

Pantheon Report

Generated at 2017-09-18 01:45:40 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

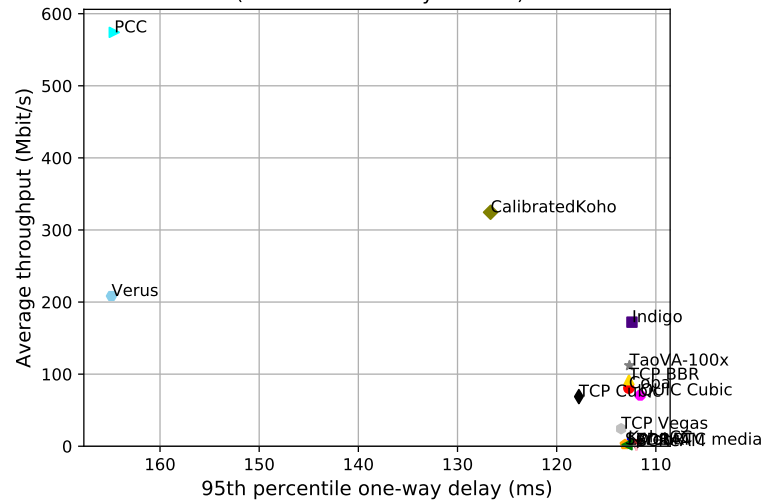
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

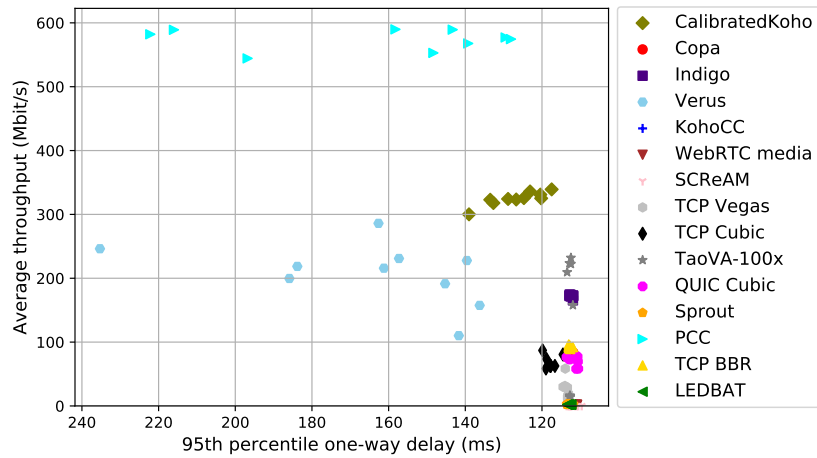
Git summary:

```
branch: master @ 57453dc11f8da93a2e03eea75289fea01b816298
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



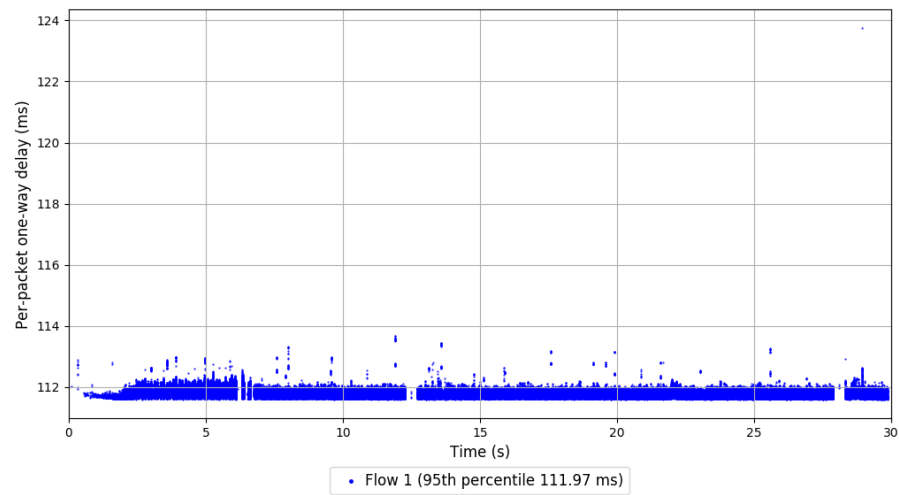
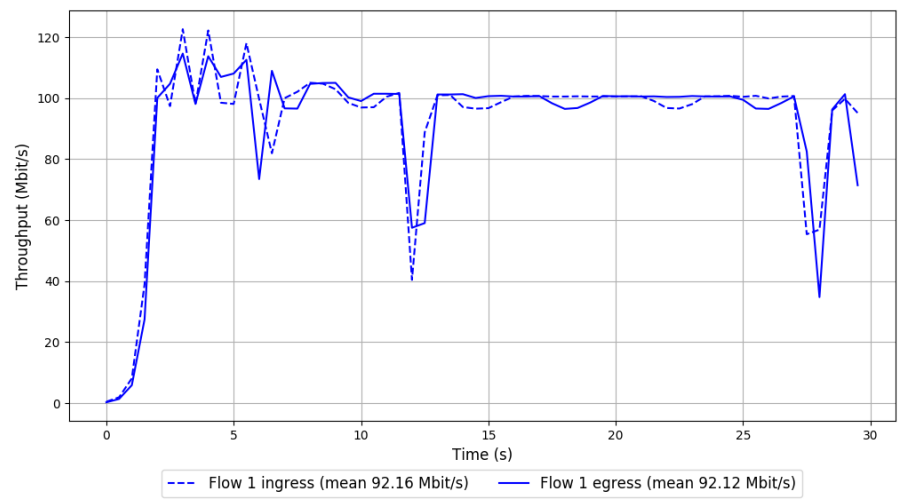
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	92.31	112.71	0.83
CalibratedKoho	10	324.52	126.67	1.19
Copa	8	80.54	112.72	0.82
TCP Cubic	8	68.84	117.76	0.78
Indigo	10	172.12	112.41	0.80
KohoCC	10	5.17	112.80	0.78
LEDBAT	10	2.05	112.91	1.03
PCC	9	574.11	164.61	2.14
QUIC Cubic	9	70.65	111.57	0.88
SCReAM	10	0.22	111.96	0.76
Sprout	7	2.58	113.11	0.87
TaoVA-100x	10	111.92	112.66	0.84
TCP Vegas	10	24.27	113.50	0.72
Verus	10	208.40	164.90	1.53
WebRTC media	9	2.11	111.97	0.83

```
Run 1: Statistics of TCP BBR

Start at: 2017-09-17 21:01:03
End at: 2017-09-17 21:01:33

# Below is generated by plot.py at 2017-09-18 01:08:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.12 Mbit/s
95th percentile per-packet one-way delay: 111.974 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 92.12 Mbit/s
95th percentile per-packet one-way delay: 111.974 ms
Loss rate: 0.80%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-09-17 21:13:08

End at: 2017-09-17 21:13:38

Below is generated by plot.py at 2017-09-18 01:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.39 Mbit/s

95th percentile per-packet one-way delay: 112.017 ms

Loss rate: 0.78%

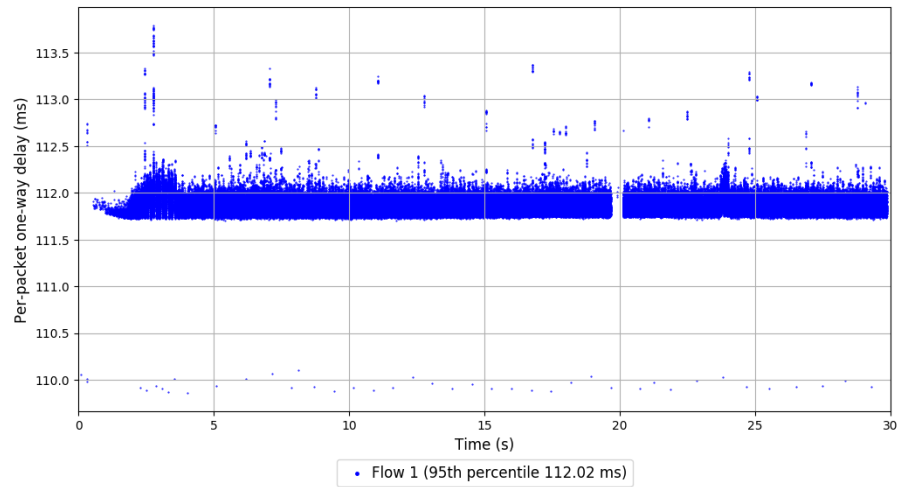
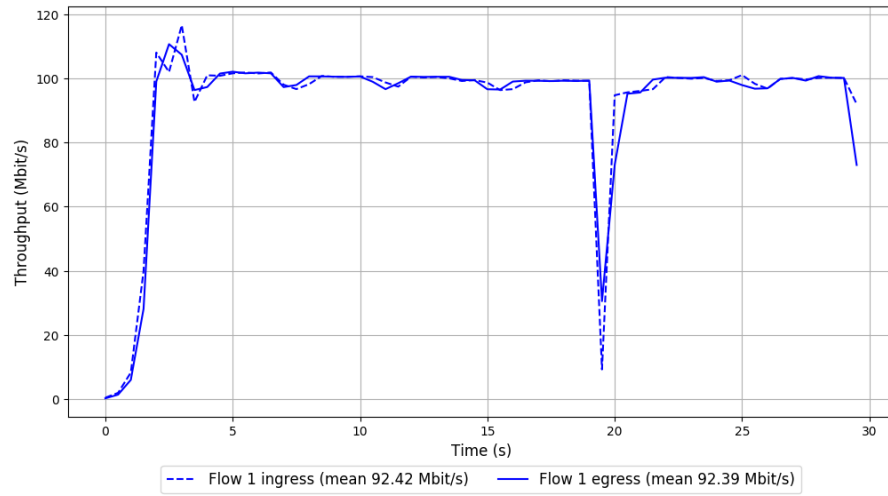
-- Flow 1:

Average throughput: 92.39 Mbit/s

95th percentile per-packet one-way delay: 112.017 ms

Loss rate: 0.78%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-09-17 21:24:58

End at: 2017-09-17 21:25:28

Below is generated by plot.py at 2017-09-18 01:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.18 Mbit/s

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

Loss rate: 0.78%

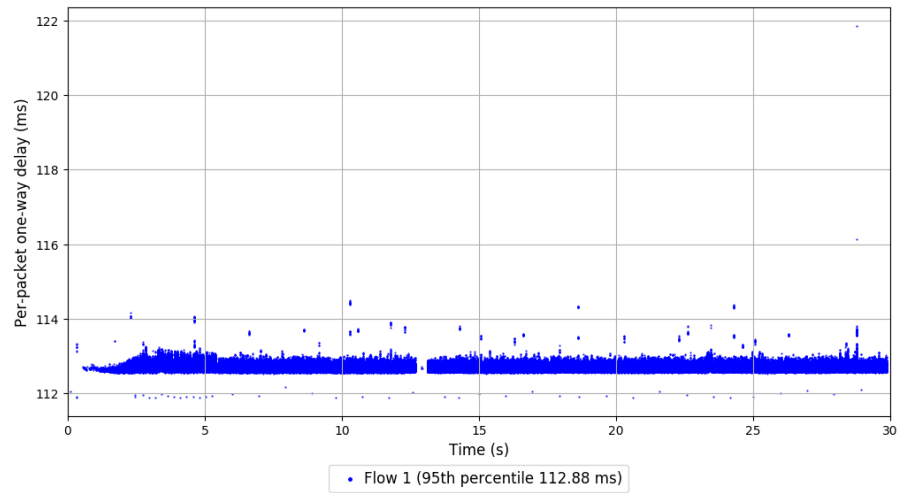
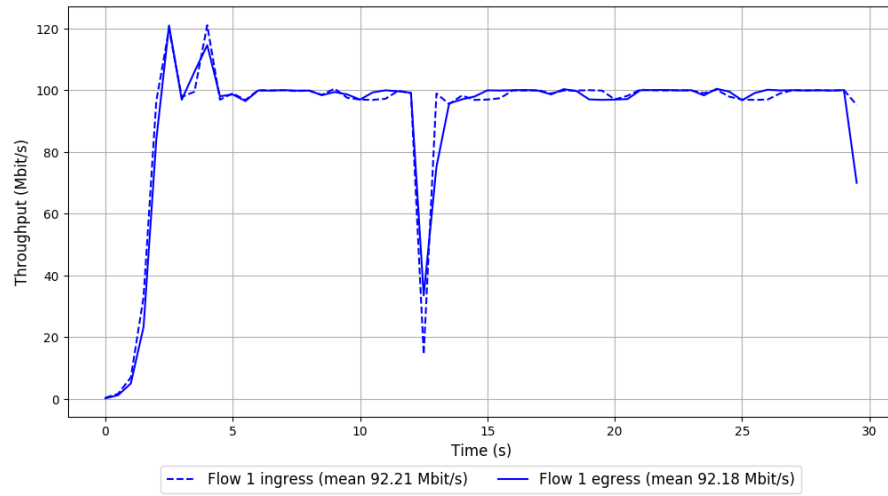
-- Flow 1:

Average throughput: 92.18 Mbit/s

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

Loss rate: 0.78%

Run 3: Report of TCP BBR — Data Link

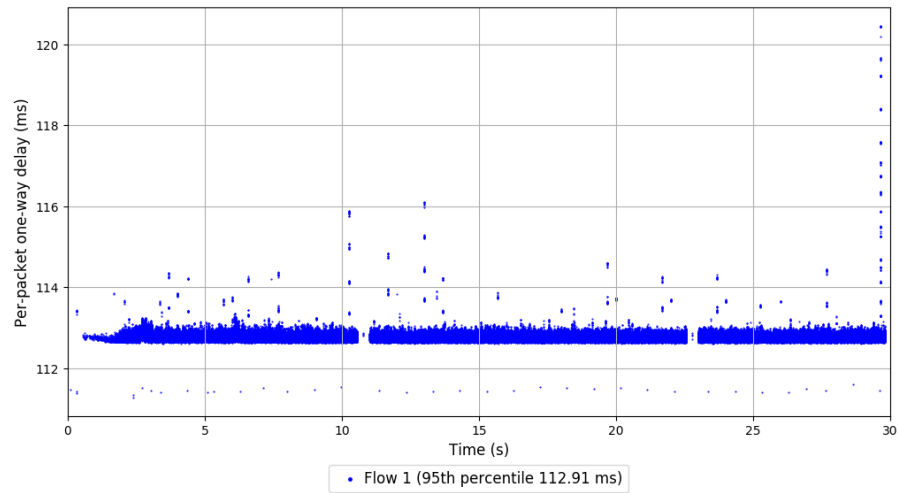
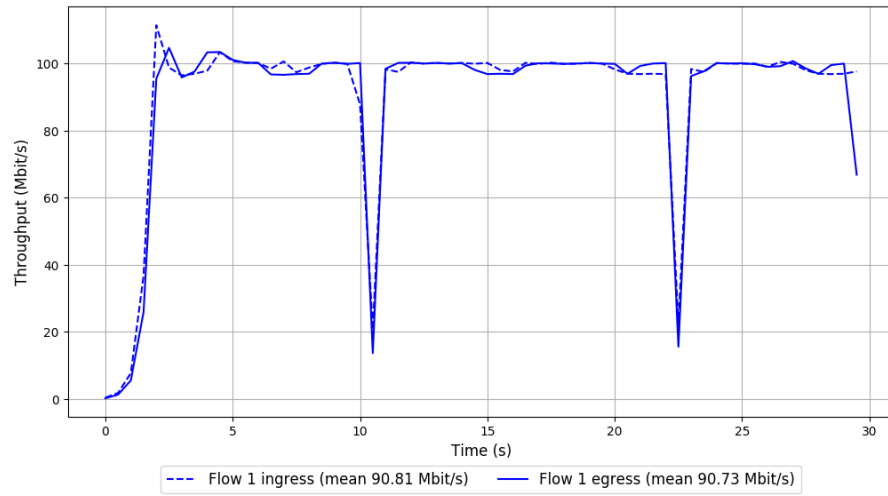


```
Run 4: Statistics of TCP BBR

Start at: 2017-09-17 21:36:59
End at: 2017-09-17 21:37:29

# Below is generated by plot.py at 2017-09-18 01:08:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.73 Mbit/s
95th percentile per-packet one-way delay: 112.907 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 90.73 Mbit/s
95th percentile per-packet one-way delay: 112.907 ms
Loss rate: 0.91%
```

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-09-17 21:48:52

End at: 2017-09-17 21:49:22

Below is generated by plot.py at 2017-09-18 01:08:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.36 Mbit/s

95th percentile per-packet one-way delay: 113.009 ms

Loss rate: 0.78%

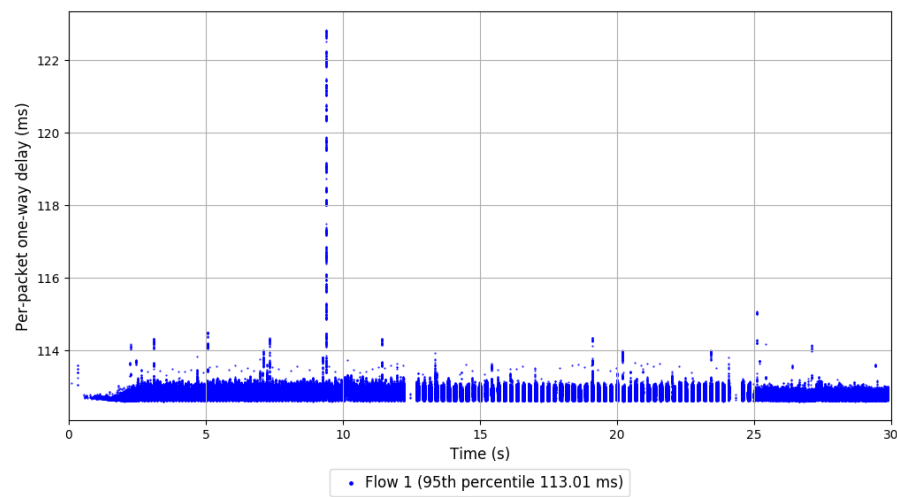
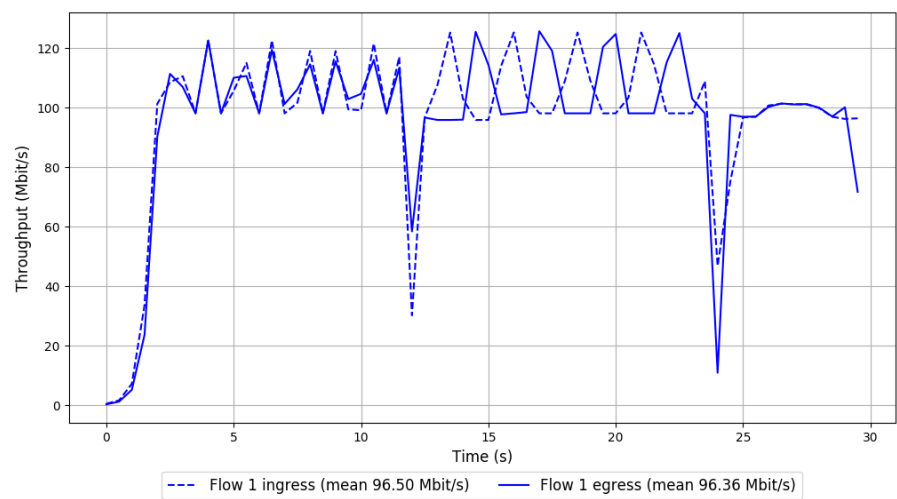
-- Flow 1:

Average throughput: 96.36 Mbit/s

95th percentile per-packet one-way delay: 113.009 ms

Loss rate: 0.78%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-09-17 22:01:01

End at: 2017-09-17 22:01:31

Below is generated by plot.py at 2017-09-18 01:08:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.32 Mbit/s

95th percentile per-packet one-way delay: 112.684 ms

Loss rate: 0.77%

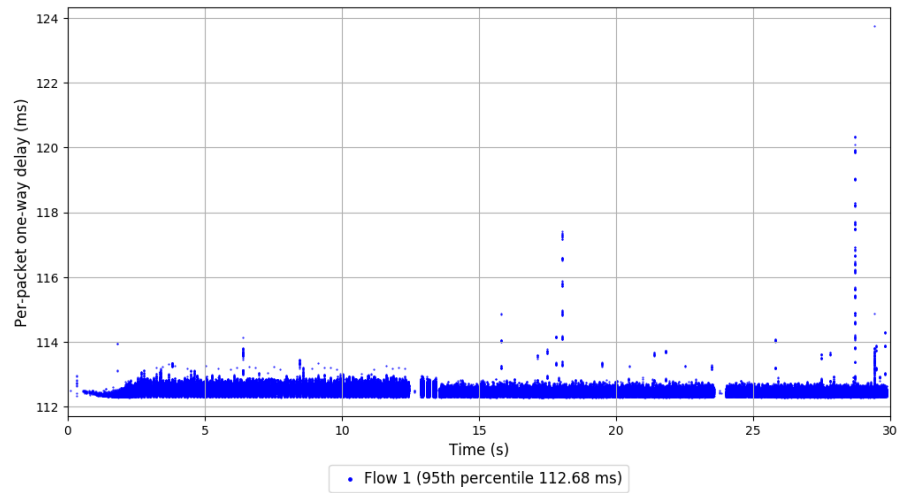
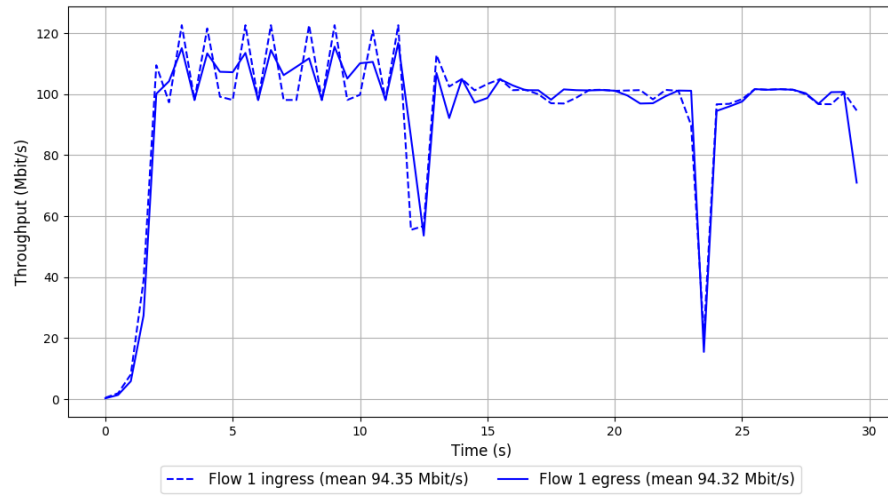
-- Flow 1:

Average throughput: 94.32 Mbit/s

95th percentile per-packet one-way delay: 112.684 ms

Loss rate: 0.77%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-09-17 22:13:03

End at: 2017-09-17 22:13:33

Below is generated by plot.py at 2017-09-18 01:08:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.20 Mbit/s

95th percentile per-packet one-way delay: 112.631 ms

Loss rate: 0.90%

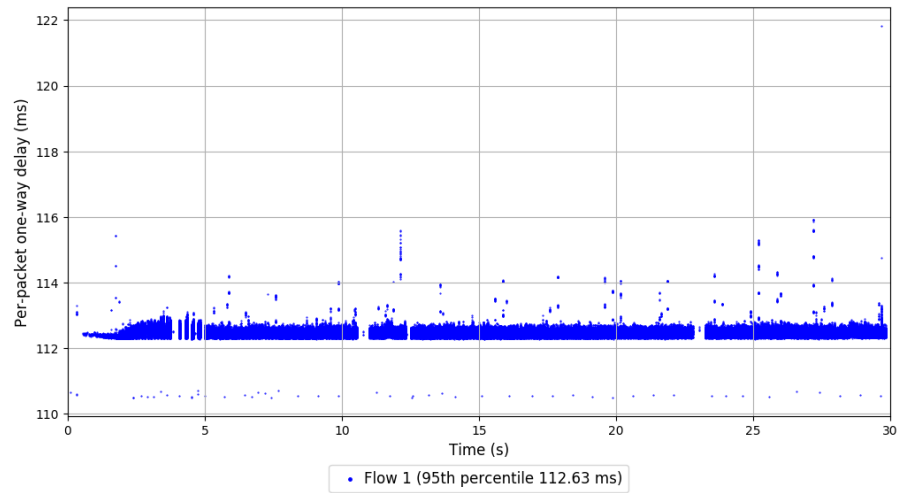
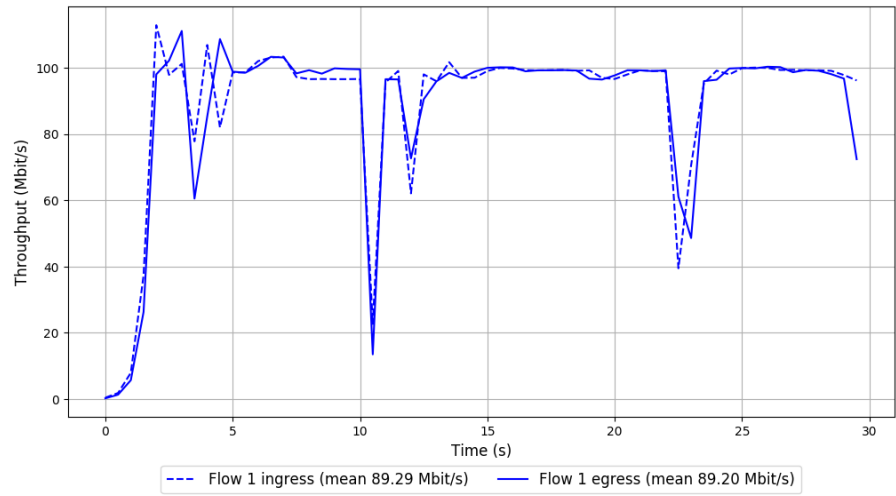
-- Flow 1:

Average throughput: 89.20 Mbit/s

95th percentile per-packet one-way delay: 112.631 ms

Loss rate: 0.90%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-09-17 22:25:01

End at: 2017-09-17 22:25:31

Below is generated by plot.py at 2017-09-18 01:08:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.77 Mbit/s

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

Loss rate: 0.83%

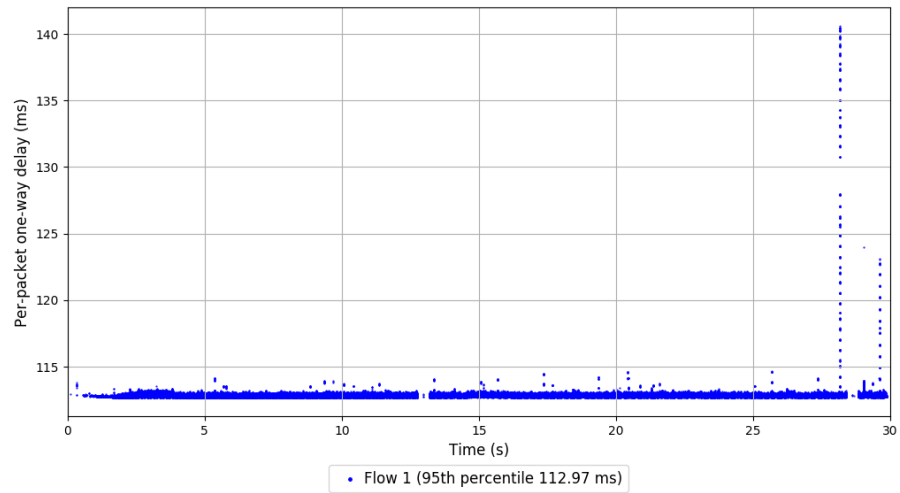
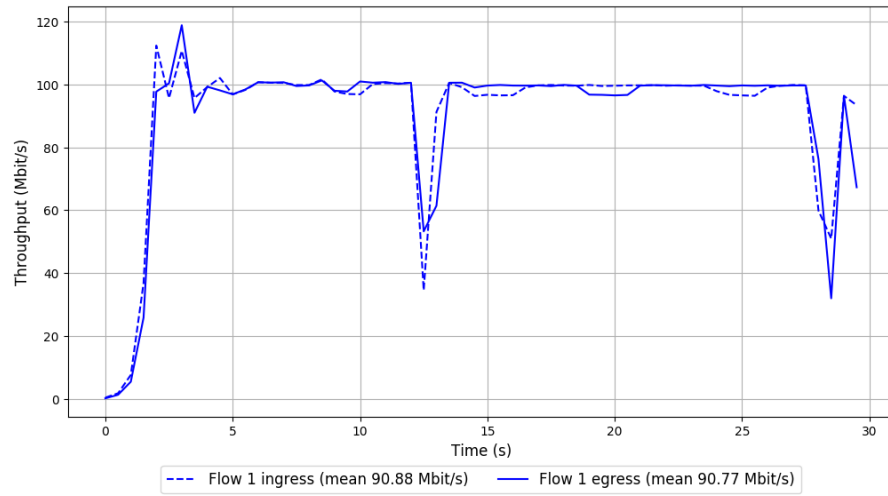
-- Flow 1:

Average throughput: 90.77 Mbit/s

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

Loss rate: 0.83%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-09-17 22:37:14

End at: 2017-09-17 22:37:44

Below is generated by plot.py at 2017-09-18 01:09:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.10 Mbit/s

95th percentile per-packet one-way delay: 113.050 ms

Loss rate: 0.87%

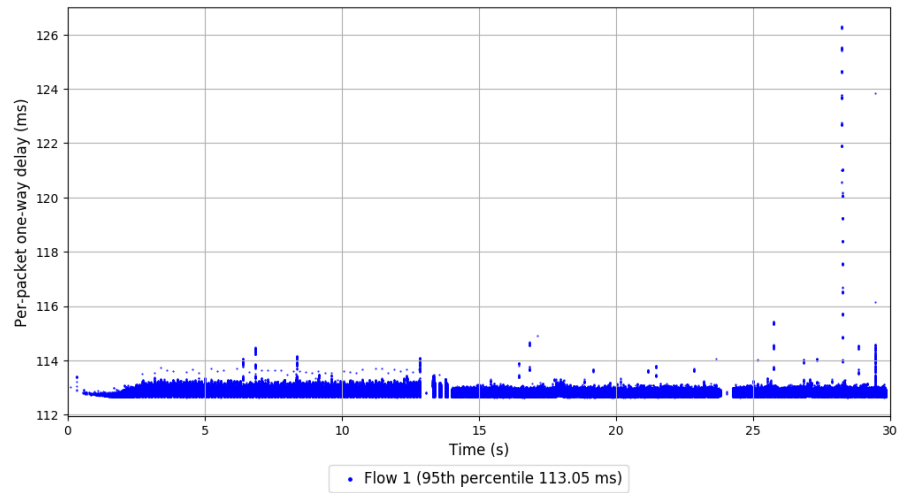
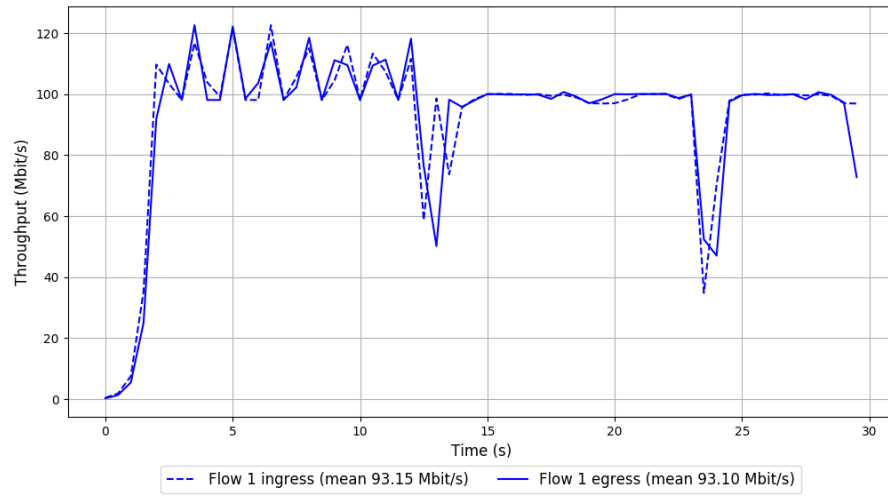
-- Flow 1:

Average throughput: 93.10 Mbit/s

95th percentile per-packet one-way delay: 113.050 ms

Loss rate: 0.87%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-09-17 22:49:10

End at: 2017-09-17 22:49:40

Below is generated by plot.py at 2017-09-18 01:09:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.89 Mbit/s

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

Loss rate: 0.86%

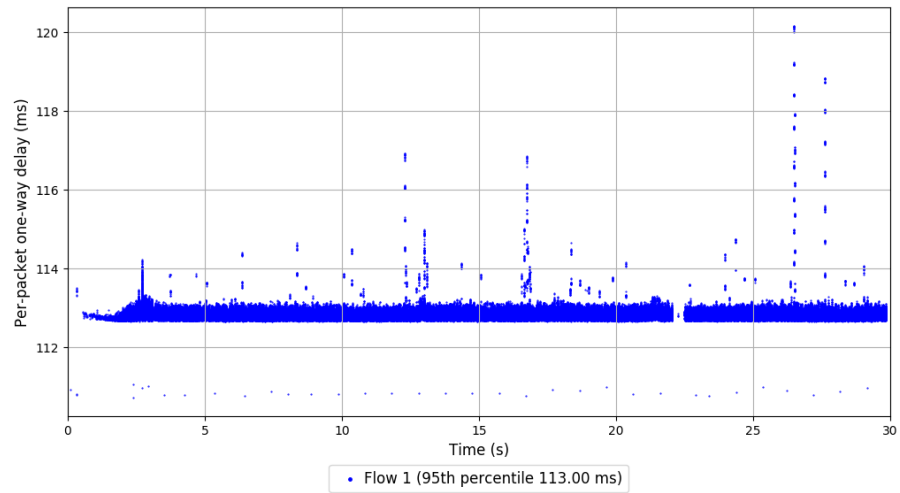
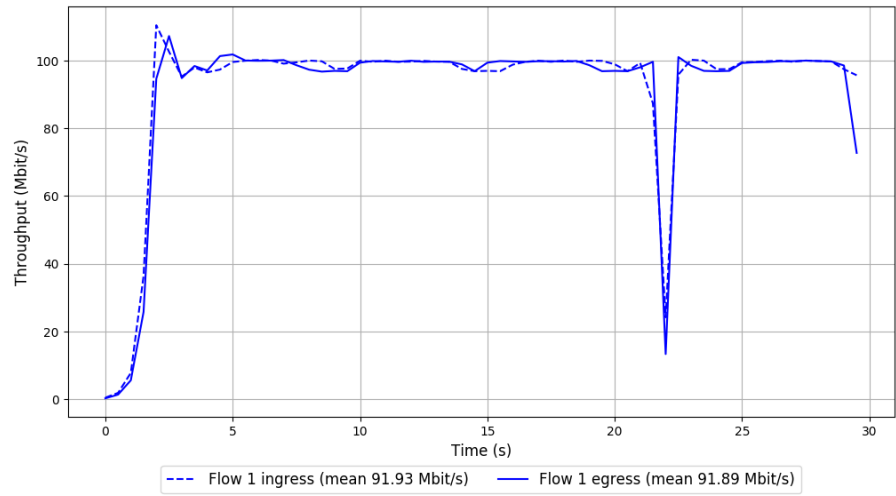
-- Flow 1:

Average throughput: 91.89 Mbit/s

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

Loss rate: 0.86%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-09-17 20:54:30

End at: 2017-09-17 20:55:00

Below is generated by plot.py at 2017-09-18 01:14:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 339.19 Mbit/s

95th percentile per-packet one-way delay: 117.476 ms

Loss rate: 1.18%

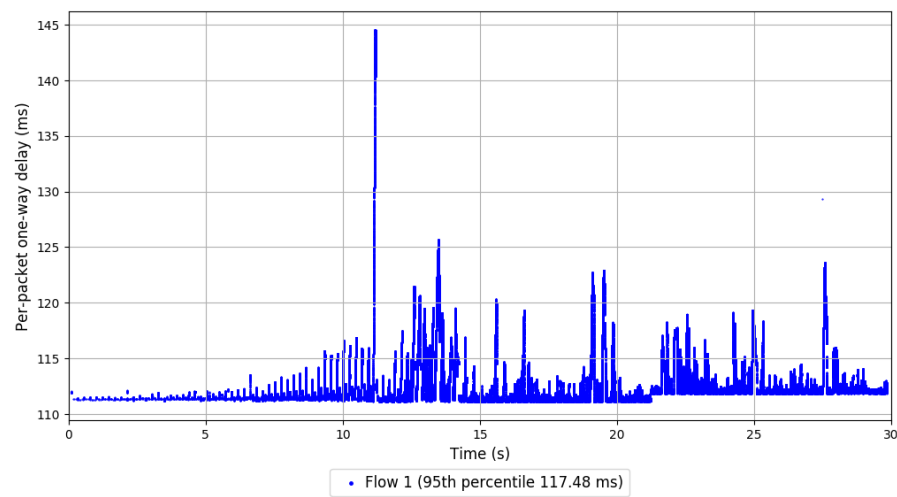
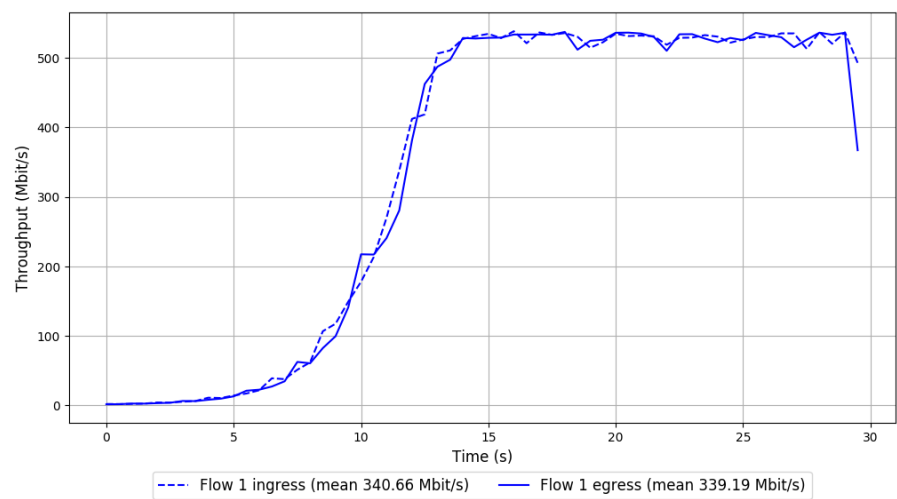
-- Flow 1:

Average throughput: 339.19 Mbit/s

95th percentile per-packet one-way delay: 117.476 ms

Loss rate: 1.18%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-09-17 21:06:39

End at: 2017-09-17 21:07:09

Below is generated by plot.py at 2017-09-18 01:14:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 325.18 Mbit/s

95th percentile per-packet one-way delay: 120.211 ms

Loss rate: 1.23%

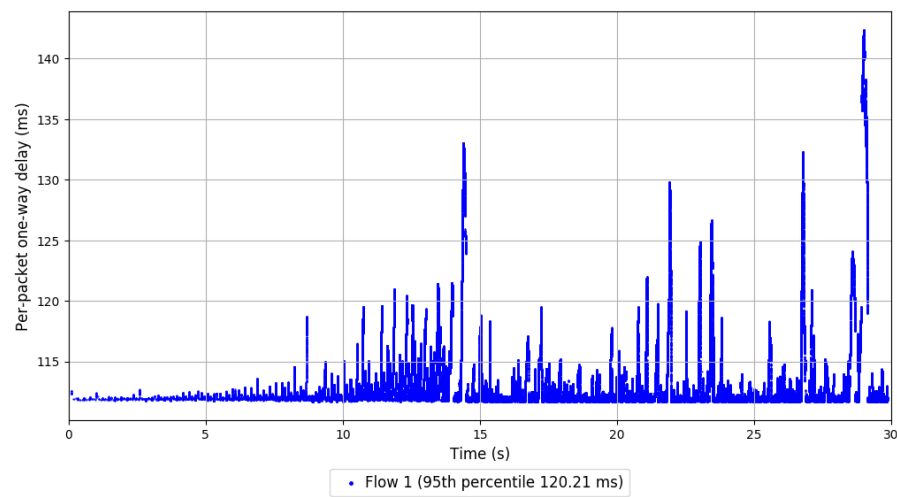
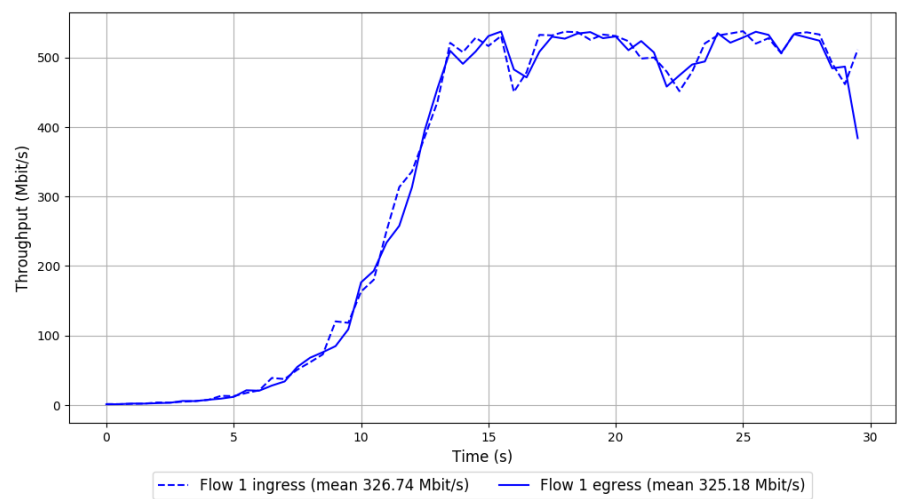
-- Flow 1:

Average throughput: 325.18 Mbit/s

95th percentile per-packet one-way delay: 120.211 ms

Loss rate: 1.23%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-09-17 21:18:32

End at: 2017-09-17 21:19:02

Below is generated by plot.py at 2017-09-18 01:14:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 300.10 Mbit/s

95th percentile per-packet one-way delay: 139.033 ms

Loss rate: 1.27%

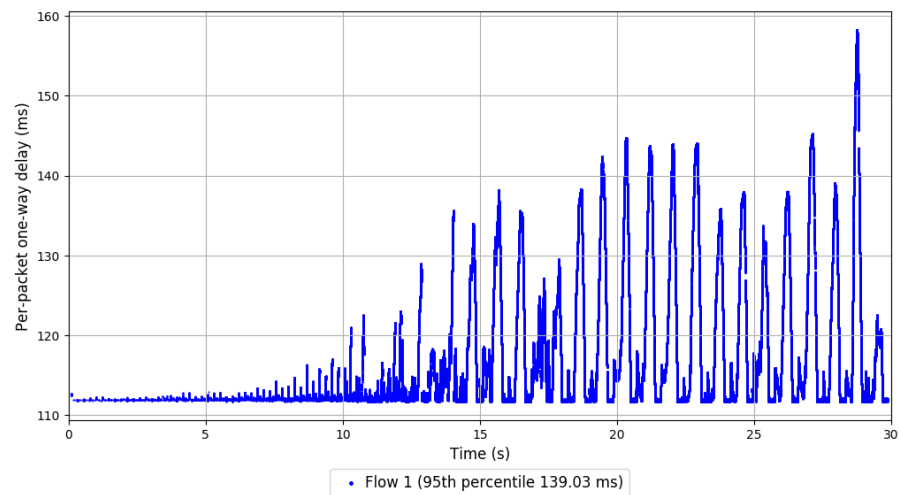
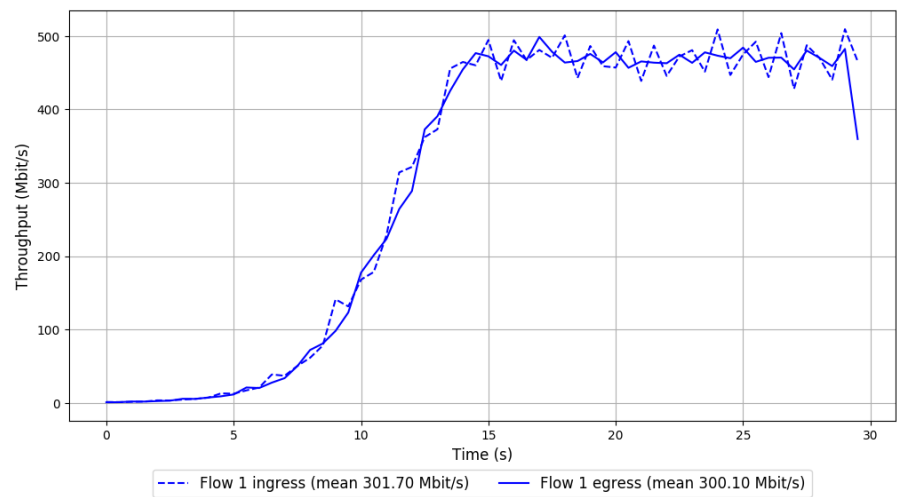
-- Flow 1:

Average throughput: 300.10 Mbit/s

95th percentile per-packet one-way delay: 139.033 ms

Loss rate: 1.27%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-09-17 21:30:25

End at: 2017-09-17 21:30:55

Below is generated by plot.py at 2017-09-18 01:14:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 323.34 Mbit/s

95th percentile per-packet one-way delay: 126.712 ms

Loss rate: 1.23%

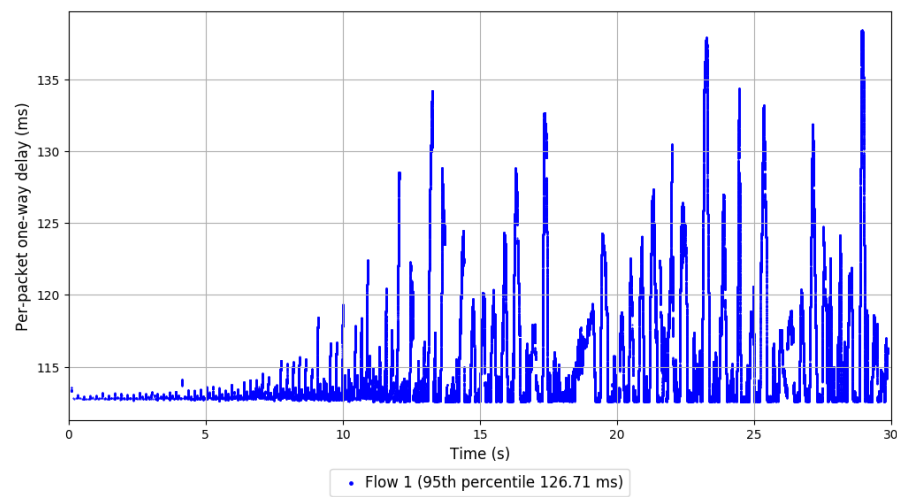
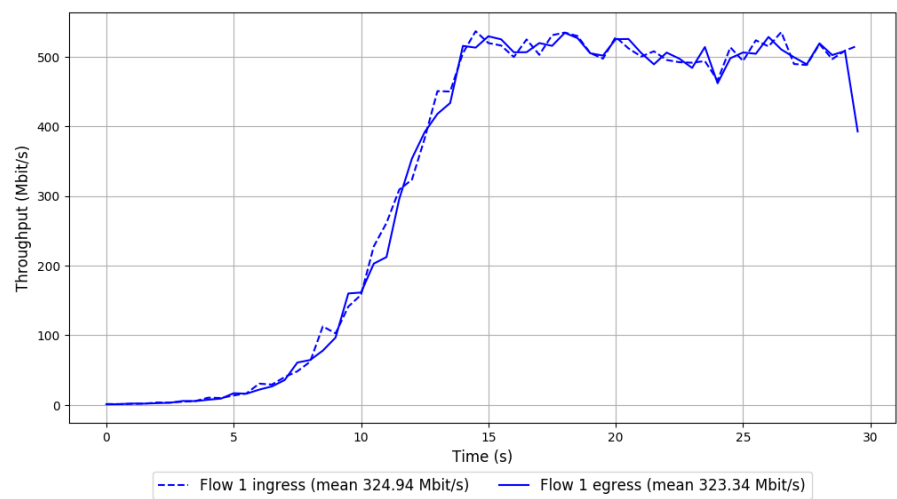
-- Flow 1:

Average throughput: 323.34 Mbit/s

95th percentile per-packet one-way delay: 126.712 ms

Loss rate: 1.23%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-09-17 21:42:24

End at: 2017-09-17 21:42:54

Below is generated by plot.py at 2017-09-18 01:14:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 335.92 Mbit/s

95th percentile per-packet one-way delay: 123.099 ms

Loss rate: 1.08%

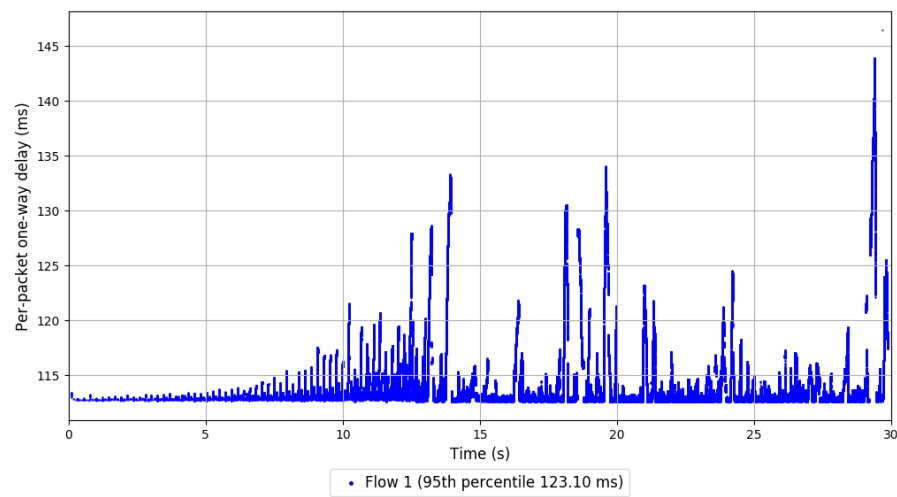
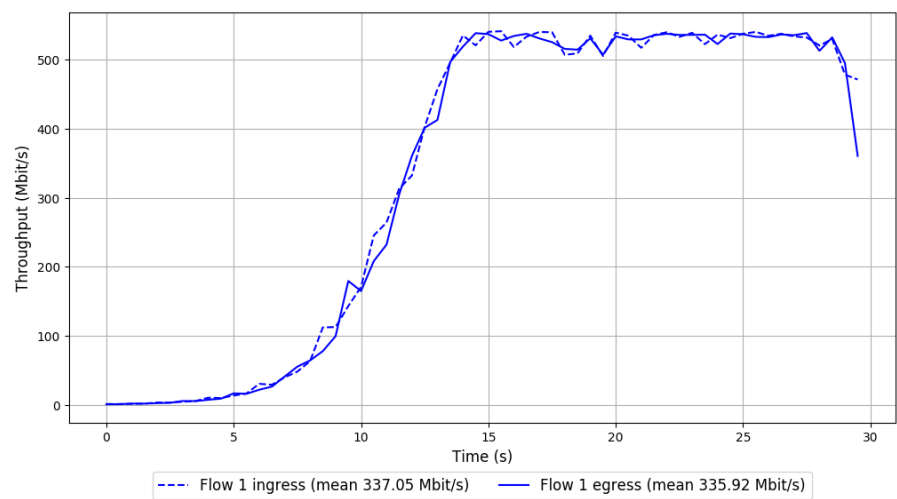
-- Flow 1:

Average throughput: 335.92 Mbit/s

95th percentile per-packet one-way delay: 123.099 ms

Loss rate: 1.08%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-09-17 21:54:32

End at: 2017-09-17 21:55:02

Below is generated by plot.py at 2017-09-18 01:14:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 325.53 Mbit/s

95th percentile per-packet one-way delay: 124.719 ms

Loss rate: 1.13%

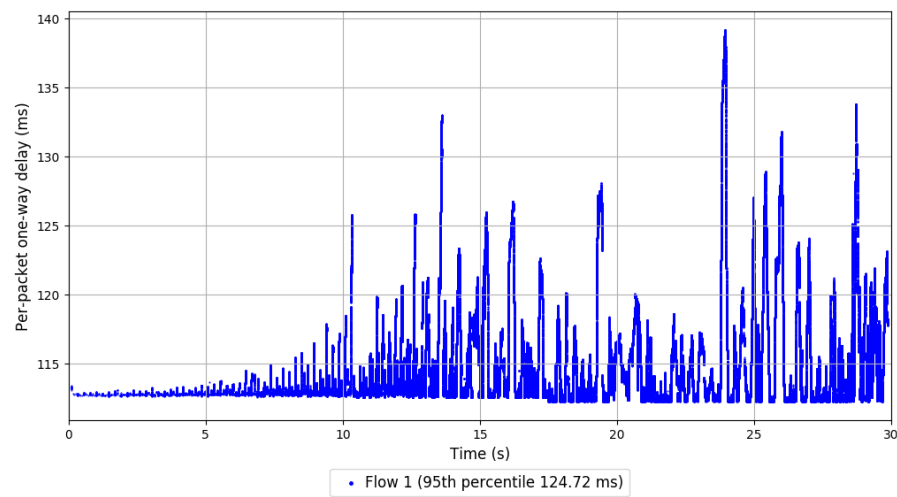
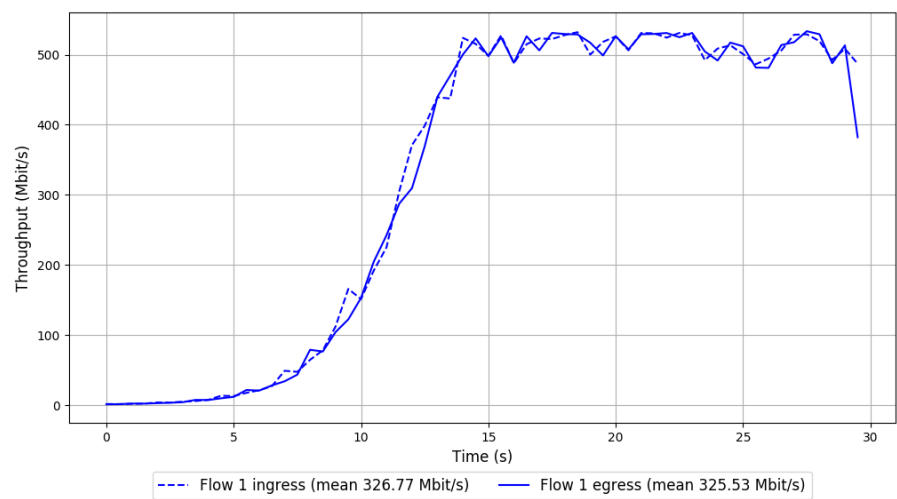
-- Flow 1:

Average throughput: 325.53 Mbit/s

95th percentile per-packet one-way delay: 124.719 ms

Loss rate: 1.13%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-09-17 22:06:33

End at: 2017-09-17 22:07:03

Below is generated by plot.py at 2017-09-18 01:15:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 331.01 Mbit/s

95th percentile per-packet one-way delay: 120.429 ms

Loss rate: 1.18%

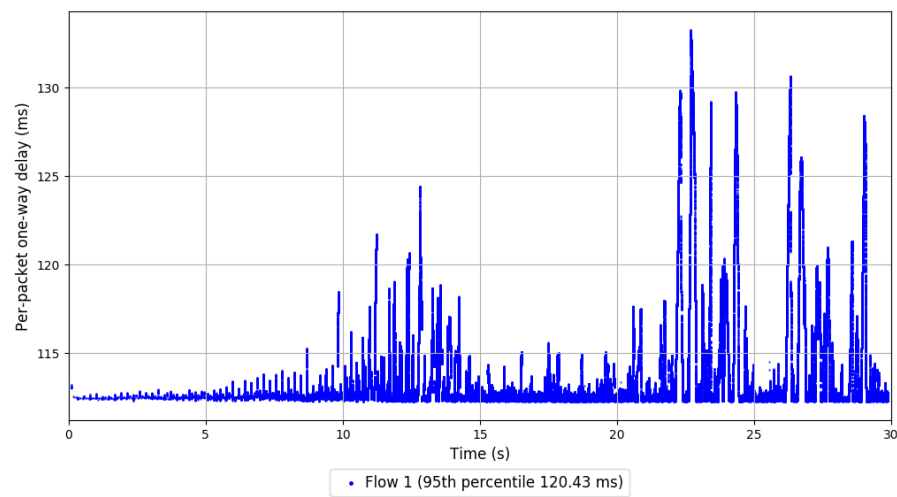
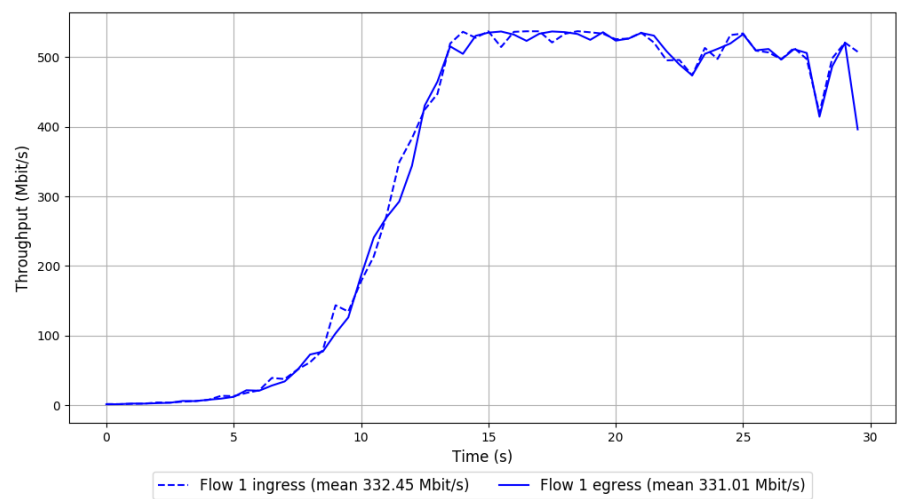
-- Flow 1:

Average throughput: 331.01 Mbit/s

95th percentile per-packet one-way delay: 120.429 ms

Loss rate: 1.18%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-09-17 22:18:46

End at: 2017-09-17 22:19:16

Below is generated by plot.py at 2017-09-18 01:15:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 322.93 Mbit/s

