

Pantheon Report

Generated at 2017-08-17 09:25:50 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

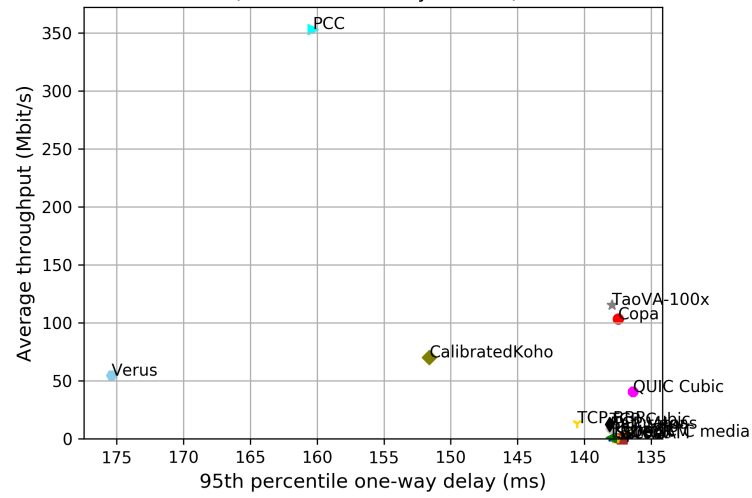
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

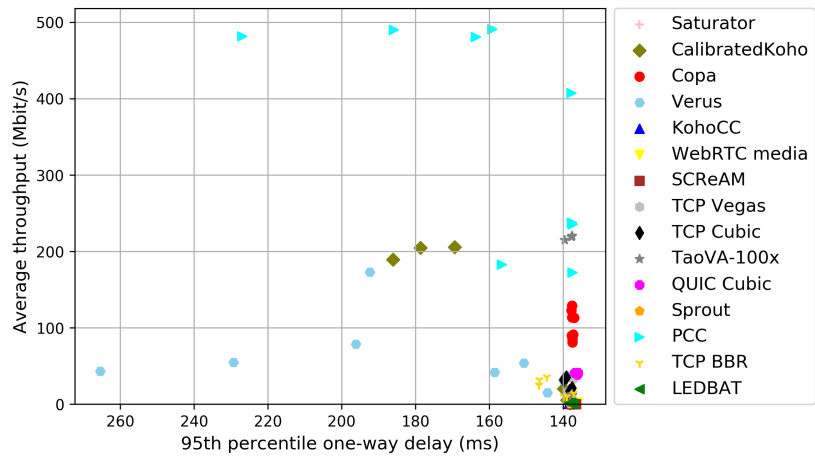
Git summary:

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

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	13.38	140.55	22.67
CalibratedKoho	9	70.30	151.60	42.02
Copa	8	103.25	137.48	0.29
TCP Cubic	10	12.53	138.12	1.73
KohoCC	10	2.64	137.79	36.52
LEDBAT	10	1.17	137.99	1.59
PCC	9	353.20	160.32	5.37
QUIC Cubic	9	40.66	136.37	0.00
Saturator	3	8.53	138.07	0.41
SCReAM	8	0.22	137.18	0.00
Sprout	10	0.38	137.68	0.03
TaoVA-100x	6	115.42	137.95	0.36
TCP Vegas	10	8.71	137.96	1.09
Verus	10	54.64	175.40	35.91
WebRTC media	10	1.98	136.89	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-08-17 06:29:18

End at: 2017-08-17 06:29:48

Below is generated by plot.py at 2017-08-17 09:09:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.07 Mbit/s

95th percentile per-packet one-way delay: 146.450 ms

Loss rate: 3.33%

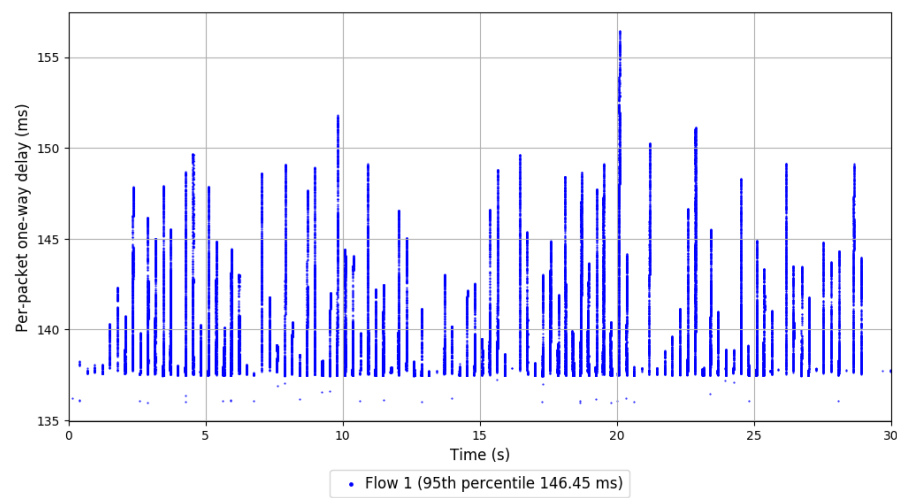
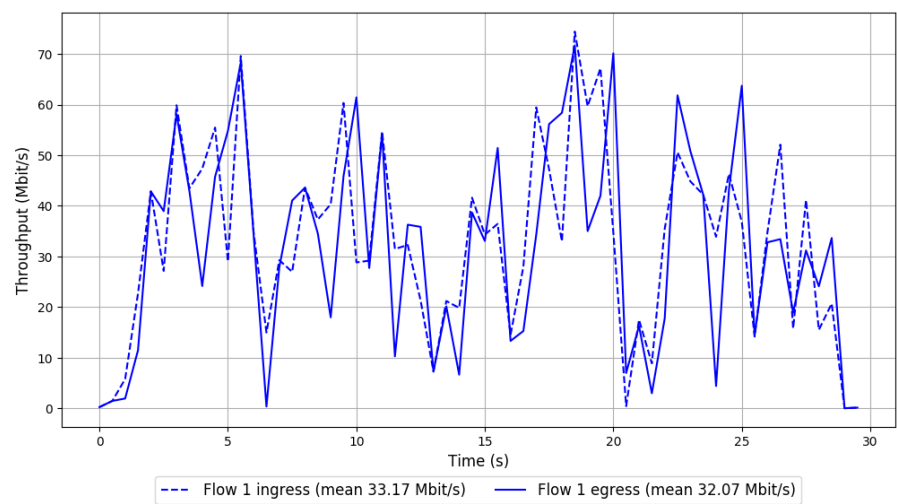
-- Flow 1:

Average throughput: 32.07 Mbit/s

95th percentile per-packet one-way delay: 146.450 ms

Loss rate: 3.33%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-17 06:40:43

End at: 2017-08-17 06:41:13

Below is generated by plot.py at 2017-08-17 09:09:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.45 Mbit/s

95th percentile per-packet one-way delay: 139.905 ms

Loss rate: 30.06%

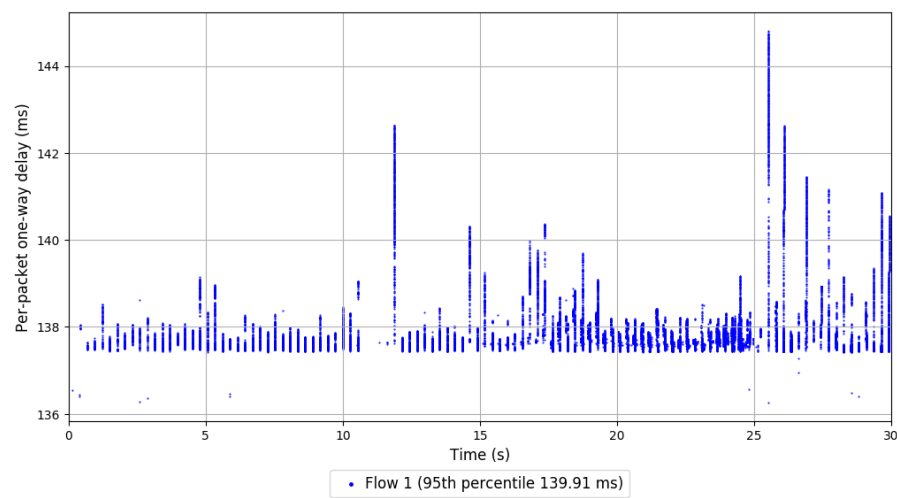
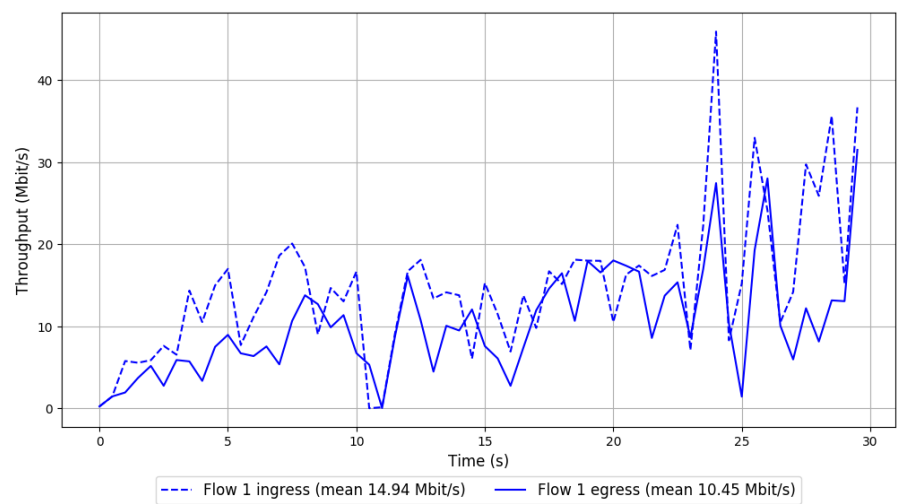
-- Flow 1:

Average throughput: 10.45 Mbit/s

95th percentile per-packet one-way delay: 139.905 ms

Loss rate: 30.06%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-17 06:51:58

End at: 2017-08-17 06:52:28

Below is generated by plot.py at 2017-08-17 09:09:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.82 Mbit/s

95th percentile per-packet one-way delay: 139.071 ms

Loss rate: 42.26%

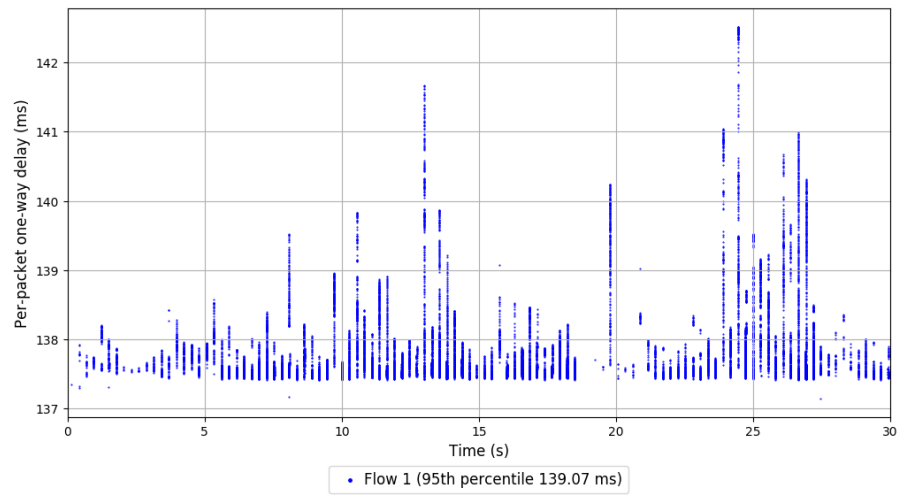
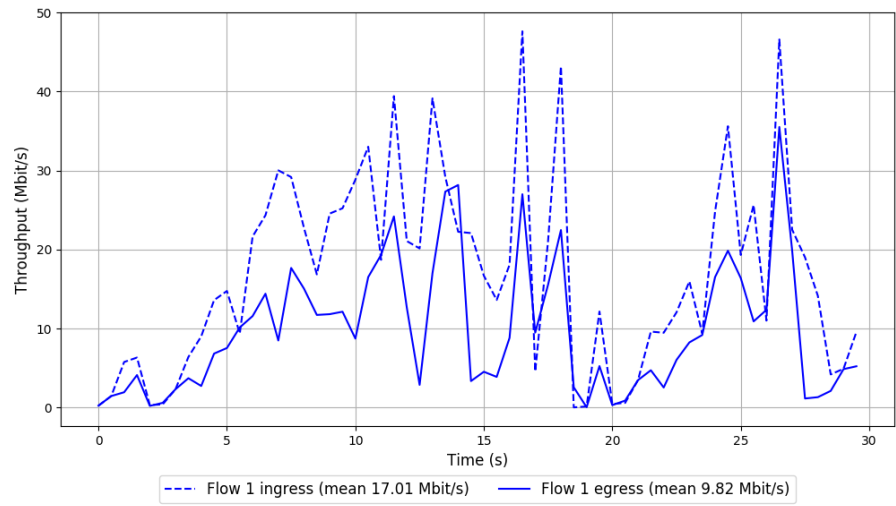
-- Flow 1:

Average throughput: 9.82 Mbit/s

95th percentile per-packet one-way delay: 139.071 ms

Loss rate: 42.26%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-17 07:03:11

End at: 2017-08-17 07:03:41

Below is generated by plot.py at 2017-08-17 09:09:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.12 Mbit/s

95th percentile per-packet one-way delay: 137.220 ms

Loss rate: 25.63%

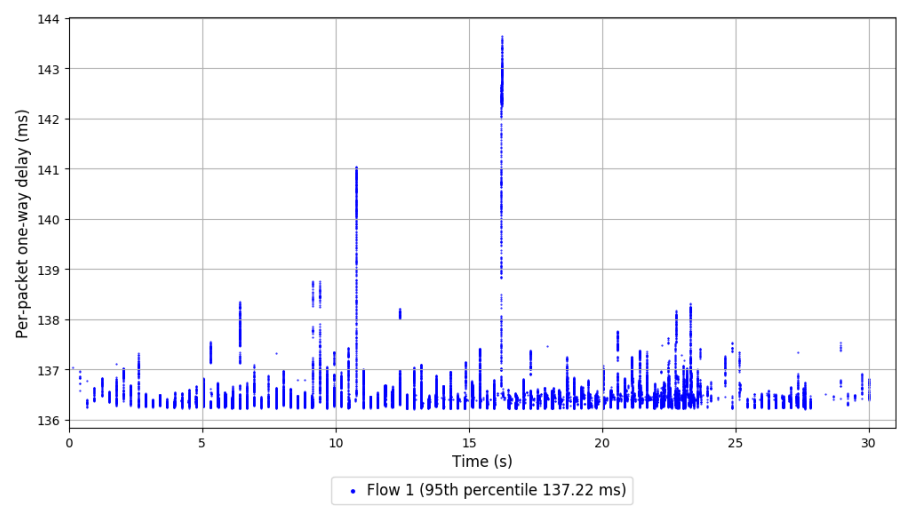
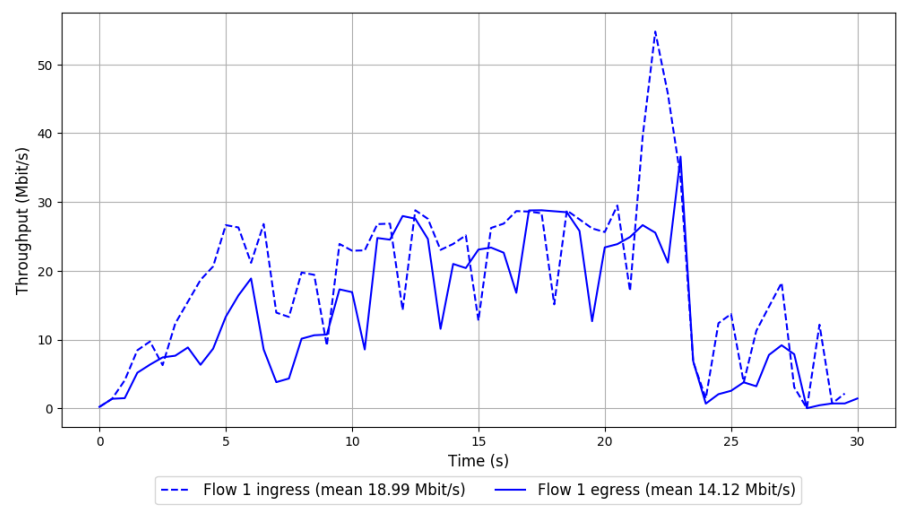
-- Flow 1:

Average throughput: 14.12 Mbit/s

95th percentile per-packet one-way delay: 137.220 ms

Loss rate: 25.63%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-17 07:14:45

End at: 2017-08-17 07:15:15

Below is generated by plot.py at 2017-08-17 09:10:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.69 Mbit/s

95th percentile per-packet one-way delay: 146.526 ms

Loss rate: 9.62%

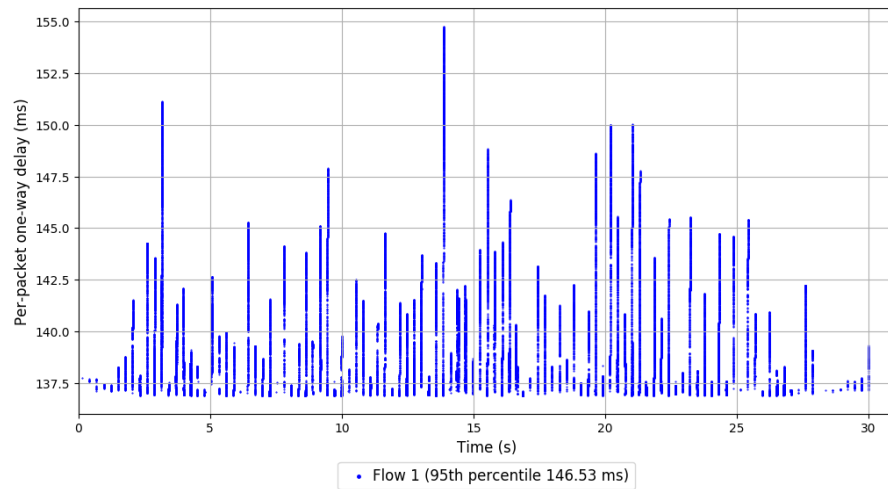
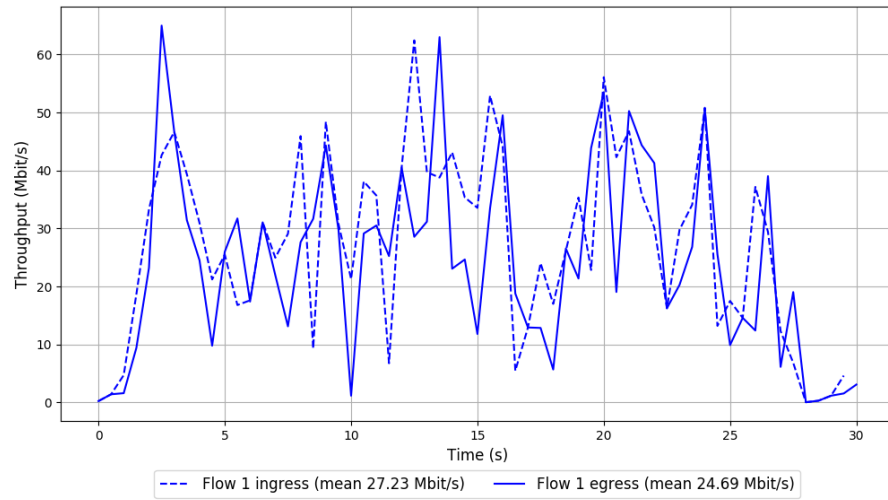
-- Flow 1:

Average throughput: 24.69 Mbit/s

95th percentile per-packet one-way delay: 146.526 ms

Loss rate: 9.62%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-17 07:26:35

End at: 2017-08-17 07:27:05

Below is generated by plot.py at 2017-08-17 09:10:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.63 Mbit/s

95th percentile per-packet one-way delay: 144.487 ms

Loss rate: 2.69%

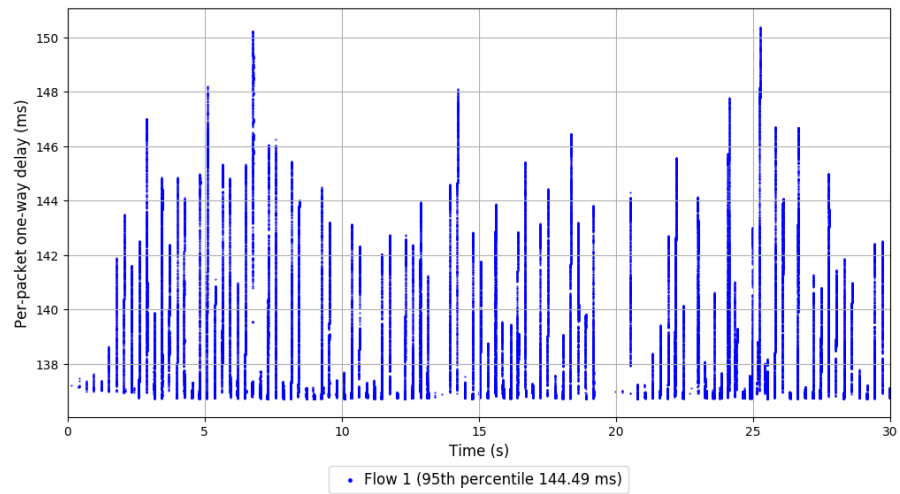
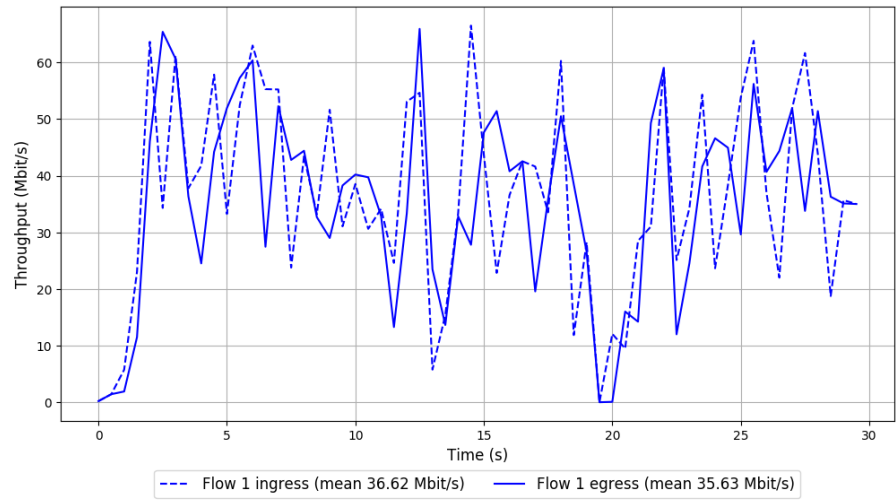
-- Flow 1:

Average throughput: 35.63 Mbit/s

95th percentile per-packet one-way delay: 144.487 ms

Loss rate: 2.69%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-17 07:38:10

End at: 2017-08-17 07:38:40

Below is generated by plot.py at 2017-08-17 09:10:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 137.856 ms

Loss rate: 16.45%

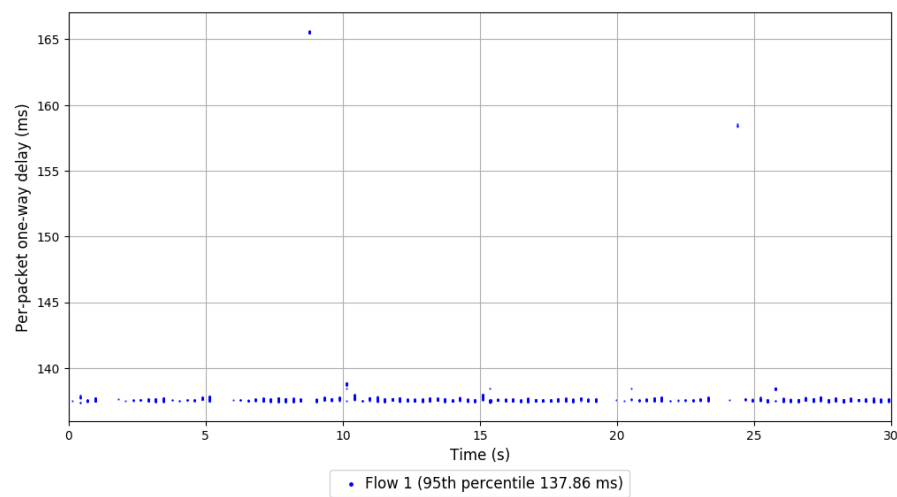
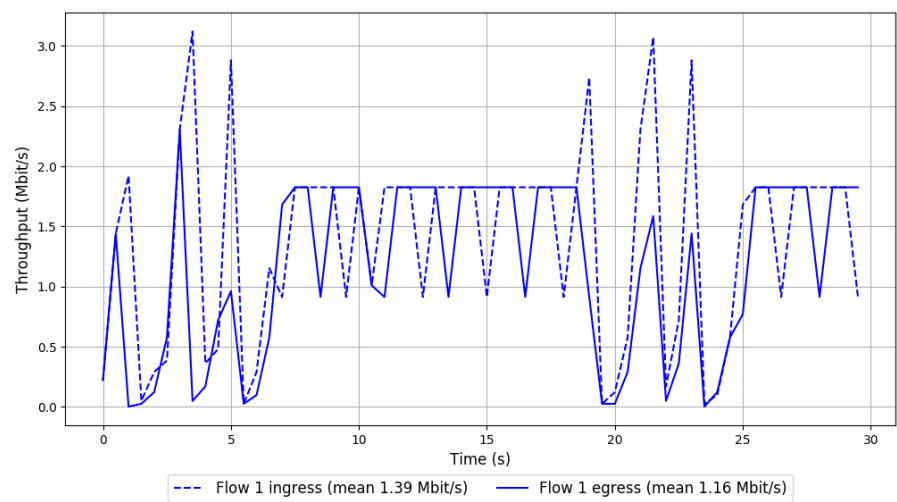
-- Flow 1:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 137.856 ms

Loss rate: 16.45%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-17 07:49:53

End at: 2017-08-17 07:50:23

Below is generated by plot.py at 2017-08-17 09:10:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 137.838 ms

Loss rate: 31.49%

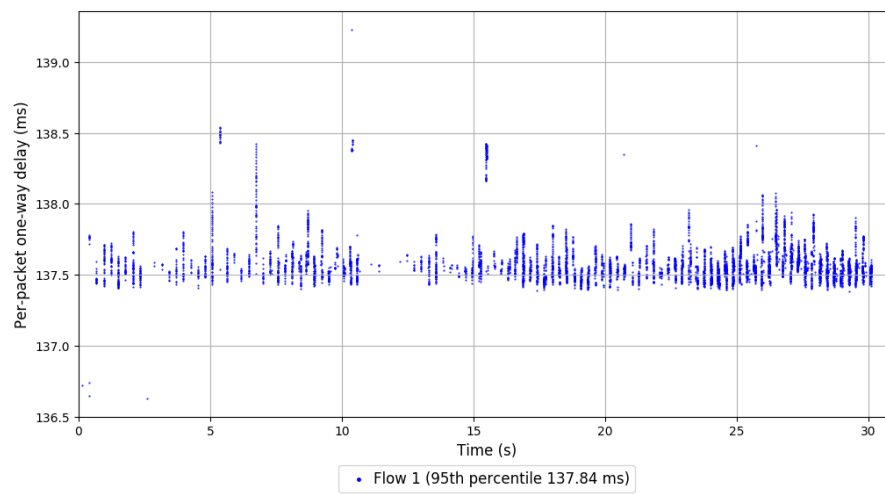
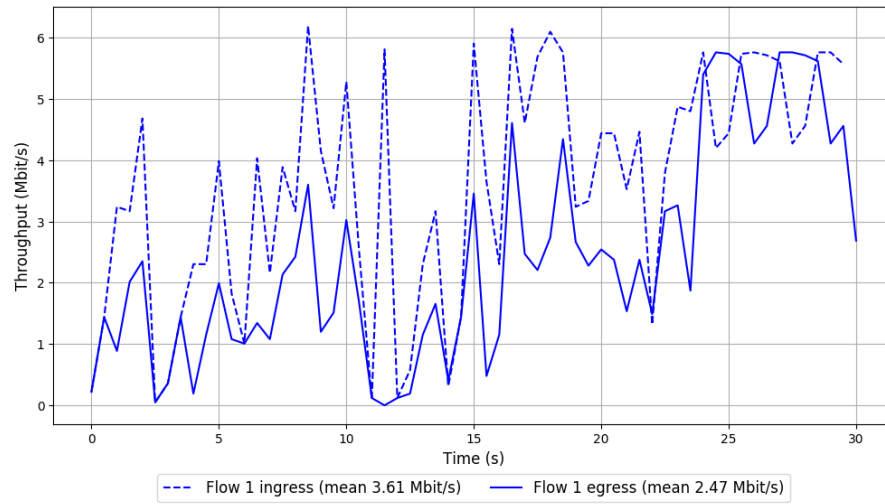
-- Flow 1:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 137.838 ms

Loss rate: 31.49%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-17 08:01:35

End at: 2017-08-17 08:02:05

Below is generated by plot.py at 2017-08-17 09:10:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 138.213 ms

Loss rate: 33.92%

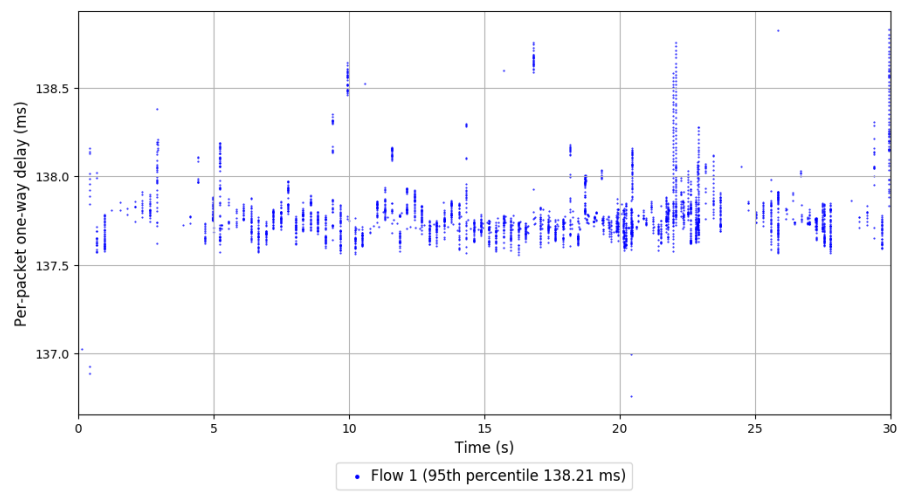
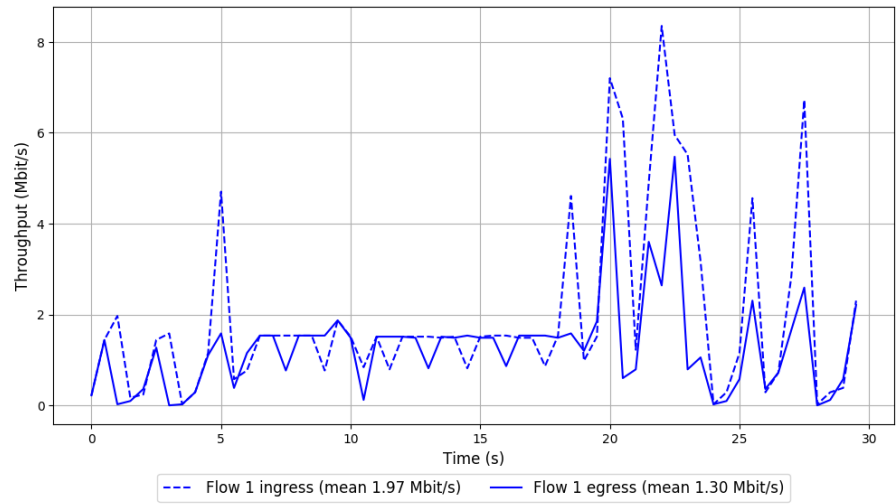
-- Flow 1:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 138.213 ms

Loss rate: 33.92%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-17 08:12:50

End at: 2017-08-17 08:13:20

Below is generated by plot.py at 2017-08-17 09:10:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 137.957 ms

Loss rate: 31.24%

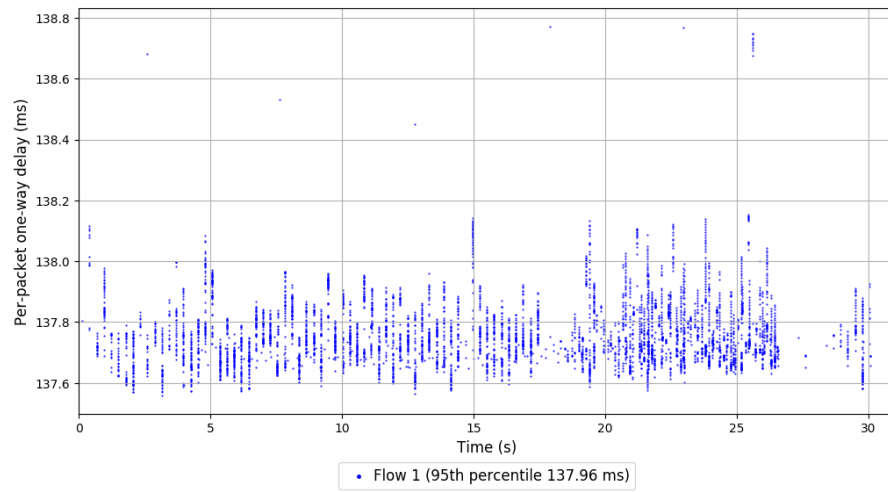
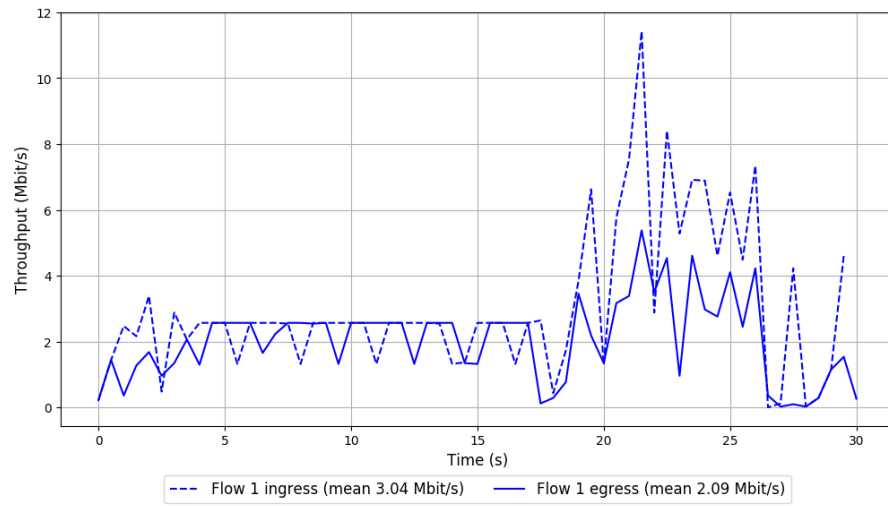
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 137.957 ms

Loss rate: 31.24%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-17 06:36:54

End at: 2017-08-17 06:37:24

Below is generated by plot.py at 2017-08-17 09:10:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.02 Mbit/s

95th percentile per-packet one-way delay: 186.096 ms

Loss rate: 0.00%

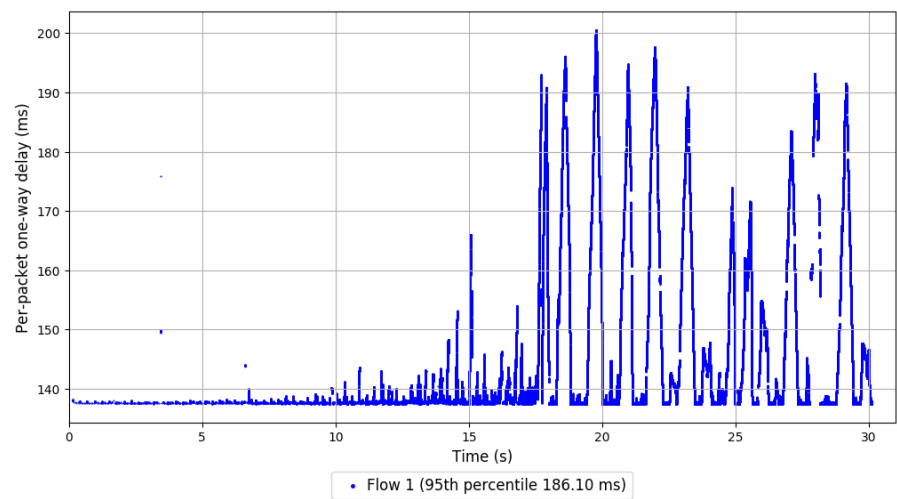
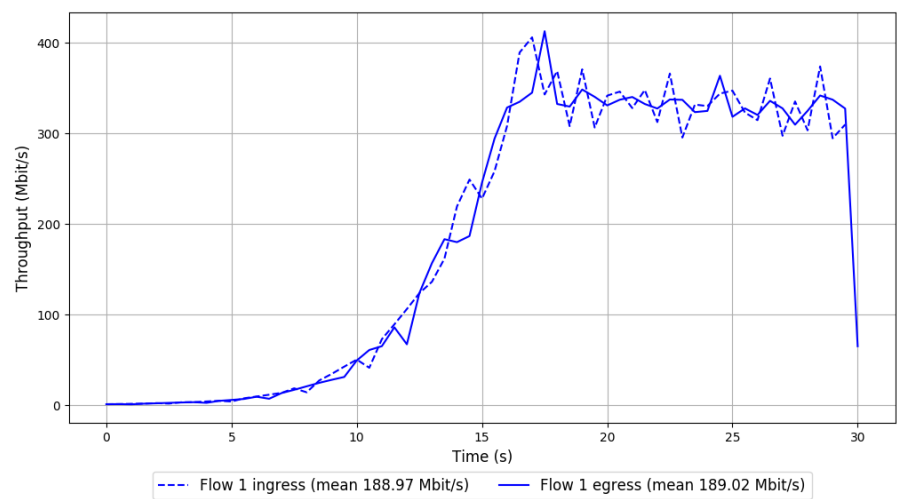
-- Flow 1:

Average throughput: 189.02 Mbit/s

95th percentile per-packet one-way delay: 186.096 ms

Loss rate: 0.00%

Run 1: Report of CalibratedKoho — Data Link

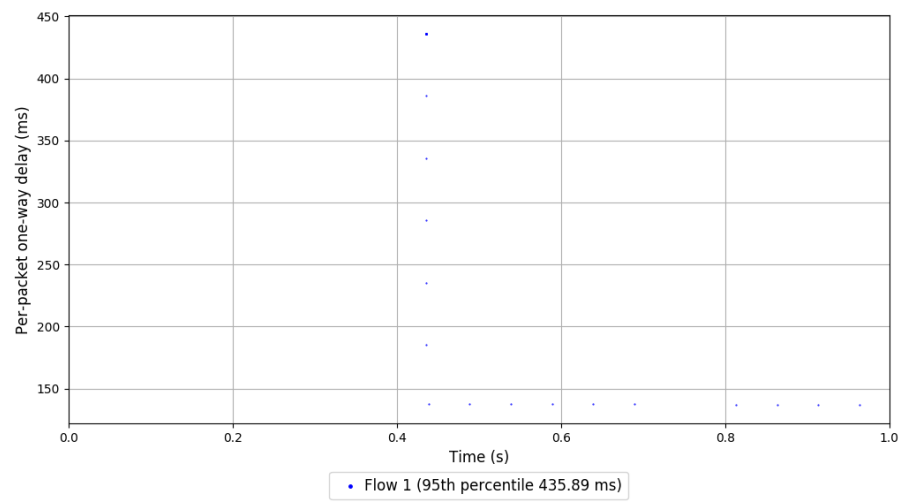
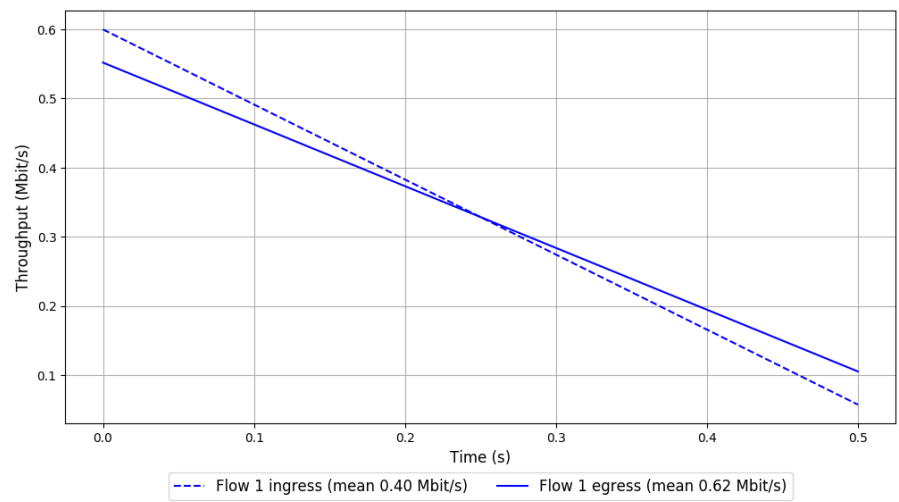


Run 2: Statistics of CalibratedKoho

Start at: 2017-08-17 06:48:23

End at: 2017-08-17 06:48:53

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-17 06:59:38

End at: 2017-08-17 07:00:08

Below is generated by plot.py at 2017-08-17 09:10:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 138.141 ms

Loss rate: 66.71%

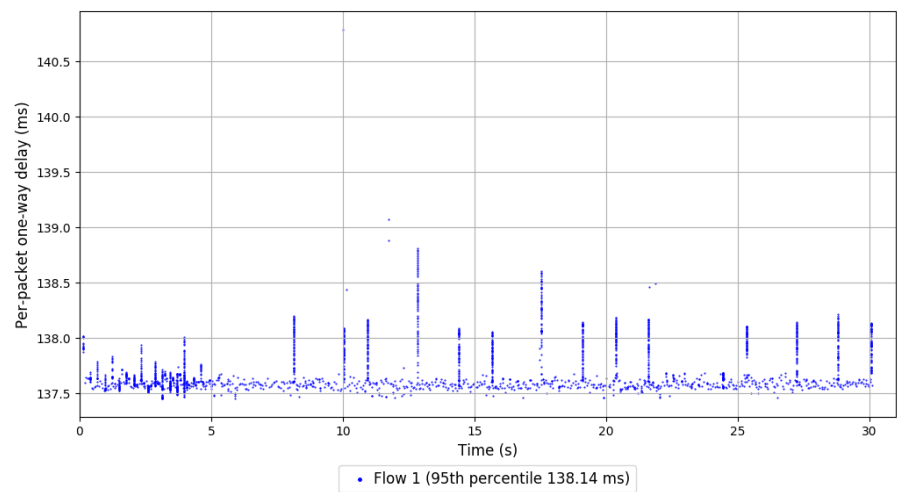
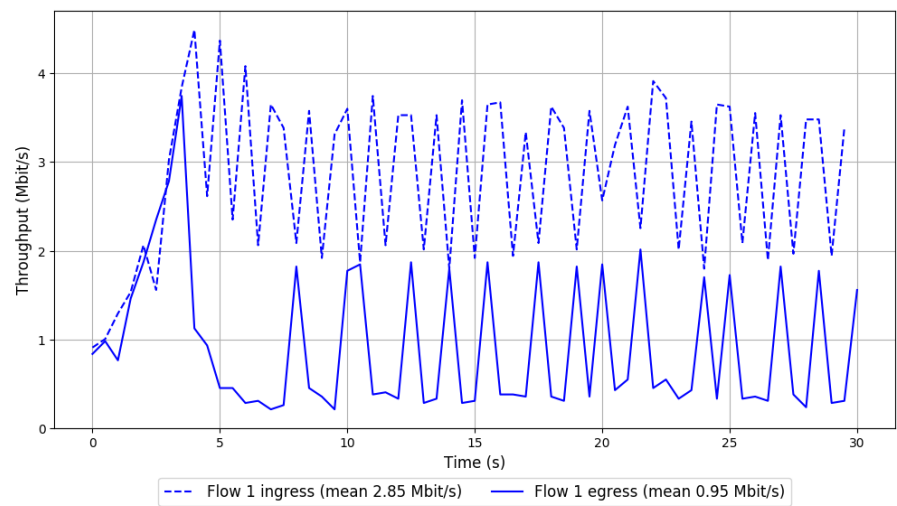
-- Flow 1:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 138.141 ms

