

Pantheon Report

Generated at 2017-08-11 10:11:51 (UTC).

Data path: GCE Sydney Ethernet (*remote*) → GCE Iowa Ethernet (*local*).

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

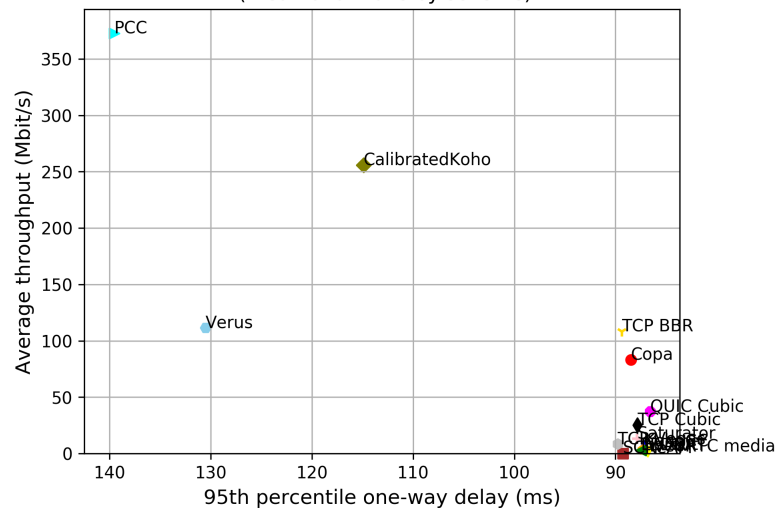
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

