

Pantheon Report

Generated at 2017-08-11 10:29:07 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

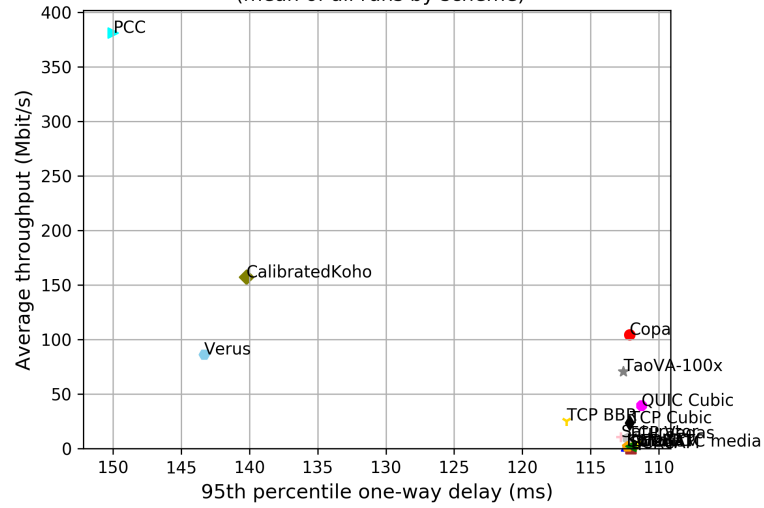
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