Loss rate: 66.71%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-17 07:11:12

End at: 2017-08-17 07:11:42

Below is generated by plot.py at 2017-08-17 09:10:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 138.956 ms

Loss rate: 61.13%

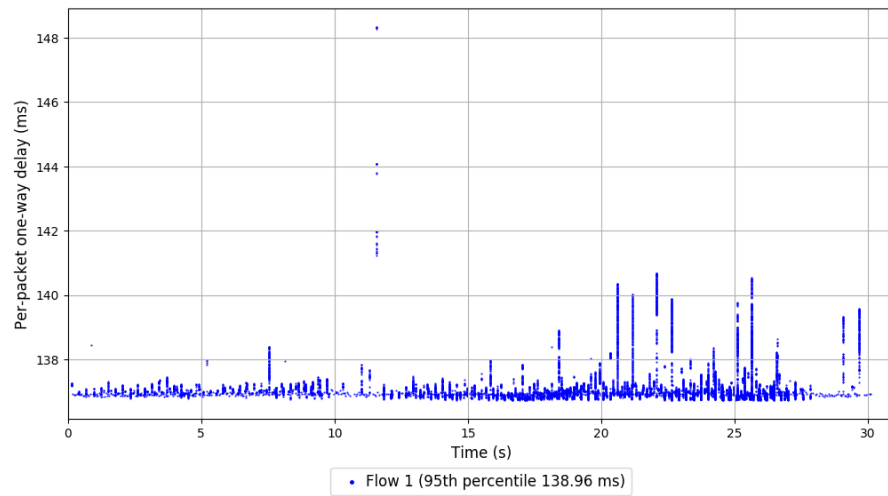
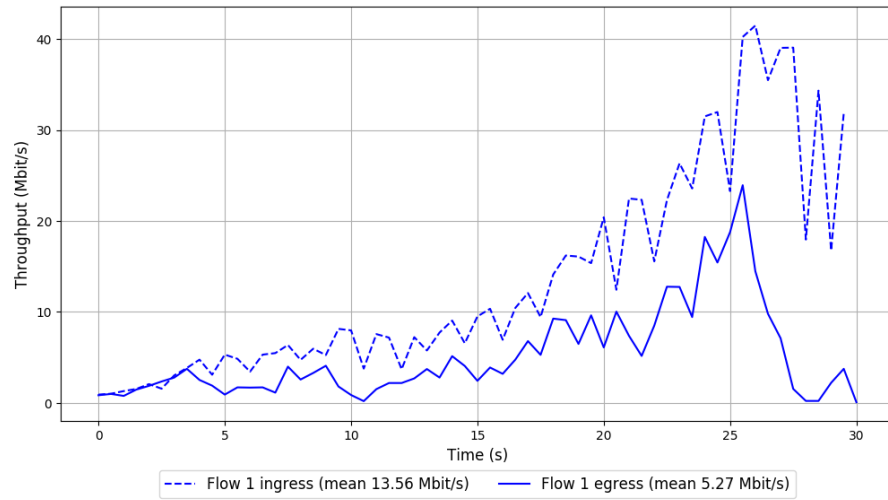
-- Flow 1:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 138.956 ms

Loss rate: 61.13%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-17 07:22:45

End at: 2017-08-17 07:23:15

Below is generated by plot.py at 2017-08-17 09:10:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.64 Mbit/s

95th percentile per-packet one-way delay: 169.329 ms

Loss rate: 0.02%

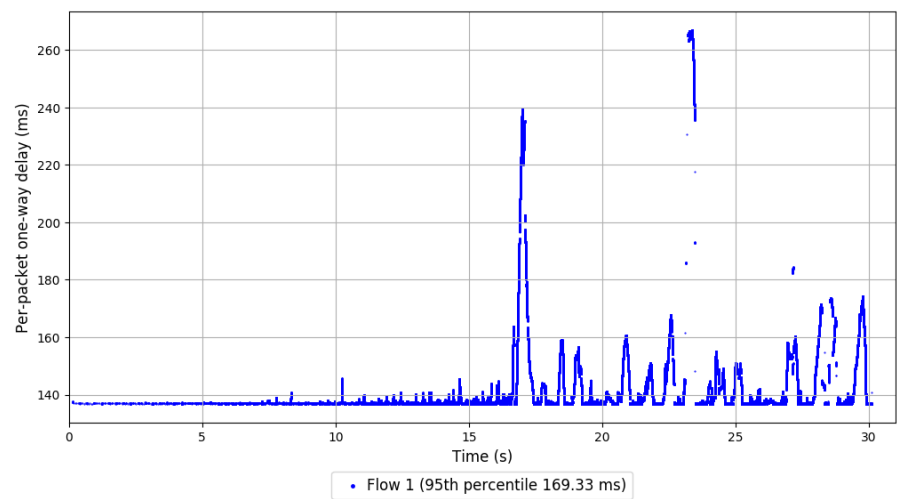
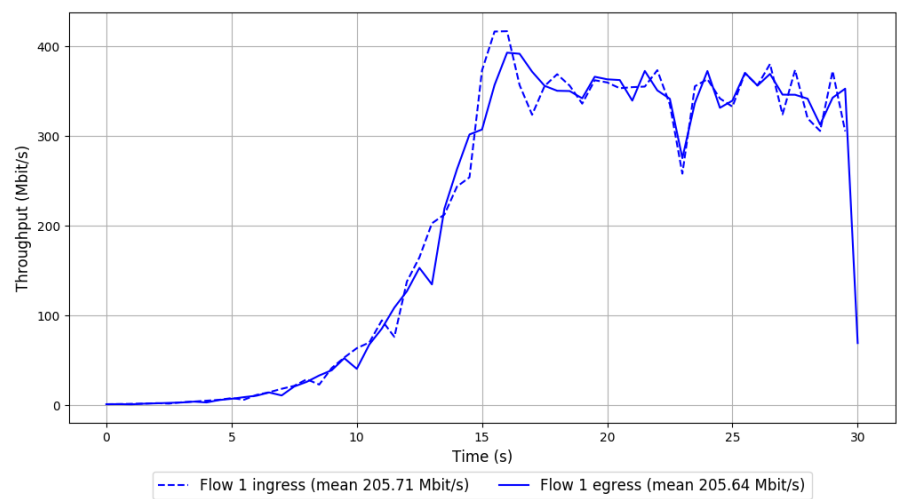
-- Flow 1:

Average throughput: 205.64 Mbit/s

95th percentile per-packet one-way delay: 169.329 ms

Loss rate: 0.02%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-17 07:34:36

End at: 2017-08-17 07:35:07

Below is generated by plot.py at 2017-08-17 09:10:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 137.315 ms

Loss rate: 64.61%

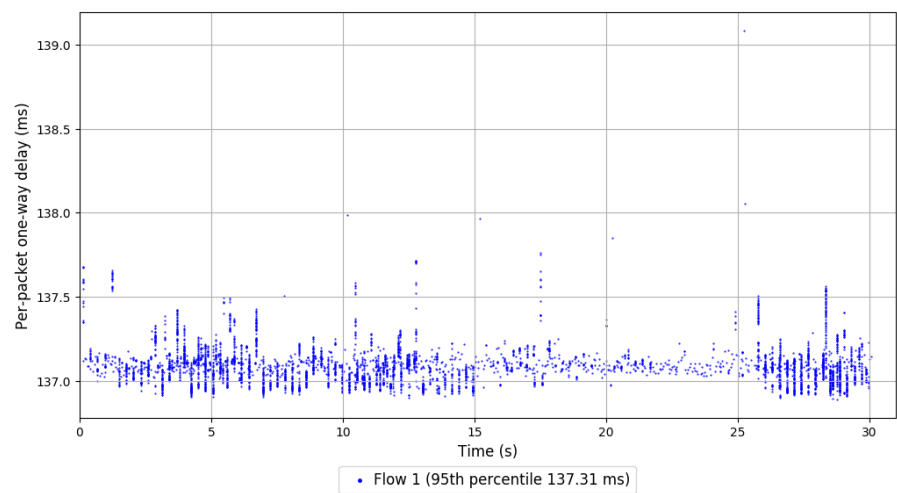
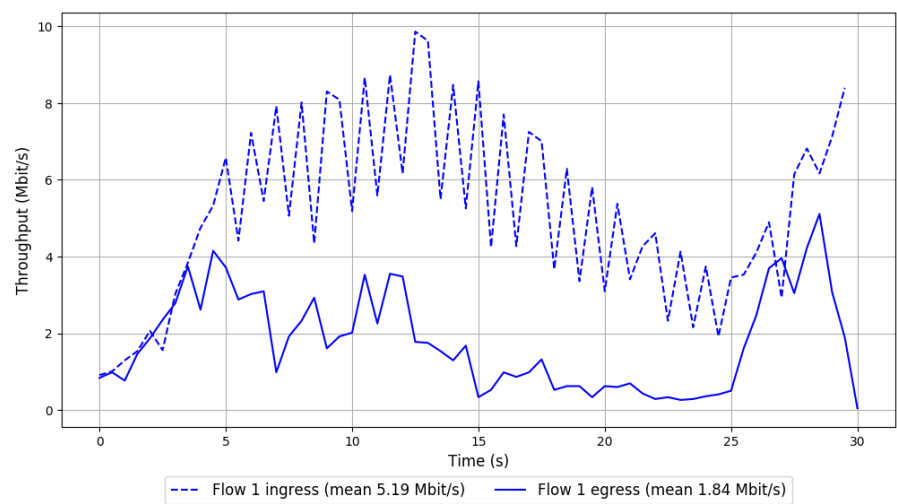
-- Flow 1:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 137.315 ms

Loss rate: 64.61%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-17 07:46:01

End at: 2017-08-17 07:46:31

Below is generated by plot.py at 2017-08-17 09:11:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 204.48 Mbit/s

95th percentile per-packet one-way delay: 178.607 ms

Loss rate: 0.02%

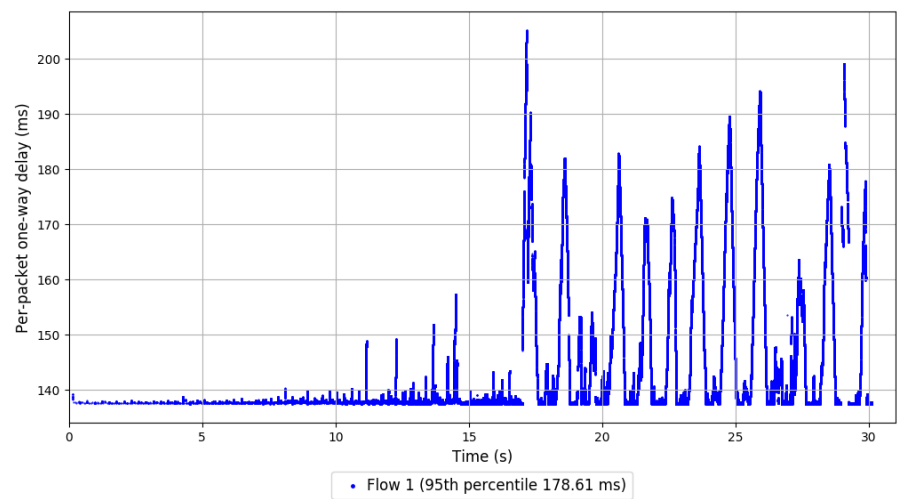
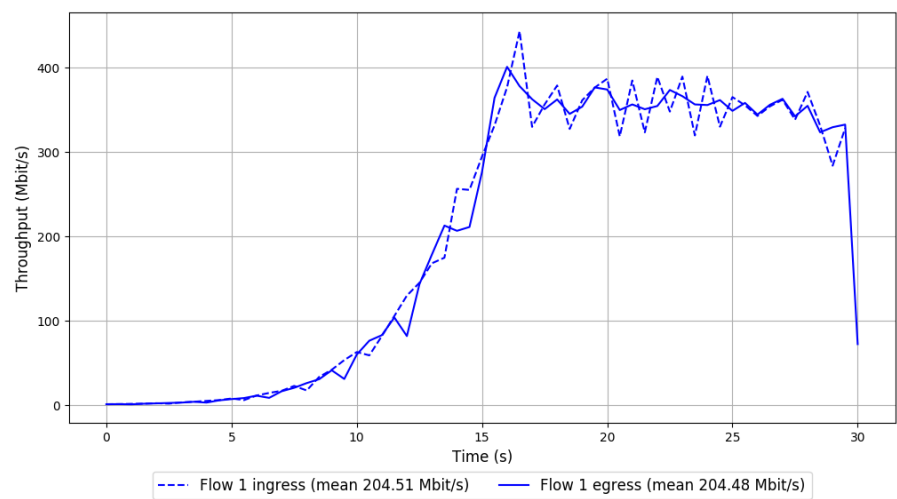
-- Flow 1:

Average throughput: 204.48 Mbit/s

95th percentile per-packet one-way delay: 178.607 ms

Loss rate: 0.02%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-17 07:57:54

End at: 2017-08-17 07:58:24

Below is generated by plot.py at 2017-08-17 09:11:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.27 Mbit/s

95th percentile per-packet one-way delay: 139.834 ms

Loss rate: 54.69%

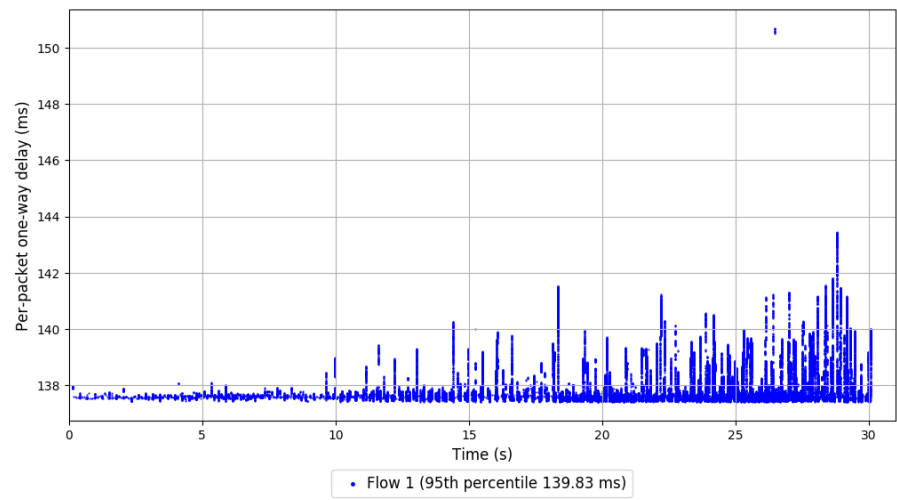
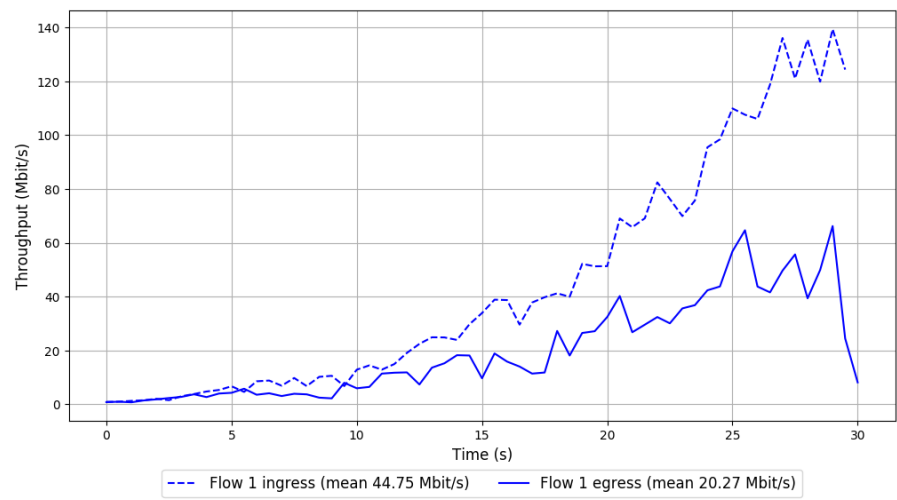
-- Flow 1:

Average throughput: 20.27 Mbit/s

95th percentile per-packet one-way delay: 139.834 ms

Loss rate: 54.69%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-17 08:09:15

End at: 2017-08-17 08:09:46

Below is generated by plot.py at 2017-08-17 09:11:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 137.904 ms

Loss rate: 63.91%

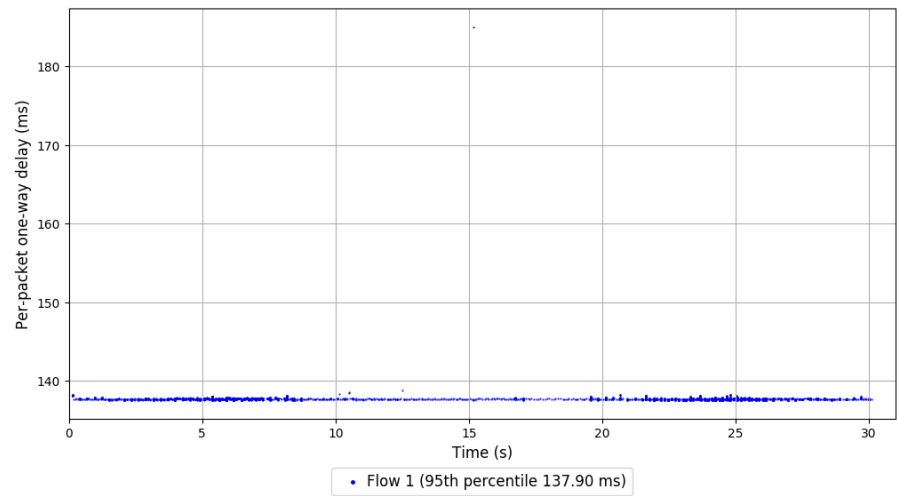
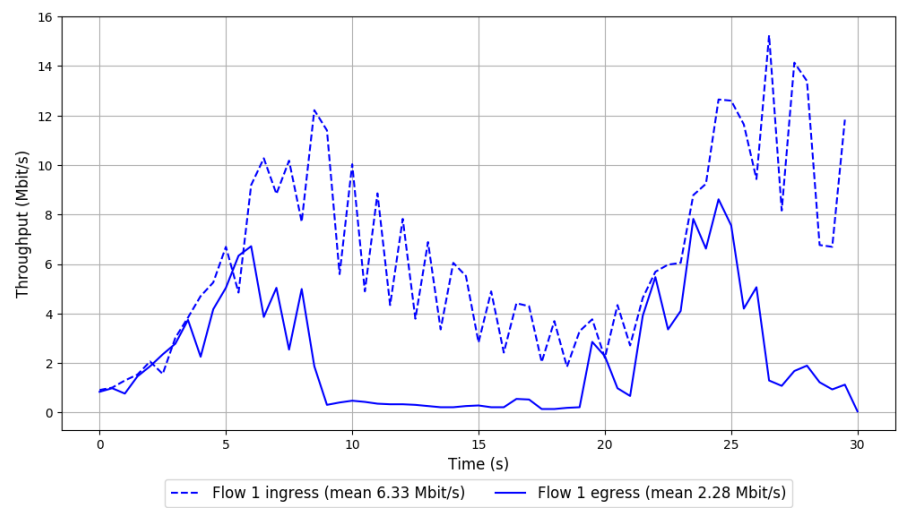
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 137.904 ms

Loss rate: 63.91%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-17 08:21:02

End at: 2017-08-17 08:21:32

Below is generated by plot.py at 2017-08-17 09:11:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 138.233 ms

Loss rate: 67.06%

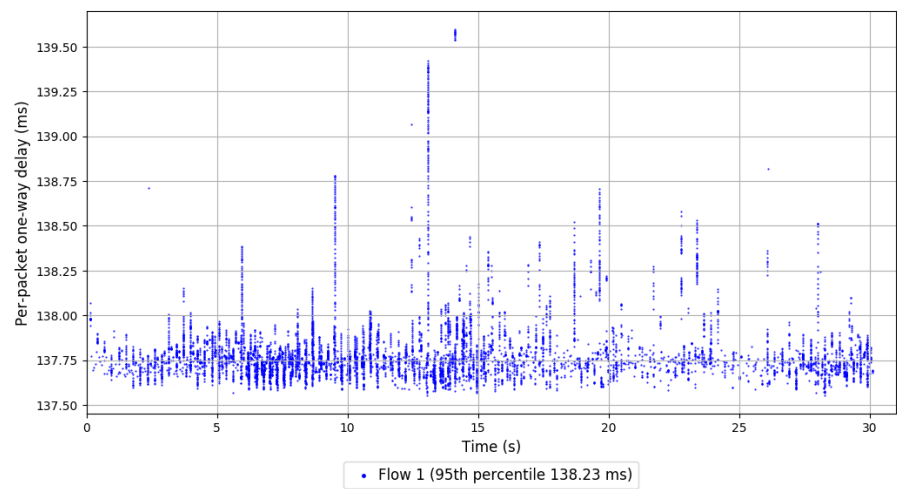
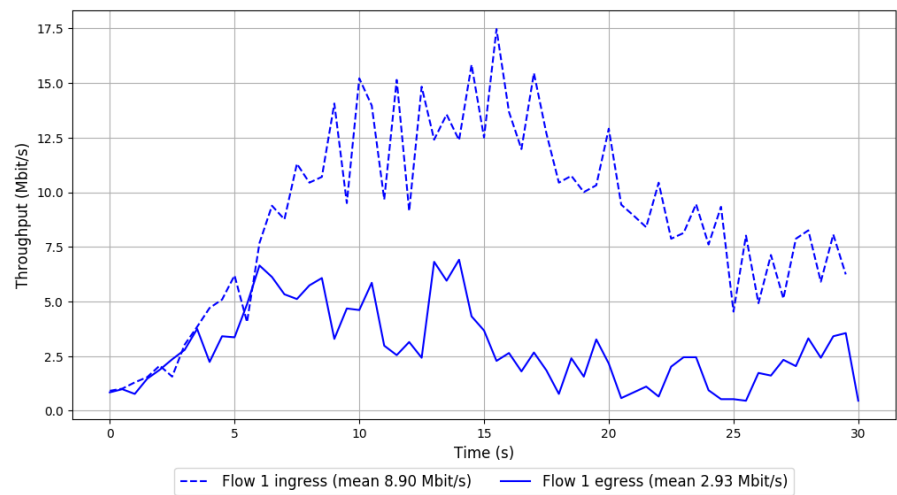
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 138.233 ms

Loss rate: 67.06%

Run 10: Report of CalibratedKoho — Data Link

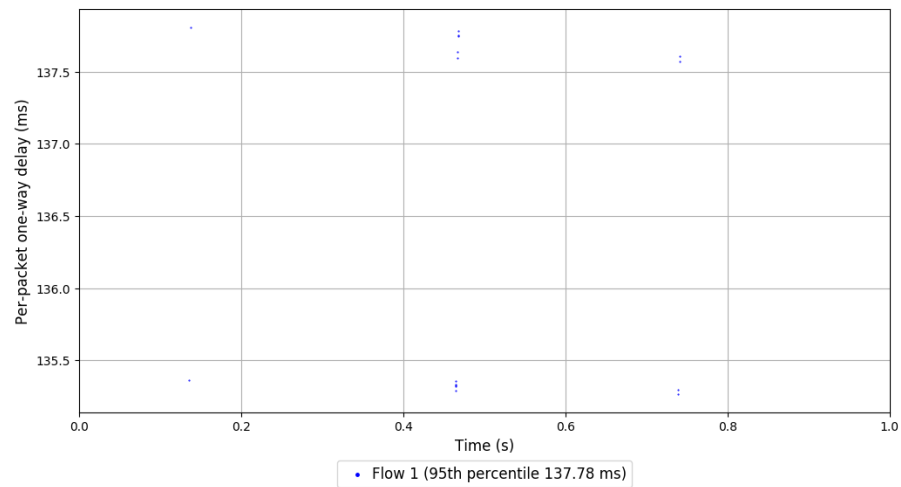
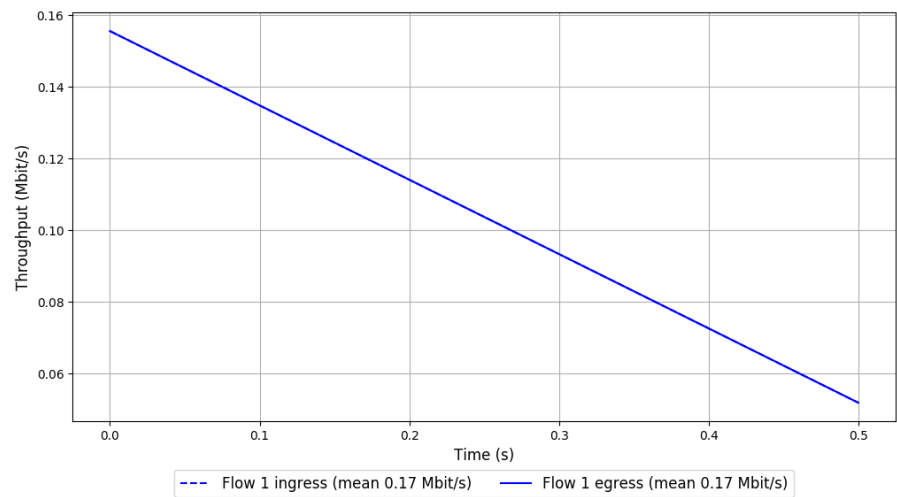


Run 1: Statistics of Copa

Start at: 2017-08-17 06:36:12

End at: 2017-08-17 06:36:42

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-17 06:47:28

End at: 2017-08-17 06:47:58

Below is generated by plot.py at 2017-08-17 09:11:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.60 Mbit/s

95th percentile per-packet one-way delay: 137.566 ms

Loss rate: 0.41%

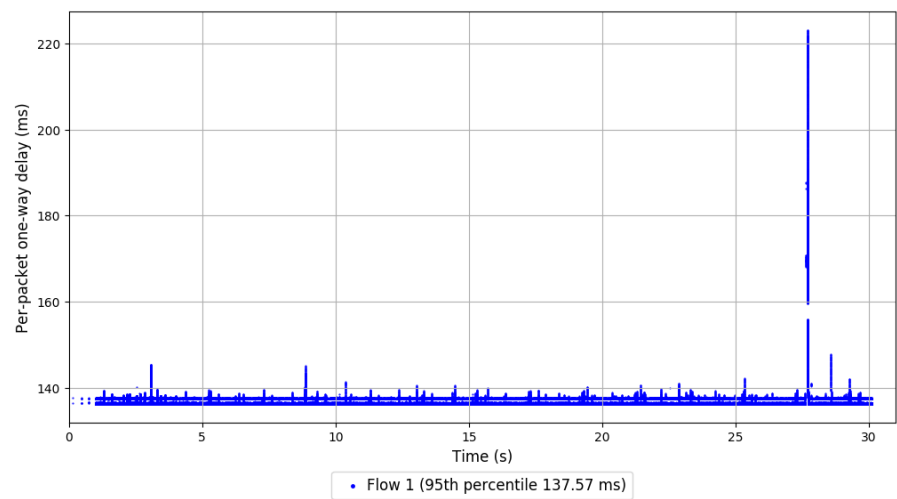
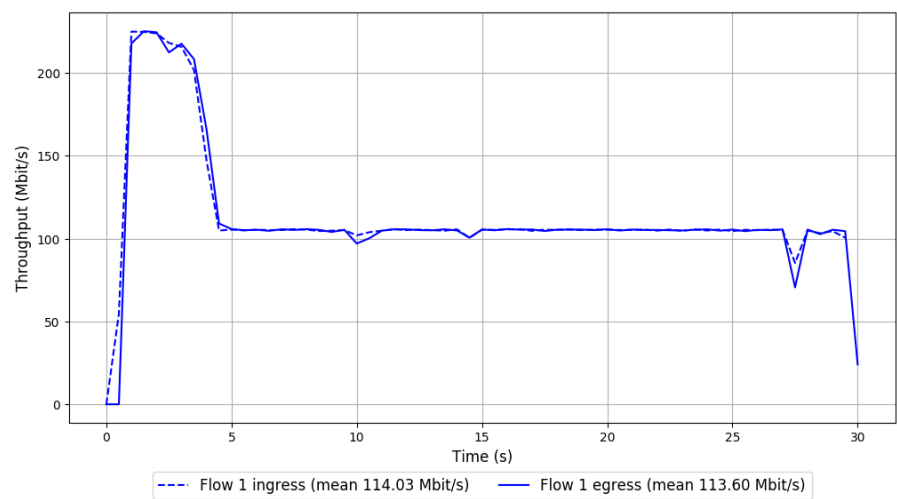
-- Flow 1:

Average throughput: 113.60 Mbit/s

95th percentile per-packet one-way delay: 137.566 ms

Loss rate: 0.41%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-17 06:58:40

End at: 2017-08-17 06:59:10

Below is generated by plot.py at 2017-08-17 09:12:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 129.09 Mbit/s

95th percentile per-packet one-way delay: 137.540 ms

Loss rate: 0.15%

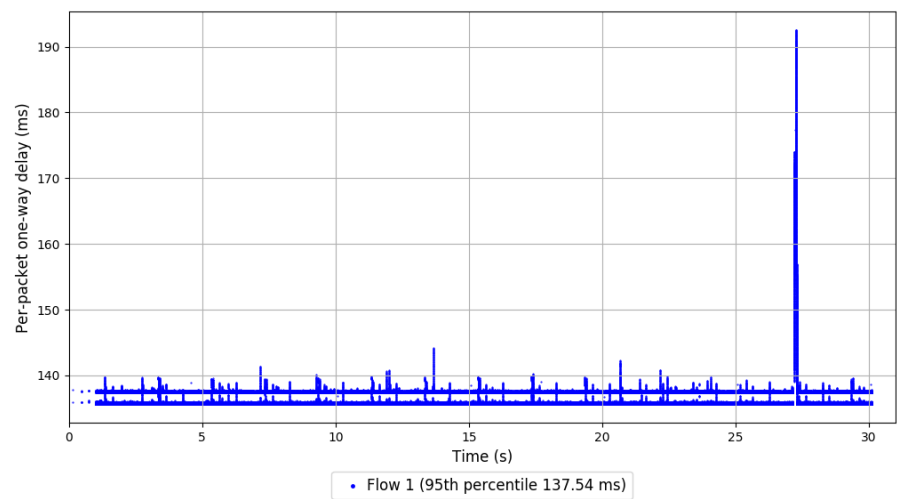
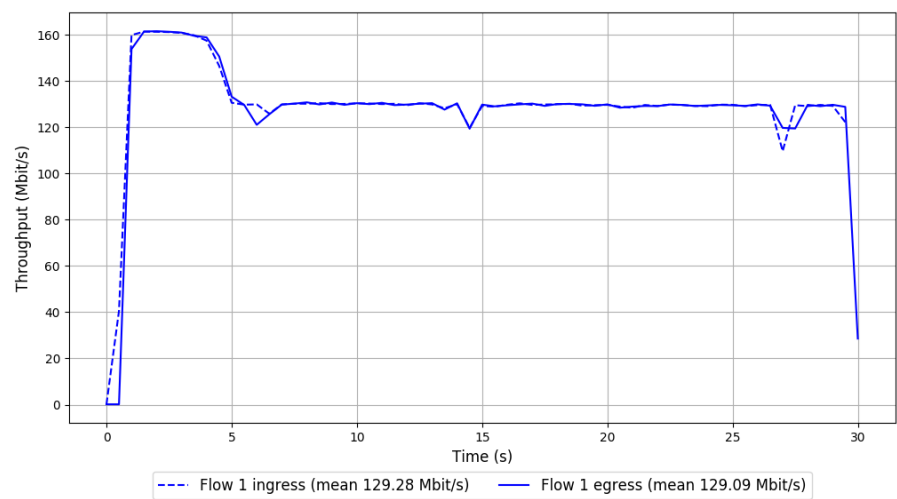
-- Flow 1:

Average throughput: 129.09 Mbit/s

95th percentile per-packet one-way delay: 137.540 ms

Loss rate: 0.15%

Run 3: Report of Copa — Data Link

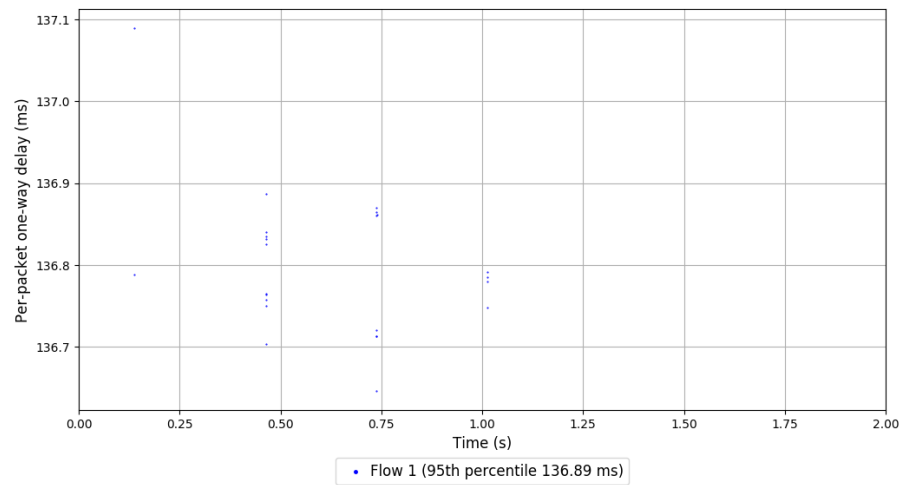
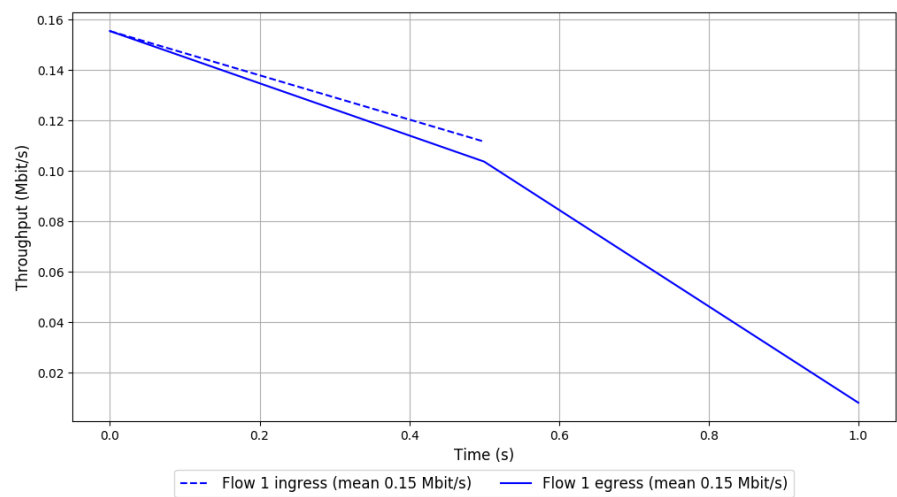


Run 4: Statistics of Copa

Start at: 2017-08-17 07:10:30

End at: 2017-08-17 07:11:00

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-17 07:21:49

End at: 2017-08-17 07:22:20

Below is generated by plot.py at 2017-08-17 09:12:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 112.94 Mbit/s

95th percentile per-packet one-way delay: 137.037 ms

Loss rate: 0.11%

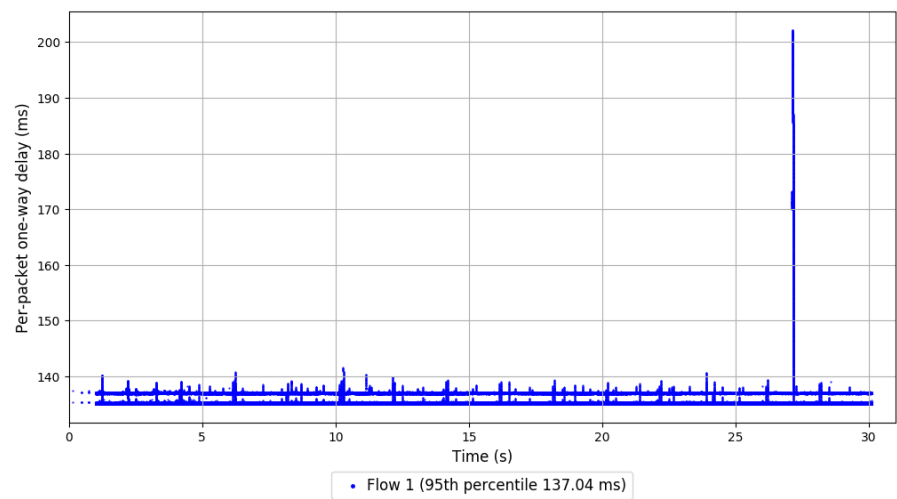
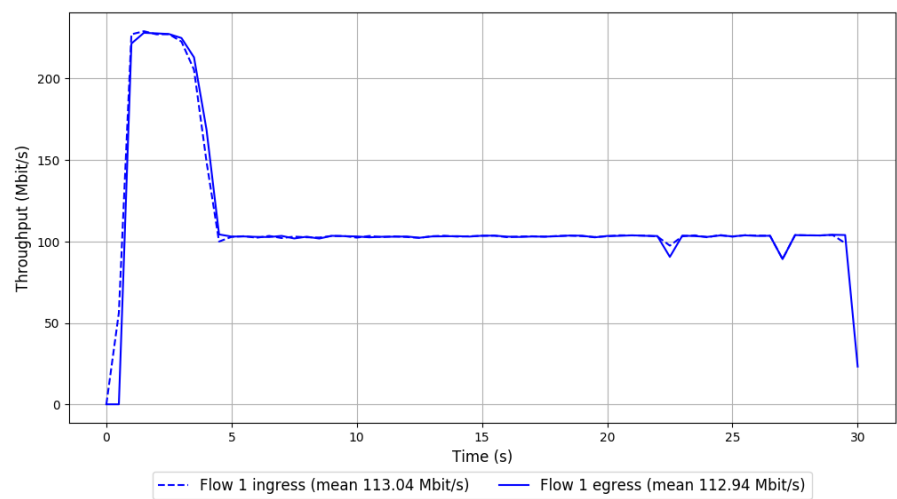
-- Flow 1:

Average throughput: 112.94 Mbit/s

95th percentile per-packet one-way delay: 137.037 ms

Loss rate: 0.11%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-17 07:33:43

End at: 2017-08-17 07:34:13

Below is generated by plot.py at 2017-08-17 09:12:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.38 Mbit/s

95th percentile per-packet one-way delay: 137.264 ms

Loss rate: 0.09%

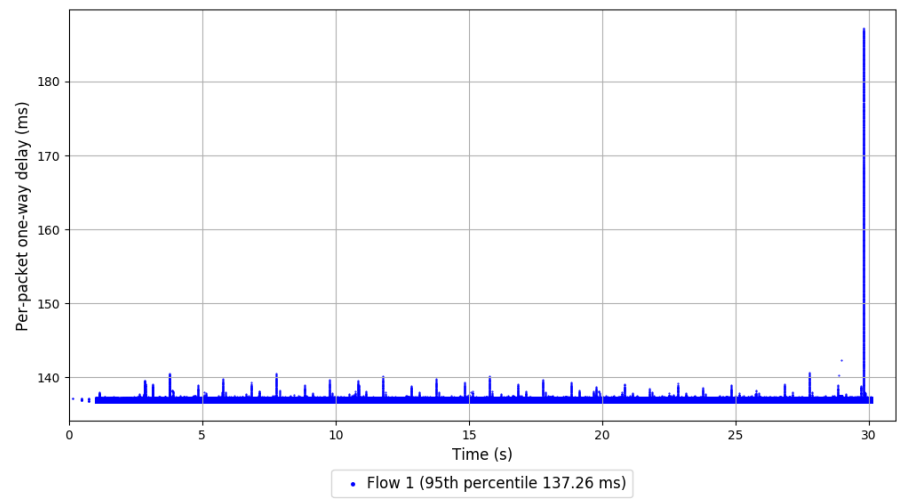
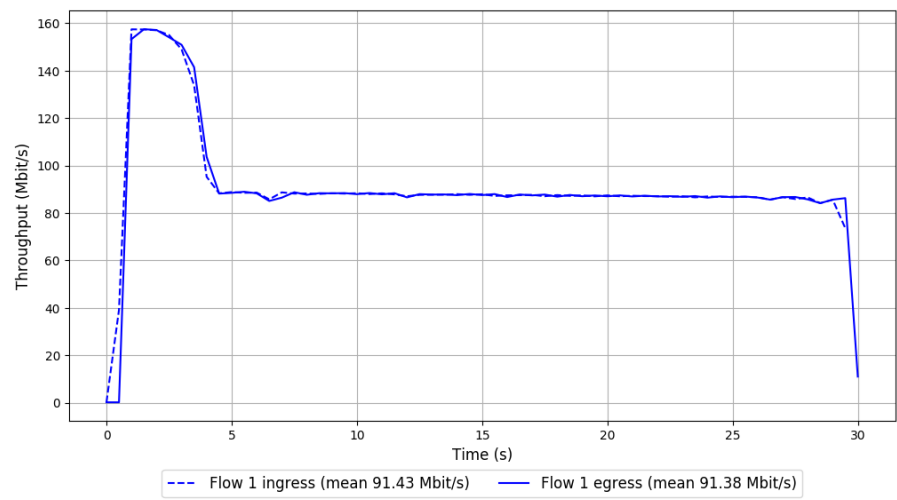
-- Flow 1:

Average throughput: 91.38 Mbit/s

95th percentile per-packet one-way delay: 137.264 ms

Loss rate: 0.09%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-17 07:45:07

End at: 2017-08-17 07:45:37

Below is generated by plot.py at 2017-08-17 09:13:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.12 Mbit/s