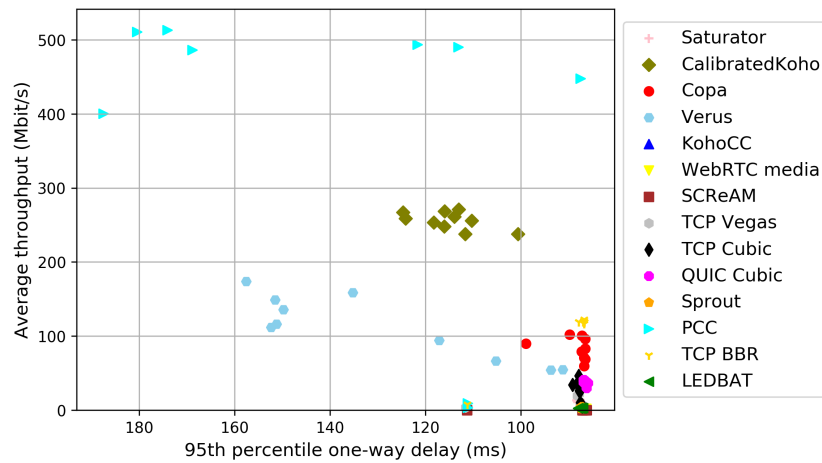
Git summary:

```
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE Sydney Ethernet to GCE Iowa 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	108.35	89.37	2.10
CalibratedKoho	10	255.95	114.89	1.98
Copa	9	83.35	88.50	0.56
TCP Cubic	10	25.37	87.83	1.10
KohoCC	10	6.68	87.20	1.10
LEDBAT	10	2.83	87.50	1.59
PCC	9	372.76	139.52	10.26
QUIC Cubic	9	37.37	86.60	0.81
Saturator	10	13.19	87.89	2.30
SCReAM	10	0.22	89.28	0.51
Sprout	10	3.45	87.29	2.88
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	10	8.41	89.80	1.19
Verus	10	111.53	130.51	8.79
WebRTC media	10	2.00	86.80	0.76

Run 1: Statistics of TCP BBR

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

End at: 2017-08-11 05:43:41

Below is generated by plot.py at 2017-08-11 09:52:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.84 Mbit/s

95th percentile per-packet one-way delay: 86.775 ms

Loss rate: 0.68%

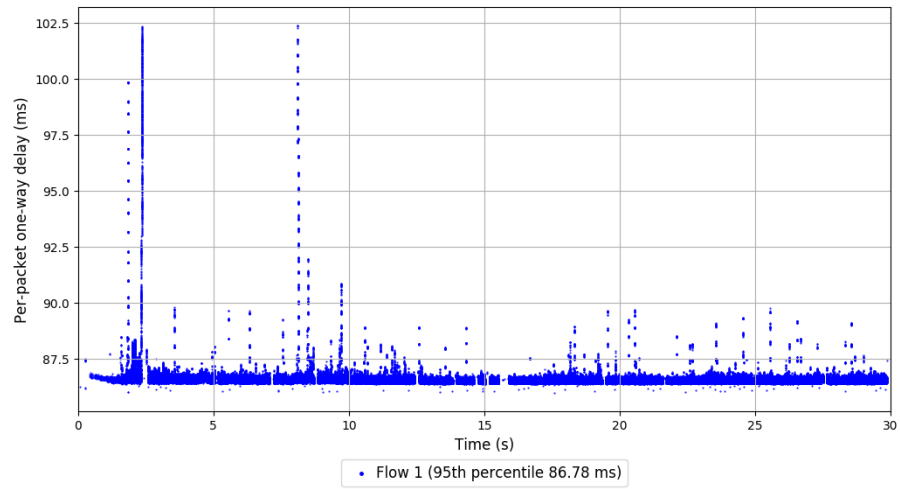
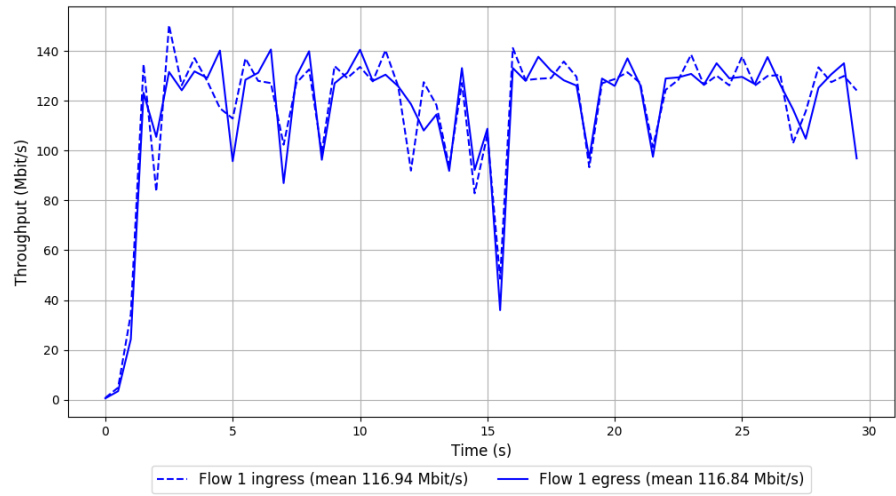
-- Flow 1:

Average throughput: 116.84 Mbit/s

95th percentile per-packet one-way delay: 86.775 ms

Loss rate: 0.68%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-11 05:54:18

End at: 2017-08-11 05:54:48

Below is generated by plot.py at 2017-08-11 09:52:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.62 Mbit/s

95th percentile per-packet one-way delay: 86.776 ms

Loss rate: 0.63%

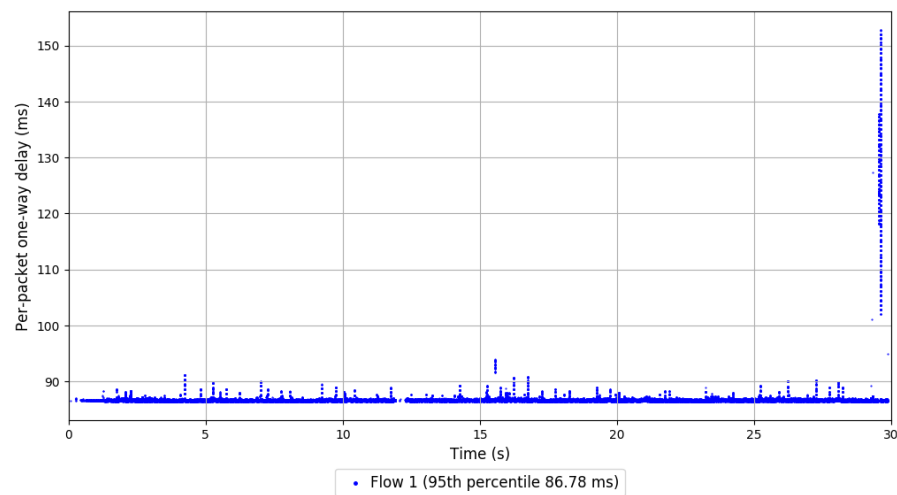
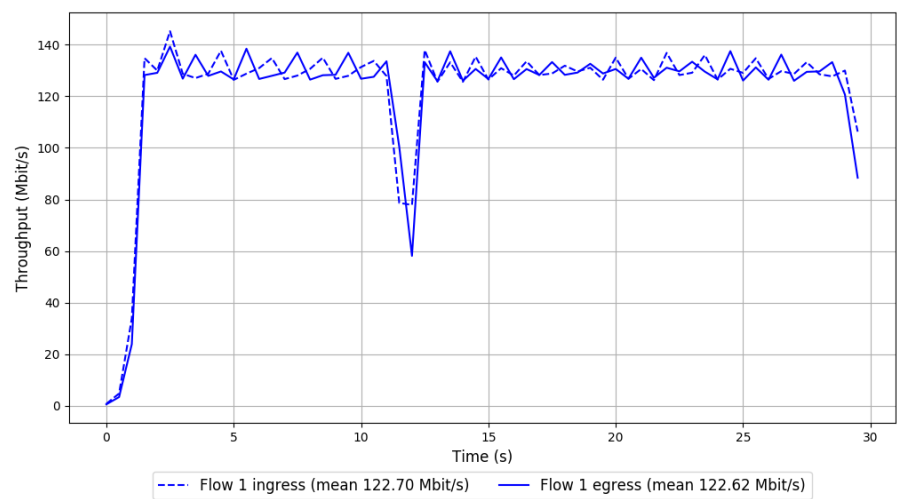
-- Flow 1:

Average throughput: 122.62 Mbit/s

95th percentile per-packet one-way delay: 86.776 ms

Loss rate: 0.63%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-11 06:05:21

End at: 2017-08-11 06:05:51

Below is generated by plot.py at 2017-08-11 09:53:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.84 Mbit/s

95th percentile per-packet one-way delay: 86.749 ms

Loss rate: 0.64%

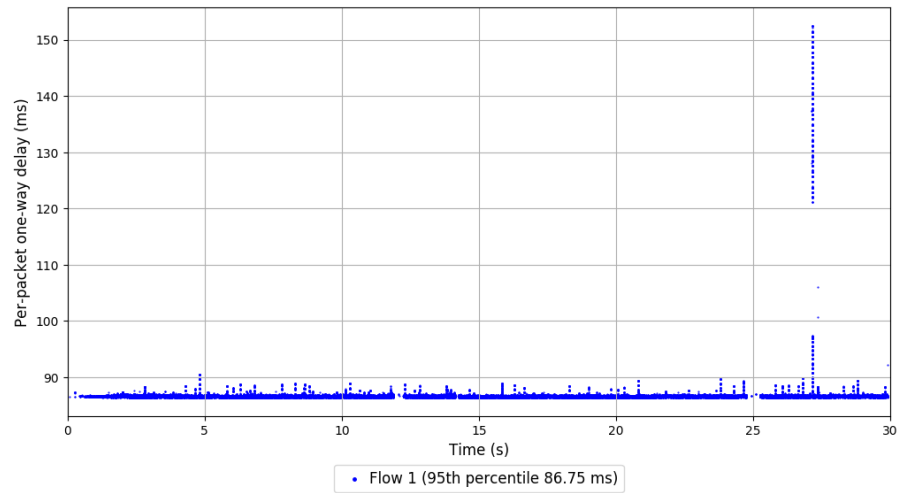
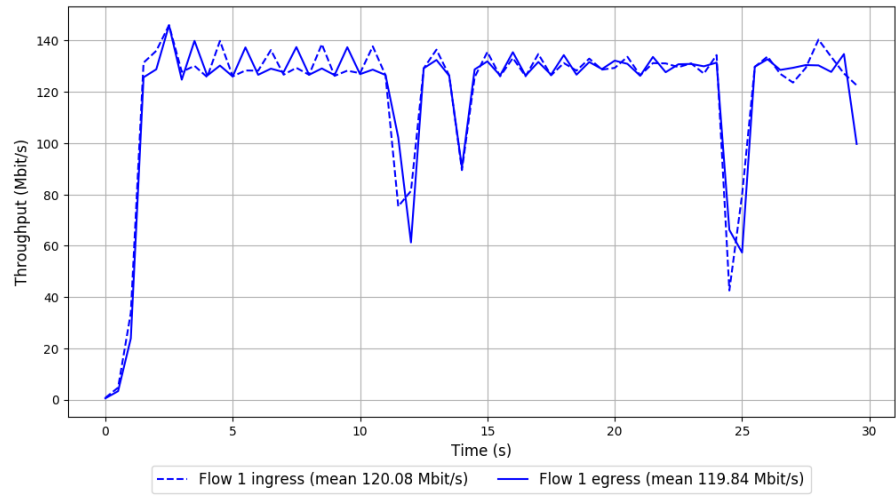
-- Flow 1:

Average throughput: 119.84 Mbit/s

95th percentile per-packet one-way delay: 86.749 ms

Loss rate: 0.64%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-11 06:16:25

End at: 2017-08-11 06:16:55

Below is generated by plot.py at 2017-08-11 09:53:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.84 Mbit/s

95th percentile per-packet one-way delay: 86.761 ms

Loss rate: 0.65%

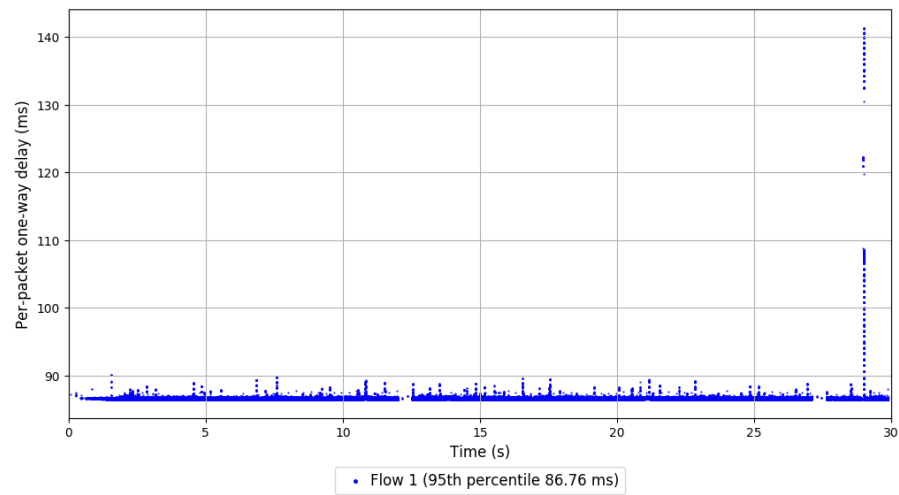
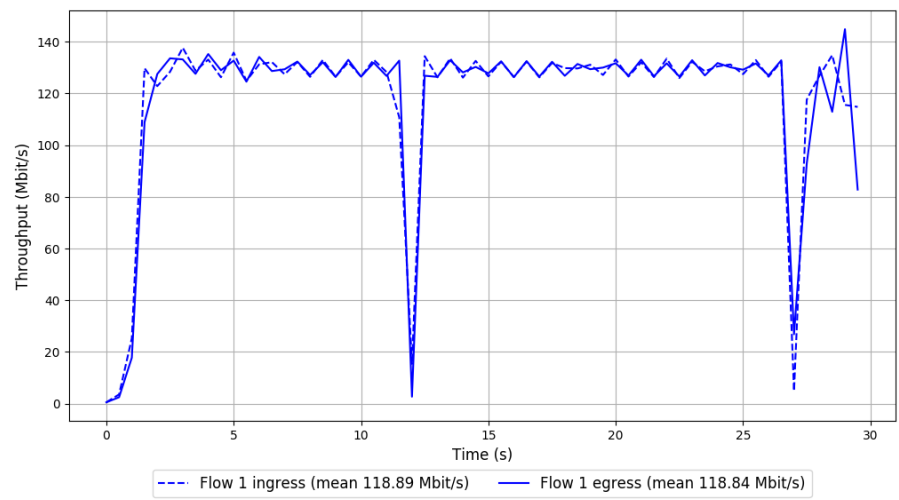
-- Flow 1:

Average throughput: 118.84 Mbit/s

95th percentile per-packet one-way delay: 86.761 ms

Loss rate: 0.65%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-11 06:27:21

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

Below is generated by plot.py at 2017-08-11 09:53:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.73 Mbit/s

95th percentile per-packet one-way delay: 86.781 ms

Loss rate: 0.65%

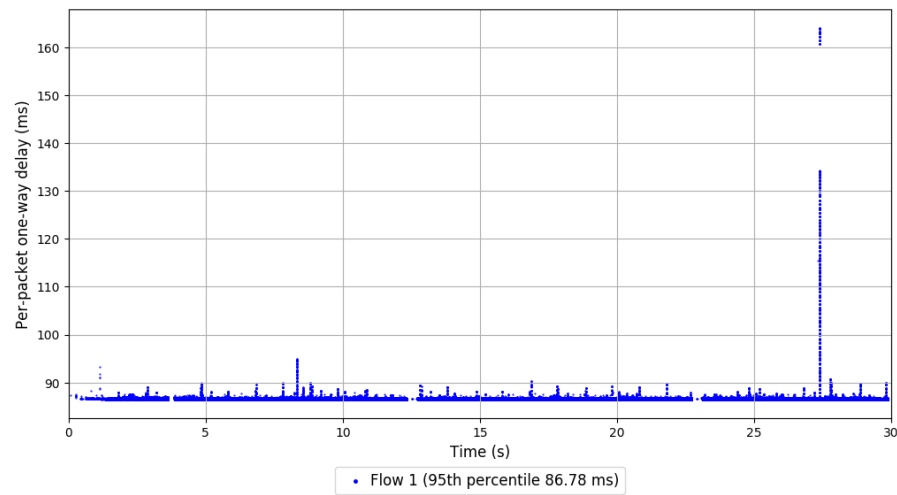
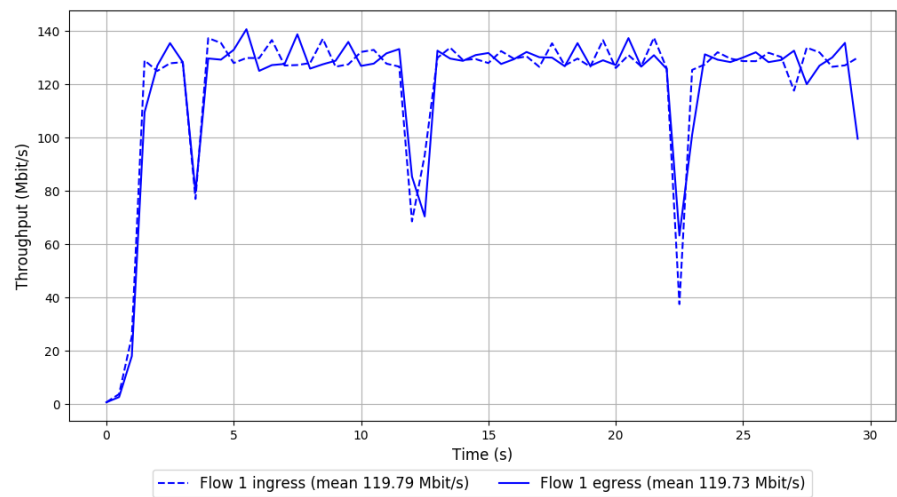
-- Flow 1:

Average throughput: 119.73 Mbit/s

95th percentile per-packet one-way delay: 86.781 ms

Loss rate: 0.65%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

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

End at: 2017-08-11 06:38:42

Below is generated by plot.py at 2017-08-11 09:53:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.32 Mbit/s

95th percentile per-packet one-way delay: 87.932 ms

Loss rate: 0.66%

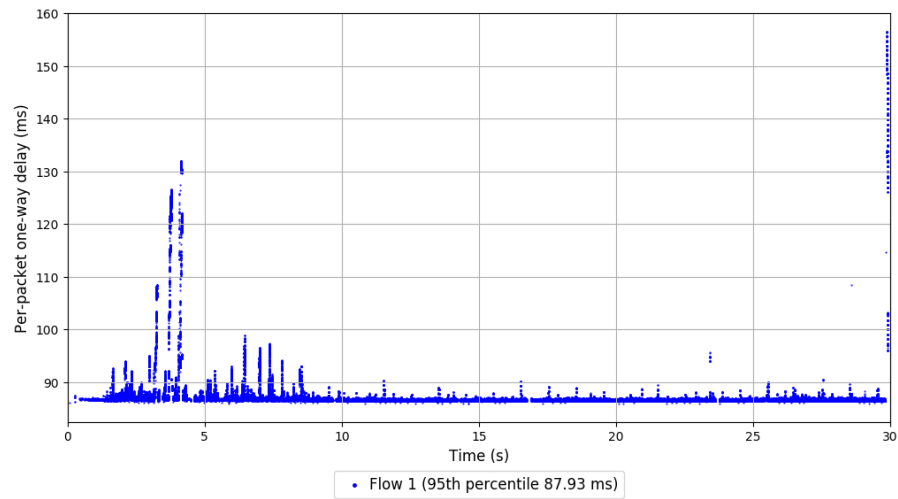
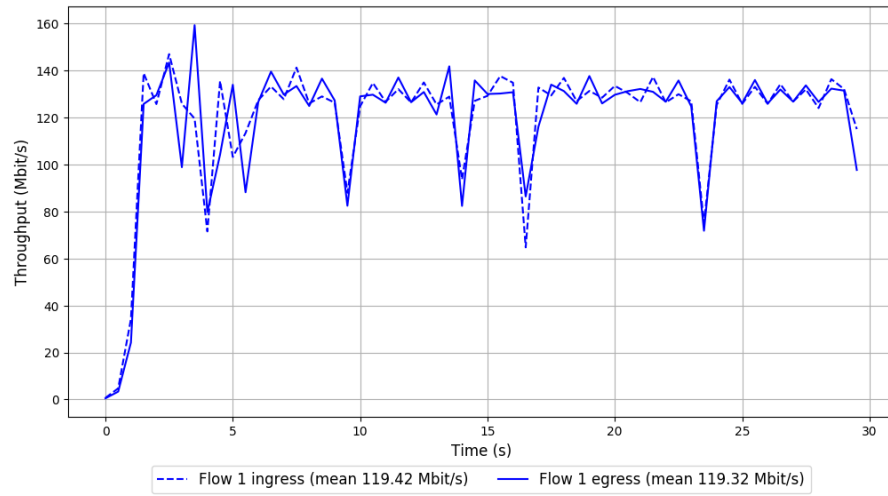
-- Flow 1:

Average throughput: 119.32 Mbit/s

95th percentile per-packet one-way delay: 87.932 ms

Loss rate: 0.66%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-11 06:48:59

End at: 2017-08-11 06:49:29

Below is generated by plot.py at 2017-08-11 09:53:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 111.238 ms

Loss rate: 15.00%

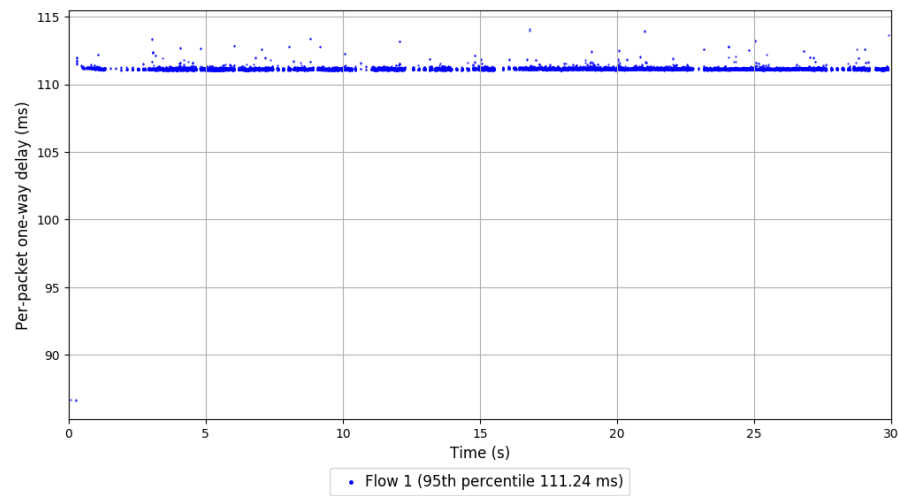
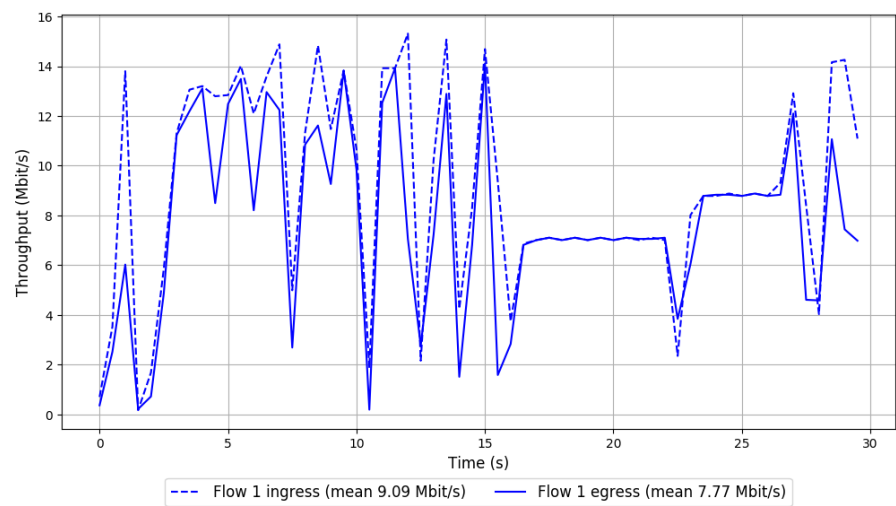
-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 111.238 ms

Loss rate: 15.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-11 06:59:33

End at: 2017-08-11 07:00:03

Below is generated by plot.py at 2017-08-11 09:53:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.33 Mbit/s

95th percentile per-packet one-way delay: 87.026 ms

Loss rate: 0.69%

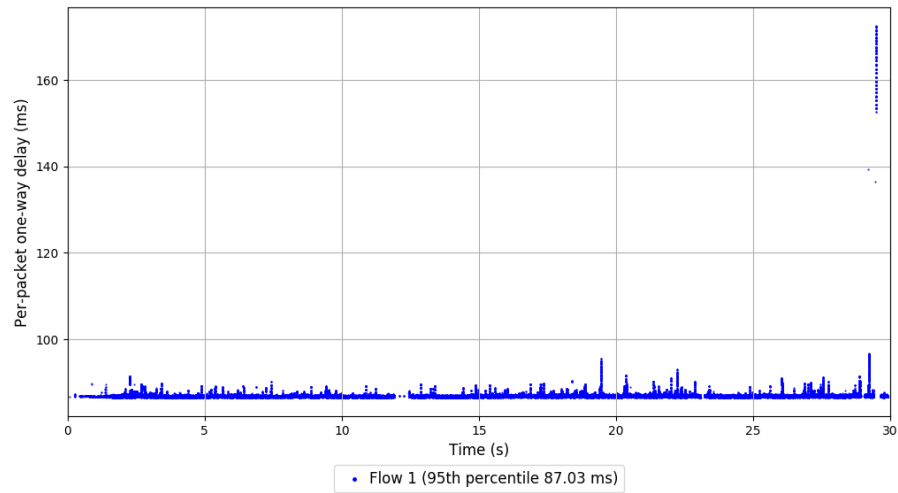
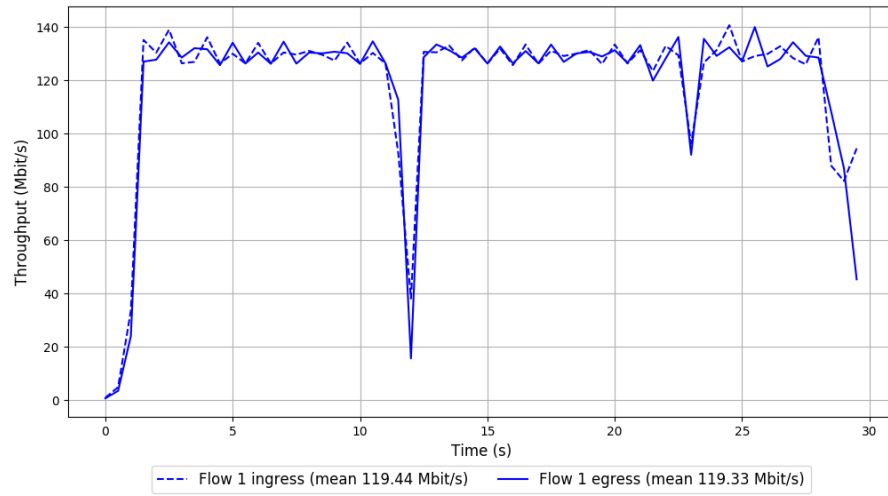
-- Flow 1:

Average throughput: 119.33 Mbit/s

95th percentile per-packet one-way delay: 87.026 ms

Loss rate: 0.69%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-11 07:10:16

End at: 2017-08-11 07:10:46

Below is generated by plot.py at 2017-08-11 09:53:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.76 Mbit/s

95th percentile per-packet one-way delay: 86.919 ms

Loss rate: 0.82%

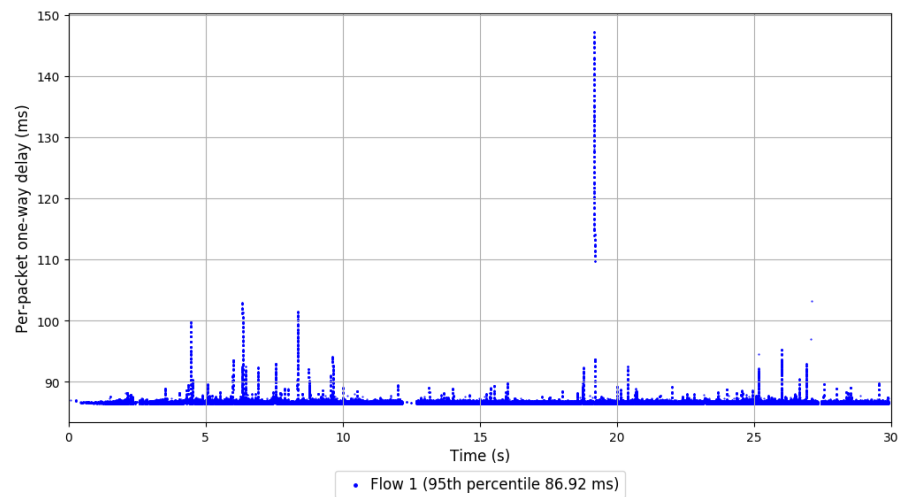
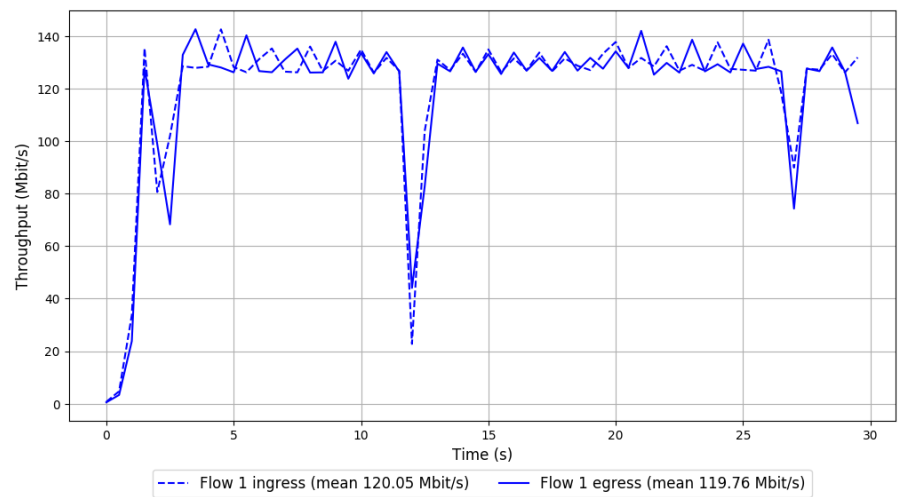
-- Flow 1:

Average throughput: 119.76 Mbit/s

95th percentile per-packet one-way delay: 86.919 ms

Loss rate: 0.82%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-11 07:21:13

End at: 2017-08-11 07:21:43

Below is generated by plot.py at 2017-08-11 09:54:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.44 Mbit/s

95th percentile per-packet one-way delay: 86.728 ms

Loss rate: 0.63%

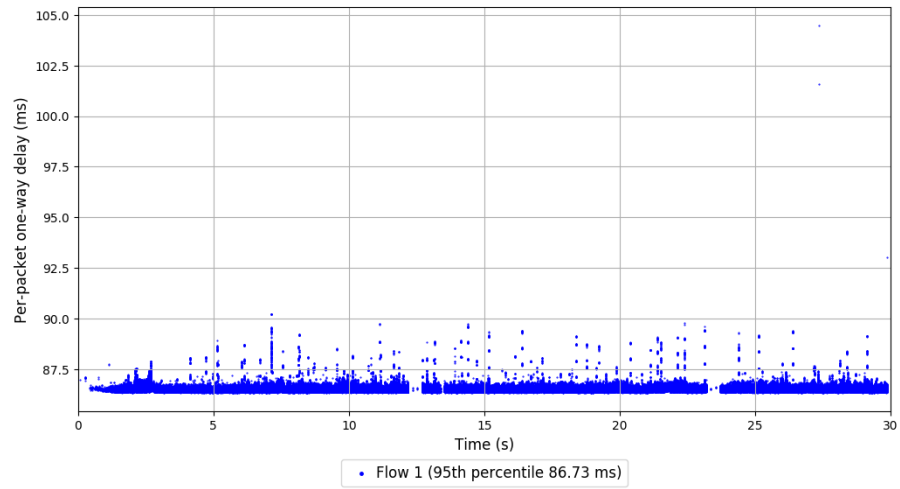
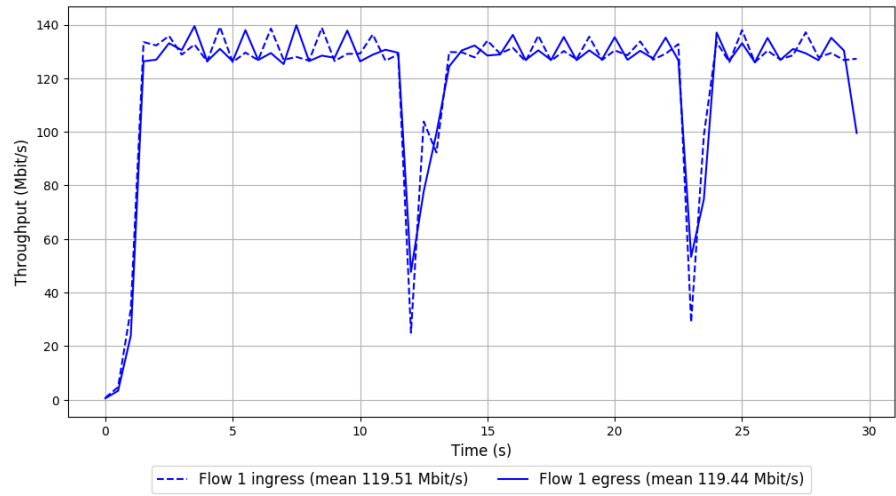
-- Flow 1:

Average throughput: 119.44 Mbit/s

95th percentile per-packet one-way delay: 86.728 ms

Loss rate: 0.63%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-11 05:37:25

End at: 2017-08-11 05:37:55

Below is generated by plot.py at 2017-08-11 09:54:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 258.62 Mbit/s

95th percentile per-packet one-way delay: 124.196 ms

Loss rate: 0.77%

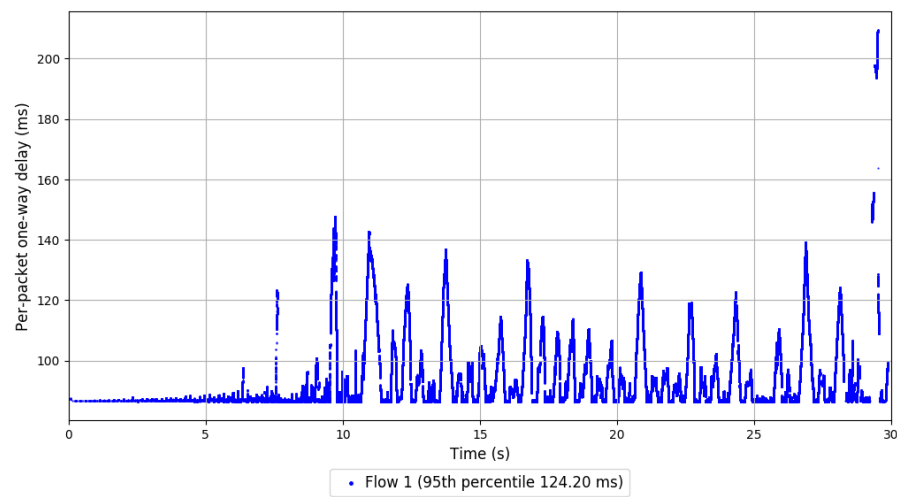
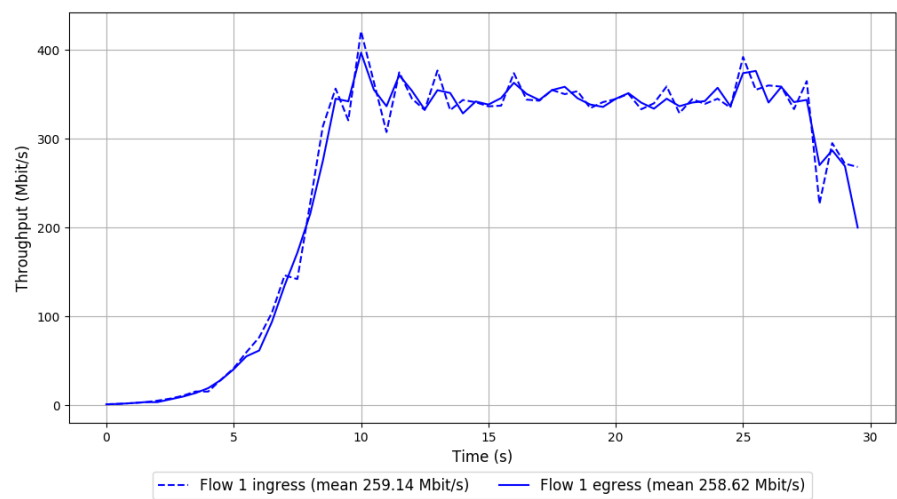
-- Flow 1:

Average throughput: 258.62 Mbit/s

95th percentile per-packet one-way delay: 124.196 ms

Loss rate: 0.77%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-11 05:48:39

End at: 2017-08-11 05:49:09

Below is generated by plot.py at 2017-08-11 09:55:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 255.73 Mbit/s

95th percentile per-packet one-way delay: 110.299 ms

Loss rate: 0.77%

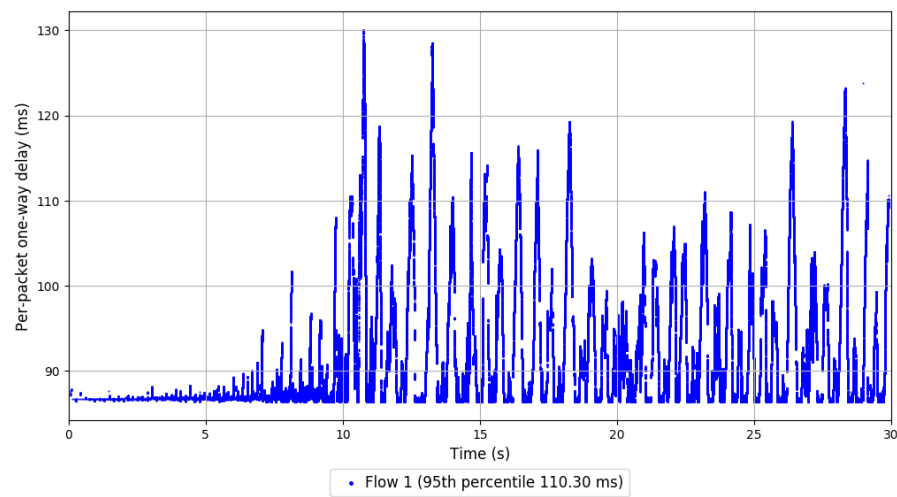
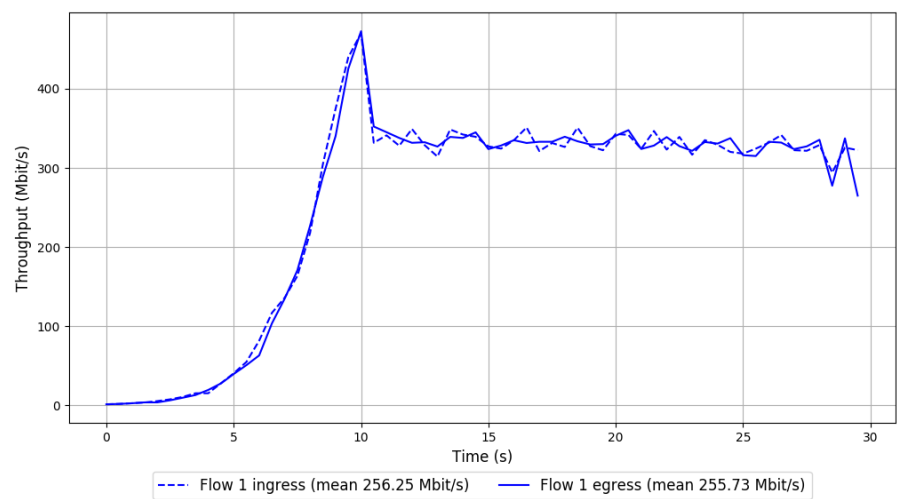
-- Flow 1:

Average throughput: 255.73 Mbit/s

95th percentile per-packet one-way delay: 110.299 ms

Loss rate: 0.77%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-11 05:59:47

End at: 2017-08-11 06:00:17

Below is generated by plot.py at 2017-08-11 09:55:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 238.01 Mbit/s

95th percentile per-packet one-way delay: 111.729 ms

Loss rate: 7.50%

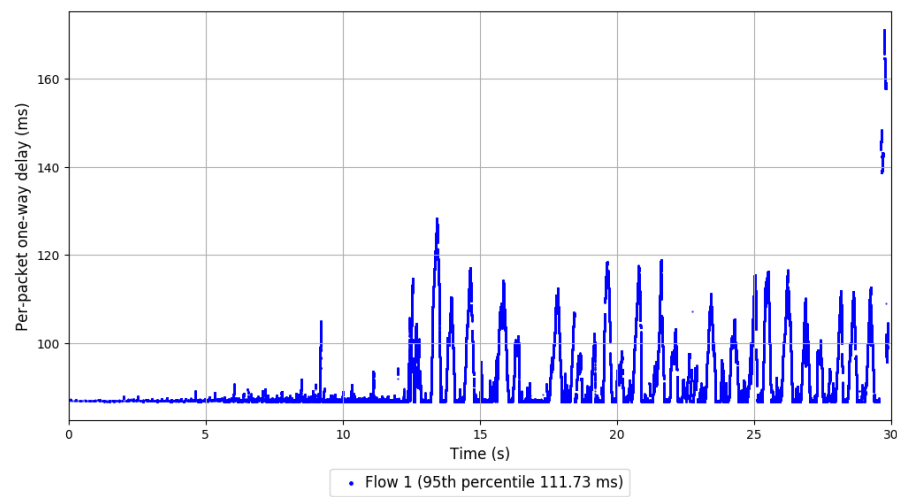
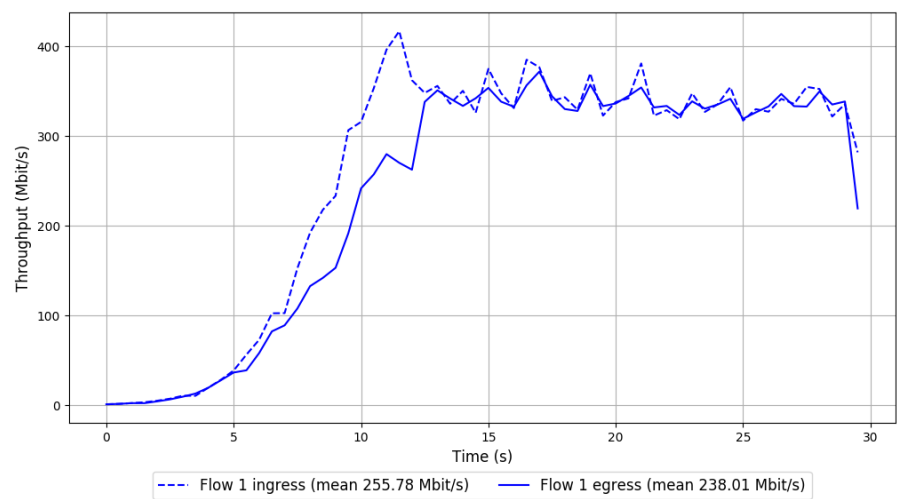
-- Flow 1:

Average throughput: 238.01 Mbit/s

95th percentile per-packet one-way delay: 111.729 ms

Loss rate: 7.50%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-11 06:10:47

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

Below is generated by plot.py at 2017-08-11 09:56:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 237.66 Mbit/s

95th percentile per-packet one-way delay: 100.664 ms

Loss rate: 4.80%

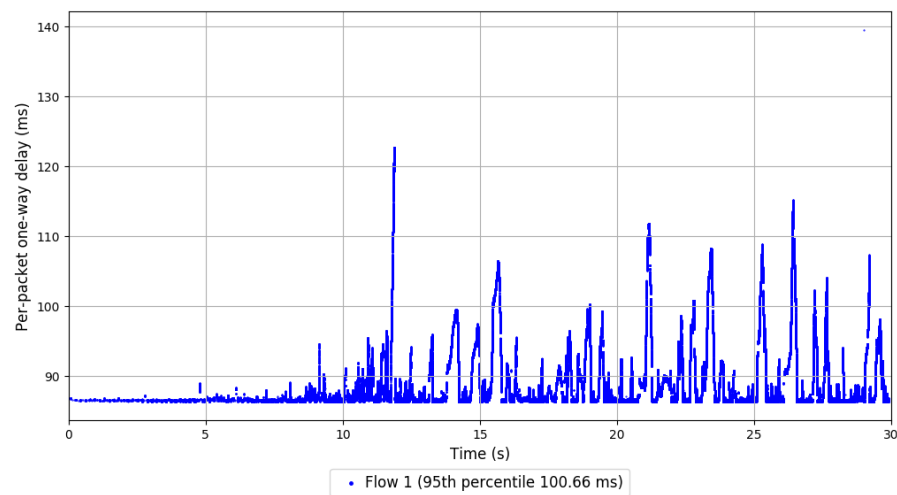
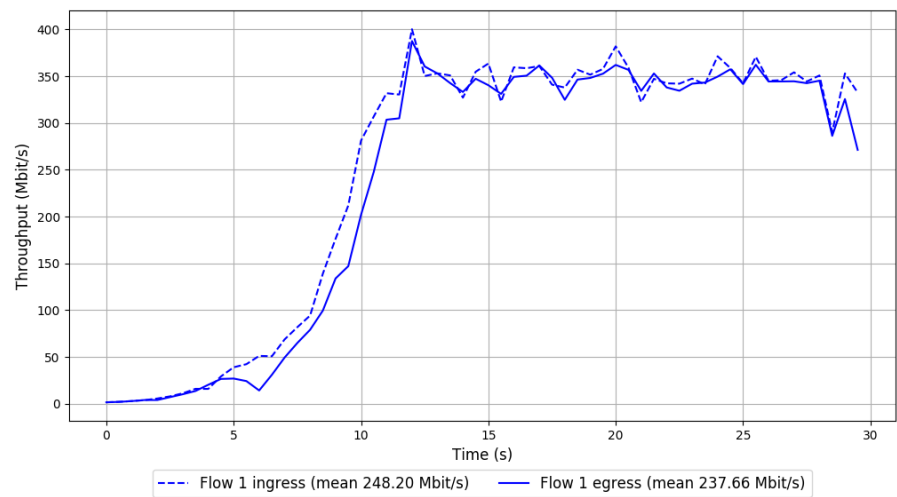
-- Flow 1:

Average throughput: 237.66 Mbit/s

95th percentile per-packet one-way delay: 100.664 ms

Loss rate: 4.80%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

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

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

Below is generated by plot.py at 2017-08-11 09:56:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 253.59 Mbit/s

95th percentile per-packet one-way delay: 118.289 ms

Loss rate: 1.53%

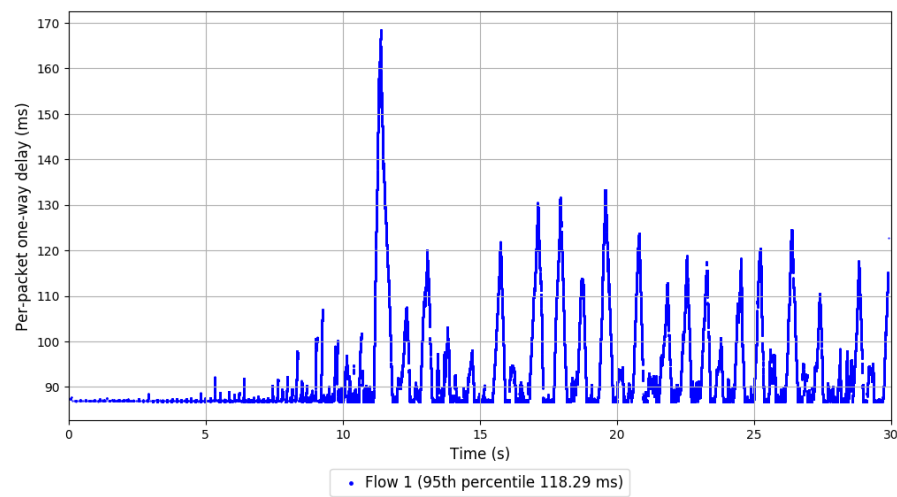
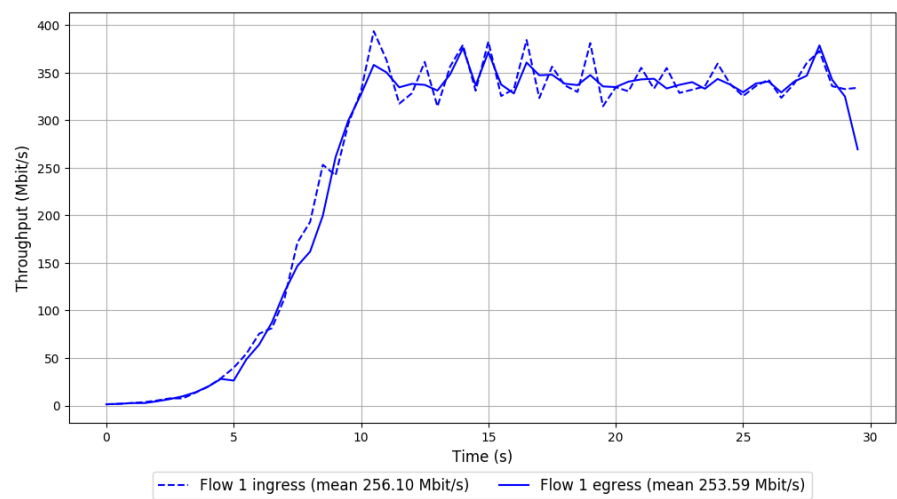
-- Flow 1:

Average throughput: 253.59 Mbit/s

95th percentile per-packet one-way delay: 118.289 ms

Loss rate: 1.53%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-11 06:32:47

End at: 2017-08-11 06:33:17

Below is generated by plot.py at 2017-08-11 09:57:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 270.97 Mbit/s

95th percentile per-packet one-way delay: 113.037 ms

Loss rate: 0.91%

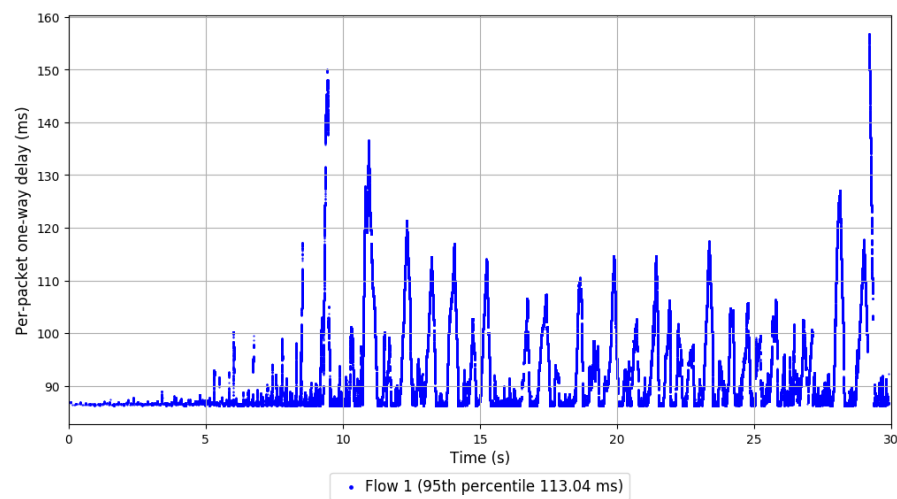
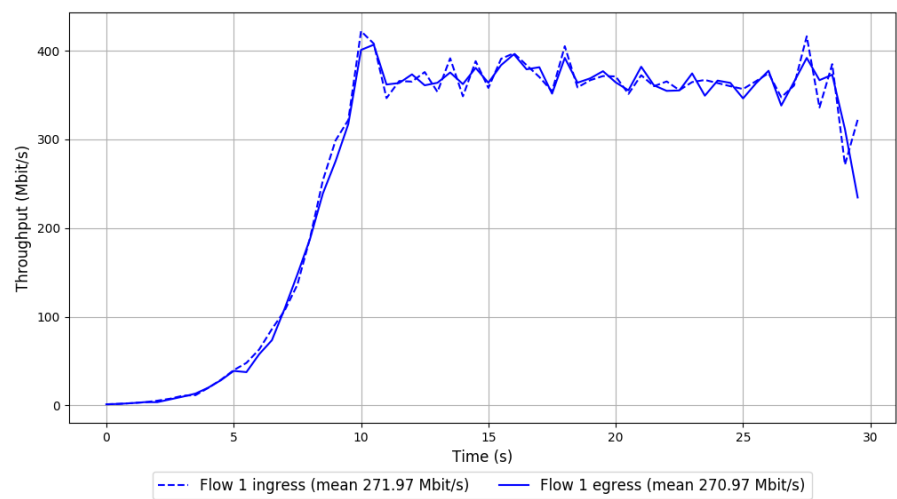
-- Flow 1:

Average throughput: 270.97 Mbit/s

95th percentile per-packet one-way delay: 113.037 ms

Loss rate: 0.91%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-11 06:43:40

End at: 2017-08-11 06:44:10

Below is generated by plot.py at 2017-08-11 09:57:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 261.15 Mbit/s

95th percentile per-packet one-way delay: 113.938 ms

Loss rate: 0.94%

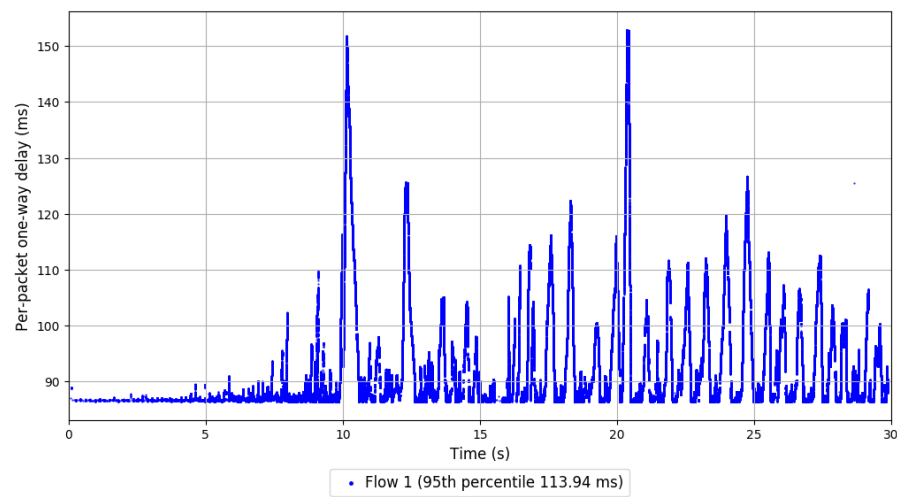
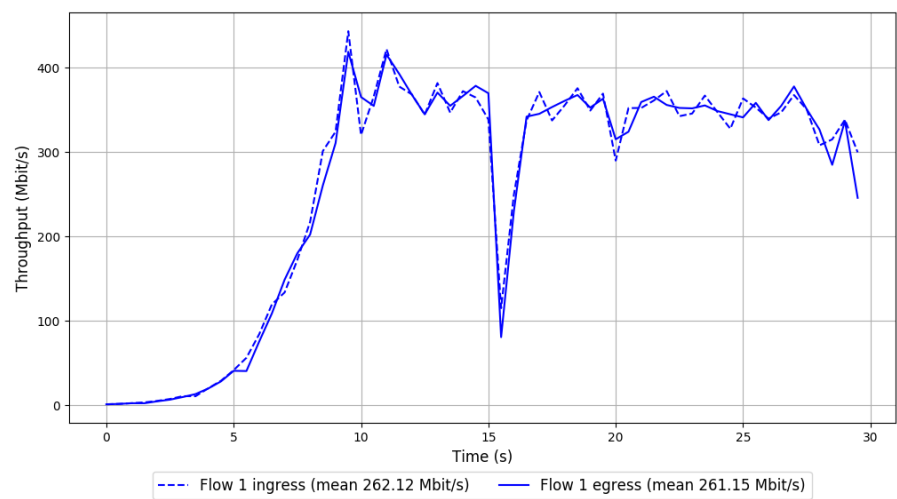
-- Flow 1:

Average throughput: 261.15 Mbit/s

95th percentile per-packet one-way delay: 113.938 ms

Loss rate: 0.94%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-11 06:54:20

End at: 2017-08-11 06:54:50

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 267.12 Mbit/s

95th percentile per-packet one-way delay: 124.750 ms

Loss rate: 0.95%

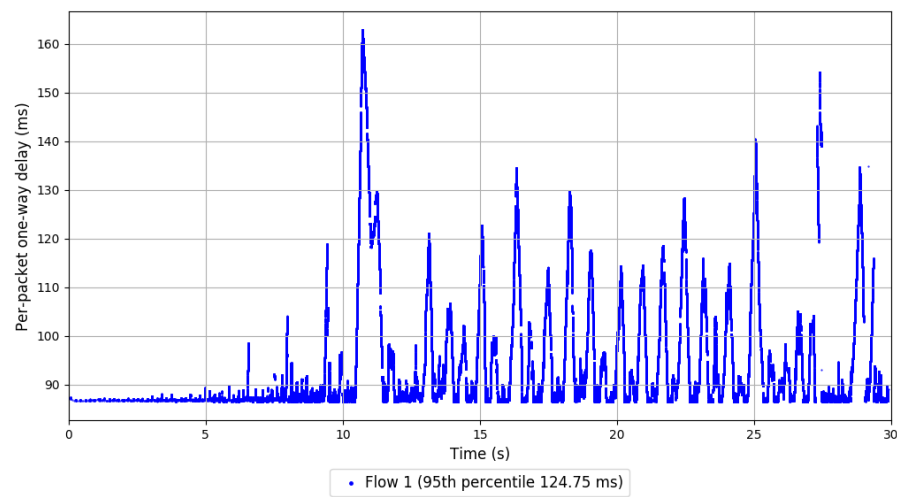
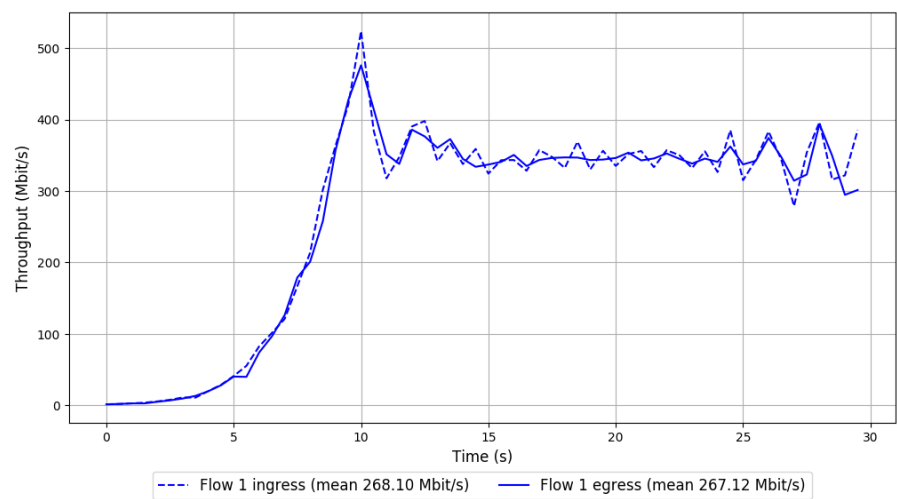
-- Flow 1:

Average throughput: 267.12 Mbit/s

95th percentile per-packet one-way delay: 124.750 ms

Loss rate: 0.95%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-11 07:05:00

End at: 2017-08-11 07:05:30

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 268.51 Mbit/s

95th percentile per-packet one-way delay: 115.979 ms

Loss rate: 0.86%

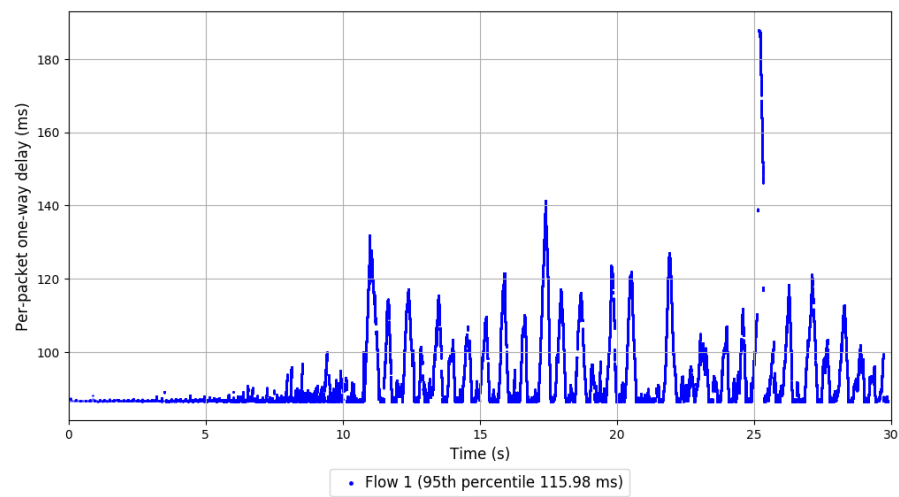
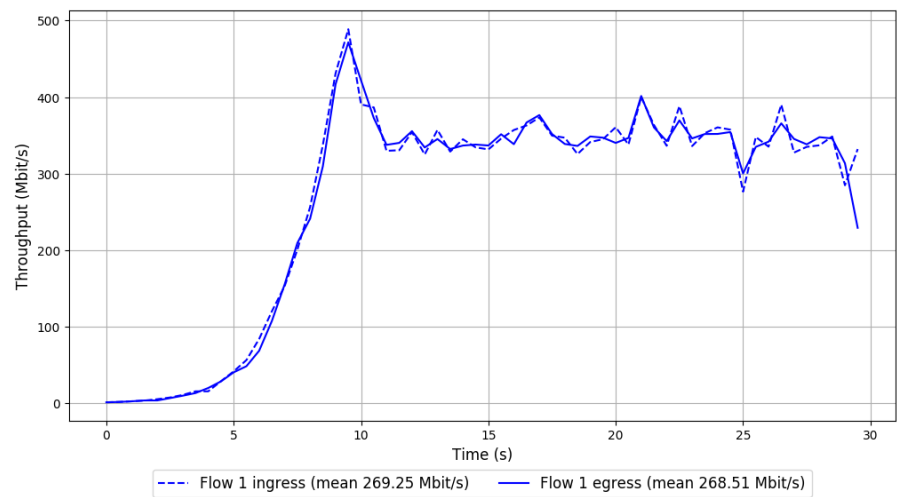
-- Flow 1:

Average throughput: 268.51 Mbit/s

95th percentile per-packet one-way delay: 115.979 ms

Loss rate: 0.86%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-11 07:15:41

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 248.15 Mbit/s

95th percentile per-packet one-way delay: 116.054 ms

Loss rate: 0.78%

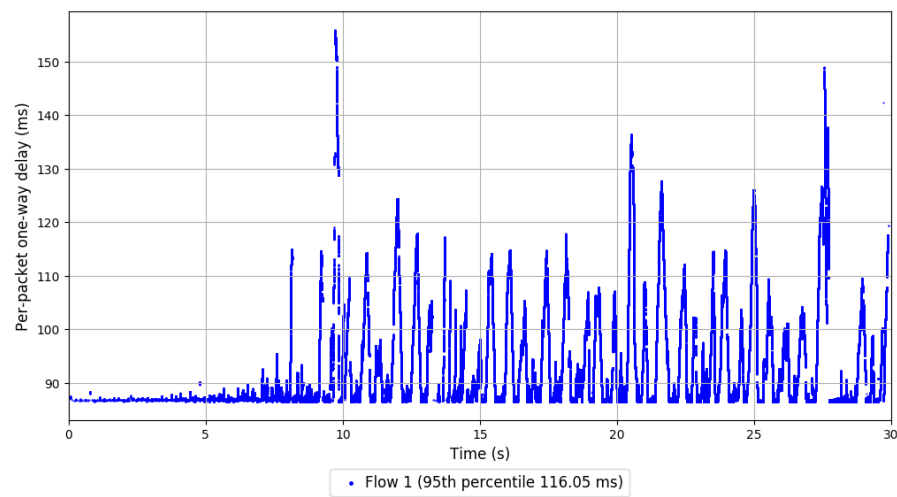
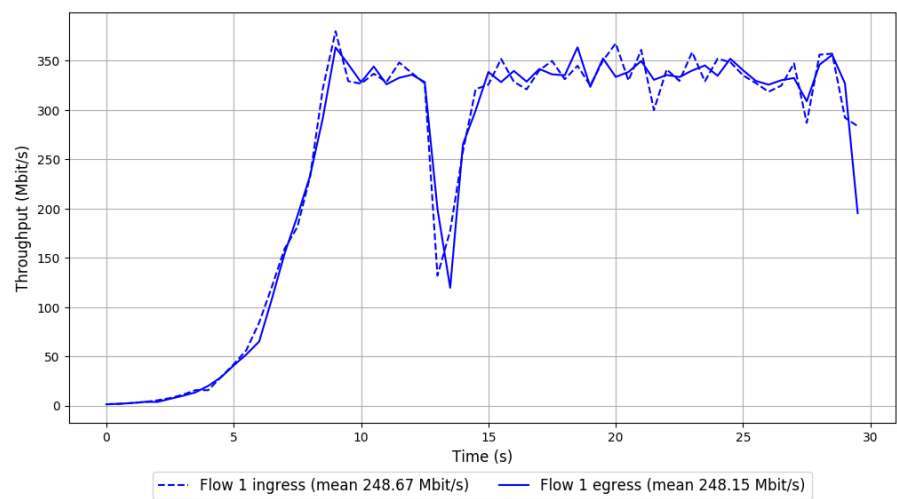
-- Flow 1:

Average throughput: 248.15 Mbit/s

95th percentile per-packet one-way delay: 116.054 ms

Loss rate: 0.78%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

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

End at: 2017-08-11 05:42:12

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.03 Mbit/s

95th percentile per-packet one-way delay: 86.570 ms

Loss rate: 0.56%

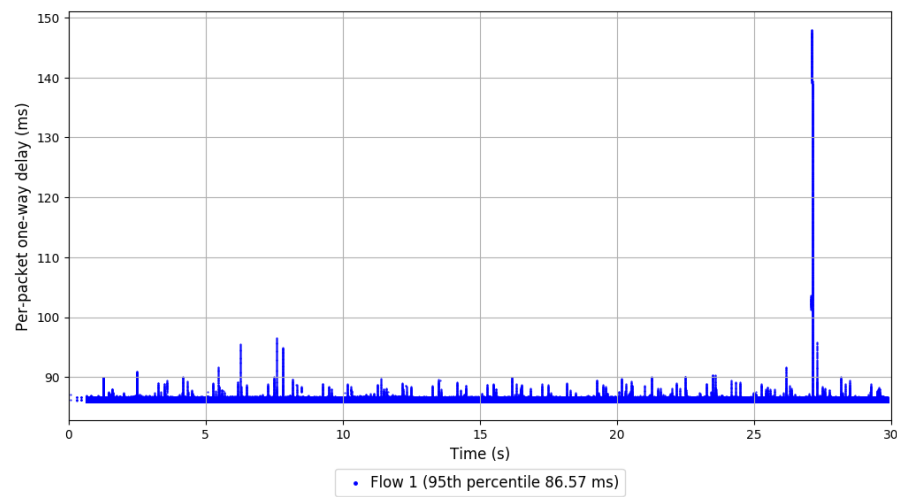
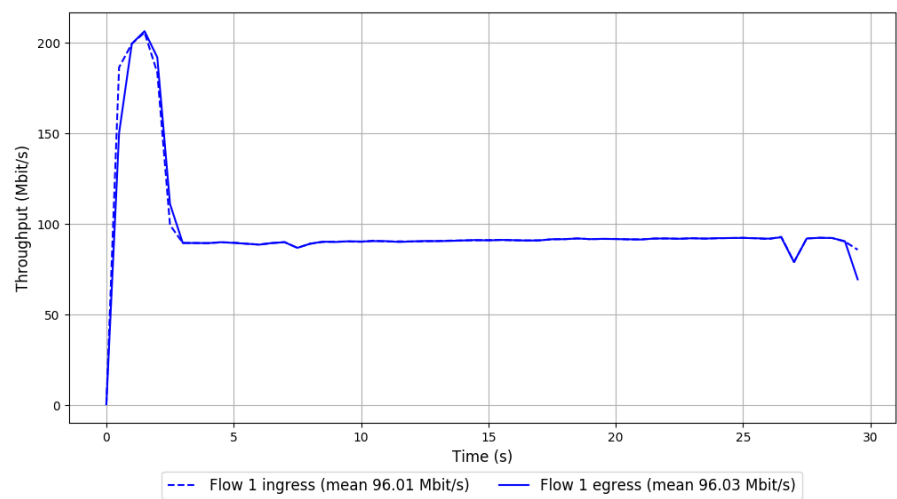
-- Flow 1:

Average throughput: 96.03 Mbit/s

95th percentile per-packet one-way delay: 86.570 ms

Loss rate: 0.56%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-11 05:52:49

End at: 2017-08-11 05:53:19

Below is generated by plot.py at 2017-08-11 09:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.07 Mbit/s

95th percentile per-packet one-way delay: 98.953 ms

Loss rate: 0.50%

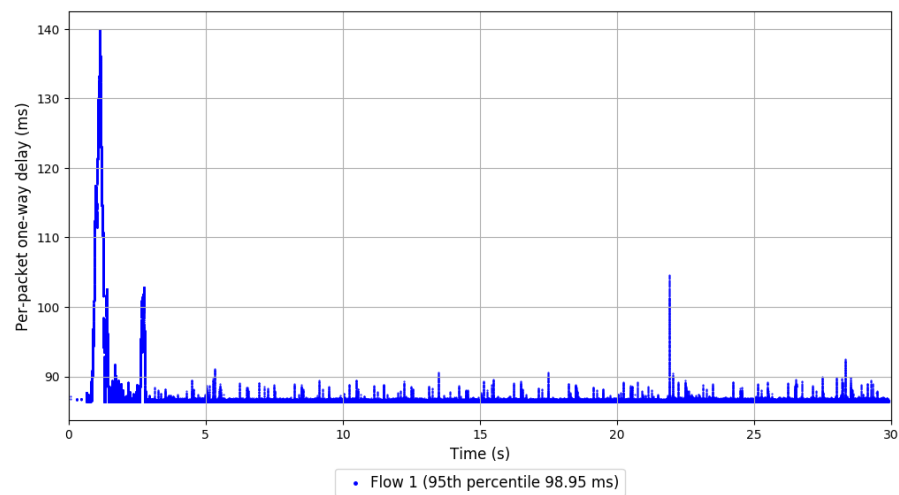
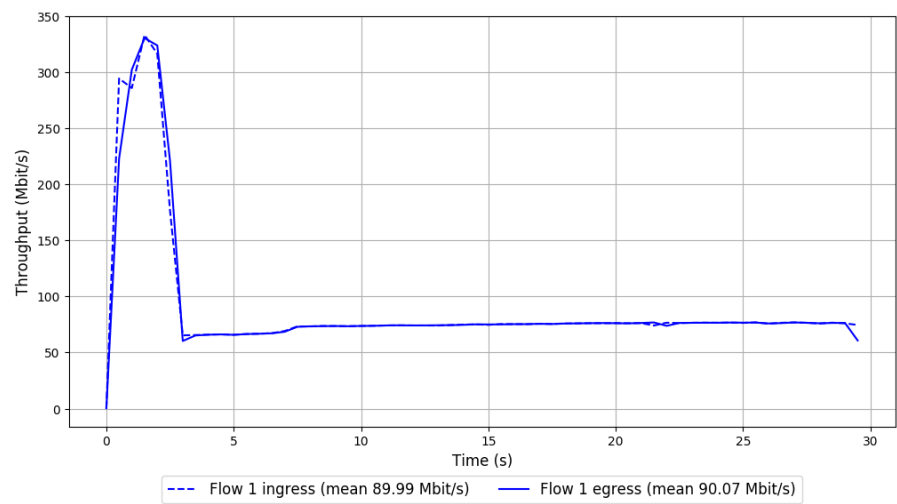
-- Flow 1:

Average throughput: 90.07 Mbit/s

95th percentile per-packet one-way delay: 98.953 ms

Loss rate: 0.50%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-11 06:03:55

End at: 2017-08-11 06:04:25

Below is generated by plot.py at 2017-08-11 09:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.76 Mbit/s

95th percentile per-packet one-way delay: 86.542 ms

Loss rate: 0.70%

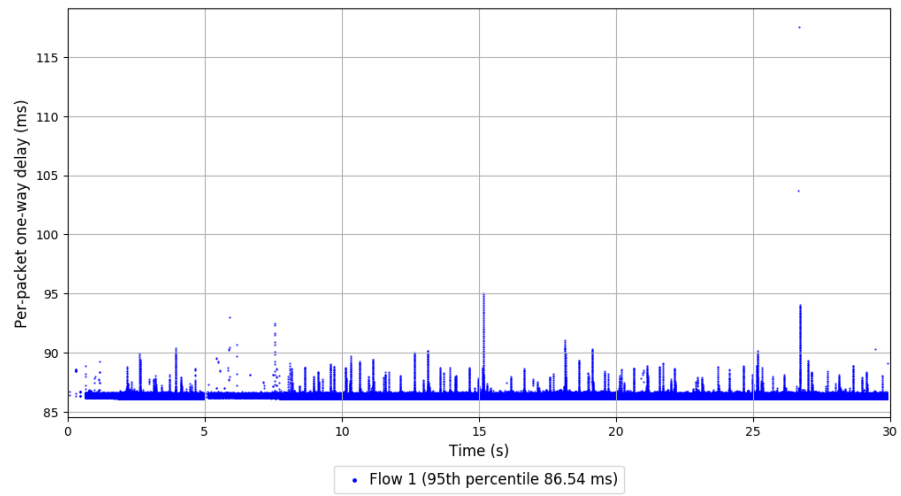
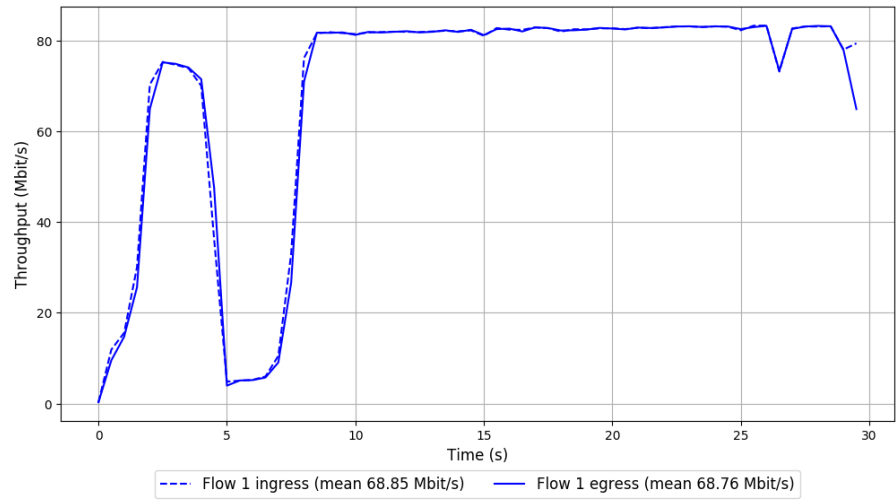
-- Flow 1:

Average throughput: 68.76 Mbit/s

95th percentile per-packet one-way delay: 86.542 ms

Loss rate: 0.70%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-11 06:14:55

End at: 2017-08-11 06:15:25

Below is generated by plot.py at 2017-08-11 09:59:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.16 Mbit/s

95th percentile per-packet one-way delay: 89.815 ms

Loss rate: 0.51%

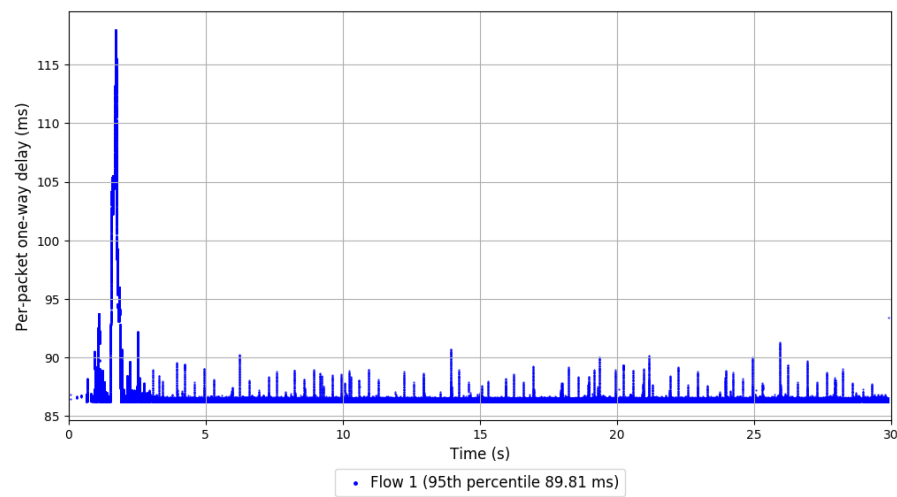
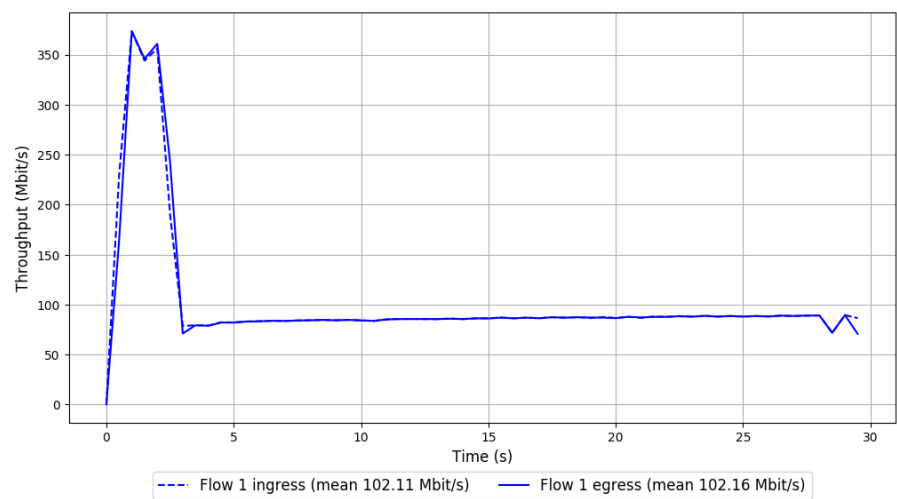
-- Flow 1:

Average throughput: 102.16 Mbit/s

95th percentile per-packet one-way delay: 89.815 ms

Loss rate: 0.51%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-11 06:25:51

End at: 2017-08-11 06:26:21

Below is generated by plot.py at 2017-08-11 09:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.71 Mbit/s

95th percentile per-packet one-way delay: 87.211 ms

Loss rate: 0.50%

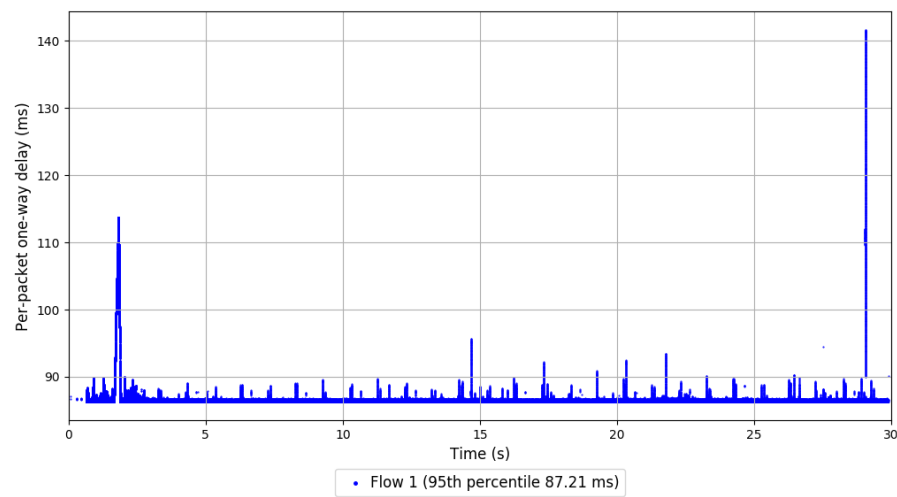
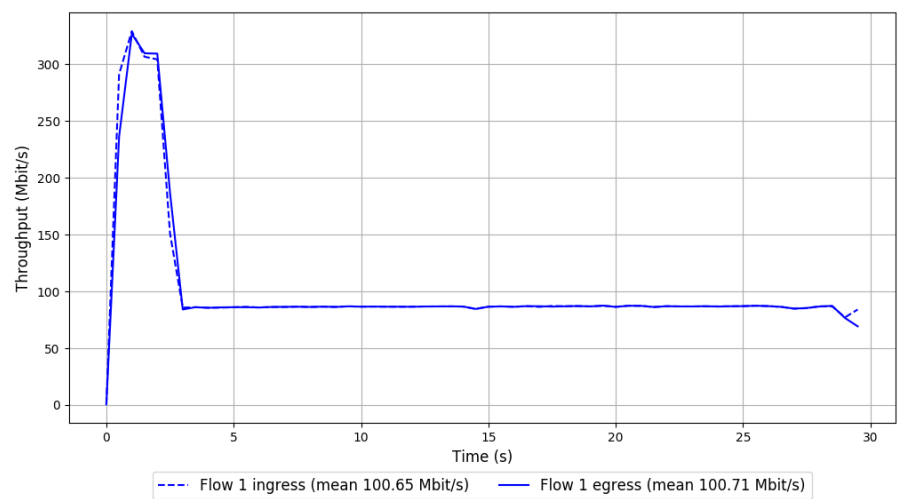
-- Flow 1:

Average throughput: 100.71 Mbit/s

95th percentile per-packet one-way delay: 87.211 ms

Loss rate: 0.50%

Run 5: Report of Copa — Data Link

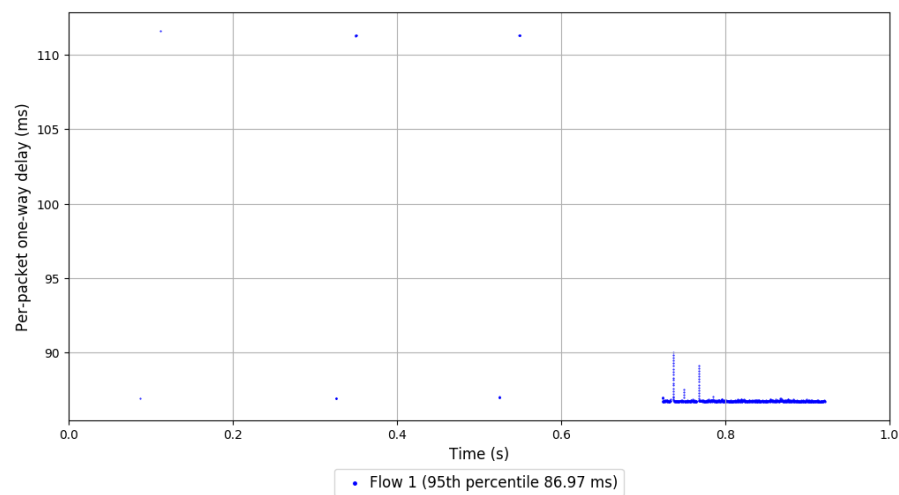
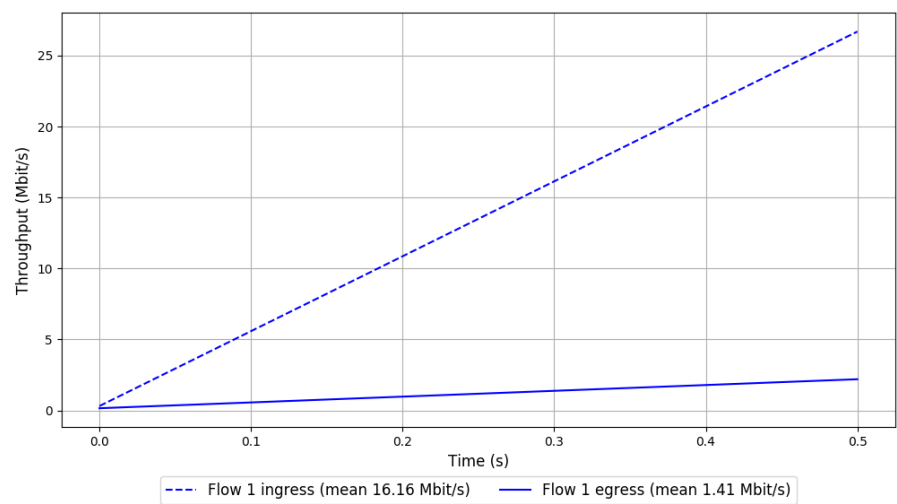


Run 6: Statistics of Copa

Start at: 2017-08-11 06:36:53

End at: 2017-08-11 06:37:23

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-11 06:47:31

End at: 2017-08-11 06:48:01

Below is generated by plot.py at 2017-08-11 10:00:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.20 Mbit/s

95th percentile per-packet one-way delay: 87.328 ms

Loss rate: 0.50%

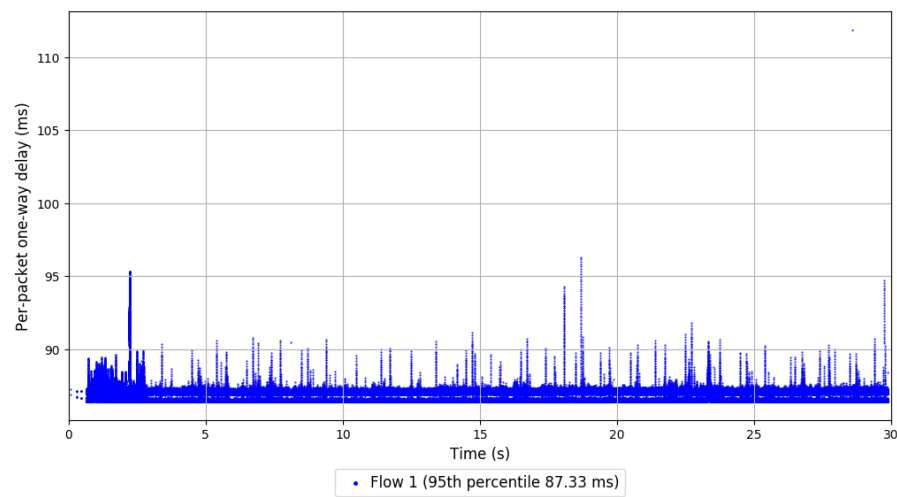
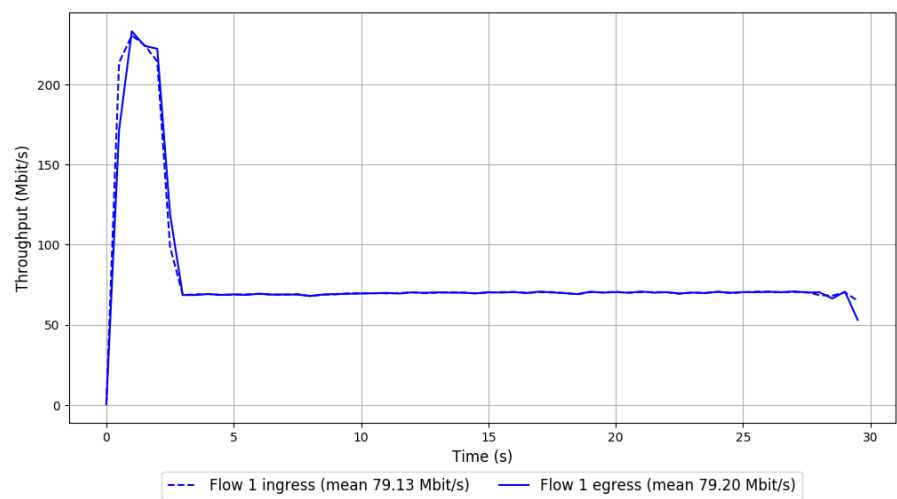
-- Flow 1:

Average throughput: 79.20 Mbit/s

95th percentile per-packet one-way delay: 87.328 ms

Loss rate: 0.50%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

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

End at: 2017-08-11 06:58:36

Below is generated by plot.py at 2017-08-11 10:00:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.92 Mbit/s

95th percentile per-packet one-way delay: 86.749 ms

Loss rate: 0.52%

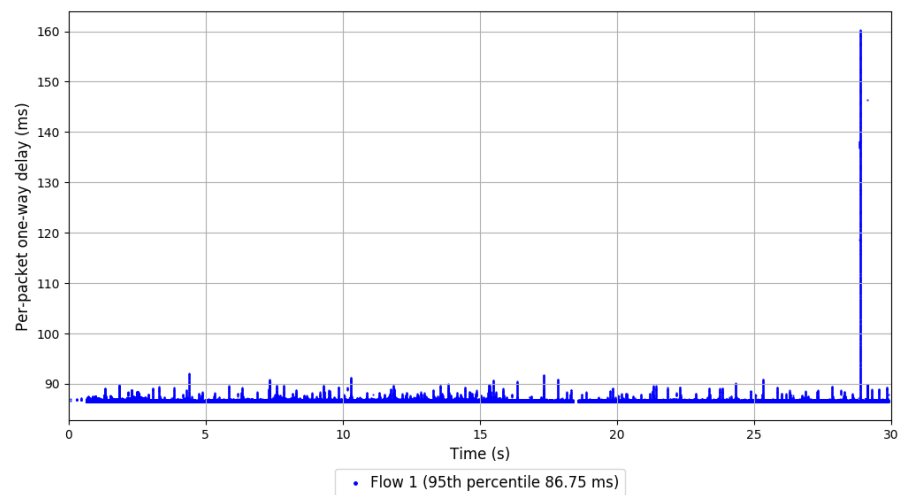
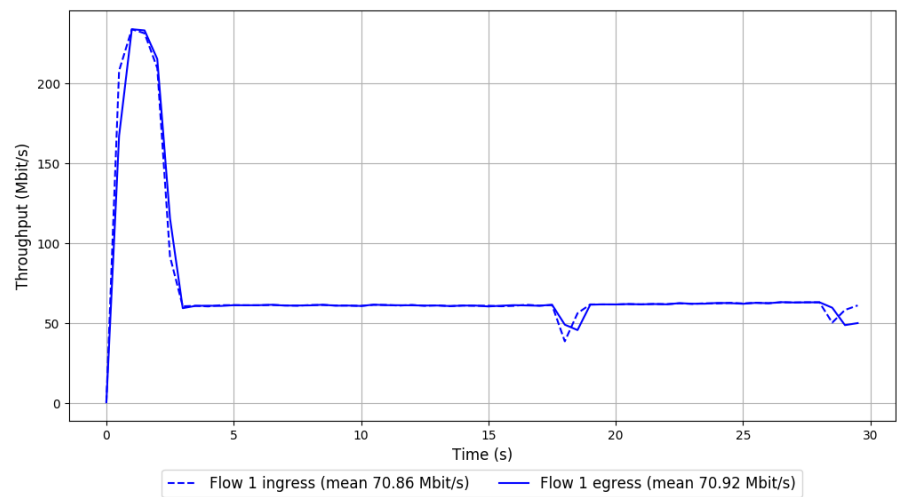
-- Flow 1:

Average throughput: 70.92 Mbit/s

95th percentile per-packet one-way delay: 86.749 ms

Loss rate: 0.52%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

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

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

Below is generated by plot.py at 2017-08-11 10:00:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.41 Mbit/s

95th percentile per-packet one-way delay: 86.744 ms

Loss rate: 0.59%

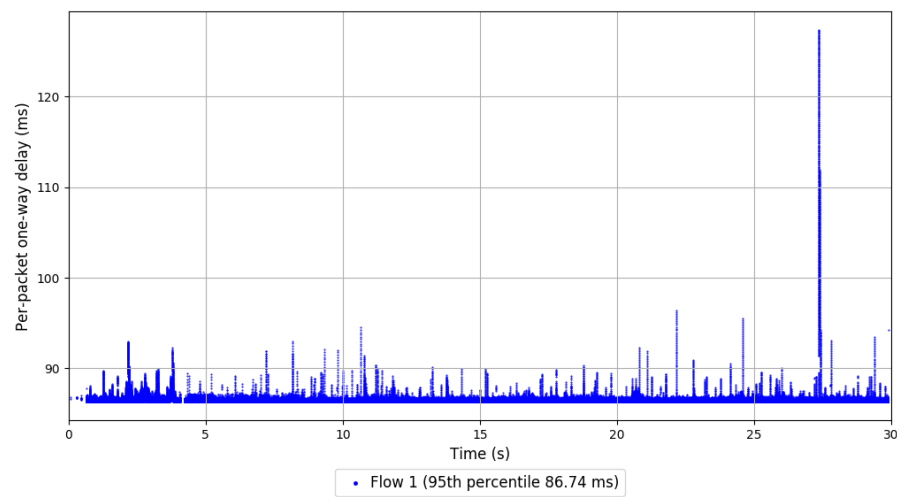
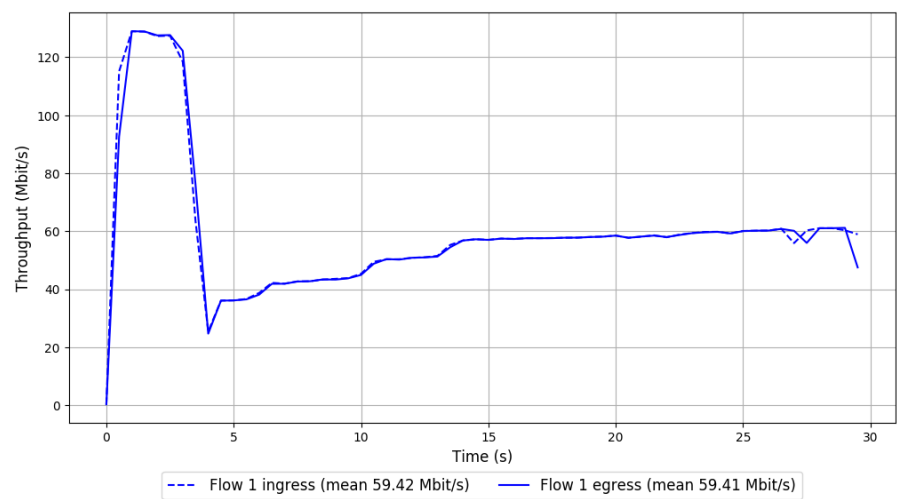
-- Flow 1:

Average throughput: 59.41 Mbit/s

95th percentile per-packet one-way delay: 86.744 ms

Loss rate: 0.59%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-11 07:19:45

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

Below is generated by plot.py at 2017-08-11 10:00:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.88 Mbit/s

95th percentile per-packet one-way delay: 86.548 ms

Loss rate: 0.62%

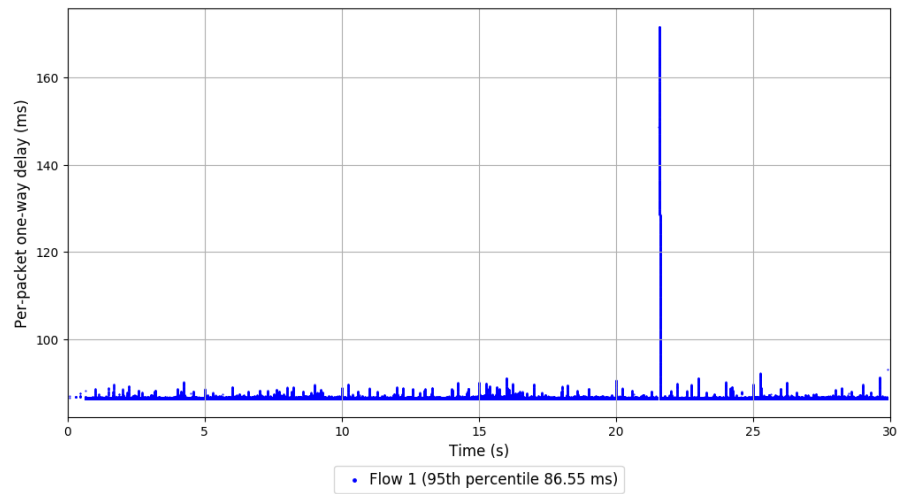
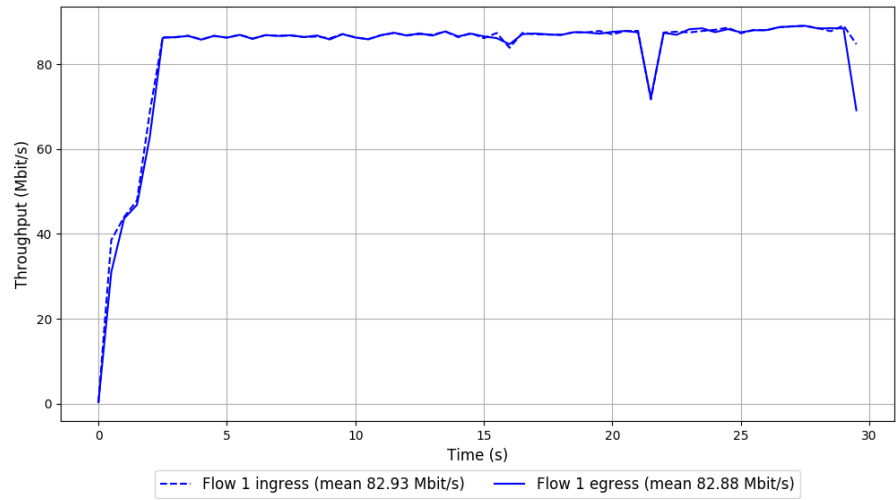
-- Flow 1:

Average throughput: 82.88 Mbit/s

95th percentile per-packet one-way delay: 86.548 ms

Loss rate: 0.62%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-11 05:32:47

End at: 2017-08-11 05:33:17

Below is generated by plot.py at 2017-08-11 10:00:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.23 Mbit/s

95th percentile per-packet one-way delay: 87.651 ms

Loss rate: 1.43%

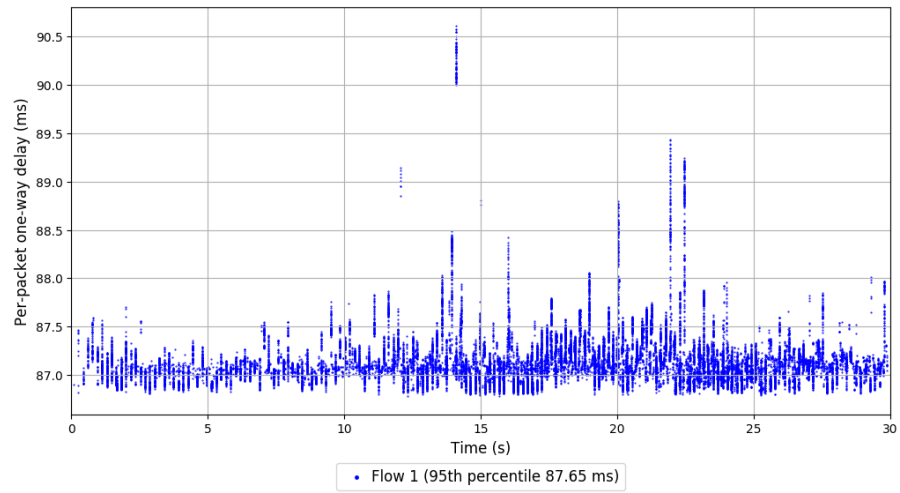
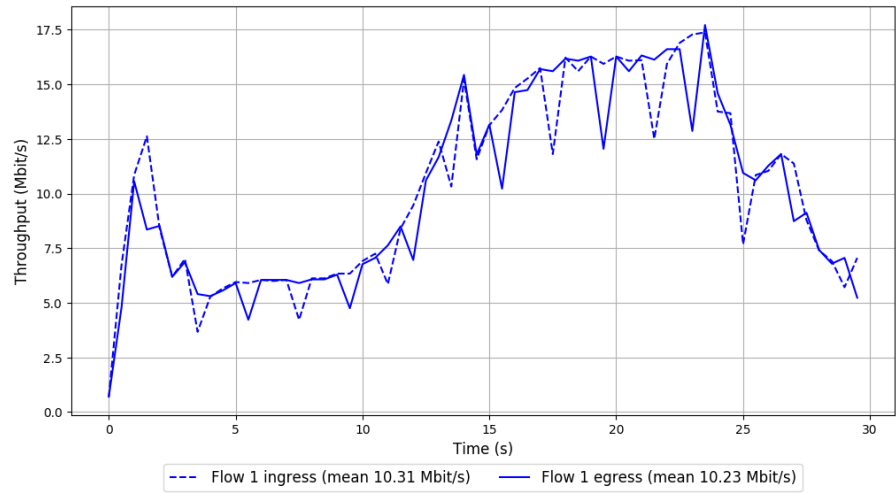
-- Flow 1:

Average throughput: 10.23 Mbit/s

95th percentile per-packet one-way delay: 87.651 ms

Loss rate: 1.43%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-11 05:43:57

End at: 2017-08-11 05:44:27

Below is generated by plot.py at 2017-08-11 10:00:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.43 Mbit/s

95th percentile per-packet one-way delay: 87.942 ms

Loss rate: 0.84%

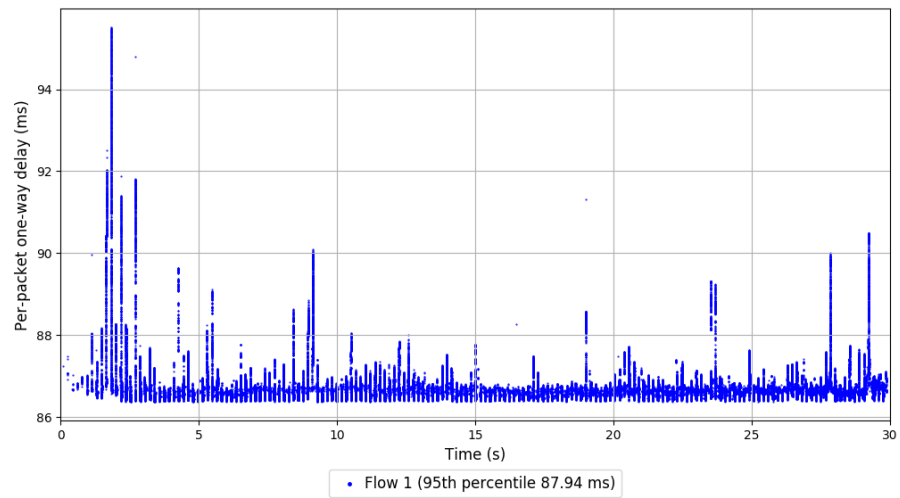
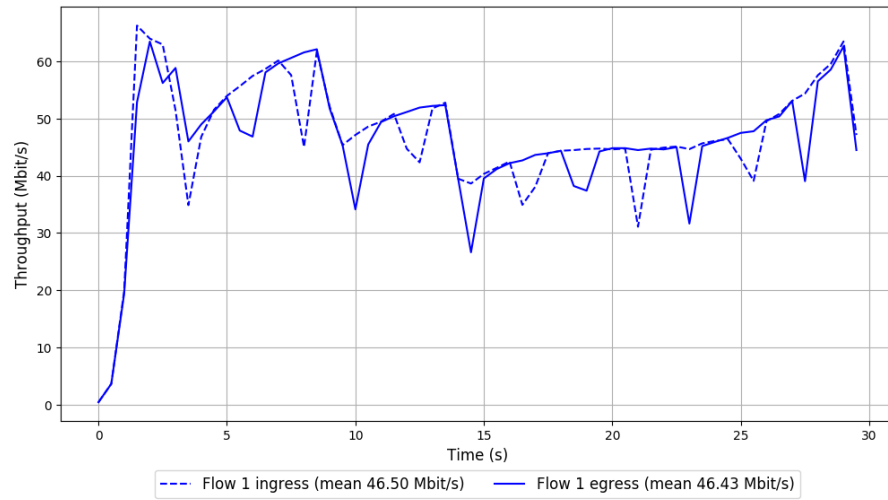
-- Flow 1:

Average throughput: 46.43 Mbit/s

95th percentile per-packet one-way delay: 87.942 ms

Loss rate: 0.84%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

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

End at: 2017-08-11 05:55:35

Below is generated by plot.py at 2017-08-11 10:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.28 Mbit/s

95th percentile per-packet one-way delay: 89.212 ms

Loss rate: 0.83%

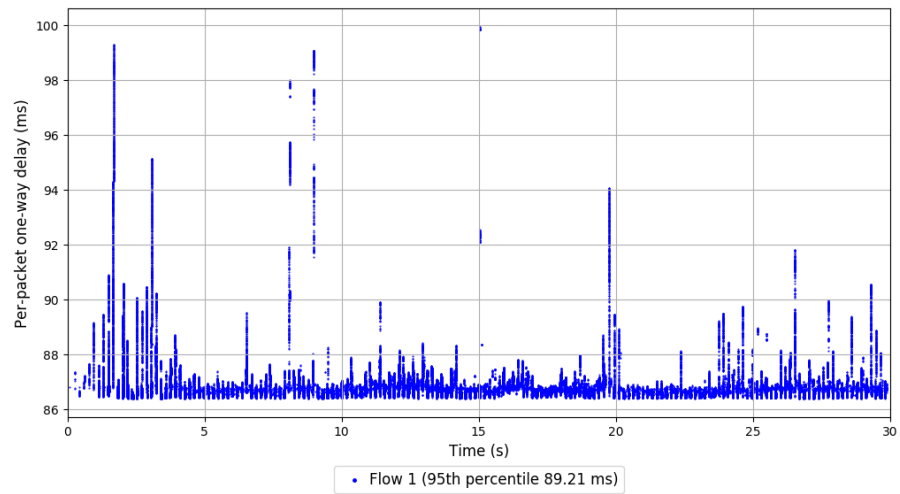
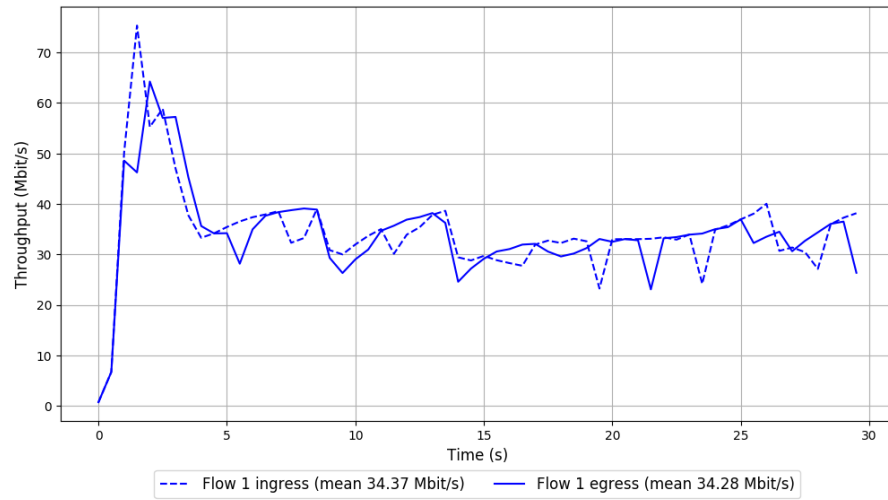
-- Flow 1:

Average throughput: 34.28 Mbit/s

95th percentile per-packet one-way delay: 89.212 ms

Loss rate: 0.83%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

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

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.49 Mbit/s

95th percentile per-packet one-way delay: 87.805 ms

Loss rate: 0.76%

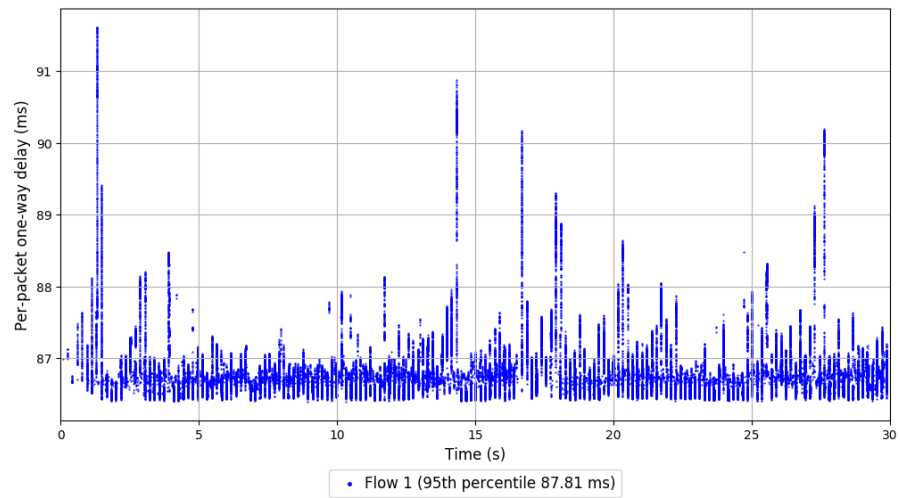
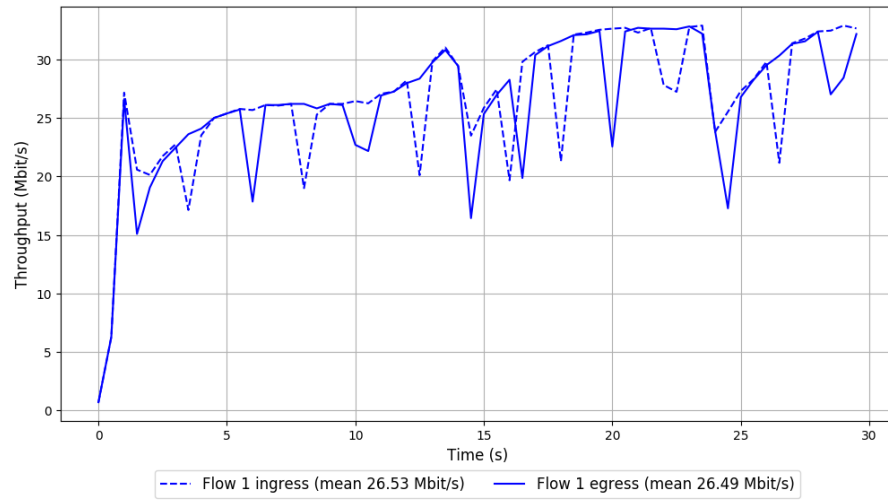
-- Flow 1:

Average throughput: 26.49 Mbit/s

95th percentile per-packet one-way delay: 87.805 ms

Loss rate: 0.76%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

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

End at: 2017-08-11 06:17:41

Below is generated by plot.py at 2017-08-11 10:01:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.33 Mbit/s

95th percentile per-packet one-way delay: 87.728 ms

Loss rate: 1.11%

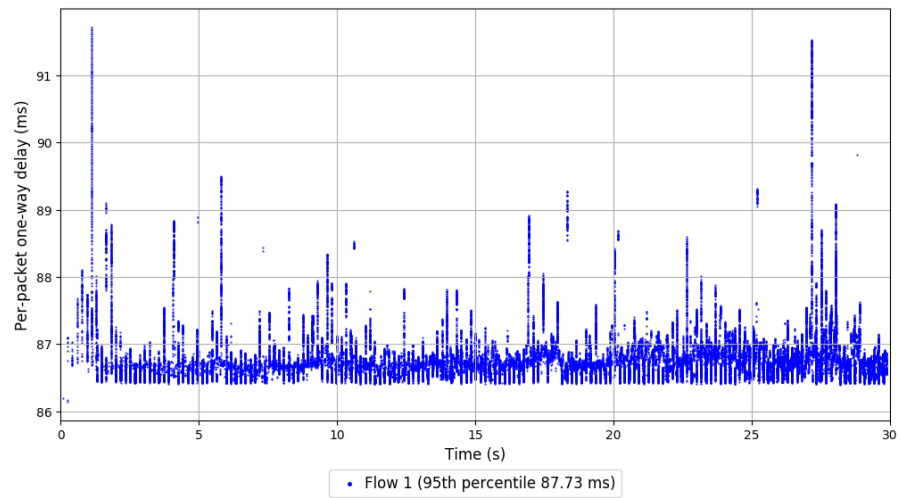
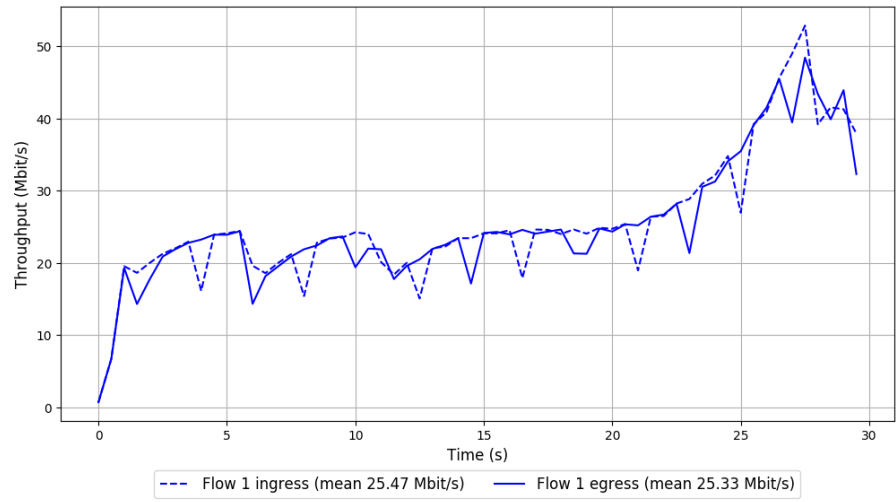
-- Flow 1:

Average throughput: 25.33 Mbit/s

95th percentile per-packet one-way delay: 87.728 ms

Loss rate: 1.11%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2017-08-11 10:01:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.96 Mbit/s

95th percentile per-packet one-way delay: 87.184 ms

Loss rate: 1.12%

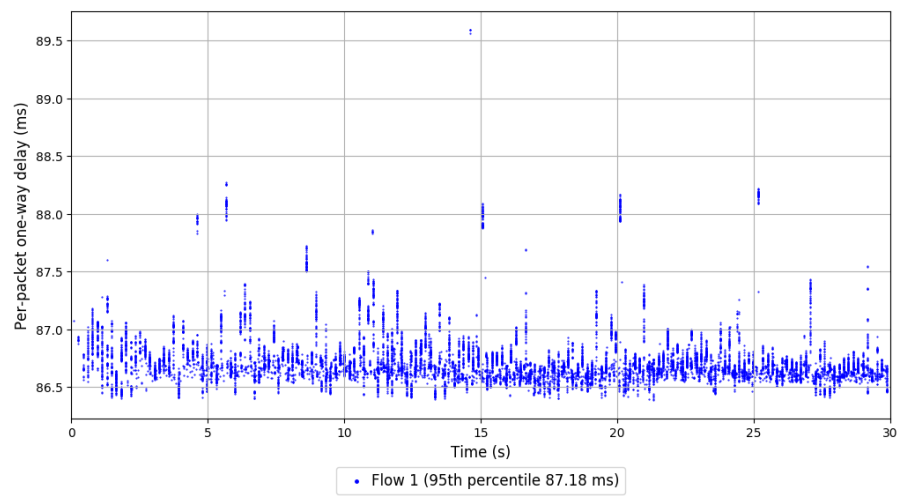
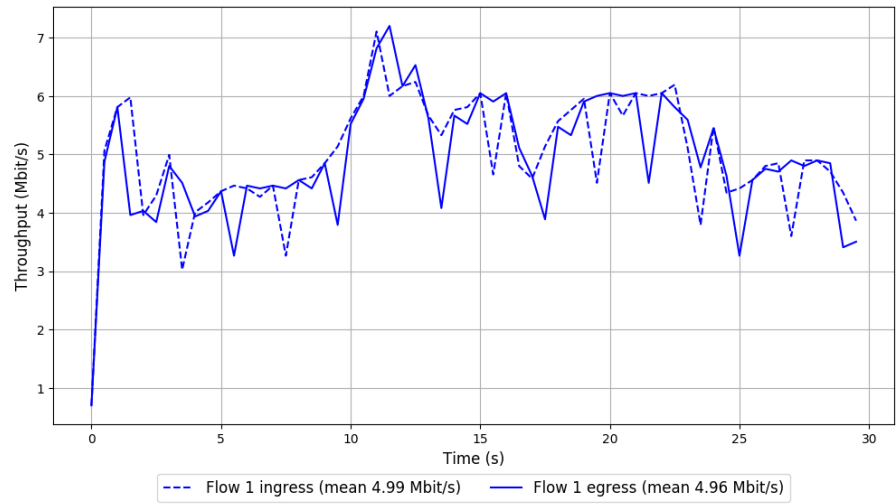
-- Flow 1:

Average throughput: 4.96 Mbit/s

95th percentile per-packet one-way delay: 87.184 ms

Loss rate: 1.12%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-11 06:38:58

End at: 2017-08-11 06:39:28

Below is generated by plot.py at 2017-08-11 10:01:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.83 Mbit/s

95th percentile per-packet one-way delay: 87.749 ms

Loss rate: 0.92%

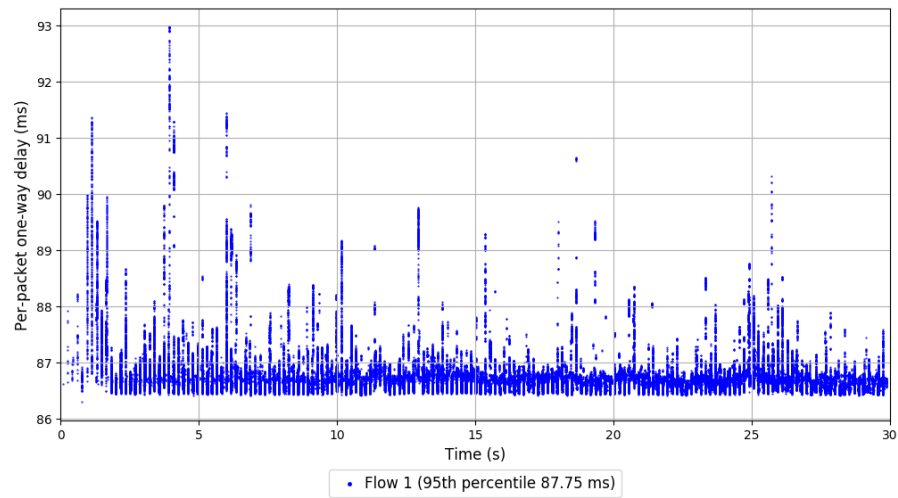
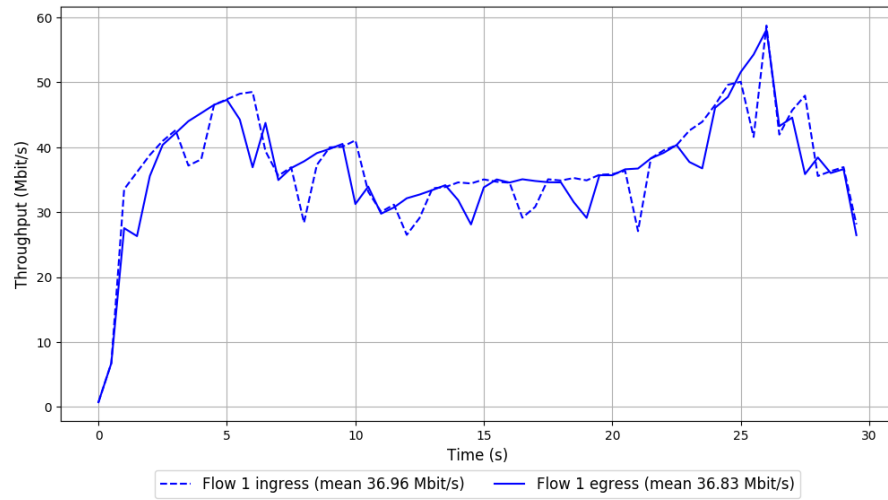
-- Flow 1:

Average throughput: 36.83 Mbit/s

95th percentile per-packet one-way delay: 87.749 ms

Loss rate: 0.92%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-11 06:49:39

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

Below is generated by plot.py at 2017-08-11 10:01:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.93 Mbit/s

95th percentile per-packet one-way delay: 88.308 ms

Loss rate: 0.87%

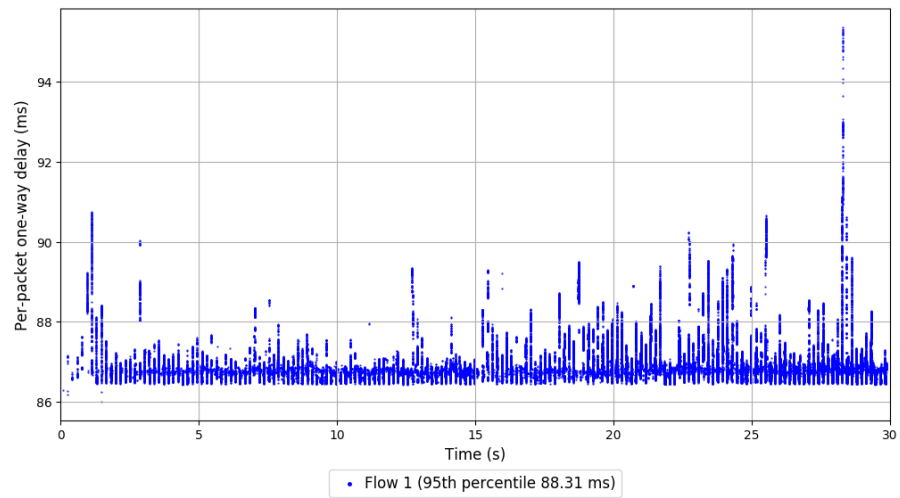
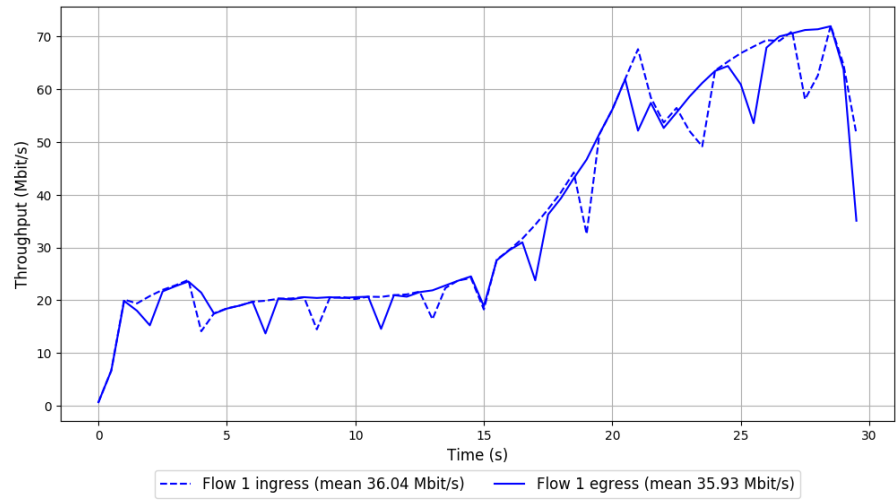
-- Flow 1:

Average throughput: 35.93 Mbit/s

95th percentile per-packet one-way delay: 88.308 ms

Loss rate: 0.87%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-11 07:00:19

End at: 2017-08-11 07:00:49

Below is generated by plot.py at 2017-08-11 10:01:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.27 Mbit/s

95th percentile per-packet one-way delay: 87.561 ms

Loss rate: 0.72%

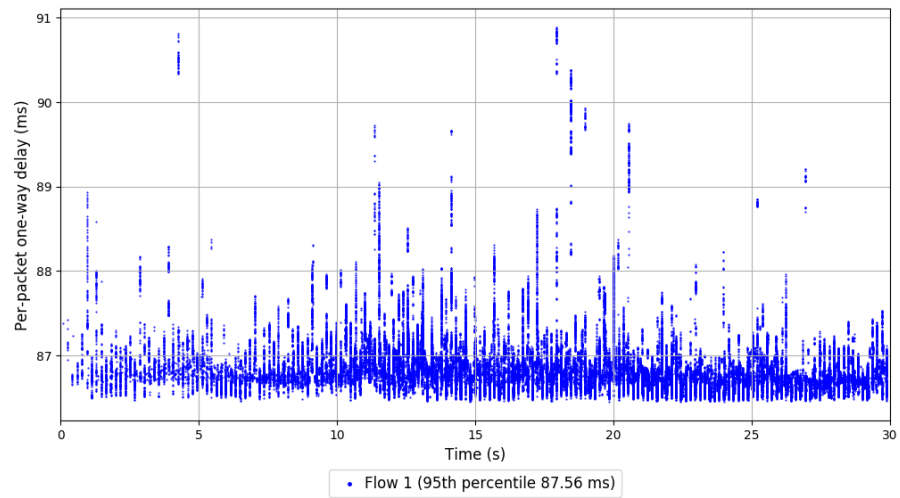
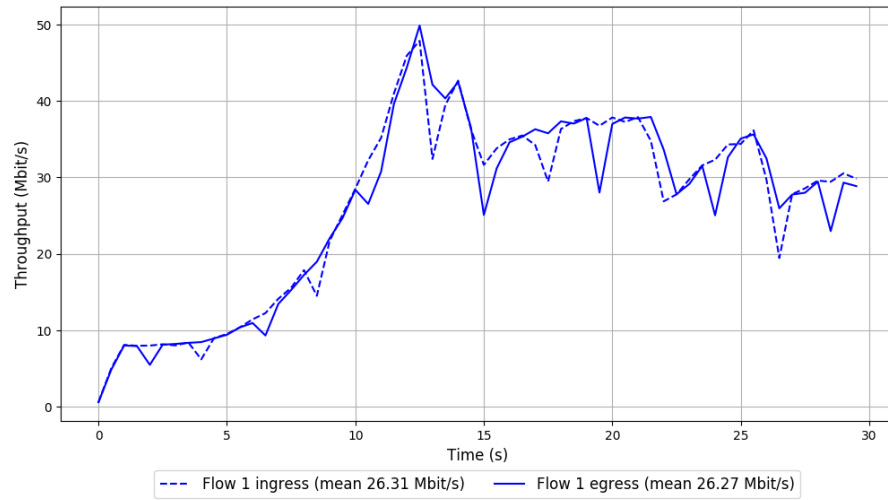
-- Flow 1:

Average throughput: 26.27 Mbit/s

95th percentile per-packet one-way delay: 87.561 ms

Loss rate: 0.72%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

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

End at: 2017-08-11 07:11:32

Below is generated by plot.py at 2017-08-11 10:01:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.92 Mbit/s

95th percentile per-packet one-way delay: 87.183 ms

Loss rate: 2.41%

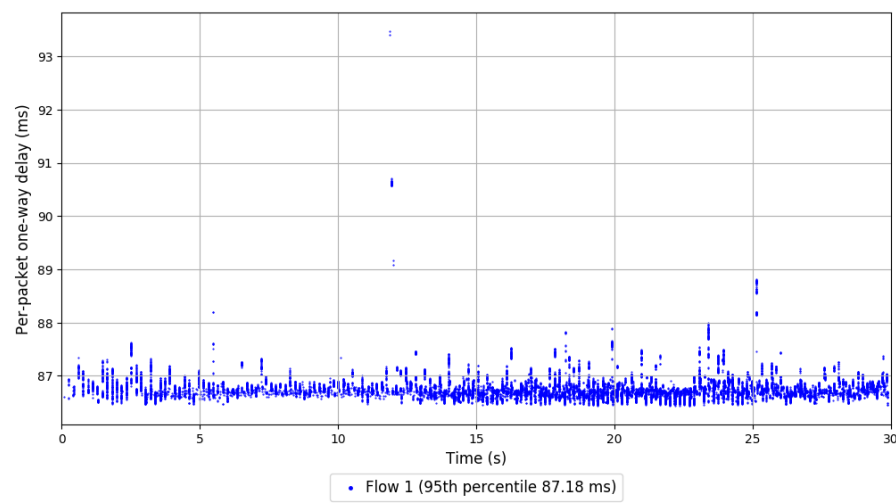
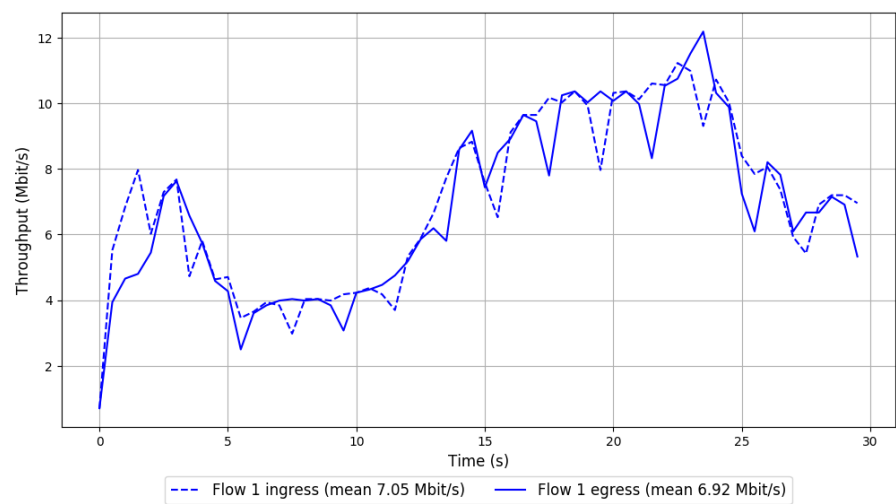
-- Flow 1:

Average throughput: 6.92 Mbit/s

95th percentile per-packet one-way delay: 87.183 ms

Loss rate: 2.41%

Run 10: Report of TCP Cubic — Data Link

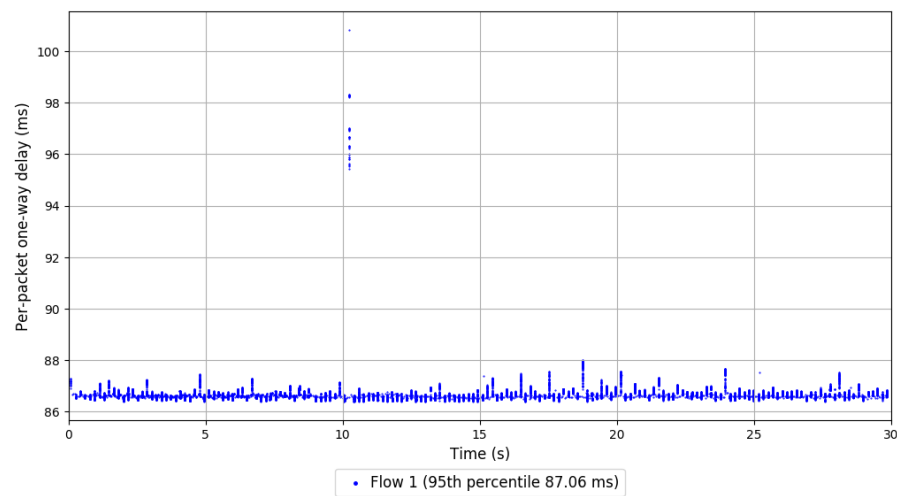
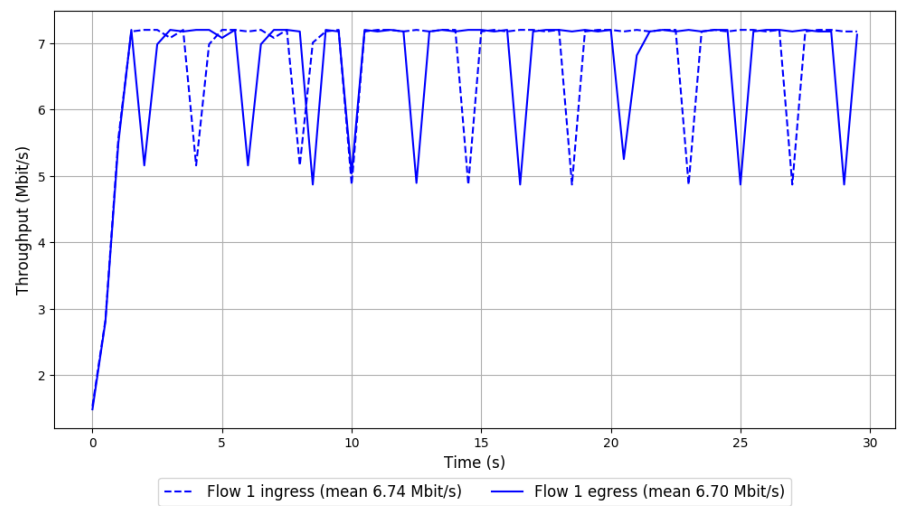