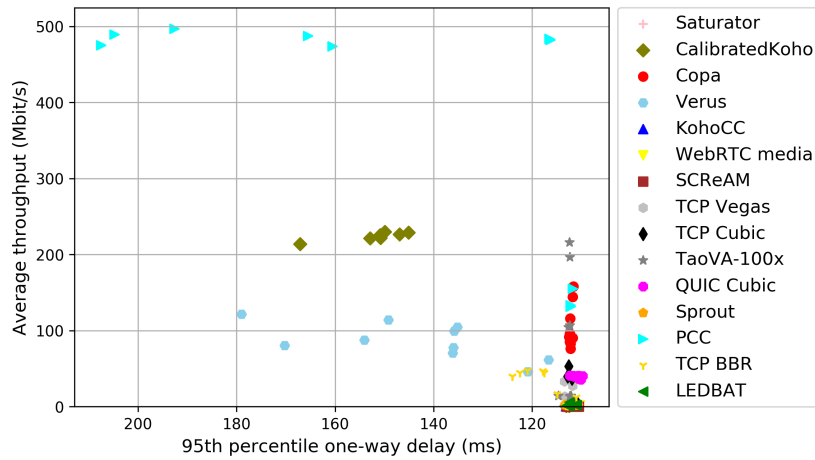
Git summary:

```
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-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 London Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	25.54	116.75	15.11
CalibratedKoho	10	157.10	140.24	21.12
Copa	9	104.50	112.14	0.04
TCP Cubic	6	23.62	112.13	1.35
KohoCC	10	2.77	112.38	45.87
LEDBAT	10	2.16	112.05	1.48
PCC	10	380.93	149.99	2.91
QUIC Cubic	9	39.48	111.27	0.00
Saturator	8	10.58	112.76	0.00
SCReAM	10	0.21	112.05	0.01
Sprout	10	1.92	112.31	2.25
TaoVA-100x	10	70.83	112.59	0.36
TCP Vegas	10	9.63	112.28	1.38
Verus	10	86.35	143.33	12.71
WebRTC media	10	2.11	111.70	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-08-11 07:24:33

End at: 2017-08-11 07:25:03

Below is generated by plot.py at 2017-08-11 10:10:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.57 Mbit/s

95th percentile per-packet one-way delay: 124.067 ms

Loss rate: 2.80%

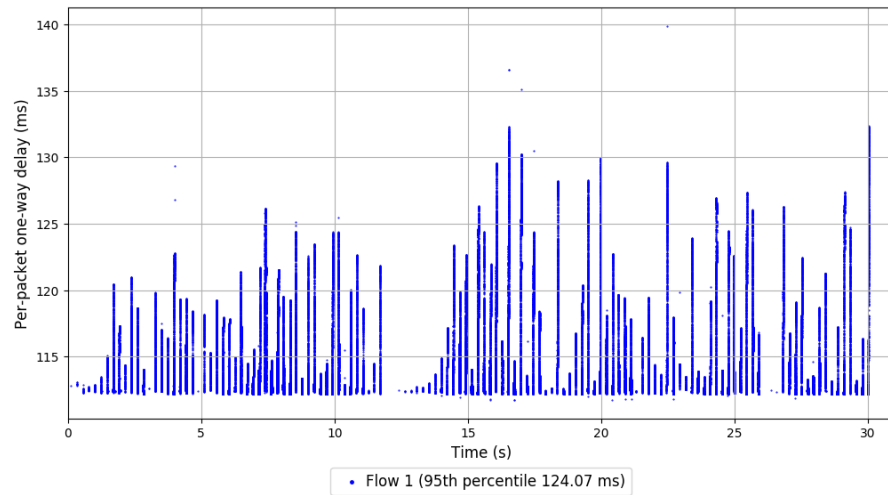
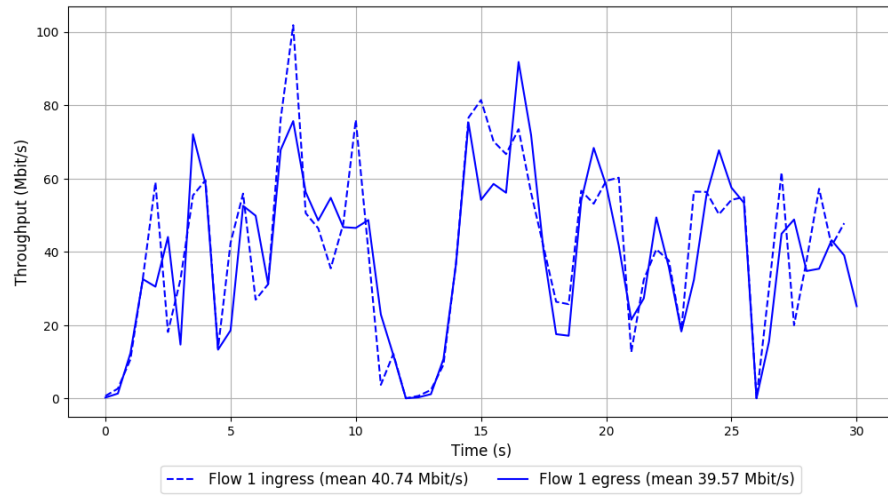
-- Flow 1:

Average throughput: 39.57 Mbit/s

95th percentile per-packet one-way delay: 124.067 ms

Loss rate: 2.80%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-11 07:35:52

End at: 2017-08-11 07:36:23

Below is generated by plot.py at 2017-08-11 10:10:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.19 Mbit/s

95th percentile per-packet one-way delay: 111.106 ms

Loss rate: 27.17%

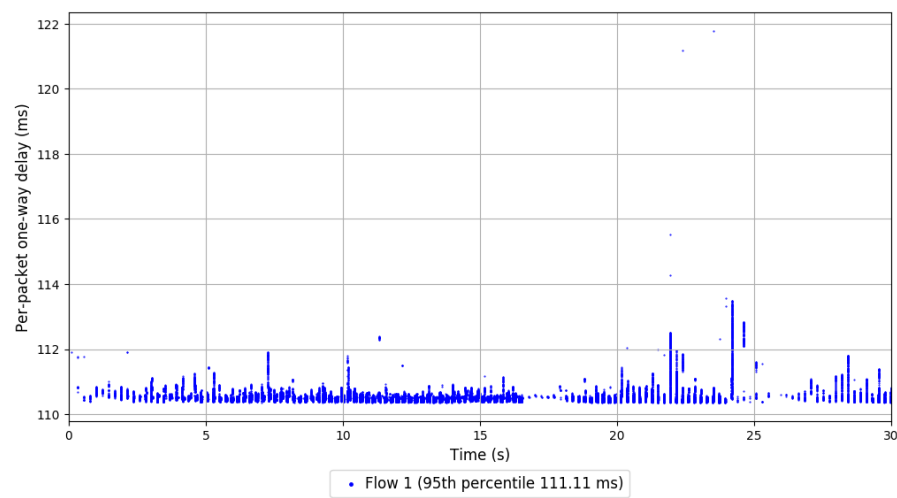
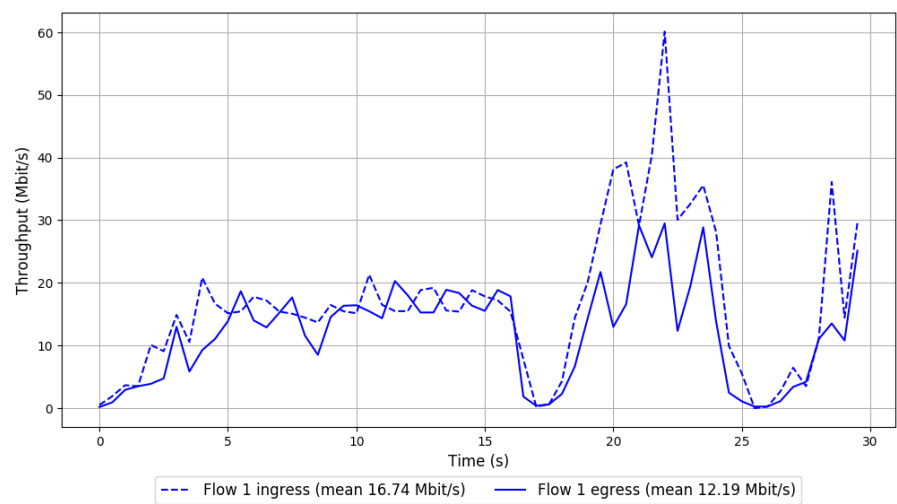
-- Flow 1:

Average throughput: 12.19 Mbit/s

95th percentile per-packet one-way delay: 111.106 ms

Loss rate: 27.17%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-11 07:47:28

End at: 2017-08-11 07:47:58

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.49 Mbit/s

95th percentile per-packet one-way delay: 120.953 ms

Loss rate: 2.97%

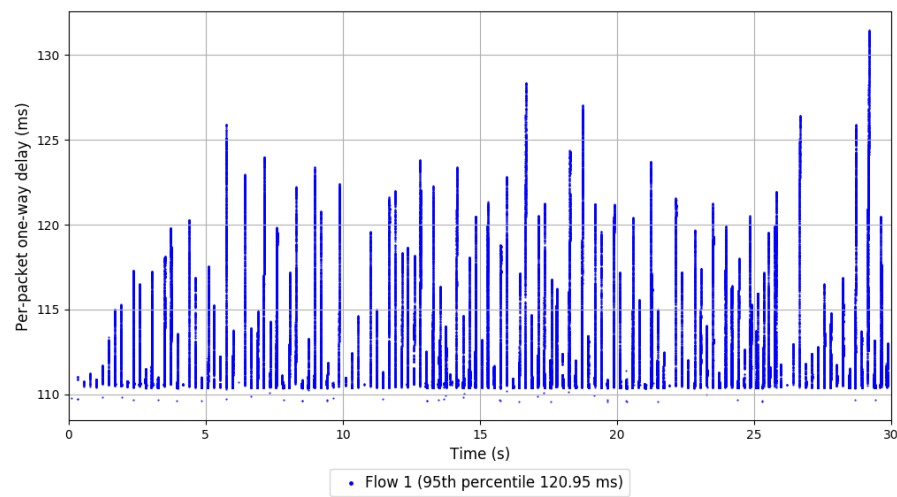
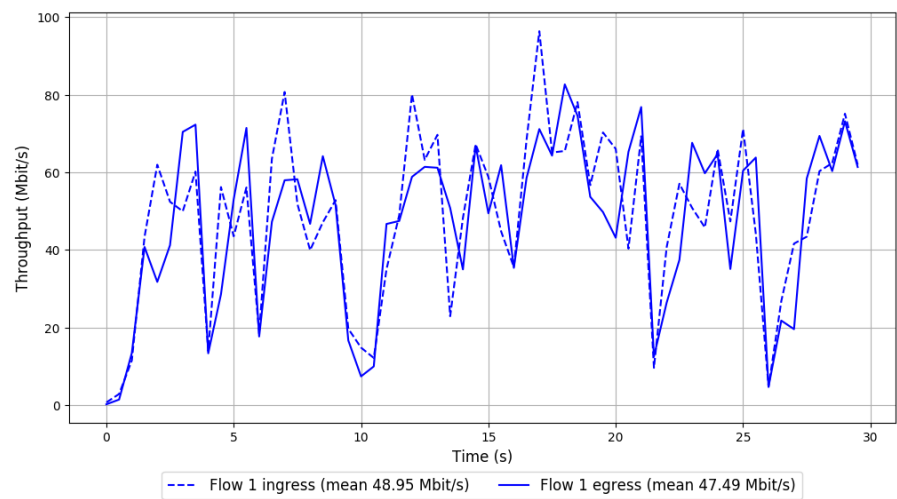
-- Flow 1:

Average throughput: 47.49 Mbit/s

95th percentile per-packet one-way delay: 120.953 ms

Loss rate: 2.97%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-11 07:59:04

End at: 2017-08-11 07:59:34

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.37 Mbit/s

95th percentile per-packet one-way delay: 117.530 ms

Loss rate: 3.16%

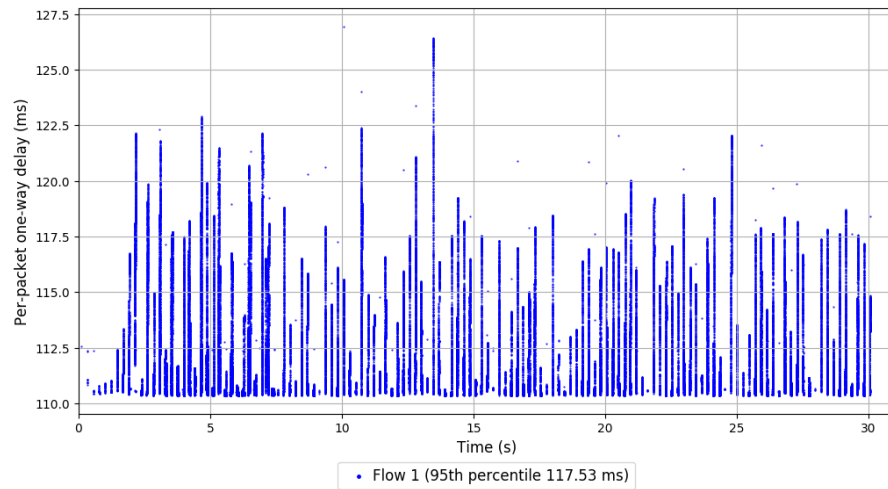
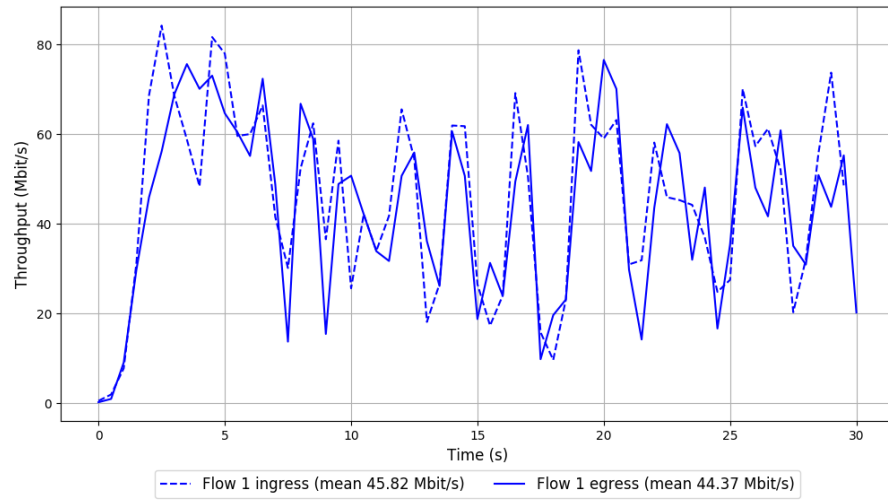
-- Flow 1:

Average throughput: 44.37 Mbit/s

95th percentile per-packet one-way delay: 117.530 ms

Loss rate: 3.16%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

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

End at: 2017-08-11 08:10:35

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 113.181 ms

Loss rate: 13.24%

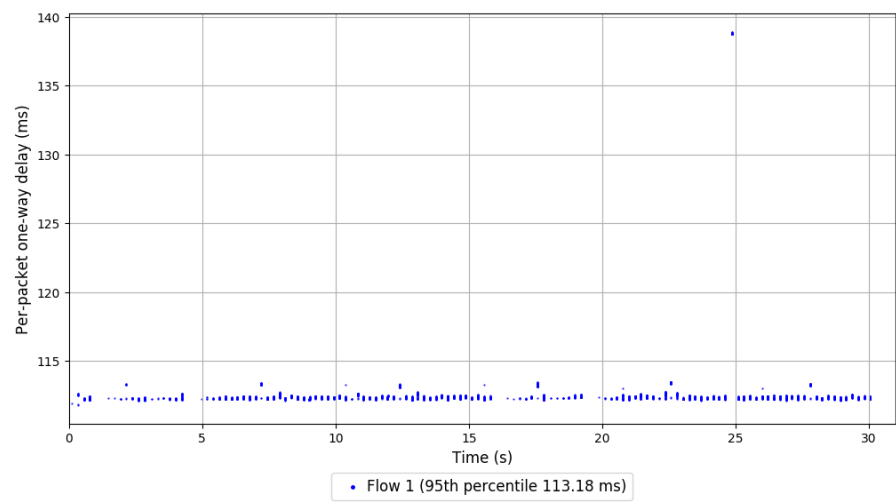
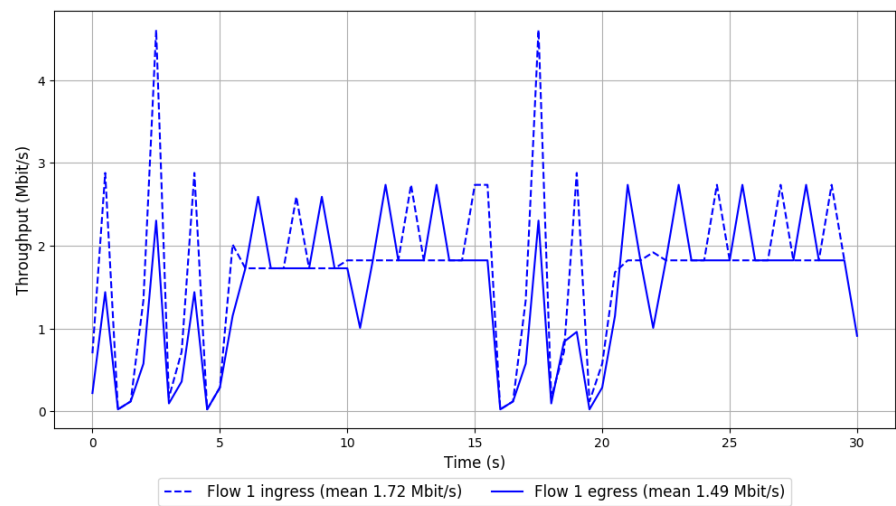
-- Flow 1:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 113.181 ms

Loss rate: 13.24%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

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

End at: 2017-08-11 08:21:38

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.55 Mbit/s

95th percentile per-packet one-way delay: 122.541 ms

Loss rate: 3.07%

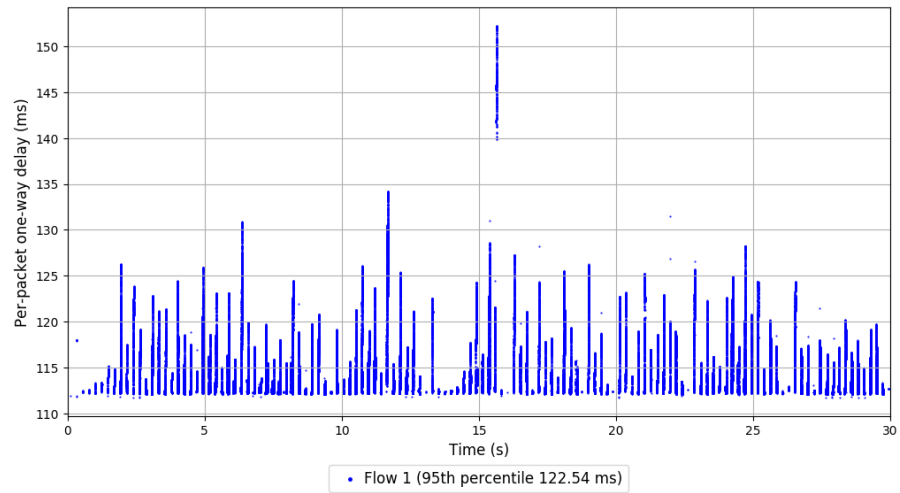
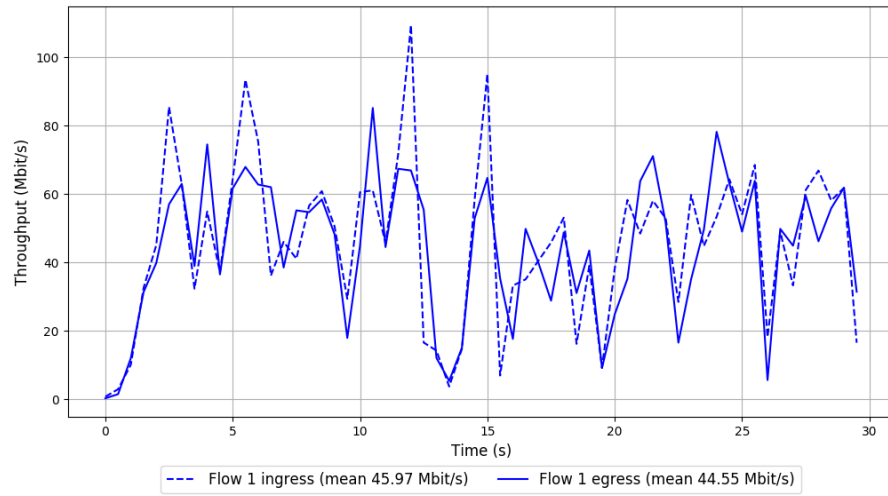
-- Flow 1:

Average throughput: 44.55 Mbit/s

95th percentile per-packet one-way delay: 122.541 ms

Loss rate: 3.07%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-11 08:32:09

End at: 2017-08-11 08:32:39

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 112.529 ms

Loss rate: 13.01%

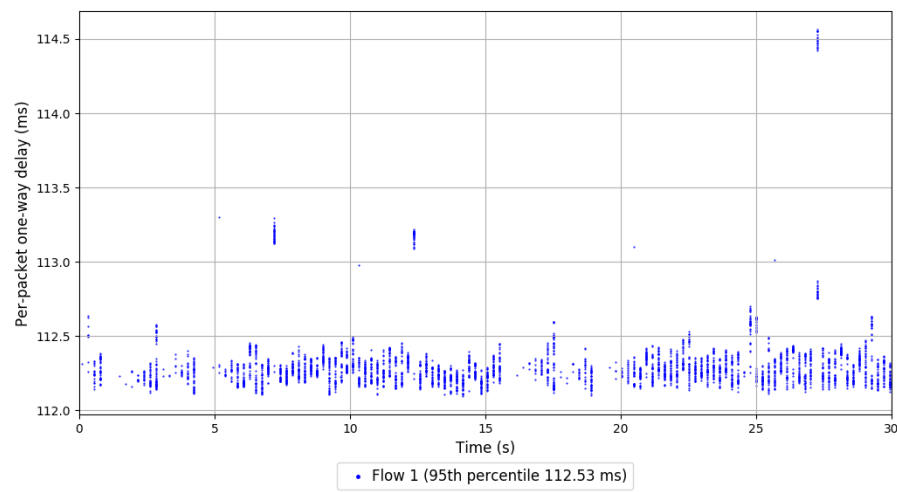
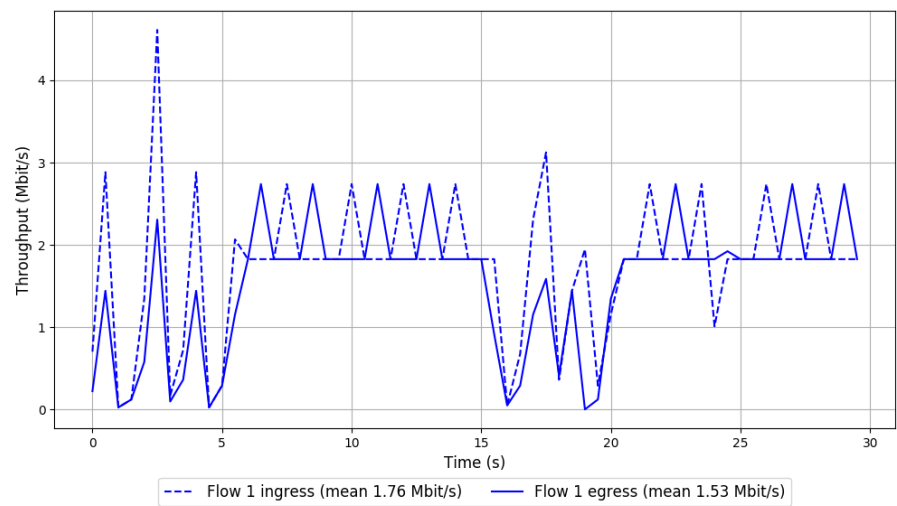
-- Flow 1:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 112.529 ms

Loss rate: 13.01%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

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

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 112.855 ms

Loss rate: 49.12%

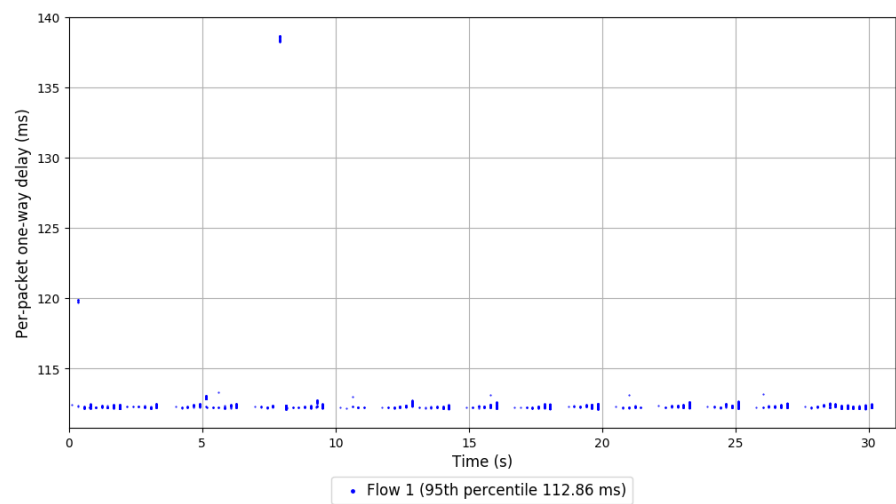
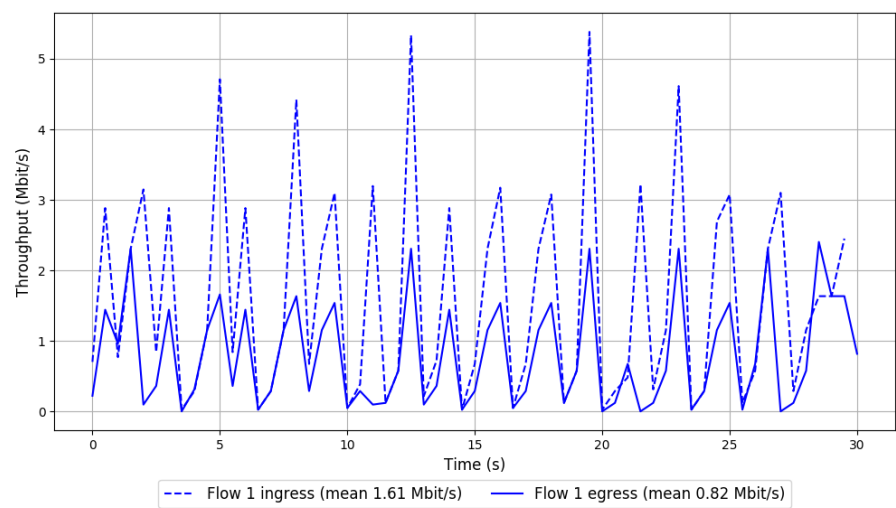
-- Flow 1:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 112.855 ms

Loss rate: 49.12%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-11 08:54:26

End at: 2017-08-11 08:54:56

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.57 Mbit/s

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

Loss rate: 33.34%

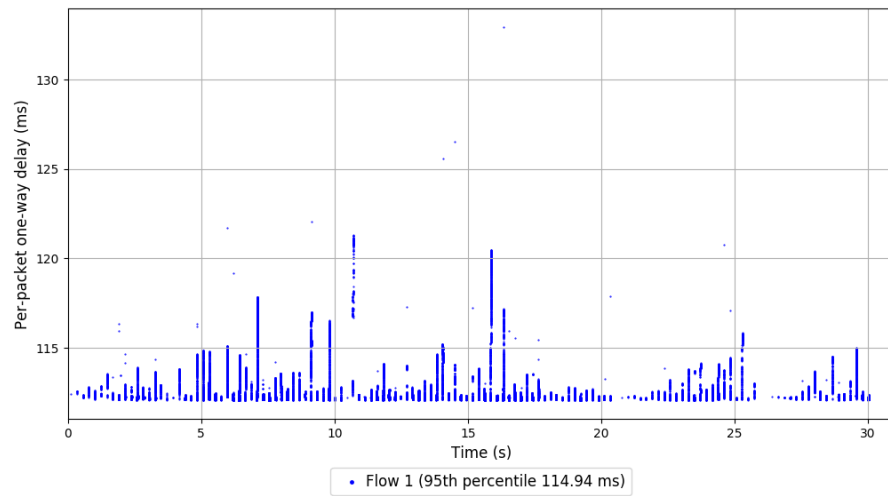
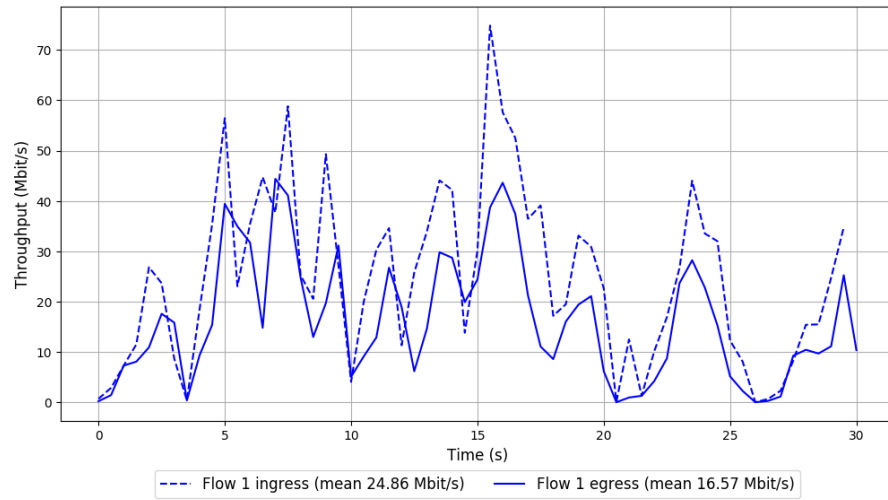
-- Flow 1:

Average throughput: 16.57 Mbit/s

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

Loss rate: 33.34%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-11 09:06:05

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.78 Mbit/s

95th percentile per-packet one-way delay: 117.825 ms

Loss rate: 3.24%

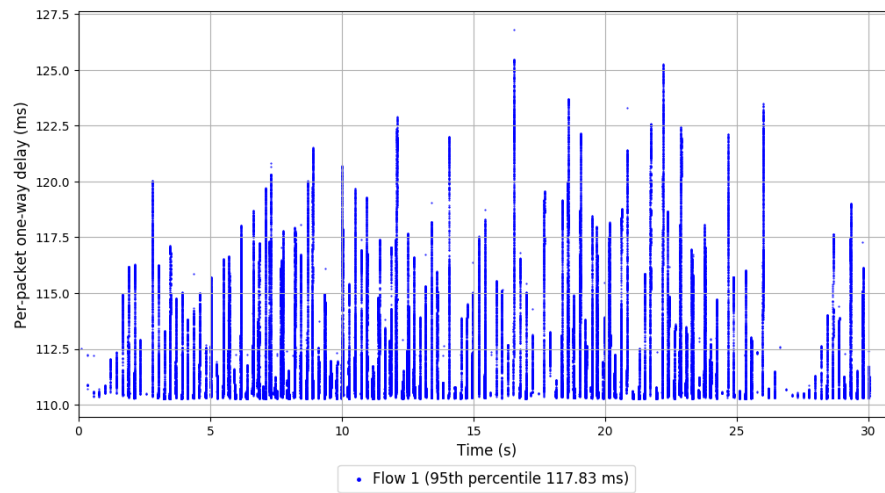
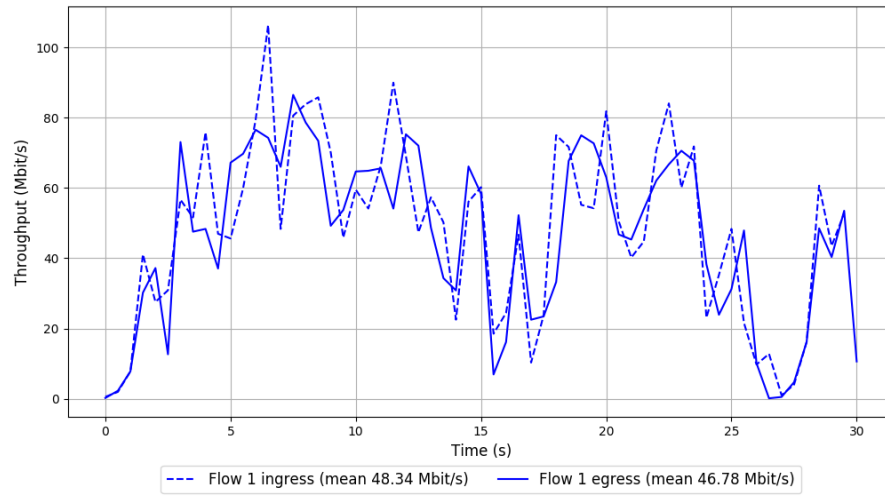
-- Flow 1:

Average throughput: 46.78 Mbit/s

95th percentile per-packet one-way delay: 117.825 ms

Loss rate: 3.24%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-11 07:28:20

End at: 2017-08-11 07:28:50

Below is generated by plot.py at 2017-08-11 10:11:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.74 Mbit/s

95th percentile per-packet one-way delay: 146.910 ms

Loss rate: 0.07%

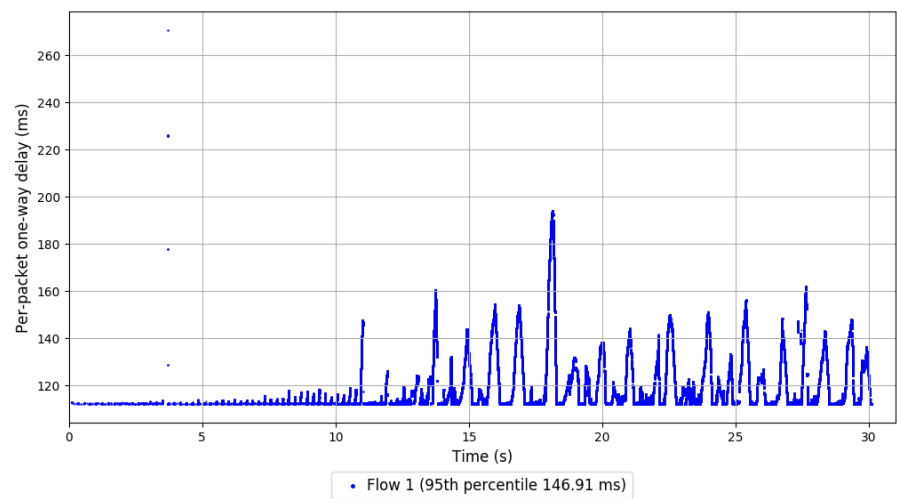
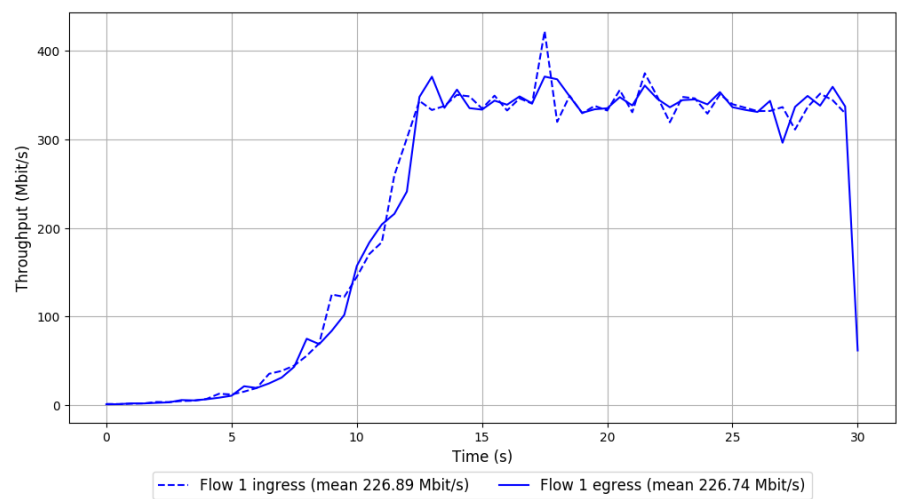
-- Flow 1:

Average throughput: 226.74 Mbit/s

95th percentile per-packet one-way delay: 146.910 ms

Loss rate: 0.07%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-11 07:39:34

End at: 2017-08-11 07:40:04

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 225.41 Mbit/s

95th percentile per-packet one-way delay: 150.870 ms

Loss rate: 0.21%

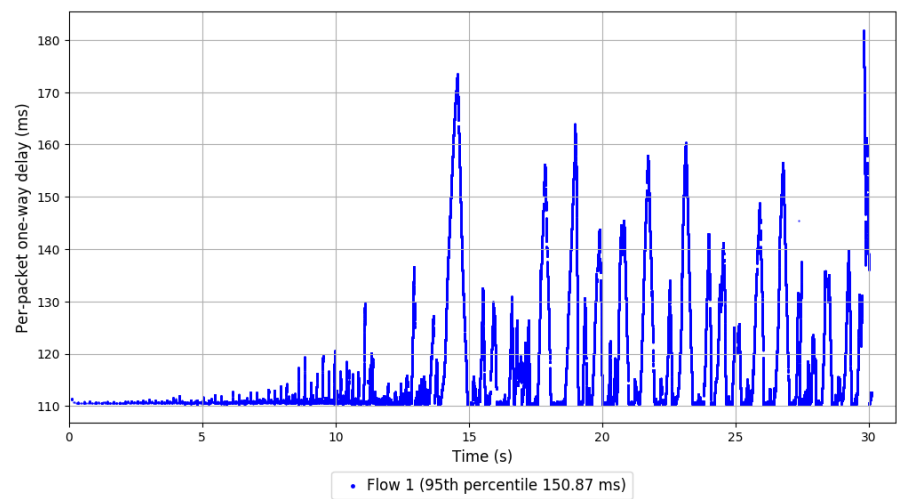
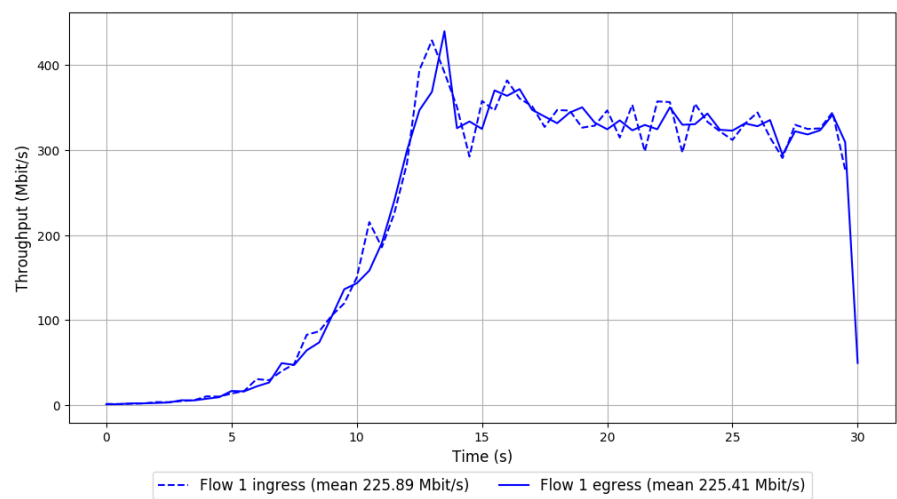
-- Flow 1:

Average throughput: 225.41 Mbit/s

95th percentile per-packet one-way delay: 150.870 ms

Loss rate: 0.21%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-11 07:51:22

End at: 2017-08-11 07:51:52

Below is generated by plot.py at 2017-08-11 10:12:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.61 Mbit/s

95th percentile per-packet one-way delay: 150.776 ms

Loss rate: 0.10%

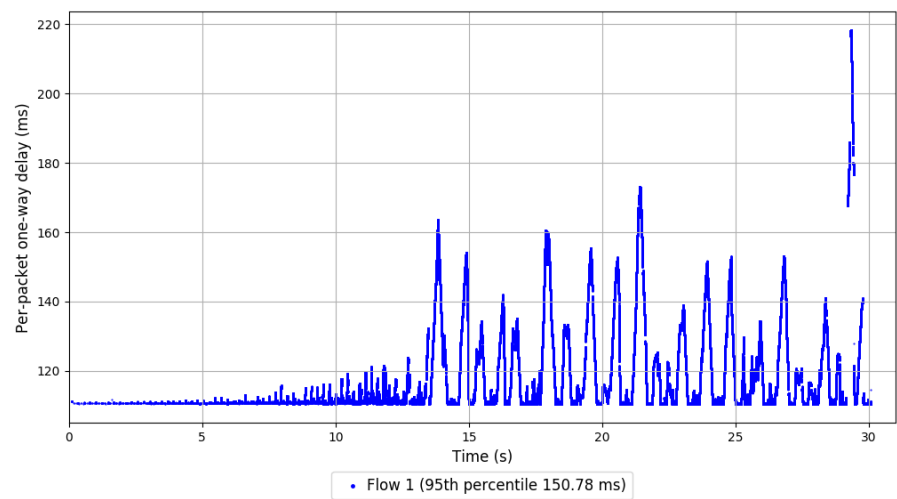
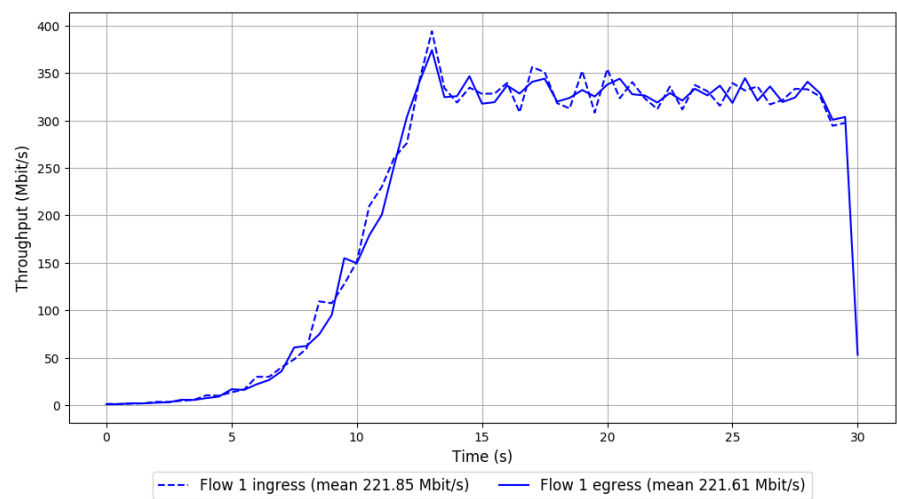
-- Flow 1:

Average throughput: 221.61 Mbit/s

95th percentile per-packet one-way delay: 150.776 ms

Loss rate: 0.10%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-11 08:02:47

End at: 2017-08-11 08:03:17

Below is generated by plot.py at 2017-08-11 10:12:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 228.84 Mbit/s

95th percentile per-packet one-way delay: 145.108 ms

Loss rate: 0.24%

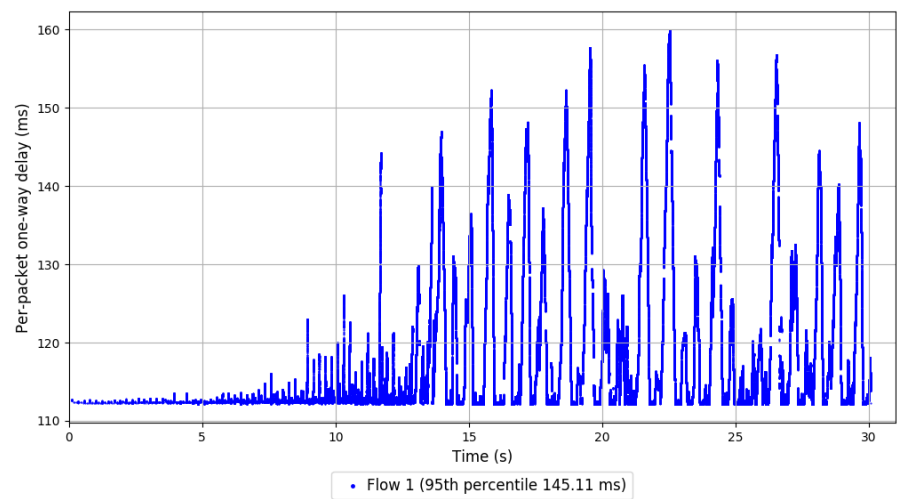
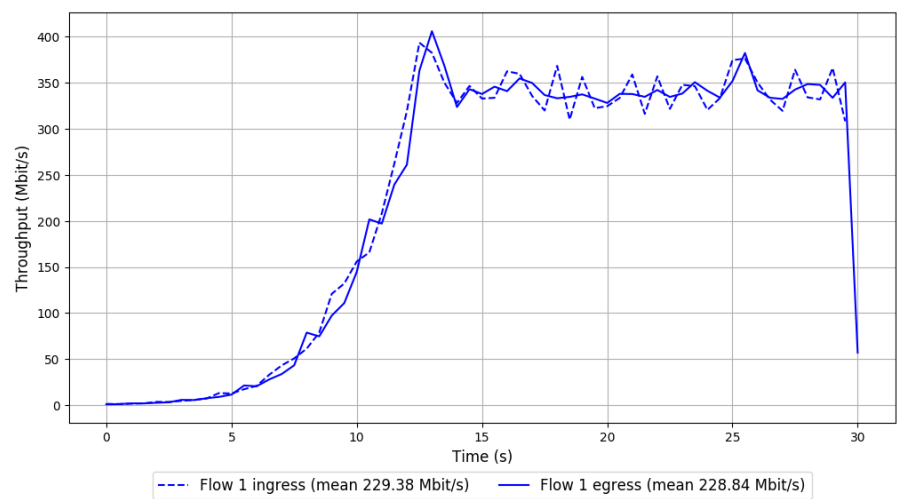
-- Flow 1:

Average throughput: 228.84 Mbit/s

95th percentile per-packet one-way delay: 145.108 ms

Loss rate: 0.24%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-11 08:13:47

End at: 2017-08-11 08:14:17

Below is generated by plot.py at 2017-08-11 10:13:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.56 Mbit/s

95th percentile per-packet one-way delay: 152.901 ms

Loss rate: 0.11%

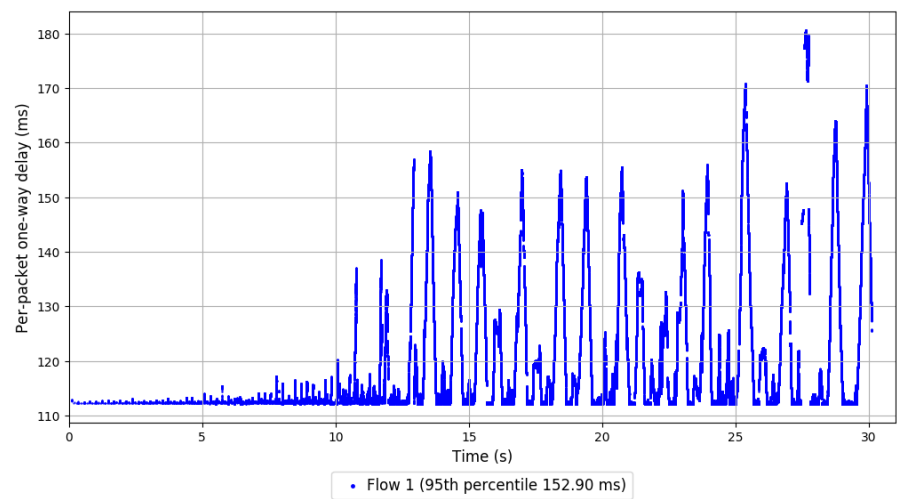
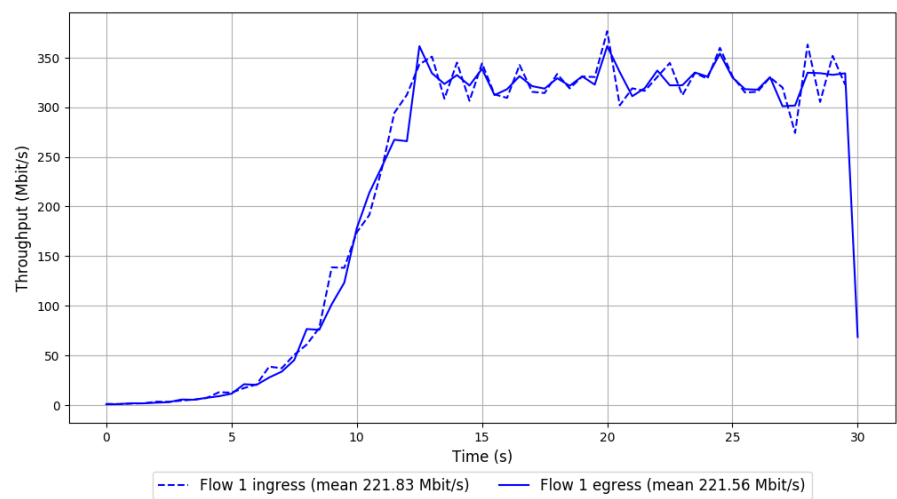
-- Flow 1:

Average throughput: 221.56 Mbit/s

95th percentile per-packet one-way delay: 152.901 ms

Loss rate: 0.11%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-11 08:24:53

End at: 2017-08-11 08:25:23

Below is generated by plot.py at 2017-08-11 10:13:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 113.144 ms

Loss rate: 68.12%

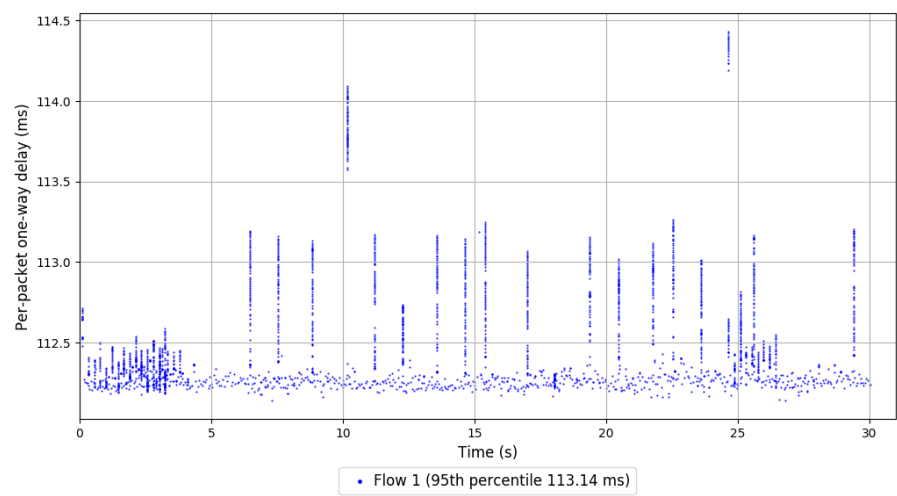
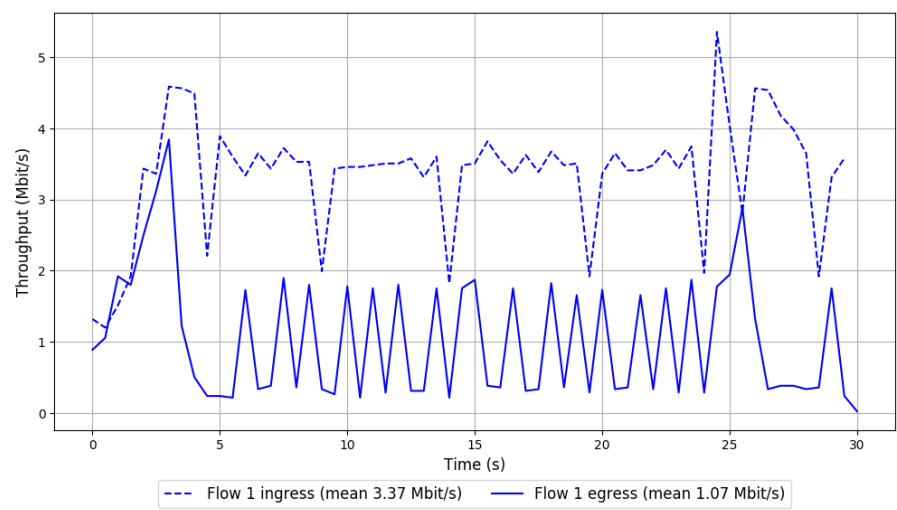
-- Flow 1:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 113.144 ms

Loss rate: 68.12%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-11 08:35:52

End at: 2017-08-11 08:36:22

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 229.69 Mbit/s

95th percentile per-packet one-way delay: 149.908 ms

Loss rate: 0.15%

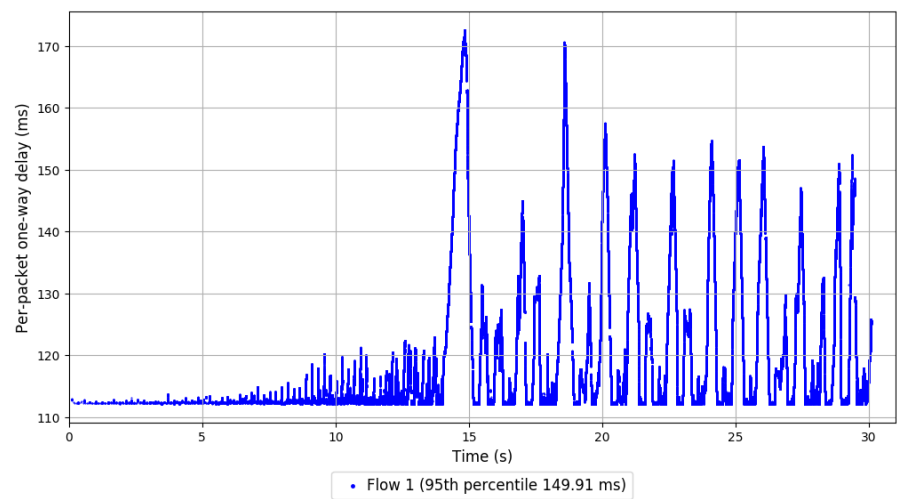
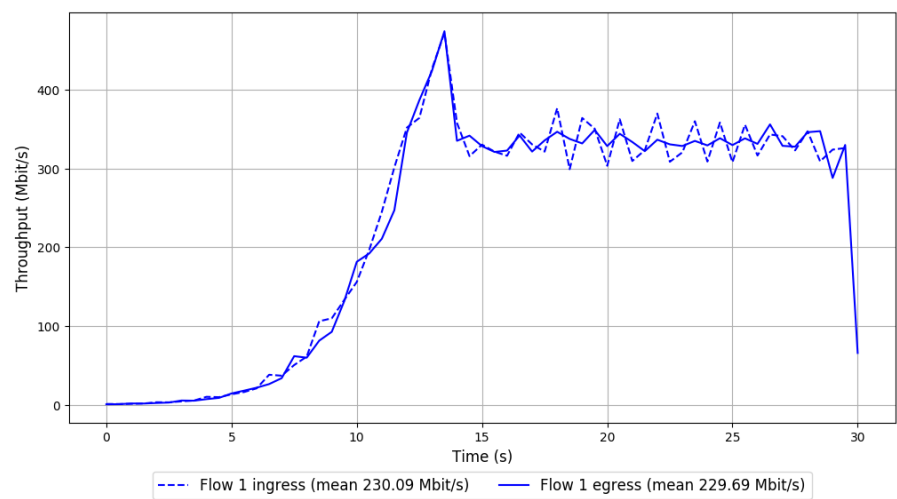
-- Flow 1:

Average throughput: 229.69 Mbit/s

95th percentile per-packet one-way delay: 149.908 ms

Loss rate: 0.15%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-11 08:47:10

End at: 2017-08-11 08:47:40

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.15 Mbit/s

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

Loss rate: 67.97%

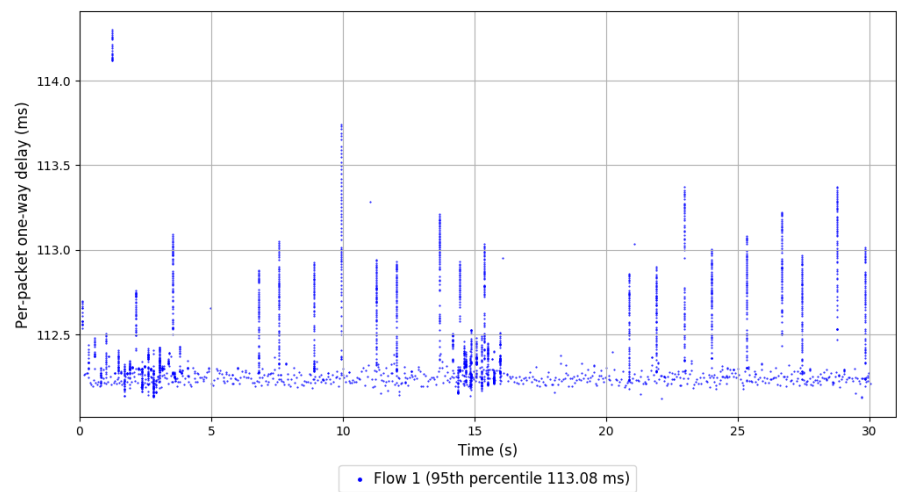
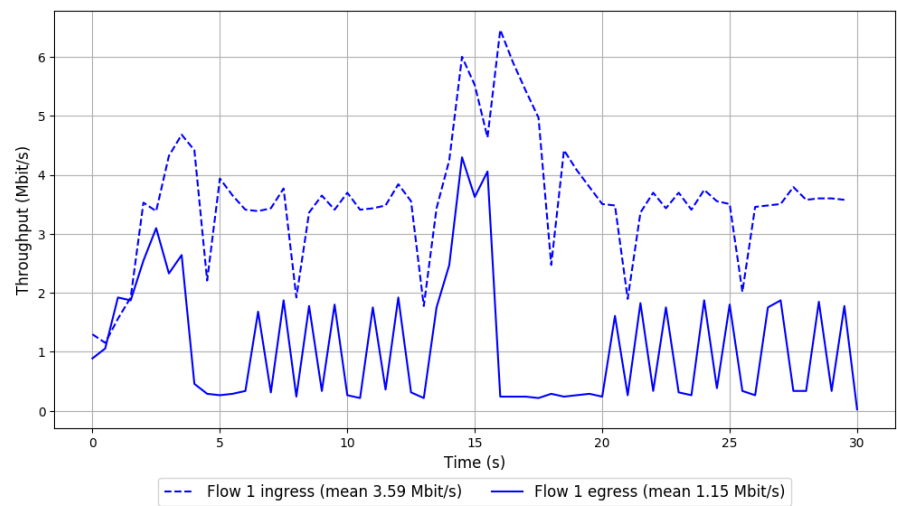
-- Flow 1:

Average throughput: 1.15 Mbit/s

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

Loss rate: 67.97%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

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

End at: 2017-08-11 08:58:38

Below is generated by plot.py at 2017-08-11 10:13:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.84 Mbit/s

95th percentile per-packet one-way delay: 167.134 ms

Loss rate: 5.86%

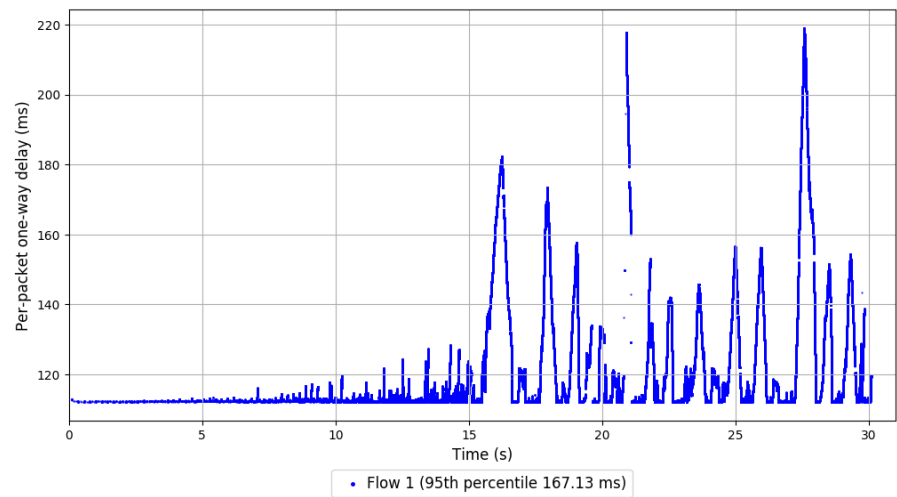
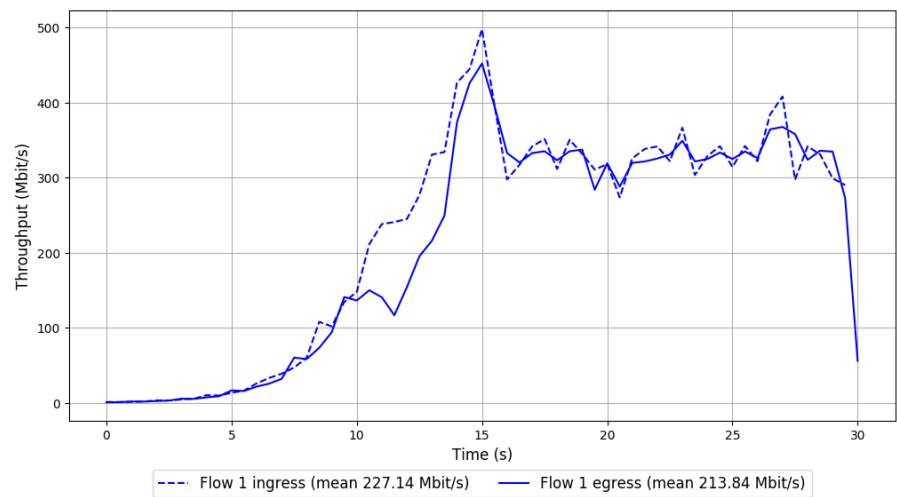
-- Flow 1:

Average throughput: 213.84 Mbit/s

95th percentile per-packet one-way delay: 167.134 ms

Loss rate: 5.86%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-11 09:09:54

End at: 2017-08-11 09:10:24

Below is generated by plot.py at 2017-08-11 10:13:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.08 Mbit/s

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

Loss rate: 68.35%

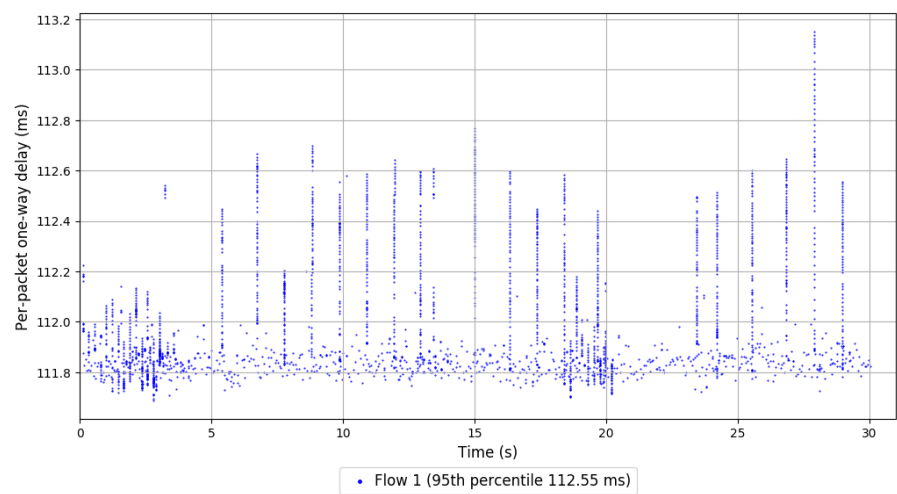
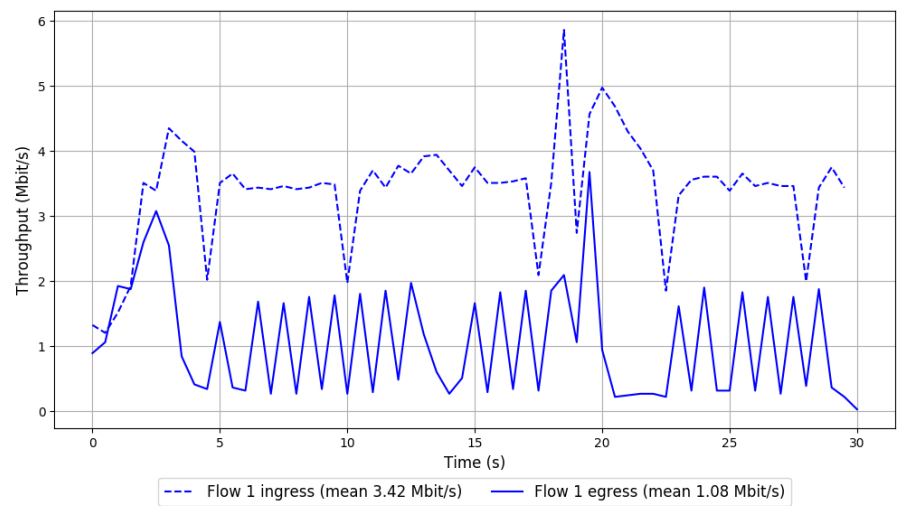
-- Flow 1:

Average throughput: 1.08 Mbit/s

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

Loss rate: 68.35%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-08-11 07:25:17

End at: 2017-08-11 07:25:47

Below is generated by plot.py at 2017-08-11 10:13:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.77 Mbit/s

95th percentile per-packet one-way delay: 112.298 ms

Loss rate: 0.12%

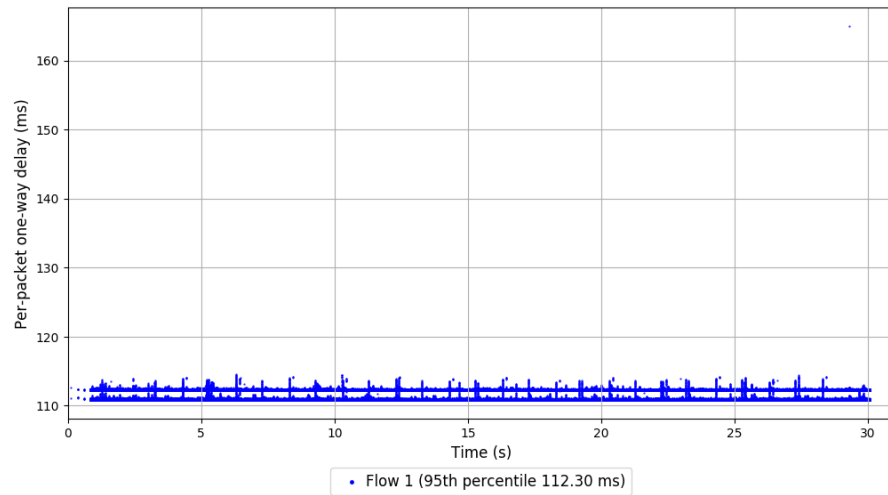
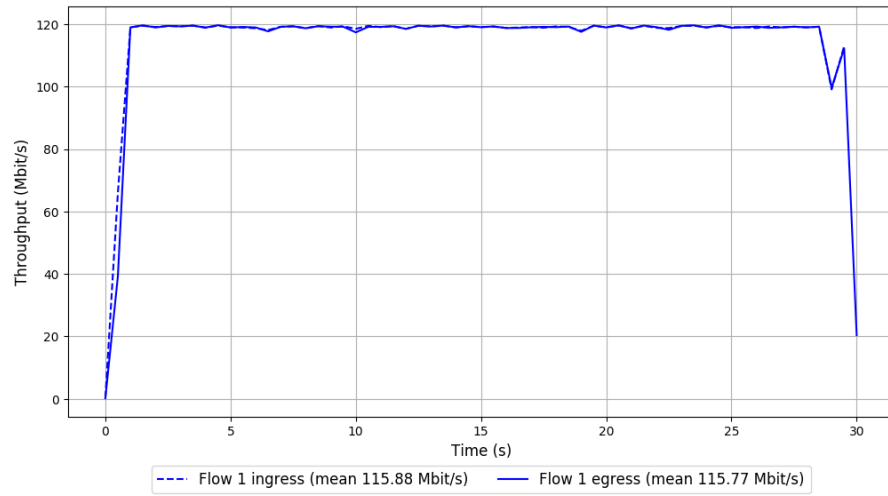
-- Flow 1:

Average throughput: 115.77 Mbit/s

95th percentile per-packet one-way delay: 112.298 ms

Loss rate: 0.12%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-11 07:36:34

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

Below is generated by plot.py at 2017-08-11 10:14:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.47 Mbit/s

95th percentile per-packet one-way delay: 111.823 ms

Loss rate: 0.00%

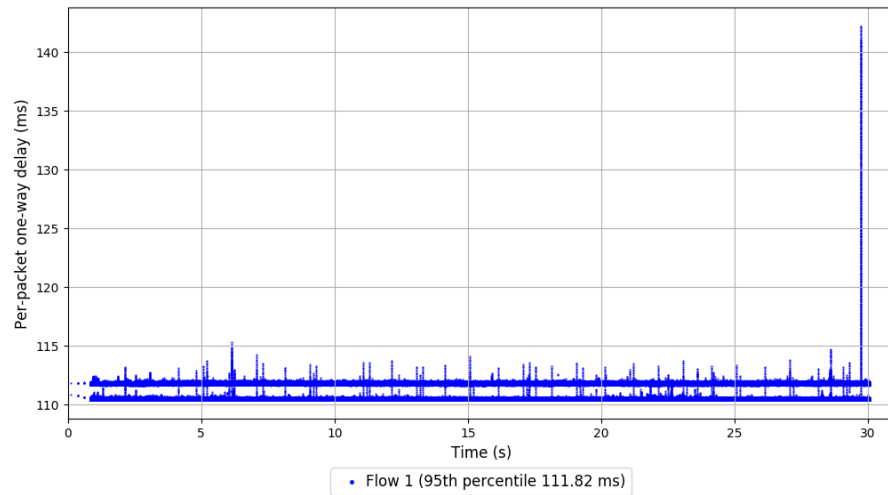
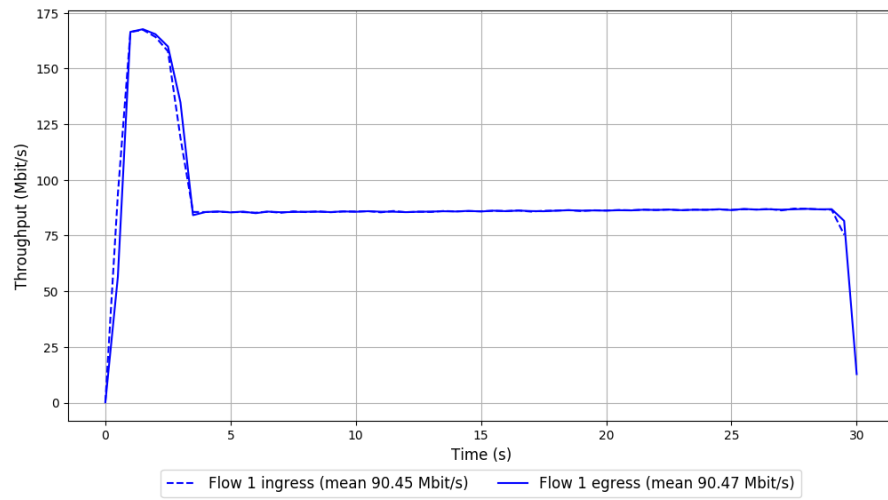
-- Flow 1:

Average throughput: 90.47 Mbit/s

95th percentile per-packet one-way delay: 111.823 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-11 07:48:13

End at: 2017-08-11 07:48:43

Below is generated by plot.py at 2017-08-11 10:14:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.19 Mbit/s

95th percentile per-packet one-way delay: 111.628 ms

Loss rate: 0.00%

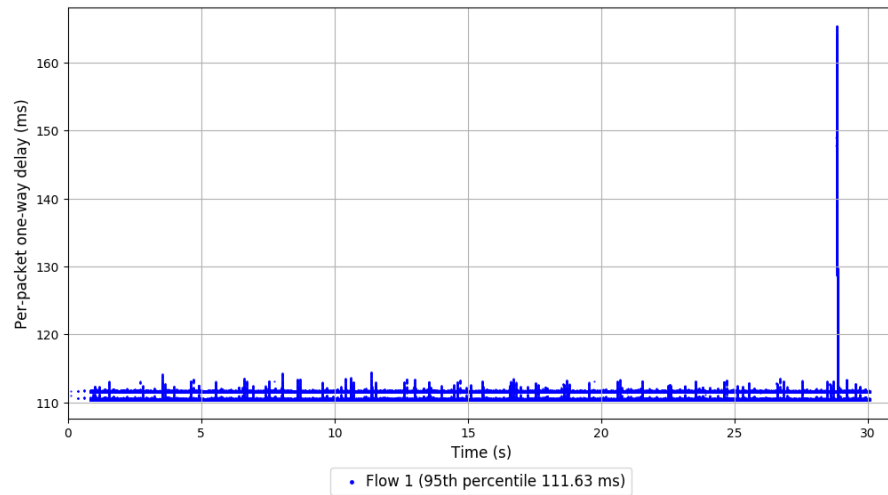
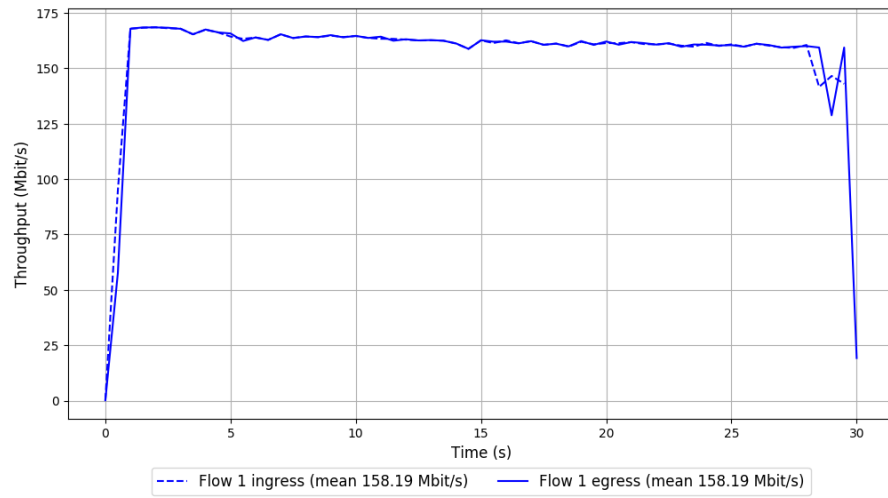
-- Flow 1:

Average throughput: 158.19 Mbit/s

95th percentile per-packet one-way delay: 111.628 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link

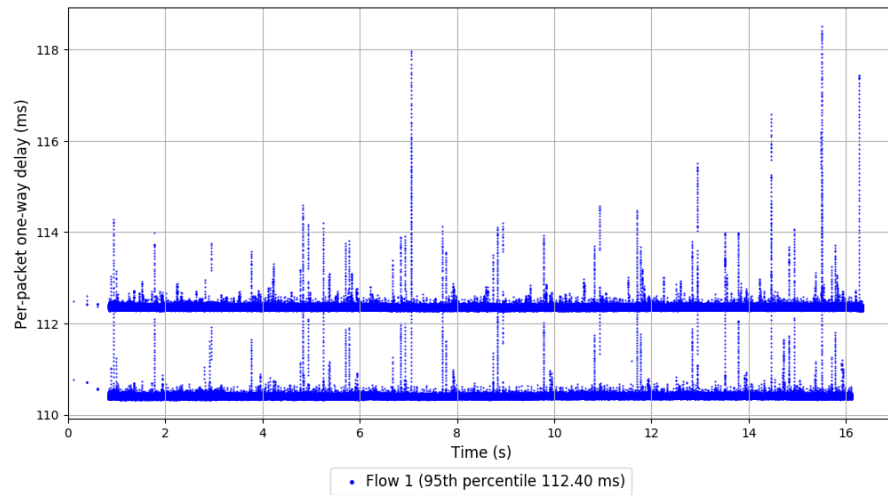
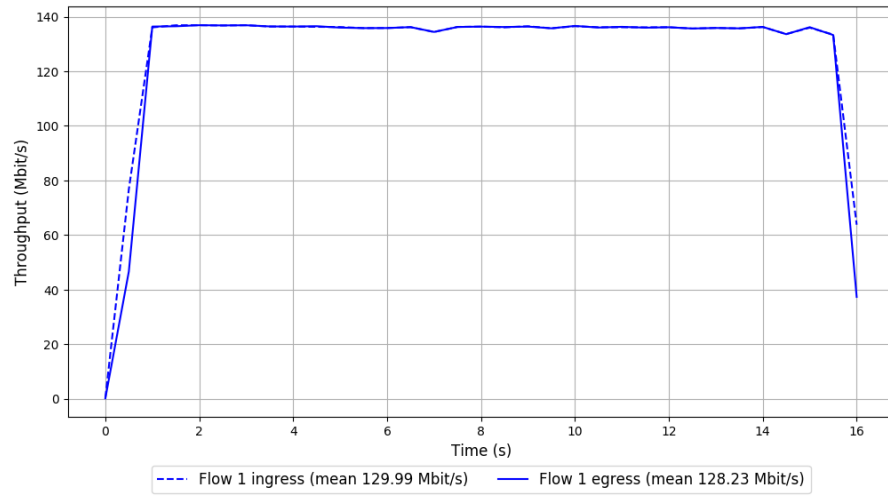


Run 4: Statistics of Copa

Start at: 2017-08-11 07:59:49

End at: 2017-08-11 08:00:19

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-11 08:10:46

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

Below is generated by plot.py at 2017-08-11 10:15:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.86 Mbit/s

95th percentile per-packet one-way delay: 112.254 ms

Loss rate: 0.00%

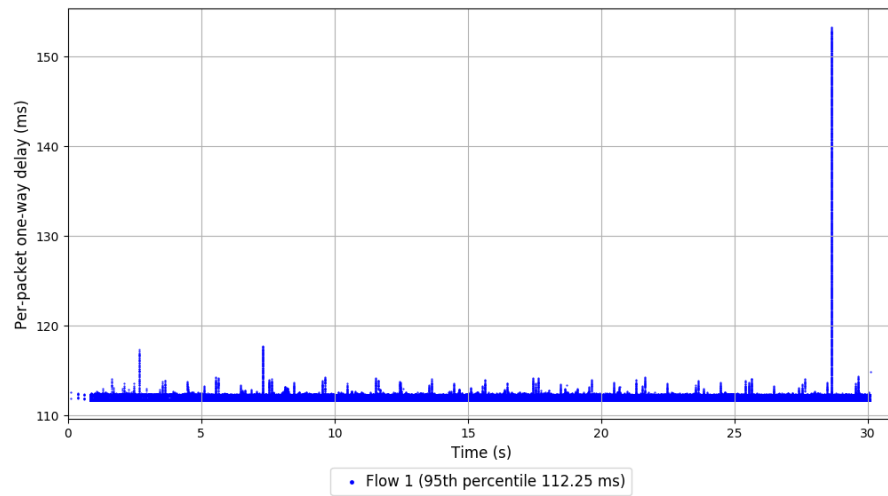
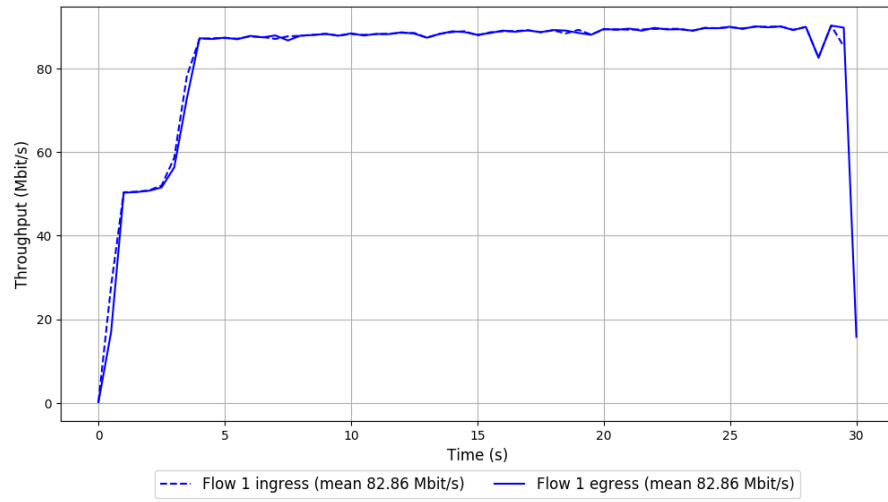
-- Flow 1:

Average throughput: 82.86 Mbit/s

95th percentile per-packet one-way delay: 112.254 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-11 08:21:53

End at: 2017-08-11 08:22:23

Below is generated by plot.py at 2017-08-11 10:15:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.21 Mbit/s

95th percentile per-packet one-way delay: 112.244 ms

Loss rate: 0.00%

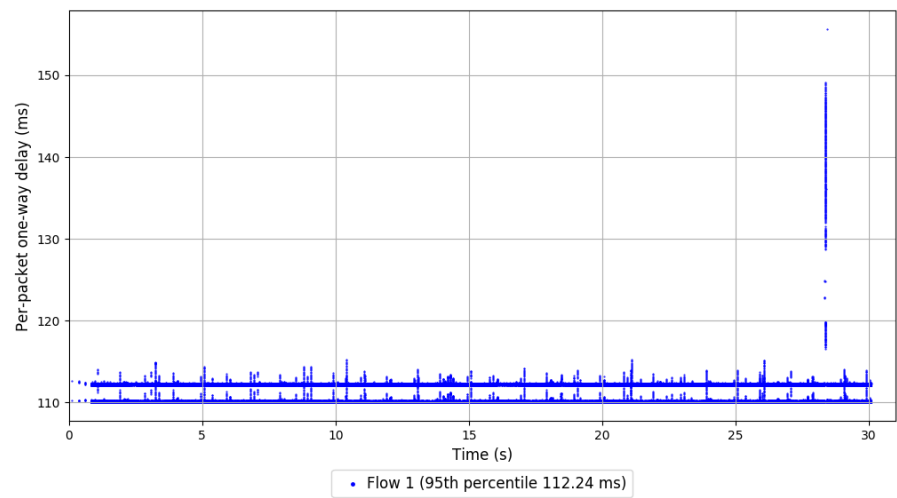
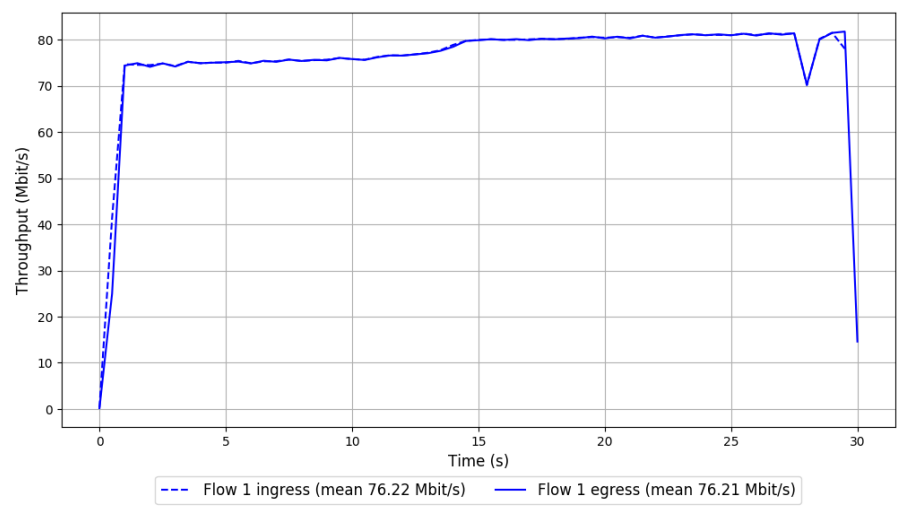
-- Flow 1:

Average throughput: 76.21 Mbit/s

95th percentile per-packet one-way delay: 112.244 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-11 08:32:49

End at: 2017-08-11 08:33:19

Below is generated by plot.py at 2017-08-11 10:15:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.87 Mbit/s

95th percentile per-packet one-way delay: 112.385 ms

Loss rate: 0.04%

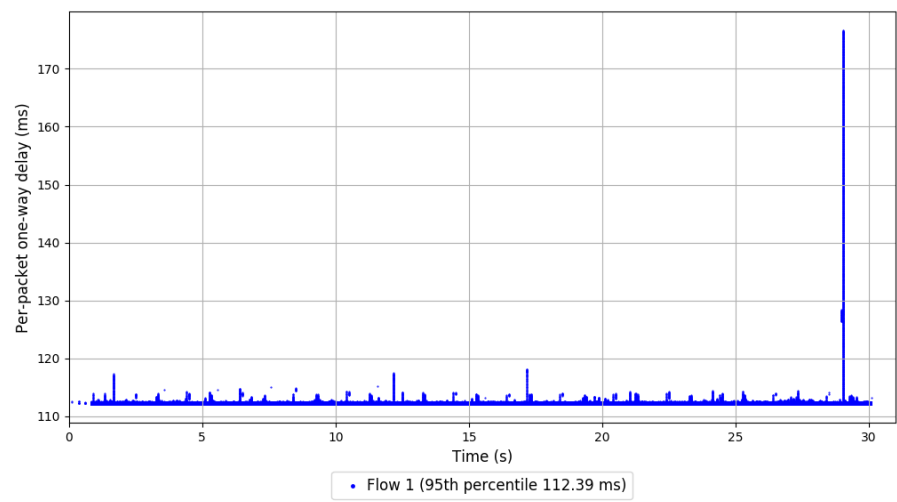
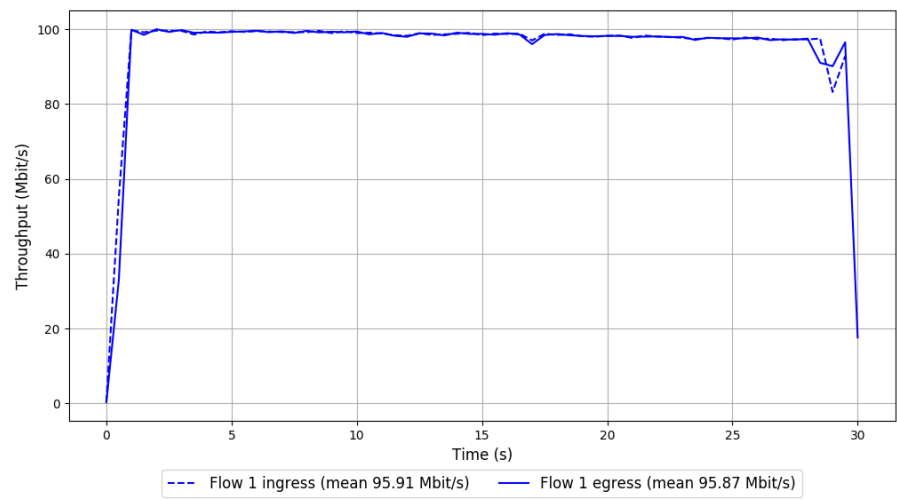
-- Flow 1:

Average throughput: 95.87 Mbit/s

95th percentile per-packet one-way delay: 112.385 ms

Loss rate: 0.04%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

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

End at: 2017-08-11 08:44:36

Below is generated by plot.py at 2017-08-11 10:15:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.28 Mbit/s

95th percentile per-packet one-way delay: 112.355 ms

Loss rate: 0.00%

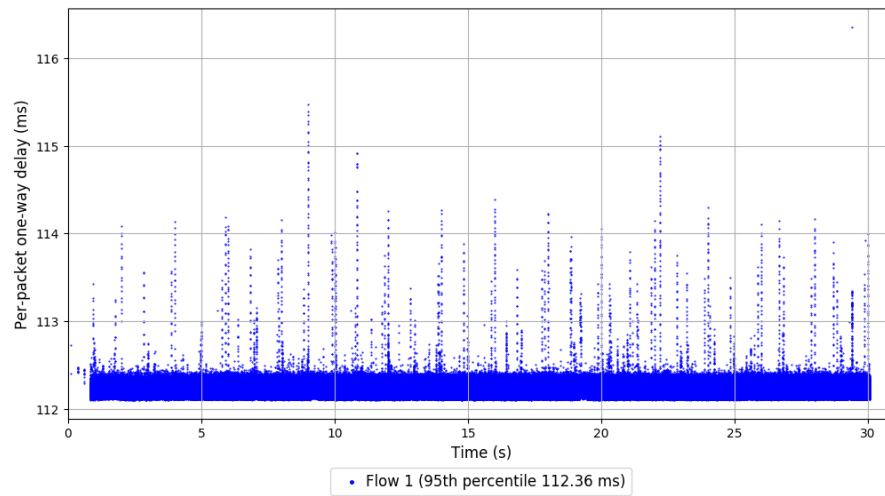
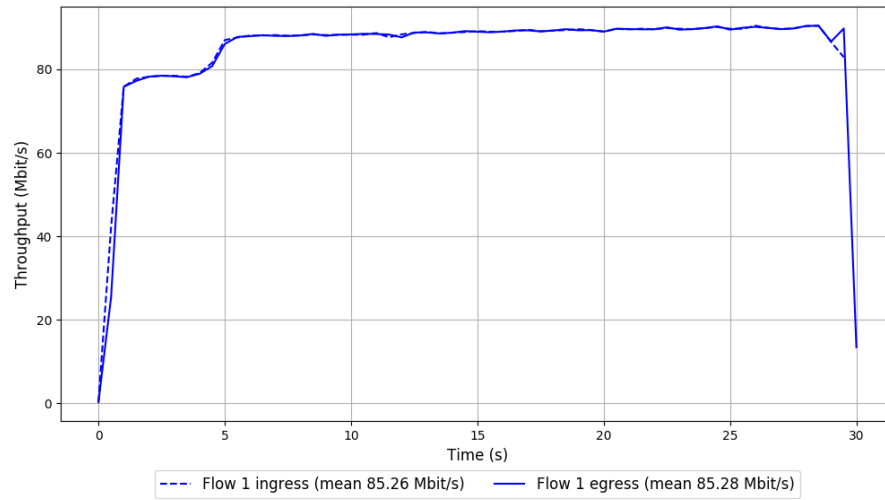
-- Flow 1:

Average throughput: 85.28 Mbit/s

95th percentile per-packet one-way delay: 112.355 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

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

End at: 2017-08-11 08:55:38

Below is generated by plot.py at 2017-08-11 10:16:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.69 Mbit/s

95th percentile per-packet one-way delay: 112.527 ms

Loss rate: 0.00%

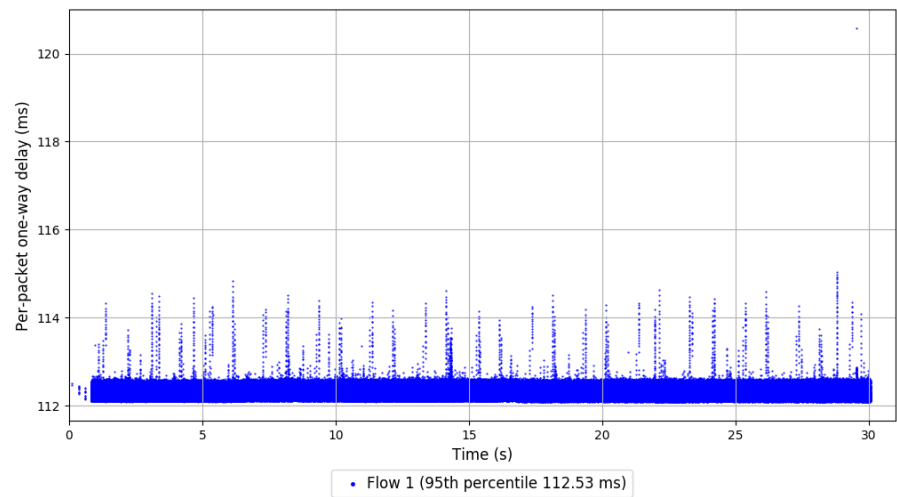
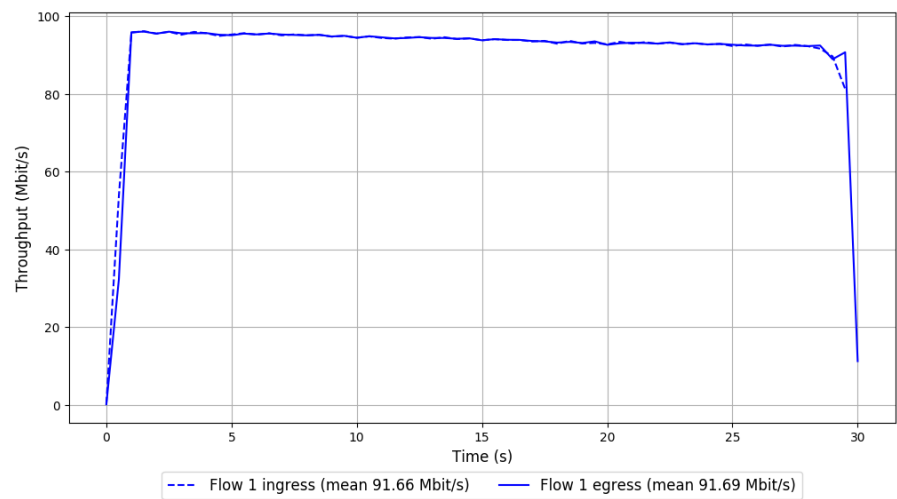
-- Flow 1:

Average throughput: 91.69 Mbit/s

95th percentile per-packet one-way delay: 112.527 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-11 09:06:50

End at: 2017-08-11 09:07:20

Below is generated by plot.py at 2017-08-11 10:16:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 144.12 Mbit/s

95th percentile per-packet one-way delay: 111.777 ms

Loss rate: 0.16%

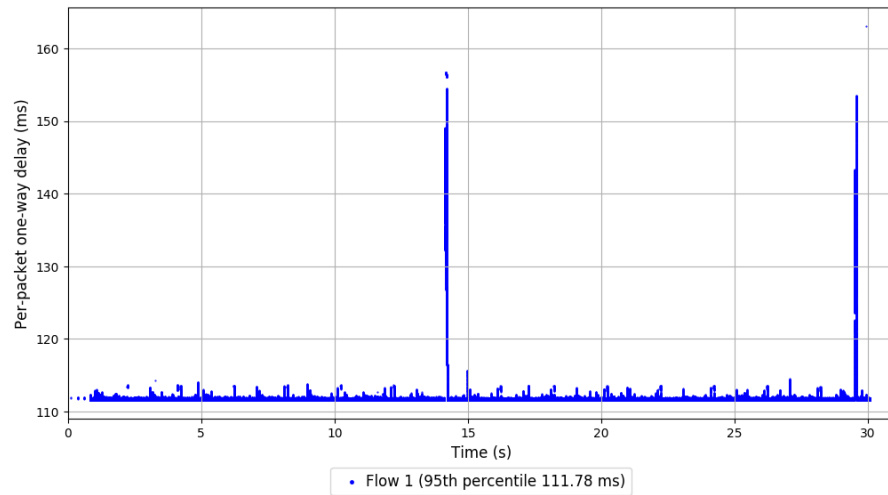
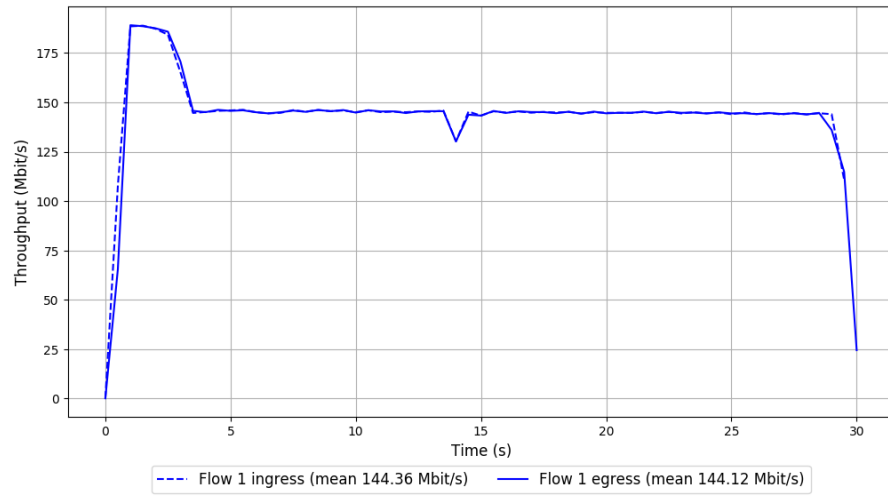
-- Flow 1:

Average throughput: 144.12 Mbit/s

95th percentile per-packet one-way delay: 111.777 ms

Loss rate: 0.16%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-11 07:33:04

End at: 2017-08-11 07:33:34

Below is generated by plot.py at 2017-08-11 10:16:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 110.860 ms

Loss rate: 1.00%

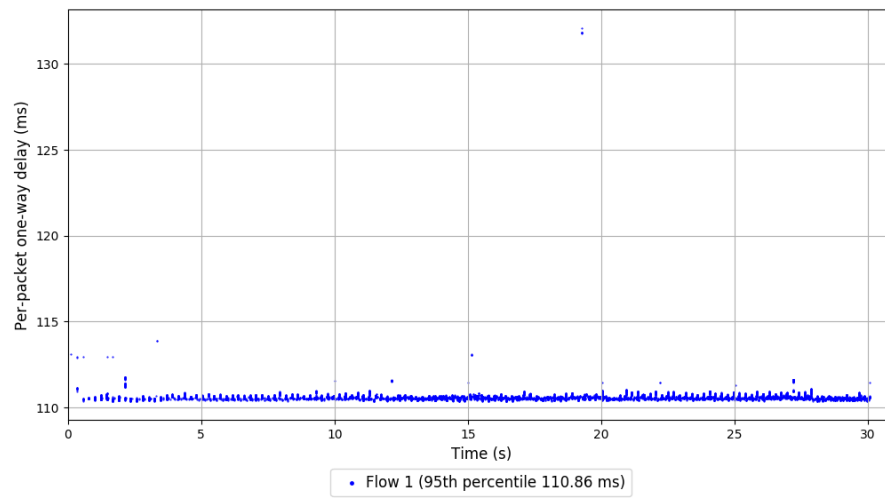
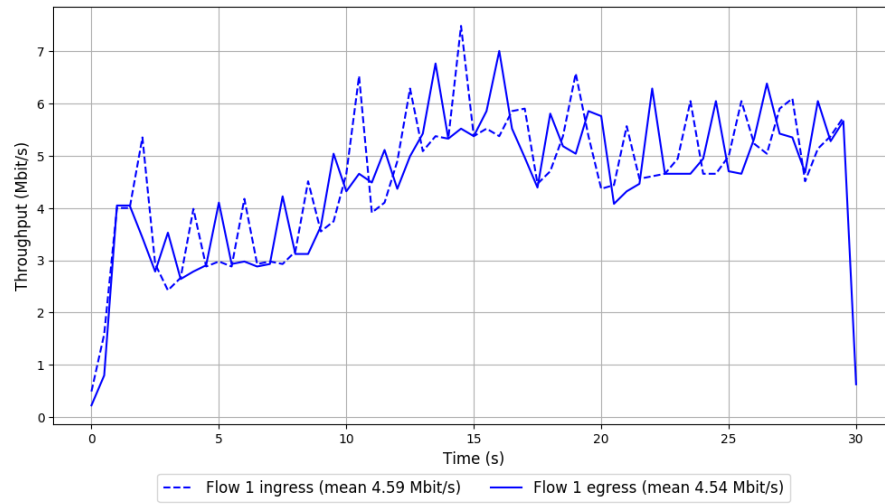
-- Flow 1:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 110.860 ms

Loss rate: 1.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-11 07:44:38

End at: 2017-08-11 07:45:08

Below is generated by plot.py at 2017-08-11 10:16:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.26 Mbit/s

95th percentile per-packet one-way delay: 112.604 ms

Loss rate: 0.11%

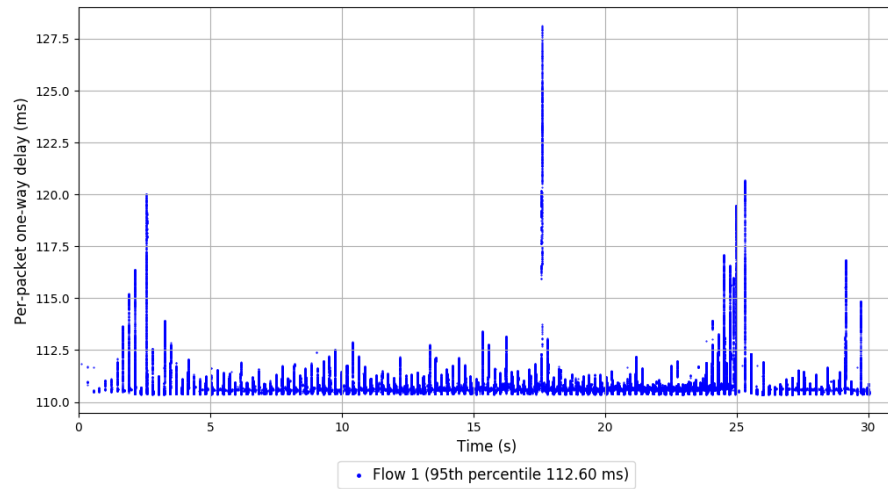
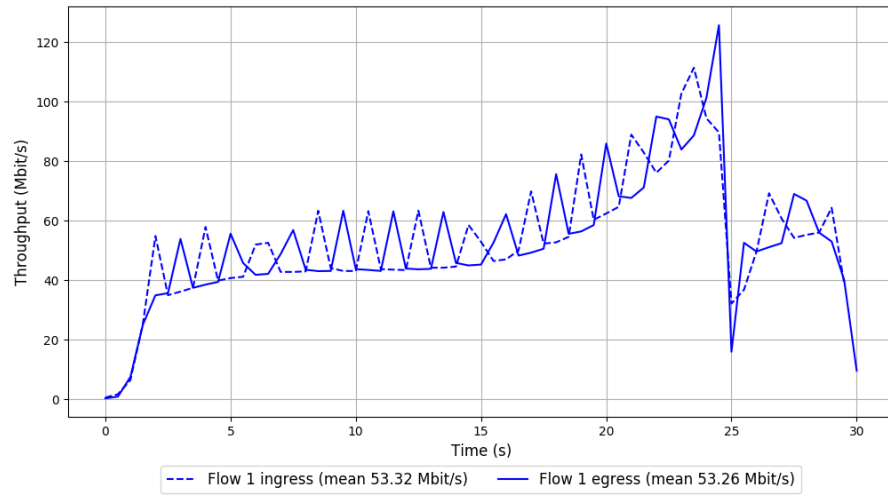
-- Flow 1:

Average throughput: 53.26 Mbit/s

95th percentile per-packet one-way delay: 112.604 ms

Loss rate: 0.11%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-11 07:56:18

End at: 2017-08-11 07:56:48

Below is generated by plot.py at 2017-08-11 10:16:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.74 Mbit/s

95th percentile per-packet one-way delay: 111.913 ms

Loss rate: 0.12%

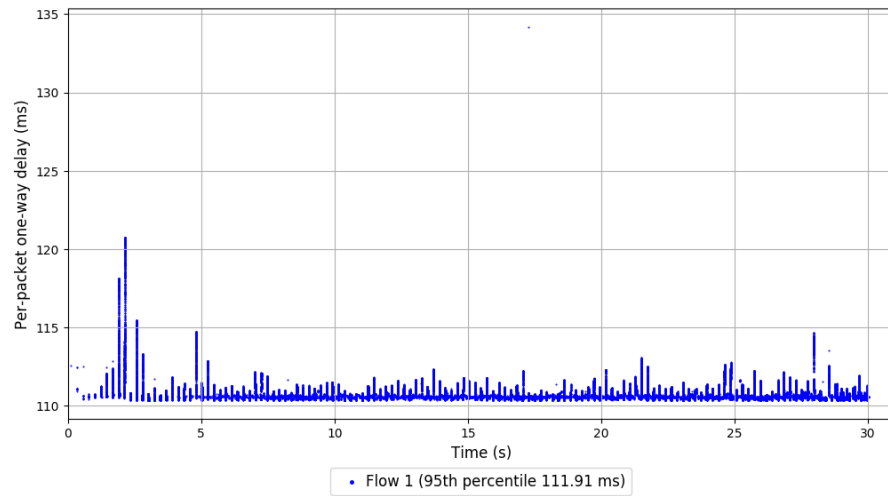
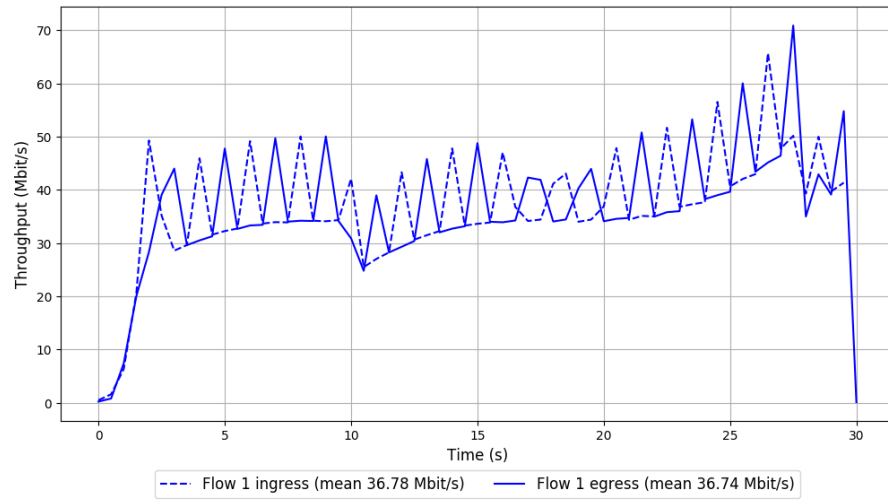
-- Flow 1:

Average throughput: 36.74 Mbit/s

95th percentile per-packet one-way delay: 111.913 ms

Loss rate: 0.12%

Run 3: Report of TCP Cubic — Data Link

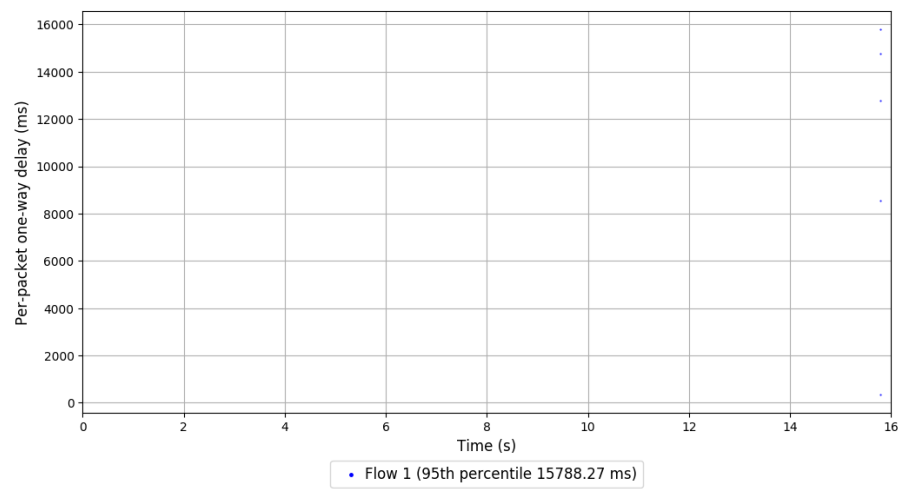
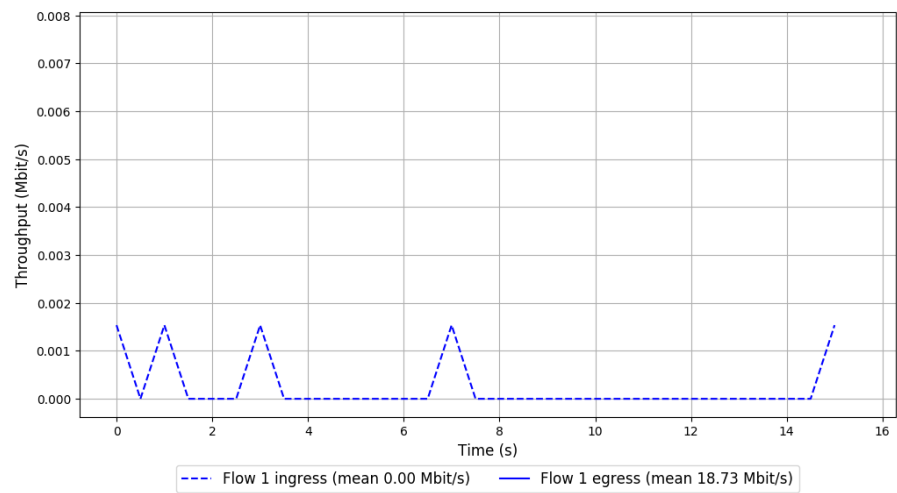


Run 4: Statistics of TCP Cubic

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

End at: 2017-08-11 08:07:49

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-11 08:18:21

End at: 2017-08-11 08:18:51

Below is generated by plot.py at 2017-08-11 10:16:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 112.543 ms

Loss rate: 2.51%

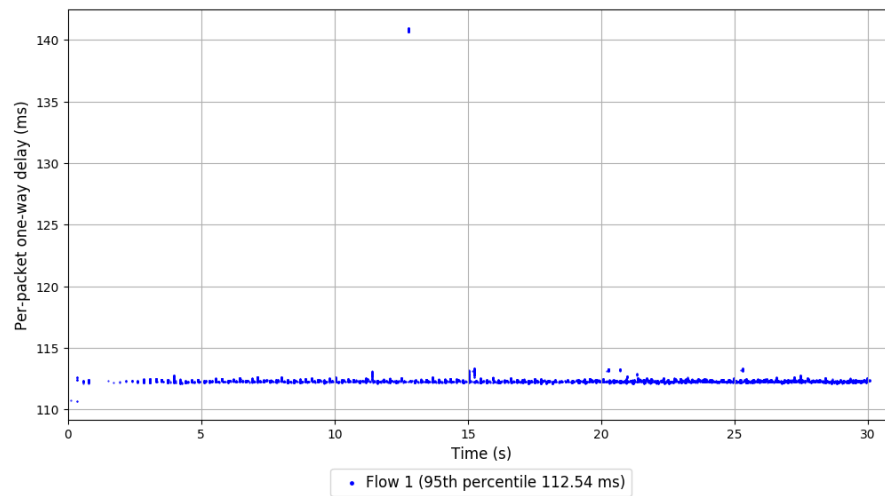
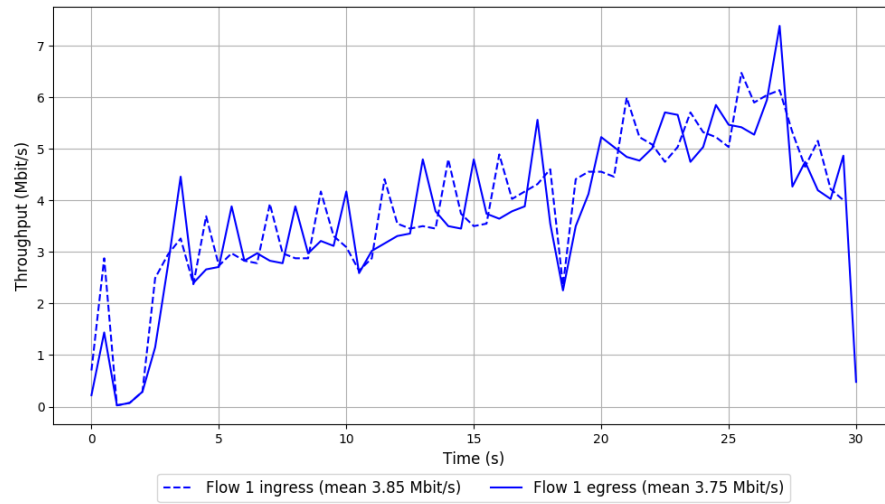
-- Flow 1:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 112.543 ms

Loss rate: 2.51%

Run 5: Report of TCP Cubic — Data Link

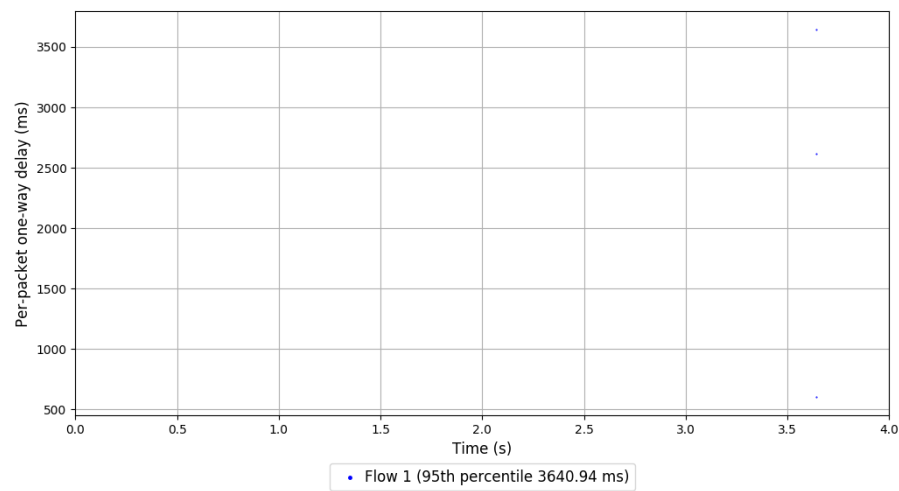
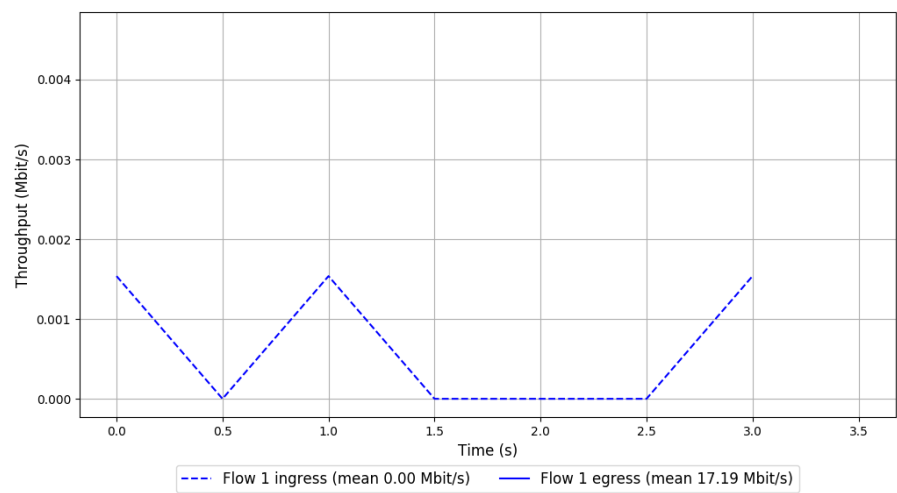


Run 6: Statistics of TCP Cubic

Start at: 2017-08-11 08:29:22

End at: 2017-08-11 08:29:52

Run 6: Report of TCP Cubic — Data Link

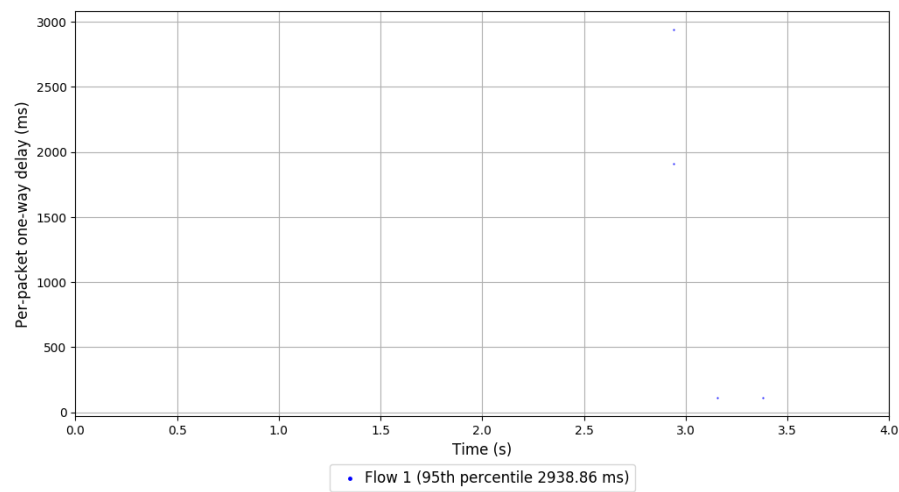
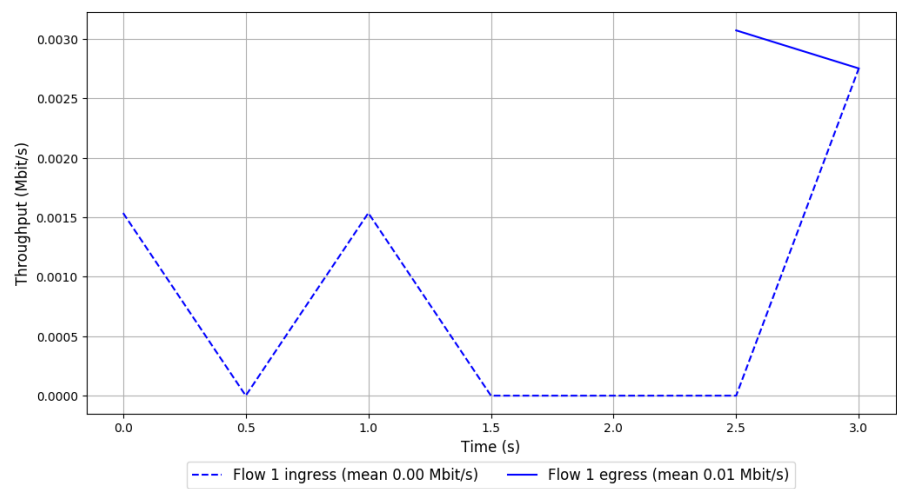


Run 7: Statistics of TCP Cubic

Start at: 2017-08-11 08:40:39

End at: 2017-08-11 08:41:09

Run 7: Report of TCP Cubic — Data Link

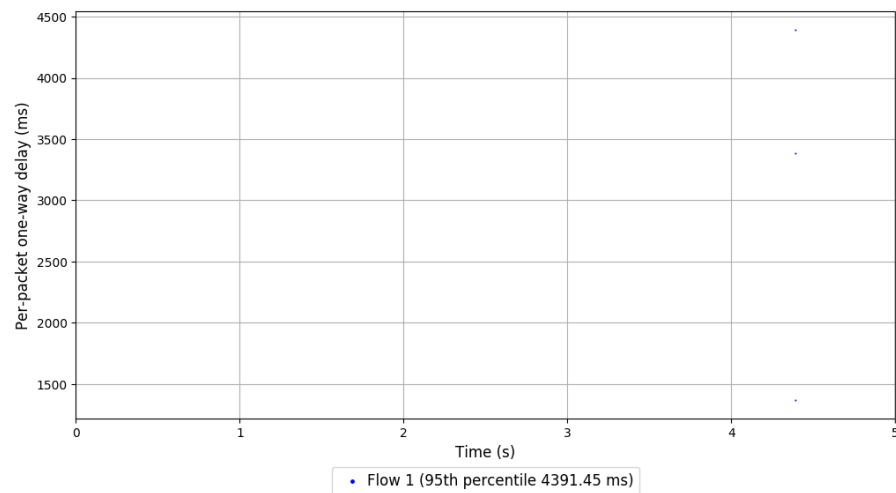
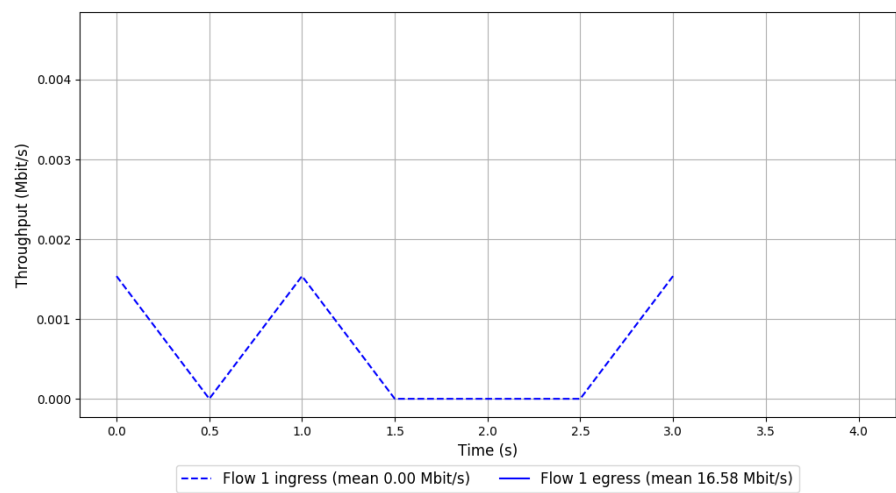


Run 8: Statistics of TCP Cubic

Start at: 2017-08-11 08:51:39

End at: 2017-08-11 08:52:09

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-11 09:03:16

End at: 2017-08-11 09:03:46

Below is generated by plot.py at 2017-08-11 10:17:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.74 Mbit/s

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

Loss rate: 0.45%

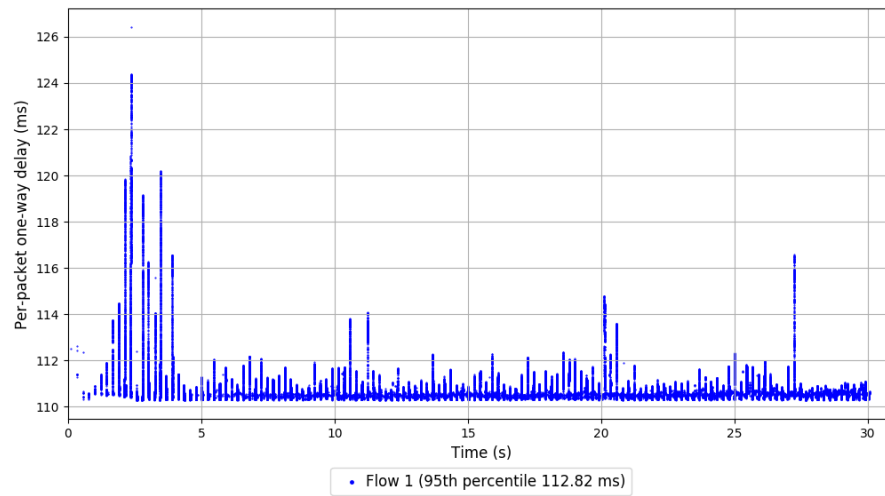
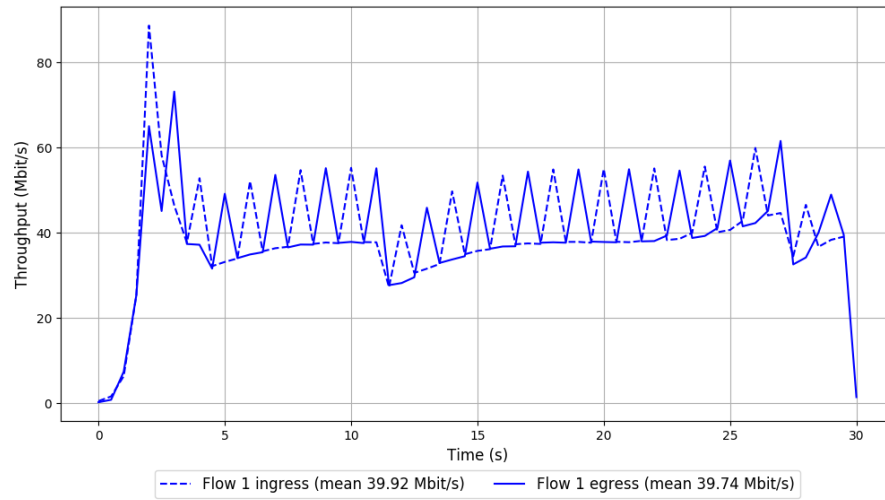
-- Flow 1:

Average throughput: 39.74 Mbit/s

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

Loss rate: 0.45%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-11 09:14:19

End at: 2017-08-11 09:14:49

Below is generated by plot.py at 2017-08-11 10:17:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 112.042 ms

Loss rate: 3.94%

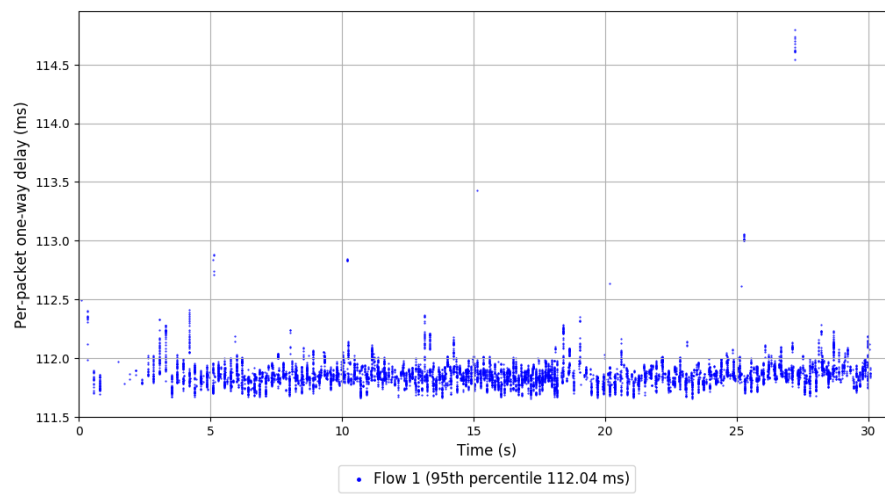
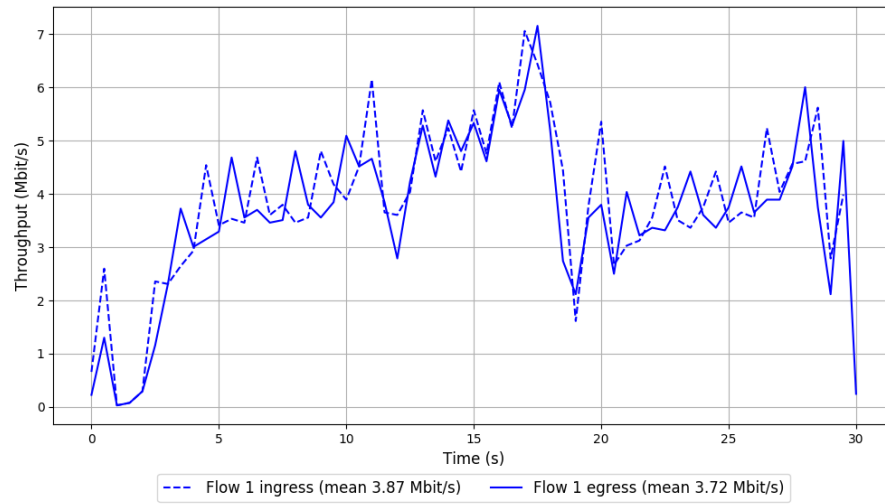
-- Flow 1:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 112.042 ms

Loss rate: 3.94%

Run 10: Report of TCP Cubic — Data Link

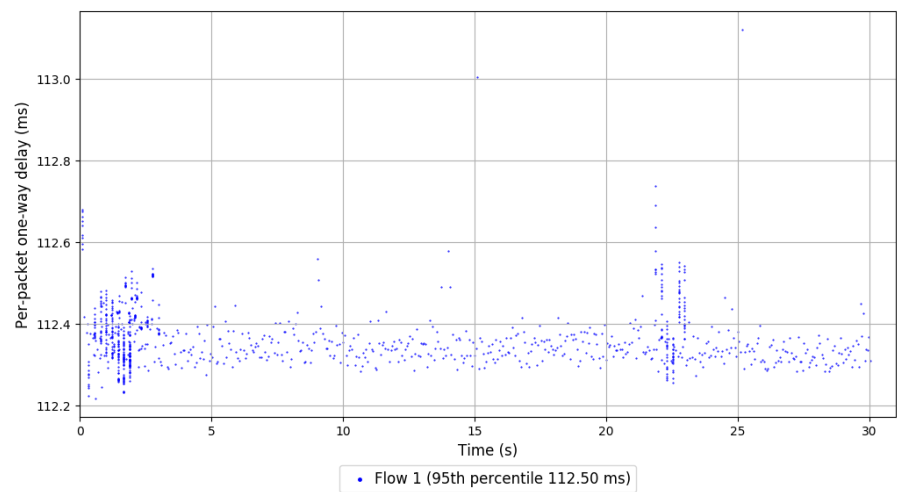
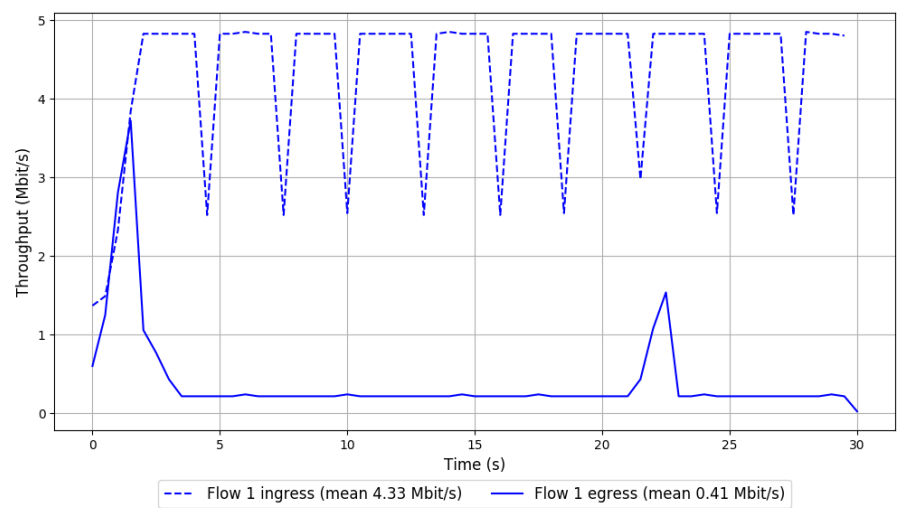


