

Pantheon Report

Generated at 2017-08-16 23:34:06 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

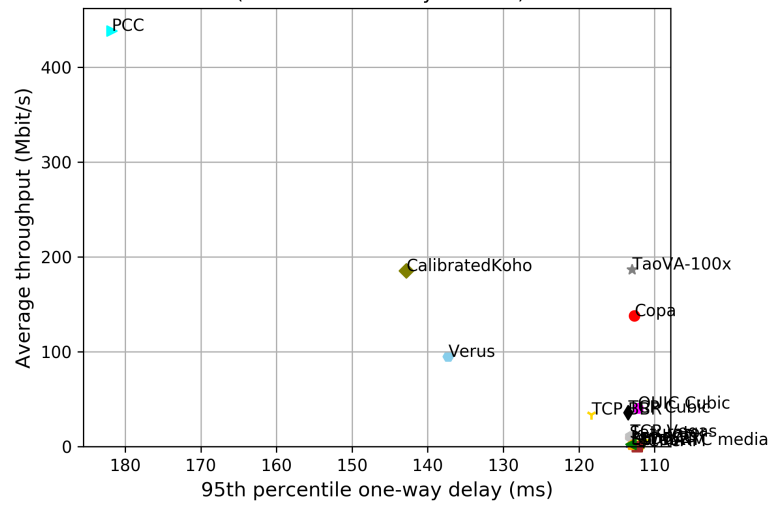
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