```
Run 1: Statistics of KohoCC

Start at: 2017-08-11 05:36:46
End at: 2017-08-11 05:37:16

# Below is generated by plot.py at 2017-08-11 10:01:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 87.055 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 87.055 ms
Loss rate: 1.14%
```


Run 1: Report of KohoCC — Data Link

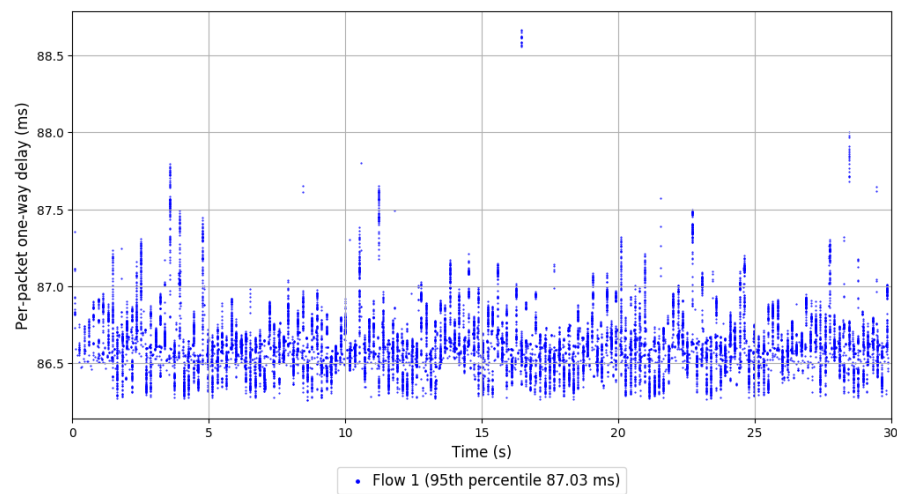
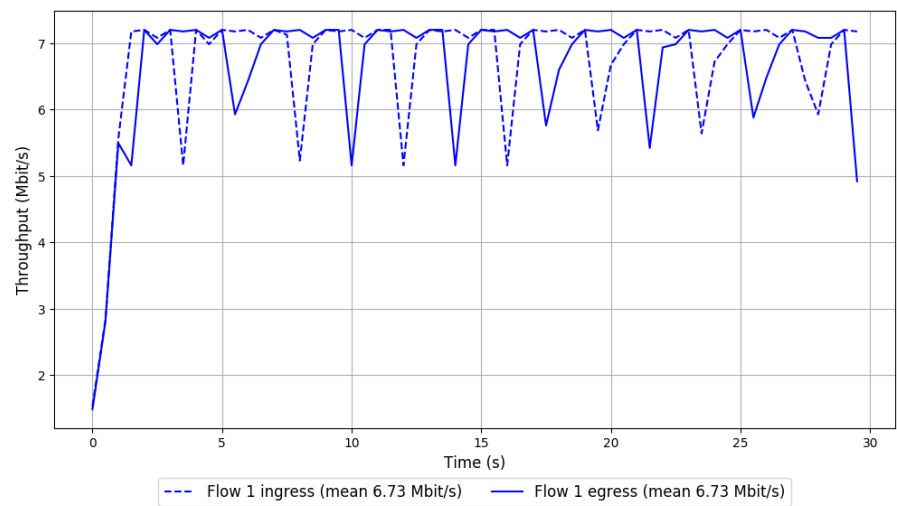


```
Run 2: Statistics of KohoCC

Start at: 2017-08-11 05:47:59
End at: 2017-08-11 05:48:29

# Below is generated by plot.py at 2017-08-11 10:01:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 87.030 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 87.030 ms
Loss rate: 0.62%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-11 05:59:07

End at: 2017-08-11 05:59:37

Below is generated by plot.py at 2017-08-11 10:01:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 87.079 ms

Loss rate: 0.60%

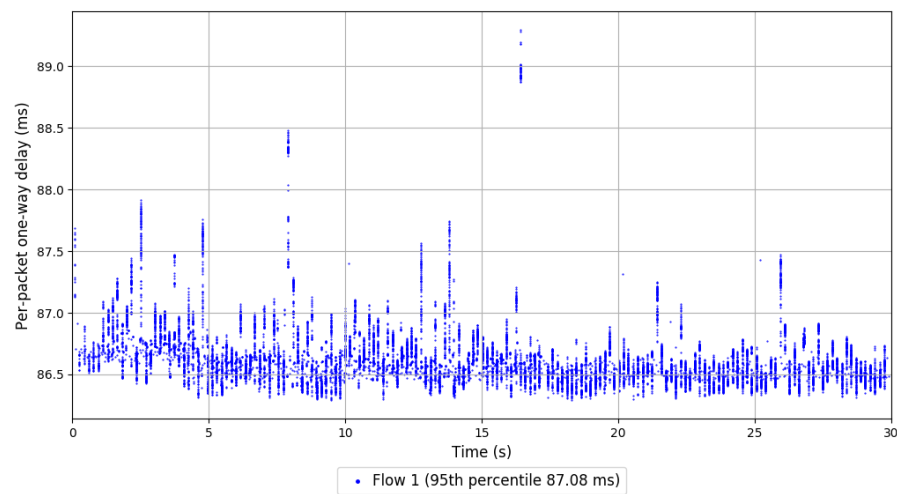
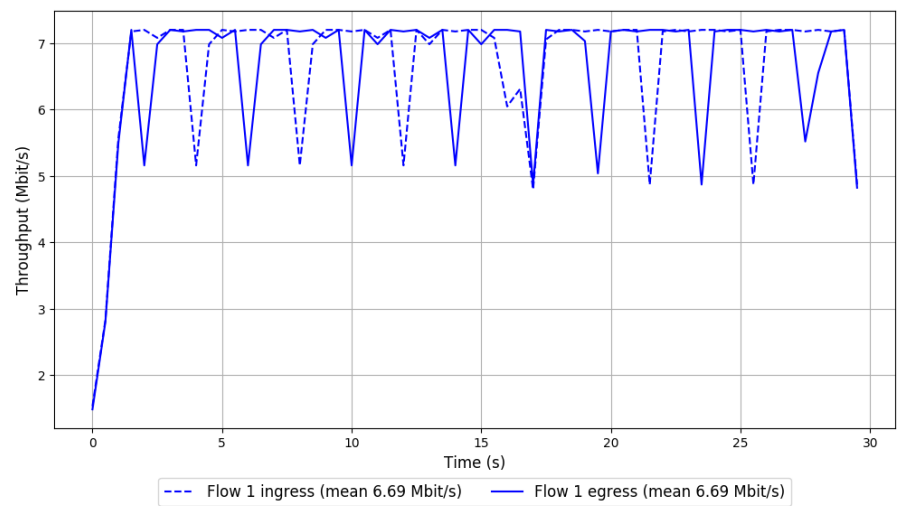
-- Flow 1:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 87.079 ms

Loss rate: 0.60%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

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

End at: 2017-08-11 06:10:38

Below is generated by plot.py at 2017-08-11 10:01:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 87.177 ms

Loss rate: 0.60%

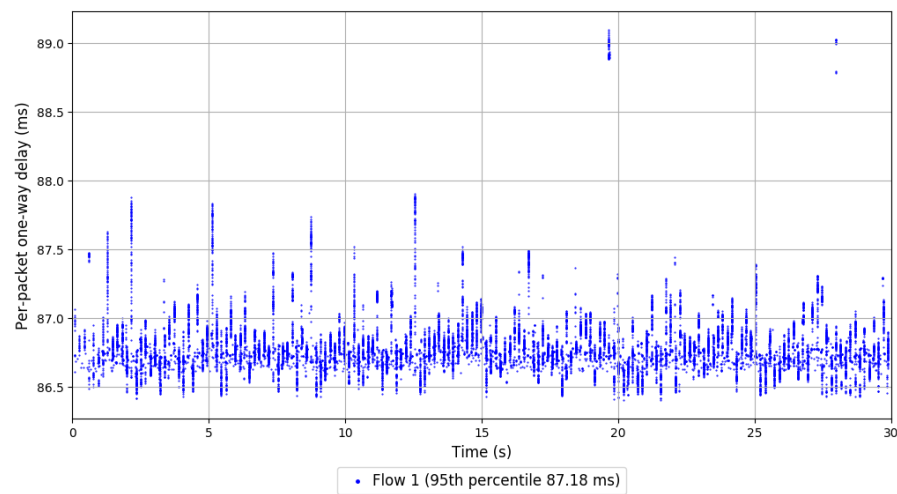
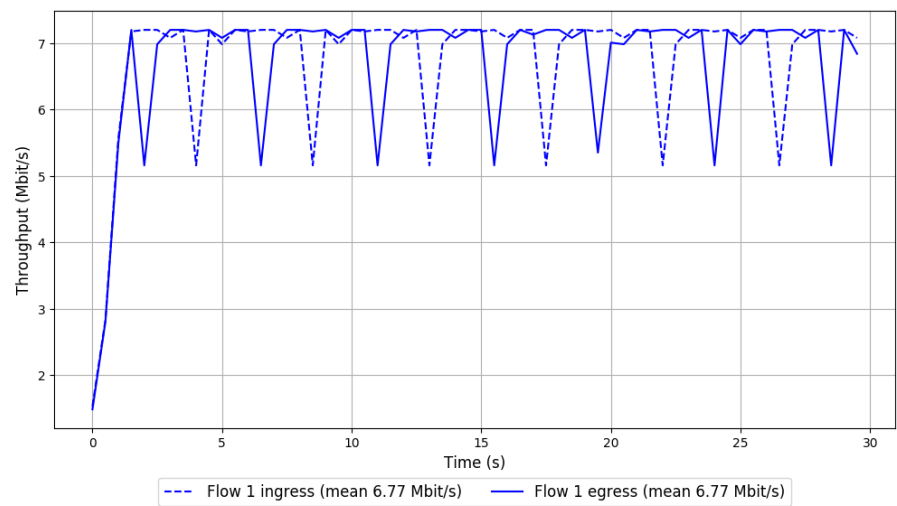
-- Flow 1:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 87.177 ms

Loss rate: 0.60%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

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

End at: 2017-08-11 06:21:42

Below is generated by plot.py at 2017-08-11 10:01:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 87.017 ms

Loss rate: 1.35%

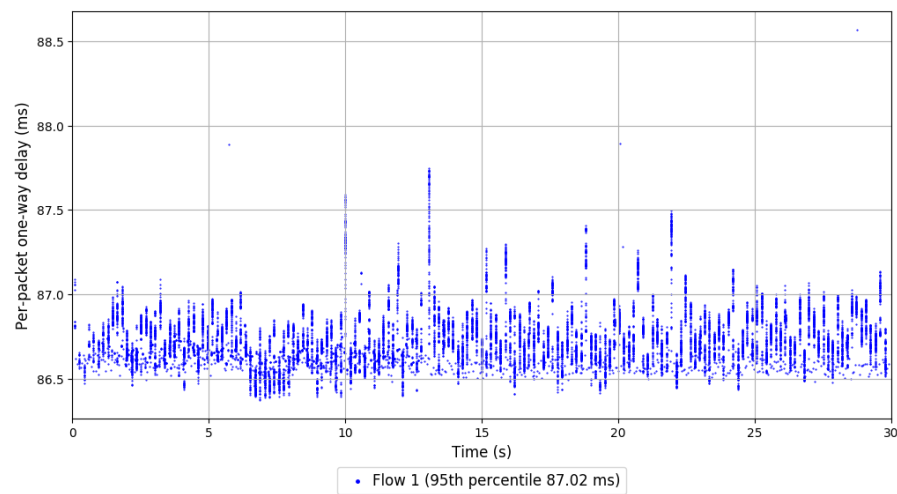
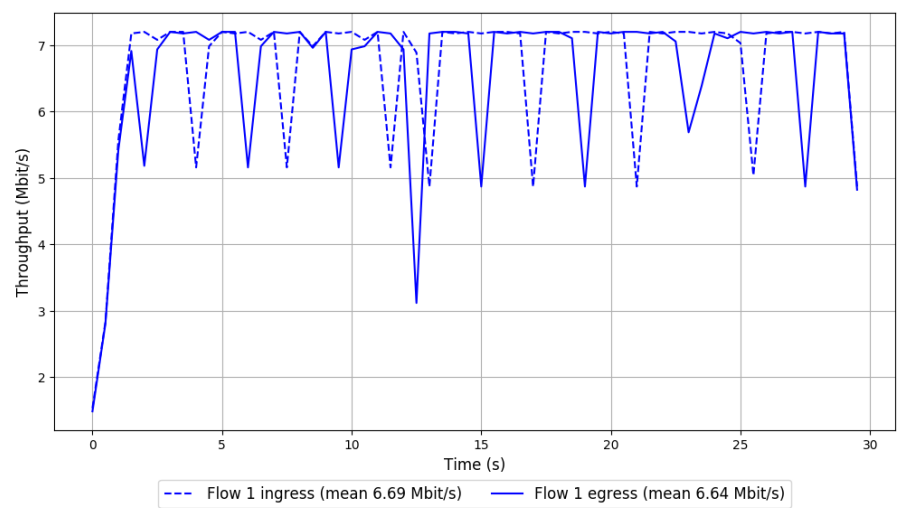
-- Flow 1:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 87.017 ms

Loss rate: 1.35%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-11 06:32:07

End at: 2017-08-11 06:32:37

Below is generated by plot.py at 2017-08-11 10:01:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.72 Mbit/s

95th percentile per-packet one-way delay: 87.504 ms

Loss rate: 0.71%

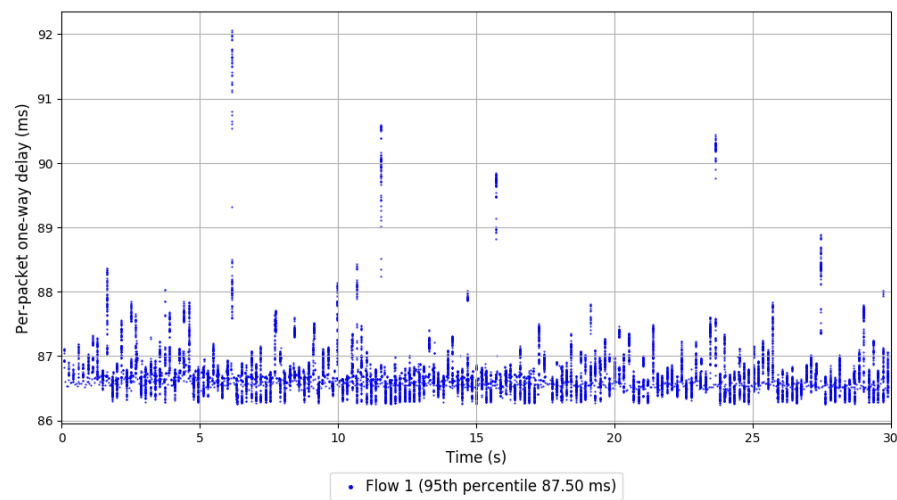
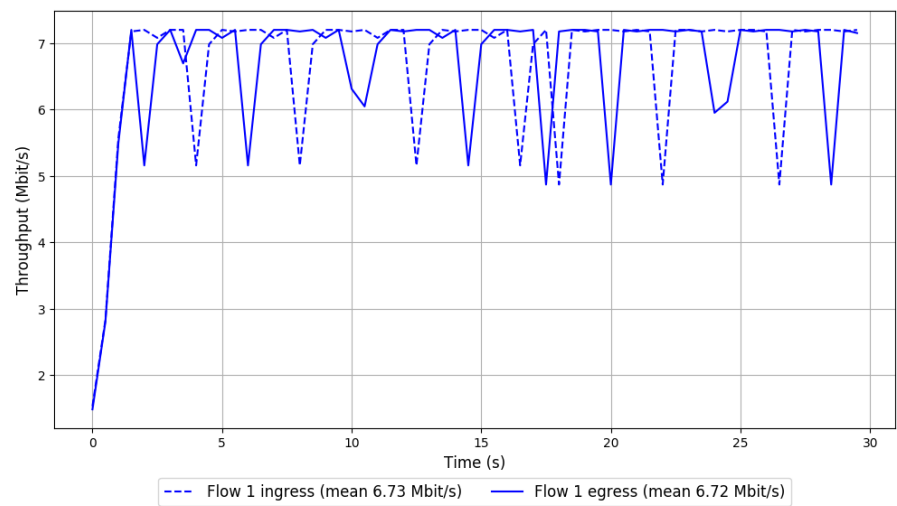
-- Flow 1:

Average throughput: 6.72 Mbit/s

95th percentile per-packet one-way delay: 87.504 ms

Loss rate: 0.71%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-11 06:43:00

End at: 2017-08-11 06:43:30

Below is generated by plot.py at 2017-08-11 10:01:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.66 Mbit/s

95th percentile per-packet one-way delay: 87.225 ms

Loss rate: 1.14%

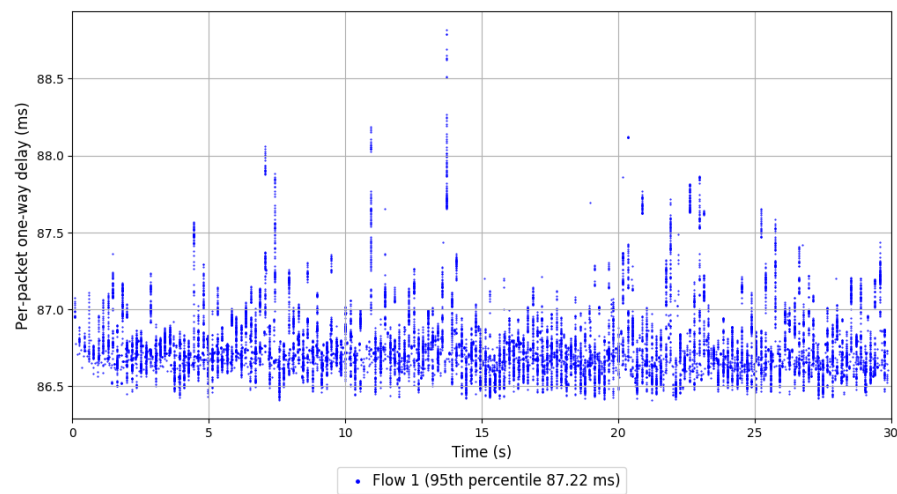
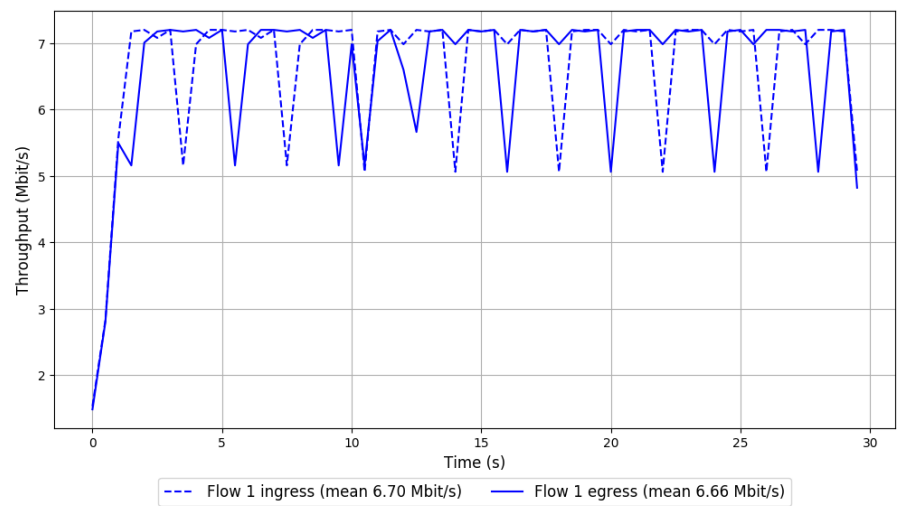
-- Flow 1:

Average throughput: 6.66 Mbit/s

95th percentile per-packet one-way delay: 87.225 ms

Loss rate: 1.14%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-11 06:53:40

End at: 2017-08-11 06:54:10

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 87.323 ms

Loss rate: 3.40%

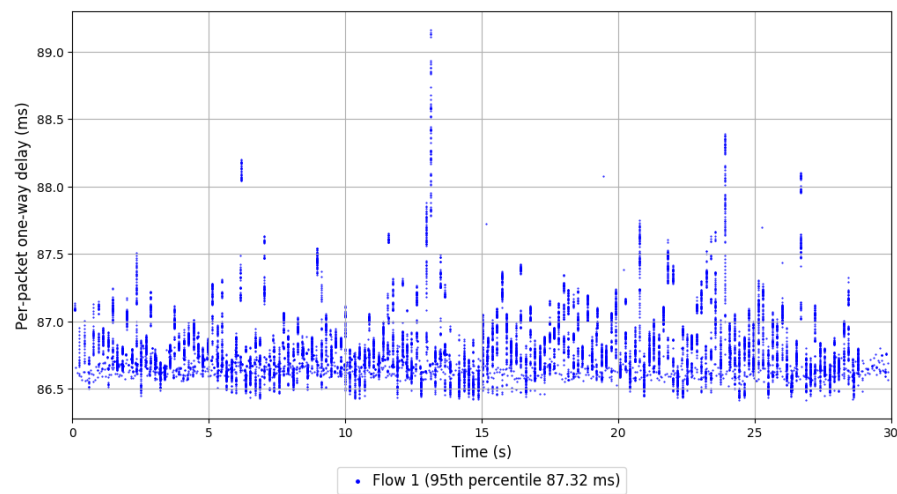
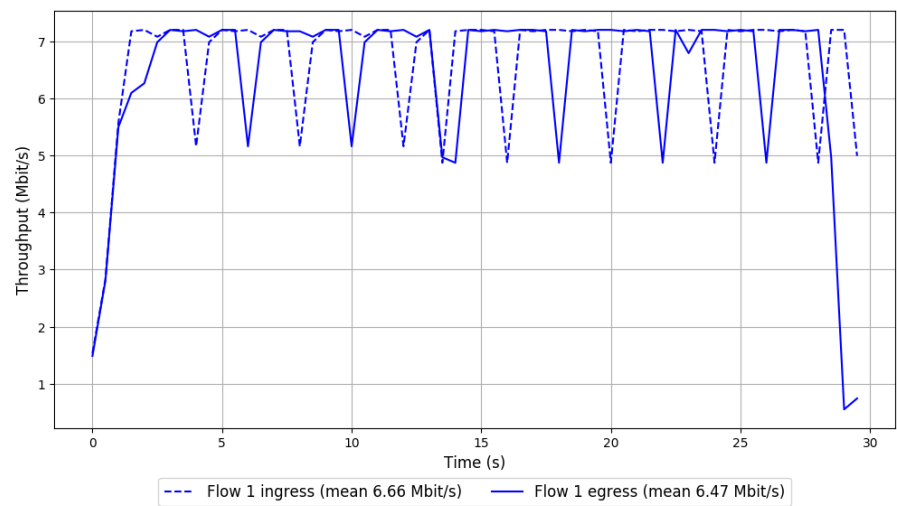
-- Flow 1:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 87.323 ms

Loss rate: 3.40%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-11 07:04:20

End at: 2017-08-11 07:04:50

Below is generated by plot.py at 2017-08-11 10:01:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.68 Mbit/s

95th percentile per-packet one-way delay: 87.400 ms

Loss rate: 0.81%

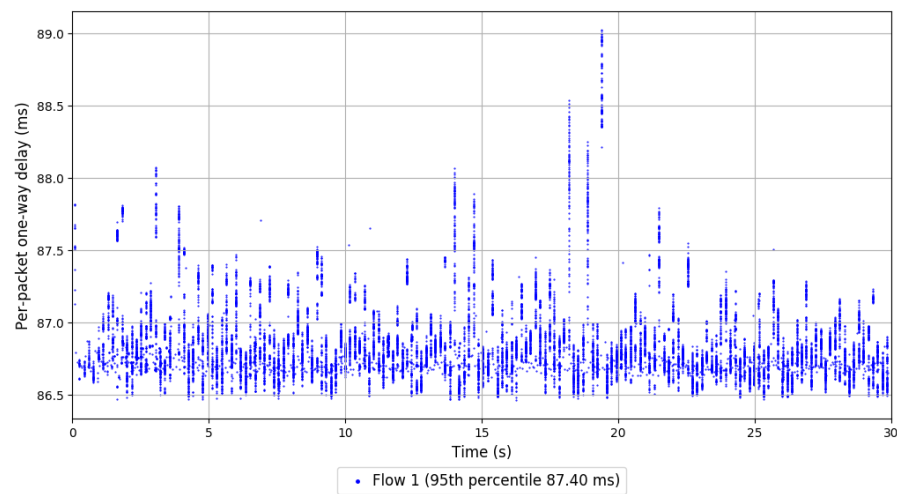
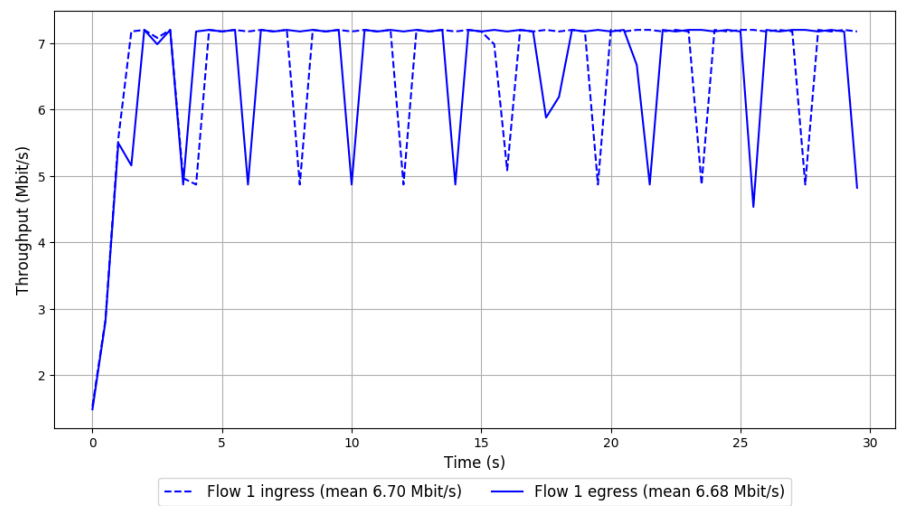
-- Flow 1:

Average throughput: 6.68 Mbit/s

95th percentile per-packet one-way delay: 87.400 ms

Loss rate: 0.81%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-11 07:15:01

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

Below is generated by plot.py at 2017-08-11 10:01:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.73 Mbit/s

95th percentile per-packet one-way delay: 87.198 ms

Loss rate: 0.61%

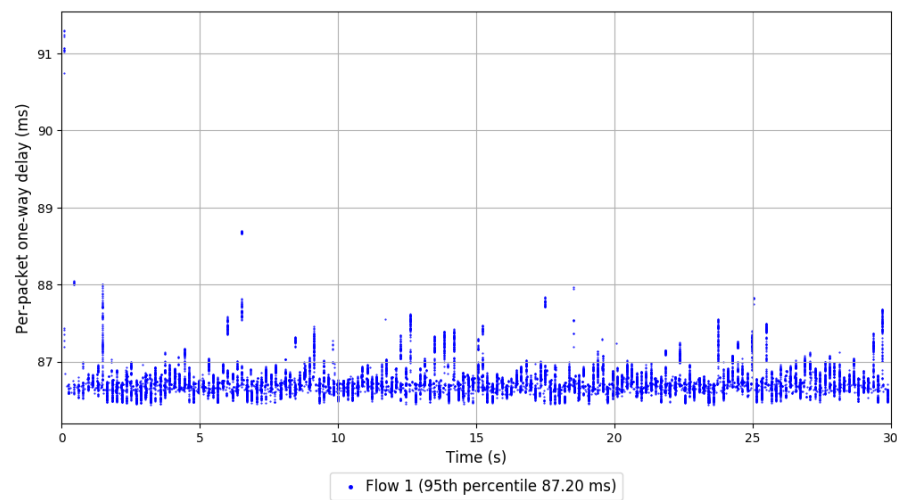
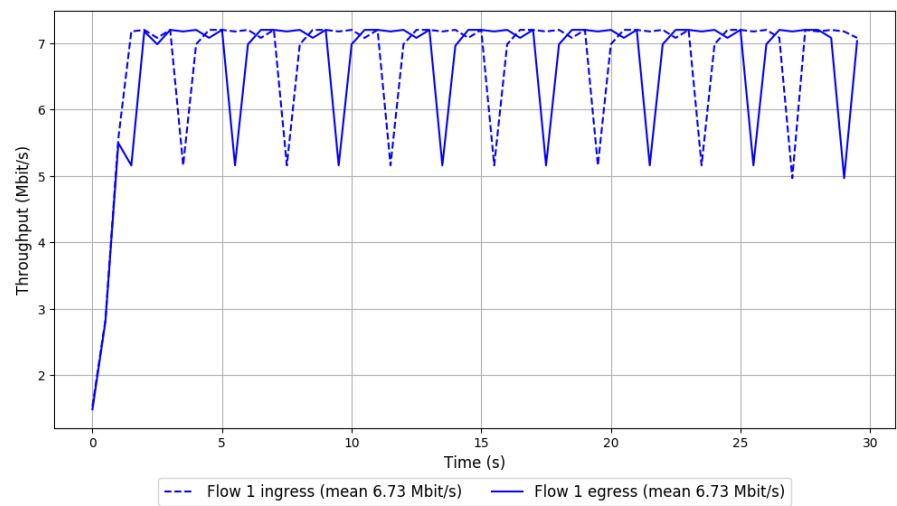
-- Flow 1:

Average throughput: 6.73 Mbit/s

95th percentile per-packet one-way delay: 87.198 ms

Loss rate: 0.61%

Run 10: Report of KohoCC — Data Link

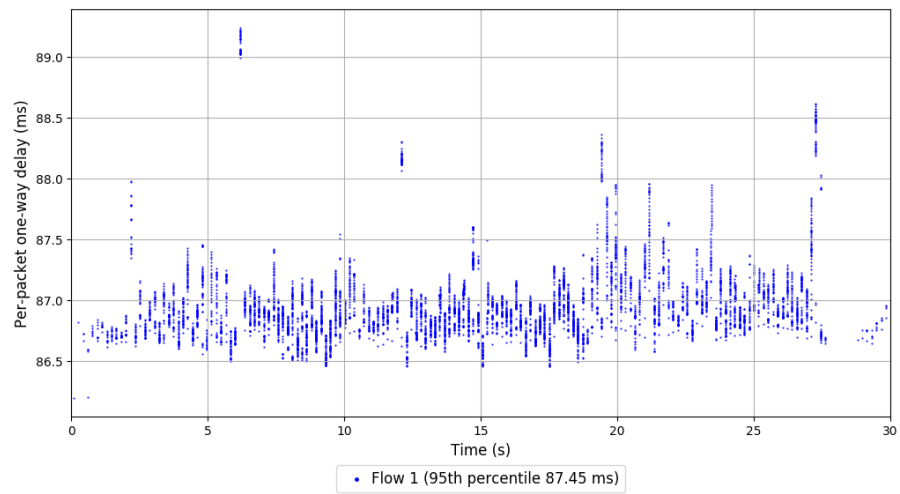
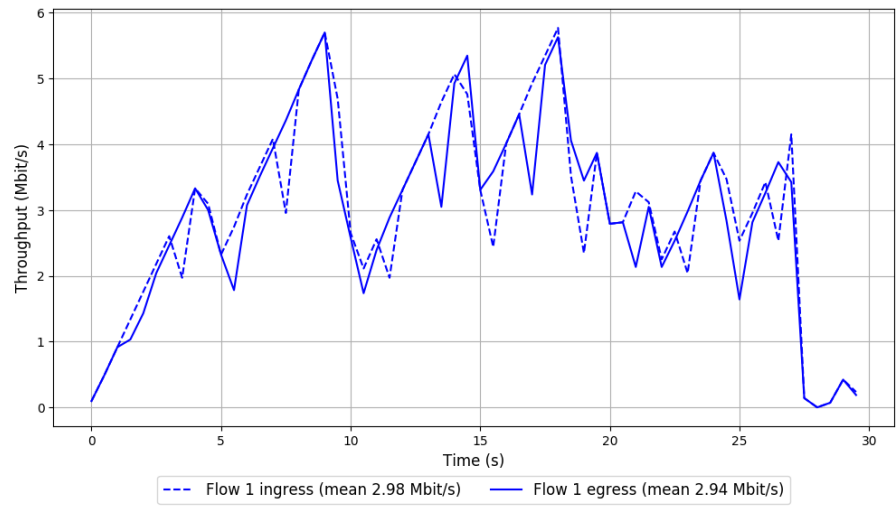


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-11 05:42:31
End at: 2017-08-11 05:43:01

# Below is generated by plot.py at 2017-08-11 10:01:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 87.452 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 87.452 ms
Loss rate: 1.85%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-08-11 05:53:38

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

Below is generated by plot.py at 2017-08-11 10:01:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.31 Mbit/s

95th percentile per-packet one-way delay: 87.299 ms

Loss rate: 1.49%

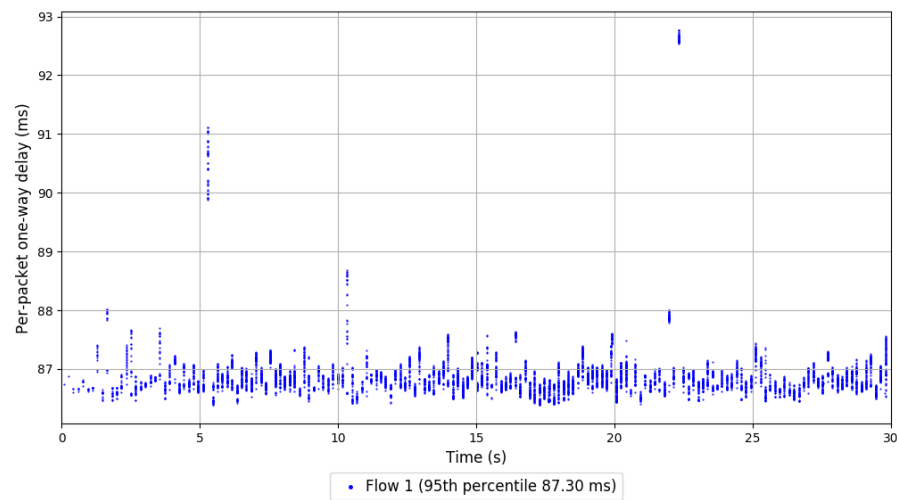
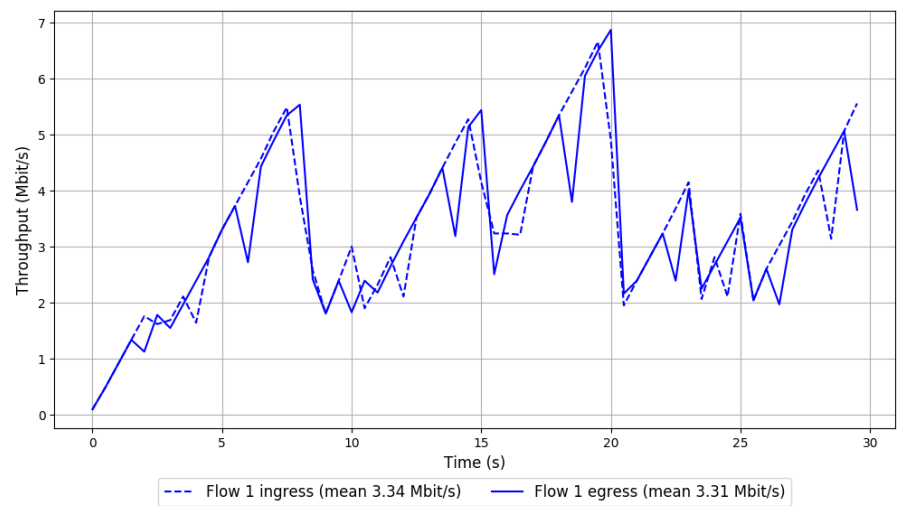
-- Flow 1:

Average throughput: 3.31 Mbit/s

95th percentile per-packet one-way delay: 87.299 ms

Loss rate: 1.49%

Run 2: Report of LEDBAT — Data Link

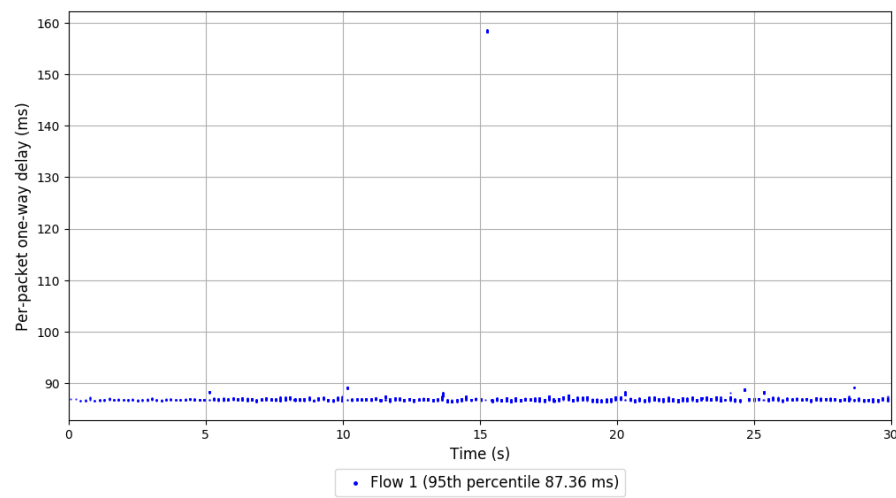
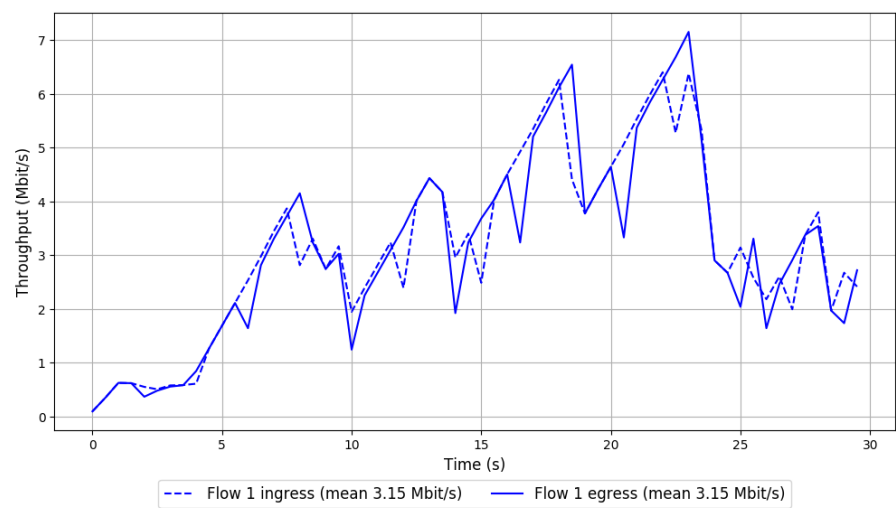


```
Run 3: Statistics of LEDBAT

Start at: 2017-08-11 06:04:41
End at: 2017-08-11 06:05:11

# Below is generated by plot.py at 2017-08-11 10:01:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 87.359 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 87.359 ms
Loss rate: 0.76%
```


Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-11 06:15:45

End at: 2017-08-11 06:16:15

Below is generated by plot.py at 2017-08-11 10:01:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 87.492 ms

Loss rate: 1.52%

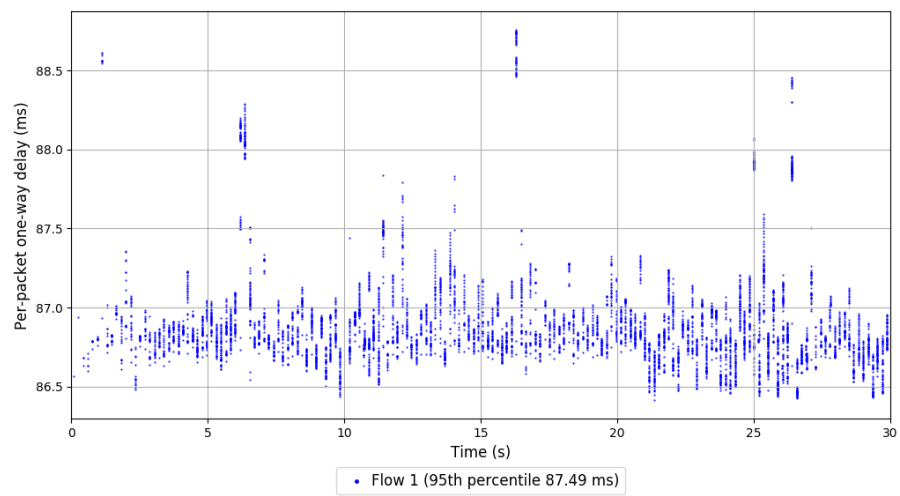
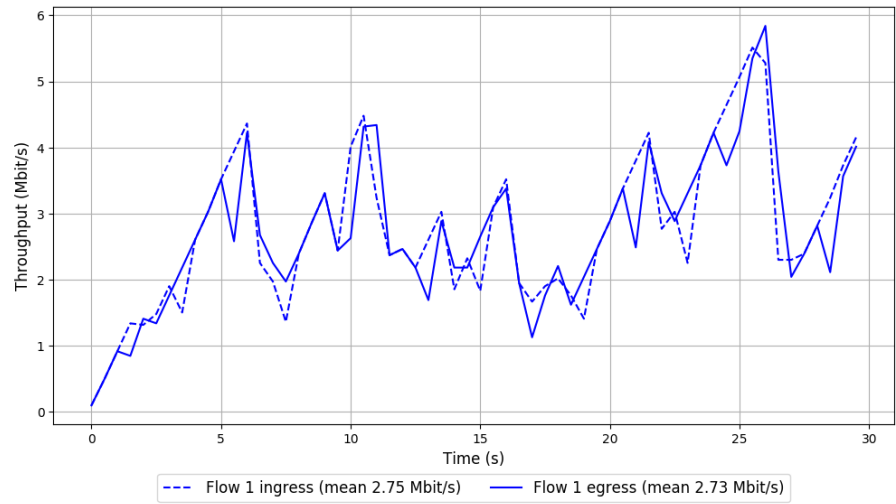
-- Flow 1:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 87.492 ms

Loss rate: 1.52%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-11 06:26:41

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

Below is generated by plot.py at 2017-08-11 10:01:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 86.995 ms

Loss rate: 0.72%

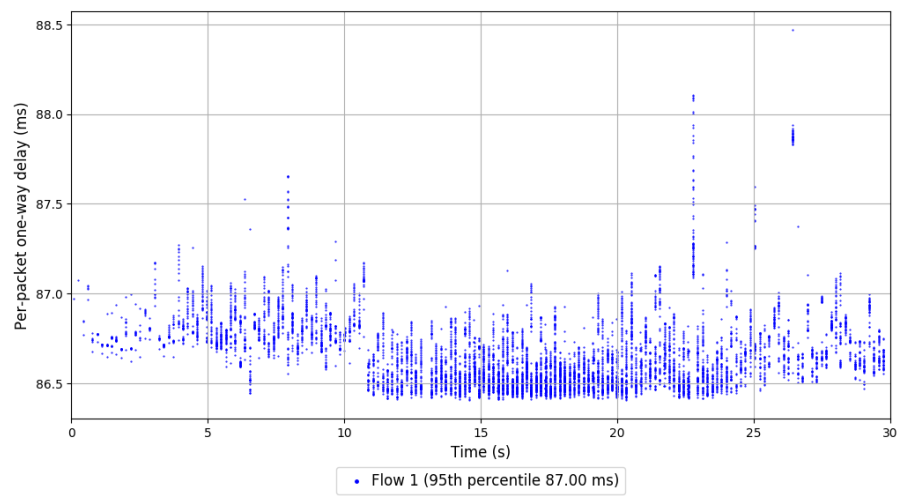
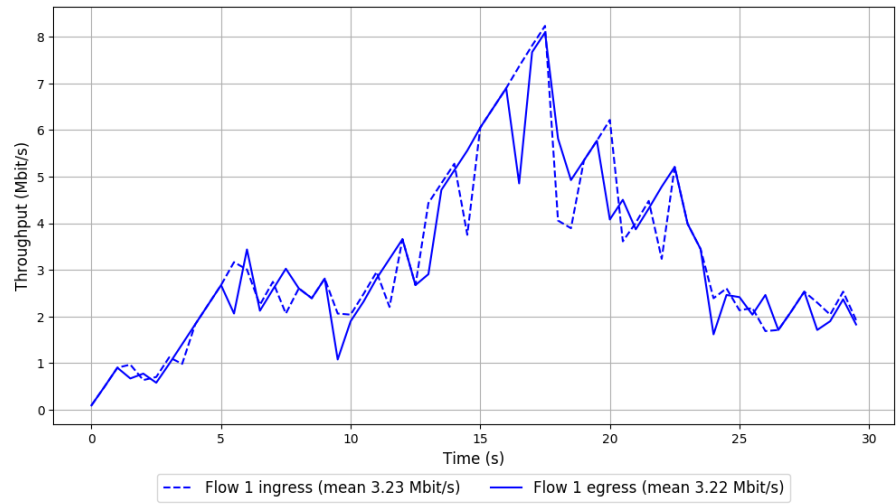
-- Flow 1:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 86.995 ms

