

Pantheon Report

Generated at 2017-08-11 10:09:53 (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.

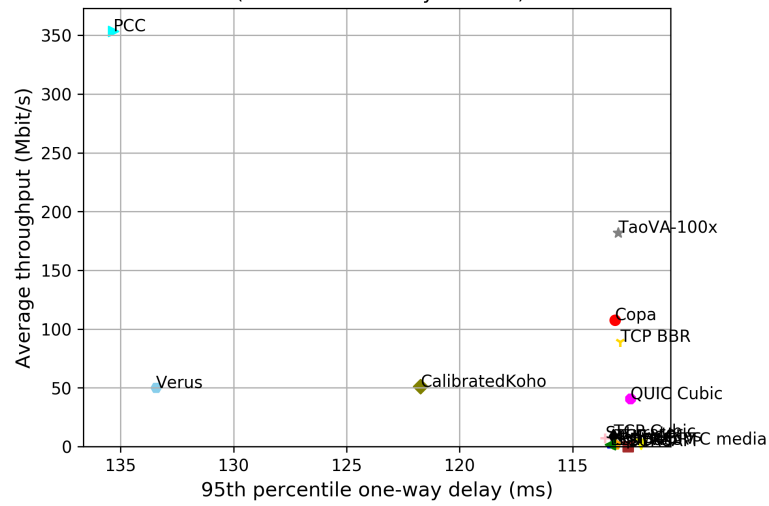
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