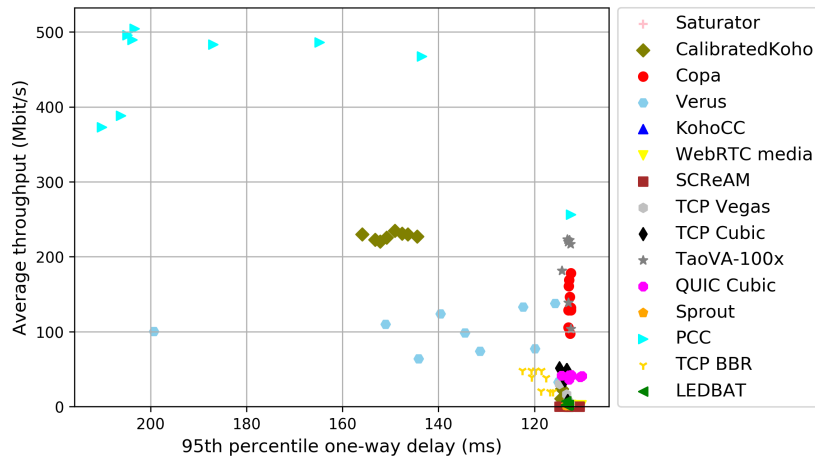
Git summary:

```
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE London Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	33.69	118.37	13.40
CalibratedKoho	10	185.56	142.83	12.36
Copa	10	137.87	112.66	0.01
TCP Cubic	8	36.02	113.53	0.82
KohoCC	10	4.89	113.10	5.13
LEDBAT	10	2.67	113.16	0.19
PCC	9	438.25	181.77	2.52
QUIC Cubic	8	40.42	112.21	0.00
Saturator	6	9.28	113.33	7.47
SCReAM	9	0.21	112.31	0.00
Sprout	10	1.85	113.07	1.35
TaoVA-100x	7	186.66	113.00	0.03
TCP Vegas	6	10.65	113.25	0.83
Verus	10	95.12	137.29	11.40
WebRTC media	8	2.10	111.60	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-08-16 20:23:03

End at: 2017-08-16 20:23:33

Below is generated by plot.py at 2017-08-16 23:09:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.57 Mbit/s

95th percentile per-packet one-way delay: 119.720 ms

Loss rate: 4.08%

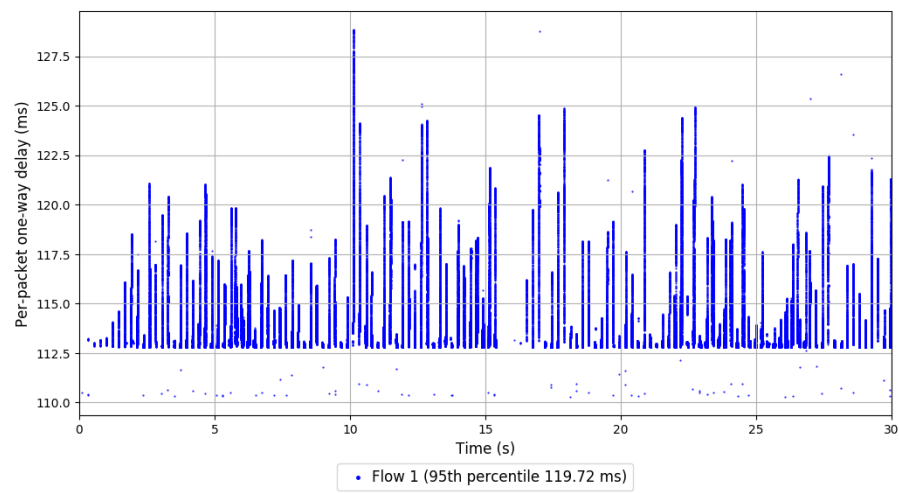
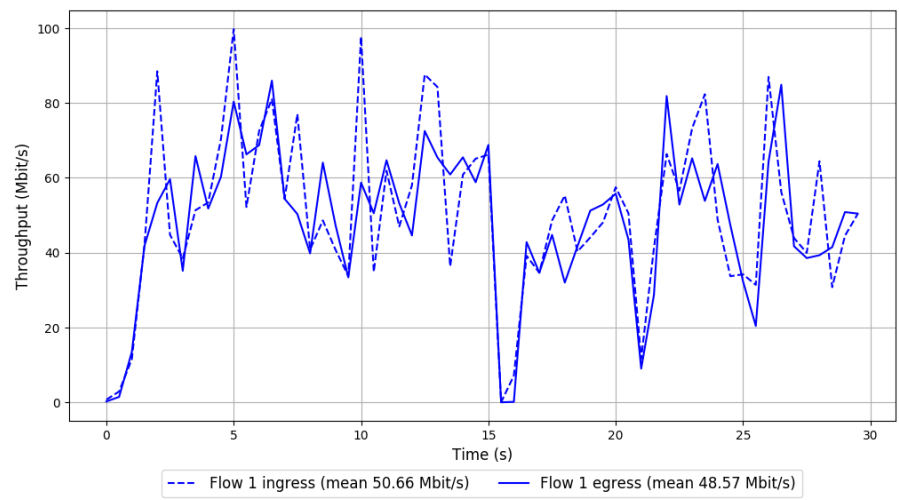
-- Flow 1:

Average throughput: 48.57 Mbit/s

95th percentile per-packet one-way delay: 119.720 ms

Loss rate: 4.08%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-16 20:34:33

End at: 2017-08-16 20:35:03

Below is generated by plot.py at 2017-08-16 23:10:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.17 Mbit/s

95th percentile per-packet one-way delay: 118.538 ms

Loss rate: 3.17%

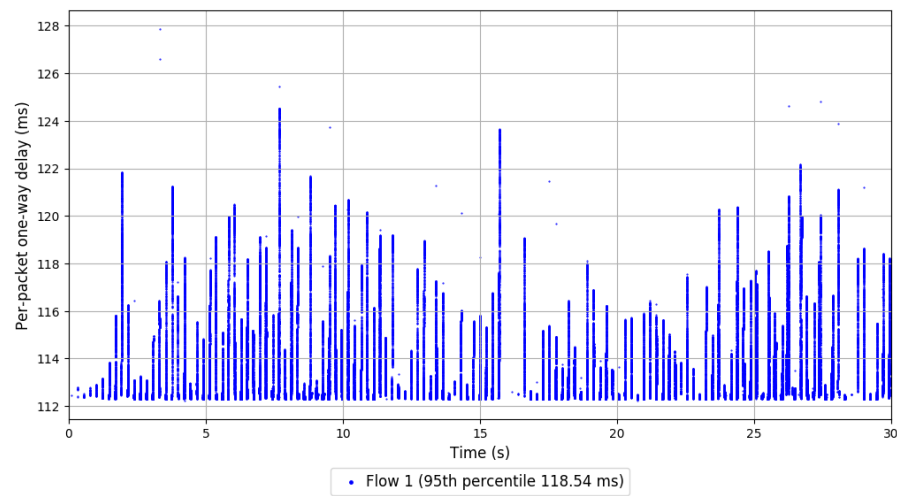
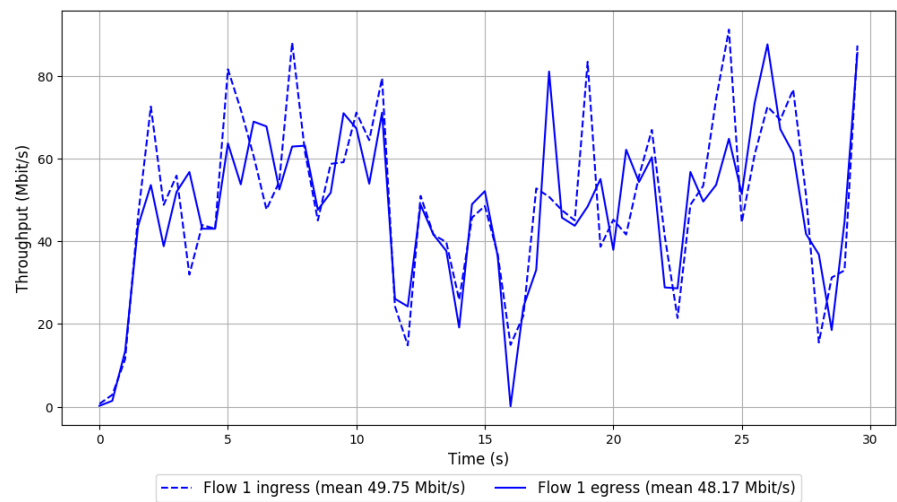
-- Flow 1:

Average throughput: 48.17 Mbit/s

95th percentile per-packet one-way delay: 118.538 ms

Loss rate: 3.17%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-16 20:45:28

End at: 2017-08-16 20:45:58

Below is generated by plot.py at 2017-08-16 23:10:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.49 Mbit/s

95th percentile per-packet one-way delay: 112.645 ms

Loss rate: 27.00%

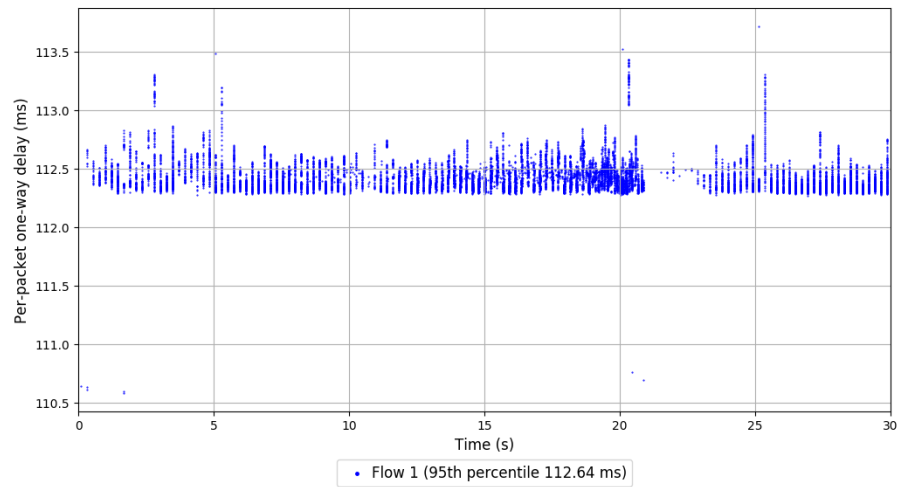
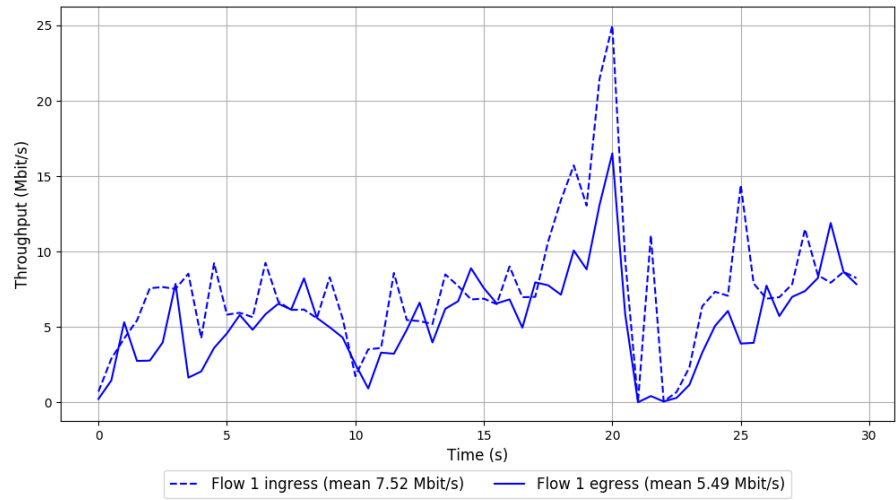
-- Flow 1:

Average throughput: 5.49 Mbit/s

95th percentile per-packet one-way delay: 112.645 ms

Loss rate: 27.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-16 20:56:55

End at: 2017-08-16 20:57:25

Below is generated by plot.py at 2017-08-16 23:10:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.19 Mbit/s

95th percentile per-packet one-way delay: 122.495 ms

Loss rate: 4.73%

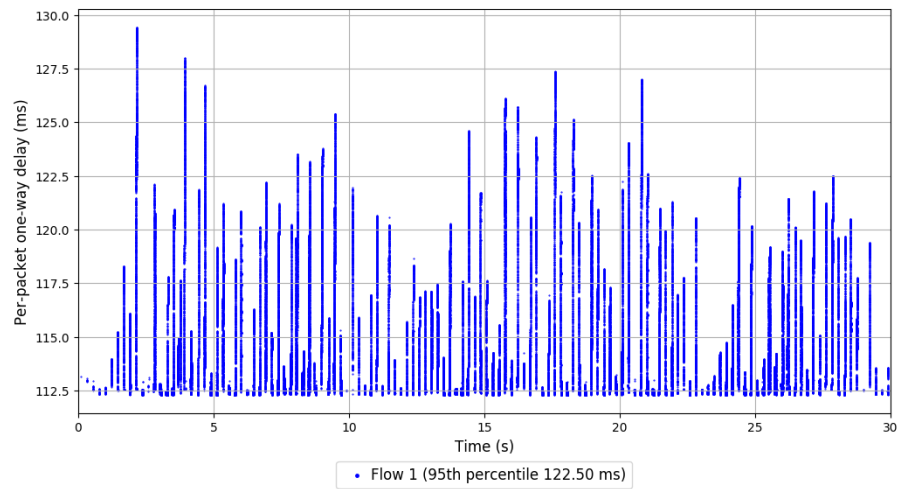
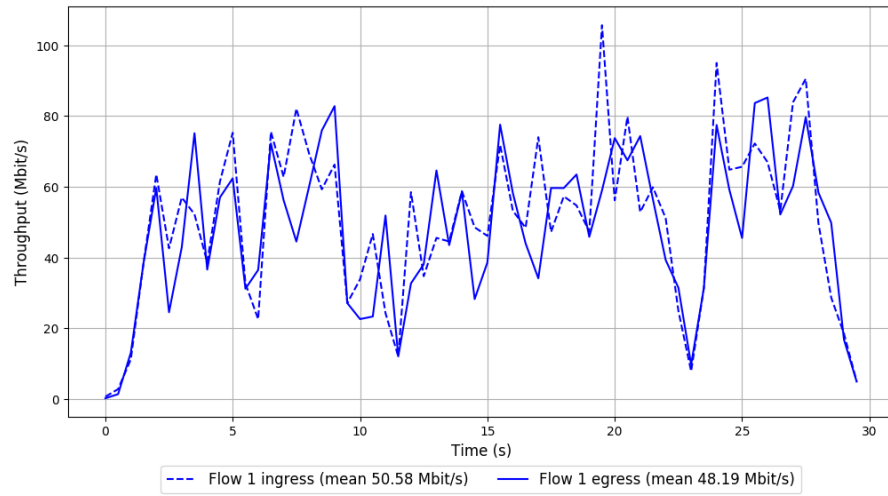
-- Flow 1:

Average throughput: 48.19 Mbit/s

95th percentile per-packet one-way delay: 122.495 ms

Loss rate: 4.73%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-16 21:08:23

End at: 2017-08-16 21:08:53

Below is generated by plot.py at 2017-08-16 23:10:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.47 Mbit/s

95th percentile per-packet one-way delay: 120.581 ms

Loss rate: 3.99%

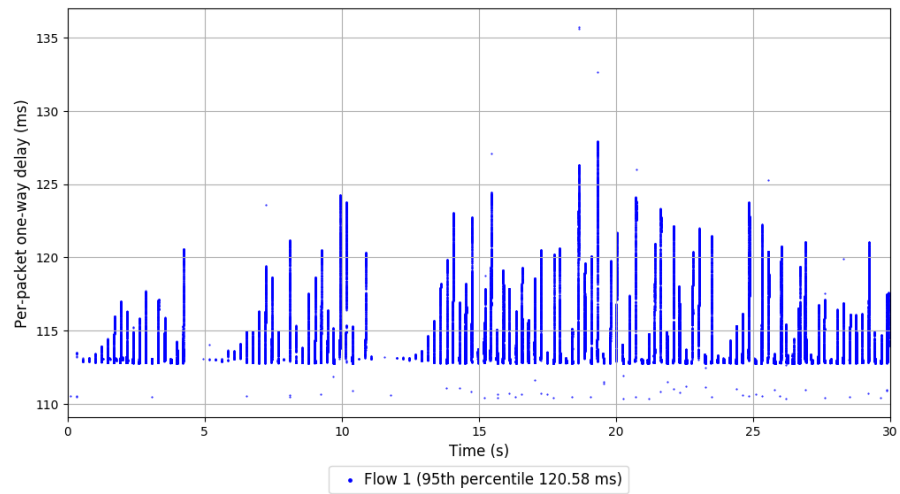
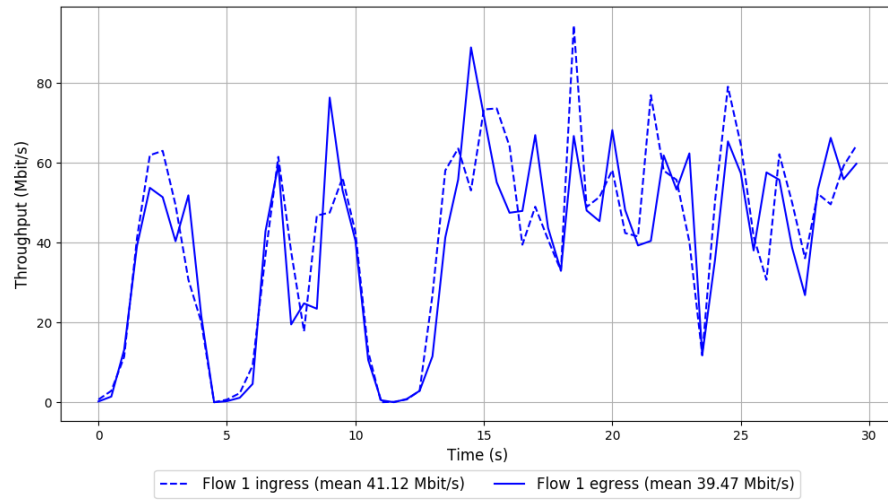
-- Flow 1:

Average throughput: 39.47 Mbit/s

95th percentile per-packet one-way delay: 120.581 ms

Loss rate: 3.99%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-16 21:20:12

End at: 2017-08-16 21:20:42

Below is generated by plot.py at 2017-08-16 23:10:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.16 Mbit/s

95th percentile per-packet one-way delay: 120.642 ms

Loss rate: 4.13%

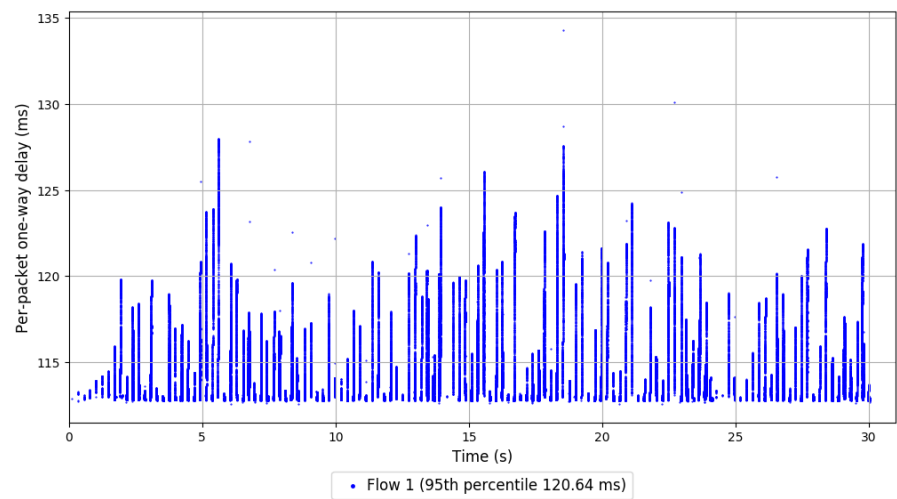
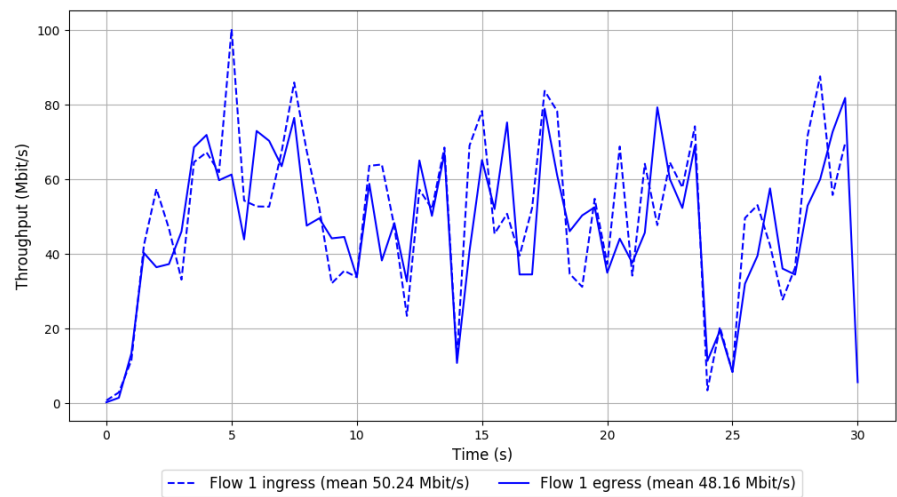
-- Flow 1:

Average throughput: 48.16 Mbit/s

95th percentile per-packet one-way delay: 120.642 ms

Loss rate: 4.13%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-16 21:31:58

End at: 2017-08-16 21:32:28

Below is generated by plot.py at 2017-08-16 23:10:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.47 Mbit/s

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

Loss rate: 2.88%

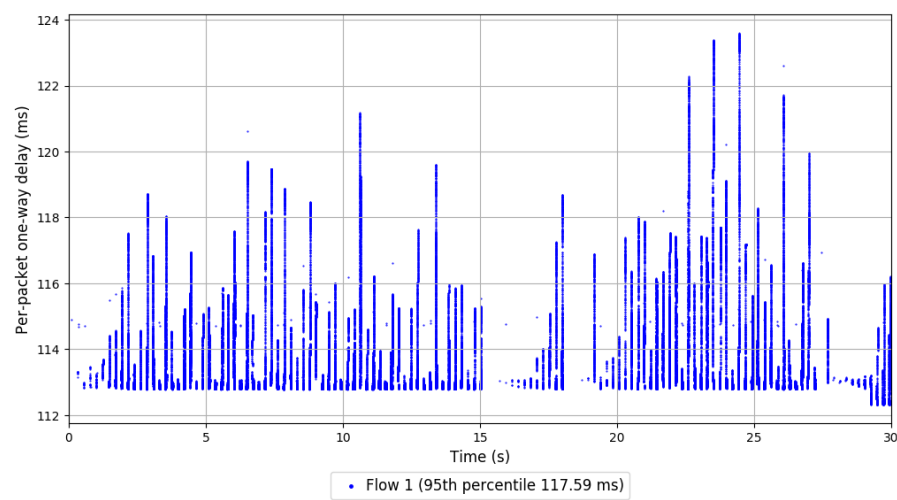
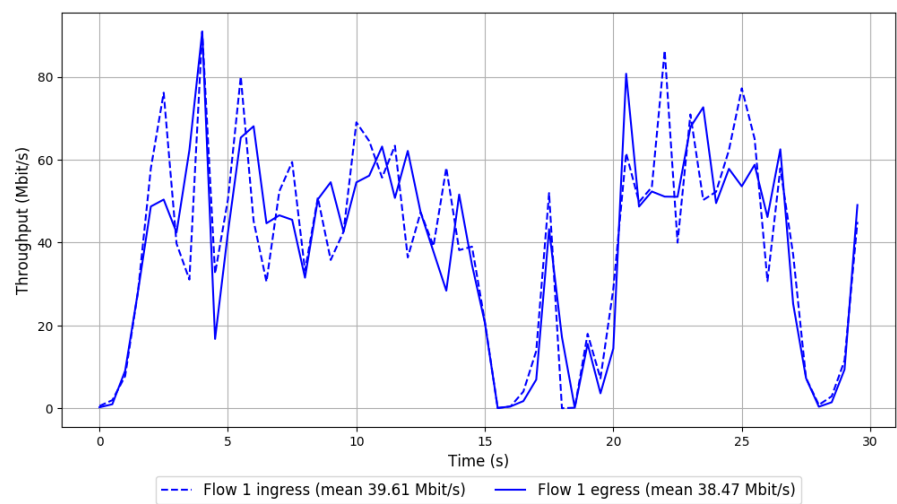
-- Flow 1:

Average throughput: 38.47 Mbit/s

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

Loss rate: 2.88%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-16 21:43:43

End at: 2017-08-16 21:44:13

Below is generated by plot.py at 2017-08-16 23:10:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.59 Mbit/s

95th percentile per-packet one-way delay: 116.733 ms

Loss rate: 34.05%

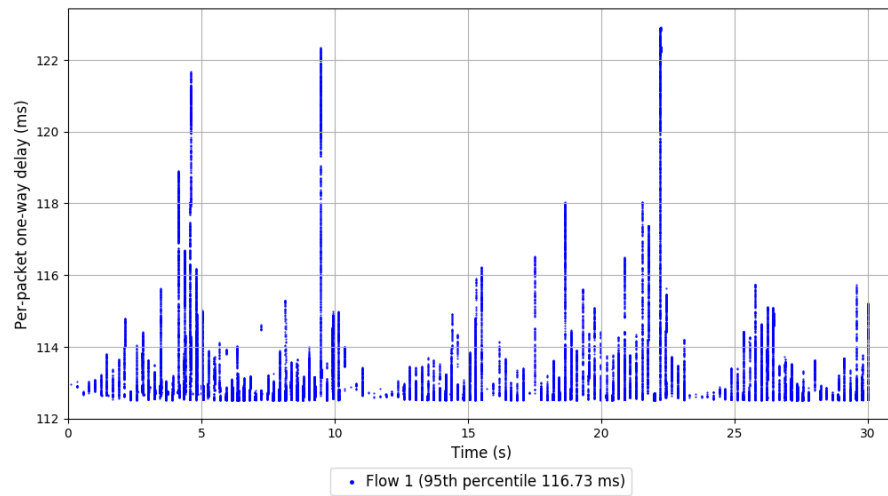
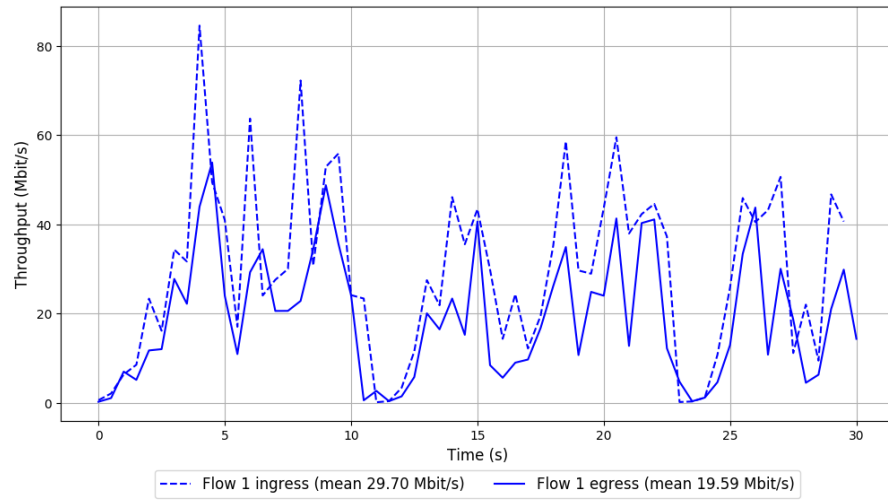
-- Flow 1:

Average throughput: 19.59 Mbit/s

95th percentile per-packet one-way delay: 116.733 ms

Loss rate: 34.05%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-16 21:55:20

End at: 2017-08-16 21:55:50

Below is generated by plot.py at 2017-08-16 23:10:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.83 Mbit/s

95th percentile per-packet one-way delay: 118.598 ms

Loss rate: 28.02%

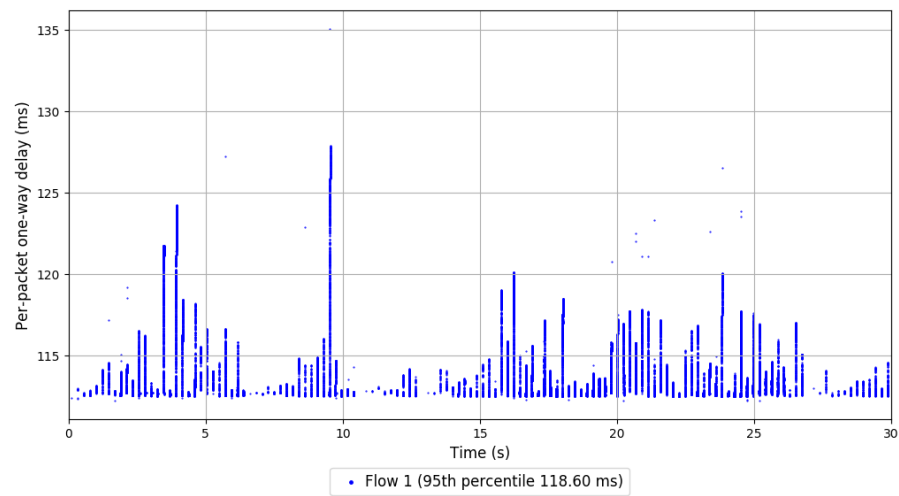
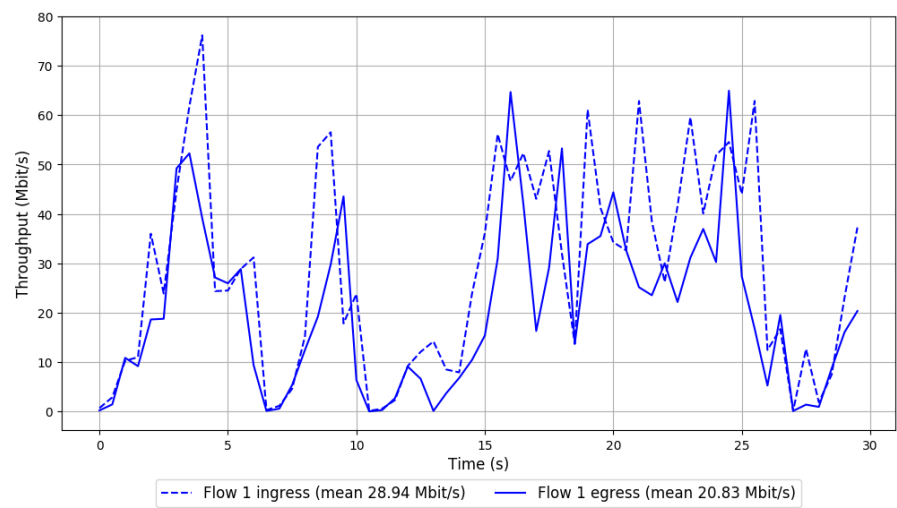
-- Flow 1:

Average throughput: 20.83 Mbit/s

95th percentile per-packet one-way delay: 118.598 ms

Loss rate: 28.02%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-16 22:06:55

End at: 2017-08-16 22:07:25

Below is generated by plot.py at 2017-08-16 23:10:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.96 Mbit/s

95th percentile per-packet one-way delay: 116.182 ms

Loss rate: 21.97%

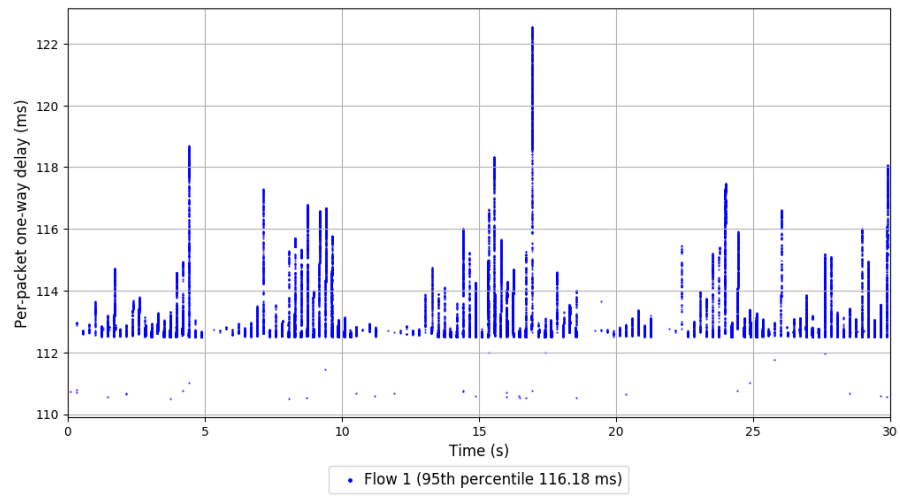
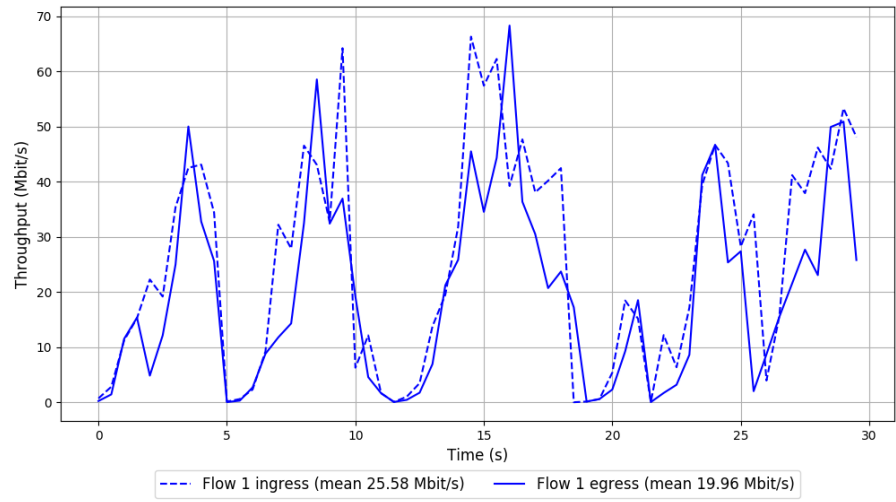
-- Flow 1:

Average throughput: 19.96 Mbit/s

95th percentile per-packet one-way delay: 116.182 ms

Loss rate: 21.97%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-16 20:28:40

End at: 2017-08-16 20:29:10

Below is generated by plot.py at 2017-08-16 23:11:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 229.78 Mbit/s

95th percentile per-packet one-way delay: 155.916 ms

Loss rate: 0.32%

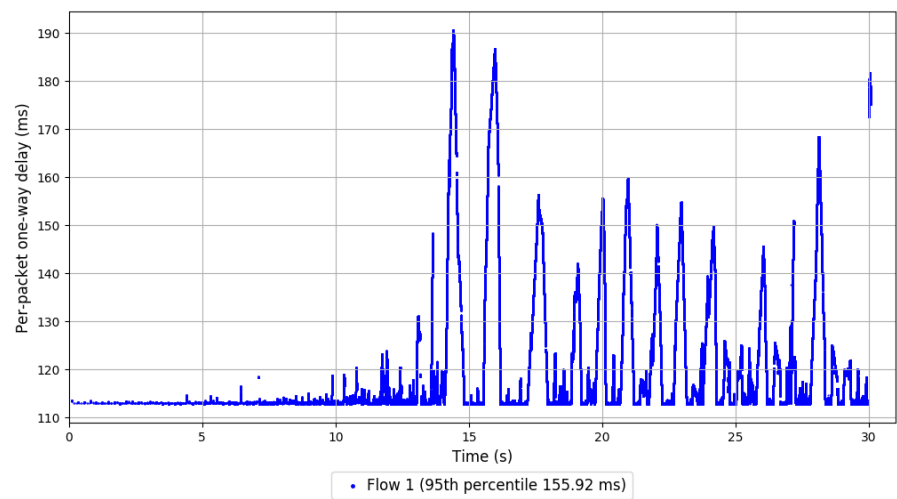
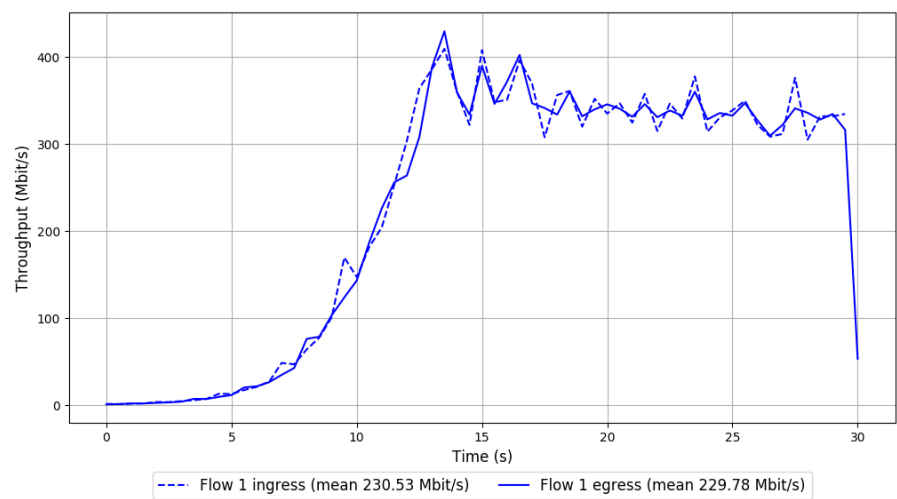
-- Flow 1:

Average throughput: 229.78 Mbit/s

95th percentile per-packet one-way delay: 155.916 ms

Loss rate: 0.32%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-16 20:39:54

End at: 2017-08-16 20:40:24

Below is generated by plot.py at 2017-08-16 23:11:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.61 Mbit/s

95th percentile per-packet one-way delay: 114.316 ms

Loss rate: 62.81%

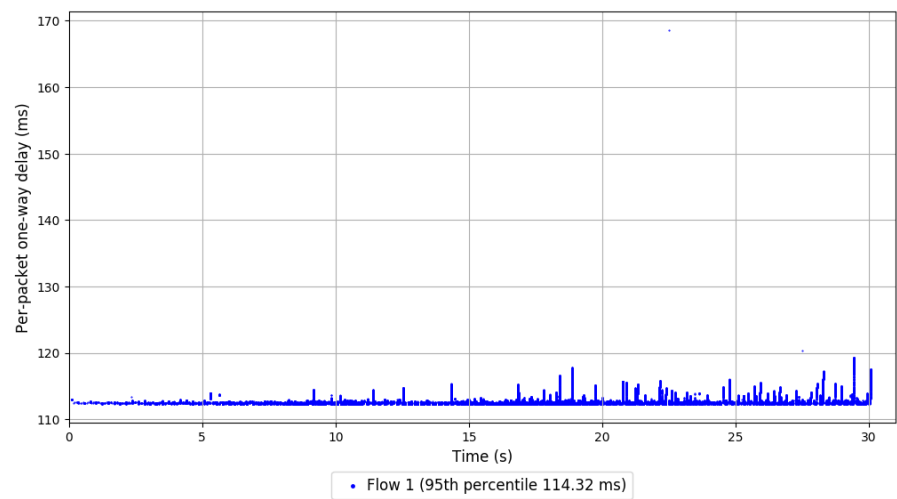
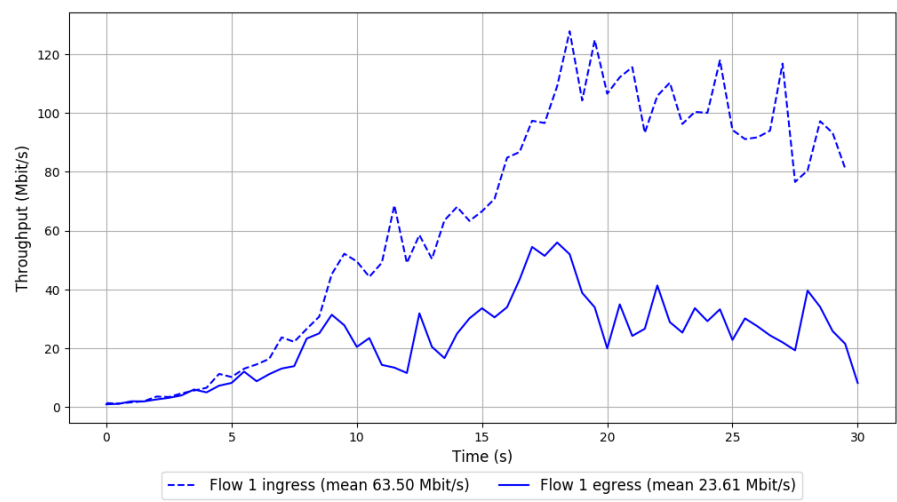
-- Flow 1:

Average throughput: 23.61 Mbit/s

95th percentile per-packet one-way delay: 114.316 ms

Loss rate: 62.81%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-16 20:51:15

End at: 2017-08-16 20:51:45

Below is generated by plot.py at 2017-08-16 23:11:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.67 Mbit/s

95th percentile per-packet one-way delay: 114.407 ms

Loss rate: 59.56%

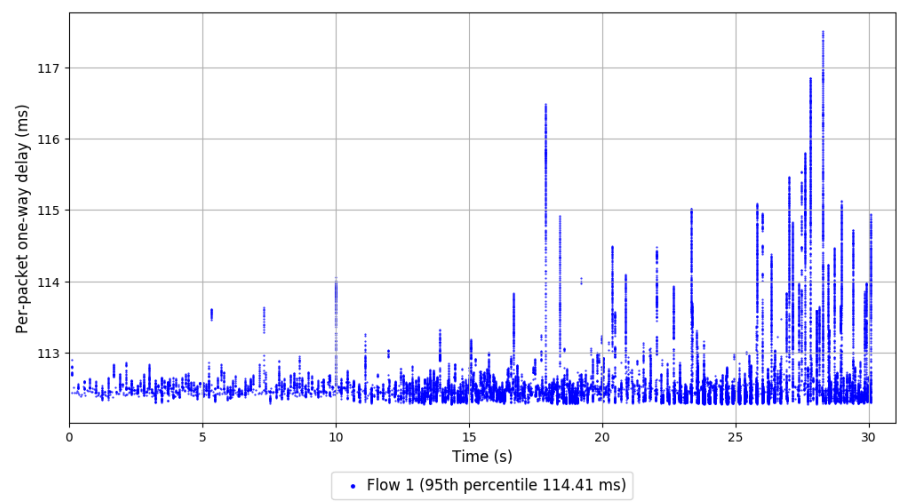
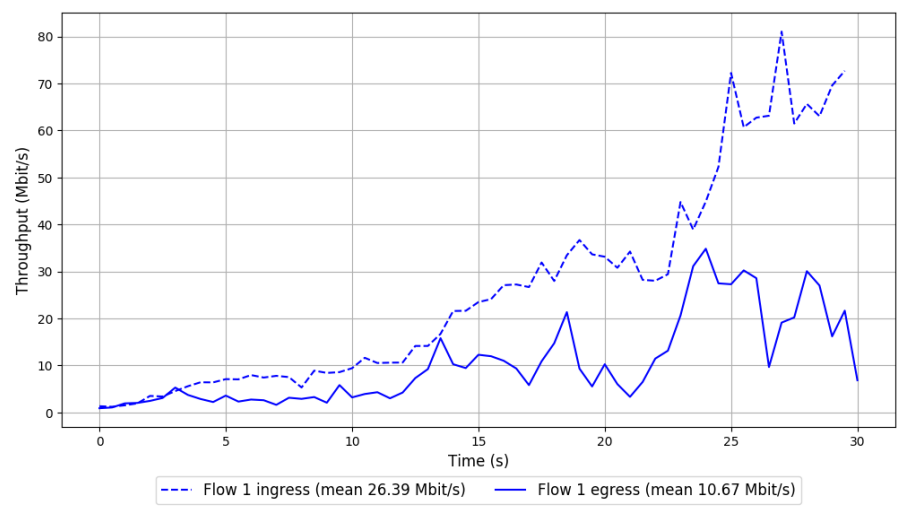
-- Flow 1:

Average throughput: 10.67 Mbit/s

95th percentile per-packet one-way delay: 114.407 ms

Loss rate: 59.56%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-16 21:02:26

End at: 2017-08-16 21:02:56

Below is generated by plot.py at 2017-08-16 23:11:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.97 Mbit/s

95th percentile per-packet one-way delay: 144.419 ms

Loss rate: 0.03%

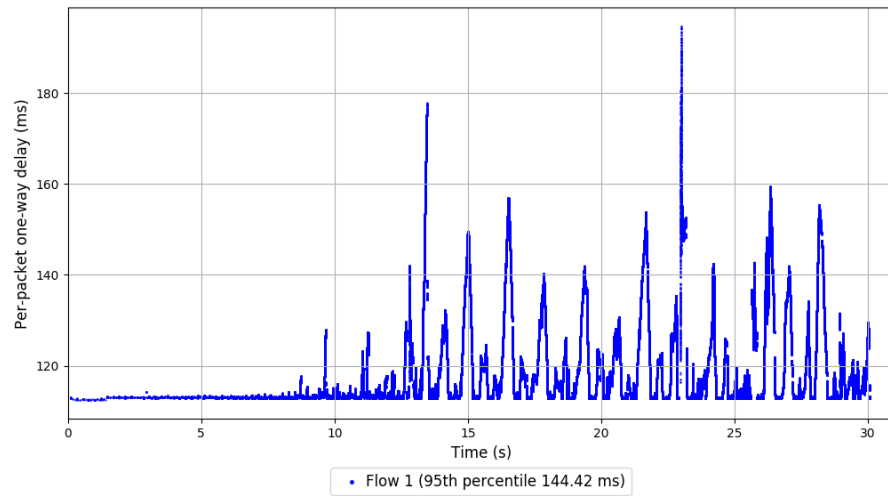
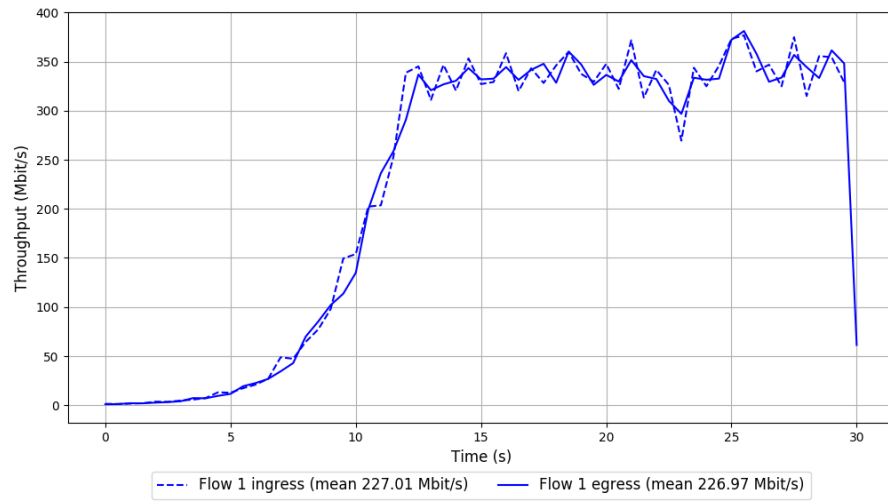
-- Flow 1:

Average throughput: 226.97 Mbit/s

95th percentile per-packet one-way delay: 144.419 ms

Loss rate: 0.03%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-16 21:14:10

End at: 2017-08-16 21:14:40

Below is generated by plot.py at 2017-08-16 23:11:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 231.08 Mbit/s

95th percentile per-packet one-way delay: 147.599 ms

Loss rate: 0.10%

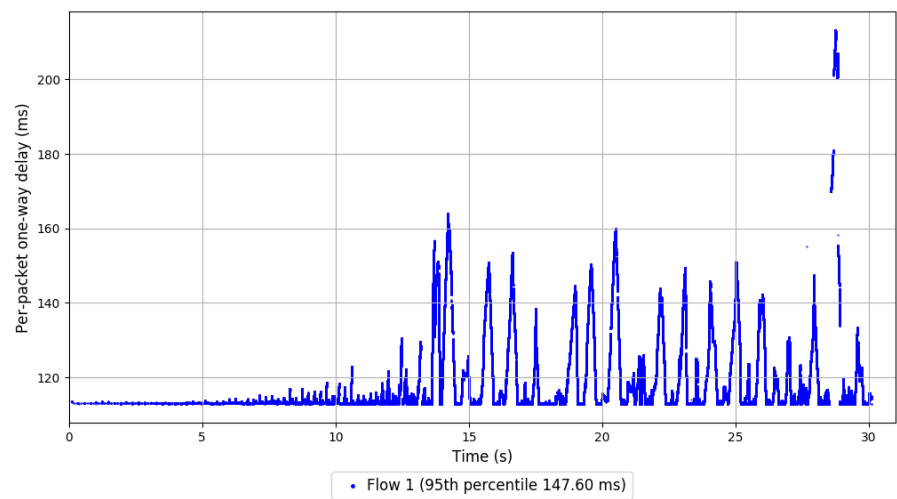
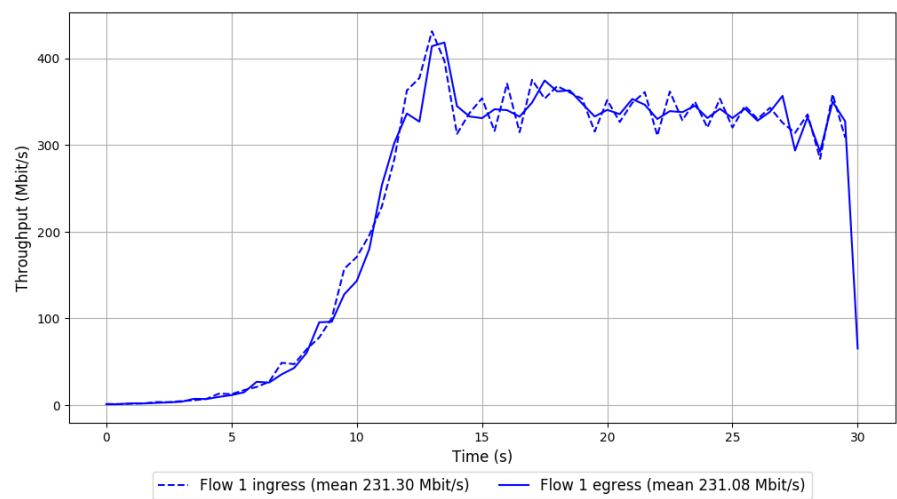
-- Flow 1:

Average throughput: 231.08 Mbit/s

95th percentile per-packet one-way delay: 147.599 ms

Loss rate: 0.10%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-16 21:25:56

End at: 2017-08-16 21:26:26

Below is generated by plot.py at 2017-08-16 23:12:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.81 Mbit/s

95th percentile per-packet one-way delay: 153.206 ms

Loss rate: 0.16%

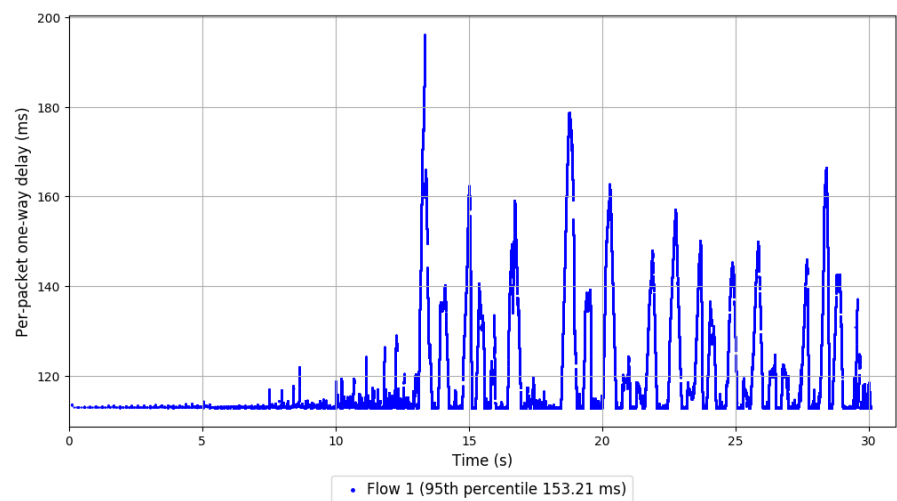
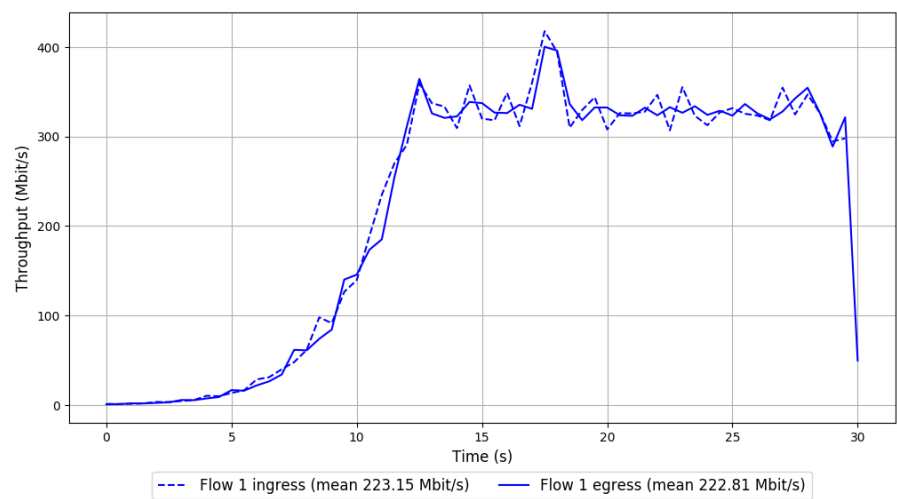
-- Flow 1:

Average throughput: 222.81 Mbit/s

95th percentile per-packet one-way delay: 153.206 ms

Loss rate: 0.16%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-16 21:37:47

End at: 2017-08-16 21:38:17

Below is generated by plot.py at 2017-08-16 23:12:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.43 Mbit/s

95th percentile per-packet one-way delay: 152.176 ms

Loss rate: 0.20%

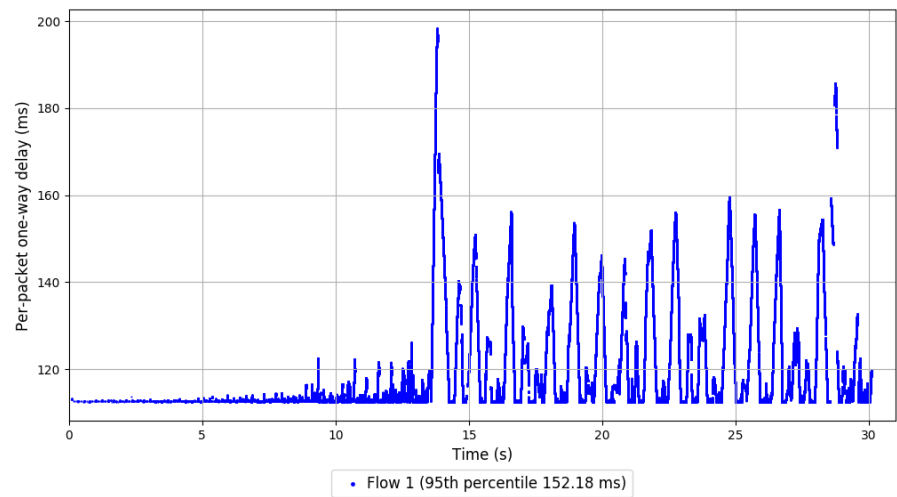
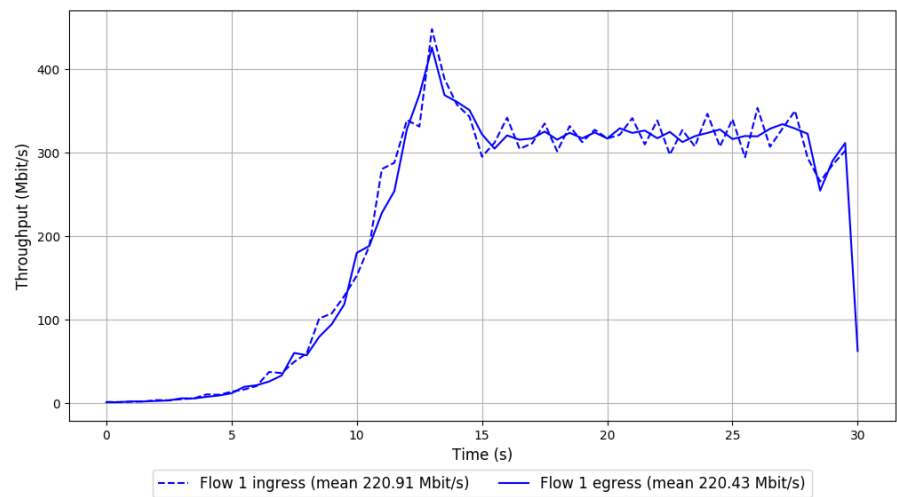
-- Flow 1:

Average throughput: 220.43 Mbit/s

95th percentile per-packet one-way delay: 152.176 ms

Loss rate: 0.20%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-16 21:49:19

End at: 2017-08-16 21:49:49

Below is generated by plot.py at 2017-08-16 23:13:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 225.61 Mbit/s

95th percentile per-packet one-way delay: 150.767 ms

Loss rate: 0.00%

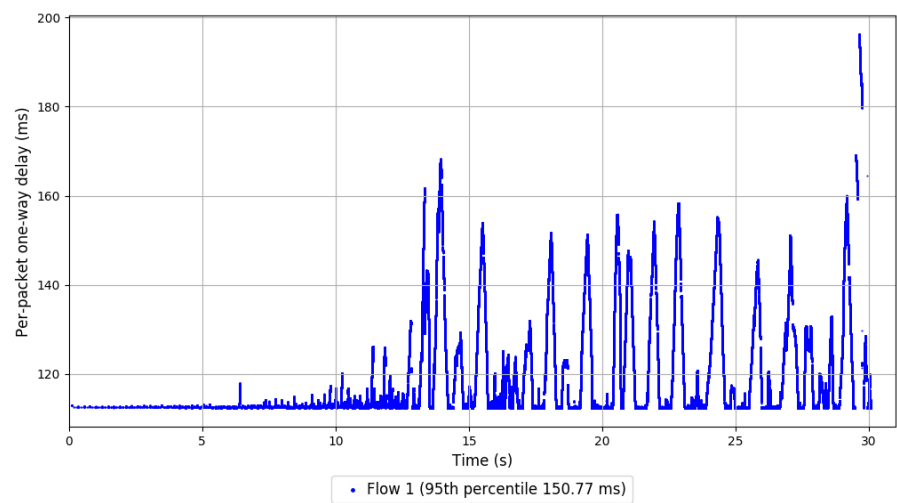
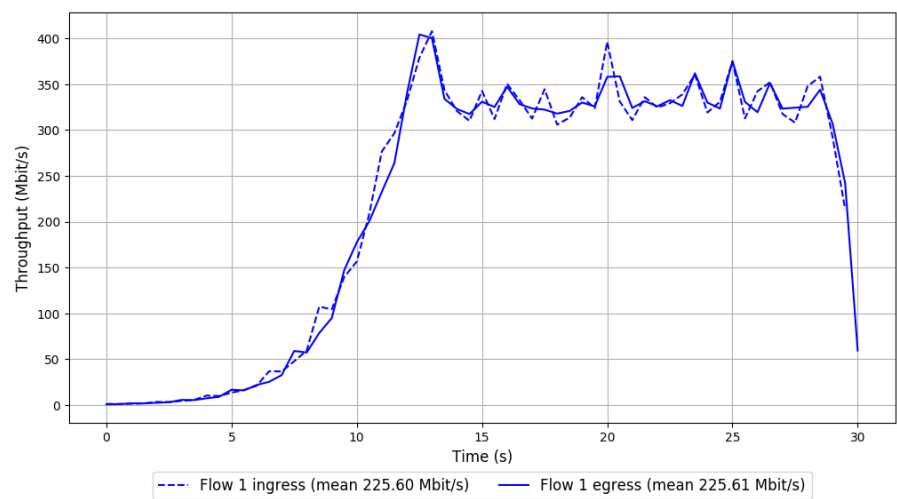
-- Flow 1:

Average throughput: 225.61 Mbit/s

95th percentile per-packet one-way delay: 150.767 ms

Loss rate: 0.00%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-16 22:00:55

End at: 2017-08-16 22:01:25

Below is generated by plot.py at 2017-08-16 23:13:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 234.57 Mbit/s

95th percentile per-packet one-way delay: 149.090 ms

Loss rate: 0.06%

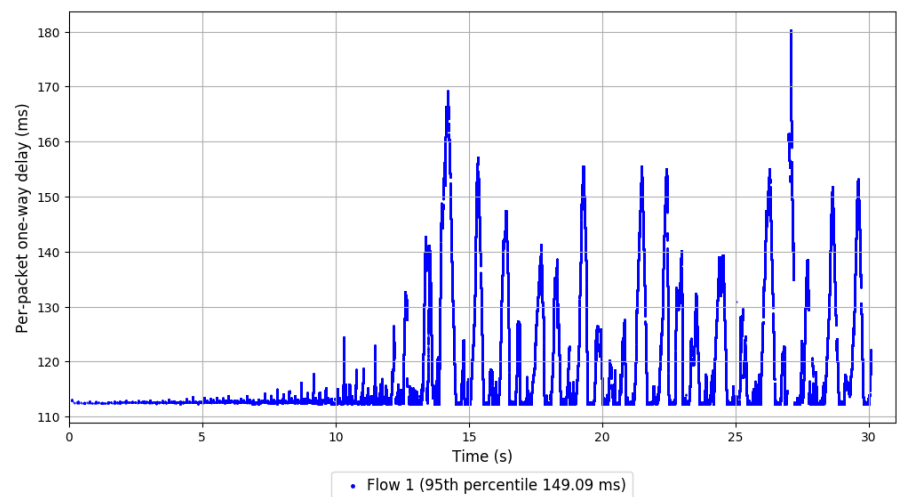
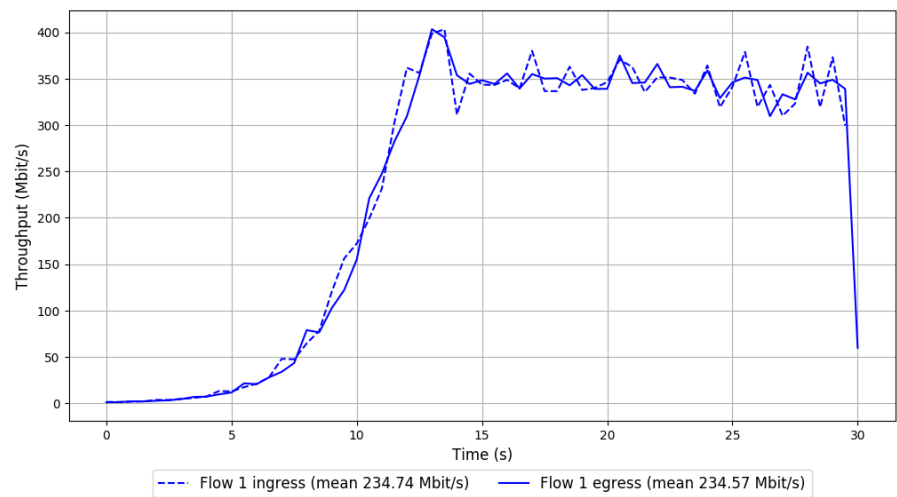