```
Run 1: Statistics of KohoCC

Start at: 2017-08-11 07:31:22
End at: 2017-08-11 07:31:52

# Below is generated by plot.py at 2017-08-11 10:17:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 112.500 ms
Loss rate: 90.48%
-- Flow 1:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 112.500 ms
Loss rate: 90.48%
```


Run 1: Report of KohoCC — Data Link



Run 2: Statistics of KohoCC

Start at: 2017-08-11 07:42:55

End at: 2017-08-11 07:43:25

Below is generated by plot.py at 2017-08-11 10:17:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.04 Mbit/s

95th percentile per-packet one-way delay: 110.846 ms

Loss rate: 3.43%

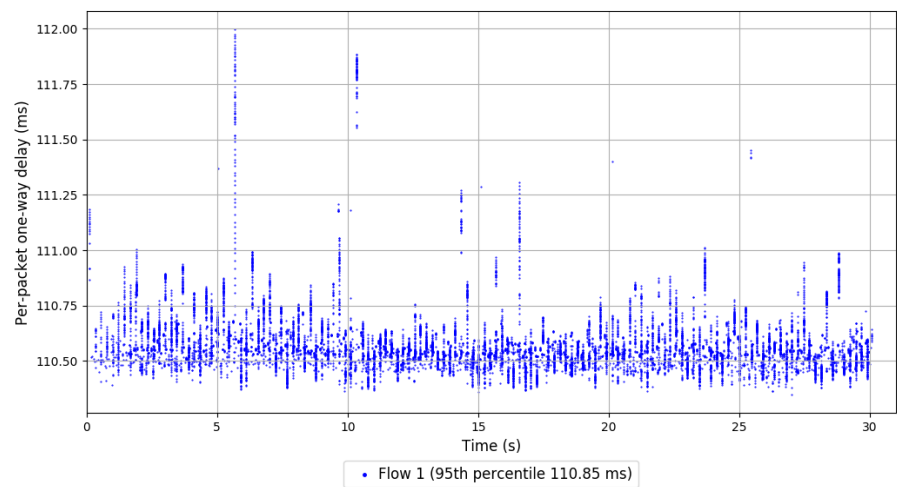
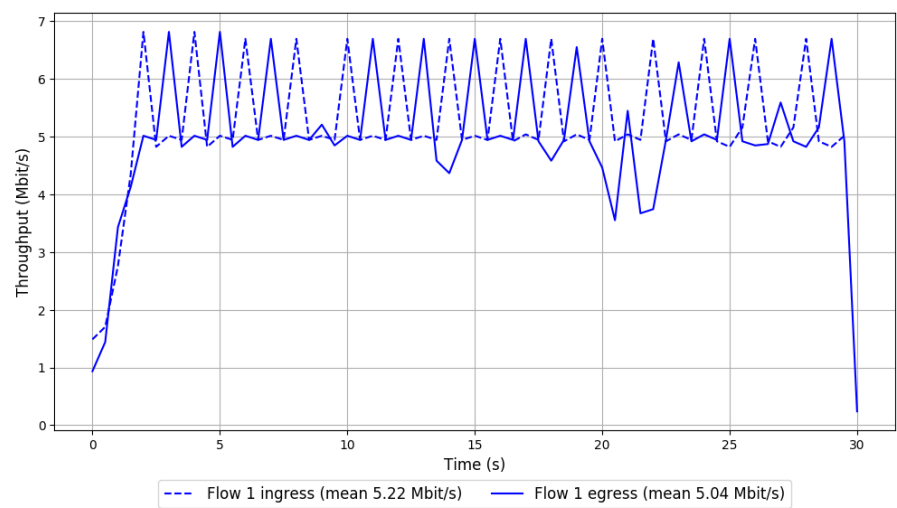
-- Flow 1:

Average throughput: 5.04 Mbit/s

95th percentile per-packet one-way delay: 110.846 ms

Loss rate: 3.43%

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-11 07:54:34

End at: 2017-08-11 07:55:04

Below is generated by plot.py at 2017-08-11 10:17:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 111.115 ms

Loss rate: 0.00%

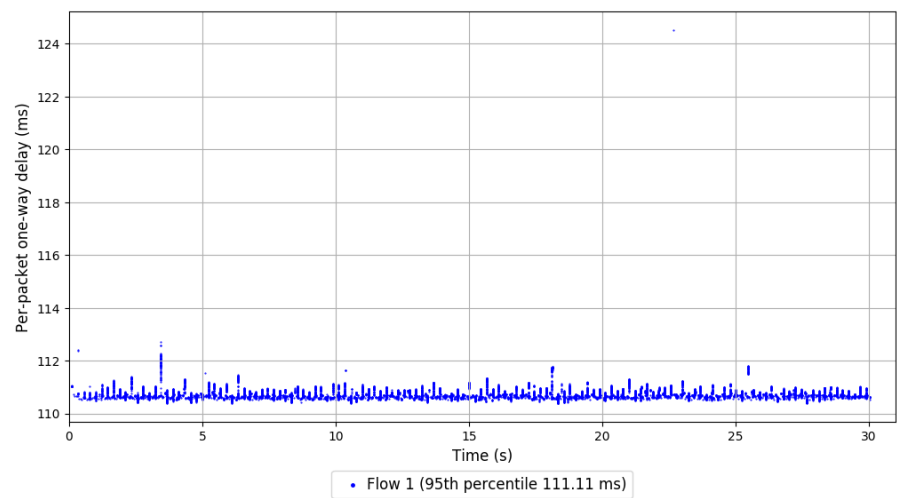
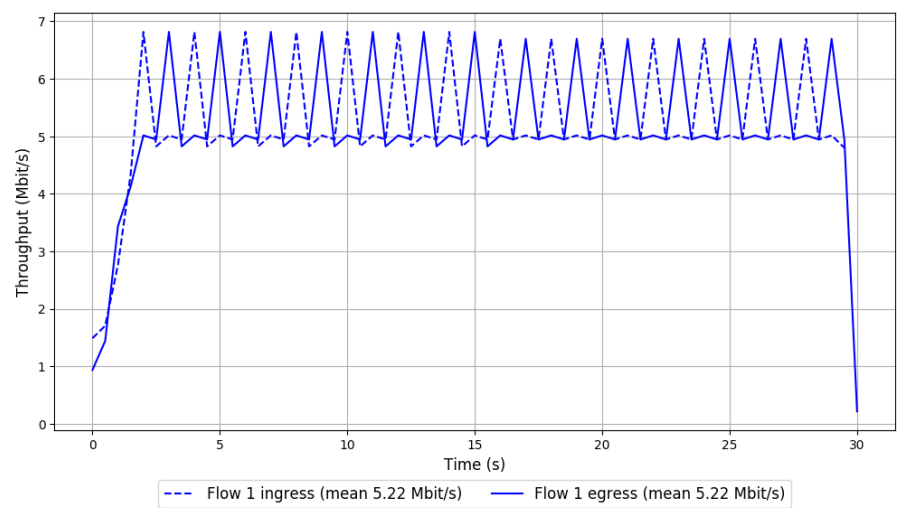
-- Flow 1:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 111.115 ms

Loss rate: 0.00%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

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

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

Below is generated by plot.py at 2017-08-11 10:17:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 112.584 ms

Loss rate: 90.96%

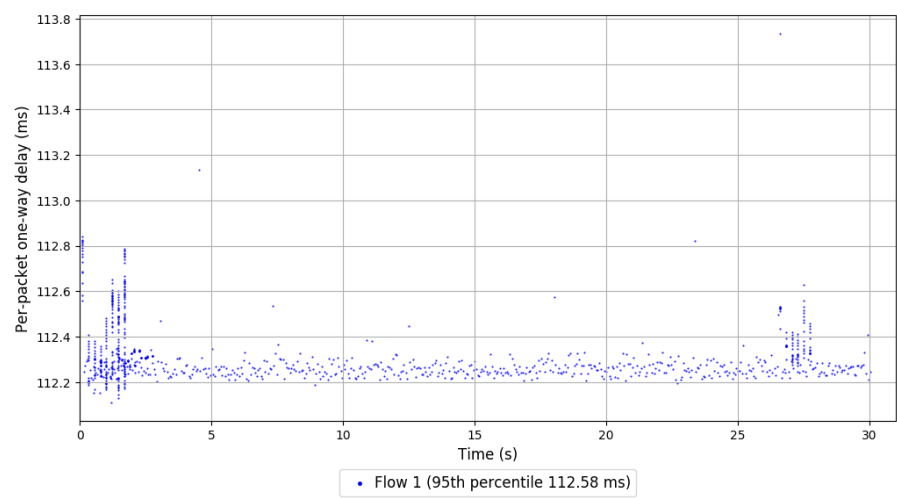
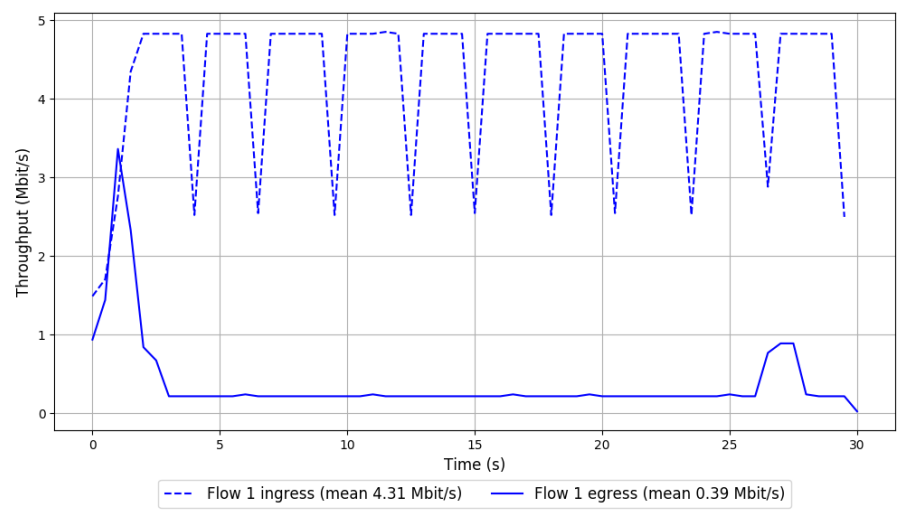
-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 112.584 ms

Loss rate: 90.96%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

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

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

Below is generated by plot.py at 2017-08-11 10:17:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 113.011 ms

Loss rate: 0.00%

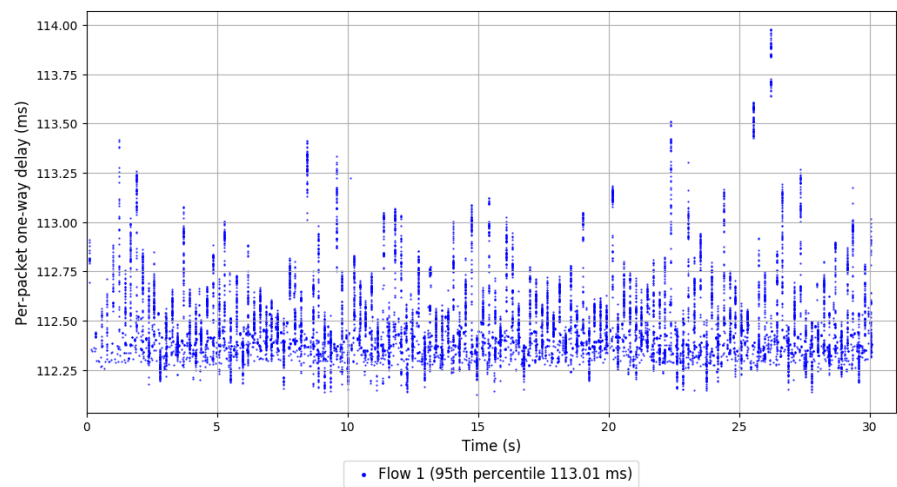
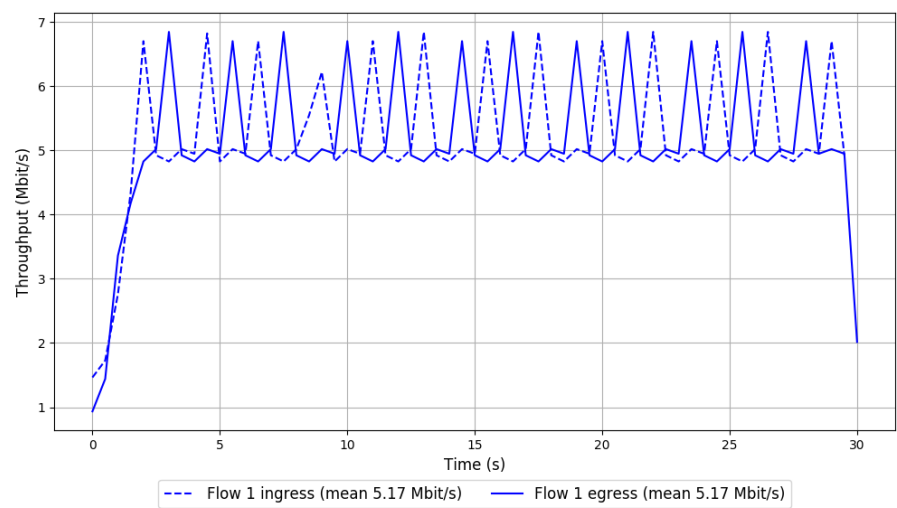
-- Flow 1:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 113.011 ms

Loss rate: 0.00%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-11 08:27:40

End at: 2017-08-11 08:28:10

Below is generated by plot.py at 2017-08-11 10:17:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 112.609 ms

Loss rate: 91.74%

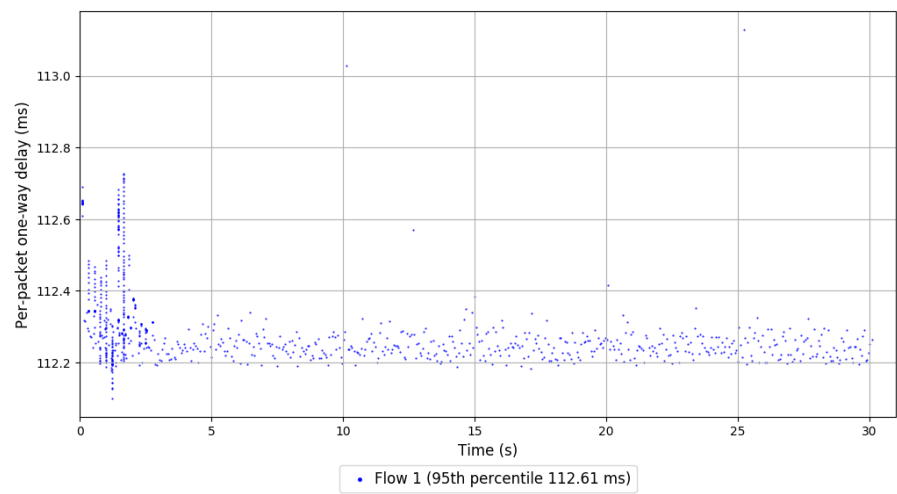
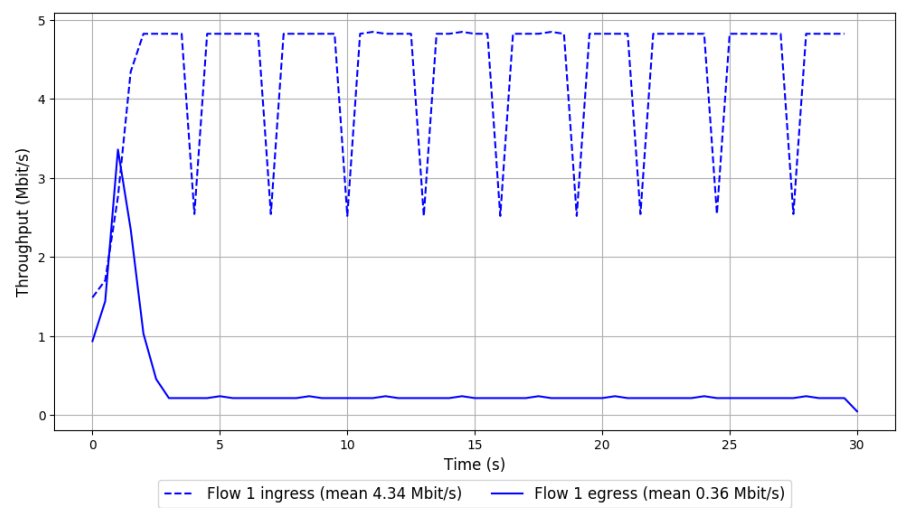
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 112.609 ms

Loss rate: 91.74%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-11 08:38:56

End at: 2017-08-11 08:39:26

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 113.215 ms

Loss rate: 90.34%

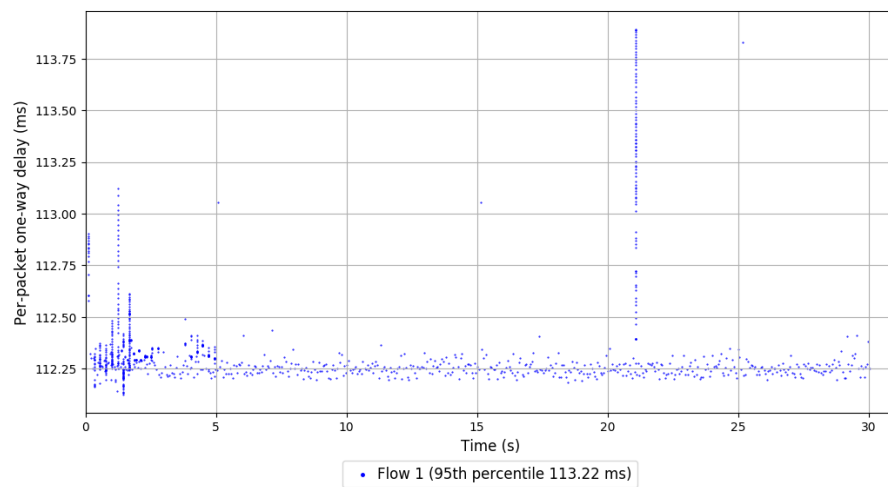
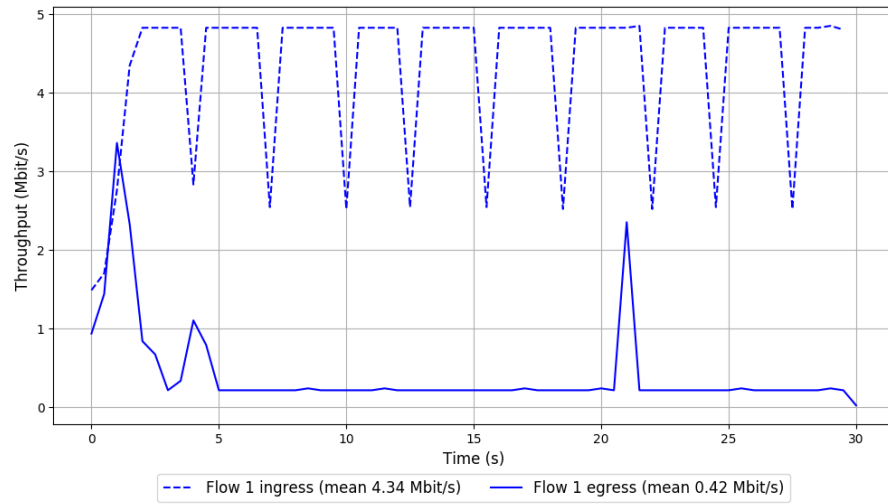
-- Flow 1:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 113.215 ms

Loss rate: 90.34%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-11 08:49:56

End at: 2017-08-11 08:50:26

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 112.965 ms

Loss rate: 0.00%

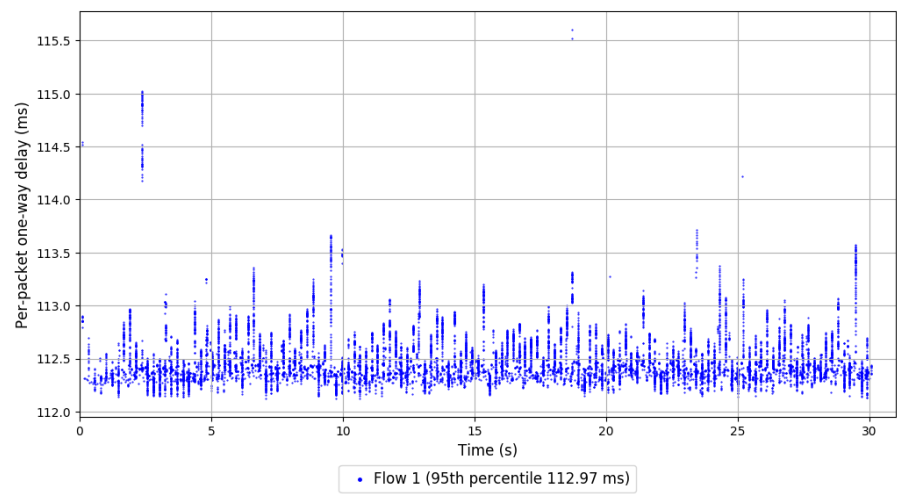
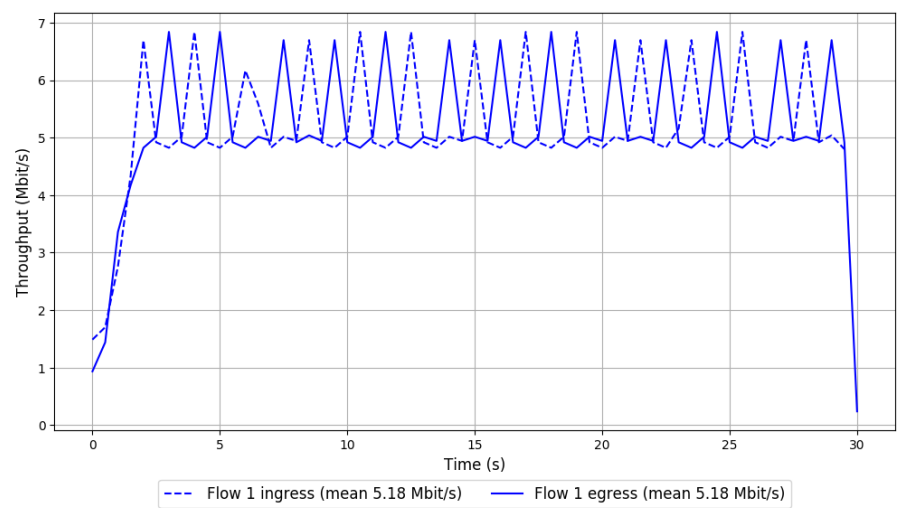
-- Flow 1:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 112.965 ms

Loss rate: 0.00%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-11 09:01:33

End at: 2017-08-11 09:02:03

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 112.893 ms

Loss rate: 0.00%

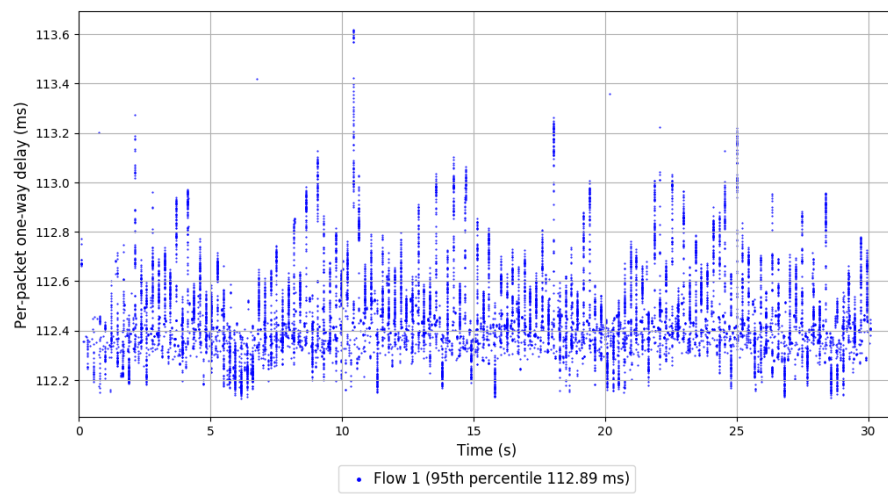
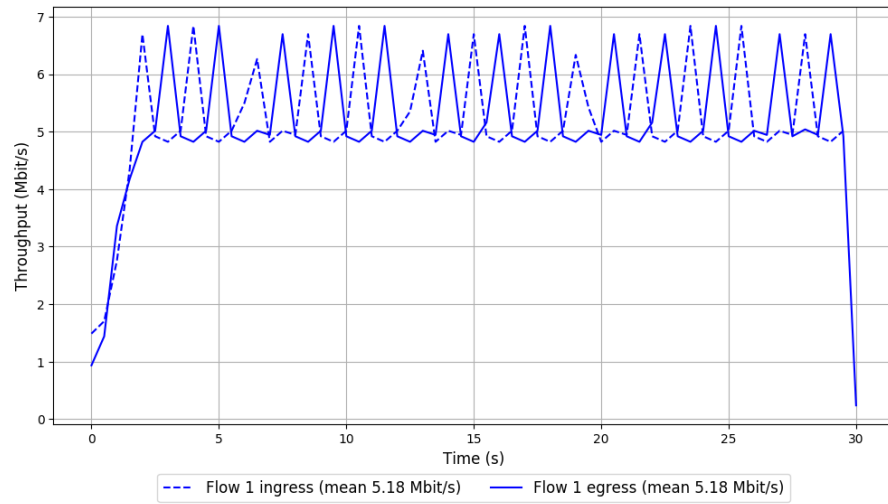
-- Flow 1:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 112.893 ms

Loss rate: 0.00%

Run 9: Report of KohoCC — Data Link

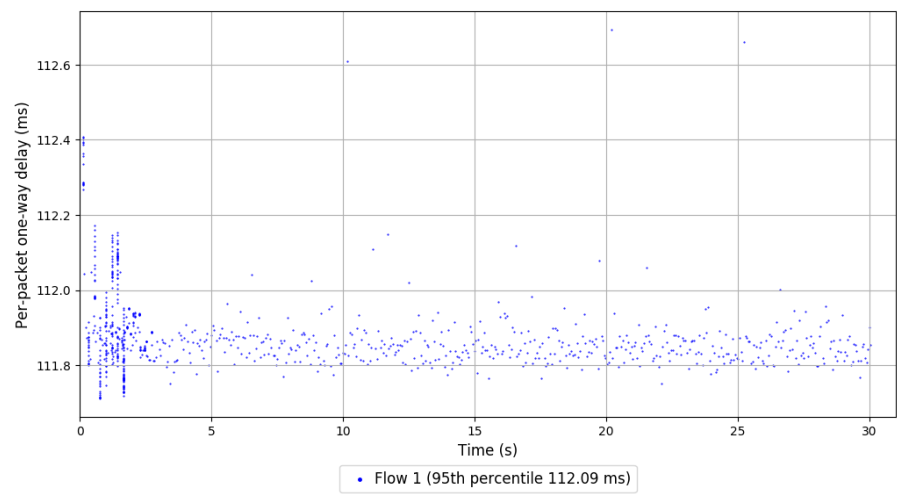
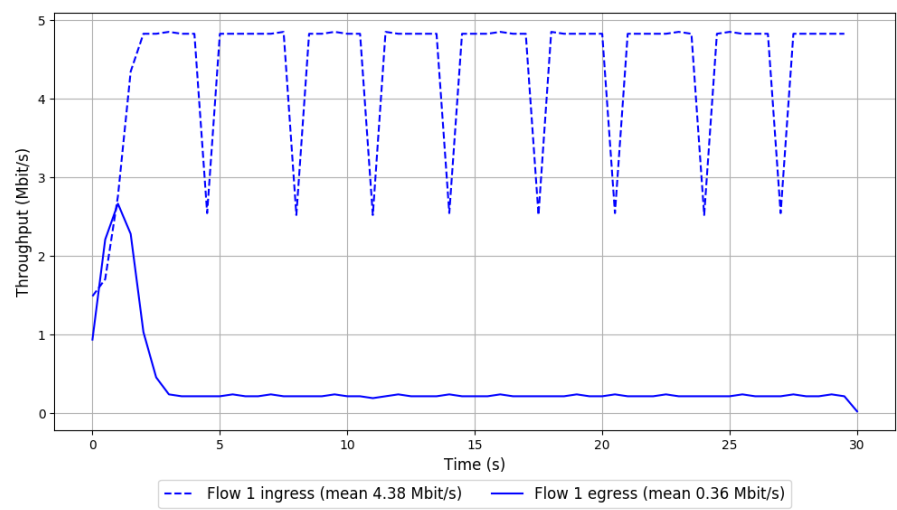


```
Run 10: Statistics of KohoCC

Start at: 2017-08-11 09:12:51
End at: 2017-08-11 09:13:21

# Below is generated by plot.py at 2017-08-11 10:17:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 112.092 ms
Loss rate: 91.78%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 112.092 ms
Loss rate: 91.78%
```

Run 10: Report of KohoCC — Data Link

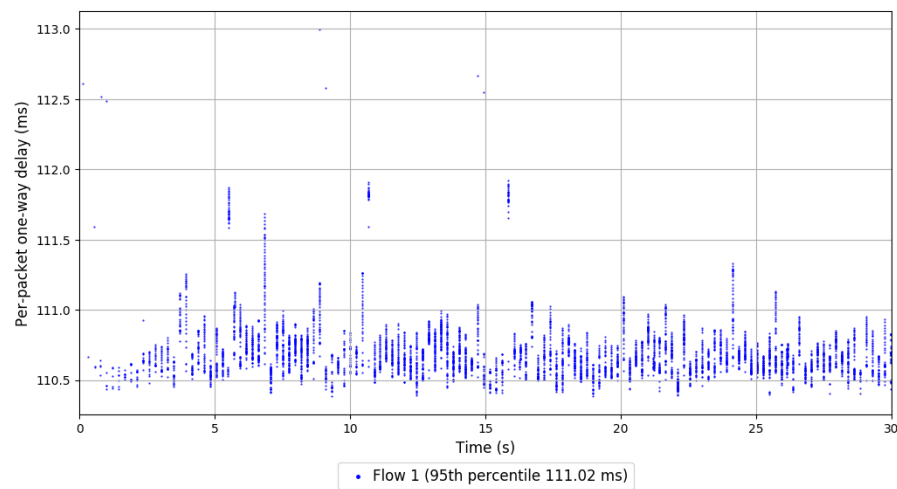
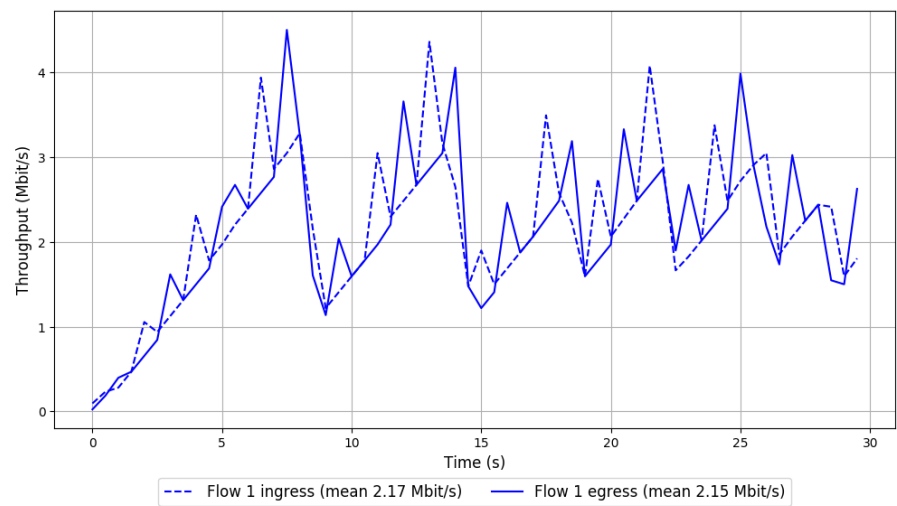


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-11 07:35:11
End at: 2017-08-11 07:35:41

# Below is generated by plot.py at 2017-08-11 10:17:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 111.024 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 111.024 ms
Loss rate: 0.90%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-08-11 07:46:47

End at: 2017-08-11 07:47:17

Below is generated by plot.py at 2017-08-11 10:17:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 111.285 ms

Loss rate: 0.00%

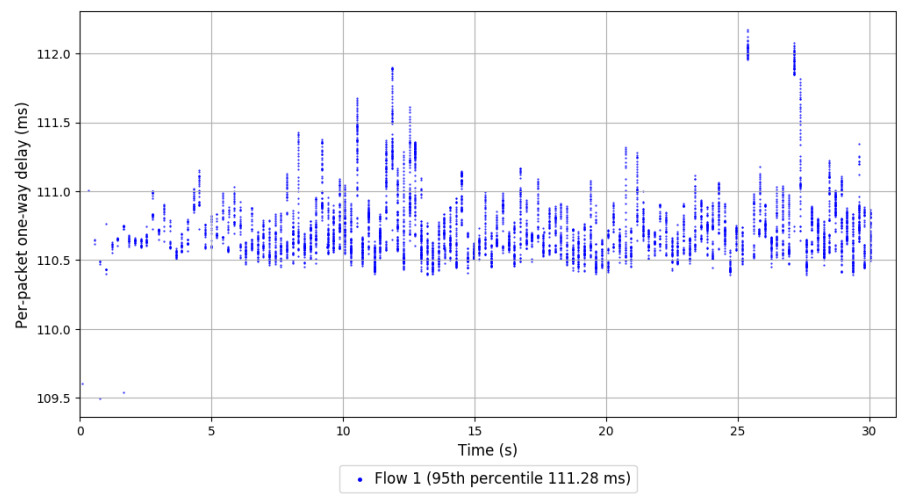
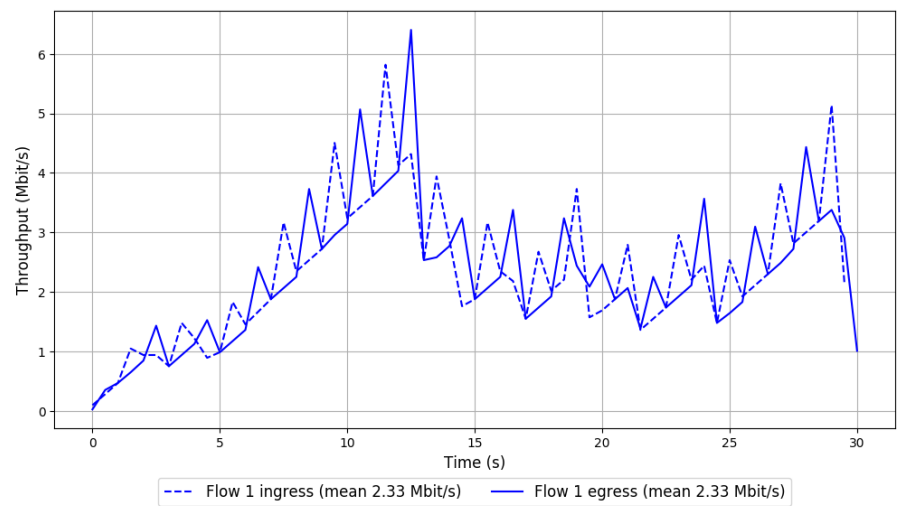
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 111.285 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-11 07:58:23

End at: 2017-08-11 07:58:53

Below is generated by plot.py at 2017-08-11 10:17:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 111.178 ms

Loss rate: 0.00%

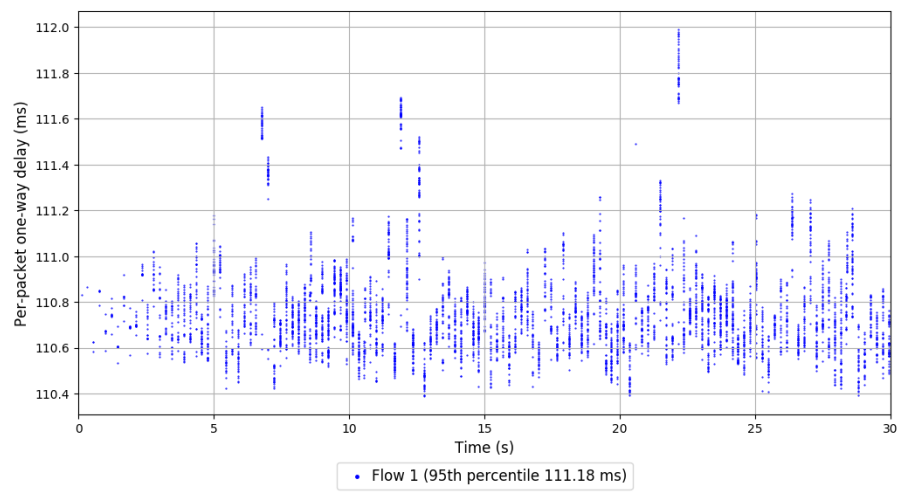
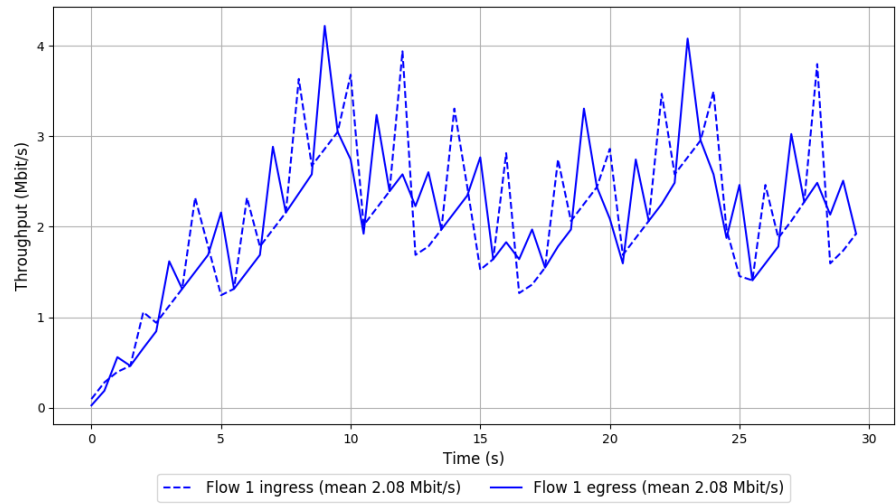
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 111.178 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-11 08:09:24

End at: 2017-08-11 08:09:54

Below is generated by plot.py at 2017-08-11 10:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 113.013 ms

Loss rate: 0.00%

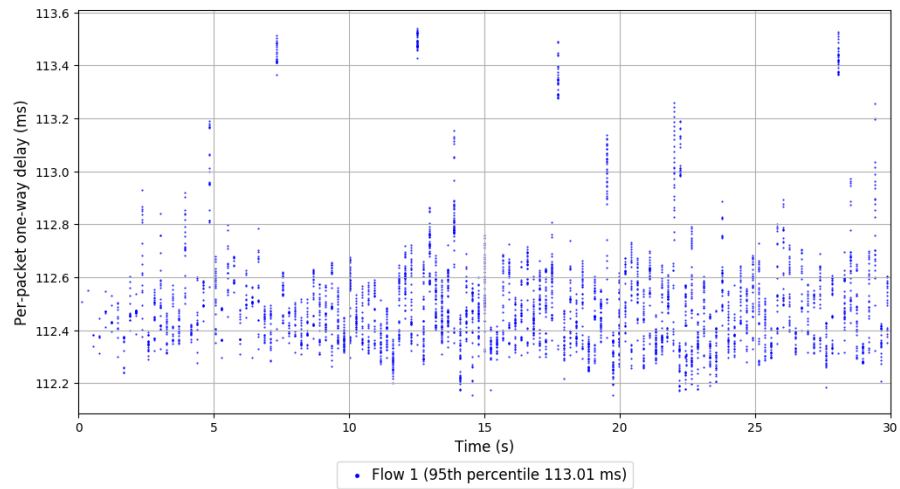
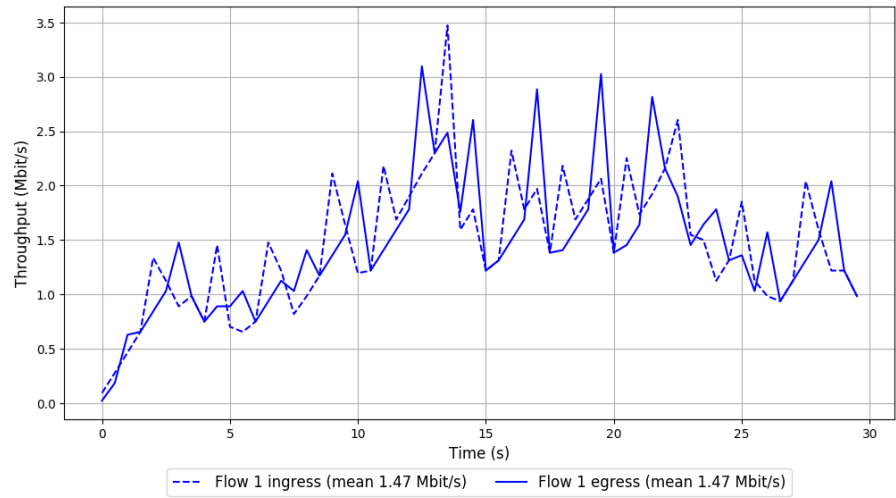
-- Flow 1:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 113.013 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-11 08:20:27

End at: 2017-08-11 08:20:57

Below is generated by plot.py at 2017-08-11 10:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 112.530 ms

Loss rate: 3.49%

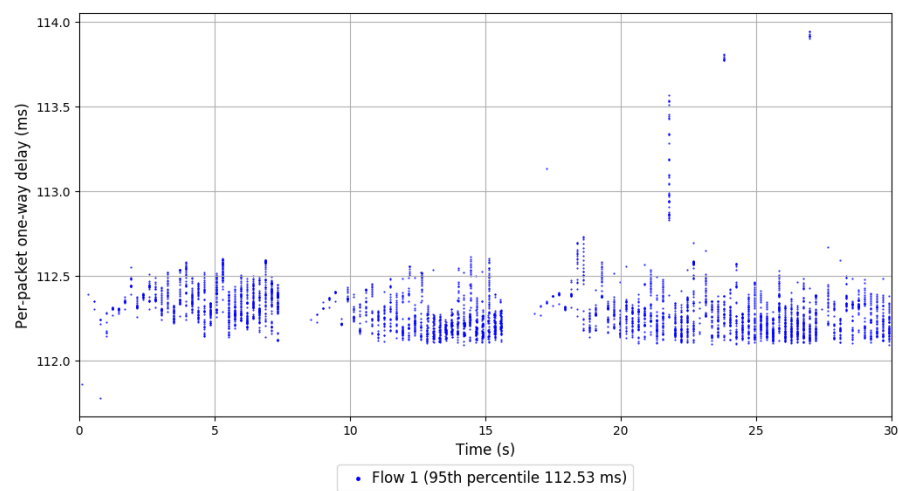
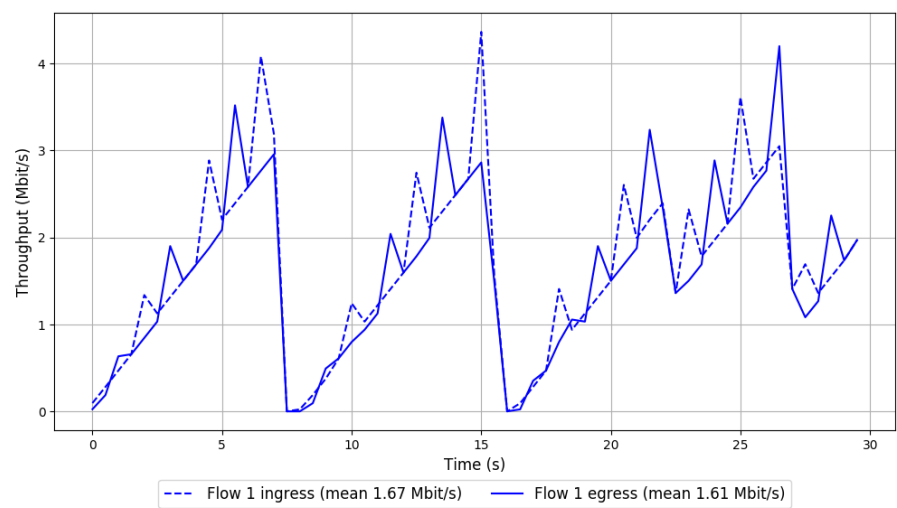
-- Flow 1:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 112.530 ms

Loss rate: 3.49%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-11 08:31:27

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

Below is generated by plot.py at 2017-08-11 10:17:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 112.667 ms

Loss rate: 3.24%

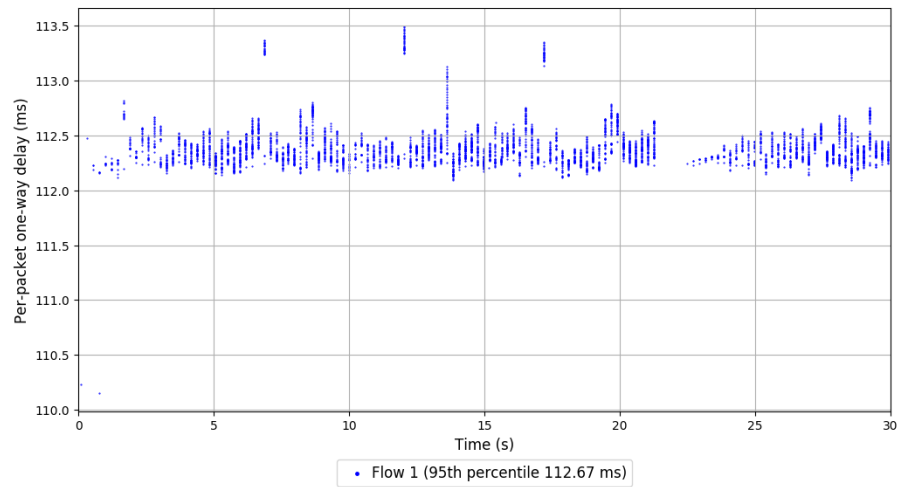
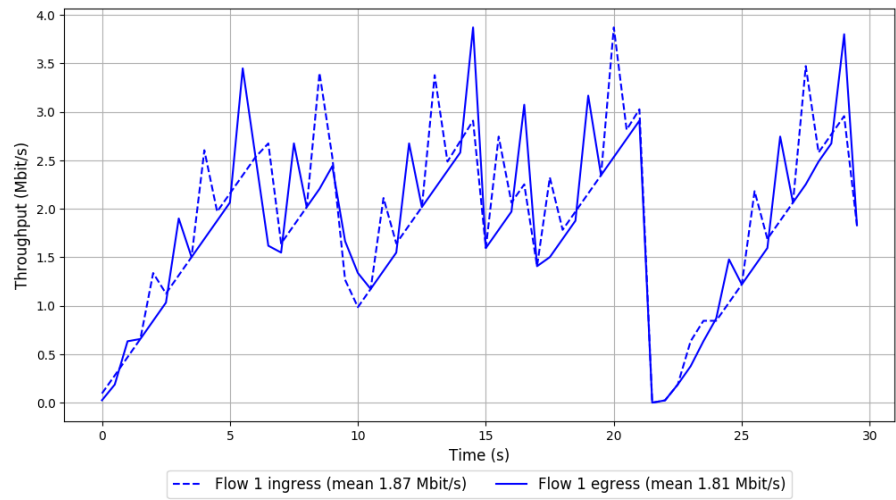
-- Flow 1:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 112.667 ms

Loss rate: 3.24%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-11 08:42:44

End at: 2017-08-11 08:43:14

Below is generated by plot.py at 2017-08-11 10:17:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 112.804 ms

Loss rate: 4.28%

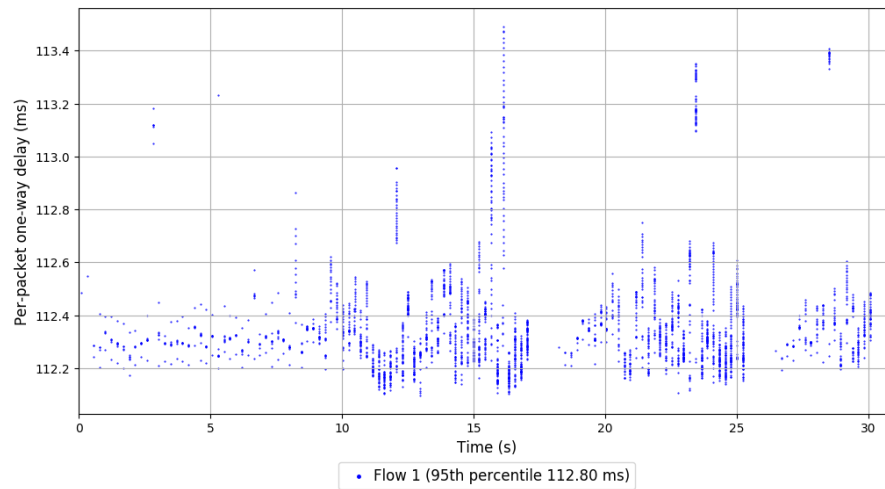
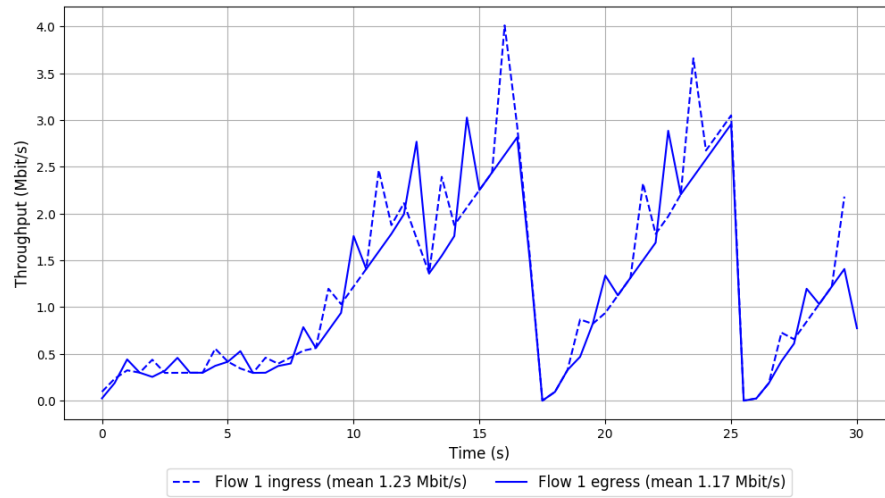
-- Flow 1:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 112.804 ms

Loss rate: 4.28%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

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

End at: 2017-08-11 08:54:14

Below is generated by plot.py at 2017-08-11 10:17:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.64 Mbit/s

95th percentile per-packet one-way delay: 112.422 ms

Loss rate: 0.51%

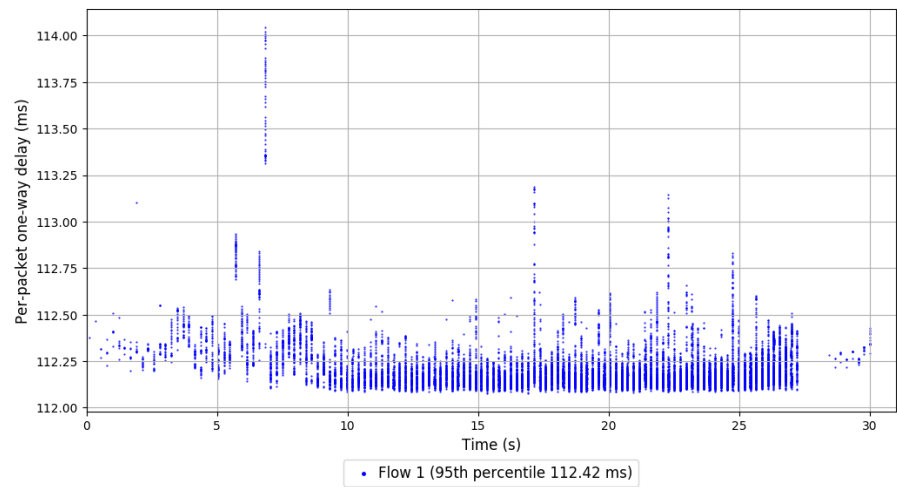
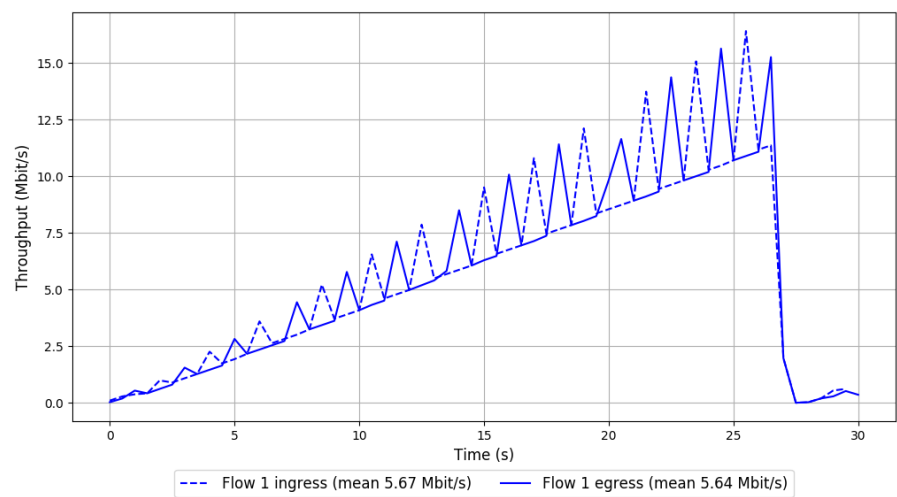
-- Flow 1:

Average throughput: 5.64 Mbit/s

95th percentile per-packet one-way delay: 112.422 ms

Loss rate: 0.51%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-11 09:05:24

End at: 2017-08-11 09:05:54

Below is generated by plot.py at 2017-08-11 10:17:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.45 Mbit/s

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

Loss rate: 2.36%

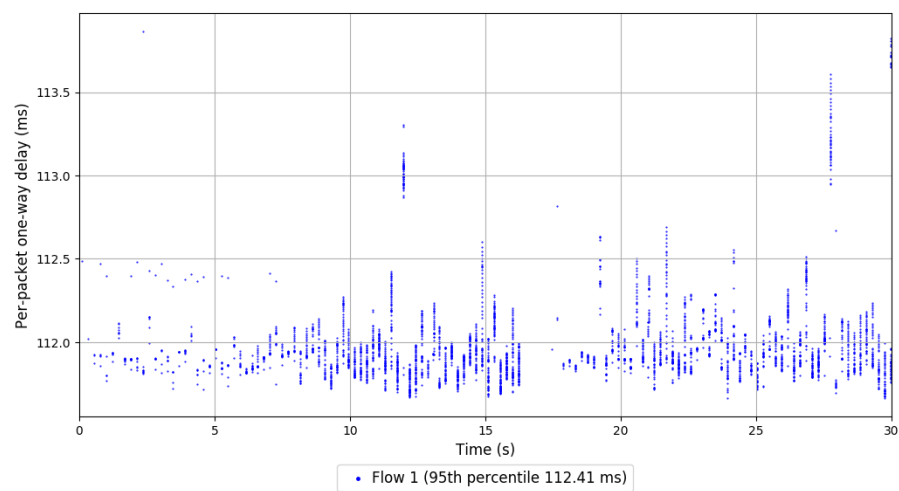
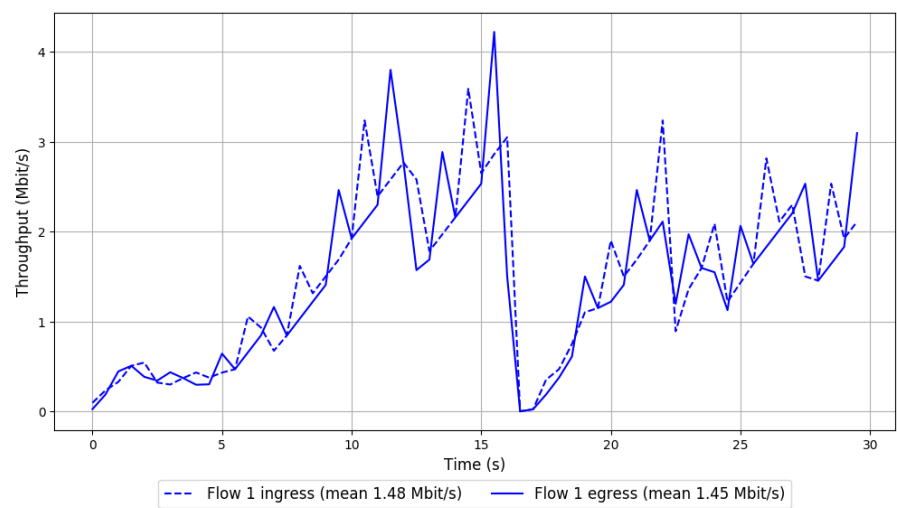
-- Flow 1:

Average throughput: 1.45 Mbit/s

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

Loss rate: 2.36%

Run 9: Report of LEDBAT — Data Link

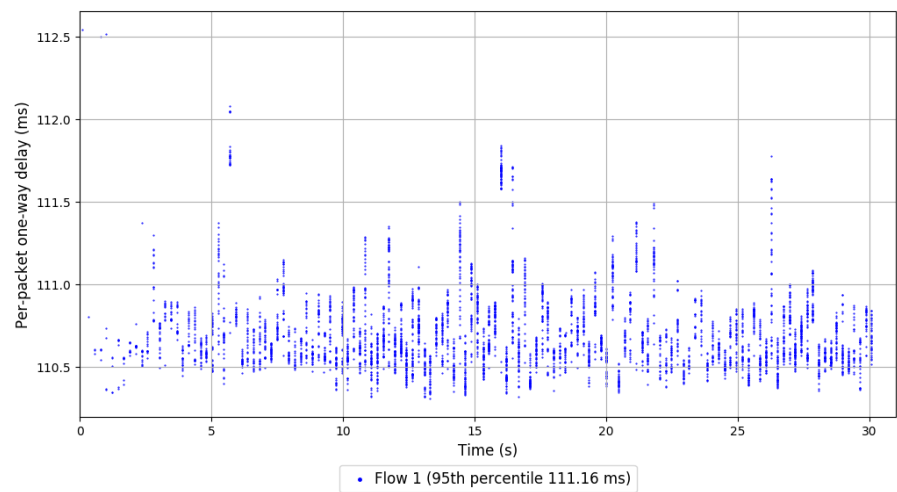
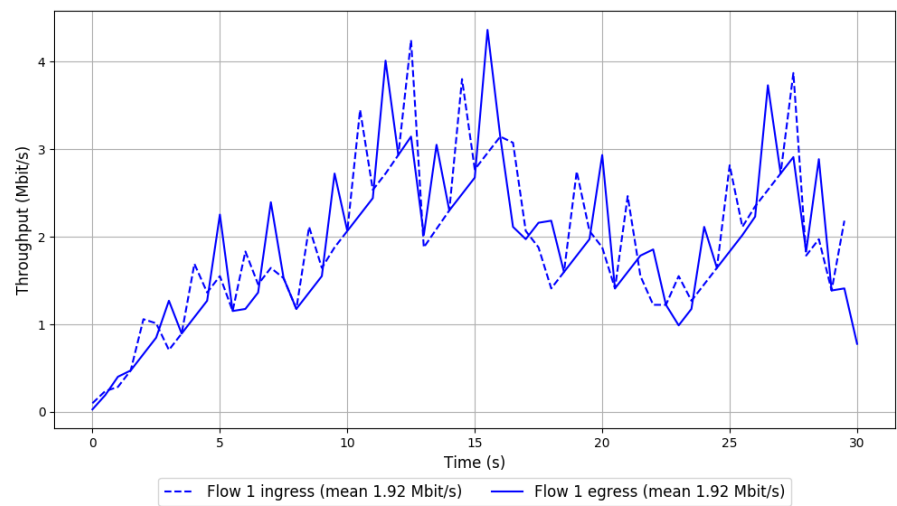