95th percentile per-packet one-way delay: 133.493 ms

Loss rate: 1.23%

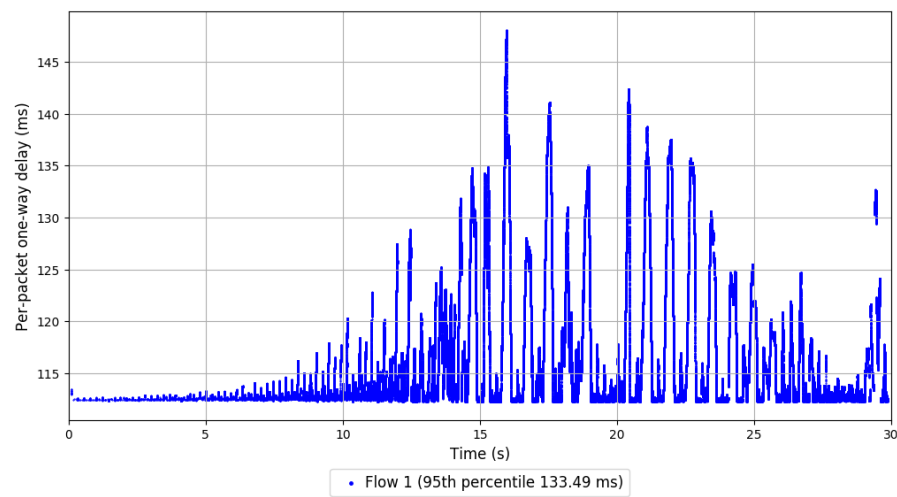
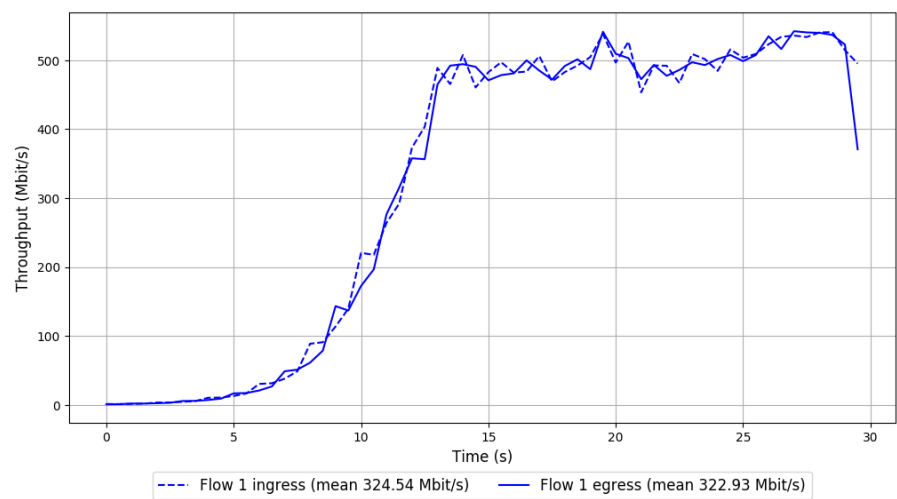
-- Flow 1:

Average throughput: 322.93 Mbit/s

95th percentile per-packet one-way delay: 133.493 ms

Loss rate: 1.23%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-09-17 22:30:43

End at: 2017-09-17 22:31:13

Below is generated by plot.py at 2017-09-18 01:18:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 324.21 Mbit/s

95th percentile per-packet one-way delay: 128.844 ms

Loss rate: 1.23%

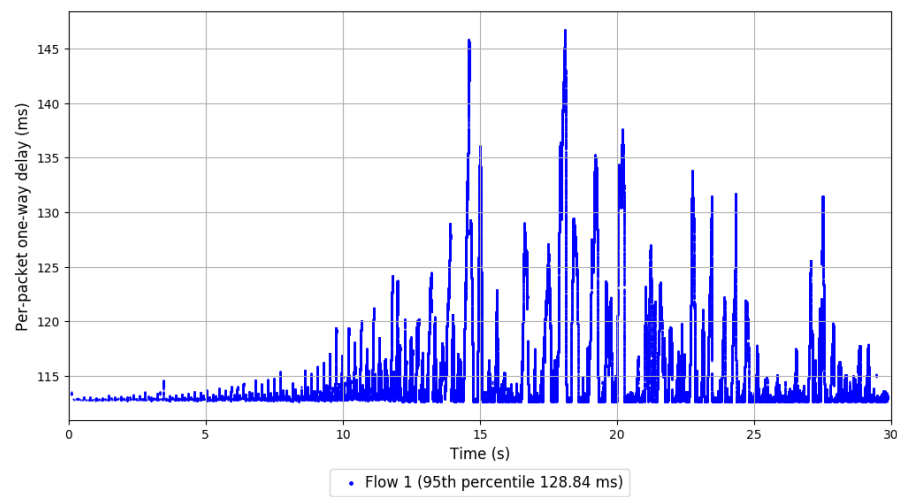
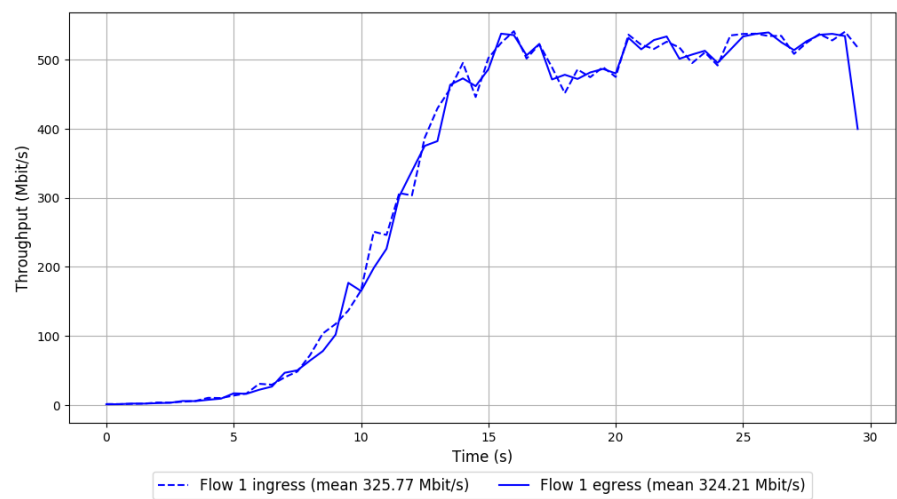
-- Flow 1:

Average throughput: 324.21 Mbit/s

95th percentile per-packet one-way delay: 128.844 ms

Loss rate: 1.23%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-09-17 22:42:38

End at: 2017-09-17 22:43:08

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 317.84 Mbit/s

95th percentile per-packet one-way delay: 132.674 ms

Loss rate: 1.18%

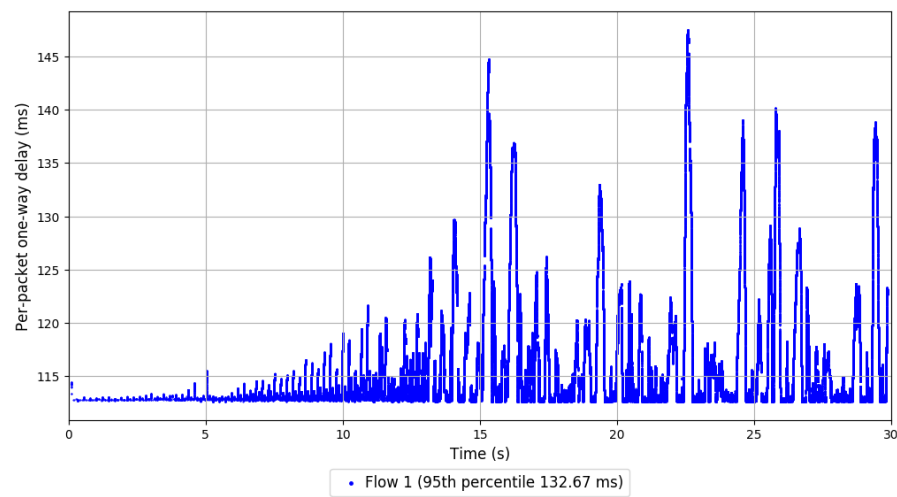
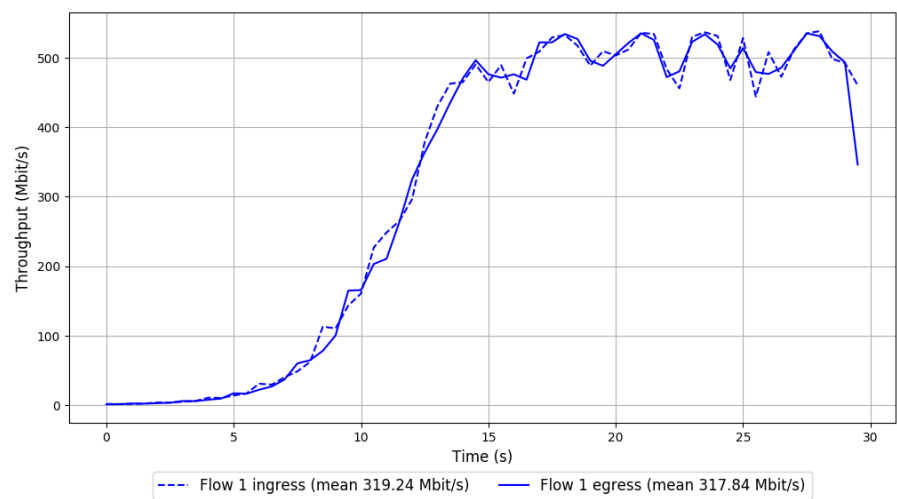
-- Flow 1:

Average throughput: 317.84 Mbit/s

95th percentile per-packet one-way delay: 132.674 ms

Loss rate: 1.18%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-09-17 20:58:36

End at: 2017-09-17 20:59:06

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.74 Mbit/s

95th percentile per-packet one-way delay: 111.849 ms

Loss rate: 0.83%

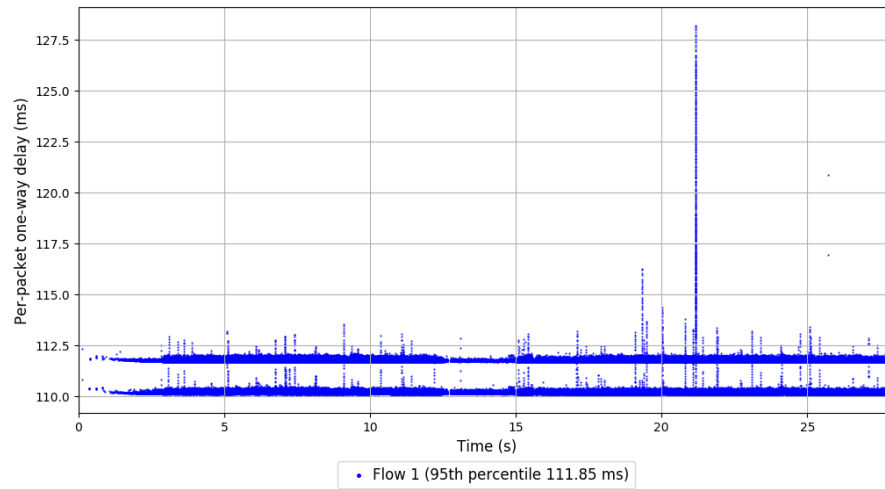
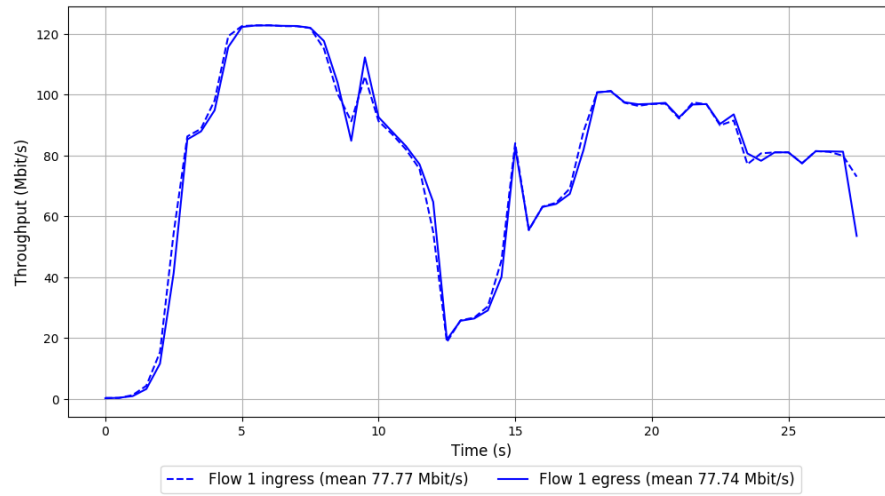
-- Flow 1:

Average throughput: 77.74 Mbit/s

95th percentile per-packet one-way delay: 111.849 ms

Loss rate: 0.83%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-09-17 21:10:45

End at: 2017-09-17 21:11:16

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.54 Mbit/s

95th percentile per-packet one-way delay: 111.819 ms

Loss rate: 0.79%

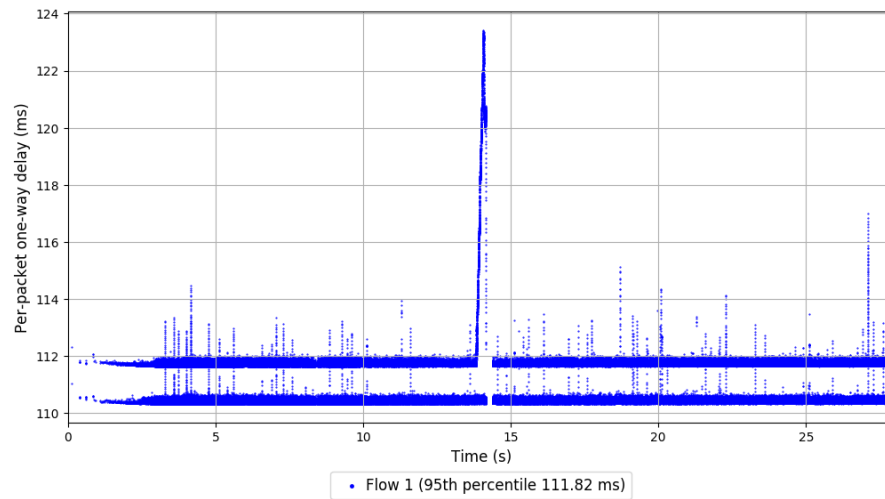
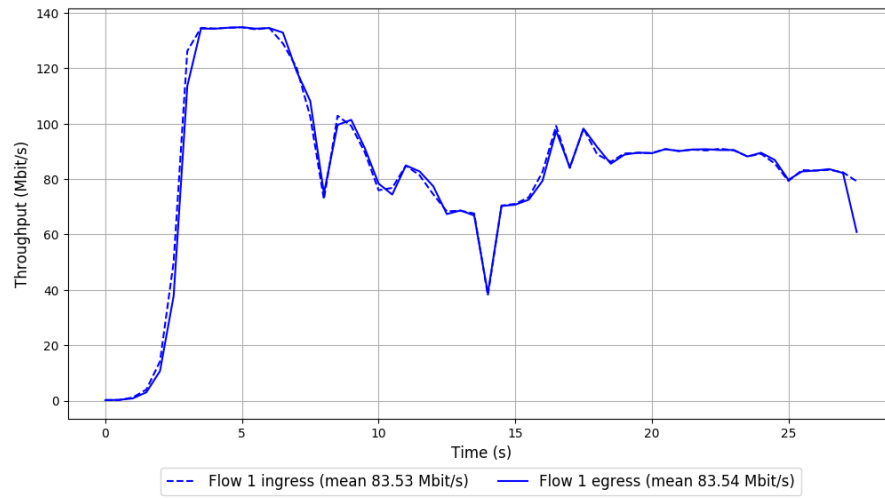
-- Flow 1:

Average throughput: 83.54 Mbit/s

95th percentile per-packet one-way delay: 111.819 ms

Loss rate: 0.79%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-09-17 21:22:31

End at: 2017-09-17 21:23:01

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.97 Mbit/s

95th percentile per-packet one-way delay: 113.577 ms

Loss rate: 0.83%

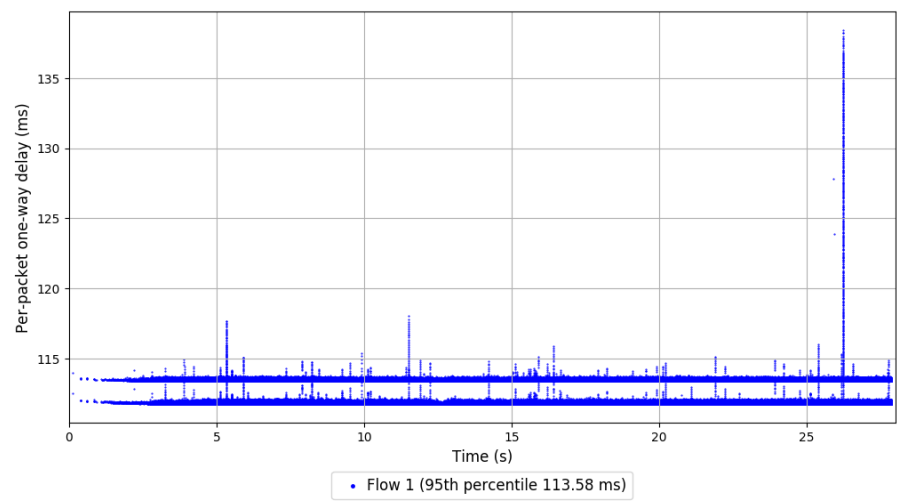
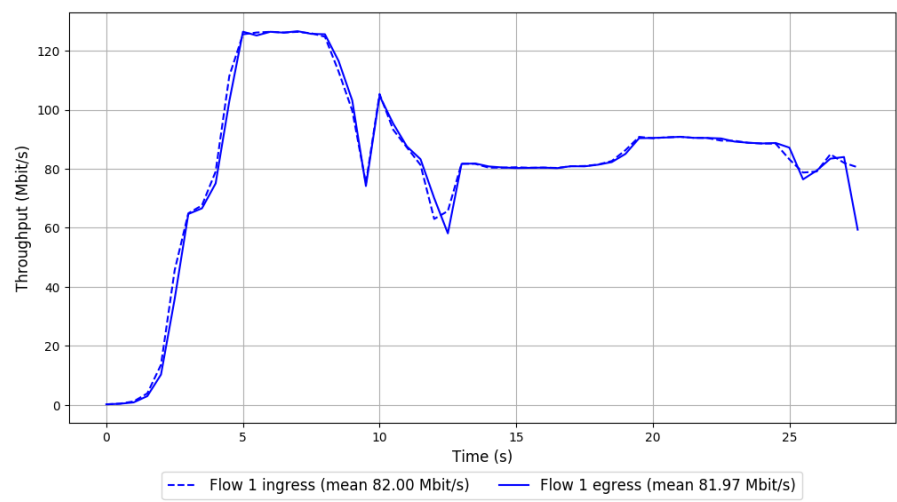
-- Flow 1:

Average throughput: 81.97 Mbit/s

95th percentile per-packet one-way delay: 113.577 ms

Loss rate: 0.83%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-09-17 21:34:30

End at: 2017-09-17 21:35:00

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.76 Mbit/s

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

Loss rate: 0.98%

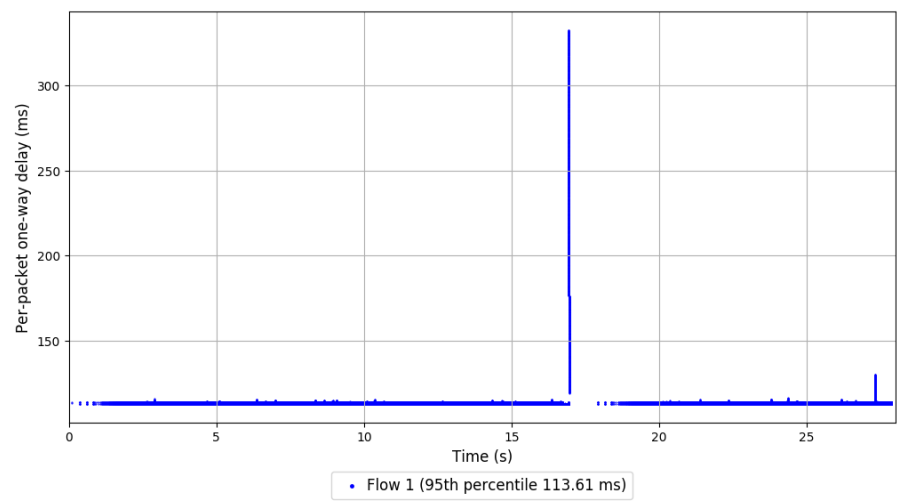
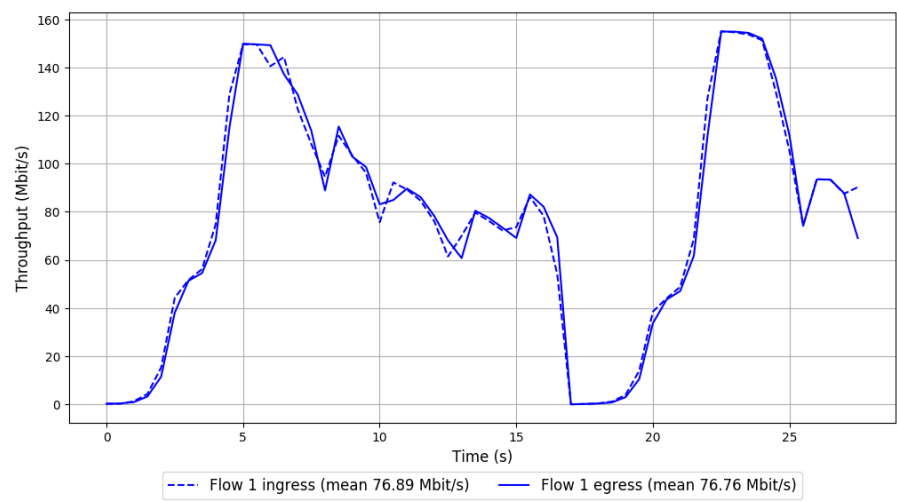
-- Flow 1:

Average throughput: 76.76 Mbit/s

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

Loss rate: 0.98%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-09-17 21:46:25

End at: 2017-09-17 21:46:55

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.68 Mbit/s

95th percentile per-packet one-way delay: 112.810 ms

Loss rate: 0.83%

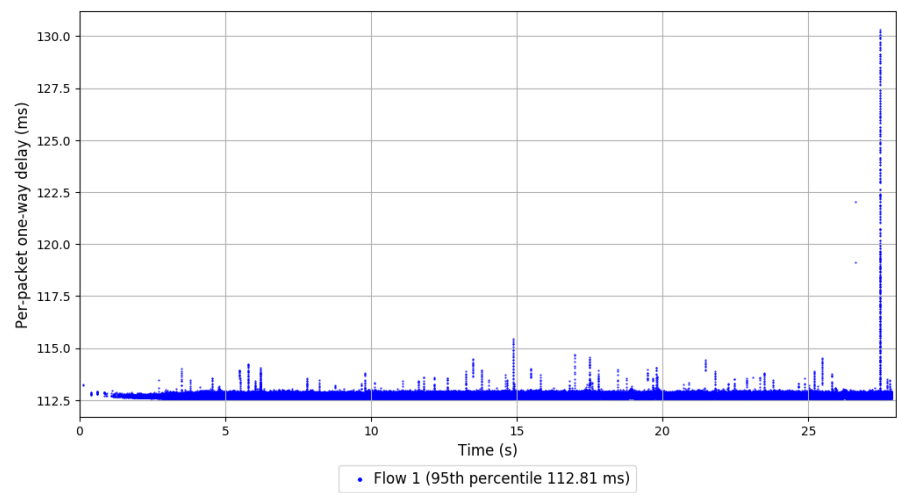
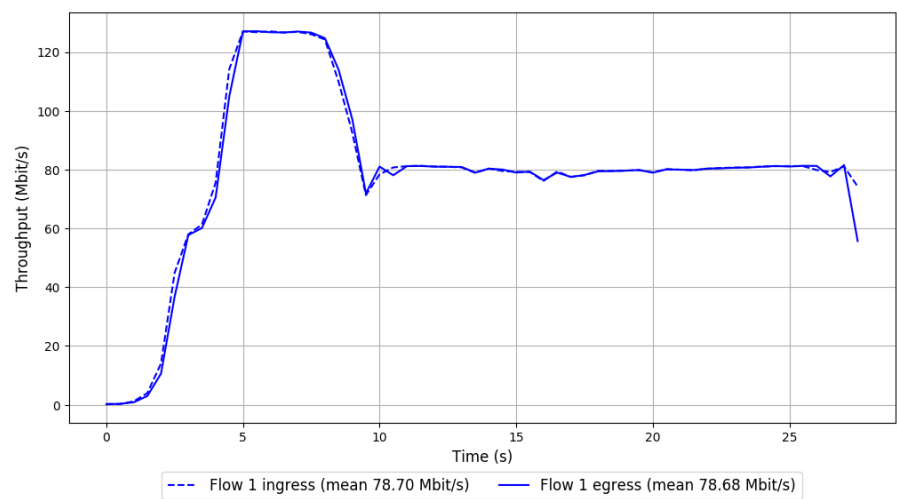
-- Flow 1:

Average throughput: 78.68 Mbit/s

95th percentile per-packet one-way delay: 112.810 ms

Loss rate: 0.83%

Run 5: Report of Copa — Data Link

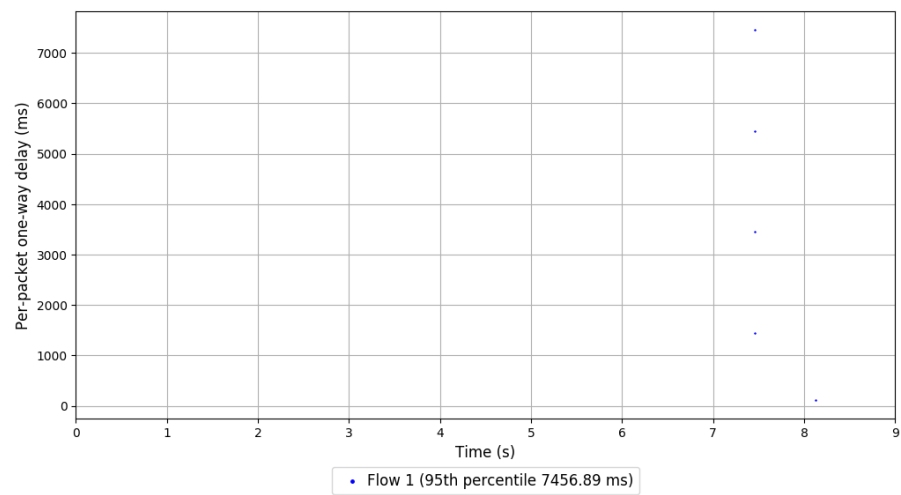
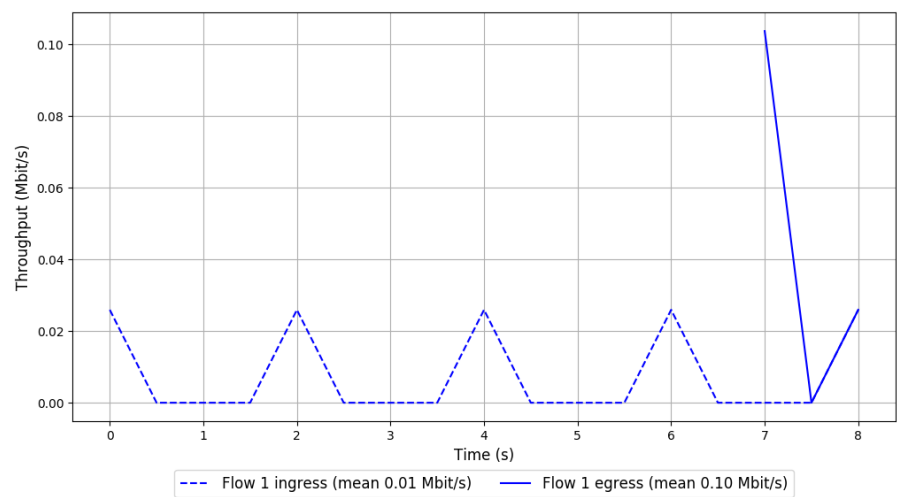


Run 6: Statistics of Copa

Start at: 2017-09-17 21:58:39

End at: 2017-09-17 21:59:09

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-09-17 22:10:38

End at: 2017-09-17 22:11:08

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.39 Mbit/s

95th percentile per-packet one-way delay: 112.494 ms

Loss rate: 0.86%

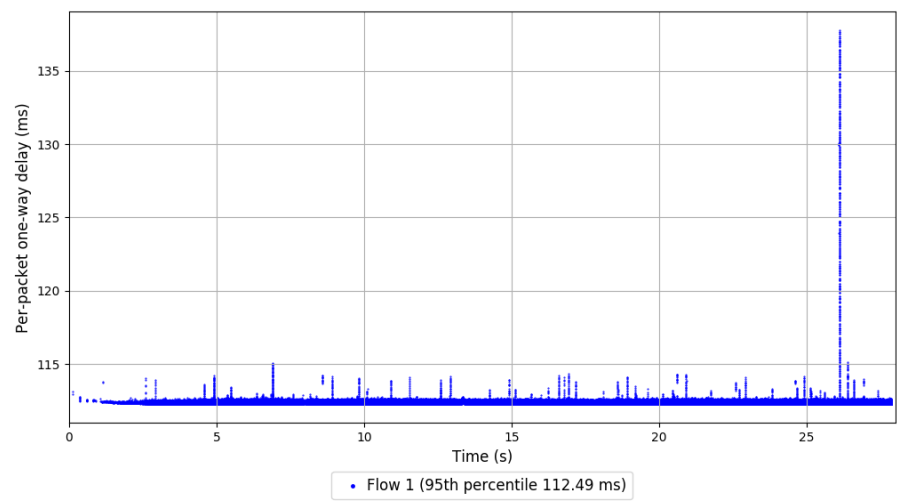
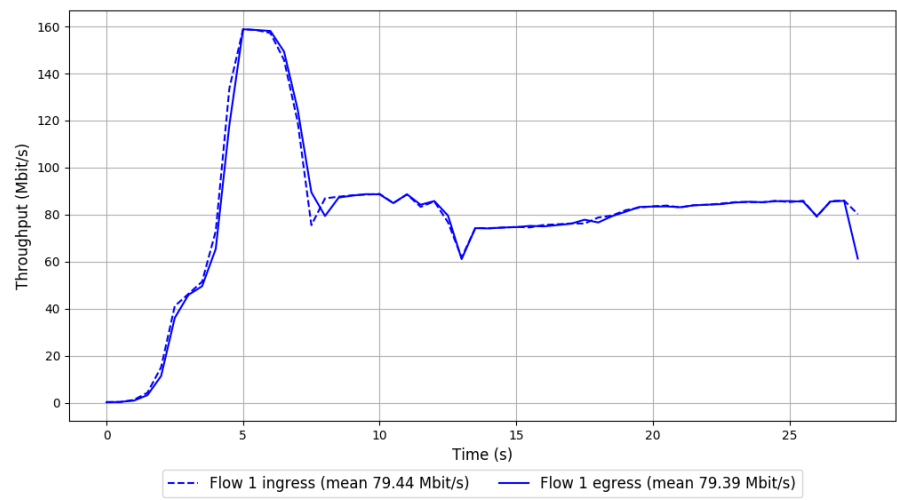
-- Flow 1:

Average throughput: 79.39 Mbit/s

95th percentile per-packet one-way delay: 112.494 ms

Loss rate: 0.86%

Run 7: Report of Copa — Data Link

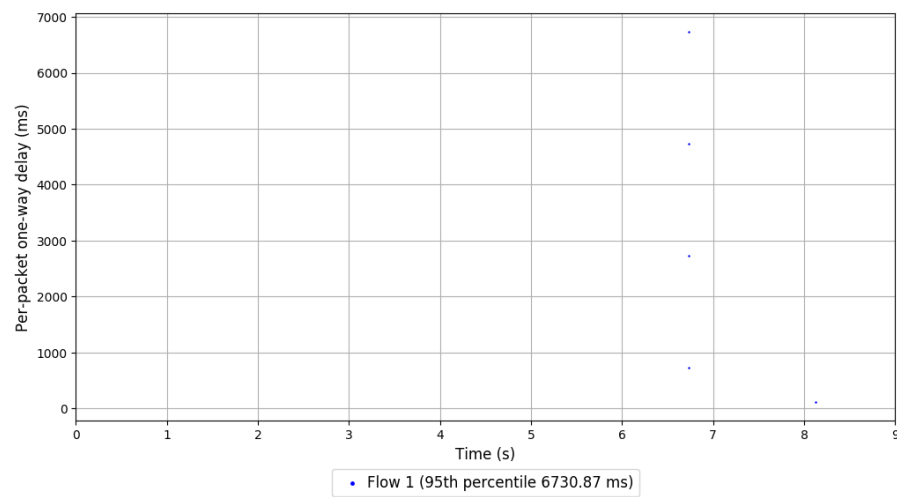
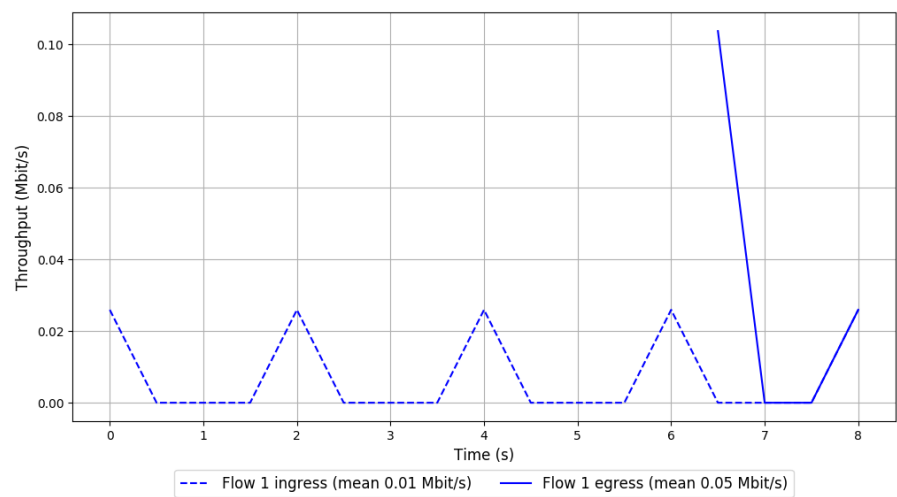


Run 8: Statistics of Copa

Start at: 2017-09-17 22:22:51

End at: 2017-09-17 22:23:21

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-09-17 22:34:49

End at: 2017-09-17 22:35:19

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.82 Mbit/s

95th percentile per-packet one-way delay: 112.800 ms

Loss rate: 0.65%

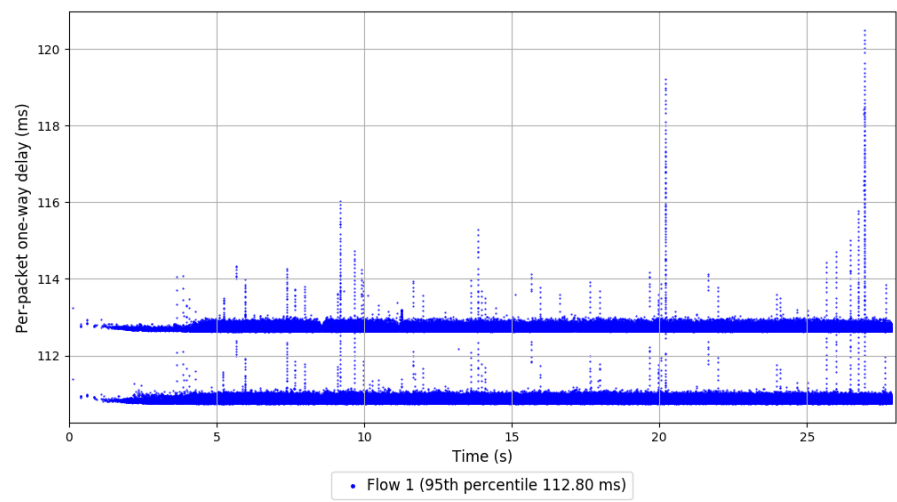
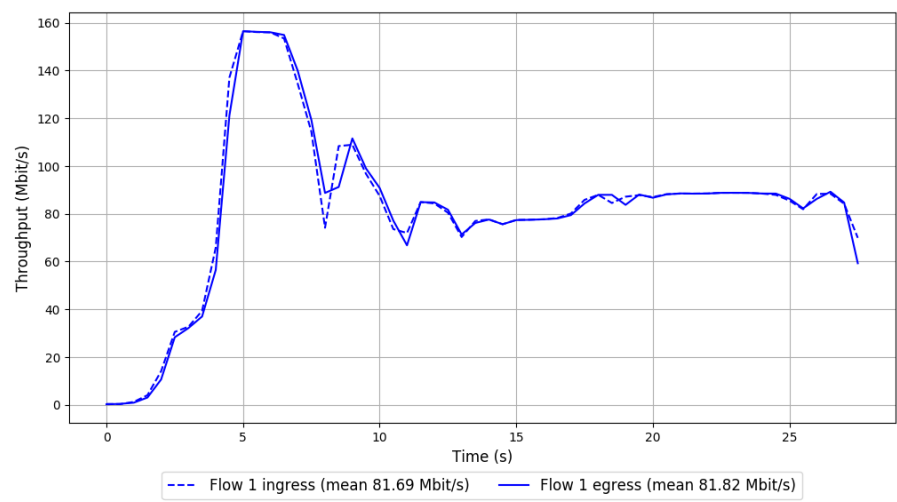
-- Flow 1:

Average throughput: 81.82 Mbit/s

95th percentile per-packet one-way delay: 112.800 ms

Loss rate: 0.65%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-09-17 22:46:43

End at: 2017-09-17 22:47:13

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.40 Mbit/s

95th percentile per-packet one-way delay: 112.815 ms

Loss rate: 0.82%

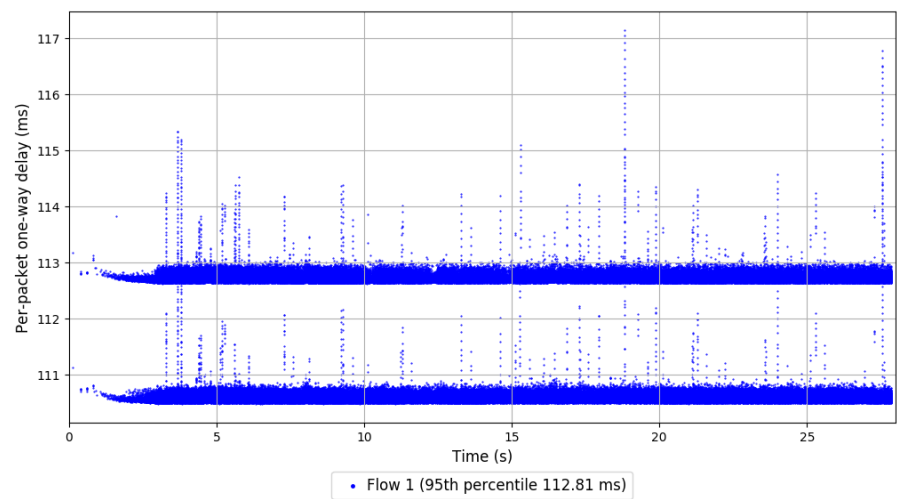
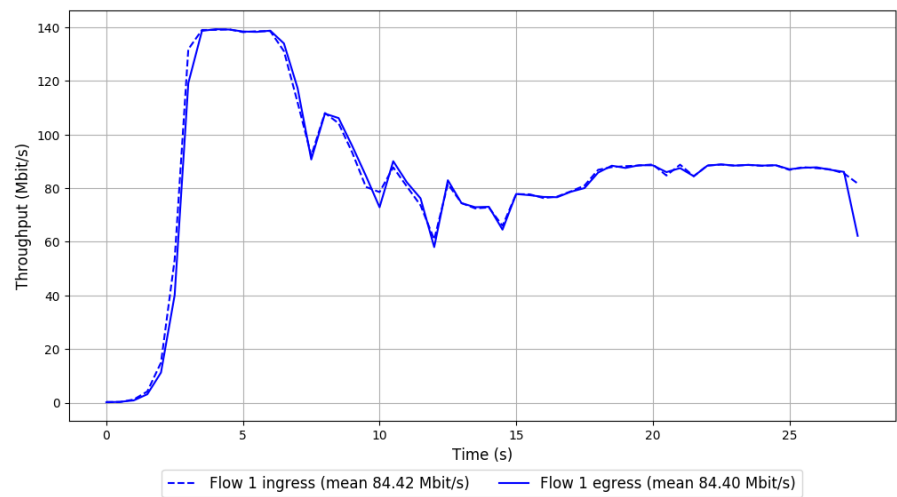
-- Flow 1:

Average throughput: 84.40 Mbit/s

95th percentile per-packet one-way delay: 112.815 ms

Loss rate: 0.82%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-09-17 20:55:36

End at: 2017-09-17 20:56:06

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.79 Mbit/s

95th percentile per-packet one-way delay: 117.724 ms

Loss rate: 1.29%

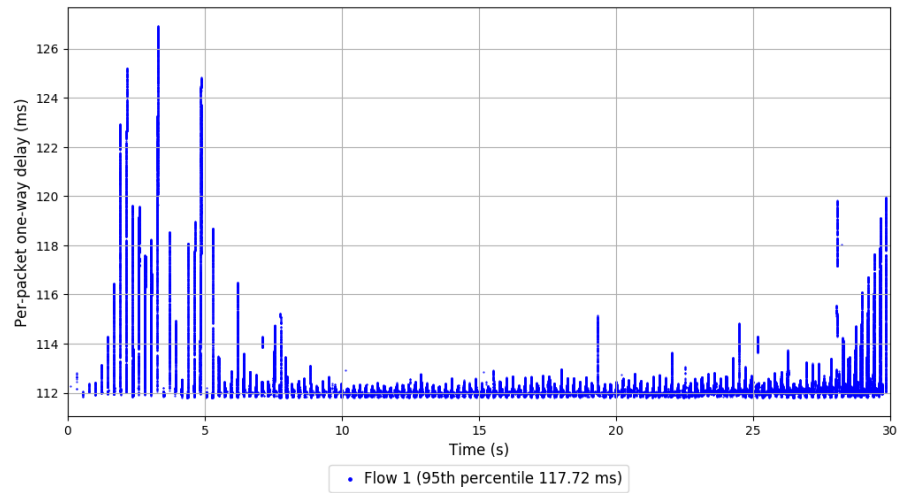
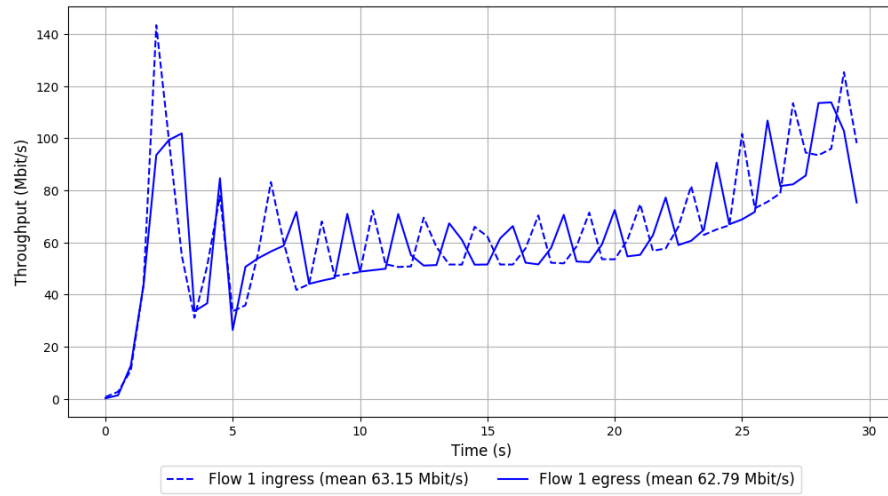
-- Flow 1:

Average throughput: 62.79 Mbit/s

95th percentile per-packet one-way delay: 117.724 ms

Loss rate: 1.29%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-09-17 21:07:43

End at: 2017-09-17 21:08:13

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.62 Mbit/s

95th percentile per-packet one-way delay: 114.520 ms

Loss rate: 0.52%

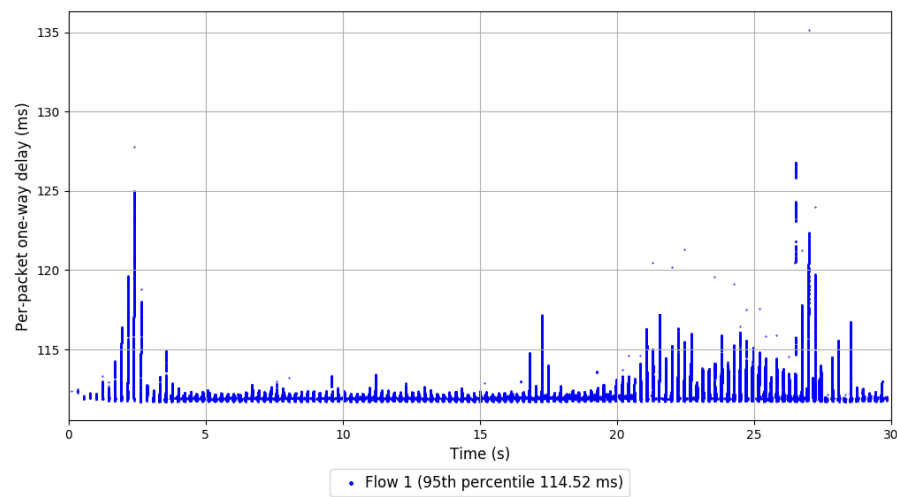
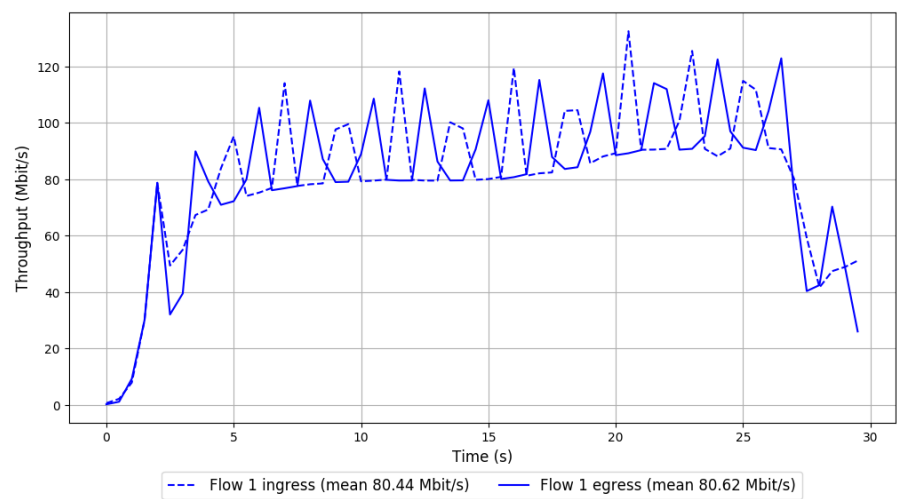
-- Flow 1:

Average throughput: 80.62 Mbit/s

95th percentile per-packet one-way delay: 114.520 ms

Loss rate: 0.52%

Run 2: Report of TCP Cubic — Data Link

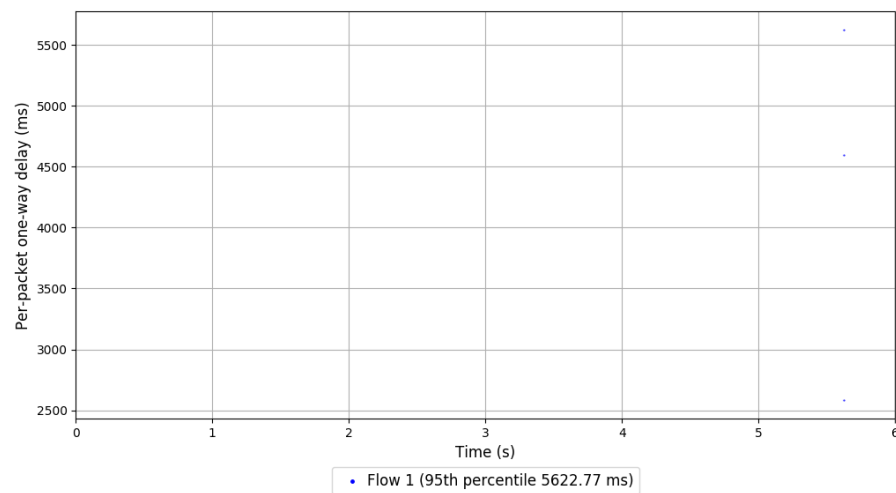
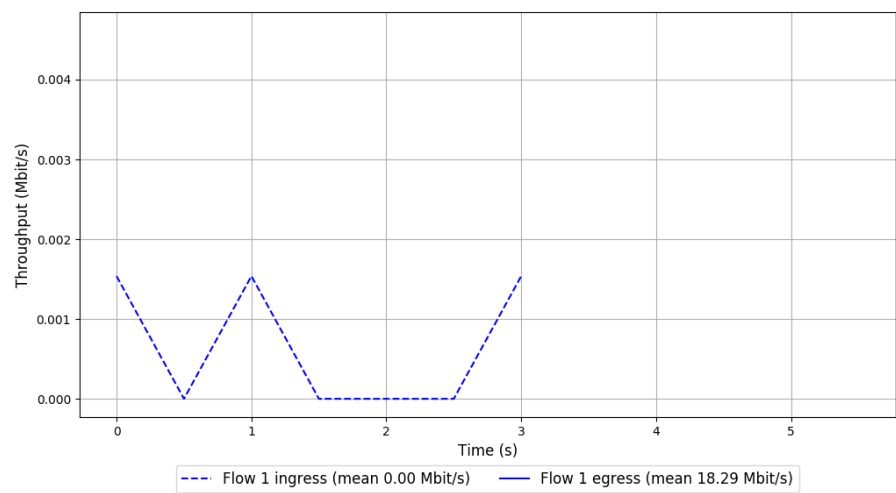


Run 3: Statistics of TCP Cubic

Start at: 2017-09-17 21:19:35

End at: 2017-09-17 21:20:05

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-09-17 21:31:30

End at: 2017-09-17 21:32:00

Below is generated by plot.py at 2017-09-18 01:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.66 Mbit/s

95th percentile per-packet one-way delay: 118.969 ms

Loss rate: 1.34%

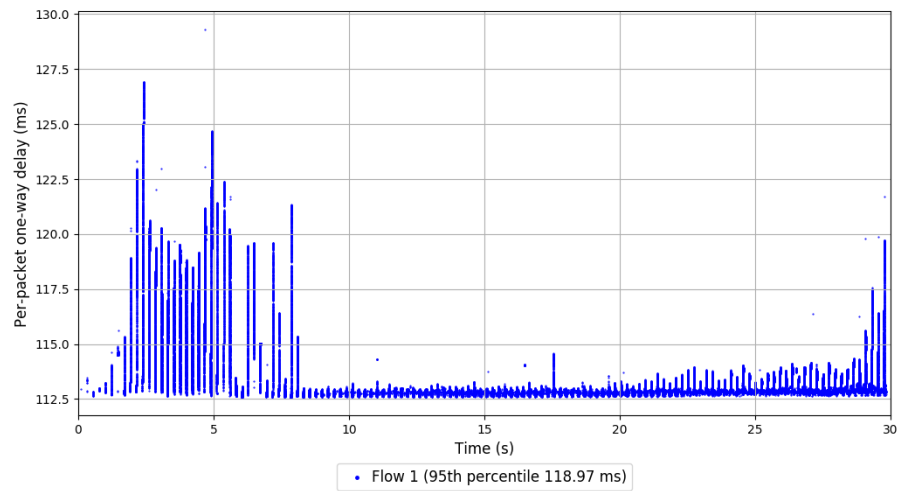
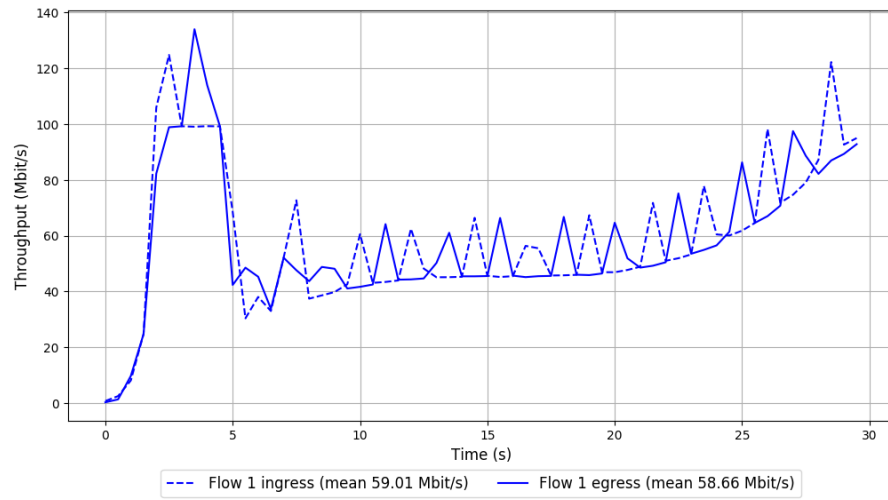
-- Flow 1:

Average throughput: 58.66 Mbit/s

95th percentile per-packet one-way delay: 118.969 ms

Loss rate: 1.34%

Run 4: Report of TCP Cubic — Data Link

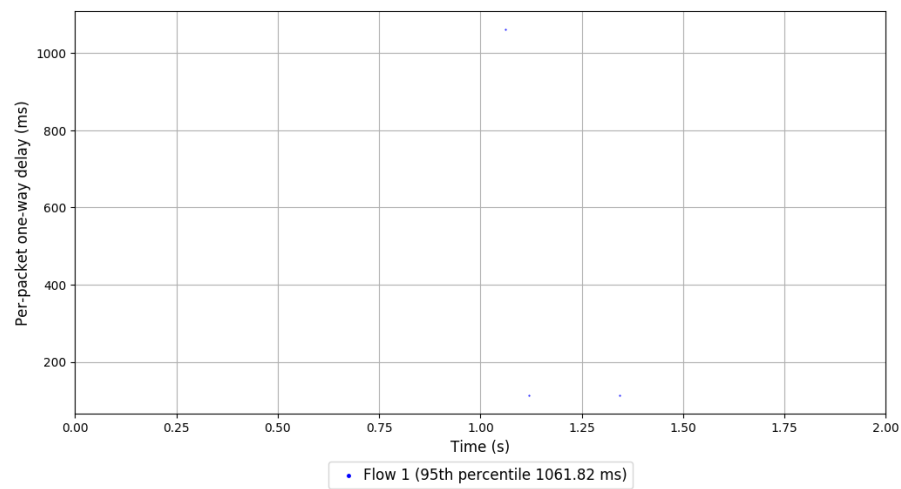
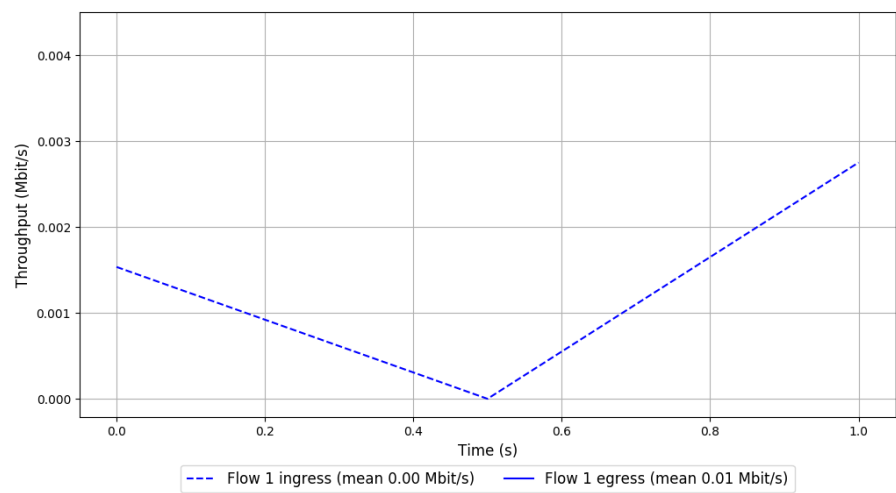


Run 5: Statistics of TCP Cubic

Start at: 2017-09-17 21:43:29

End at: 2017-09-17 21:43:59

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-09-17 21:55:37

End at: 2017-09-17 21:56:07

Below is generated by plot.py at 2017-09-18 01:19:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.96 Mbit/s

95th percentile per-packet one-way delay: 119.837 ms

Loss rate: 0.58%

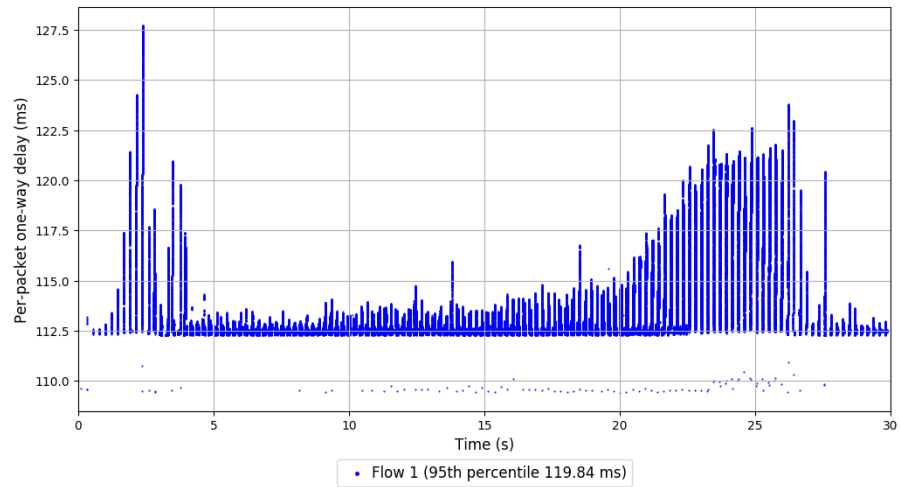
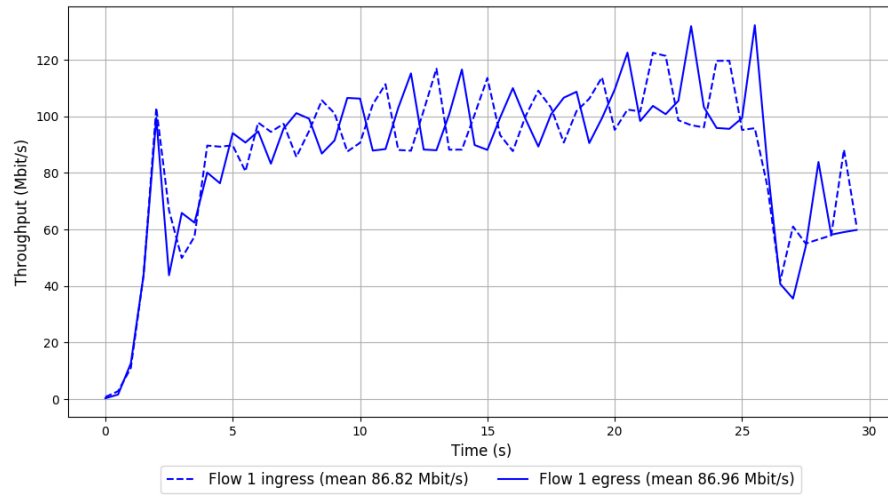
-- Flow 1:

Average throughput: 86.96 Mbit/s

95th percentile per-packet one-way delay: 119.837 ms

Loss rate: 0.58%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-09-17 22:07:38

End at: 2017-09-17 22:08:08

Below is generated by plot.py at 2017-09-18 01:19:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.61 Mbit/s