-- Flow 1:

Average throughput: 234.57 Mbit/s

95th percentile per-packet one-way delay: 149.090 ms

Loss rate: 0.06%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-16 22:12:37

End at: 2017-08-16 22:13:07

Below is generated by plot.py at 2017-08-16 23:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.12 Mbit/s

95th percentile per-packet one-way delay: 146.394 ms

Loss rate: 0.32%

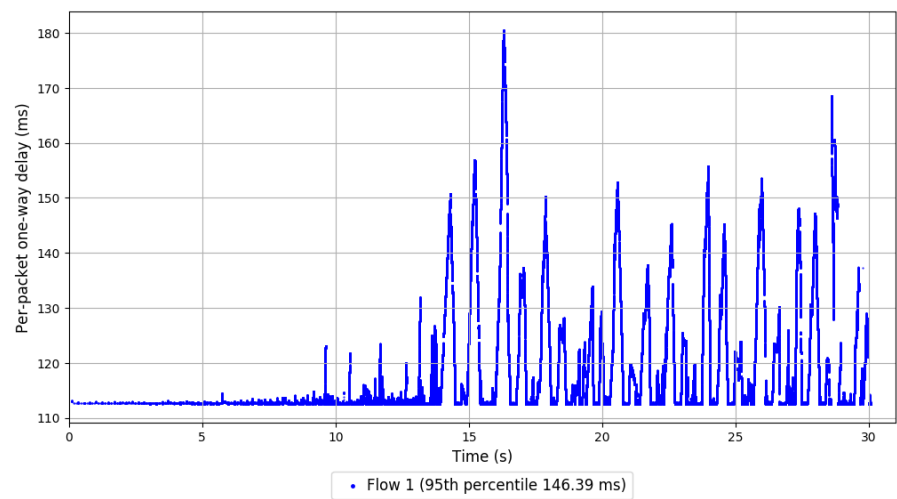
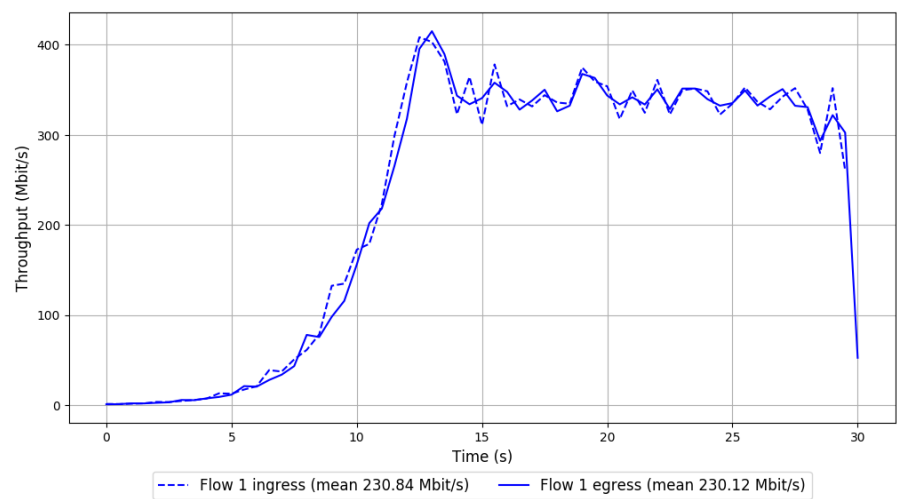
-- Flow 1:

Average throughput: 230.12 Mbit/s

95th percentile per-packet one-way delay: 146.394 ms

Loss rate: 0.32%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-08-16 20:23:48

End at: 2017-08-16 20:24:18

Below is generated by plot.py at 2017-08-16 23:14:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 128.84 Mbit/s

95th percentile per-packet one-way delay: 112.919 ms

Loss rate: 0.00%

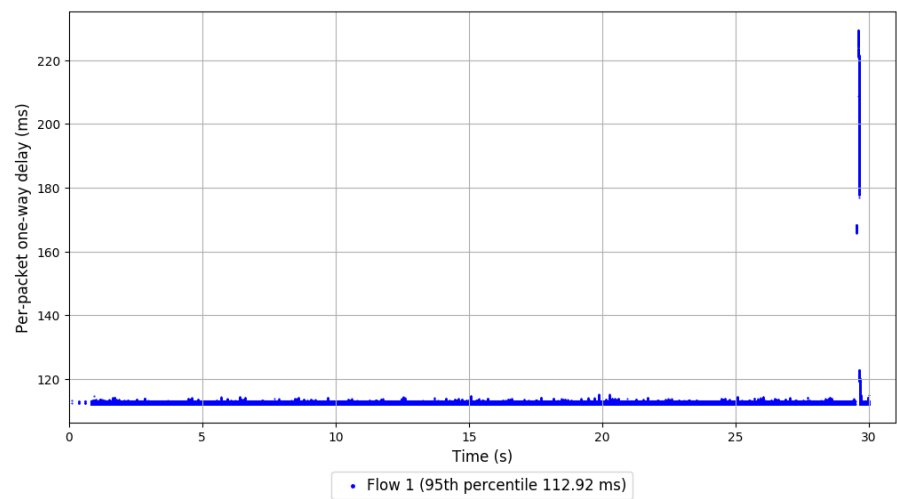
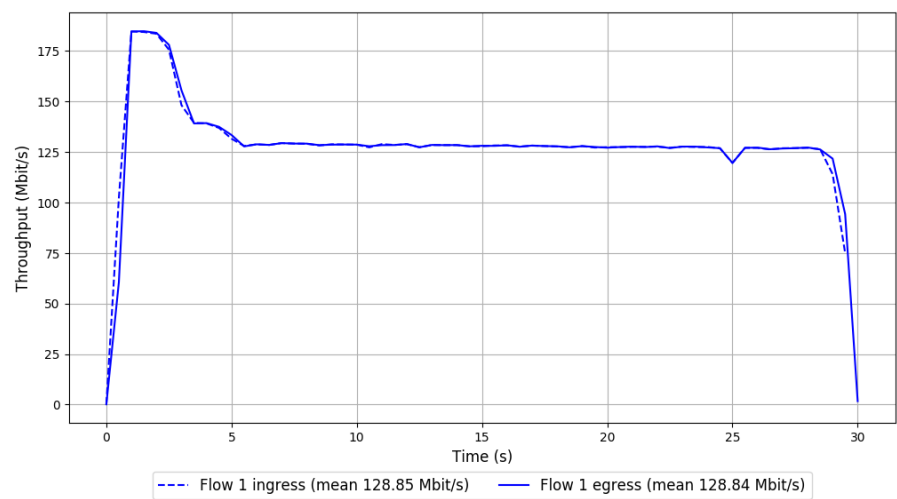
-- Flow 1:

Average throughput: 128.84 Mbit/s

95th percentile per-packet one-way delay: 112.919 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-16 20:35:18

End at: 2017-08-16 20:35:48

Below is generated by plot.py at 2017-08-16 23:14:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 128.81 Mbit/s

95th percentile per-packet one-way delay: 112.411 ms

Loss rate: 0.00%

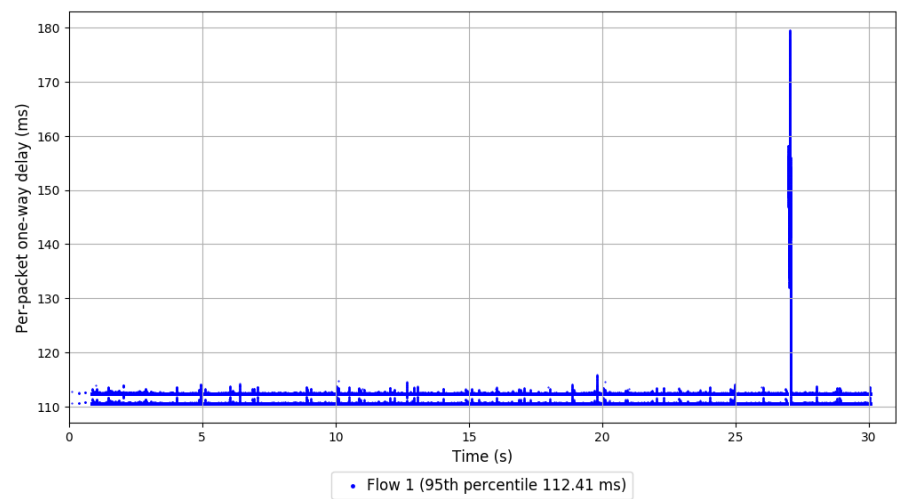
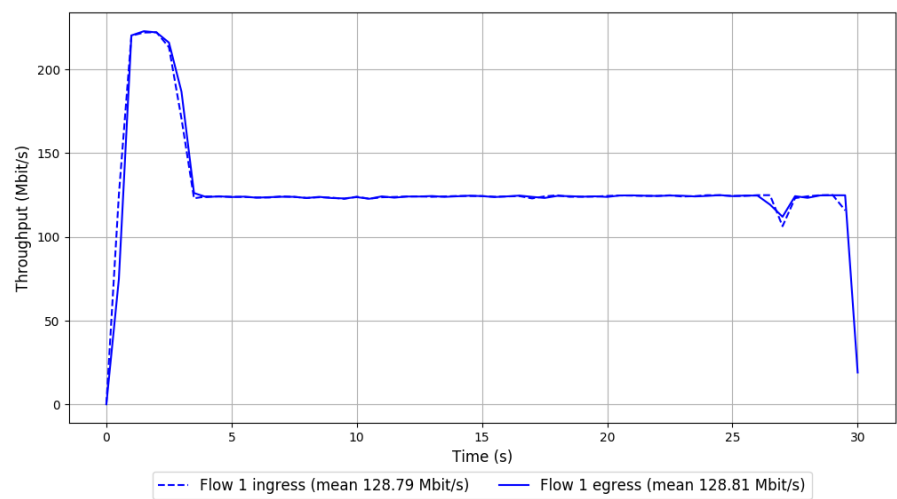
-- Flow 1:

Average throughput: 128.81 Mbit/s

95th percentile per-packet one-way delay: 112.411 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-16 20:46:10

End at: 2017-08-16 20:46:40

Below is generated by plot.py at 2017-08-16 23:14:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.52 Mbit/s

95th percentile per-packet one-way delay: 112.547 ms

Loss rate: 0.05%

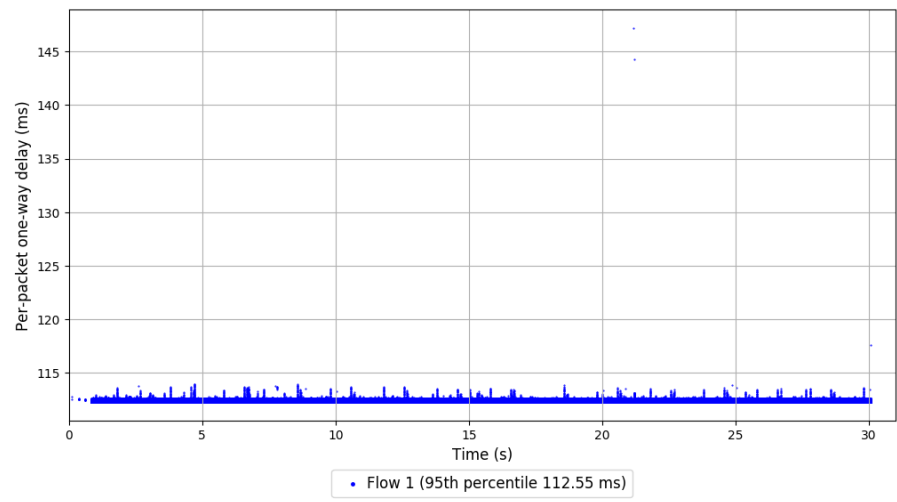
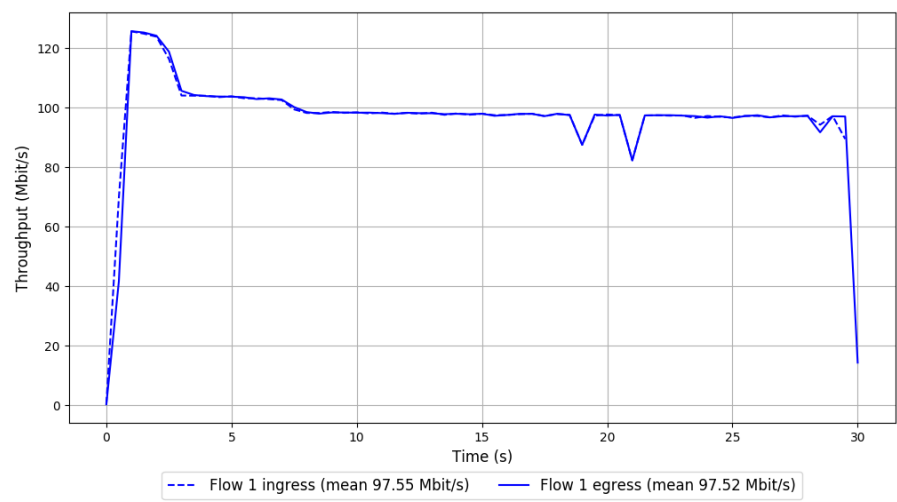
-- Flow 1:

Average throughput: 97.52 Mbit/s

95th percentile per-packet one-way delay: 112.547 ms

Loss rate: 0.05%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-16 20:57:40

End at: 2017-08-16 20:58:10

Below is generated by plot.py at 2017-08-16 23:15:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.83 Mbit/s

95th percentile per-packet one-way delay: 112.808 ms

Loss rate: 0.02%

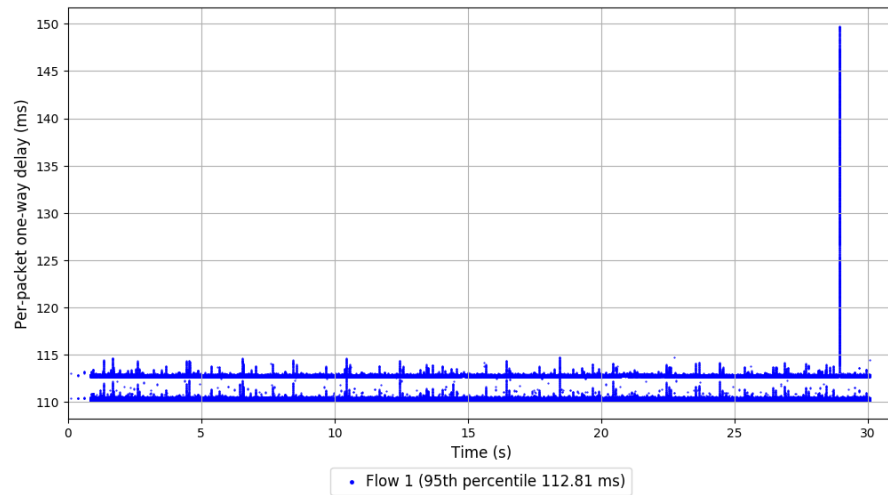
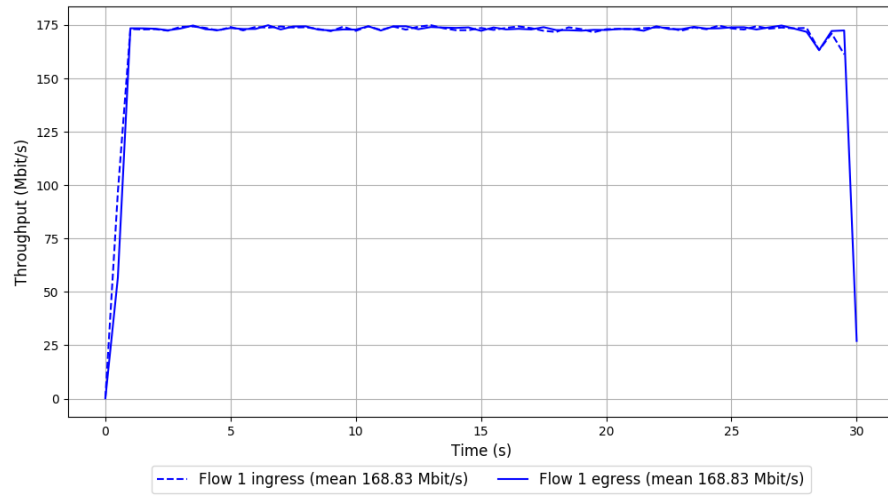
-- Flow 1:

Average throughput: 168.83 Mbit/s

95th percentile per-packet one-way delay: 112.808 ms

Loss rate: 0.02%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-16 21:09:07

End at: 2017-08-16 21:09:37

Below is generated by plot.py at 2017-08-16 23:15:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.42 Mbit/s

95th percentile per-packet one-way delay: 112.906 ms

Loss rate: 0.00%

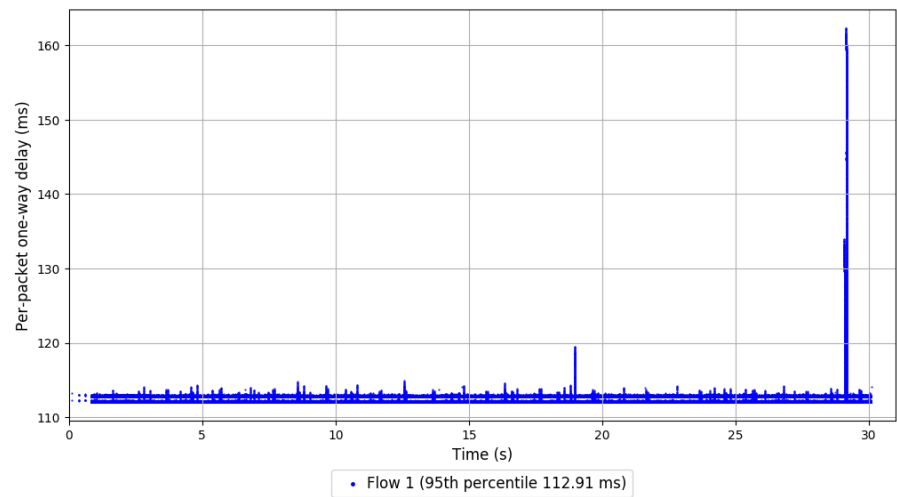
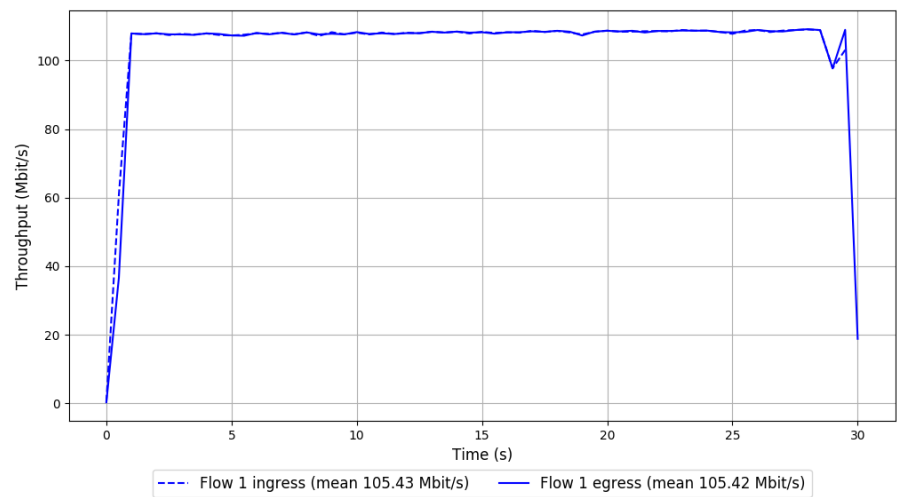
-- Flow 1:

Average throughput: 105.42 Mbit/s

95th percentile per-packet one-way delay: 112.906 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-16 21:20:57

End at: 2017-08-16 21:21:27

Below is generated by plot.py at 2017-08-16 23:16:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 160.78 Mbit/s

95th percentile per-packet one-way delay: 112.880 ms

Loss rate: 0.05%

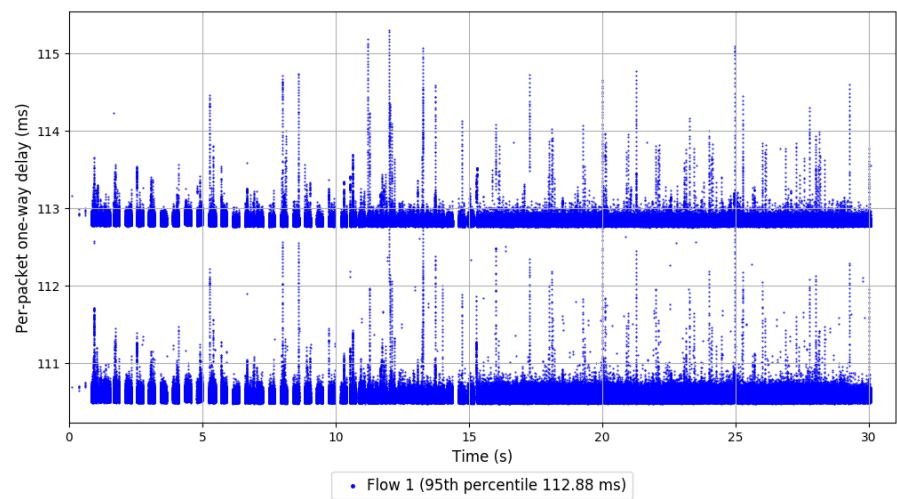
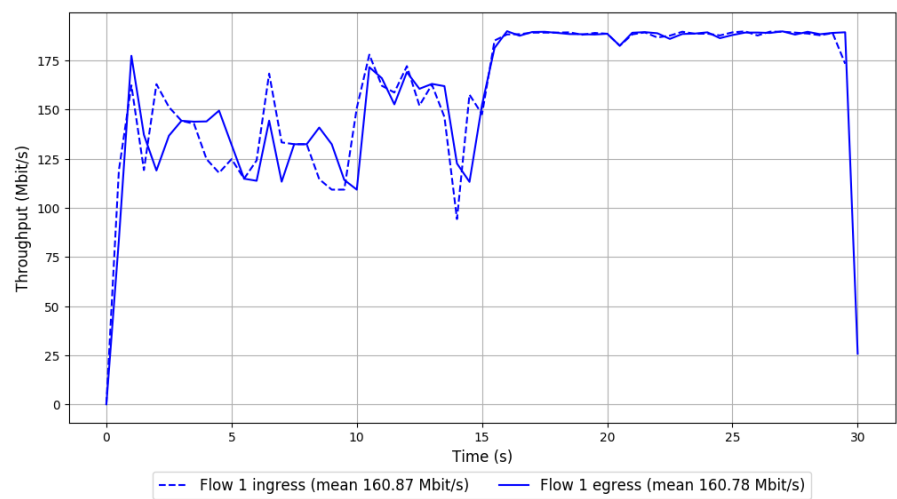
-- Flow 1:

Average throughput: 160.78 Mbit/s

95th percentile per-packet one-way delay: 112.880 ms

Loss rate: 0.05%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-16 21:32:43

End at: 2017-08-16 21:33:13

Below is generated by plot.py at 2017-08-16 23:16:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.01 Mbit/s

95th percentile per-packet one-way delay: 112.437 ms

Loss rate: 0.00%

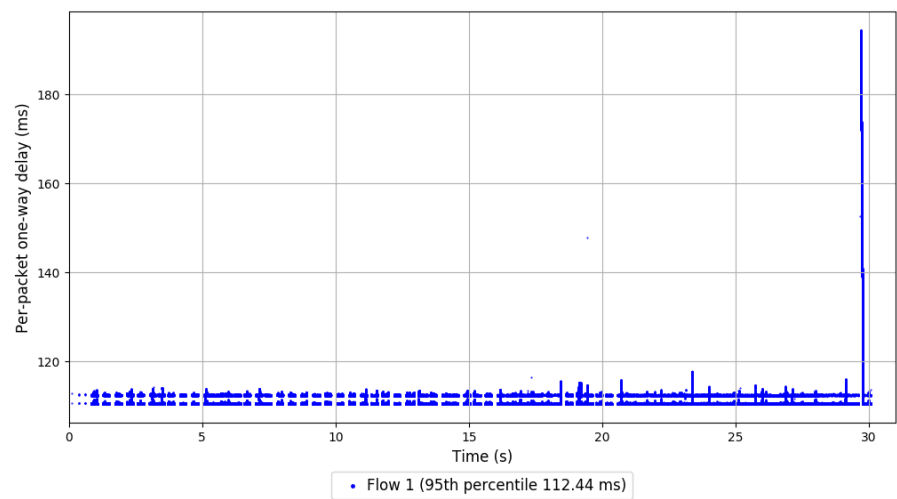
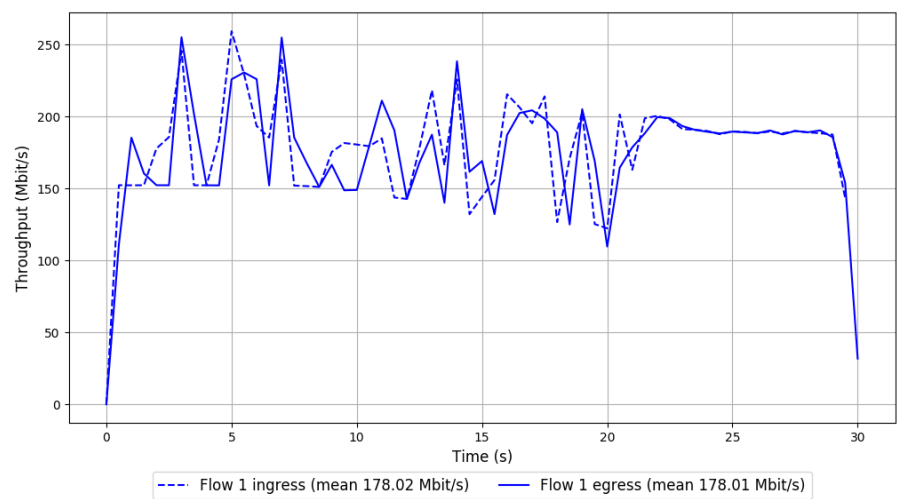
-- Flow 1:

Average throughput: 178.01 Mbit/s

95th percentile per-packet one-way delay: 112.437 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-16 21:44:26

End at: 2017-08-16 21:44:56

Below is generated by plot.py at 2017-08-16 23:17:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.91 Mbit/s

95th percentile per-packet one-way delay: 112.433 ms

Loss rate: 0.00%

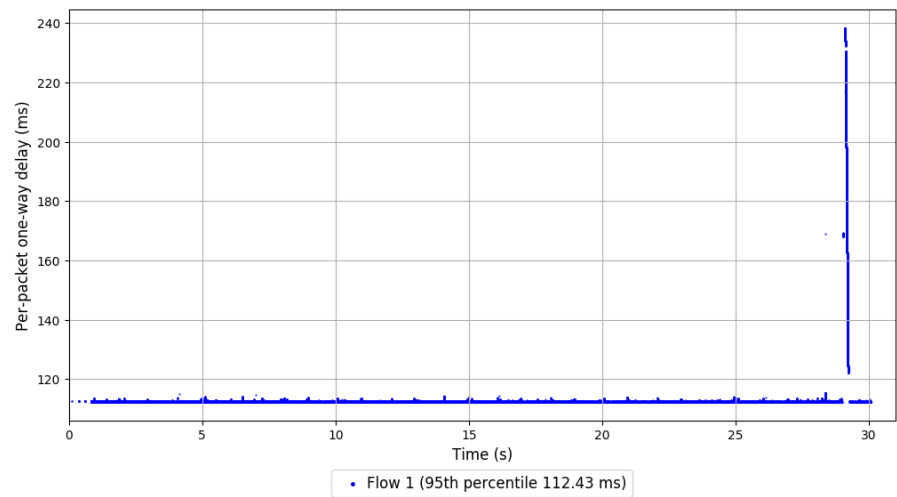
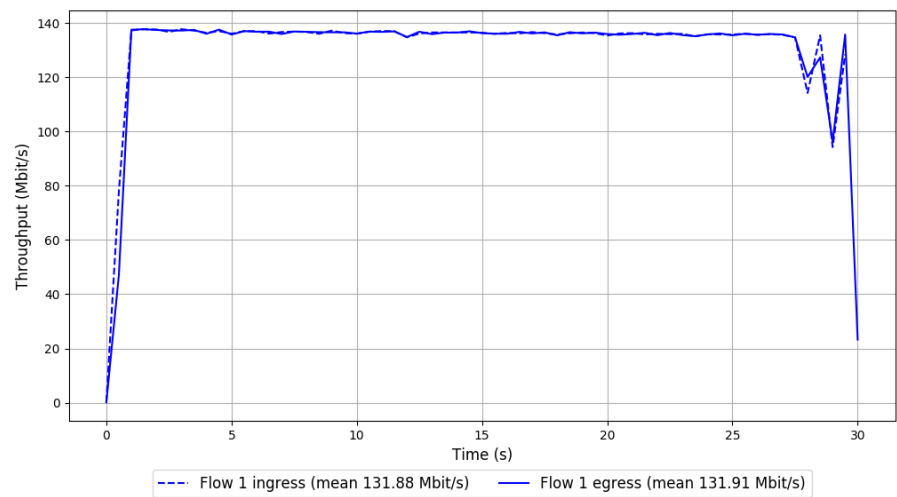
-- Flow 1:

Average throughput: 131.91 Mbit/s

95th percentile per-packet one-way delay: 112.433 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-16 21:56:03

End at: 2017-08-16 21:56:33

Below is generated by plot.py at 2017-08-16 23:17:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 146.22 Mbit/s

95th percentile per-packet one-way delay: 112.629 ms

Loss rate: 0.02%

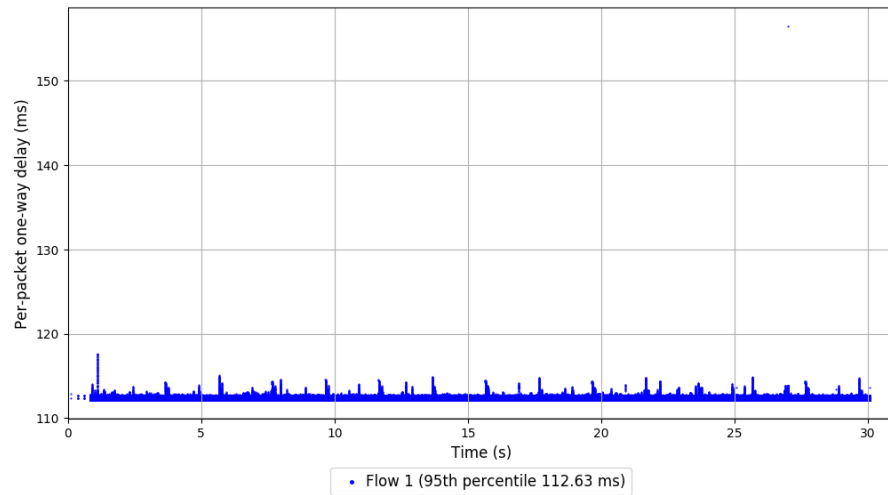
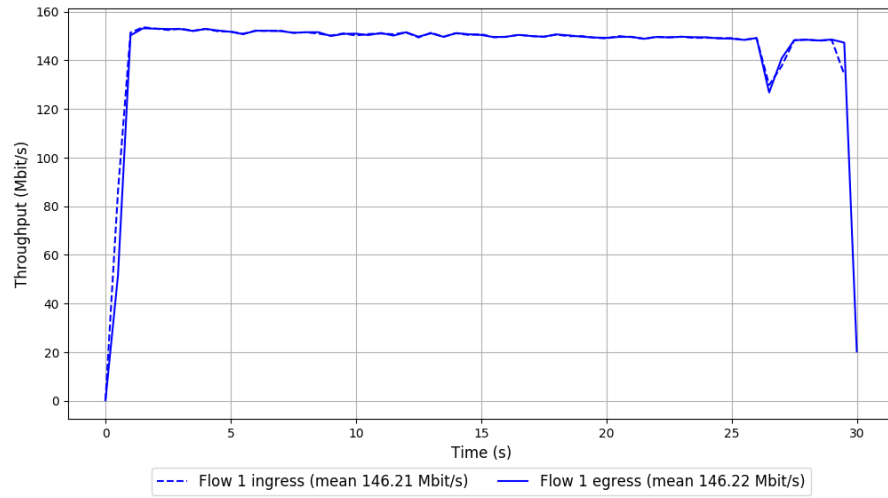
-- Flow 1:

Average throughput: 146.22 Mbit/s

95th percentile per-packet one-way delay: 112.629 ms

Loss rate: 0.02%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-16 22:07:38

End at: 2017-08-16 22:08:08

Below is generated by plot.py at 2017-08-16 23:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 132.35 Mbit/s

95th percentile per-packet one-way delay: 112.658 ms

Loss rate: 0.00%

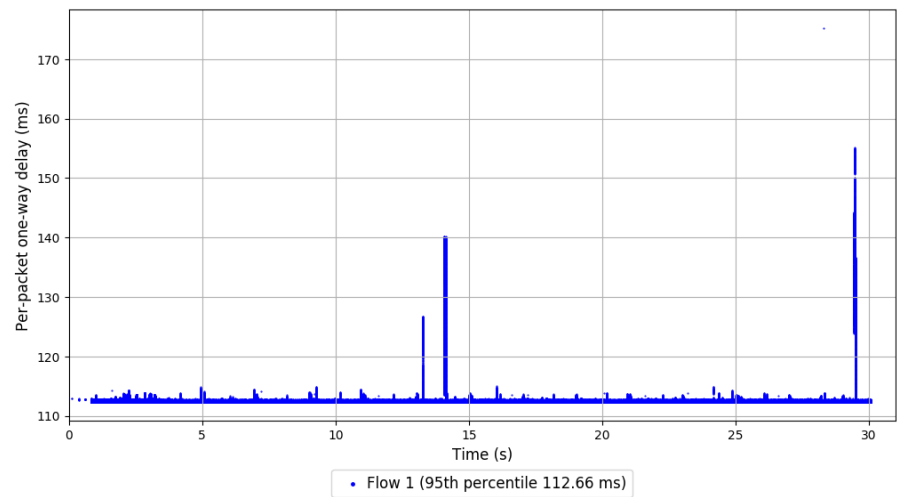
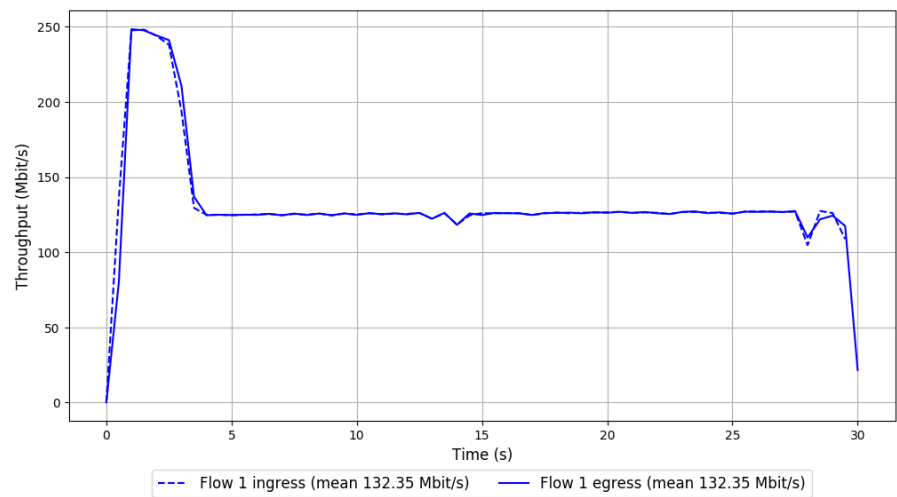
-- Flow 1:

Average throughput: 132.35 Mbit/s

95th percentile per-packet one-way delay: 112.658 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-16 20:27:59

End at: 2017-08-16 20:28:29

Below is generated by plot.py at 2017-08-16 23:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.52 Mbit/s

95th percentile per-packet one-way delay: 113.091 ms

Loss rate: 3.27%

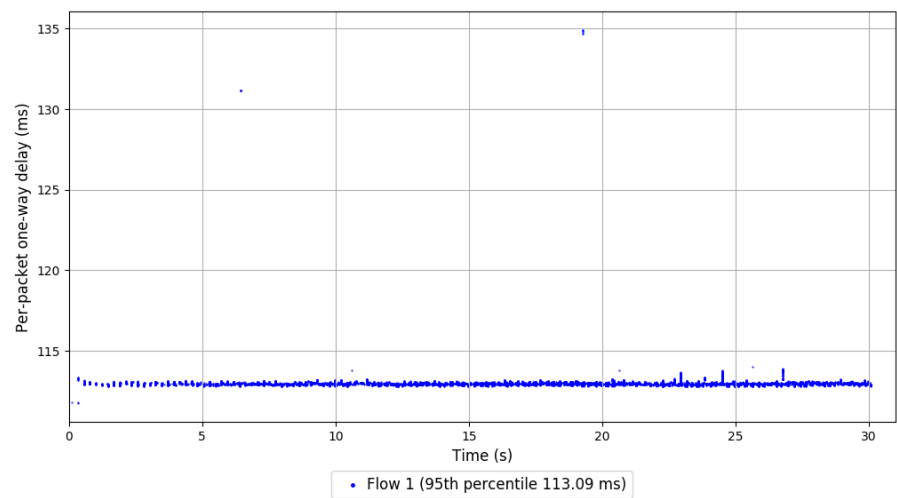
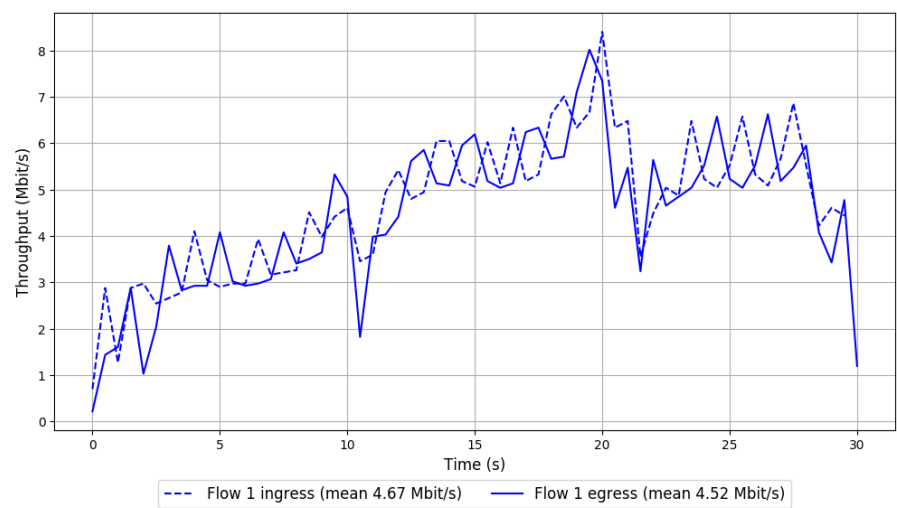
-- Flow 1:

Average throughput: 4.52 Mbit/s

95th percentile per-packet one-way delay: 113.091 ms

Loss rate: 3.27%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-16 20:39:10

End at: 2017-08-16 20:39:40

Below is generated by plot.py at 2017-08-16 23:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.64 Mbit/s

95th percentile per-packet one-way delay: 113.466 ms

Loss rate: 0.12%

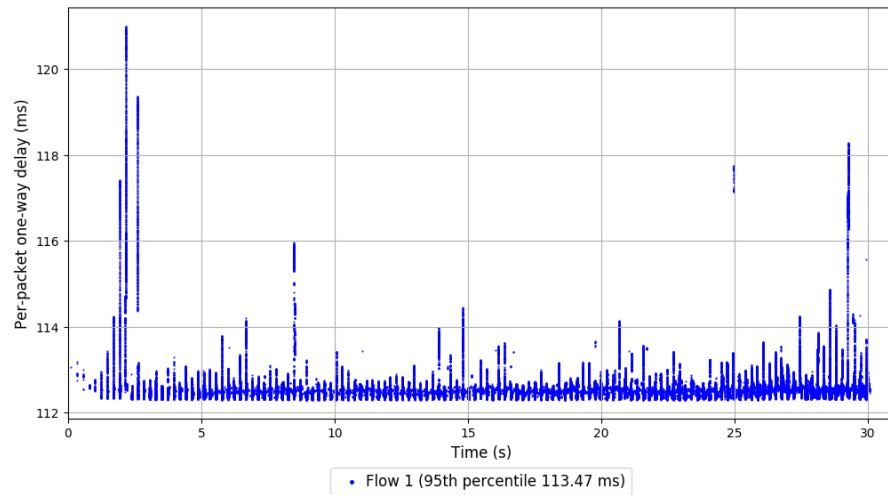
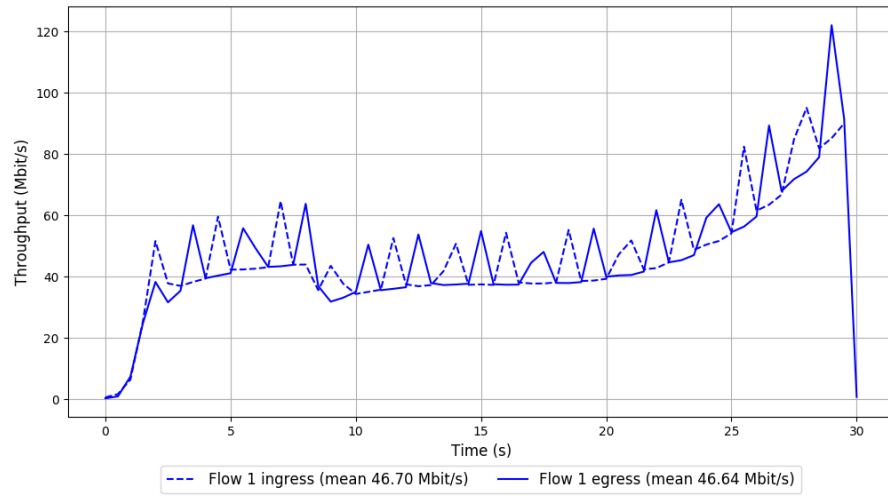
-- Flow 1:

Average throughput: 46.64 Mbit/s

95th percentile per-packet one-way delay: 113.466 ms

Loss rate: 0.12%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-16 20:50:30

End at: 2017-08-16 20:51:00

Below is generated by plot.py at 2017-08-16 23:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.57 Mbit/s

95th percentile per-packet one-way delay: 114.845 ms

Loss rate: 0.57%

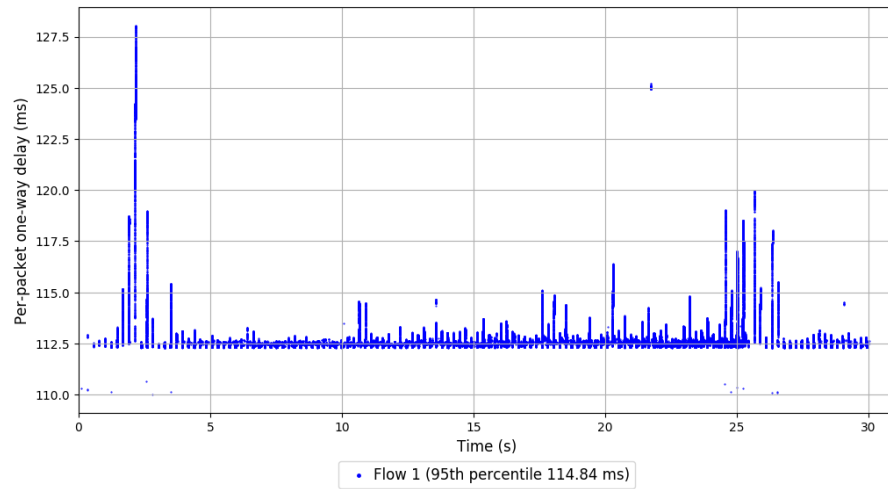
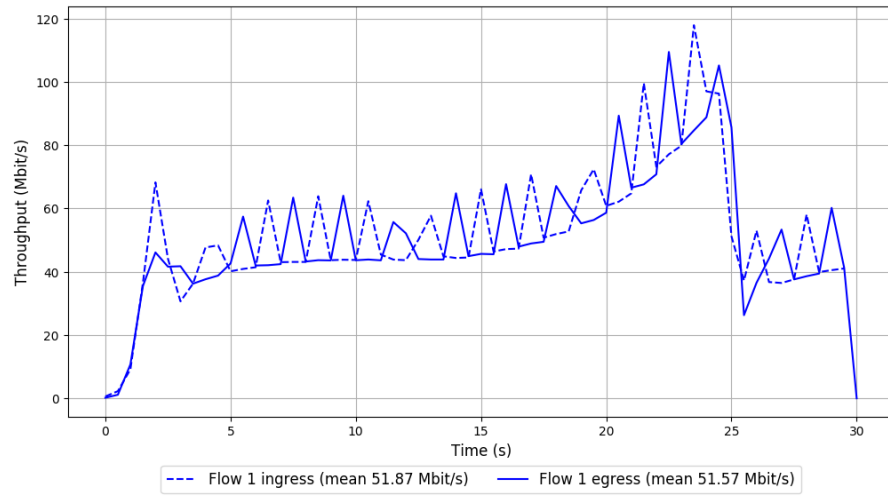
-- Flow 1:

Average throughput: 51.57 Mbit/s

95th percentile per-packet one-way delay: 114.845 ms

Loss rate: 0.57%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-16 21:01:44

End at: 2017-08-16 21:02:14

Below is generated by plot.py at 2017-08-16 23:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 113.070 ms

Loss rate: 1.13%

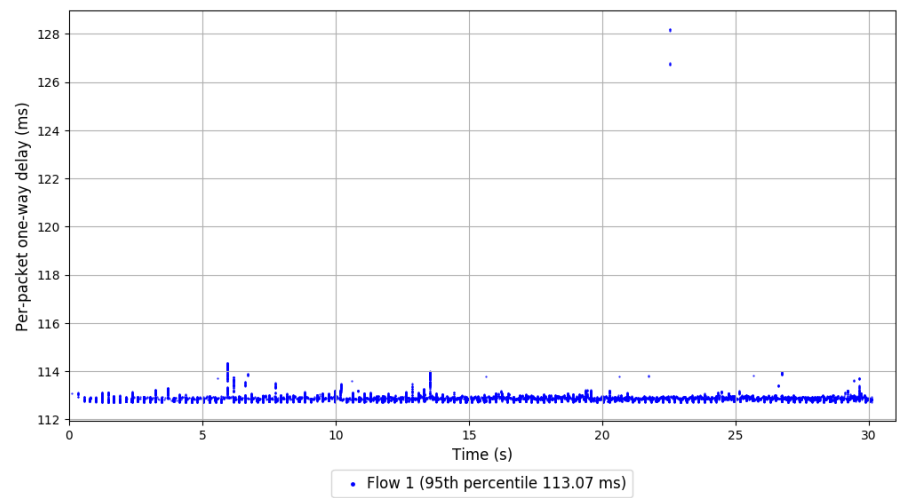
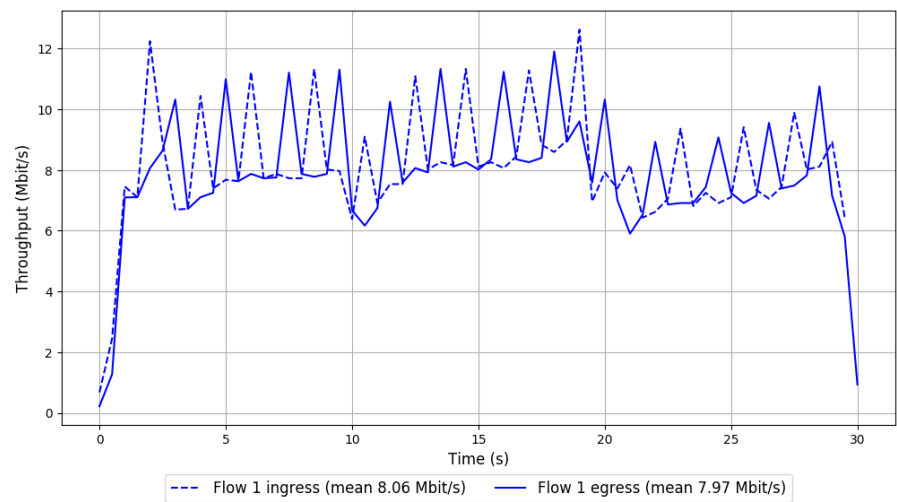
-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 113.070 ms

Loss rate: 1.13%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-16 21:13:27

End at: 2017-08-16 21:13:57

Below is generated by plot.py at 2017-08-16 23:18:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.18 Mbit/s

95th percentile per-packet one-way delay: 113.709 ms

Loss rate: 0.40%

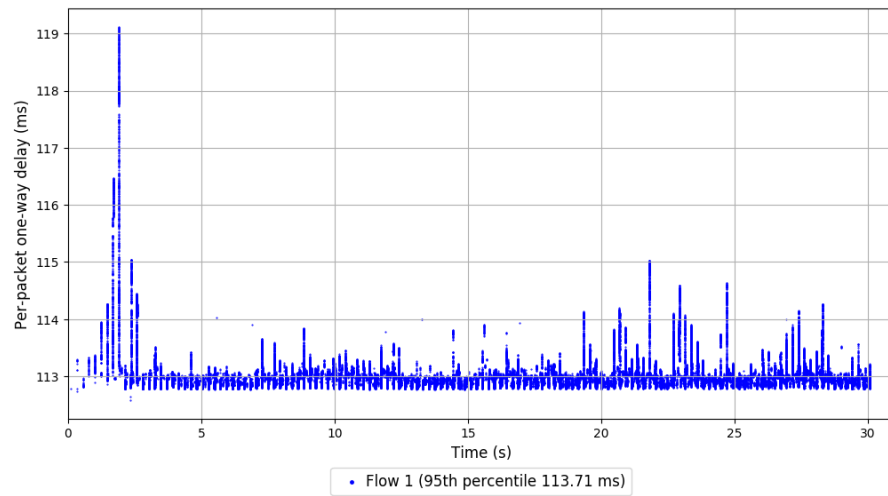
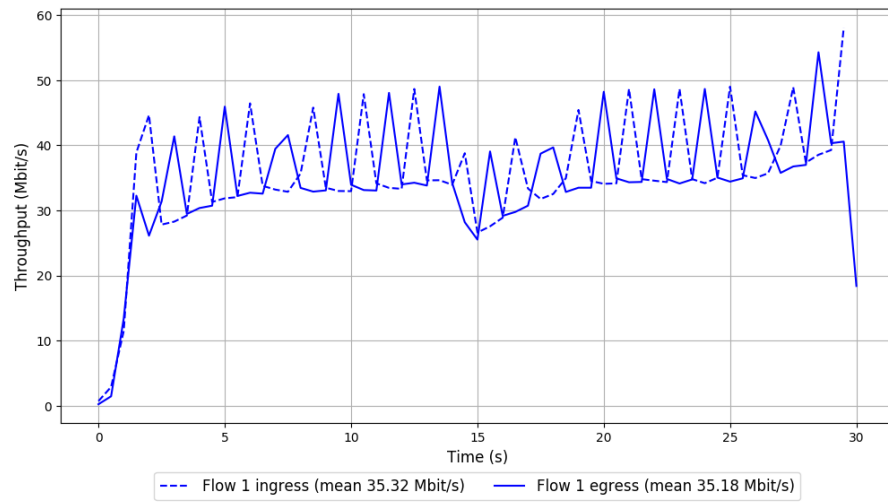
-- Flow 1:

Average throughput: 35.18 Mbit/s

95th percentile per-packet one-way delay: 113.709 ms

Loss rate: 0.40%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-16 21:25:12

End at: 2017-08-16 21:25:42

Below is generated by plot.py at 2017-08-16 23:18:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.42 Mbit/s

95th percentile per-packet one-way delay: 113.438 ms

Loss rate: 0.72%

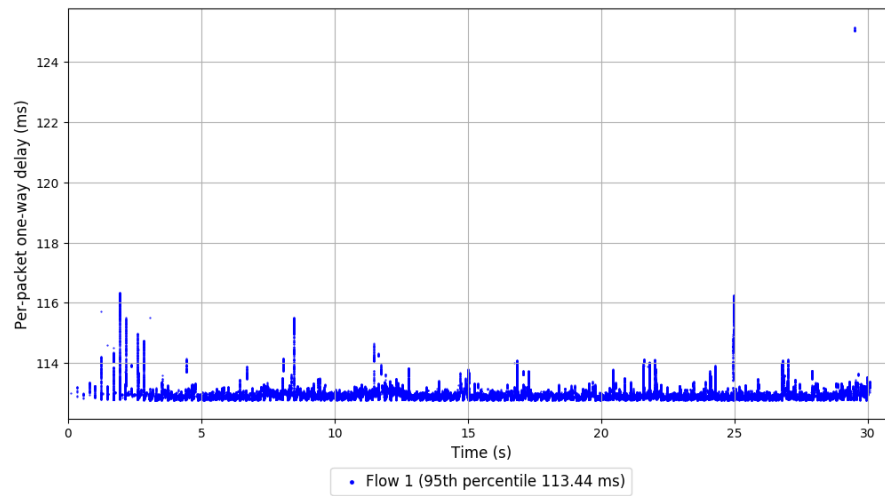
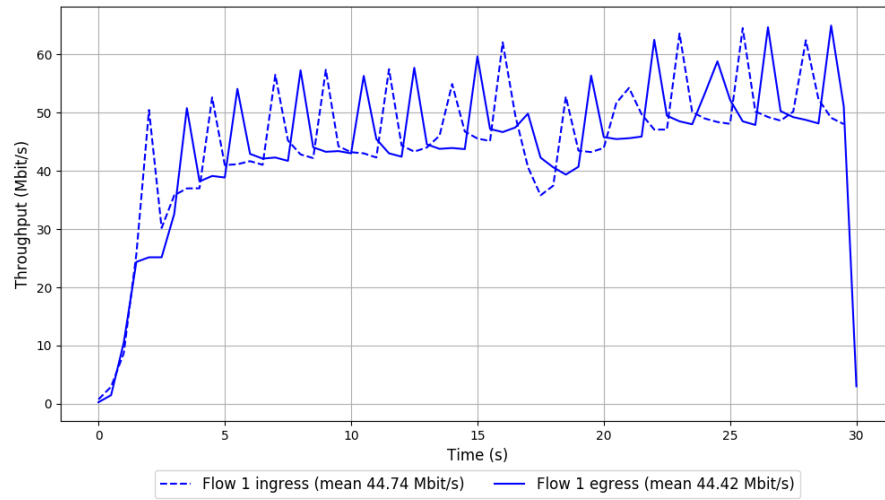
-- Flow 1:

Average throughput: 44.42 Mbit/s

95th percentile per-packet one-way delay: 113.438 ms

Loss rate: 0.72%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-16 21:37:02

End at: 2017-08-16 21:37:32

Below is generated by plot.py at 2017-08-16 23:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.95 Mbit/s

95th percentile per-packet one-way delay: 113.266 ms

Loss rate: 0.22%

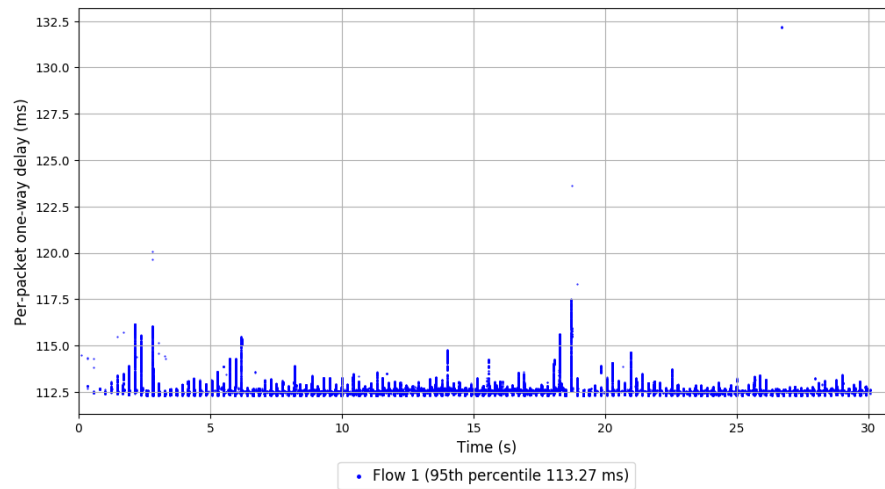
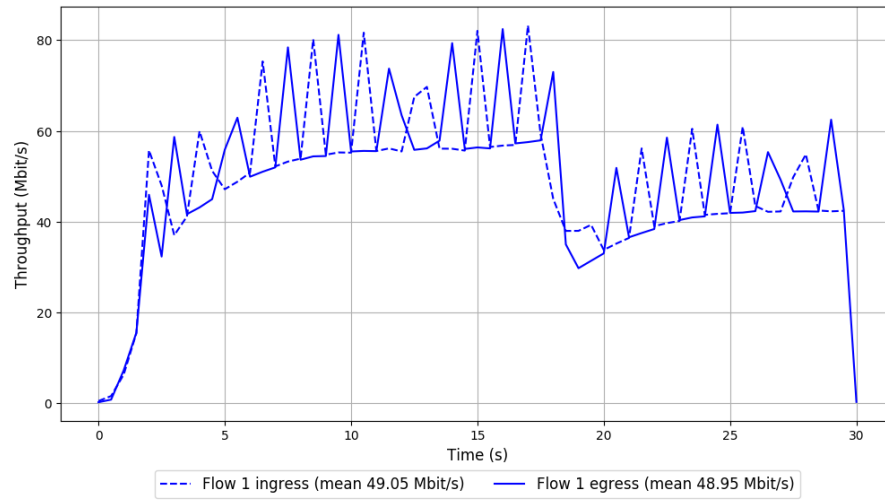
-- Flow 1:

Average throughput: 48.95 Mbit/s

95th percentile per-packet one-way delay: 113.266 ms

Loss rate: 0.22%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-16 21:48:35

End at: 2017-08-16 21:49:05

Below is generated by plot.py at 2017-08-16 23:18:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.91 Mbit/s

95th percentile per-packet one-way delay: 113.334 ms

Loss rate: 0.14%

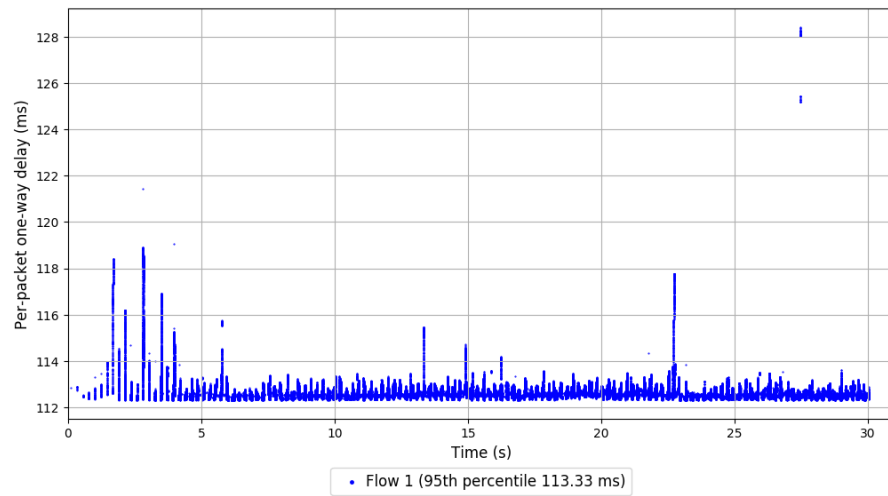
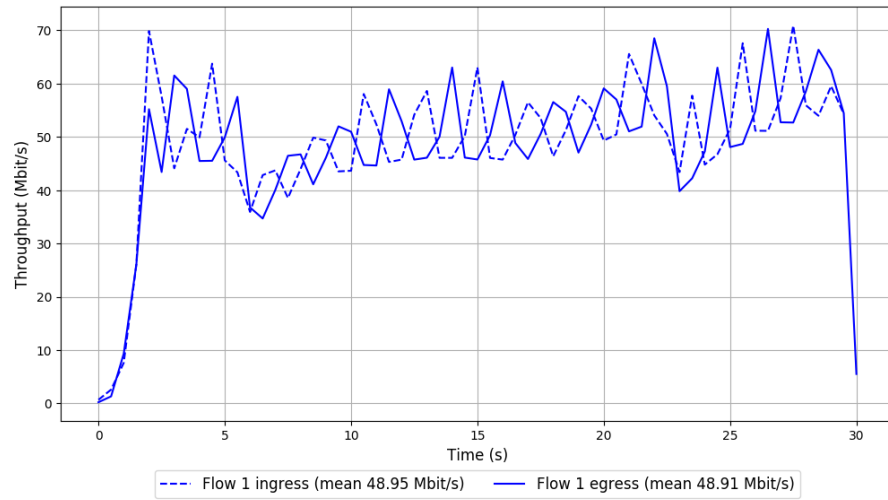
-- Flow 1:

Average throughput: 48.91 Mbit/s

95th percentile per-packet one-way delay: 113.334 ms

Loss rate: 0.14%

Run 8: Report of TCP Cubic — Data Link

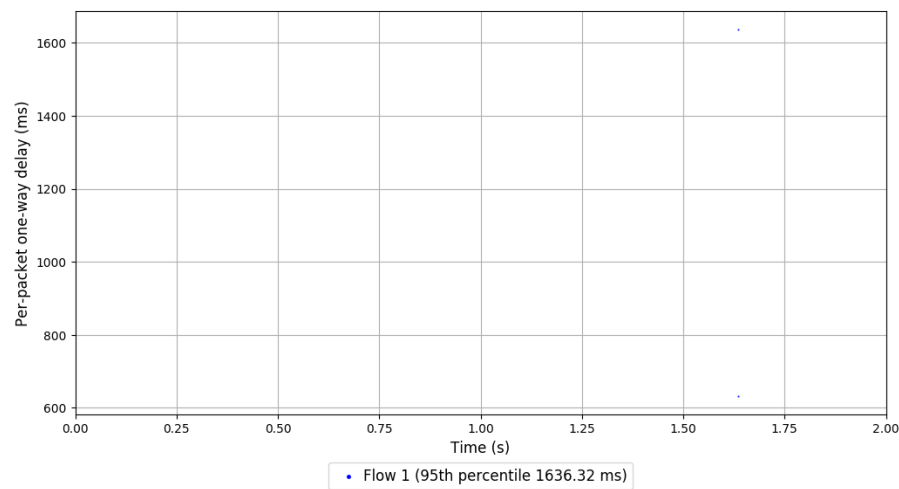
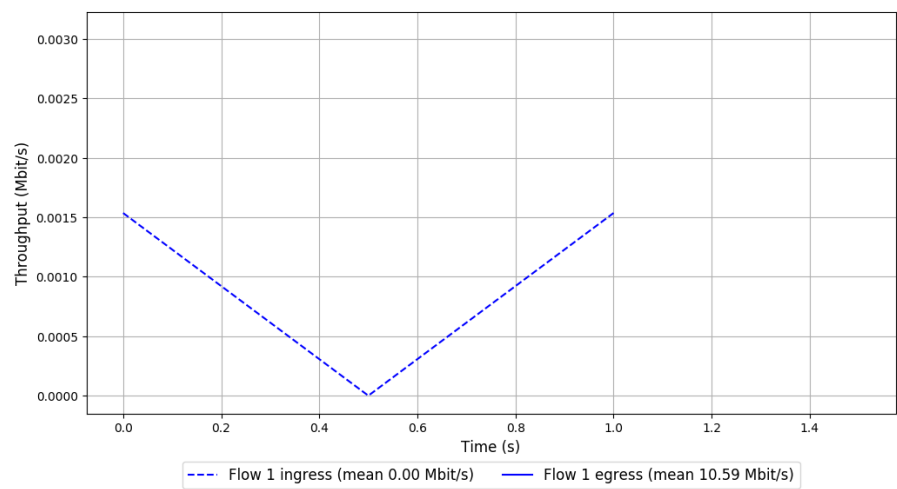


Run 9: Statistics of TCP Cubic

Start at: 2017-08-16 22:00:14

End at: 2017-08-16 22:00:44

Run 9: Report of TCP Cubic — Data Link

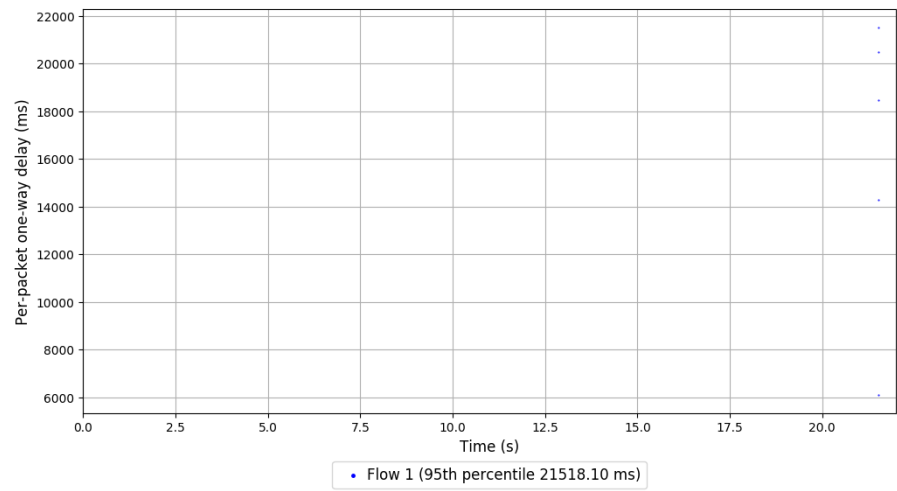
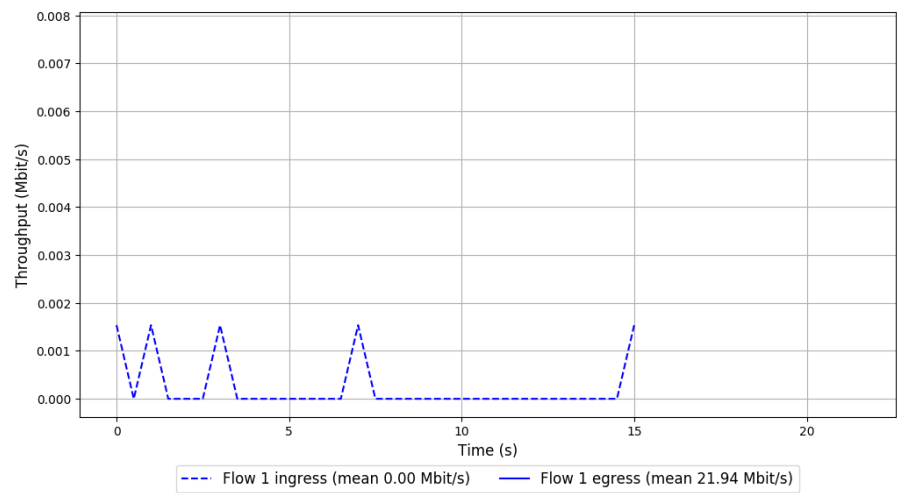


Run 10: Statistics of TCP Cubic

Start at: 2017-08-16 22:11:56

End at: 2017-08-16 22:12:26

Run 10: Report of TCP Cubic — Data Link

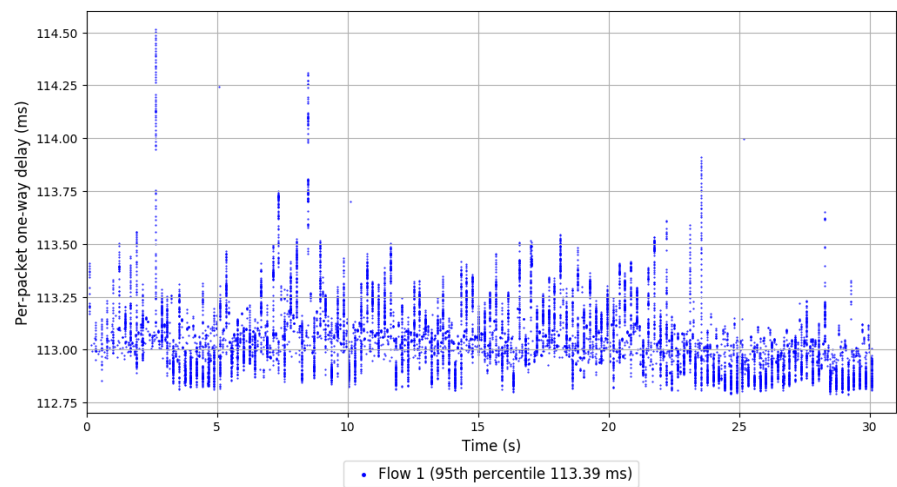
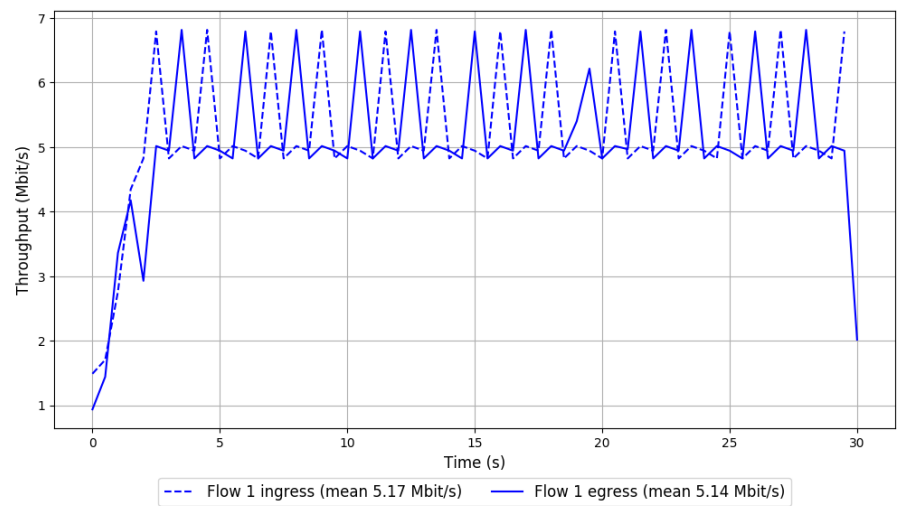