95th percentile per-packet one-way delay: 137.497 ms

Loss rate: 0.83%

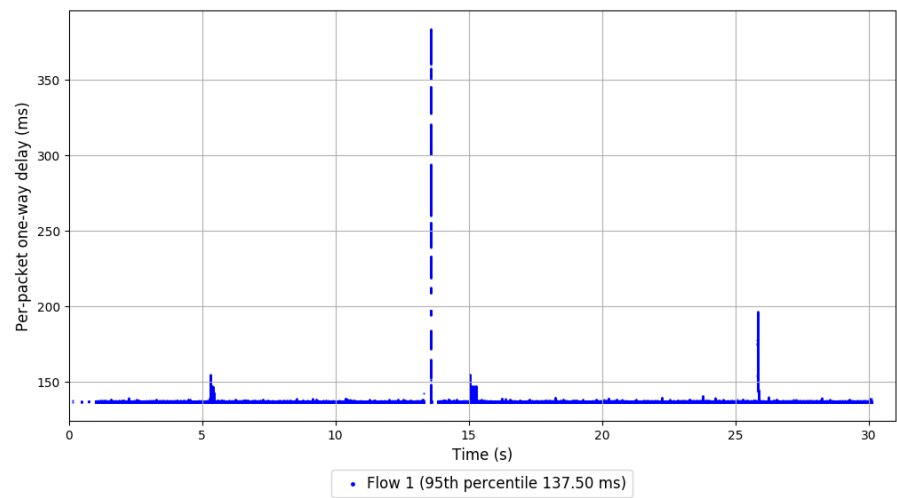
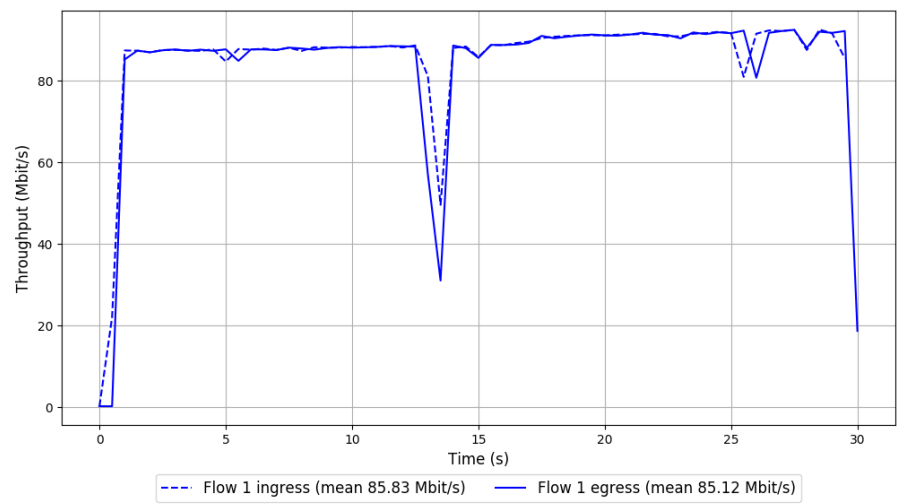
-- Flow 1:

Average throughput: 85.12 Mbit/s

95th percentile per-packet one-way delay: 137.497 ms

Loss rate: 0.83%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-17 07:57:02

End at: 2017-08-17 07:57:32

Below is generated by plot.py at 2017-08-17 09:13:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.04 Mbit/s

95th percentile per-packet one-way delay: 137.520 ms

Loss rate: 0.64%

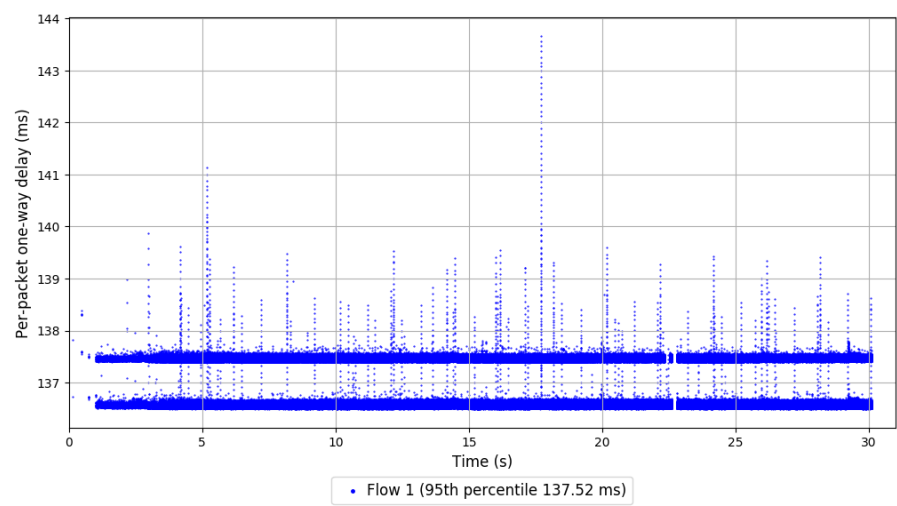
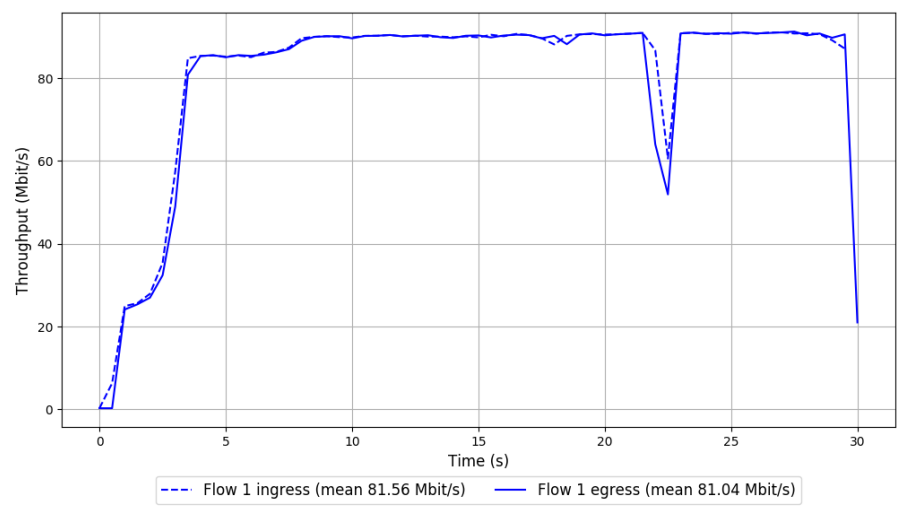
-- Flow 1:

Average throughput: 81.04 Mbit/s

95th percentile per-packet one-way delay: 137.520 ms

Loss rate: 0.64%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

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

End at: 2017-08-17 08:08:48

Below is generated by plot.py at 2017-08-17 09:13:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.99 Mbit/s

95th percentile per-packet one-way delay: 137.734 ms

Loss rate: 0.06%

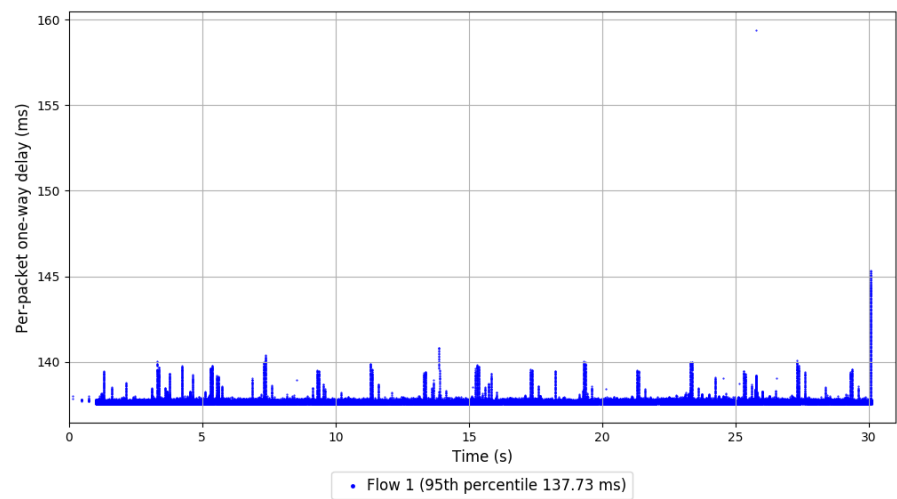
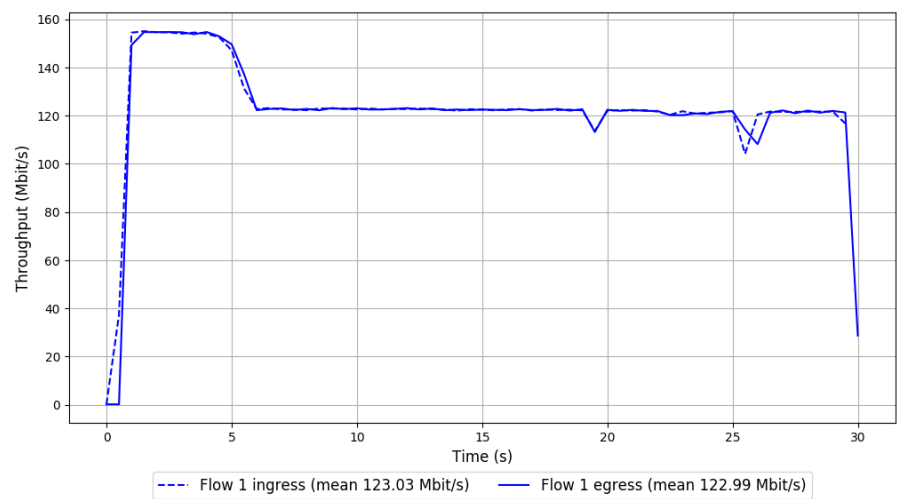
-- Flow 1:

Average throughput: 122.99 Mbit/s

95th percentile per-packet one-way delay: 137.734 ms

Loss rate: 0.06%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

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

End at: 2017-08-17 08:20:38

Below is generated by plot.py at 2017-08-17 09:14:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.88 Mbit/s

95th percentile per-packet one-way delay: 137.677 ms

Loss rate: 0.01%

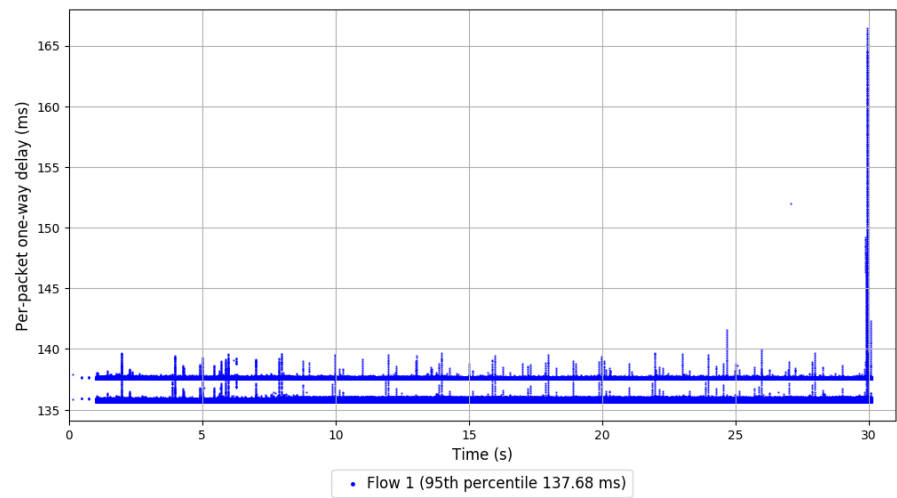
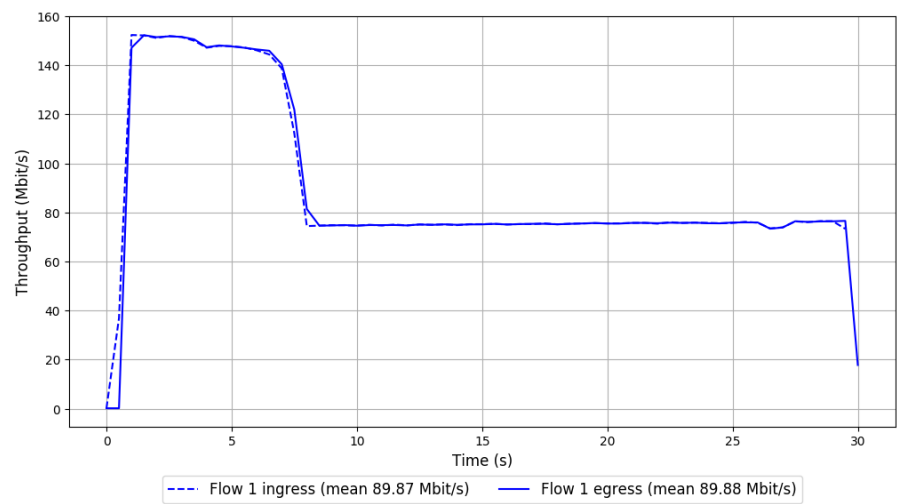
-- Flow 1:

Average throughput: 89.88 Mbit/s

95th percentile per-packet one-way delay: 137.677 ms

Loss rate: 0.01%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-17 06:33:00

End at: 2017-08-17 06:33:30

Below is generated by plot.py at 2017-08-17 09:14:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.00 Mbit/s

95th percentile per-packet one-way delay: 139.875 ms

Loss rate: 0.59%

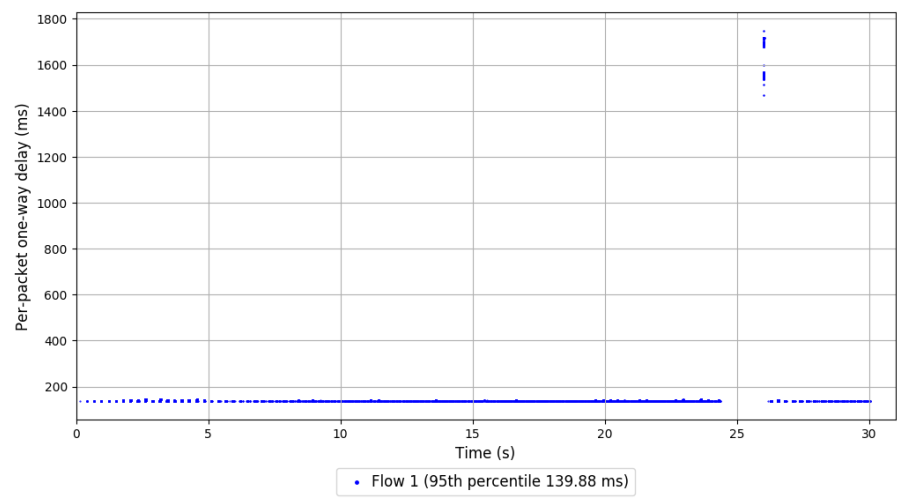
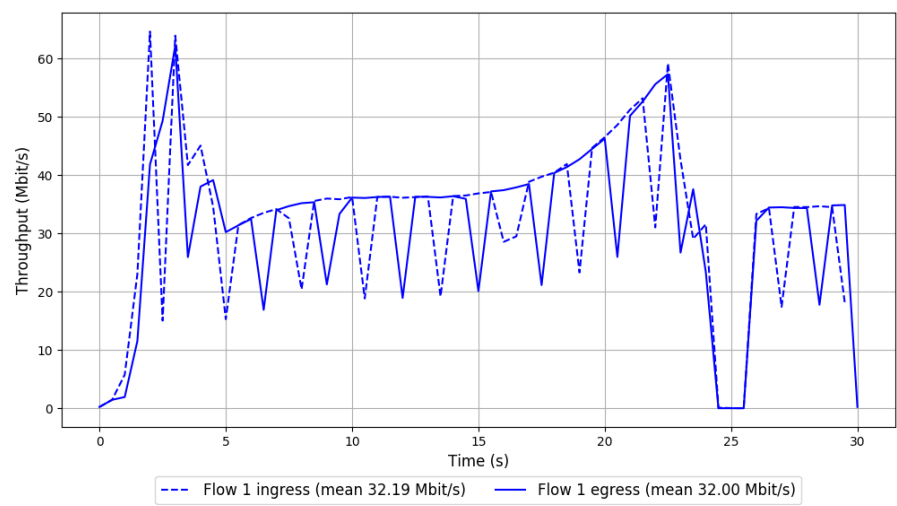
-- Flow 1:

Average throughput: 32.00 Mbit/s

95th percentile per-packet one-way delay: 139.875 ms

Loss rate: 0.59%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-17 06:44:25

End at: 2017-08-17 06:44:55

Below is generated by plot.py at 2017-08-17 09:14:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.24 Mbit/s

95th percentile per-packet one-way delay: 137.879 ms

Loss rate: 0.59%

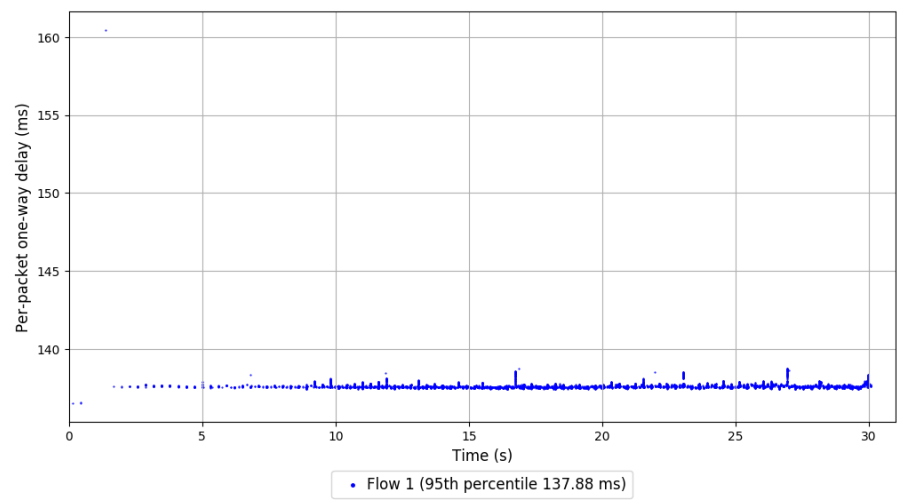
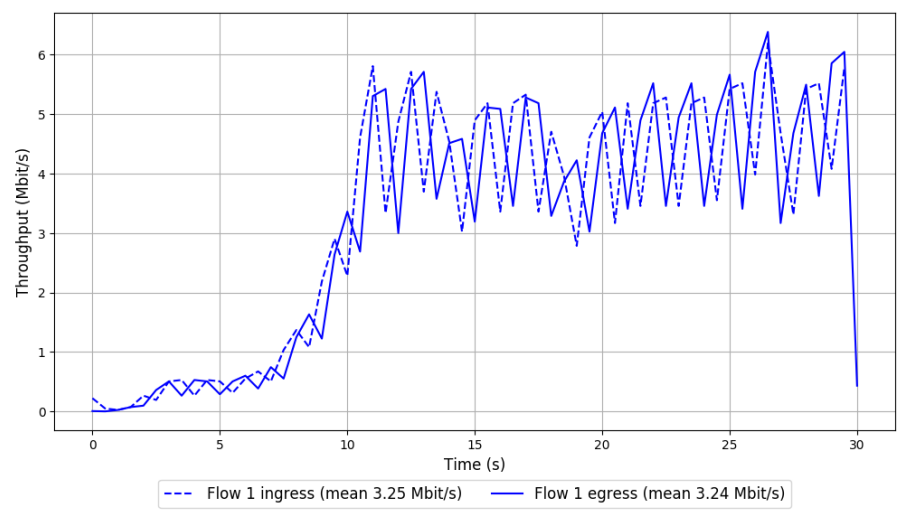
-- Flow 1:

Average throughput: 3.24 Mbit/s

95th percentile per-packet one-way delay: 137.879 ms

Loss rate: 0.59%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-17 06:55:40

End at: 2017-08-17 06:56:10

Below is generated by plot.py at 2017-08-17 09:14:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 137.884 ms

Loss rate: 1.06%

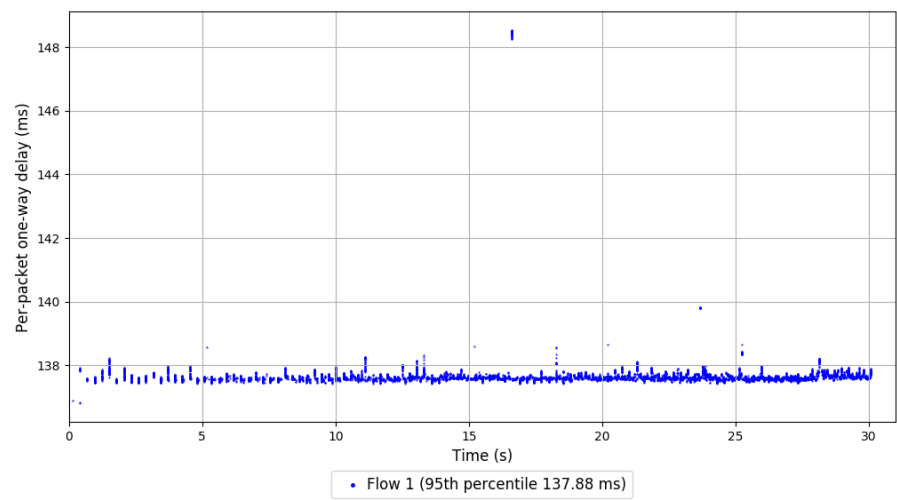
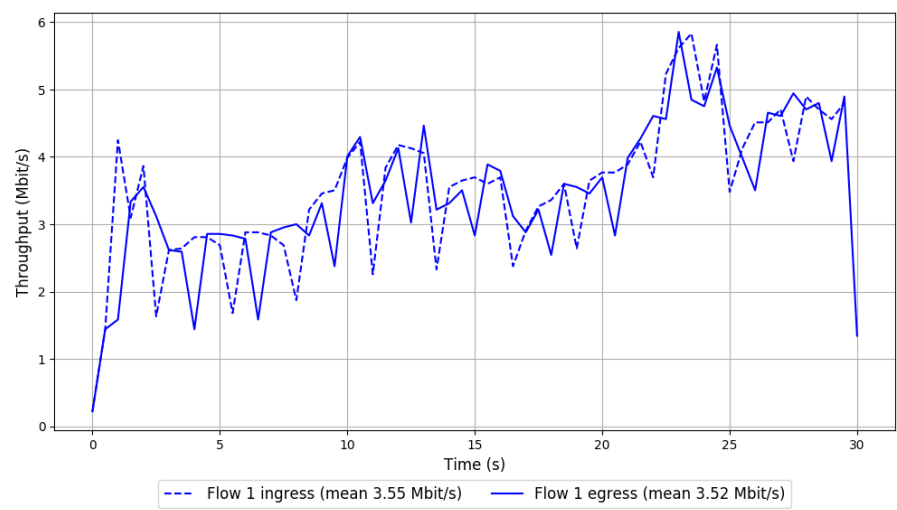
-- Flow 1:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 137.884 ms

Loss rate: 1.06%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-17 07:07:02

End at: 2017-08-17 07:07:32

Below is generated by plot.py at 2017-08-17 09:14:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.75 Mbit/s

95th percentile per-packet one-way delay: 137.201 ms

Loss rate: 7.42%

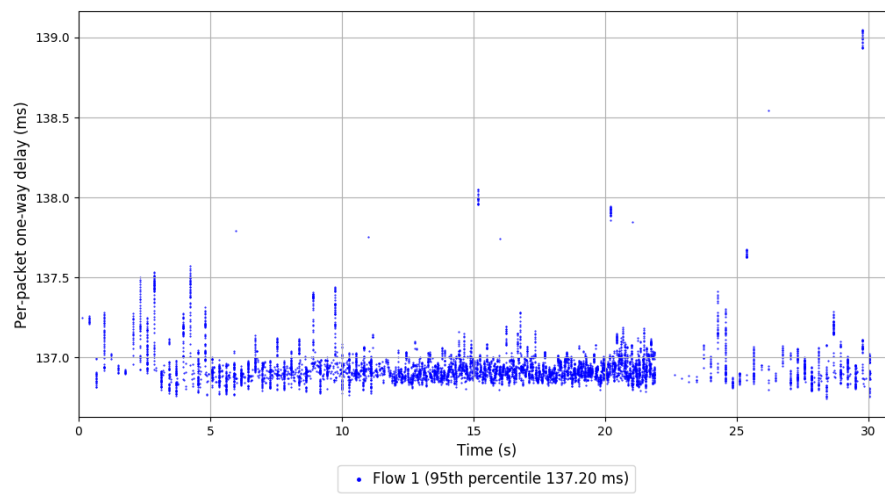
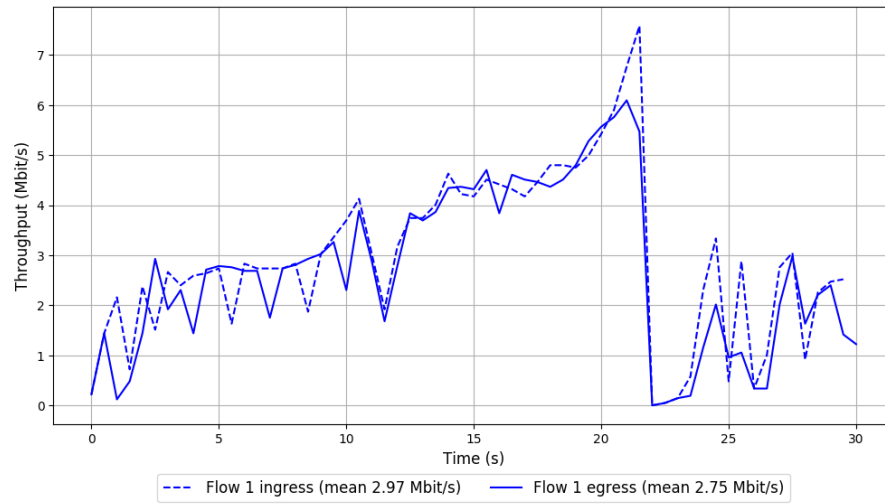
-- Flow 1:

Average throughput: 2.75 Mbit/s

95th percentile per-packet one-way delay: 137.201 ms

Loss rate: 7.42%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-17 07:18:29

End at: 2017-08-17 07:18:59

Below is generated by plot.py at 2017-08-17 09:14:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.32 Mbit/s

95th percentile per-packet one-way delay: 138.284 ms

Loss rate: 0.05%

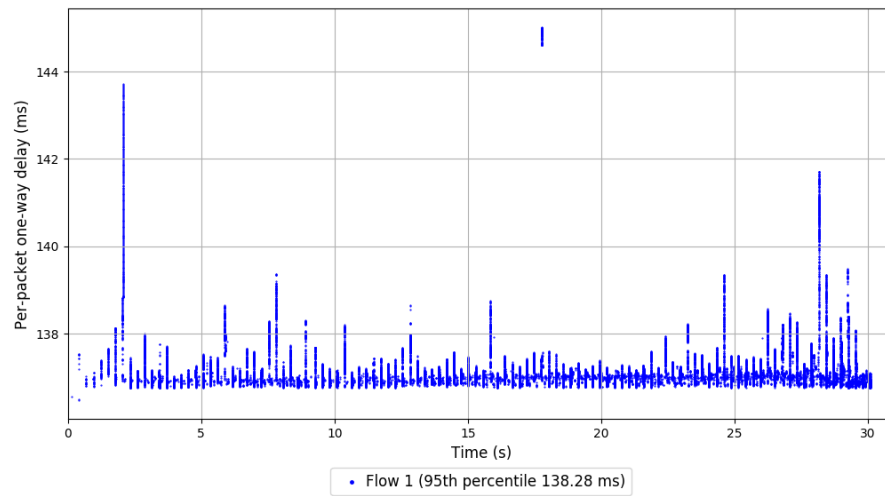
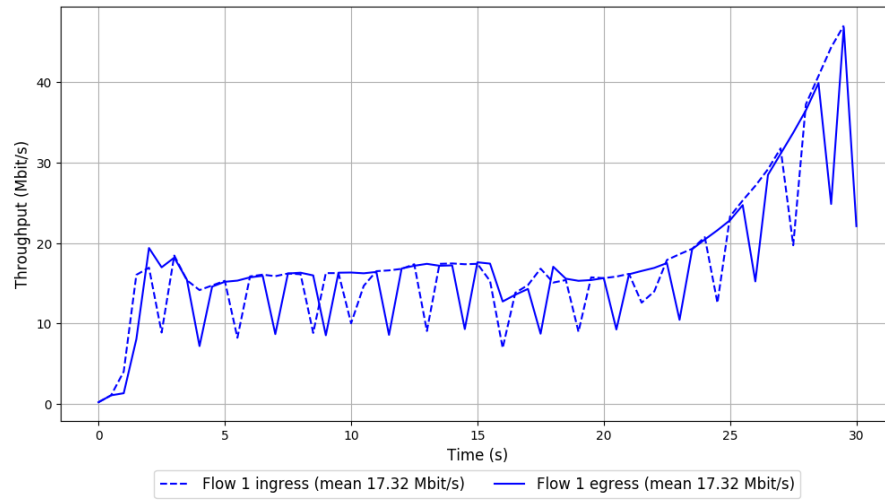
-- Flow 1:

Average throughput: 17.32 Mbit/s

95th percentile per-packet one-way delay: 138.284 ms

Loss rate: 0.05%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-17 07:30:18

End at: 2017-08-17 07:30:48

Below is generated by plot.py at 2017-08-17 09:14:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.91 Mbit/s

95th percentile per-packet one-way delay: 137.614 ms

Loss rate: 1.08%

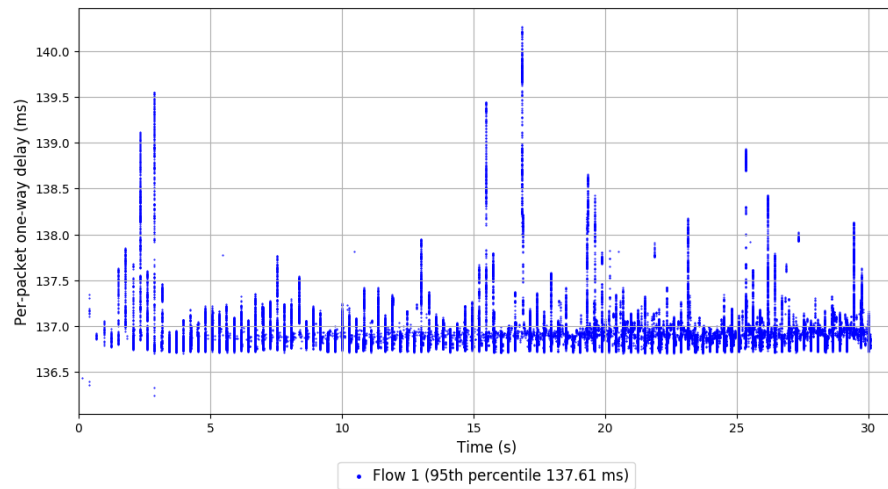
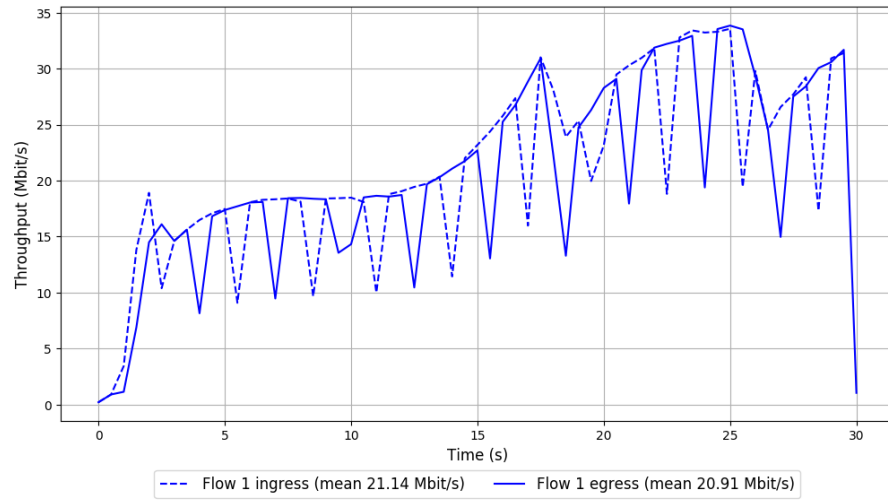
-- Flow 1:

Average throughput: 20.91 Mbit/s

95th percentile per-packet one-way delay: 137.614 ms

Loss rate: 1.08%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-17 07:41:53

End at: 2017-08-17 07:42:23

Below is generated by plot.py at 2017-08-17 09:14:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 137.711 ms

Loss rate: 2.66%

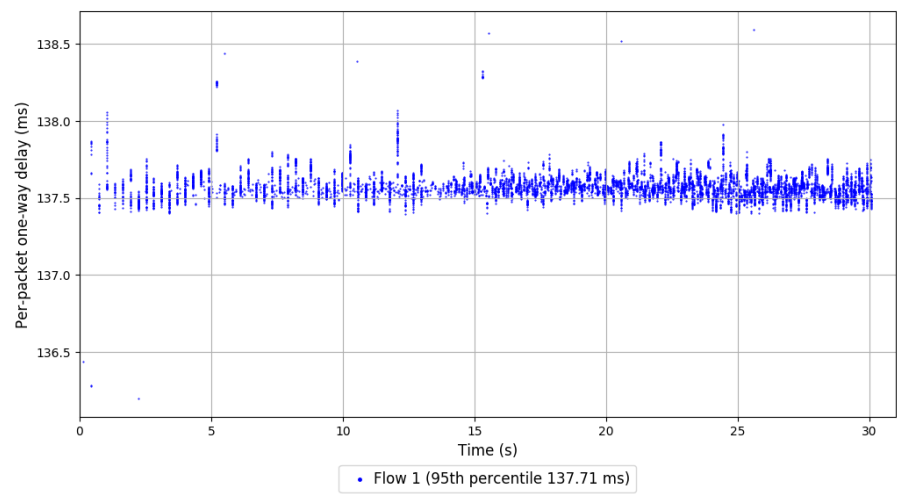
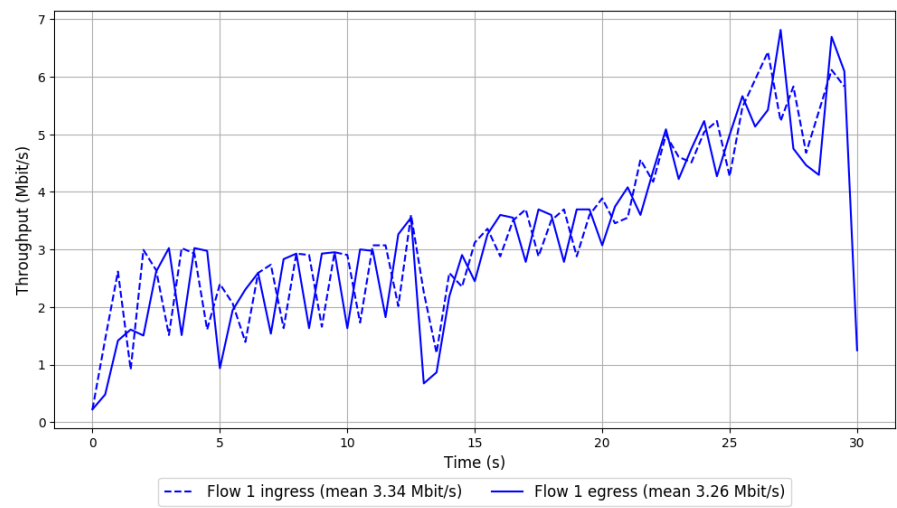
-- Flow 1:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 137.711 ms

Loss rate: 2.66%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-17 07:53:33

End at: 2017-08-17 07:54:03

Below is generated by plot.py at 2017-08-17 09:14:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.40 Mbit/s

95th percentile per-packet one-way delay: 137.740 ms

Loss rate: 1.51%

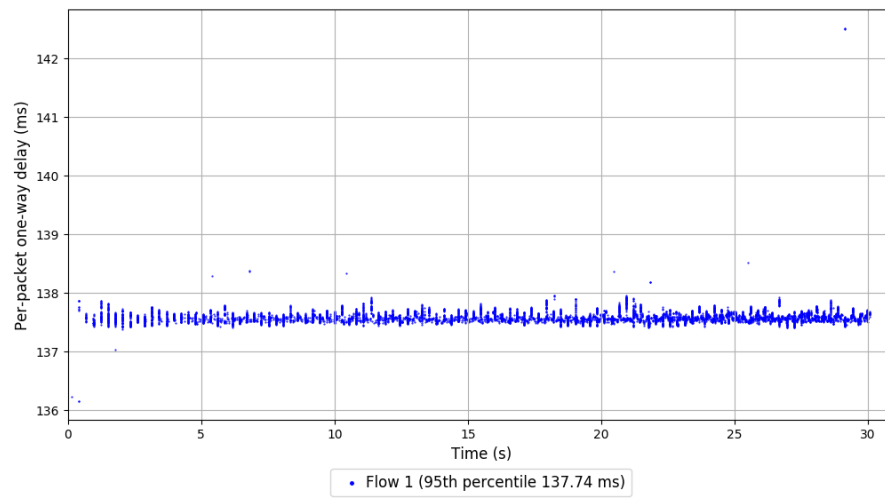
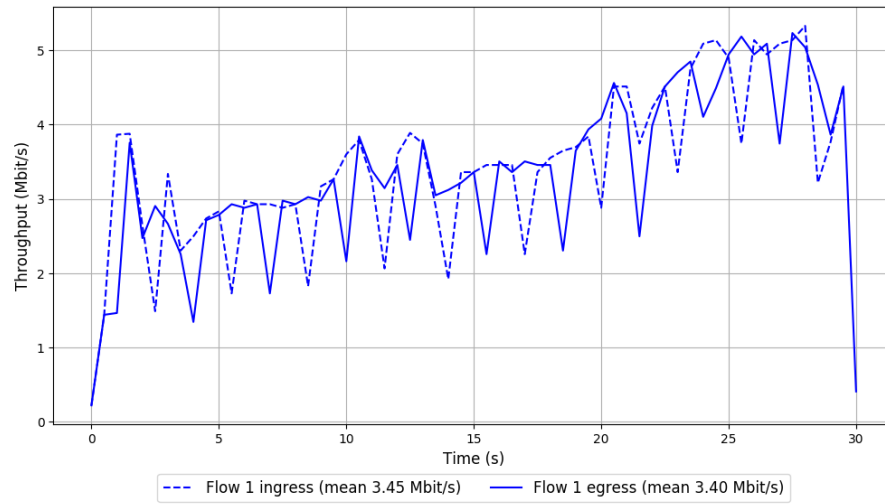
-- Flow 1:

Average throughput: 3.40 Mbit/s

95th percentile per-packet one-way delay: 137.740 ms

Loss rate: 1.51%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-17 08:05:15

End at: 2017-08-17 08:05:45

Below is generated by plot.py at 2017-08-17 09:14:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 137.841 ms

Loss rate: 1.98%

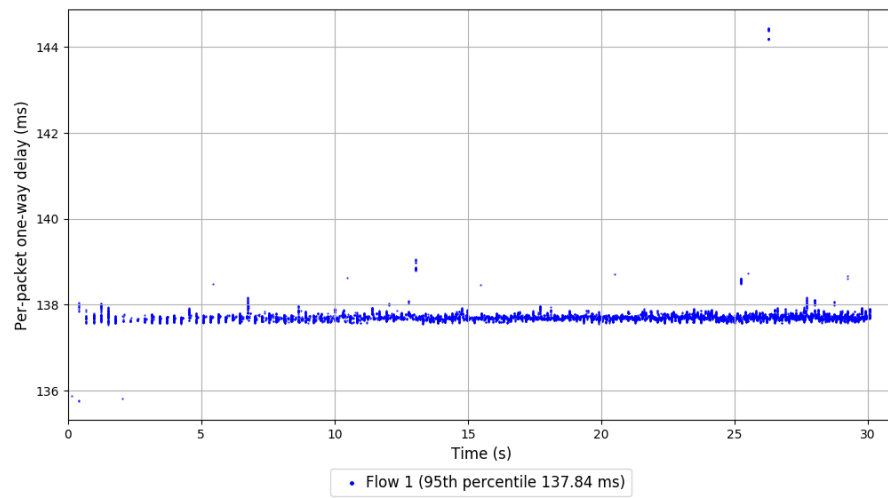
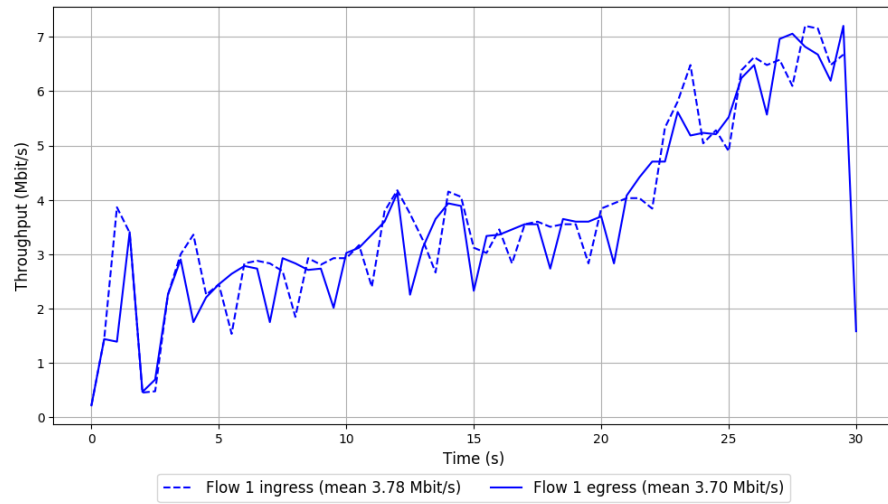
-- Flow 1:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 137.841 ms

Loss rate: 1.98%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-17 08:16:30

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

Below is generated by plot.py at 2017-08-17 09:14:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.22 Mbit/s

95th percentile per-packet one-way delay: 139.169 ms

Loss rate: 0.33%

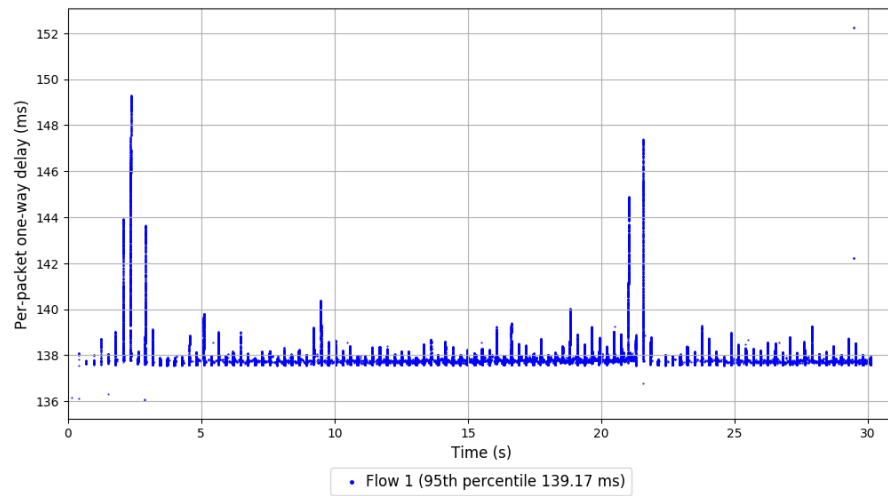
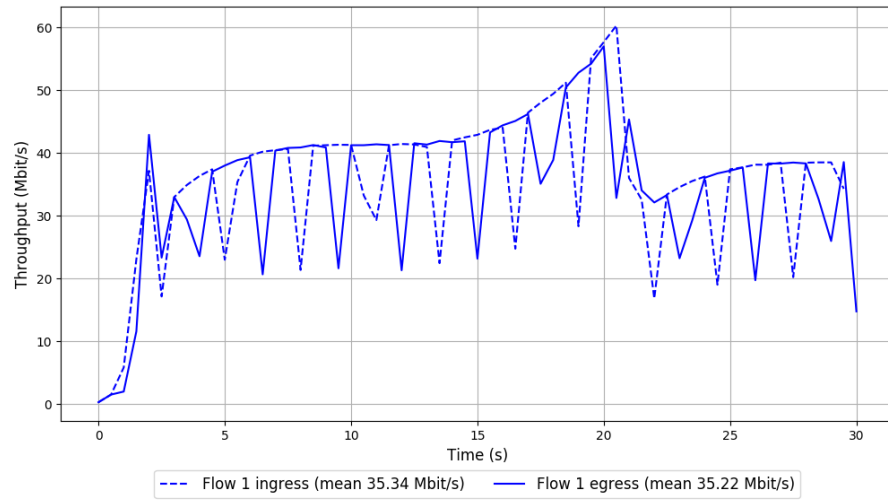
-- Flow 1:

Average throughput: 35.22 Mbit/s

95th percentile per-packet one-way delay: 139.169 ms

Loss rate: 0.33%

Run 10: Report of TCP Cubic — Data Link

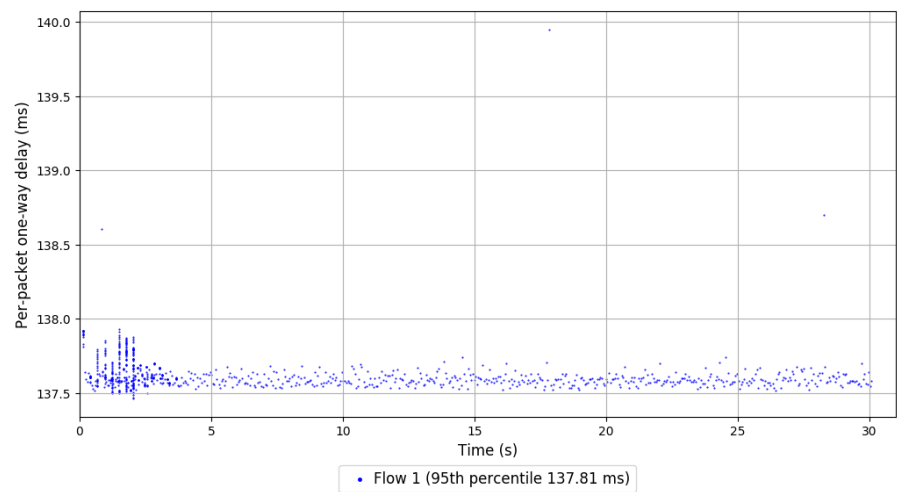
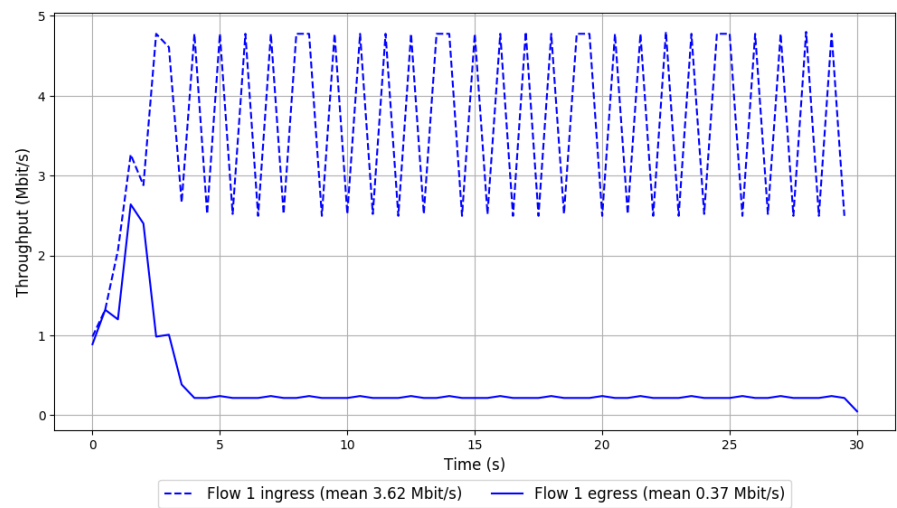


```
Run 1: Statistics of KohoCC

Start at: 2017-08-17 06:27:09
End at: 2017-08-17 06:27:39

# Below is generated by plot.py at 2017-08-17 09:14:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 137.807 ms
Loss rate: 89.64%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 137.807 ms
Loss rate: 89.64%
```


Run 1: Report of KohoCC — Data Link

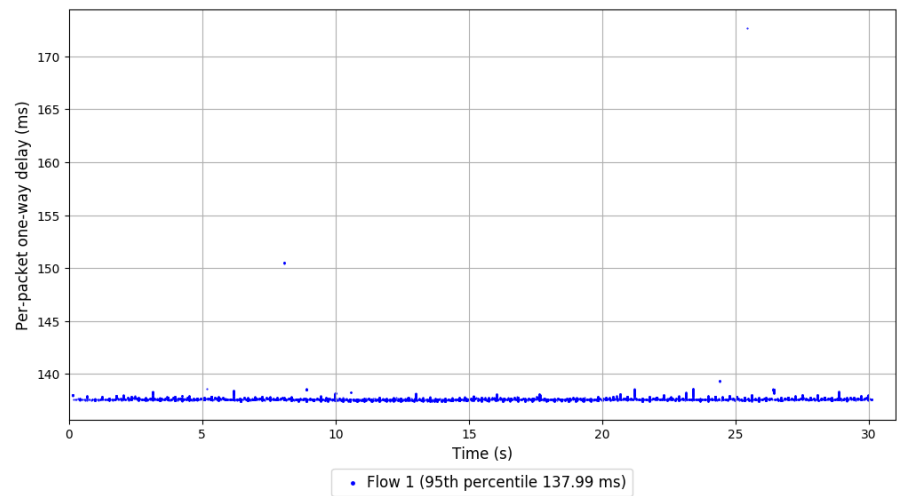
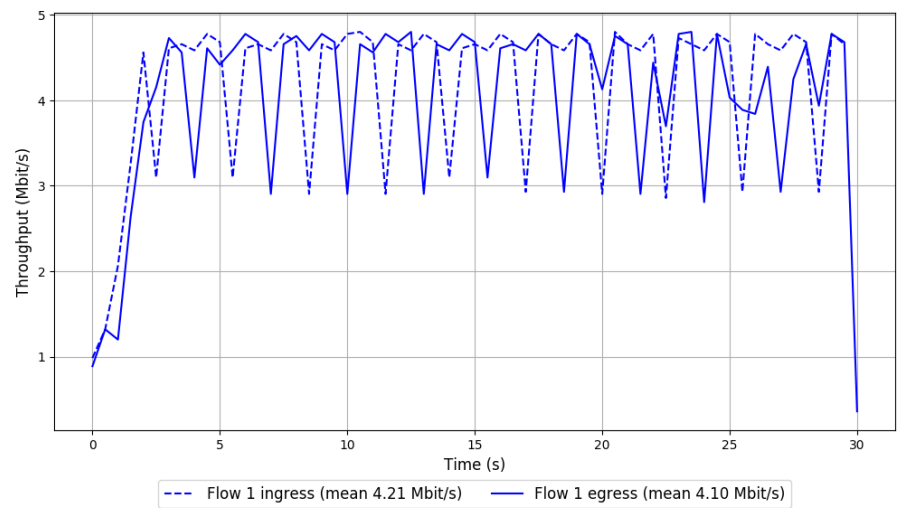


```
Run 2: Statistics of KohoCC

Start at: 2017-08-17 06:38:33
End at: 2017-08-17 06:39:03

# Below is generated by plot.py at 2017-08-17 09:14:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 137.992 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 137.992 ms
Loss rate: 2.62%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-17 06:49:47

End at: 2017-08-17 06:50:17

Below is generated by plot.py at 2017-08-17 09:14:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 138.063 ms

Loss rate: 0.08%

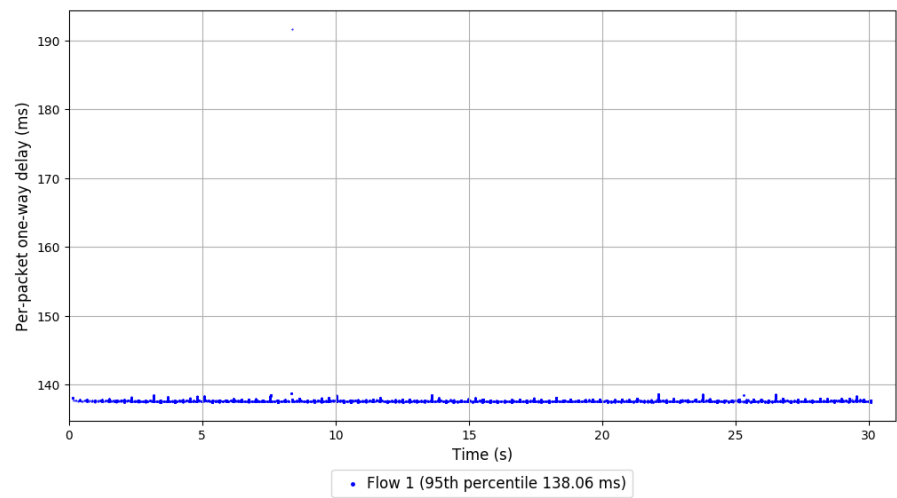
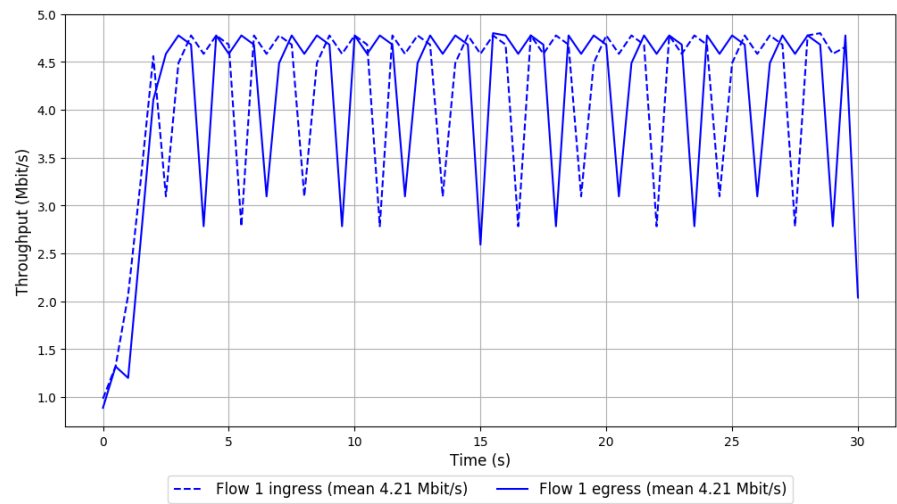
-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 138.063 ms

Loss rate: 0.08%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-17 07:01:02

End at: 2017-08-17 07:01:32

Below is generated by plot.py at 2017-08-17 09:14:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.928 ms

Loss rate: 89.48%

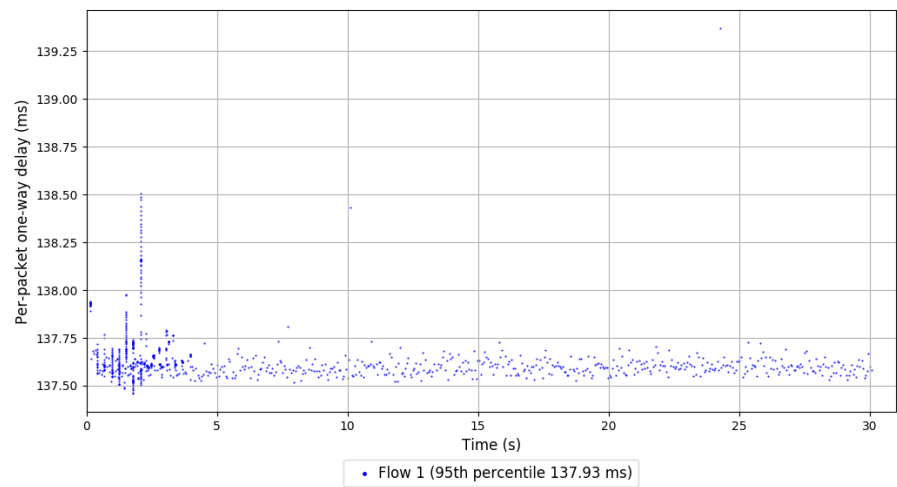
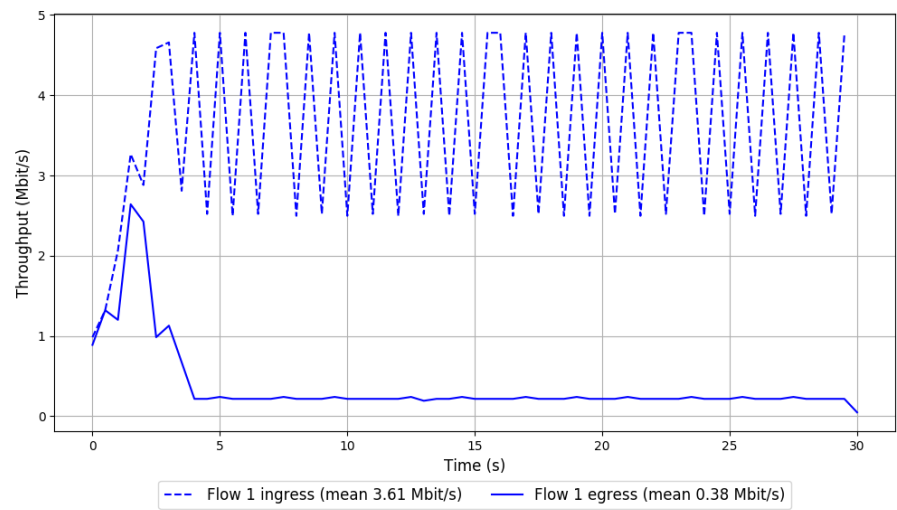
-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.928 ms

Loss rate: 89.48%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-17 07:12:37

End at: 2017-08-17 07:13:07

Below is generated by plot.py at 2017-08-17 09:14:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 137.692 ms

Loss rate: 0.00%

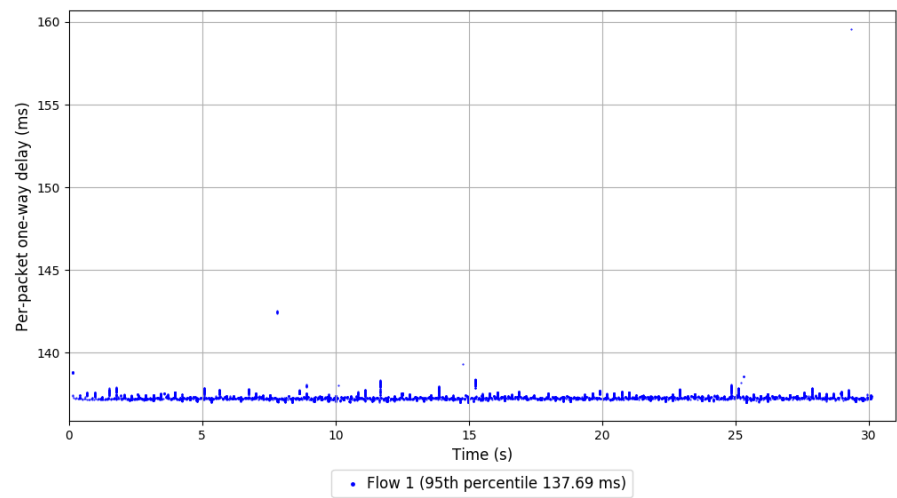
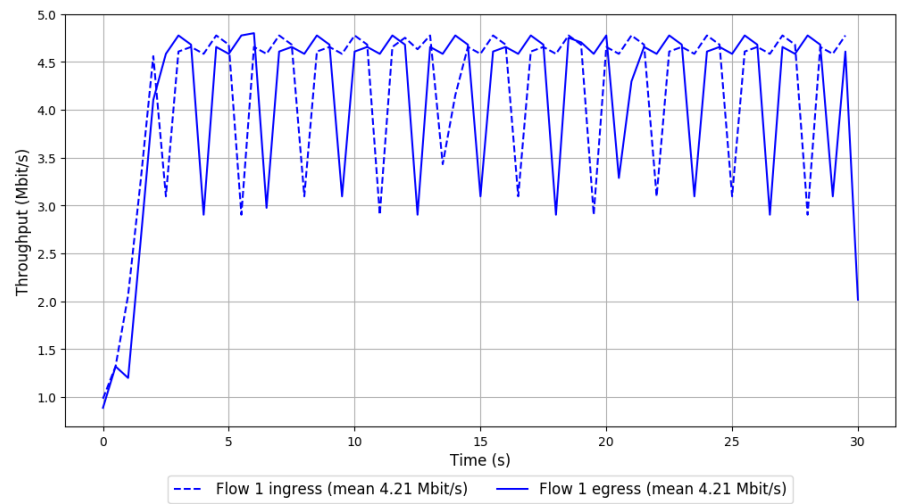
-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 137.692 ms

Loss rate: 0.00%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-17 07:24:26

End at: 2017-08-17 07:24:56

Below is generated by plot.py at 2017-08-17 09:14:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 137.303 ms

Loss rate: 0.00%

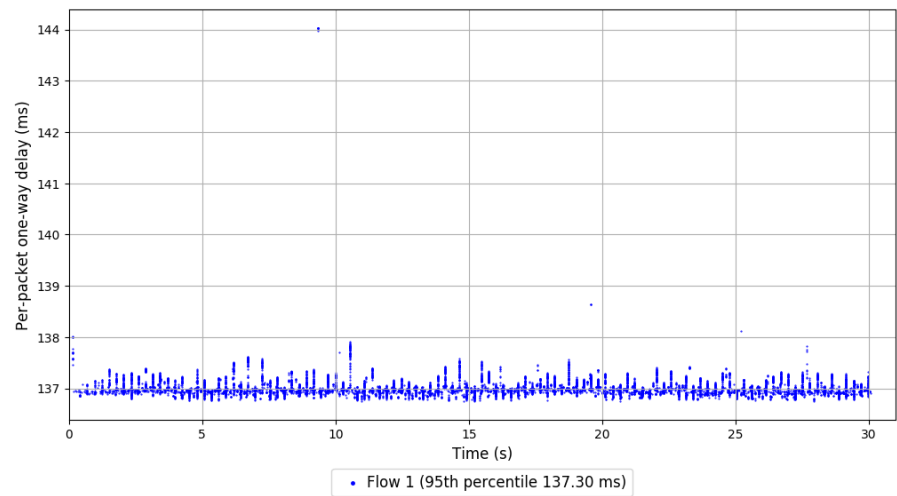
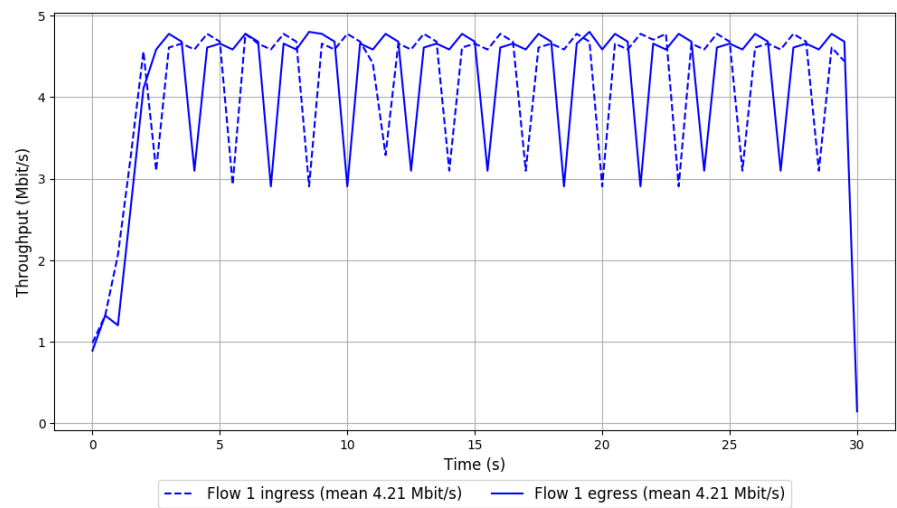
-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 137.303 ms

Loss rate: 0.00%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-17 07:36:01

End at: 2017-08-17 07:36:31

Below is generated by plot.py at 2017-08-17 09:14:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 137.802 ms

Loss rate: 11.26%

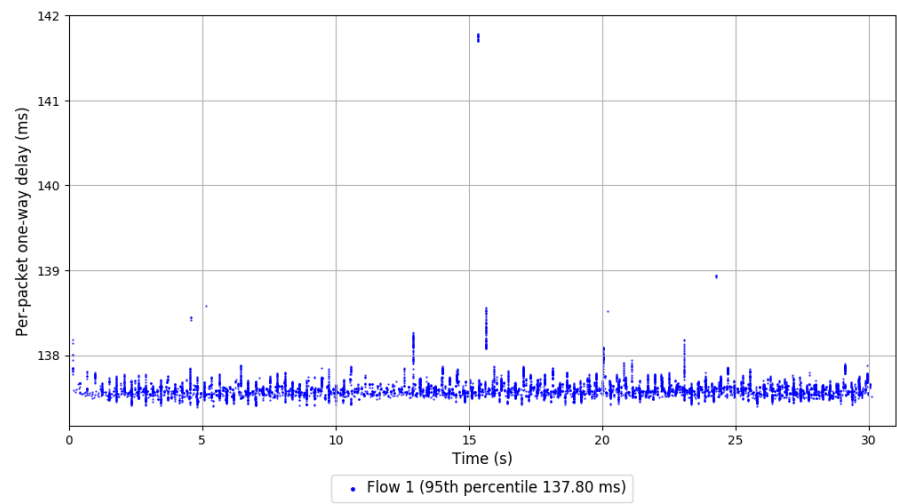
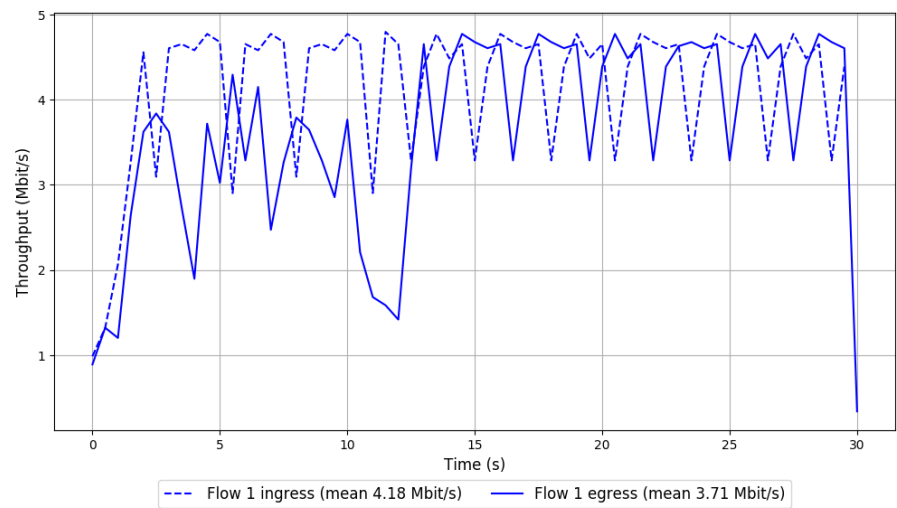
-- Flow 1:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 137.802 ms

Loss rate: 11.26%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-17 07:47:43

End at: 2017-08-17 07:48:13

Below is generated by plot.py at 2017-08-17 09:14:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 138.406 ms

Loss rate: 82.94%

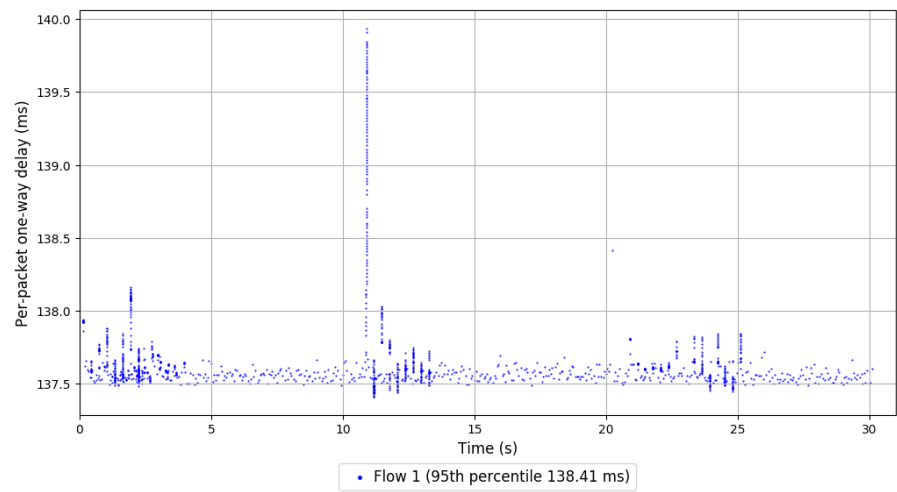
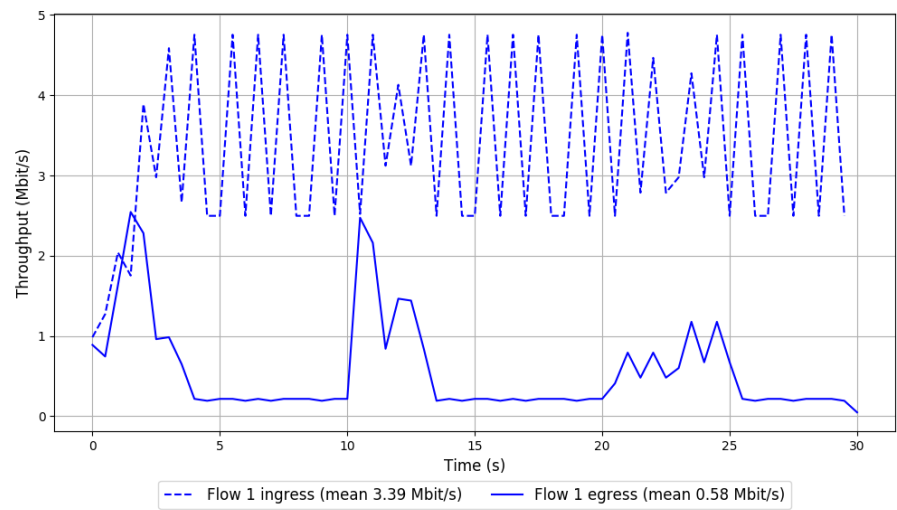
-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 138.406 ms

Loss rate: 82.94%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-17 07:59:22

End at: 2017-08-17 07:59:52

Below is generated by plot.py at 2017-08-17 09:14:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 137.032 ms

Loss rate: 0.06%

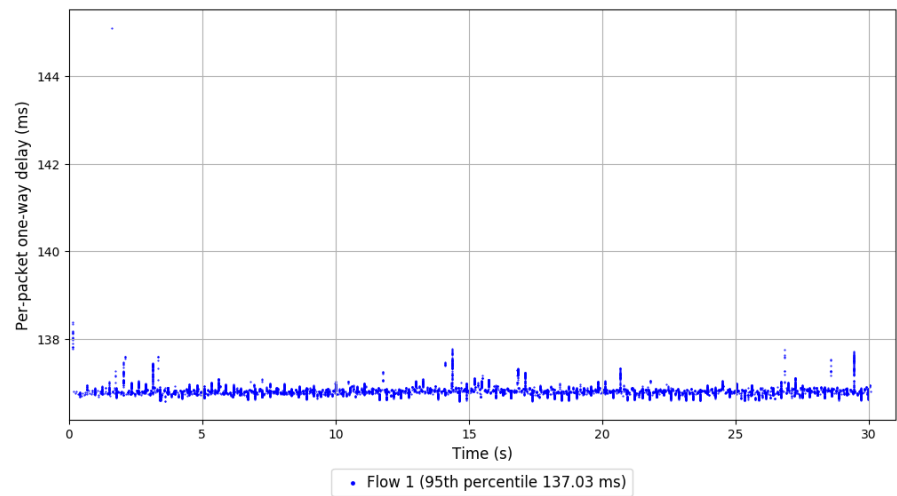
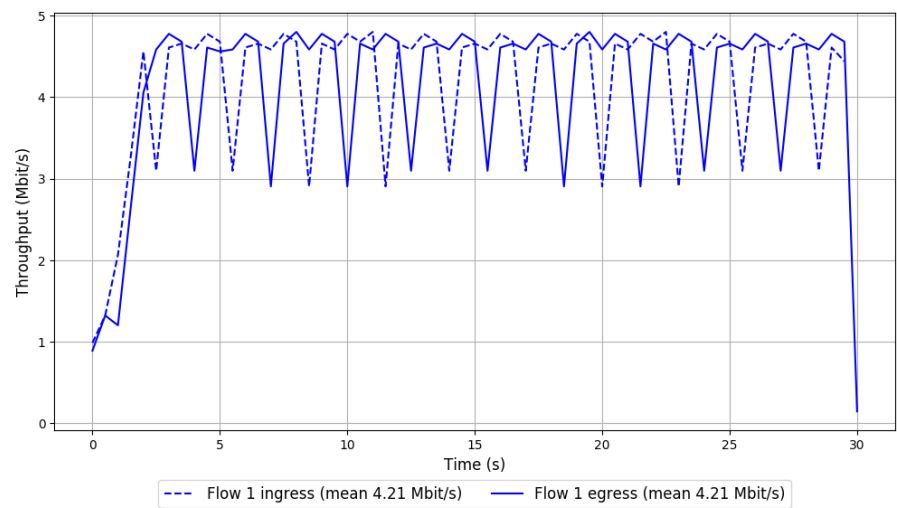
-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 137.032 ms

Loss rate: 0.06%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-17 08:10:41

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

Below is generated by plot.py at 2017-08-17 09:14:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.870 ms

Loss rate: 89.10%

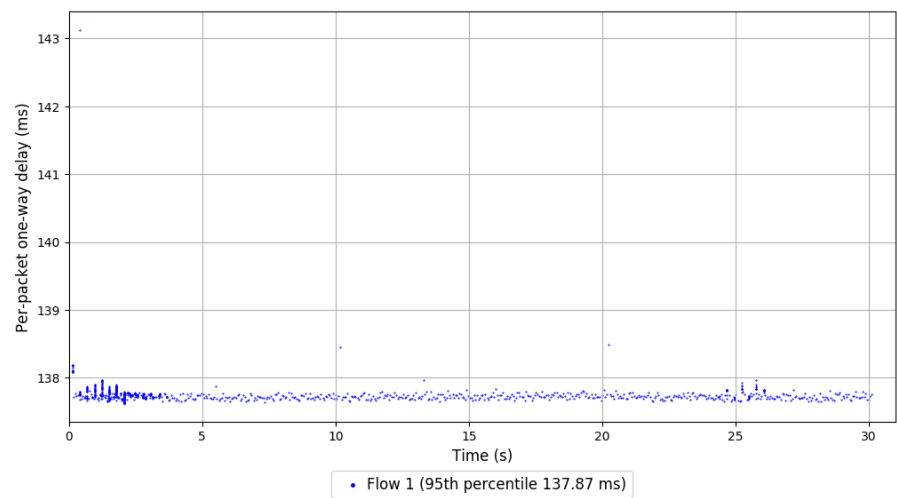
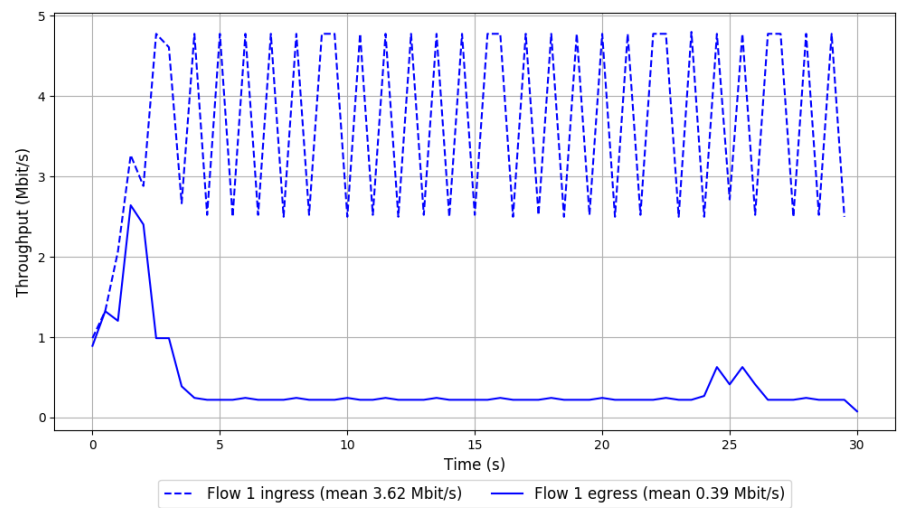
-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.870 ms

