

Pantheon Report

Generated at 2017-08-16 23:09:15 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

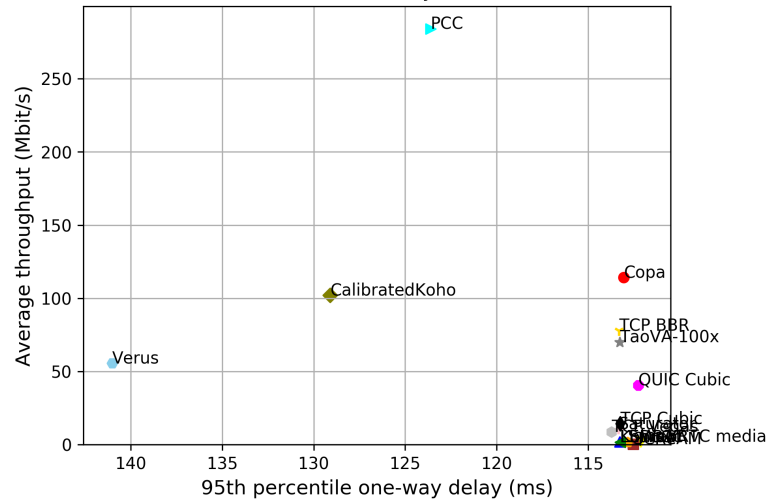
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

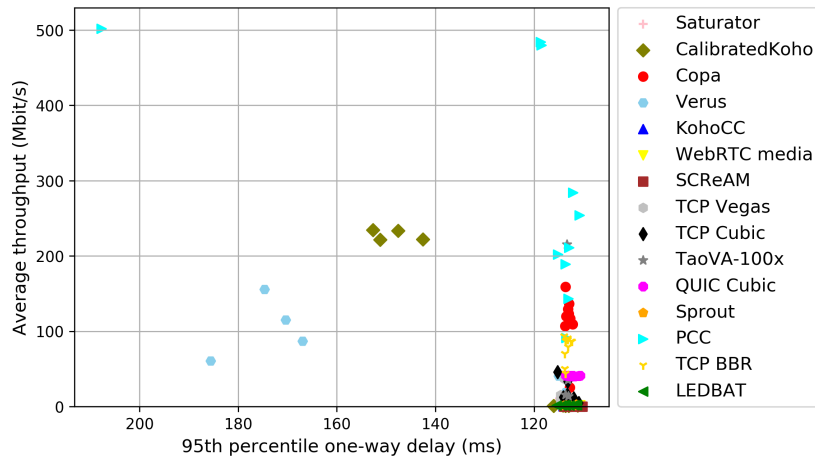
Git summary:

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	77.76	113.31	4.22
CalibratedKoho	9	102.10	129.10	38.09
Copa	9	114.16	113.05	0.70
TCP Cubic	10	14.27	113.25	2.29
KohoCC	10	1.84	113.27	63.31
LEDBAT	10	1.76	113.26	1.95
PCC	10	284.01	123.60	5.79
QUIC Cubic	9	40.67	112.25	0.26
Saturator	6	10.46	113.34	1.08
SCReAM	10	0.21	112.55	0.70
Sprout	7	1.71	112.83	2.81
TaoVA-100x	4	69.97	113.28	4.46
TCP Vegas	10	8.65	113.73	2.41
Verus	9	55.70	141.02	41.89
WebRTC media	10	2.05	112.13	0.99

Run 1: Statistics of TCP BBR

Start at: 2017-08-16 18:35:30

End at: 2017-08-16 18:36:00

Below is generated by plot.py at 2017-08-16 22:53:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.61 Mbit/s

95th percentile per-packet one-way delay: 113.638 ms

Loss rate: 0.94%

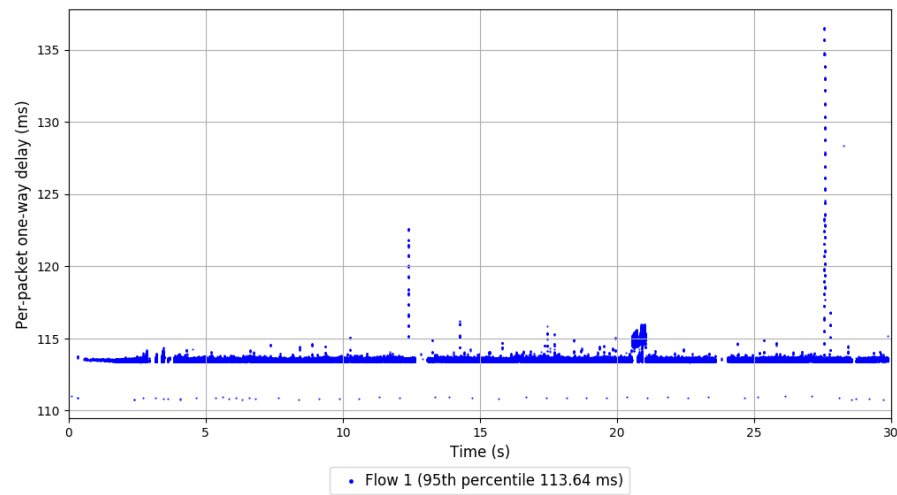
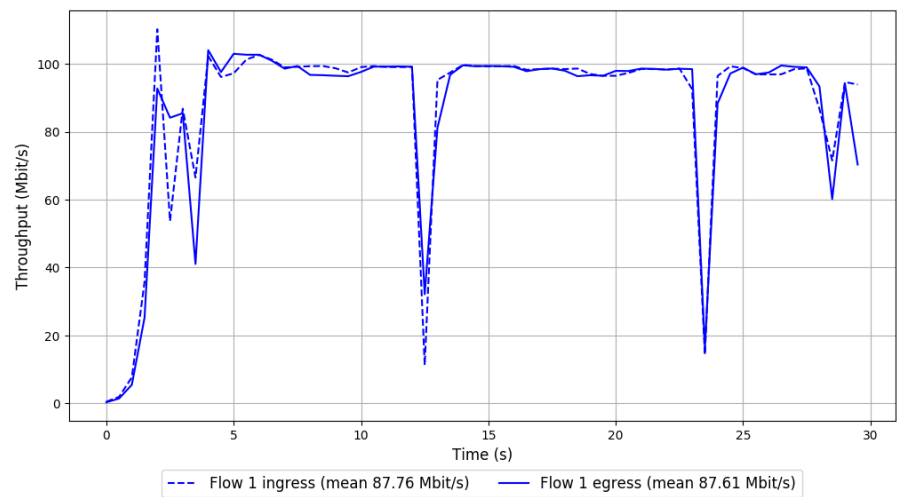
-- Flow 1:

Average throughput: 87.61 Mbit/s

95th percentile per-packet one-way delay: 113.638 ms

Loss rate: 0.94%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-16 18:46:48

End at: 2017-08-16 18:47:18

Below is generated by plot.py at 2017-08-16 22:53:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.89 Mbit/s

95th percentile per-packet one-way delay: 113.210 ms

Loss rate: 0.84%

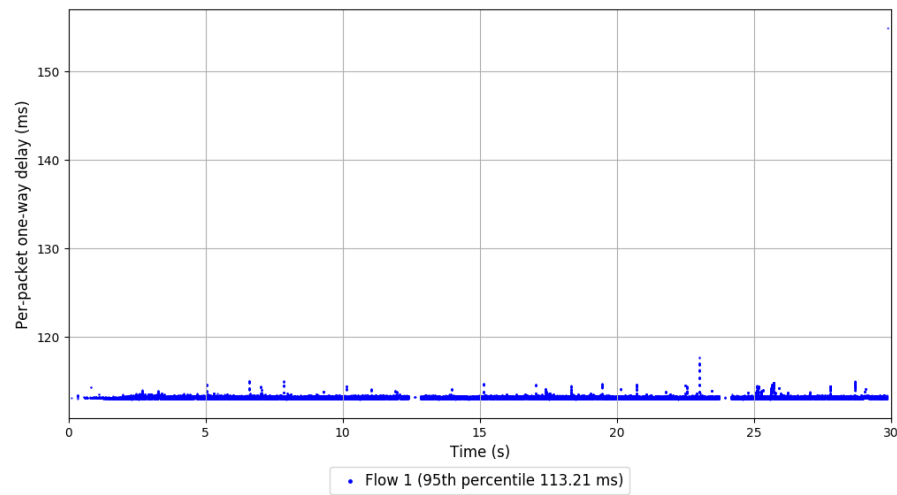
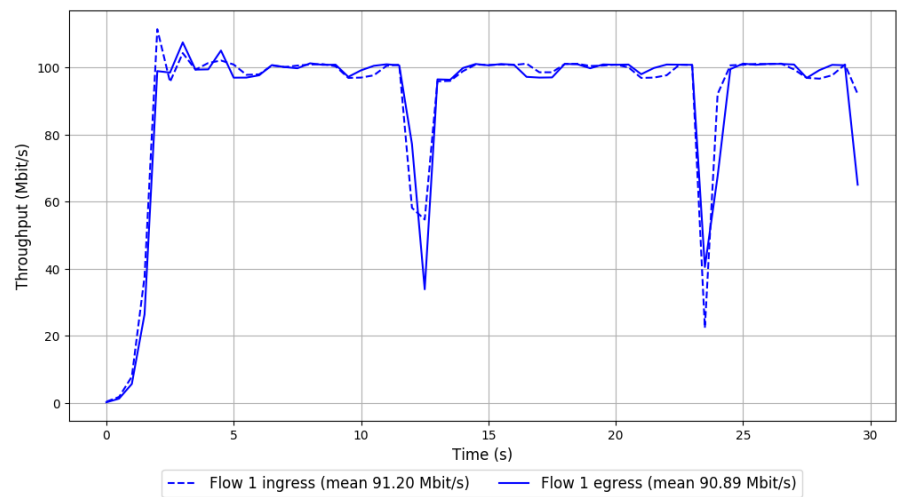
-- Flow 1:

Average throughput: 90.89 Mbit/s

95th percentile per-packet one-way delay: 113.210 ms

Loss rate: 0.84%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-16 18:58:02

End at: 2017-08-16 18:58:32

Below is generated by plot.py at 2017-08-16 22:53:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.60 Mbit/s

95th percentile per-packet one-way delay: 113.913 ms

Loss rate: 0.78%

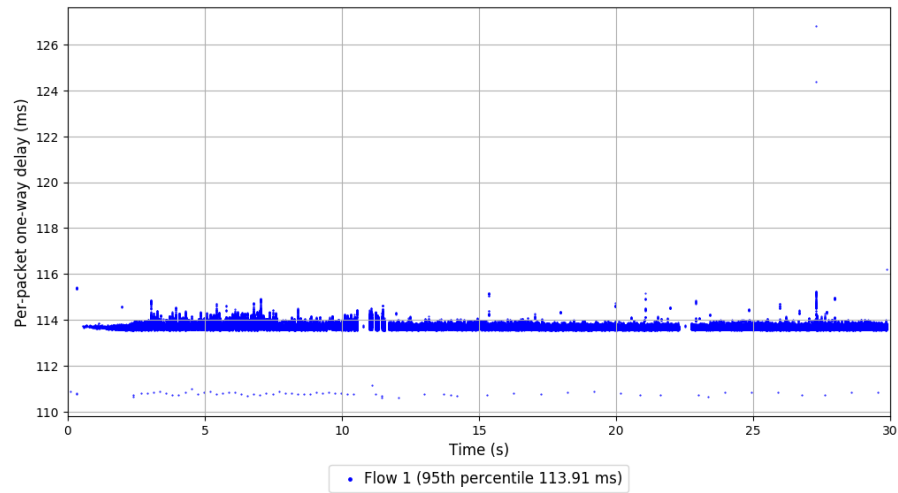
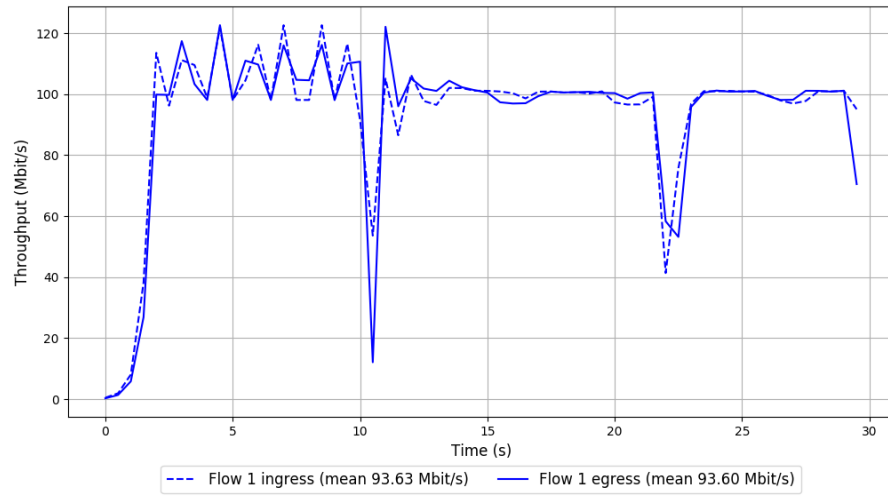
-- Flow 1:

Average throughput: 93.60 Mbit/s

95th percentile per-packet one-way delay: 113.913 ms

Loss rate: 0.78%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-16 19:09:09

End at: 2017-08-16 19:09:39

Below is generated by plot.py at 2017-08-16 22:53:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 113.746 ms

Loss rate: 14.27%

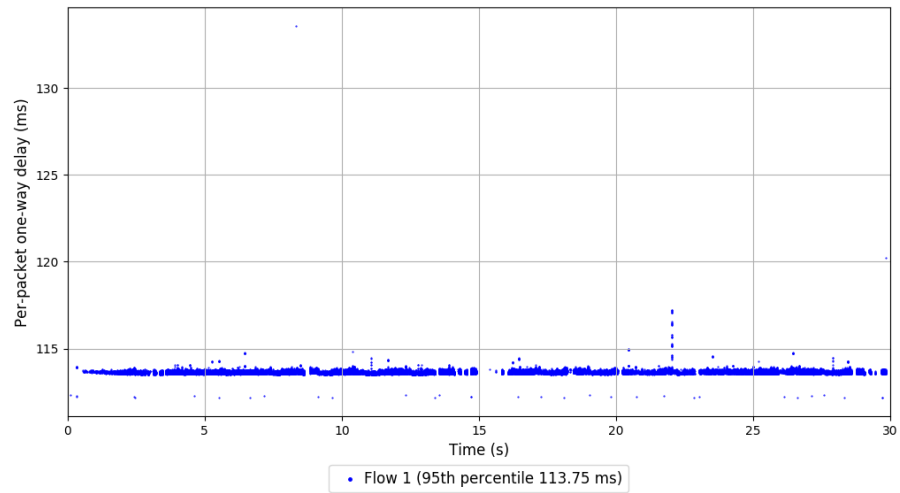
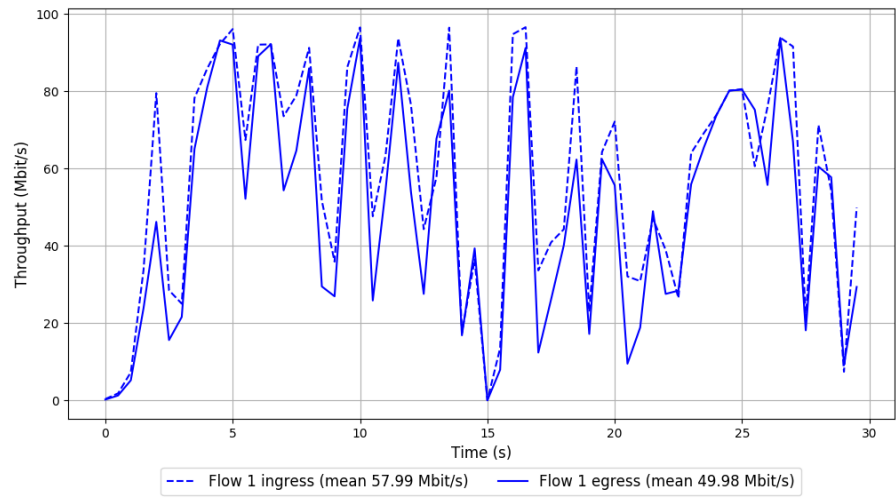
-- Flow 1:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 113.746 ms

Loss rate: 14.27%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

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

End at: 2017-08-16 19:20:49

Below is generated by plot.py at 2017-08-16 22:53:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.45 Mbit/s

95th percentile per-packet one-way delay: 112.315 ms

Loss rate: 2.30%

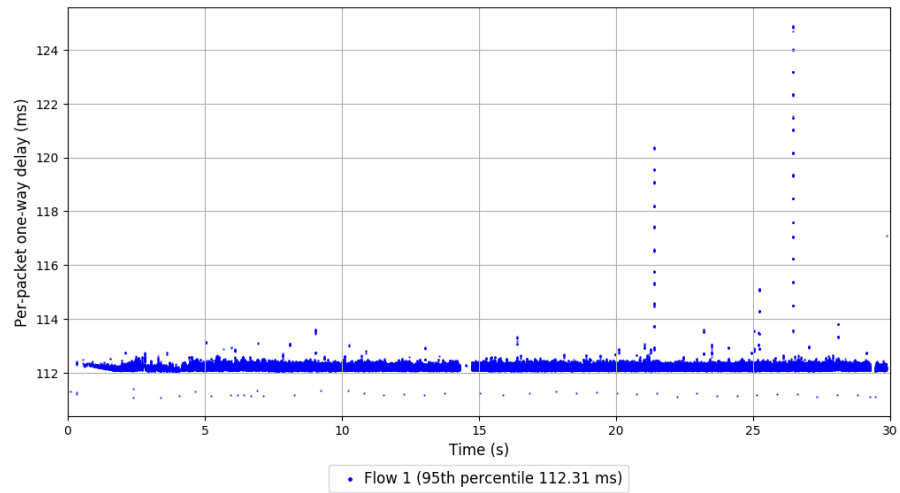
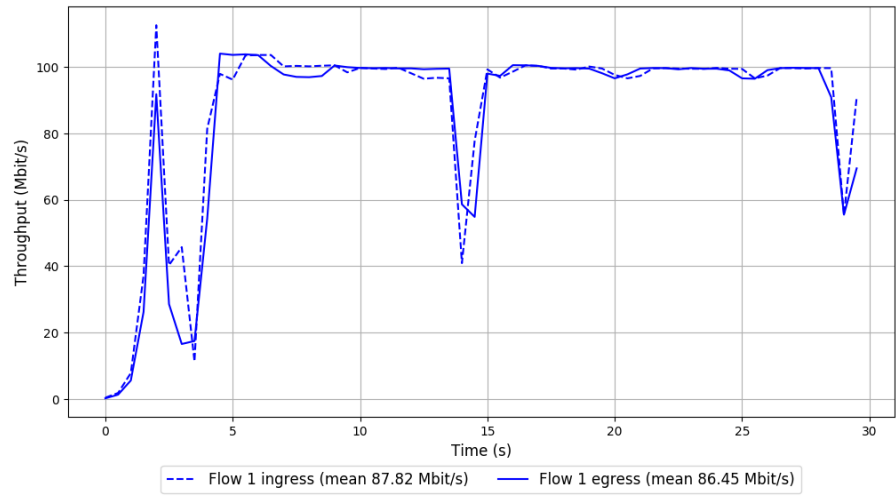
-- Flow 1:

Average throughput: 86.45 Mbit/s

95th percentile per-packet one-way delay: 112.315 ms

Loss rate: 2.30%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-16 19:31:38

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

Below is generated by plot.py at 2017-08-16 22:53:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.05 Mbit/s

95th percentile per-packet one-way delay: 113.186 ms

Loss rate: 1.12%

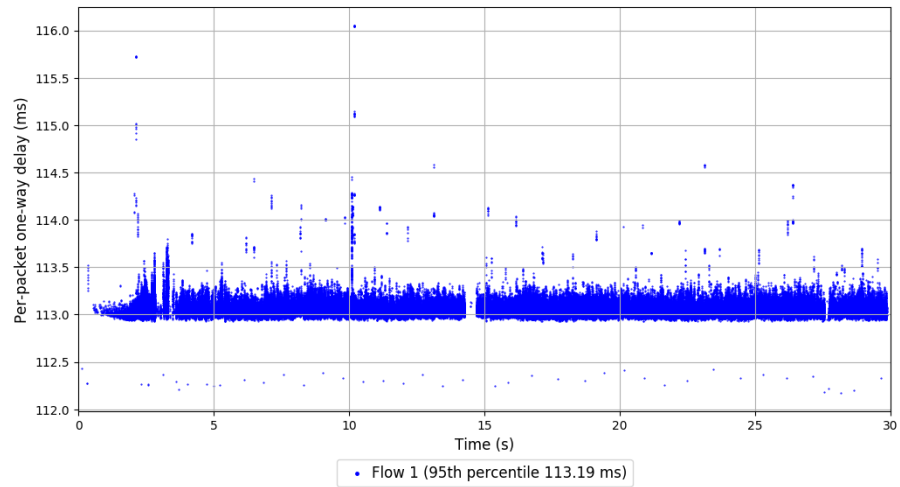
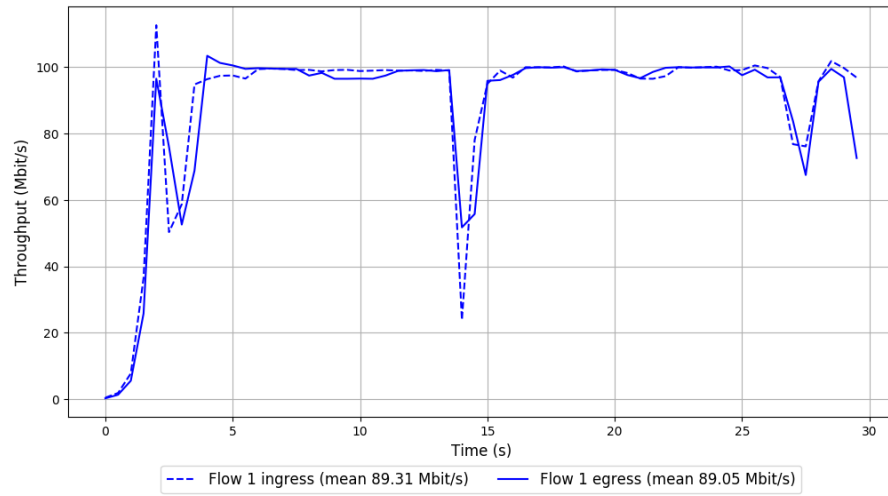
-- Flow 1:

Average throughput: 89.05 Mbit/s

95th percentile per-packet one-way delay: 113.186 ms

Loss rate: 1.12%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-16 19:42:34

End at: 2017-08-16 19:43:04

Below is generated by plot.py at 2017-08-16 22:54:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.42 Mbit/s

95th percentile per-packet one-way delay: 113.150 ms

Loss rate: 2.57%

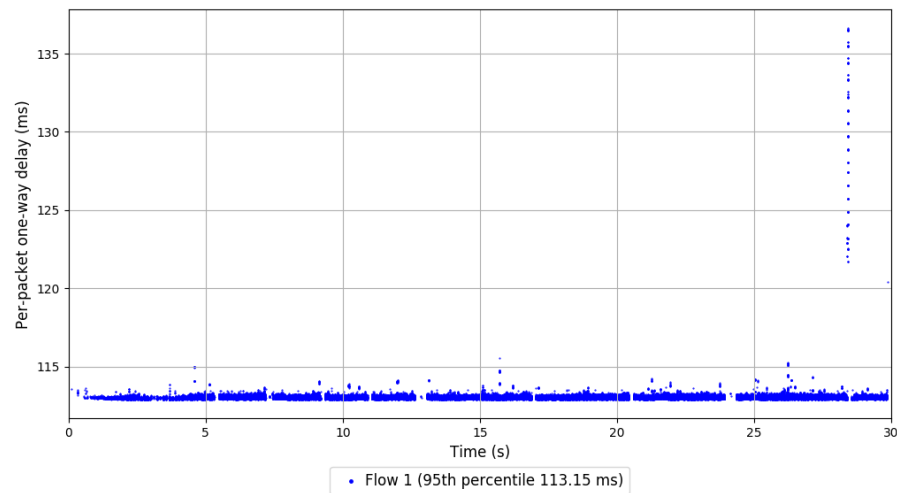
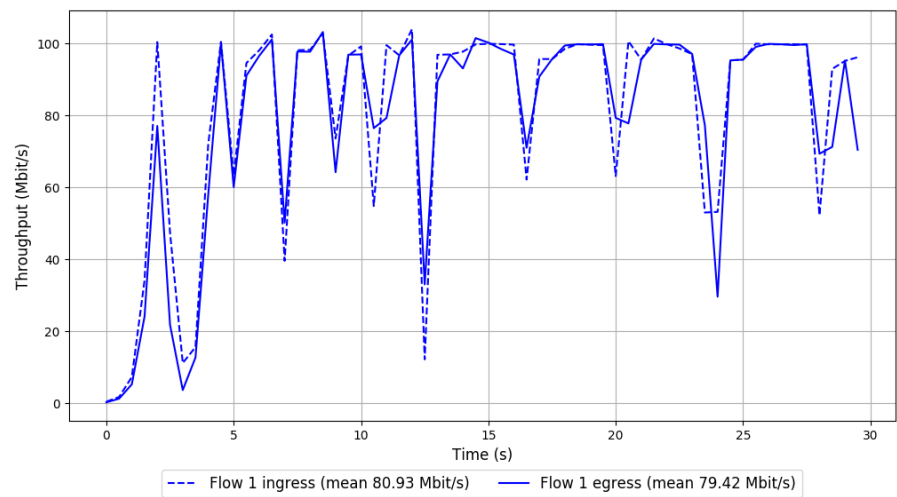
-- Flow 1:

Average throughput: 79.42 Mbit/s

95th percentile per-packet one-way delay: 113.150 ms

Loss rate: 2.57%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-16 19:53:40

End at: 2017-08-16 19:54:10

Below is generated by plot.py at 2017-08-16 22:54:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.04 Mbit/s

95th percentile per-packet one-way delay: 113.752 ms

Loss rate: 6.53%

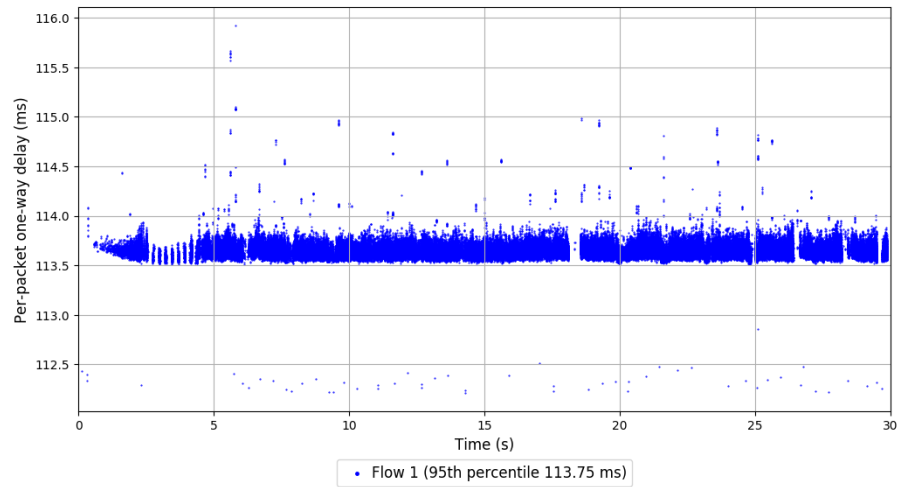
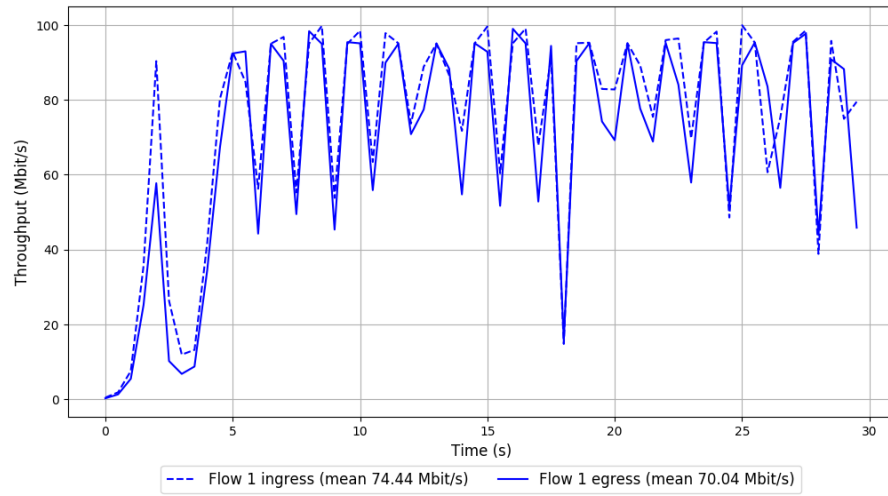
-- Flow 1:

Average throughput: 70.04 Mbit/s

95th percentile per-packet one-way delay: 113.752 ms

Loss rate: 6.53%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-16 20:04:45

End at: 2017-08-16 20:05:15

Below is generated by plot.py at 2017-08-16 22:54:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.51 Mbit/s

95th percentile per-packet one-way delay: 112.536 ms

Loss rate: 2.21%

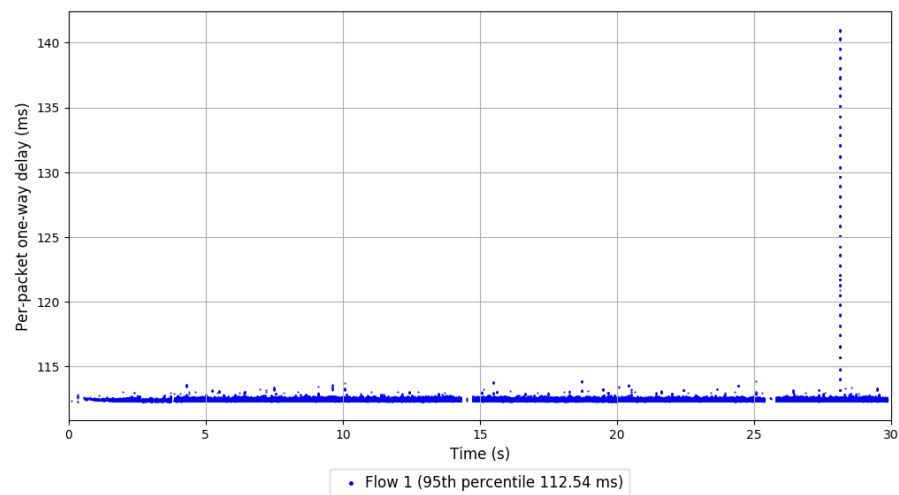
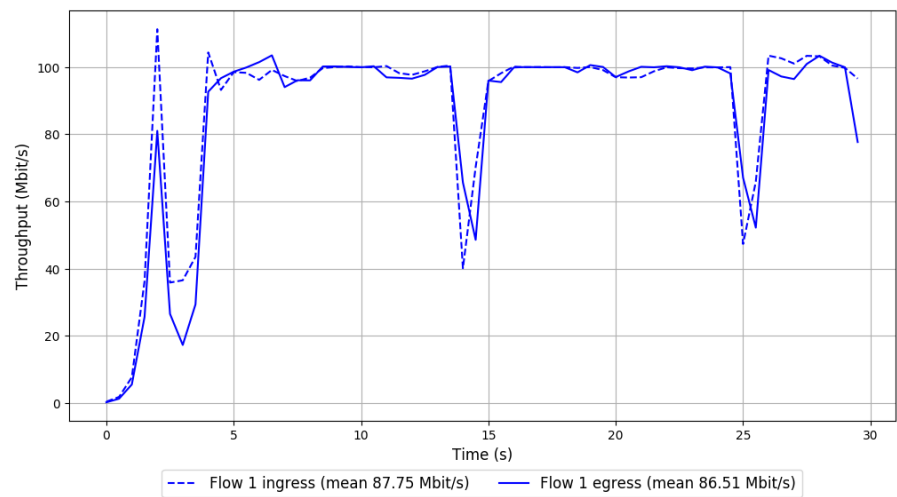
-- Flow 1:

Average throughput: 86.51 Mbit/s

95th percentile per-packet one-way delay: 112.536 ms

Loss rate: 2.21%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-16 20:15:37

End at: 2017-08-16 20:16:07

Below is generated by plot.py at 2017-08-16 22:54:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.02 Mbit/s

95th percentile per-packet one-way delay: 113.621 ms

Loss rate: 10.60%

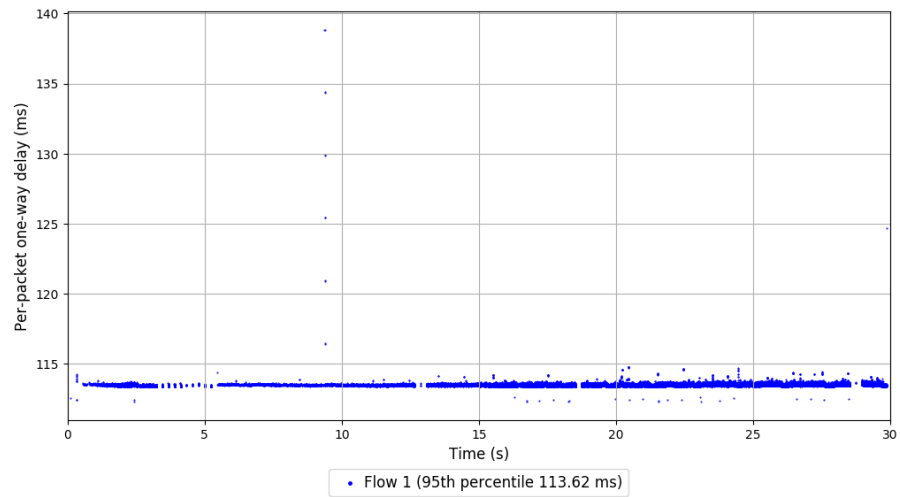
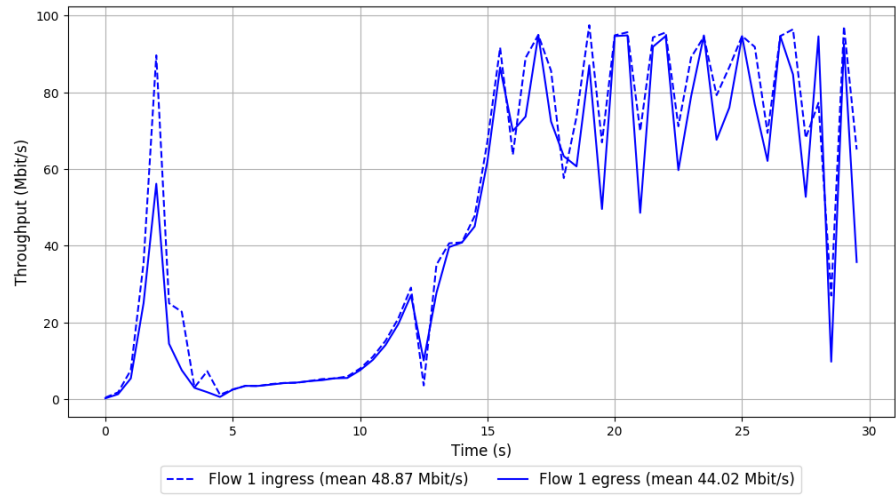
-- Flow 1:

Average throughput: 44.02 Mbit/s

95th percentile per-packet one-way delay: 113.621 ms

Loss rate: 10.60%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-16 18:39:18

End at: 2017-08-16 18:39:48

Below is generated by plot.py at 2017-08-16 22:55:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 234.66 Mbit/s

95th percentile per-packet one-way delay: 152.676 ms

Loss rate: 1.28%

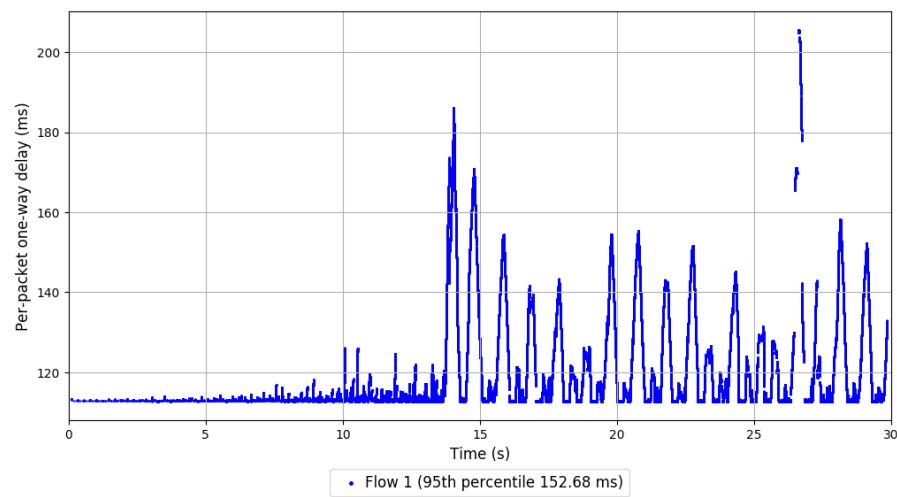
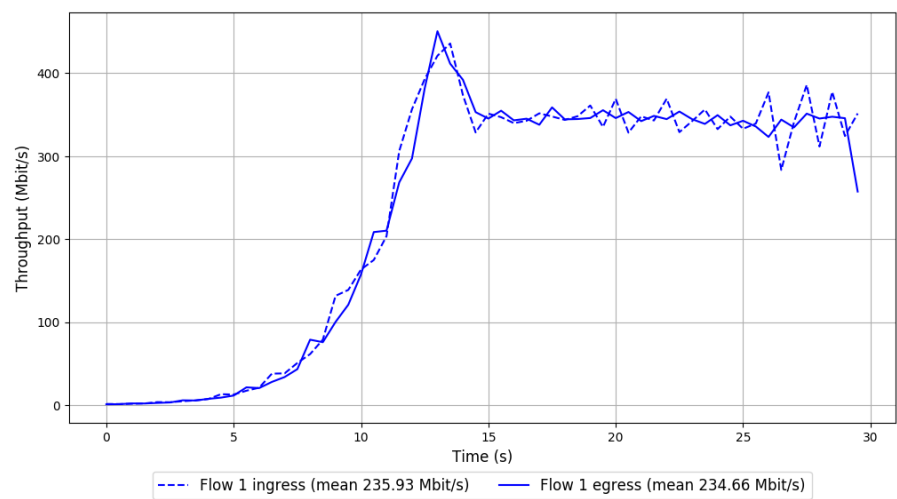
-- Flow 1:

Average throughput: 234.66 Mbit/s

95th percentile per-packet one-way delay: 152.676 ms

Loss rate: 1.28%

Run 1: Report of CalibratedKoho — Data Link

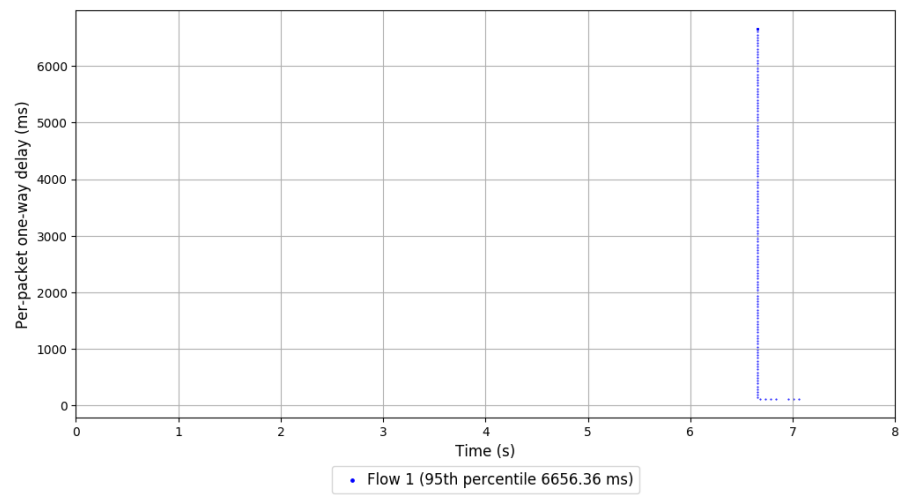
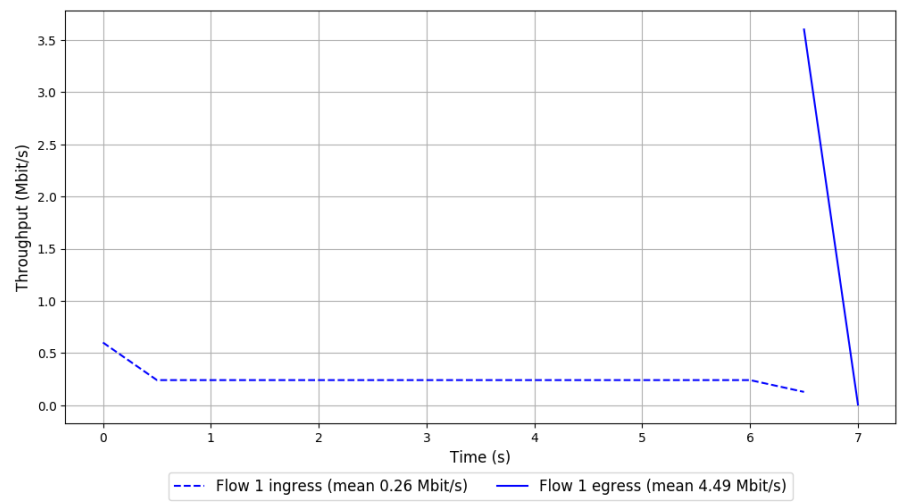


Run 2: Statistics of CalibratedKoho

Start at: 2017-08-16 18:50:53

End at: 2017-08-16 18:51:23

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-16 19:01:57

End at: 2017-08-16 19:02:27

Below is generated by plot.py at 2017-08-16 22:55:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 114.114 ms

Loss rate: 68.07%

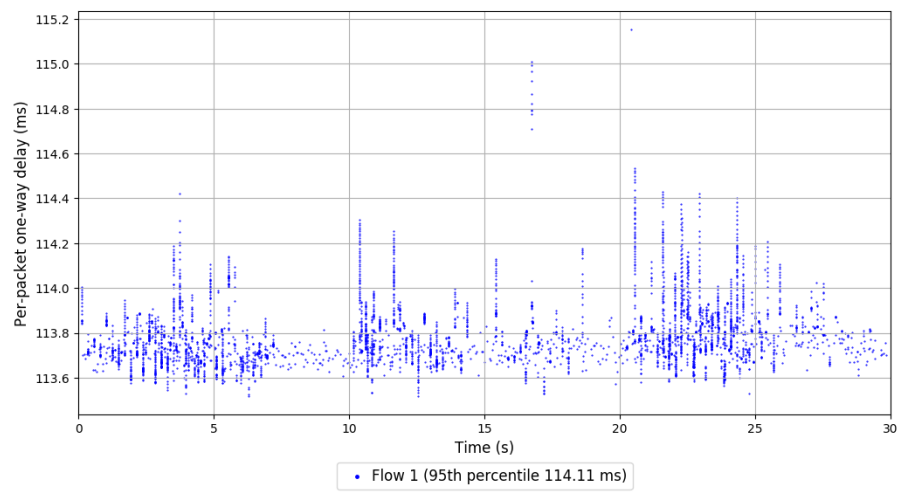
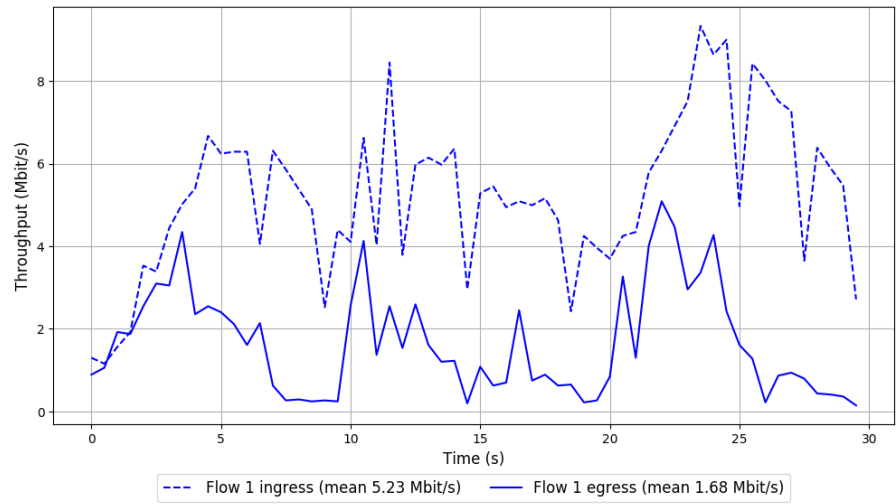
-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 114.114 ms

Loss rate: 68.07%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-16 19:13:01

End at: 2017-08-16 19:13:31

Below is generated by plot.py at 2017-08-16 22:55:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 112.994 ms

Loss rate: 65.88%

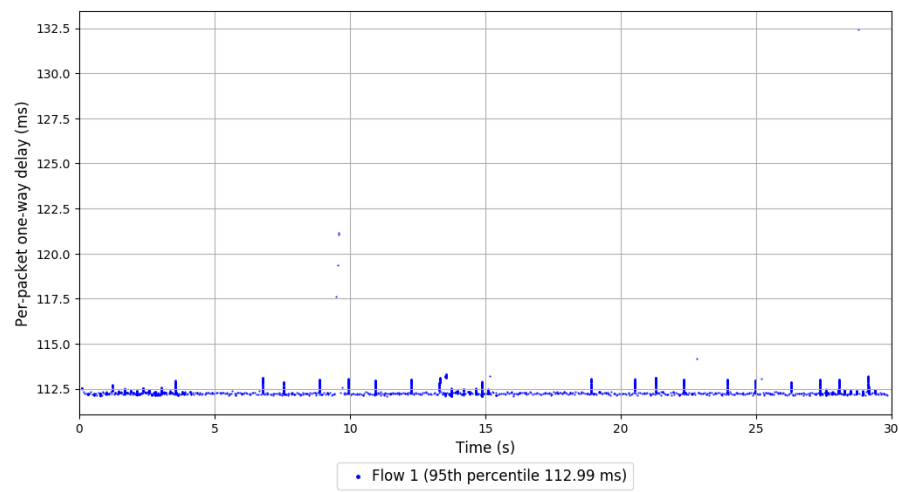
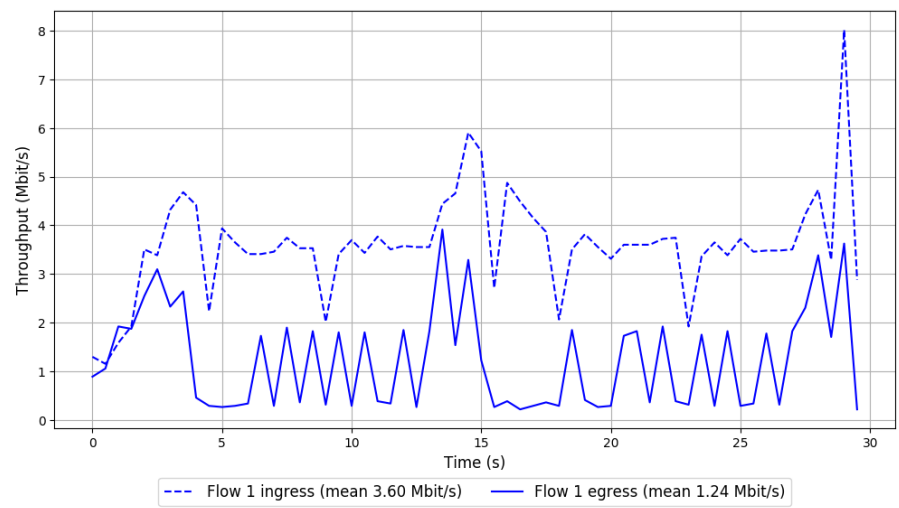
-- Flow 1:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 112.994 ms

Loss rate: 65.88%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-16 19:24:13

End at: 2017-08-16 19:24:43

Below is generated by plot.py at 2017-08-16 22:55:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.65 Mbit/s

95th percentile per-packet one-way delay: 151.224 ms

Loss rate: 1.14%

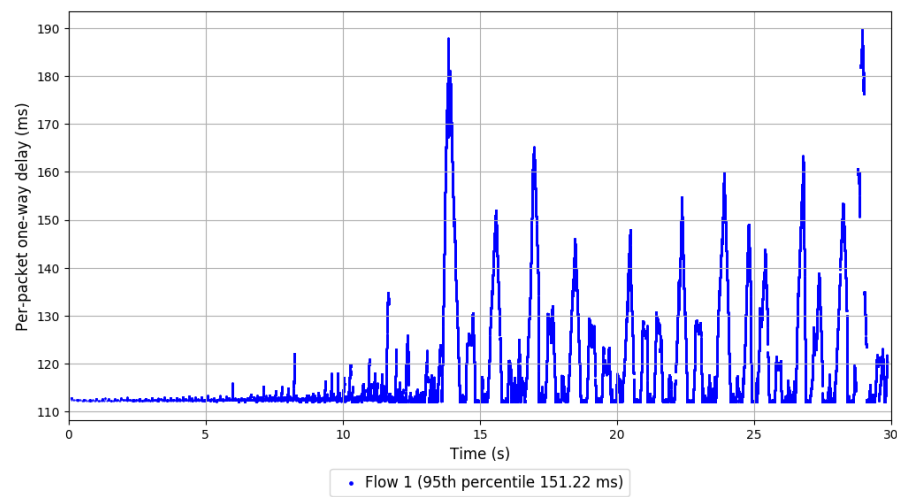
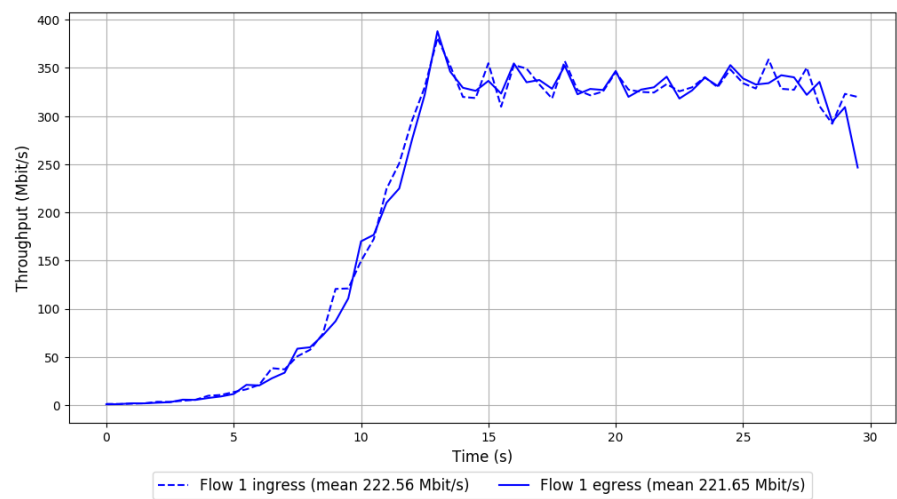
-- Flow 1:

Average throughput: 221.65 Mbit/s

95th percentile per-packet one-way delay: 151.224 ms

Loss rate: 1.14%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-16 19:35:28

End at: 2017-08-16 19:35:58

Below is generated by plot.py at 2017-08-16 22:55:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 113.652 ms

Loss rate: 68.42%

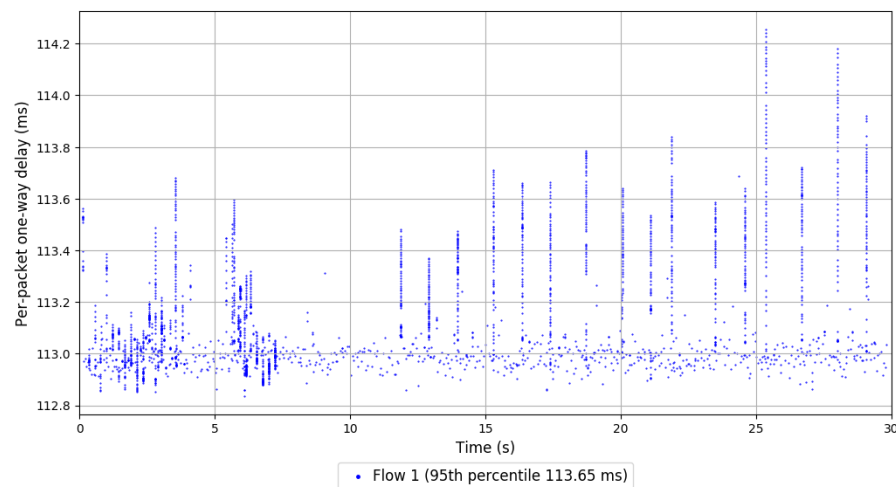
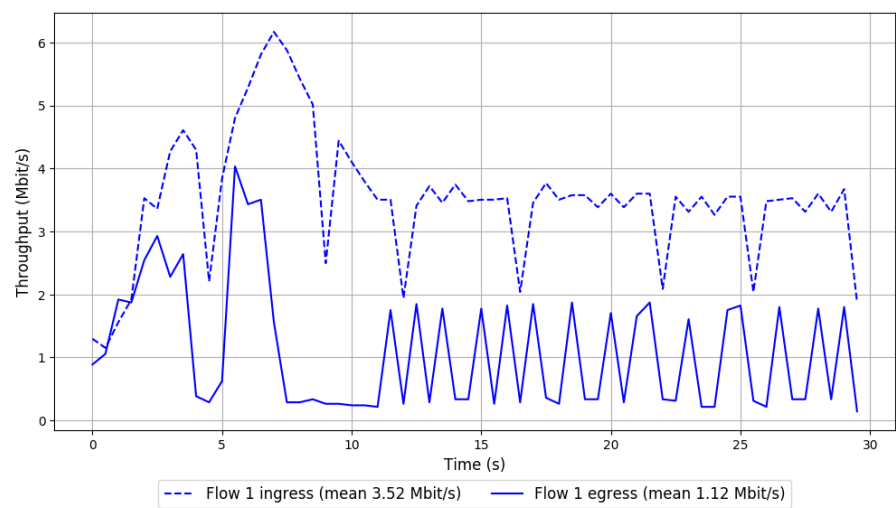
-- Flow 1:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 113.652 ms

Loss rate: 68.42%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-16 19:46:16

End at: 2017-08-16 19:46:46

Below is generated by plot.py at 2017-08-16 22:55:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 233.73 Mbit/s

95th percentile per-packet one-way delay: 147.550 ms

Loss rate: 2.07%

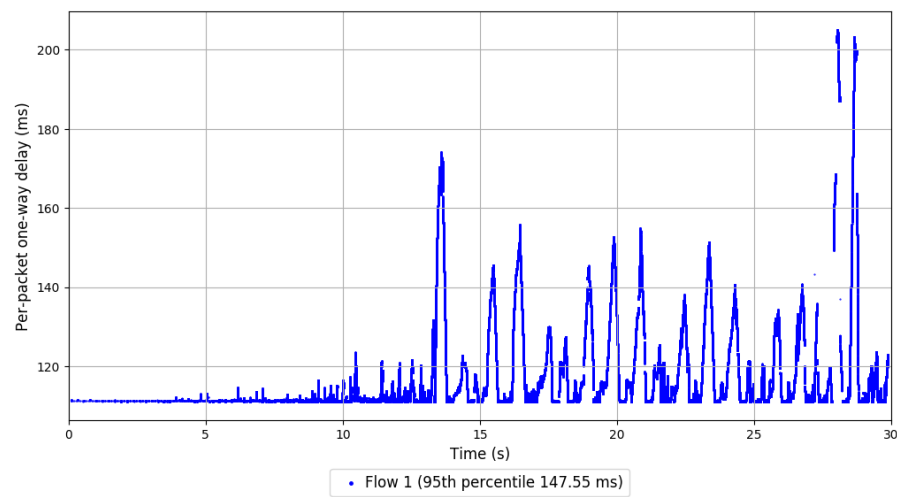
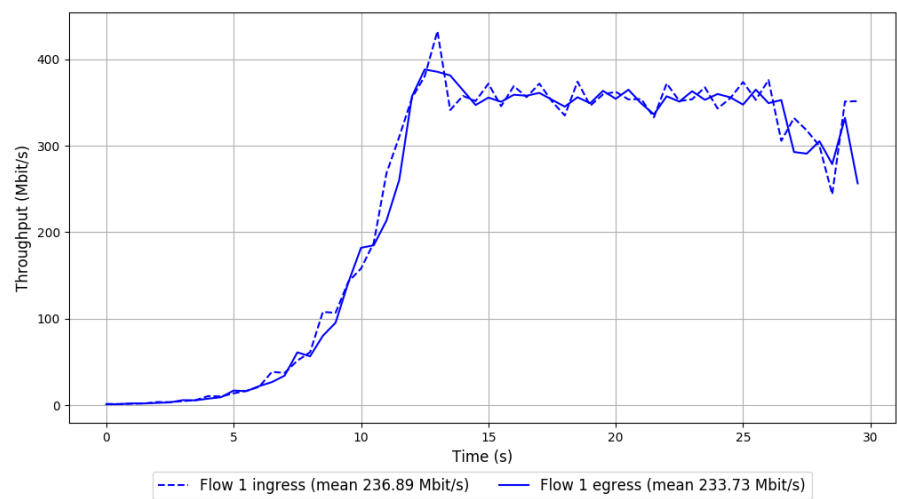
-- Flow 1:

Average throughput: 233.73 Mbit/s

95th percentile per-packet one-way delay: 147.550 ms

Loss rate: 2.07%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-16 19:57:25

End at: 2017-08-16 19:57:55

Below is generated by plot.py at 2017-08-16 22:55:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.06 Mbit/s