```
Run 1: Statistics of KohoCC

Start at: 2017-08-16 20:20:59
End at: 2017-08-16 20:21:29

# Below is generated by plot.py at 2017-08-16 23:18:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.14 Mbit/s
95th percentile per-packet one-way delay: 113.394 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 5.14 Mbit/s
95th percentile per-packet one-way delay: 113.394 ms
Loss rate: 0.61%
```


Run 1: Report of KohoCC — Data Link



Run 2: Statistics of KohoCC

Start at: 2017-08-16 20:32:29

End at: 2017-08-16 20:32:59

Below is generated by plot.py at 2017-08-16 23:18:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 112.751 ms

Loss rate: 25.37%

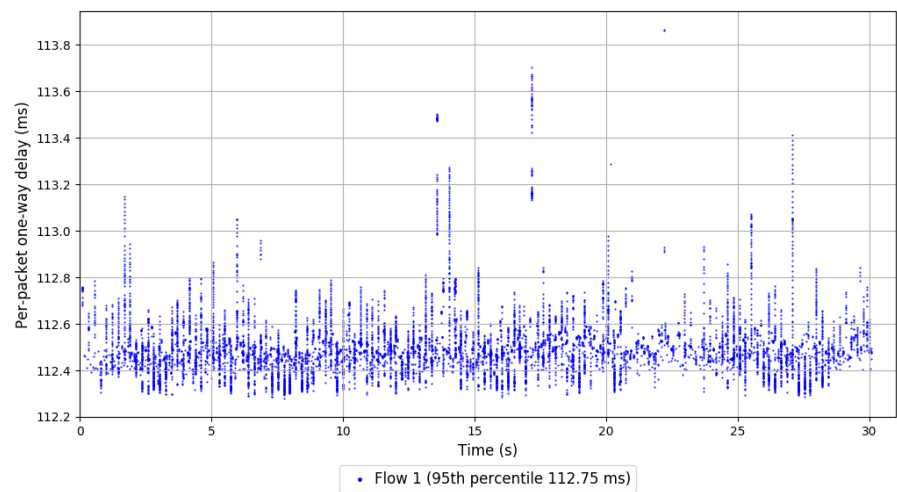
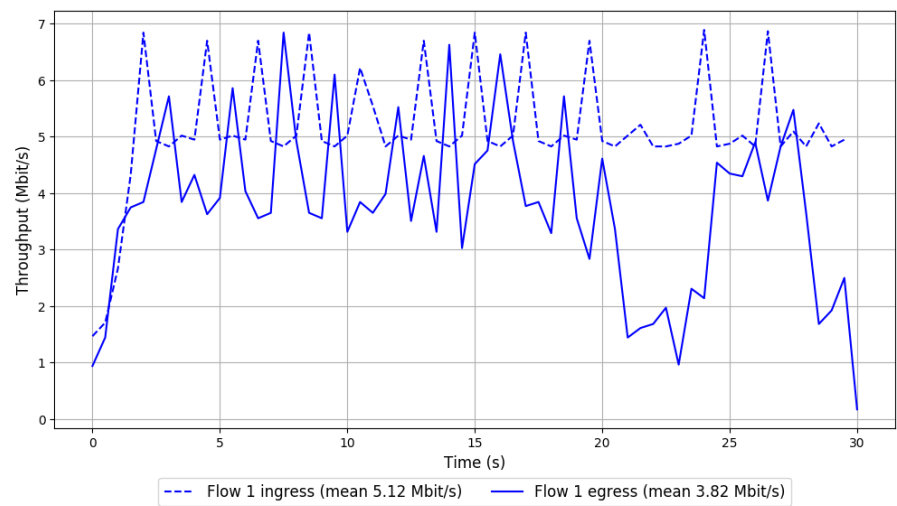
-- Flow 1:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 112.751 ms

Loss rate: 25.37%

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-16 20:43:24

End at: 2017-08-16 20:43:54

Below is generated by plot.py at 2017-08-16 23:18:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 112.858 ms

Loss rate: 0.00%

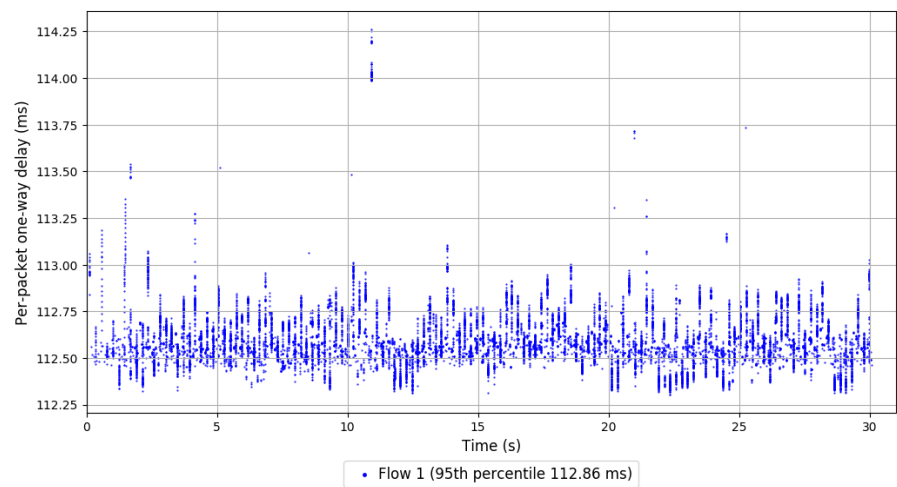
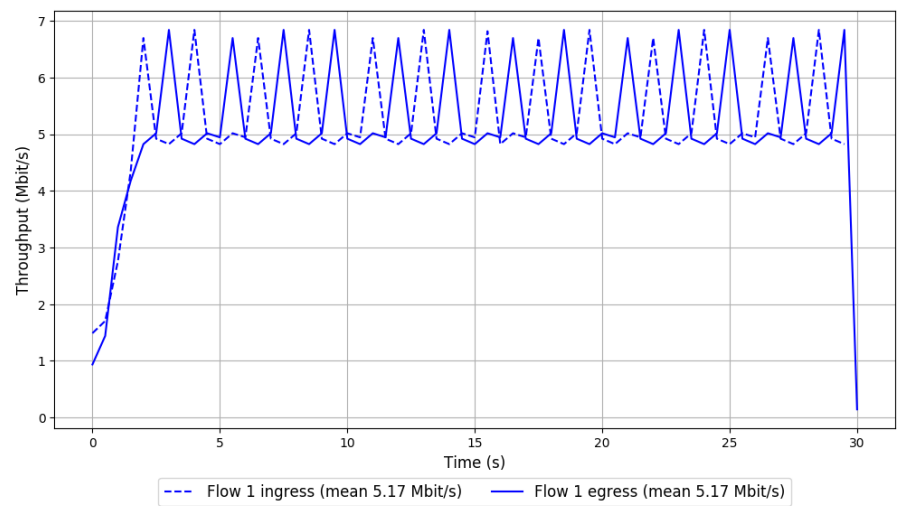
-- Flow 1:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 112.858 ms

Loss rate: 0.00%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-16 20:54:52

End at: 2017-08-16 20:55:22

Below is generated by plot.py at 2017-08-16 23:18:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 112.753 ms

Loss rate: 24.96%

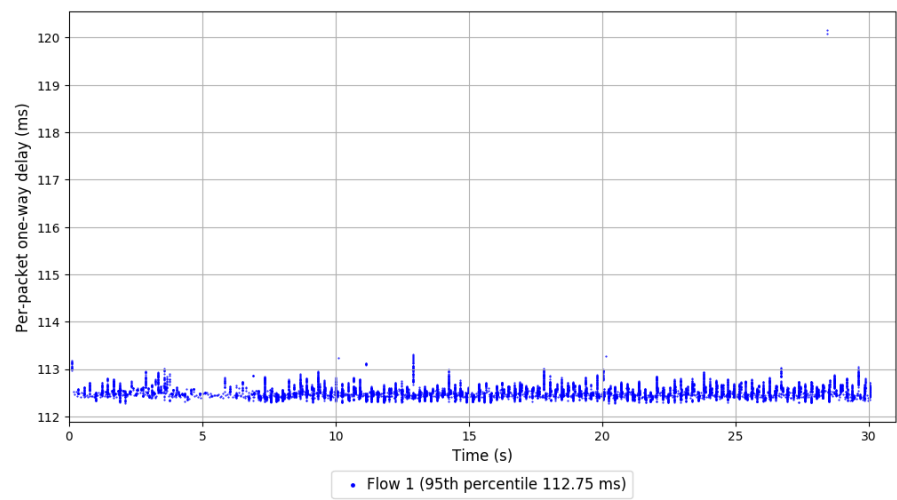
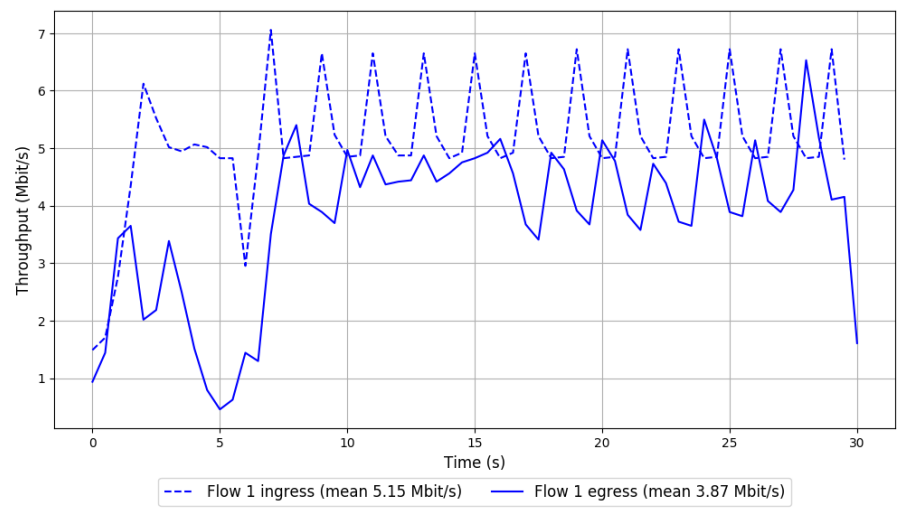
-- Flow 1:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 112.753 ms

Loss rate: 24.96%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-16 21:06:19

End at: 2017-08-16 21:06:49

Below is generated by plot.py at 2017-08-16 23:18:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.12 Mbit/s

95th percentile per-packet one-way delay: 113.351 ms

Loss rate: 0.33%

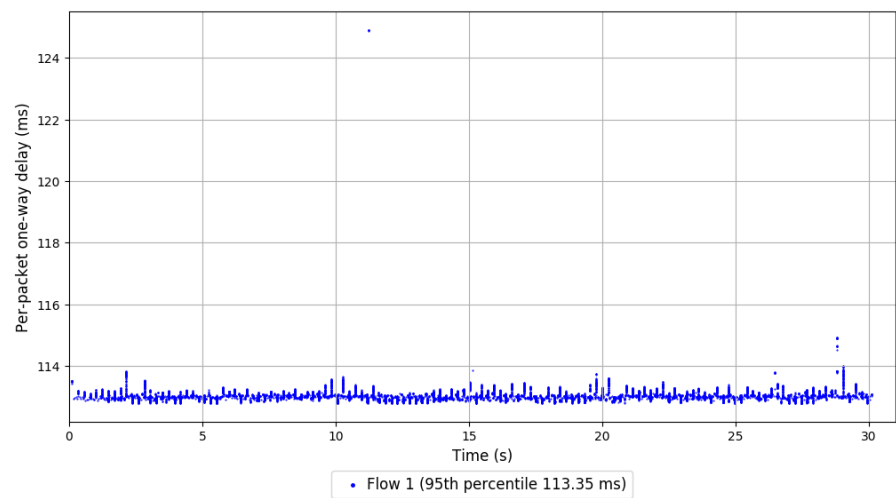
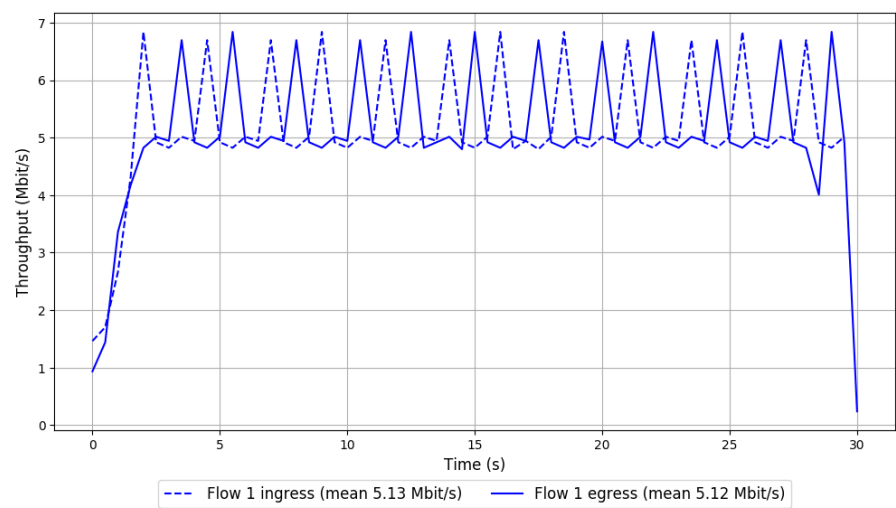
-- Flow 1:

Average throughput: 5.12 Mbit/s

95th percentile per-packet one-way delay: 113.351 ms

Loss rate: 0.33%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-16 21:18:08

End at: 2017-08-16 21:18:38

Below is generated by plot.py at 2017-08-16 23:18:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.472 ms

Loss rate: 0.00%

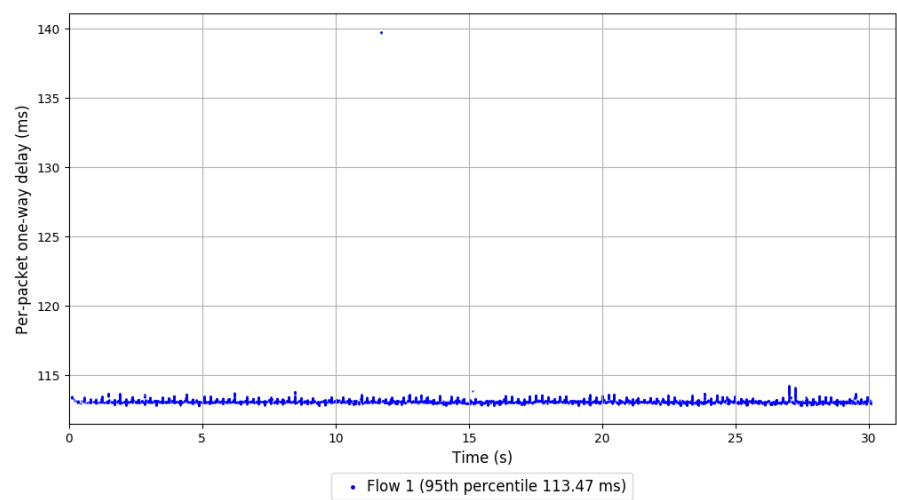
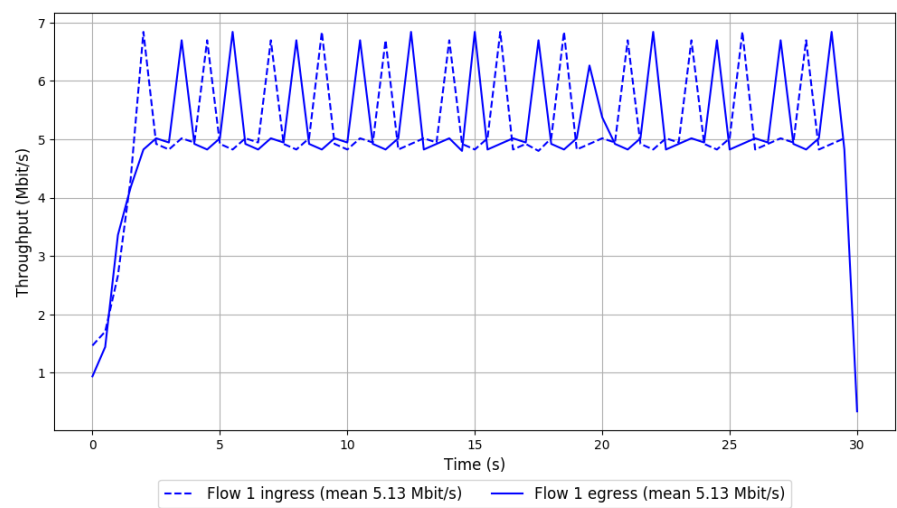
-- Flow 1:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.472 ms

Loss rate: 0.00%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-16 21:29:54

End at: 2017-08-16 21:30:24

Below is generated by plot.py at 2017-08-16 23:18:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 113.433 ms

Loss rate: 0.03%

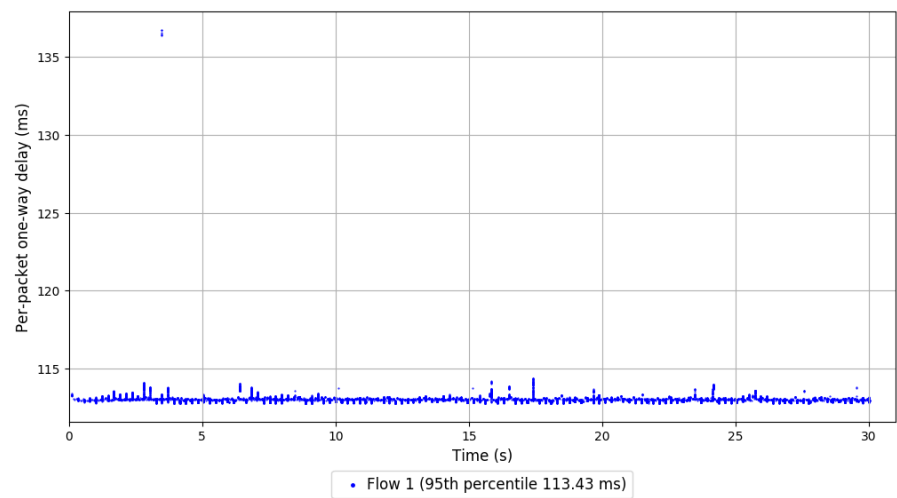
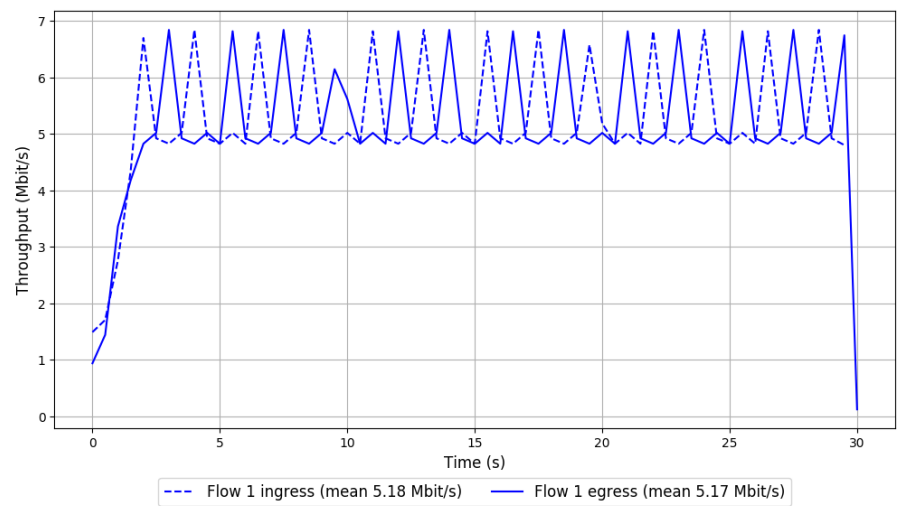
-- Flow 1:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 113.433 ms

Loss rate: 0.03%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-16 21:41:39

End at: 2017-08-16 21:42:09

Below is generated by plot.py at 2017-08-16 23:18:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 113.132 ms

Loss rate: 0.00%

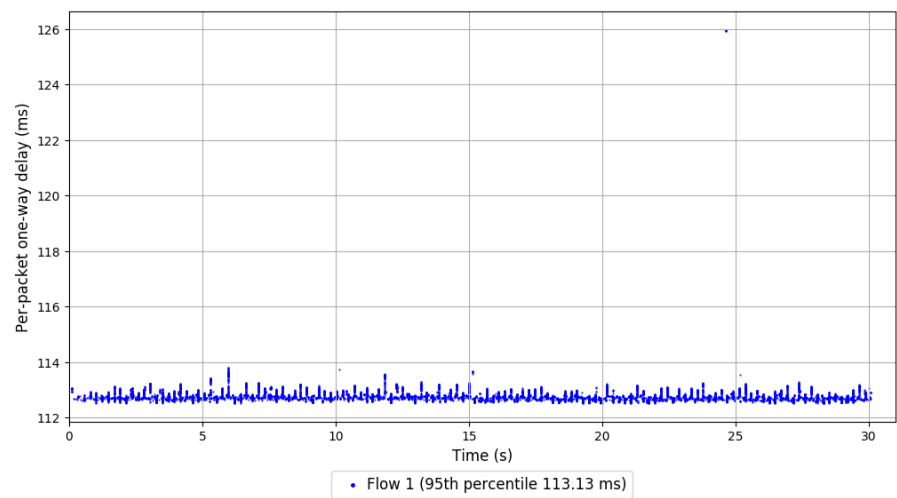
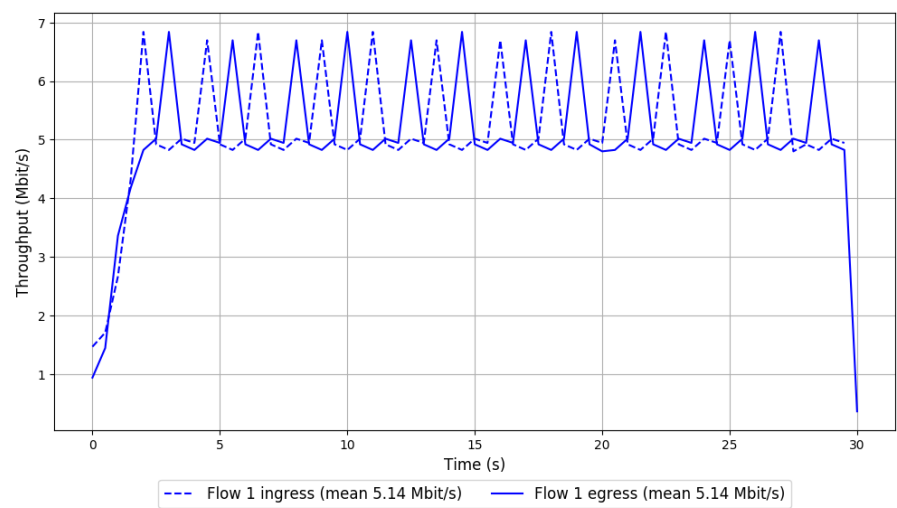
-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 113.132 ms

Loss rate: 0.00%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-16 21:53:16

End at: 2017-08-16 21:53:46

Below is generated by plot.py at 2017-08-16 23:18:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.885 ms

Loss rate: 0.00%

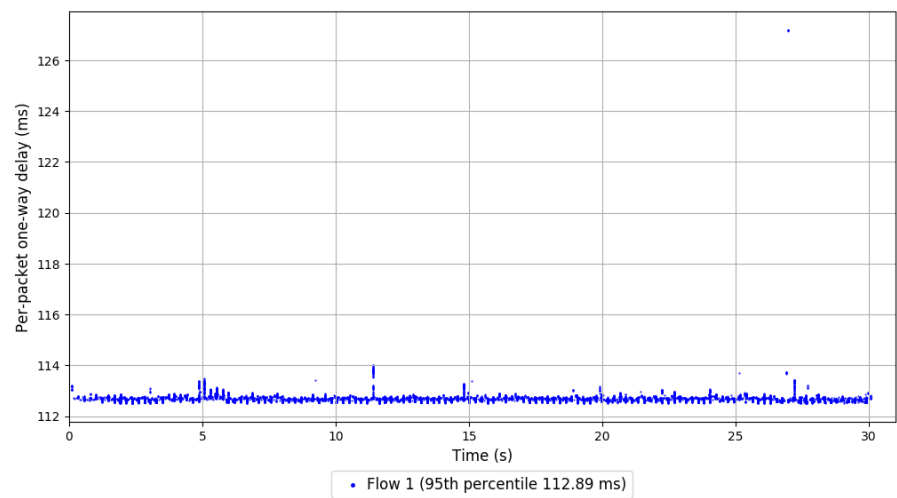
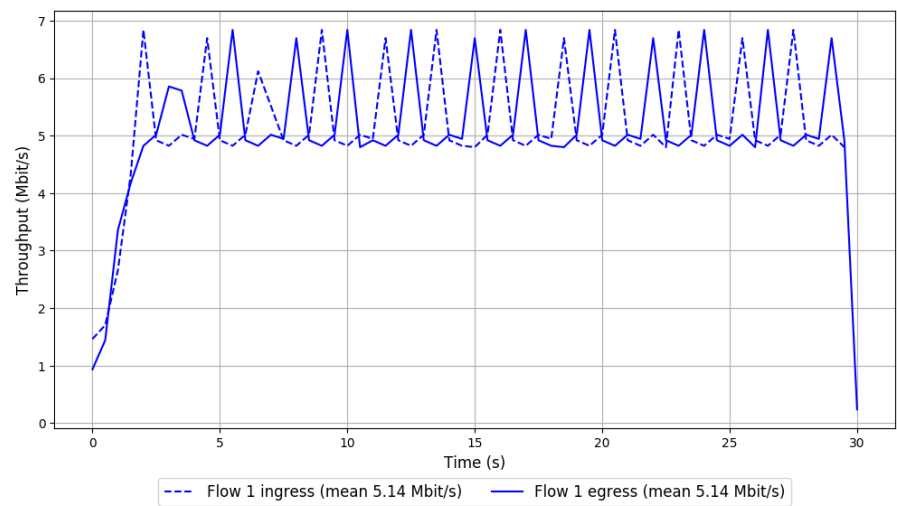
-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.885 ms

Loss rate: 0.00%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-16 22:04:51

End at: 2017-08-16 22:05:21

Below is generated by plot.py at 2017-08-16 23:18:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 112.960 ms

Loss rate: 0.00%

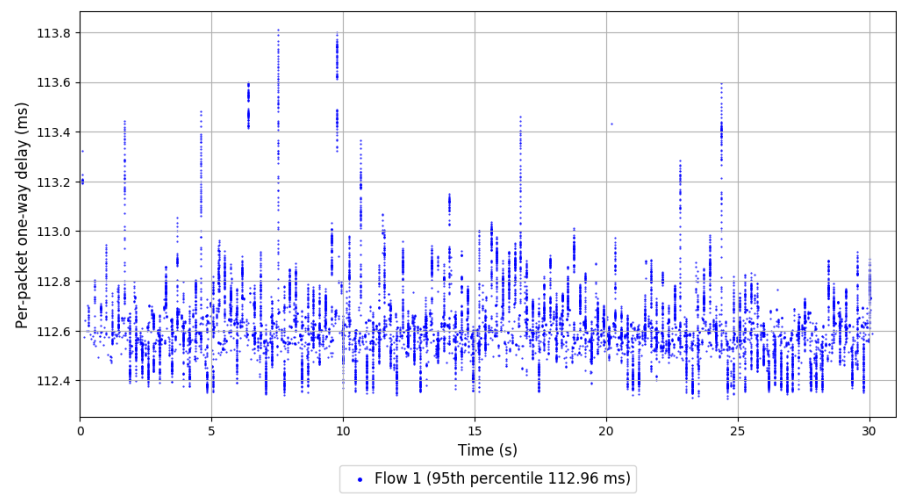
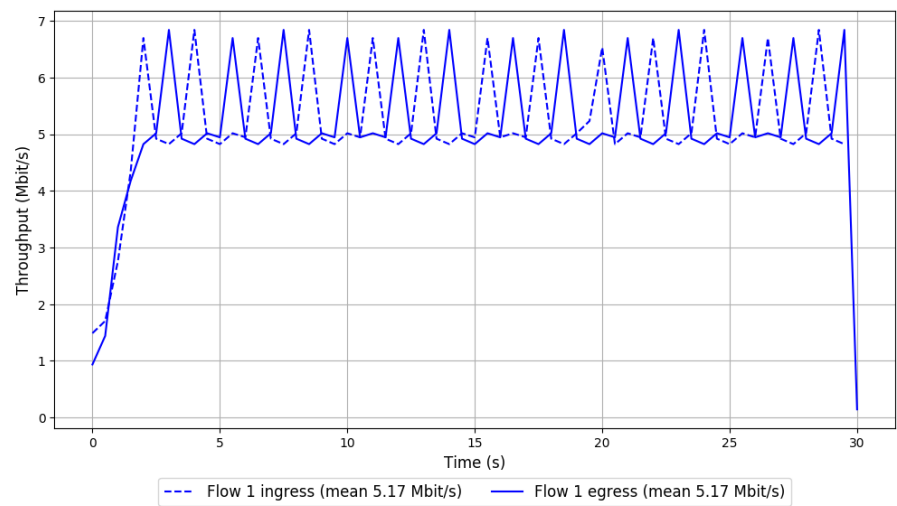
-- Flow 1:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 112.960 ms

Loss rate: 0.00%

Run 10: Report of KohoCC — Data Link

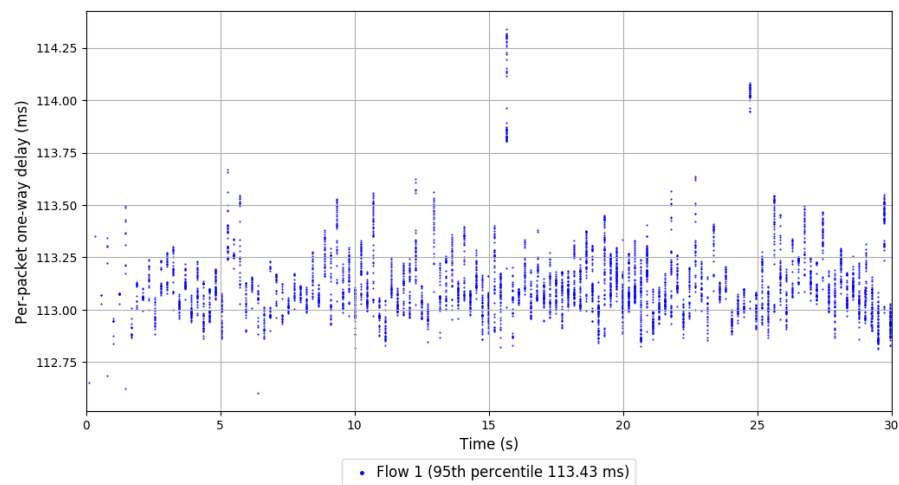
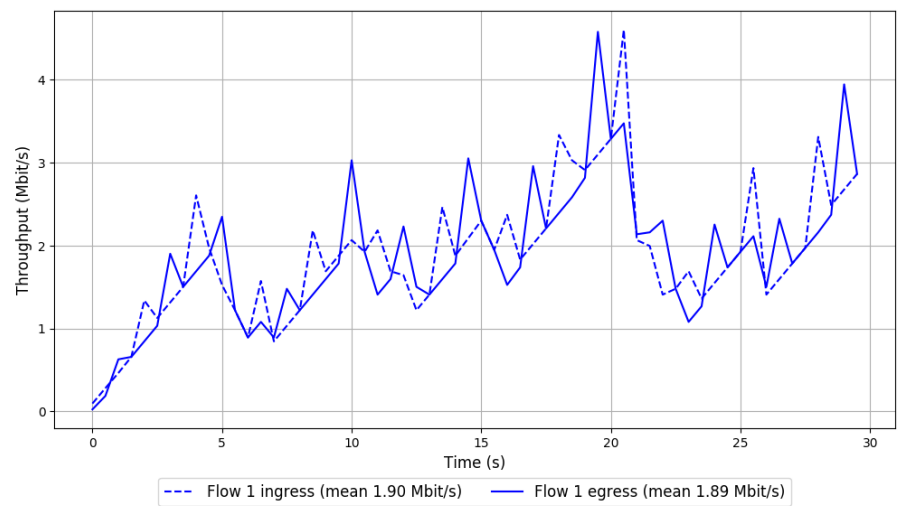


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-16 20:27:18
End at: 2017-08-16 20:27:48

# Below is generated by plot.py at 2017-08-16 23:18:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 113.434 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 113.434 ms
Loss rate: 0.17%
```

Run 1: Report of LEDBAT — Data Link

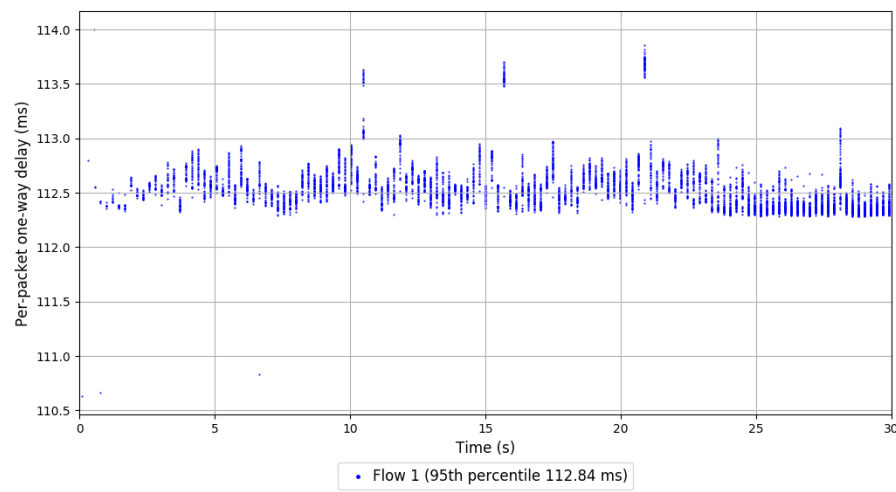
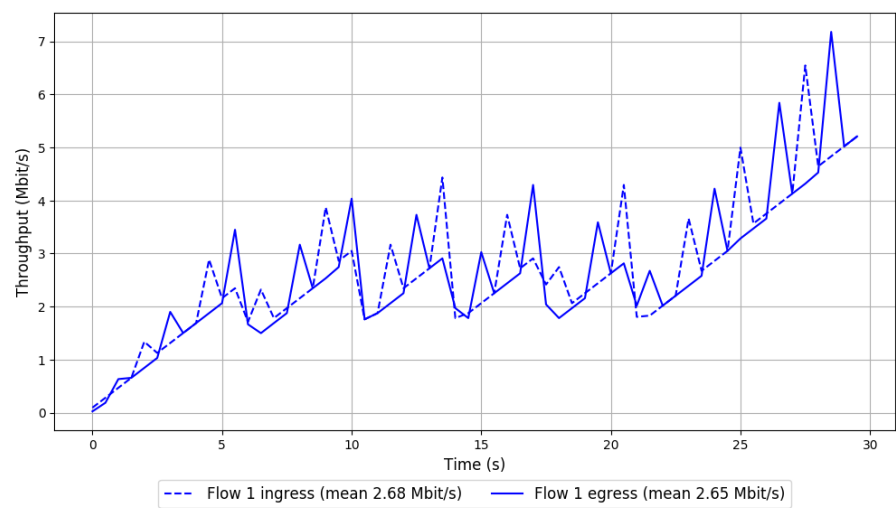


```
Run 2: Statistics of LEDBAT

Start at: 2017-08-16 20:38:29
End at: 2017-08-16 20:38:59

# Below is generated by plot.py at 2017-08-16 23:18:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 112.843 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 112.843 ms
Loss rate: 1.12%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-16 20:49:49

End at: 2017-08-16 20:50:19

Below is generated by plot.py at 2017-08-16 23:18:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 113.026 ms

Loss rate: 0.00%

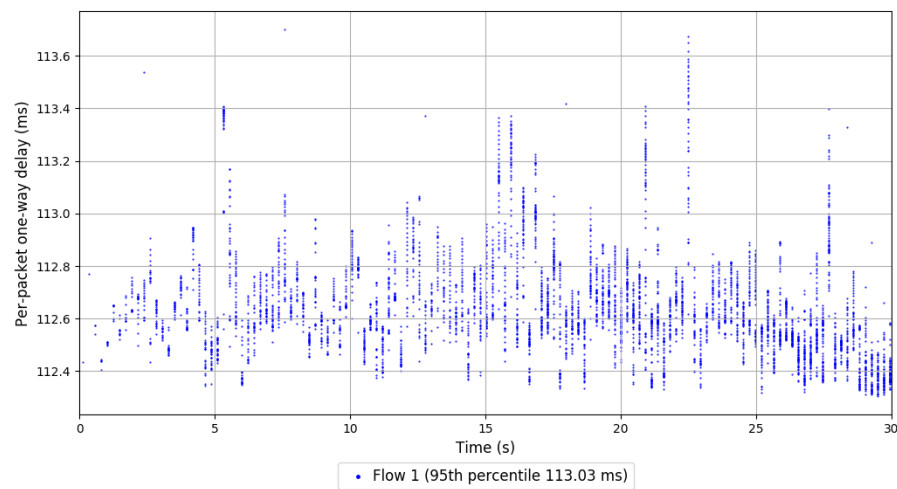
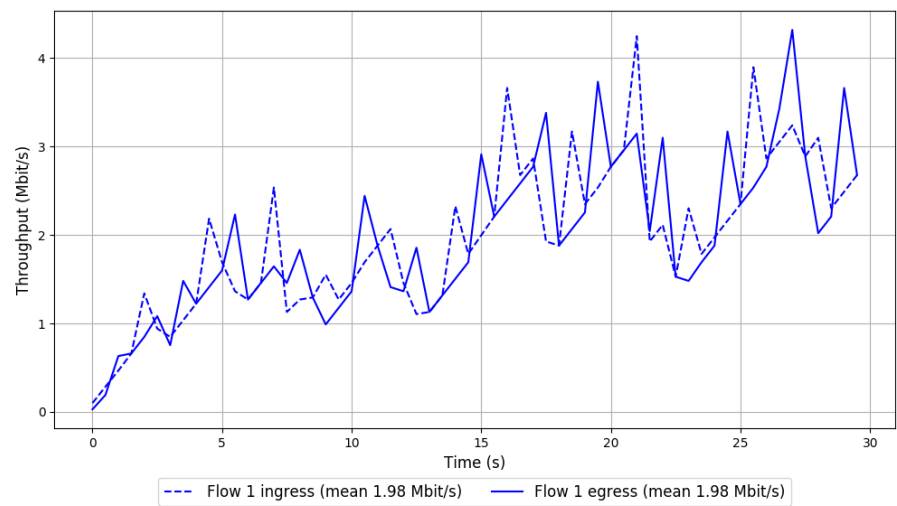
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 113.026 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

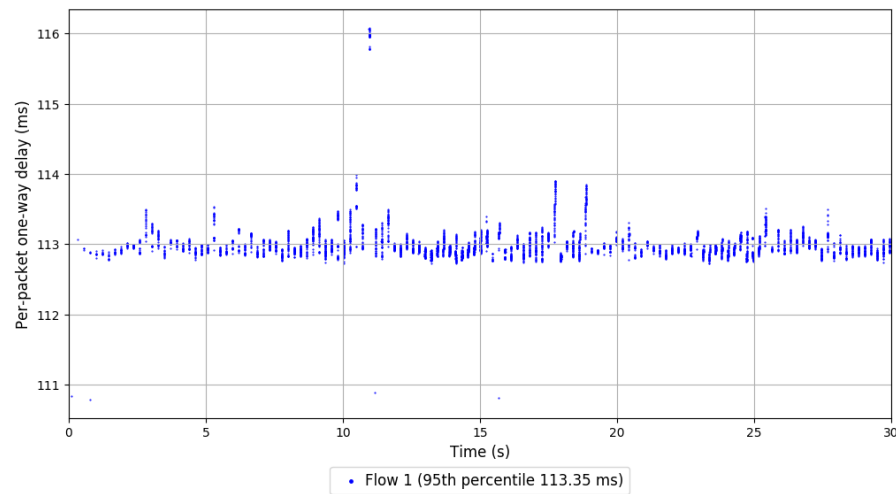
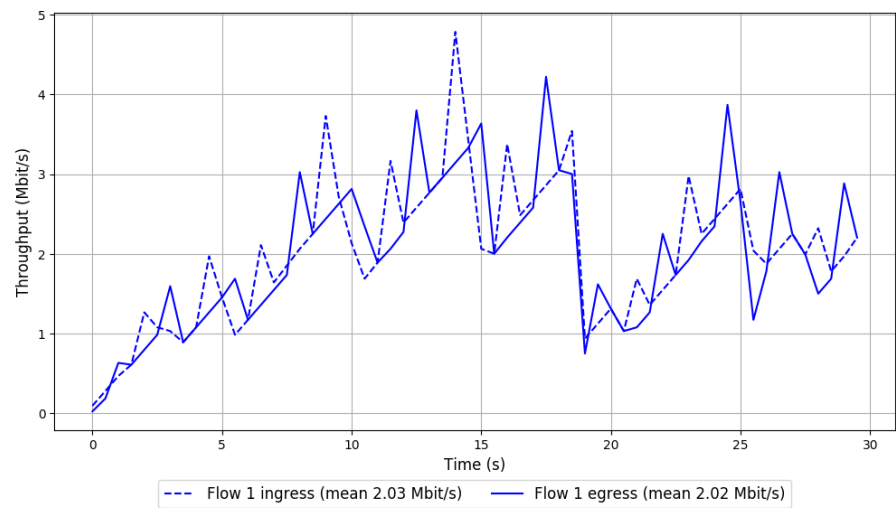