95th percentile per-packet one-way delay: 117.824 ms

Loss rate: 0.67%

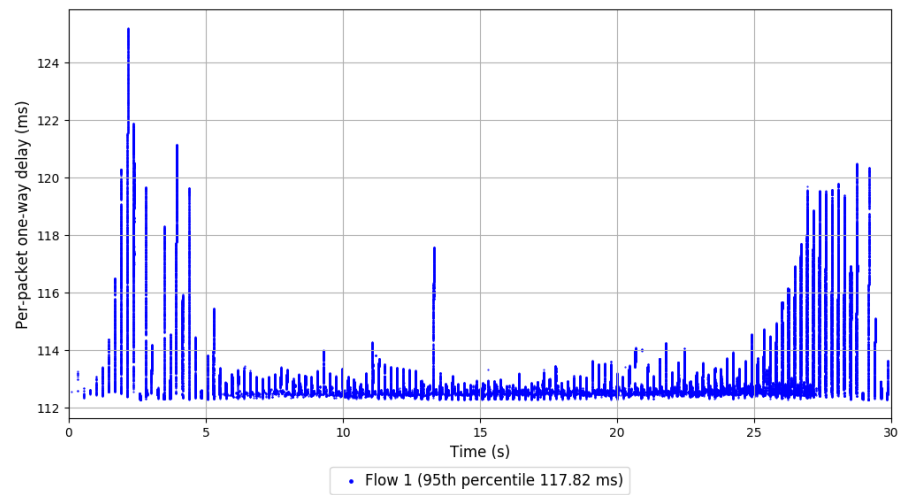
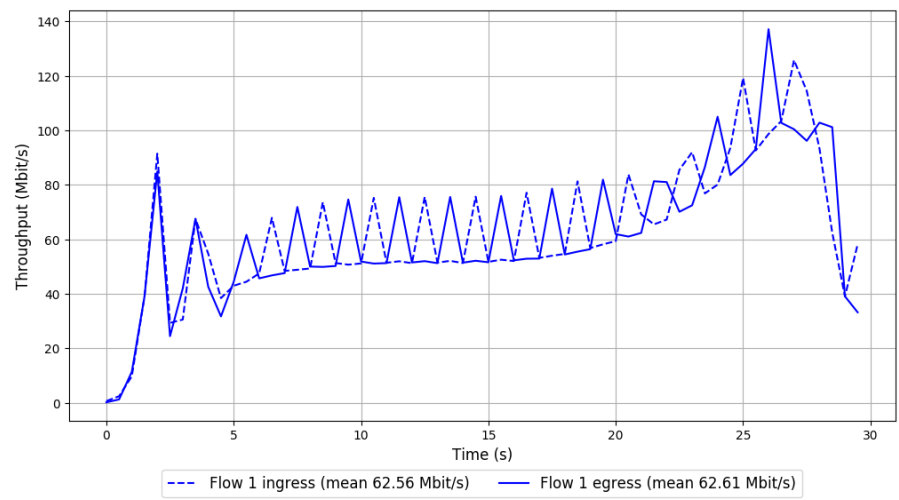
-- Flow 1:

Average throughput: 62.61 Mbit/s

95th percentile per-packet one-way delay: 117.824 ms

Loss rate: 0.67%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-09-17 22:19:51

End at: 2017-09-17 22:20:21

Below is generated by plot.py at 2017-09-18 01:19:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.67 Mbit/s

95th percentile per-packet one-way delay: 116.622 ms

Loss rate: 0.57%

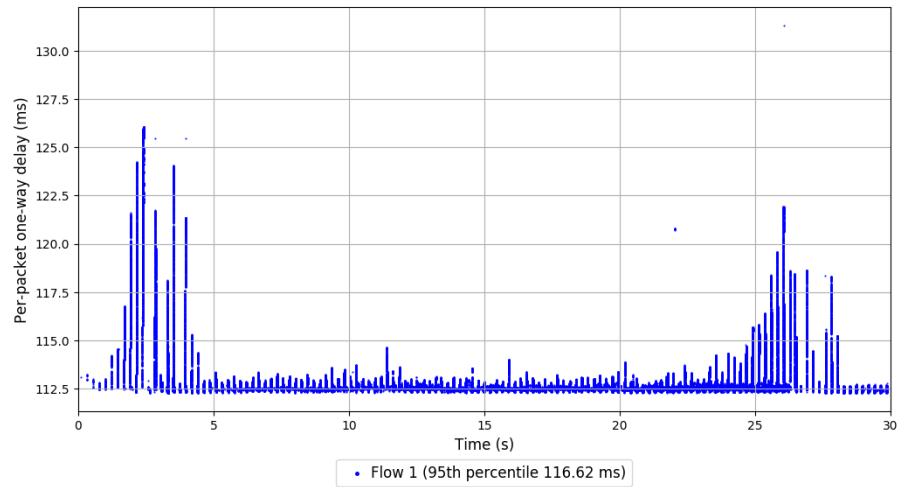
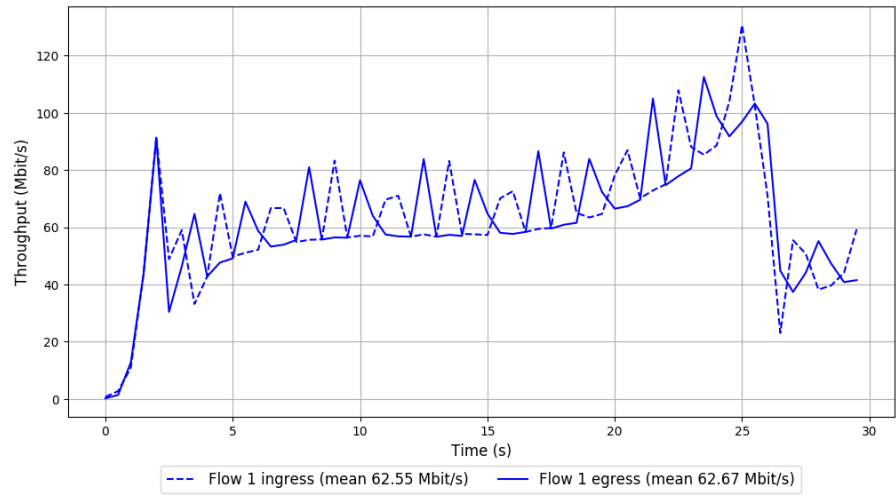
-- Flow 1:

Average throughput: 62.67 Mbit/s

95th percentile per-packet one-way delay: 116.622 ms

Loss rate: 0.57%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-09-17 22:31:48

End at: 2017-09-17 22:32:18

Below is generated by plot.py at 2017-09-18 01:19:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.52 Mbit/s

95th percentile per-packet one-way delay: 118.824 ms

Loss rate: 0.50%

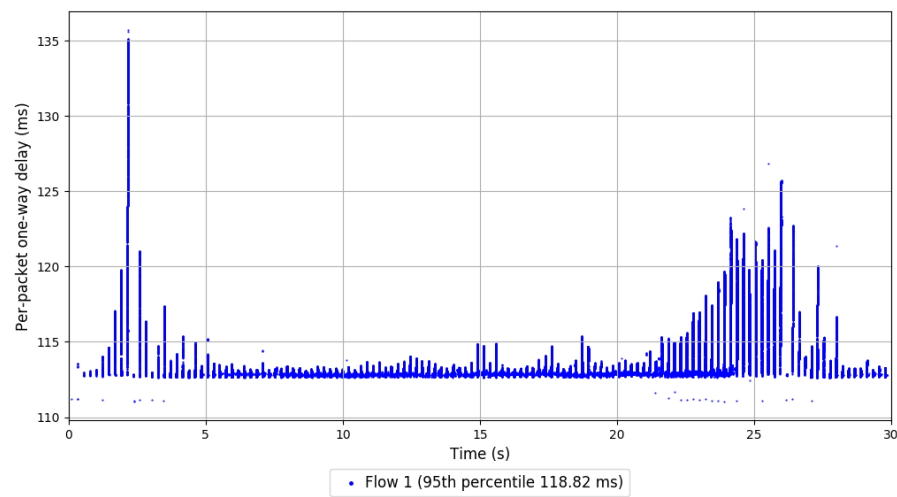
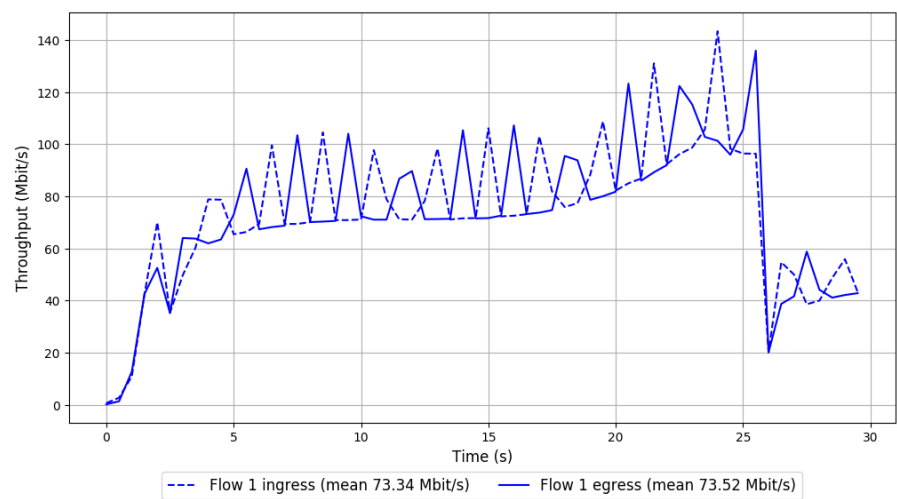
-- Flow 1:

Average throughput: 73.52 Mbit/s

95th percentile per-packet one-way delay: 118.824 ms

Loss rate: 0.50%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-09-17 22:43:43

End at: 2017-09-17 22:44:13

Below is generated by plot.py at 2017-09-18 01:19:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.93 Mbit/s

95th percentile per-packet one-way delay: 117.778 ms

Loss rate: 0.77%

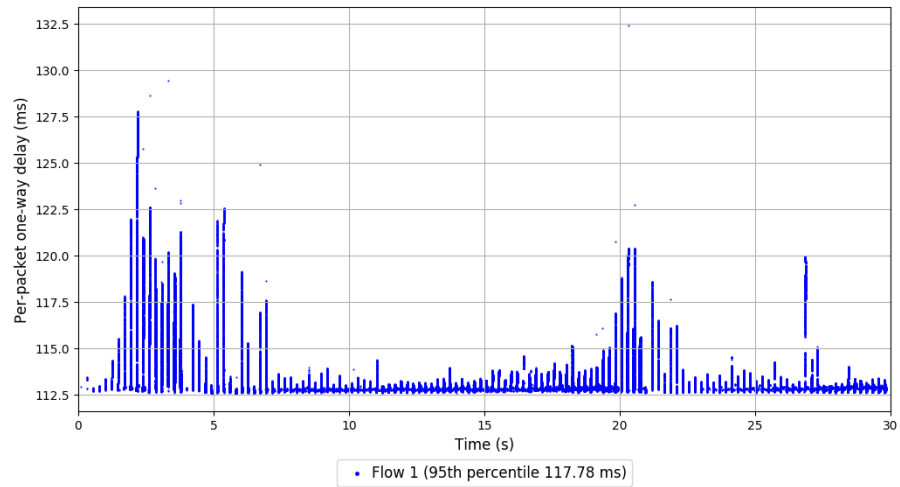
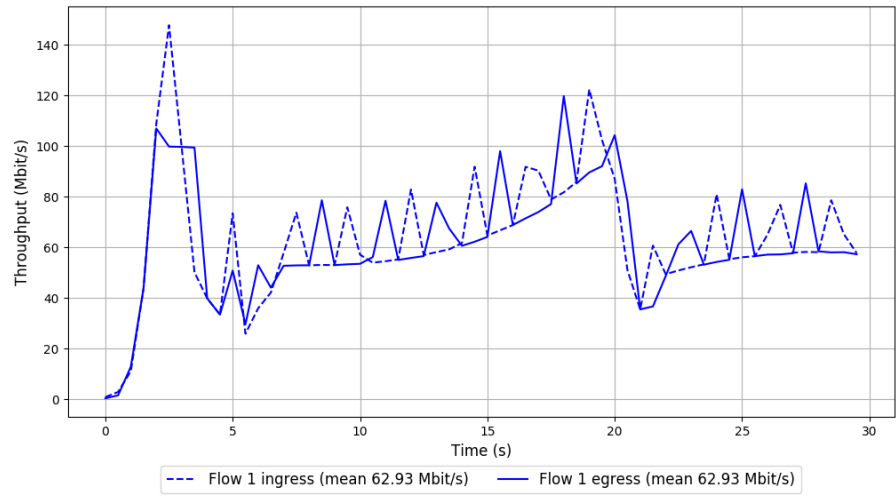
-- Flow 1:

Average throughput: 62.93 Mbit/s

95th percentile per-packet one-way delay: 117.778 ms

Loss rate: 0.77%

Run 10: Report of TCP Cubic — Data Link

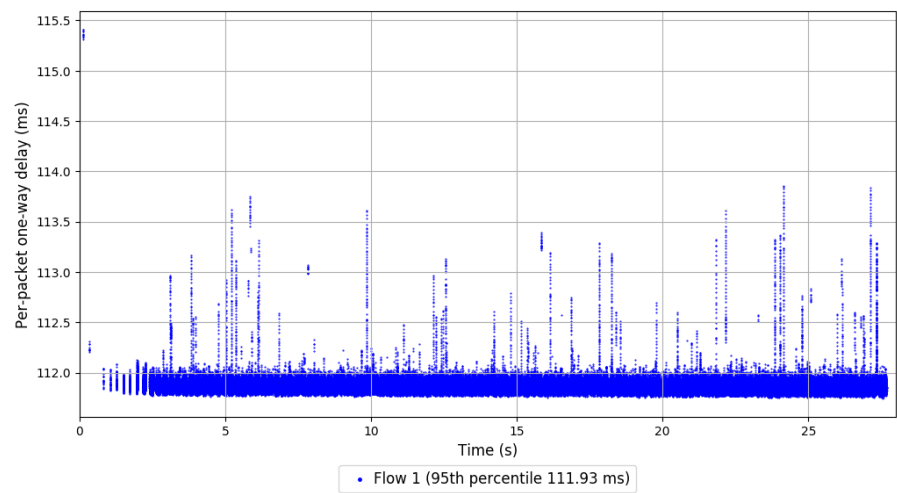
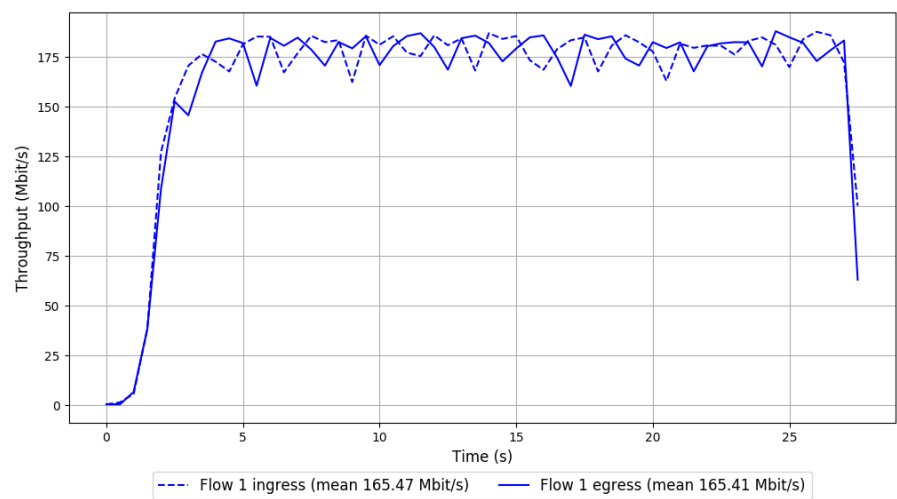


```
Run 1: Statistics of Indigo

Start at: 2017-09-17 20:56:21
End at: 2017-09-17 20:56:51

# Below is generated by plot.py at 2017-09-18 01:21:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 165.41 Mbit/s
95th percentile per-packet one-way delay: 111.931 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 165.41 Mbit/s
95th percentile per-packet one-way delay: 111.931 ms
Loss rate: 0.86%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-09-17 21:08:29

End at: 2017-09-17 21:08:59

Below is generated by plot.py at 2017-09-18 01:21:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.14 Mbit/s

95th percentile per-packet one-way delay: 111.840 ms

Loss rate: 0.78%

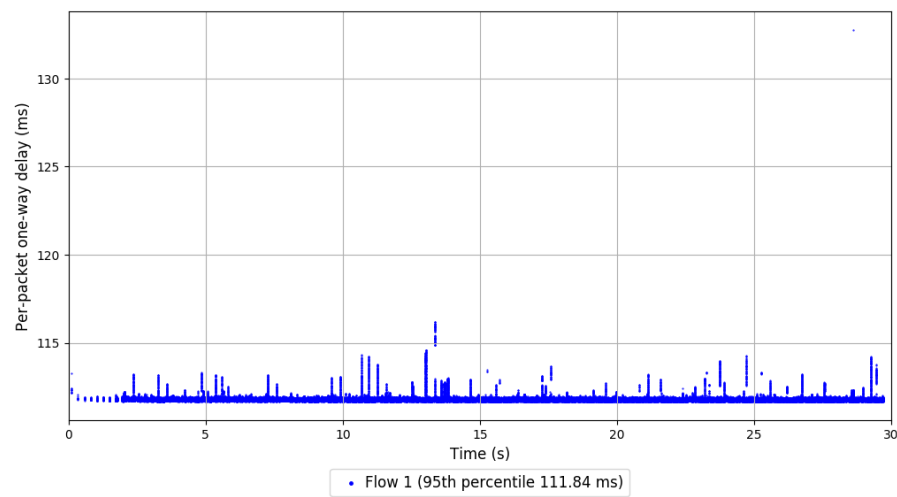
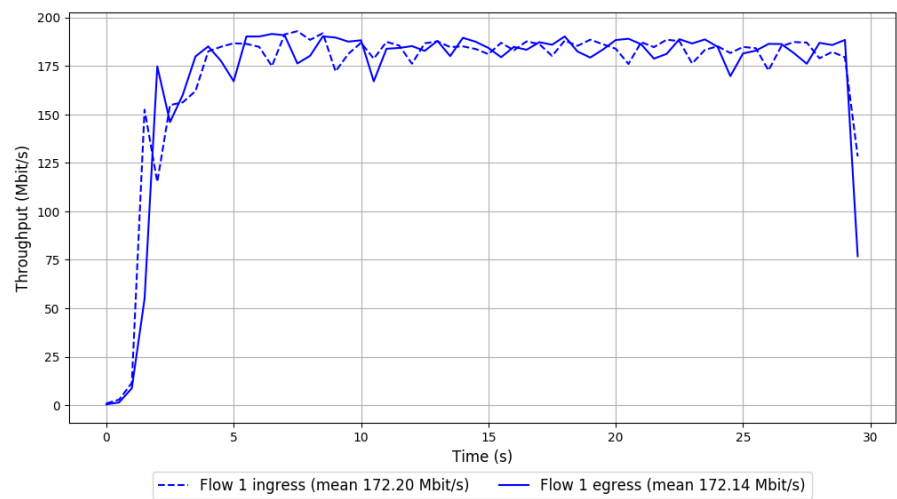
-- Flow 1:

Average throughput: 172.14 Mbit/s

95th percentile per-packet one-way delay: 111.840 ms

Loss rate: 0.78%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-09-17 21:20:15

End at: 2017-09-17 21:20:45

Below is generated by plot.py at 2017-09-18 01:21:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.15 Mbit/s

95th percentile per-packet one-way delay: 111.891 ms

Loss rate: 0.80%

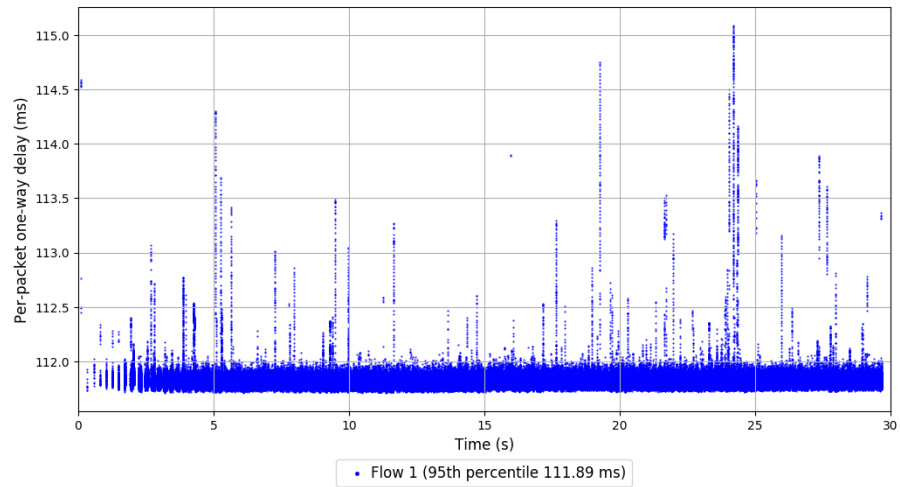
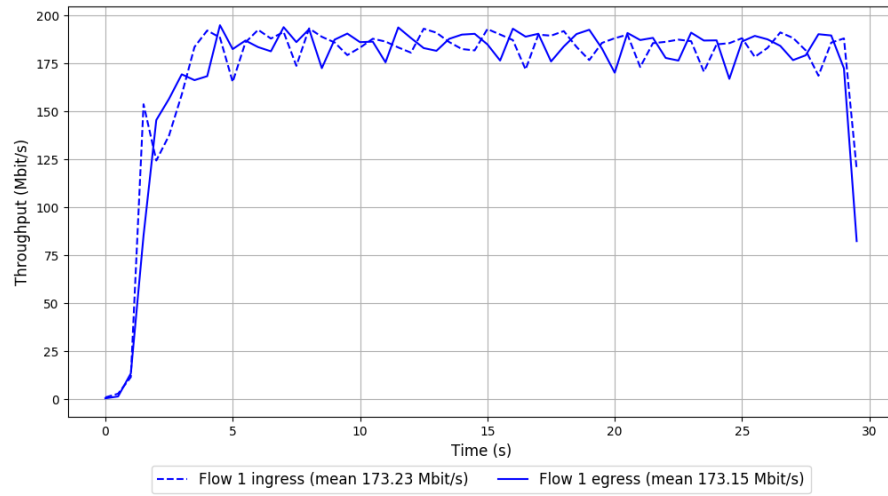
-- Flow 1:

Average throughput: 173.15 Mbit/s

95th percentile per-packet one-way delay: 111.891 ms

Loss rate: 0.80%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-09-17 21:32:14

End at: 2017-09-17 21:32:44

Below is generated by plot.py at 2017-09-18 01:21:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.69 Mbit/s

95th percentile per-packet one-way delay: 112.782 ms

Loss rate: 0.81%

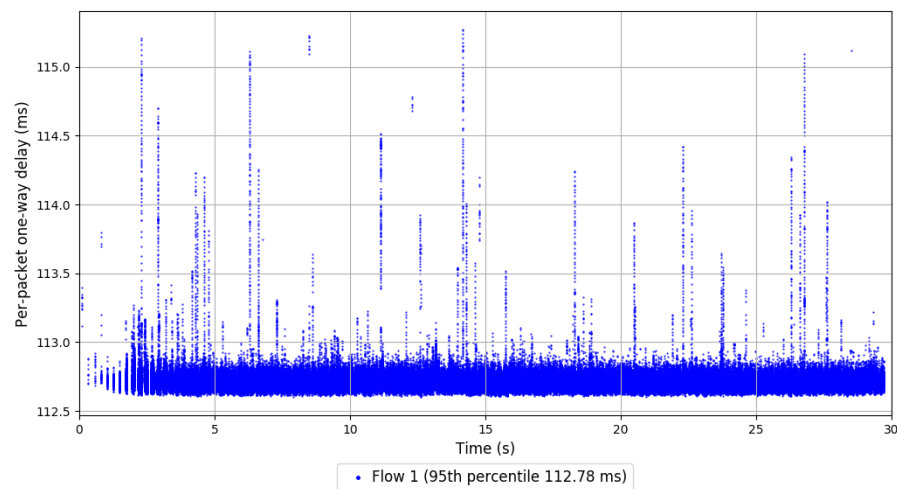
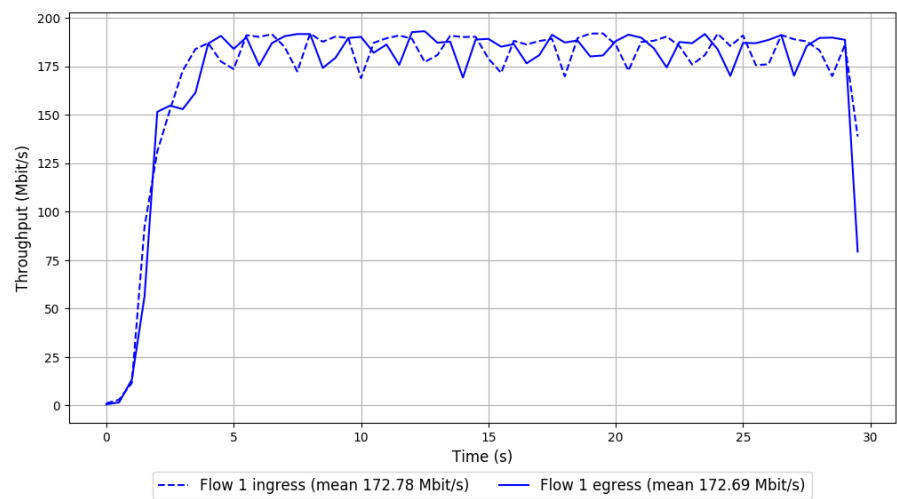
-- Flow 1:

Average throughput: 172.69 Mbit/s

95th percentile per-packet one-way delay: 112.782 ms

Loss rate: 0.81%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-09-17 21:44:09

End at: 2017-09-17 21:44:39

Below is generated by plot.py at 2017-09-18 01:22:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.63 Mbit/s

95th percentile per-packet one-way delay: 112.755 ms

Loss rate: 0.80%

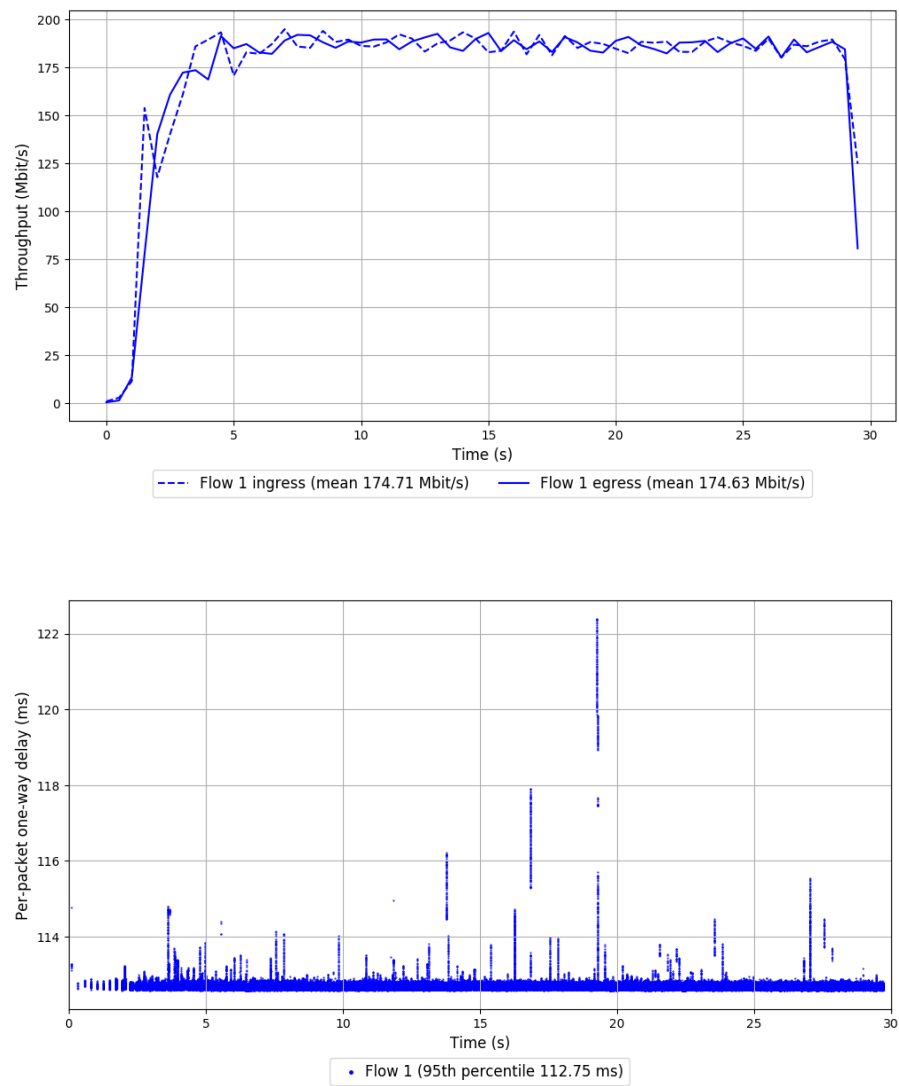
-- Flow 1:

Average throughput: 174.63 Mbit/s

95th percentile per-packet one-way delay: 112.755 ms

Loss rate: 0.80%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-09-17 21:56:23

End at: 2017-09-17 21:56:53

Below is generated by plot.py at 2017-09-18 01:22:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.51 Mbit/s

95th percentile per-packet one-way delay: 112.436 ms

Loss rate: 0.76%

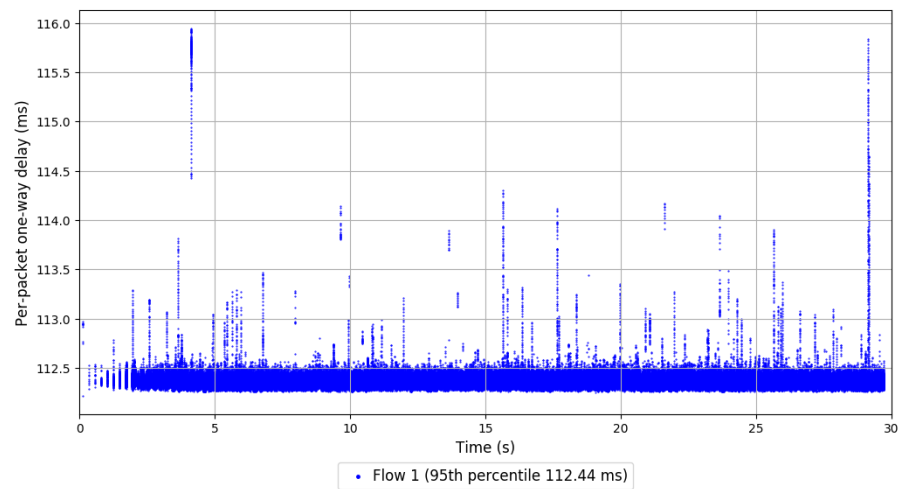
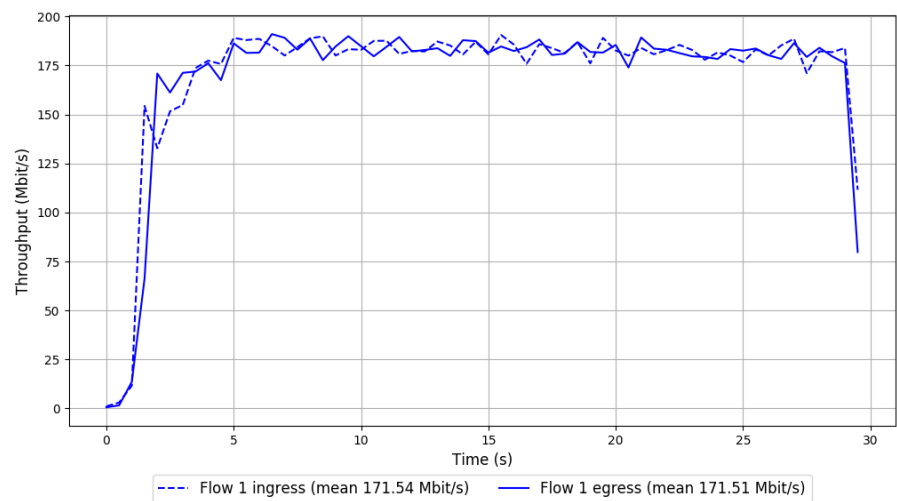
-- Flow 1:

Average throughput: 171.51 Mbit/s

95th percentile per-packet one-way delay: 112.436 ms

Loss rate: 0.76%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-09-17 22:08:23

End at: 2017-09-17 22:08:53

Below is generated by plot.py at 2017-09-18 01:22:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.29 Mbit/s

95th percentile per-packet one-way delay: 112.439 ms

Loss rate: 0.76%

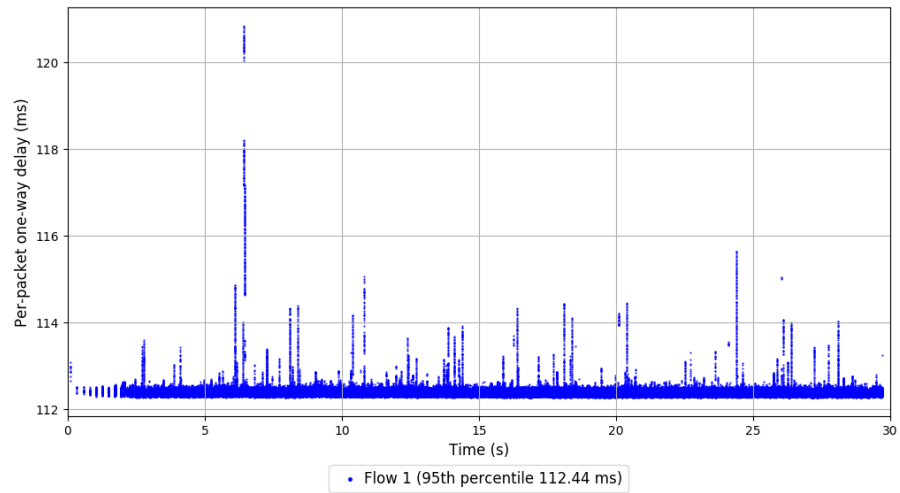
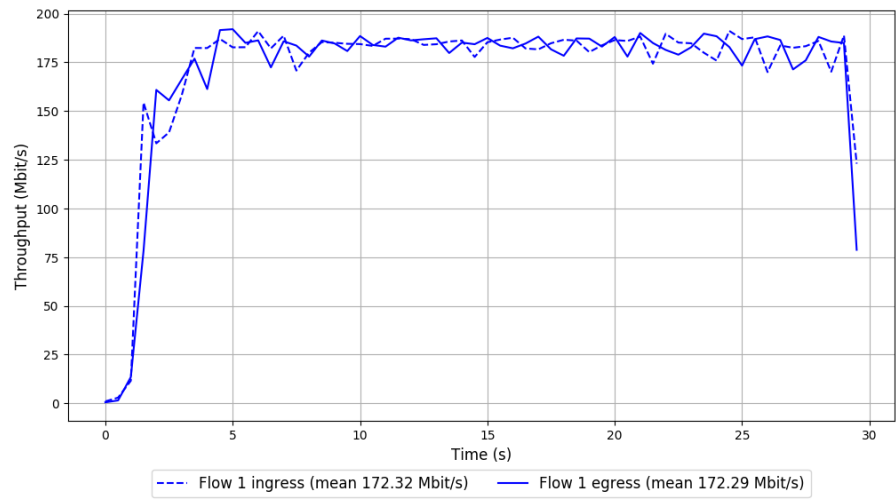
-- Flow 1:

Average throughput: 172.29 Mbit/s

95th percentile per-packet one-way delay: 112.439 ms

Loss rate: 0.76%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-09-17 22:20:35

End at: 2017-09-17 22:21:05

Below is generated by plot.py at 2017-09-18 01:22:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.84 Mbit/s

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

Loss rate: 0.80%

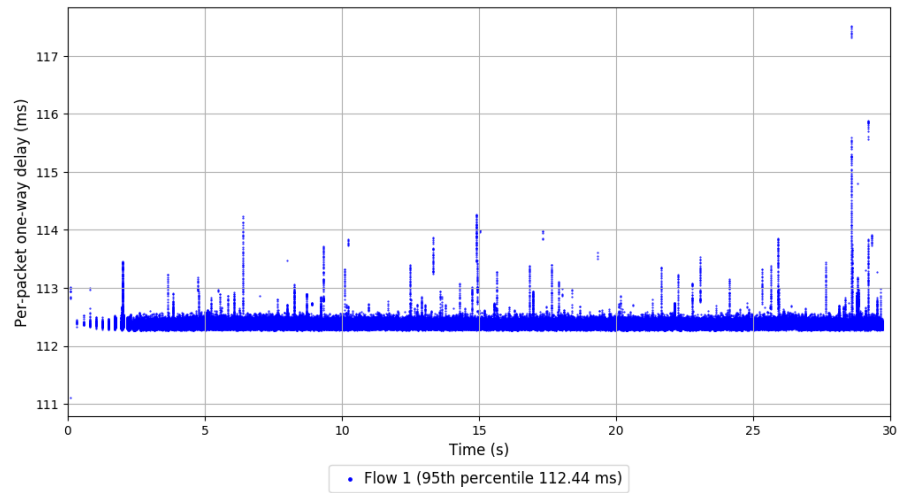
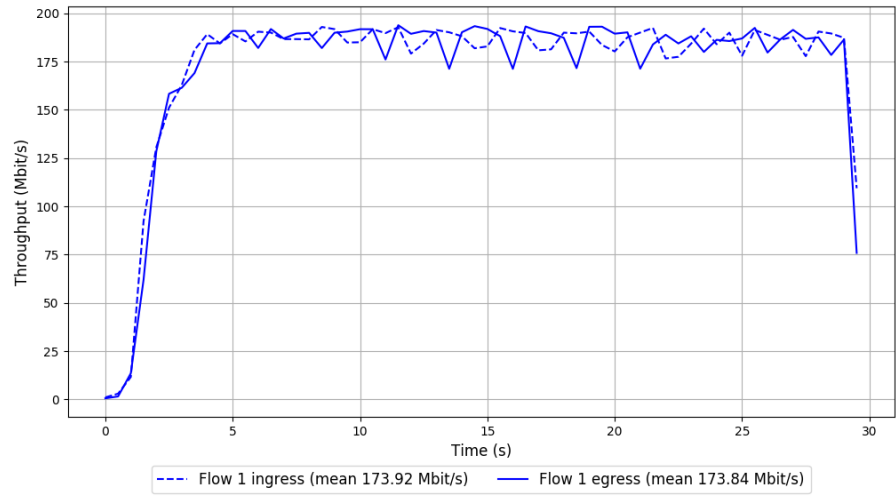
-- Flow 1:

Average throughput: 173.84 Mbit/s

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

Loss rate: 0.80%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-09-17 22:32:33

End at: 2017-09-17 22:33:03

Below is generated by plot.py at 2017-09-18 01:24:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.12 Mbit/s

95th percentile per-packet one-way delay: 112.795 ms

Loss rate: 0.80%

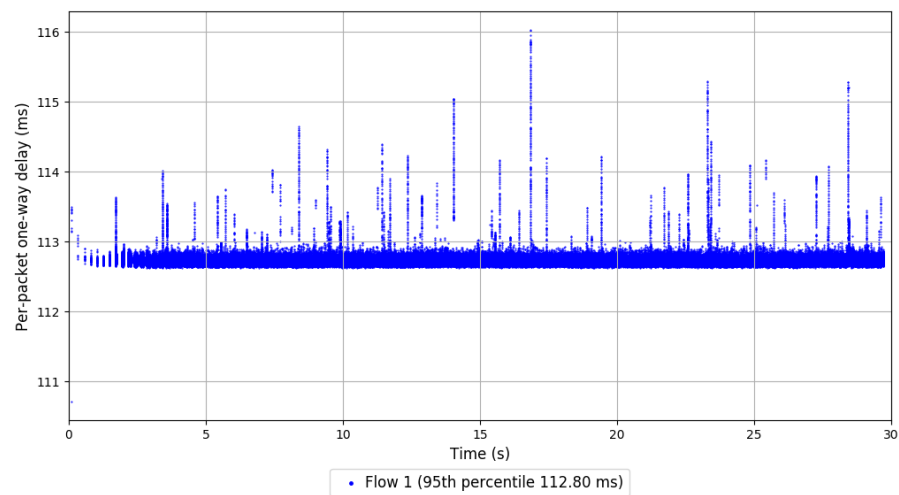
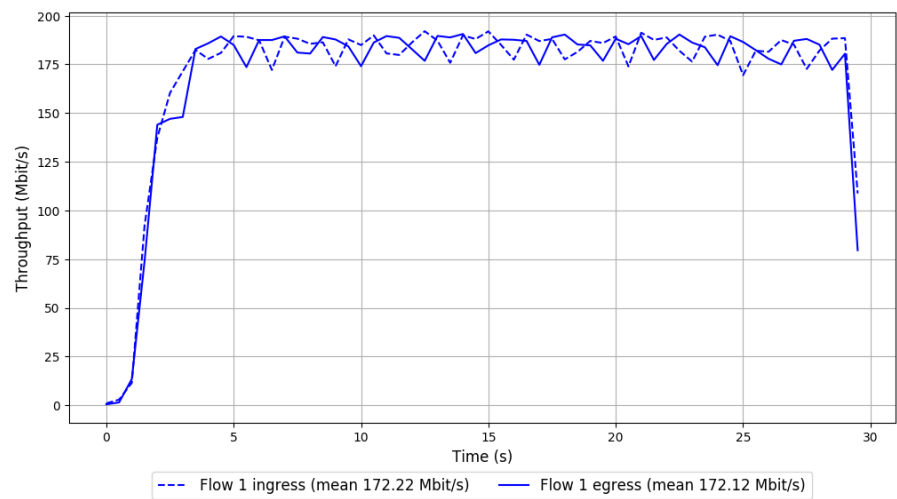
-- Flow 1:

Average throughput: 172.12 Mbit/s

95th percentile per-packet one-way delay: 112.795 ms

Loss rate: 0.80%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-09-17 22:44:27

End at: 2017-09-17 22:44:57

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.43 Mbit/s

95th percentile per-packet one-way delay: 112.782 ms

Loss rate: 0.81%

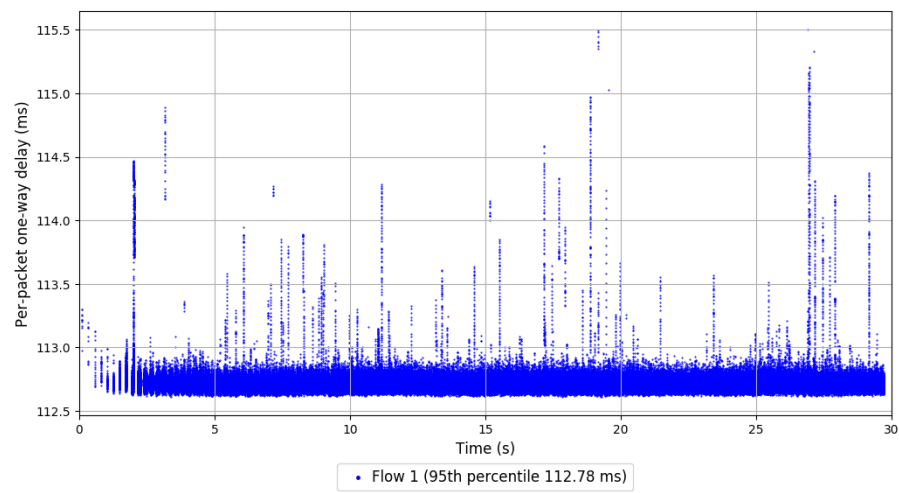
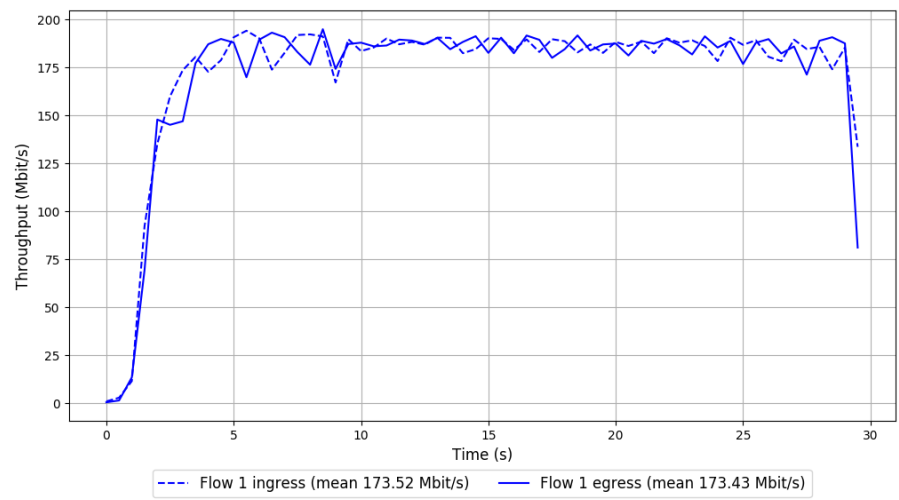
-- Flow 1:

Average throughput: 173.43 Mbit/s

95th percentile per-packet one-way delay: 112.782 ms

Loss rate: 0.81%

Run 10: Report of Indigo — Data Link

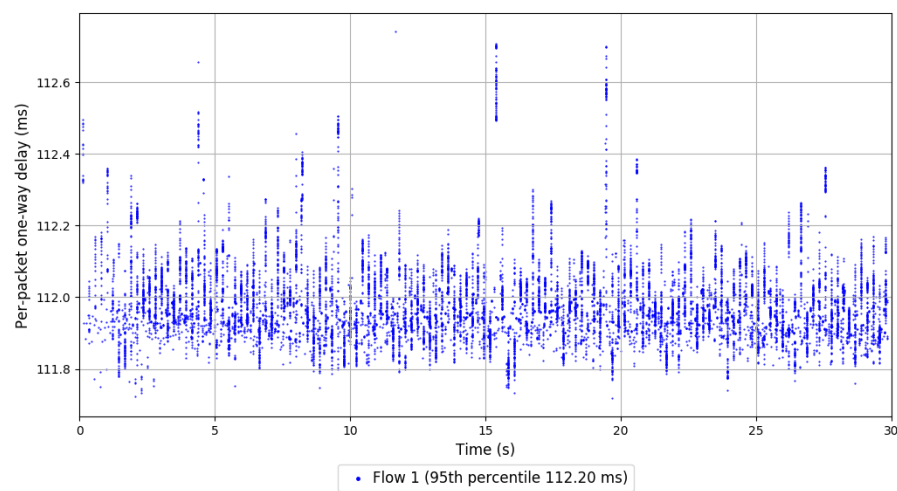
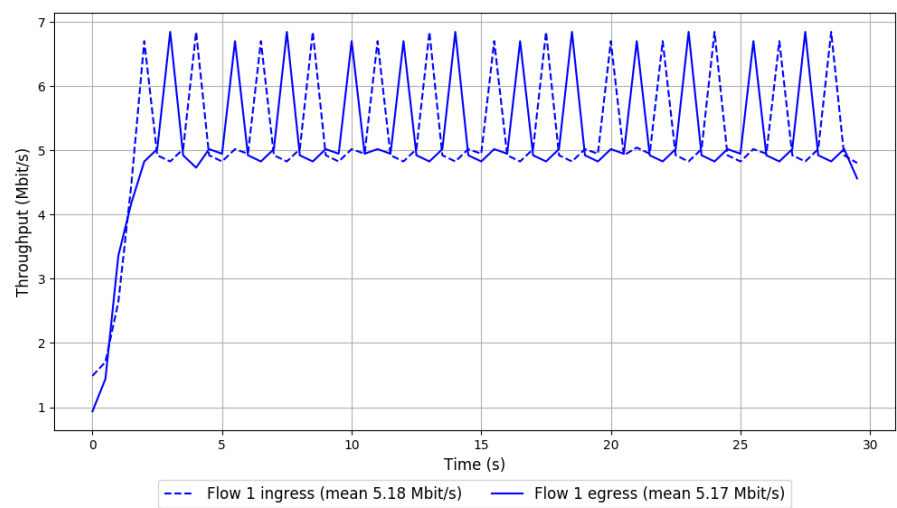


```
Run 1: Statistics of KohoCC

Start at: 2017-09-17 20:57:54
End at: 2017-09-17 20:58:24

# Below is generated by plot.py at 2017-09-18 01:24:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 112.199 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 112.199 ms
Loss rate: 0.81%
```

Run 1: Report of KohoCC — Data Link

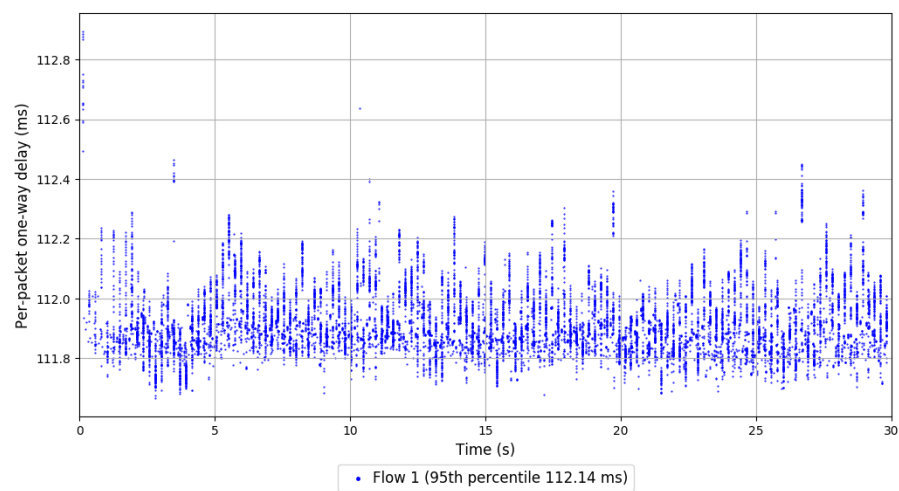
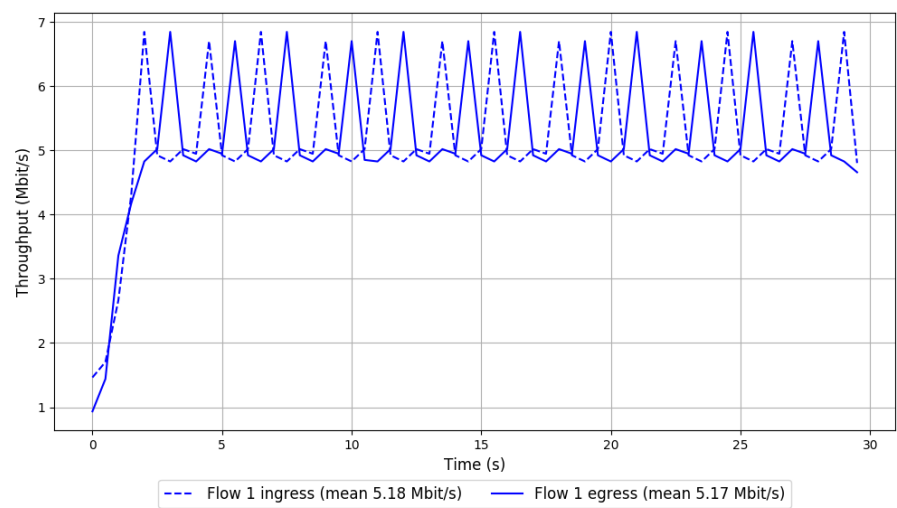


```
Run 2: Statistics of KohoCC

Start at: 2017-09-17 21:10:04
End at: 2017-09-17 21:10:34

# Below is generated by plot.py at 2017-09-18 01:24:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 112.140 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 112.140 ms
Loss rate: 0.80%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-09-17 21:21:49

End at: 2017-09-17 21:22:20

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 112.410 ms

Loss rate: 0.77%

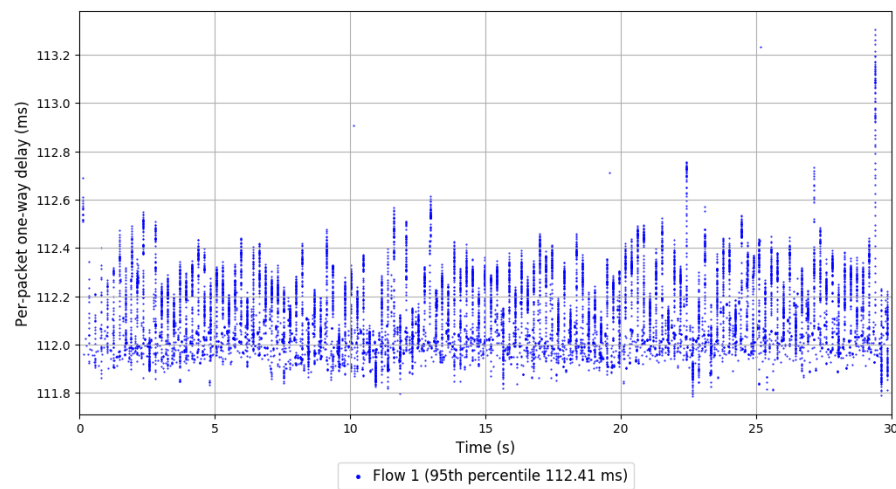
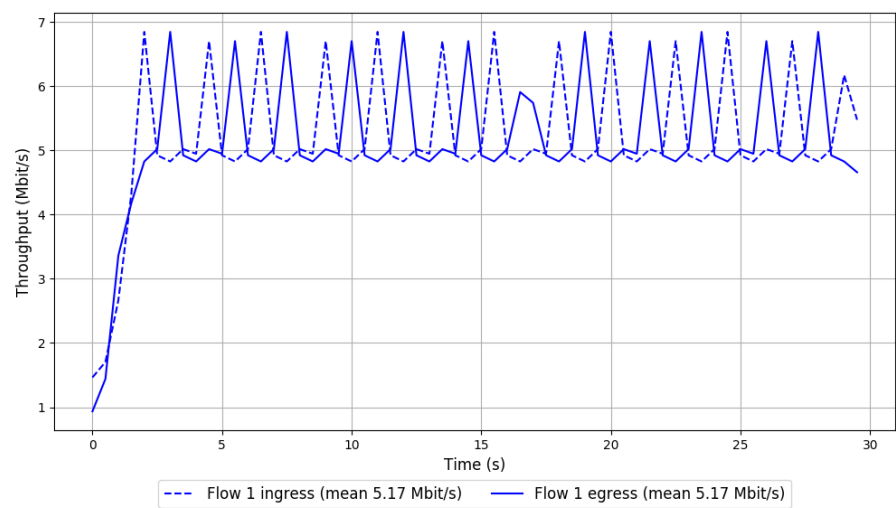
-- Flow 1:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 112.410 ms

Loss rate: 0.77%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-09-17 21:33:49

End at: 2017-09-17 21:34:19

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 113.206 ms

Loss rate: 0.78%

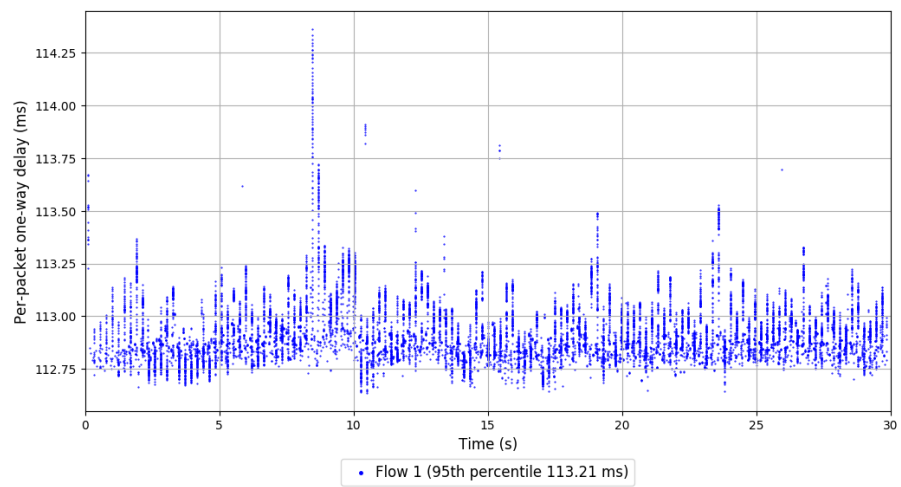
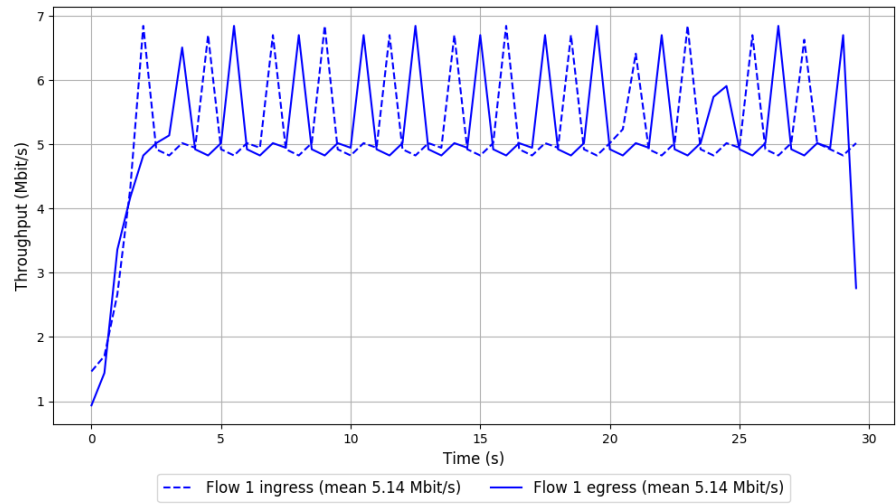
-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 113.206 ms

Loss rate: 0.78%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-09-17 21:45:44

End at: 2017-09-17 21:46:14

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.152 ms

Loss rate: 0.78%

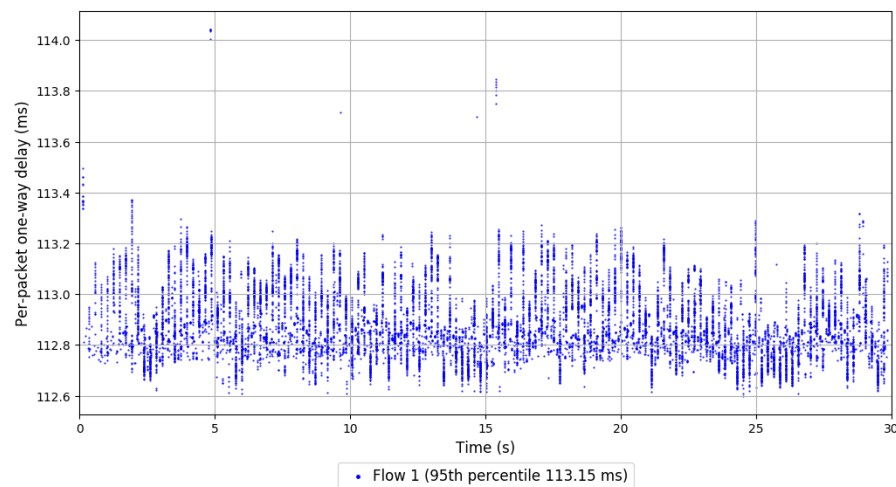
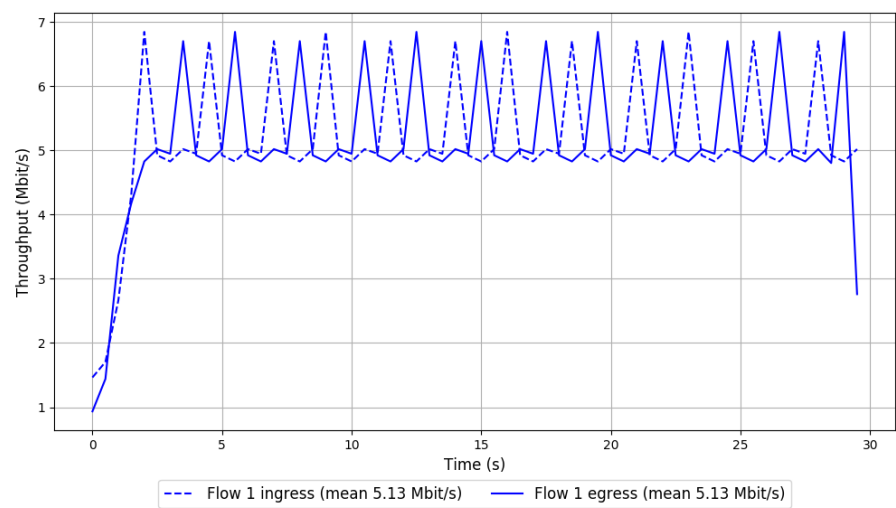
-- Flow 1:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.152 ms