```
Run 10: Statistics of LEDBAT

Start at: 2017-08-11 09:16:25
End at: 2017-08-11 09:16:55

# Below is generated by plot.py at 2017-08-11 10:17:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 111.164 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 111.164 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

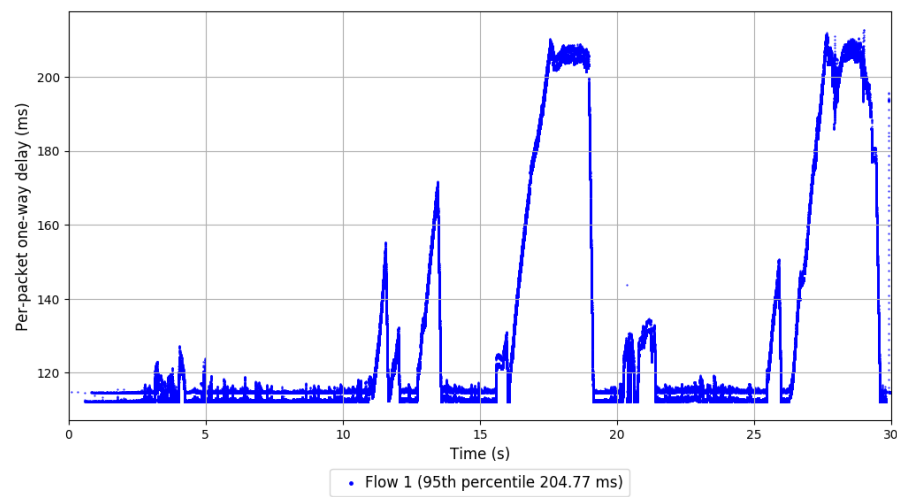
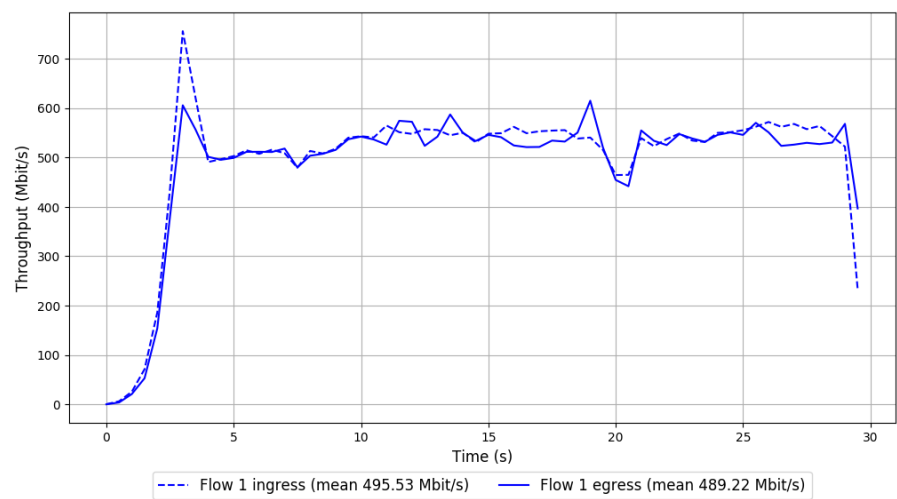


```
Run 1: Statistics of PCC

Start at: 2017-08-11 07:32:03
End at: 2017-08-11 07:32:33

# Below is generated by plot.py at 2017-08-11 10:18:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 489.22 Mbit/s
95th percentile per-packet one-way delay: 204.766 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 489.22 Mbit/s
95th percentile per-packet one-way delay: 204.766 ms
Loss rate: 1.29%
```


Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-11 07:43:36

End at: 2017-08-11 07:44:06

Below is generated by plot.py at 2017-08-11 10:18:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 482.40 Mbit/s

95th percentile per-packet one-way delay: 116.306 ms

Loss rate: 0.88%

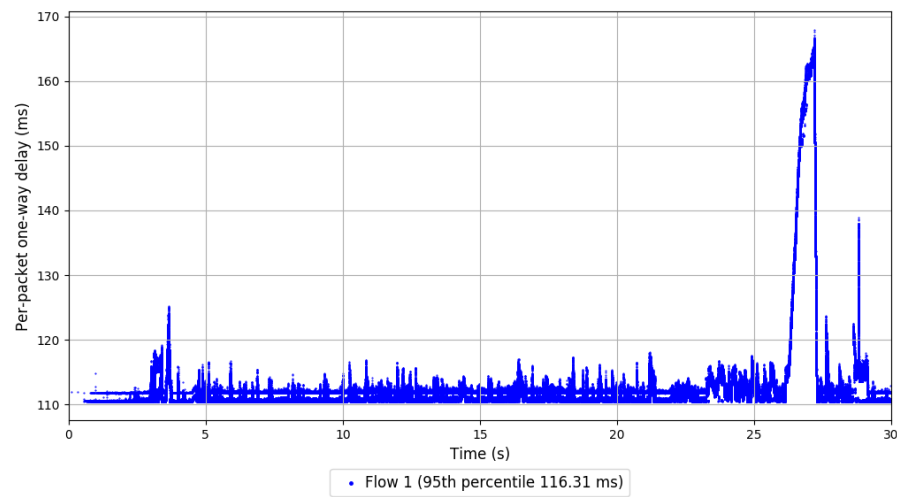
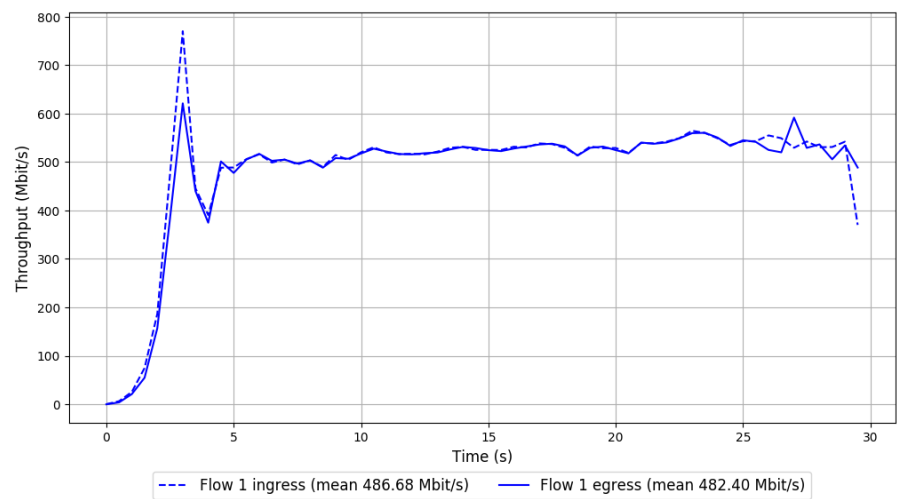
-- Flow 1:

Average throughput: 482.40 Mbit/s

95th percentile per-packet one-way delay: 116.306 ms

Loss rate: 0.88%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-11 07:55:15

End at: 2017-08-11 07:55:45

Below is generated by plot.py at 2017-08-11 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 497.04 Mbit/s

95th percentile per-packet one-way delay: 192.646 ms

Loss rate: 1.07%

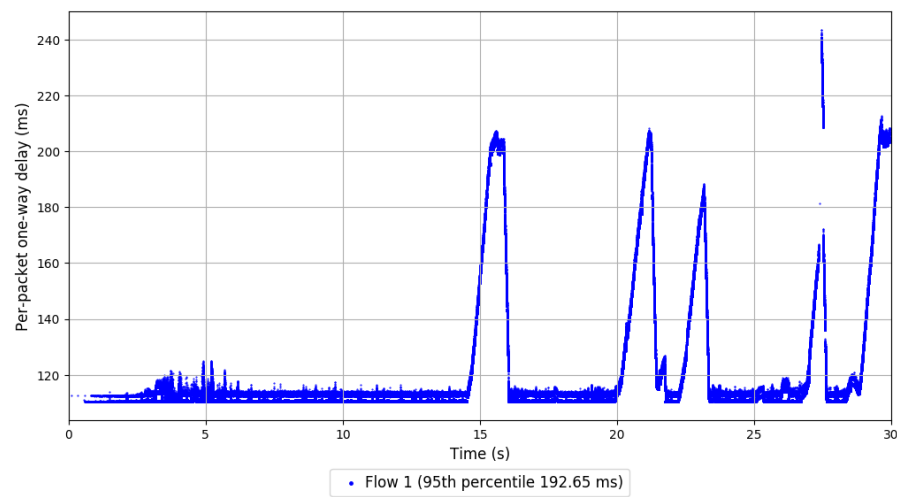
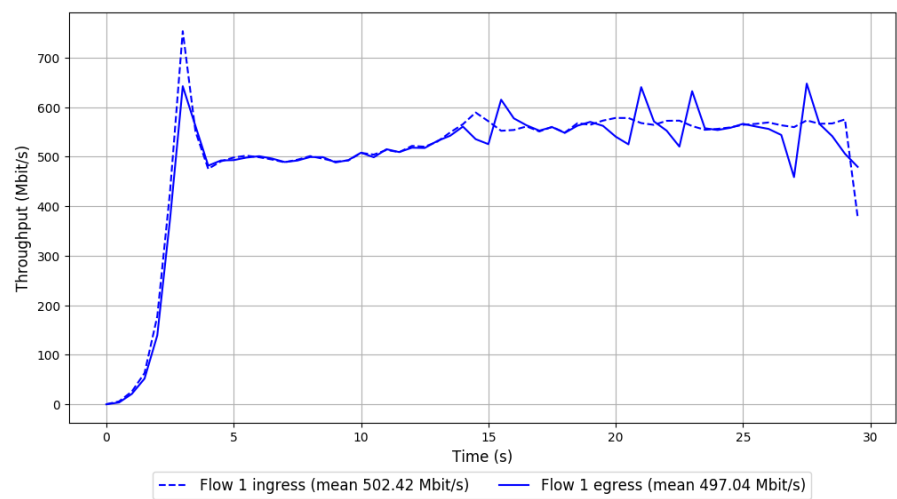
-- Flow 1:

Average throughput: 497.04 Mbit/s

95th percentile per-packet one-way delay: 192.646 ms

Loss rate: 1.07%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

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

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

Below is generated by plot.py at 2017-08-11 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.64 Mbit/s

95th percentile per-packet one-way delay: 112.225 ms

Loss rate: 9.02%

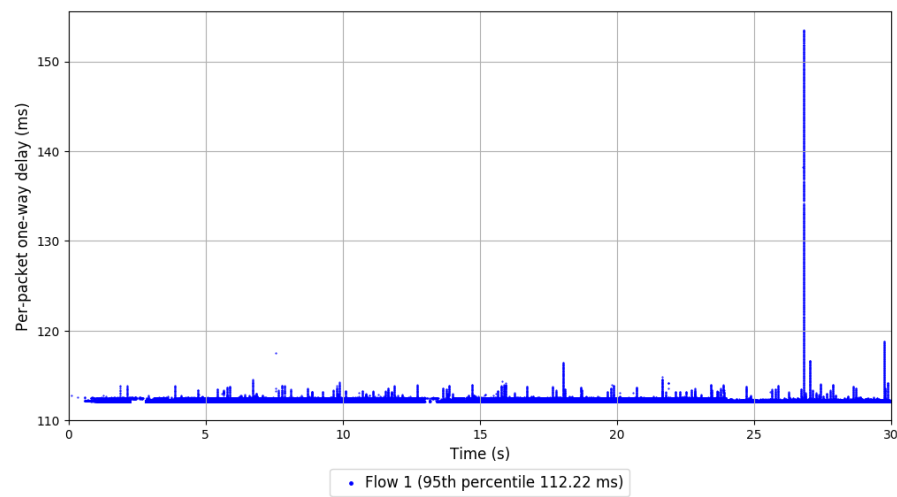
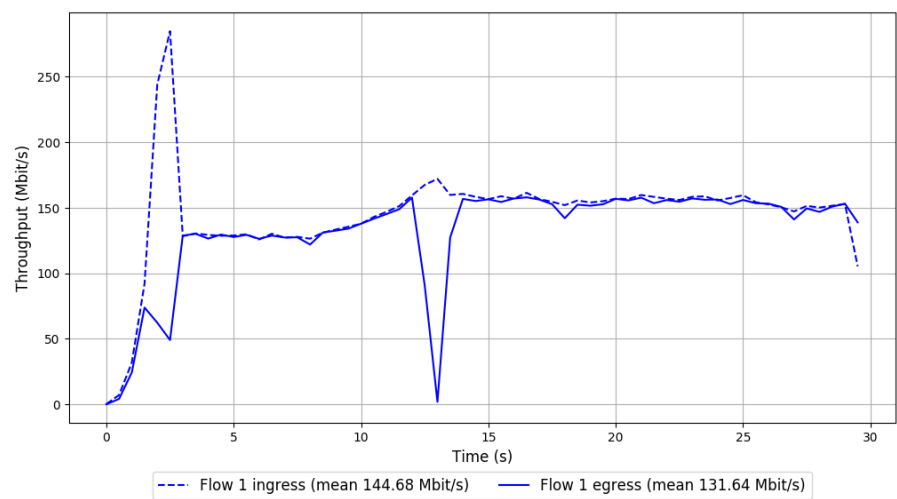
-- Flow 1:

Average throughput: 131.64 Mbit/s

95th percentile per-packet one-way delay: 112.225 ms

Loss rate: 9.02%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

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

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

Below is generated by plot.py at 2017-08-11 10:20:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 133.45 Mbit/s

95th percentile per-packet one-way delay: 112.205 ms

Loss rate: 6.25%

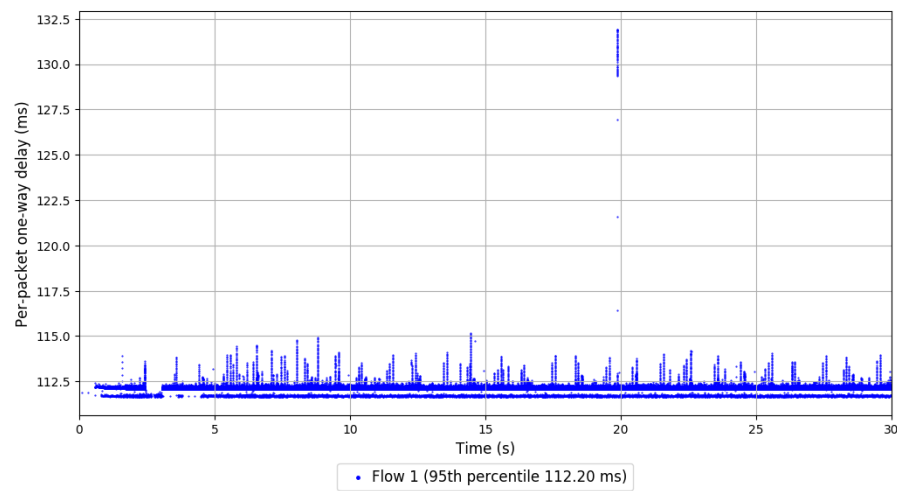
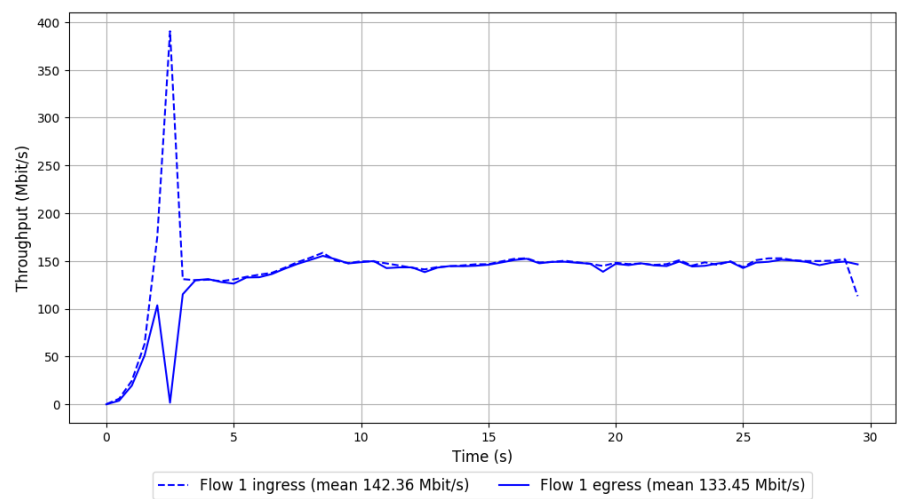
-- Flow 1:

Average throughput: 133.45 Mbit/s

95th percentile per-packet one-way delay: 112.205 ms

Loss rate: 6.25%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-11 08:28:21

End at: 2017-08-11 08:28:51

Below is generated by plot.py at 2017-08-11 10:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 475.18 Mbit/s

95th percentile per-packet one-way delay: 207.461 ms

Loss rate: 0.97%

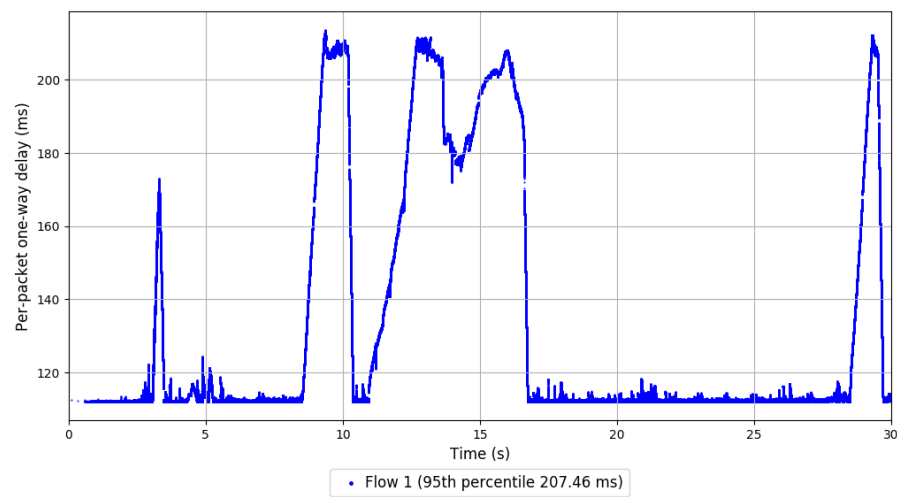
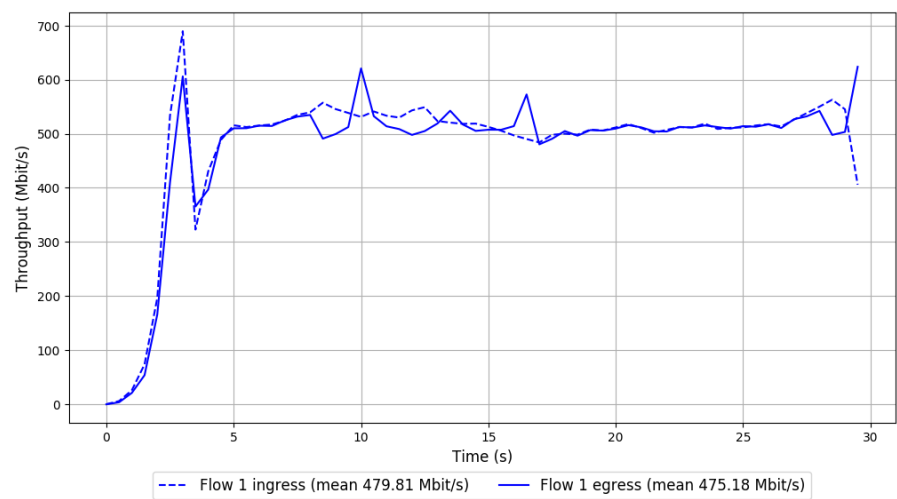
-- Flow 1:

Average throughput: 475.18 Mbit/s

95th percentile per-packet one-way delay: 207.461 ms

Loss rate: 0.97%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-11 08:39:36

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

Below is generated by plot.py at 2017-08-11 10:21:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 473.66 Mbit/s

95th percentile per-packet one-way delay: 160.534 ms

Loss rate: 1.06%

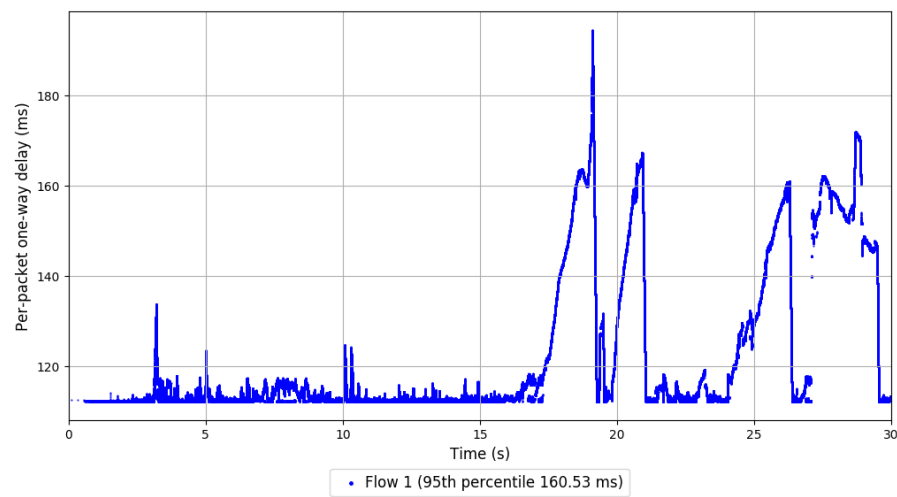
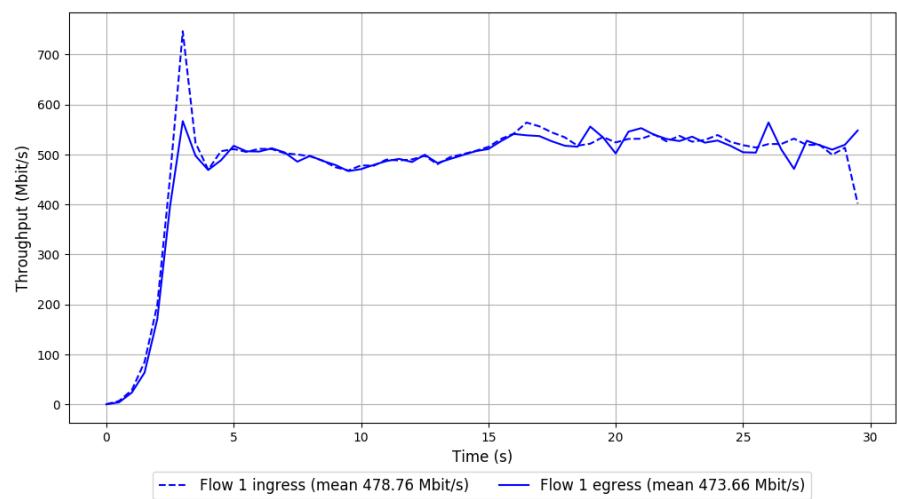
-- Flow 1:

Average throughput: 473.66 Mbit/s

95th percentile per-packet one-way delay: 160.534 ms

Loss rate: 1.06%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-11 08:50:38

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

Below is generated by plot.py at 2017-08-11 10:23:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 487.72 Mbit/s

95th percentile per-packet one-way delay: 165.499 ms

Loss rate: 1.31%

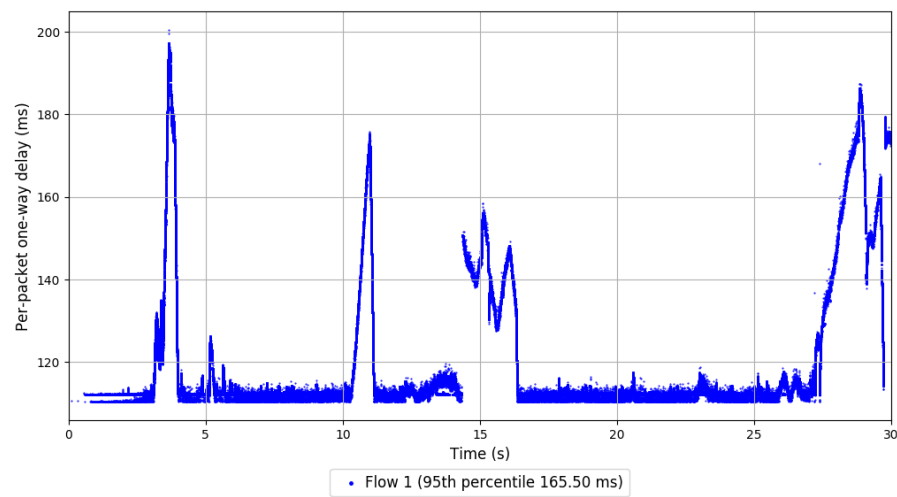
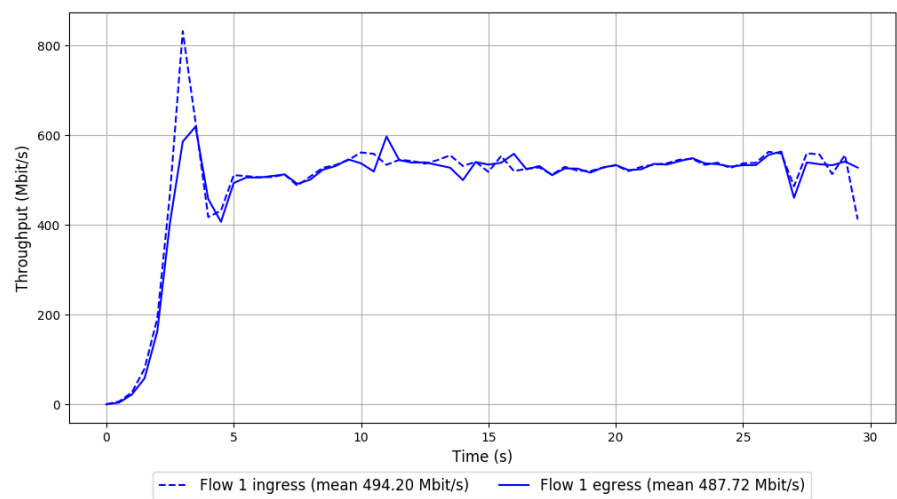
-- Flow 1:

Average throughput: 487.72 Mbit/s

95th percentile per-packet one-way delay: 165.499 ms

Loss rate: 1.31%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-11 09:02:15

End at: 2017-08-11 09:02:45

Below is generated by plot.py at 2017-08-11 10:23:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 483.78 Mbit/s

95th percentile per-packet one-way delay: 116.529 ms

Loss rate: 1.46%

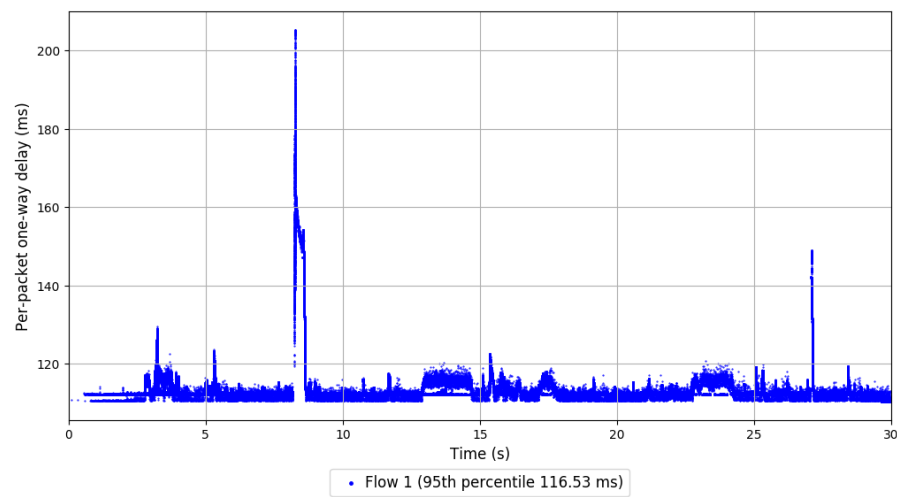
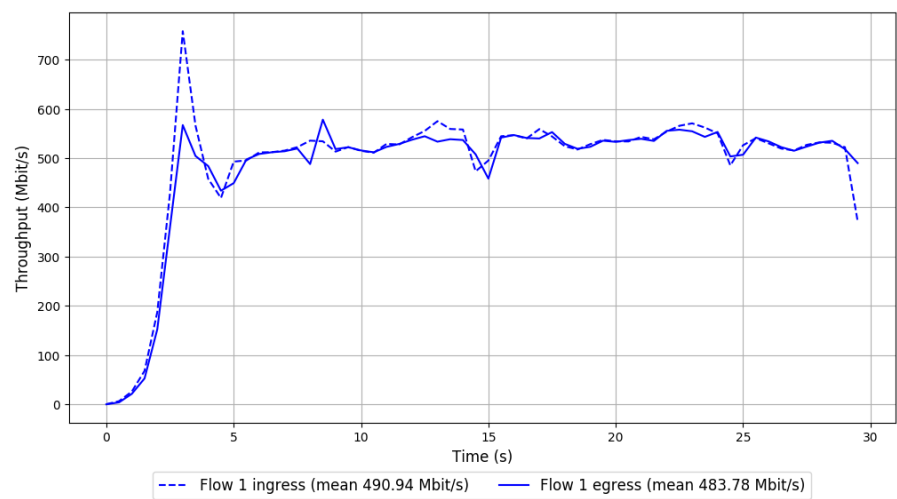
-- Flow 1:

Average throughput: 483.78 Mbit/s

95th percentile per-packet one-way delay: 116.529 ms

Loss rate: 1.46%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-11 09:13:31

End at: 2017-08-11 09:14:01

Below is generated by plot.py at 2017-08-11 10:23:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 155.25 Mbit/s

95th percentile per-packet one-way delay: 111.769 ms

Loss rate: 5.78%

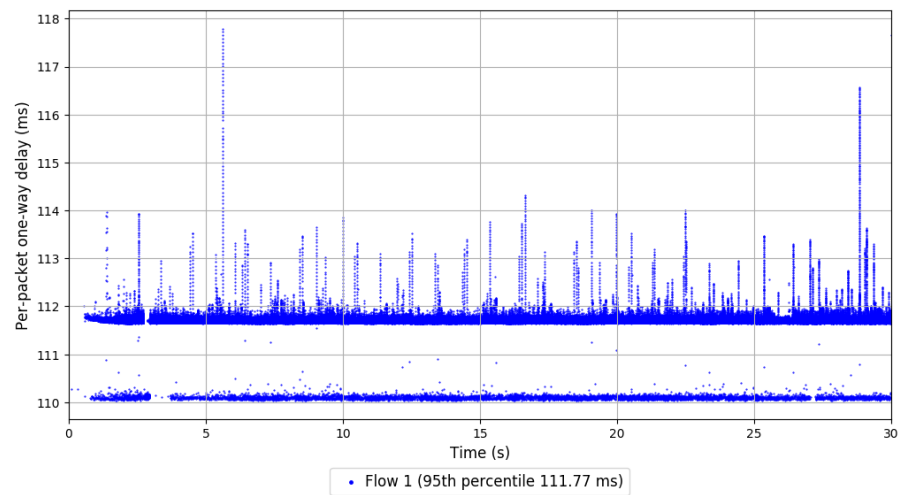
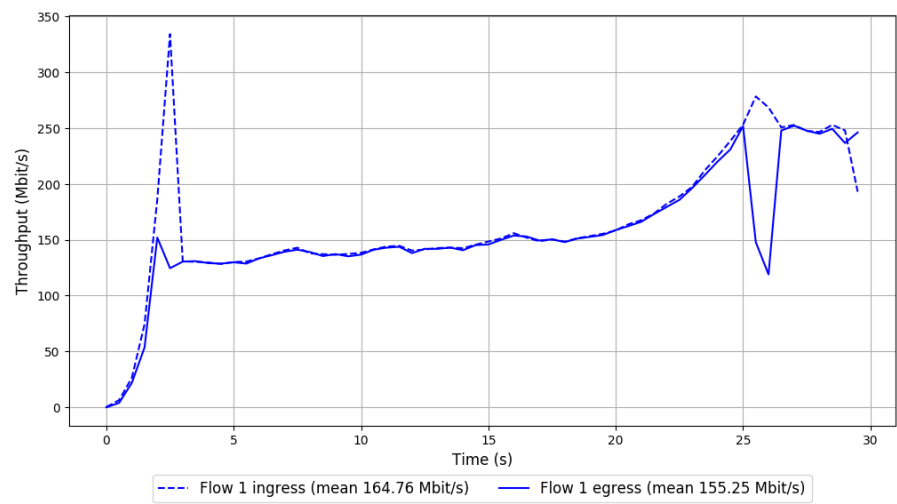
-- Flow 1:

Average throughput: 155.25 Mbit/s

95th percentile per-packet one-way delay: 111.769 ms

Loss rate: 5.78%

Run 10: Report of PCC — Data Link

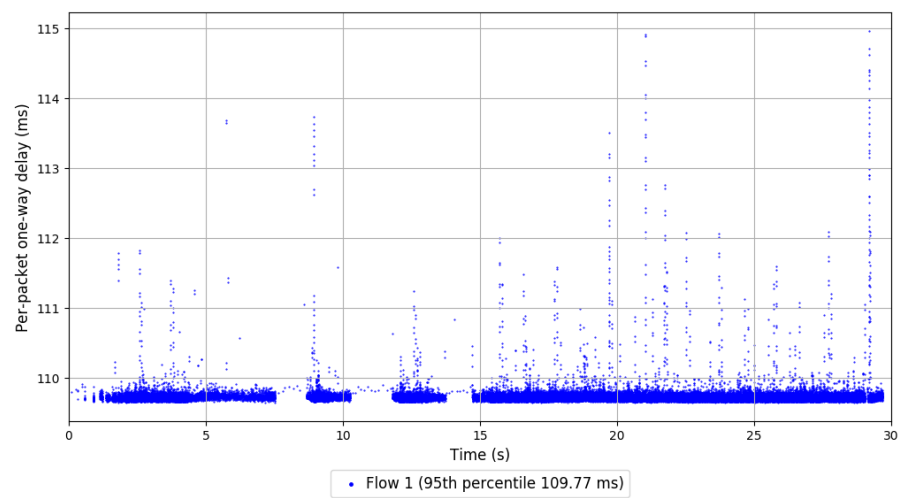
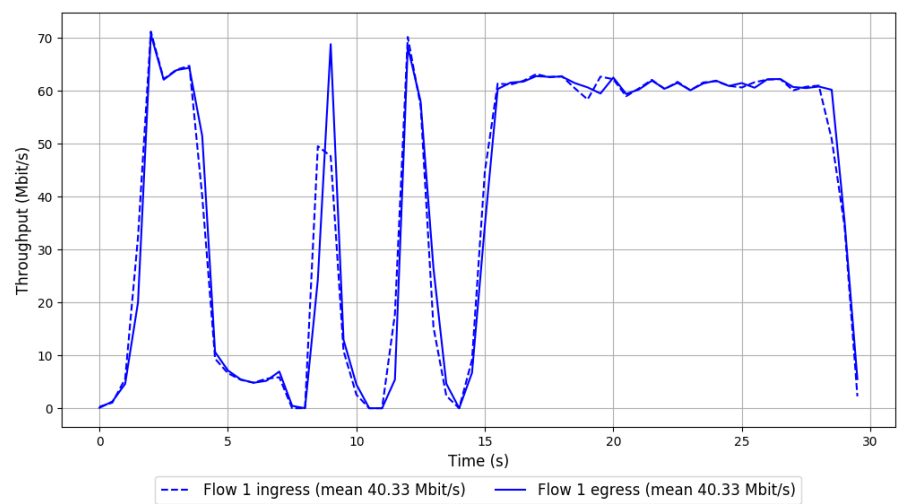


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-11 07:33:46
End at: 2017-08-11 07:34:16

# Below is generated by plot.py at 2017-08-11 10:23:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.33 Mbit/s
95th percentile per-packet one-way delay: 109.770 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.33 Mbit/s
95th percentile per-packet one-way delay: 109.770 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-11 07:45:22

End at: 2017-08-11 07:45:52

Below is generated by plot.py at 2017-08-11 10:23:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.64 Mbit/s

95th percentile per-packet one-way delay: 110.666 ms

Loss rate: 0.00%

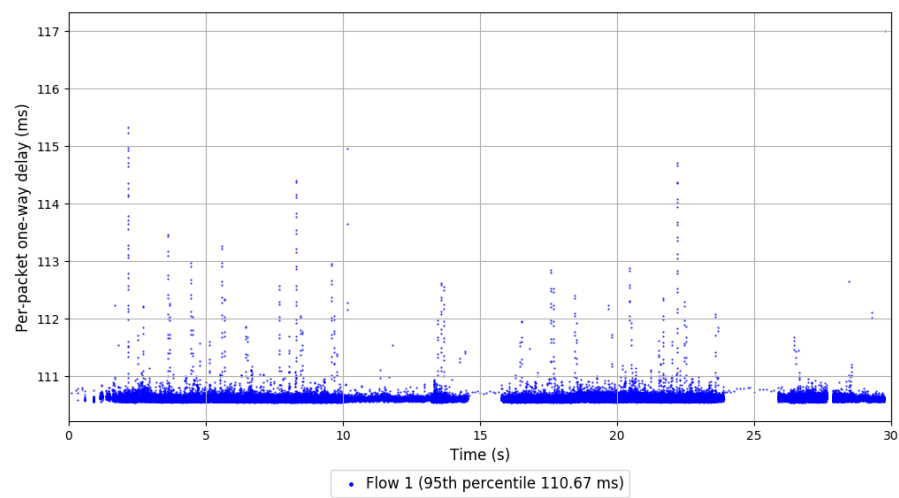
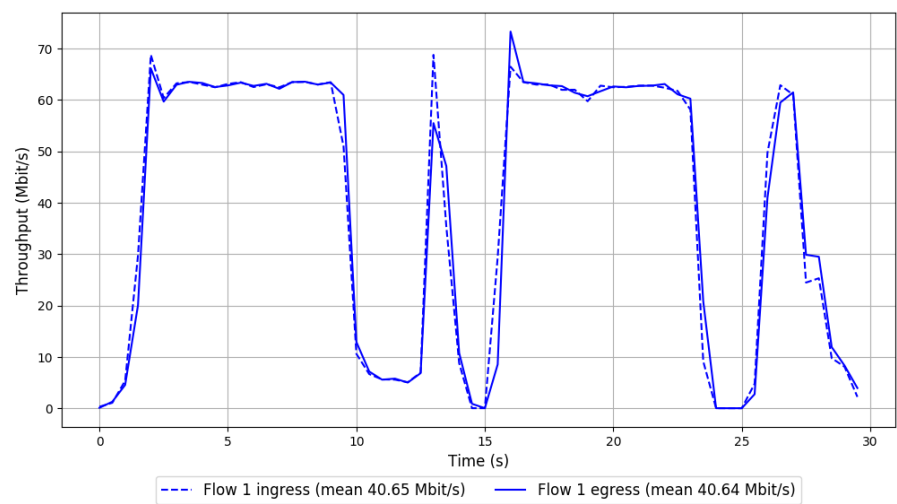
-- Flow 1:

Average throughput: 40.64 Mbit/s

95th percentile per-packet one-way delay: 110.666 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link

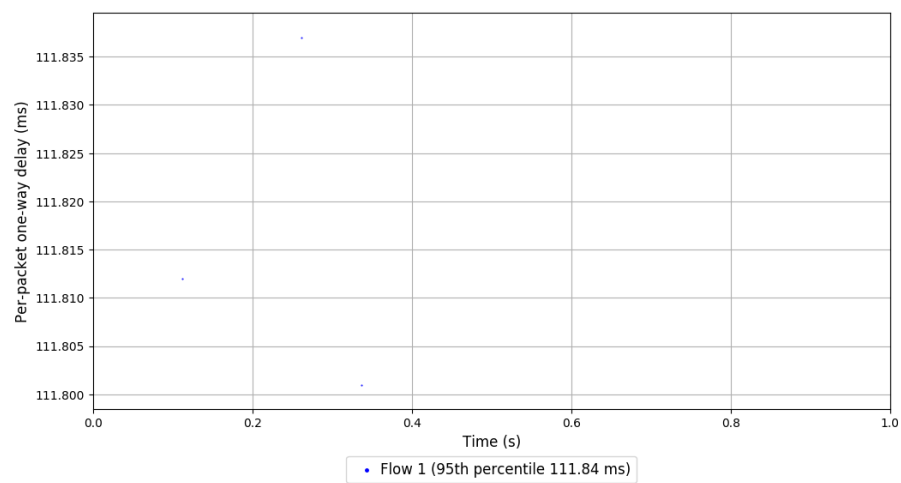
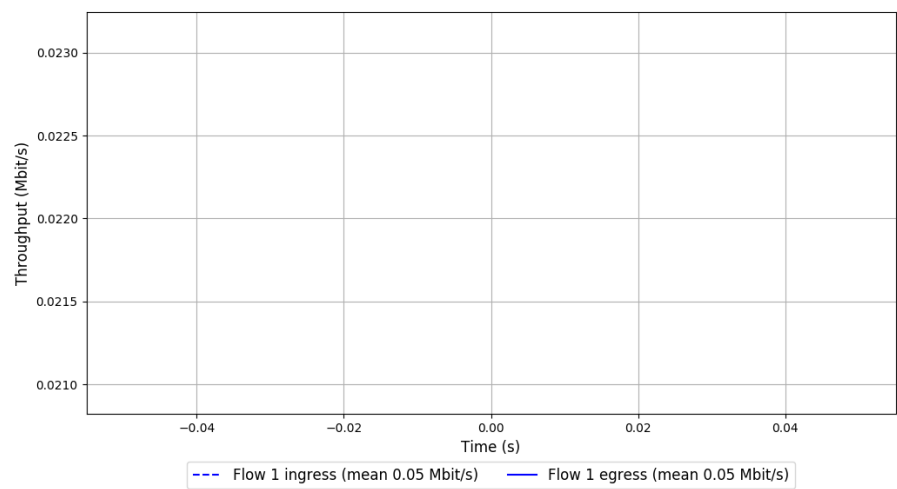


Run 3: Statistics of QUIC Cubic

Start at: 2017-08-11 07:57:01

End at: 2017-08-11 07:57:31

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-11 08:07:59

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

Below is generated by plot.py at 2017-08-11 10:23:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.58 Mbit/s

95th percentile per-packet one-way delay: 112.414 ms

Loss rate: 0.00%

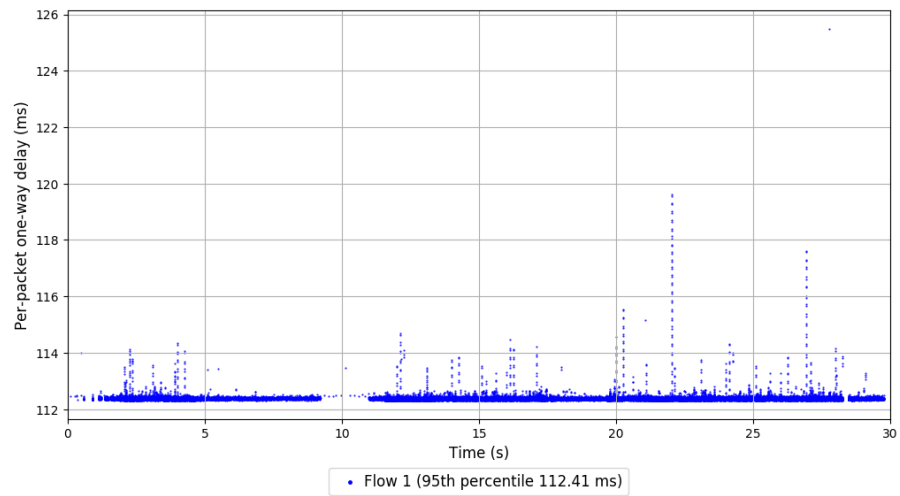
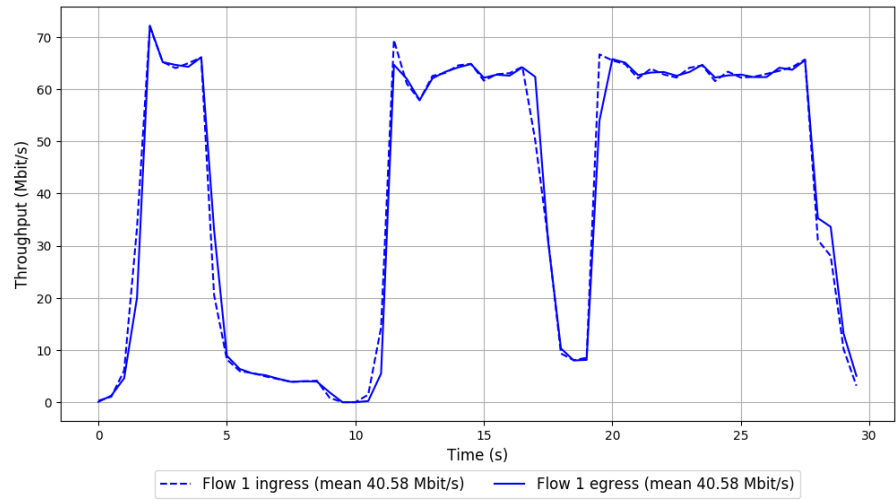
-- Flow 1:

Average throughput: 40.58 Mbit/s

95th percentile per-packet one-way delay: 112.414 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-11 08:19:02

End at: 2017-08-11 08:19:32

Below is generated by plot.py at 2017-08-11 10:24:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.80 Mbit/s

95th percentile per-packet one-way delay: 111.750 ms

Loss rate: 0.00%

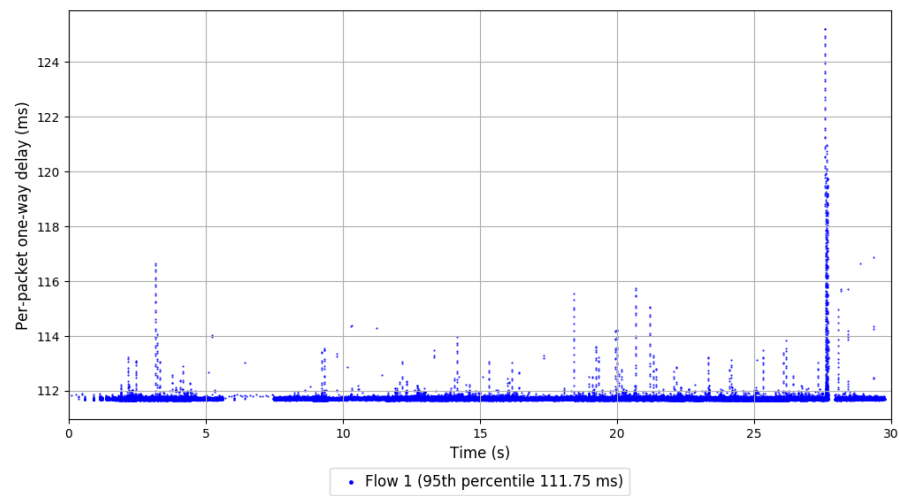
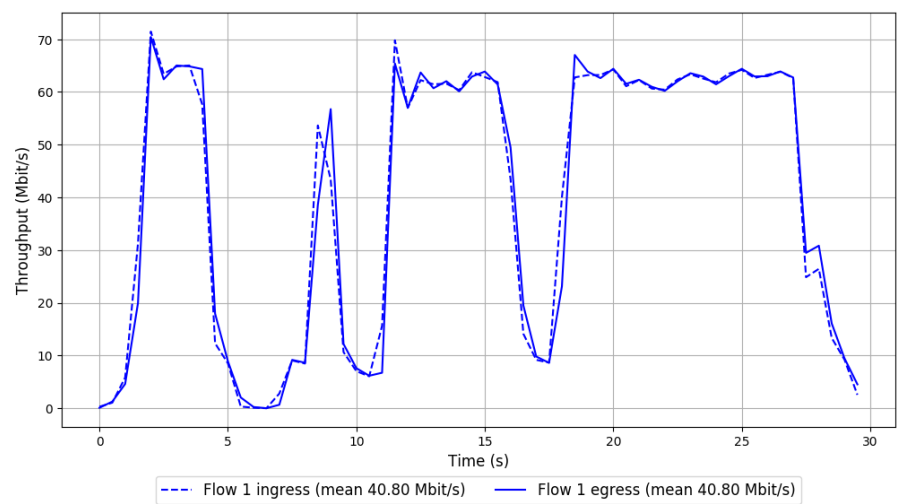
-- Flow 1:

Average throughput: 40.80 Mbit/s

95th percentile per-packet one-way delay: 111.750 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-11 08:30:02

End at: 2017-08-11 08:30:32

Below is generated by plot.py at 2017-08-11 10:24:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.56 Mbit/s

95th percentile per-packet one-way delay: 112.407 ms

Loss rate: 0.00%

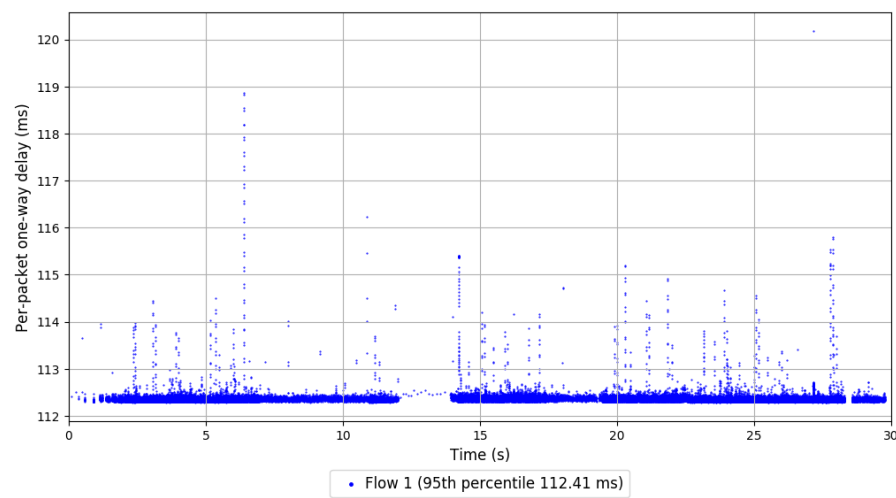
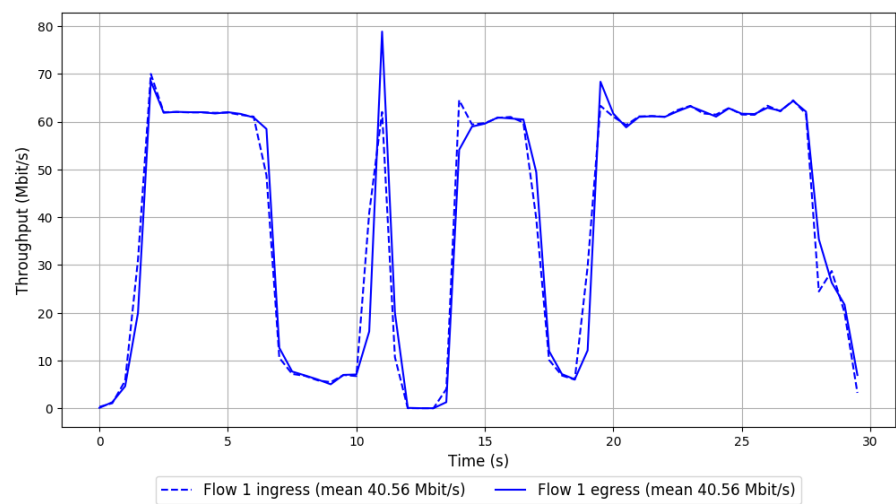
-- Flow 1:

Average throughput: 40.56 Mbit/s

95th percentile per-packet one-way delay: 112.407 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

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

End at: 2017-08-11 08:41:49

Below is generated by plot.py at 2017-08-11 10:24:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.62 Mbit/s

95th percentile per-packet one-way delay: 110.543 ms

Loss rate: 0.00%

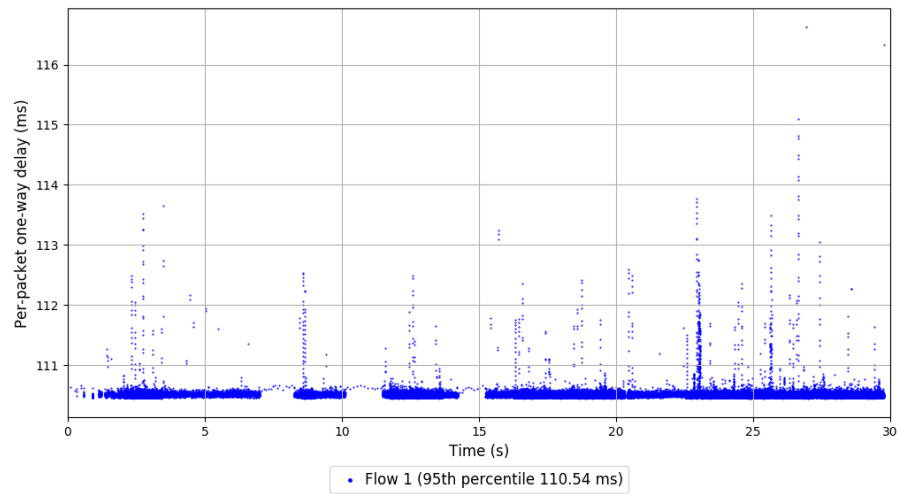
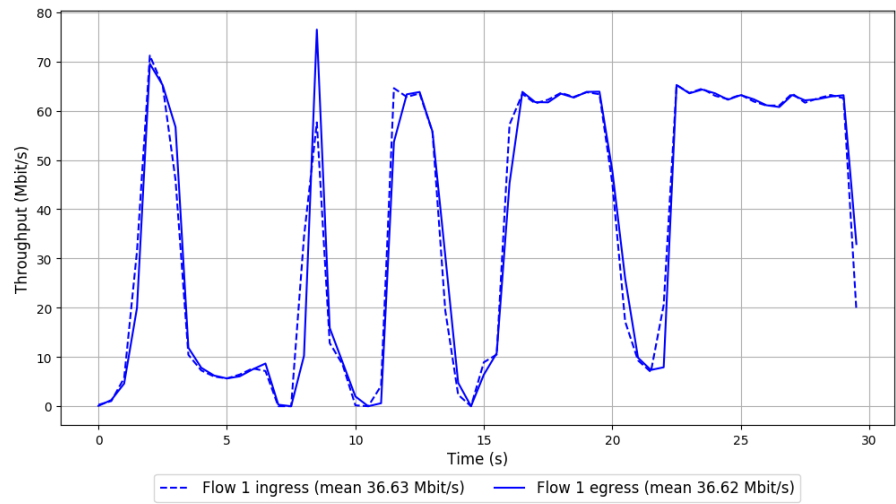
-- Flow 1:

Average throughput: 36.62 Mbit/s

95th percentile per-packet one-way delay: 110.543 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-11 08:52:19

End at: 2017-08-11 08:52:49

Below is generated by plot.py at 2017-08-11 10:24:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.85 Mbit/s

95th percentile per-packet one-way delay: 112.357 ms

Loss rate: 0.00%

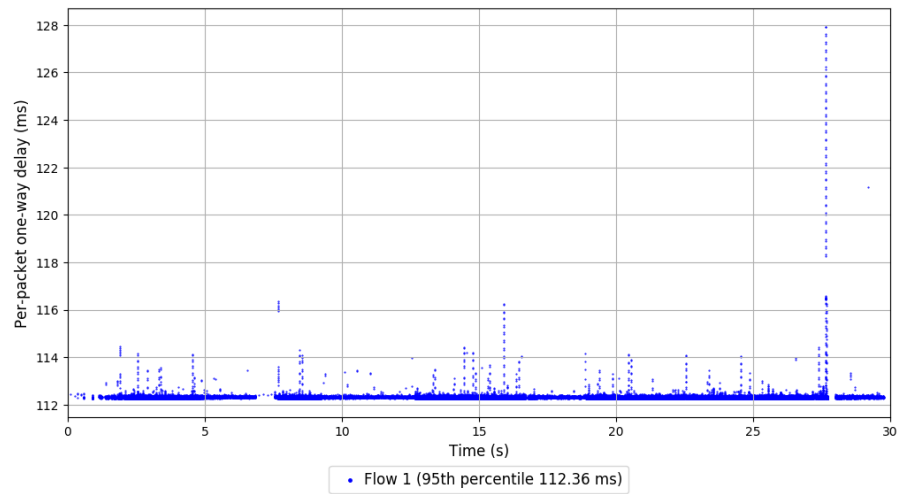
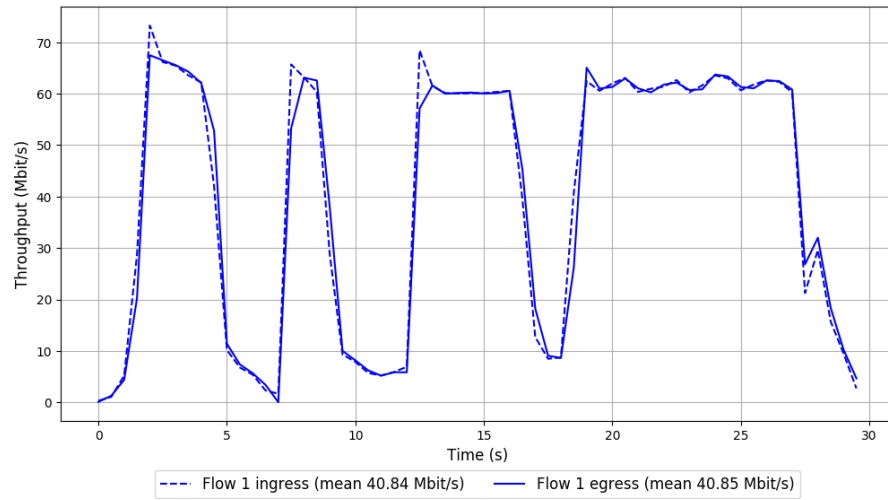
-- Flow 1:

Average throughput: 40.85 Mbit/s

95th percentile per-packet one-way delay: 112.357 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-11 09:03:59

End at: 2017-08-11 09:04:29

Below is generated by plot.py at 2017-08-11 10:24:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.49 Mbit/s

95th percentile per-packet one-way delay: 110.123 ms

Loss rate: 0.00%

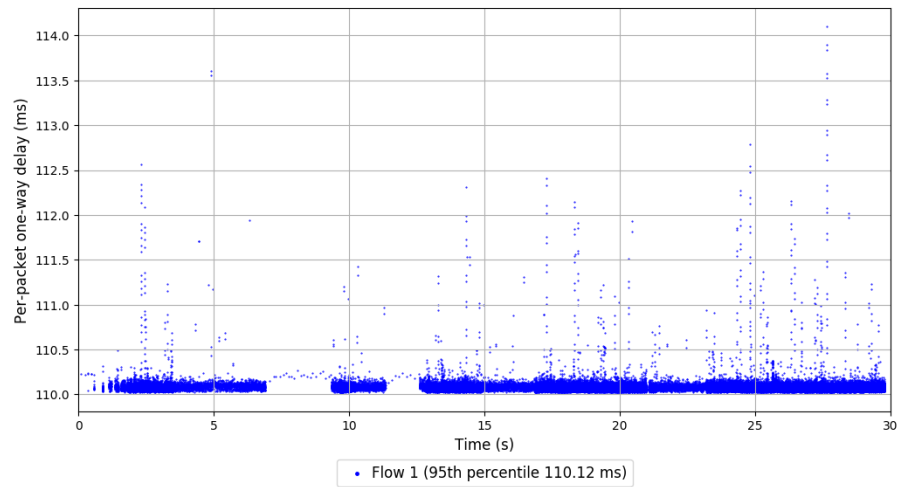
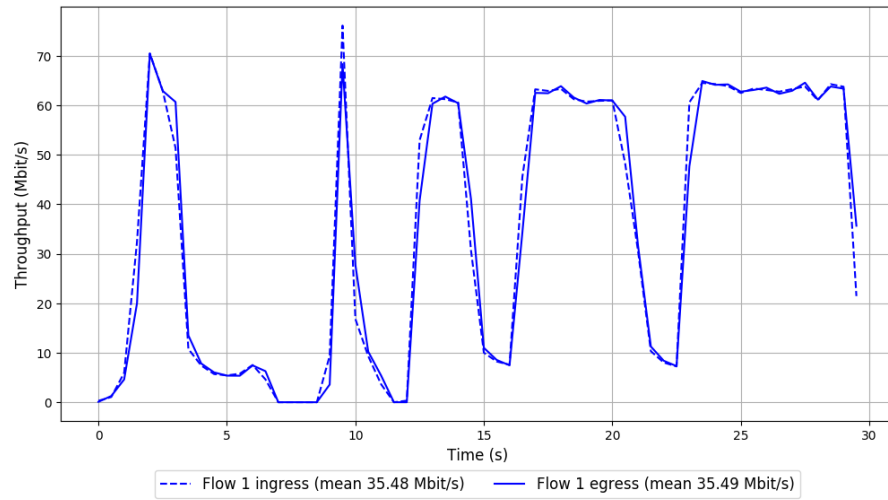
-- Flow 1:

Average throughput: 35.49 Mbit/s

95th percentile per-packet one-way delay: 110.123 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

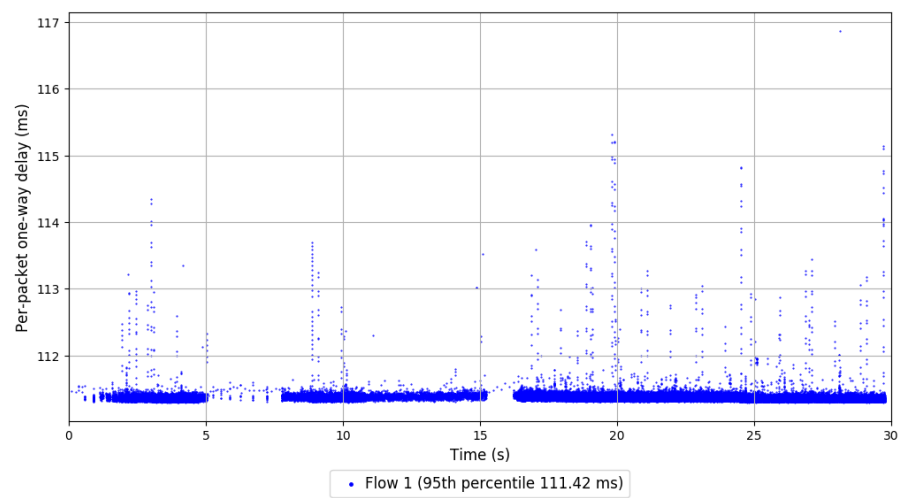
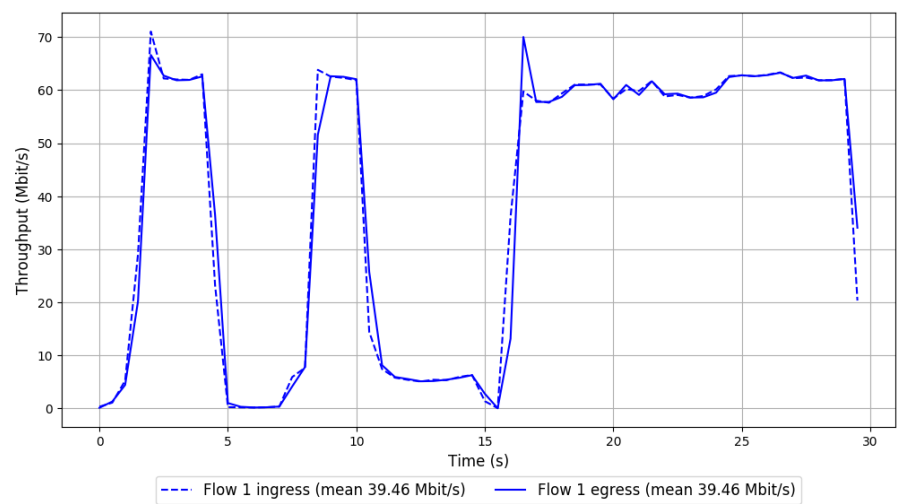


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-11 09:15:00
End at: 2017-08-11 09:15:30

# Below is generated by plot.py at 2017-08-11 10:24:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.46 Mbit/s
95th percentile per-packet one-way delay: 111.422 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.46 Mbit/s
95th percentile per-packet one-way delay: 111.422 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

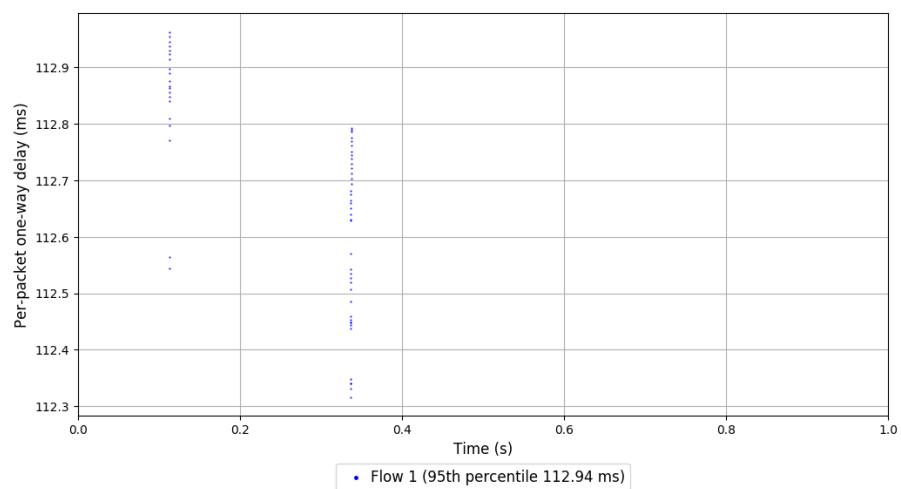
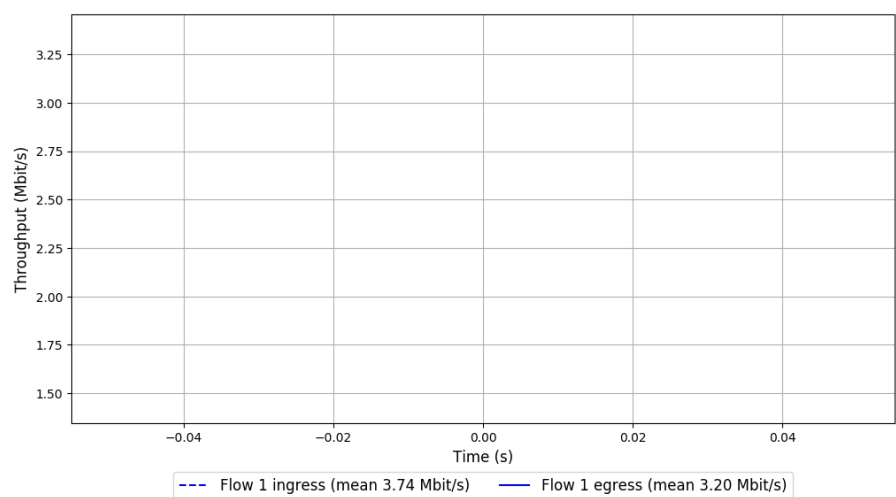


Run 1: Statistics of Saturator

Start at: 2017-08-11 07:26:52

End at: 2017-08-11 07:27:22

Run 1: Report of Saturator — Data Link



Run 2: Statistics of Saturator

Start at: 2017-08-11 07:38:06

End at: 2017-08-11 07:38:36

Below is generated by plot.py at 2017-08-11 10:24:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 111.453 ms

Loss rate: 0.00%

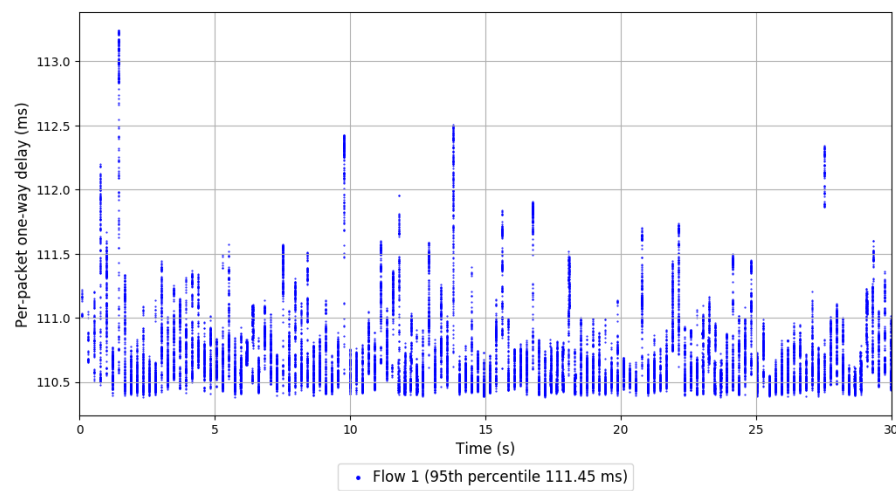
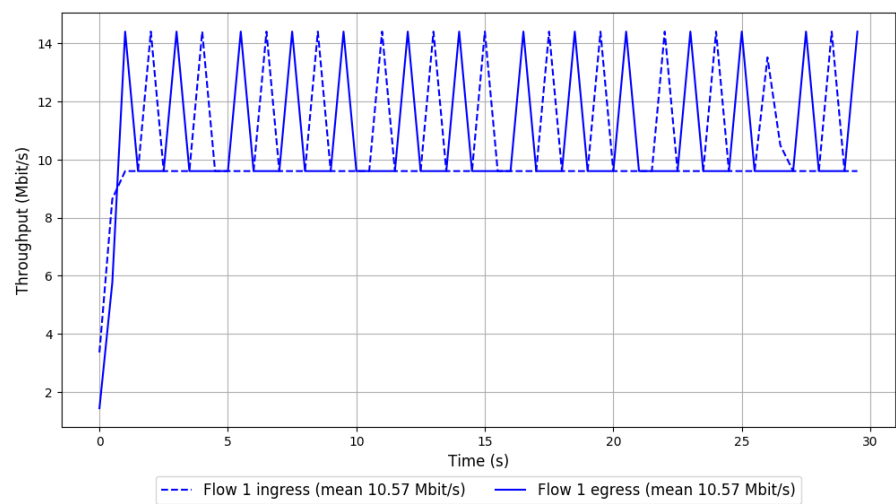
-- Flow 1:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 111.453 ms

Loss rate: 0.00%

Run 2: Report of Saturator — Data Link



Run 3: Statistics of Saturator

Start at: 2017-08-11 07:49:51

End at: 2017-08-11 07:50:21

Below is generated by plot.py at 2017-08-11 10:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 111.582 ms

Loss rate: 0.01%

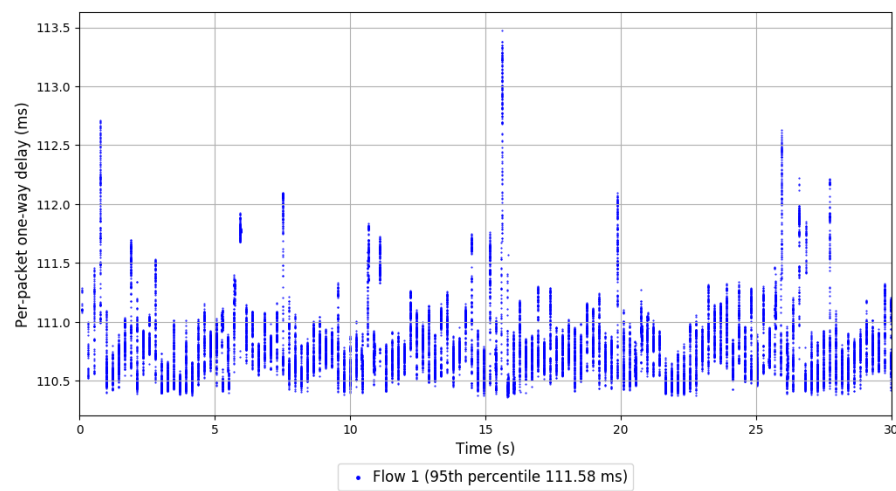
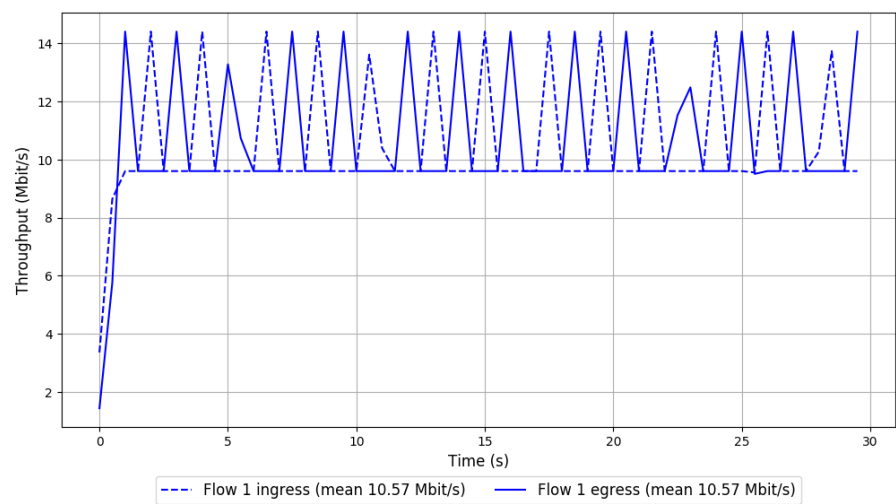
-- Flow 1:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 111.582 ms

Loss rate: 0.01%

Run 3: Report of Saturator — Data Link



Run 4: Statistics of Saturator

Start at: 2017-08-11 08:01:18

End at: 2017-08-11 08:01:48

Below is generated by plot.py at 2017-08-11 10:24:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.71 Mbit/s

95th percentile per-packet one-way delay: 111.735 ms

Loss rate: 0.00%

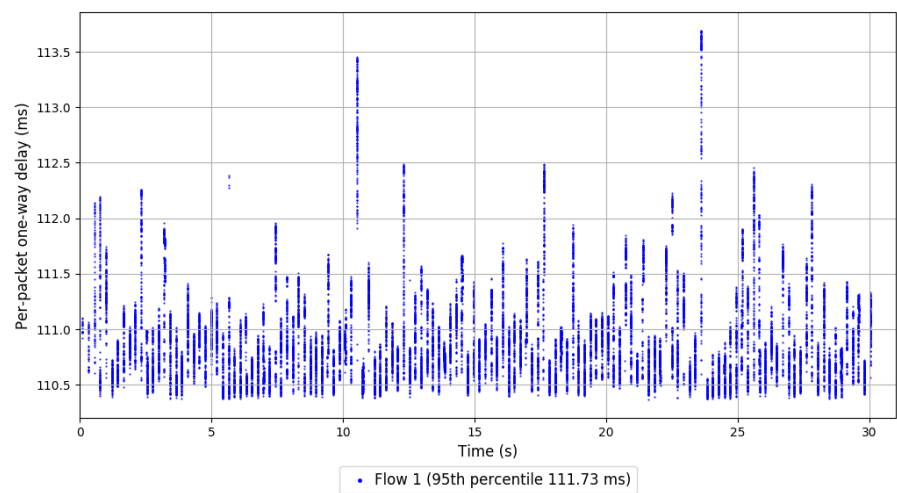
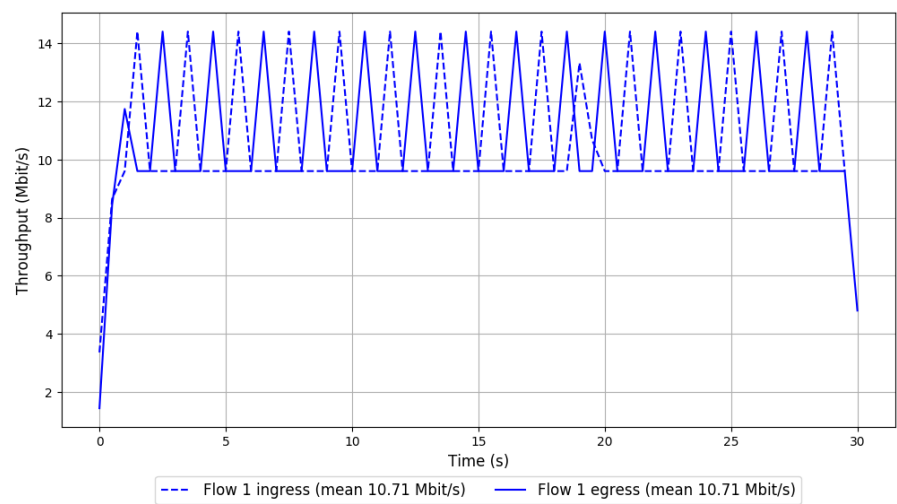
-- Flow 1:

Average throughput: 10.71 Mbit/s

95th percentile per-packet one-way delay: 111.735 ms

Loss rate: 0.00%

Run 4: Report of Saturator — Data Link



Run 5: Statistics of Saturator

Start at: 2017-08-11 08:12:17

End at: 2017-08-11 08:12:47

Below is generated by plot.py at 2017-08-11 10:24:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.53 Mbit/s

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

Loss rate: 0.00%

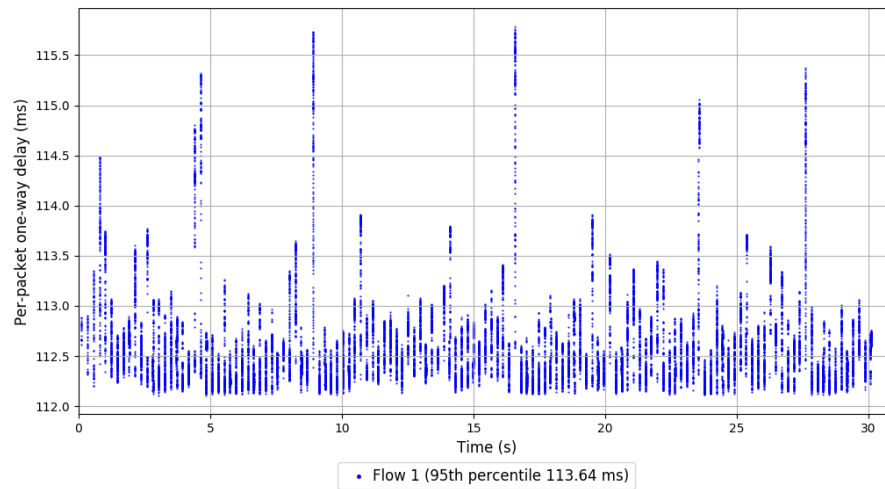
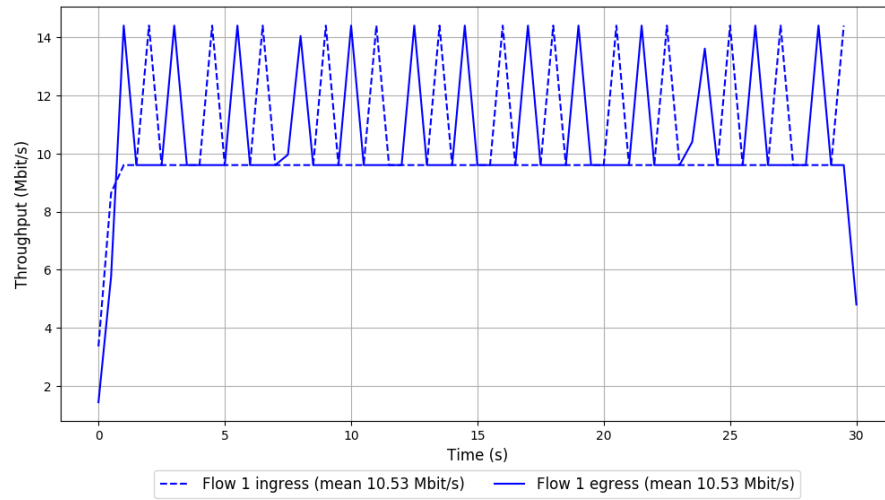
-- Flow 1:

Average throughput: 10.53 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of Saturator — Data Link



Run 6: Statistics of Saturator

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

End at: 2017-08-11 08:23:53

Below is generated by plot.py at 2017-08-11 10:24:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.63 Mbit/s

95th percentile per-packet one-way delay: 113.494 ms

Loss rate: 0.00%

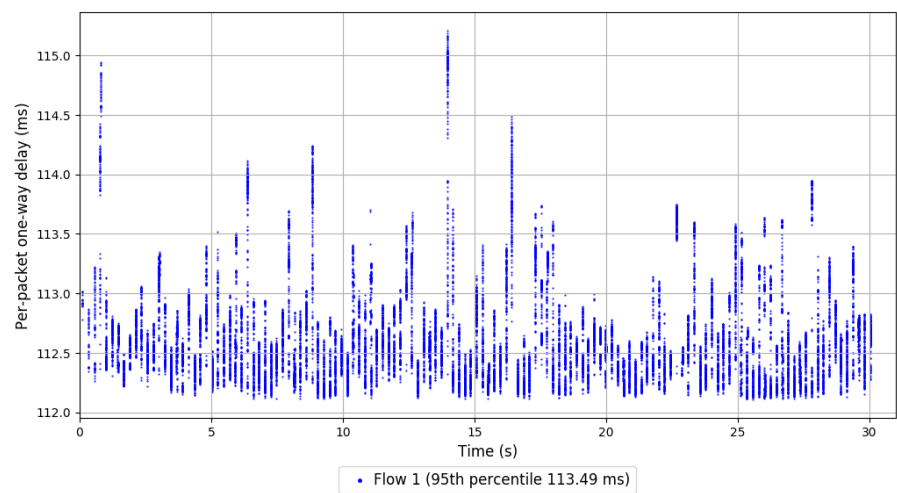
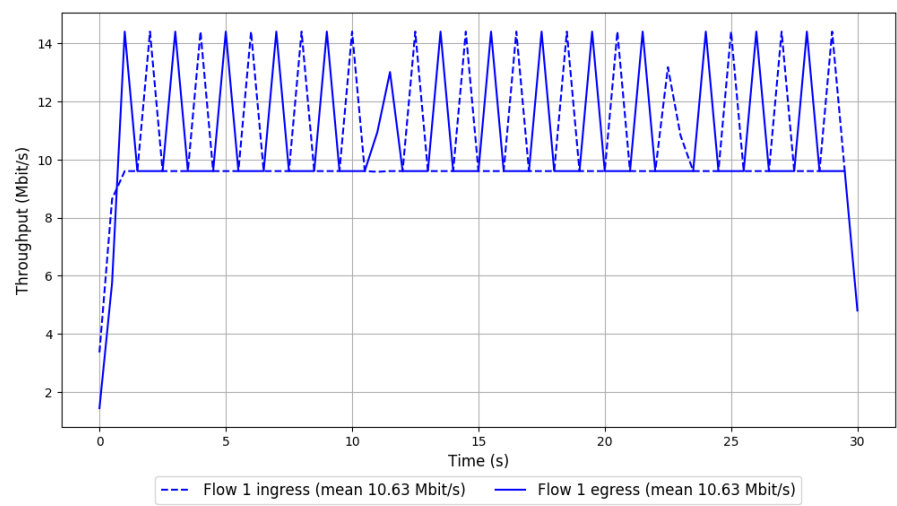
-- Flow 1:

Average throughput: 10.63 Mbit/s

95th percentile per-packet one-way delay: 113.494 ms

Loss rate: 0.00%

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: 2017-08-11 08:34:21

End at: 2017-08-11 08:34:51

Below is generated by plot.py at 2017-08-11 10:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.52 Mbit/s

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

Loss rate: 0.00%

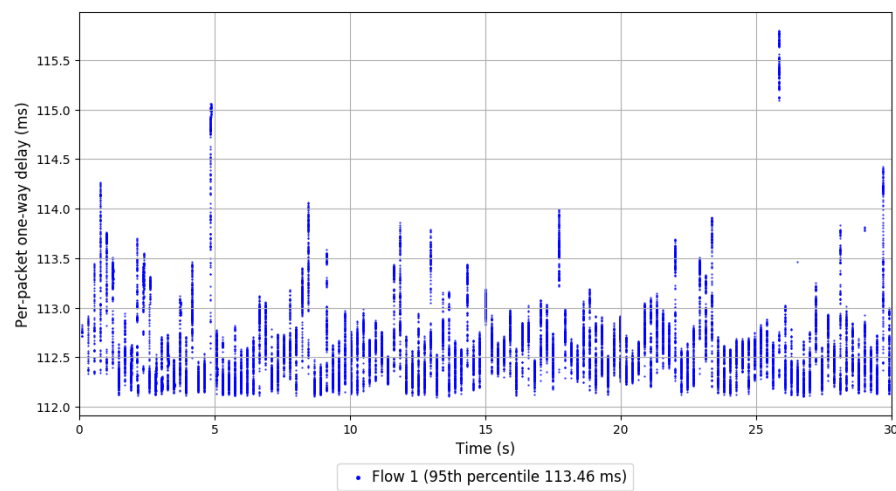
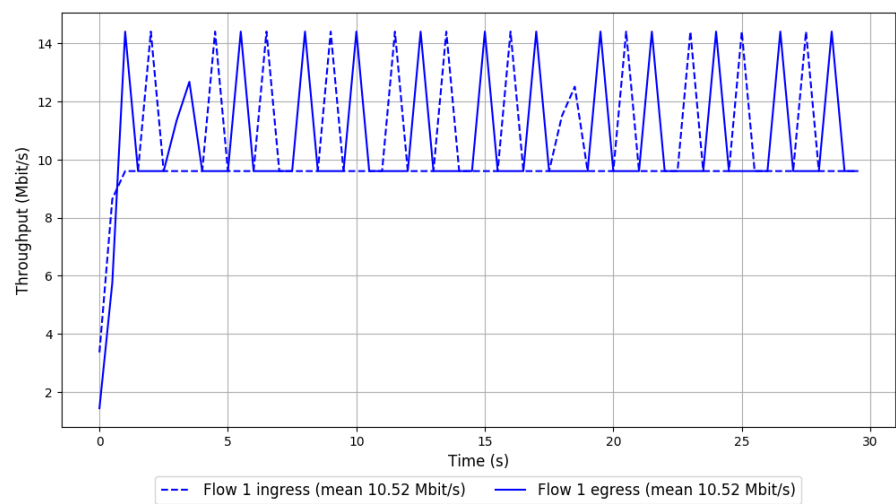
-- Flow 1:

Average throughput: 10.52 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-11 08:45:37

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

Below is generated by plot.py at 2017-08-11 10:24:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.51 Mbit/s

95th percentile per-packet one-way delay: 113.439 ms

Loss rate: 0.01%

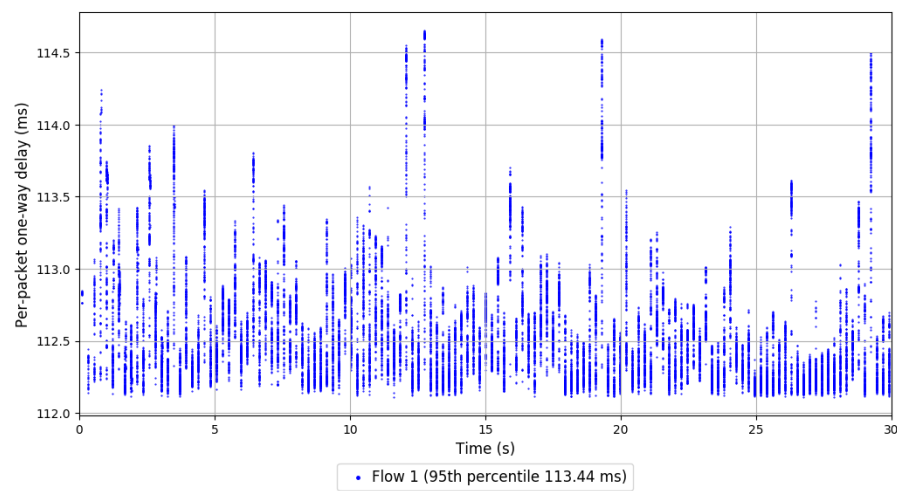
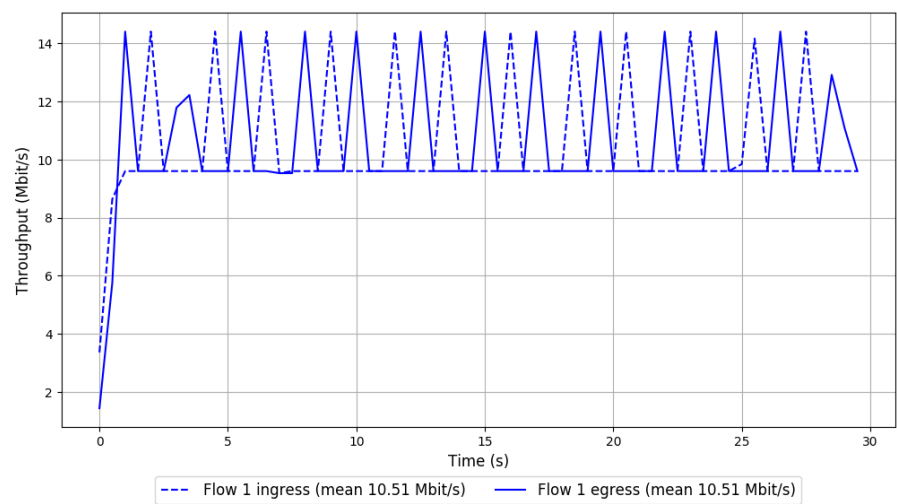
-- Flow 1:

Average throughput: 10.51 Mbit/s

95th percentile per-packet one-way delay: 113.439 ms

Loss rate: 0.01%

Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

Start at: 2017-08-11 08:56:40

End at: 2017-08-11 08:57:10

Below is generated by plot.py at 2017-08-11 10:24:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 113.312 ms

Loss rate: 0.01%

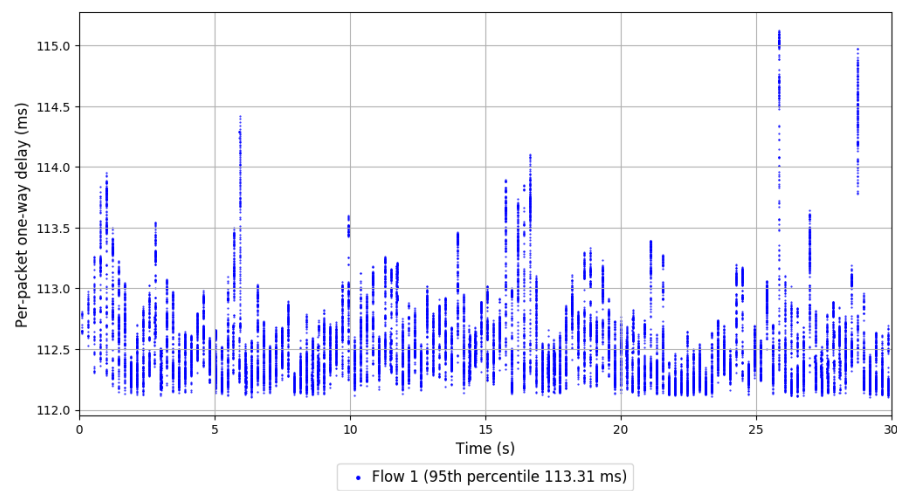
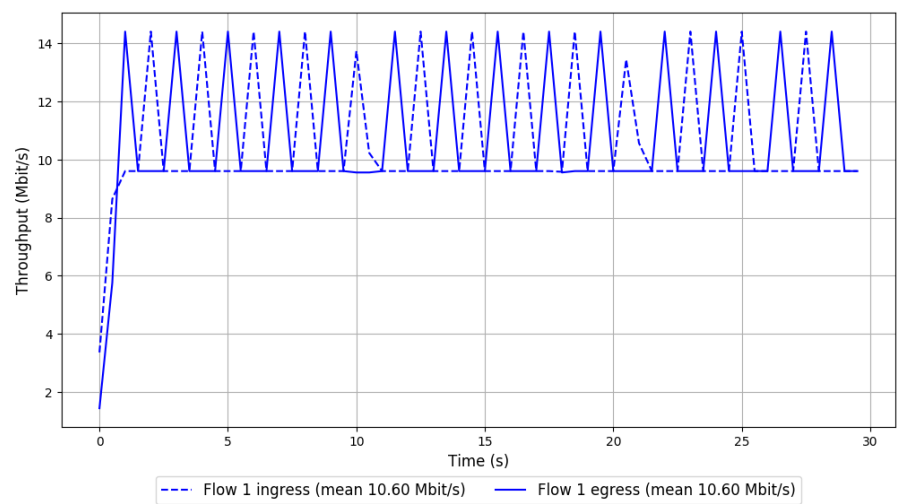
-- Flow 1:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 113.312 ms

Loss rate: 0.01%

Run 9: Report of Saturator — Data Link

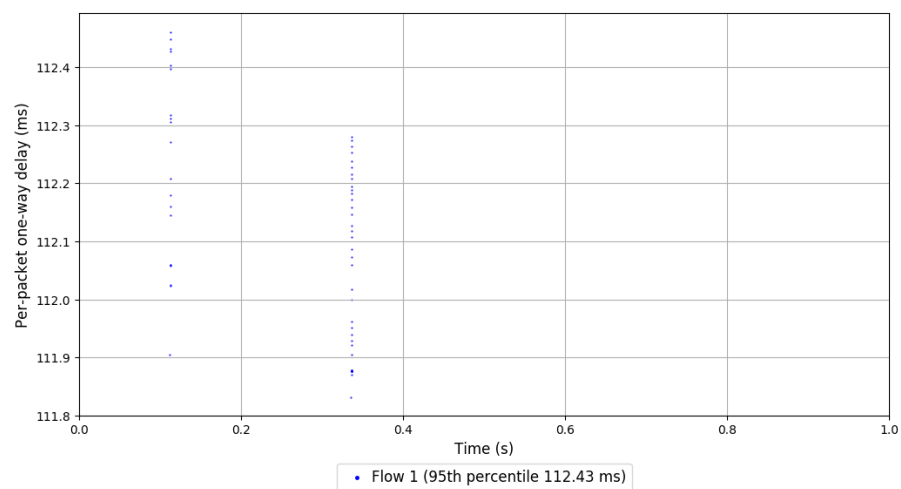
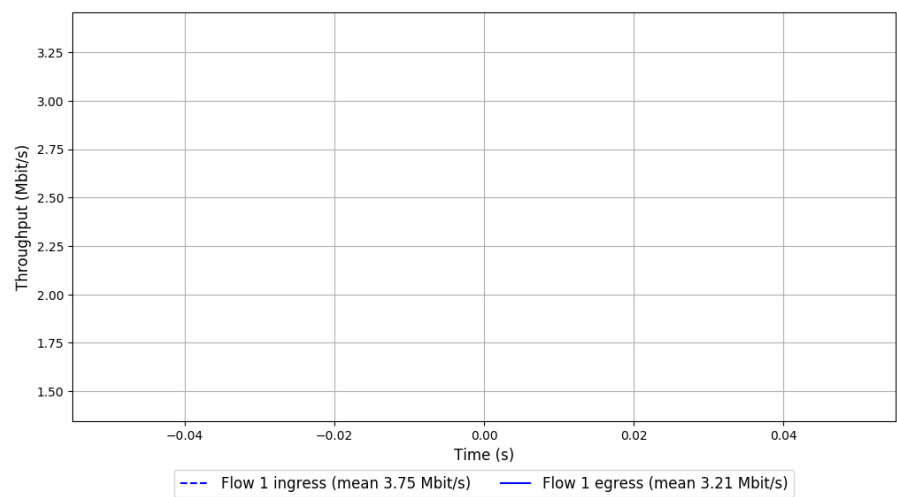