Loss rate: 89.10%

Run 10: Report of KohoCC — Data Link

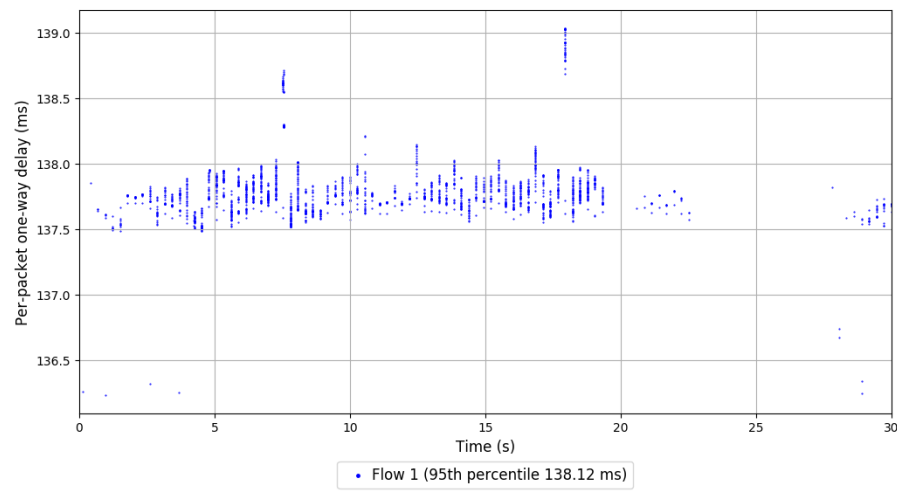
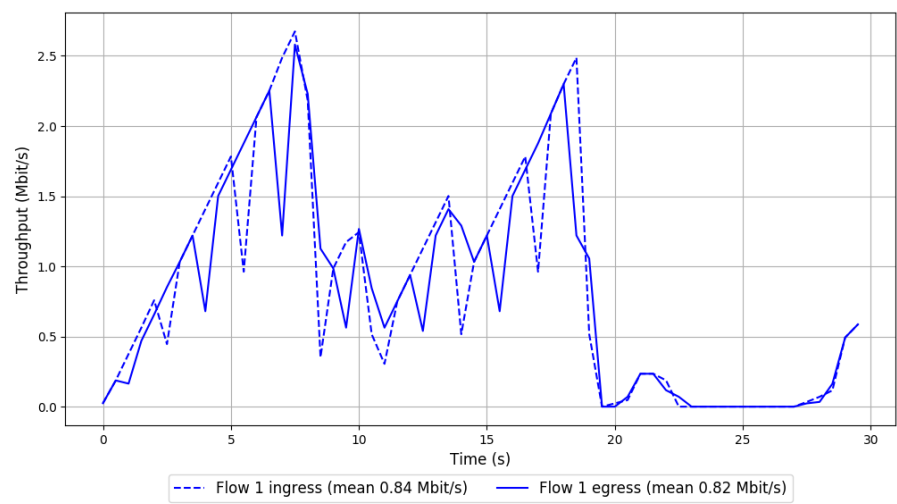


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-17 06:31:36
End at: 2017-08-17 06:32:06

# Below is generated by plot.py at 2017-08-17 09:14:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 138.115 ms
Loss rate: 2.53%
-- Flow 1:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 138.115 ms
Loss rate: 2.53%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-08-17 06:42:57

End at: 2017-08-17 06:43:27

Below is generated by plot.py at 2017-08-17 09:14:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 138.136 ms

Loss rate: 2.92%

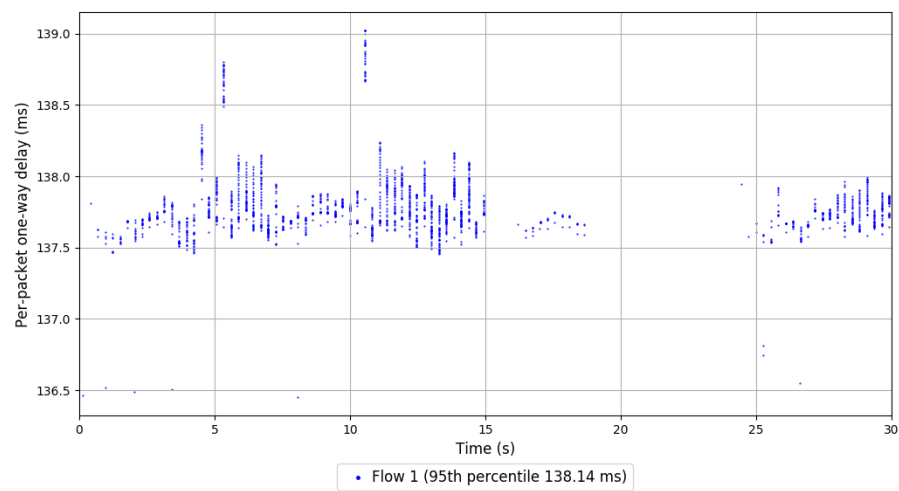
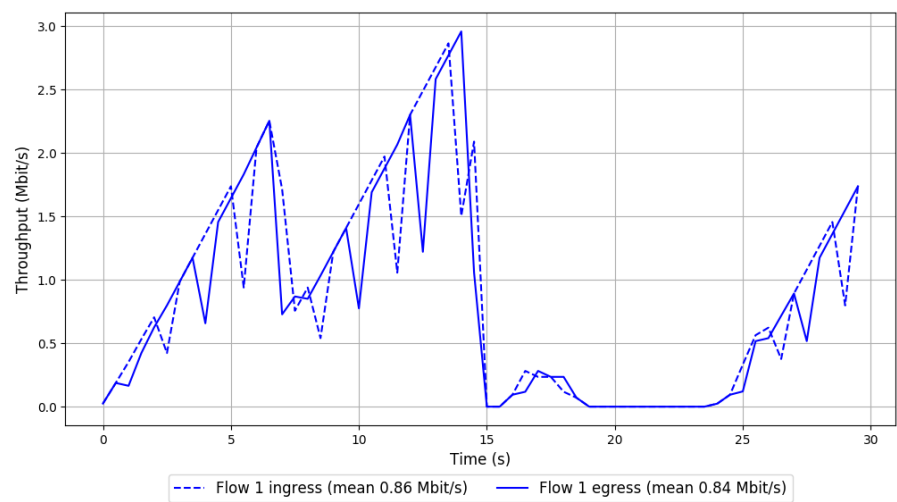
-- Flow 1:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 138.136 ms

Loss rate: 2.92%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-17 06:54:11

End at: 2017-08-17 06:54:41

Below is generated by plot.py at 2017-08-17 09:14:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 138.129 ms

Loss rate: 1.71%

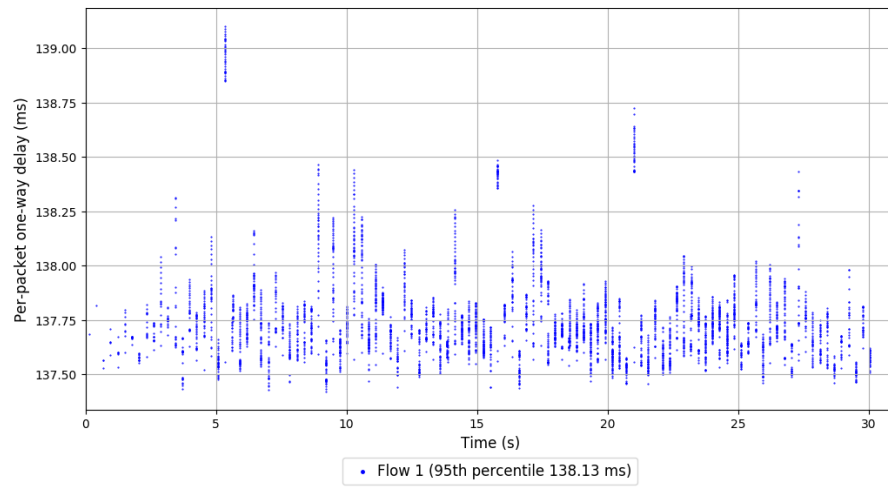
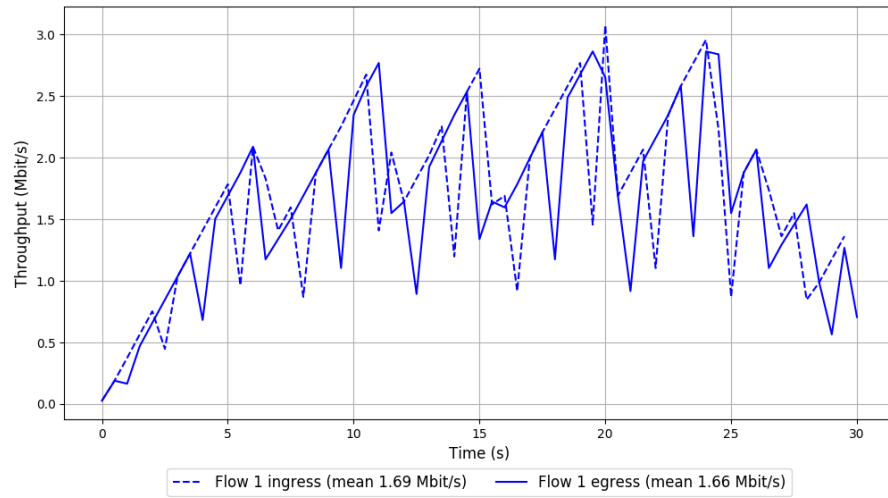
-- Flow 1:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 138.129 ms

Loss rate: 1.71%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-17 07:05:34

End at: 2017-08-17 07:06:04

Below is generated by plot.py at 2017-08-17 09:14:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 137.191 ms

Loss rate: 0.00%

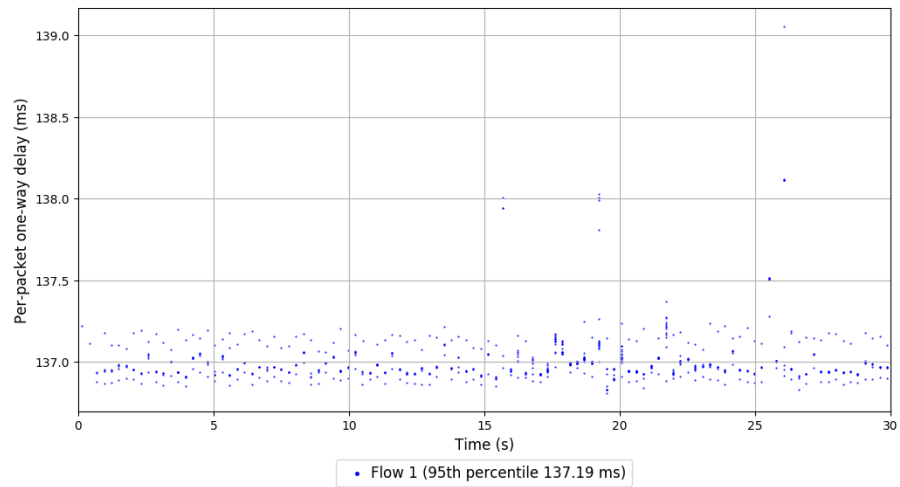
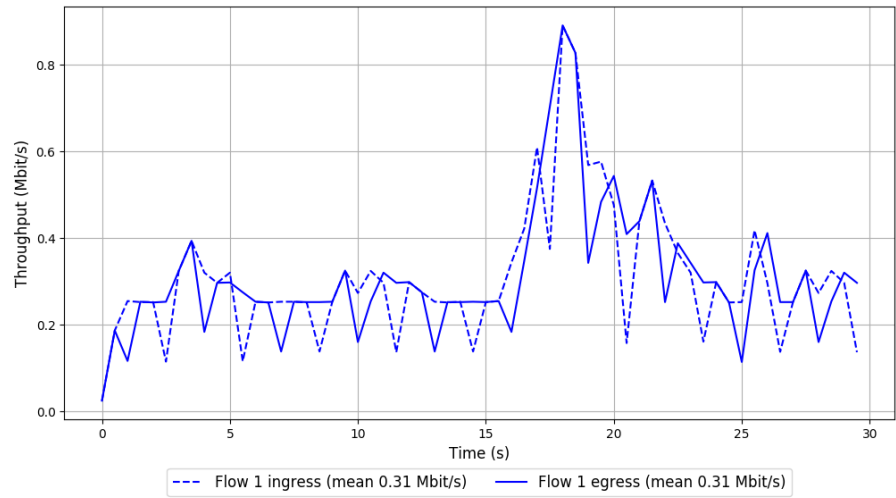
-- Flow 1:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 137.191 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-17 07:17:01

End at: 2017-08-17 07:17:31

Below is generated by plot.py at 2017-08-17 09:14:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 138.043 ms

Loss rate: 0.95%

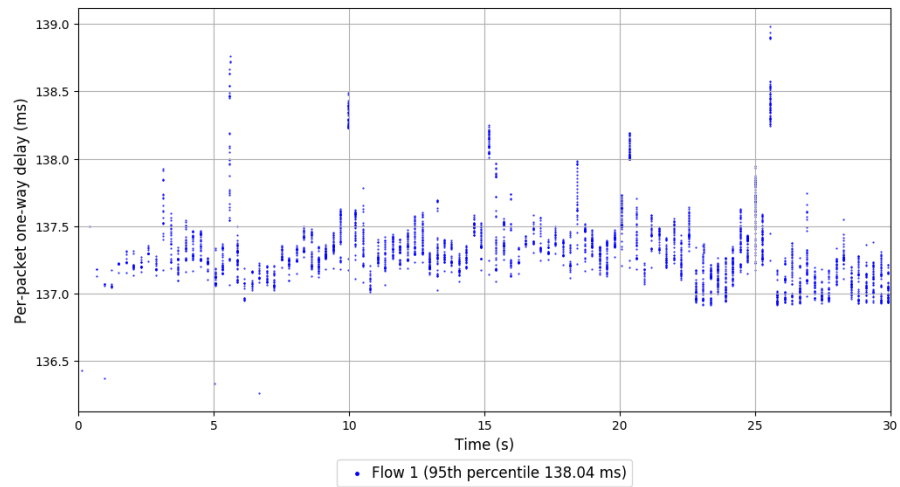
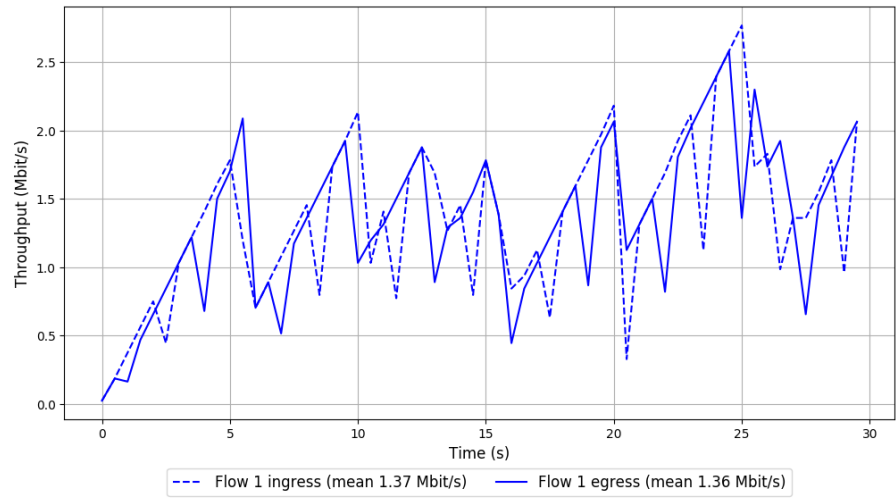
-- Flow 1:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 138.043 ms

Loss rate: 0.95%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-17 07:28:50

End at: 2017-08-17 07:29:20

Below is generated by plot.py at 2017-08-17 09:14:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 137.735 ms

Loss rate: 1.55%

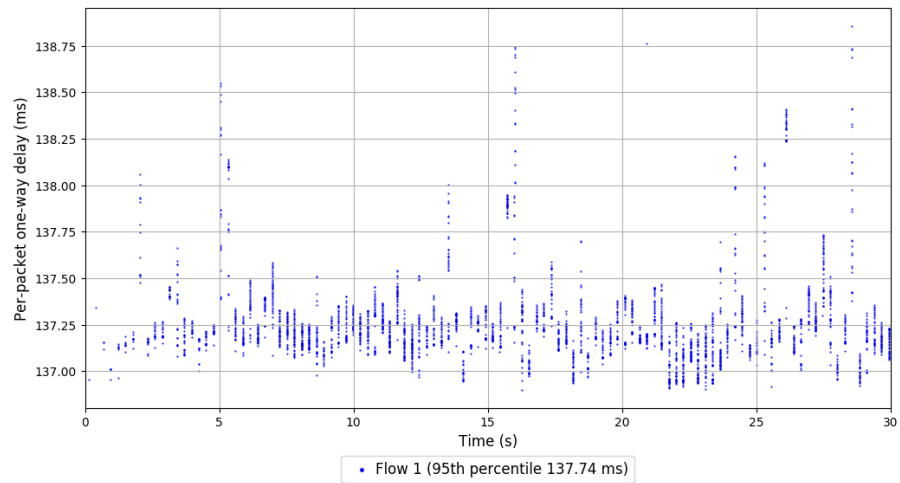
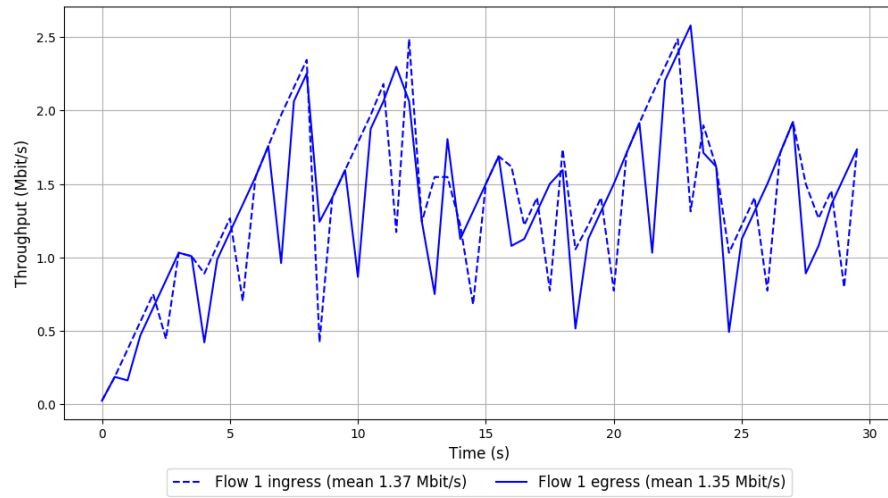
-- Flow 1:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 137.735 ms

Loss rate: 1.55%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-17 07:40:25

End at: 2017-08-17 07:40:55

Below is generated by plot.py at 2017-08-17 09:14:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 138.142 ms

Loss rate: 0.53%

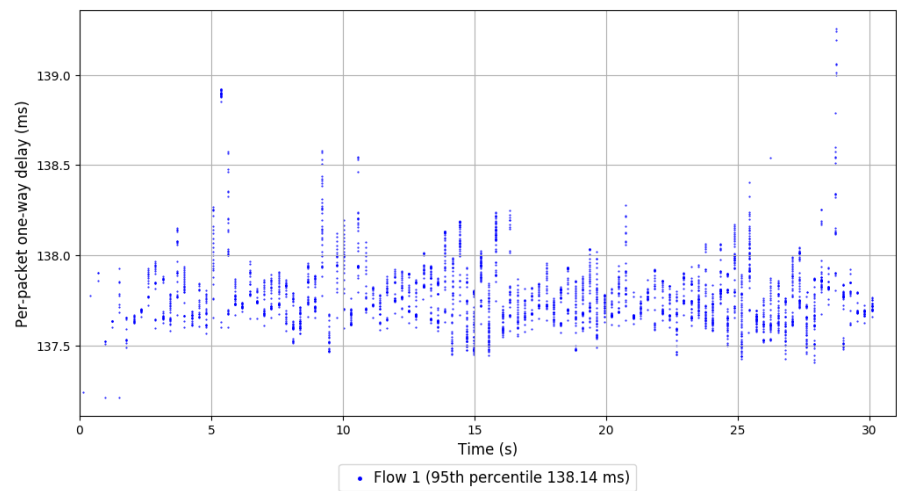
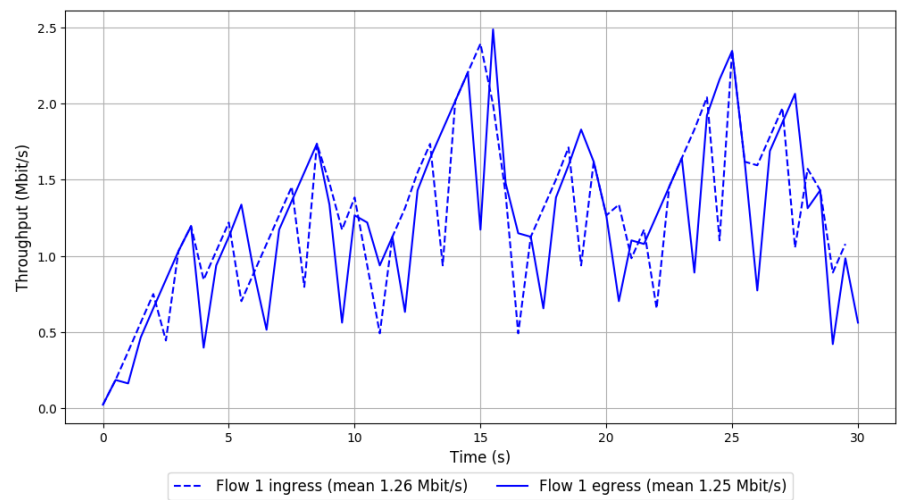
-- Flow 1:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 138.142 ms

Loss rate: 0.53%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-17 07:52:04

End at: 2017-08-17 07:52:34

Below is generated by plot.py at 2017-08-17 09:14:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 137.971 ms

Loss rate: 1.19%

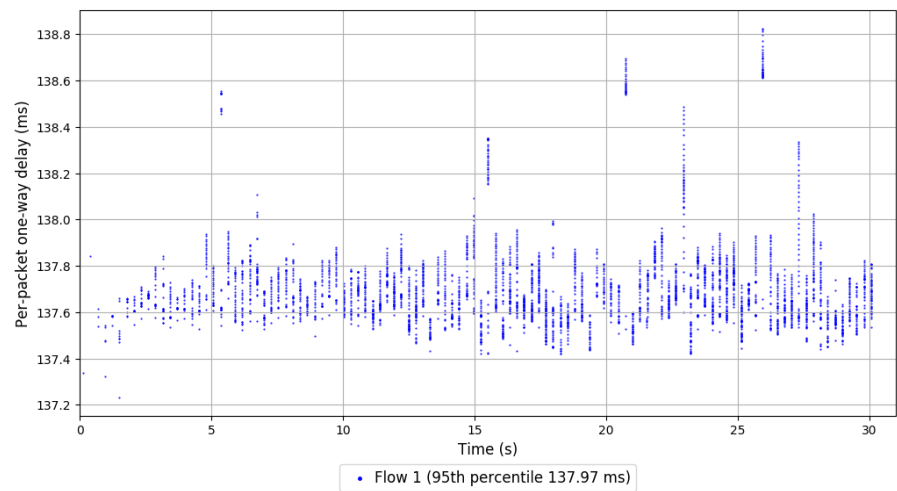
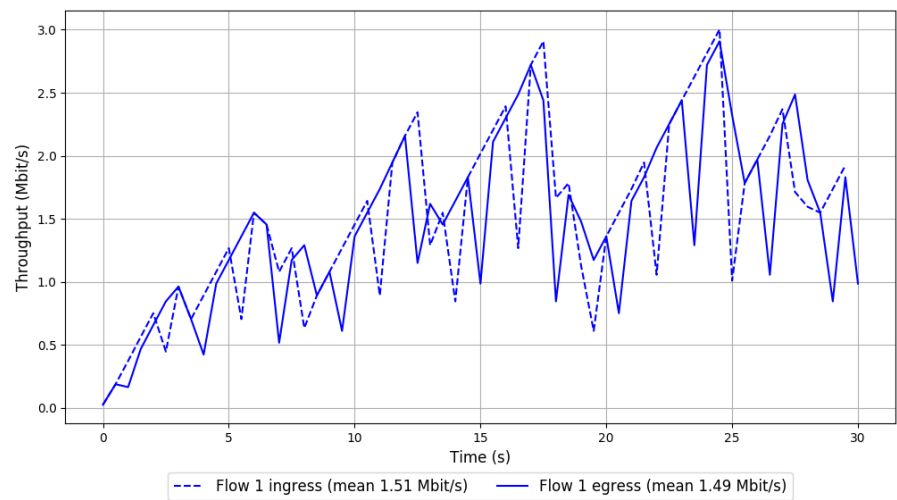
-- Flow 1:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 137.971 ms

Loss rate: 1.19%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-17 08:03:47

End at: 2017-08-17 08:04:17

Below is generated by plot.py at 2017-08-17 09:14:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 138.024 ms

Loss rate: 3.45%

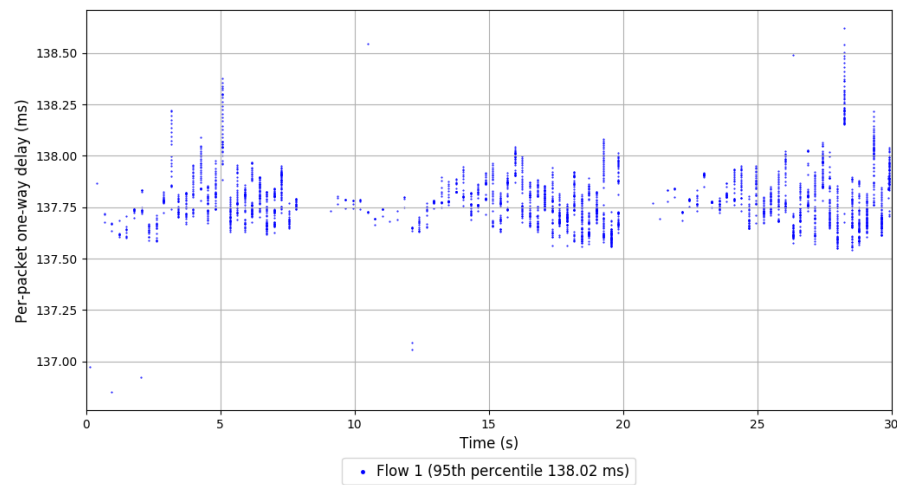
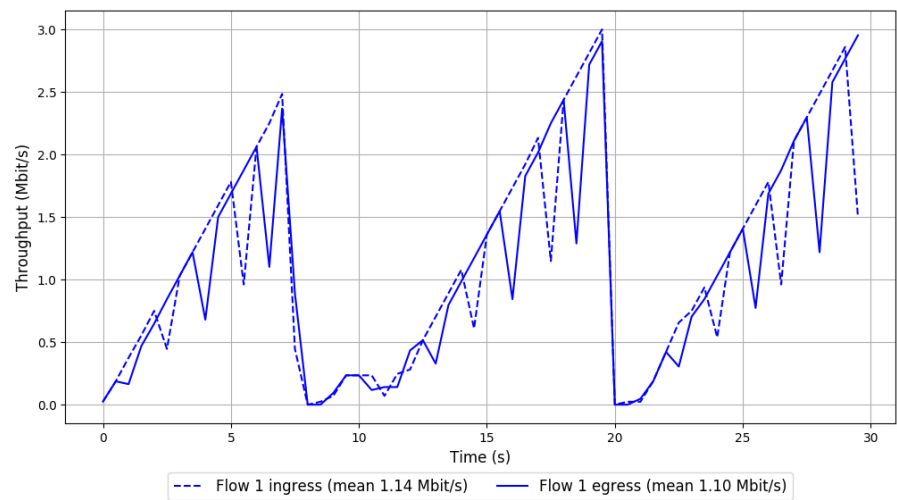
-- Flow 1:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 138.024 ms

Loss rate: 3.45%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-17 08:15:01

End at: 2017-08-17 08:15:31

Below is generated by plot.py at 2017-08-17 09:14:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 138.427 ms

Loss rate: 1.11%

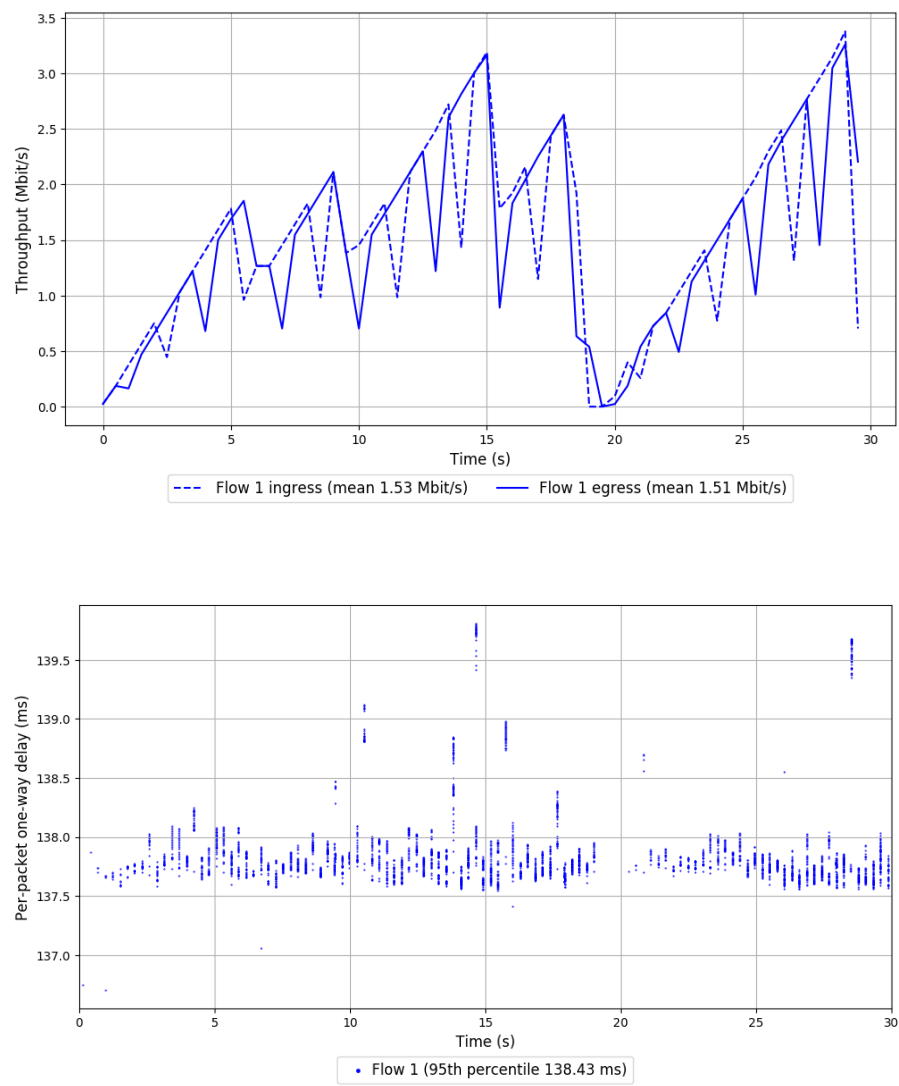
-- Flow 1:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 138.427 ms

Loss rate: 1.11%

Run 10: Report of LEDBAT — Data Link

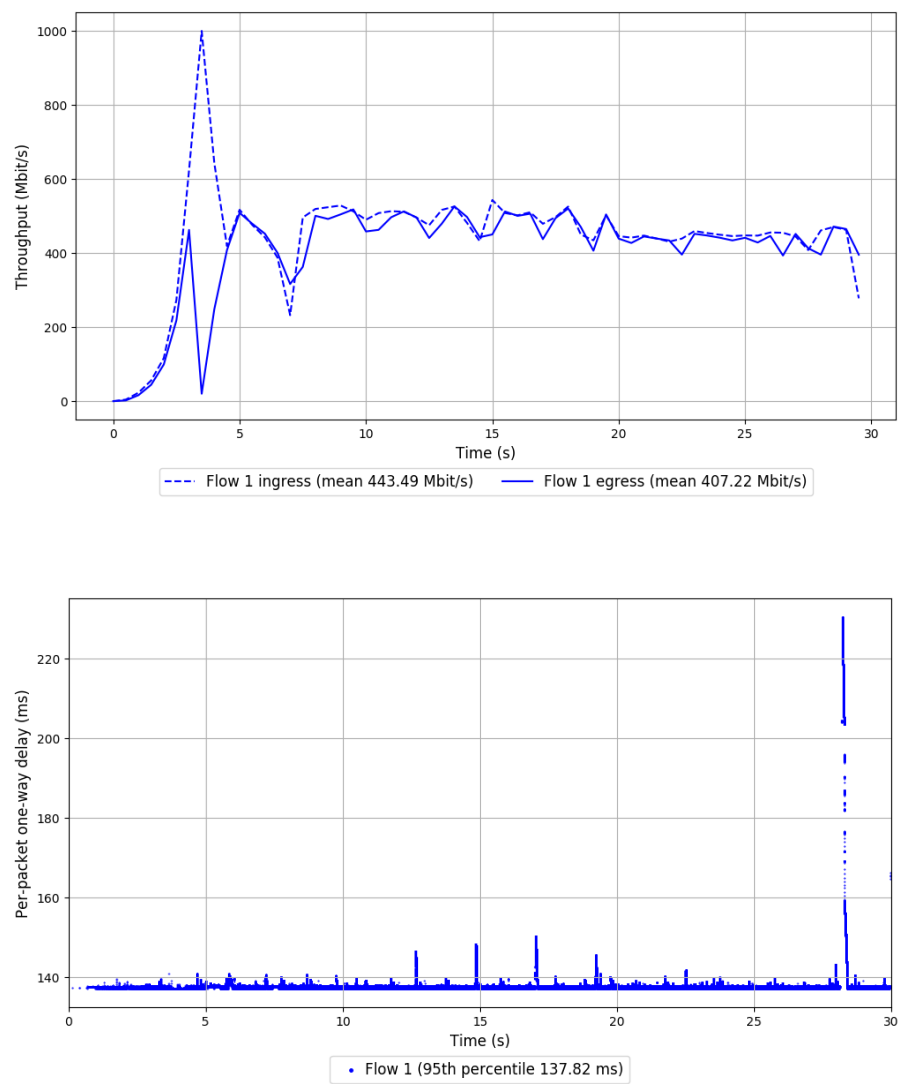