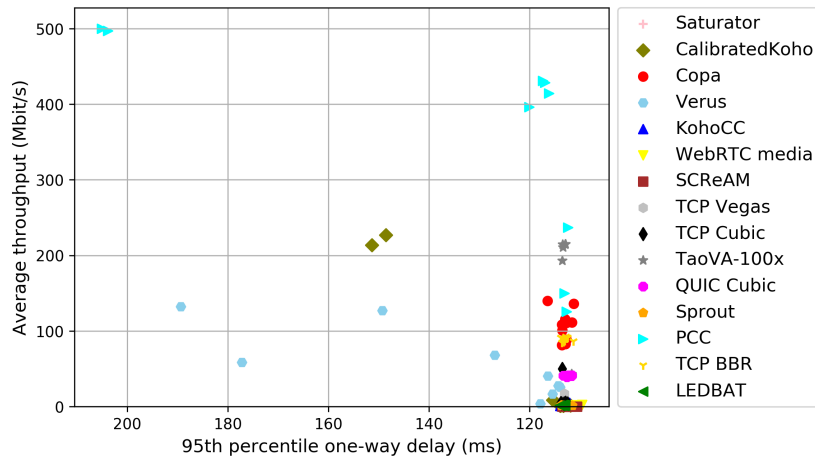
Git summary:

```
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-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	89.05	112.90	1.39
CalibratedKoho	9	51.06	121.73	52.63
Copa	10	107.67	113.13	0.83
TCP Cubic	10	8.84	113.19	2.62
KohoCC	10	3.39	113.24	33.77
LEDBAT	10	1.64	113.33	1.84
PCC	9	353.31	135.31	6.32
QUIC Cubic	10	40.76	112.44	0.60
Saturator	4	6.96	113.56	21.01
SCReAM	10	0.20	112.54	0.72
Sprout	9	1.64	113.11	2.43
TaoVA-100x	6	181.85	112.99	6.41
TCP Vegas	10	4.50	113.13	2.46
Verus	10	50.11	133.43	50.16
WebRTC media	10	2.06	111.97	0.96

Run 1: Statistics of TCP BBR

Start at: 2017-08-11 05:37:10

End at: 2017-08-11 05:37:40

Below is generated by plot.py at 2017-08-11 09:52:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.61 Mbit/s

95th percentile per-packet one-way delay: 112.837 ms

Loss rate: 0.86%

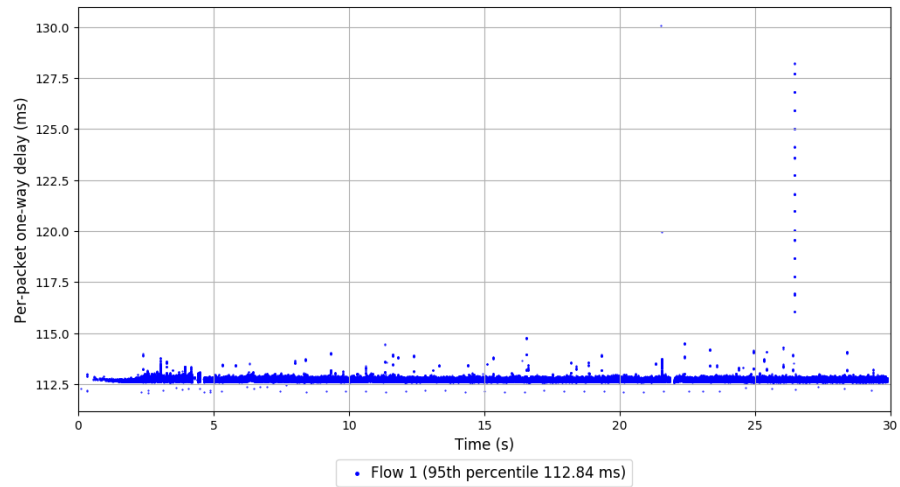
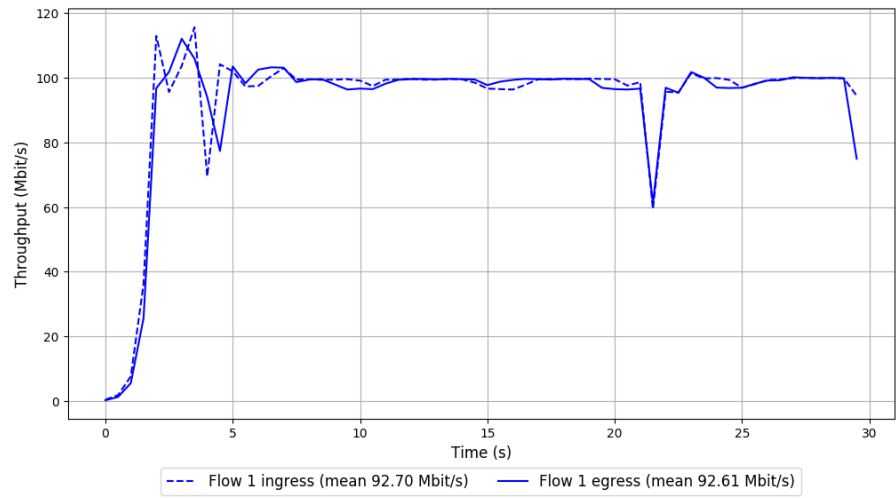
-- Flow 1:

Average throughput: 92.61 Mbit/s

95th percentile per-packet one-way delay: 112.837 ms

Loss rate: 0.86%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-11 05:48:17

End at: 2017-08-11 05:48:47

Below is generated by plot.py at 2017-08-11 09:52:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.30 Mbit/s

95th percentile per-packet one-way delay: 112.826 ms

Loss rate: 0.91%

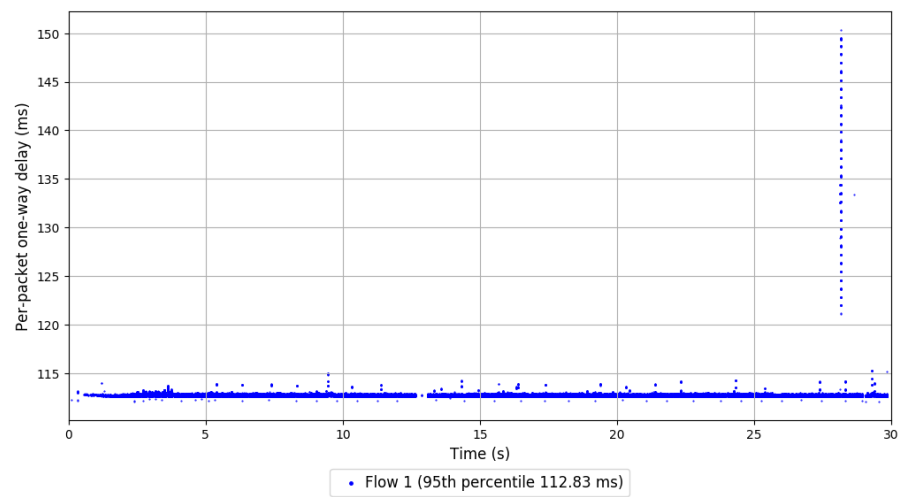
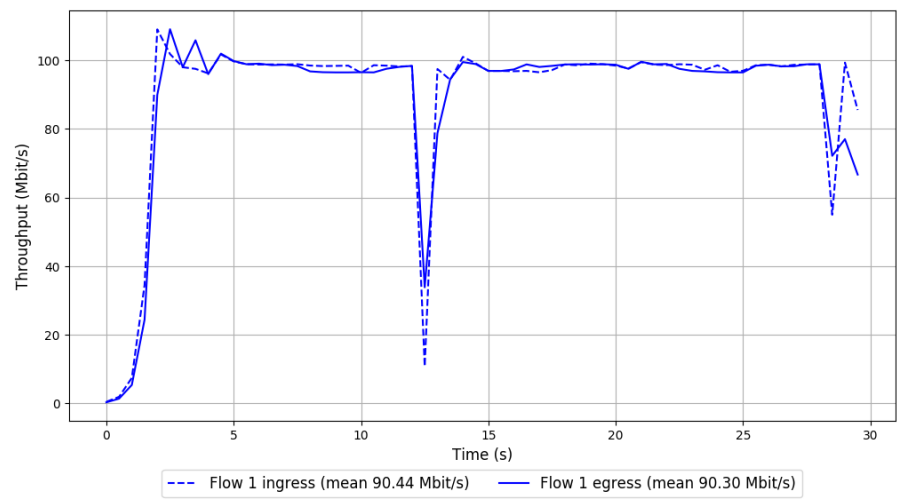
-- Flow 1:

Average throughput: 90.30 Mbit/s

95th percentile per-packet one-way delay: 112.826 ms

Loss rate: 0.91%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-11 05:59:39

End at: 2017-08-11 06:00:09

Below is generated by plot.py at 2017-08-11 09:52:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.44 Mbit/s

95th percentile per-packet one-way delay: 111.333 ms

Loss rate: 1.69%

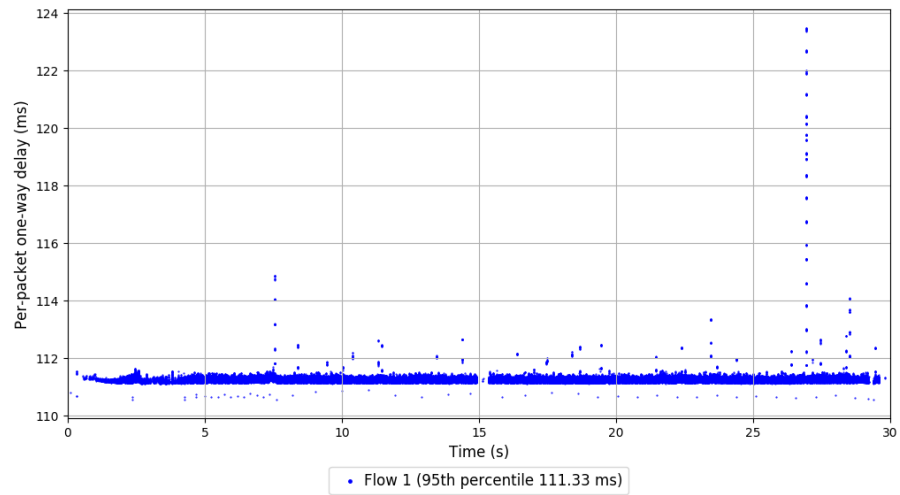
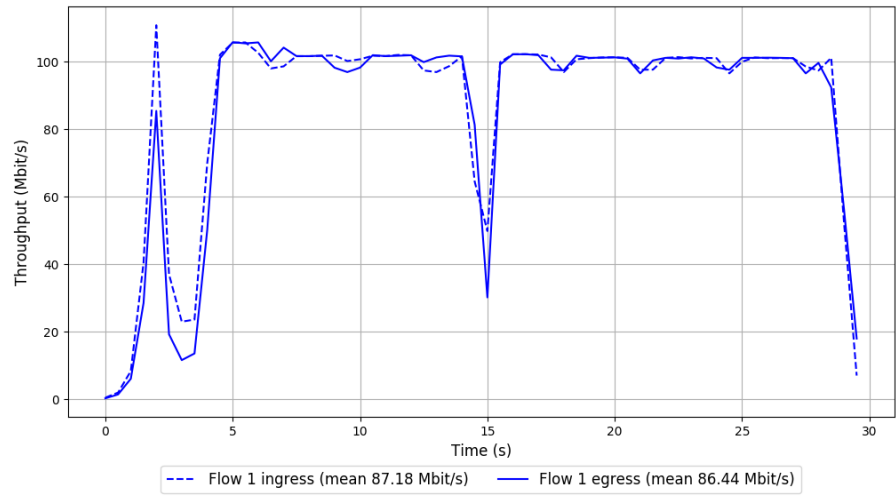
-- Flow 1:

Average throughput: 86.44 Mbit/s

95th percentile per-packet one-way delay: 111.333 ms

Loss rate: 1.69%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-11 06:10:41

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

Below is generated by plot.py at 2017-08-11 09:52:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.26 Mbit/s

95th percentile per-packet one-way delay: 113.030 ms

Loss rate: 1.98%

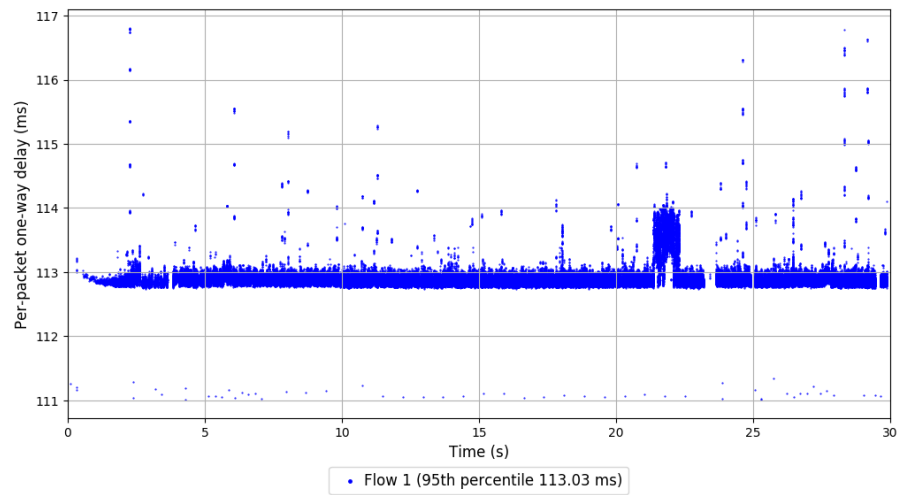
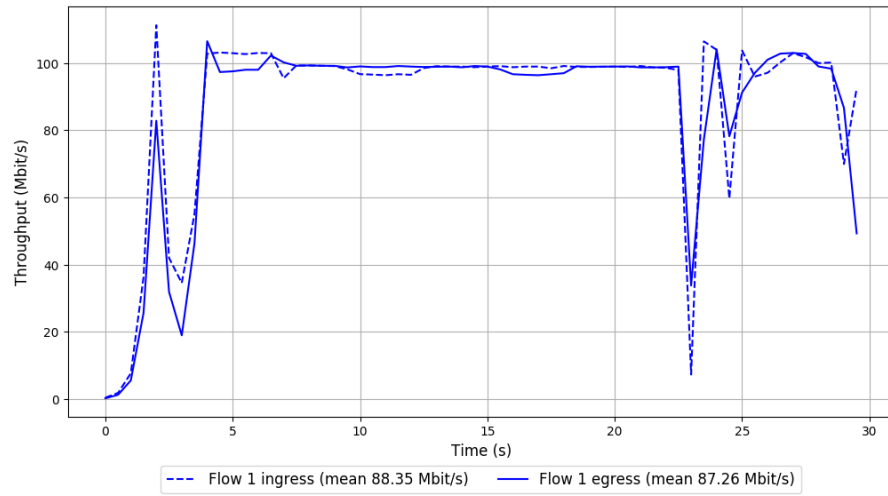
-- Flow 1:

Average throughput: 87.26 Mbit/s

95th percentile per-packet one-way delay: 113.030 ms

Loss rate: 1.98%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-11 06:21:51

End at: 2017-08-11 06:22:21

Below is generated by plot.py at 2017-08-11 09:52:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.81 Mbit/s

95th percentile per-packet one-way delay: 113.250 ms

Loss rate: 2.34%

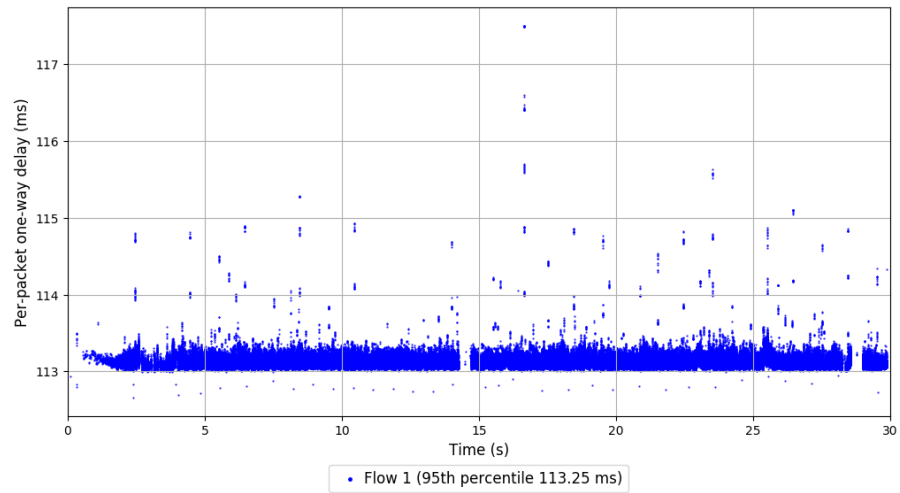
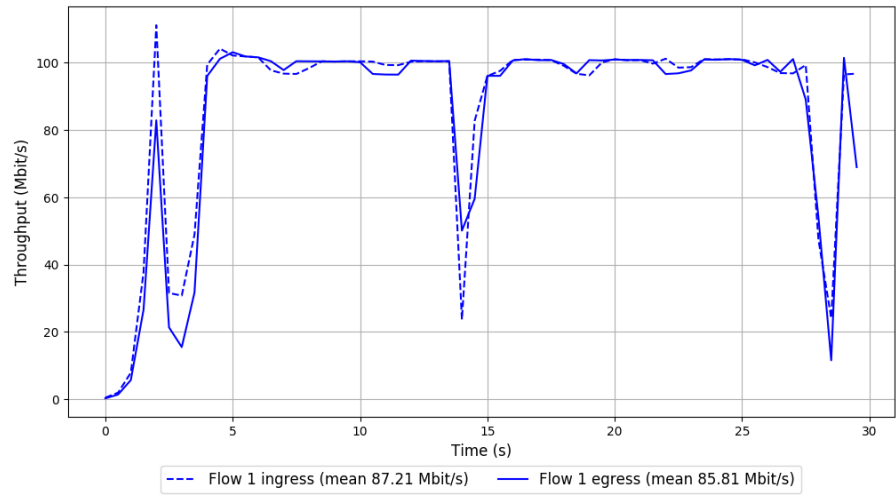
-- Flow 1:

Average throughput: 85.81 Mbit/s

95th percentile per-packet one-way delay: 113.250 ms

Loss rate: 2.34%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-11 06:33:00

End at: 2017-08-11 06:33:30

Below is generated by plot.py at 2017-08-11 09:52:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.25 Mbit/s

95th percentile per-packet one-way delay: 112.591 ms

Loss rate: 1.21%

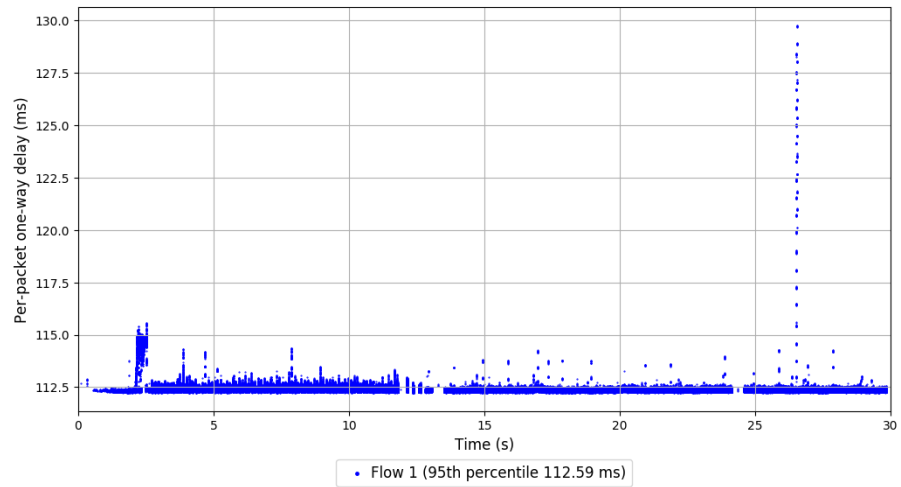
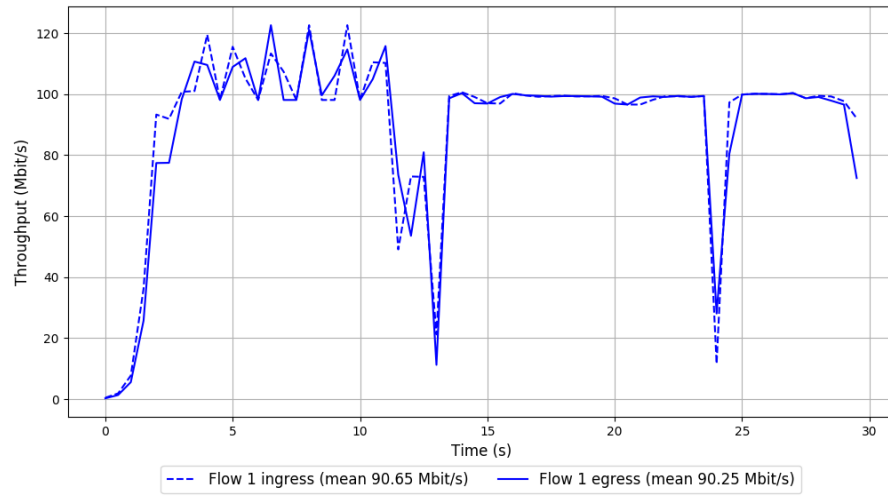
-- Flow 1:

Average throughput: 90.25 Mbit/s

95th percentile per-packet one-way delay: 112.591 ms

Loss rate: 1.21%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-11 06:44:27

End at: 2017-08-11 06:44:57

Below is generated by plot.py at 2017-08-11 09:53:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.58 Mbit/s

95th percentile per-packet one-way delay: 112.453 ms

Loss rate: 0.88%

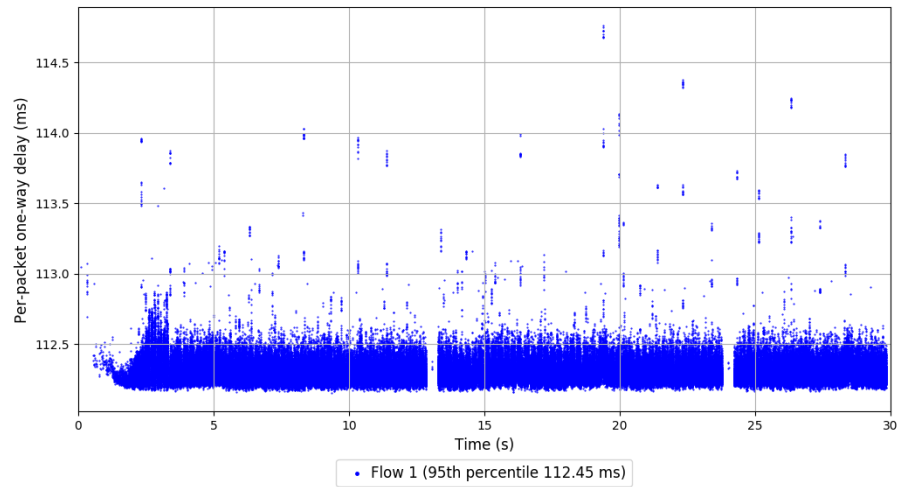
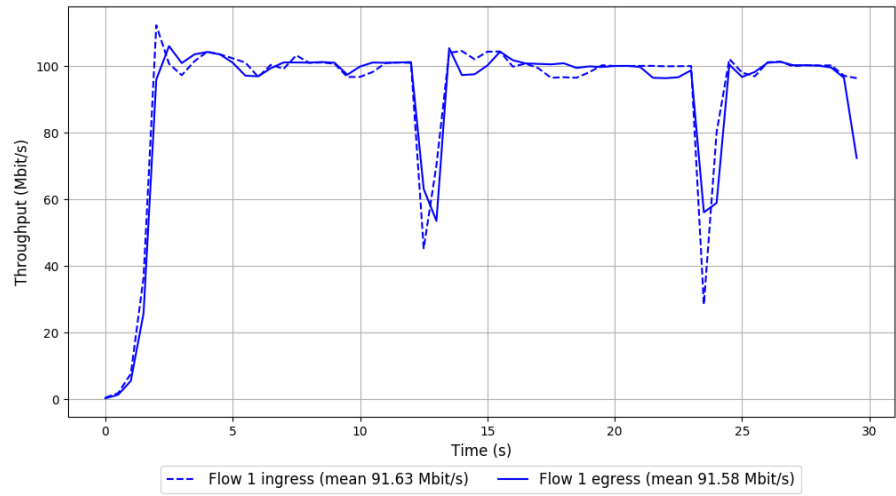
-- Flow 1:

Average throughput: 91.58 Mbit/s

95th percentile per-packet one-way delay: 112.453 ms

Loss rate: 0.88%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-11 06:55:33

End at: 2017-08-11 06:56:03

Below is generated by plot.py at 2017-08-11 09:53:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.84 Mbit/s

95th percentile per-packet one-way delay: 113.280 ms

Loss rate: 0.99%

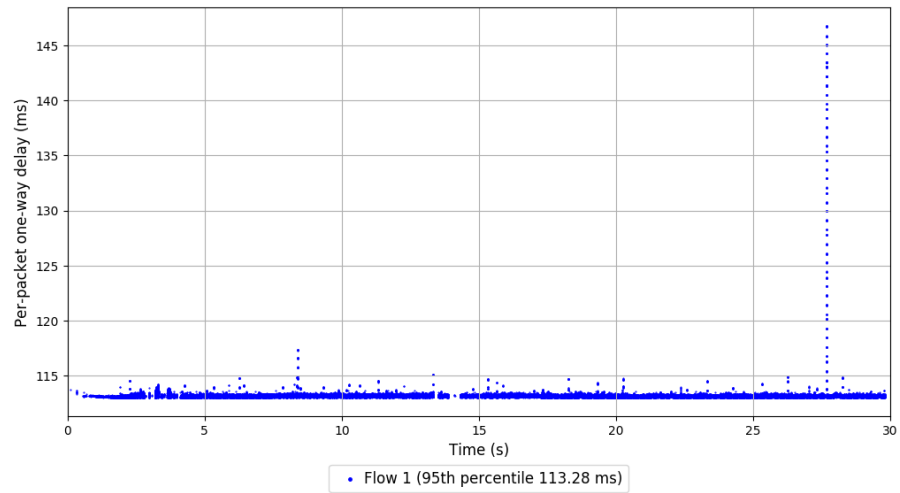
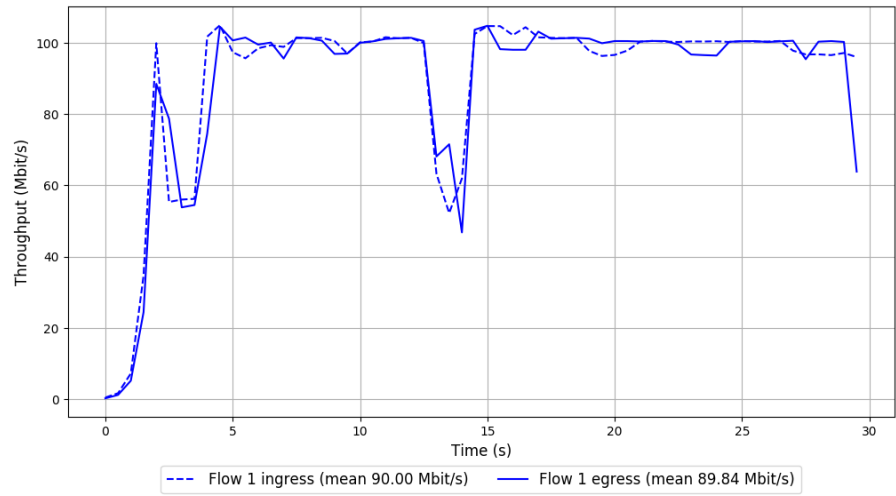
-- Flow 1:

Average throughput: 89.84 Mbit/s

95th percentile per-packet one-way delay: 113.280 ms

Loss rate: 0.99%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-11 07:06:40

End at: 2017-08-11 07:07:10

Below is generated by plot.py at 2017-08-11 09:53:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.45 Mbit/s

95th percentile per-packet one-way delay: 113.801 ms

Loss rate: 0.83%

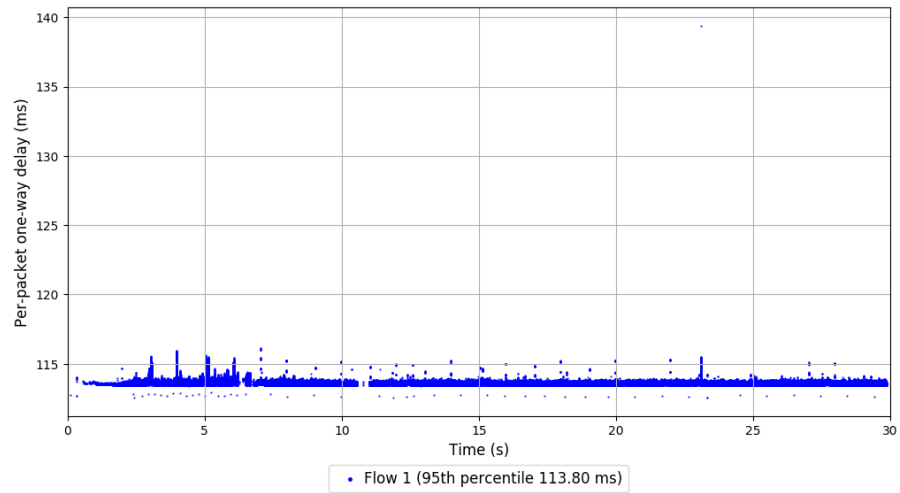
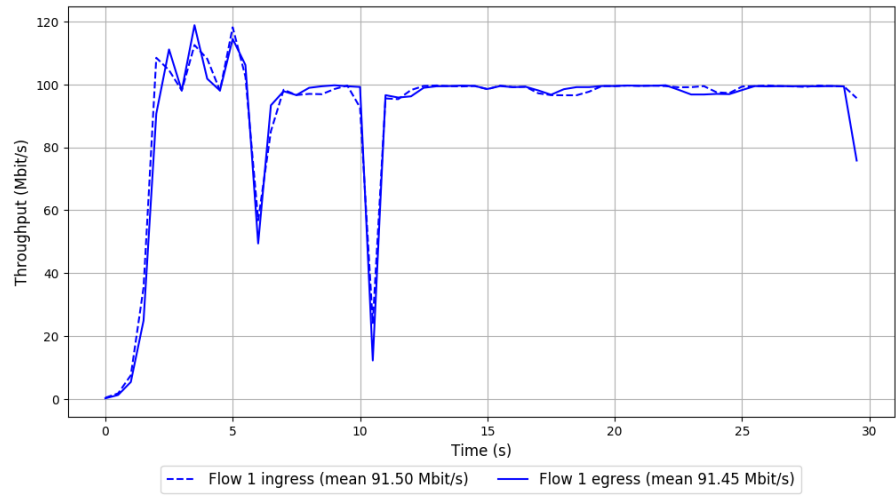
-- Flow 1:

Average throughput: 91.45 Mbit/s

95th percentile per-packet one-way delay: 113.801 ms

Loss rate: 0.83%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-11 07:17:34

End at: 2017-08-11 07:18:04

Below is generated by plot.py at 2017-08-11 09:53:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.96 Mbit/s

95th percentile per-packet one-way delay: 113.614 ms

Loss rate: 2.24%

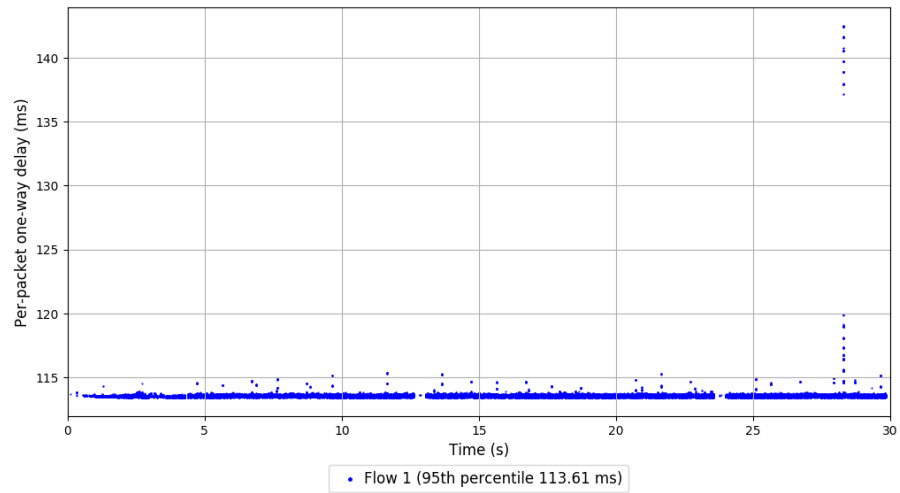
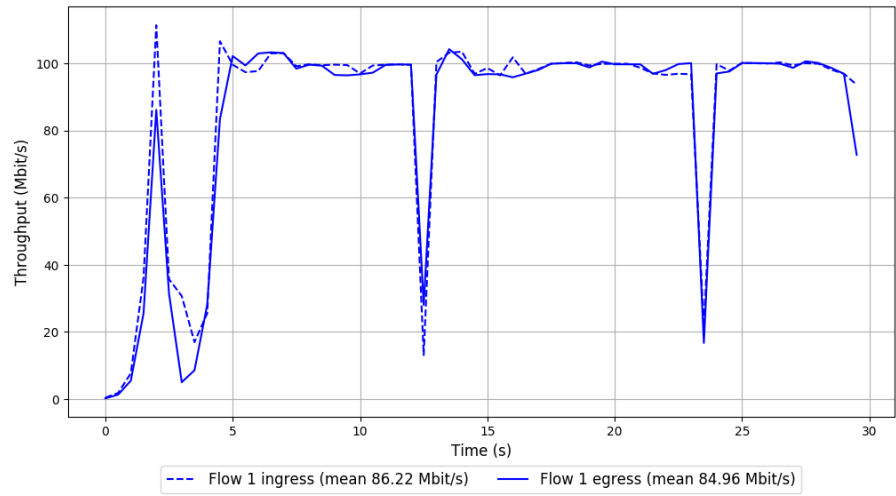
-- Flow 1:

Average throughput: 84.96 Mbit/s

95th percentile per-packet one-way delay: 113.614 ms

Loss rate: 2.24%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-11 05:33:28

End at: 2017-08-11 05:33:58

Below is generated by plot.py at 2017-08-11 09:54:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.65 Mbit/s

95th percentile per-packet one-way delay: 151.374 ms

Loss rate: 5.29%

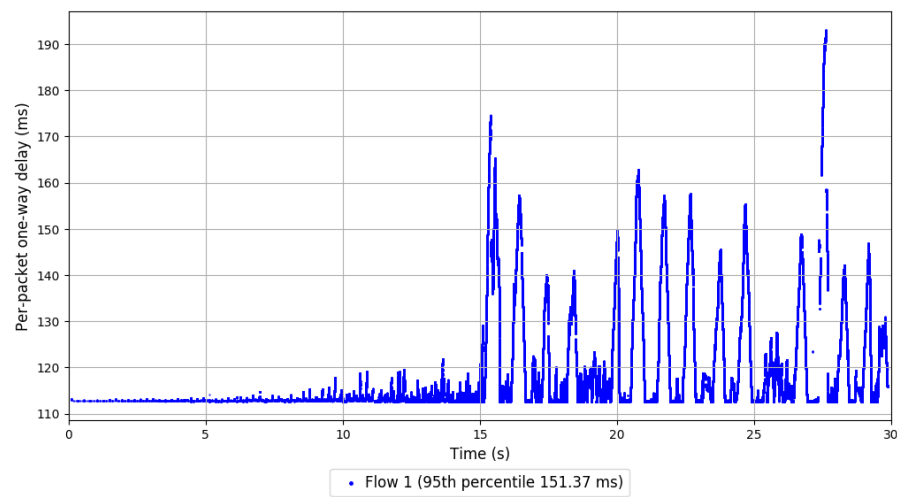
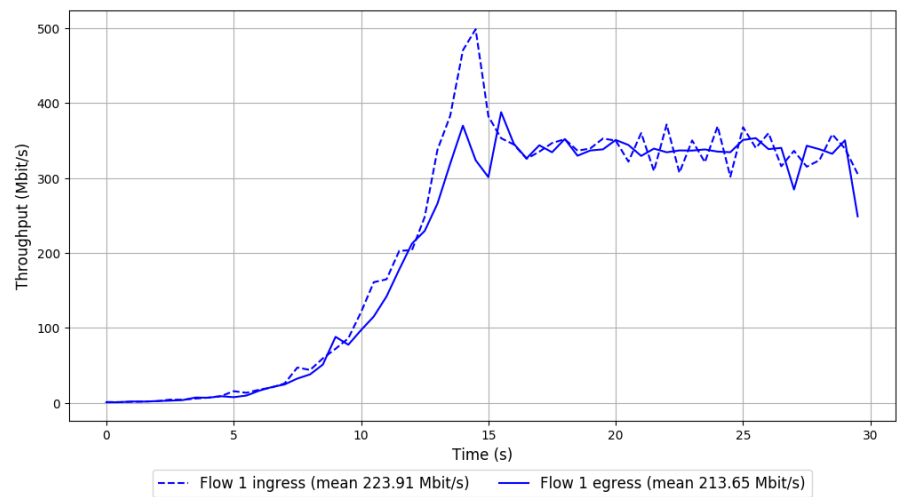
-- Flow 1:

Average throughput: 213.65 Mbit/s

95th percentile per-packet one-way delay: 151.374 ms

Loss rate: 5.29%

Run 1: Report of CalibratedKoho — Data Link

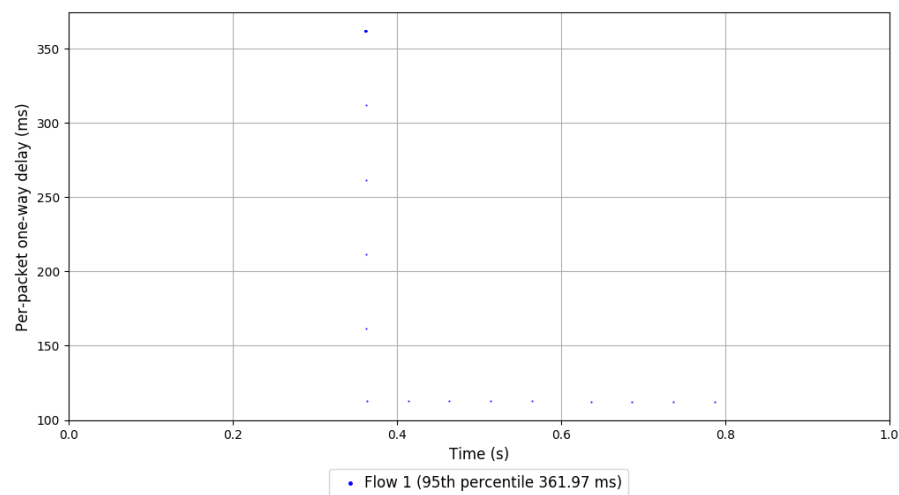
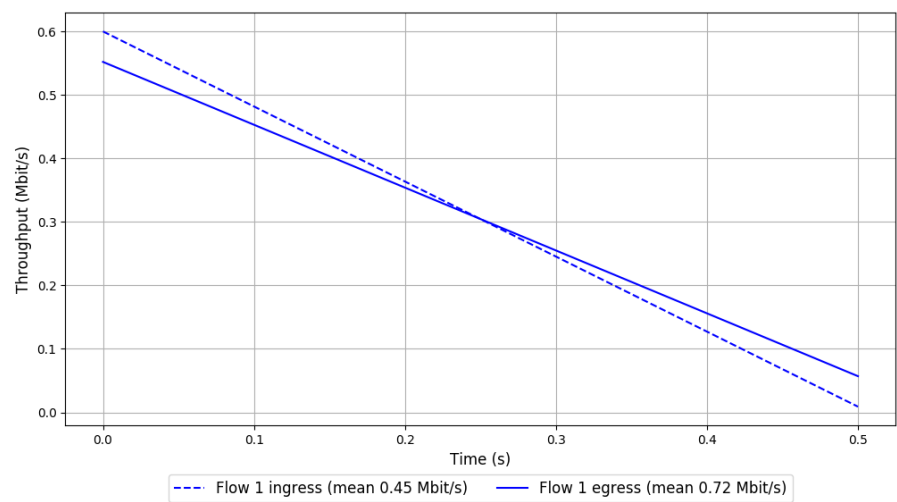


Run 2: Statistics of CalibratedKoho

Start at: 2017-08-11 05:44:53

End at: 2017-08-11 05:45:23

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-11 05:56:14

End at: 2017-08-11 05:56:44

Below is generated by plot.py at 2017-08-11 09:54:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 113.333 ms

Loss rate: 67.54%

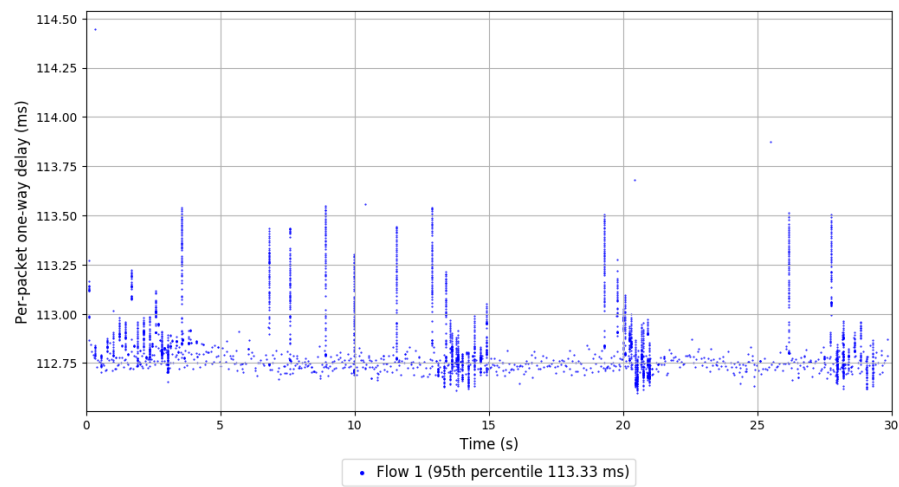
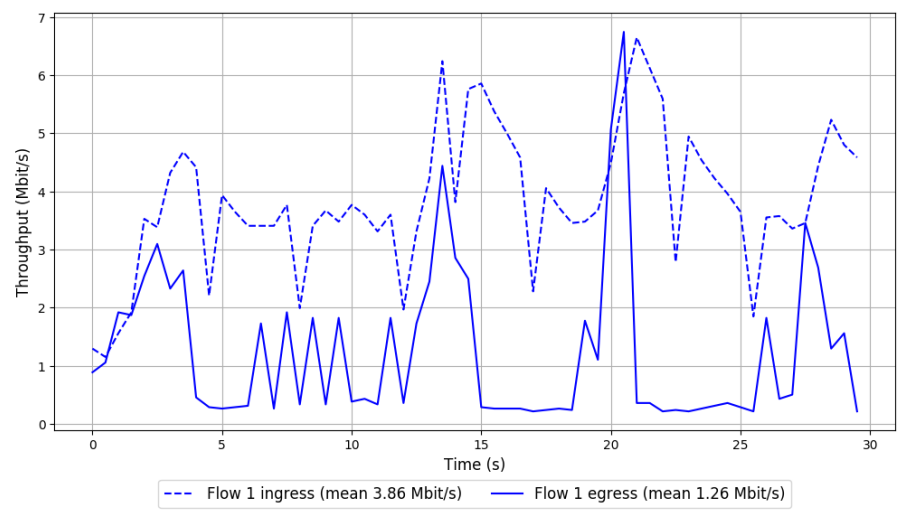
-- Flow 1:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 113.333 ms

Loss rate: 67.54%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-11 06:07:16

End at: 2017-08-11 06:07:46

Below is generated by plot.py at 2017-08-11 09:54:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 113.890 ms

Loss rate: 67.84%

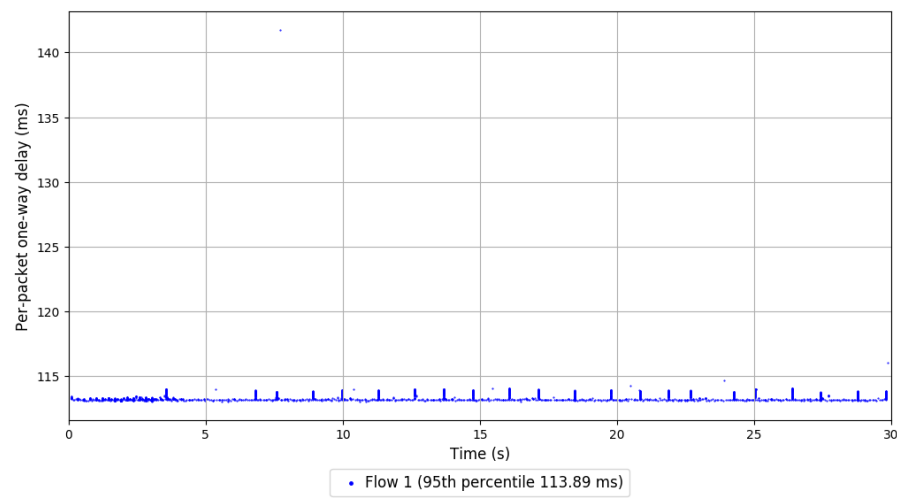
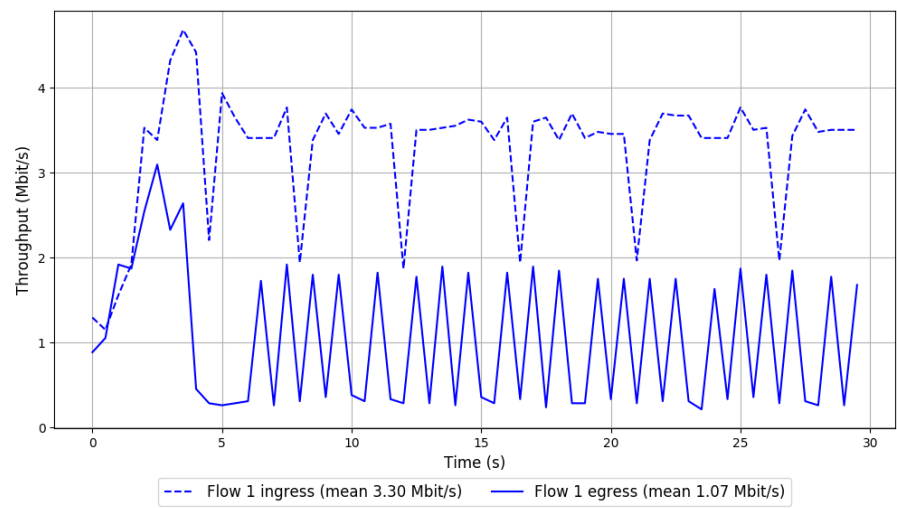
-- Flow 1:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 113.890 ms

Loss rate: 67.84%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-11 06:18:26

End at: 2017-08-11 06:18:56

Below is generated by plot.py at 2017-08-11 09:54:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 111.856 ms

Loss rate: 65.31%

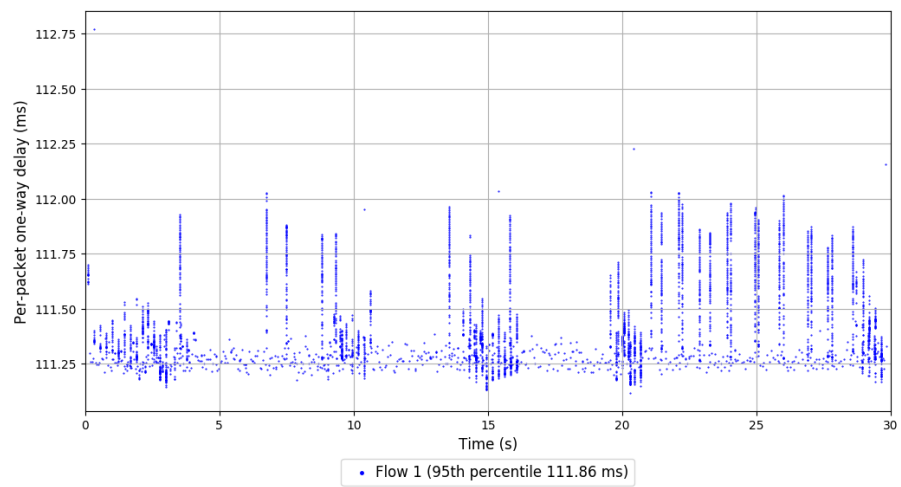
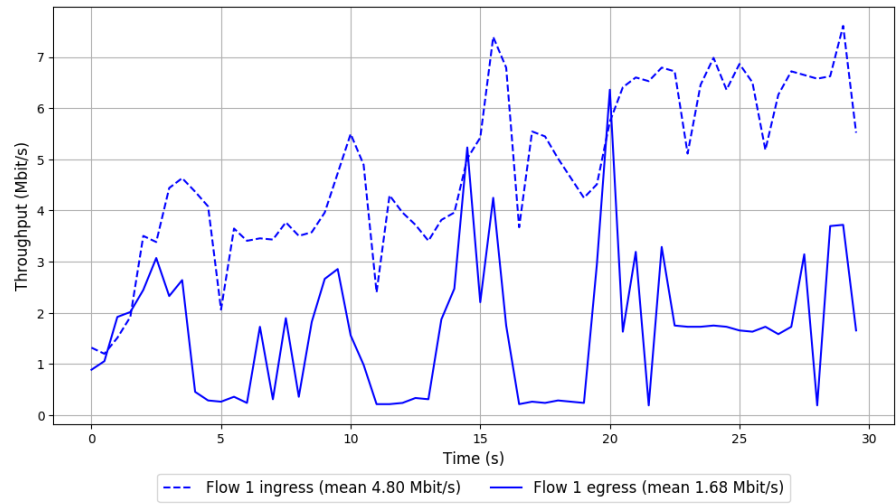
-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 111.856 ms

Loss rate: 65.31%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-11 06:29:18

End at: 2017-08-11 06:29:48

Below is generated by plot.py at 2017-08-11 09:54:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.83 Mbit/s

95th percentile per-packet one-way delay: 148.577 ms

Loss rate: 1.21%

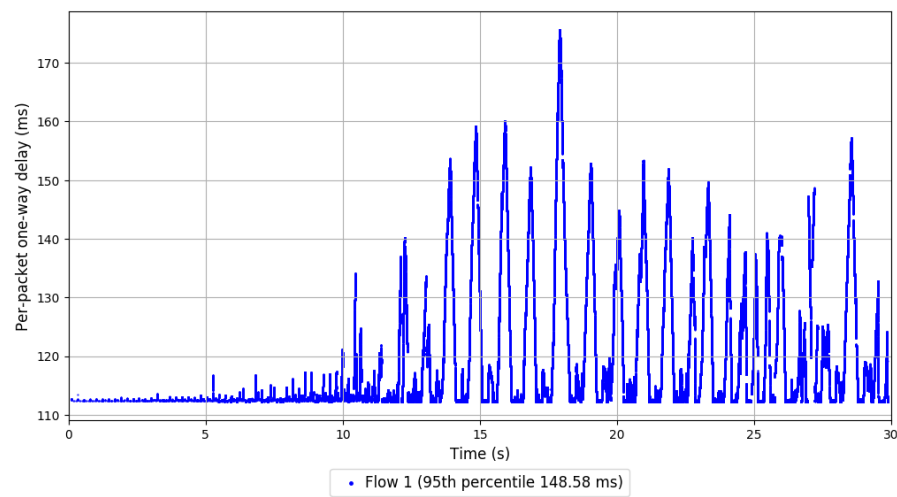
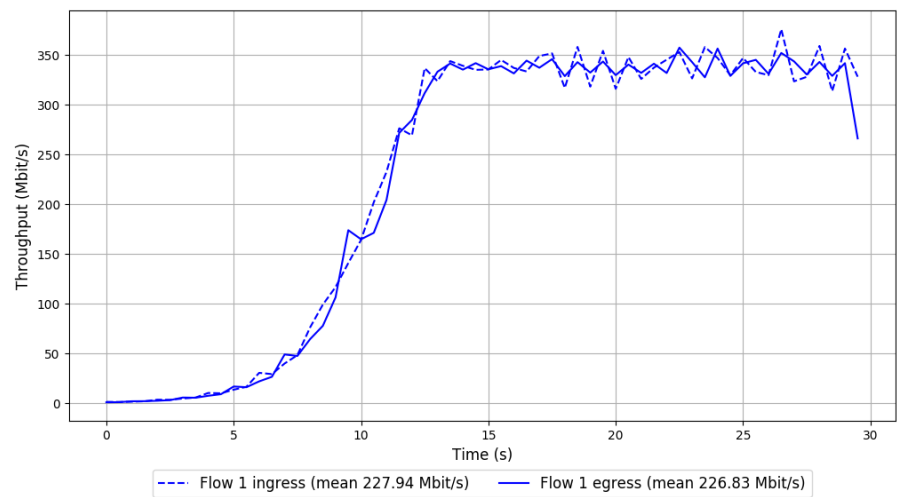
-- Flow 1:

Average throughput: 226.83 Mbit/s

95th percentile per-packet one-way delay: 148.577 ms

Loss rate: 1.21%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-11 06:41:02

End at: 2017-08-11 06:41:32

Below is generated by plot.py at 2017-08-11 09:54:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 113.507 ms

Loss rate: 68.16%

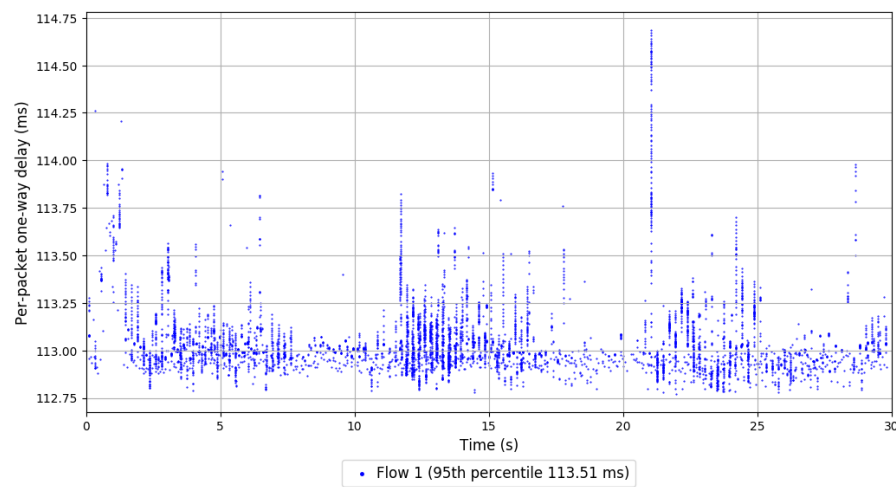
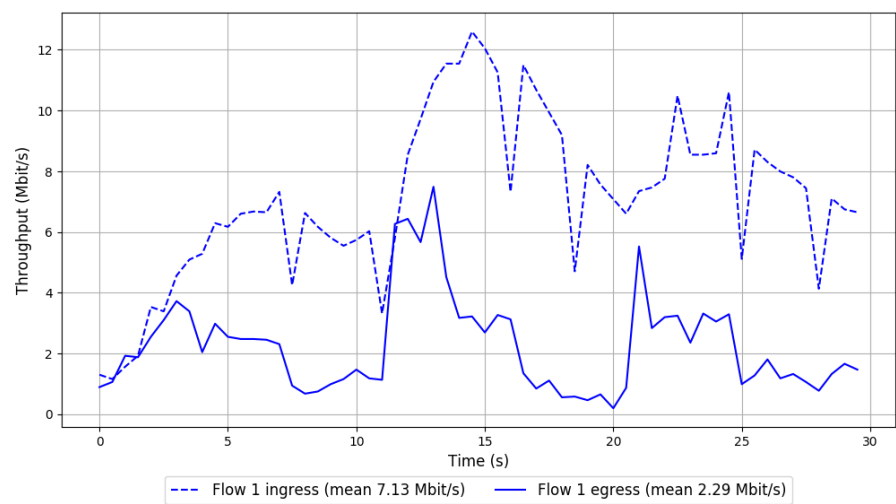
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 113.507 ms

Loss rate: 68.16%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-11 06:52:08

End at: 2017-08-11 06:52:38

Below is generated by plot.py at 2017-08-11 09:54:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 113.562 ms

Loss rate: 64.60%

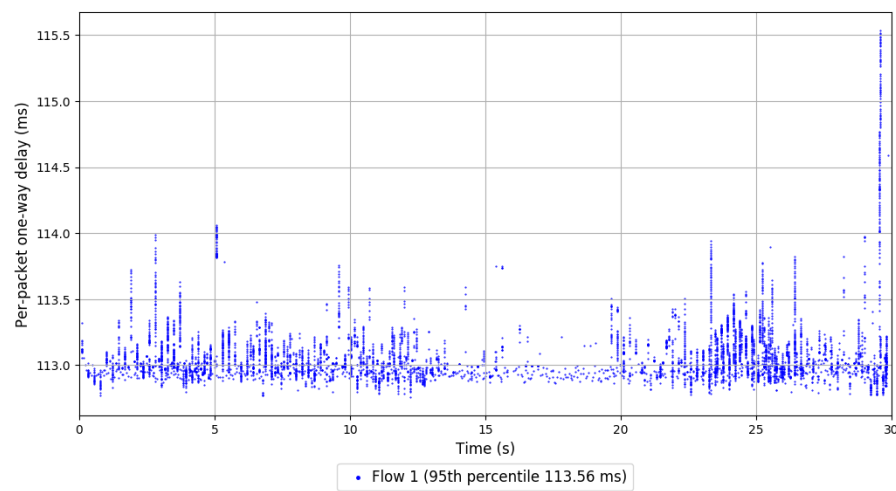
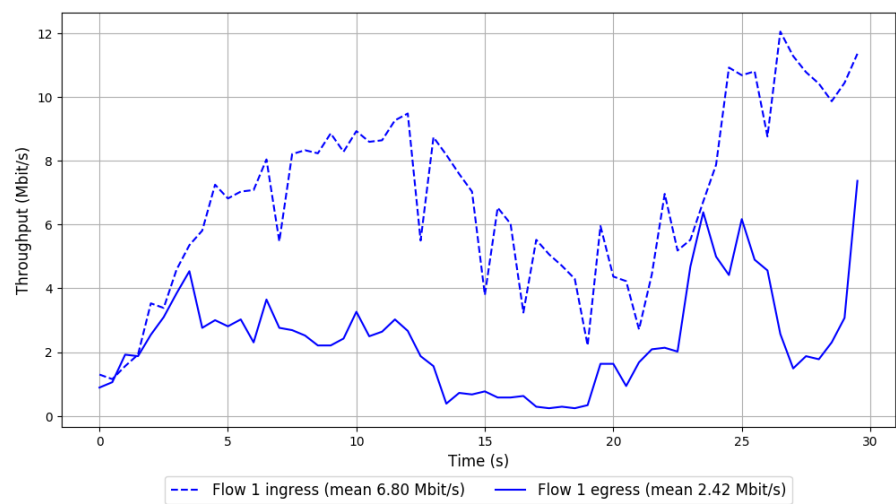
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 113.562 ms

Loss rate: 64.60%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-11 07:03:14

End at: 2017-08-11 07:03:44

Below is generated by plot.py at 2017-08-11 09:54:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 114.035 ms

Loss rate: 69.23%

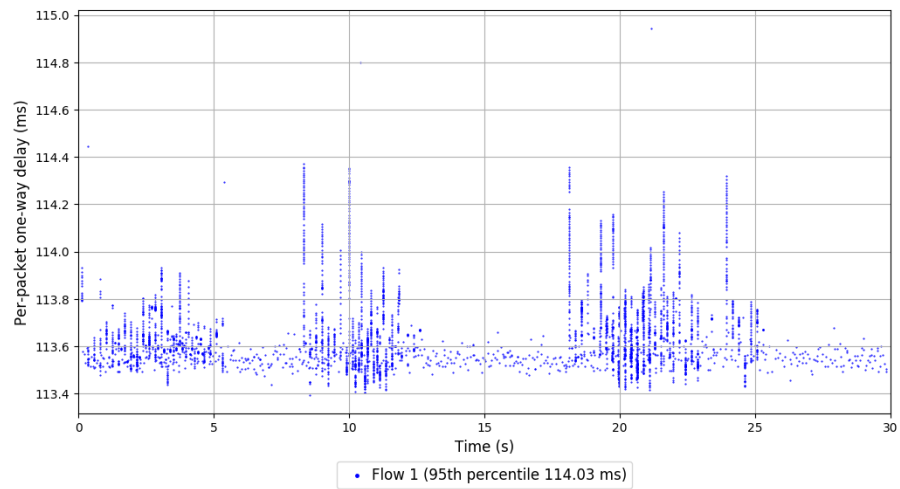
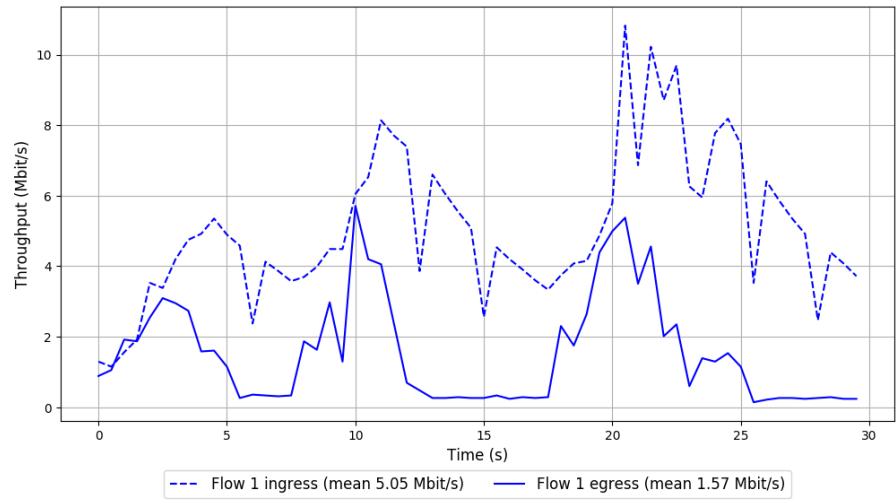
-- Flow 1:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 114.035 ms

Loss rate: 69.23%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-11 07:14:08

End at: 2017-08-11 07:14:38

Below is generated by plot.py at 2017-08-11 09:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.79 Mbit/s

95th percentile per-packet one-way delay: 115.403 ms

Loss rate: 64.50%

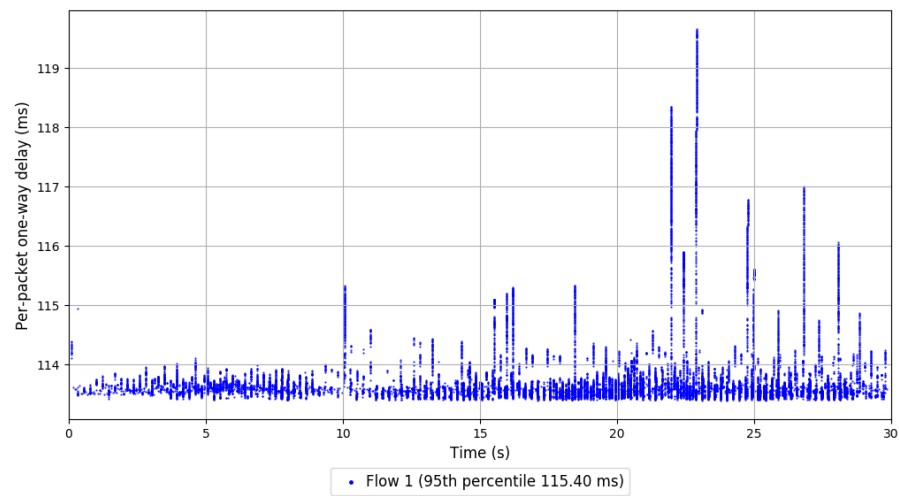