Loss rate: 0.72%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-11 06:37:32

End at: 2017-08-11 06:38:02

Below is generated by plot.py at 2017-08-11 10:01:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 88.066 ms

Loss rate: 1.93%

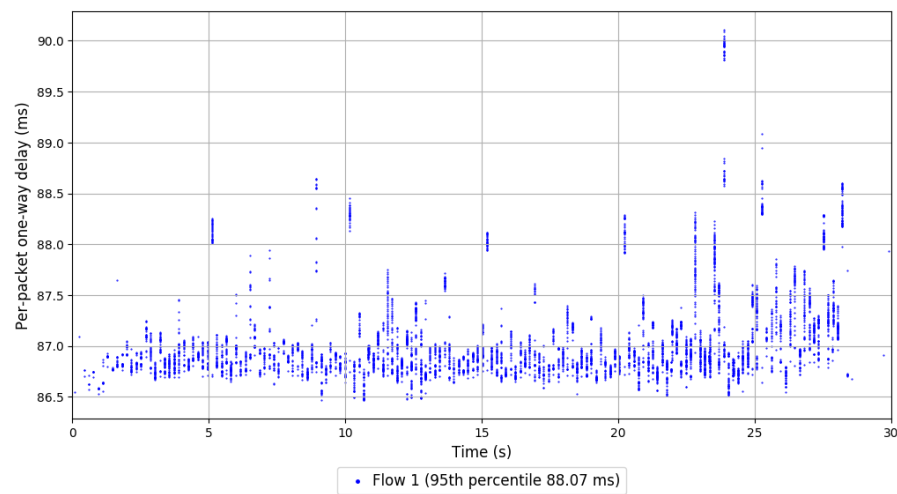
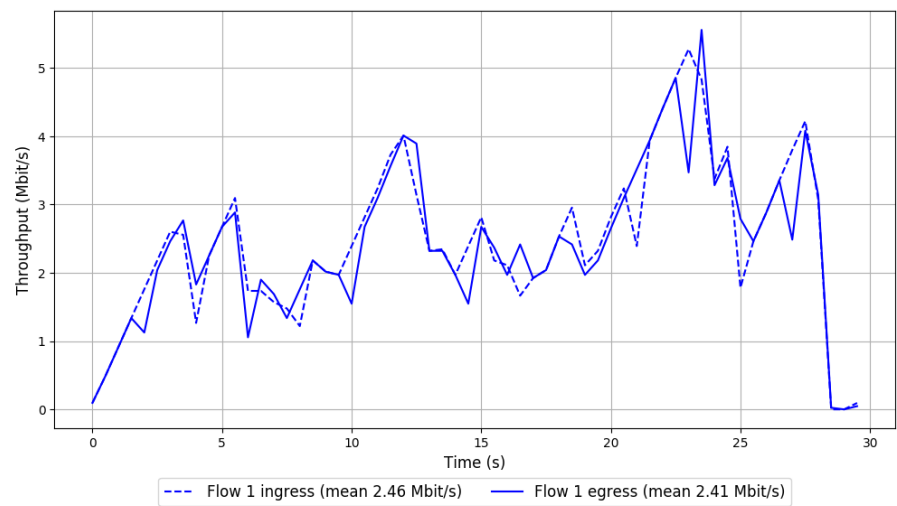
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 88.066 ms

Loss rate: 1.93%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

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

End at: 2017-08-11 06:48:49

Below is generated by plot.py at 2017-08-11 10:01:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 87.593 ms

Loss rate: 1.48%

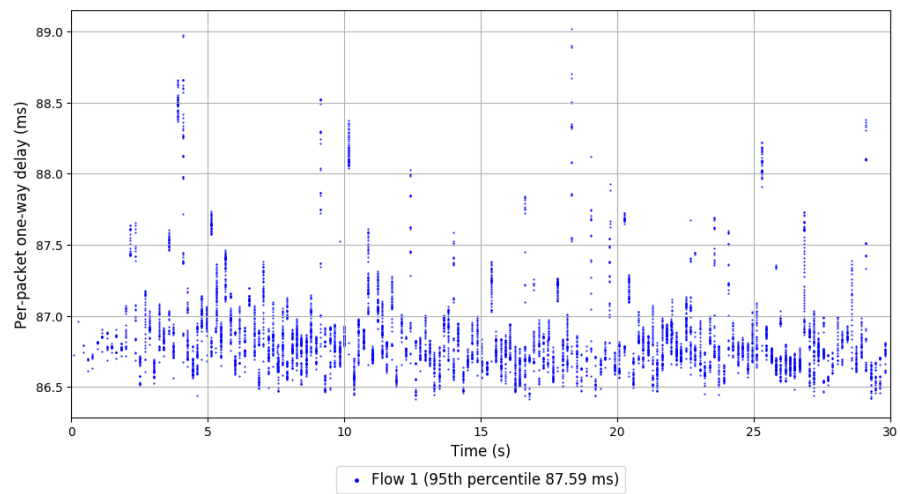
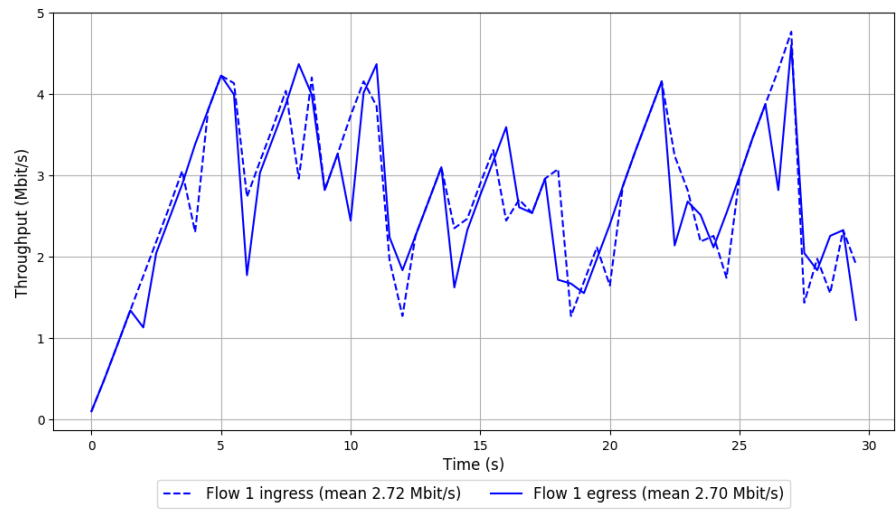
-- Flow 1:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 87.593 ms

Loss rate: 1.48%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-11 06:58:52

End at: 2017-08-11 06:59:22

Below is generated by plot.py at 2017-08-11 10:01:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 88.029 ms

Loss rate: 1.75%

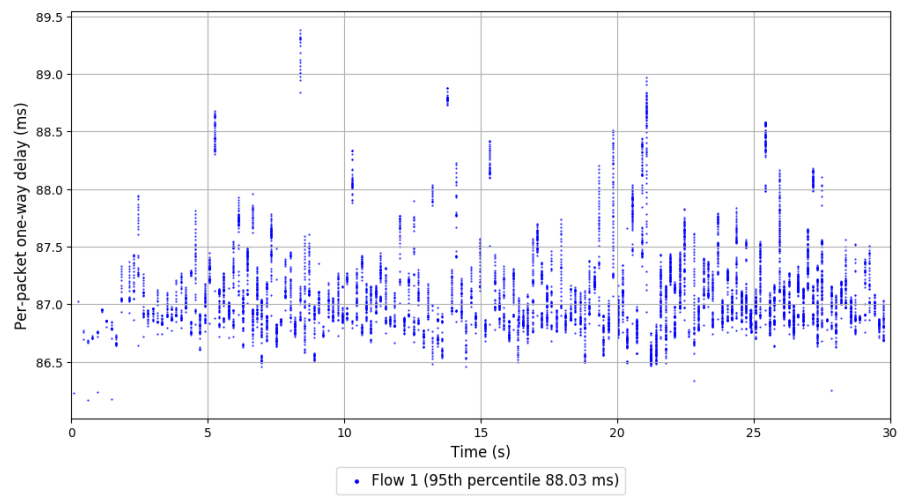
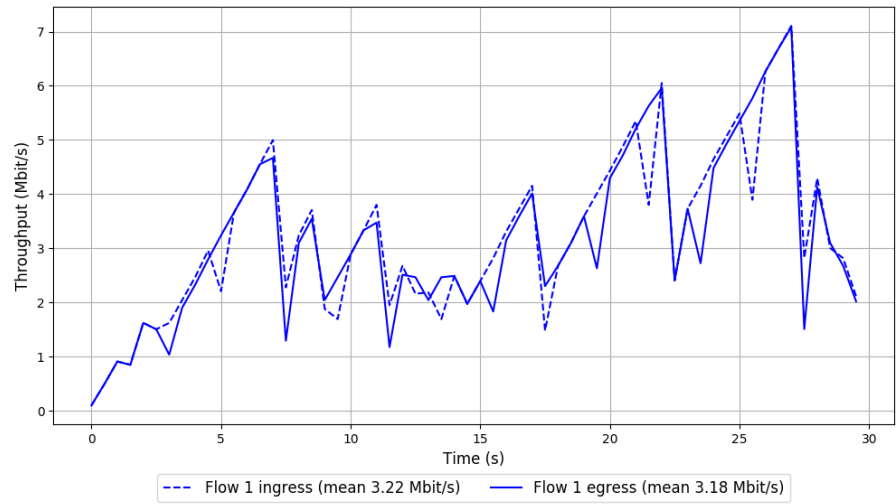
-- Flow 1:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 88.029 ms

Loss rate: 1.75%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-11 07:09:36

End at: 2017-08-11 07:10:06

Below is generated by plot.py at 2017-08-11 10:01:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 87.337 ms

Loss rate: 2.95%

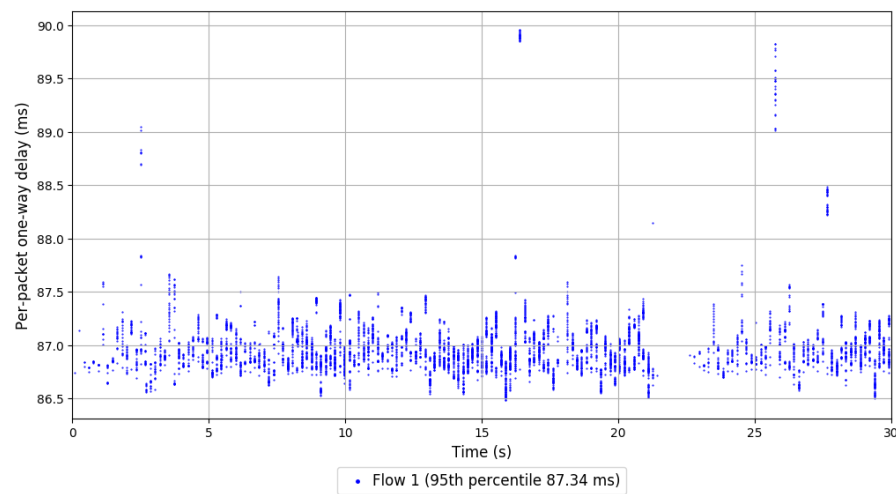
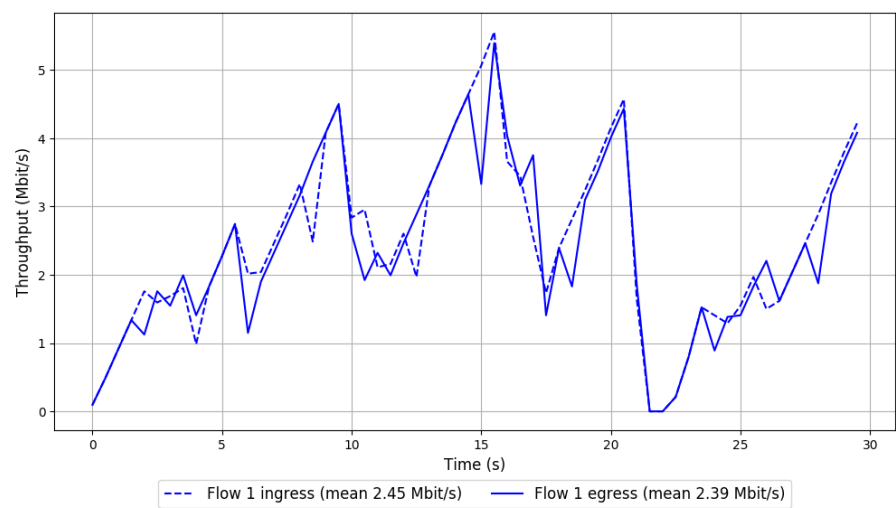
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 87.337 ms

Loss rate: 2.95%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-11 07:20:33

End at: 2017-08-11 07:21:03

Below is generated by plot.py at 2017-08-11 10:01:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 87.332 ms

Loss rate: 1.49%

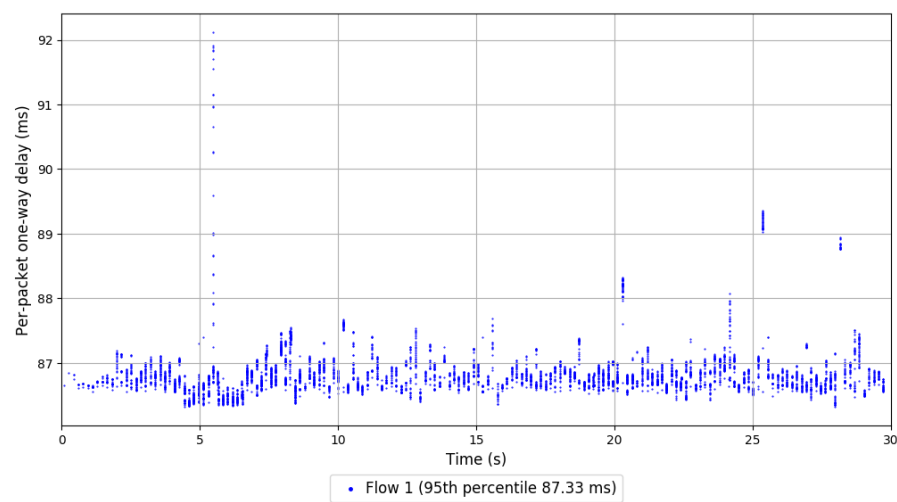
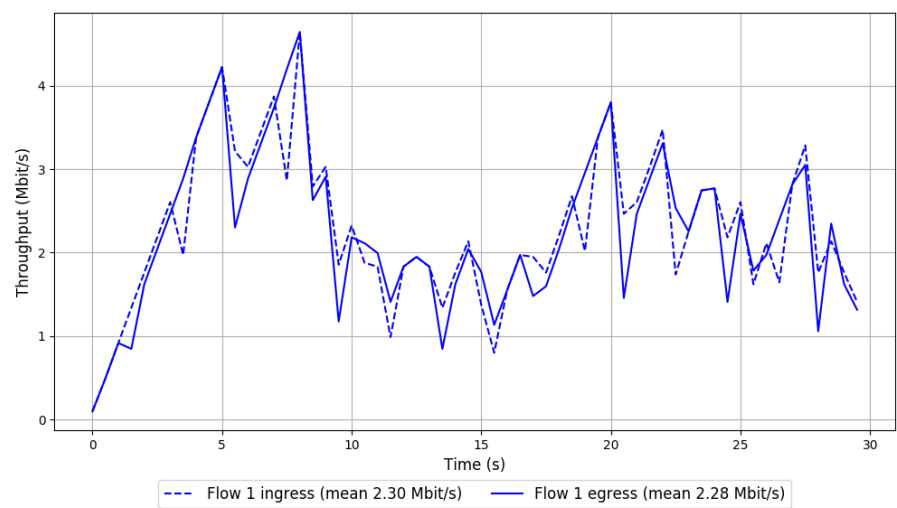
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 87.332 ms

Loss rate: 1.49%

Run 10: Report of LEDBAT — Data Link

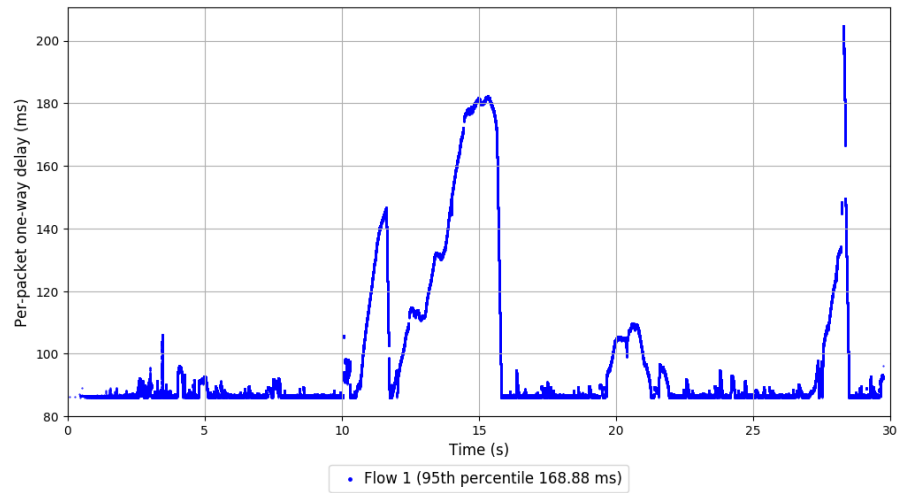
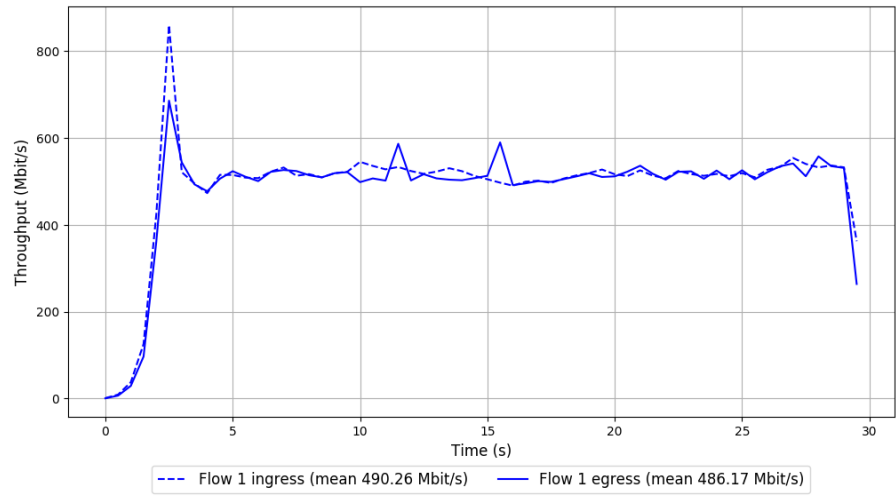


```
Run 1: Statistics of PCC

Start at: 2017-08-11 05:38:24
End at: 2017-08-11 05:38:54

# Below is generated by plot.py at 2017-08-11 10:03:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 486.17 Mbit/s
95th percentile per-packet one-way delay: 168.884 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 486.17 Mbit/s
95th percentile per-packet one-way delay: 168.884 ms
Loss rate: 1.44%
```


Run 1: Report of PCC — Data Link

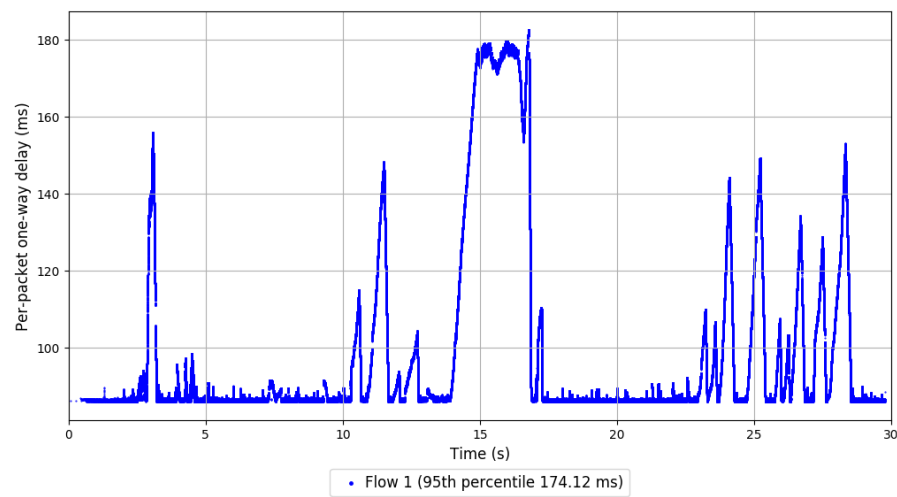
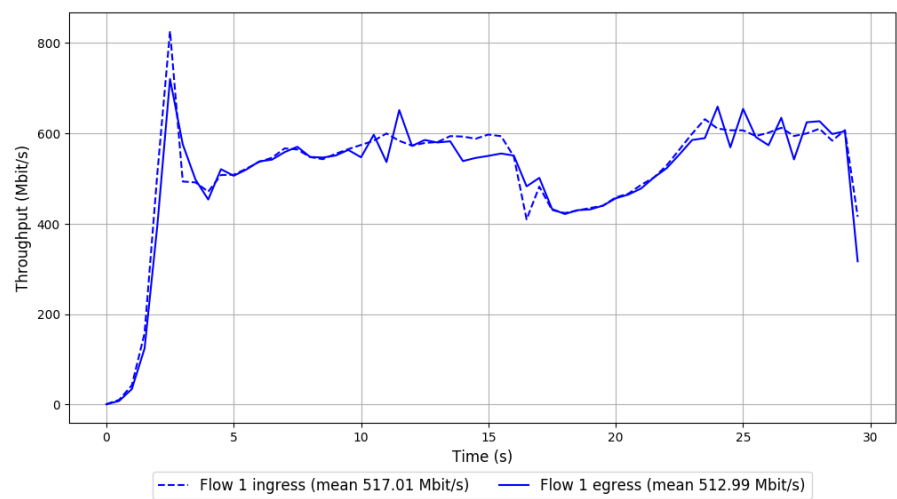


```
Run 2: Statistics of PCC

Start at: 2017-08-11 05:49:37
End at: 2017-08-11 05:50:07

# Below is generated by plot.py at 2017-08-11 10:03:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 512.99 Mbit/s
95th percentile per-packet one-way delay: 174.125 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 512.99 Mbit/s
95th percentile per-packet one-way delay: 174.125 ms
Loss rate: 1.39%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-11 06:00:44

End at: 2017-08-11 06:01:14

Below is generated by plot.py at 2017-08-11 10:04:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 447.63 Mbit/s

95th percentile per-packet one-way delay: 87.565 ms

Loss rate: 6.47%

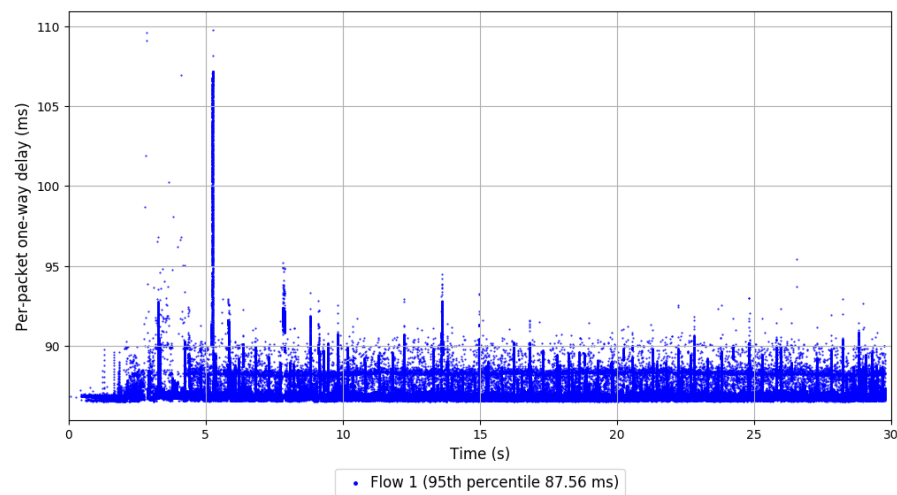
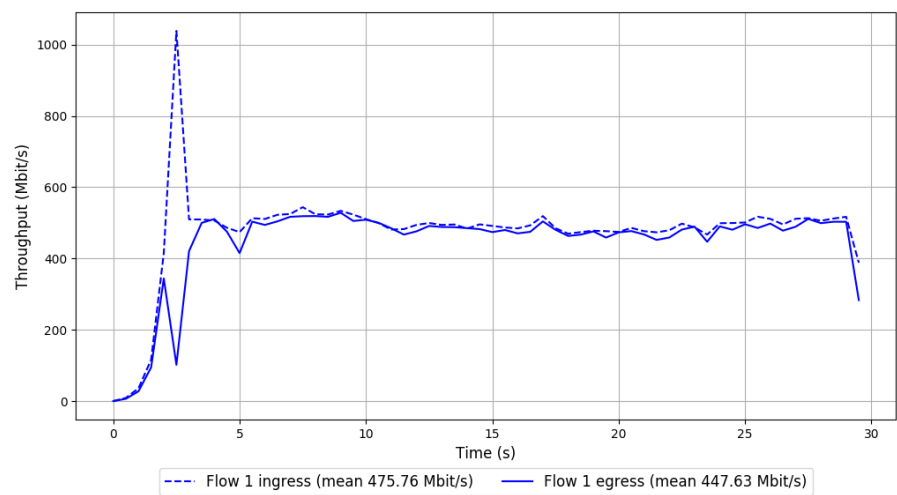
-- Flow 1:

Average throughput: 447.63 Mbit/s

95th percentile per-packet one-way delay: 87.565 ms

Loss rate: 6.47%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

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

End at: 2017-08-11 06:12:14

Below is generated by plot.py at 2017-08-11 10:04:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 490.27 Mbit/s

95th percentile per-packet one-way delay: 113.102 ms

Loss rate: 0.99%

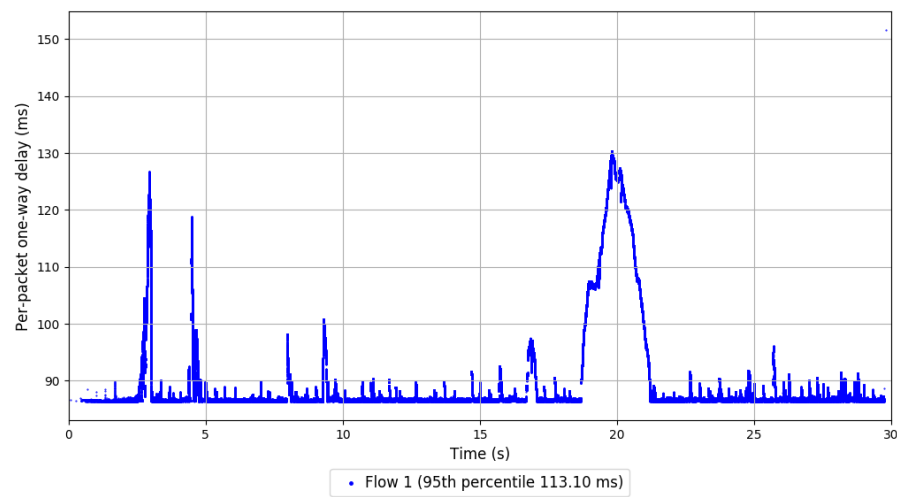
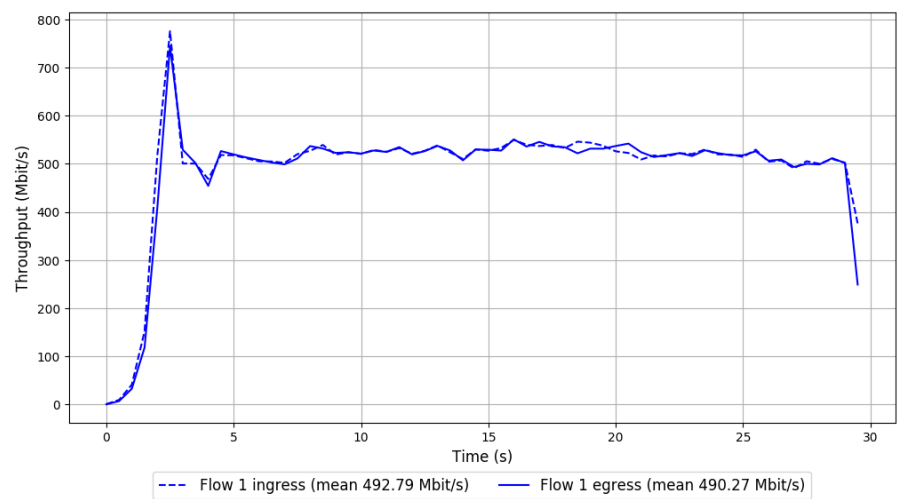
-- Flow 1:

Average throughput: 490.27 Mbit/s

95th percentile per-packet one-way delay: 113.102 ms

Loss rate: 0.99%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-11 06:22:49

End at: 2017-08-11 06:23:19

Below is generated by plot.py at 2017-08-11 10:06:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 400.48 Mbit/s

95th percentile per-packet one-way delay: 187.502 ms

Loss rate: 2.53%

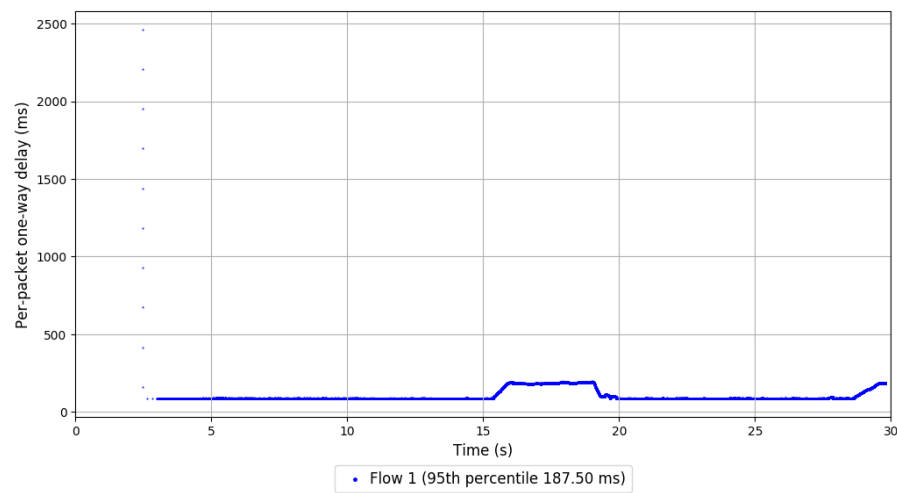
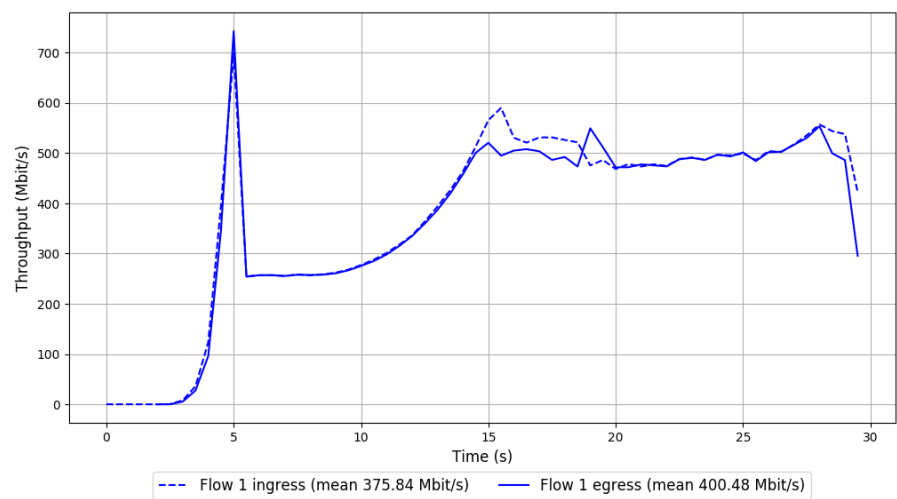
-- Flow 1:

Average throughput: 400.48 Mbit/s

95th percentile per-packet one-way delay: 187.502 ms

Loss rate: 2.53%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

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

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

Below is generated by plot.py at 2017-08-11 10:06:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 493.66 Mbit/s

95th percentile per-packet one-way delay: 121.668 ms

Loss rate: 1.32%

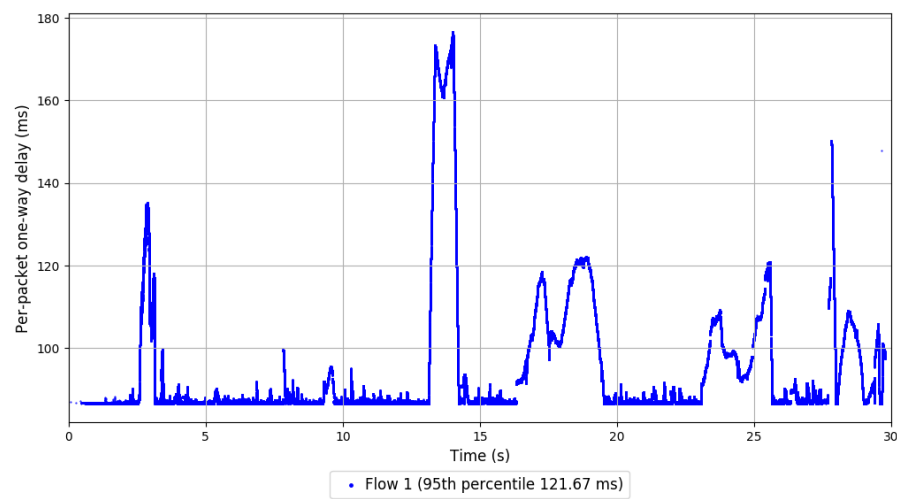
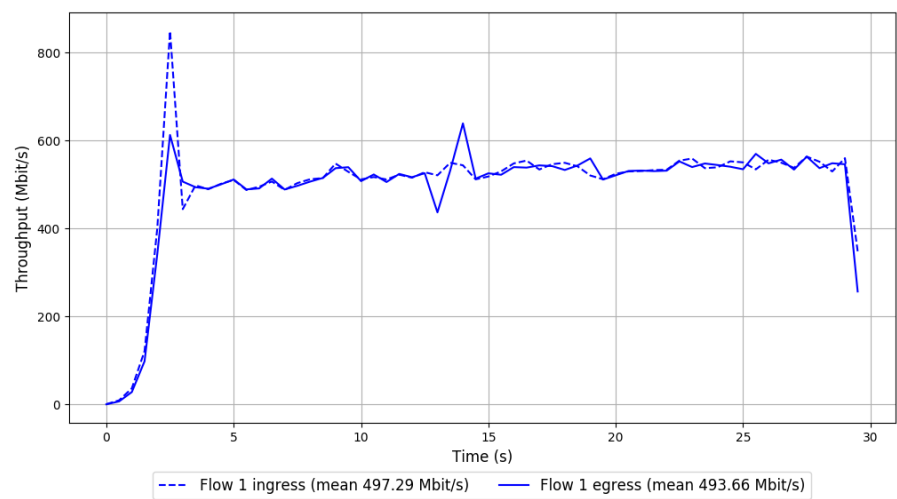
-- Flow 1:

Average throughput: 493.66 Mbit/s

95th percentile per-packet one-way delay: 121.668 ms

Loss rate: 1.32%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-11 06:44:38

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

Below is generated by plot.py at 2017-08-11 10:06:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.36 Mbit/s

95th percentile per-packet one-way delay: 111.173 ms

Loss rate: 1.77%

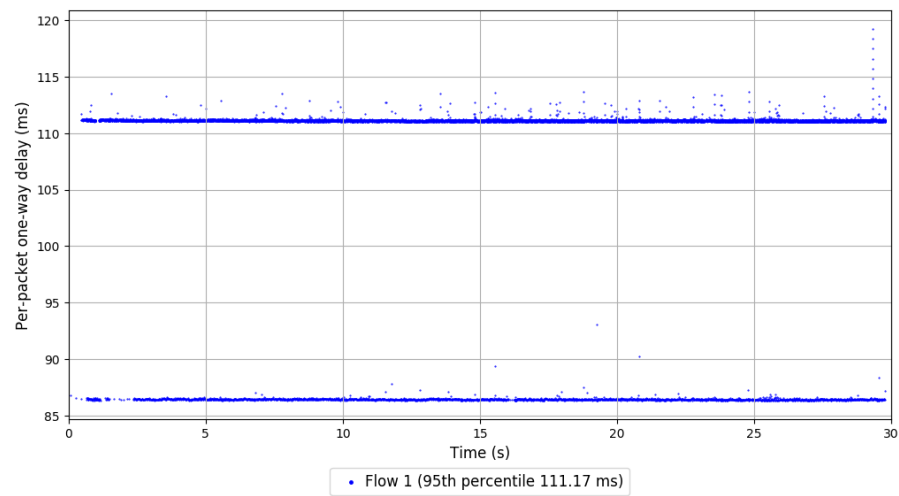
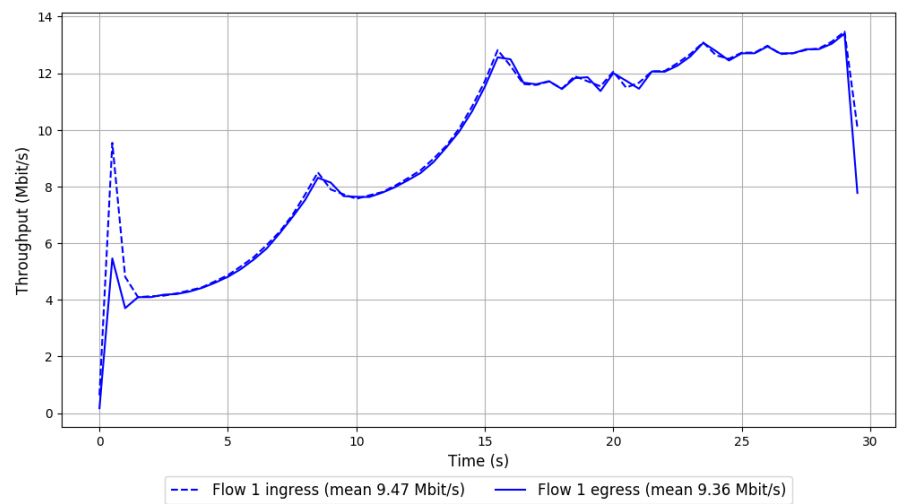
-- Flow 1:

Average throughput: 9.36 Mbit/s

95th percentile per-packet one-way delay: 111.173 ms

Loss rate: 1.77%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-11 06:55:19

End at: 2017-08-11 06:55:49

Below is generated by plot.py at 2017-08-11 10:06:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 111.183 ms

Loss rate: 75.05%

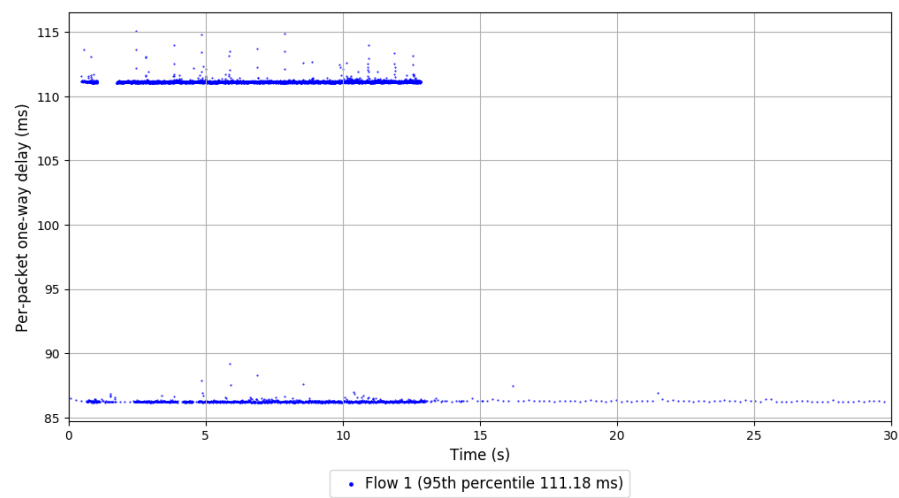
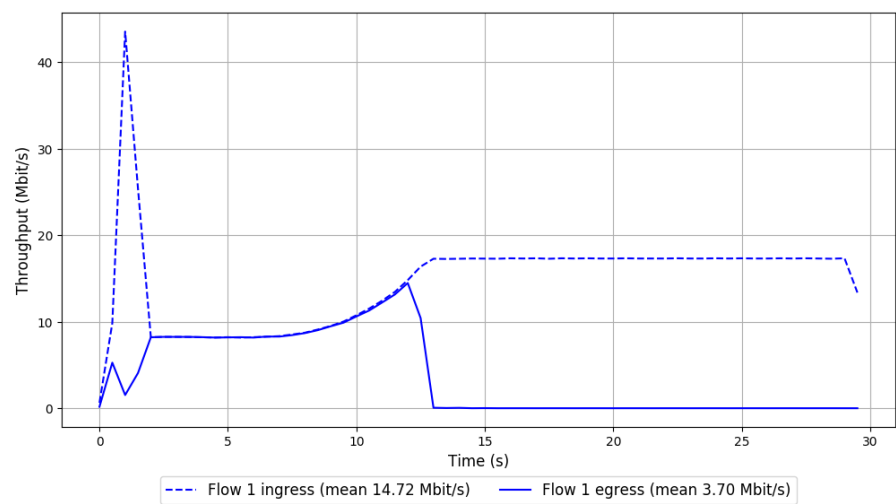
-- Flow 1:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 111.183 ms

Loss rate: 75.05%

Run 8: Report of PCC — Data Link

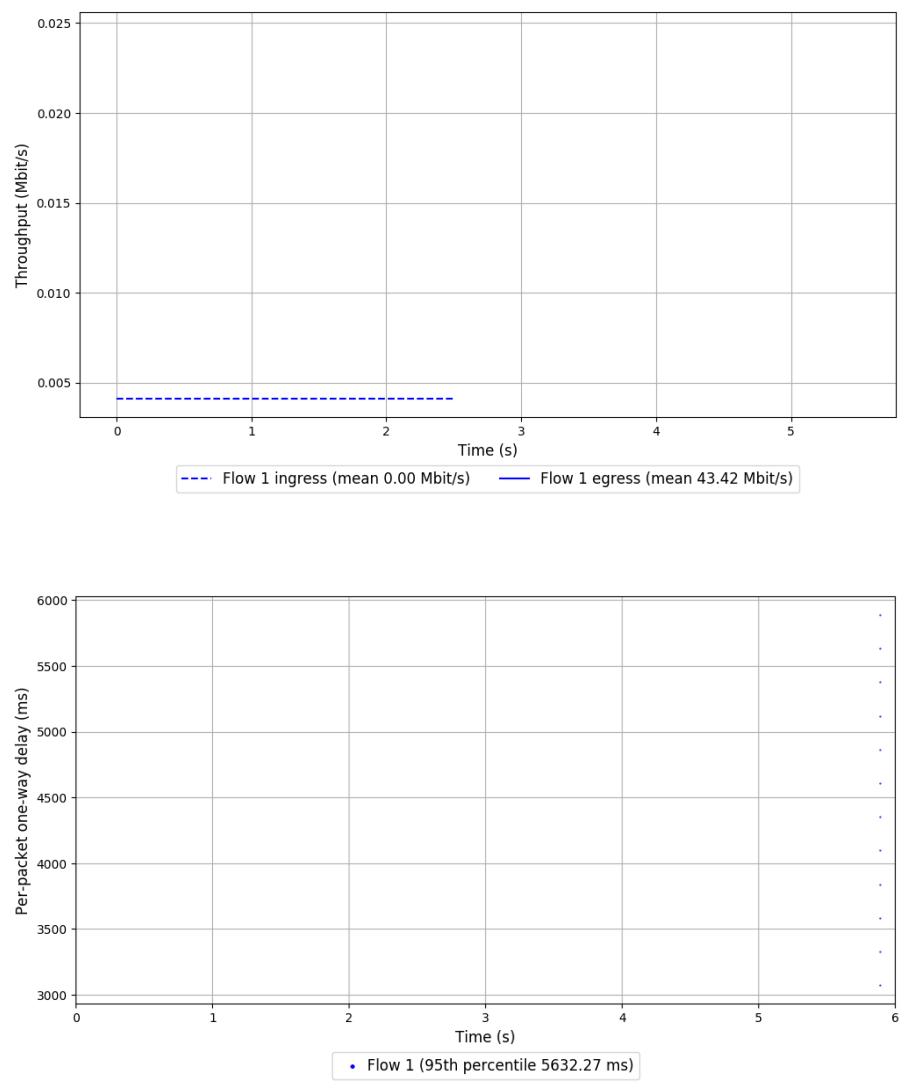


Run 9: Statistics of PCC

Start at: 2017-08-11 07:05:59

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

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-11 07:16:38

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

Below is generated by plot.py at 2017-08-11 10:07:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 510.55 Mbit/s

95th percentile per-packet one-way delay: 180.470 ms

Loss rate: 1.39%

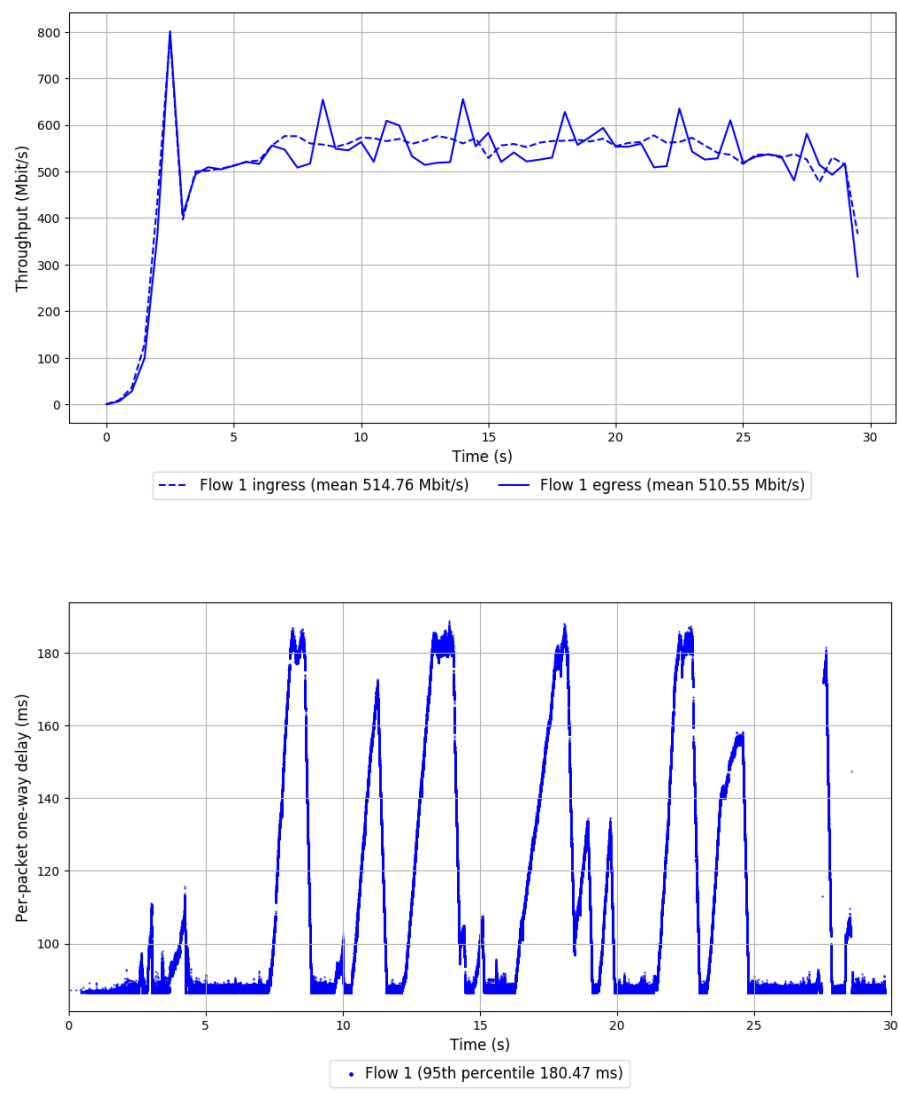
-- Flow 1:

Average throughput: 510.55 Mbit/s

95th percentile per-packet one-way delay: 180.470 ms

Loss rate: 1.39%

Run 10: Report of PCC — Data Link

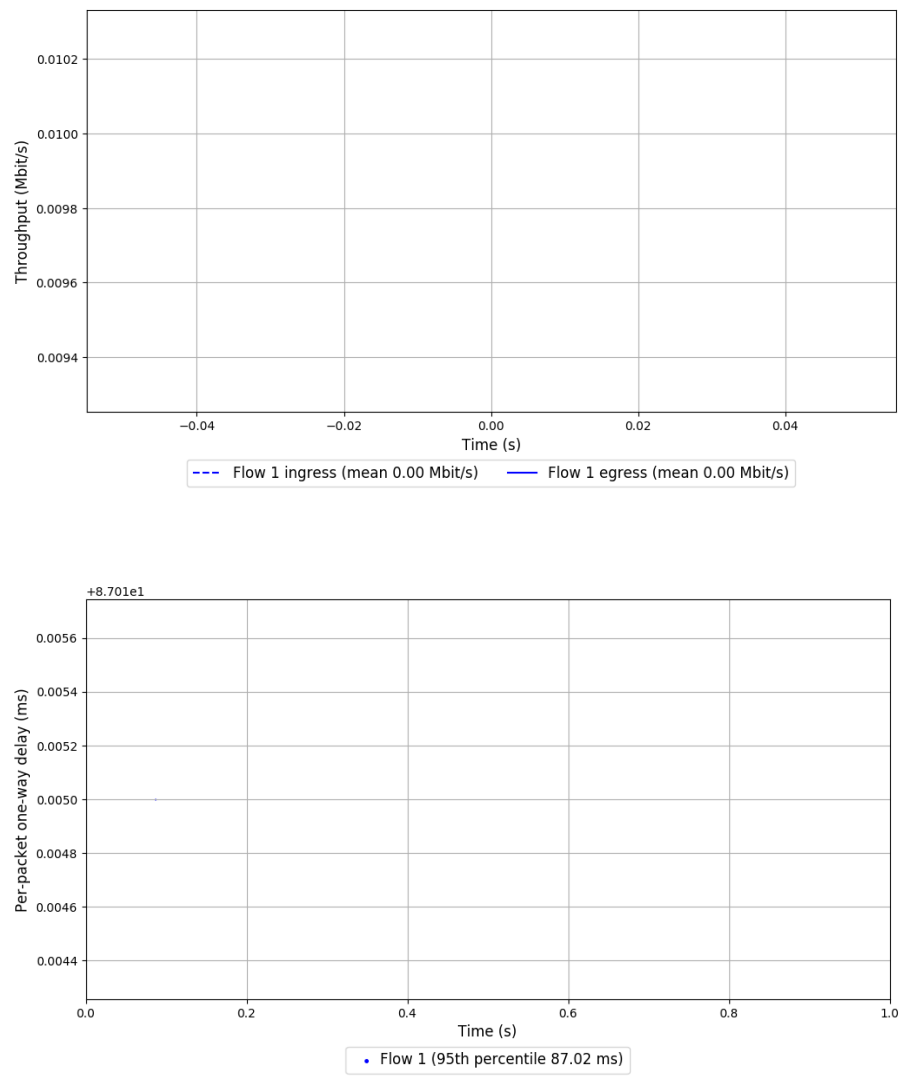


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-11 05:34:47

End at: 2017-08-11 05:35:17

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-11 05:45:59

End at: 2017-08-11 05:46:29

Below is generated by plot.py at 2017-08-11 10:07:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.01 Mbit/s

95th percentile per-packet one-way delay: 86.751 ms

Loss rate: 1.39%

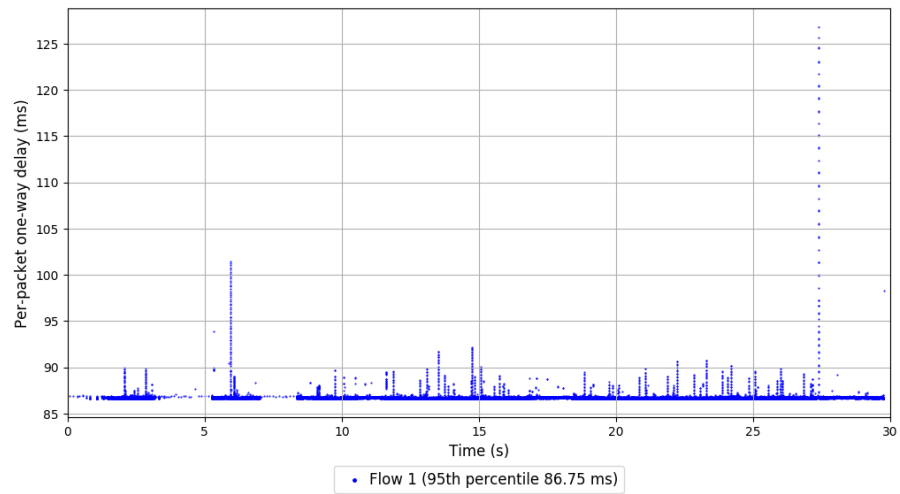
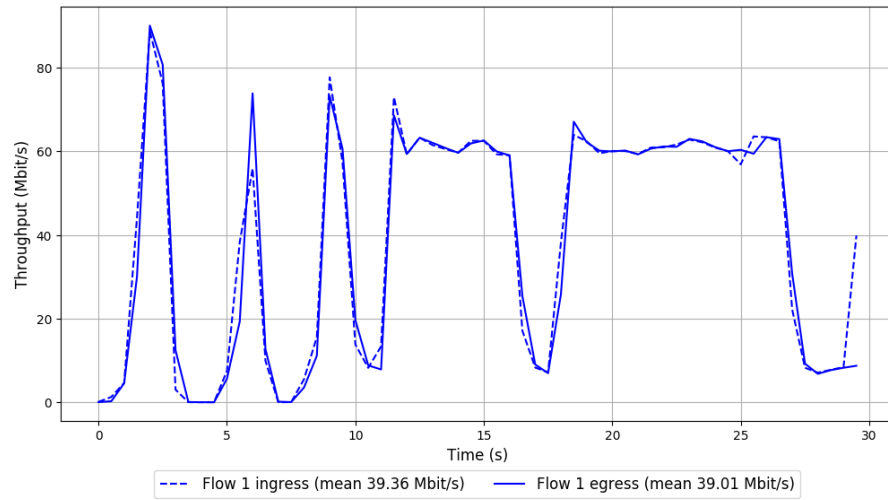
-- Flow 1:

Average throughput: 39.01 Mbit/s

95th percentile per-packet one-way delay: 86.751 ms

Loss rate: 1.39%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

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

End at: 2017-08-11 05:57:35

Below is generated by plot.py at 2017-08-11 10:07:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.23 Mbit/s

95th percentile per-packet one-way delay: 86.929 ms

Loss rate: 0.84%

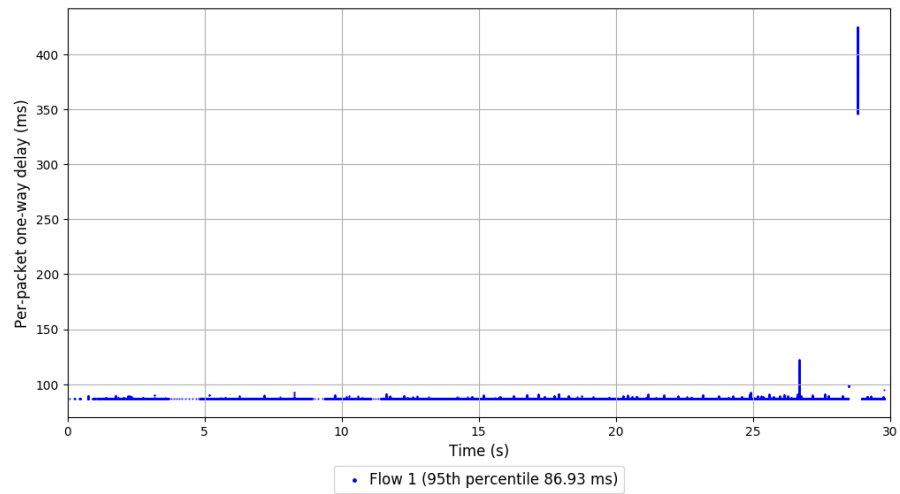
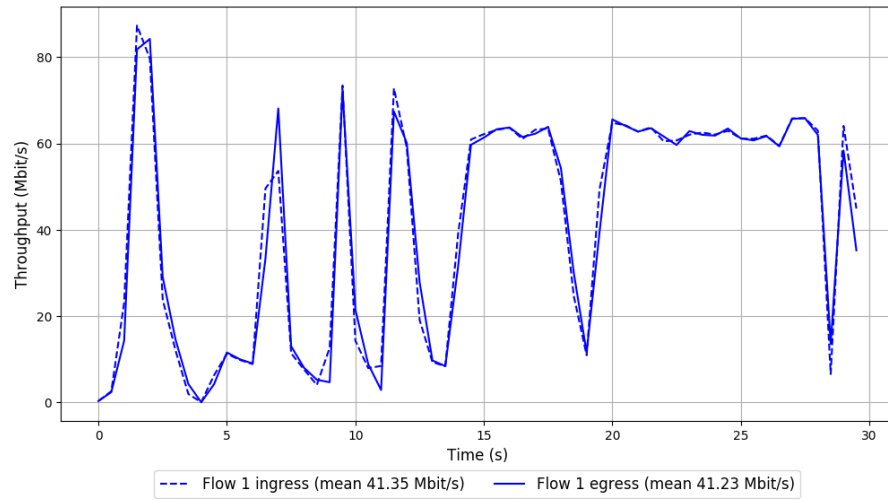
-- Flow 1:

Average throughput: 41.23 Mbit/s

95th percentile per-packet one-way delay: 86.929 ms

Loss rate: 0.84%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2017-08-11 10:07:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.68 Mbit/s

95th percentile per-packet one-way delay: 86.364 ms

Loss rate: 0.47%

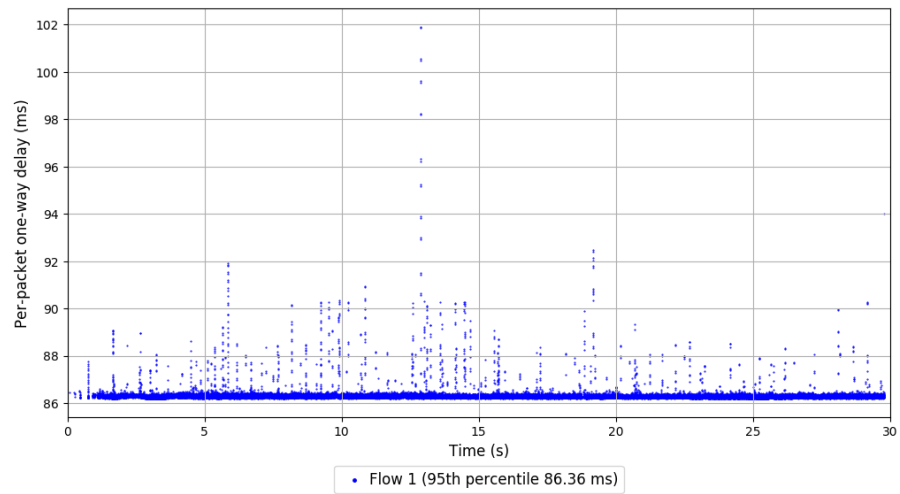
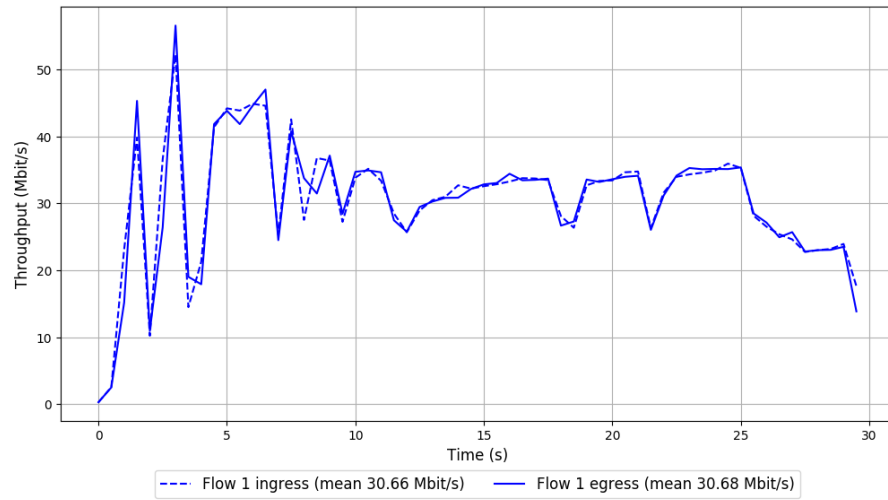
-- Flow 1:

Average throughput: 30.68 Mbit/s

95th percentile per-packet one-way delay: 86.364 ms

Loss rate: 0.47%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

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

End at: 2017-08-11 06:19:41

Below is generated by plot.py at 2017-08-11 10:07:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.68 Mbit/s

95th percentile per-packet one-way delay: 85.980 ms

Loss rate: 1.04%

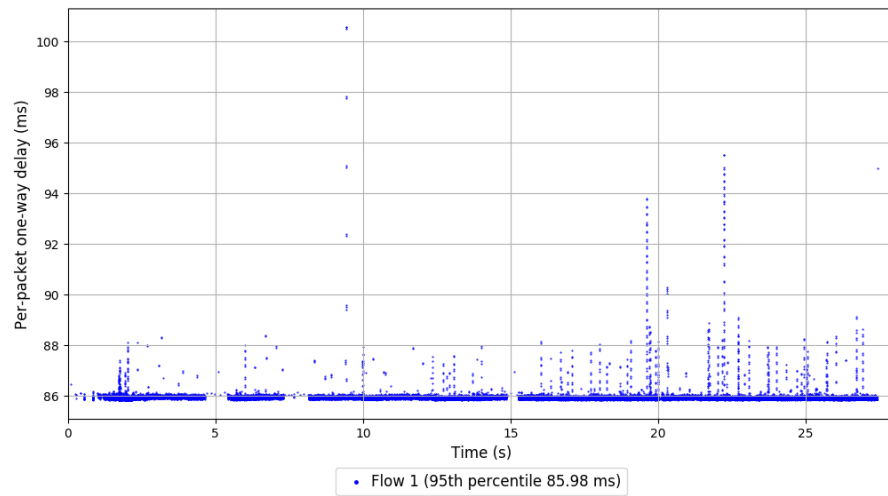
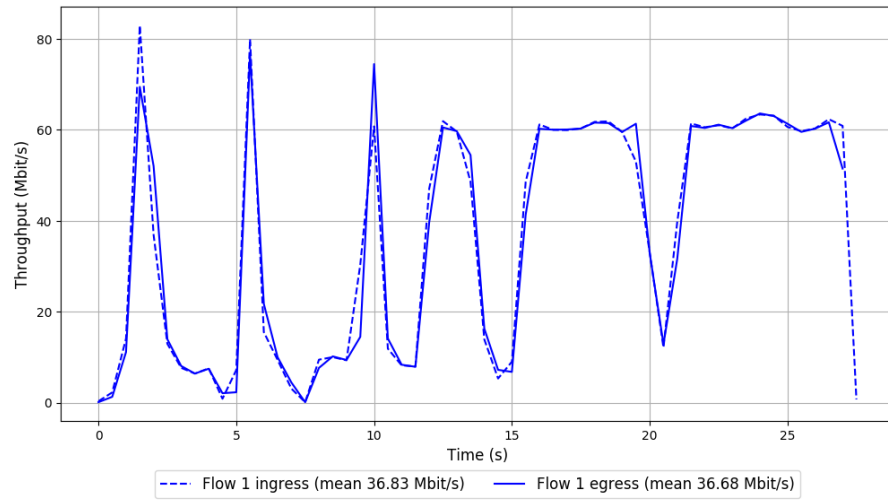
-- Flow 1:

Average throughput: 36.68 Mbit/s

95th percentile per-packet one-way delay: 85.980 ms

Loss rate: 1.04%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

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

End at: 2017-08-11 06:30:36

Below is generated by plot.py at 2017-08-11 10:07:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.16 Mbit/s

95th percentile per-packet one-way delay: 86.808 ms

Loss rate: 0.91%

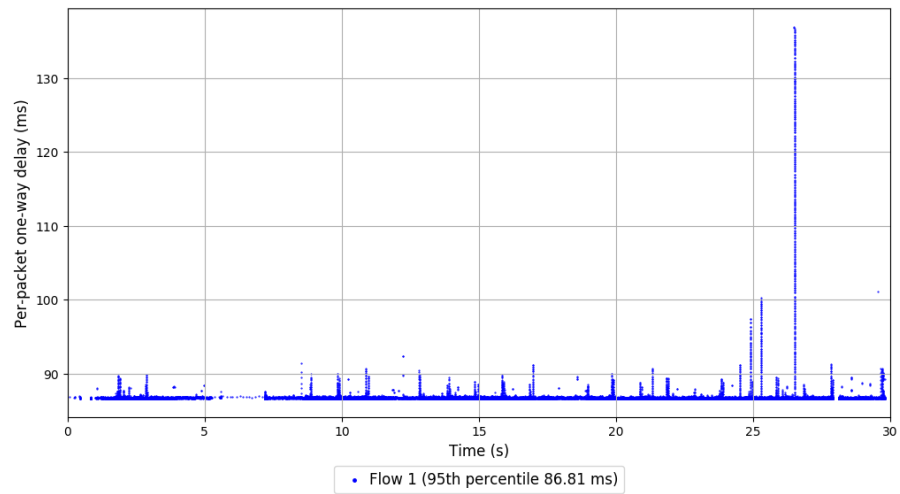
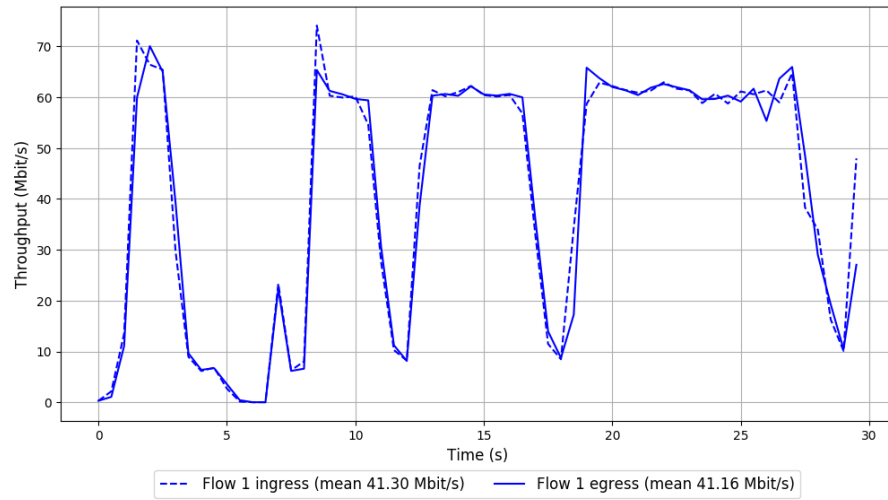
-- Flow 1:

Average throughput: 41.16 Mbit/s

95th percentile per-packet one-way delay: 86.808 ms

Loss rate: 0.91%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-11 06:40:59

End at: 2017-08-11 06:41:29

Below is generated by plot.py at 2017-08-11 10:07:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.65 Mbit/s

95th percentile per-packet one-way delay: 86.471 ms

Loss rate: 0.07%

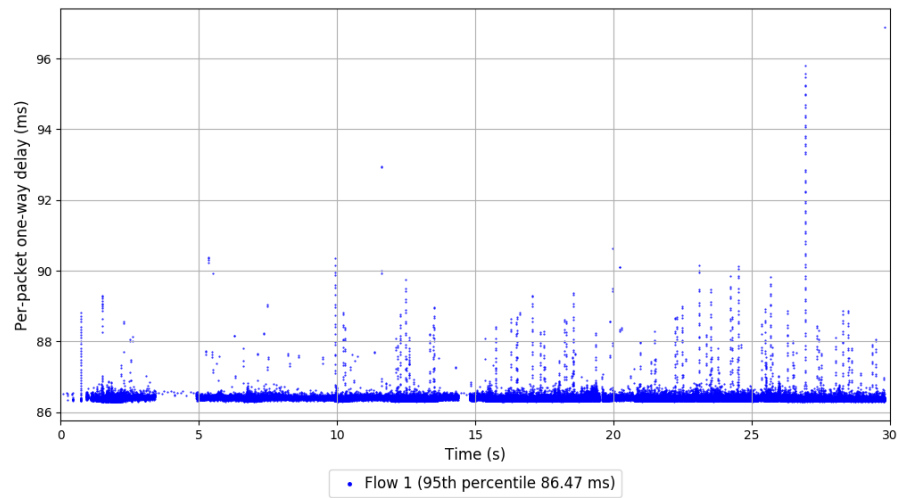
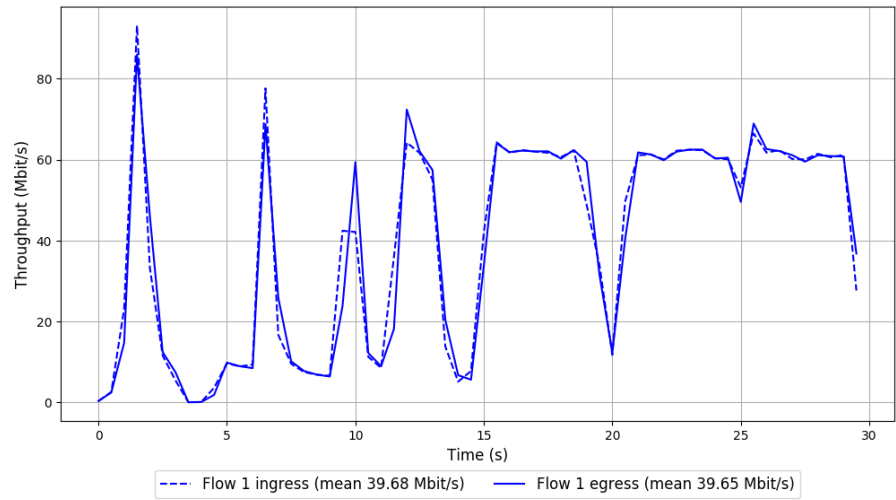
-- Flow 1:

Average throughput: 39.65 Mbit/s

95th percentile per-packet one-way delay: 86.471 ms

Loss rate: 0.07%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-11 06:51:39

End at: 2017-08-11 06:52:10

Below is generated by plot.py at 2017-08-11 10:07:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.48 Mbit/s

95th percentile per-packet one-way delay: 86.921 ms

Loss rate: 0.93%

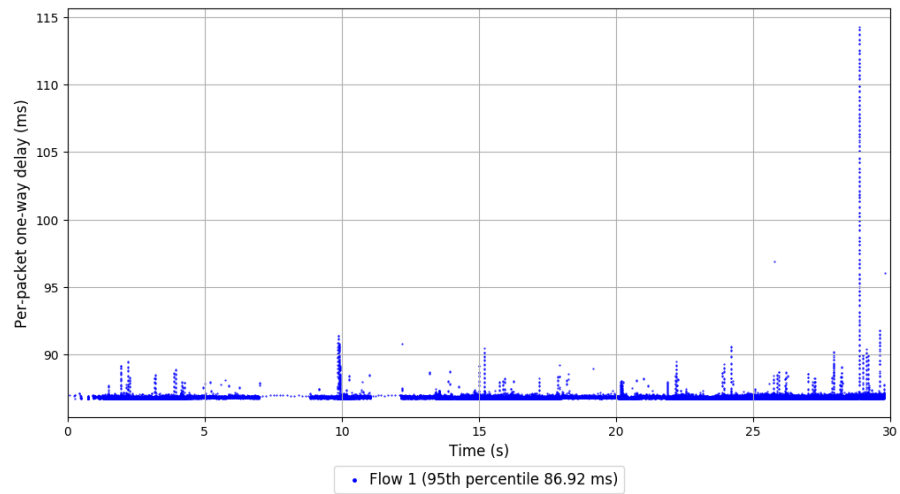
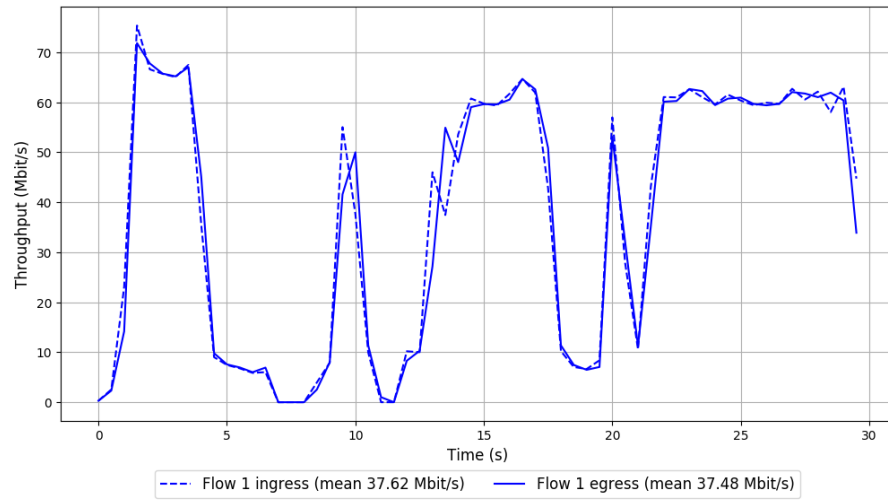
-- Flow 1:

Average throughput: 37.48 Mbit/s

95th percentile per-packet one-way delay: 86.921 ms

Loss rate: 0.93%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-11 07:02:19

End at: 2017-08-11 07:02:49

Below is generated by plot.py at 2017-08-11 10:07:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.75 Mbit/s

95th percentile per-packet one-way delay: 86.931 ms

Loss rate: 1.11%

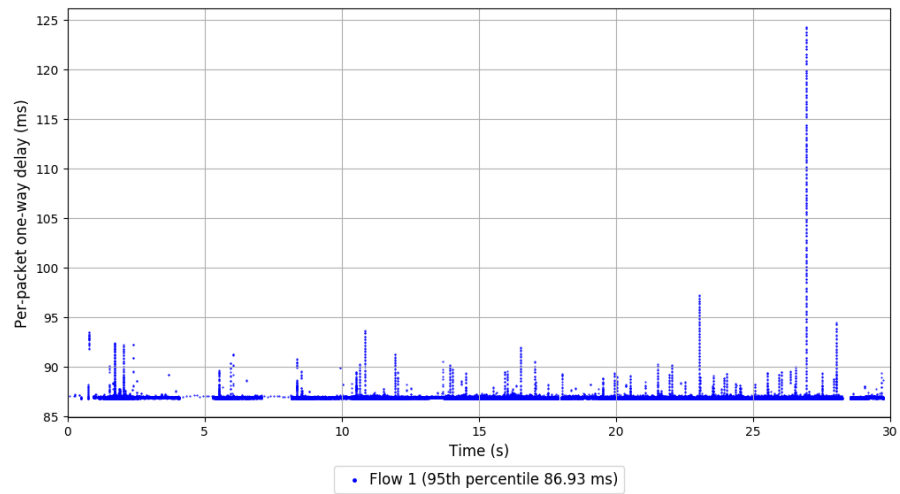
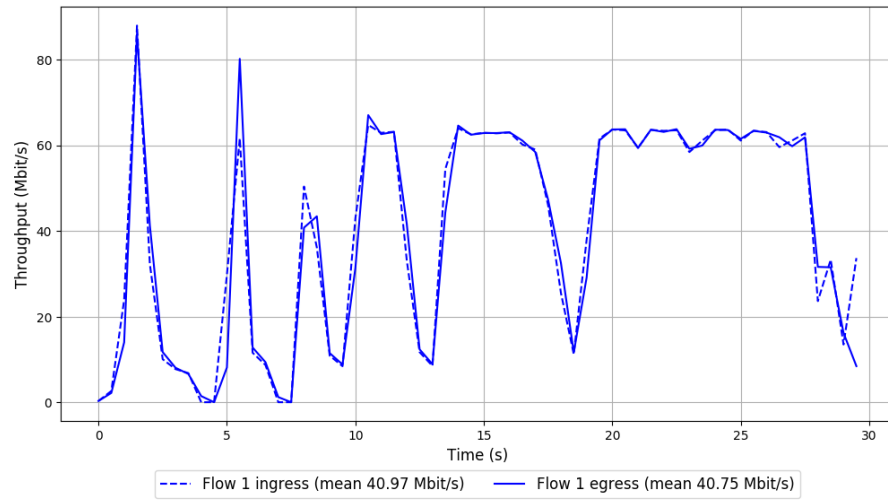
-- Flow 1:

Average throughput: 40.75 Mbit/s

95th percentile per-packet one-way delay: 86.931 ms

Loss rate: 1.11%

Run 9: Report of QUIC Cubic — Data Link

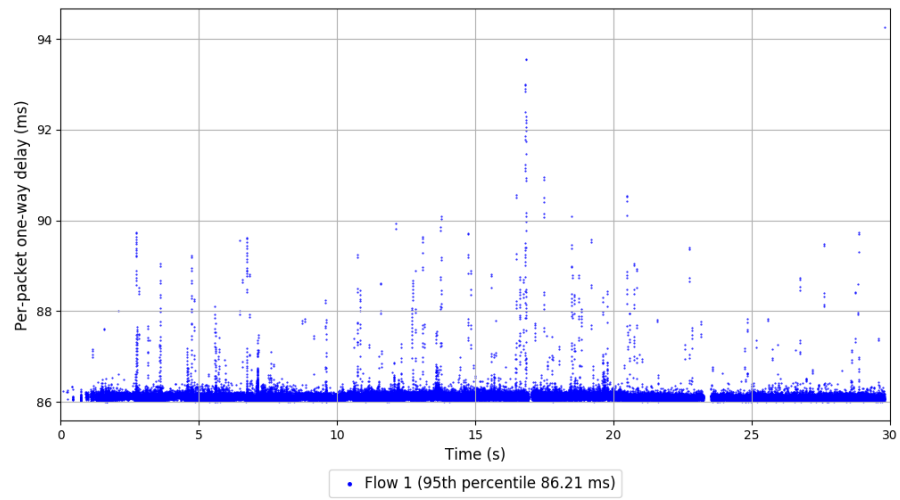
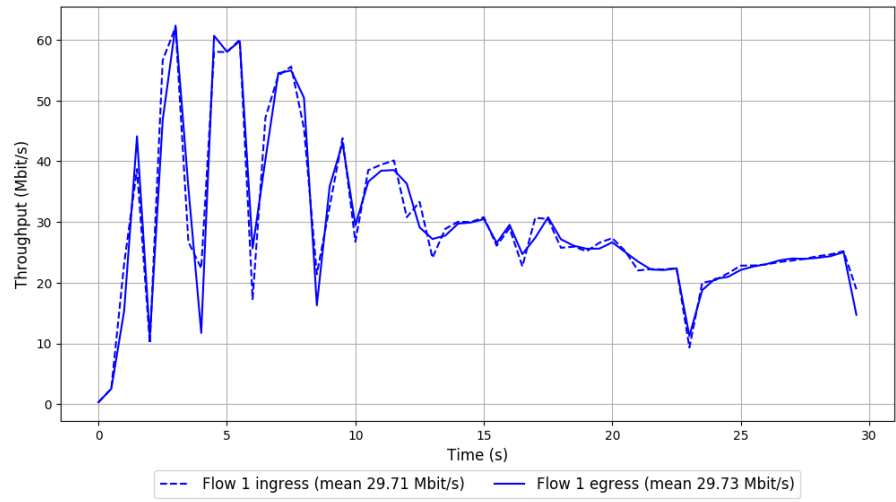


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-11 07:13:01
End at: 2017-08-11 07:13:31

# Below is generated by plot.py at 2017-08-11 10:07:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.73 Mbit/s
95th percentile per-packet one-way delay: 86.214 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 29.73 Mbit/s
95th percentile per-packet one-way delay: 86.214 ms
Loss rate: 0.51%
```