```
Run 1: Statistics of PCC

Start at: 2017-08-17 06:34:30
End at: 2017-08-17 06:35:00

# Below is generated by plot.py at 2017-08-17 09:15:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 407.22 Mbit/s
95th percentile per-packet one-way delay: 137.820 ms
Loss rate: 8.13%
-- Flow 1:
Average throughput: 407.22 Mbit/s
95th percentile per-packet one-way delay: 137.820 ms
Loss rate: 8.13%
```


Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-17 06:45:55

End at: 2017-08-17 06:46:25

Below is generated by plot.py at 2017-08-17 09:15:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.74 Mbit/s

95th percentile per-packet one-way delay: 156.608 ms

Loss rate: 11.71%

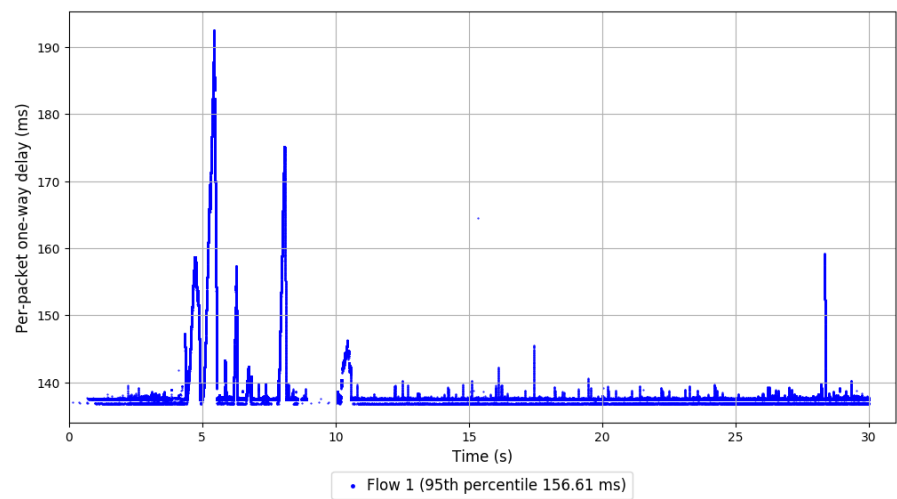
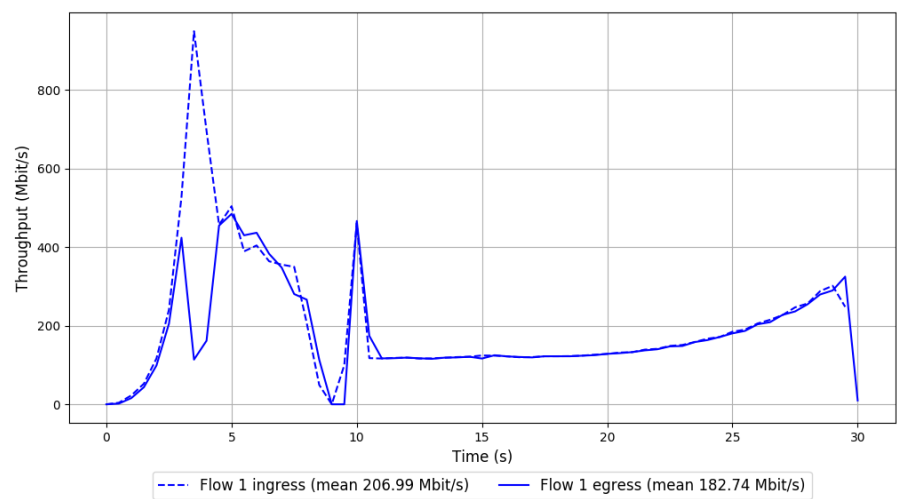
-- Flow 1:

Average throughput: 182.74 Mbit/s

95th percentile per-packet one-way delay: 156.608 ms

Loss rate: 11.71%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-17 06:57:07

End at: 2017-08-17 06:57:37

Below is generated by plot.py at 2017-08-17 09:15:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.31 Mbit/s

95th percentile per-packet one-way delay: 137.532 ms

Loss rate: 8.77%

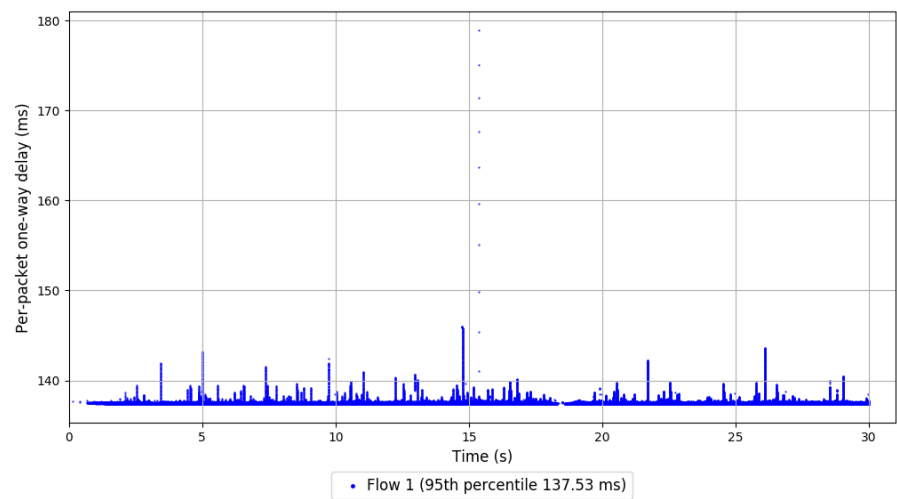
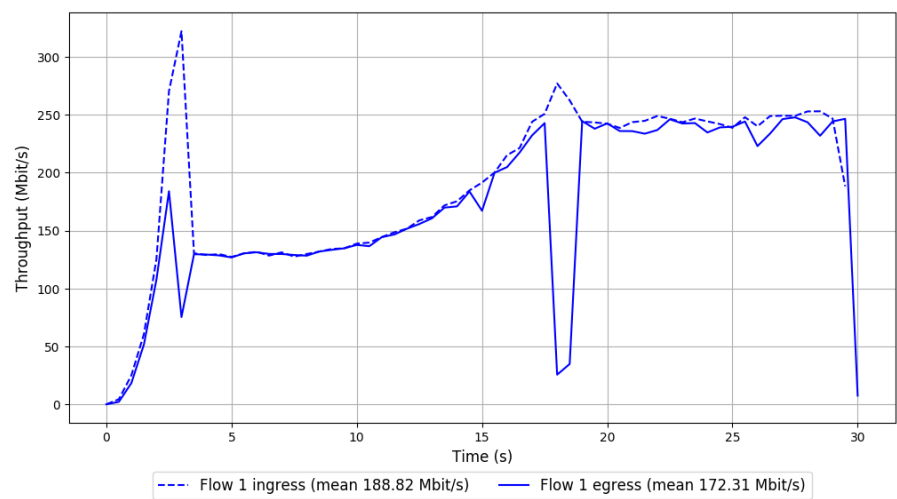
-- Flow 1:

Average throughput: 172.31 Mbit/s

95th percentile per-packet one-way delay: 137.532 ms

Loss rate: 8.77%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-17 07:08:41

End at: 2017-08-17 07:09:12

Below is generated by plot.py at 2017-08-17 09:17:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 489.94 Mbit/s

95th percentile per-packet one-way delay: 185.905 ms

Loss rate: 0.69%

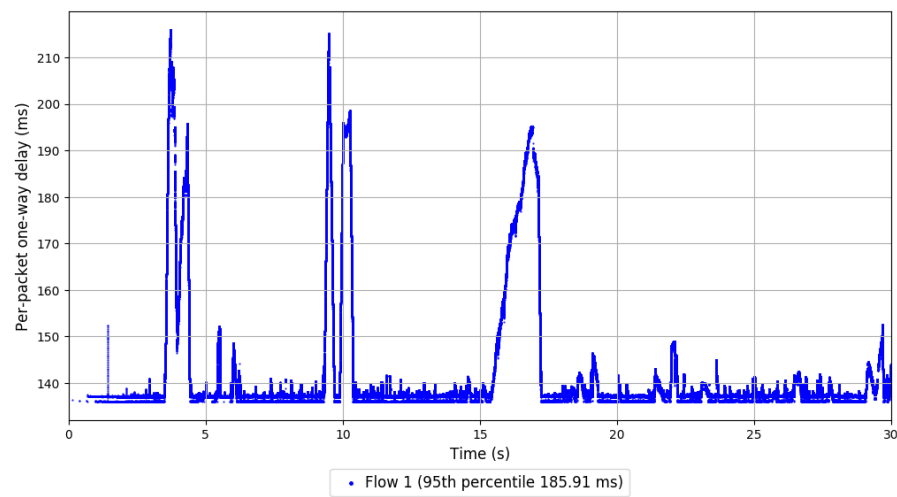
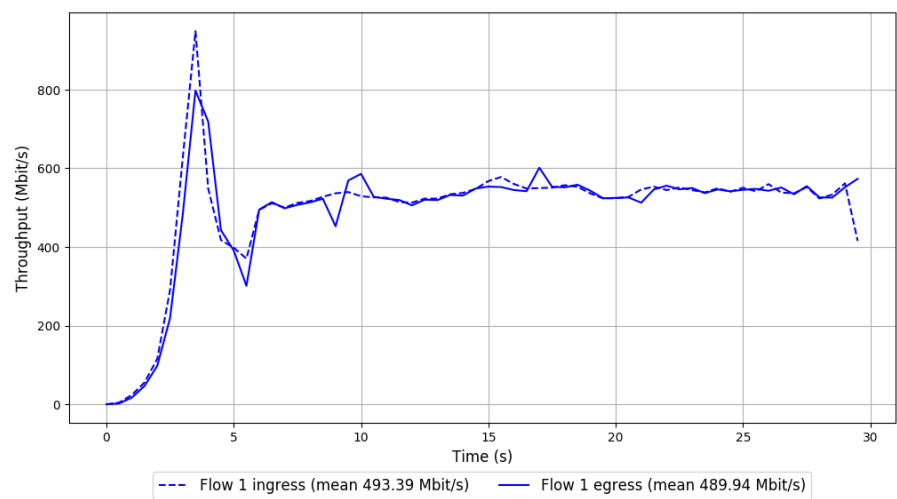
-- Flow 1:

Average throughput: 489.94 Mbit/s

95th percentile per-packet one-way delay: 185.905 ms

Loss rate: 0.69%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-17 07:20:03

End at: 2017-08-17 07:20:33

Below is generated by plot.py at 2017-08-17 09:17:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 490.97 Mbit/s

95th percentile per-packet one-way delay: 159.224 ms

Loss rate: 0.72%

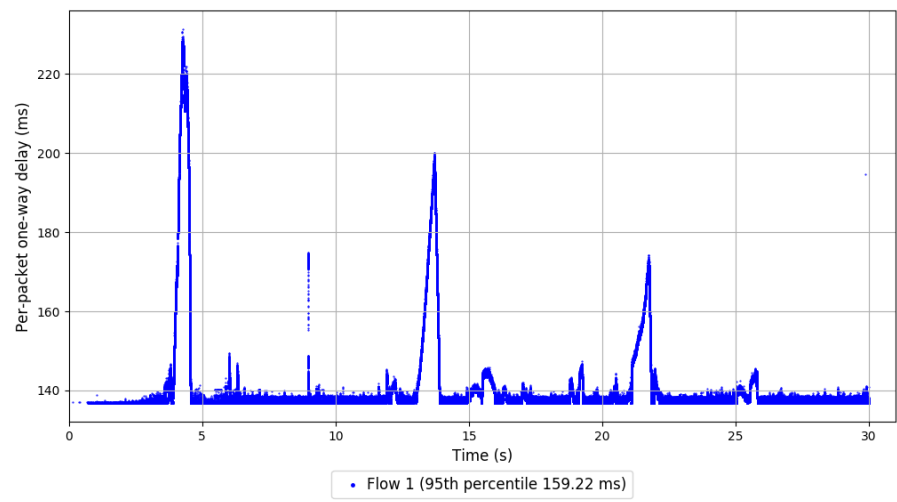
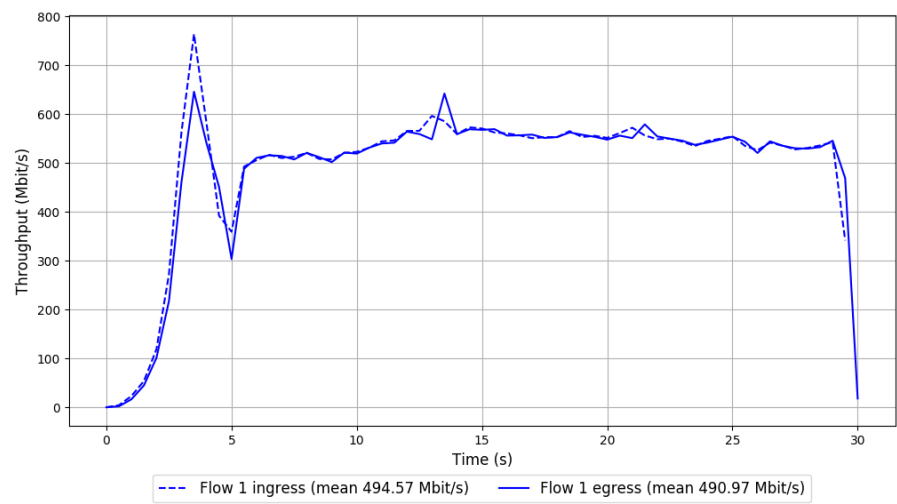
-- Flow 1:

Average throughput: 490.97 Mbit/s

95th percentile per-packet one-way delay: 159.224 ms

Loss rate: 0.72%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-17 07:31:56

End at: 2017-08-17 07:32:26

Below is generated by plot.py at 2017-08-17 09:19:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 480.49 Mbit/s

95th percentile per-packet one-way delay: 163.673 ms

Loss rate: 0.42%

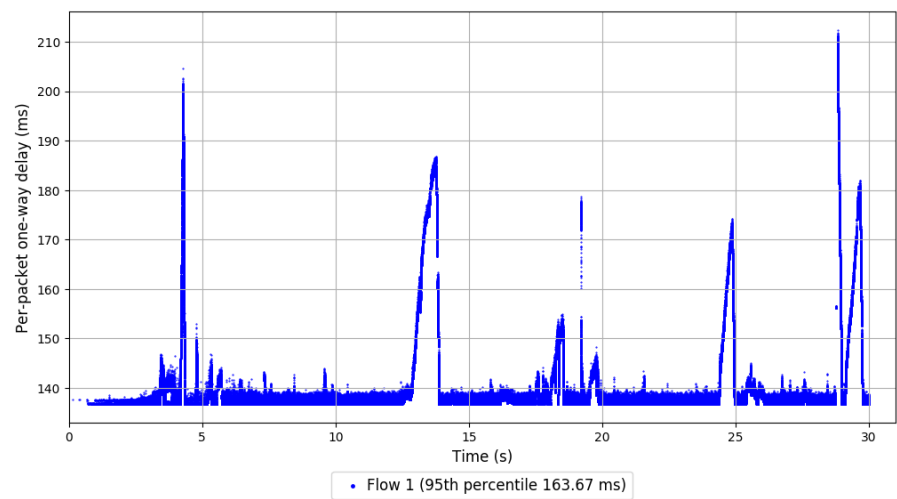
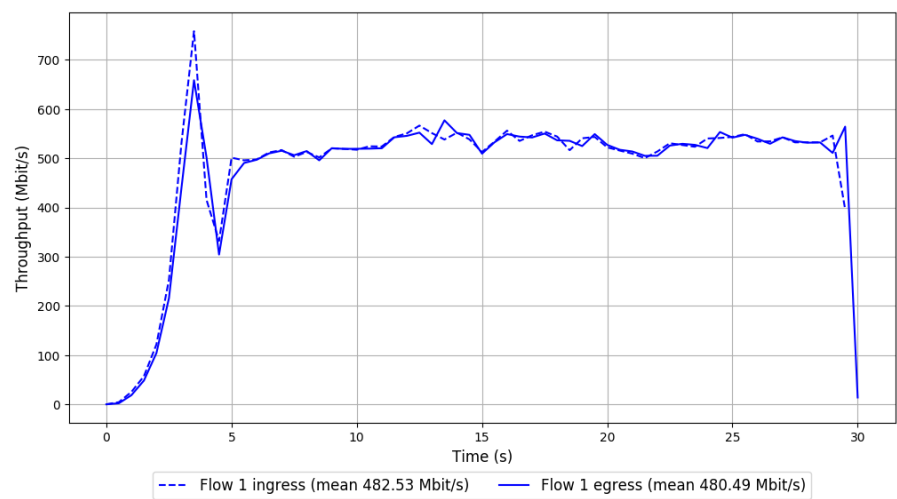
-- Flow 1:

Average throughput: 480.49 Mbit/s

95th percentile per-packet one-way delay: 163.673 ms

Loss rate: 0.42%

Run 6: Report of PCC — Data Link

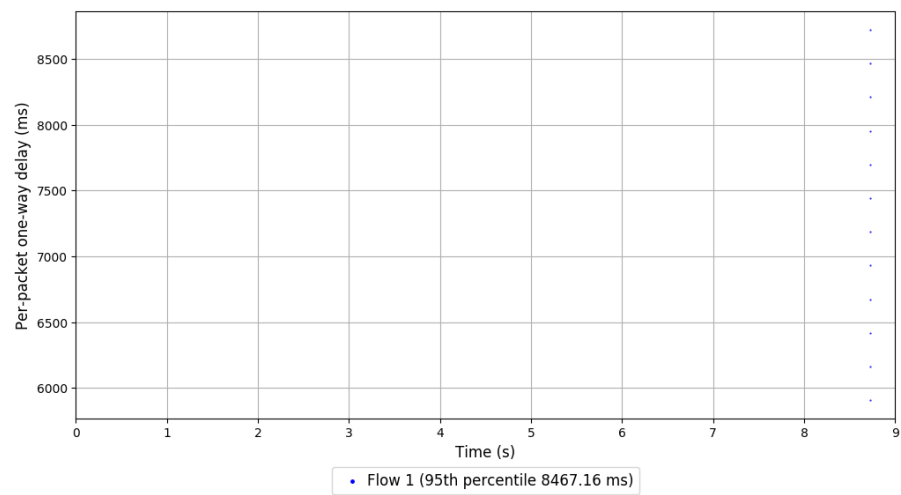
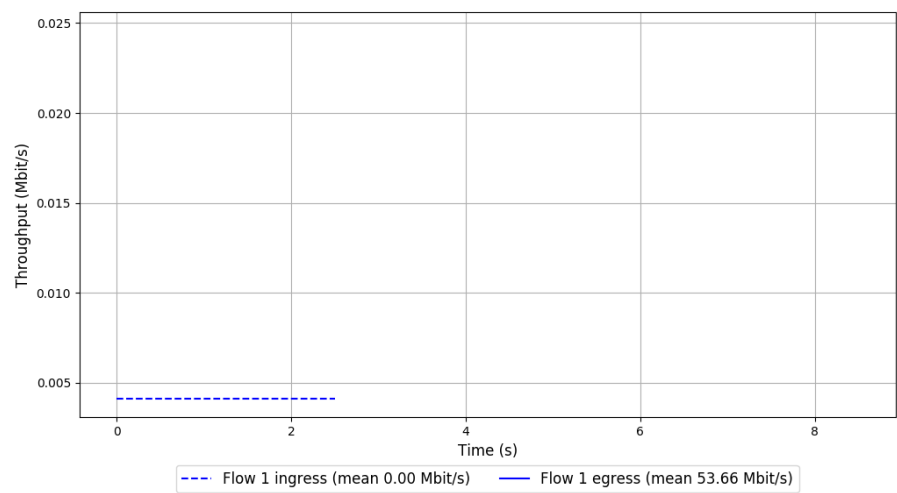


Run 7: Statistics of PCC

Start at: 2017-08-17 07:43:44

End at: 2017-08-17 07:44:14

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-17 07:55:25

End at: 2017-08-17 07:55:55

Below is generated by plot.py at 2017-08-17 09:19:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 235.64 Mbit/s

95th percentile per-packet one-way delay: 137.507 ms

Loss rate: 8.08%

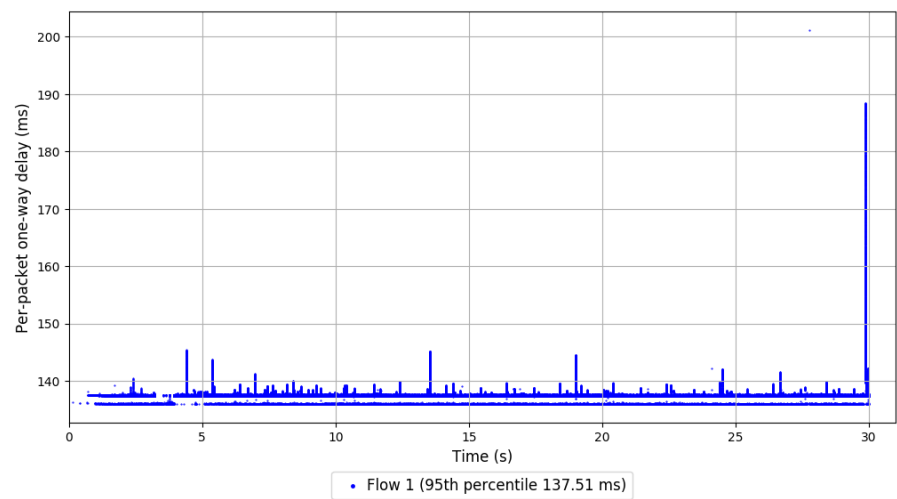
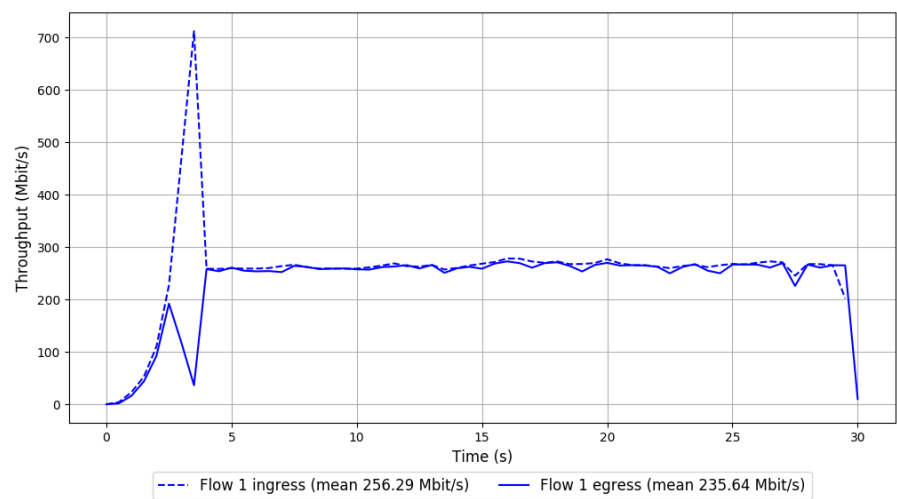
-- Flow 1:

Average throughput: 235.64 Mbit/s

95th percentile per-packet one-way delay: 137.507 ms

Loss rate: 8.08%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-17 08:06:42

End at: 2017-08-17 08:07:12

Below is generated by plot.py at 2017-08-17 09:19:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 238.01 Mbit/s

95th percentile per-packet one-way delay: 137.644 ms

Loss rate: 8.74%

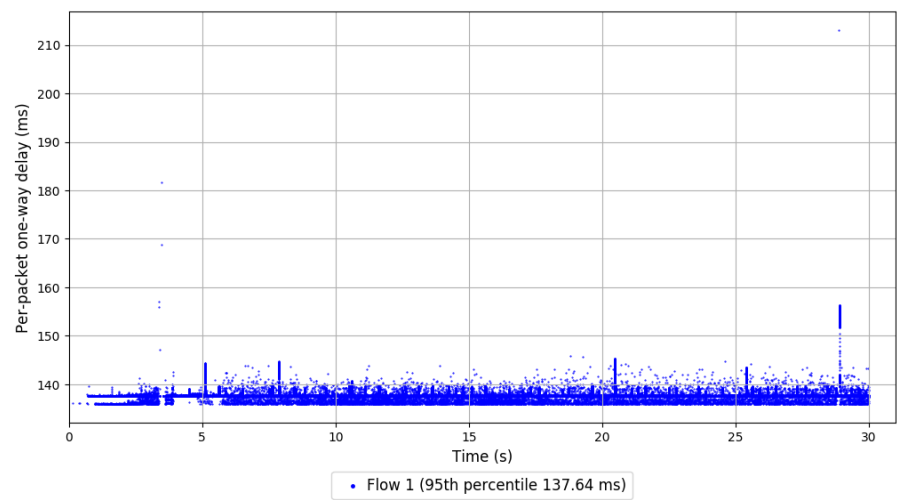
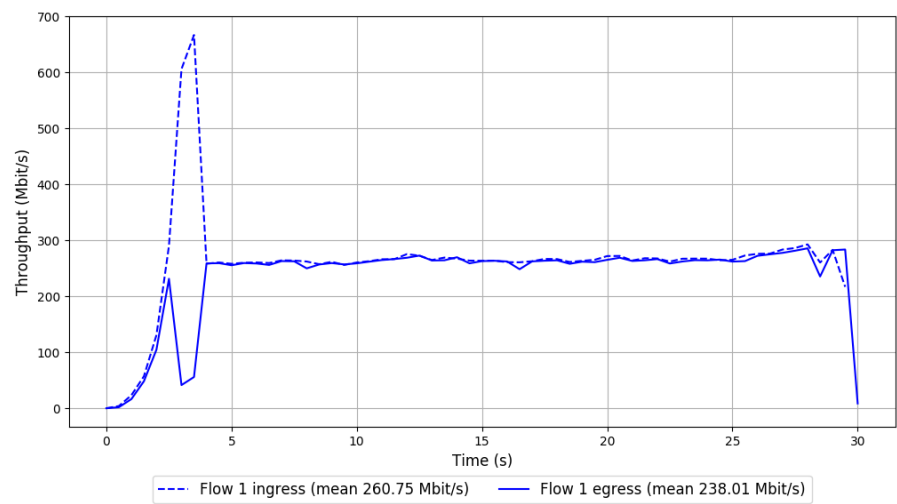
-- Flow 1:

Average throughput: 238.01 Mbit/s

95th percentile per-packet one-way delay: 137.644 ms

Loss rate: 8.74%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-17 08:18:22

End at: 2017-08-17 08:18:52

Below is generated by plot.py at 2017-08-17 09:20:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 481.44 Mbit/s

95th percentile per-packet one-way delay: 226.997 ms

Loss rate: 1.04%

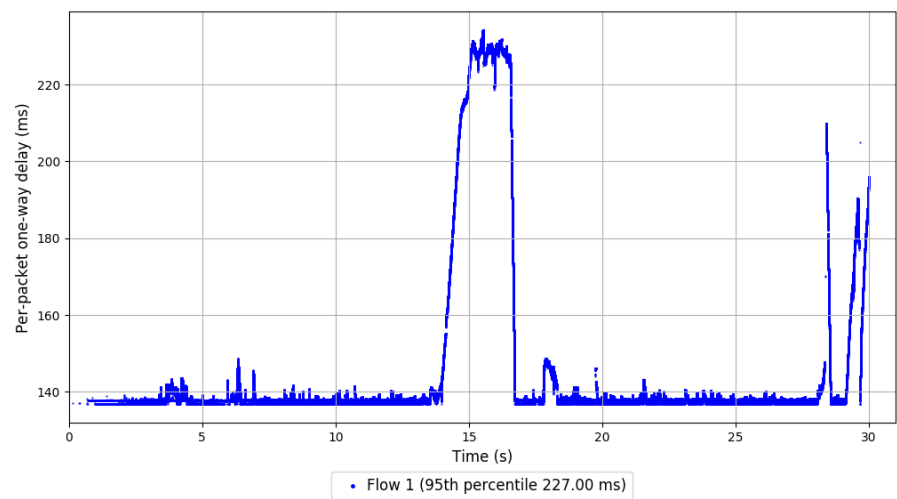
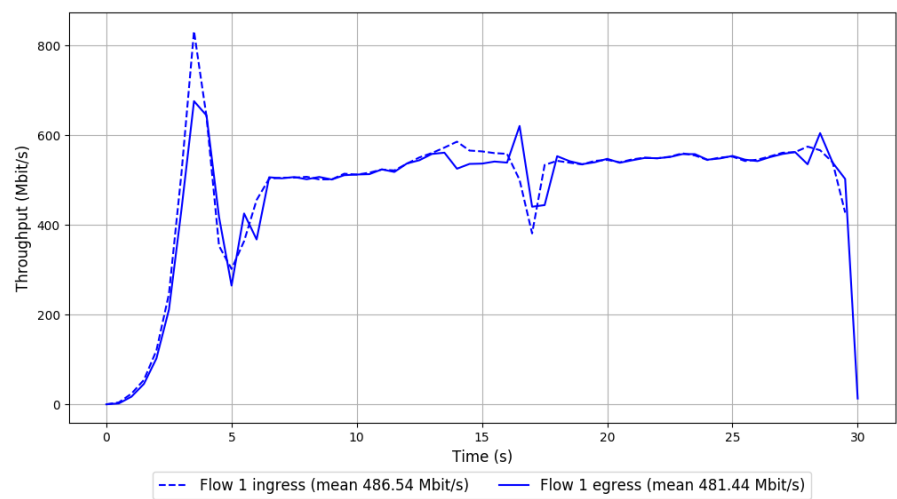
-- Flow 1:

Average throughput: 481.44 Mbit/s

95th percentile per-packet one-way delay: 226.997 ms

Loss rate: 1.04%

Run 10: Report of PCC — Data Link

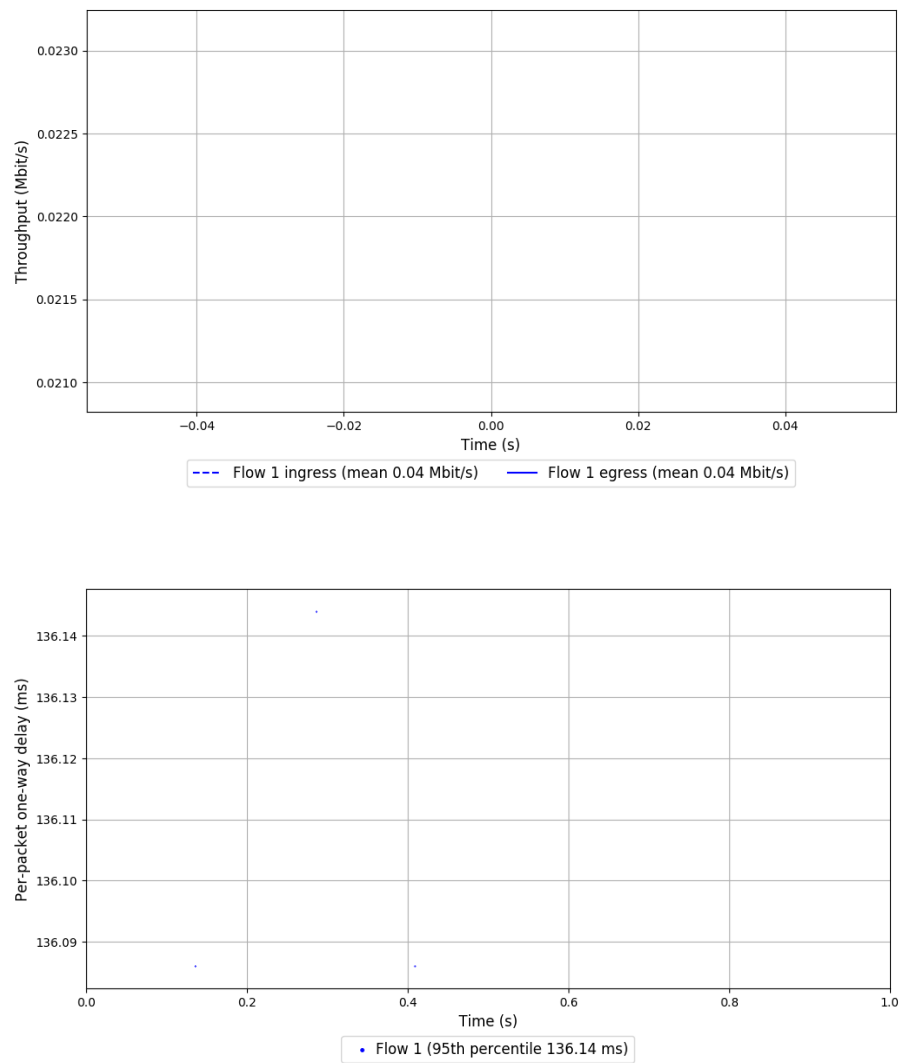


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-17 06:32:18

End at: 2017-08-17 06:32:48

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-17 06:43:39

End at: 2017-08-17 06:44:09

Below is generated by plot.py at 2017-08-17 09:20:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.40 Mbit/s

95th percentile per-packet one-way delay: 135.983 ms

Loss rate: 0.00%

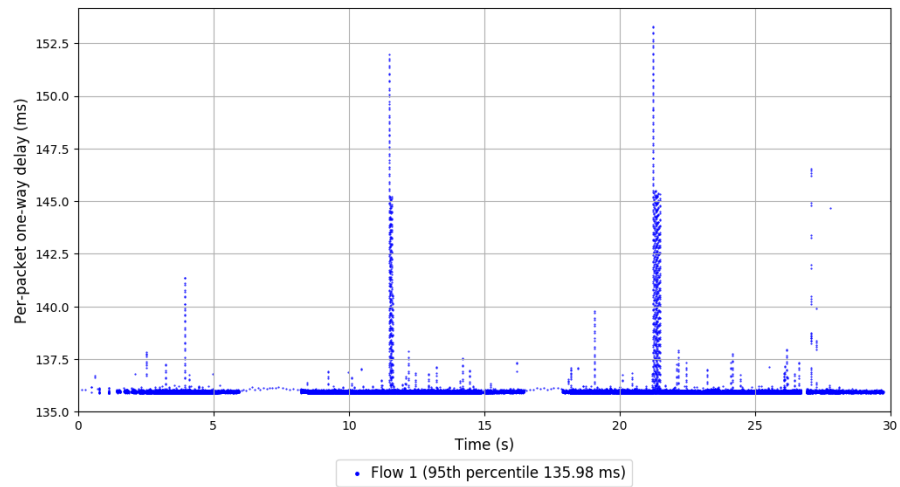
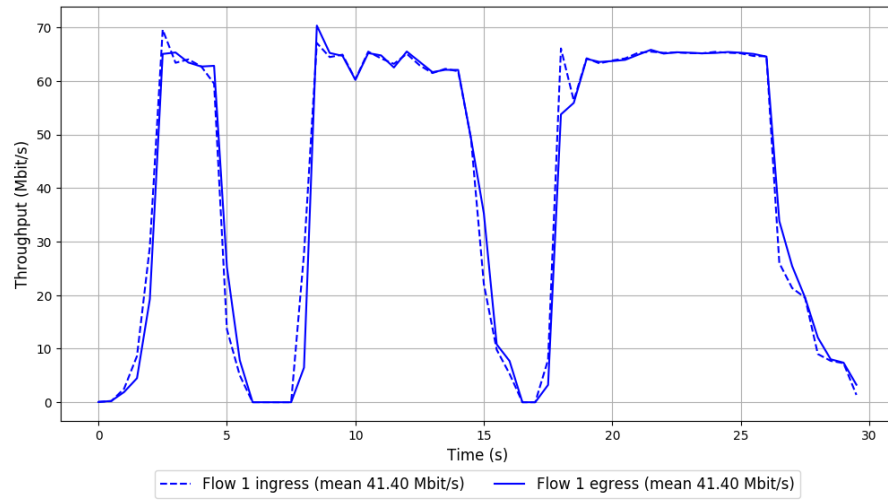
-- Flow 1:

Average throughput: 41.40 Mbit/s

95th percentile per-packet one-way delay: 135.983 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-17 06:54:54

End at: 2017-08-17 06:55:24

Below is generated by plot.py at 2017-08-17 09:20:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.58 Mbit/s

95th percentile per-packet one-way delay: 136.862 ms

Loss rate: 0.00%

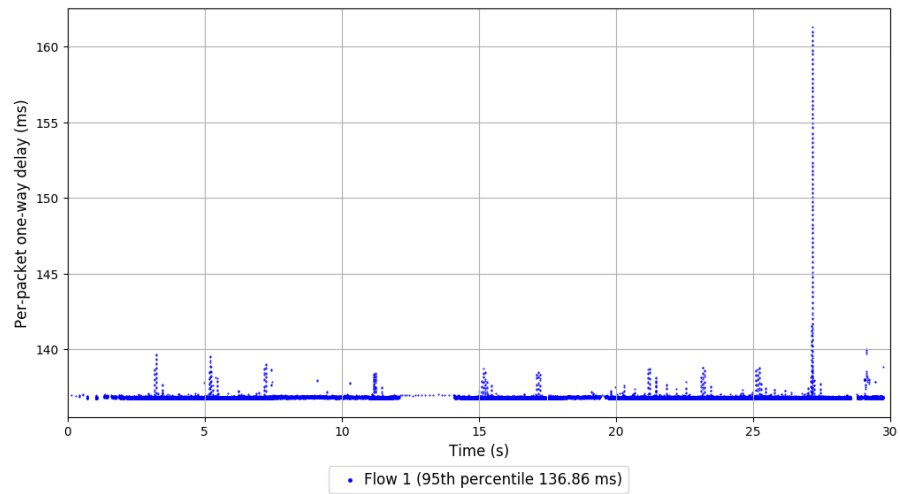
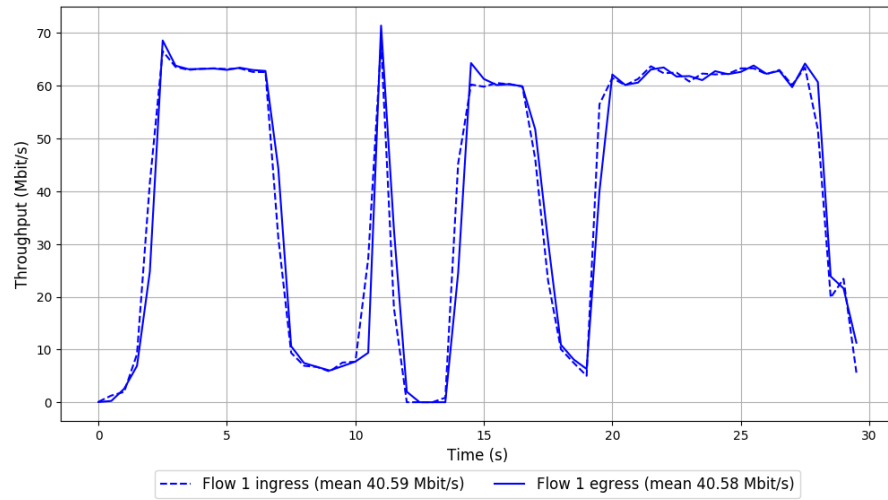
-- Flow 1:

Average throughput: 40.58 Mbit/s

95th percentile per-packet one-way delay: 136.862 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-17 07:06:16

End at: 2017-08-17 07:06:46

Below is generated by plot.py at 2017-08-17 09:20:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.25 Mbit/s

95th percentile per-packet one-way delay: 136.387 ms

Loss rate: 0.00%

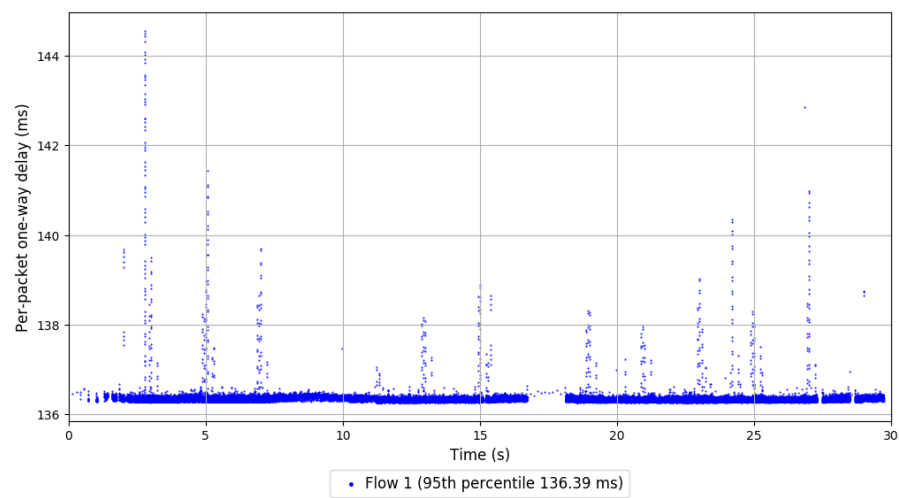
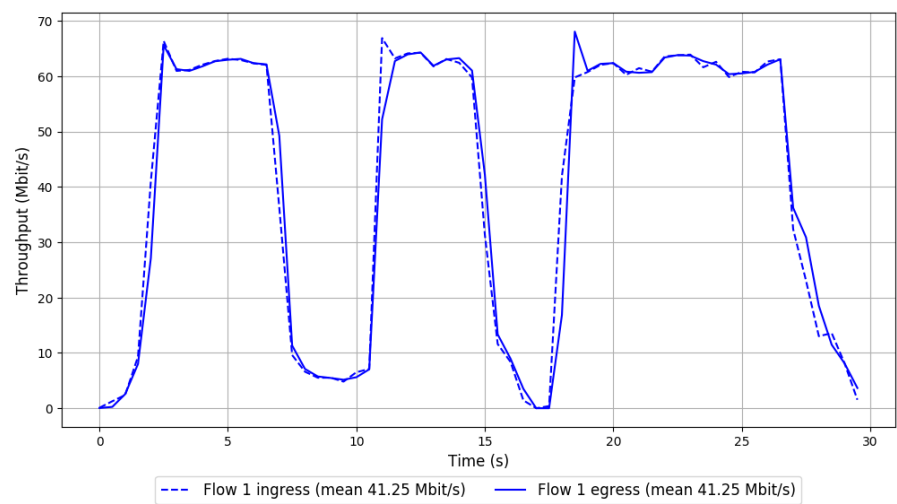
-- Flow 1:

Average throughput: 41.25 Mbit/s