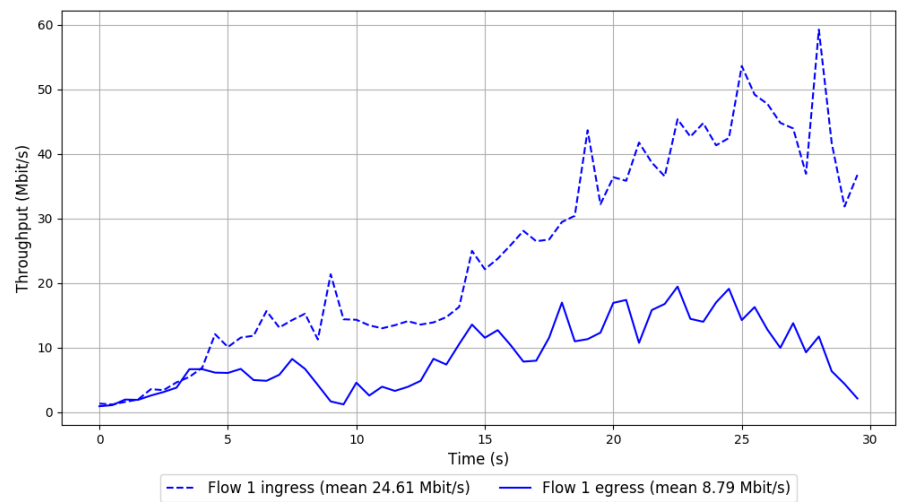
-- Flow 1:

Average throughput: 8.79 Mbit/s

95th percentile per-packet one-way delay: 115.403 ms

Loss rate: 64.50%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-08-11 05:40:44

End at: 2017-08-11 05:41:14

Below is generated by plot.py at 2017-08-11 09:55:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.81 Mbit/s

95th percentile per-packet one-way delay: 112.694 ms

Loss rate: 0.78%

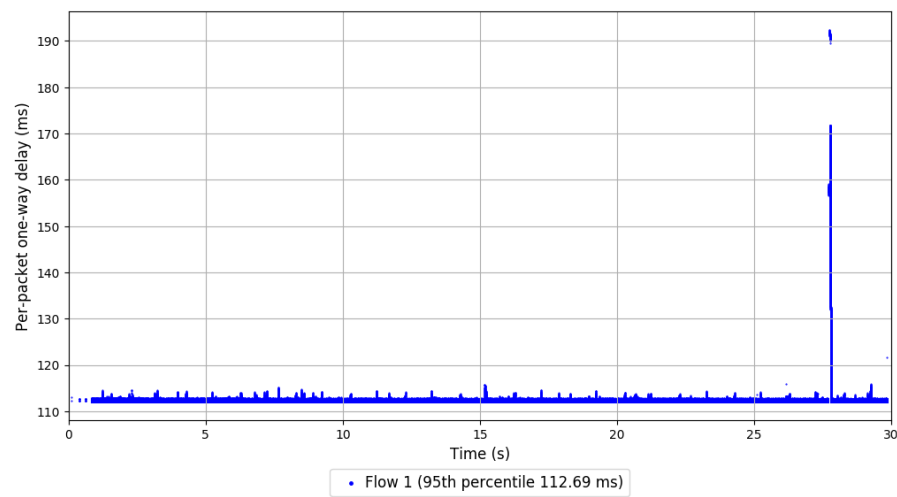
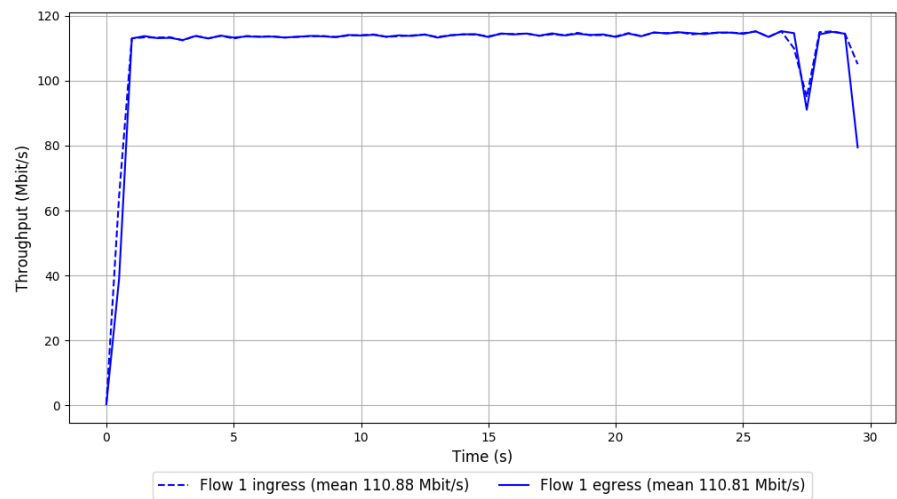
-- Flow 1:

Average throughput: 110.81 Mbit/s

95th percentile per-packet one-way delay: 112.694 ms

Loss rate: 0.78%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-11 05:51:54

End at: 2017-08-11 05:52:24

Below is generated by plot.py at 2017-08-11 09:55:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.65 Mbit/s

95th percentile per-packet one-way delay: 112.932 ms

Loss rate: 0.80%

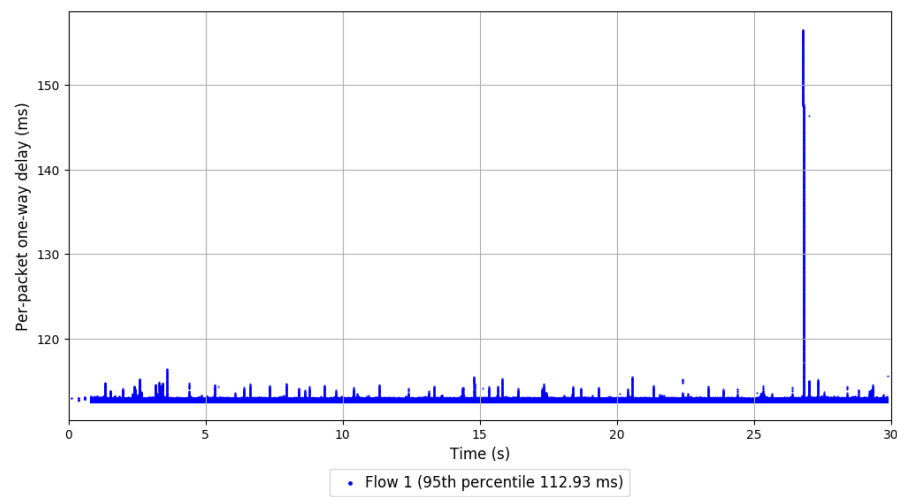
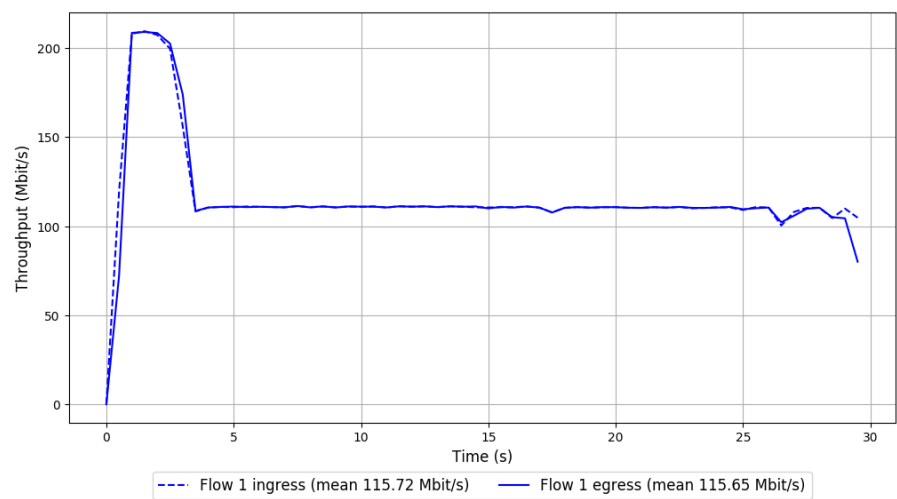
-- Flow 1:

Average throughput: 115.65 Mbit/s

95th percentile per-packet one-way delay: 112.932 ms

Loss rate: 0.80%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-11 06:03:12

End at: 2017-08-11 06:03:42

Below is generated by plot.py at 2017-08-11 09:55:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.54 Mbit/s

95th percentile per-packet one-way delay: 111.611 ms

Loss rate: 0.78%

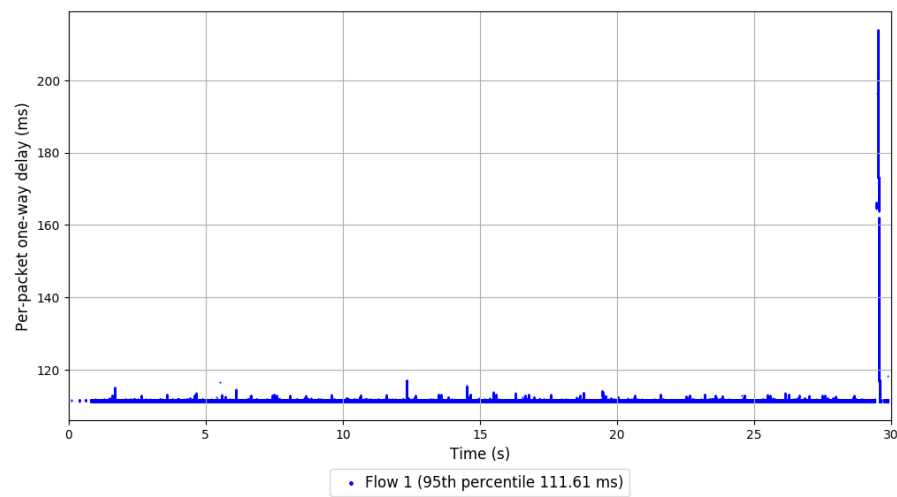
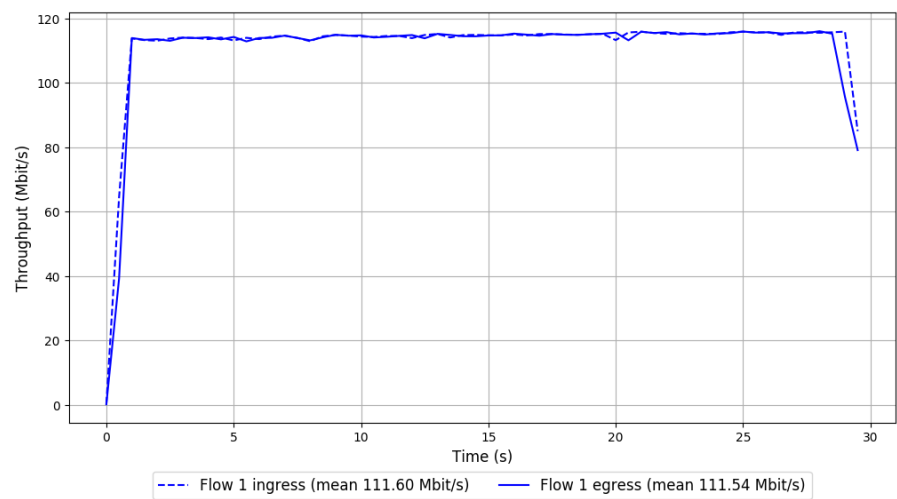
-- Flow 1:

Average throughput: 111.54 Mbit/s

95th percentile per-packet one-way delay: 111.611 ms

Loss rate: 0.78%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-11 06:14:14

End at: 2017-08-11 06:14:44

Below is generated by plot.py at 2017-08-11 09:55:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.92 Mbit/s

95th percentile per-packet one-way delay: 111.249 ms

Loss rate: 0.76%

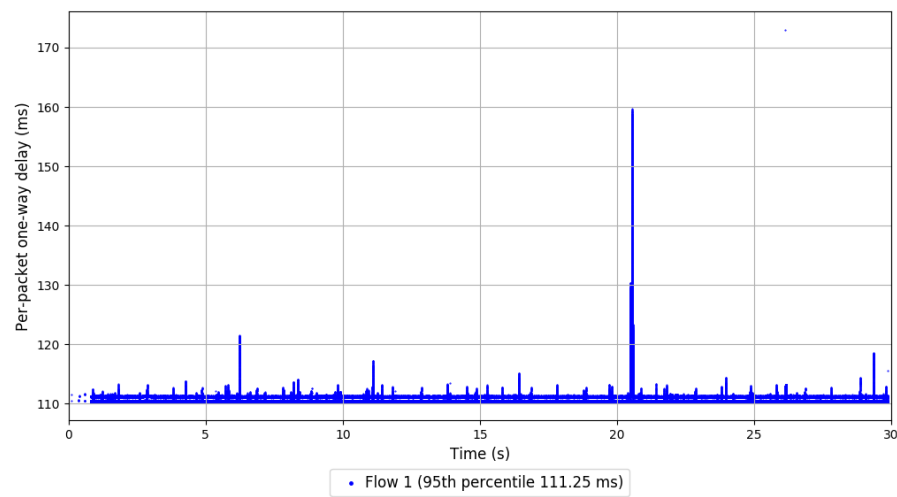
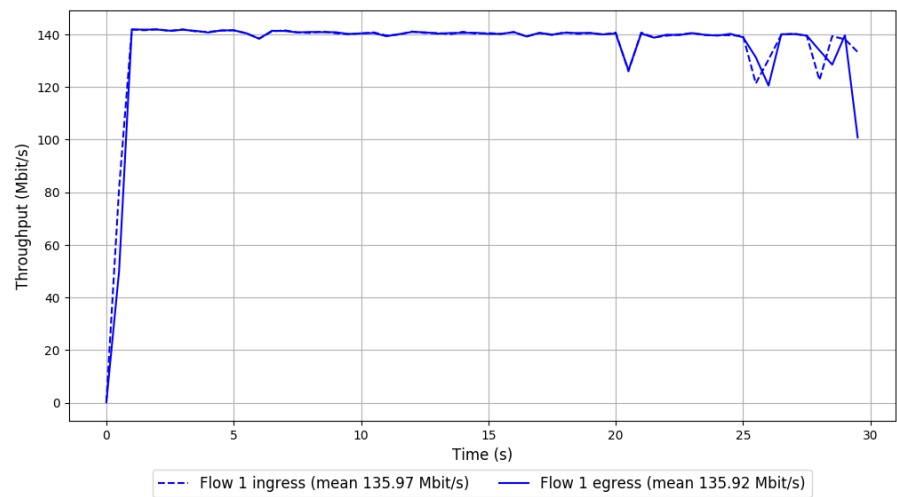
-- Flow 1:

Average throughput: 135.92 Mbit/s

95th percentile per-packet one-way delay: 111.249 ms

Loss rate: 0.76%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-11 06:25:24

End at: 2017-08-11 06:25:54

Below is generated by plot.py at 2017-08-11 09:56:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.04 Mbit/s

95th percentile per-packet one-way delay: 112.871 ms

Loss rate: 0.79%

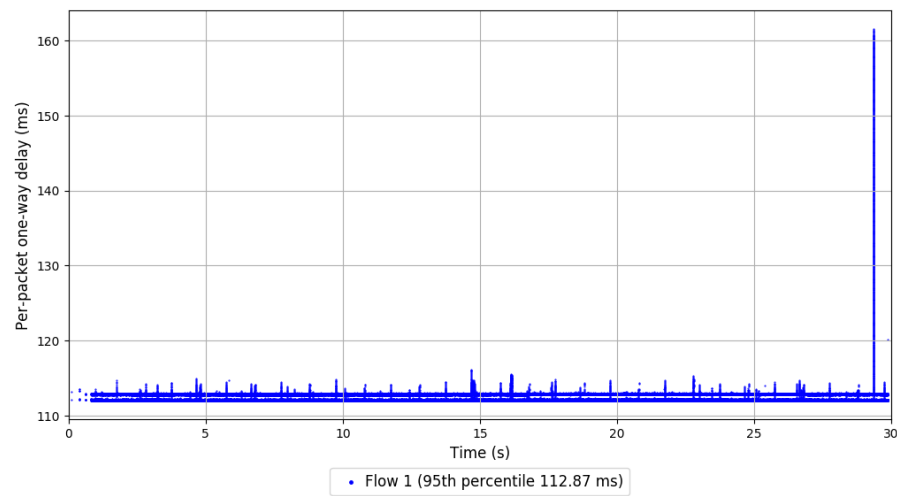
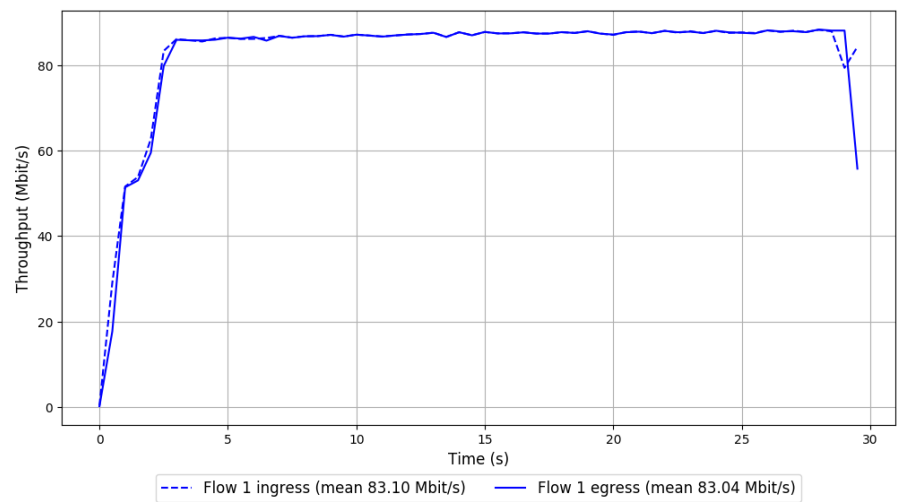
-- Flow 1:

Average throughput: 83.04 Mbit/s

95th percentile per-packet one-way delay: 112.871 ms

Loss rate: 0.79%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-11 06:36:34

End at: 2017-08-11 06:37:04

Below is generated by plot.py at 2017-08-11 09:56:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.76 Mbit/s

95th percentile per-packet one-way delay: 112.691 ms

Loss rate: 0.77%

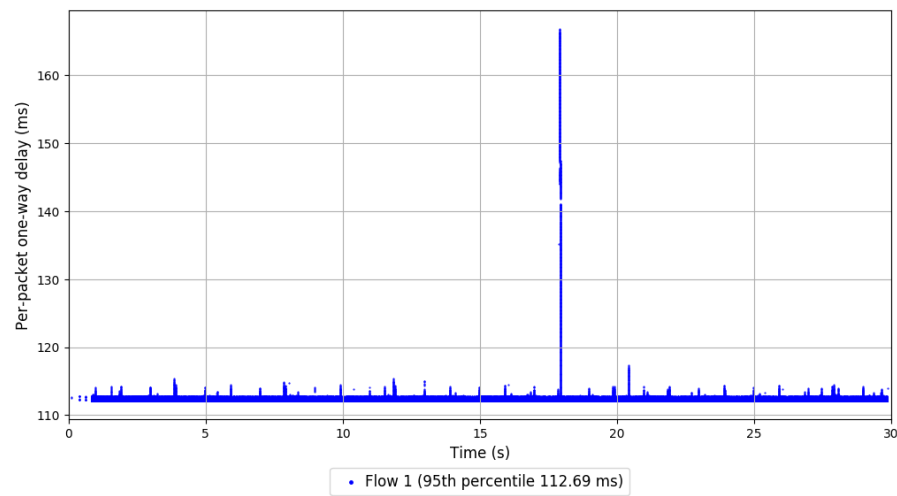
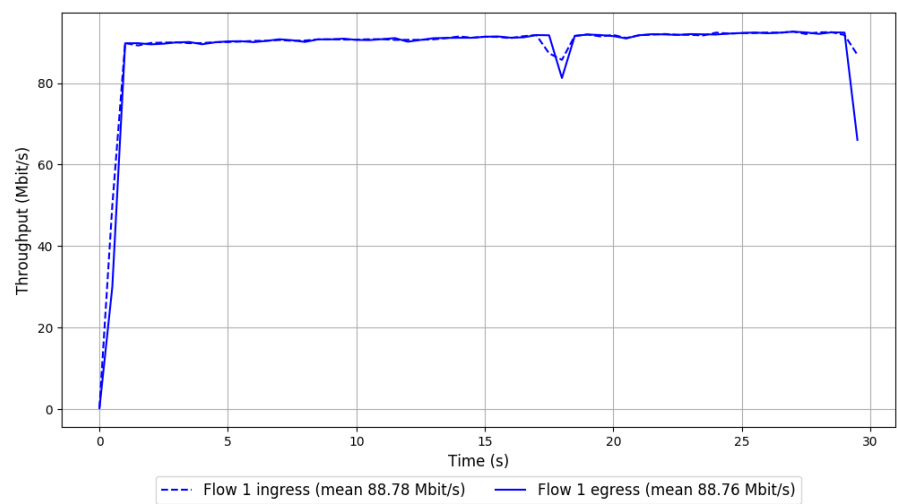
-- Flow 1:

Average throughput: 88.76 Mbit/s

95th percentile per-packet one-way delay: 112.691 ms

Loss rate: 0.77%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-11 06:48:03

End at: 2017-08-11 06:48:33

Below is generated by plot.py at 2017-08-11 09:57:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.03 Mbit/s

95th percentile per-packet one-way delay: 116.491 ms

Loss rate: 1.53%

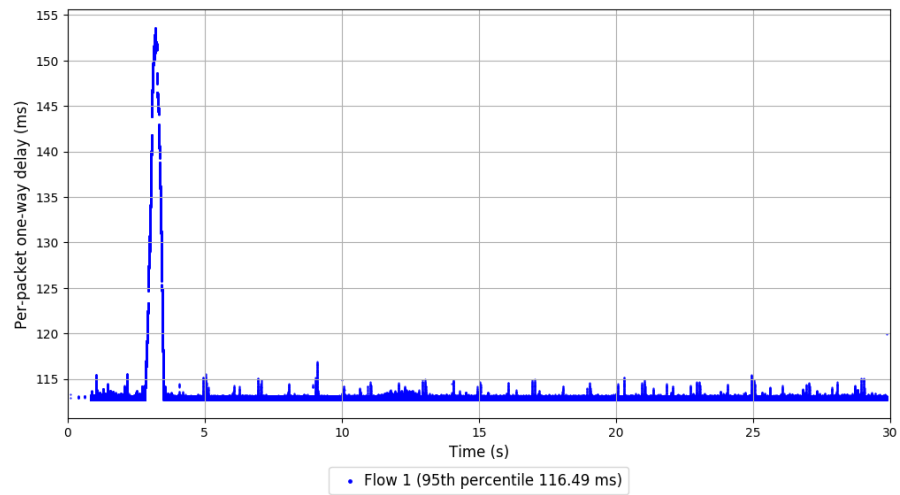
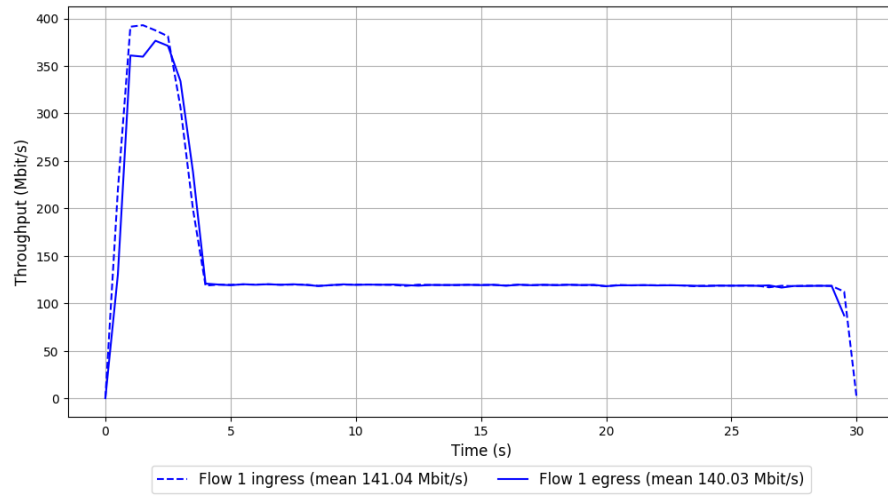
-- Flow 1:

Average throughput: 140.03 Mbit/s

95th percentile per-packet one-way delay: 116.491 ms

Loss rate: 1.53%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-11 06:59:08

End at: 2017-08-11 06:59:38

Below is generated by plot.py at 2017-08-11 09:57:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.73 Mbit/s

95th percentile per-packet one-way delay: 113.613 ms

Loss rate: 0.72%

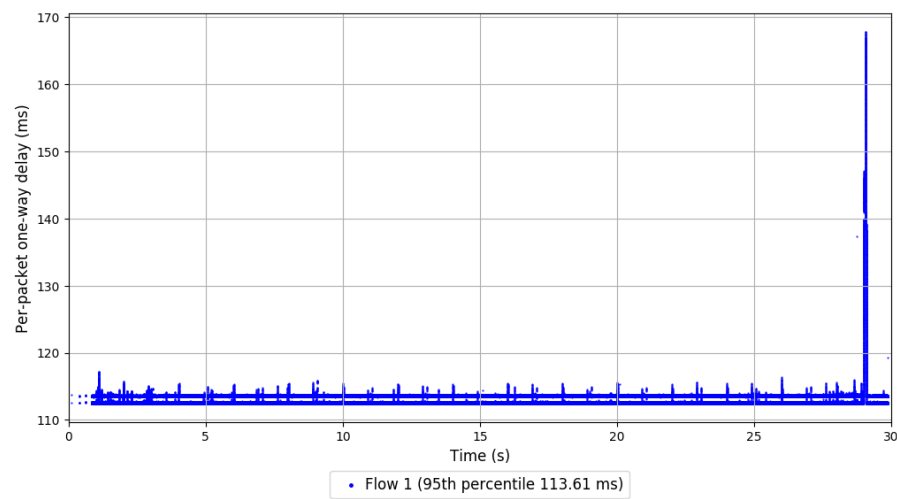
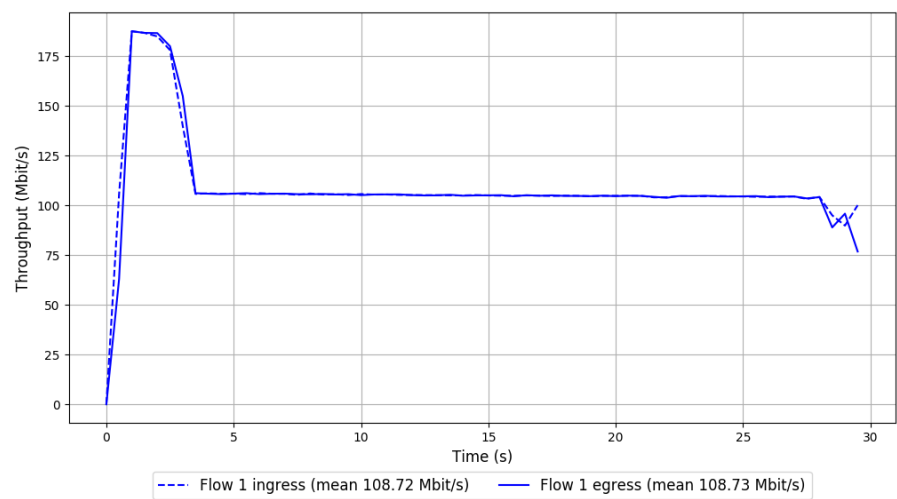
-- Flow 1:

Average throughput: 108.73 Mbit/s

95th percentile per-packet one-way delay: 113.613 ms

Loss rate: 0.72%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-11 07:10:13

End at: 2017-08-11 07:10:43

Below is generated by plot.py at 2017-08-11 09:57:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.42 Mbit/s

95th percentile per-packet one-way delay: 113.573 ms

Loss rate: 0.71%

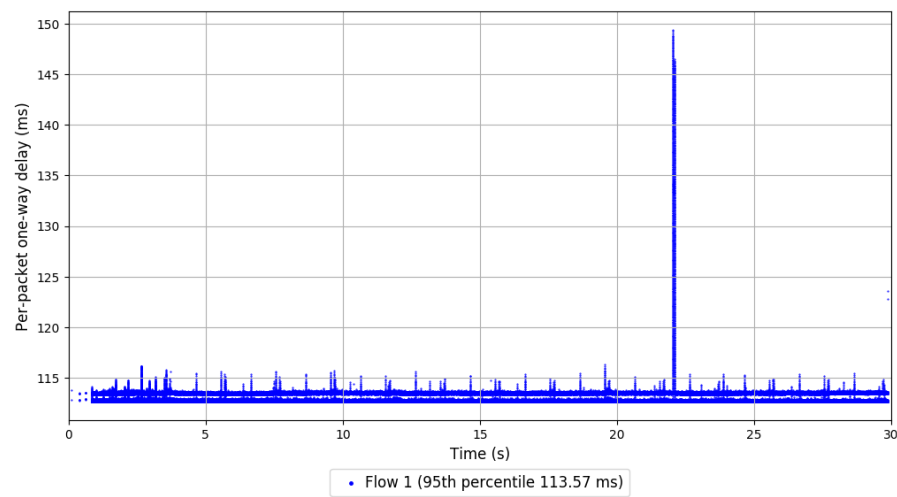
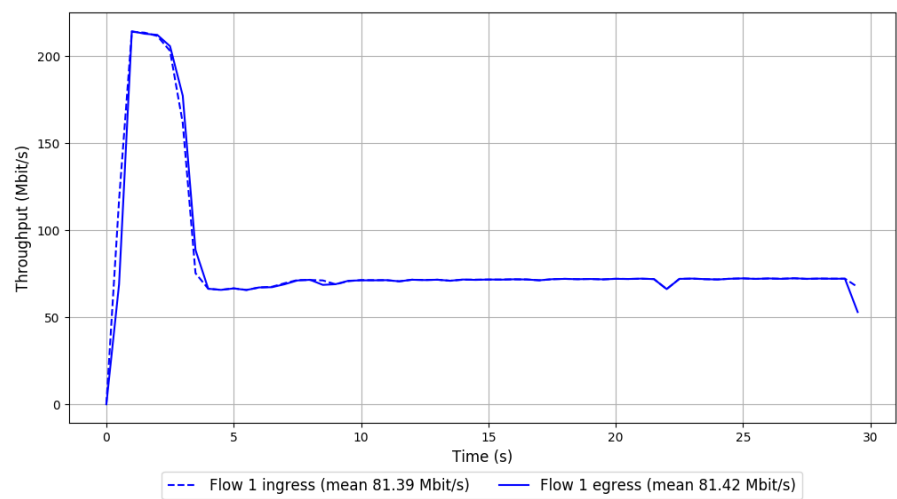
-- Flow 1:

Average throughput: 81.42 Mbit/s

95th percentile per-packet one-way delay: 113.573 ms

Loss rate: 0.71%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-11 07:21:07

End at: 2017-08-11 07:21:37

Below is generated by plot.py at 2017-08-11 09:57:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.78 Mbit/s

95th percentile per-packet one-way delay: 113.559 ms

Loss rate: 0.70%

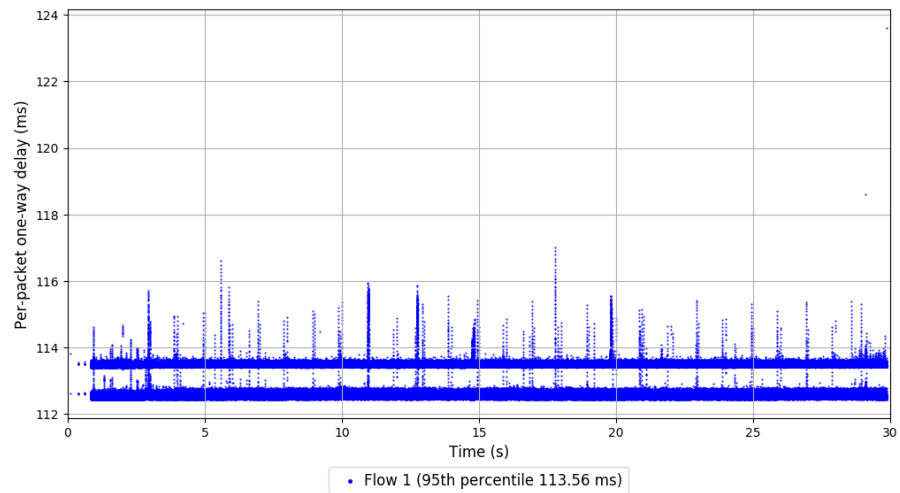
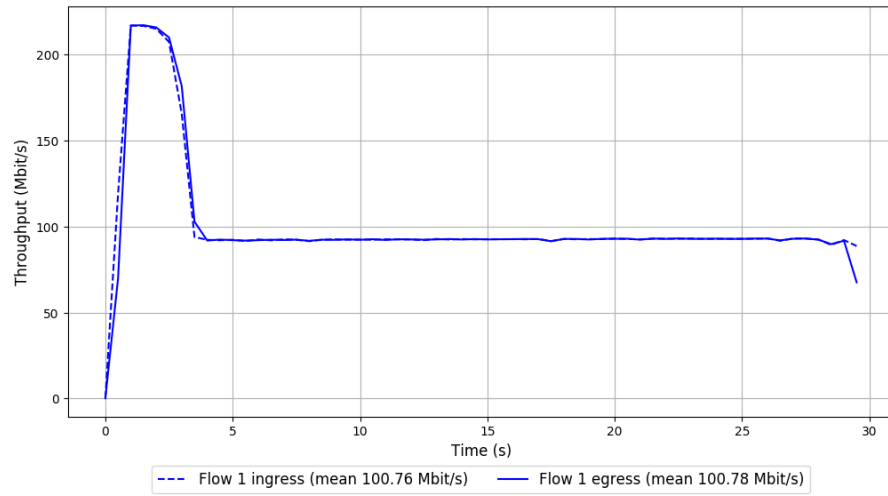
-- Flow 1:

Average throughput: 100.78 Mbit/s

95th percentile per-packet one-way delay: 113.559 ms

Loss rate: 0.70%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-11 05:39:19

End at: 2017-08-11 05:39:49

Below is generated by plot.py at 2017-08-11 09:57:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 112.954 ms

Loss rate: 2.11%

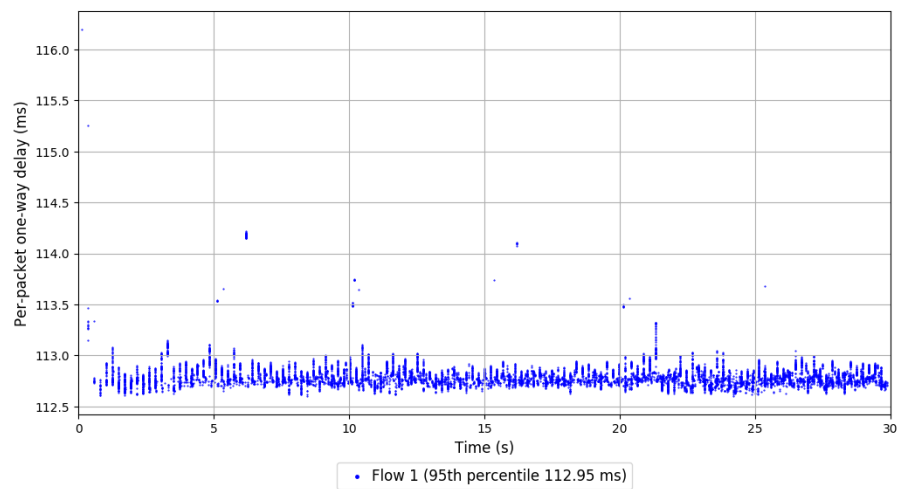
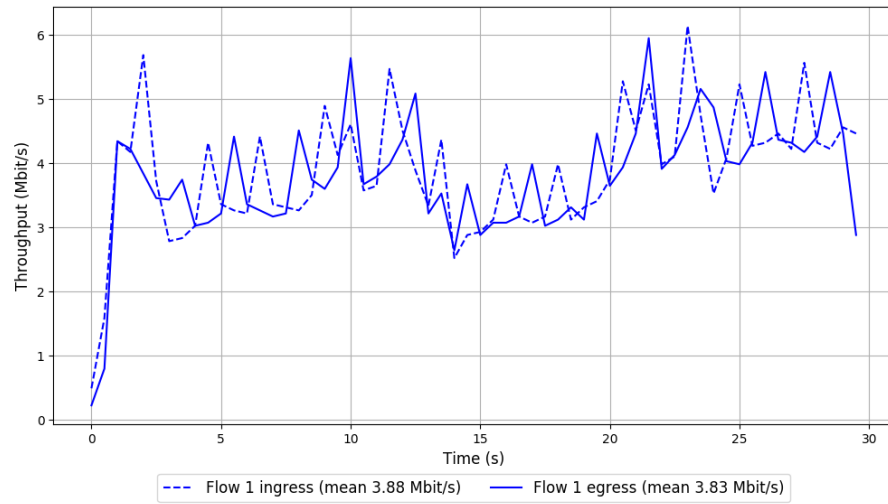
-- Flow 1:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 112.954 ms

Loss rate: 2.11%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-11 05:50:27

End at: 2017-08-11 05:50:57

Below is generated by plot.py at 2017-08-11 09:57:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.87 Mbit/s

95th percentile per-packet one-way delay: 113.534 ms

Loss rate: 1.30%

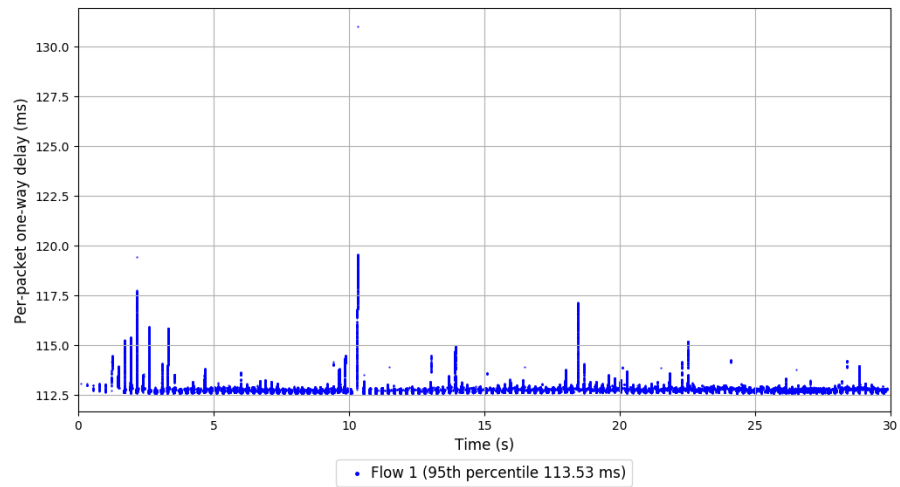
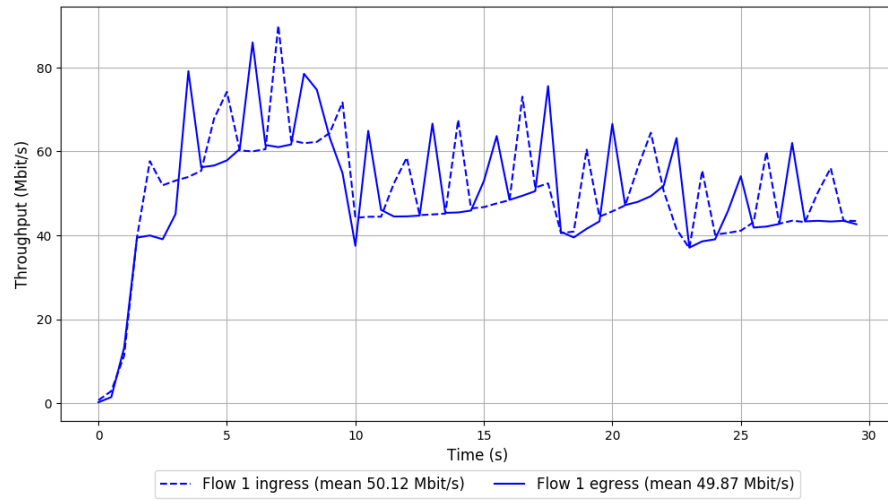
-- Flow 1:

Average throughput: 49.87 Mbit/s

95th percentile per-packet one-way delay: 113.534 ms

Loss rate: 1.30%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-11 06:01:47

End at: 2017-08-11 06:02:17

Below is generated by plot.py at 2017-08-11 09:57:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 113.008 ms

Loss rate: 2.10%

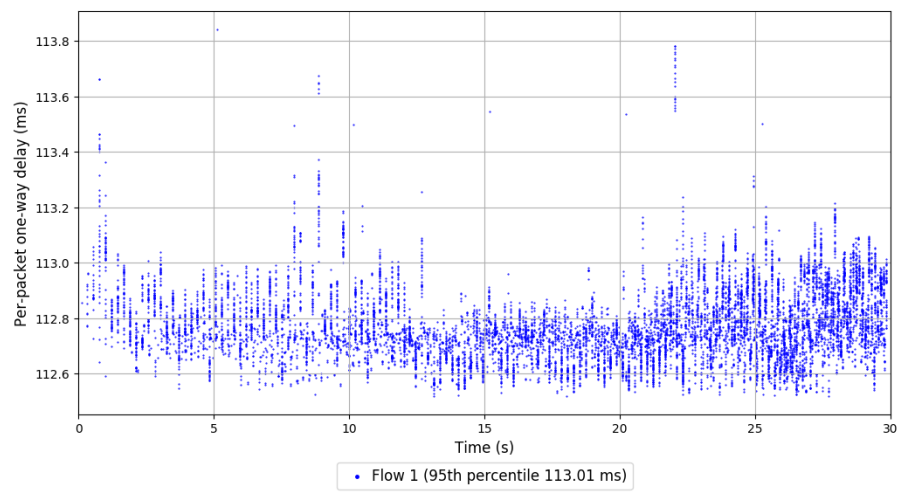
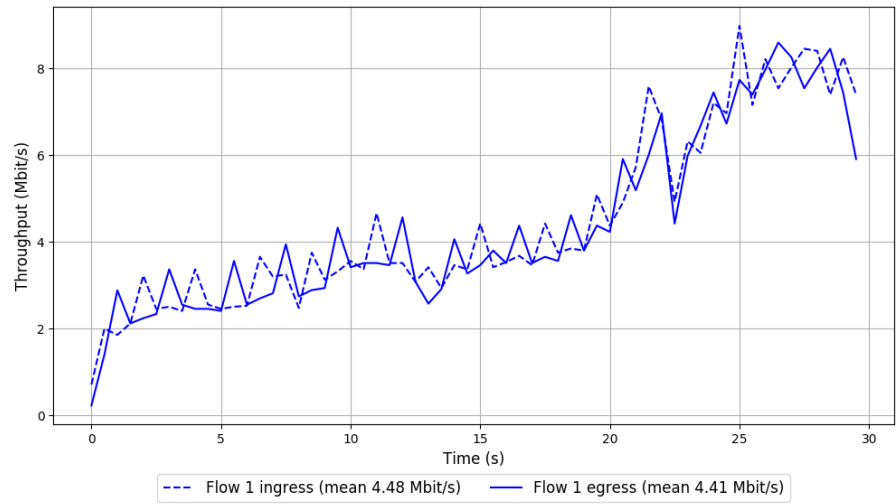
-- Flow 1:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 113.008 ms

Loss rate: 2.10%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-11 06:12:48

End at: 2017-08-11 06:13:18

Below is generated by plot.py at 2017-08-11 09:57:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.891 ms

Loss rate: 3.53%

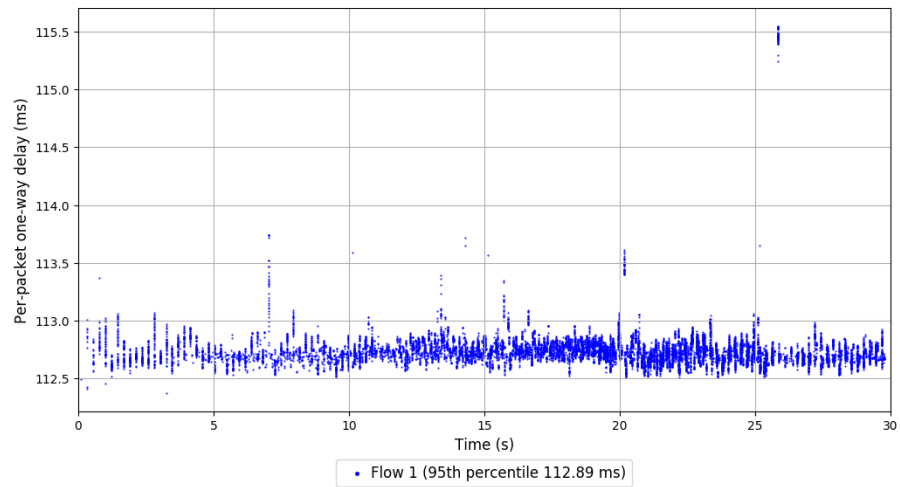
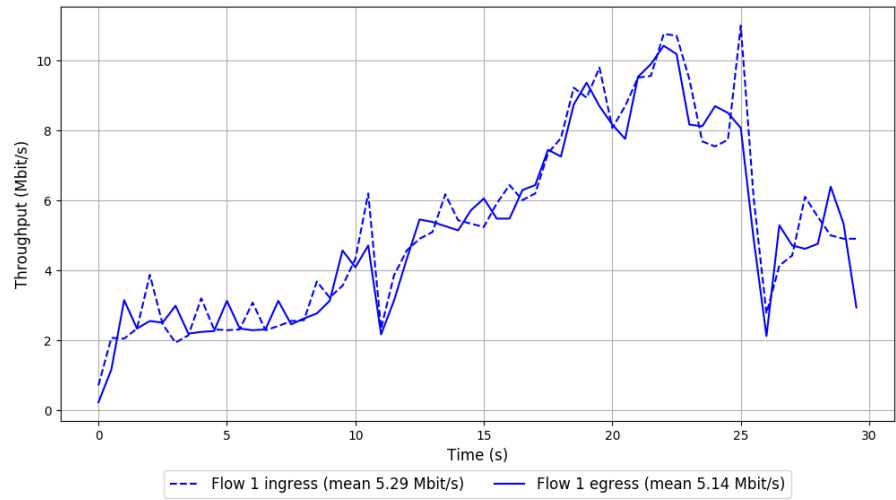
-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.891 ms

Loss rate: 3.53%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-11 06:23:59

End at: 2017-08-11 06:24:29

Below is generated by plot.py at 2017-08-11 09:57:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 113.208 ms

Loss rate: 3.92%

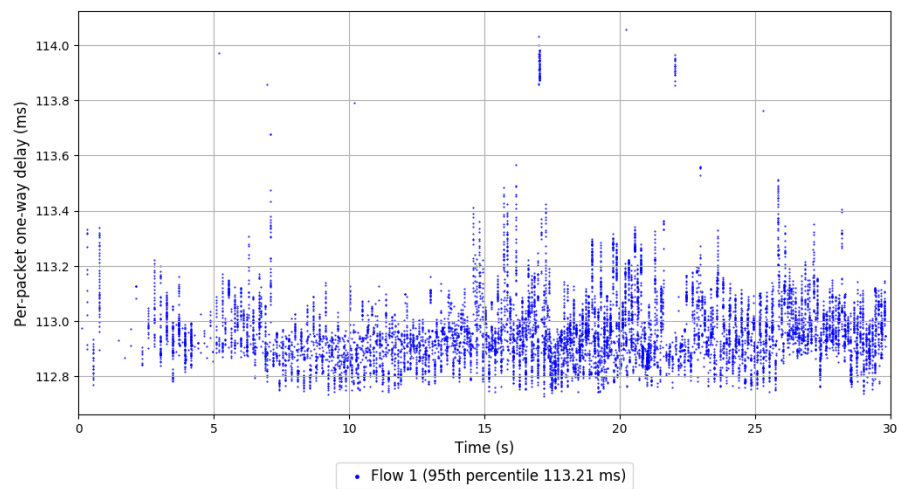
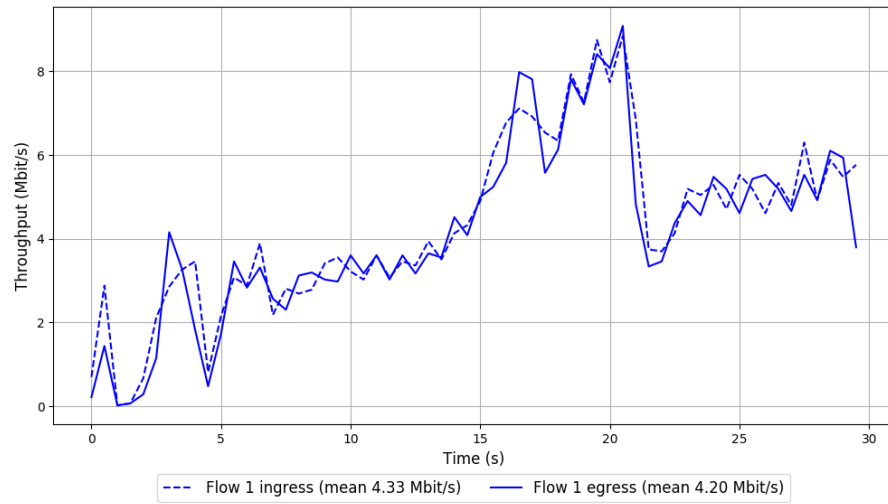
-- Flow 1:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 113.208 ms

Loss rate: 3.92%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-11 06:35:09

End at: 2017-08-11 06:35:39

Below is generated by plot.py at 2017-08-11 09:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.36 Mbit/s

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

Loss rate: 2.49%

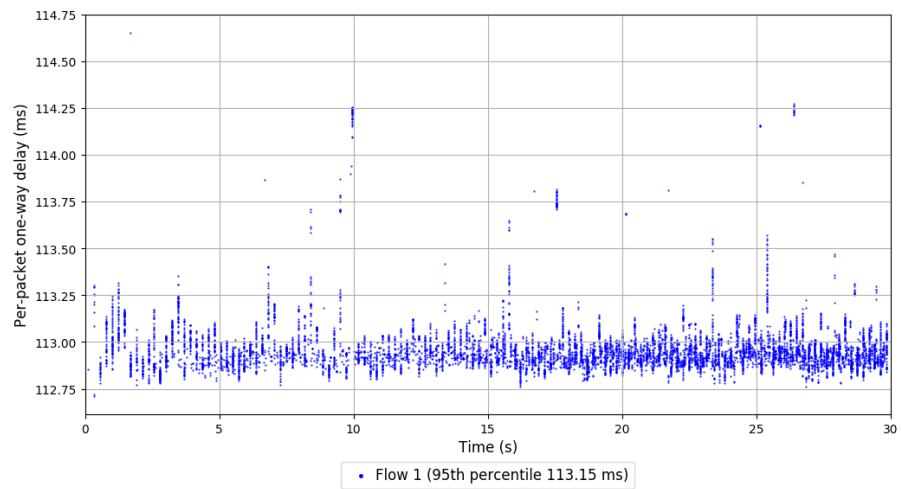
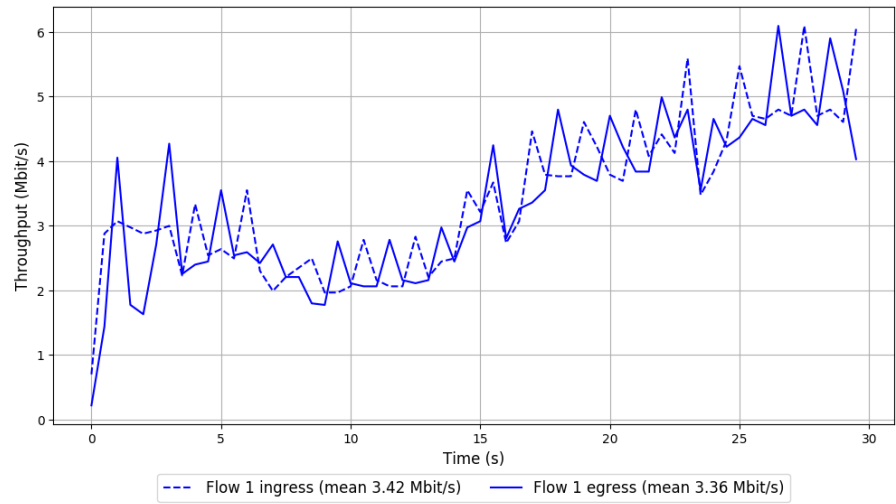
-- Flow 1:

Average throughput: 3.36 Mbit/s

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

Loss rate: 2.49%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-11 06:46:37

End at: 2017-08-11 06:47:07

Below is generated by plot.py at 2017-08-11 09:57:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 112.447 ms

Loss rate: 2.45%

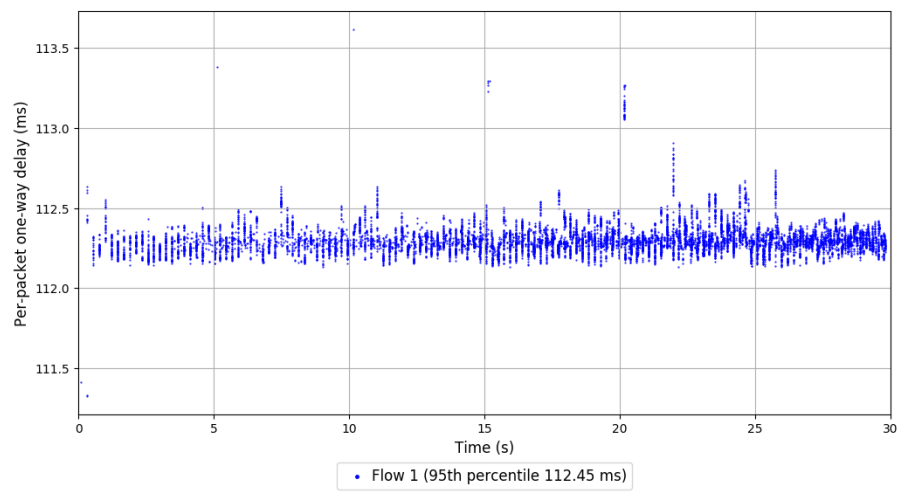
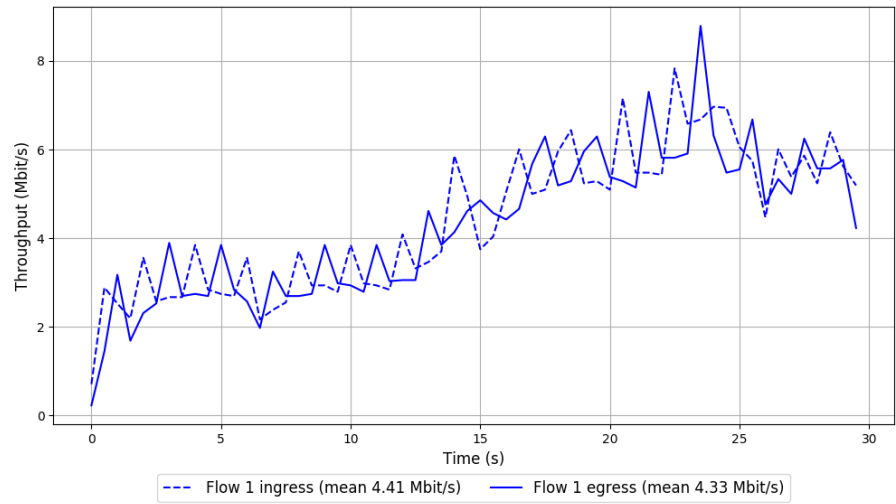
-- Flow 1:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 112.447 ms

Loss rate: 2.45%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-11 06:57:42

End at: 2017-08-11 06:58:12

Below is generated by plot.py at 2017-08-11 09:57:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 113.189 ms

Loss rate: 2.41%

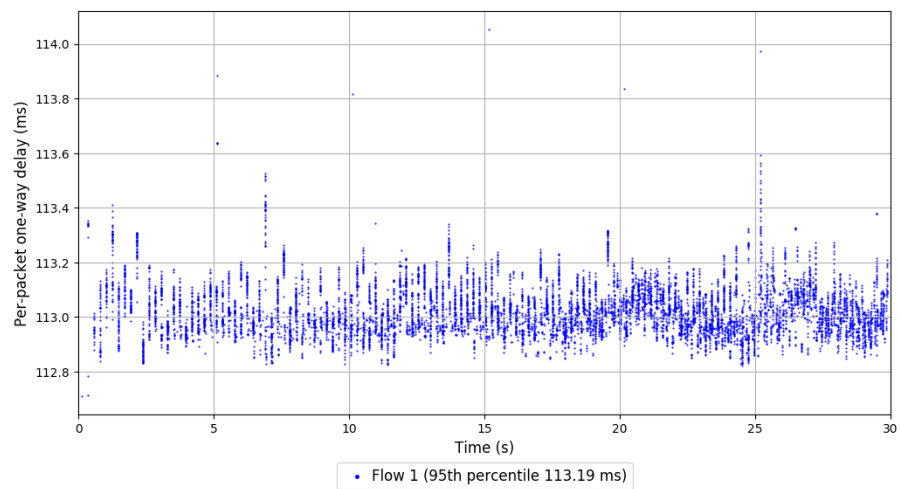
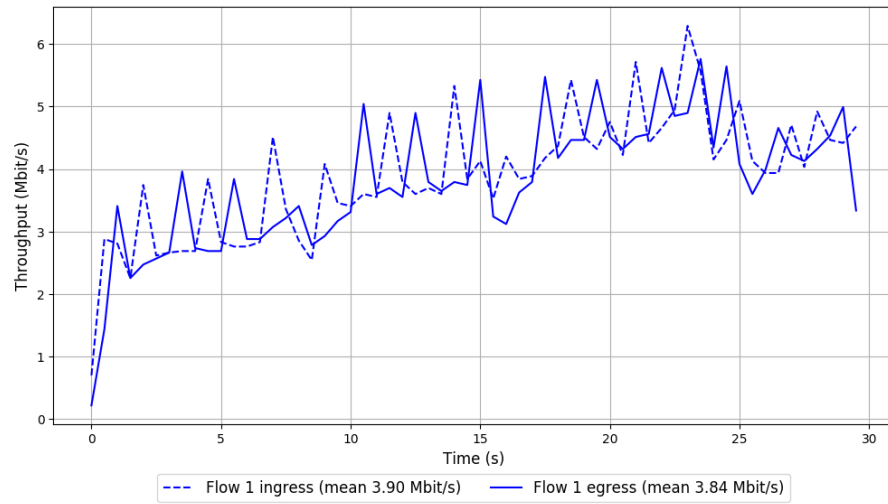
-- Flow 1:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 113.189 ms

Loss rate: 2.41%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-11 07:08:48

End at: 2017-08-11 07:09:18

Below is generated by plot.py at 2017-08-11 09:58:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.00 Mbit/s

95th percentile per-packet one-way delay: 113.811 ms

Loss rate: 2.26%

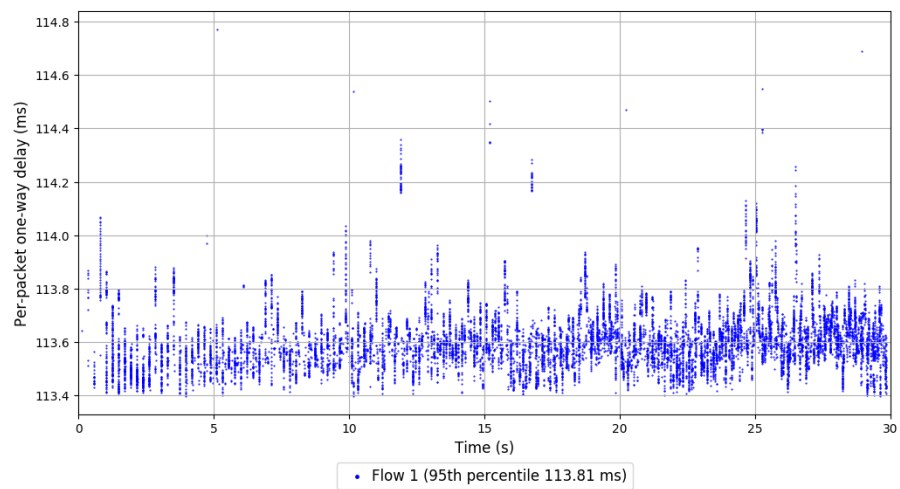
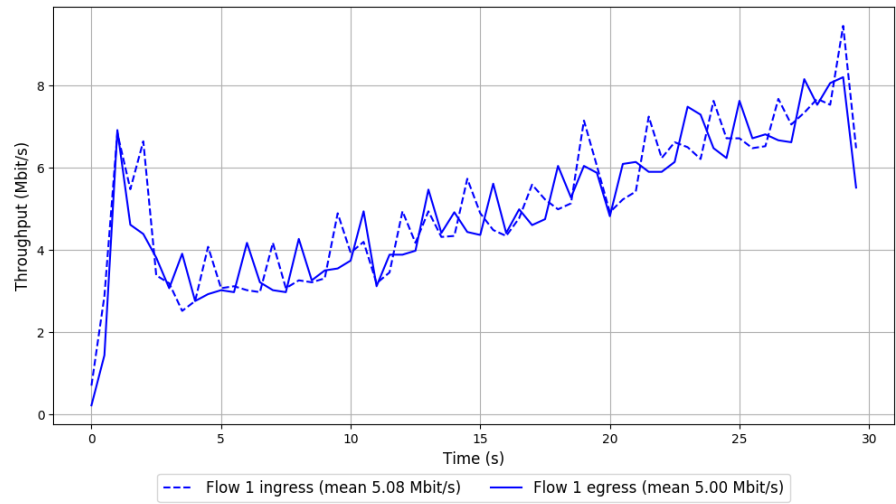
-- Flow 1:

Average throughput: 5.00 Mbit/s

95th percentile per-packet one-way delay: 113.811 ms

Loss rate: 2.26%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-11 07:19:41

End at: 2017-08-11 07:20:11

Below is generated by plot.py at 2017-08-11 09:58:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 113.696 ms

Loss rate: 3.65%

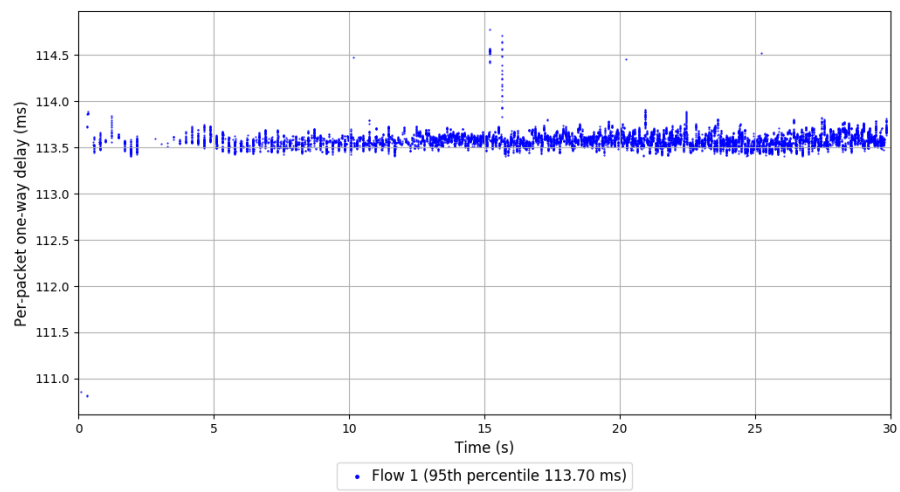
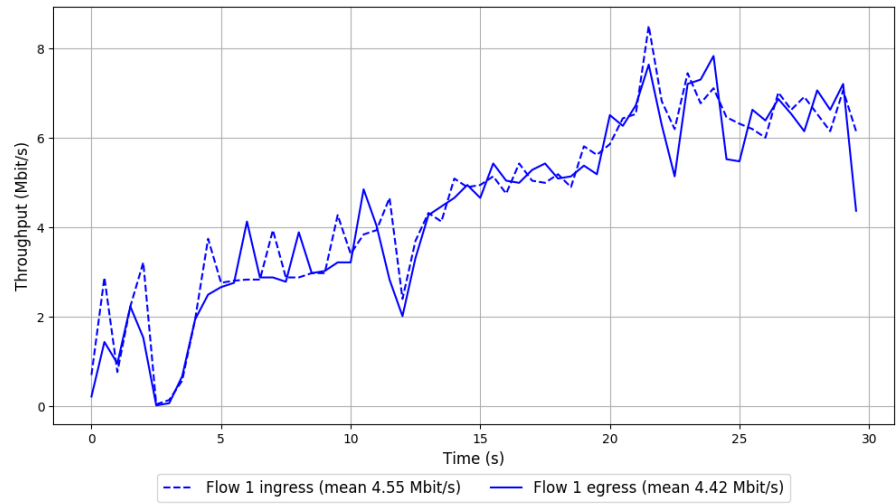
-- Flow 1:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 113.696 ms

Loss rate: 3.65%

Run 10: Report of TCP Cubic — Data Link

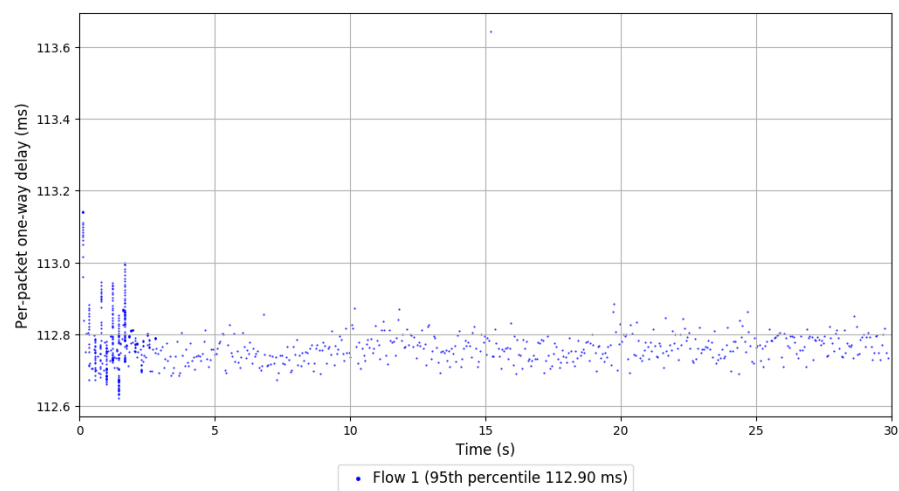
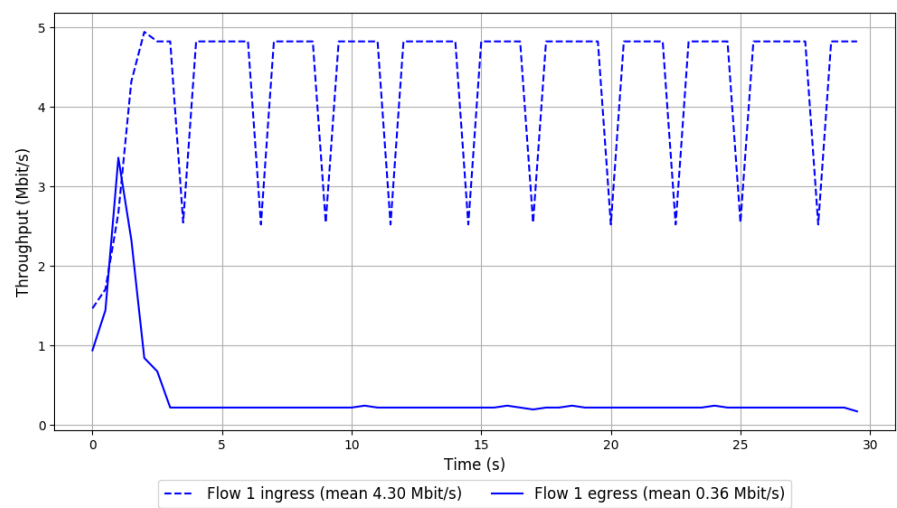