```
Run 4: Statistics of LEDBAT

Start at: 2017-08-16 21:01:03
End at: 2017-08-16 21:01:33

# Below is generated by plot.py at 2017-08-16 23:18:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 113.350 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 113.350 ms
Loss rate: 0.50%
```

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-16 21:12:45

End at: 2017-08-16 21:13:15

Below is generated by plot.py at 2017-08-16 23:18:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.18 Mbit/s

95th percentile per-packet one-way delay: 113.375 ms

Loss rate: 0.00%

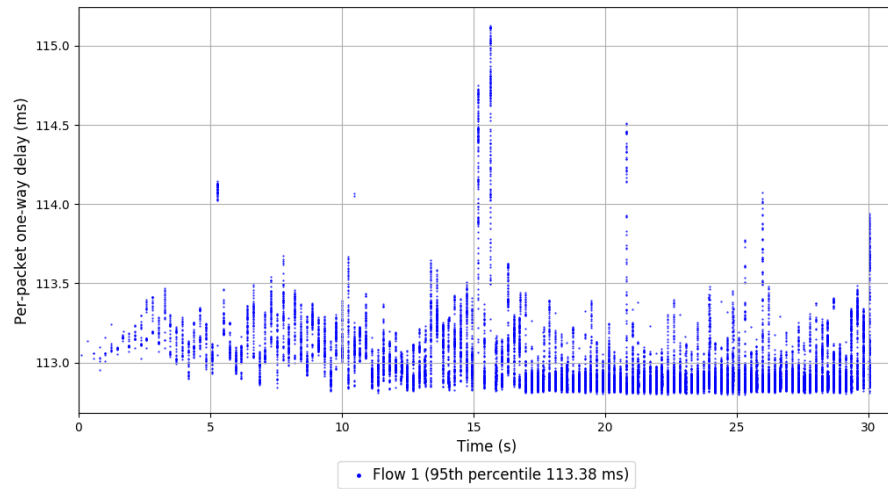
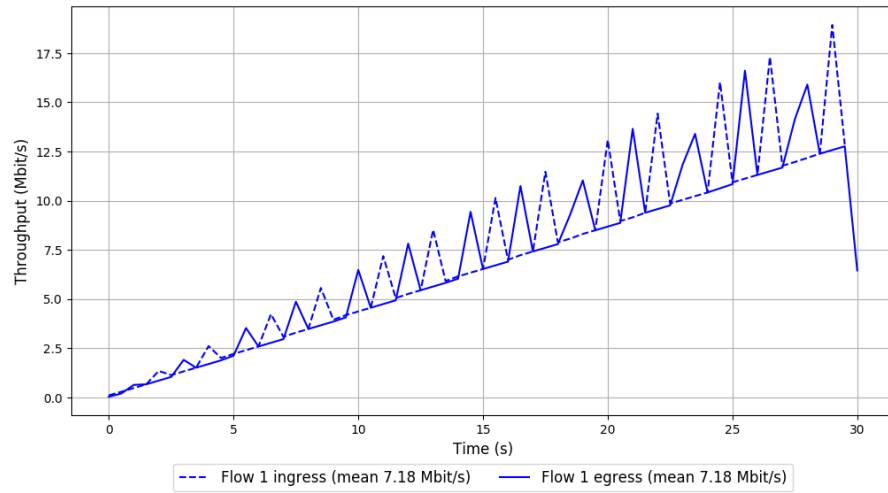
-- Flow 1:

Average throughput: 7.18 Mbit/s

95th percentile per-packet one-way delay: 113.375 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-16 21:24:31

End at: 2017-08-16 21:25:01

Below is generated by plot.py at 2017-08-16 23:18:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 113.432 ms

Loss rate: 0.11%

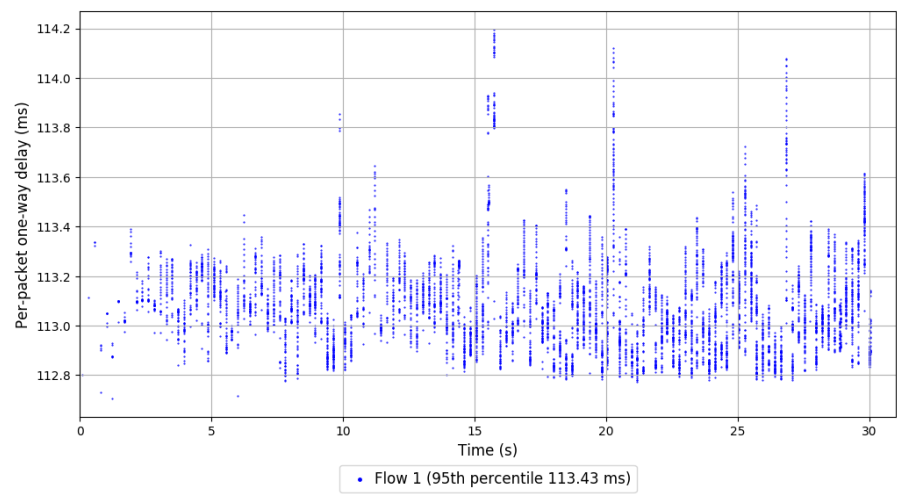
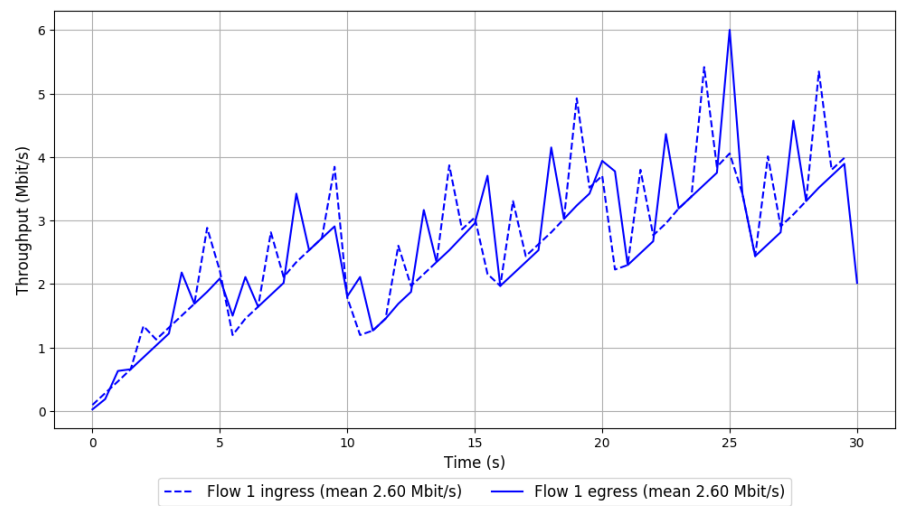
-- Flow 1:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 113.432 ms

Loss rate: 0.11%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-16 21:36:21

End at: 2017-08-16 21:36:51

Below is generated by plot.py at 2017-08-16 23:18:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 113.016 ms

Loss rate: 0.00%

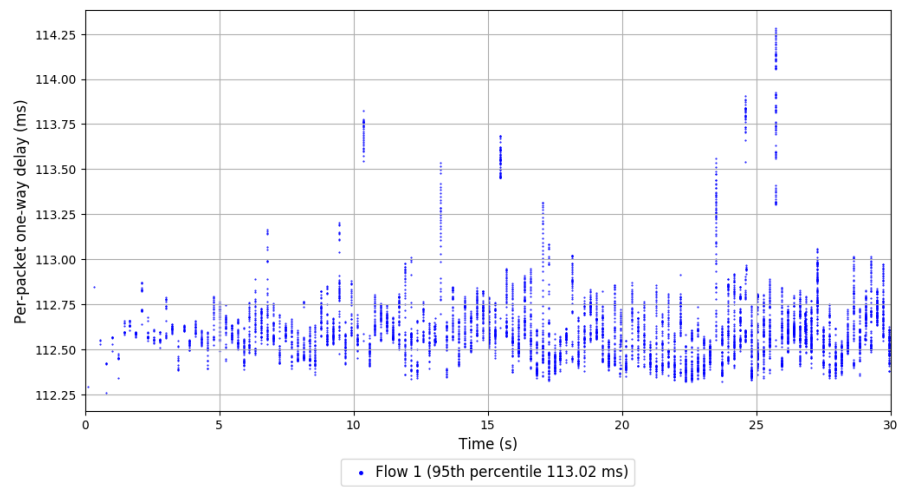
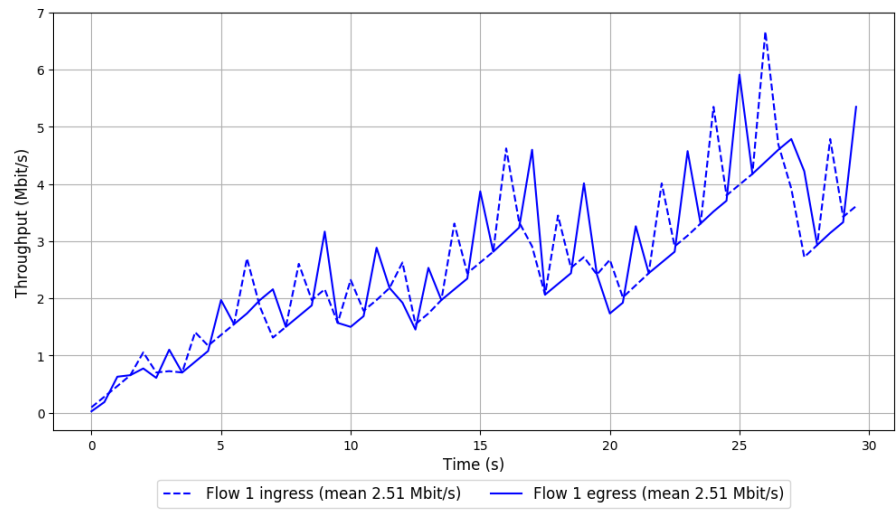
-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 113.016 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-16 21:47:54

End at: 2017-08-16 21:48:24

Below is generated by plot.py at 2017-08-16 23:18:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 112.982 ms

Loss rate: 0.00%

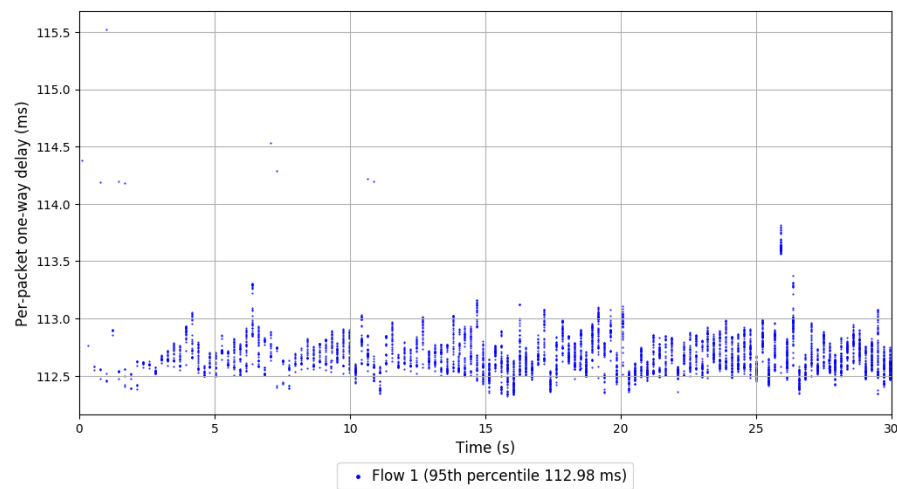
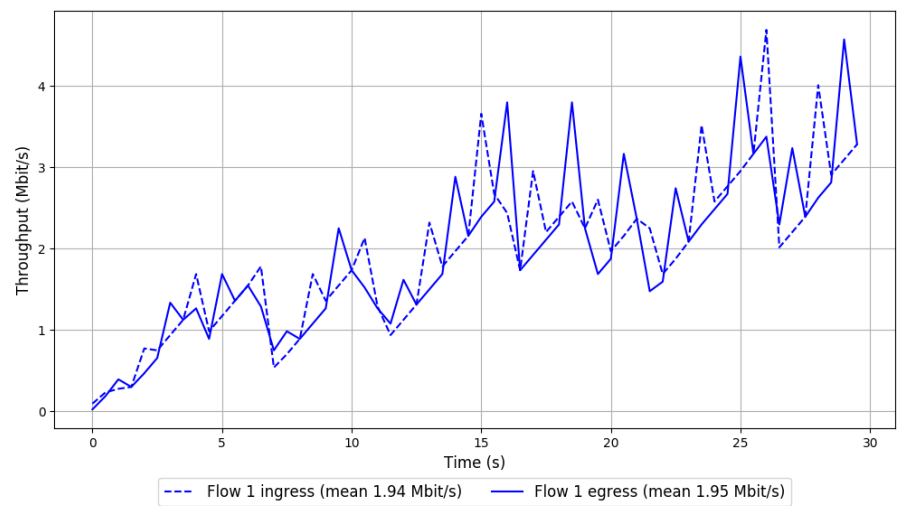
-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 112.982 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-16 21:59:34

End at: 2017-08-16 22:00:04

Below is generated by plot.py at 2017-08-16 23:18:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 113.160 ms

Loss rate: 0.00%

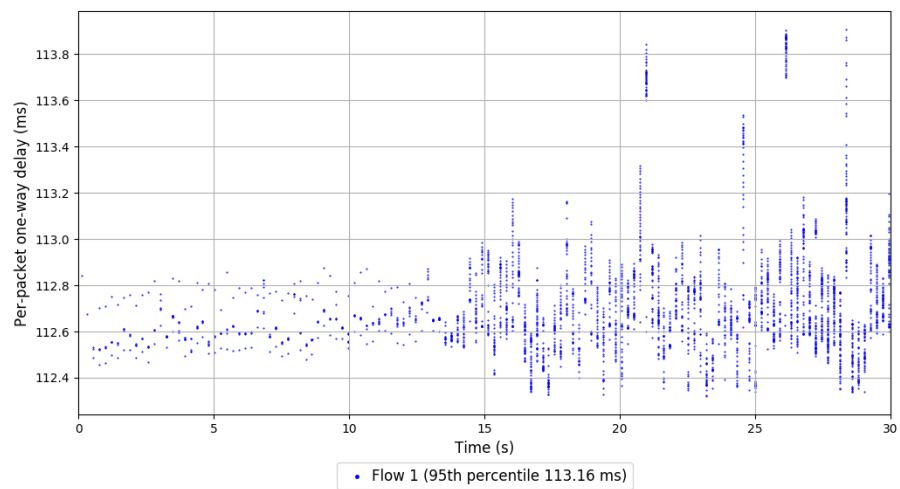
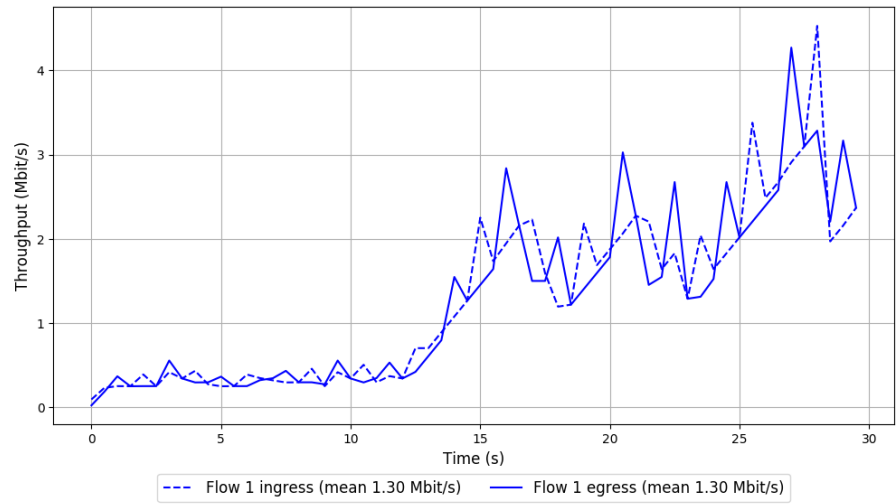
-- Flow 1:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 113.160 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-16 22:11:15

End at: 2017-08-16 22:11:45

Below is generated by plot.py at 2017-08-16 23:18:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 112.980 ms

Loss rate: 0.00%

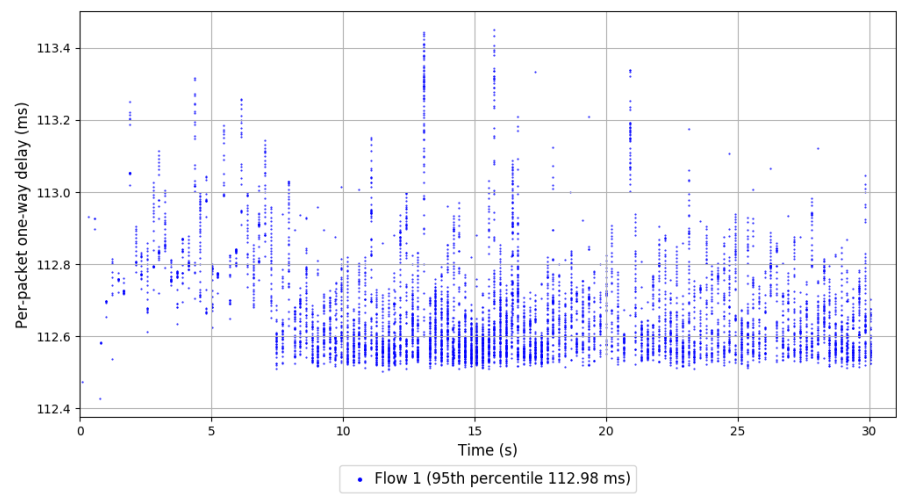
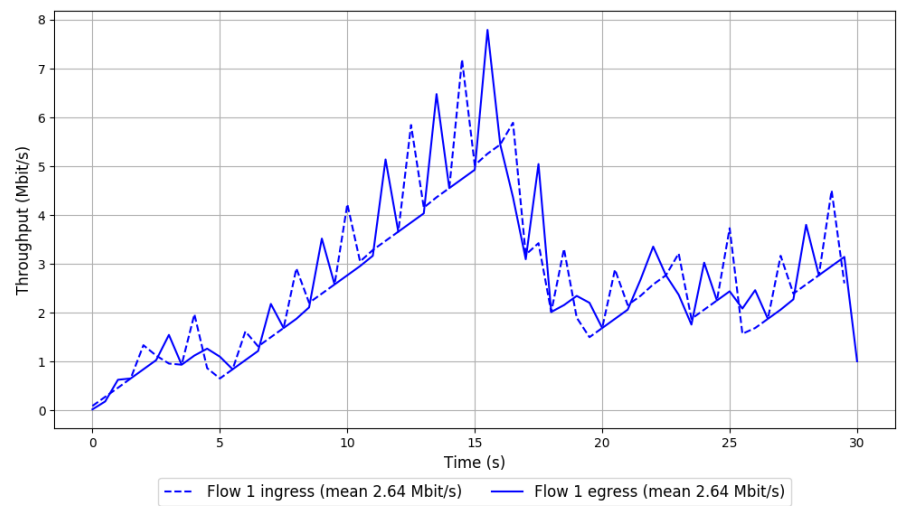
-- Flow 1:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 112.980 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

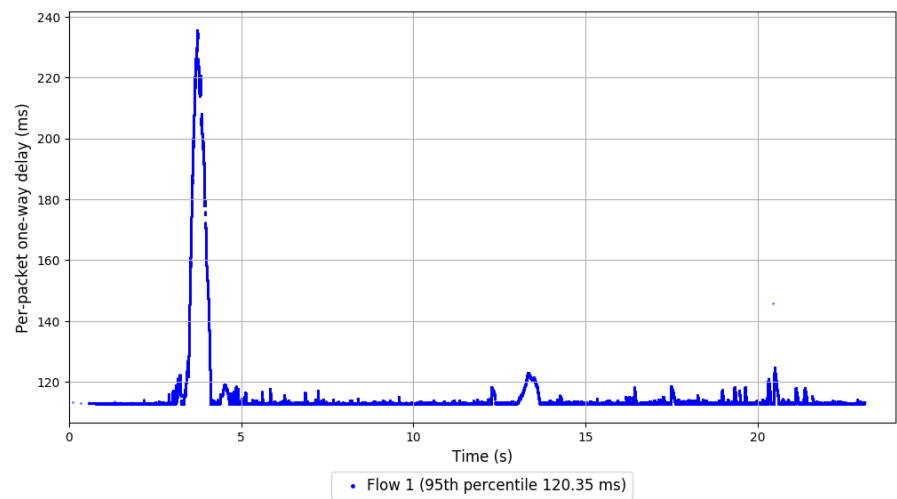
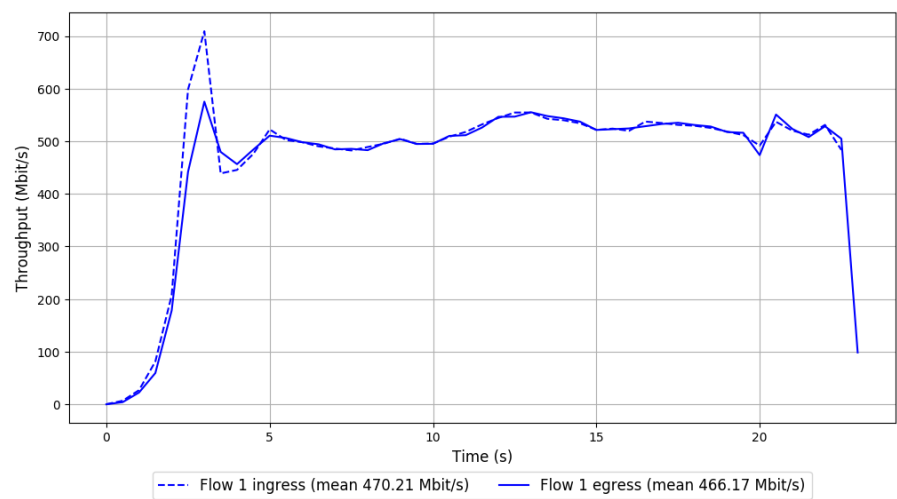


Run 1: Statistics of PCC

Start at: 2017-08-16 20:25:23

End at: 2017-08-16 20:25:54

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-16 20:36:53

End at: 2017-08-16 20:37:23

Below is generated by plot.py at 2017-08-16 23:20:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 256.29 Mbit/s

95th percentile per-packet one-way delay: 112.388 ms

Loss rate: 3.82%

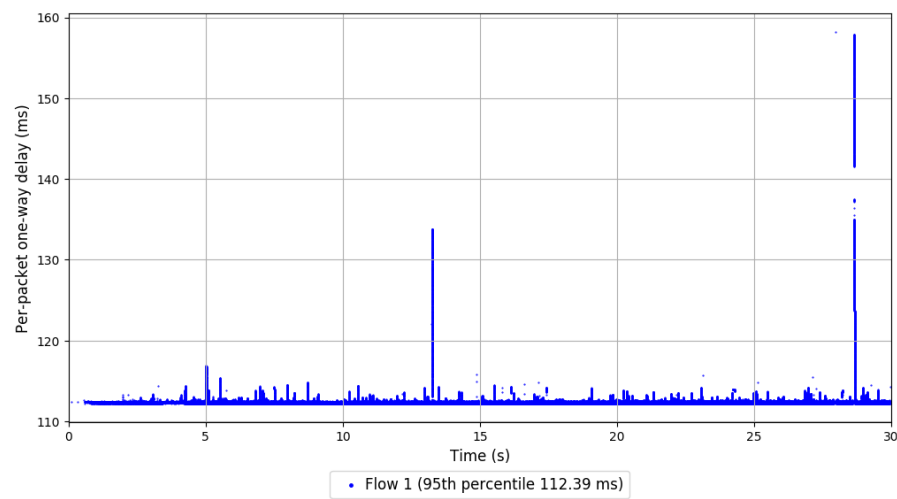
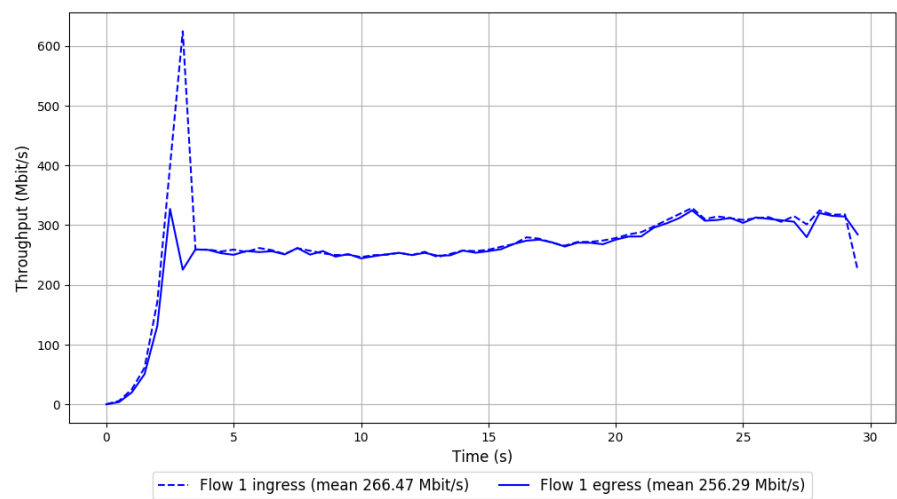
-- Flow 1:

Average throughput: 256.29 Mbit/s

95th percentile per-packet one-way delay: 112.388 ms

Loss rate: 3.82%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-16 20:47:42

End at: 2017-08-16 20:48:12

Below is generated by plot.py at 2017-08-16 23:21:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 504.52 Mbit/s

95th percentile per-packet one-way delay: 203.360 ms

Loss rate: 1.59%

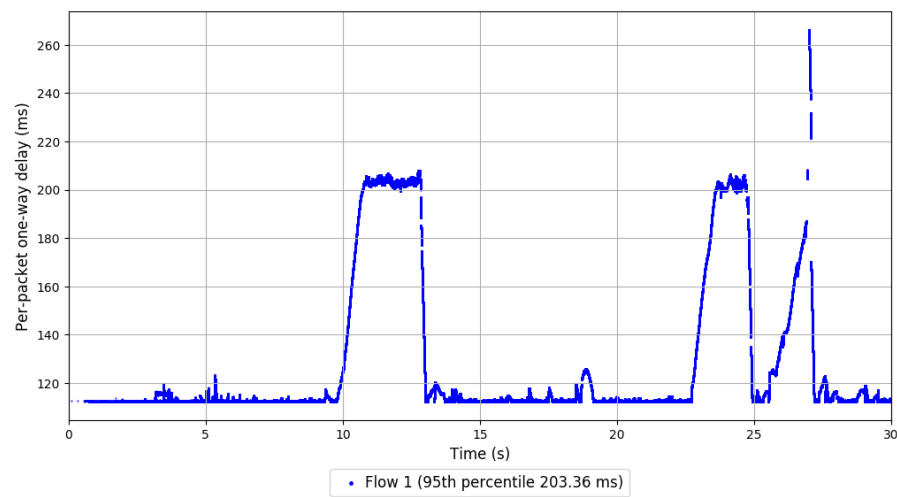
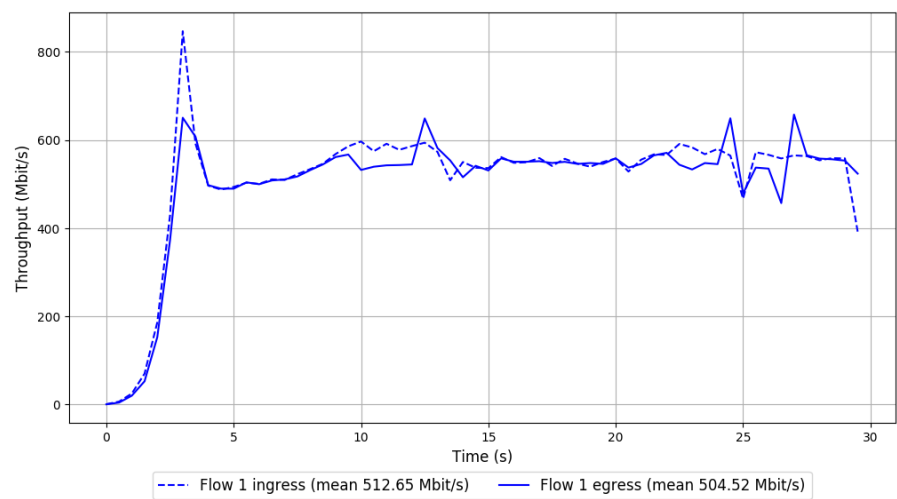
-- Flow 1:

Average throughput: 504.52 Mbit/s

95th percentile per-packet one-way delay: 203.360 ms

Loss rate: 1.59%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-16 20:59:14

End at: 2017-08-16 20:59:44

Below is generated by plot.py at 2017-08-16 23:21:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 372.81 Mbit/s

95th percentile per-packet one-way delay: 210.139 ms

Loss rate: 5.45%

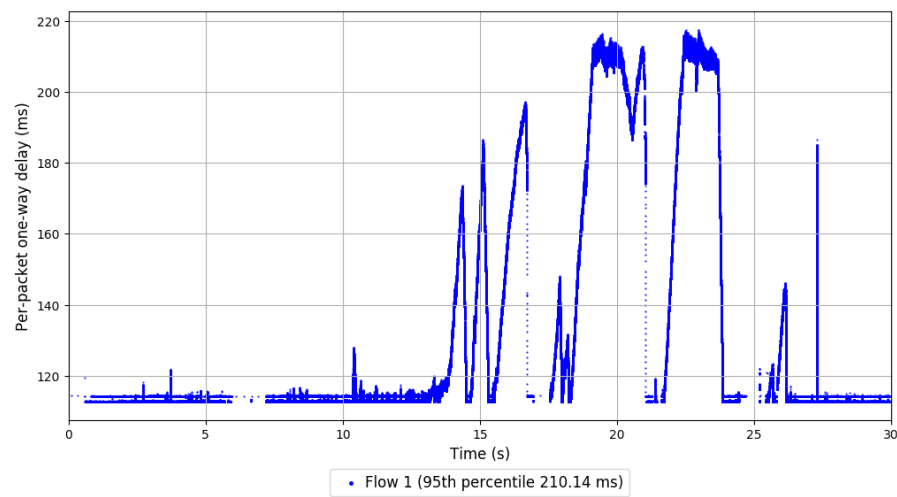
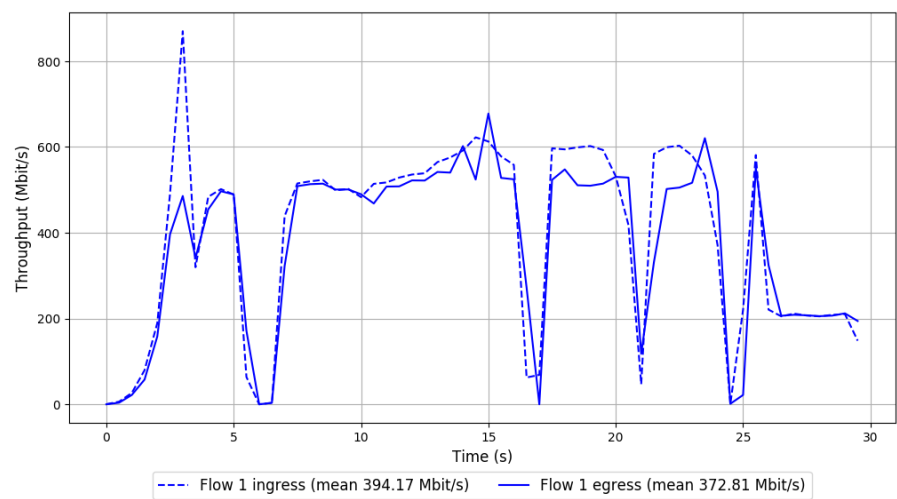
-- Flow 1:

Average throughput: 372.81 Mbit/s

95th percentile per-packet one-way delay: 210.139 ms

Loss rate: 5.45%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-16 21:10:39

End at: 2017-08-16 21:11:09

Below is generated by plot.py at 2017-08-16 23:22:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 486.10 Mbit/s

95th percentile per-packet one-way delay: 164.791 ms

Loss rate: 1.25%

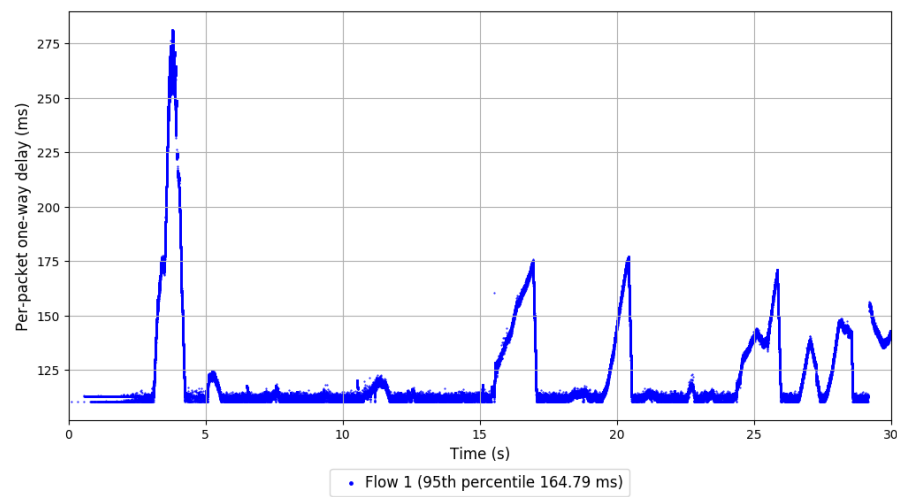
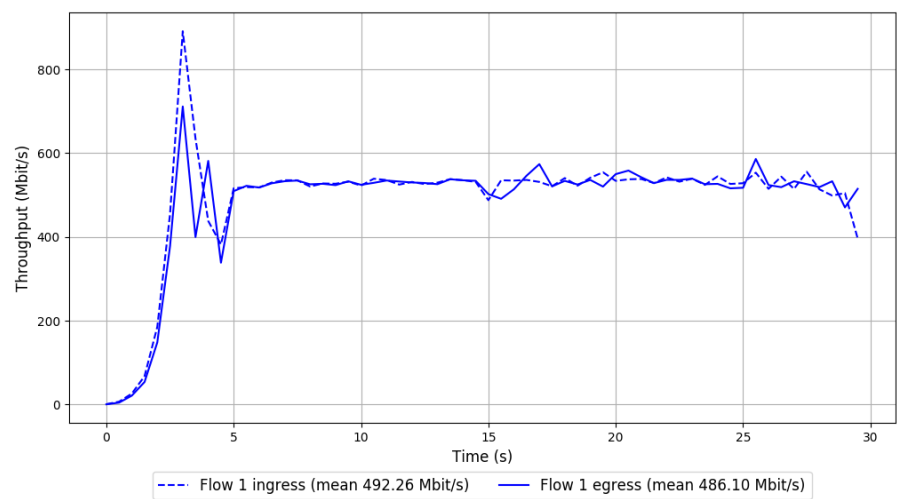
-- Flow 1:

Average throughput: 486.10 Mbit/s

95th percentile per-packet one-way delay: 164.791 ms

Loss rate: 1.25%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-16 21:22:30

End at: 2017-08-16 21:23:00

Below is generated by plot.py at 2017-08-16 23:23:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 467.62 Mbit/s

95th percentile per-packet one-way delay: 143.479 ms

Loss rate: 0.41%

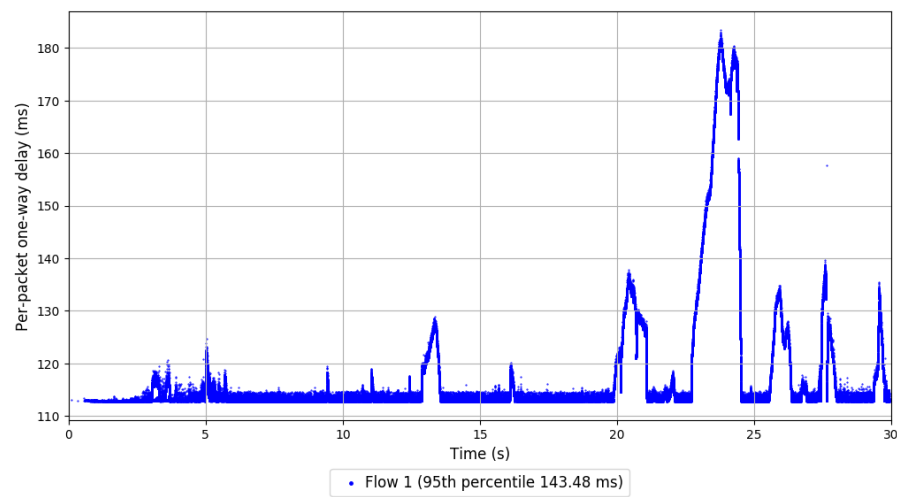
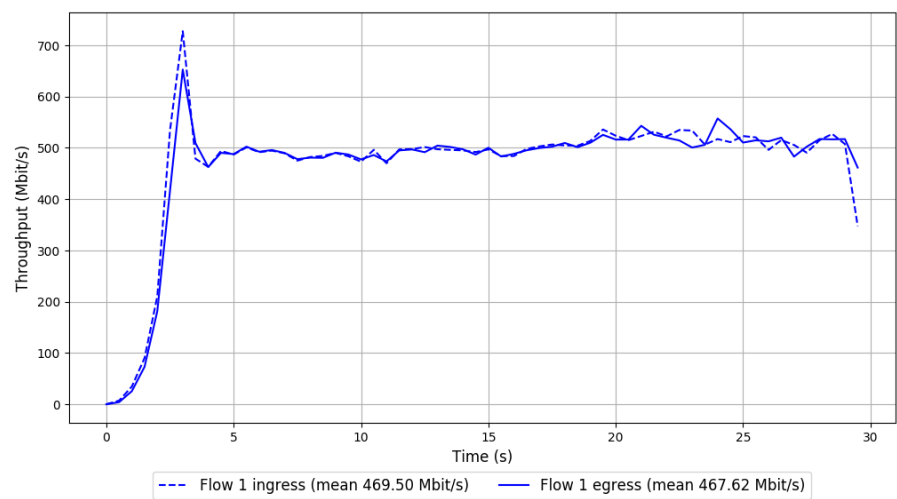
-- Flow 1:

Average throughput: 467.62 Mbit/s

95th percentile per-packet one-way delay: 143.479 ms

Loss rate: 0.41%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-16 21:34:19

End at: 2017-08-16 21:34:49

Below is generated by plot.py at 2017-08-16 23:24:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 483.21 Mbit/s

95th percentile per-packet one-way delay: 186.954 ms

Loss rate: 0.71%

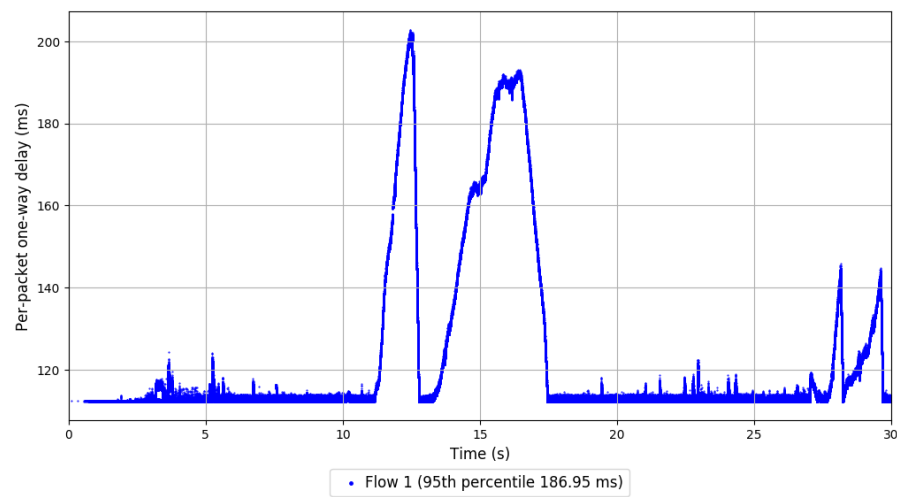
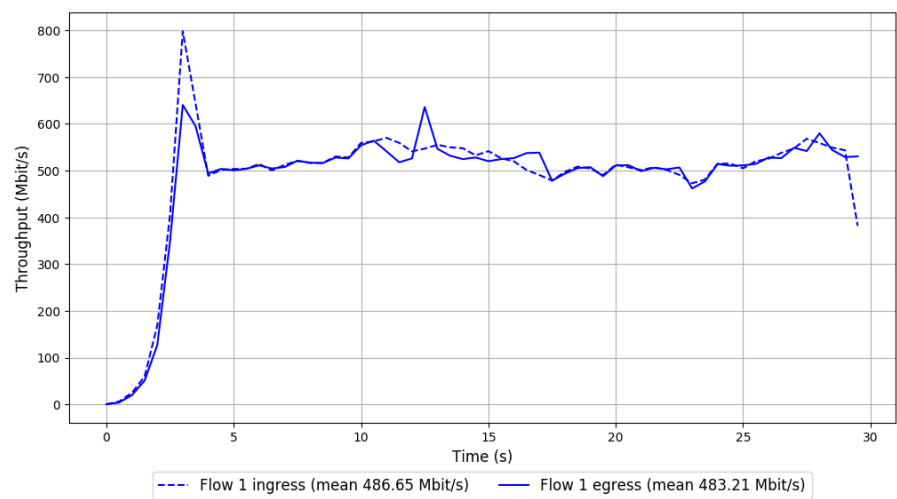
-- Flow 1:

Average throughput: 483.21 Mbit/s

95th percentile per-packet one-way delay: 186.954 ms

Loss rate: 0.71%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-16 21:46:02

End at: 2017-08-16 21:46:32

Below is generated by plot.py at 2017-08-16 23:24:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 489.49 Mbit/s

95th percentile per-packet one-way delay: 203.774 ms

Loss rate: 1.88%

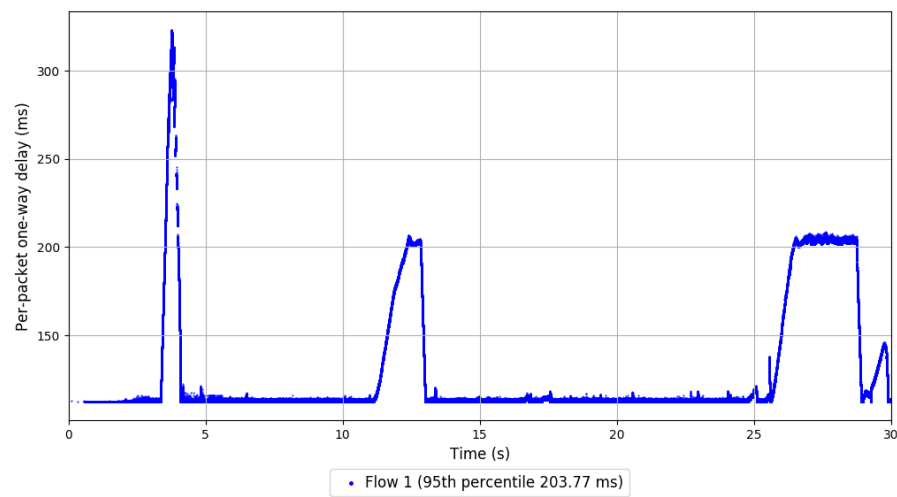
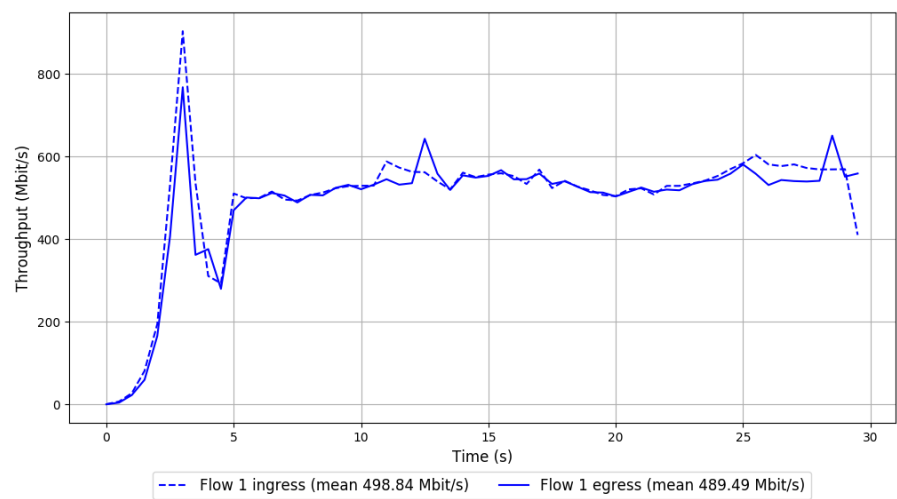
-- Flow 1:

Average throughput: 489.49 Mbit/s

95th percentile per-packet one-way delay: 203.774 ms

Loss rate: 1.88%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-16 21:57:40

End at: 2017-08-16 21:58:10

Below is generated by plot.py at 2017-08-16 23:26:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 495.80 Mbit/s

95th percentile per-packet one-way delay: 204.817 ms

Loss rate: 0.99%

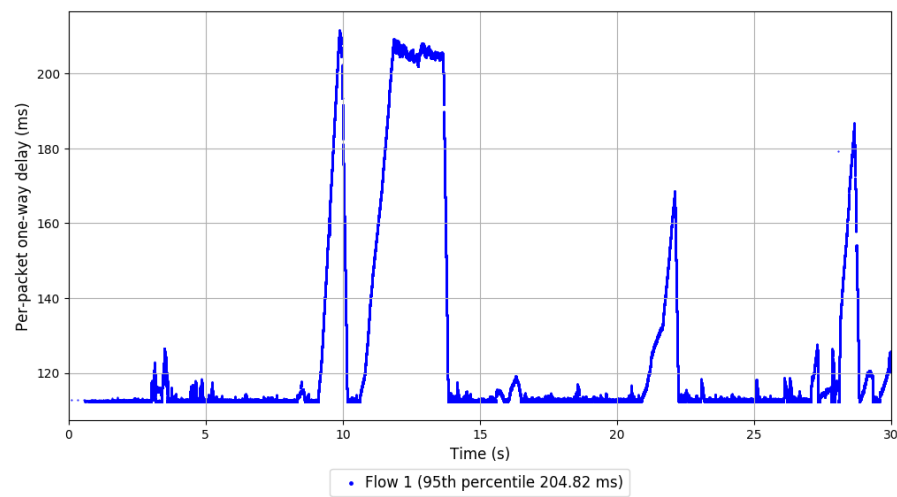
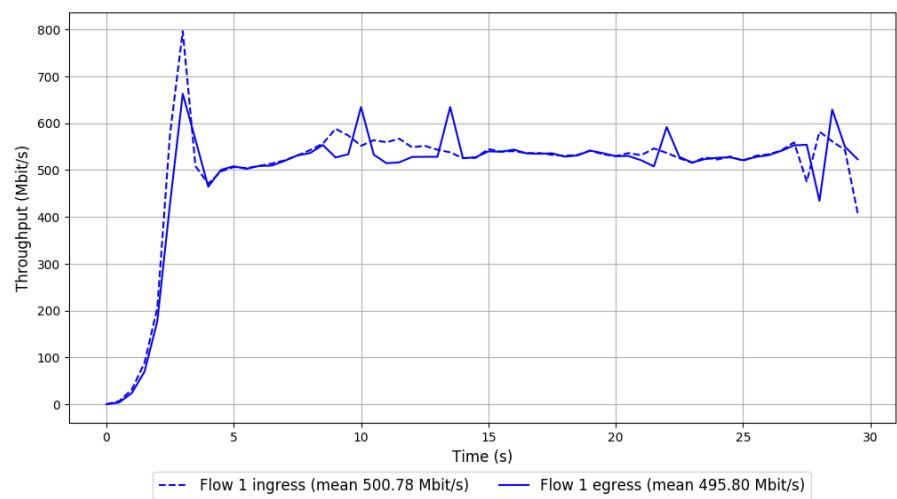
-- Flow 1:

Average throughput: 495.80 Mbit/s

95th percentile per-packet one-way delay: 204.817 ms

Loss rate: 0.99%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-16 22:09:13

End at: 2017-08-16 22:09:43

Below is generated by plot.py at 2017-08-16 23:26:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 388.45 Mbit/s

95th percentile per-packet one-way delay: 206.198 ms

Loss rate: 6.57%

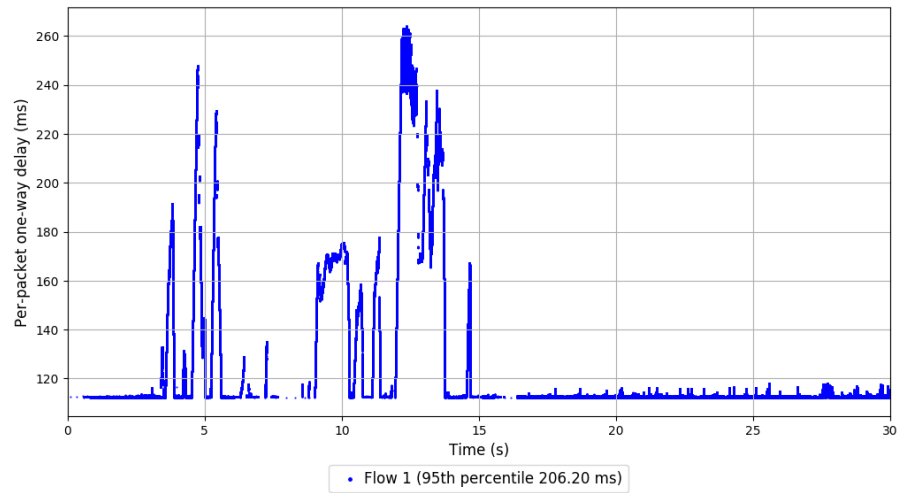
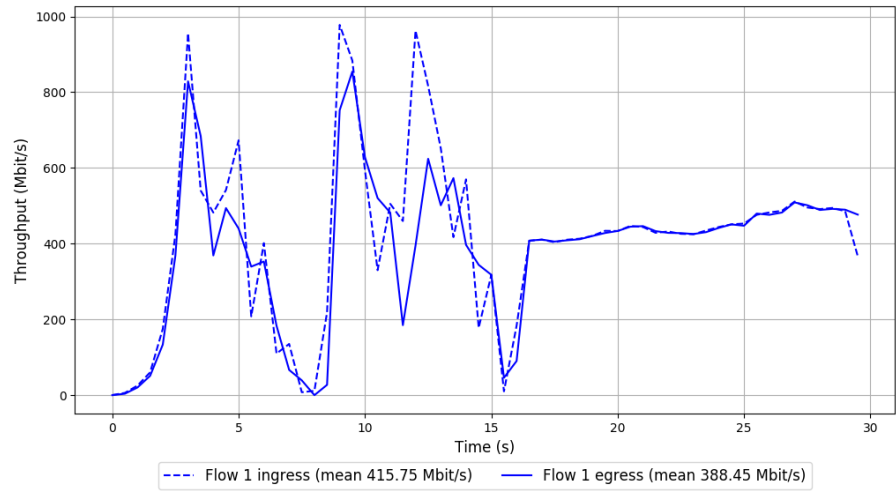
-- Flow 1:

Average throughput: 388.45 Mbit/s

95th percentile per-packet one-way delay: 206.198 ms

Loss rate: 6.57%

Run 10: Report of PCC — Data Link

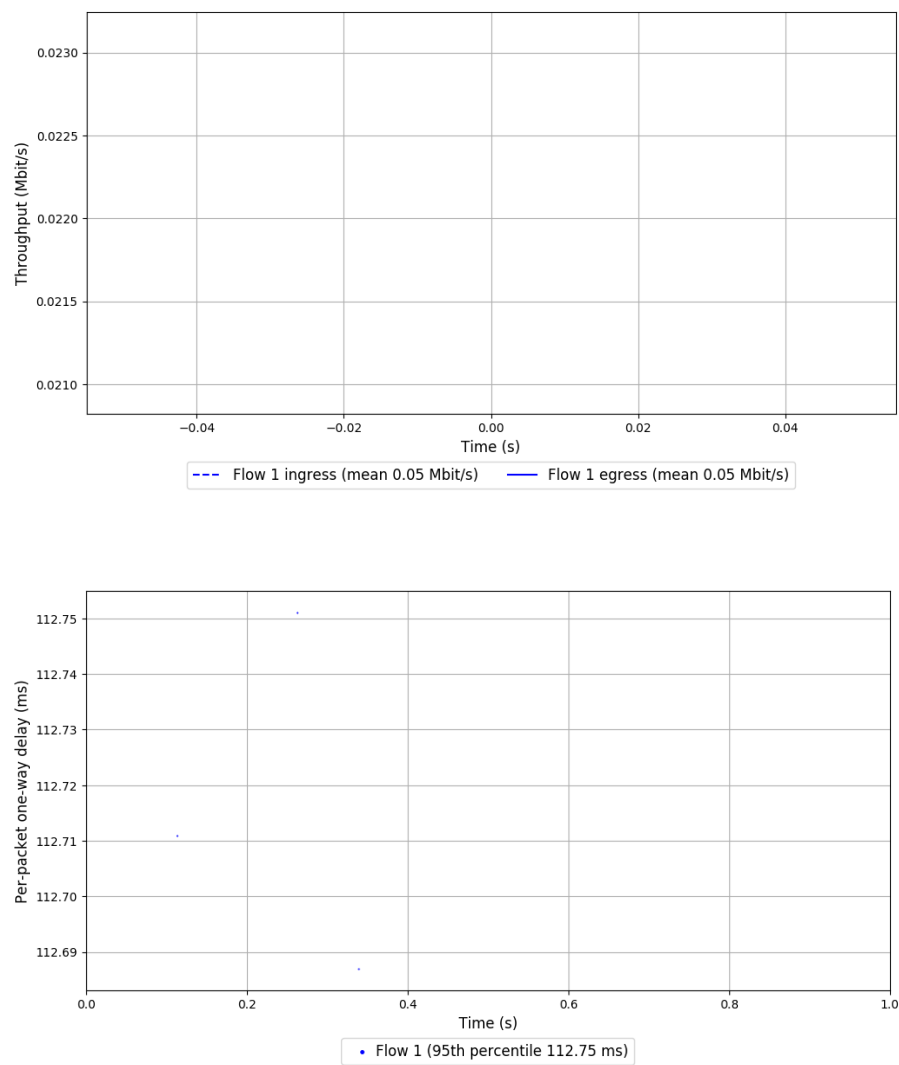


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-16 20:29:39

End at: 2017-08-16 20:30:09

Run 1: Report of QUIC Cubic — Data Link

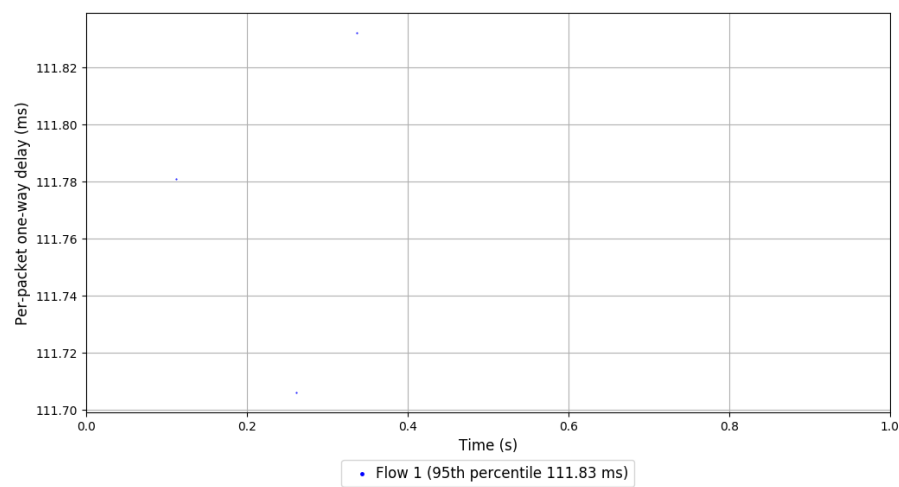
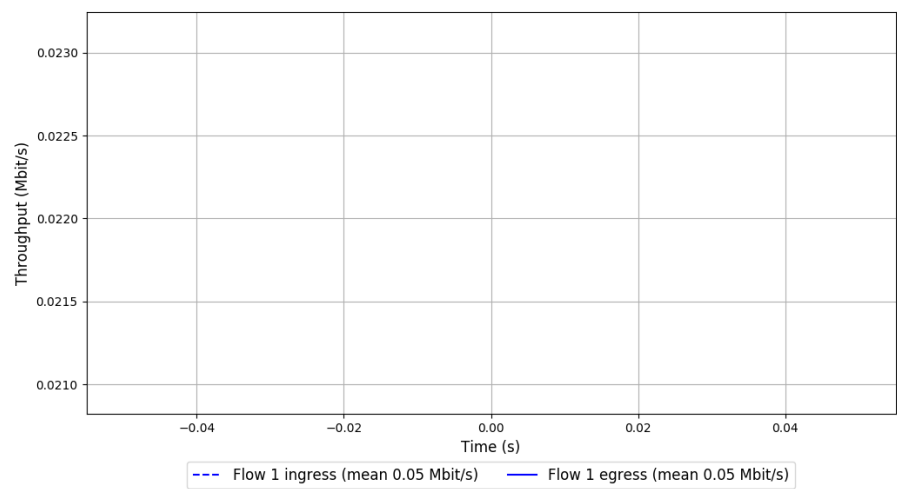


Run 2: Statistics of QUIC Cubic

Start at: 2017-08-16 20:40:38

End at: 2017-08-16 20:41:08

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-16 20:51:57

End at: 2017-08-16 20:52:27

Below is generated by plot.py at 2017-08-16 23:26:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.47 Mbit/s

95th percentile per-packet one-way delay: 112.320 ms

Loss rate: 0.00%

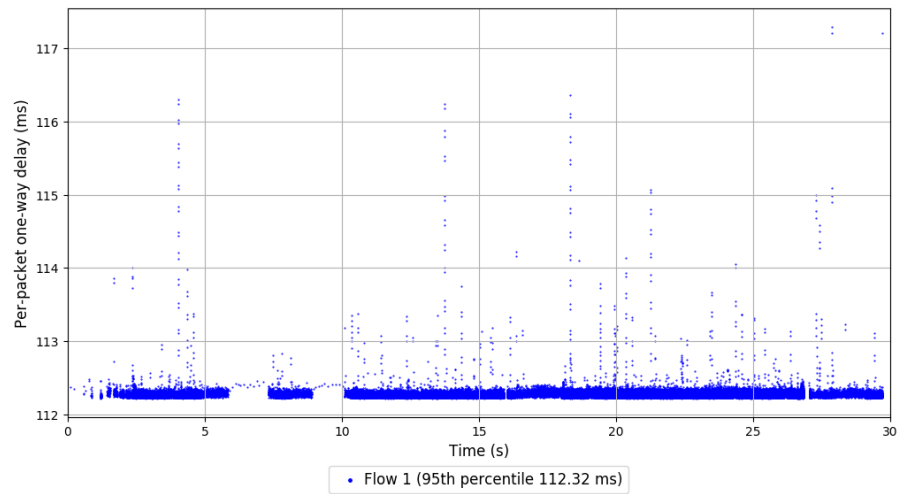
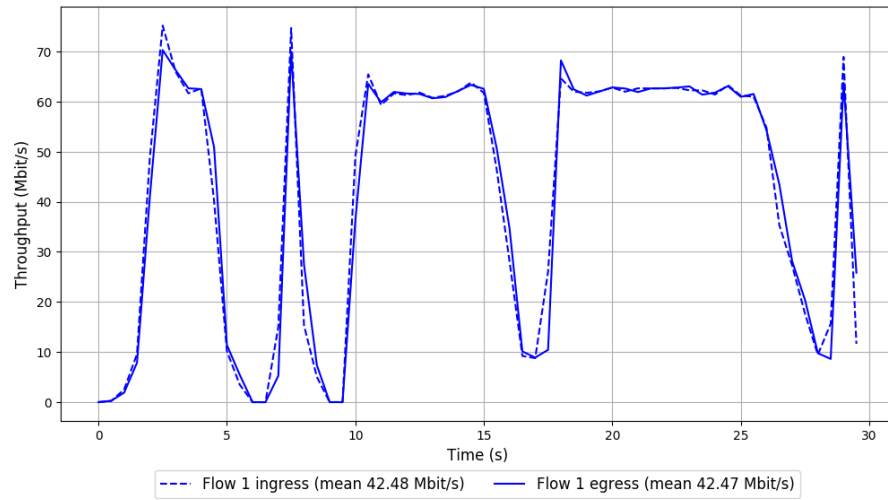
-- Flow 1:

Average throughput: 42.47 Mbit/s

95th percentile per-packet one-way delay: 112.320 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-16 21:03:25

End at: 2017-08-16 21:03:55

Below is generated by plot.py at 2017-08-16 23:26:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.77 Mbit/s

95th percentile per-packet one-way delay: 112.816 ms

Loss rate: 0.00%

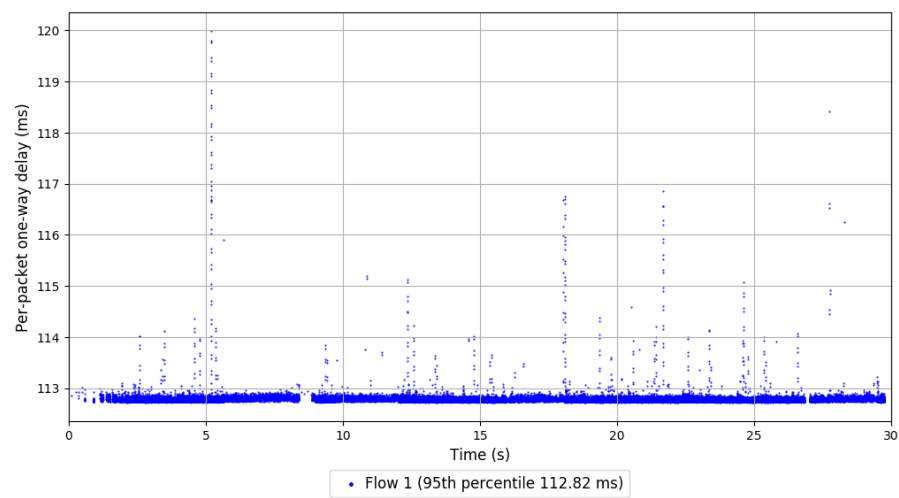
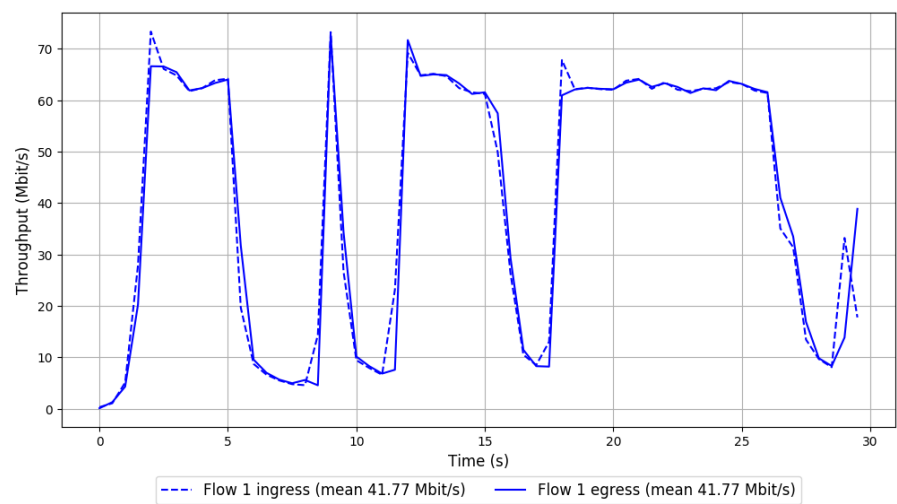
-- Flow 1:

Average throughput: 41.77 Mbit/s

95th percentile per-packet one-way delay: 112.816 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-16 21:15:10

End at: 2017-08-16 21:15:40

Below is generated by plot.py at 2017-08-16 23:26:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.51 Mbit/s

95th percentile per-packet one-way delay: 110.440 ms

Loss rate: 0.00%

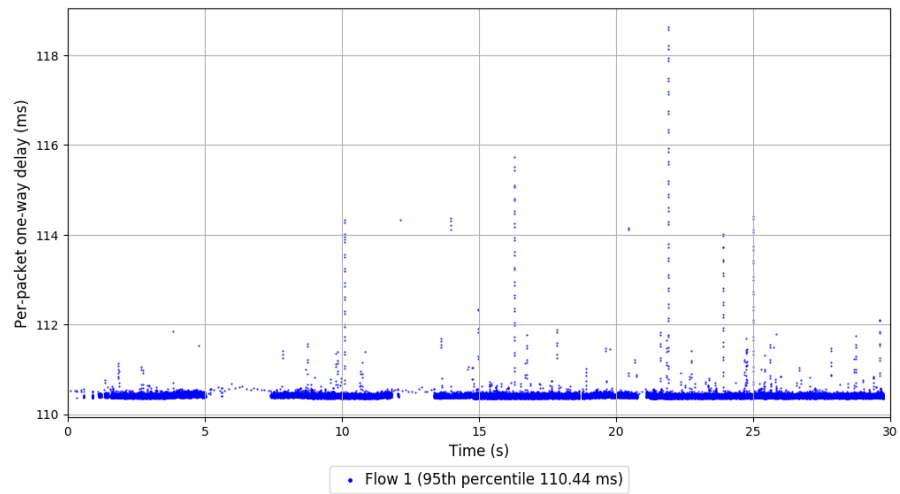
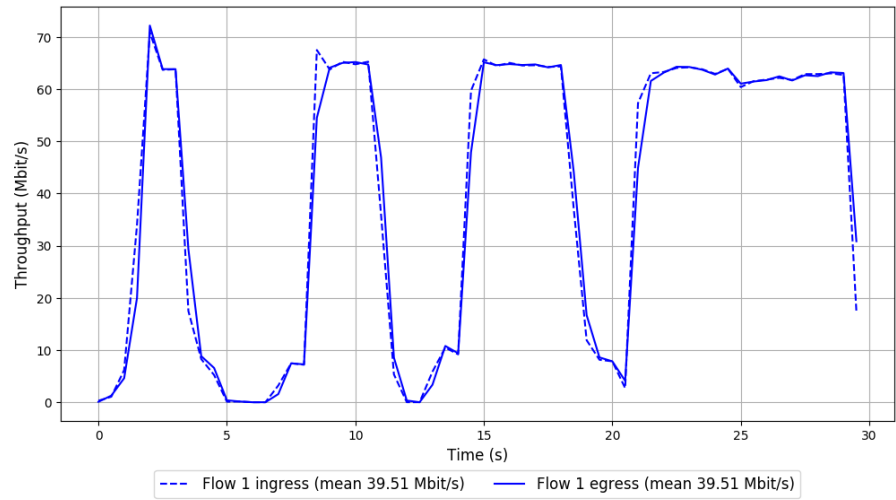
-- Flow 1:

Average throughput: 39.51 Mbit/s

95th percentile per-packet one-way delay: 110.440 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-16 21:26:54

End at: 2017-08-16 21:27:24

Below is generated by plot.py at 2017-08-16 23:26:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.92 Mbit/s

95th percentile per-packet one-way delay: 112.765 ms

Loss rate: 0.00%

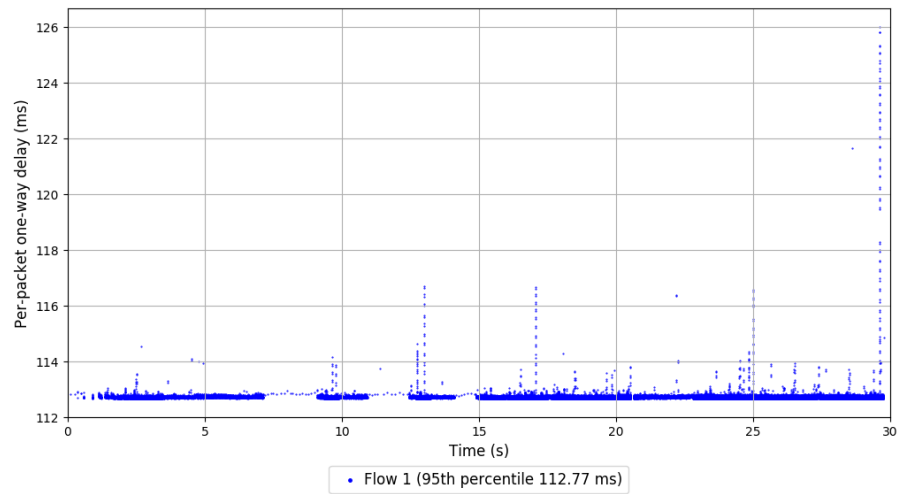
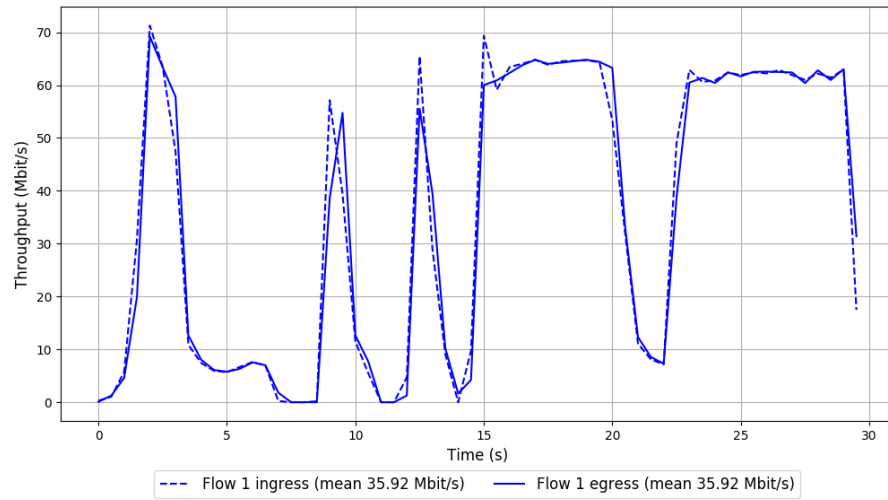
-- Flow 1:

Average throughput: 35.92 Mbit/s

95th percentile per-packet one-way delay: 112.765 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-16 21:38:44

End at: 2017-08-16 21:39:14

Below is generated by plot.py at 2017-08-16 23:26:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.83 Mbit/s

95th percentile per-packet one-way delay: 112.623 ms

Loss rate: 0.00%

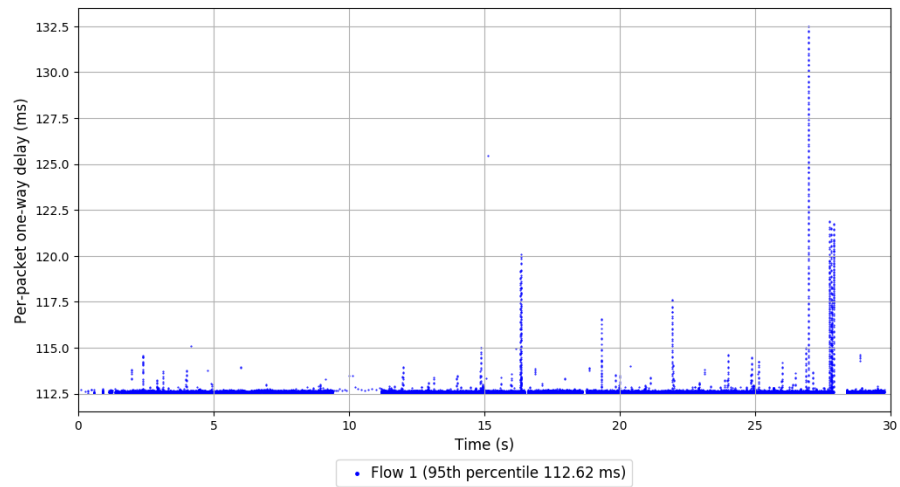
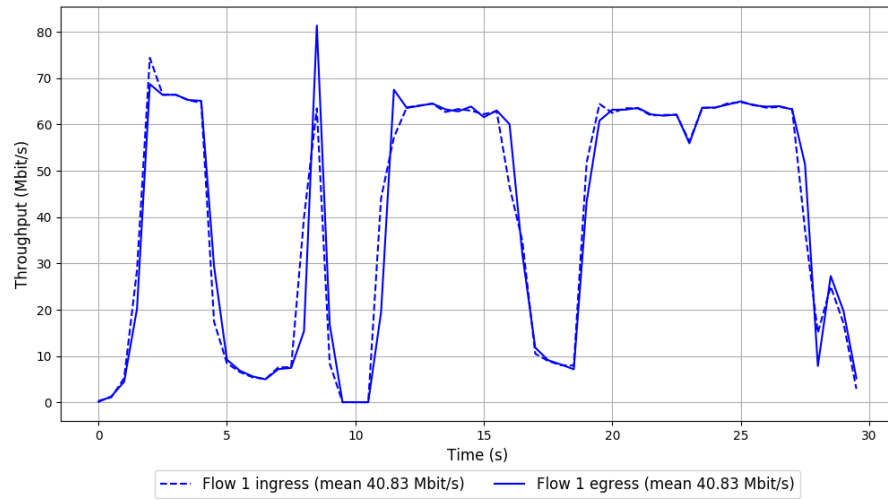
-- Flow 1:

Average throughput: 40.83 Mbit/s

95th percentile per-packet one-way delay: 112.623 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-16 21:50:17

End at: 2017-08-16 21:50:47

Below is generated by plot.py at 2017-08-16 23:26:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.31 Mbit/s

95th percentile per-packet one-way delay: 114.327 ms

Loss rate: 0.00%

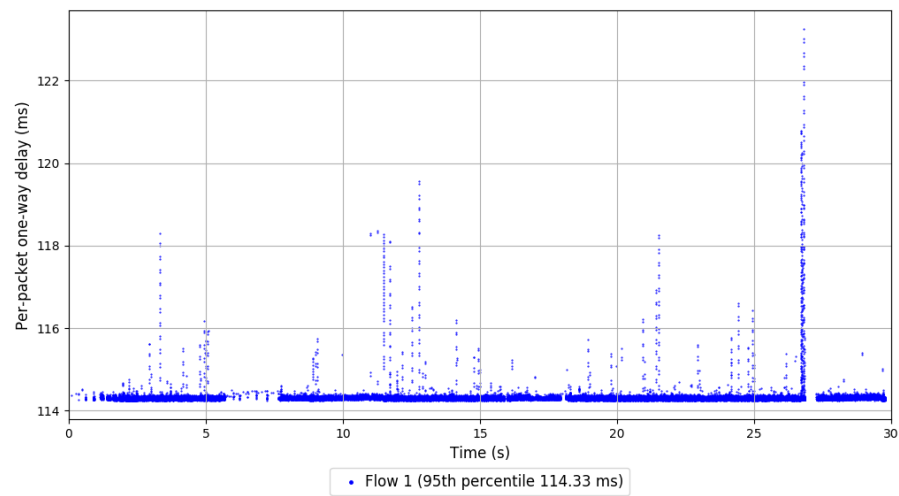
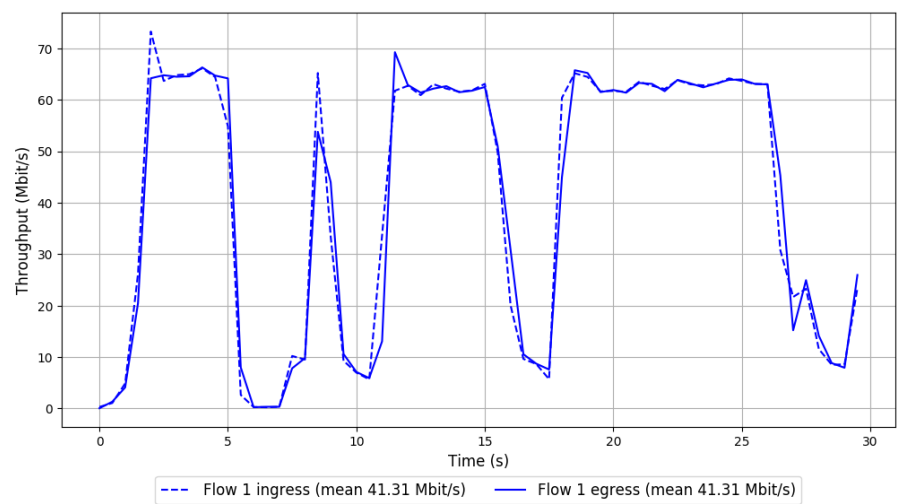
-- Flow 1:

Average throughput: 41.31 Mbit/s

95th percentile per-packet one-way delay: 114.327 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-16 22:01:54

End at: 2017-08-16 22:02:24

Below is generated by plot.py at 2017-08-16 23:26:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.68 Mbit/s

95th percentile per-packet one-way delay: 110.073 ms

Loss rate: 0.00%

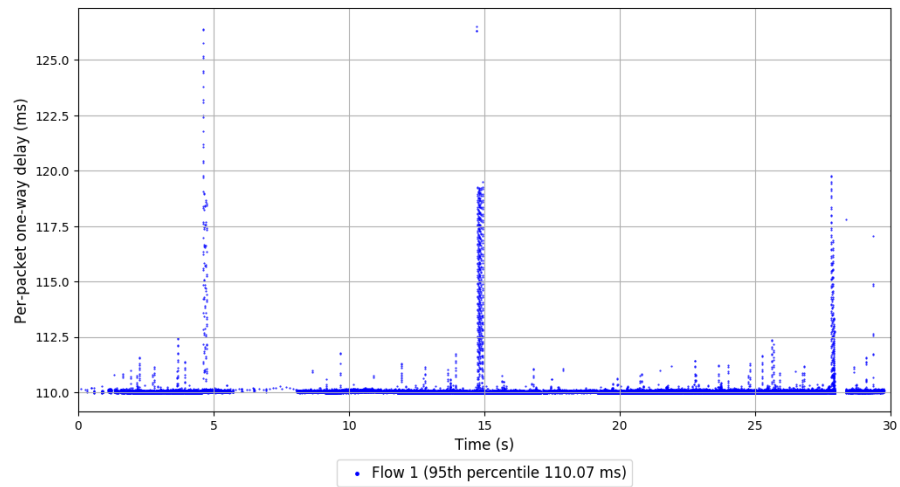
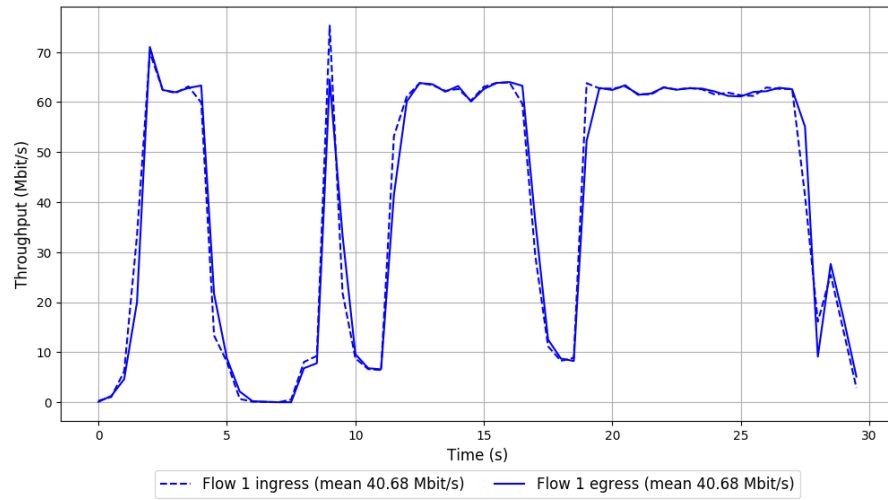
-- Flow 1:

Average throughput: 40.68 Mbit/s

95th percentile per-packet one-way delay: 110.073 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-08-16 22:13:35

End at: 2017-08-16 22:14:05

Below is generated by plot.py at 2017-08-16 23:26:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.87 Mbit/s

95th percentile per-packet one-way delay: 112.322 ms

Loss rate: 0.00%

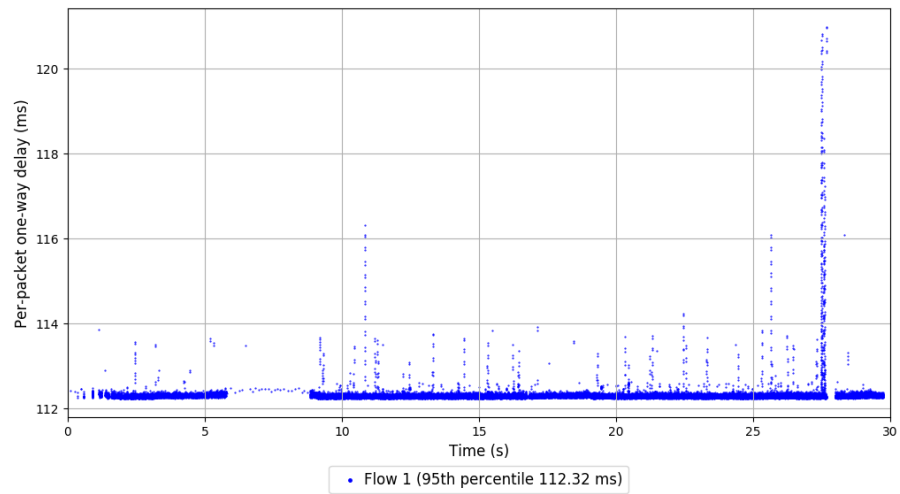
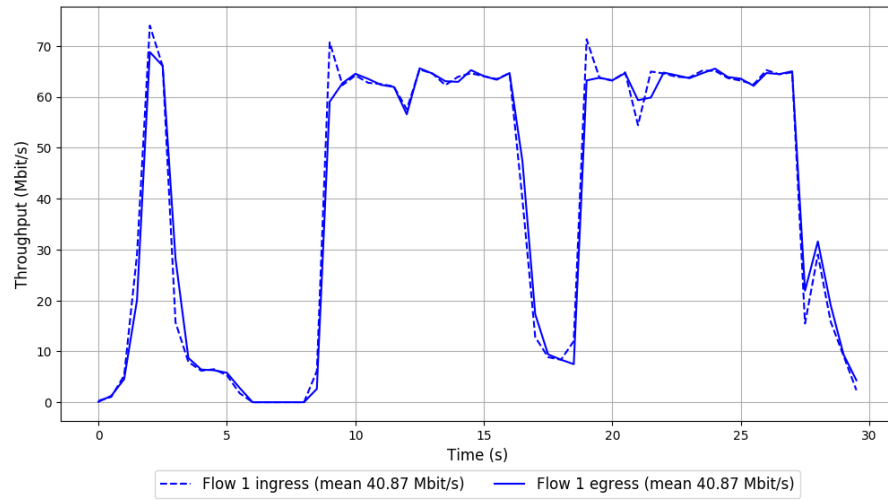
-- Flow 1:

Average throughput: 40.87 Mbit/s

95th percentile per-packet one-way delay: 112.322 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

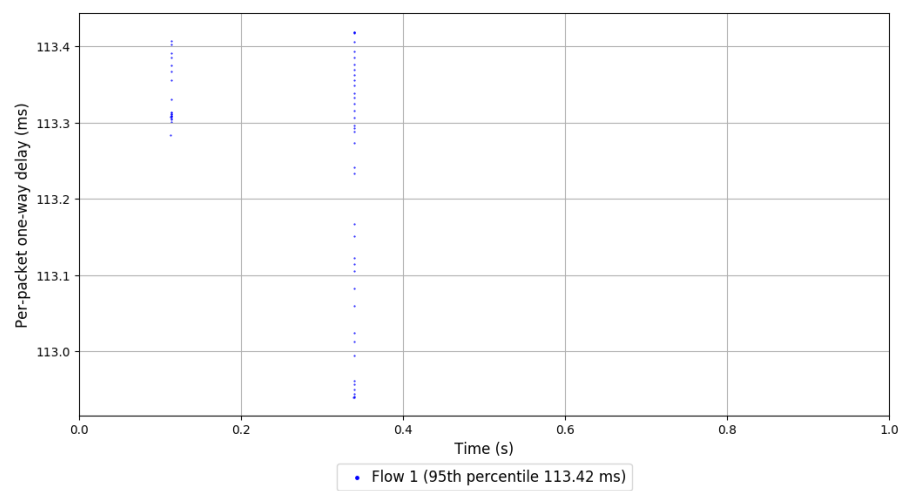
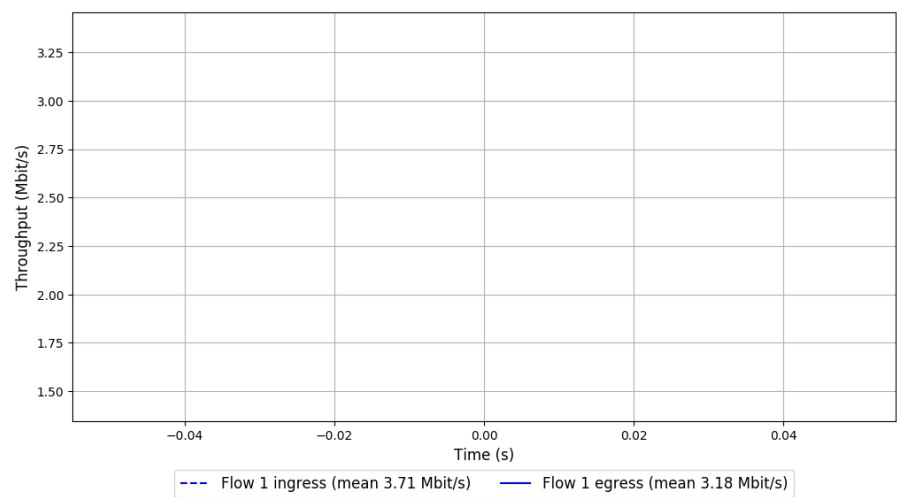


Run 1: Statistics of Saturator

Start at: 2017-08-16 20:31:49

End at: 2017-08-16 20:32:19

Run 1: Report of Saturator — Data Link

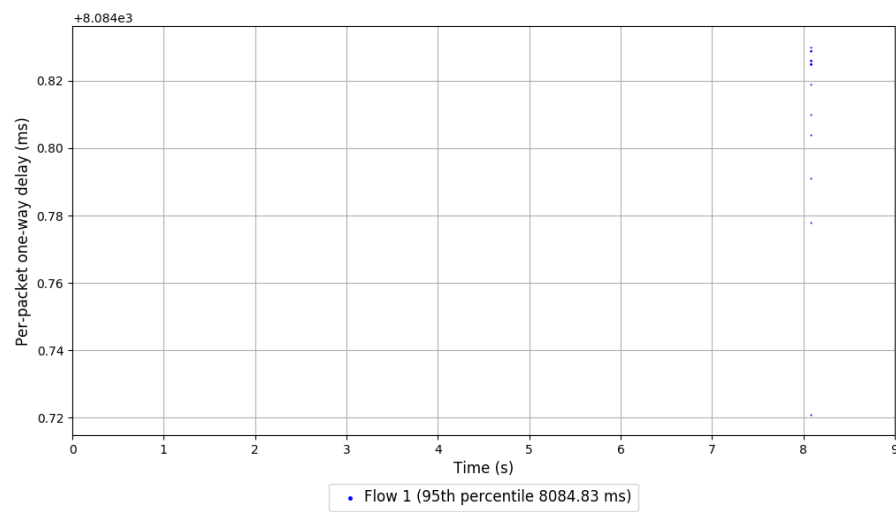
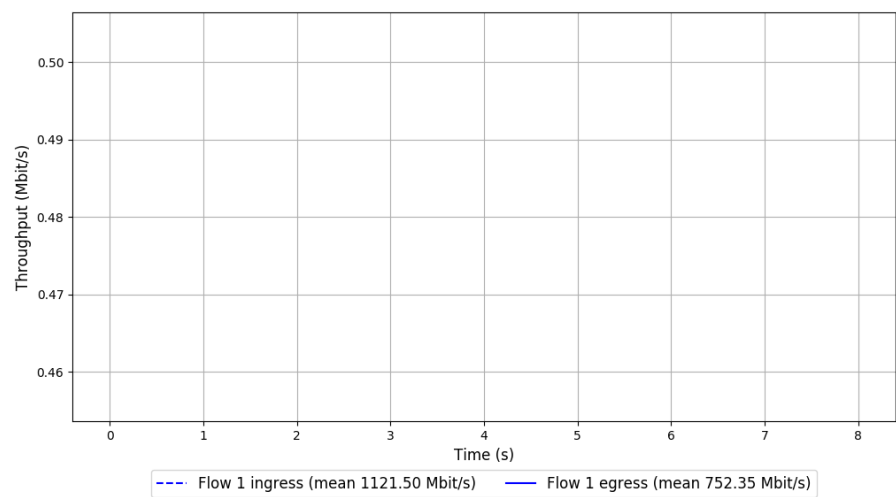


Run 2: Statistics of Saturator

Start at: 2017-08-16 20:42:44

End at: 2017-08-16 20:43:14

Run 2: Report of Saturator — Data Link



Run 3: Statistics of Saturator

Start at: 2017-08-16 20:54:11

End at: 2017-08-16 20:54:41

Below is generated by plot.py at 2017-08-16 23:26:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 113.053 ms

Loss rate: 43.99%

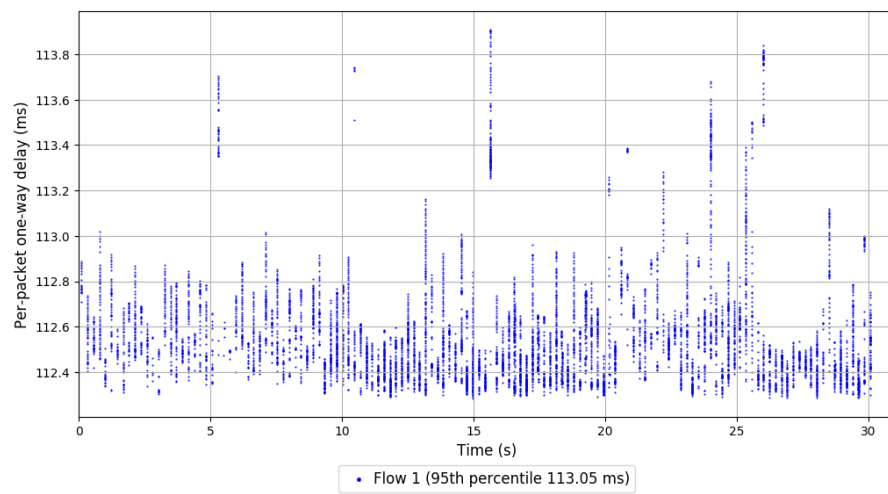
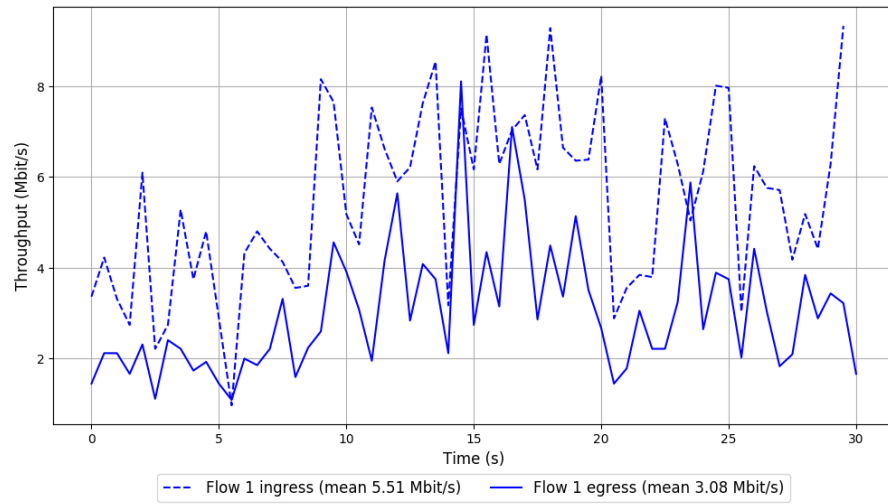
-- Flow 1:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 113.053 ms

Loss rate: 43.99%

Run 3: Report of Saturator — Data Link



Run 4: Statistics of Saturator

Start at: 2017-08-16 21:05:38

End at: 2017-08-16 21:06:08

Below is generated by plot.py at 2017-08-16 23:26:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.47 Mbit/s

95th percentile per-packet one-way delay: 113.732 ms

Loss rate: 0.82%

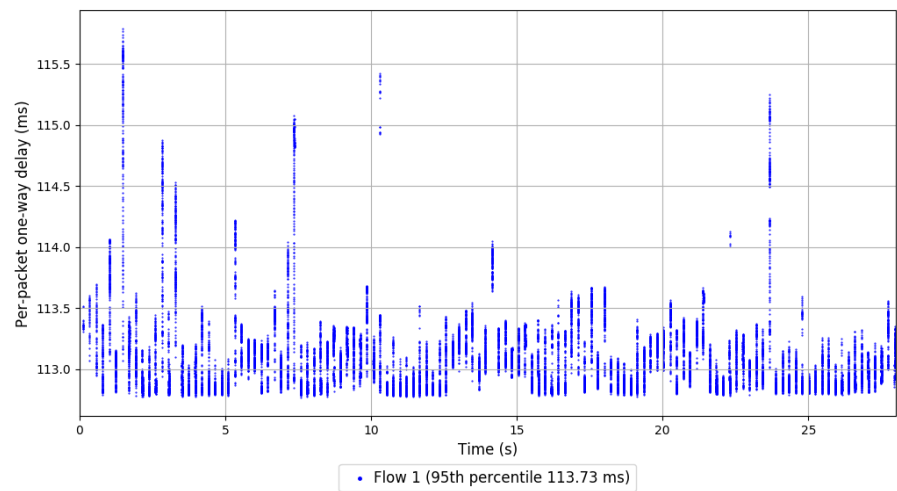
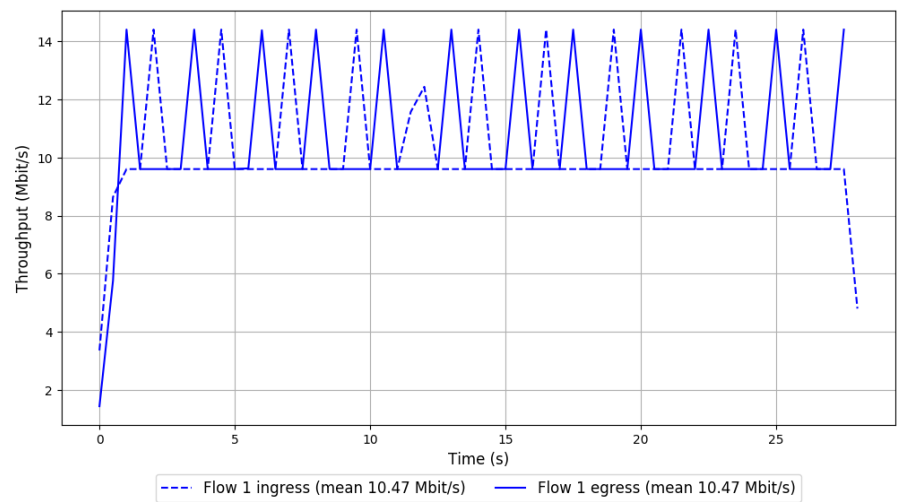
-- Flow 1:

Average throughput: 10.47 Mbit/s

95th percentile per-packet one-way delay: 113.732 ms

Loss rate: 0.82%

Run 4: Report of Saturator — Data Link



Run 5: Statistics of Saturator

Start at: 2017-08-16 21:17:26

End at: 2017-08-16 21:17:56

Below is generated by plot.py at 2017-08-16 23:27:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.38 Mbit/s

95th percentile per-packet one-way delay: 113.500 ms

Loss rate: 0.00%

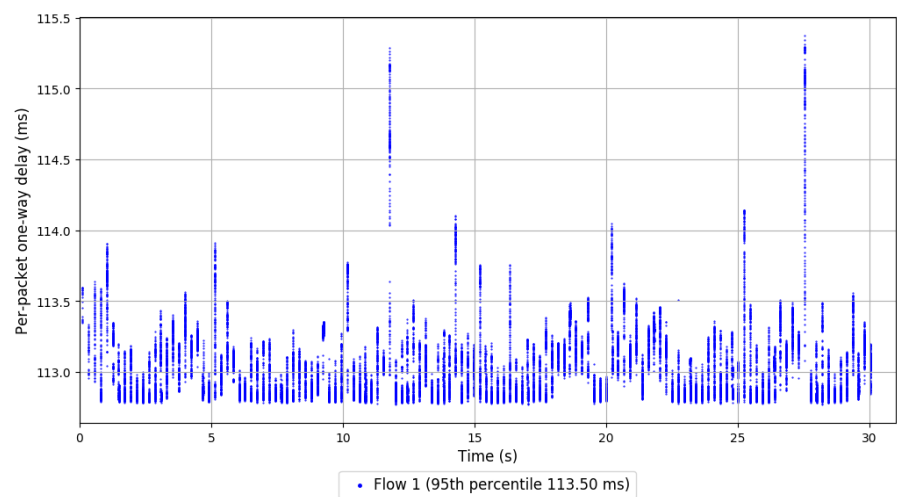
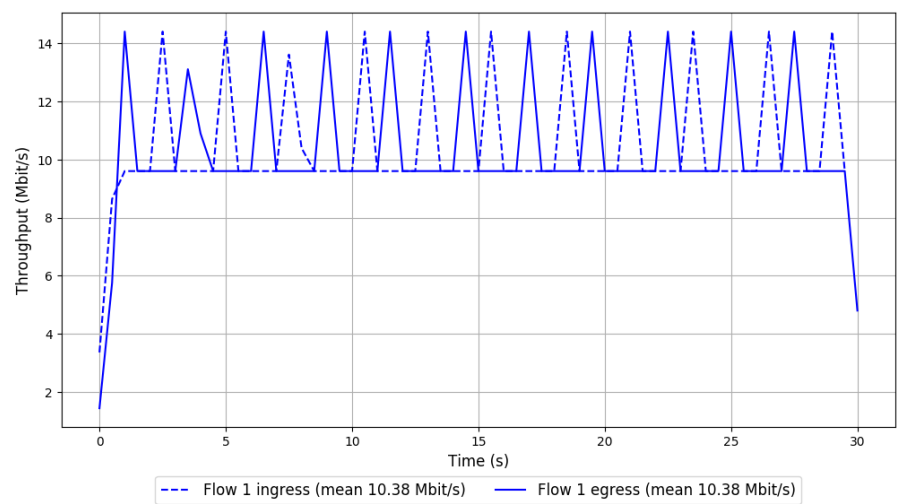
-- Flow 1:

Average throughput: 10.38 Mbit/s

95th percentile per-packet one-way delay: 113.500 ms

Loss rate: 0.00%

Run 5: Report of Saturator — Data Link

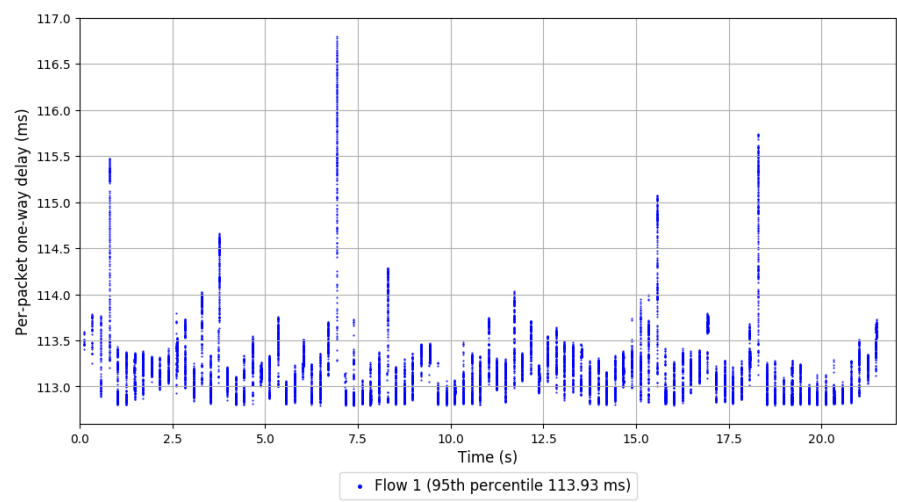
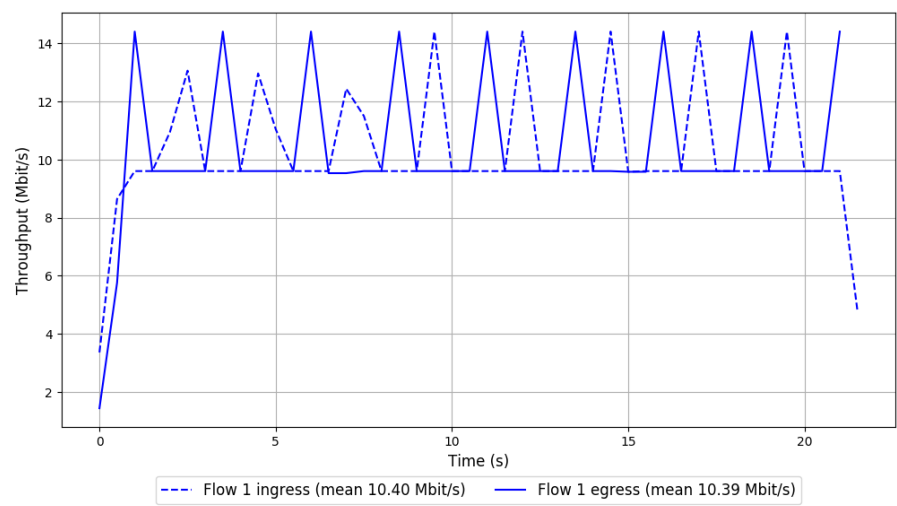


Run 6: Statistics of Saturator

Start at: 2017-08-16 21:29:12

End at: 2017-08-16 21:29:42

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: 2017-08-16 21:40:57

End at: 2017-08-16 21:41:27

Below is generated by plot.py at 2017-08-16 23:27:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.62 Mbit/s

95th percentile per-packet one-way delay: 113.068 ms

Loss rate: 0.00%

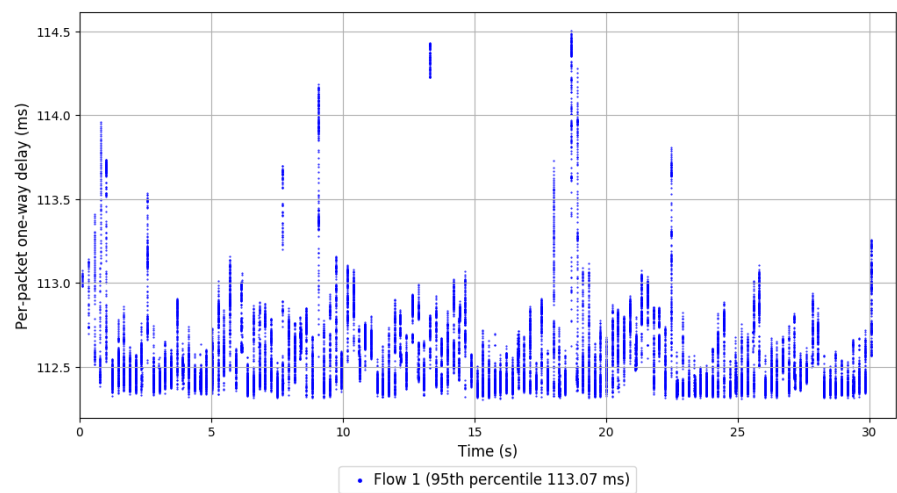
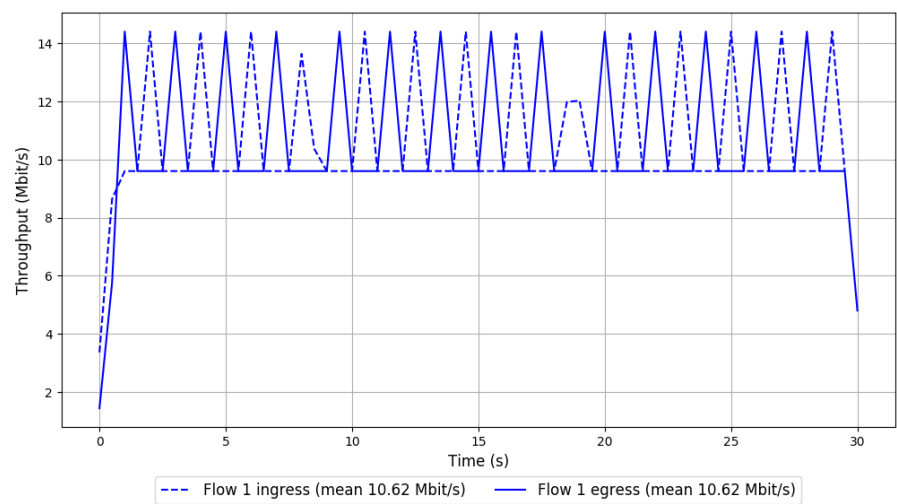
-- Flow 1:

Average throughput: 10.62 Mbit/s

95th percentile per-packet one-way delay: 113.068 ms

Loss rate: 0.00%

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-16 21:52:34

End at: 2017-08-16 21:53:04

Below is generated by plot.py at 2017-08-16 23:27:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.67 Mbit/s

95th percentile per-packet one-way delay: 113.343 ms

Loss rate: 0.00%

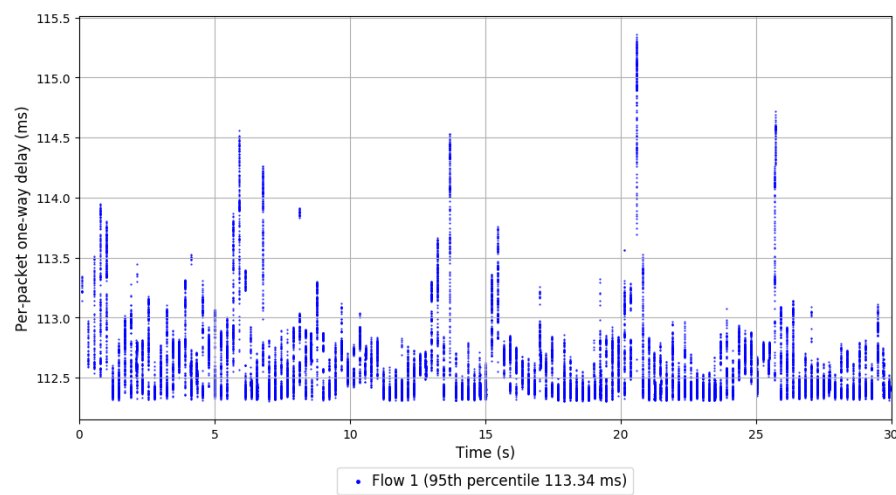
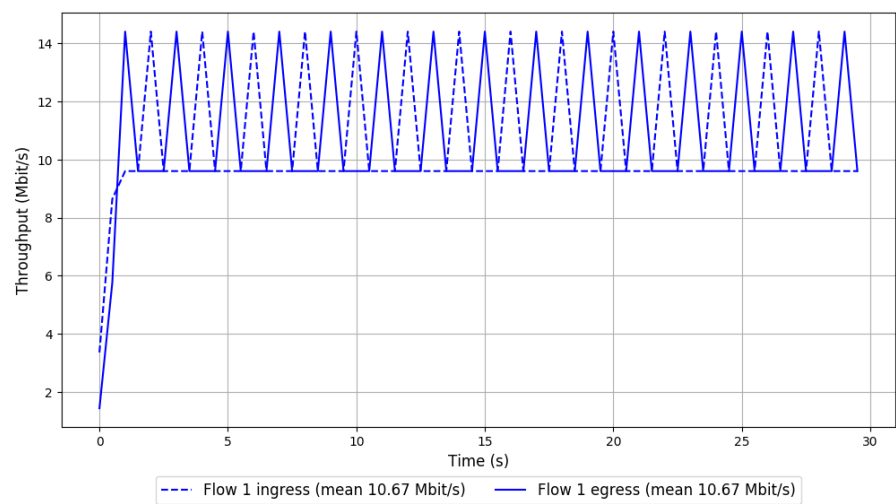
-- Flow 1:

Average throughput: 10.67 Mbit/s

95th percentile per-packet one-way delay: 113.343 ms

Loss rate: 0.00%

Run 8: Report of Saturator — Data Link

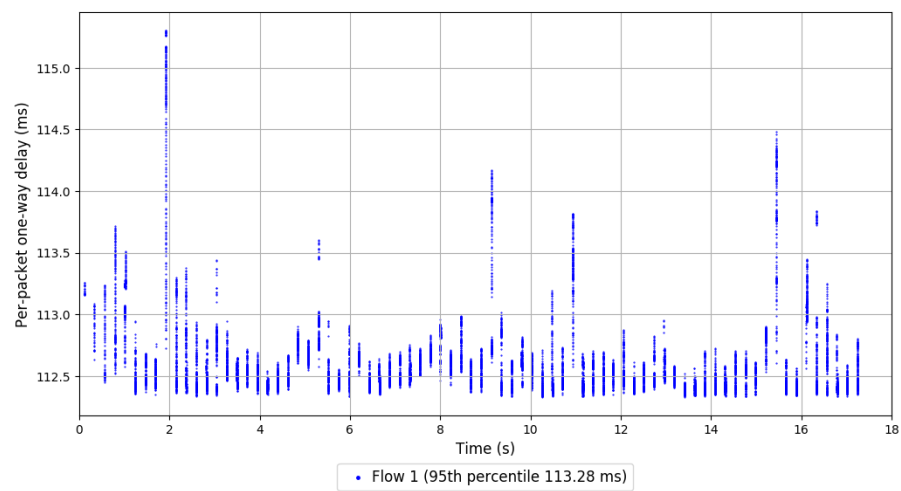
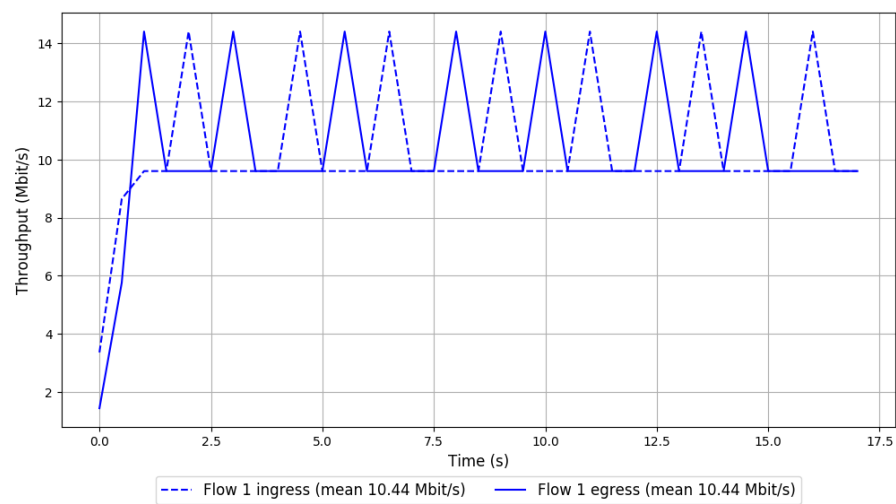


Run 9: Statistics of Saturator

Start at: 2017-08-16 22:04:09

End at: 2017-08-16 22:04:40

Run 9: Report of Saturator — Data Link



Run 10: Statistics of Saturator

Start at: 2017-08-16 22:15:47

End at: 2017-08-16 22:16:17

Below is generated by plot.py at 2017-08-16 23:27:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.45 Mbit/s

95th percentile per-packet one-way delay: 113.307 ms

Loss rate: 0.00%

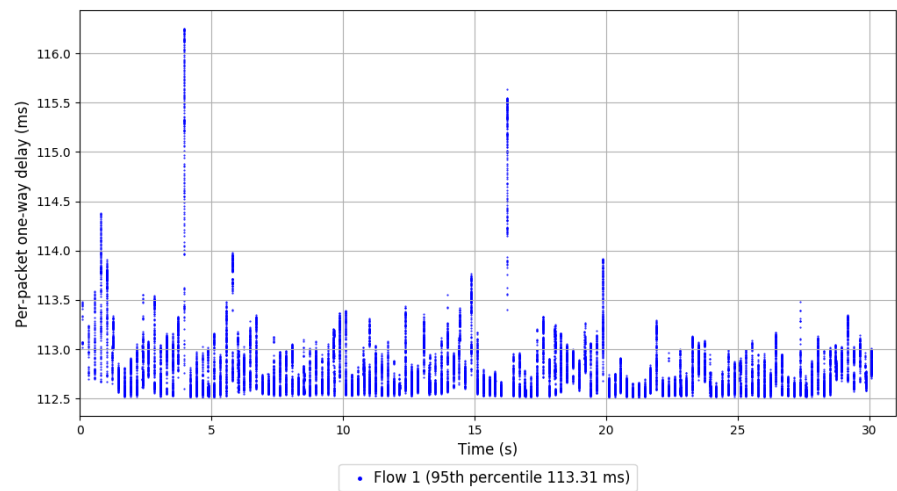
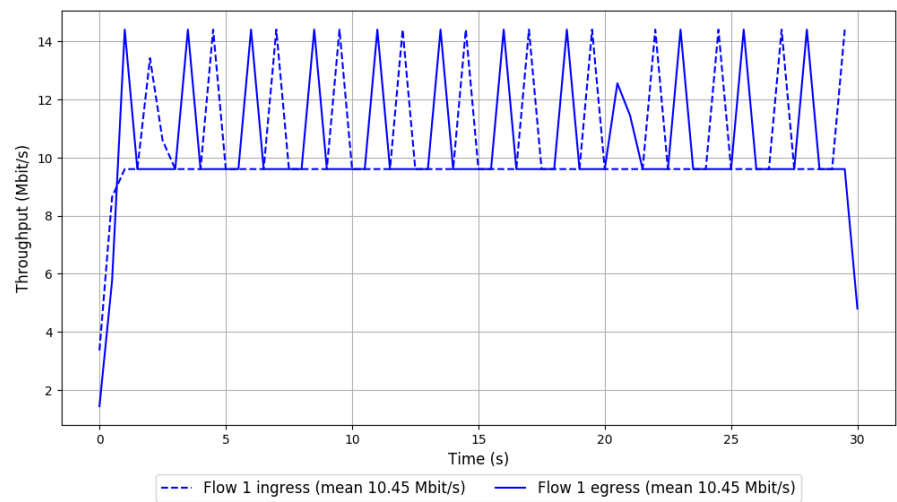
-- Flow 1:

Average throughput: 10.45 Mbit/s

95th percentile per-packet one-way delay: 113.307 ms

Loss rate: 0.00%

Run 10: Report of Saturator — Data Link

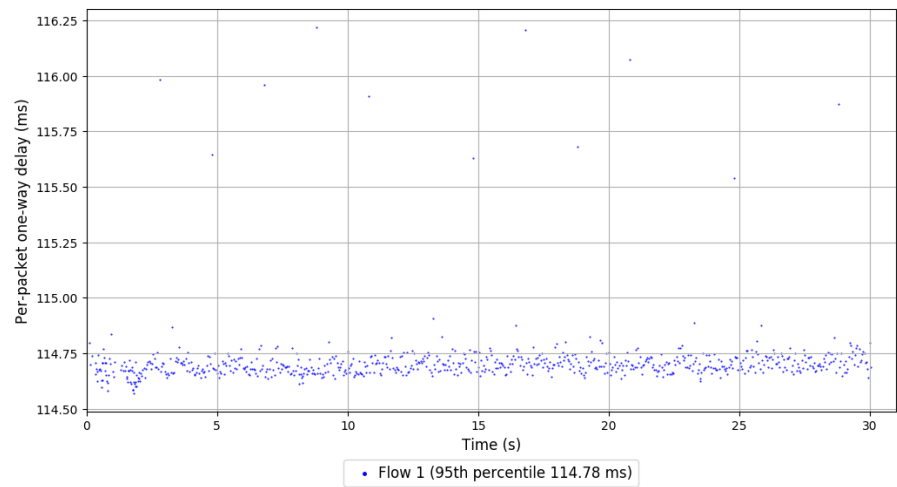
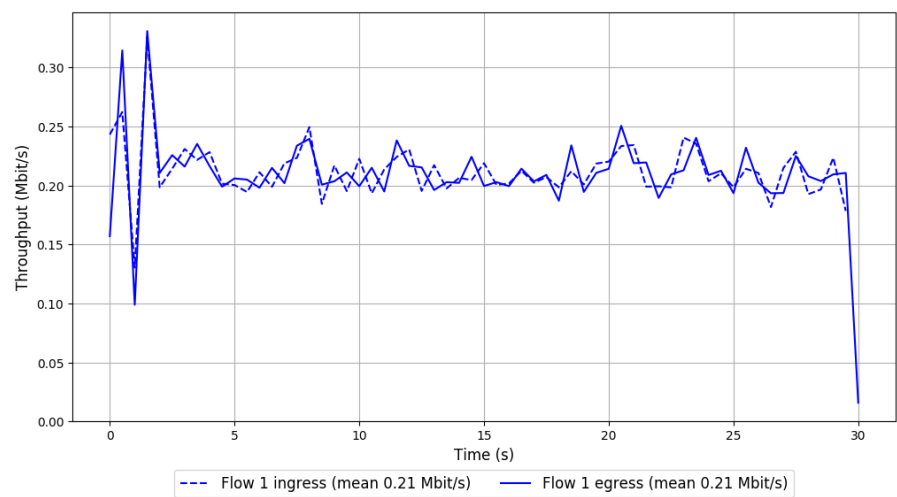