95th percentile per-packet one-way delay: 136.387 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-17 07:17:43

End at: 2017-08-17 07:18:13

Below is generated by plot.py at 2017-08-17 09:20:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.25 Mbit/s

95th percentile per-packet one-way delay: 136.101 ms

Loss rate: 0.00%

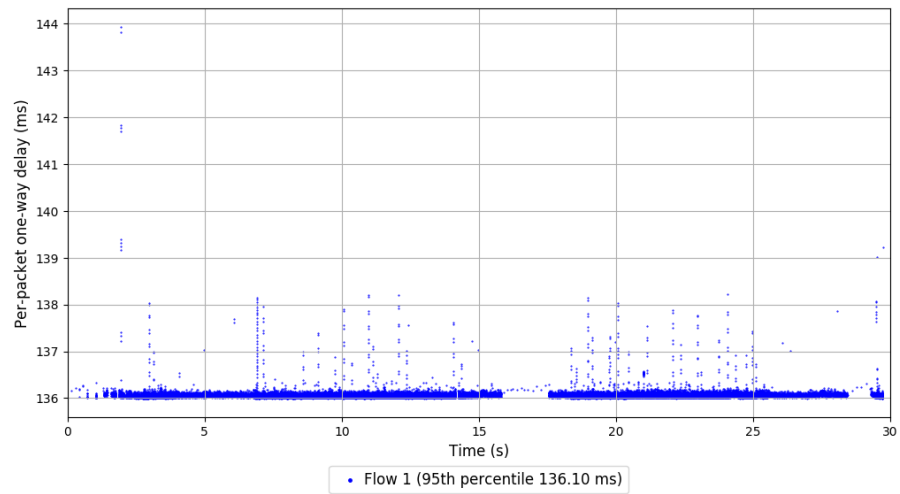
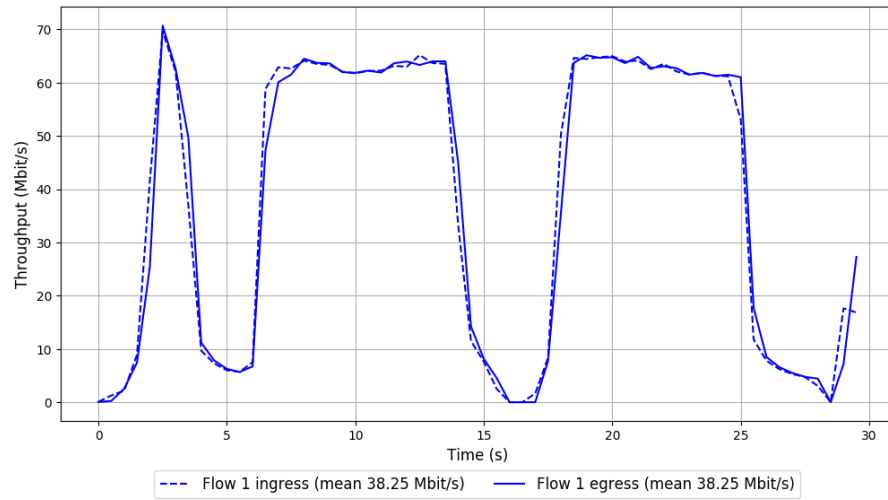
-- Flow 1:

Average throughput: 38.25 Mbit/s

95th percentile per-packet one-way delay: 136.101 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-17 07:29:33

End at: 2017-08-17 07:30:03

Below is generated by plot.py at 2017-08-17 09:20:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.18 Mbit/s

95th percentile per-packet one-way delay: 136.078 ms

Loss rate: 0.00%

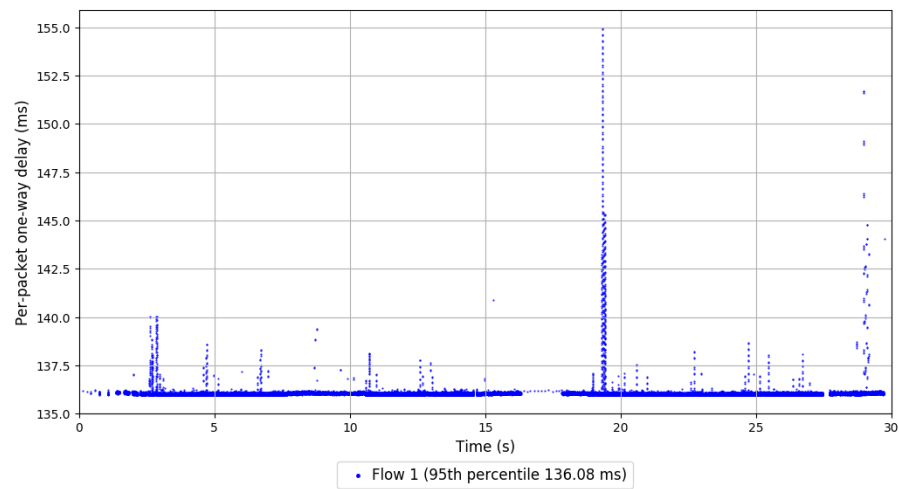
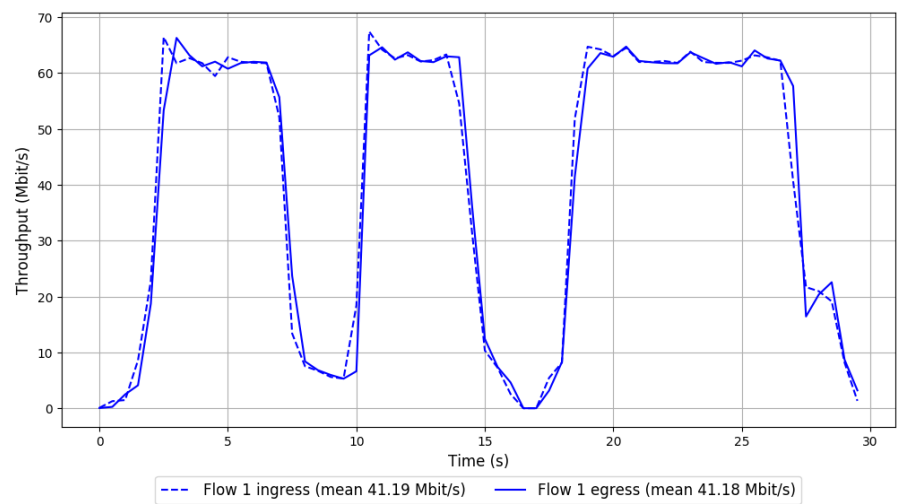
-- Flow 1:

Average throughput: 41.18 Mbit/s

95th percentile per-packet one-way delay: 136.078 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-17 07:41:07

End at: 2017-08-17 07:41:37

Below is generated by plot.py at 2017-08-17 09:20:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.19 Mbit/s

95th percentile per-packet one-way delay: 136.029 ms

Loss rate: 0.00%

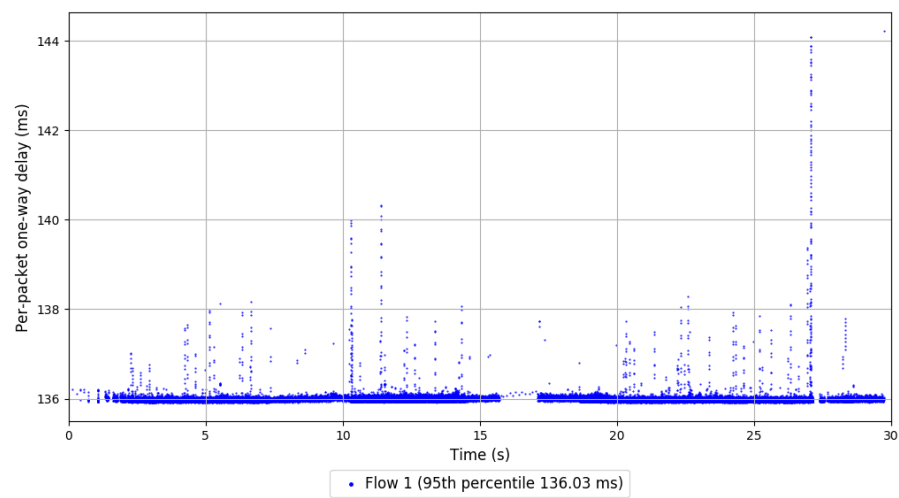
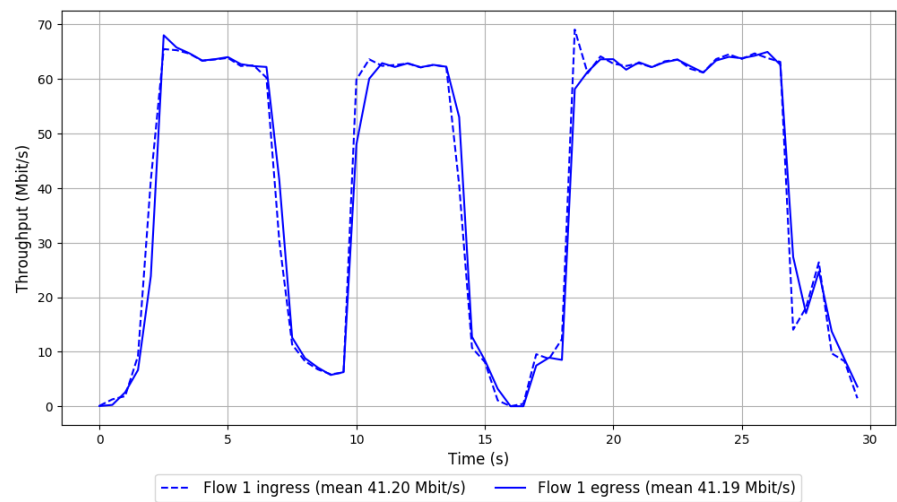
-- Flow 1:

Average throughput: 41.19 Mbit/s

95th percentile per-packet one-way delay: 136.029 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-17 07:52:47

End at: 2017-08-17 07:53:17

Below is generated by plot.py at 2017-08-17 09:20:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.11 Mbit/s

95th percentile per-packet one-way delay: 136.795 ms

Loss rate: 0.00%

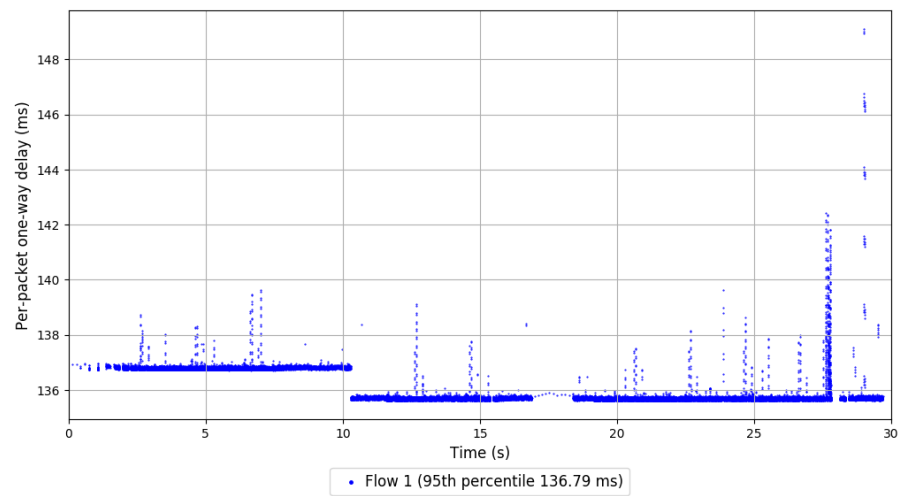
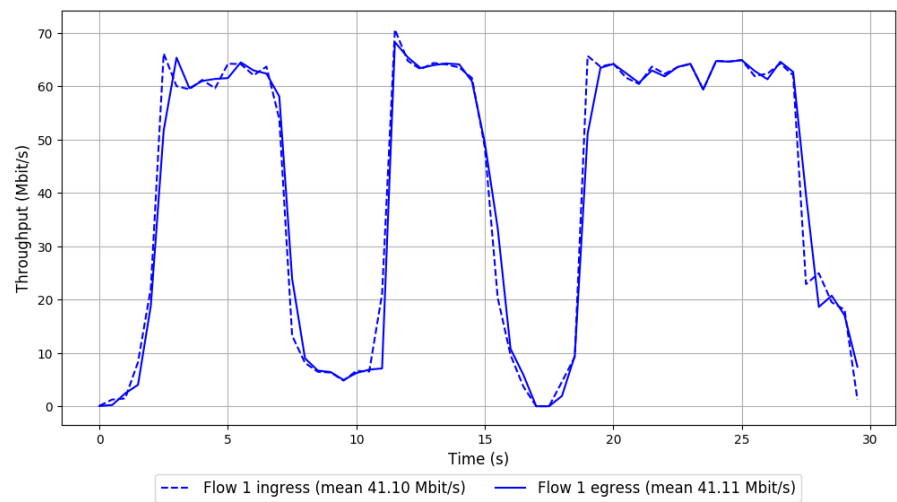
-- Flow 1:

Average throughput: 41.11 Mbit/s

95th percentile per-packet one-way delay: 136.795 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-17 08:04:29

End at: 2017-08-17 08:04:59

Below is generated by plot.py at 2017-08-17 09:20:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.25 Mbit/s

95th percentile per-packet one-way delay: 136.388 ms

Loss rate: 0.00%

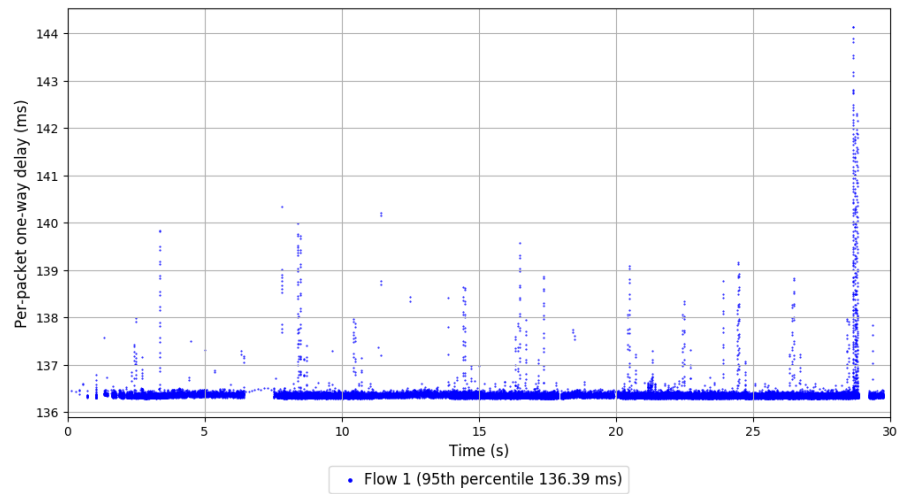
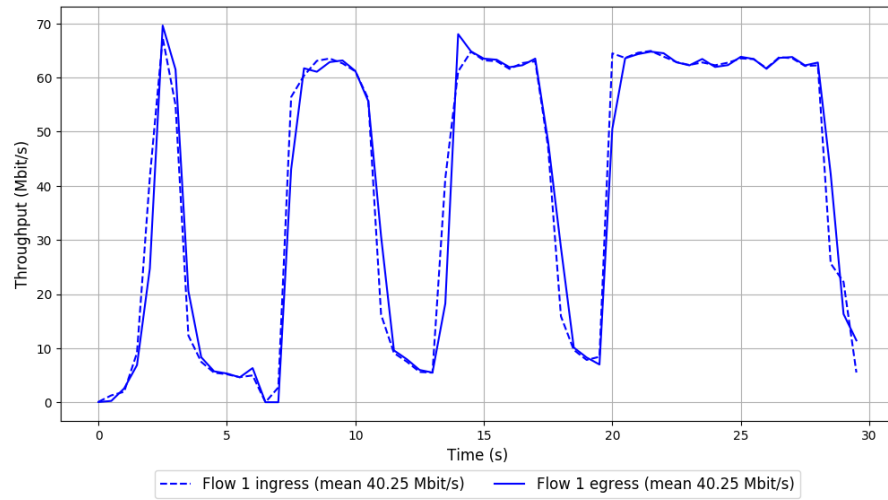
-- Flow 1:

Average throughput: 40.25 Mbit/s

95th percentile per-packet one-way delay: 136.388 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

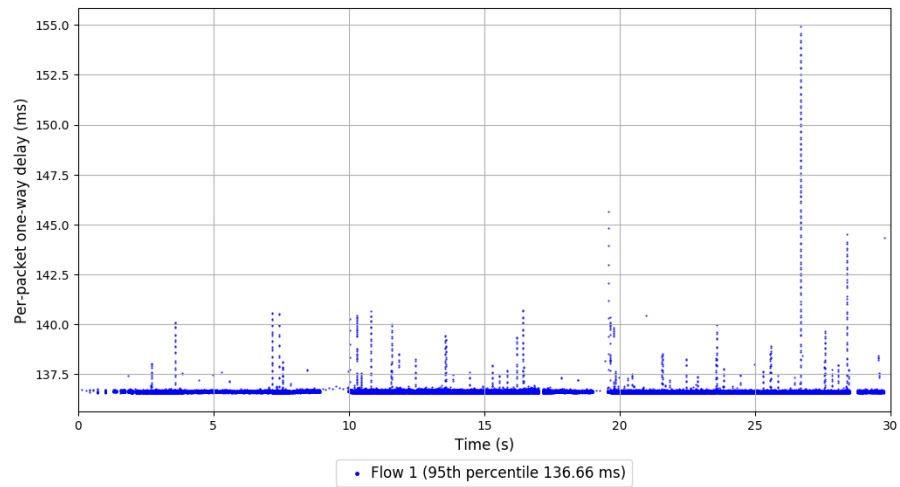
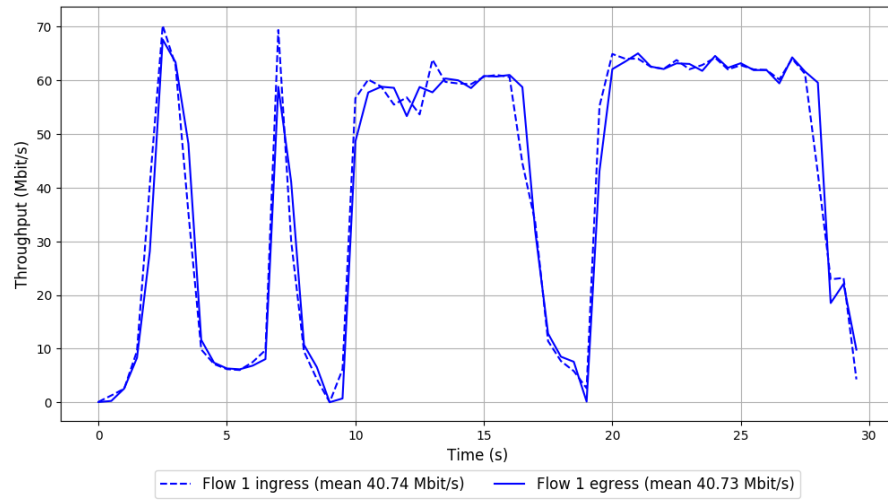


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-17 08:15:44
End at: 2017-08-17 08:16:14

# Below is generated by plot.py at 2017-08-17 09:20:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.73 Mbit/s
95th percentile per-packet one-way delay: 136.662 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.73 Mbit/s
95th percentile per-packet one-way delay: 136.662 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

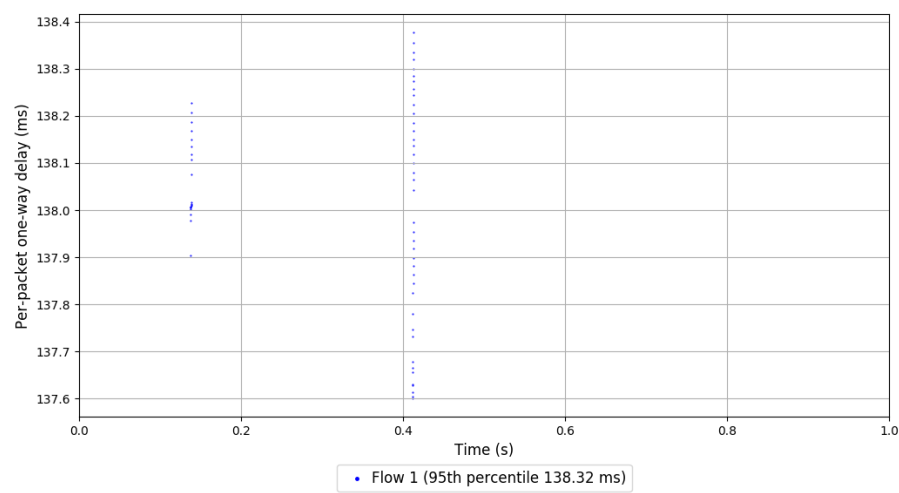
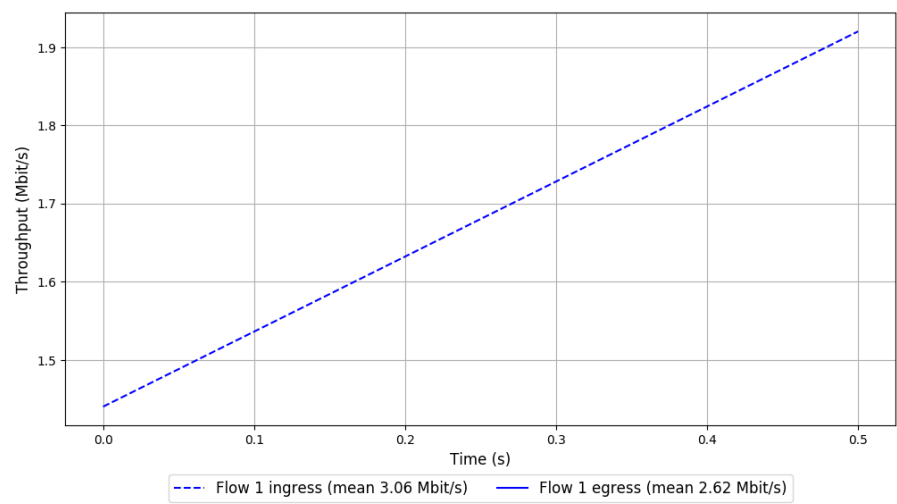


Run 1: Statistics of Saturator

Start at: 2017-08-17 06:27:51

End at: 2017-08-17 06:28:22

Run 1: Report of Saturator — Data Link

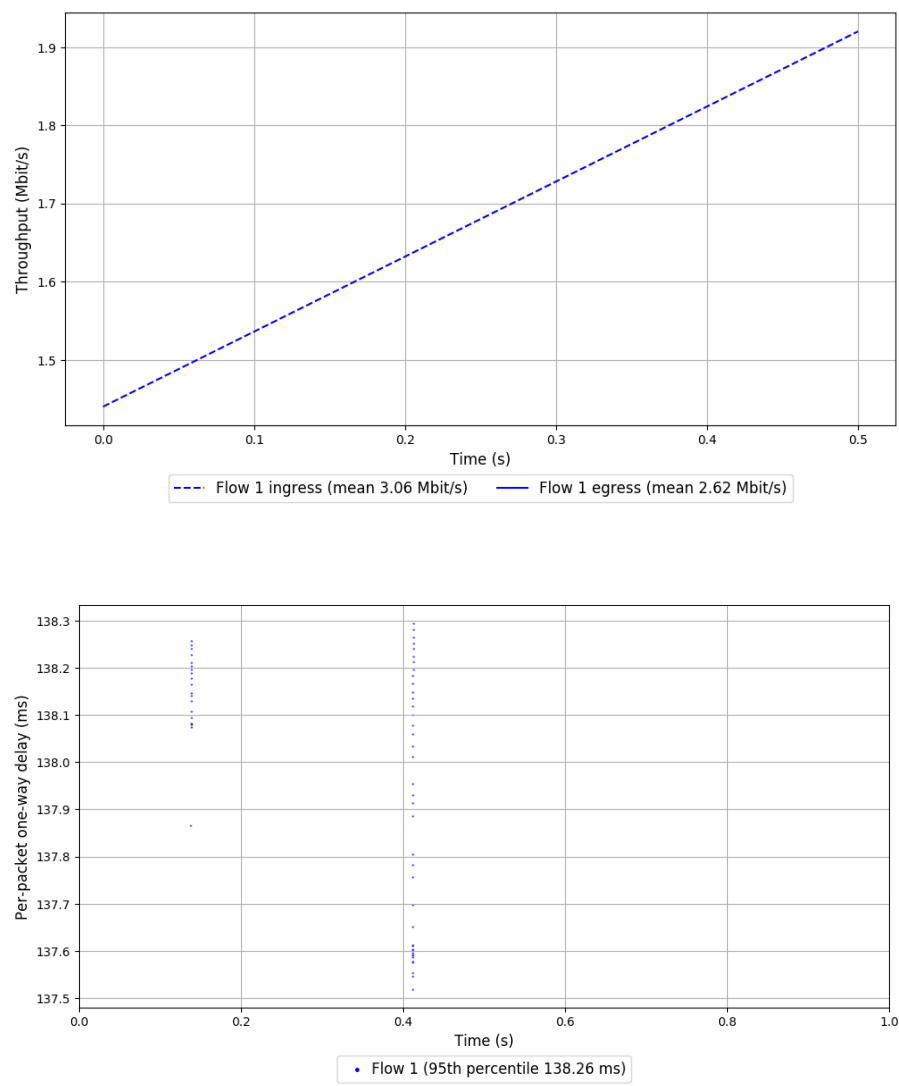


Run 2: Statistics of Saturator

Start at: 2017-08-17 06:39:17

End at: 2017-08-17 06:39:47

Run 2: Report of Saturator — Data Link



Run 3: Statistics of Saturator

Start at: 2017-08-17 06:50:31

End at: 2017-08-17 06:51:01

Below is generated by plot.py at 2017-08-17 09:20:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.34 Mbit/s

95th percentile per-packet one-way delay: 138.319 ms

Loss rate: 1.06%

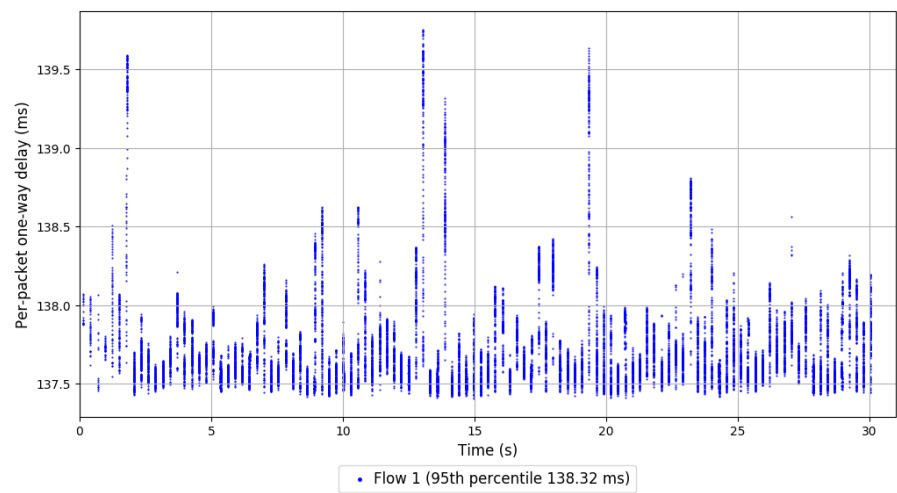
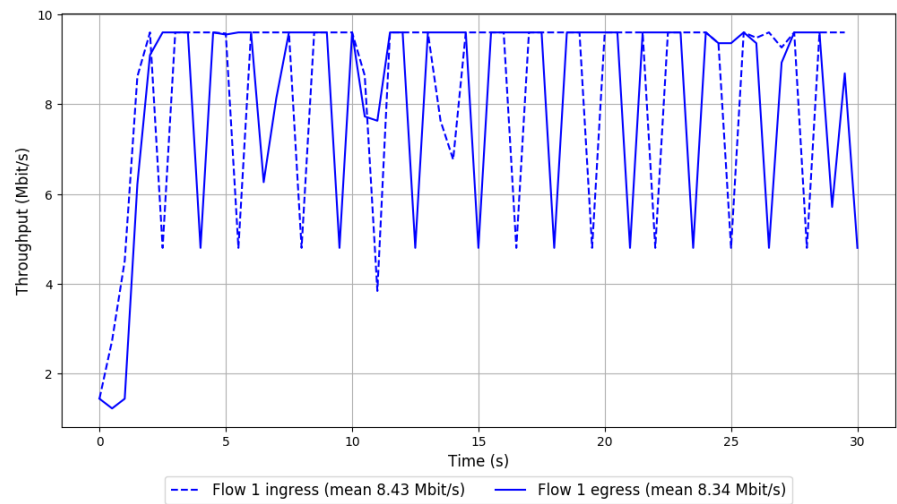
-- Flow 1:

Average throughput: 8.34 Mbit/s

95th percentile per-packet one-way delay: 138.319 ms

Loss rate: 1.06%

Run 3: Report of Saturator — Data Link

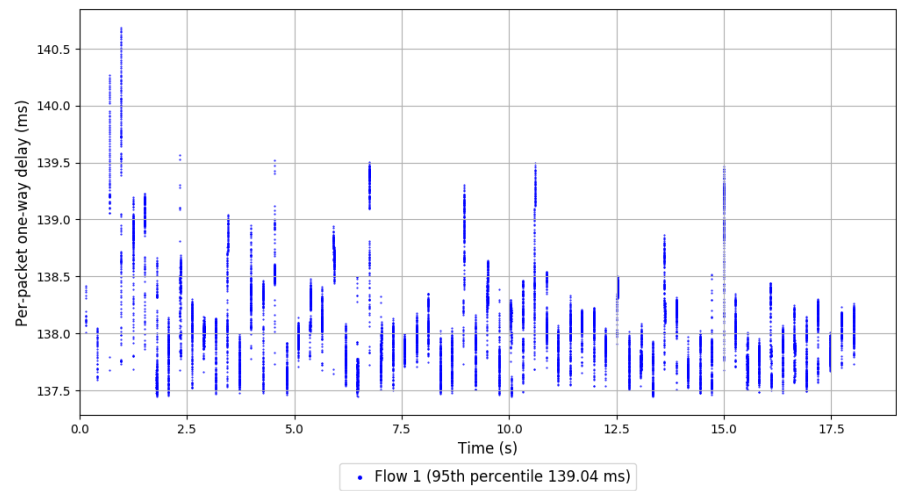
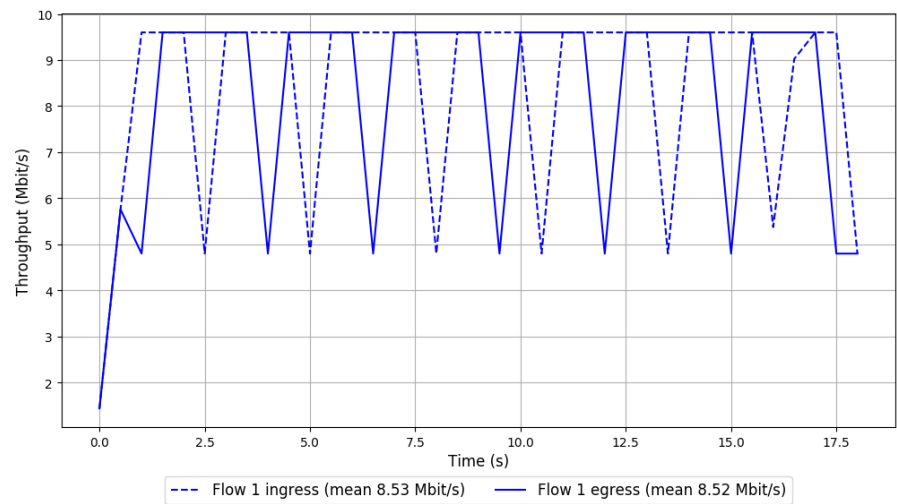


Run 4: Statistics of Saturator

Start at: 2017-08-17 07:01:45

End at: 2017-08-17 07:02:15

Run 4: Report of Saturator — Data Link

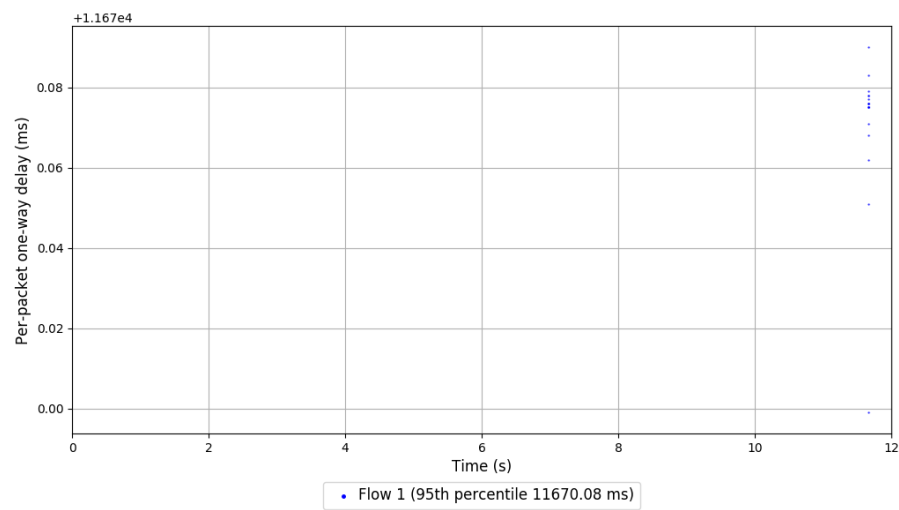
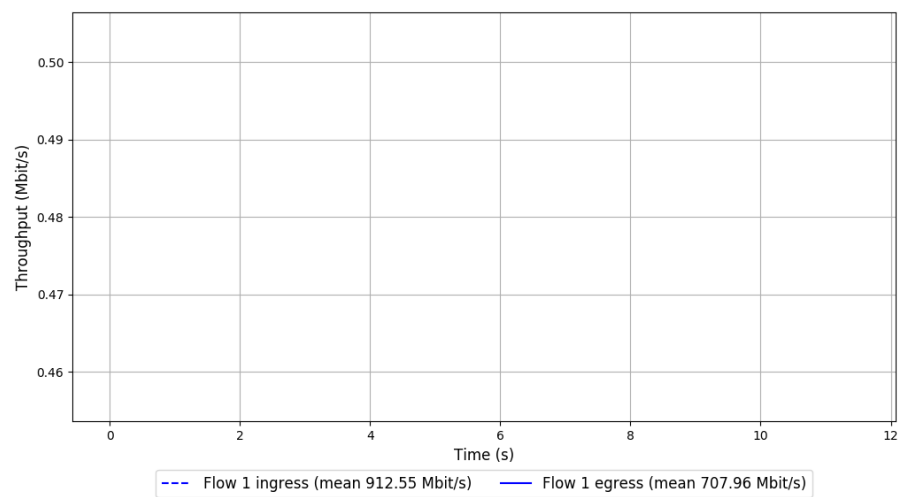


Run 5: Statistics of Saturator

Start at: 2017-08-17 07:13:20

End at: 2017-08-17 07:13:50

Run 5: Report of Saturator — Data Link

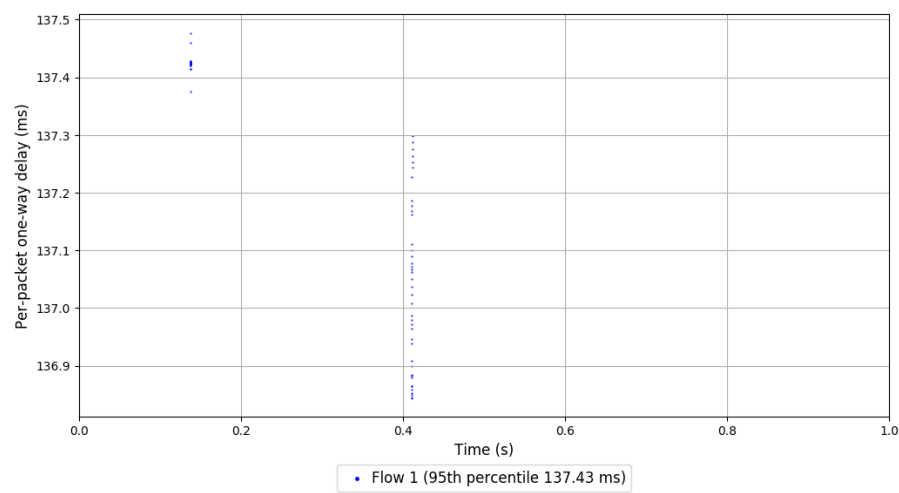
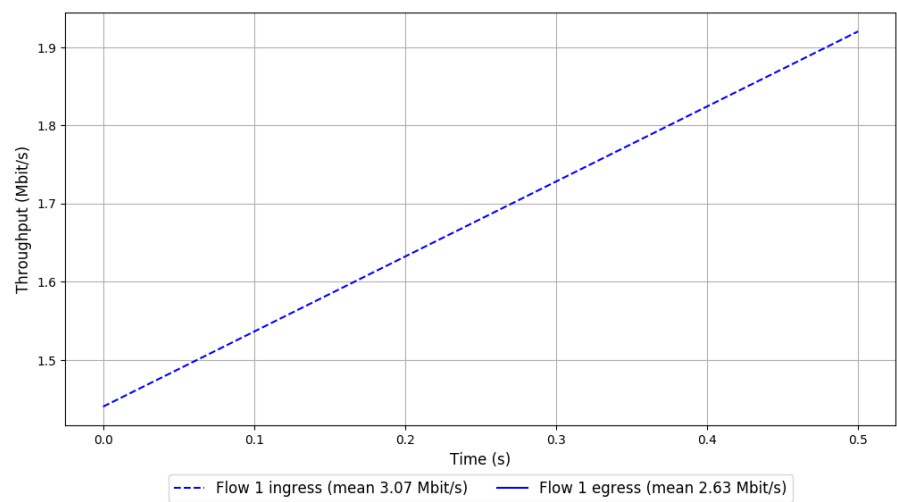


Run 6: Statistics of Saturator

Start at: 2017-08-17 07:25:09

End at: 2017-08-17 07:25:40

Run 6: Report of Saturator — Data Link

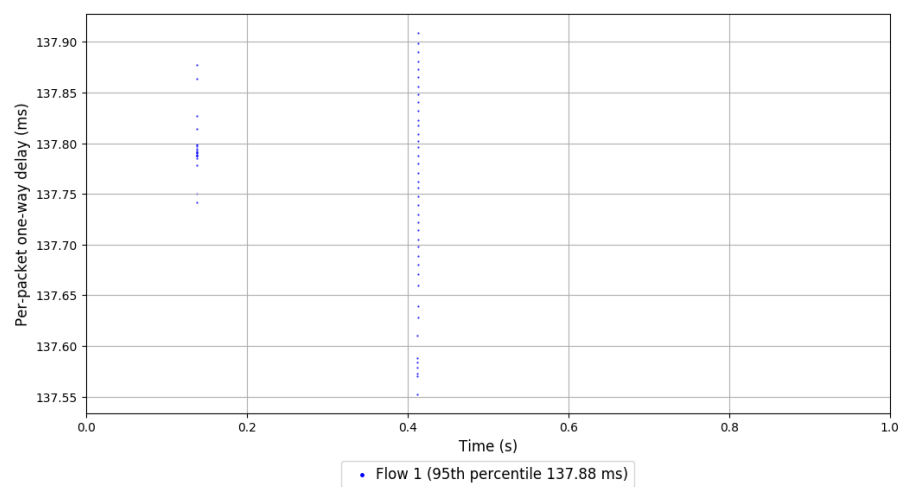
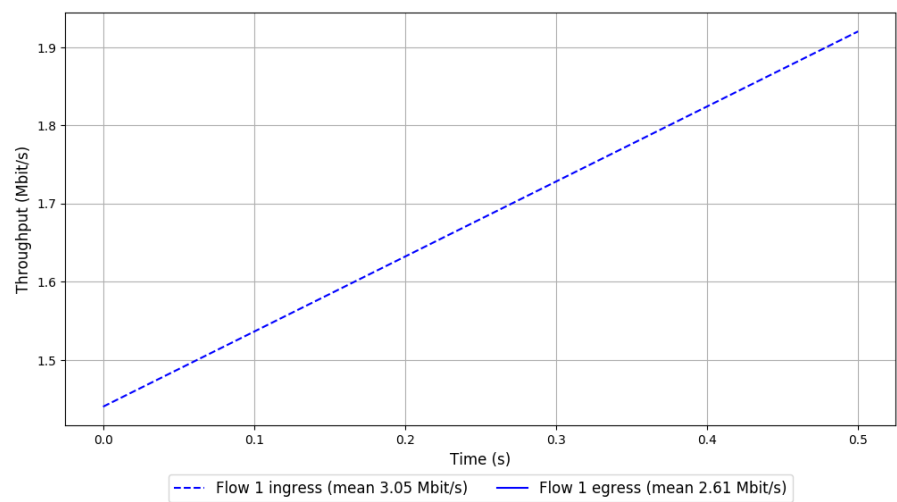


Run 7: Statistics of Saturator

Start at: 2017-08-17 07:36:45

End at: 2017-08-17 07:37:15

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-17 07:48:25

End at: 2017-08-17 07:48:55

Below is generated by plot.py at 2017-08-17 09:20:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.60 Mbit/s

95th percentile per-packet one-way delay: 138.537 ms

Loss rate: 0.09%

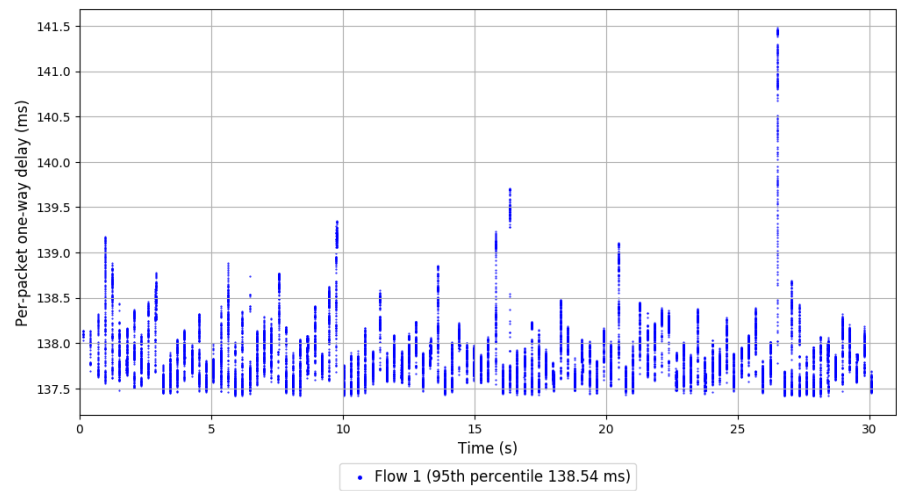
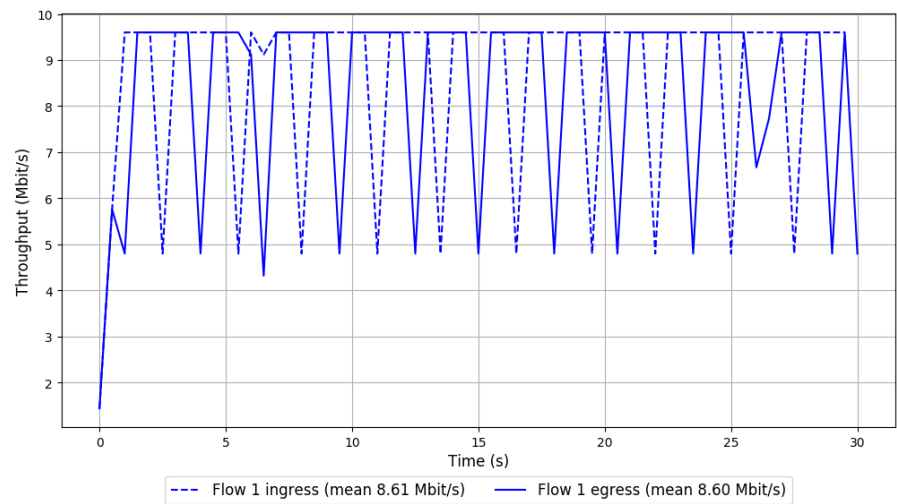
-- Flow 1:

Average throughput: 8.60 Mbit/s

95th percentile per-packet one-way delay: 138.537 ms

Loss rate: 0.09%

Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

Start at: 2017-08-17 08:00:05

End at: 2017-08-17 08:00:35

Below is generated by plot.py at 2017-08-17 09:20:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.64 Mbit/s

95th percentile per-packet one-way delay: 137.361 ms

Loss rate: 0.07%

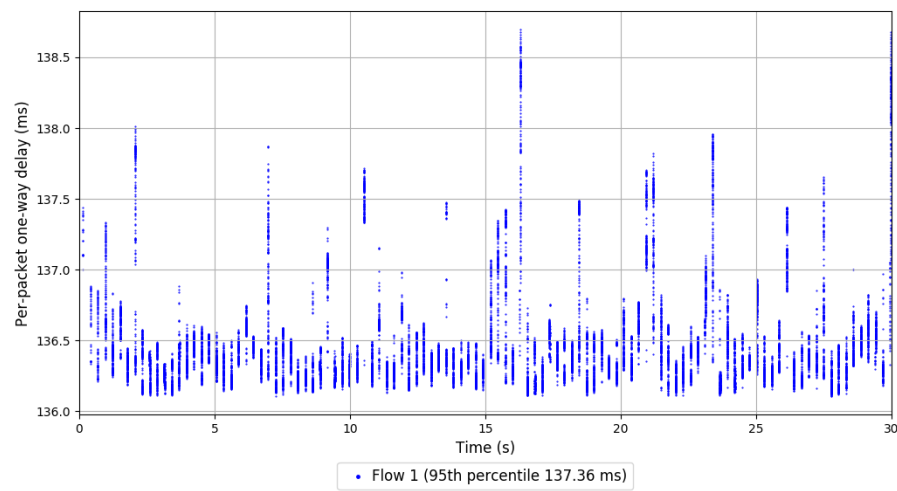
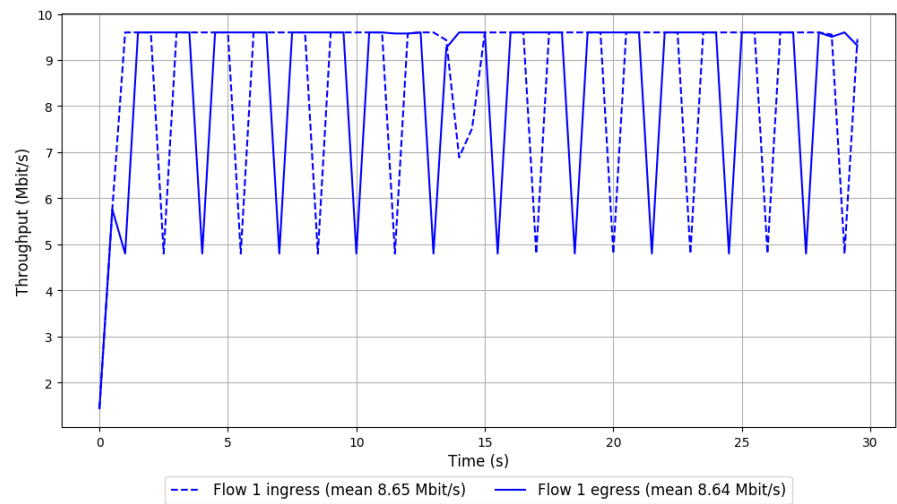
-- Flow 1:

Average throughput: 8.64 Mbit/s

95th percentile per-packet one-way delay: 137.361 ms

Loss rate: 0.07%

Run 9: Report of Saturator — Data Link

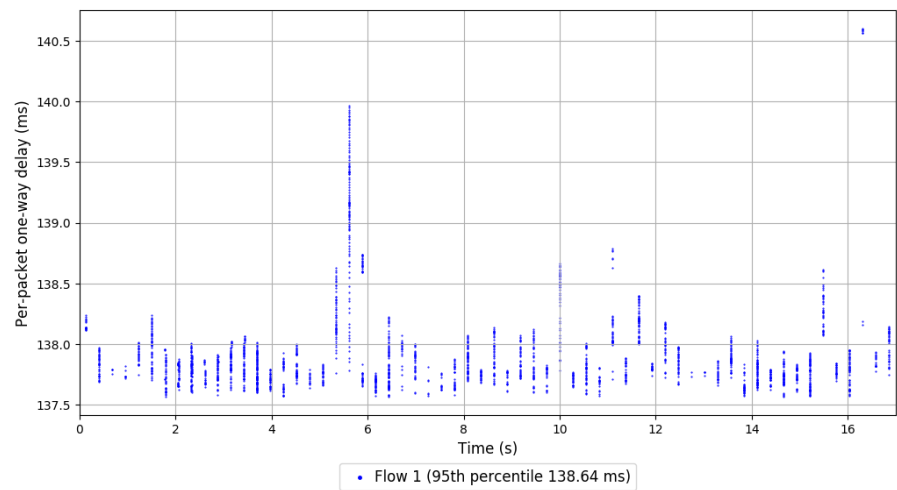
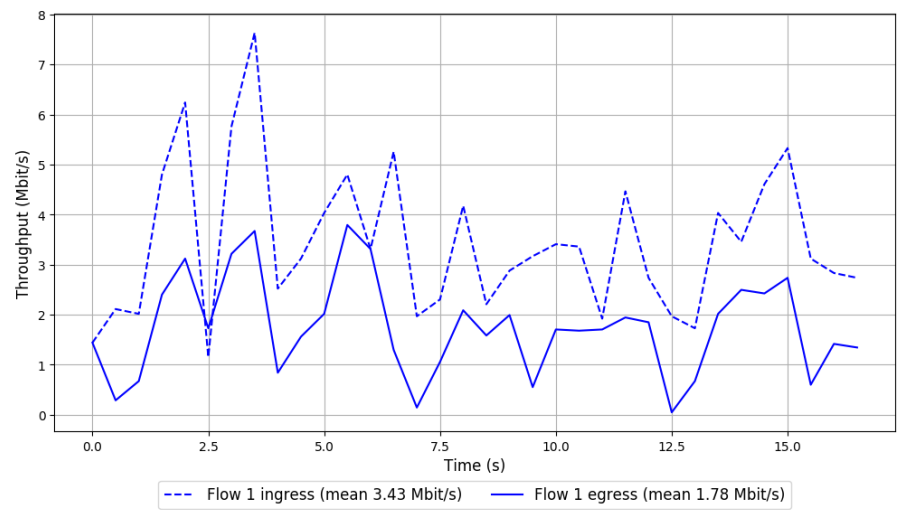


Run 10: Statistics of Saturator

Start at: 2017-08-17 08:11:23

End at: 2017-08-17 08:11:53

Run 10: Report of Saturator — Data Link

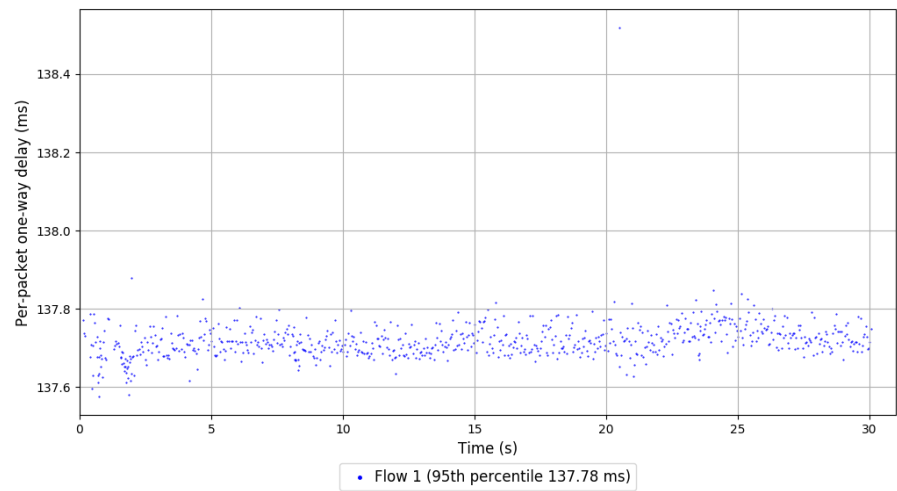
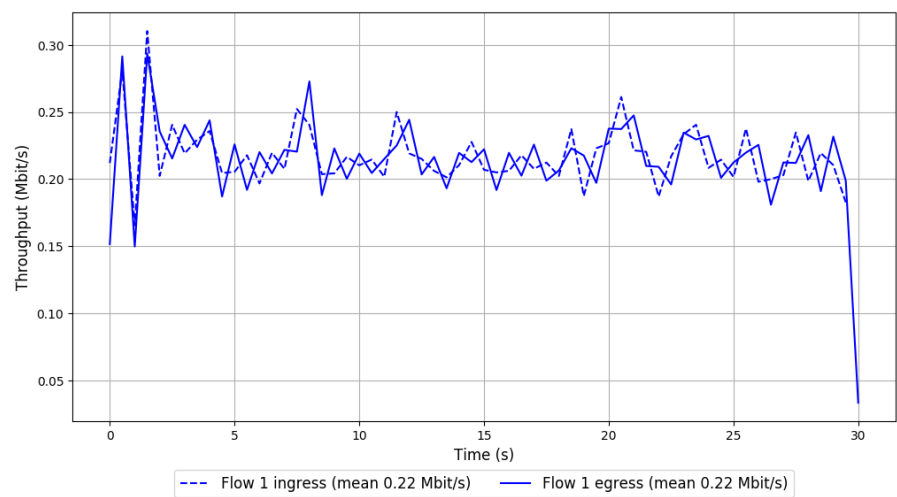