95th percentile per-packet one-way delay: 142.518 ms

Loss rate: 1.09%

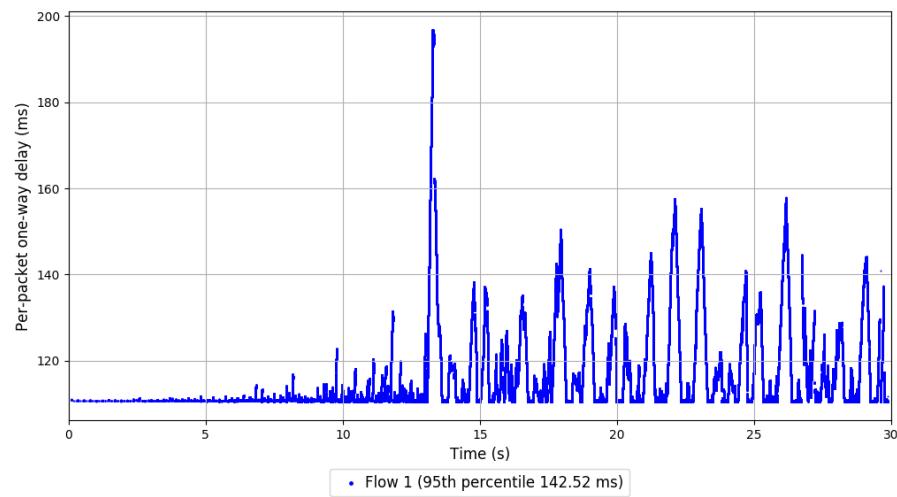
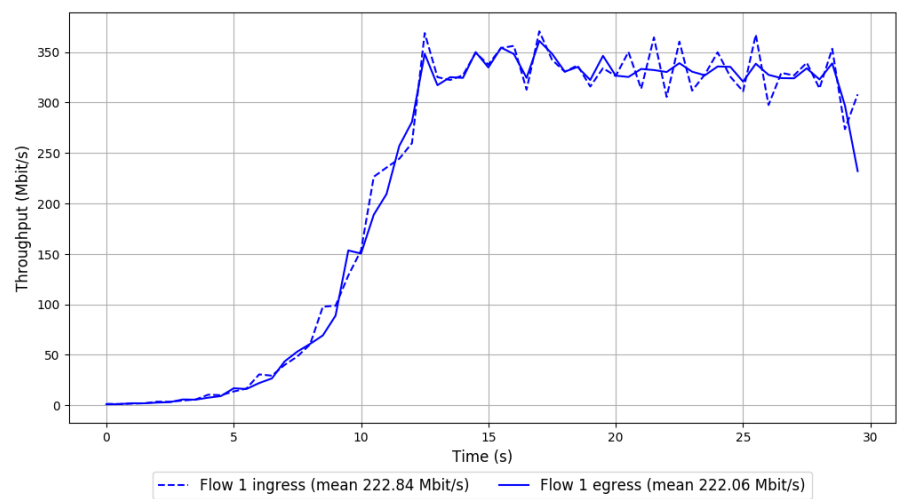
-- Flow 1:

Average throughput: 222.06 Mbit/s

95th percentile per-packet one-way delay: 142.518 ms

Loss rate: 1.09%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

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

End at: 2017-08-16 20:09:02

Below is generated by plot.py at 2017-08-16 22:55:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 116.000 ms

Loss rate: 67.84%

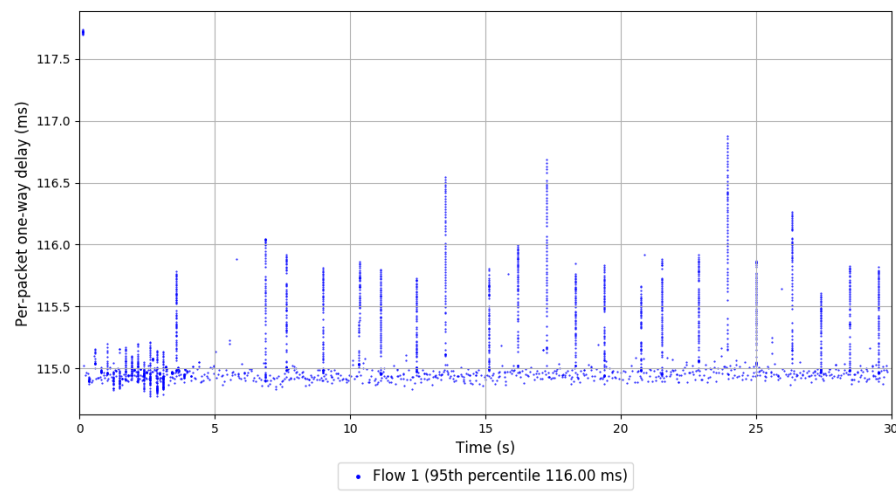
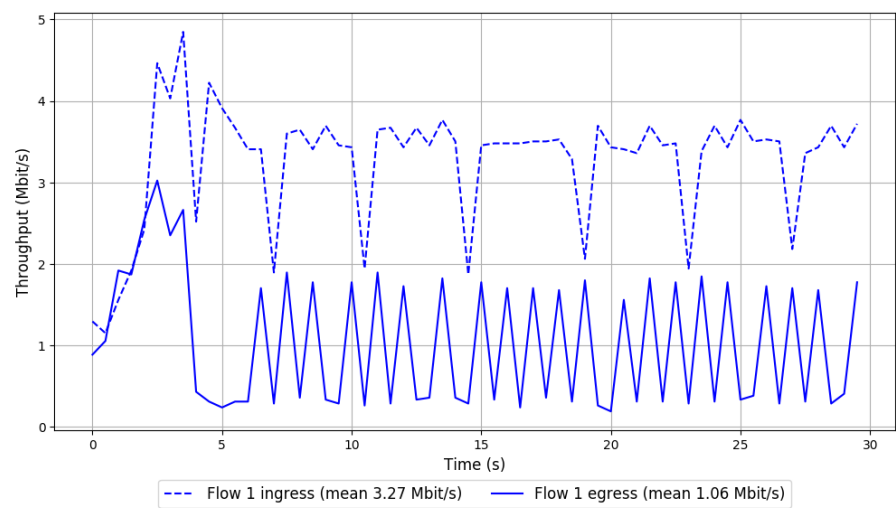
-- Flow 1:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 116.000 ms

Loss rate: 67.84%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-16 20:19:35

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

Below is generated by plot.py at 2017-08-16 22:55:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 111.169 ms

Loss rate: 67.04%

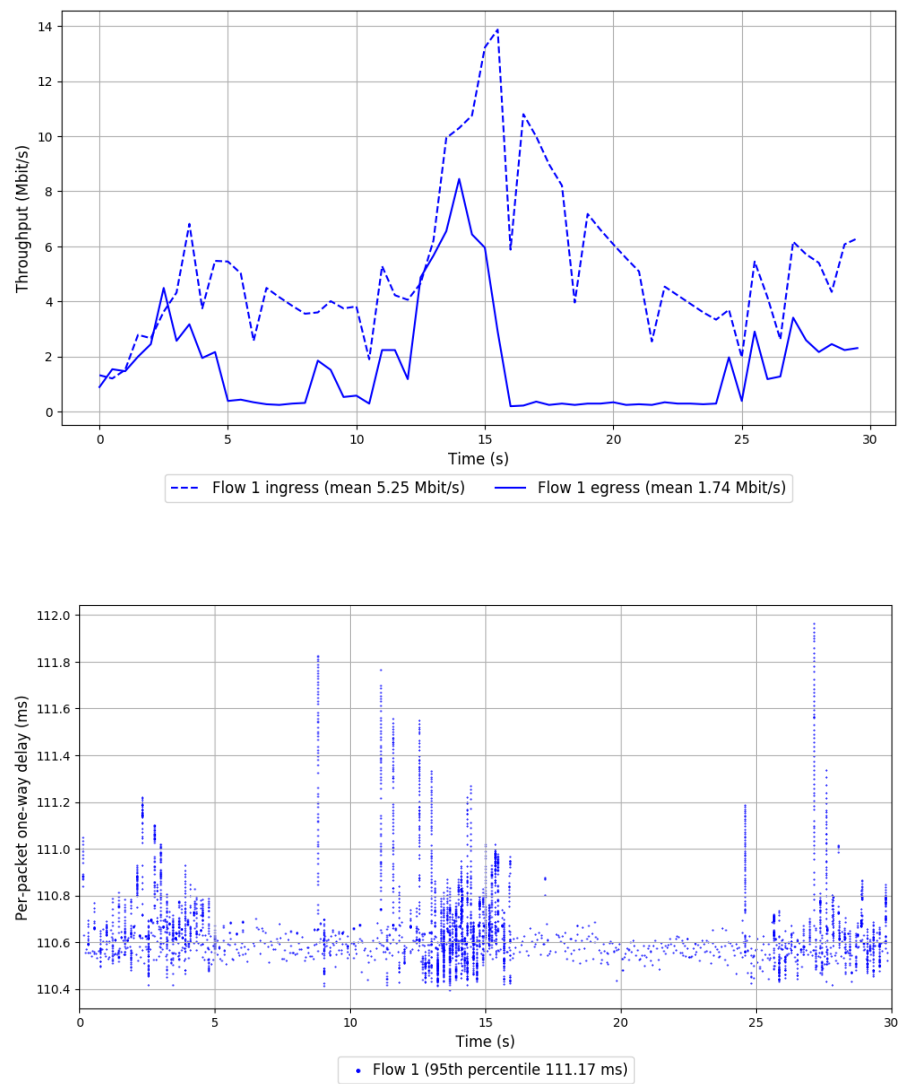
-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 111.169 ms

Loss rate: 67.04%

Run 10: Report of CalibratedKoho — Data Link

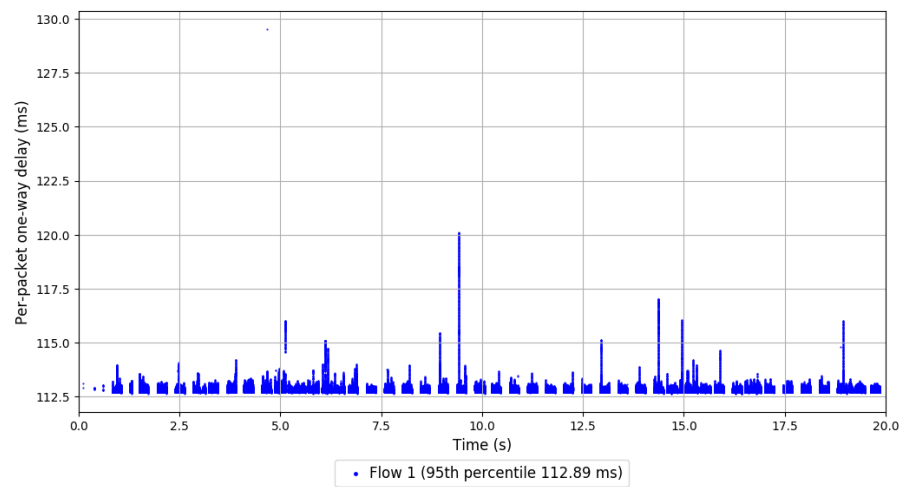
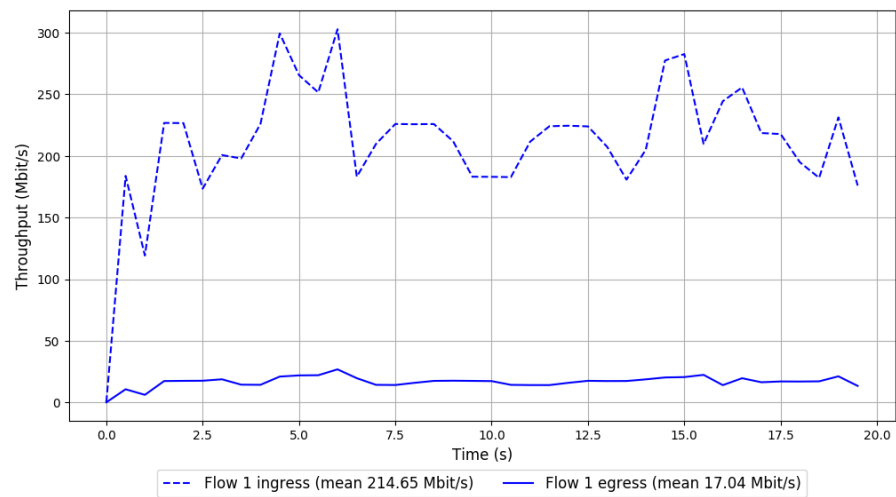


Run 1: Statistics of Copa

Start at: 2017-08-16 18:33:08

End at: 2017-08-16 18:33:38

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-16 18:44:25

End at: 2017-08-16 18:44:55

Below is generated by plot.py at 2017-08-16 22:56:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 129.52 Mbit/s

95th percentile per-packet one-way delay: 113.151 ms

Loss rate: 0.70%

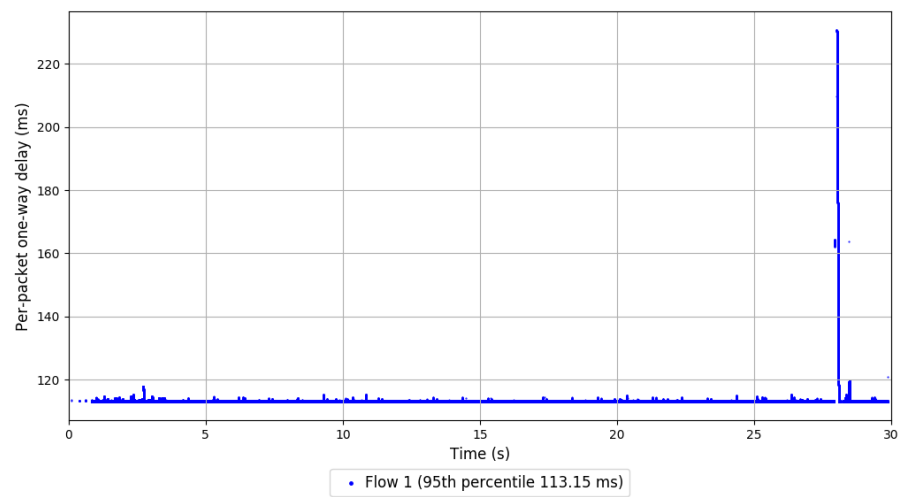
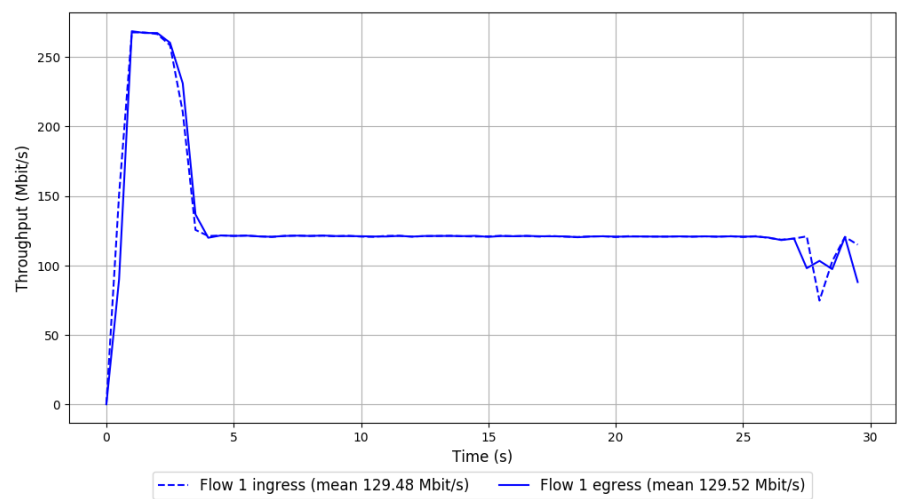
-- Flow 1:

Average throughput: 129.52 Mbit/s

95th percentile per-packet one-way delay: 113.151 ms

Loss rate: 0.70%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-16 18:55:41

End at: 2017-08-16 18:56:11

Below is generated by plot.py at 2017-08-16 22:57:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.11 Mbit/s

95th percentile per-packet one-way delay: 112.690 ms

Loss rate: 0.82%

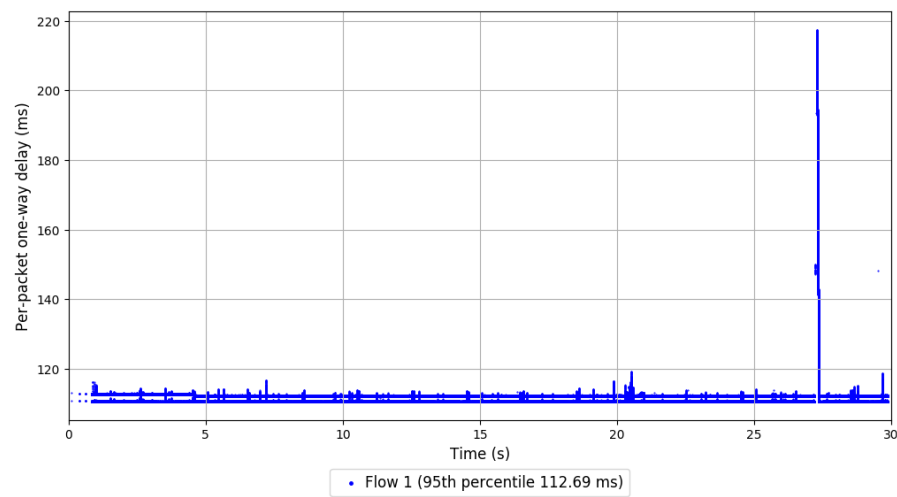
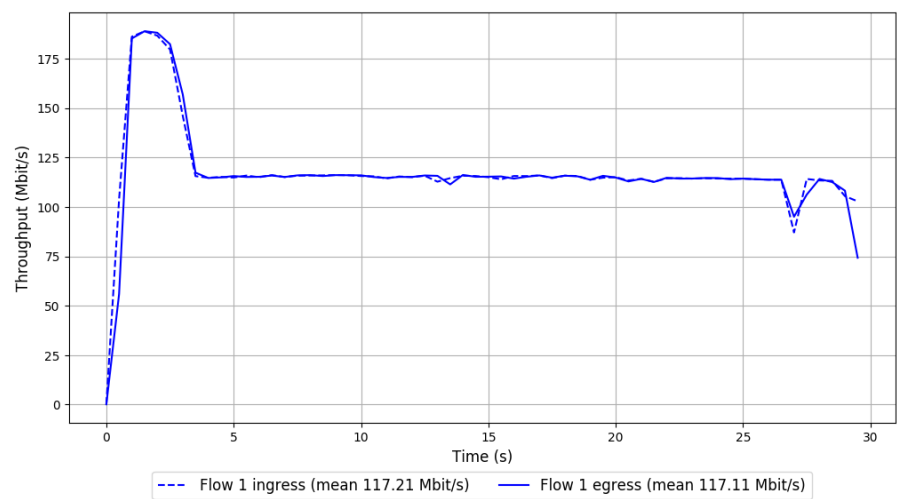
-- Flow 1:

Average throughput: 117.11 Mbit/s

95th percentile per-packet one-way delay: 112.690 ms

Loss rate: 0.82%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-16 19:06:46

End at: 2017-08-16 19:07:16

Below is generated by plot.py at 2017-08-16 22:57:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 159.11 Mbit/s

95th percentile per-packet one-way delay: 113.628 ms

Loss rate: 0.74%

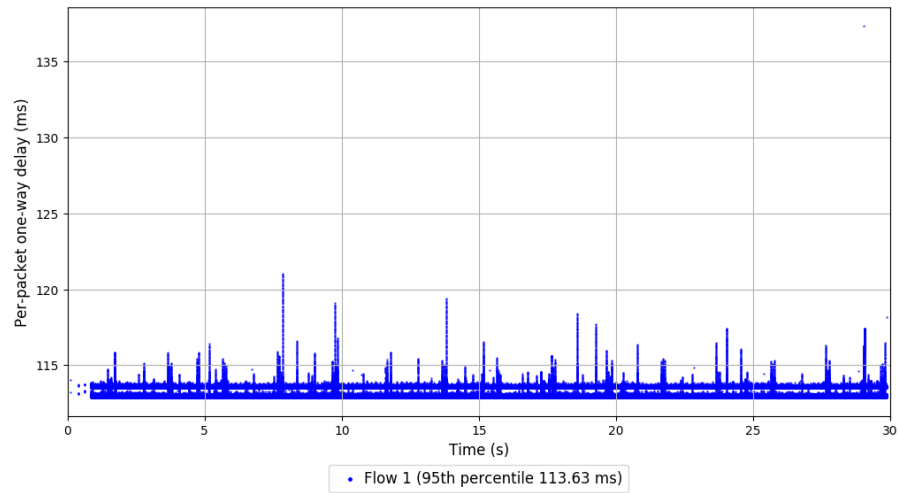
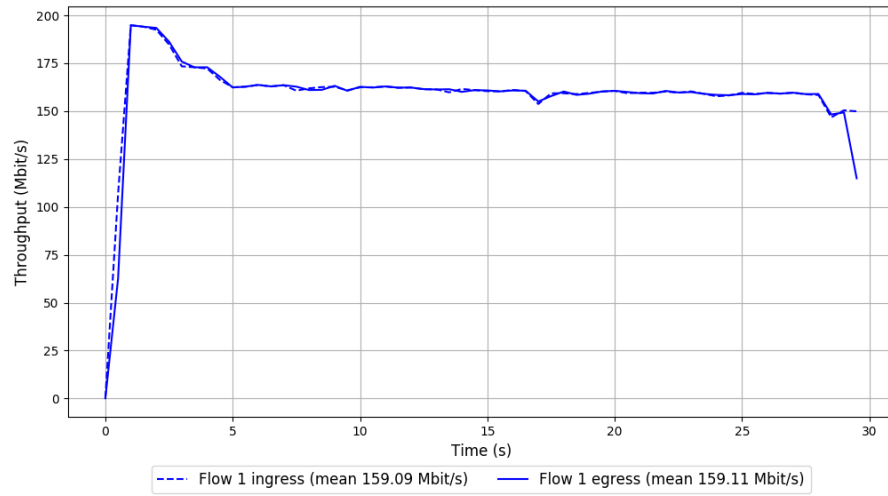
-- Flow 1:

Average throughput: 159.11 Mbit/s

95th percentile per-packet one-way delay: 113.628 ms

Loss rate: 0.74%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-16 19:17:48

End at: 2017-08-16 19:18:18

Below is generated by plot.py at 2017-08-16 22:57:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 123.04 Mbit/s

95th percentile per-packet one-way delay: 112.945 ms

Loss rate: 0.77%

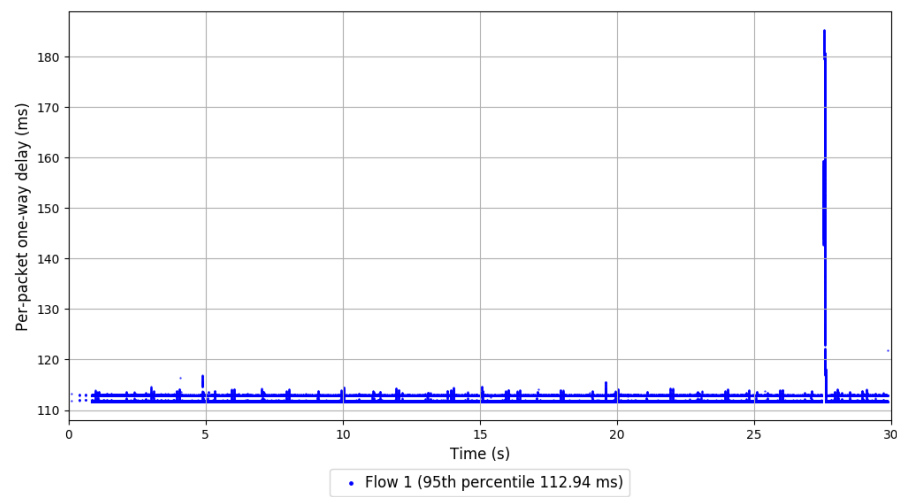
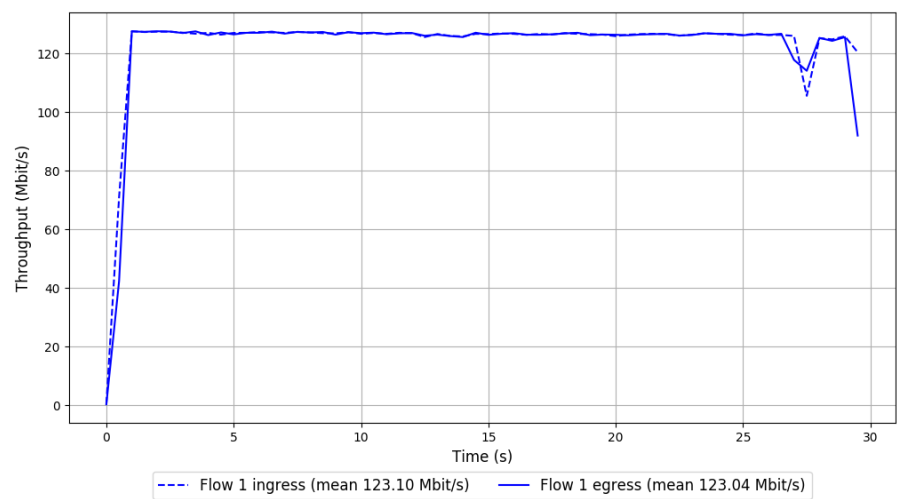
-- Flow 1:

Average throughput: 123.04 Mbit/s

95th percentile per-packet one-way delay: 112.945 ms

Loss rate: 0.77%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-16 19:29:16

End at: 2017-08-16 19:29:46

Below is generated by plot.py at 2017-08-16 22:58:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 136.76 Mbit/s

95th percentile per-packet one-way delay: 112.924 ms

Loss rate: 0.78%

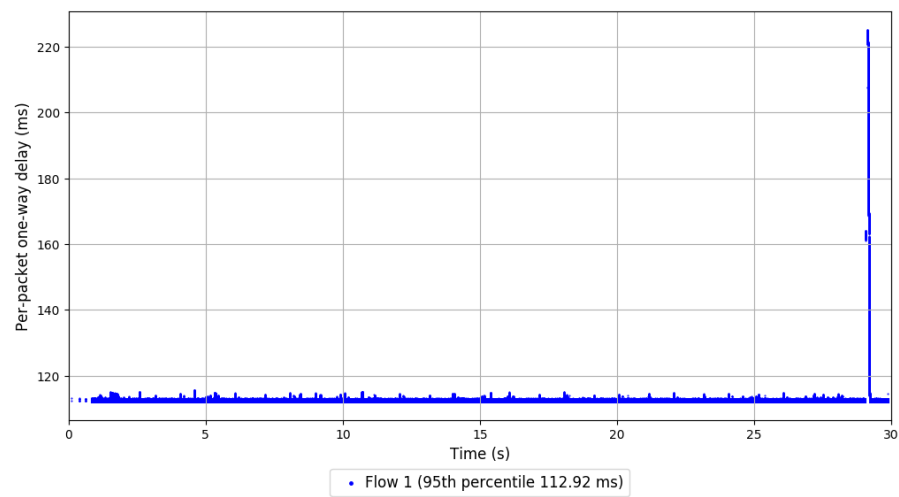
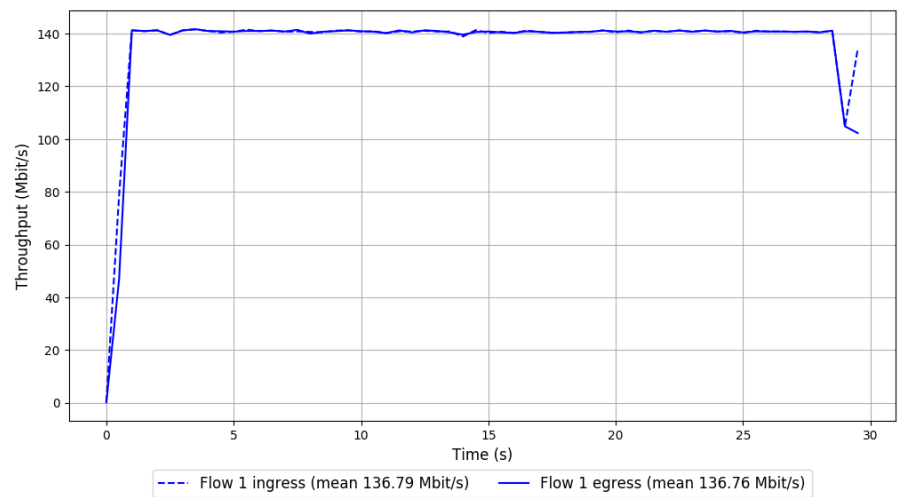
-- Flow 1:

Average throughput: 136.76 Mbit/s

95th percentile per-packet one-way delay: 112.924 ms

Loss rate: 0.78%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-16 19:40:16

End at: 2017-08-16 19:40:46

Below is generated by plot.py at 2017-08-16 22:58:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.23 Mbit/s

95th percentile per-packet one-way delay: 113.690 ms

Loss rate: 0.97%

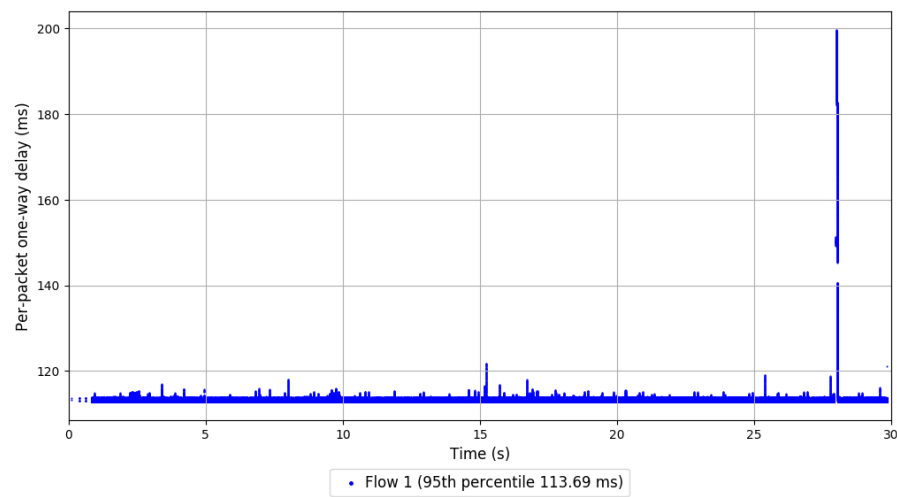
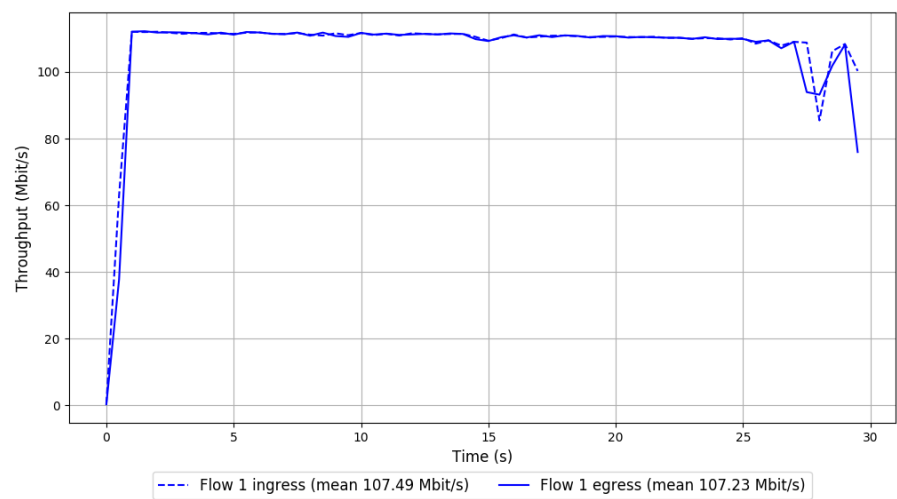
-- Flow 1:

Average throughput: 107.23 Mbit/s

95th percentile per-packet one-way delay: 113.690 ms

Loss rate: 0.97%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-16 19:51:21

End at: 2017-08-16 19:51:51

Below is generated by plot.py at 2017-08-16 22:59:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.83 Mbit/s

95th percentile per-packet one-way delay: 113.448 ms

Loss rate: 0.77%

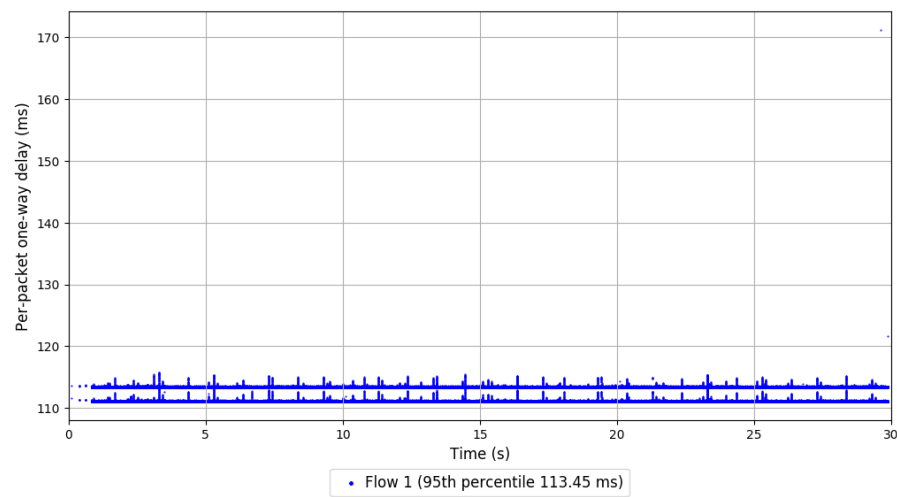
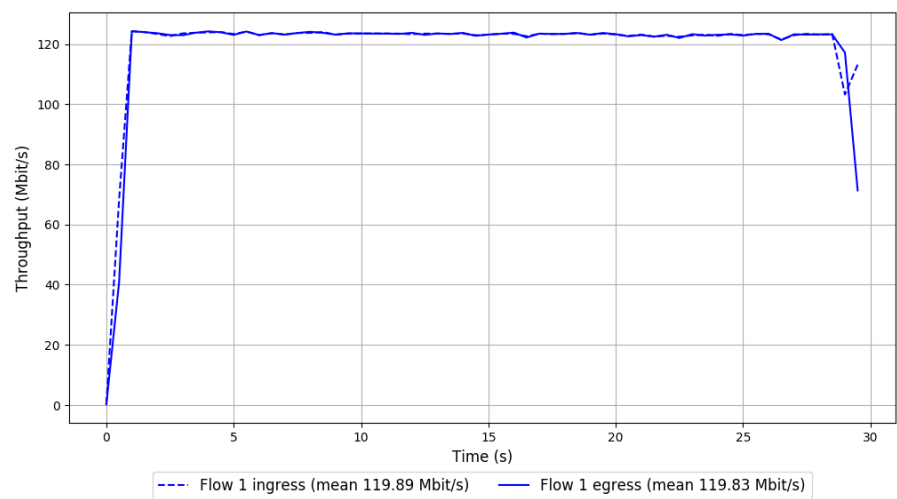
-- Flow 1:

Average throughput: 119.83 Mbit/s

95th percentile per-packet one-way delay: 113.448 ms

Loss rate: 0.77%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-16 20:02:29

End at: 2017-08-16 20:02:59

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.38 Mbit/s

95th percentile per-packet one-way delay: 112.789 ms

Loss rate: 0.16%

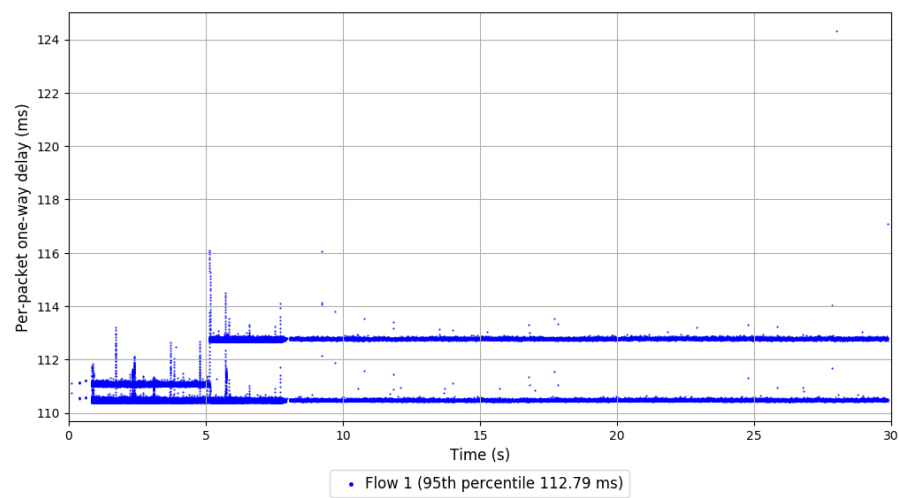
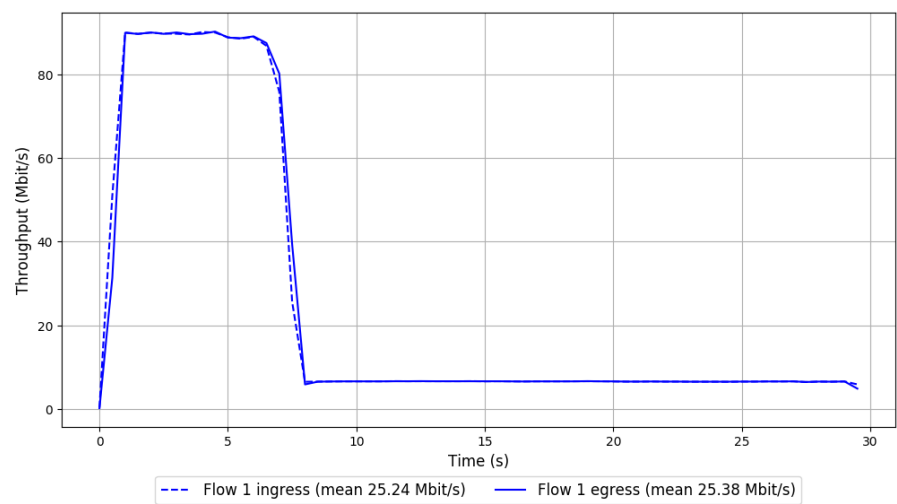
-- Flow 1:

Average throughput: 25.38 Mbit/s

95th percentile per-packet one-way delay: 112.789 ms

Loss rate: 0.16%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-16 20:13:20

End at: 2017-08-16 20:13:50

Below is generated by plot.py at 2017-08-16 22:59:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.45 Mbit/s

95th percentile per-packet one-way delay: 112.168 ms

Loss rate: 0.57%

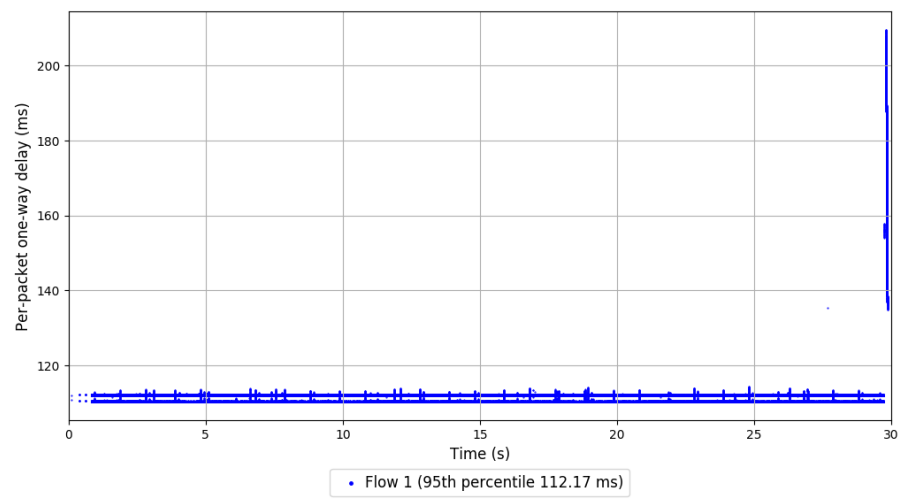
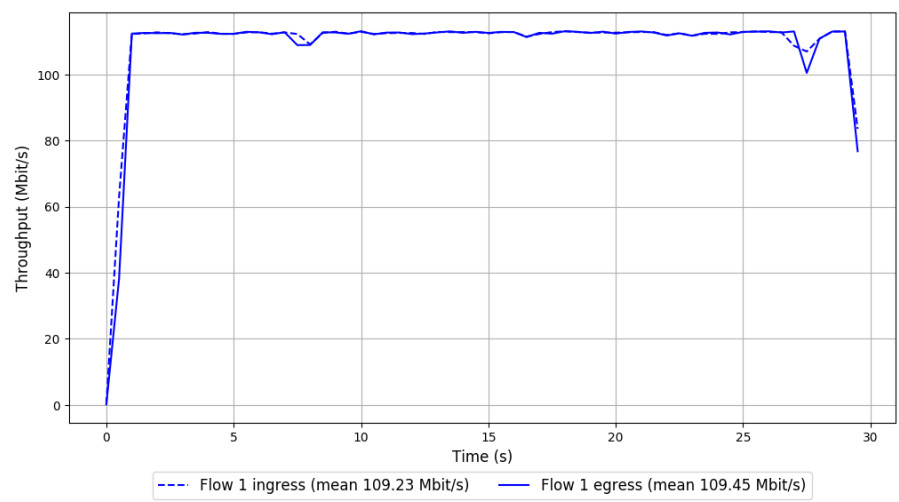
-- Flow 1:

Average throughput: 109.45 Mbit/s

95th percentile per-packet one-way delay: 112.168 ms

Loss rate: 0.57%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-16 18:33:58

End at: 2017-08-16 18:34:28

Below is generated by plot.py at 2017-08-16 22:59:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.30 Mbit/s

95th percentile per-packet one-way delay: 114.053 ms

Loss rate: 1.93%

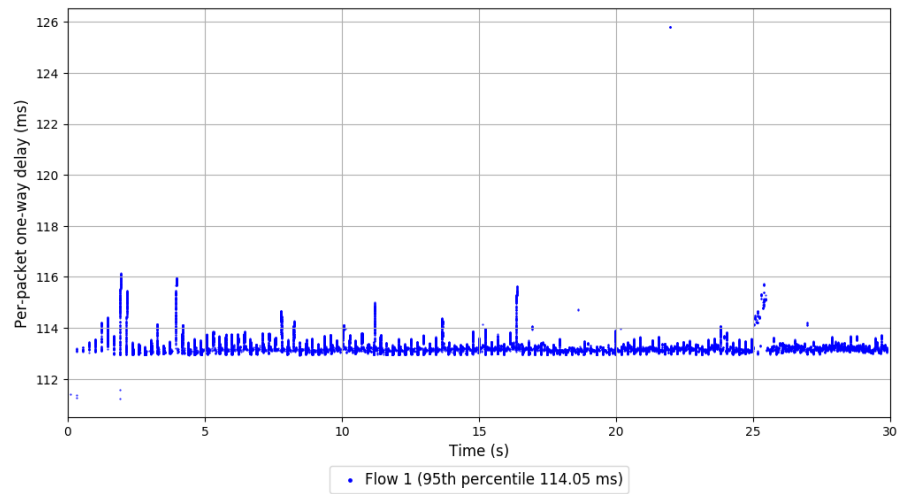
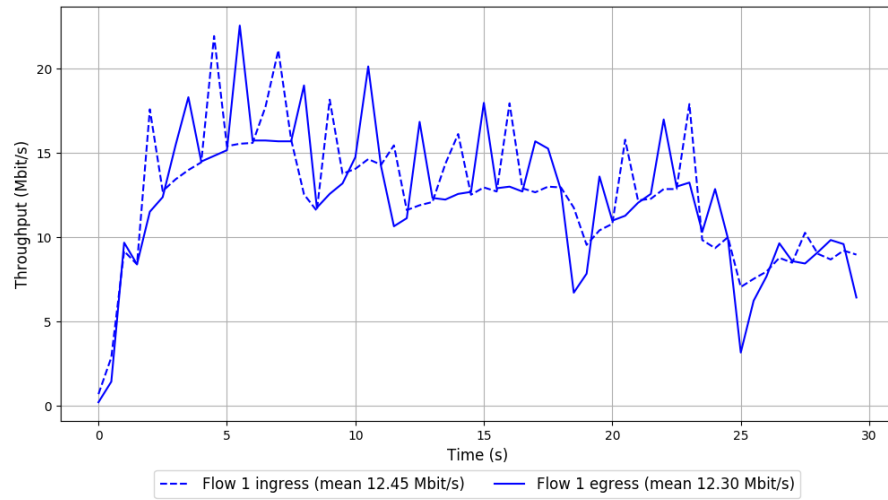
-- Flow 1:

Average throughput: 12.30 Mbit/s

95th percentile per-packet one-way delay: 114.053 ms

Loss rate: 1.93%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-16 18:45:20

End at: 2017-08-16 18:45:50

Below is generated by plot.py at 2017-08-16 22:59:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 113.789 ms

Loss rate: 2.67%

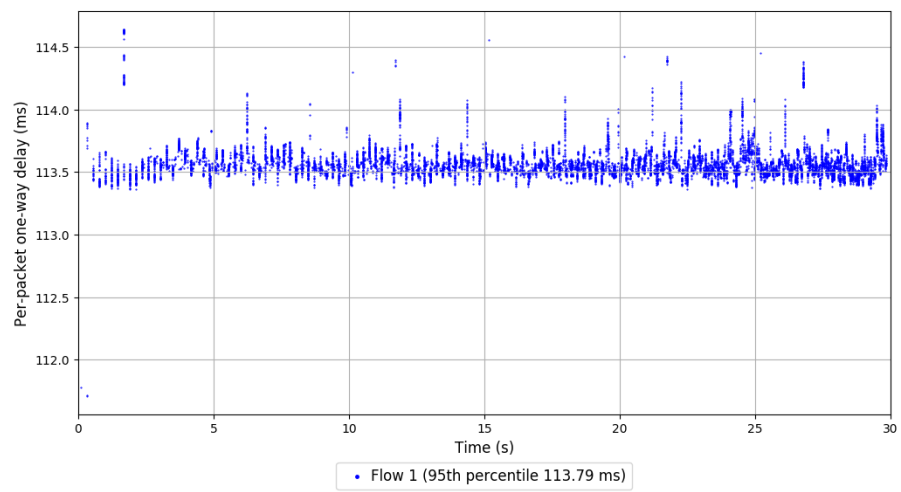
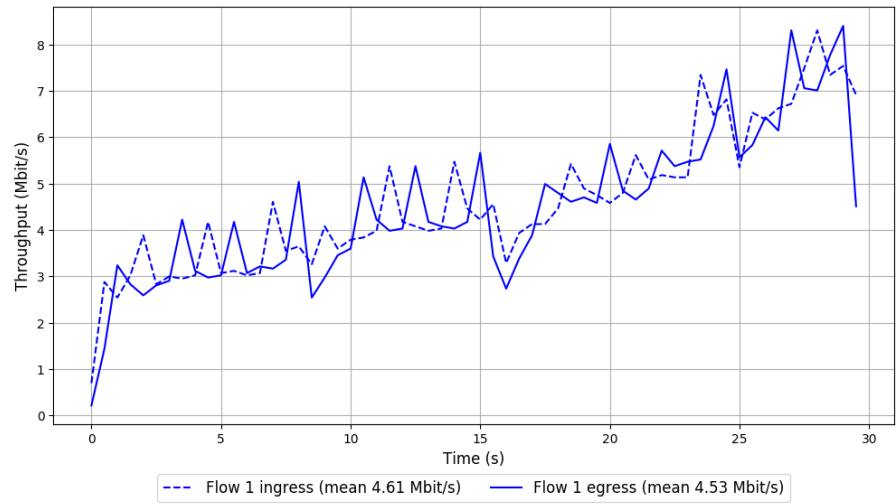
-- Flow 1:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 113.789 ms

Loss rate: 2.67%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-16 18:56:35

End at: 2017-08-16 18:57:05

Below is generated by plot.py at 2017-08-16 22:59:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.05 Mbit/s

95th percentile per-packet one-way delay: 113.268 ms

Loss rate: 1.18%

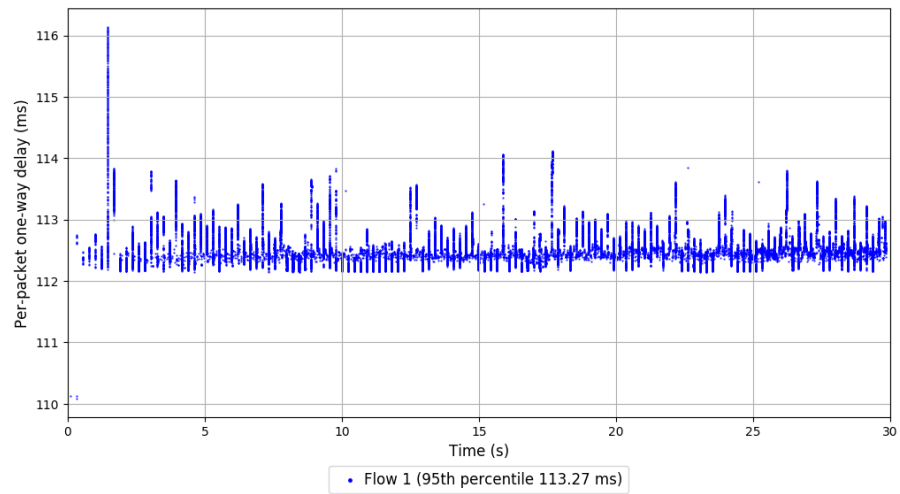
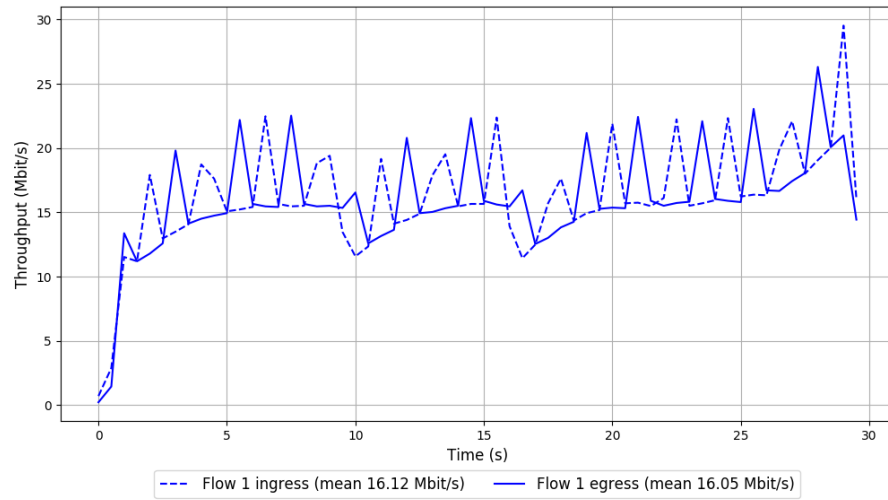
-- Flow 1:

Average throughput: 16.05 Mbit/s

95th percentile per-packet one-way delay: 113.268 ms

Loss rate: 1.18%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-16 19:07:44

End at: 2017-08-16 19:08:14

Below is generated by plot.py at 2017-08-16 22:59:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.89 Mbit/s

95th percentile per-packet one-way delay: 114.031 ms

Loss rate: 2.70%

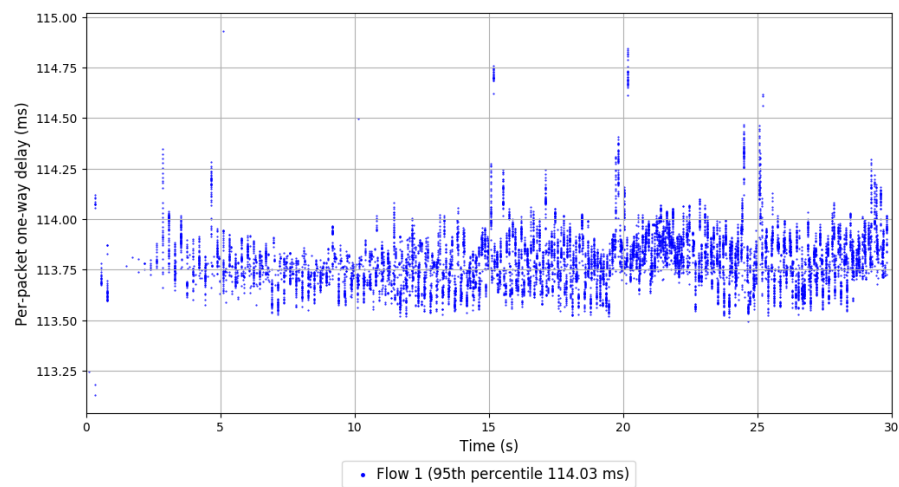
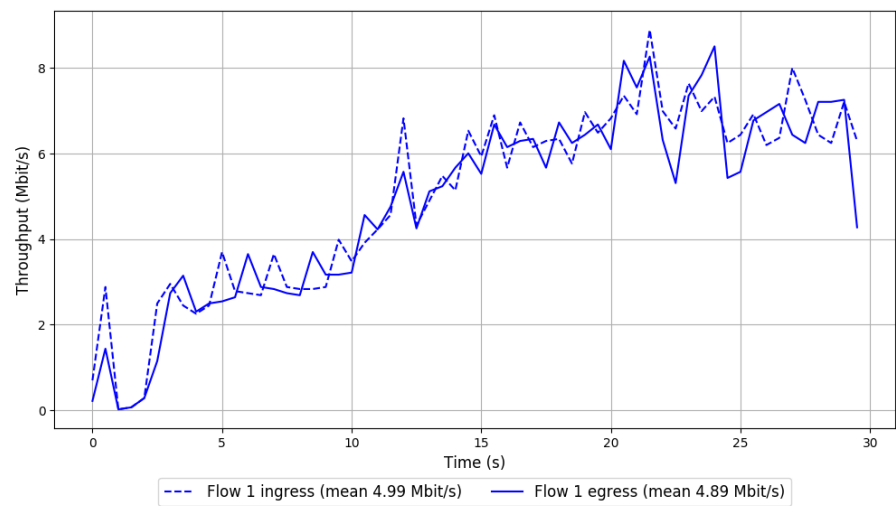
-- Flow 1:

Average throughput: 4.89 Mbit/s

95th percentile per-packet one-way delay: 114.031 ms

Loss rate: 2.70%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-16 19:18:42

End at: 2017-08-16 19:19:12

Below is generated by plot.py at 2017-08-16 22:59:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.07 Mbit/s

95th percentile per-packet one-way delay: 115.251 ms

Loss rate: 1.38%

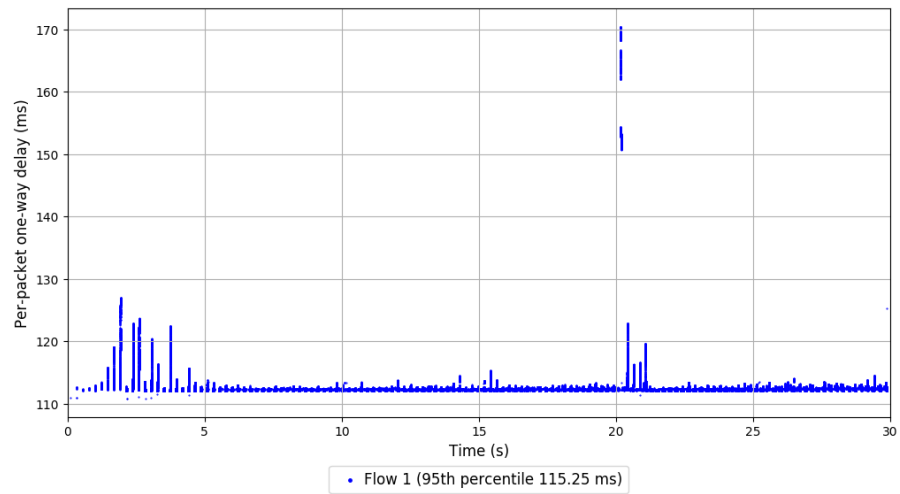
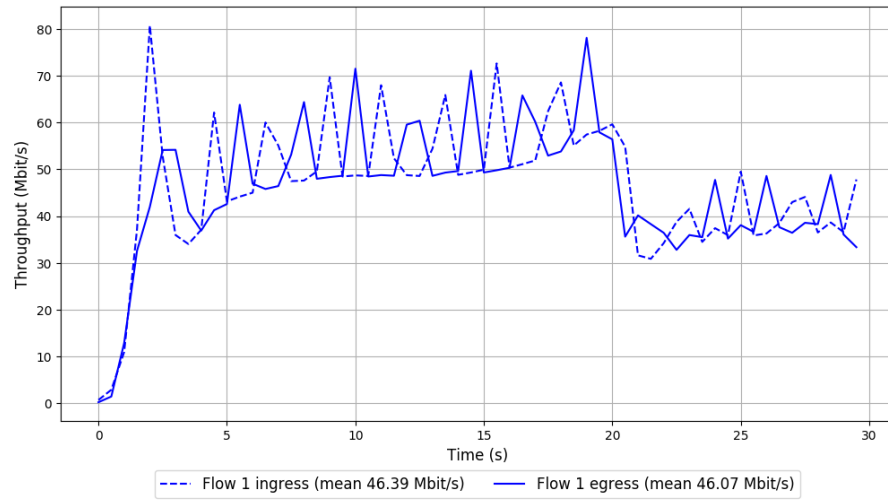
-- Flow 1:

Average throughput: 46.07 Mbit/s

95th percentile per-packet one-way delay: 115.251 ms

Loss rate: 1.38%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-16 19:30:12

End at: 2017-08-16 19:30:42

Below is generated by plot.py at 2017-08-16 22:59:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.68 Mbit/s

95th percentile per-packet one-way delay: 113.463 ms

Loss rate: 2.28%

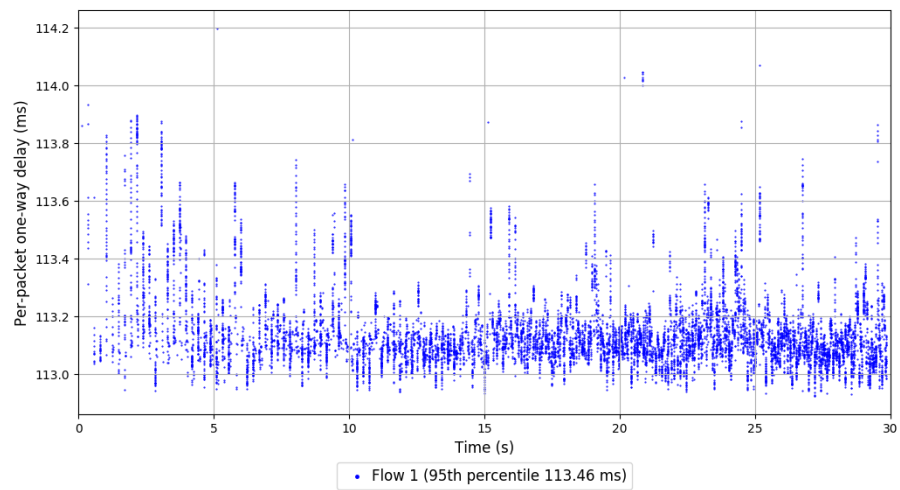
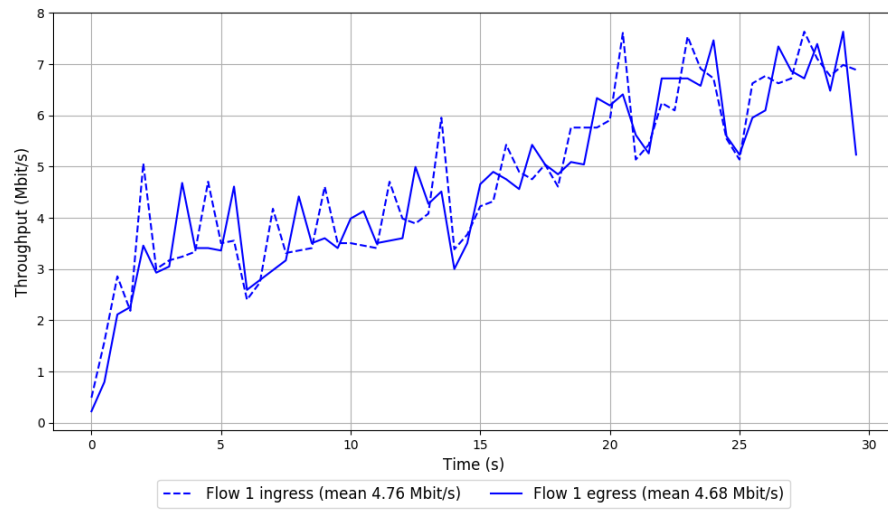
-- Flow 1:

Average throughput: 4.68 Mbit/s

95th percentile per-packet one-way delay: 113.463 ms

Loss rate: 2.28%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-16 19:41:08

End at: 2017-08-16 19:41:38

Below is generated by plot.py at 2017-08-16 22:59:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 112.523 ms

Loss rate: 4.02%

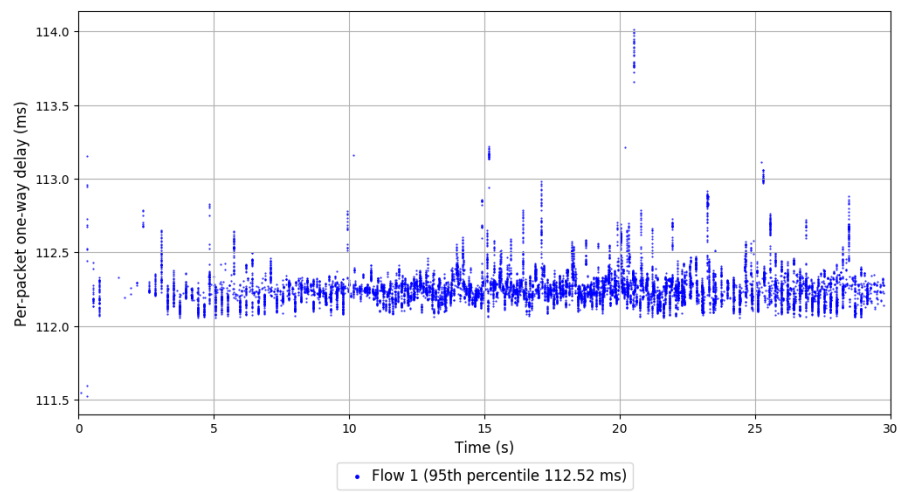
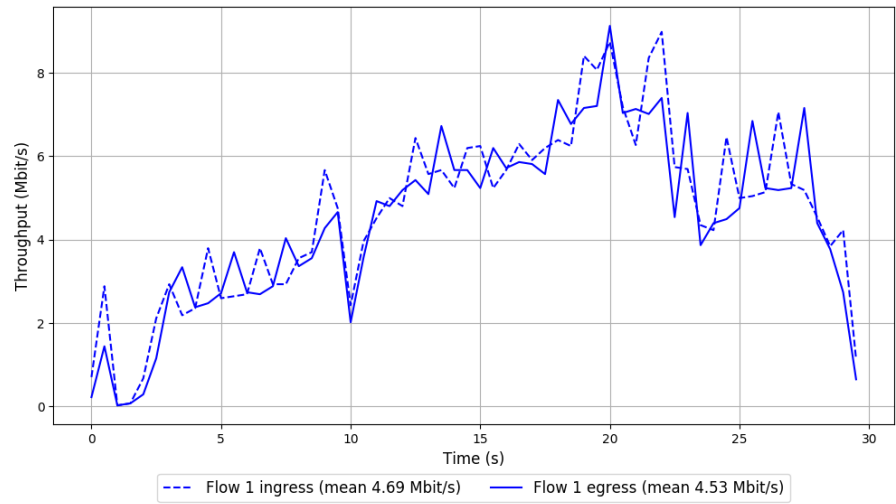
-- Flow 1:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 112.523 ms

Loss rate: 4.02%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-16 19:52:15

End at: 2017-08-16 19:52:45

Below is generated by plot.py at 2017-08-16 22:59:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.16 Mbit/s

95th percentile per-packet one-way delay: 111.978 ms

Loss rate: 1.11%

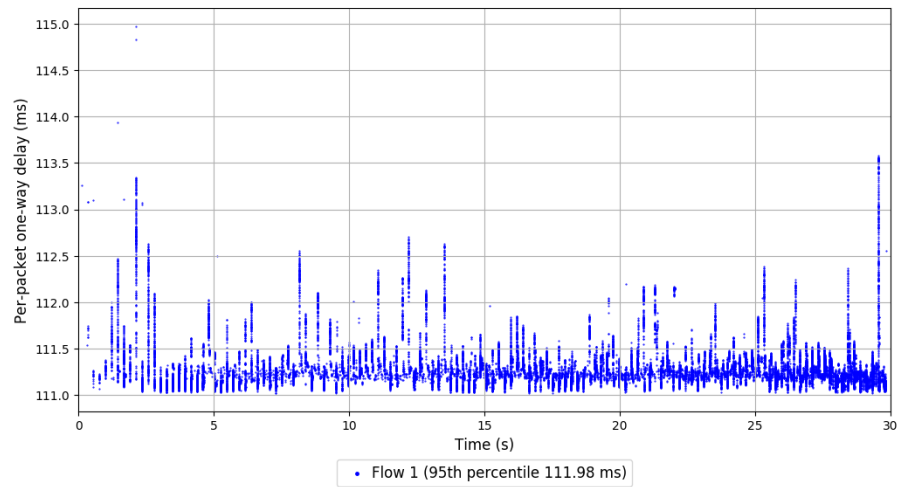
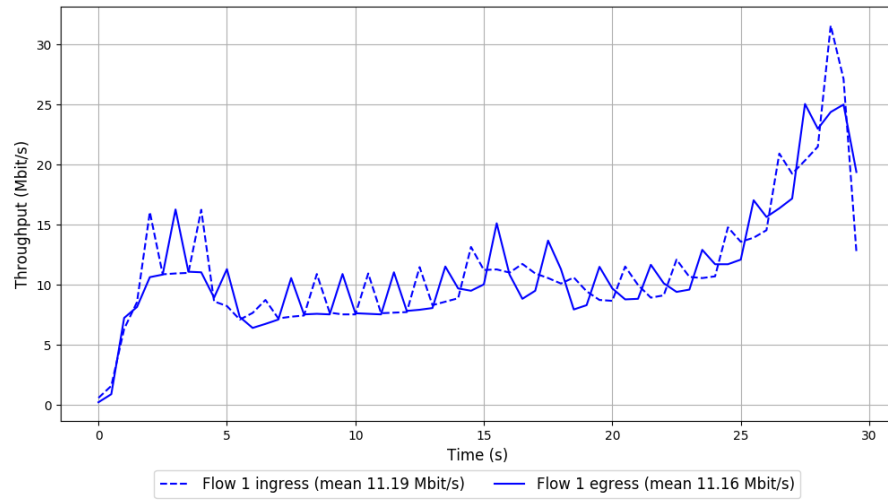
-- Flow 1:

Average throughput: 11.16 Mbit/s

95th percentile per-packet one-way delay: 111.978 ms

Loss rate: 1.11%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-16 20:03:13

End at: 2017-08-16 20:03:43

Below is generated by plot.py at 2017-08-16 22:59:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.57 Mbit/s

95th percentile per-packet one-way delay: 113.161 ms

Loss rate: 1.57%

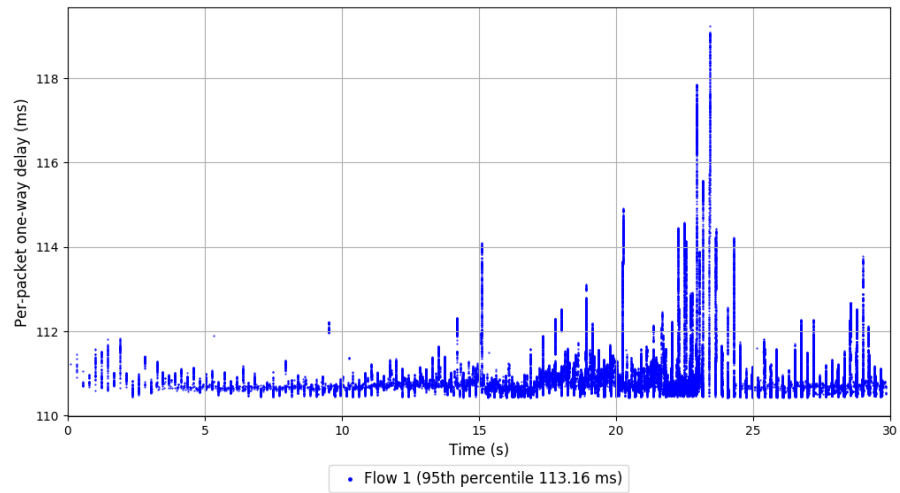
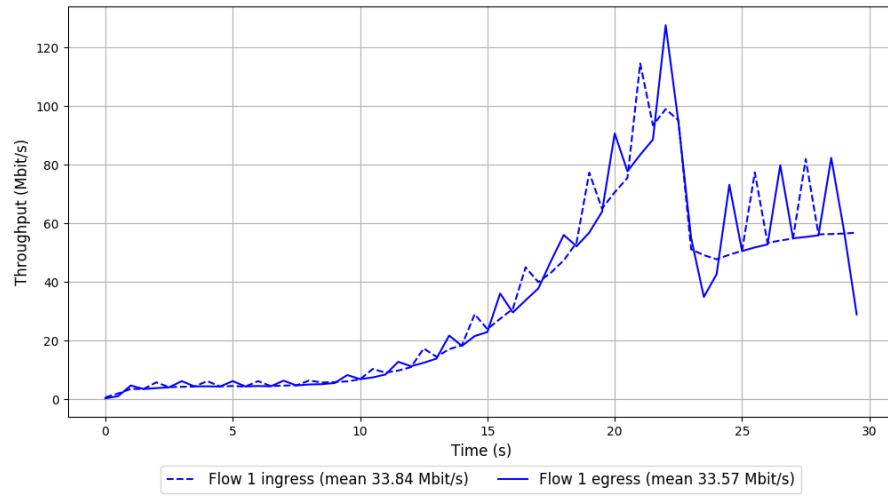
-- Flow 1:

Average throughput: 33.57 Mbit/s

95th percentile per-packet one-way delay: 113.161 ms

Loss rate: 1.57%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-16 20:14:12

End at: 2017-08-16 20:14:42

Below is generated by plot.py at 2017-08-16 22:59:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.87 Mbit/s

95th percentile per-packet one-way delay: 110.935 ms

Loss rate: 4.05%

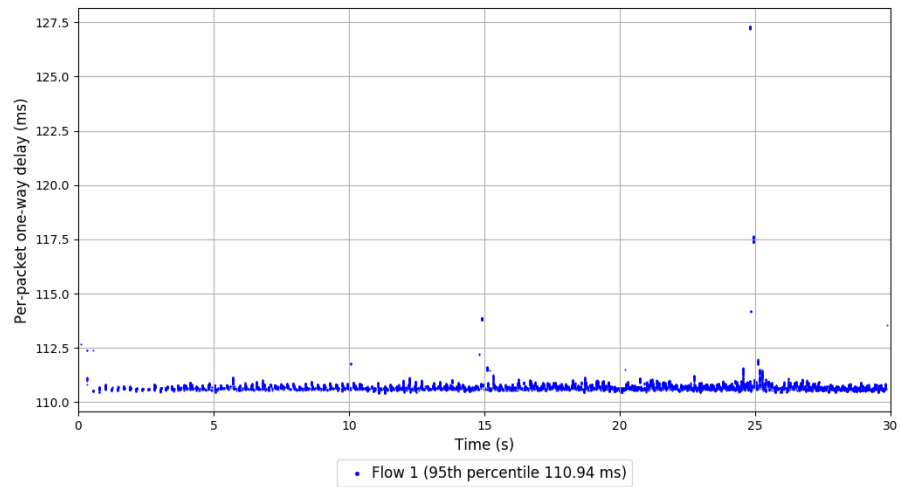
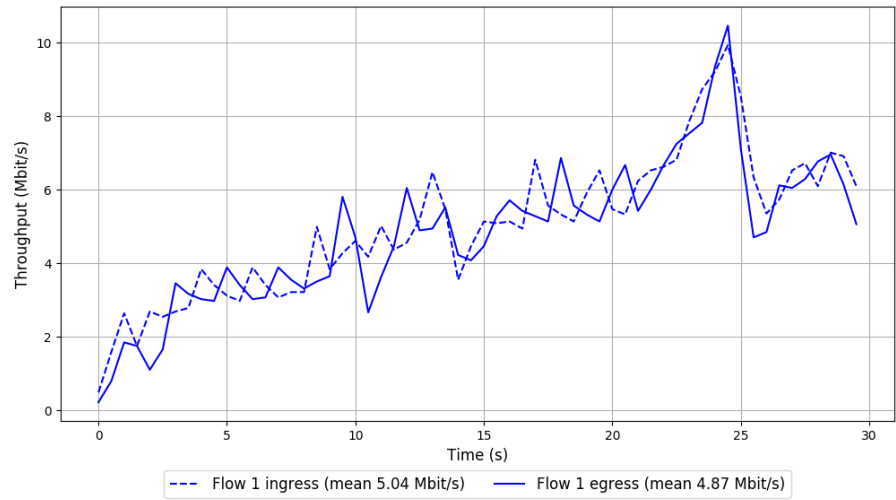
-- Flow 1:

Average throughput: 4.87 Mbit/s

95th percentile per-packet one-way delay: 110.935 ms

Loss rate: 4.05%

Run 10: Report of TCP Cubic — Data Link

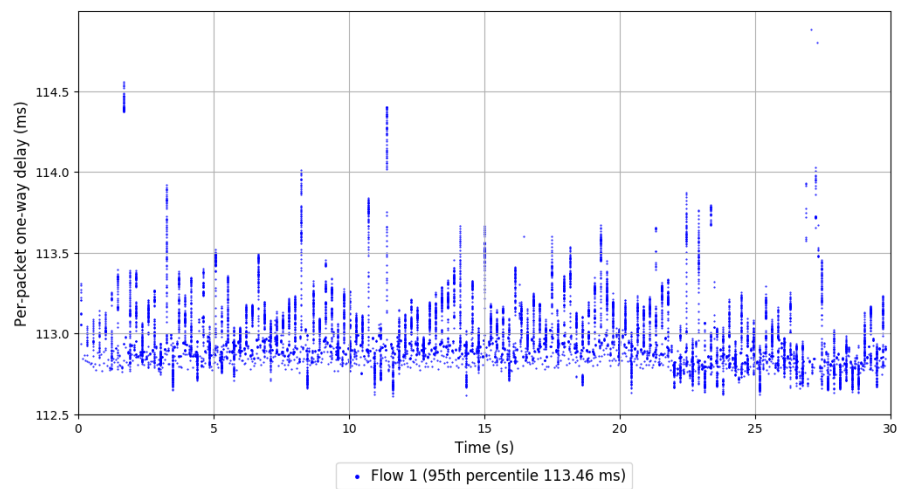
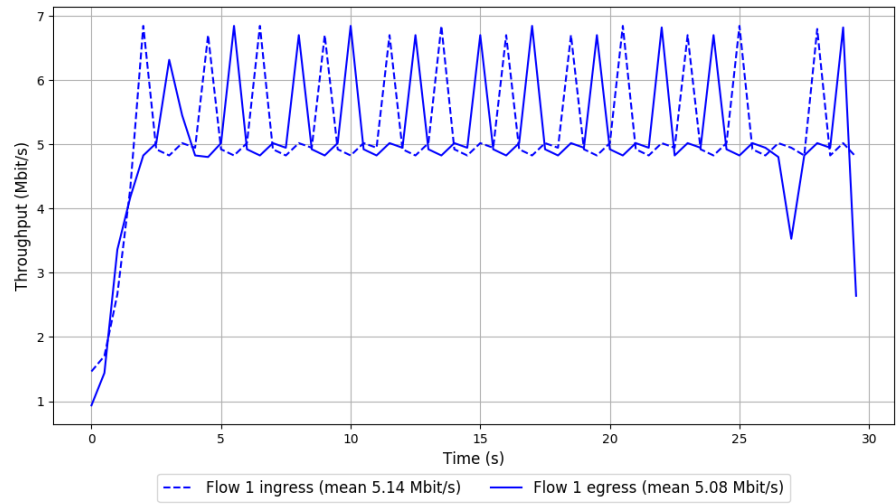


```
Run 1: Statistics of KohoCC

Start at: 2017-08-16 18:32:26
End at: 2017-08-16 18:32:56

# Below is generated by plot.py at 2017-08-16 22:59:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.08 Mbit/s
95th percentile per-packet one-way delay: 113.460 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 5.08 Mbit/s
95th percentile per-packet one-way delay: 113.460 ms
Loss rate: 1.85%
```


Run 1: Report of KohoCC — Data Link

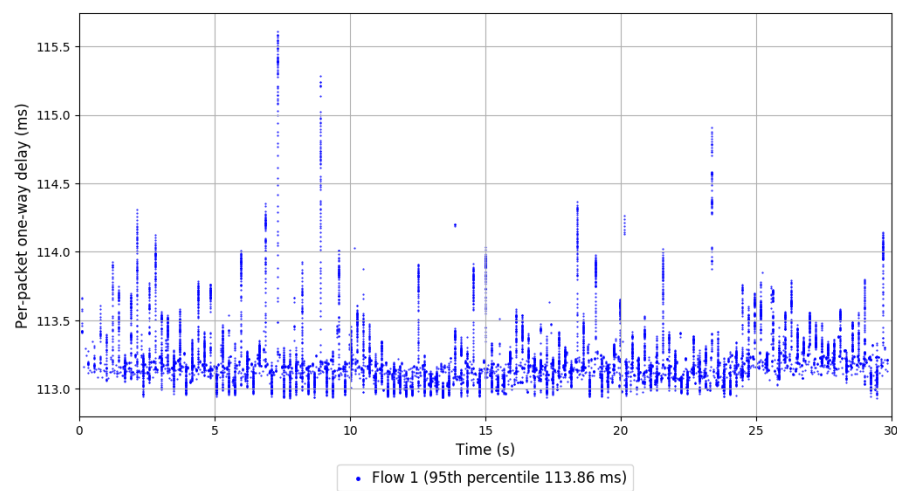
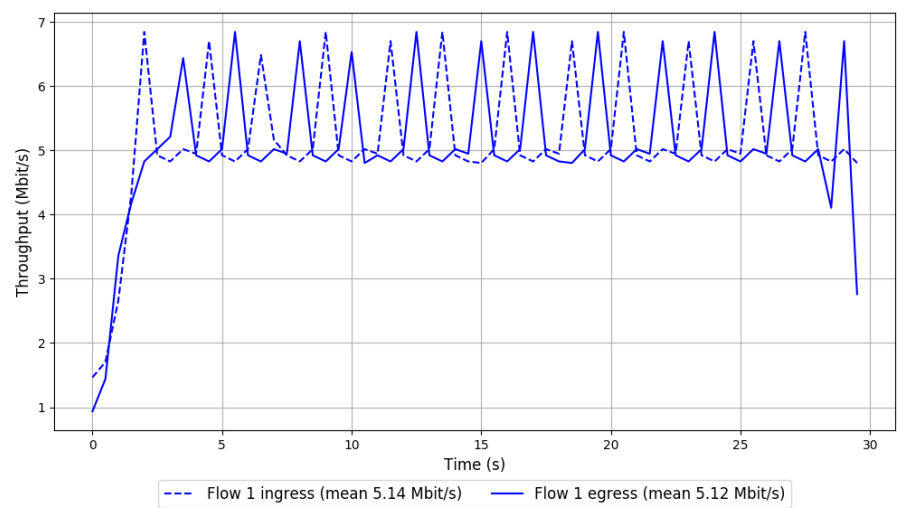


```
Run 2: Statistics of KohoCC

Start at: 2017-08-16 18:43:44
End at: 2017-08-16 18:44:14

# Below is generated by plot.py at 2017-08-16 22:59:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 113.857 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 113.857 ms
Loss rate: 1.15%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-16 18:54:59

End at: 2017-08-16 18:55:29

Below is generated by plot.py at 2017-08-16 22:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.755 ms

Loss rate: 0.83%

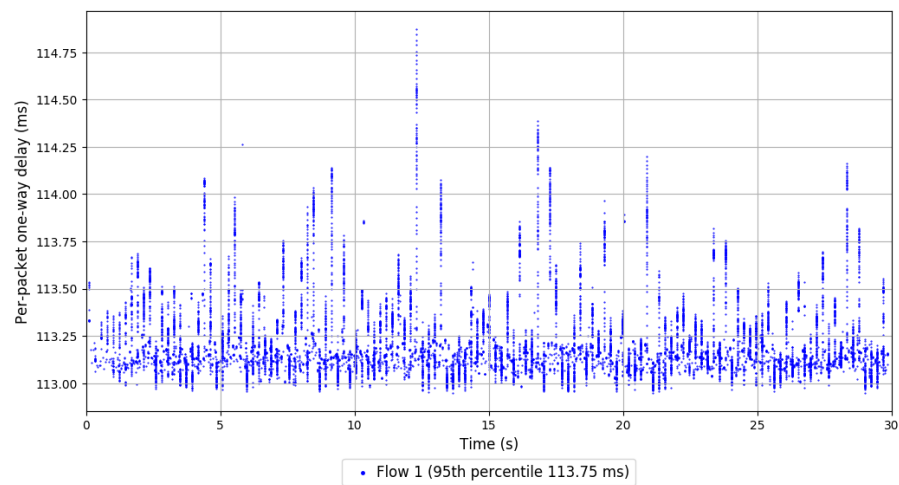
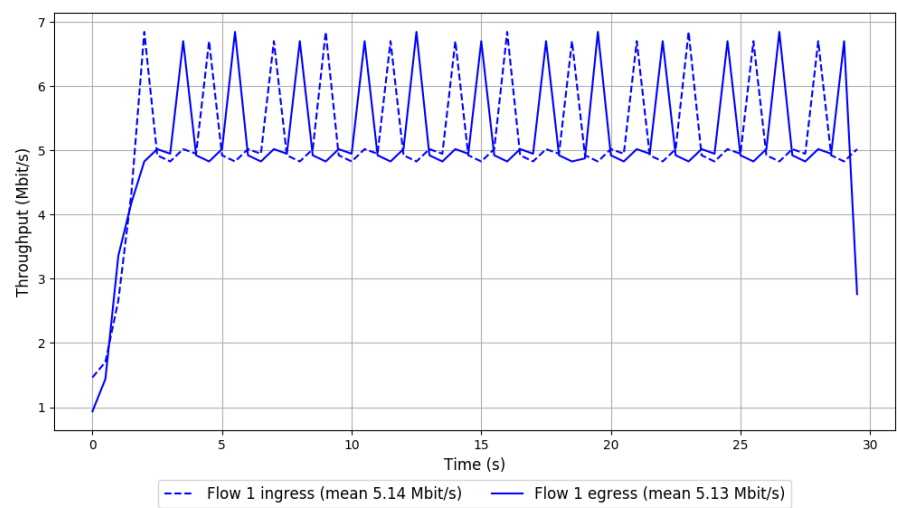
-- Flow 1:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.755 ms

Loss rate: 0.83%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-16 19:06:05

End at: 2017-08-16 19:06:35

Below is generated by plot.py at 2017-08-16 22:59:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 113.990 ms

Loss rate: 87.96%

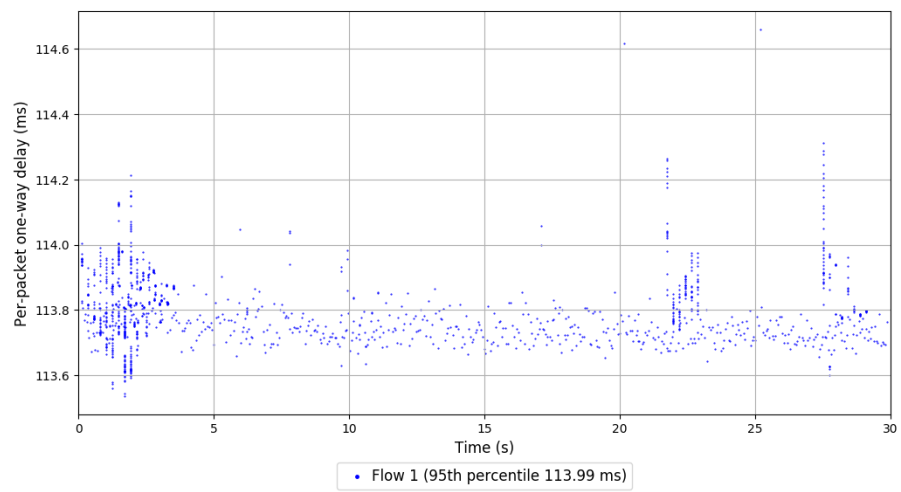
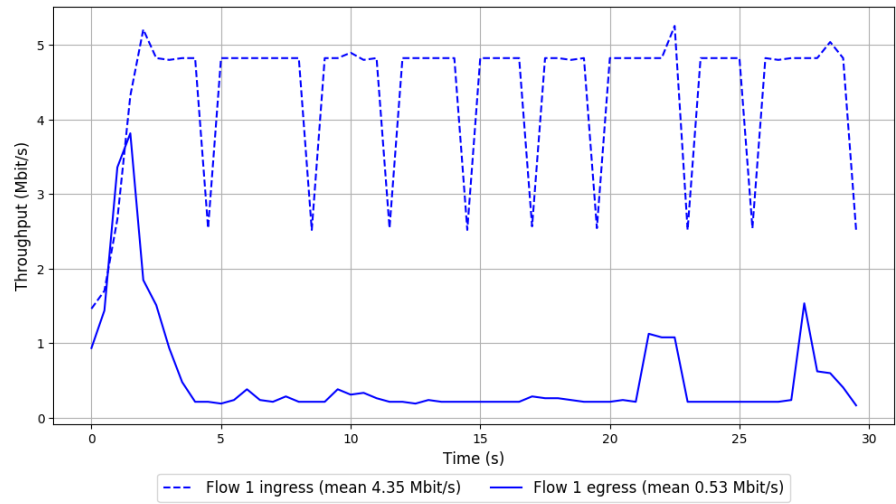
-- Flow 1:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 113.990 ms

Loss rate: 87.96%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-16 19:17:06

End at: 2017-08-16 19:17:36

Below is generated by plot.py at 2017-08-16 22:59:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 112.634 ms

Loss rate: 91.73%

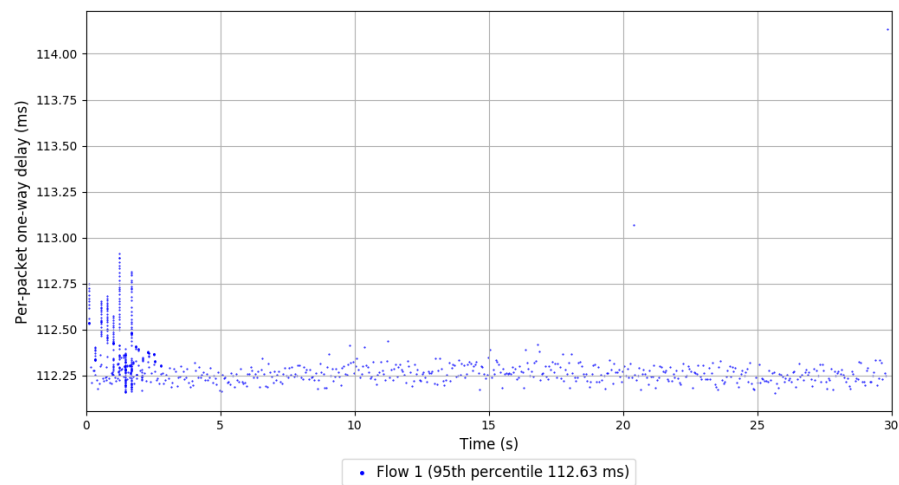
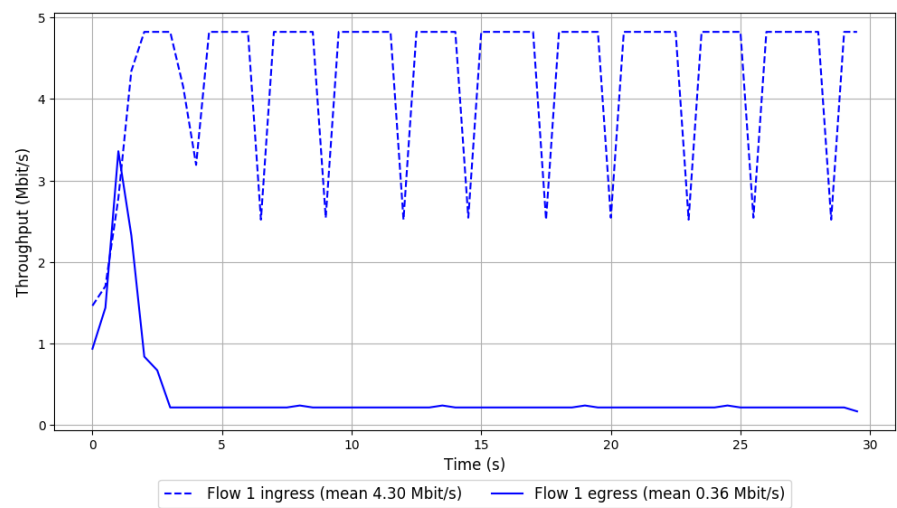
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 112.634 ms

Loss rate: 91.73%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-16 19:28:35

End at: 2017-08-16 19:29:05

Below is generated by plot.py at 2017-08-16 22:59:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 114.073 ms

Loss rate: 85.67%

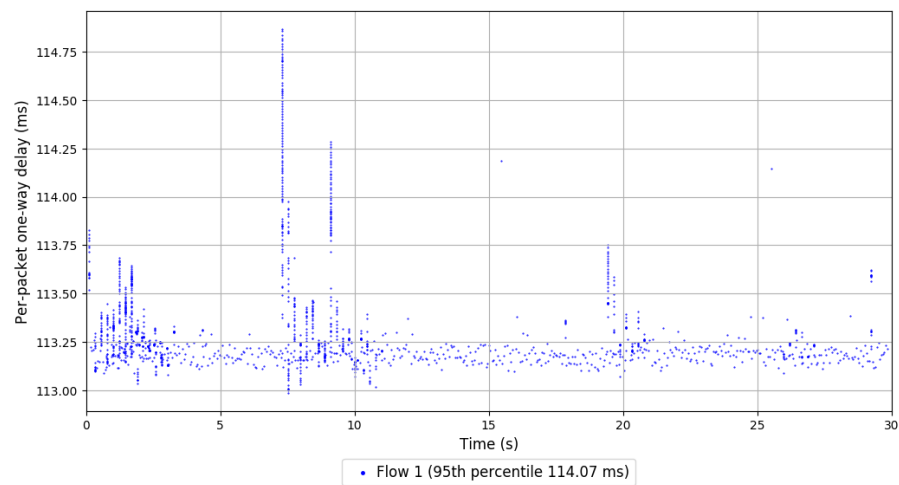
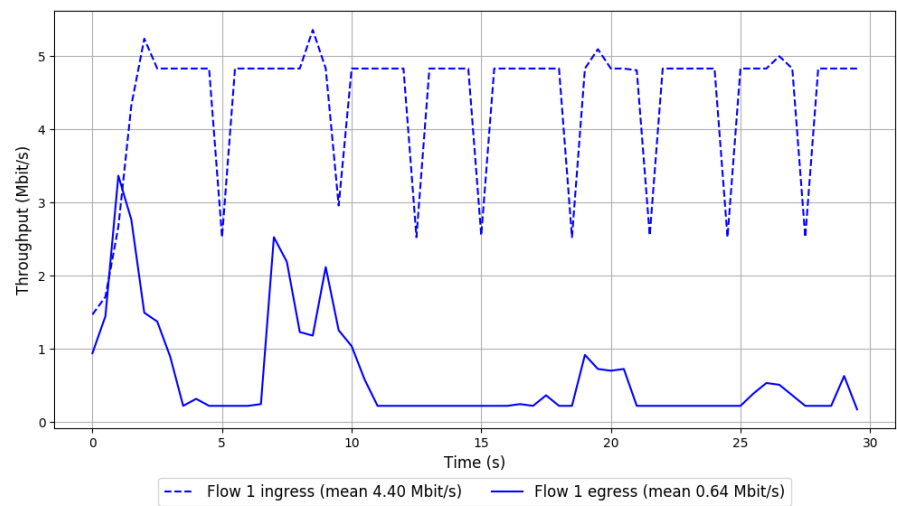
-- Flow 1:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 114.073 ms

Loss rate: 85.67%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-16 19:39:34

End at: 2017-08-16 19:40:05

Below is generated by plot.py at 2017-08-16 22:59:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 113.286 ms

Loss rate: 91.68%

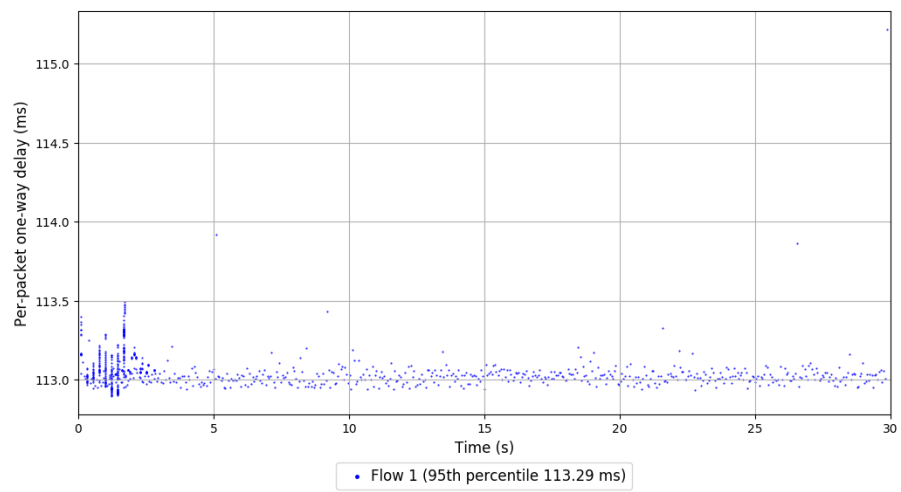
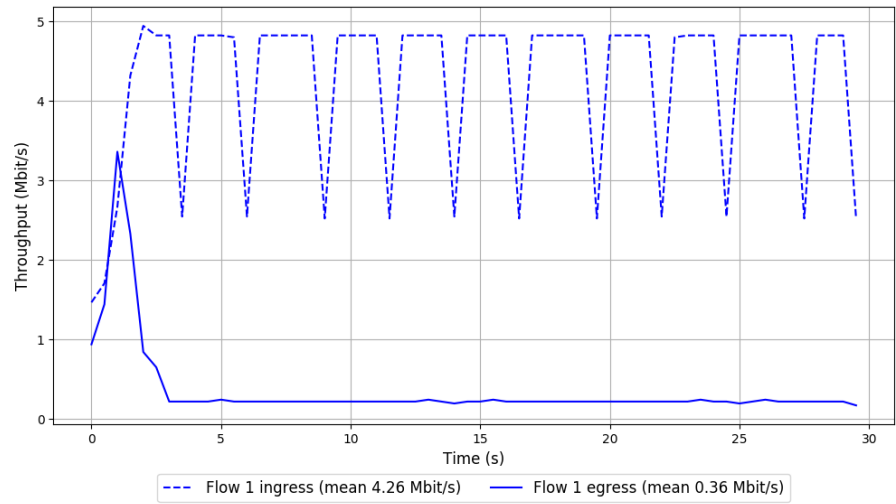
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 113.286 ms

Loss rate: 91.68%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-16 19:50:40

End at: 2017-08-16 19:51:10

Below is generated by plot.py at 2017-08-16 22:59:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 113.478 ms

Loss rate: 91.68%

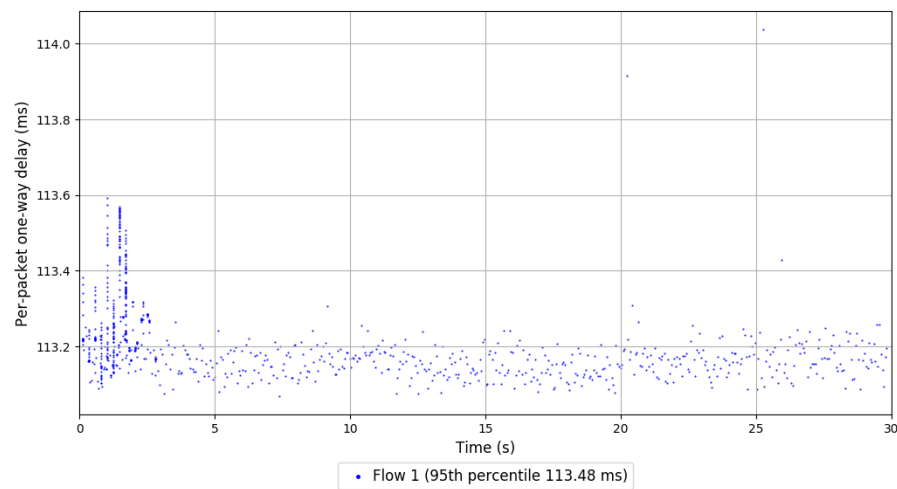
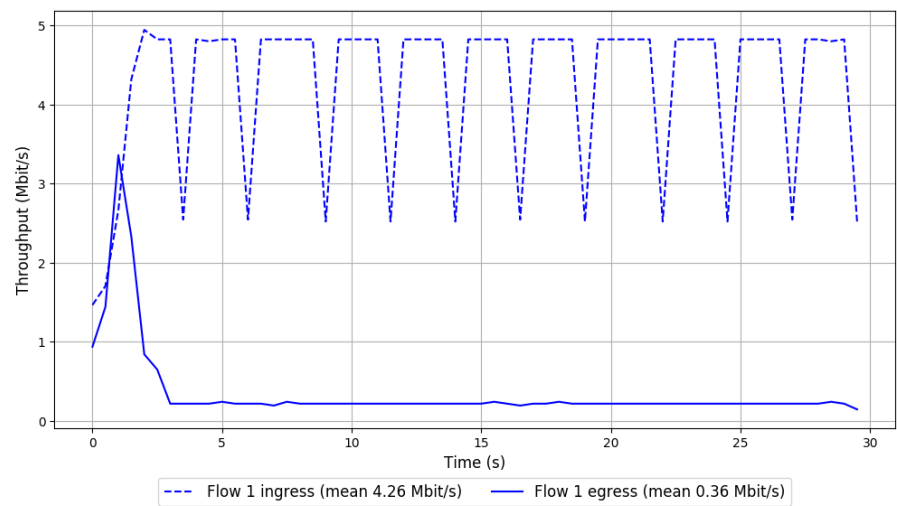
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 113.478 ms

Loss rate: 91.68%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-16 20:01:48

End at: 2017-08-16 20:02:18

Below is generated by plot.py at 2017-08-16 22:59:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 113.392 ms

Loss rate: 91.75%

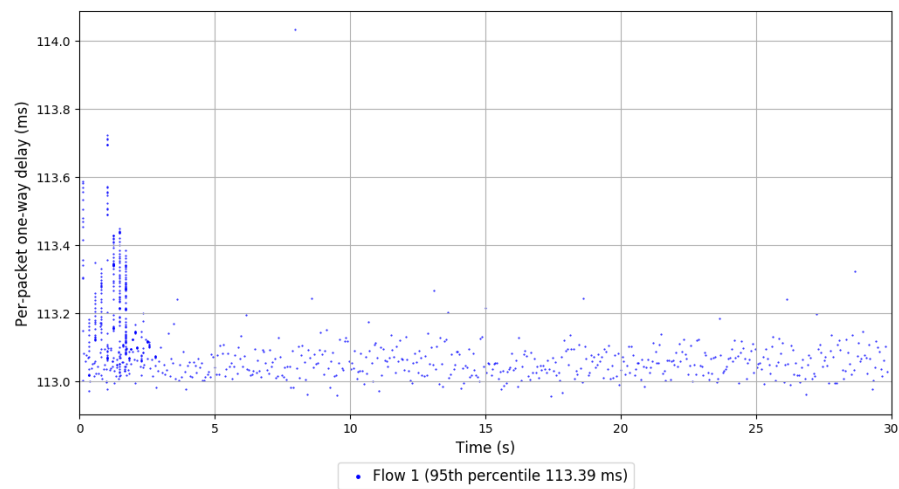
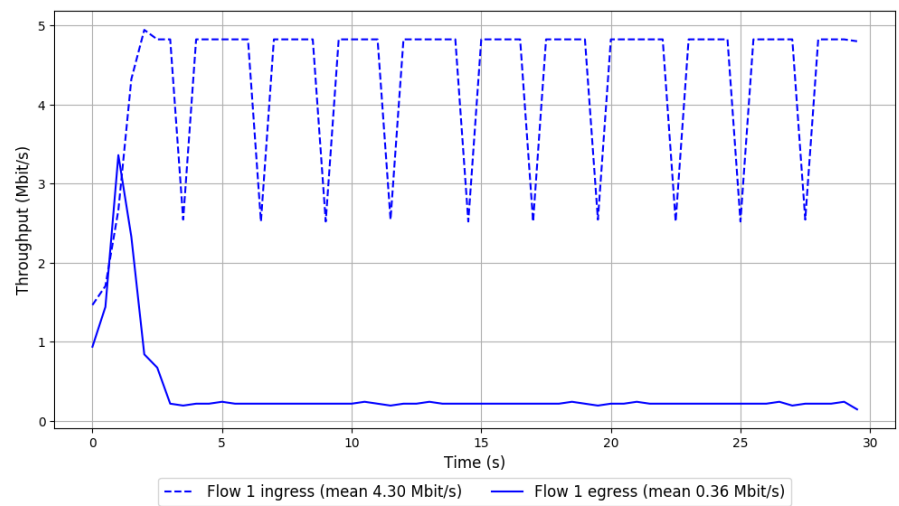
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 113.392 ms

Loss rate: 91.75%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-16 20:12:38

End at: 2017-08-16 20:13:08

Below is generated by plot.py at 2017-08-16 22:59:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 110.799 ms

Loss rate: 88.85%

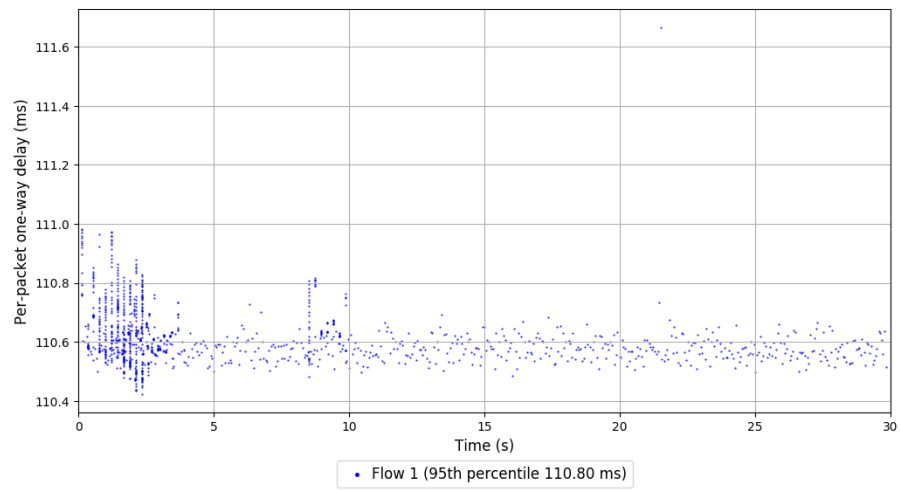
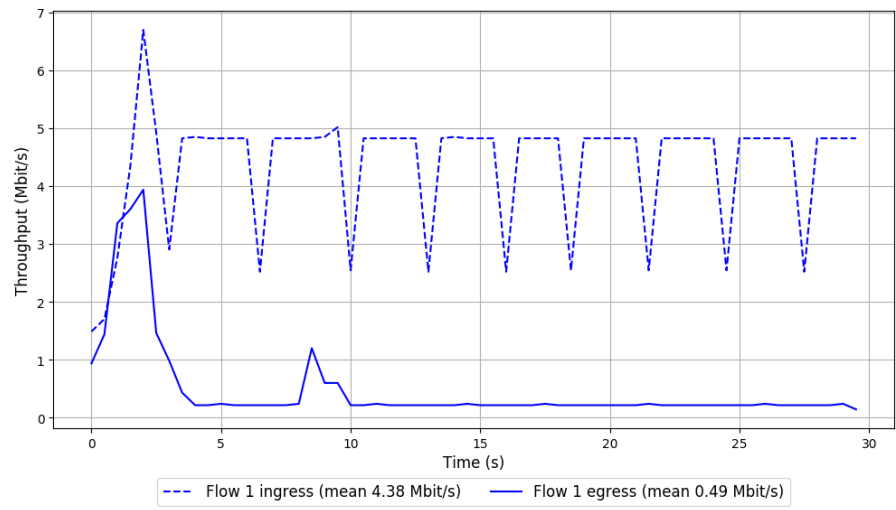
-- Flow 1:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 110.799 ms

Loss rate: 88.85%

Run 10: Report of KohoCC — Data Link

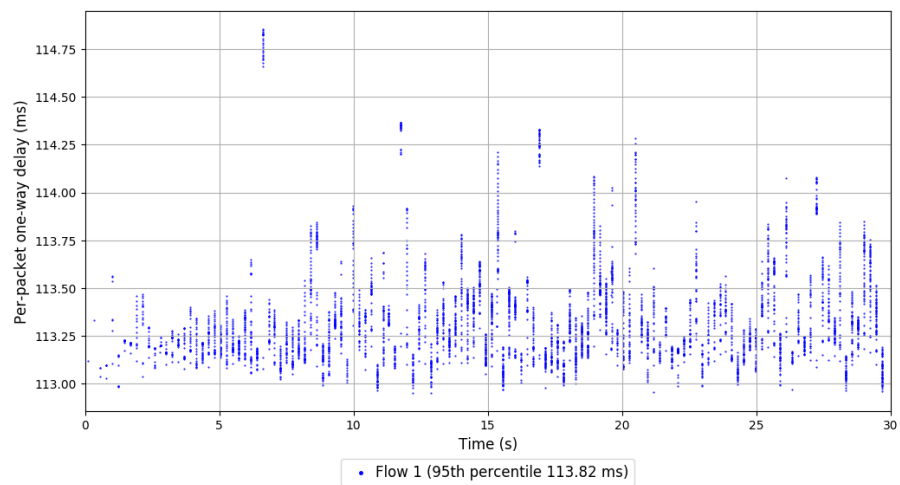
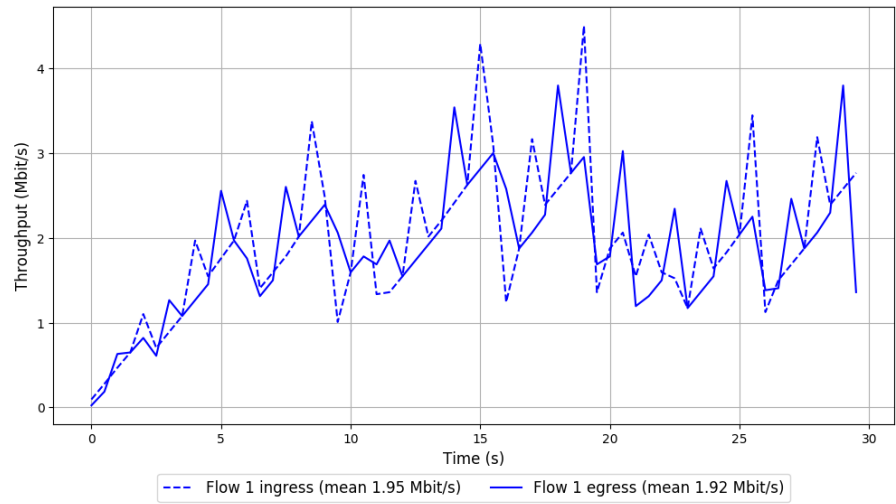


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-16 18:40:18
End at: 2017-08-16 18:40:48

# Below is generated by plot.py at 2017-08-16 22:59:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 113.824 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 113.824 ms
Loss rate: 2.46%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-08-16 18:51:33

End at: 2017-08-16 18:52:03

Below is generated by plot.py at 2017-08-16 22:59:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 113.844 ms

Loss rate: 1.84%

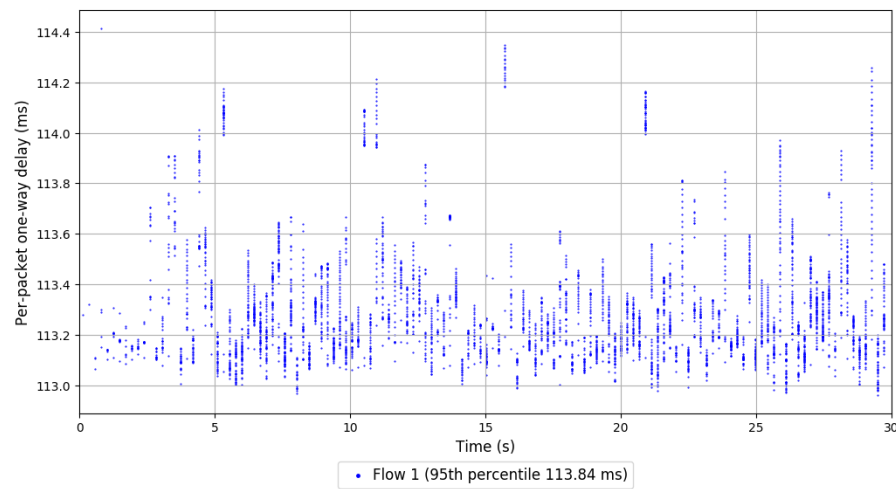
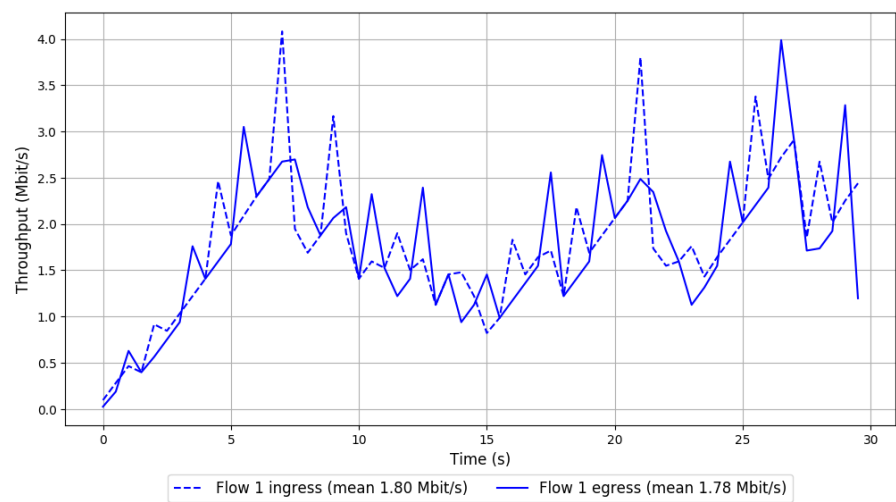
-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 113.844 ms

Loss rate: 1.84%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-16 19:02:38

End at: 2017-08-16 19:03:08

Below is generated by plot.py at 2017-08-16 22:59:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 114.440 ms

Loss rate: 2.60%

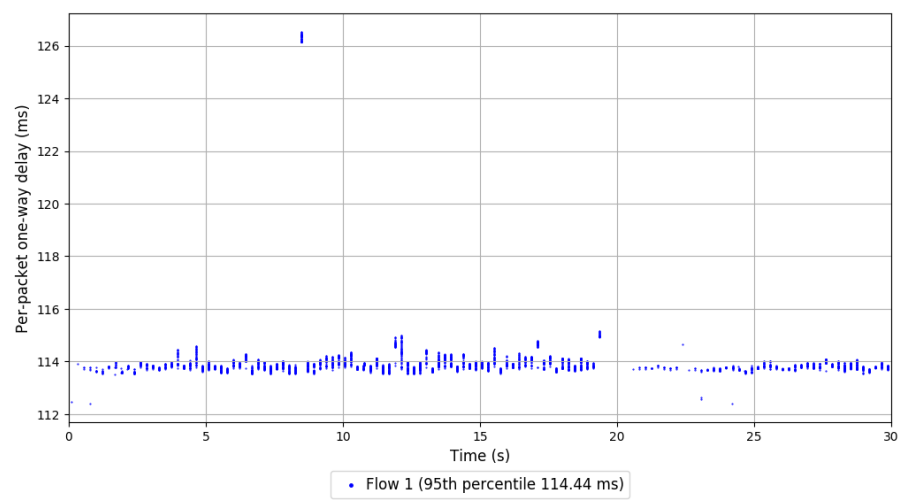
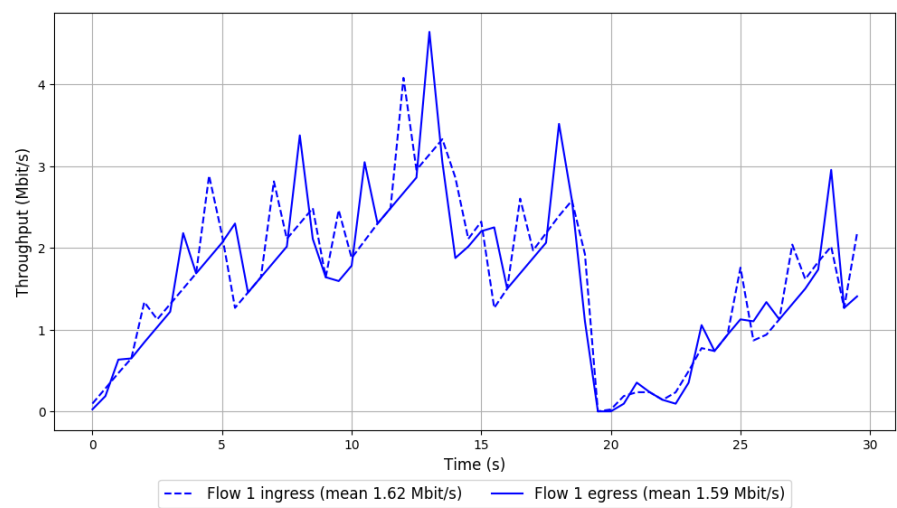
-- Flow 1:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 114.440 ms

Loss rate: 2.60%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-16 19:13:42

End at: 2017-08-16 19:14:12

Below is generated by plot.py at 2017-08-16 22:59:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 113.585 ms

Loss rate: 2.28%

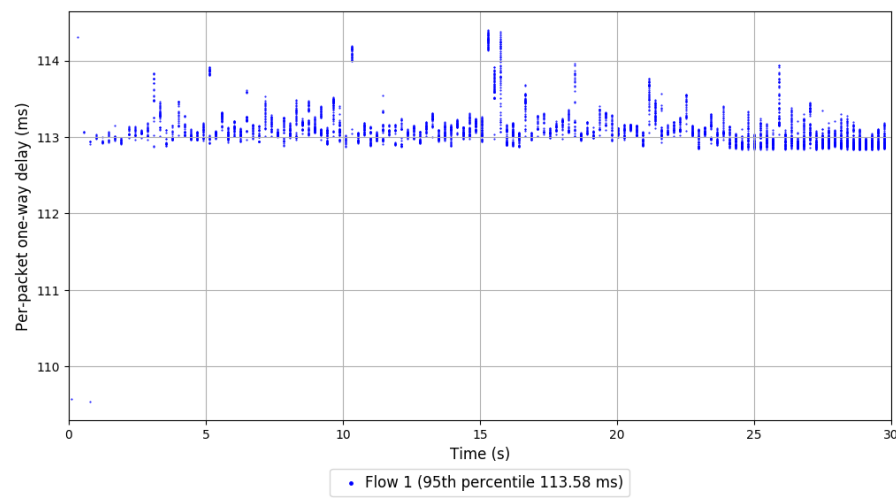
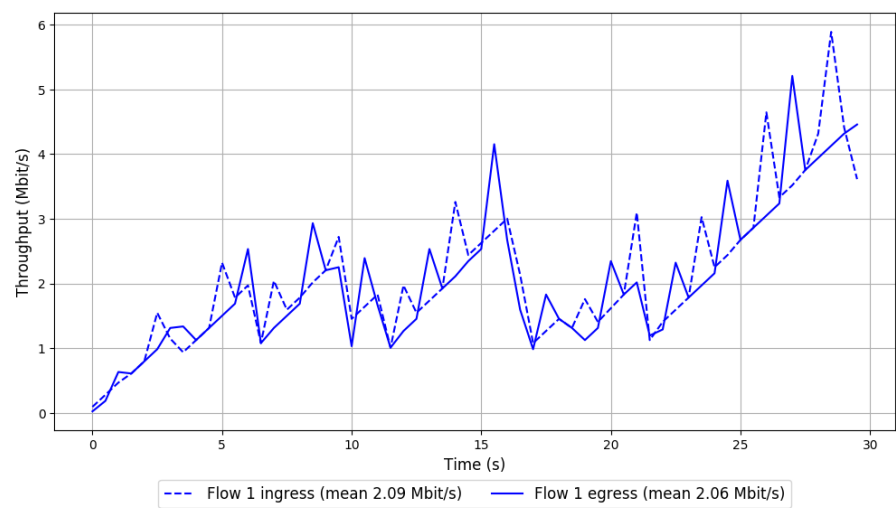
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 113.585 ms

Loss rate: 2.28%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-16 19:25:12

End at: 2017-08-16 19:25:42

Below is generated by plot.py at 2017-08-16 22:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 112.824 ms

Loss rate: 1.71%

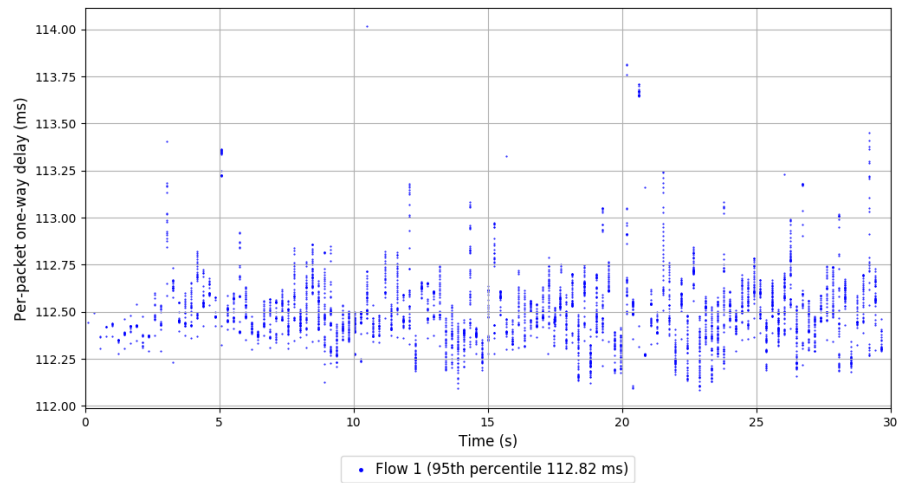
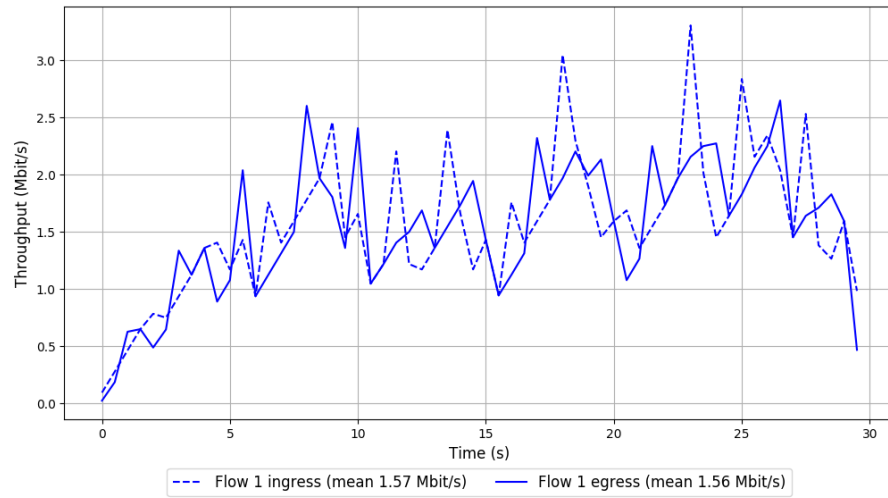
-- Flow 1:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 112.824 ms

Loss rate: 1.71%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-16 19:36:09

End at: 2017-08-16 19:36:39

Below is generated by plot.py at 2017-08-16 22:59:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 113.701 ms

Loss rate: 1.67%

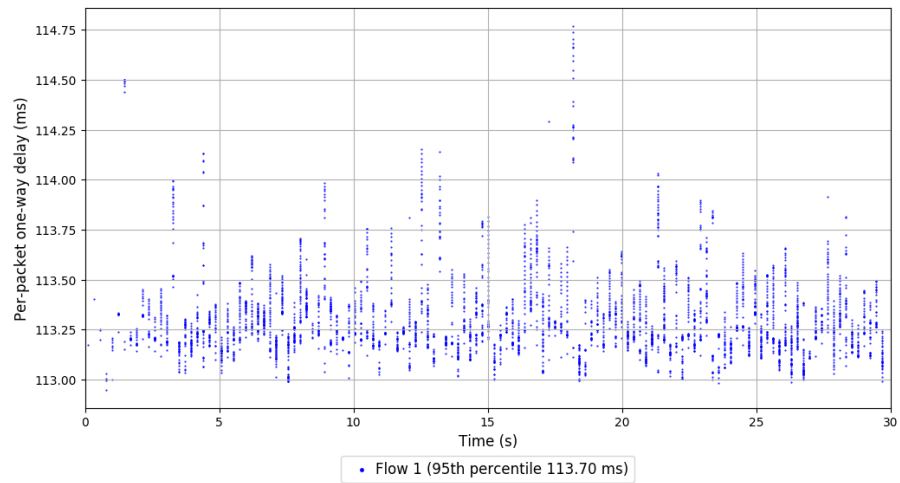
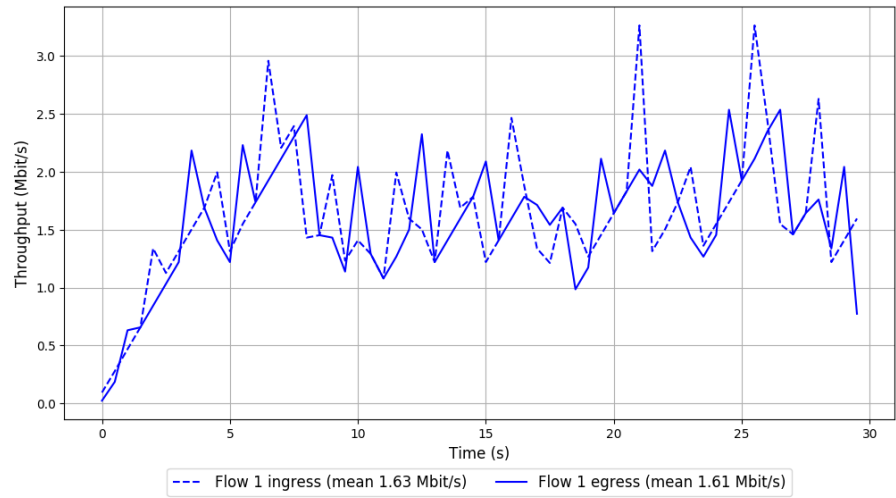
-- Flow 1:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 113.701 ms

Loss rate: 1.67%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-16 19:47:14

End at: 2017-08-16 19:47:44

Below is generated by plot.py at 2017-08-16 22:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 111.612 ms

Loss rate: 0.51%

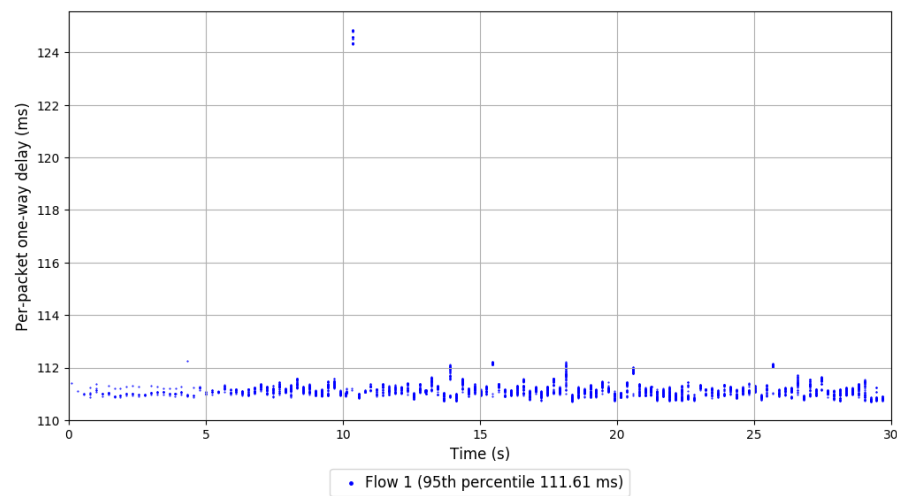
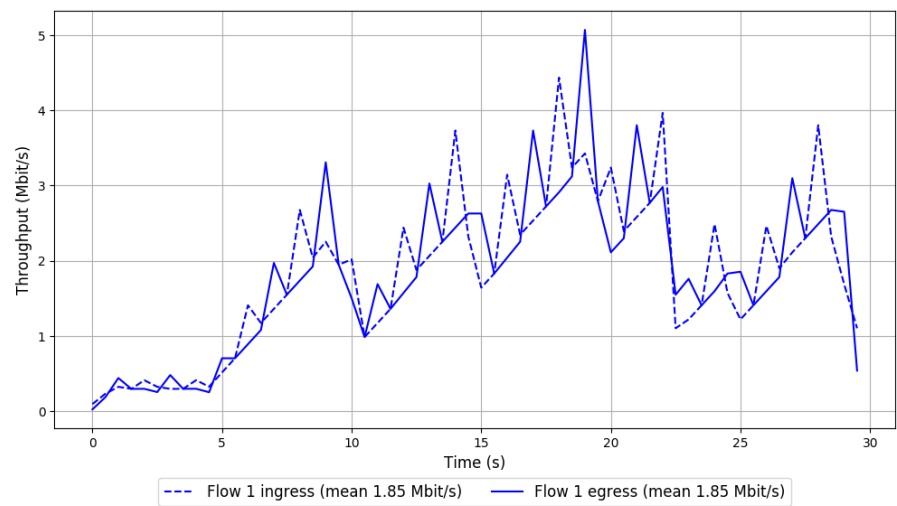
-- Flow 1:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 111.612 ms

Loss rate: 0.51%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-16 19:58:23

End at: 2017-08-16 19:58:53

Below is generated by plot.py at 2017-08-16 22:59:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 111.947 ms

Loss rate: 2.17%

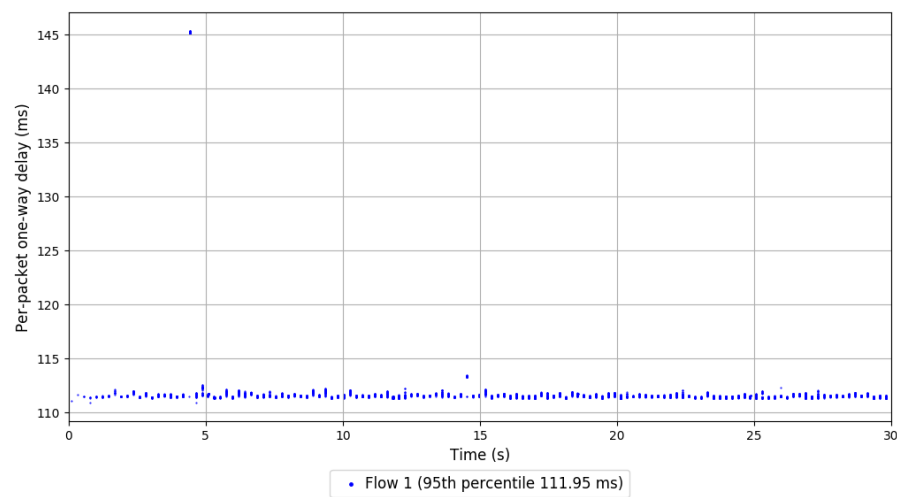
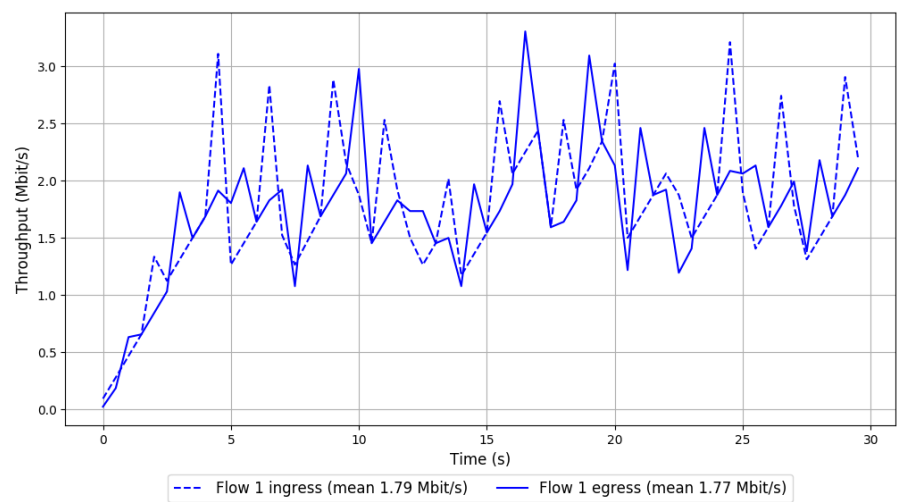
-- Flow 1:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 111.947 ms

Loss rate: 2.17%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-16 20:09:13

End at: 2017-08-16 20:09:43

Below is generated by plot.py at 2017-08-16 22:59:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 111.308 ms

Loss rate: 0.90%

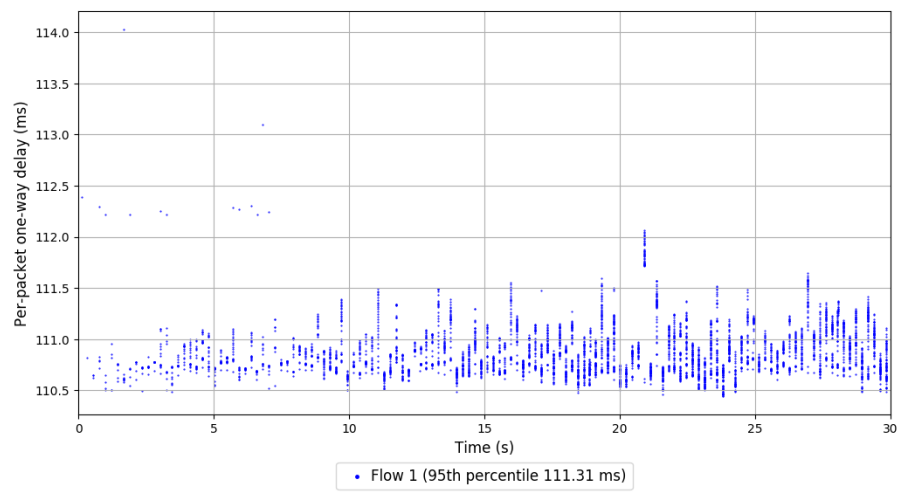
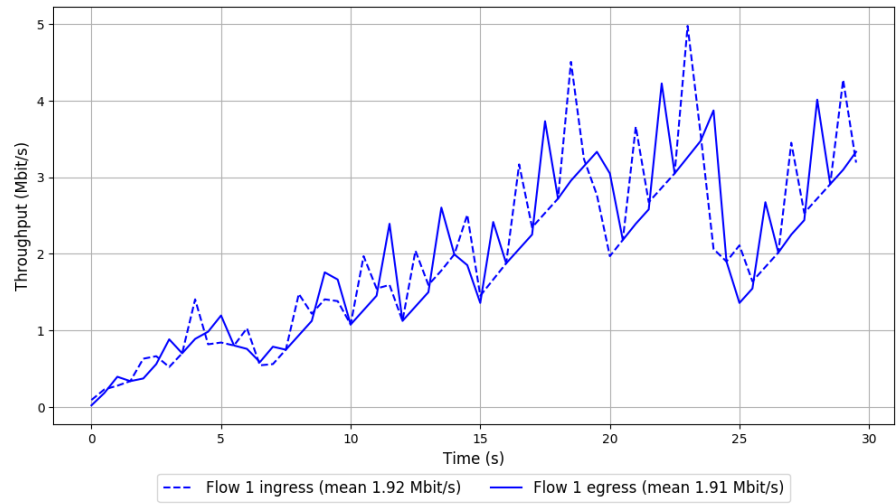
-- Flow 1:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 111.308 ms

Loss rate: 0.90%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

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

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

Below is generated by plot.py at 2017-08-16 22:59:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 115.467 ms

Loss rate: 3.36%

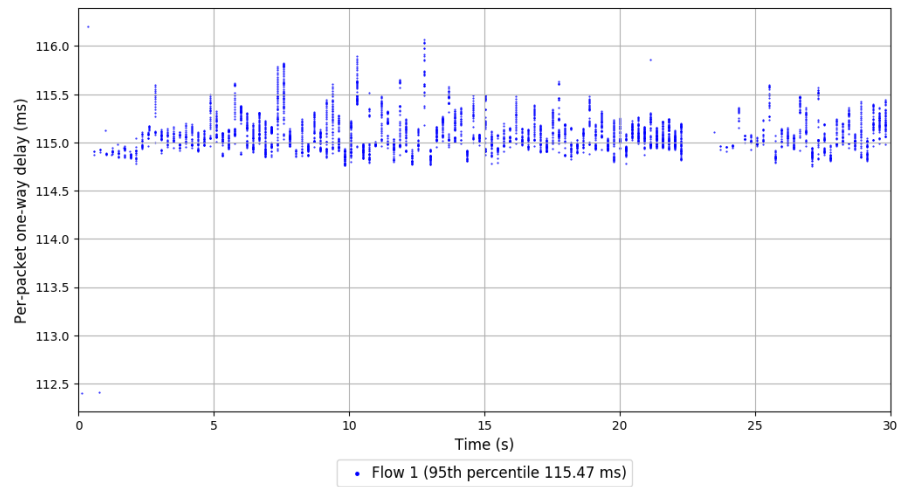
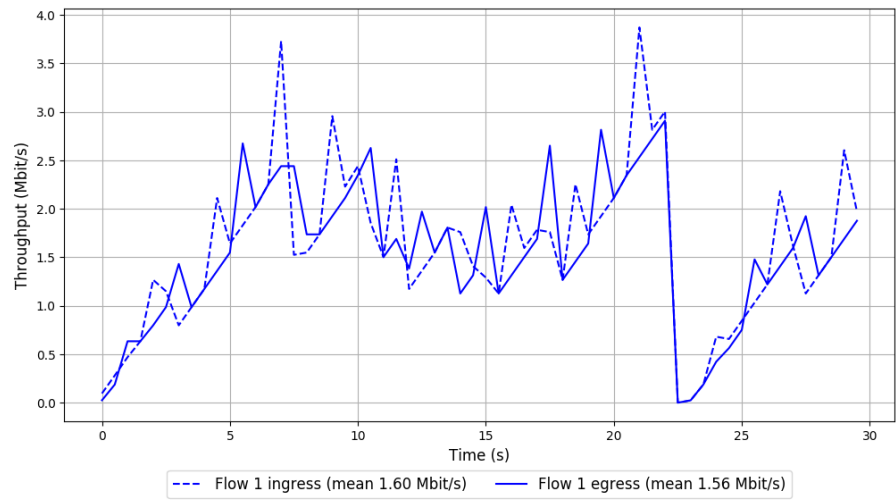
-- Flow 1:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 115.467 ms

Loss rate: 3.36%

Run 10: Report of LEDBAT — Data Link

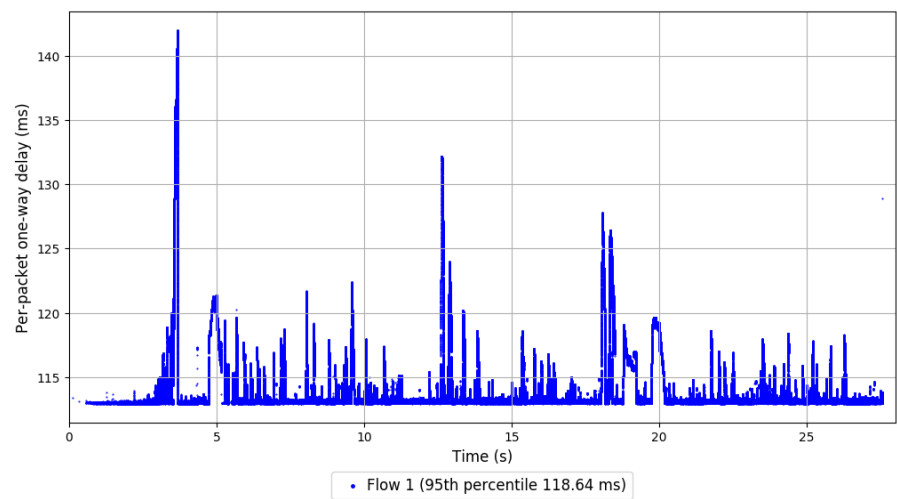
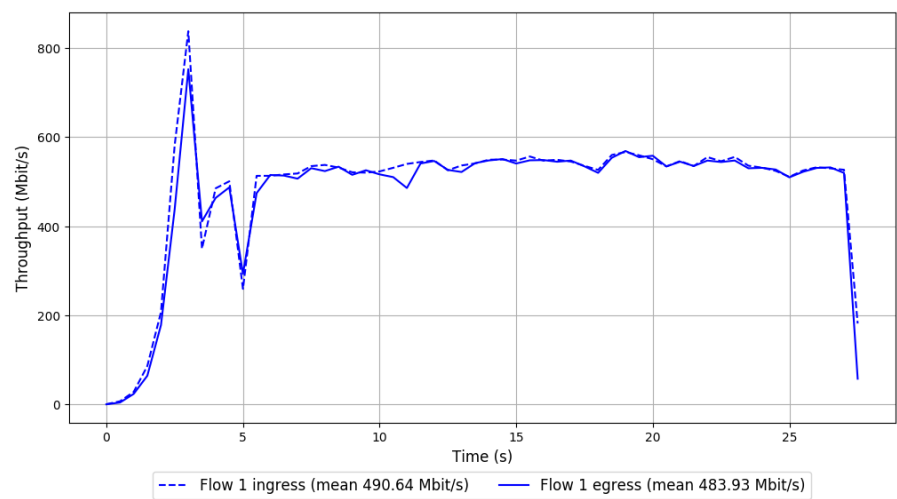