```
Run 1: Statistics of KohoCC

Start at: 2017-08-11 05:34:26
End at: 2017-08-11 05:34:56

# Below is generated by plot.py at 2017-08-11 09:58:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 112.902 ms
Loss rate: 91.74%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 112.902 ms
Loss rate: 91.74%
```


Run 1: Report of KohoCC — Data Link



Run 2: Statistics of KohoCC

Start at: 2017-08-11 05:45:33

End at: 2017-08-11 05:46:03

Below is generated by plot.py at 2017-08-11 09:58:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

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

Loss rate: 0.78%

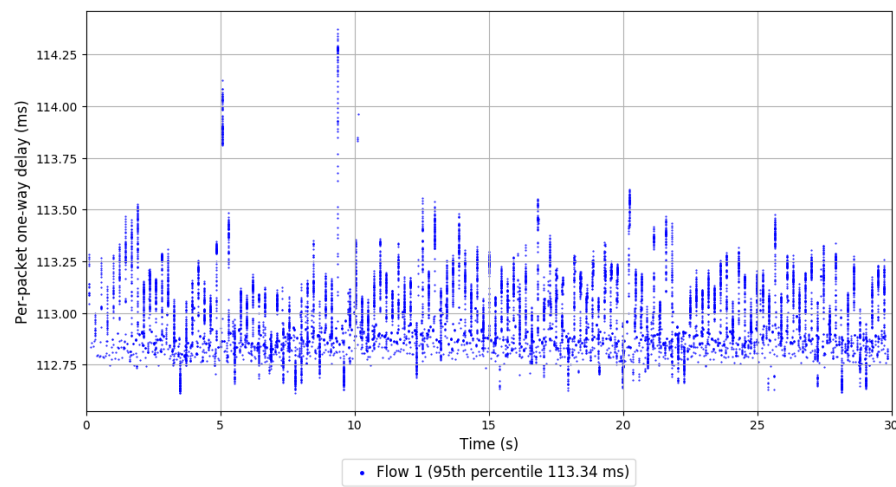
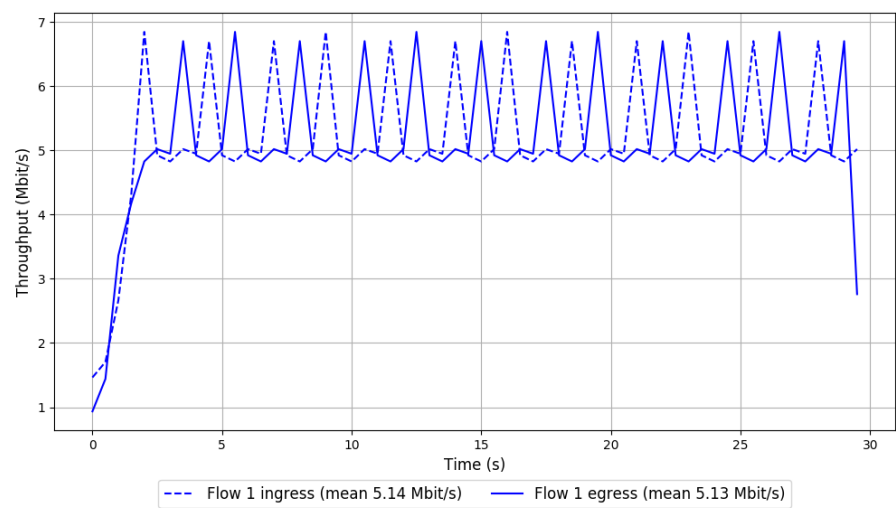
-- Flow 1:

Average throughput: 5.13 Mbit/s

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

Loss rate: 0.78%

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-11 05:56:55

End at: 2017-08-11 05:57:25

Below is generated by plot.py at 2017-08-11 09:58:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.05 Mbit/s

95th percentile per-packet one-way delay: 113.033 ms

Loss rate: 2.35%

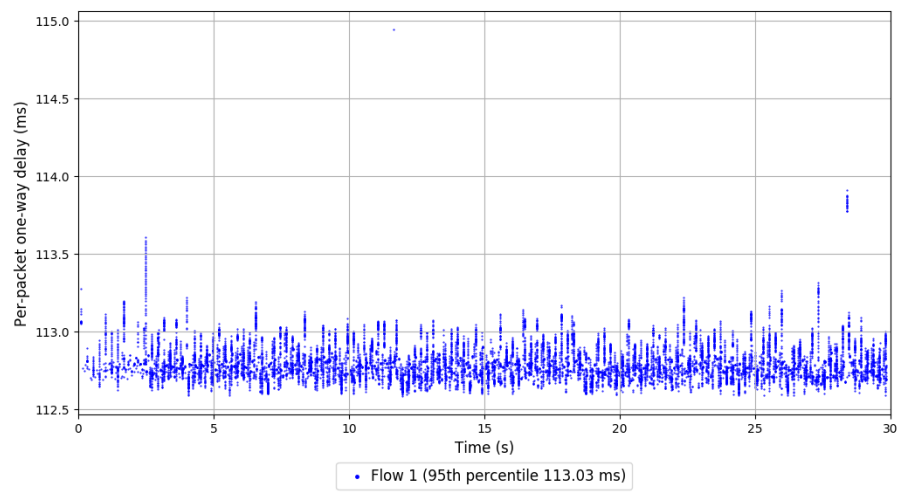
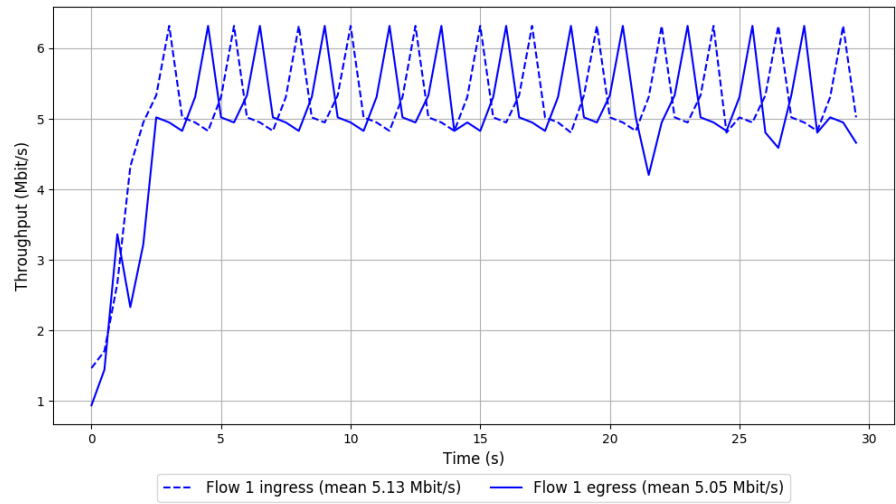
-- Flow 1:

Average throughput: 5.05 Mbit/s

95th percentile per-packet one-way delay: 113.033 ms

Loss rate: 2.35%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-11 06:07:57

End at: 2017-08-11 06:08:27

Below is generated by plot.py at 2017-08-11 09:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 112.092 ms

Loss rate: 0.77%

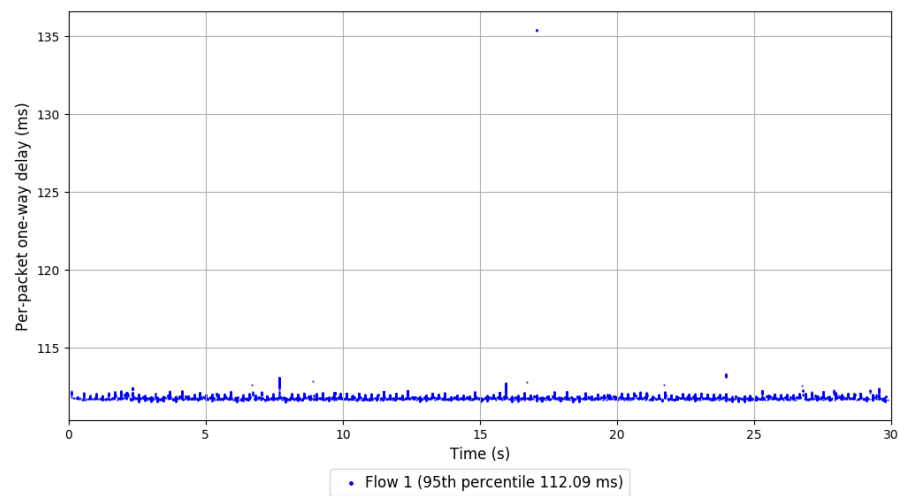
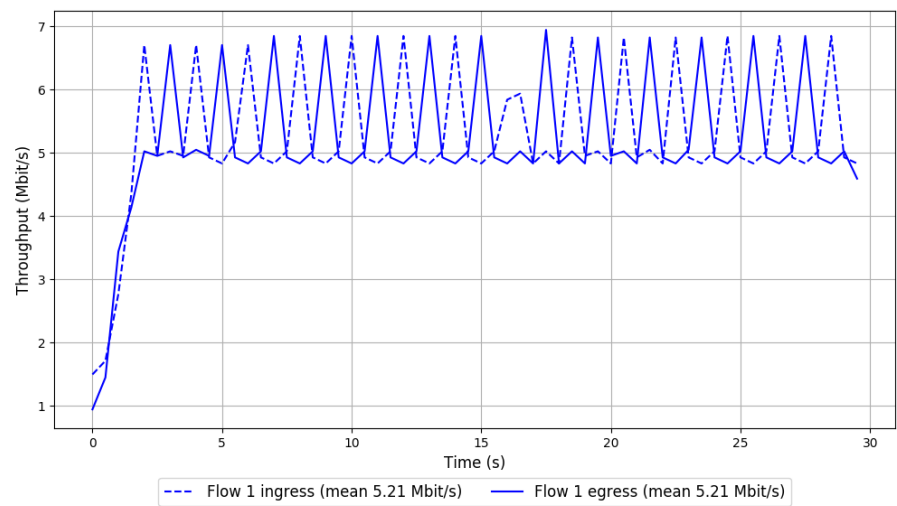
-- Flow 1:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 112.092 ms

Loss rate: 0.77%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-11 06:19:07

End at: 2017-08-11 06:19:37

Below is generated by plot.py at 2017-08-11 09:58:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 113.698 ms

Loss rate: 91.78%

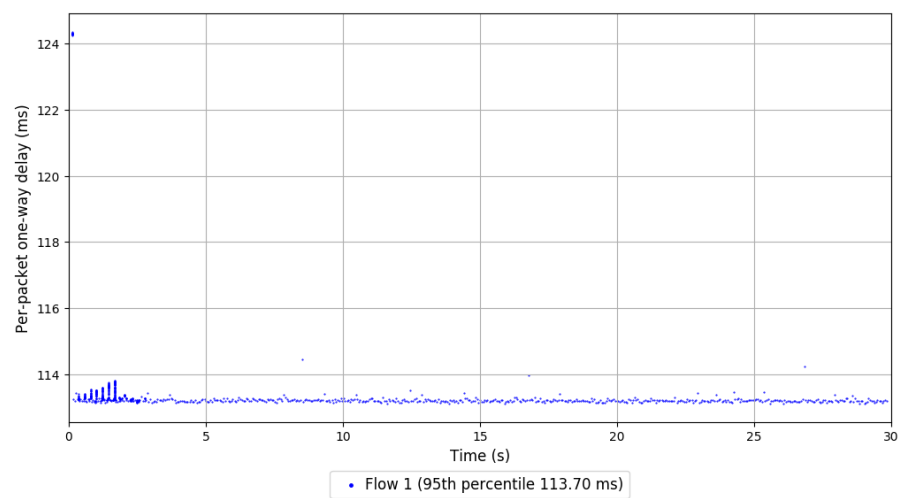
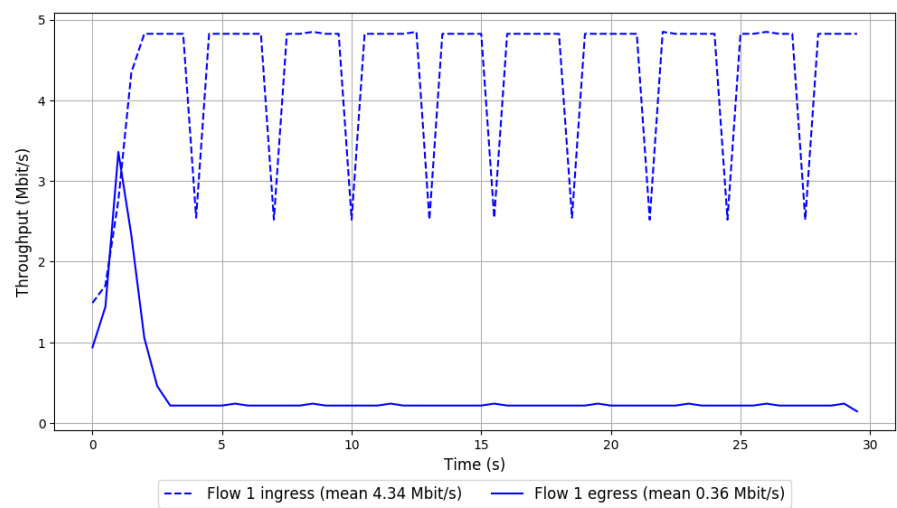
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 113.698 ms

Loss rate: 91.78%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-11 06:30:16

End at: 2017-08-11 06:30:46

Below is generated by plot.py at 2017-08-11 09:58:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 113.130 ms

Loss rate: 2.04%

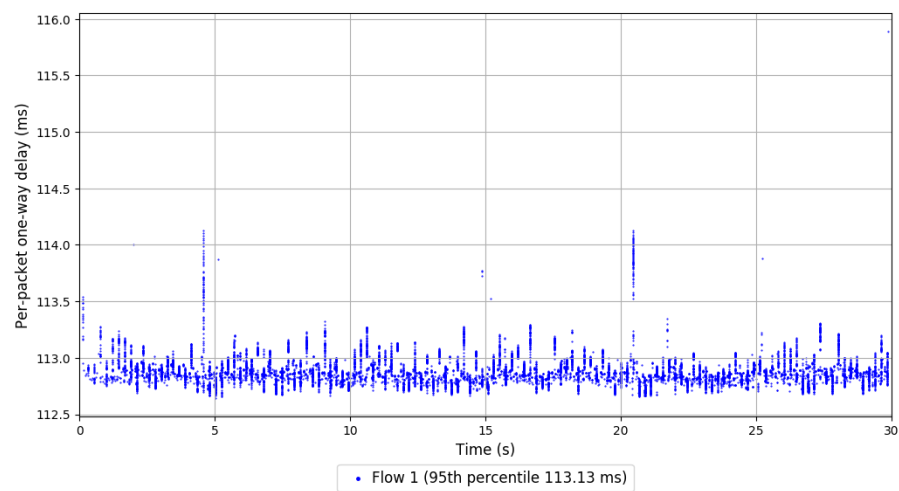
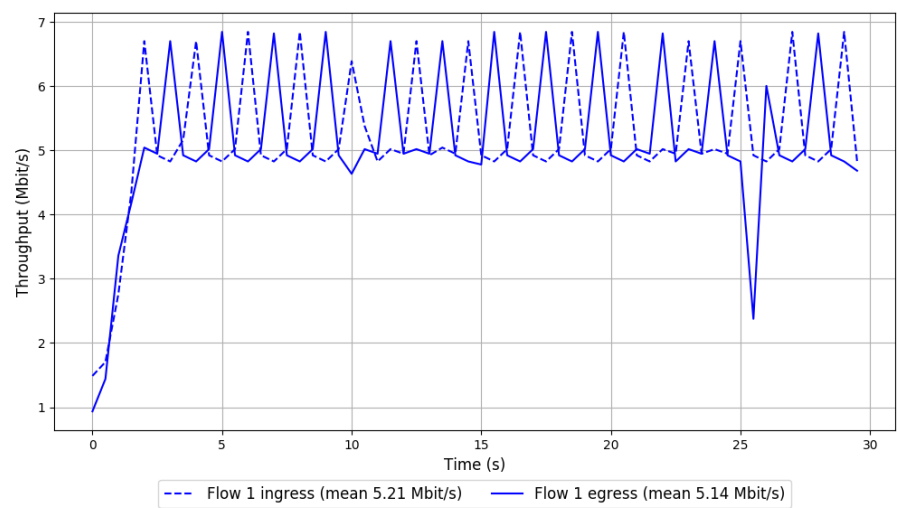
-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 113.130 ms

Loss rate: 2.04%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-11 06:41:43

End at: 2017-08-11 06:42:13

Below is generated by plot.py at 2017-08-11 09:58:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.022 ms

Loss rate: 0.78%

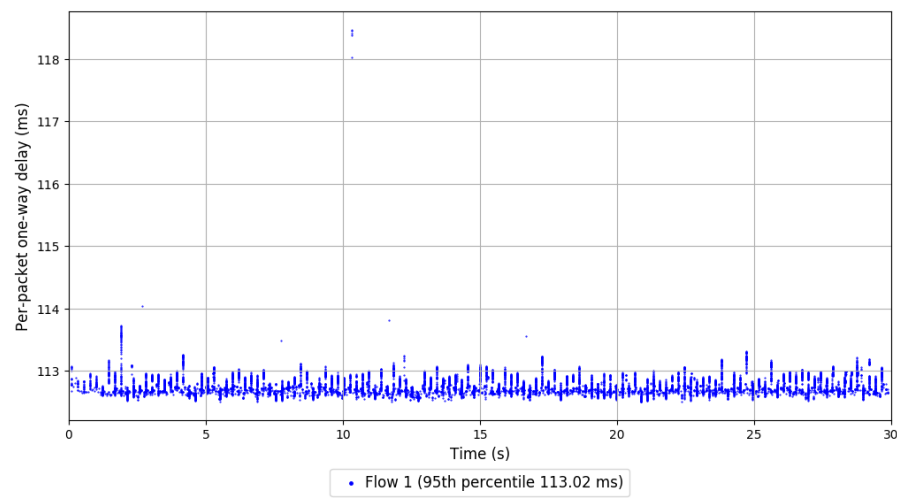
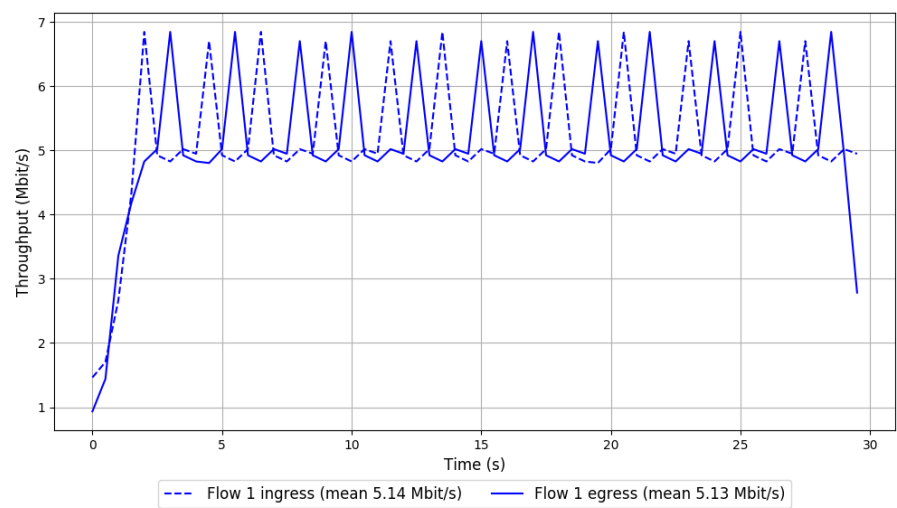
-- Flow 1:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.022 ms

Loss rate: 0.78%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-11 06:52:49

End at: 2017-08-11 06:53:19

Below is generated by plot.py at 2017-08-11 09:58:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.74 Mbit/s

95th percentile per-packet one-way delay: 113.395 ms

Loss rate: 8.31%

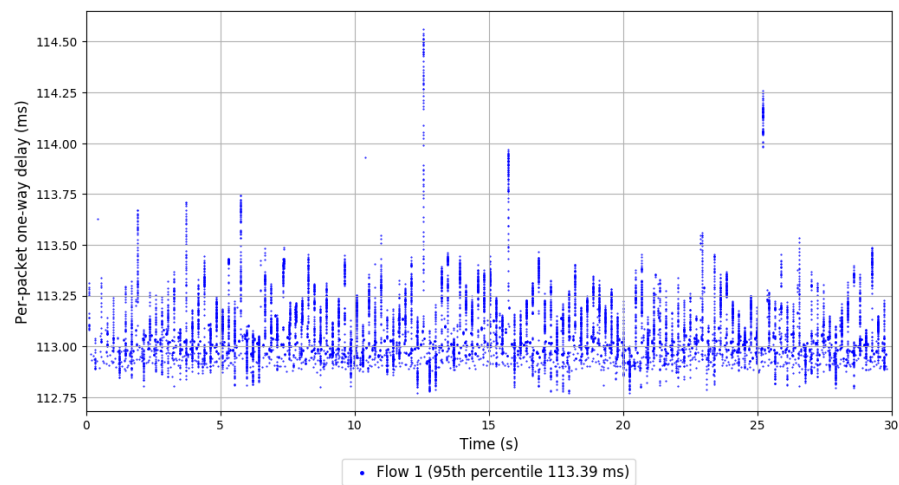
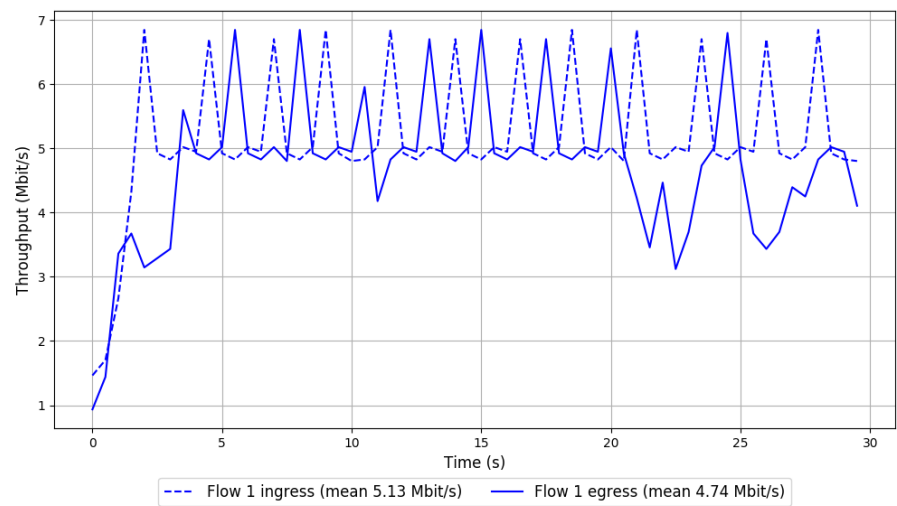
-- Flow 1:

Average throughput: 4.74 Mbit/s

95th percentile per-packet one-way delay: 113.395 ms

Loss rate: 8.31%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-11 07:03:55

End at: 2017-08-11 07:04:25

Below is generated by plot.py at 2017-08-11 09:58:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 113.813 ms

Loss rate: 65.15%

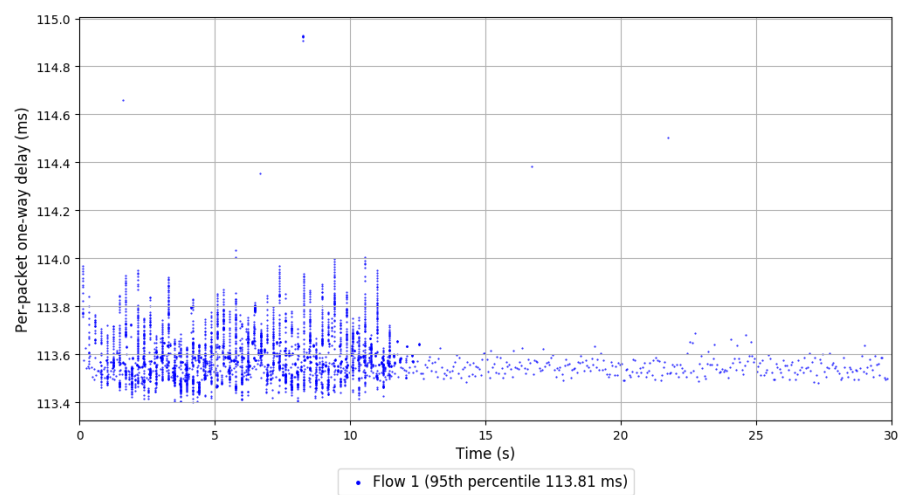
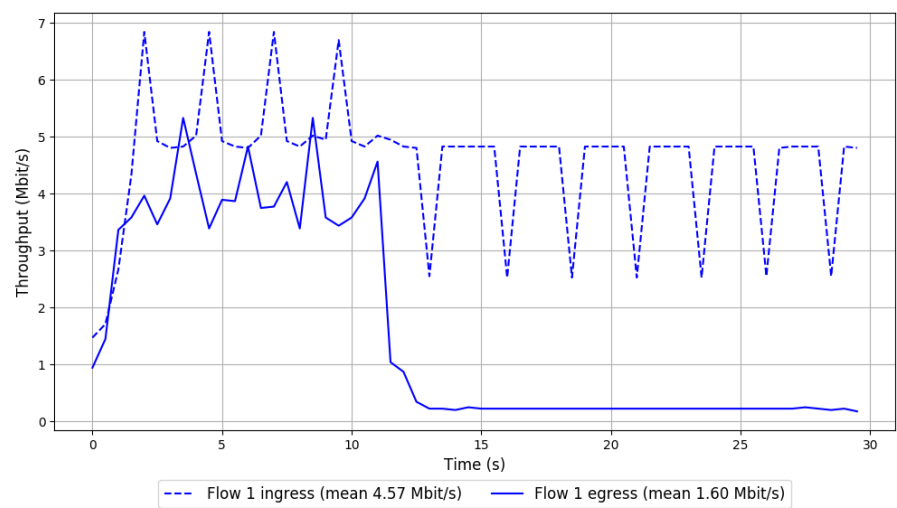
-- Flow 1:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 113.813 ms

Loss rate: 65.15%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-11 07:14:50

End at: 2017-08-11 07:15:20

Below is generated by plot.py at 2017-08-11 09:58:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 113.942 ms

Loss rate: 73.96%

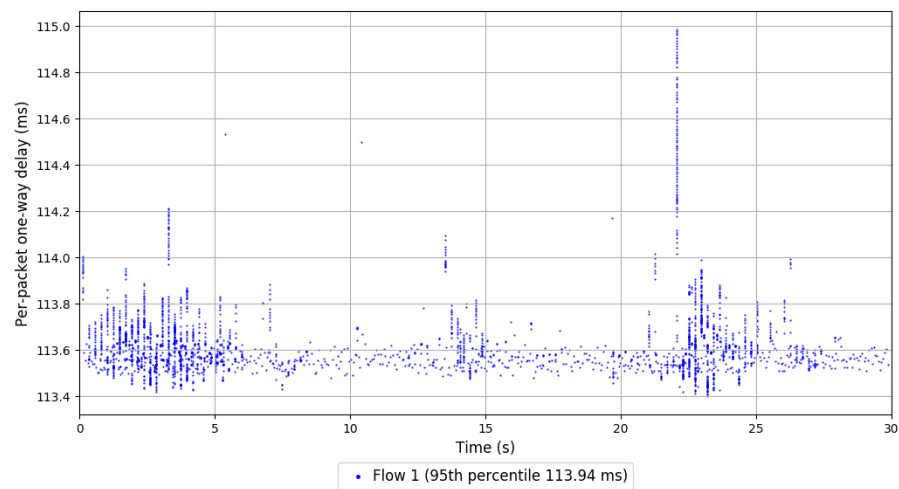
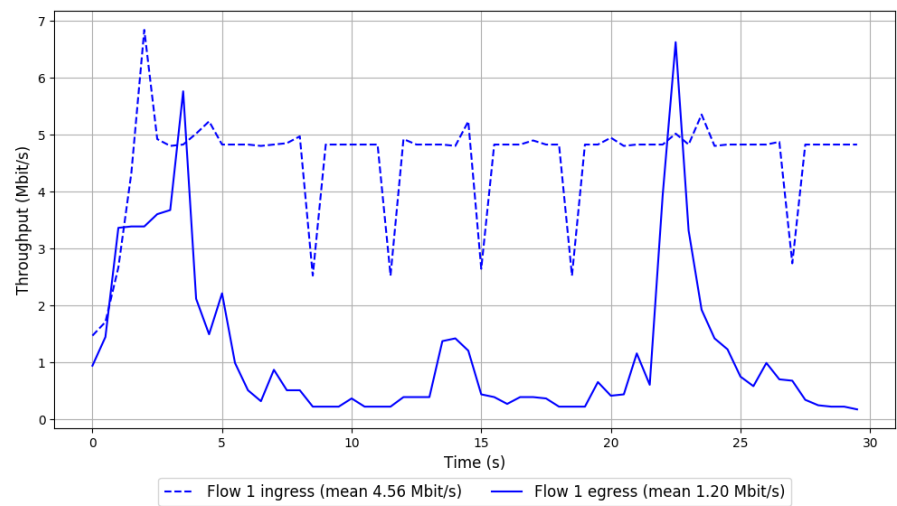
-- Flow 1:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 113.942 ms

Loss rate: 73.96%

Run 10: Report of KohoCC — Data Link

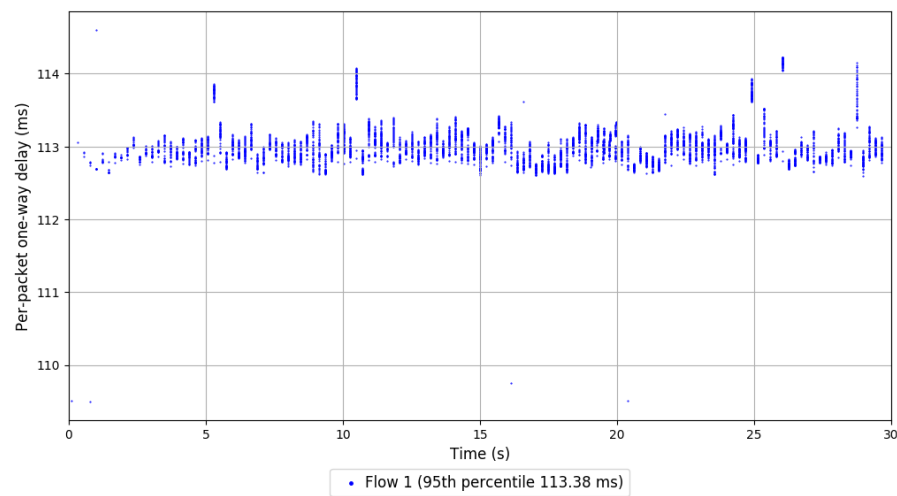
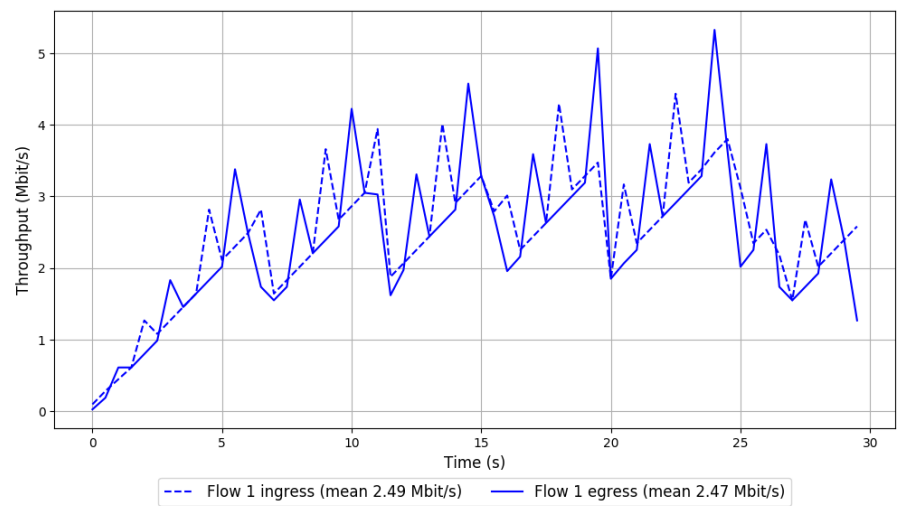


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-11 05:35:48
End at: 2017-08-11 05:36:18

# Below is generated by plot.py at 2017-08-11 09:58:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 113.378 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 113.378 ms
Loss rate: 1.75%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-08-11 05:46:55

End at: 2017-08-11 05:47:25

Below is generated by plot.py at 2017-08-11 09:58:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 113.158 ms

Loss rate: 2.97%

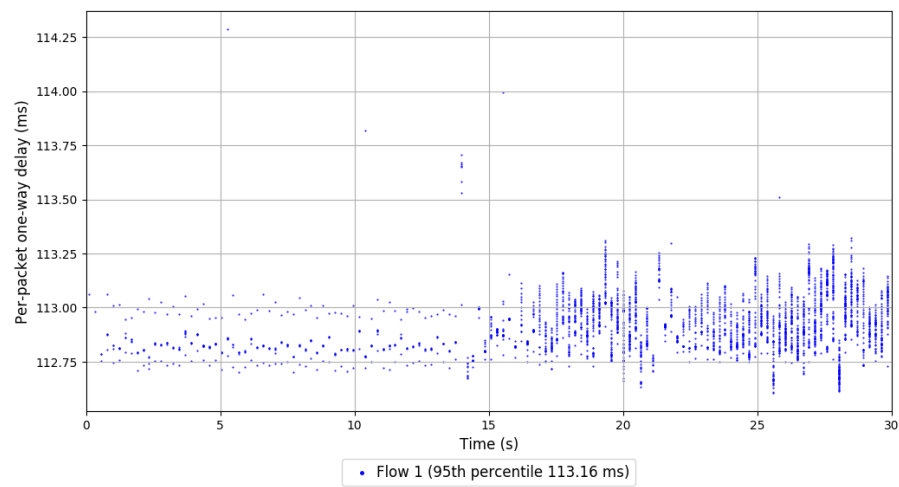
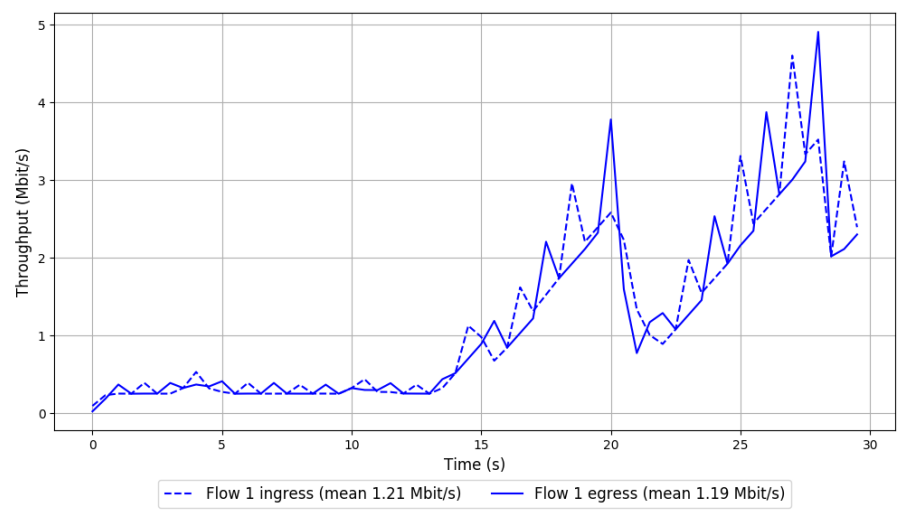
-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 113.158 ms

Loss rate: 2.97%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-11 05:58:17

End at: 2017-08-11 05:58:47

Below is generated by plot.py at 2017-08-11 09:58:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 113.241 ms

Loss rate: 0.85%

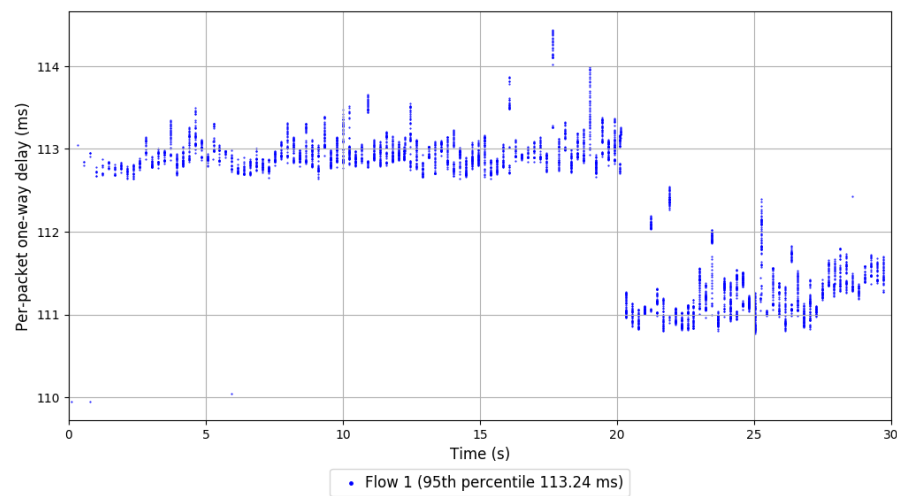
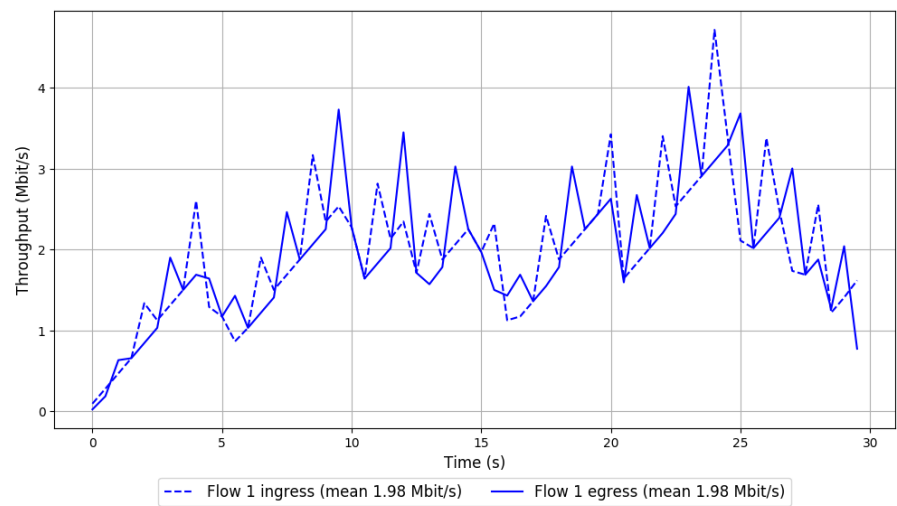
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 113.241 ms

Loss rate: 0.85%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-11 06:09:19

End at: 2017-08-11 06:09:49

Below is generated by plot.py at 2017-08-11 09:58:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 112.975 ms

Loss rate: 1.47%

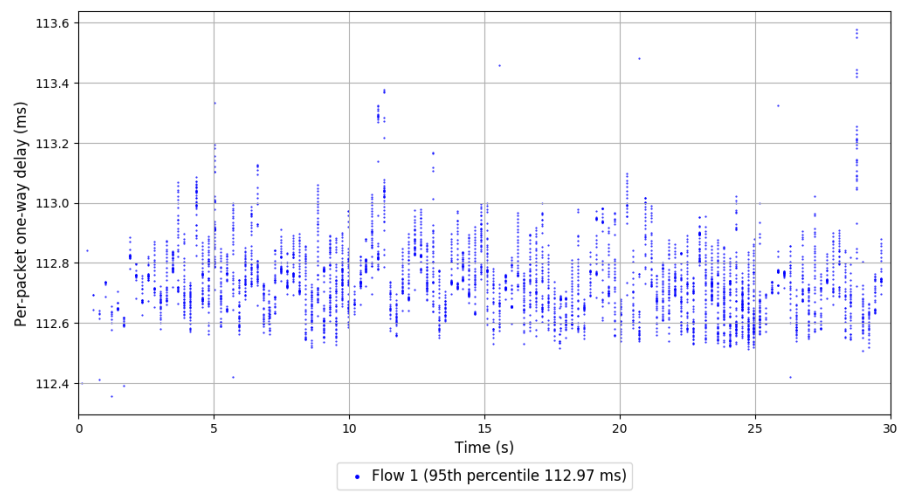
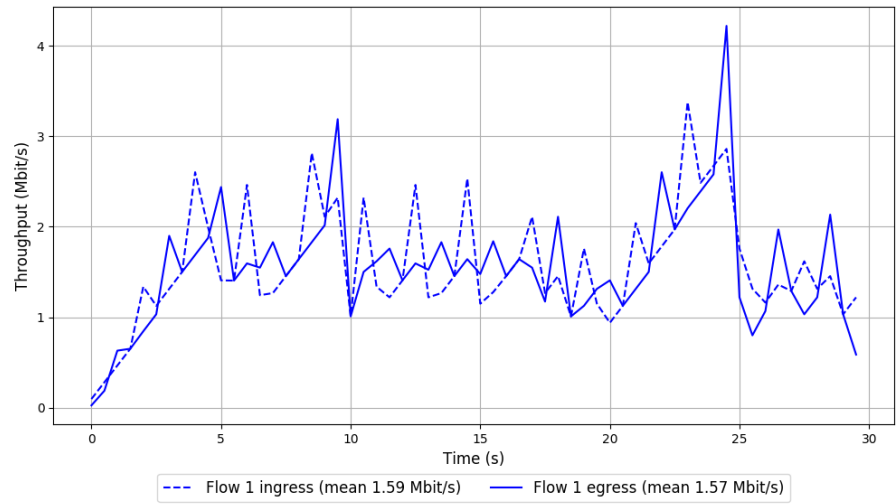
-- Flow 1:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 112.975 ms

Loss rate: 1.47%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-11 06:20:29

End at: 2017-08-11 06:20:59

Below is generated by plot.py at 2017-08-11 09:58:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 113.506 ms

Loss rate: 1.39%

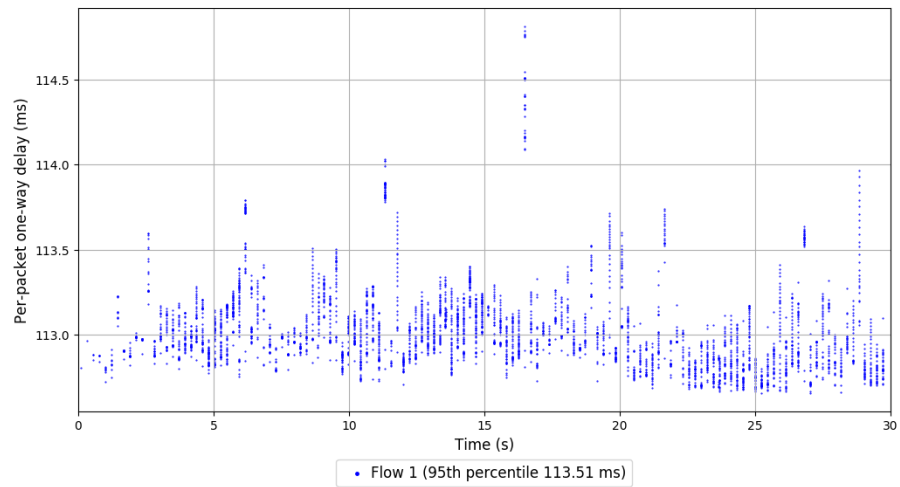
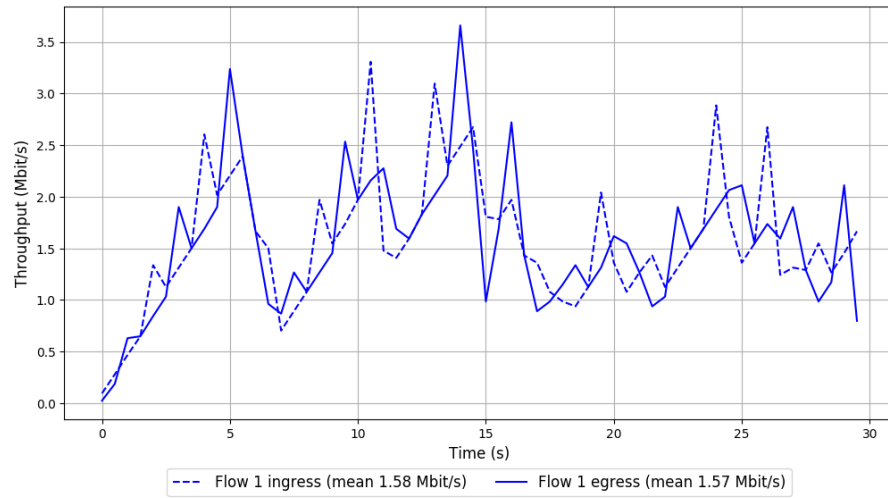
-- Flow 1:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 113.506 ms

Loss rate: 1.39%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-11 06:31:38

End at: 2017-08-11 06:32:08

Below is generated by plot.py at 2017-08-11 09:58:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 113.184 ms

Loss rate: 2.52%

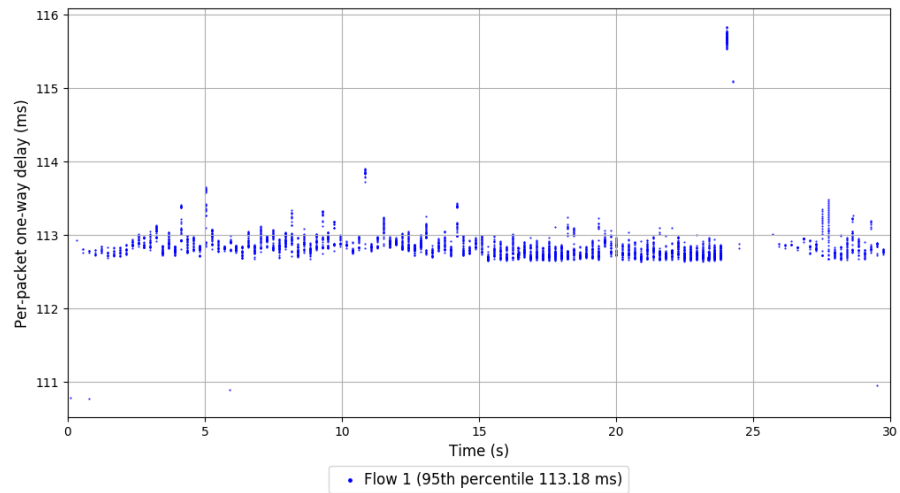
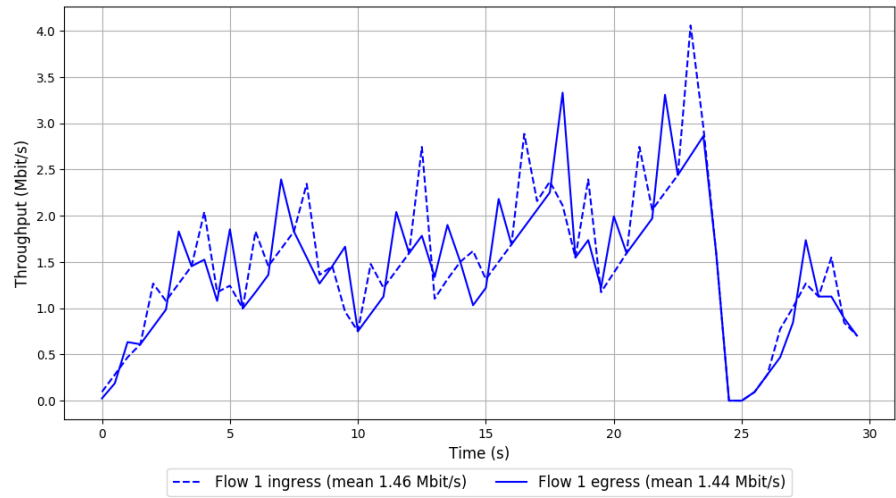
-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 113.184 ms

Loss rate: 2.52%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-11 06:43:05

End at: 2017-08-11 06:43:35

Below is generated by plot.py at 2017-08-11 09:58:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 112.970 ms

Loss rate: 0.81%

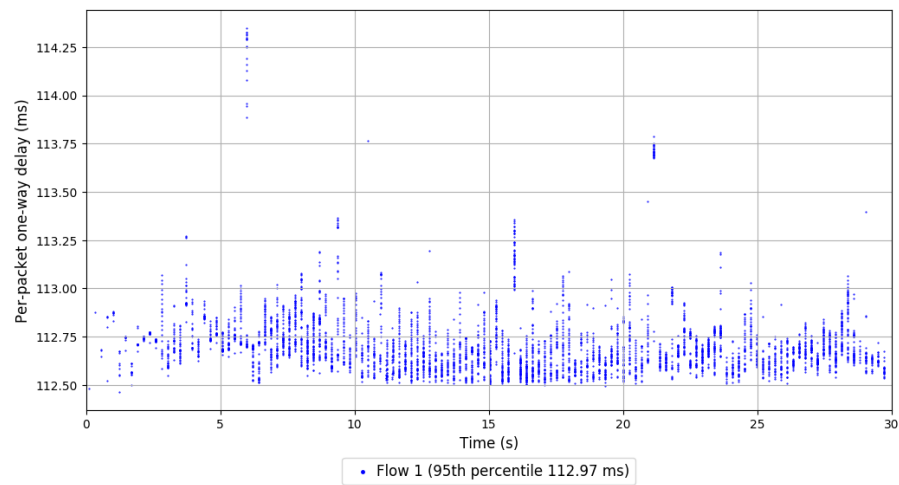
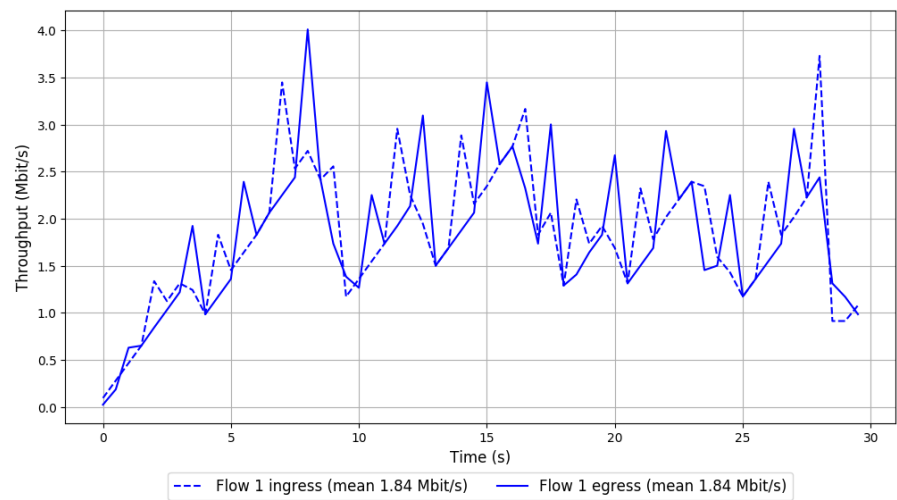
-- Flow 1:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 112.970 ms

Loss rate: 0.81%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-11 06:54:11

End at: 2017-08-11 06:54:41

Below is generated by plot.py at 2017-08-11 09:58:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 112.936 ms

Loss rate: 1.31%

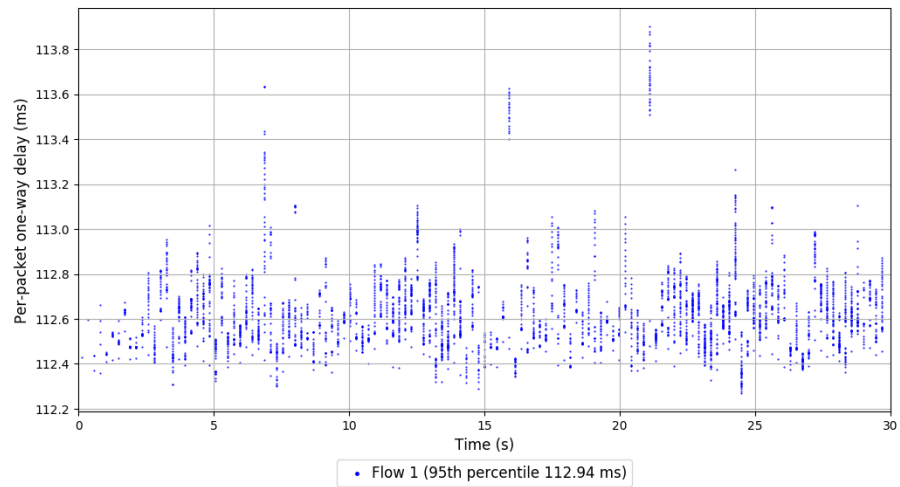
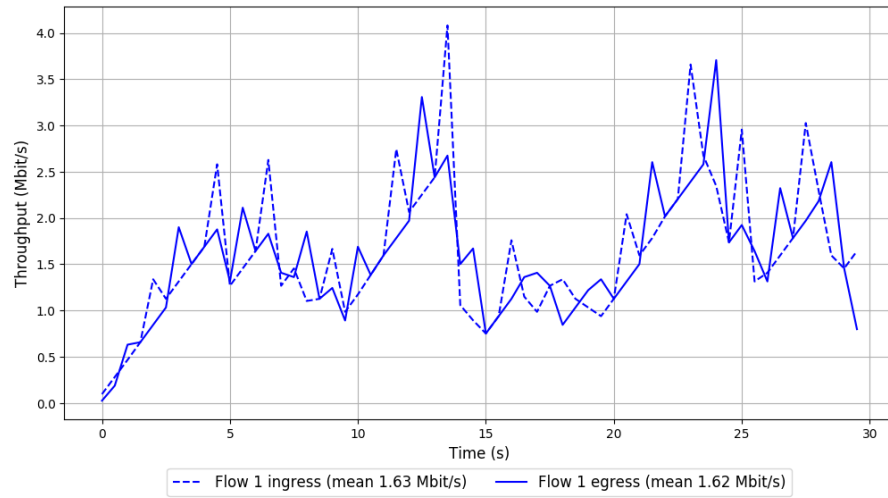
-- Flow 1:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 112.936 ms

Loss rate: 1.31%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-11 07:05:17

End at: 2017-08-11 07:05:47

Below is generated by plot.py at 2017-08-11 09:58:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 114.036 ms

Loss rate: 0.96%

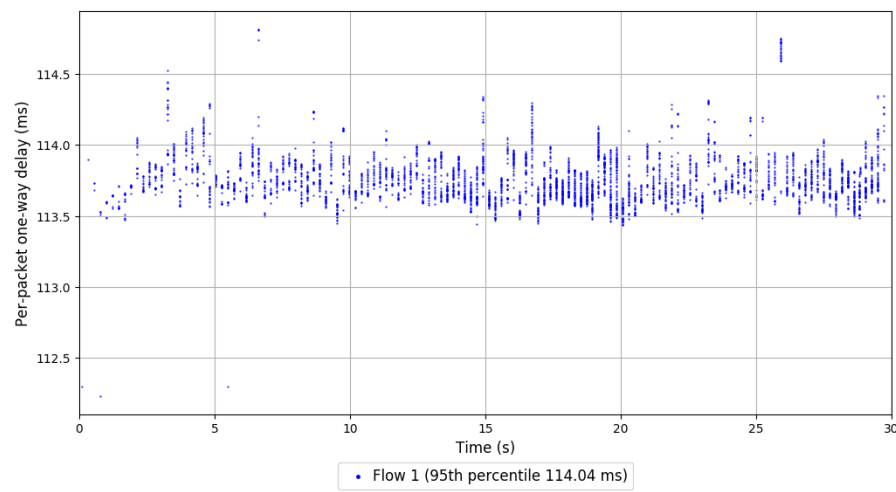
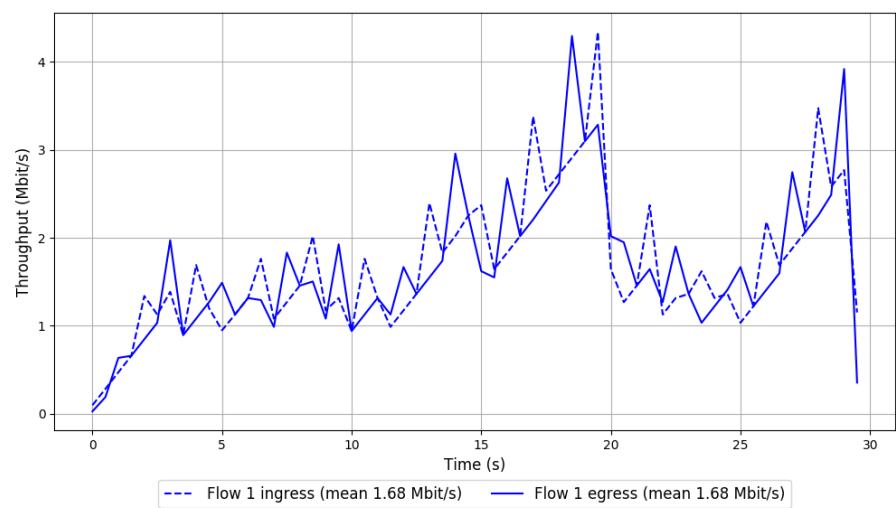
-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 114.036 ms

Loss rate: 0.96%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-11 07:16:12

End at: 2017-08-11 07:16:42

Below is generated by plot.py at 2017-08-11 09:58:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.02 Mbit/s

95th percentile per-packet one-way delay: 113.893 ms

Loss rate: 4.32%

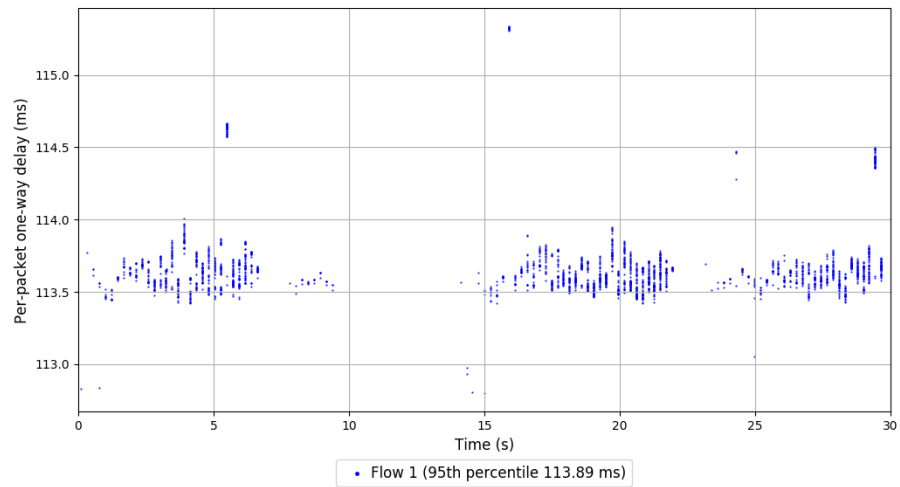
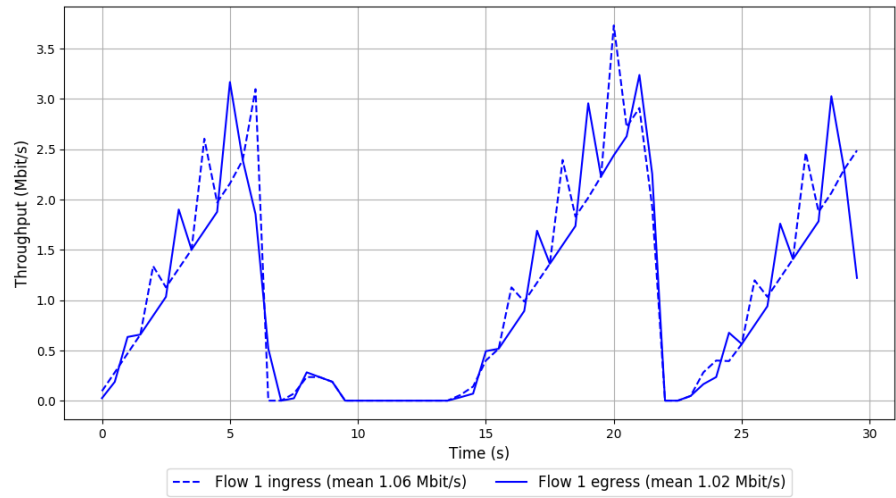
-- Flow 1:

Average throughput: 1.02 Mbit/s

95th percentile per-packet one-way delay: 113.893 ms

Loss rate: 4.32%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2017-08-11 05:43:25

End at: 2017-08-11 05:43:55

Below is generated by plot.py at 2017-08-11 09:58:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 125.54 Mbit/s

95th percentile per-packet one-way delay: 112.703 ms

Loss rate: 9.14%

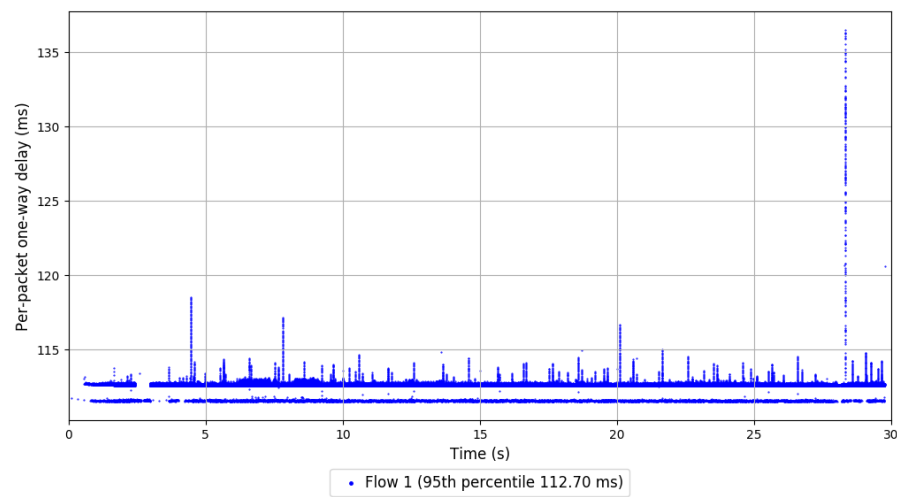
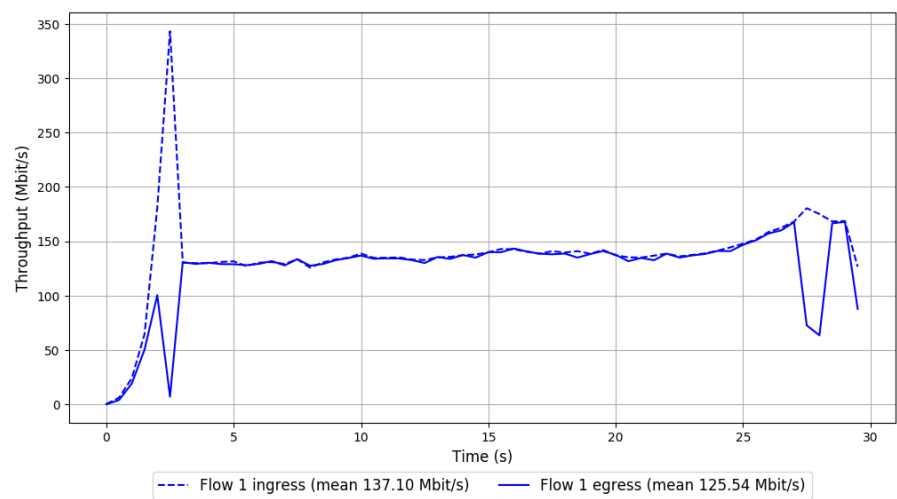
-- Flow 1:

Average throughput: 125.54 Mbit/s

95th percentile per-packet one-way delay: 112.703 ms

Loss rate: 9.14%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-11 05:54:34

End at: 2017-08-11 05:55:04

Below is generated by plot.py at 2017-08-11 09:59:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 428.73 Mbit/s

95th percentile per-packet one-way delay: 116.951 ms

Loss rate: 7.98%

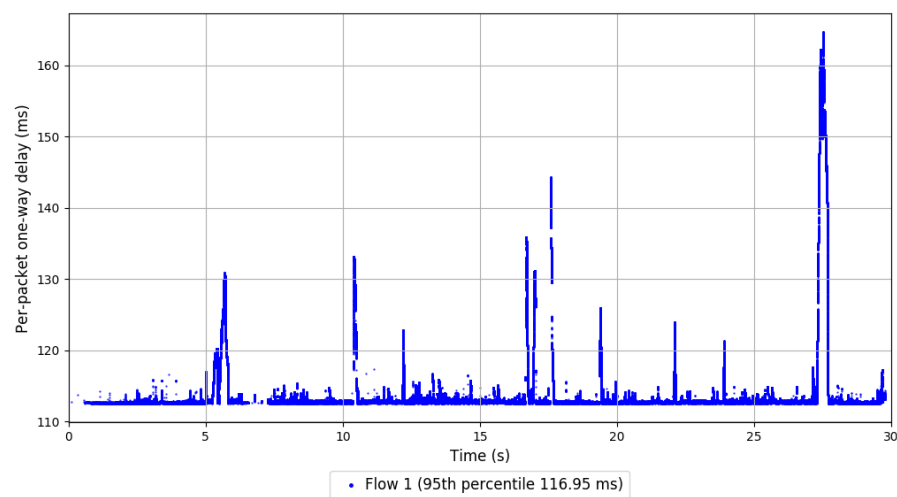
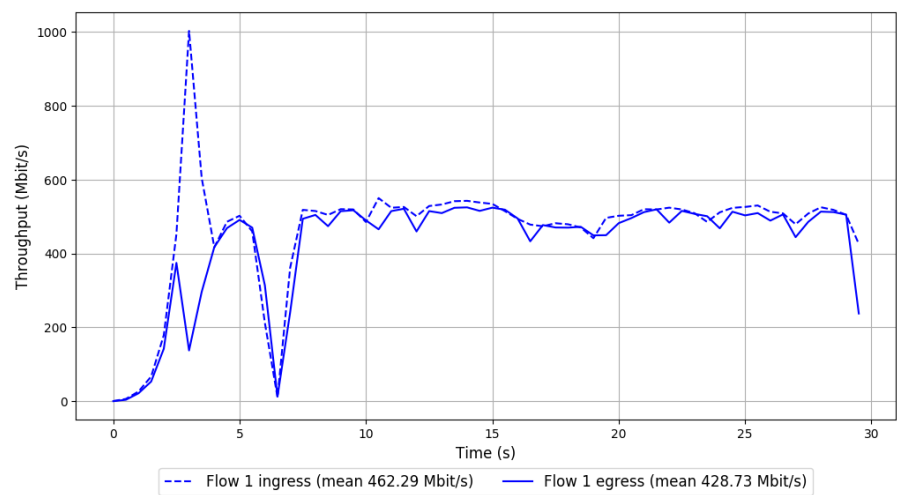
-- Flow 1:

Average throughput: 428.73 Mbit/s

95th percentile per-packet one-way delay: 116.951 ms

Loss rate: 7.98%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-11 06:05:36

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

Below is generated by plot.py at 2017-08-11 10:00:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 396.22 Mbit/s

95th percentile per-packet one-way delay: 120.083 ms

Loss rate: 3.87%

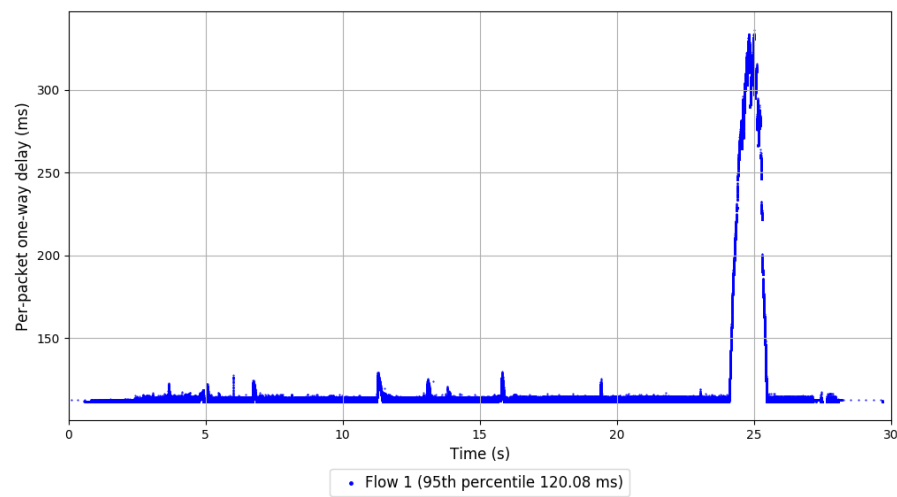
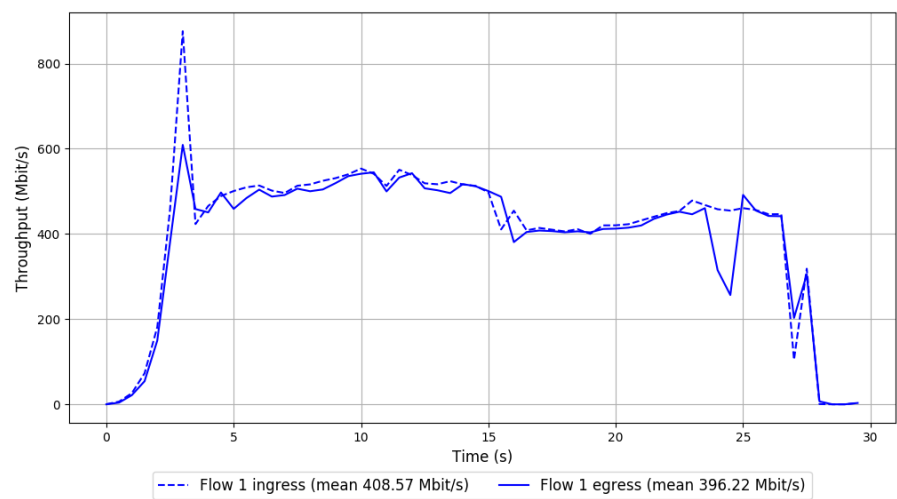
-- Flow 1:

Average throughput: 396.22 Mbit/s

95th percentile per-packet one-way delay: 120.083 ms

Loss rate: 3.87%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-11 06:16:57

End at: 2017-08-11 06:17:27

Below is generated by plot.py at 2017-08-11 10:00:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 149.93 Mbit/s

95th percentile per-packet one-way delay: 113.099 ms

Loss rate: 6.86%

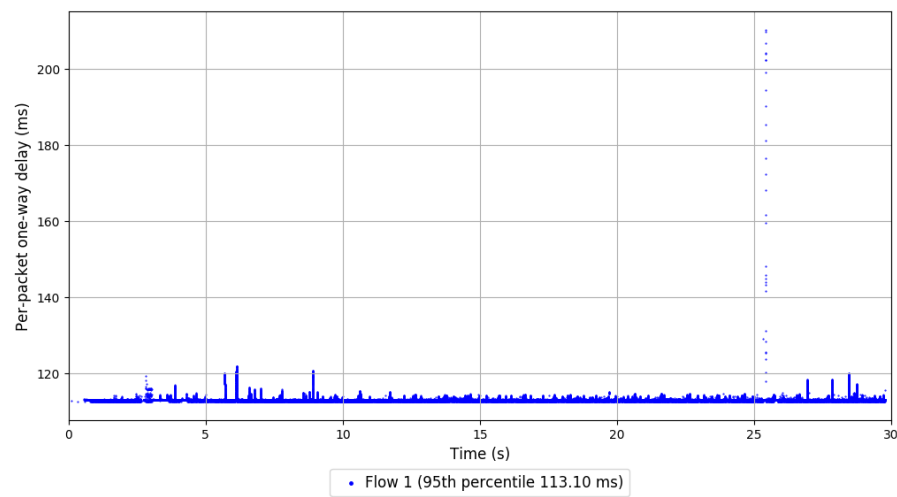
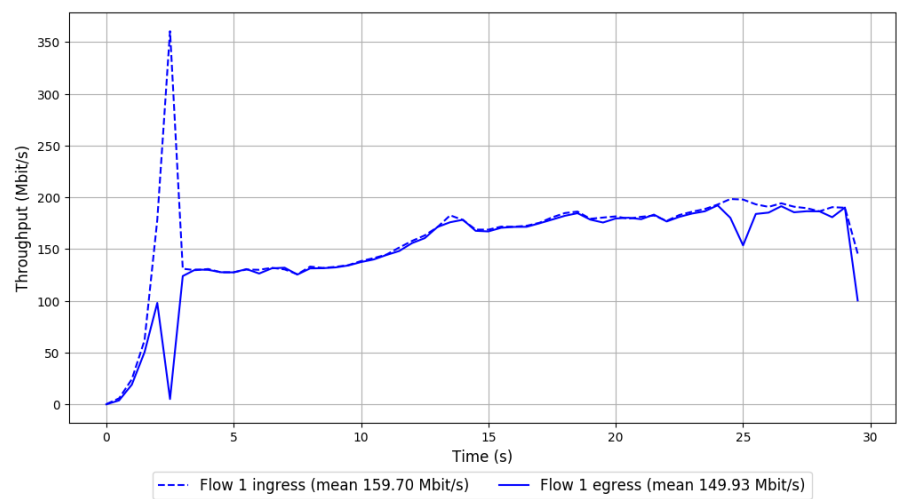
-- Flow 1:

Average throughput: 149.93 Mbit/s

95th percentile per-packet one-way delay: 113.099 ms

Loss rate: 6.86%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-11 06:27:46

End at: 2017-08-11 06:28:16

Below is generated by plot.py at 2017-08-11 10:00:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 236.98 Mbit/s