Loss rate: 0.78%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-09-17 21:57:57

End at: 2017-09-17 21:58:27

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 112.726 ms

Loss rate: 0.77%

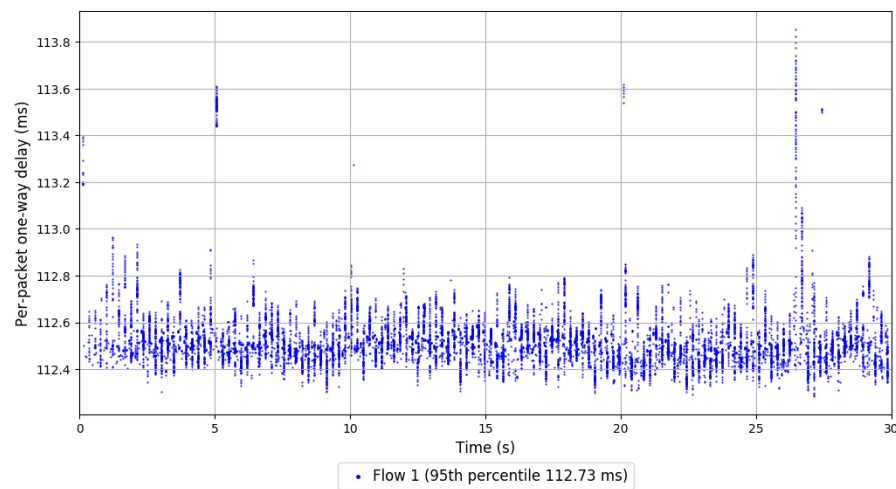
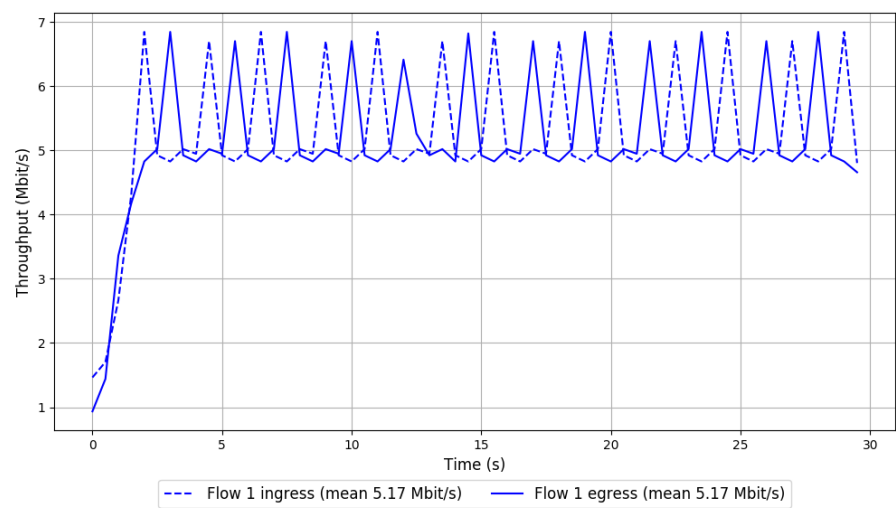
-- Flow 1:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 112.726 ms

Loss rate: 0.77%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-09-17 22:09:57

End at: 2017-09-17 22:10:27

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 112.840 ms

Loss rate: 0.77%

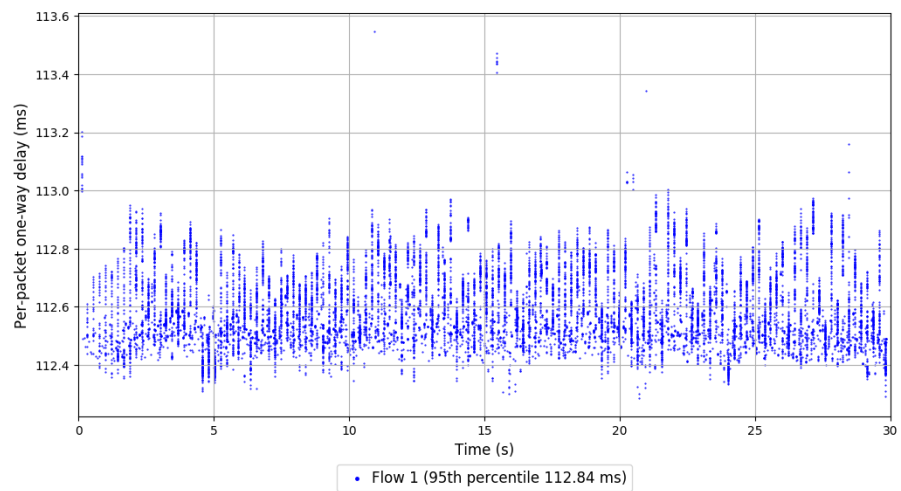
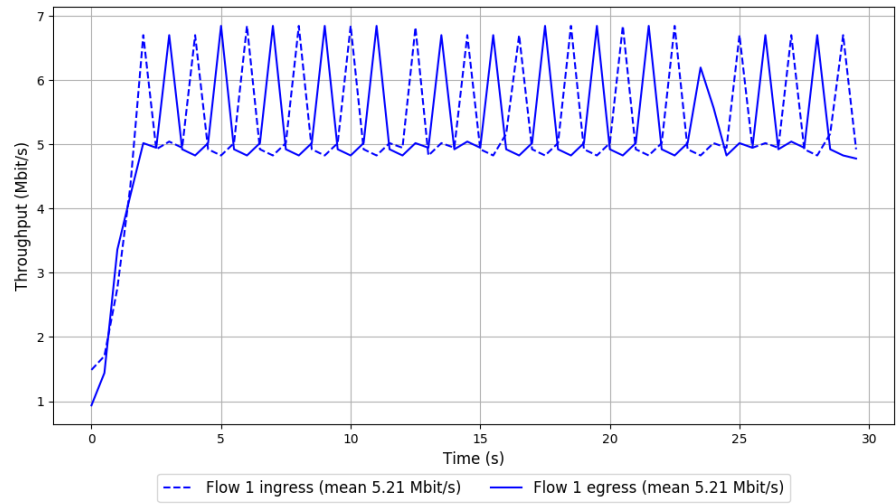
-- Flow 1:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 112.840 ms

Loss rate: 0.77%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-09-17 22:22:10

End at: 2017-09-17 22:22:40

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 112.821 ms

Loss rate: 0.77%

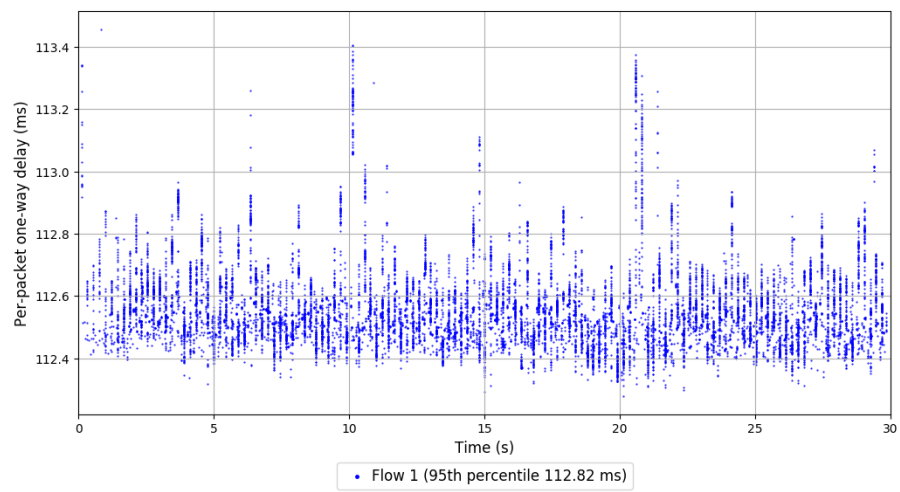
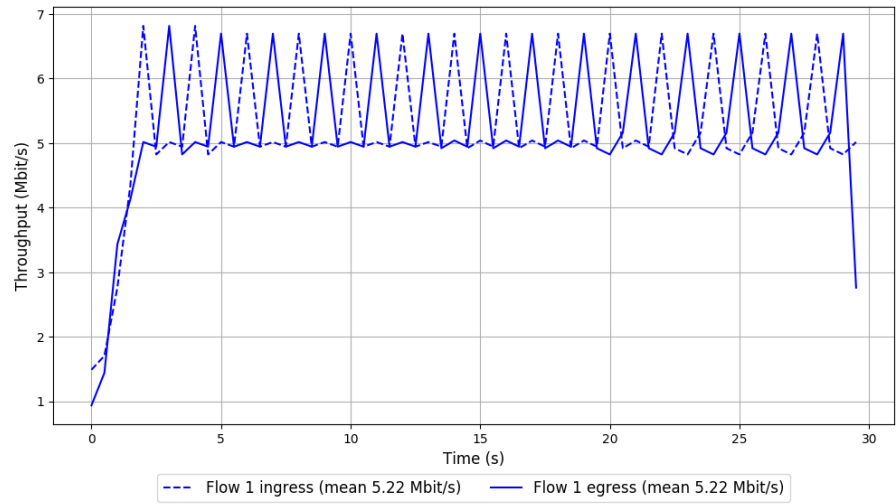
-- Flow 1:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 112.821 ms

Loss rate: 0.77%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-09-17 22:34:08

End at: 2017-09-17 22:34:38

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.301 ms

Loss rate: 0.80%

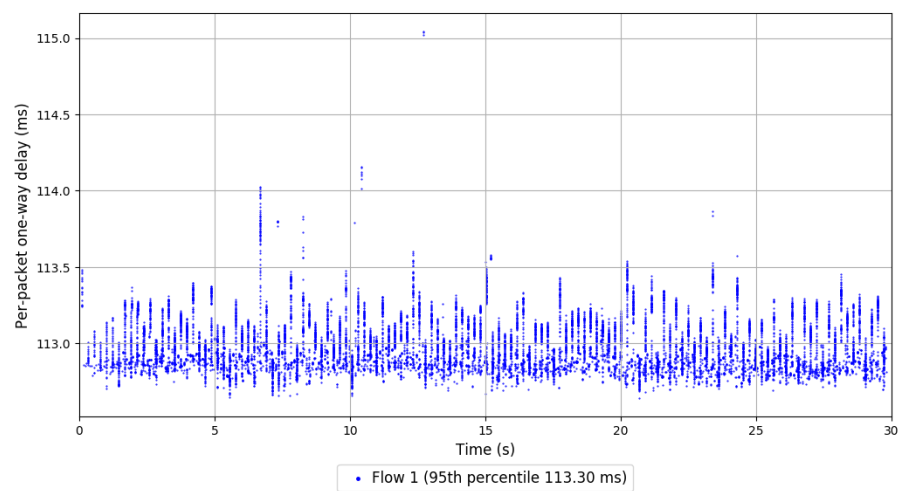
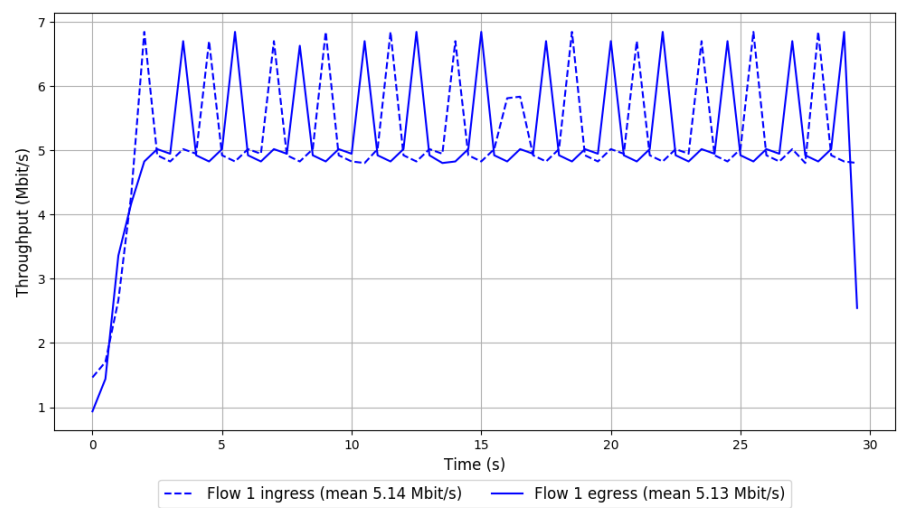
-- Flow 1:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 113.301 ms

Loss rate: 0.80%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-09-17 22:46:02

End at: 2017-09-17 22:46:32

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 113.206 ms

Loss rate: 0.77%

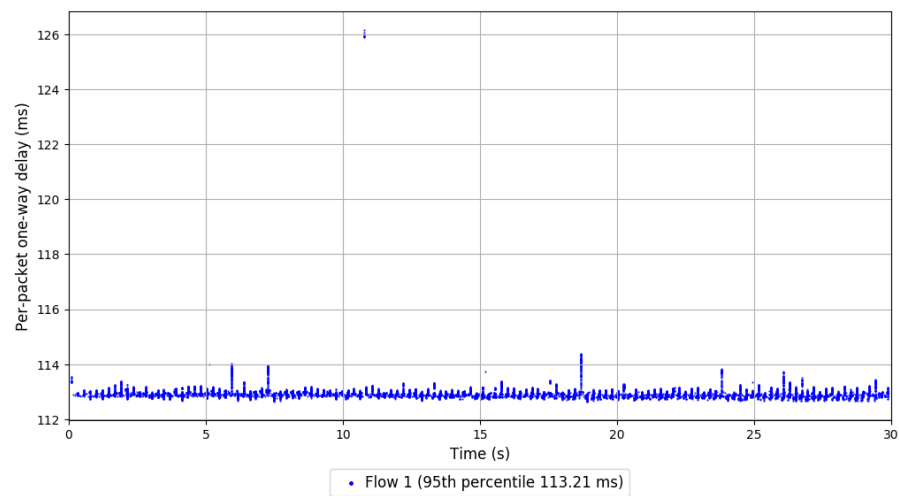
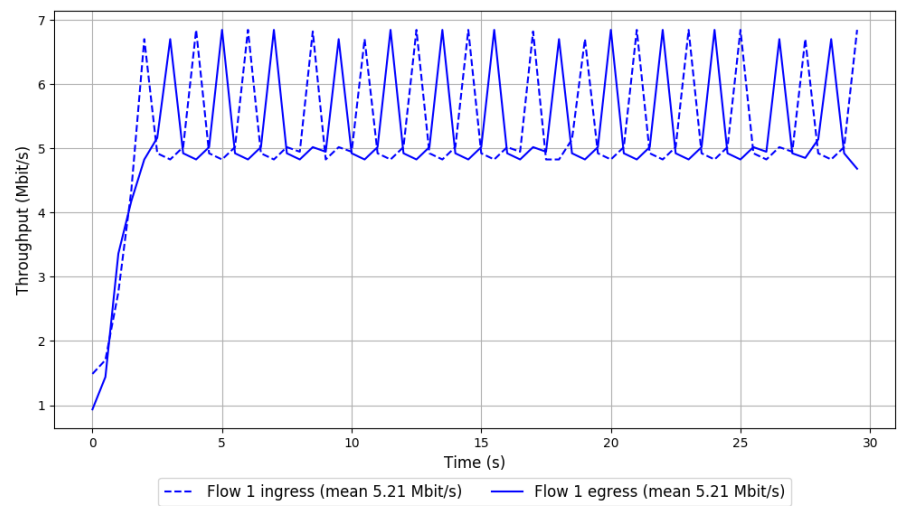
-- Flow 1:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 113.206 ms

Loss rate: 0.77%

Run 10: Report of KohoCC — Data Link

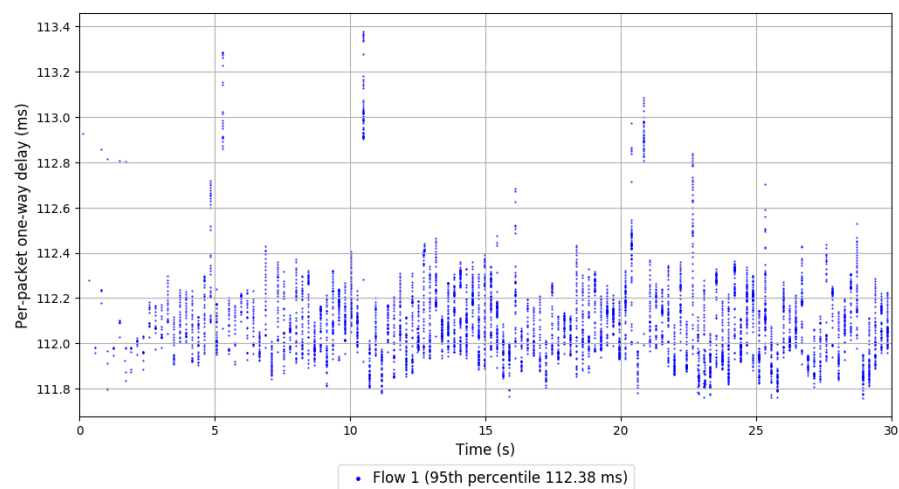
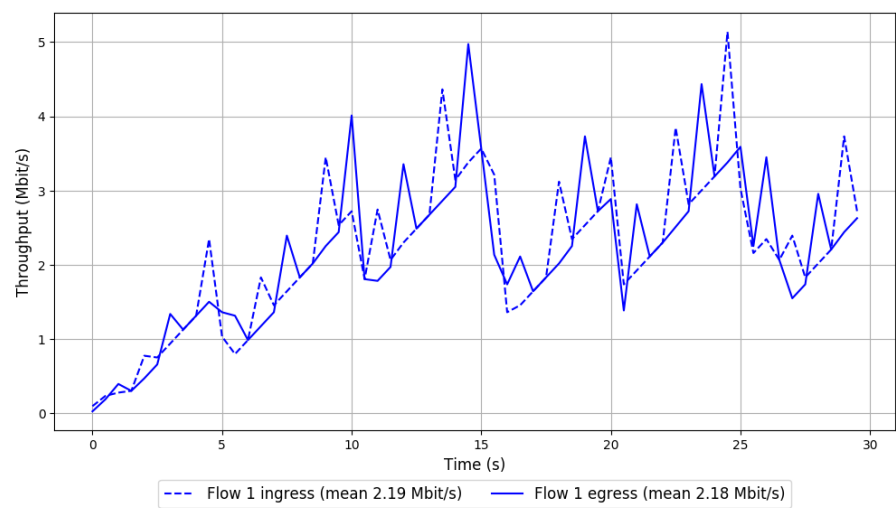


```
Run 1: Statistics of LEDBAT

Start at: 2017-09-17 20:57:13
End at: 2017-09-17 20:57:43

# Below is generated by plot.py at 2017-09-18 01:24:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 112.384 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 112.384 ms
Loss rate: 1.11%
```


Run 1: Report of LEDBAT — Data Link

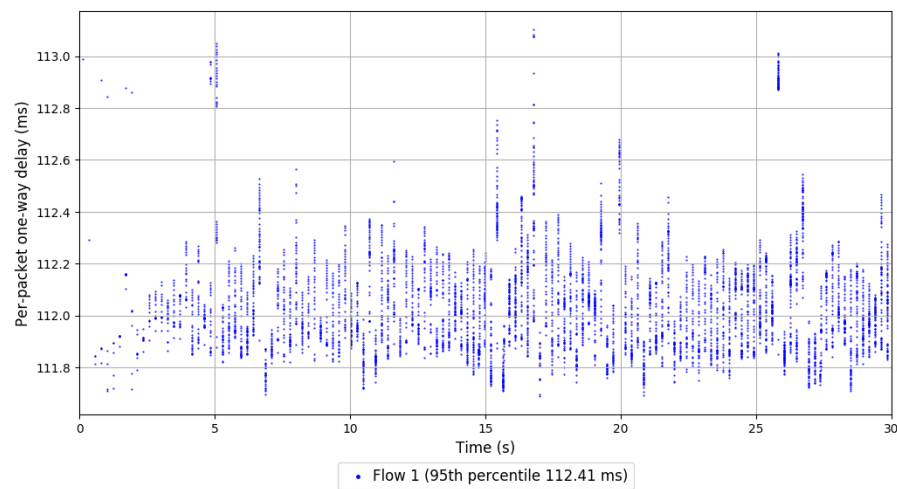
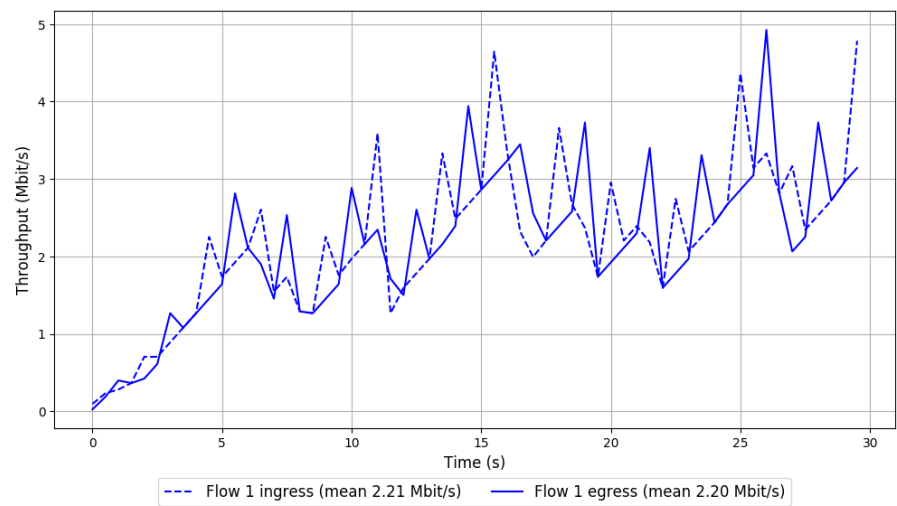


```
Run 2: Statistics of LEDBAT

Start at: 2017-09-17 21:09:23
End at: 2017-09-17 21:09:53

# Below is generated by plot.py at 2017-09-18 01:24:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 112.407 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 112.407 ms
Loss rate: 1.31%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-09-17 21:21:09

End at: 2017-09-17 21:21:39

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 112.403 ms

Loss rate: 1.22%

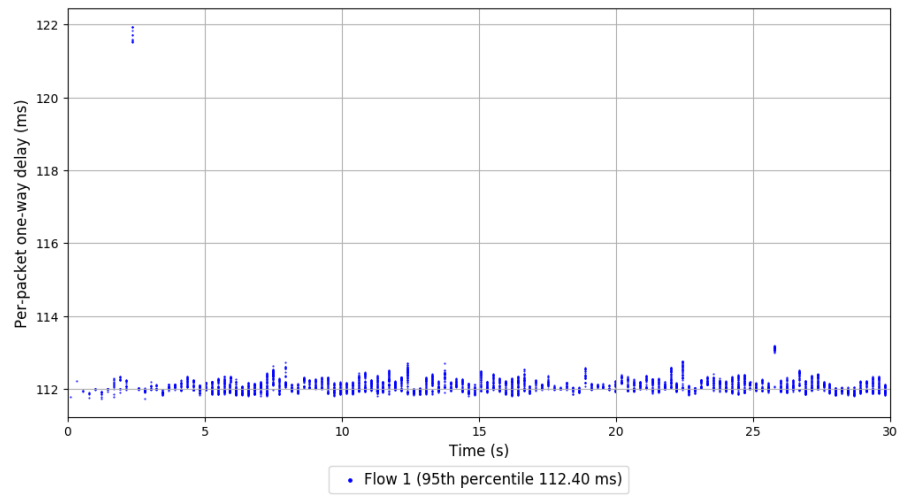
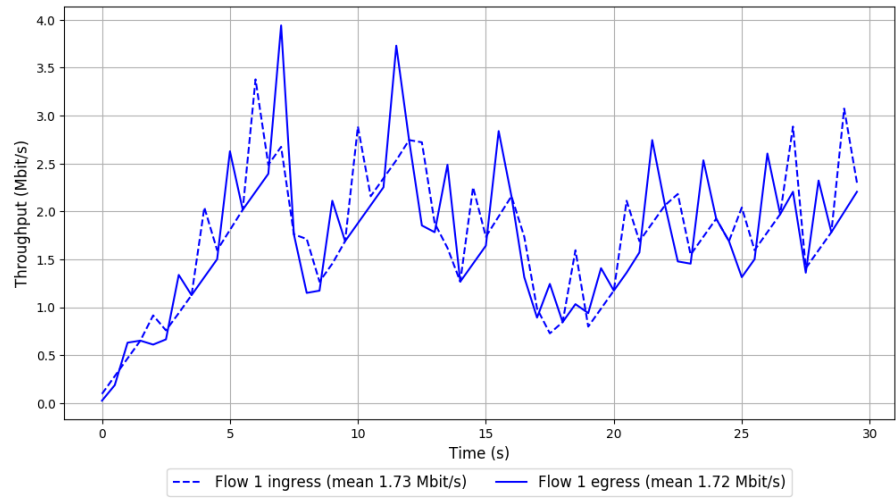
-- Flow 1:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 112.403 ms

Loss rate: 1.22%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-09-17 21:33:08

End at: 2017-09-17 21:33:38

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 113.304 ms

Loss rate: 0.45%

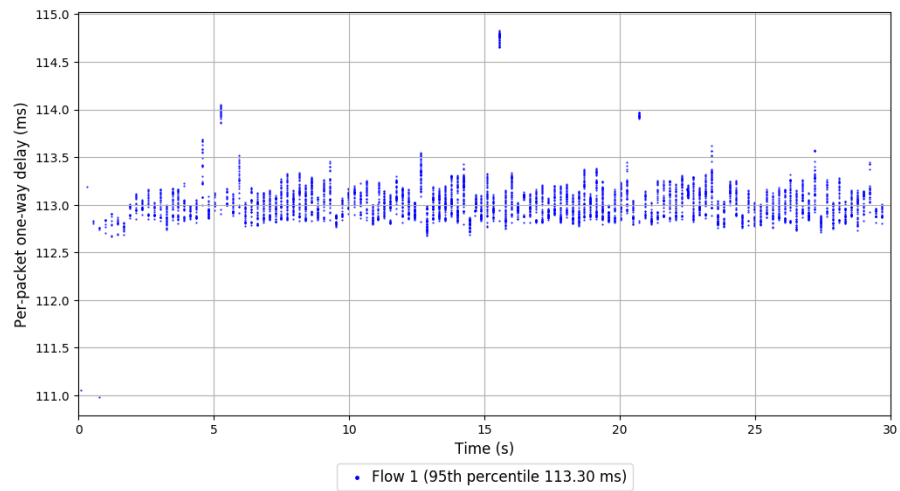
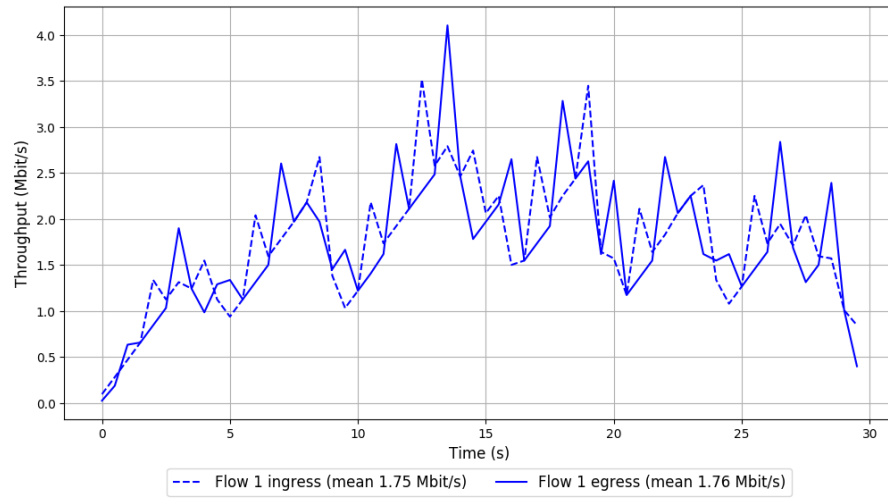
-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 113.304 ms

Loss rate: 0.45%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-09-17 21:45:03

End at: 2017-09-17 21:45:33

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 113.263 ms

Loss rate: 1.09%

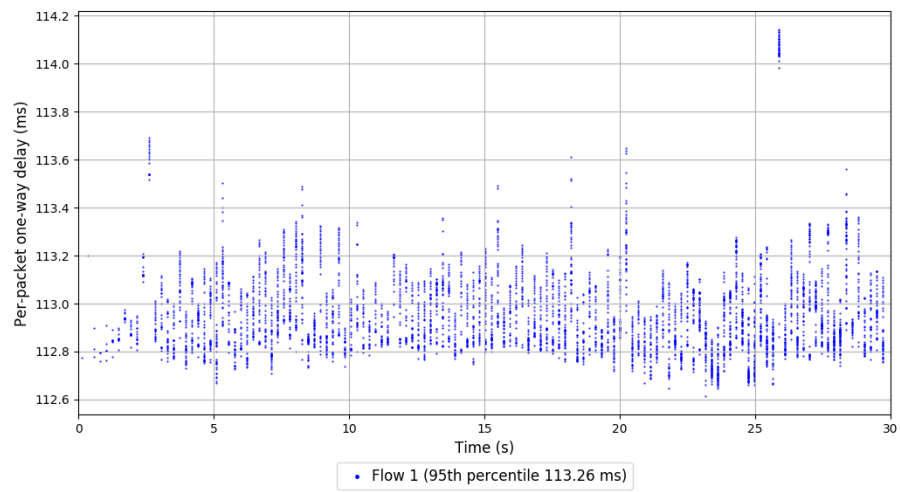
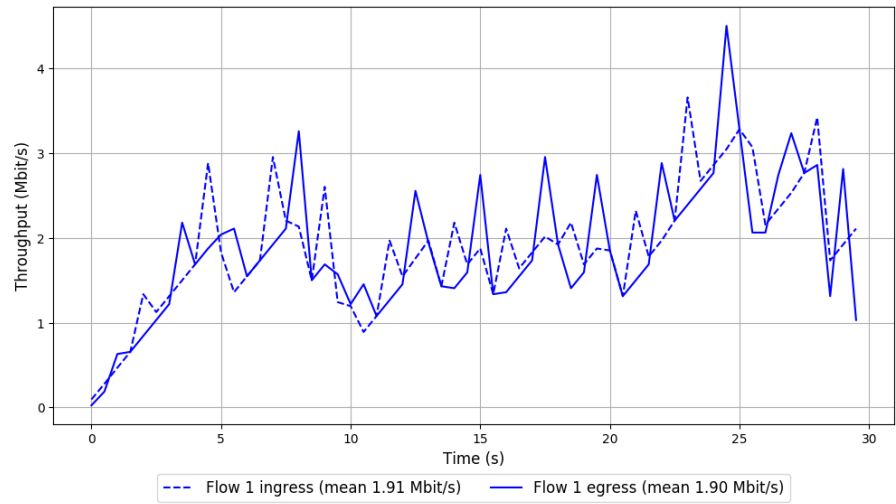
-- Flow 1:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 113.263 ms

Loss rate: 1.09%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-09-17 21:57:16

End at: 2017-09-17 21:57:47

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 112.909 ms

Loss rate: 0.70%

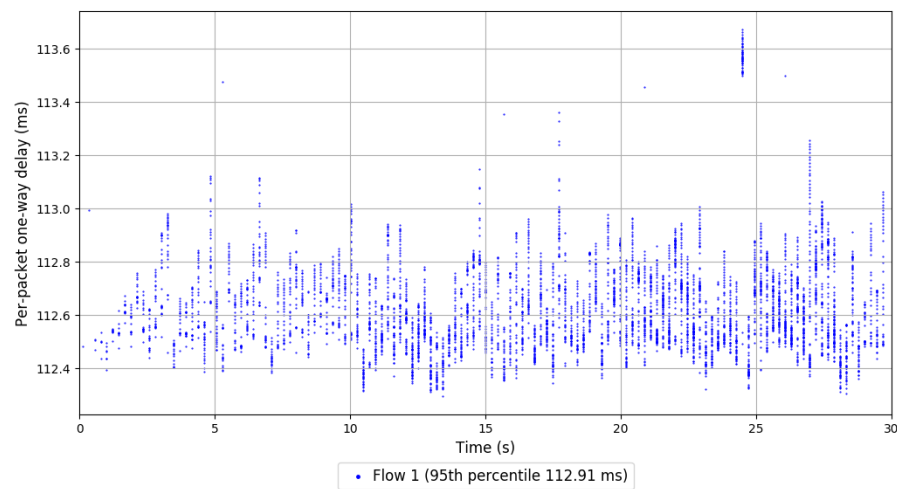
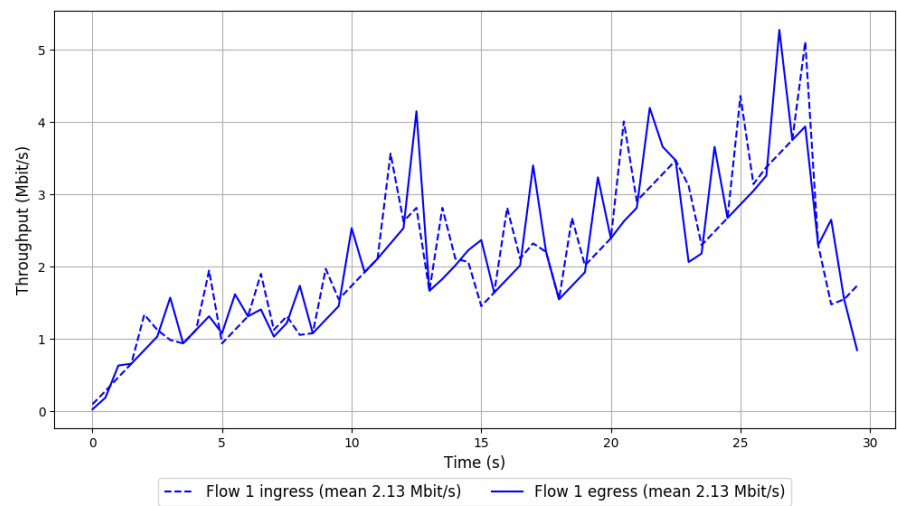
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 112.909 ms

Loss rate: 0.70%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-09-17 22:09:16

End at: 2017-09-17 22:09:46

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.917 ms

Loss rate: 0.91%

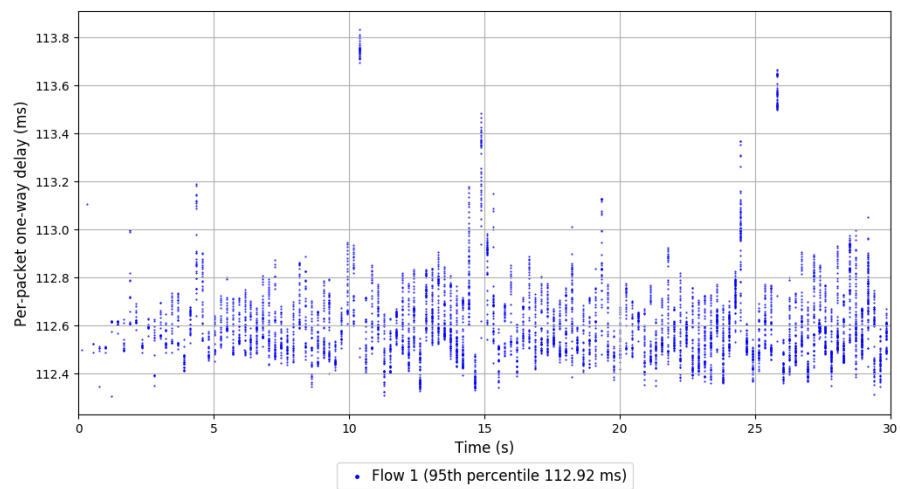
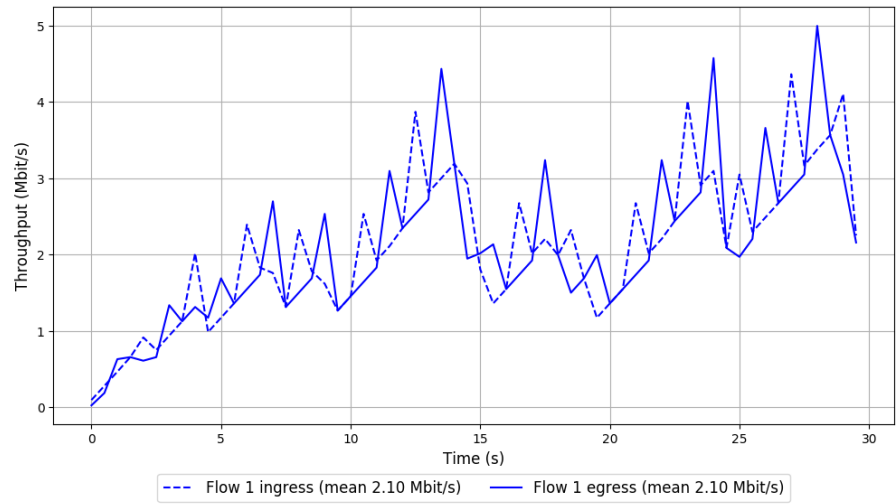
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.917 ms

Loss rate: 0.91%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-09-17 22:21:29

End at: 2017-09-17 22:21:59

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 112.846 ms

Loss rate: 1.36%

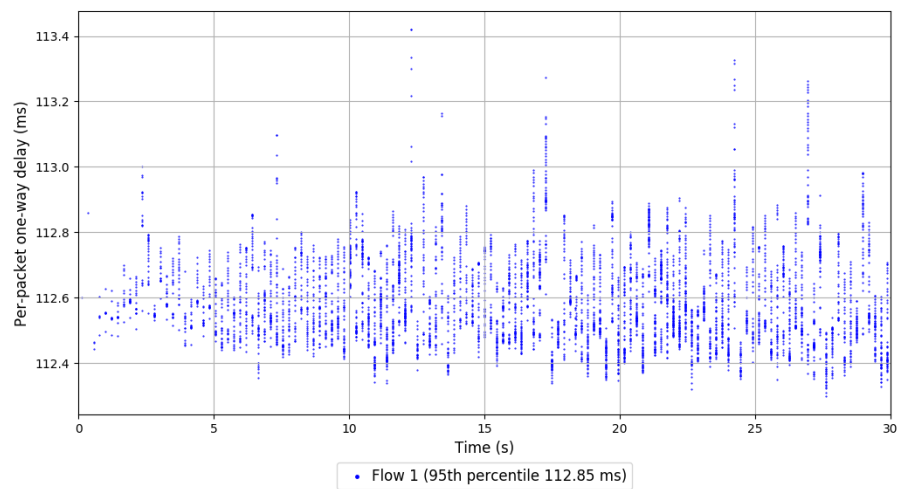
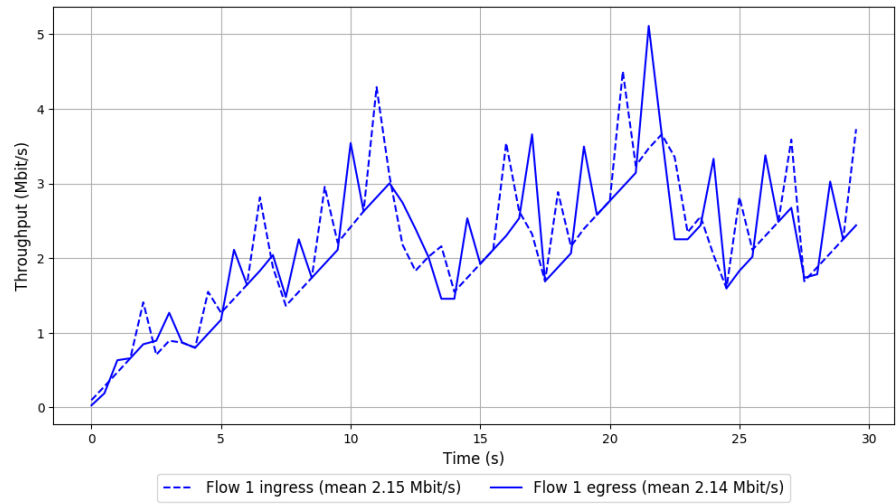
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 112.846 ms

Loss rate: 1.36%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-09-17 22:33:27

End at: 2017-09-17 22:33:57

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 113.338 ms

Loss rate: 0.98%

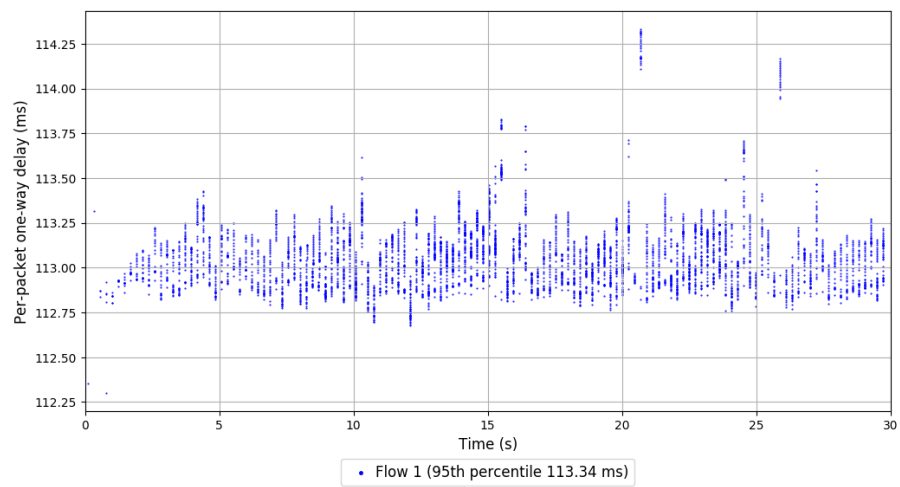
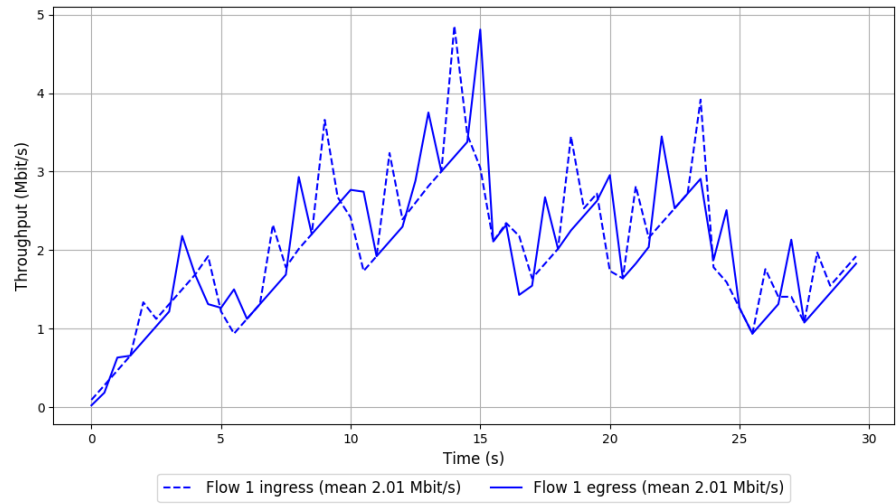
-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 113.338 ms

Loss rate: 0.98%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-09-17 22:45:21

End at: 2017-09-17 22:45:51

Below is generated by plot.py at 2017-09-18 01:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 113.324 ms

Loss rate: 1.18%

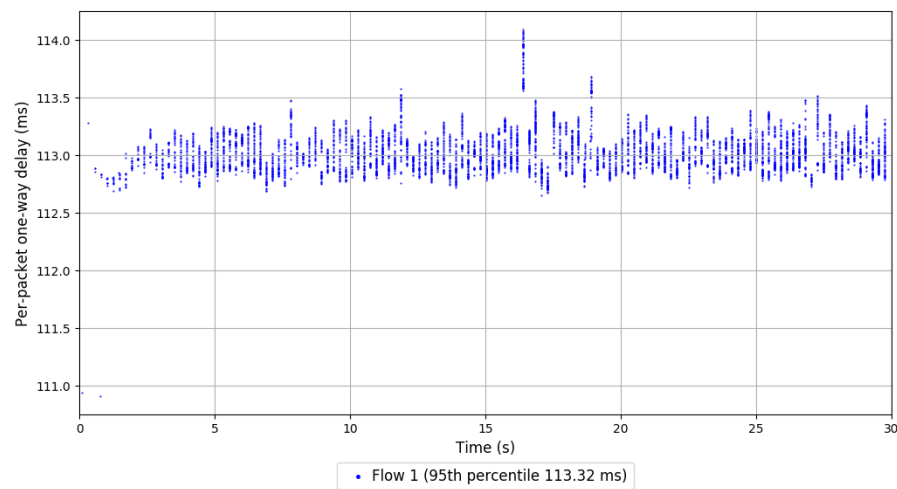
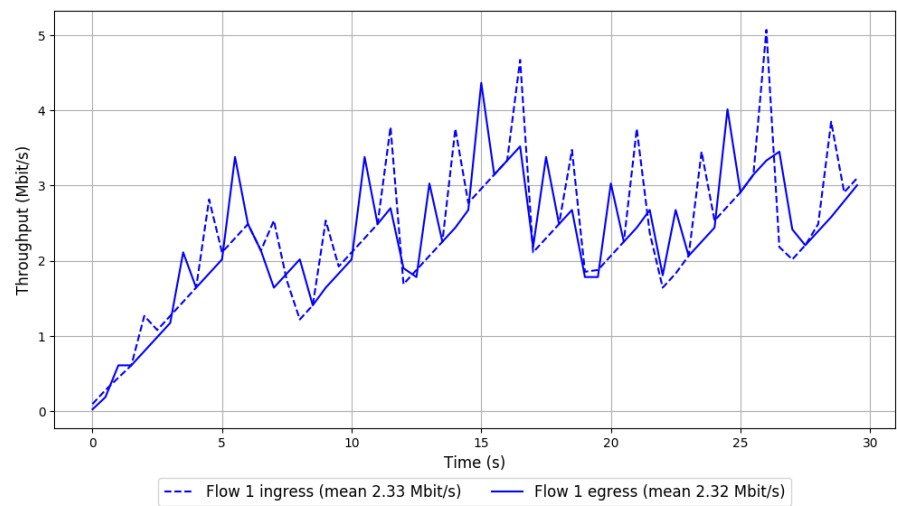
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 113.324 ms

Loss rate: 1.18%

Run 10: Report of LEDBAT — Data Link

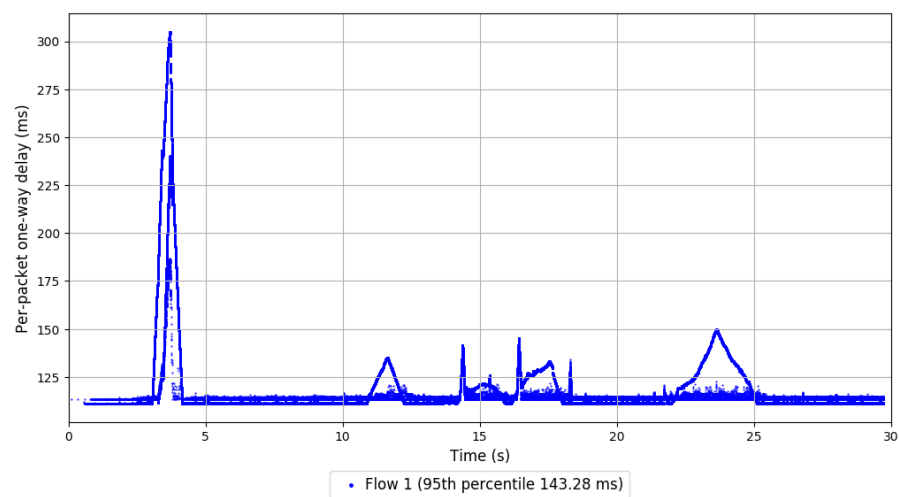
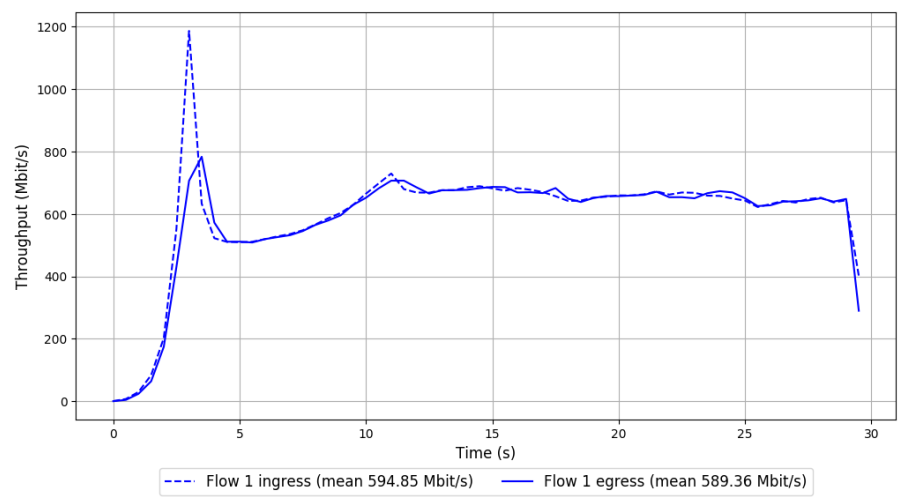


```
Run 1: Statistics of PCC

Start at: 2017-09-17 20:52:04
End at: 2017-09-17 20:52:34

# Below is generated by plot.py at 2017-09-18 01:32:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 589.36 Mbit/s
95th percentile per-packet one-way delay: 143.278 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 589.36 Mbit/s
95th percentile per-packet one-way delay: 143.278 ms
Loss rate: 1.68%
```

Run 1: Report of PCC — Data Link

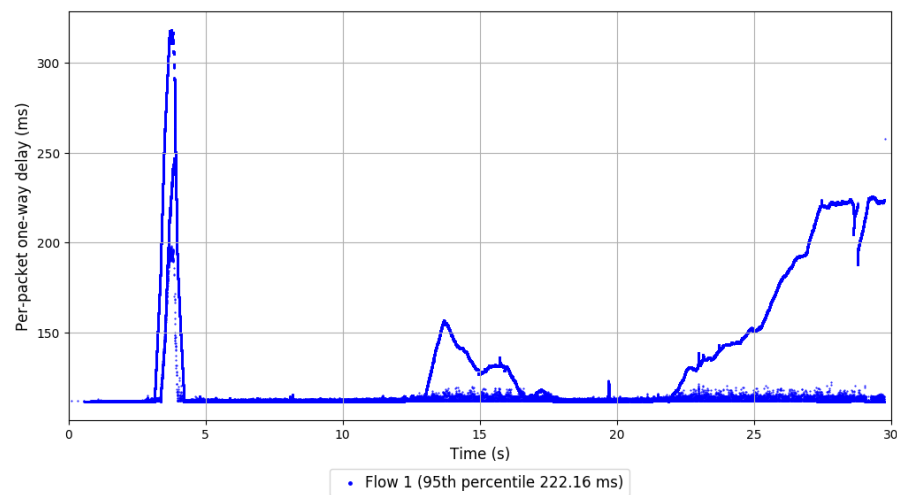
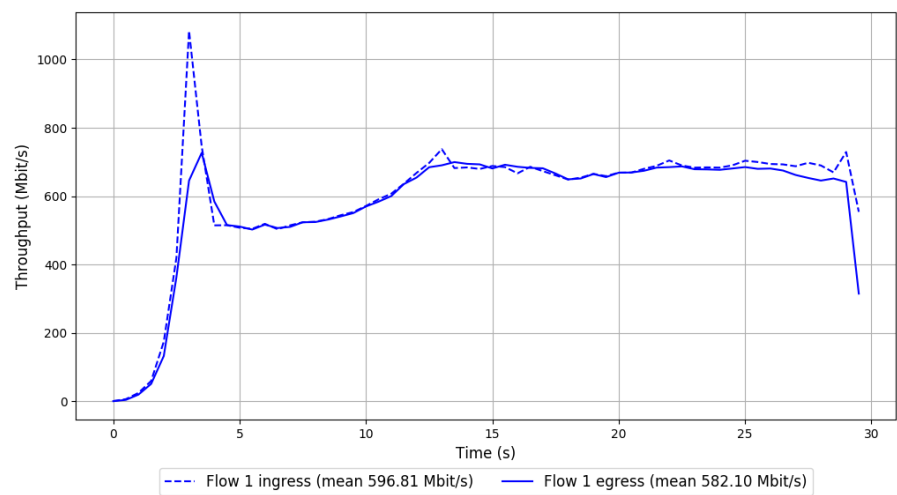


```
Run 2: Statistics of PCC

Start at: 2017-09-17 21:04:08
End at: 2017-09-17 21:04:38

# Below is generated by plot.py at 2017-09-18 01:32:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 582.10 Mbit/s
95th percentile per-packet one-way delay: 222.156 ms
Loss rate: 3.16%
-- Flow 1:
Average throughput: 582.10 Mbit/s
95th percentile per-packet one-way delay: 222.156 ms
Loss rate: 3.16%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-09-17 21:16:02

End at: 2017-09-17 21:16:32

Below is generated by plot.py at 2017-09-18 01:32:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 589.80 Mbit/s

95th percentile per-packet one-way delay: 158.209 ms

Loss rate: 1.89%

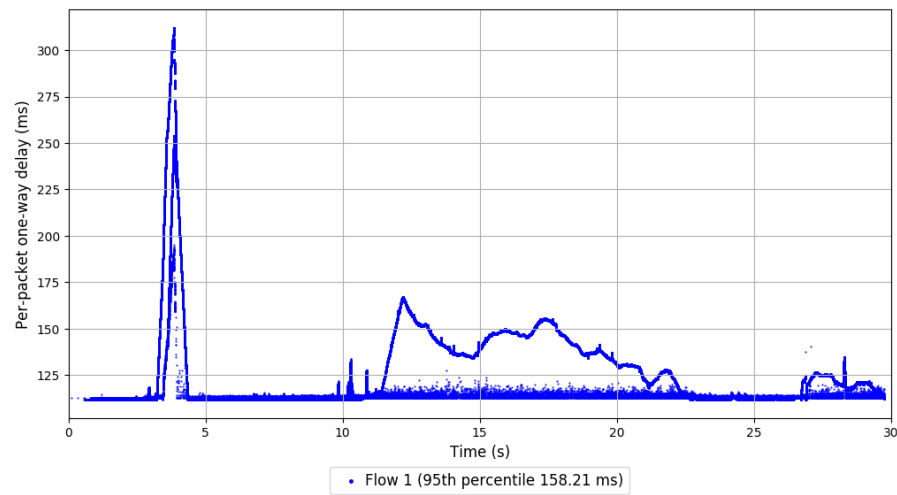
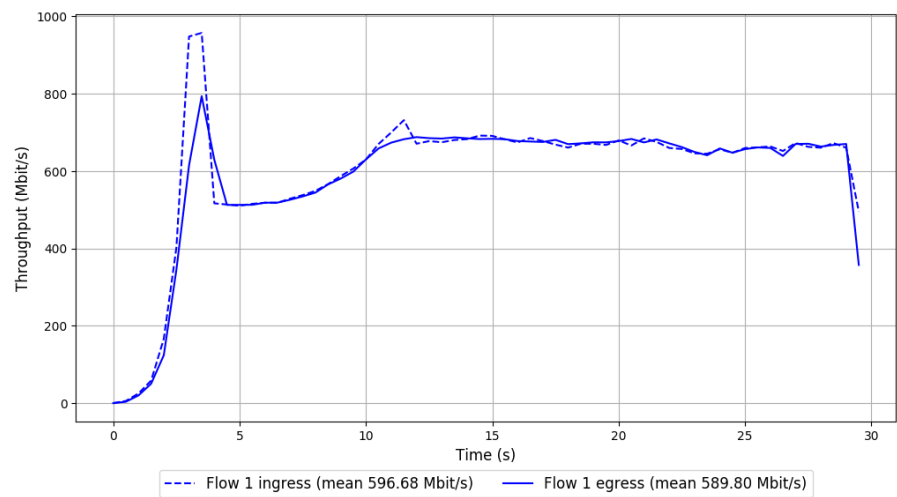
-- Flow 1:

Average throughput: 589.80 Mbit/s

95th percentile per-packet one-way delay: 158.209 ms

Loss rate: 1.89%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-09-17 21:27:53

End at: 2017-09-17 21:28:23

Below is generated by plot.py at 2017-09-18 01:32:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 589.09 Mbit/s

95th percentile per-packet one-way delay: 215.996 ms

Loss rate: 1.79%

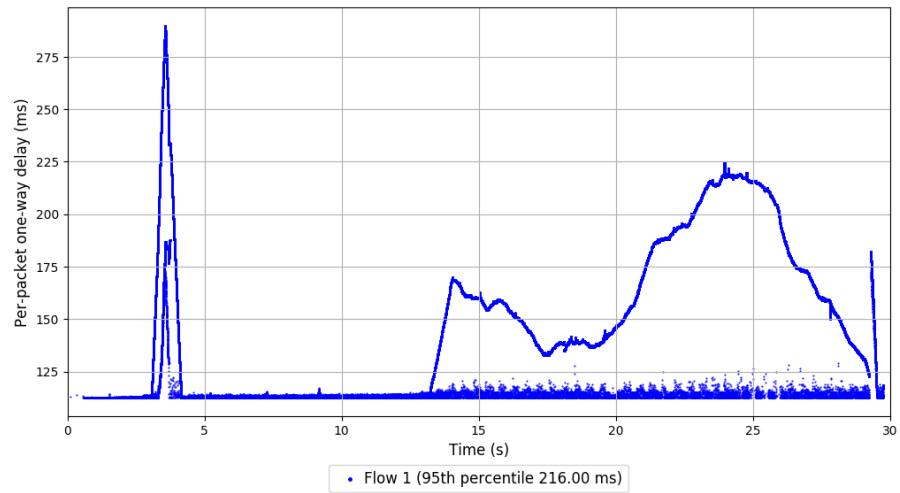
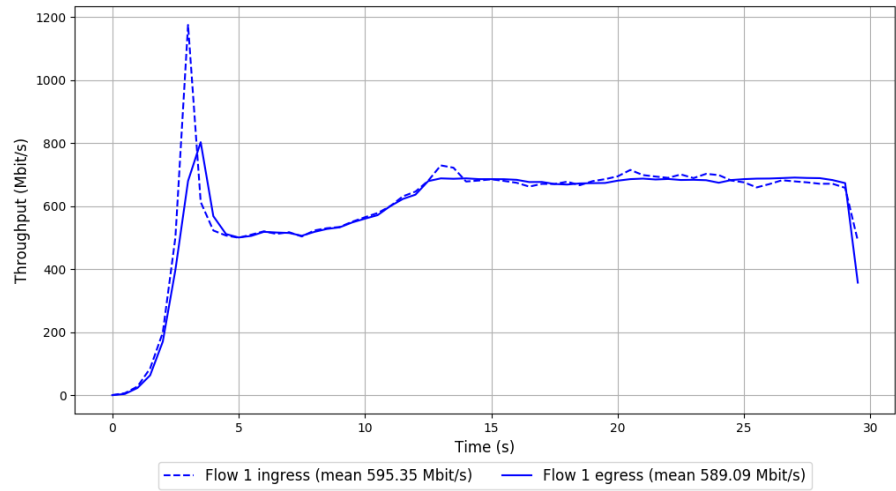
-- Flow 1:

Average throughput: 589.09 Mbit/s

95th percentile per-packet one-way delay: 215.996 ms

Loss rate: 1.79%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-09-17 21:39:52

End at: 2017-09-17 21:40:22

Below is generated by plot.py at 2017-09-18 01:32:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 574.55 Mbit/s

95th percentile per-packet one-way delay: 128.084 ms

Loss rate: 1.87%

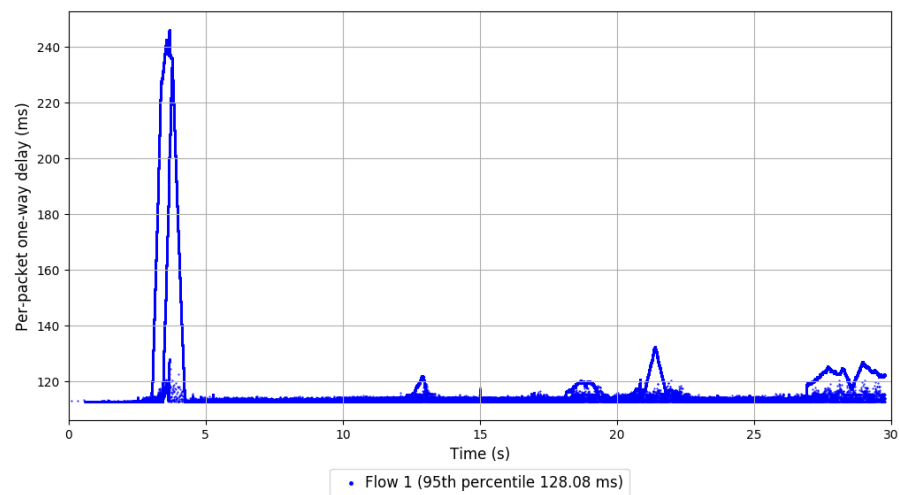
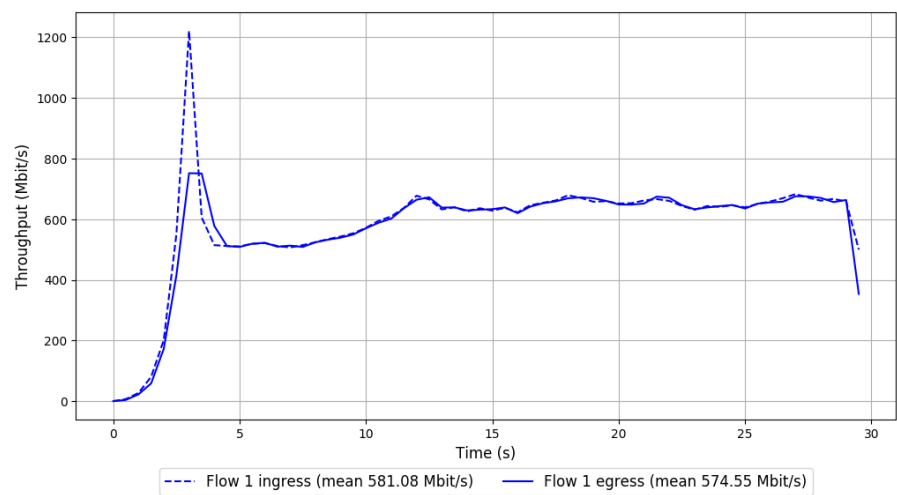
-- Flow 1:

Average throughput: 574.55 Mbit/s

95th percentile per-packet one-way delay: 128.084 ms

Loss rate: 1.87%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-09-17 21:52:02

End at: 2017-09-17 21:52:32

Below is generated by plot.py at 2017-09-18 01:32:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 567.73 Mbit/s

95th percentile per-packet one-way delay: 139.238 ms

Loss rate: 1.80%

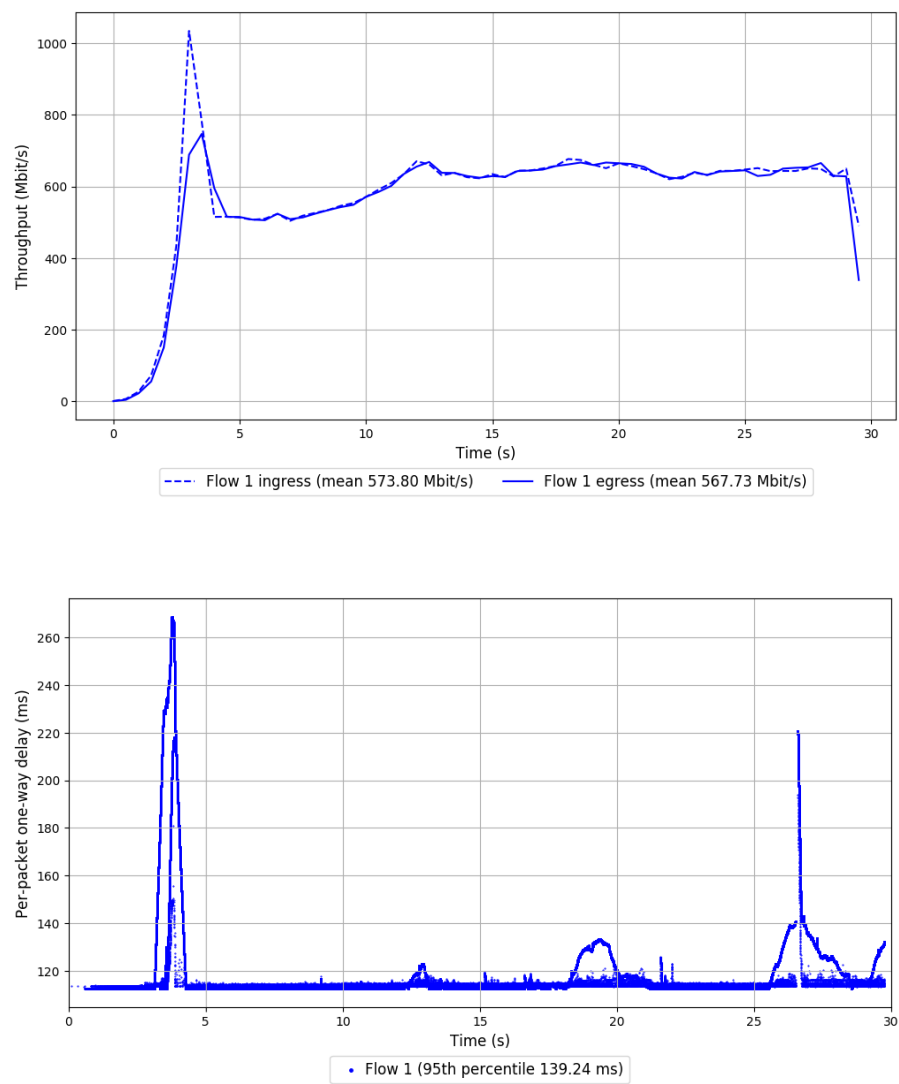
-- Flow 1:

Average throughput: 567.73 Mbit/s

95th percentile per-packet one-way delay: 139.238 ms

Loss rate: 1.80%

Run 6: Report of PCC — Data Link

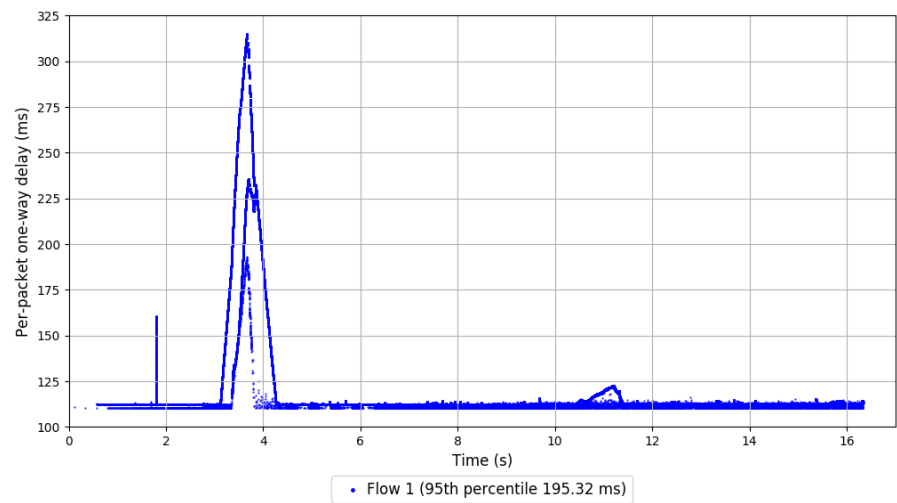
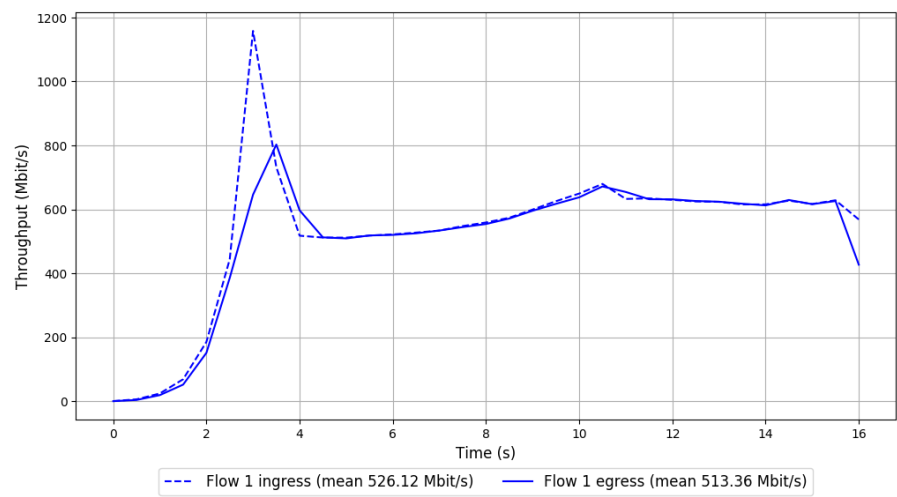


Run 7: Statistics of PCC

Start at: 2017-09-17 22:04:14

End at: 2017-09-17 22:04:44

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-09-17 22:16:17

End at: 2017-09-17 22:16:47

Below is generated by plot.py at 2017-09-18 01:34:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 552.93 Mbit/s

95th percentile per-packet one-way delay: 148.315 ms

Loss rate: 2.56%

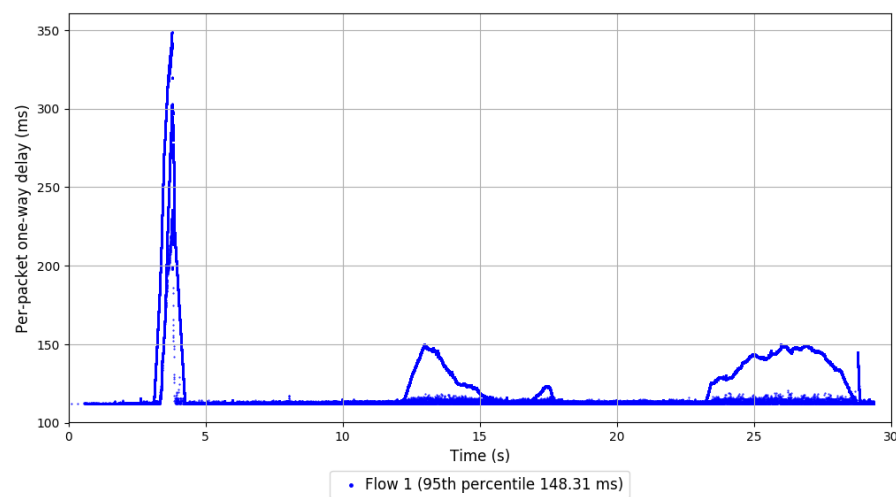
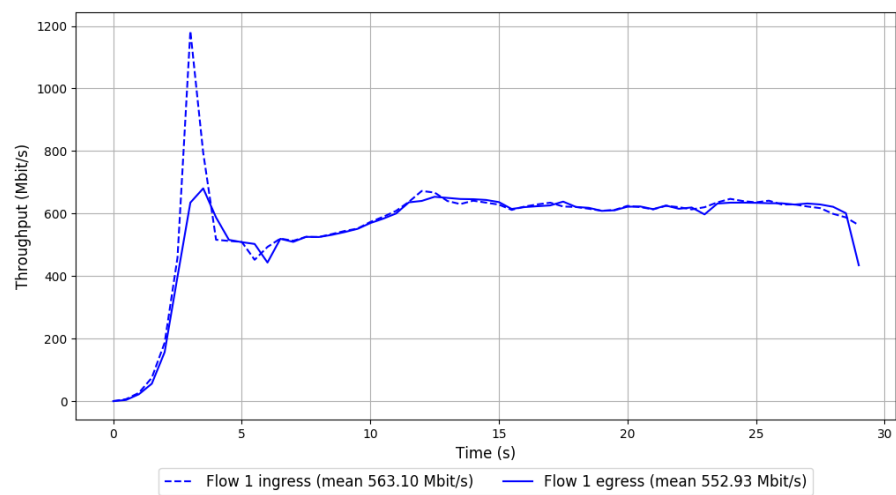
-- Flow 1:

Average throughput: 552.93 Mbit/s

95th percentile per-packet one-way delay: 148.315 ms

Loss rate: 2.56%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-09-17 22:28:13

End at: 2017-09-17 22:28:44

Below is generated by plot.py at 2017-09-18 01:40:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 544.32 Mbit/s

95th percentile per-packet one-way delay: 196.773 ms

Loss rate: 2.78%

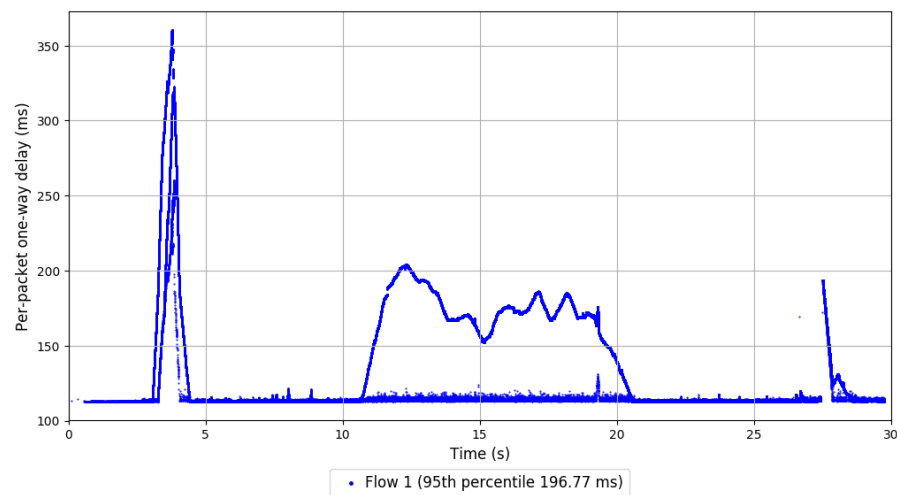
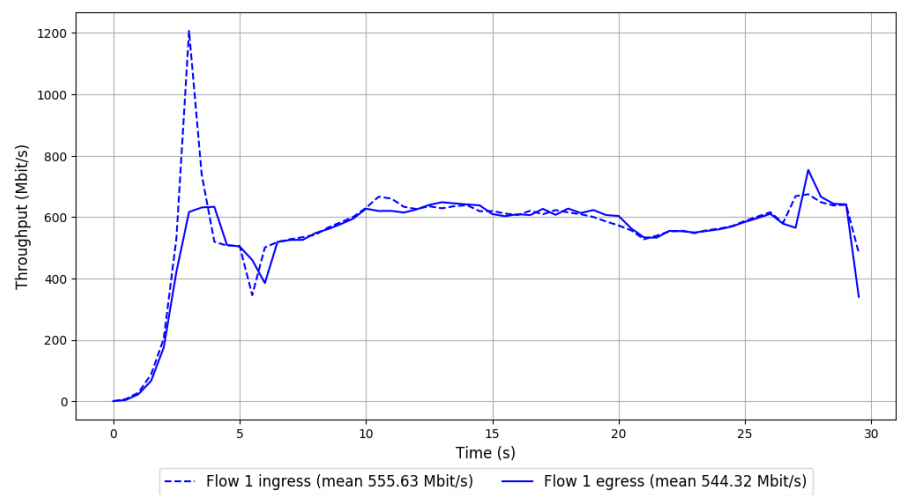
-- Flow 1:

Average throughput: 544.32 Mbit/s

95th percentile per-packet one-way delay: 196.773 ms

Loss rate: 2.78%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-09-17 22:40:07

End at: 2017-09-17 22:40:37

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 577.09 Mbit/s

95th percentile per-packet one-way delay: 129.471 ms

Loss rate: 1.77%

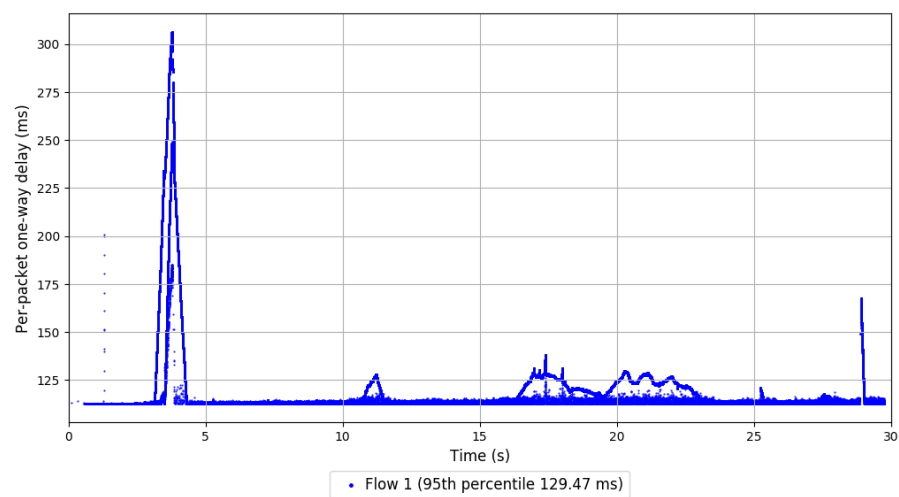
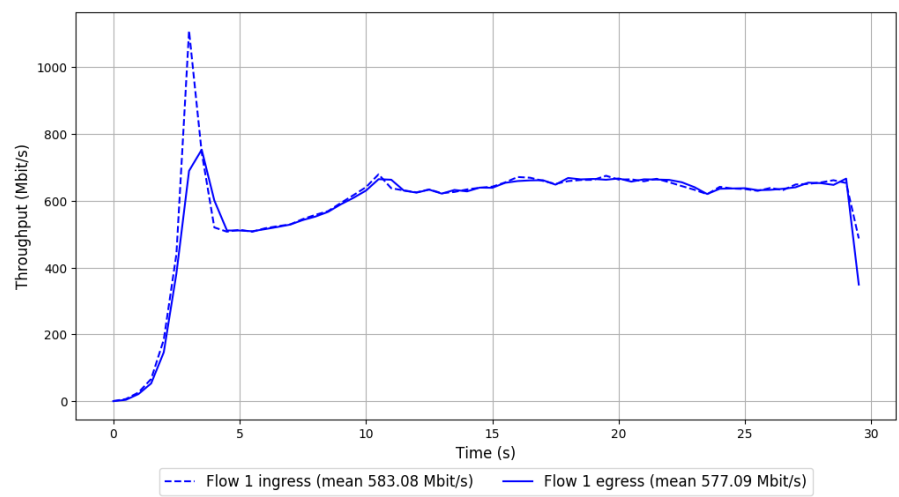
-- Flow 1:

Average throughput: 577.09 Mbit/s

95th percentile per-packet one-way delay: 129.471 ms

Loss rate: 1.77%

Run 10: Report of PCC — Data Link

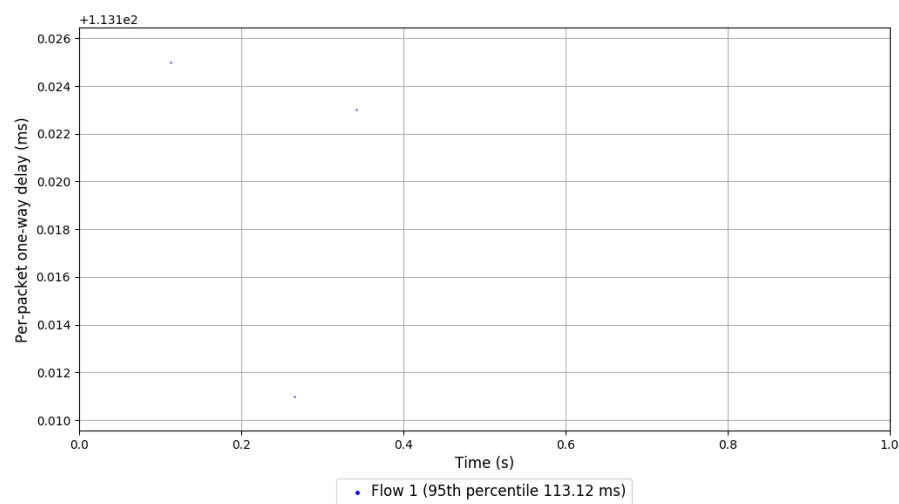
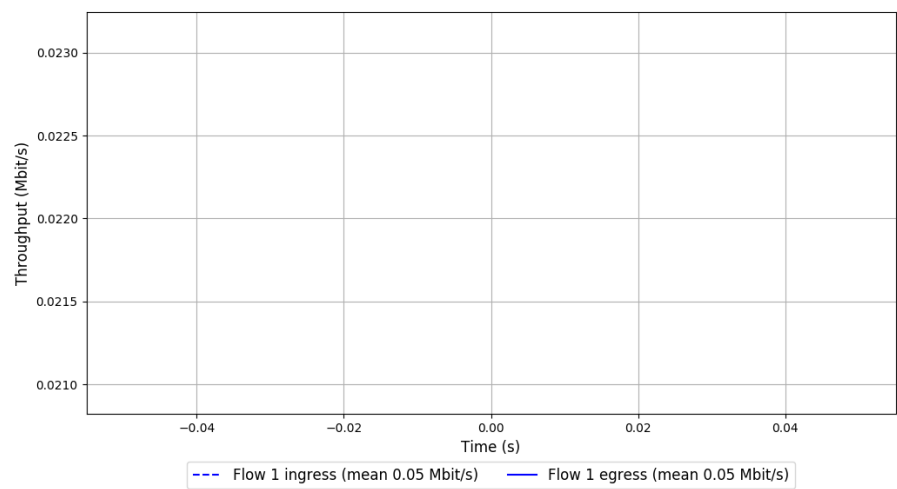


Run 1: Statistics of QUIC Cubic

Start at: 2017-09-17 20:53:50

End at: 2017-09-17 20:54:20

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-09-17 21:05:54

End at: 2017-09-17 21:06:24

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.35 Mbit/s

95th percentile per-packet one-way delay: 110.530 ms

Loss rate: 0.92%

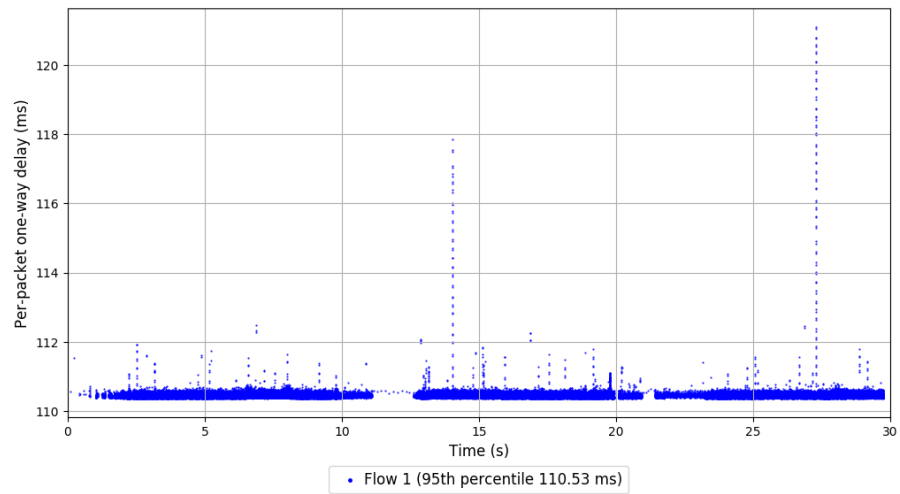
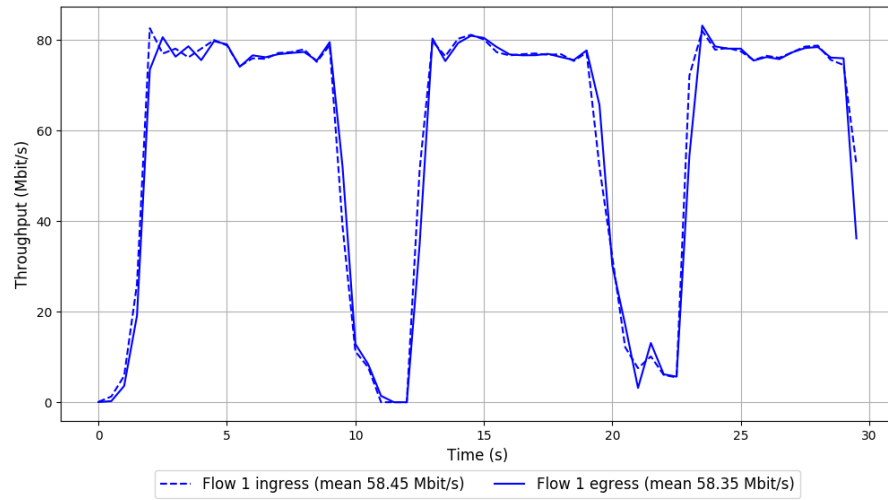
-- Flow 1:

Average throughput: 58.35 Mbit/s

95th percentile per-packet one-way delay: 110.530 ms

Loss rate: 0.92%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-09-17 21:17:47

End at: 2017-09-17 21:18:17

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.11 Mbit/s

95th percentile per-packet one-way delay: 111.080 ms

Loss rate: 1.12%

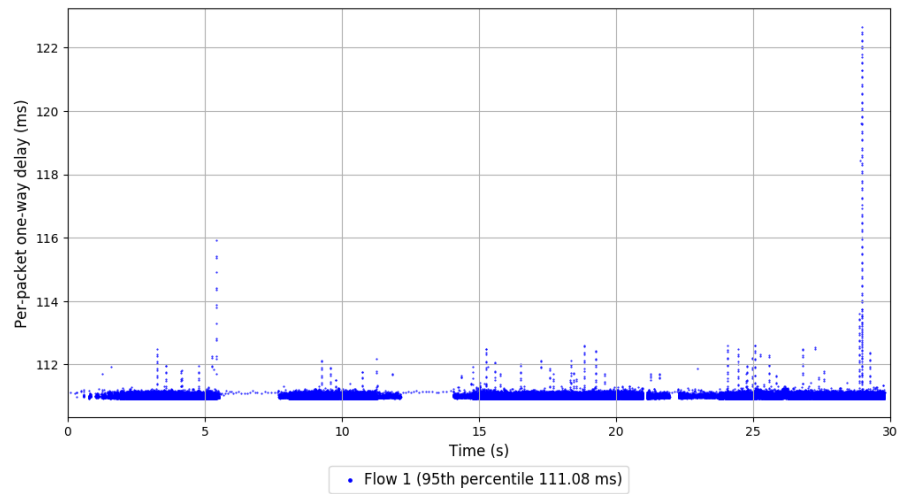
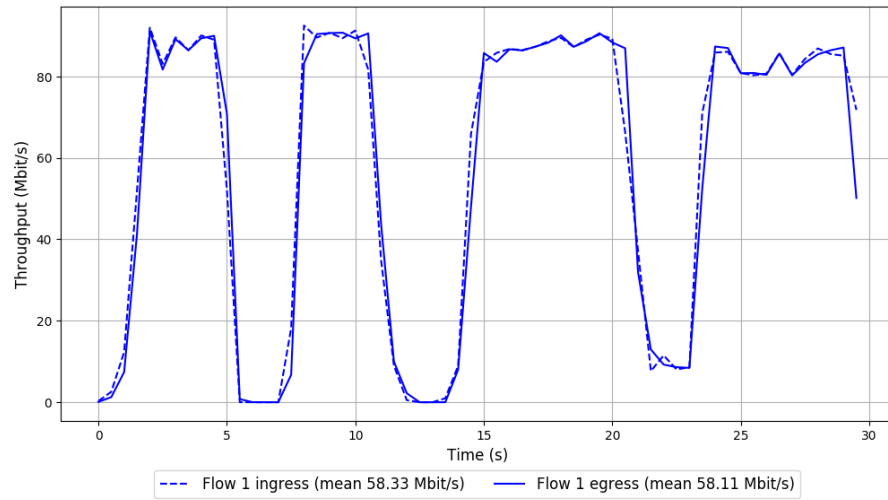
-- Flow 1:

Average throughput: 58.11 Mbit/s

95th percentile per-packet one-way delay: 111.080 ms

Loss rate: 1.12%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-09-17 21:29:39

End at: 2017-09-17 21:30:09

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.46 Mbit/s

95th percentile per-packet one-way delay: 110.879 ms

Loss rate: 0.86%

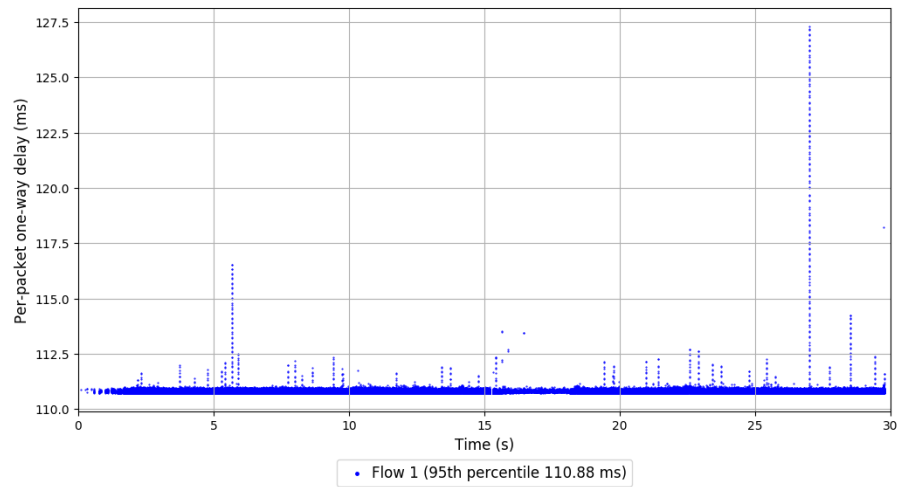
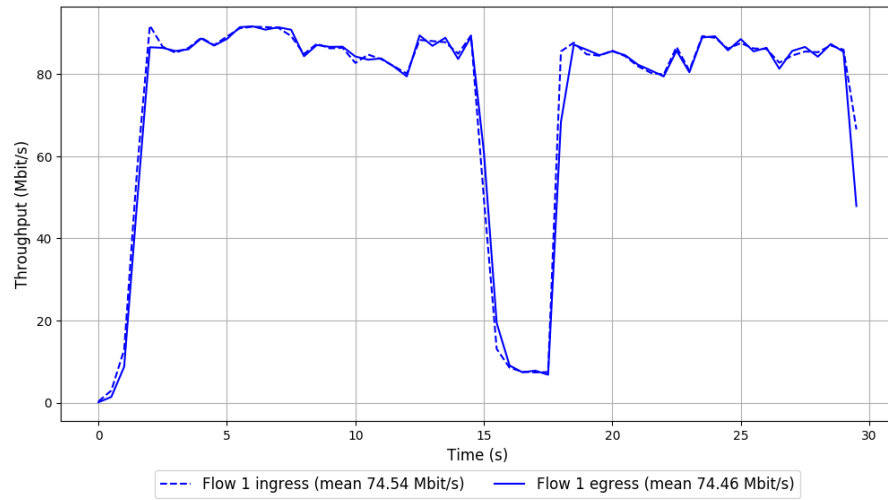
-- Flow 1:

Average throughput: 74.46 Mbit/s

95th percentile per-packet one-way delay: 110.879 ms

Loss rate: 0.86%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-09-17 21:41:38

End at: 2017-09-17 21:42:08

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.41 Mbit/s

95th percentile per-packet one-way delay: 113.612 ms

Loss rate: 0.89%

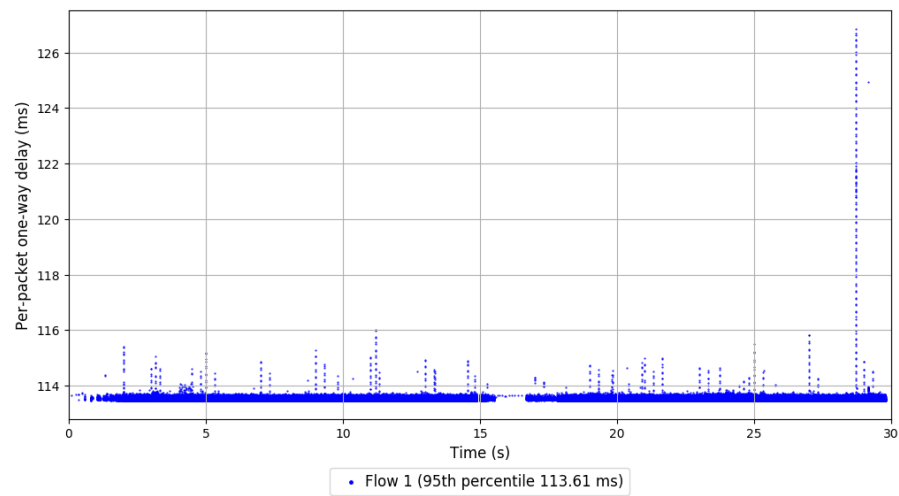
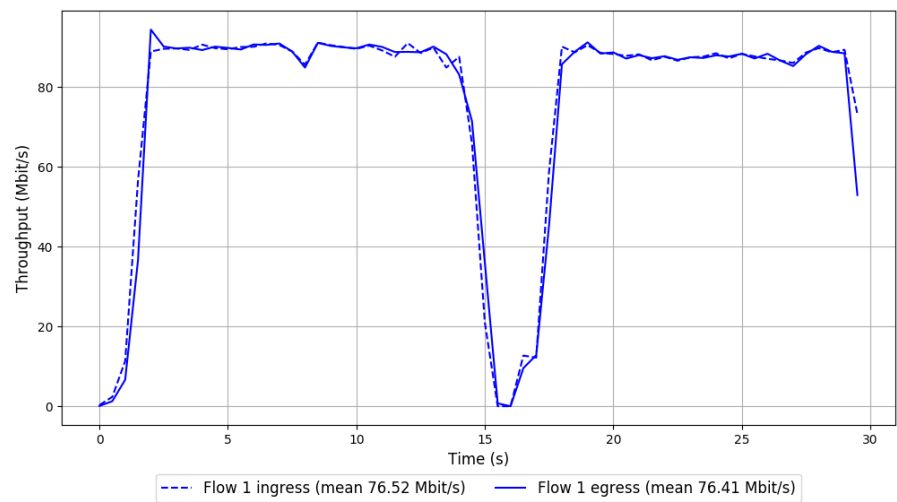
-- Flow 1:

Average throughput: 76.41 Mbit/s

95th percentile per-packet one-way delay: 113.612 ms

Loss rate: 0.89%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-09-17 21:53:47

End at: 2017-09-17 21:54:17

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.94 Mbit/s

95th percentile per-packet one-way delay: 112.689 ms

Loss rate: 0.91%

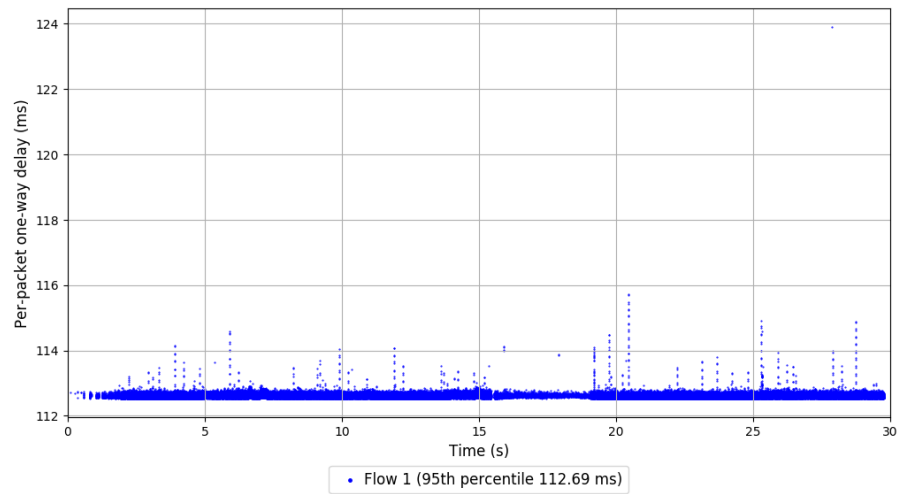
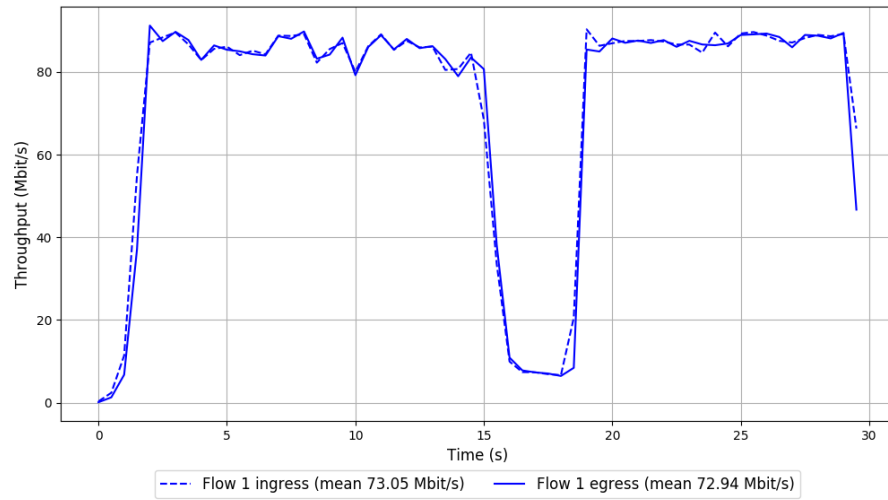
-- Flow 1:

Average throughput: 72.94 Mbit/s

95th percentile per-packet one-way delay: 112.689 ms

Loss rate: 0.91%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-09-17 22:05:47

End at: 2017-09-17 22:06:17

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.31 Mbit/s

95th percentile per-packet one-way delay: 110.709 ms

Loss rate: 0.86%

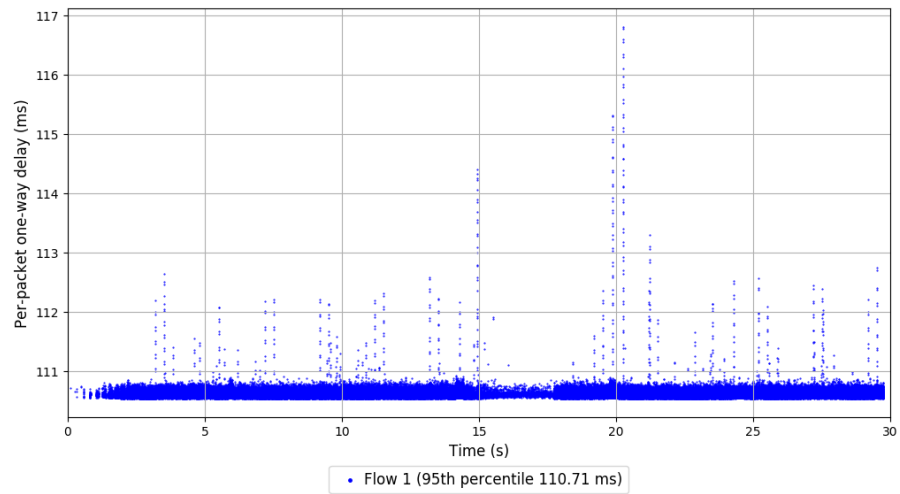
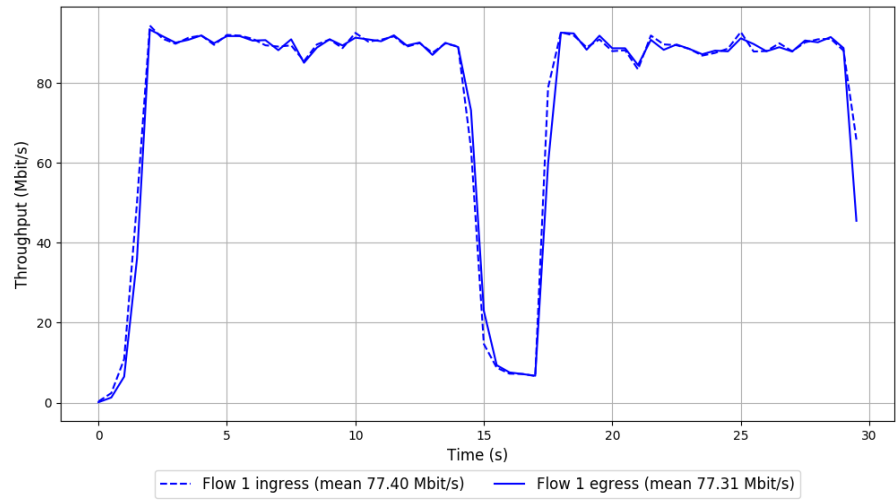
-- Flow 1:

Average throughput: 77.31 Mbit/s

95th percentile per-packet one-way delay: 110.709 ms

Loss rate: 0.86%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-09-17 22:18:01

End at: 2017-09-17 22:18:31

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.58 Mbit/s

95th percentile per-packet one-way delay: 110.619 ms

Loss rate: 0.97%

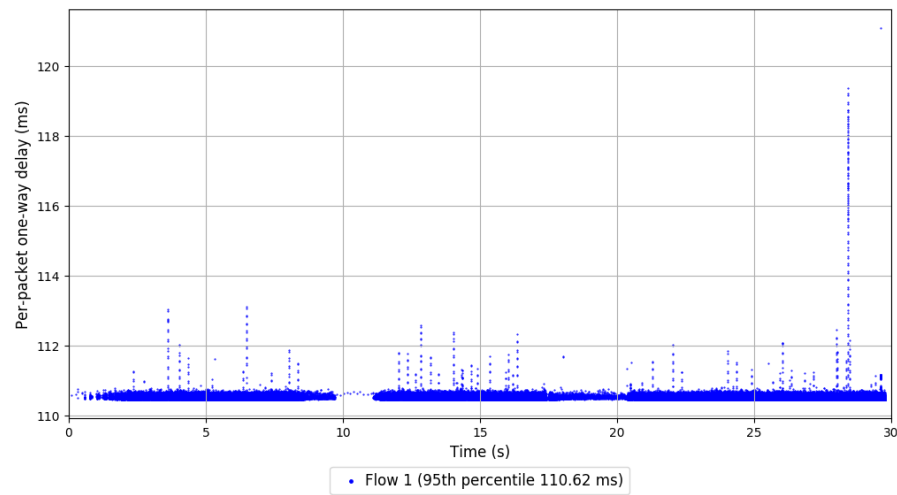
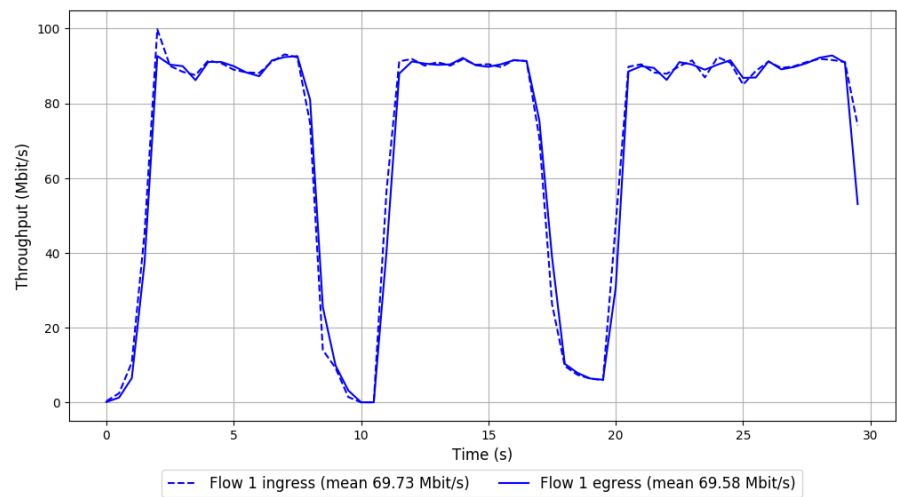
-- Flow 1:

Average throughput: 69.58 Mbit/s

95th percentile per-packet one-way delay: 110.619 ms

Loss rate: 0.97%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-09-17 22:29:58

End at: 2017-09-17 22:30:28

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.04 Mbit/s

95th percentile per-packet one-way delay: 112.926 ms

Loss rate: 0.87%

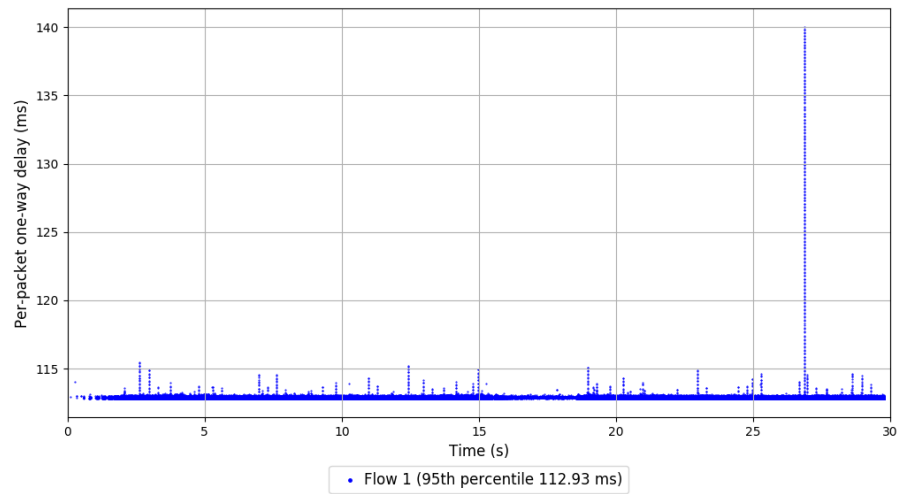
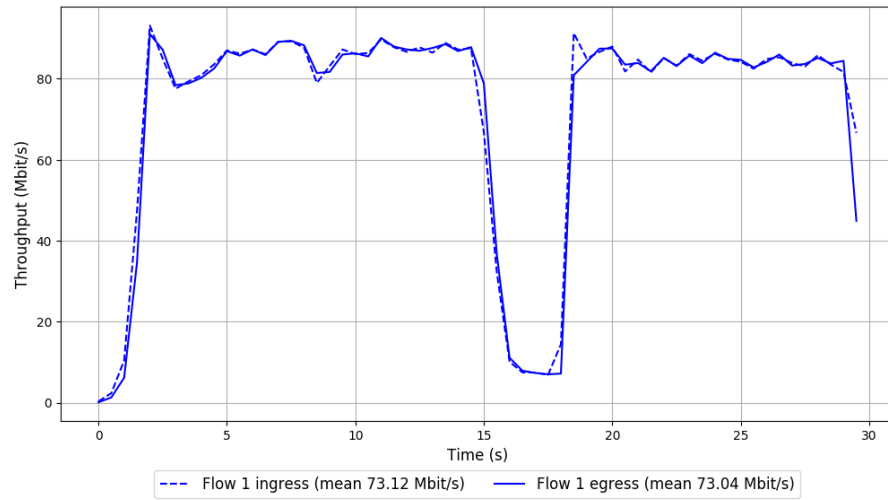
-- Flow 1:

Average throughput: 73.04 Mbit/s

95th percentile per-packet one-way delay: 112.926 ms

Loss rate: 0.87%

Run 9: Report of QUIC Cubic — Data Link

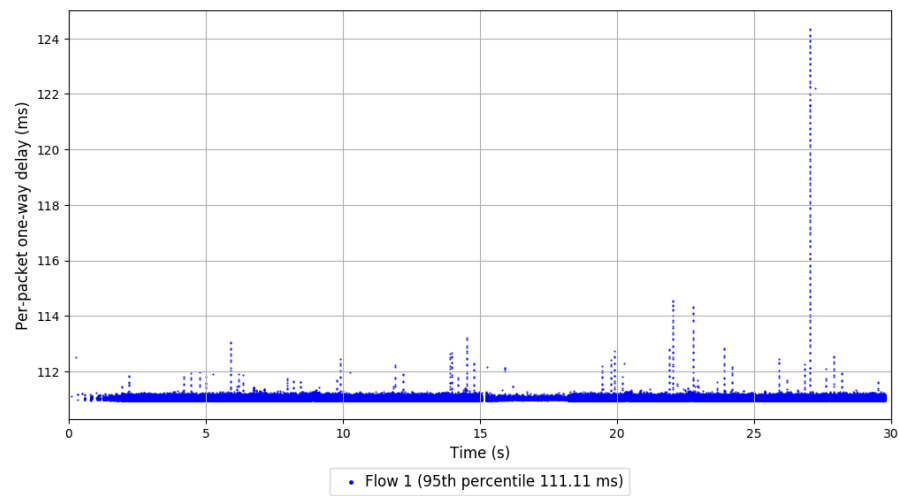
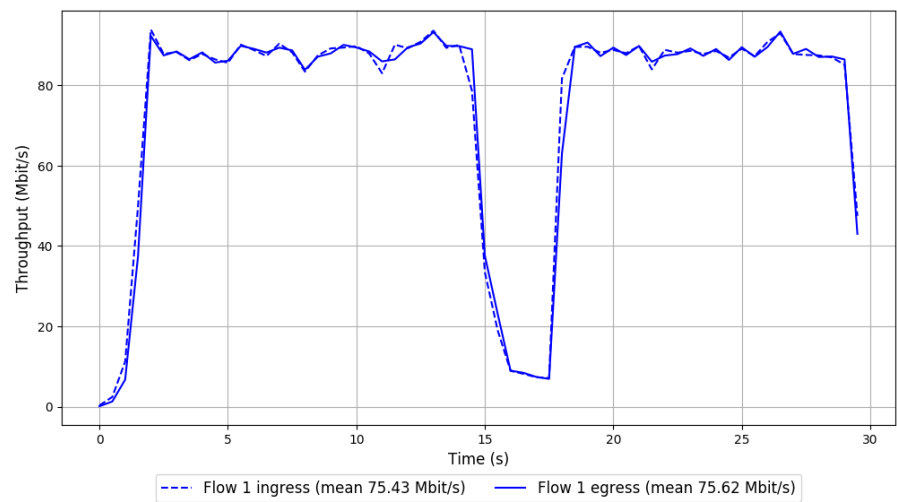


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-17 22:41:53
End at: 2017-09-17 22:42:23

# Below is generated by plot.py at 2017-09-18 01:42:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.62 Mbit/s
95th percentile per-packet one-way delay: 111.113 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 75.62 Mbit/s
95th percentile per-packet one-way delay: 111.113 ms
Loss rate: 0.50%
```

Run 10: Report of QUIC Cubic — Data Link

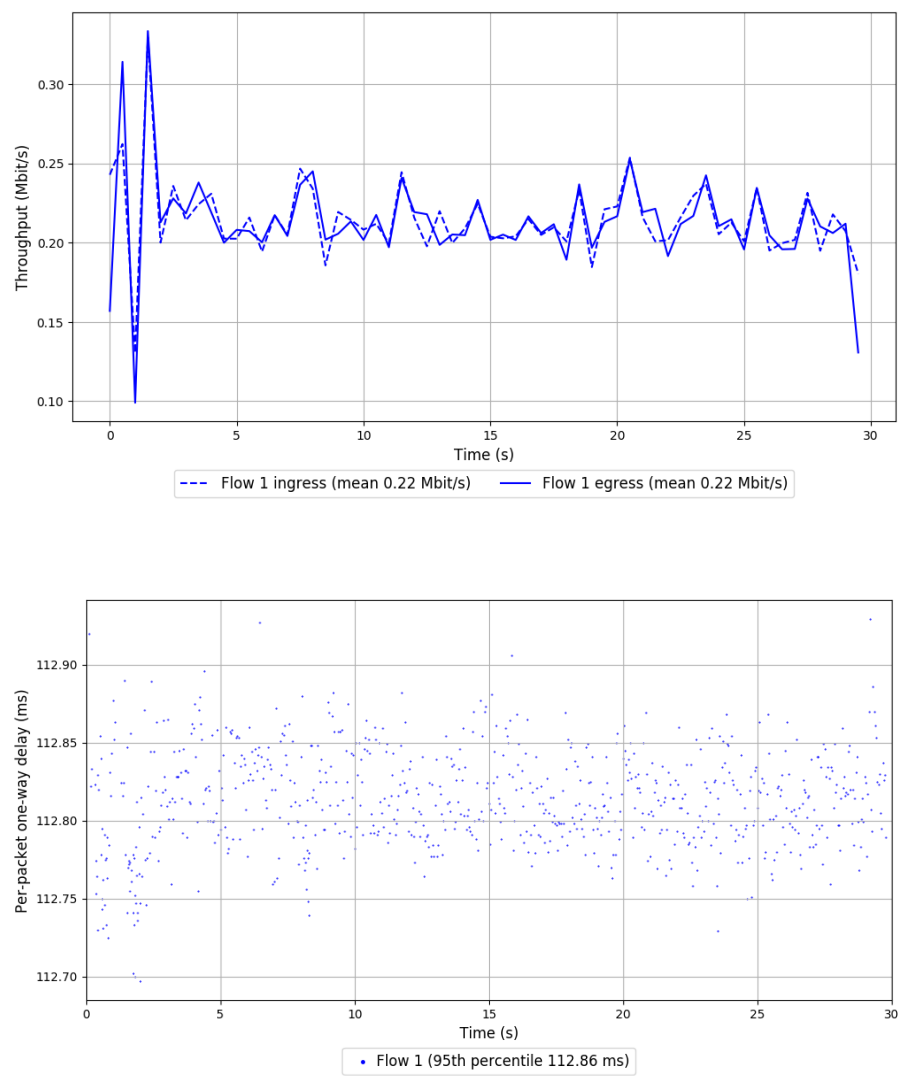


```
Run 1: Statistics of SCReAM

Start at: 2017-09-17 20:59:24
End at: 2017-09-17 20:59:54

# Below is generated by plot.py at 2017-09-18 01:42:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.863 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.863 ms
Loss rate: 0.76%
```

Run 1: Report of SReAM — Data Link

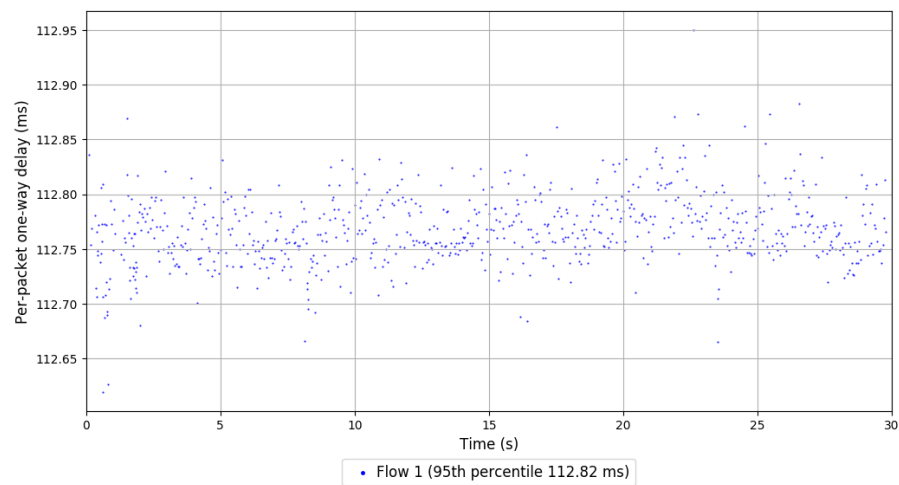
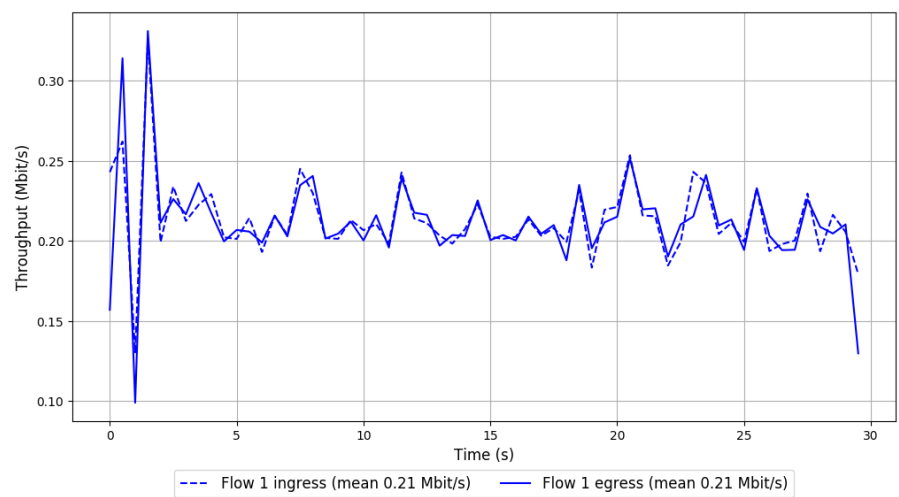


```
Run 2: Statistics of SCReAM

Start at: 2017-09-17 21:11:34
End at: 2017-09-17 21:12:04

# Below is generated by plot.py at 2017-09-18 01:42:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.822 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.822 ms
Loss rate: 0.76%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-09-17 21:23:20