Run 10: Statistics of Saturator

Start at: 2017-08-11 09:08:27

End at: 2017-08-11 09:08:57

Run 10: Report of Saturator — Data Link

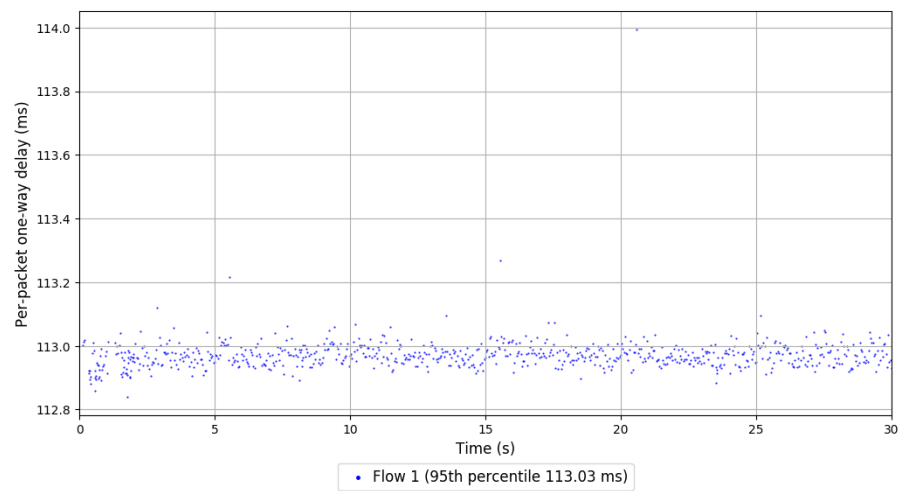
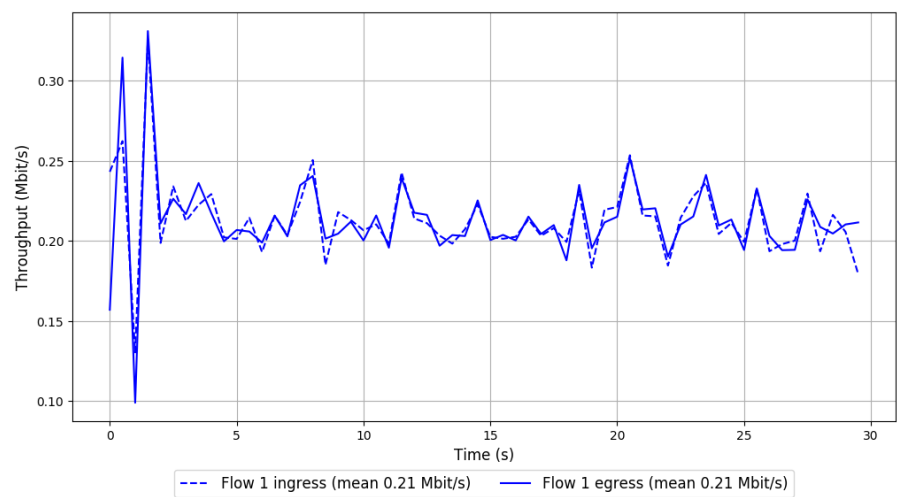


```
Run 1: Statistics of SCReAM

Start at: 2017-08-11 07:26:12
End at: 2017-08-11 07:26:42

# Below is generated by plot.py at 2017-08-11 10:24:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.026 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.026 ms
Loss rate: 0.13%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2017-08-11 07:37:25

End at: 2017-08-11 07:37:55

Below is generated by plot.py at 2017-08-11 10:24:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.888 ms

Loss rate: 0.00%

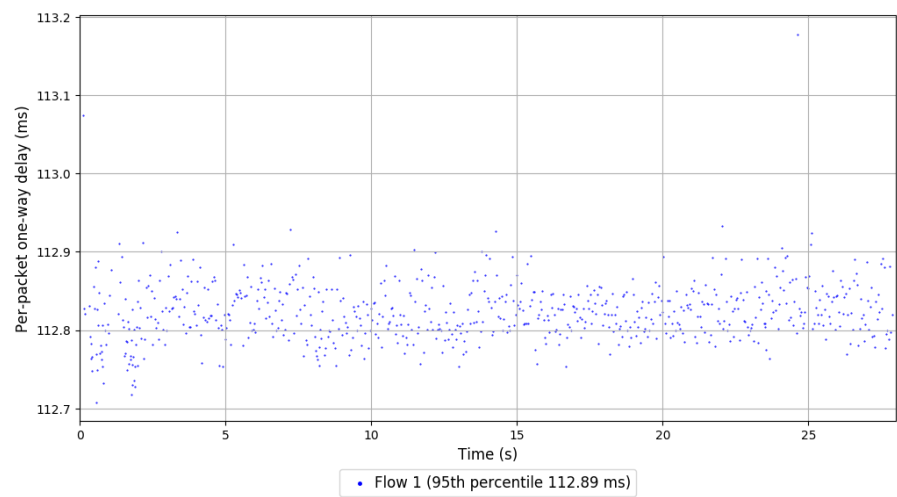
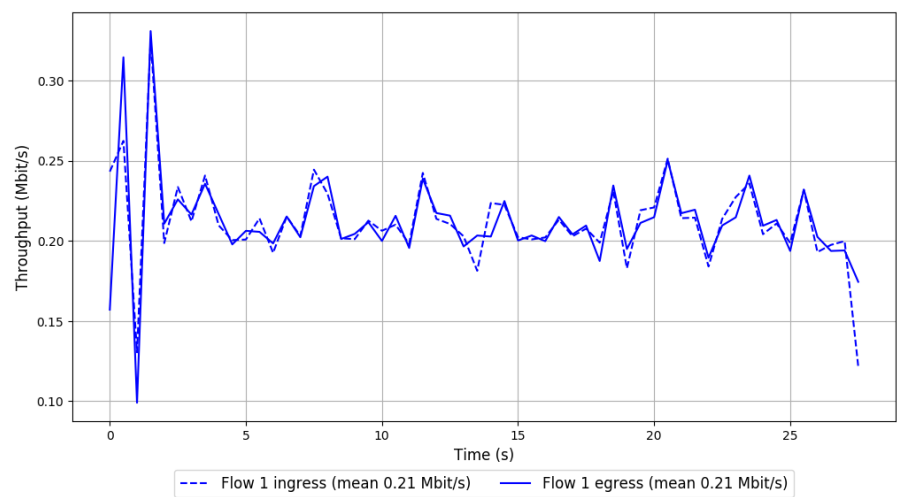
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.888 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-11 07:49:10

End at: 2017-08-11 07:49:40

Below is generated by plot.py at 2017-08-11 10:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.003 ms

Loss rate: 0.00%

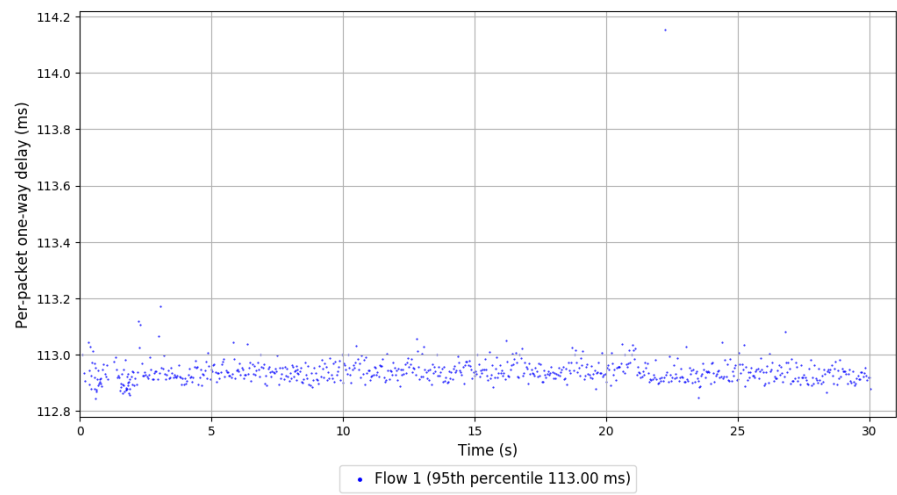
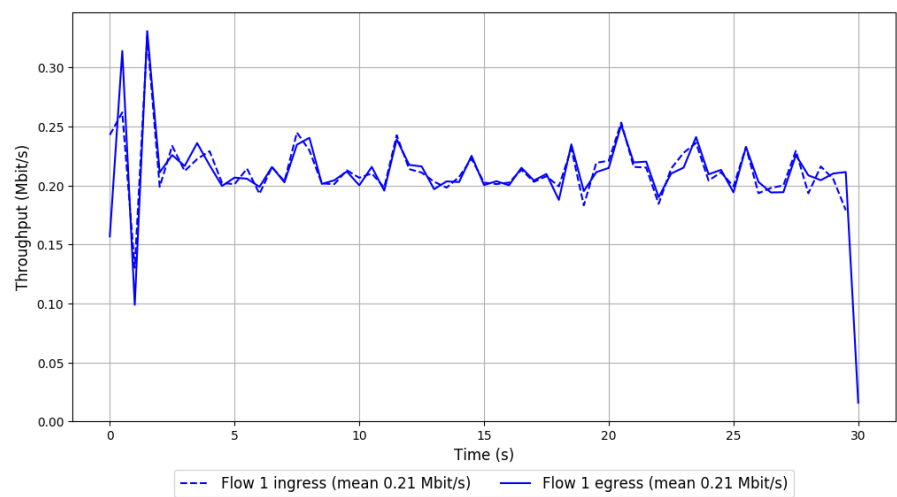
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.003 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-11 08:00:38

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

Below is generated by plot.py at 2017-08-11 10:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.689 ms

Loss rate: 0.00%

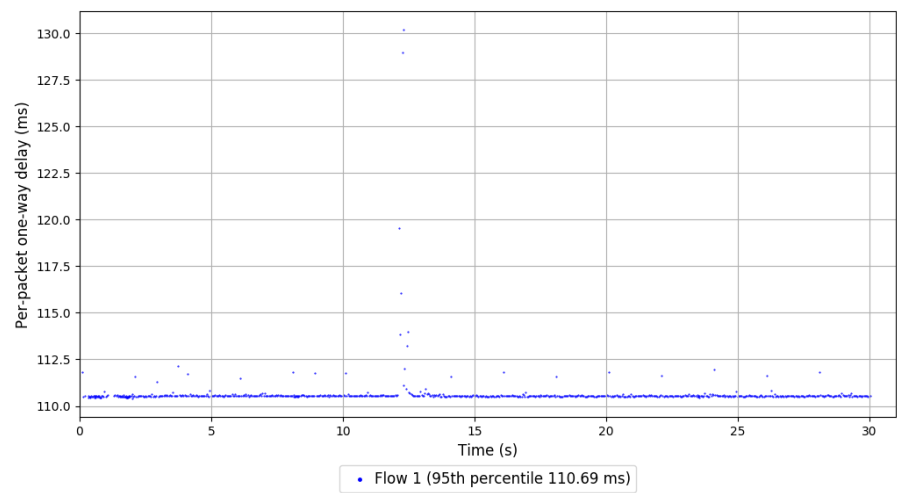
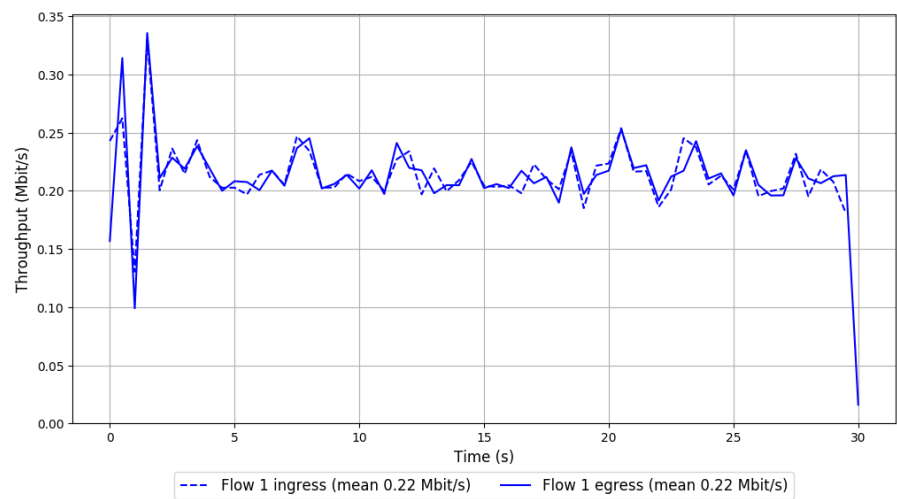
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.689 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

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

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

Below is generated by plot.py at 2017-08-11 10:24:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 111.903 ms

Loss rate: 0.00%

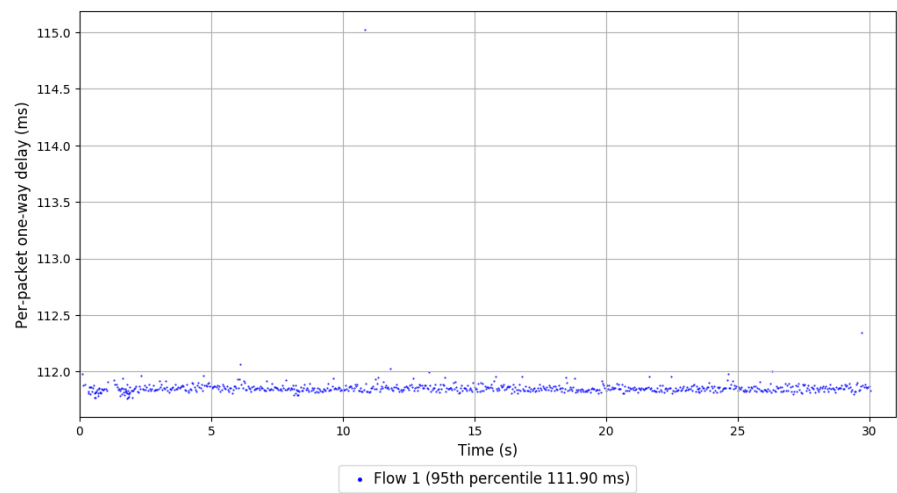
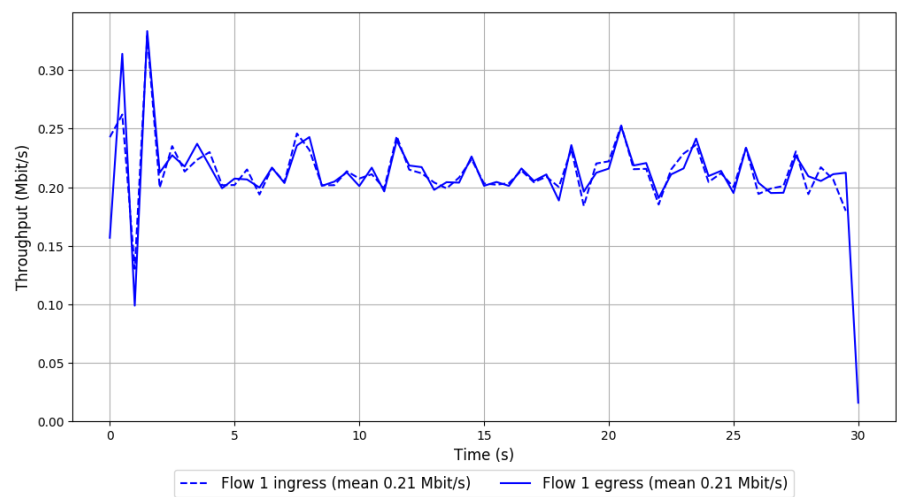
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 111.903 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-11 08:22:42

End at: 2017-08-11 08:23:12

Below is generated by plot.py at 2017-08-11 10:24:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.430 ms

Loss rate: 0.00%

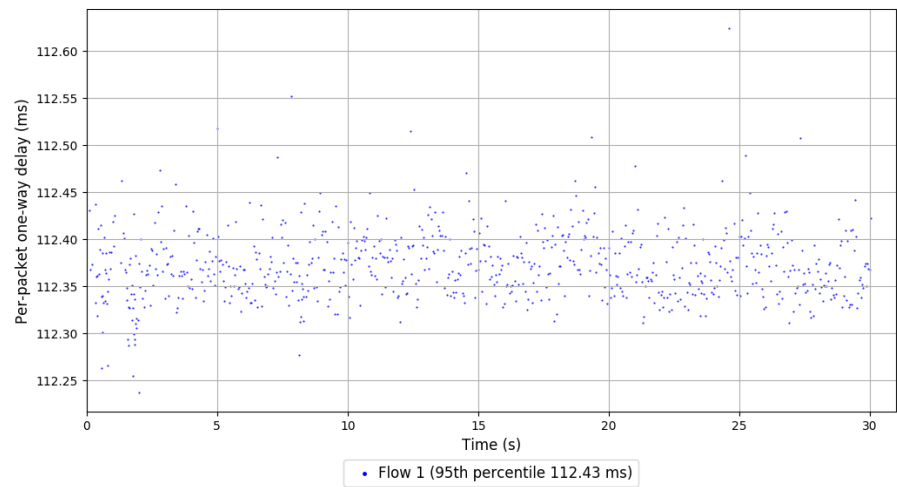
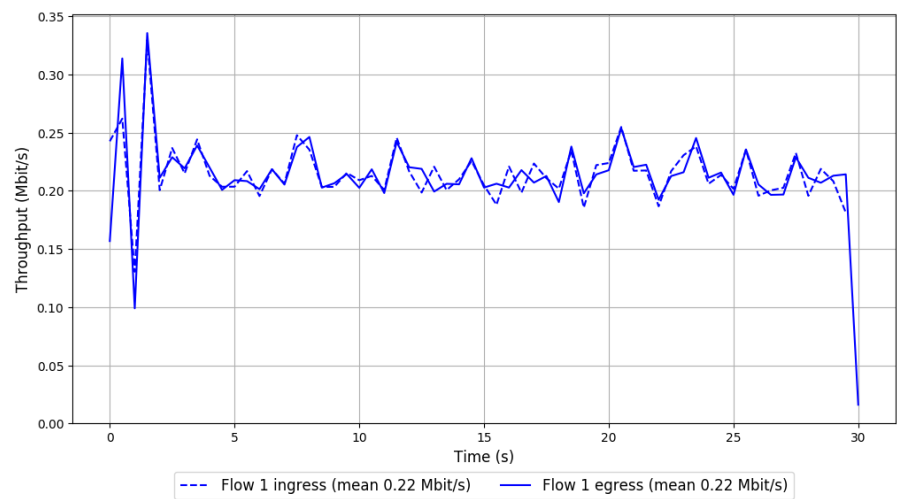
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.430 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-11 08:33:40

End at: 2017-08-11 08:34:10

Below is generated by plot.py at 2017-08-11 10:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.593 ms

Loss rate: 0.00%

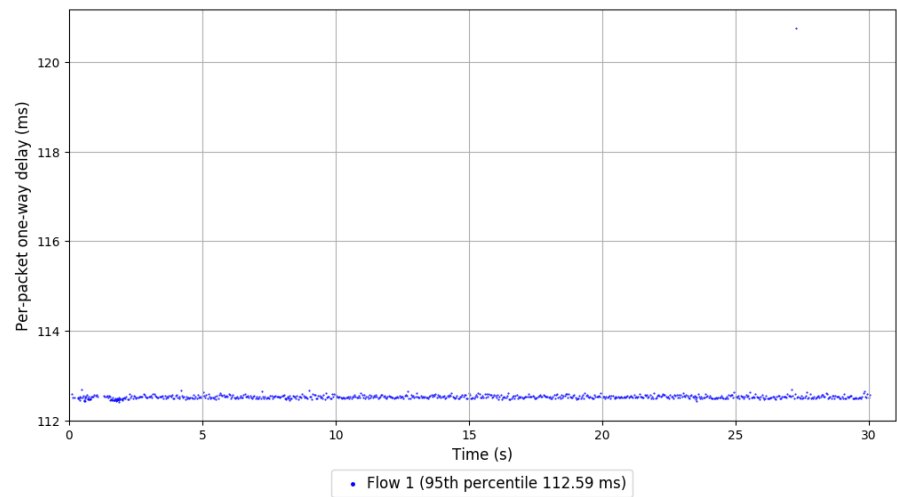
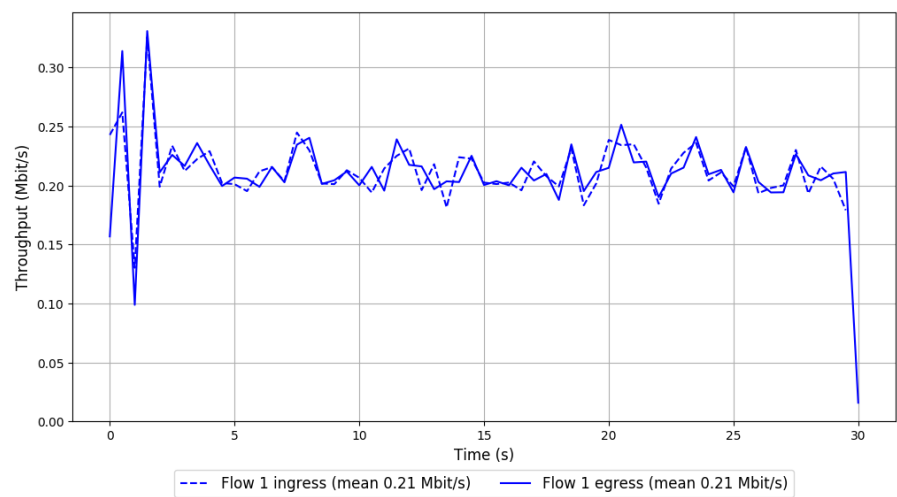
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.593 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-11 08:44:56

End at: 2017-08-11 08:45:26

Below is generated by plot.py at 2017-08-11 10:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

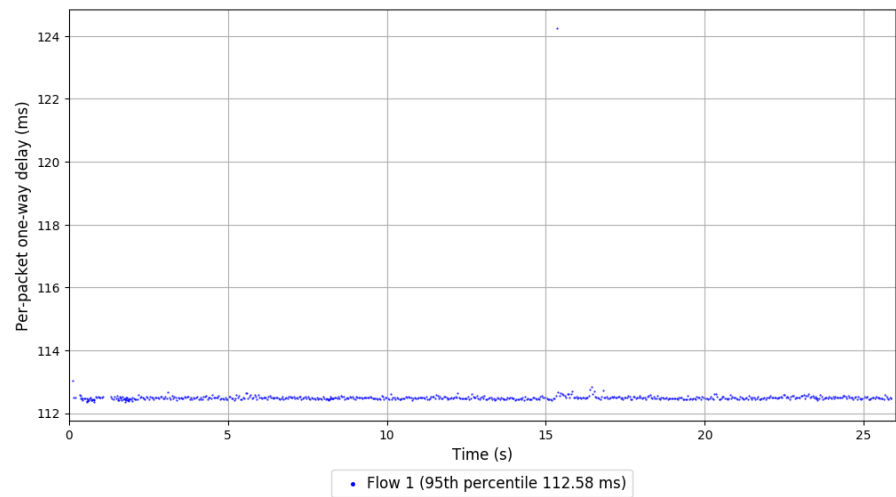
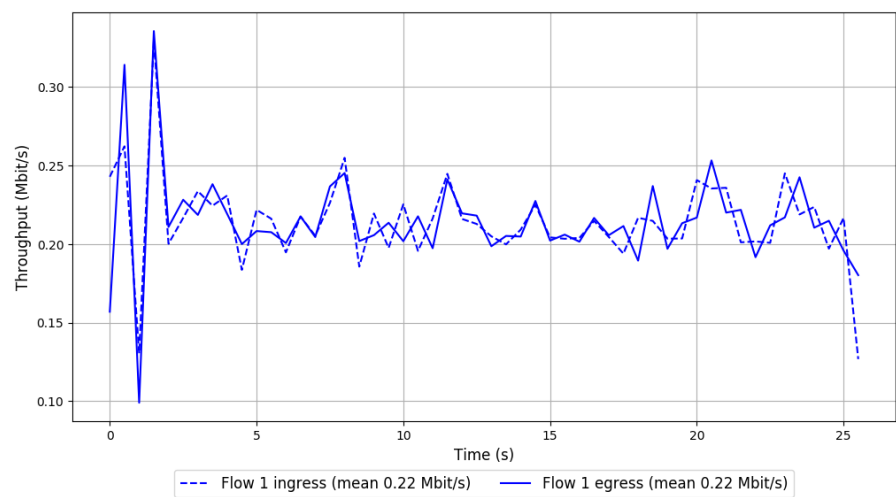
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-11 08:55:59

End at: 2017-08-11 08:56:29

Below is generated by plot.py at 2017-08-11 10:24:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.571 ms

Loss rate: 0.00%

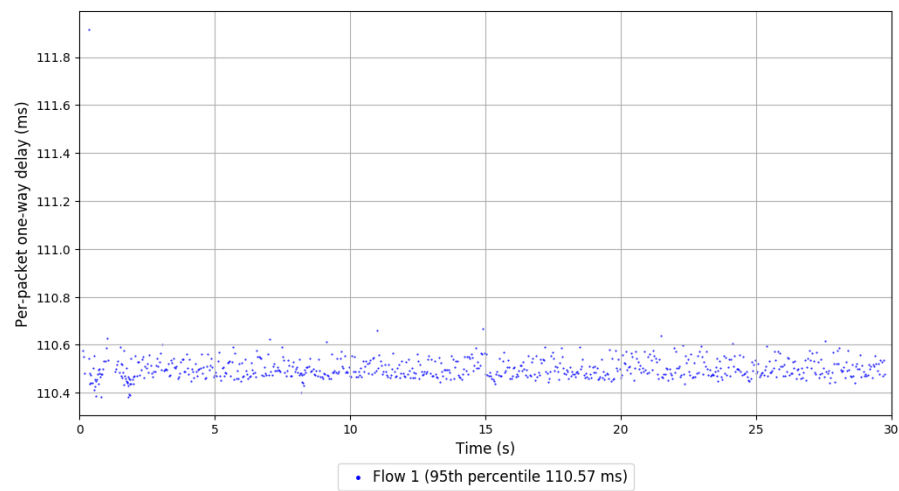
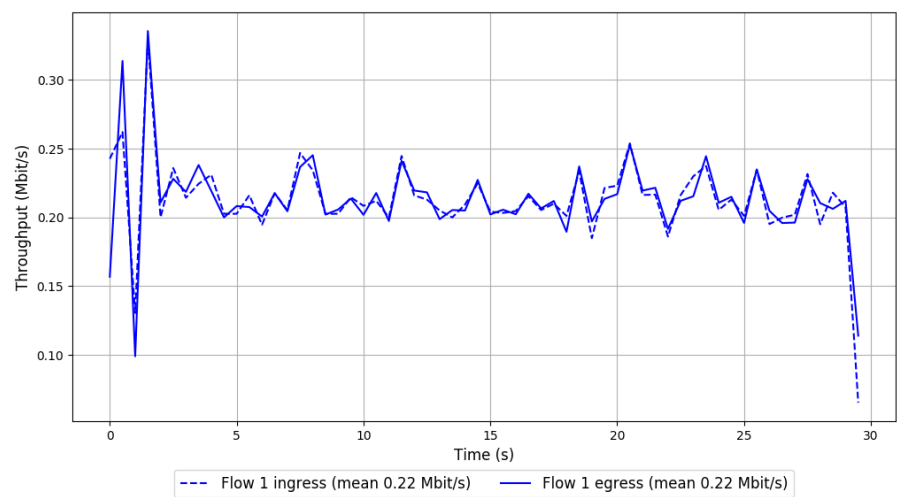
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.571 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-08-11 09:07:47

End at: 2017-08-11 09:08:17

Below is generated by plot.py at 2017-08-11 10:24:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.819 ms

Loss rate: 0.00%

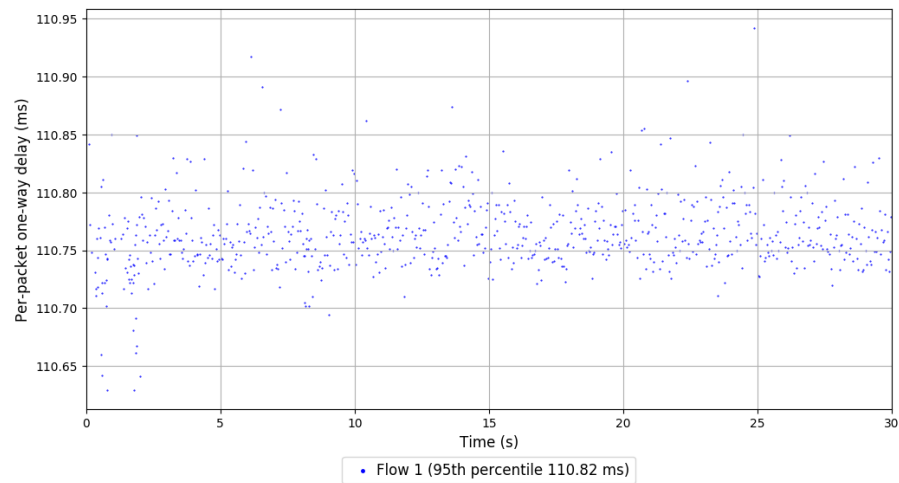
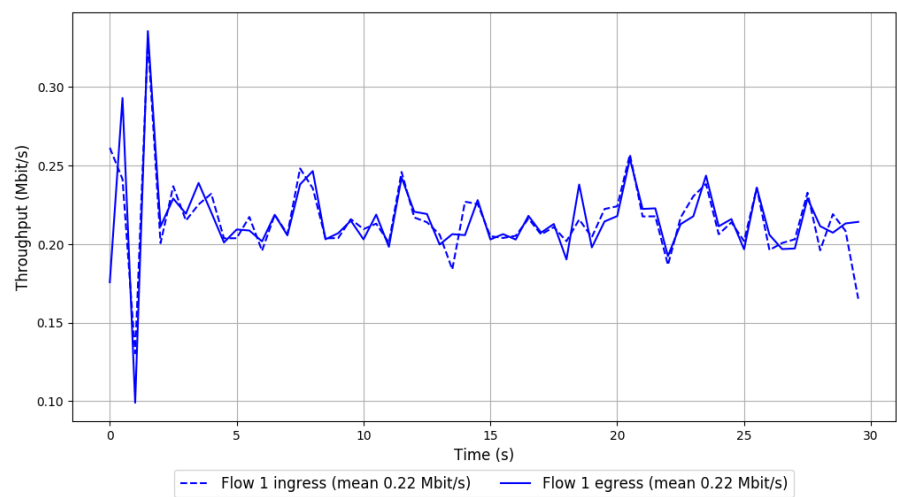
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.819 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-08-11 07:34:30

End at: 2017-08-11 07:35:00

Below is generated by plot.py at 2017-08-11 10:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 111.781 ms

Loss rate: 2.02%

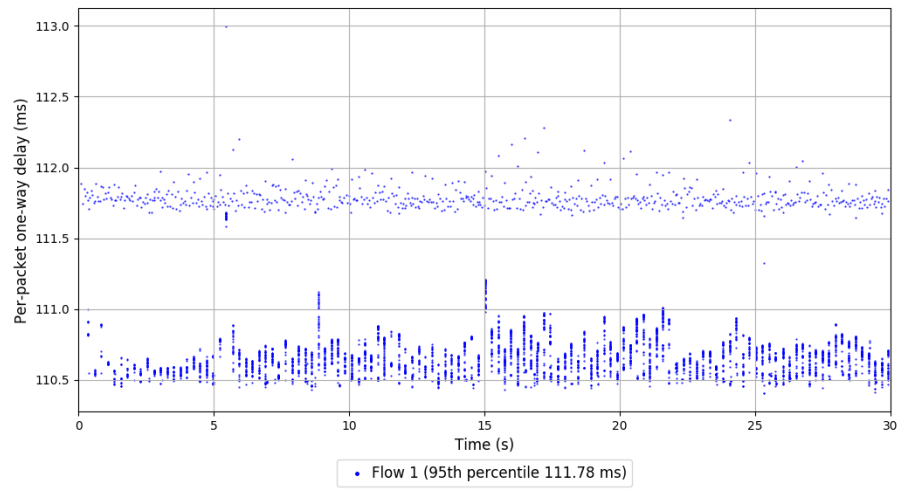
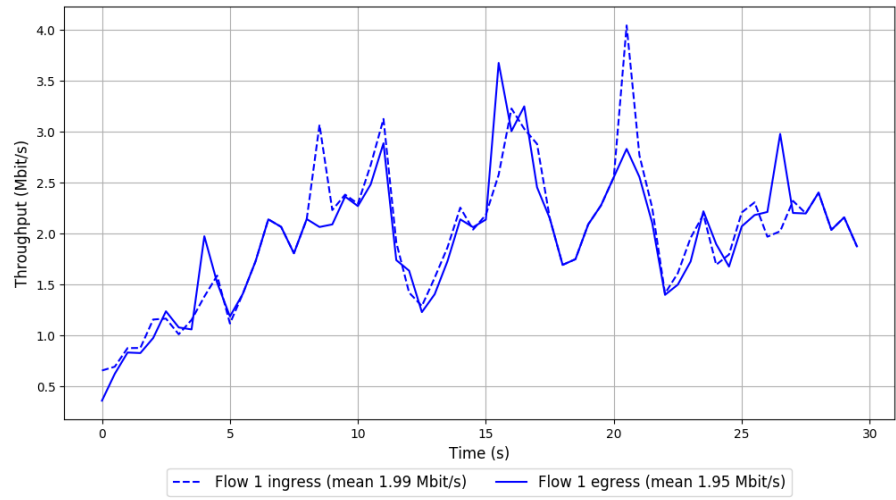
-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 111.781 ms

Loss rate: 2.02%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

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

End at: 2017-08-11 07:46:36

Below is generated by plot.py at 2017-08-11 10:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 111.853 ms

Loss rate: 0.00%

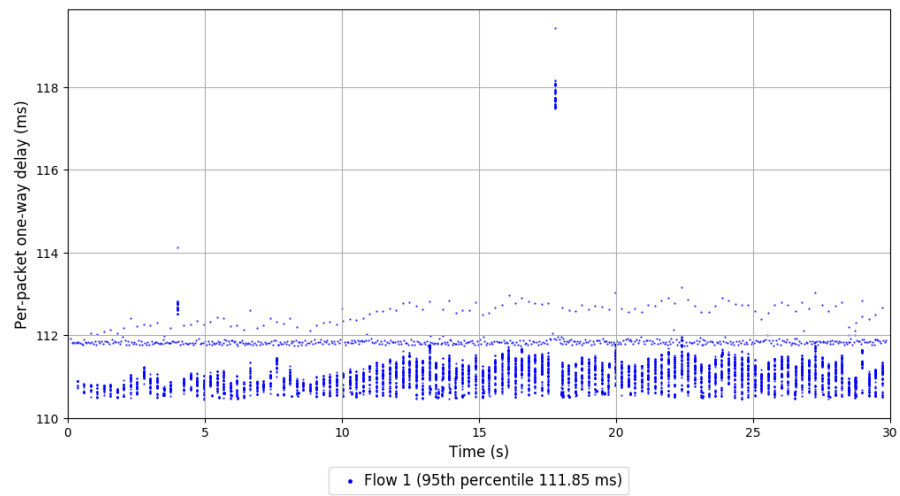
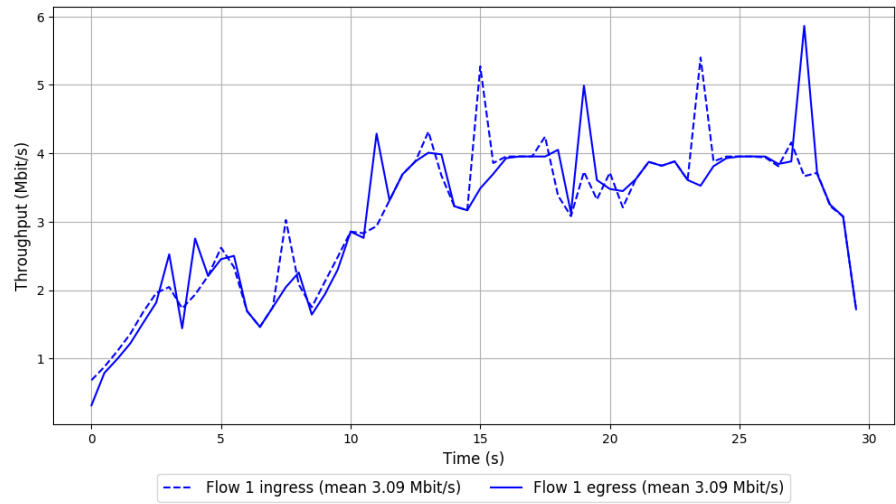
-- Flow 1:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 111.853 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-11 07:57:42

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

Below is generated by plot.py at 2017-08-11 10:24:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.68 Mbit/s

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

Loss rate: 3.55%

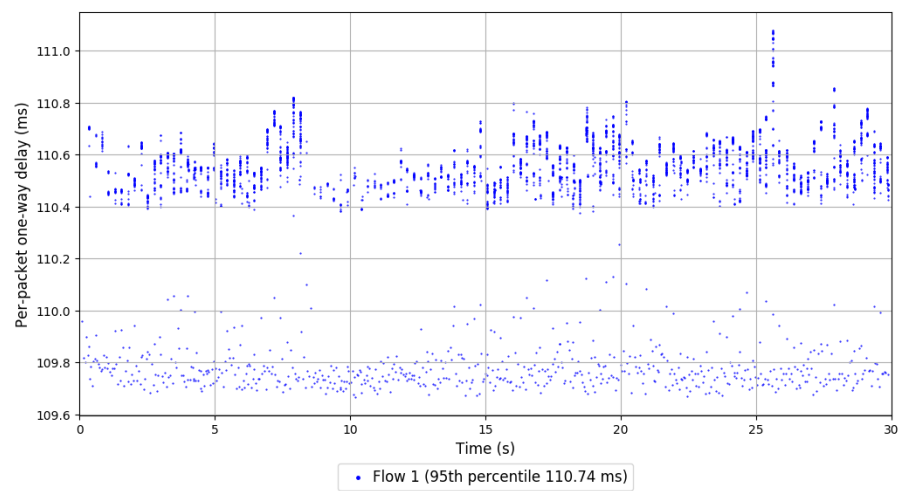
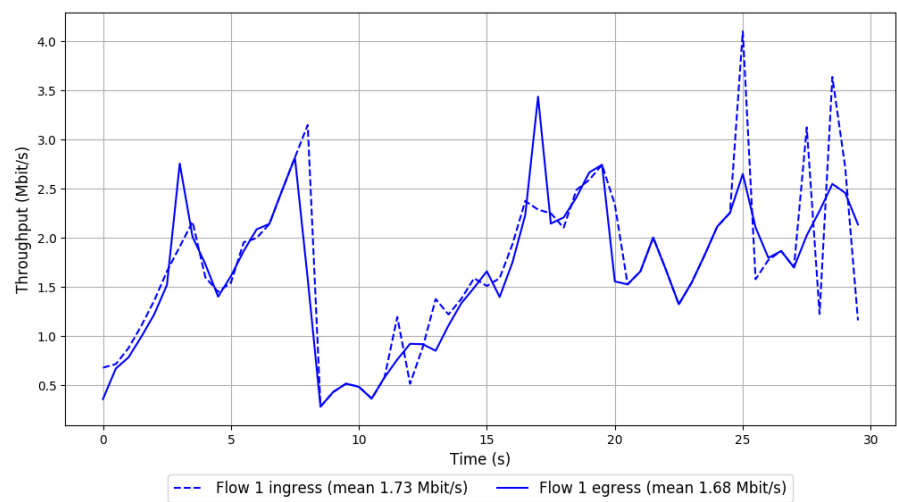
-- Flow 1:

Average throughput: 1.68 Mbit/s

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

Loss rate: 3.55%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

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

End at: 2017-08-11 08:09:13

Below is generated by plot.py at 2017-08-11 10:24:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 112.571 ms

Loss rate: 3.00%

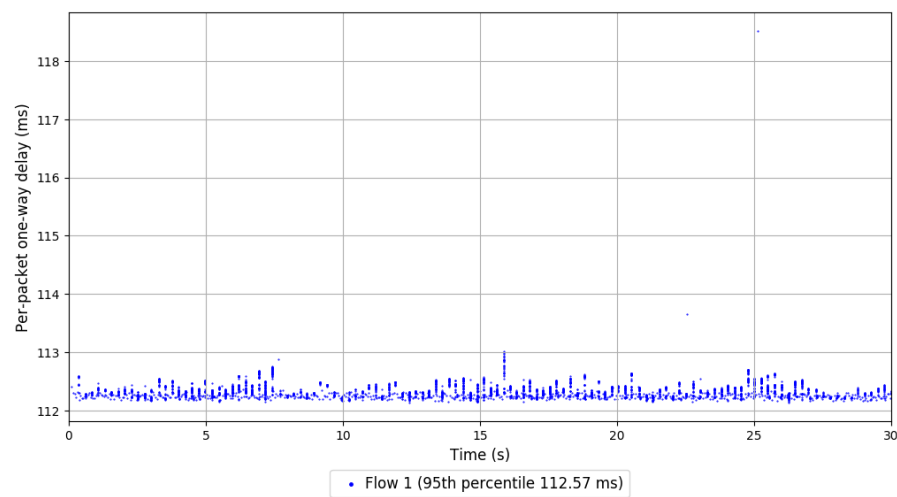
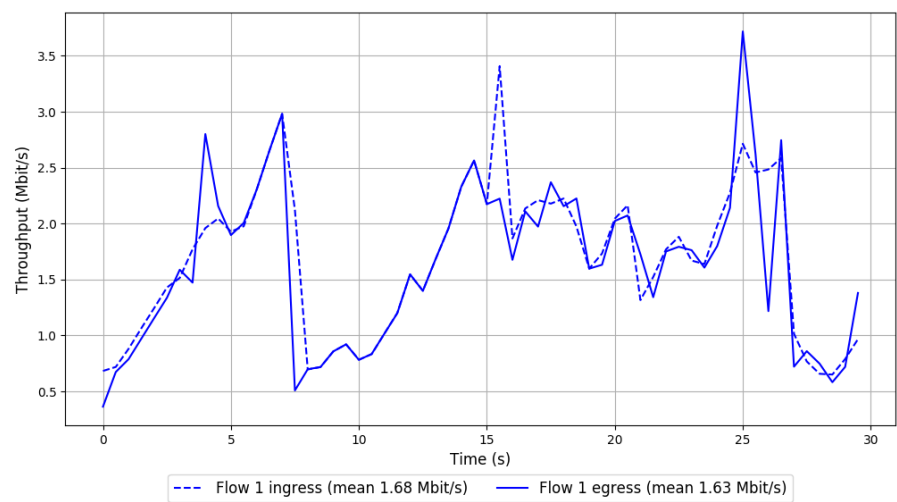
-- Flow 1:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 112.571 ms

Loss rate: 3.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-11 08:19:46

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

Below is generated by plot.py at 2017-08-11 10:24:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 113.205 ms

Loss rate: 0.00%

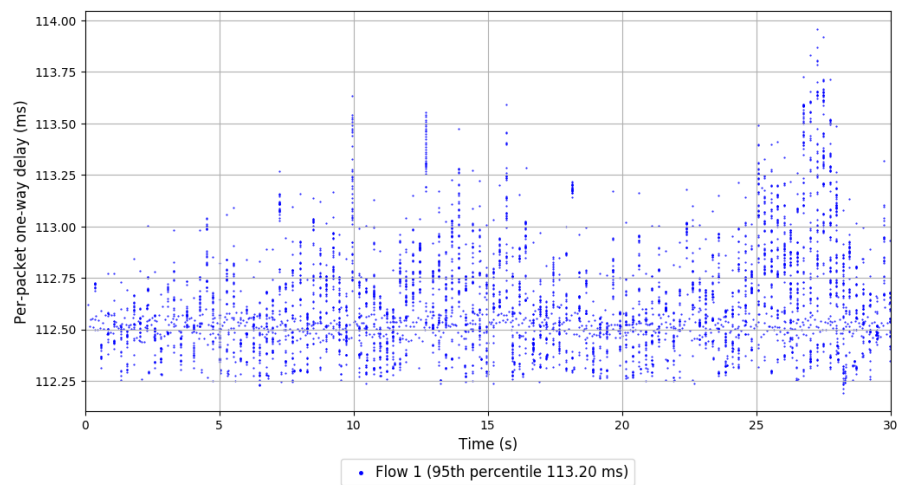
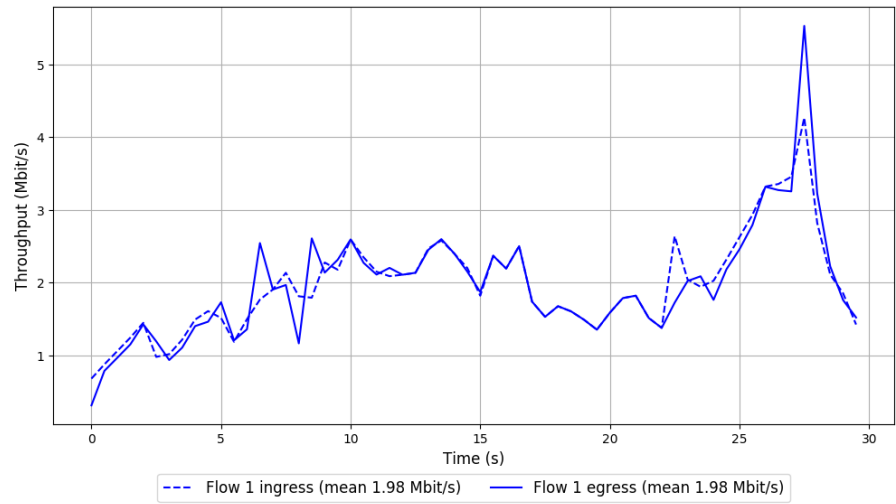
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 113.205 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-11 08:30:46

End at: 2017-08-11 08:31:16

Below is generated by plot.py at 2017-08-11 10:24:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.85 Mbit/s

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

Loss rate: 0.00%

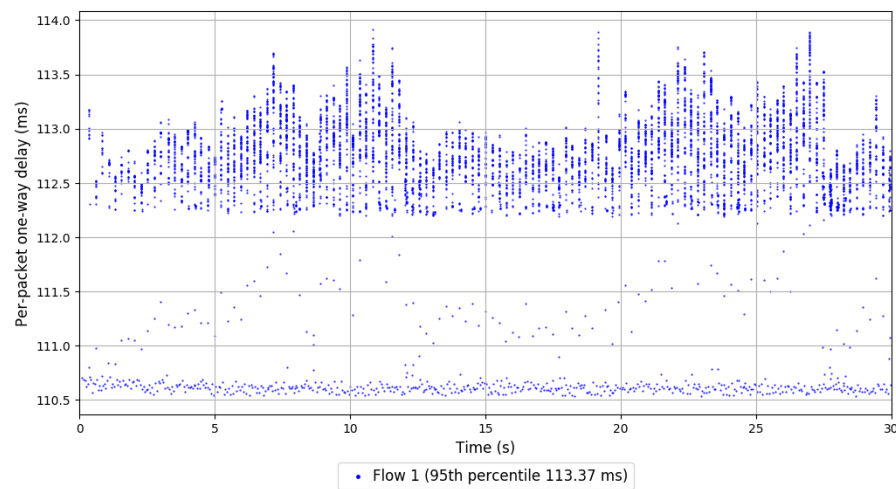
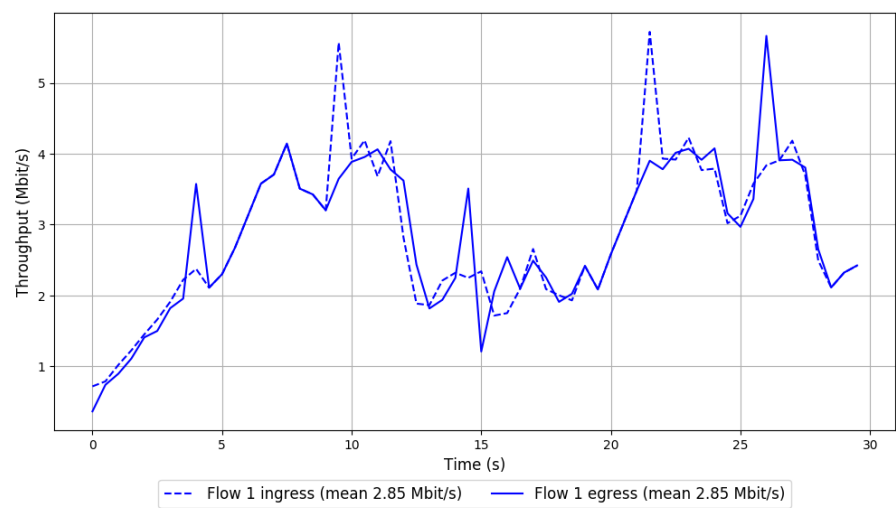
-- Flow 1:

Average throughput: 2.85 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-11 08:42:03

End at: 2017-08-11 08:42:33

Below is generated by plot.py at 2017-08-11 10:24:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 112.529 ms

Loss rate: 6.91%

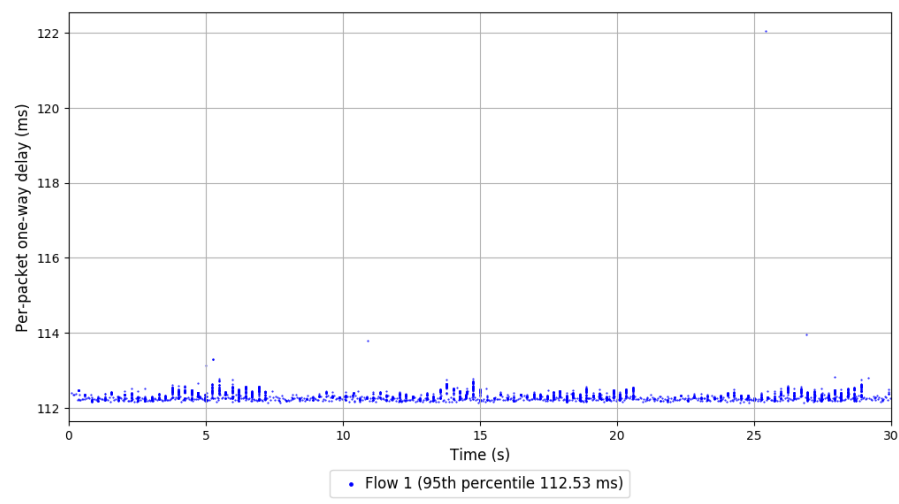
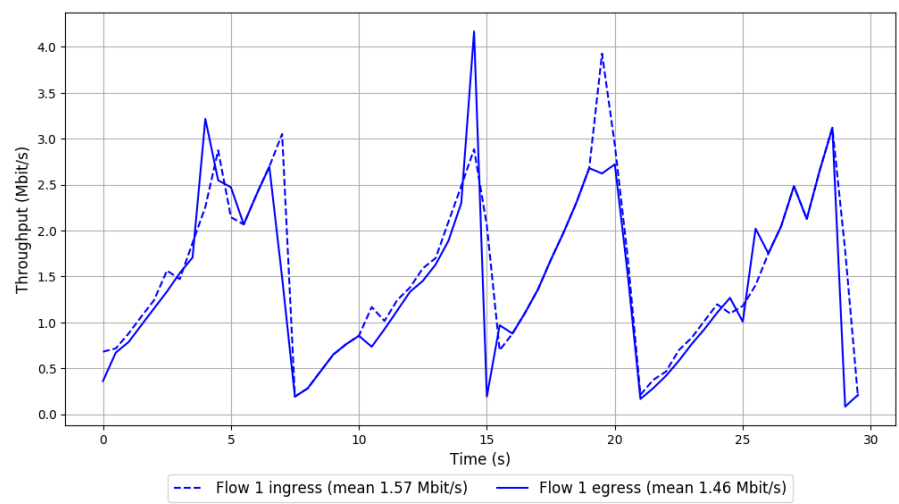
-- Flow 1:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 112.529 ms

Loss rate: 6.91%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-11 08:53:03

End at: 2017-08-11 08:53:33

Below is generated by plot.py at 2017-08-11 10:24:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 112.526 ms

Loss rate: 2.00%

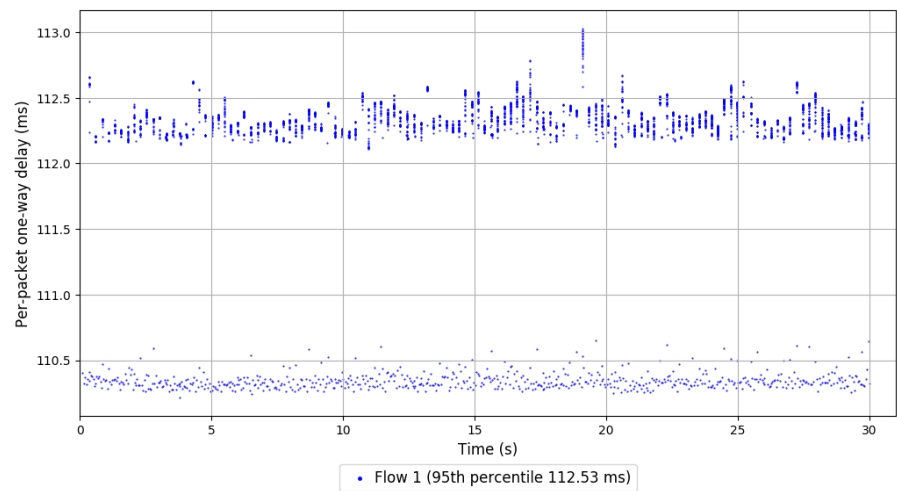
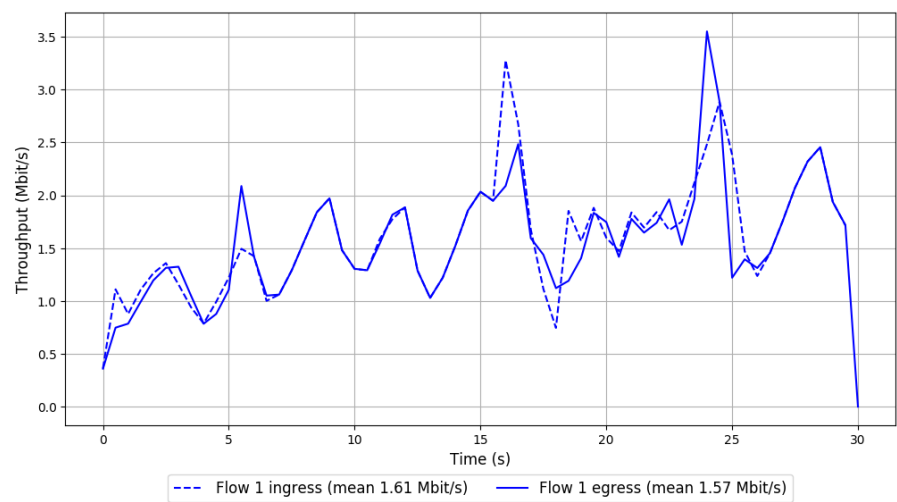
-- Flow 1:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 112.526 ms

Loss rate: 2.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-11 09:04:43

End at: 2017-08-11 09:05:13

Below is generated by plot.py at 2017-08-11 10:24:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 112.421 ms

Loss rate: 0.78%

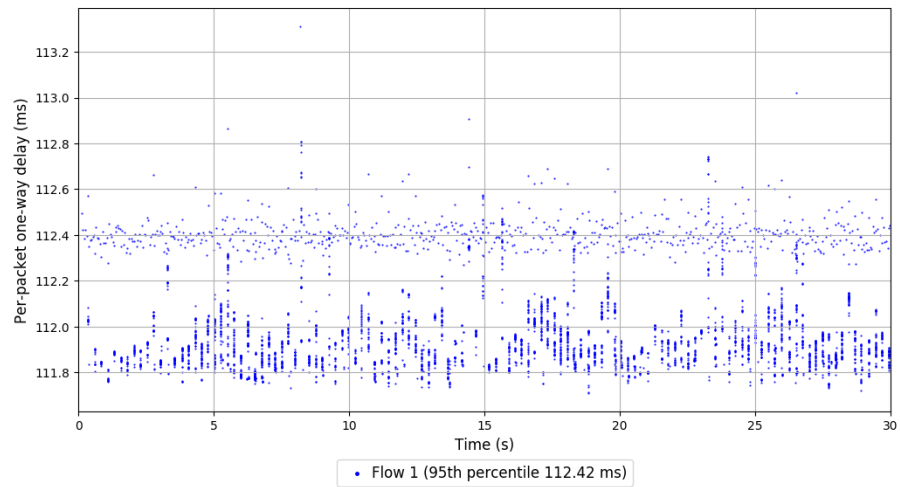
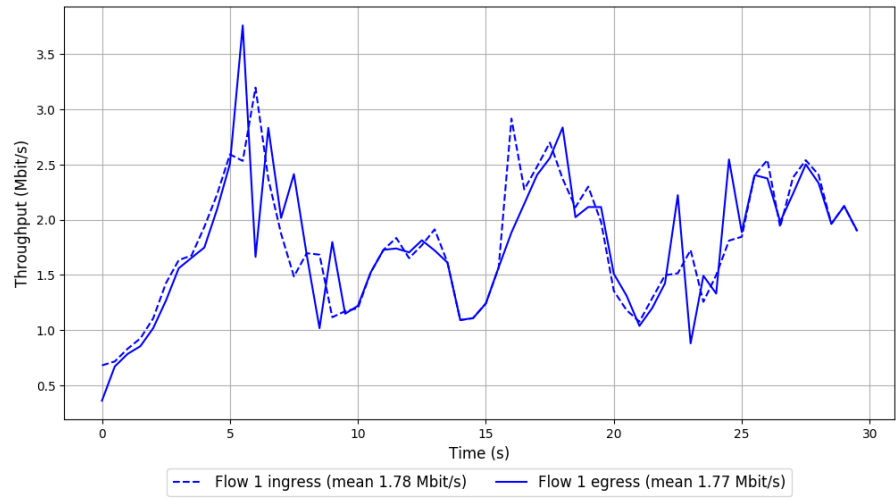
-- Flow 1:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 112.421 ms

Loss rate: 0.78%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-11 09:15:44

End at: 2017-08-11 09:16:14

Below is generated by plot.py at 2017-08-11 10:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 112.130 ms

Loss rate: 4.21%

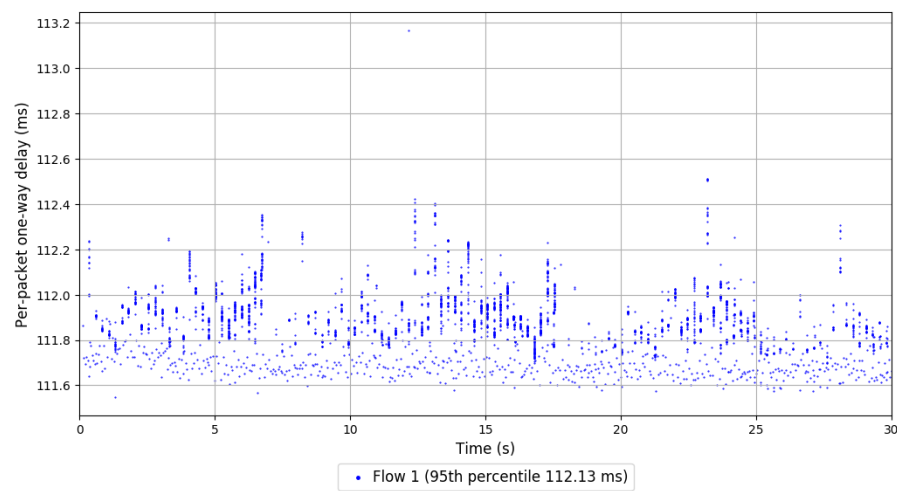
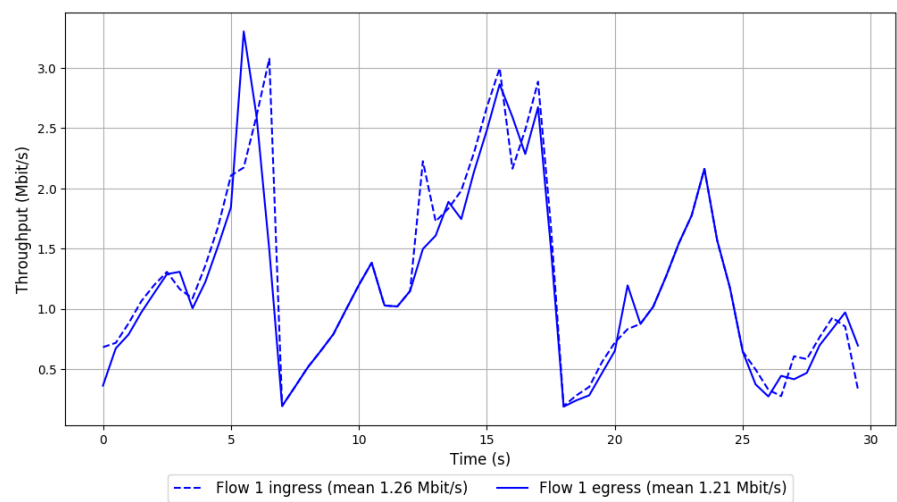
-- Flow 1:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 112.130 ms

Loss rate: 4.21%

Run 10: Report of Sprout — Data Link

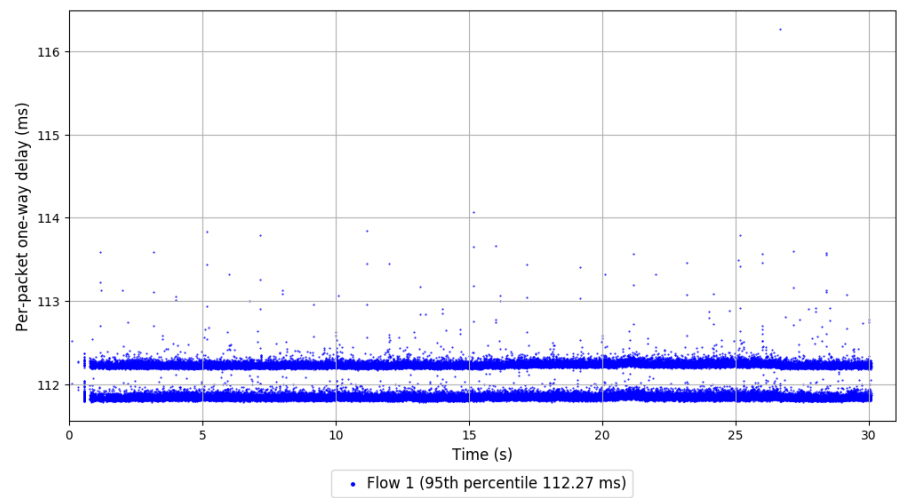
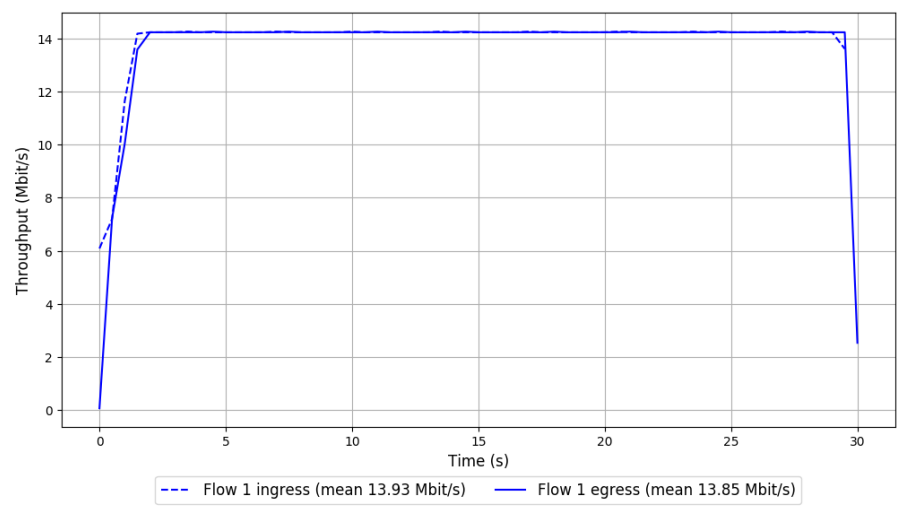


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-08-11 07:29:59
End at: 2017-08-11 07:30:29

# Below is generated by plot.py at 2017-08-11 10:24:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.85 Mbit/s
95th percentile per-packet one-way delay: 112.270 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 13.85 Mbit/s
95th percentile per-packet one-way delay: 112.270 ms
Loss rate: 0.60%
```