95th percentile per-packet one-way delay: 112.400 ms

Loss rate: 7.66%

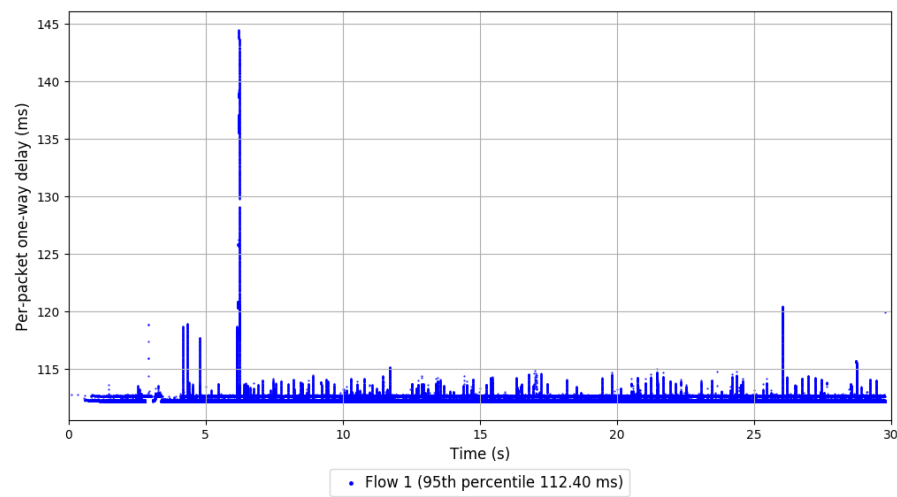
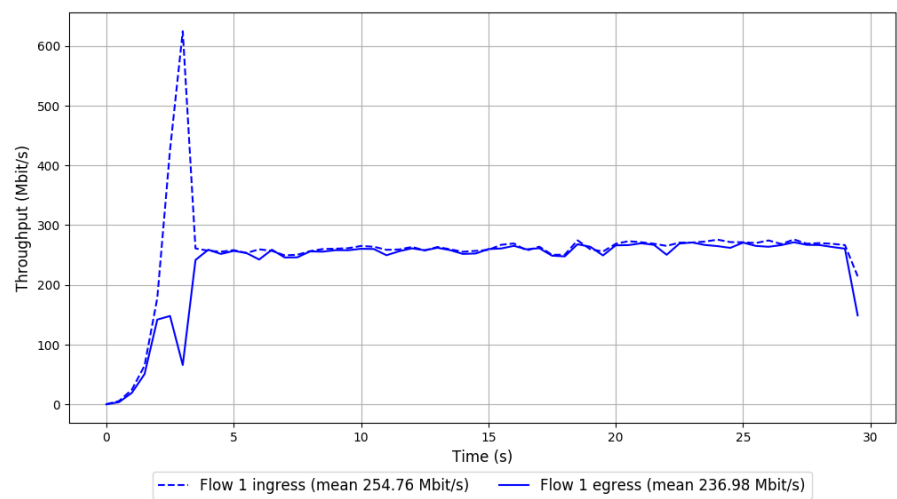
-- Flow 1:

Average throughput: 236.98 Mbit/s

95th percentile per-packet one-way delay: 112.400 ms

Loss rate: 7.66%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-11 06:39:18

End at: 2017-08-11 06:39:48

Below is generated by plot.py at 2017-08-11 10:01:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 497.15 Mbit/s

95th percentile per-packet one-way delay: 203.886 ms

Loss rate: 2.83%

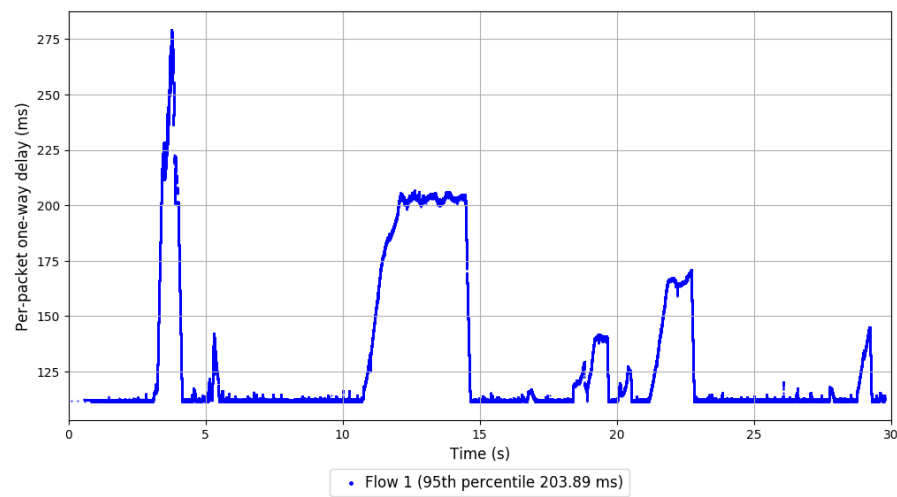
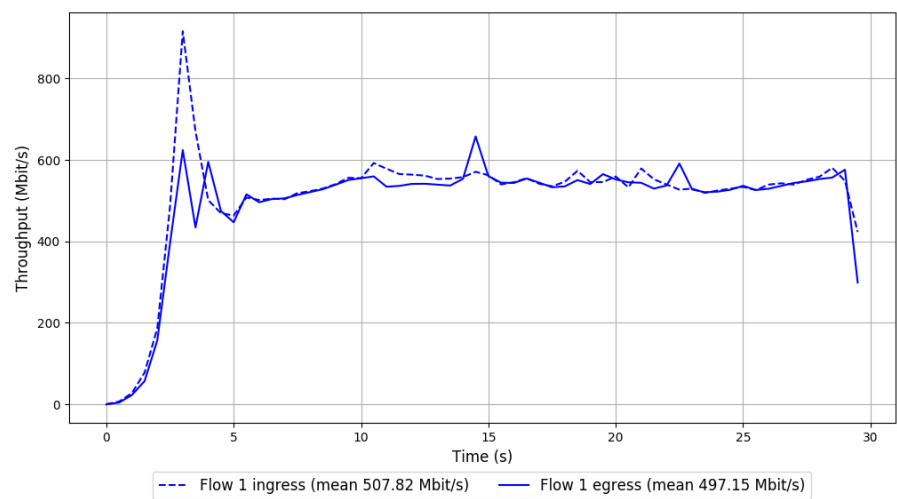
-- Flow 1:

Average throughput: 497.15 Mbit/s

95th percentile per-packet one-way delay: 203.886 ms

Loss rate: 2.83%

Run 6: Report of PCC — Data Link

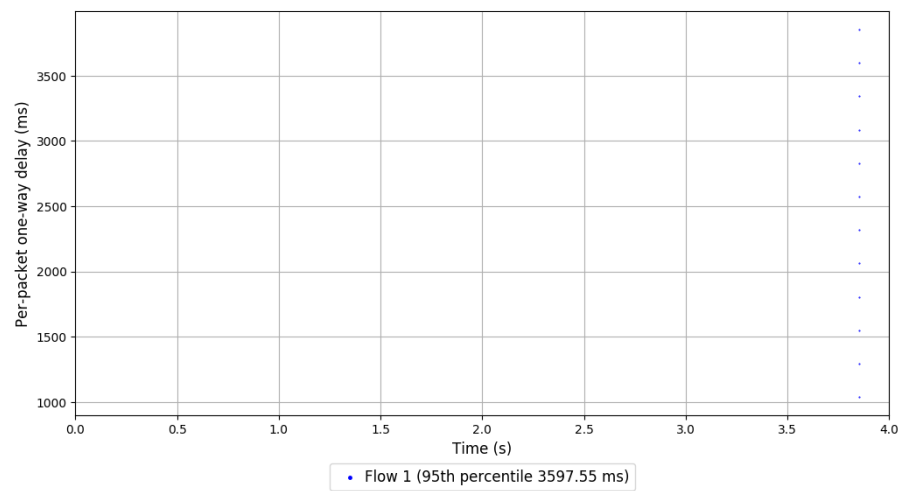
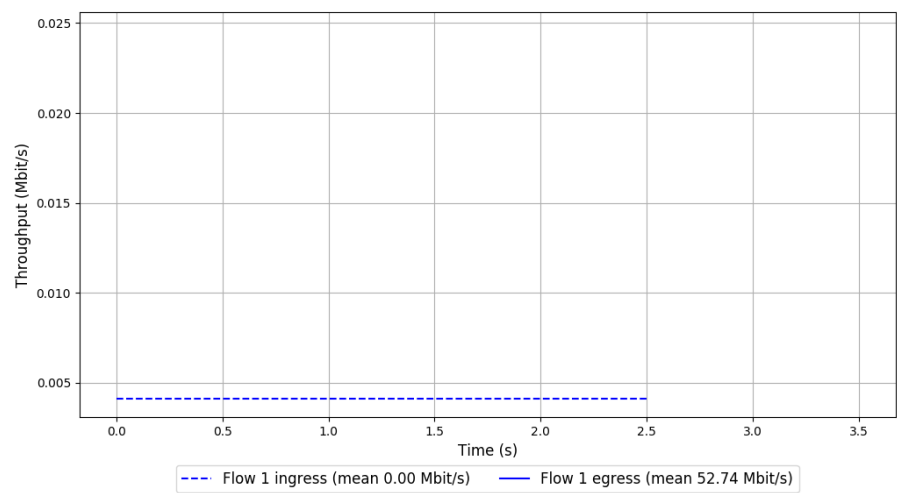


Run 7: Statistics of PCC

Start at: 2017-08-11 06:50:47

End at: 2017-08-11 06:51:17

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-11 07:01:30

End at: 2017-08-11 07:02:00

Below is generated by plot.py at 2017-08-11 10:02:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 499.99 Mbit/s

95th percentile per-packet one-way delay: 205.108 ms

Loss rate: 2.43%

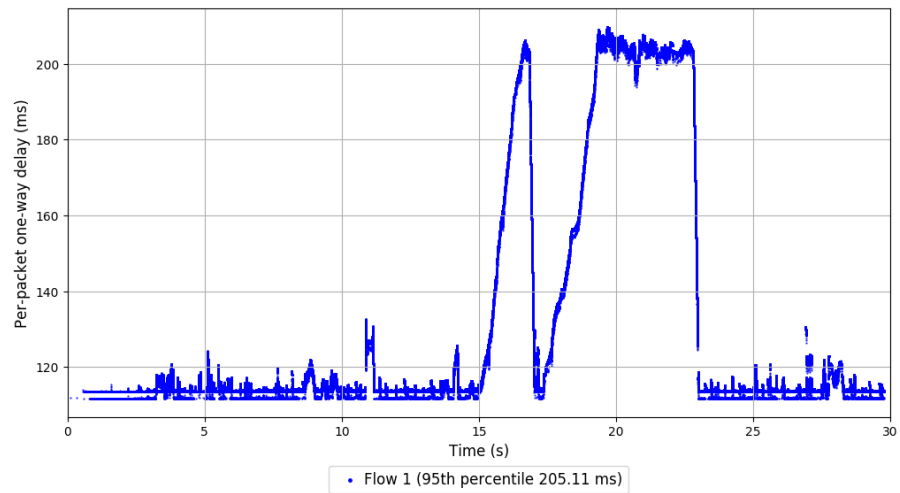
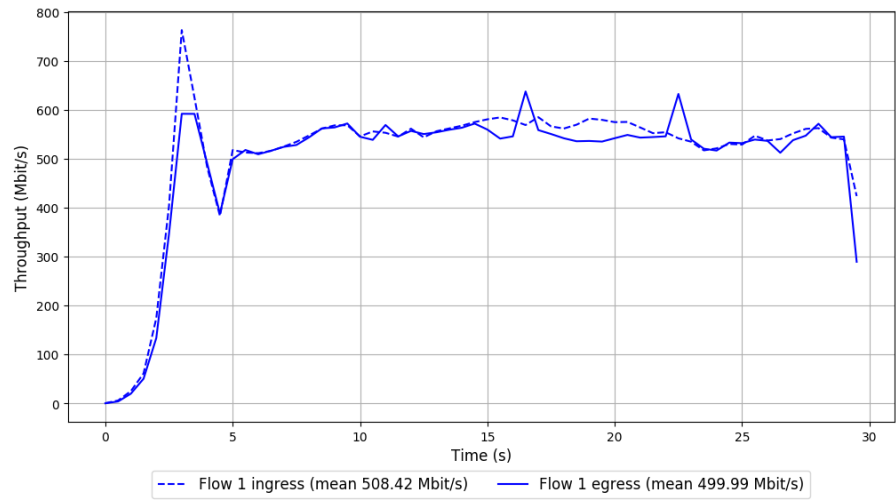
-- Flow 1:

Average throughput: 499.99 Mbit/s

95th percentile per-packet one-way delay: 205.108 ms

Loss rate: 2.43%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-11 07:12:28

End at: 2017-08-11 07:12:58

Below is generated by plot.py at 2017-08-11 10:03:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 430.92 Mbit/s

95th percentile per-packet one-way delay: 117.420 ms

Loss rate: 7.76%

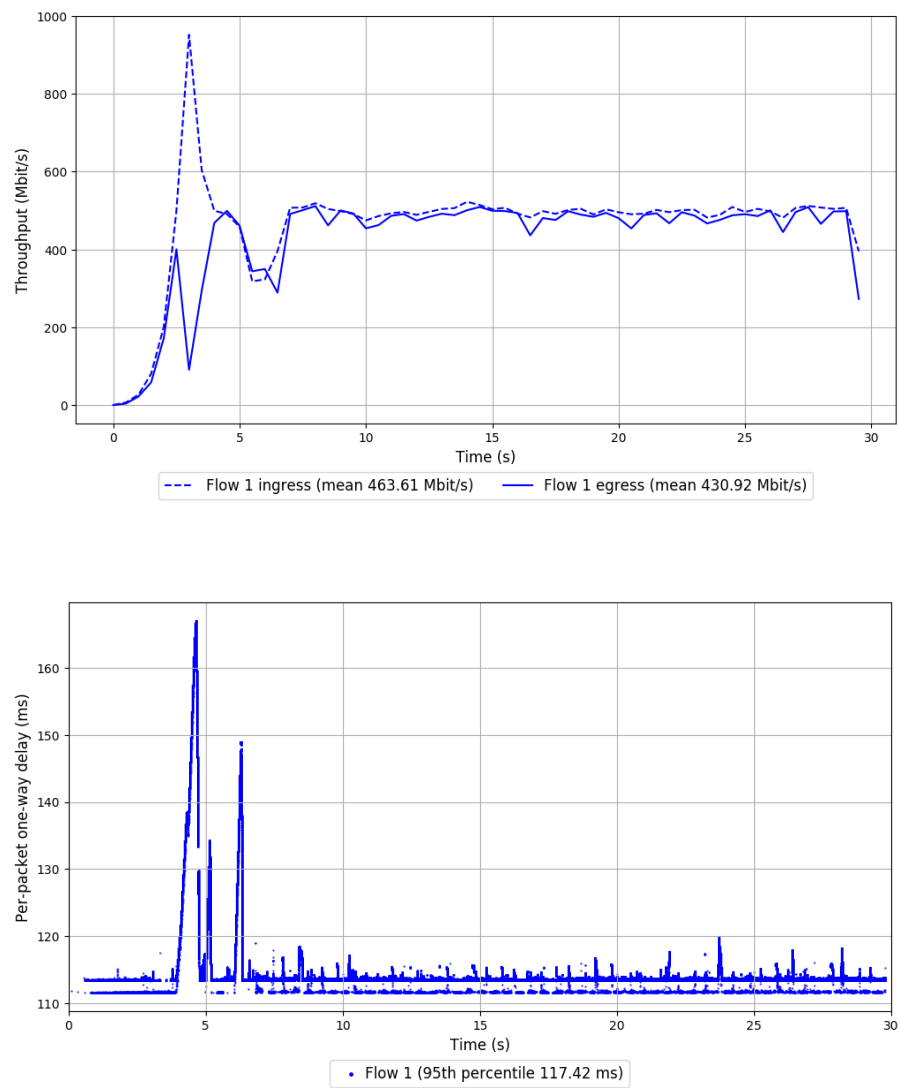
-- Flow 1:

Average throughput: 430.92 Mbit/s

95th percentile per-packet one-way delay: 117.420 ms

Loss rate: 7.76%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-11 07:23:29

End at: 2017-08-11 07:23:59

Below is generated by plot.py at 2017-08-11 10:04:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 414.33 Mbit/s

95th percentile per-packet one-way delay: 116.170 ms

Loss rate: 8.34%

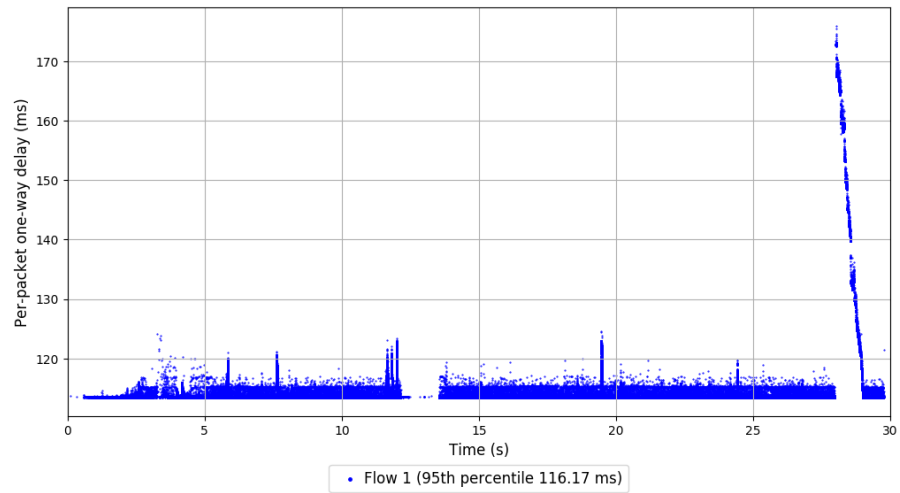
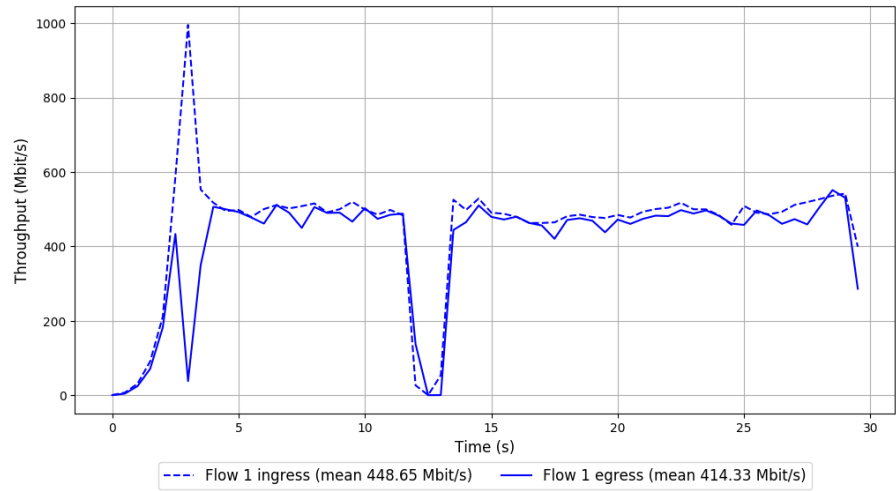
-- Flow 1:

Average throughput: 414.33 Mbit/s

95th percentile per-packet one-way delay: 116.170 ms

Loss rate: 8.34%

Run 10: Report of PCC — Data Link

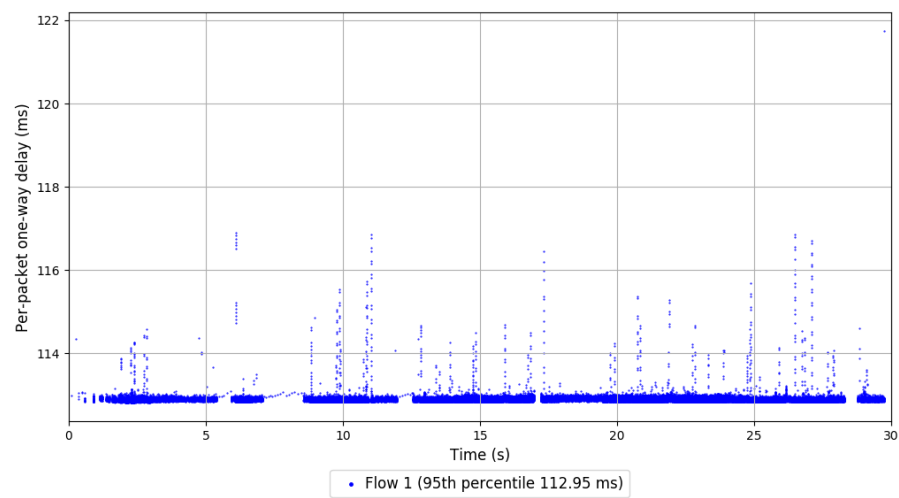
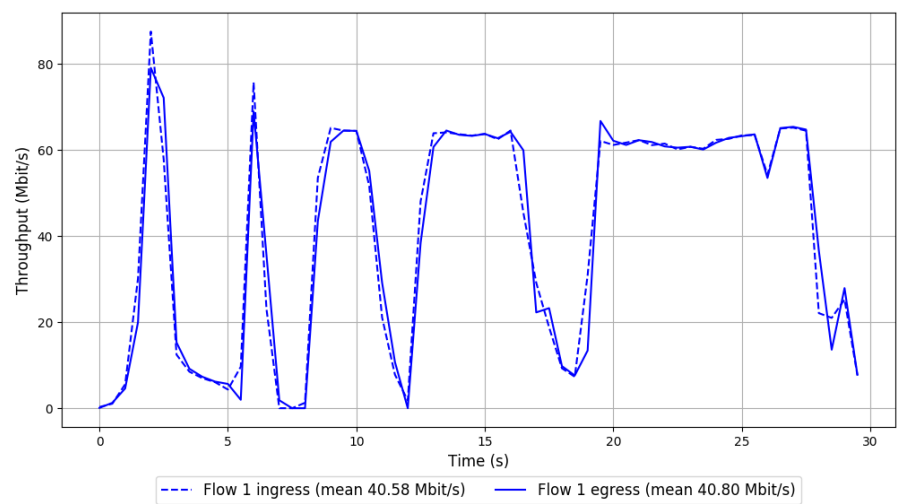


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-11 05:40:01
End at: 2017-08-11 05:40:31

# Below is generated by plot.py at 2017-08-11 10:04:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.80 Mbit/s
95th percentile per-packet one-way delay: 112.946 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 40.80 Mbit/s
95th percentile per-packet one-way delay: 112.946 ms
Loss rate: 0.19%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-11 05:51:11

End at: 2017-08-11 05:51:41

Below is generated by plot.py at 2017-08-11 10:04:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.68 Mbit/s

95th percentile per-packet one-way delay: 111.668 ms

Loss rate: 0.39%

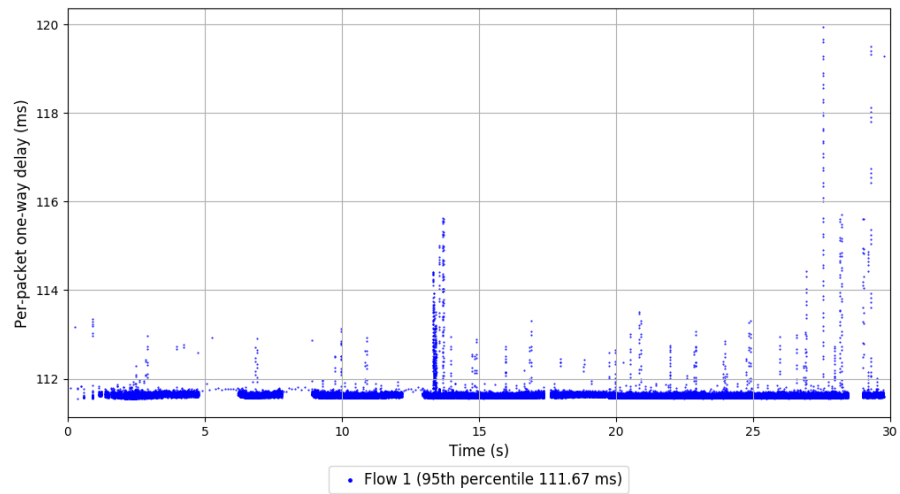
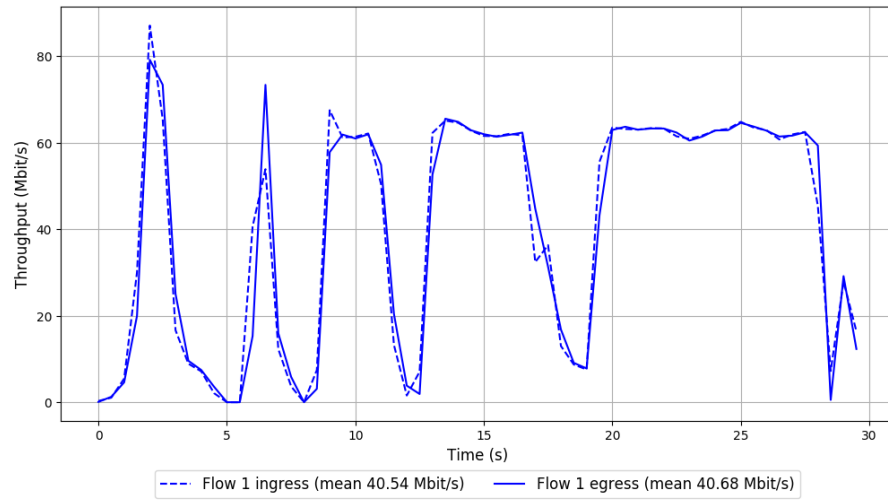
-- Flow 1:

Average throughput: 40.68 Mbit/s

95th percentile per-packet one-way delay: 111.668 ms

Loss rate: 0.39%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-11 06:02:28

End at: 2017-08-11 06:02:58

Below is generated by plot.py at 2017-08-11 10:04:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.24 Mbit/s

95th percentile per-packet one-way delay: 112.266 ms

Loss rate: 1.52%

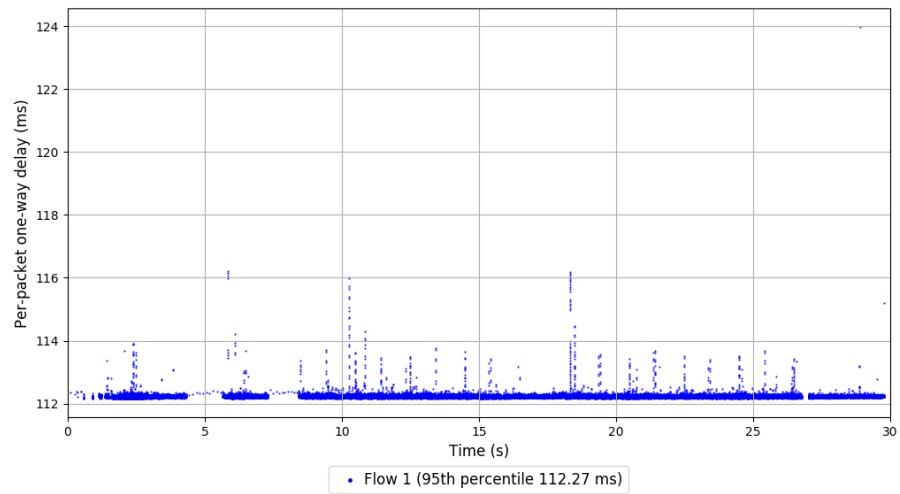
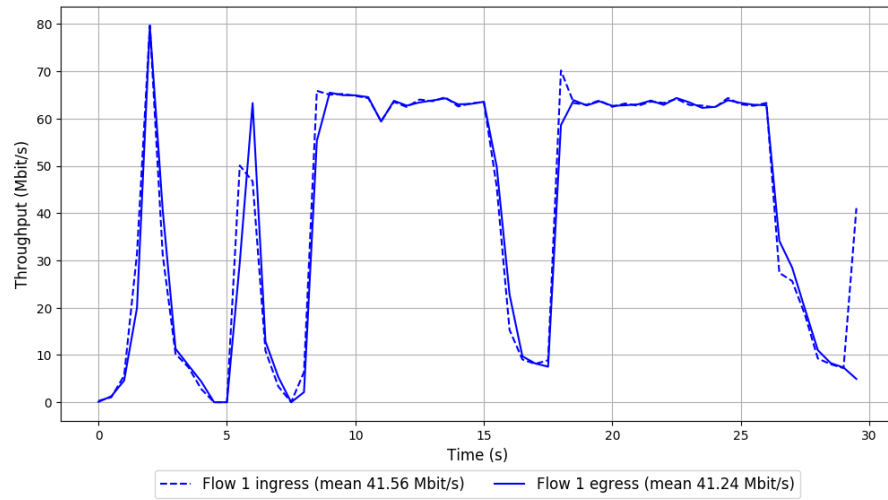
-- Flow 1:

Average throughput: 41.24 Mbit/s

95th percentile per-packet one-way delay: 112.266 ms

Loss rate: 1.52%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-11 06:13:30

End at: 2017-08-11 06:14:00

Below is generated by plot.py at 2017-08-11 10:04:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.44 Mbit/s

95th percentile per-packet one-way delay: 111.639 ms

Loss rate: 1.40%

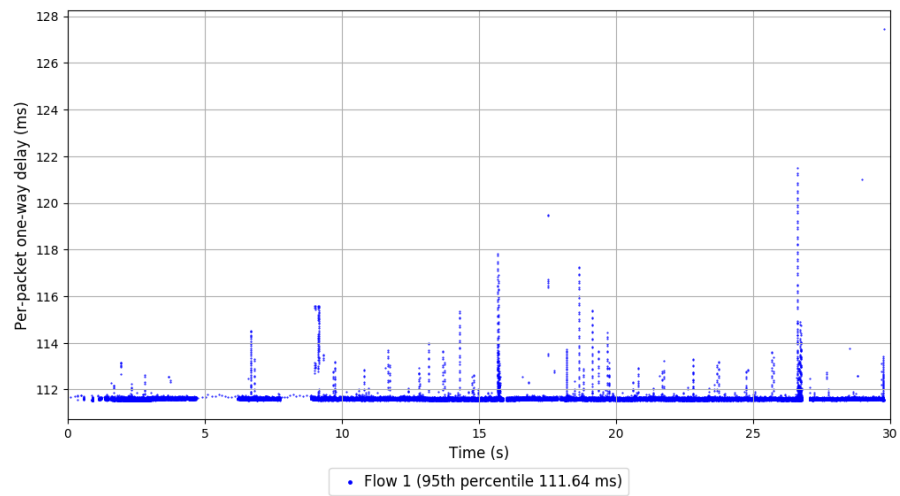
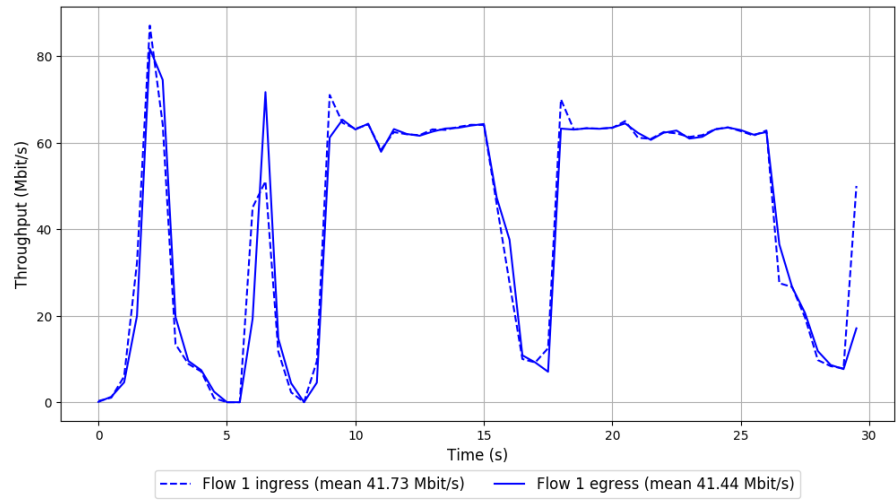
-- Flow 1:

Average throughput: 41.44 Mbit/s

95th percentile per-packet one-way delay: 111.639 ms

Loss rate: 1.40%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-11 06:24:40

End at: 2017-08-11 06:25:10

Below is generated by plot.py at 2017-08-11 10:04:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.20 Mbit/s

95th percentile per-packet one-way delay: 112.612 ms

Loss rate: 1.19%

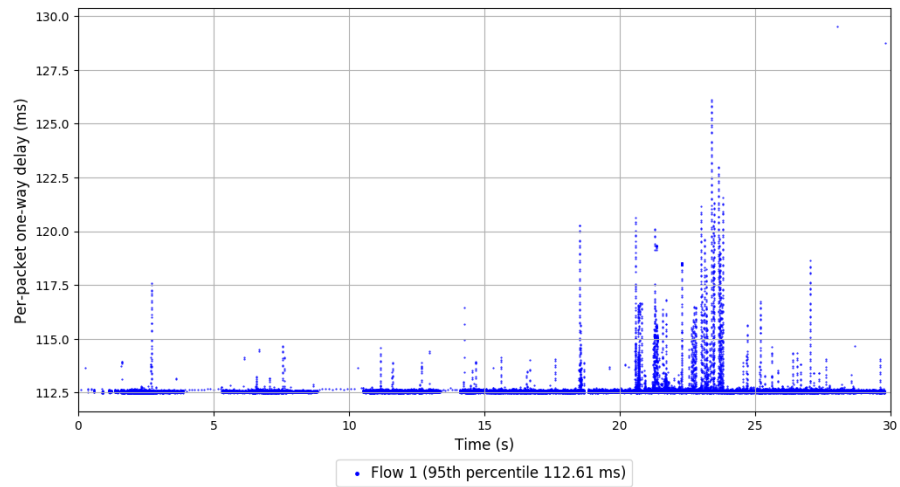
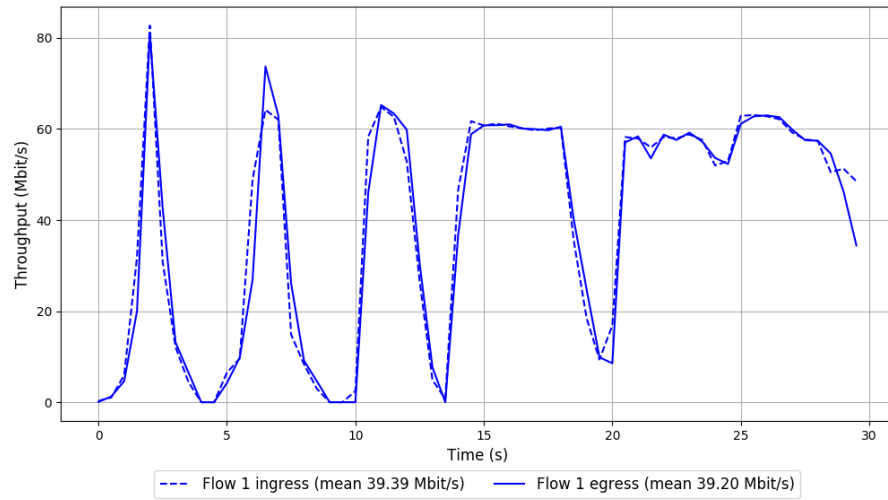
-- Flow 1:

Average throughput: 39.20 Mbit/s

95th percentile per-packet one-way delay: 112.612 ms

Loss rate: 1.19%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-11 06:35:50

End at: 2017-08-11 06:36:20

Below is generated by plot.py at 2017-08-11 10:04:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.95 Mbit/s

95th percentile per-packet one-way delay: 112.257 ms

Loss rate: 0.18%

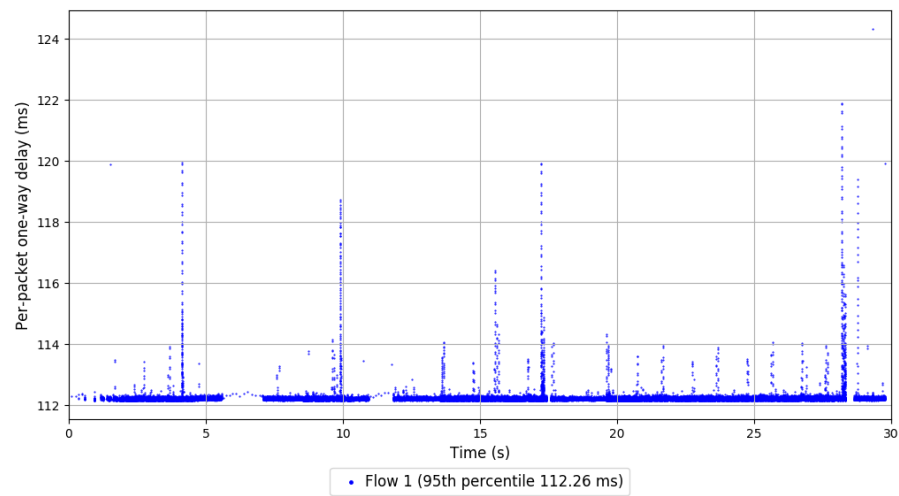
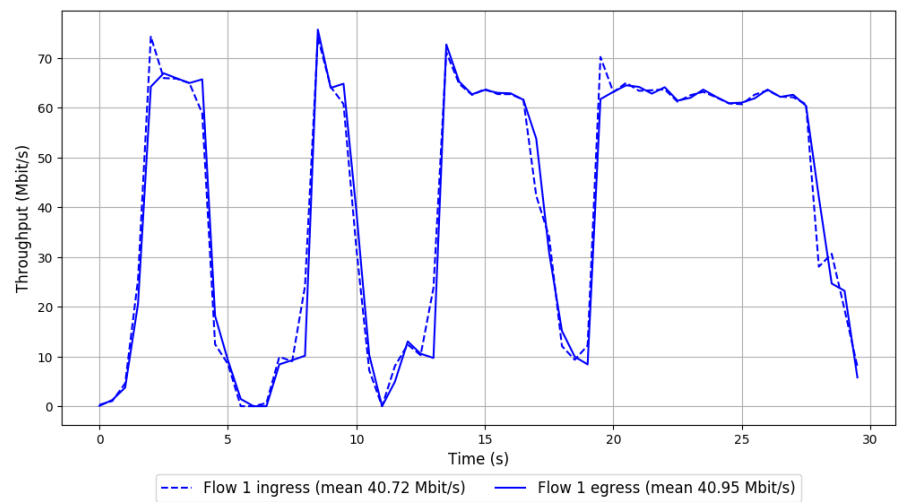
-- Flow 1:

Average throughput: 40.95 Mbit/s

95th percentile per-packet one-way delay: 112.257 ms

Loss rate: 0.18%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-11 06:47:18

End at: 2017-08-11 06:47:48

Below is generated by plot.py at 2017-08-11 10:04:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.96 Mbit/s

95th percentile per-packet one-way delay: 112.835 ms

Loss rate: 0.16%

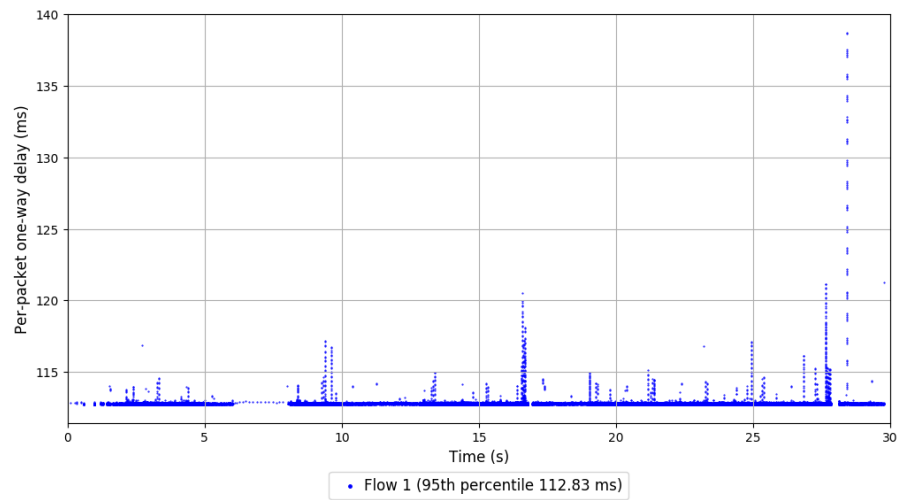
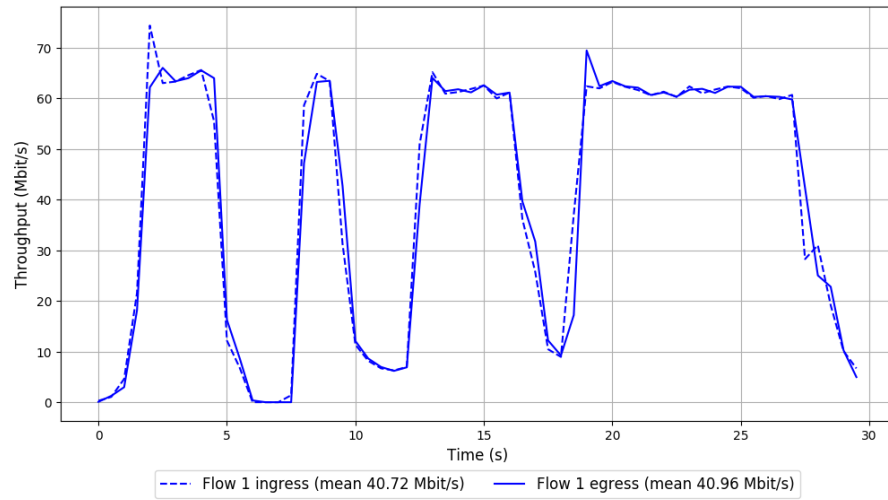
-- Flow 1:

Average throughput: 40.96 Mbit/s

95th percentile per-packet one-way delay: 112.835 ms

Loss rate: 0.16%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-11 06:58:24

End at: 2017-08-11 06:58:54

Below is generated by plot.py at 2017-08-11 10:04:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.96 Mbit/s

95th percentile per-packet one-way delay: 113.315 ms

Loss rate: 0.16%

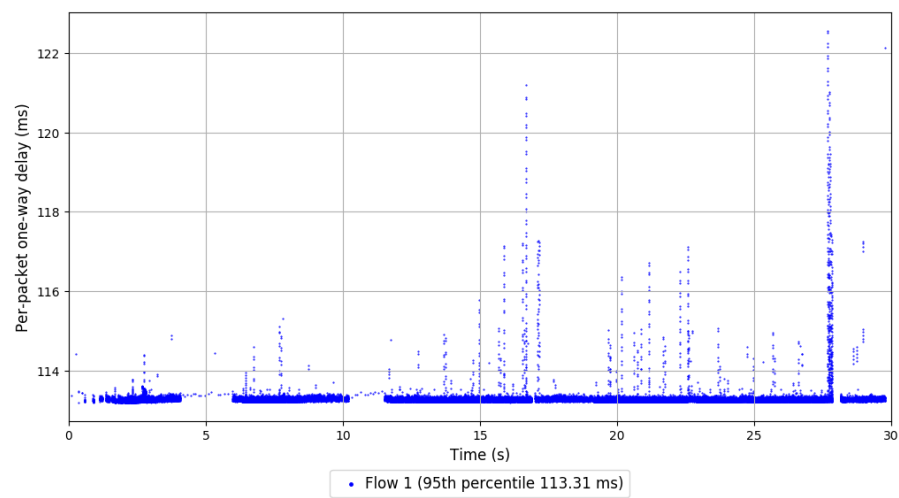
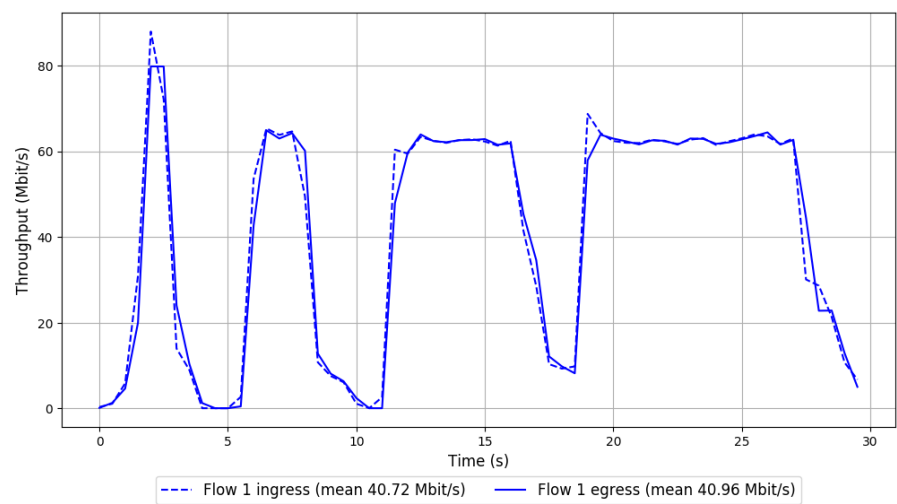
-- Flow 1:

Average throughput: 40.96 Mbit/s

95th percentile per-packet one-way delay: 113.315 ms

Loss rate: 0.16%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-11 07:09:29

End at: 2017-08-11 07:09:59

Below is generated by plot.py at 2017-08-11 10:04:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.00 Mbit/s

95th percentile per-packet one-way delay: 112.661 ms

Loss rate: 0.15%

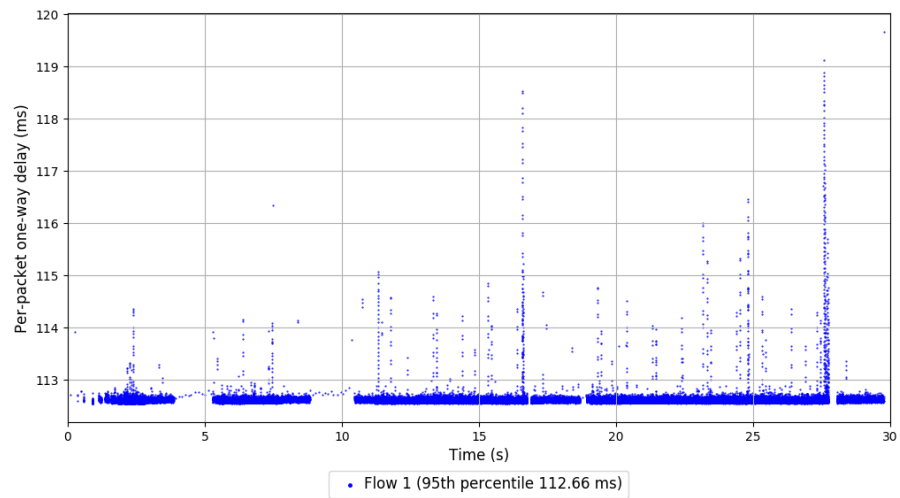
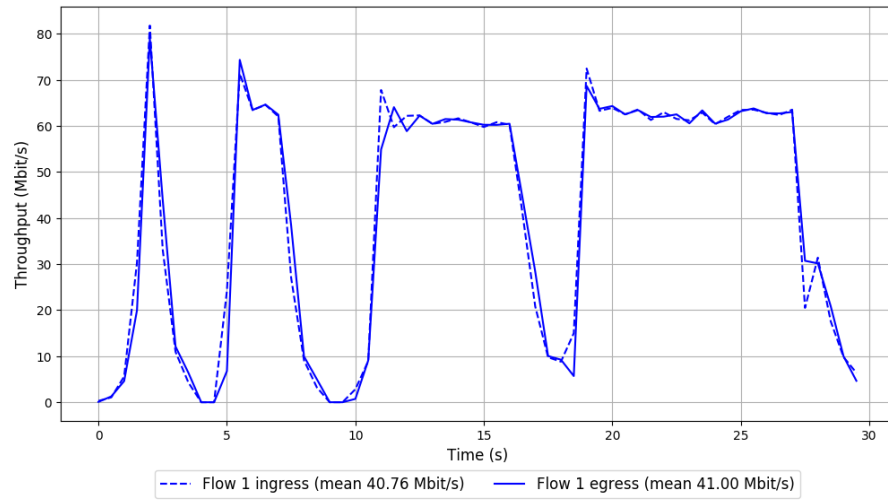
-- Flow 1:

Average throughput: 41.00 Mbit/s

95th percentile per-packet one-way delay: 112.661 ms

Loss rate: 0.15%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-08-11 07:20:23

End at: 2017-08-11 07:20:53

Below is generated by plot.py at 2017-08-11 10:04:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.34 Mbit/s

95th percentile per-packet one-way delay: 112.188 ms

Loss rate: 0.71%

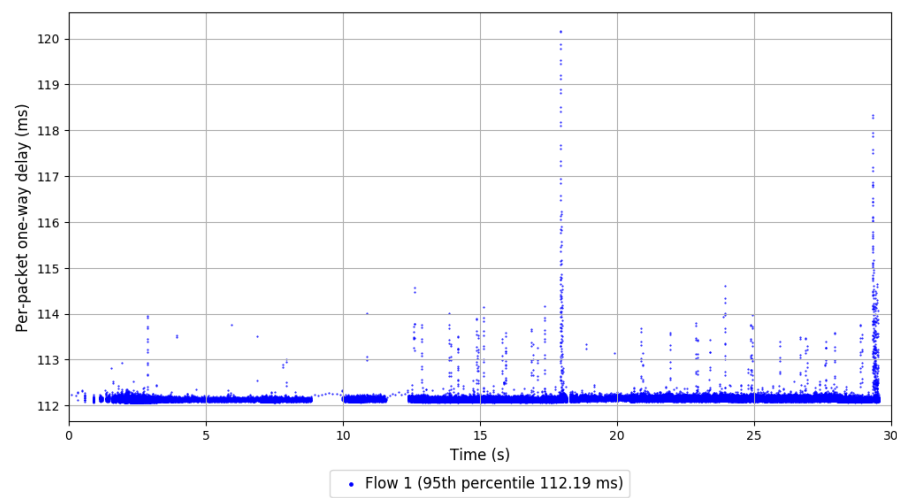
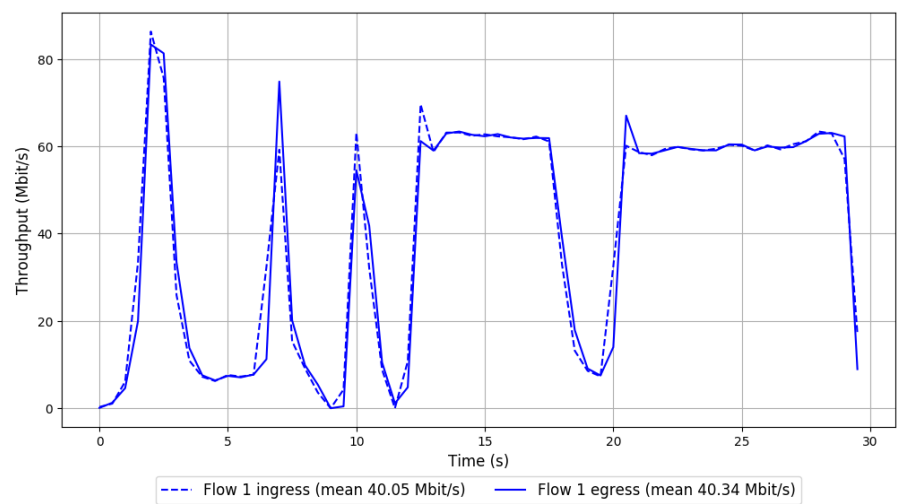
-- Flow 1:

Average throughput: 40.34 Mbit/s

95th percentile per-packet one-way delay: 112.188 ms

Loss rate: 0.71%

Run 10: Report of QUIC Cubic — Data Link

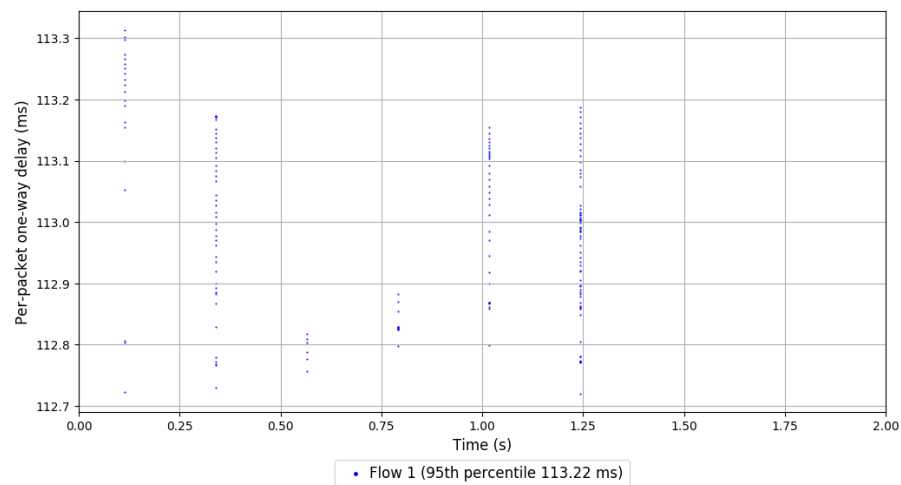
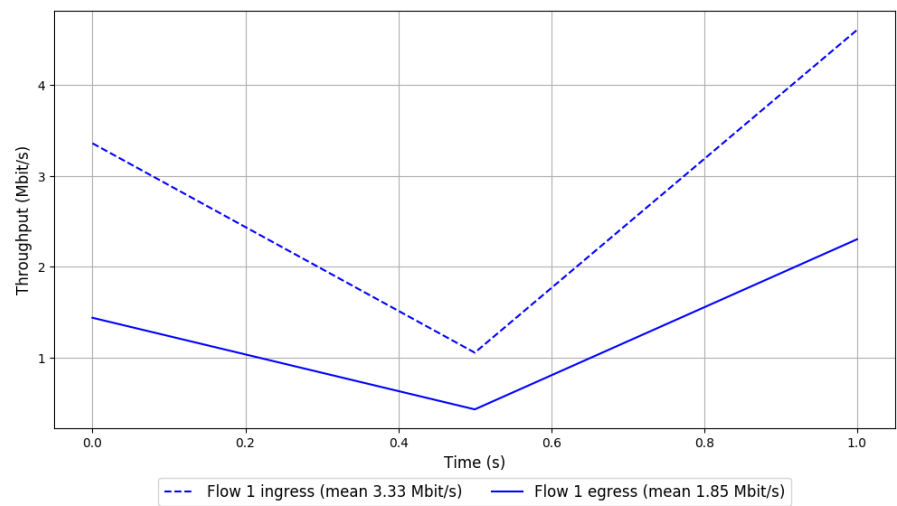


Run 1: Statistics of Saturator

Start at: 2017-08-11 05:38:39

End at: 2017-08-11 05:39:09

Run 1: Report of Saturator — Data Link



Run 2: Statistics of Saturator

Start at: 2017-08-11 05:49:45

End at: 2017-08-11 05:50:15

Below is generated by plot.py at 2017-08-11 10:04:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.51 Mbit/s

95th percentile per-packet one-way delay: 113.446 ms

Loss rate: 0.77%

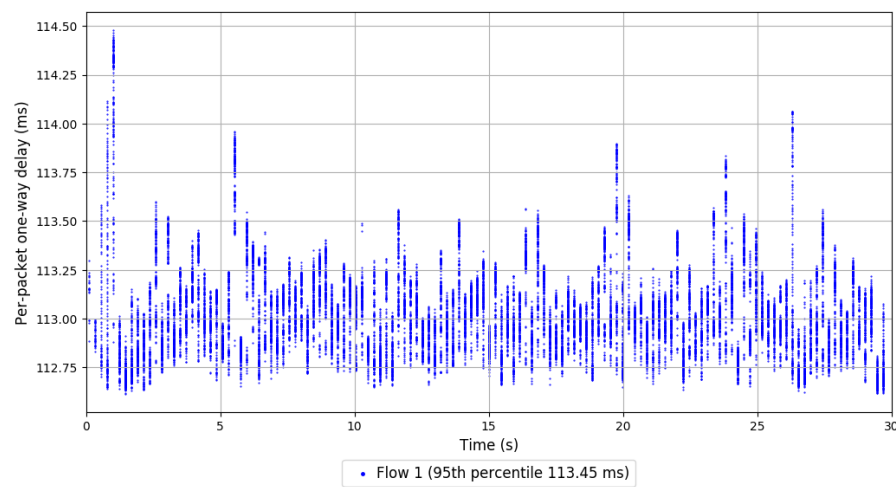
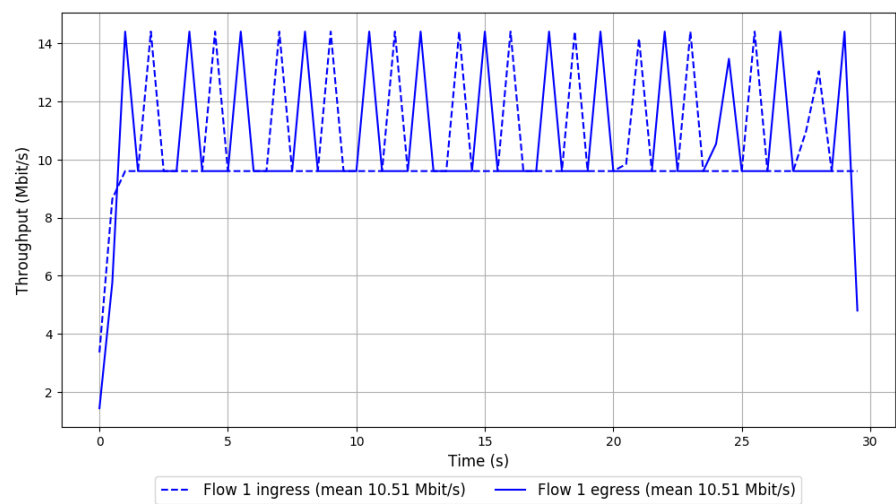
-- Flow 1:

Average throughput: 10.51 Mbit/s

95th percentile per-packet one-way delay: 113.446 ms

Loss rate: 0.77%

Run 2: Report of Saturator — Data Link

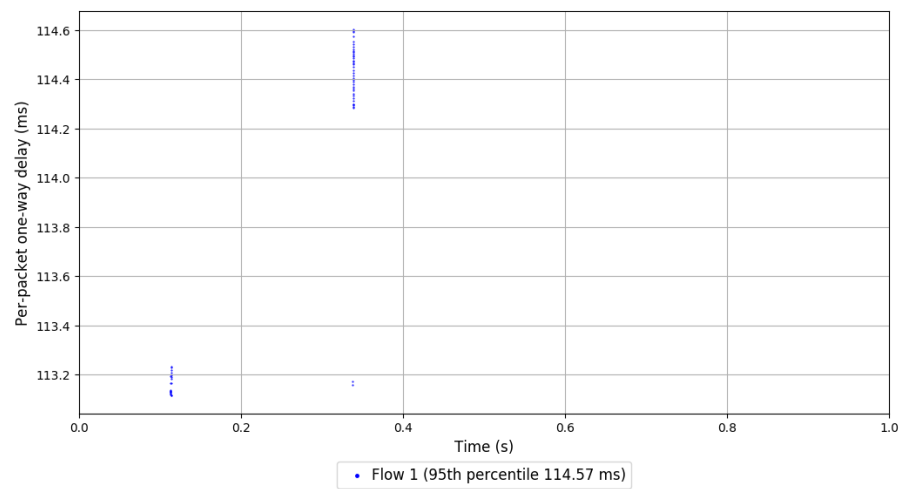
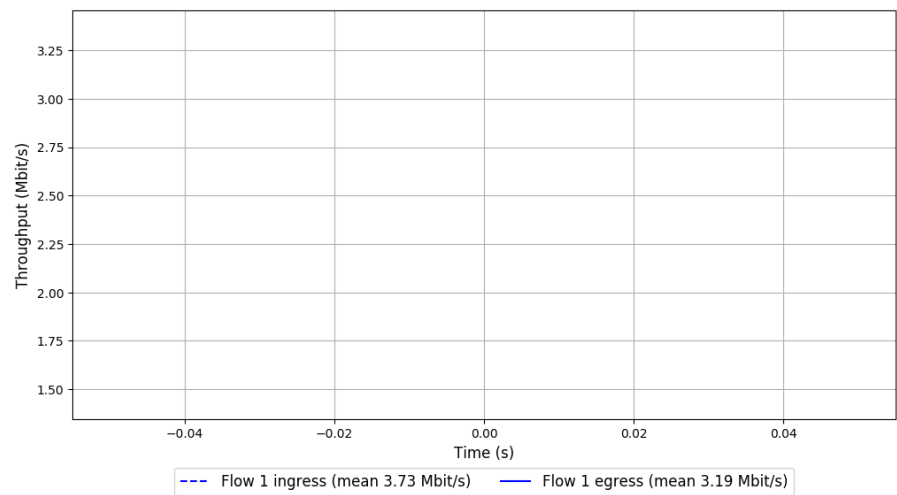


Run 3: Statistics of Saturator

Start at: 2017-08-11 06:01:07

End at: 2017-08-11 06:01:37

Run 3: Report of Saturator — Data Link

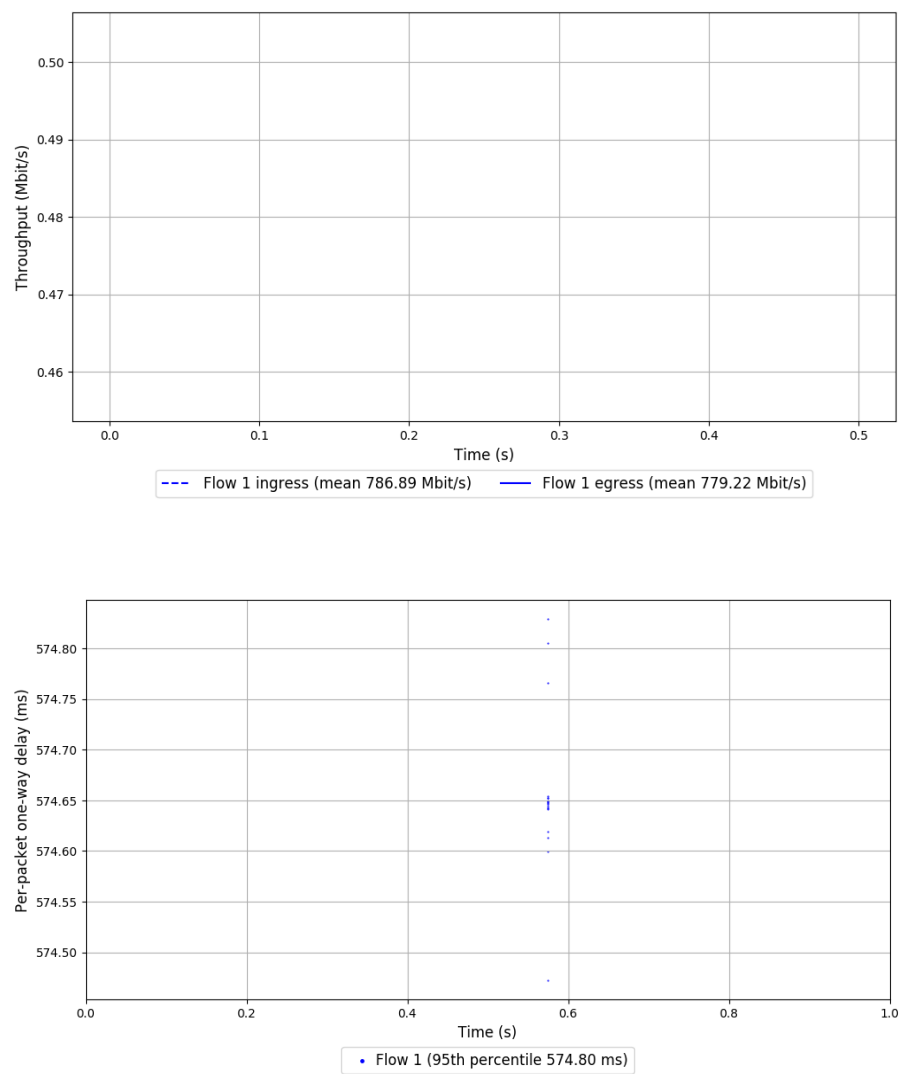


Run 4: Statistics of Saturator

Start at: 2017-08-11 06:12:08

End at: 2017-08-11 06:12:38

Run 4: Report of Saturator — Data Link

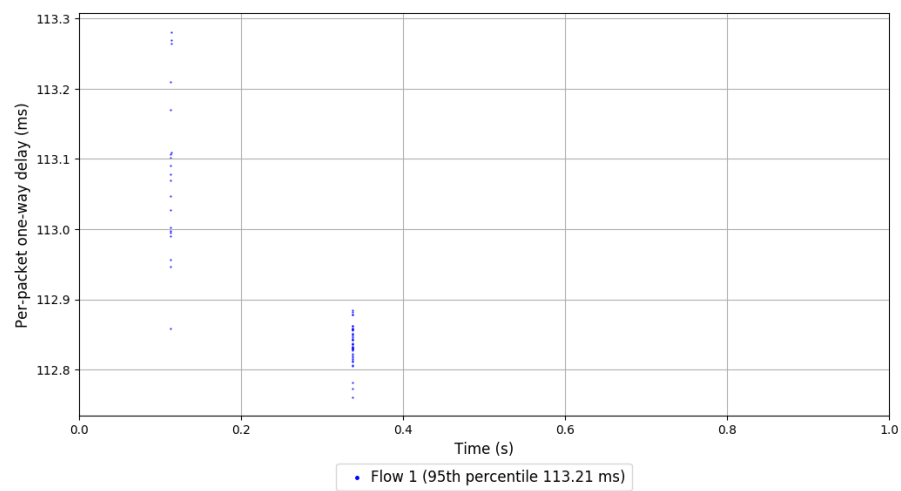
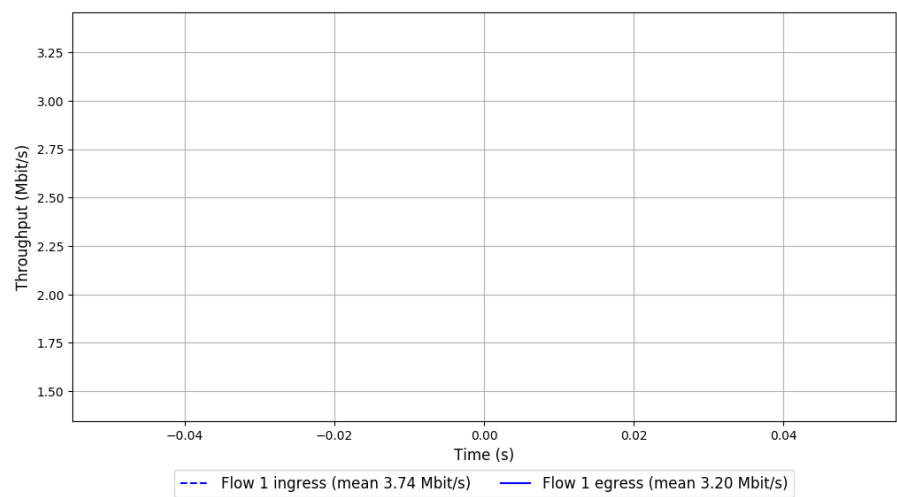


Run 5: Statistics of Saturator

Start at: 2017-08-11 06:23:18

End at: 2017-08-11 06:23:48

Run 5: Report of Saturator — Data Link



Run 6: Statistics of Saturator

Start at: 2017-08-11 06:34:28

End at: 2017-08-11 06:34:58

Below is generated by plot.py at 2017-08-11 10:04:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 113.331 ms

Loss rate: 49.94%

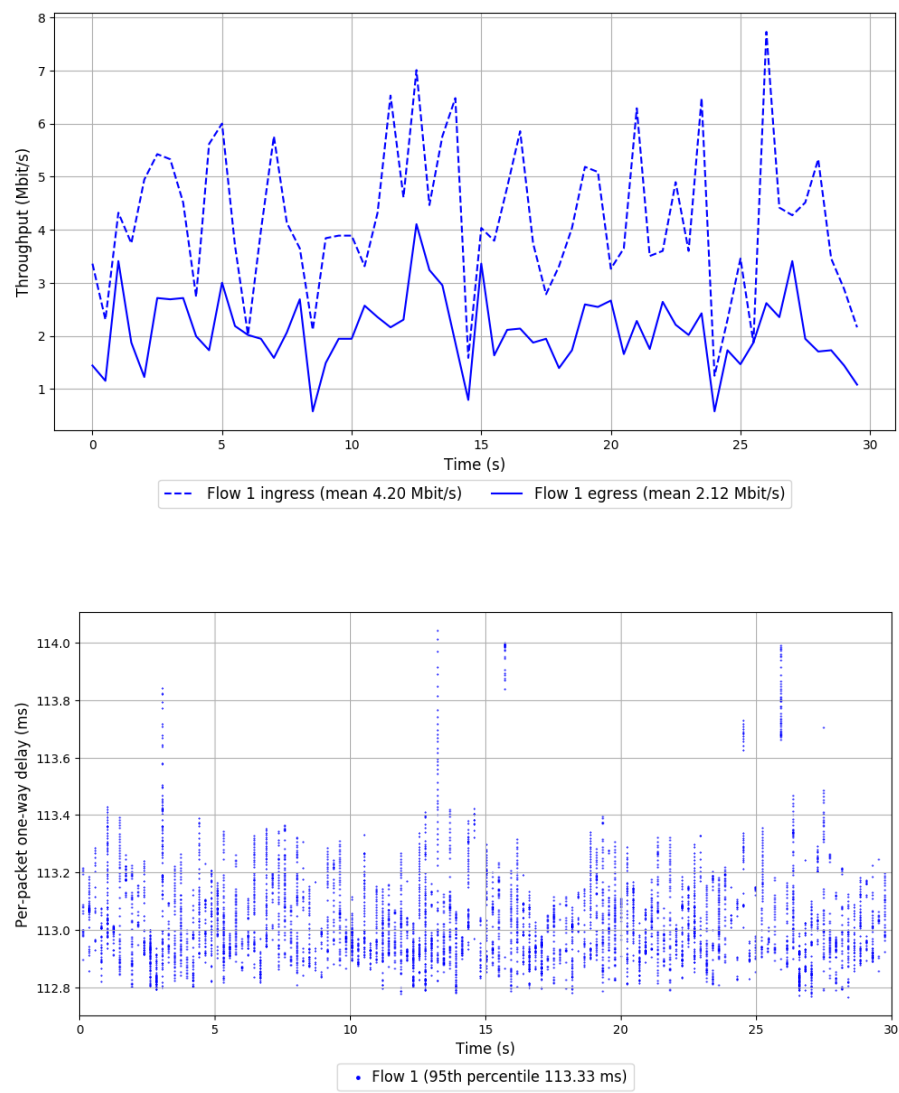
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 113.331 ms

Loss rate: 49.94%

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: 2017-08-11 06:45:55

End at: 2017-08-11 06:46:25

Below is generated by plot.py at 2017-08-11 10:04:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 113.461 ms

Loss rate: 0.85%

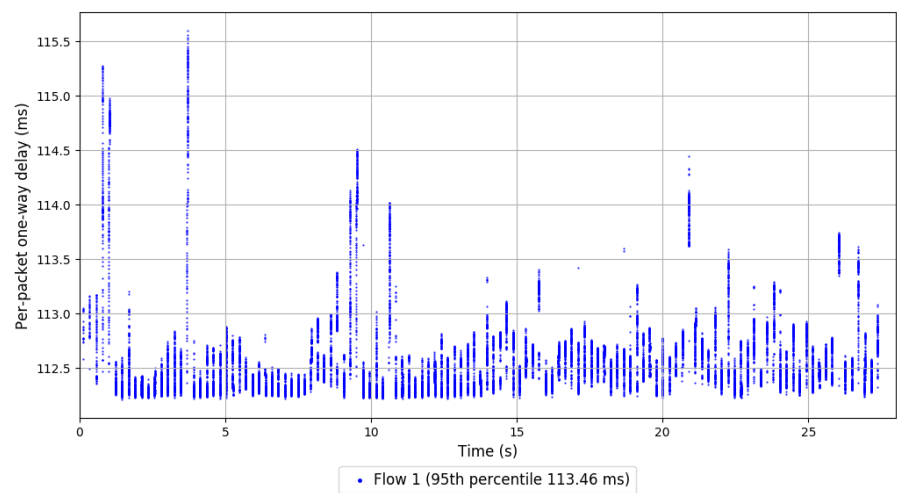
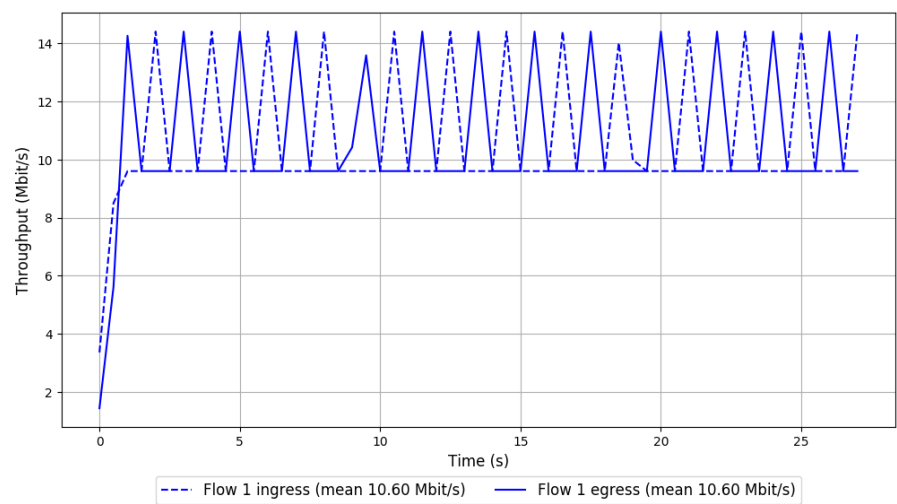
-- Flow 1:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 113.461 ms

Loss rate: 0.85%

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-11 06:57:01

End at: 2017-08-11 06:57:31

Below is generated by plot.py at 2017-08-11 10:04:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 113.982 ms

Loss rate: 32.49%

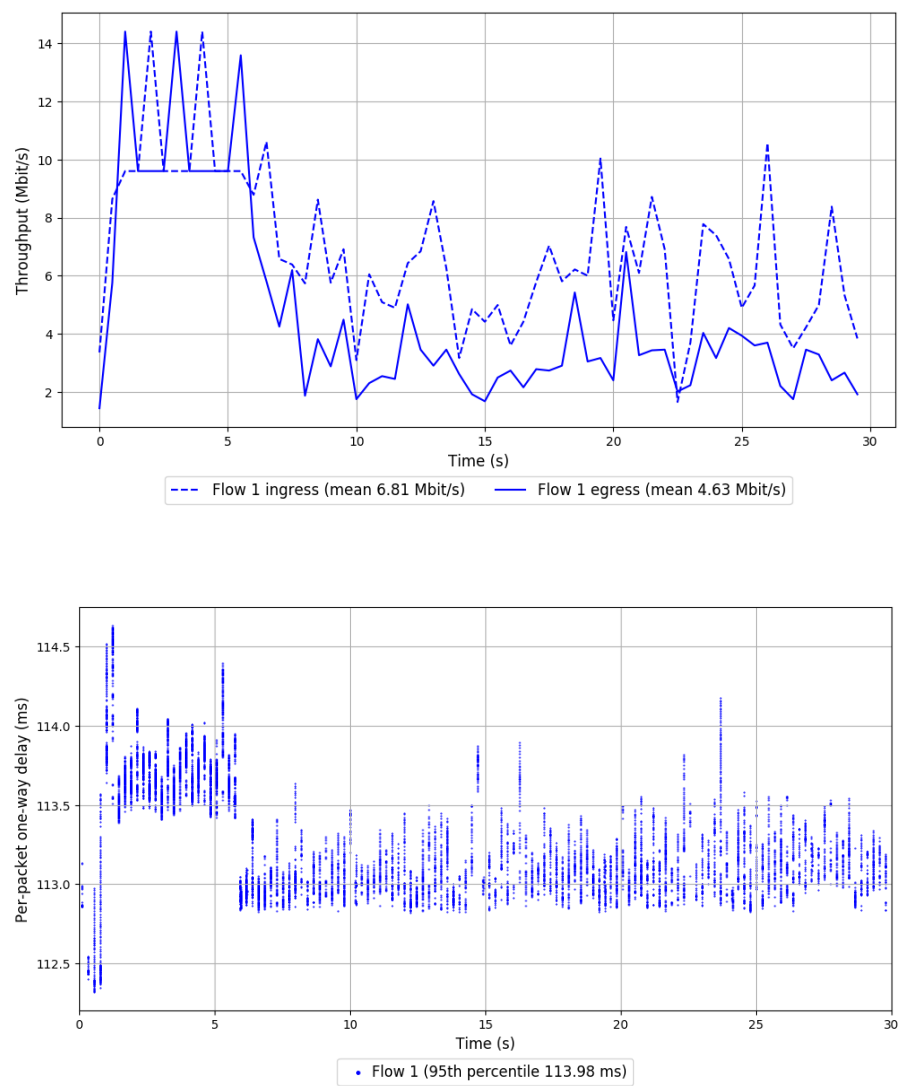
-- Flow 1:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 113.982 ms

Loss rate: 32.49%

Run 8: Report of Saturator — Data Link

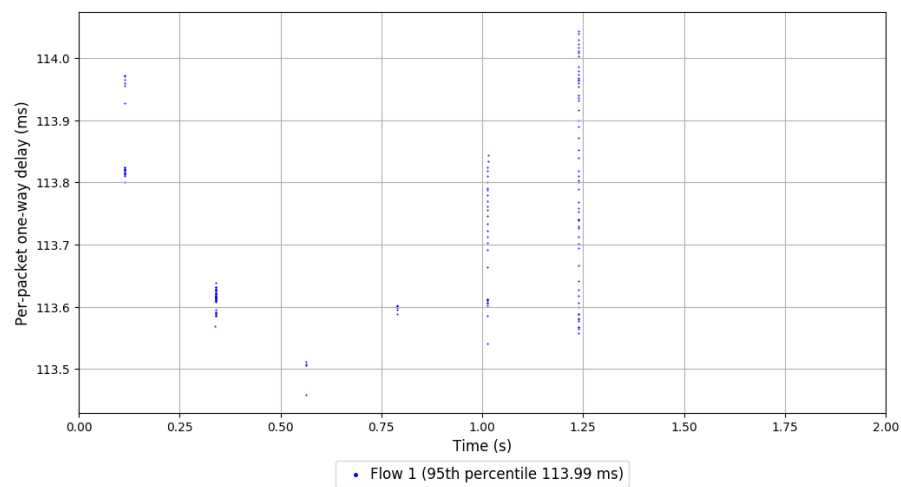
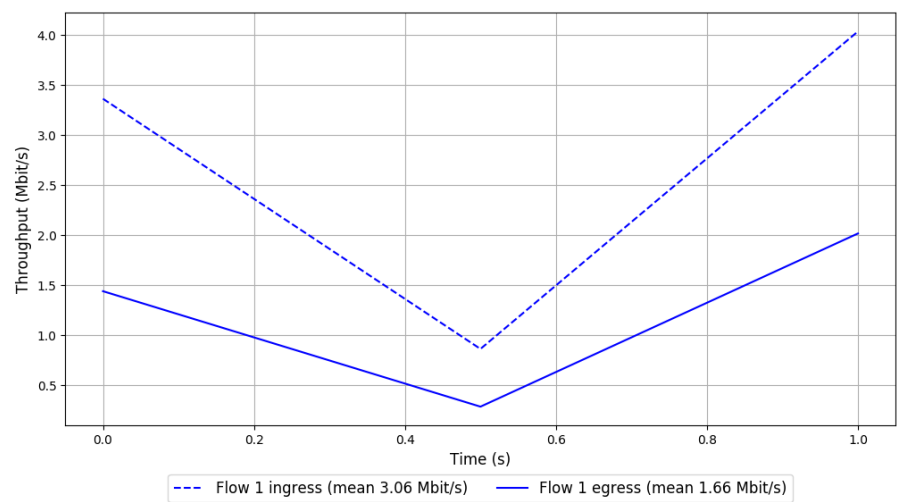


Run 9: Statistics of Saturator

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

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

Run 9: Report of Saturator — Data Link

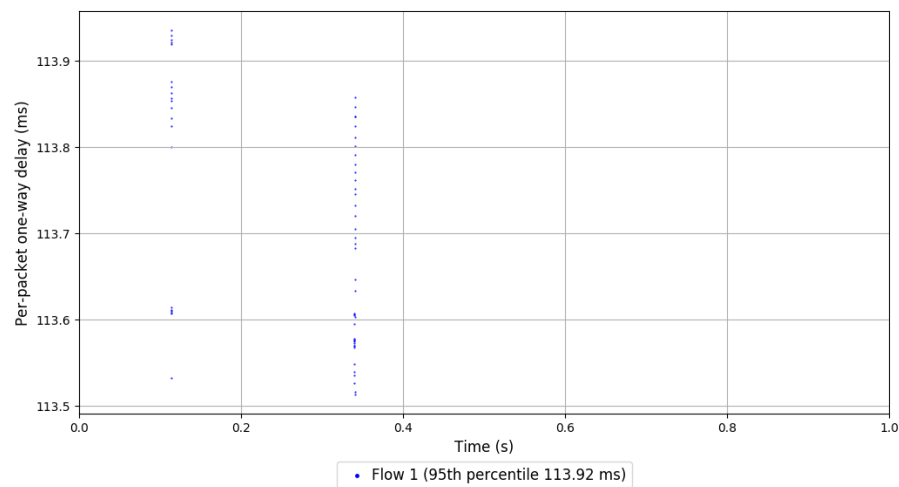
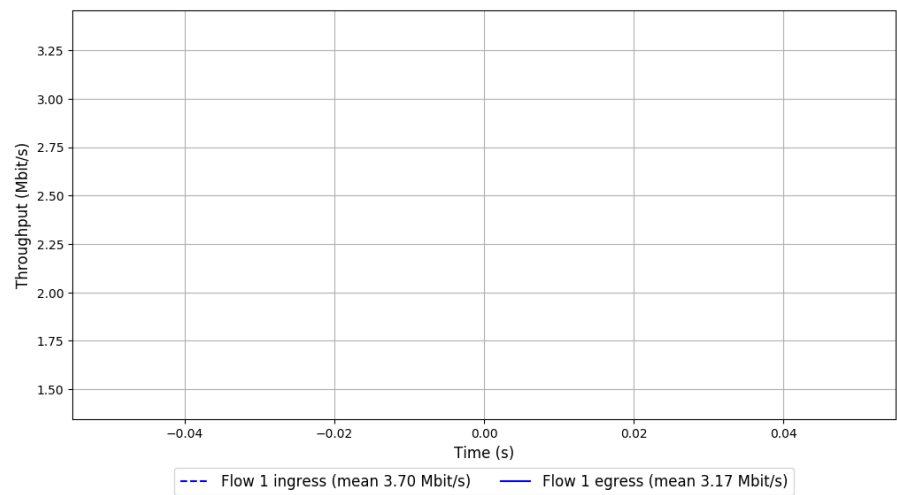


Run 10: Statistics of Saturator

Start at: 2017-08-11 07:19:01

End at: 2017-08-11 07:19:31

Run 10: Report of Saturator — Data Link

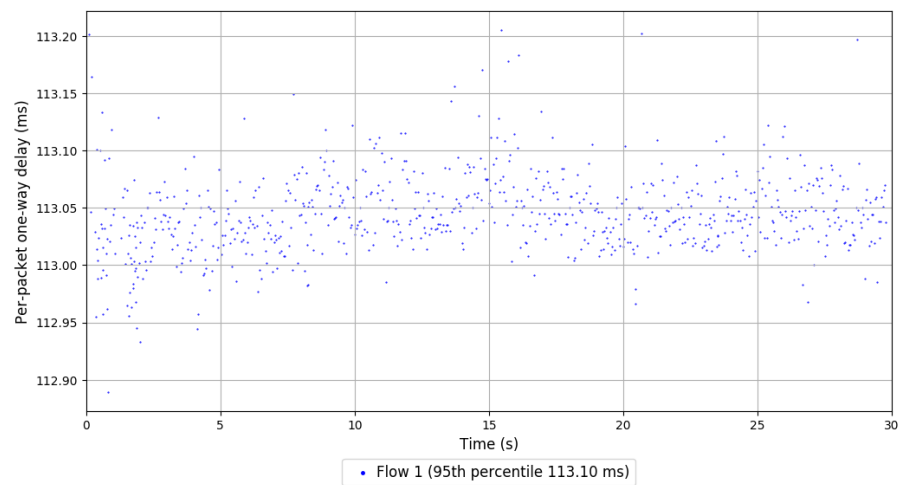
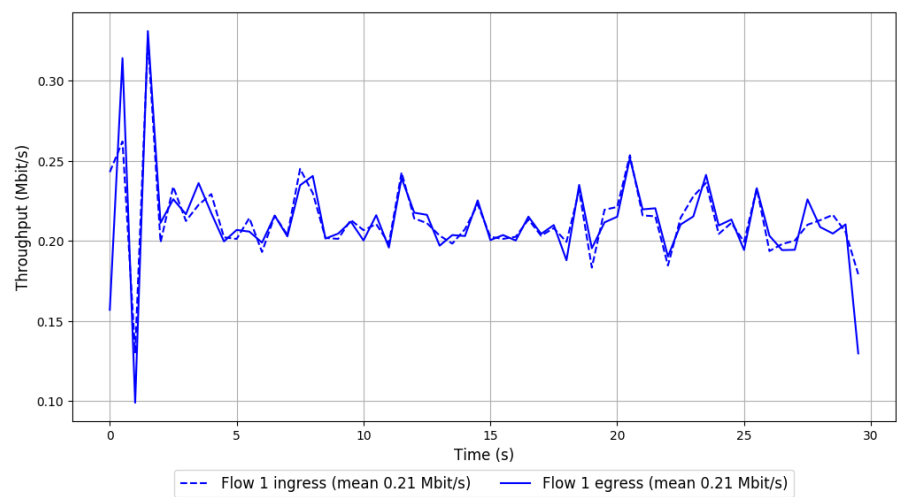