```
Run 1: Statistics of SCReAM

Start at: 2017-08-16 20:24:43
End at: 2017-08-16 20:25:13

# Below is generated by plot.py at 2017-08-16 23:27:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.776 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.776 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

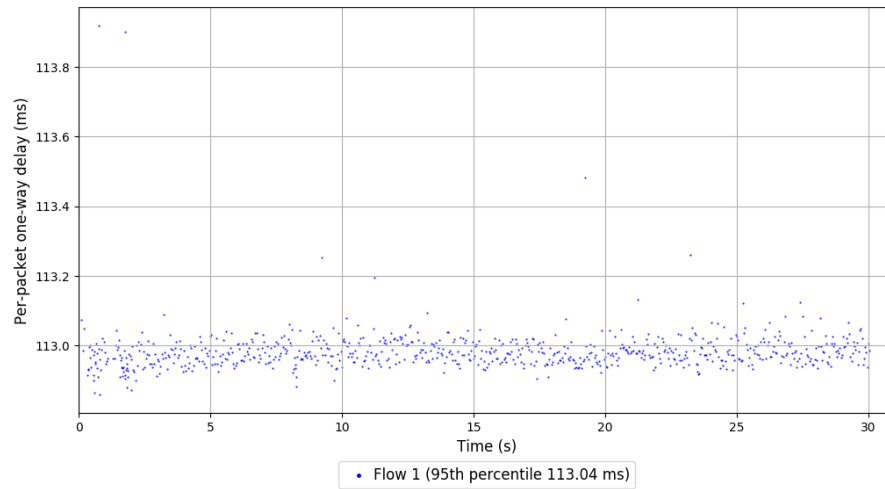
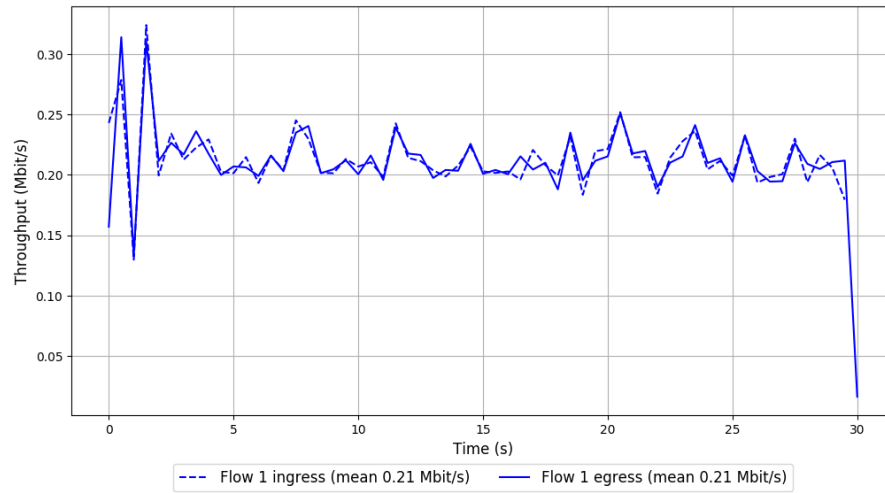


```
Run 2: Statistics of SCReAM

Start at: 2017-08-16 20:36:13
End at: 2017-08-16 20:36:43

# Below is generated by plot.py at 2017-08-16 23:27:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.043 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.043 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

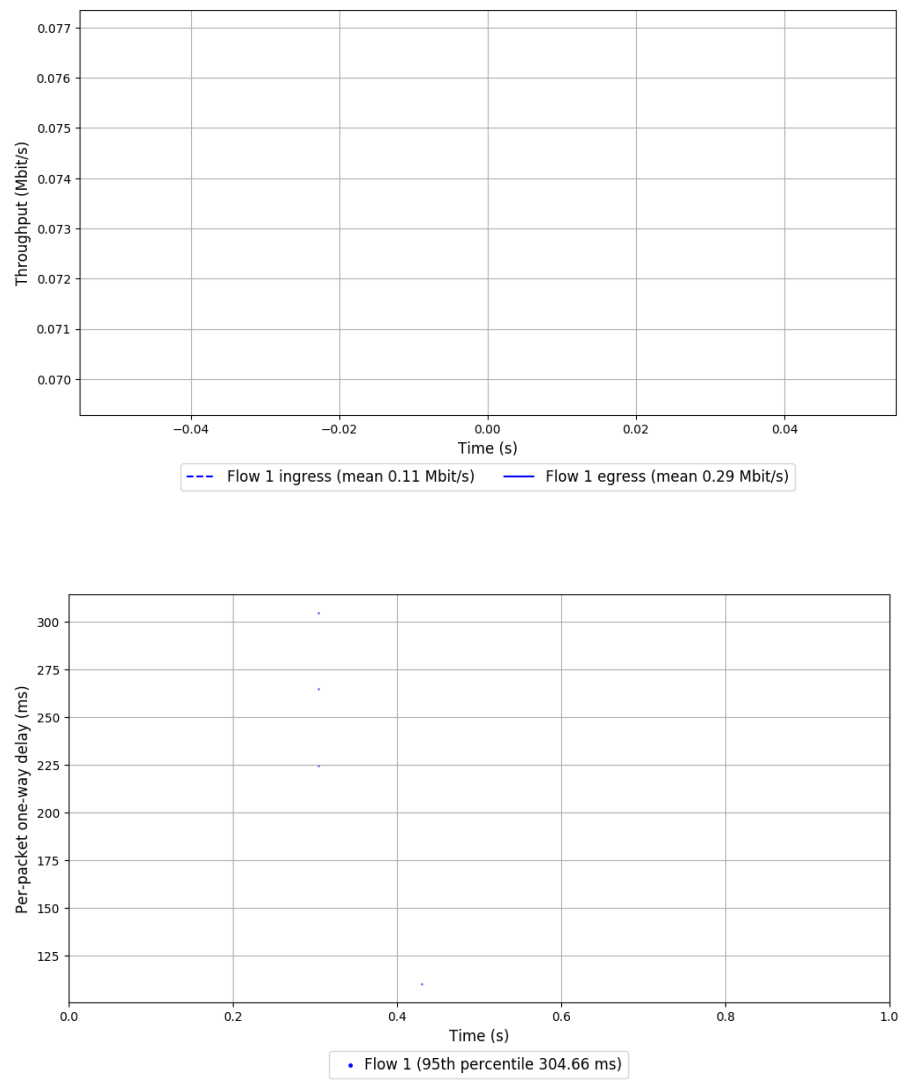


Run 3: Statistics of SReAM

Start at: 2017-08-16 20:47:01

End at: 2017-08-16 20:47:32

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-16 20:58:34

End at: 2017-08-16 20:59:04

Below is generated by plot.py at 2017-08-16 23:27:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.734 ms

Loss rate: 0.00%

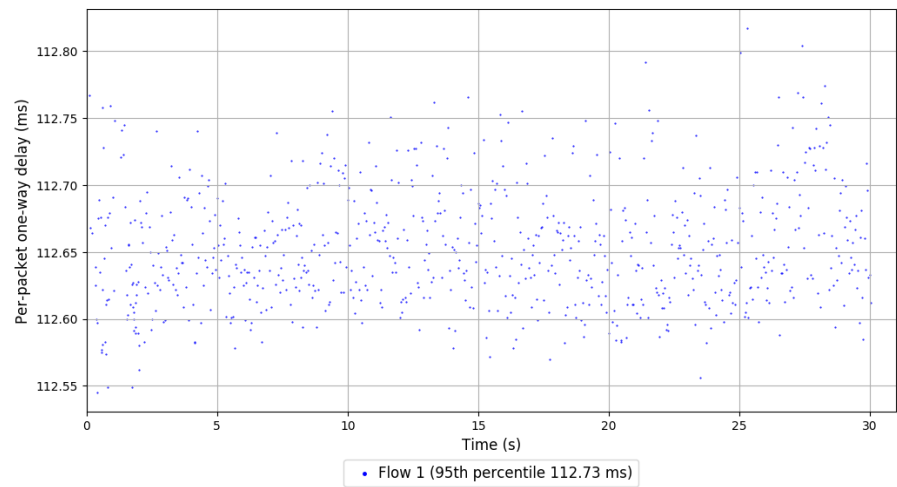
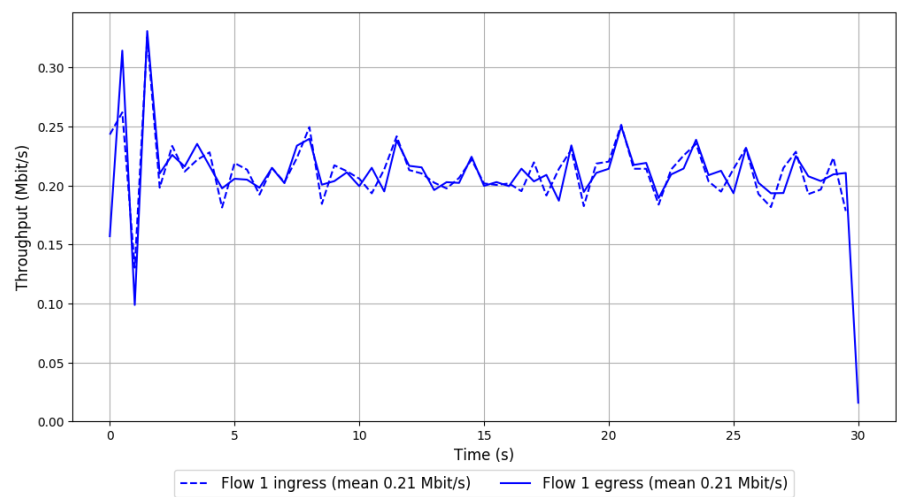
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.734 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-16 21:09:59

End at: 2017-08-16 21:10:29

Below is generated by plot.py at 2017-08-16 23:27:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.976 ms

Loss rate: 0.00%

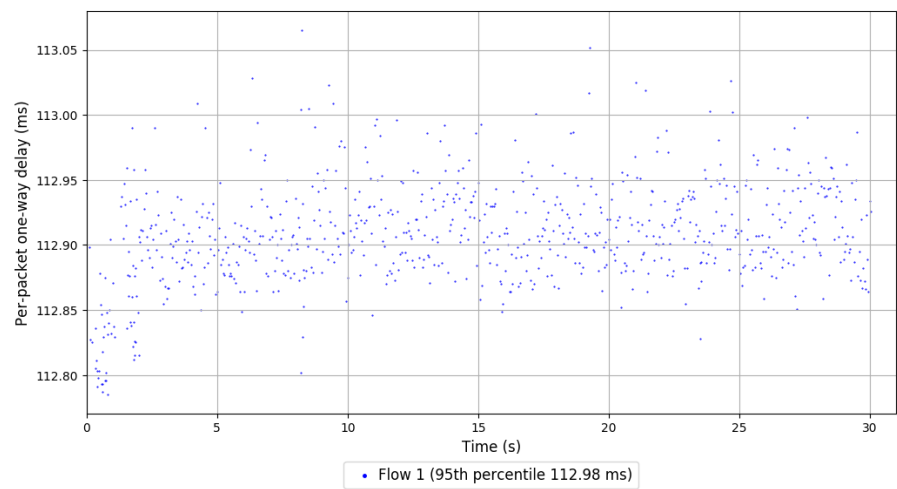
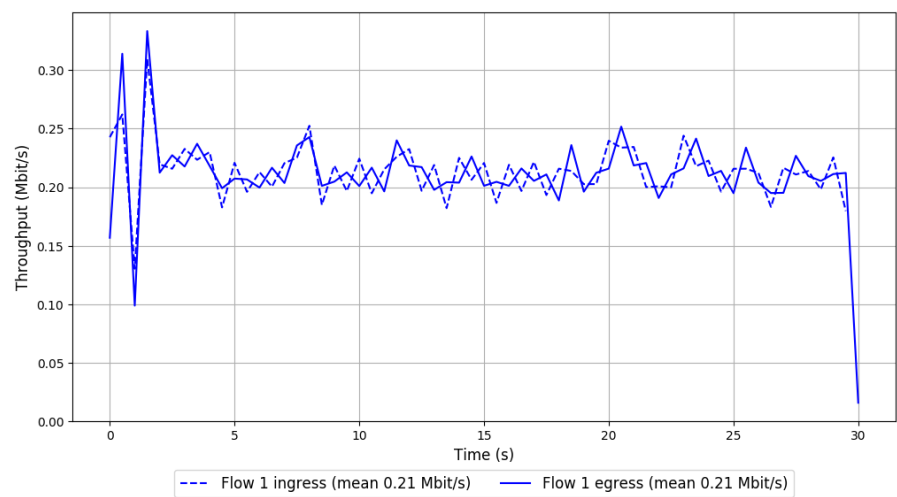
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.976 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-16 21:21:50

End at: 2017-08-16 21:22:20

Below is generated by plot.py at 2017-08-16 23:27:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.857 ms

Loss rate: 0.00%

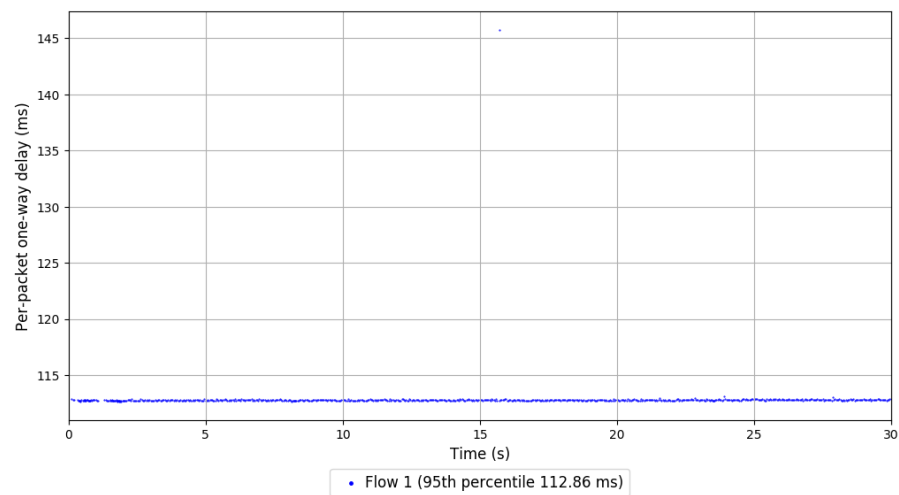
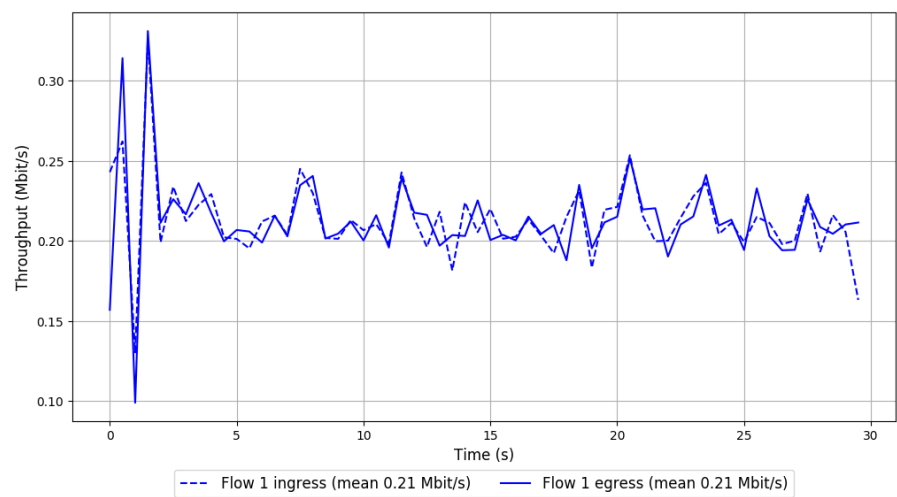
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.857 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-16 21:33:38

End at: 2017-08-16 21:34:08

Below is generated by plot.py at 2017-08-16 23:27:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.726 ms

Loss rate: 0.00%

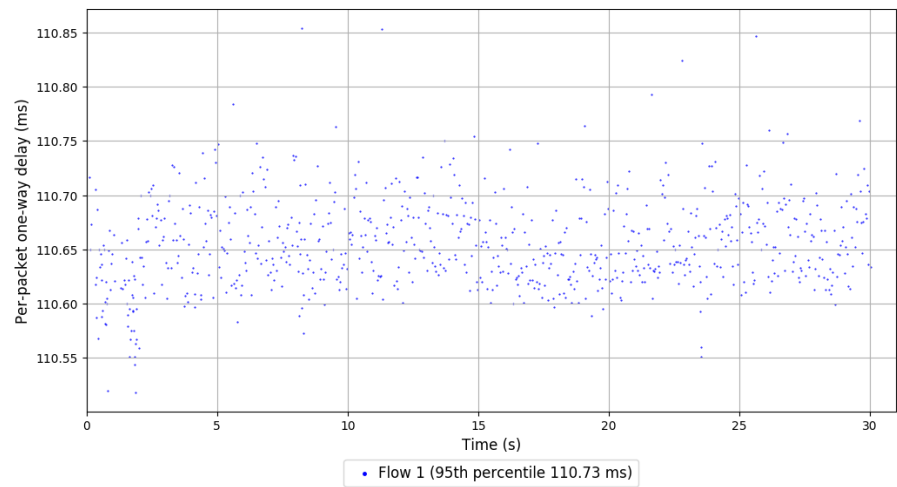
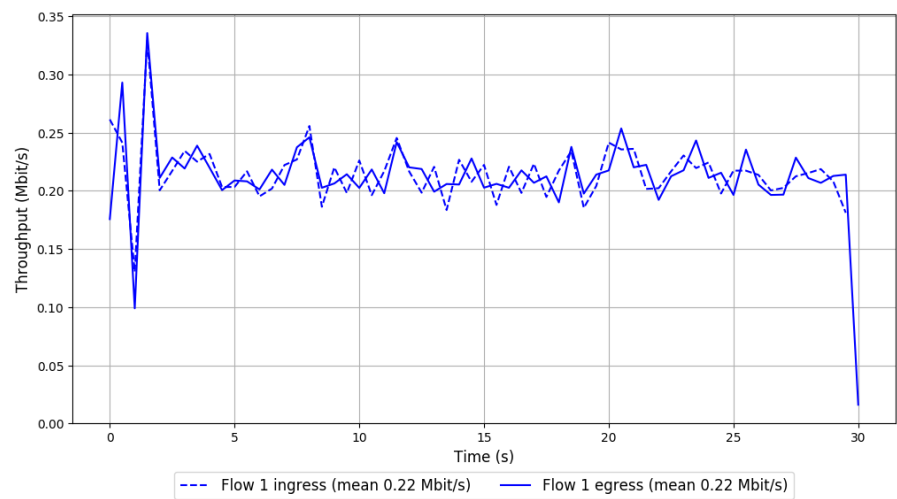
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.726 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-16 21:45:21

End at: 2017-08-16 21:45:51

Below is generated by plot.py at 2017-08-16 23:27:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.633 ms

Loss rate: 0.00%

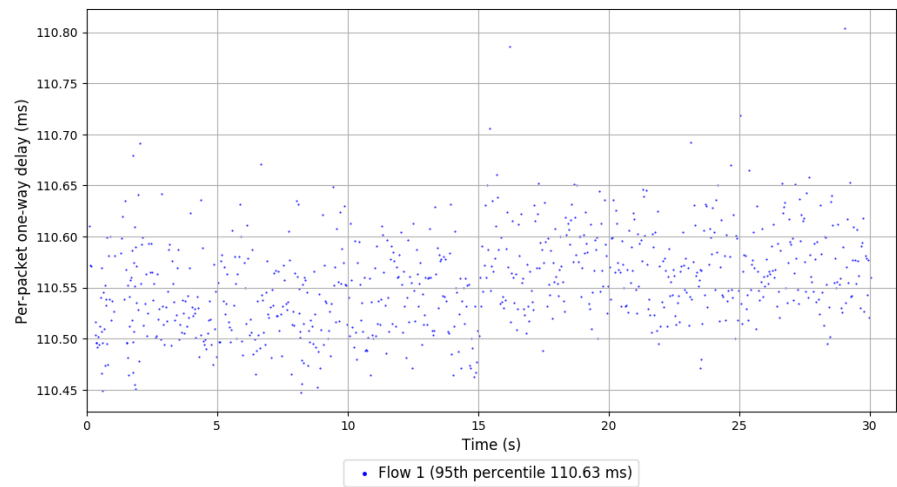
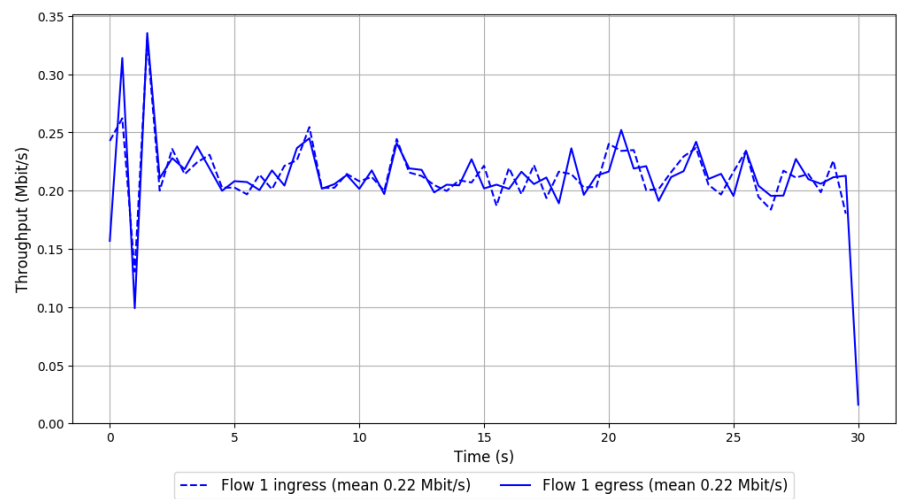
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.633 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-16 21:57:00

End at: 2017-08-16 21:57:30

Below is generated by plot.py at 2017-08-16 23:27:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.460 ms

Loss rate: 0.00%

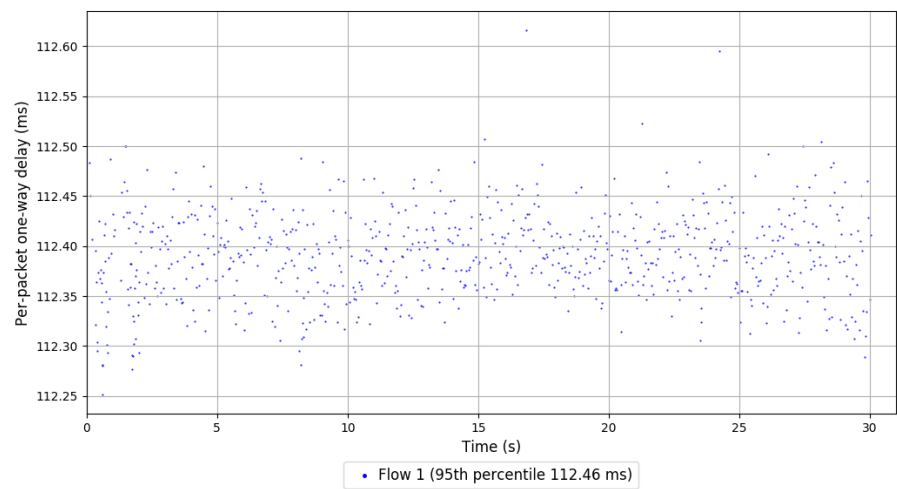
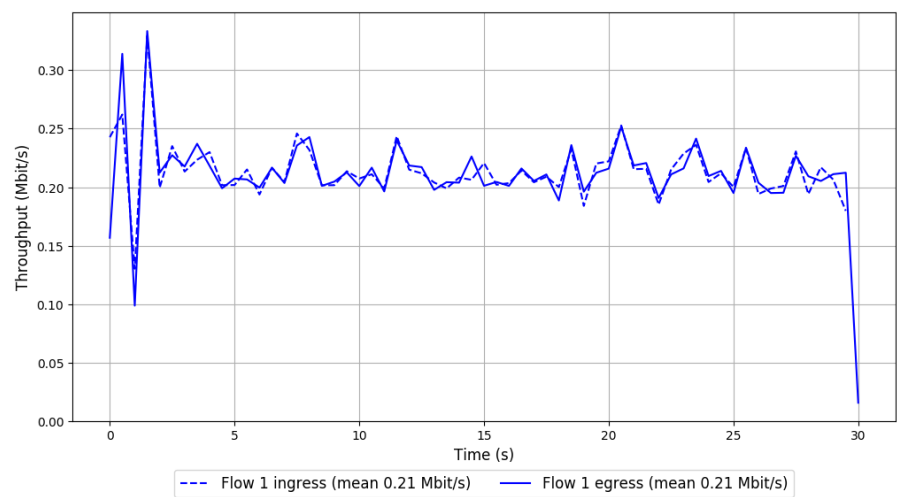
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.460 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

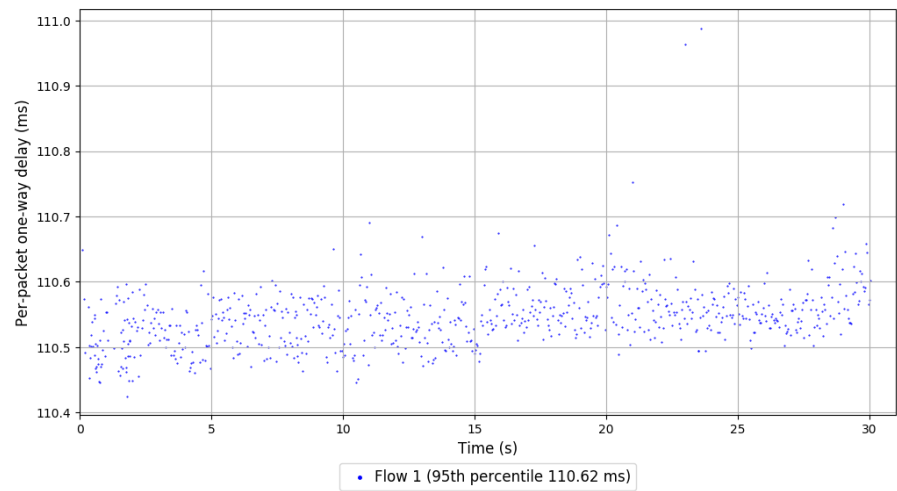
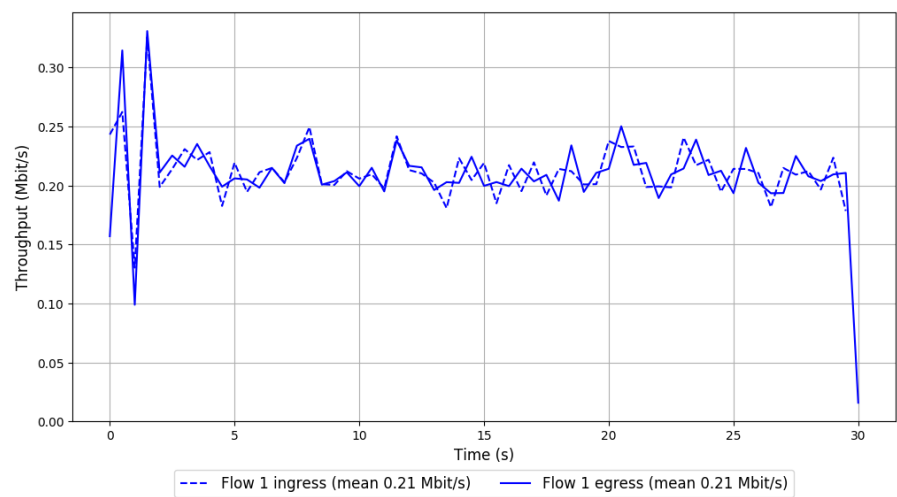


```
Run 10: Statistics of SReAM

Start at: 2017-08-16 22:08:33
End at: 2017-08-16 22:09:03

# Below is generated by plot.py at 2017-08-16 23:27:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 110.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 110.620 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-08-16 20:21:41

End at: 2017-08-16 20:22:11

Below is generated by plot.py at 2017-08-16 23:27:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 113.076 ms

Loss rate: 2.68%

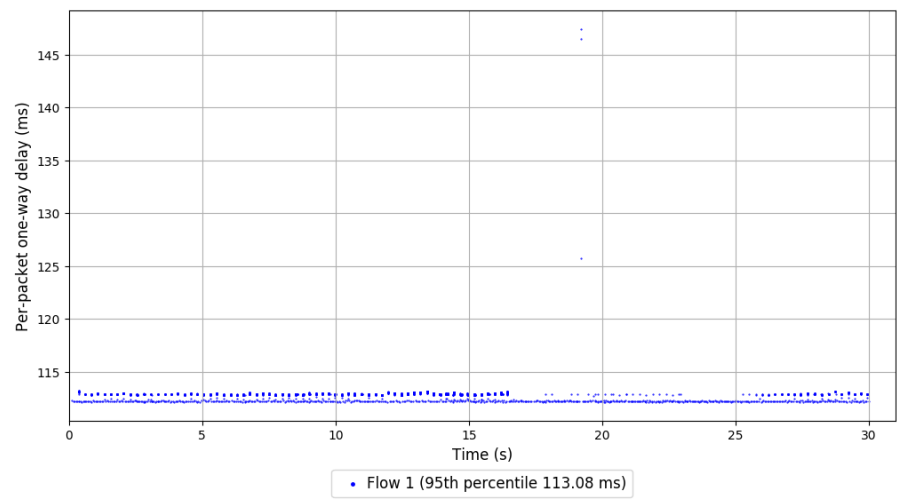
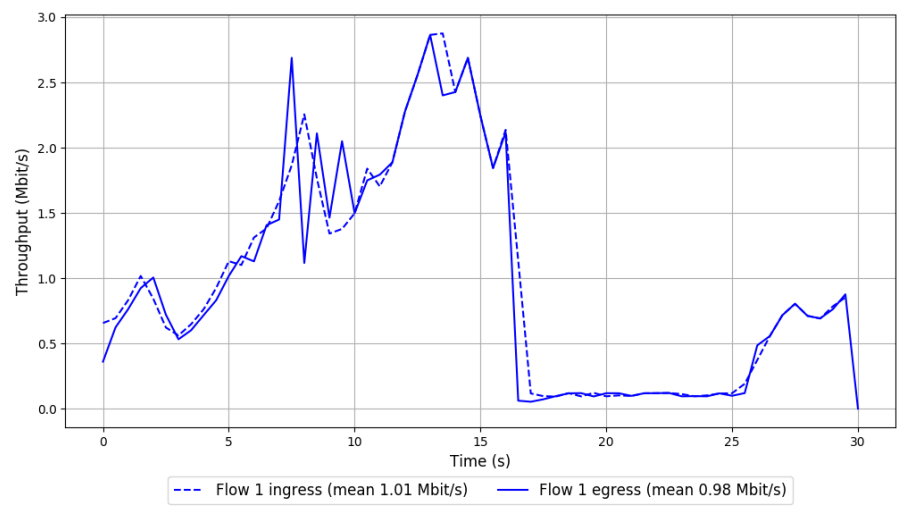
-- Flow 1:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 113.076 ms

Loss rate: 2.68%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-16 20:33:10

End at: 2017-08-16 20:33:40

Below is generated by plot.py at 2017-08-16 23:27:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 112.683 ms

Loss rate: 2.92%

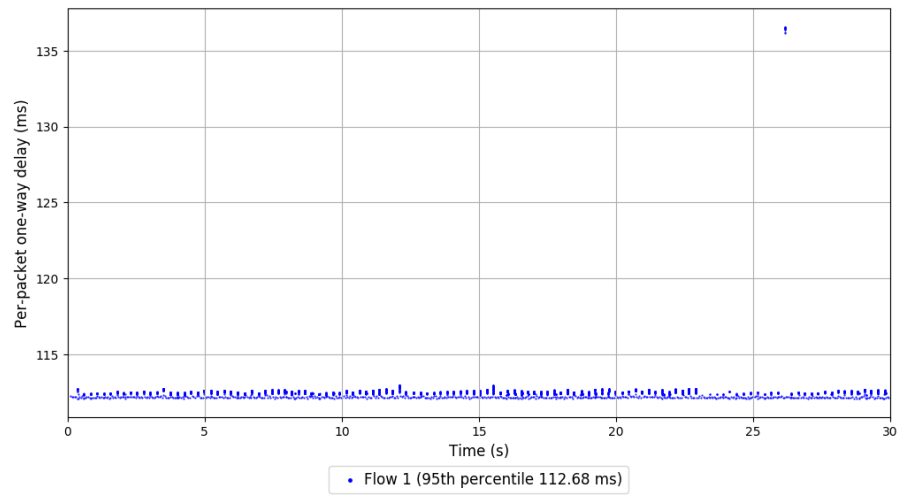
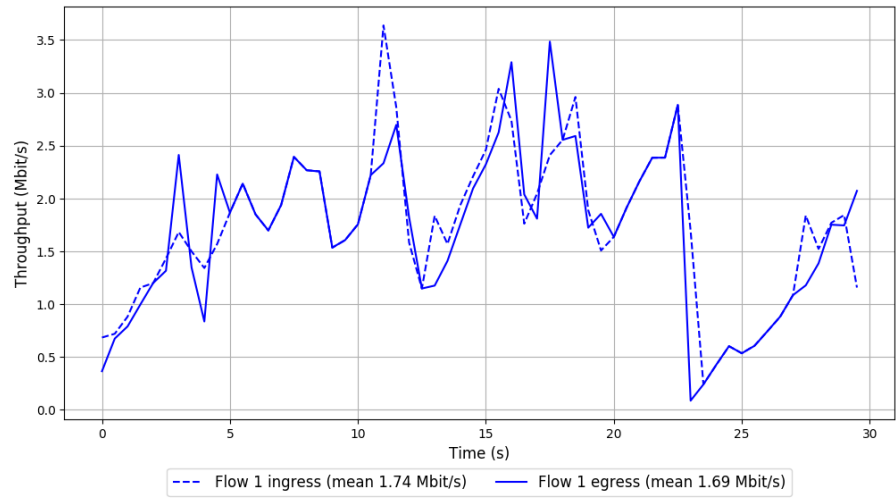
-- Flow 1:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 112.683 ms

Loss rate: 2.92%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-16 20:44:06

End at: 2017-08-16 20:44:36

Below is generated by plot.py at 2017-08-16 23:27:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 113.016 ms

Loss rate: 1.47%

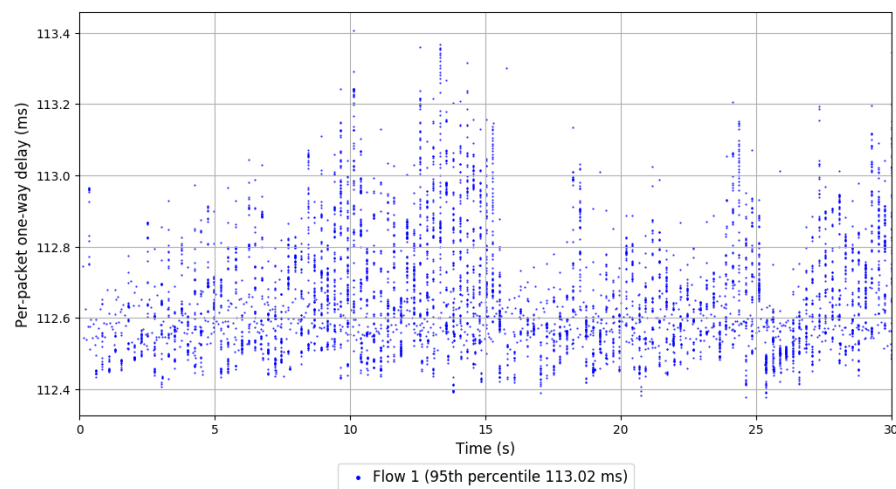
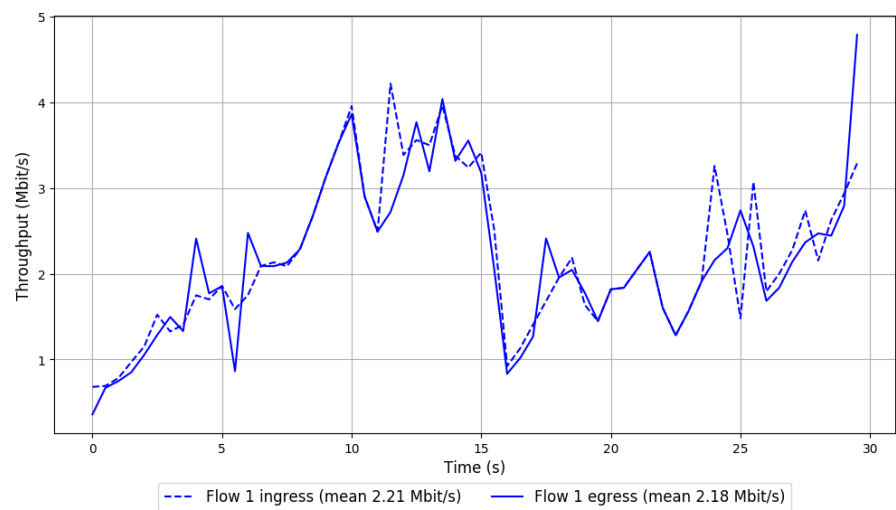
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 113.016 ms

Loss rate: 1.47%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-16 20:55:33

End at: 2017-08-16 20:56:03

Below is generated by plot.py at 2017-08-16 23:27:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.46 Mbit/s

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

Loss rate: 5.19%

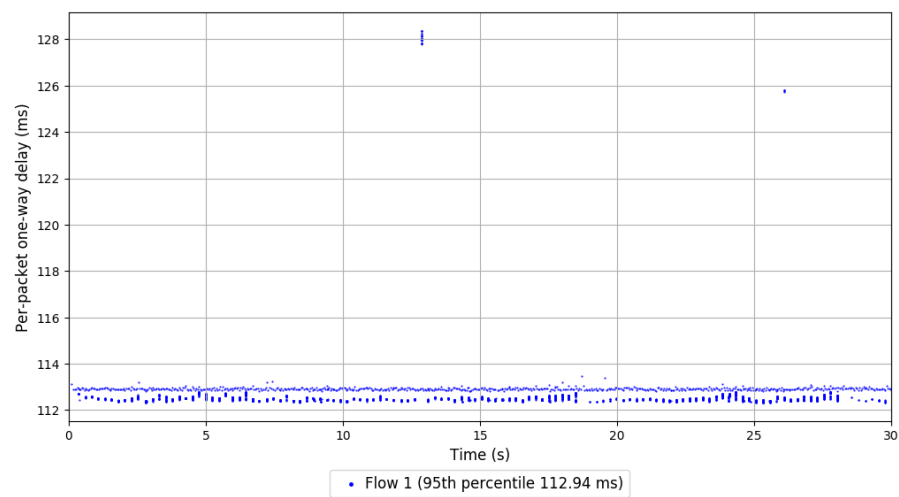
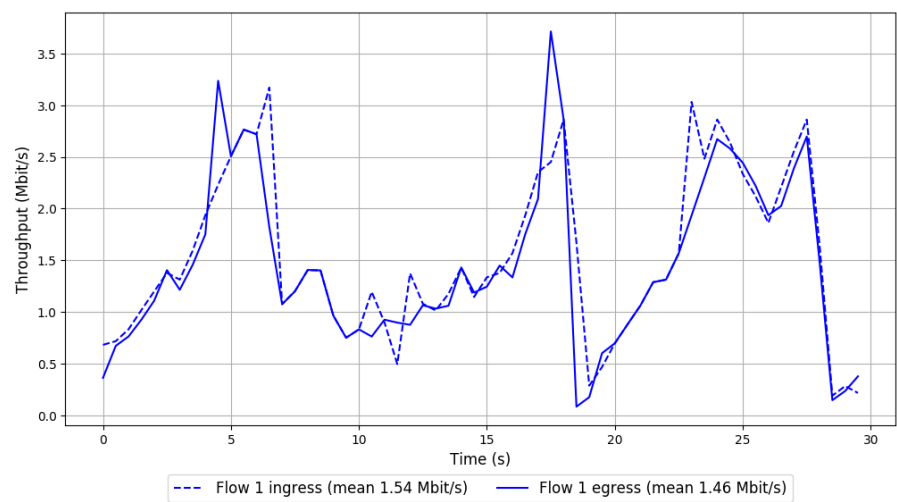
-- Flow 1:

Average throughput: 1.46 Mbit/s

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

Loss rate: 5.19%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-16 21:07:01

End at: 2017-08-16 21:07:31

Below is generated by plot.py at 2017-08-16 23:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 113.441 ms

Loss rate: 0.08%

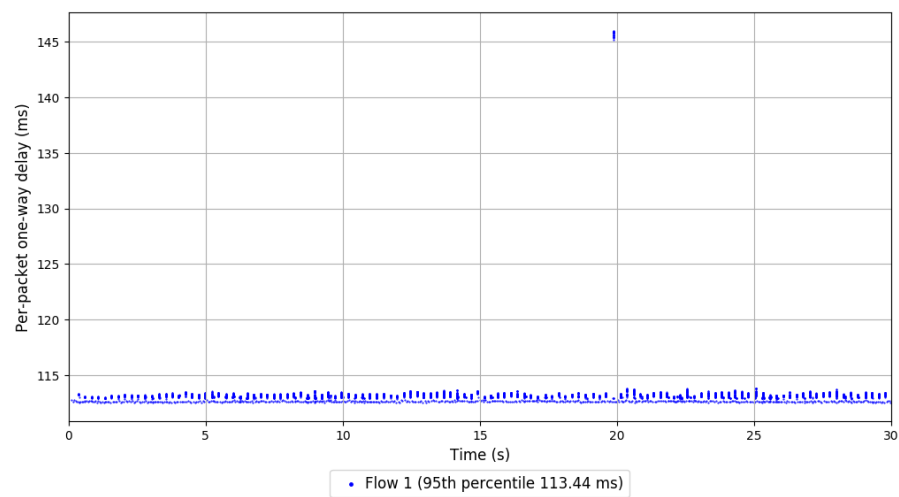
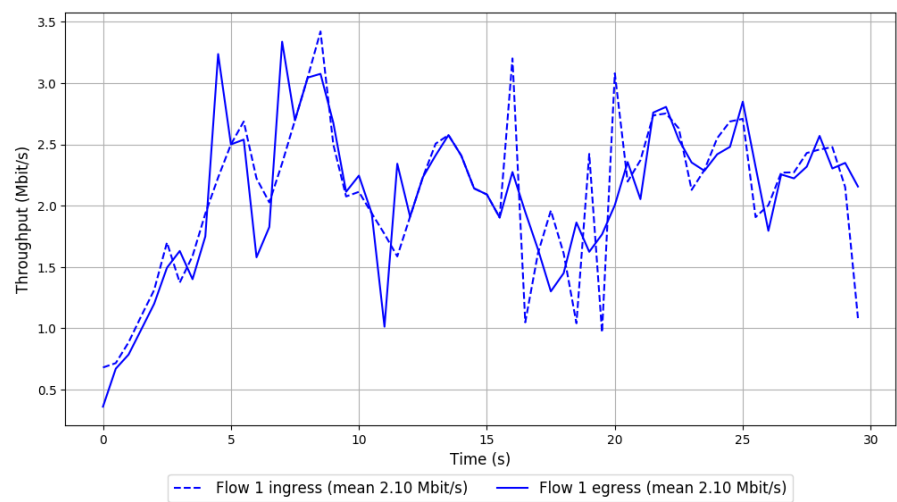
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 113.441 ms

Loss rate: 0.08%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-16 21:18:50

End at: 2017-08-16 21:19:20

Below is generated by plot.py at 2017-08-16 23:27:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 113.377 ms

Loss rate: 0.00%

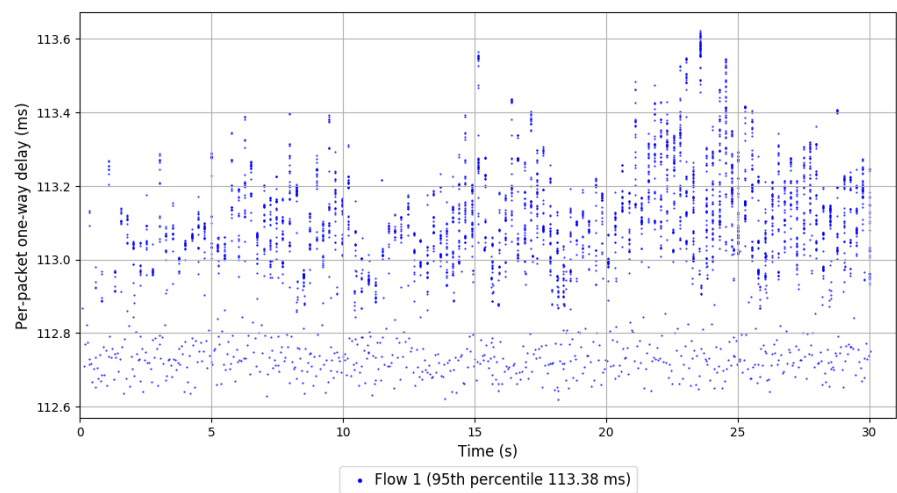
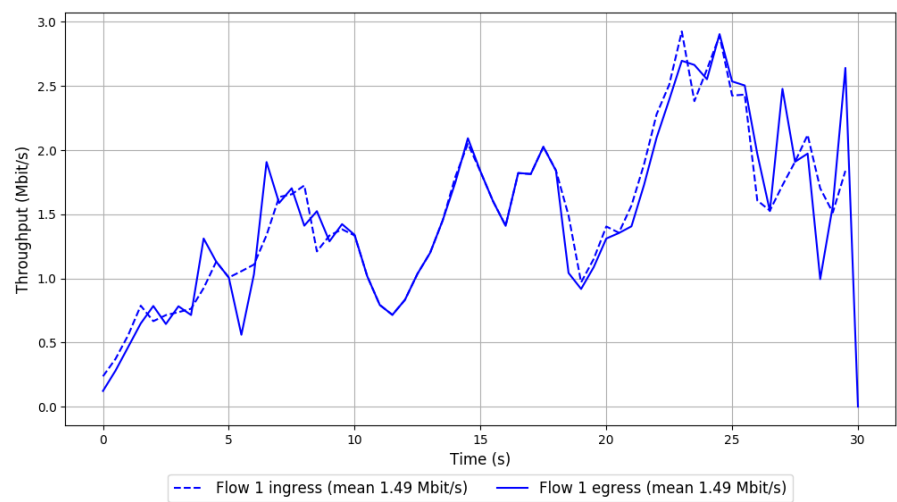
-- Flow 1:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 113.377 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-16 21:30:36

End at: 2017-08-16 21:31:06

Below is generated by plot.py at 2017-08-16 23:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.255 ms

Loss rate: 0.91%

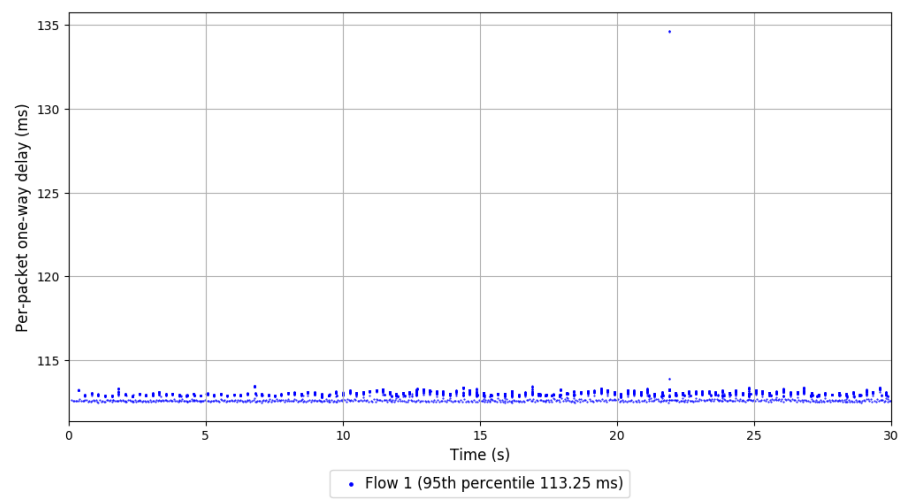
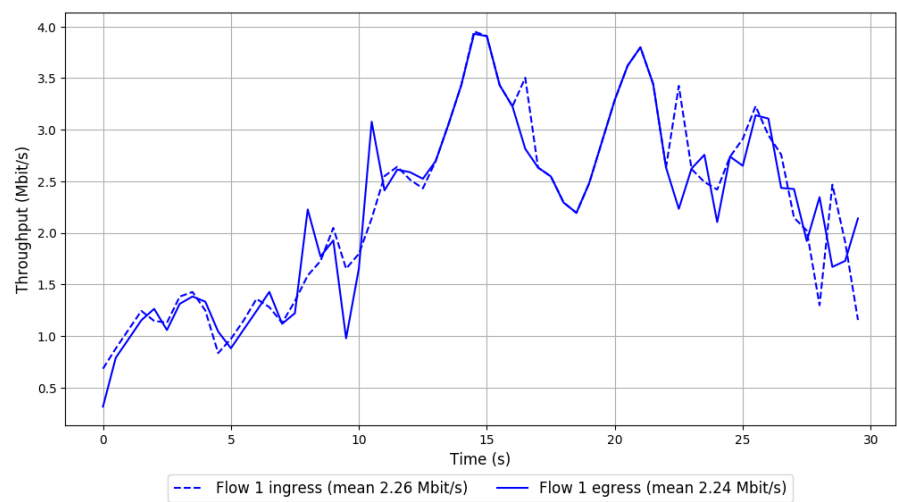
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.255 ms

Loss rate: 0.91%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-16 21:42:20

End at: 2017-08-16 21:42:50

Below is generated by plot.py at 2017-08-16 23:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 112.996 ms

Loss rate: 0.16%

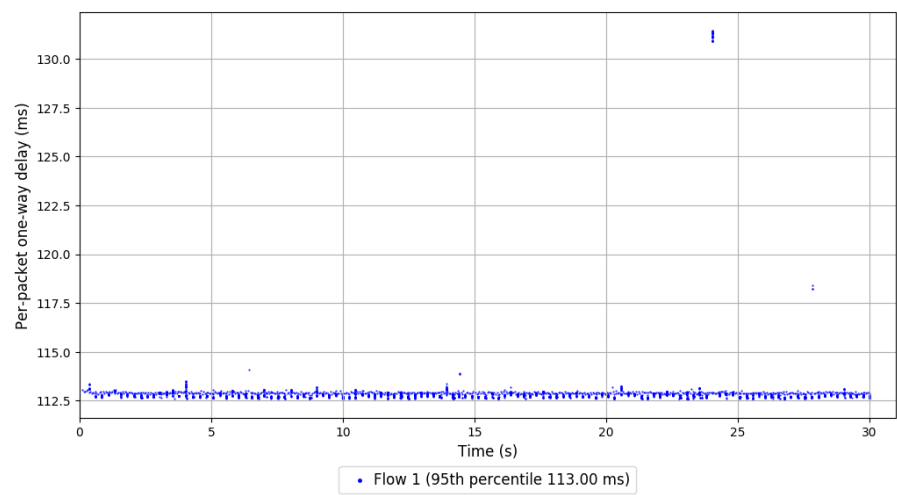
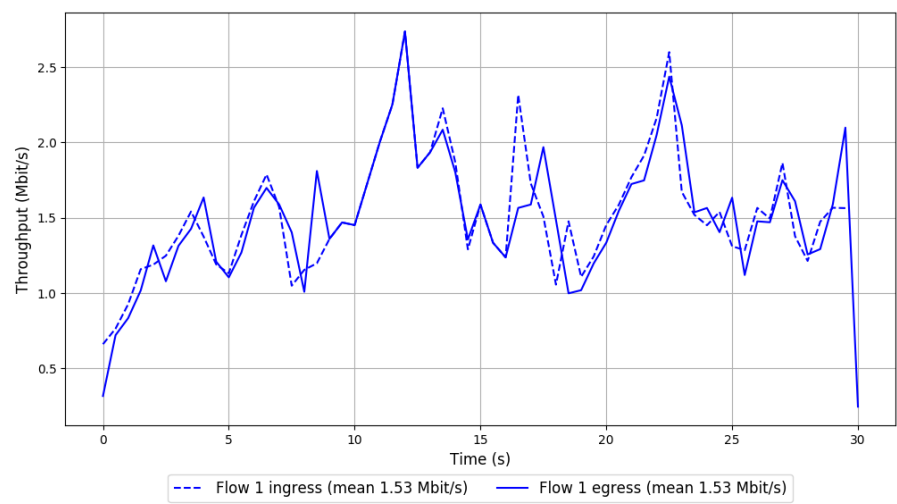
-- Flow 1:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 112.996 ms

Loss rate: 0.16%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-16 21:53:57

End at: 2017-08-16 21:54:27

Below is generated by plot.py at 2017-08-16 23:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 112.906 ms

Loss rate: 0.00%

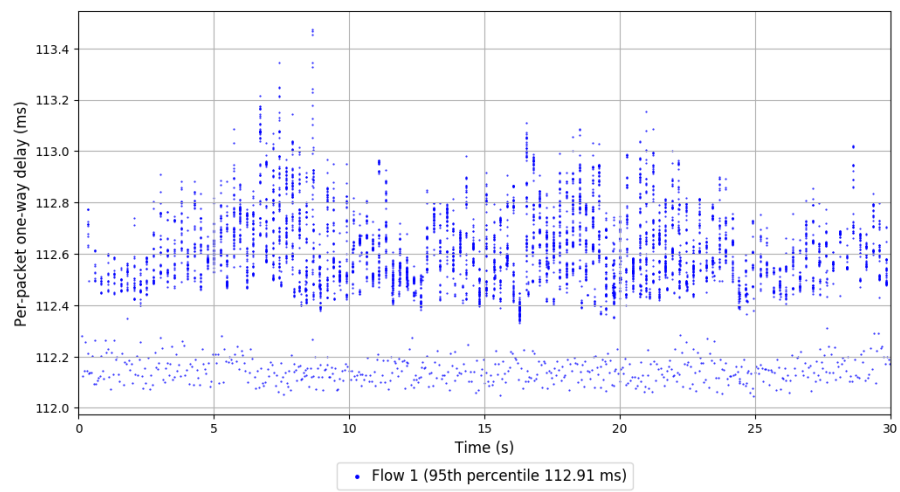
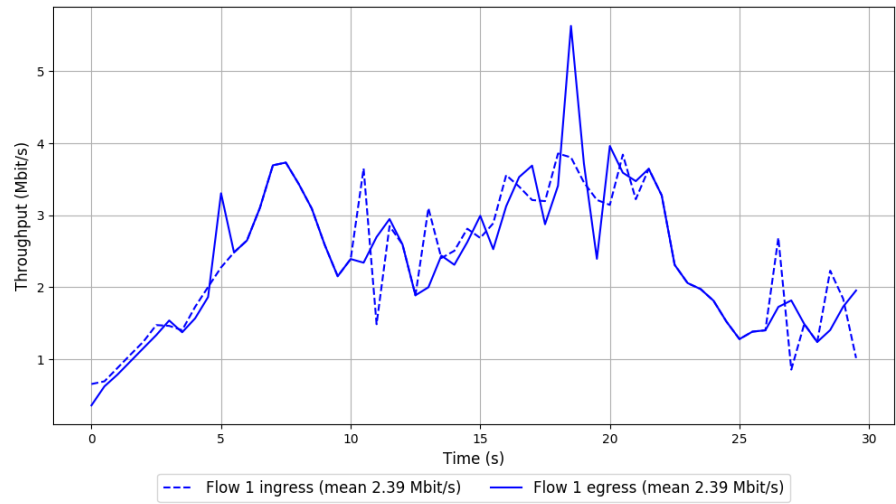
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 112.906 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-16 22:05:32

End at: 2017-08-16 22:06:02

Below is generated by plot.py at 2017-08-16 23:27:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 112.985 ms

Loss rate: 0.11%

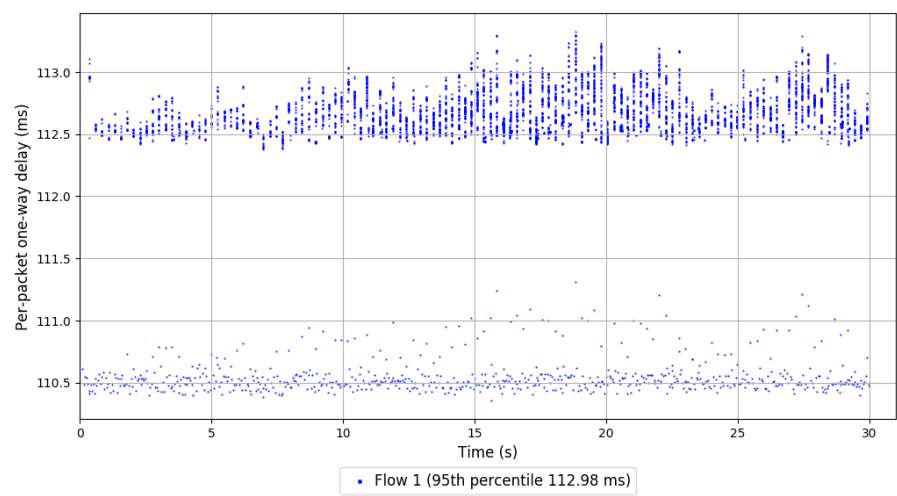
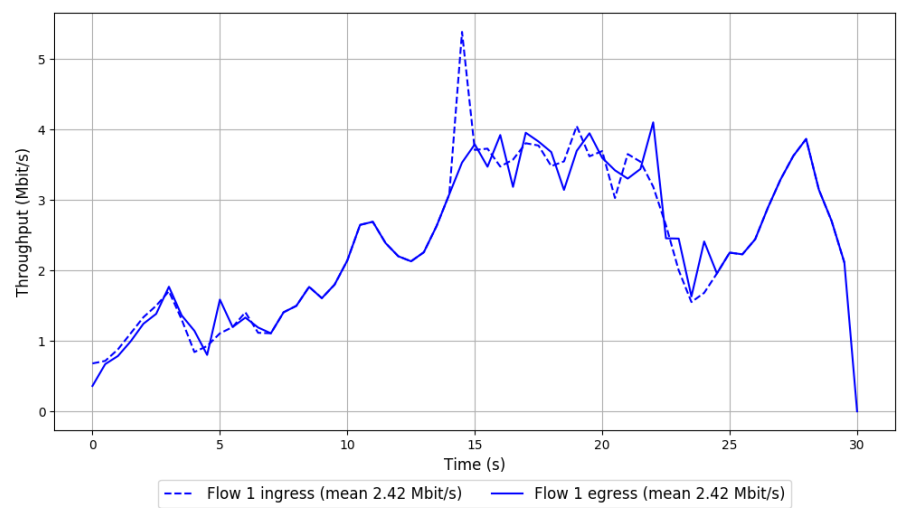
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 112.985 ms

Loss rate: 0.11%

Run 10: Report of Sprout — Data Link

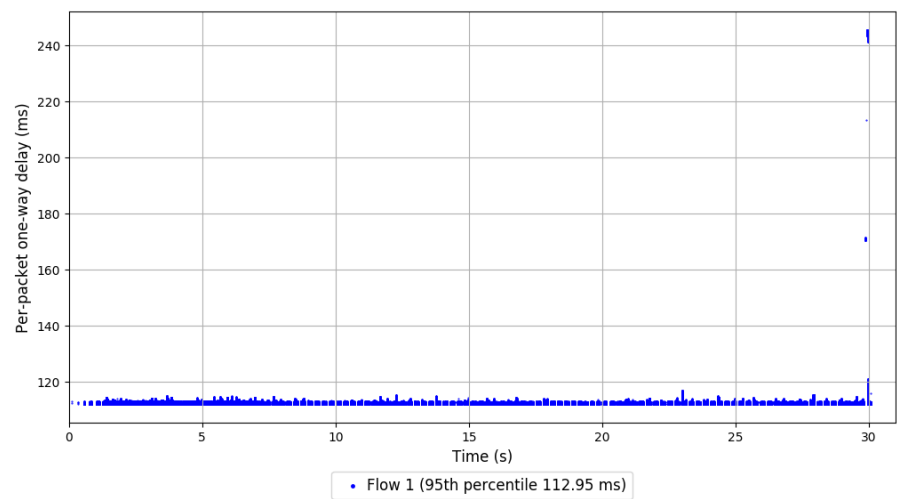
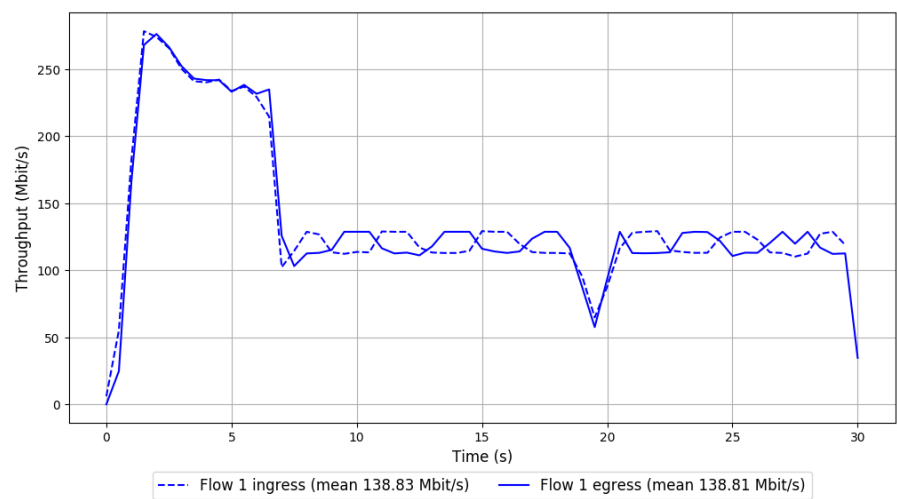


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-08-16 20:26:22
End at: 2017-08-16 20:26:52