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of Saturator

Start at: 2017-08-11 05:40:10

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

Below is generated by plot.py at 2017-08-11 10:07:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.23 Mbit/s

95th percentile per-packet one-way delay: 87.793 ms

Loss rate: 1.83%

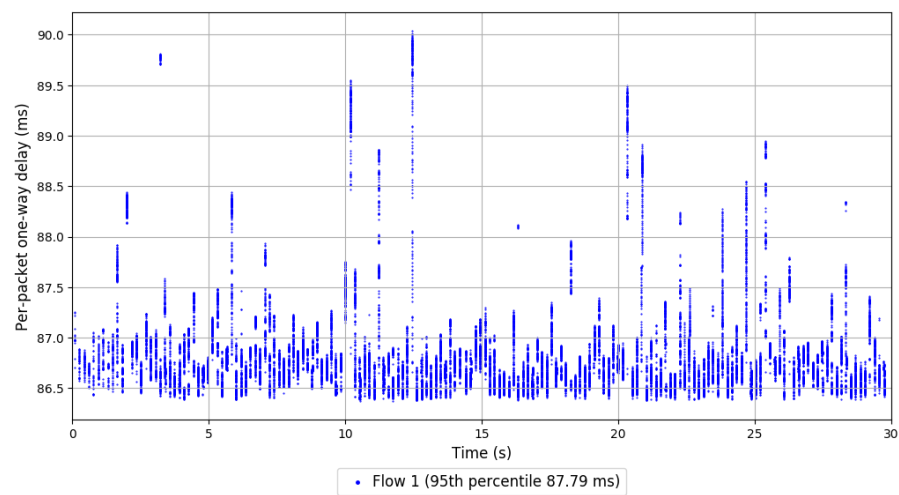
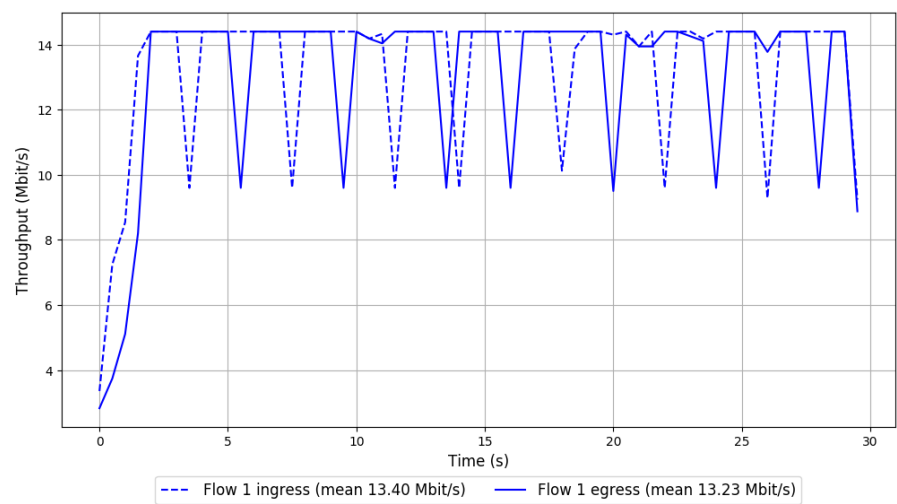
-- Flow 1:

Average throughput: 13.23 Mbit/s

95th percentile per-packet one-way delay: 87.793 ms

Loss rate: 1.83%

Run 1: Report of Saturator — Data Link



Run 2: Statistics of Saturator

Start at: 2017-08-11 05:51:28

End at: 2017-08-11 05:51:58

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.29 Mbit/s

95th percentile per-packet one-way delay: 88.371 ms

Loss rate: 1.52%

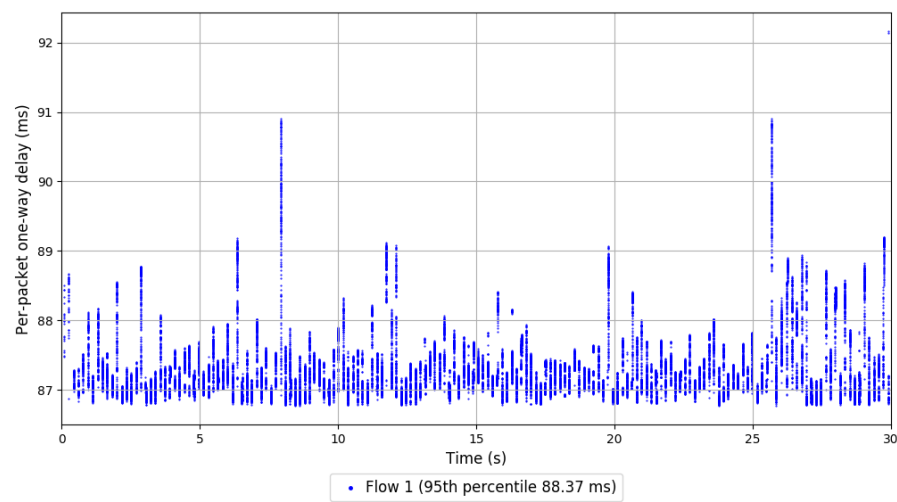
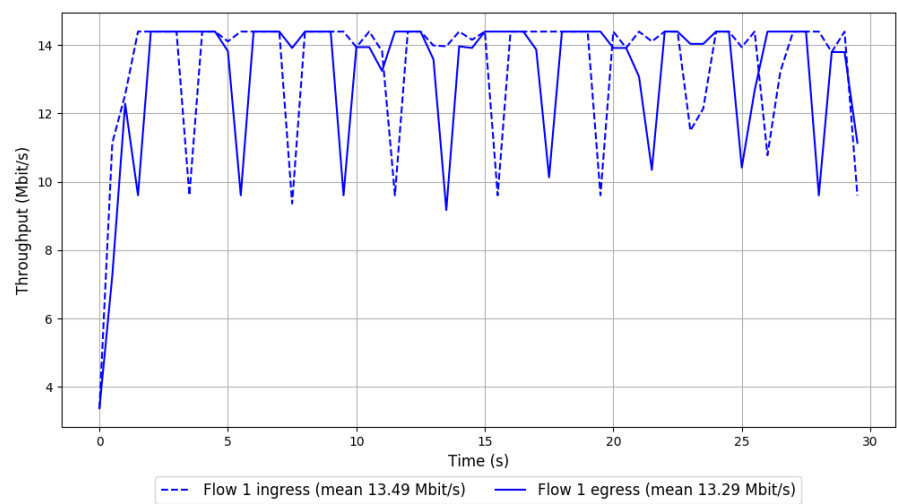
-- Flow 1:

Average throughput: 13.29 Mbit/s

95th percentile per-packet one-way delay: 88.371 ms

Loss rate: 1.52%

Run 2: Report of Saturator — Data Link



Run 3: Statistics of Saturator

Start at: 2017-08-11 06:02:34

End at: 2017-08-11 06:03:04

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.59 Mbit/s

95th percentile per-packet one-way delay: 87.713 ms

Loss rate: 0.85%

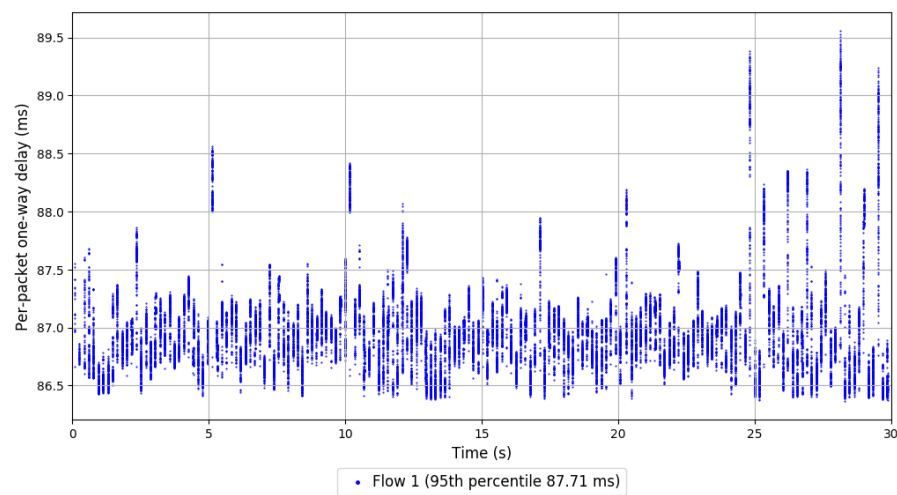
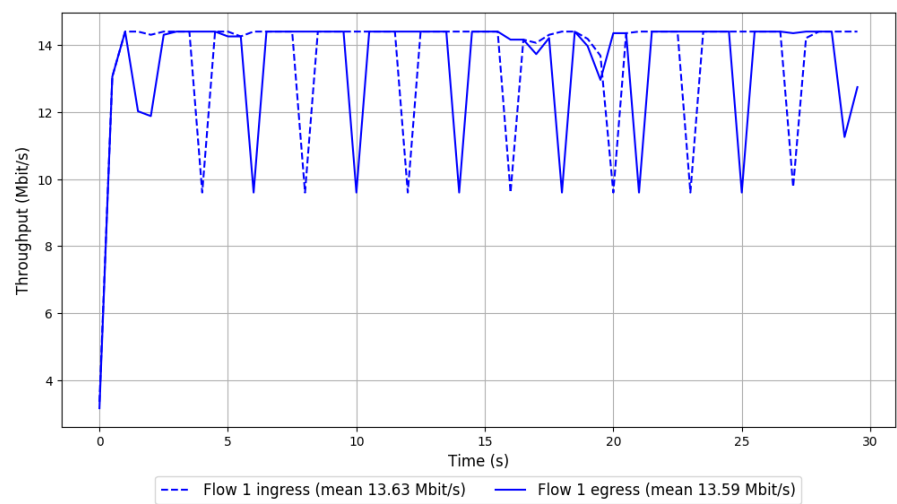
-- Flow 1:

Average throughput: 13.59 Mbit/s

95th percentile per-packet one-way delay: 87.713 ms

Loss rate: 0.85%

Run 3: Report of Saturator — Data Link



Run 4: Statistics of Saturator

Start at: 2017-08-11 06:13:35

End at: 2017-08-11 06:14:05

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.59 Mbit/s

95th percentile per-packet one-way delay: 87.790 ms

Loss rate: 0.94%

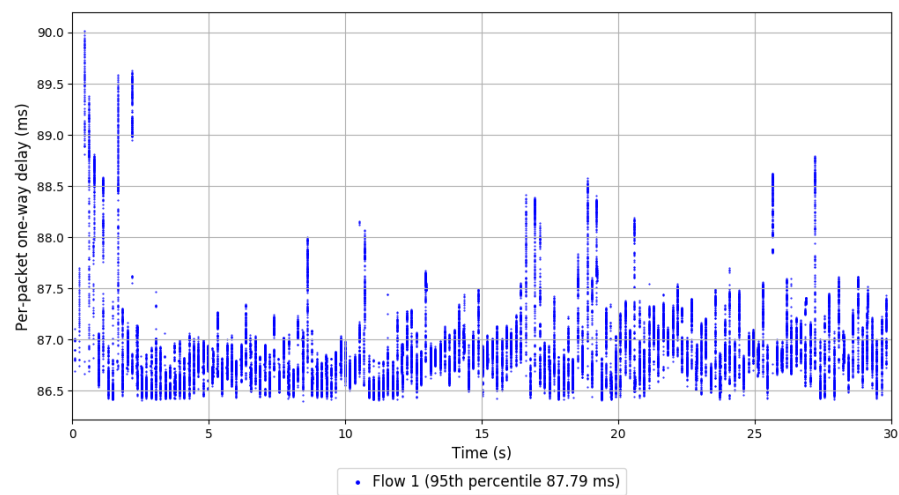
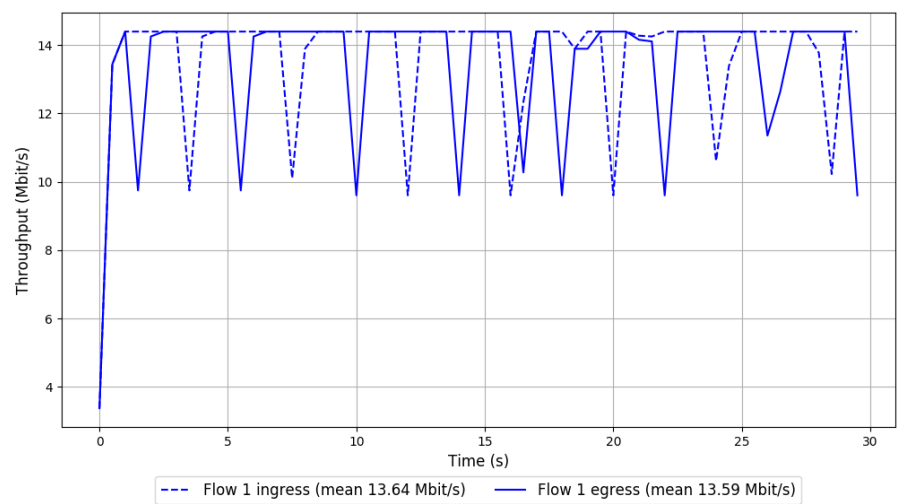
-- Flow 1:

Average throughput: 13.59 Mbit/s

95th percentile per-packet one-way delay: 87.790 ms

Loss rate: 0.94%

Run 4: Report of Saturator — Data Link



Run 5: Statistics of Saturator

Start at: 2017-08-11 06:24:27

End at: 2017-08-11 06:24:57

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.56 Mbit/s

95th percentile per-packet one-way delay: 87.669 ms

Loss rate: 1.14%

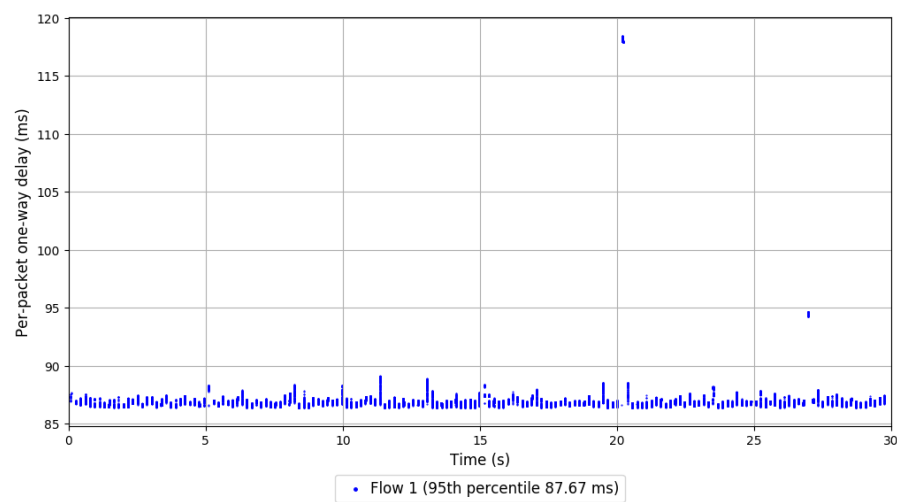
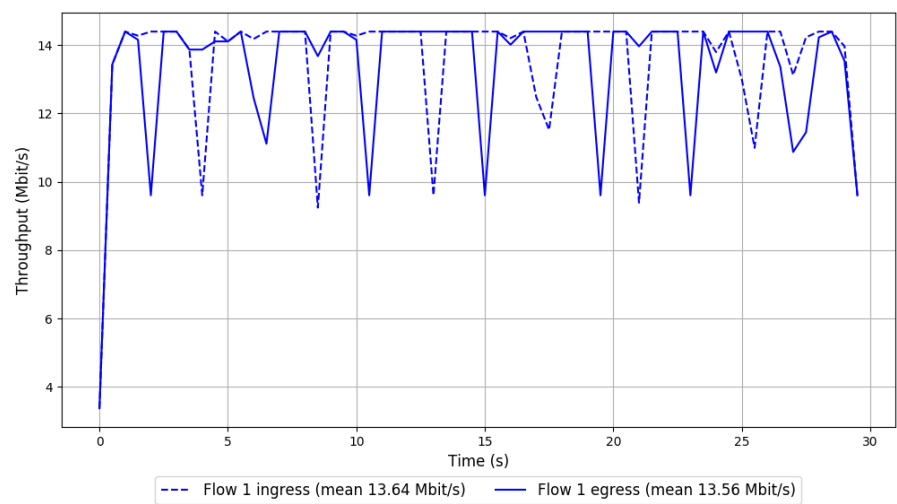
-- Flow 1:

Average throughput: 13.56 Mbit/s

95th percentile per-packet one-way delay: 87.669 ms

Loss rate: 1.14%

Run 5: Report of Saturator — Data Link



Run 6: Statistics of Saturator

Start at: 2017-08-11 06:35:33

End at: 2017-08-11 06:36:03

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.65 Mbit/s

95th percentile per-packet one-way delay: 88.107 ms

Loss rate: 0.85%

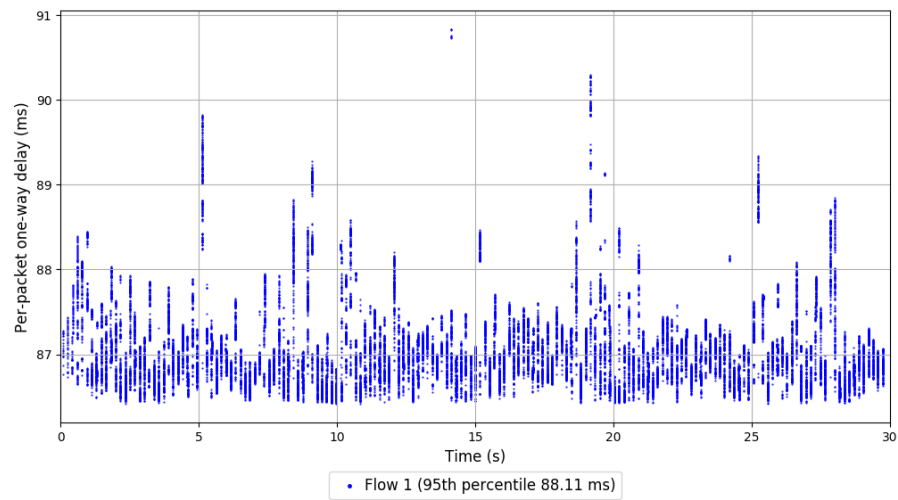
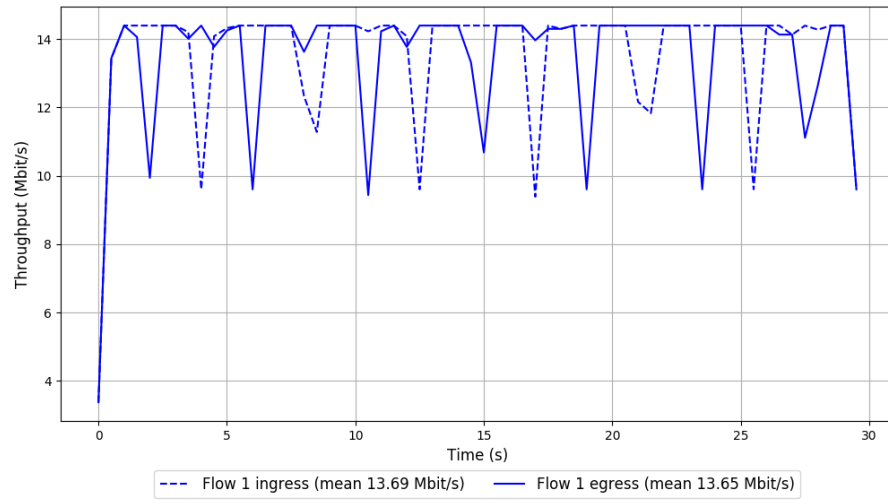
-- Flow 1:

Average throughput: 13.65 Mbit/s

95th percentile per-packet one-way delay: 88.107 ms

Loss rate: 0.85%

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

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

End at: 2017-08-11 06:46:36

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 87.581 ms

Loss rate: 2.91%

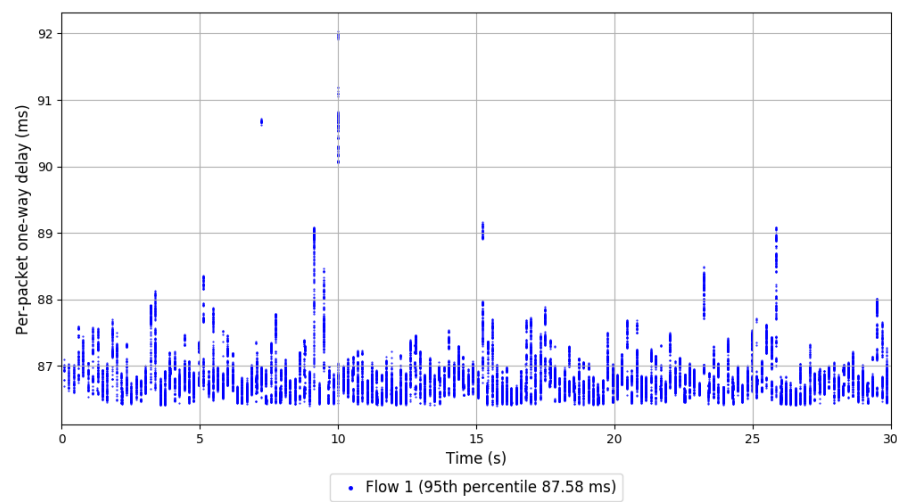
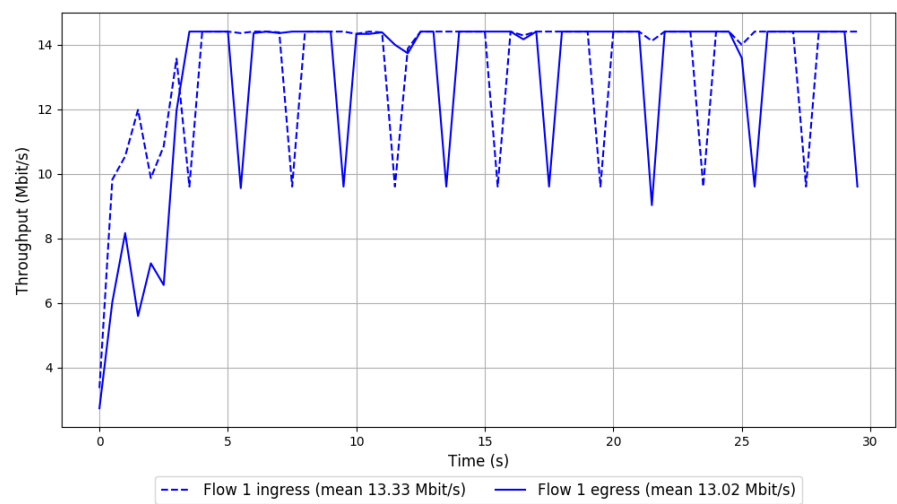
-- Flow 1:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 87.581 ms

Loss rate: 2.91%

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-11 06:56:46

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.59 Mbit/s

95th percentile per-packet one-way delay: 88.010 ms

Loss rate: 0.83%

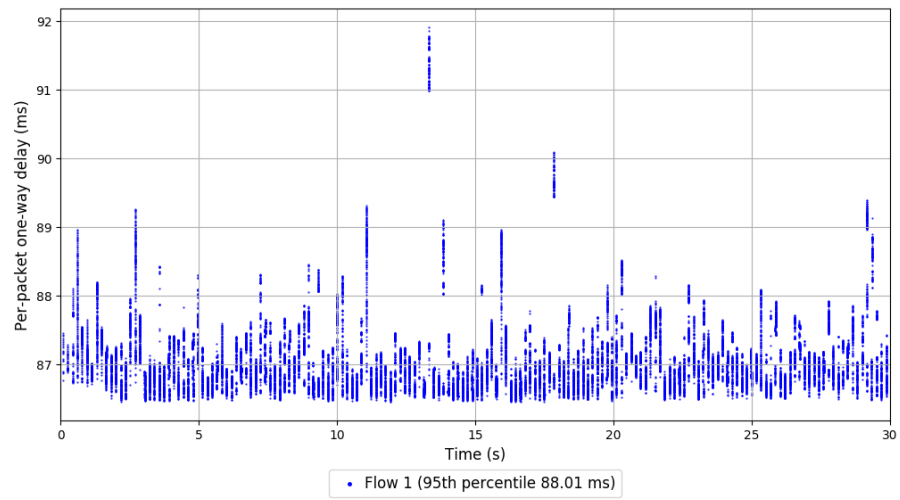
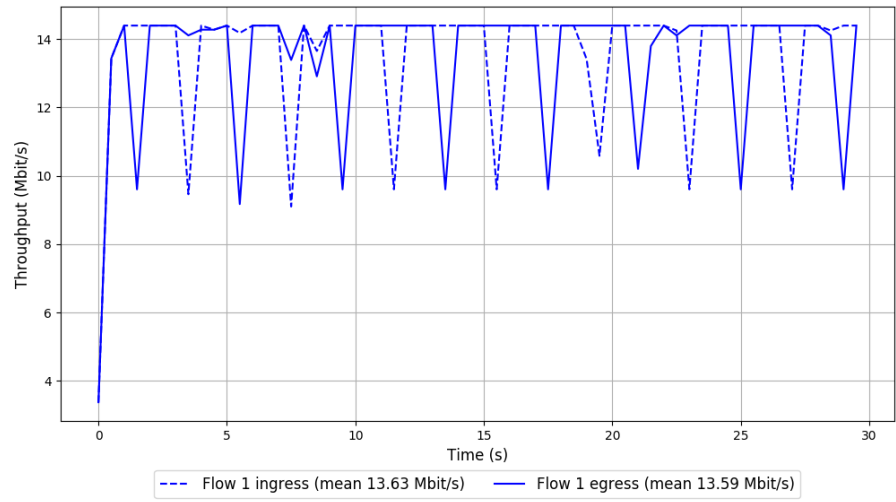
-- Flow 1:

Average throughput: 13.59 Mbit/s

95th percentile per-packet one-way delay: 88.010 ms

Loss rate: 0.83%

Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

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

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.57 Mbit/s

95th percentile per-packet one-way delay: 87.756 ms

Loss rate: 1.01%

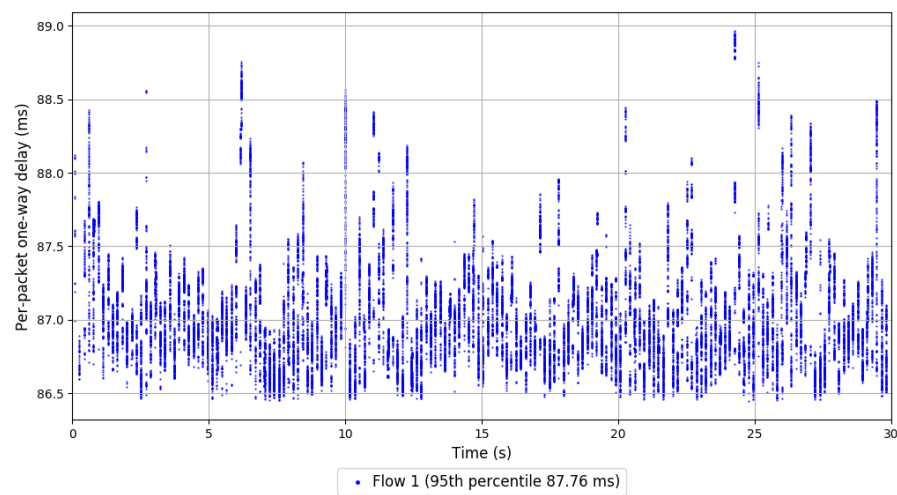
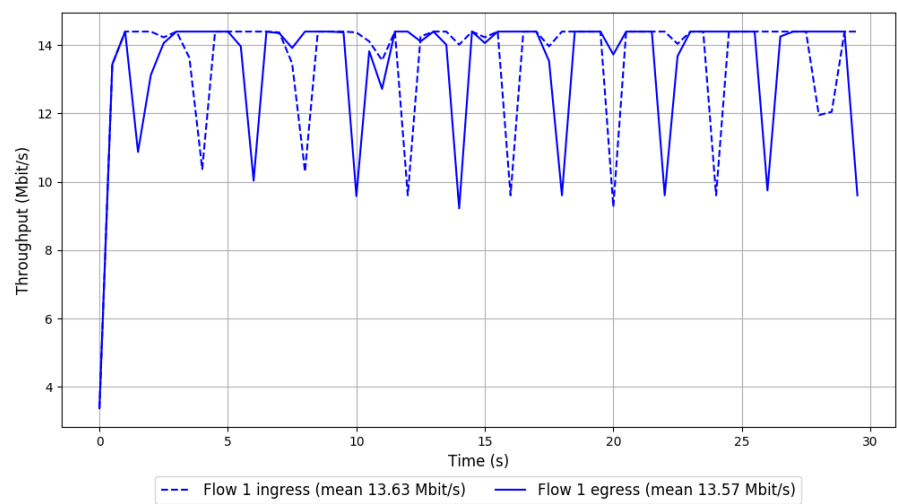
-- Flow 1:

Average throughput: 13.57 Mbit/s

95th percentile per-packet one-way delay: 87.756 ms

Loss rate: 1.01%

Run 9: Report of Saturator — Data Link



Run 10: Statistics of Saturator

Start at: 2017-08-11 07:18:23

End at: 2017-08-11 07:18:53

Below is generated by plot.py at 2017-08-11 10:08:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 88.144 ms

Loss rate: 11.16%

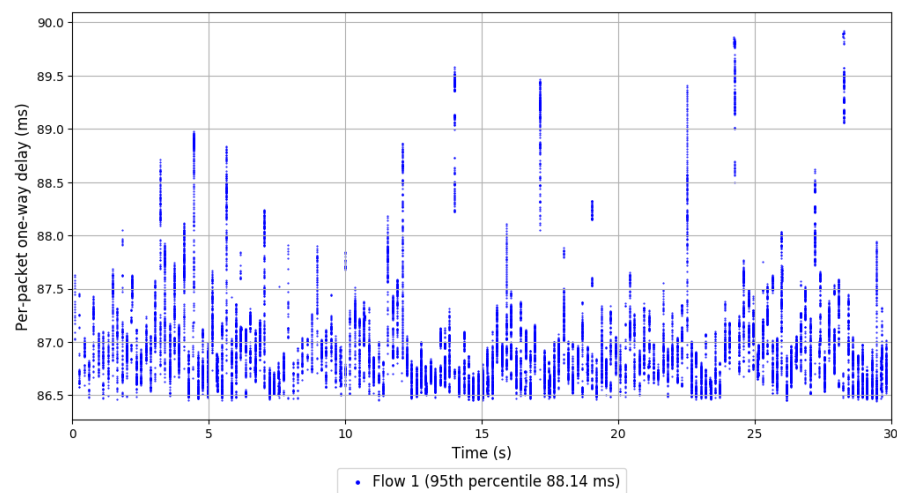
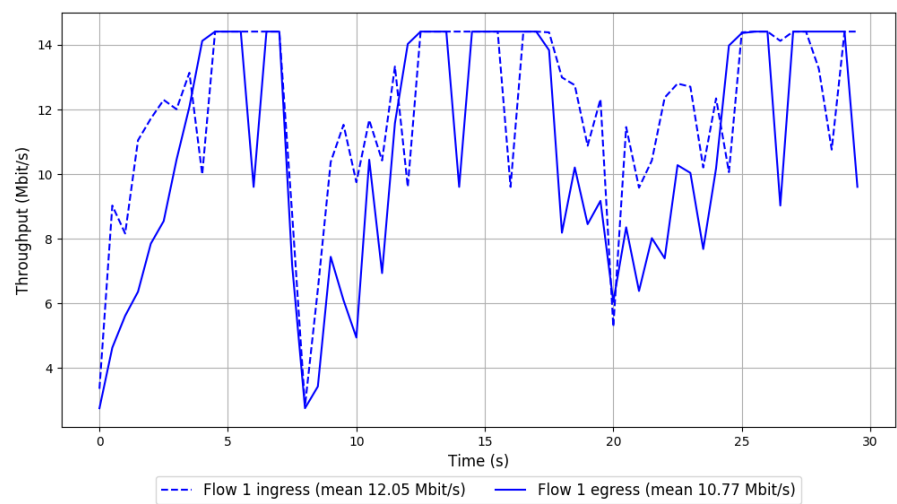
-- Flow 1:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 88.144 ms

Loss rate: 11.16%

Run 10: Report of Saturator — Data Link

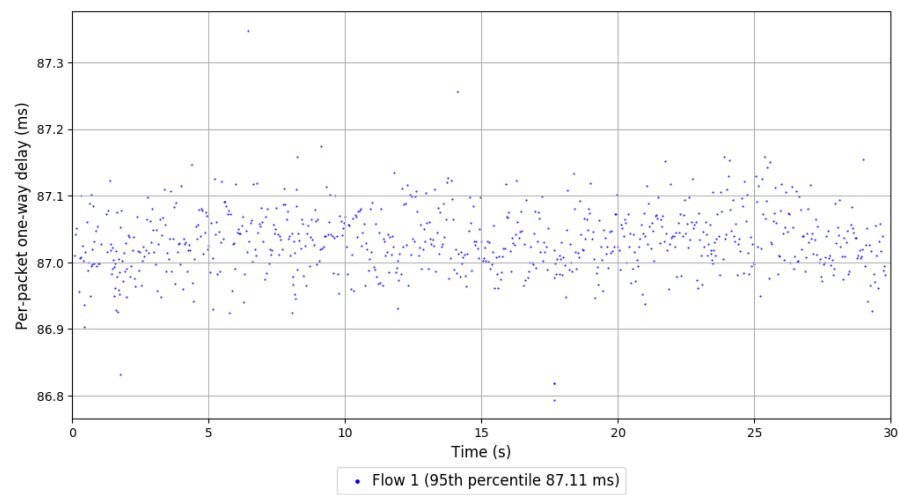
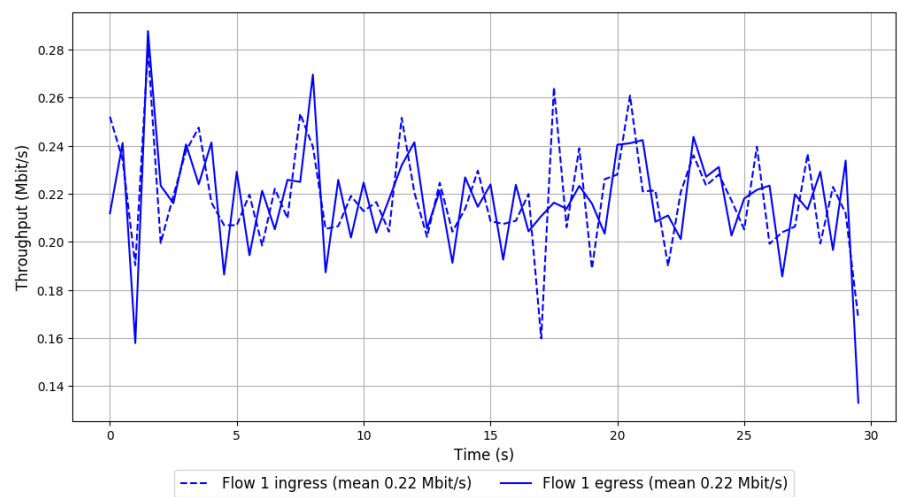


```
Run 1: Statistics of SCReAM

Start at: 2017-08-11 05:36:07
End at: 2017-08-11 05:36:37

# Below is generated by plot.py at 2017-08-11 10:08:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.114 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.114 ms
Loss rate: 0.52%
```