```
Run 1: Statistics of SCReAM

Start at: 2017-08-11 05:35:07
End at: 2017-08-11 05:35:37

# Below is generated by plot.py at 2017-08-11 10:04:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.104 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.104 ms
Loss rate: 0.76%
```

Run 1: Report of SReAM — Data Link

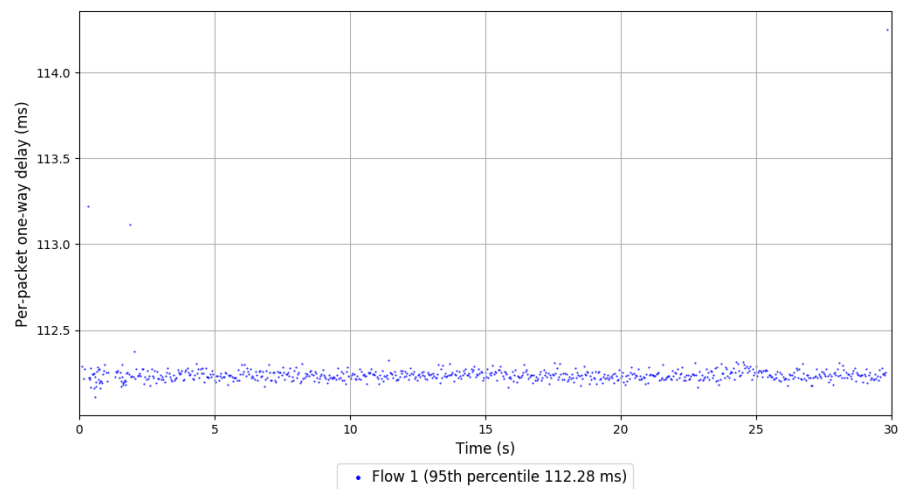
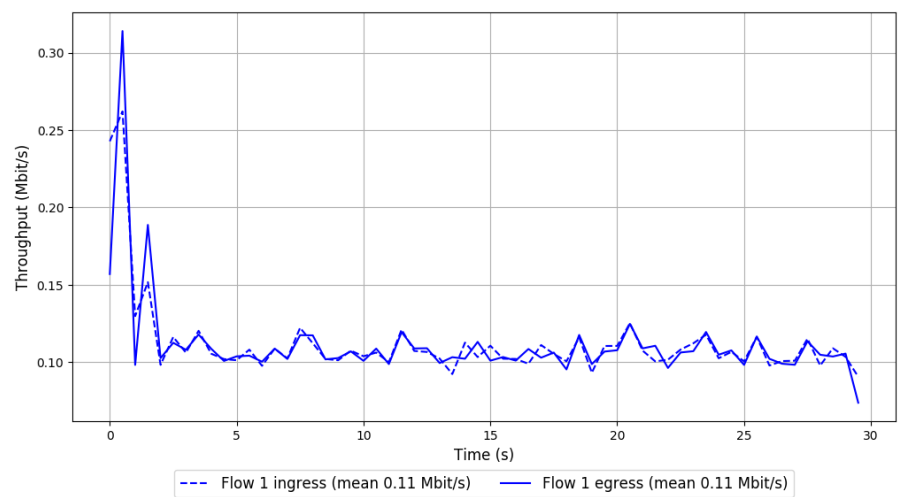