```
Run 1: Statistics of PCC

Start at: 2017-08-16 18:36:17
End at: 2017-08-16 18:36:47

# Below is generated by plot.py at 2017-08-16 23:01:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 483.93 Mbit/s
95th percentile per-packet one-way delay: 118.644 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 483.93 Mbit/s
95th percentile per-packet one-way delay: 118.644 ms
Loss rate: 2.12%
```


Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-16 18:47:34

End at: 2017-08-16 18:48:04

Below is generated by plot.py at 2017-08-16 23:01:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 479.72 Mbit/s

95th percentile per-packet one-way delay: 118.536 ms

Loss rate: 1.35%

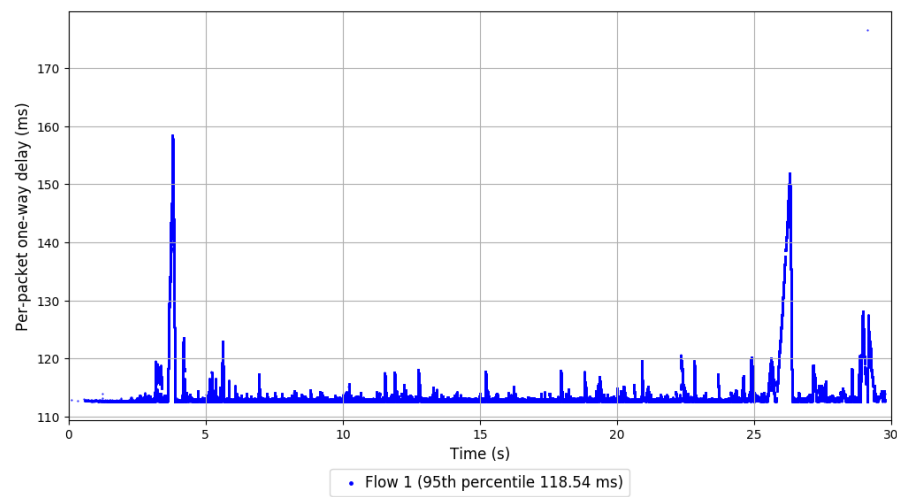
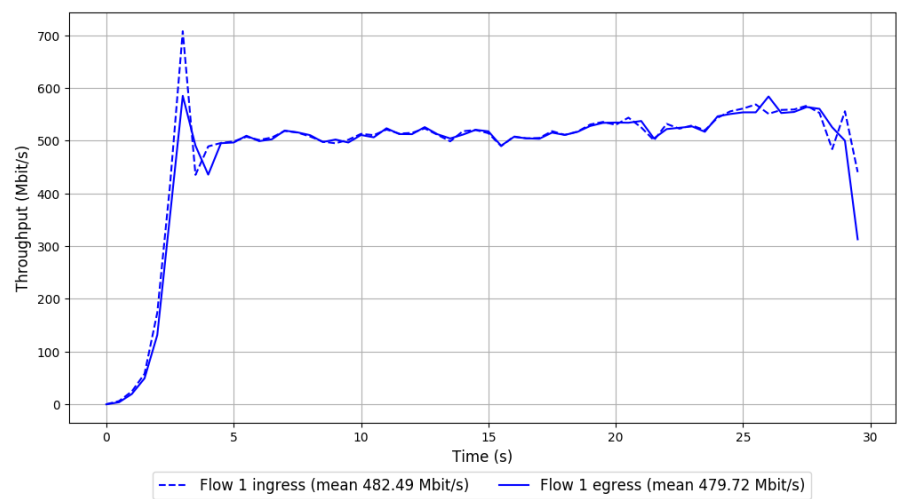
-- Flow 1:

Average throughput: 479.72 Mbit/s

95th percentile per-packet one-way delay: 118.536 ms

Loss rate: 1.35%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-16 18:58:49

End at: 2017-08-16 18:59:19

Below is generated by plot.py at 2017-08-16 23:02:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 501.85 Mbit/s

95th percentile per-packet one-way delay: 207.747 ms

Loss rate: 3.74%

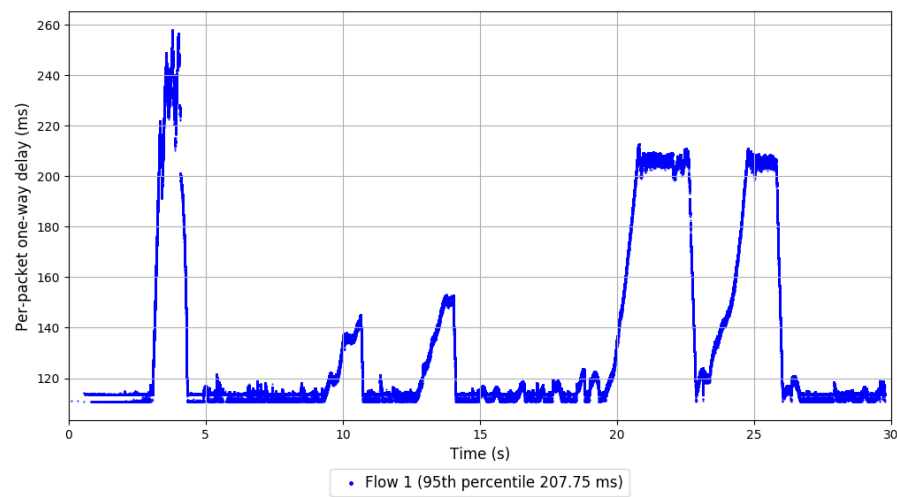
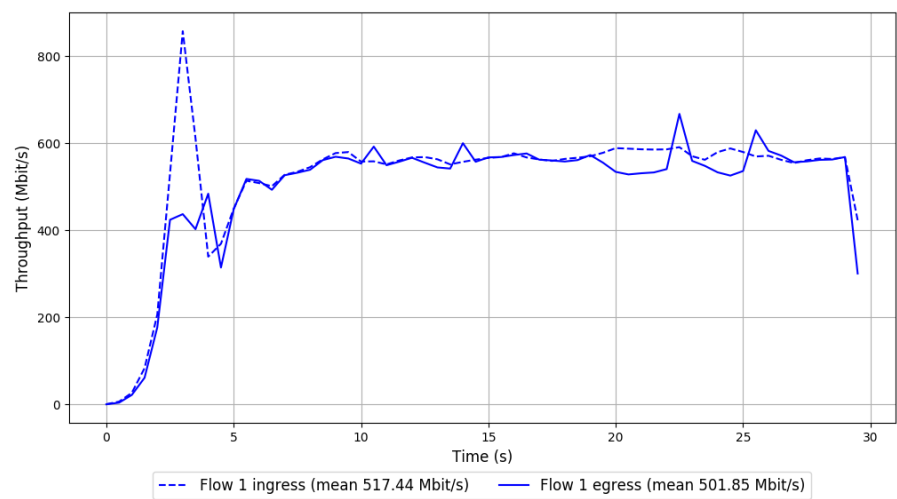
-- Flow 1:

Average throughput: 501.85 Mbit/s

95th percentile per-packet one-way delay: 207.747 ms

Loss rate: 3.74%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-16 19:09:54

End at: 2017-08-16 19:10:24

Below is generated by plot.py at 2017-08-16 23:02:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.18 Mbit/s

95th percentile per-packet one-way delay: 115.127 ms

Loss rate: 10.70%

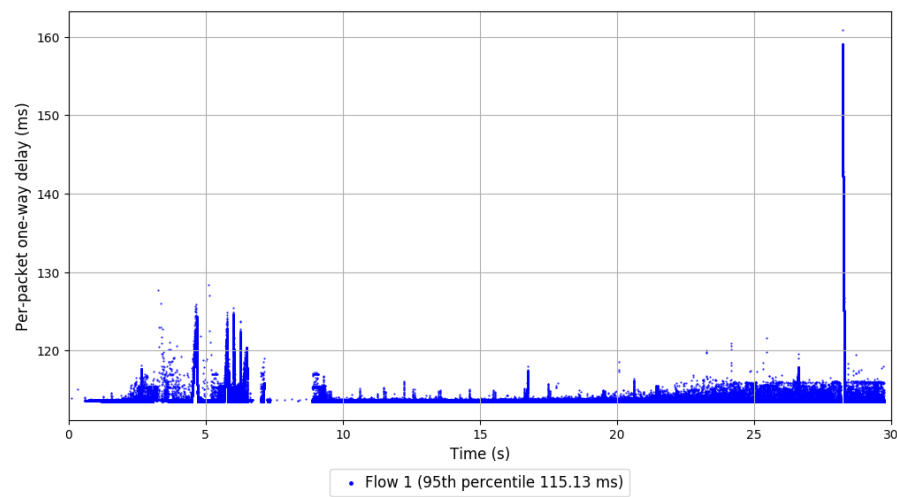
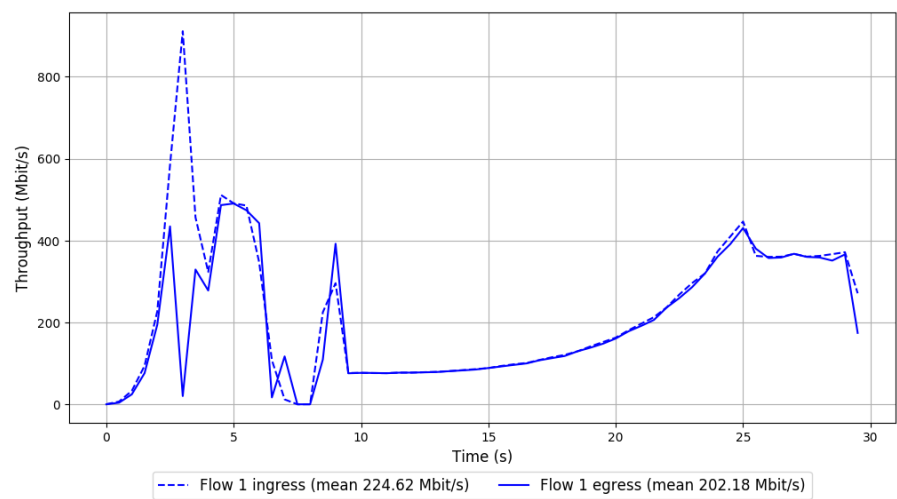
-- Flow 1:

Average throughput: 202.18 Mbit/s

95th percentile per-packet one-way delay: 115.127 ms

Loss rate: 10.70%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-16 19:21:05

End at: 2017-08-16 19:21:35

Below is generated by plot.py at 2017-08-16 23:02:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.26 Mbit/s

95th percentile per-packet one-way delay: 113.641 ms

Loss rate: 8.01%

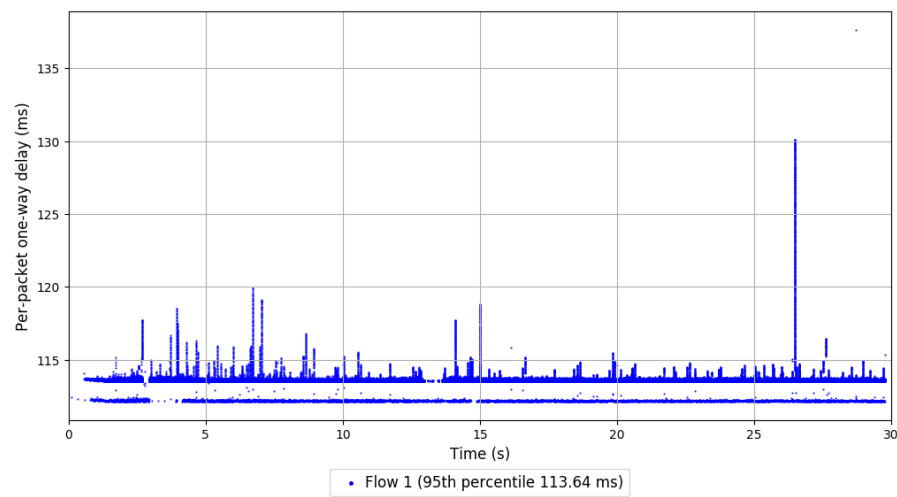
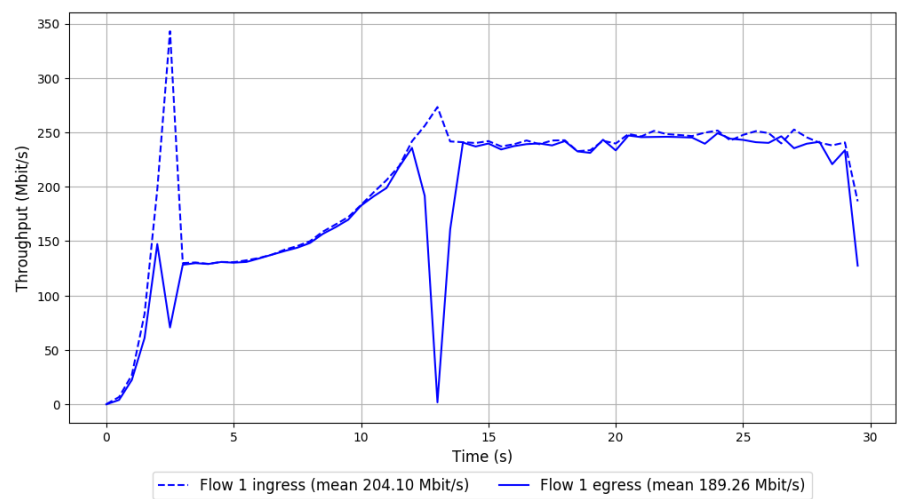
-- Flow 1:

Average throughput: 189.26 Mbit/s

95th percentile per-packet one-way delay: 113.641 ms

Loss rate: 8.01%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-16 19:32:25

End at: 2017-08-16 19:32:55

Below is generated by plot.py at 2017-08-16 23:03:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 283.95 Mbit/s

95th percentile per-packet one-way delay: 112.132 ms

Loss rate: 6.96%

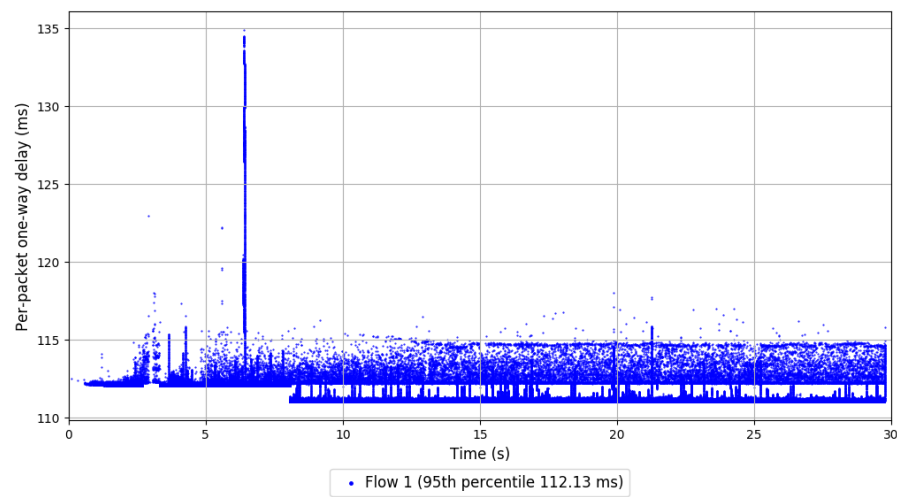
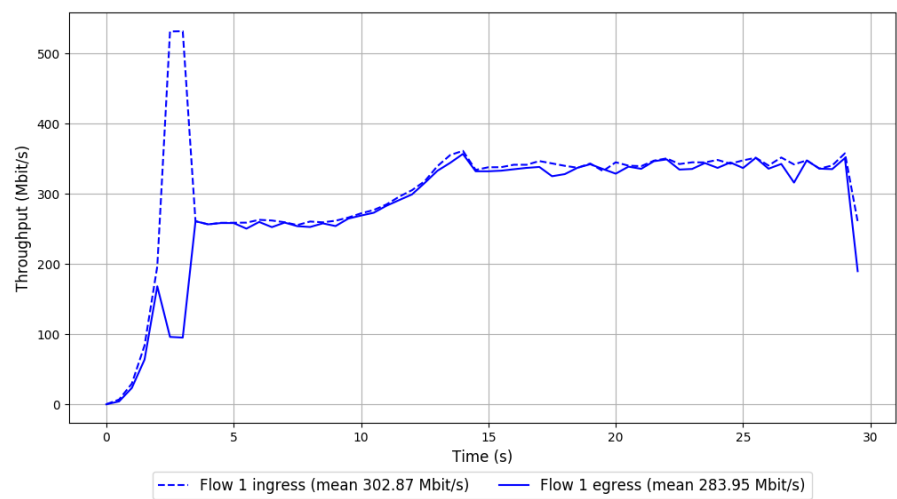
-- Flow 1:

Average throughput: 283.95 Mbit/s

95th percentile per-packet one-way delay: 112.132 ms

Loss rate: 6.96%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-16 19:43:20

End at: 2017-08-16 19:43:50

Below is generated by plot.py at 2017-08-16 23:03:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 143.30 Mbit/s

95th percentile per-packet one-way delay: 113.014 ms

Loss rate: 7.99%

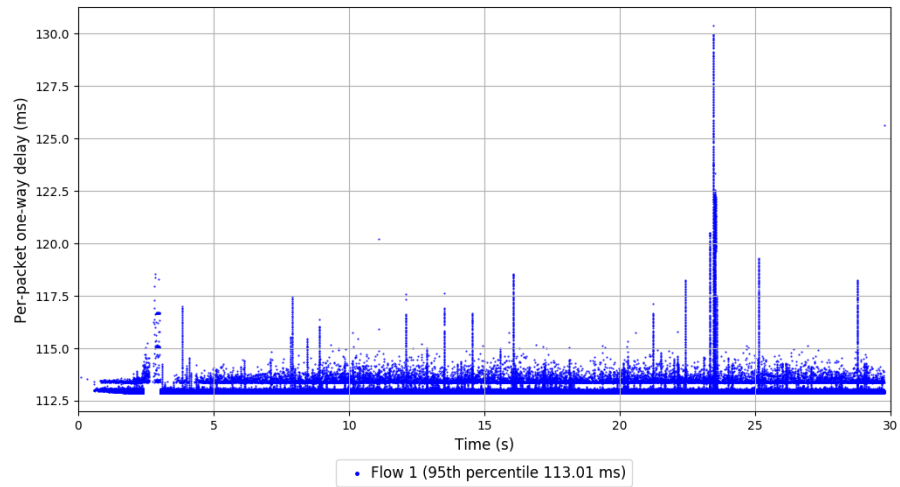
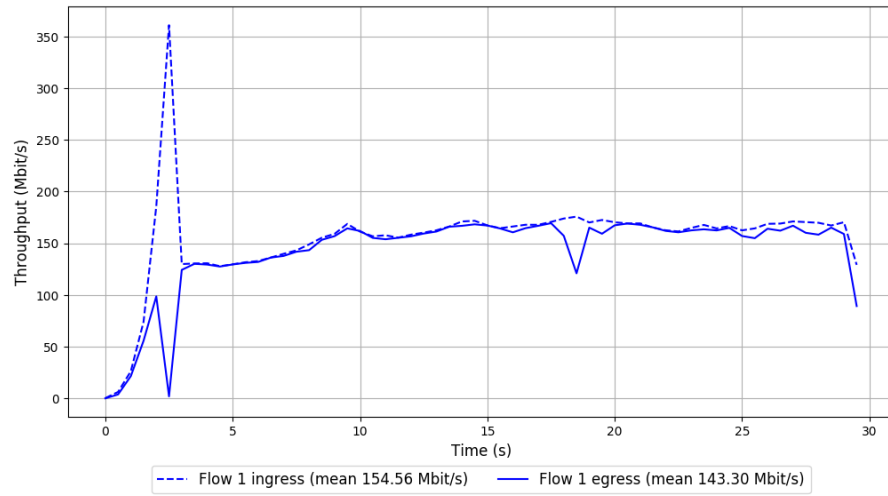
-- Flow 1:

Average throughput: 143.30 Mbit/s

95th percentile per-packet one-way delay: 113.014 ms

Loss rate: 7.99%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-16 19:54:26

End at: 2017-08-16 19:54:56

Below is generated by plot.py at 2017-08-16 23:04:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.88 Mbit/s

95th percentile per-packet one-way delay: 112.905 ms

Loss rate: 5.57%

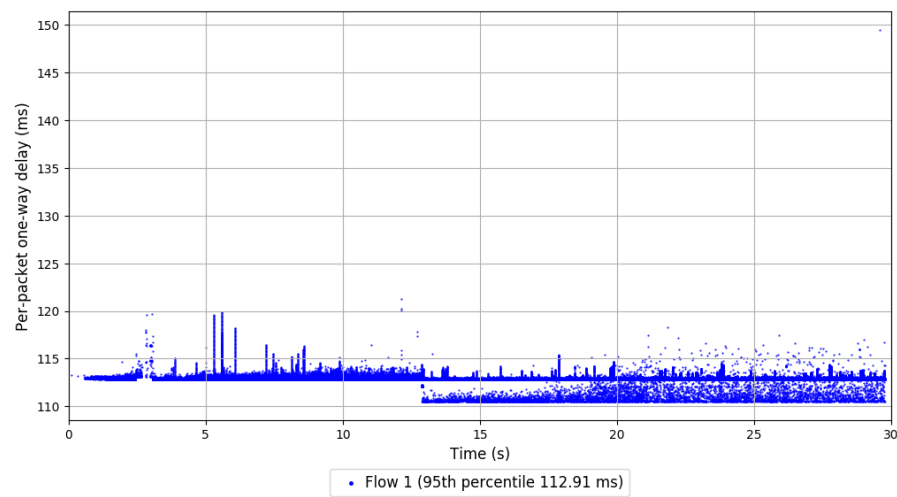
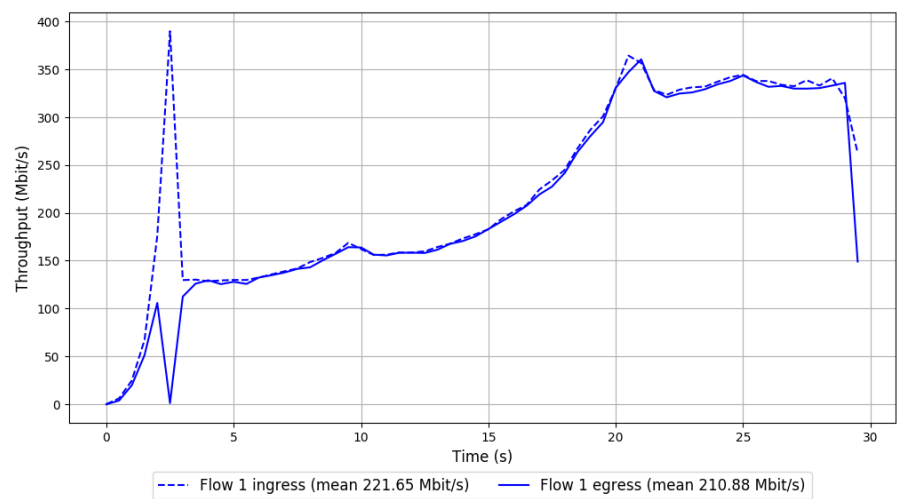
-- Flow 1:

Average throughput: 210.88 Mbit/s

95th percentile per-packet one-way delay: 112.905 ms

Loss rate: 5.57%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-16 20:05:31

End at: 2017-08-16 20:06:01

Below is generated by plot.py at 2017-08-16 23:04:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 253.95 Mbit/s

95th percentile per-packet one-way delay: 110.814 ms

Loss rate: 7.42%

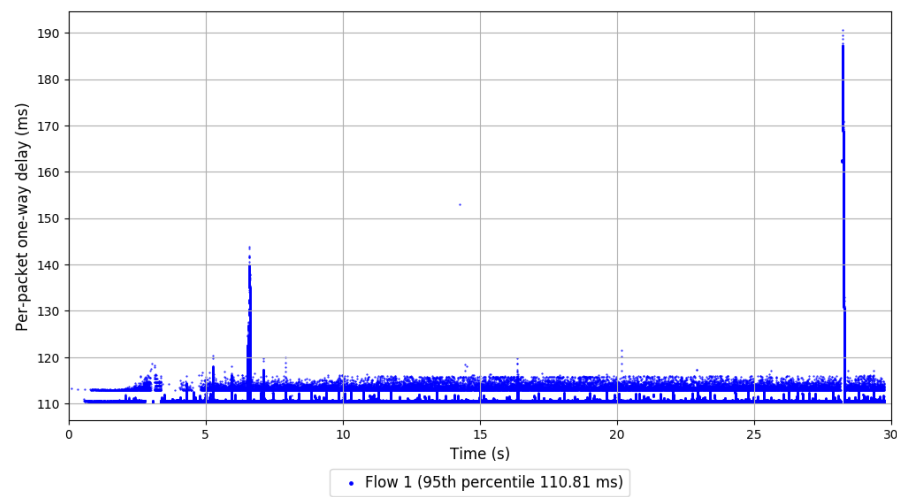
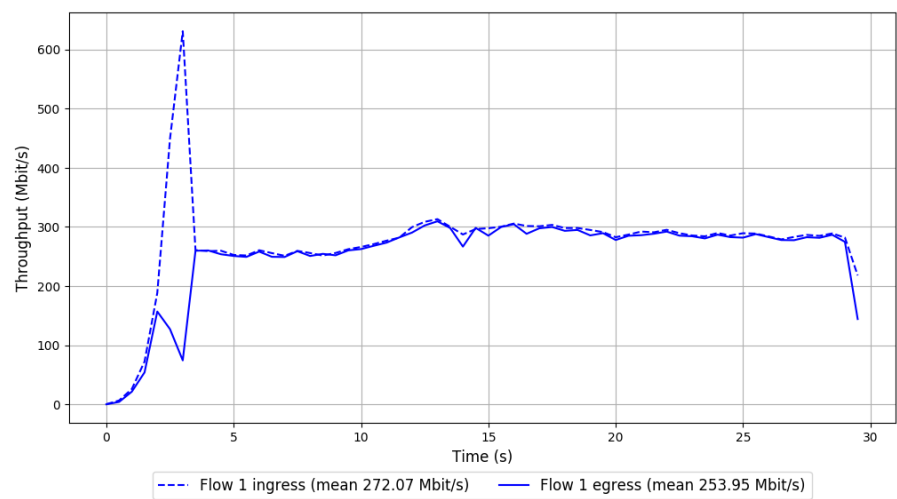
-- Flow 1:

Average throughput: 253.95 Mbit/s

95th percentile per-packet one-way delay: 110.814 ms

Loss rate: 7.42%

Run 9: Report of PCC — Data Link

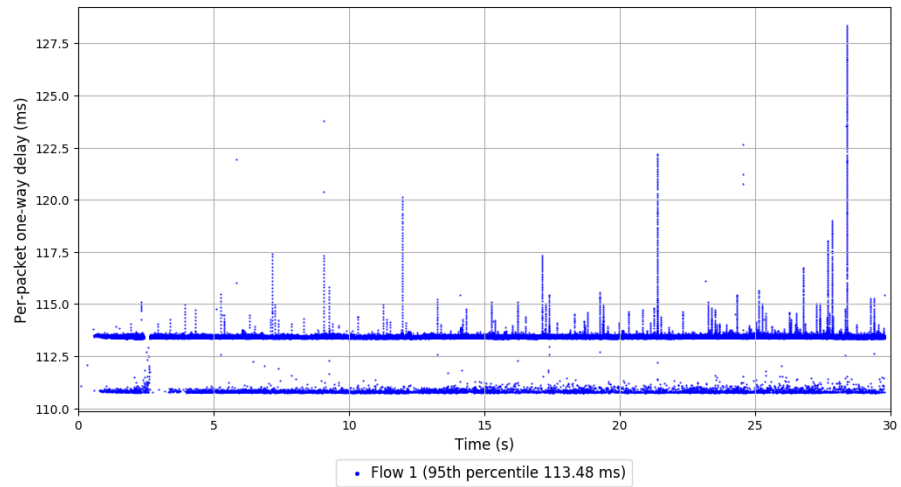
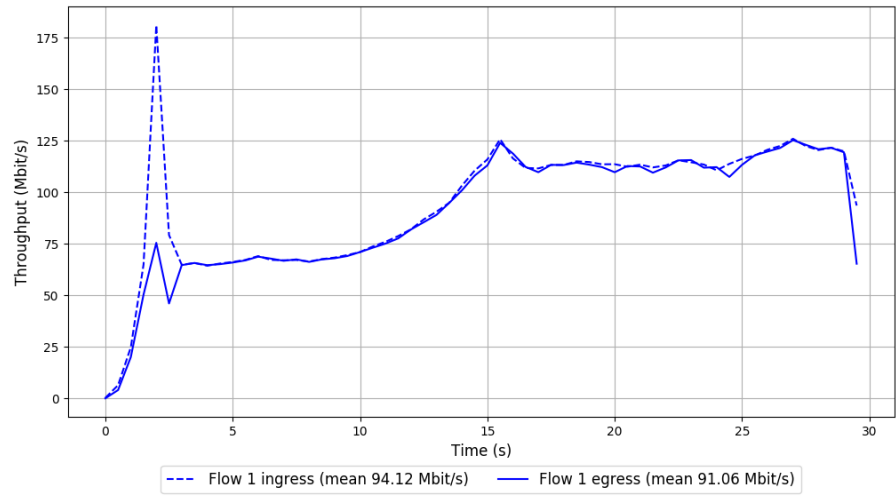


