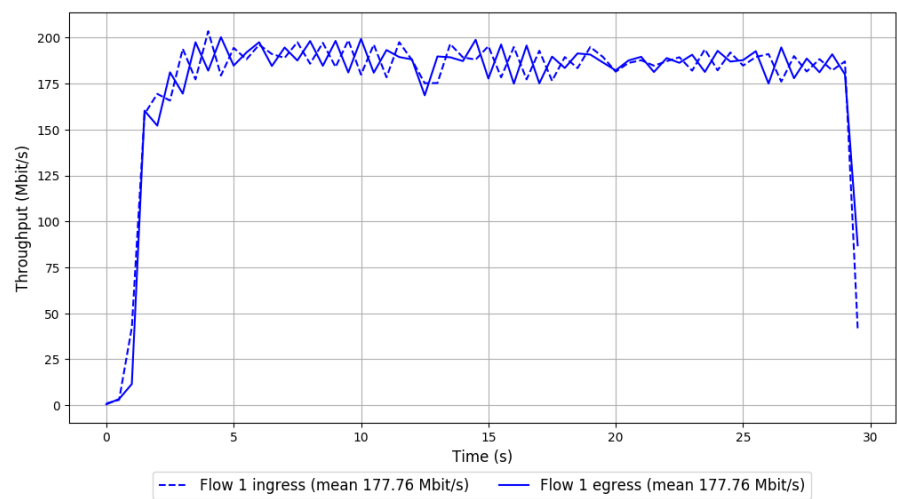
-- Flow 1:

Average throughput: 177.76 Mbit/s

95th percentile per-packet one-way delay: 114.197 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-10-10 20:42:27

End at: 2017-10-10 20:42:57

Below is generated by plot.py at 2017-10-10 22:38:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.35 Mbit/s

95th percentile per-packet one-way delay: 114.189 ms

Loss rate: 0.00%

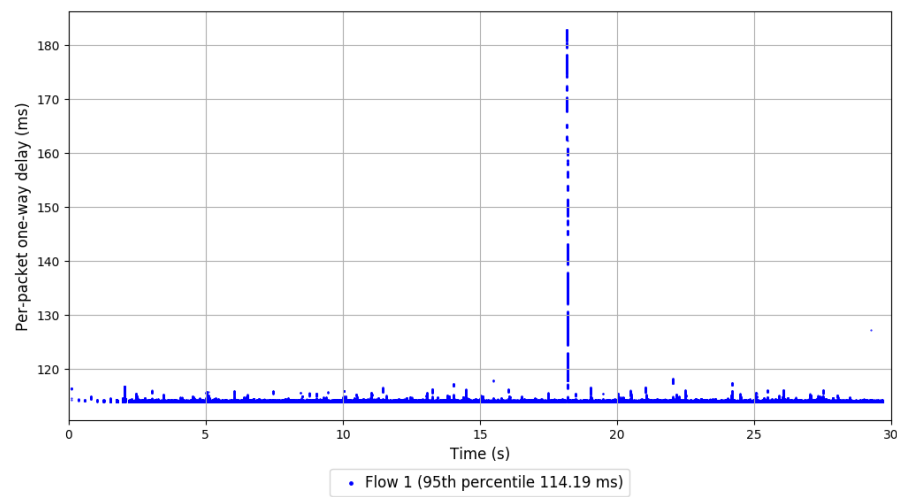
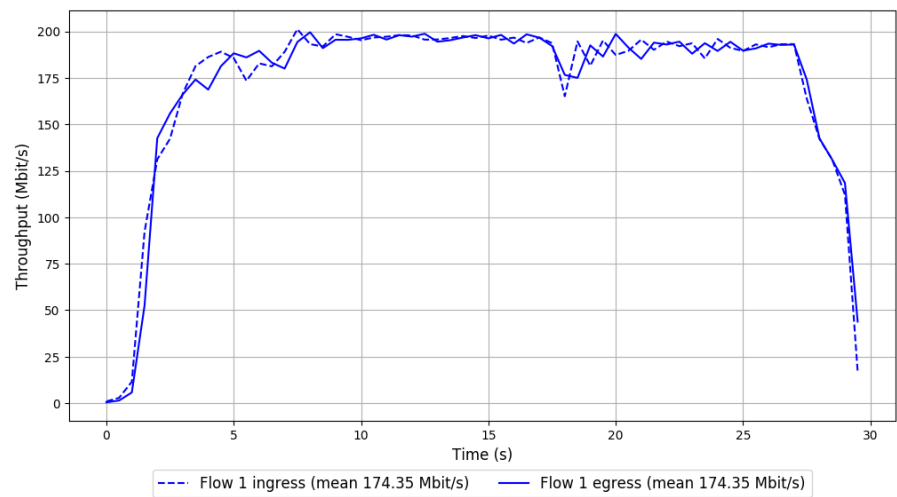
-- Flow 1:

Average throughput: 174.35 Mbit/s

95th percentile per-packet one-way delay: 114.189 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-10-10 20:53:46

End at: 2017-10-10 20:54:16

Below is generated by plot.py at 2017-10-10 22:38:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.67 Mbit/s

95th percentile per-packet one-way delay: 114.189 ms

Loss rate: 0.00%

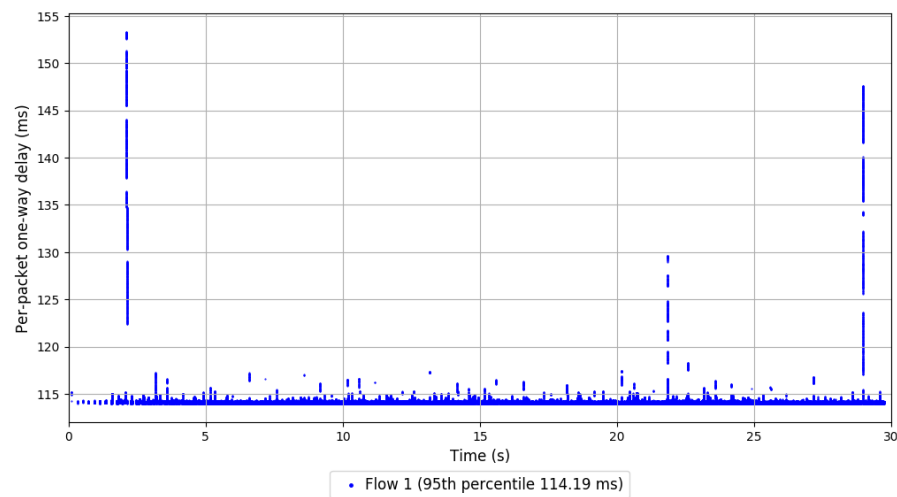
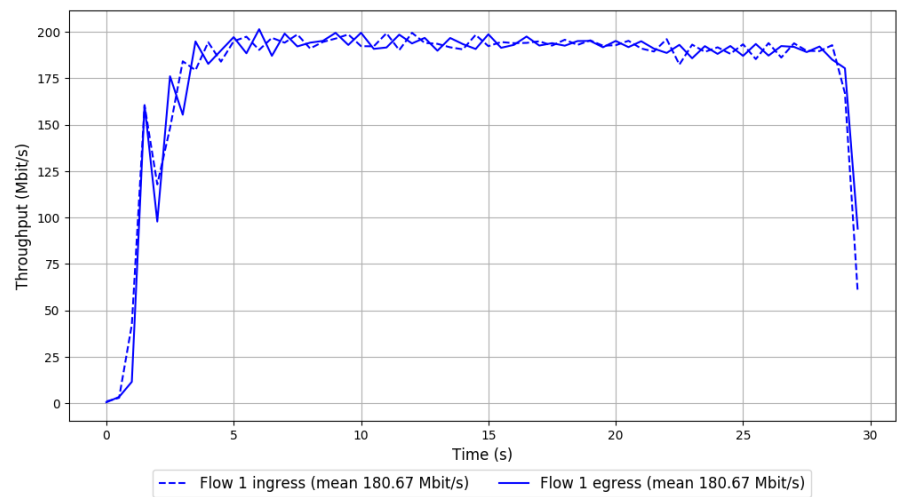
-- Flow 1:

Average throughput: 180.67 Mbit/s

95th percentile per-packet one-way delay: 114.189 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-10-10 21:05:19

End at: 2017-10-10 21:05:49

Below is generated by plot.py at 2017-10-10 22:38:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.97 Mbit/s

95th percentile per-packet one-way delay: 114.192 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 172.97 Mbit/s

95th percentile per-packet one-way delay: 114.192 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