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

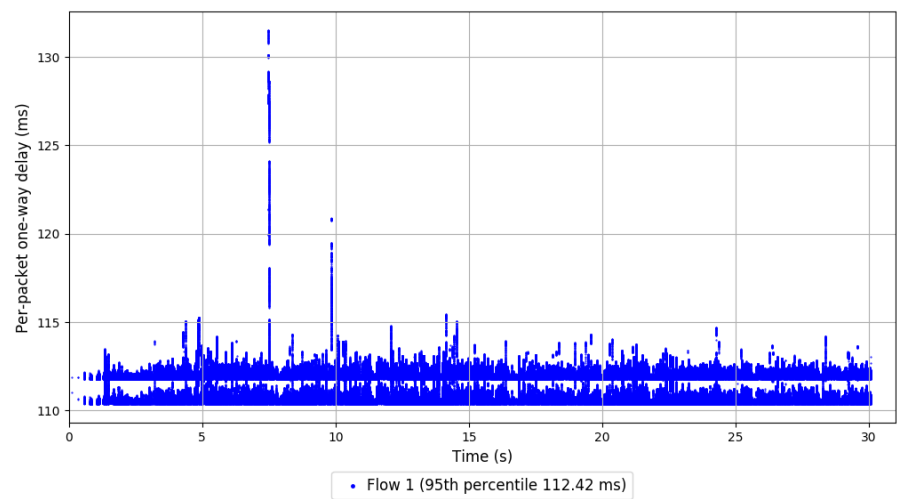
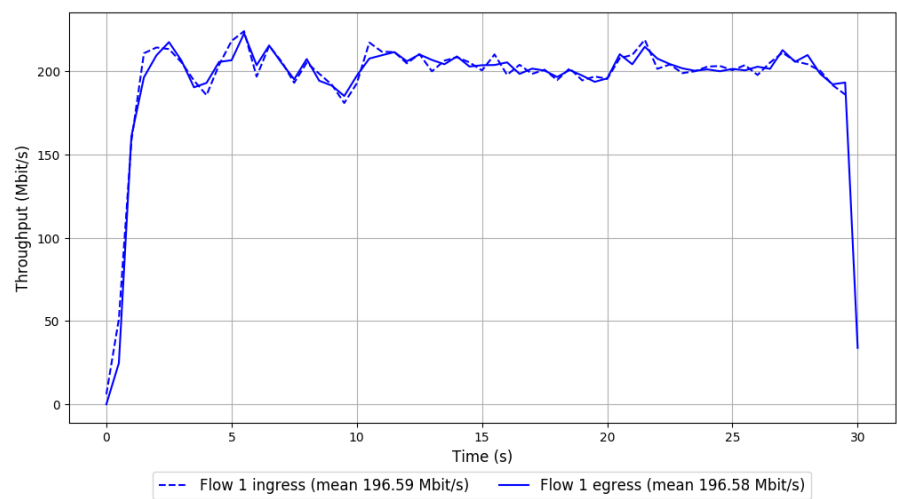


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-08-11 07:41:13
End at: 2017-08-11 07:41:43

# Below is generated by plot.py at 2017-08-11 10:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.58 Mbit/s
95th percentile per-packet one-way delay: 112.417 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 196.58 Mbit/s
95th percentile per-packet one-way delay: 112.417 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-08-11 07:53:01

End at: 2017-08-11 07:53:31

Below is generated by plot.py at 2017-08-11 10:26:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.46 Mbit/s

95th percentile per-packet one-way delay: 112.673 ms

Loss rate: 0.00%

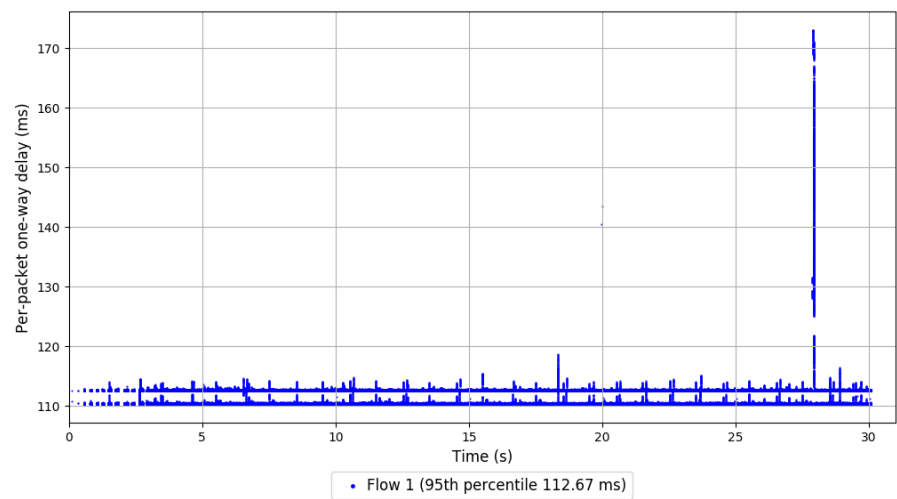
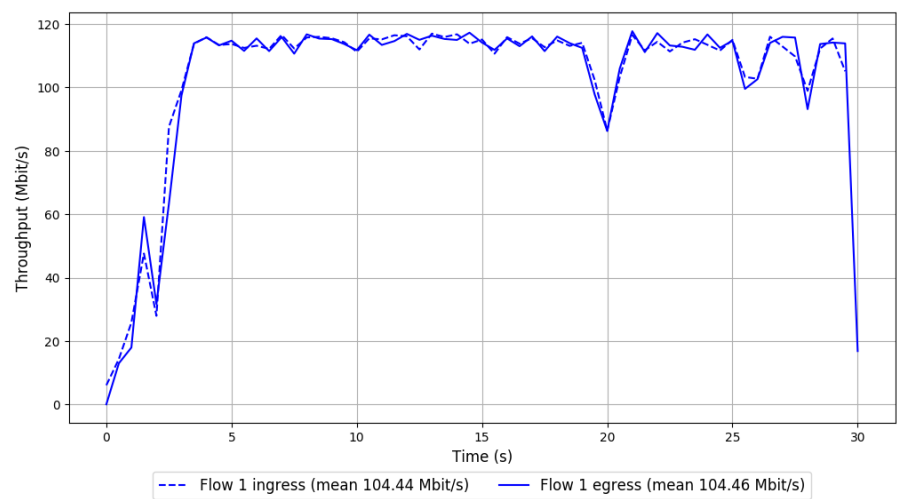
-- Flow 1:

Average throughput: 104.46 Mbit/s

95th percentile per-packet one-way delay: 112.673 ms

Loss rate: 0.00%

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

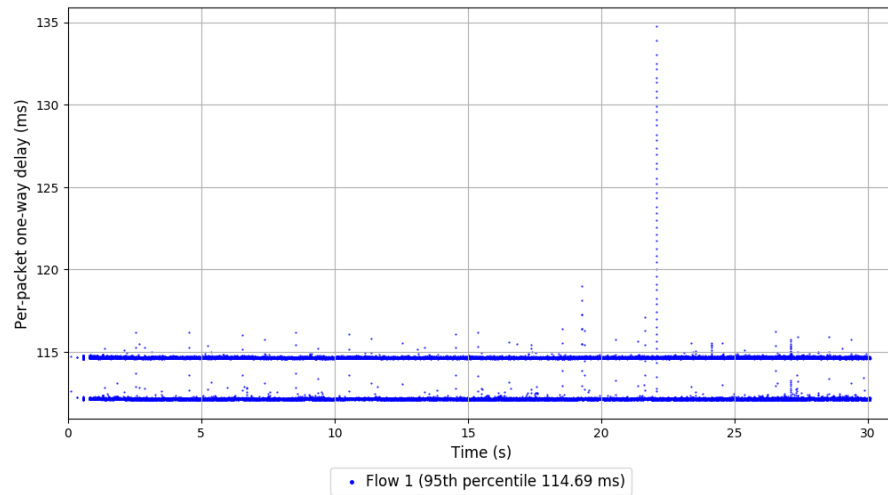
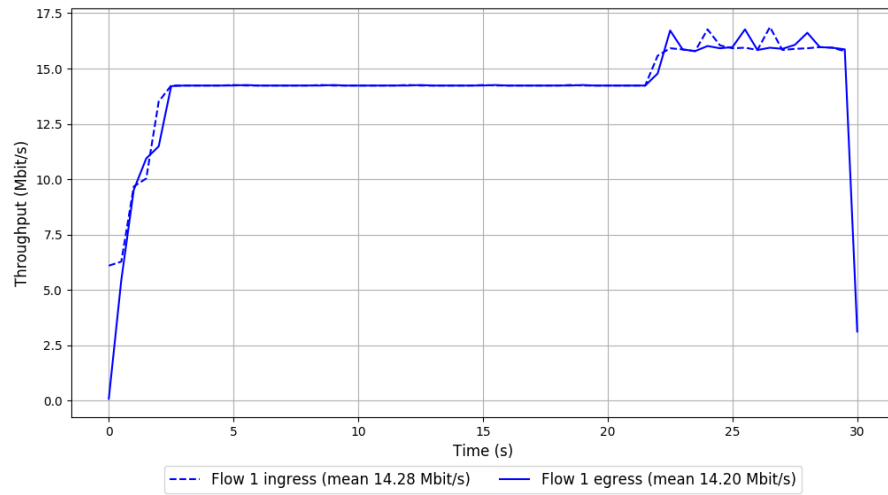


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-08-11 08:04:27
End at: 2017-08-11 08:04:57

# Below is generated by plot.py at 2017-08-11 10:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.20 Mbit/s
95th percentile per-packet one-way delay: 114.692 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 14.20 Mbit/s
95th percentile per-packet one-way delay: 114.692 ms
Loss rate: 0.58%
```

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

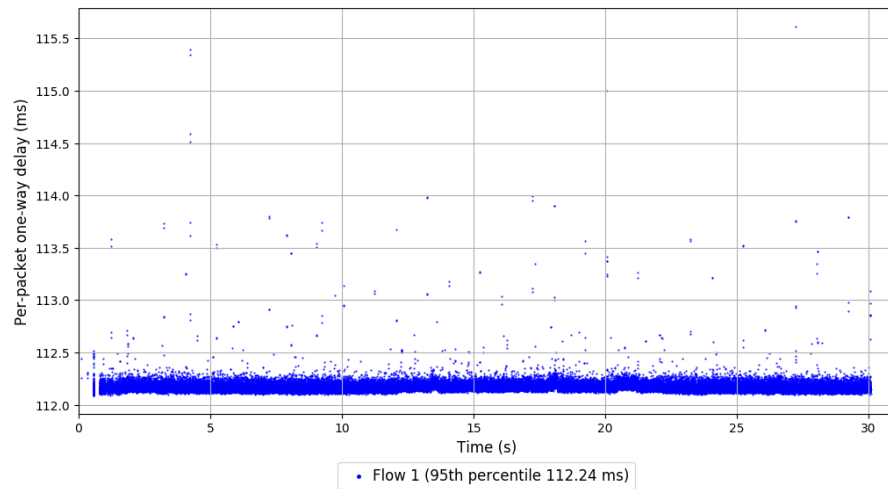
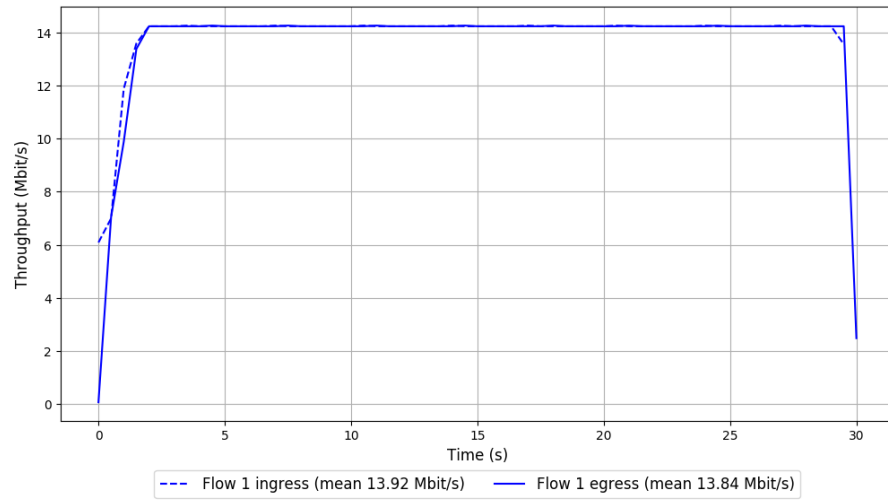


```
Run 5: Statistics of TaoVA-100x

Start at: 2017-08-11 08:15:29
End at: 2017-08-11 08:15:59

# Below is generated by plot.py at 2017-08-11 10:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.84 Mbit/s
95th percentile per-packet one-way delay: 112.238 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 13.84 Mbit/s
95th percentile per-packet one-way delay: 112.238 ms
Loss rate: 0.60%
```

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

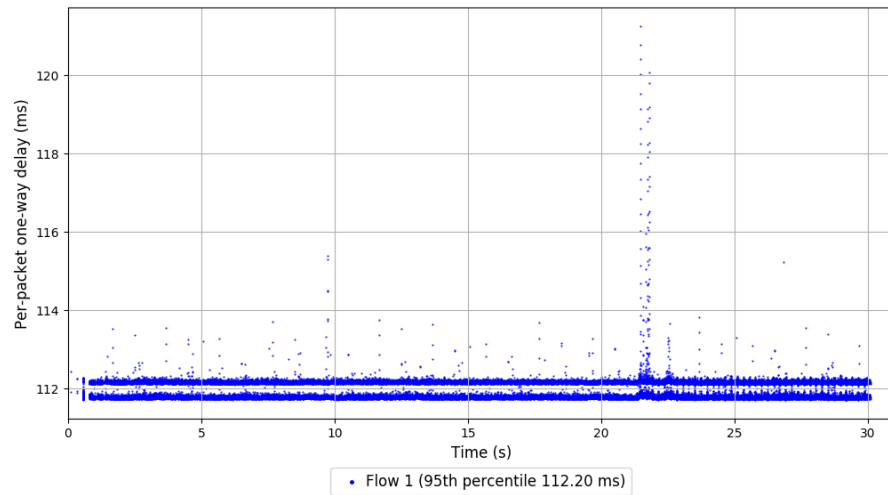
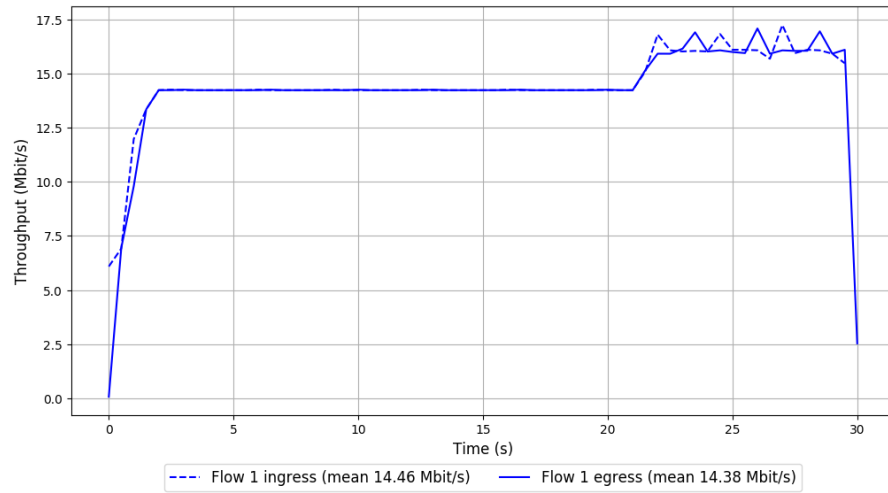


```
Run 6: Statistics of TaoVA-100x

Start at: 2017-08-11 08:26:16
End at: 2017-08-11 08:26:46

# Below is generated by plot.py at 2017-08-11 10:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.38 Mbit/s
95th percentile per-packet one-way delay: 112.201 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 14.38 Mbit/s
95th percentile per-packet one-way delay: 112.201 ms
Loss rate: 0.58%
```

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

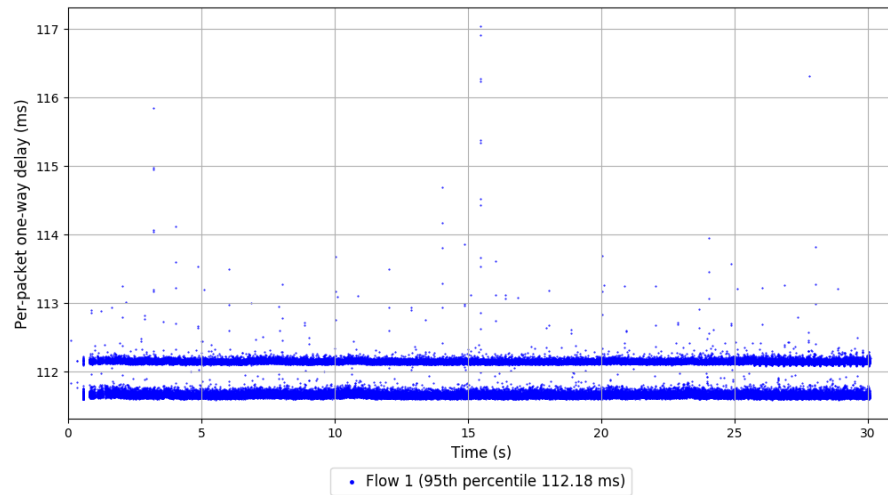
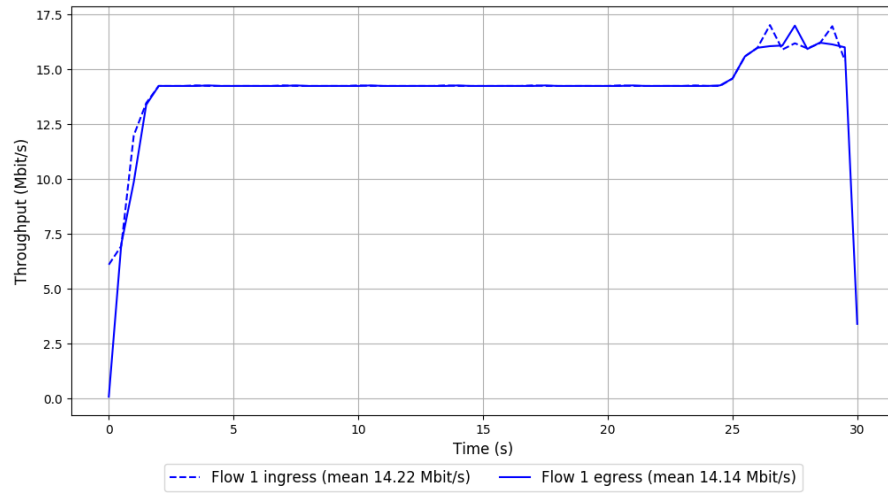


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-08-11 08:37:32
End at: 2017-08-11 08:38:02

# Below is generated by plot.py at 2017-08-11 10:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.14 Mbit/s
95th percentile per-packet one-way delay: 112.178 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 14.14 Mbit/s
95th percentile per-packet one-way delay: 112.178 ms
Loss rate: 0.58%
```


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



Run 8: Statistics of TaoVA-100x

Start at: 2017-08-11 08:48:32

End at: 2017-08-11 08:49:02

Below is generated by plot.py at 2017-08-11 10:26:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.86 Mbit/s

95th percentile per-packet one-way delay: 112.357 ms

Loss rate: 0.60%

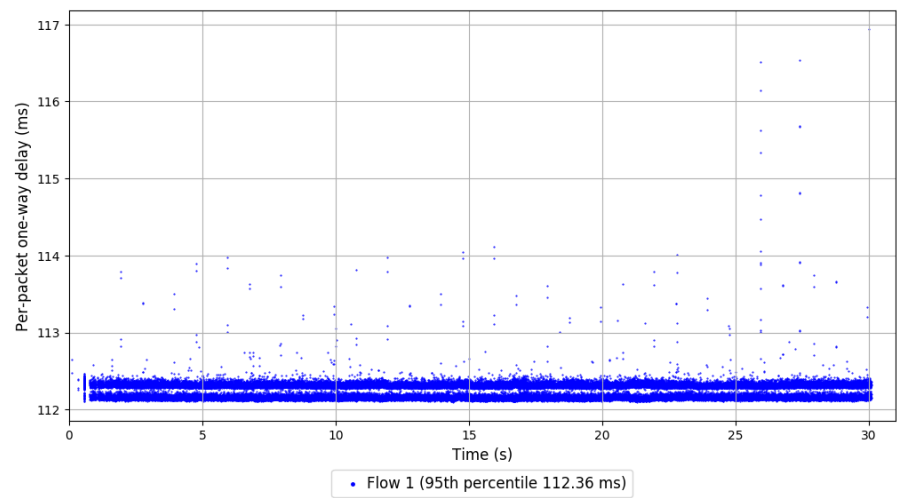
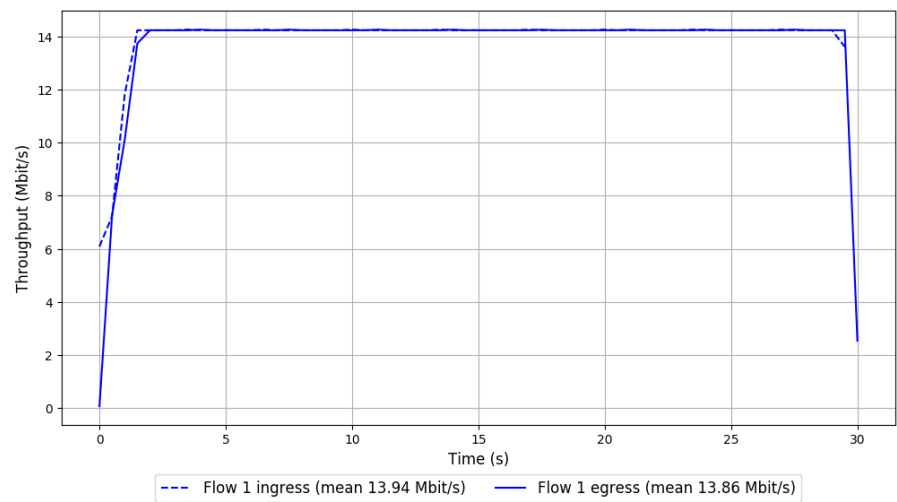
-- Flow 1:

Average throughput: 13.86 Mbit/s

95th percentile per-packet one-way delay: 112.357 ms

Loss rate: 0.60%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-08-11 08:59:47

End at: 2017-08-11 09:00:17

Below is generated by plot.py at 2017-08-11 10:27:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.07 Mbit/s

95th percentile per-packet one-way delay: 112.438 ms

Loss rate: 0.09%

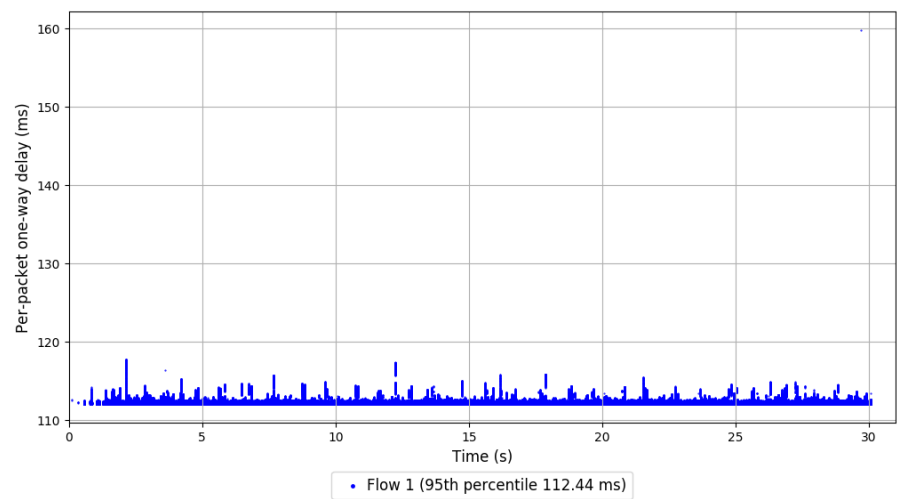
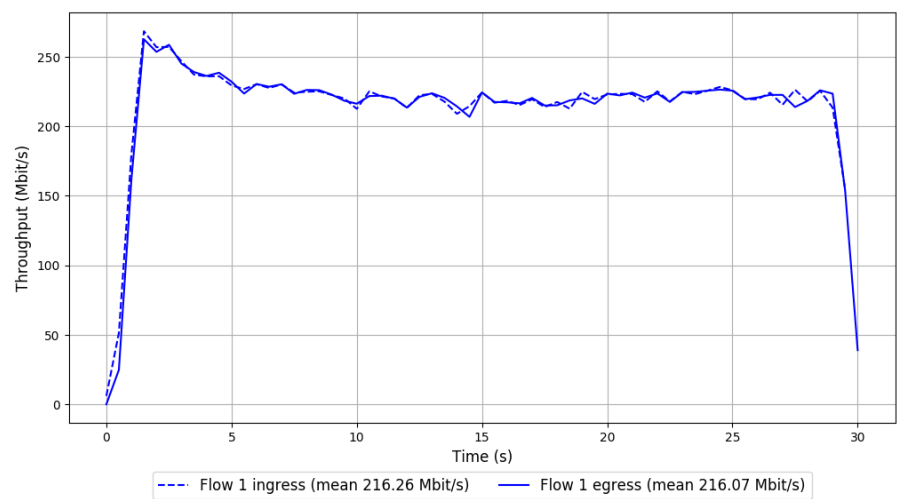
-- Flow 1:

Average throughput: 216.07 Mbit/s

95th percentile per-packet one-way delay: 112.438 ms

Loss rate: 0.09%

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

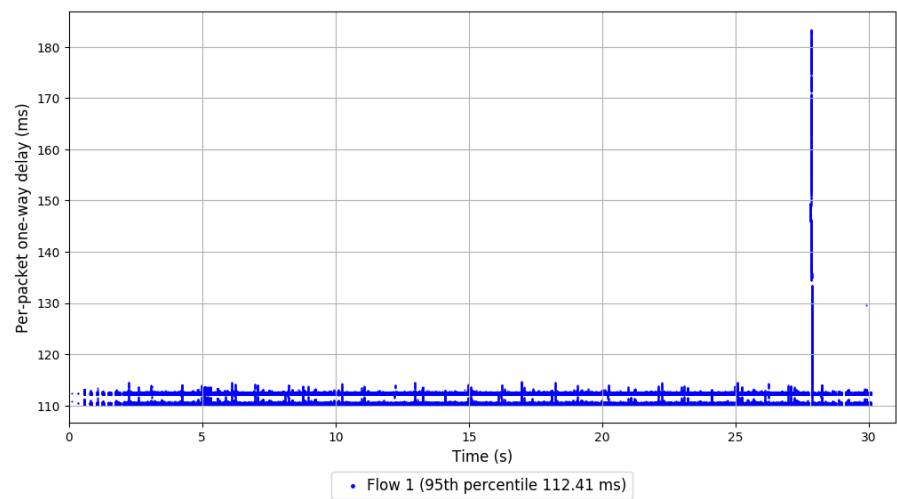
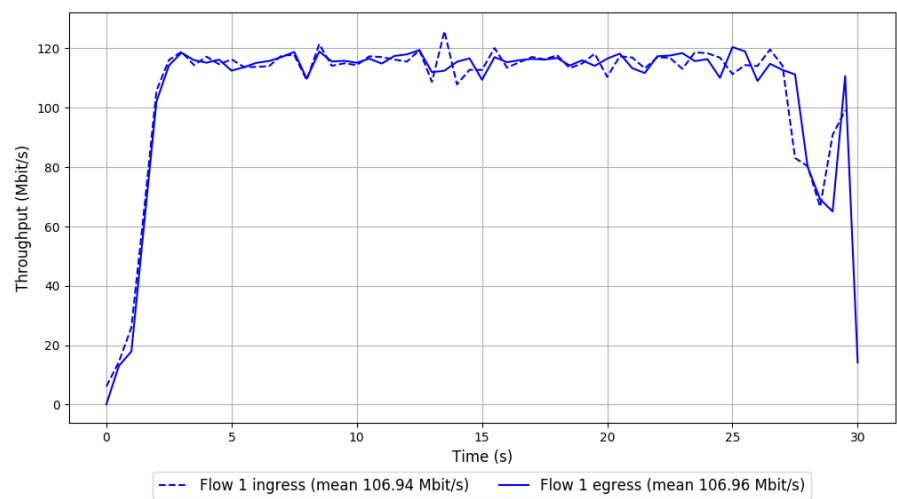


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-11 09:11:18
End at: 2017-08-11 09:11:48

# Below is generated by plot.py at 2017-08-11 10:27:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 106.96 Mbit/s
95th percentile per-packet one-way delay: 112.406 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 106.96 Mbit/s
95th percentile per-packet one-way delay: 112.406 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-11 07:29:18

End at: 2017-08-11 07:29:48

Below is generated by plot.py at 2017-08-11 10:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 112.559 ms

Loss rate: 1.55%

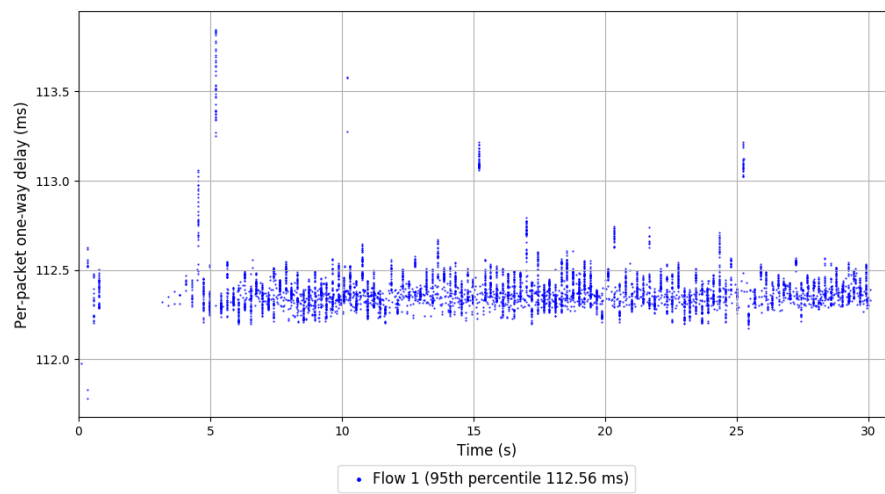
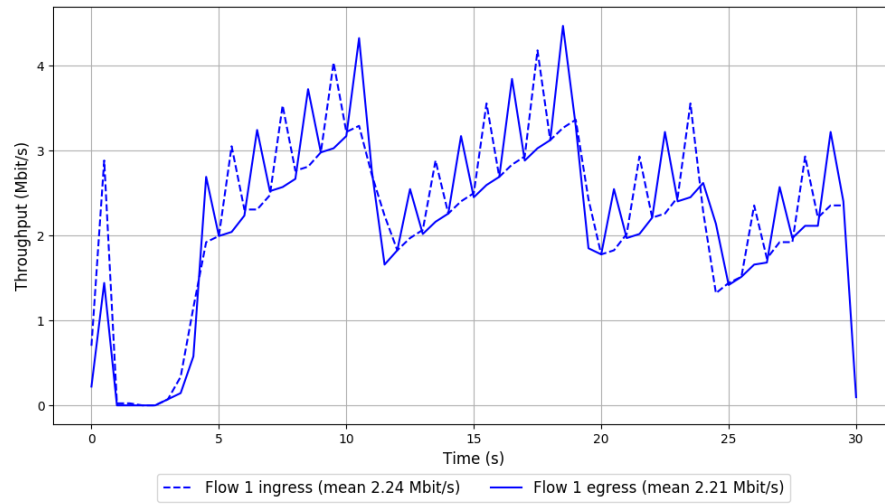
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 112.559 ms

Loss rate: 1.55%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-11 07:40:32

End at: 2017-08-11 07:41:02

Below is generated by plot.py at 2017-08-11 10:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 110.822 ms

Loss rate: 1.20%

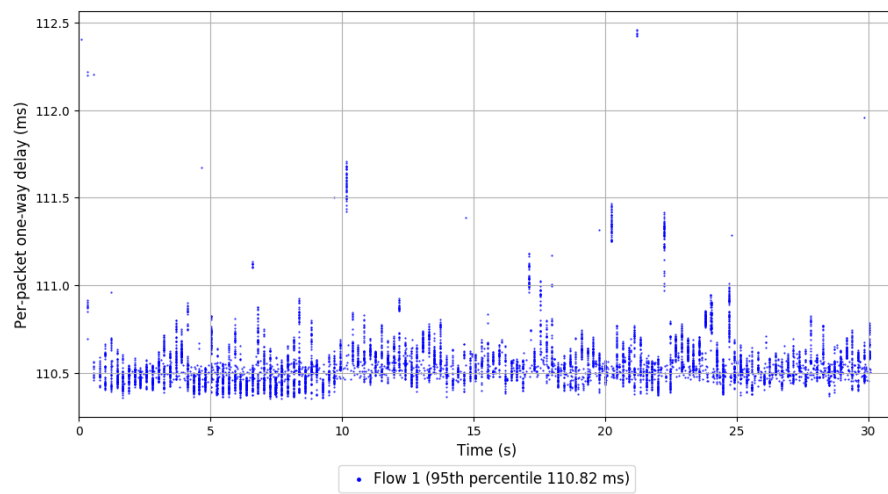
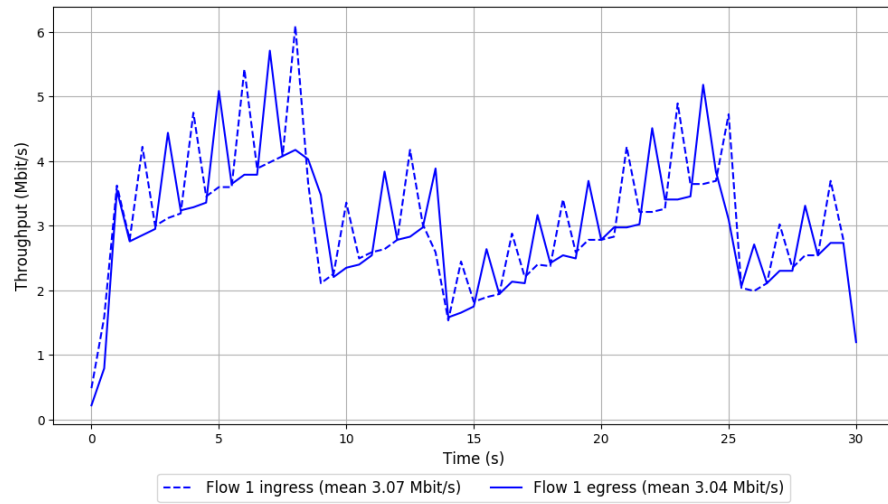
-- Flow 1:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 110.822 ms

Loss rate: 1.20%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-11 07:52:20

End at: 2017-08-11 07:52:50

Below is generated by plot.py at 2017-08-11 10:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 110.767 ms

Loss rate: 1.86%

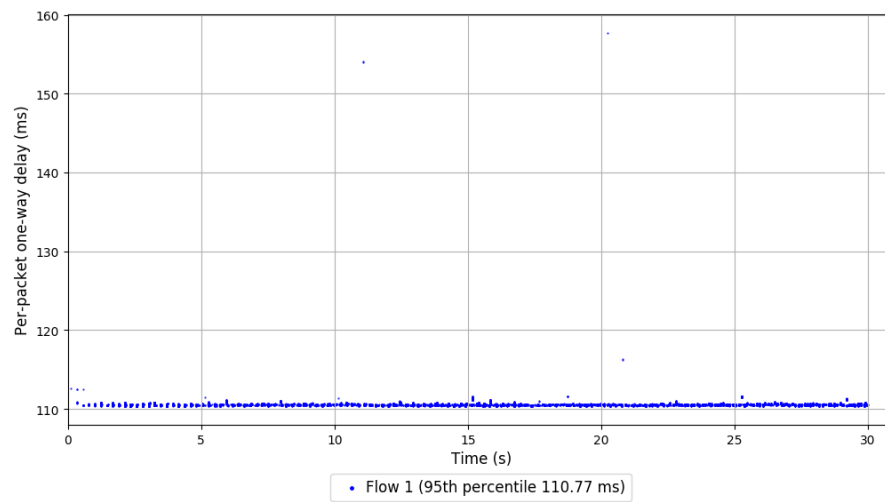
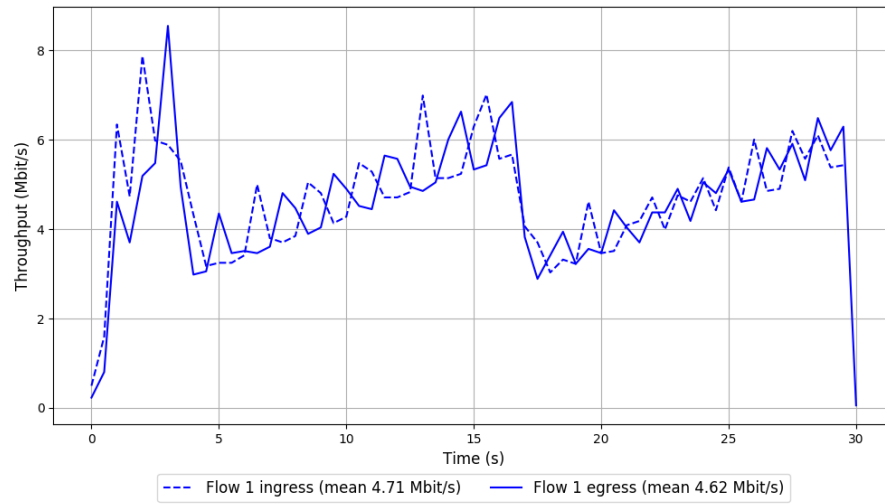
-- Flow 1:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 110.767 ms

Loss rate: 1.86%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-11 08:03:46

End at: 2017-08-11 08:04:16

Below is generated by plot.py at 2017-08-11 10:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.05 Mbit/s

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

Loss rate: 2.07%

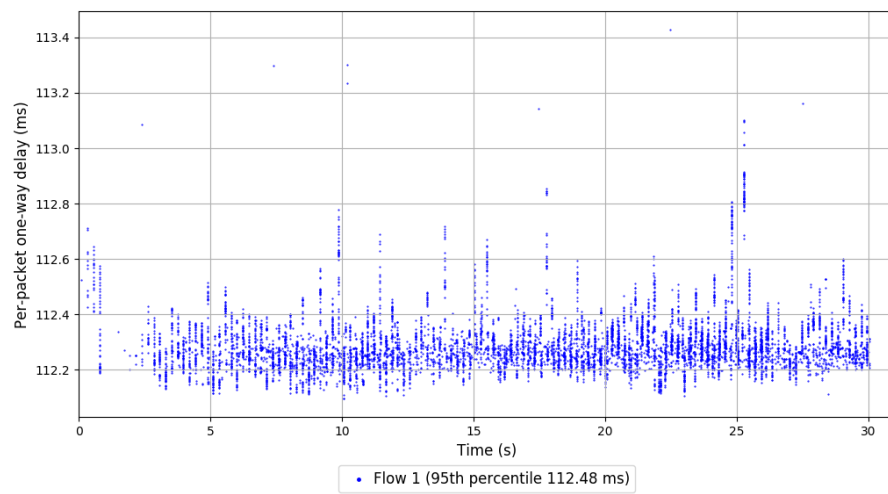
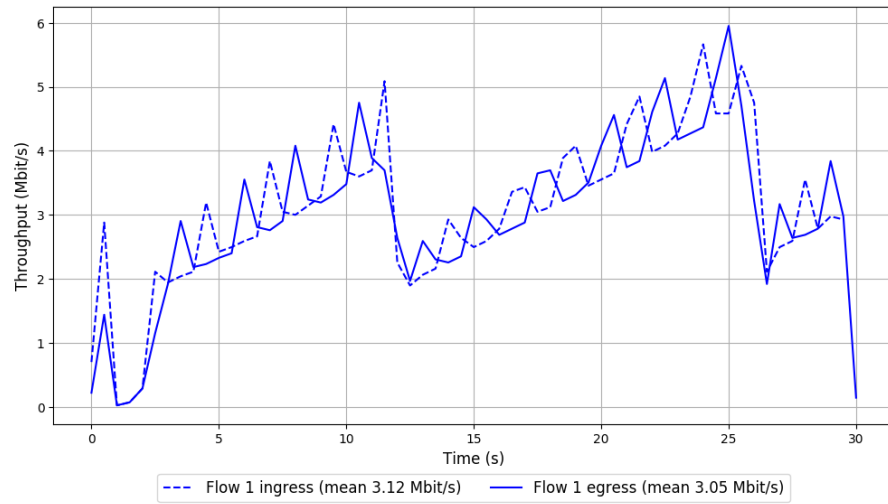
-- Flow 1:

Average throughput: 3.05 Mbit/s

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

Loss rate: 2.07%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2017-08-11 10:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.18 Mbit/s

95th percentile per-packet one-way delay: 113.451 ms

Loss rate: 0.14%

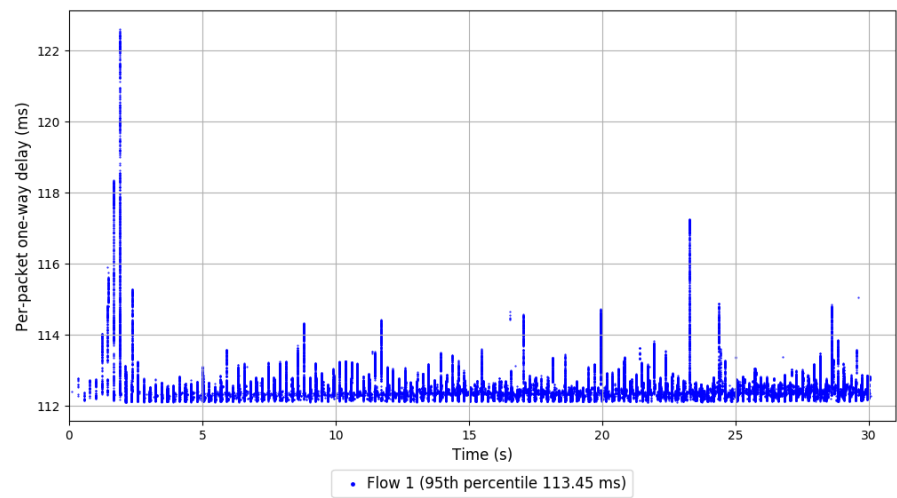
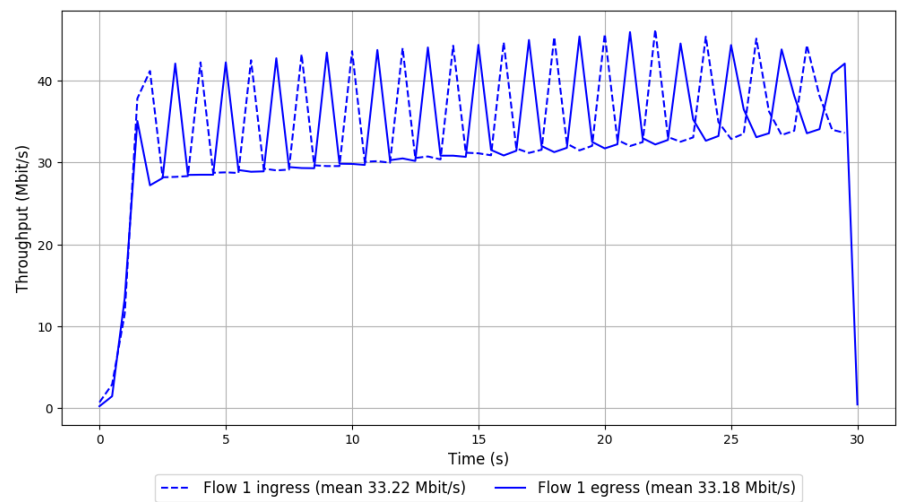
-- Flow 1:

Average throughput: 33.18 Mbit/s

95th percentile per-packet one-way delay: 113.451 ms

Loss rate: 0.14%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-11 08:25:34

End at: 2017-08-11 08:26:04

Below is generated by plot.py at 2017-08-11 10:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.16 Mbit/s

95th percentile per-packet one-way delay: 113.412 ms

Loss rate: 0.01%

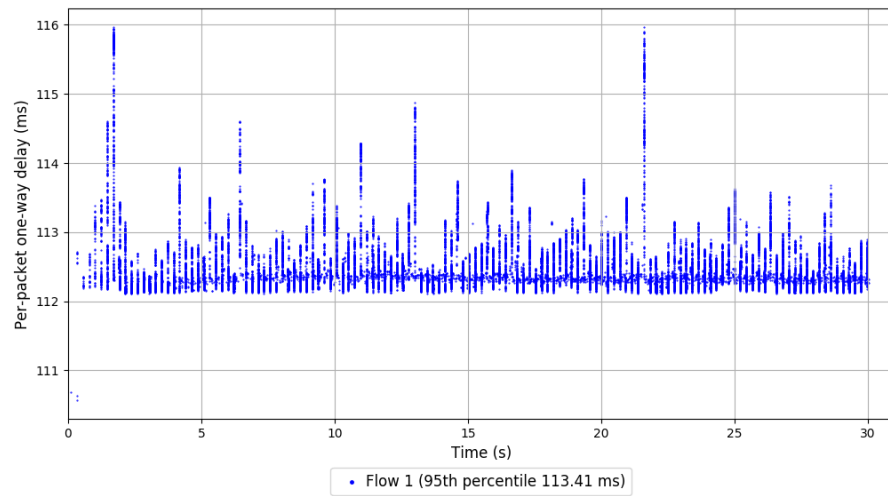
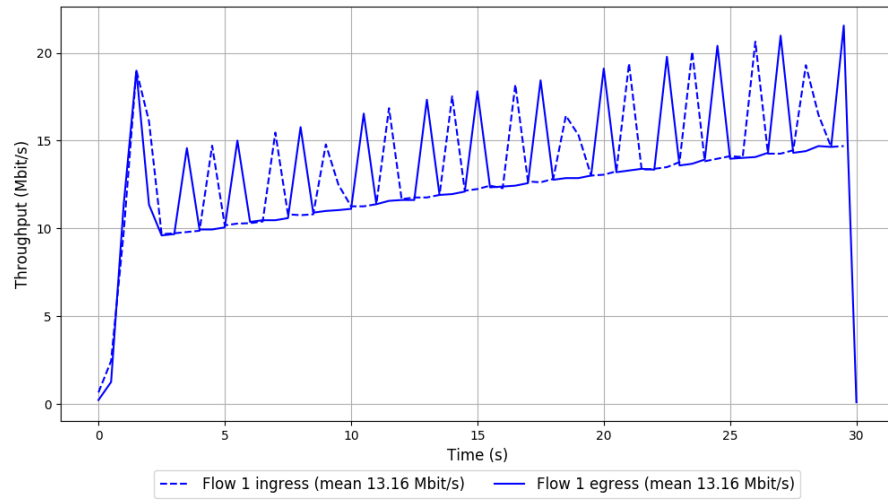
-- Flow 1:

Average throughput: 13.16 Mbit/s

95th percentile per-packet one-way delay: 113.412 ms

Loss rate: 0.01%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-11 08:36:51

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

Below is generated by plot.py at 2017-08-11 10:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 112.478 ms

Loss rate: 2.85%

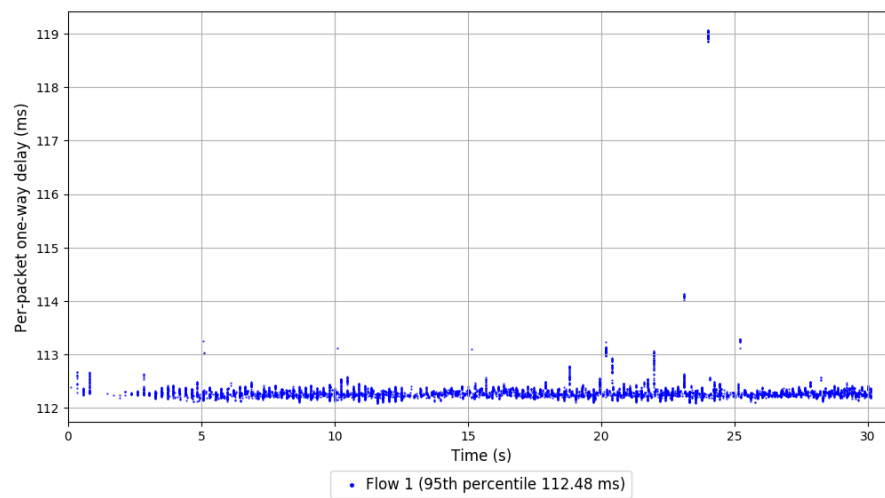
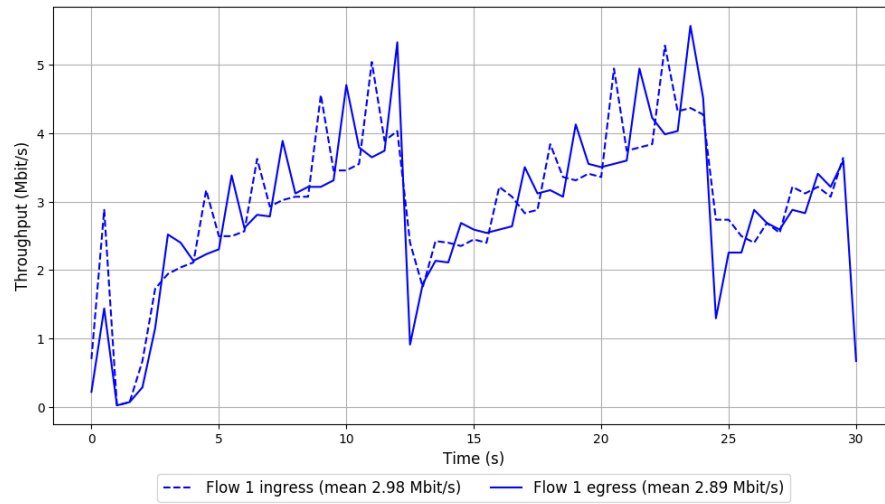
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 112.478 ms

Loss rate: 2.85%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-11 08:47:51

End at: 2017-08-11 08:48:21

Below is generated by plot.py at 2017-08-11 10:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 112.496 ms

Loss rate: 2.69%

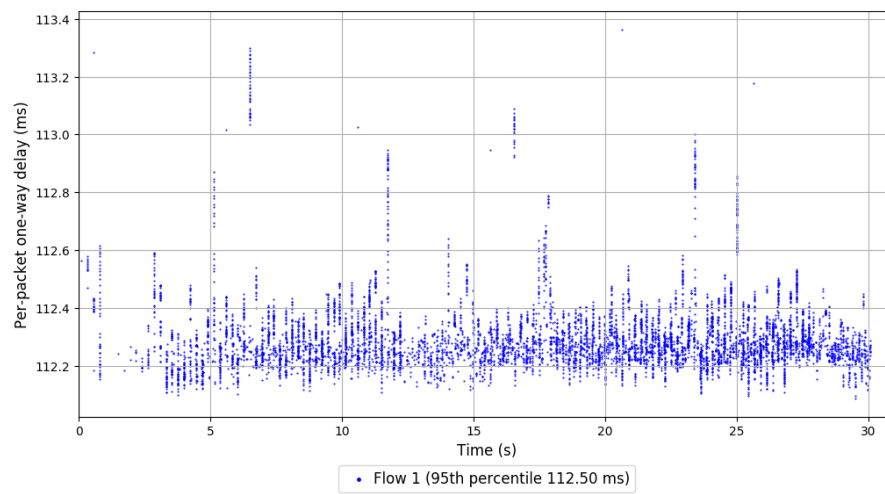
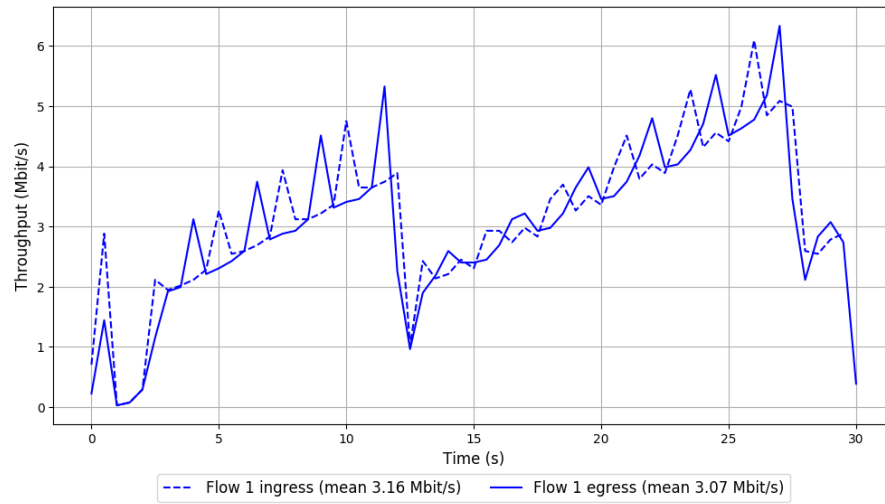
-- Flow 1:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 112.496 ms

Loss rate: 2.69%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2017-08-11 10:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.47 Mbit/s

95th percentile per-packet one-way delay: 112.514 ms

Loss rate: 1.23%

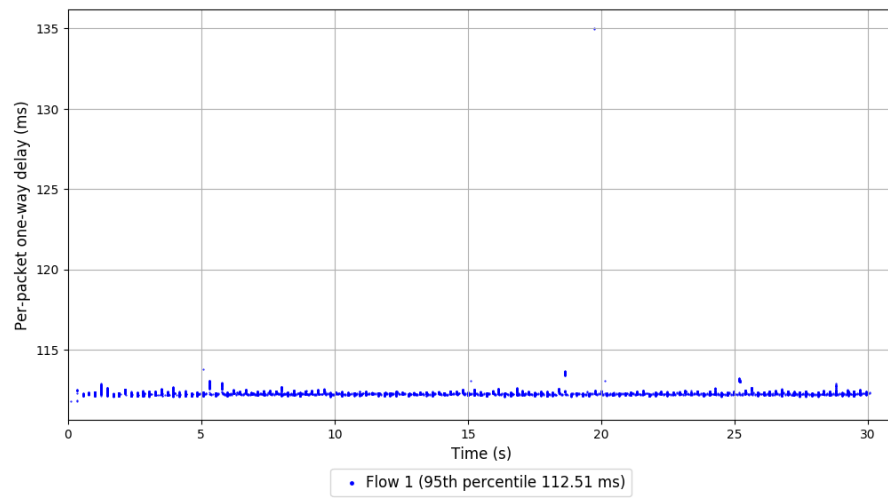
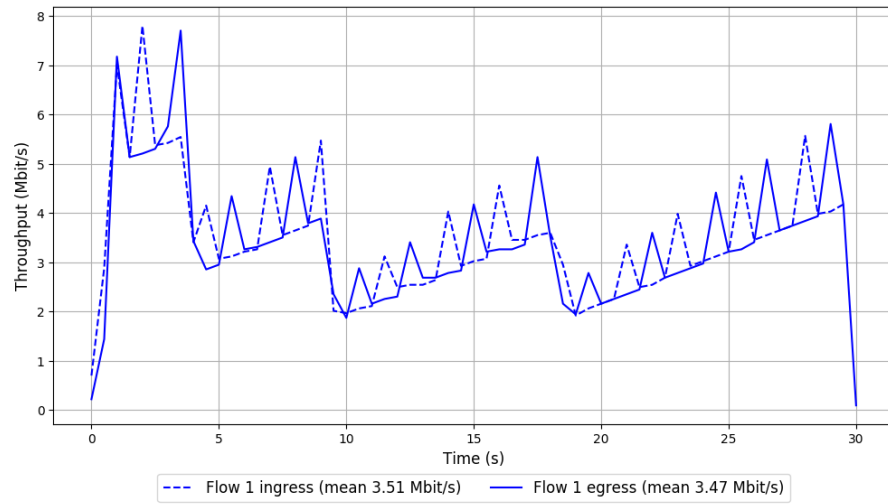
-- Flow 1:

Average throughput: 3.47 Mbit/s

95th percentile per-packet one-way delay: 112.514 ms

Loss rate: 1.23%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-11 09:10:35

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

Below is generated by plot.py at 2017-08-11 10:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.58 Mbit/s

95th percentile per-packet one-way delay: 111.784 ms

Loss rate: 0.24%

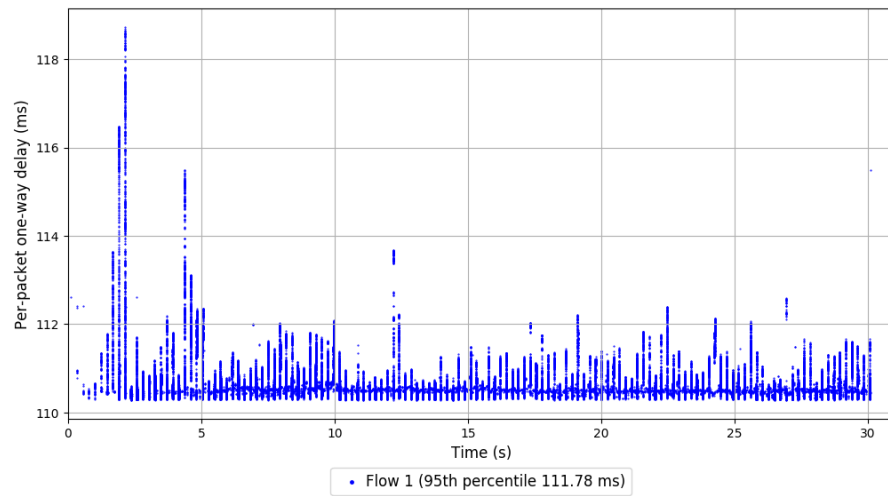
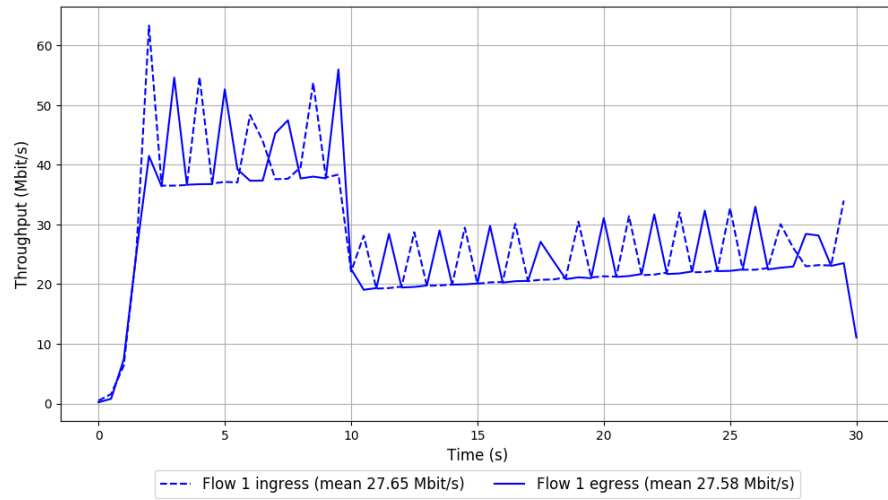
-- Flow 1:

Average throughput: 27.58 Mbit/s

95th percentile per-packet one-way delay: 111.784 ms

Loss rate: 0.24%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-11 07:27:32

End at: 2017-08-11 07:28:02

Below is generated by plot.py at 2017-08-11 10:27:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.59 Mbit/s