```
Run 10: Statistics of PCC

Start at: 2017-08-16 20:16:21
End at: 2017-08-16 20:16:51

# Below is generated by plot.py at 2017-08-16 23:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.06 Mbit/s
95th percentile per-packet one-way delay: 113.485 ms
Loss rate: 4.01%
-- Flow 1:
Average throughput: 91.06 Mbit/s
95th percentile per-packet one-way delay: 113.485 ms
Loss rate: 4.01%
```

Run 10: Report of PCC — Data Link

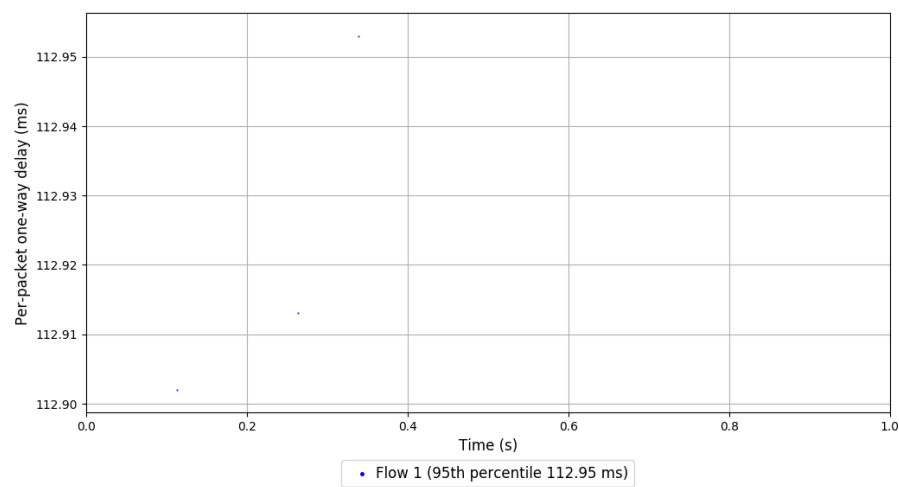
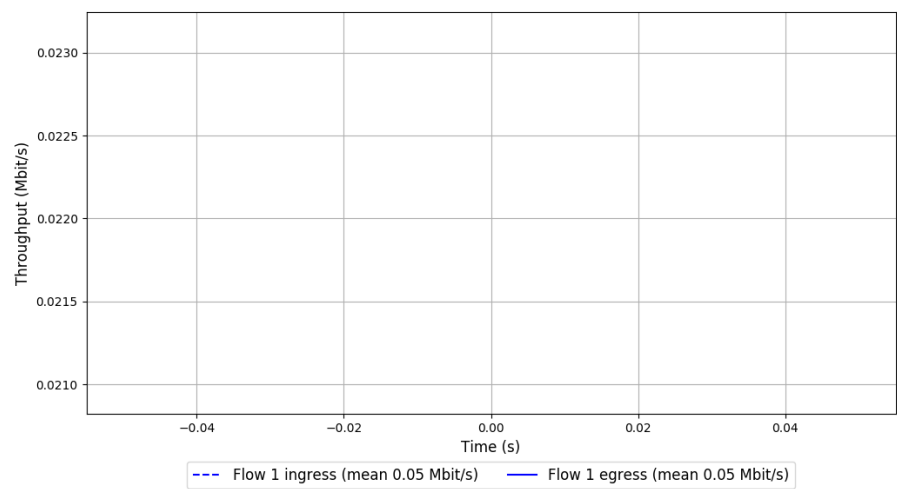


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-16 18:37:17

End at: 2017-08-16 18:37:47

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-16 18:48:36

End at: 2017-08-16 18:49:06

Below is generated by plot.py at 2017-08-16 23:04:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.92 Mbit/s

95th percentile per-packet one-way delay: 110.659 ms

Loss rate: 0.18%

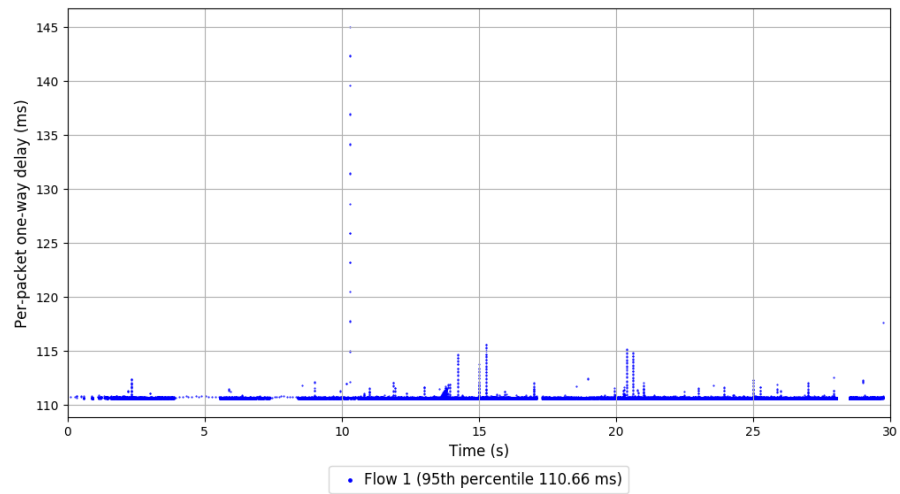
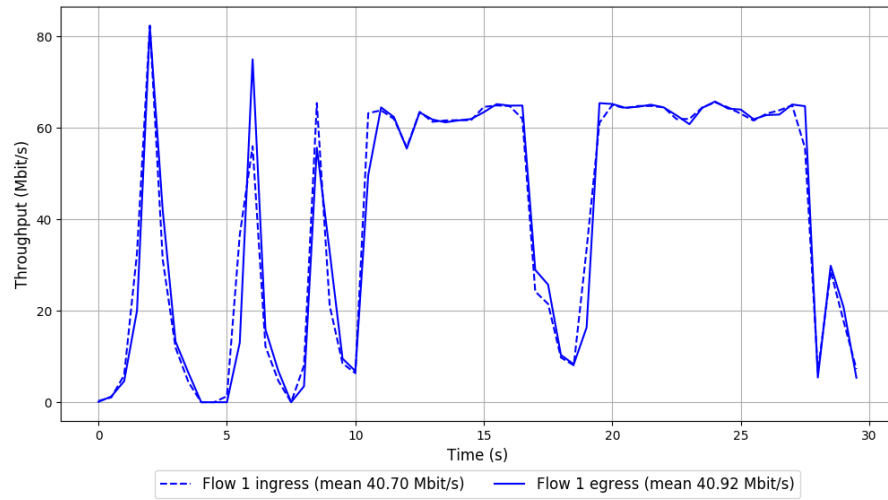
-- Flow 1:

Average throughput: 40.92 Mbit/s

95th percentile per-packet one-way delay: 110.659 ms

Loss rate: 0.18%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-16 18:59:51

End at: 2017-08-16 19:00:21

Below is generated by plot.py at 2017-08-16 23:04:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.44 Mbit/s

95th percentile per-packet one-way delay: 112.768 ms

Loss rate: 0.43%

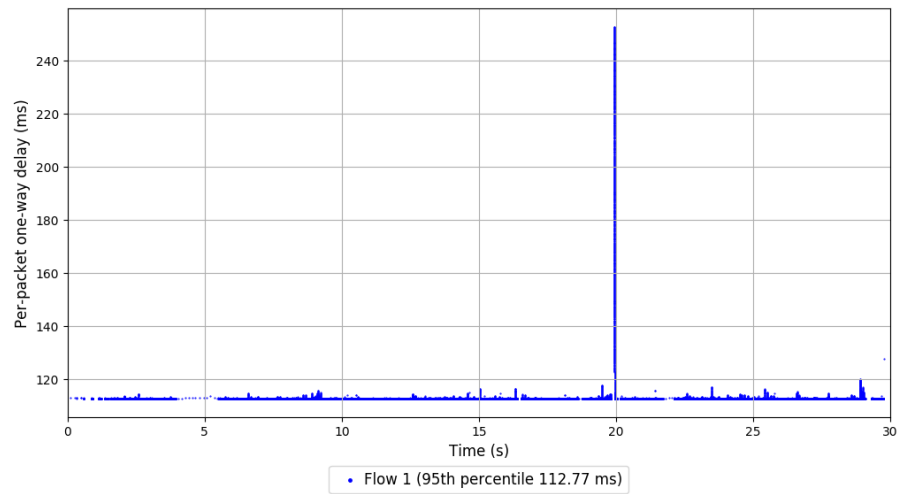
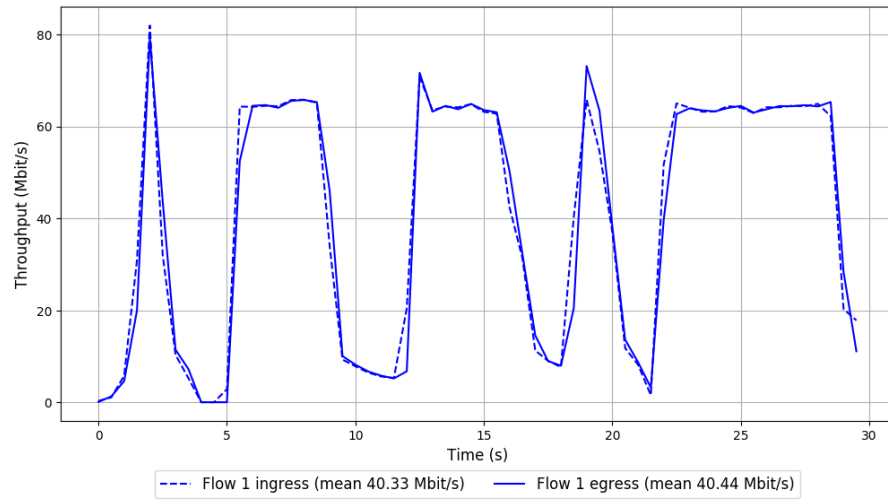
-- Flow 1:

Average throughput: 40.44 Mbit/s

95th percentile per-packet one-way delay: 112.768 ms

Loss rate: 0.43%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-16 19:10:45

End at: 2017-08-16 19:11:15

Below is generated by plot.py at 2017-08-16 23:04:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.76 Mbit/s

95th percentile per-packet one-way delay: 110.913 ms

Loss rate: 0.50%

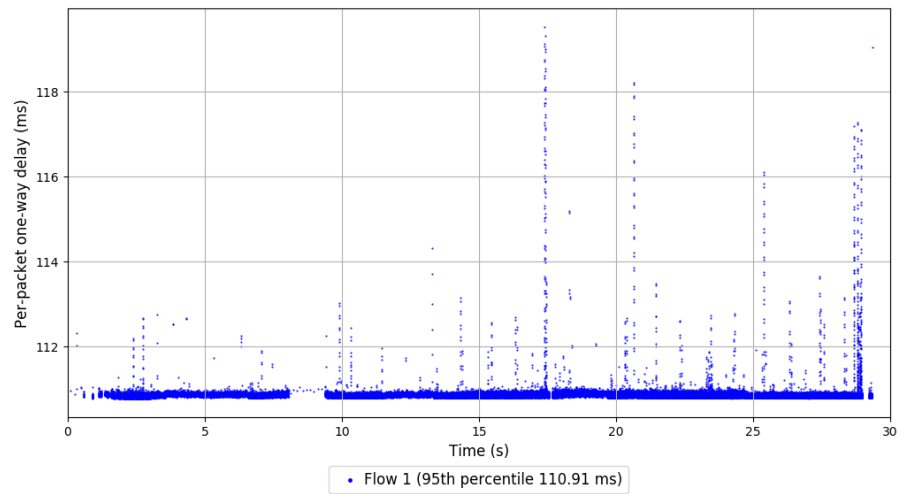
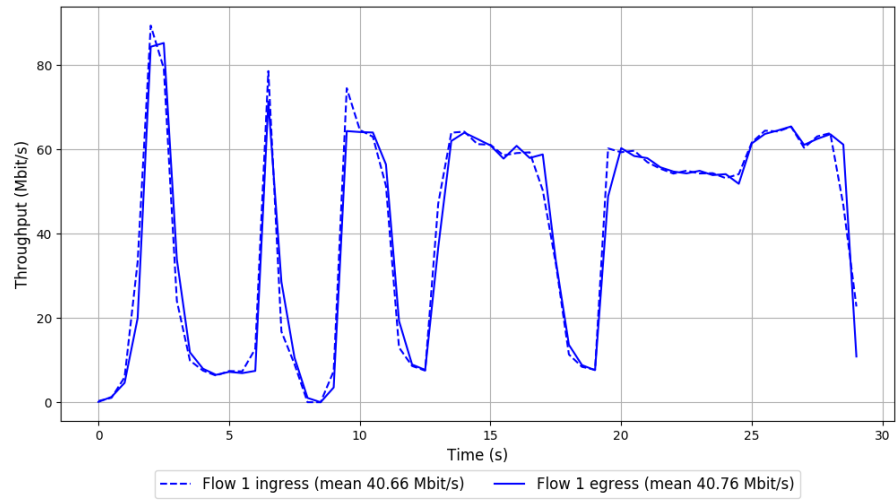
-- Flow 1:

Average throughput: 40.76 Mbit/s

95th percentile per-packet one-way delay: 110.913 ms

Loss rate: 0.50%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-16 19:21:54

End at: 2017-08-16 19:22:24

Below is generated by plot.py at 2017-08-16 23:04:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.04 Mbit/s

95th percentile per-packet one-way delay: 112.191 ms

Loss rate: 0.15%

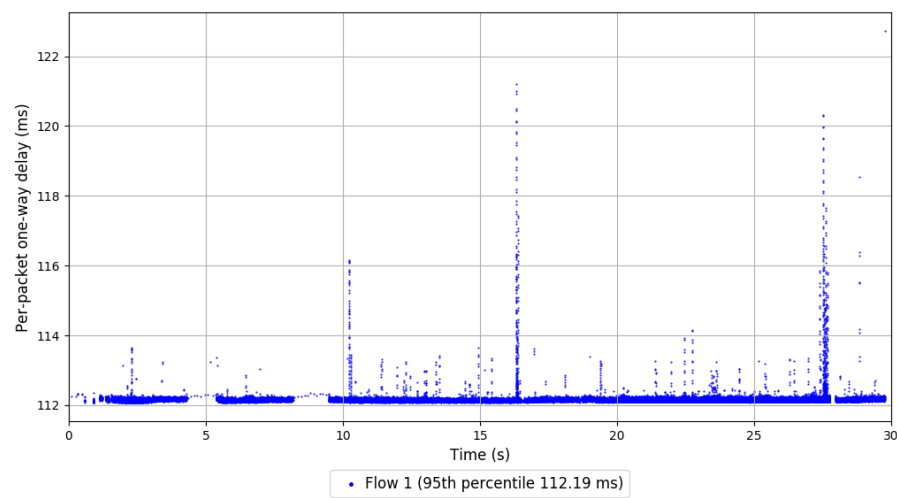
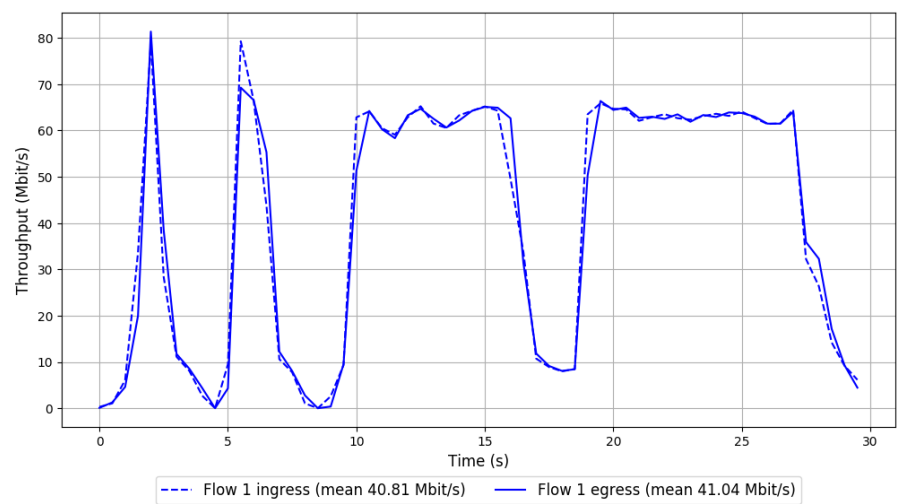
-- Flow 1:

Average throughput: 41.04 Mbit/s

95th percentile per-packet one-way delay: 112.191 ms

Loss rate: 0.15%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-16 19:33:19

End at: 2017-08-16 19:33:49

Below is generated by plot.py at 2017-08-16 23:04:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.20 Mbit/s

95th percentile per-packet one-way delay: 113.555 ms

Loss rate: 0.14%

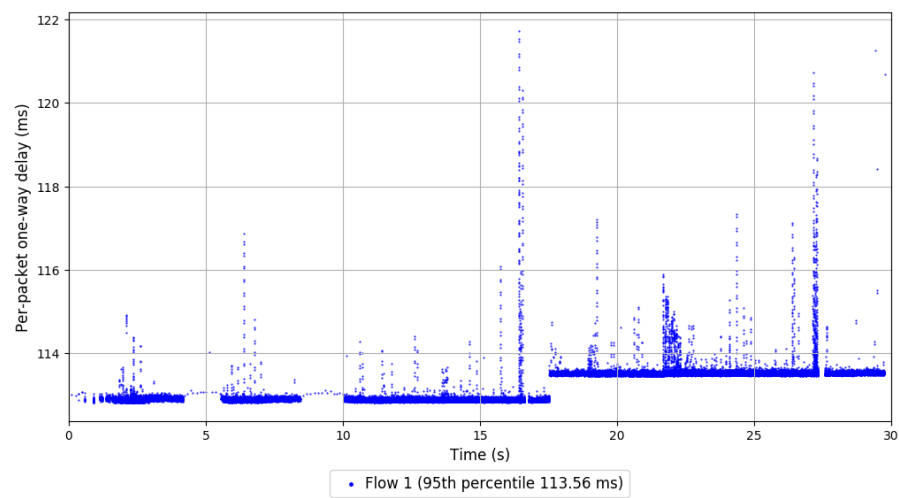
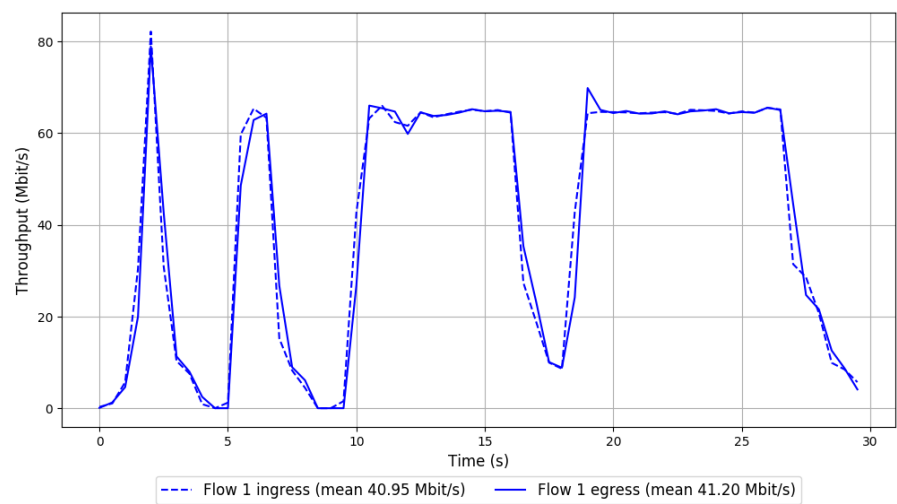
-- Flow 1:

Average throughput: 41.20 Mbit/s

95th percentile per-packet one-way delay: 113.555 ms

Loss rate: 0.14%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-16 19:44:08

End at: 2017-08-16 19:44:38

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.02 Mbit/s

95th percentile per-packet one-way delay: 113.032 ms

Loss rate: 0.16%

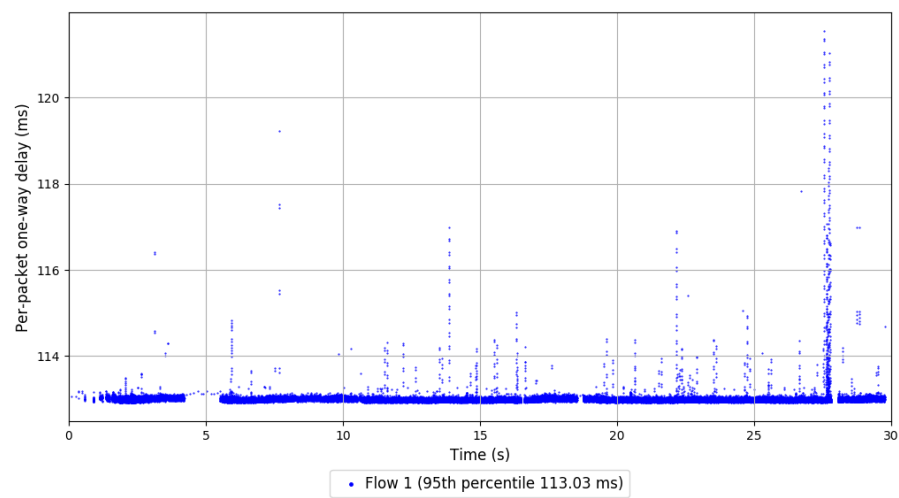
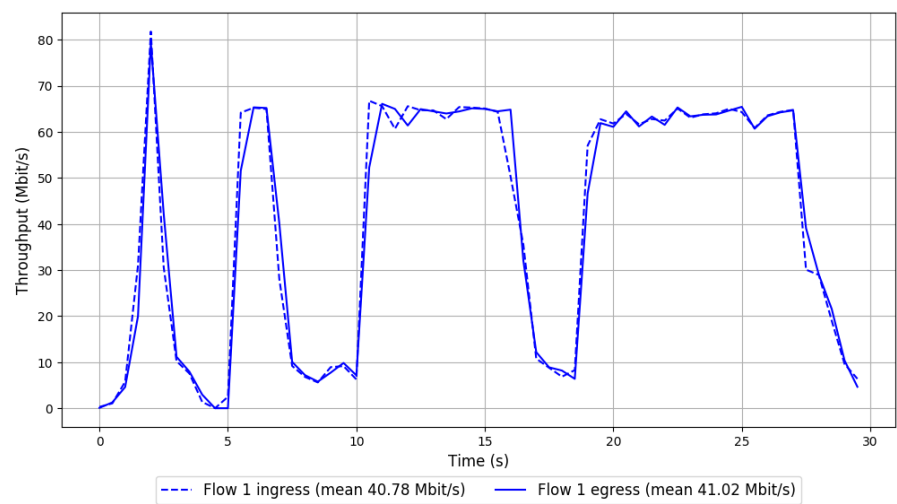
-- Flow 1:

Average throughput: 41.02 Mbit/s

95th percentile per-packet one-way delay: 113.032 ms

Loss rate: 0.16%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-16 19:55:16

End at: 2017-08-16 19:55:46

Below is generated by plot.py at 2017-08-16 23:05:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.13 Mbit/s

95th percentile per-packet one-way delay: 111.827 ms

Loss rate: 0.56%

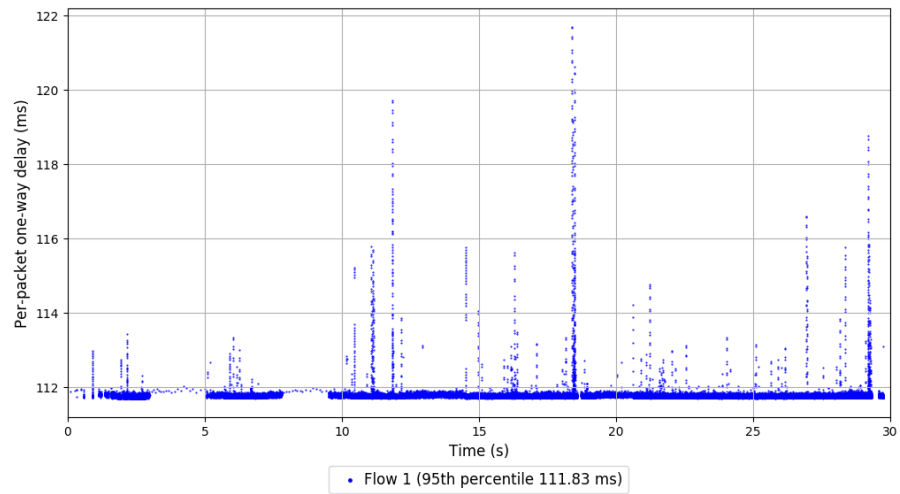
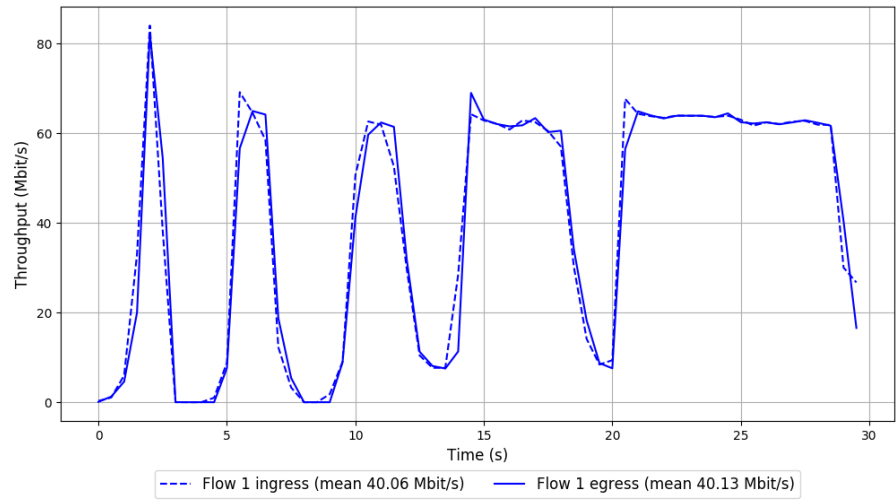
-- Flow 1:

Average throughput: 40.13 Mbit/s

95th percentile per-packet one-way delay: 111.827 ms

Loss rate: 0.56%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-16 20:06:24

End at: 2017-08-16 20:06:54

Below is generated by plot.py at 2017-08-16 23:05:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.58 Mbit/s

95th percentile per-packet one-way delay: 112.961 ms

Loss rate: 0.20%

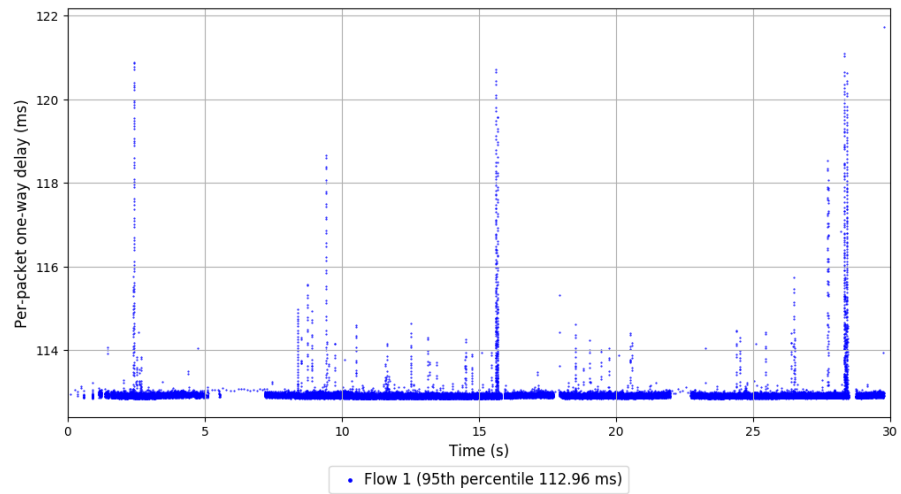
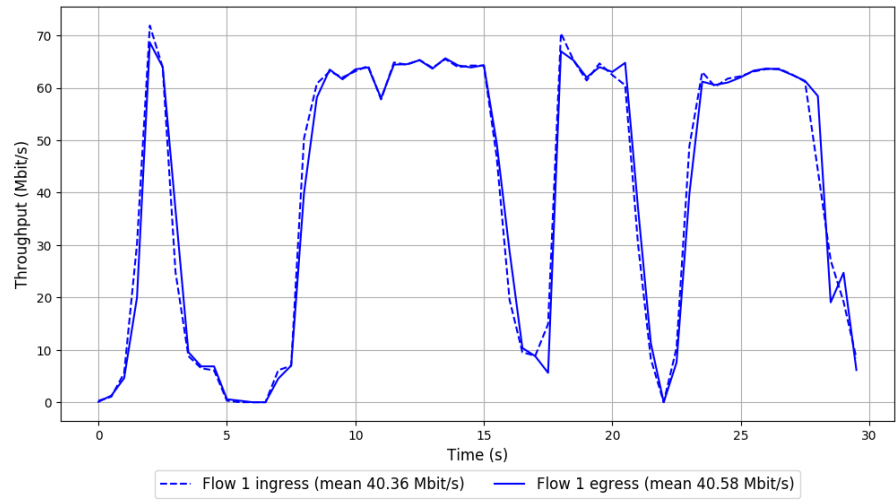
-- Flow 1:

Average throughput: 40.58 Mbit/s

95th percentile per-packet one-way delay: 112.961 ms

Loss rate: 0.20%

Run 9: Report of QUIC Cubic — Data Link

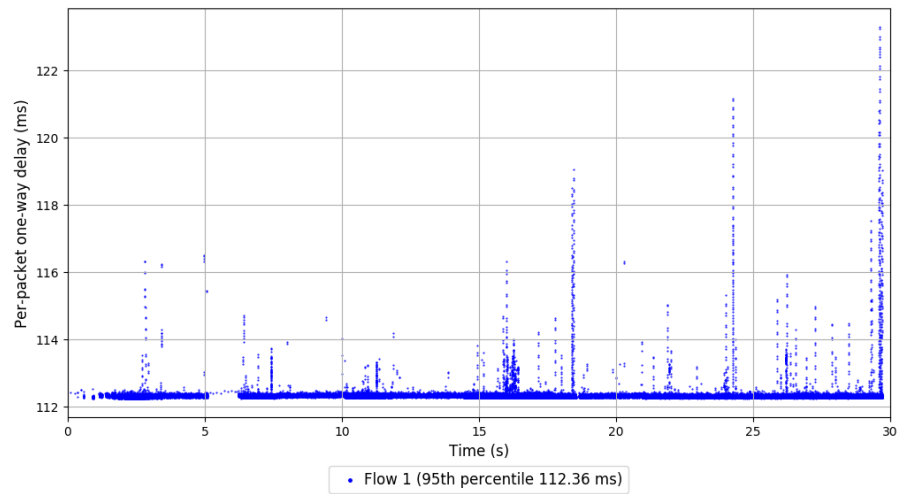
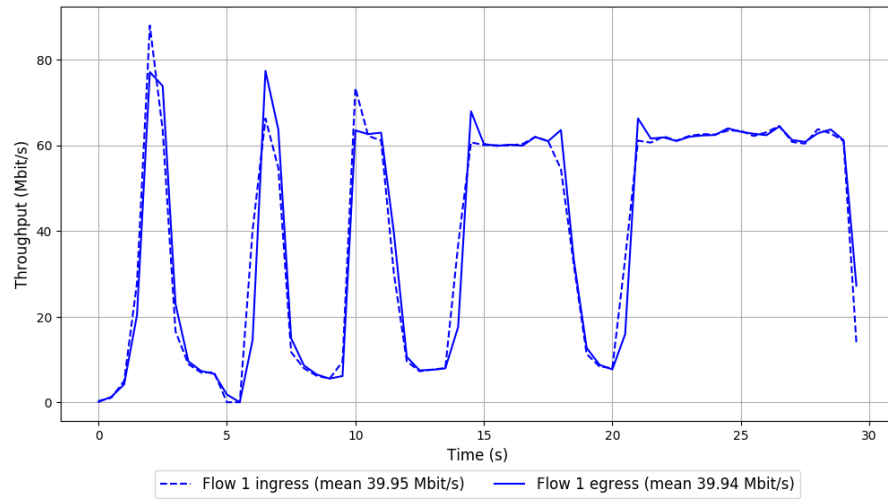


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-16 20:17:07
End at: 2017-08-16 20:17:37

# Below is generated by plot.py at 2017-08-16 23:05:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.94 Mbit/s
95th percentile per-packet one-way delay: 112.363 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.94 Mbit/s
95th percentile per-packet one-way delay: 112.363 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of Saturator

Start at: 2017-08-16 18:31:44

End at: 2017-08-16 18:32:14

Below is generated by plot.py at 2017-08-16 23:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.44 Mbit/s

95th percentile per-packet one-way delay: 114.213 ms

Loss rate: 1.05%

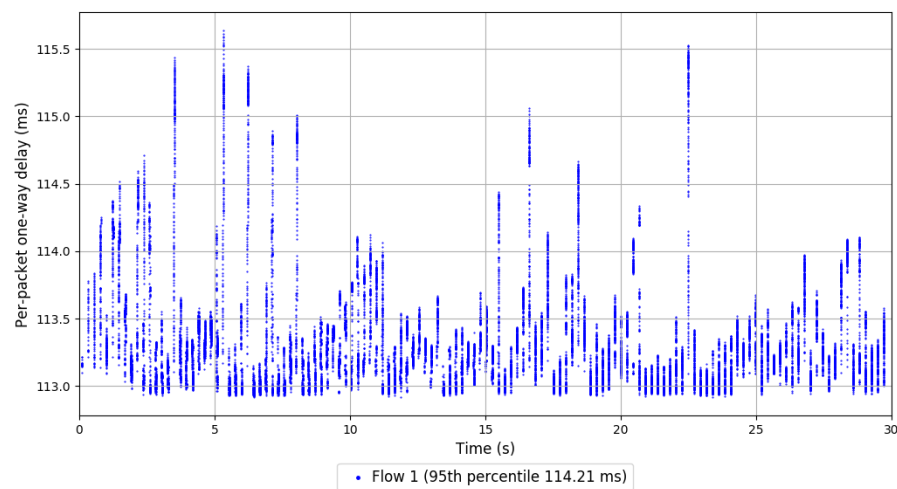
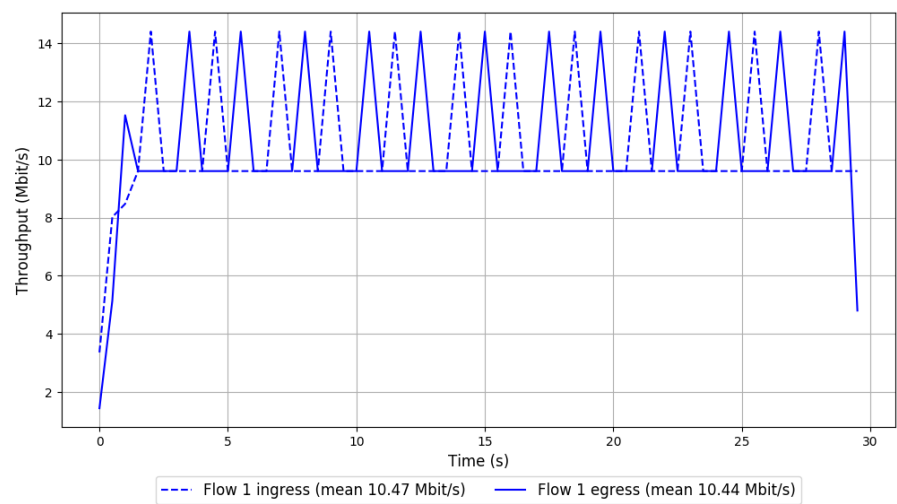
-- Flow 1:

Average throughput: 10.44 Mbit/s

95th percentile per-packet one-way delay: 114.213 ms

Loss rate: 1.05%

Run 1: Report of Saturator — Data Link



Run 2: Statistics of Saturator

Start at: 2017-08-16 18:43:02

End at: 2017-08-16 18:43:32

Below is generated by plot.py at 2017-08-16 23:05:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.33 Mbit/s

95th percentile per-packet one-way delay: 114.347 ms

Loss rate: 1.52%

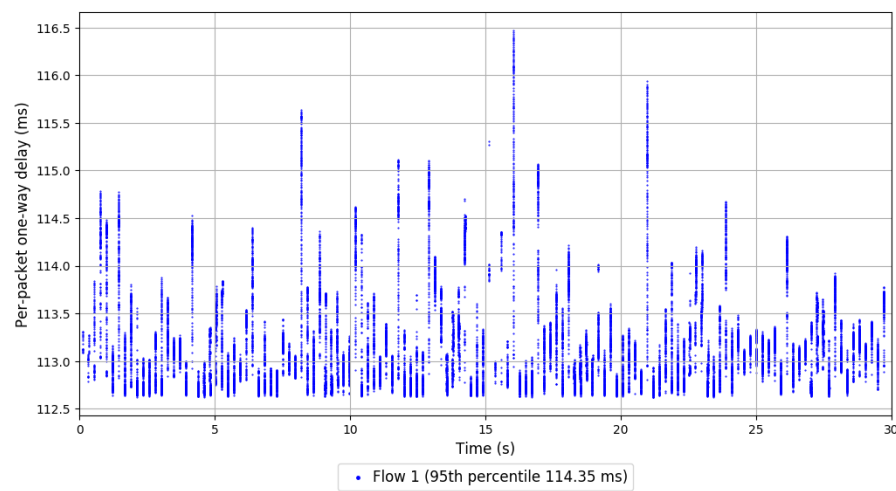
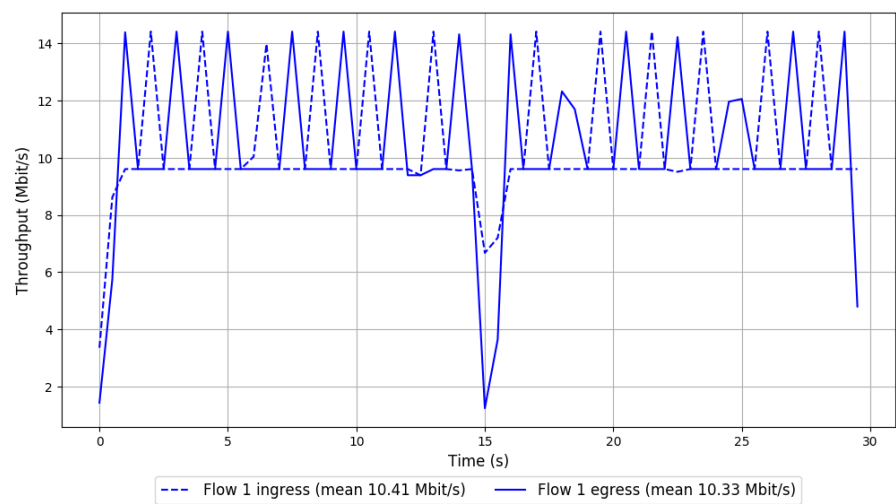
-- Flow 1:

Average throughput: 10.33 Mbit/s

95th percentile per-packet one-way delay: 114.347 ms

Loss rate: 1.52%

Run 2: Report of Saturator — Data Link

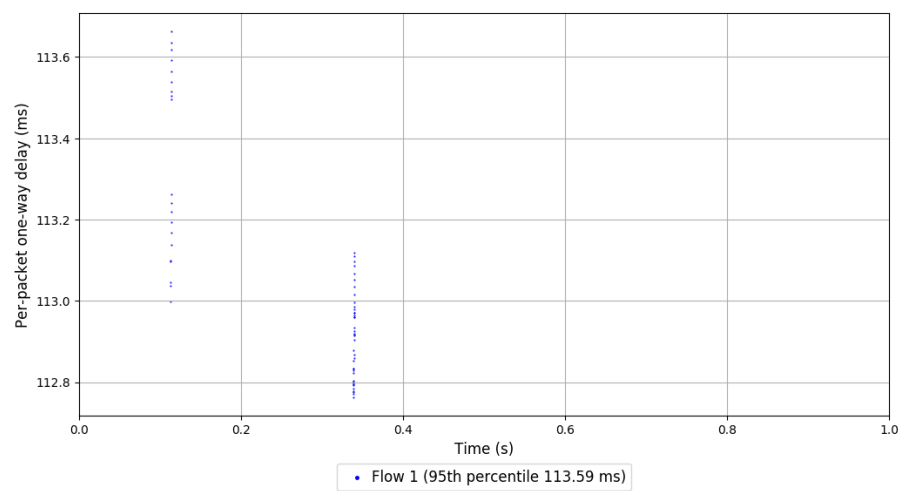
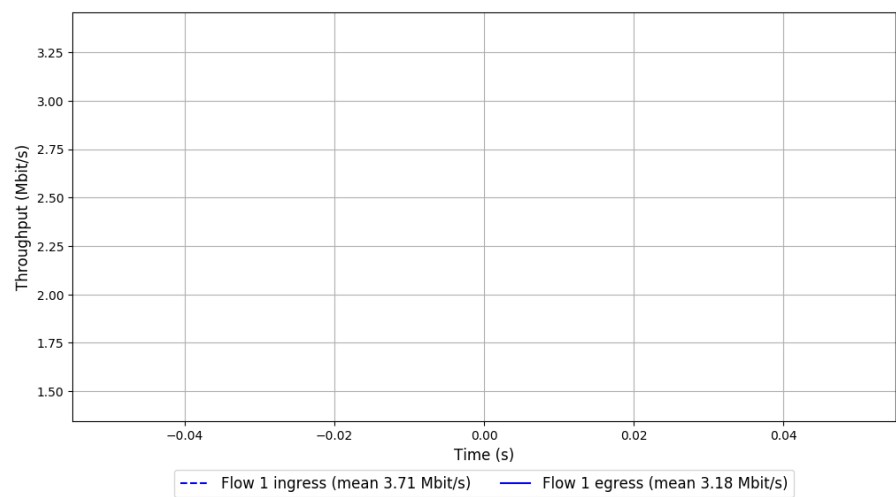


Run 3: Statistics of Saturator

Start at: 2017-08-16 18:54:19

End at: 2017-08-16 18:54:49

Run 3: Report of Saturator — Data Link



Run 4: Statistics of Saturator

Start at: 2017-08-16 19:05:23

End at: 2017-08-16 19:05:53

Below is generated by plot.py at 2017-08-16 23:05:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.38 Mbit/s

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

Loss rate: 1.15%

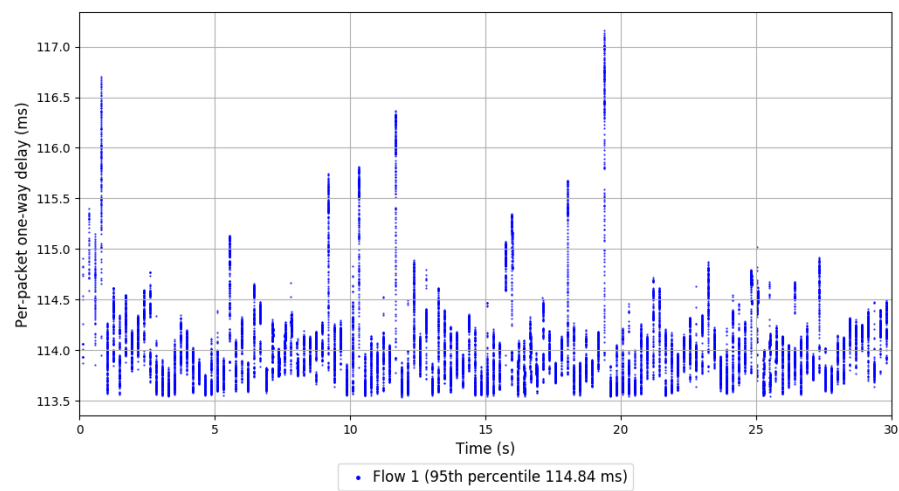
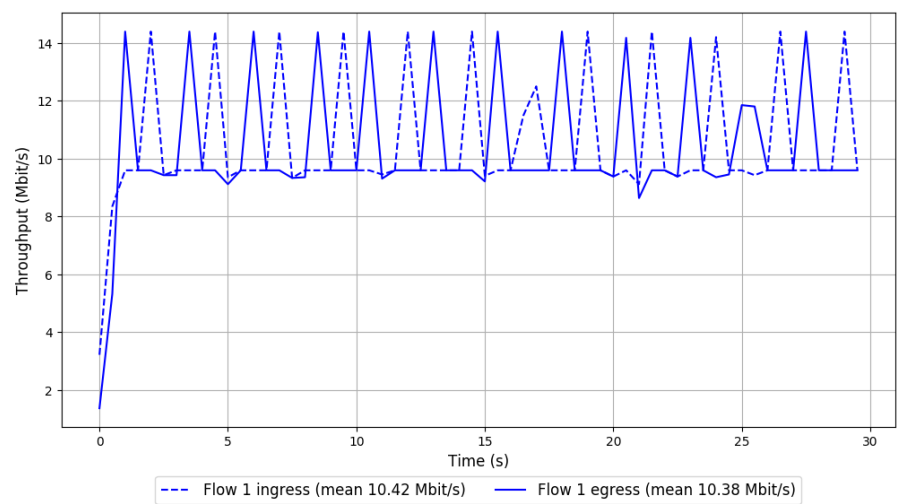
-- Flow 1:

Average throughput: 10.38 Mbit/s

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

Loss rate: 1.15%

Run 4: Report of Saturator — Data Link

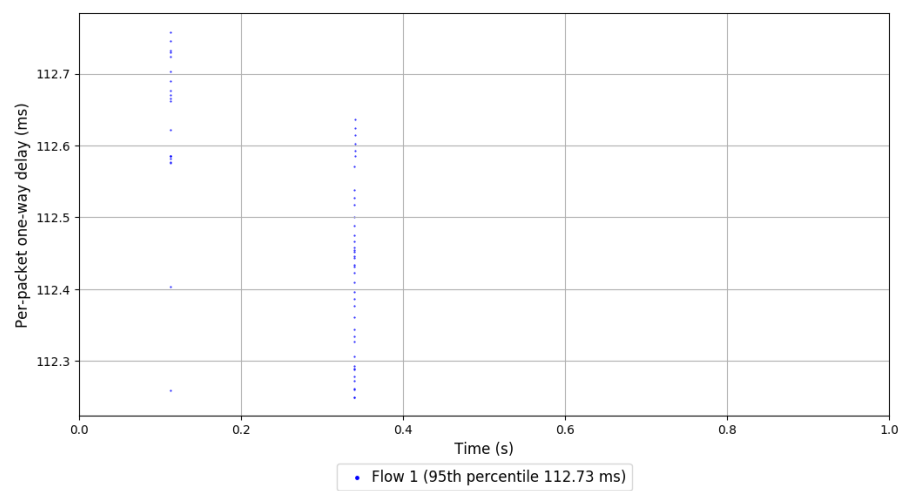
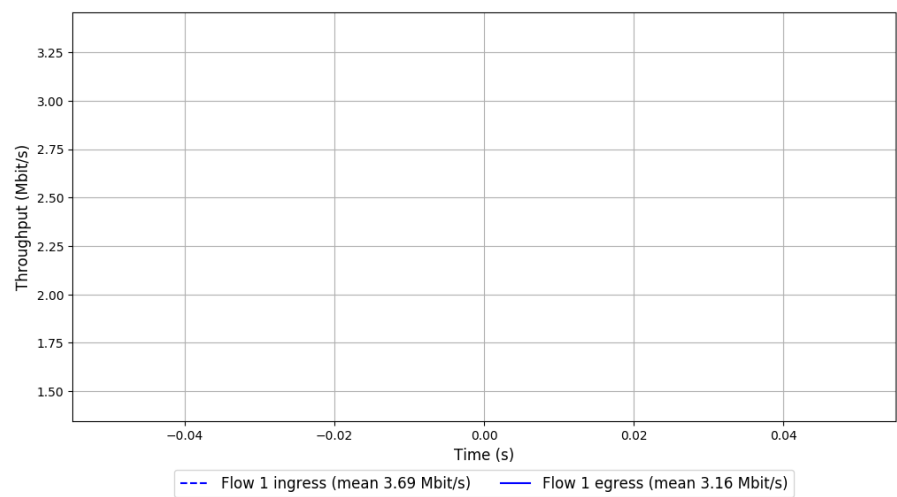


Run 5: Statistics of Saturator

Start at: 2017-08-16 19:16:26

End at: 2017-08-16 19:16:56

Run 5: Report of Saturator — Data Link

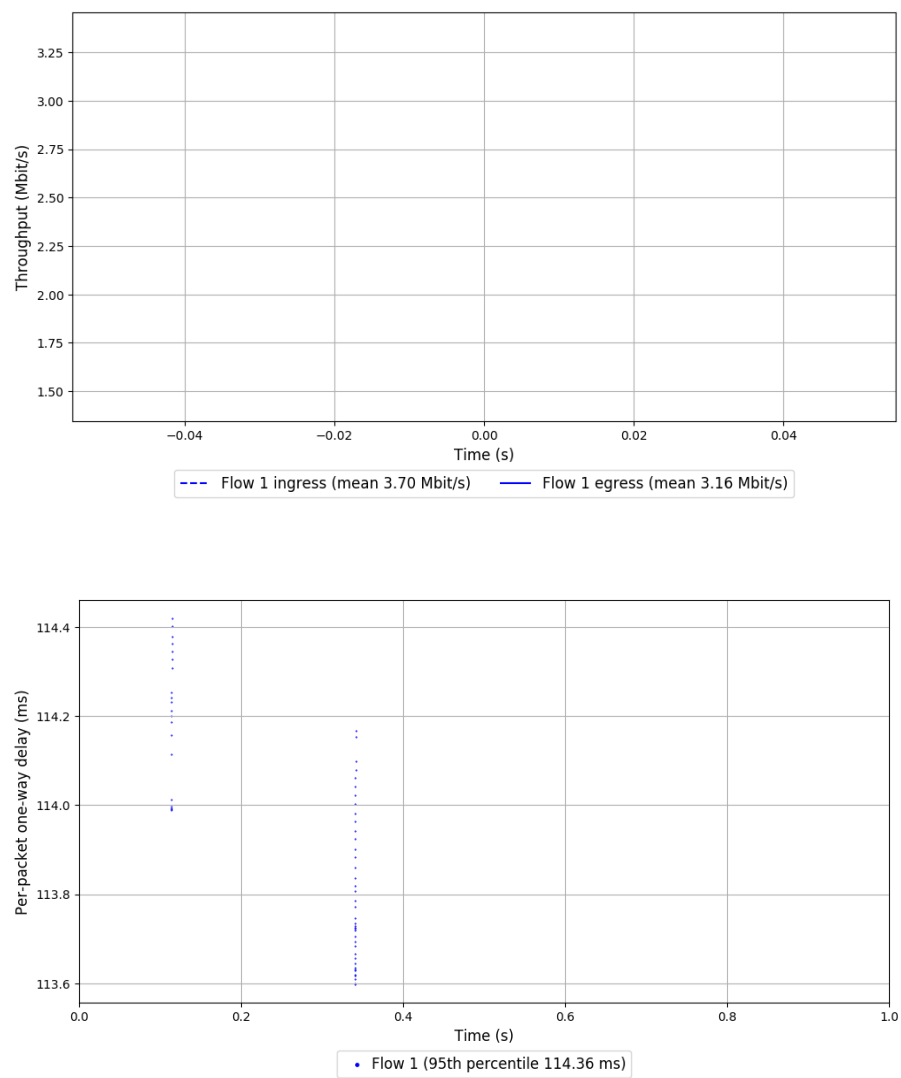


Run 6: Statistics of Saturator

Start at: 2017-08-16 19:27:55

End at: 2017-08-16 19:28:25

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: 2017-08-16 19:38:52

End at: 2017-08-16 19:39:23

Below is generated by plot.py at 2017-08-16 23:05:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.47 Mbit/s

95th percentile per-packet one-way delay: 112.279 ms

Loss rate: 1.15%

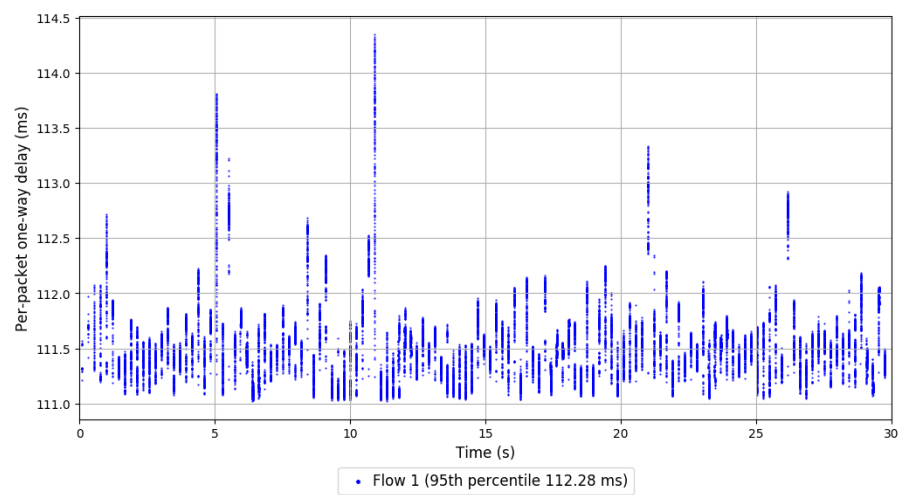
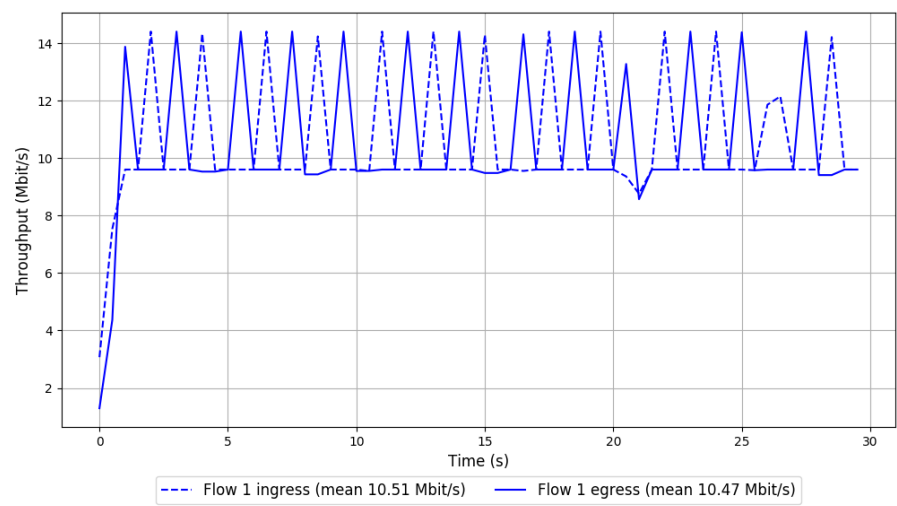
-- Flow 1:

Average throughput: 10.47 Mbit/s

95th percentile per-packet one-way delay: 112.279 ms

Loss rate: 1.15%

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-16 19:49:58

End at: 2017-08-16 19:50:28

Below is generated by plot.py at 2017-08-16 23:05:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 112.366 ms

Loss rate: 0.80%

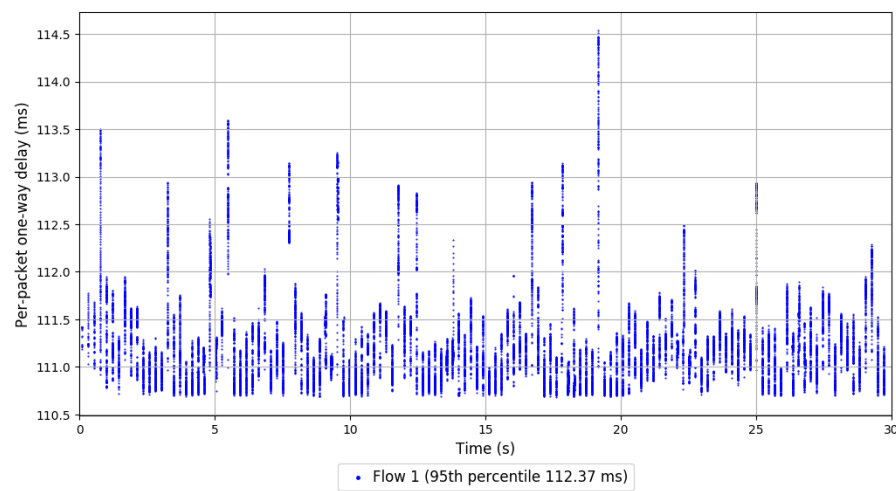
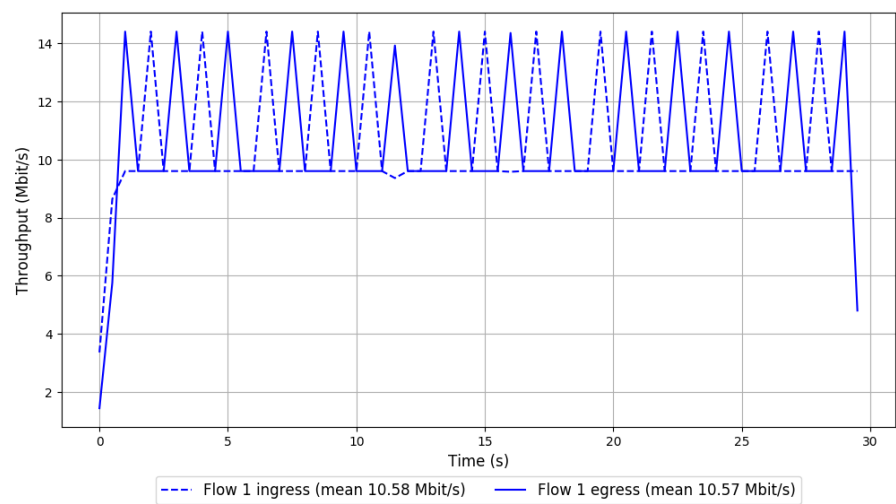
-- Flow 1:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 112.366 ms

Loss rate: 0.80%

Run 8: Report of Saturator — Data Link

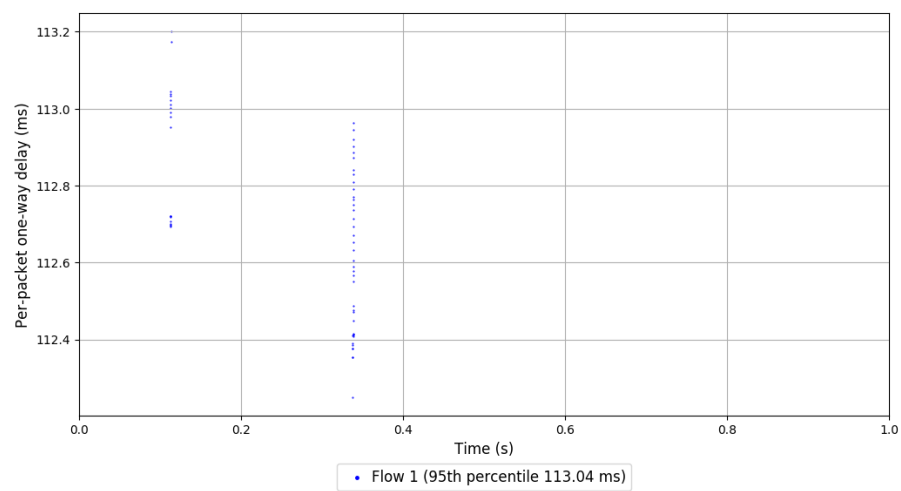
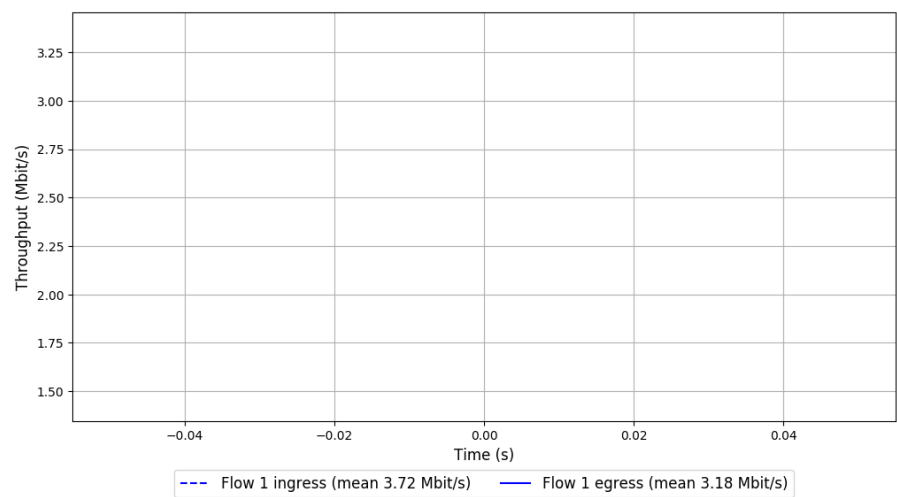


Run 9: Statistics of Saturator

Start at: 2017-08-16 20:01:07

End at: 2017-08-16 20:01:37

Run 9: Report of Saturator — Data Link



Run 10: Statistics of Saturator

Start at: 2017-08-16 20:11:56

End at: 2017-08-16 20:12:26

Below is generated by plot.py at 2017-08-16 23:05:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.58 Mbit/s

95th percentile per-packet one-way delay: 112.016 ms

Loss rate: 0.83%

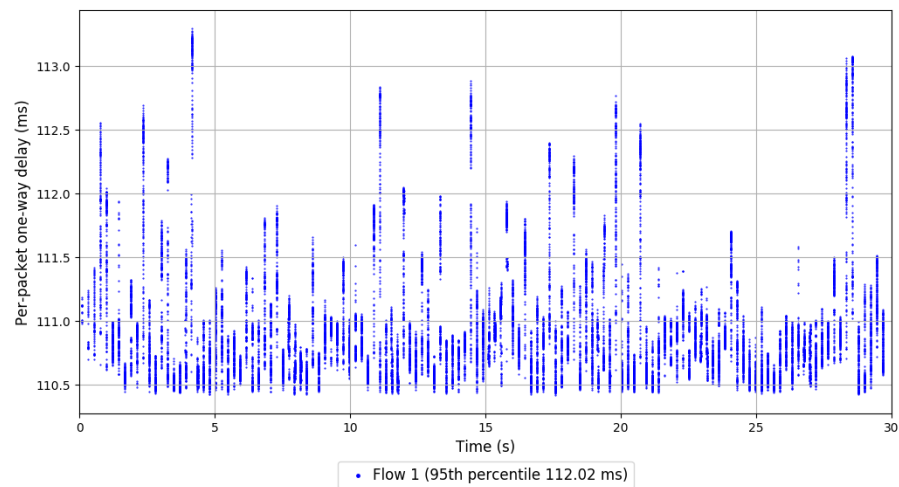
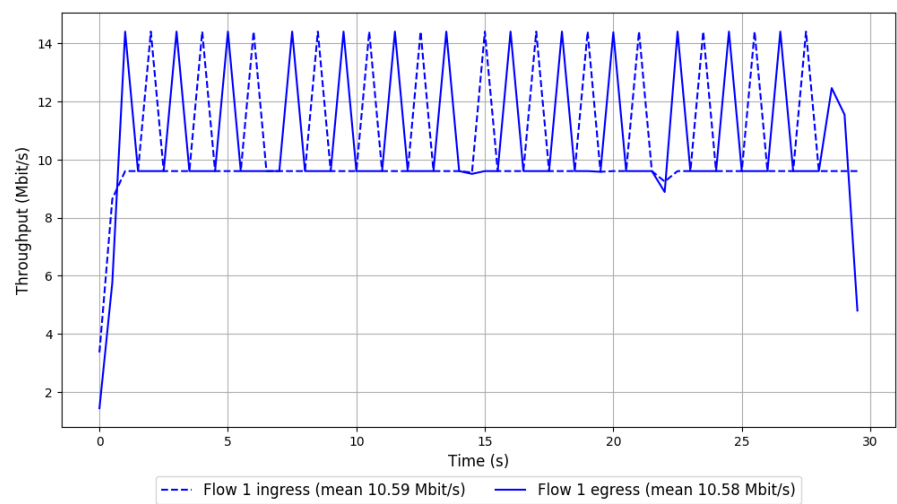
-- Flow 1:

Average throughput: 10.58 Mbit/s

95th percentile per-packet one-way delay: 112.016 ms

Loss rate: 0.83%

Run 10: Report of Saturator — Data Link

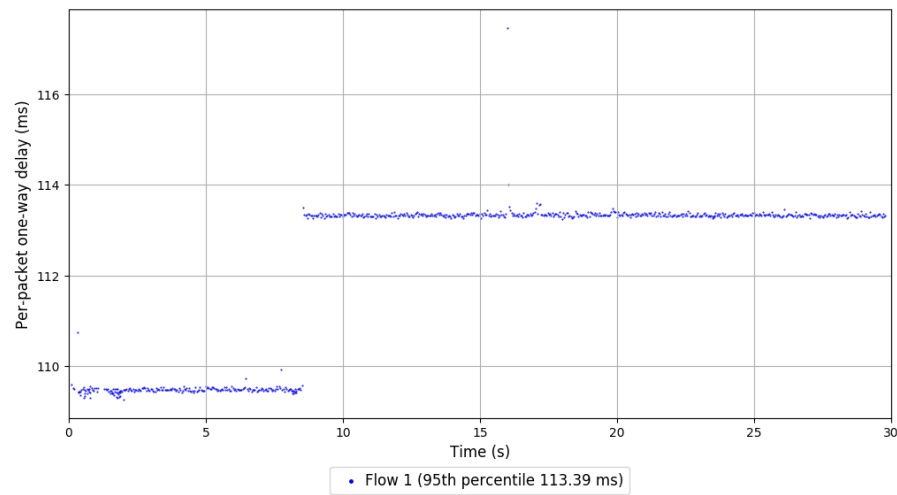
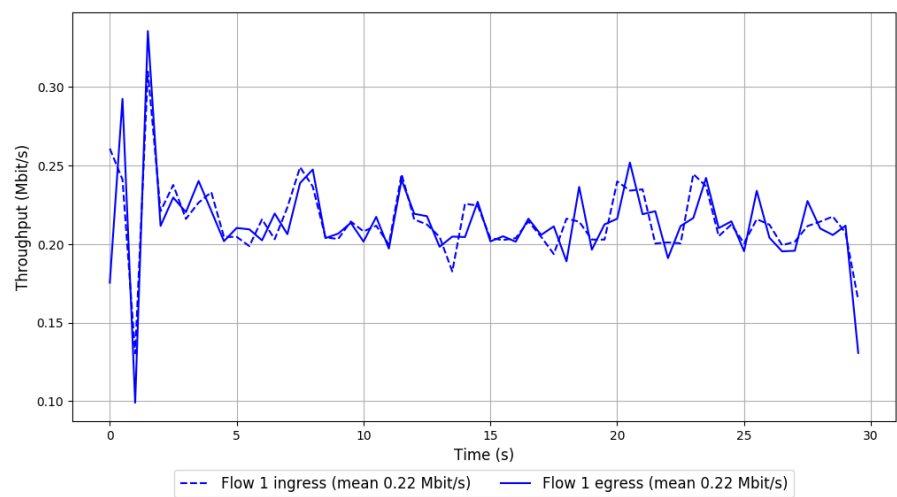


```
Run 1: Statistics of SCReAM

Start at: 2017-08-16 18:30:21
End at: 2017-08-16 18:30:51

# Below is generated by plot.py at 2017-08-16 23:05:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.390 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.390 ms
Loss rate: 0.64%
```

Run 1: Report of SReAM — Data Link

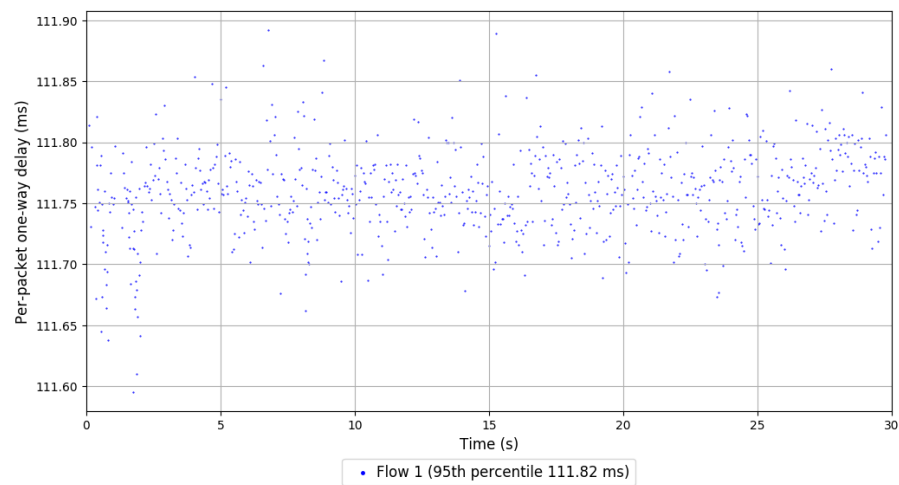
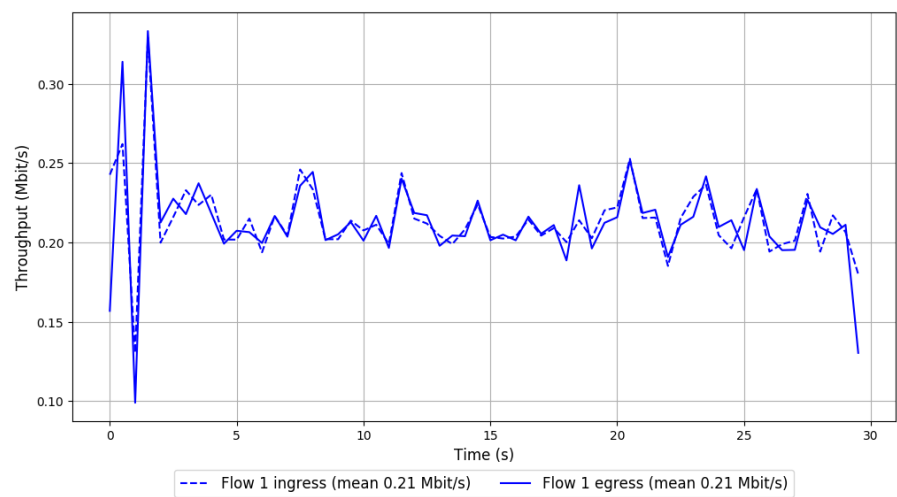