End at: 2017-09-17 21:23:50

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.100 ms

Loss rate: 0.76%

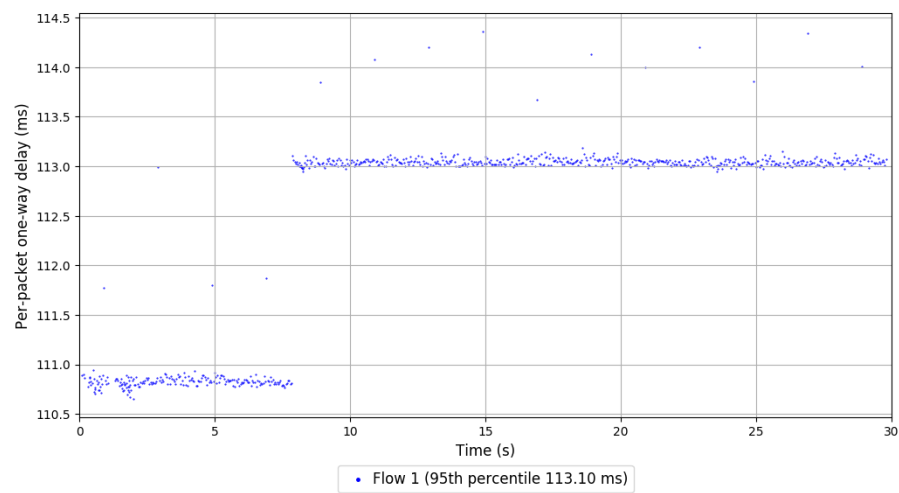
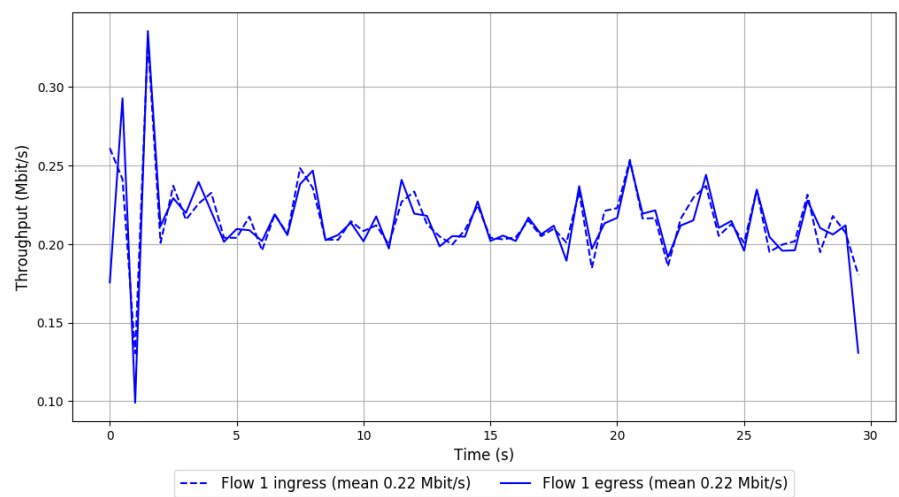
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.100 ms

Loss rate: 0.76%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-09-17 21:35:19

End at: 2017-09-17 21:35:49

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.401 ms

Loss rate: 0.76%

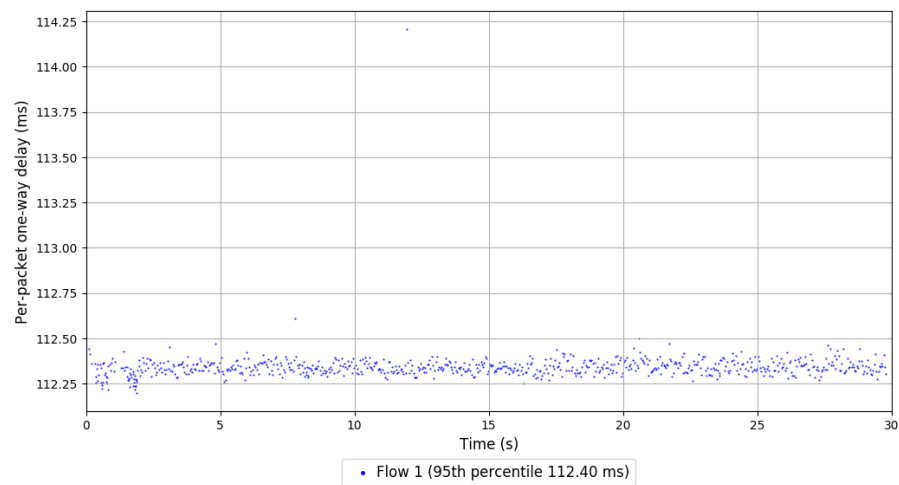
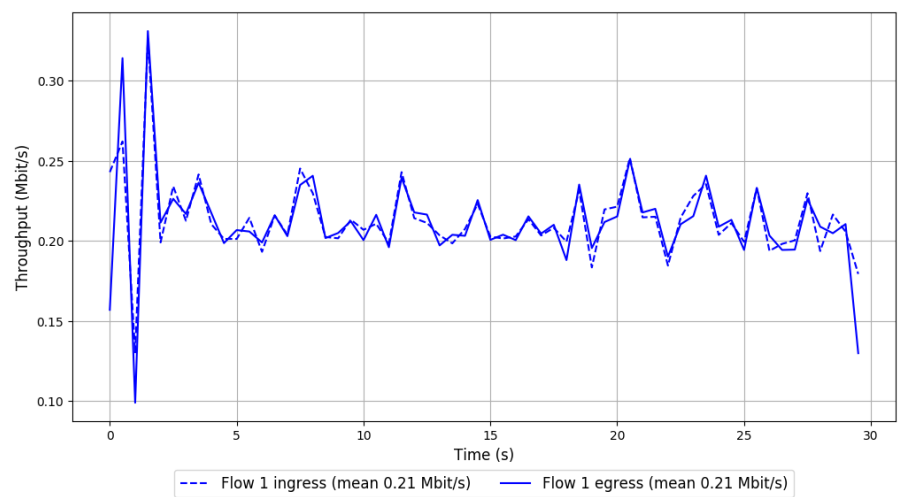
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.401 ms

Loss rate: 0.76%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-09-17 21:47:14

End at: 2017-09-17 21:47:44

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.76%

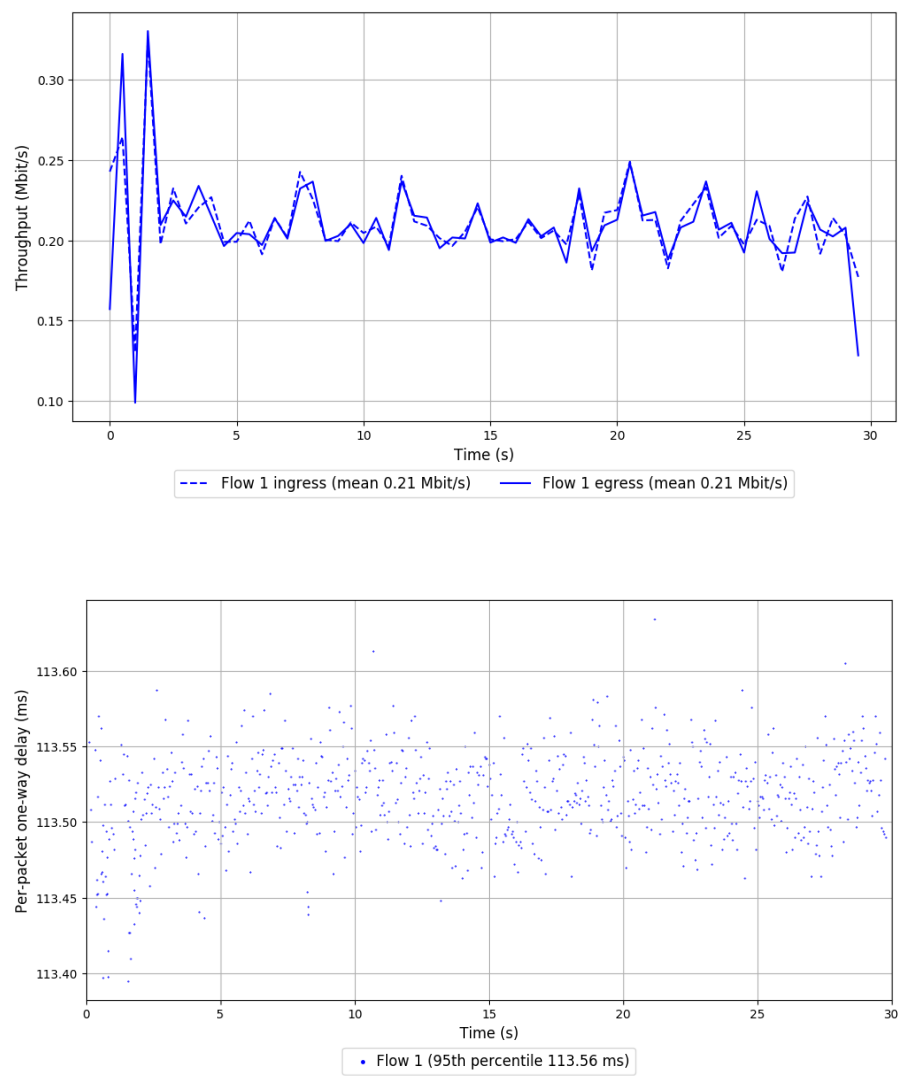
-- Flow 1:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.76%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-09-17 21:59:19

End at: 2017-09-17 21:59:49

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.631 ms

Loss rate: 0.77%

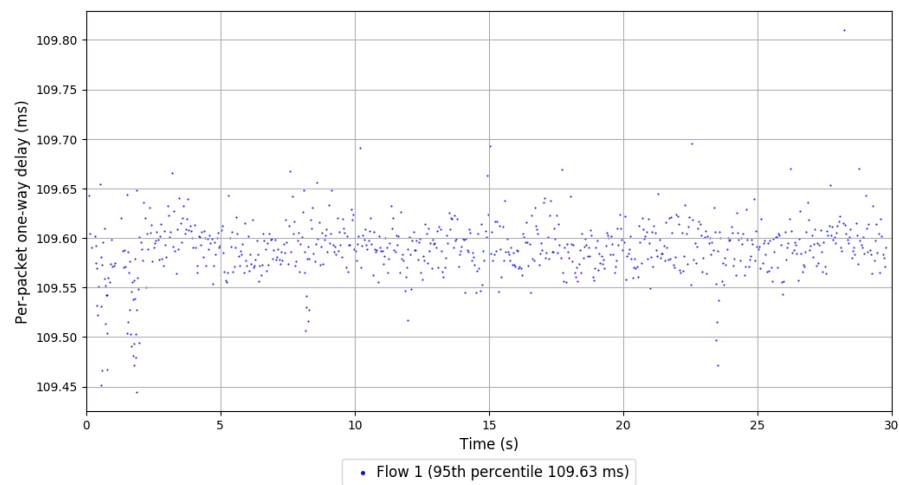
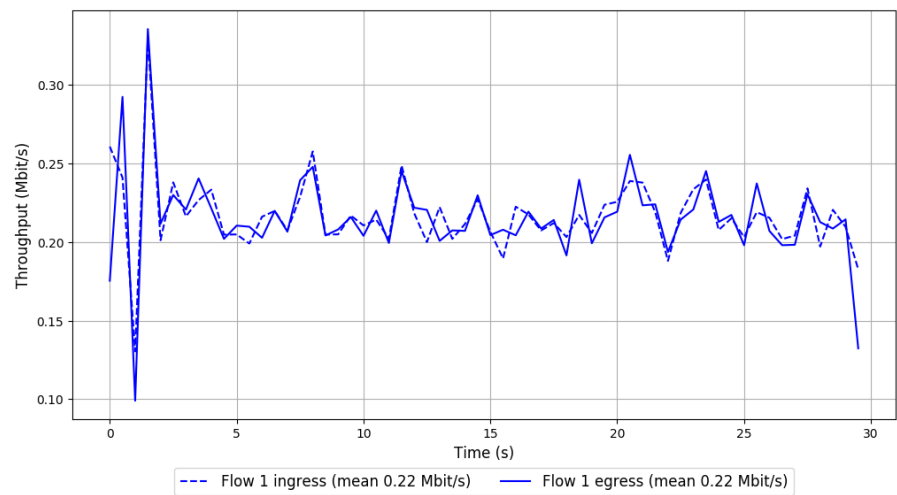
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.631 ms

Loss rate: 0.77%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-09-17 22:11:27

End at: 2017-09-17 22:11:57

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.333 ms

Loss rate: 0.76%

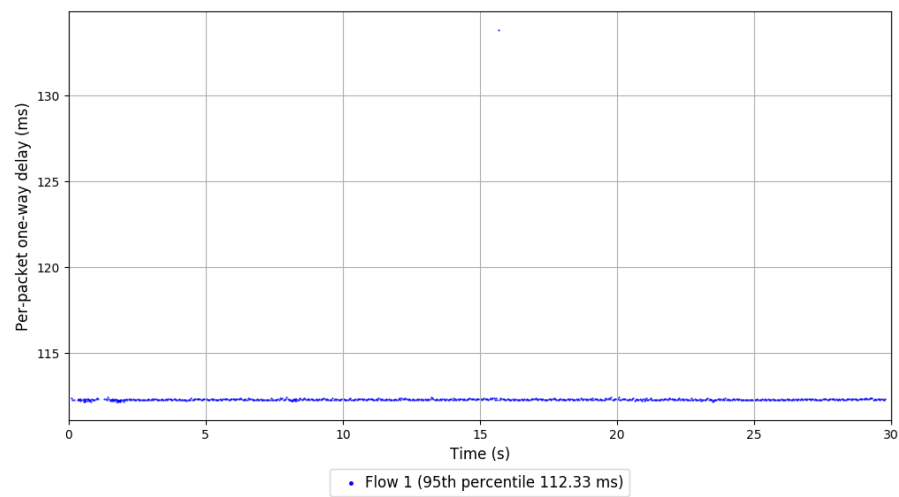
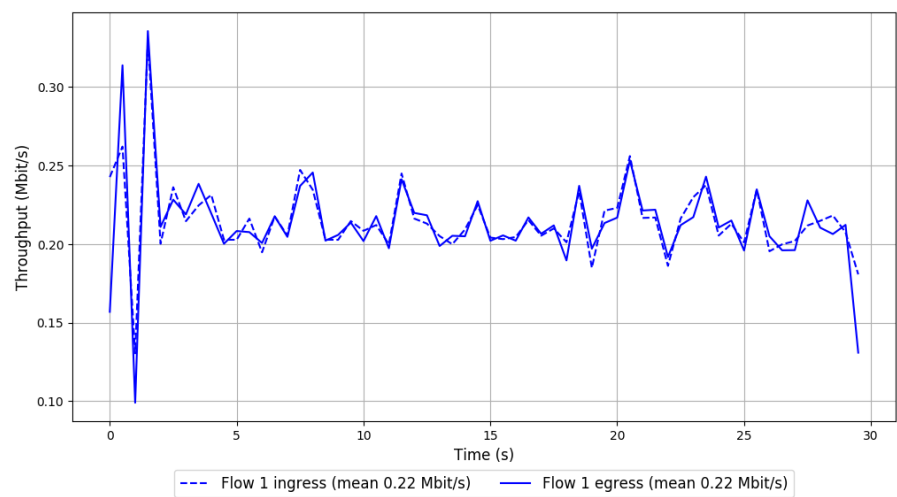
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.333 ms

Loss rate: 0.76%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-09-17 22:23:31

End at: 2017-09-17 22:24:01

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.559 ms

Loss rate: 0.76%

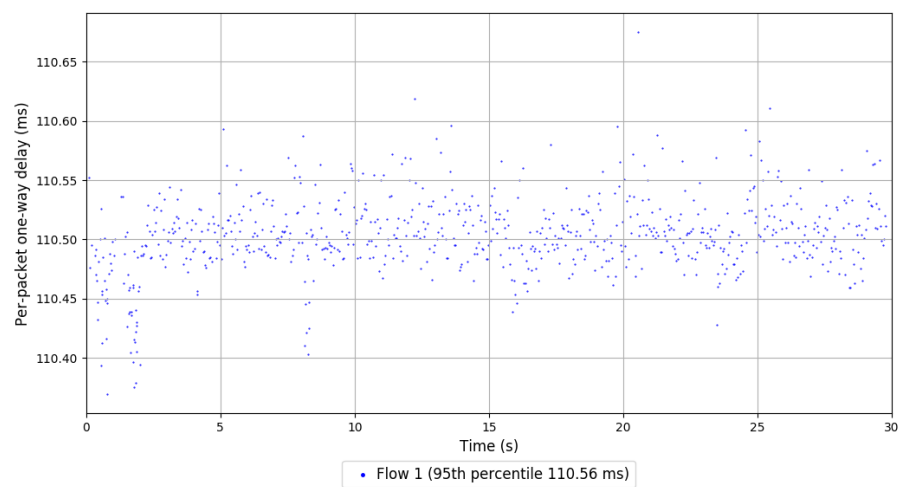
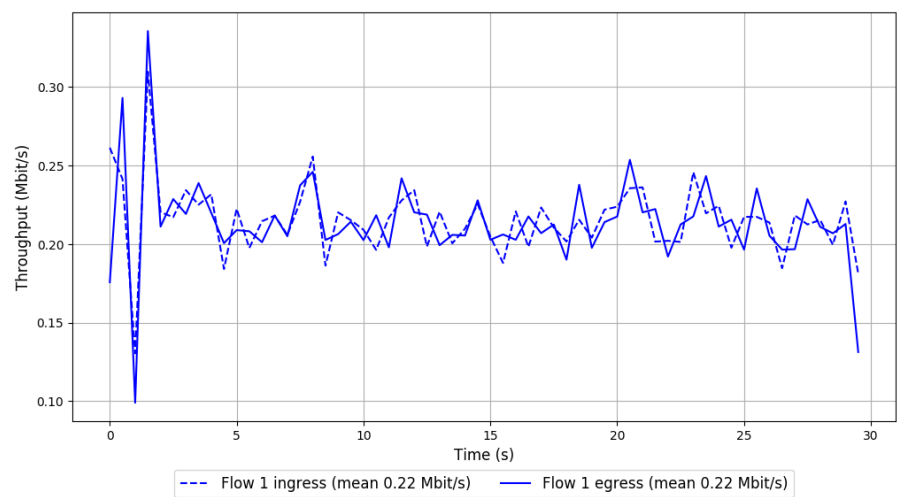
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.559 ms

Loss rate: 0.76%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-09-17 22:35:38

End at: 2017-09-17 22:36:08

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.934 ms

Loss rate: 0.77%

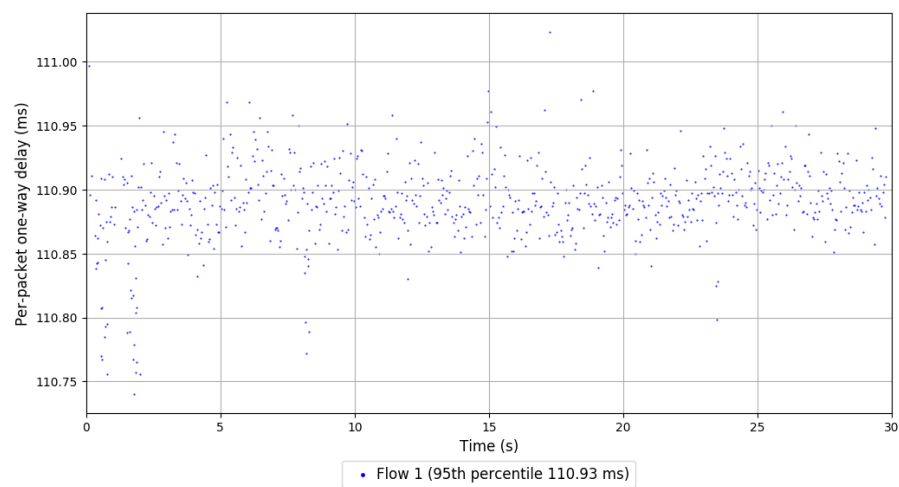
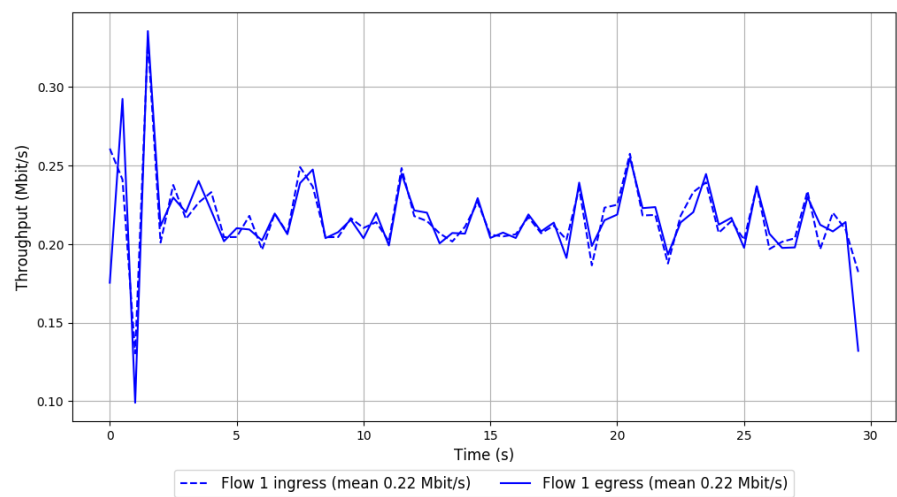
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.934 ms

Loss rate: 0.77%

Run 9: Report of SReAM — Data Link

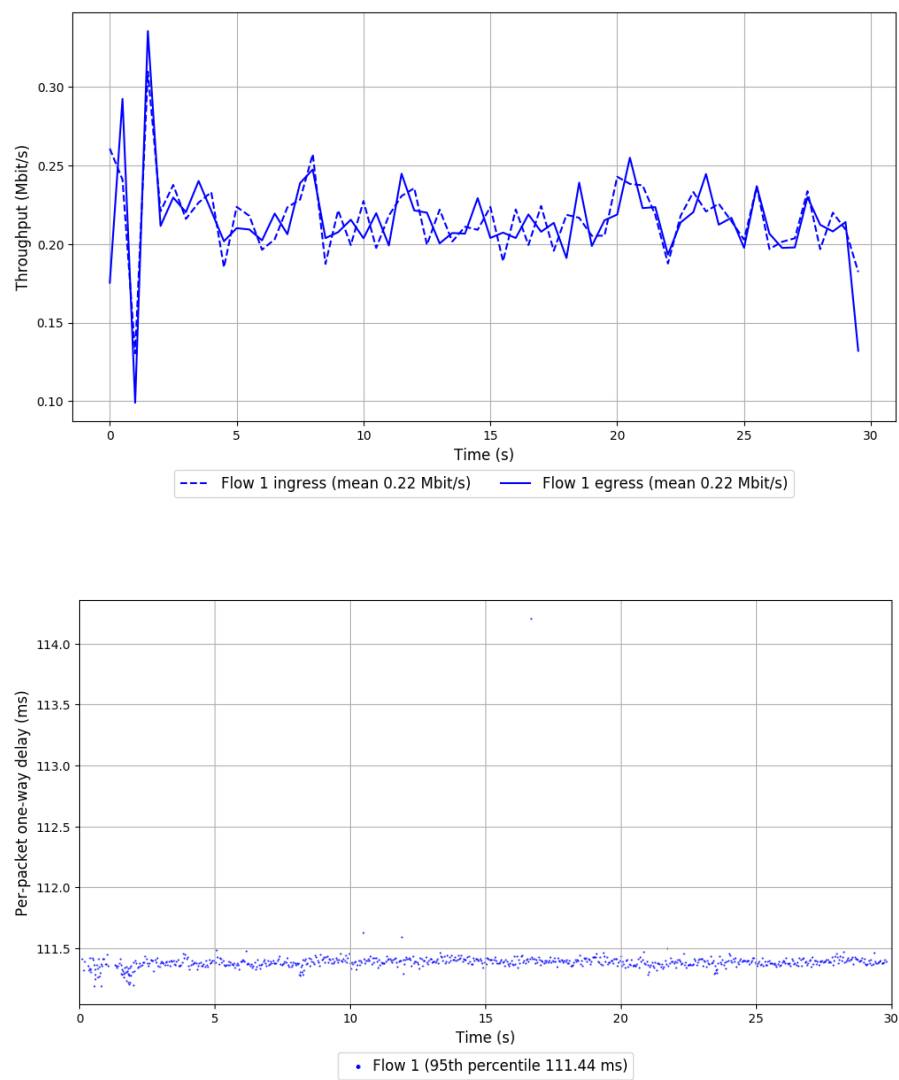


```
Run 10: Statistics of SReAM

Start at: 2017-09-17 22:47:33
End at: 2017-09-17 22:48:03

# Below is generated by plot.py at 2017-09-18 01:42:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.436 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.436 ms
Loss rate: 0.77%
```

Run 10: Report of SCReAM — Data Link

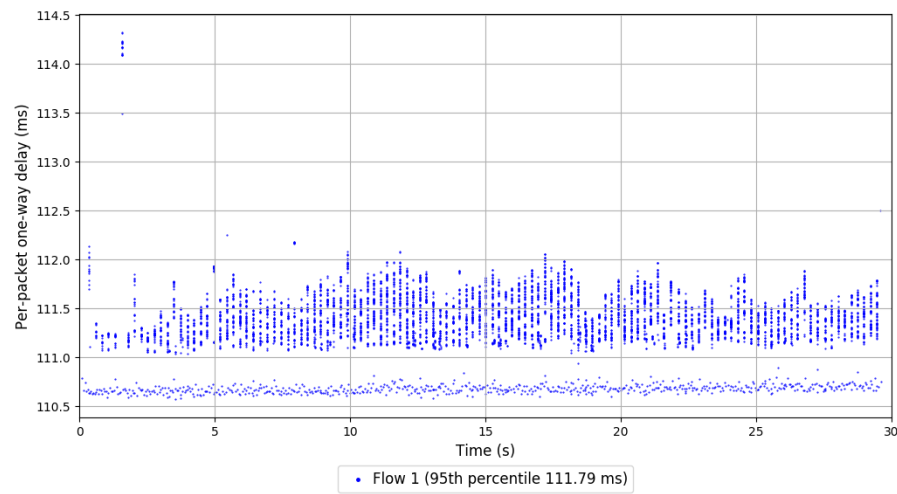
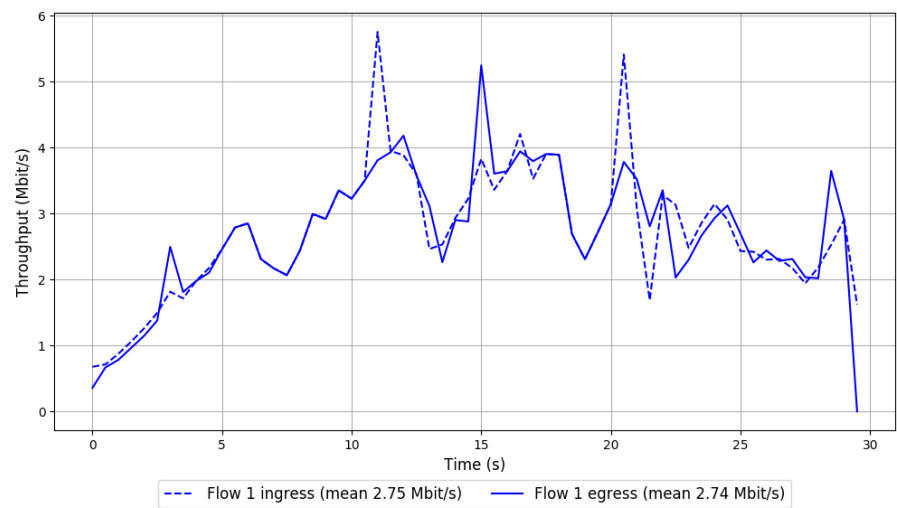


```
Run 1: Statistics of Sprout

Start at: 2017-09-17 20:51:23
End at: 2017-09-17 20:51:53

# Below is generated by plot.py at 2017-09-18 01:42:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 111.790 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 111.790 ms
Loss rate: 1.09%
```


Run 1: Report of Sprout — Data Link

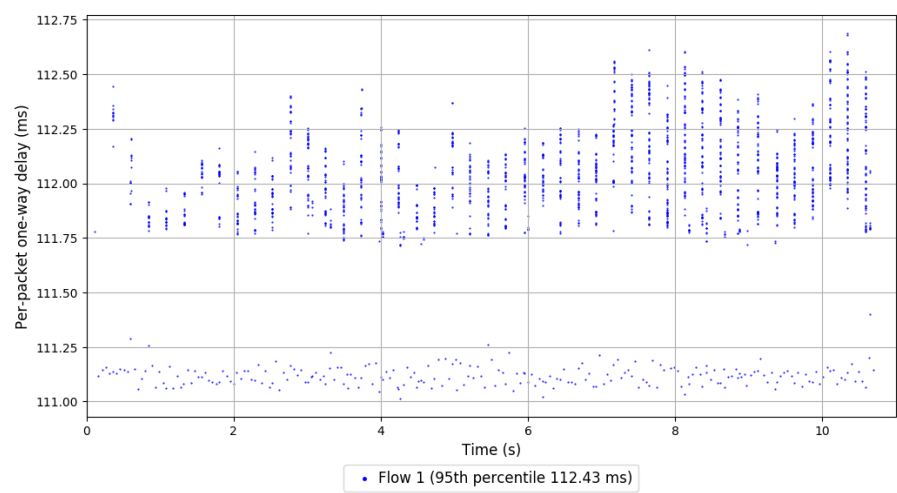
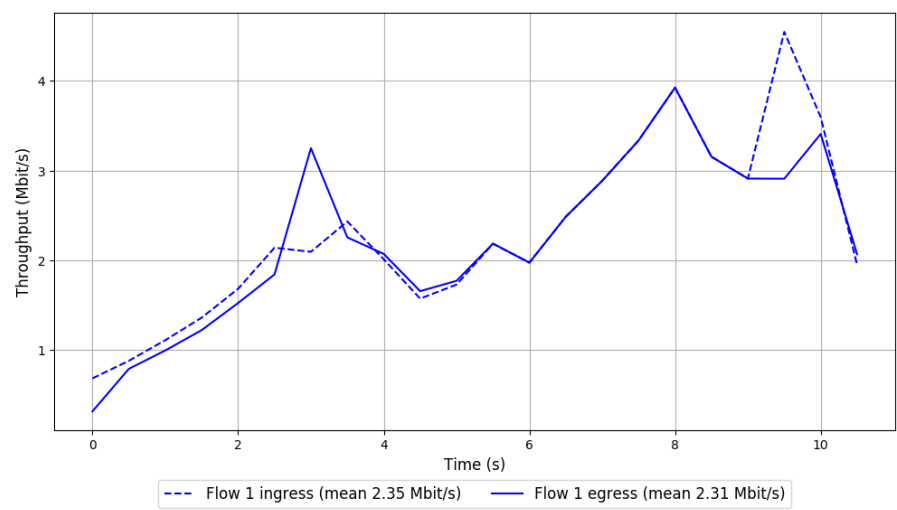


Run 2: Statistics of Sprout

Start at: 2017-09-17 21:03:27

End at: 2017-09-17 21:03:57

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-09-17 21:15:21

End at: 2017-09-17 21:15:51

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 112.933 ms

Loss rate: 1.14%

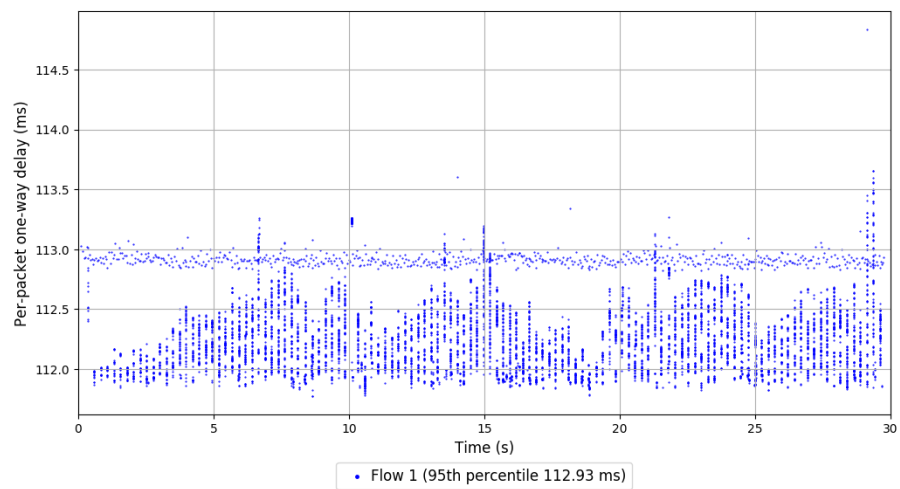
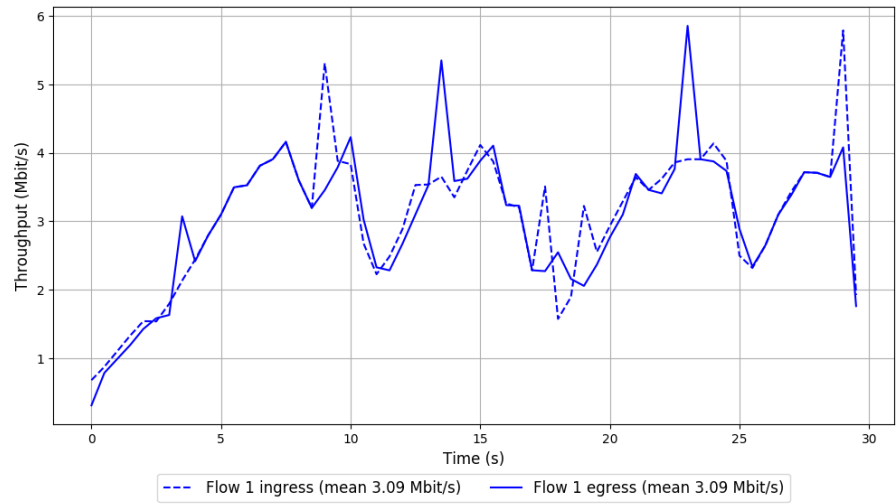
-- Flow 1:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 112.933 ms

Loss rate: 1.14%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-09-17 21:27:13

End at: 2017-09-17 21:27:43

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.02 Mbit/s

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

Loss rate: 1.27%

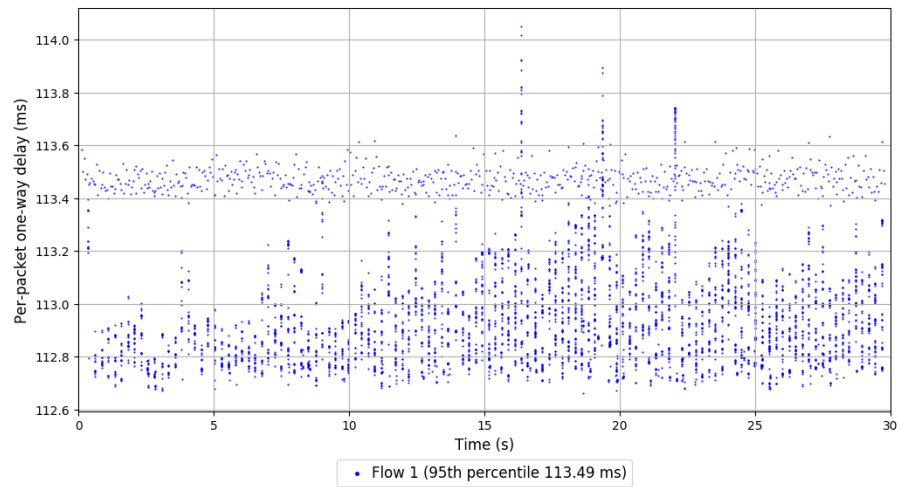
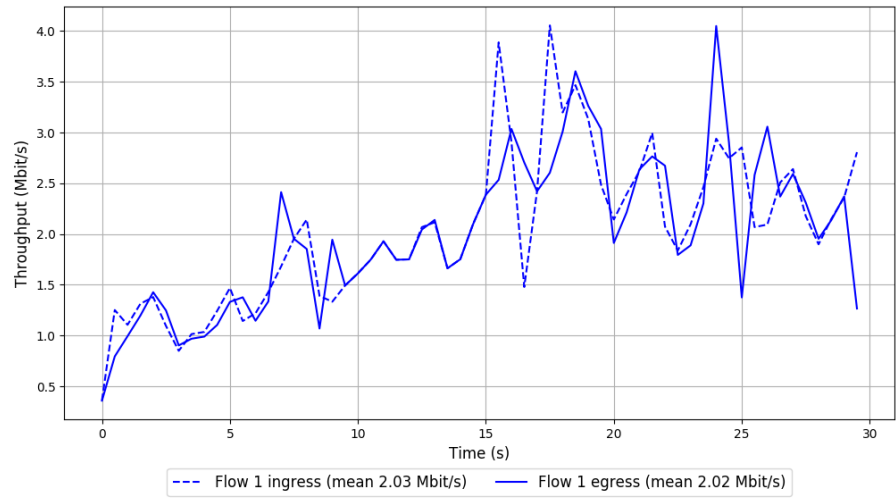
-- Flow 1:

Average throughput: 2.02 Mbit/s

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

Loss rate: 1.27%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-09-17 21:39:11

End at: 2017-09-17 21:39:41

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 113.253 ms

Loss rate: 0.54%

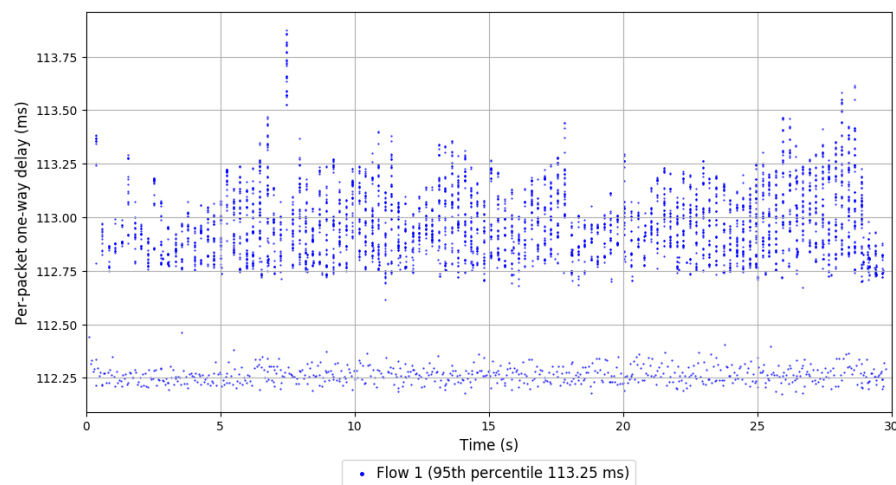
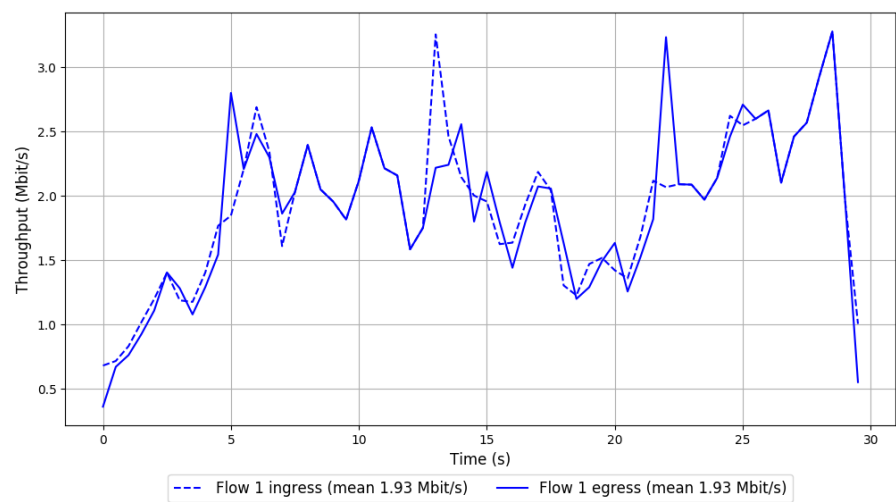
-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 113.253 ms

Loss rate: 0.54%

Run 5: Report of Sprout — Data Link

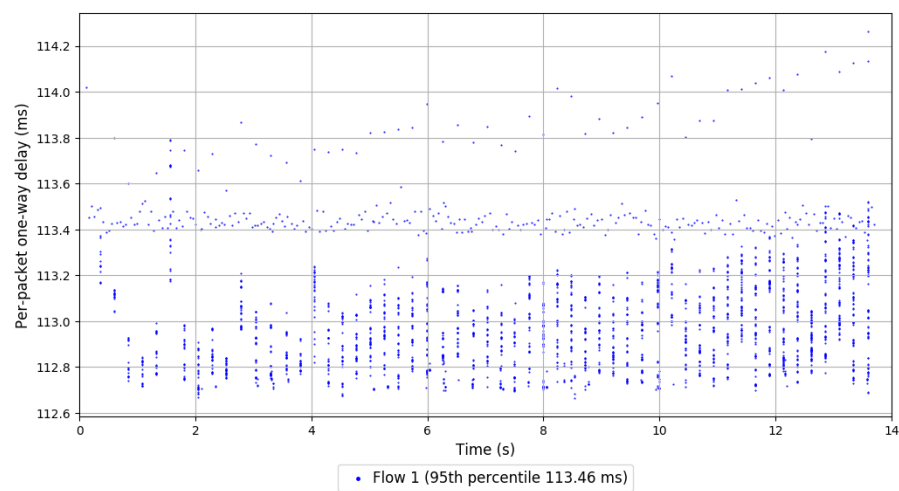
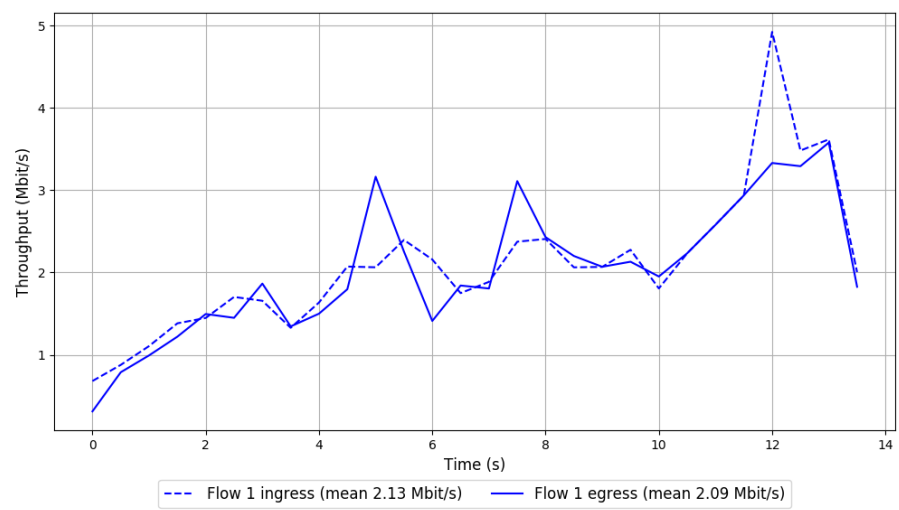


Run 6: Statistics of Sprout

Start at: 2017-09-17 21:51:21

End at: 2017-09-17 21:51:51

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-09-17 22:03:33

End at: 2017-09-17 22:04:03

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 113.238 ms

Loss rate: 0.53%

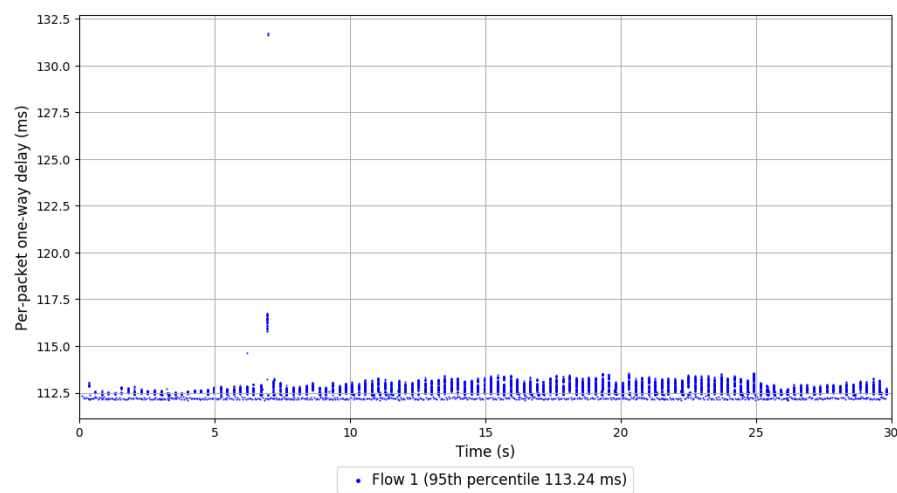
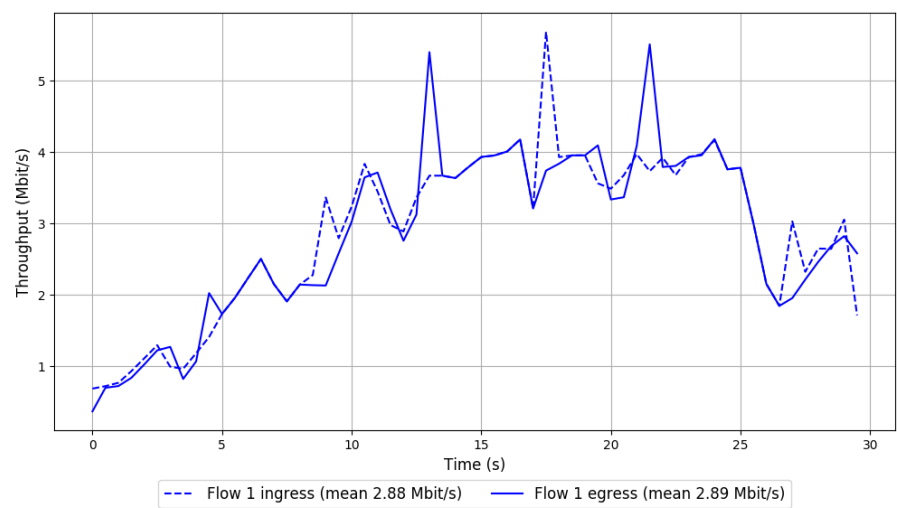
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 113.238 ms

Loss rate: 0.53%

Run 7: Report of Sprout — Data Link

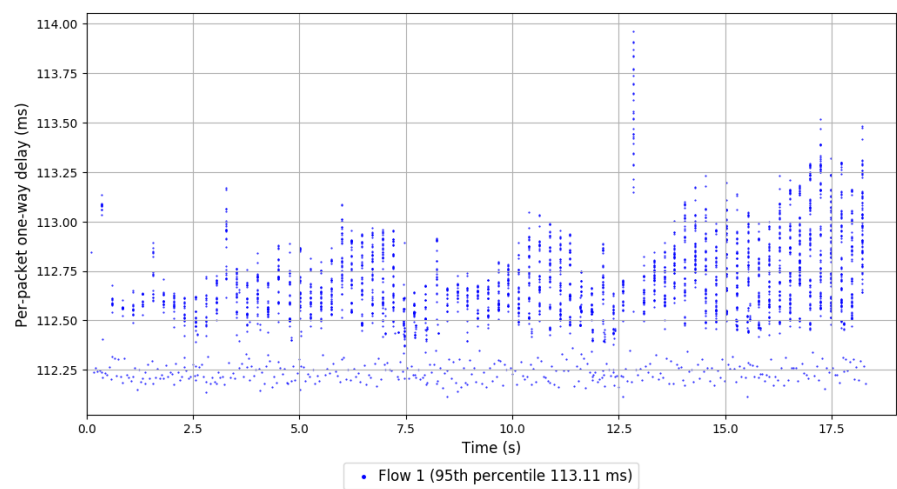
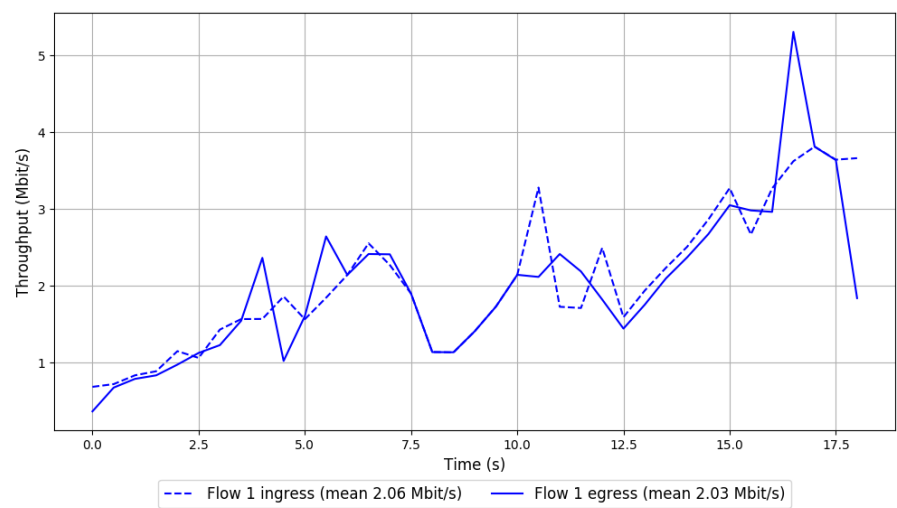


Run 8: Statistics of Sprout

Start at: 2017-09-17 22:15:36

End at: 2017-09-17 22:16:06

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-09-17 22:27:33

End at: 2017-09-17 22:28:03

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 113.533 ms

Loss rate: 1.07%

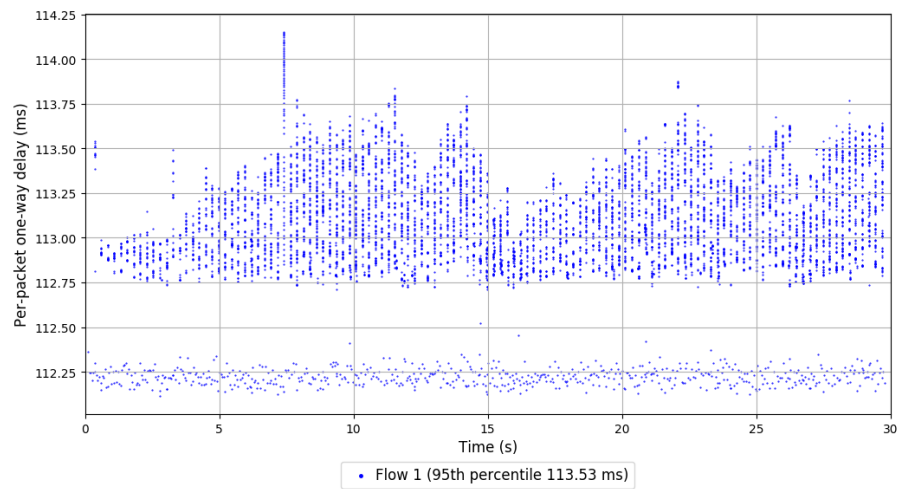
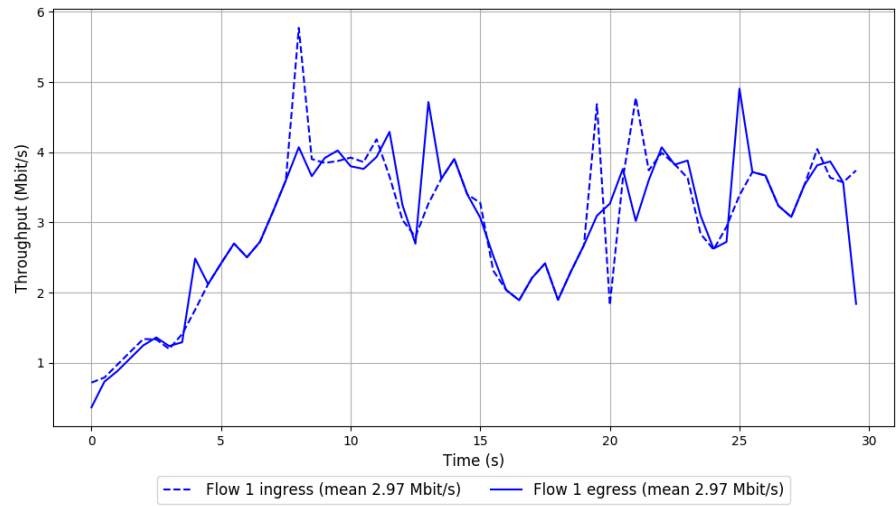
-- Flow 1:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 113.533 ms

Loss rate: 1.07%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-09-17 22:39:26

End at: 2017-09-17 22:39:57

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 113.504 ms

Loss rate: 0.45%

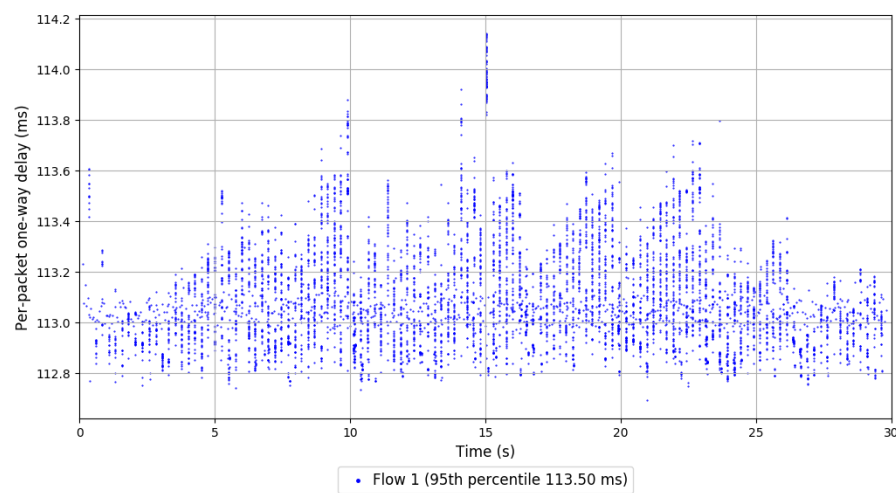
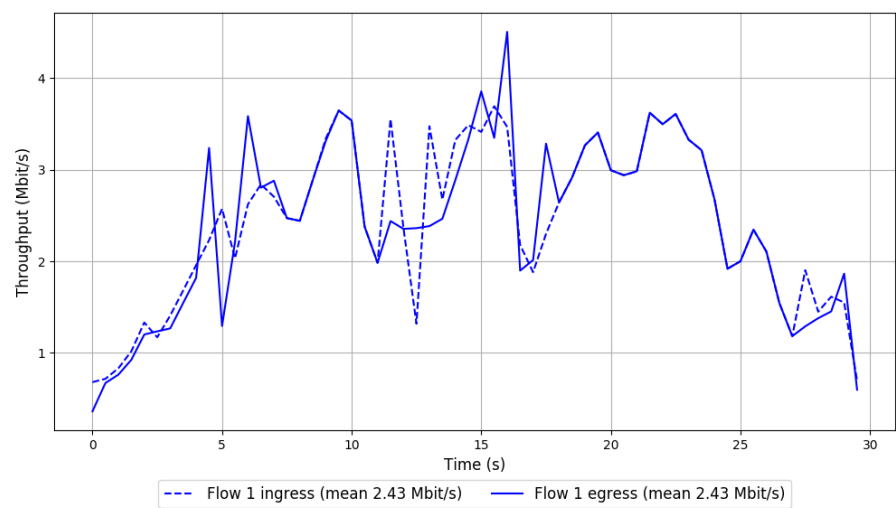
-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 113.504 ms

Loss rate: 0.45%

Run 10: Report of Sprout — Data Link

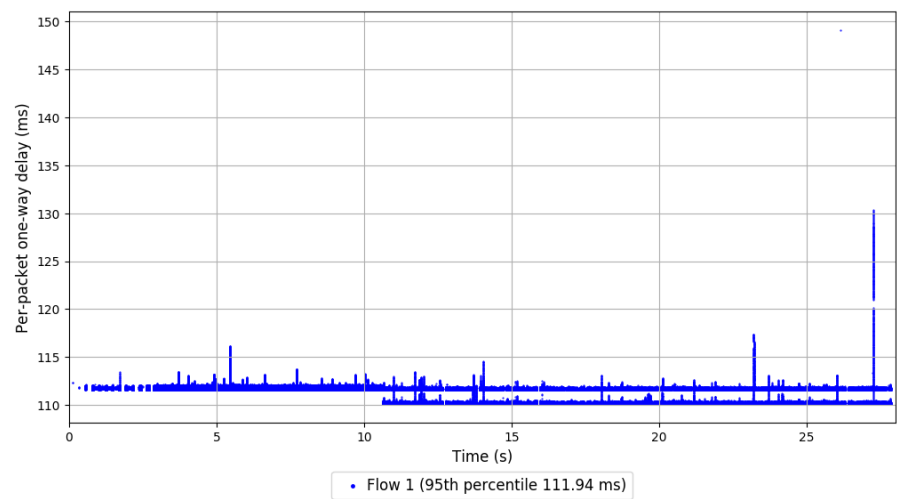
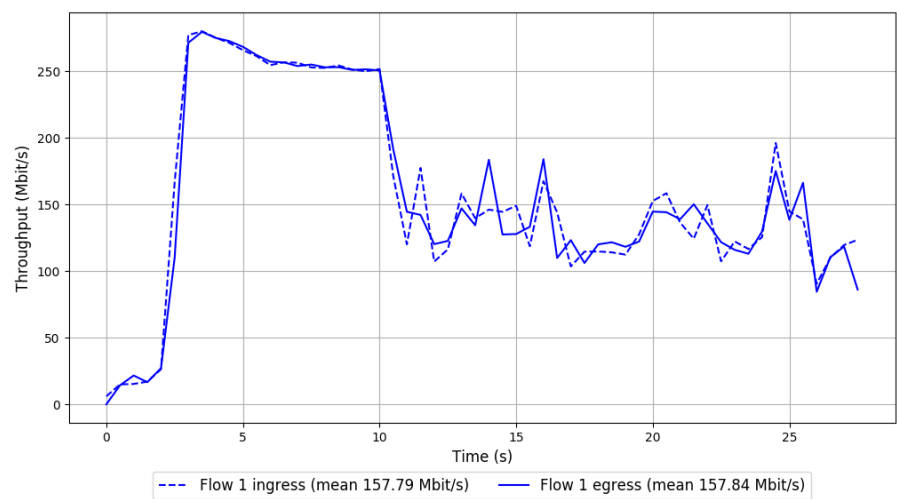


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-09-17 21:02:31
End at: 2017-09-17 21:03:01