Run 1: Report of SReAM — Data Link

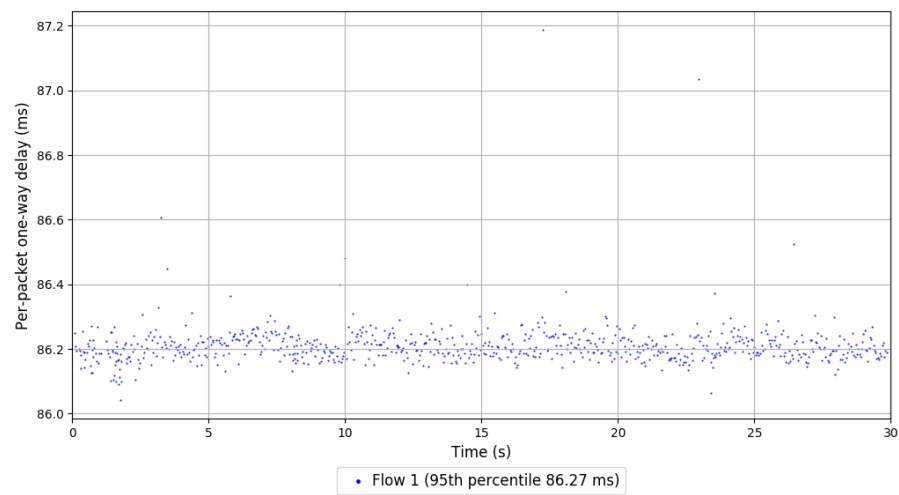
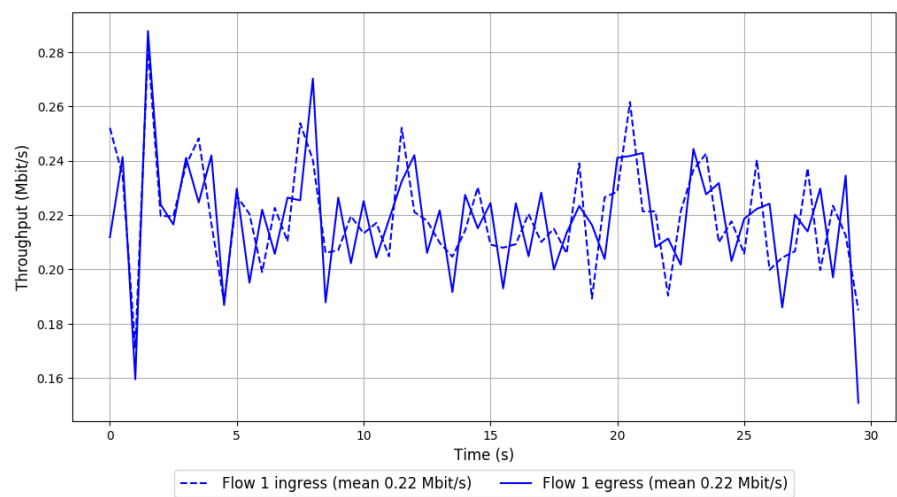


```
Run 2: Statistics of SCReAM

Start at: 2017-08-11 05:47:20
End at: 2017-08-11 05:47:50

# Below is generated by plot.py at 2017-08-11 10:08:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.274 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.274 ms
Loss rate: 0.51%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-11 05:58:28

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

Below is generated by plot.py at 2017-08-11 10:08:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.469 ms

Loss rate: 0.51%

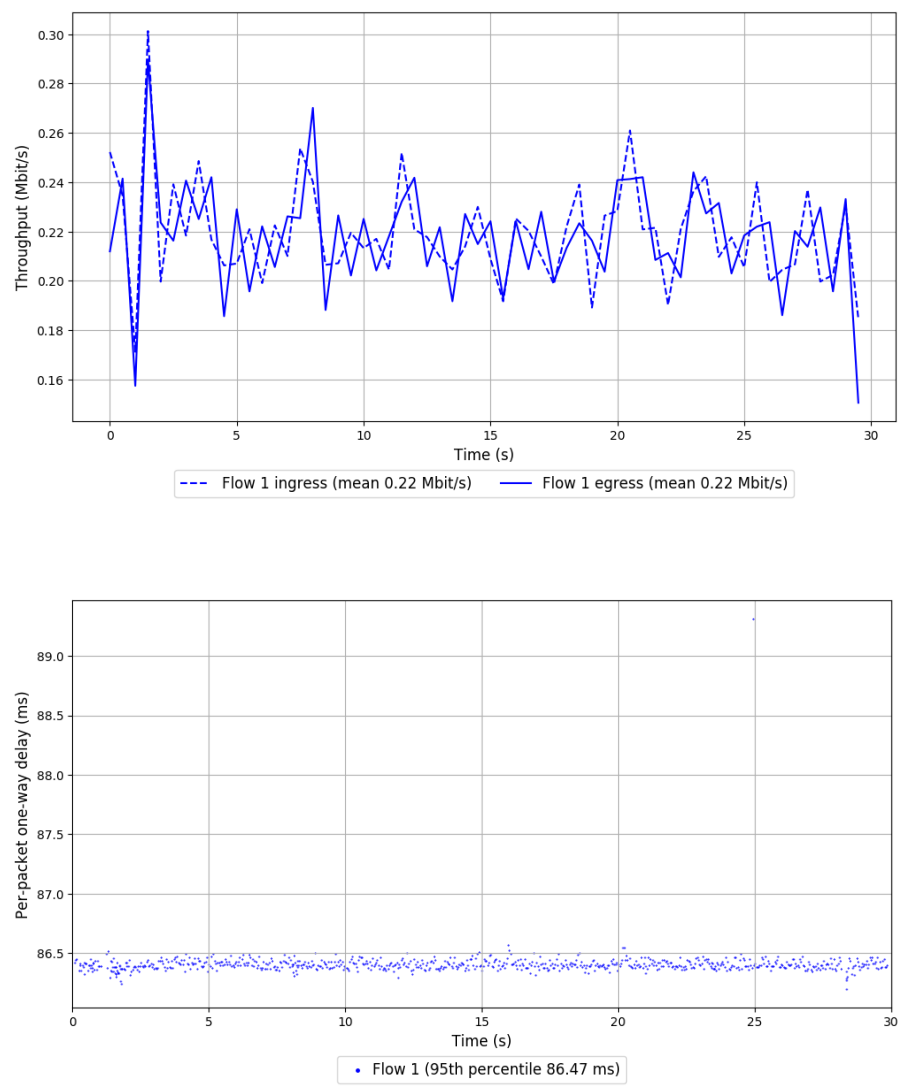
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.469 ms

Loss rate: 0.51%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-11 06:09:29

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

Below is generated by plot.py at 2017-08-11 10:08:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.809 ms

Loss rate: 0.52%

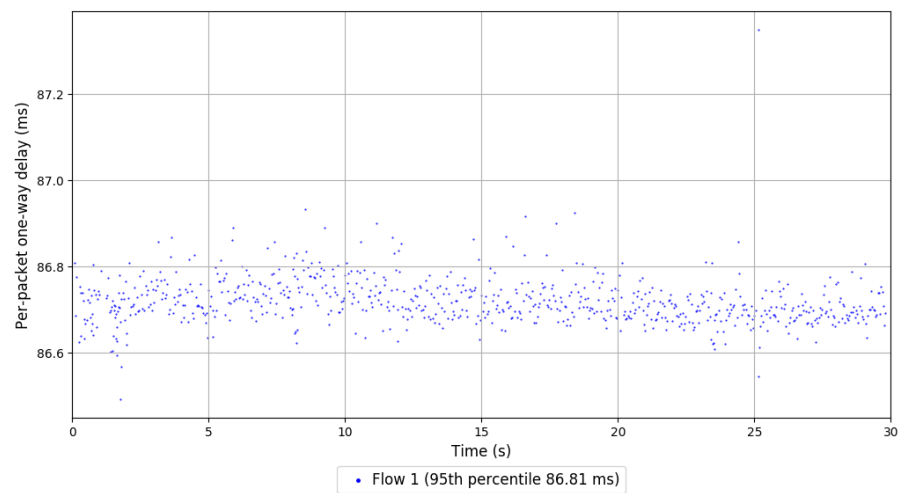
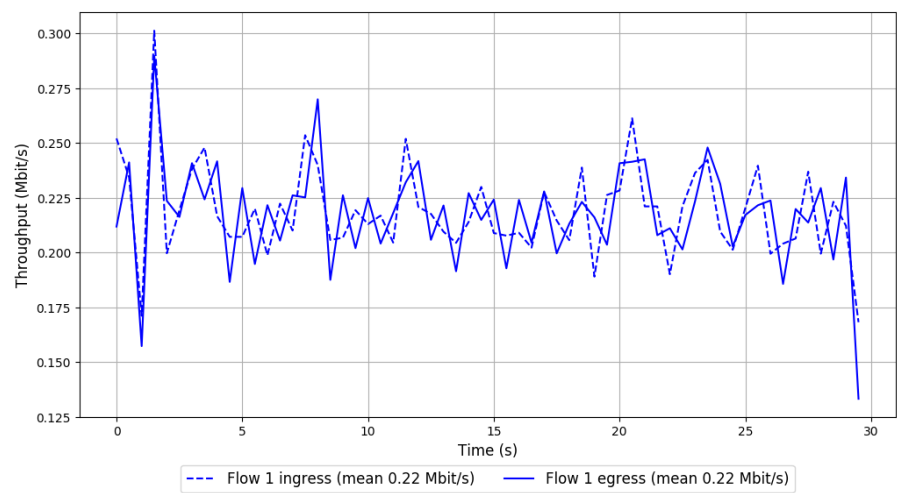
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.809 ms

Loss rate: 0.52%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-11 06:20:32

End at: 2017-08-11 06:21:03

Below is generated by plot.py at 2017-08-11 10:08:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 87.017 ms

Loss rate: 0.26%

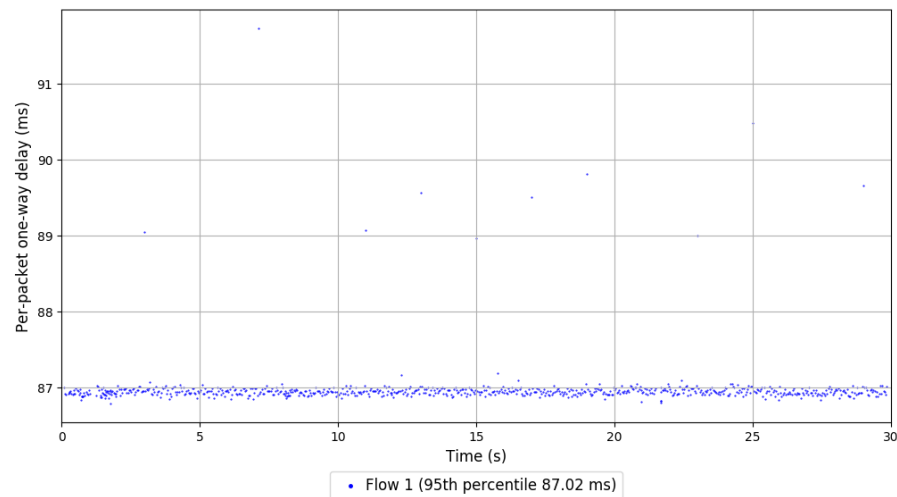
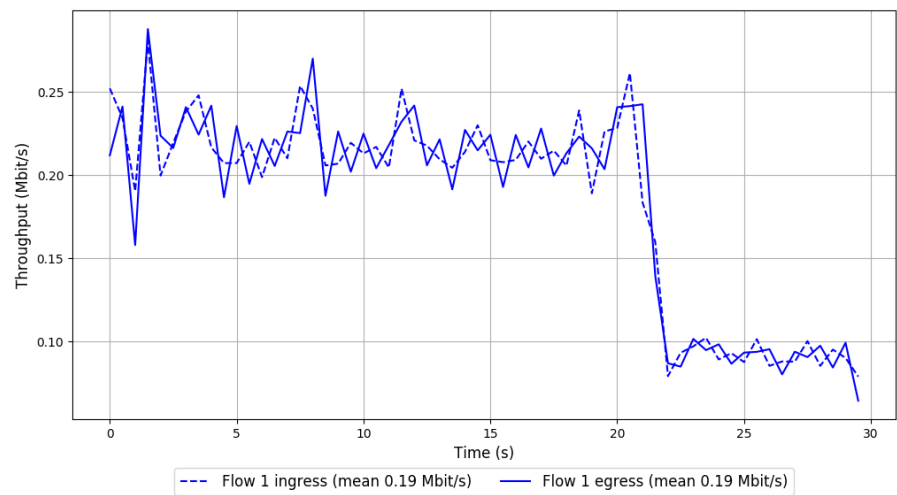
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 87.017 ms

Loss rate: 0.26%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-11 06:31:28

End at: 2017-08-11 06:31:58

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.097 ms

Loss rate: 0.51%

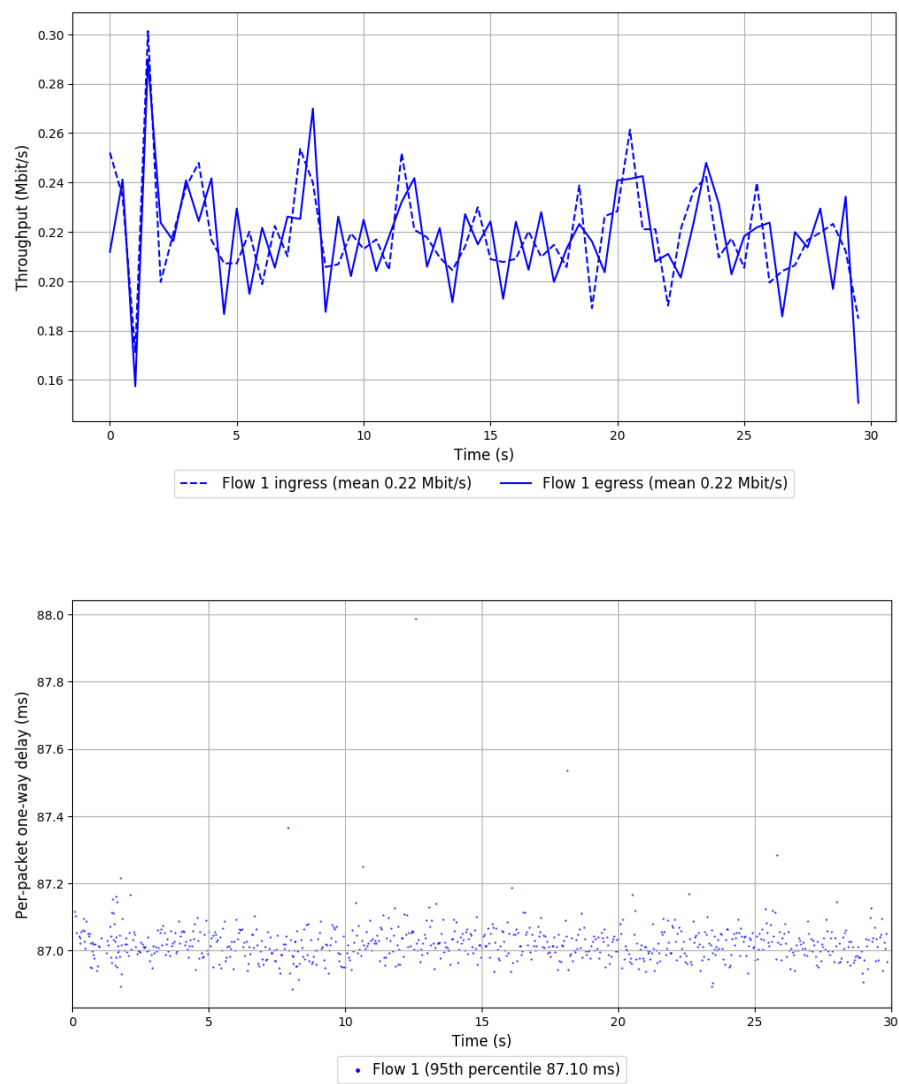
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.097 ms

Loss rate: 0.51%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-11 06:42:21

End at: 2017-08-11 06:42:51

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.130 ms

Loss rate: 0.51%

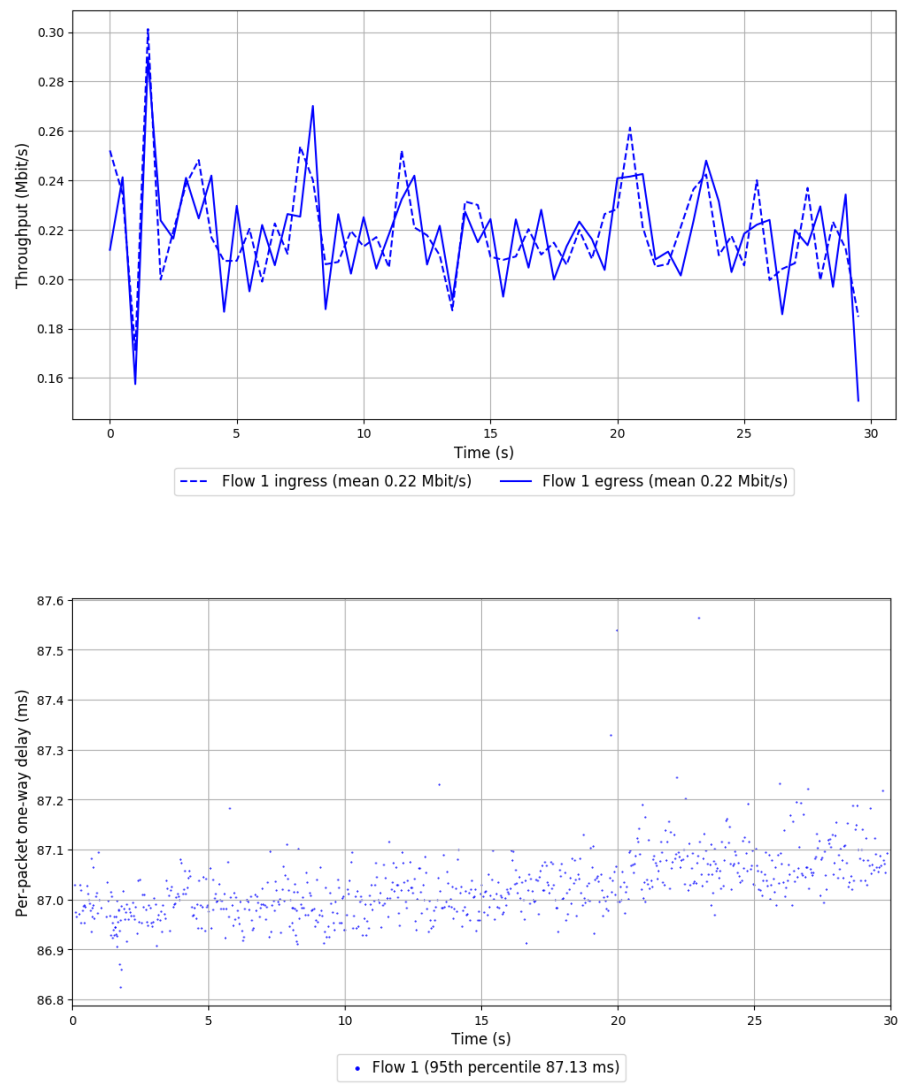
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.130 ms

Loss rate: 0.51%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-11 06:53:01

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.340 ms

Loss rate: 0.64%

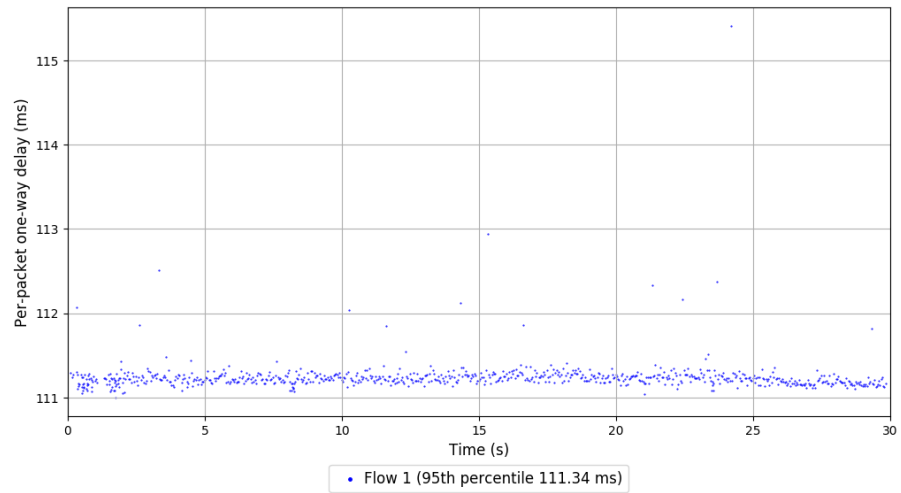
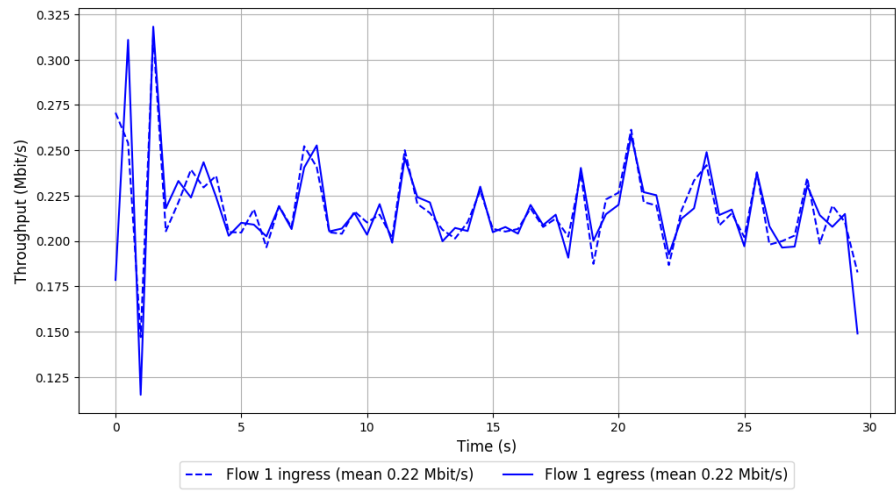
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.340 ms

Loss rate: 0.64%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-11 07:03:41

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.972 ms

Loss rate: 0.64%

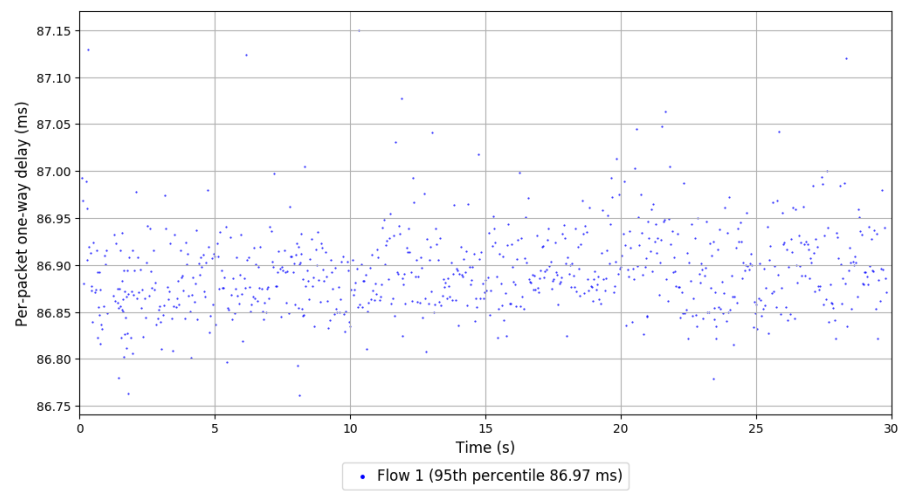
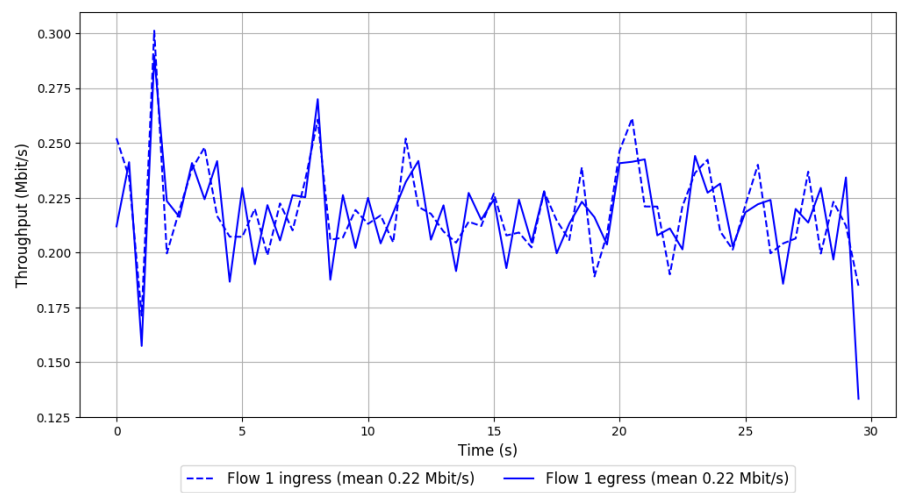
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.972 ms

Loss rate: 0.64%

Run 9: Report of SReAM — Data Link

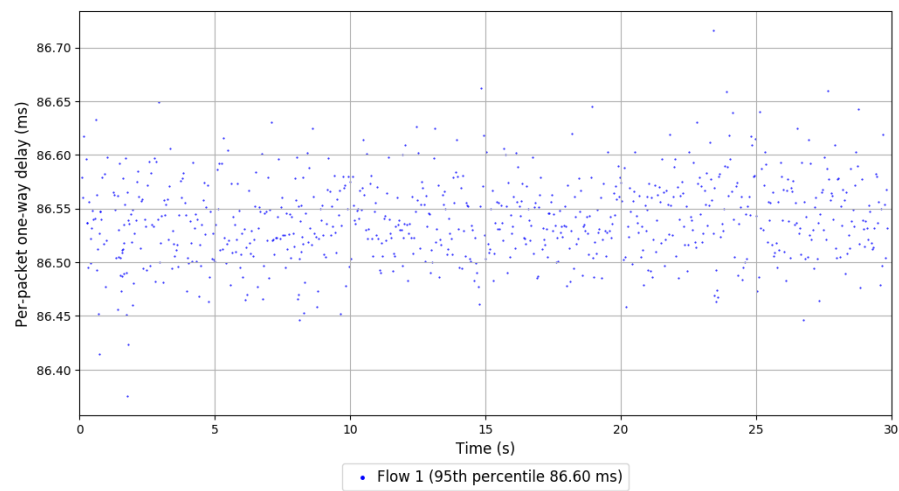
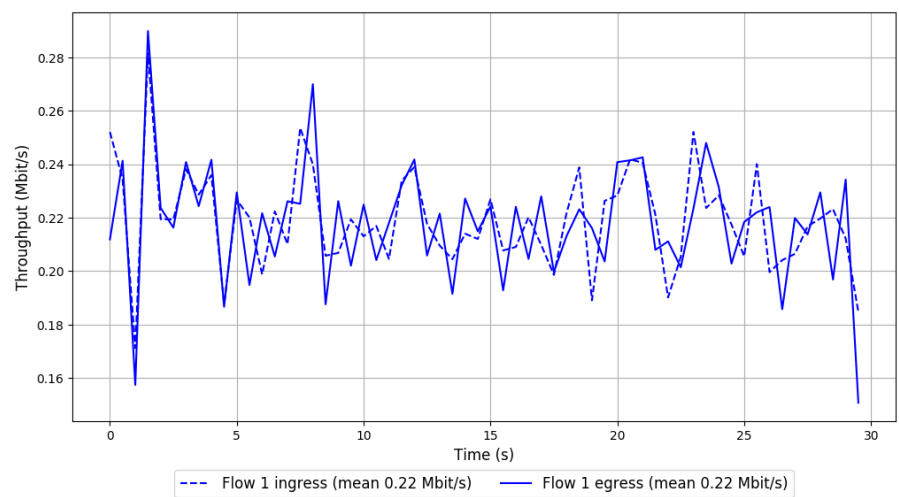


```
Run 10: Statistics of SReAM

Start at: 2017-08-11 07:14:22
End at: 2017-08-11 07:14:52

# Below is generated by plot.py at 2017-08-11 10:08:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.603 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.603 ms
Loss rate: 0.51%
```

Run 10: Report of SReAM — Data Link

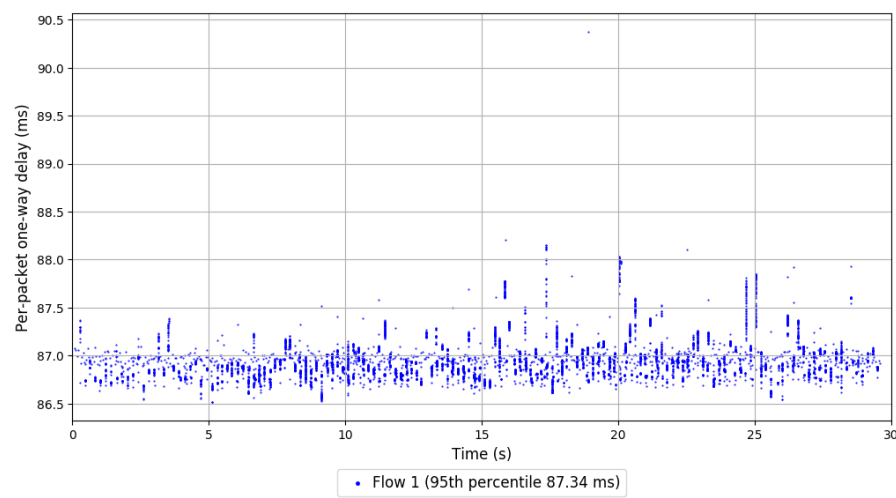
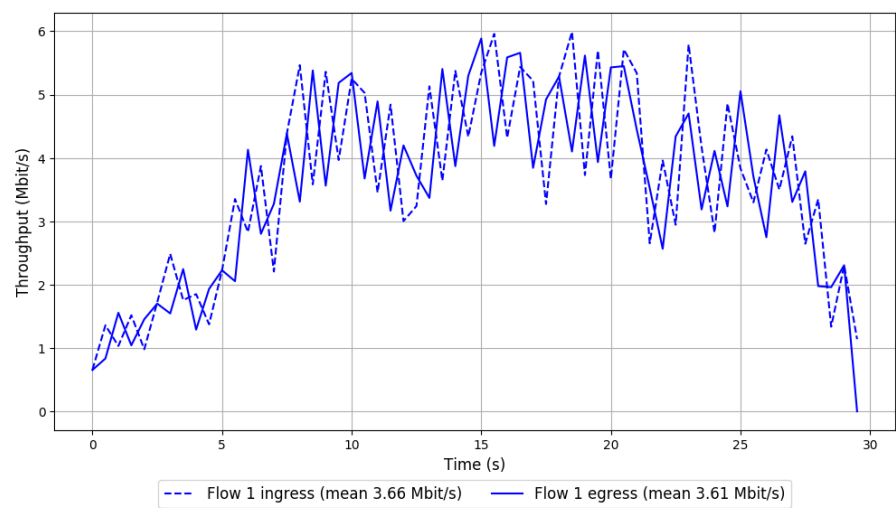