```
Run 2: Statistics of SCReAM

Start at: 2017-08-16 18:41:40
End at: 2017-08-16 18:42:10

# Below is generated by plot.py at 2017-08-16 23:05:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.819 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.819 ms
Loss rate: 0.76%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-16 18:52:55

End at: 2017-08-16 18:53:25

Below is generated by plot.py at 2017-08-16 23:05:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.861 ms

Loss rate: 0.76%

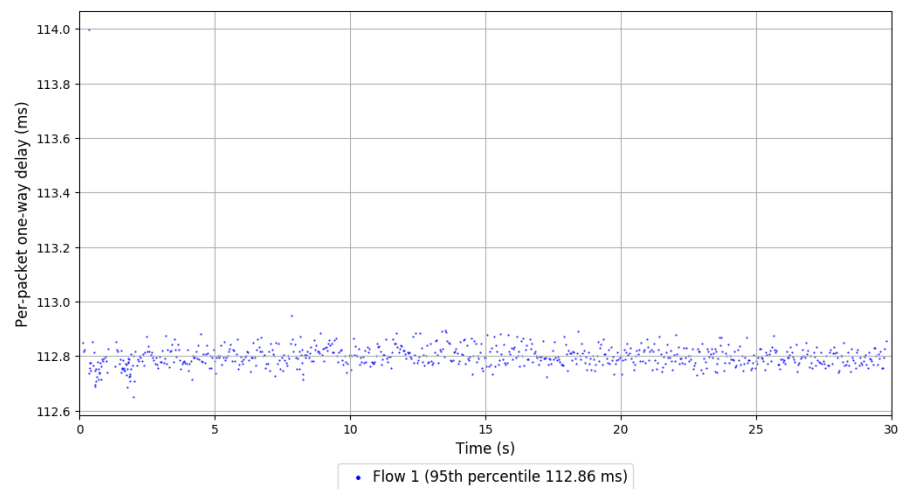
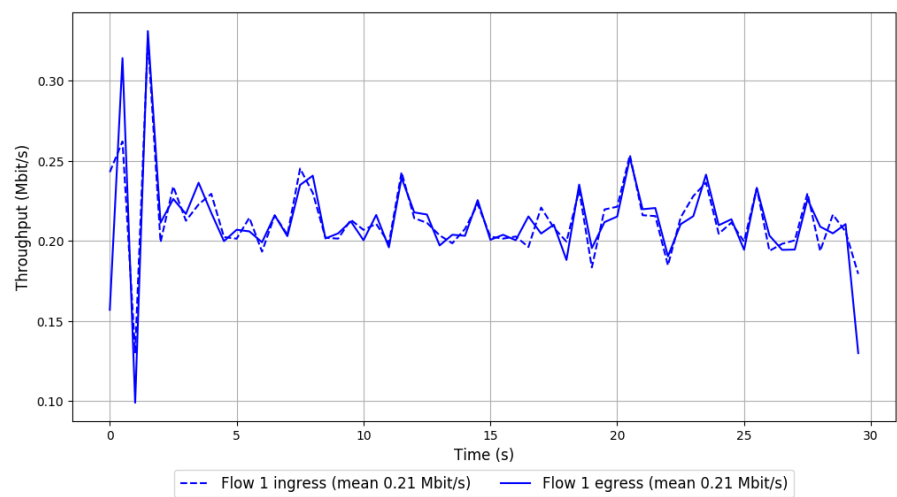
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.861 ms

Loss rate: 0.76%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-16 19:04:00

End at: 2017-08-16 19:04:30

Below is generated by plot.py at 2017-08-16 23:05:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.832 ms

Loss rate: 0.76%

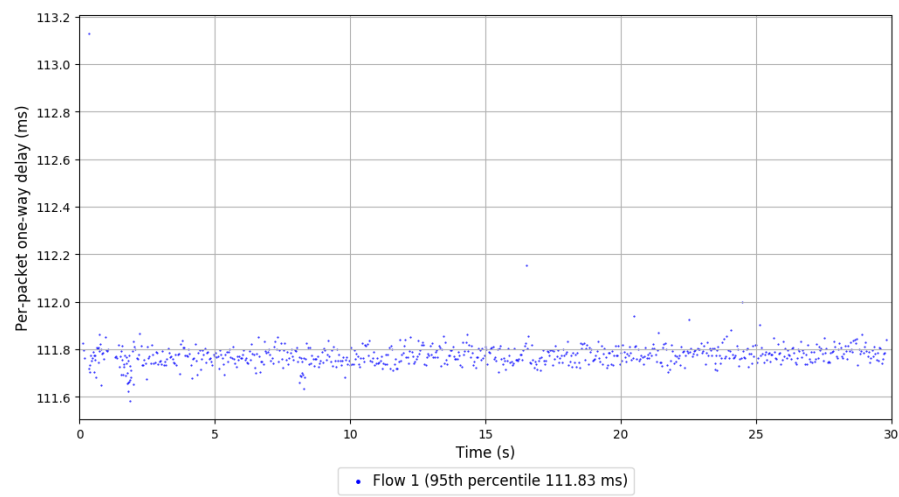
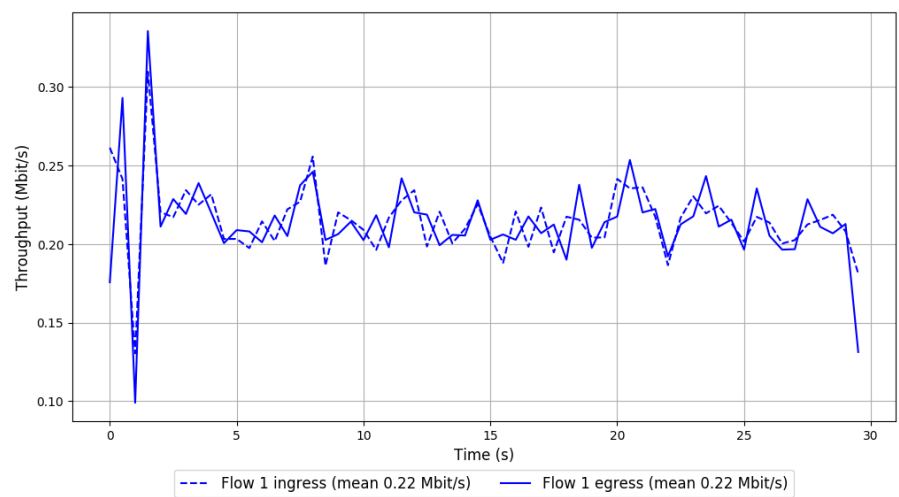
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.832 ms

Loss rate: 0.76%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-16 19:15:04

End at: 2017-08-16 19:15:34

Below is generated by plot.py at 2017-08-16 23:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.76%

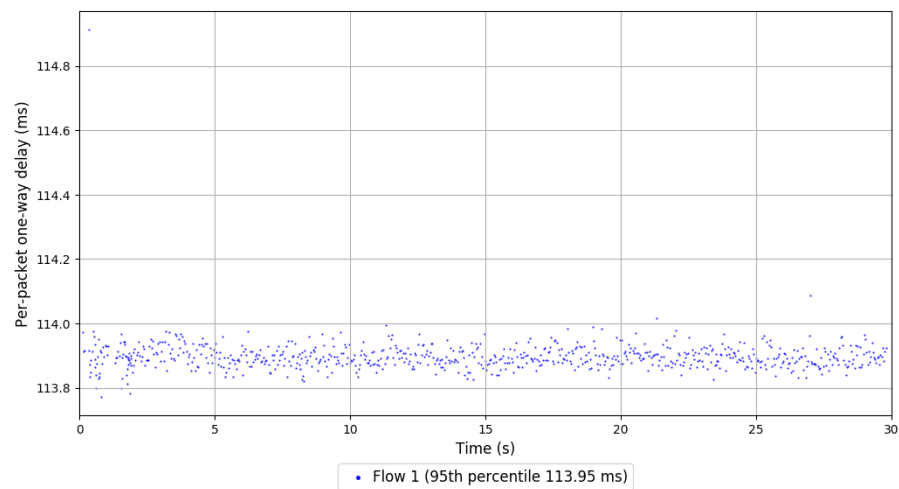
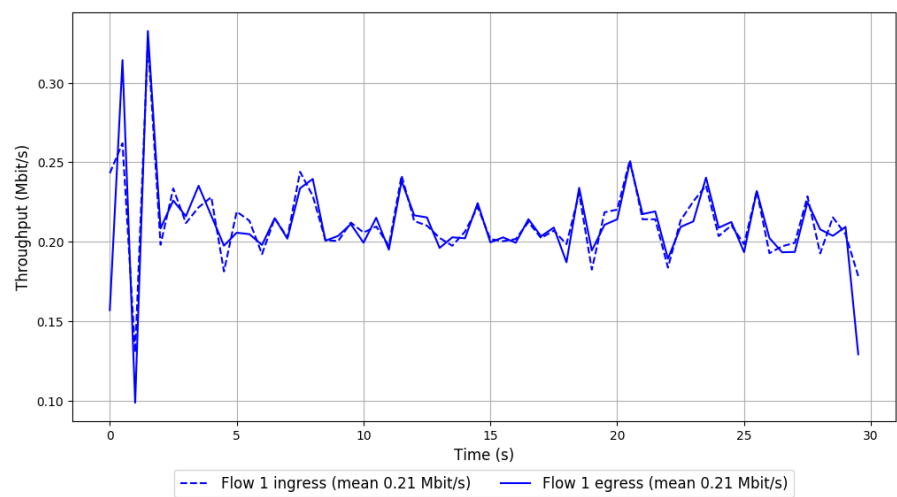
-- Flow 1:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.76%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-16 19:26:33

End at: 2017-08-16 19:27:03

Below is generated by plot.py at 2017-08-16 23:05:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.880 ms

Loss rate: 0.76%

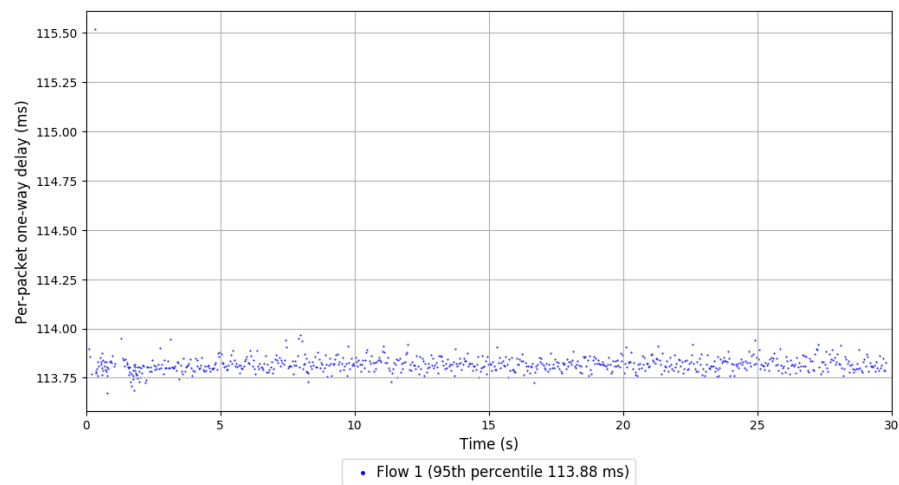
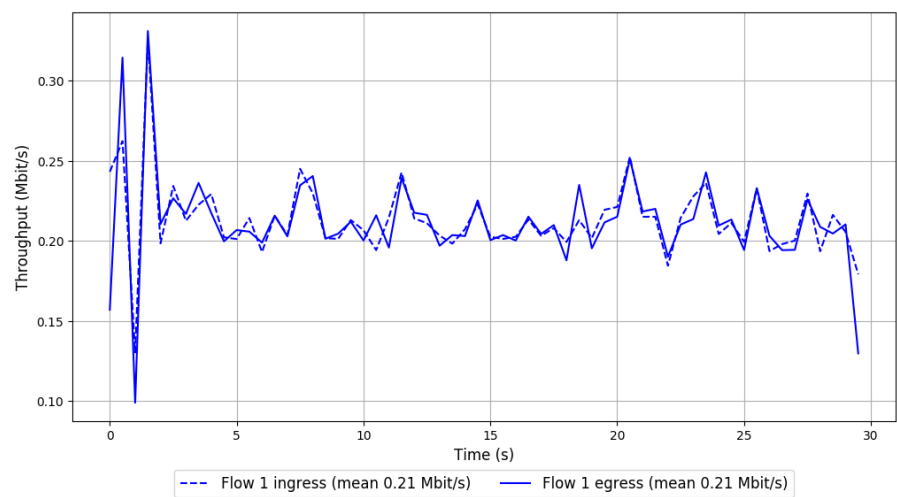
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.880 ms

Loss rate: 0.76%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-16 19:37:31

End at: 2017-08-16 19:38:01

Below is generated by plot.py at 2017-08-16 23:05:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 110.220 ms

Loss rate: 0.36%

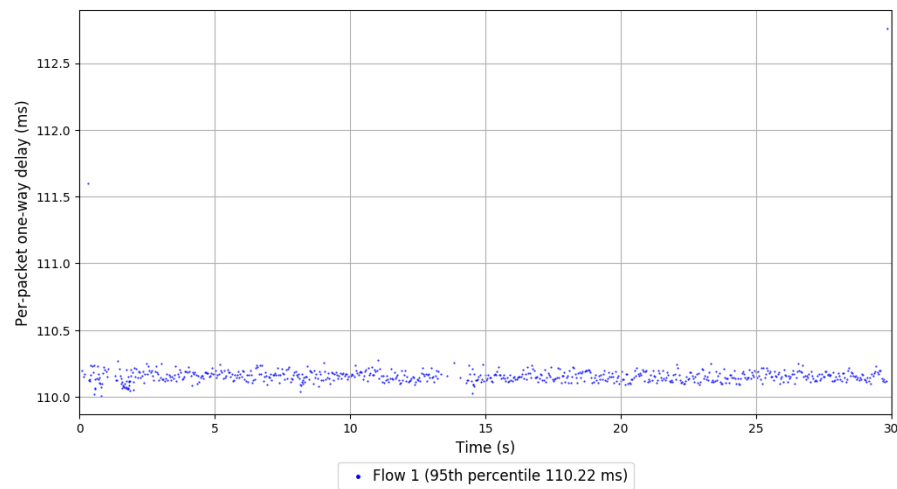
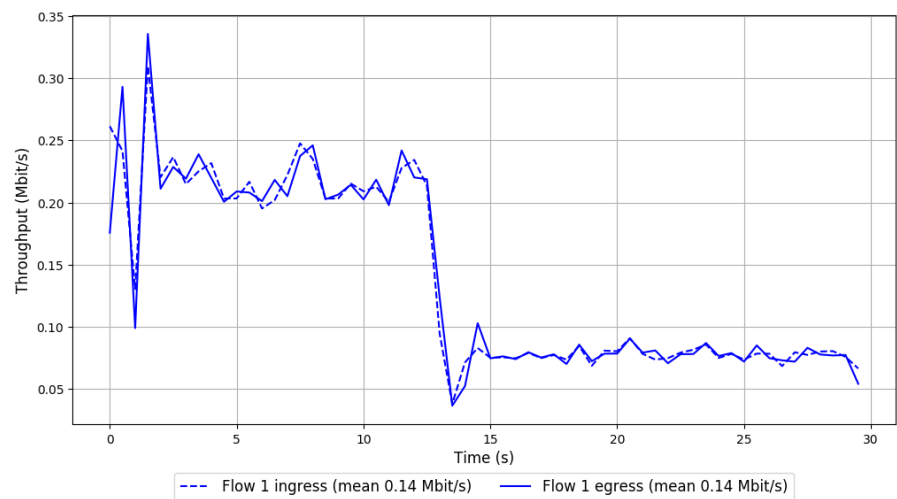
-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 110.220 ms

Loss rate: 0.36%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-16 19:48:36

End at: 2017-08-16 19:49:06

Below is generated by plot.py at 2017-08-16 23:05:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.677 ms

Loss rate: 0.76%

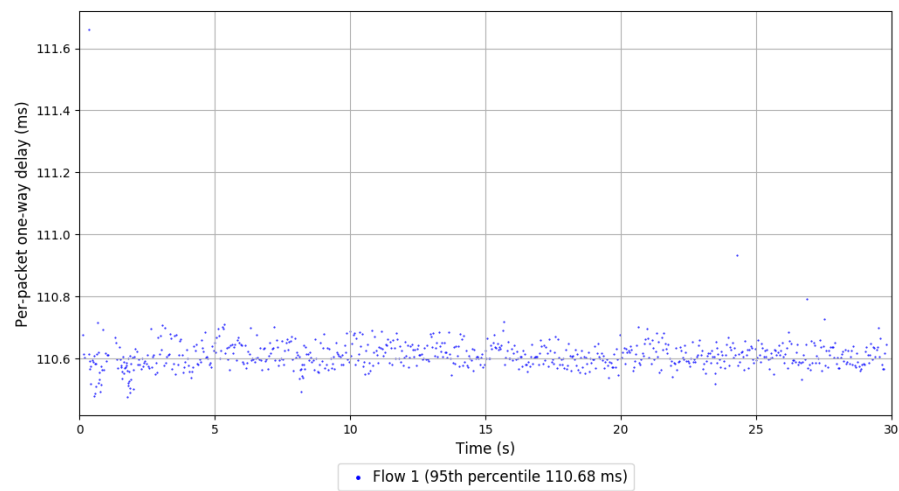
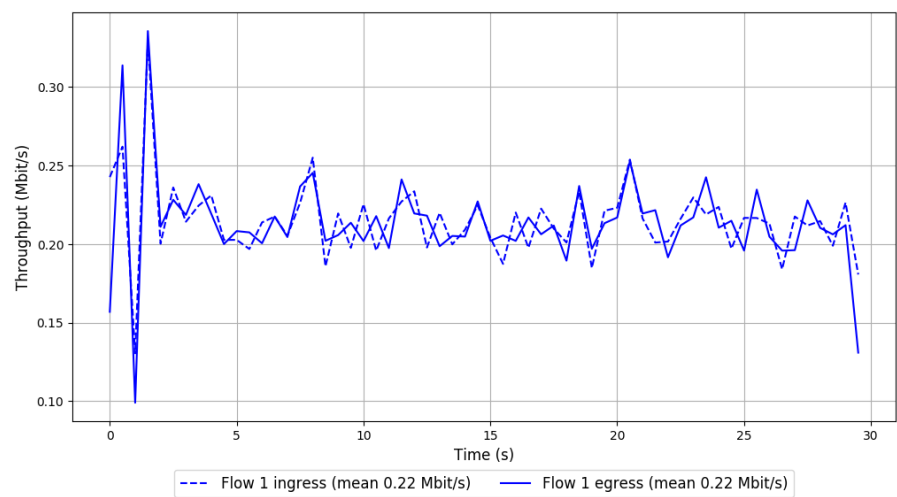
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.677 ms

Loss rate: 0.76%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-16 19:59:45

End at: 2017-08-16 20:00:15

Below is generated by plot.py at 2017-08-16 23:05:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.190 ms

Loss rate: 0.64%

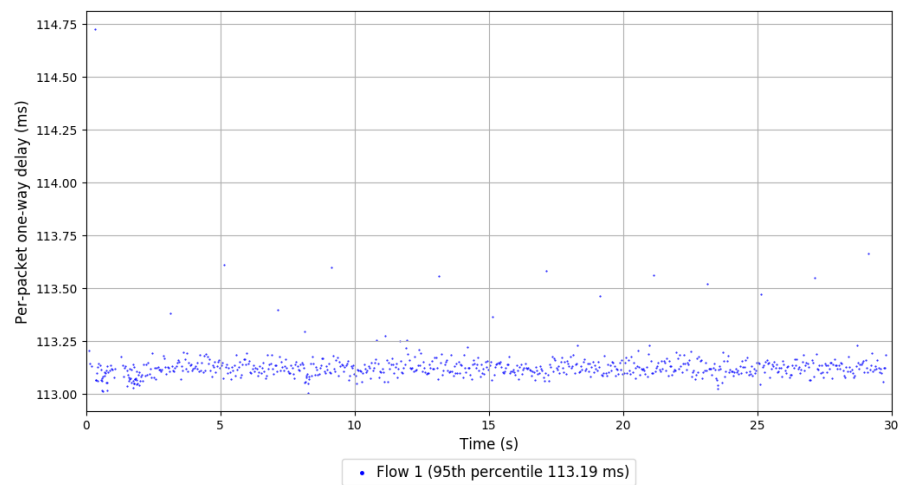
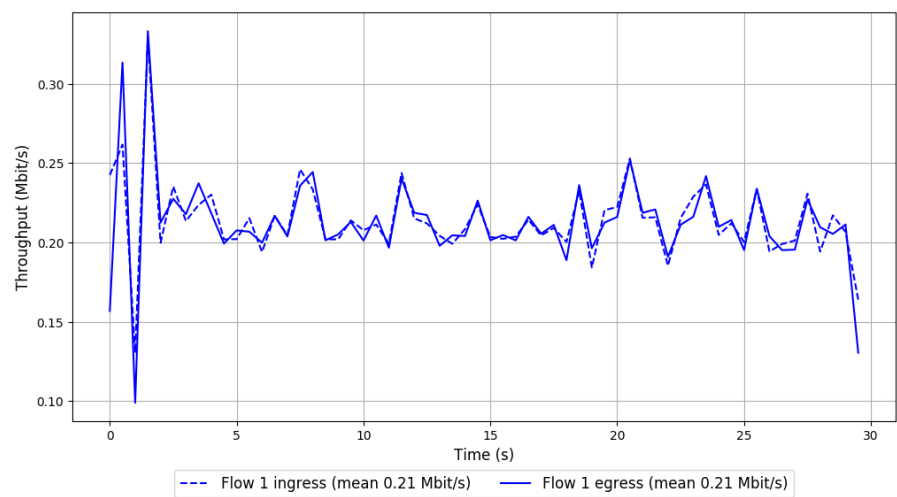
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.190 ms

Loss rate: 0.64%

Run 9: Report of SReAM — Data Link

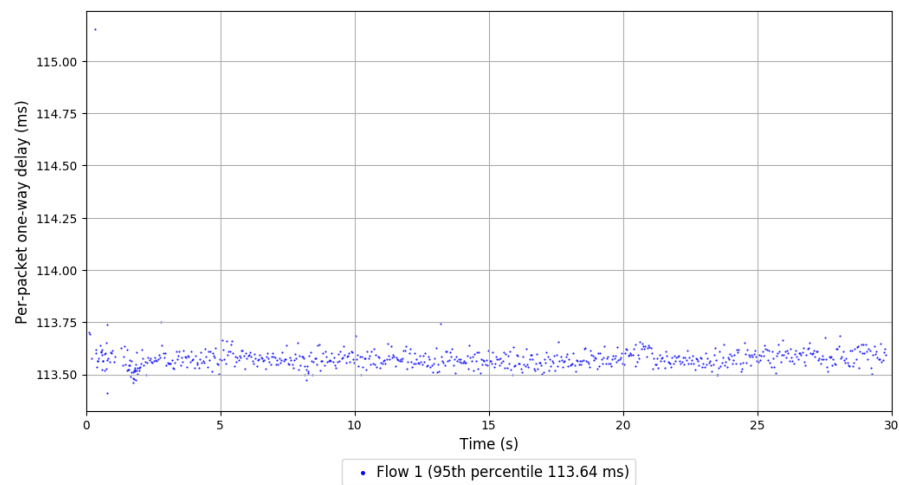
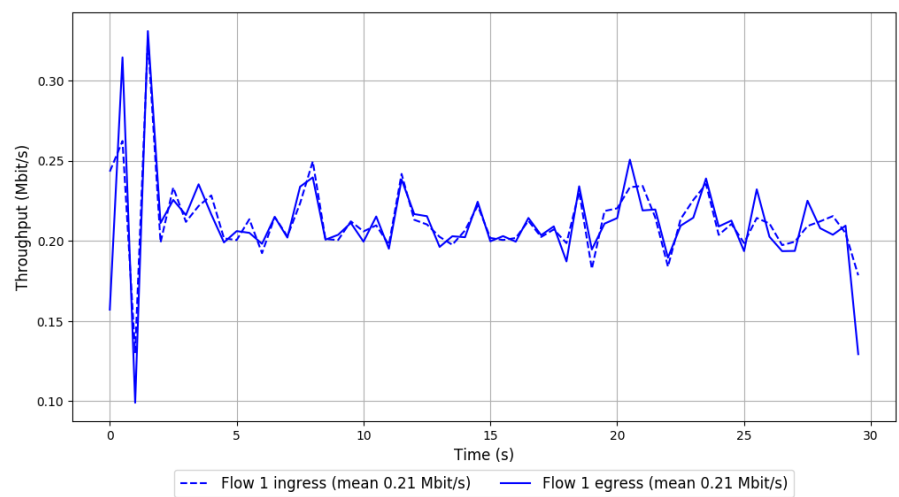


```
Run 10: Statistics of SReAM

Start at: 2017-08-16 20:10:35
End at: 2017-08-16 20:11:05

# Below is generated by plot.py at 2017-08-16 23:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.636 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.636 ms
Loss rate: 0.76%
```

Run 10: Report of SReAM — Data Link

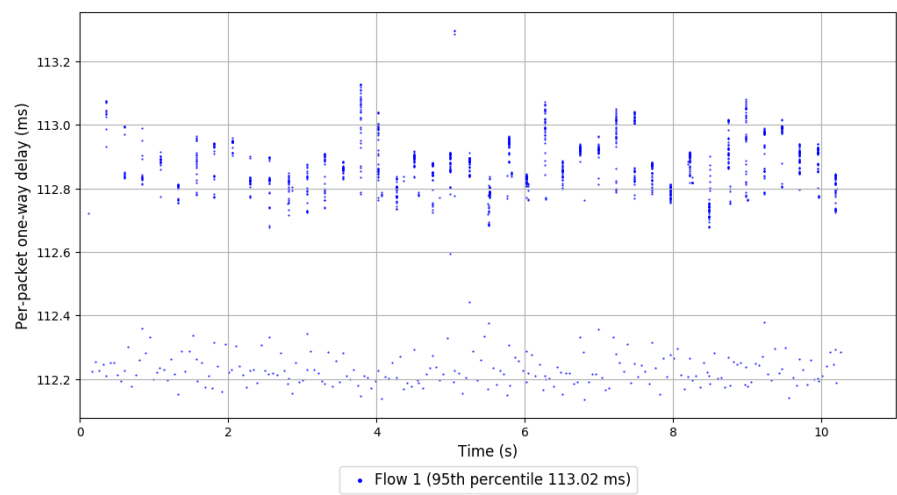
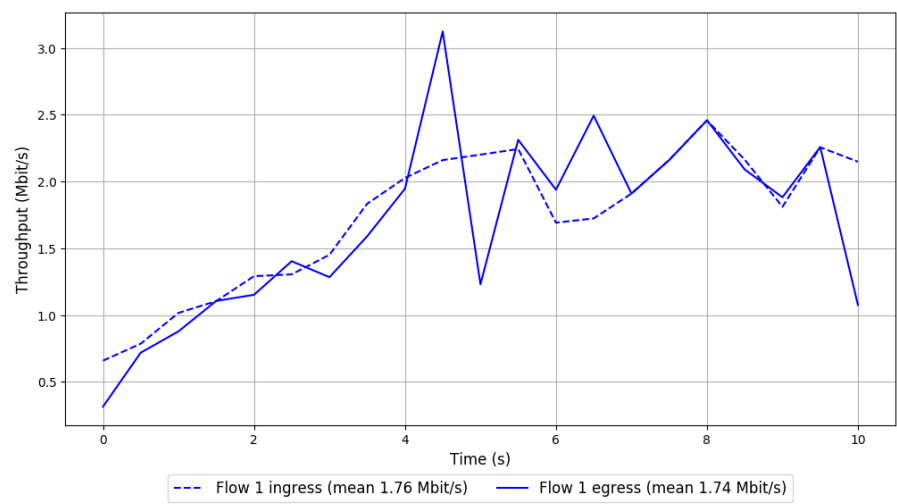


Run 1: Statistics of Sprout

Start at: 2017-08-16 18:37:57

End at: 2017-08-16 18:38:27

Run 1: Report of Sprout — Data Link

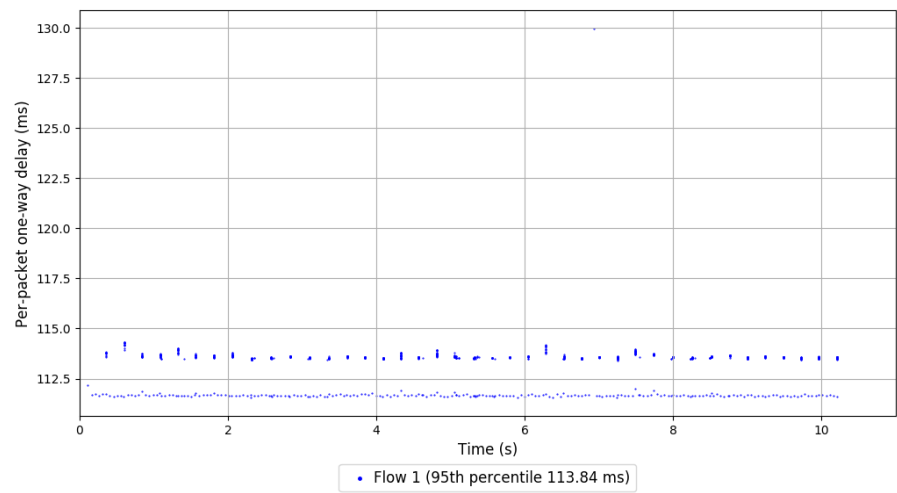
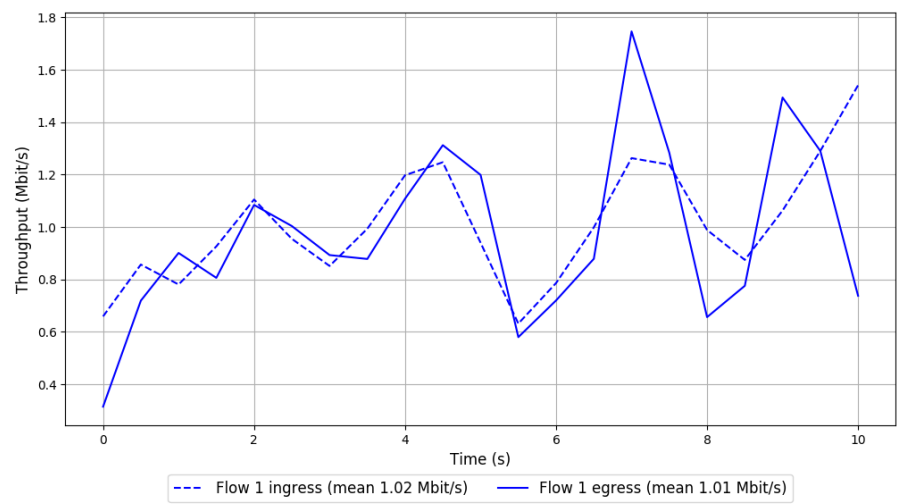


Run 2: Statistics of Sprout

Start at: 2017-08-16 18:49:19

End at: 2017-08-16 18:49:49

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-16 19:00:35

End at: 2017-08-16 19:01:05

Below is generated by plot.py at 2017-08-16 23:05:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 114.021 ms

Loss rate: 1.58%

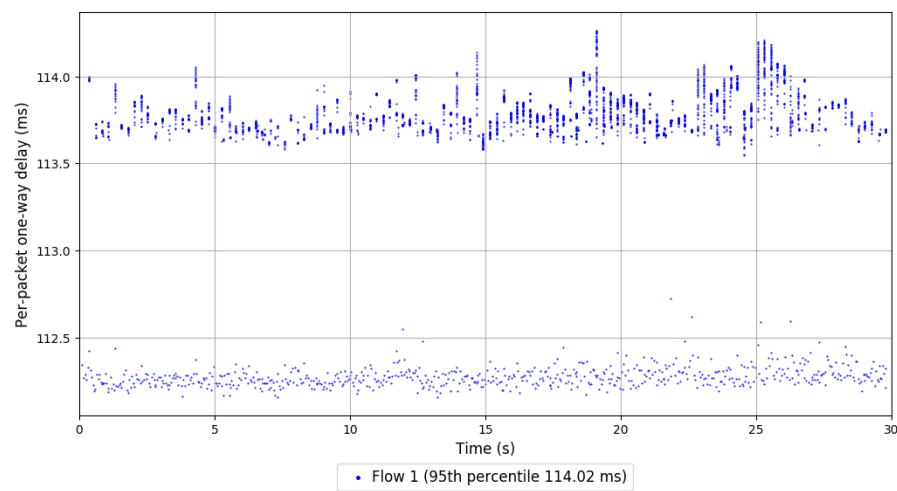
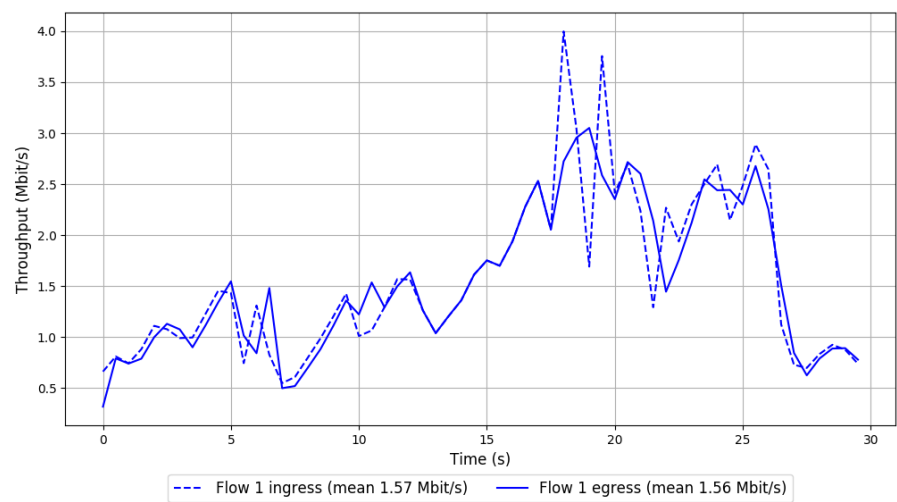
-- Flow 1:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 114.021 ms

Loss rate: 1.58%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-16 19:11:28

End at: 2017-08-16 19:11:58

Below is generated by plot.py at 2017-08-16 23:05:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 113.899 ms

Loss rate: 3.18%

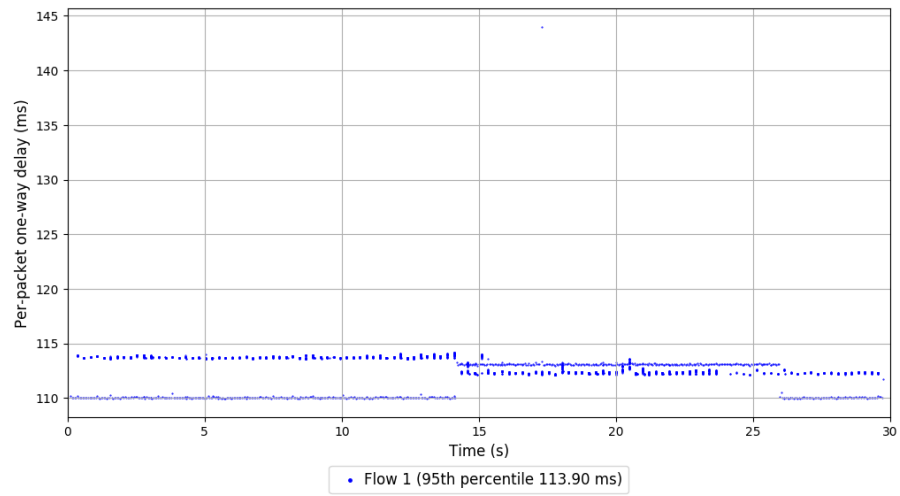
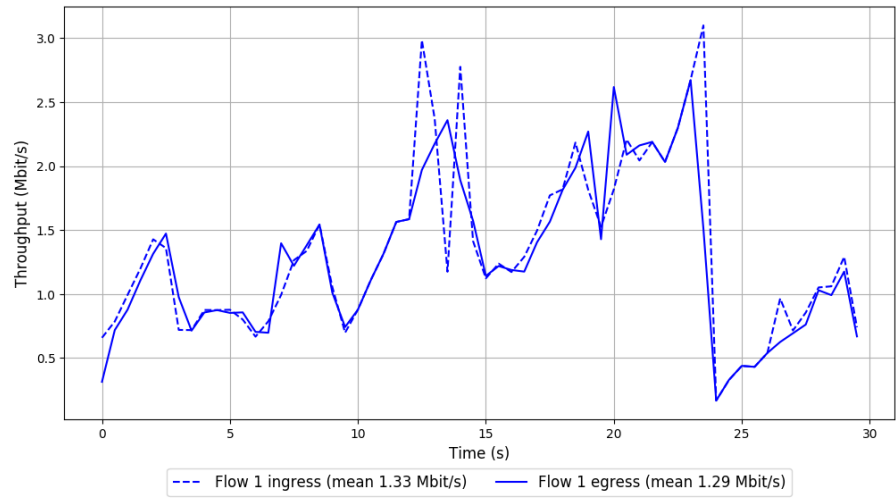
-- Flow 1:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 113.899 ms

Loss rate: 3.18%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-16 19:22:38

End at: 2017-08-16 19:23:08

Below is generated by plot.py at 2017-08-16 23:05:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 112.581 ms

Loss rate: 3.53%

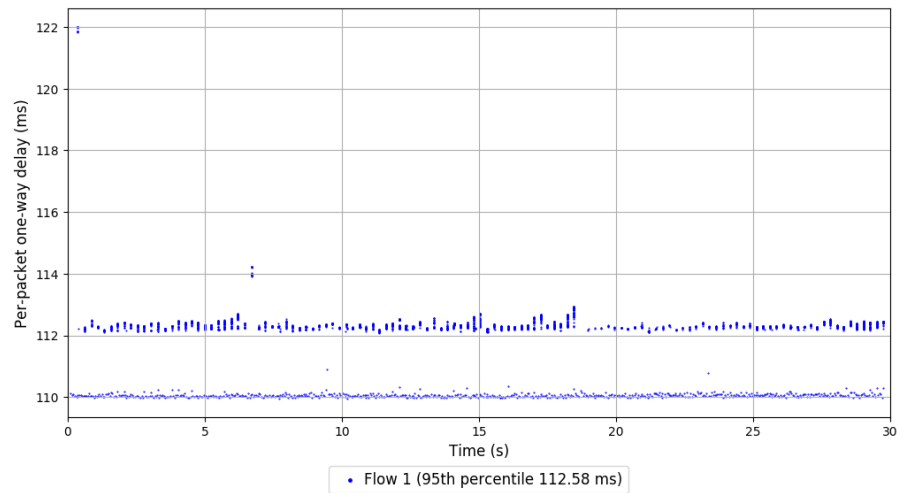
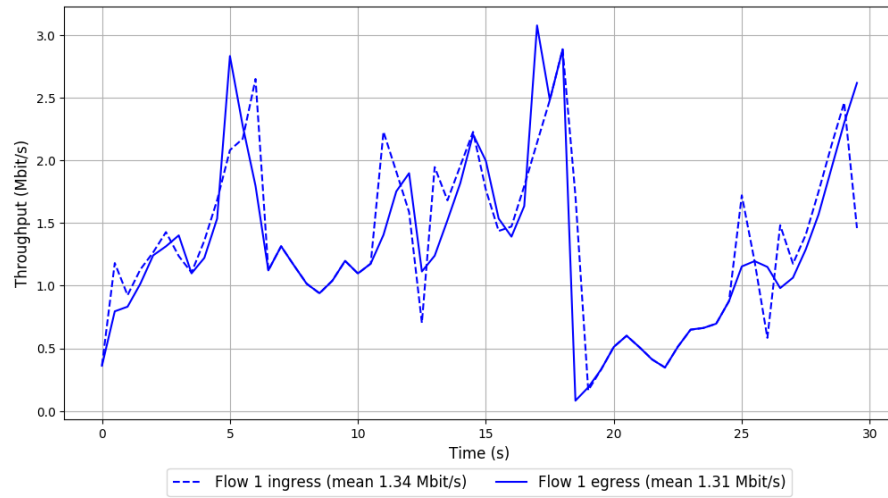
-- Flow 1:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 112.581 ms

Loss rate: 3.53%

Run 5: Report of Sprout — Data Link

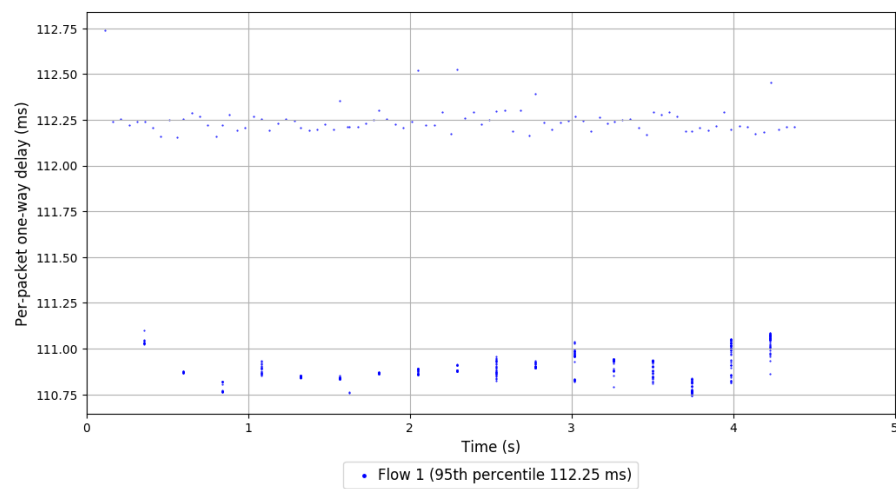
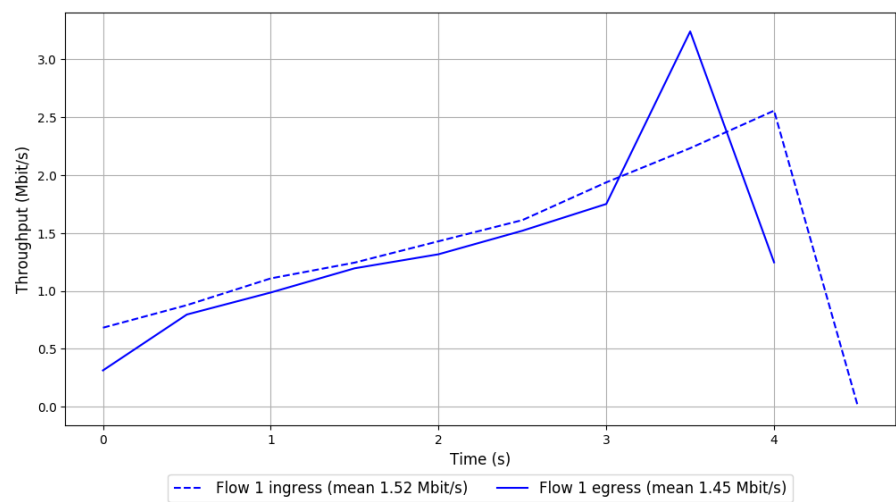


Run 6: Statistics of Sprout

Start at: 2017-08-16 19:34:02

End at: 2017-08-16 19:34:32

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-16 19:44:52

End at: 2017-08-16 19:45:22

Below is generated by plot.py at 2017-08-16 23:05:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 112.598 ms

Loss rate: 2.36%

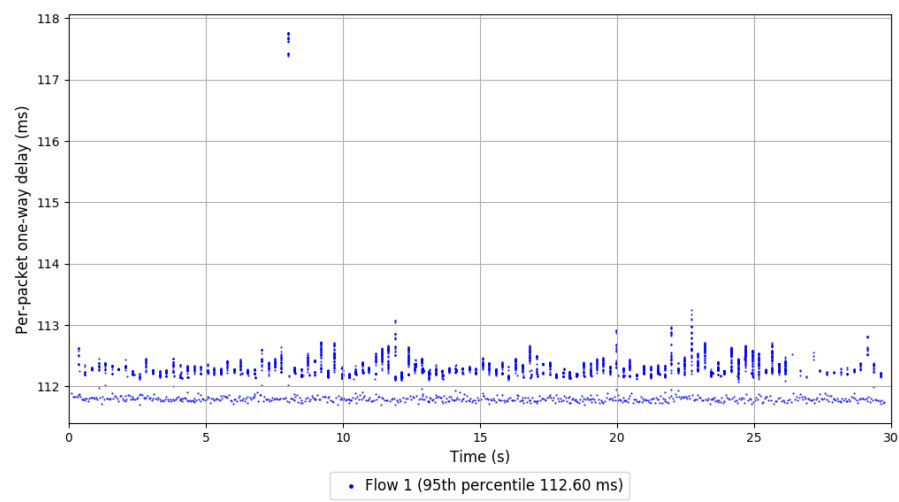
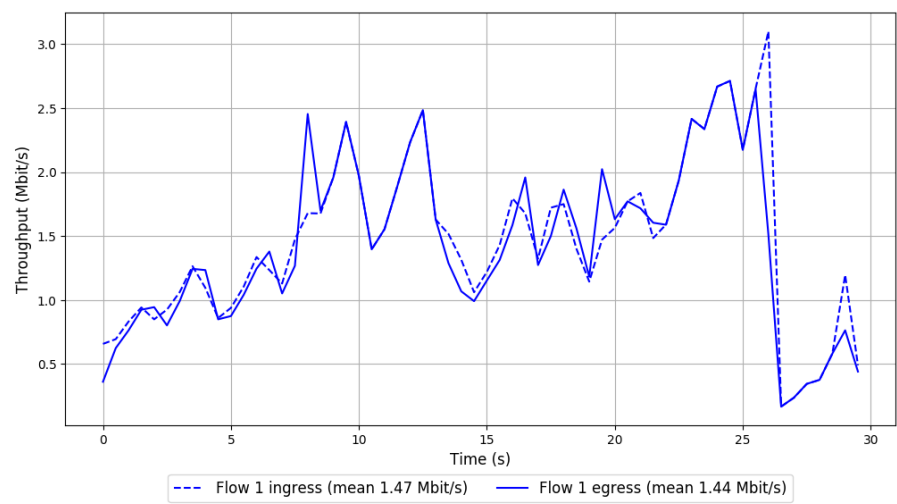
-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 112.598 ms

Loss rate: 2.36%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-16 19:56:00

End at: 2017-08-16 19:56:30

Below is generated by plot.py at 2017-08-16 23:05:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 113.513 ms

Loss rate: 2.51%

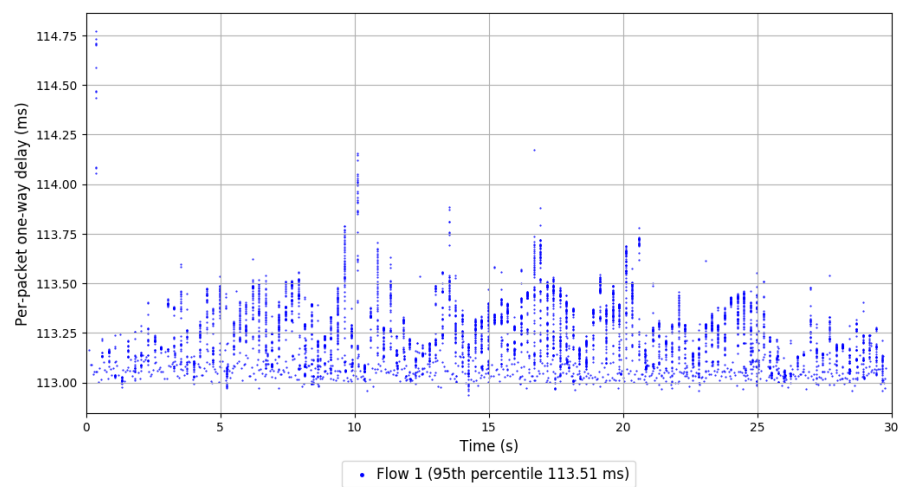
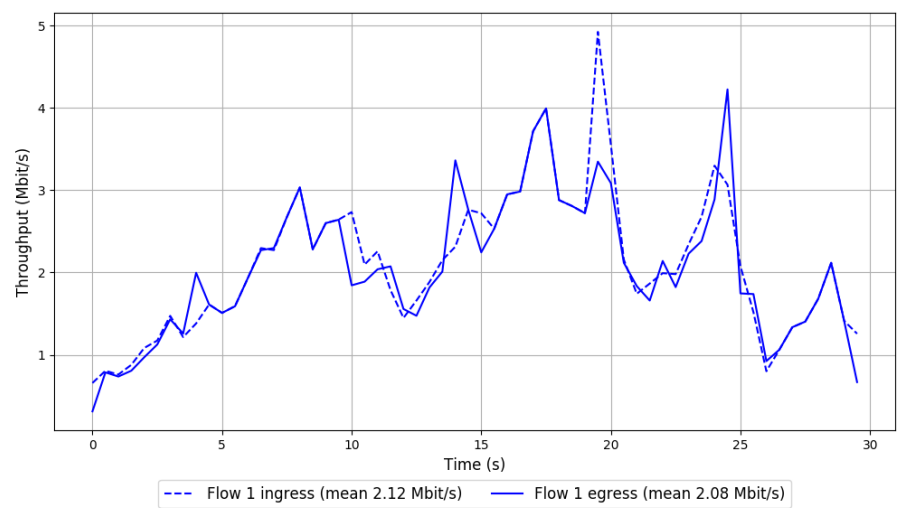
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 113.513 ms

Loss rate: 2.51%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-16 20:07:08

End at: 2017-08-16 20:07:38

Below is generated by plot.py at 2017-08-16 23:05:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 111.462 ms

Loss rate: 0.92%

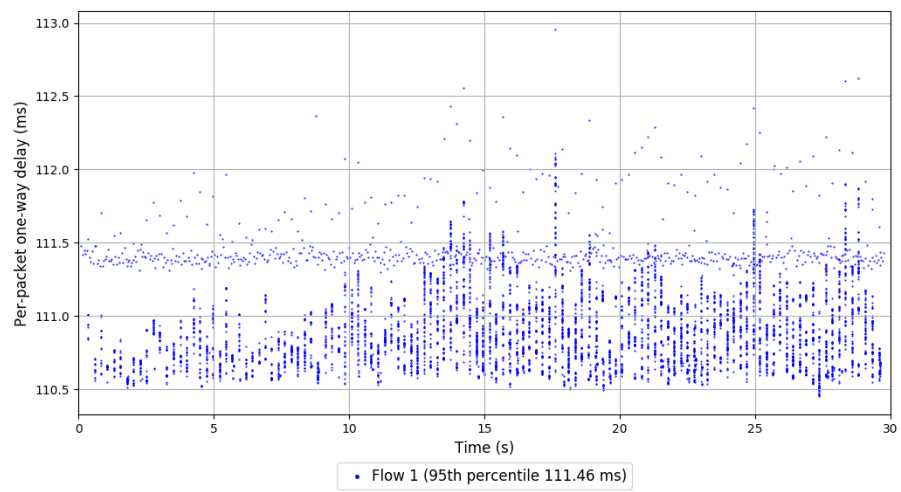
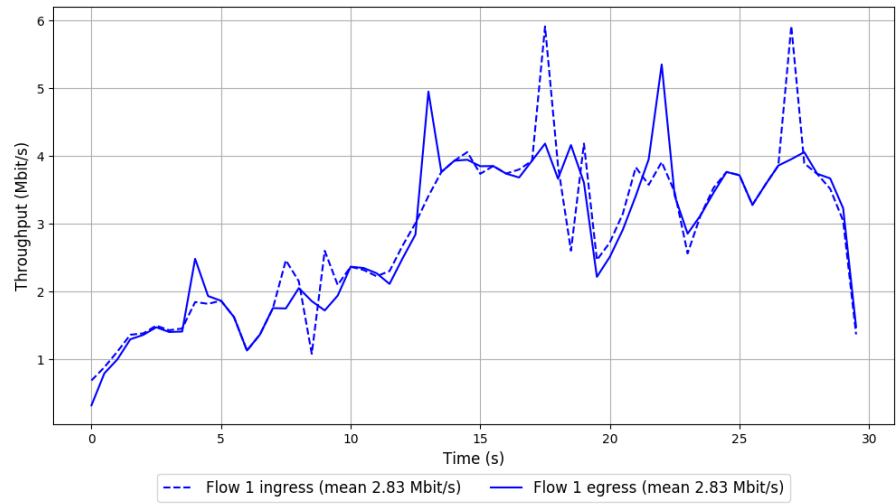
-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 111.462 ms

Loss rate: 0.92%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-16 20:17:51

End at: 2017-08-16 20:18:21

Below is generated by plot.py at 2017-08-16 23:05:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 111.743 ms

Loss rate: 5.62%

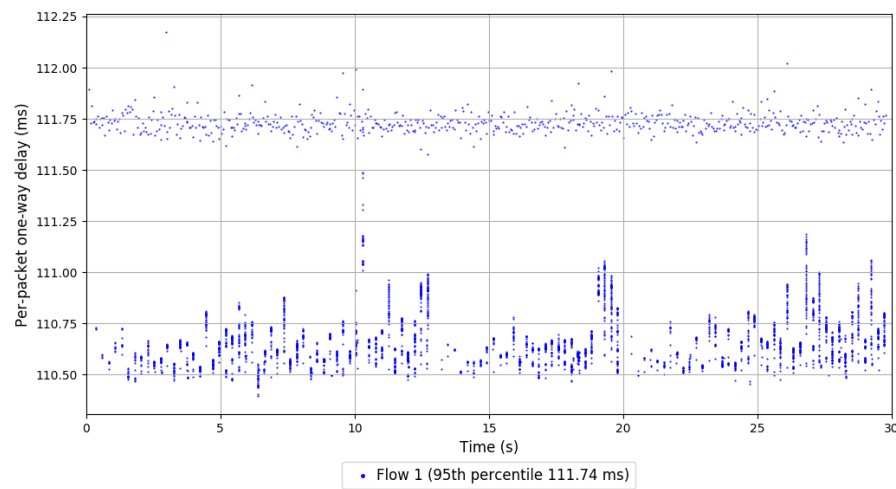
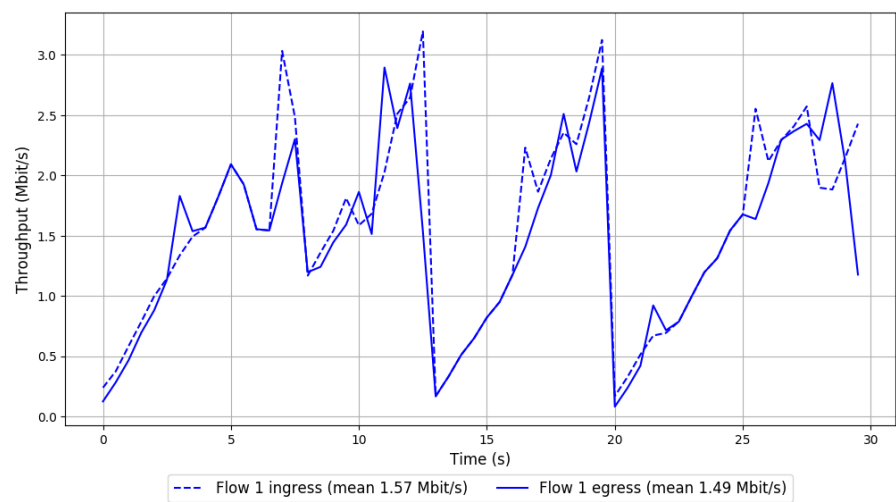
-- Flow 1:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 111.743 ms

Loss rate: 5.62%

Run 10: Report of Sprout — Data Link

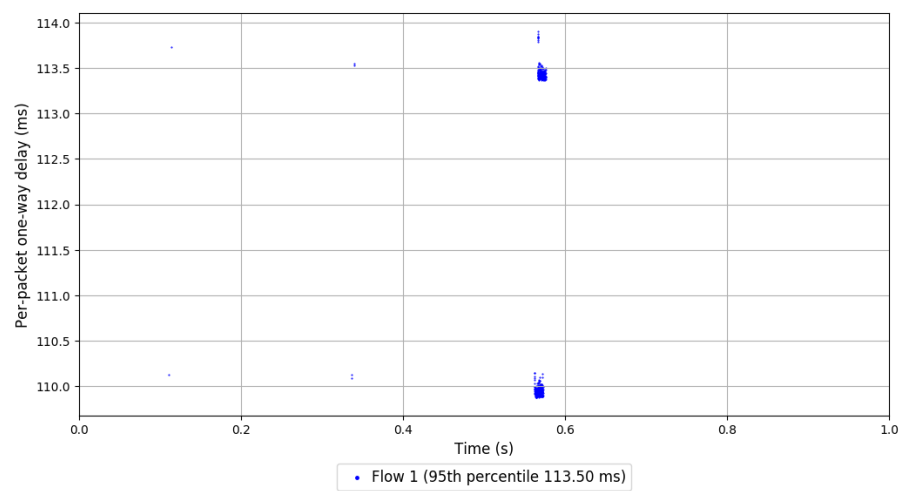
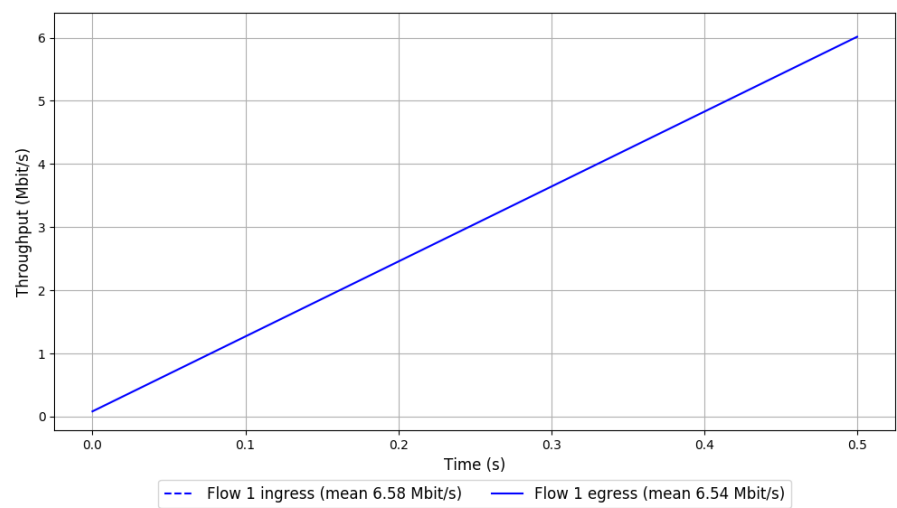