95th percentile per-packet one-way delay: 154.090 ms

Loss rate: 1.52%

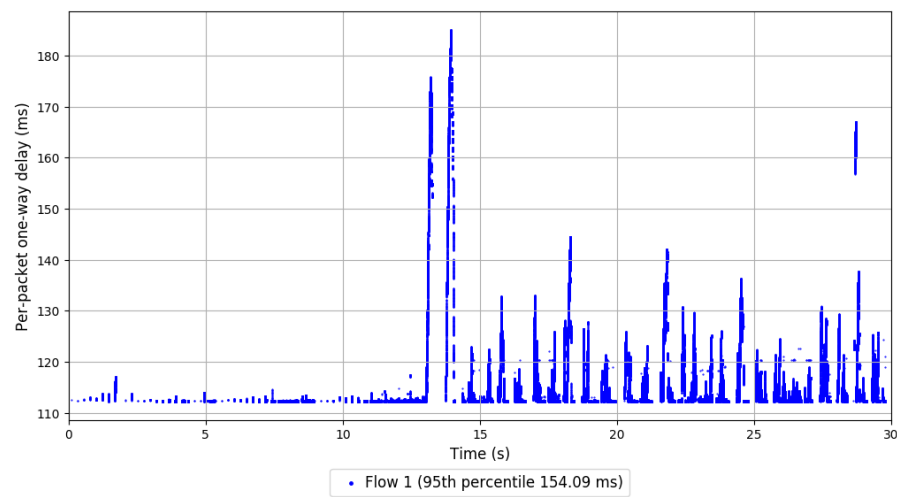
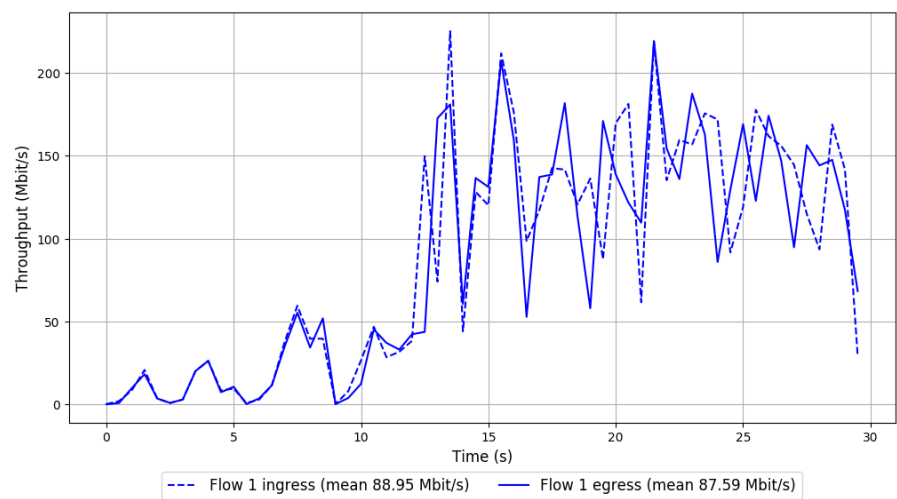
-- Flow 1:

Average throughput: 87.59 Mbit/s

95th percentile per-packet one-way delay: 154.090 ms

Loss rate: 1.52%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-11 07:38:47

End at: 2017-08-11 07:39:17

Below is generated by plot.py at 2017-08-11 10:27:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.89 Mbit/s

95th percentile per-packet one-way delay: 120.936 ms

Loss rate: 68.32%

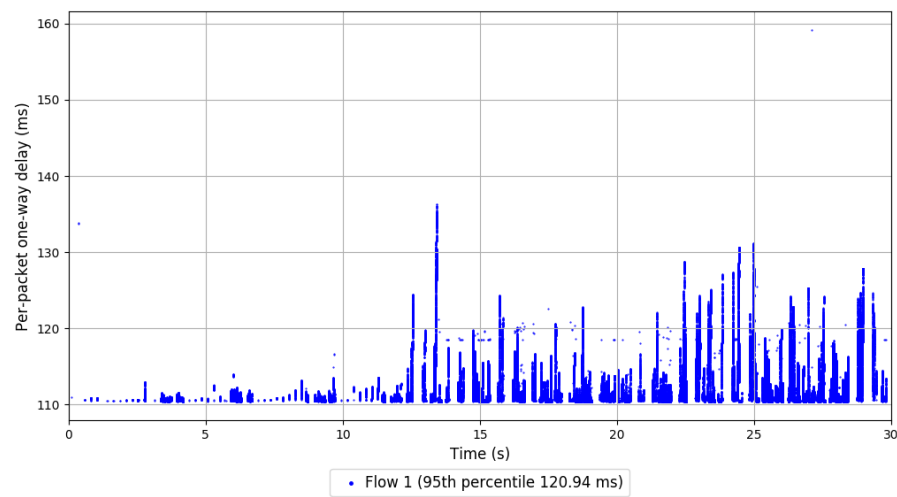
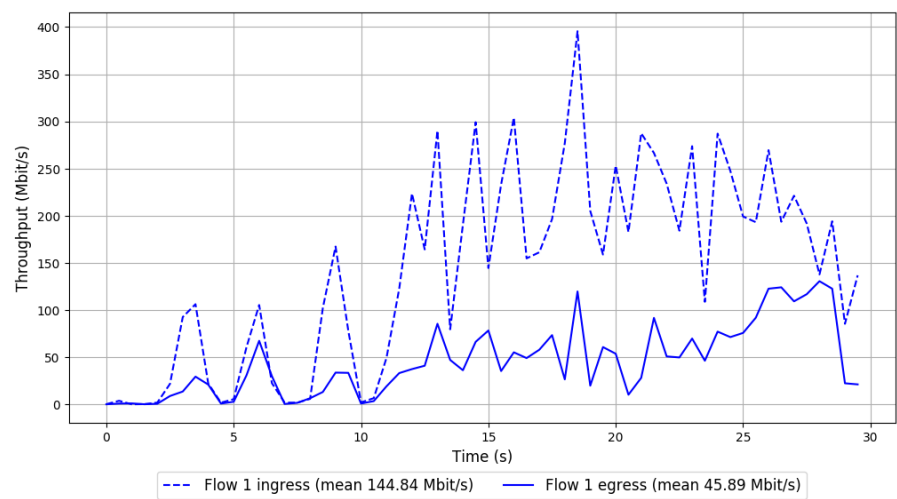
-- Flow 1:

Average throughput: 45.89 Mbit/s

95th percentile per-packet one-way delay: 120.936 ms

Loss rate: 68.32%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-11 07:50:33

End at: 2017-08-11 07:51:03

Below is generated by plot.py at 2017-08-11 10:27:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 114.07 Mbit/s

95th percentile per-packet one-way delay: 149.208 ms

Loss rate: 2.99%

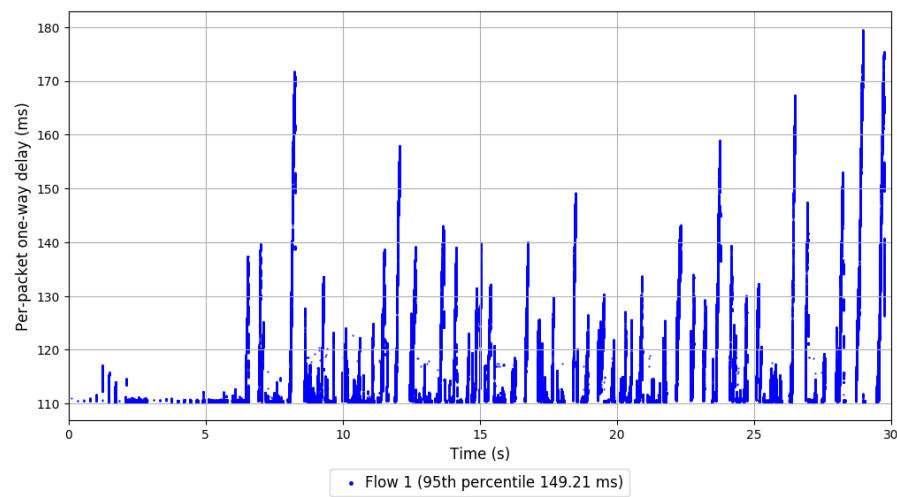
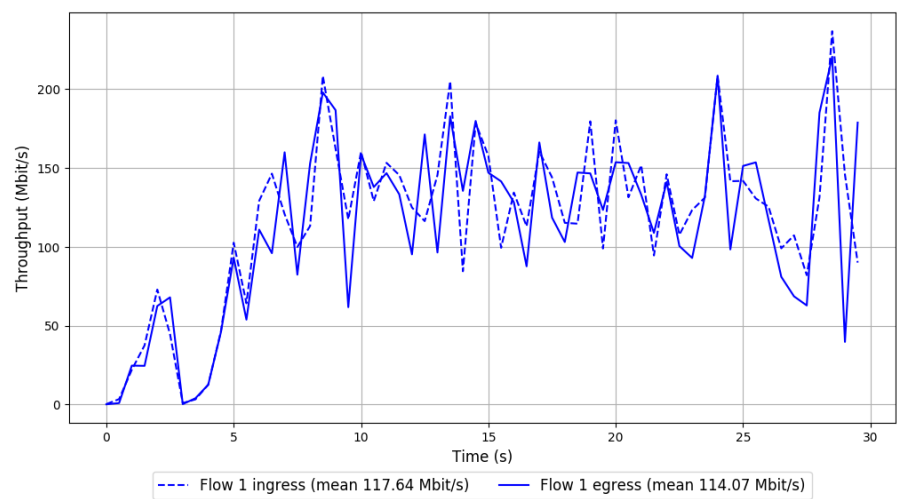
-- Flow 1:

Average throughput: 114.07 Mbit/s

95th percentile per-packet one-way delay: 149.208 ms

Loss rate: 2.99%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-11 08:02:00

End at: 2017-08-11 08:02:30

Below is generated by plot.py at 2017-08-11 10:27:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.79 Mbit/s

95th percentile per-packet one-way delay: 136.003 ms

Loss rate: 4.94%

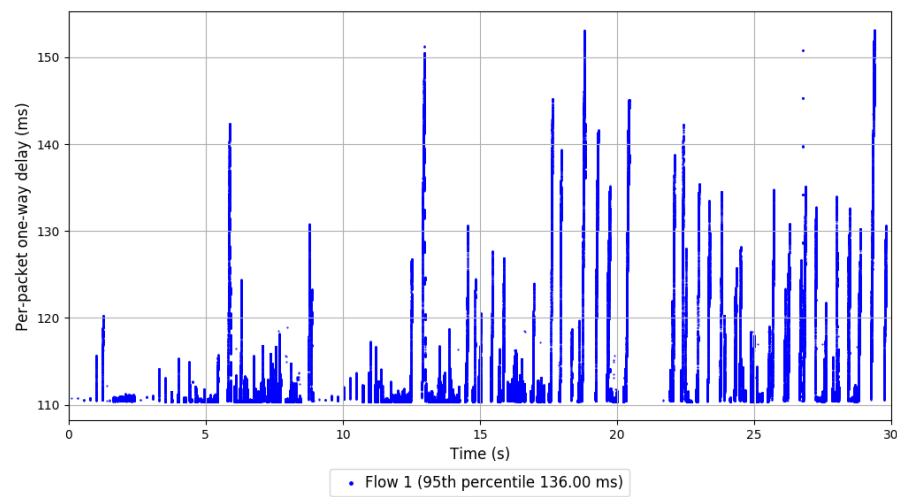
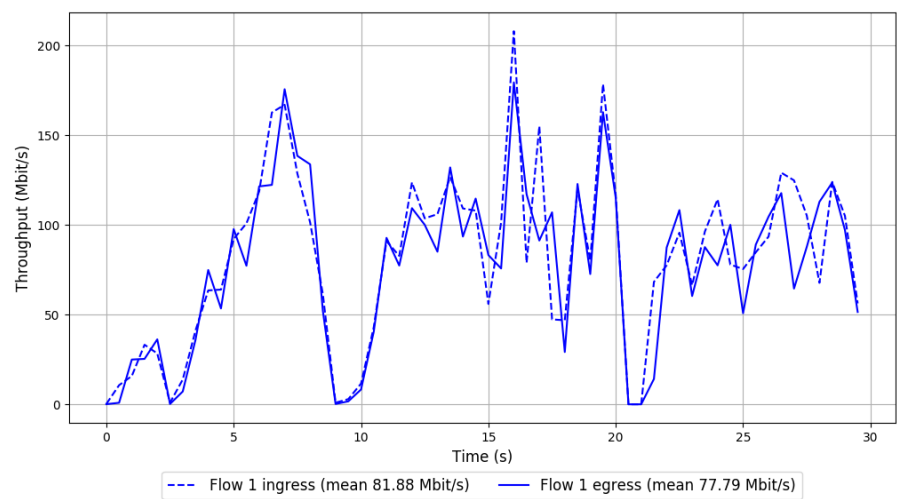
-- Flow 1:

Average throughput: 77.79 Mbit/s

95th percentile per-packet one-way delay: 136.003 ms

Loss rate: 4.94%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-11 08:12:59

End at: 2017-08-11 08:13:29

Below is generated by plot.py at 2017-08-11 10:28:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.59 Mbit/s

95th percentile per-packet one-way delay: 170.236 ms

Loss rate: 4.46%

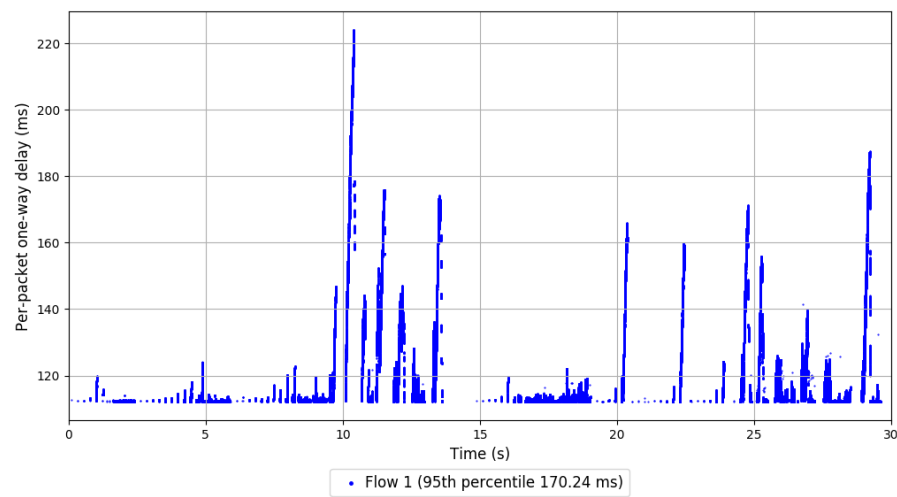
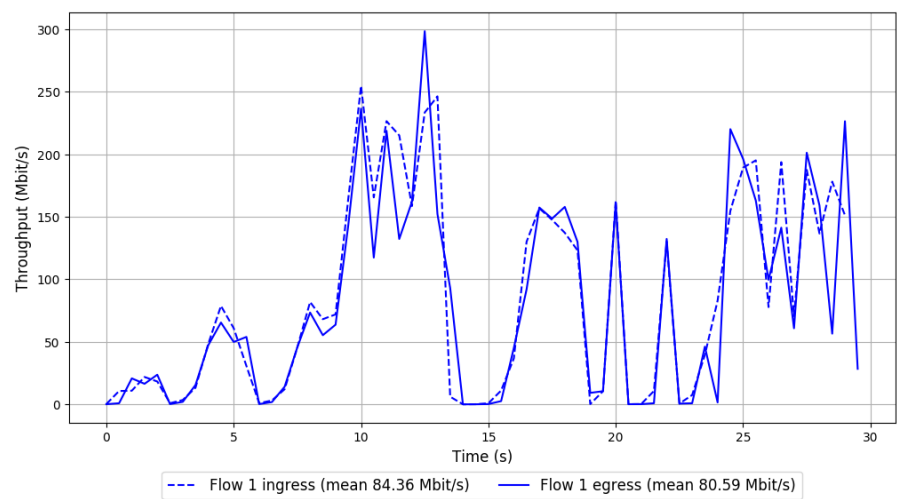
-- Flow 1:

Average throughput: 80.59 Mbit/s

95th percentile per-packet one-way delay: 170.236 ms

Loss rate: 4.46%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-11 08:24:05

End at: 2017-08-11 08:24:35

Below is generated by plot.py at 2017-08-11 10:28:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 99.42 Mbit/s

95th percentile per-packet one-way delay: 135.868 ms

Loss rate: 2.55%

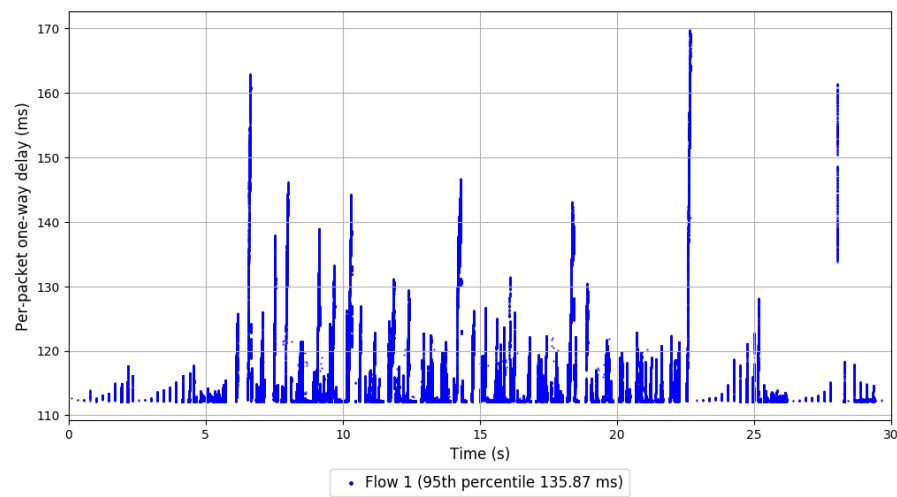
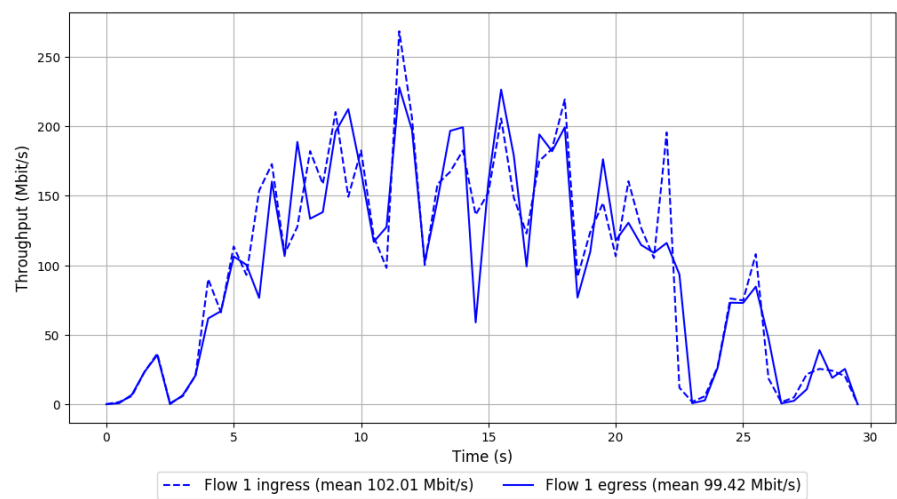
-- Flow 1:

Average throughput: 99.42 Mbit/s

95th percentile per-packet one-way delay: 135.868 ms

Loss rate: 2.55%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-11 08:35:03

End at: 2017-08-11 08:35:33

Below is generated by plot.py at 2017-08-11 10:28:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.34 Mbit/s

95th percentile per-packet one-way delay: 135.222 ms

Loss rate: 3.22%

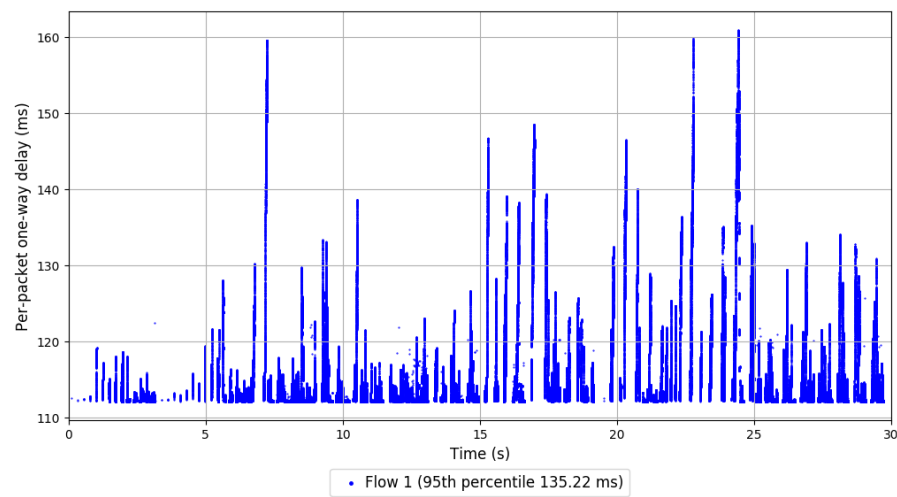
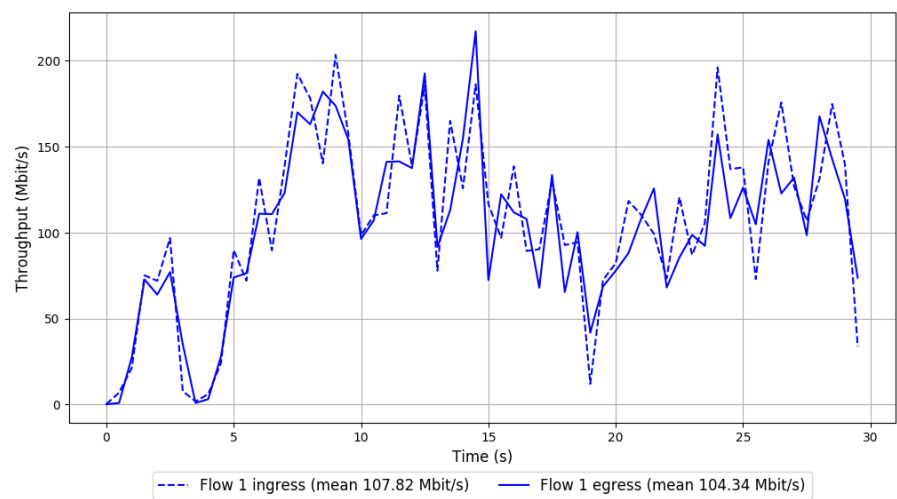
-- Flow 1:

Average throughput: 104.34 Mbit/s

95th percentile per-packet one-way delay: 135.222 ms

Loss rate: 3.22%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-11 08:46:19

End at: 2017-08-11 08:46:49

Below is generated by plot.py at 2017-08-11 10:28:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.58 Mbit/s

95th percentile per-packet one-way delay: 178.967 ms

Loss rate: 3.33%

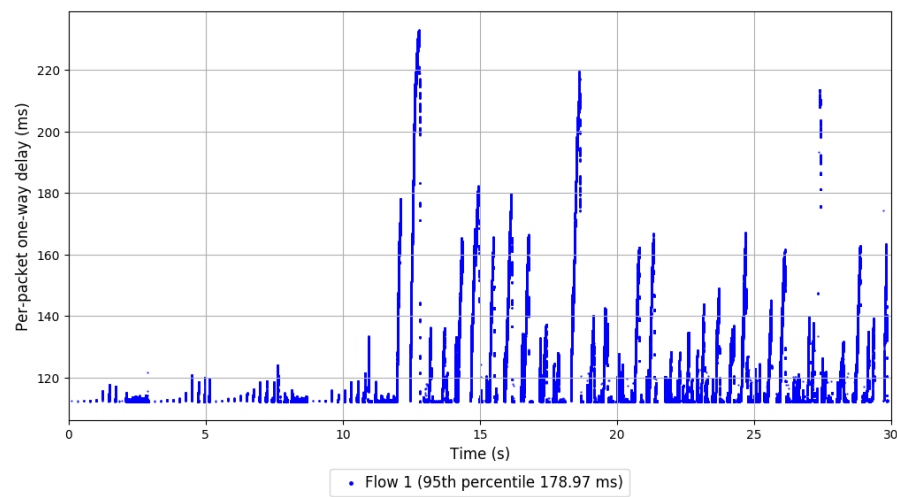
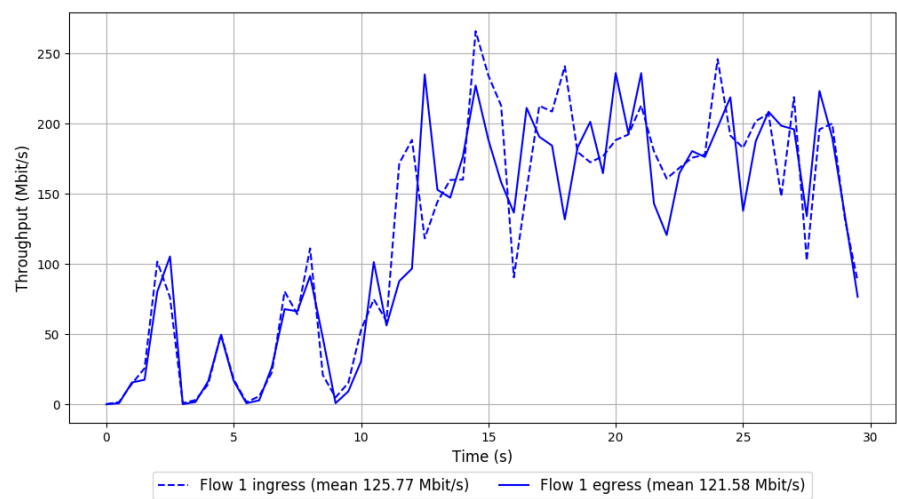
-- Flow 1:

Average throughput: 121.58 Mbit/s

95th percentile per-packet one-way delay: 178.967 ms

Loss rate: 3.33%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-11 08:57:22

End at: 2017-08-11 08:57:52

Below is generated by plot.py at 2017-08-11 10:28:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.61 Mbit/s

95th percentile per-packet one-way delay: 116.648 ms

Loss rate: 32.71%

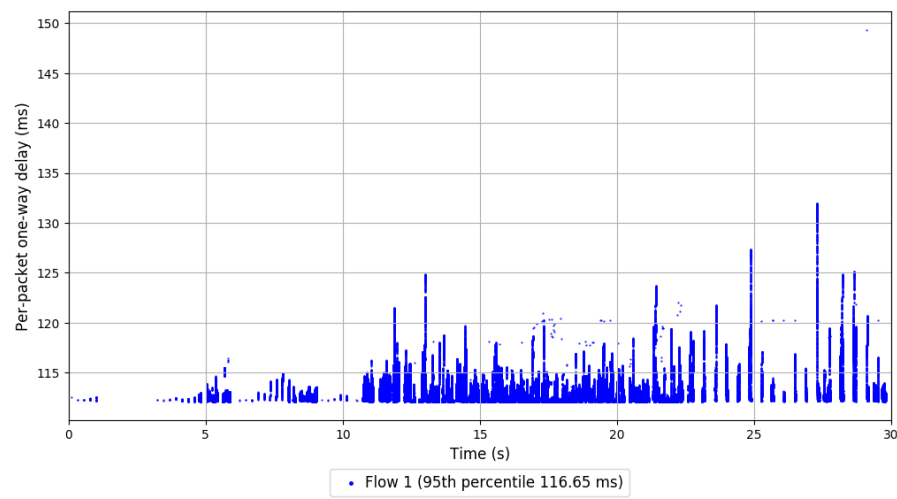
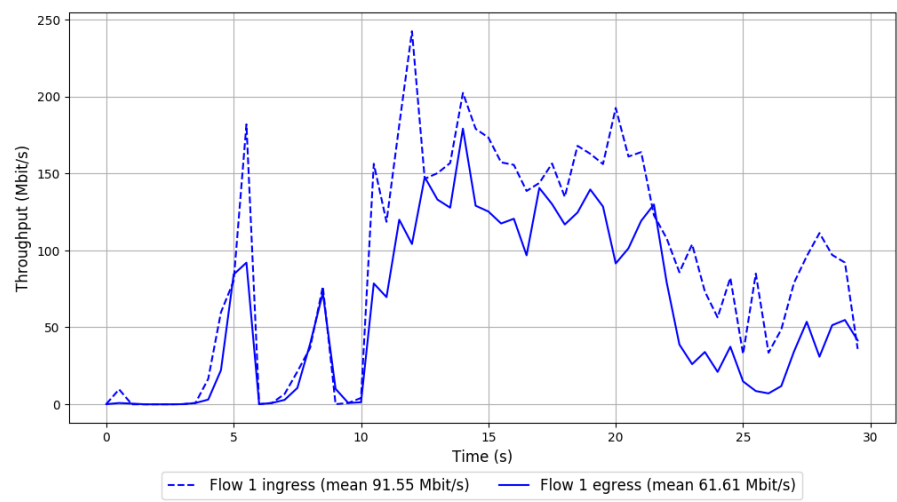
-- Flow 1:

Average throughput: 61.61 Mbit/s

95th percentile per-packet one-way delay: 116.648 ms

Loss rate: 32.71%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

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

End at: 2017-08-11 09:09:37

Below is generated by plot.py at 2017-08-11 10:28:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.58 Mbit/s

95th percentile per-packet one-way delay: 136.159 ms

Loss rate: 3.02%

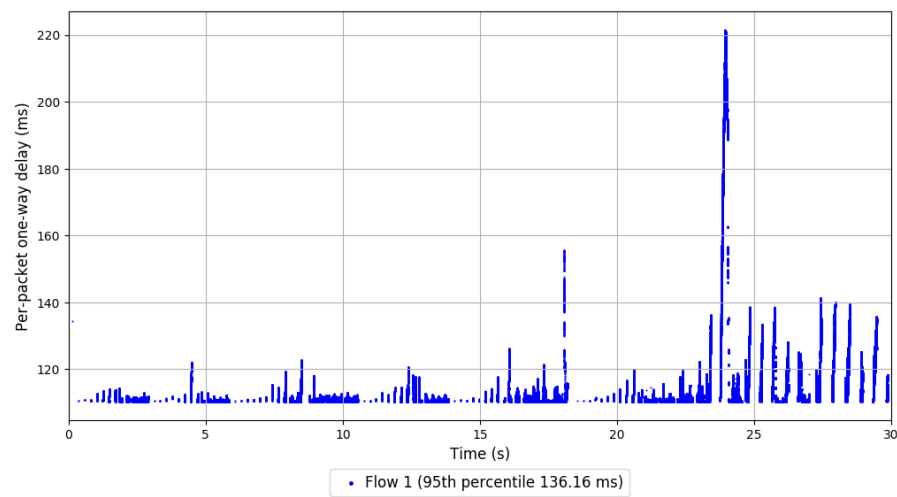
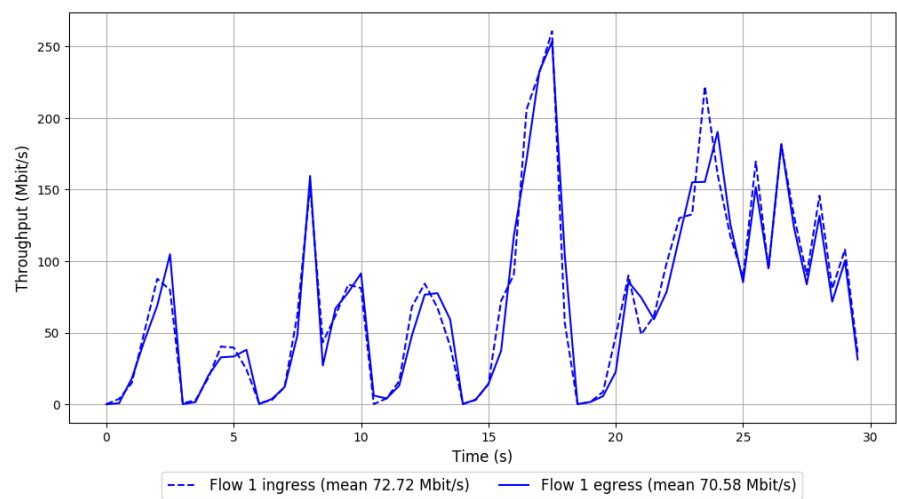
-- Flow 1:

Average throughput: 70.58 Mbit/s

95th percentile per-packet one-way delay: 136.159 ms

Loss rate: 3.02%

Run 10: Report of Verus — Data Link



Run 1: Statistics of WebRTC media

Start at: 2017-08-11 07:30:41

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

Below is generated by plot.py at 2017-08-11 10:28:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 110.628 ms

Loss rate: 0.00%

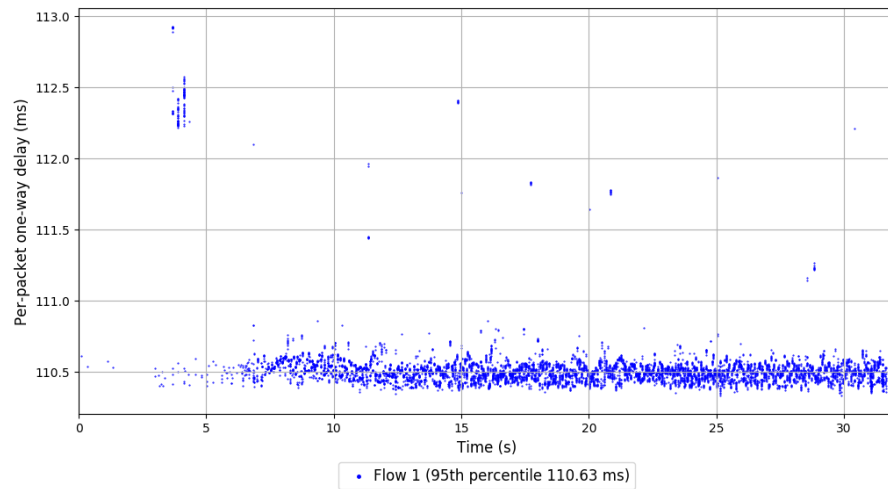
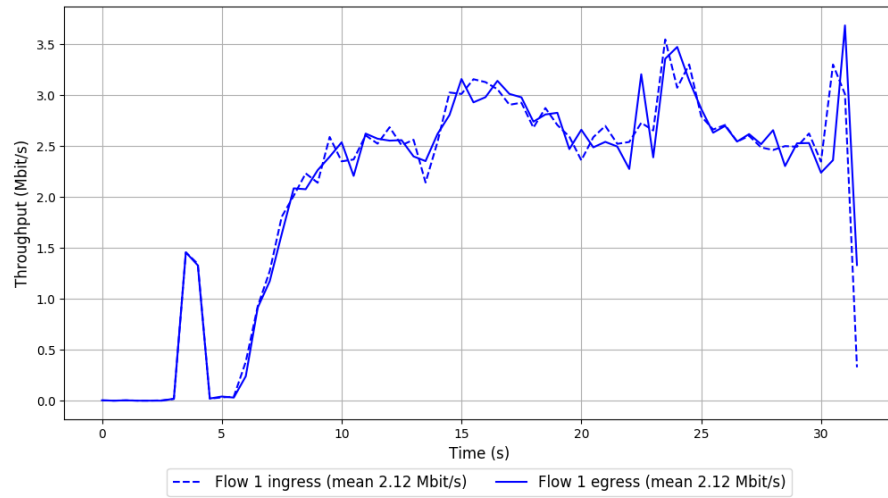
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 110.628 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-11 07:42:14

End at: 2017-08-11 07:42:44

Below is generated by plot.py at 2017-08-11 10:28:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 110.611 ms

Loss rate: 0.00%

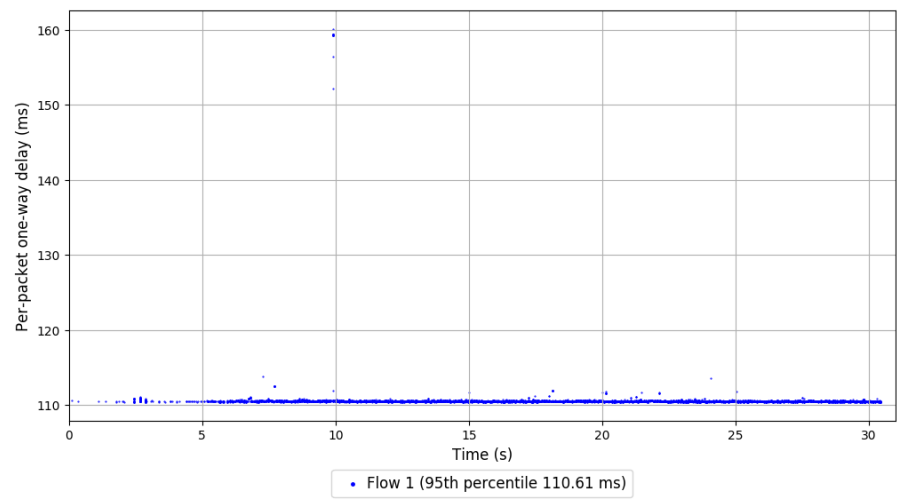
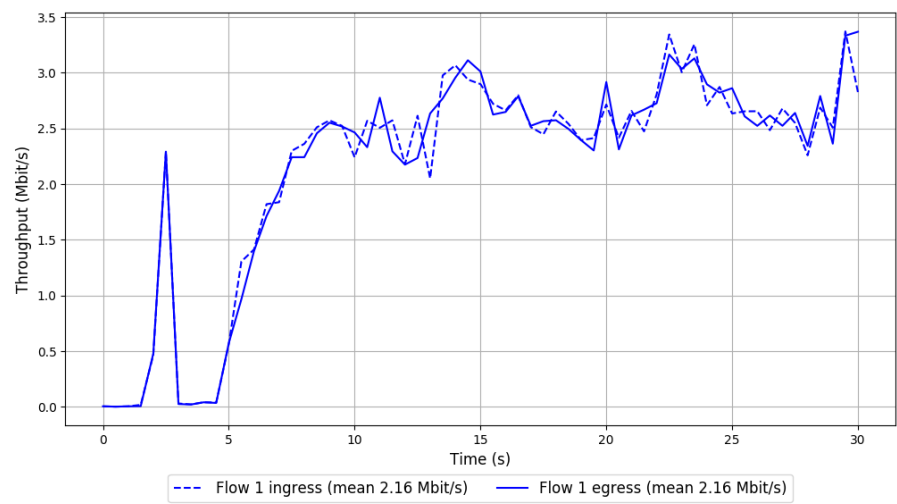
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 110.611 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-11 07:53:53

End at: 2017-08-11 07:54:23

Below is generated by plot.py at 2017-08-11 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 112.639 ms

Loss rate: 0.00%

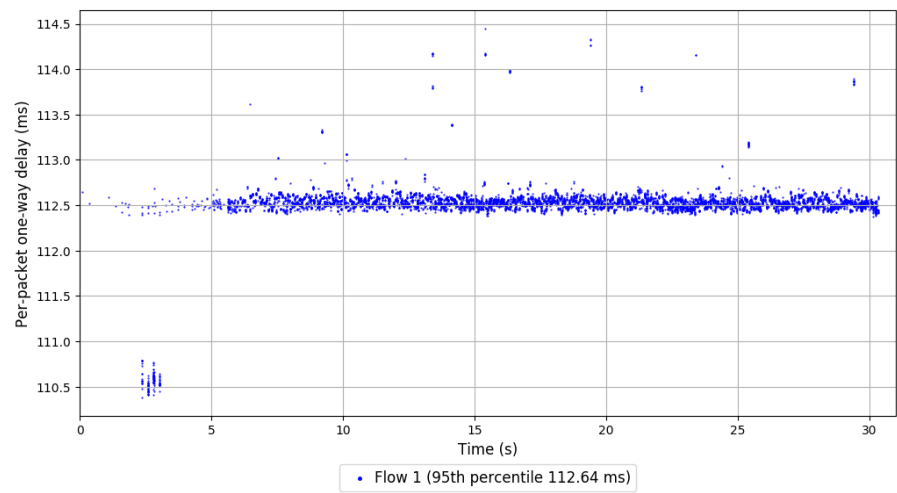
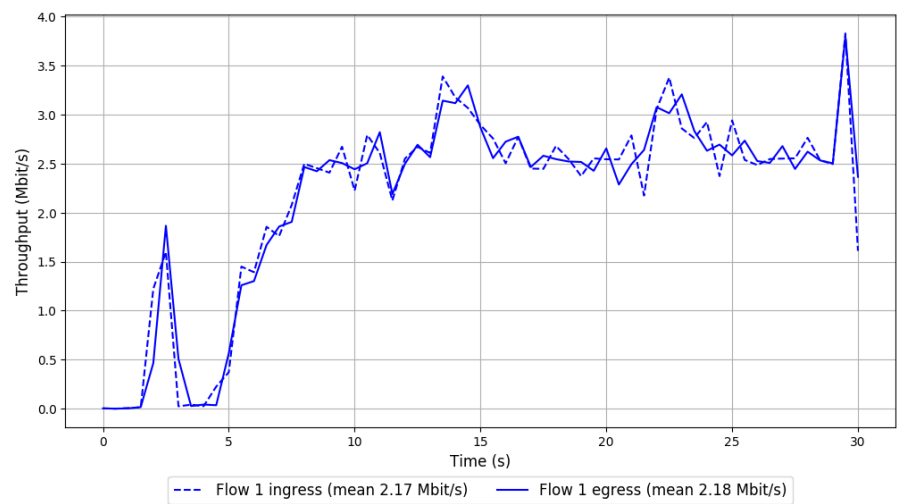
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 112.639 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2017-08-11 10:28:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

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

Loss rate: 0.00%

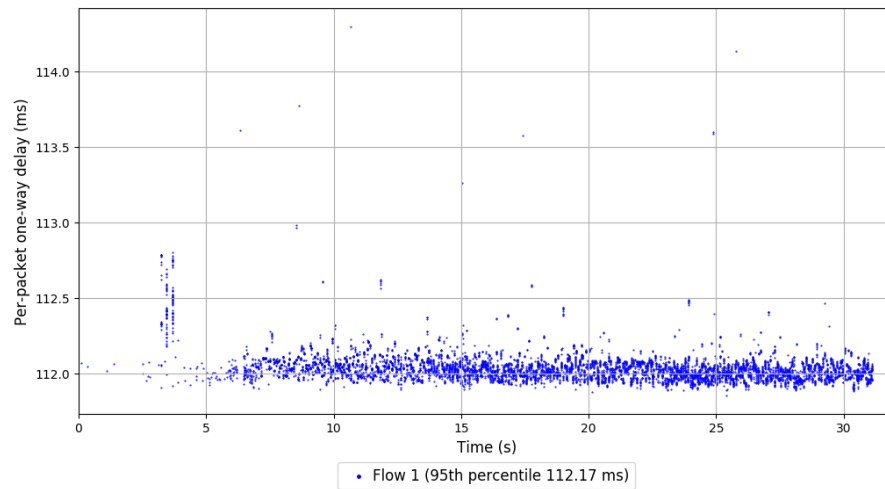
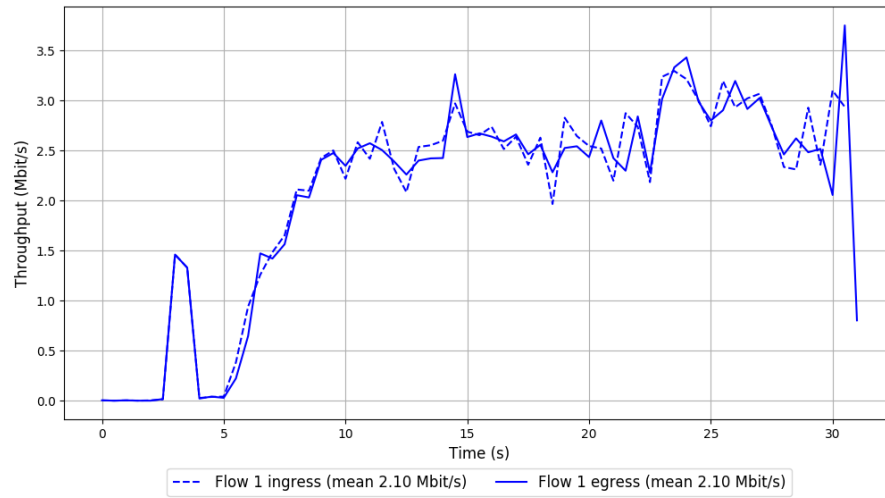
-- Flow 1:

Average throughput: 2.10 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

End at: 2017-08-11 08:16:41

Below is generated by plot.py at 2017-08-11 10:28:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

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

Loss rate: 0.00%

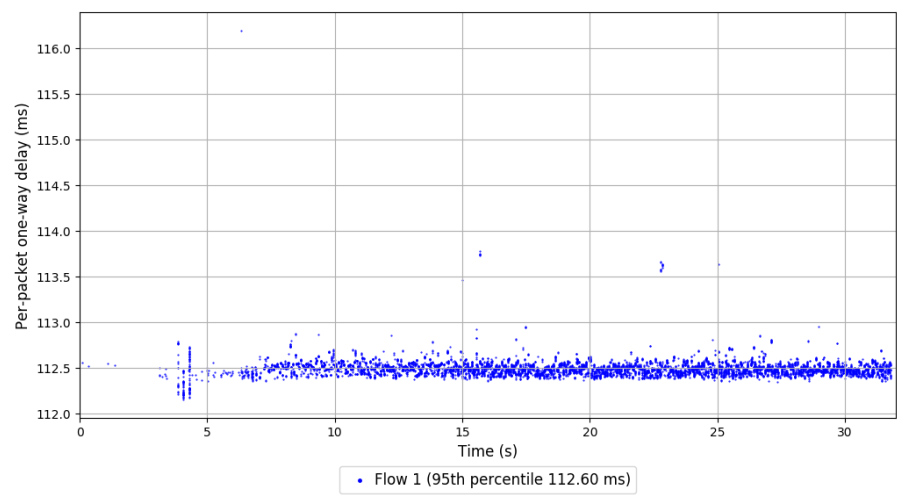
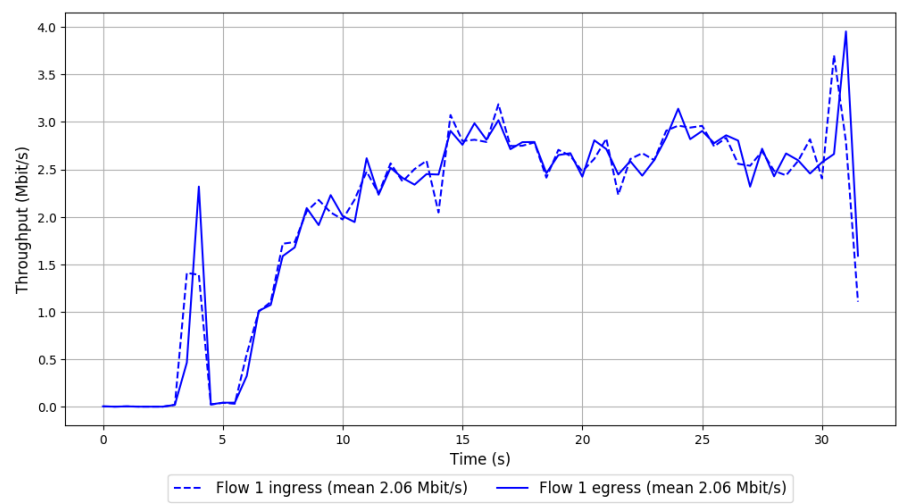
-- Flow 1:

Average throughput: 2.06 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2017-08-11 10:29:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 112.676 ms

Loss rate: 0.00%

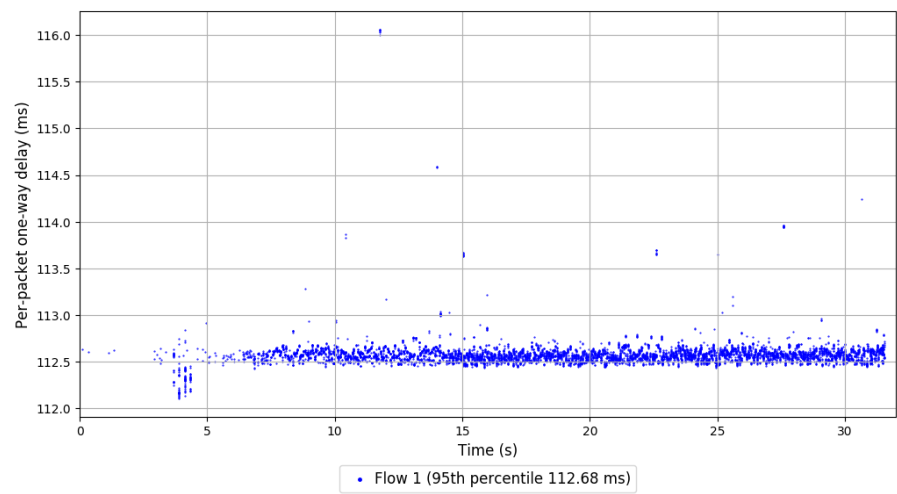
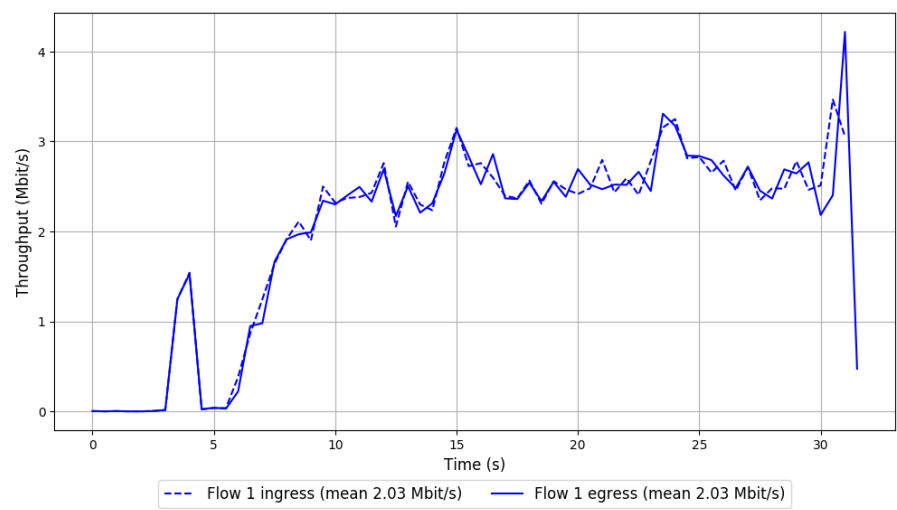
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 112.676 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-11 08:38:15

End at: 2017-08-11 08:38:45

Below is generated by plot.py at 2017-08-11 10:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 110.328 ms

Loss rate: 0.00%

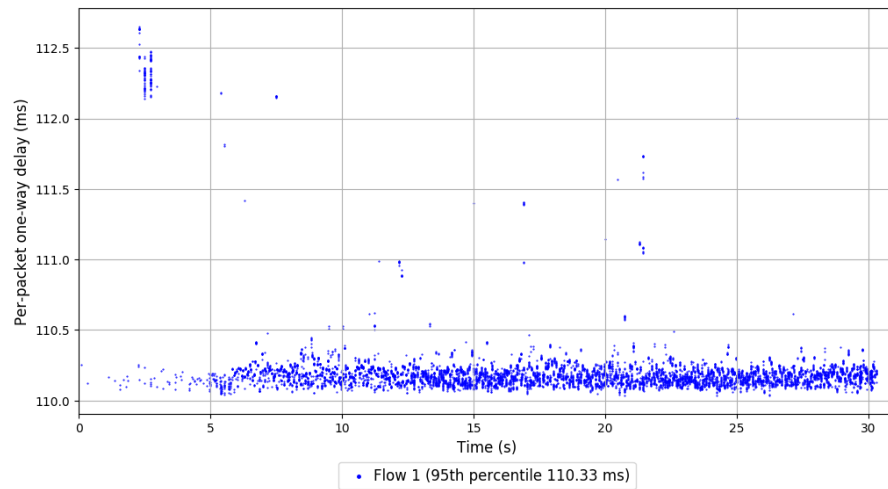
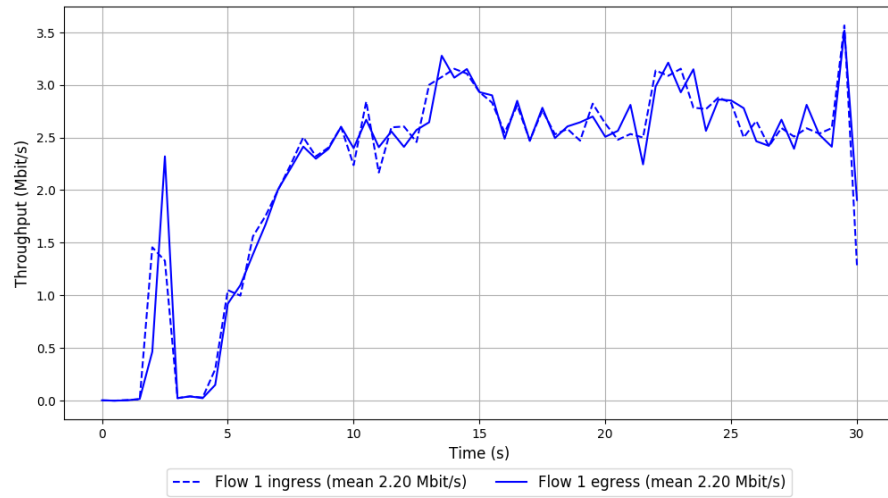
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 110.328 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-11 08:49:15

End at: 2017-08-11 08:49:45

Below is generated by plot.py at 2017-08-11 10:29:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 110.319 ms

Loss rate: 0.00%

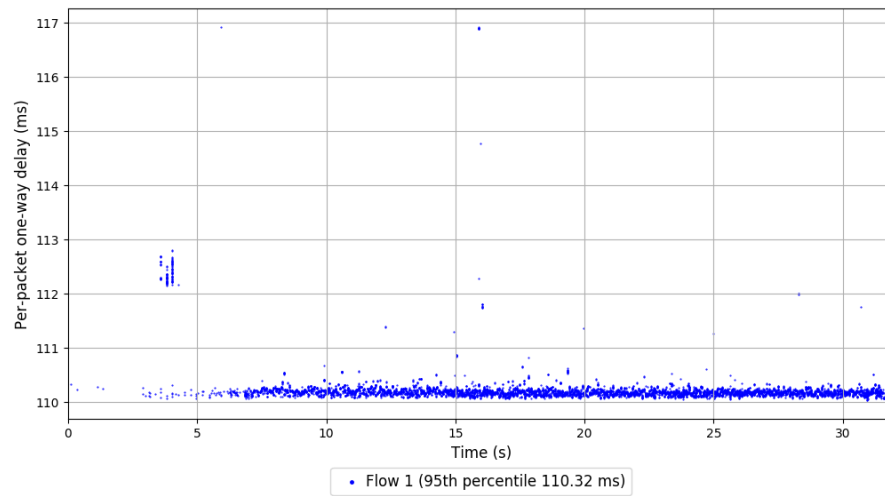
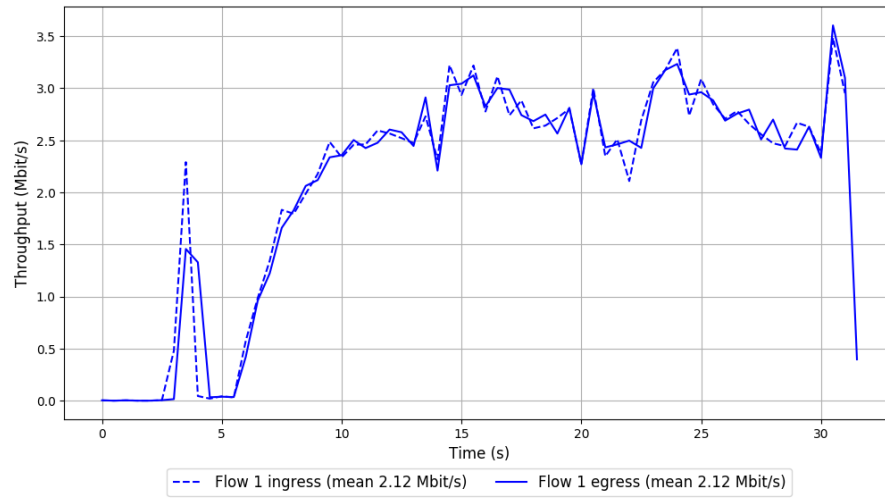
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 110.319 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-11 09:00:52

End at: 2017-08-11 09:01:22

Below is generated by plot.py at 2017-08-11 10:29:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.455 ms

Loss rate: 0.00%

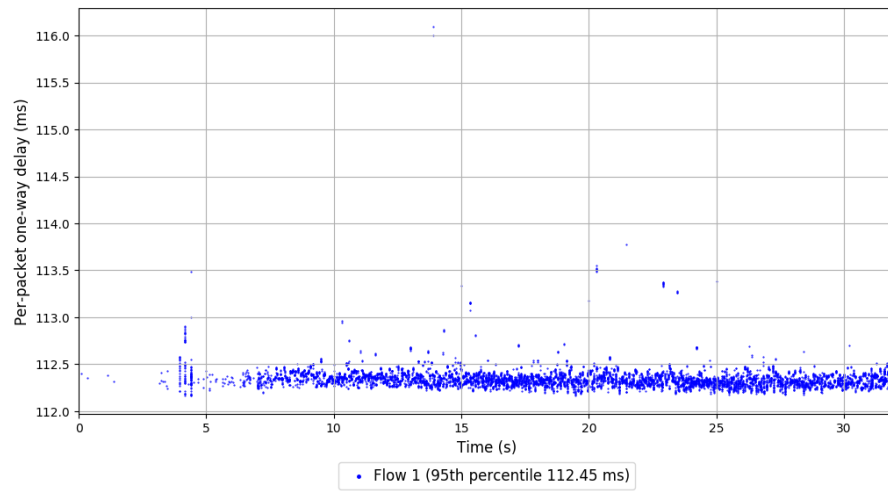
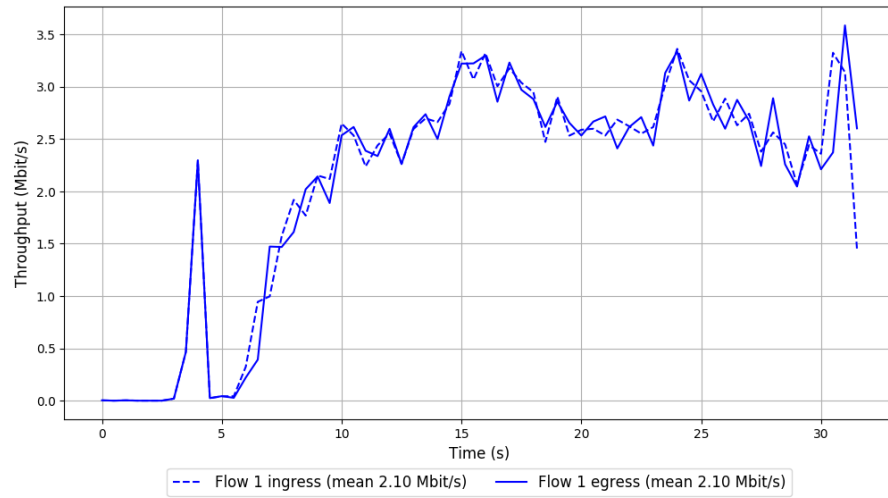
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.455 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-11 09:12:10

End at: 2017-08-11 09:12:40

Below is generated by plot.py at 2017-08-11 10:29:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.568 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.568 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