# Below is generated by plot.py at 2017-09-18 01:42:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 157.84 Mbit/s
95th percentile per-packet one-way delay: 111.938 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 157.84 Mbit/s
95th percentile per-packet one-way delay: 111.938 ms
Loss rate: 0.76%
```

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

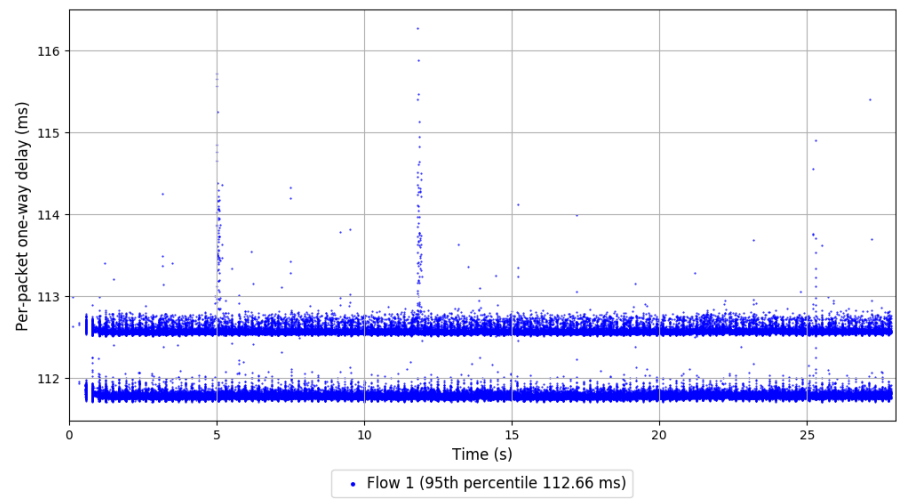
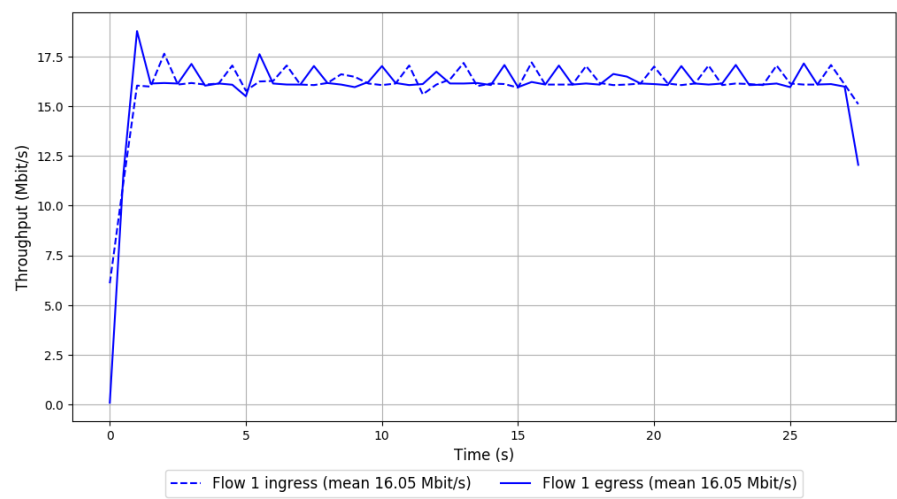


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-09-17 21:14:38
End at: 2017-09-17 21:15:08

# Below is generated by plot.py at 2017-09-18 01:42:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.05 Mbit/s
95th percentile per-packet one-way delay: 112.659 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 16.05 Mbit/s
95th percentile per-packet one-way delay: 112.659 ms
Loss rate: 0.81%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-09-17 21:26:29

End at: 2017-09-17 21:26:59

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.94 Mbit/s

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

Loss rate: 0.81%

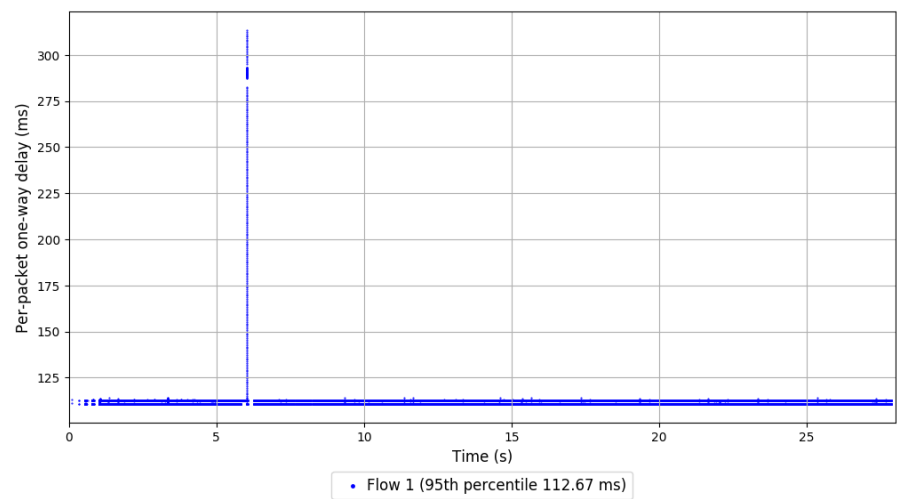
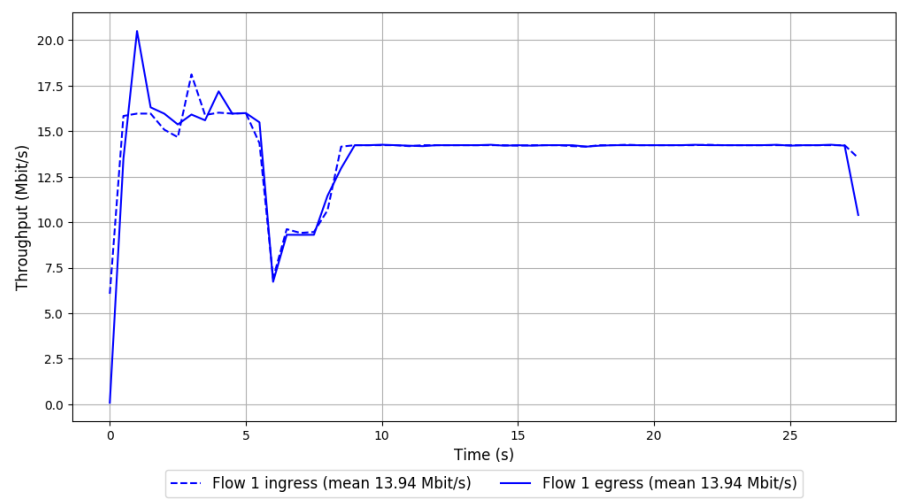
-- Flow 1:

Average throughput: 13.94 Mbit/s

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

Loss rate: 0.81%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-09-17 21:38:28

End at: 2017-09-17 21:38:58

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.88 Mbit/s

95th percentile per-packet one-way delay: 112.707 ms

Loss rate: 0.82%

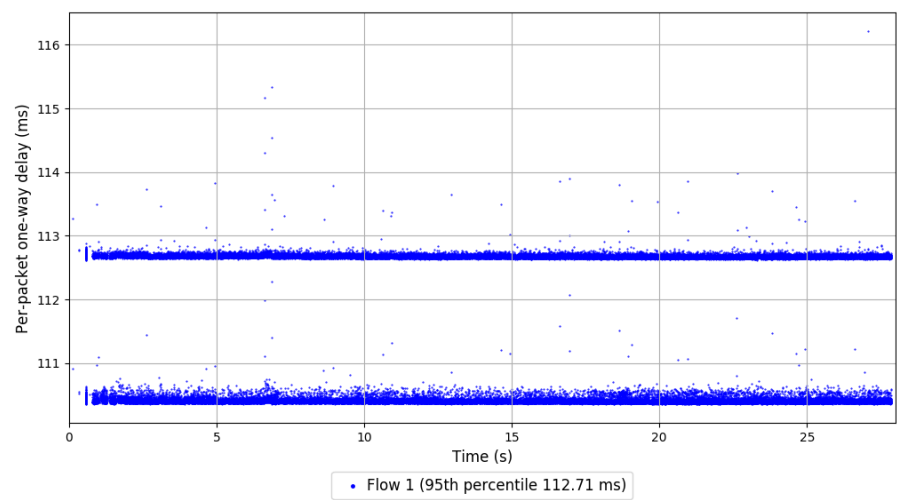
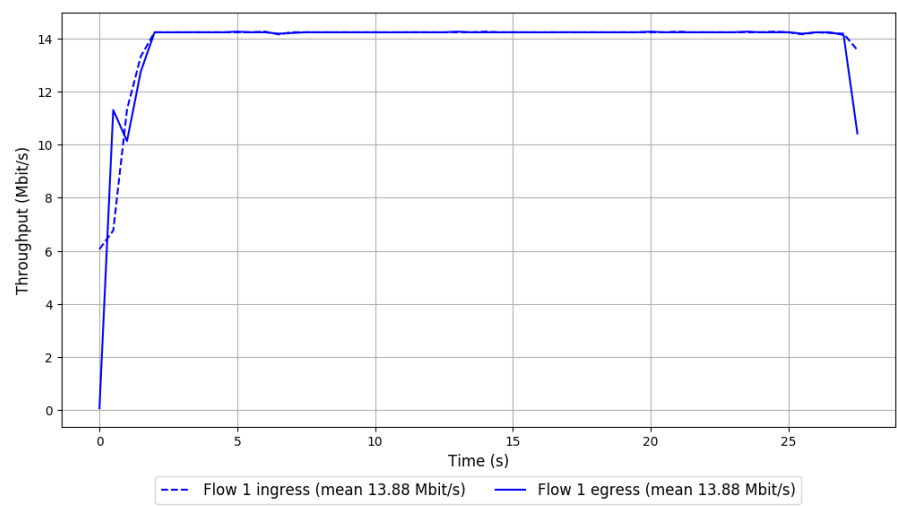
-- Flow 1:

Average throughput: 13.88 Mbit/s

95th percentile per-packet one-way delay: 112.707 ms

Loss rate: 0.82%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-09-17 21:50:20

End at: 2017-09-17 21:50:50

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.50 Mbit/s

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

Loss rate: 0.87%

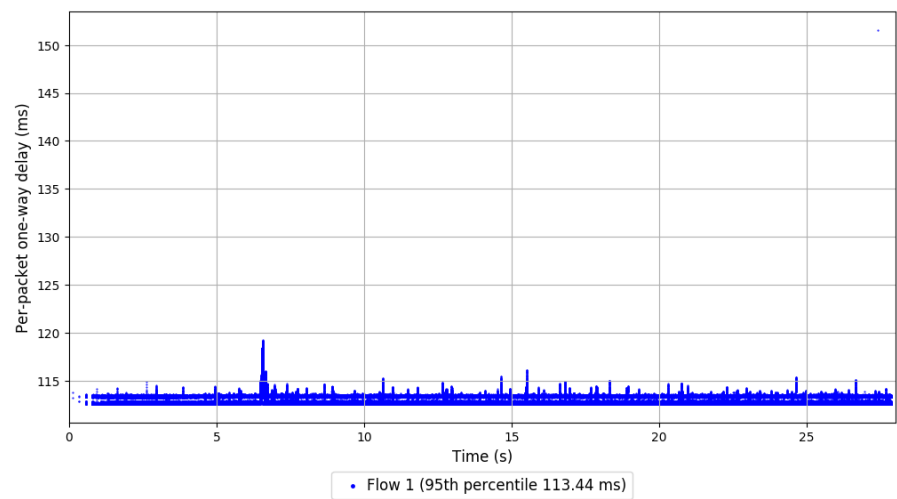
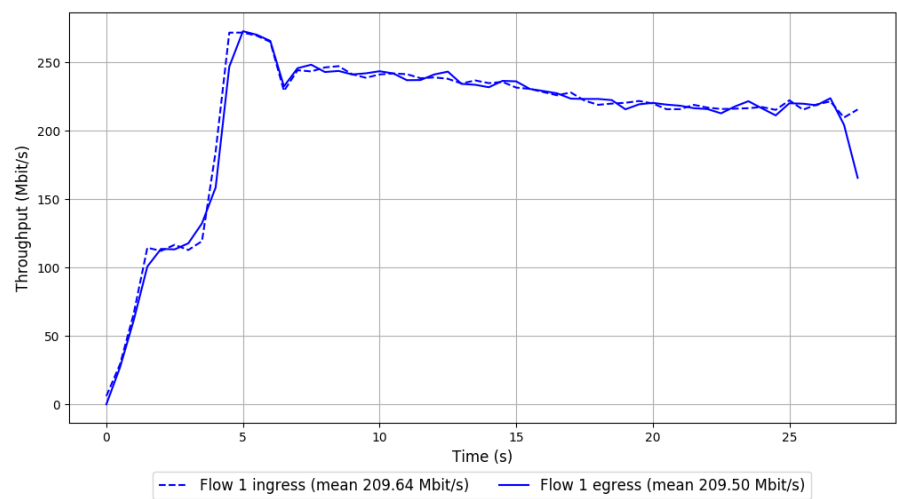
-- Flow 1:

Average throughput: 209.50 Mbit/s

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

Loss rate: 0.87%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-09-17 22:02:30

End at: 2017-09-17 22:03:00

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.39 Mbit/s

95th percentile per-packet one-way delay: 112.448 ms

Loss rate: 0.91%

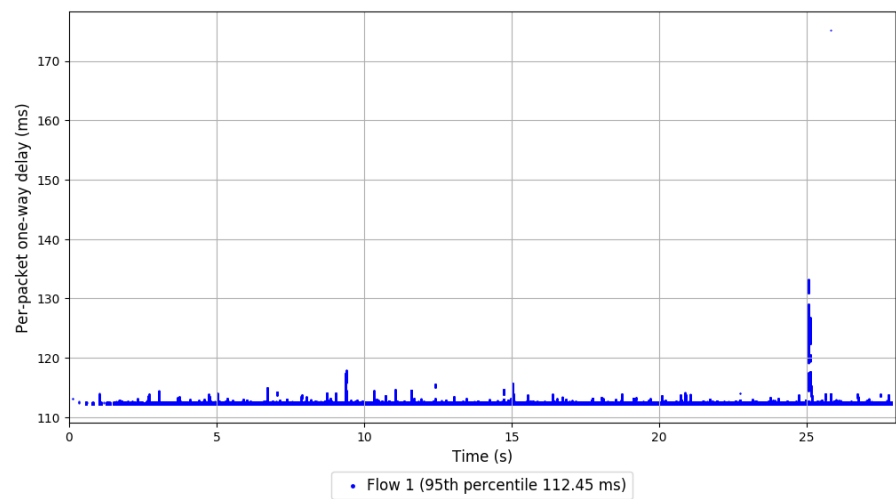
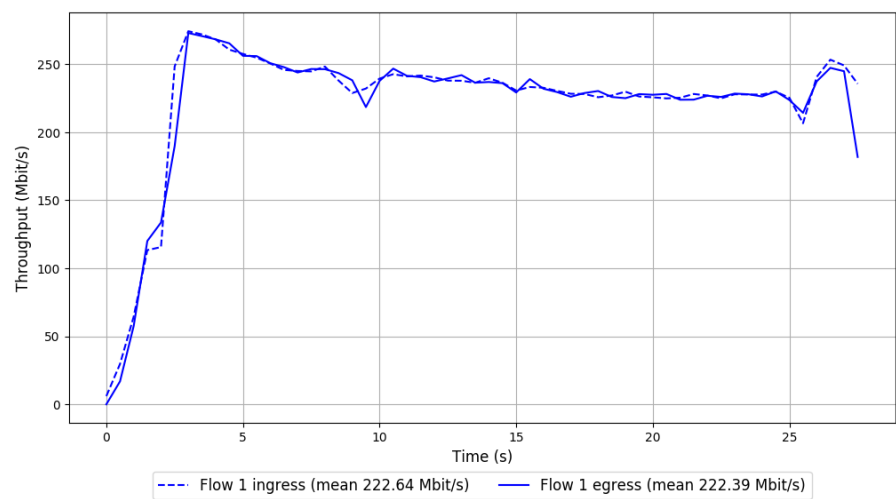
-- Flow 1:

Average throughput: 222.39 Mbit/s

95th percentile per-packet one-way delay: 112.448 ms

Loss rate: 0.91%

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

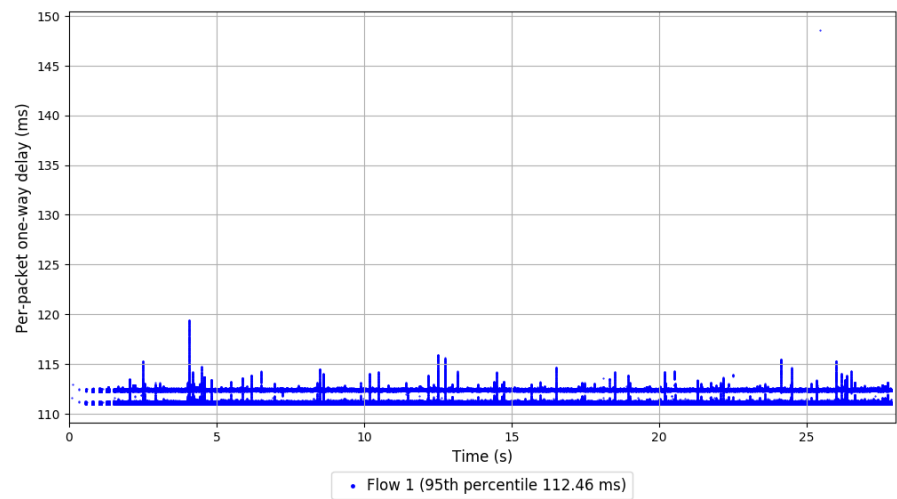
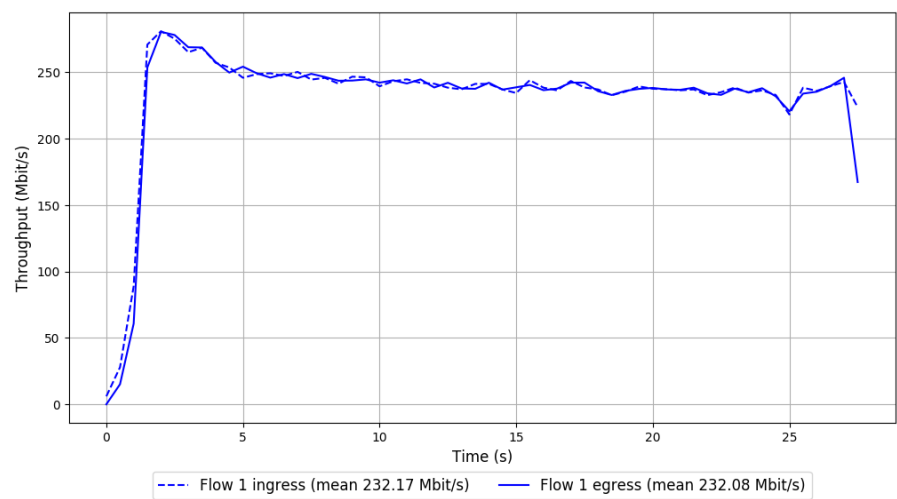


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-09-17 22:14:33
End at: 2017-09-17 22:15:03

# Below is generated by plot.py at 2017-09-18 01:42:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.08 Mbit/s
95th percentile per-packet one-way delay: 112.457 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 232.08 Mbit/s
95th percentile per-packet one-way delay: 112.457 ms
Loss rate: 0.83%
```


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



Run 8: Statistics of TaoVA-100x

Start at: 2017-09-17 22:26:30

End at: 2017-09-17 22:27:00

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.71 Mbit/s

95th percentile per-packet one-way delay: 112.815 ms

Loss rate: 0.91%

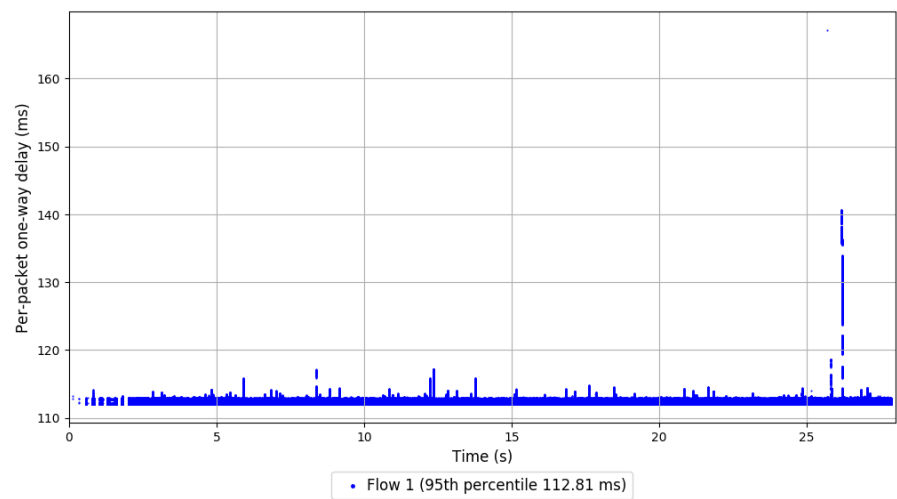
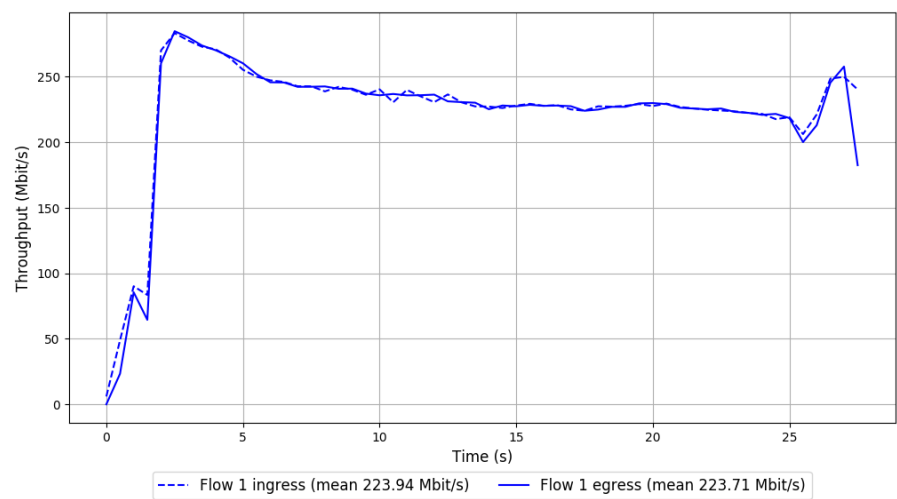
-- Flow 1:

Average throughput: 223.71 Mbit/s

95th percentile per-packet one-way delay: 112.815 ms

Loss rate: 0.91%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-09-17 22:38:43

End at: 2017-09-17 22:39:13

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.75 Mbit/s

95th percentile per-packet one-way delay: 112.715 ms

Loss rate: 0.83%

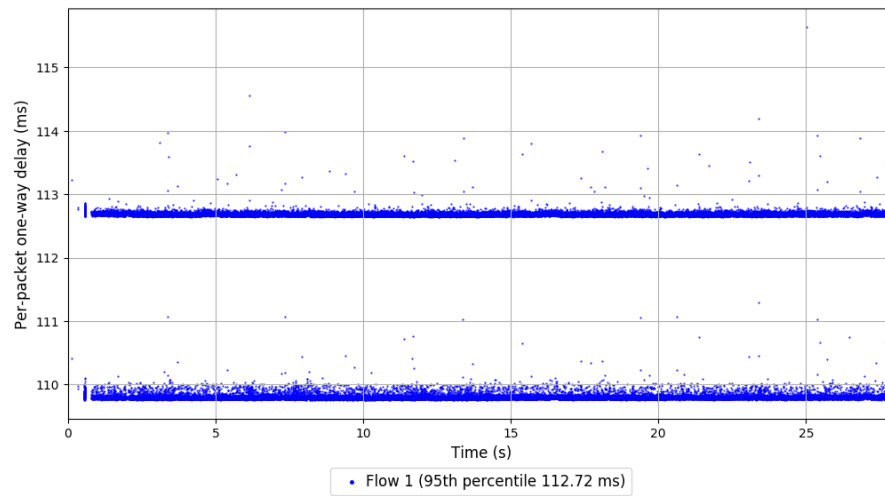
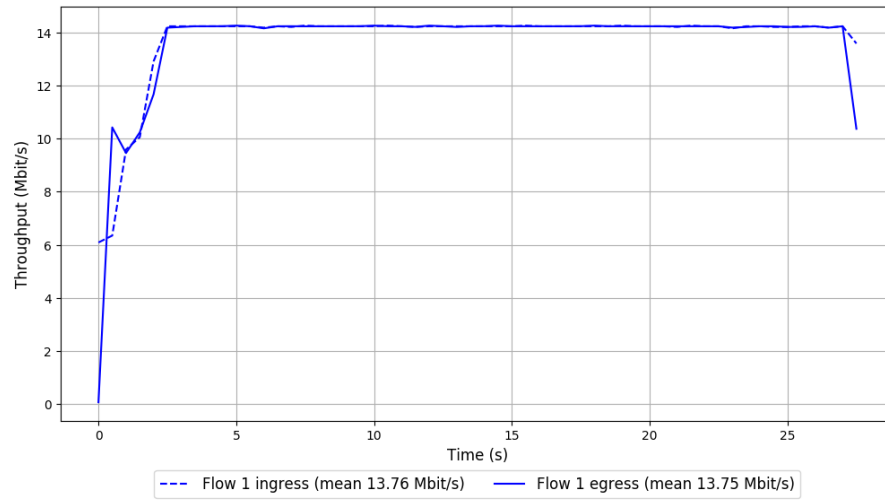
-- Flow 1:

Average throughput: 13.75 Mbit/s

95th percentile per-packet one-way delay: 112.715 ms

Loss rate: 0.83%

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

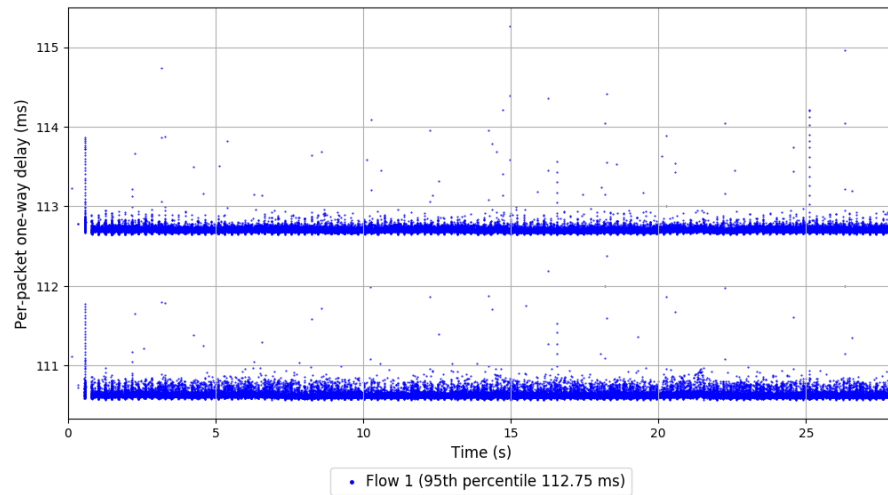
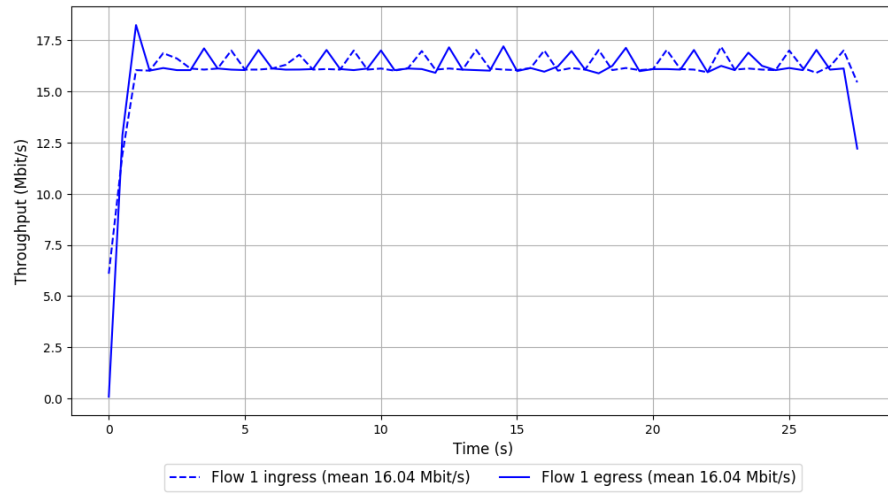


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-09-17 22:50:38
End at: 2017-09-17 22:51:09

# Below is generated by plot.py at 2017-09-18 01:42:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.04 Mbit/s
95th percentile per-packet one-way delay: 112.747 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 16.04 Mbit/s
95th percentile per-packet one-way delay: 112.747 ms
Loss rate: 0.82%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-09-17 21:01:50

End at: 2017-09-17 21:02:20

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.369 ms

Loss rate: 1.27%

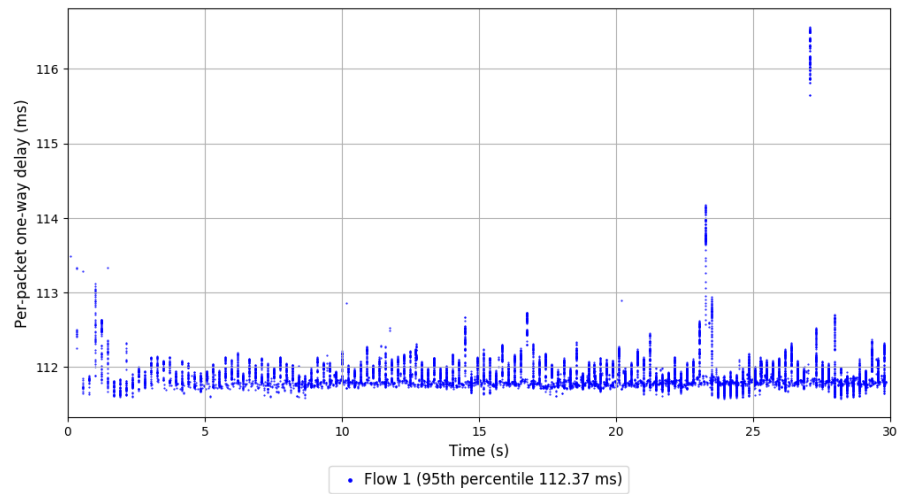
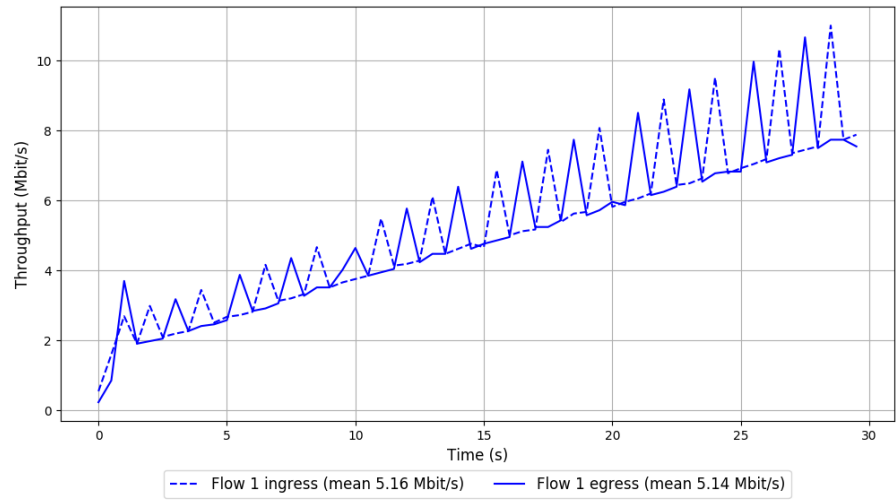
-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.369 ms

Loss rate: 1.27%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-09-17 21:13:54

End at: 2017-09-17 21:14:25

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.37 Mbit/s

95th percentile per-packet one-way delay: 113.995 ms

Loss rate: 0.84%

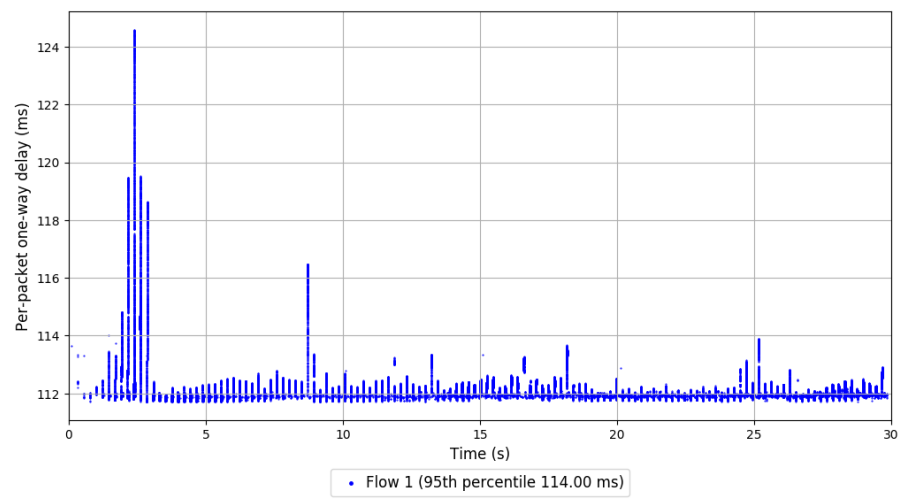
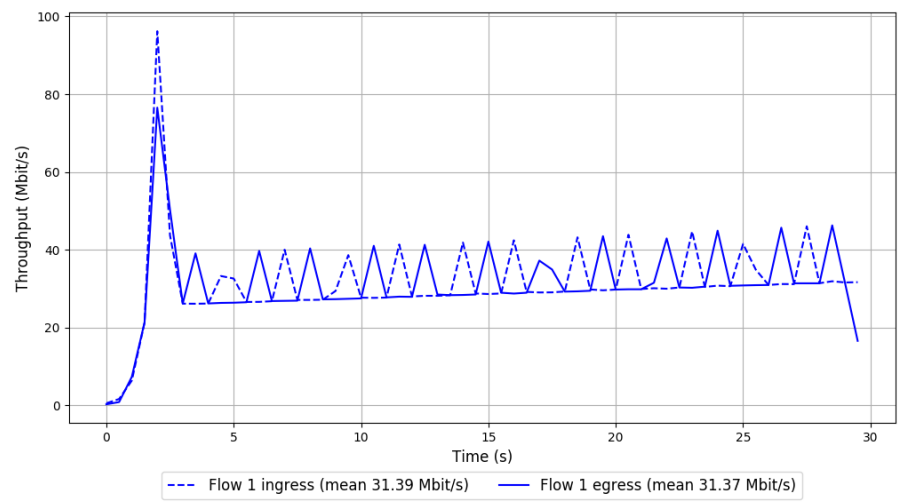
-- Flow 1:

Average throughput: 31.37 Mbit/s

95th percentile per-packet one-way delay: 113.995 ms

Loss rate: 0.84%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-09-17 21:25:45

End at: 2017-09-17 21:26:15

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.43 Mbit/s

95th percentile per-packet one-way delay: 113.928 ms

Loss rate: 0.84%

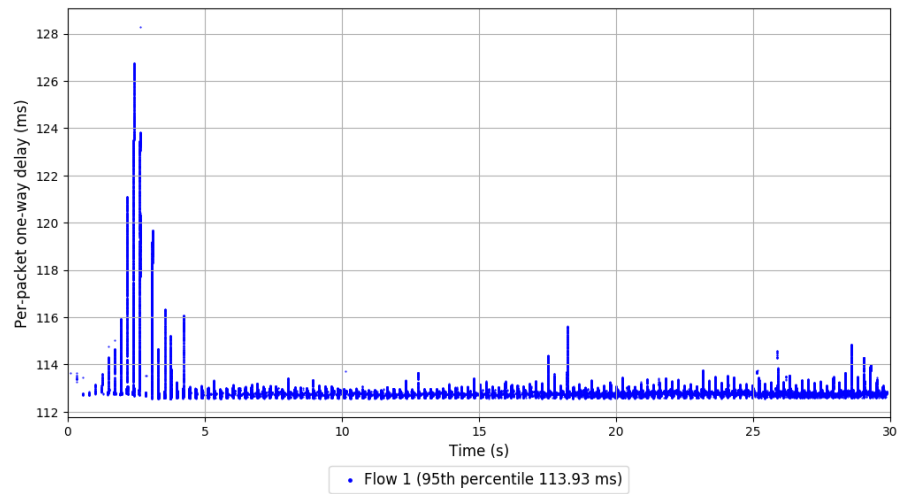
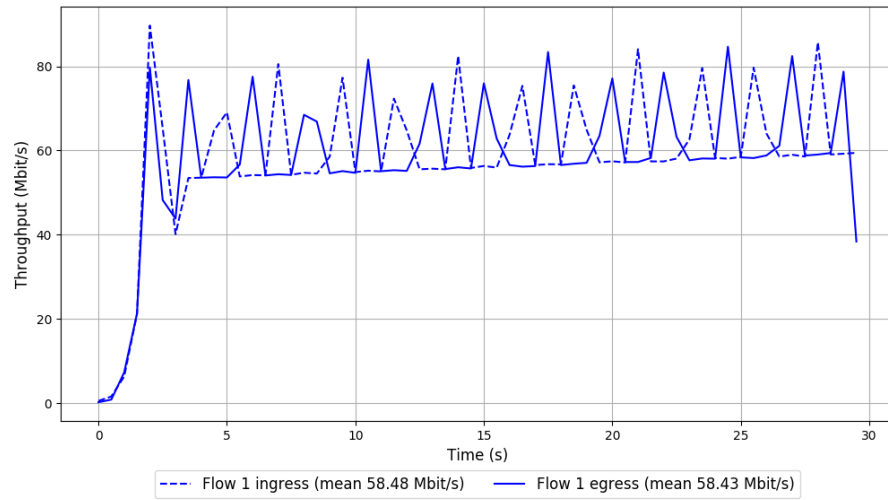
-- Flow 1:

Average throughput: 58.43 Mbit/s

95th percentile per-packet one-way delay: 113.928 ms

Loss rate: 0.84%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-09-17 21:37:45

End at: 2017-09-17 21:38:15

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 113.369 ms

Loss rate: 0.78%

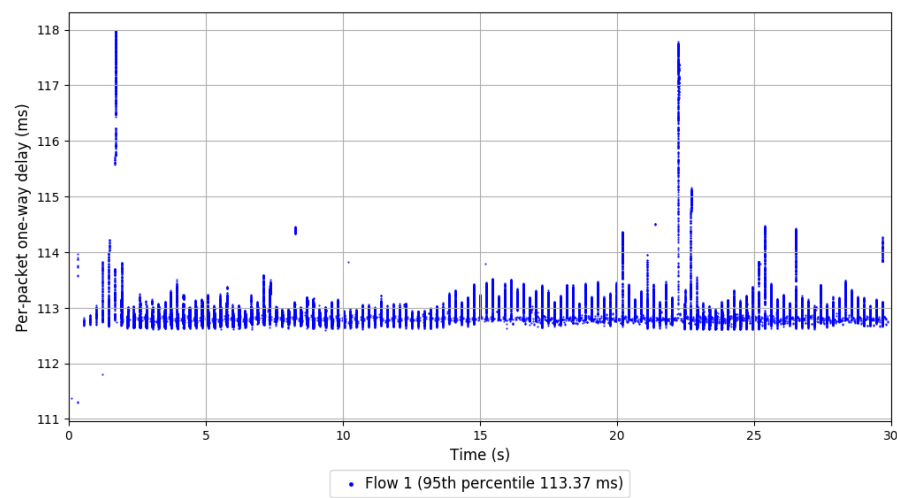
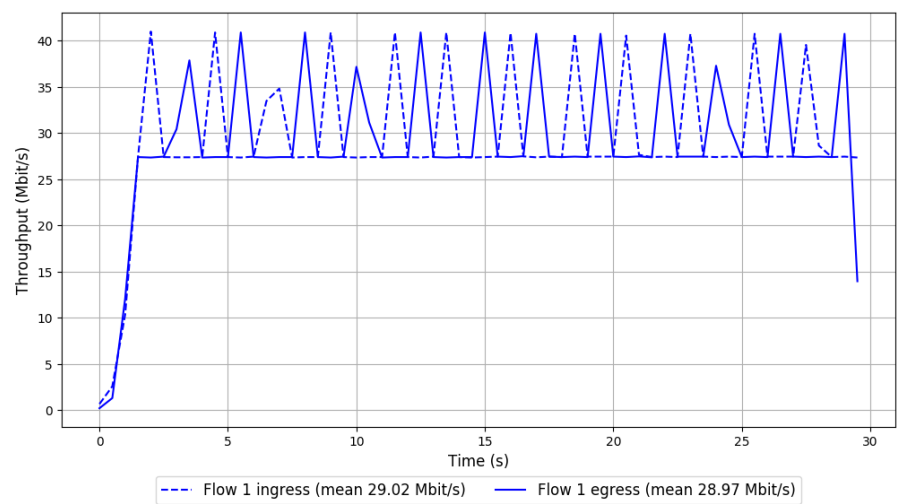
-- Flow 1:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 113.369 ms

Loss rate: 0.78%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-09-17 21:49:38

End at: 2017-09-17 21:50:08

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.35 Mbit/s

95th percentile per-packet one-way delay: 113.342 ms

Loss rate: 0.53%

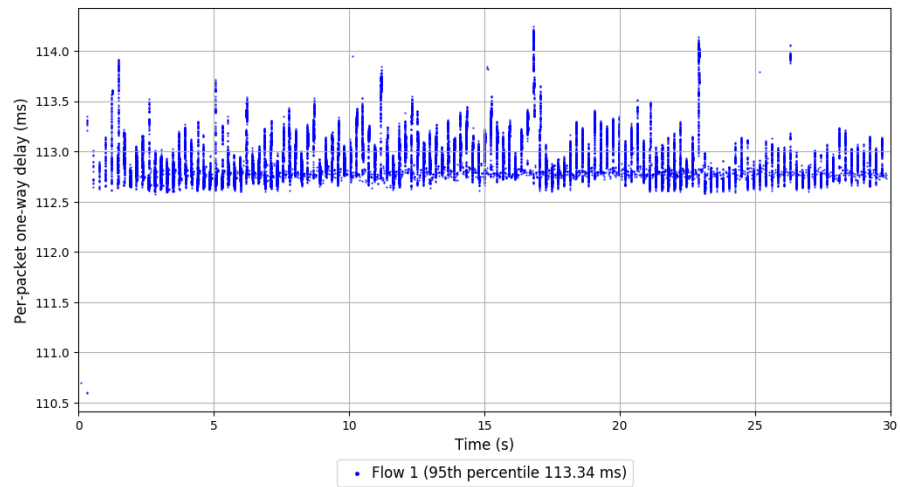
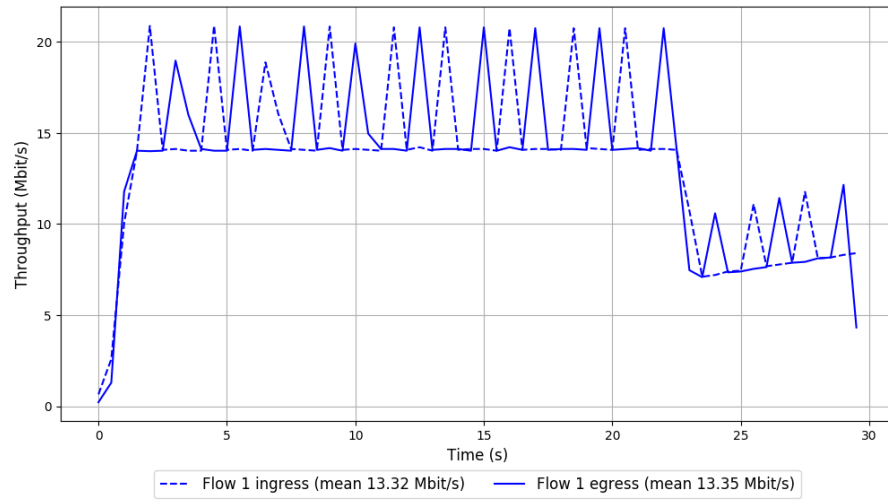
-- Flow 1:

Average throughput: 13.35 Mbit/s

95th percentile per-packet one-way delay: 113.342 ms

Loss rate: 0.53%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-09-17 22:01:48

End at: 2017-09-17 22:02:18

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.02 Mbit/s

95th percentile per-packet one-way delay: 113.088 ms

Loss rate: 0.57%

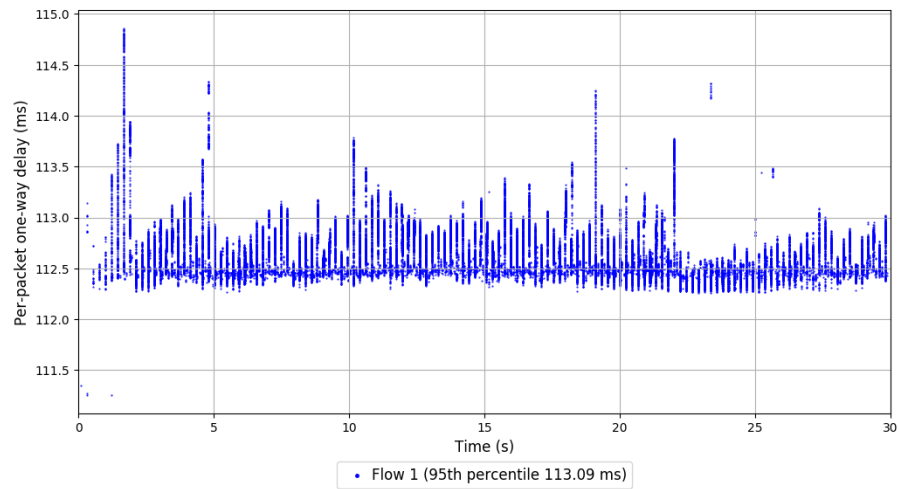
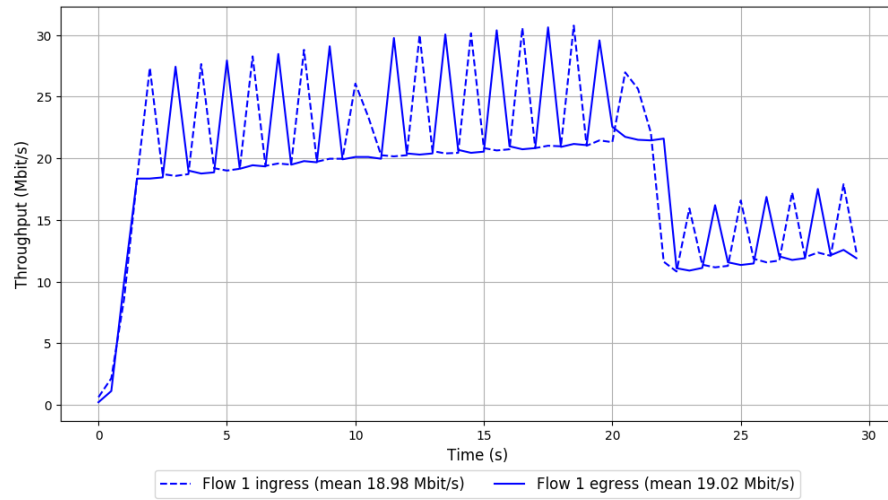
-- Flow 1:

Average throughput: 19.02 Mbit/s

95th percentile per-packet one-way delay: 113.088 ms

Loss rate: 0.57%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-09-17 22:13:50

End at: 2017-09-17 22:14:20

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.89 Mbit/s

95th percentile per-packet one-way delay: 114.497 ms

Loss rate: 0.45%

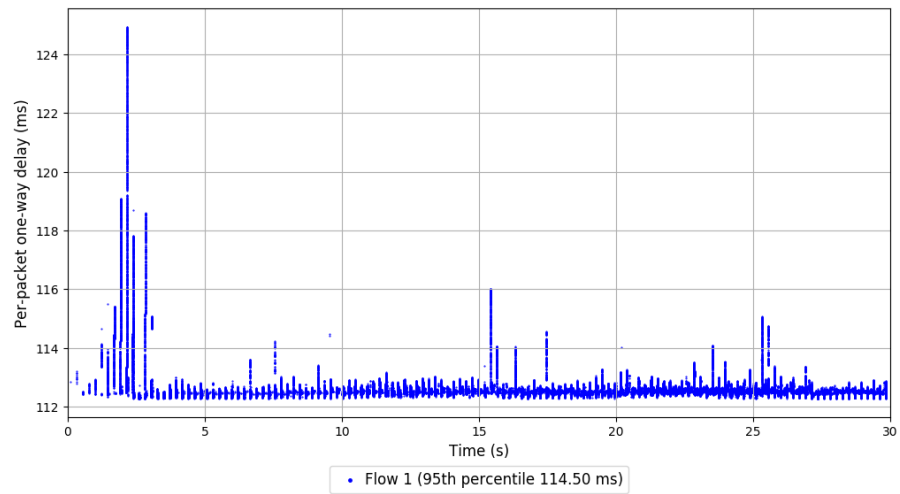
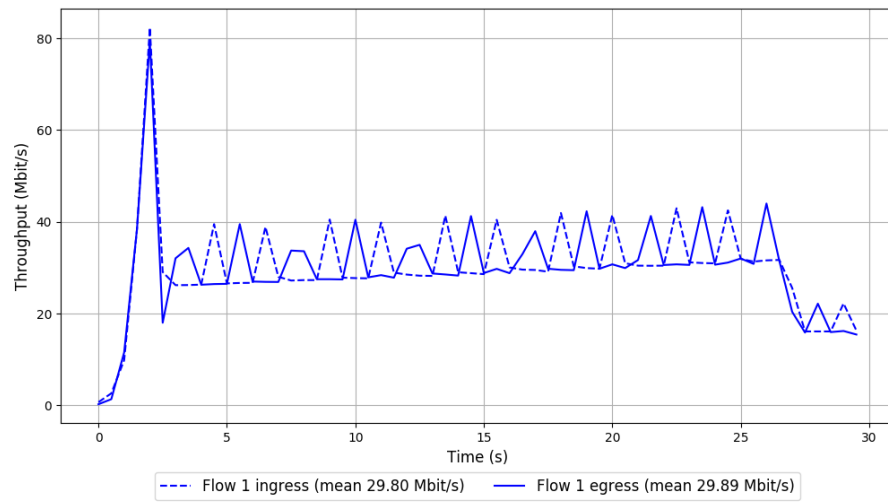
-- Flow 1:

Average throughput: 29.89 Mbit/s

95th percentile per-packet one-way delay: 114.497 ms

Loss rate: 0.45%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-09-17 22:25:48

End at: 2017-09-17 22:26:18

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.98 Mbit/s

95th percentile per-packet one-way delay: 113.261 ms

Loss rate: 0.40%

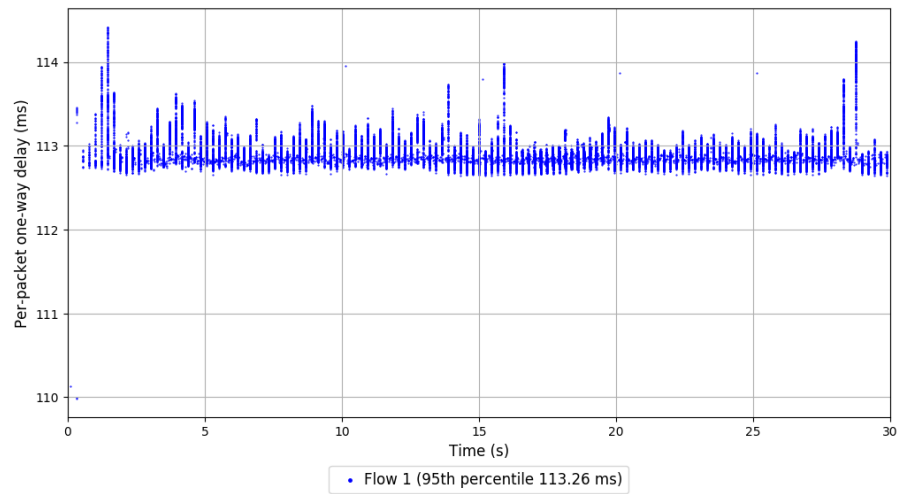
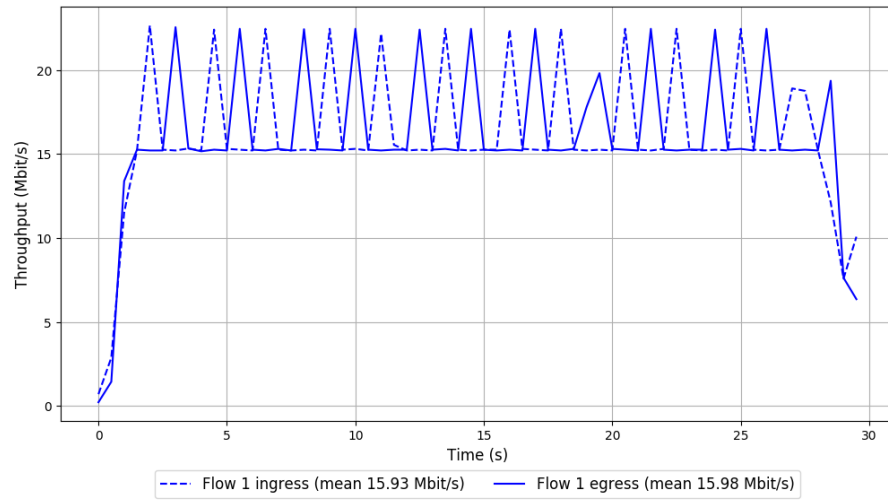
-- Flow 1:

Average throughput: 15.98 Mbit/s

95th percentile per-packet one-way delay: 113.261 ms

Loss rate: 0.40%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-09-17 22:38:00

End at: 2017-09-17 22:38:30

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.29 Mbit/s

95th percentile per-packet one-way delay: 113.858 ms

Loss rate: 0.78%

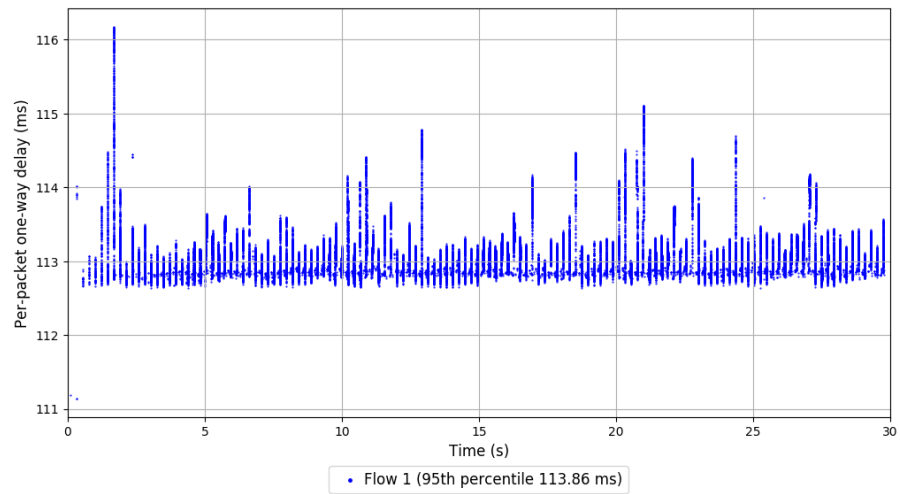
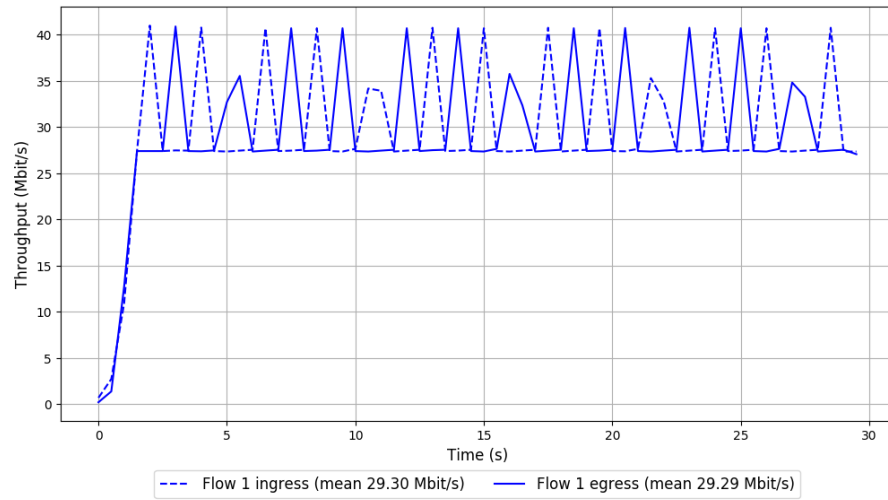
-- Flow 1:

Average throughput: 29.29 Mbit/s

95th percentile per-packet one-way delay: 113.858 ms

Loss rate: 0.78%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-09-17 22:49:57

End at: 2017-09-17 22:50:27

Below is generated by plot.py at 2017-09-18 01:42:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.24 Mbit/s

95th percentile per-packet one-way delay: 113.290 ms

Loss rate: 0.79%

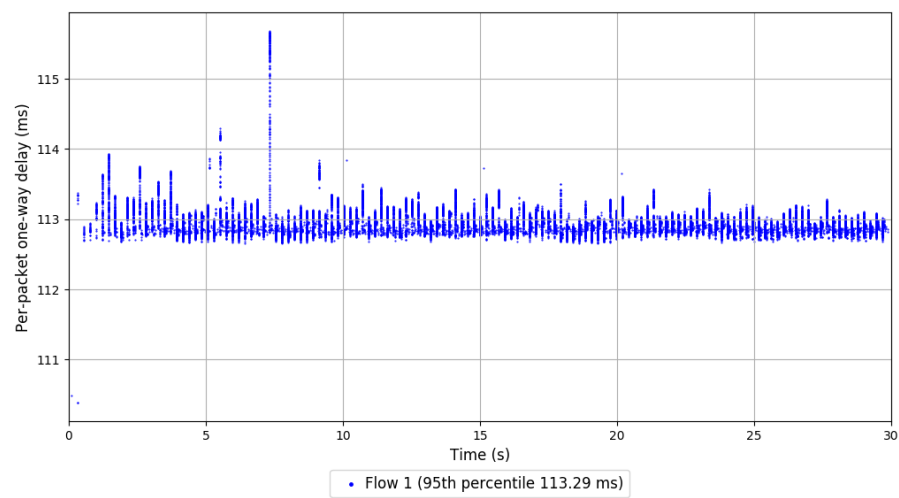
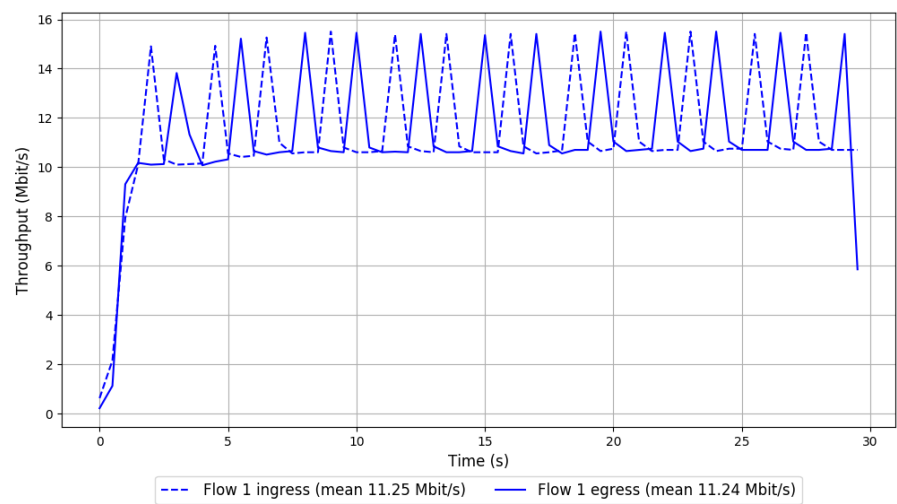
-- Flow 1:

Average throughput: 11.24 Mbit/s

95th percentile per-packet one-way delay: 113.290 ms

Loss rate: 0.79%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-09-17 21:00:05

End at: 2017-09-17 21:00:35

Below is generated by plot.py at 2017-09-18 01:43:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 227.76 Mbit/s