```
Run 2: Statistics of SCReAM

Start at: 2017-08-11 05:46:15
End at: 2017-08-11 05:46:45

# Below is generated by plot.py at 2017-08-11 10:04:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 112.284 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 112.284 ms
Loss rate: 0.61%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-11 05:57:37

End at: 2017-08-11 05:58:07

Below is generated by plot.py at 2017-08-11 10:04:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.881 ms

Loss rate: 0.76%

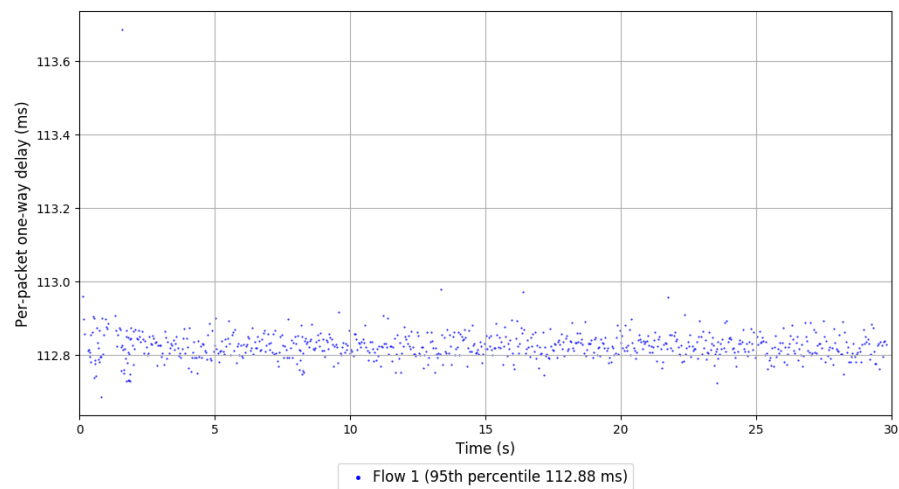
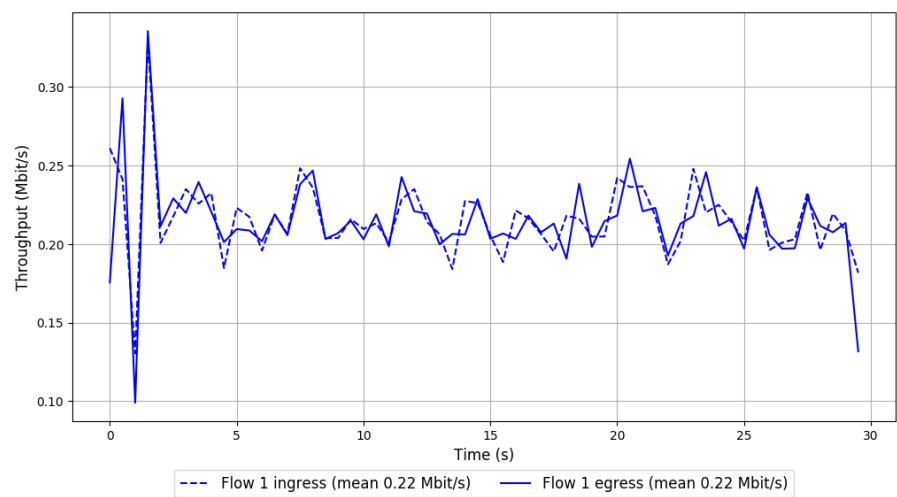
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.881 ms

Loss rate: 0.76%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-11 06:08:38

End at: 2017-08-11 06:09:08

Below is generated by plot.py at 2017-08-11 10:04:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.608 ms

Loss rate: 0.76%

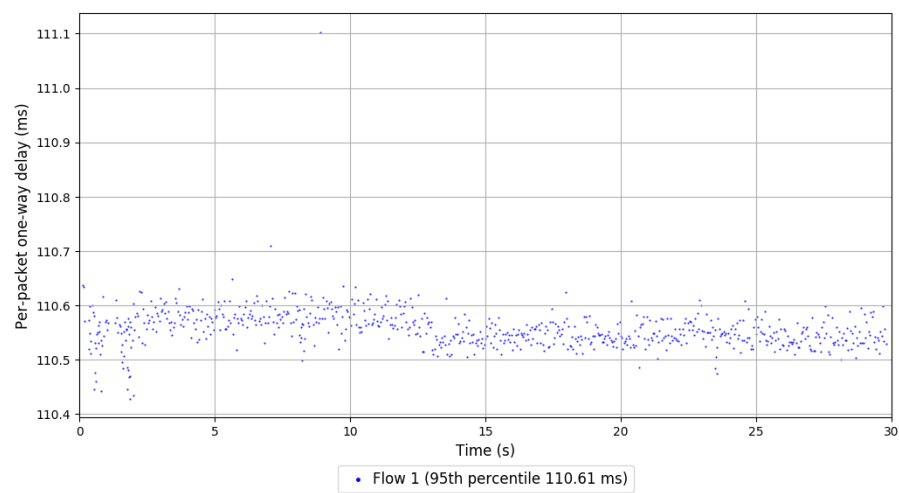
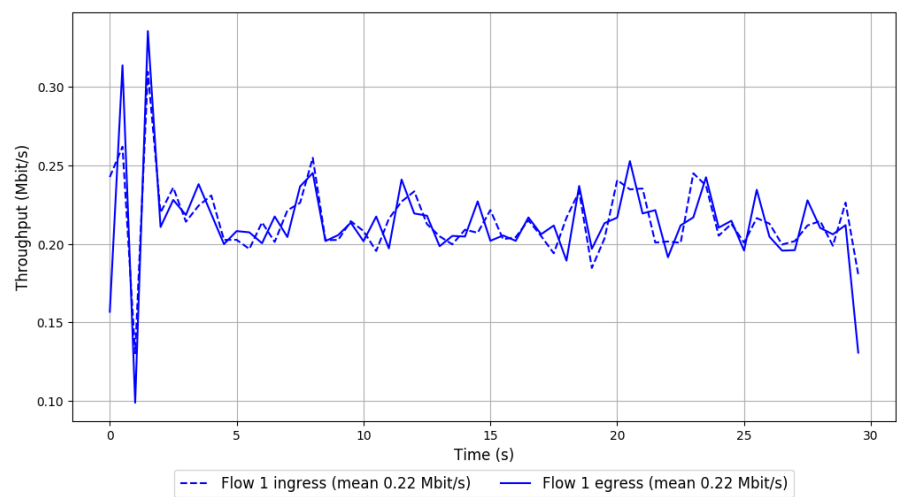
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.608 ms

Loss rate: 0.76%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-11 06:19:48

End at: 2017-08-11 06:20:18

Below is generated by plot.py at 2017-08-11 10:04:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.763 ms

Loss rate: 0.76%

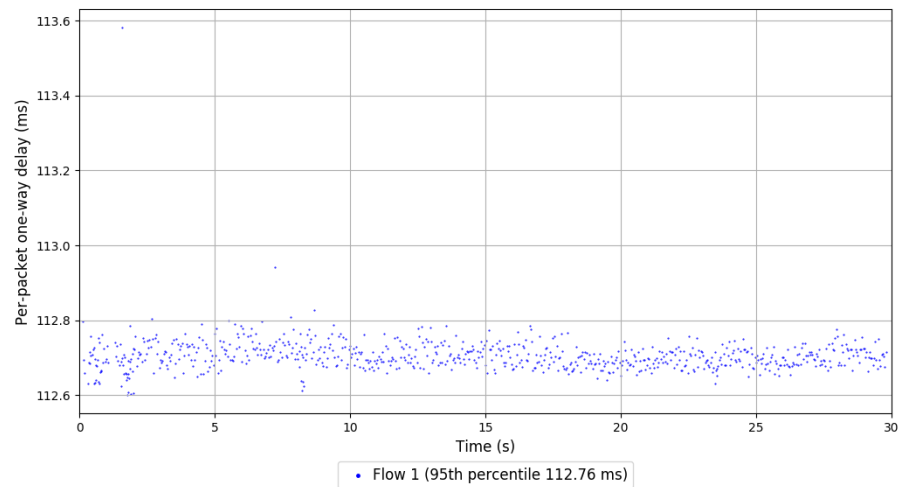
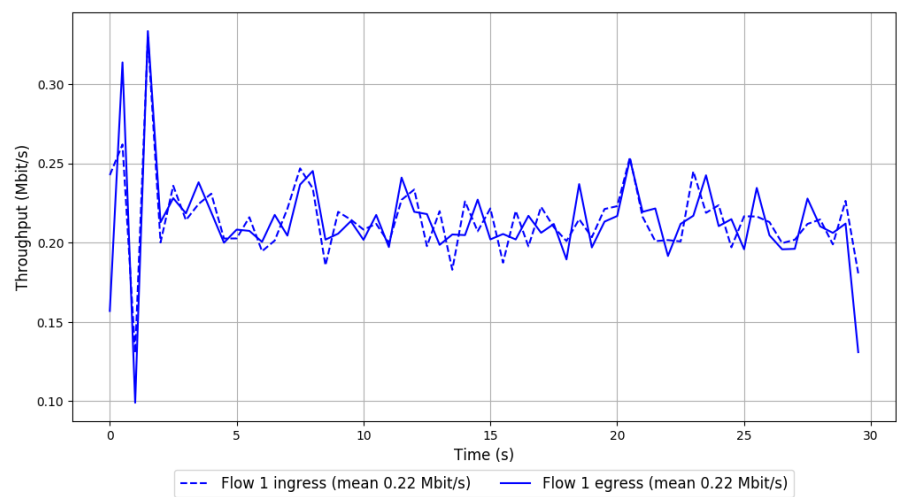
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.763 ms

Loss rate: 0.76%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-11 06:30:57

End at: 2017-08-11 06:31:27

Below is generated by plot.py at 2017-08-11 10:04:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.64%

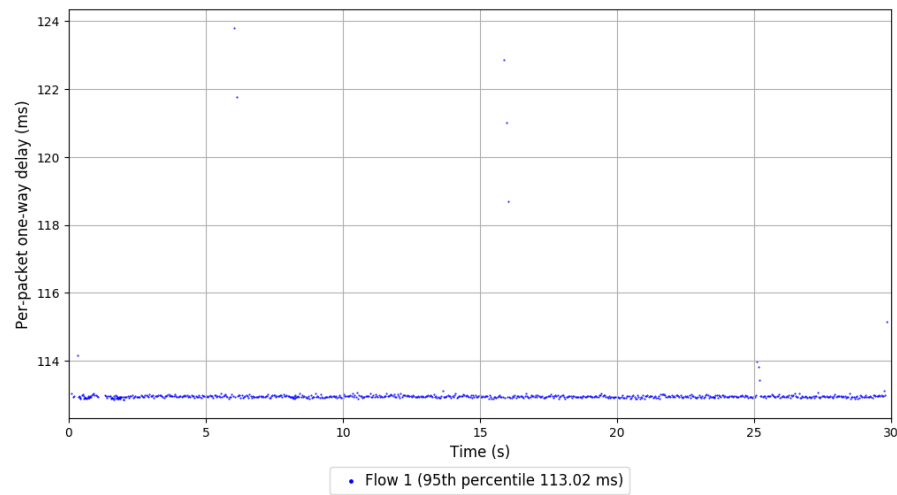
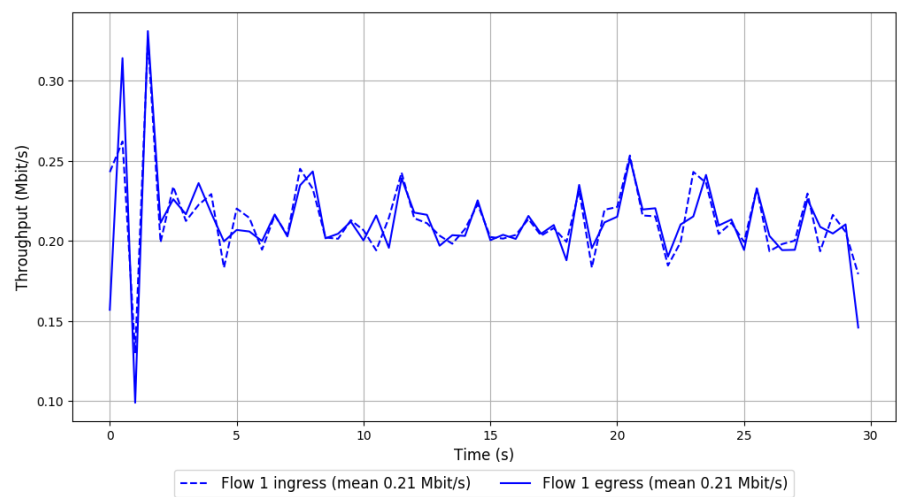
-- Flow 1:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.64%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-11 06:42:24

End at: 2017-08-11 06:42:54

Below is generated by plot.py at 2017-08-11 10:04:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.743 ms

Loss rate: 0.76%

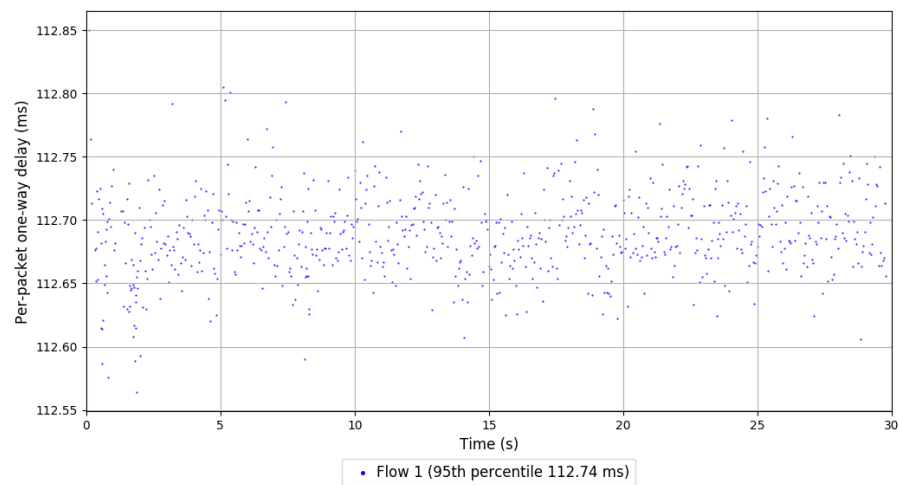
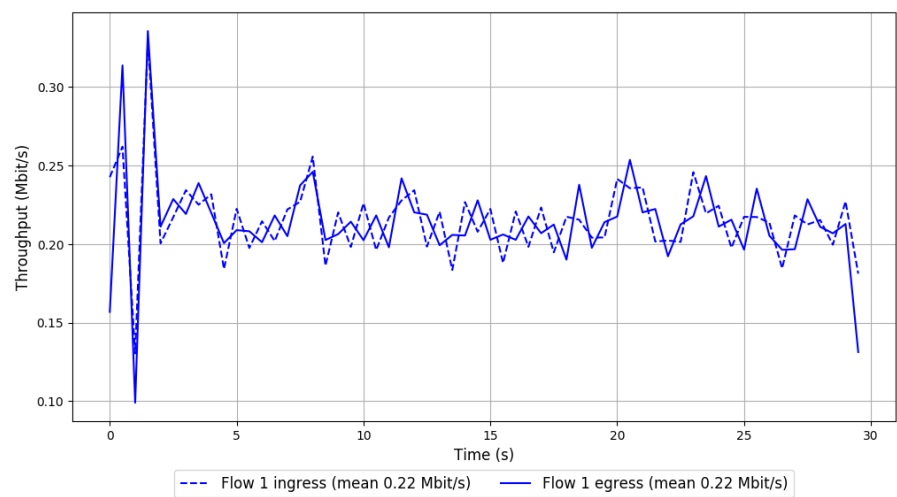
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.743 ms

Loss rate: 0.76%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-11 06:53:31

End at: 2017-08-11 06:54:01

Below is generated by plot.py at 2017-08-11 10:04:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 111.795 ms

Loss rate: 0.76%

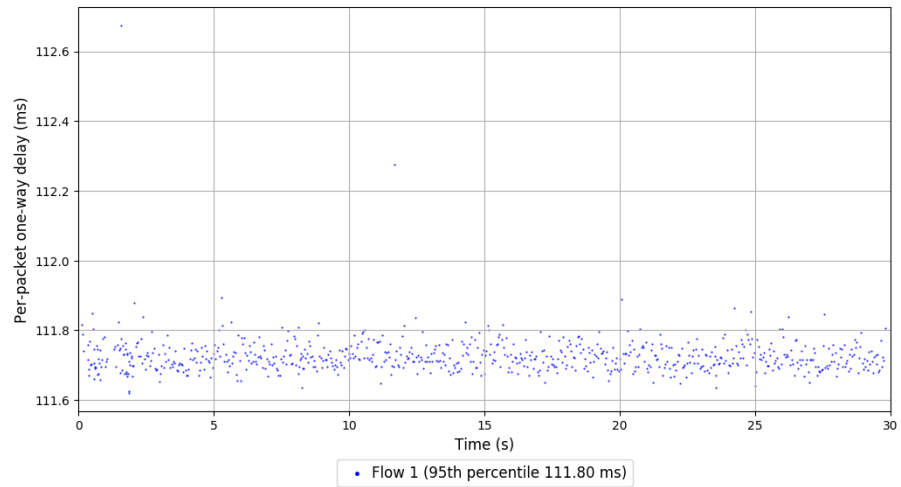
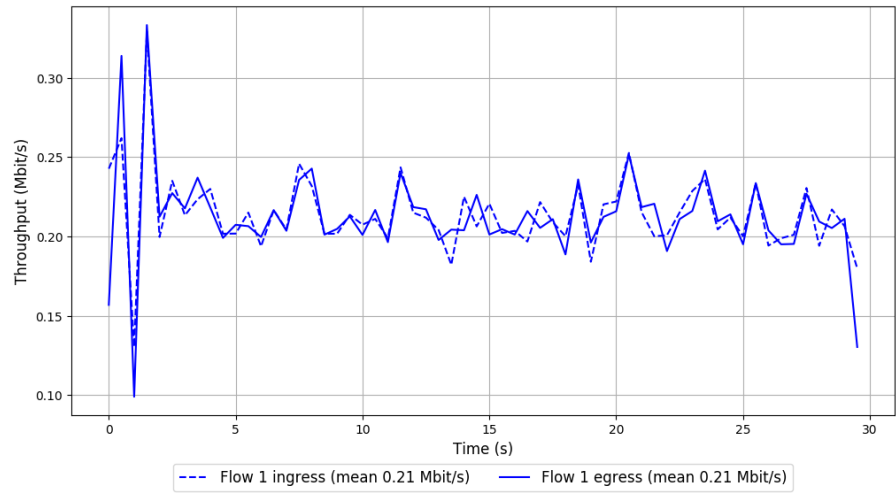
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 111.795 ms

Loss rate: 0.76%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-11 07:04:37

End at: 2017-08-11 07:05:07

Below is generated by plot.py at 2017-08-11 10:04:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.705 ms

Loss rate: 0.76%

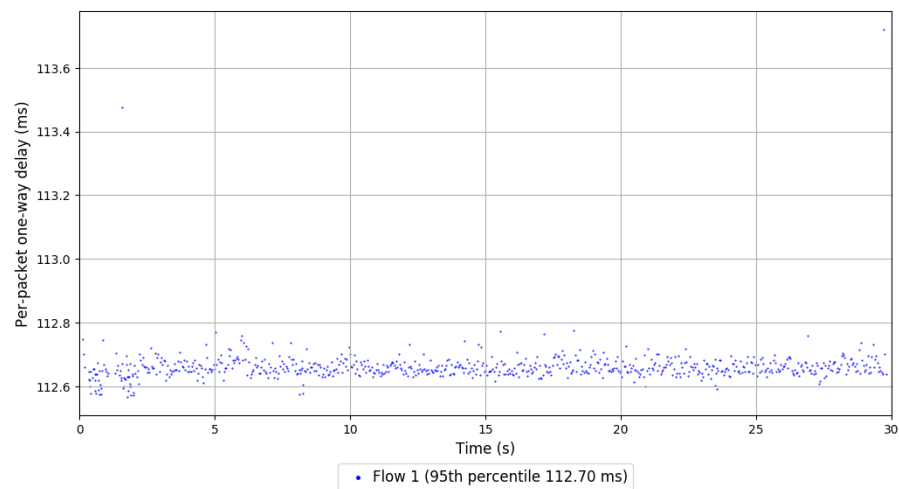
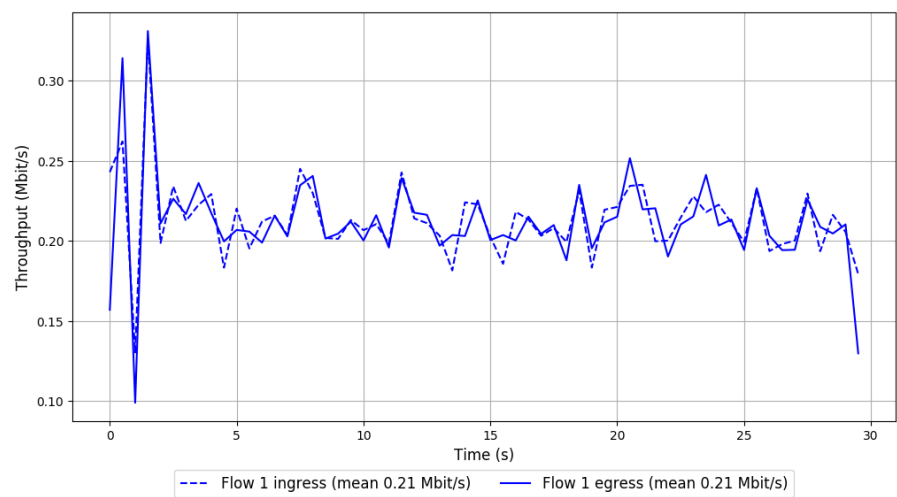
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.705 ms

Loss rate: 0.76%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-08-11 07:15:31

End at: 2017-08-11 07:16:01

Below is generated by plot.py at 2017-08-11 10:04:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.496 ms

Loss rate: 0.64%

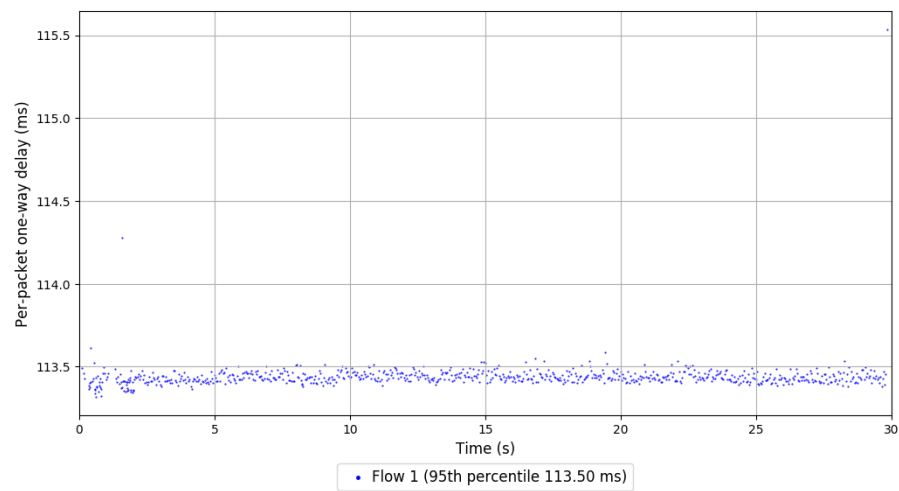
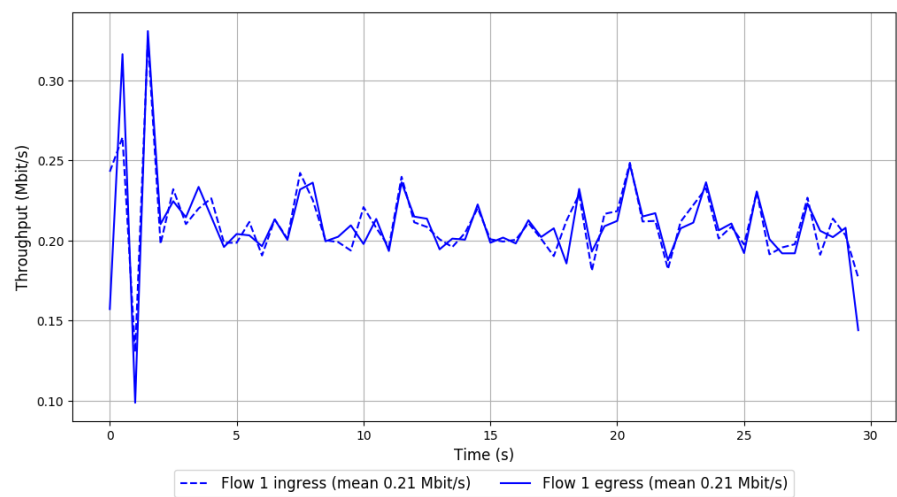
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.496 ms

Loss rate: 0.64%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-08-11 05:36:29

End at: 2017-08-11 05:36:59

Below is generated by plot.py at 2017-08-11 10:04:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 113.078 ms

Loss rate: 4.08%

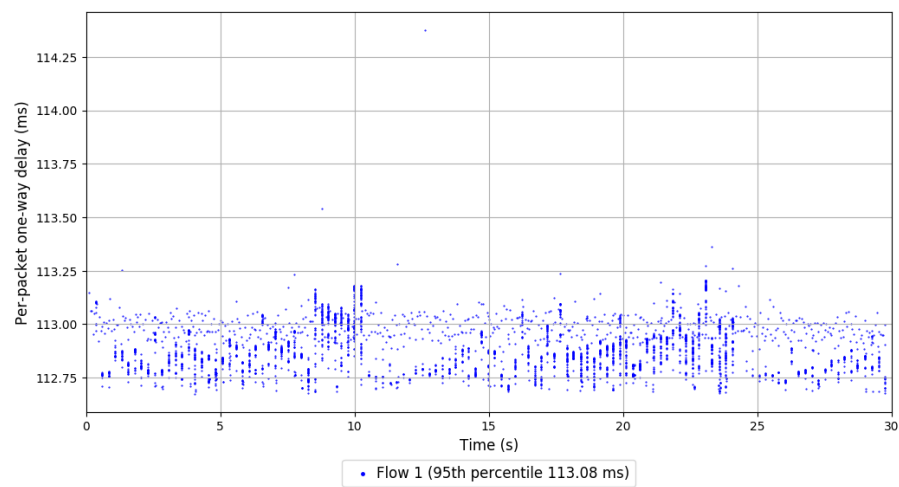
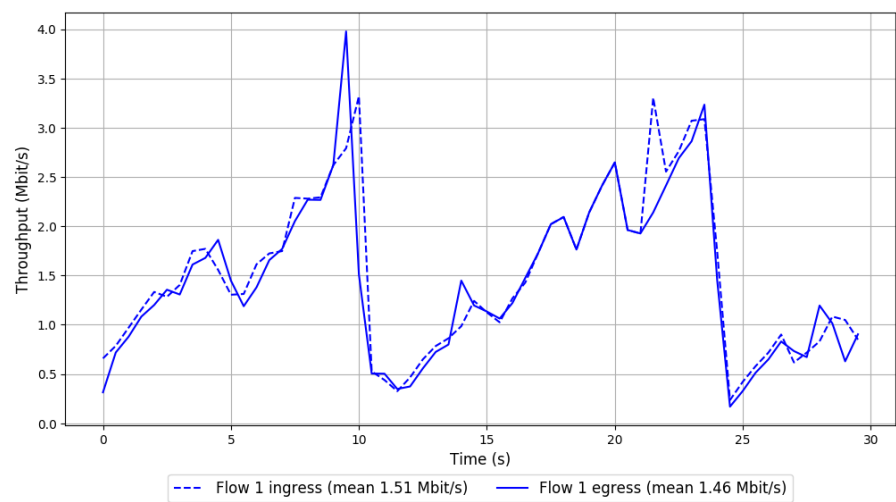
-- Flow 1:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 113.078 ms

Loss rate: 4.08%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-11 05:47:36

End at: 2017-08-11 05:48:06

Below is generated by plot.py at 2017-08-11 10:04:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 113.146 ms

Loss rate: 1.63%

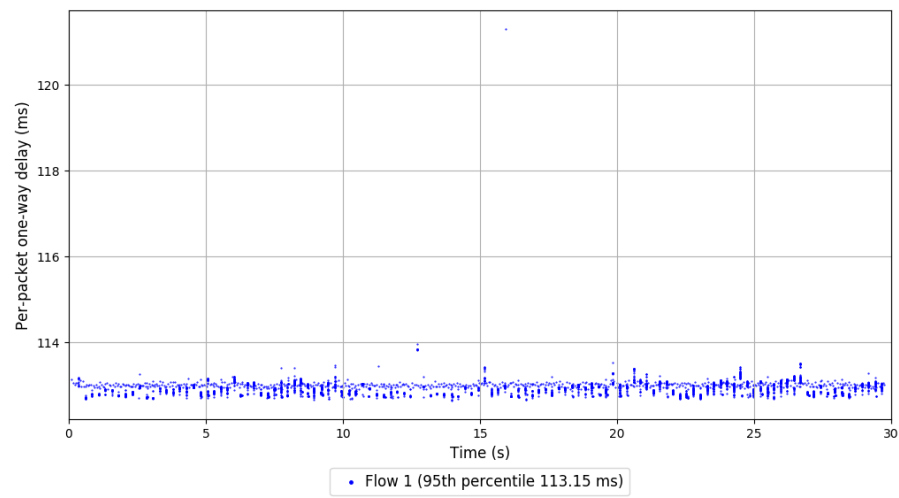
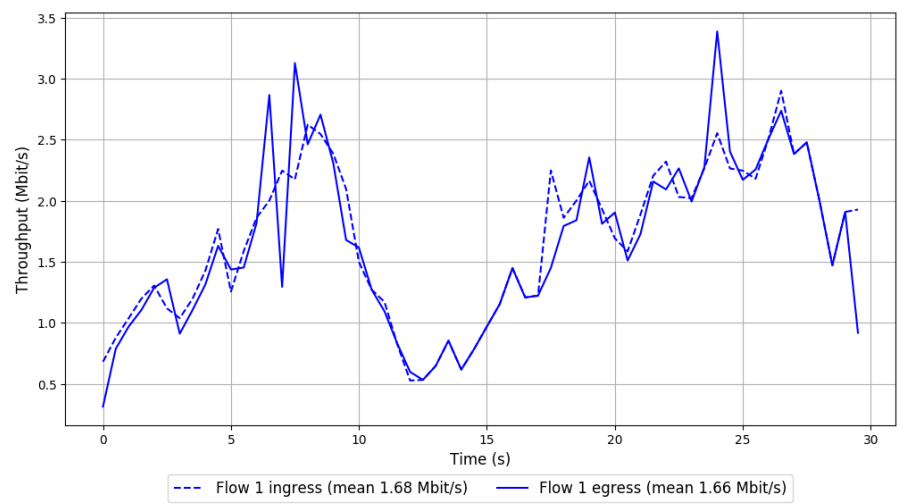
-- Flow 1:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 113.146 ms

Loss rate: 1.63%

Run 2: Report of Sprout — Data Link

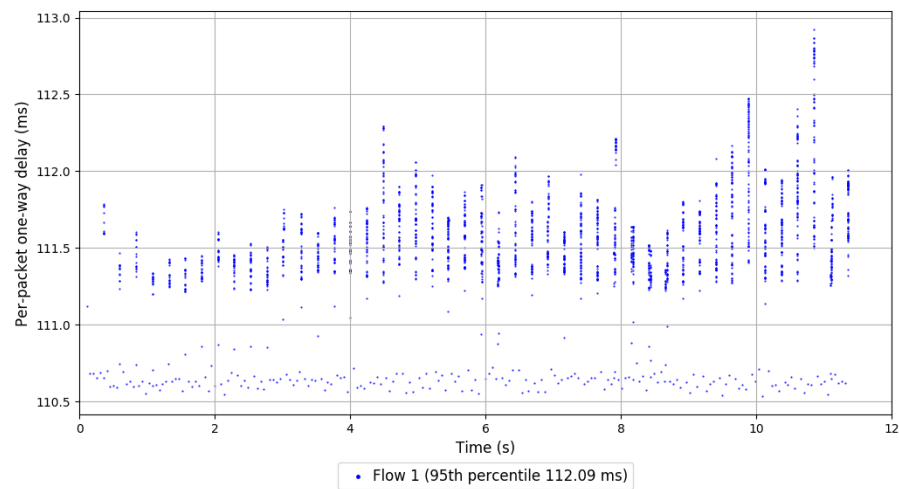
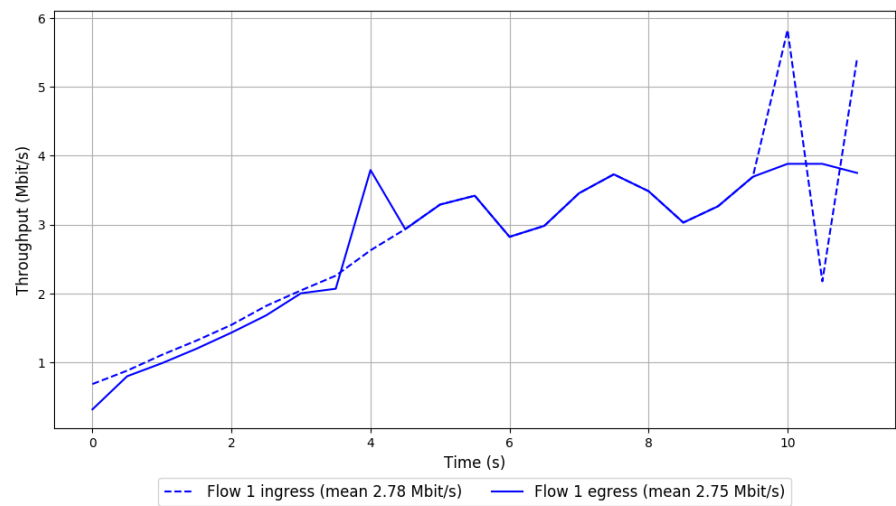


Run 3: Statistics of Sprout

Start at: 2017-08-11 05:58:58

End at: 2017-08-11 05:59:28

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-11 06:09:59

End at: 2017-08-11 06:10:29

Below is generated by plot.py at 2017-08-11 10:04:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 111.560 ms

Loss rate: 4.52%

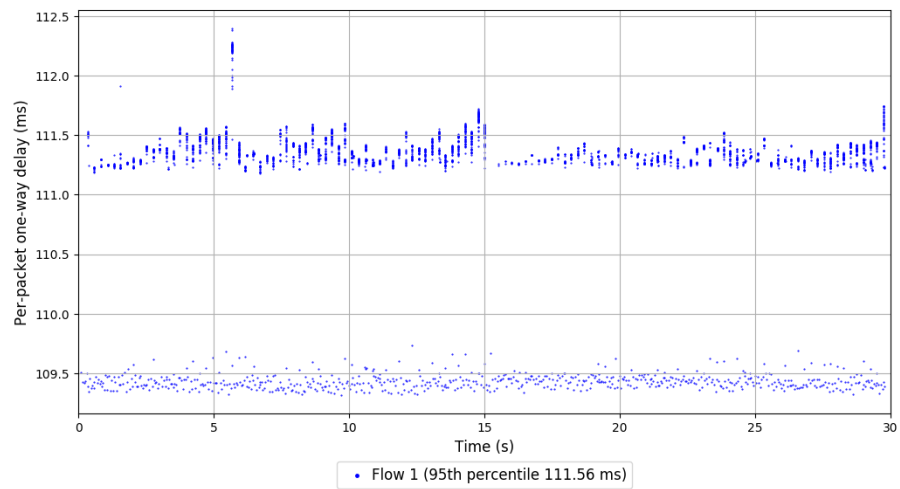
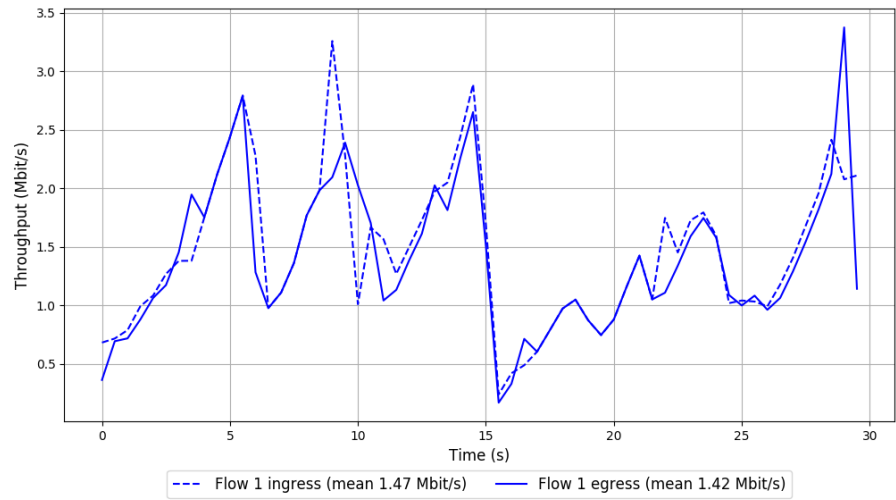
-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 111.560 ms

Loss rate: 4.52%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-11 06:21:10

End at: 2017-08-11 06:21:40

Below is generated by plot.py at 2017-08-11 10:04:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 112.348 ms

Loss rate: 0.32%

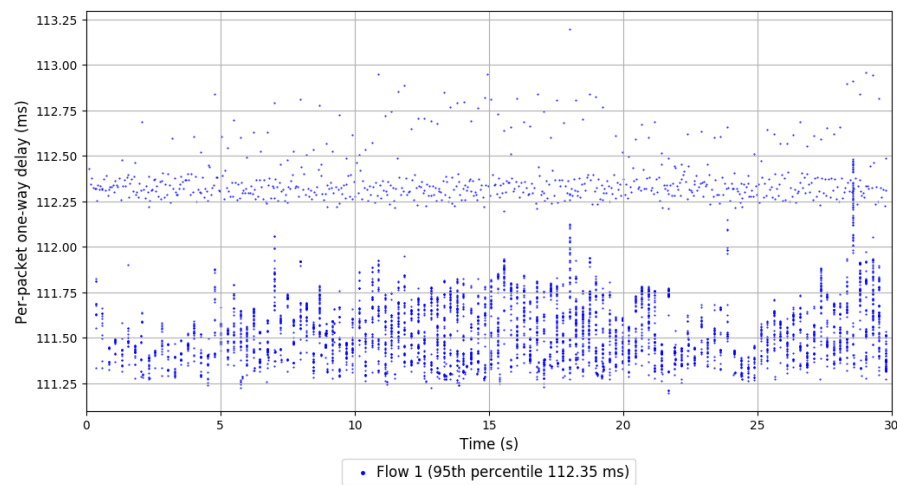
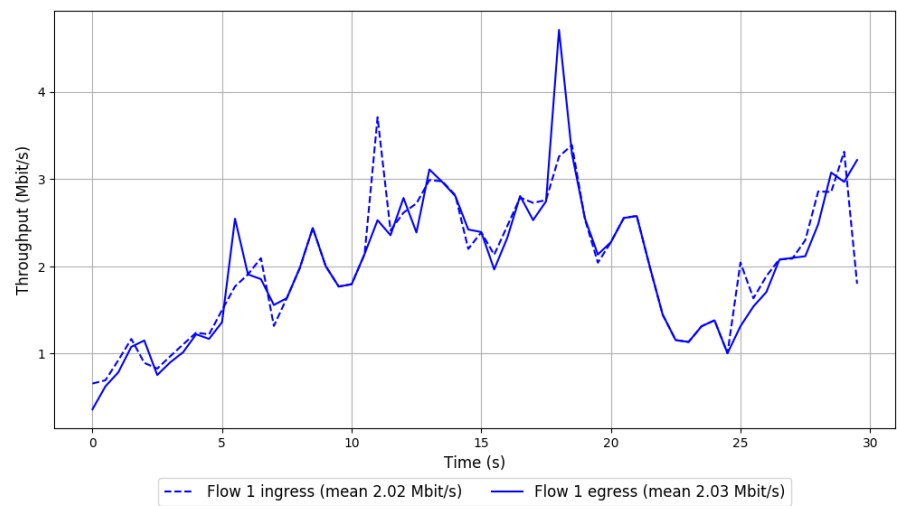
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 112.348 ms

Loss rate: 0.32%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-11 06:32:18

End at: 2017-08-11 06:32:48

Below is generated by plot.py at 2017-08-11 10:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 113.423 ms

Loss rate: 1.98%

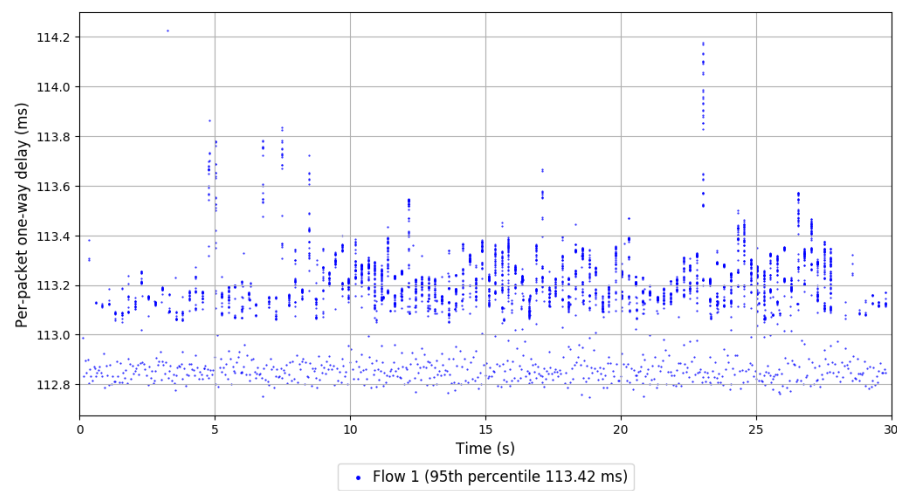
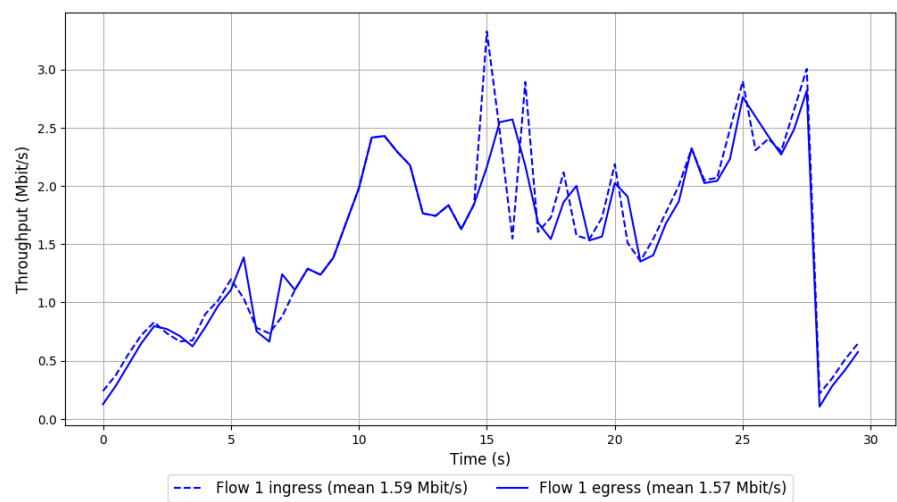
-- Flow 1:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 113.423 ms

Loss rate: 1.98%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-11 06:43:46

End at: 2017-08-11 06:44:16

Below is generated by plot.py at 2017-08-11 10:04:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 113.480 ms

Loss rate: 1.08%

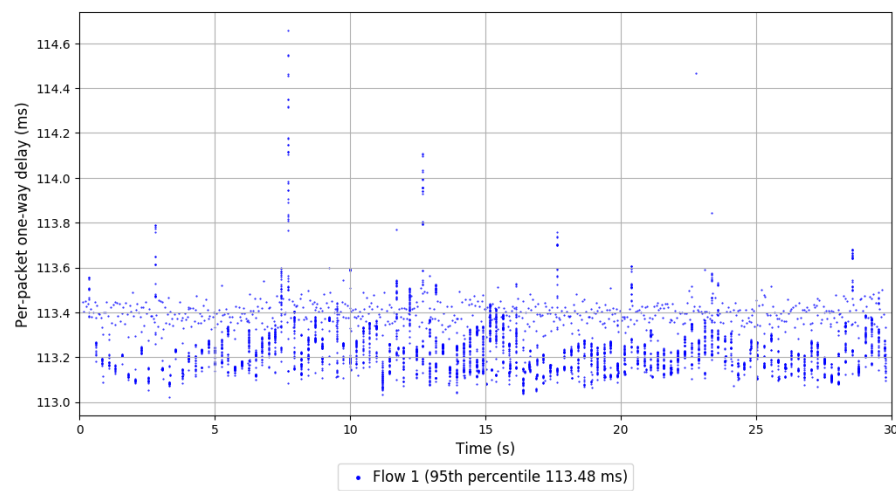
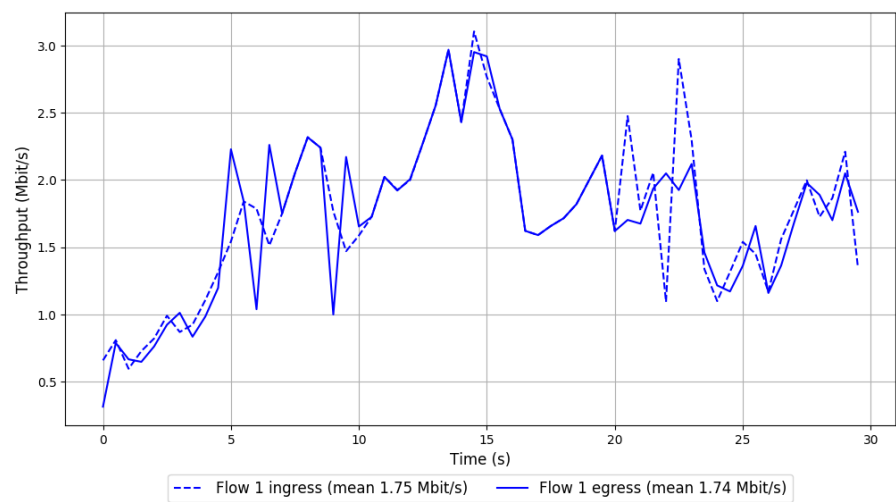
-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 113.480 ms

Loss rate: 1.08%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-11 06:54:52

End at: 2017-08-11 06:55:22

Below is generated by plot.py at 2017-08-11 10:04:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.55 Mbit/s

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

Loss rate: 3.62%

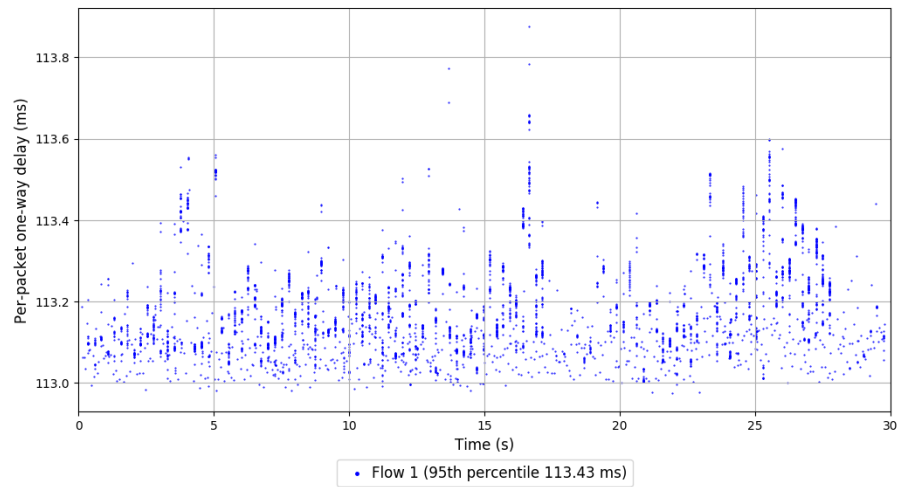
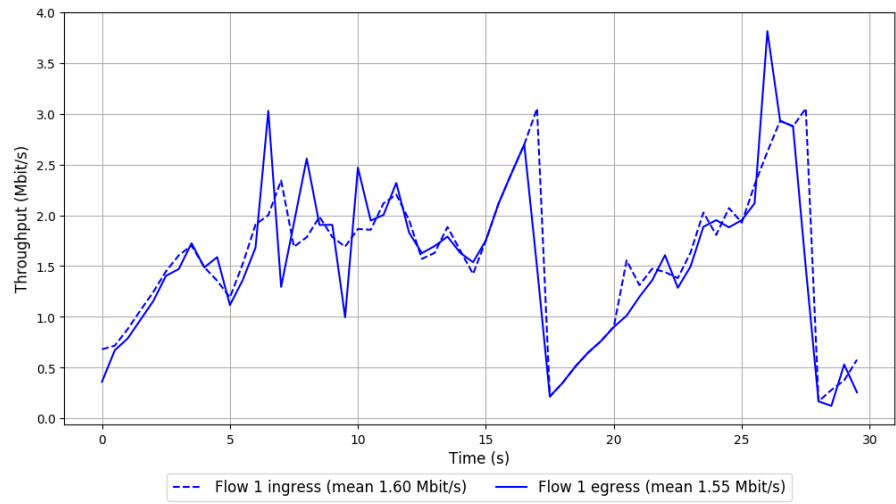
-- Flow 1:

Average throughput: 1.55 Mbit/s

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

Loss rate: 3.62%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-11 07:05:58

End at: 2017-08-11 07:06:28

Below is generated by plot.py at 2017-08-11 10:04:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 113.758 ms

Loss rate: 1.38%

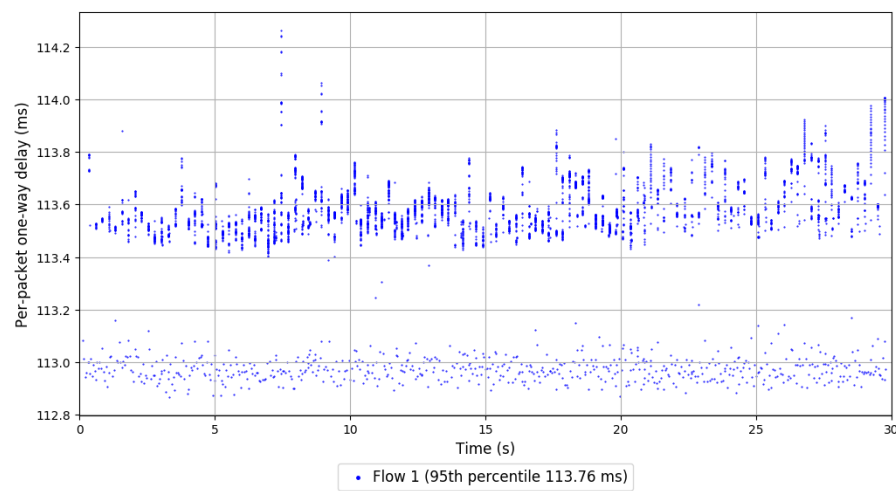
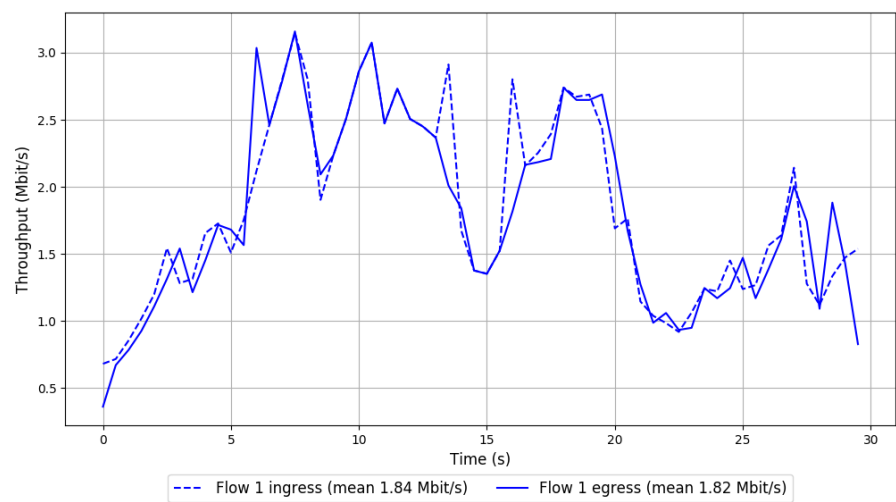
-- Flow 1:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 113.758 ms

Loss rate: 1.38%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-11 07:16:52

End at: 2017-08-11 07:17:22

Below is generated by plot.py at 2017-08-11 10:04:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 113.751 ms

Loss rate: 3.24%

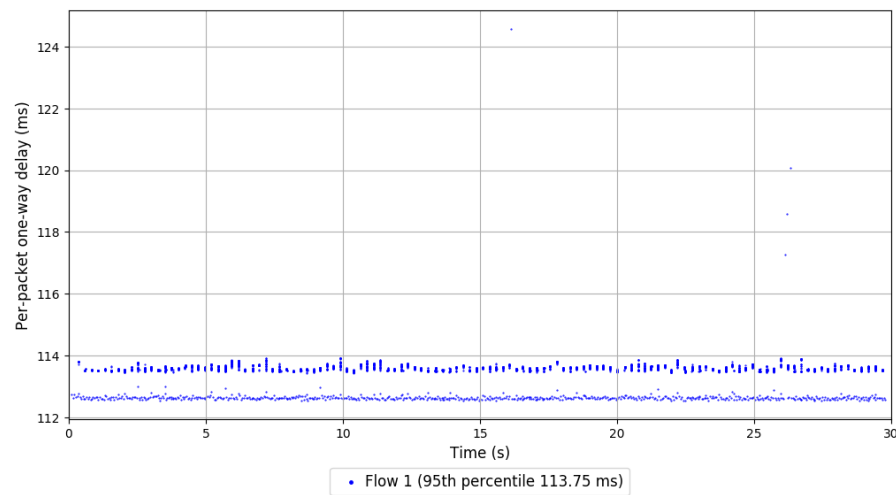
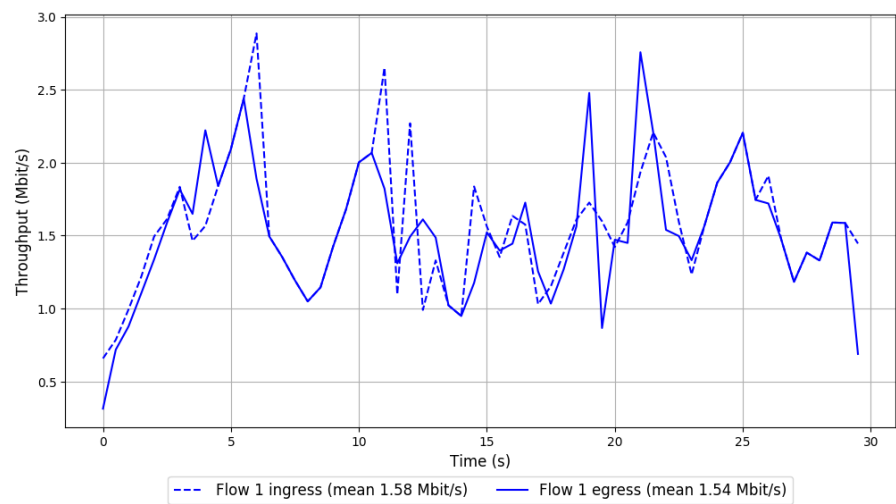
-- Flow 1:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 113.751 ms

Loss rate: 3.24%

Run 10: Report of Sprout — Data Link

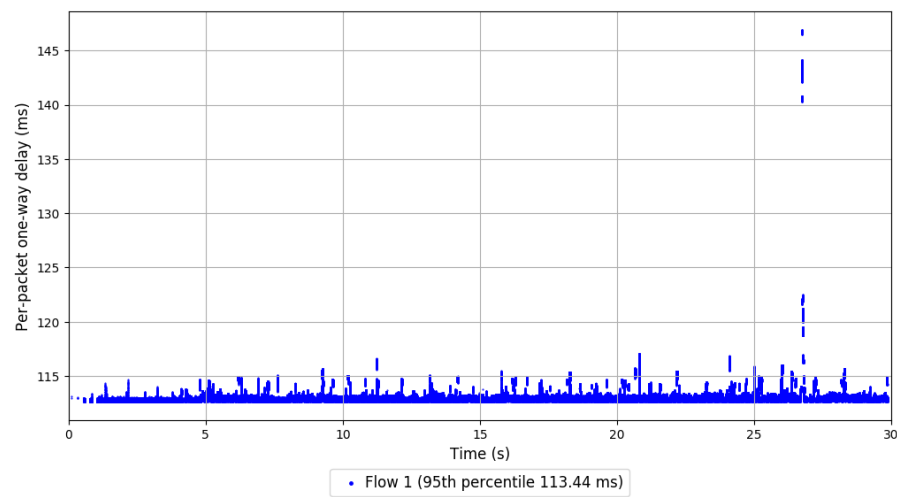
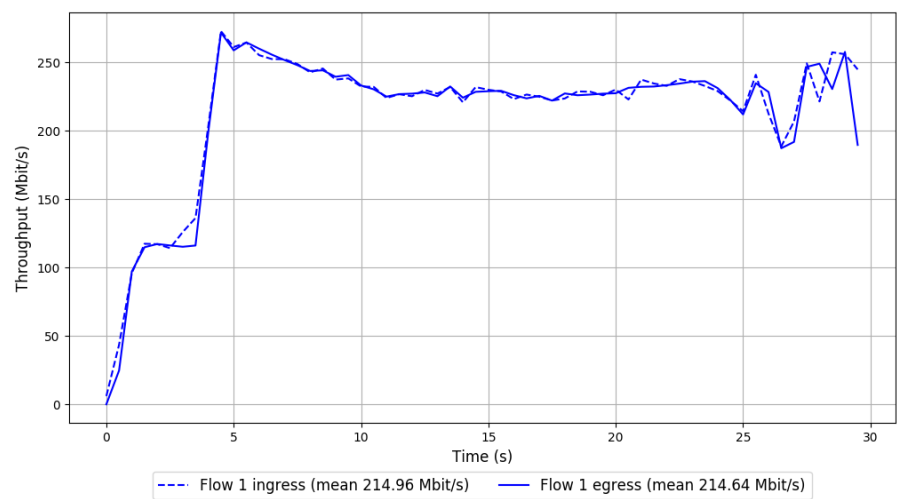


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-08-11 05:41:37
End at: 2017-08-11 05:42:07