# Below is generated by plot.py at 2017-08-16 23:28:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 138.81 Mbit/s
95th percentile per-packet one-way delay: 112.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 138.81 Mbit/s
95th percentile per-packet one-way delay: 112.952 ms
Loss rate: 0.00%
```

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

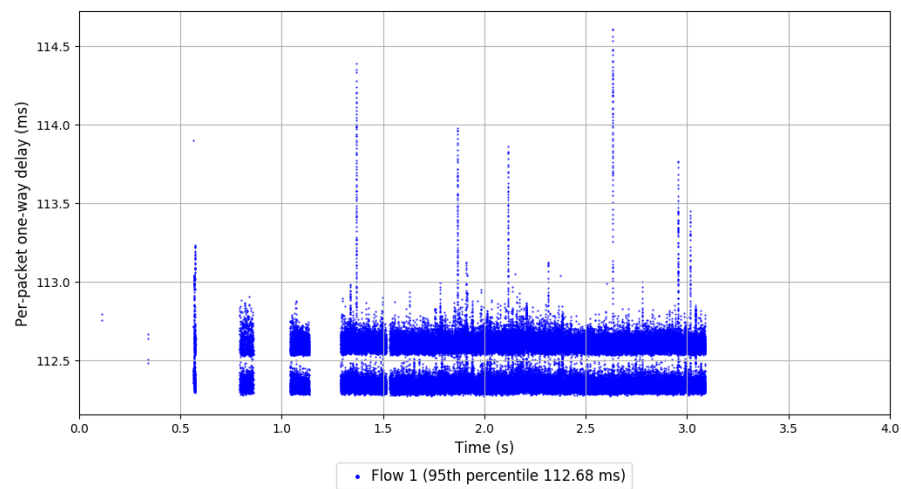
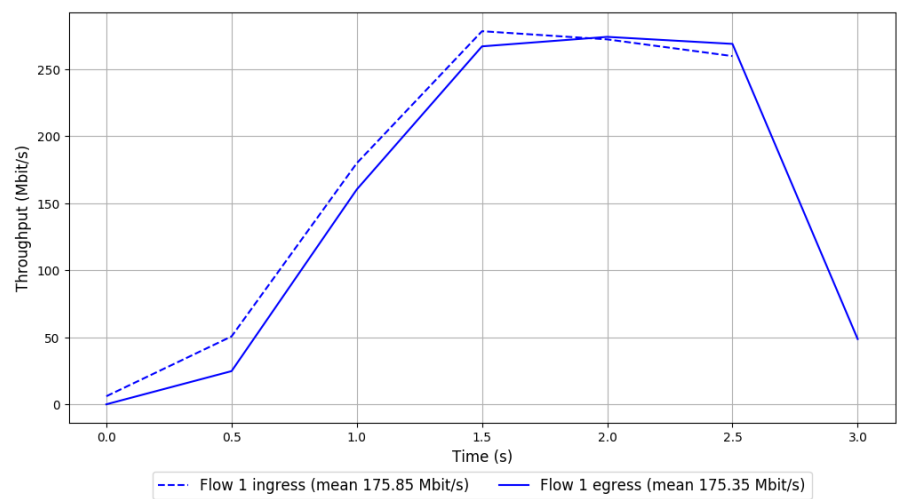


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-16 20:37:46

End at: 2017-08-16 20:38:16

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-08-16 20:48:46

End at: 2017-08-16 20:49:16

Below is generated by plot.py at 2017-08-16 23:28:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.02 Mbit/s

95th percentile per-packet one-way delay: 112.477 ms

Loss rate: 0.08%

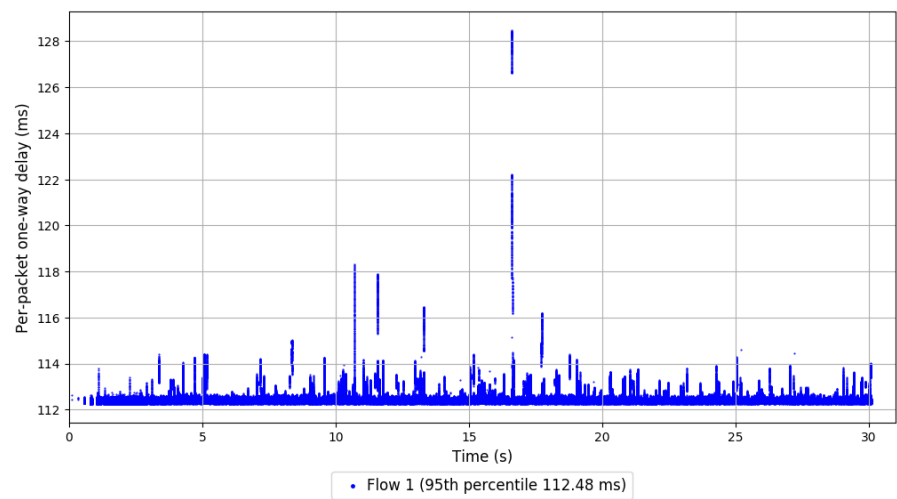
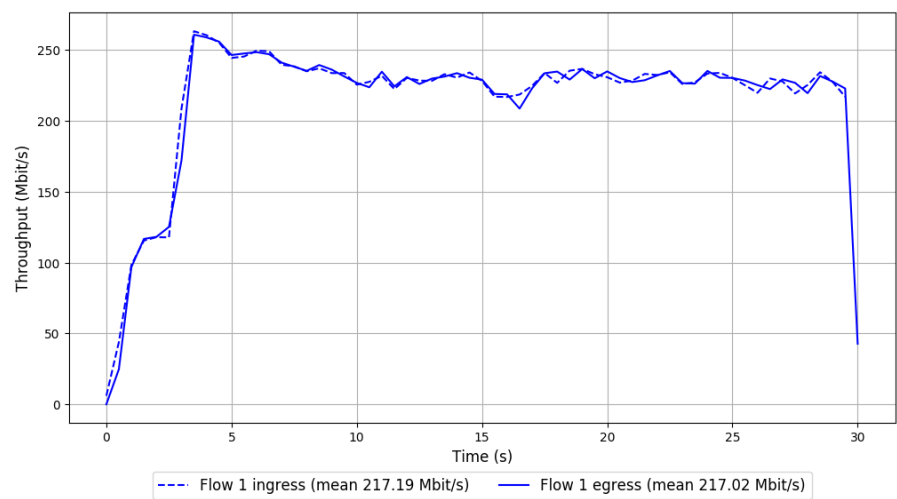
-- Flow 1:

Average throughput: 217.02 Mbit/s

95th percentile per-packet one-way delay: 112.477 ms

Loss rate: 0.08%

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

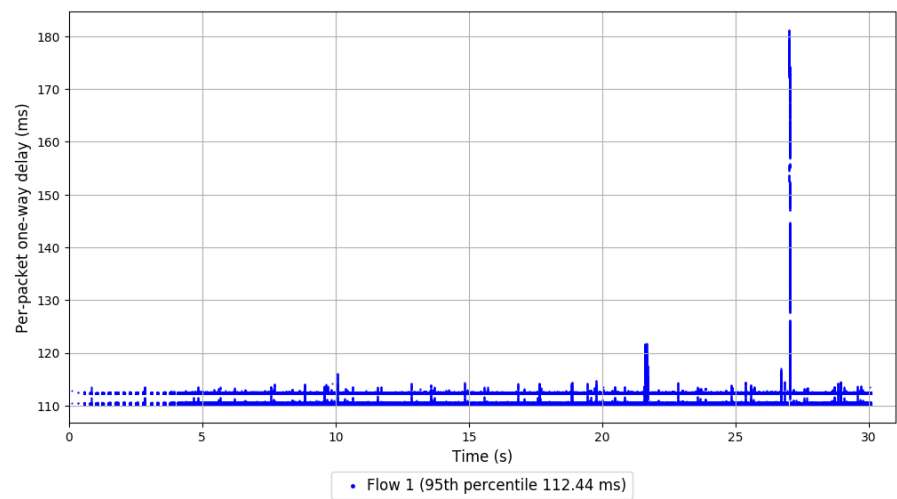
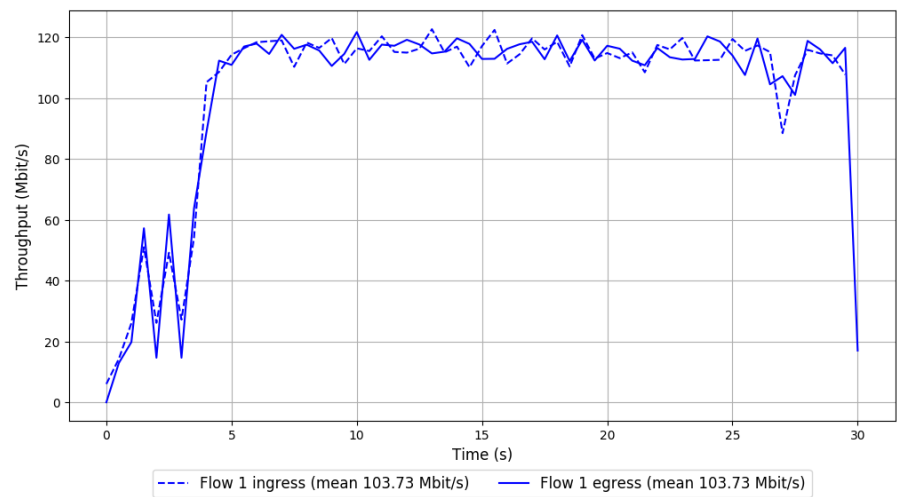


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-08-16 21:00:11
End at: 2017-08-16 21:00:41

# Below is generated by plot.py at 2017-08-16 23:28:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 103.73 Mbit/s
95th percentile per-packet one-way delay: 112.441 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.73 Mbit/s
95th percentile per-packet one-way delay: 112.441 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-08-16 21:11:41

End at: 2017-08-16 21:12:11

Below is generated by plot.py at 2017-08-16 23:30:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.41 Mbit/s

95th percentile per-packet one-way delay: 113.131 ms

Loss rate: 0.11%

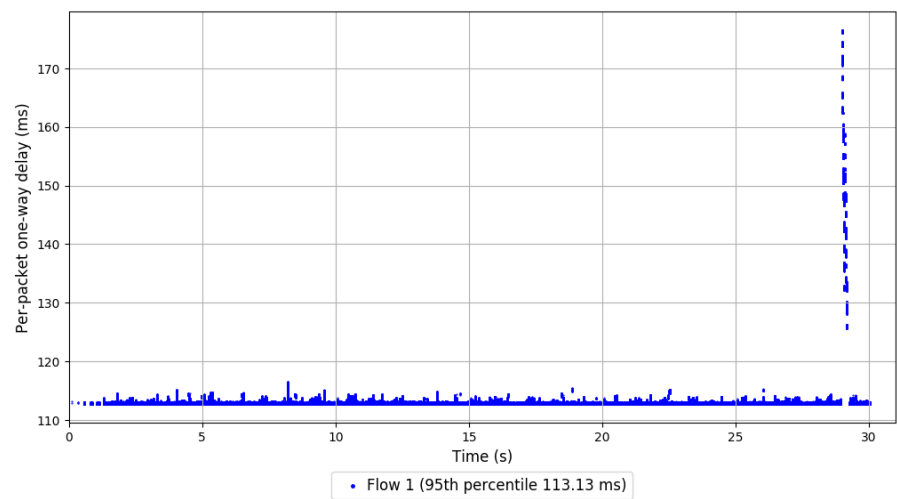
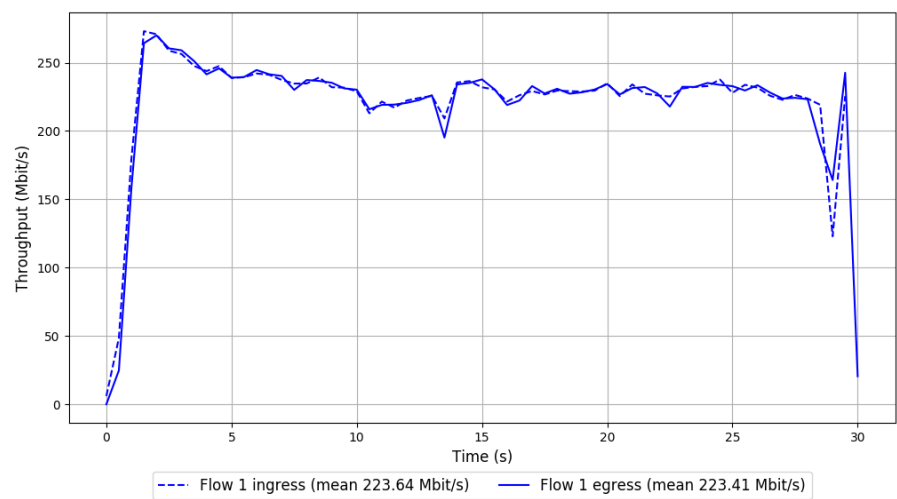
-- Flow 1:

Average throughput: 223.41 Mbit/s

95th percentile per-packet one-way delay: 113.131 ms

Loss rate: 0.11%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-08-16 21:23:31

End at: 2017-08-16 21:24:01

Below is generated by plot.py at 2017-08-16 23:30:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.94 Mbit/s

95th percentile per-packet one-way delay: 113.021 ms

Loss rate: 0.00%

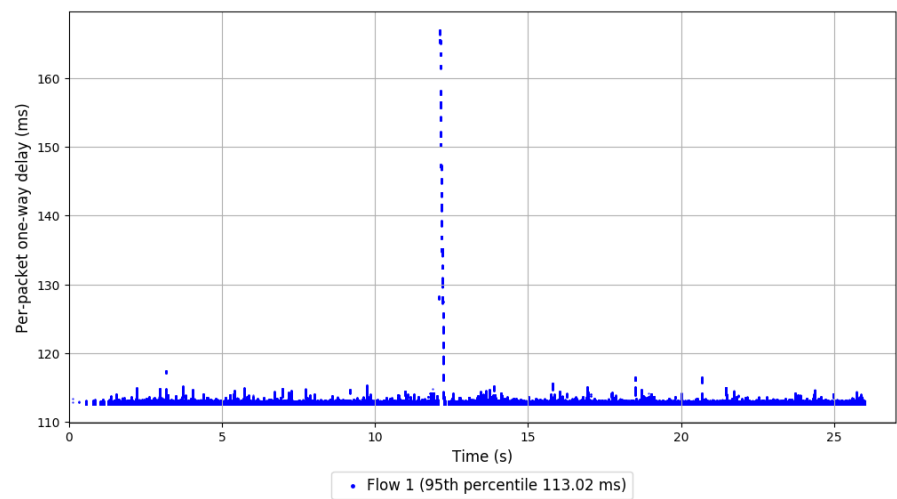
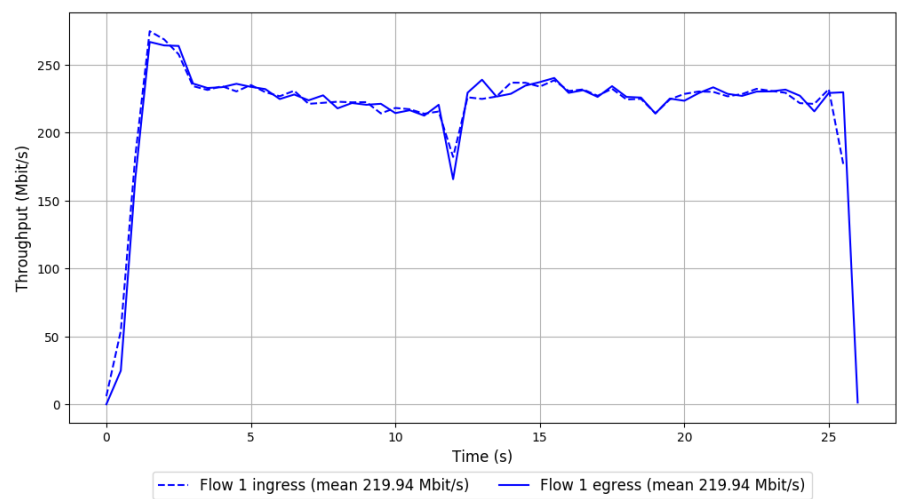
-- Flow 1:

Average throughput: 219.94 Mbit/s

95th percentile per-packet one-way delay: 113.021 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-08-16 21:35:21

End at: 2017-08-16 21:35:51

Below is generated by plot.py at 2017-08-16 23:31:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.61 Mbit/s

95th percentile per-packet one-way delay: 114.290 ms

Loss rate: 0.04%

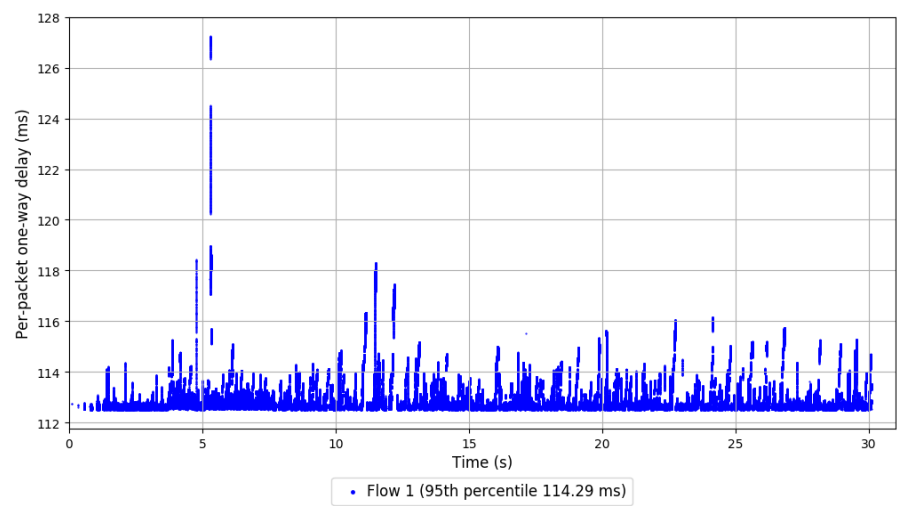
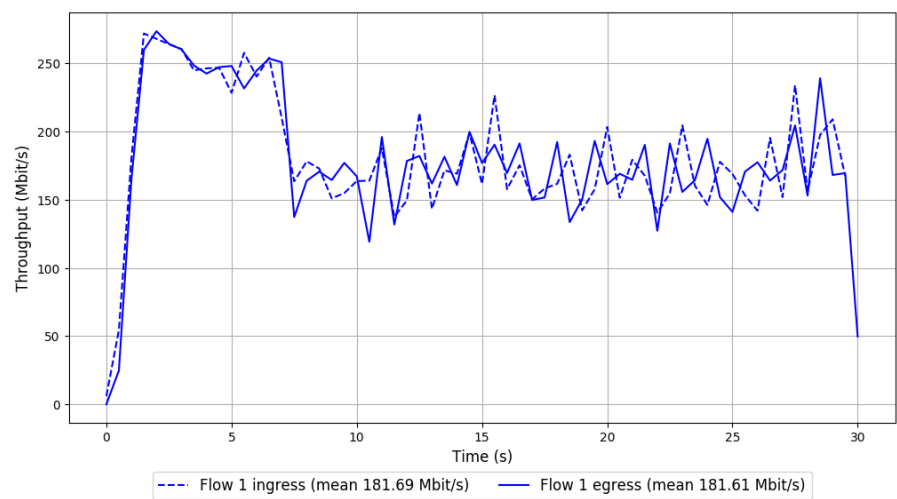
-- Flow 1:

Average throughput: 181.61 Mbit/s

95th percentile per-packet one-way delay: 114.290 ms

Loss rate: 0.04%

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

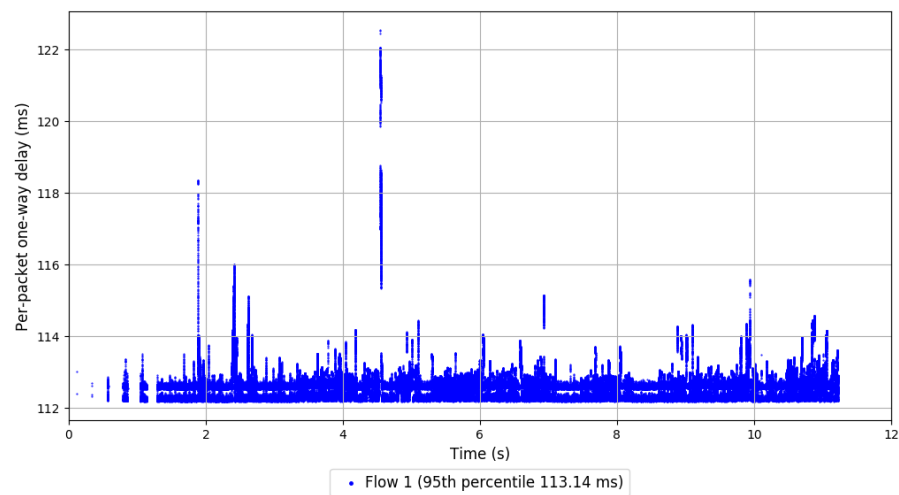
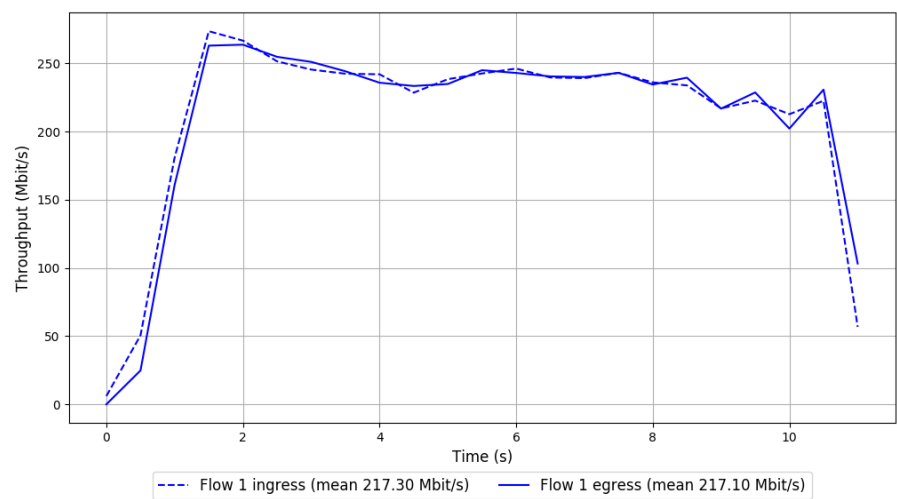


Run 8: Statistics of TaoVA-100x

Start at: 2017-08-16 21:47:04

End at: 2017-08-16 21:47:34

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

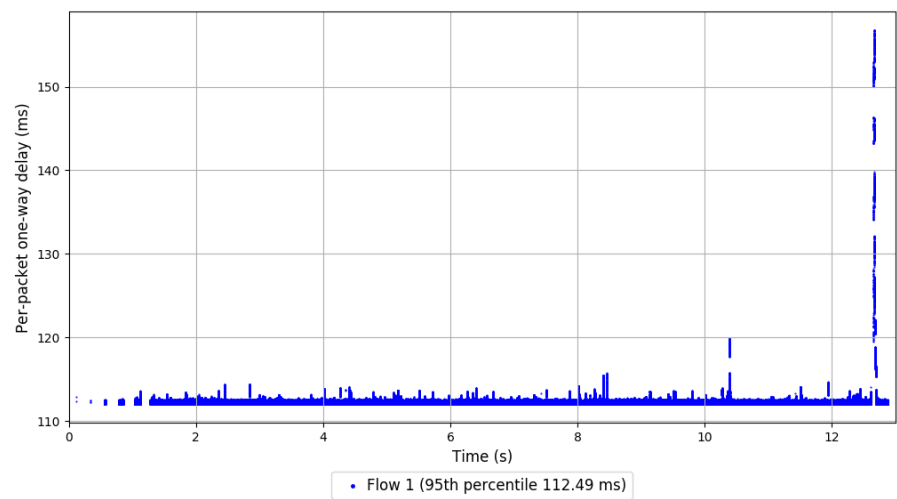
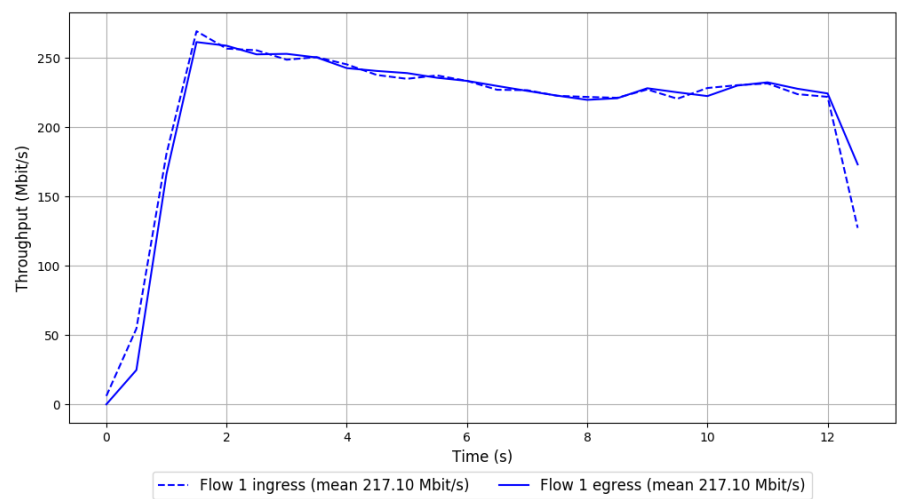


Run 9: Statistics of TaoVA-100x

Start at: 2017-08-16 21:58:42

End at: 2017-08-16 21:59:12

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

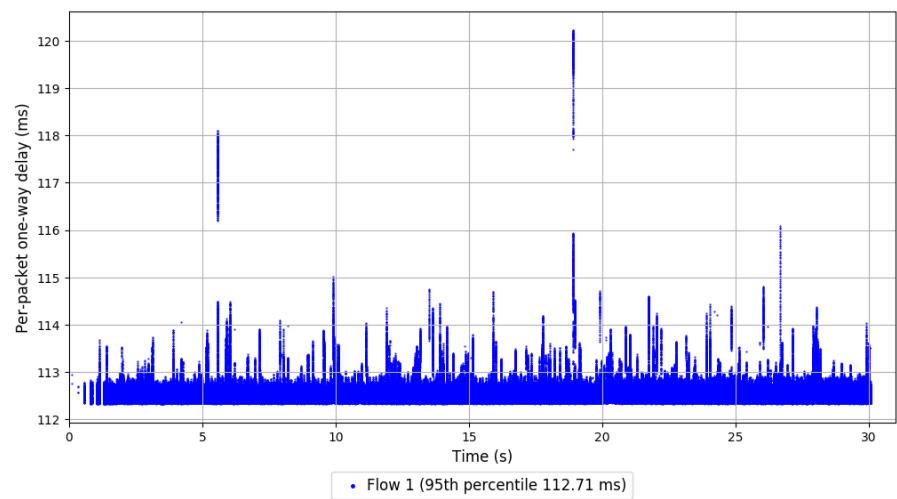
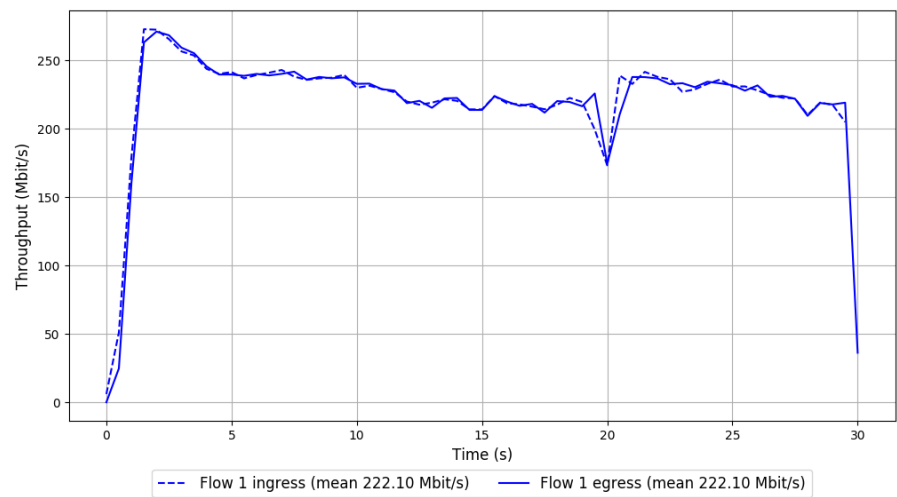


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-16 22:10:11
End at: 2017-08-16 22:10:41

# Below is generated by plot.py at 2017-08-16 23:32:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.10 Mbit/s
95th percentile per-packet one-way delay: 112.712 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 222.10 Mbit/s
95th percentile per-packet one-way delay: 112.712 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-16 20:30:19

End at: 2017-08-16 20:30:49

Below is generated by plot.py at 2017-08-16 23:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 113.113 ms

Loss rate: 2.11%

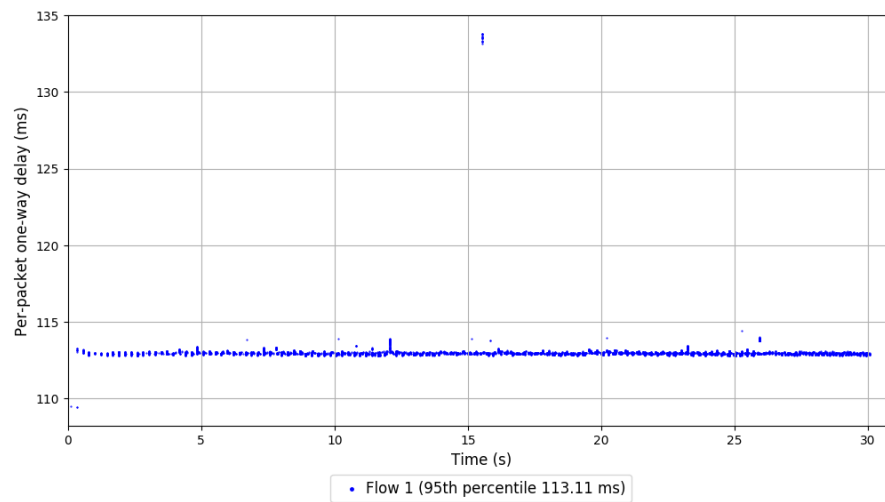
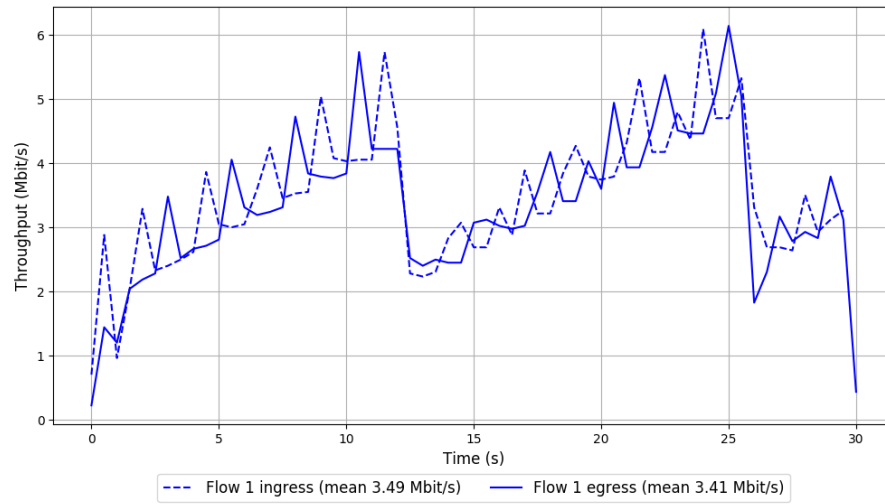
-- Flow 1:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 113.113 ms

Loss rate: 2.11%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-16 20:41:18

End at: 2017-08-16 20:41:48

Below is generated by plot.py at 2017-08-16 23:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 112.588 ms

Loss rate: 0.41%

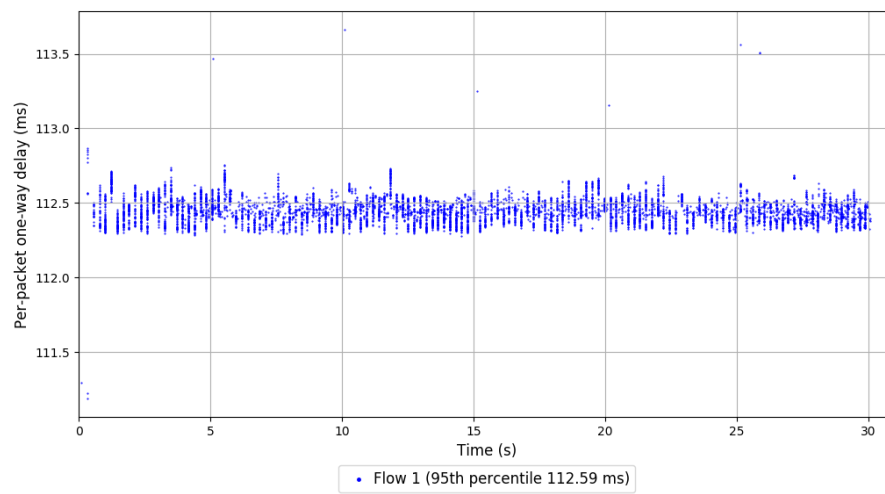
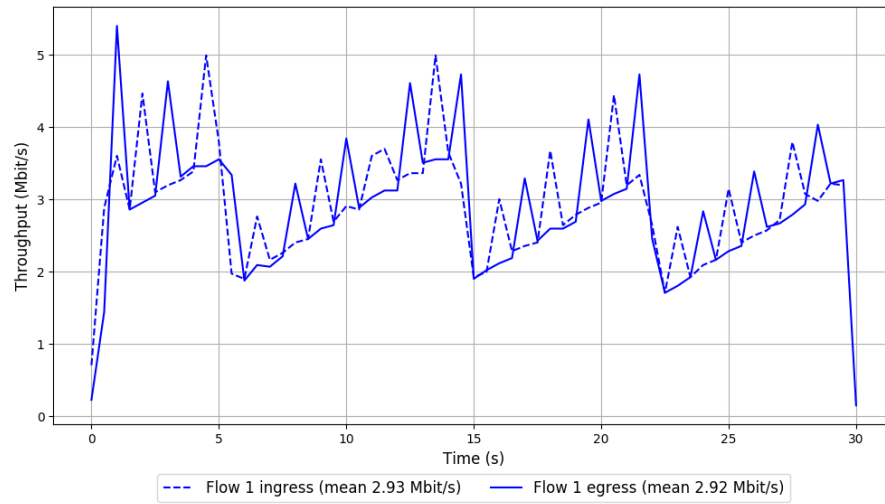
-- Flow 1:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 112.588 ms

Loss rate: 0.41%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-16 20:52:41

End at: 2017-08-16 20:53:11

Below is generated by plot.py at 2017-08-16 23:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 112.654 ms

Loss rate: 1.15%

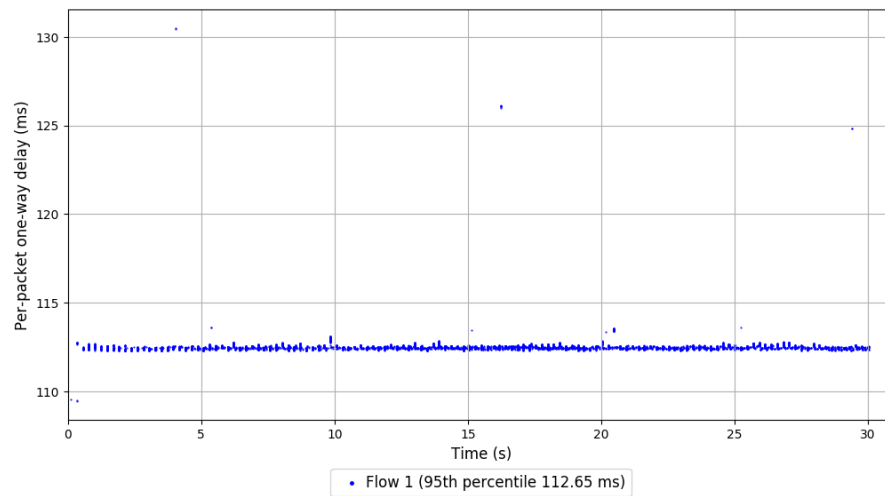
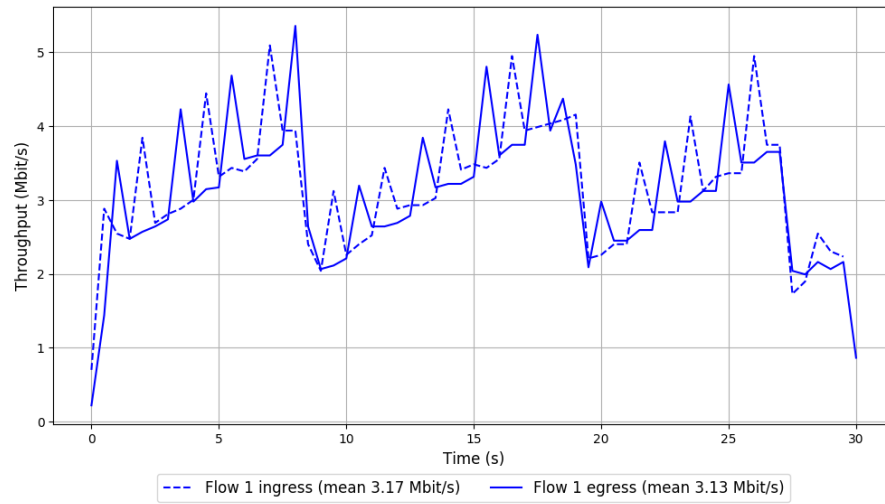
-- Flow 1:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 112.654 ms

Loss rate: 1.15%

Run 3: Report of TCP Vegas — Data Link

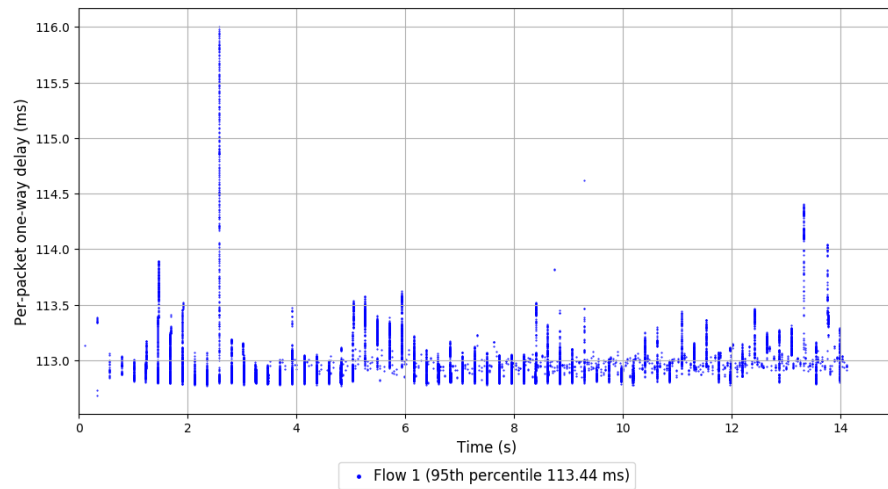
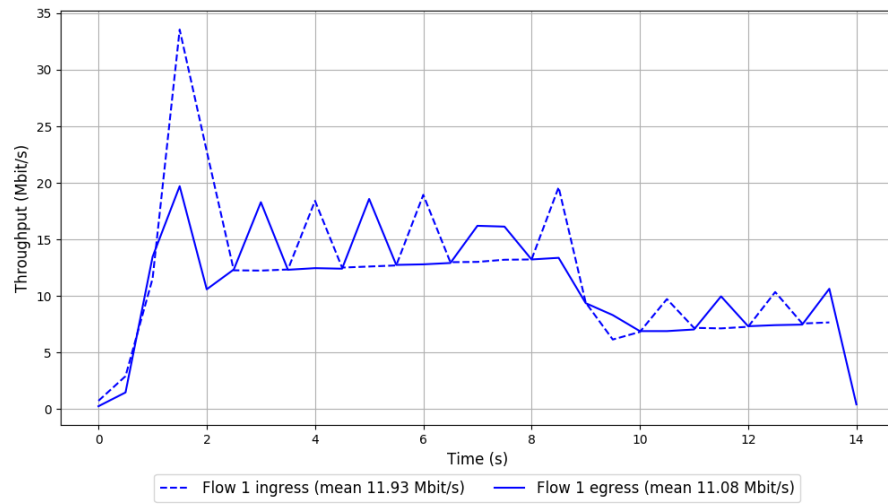


Run 4: Statistics of TCP Vegas

Start at: 2017-08-16 21:04:09

End at: 2017-08-16 21:04:39

Run 4: Report of TCP Vegas — Data Link

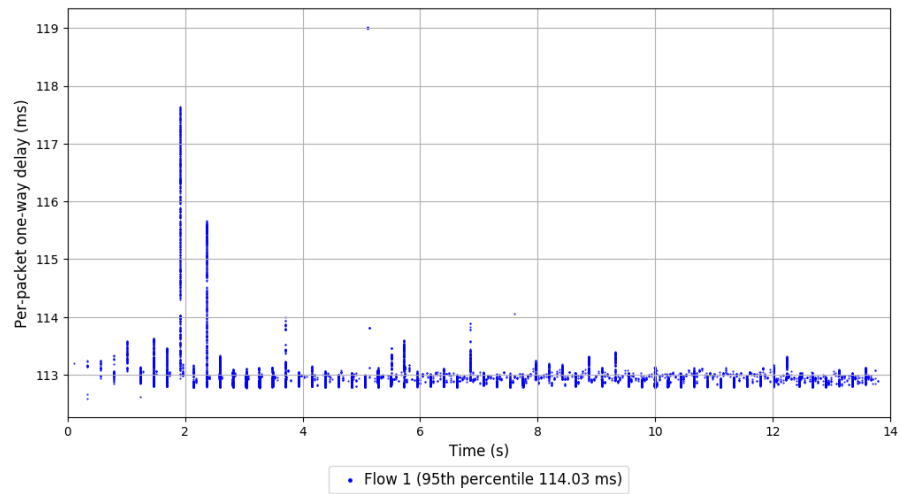
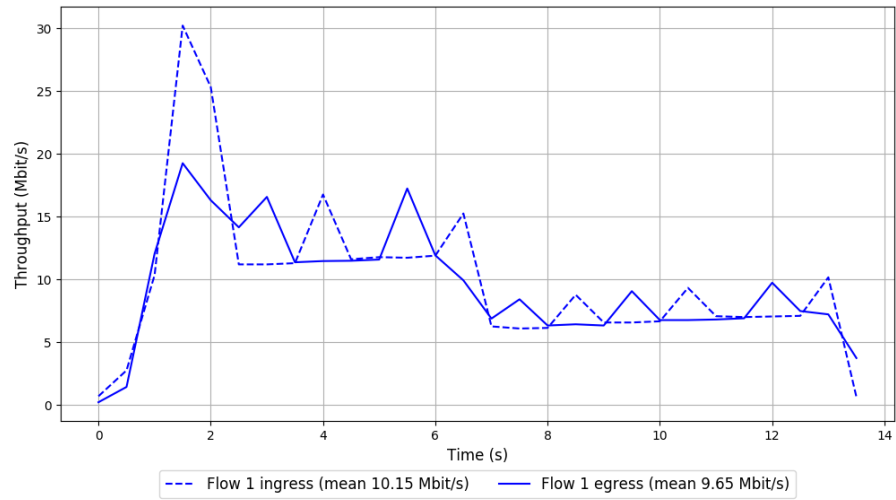


Run 5: Statistics of TCP Vegas

Start at: 2017-08-16 21:15:53

End at: 2017-08-16 21:16:23

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-16 21:27:37

End at: 2017-08-16 21:28:08

Below is generated by plot.py at 2017-08-16 23:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.20 Mbit/s

95th percentile per-packet one-way delay: 114.807 ms

Loss rate: 0.89%

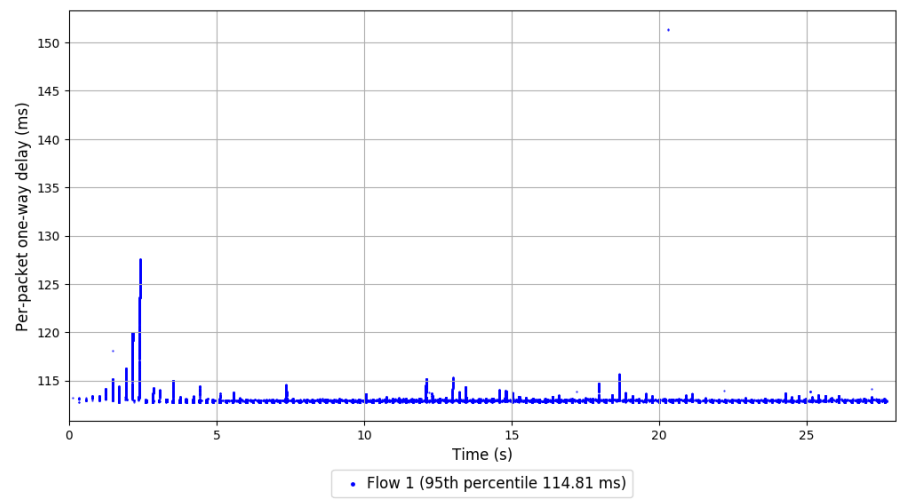
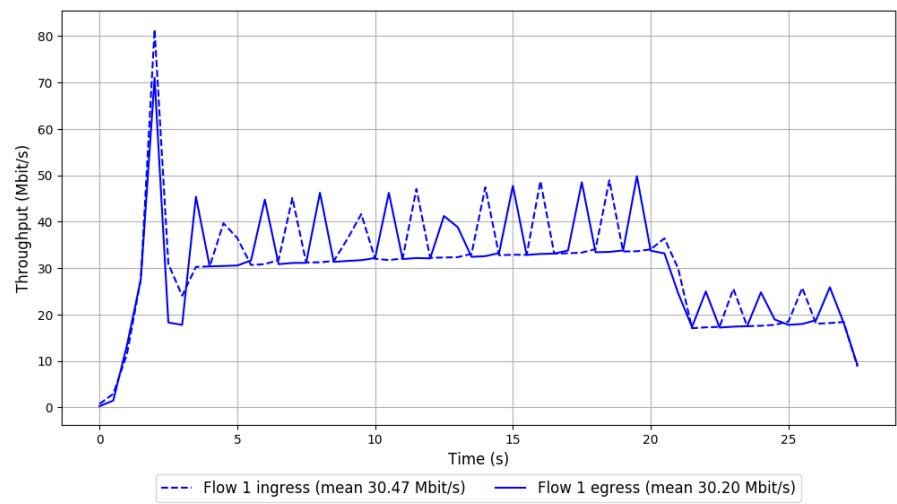
-- Flow 1:

Average throughput: 30.20 Mbit/s

95th percentile per-packet one-way delay: 114.807 ms

Loss rate: 0.89%

Run 6: Report of TCP Vegas — Data Link

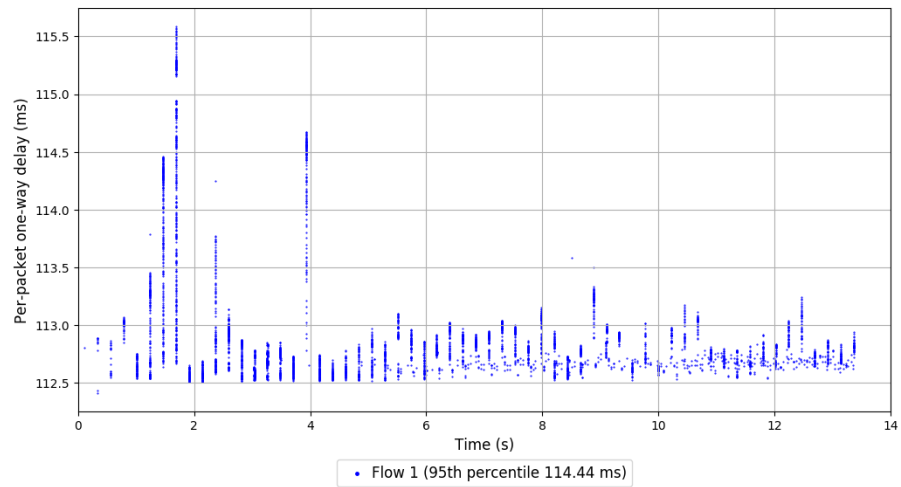
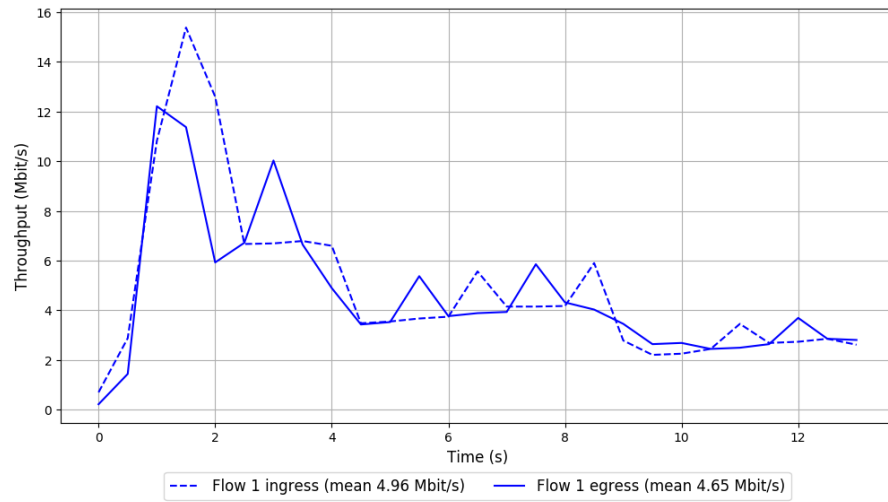


Run 7: Statistics of TCP Vegas

Start at: 2017-08-16 21:39:28

End at: 2017-08-16 21:39:58

Run 7: Report of TCP Vegas — Data Link

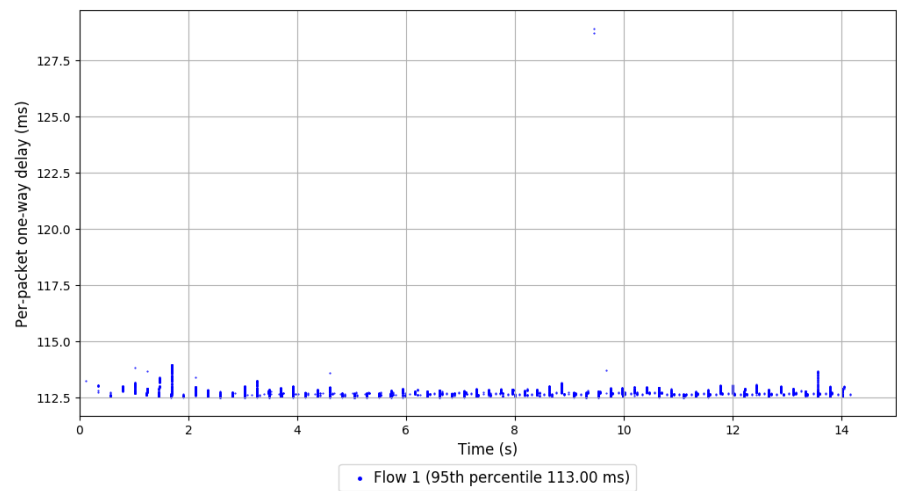
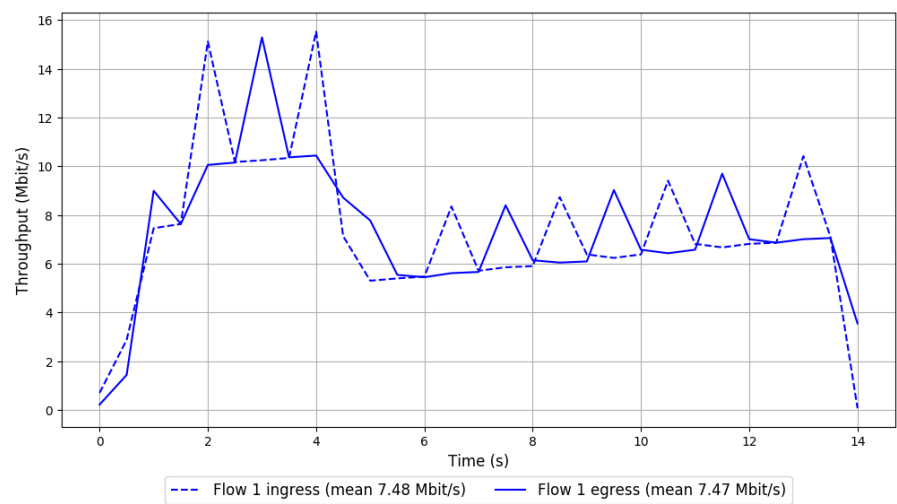


Run 8: Statistics of TCP Vegas

Start at: 2017-08-16 21:51:01

End at: 2017-08-16 21:51:31

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-16 22:02:37

End at: 2017-08-16 22:03:07

Below is generated by plot.py at 2017-08-16 23:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.31 Mbit/s

95th percentile per-packet one-way delay: 113.337 ms

Loss rate: 0.00%

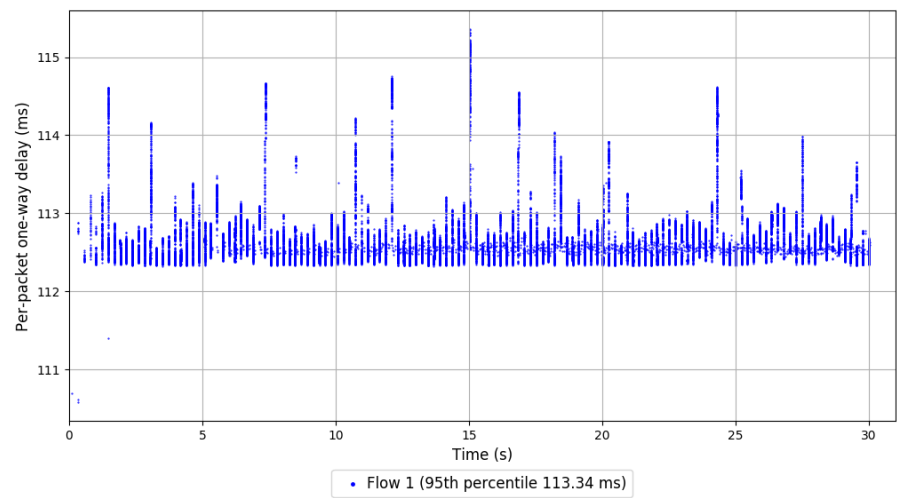
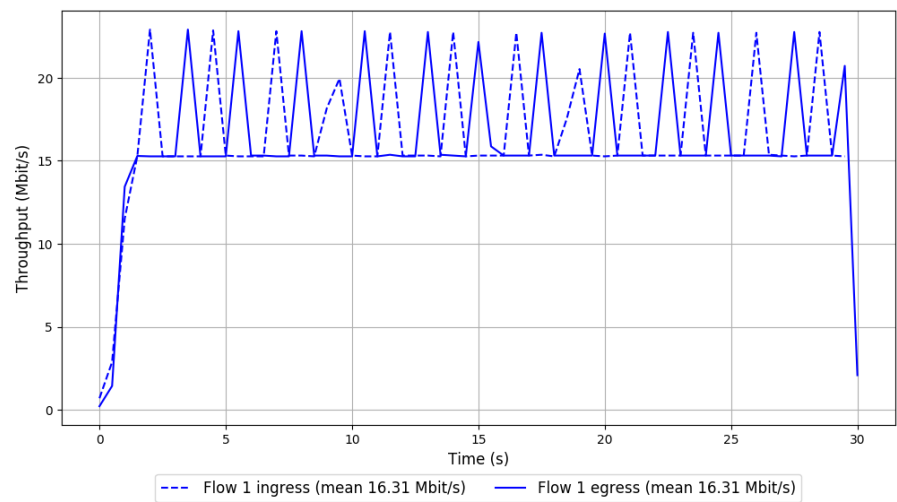
-- Flow 1:

Average throughput: 16.31 Mbit/s

95th percentile per-packet one-way delay: 113.337 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-16 22:14:19

End at: 2017-08-16 22:14:49

Below is generated by plot.py at 2017-08-16 23:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 113.002 ms

Loss rate: 0.42%

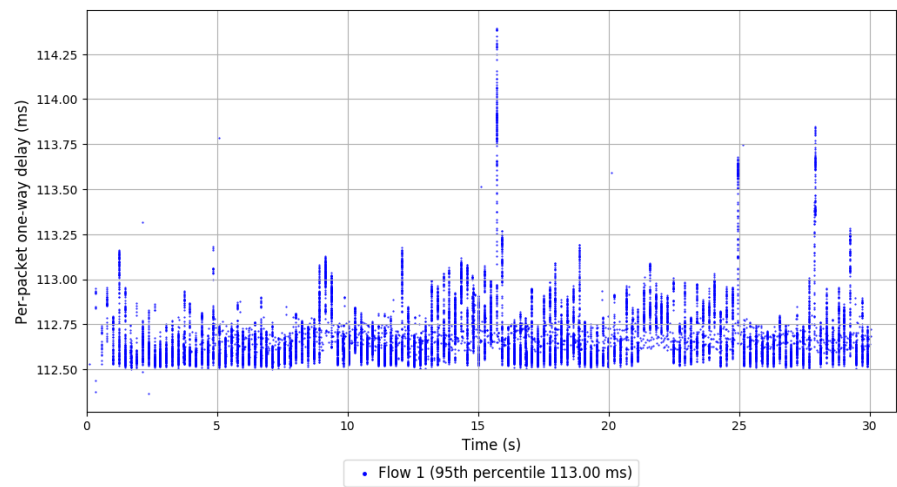
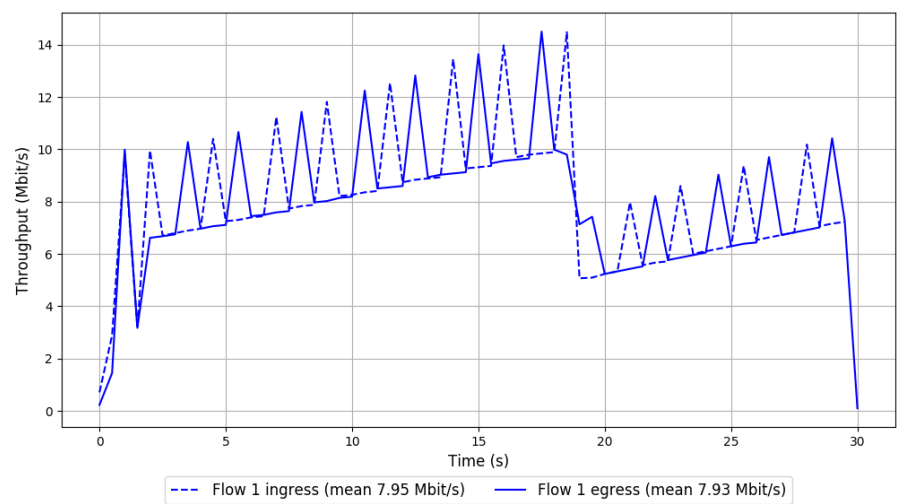
-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 113.002 ms

Loss rate: 0.42%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-16 20:31:00

End at: 2017-08-16 20:31:30

Below is generated by plot.py at 2017-08-16 23:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.24 Mbit/s

95th percentile per-packet one-way delay: 134.521 ms

Loss rate: 2.22%

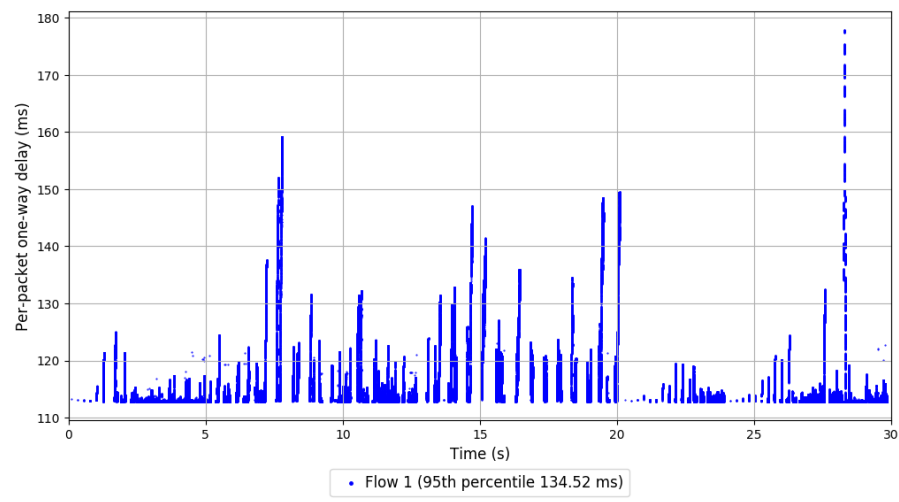
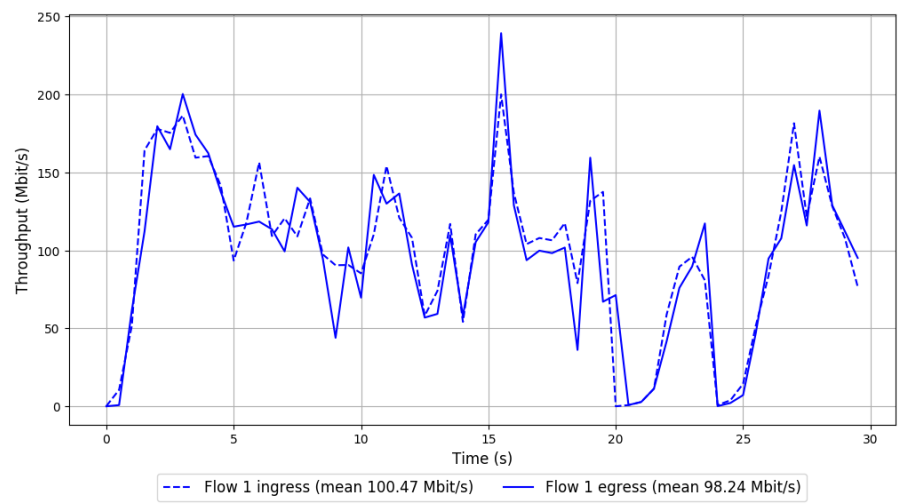
-- Flow 1:

Average throughput: 98.24 Mbit/s