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-16 18:38:38

End at: 2017-08-16 18:39:08

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

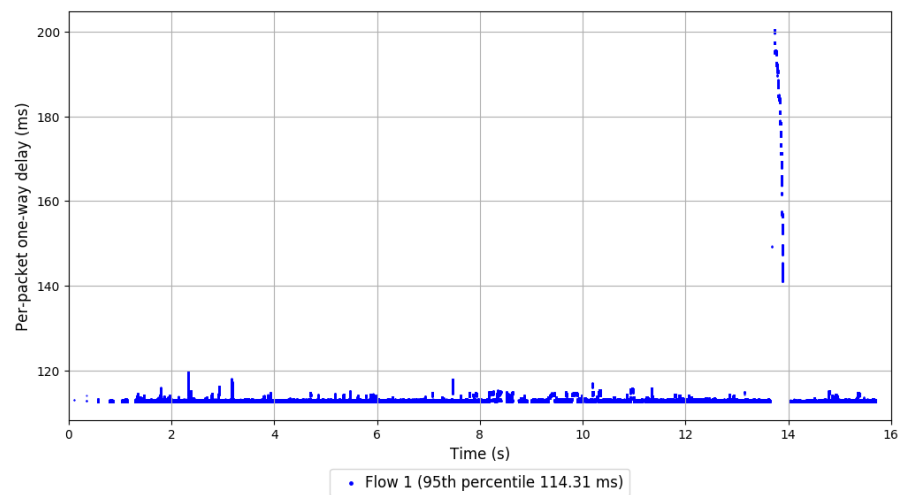
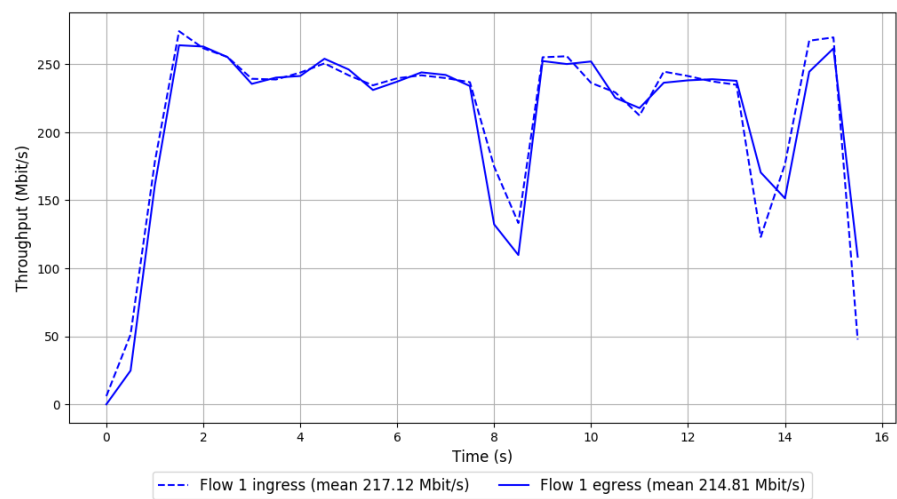


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-16 18:50:00

End at: 2017-08-16 18:50:30

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

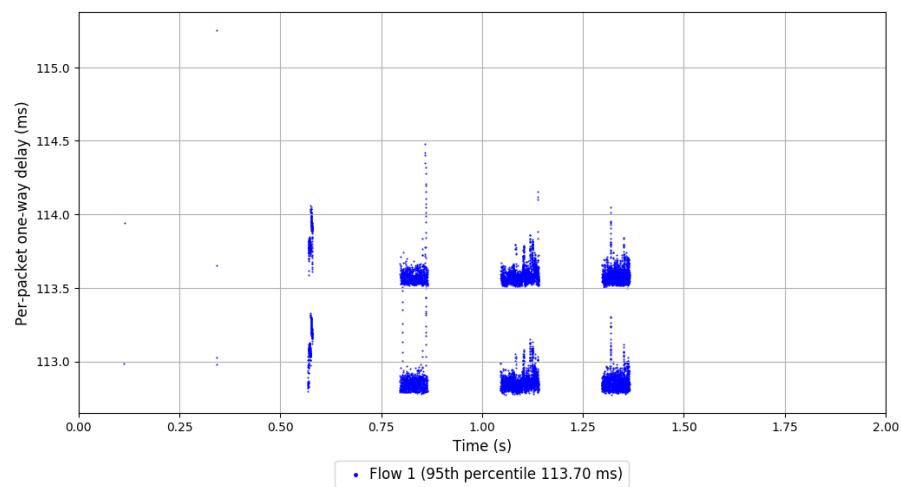
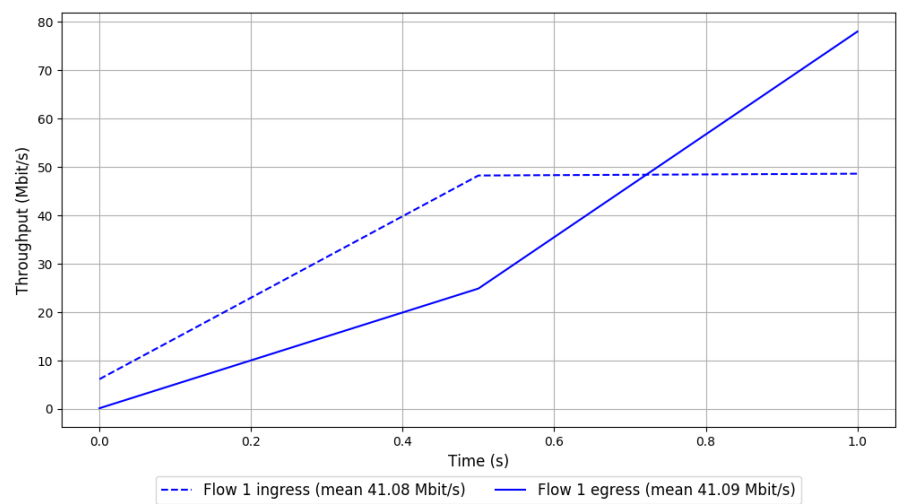


Run 3: Statistics of TaoVA-100x

Start at: 2017-08-16 19:01:16

End at: 2017-08-16 19:01:46

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

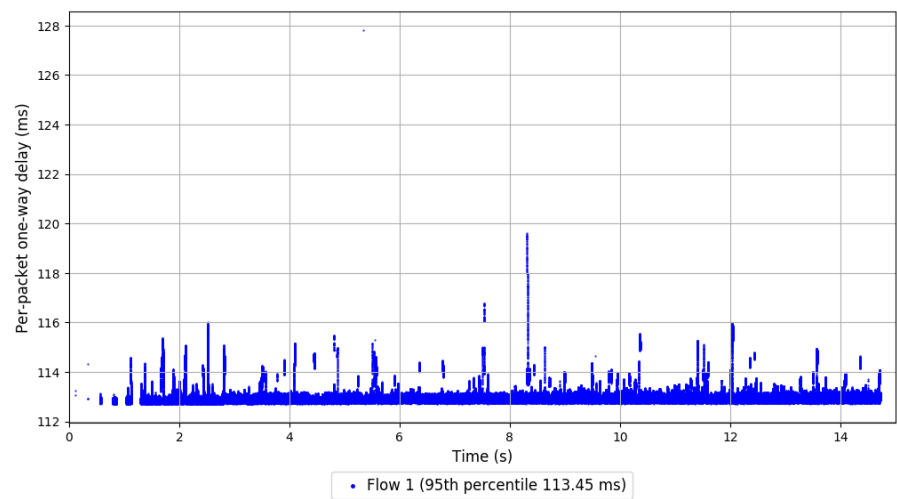
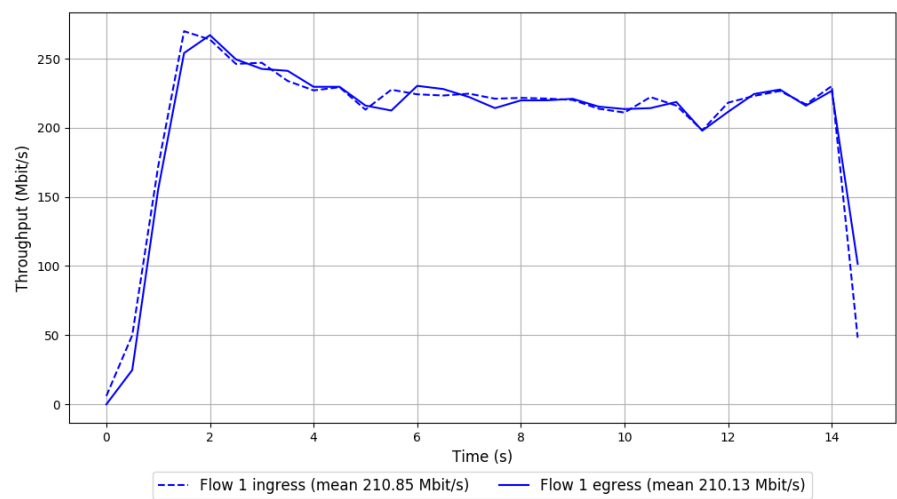


Run 4: Statistics of TaoVA-100x

Start at: 2017-08-16 19:12:09

End at: 2017-08-16 19:12:39

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

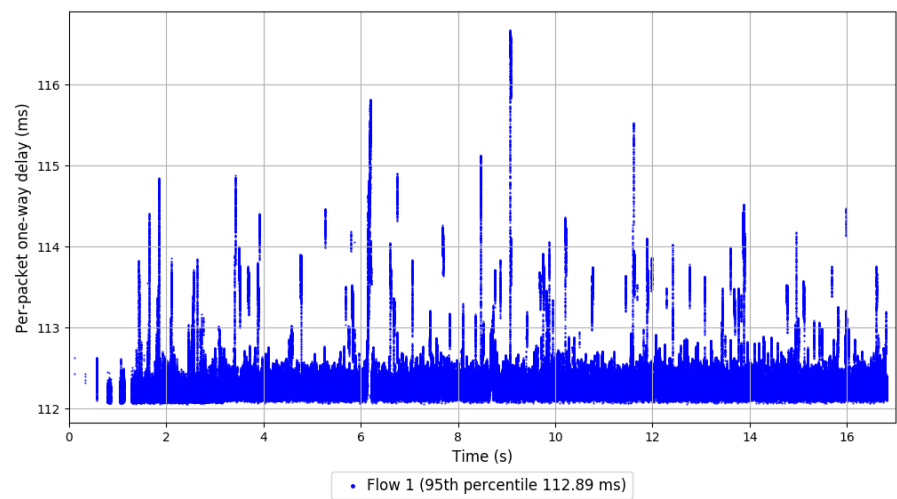
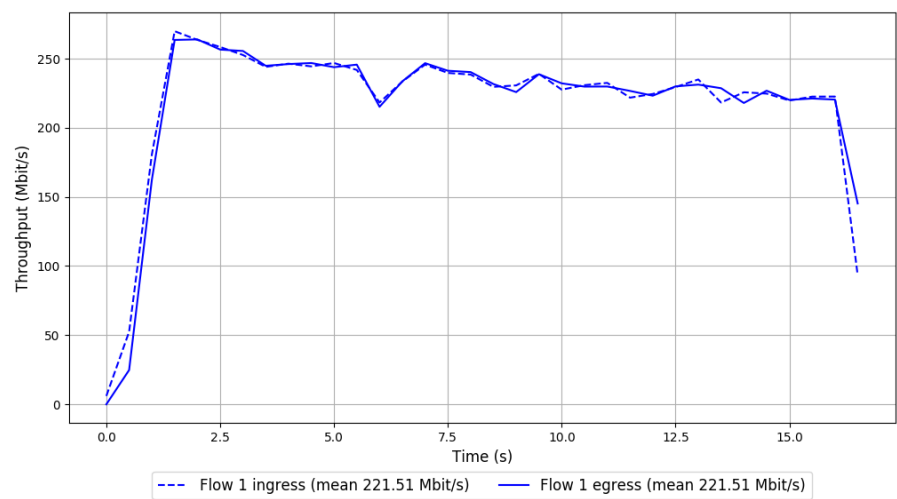


Run 5: Statistics of TaoVA-100x

Start at: 2017-08-16 19:23:19

End at: 2017-08-16 19:23:49

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-08-16 19:34:43

End at: 2017-08-16 19:35:13

Below is generated by plot.py at 2017-08-16 23:07:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.26 Mbit/s

95th percentile per-packet one-way delay: 113.089 ms

Loss rate: 13.97%

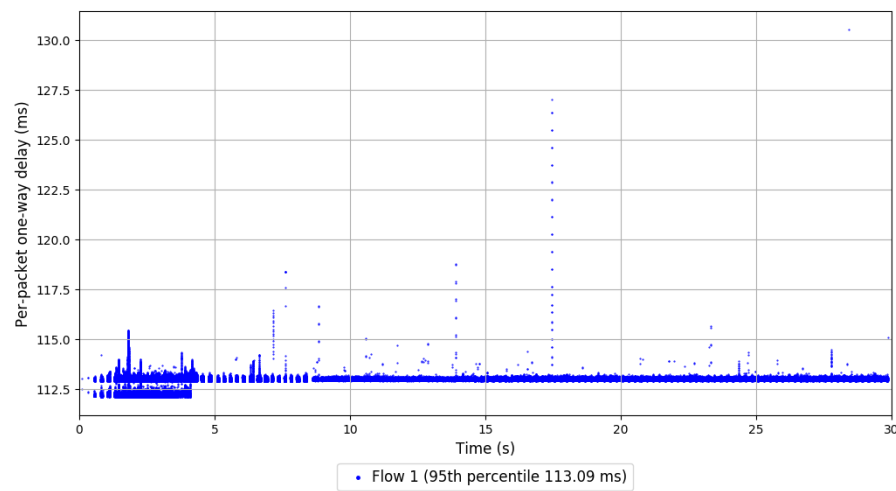
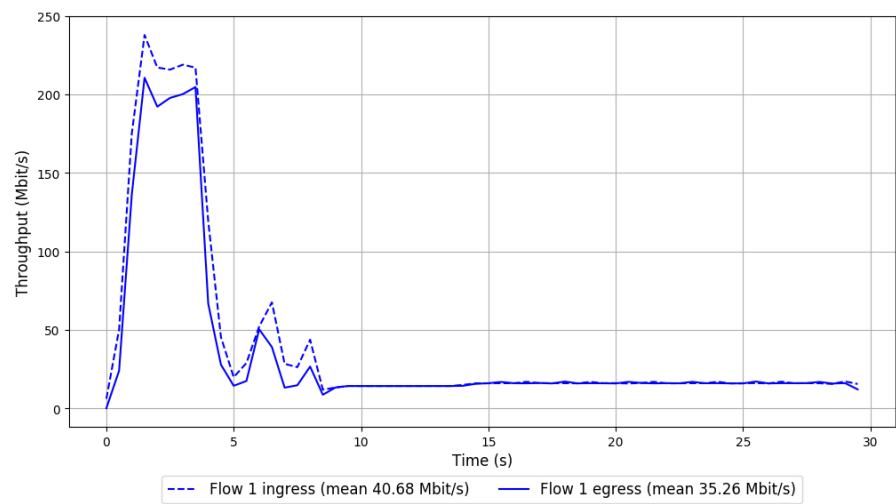
-- Flow 1:

Average throughput: 35.26 Mbit/s

95th percentile per-packet one-way delay: 113.089 ms

Loss rate: 13.97%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-08-16 19:45:33

End at: 2017-08-16 19:46:03

Below is generated by plot.py at 2017-08-16 23:07:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.61 Mbit/s

95th percentile per-packet one-way delay: 113.654 ms

Loss rate: 1.38%

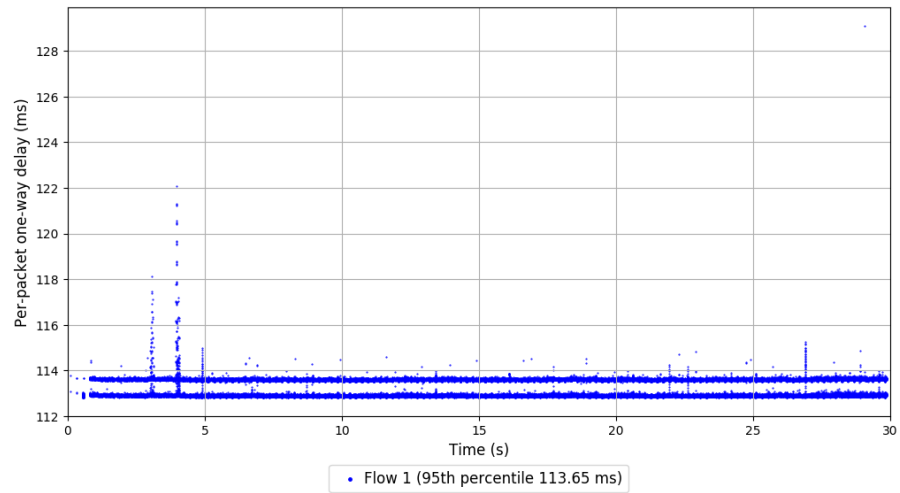
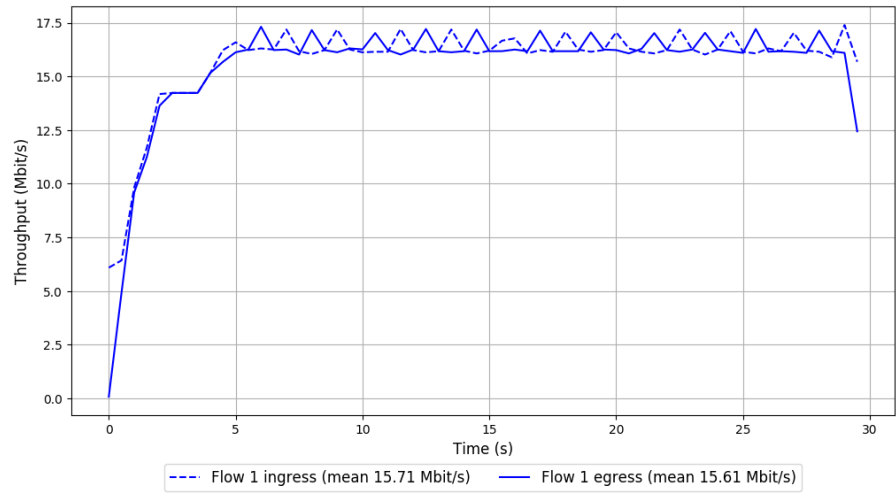
-- Flow 1:

Average throughput: 15.61 Mbit/s

95th percentile per-packet one-way delay: 113.654 ms

Loss rate: 1.38%

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

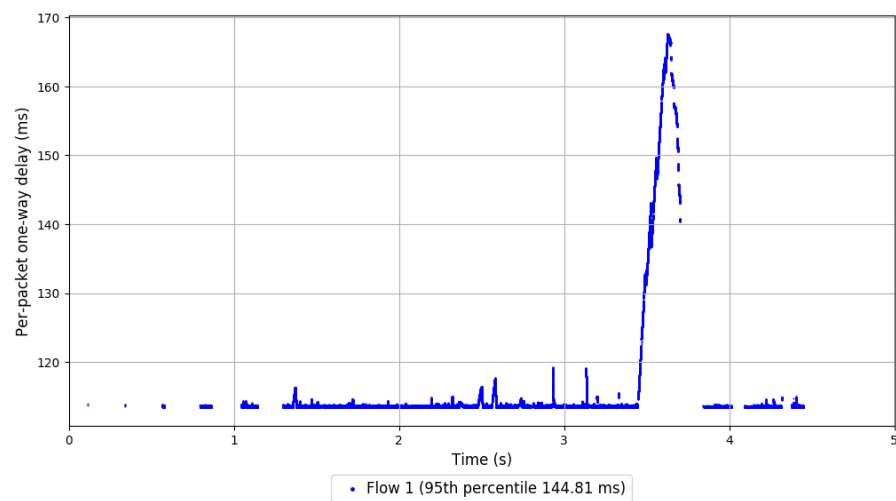
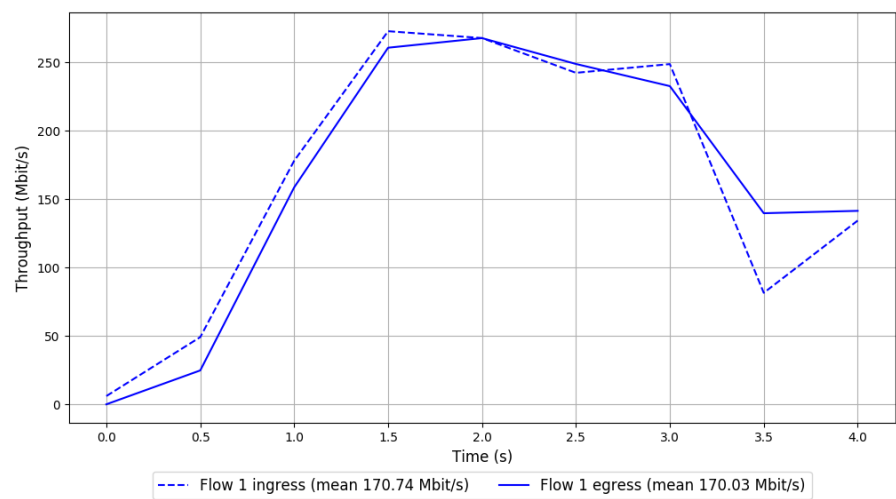


Run 8: Statistics of TaoVA-100x

Start at: 2017-08-16 19:56:41

End at: 2017-08-16 19:57:11

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-08-16 20:07:49

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

Below is generated by plot.py at 2017-08-16 23:07:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.71 Mbit/s

95th percentile per-packet one-way delay: 113.047 ms

Loss rate: 1.43%

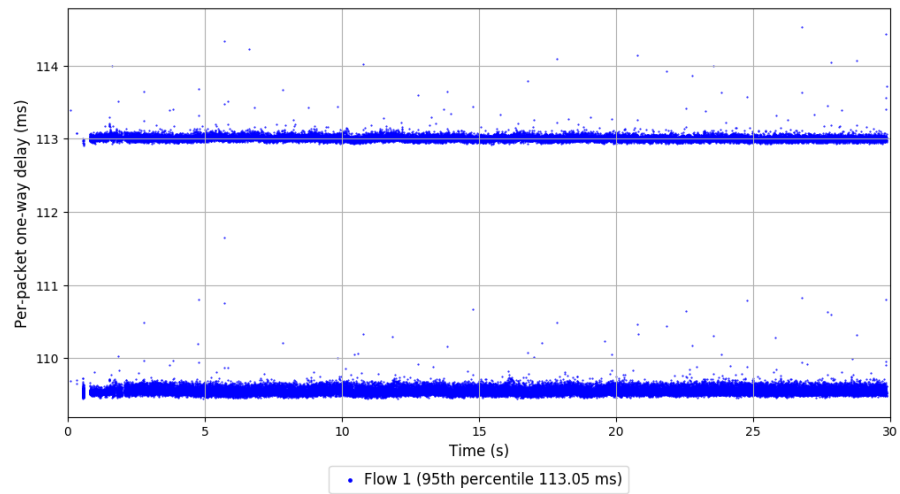
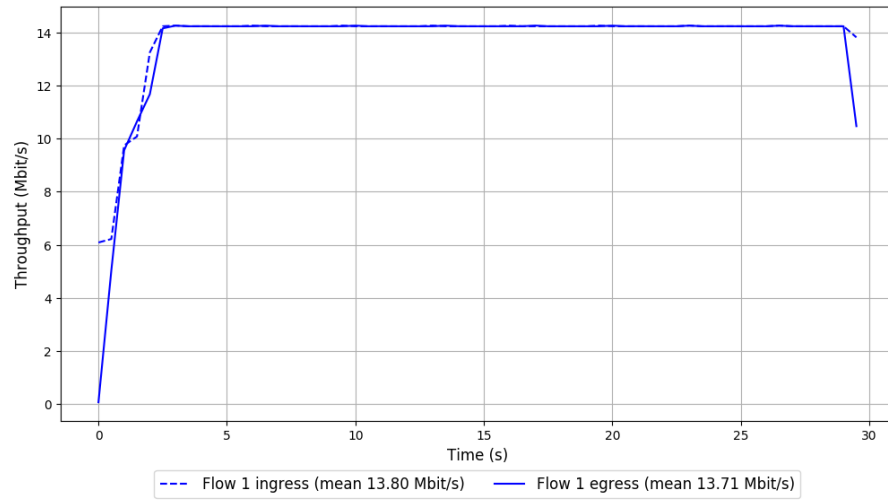
-- Flow 1:

Average throughput: 13.71 Mbit/s

95th percentile per-packet one-way delay: 113.047 ms

Loss rate: 1.43%

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

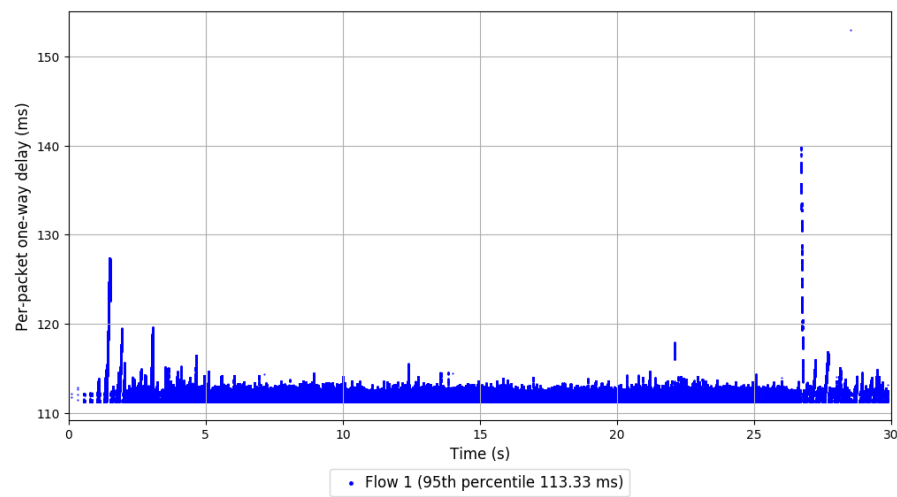
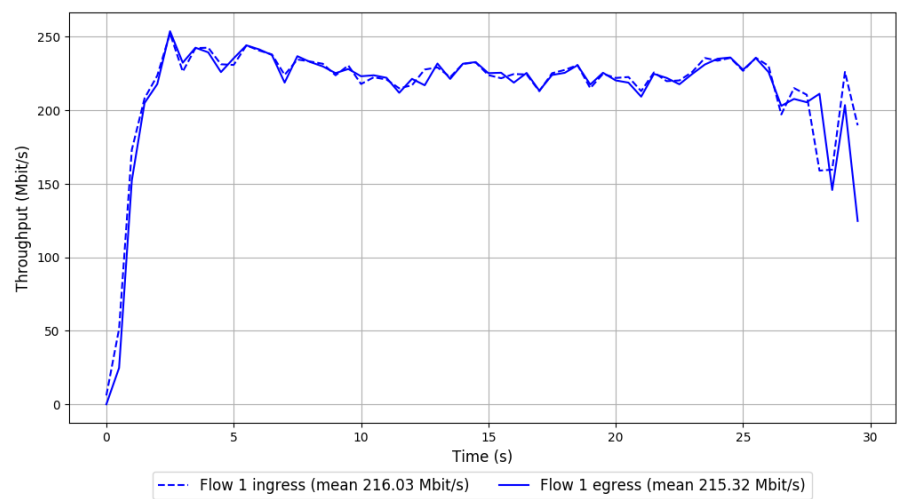


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-16 20:18:32
End at: 2017-08-16 20:19:02

# Below is generated by plot.py at 2017-08-16 23:08:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.32 Mbit/s
95th percentile per-packet one-way delay: 113.327 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 215.32 Mbit/s
95th percentile per-packet one-way delay: 113.327 ms
Loss rate: 1.06%
```

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

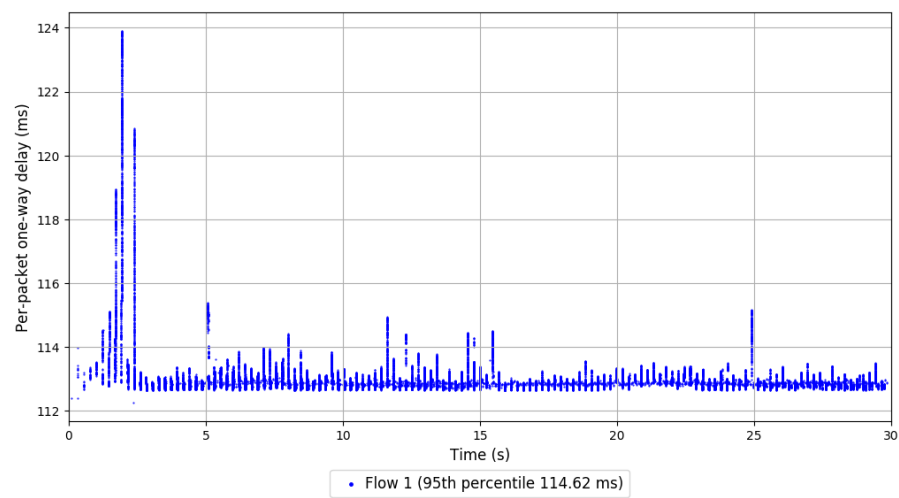
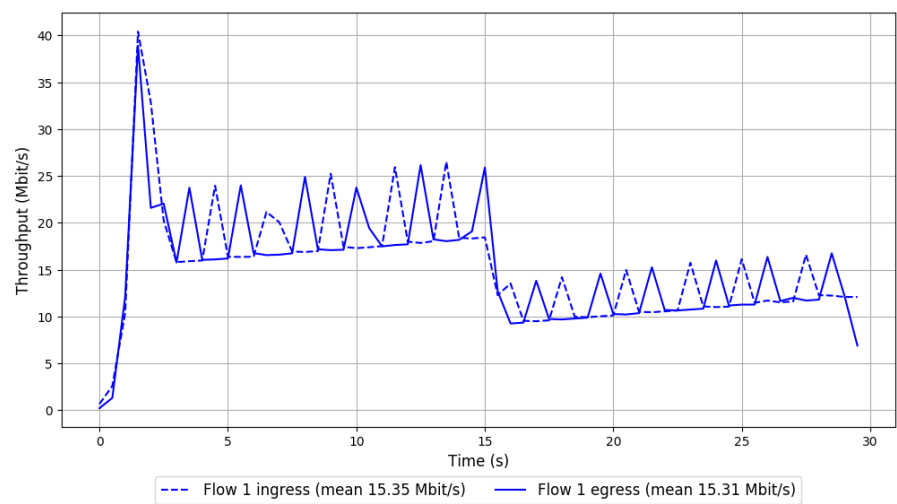