# Below is generated by plot.py at 2017-08-11 10:06:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.64 Mbit/s
95th percentile per-packet one-way delay: 113.442 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 214.64 Mbit/s
95th percentile per-packet one-way delay: 113.442 ms
Loss rate: 0.90%
```

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

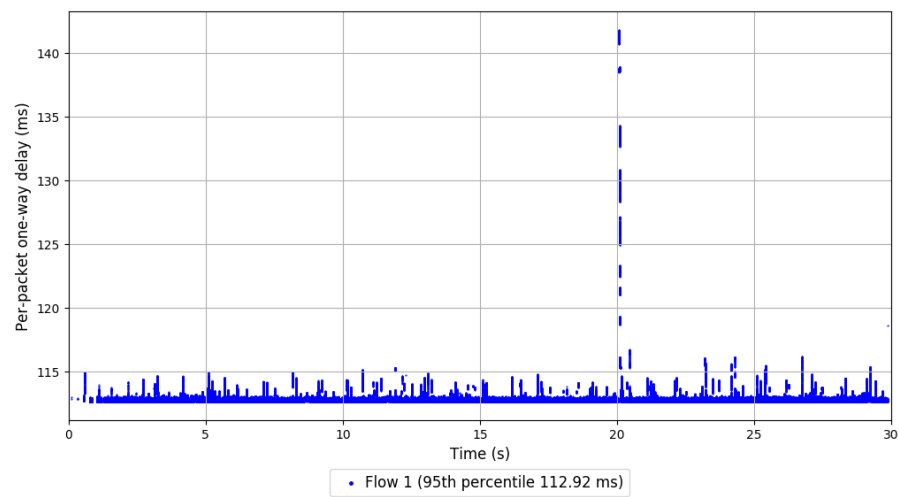
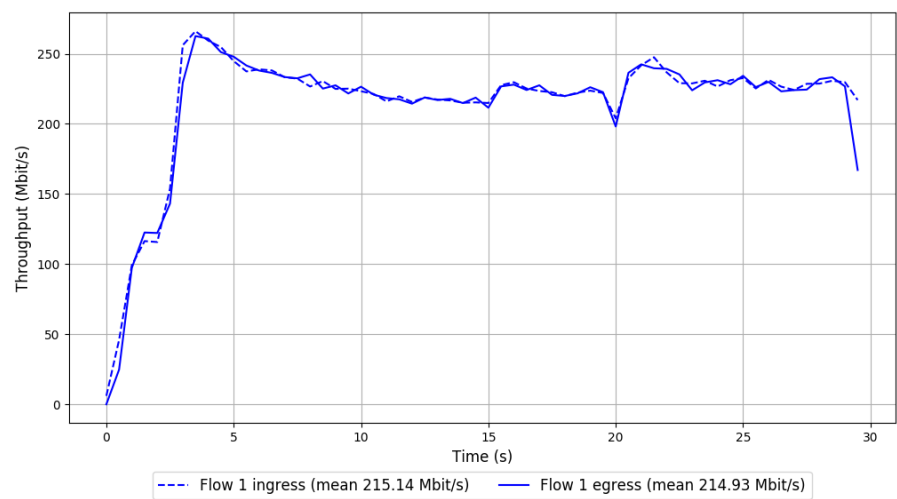


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-08-11 05:52:47
End at: 2017-08-11 05:53:17

# Below is generated by plot.py at 2017-08-11 10:06:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.93 Mbit/s
95th percentile per-packet one-way delay: 112.923 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 214.93 Mbit/s
95th percentile per-packet one-way delay: 112.923 ms
Loss rate: 0.83%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-08-11 06:04:05

End at: 2017-08-11 06:04:35

Below is generated by plot.py at 2017-08-11 10:06:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.43 Mbit/s

95th percentile per-packet one-way delay: 111.664 ms

Loss rate: 31.54%

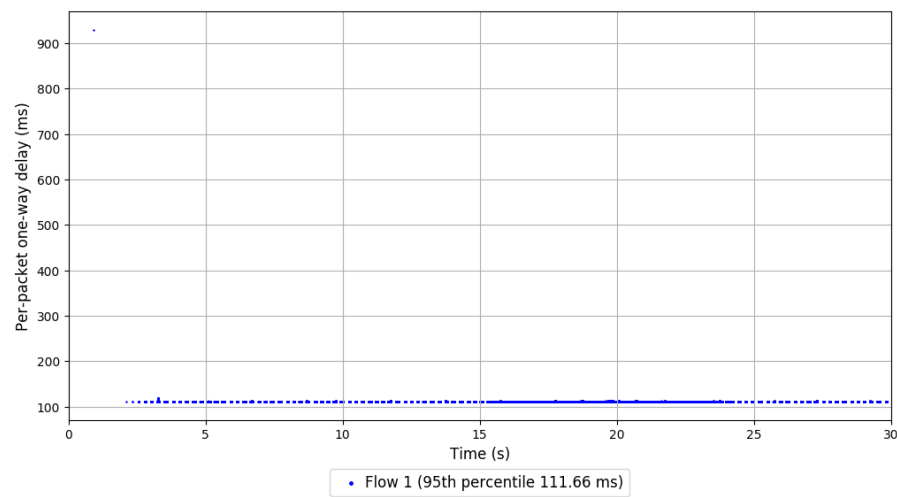
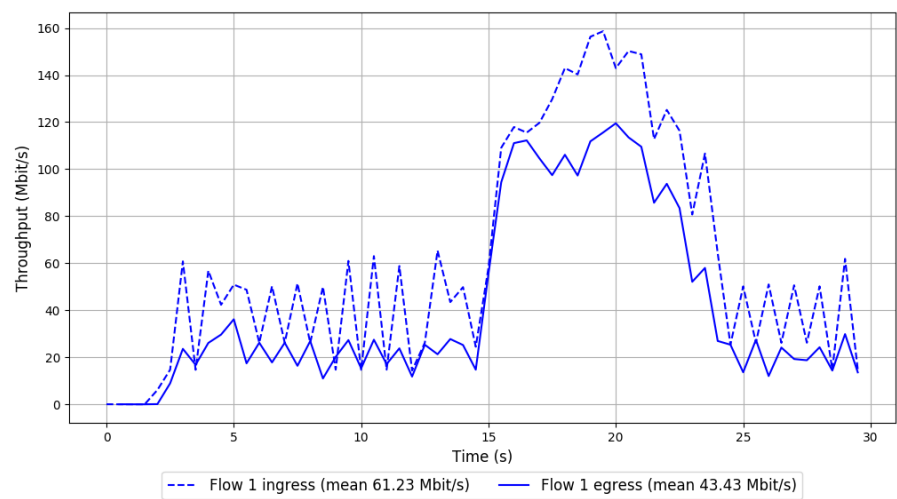
-- Flow 1:

Average throughput: 43.43 Mbit/s

95th percentile per-packet one-way delay: 111.664 ms

Loss rate: 31.54%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-08-11 06:15:09

End at: 2017-08-11 06:15:39

Below is generated by plot.py at 2017-08-11 10:07:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.54 Mbit/s

95th percentile per-packet one-way delay: 113.385 ms

Loss rate: 3.22%

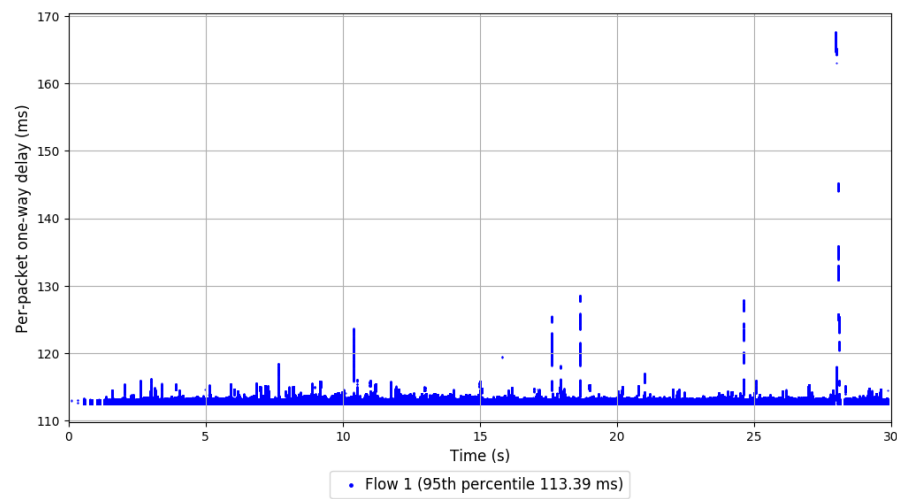
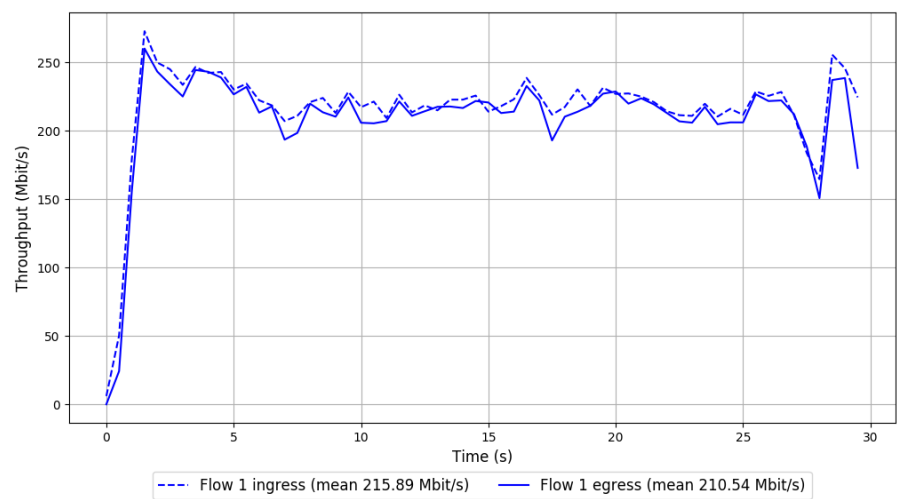
-- Flow 1:

Average throughput: 210.54 Mbit/s

95th percentile per-packet one-way delay: 113.385 ms

Loss rate: 3.22%

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

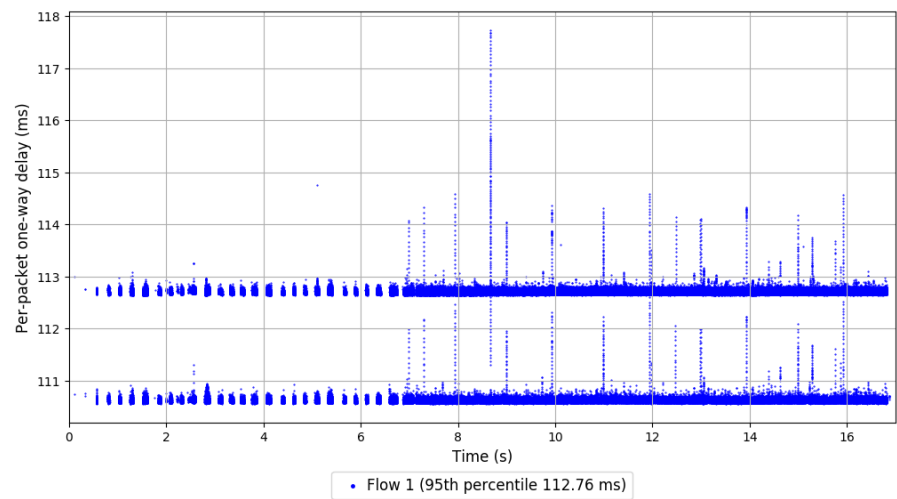
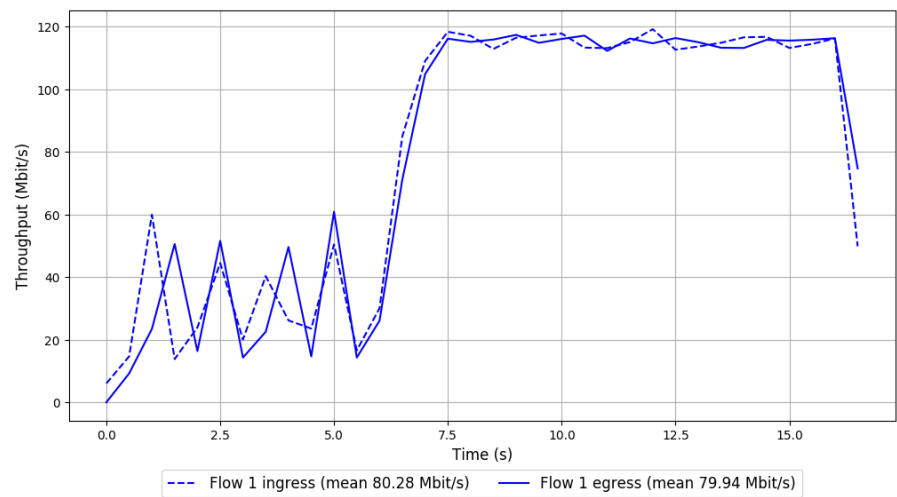


Run 5: Statistics of TaoVA-100x

Start at: 2017-08-11 06:26:14

End at: 2017-08-11 06:26:44

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-08-11 06:37:24

End at: 2017-08-11 06:37:54

Below is generated by plot.py at 2017-08-11 10:07:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.58 Mbit/s

95th percentile per-packet one-way delay: 112.967 ms

Loss rate: 0.76%

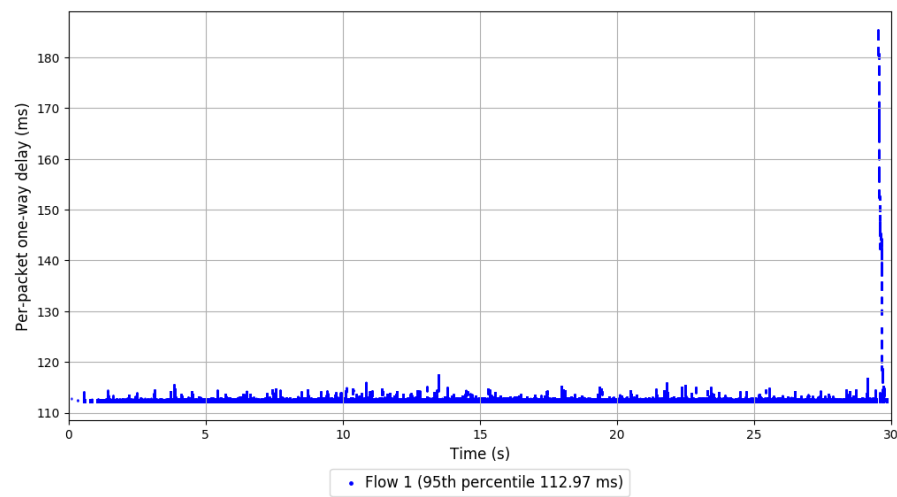
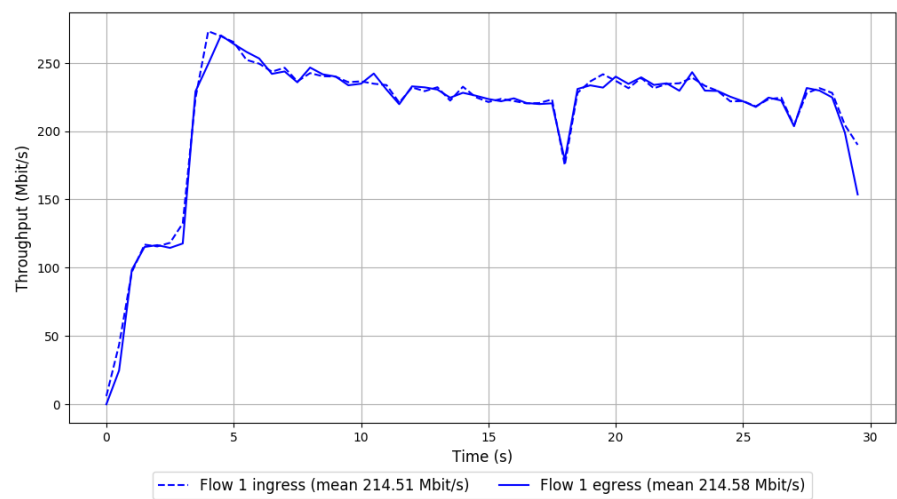
-- Flow 1:

Average throughput: 214.58 Mbit/s

95th percentile per-packet one-way delay: 112.967 ms

Loss rate: 0.76%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-08-11 06:48:58

End at: 2017-08-11 06:49:28

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.96 Mbit/s

95th percentile per-packet one-way delay: 113.549 ms

Loss rate: 1.23%

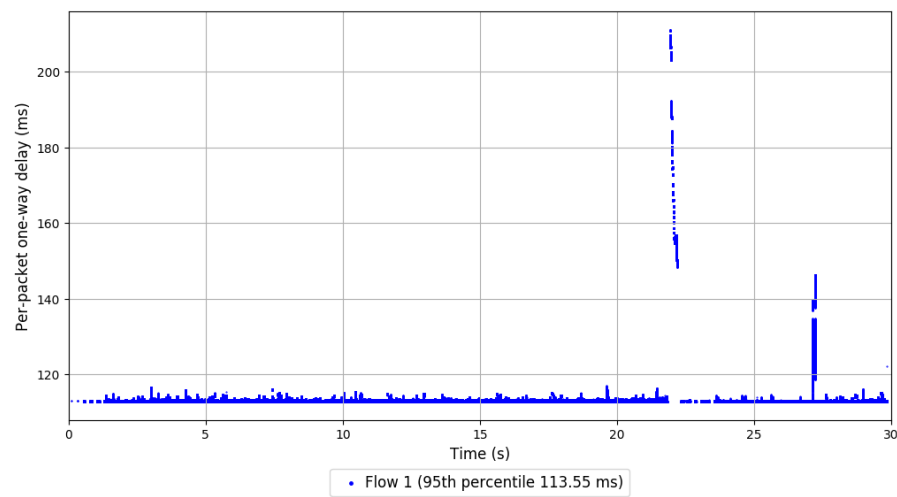
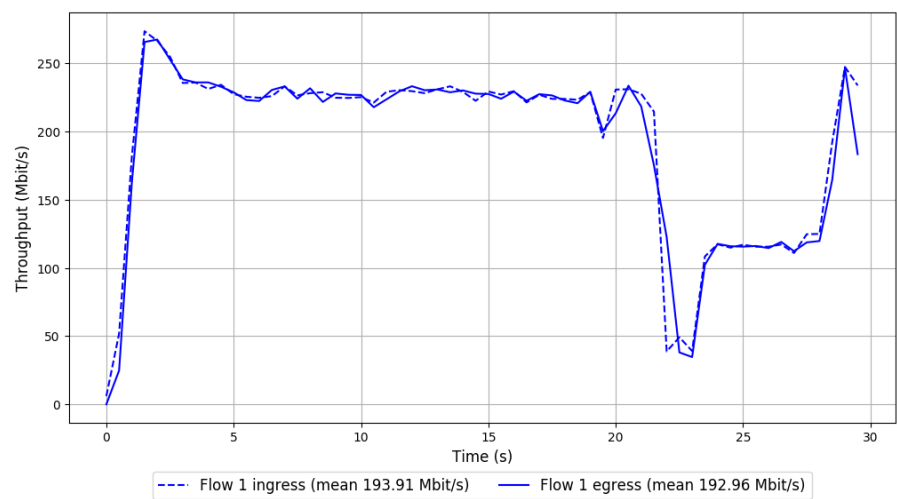
-- Flow 1:

Average throughput: 192.96 Mbit/s

95th percentile per-packet one-way delay: 113.549 ms

Loss rate: 1.23%

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

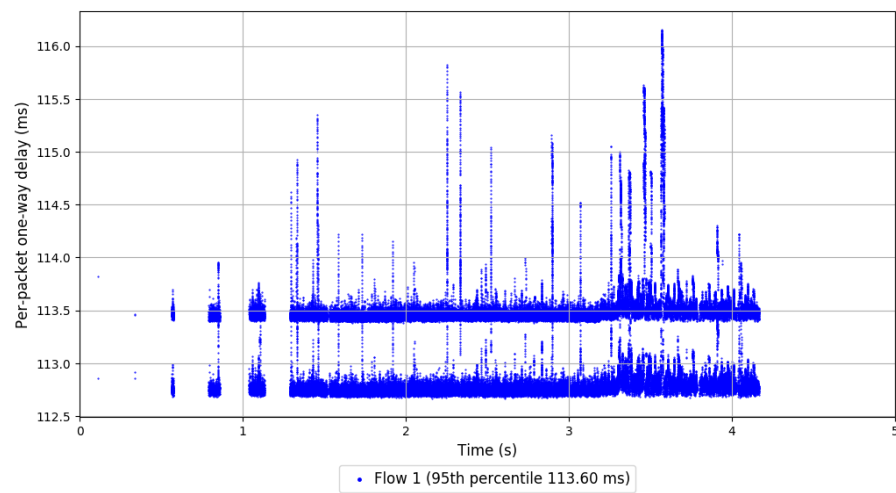
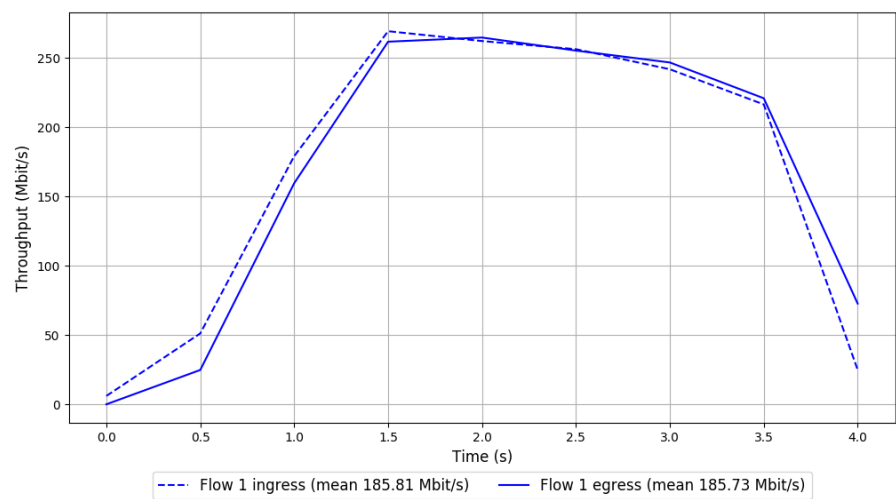


Run 8: Statistics of TaoVA-100x

Start at: 2017-08-11 07:00:00

End at: 2017-08-11 07:00:30

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

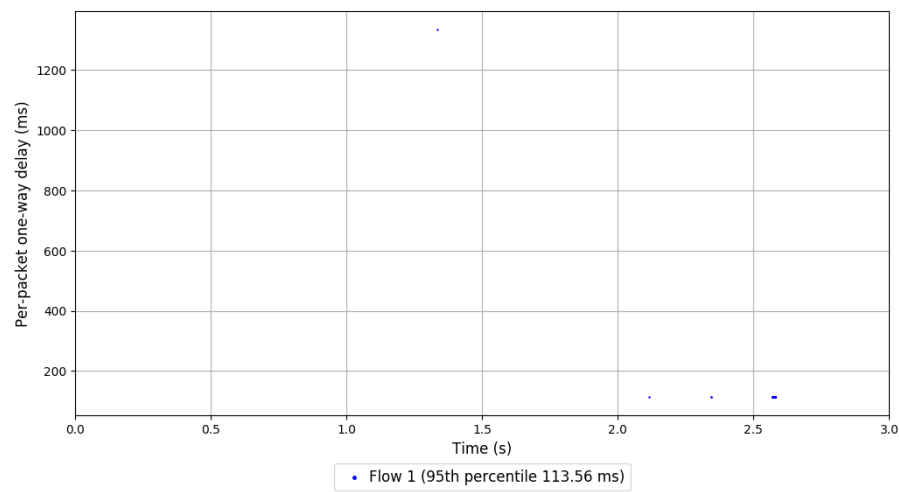
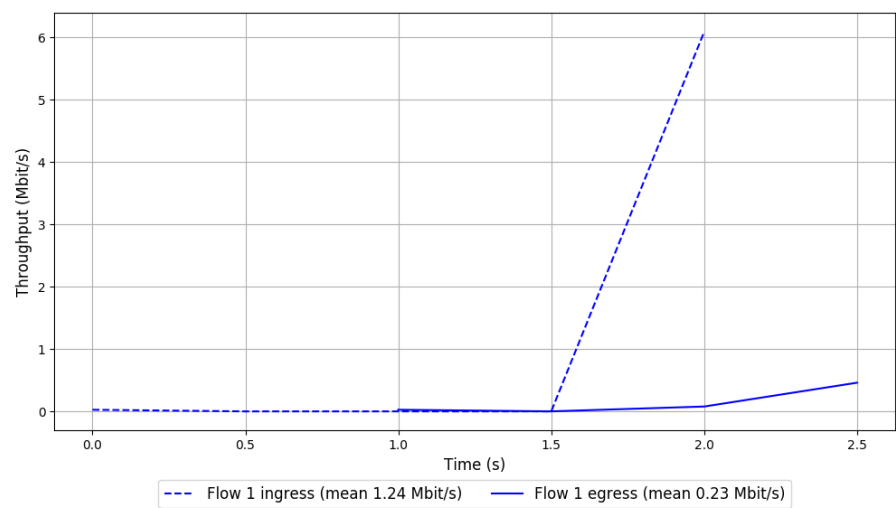


Run 9: Statistics of TaoVA-100x

Start at: 2017-08-11 07:11:03

End at: 2017-08-11 07:11:33

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

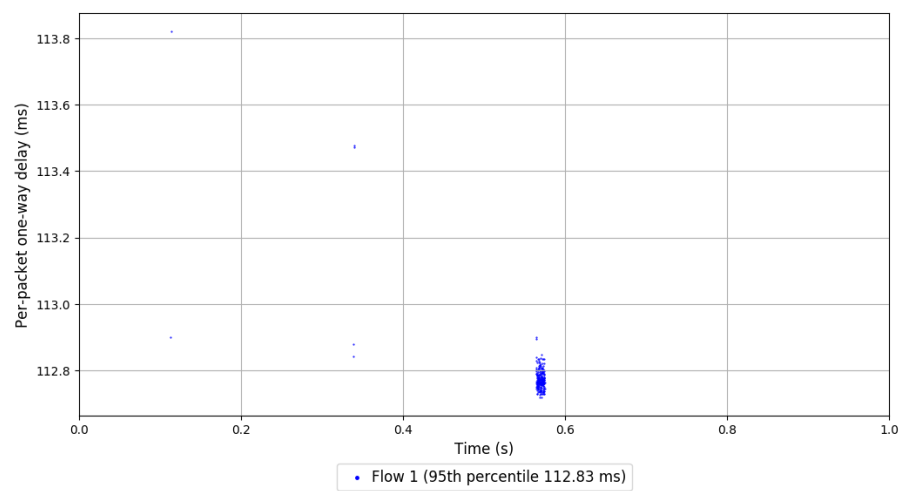
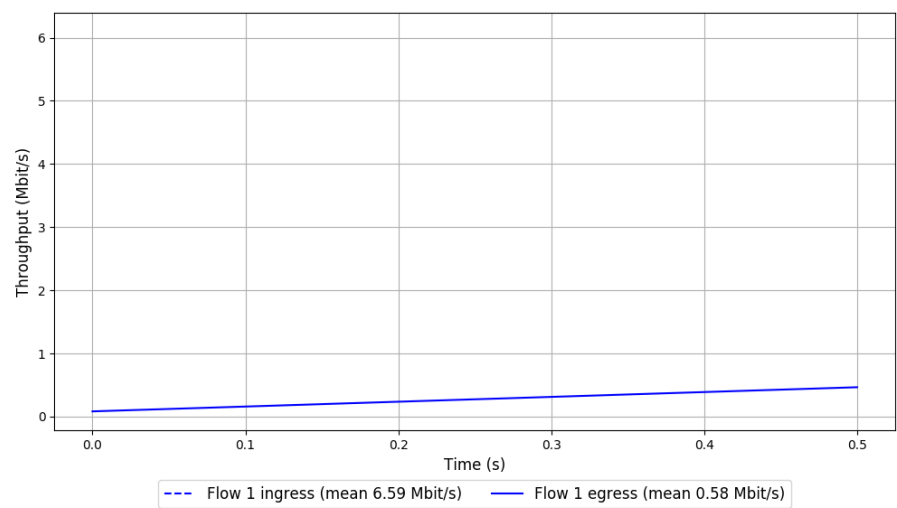


Run 10: Statistics of TaoVA-100x

Start at: 2017-08-11 07:21:58

End at: 2017-08-11 07:22:28

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-11 05:37:57

End at: 2017-08-11 05:38:27

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.38 Mbit/s

95th percentile per-packet one-way delay: 113.114 ms

Loss rate: 0.92%

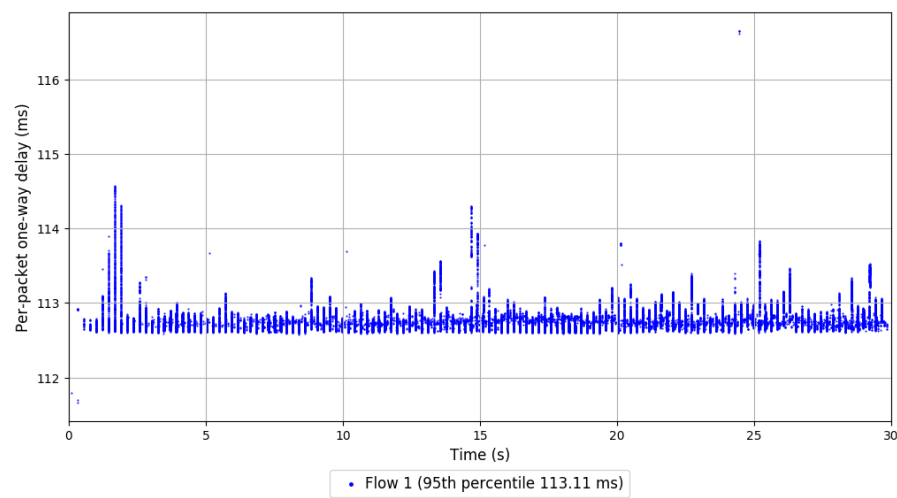
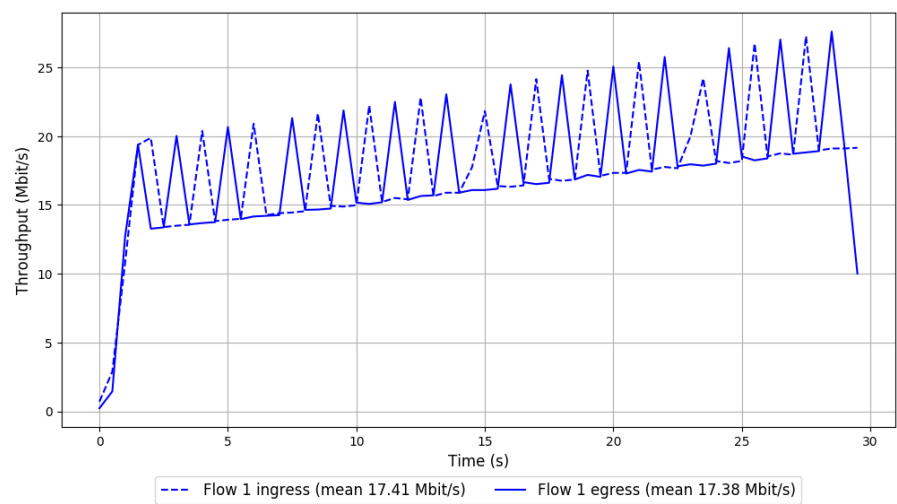
-- Flow 1:

Average throughput: 17.38 Mbit/s

95th percentile per-packet one-way delay: 113.114 ms

Loss rate: 0.92%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-11 05:49:04

End at: 2017-08-11 05:49:34

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.23 Mbit/s

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

Loss rate: 2.82%

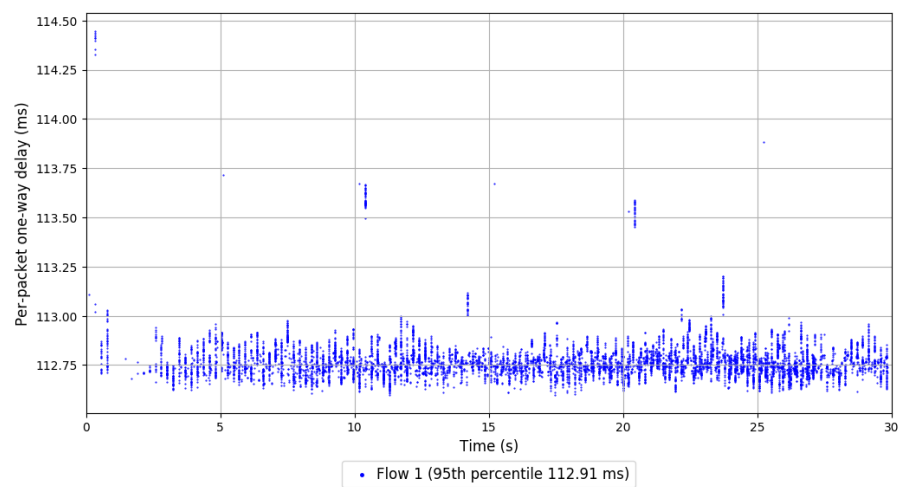
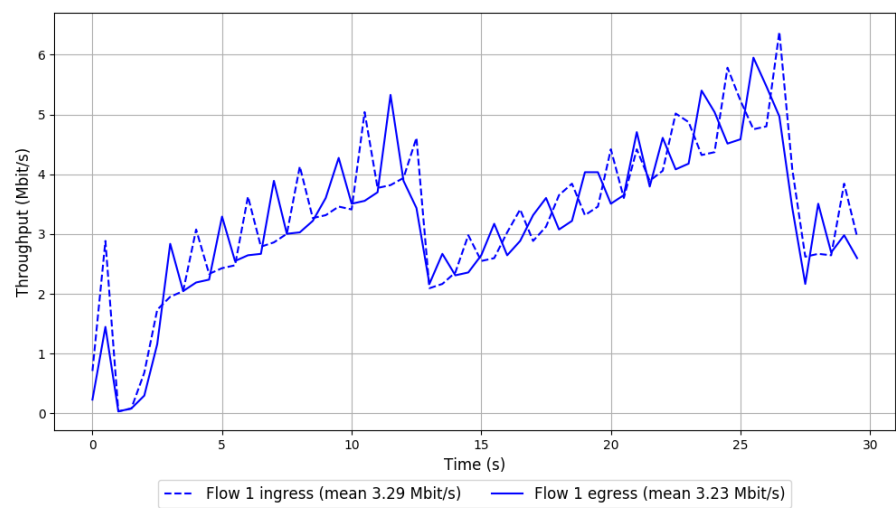
-- Flow 1:

Average throughput: 3.23 Mbit/s

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

Loss rate: 2.82%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-11 06:00:25

End at: 2017-08-11 06:00:55

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 112.463 ms

Loss rate: 2.42%

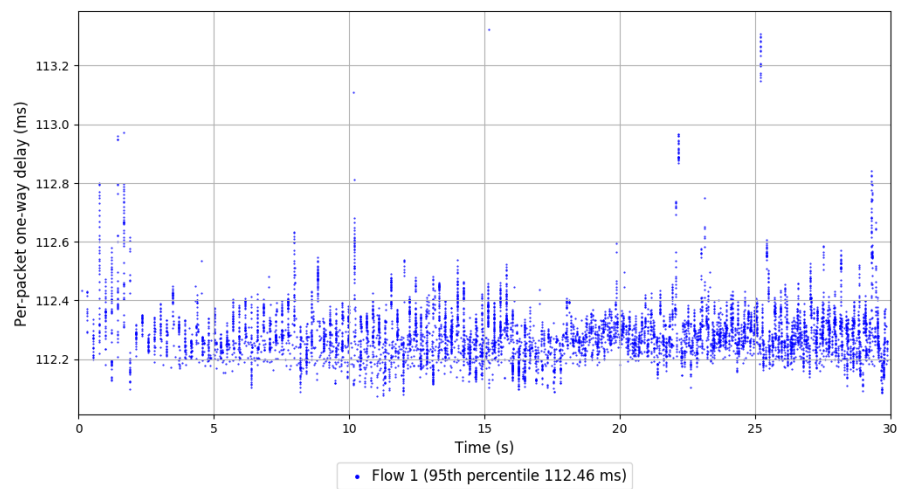
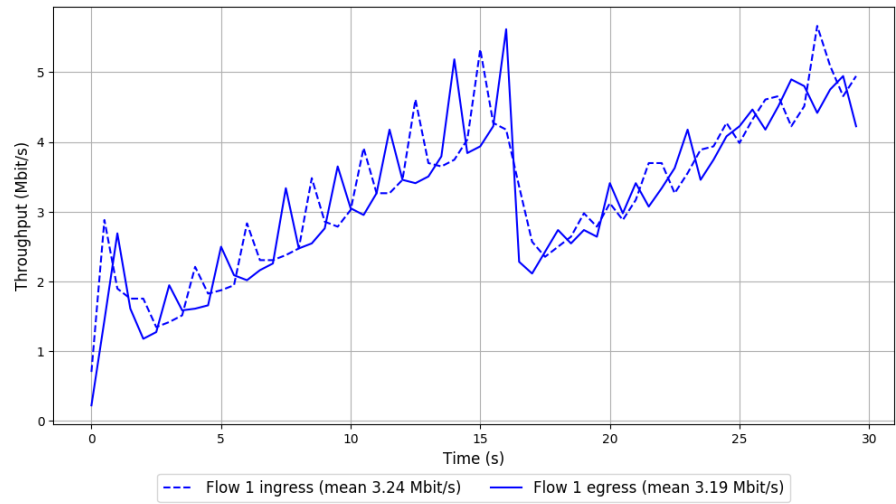
-- Flow 1:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 112.463 ms

Loss rate: 2.42%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-11 06:11:27

End at: 2017-08-11 06:11:57

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 113.367 ms

Loss rate: 2.44%

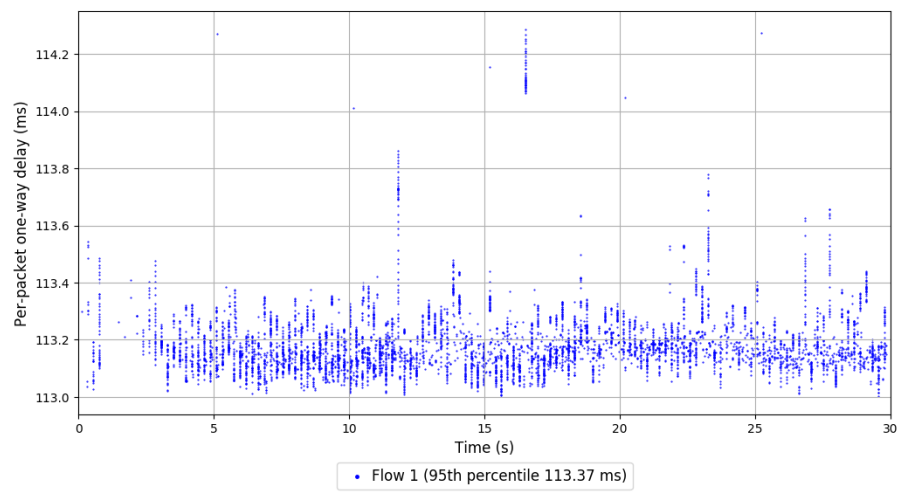
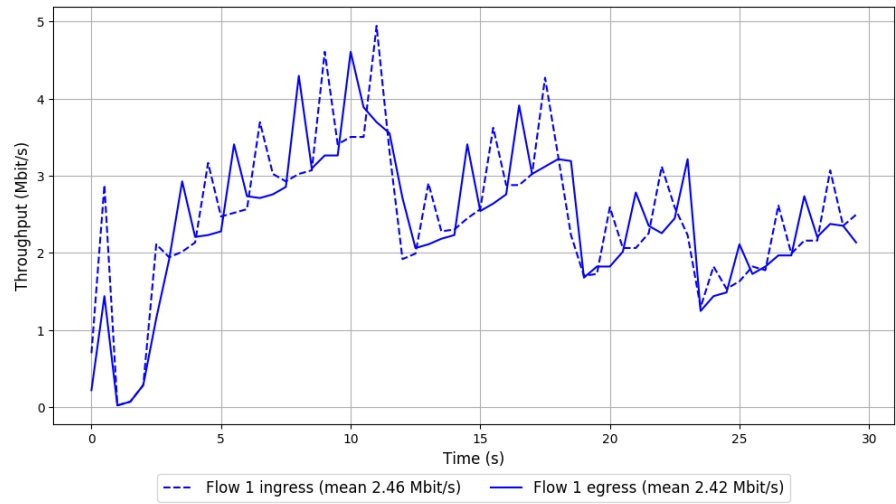
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 113.367 ms

Loss rate: 2.44%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-11 06:22:37

End at: 2017-08-11 06:23:07

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 112.981 ms

Loss rate: 3.20%

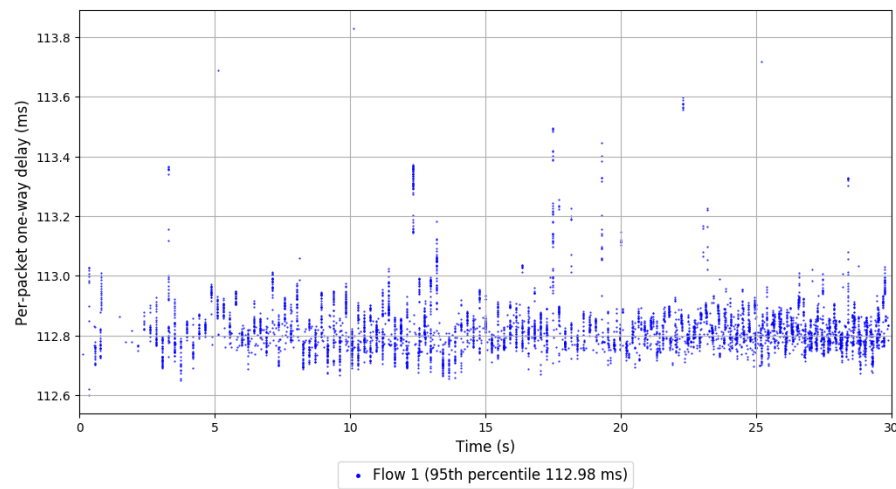
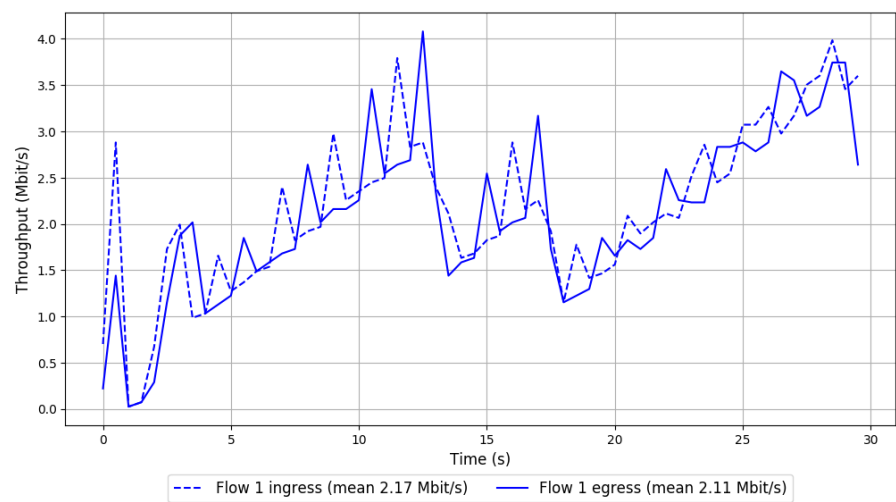
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 112.981 ms

Loss rate: 3.20%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-11 06:33:46

End at: 2017-08-11 06:34:16

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.69 Mbit/s

95th percentile per-packet one-way delay: 113.281 ms

Loss rate: 1.29%

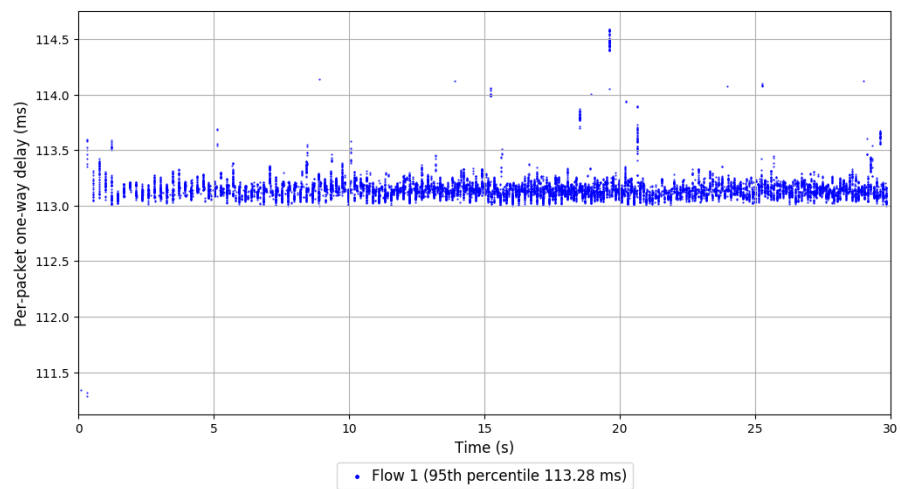
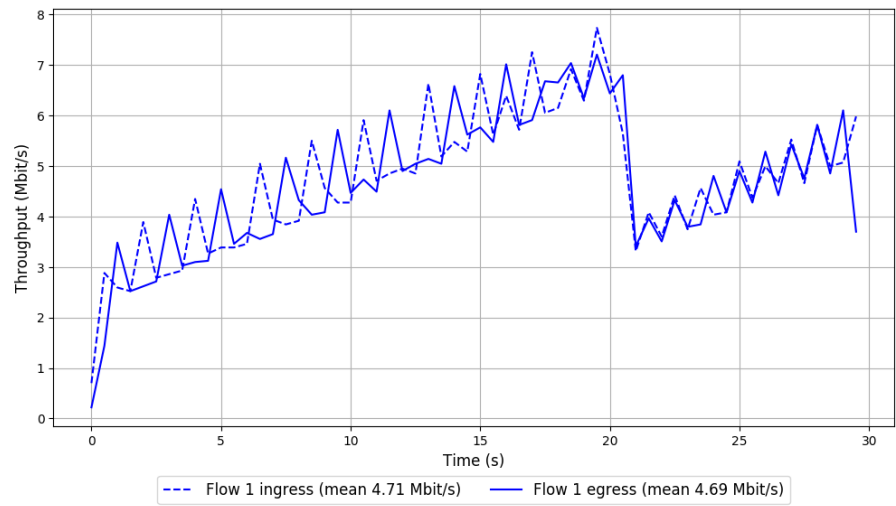
-- Flow 1:

Average throughput: 4.69 Mbit/s

95th percentile per-packet one-way delay: 113.281 ms

Loss rate: 1.29%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-11 06:45:14

End at: 2017-08-11 06:45:44

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.23 Mbit/s

95th percentile per-packet one-way delay: 113.303 ms

Loss rate: 2.08%

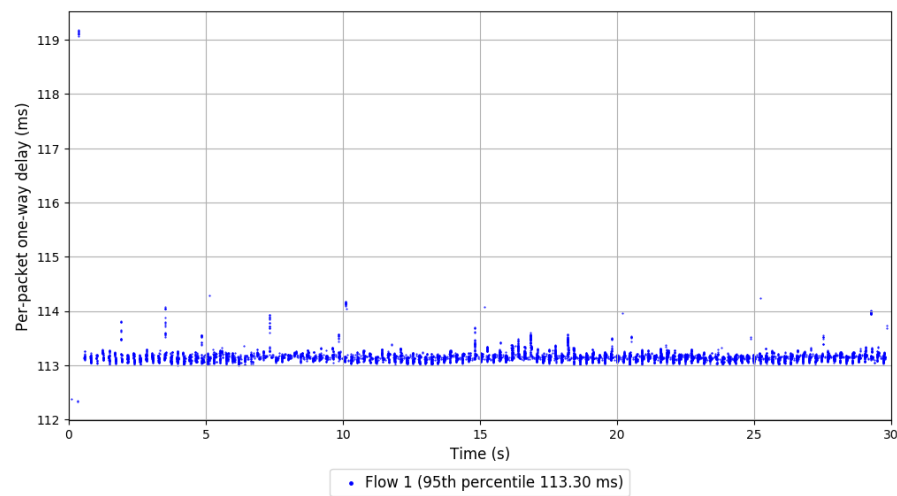
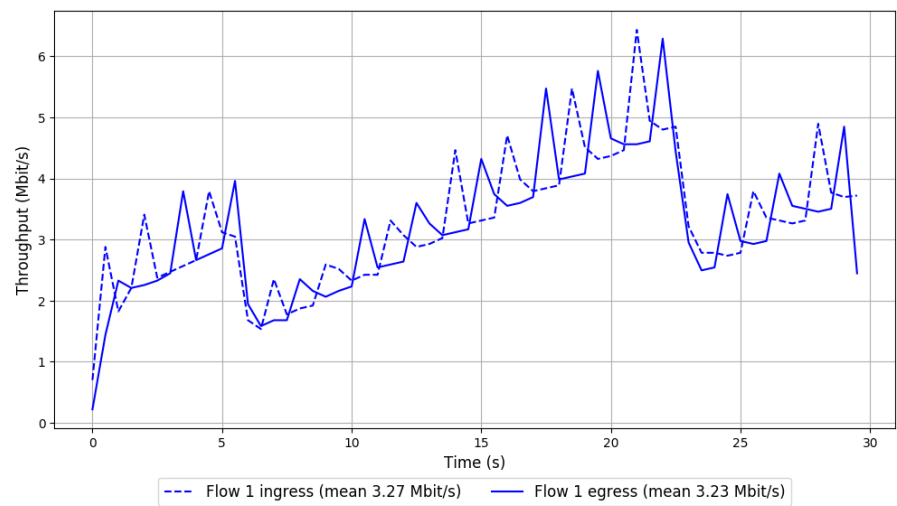
-- Flow 1:

Average throughput: 3.23 Mbit/s

95th percentile per-packet one-way delay: 113.303 ms

Loss rate: 2.08%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-11 06:56:20

End at: 2017-08-11 06:56:50

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 112.509 ms

Loss rate: 2.23%

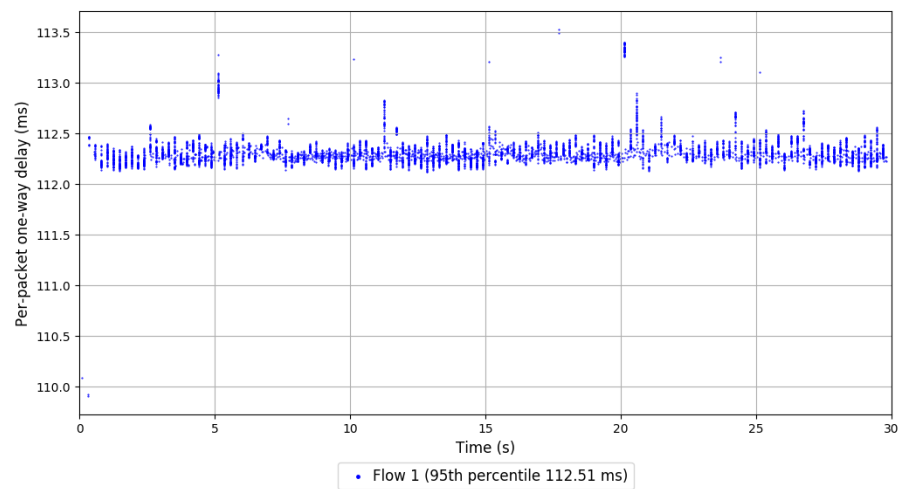
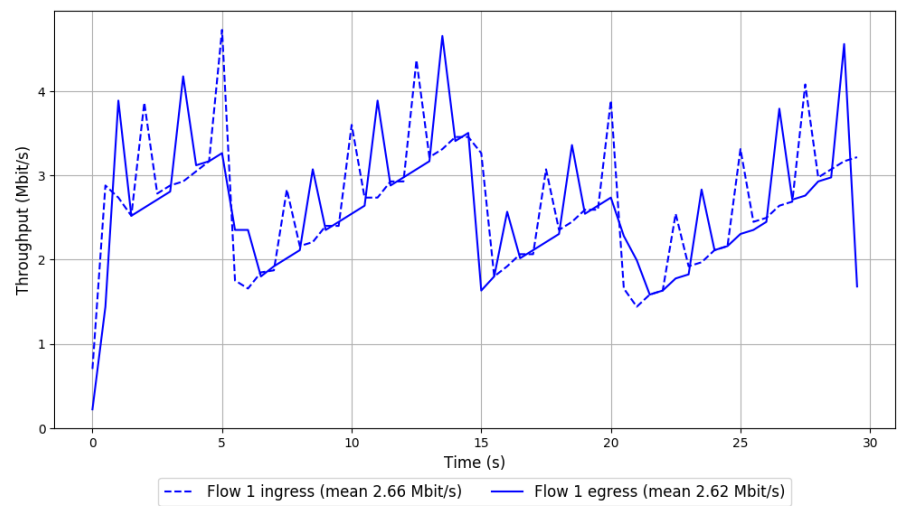
-- Flow 1:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 112.509 ms

Loss rate: 2.23%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-11 07:07:26

End at: 2017-08-11 07:07:56

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 113.695 ms

Loss rate: 3.86%

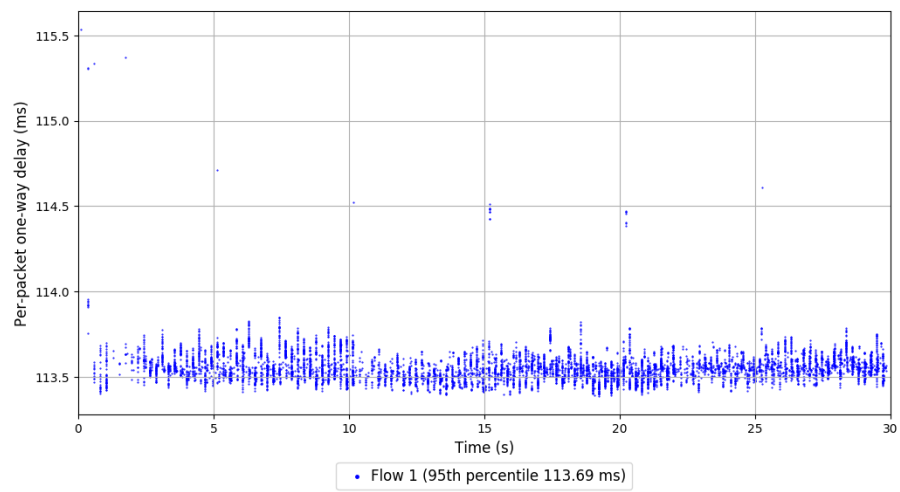
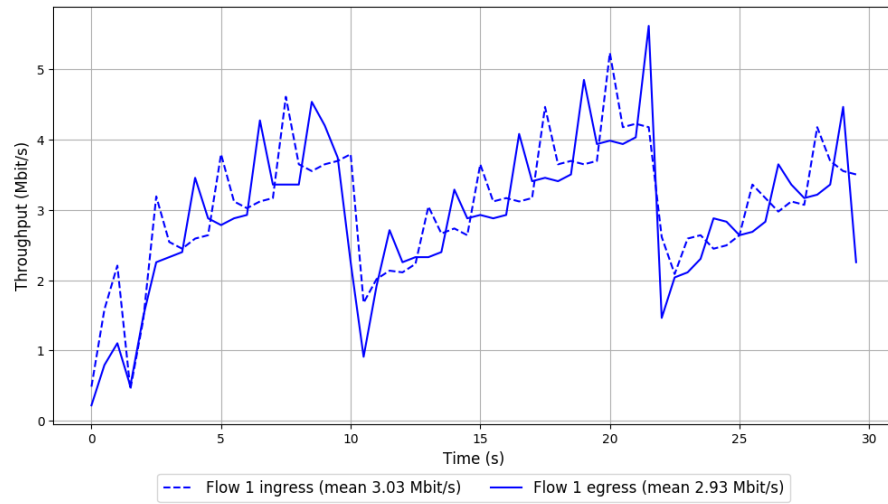
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 113.695 ms

Loss rate: 3.86%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-11 07:18:20

End at: 2017-08-11 07:18:50

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 113.696 ms

Loss rate: 3.34%

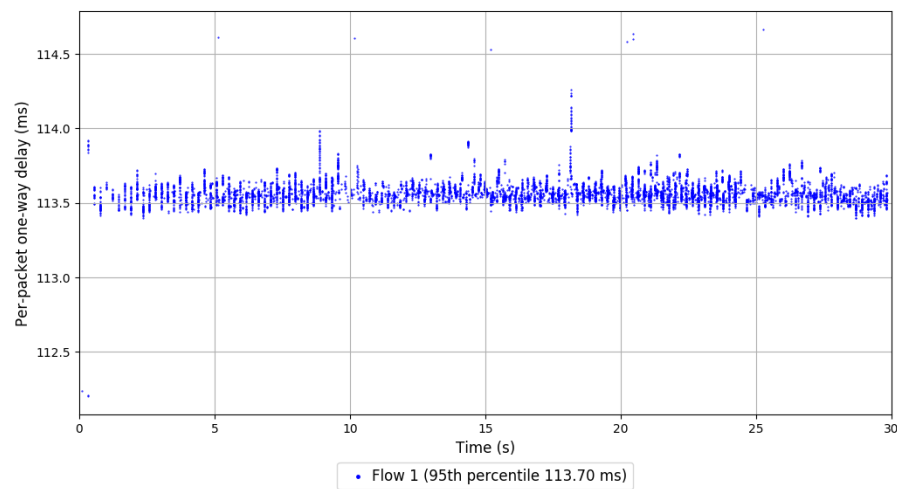
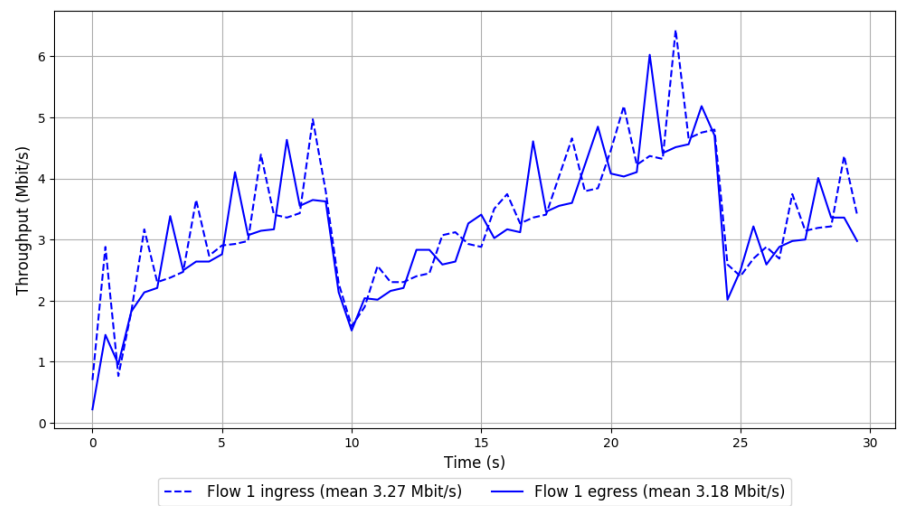
-- Flow 1:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 113.696 ms

Loss rate: 3.34%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-11 05:42:41

End at: 2017-08-11 05:43:11

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.50 Mbit/s

95th percentile per-packet one-way delay: 114.322 ms

Loss rate: 55.39%

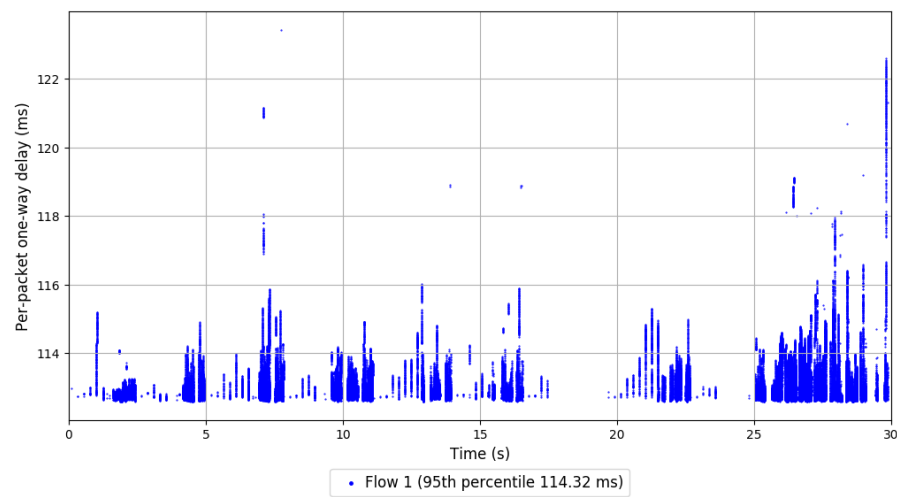
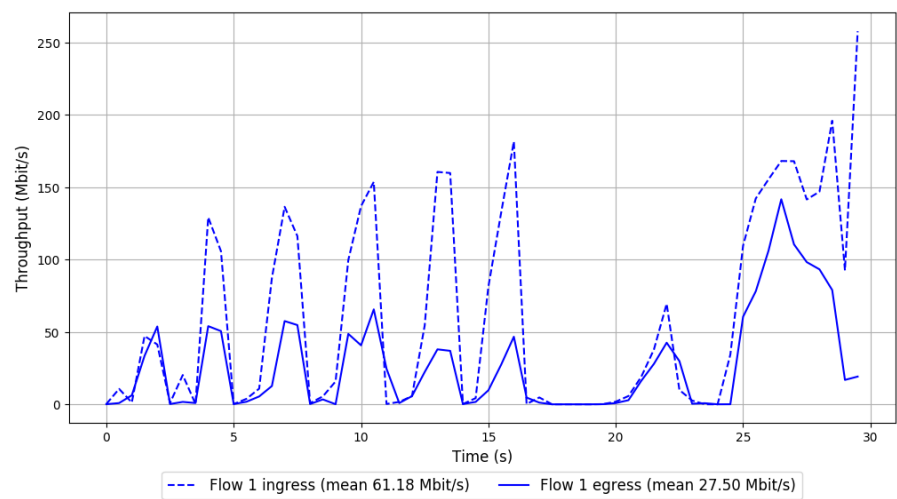
-- Flow 1:

Average throughput: 27.50 Mbit/s

95th percentile per-packet one-way delay: 114.322 ms

Loss rate: 55.39%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-11 05:53:51

End at: 2017-08-11 05:54:21

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.506 ms

Loss rate: 99.81%

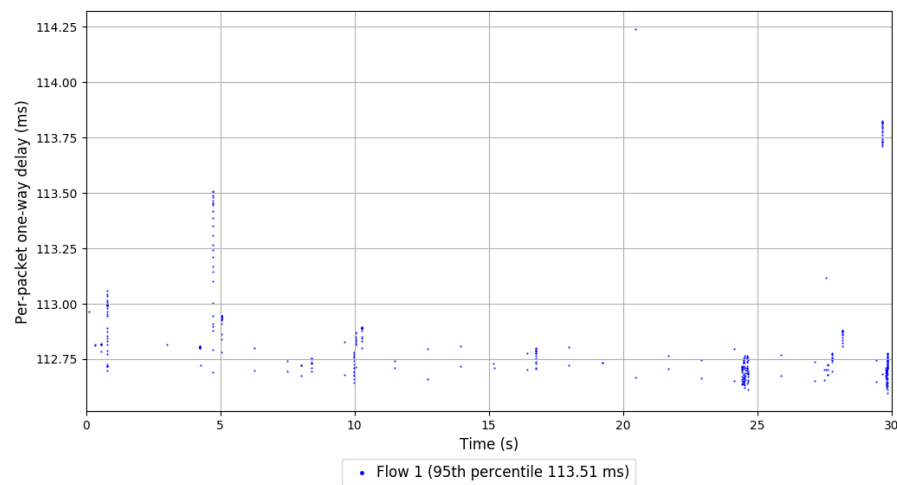
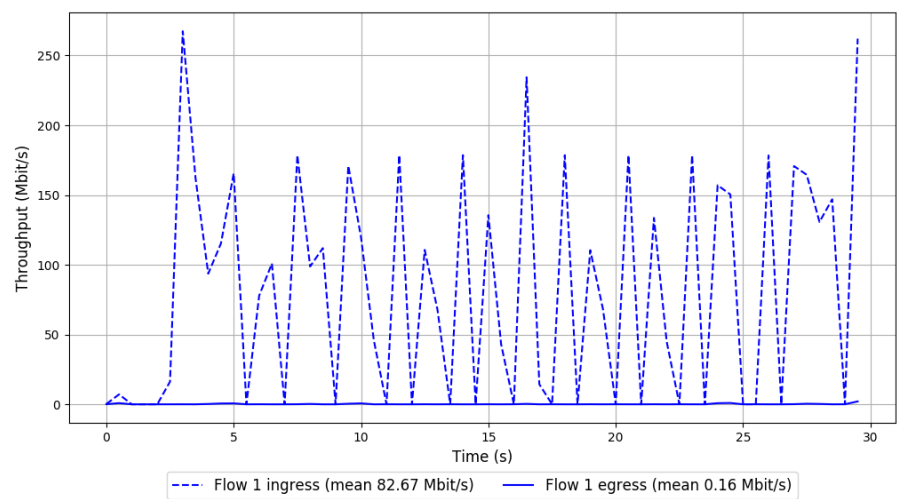
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.506 ms

Loss rate: 99.81%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-11 06:04:52

End at: 2017-08-11 06:05:22

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.95 Mbit/s

95th percentile per-packet one-way delay: 113.967 ms

Loss rate: 60.51%

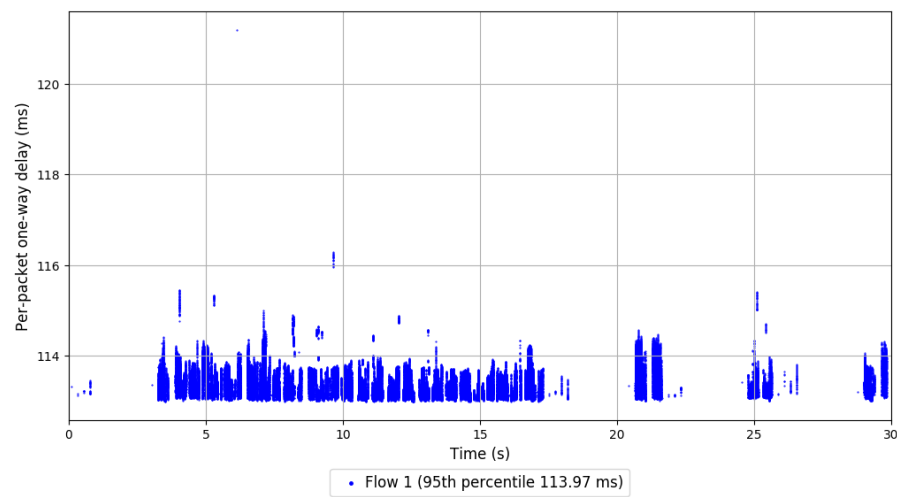
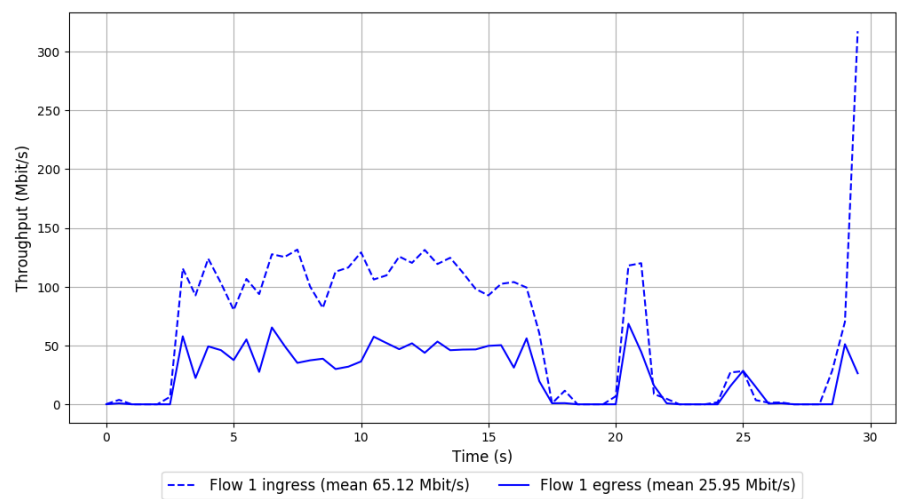
-- Flow 1:

Average throughput: 25.95 Mbit/s

95th percentile per-packet one-way delay: 113.967 ms

Loss rate: 60.51%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-11 06:16:12

End at: 2017-08-11 06:16:42

Below is generated by plot.py at 2017-08-11 10:08:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 117.857 ms

Loss rate: 96.31%

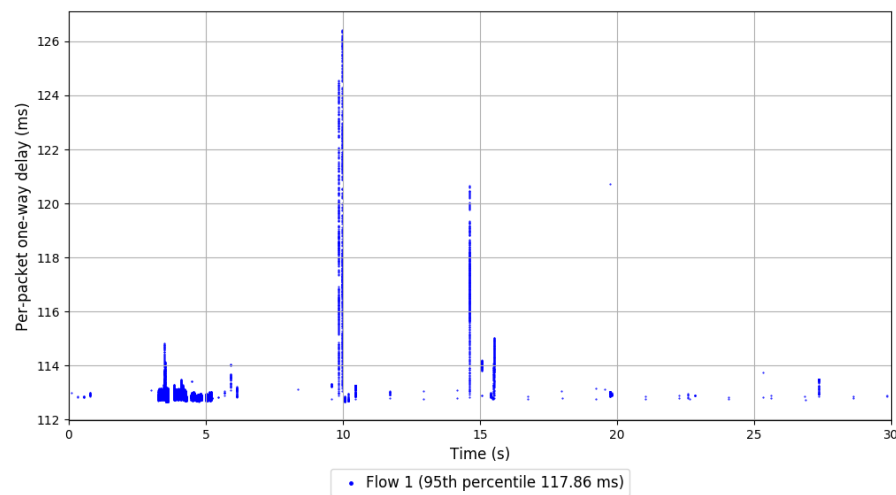
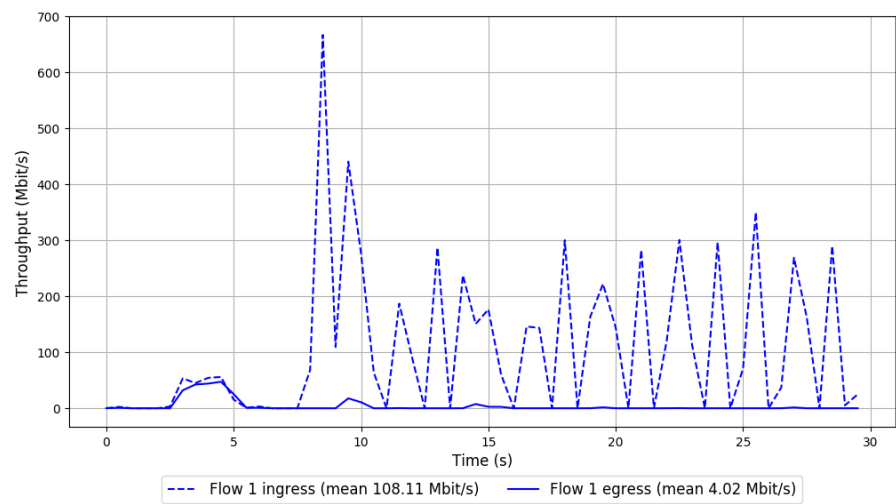
-- Flow 1:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 117.857 ms

Loss rate: 96.31%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-11 06:26:59

End at: 2017-08-11 06:27:29

Below is generated by plot.py at 2017-08-11 10:09:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.47 Mbit/s

95th percentile per-packet one-way delay: 116.402 ms

Loss rate: 69.42%

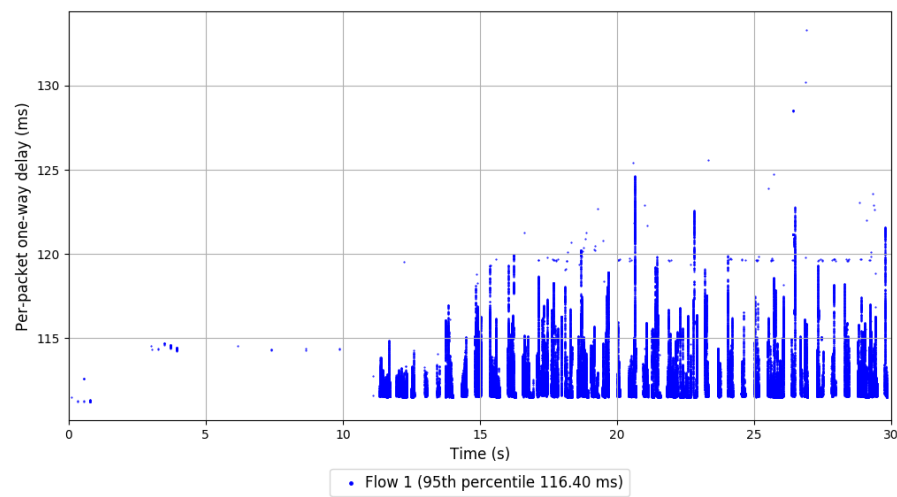
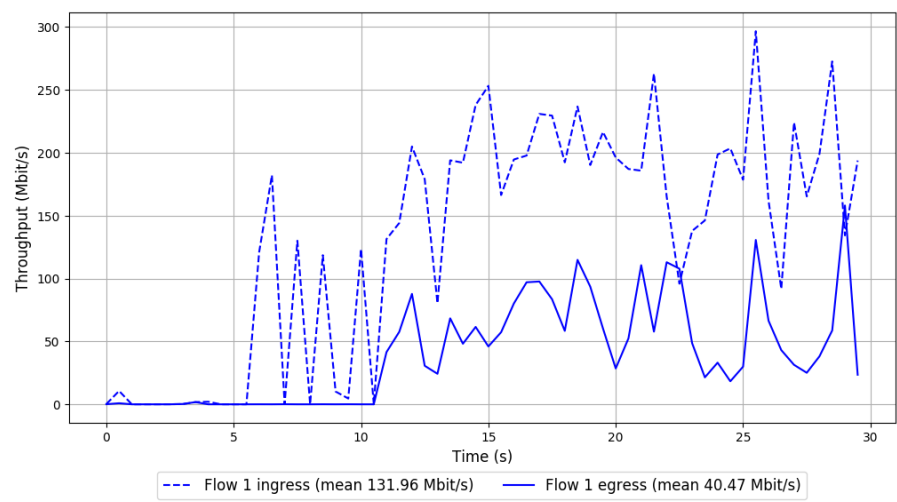
-- Flow 1:

Average throughput: 40.47 Mbit/s

95th percentile per-packet one-way delay: 116.402 ms

Loss rate: 69.42%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-11 06:38:27

End at: 2017-08-11 06:38:57

Below is generated by plot.py at 2017-08-11 10:09:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 132.10 Mbit/s

95th percentile per-packet one-way delay: 189.358 ms

Loss rate: 1.39%

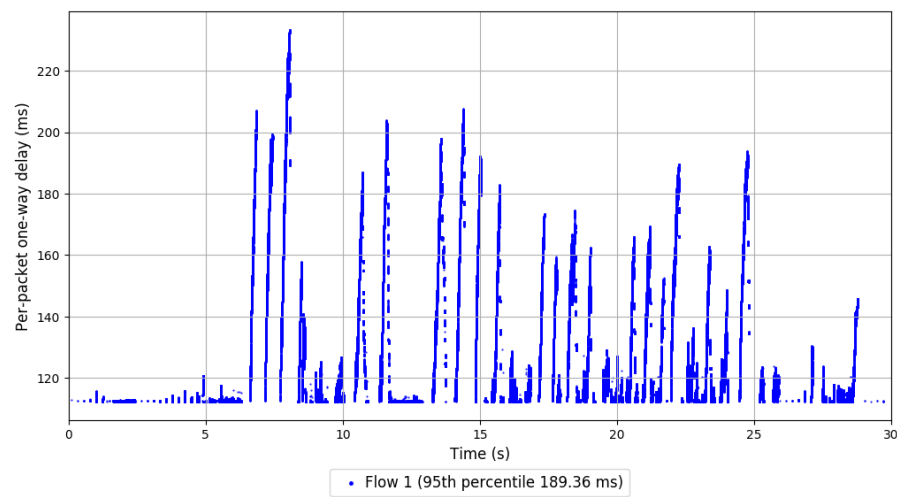
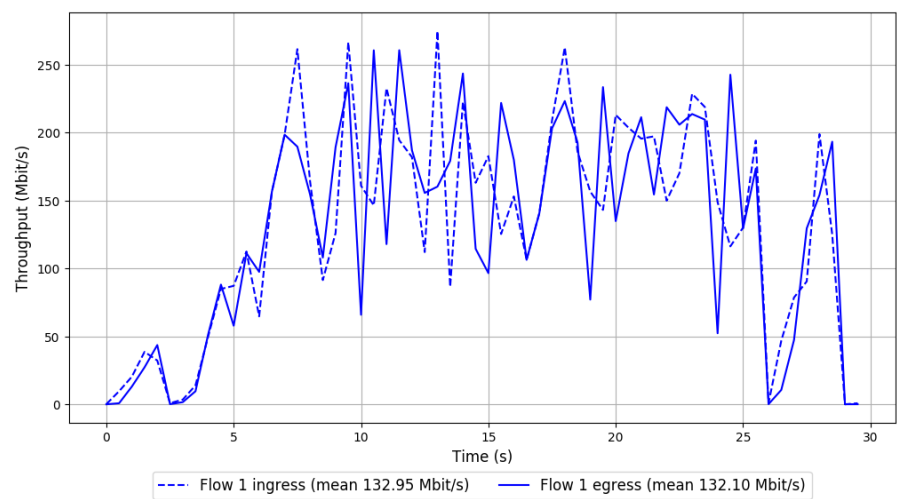
-- Flow 1:

Average throughput: 132.10 Mbit/s

95th percentile per-packet one-way delay: 189.358 ms

Loss rate: 1.39%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-11 06:49:59

End at: 2017-08-11 06:50:29

Below is generated by plot.py at 2017-08-11 10:09:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.28 Mbit/s

95th percentile per-packet one-way delay: 126.946 ms

Loss rate: 29.16%

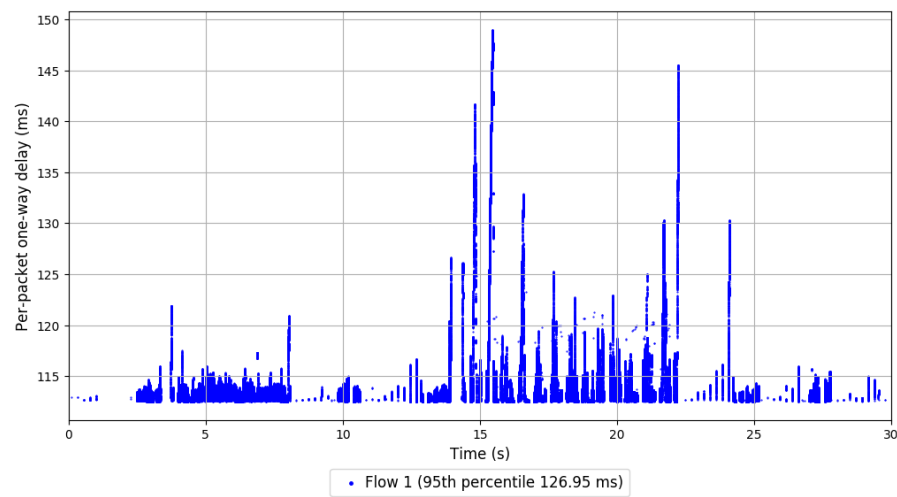
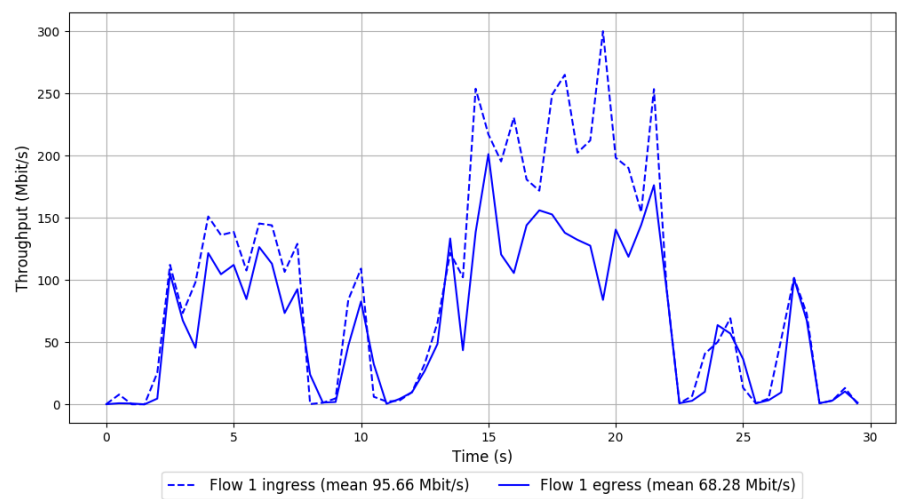
-- Flow 1:

Average throughput: 68.28 Mbit/s

95th percentile per-packet one-way delay: 126.946 ms

Loss rate: 29.16%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-11 07:00:44

End at: 2017-08-11 07:01:14

Below is generated by plot.py at 2017-08-11 10:09:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.58 Mbit/s

95th percentile per-packet one-way delay: 177.194 ms

Loss rate: 5.56%

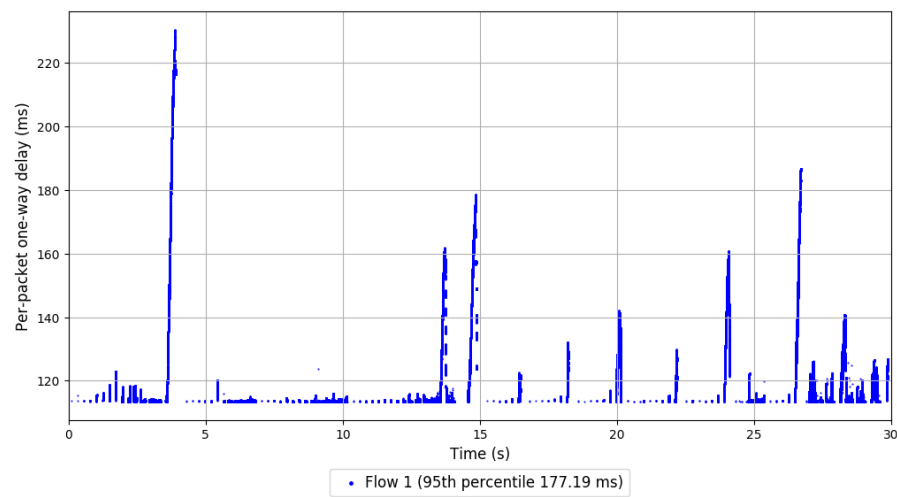
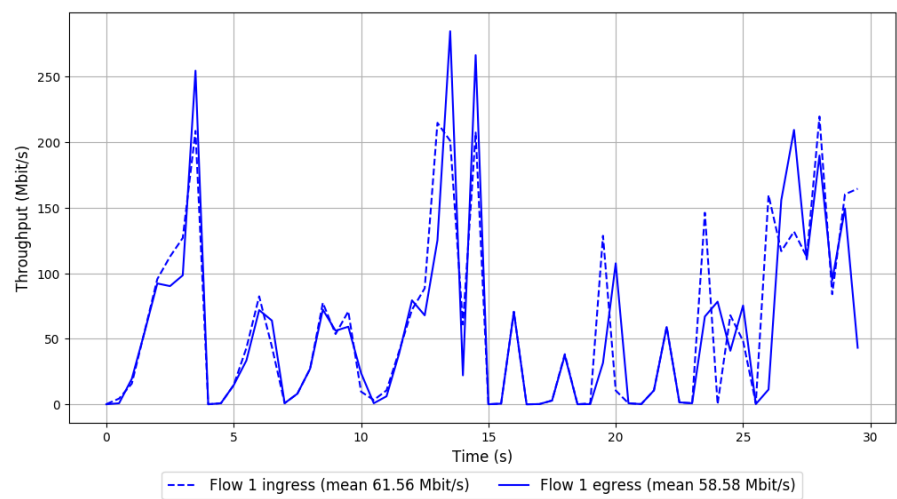
-- Flow 1:

Average throughput: 58.58 Mbit/s

95th percentile per-packet one-way delay: 177.194 ms

Loss rate: 5.56%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-11 07:11:43

End at: 2017-08-11 07:12:13

Below is generated by plot.py at 2017-08-11 10:09:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.83 Mbit/s

95th percentile per-packet one-way delay: 115.474 ms

Loss rate: 83.29%

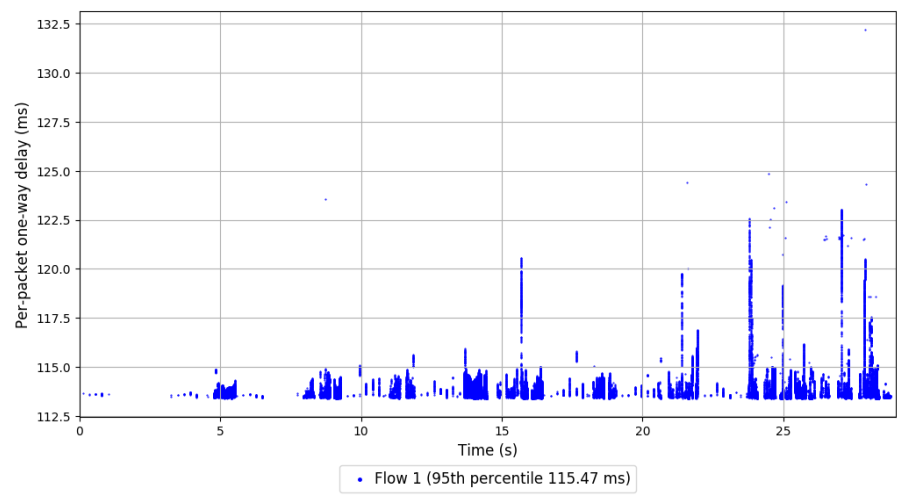
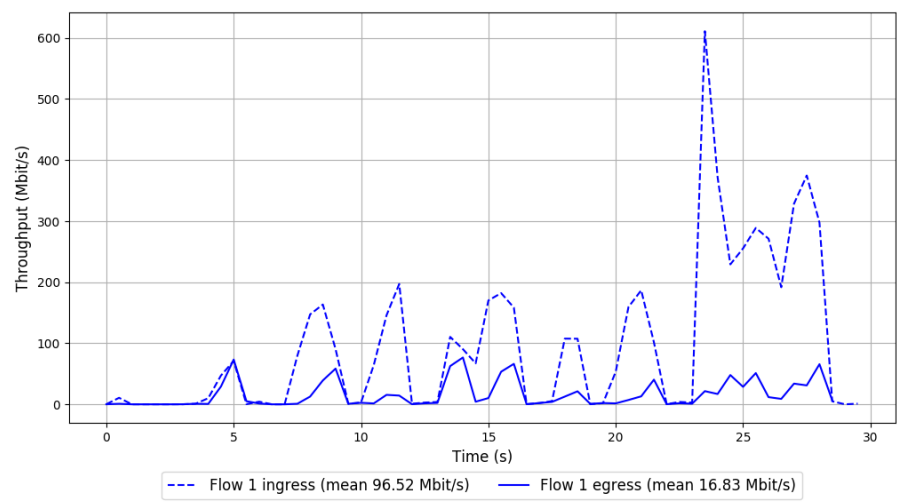
-- Flow 1:

Average throughput: 16.83 Mbit/s

95th percentile per-packet one-way delay: 115.474 ms

Loss rate: 83.29%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-11 07:22:38

End at: 2017-08-11 07:23:08

Below is generated by plot.py at 2017-08-11 10:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 127.25 Mbit/s

95th percentile per-packet one-way delay: 149.323 ms

Loss rate: 0.76%

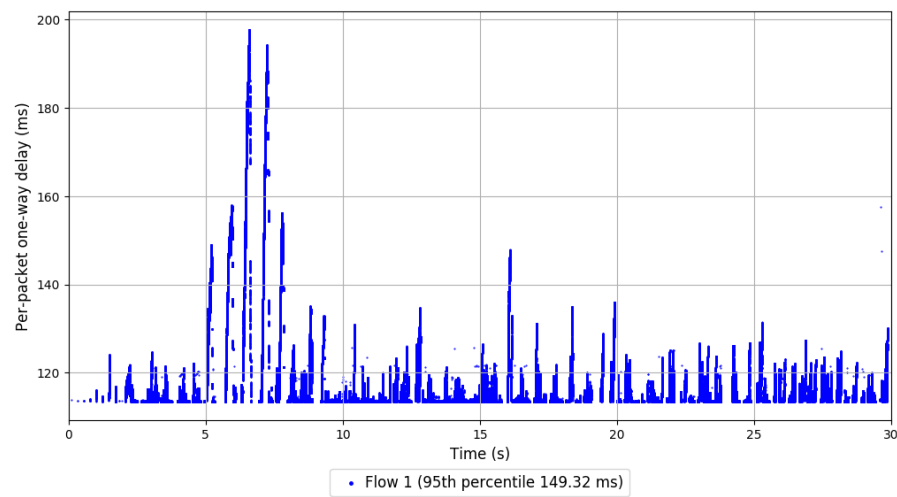
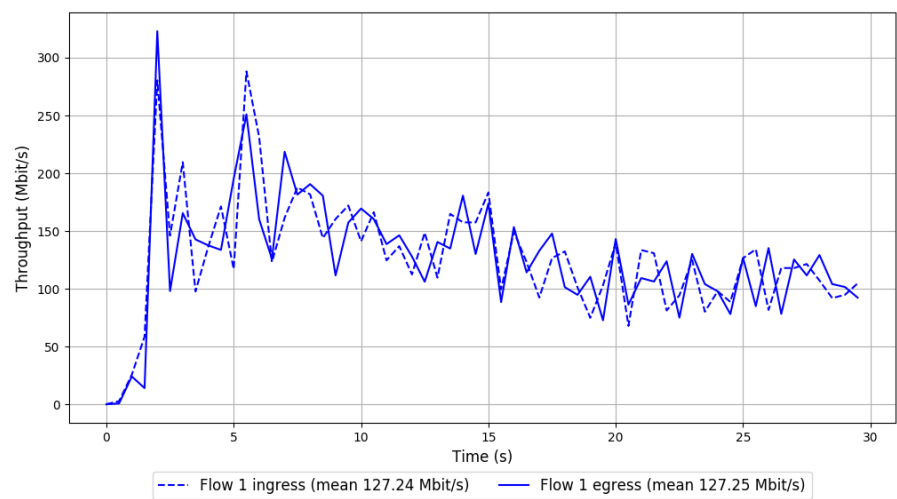
-- Flow 1:

Average throughput: 127.25 Mbit/s

95th percentile per-packet one-way delay: 149.323 ms

Loss rate: 0.76%

Run 10: Report of Verus — Data Link

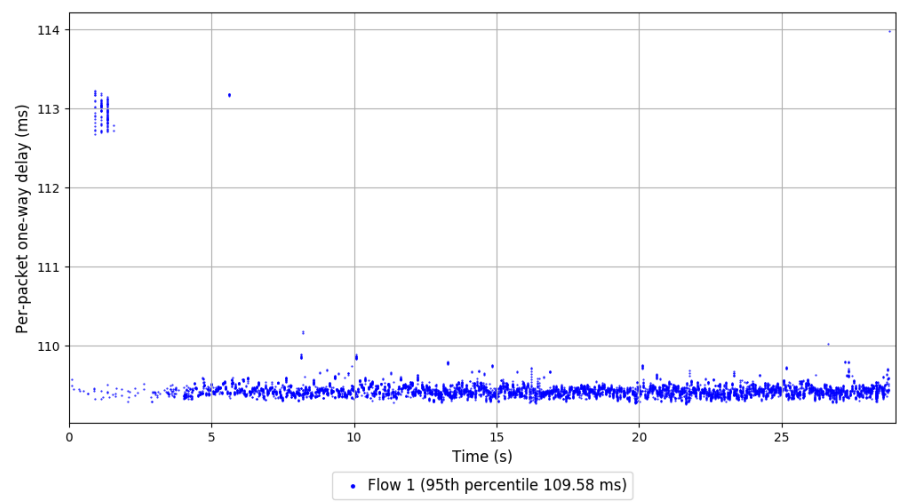
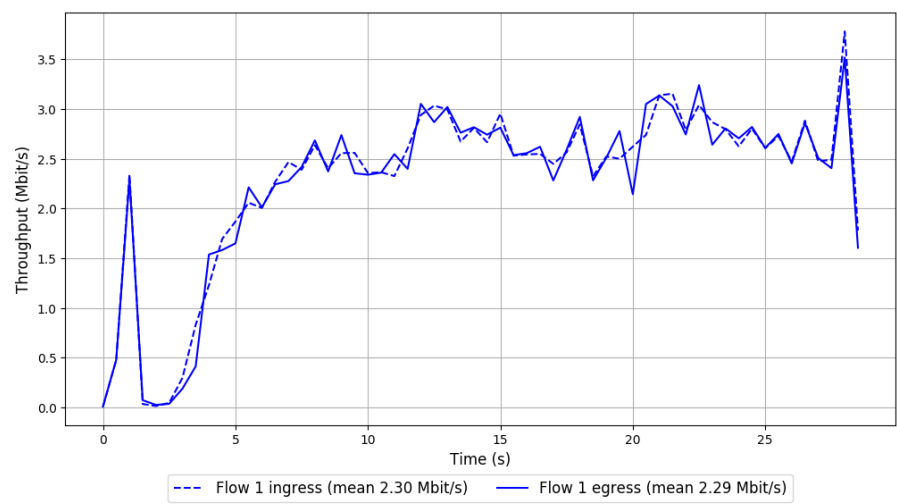


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-11 05:32:47
End at: 2017-08-11 05:33:17

# Below is generated by plot.py at 2017-08-11 10:09:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 109.576 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 109.576 ms
Loss rate: 0.84%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-11 05:44:12

End at: 2017-08-11 05:44:42

Below is generated by plot.py at 2017-08-11 10:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 112.318 ms

Loss rate: 1.10%

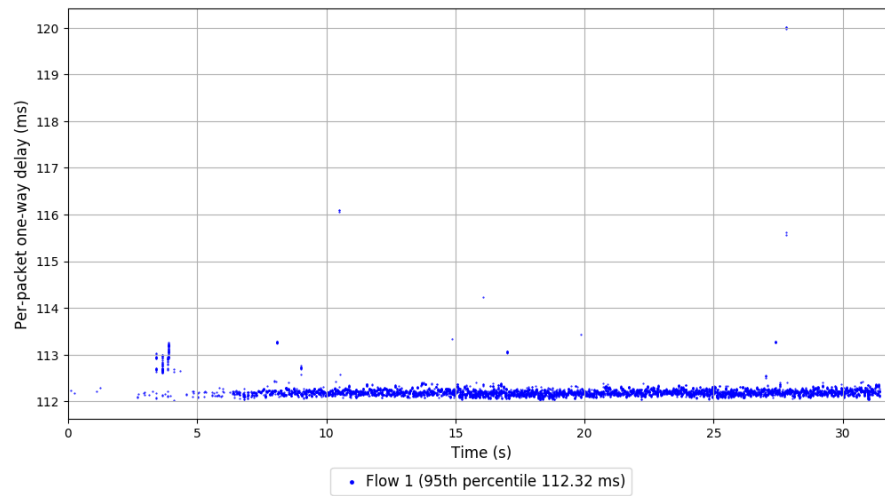
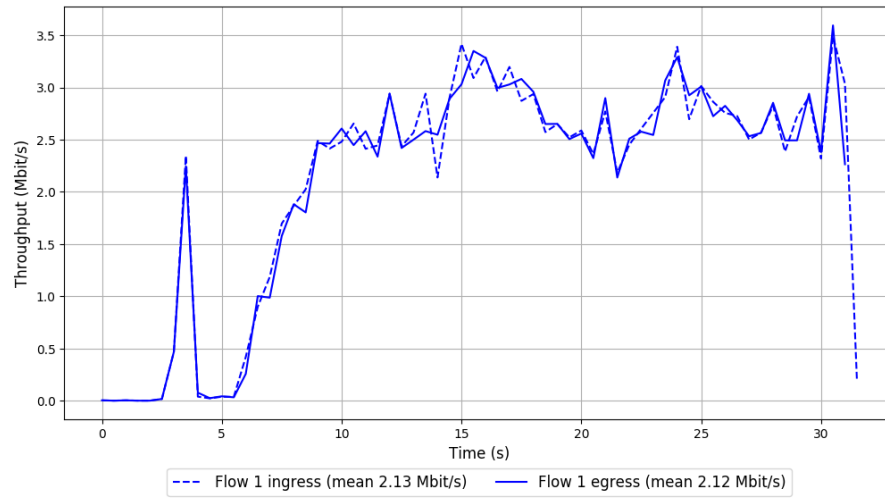
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 112.318 ms

Loss rate: 1.10%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-11 05:55:33

End at: 2017-08-11 05:56:03

Below is generated by plot.py at 2017-08-11 10:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 113.146 ms

Loss rate: 0.97%

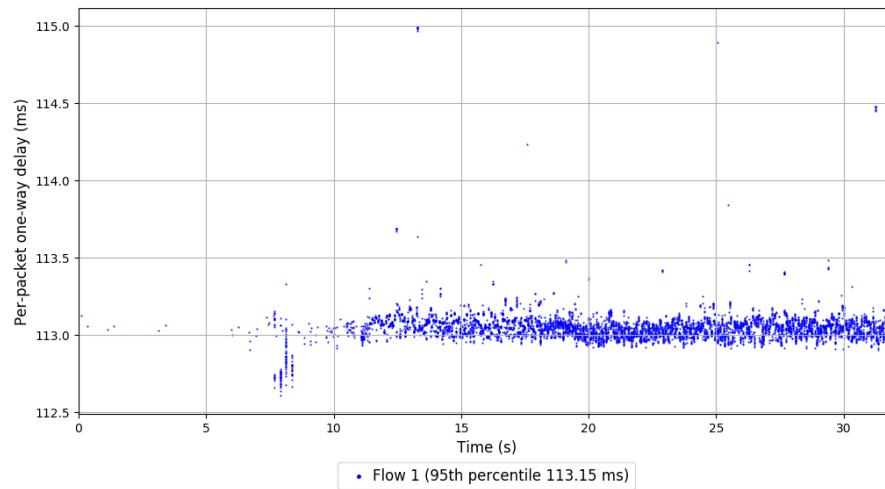
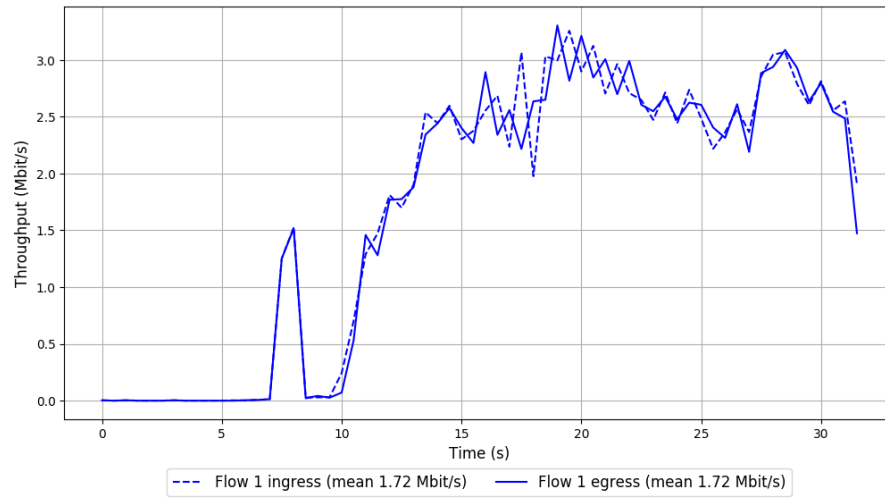
-- Flow 1:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 113.146 ms

Loss rate: 0.97%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-11 06:06:35

End at: 2017-08-11 06:07:05

Below is generated by plot.py at 2017-08-11 10:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.807 ms

Loss rate: 1.06%

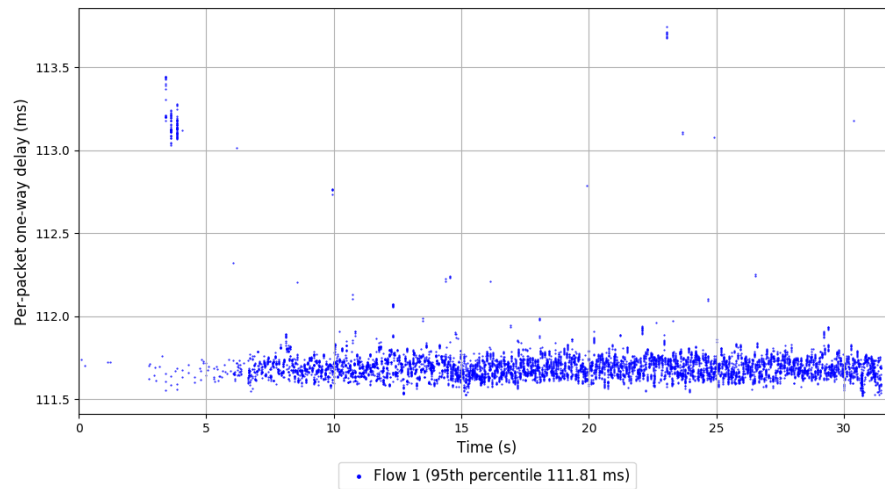
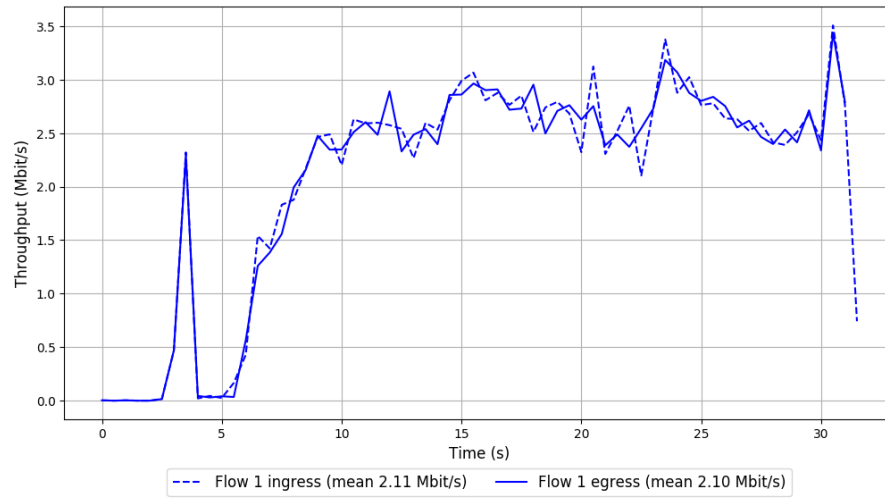
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 111.807 ms

Loss rate: 1.06%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-11 06:17:45

End at: 2017-08-11 06:18:15

Below is generated by plot.py at 2017-08-11 10:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.499 ms

Loss rate: 1.02%

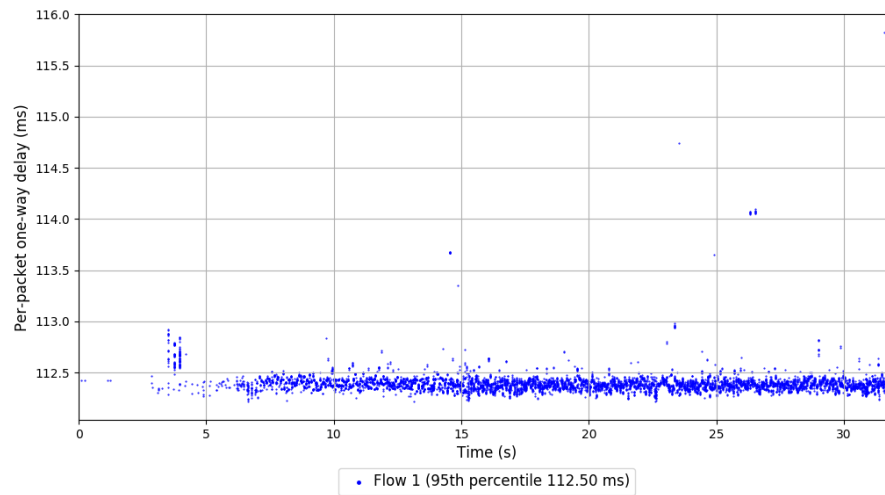
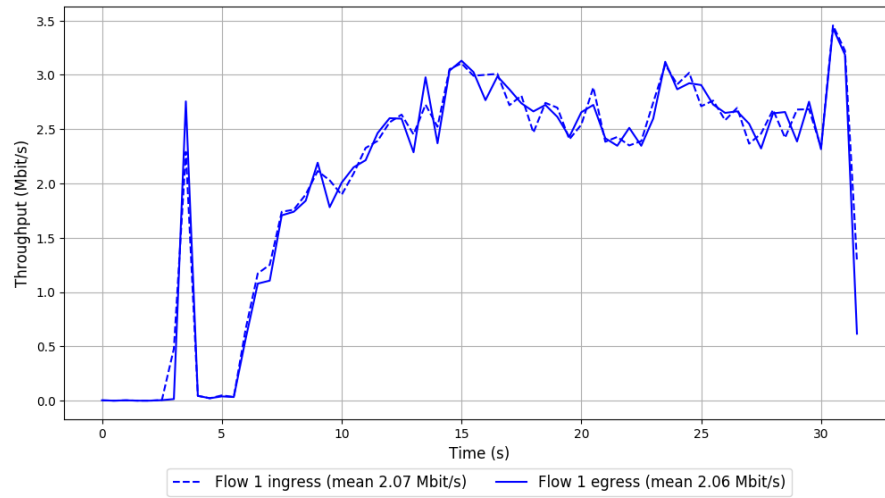
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.499 ms

Loss rate: 1.02%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-11 06:28:37

End at: 2017-08-11 06:29:07

Below is generated by plot.py at 2017-08-11 10:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 110.987 ms

Loss rate: 0.87%

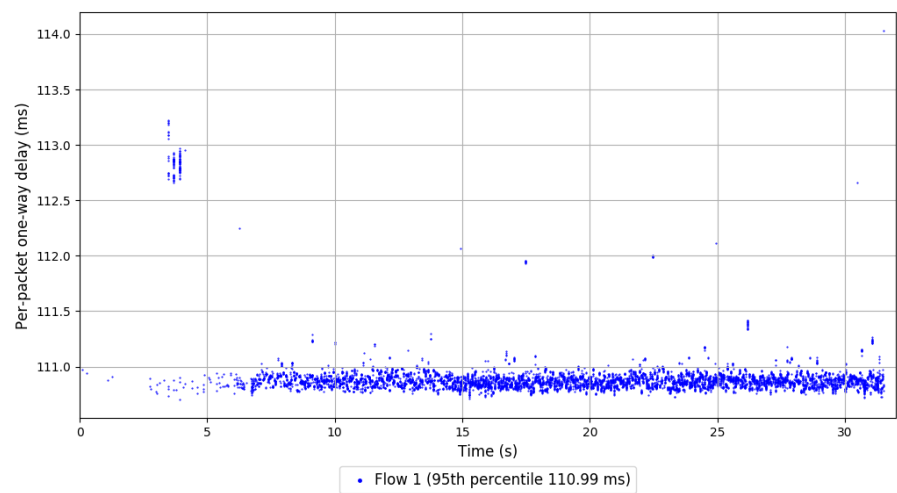
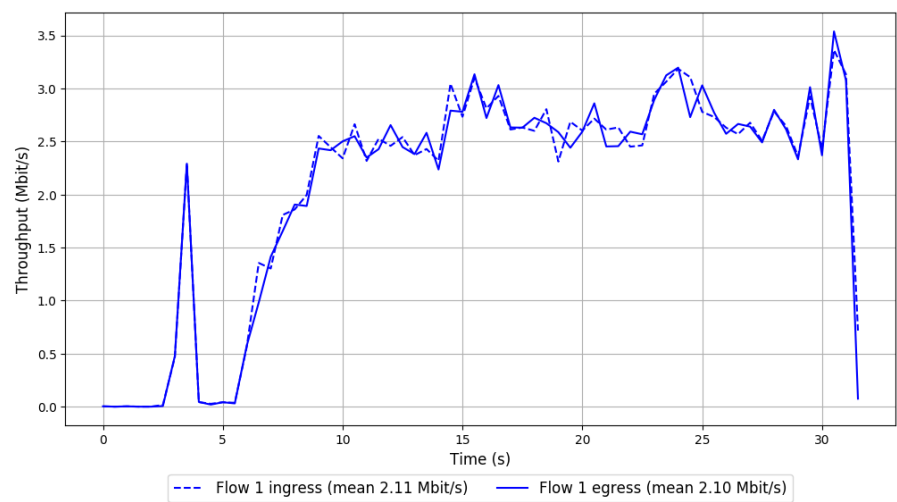
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 110.987 ms

Loss rate: 0.87%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-11 06:40:21

End at: 2017-08-11 06:40:51

Below is generated by plot.py at 2017-08-11 10:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.96 Mbit/s

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

Loss rate: 0.79%

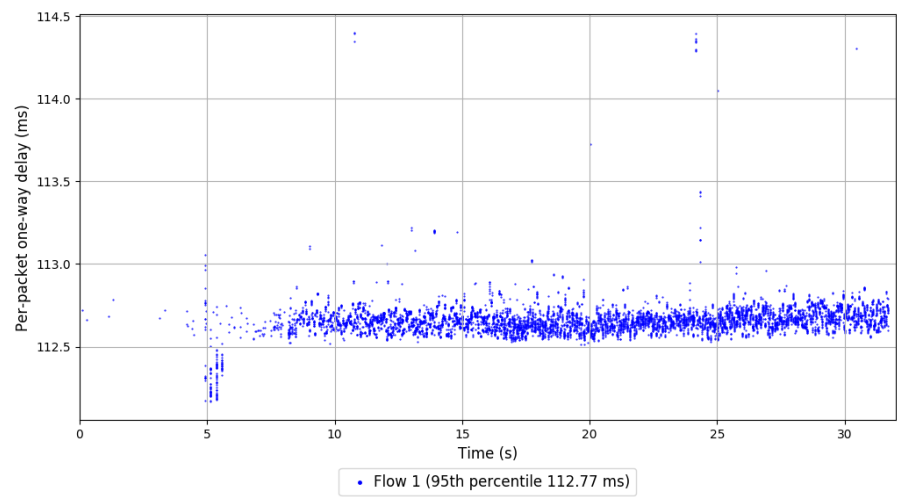
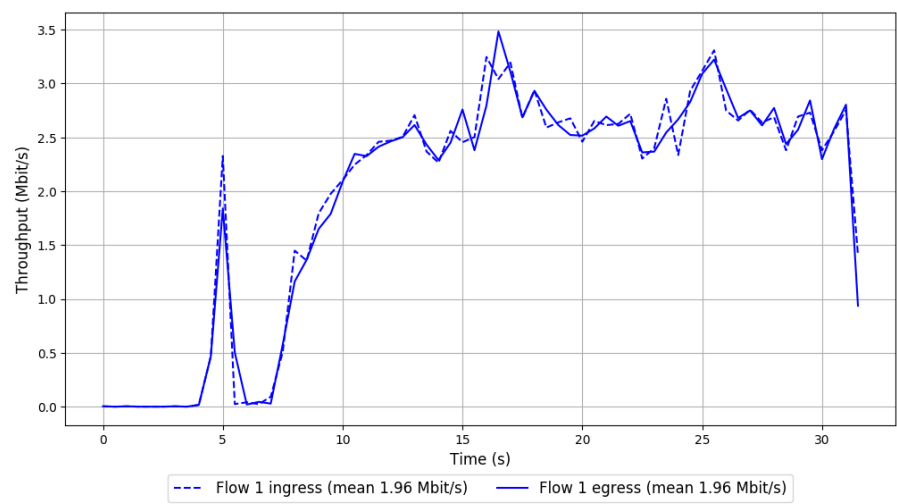
-- Flow 1:

Average throughput: 1.96 Mbit/s

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

Loss rate: 0.79%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-11 06:51:27

End at: 2017-08-11 06:51:57

Below is generated by plot.py at 2017-08-11 10:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 113.204 ms

Loss rate: 0.91%

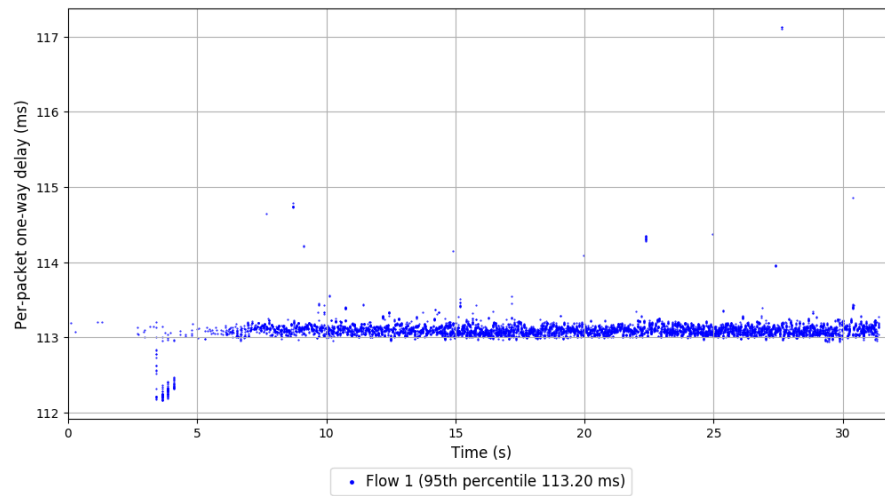
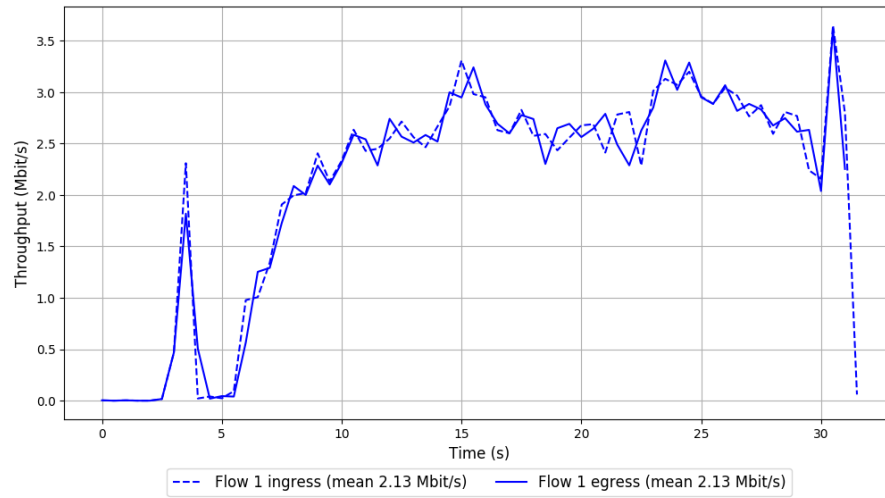
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 113.204 ms

Loss rate: 0.91%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-11 07:02:33

End at: 2017-08-11 07:03:03

Below is generated by plot.py at 2017-08-11 10:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

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

Loss rate: 1.00%

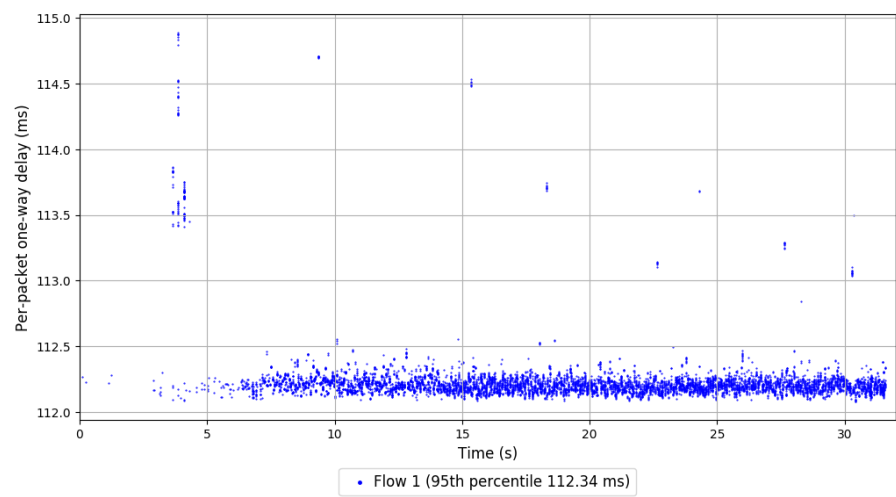
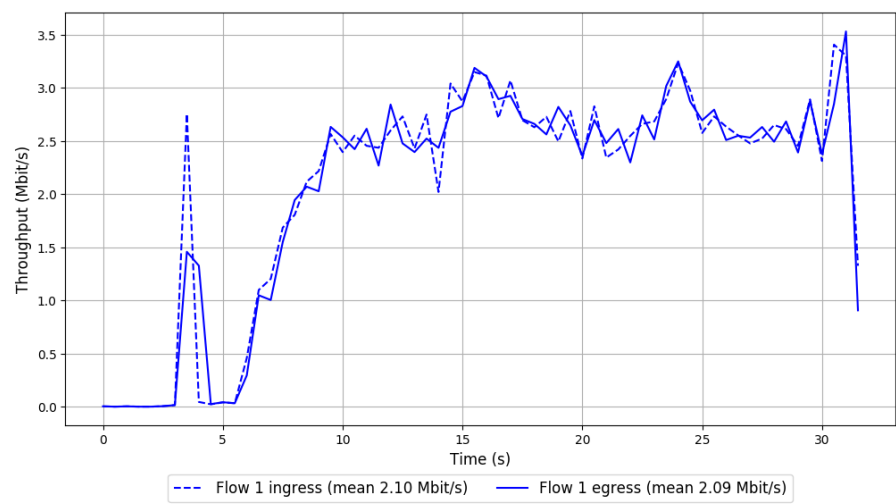
-- Flow 1:

Average throughput: 2.09 Mbit/s

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

Loss rate: 1.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-11 07:13:27

End at: 2017-08-11 07:13:57

Below is generated by plot.py at 2017-08-11 10:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 111.085 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 111.085 ms

Loss rate: 0.99%

Run 10: Report of WebRTC media — Data Link