95th percentile per-packet one-way delay: 139.594 ms

Loss rate: 1.15%

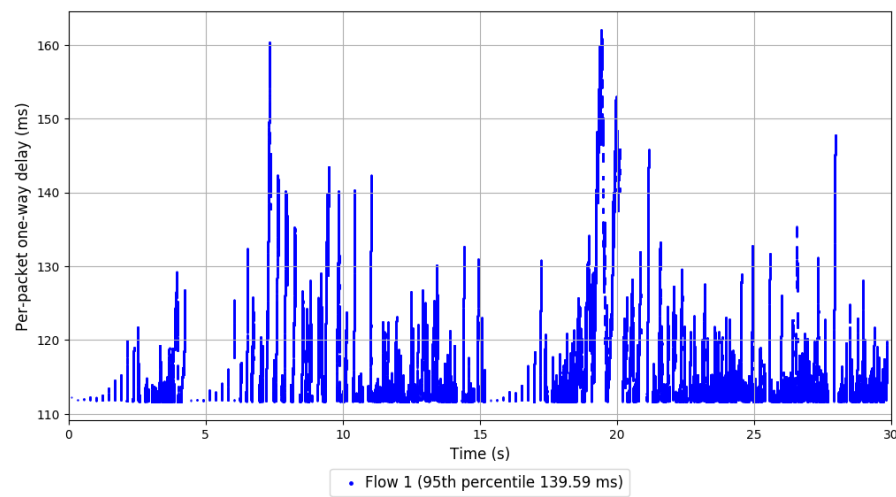
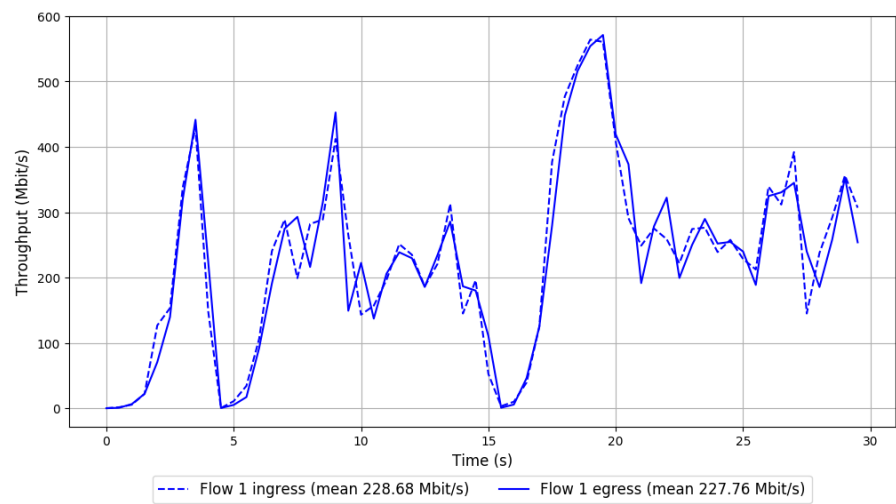
-- Flow 1:

Average throughput: 227.76 Mbit/s

95th percentile per-packet one-way delay: 139.594 ms

Loss rate: 1.15%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-09-17 21:12:15

End at: 2017-09-17 21:12:45

Below is generated by plot.py at 2017-09-18 01:43:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 157.51 Mbit/s

95th percentile per-packet one-way delay: 136.250 ms

Loss rate: 1.06%

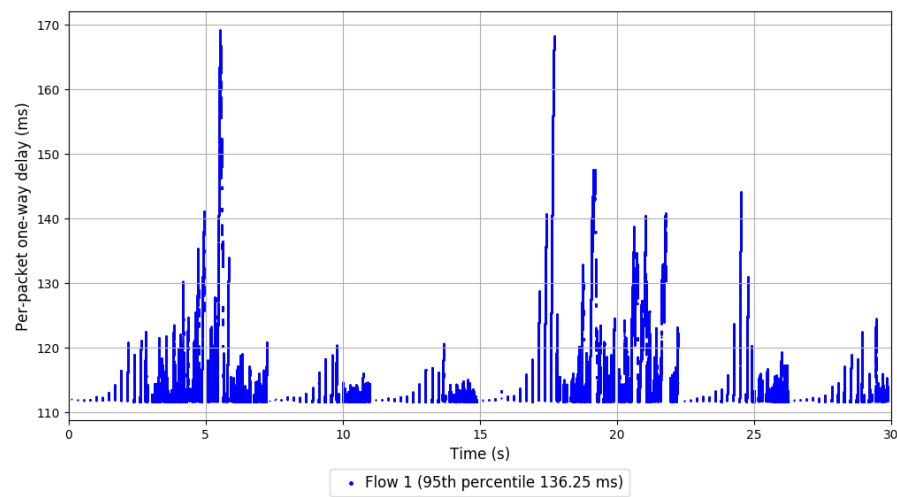
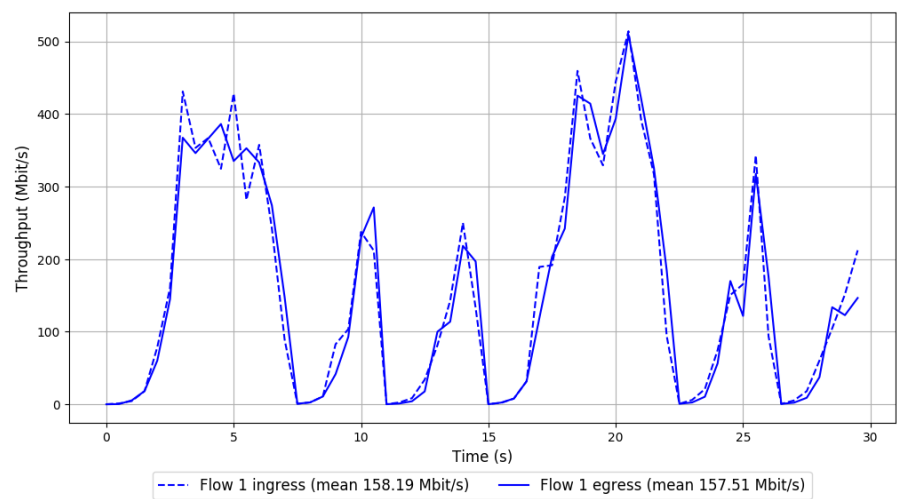
-- Flow 1:

Average throughput: 157.51 Mbit/s

95th percentile per-packet one-way delay: 136.250 ms

Loss rate: 1.06%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-09-17 21:24:00

End at: 2017-09-17 21:24:30

Below is generated by plot.py at 2017-09-18 01:44:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.97 Mbit/s

95th percentile per-packet one-way delay: 157.298 ms

Loss rate: 1.97%

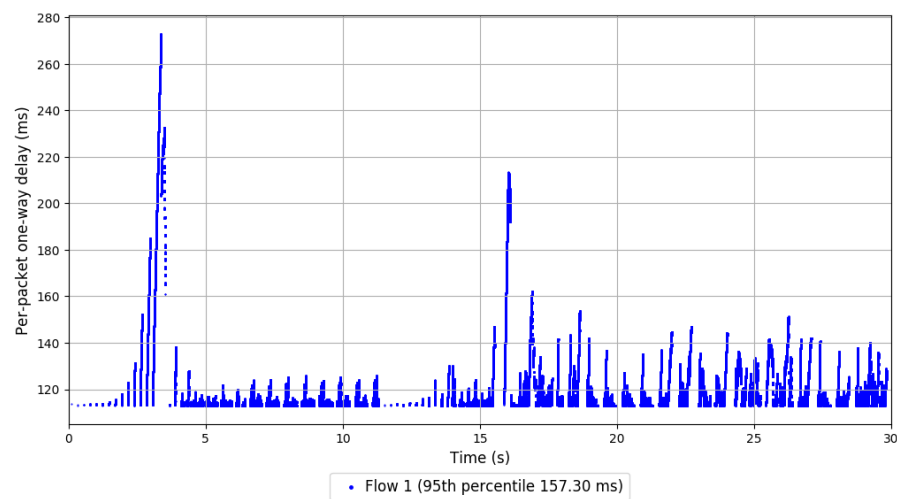
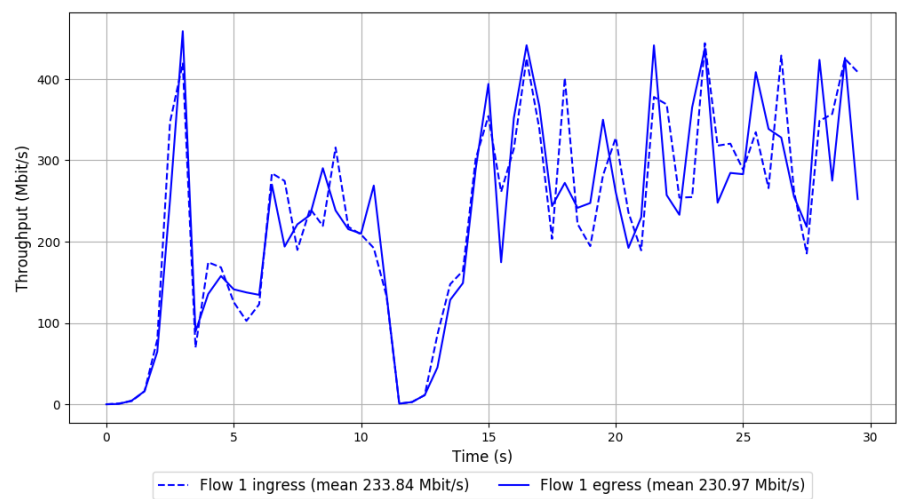
-- Flow 1:

Average throughput: 230.97 Mbit/s

95th percentile per-packet one-way delay: 157.298 ms

Loss rate: 1.97%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-09-17 21:35:59

End at: 2017-09-17 21:36:29

Below is generated by plot.py at 2017-09-18 01:45:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 246.24 Mbit/s

95th percentile per-packet one-way delay: 235.299 ms

Loss rate: 2.68%

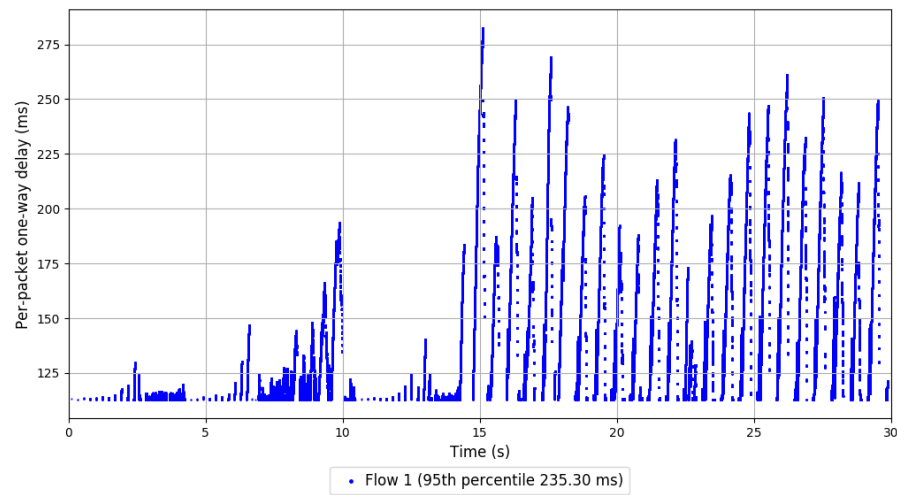
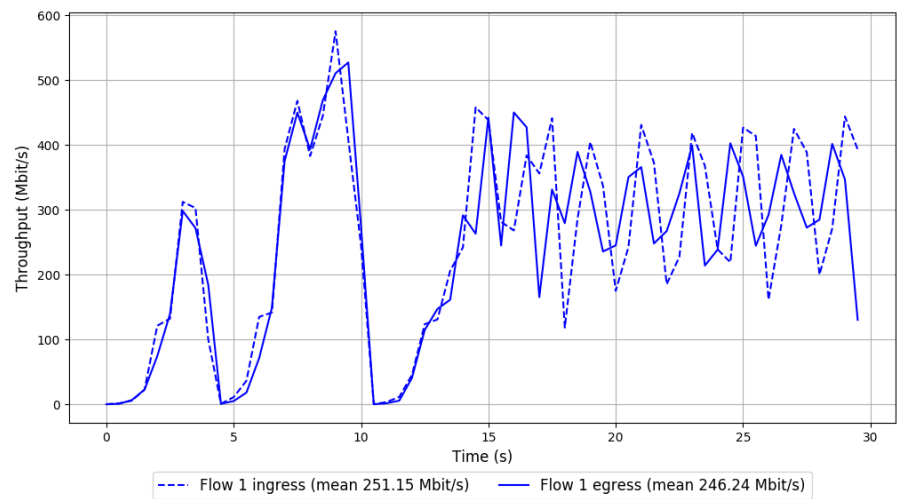
-- Flow 1:

Average throughput: 246.24 Mbit/s

95th percentile per-packet one-way delay: 235.299 ms

Loss rate: 2.68%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-09-17 21:47:54

End at: 2017-09-17 21:48:24

Below is generated by plot.py at 2017-09-18 01:45:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.76 Mbit/s

95th percentile per-packet one-way delay: 161.228 ms

Loss rate: 1.55%

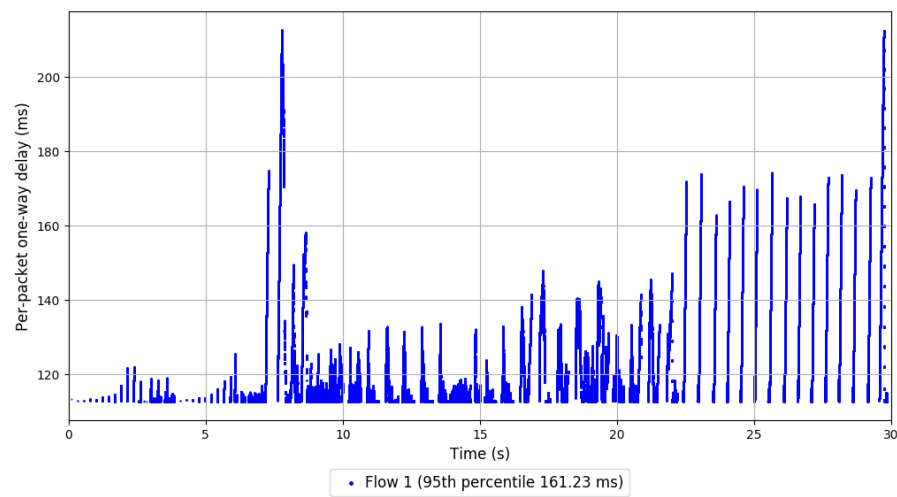
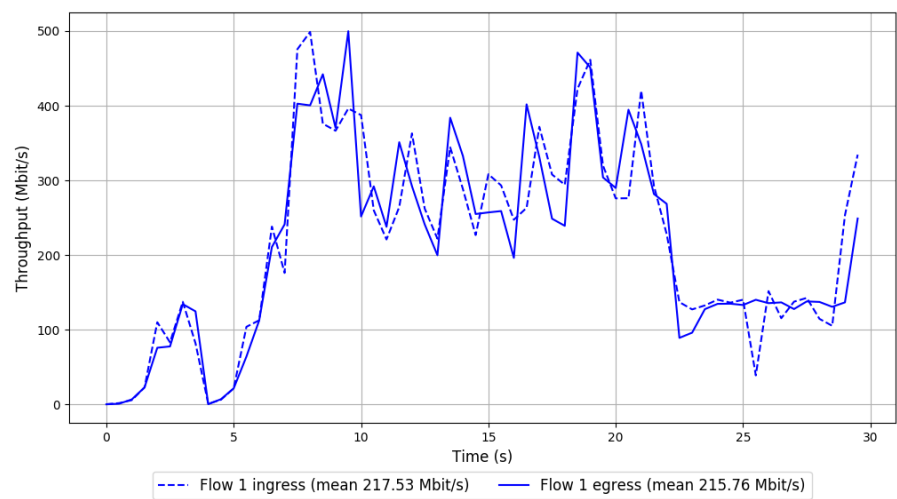
-- Flow 1:

Average throughput: 215.76 Mbit/s

95th percentile per-packet one-way delay: 161.228 ms

Loss rate: 1.55%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-09-17 21:59:59

End at: 2017-09-17 22:00:29

Below is generated by plot.py at 2017-09-18 01:45:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 285.99 Mbit/s

95th percentile per-packet one-way delay: 162.642 ms

Loss rate: 1.34%

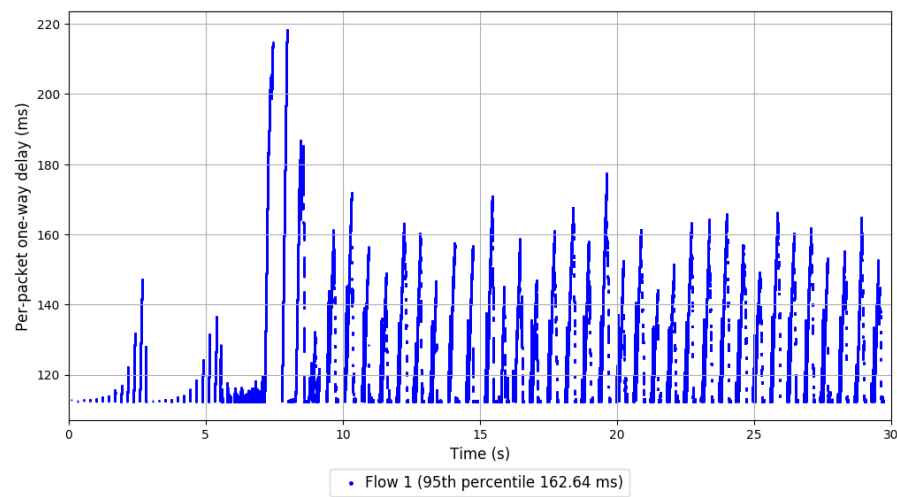
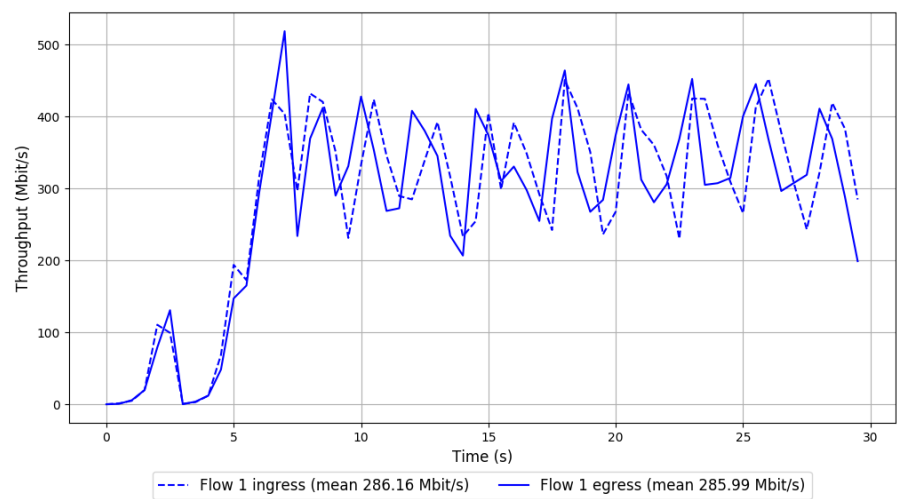
-- Flow 1:

Average throughput: 285.99 Mbit/s

95th percentile per-packet one-way delay: 162.642 ms

Loss rate: 1.34%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-09-17 22:12:07

End at: 2017-09-17 22:12:37

Below is generated by plot.py at 2017-09-18 01:45:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.65 Mbit/s

95th percentile per-packet one-way delay: 185.888 ms

Loss rate: 2.55%

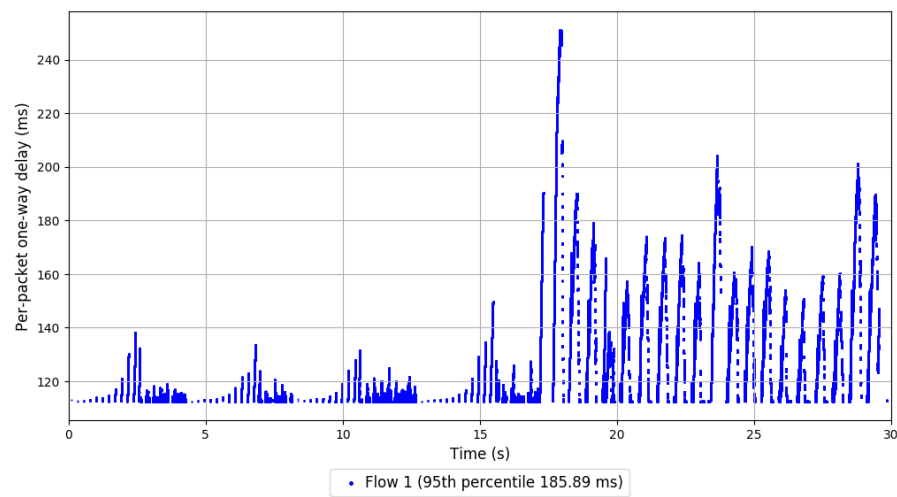
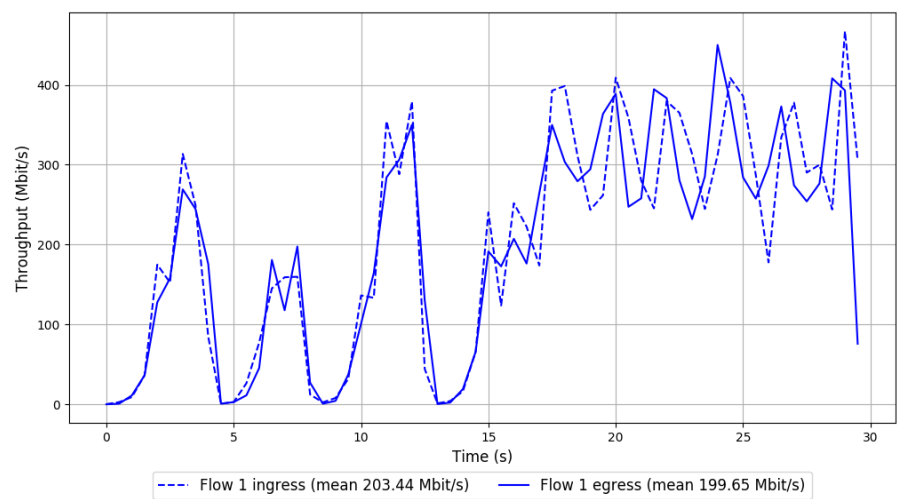
-- Flow 1:

Average throughput: 199.65 Mbit/s

95th percentile per-packet one-way delay: 185.888 ms

Loss rate: 2.55%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-09-17 22:24:12

End at: 2017-09-17 22:24:42

Below is generated by plot.py at 2017-09-18 01:45:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.12 Mbit/s

95th percentile per-packet one-way delay: 141.694 ms

Loss rate: 1.19%

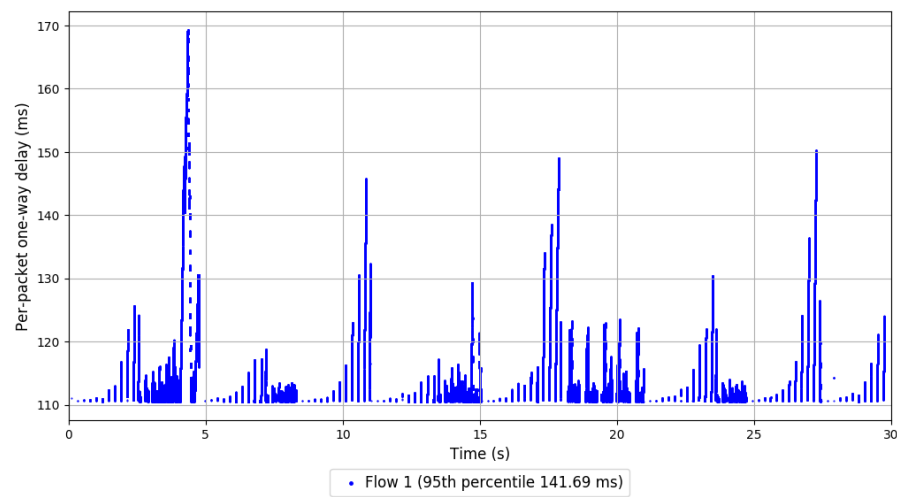
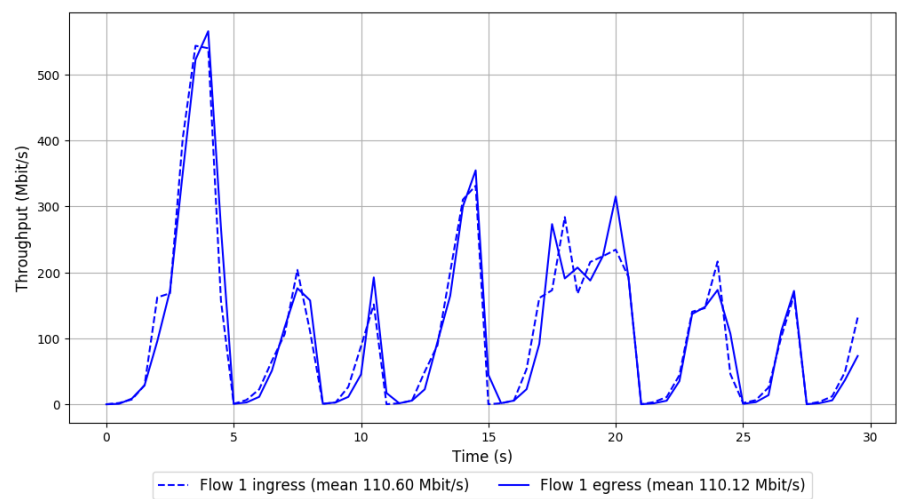
-- Flow 1:

Average throughput: 110.12 Mbit/s

95th percentile per-packet one-way delay: 141.694 ms

Loss rate: 1.19%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-09-17 22:36:18

End at: 2017-09-17 22:36:48

Below is generated by plot.py at 2017-09-18 01:45:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.39 Mbit/s

95th percentile per-packet one-way delay: 145.270 ms

Loss rate: 0.13%

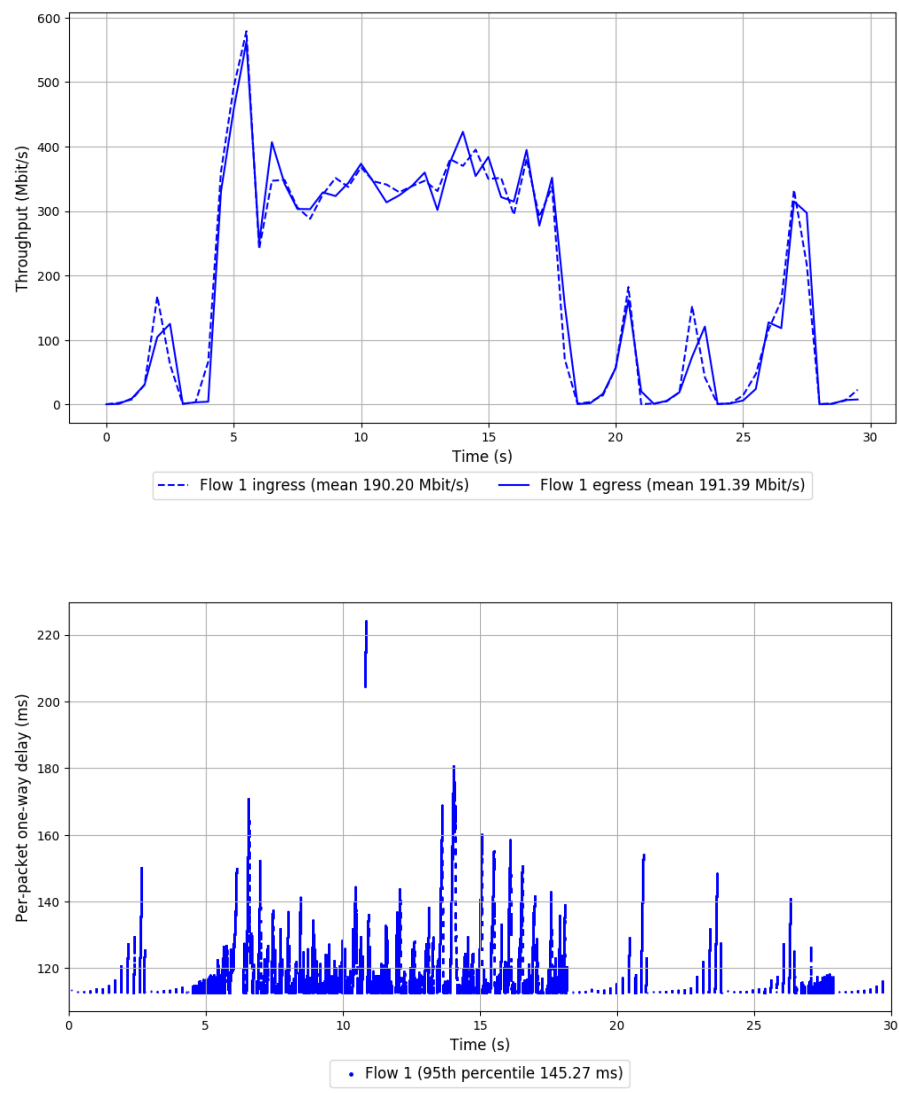
-- Flow 1:

Average throughput: 191.39 Mbit/s

95th percentile per-packet one-way delay: 145.270 ms

Loss rate: 0.13%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-09-17 22:48:13

End at: 2017-09-17 22:48:43

Below is generated by plot.py at 2017-09-18 01:45:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.57 Mbit/s

95th percentile per-packet one-way delay: 183.817 ms

Loss rate: 1.66%

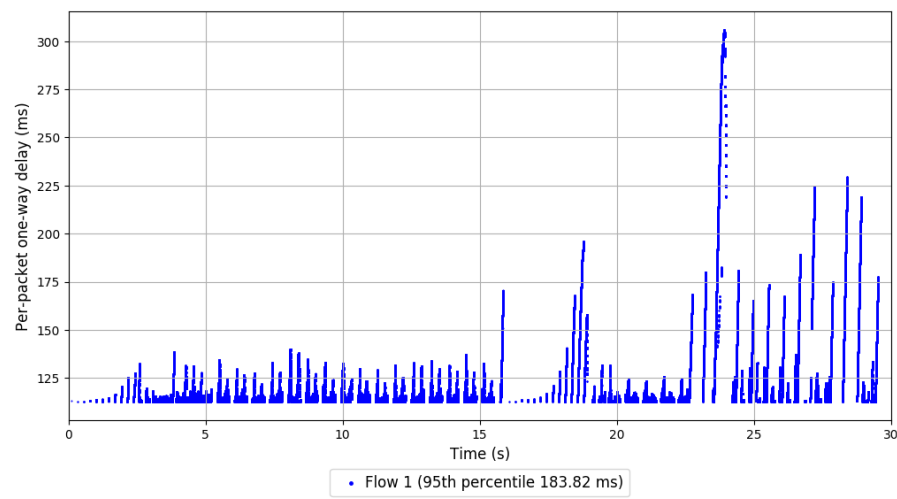
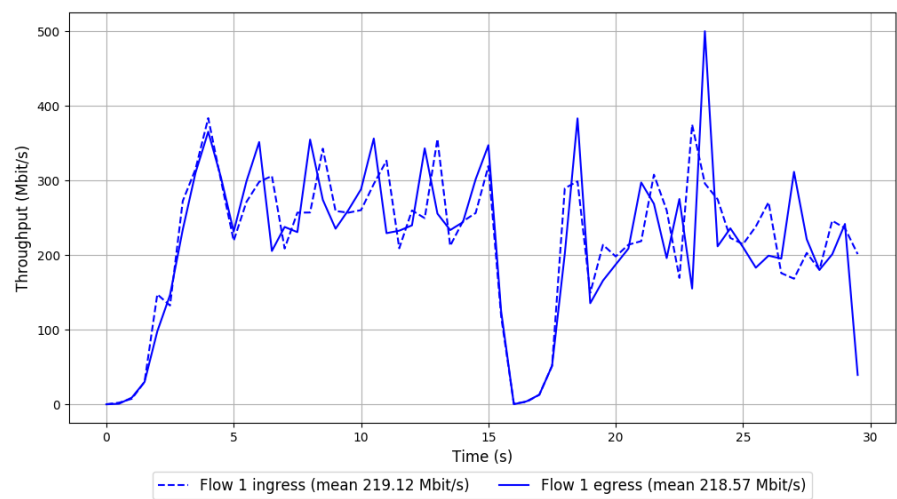
-- Flow 1:

Average throughput: 218.57 Mbit/s

95th percentile per-packet one-way delay: 183.817 ms

Loss rate: 1.66%

Run 10: Report of Verus — Data Link

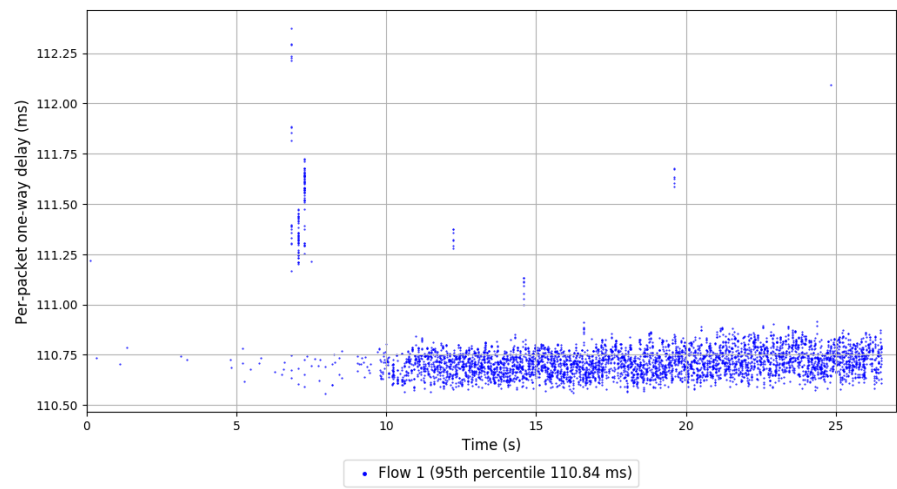
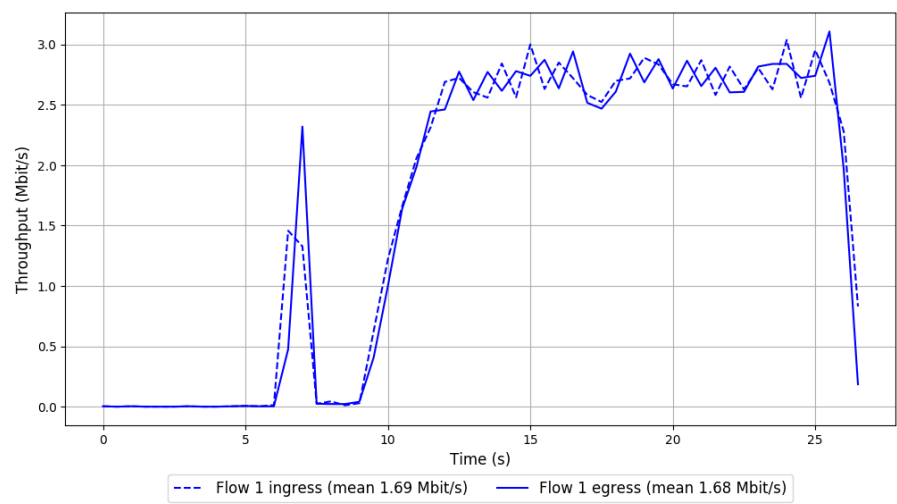


```
Run 1: Statistics of WebRTC media

Start at: 2017-09-17 20:53:09
End at: 2017-09-17 20:53:39

# Below is generated by plot.py at 2017-09-18 01:45:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 110.837 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 110.837 ms
Loss rate: 1.35%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-09-17 21:05:13

End at: 2017-09-17 21:05:43

Below is generated by plot.py at 2017-09-18 01:45:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.160 ms

Loss rate: 0.68%

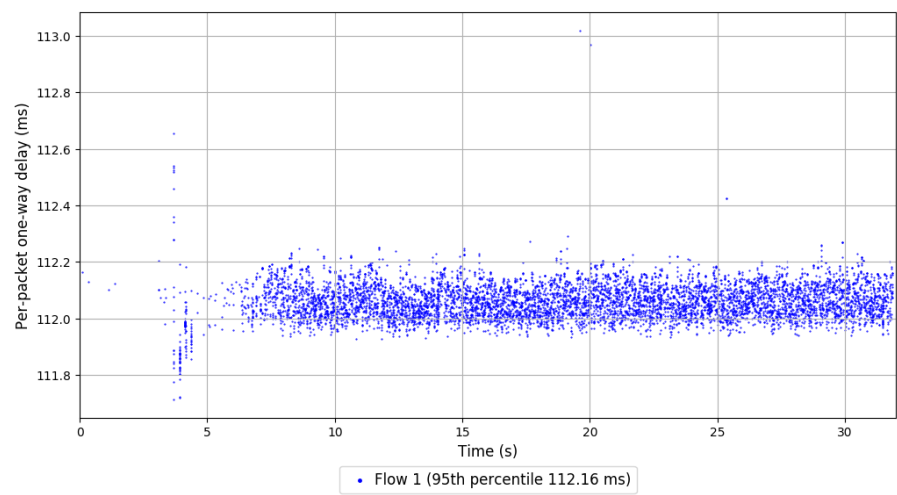
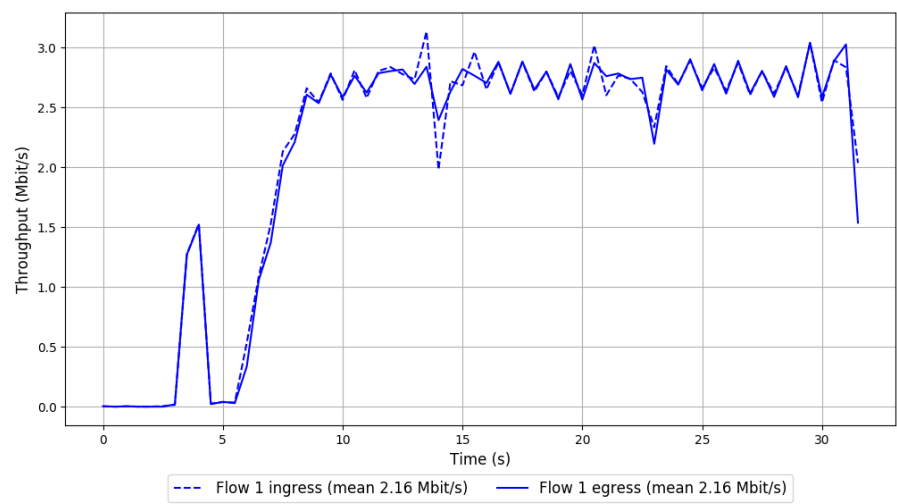
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.160 ms

Loss rate: 0.68%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-09-17 21:17:07

End at: 2017-09-17 21:17:37

Below is generated by plot.py at 2017-09-18 01:45:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 111.934 ms

Loss rate: 0.84%

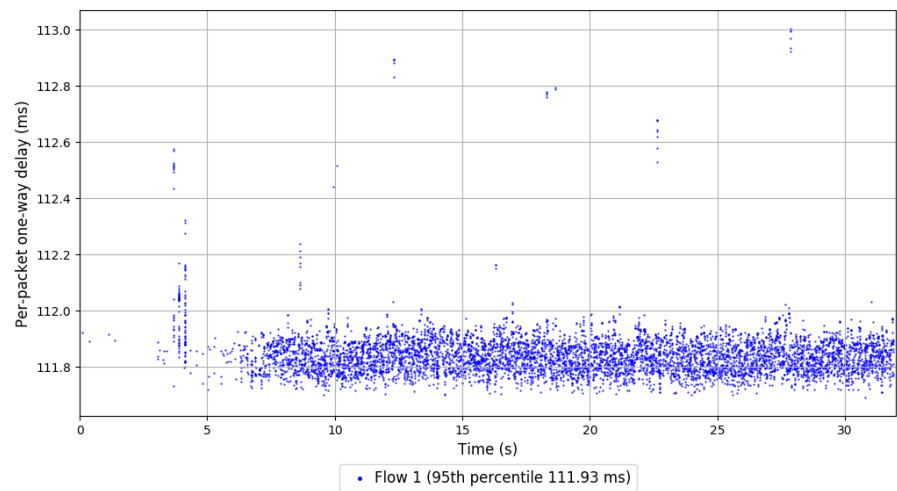
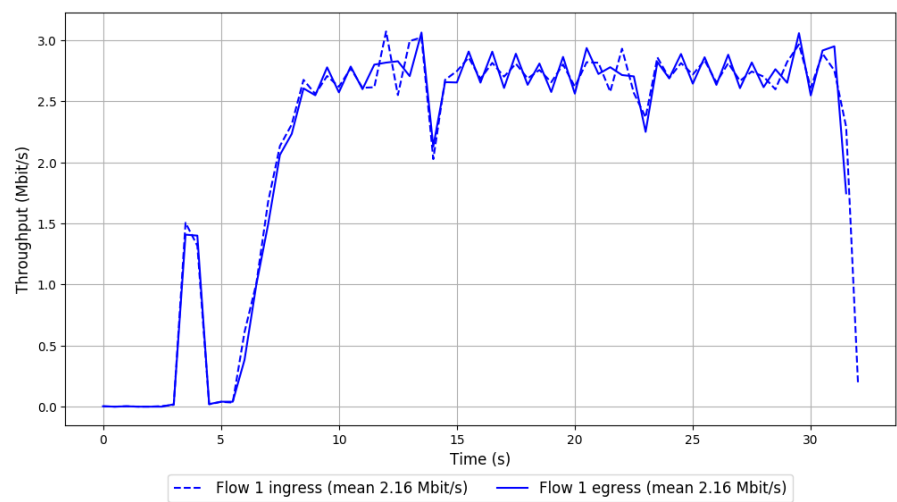
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 111.934 ms

Loss rate: 0.84%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-09-17 21:28:58

End at: 2017-09-17 21:29:28

Below is generated by plot.py at 2017-09-18 01:45:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 111.268 ms

Loss rate: 0.70%

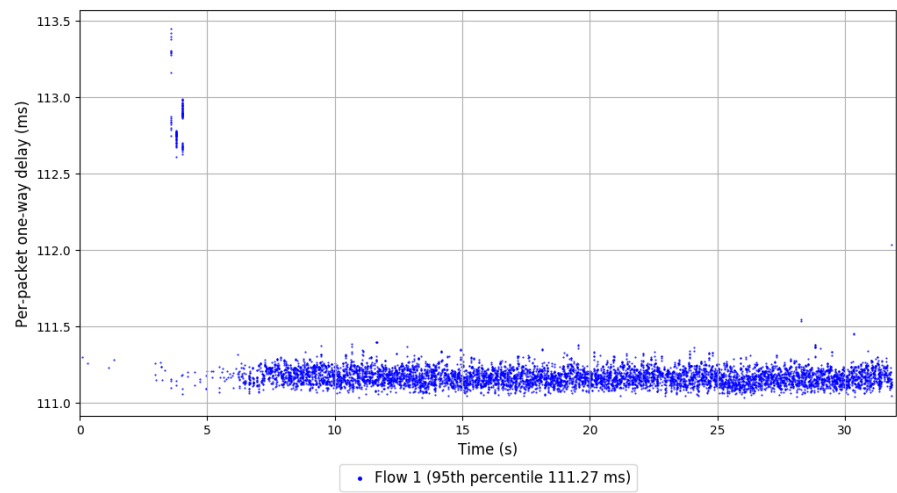
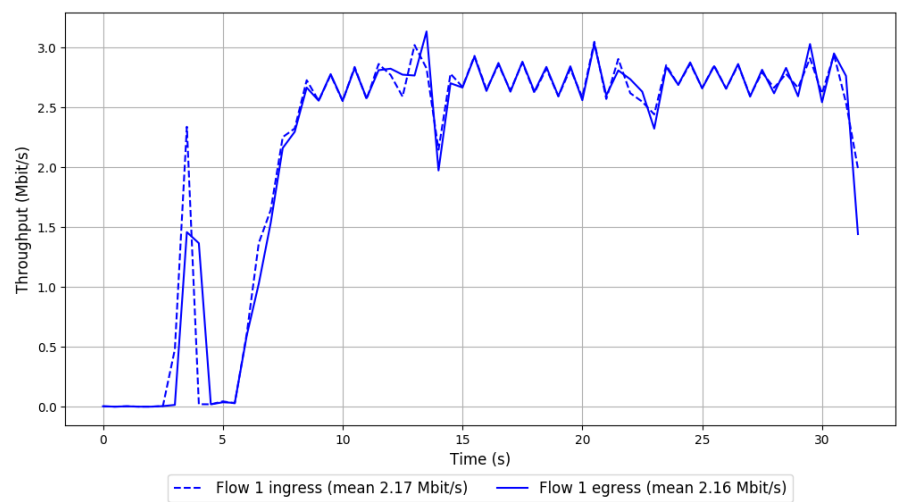
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 111.268 ms

Loss rate: 0.70%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-09-17 21:40:57

End at: 2017-09-17 21:41:27

Below is generated by plot.py at 2017-09-18 01:45:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

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

Loss rate: 0.86%

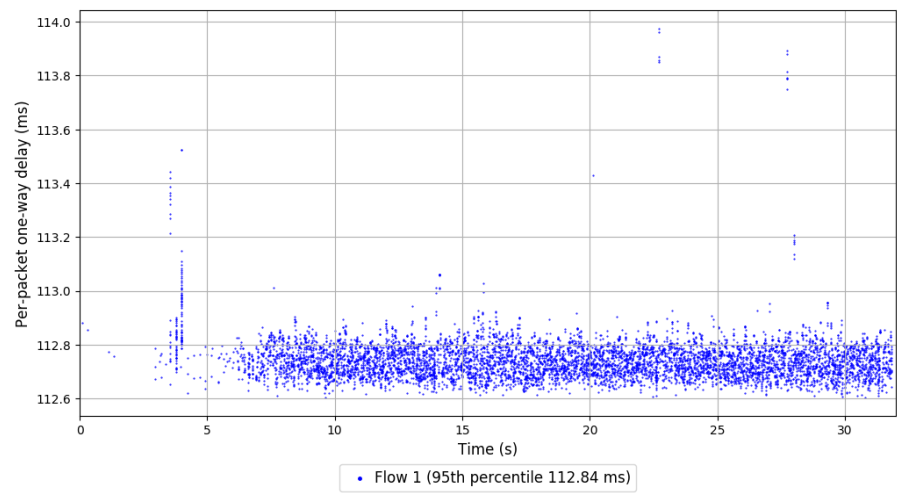
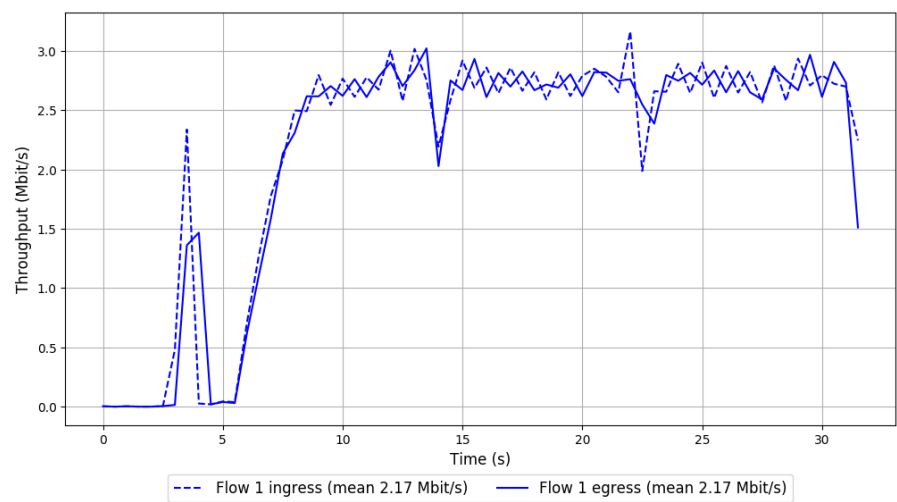
-- Flow 1:

Average throughput: 2.17 Mbit/s

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

Loss rate: 0.86%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-09-17 21:53:06

End at: 2017-09-17 21:53:36

Below is generated by plot.py at 2017-09-18 01:45:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 112.346 ms

Loss rate: 0.70%

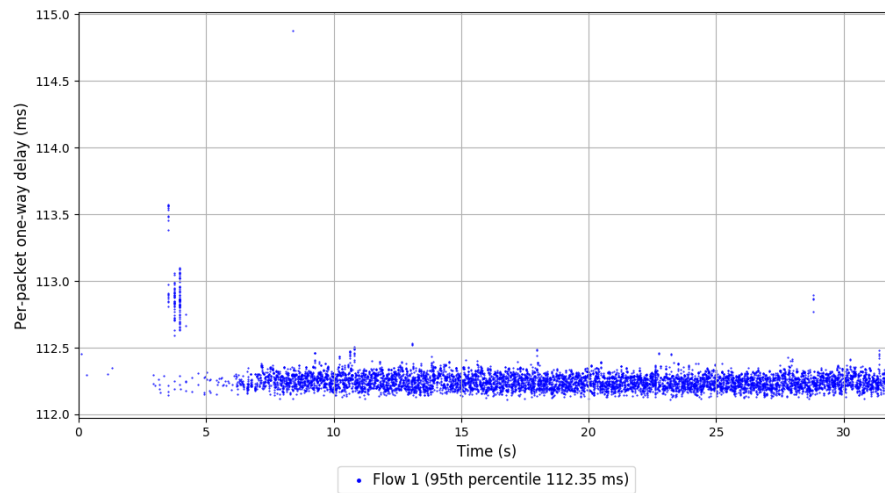
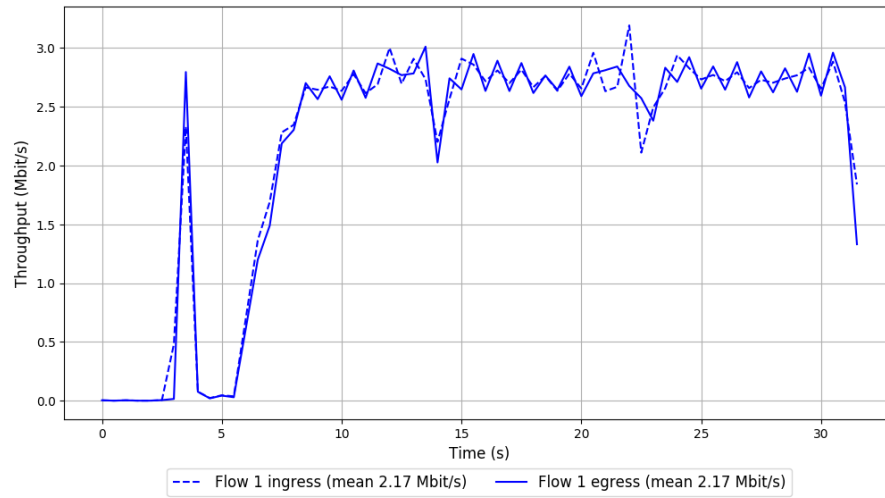
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 112.346 ms

Loss rate: 0.70%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-09-17 22:05:07

End at: 2017-09-17 22:05:37

Below is generated by plot.py at 2017-09-18 01:45:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.345 ms

Loss rate: 0.83%

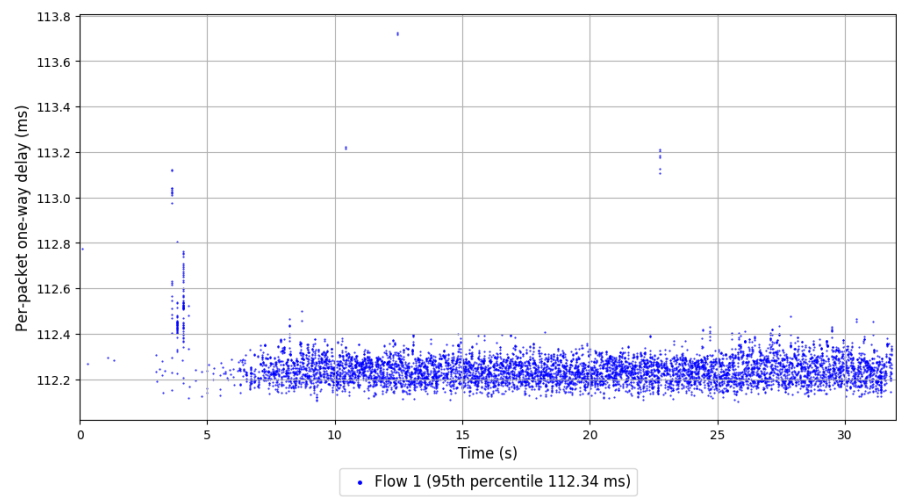
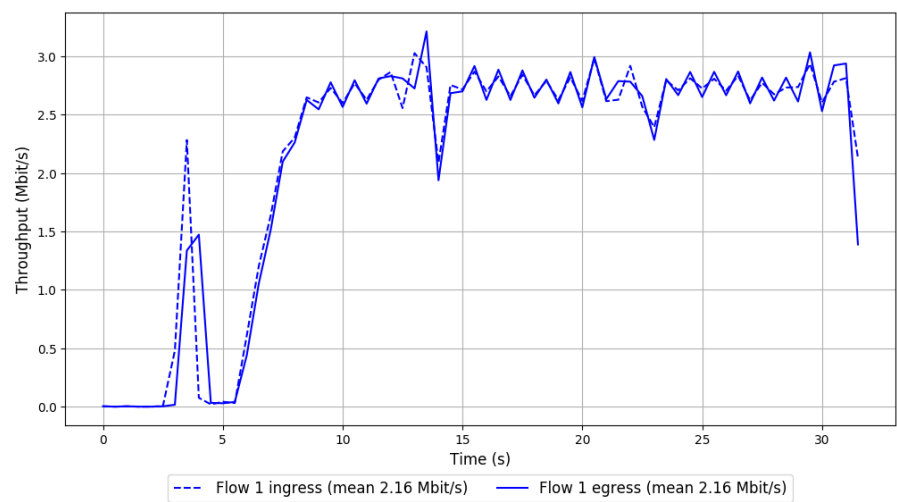
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 112.345 ms

Loss rate: 0.83%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-09-17 22:17:20

End at: 2017-09-17 22:17:50

Below is generated by plot.py at 2017-09-18 01:45:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 110.873 ms

Loss rate: 0.81%

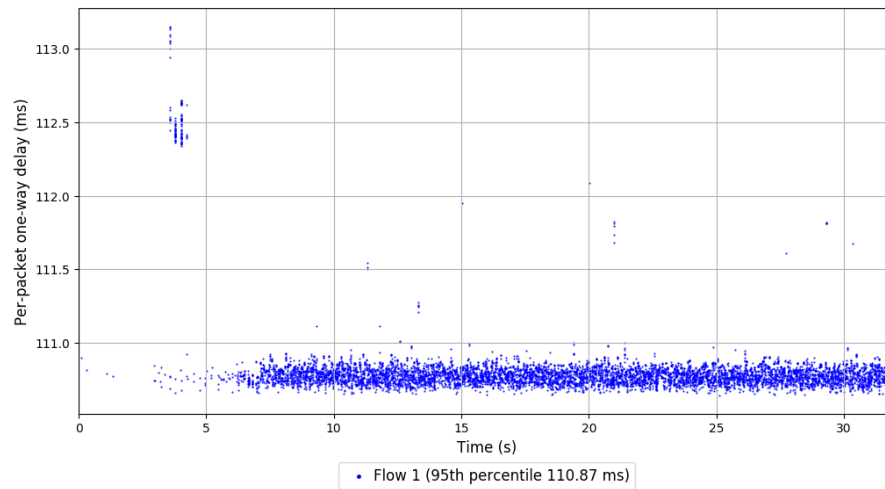
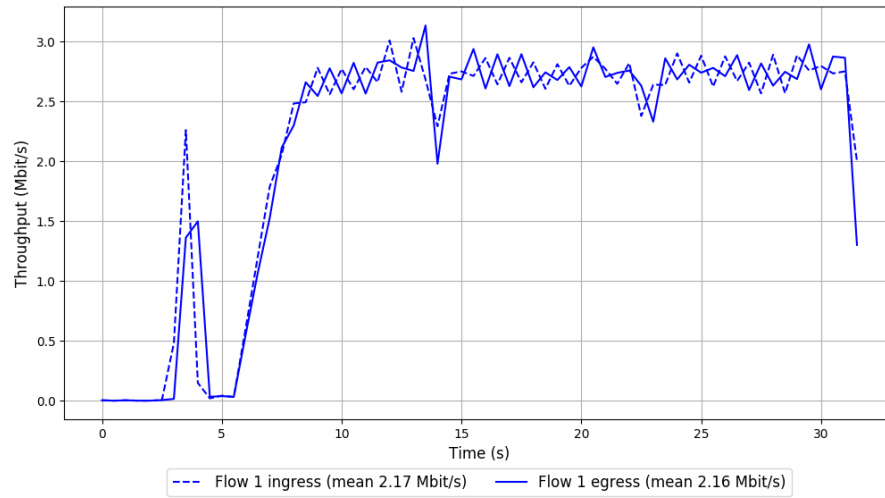
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 110.873 ms

Loss rate: 0.81%

Run 8: Report of WebRTC media — Data Link

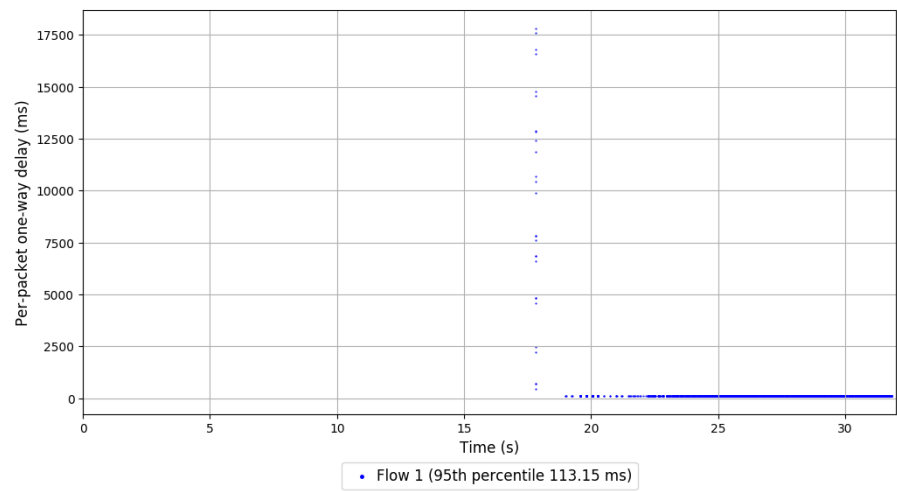
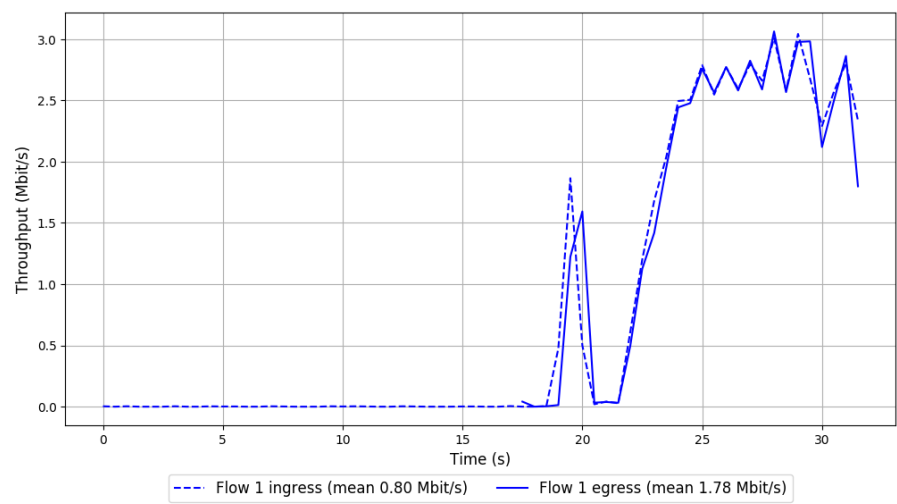


Run 9: Statistics of WebRTC media

Start at: 2017-09-17 22:29:17

End at: 2017-09-17 22:29:47

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-09-17 22:41:12

End at: 2017-09-17 22:41:42

Below is generated by plot.py at 2017-09-18 01:45:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.111 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.111 ms

Loss rate: 0.68%

Run 10: Report of WebRTC media — Data Link