```
Run 1: Statistics of Sprout

Start at: 2017-08-11 05:33:28
End at: 2017-08-11 05:33:58

# Below is generated by plot.py at 2017-08-11 10:08:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: 87.344 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: 87.344 ms
Loss rate: 1.98%
```


Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-11 05:44:39

End at: 2017-08-11 05:45:09

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 87.115 ms

Loss rate: 1.60%

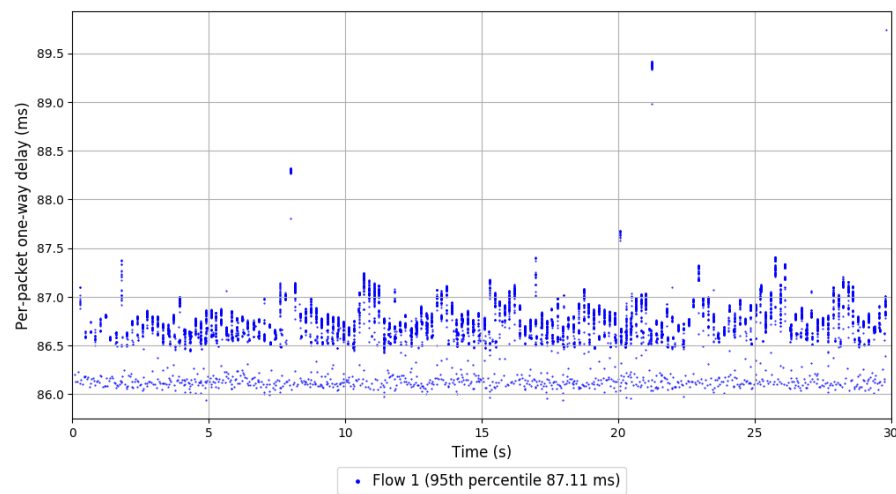
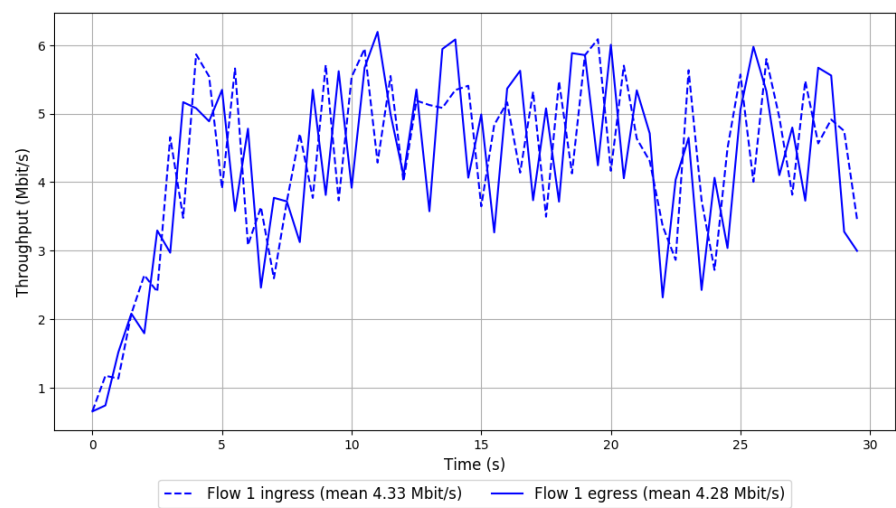
-- Flow 1:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 87.115 ms

Loss rate: 1.60%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

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

End at: 2017-08-11 05:56:16

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 87.384 ms

Loss rate: 5.83%

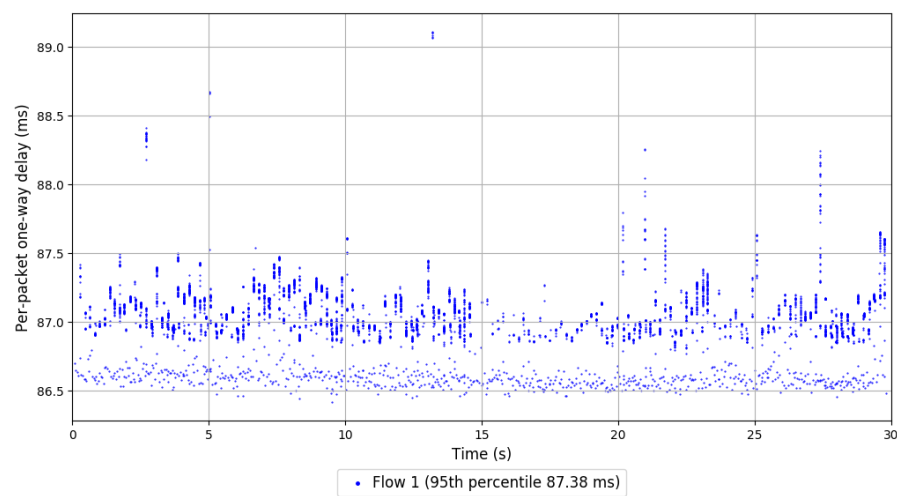
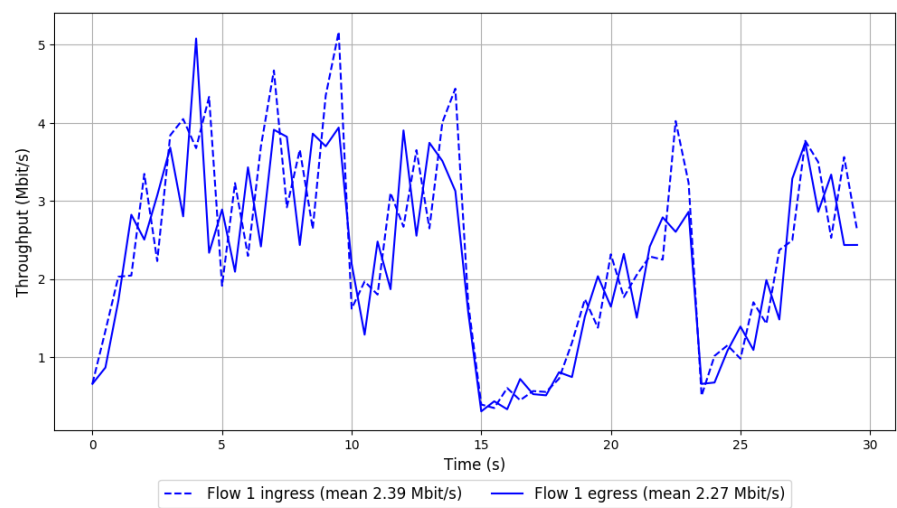
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 87.384 ms

Loss rate: 5.83%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

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

End at: 2017-08-11 06:07:18

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 87.260 ms

Loss rate: 4.92%

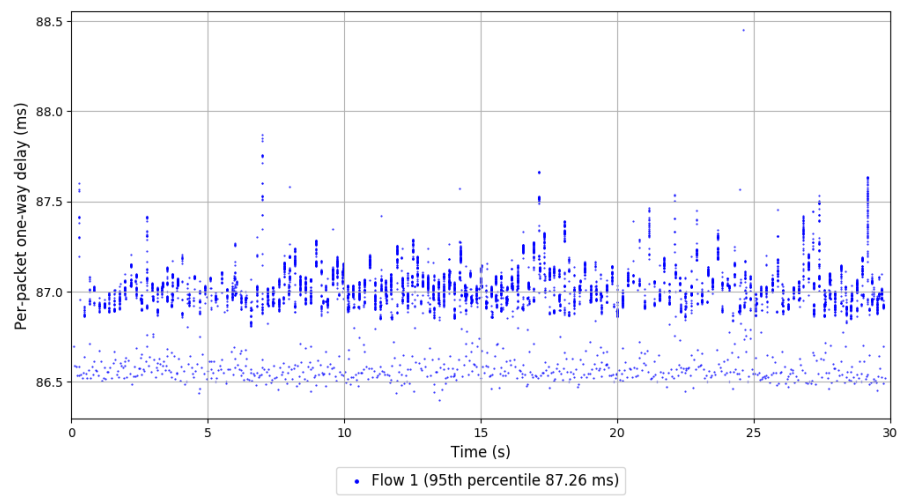
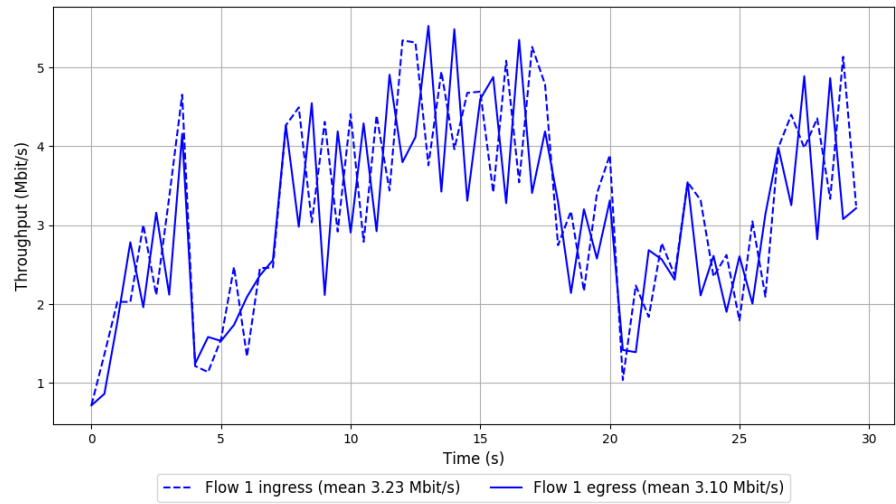
-- Flow 1:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 87.260 ms

Loss rate: 4.92%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-11 06:17:52

End at: 2017-08-11 06:18:22

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 87.299 ms

Loss rate: 3.53%

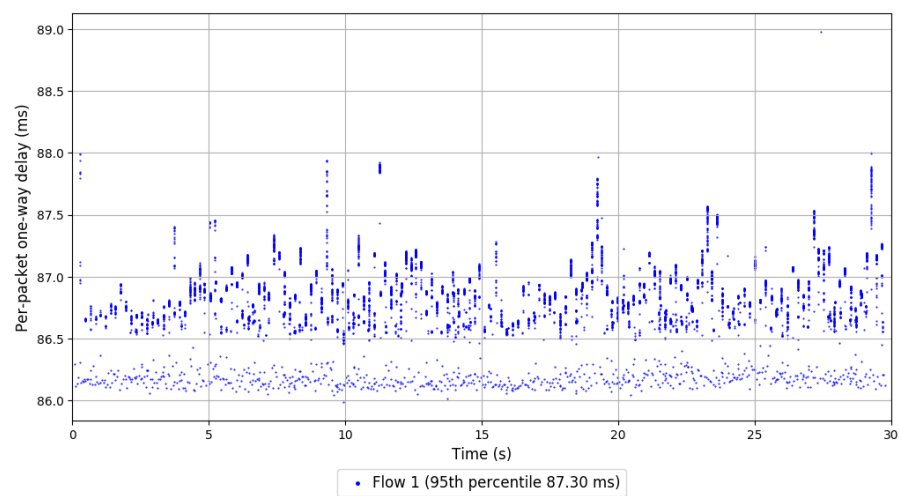
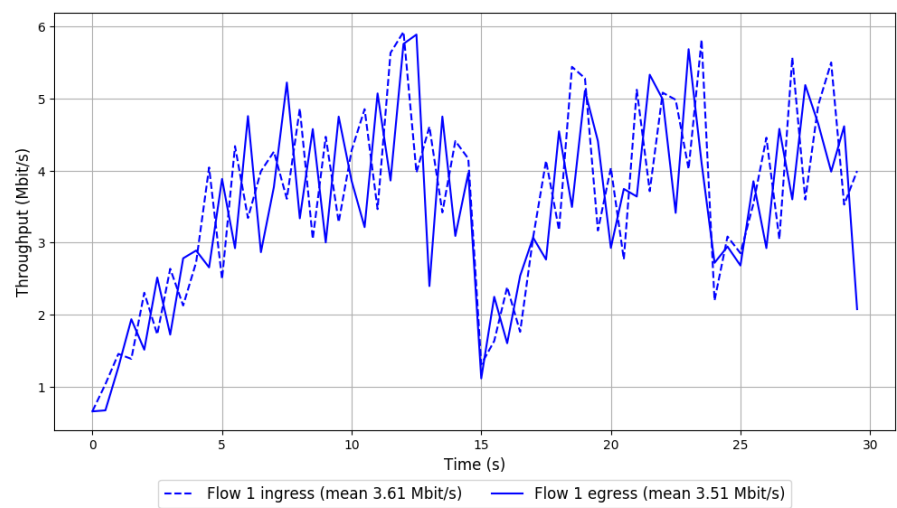
-- Flow 1:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 87.299 ms

Loss rate: 3.53%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-11 06:28:47

End at: 2017-08-11 06:29:17

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 87.006 ms

Loss rate: 3.18%

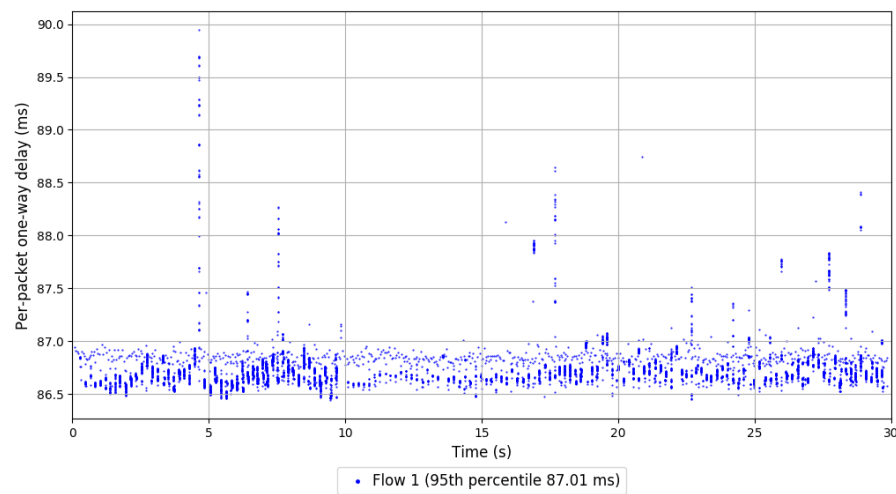
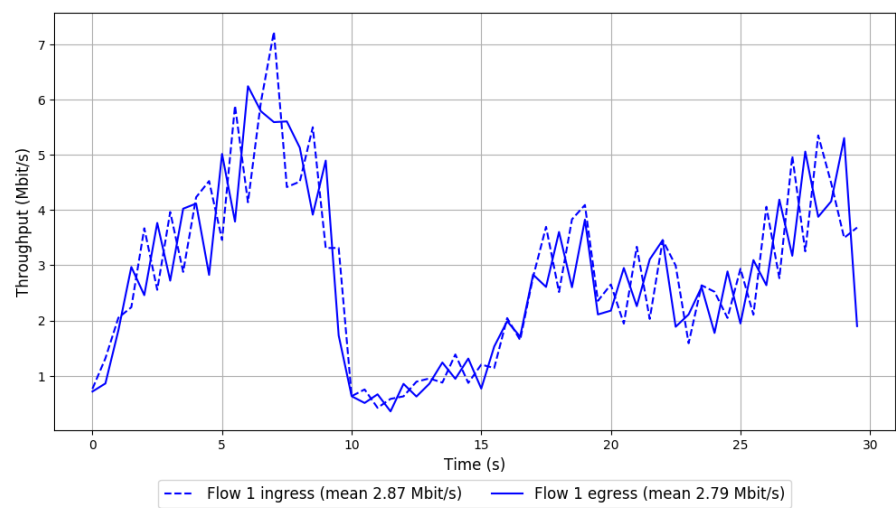
-- Flow 1:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 87.006 ms

Loss rate: 3.18%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-11 06:39:40

End at: 2017-08-11 06:40:10

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 87.460 ms

Loss rate: 0.95%

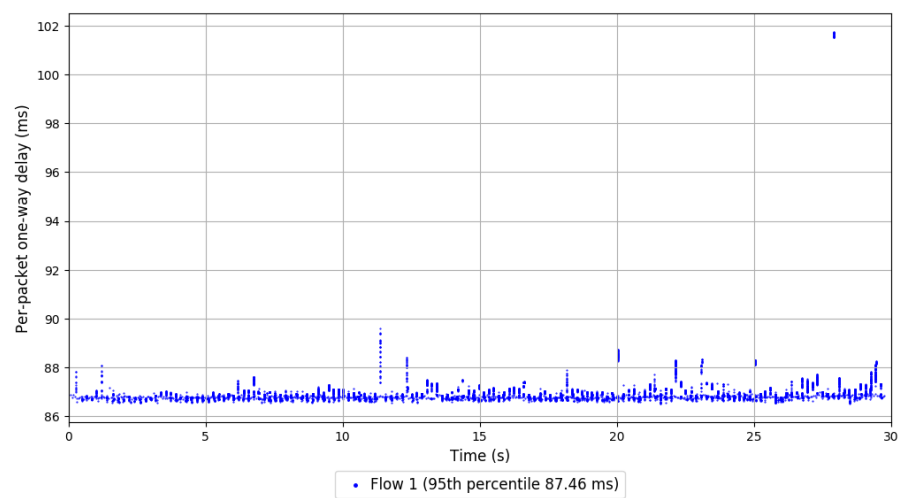
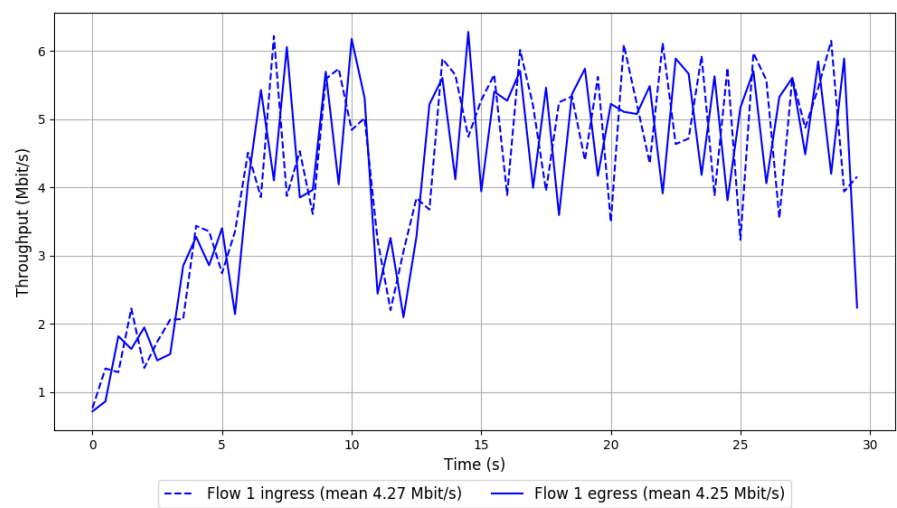
-- Flow 1:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 87.460 ms

Loss rate: 0.95%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-11 06:50:21

End at: 2017-08-11 06:50:51

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 87.167 ms

Loss rate: 4.53%

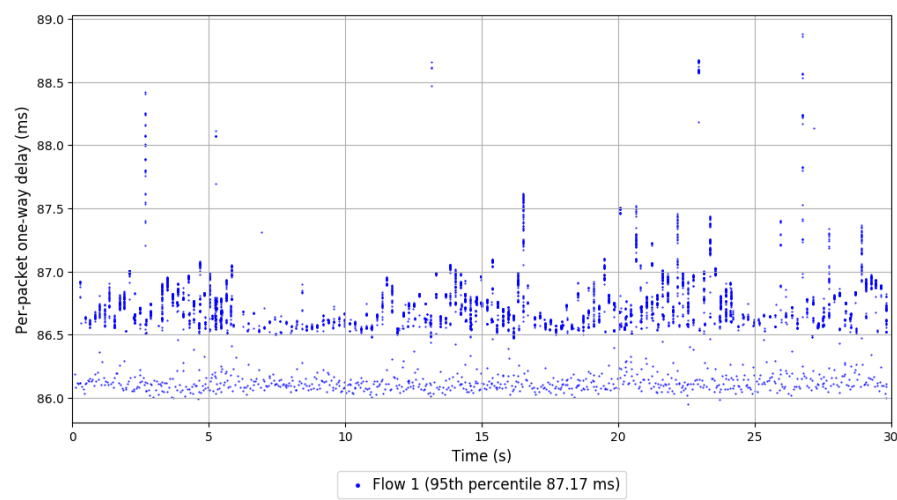
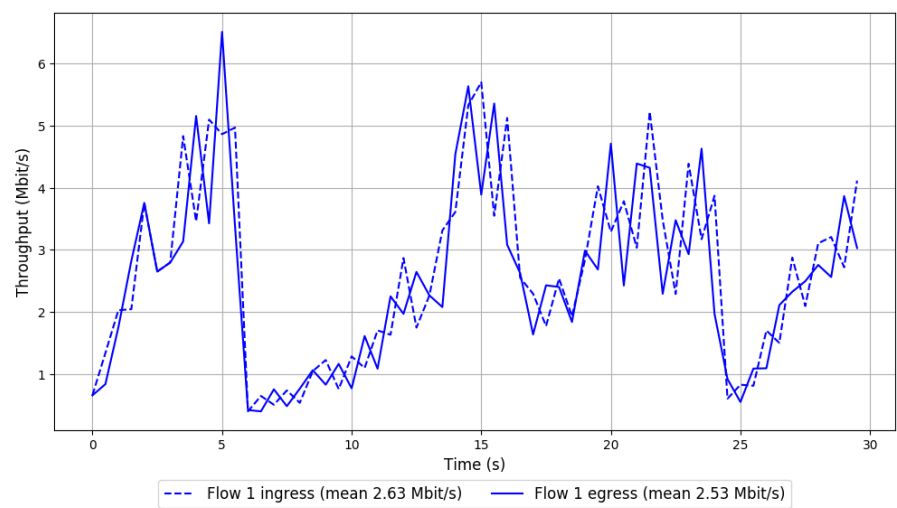
-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 87.167 ms

Loss rate: 4.53%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-11 07:01:00

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

Below is generated by plot.py at 2017-08-11 10:08:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 87.339 ms

Loss rate: 0.99%

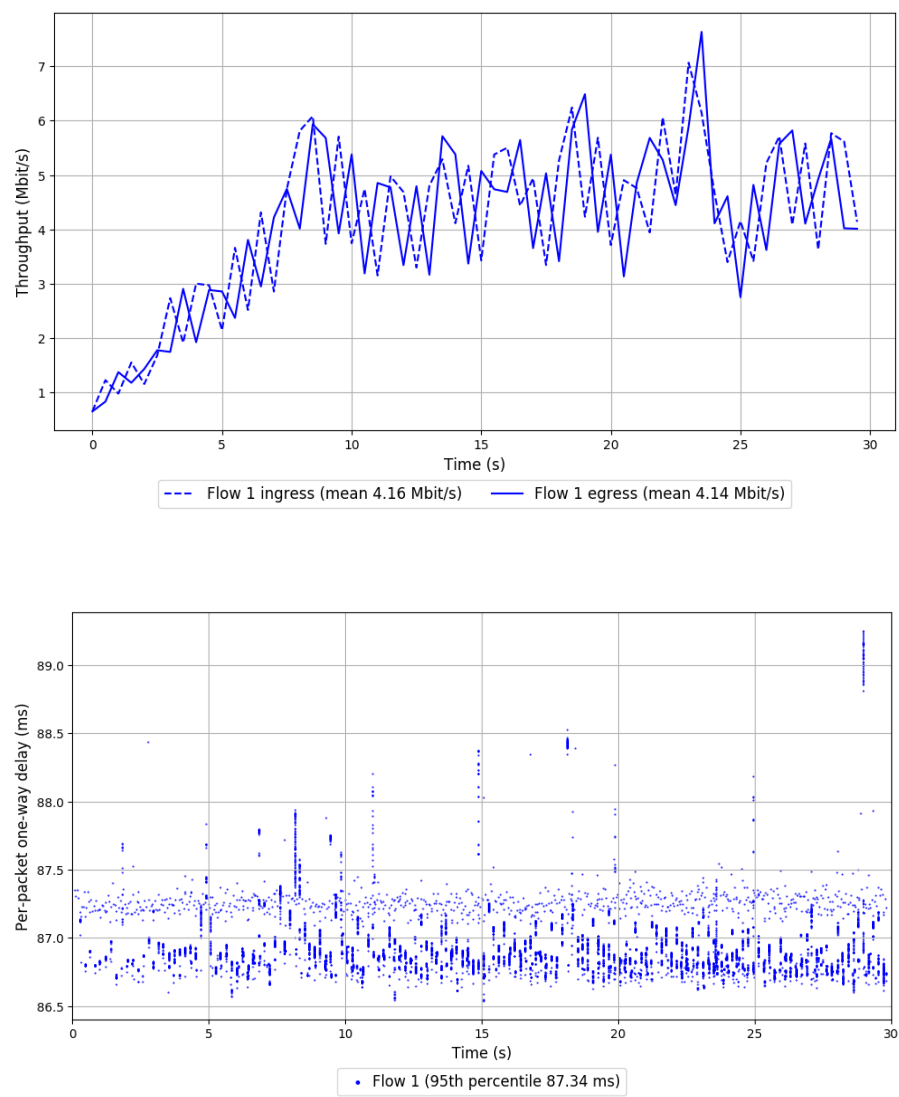
-- Flow 1:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 87.339 ms

Loss rate: 0.99%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

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

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

Below is generated by plot.py at 2017-08-11 10:08:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 87.504 ms

Loss rate: 1.26%

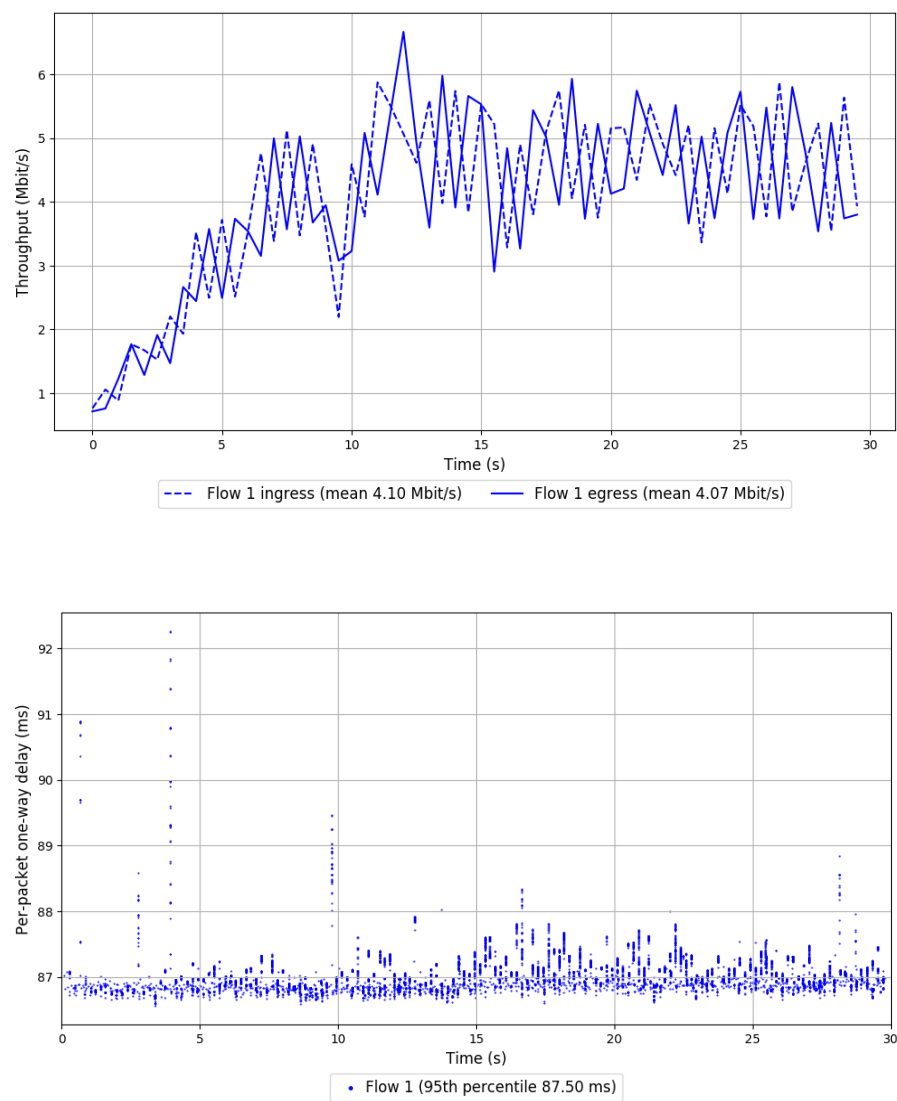
-- Flow 1:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 87.504 ms

Loss rate: 1.26%

Run 10: Report of Sprout — Data Link

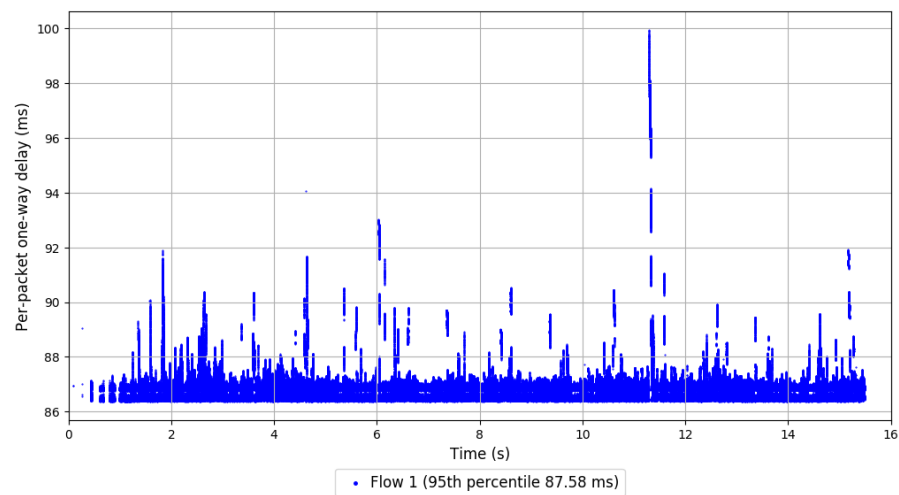
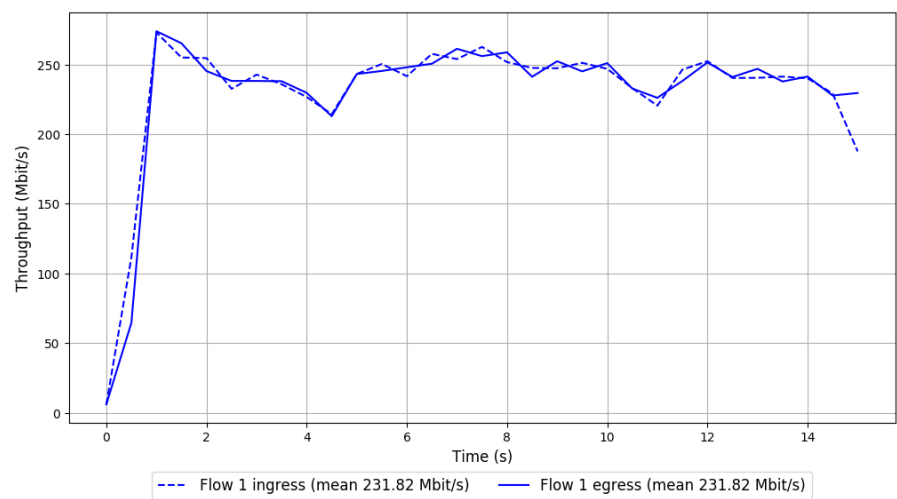


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-11 05:40:50

End at: 2017-08-11 05:41:20

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

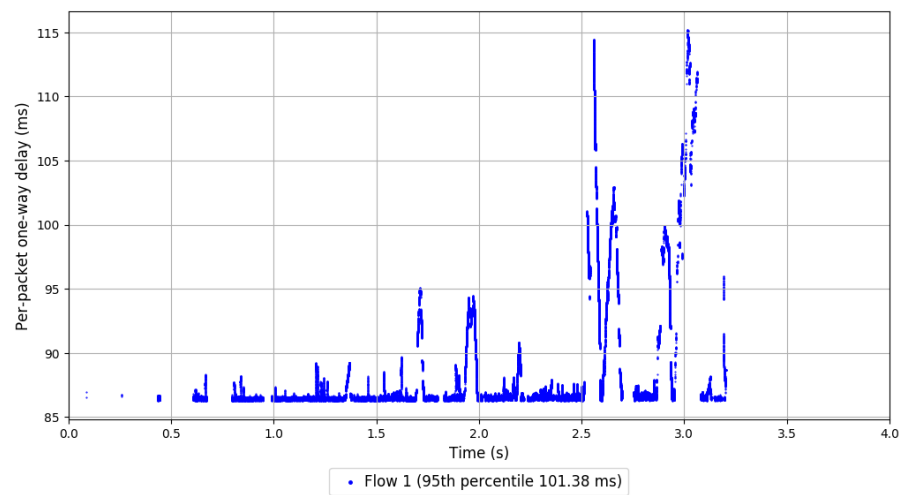
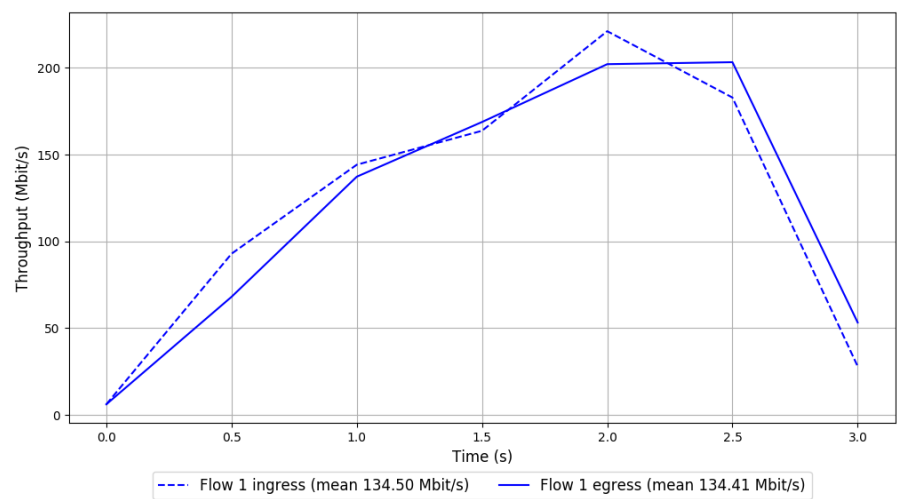


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-11 05:52:08

End at: 2017-08-11 05:52:38

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

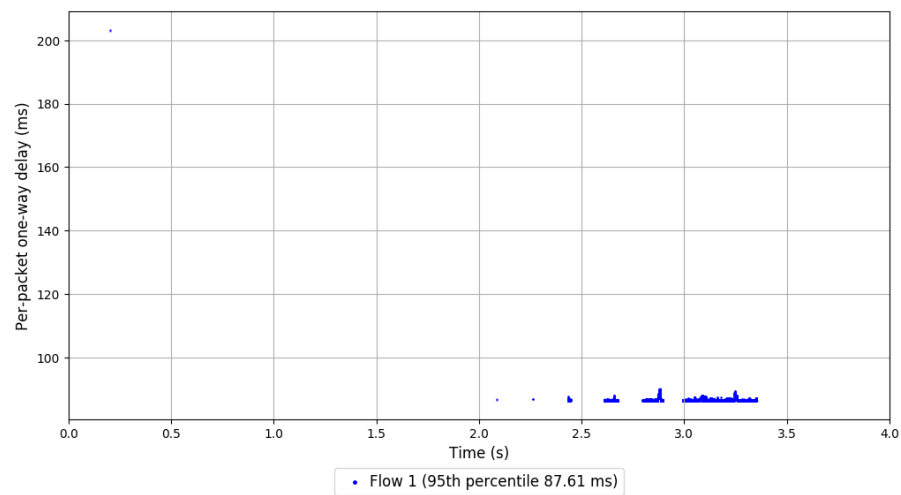
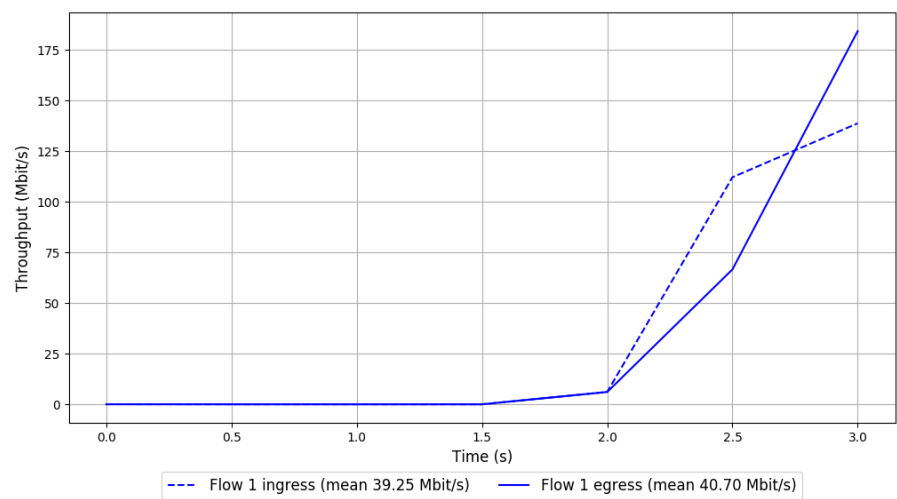


Run 3: Statistics of TaoVA-100x

Start at: 2017-08-11 06:03:15

End at: 2017-08-11 06:03:45

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

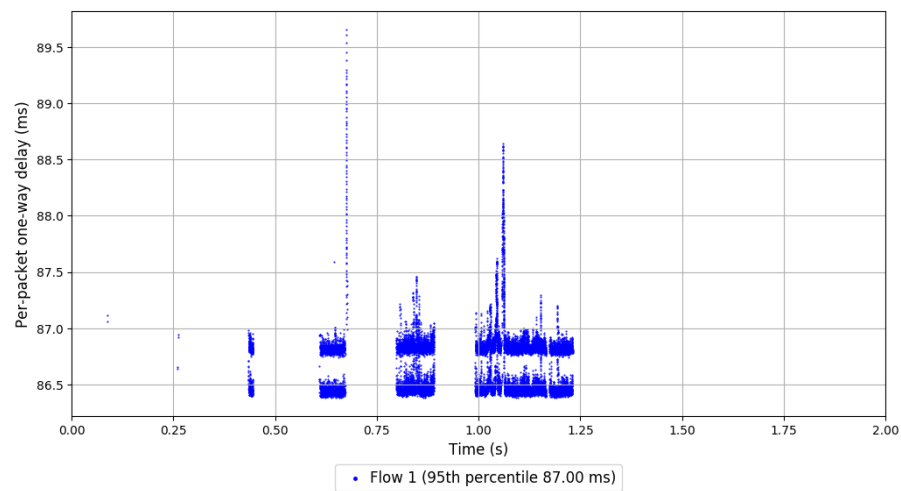
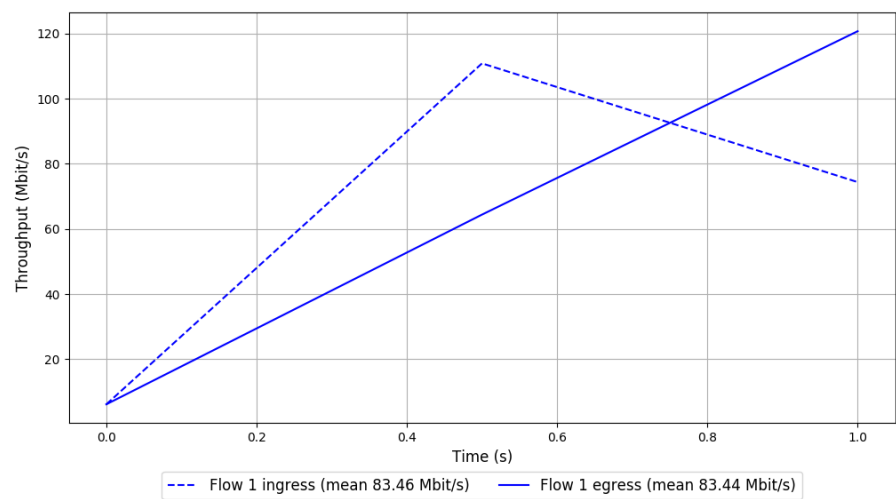


Run 4: Statistics of TaoVA-100x

Start at: 2017-08-11 06:14:16

End at: 2017-08-11 06:14:46

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

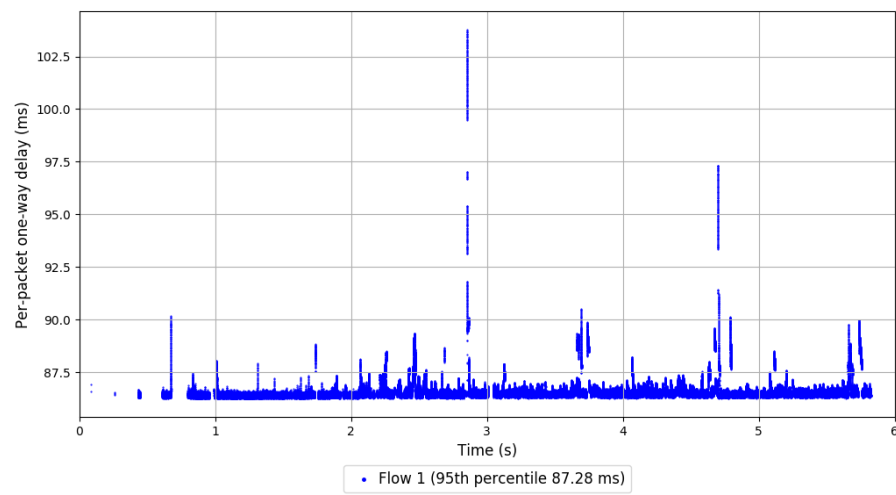
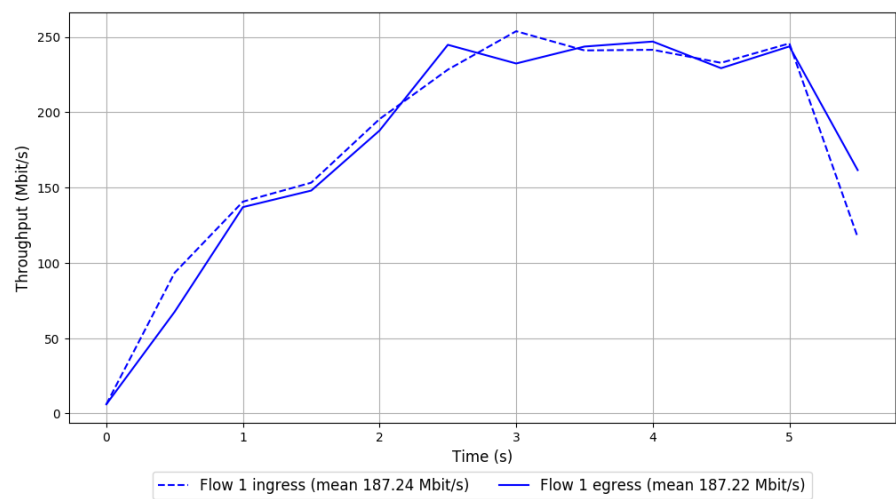


Run 5: Statistics of TaoVA-100x

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

End at: 2017-08-11 06:25:38

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

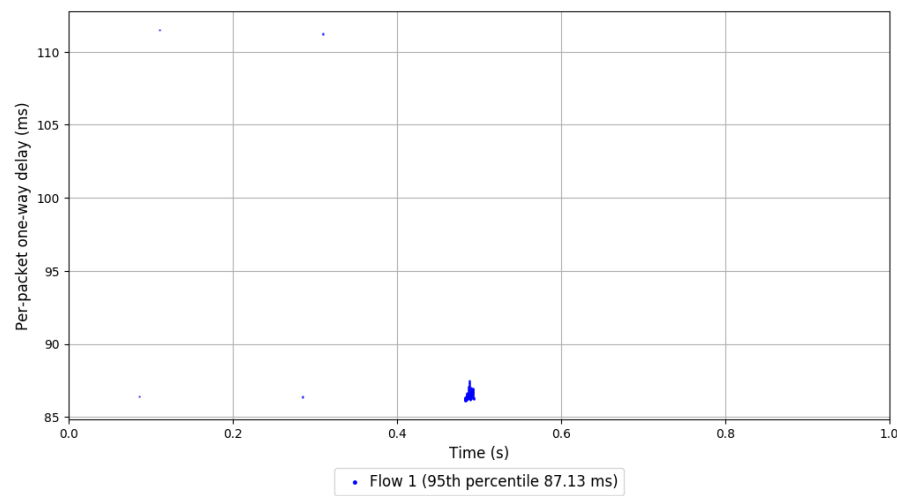
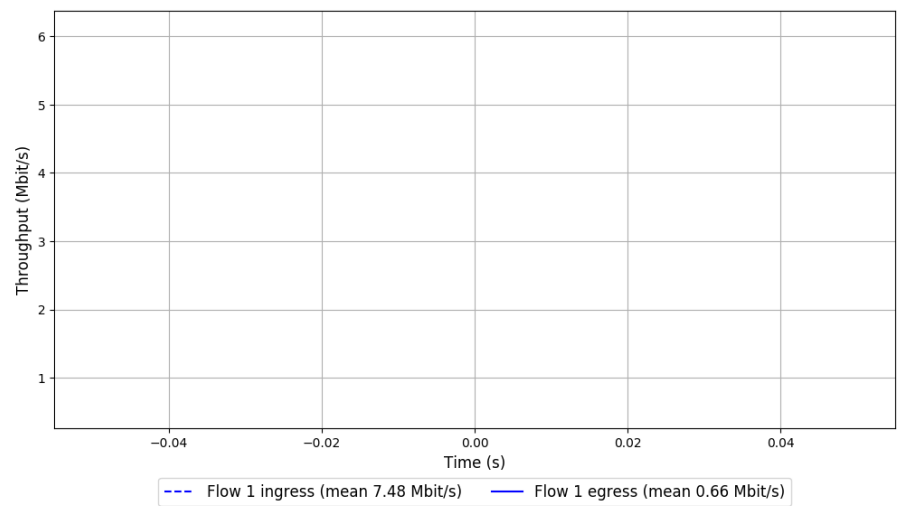


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-11 06:36:14

End at: 2017-08-11 06:36:44

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

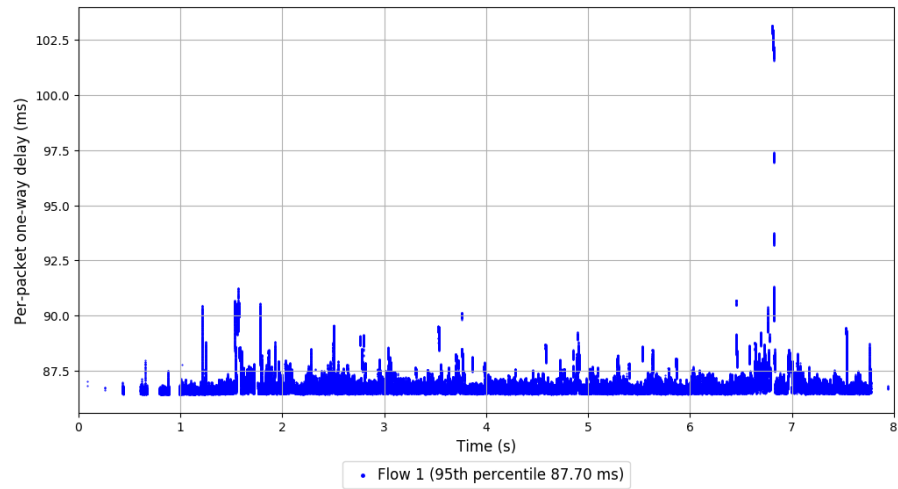
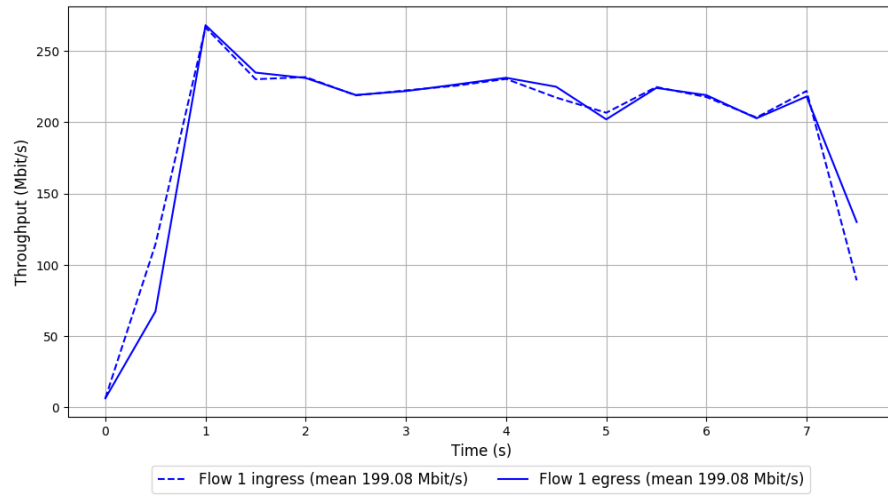


Run 7: Statistics of TaoVA-100x

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

End at: 2017-08-11 06:47:16

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

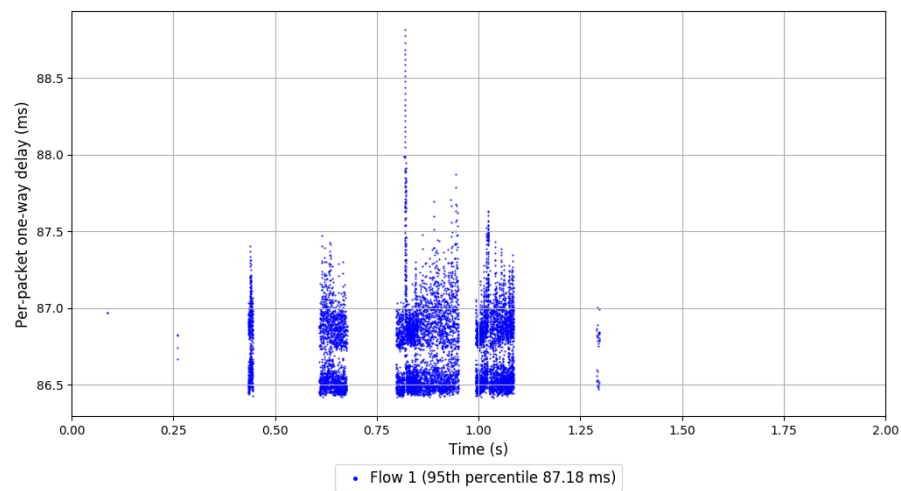
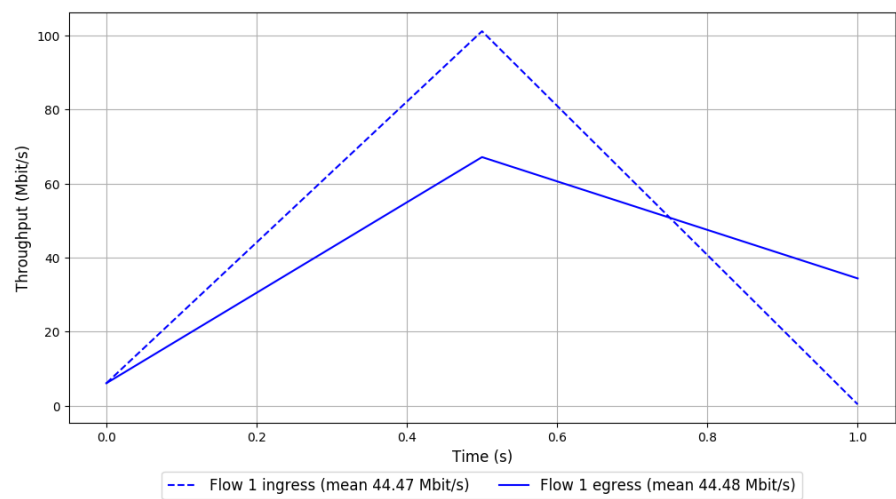


Run 8: Statistics of TaoVA-100x

Start at: 2017-08-11 06:57:26

End at: 2017-08-11 06:57:56

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

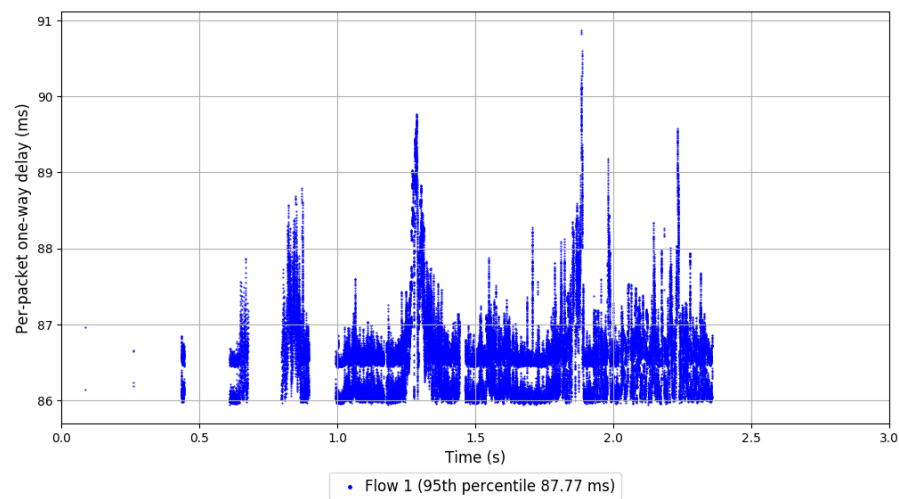
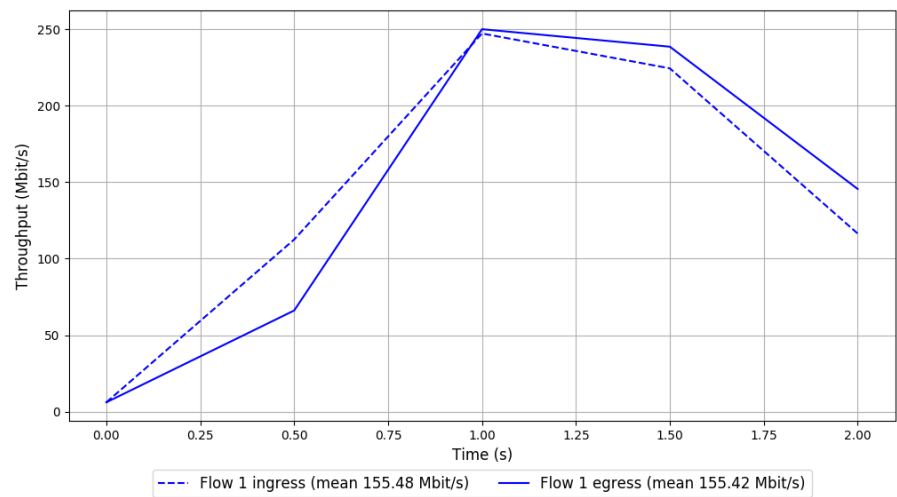


Run 9: Statistics of TaoVA-100x

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

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

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

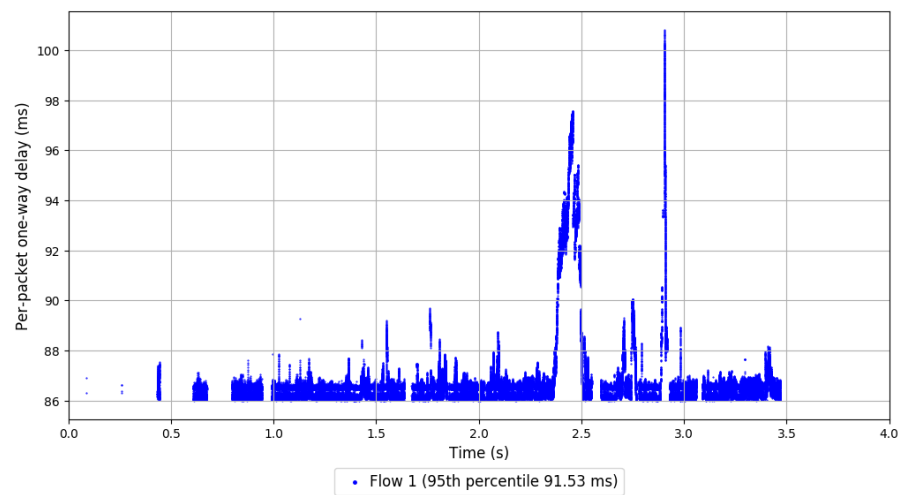
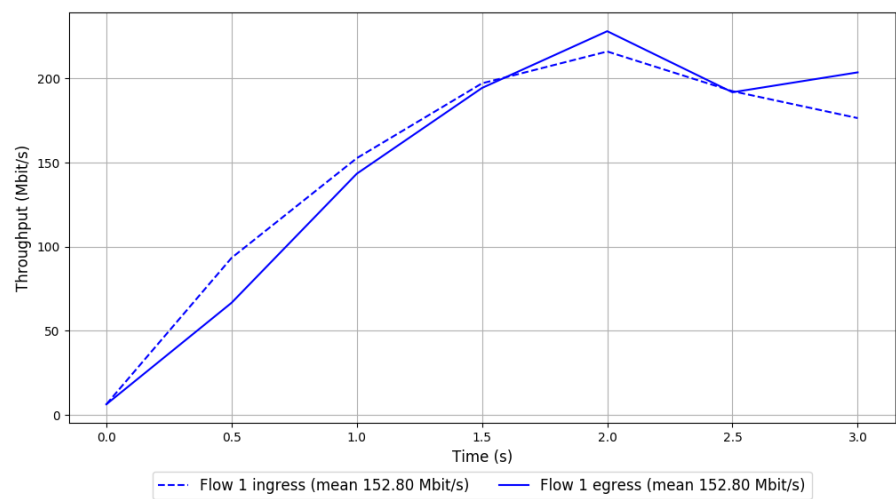


Run 10: Statistics of TaoVA-100x

Start at: 2017-08-11 07:19:04

End at: 2017-08-11 07:19:34

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-11 05:35:26

End at: 2017-08-11 05:35:56

Below is generated by plot.py at 2017-08-11 10:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.58 Mbit/s

95th percentile per-packet one-way delay: 88.214 ms

Loss rate: 0.29%

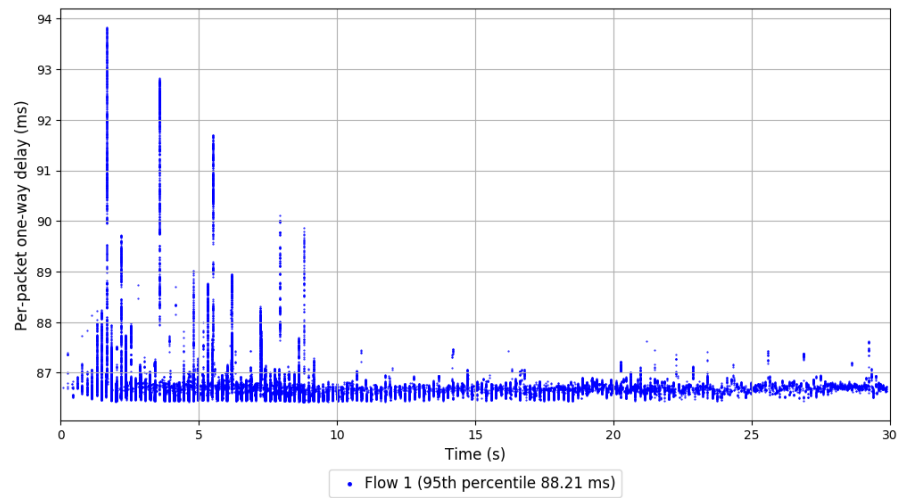
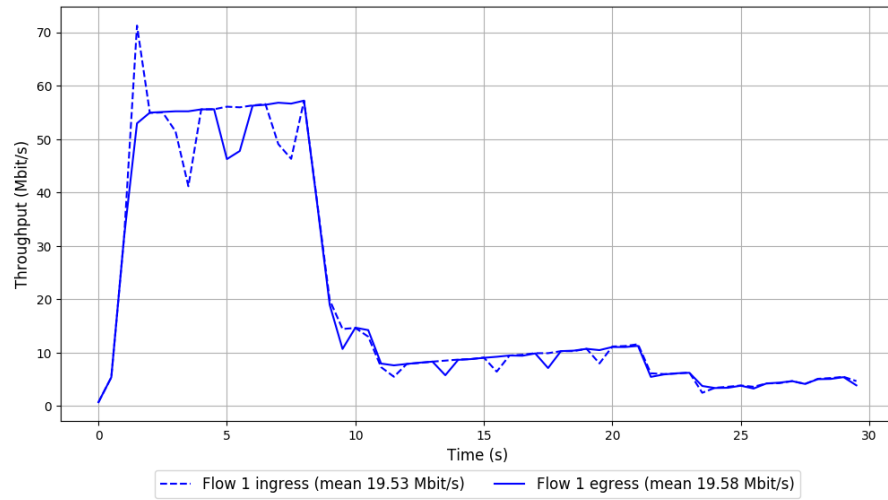
-- Flow 1:

Average throughput: 19.58 Mbit/s

95th percentile per-packet one-way delay: 88.214 ms

Loss rate: 0.29%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-11 05:46:40

End at: 2017-08-11 05:47:10

Below is generated by plot.py at 2017-08-11 10:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.80 Mbit/s

95th percentile per-packet one-way delay: 87.105 ms

Loss rate: 1.21%

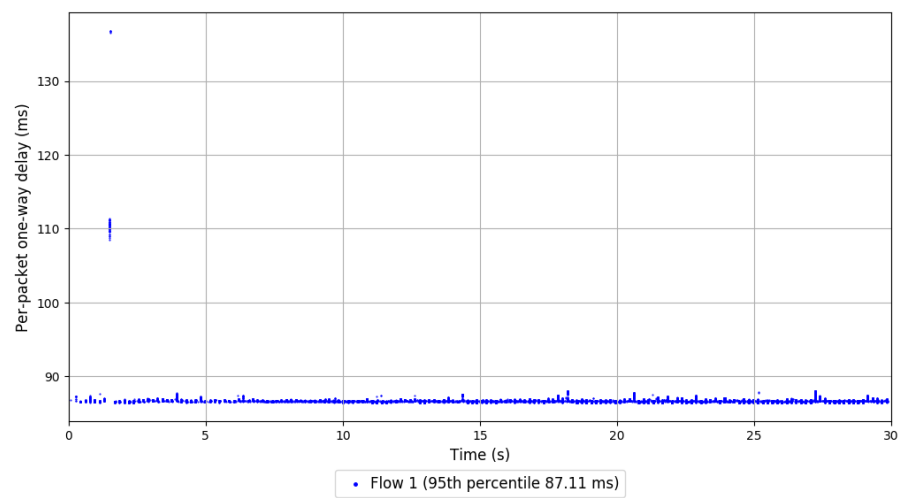
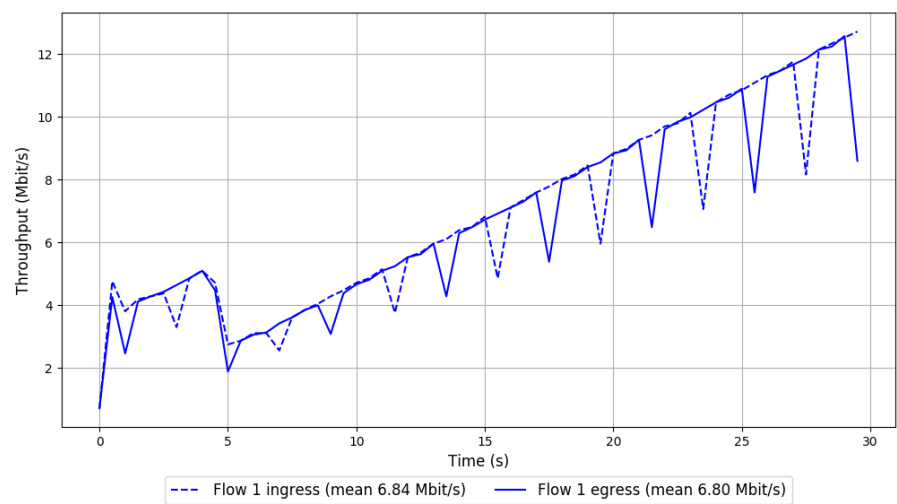
-- Flow 1:

Average throughput: 6.80 Mbit/s

95th percentile per-packet one-way delay: 87.105 ms

Loss rate: 1.21%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-11 05:57:47

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

Below is generated by plot.py at 2017-08-11 10:09:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.24 Mbit/s

95th percentile per-packet one-way delay: 87.824 ms

Loss rate: 0.56%

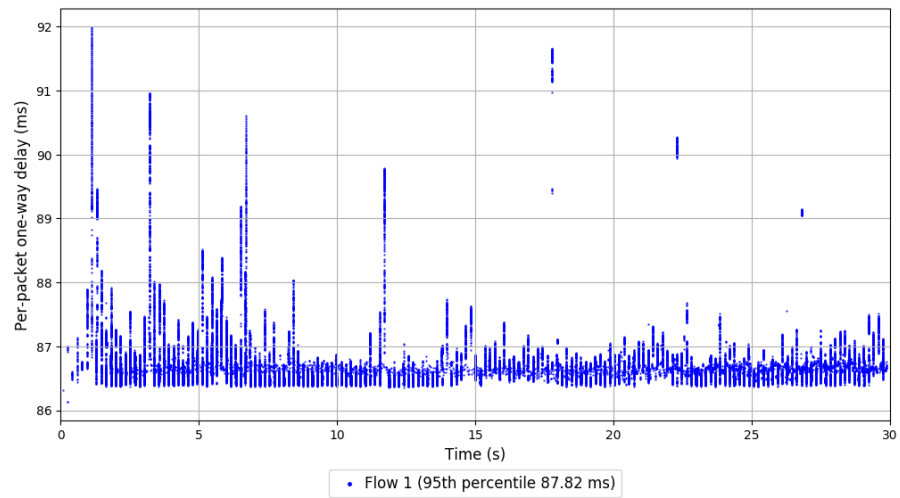
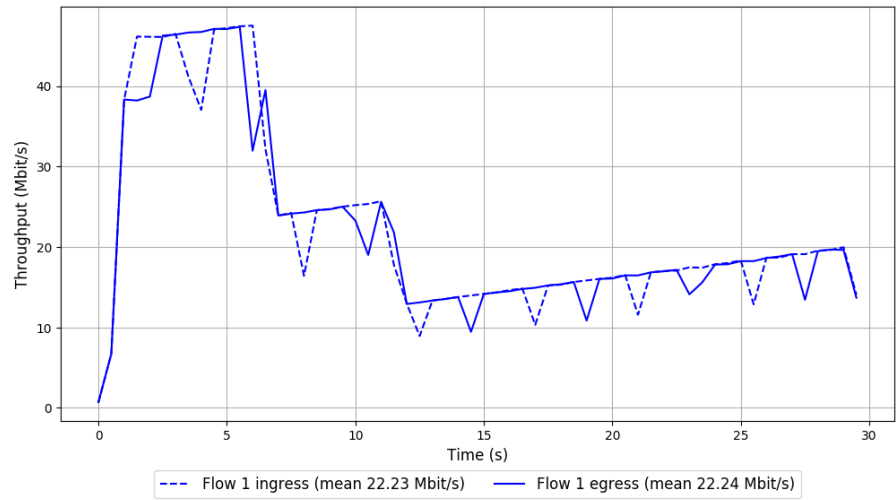
-- Flow 1:

Average throughput: 22.24 Mbit/s

95th percentile per-packet one-way delay: 87.824 ms

Loss rate: 0.56%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2017-08-11 10:09:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 87.348 ms

Loss rate: 1.06%

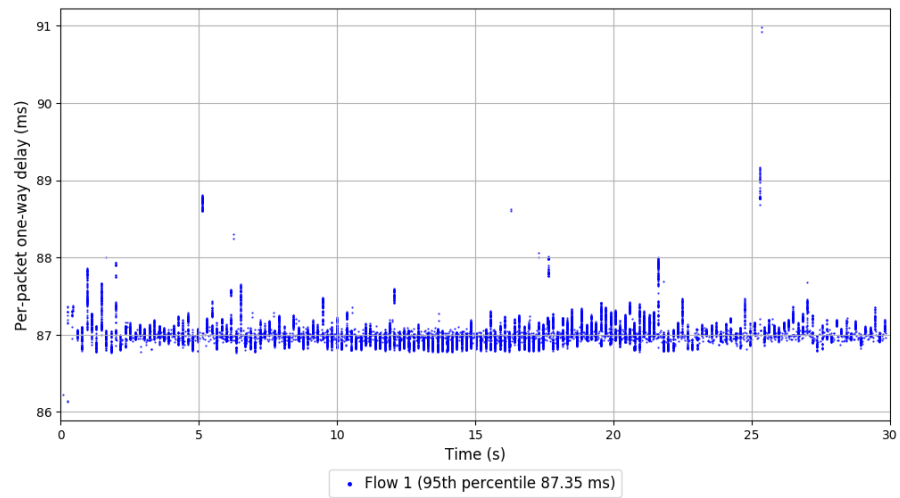
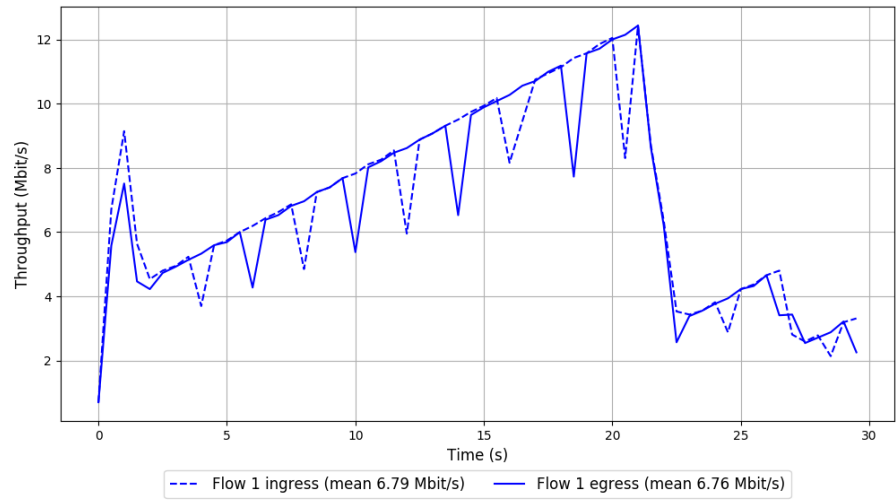
-- Flow 1:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 87.348 ms

Loss rate: 1.06%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

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

End at: 2017-08-11 06:20:23

Below is generated by plot.py at 2017-08-11 10:09:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.57 Mbit/s

95th percentile per-packet one-way delay: 86.946 ms

Loss rate: 1.26%

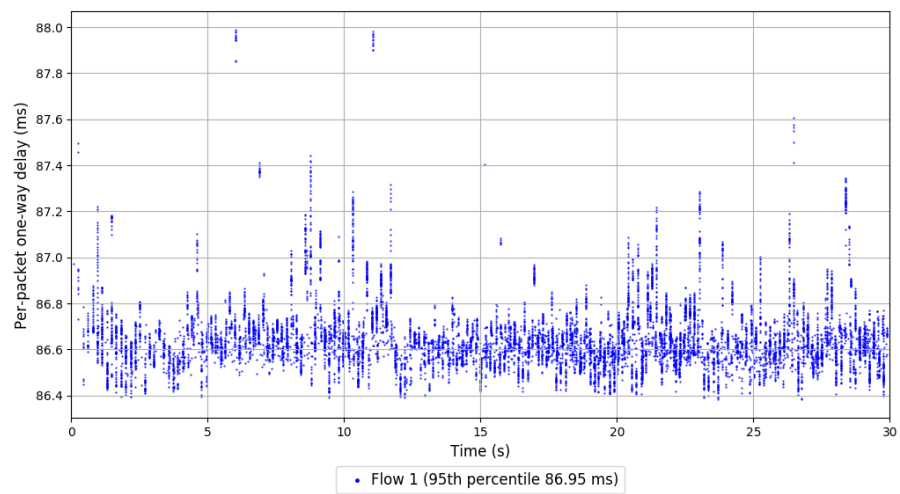
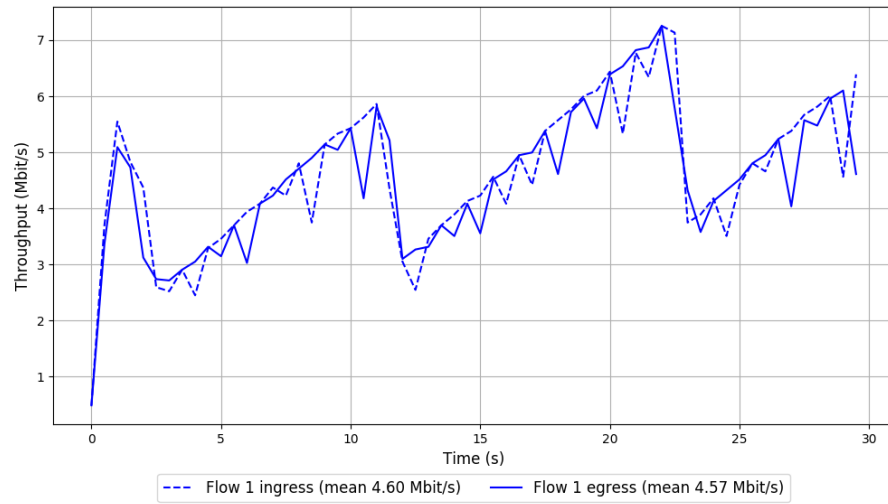
-- Flow 1:

Average throughput: 4.57 Mbit/s

95th percentile per-packet one-way delay: 86.946 ms

Loss rate: 1.26%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-11 06:30:48

End at: 2017-08-11 06:31:18

Below is generated by plot.py at 2017-08-11 10:09:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 87.135 ms

Loss rate: 2.02%

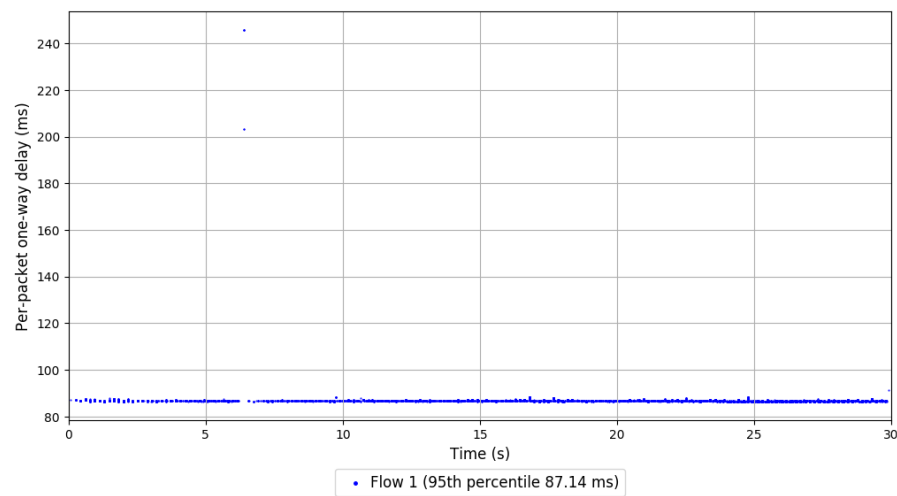
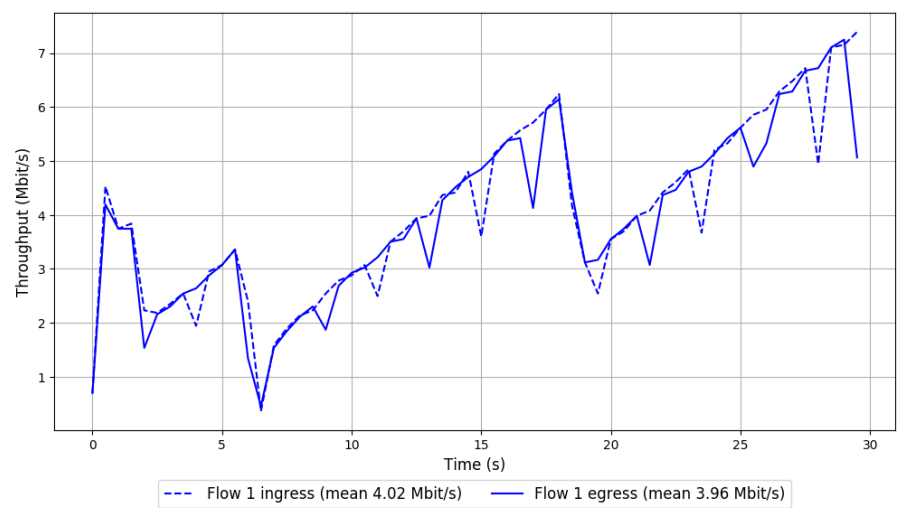
-- Flow 1:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 87.135 ms

Loss rate: 2.02%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2017-08-11 10:09:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 111.615 ms

Loss rate: 2.54%

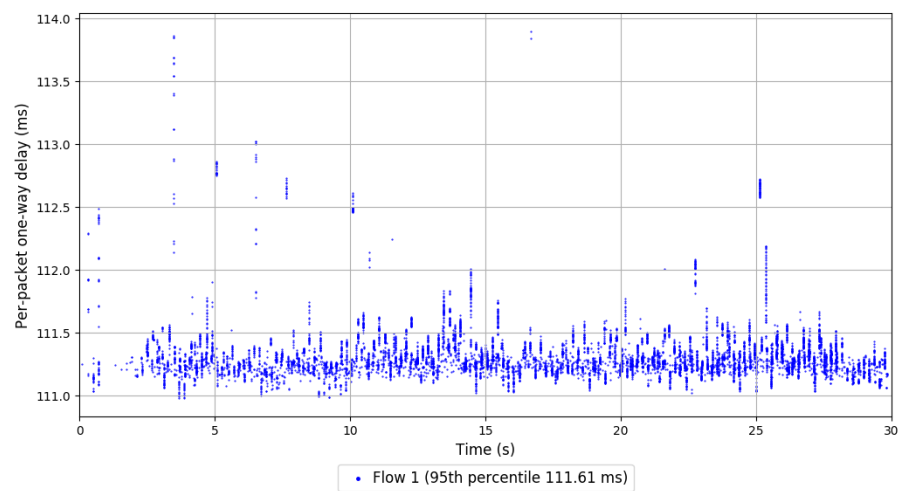
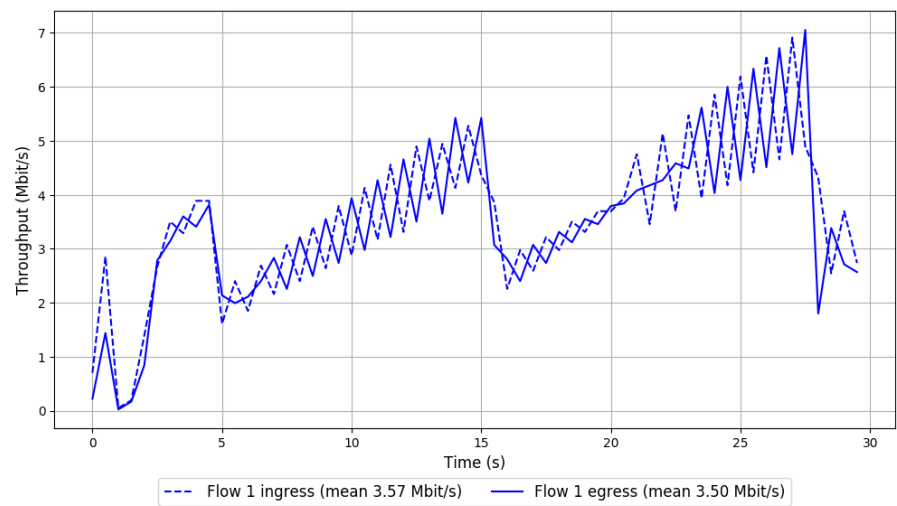
-- Flow 1:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 111.615 ms

Loss rate: 2.54%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-11 06:52:21

End at: 2017-08-11 06:52:51

Below is generated by plot.py at 2017-08-11 10:09:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.28 Mbit/s

95th percentile per-packet one-way delay: 87.590 ms

Loss rate: 0.70%

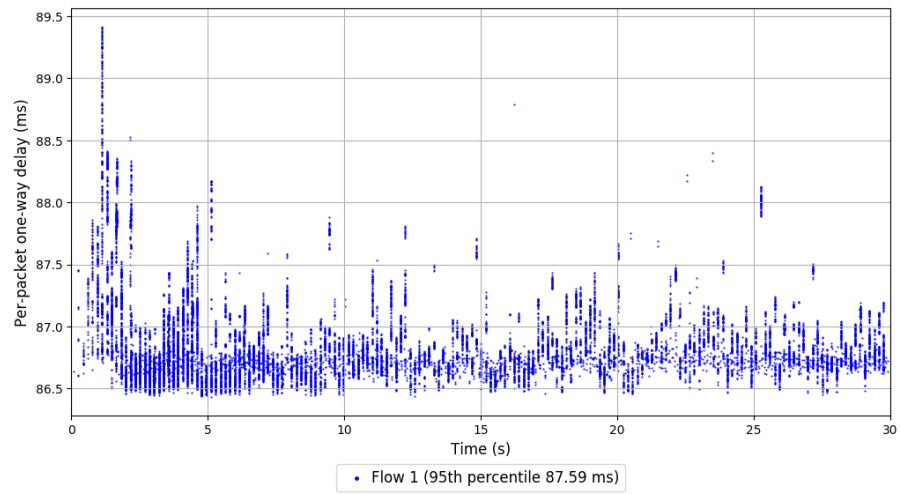
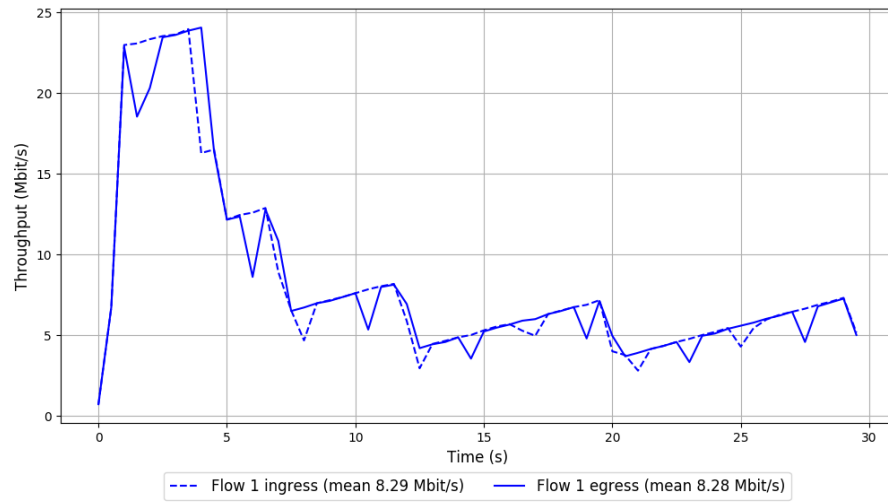
-- Flow 1:

Average throughput: 8.28 Mbit/s

95th percentile per-packet one-way delay: 87.590 ms

Loss rate: 0.70%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-11 07:03:01

End at: 2017-08-11 07:03:31

Below is generated by plot.py at 2017-08-11 10:09:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 87.175 ms

Loss rate: 1.19%

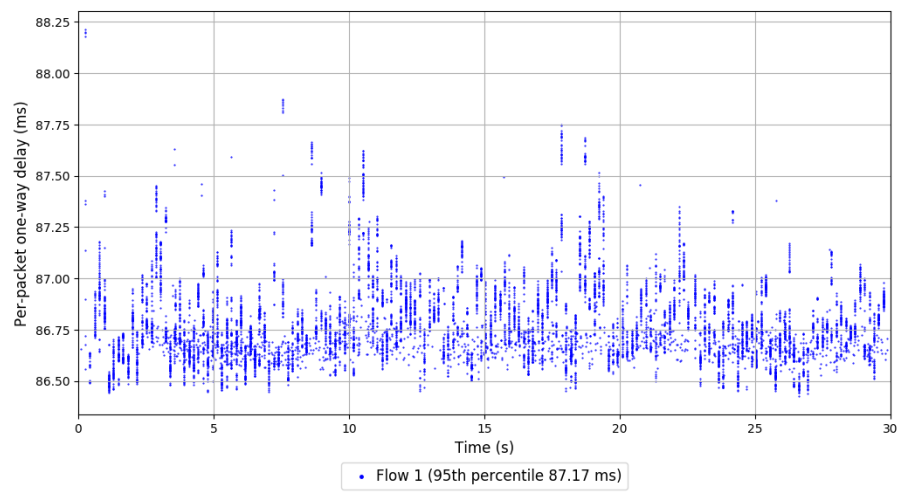
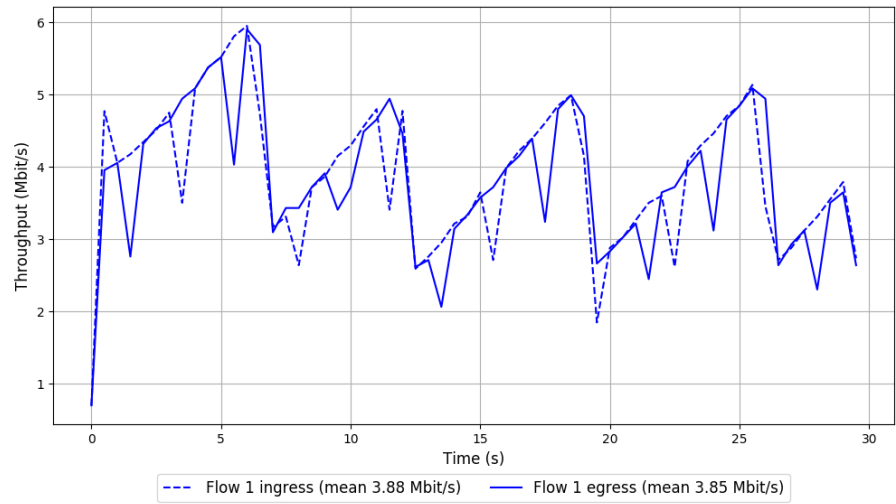
-- Flow 1:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 87.175 ms

Loss rate: 1.19%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-11 07:13:42

End at: 2017-08-11 07:14:12

Below is generated by plot.py at 2017-08-11 10:09:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 87.060 ms

Loss rate: 1.09%

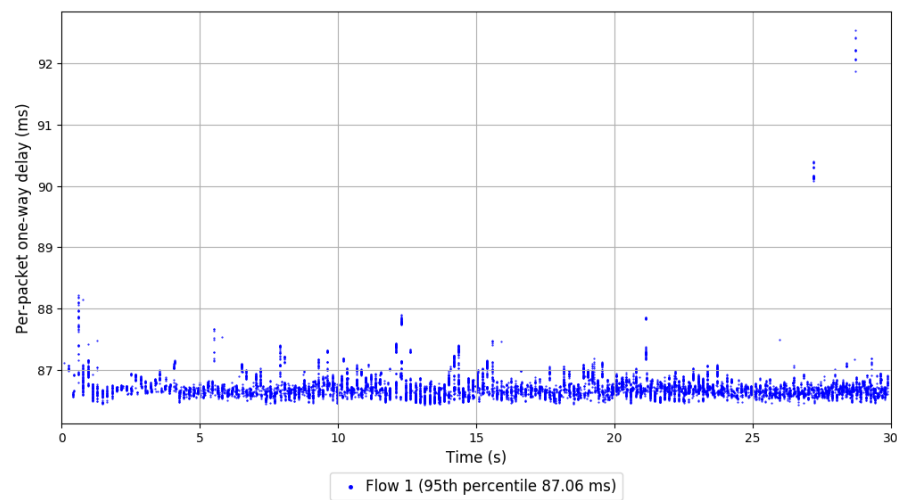
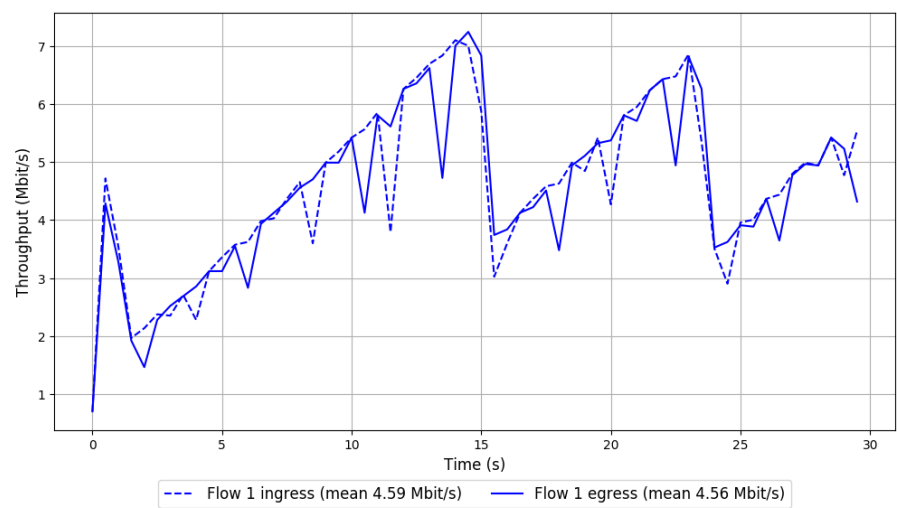
-- Flow 1:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 87.060 ms

Loss rate: 1.09%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-11 05:39:23

End at: 2017-08-11 05:39:53

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.27 Mbit/s

95th percentile per-packet one-way delay: 117.146 ms

Loss rate: 1.14%

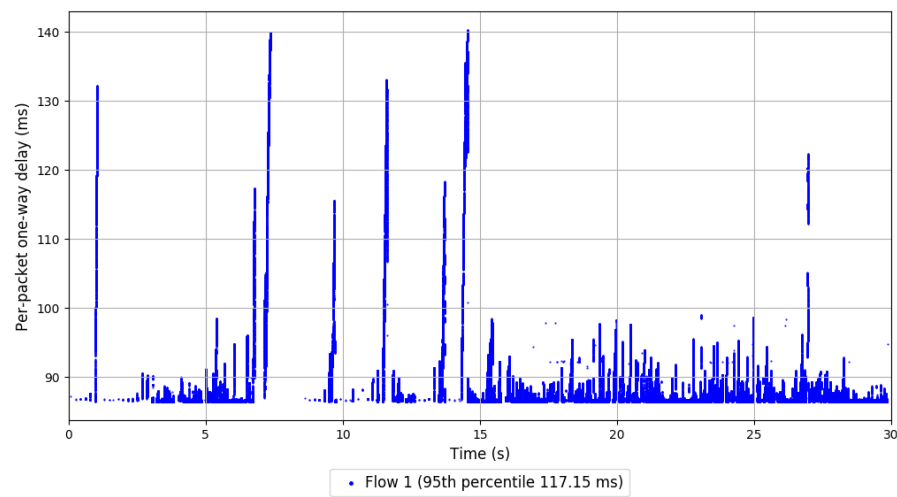
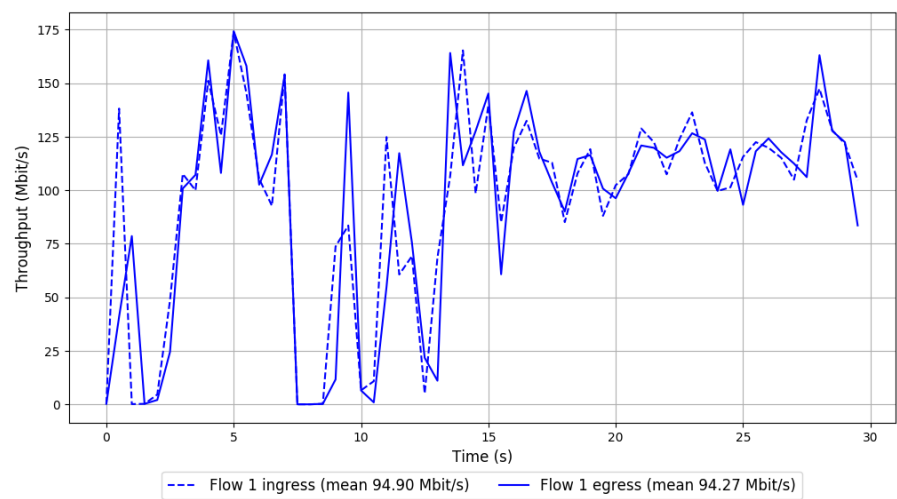
-- Flow 1:

Average throughput: 94.27 Mbit/s

95th percentile per-packet one-way delay: 117.146 ms

Loss rate: 1.14%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-11 05:50:38

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.81 Mbit/s

95th percentile per-packet one-way delay: 149.787 ms

Loss rate: 4.62%

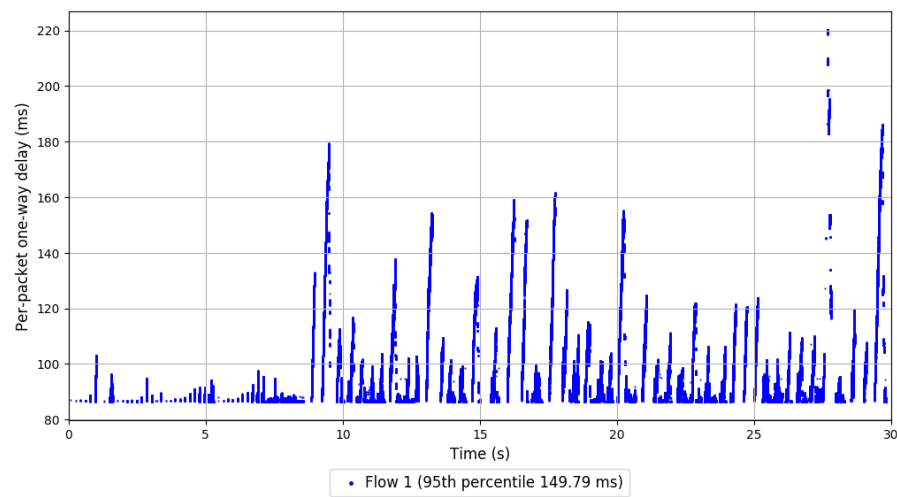
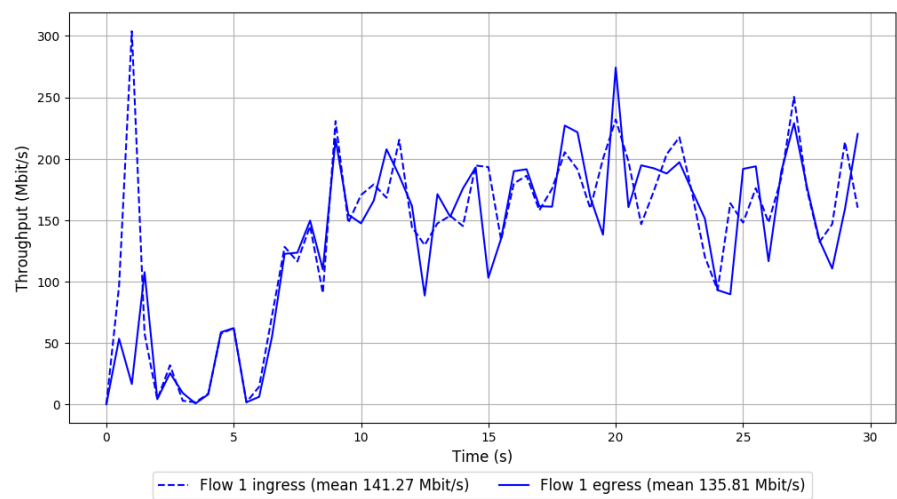
-- Flow 1:

Average throughput: 135.81 Mbit/s

95th percentile per-packet one-way delay: 149.787 ms

Loss rate: 4.62%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-11 06:01:42

End at: 2017-08-11 06:02:12

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.79 Mbit/s

95th percentile per-packet one-way delay: 157.576 ms

Loss rate: 2.59%

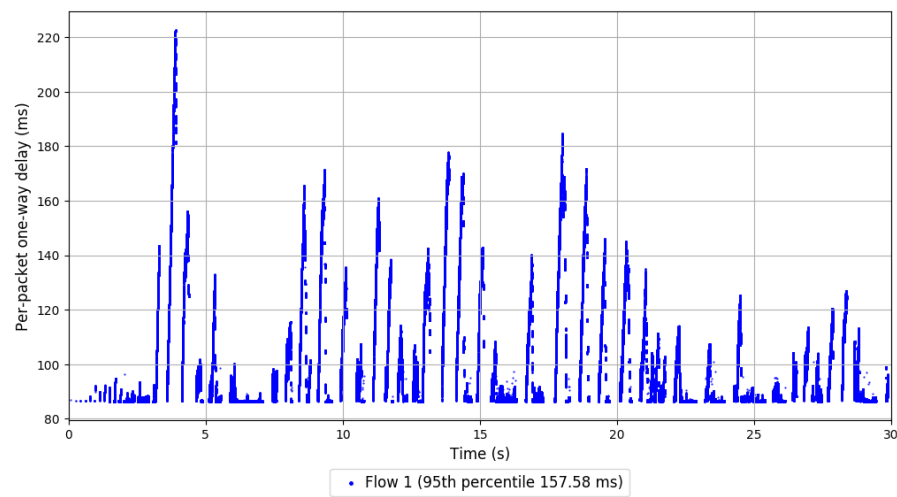
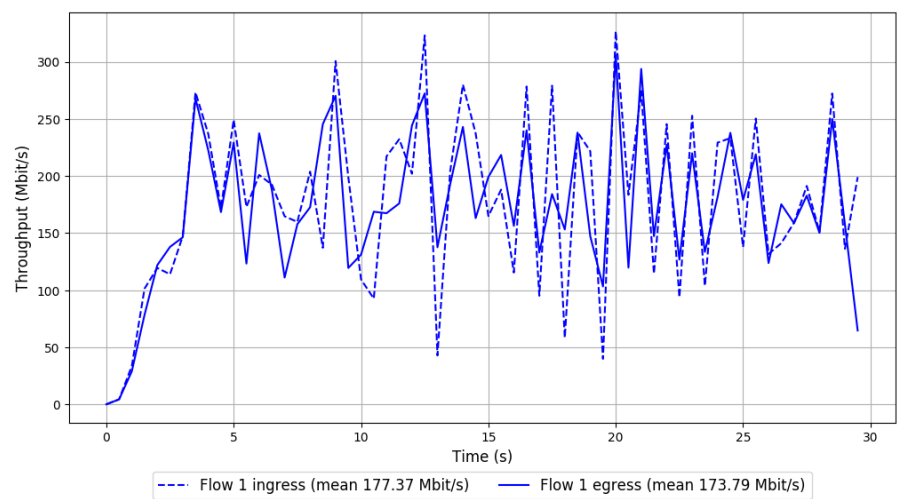
-- Flow 1:

Average throughput: 173.79 Mbit/s

95th percentile per-packet one-way delay: 157.576 ms

Loss rate: 2.59%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-11 06:12:44

End at: 2017-08-11 06:13:14

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.77 Mbit/s

95th percentile per-packet one-way delay: 151.560 ms

Loss rate: 2.36%

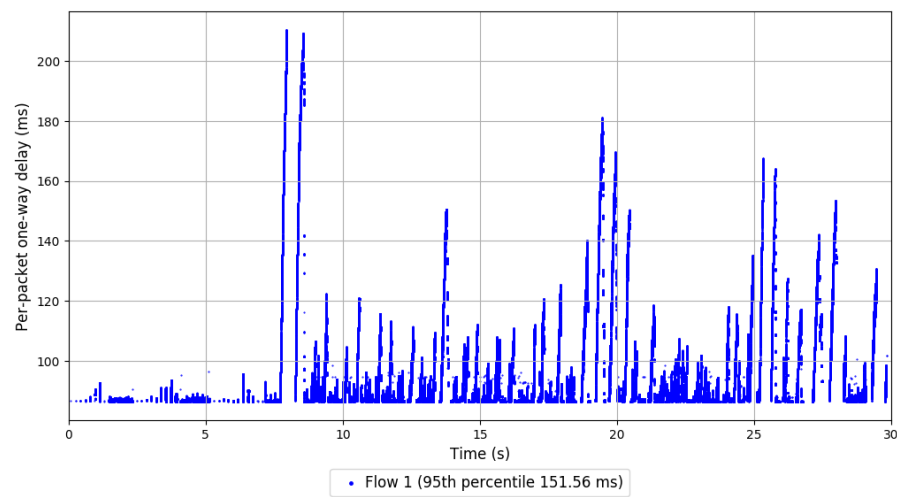
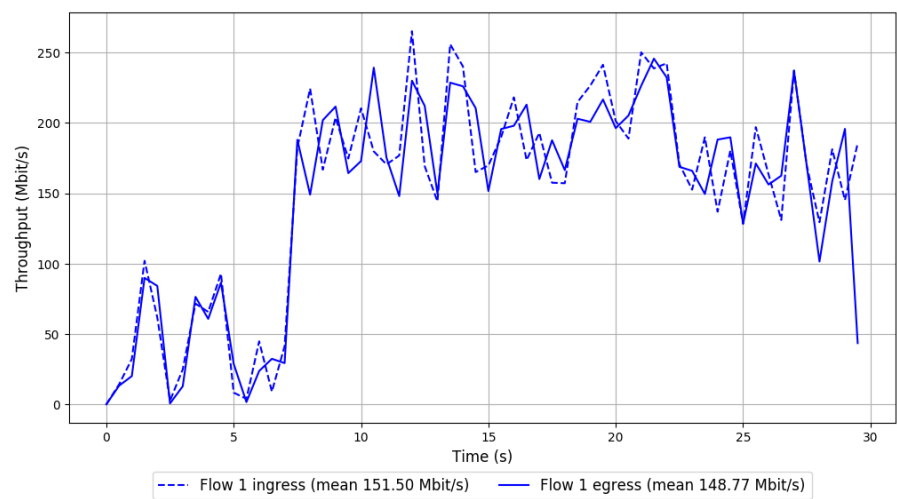
-- Flow 1:

Average throughput: 148.77 Mbit/s

95th percentile per-packet one-way delay: 151.560 ms

Loss rate: 2.36%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-11 06:23:44

End at: 2017-08-11 06:24:14

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.68 Mbit/s

95th percentile per-packet one-way delay: 91.281 ms

Loss rate: 2.13%

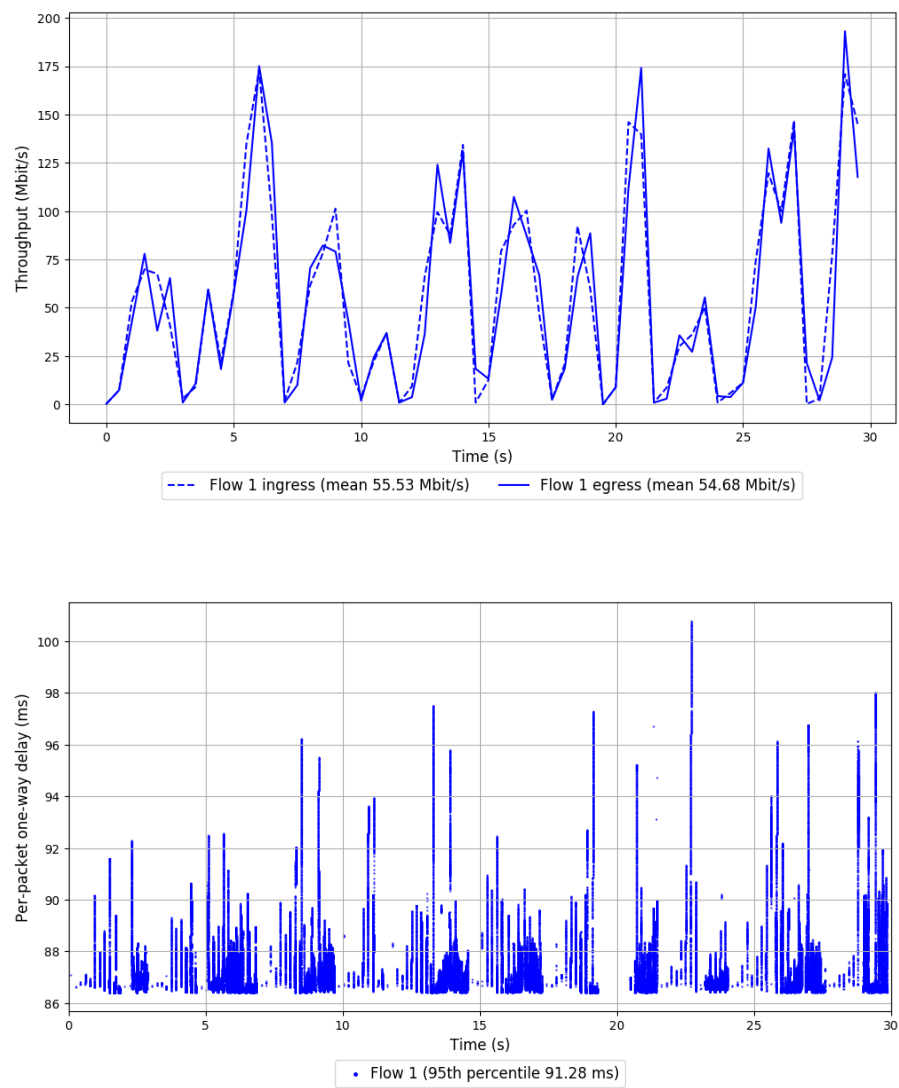
-- Flow 1:

Average throughput: 54.68 Mbit/s

95th percentile per-packet one-way delay: 91.281 ms

Loss rate: 2.13%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-11 06:34:46

End at: 2017-08-11 06:35:16

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.76 Mbit/s

95th percentile per-packet one-way delay: 152.336 ms

Loss rate: 2.10%

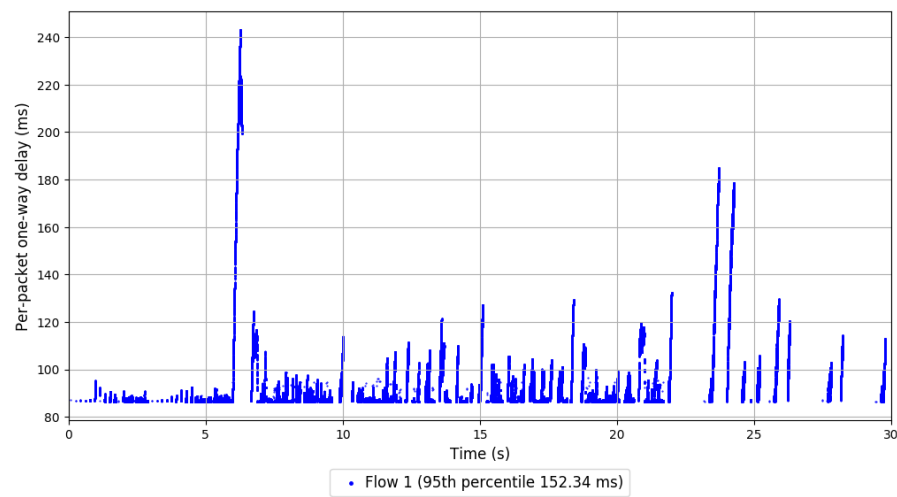
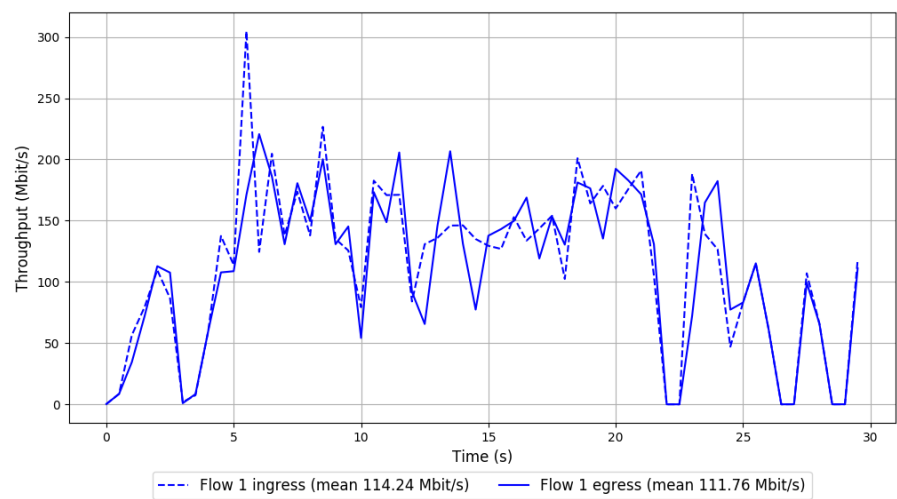
-- Flow 1:

Average throughput: 111.76 Mbit/s

95th percentile per-packet one-way delay: 152.336 ms

Loss rate: 2.10%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-11 06:45:18

End at: 2017-08-11 06:45:48

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.48 Mbit/s

95th percentile per-packet one-way delay: 151.241 ms

Loss rate: 0.79%

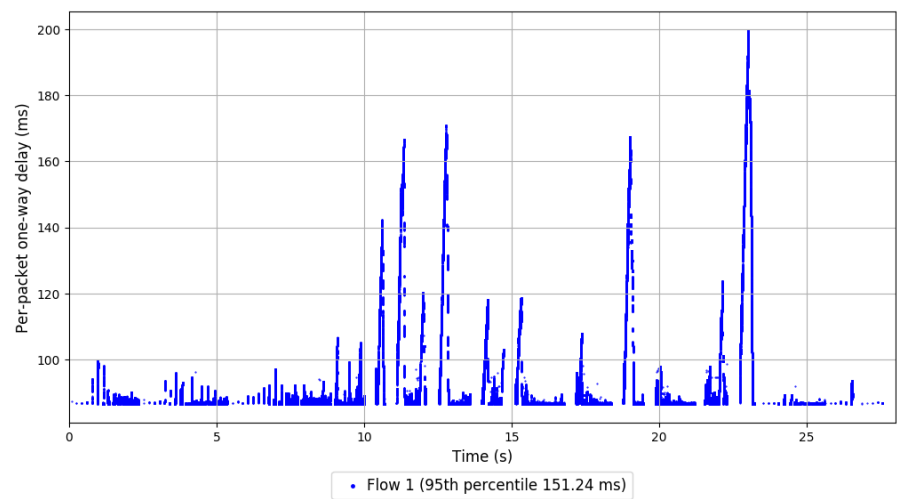
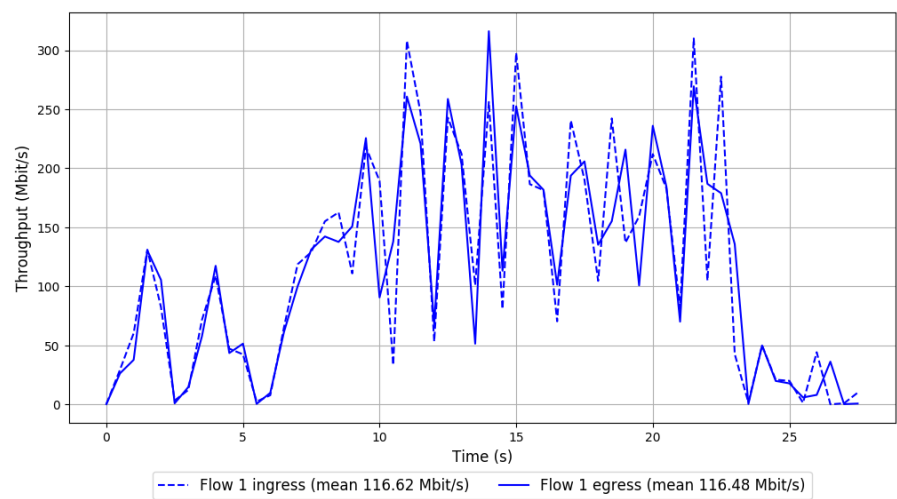
-- Flow 1:

Average throughput: 116.48 Mbit/s

95th percentile per-packet one-way delay: 151.241 ms

Loss rate: 0.79%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-11 06:55:59

End at: 2017-08-11 06:56:29

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.33 Mbit/s

95th percentile per-packet one-way delay: 93.712 ms

Loss rate: 68.89%

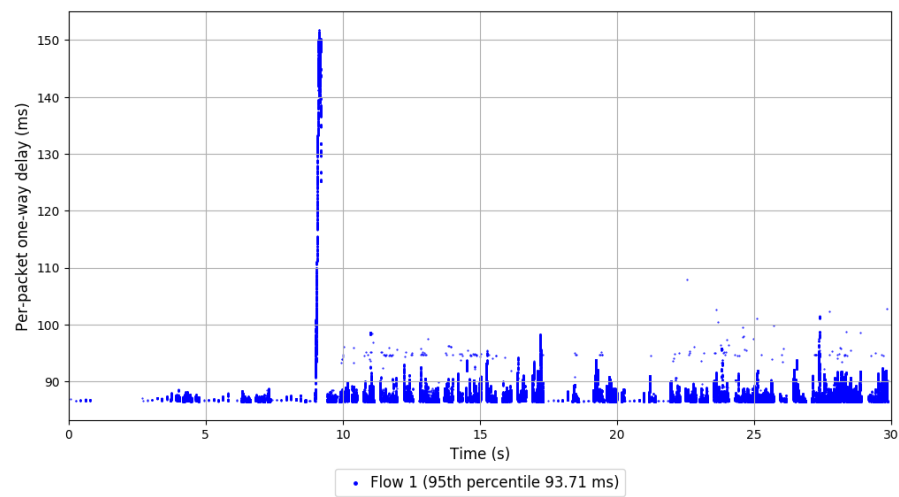
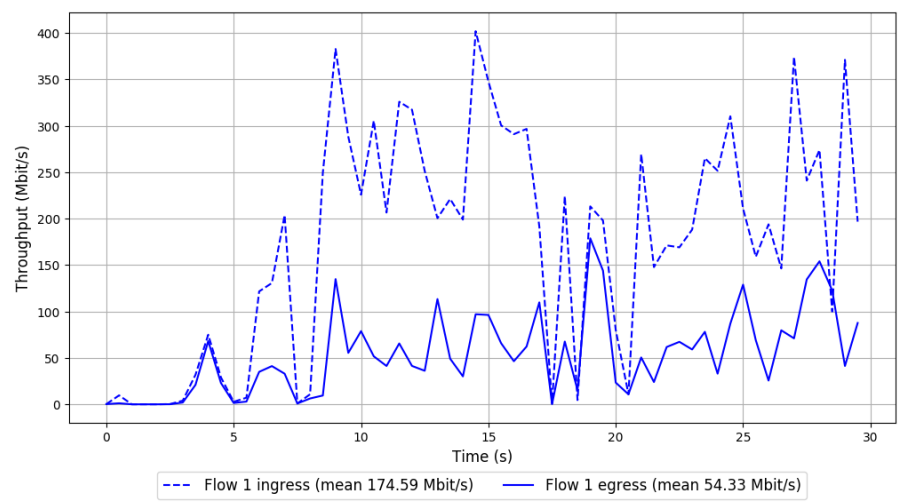
-- Flow 1:

Average throughput: 54.33 Mbit/s

95th percentile per-packet one-way delay: 93.712 ms

Loss rate: 68.89%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

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

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.82 Mbit/s

95th percentile per-packet one-way delay: 135.237 ms

Loss rate: 1.24%

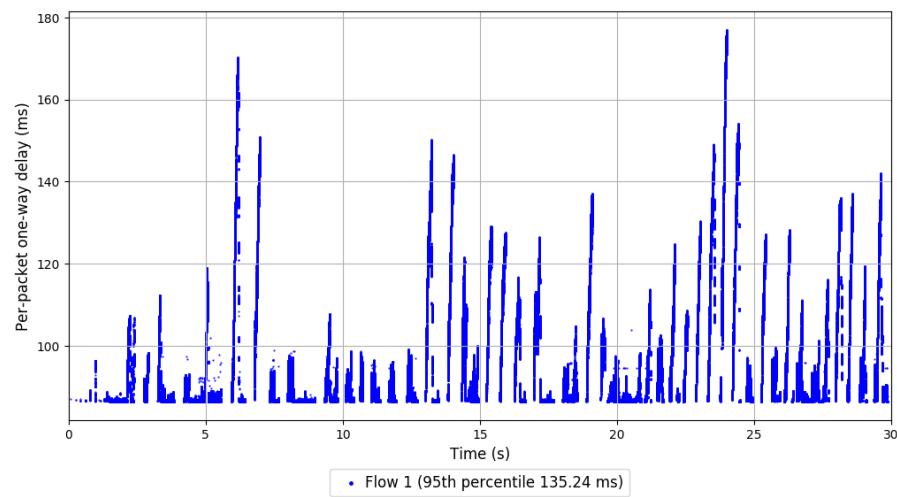
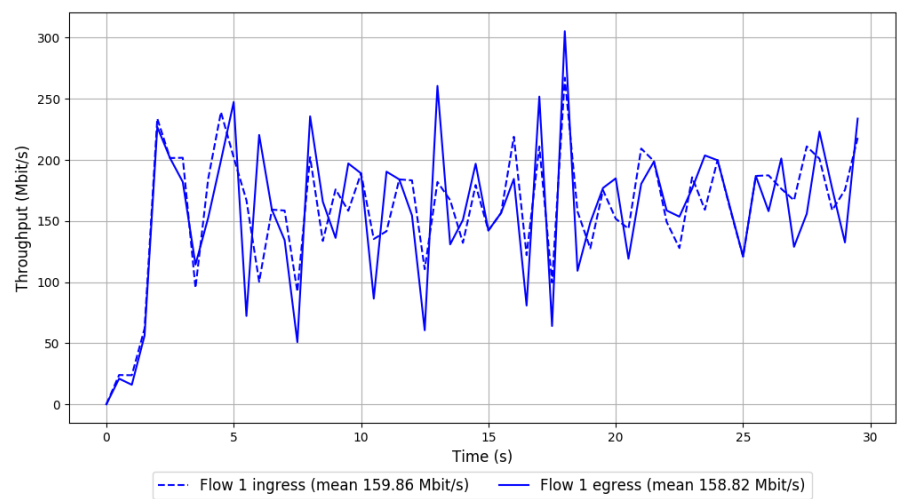
-- Flow 1:

Average throughput: 158.82 Mbit/s

95th percentile per-packet one-way delay: 135.237 ms

Loss rate: 1.24%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

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

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.57 Mbit/s

95th percentile per-packet one-way delay: 105.227 ms

Loss rate: 2.04%

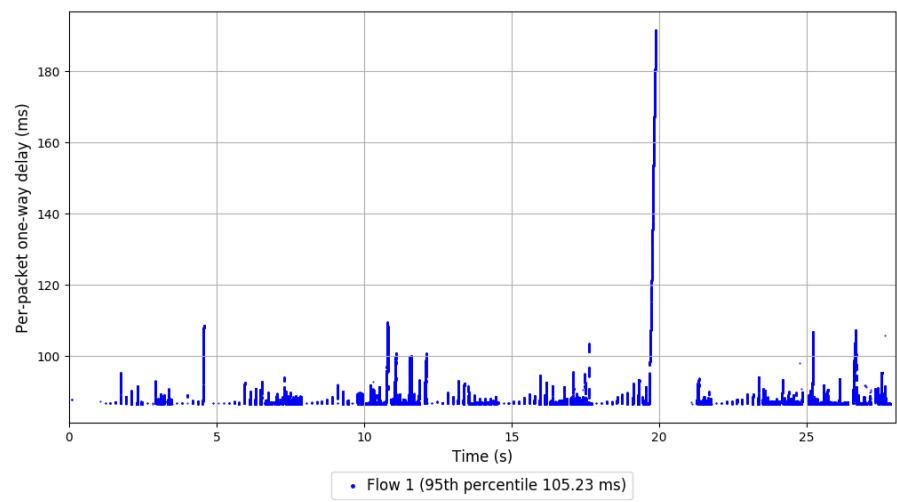
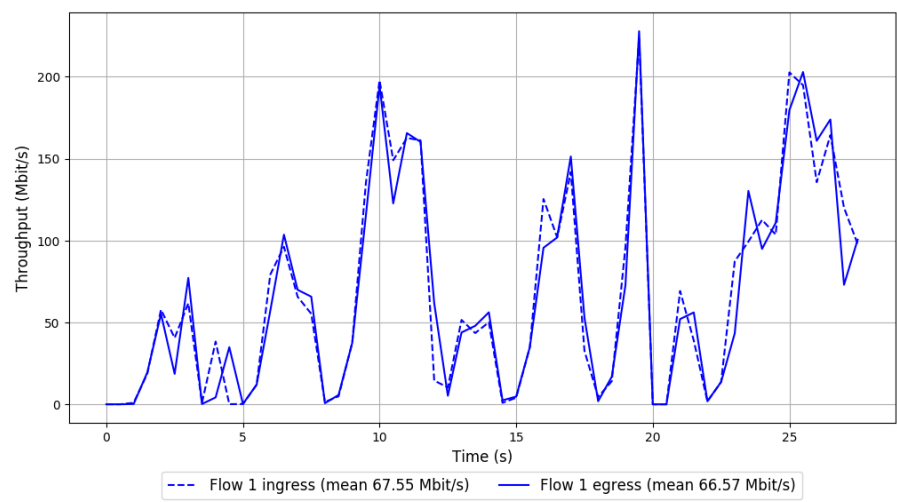
-- Flow 1:

Average throughput: 66.57 Mbit/s

95th percentile per-packet one-way delay: 105.227 ms

Loss rate: 2.04%

Run 10: Report of Verus — Data Link

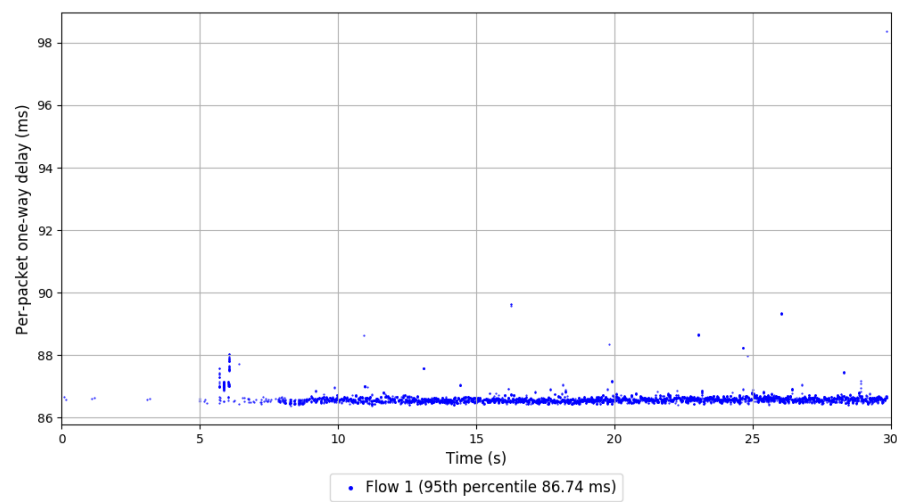
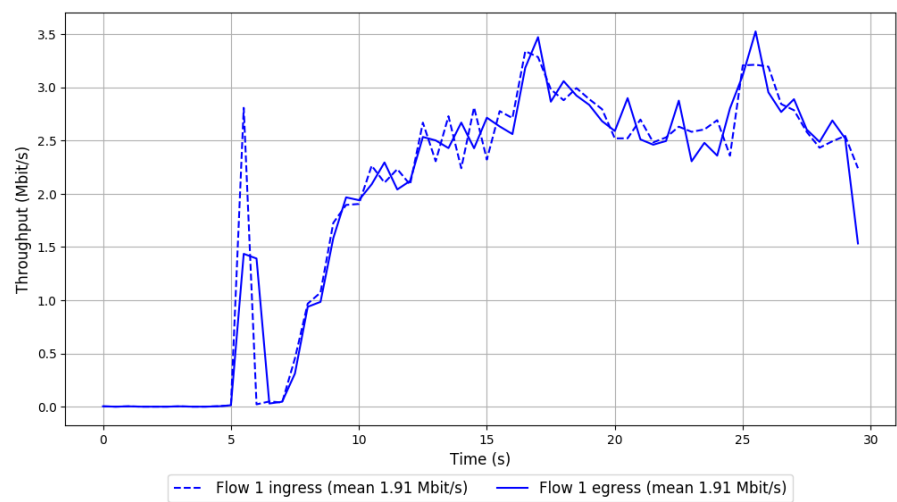


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-11 05:34:07
End at: 2017-08-11 05:34:37

# Below is generated by plot.py at 2017-08-11 10:11:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 86.742 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 86.742 ms
Loss rate: 0.85%
```