95th percentile per-packet one-way delay: 134.521 ms

Loss rate: 2.22%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-16 20:41:59

End at: 2017-08-16 20:42:29

Below is generated by plot.py at 2017-08-16 23:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.56 Mbit/s

95th percentile per-packet one-way delay: 115.008 ms

Loss rate: 61.62%

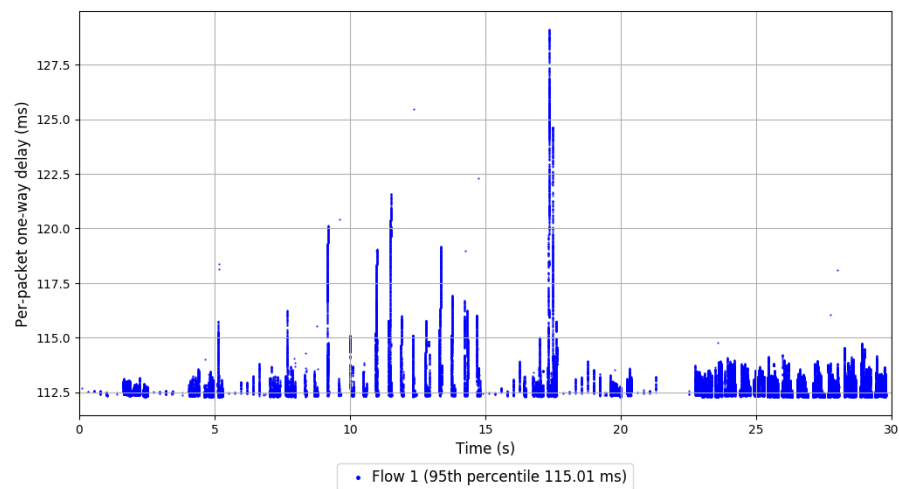
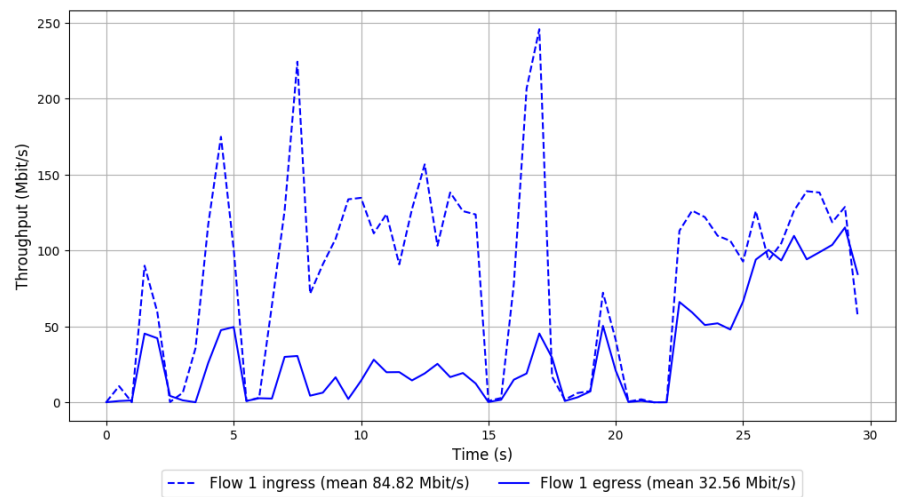
-- Flow 1:

Average throughput: 32.56 Mbit/s

95th percentile per-packet one-way delay: 115.008 ms

Loss rate: 61.62%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-16 20:53:22

End at: 2017-08-16 20:53:52

Below is generated by plot.py at 2017-08-16 23:32:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.49 Mbit/s

95th percentile per-packet one-way delay: 199.257 ms

Loss rate: 2.30%

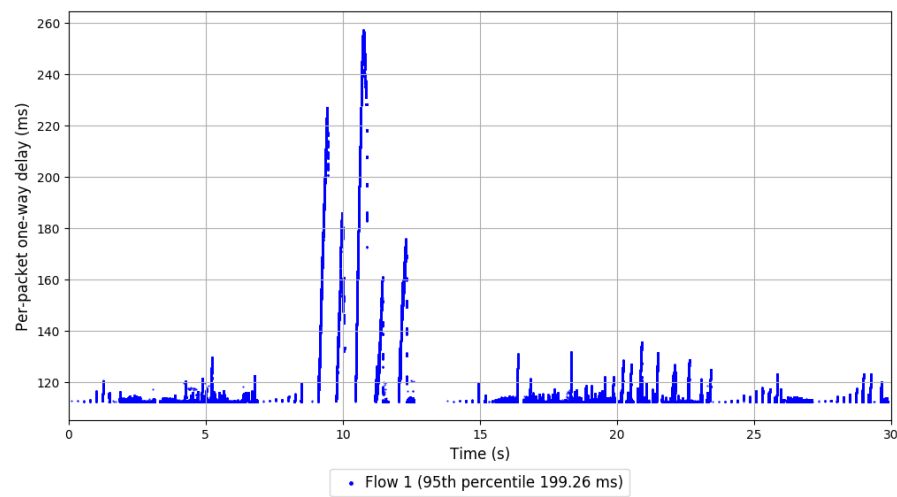
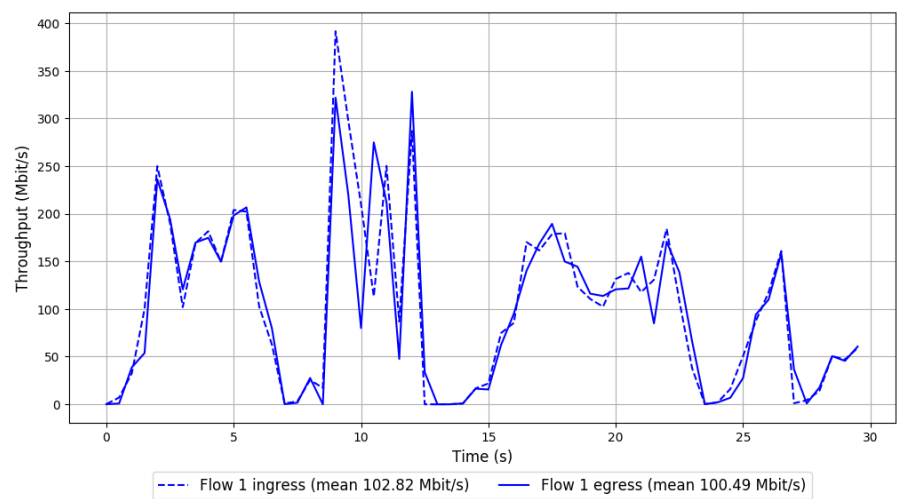
-- Flow 1:

Average throughput: 100.49 Mbit/s

95th percentile per-packet one-way delay: 199.257 ms

Loss rate: 2.30%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-16 21:04:50

End at: 2017-08-16 21:05:20

Below is generated by plot.py at 2017-08-16 23:32:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.11 Mbit/s

95th percentile per-packet one-way delay: 119.895 ms

Loss rate: 1.12%

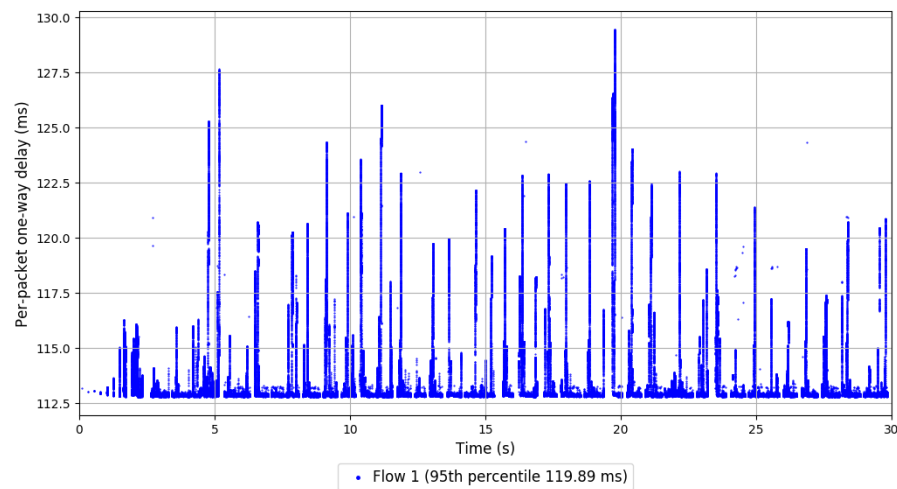
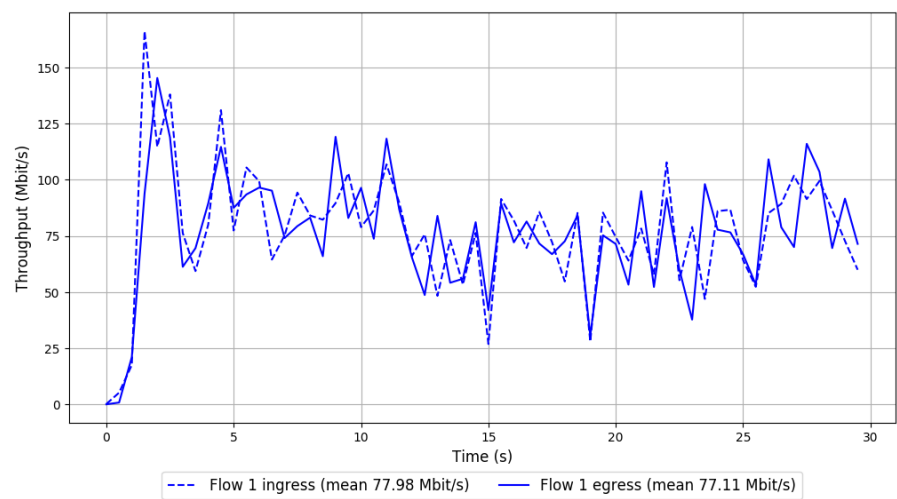
-- Flow 1:

Average throughput: 77.11 Mbit/s

95th percentile per-packet one-way delay: 119.895 ms

Loss rate: 1.12%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-16 21:16:35

End at: 2017-08-16 21:17:05

Below is generated by plot.py at 2017-08-16 23:33:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 133.20 Mbit/s

95th percentile per-packet one-way delay: 122.389 ms

Loss rate: 0.67%

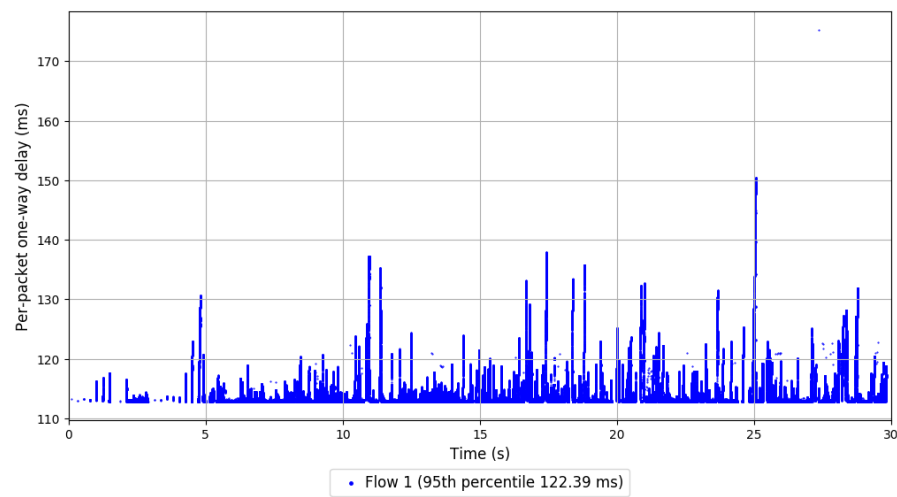
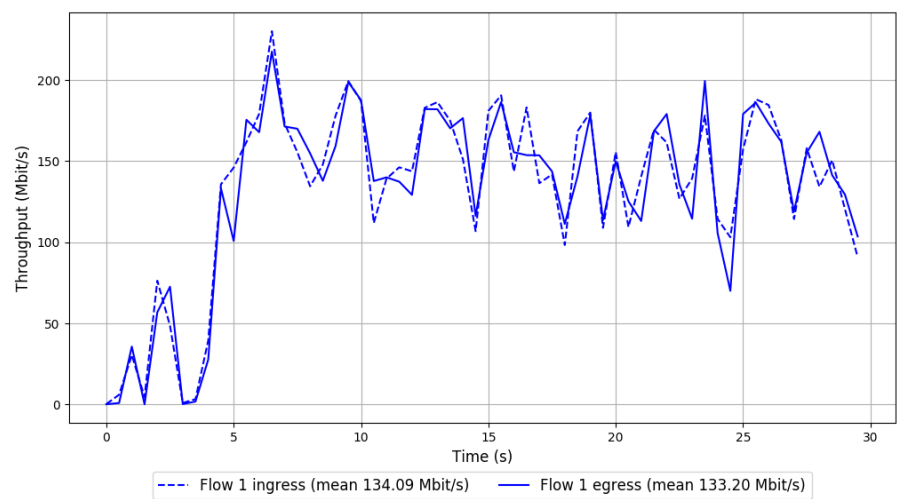
-- Flow 1:

Average throughput: 133.20 Mbit/s

95th percentile per-packet one-way delay: 122.389 ms

Loss rate: 0.67%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-16 21:28:20

End at: 2017-08-16 21:28:50

Below is generated by plot.py at 2017-08-16 23:33:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 137.92 Mbit/s

95th percentile per-packet one-way delay: 115.693 ms

Loss rate: 0.12%

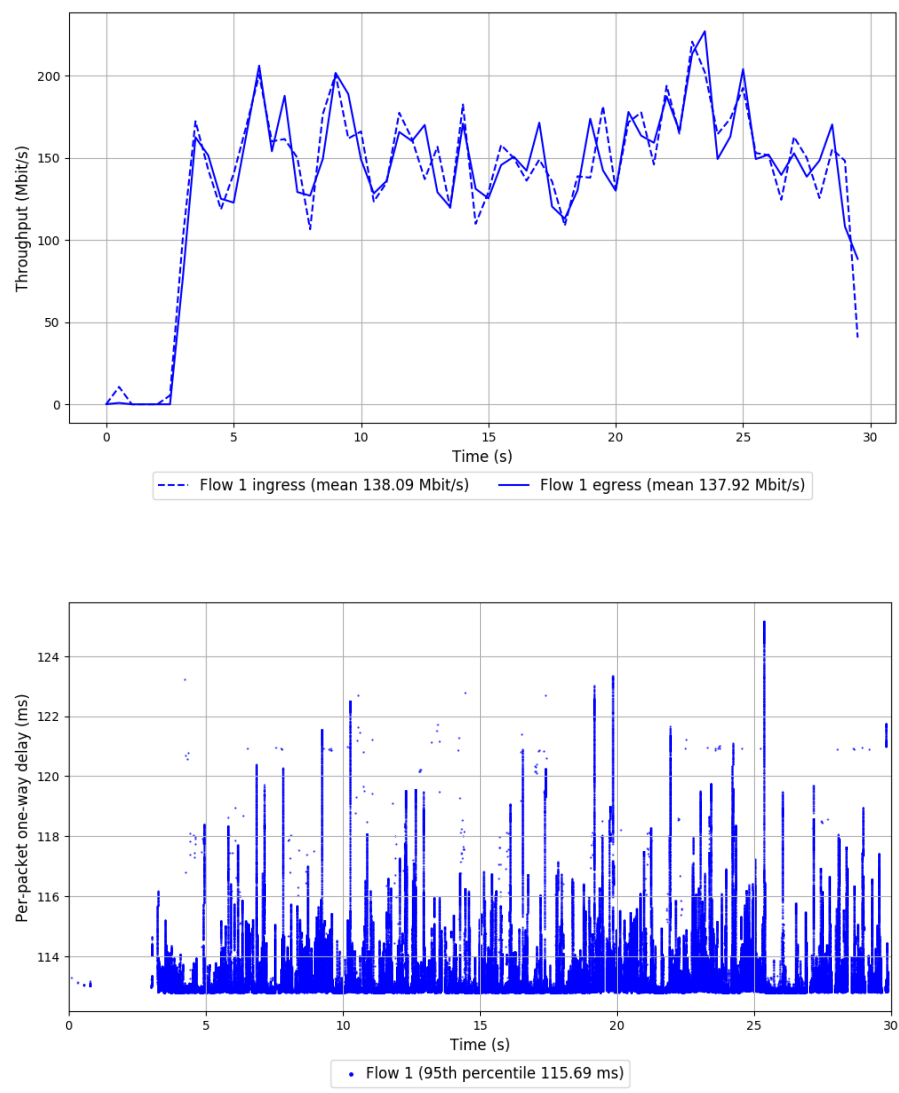
-- Flow 1:

Average throughput: 137.92 Mbit/s

95th percentile per-packet one-way delay: 115.693 ms

Loss rate: 0.12%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-16 21:40:09

End at: 2017-08-16 21:40:39

Below is generated by plot.py at 2017-08-16 23:33:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.07 Mbit/s

95th percentile per-packet one-way delay: 131.383 ms

Loss rate: 16.80%

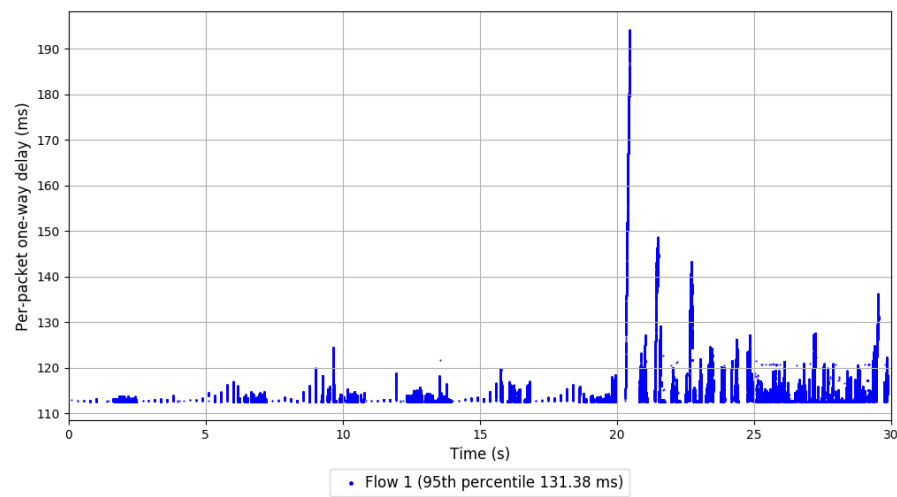
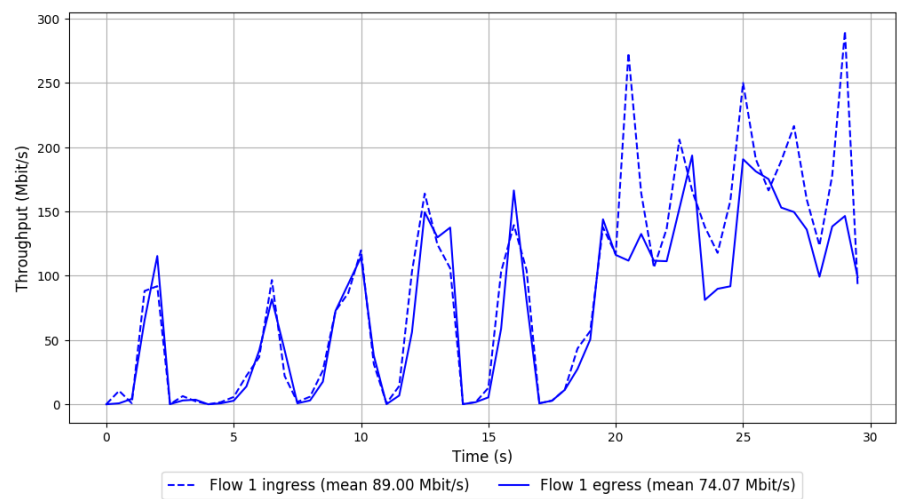
-- Flow 1:

Average throughput: 74.07 Mbit/s

95th percentile per-packet one-way delay: 131.383 ms

Loss rate: 16.80%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-16 21:51:42

End at: 2017-08-16 21:52:12

Below is generated by plot.py at 2017-08-16 23:33:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 123.93 Mbit/s

95th percentile per-packet one-way delay: 139.588 ms

Loss rate: 20.67%

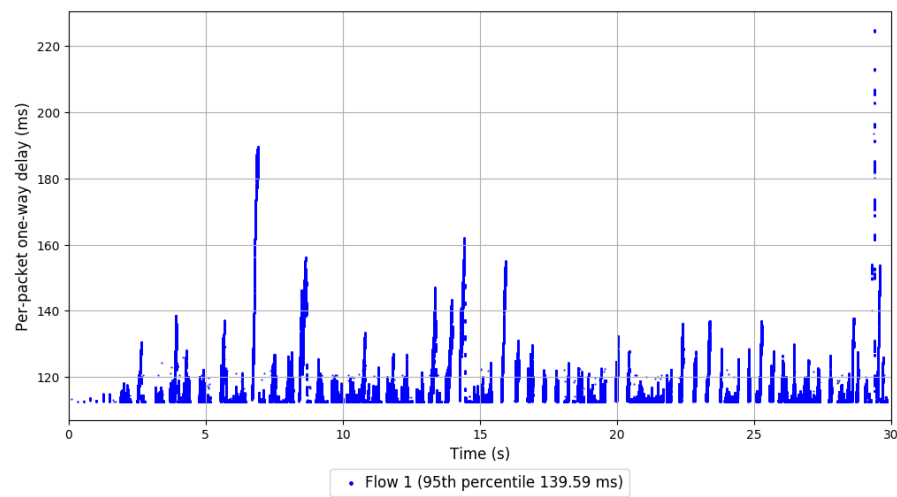
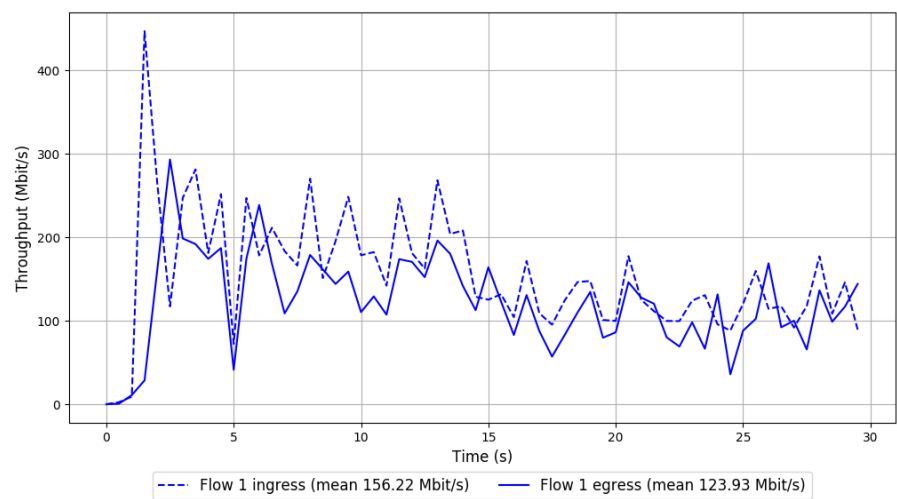
-- Flow 1:

Average throughput: 123.93 Mbit/s

95th percentile per-packet one-way delay: 139.588 ms

Loss rate: 20.67%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-16 22:03:20

End at: 2017-08-16 22:03:50

Below is generated by plot.py at 2017-08-16 23:33:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.78 Mbit/s

95th percentile per-packet one-way delay: 151.038 ms

Loss rate: 1.42%

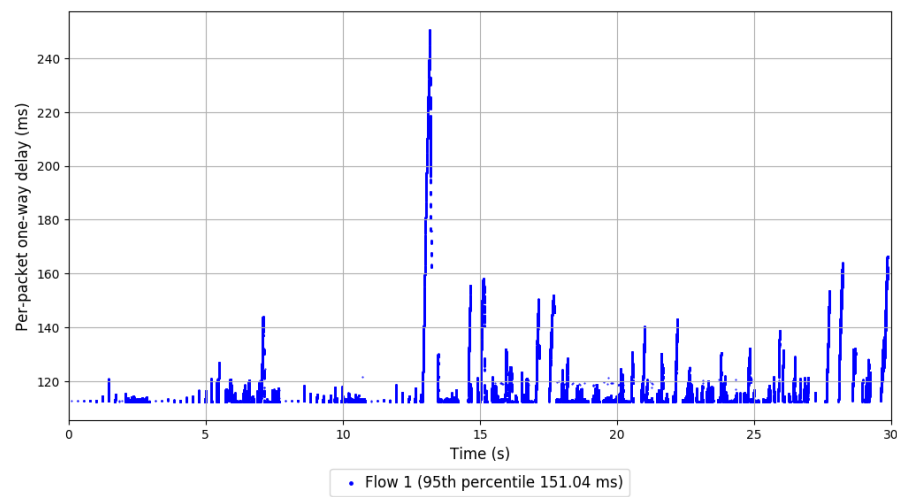
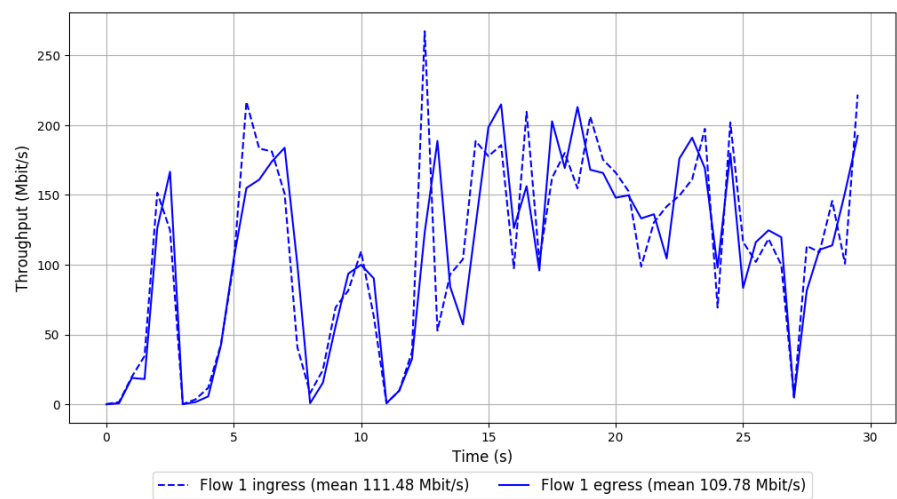
-- Flow 1:

Average throughput: 109.78 Mbit/s

95th percentile per-packet one-way delay: 151.038 ms

Loss rate: 1.42%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-16 22:15:00

End at: 2017-08-16 22:15:30

Below is generated by plot.py at 2017-08-16 23:33:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.91 Mbit/s

95th percentile per-packet one-way delay: 144.147 ms

Loss rate: 7.05%

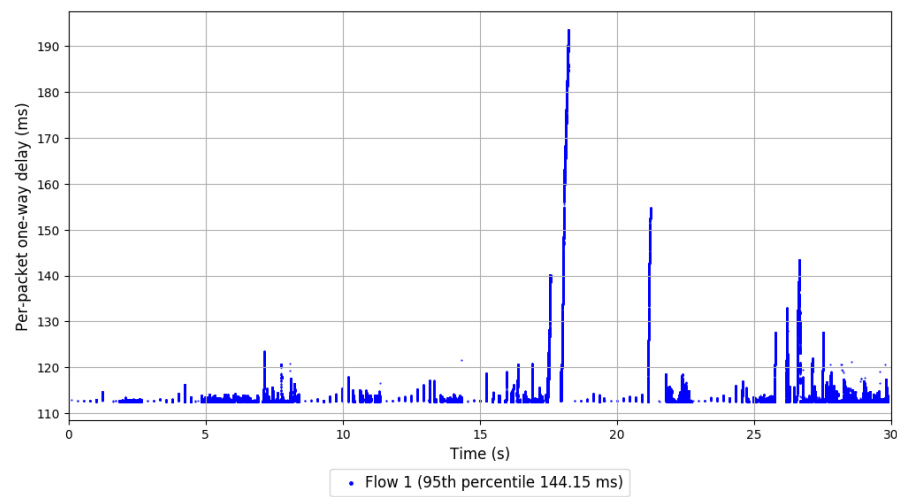
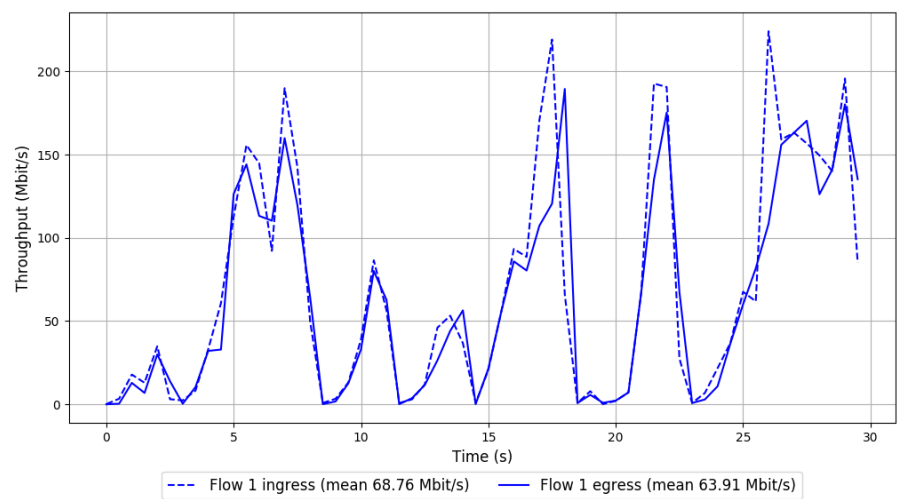
-- Flow 1:

Average throughput: 63.91 Mbit/s

95th percentile per-packet one-way delay: 144.147 ms

Loss rate: 7.05%

Run 10: Report of Verus — Data Link

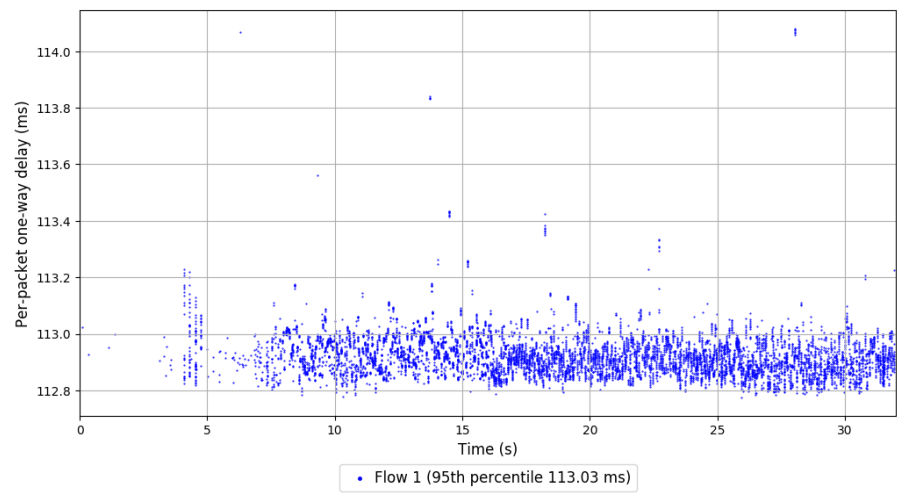
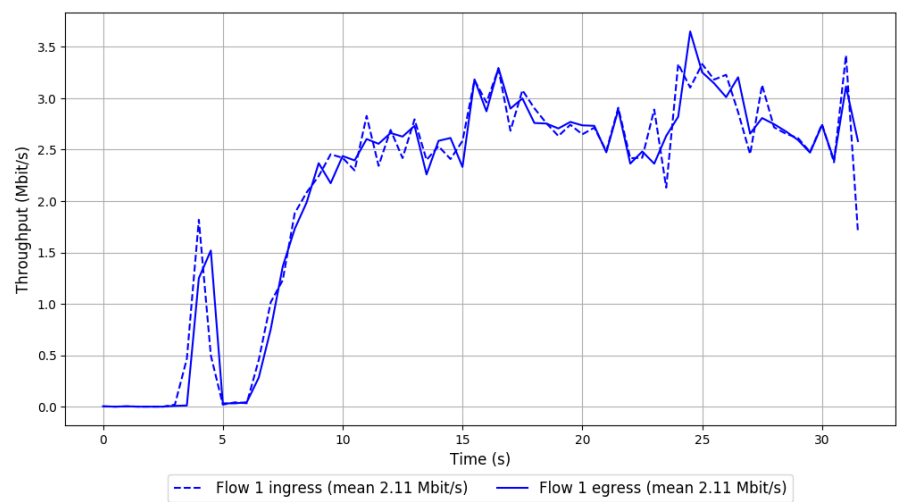


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-16 20:22:22
End at: 2017-08-16 20:22:52

# Below is generated by plot.py at 2017-08-16 23:33:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 113.027 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 113.027 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

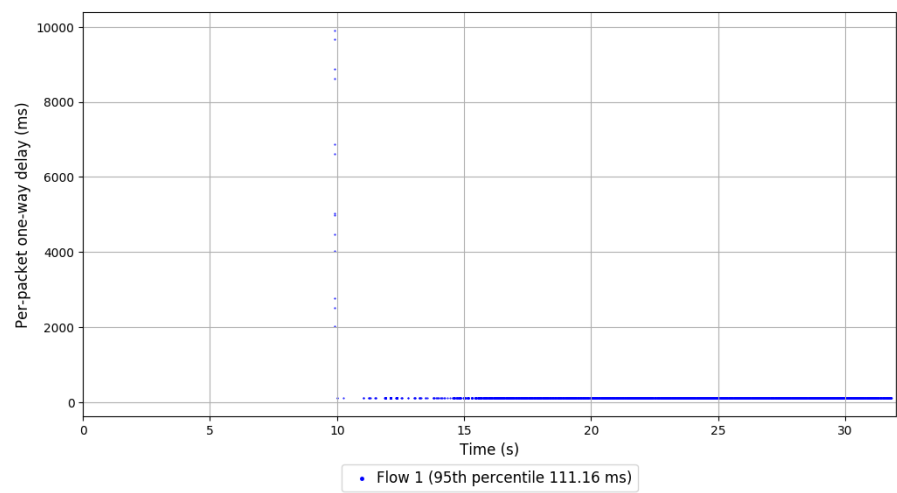
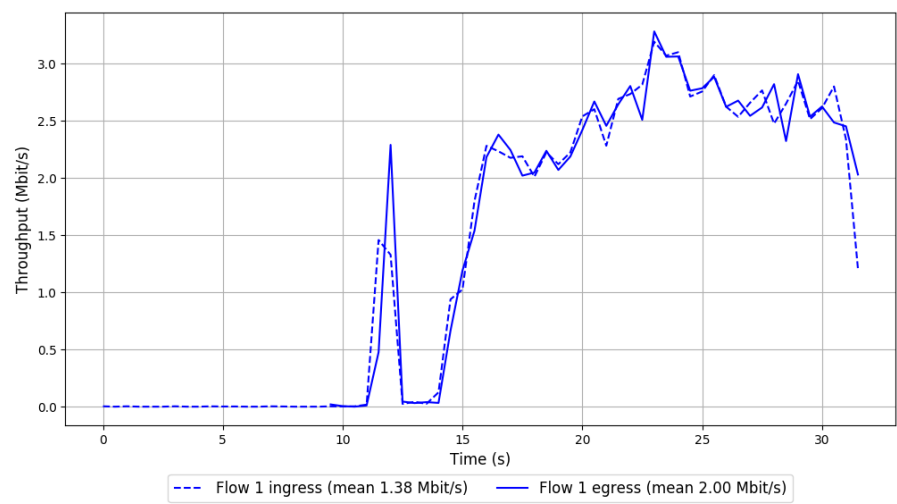


Run 2: Statistics of WebRTC media

Start at: 2017-08-16 20:33:51

End at: 2017-08-16 20:34:21

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-16 20:44:47

End at: 2017-08-16 20:45:17

Below is generated by plot.py at 2017-08-16 23:33:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 110.254 ms

Loss rate: 0.00%

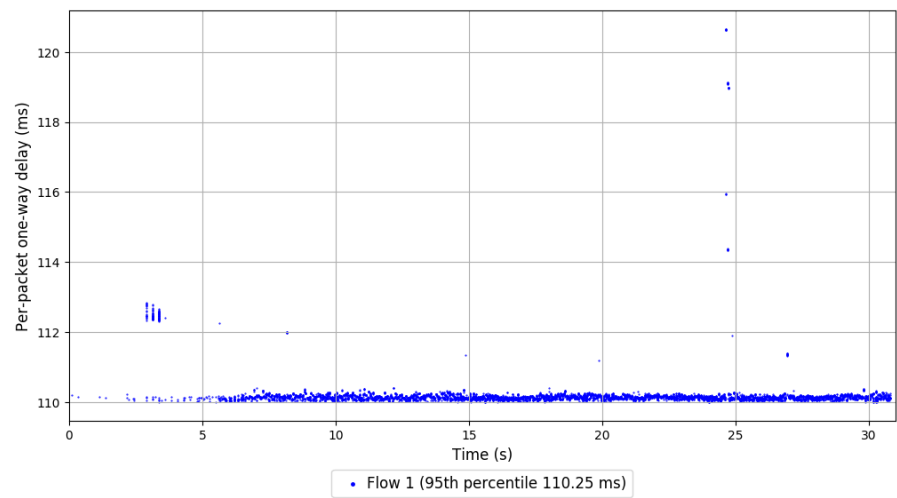
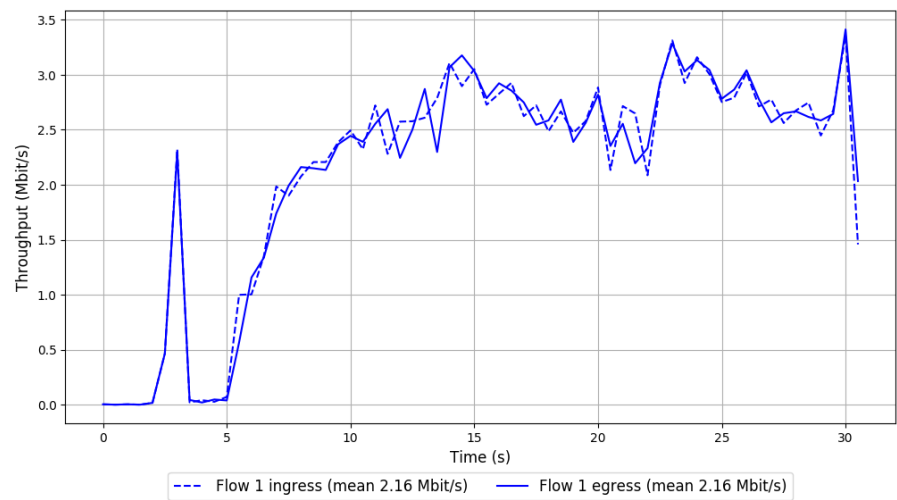
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 110.254 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-16 20:56:14

End at: 2017-08-16 20:56:44

Below is generated by plot.py at 2017-08-16 23:33:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 110.266 ms

Loss rate: 0.00%

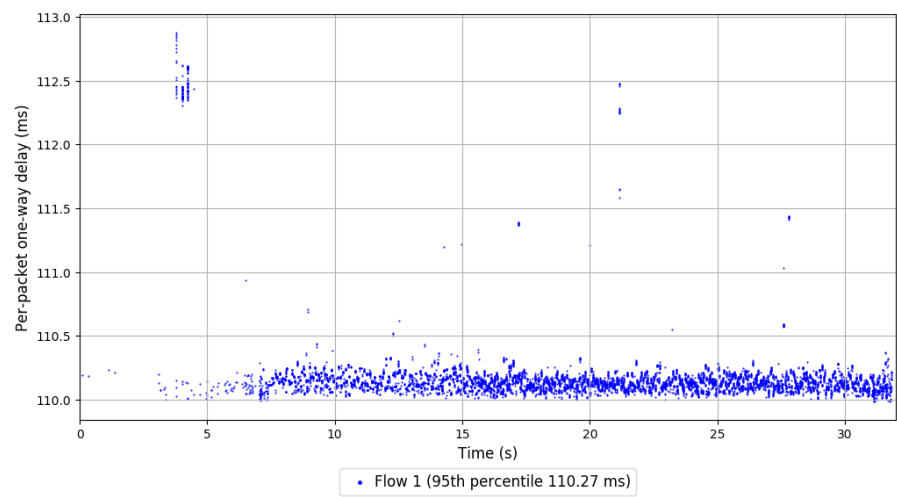
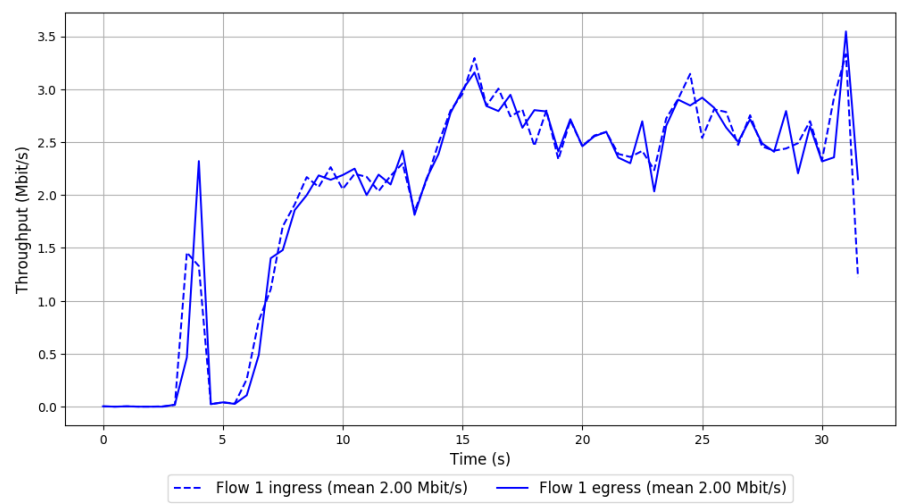
-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 110.266 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-16 21:07:42

End at: 2017-08-16 21:08:12

Below is generated by plot.py at 2017-08-16 23:34:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 112.339 ms

Loss rate: 0.00%

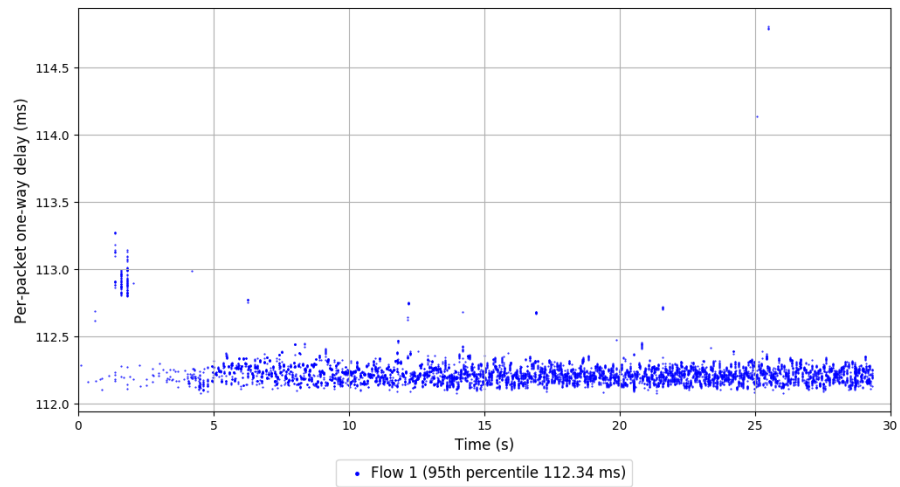
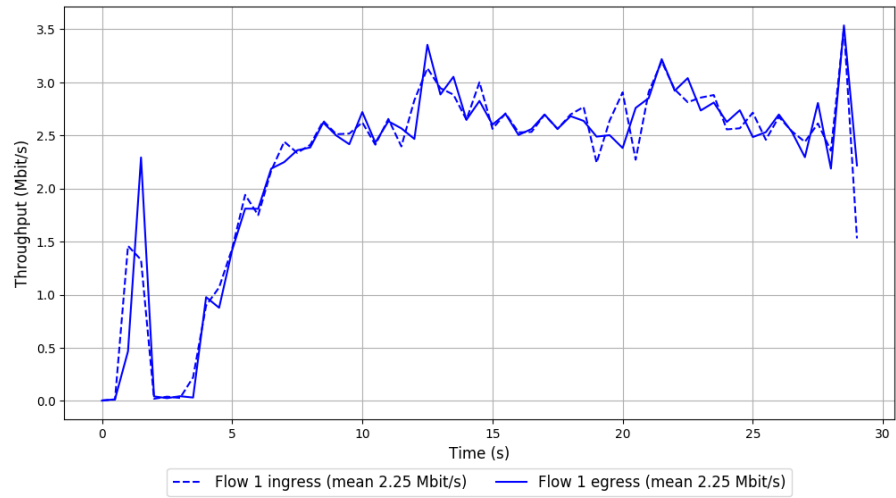
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 112.339 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-16 21:19:30

End at: 2017-08-16 21:20:00

Below is generated by plot.py at 2017-08-16 23:34:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 112.853 ms

Loss rate: 0.00%

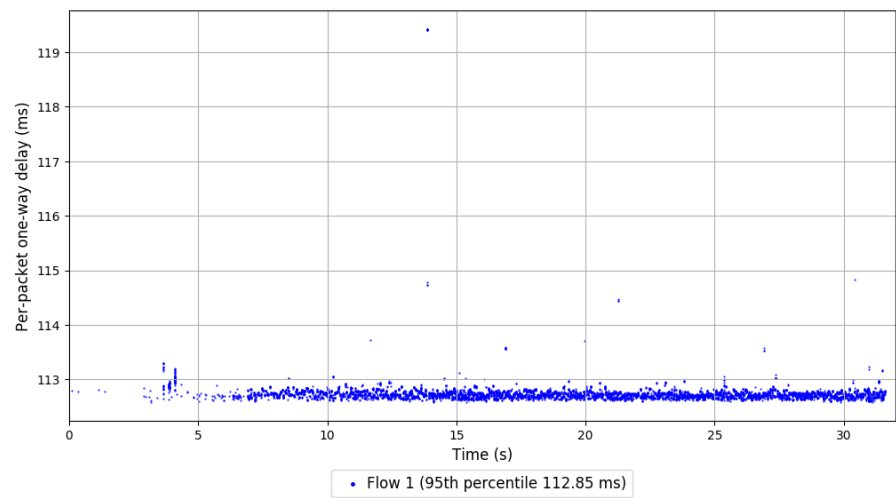
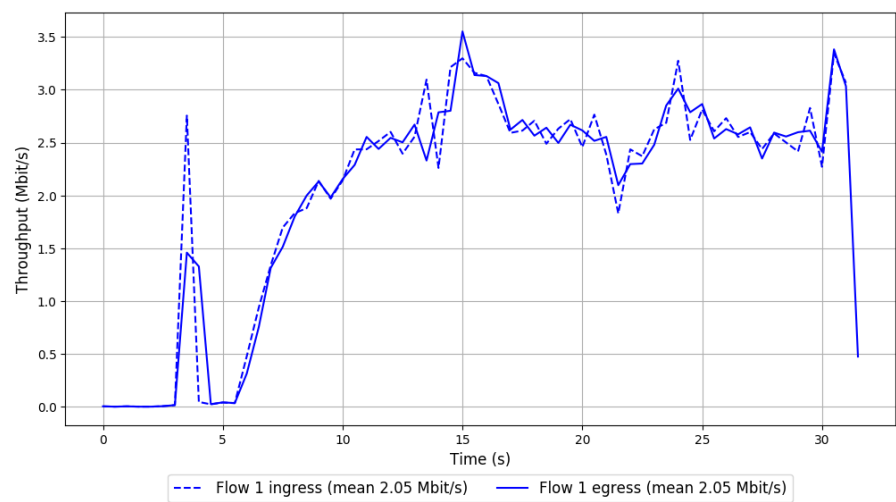
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 112.853 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

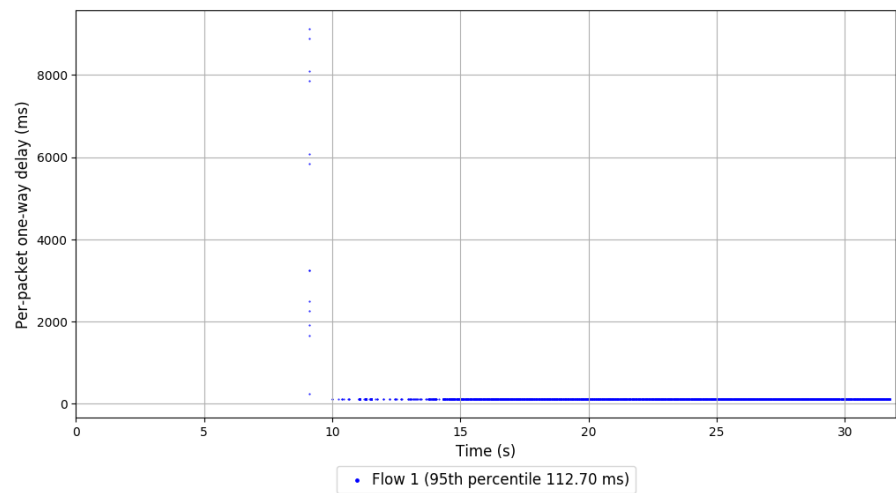
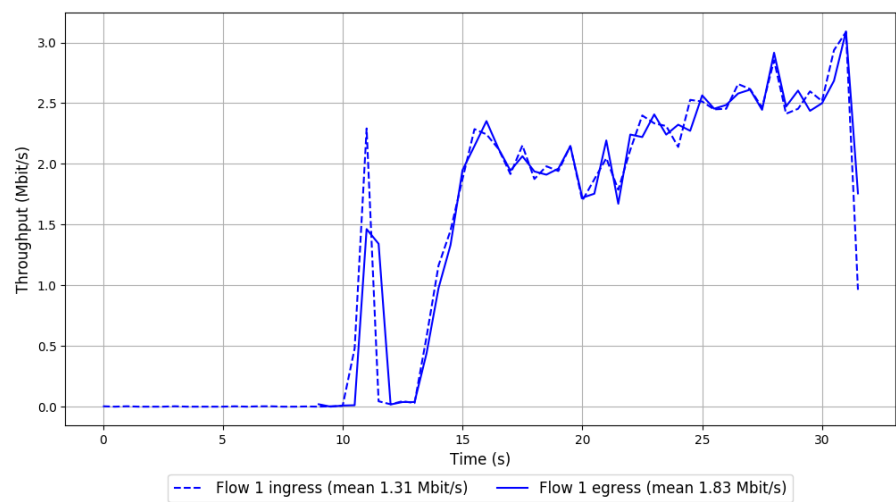


Run 7: Statistics of WebRTC media

Start at: 2017-08-16 21:31:17

End at: 2017-08-16 21:31:47

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-16 21:43:01

End at: 2017-08-16 21:43:31

Below is generated by plot.py at 2017-08-16 23:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 110.821 ms

Loss rate: 0.00%

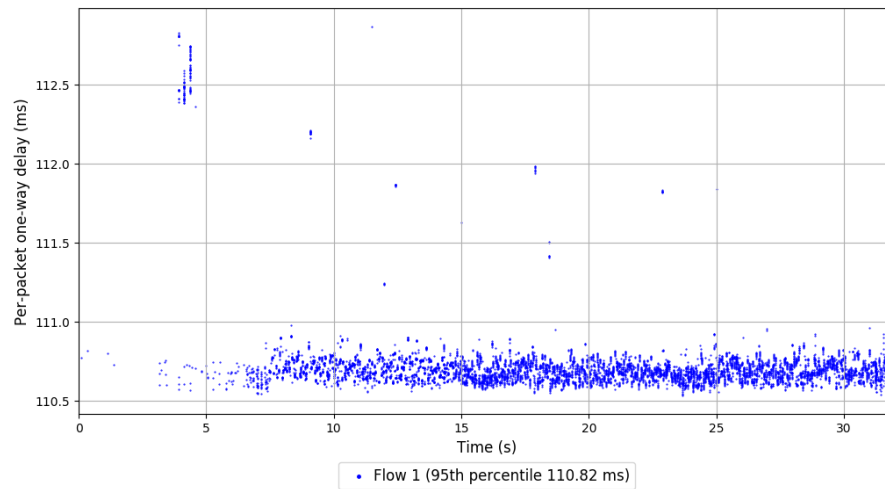
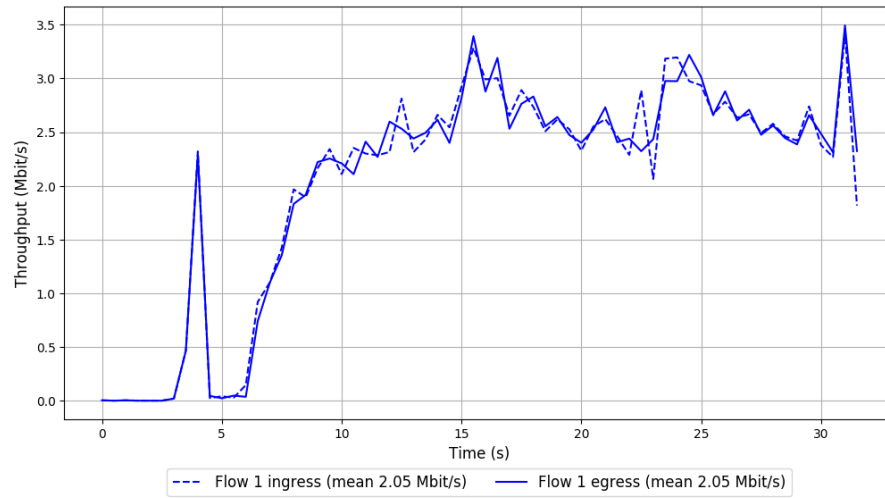
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 110.821 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-16 21:54:38

End at: 2017-08-16 21:55:08

Below is generated by plot.py at 2017-08-16 23:34:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 110.219 ms

Loss rate: 0.00%

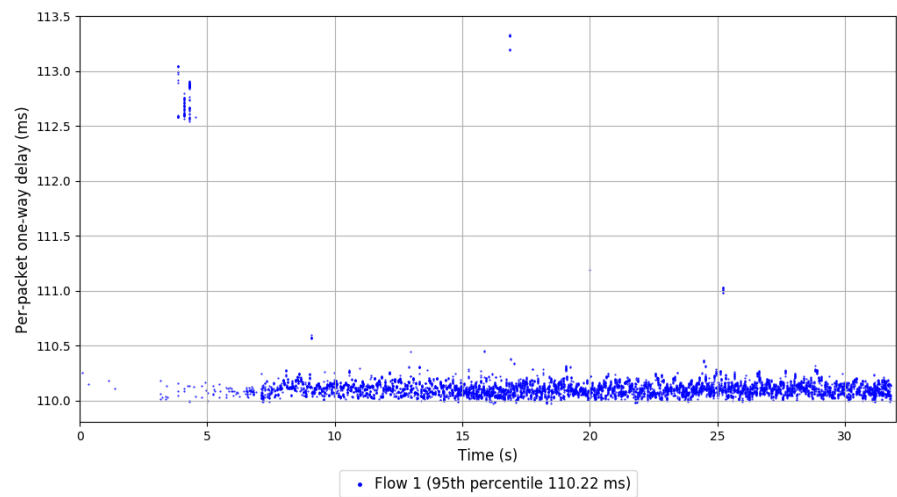
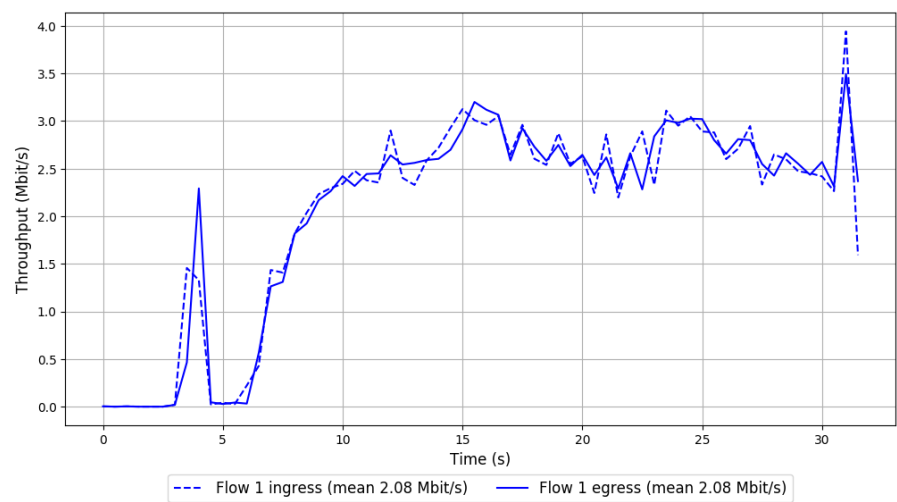
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 110.219 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-16 22:06:13

End at: 2017-08-16 22:06:43

Below is generated by plot.py at 2017-08-16 23:34:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 113.004 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 113.004 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