```
Run 1: Statistics of TCP Vegas

Start at: 2017-08-16 18:31:02
End at: 2017-08-16 18:31:32

# Below is generated by plot.py at 2017-08-16 23:08:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.31 Mbit/s
95th percentile per-packet one-way delay: 114.622 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 15.31 Mbit/s
95th percentile per-packet one-way delay: 114.622 ms
Loss rate: 1.01%
```


Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-16 18:42:20

End at: 2017-08-16 18:42:50

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 113.728 ms

Loss rate: 1.17%

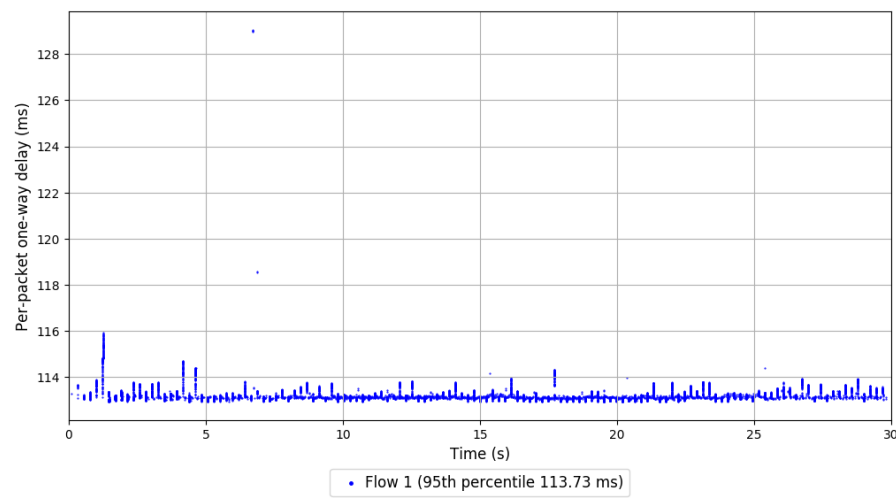
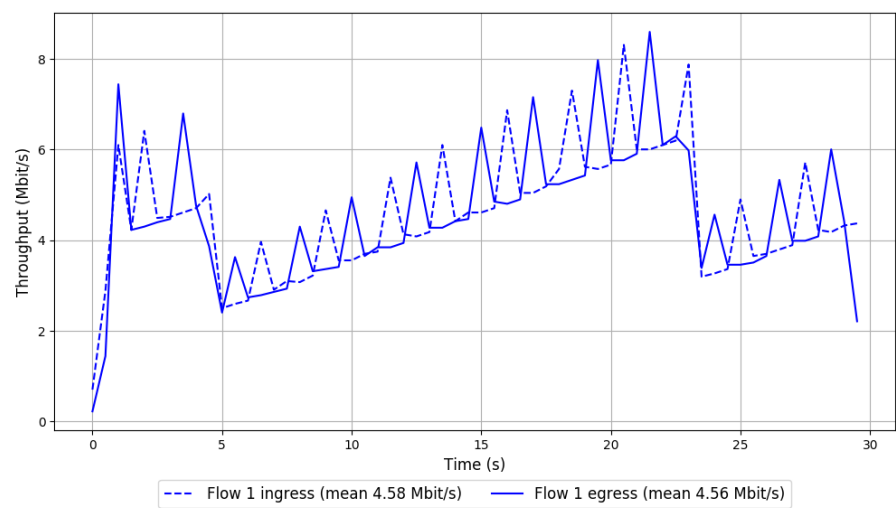
-- Flow 1:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 113.728 ms

Loss rate: 1.17%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-16 18:53:35

End at: 2017-08-16 18:54:05

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.68 Mbit/s

95th percentile per-packet one-way delay: 113.832 ms

Loss rate: 1.08%

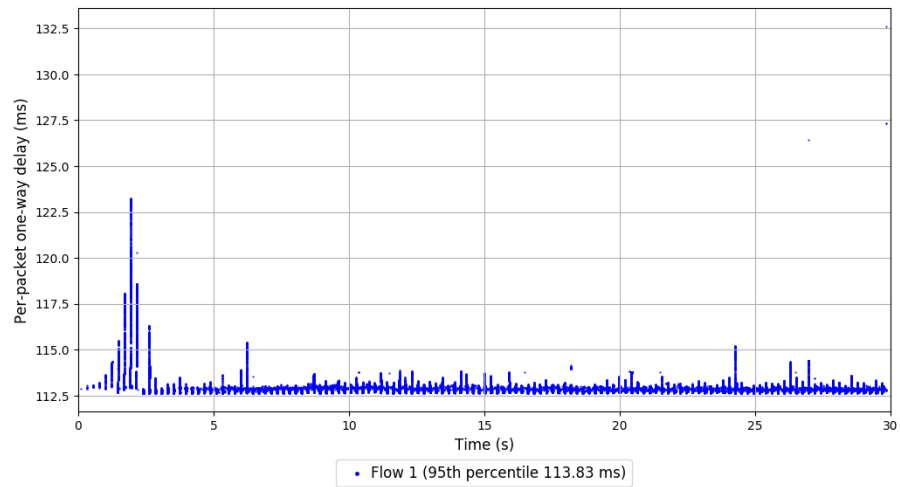
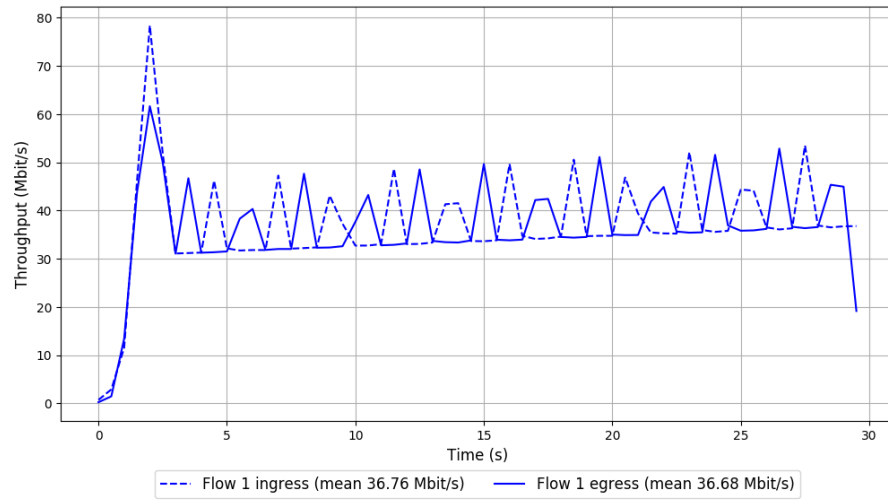
-- Flow 1:

Average throughput: 36.68 Mbit/s

95th percentile per-packet one-way delay: 113.832 ms

Loss rate: 1.08%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-16 19:04:41

End at: 2017-08-16 19:05:11

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.27 Mbit/s

95th percentile per-packet one-way delay: 114.641 ms

Loss rate: 0.68%

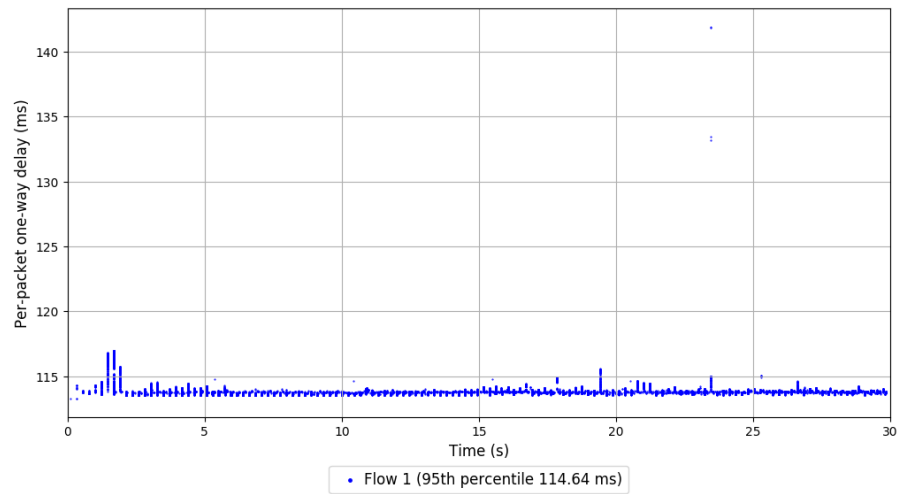
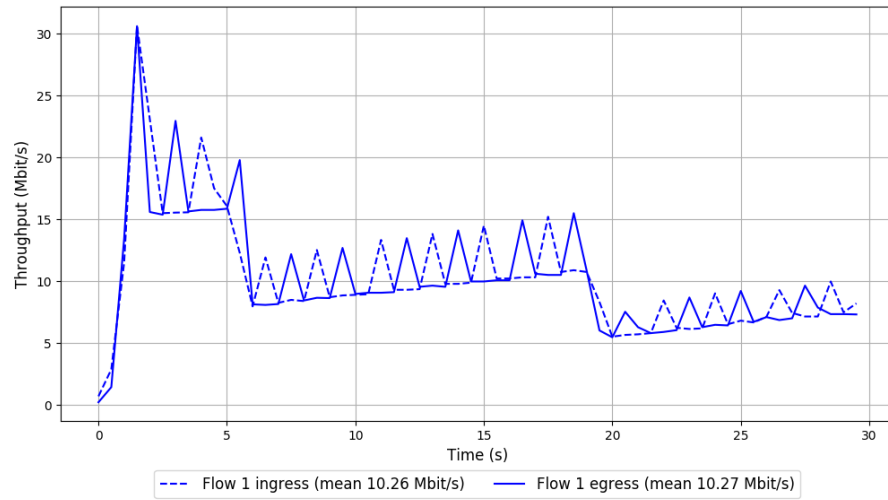
-- Flow 1:

Average throughput: 10.27 Mbit/s

95th percentile per-packet one-way delay: 114.641 ms

Loss rate: 0.68%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-16 19:15:45

End at: 2017-08-16 19:16:15

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 114.143 ms

Loss rate: 3.56%

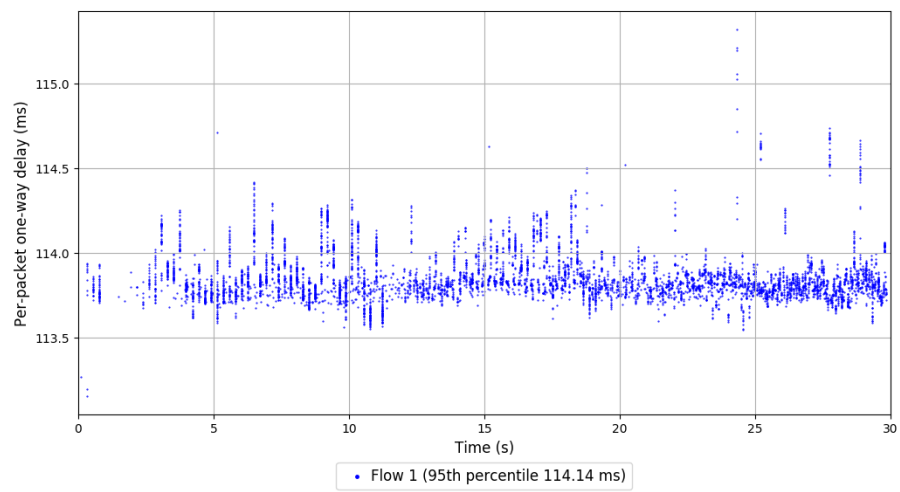
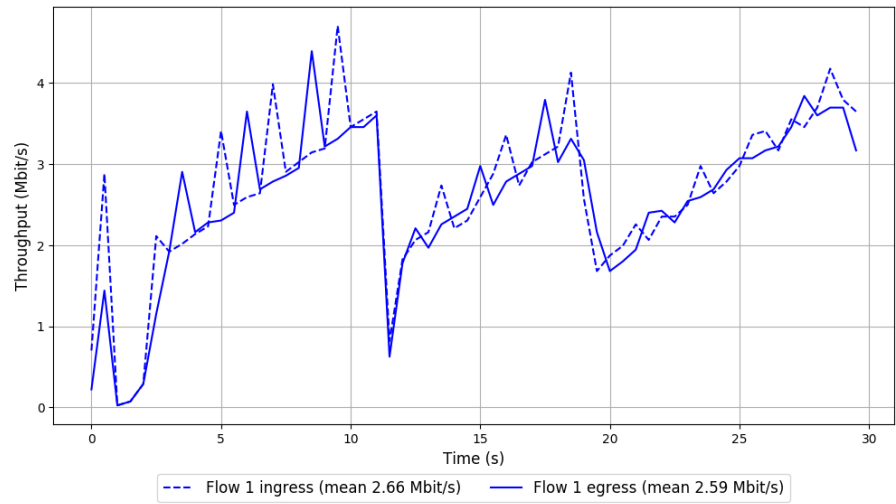
-- Flow 1:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 114.143 ms

Loss rate: 3.56%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-16 19:27:14

End at: 2017-08-16 19:27:44

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.37 Mbit/s

95th percentile per-packet one-way delay: 114.339 ms

Loss rate: 2.86%

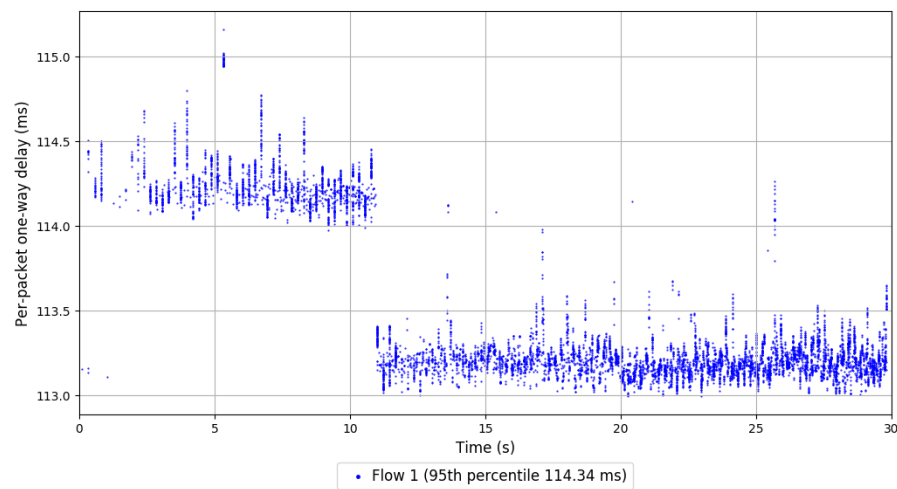
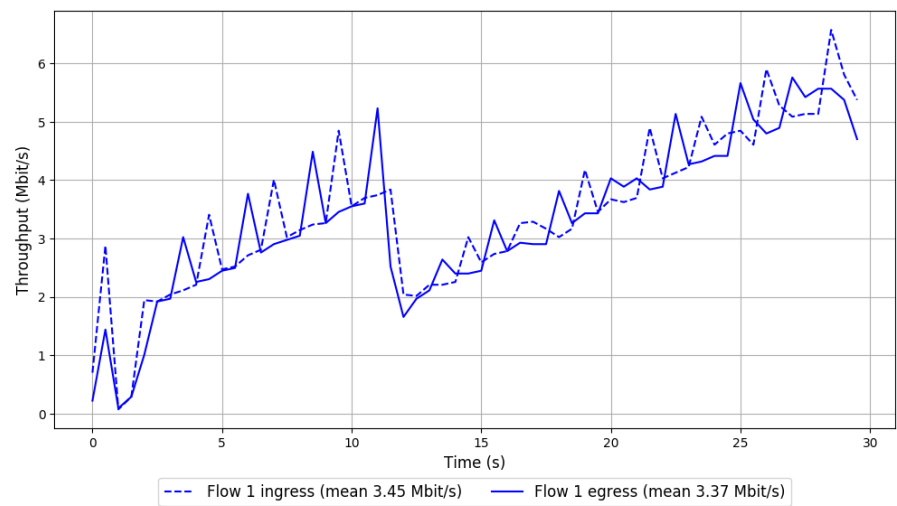
-- Flow 1:

Average throughput: 3.37 Mbit/s

95th percentile per-packet one-way delay: 114.339 ms

Loss rate: 2.86%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-16 19:38:11

End at: 2017-08-16 19:38:41

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.23 Mbit/s

95th percentile per-packet one-way delay: 114.069 ms

Loss rate: 3.11%

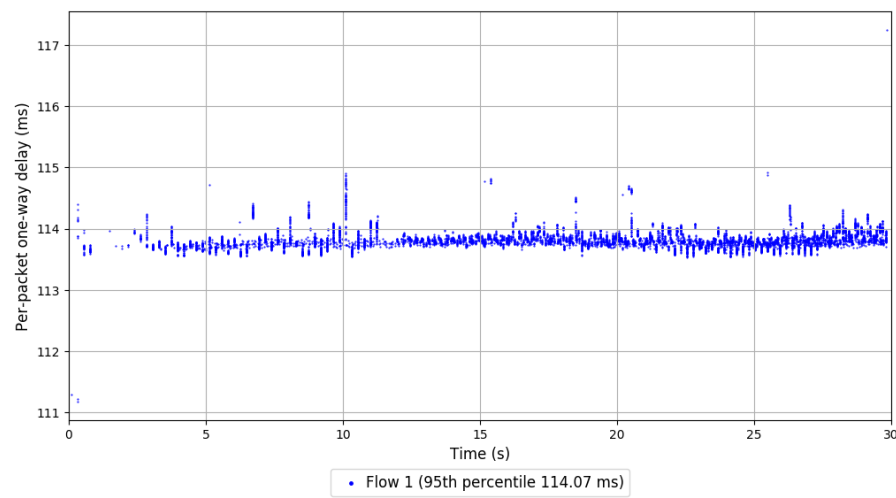
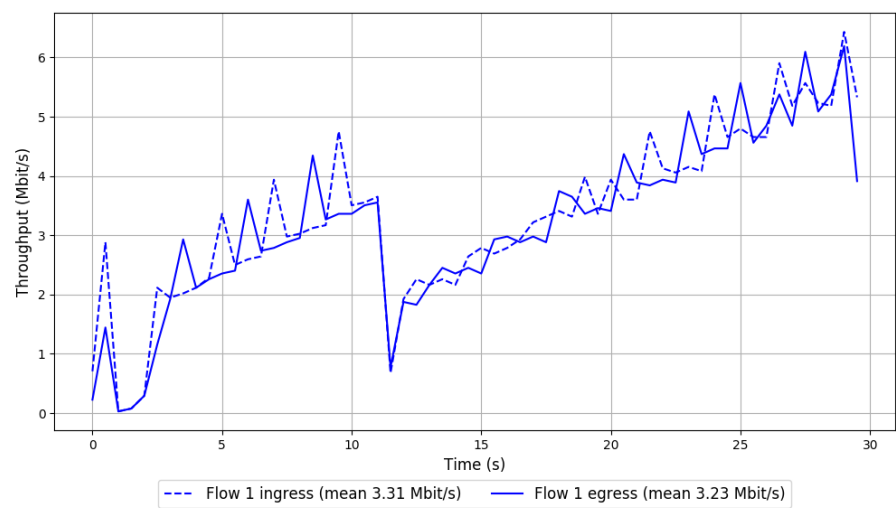
-- Flow 1:

Average throughput: 3.23 Mbit/s

95th percentile per-packet one-way delay: 114.069 ms

Loss rate: 3.11%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-16 19:49:17

End at: 2017-08-16 19:49:47

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.15 Mbit/s

95th percentile per-packet one-way delay: 113.431 ms

Loss rate: 5.76%

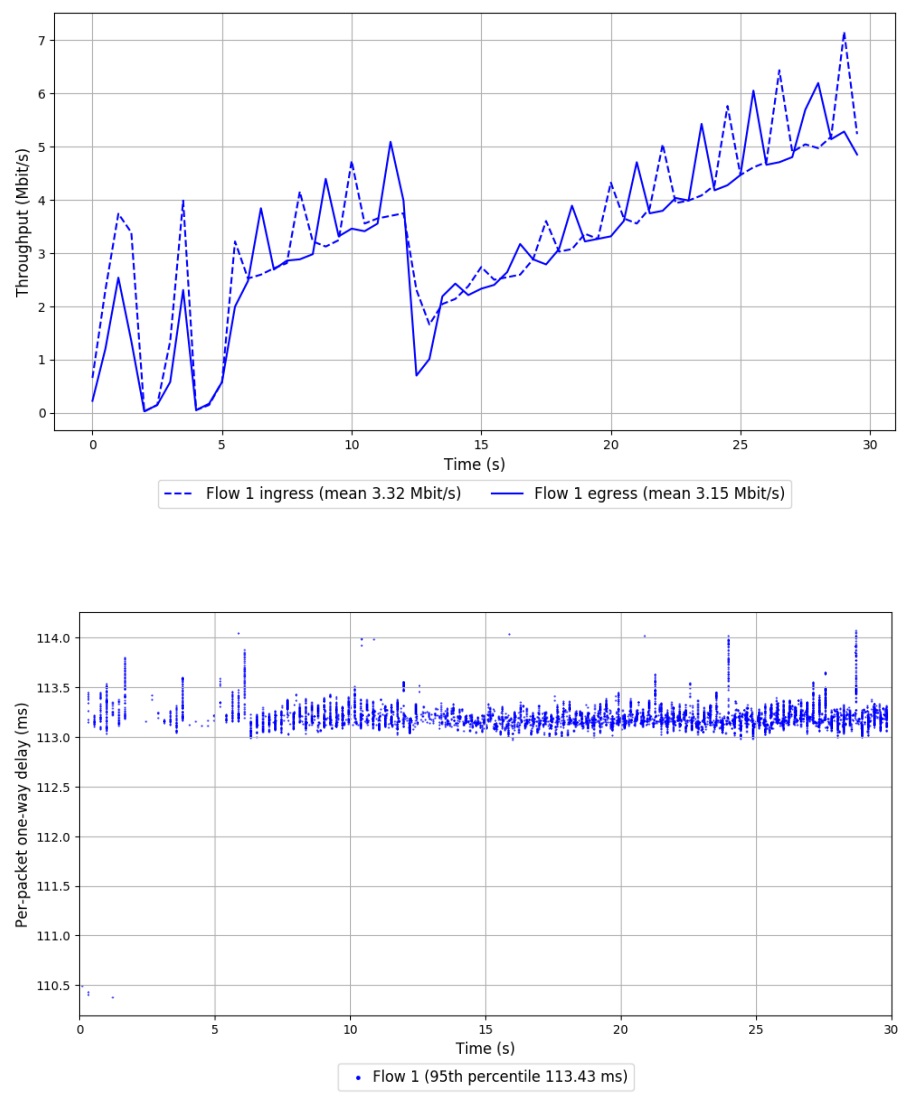
-- Flow 1:

Average throughput: 3.15 Mbit/s

95th percentile per-packet one-way delay: 113.431 ms

Loss rate: 5.76%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-16 20:00:26

End at: 2017-08-16 20:00:56

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 111.771 ms

Loss rate: 1.85%

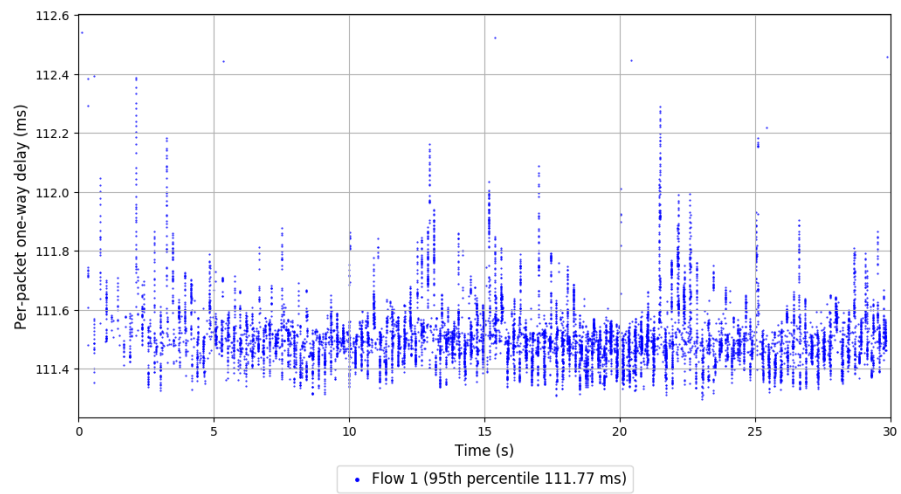
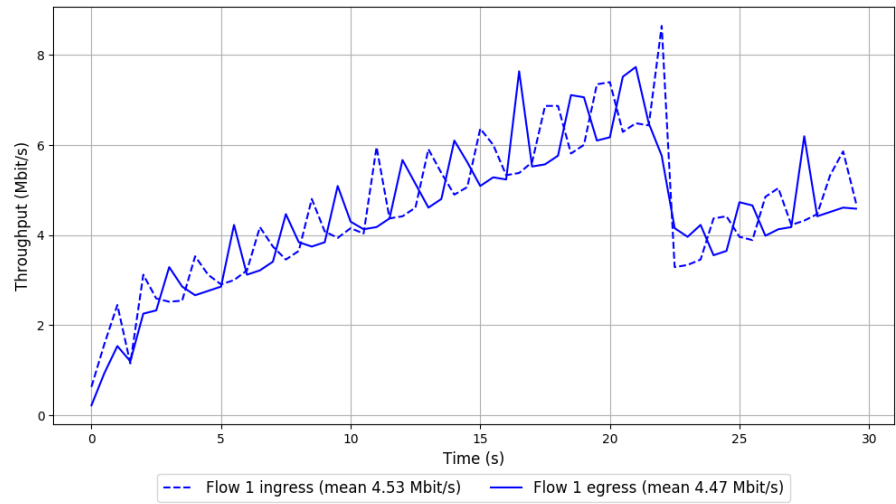
-- Flow 1:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 111.771 ms

Loss rate: 1.85%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-16 20:11:15

End at: 2017-08-16 20:11:45

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 112.725 ms

Loss rate: 2.98%

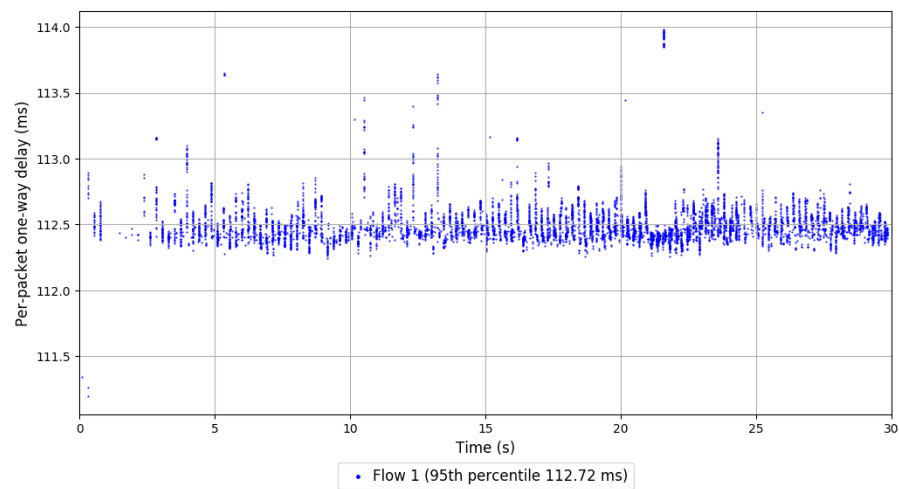
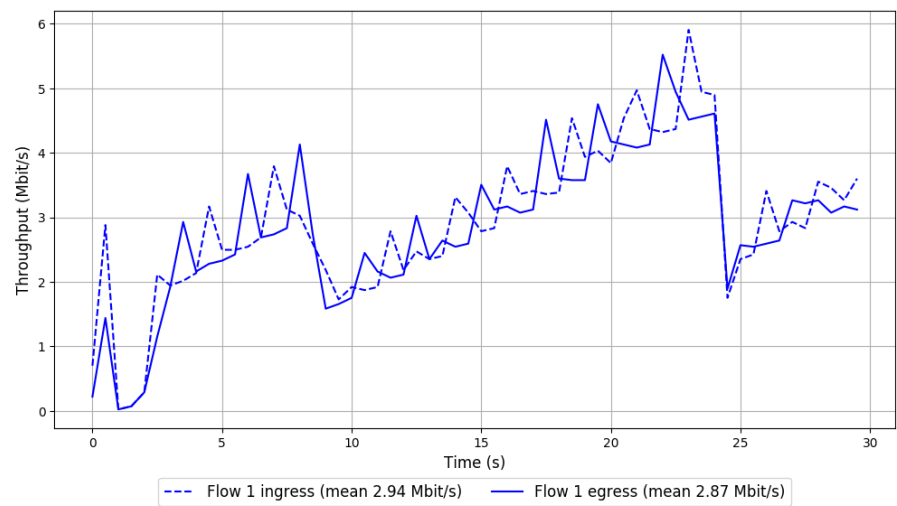
-- Flow 1:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 112.725 ms

Loss rate: 2.98%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-16 18:34:40

End at: 2017-08-16 18:35:10

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.17 Mbit/s

95th percentile per-packet one-way delay: 170.378 ms

Loss rate: 3.76%

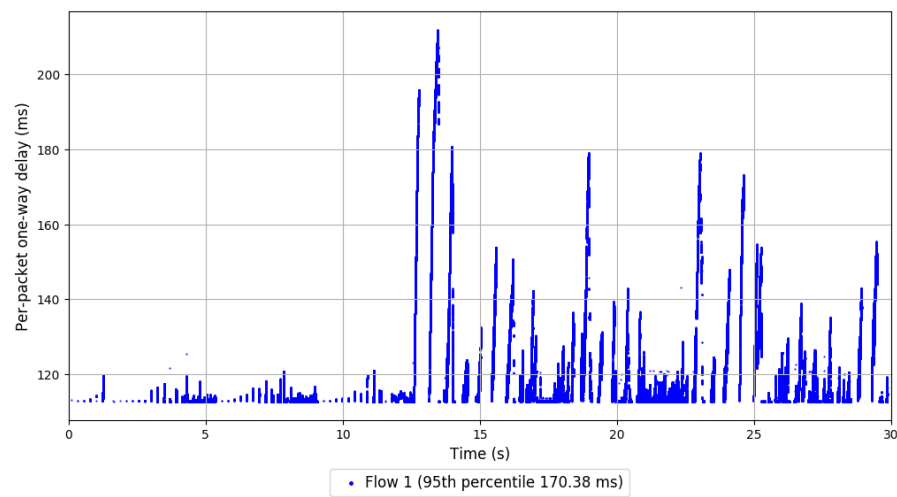
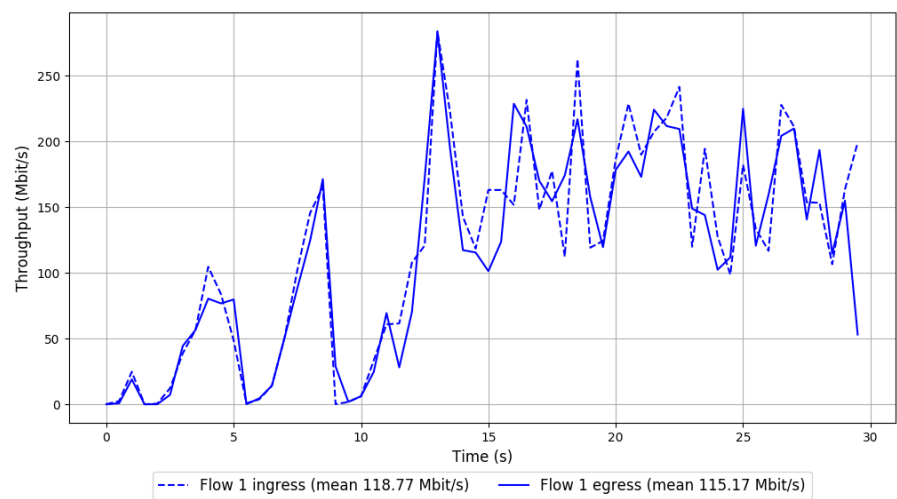
-- Flow 1:

Average throughput: 115.17 Mbit/s

95th percentile per-packet one-way delay: 170.378 ms

Loss rate: 3.76%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-16 18:46:01

End at: 2017-08-16 18:46:31

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.84 Mbit/s

95th percentile per-packet one-way delay: 185.595 ms

Loss rate: 18.75%

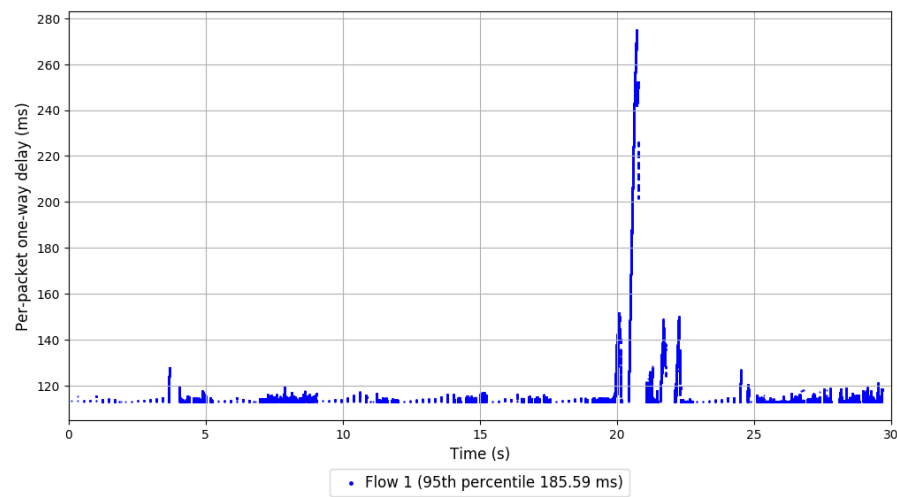
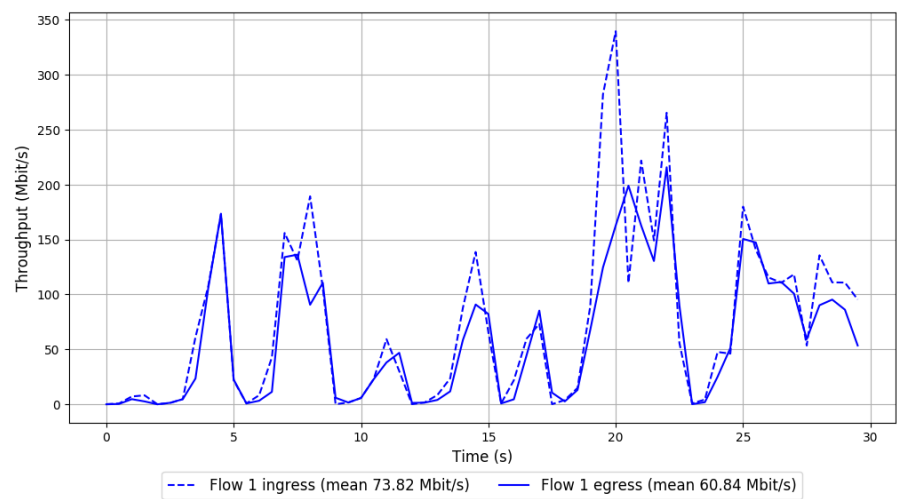
-- Flow 1:

Average throughput: 60.84 Mbit/s

95th percentile per-packet one-way delay: 185.595 ms

Loss rate: 18.75%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-16 18:57:17

End at: 2017-08-16 18:57:47

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.78 Mbit/s

95th percentile per-packet one-way delay: 114.485 ms

Loss rate: 79.14%

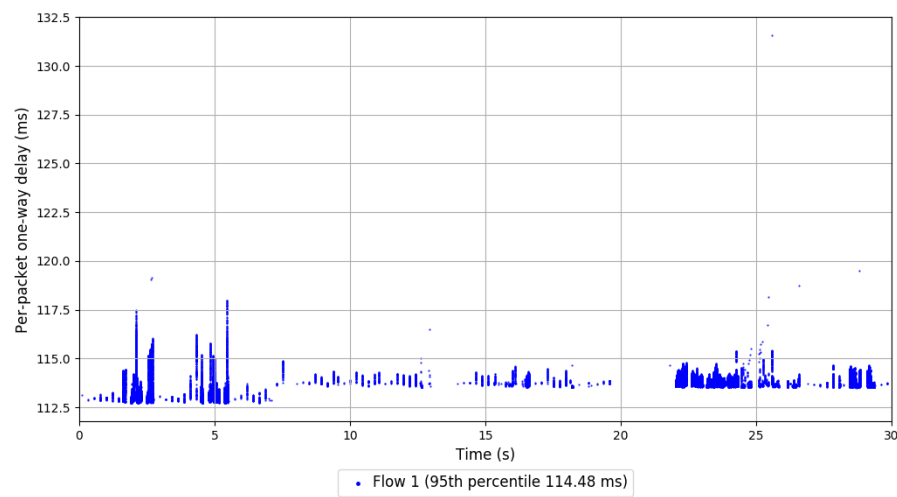
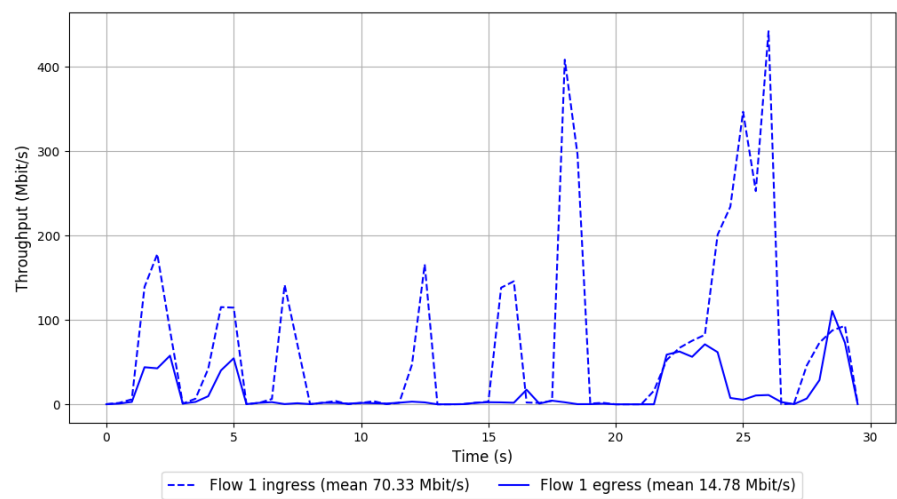
-- Flow 1:

Average throughput: 14.78 Mbit/s

95th percentile per-packet one-way delay: 114.485 ms

Loss rate: 79.14%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-16 19:08:25

End at: 2017-08-16 19:08:55

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.15 Mbit/s

95th percentile per-packet one-way delay: 114.522 ms

Loss rate: 93.69%

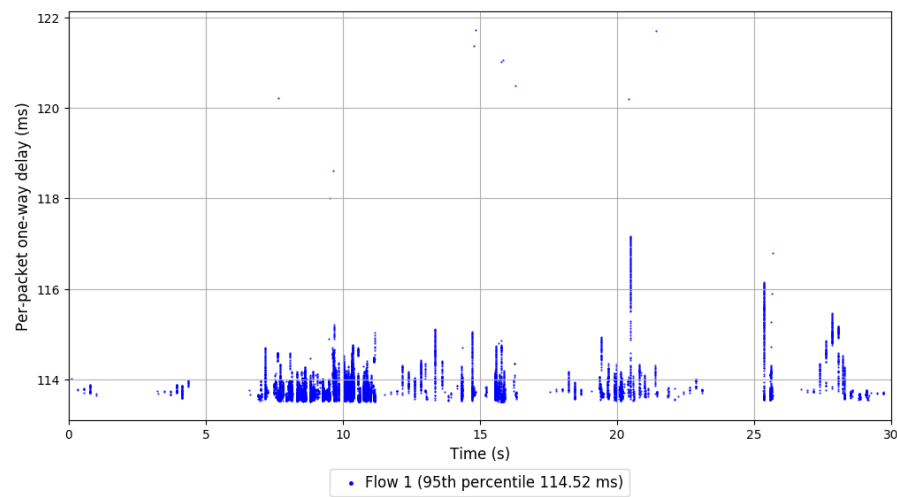
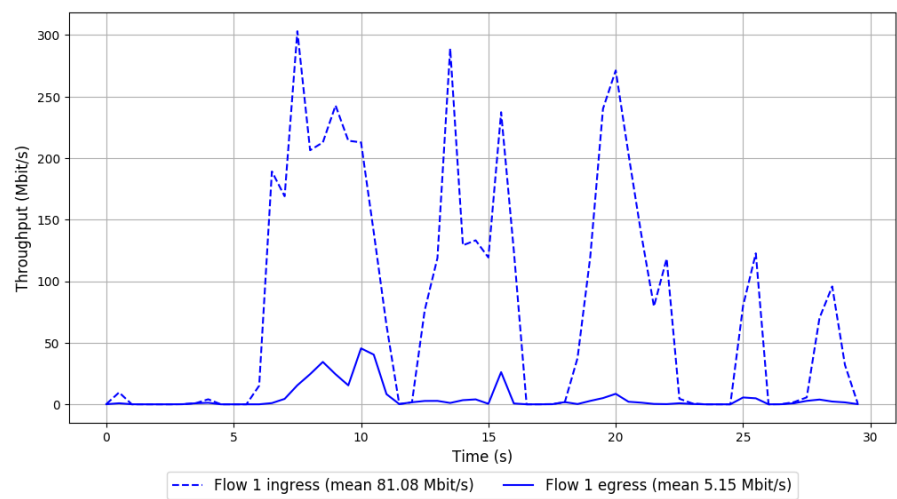
-- Flow 1:

Average throughput: 5.15 Mbit/s

95th percentile per-packet one-way delay: 114.522 ms

Loss rate: 93.69%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-16 19:19:26

End at: 2017-08-16 19:19:56

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 155.47 Mbit/s

95th percentile per-packet one-way delay: 174.665 ms

Loss rate: 8.02%

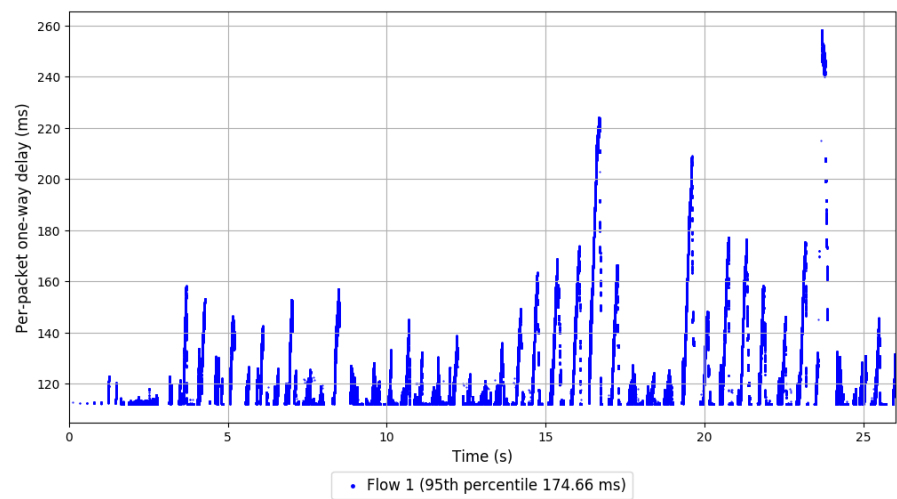
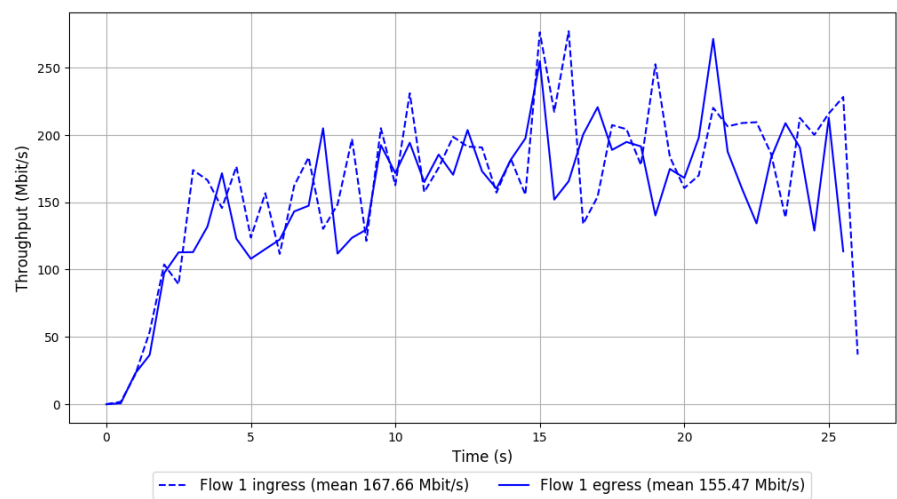
-- Flow 1:

Average throughput: 155.47 Mbit/s

95th percentile per-packet one-way delay: 174.665 ms

Loss rate: 8.02%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-16 19:30:53

End at: 2017-08-16 19:31:23

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.67 Mbit/s

95th percentile per-packet one-way delay: 113.631 ms

Loss rate: 79.47%

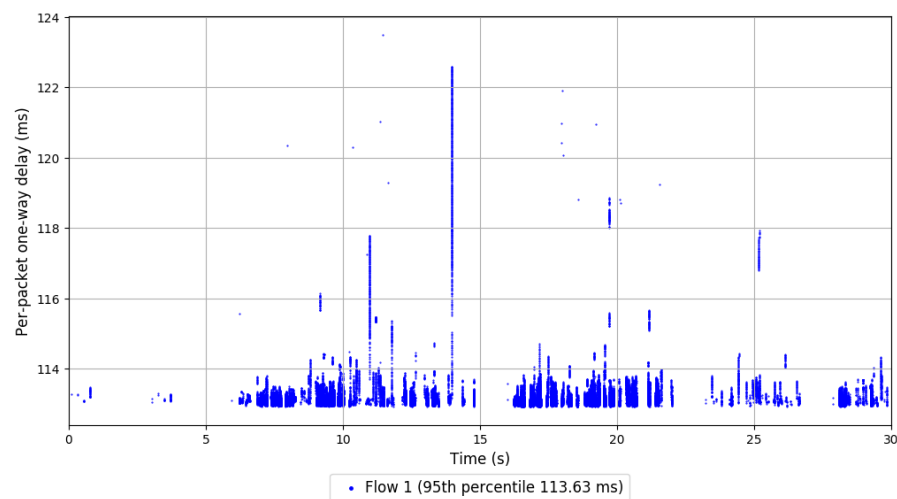
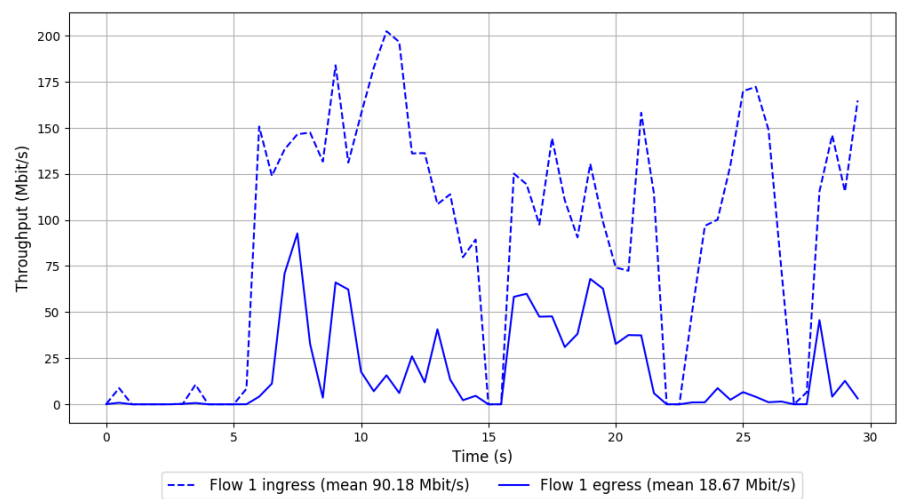
-- Flow 1:

Average throughput: 18.67 Mbit/s

95th percentile per-packet one-way delay: 113.631 ms

Loss rate: 79.47%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-16 19:41:50

End at: 2017-08-16 19:42:20

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.55 Mbit/s

95th percentile per-packet one-way delay: 115.019 ms

Loss rate: 0.55%

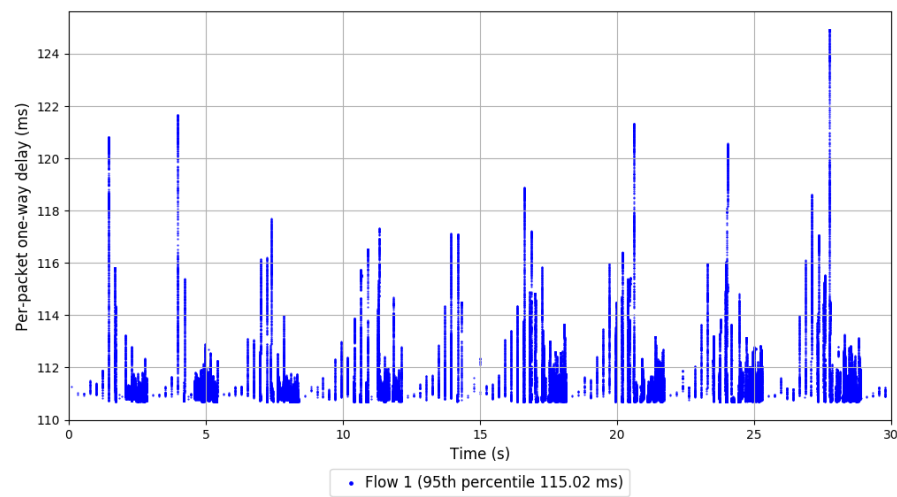
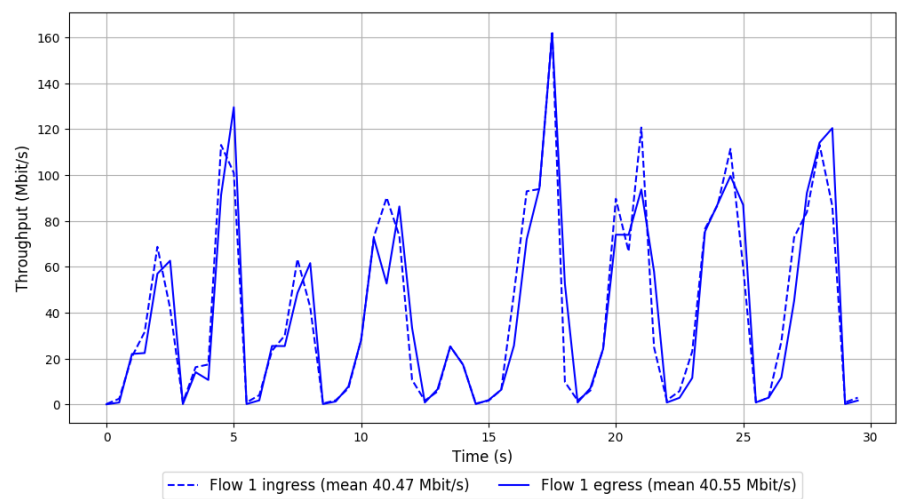
-- Flow 1:

Average throughput: 40.55 Mbit/s

95th percentile per-packet one-way delay: 115.019 ms

Loss rate: 0.55%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-16 19:52:57

End at: 2017-08-16 19:53:27

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 113.926 ms

Loss rate: 88.94%

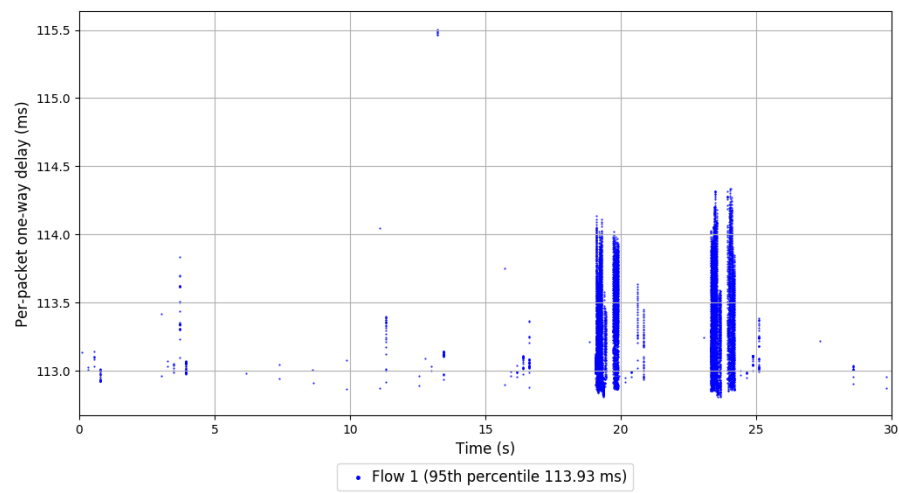
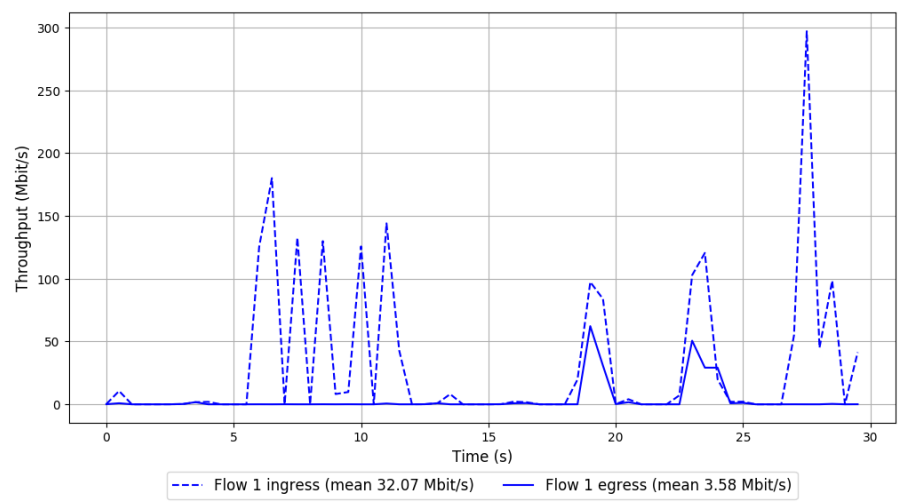
-- Flow 1:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 113.926 ms

Loss rate: 88.94%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

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

End at: 2017-08-16 20:04:26

Below is generated by plot.py at 2017-08-16 23:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.13 Mbit/s

95th percentile per-packet one-way delay: 166.955 ms

Loss rate: 4.66%

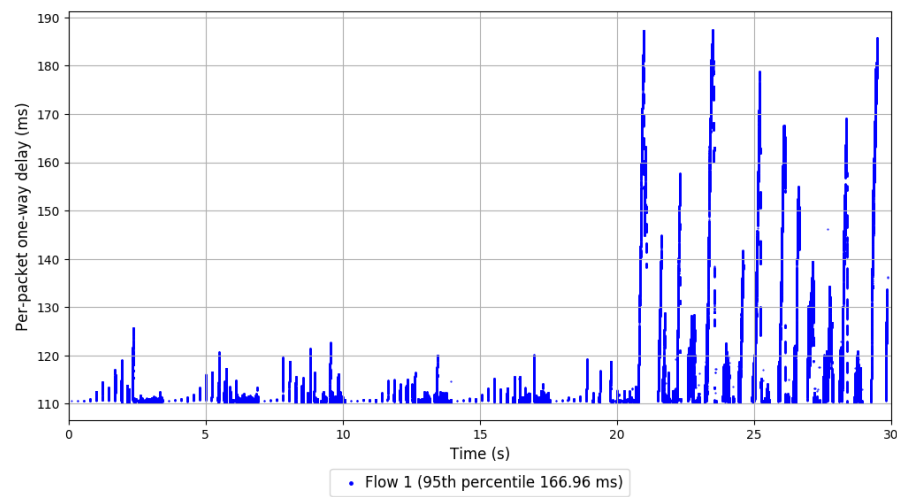
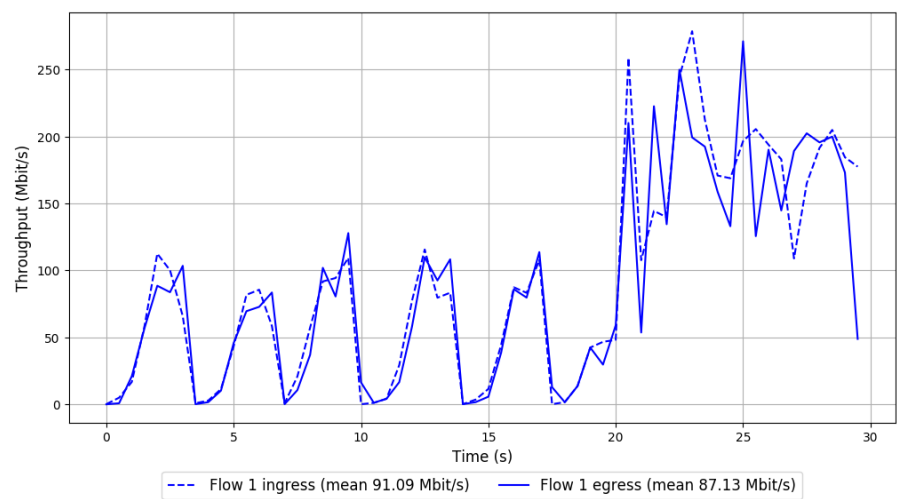
-- Flow 1:

Average throughput: 87.13 Mbit/s

95th percentile per-packet one-way delay: 166.955 ms

Loss rate: 4.66%

Run 9: Report of Verus — Data Link

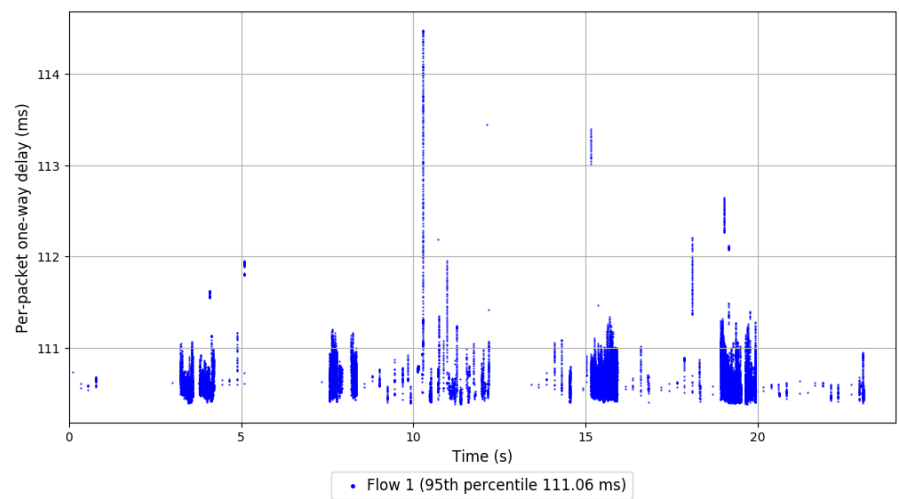
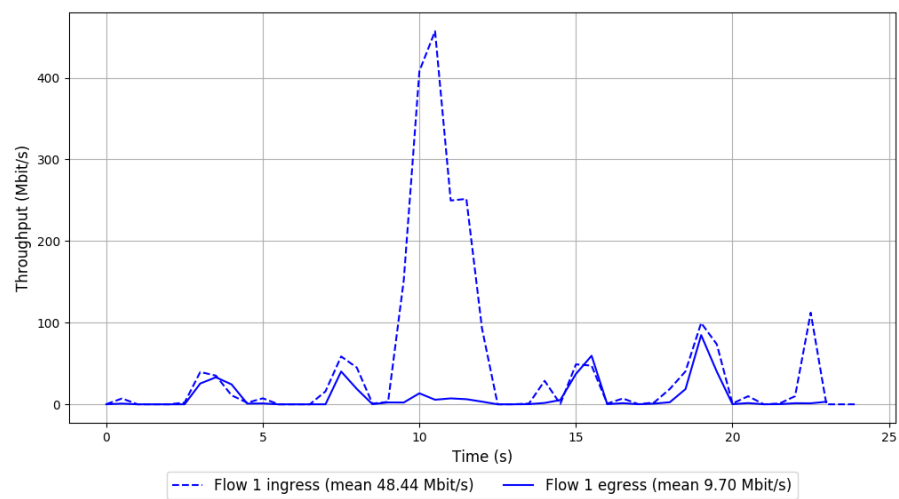


Run 10: Statistics of Verus

Start at: 2017-08-16 20:14:54

End at: 2017-08-16 20:15:24

Run 10: Report of Verus — Data Link

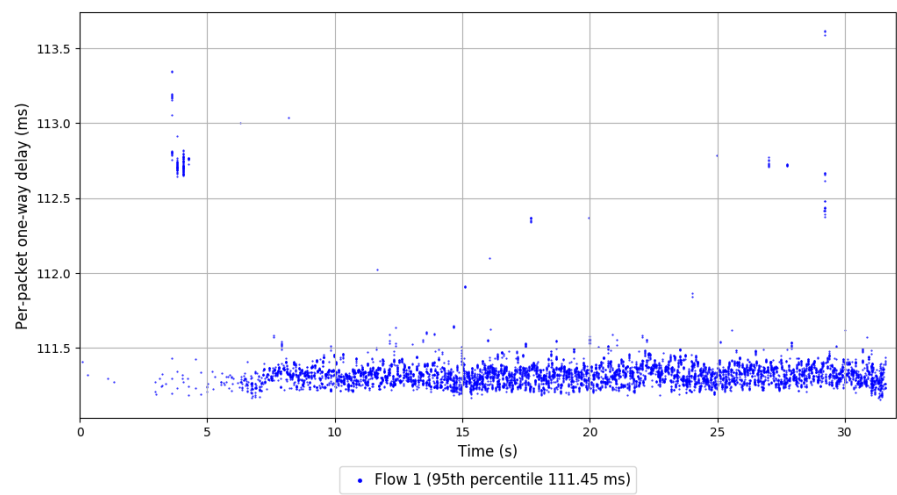
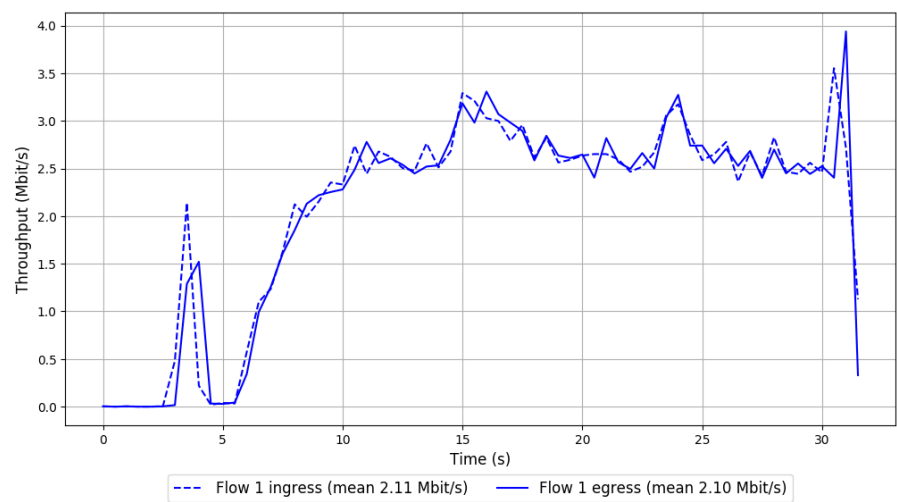


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-16 18:29:40
End at: 2017-08-16 18:30:10

# Below is generated by plot.py at 2017-08-16 23:09:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 111.452 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 111.452 ms
Loss rate: 0.96%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-16 18:40:59

End at: 2017-08-16 18:41:29

Below is generated by plot.py at 2017-08-16 23:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 110.738 ms

Loss rate: 0.77%

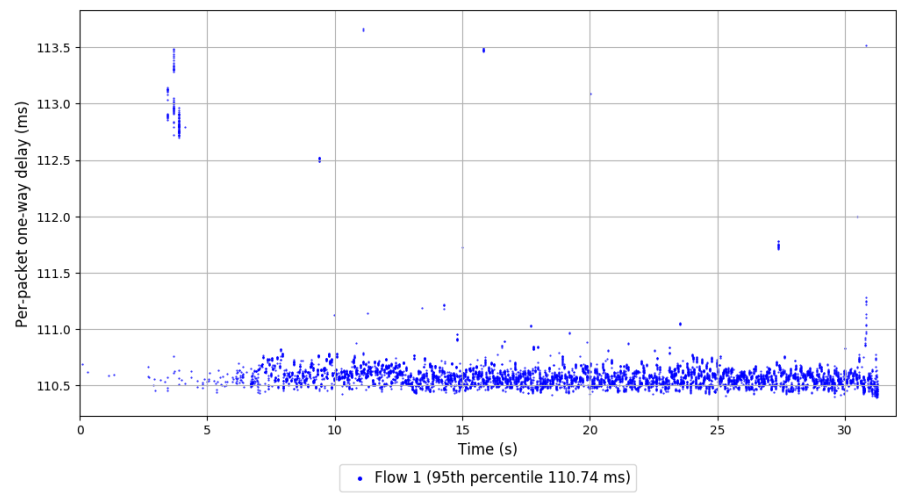
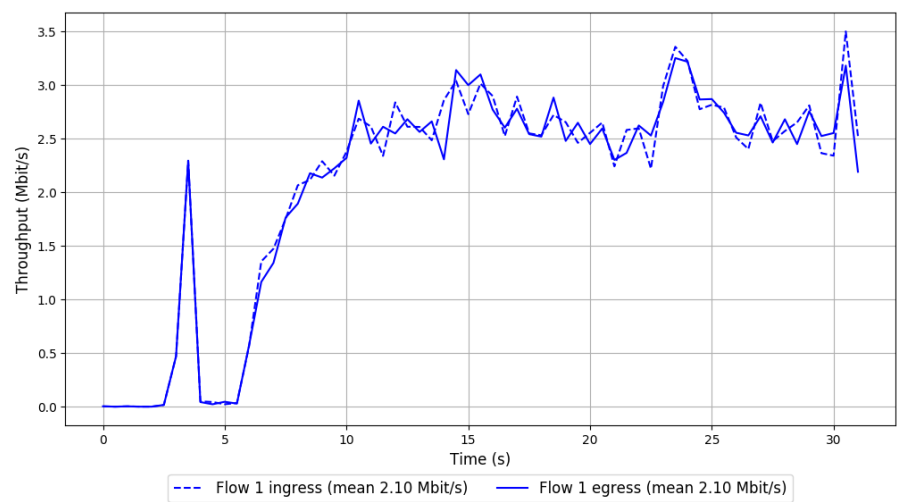
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 110.738 ms

Loss rate: 0.77%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-16 18:52:14

End at: 2017-08-16 18:52:44

Below is generated by plot.py at 2017-08-16 23:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.379 ms

Loss rate: 0.88%

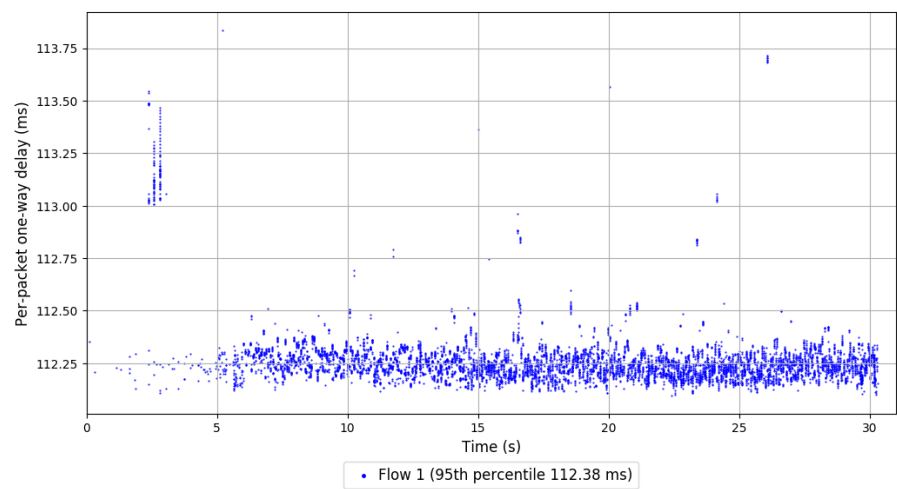
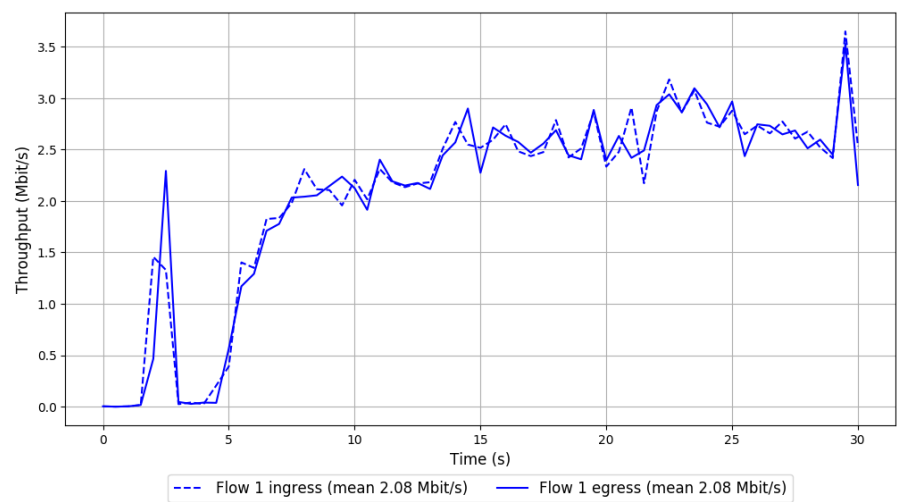
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.379 ms

Loss rate: 0.88%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-16 19:03:19

End at: 2017-08-16 19:03:49

Below is generated by plot.py at 2017-08-16 23:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.354 ms

Loss rate: 0.97%

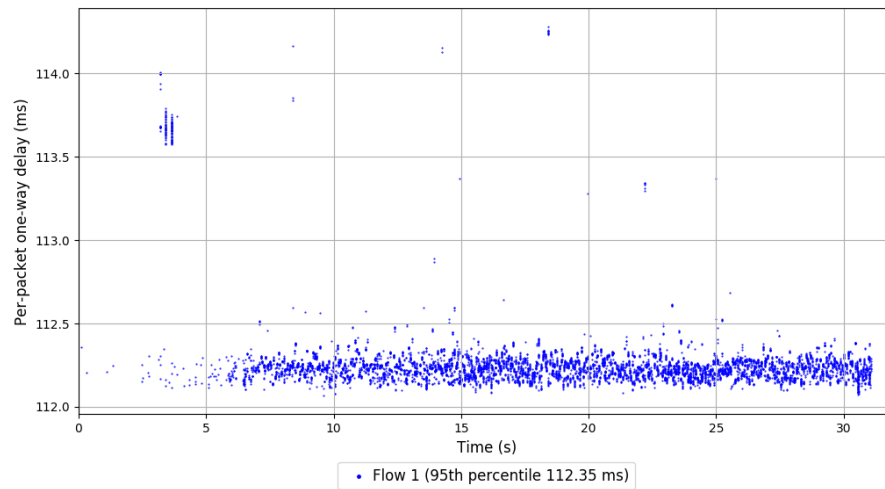
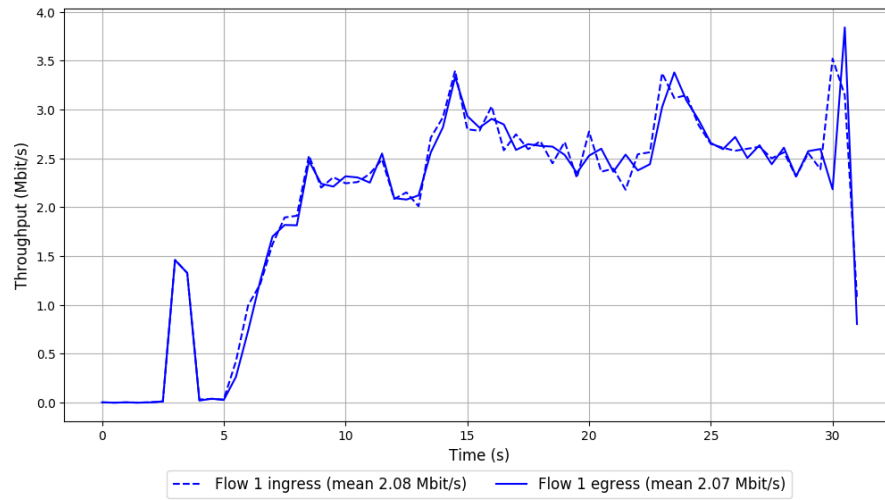
-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.354 ms

Loss rate: 0.97%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-16 19:14:23

End at: 2017-08-16 19:14:53

Below is generated by plot.py at 2017-08-16 23:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 112.535 ms

Loss rate: 0.99%

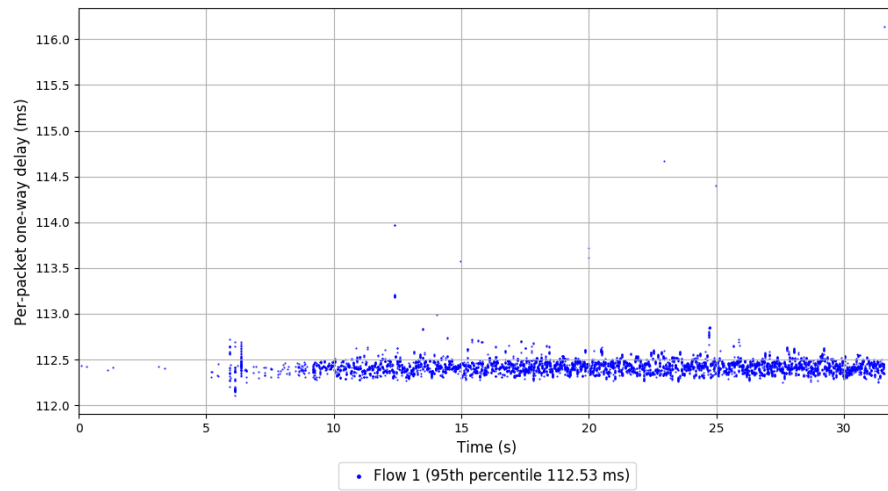
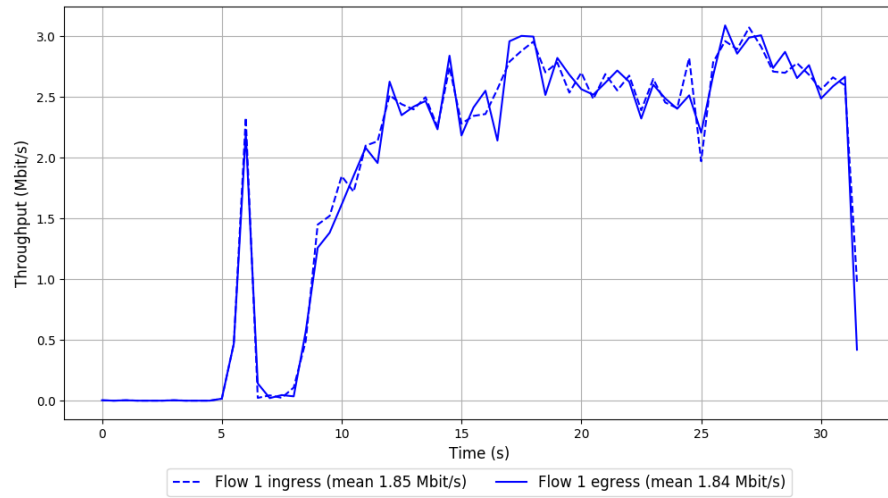
-- Flow 1:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 112.535 ms

Loss rate: 0.99%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-16 19:25:52

End at: 2017-08-16 19:26:22

Below is generated by plot.py at 2017-08-16 23:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 111.878 ms

Loss rate: 1.13%

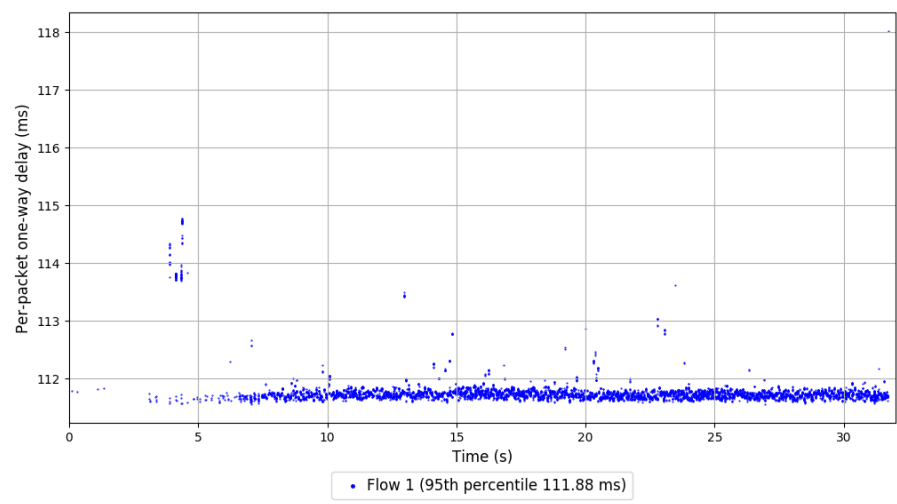
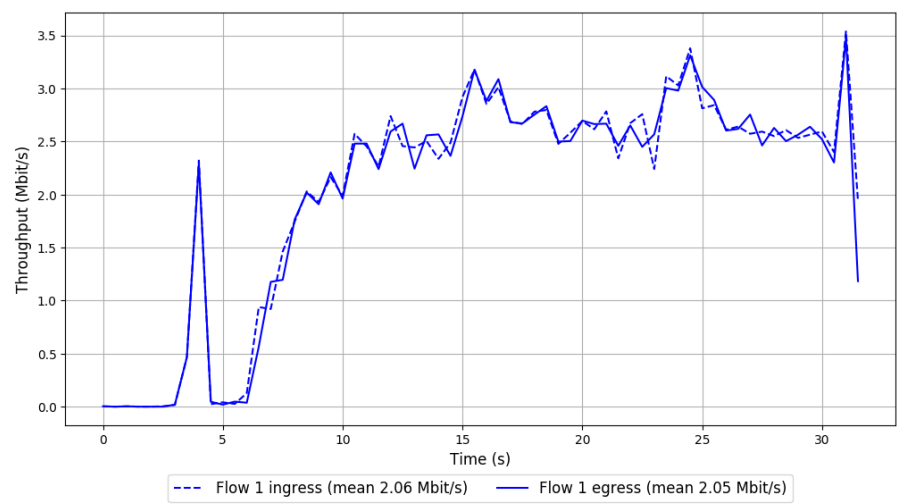
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 111.878 ms

Loss rate: 1.13%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-16 19:36:50

End at: 2017-08-16 19:37:20

Below is generated by plot.py at 2017-08-16 23:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.823 ms

Loss rate: 1.25%

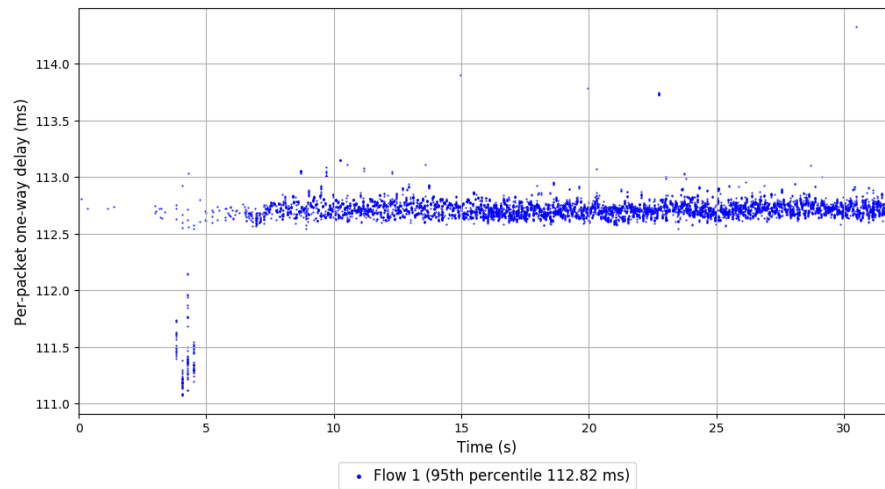
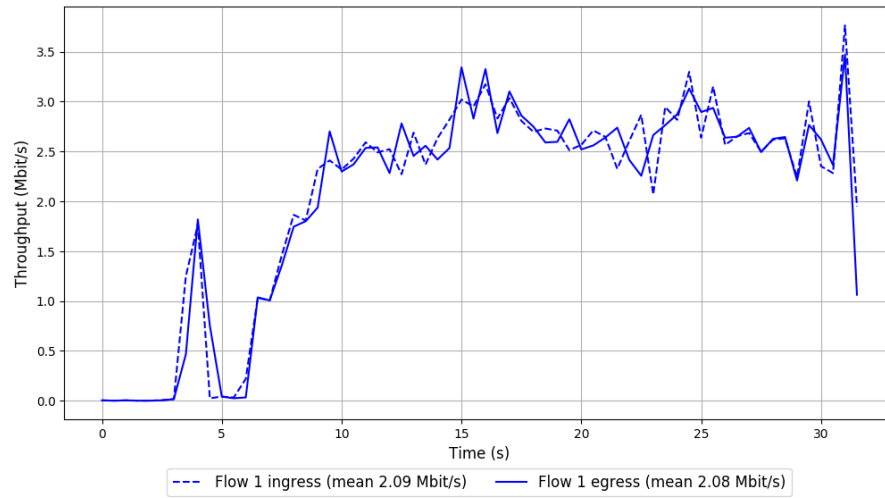
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.823 ms

Loss rate: 1.25%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-16 19:47:55

End at: 2017-08-16 19:48:25

Below is generated by plot.py at 2017-08-16 23:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.831 ms

Loss rate: 0.96%

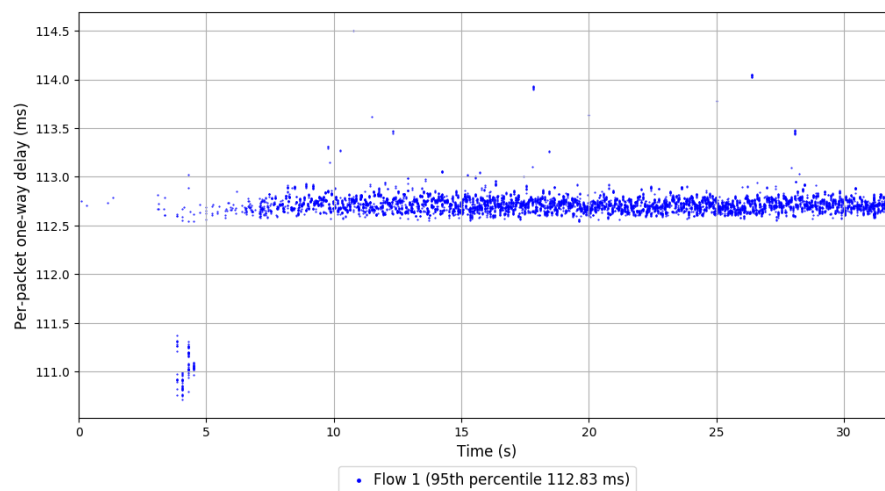
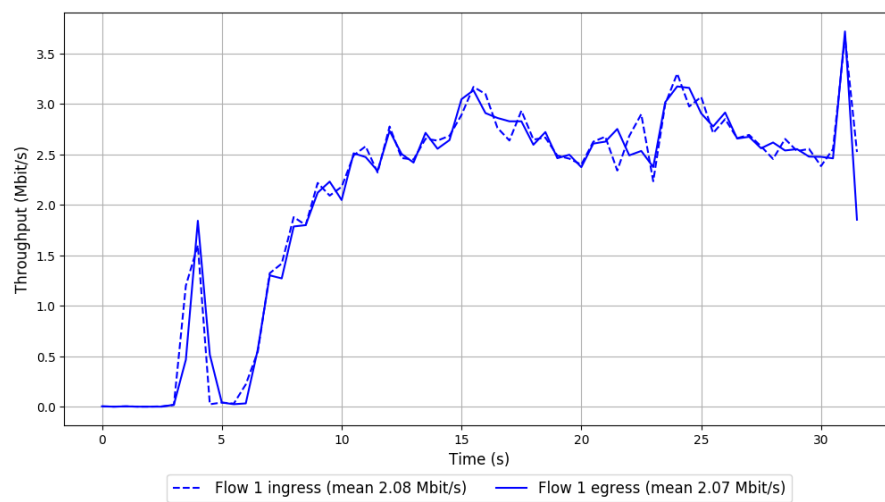
-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.831 ms

Loss rate: 0.96%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-16 19:59:04

End at: 2017-08-16 19:59:34

Below is generated by plot.py at 2017-08-16 23:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 110.663 ms

Loss rate: 1.11%

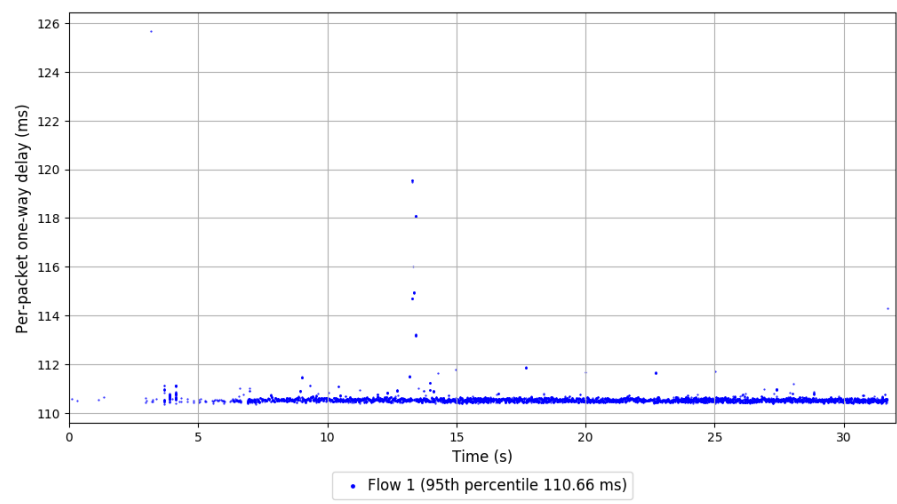
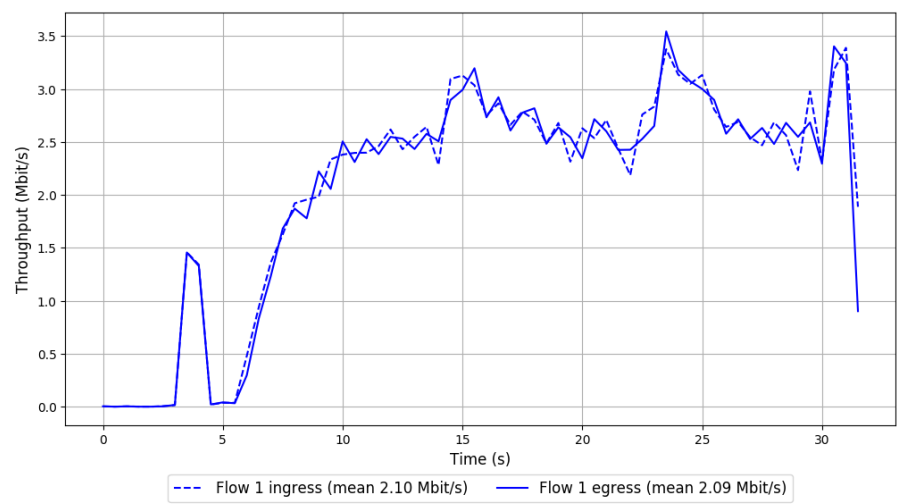
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 110.663 ms

Loss rate: 1.11%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-16 20:09:54

End at: 2017-08-16 20:10:24

Below is generated by plot.py at 2017-08-16 23:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 113.635 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 113.635 ms

Loss rate: 0.85%

Run 10: Report of WebRTC media — Data Link