Run 1: Report of WebRTC media — Data Link

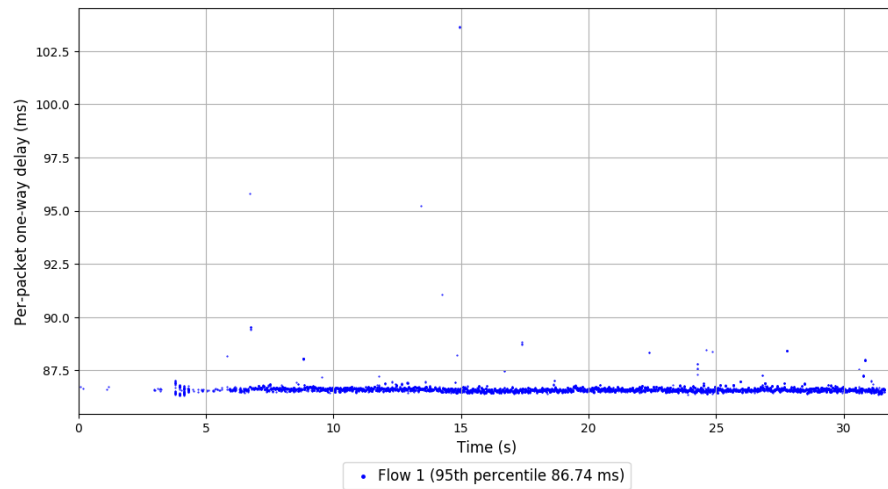
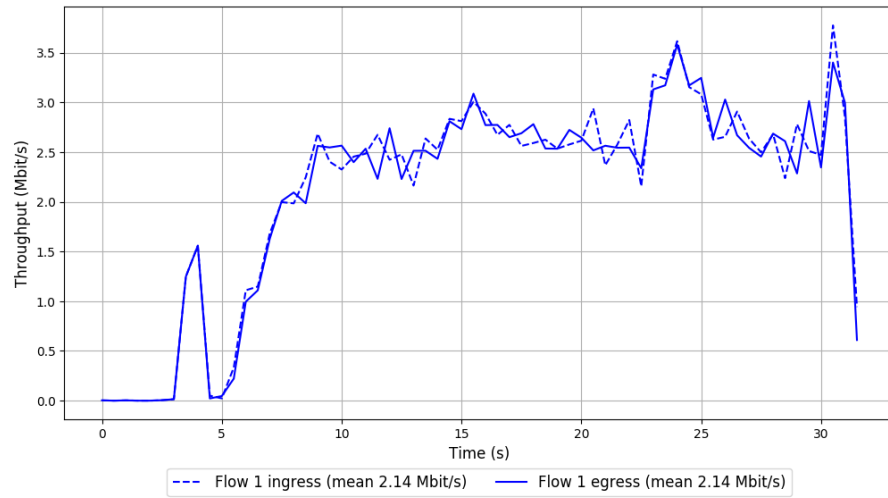


```
Run 2: Statistics of WebRTC media

Start at: 2017-08-11 05:45:19
End at: 2017-08-11 05:45:49

# Below is generated by plot.py at 2017-08-11 10:11:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 86.738 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 86.738 ms
Loss rate: 0.66%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

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

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 86.840 ms

Loss rate: 0.75%

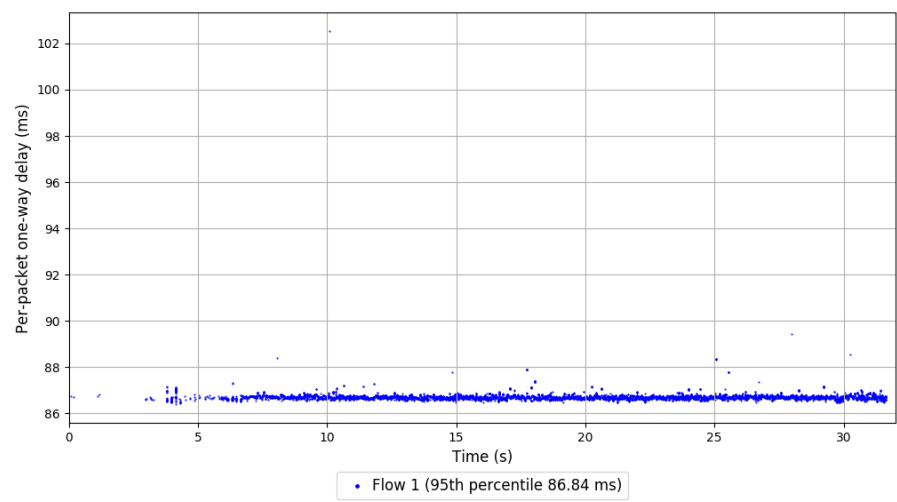
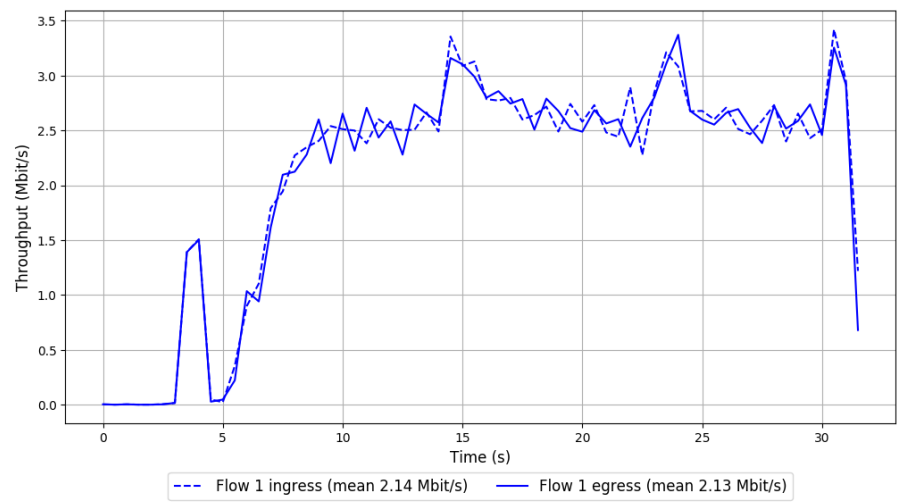
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 86.840 ms

Loss rate: 0.75%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

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

End at: 2017-08-11 06:07:58

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 86.791 ms

Loss rate: 1.08%

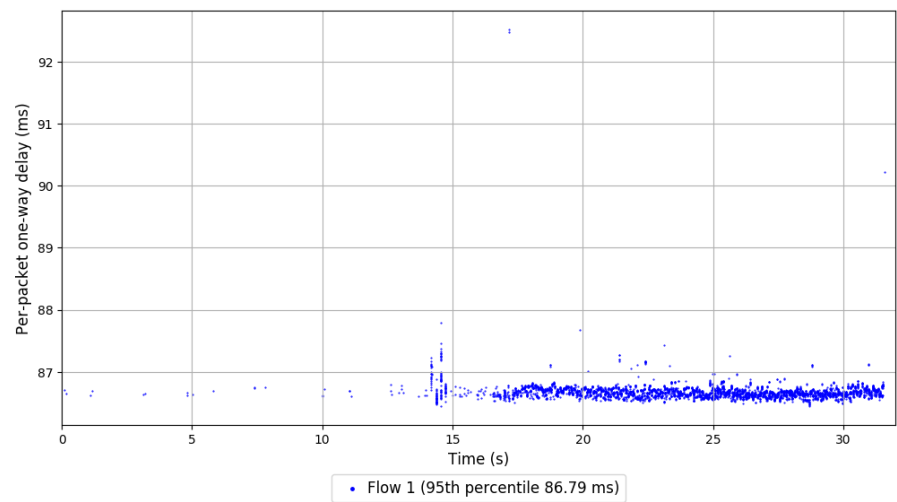
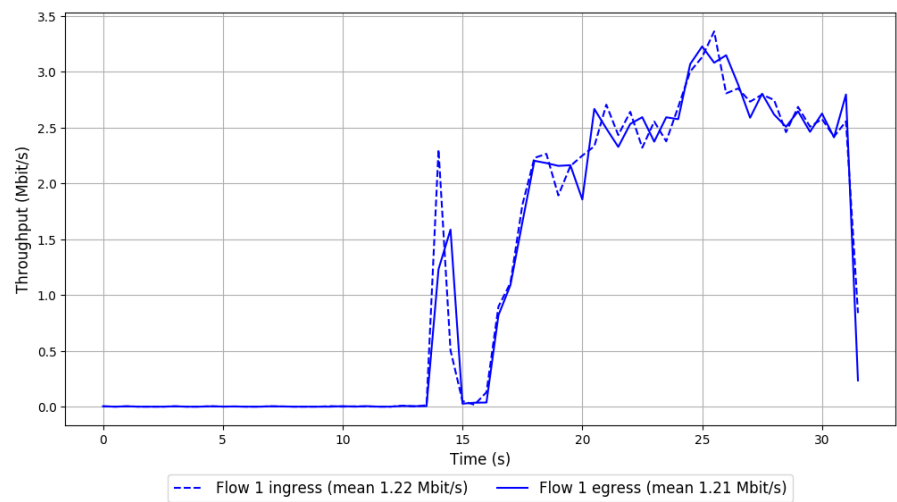
-- Flow 1:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 86.791 ms

Loss rate: 1.08%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

End at: 2017-08-11 06:19:02

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 86.756 ms

Loss rate: 0.74%

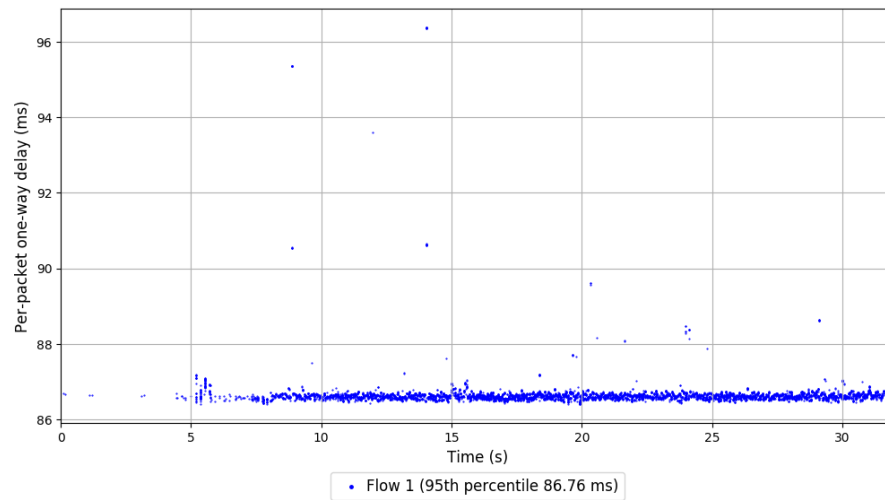
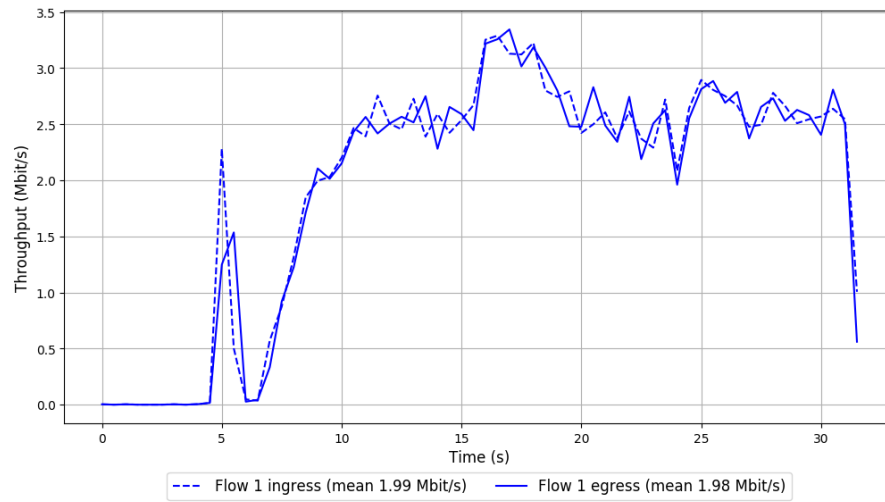
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 86.756 ms

Loss rate: 0.74%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-11 06:29:26

End at: 2017-08-11 06:29:56

Below is generated by plot.py at 2017-08-11 10:11:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 86.336 ms

Loss rate: 0.81%

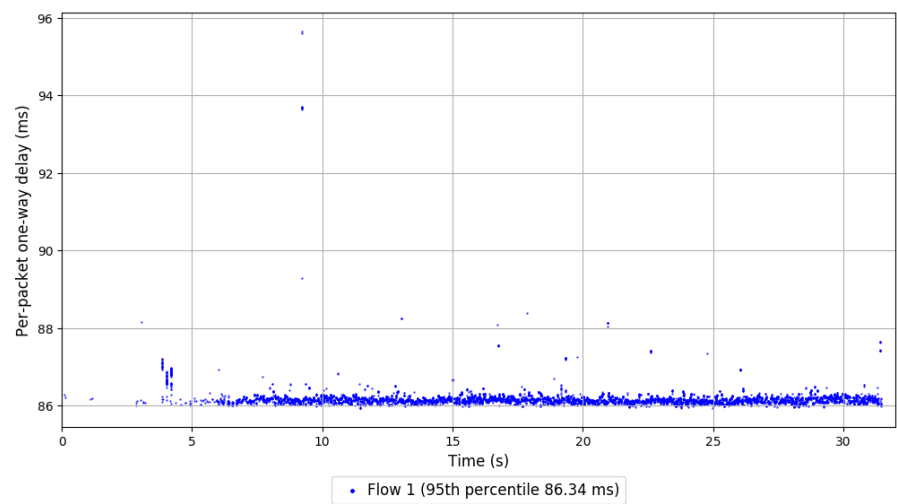
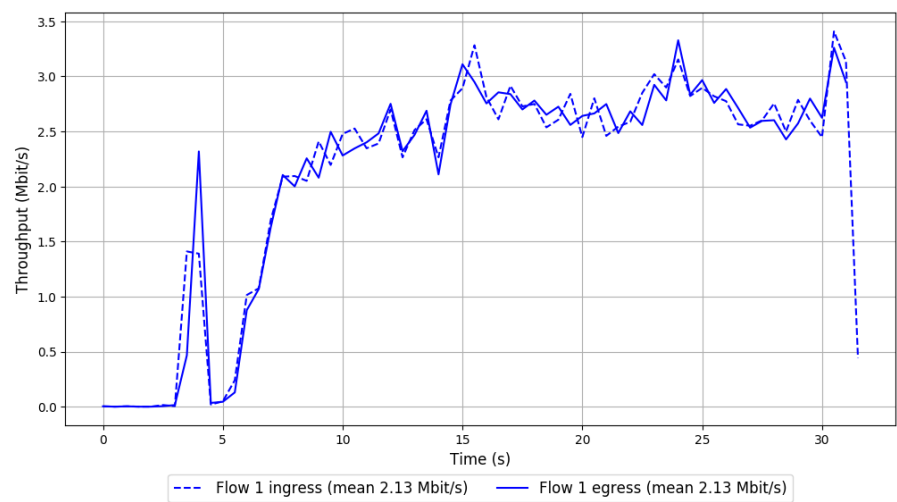
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 86.336 ms

Loss rate: 0.81%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-11 06:40:20

End at: 2017-08-11 06:40:50

Below is generated by plot.py at 2017-08-11 10:11:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 87.212 ms

Loss rate: 0.69%

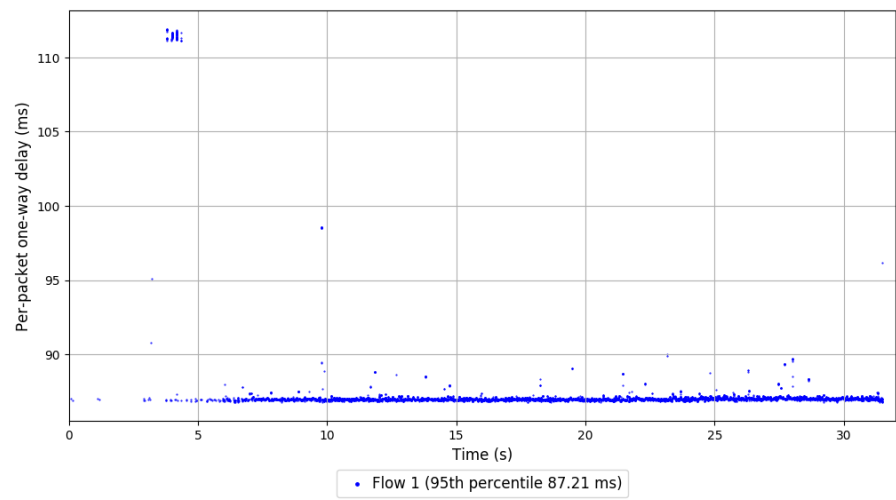
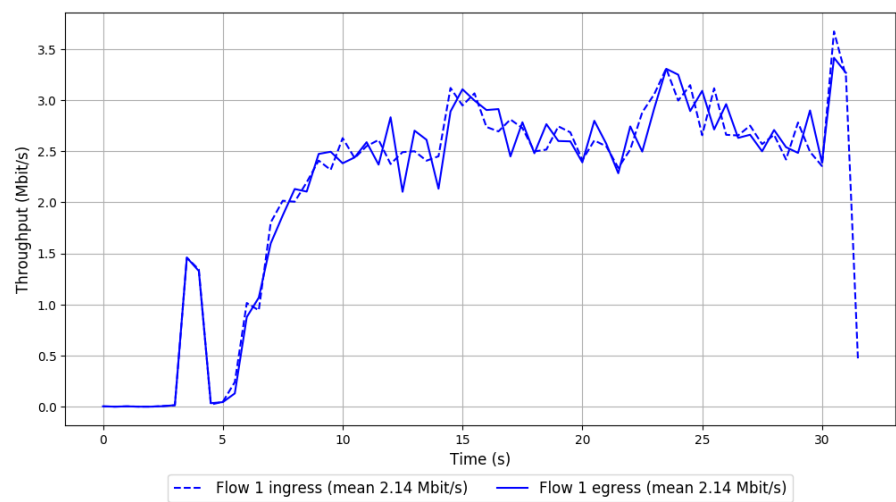
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 87.212 ms

Loss rate: 0.69%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-11 06:51:00

End at: 2017-08-11 06:51:30

Below is generated by plot.py at 2017-08-11 10:11:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 86.402 ms

Loss rate: 0.74%

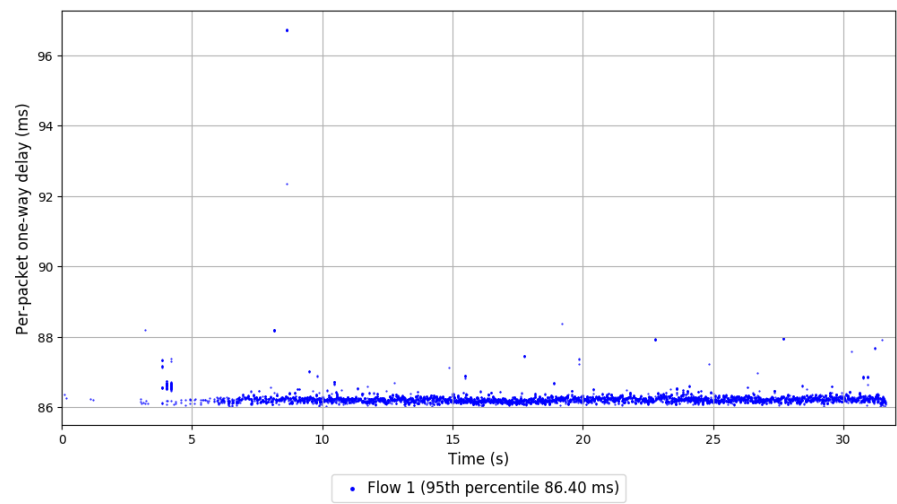
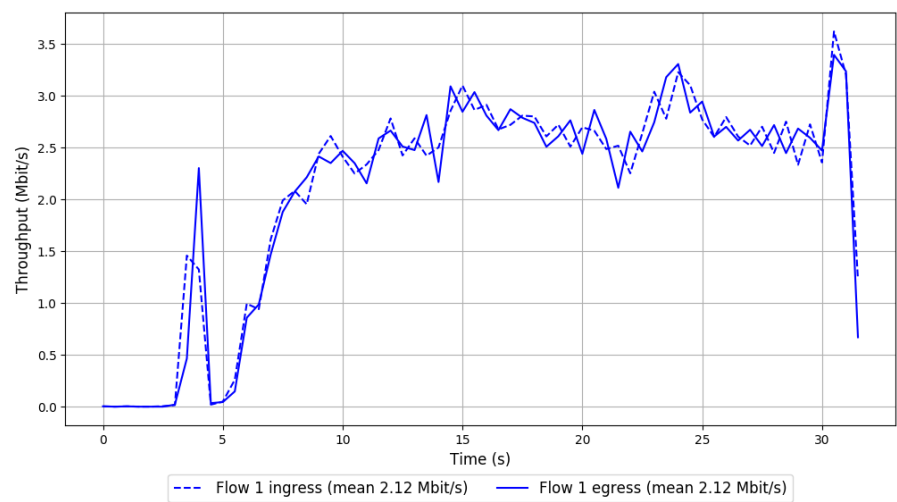
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 86.402 ms

Loss rate: 0.74%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-11 07:01:40

End at: 2017-08-11 07:02:10

Below is generated by plot.py at 2017-08-11 10:11:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 86.885 ms

Loss rate: 0.63%

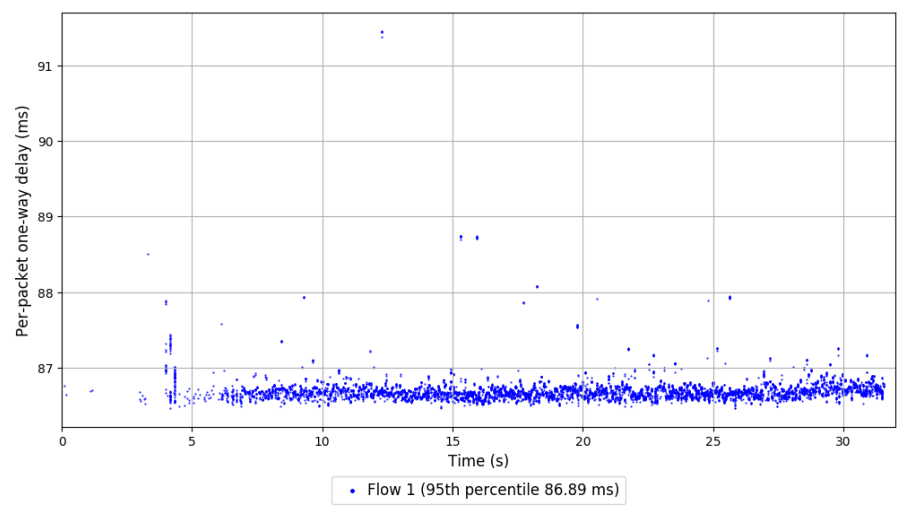
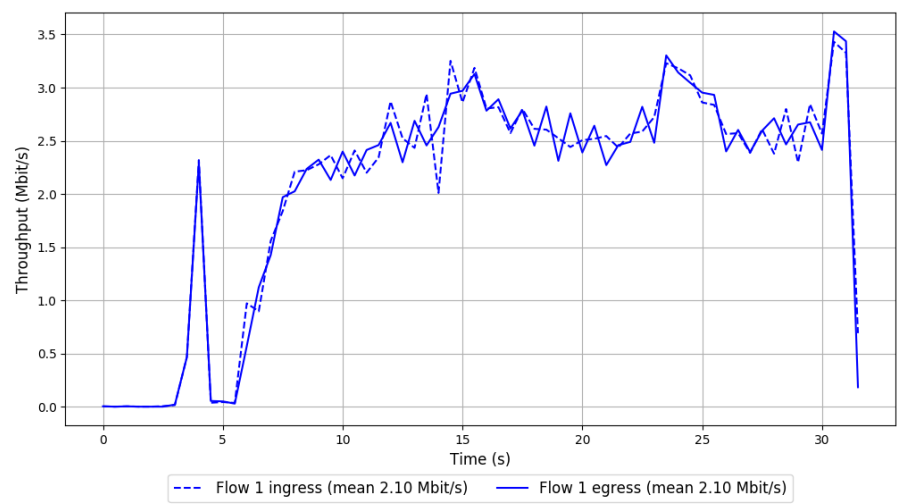
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 86.885 ms

Loss rate: 0.63%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-11 07:12:21

End at: 2017-08-11 07:12:51

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 87.292 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 87.292 ms

Loss rate: 0.63%

Run 10: Report of WebRTC media — Data Link