```
Run 1: Statistics of SCReAM

Start at: 2017-08-17 06:35:30
End at: 2017-08-17 06:36:00

# Below is generated by plot.py at 2017-08-17 09:20:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.781 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.781 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

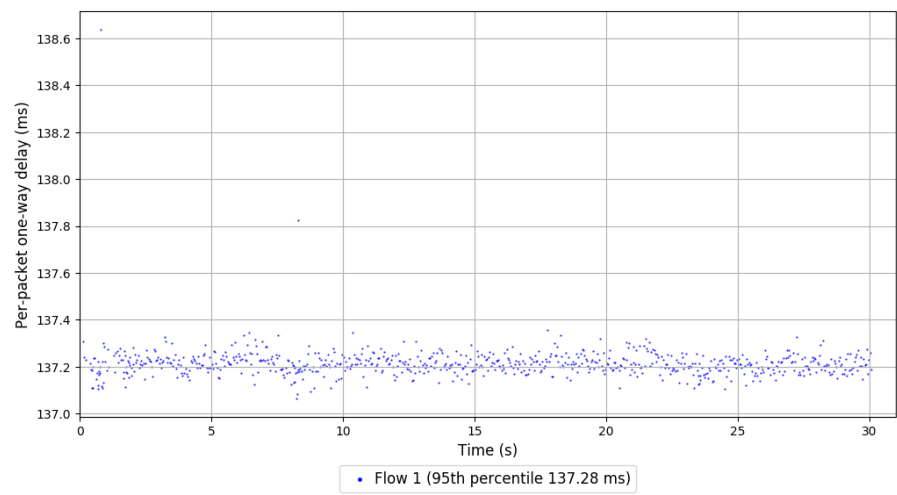
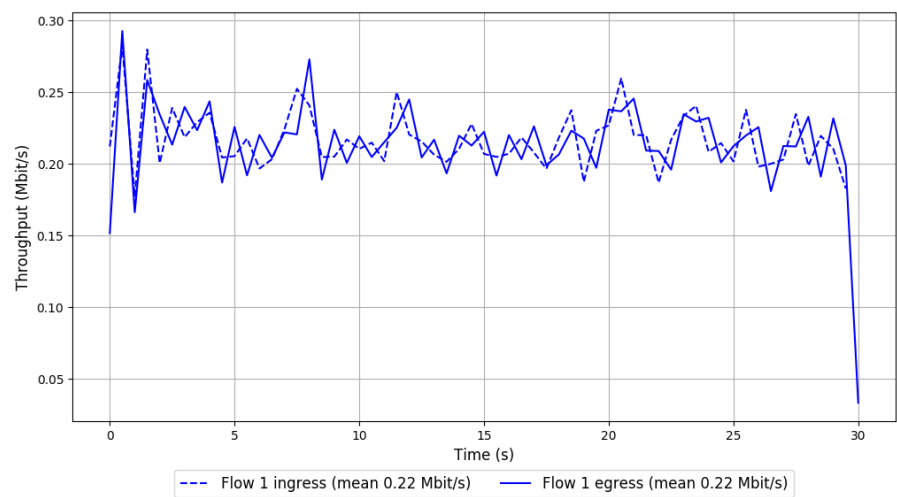


```
Run 2: Statistics of SCReAM

Start at: 2017-08-17 06:46:46
End at: 2017-08-17 06:47:16

# Below is generated by plot.py at 2017-08-17 09:20:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.285 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.285 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-17 06:57:58

End at: 2017-08-17 06:58:28

Below is generated by plot.py at 2017-08-17 09:20:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.519 ms

Loss rate: 0.00%

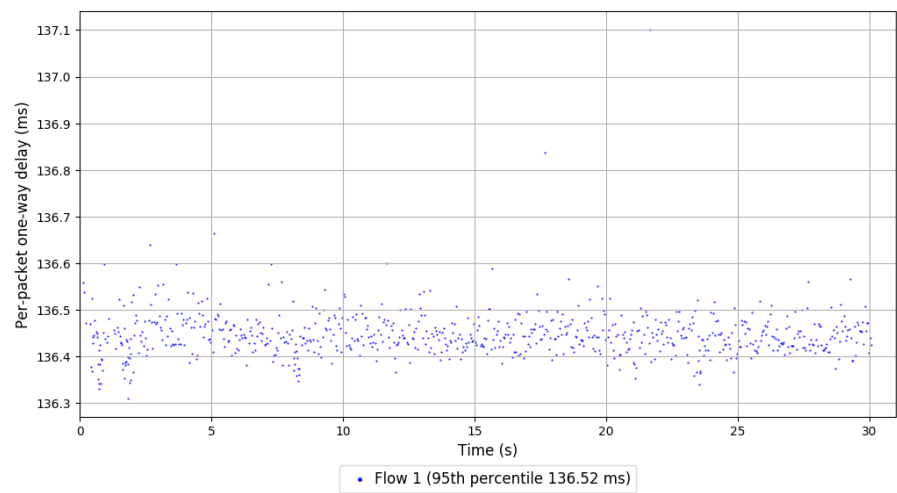
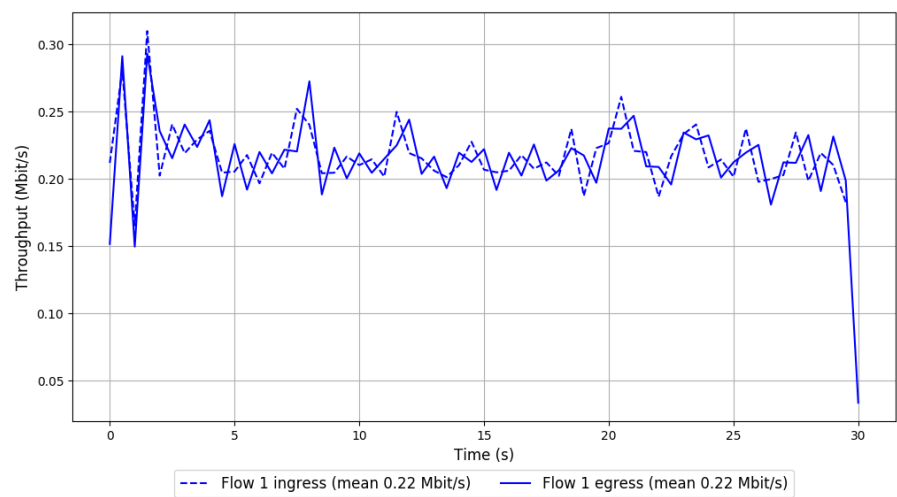
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.519 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-17 07:09:48

End at: 2017-08-17 07:10:18

Below is generated by plot.py at 2017-08-17 09:20:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.425 ms

Loss rate: 0.00%

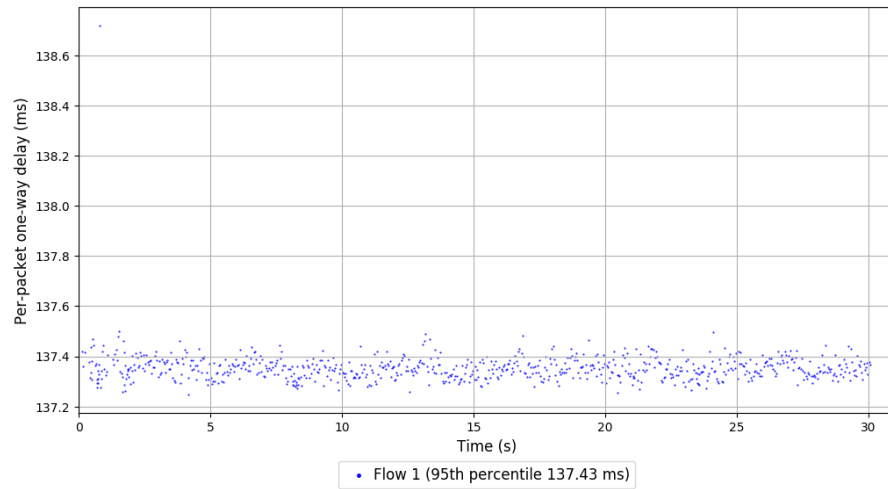
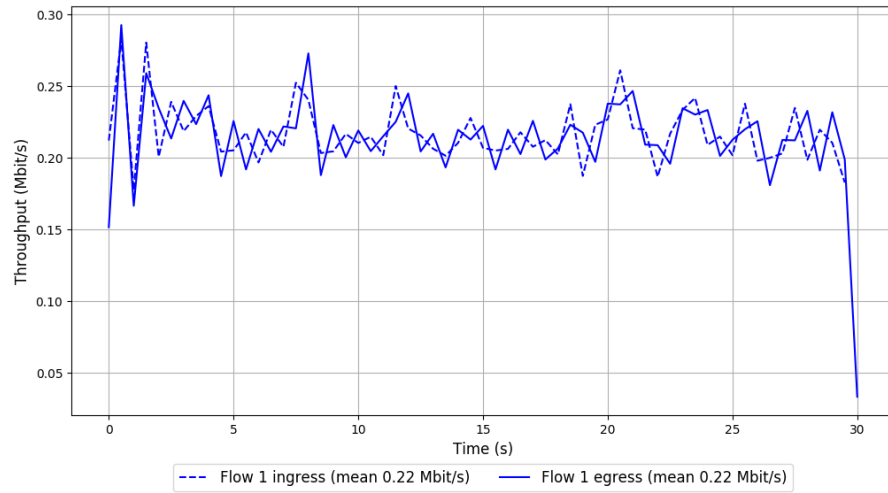
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.425 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

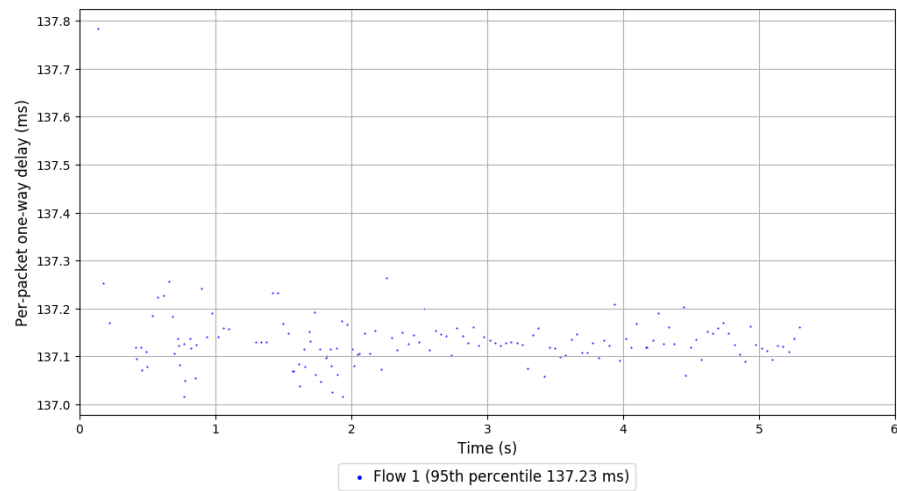
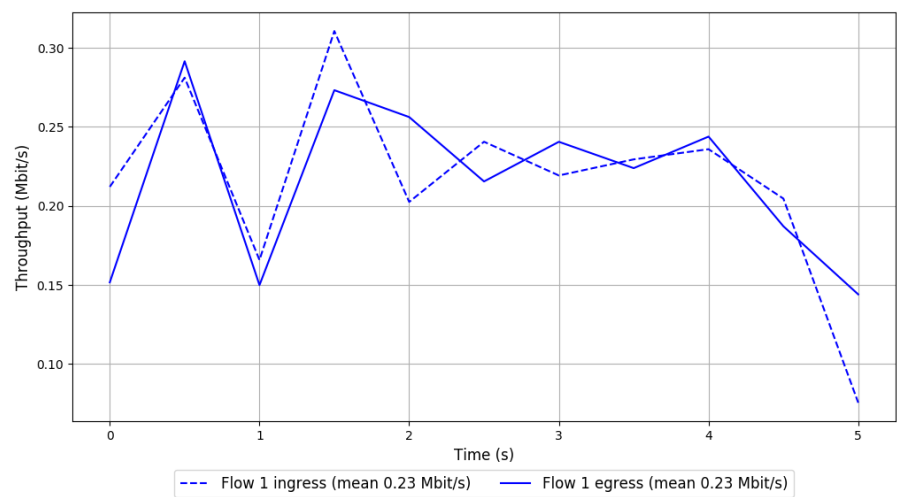


Run 5: Statistics of SReAM

Start at: 2017-08-17 07:21:08

End at: 2017-08-17 07:21:38

Run 5: Report of SReAM — Data Link

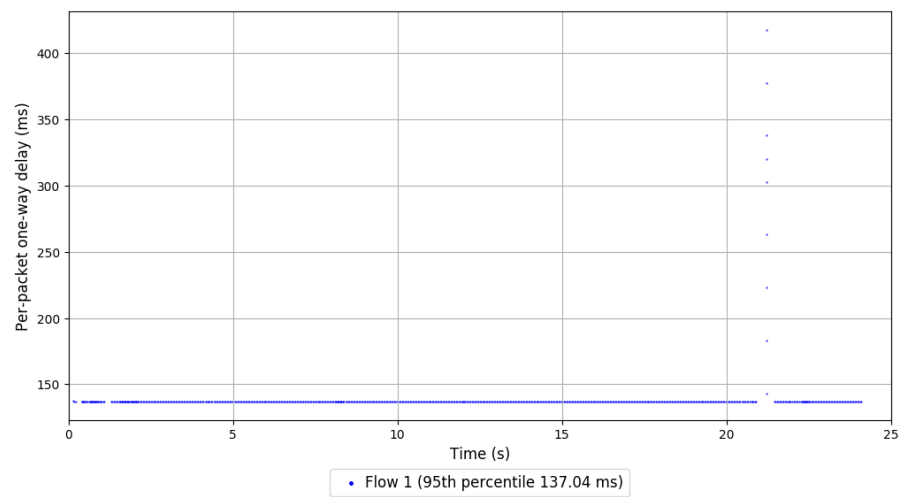
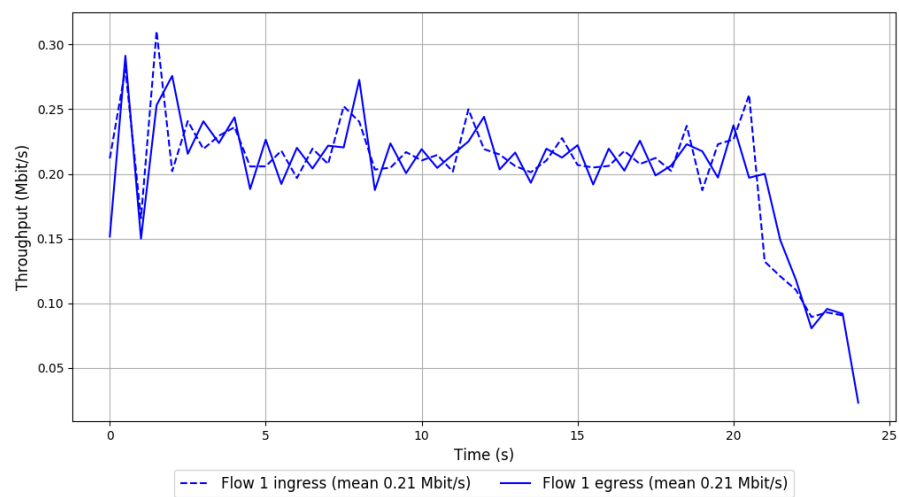


Run 6: Statistics of SReAM

Start at: 2017-08-17 07:33:01

End at: 2017-08-17 07:33:31

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-17 07:44:25

End at: 2017-08-17 07:44:55

Below is generated by plot.py at 2017-08-17 09:20:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.574 ms

Loss rate: 0.00%

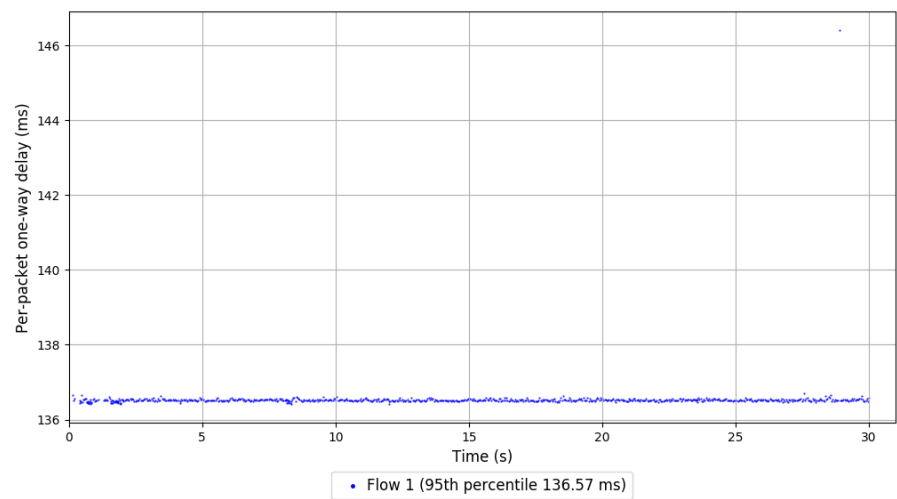
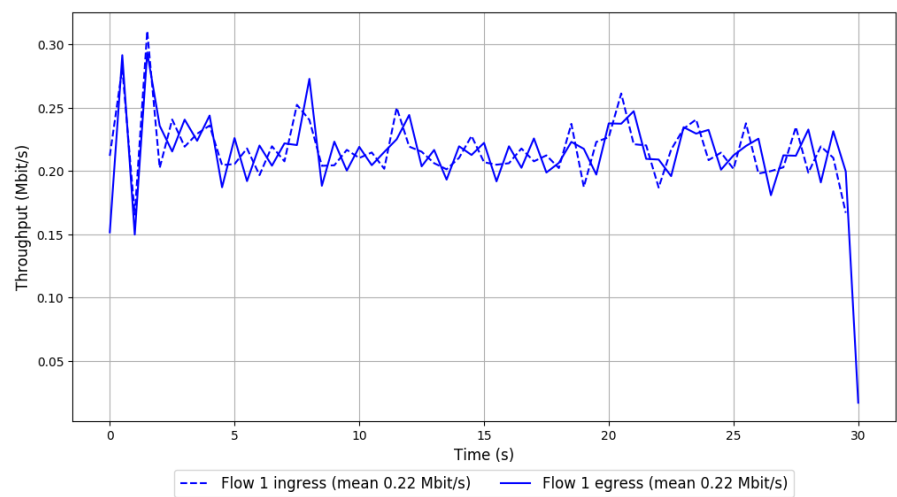
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.574 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-17 07:56:19

End at: 2017-08-17 07:56:49

Below is generated by plot.py at 2017-08-17 09:20:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.403 ms

Loss rate: 0.00%

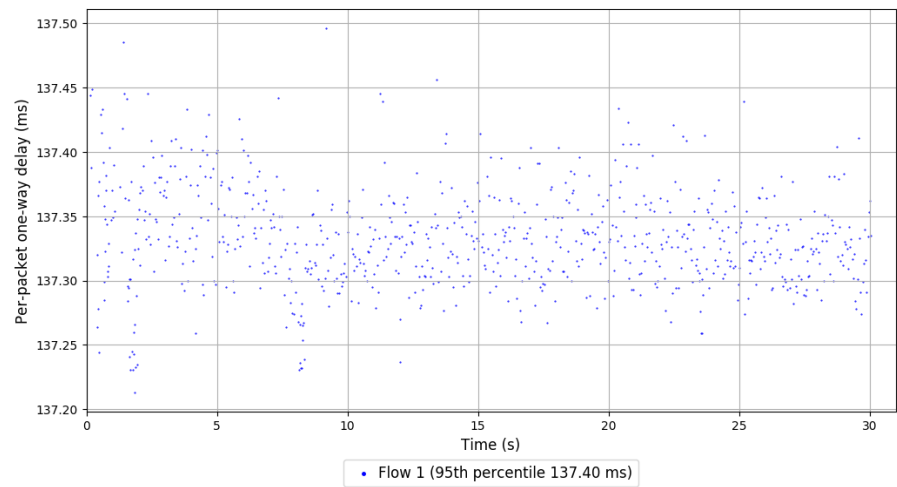
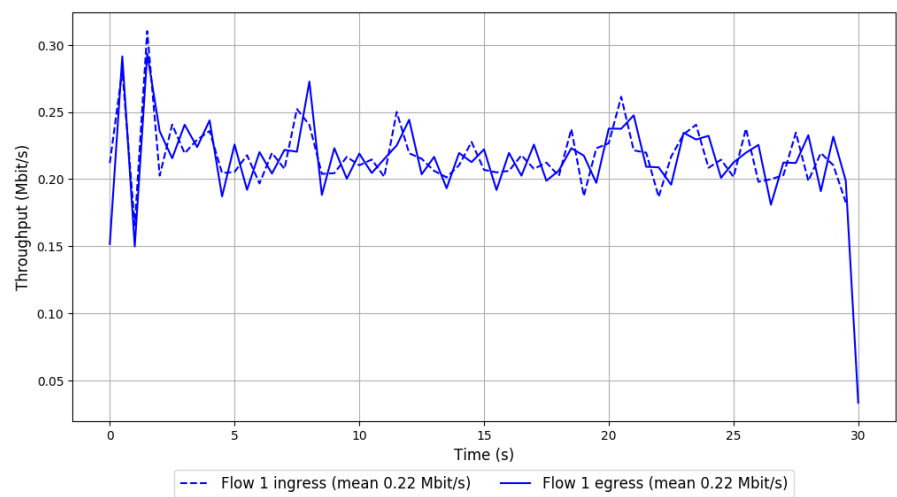
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.403 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-17 08:07:36

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

Below is generated by plot.py at 2017-08-17 09:20:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.765 ms

Loss rate: 0.00%

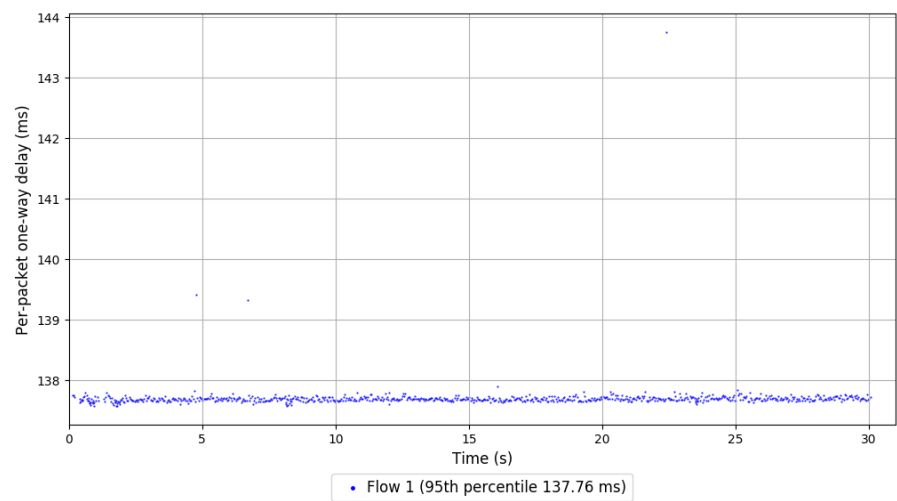
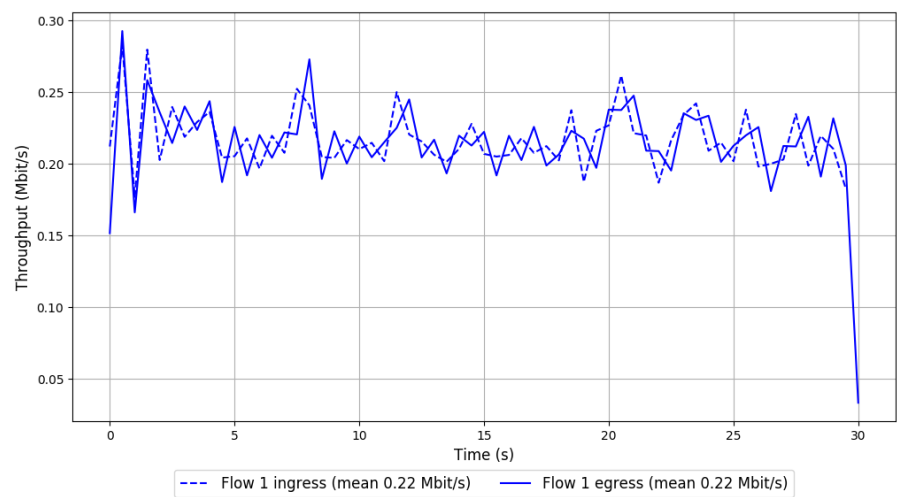
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.765 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

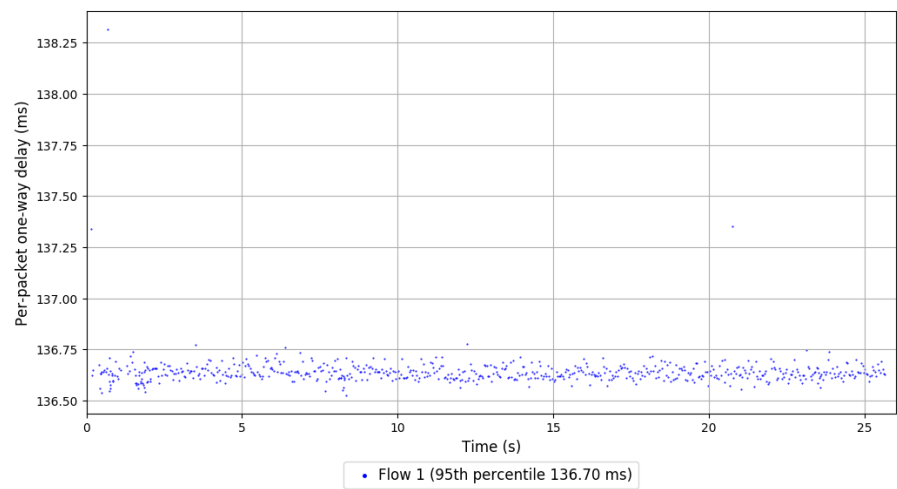
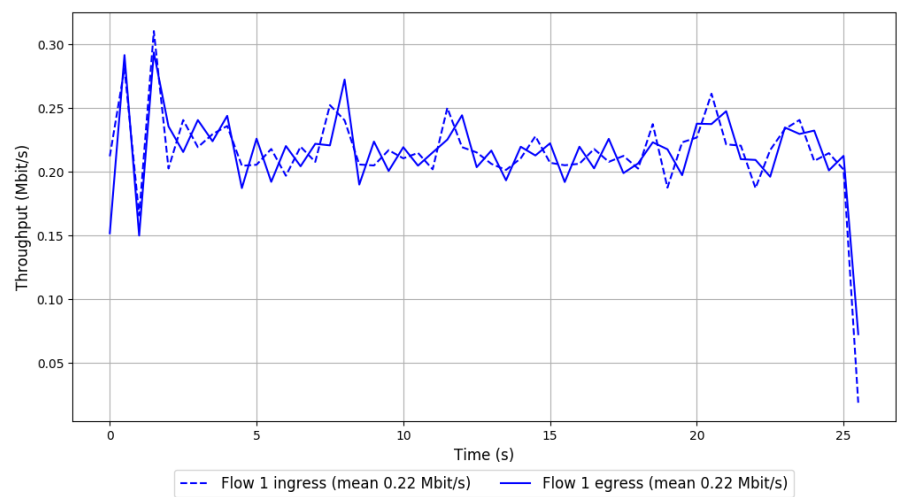


```
Run 10: Statistics of SReAM

Start at: 2017-08-17 08:19:26
End at: 2017-08-17 08:19:56

# Below is generated by plot.py at 2017-08-17 09:20:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.701 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.701 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-08-17 06:26:27

End at: 2017-08-17 06:26:57

Below is generated by plot.py at 2017-08-17 09:20:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 137.796 ms

Loss rate: 0.30%

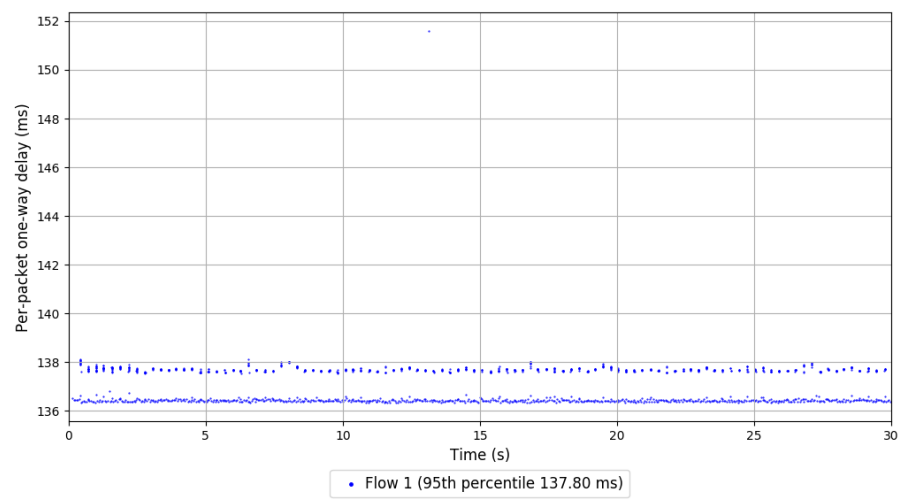
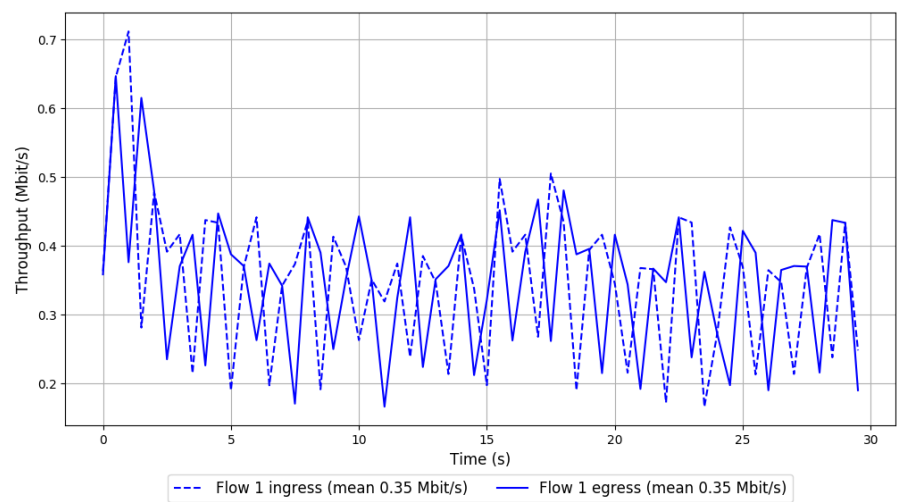
-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 137.796 ms

Loss rate: 0.30%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-17 06:37:51

End at: 2017-08-17 06:38:21

Below is generated by plot.py at 2017-08-17 09:20:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 137.647 ms

Loss rate: 0.00%

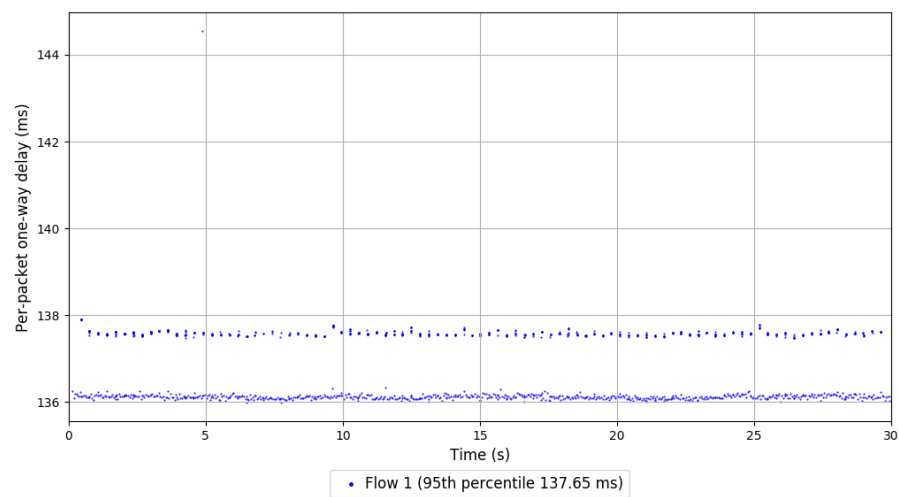
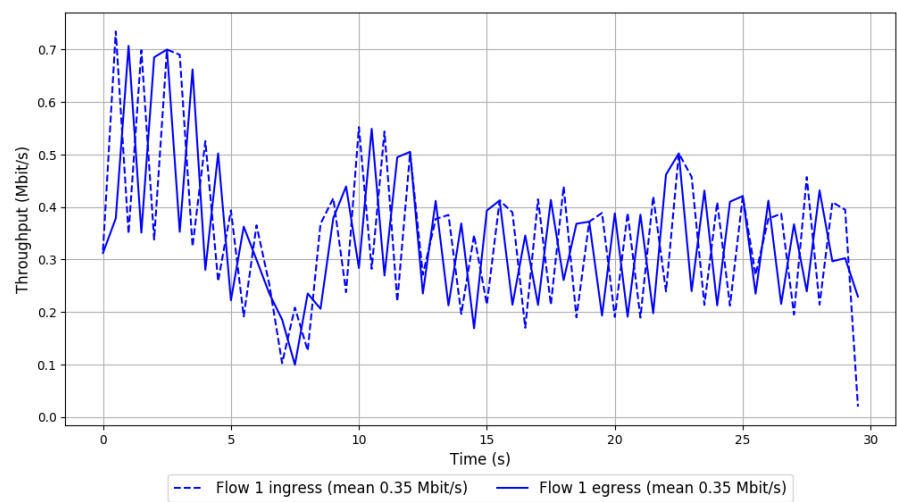
-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 137.647 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-17 06:49:05

End at: 2017-08-17 06:49:35

Below is generated by plot.py at 2017-08-17 09:20:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 137.964 ms

Loss rate: 0.00%

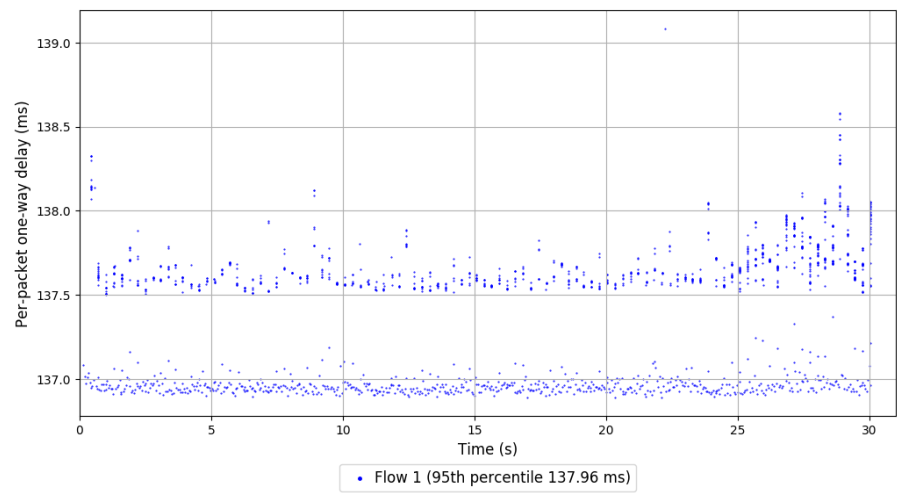
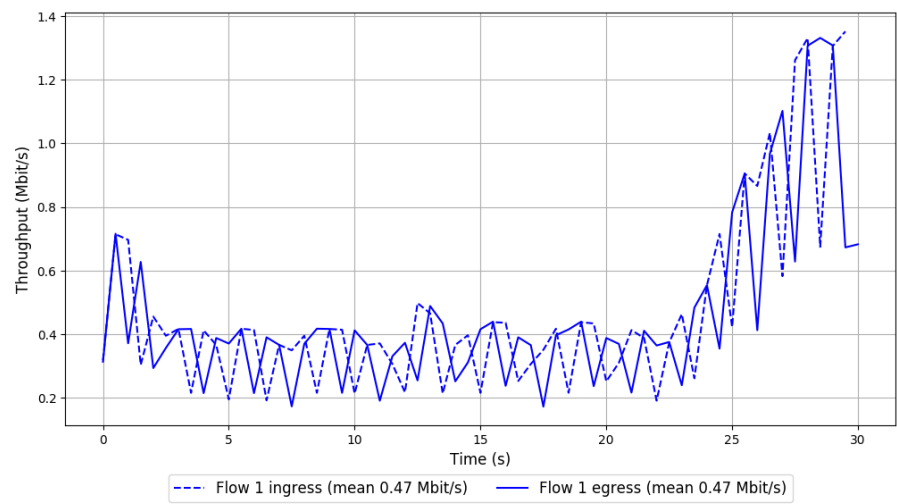
-- Flow 1:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 137.964 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-17 07:00:20

End at: 2017-08-17 07:00:50

Below is generated by plot.py at 2017-08-17 09:21:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.771 ms

Loss rate: 0.00%

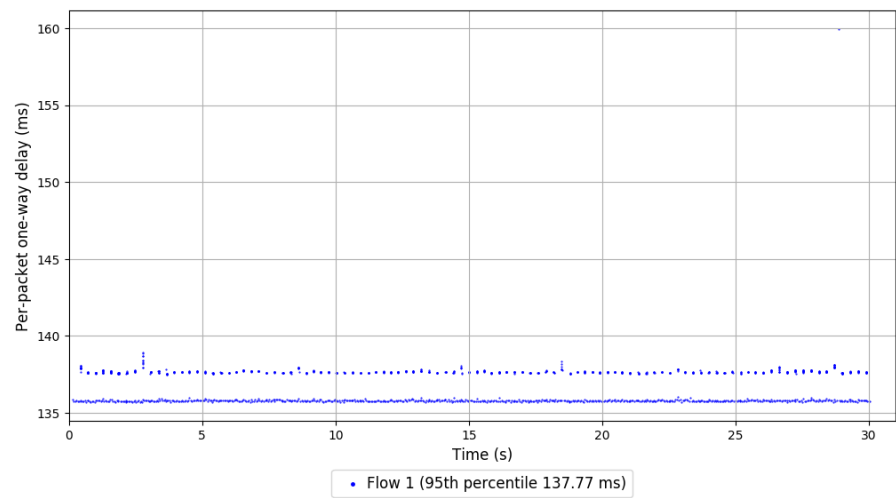
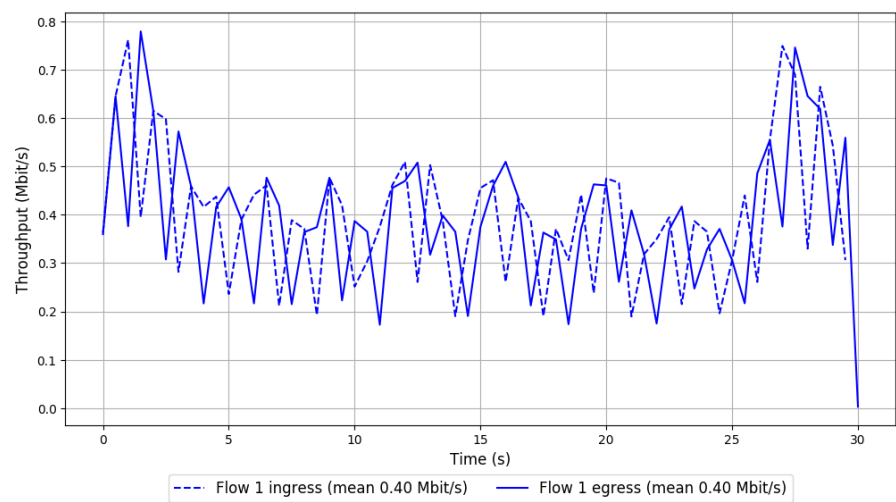
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.771 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-17 07:11:55

End at: 2017-08-17 07:12:25

Below is generated by plot.py at 2017-08-17 09:21:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.224 ms

Loss rate: 0.00%

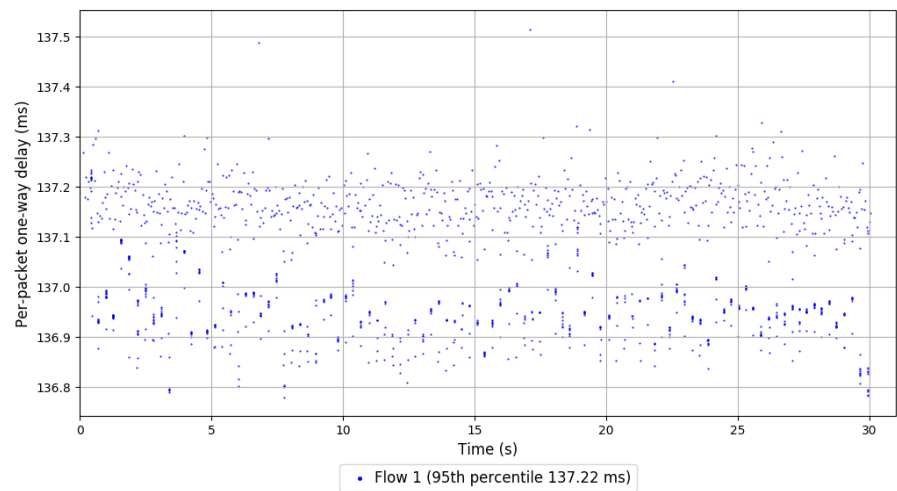
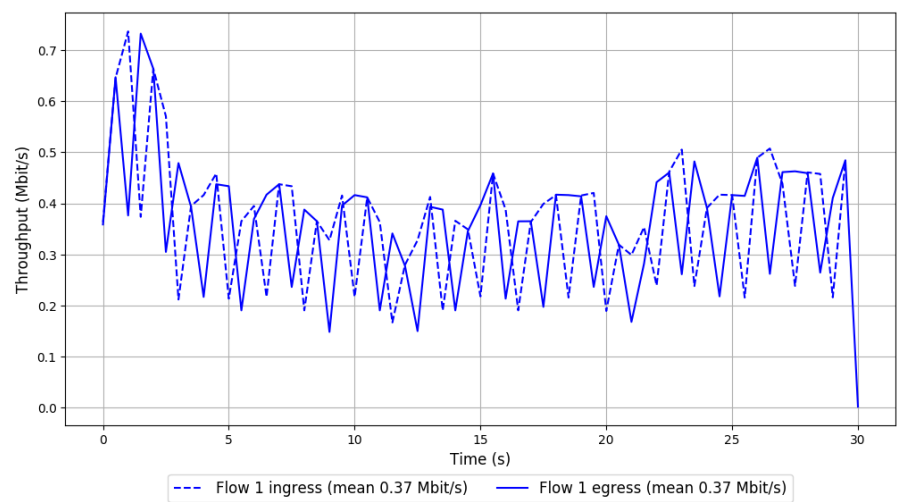
-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.224 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-17 07:23:44

End at: 2017-08-17 07:24:14

Below is generated by plot.py at 2017-08-17 09:21:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 137.433 ms

Loss rate: 0.01%

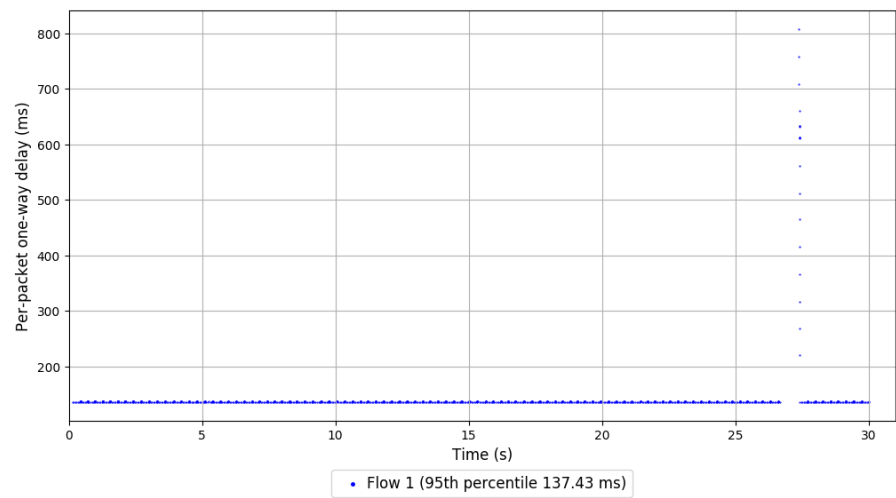
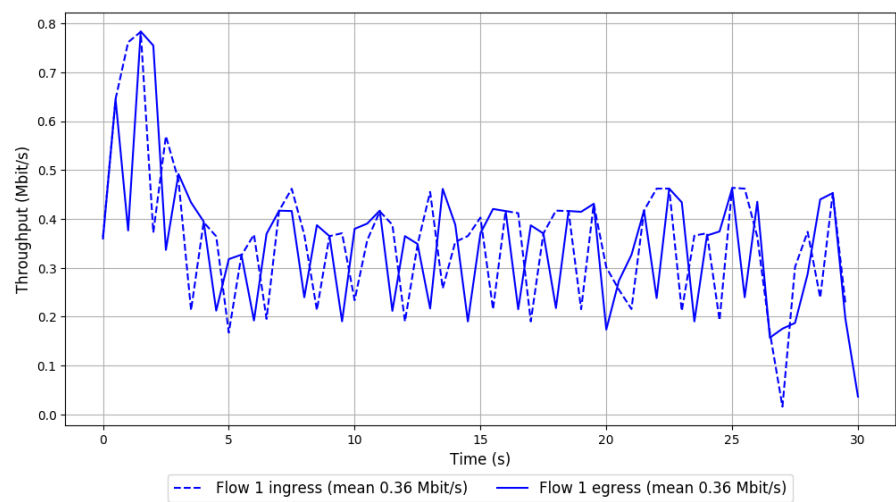
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 137.433 ms

Loss rate: 0.01%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-17 07:35:19

End at: 2017-08-17 07:35:49

Below is generated by plot.py at 2017-08-17 09:21:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.586 ms

Loss rate: 0.00%

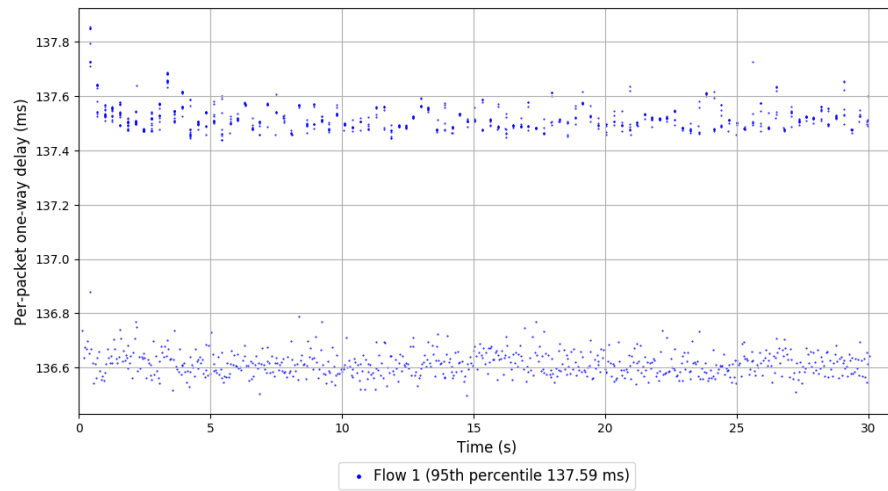
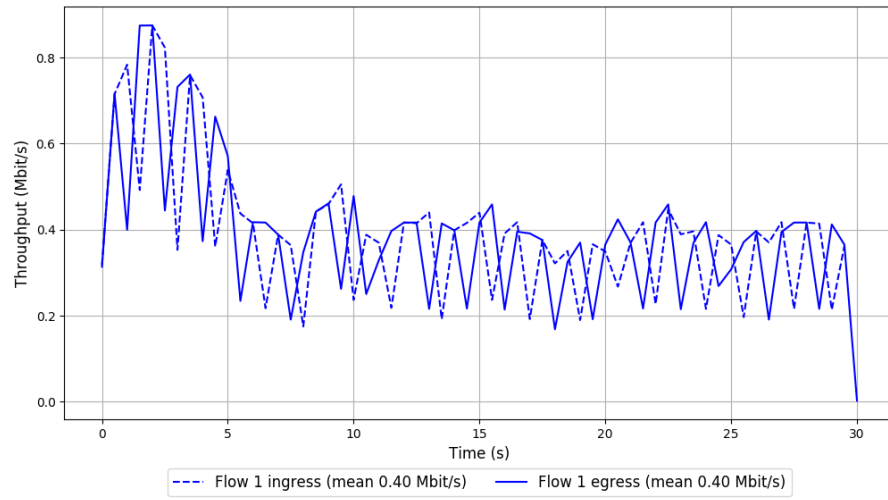
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.586 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-17 07:47:01

End at: 2017-08-17 07:47:31

Below is generated by plot.py at 2017-08-17 09:21:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.602 ms

Loss rate: 0.00%

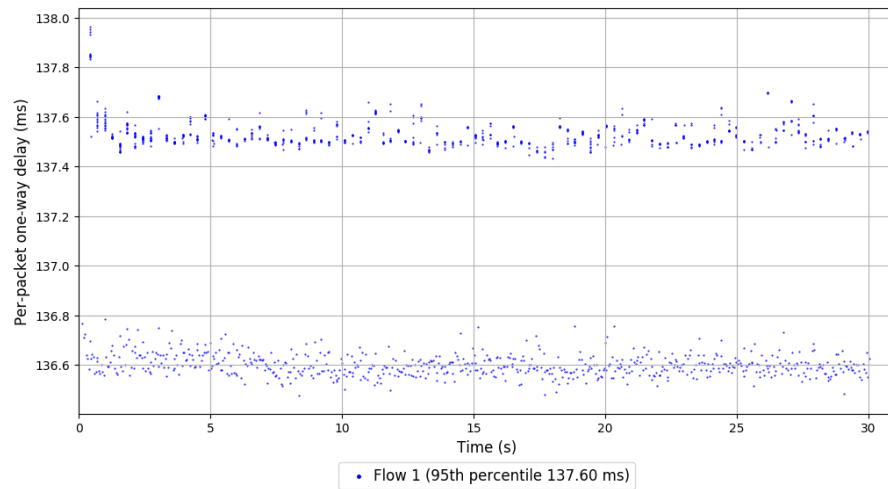
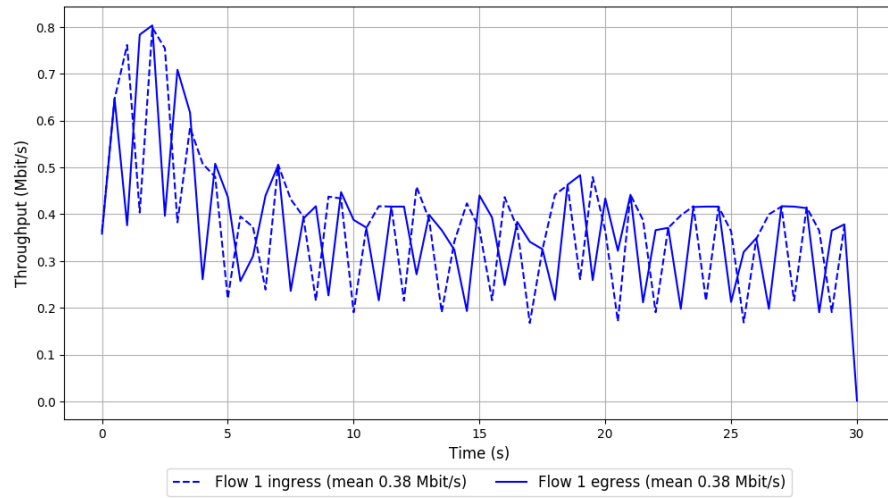
-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.602 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-17 07:58:39

End at: 2017-08-17 07:59:10

Below is generated by plot.py at 2017-08-17 09:21:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 137.916 ms

Loss rate: 0.00%

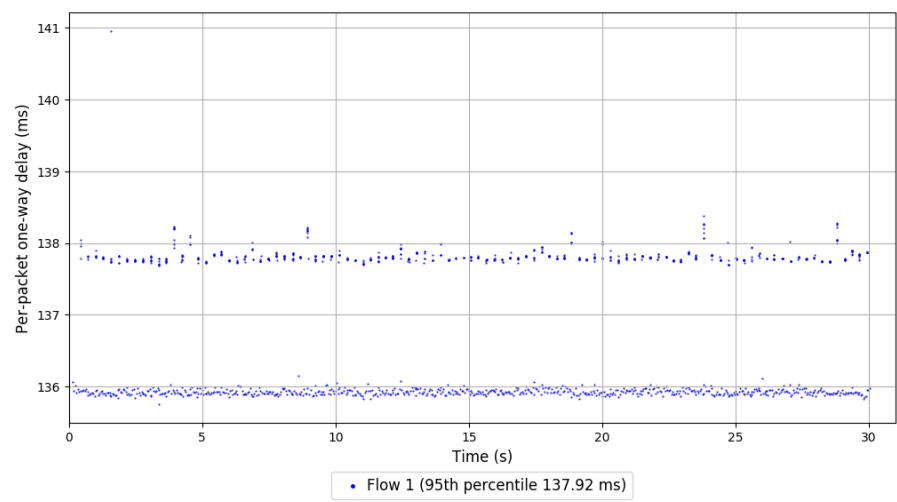
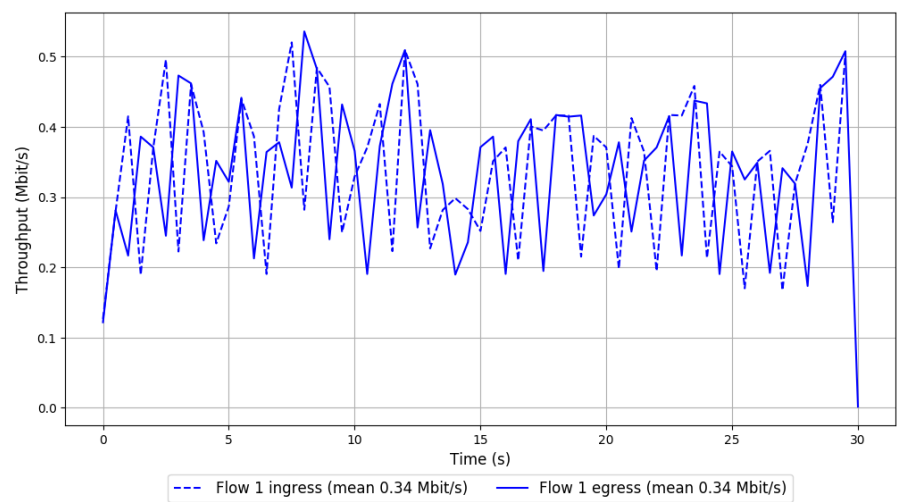
-- Flow 1:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 137.916 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-17 08:09:59

End at: 2017-08-17 08:10:29

Below is generated by plot.py at 2017-08-17 09:21:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.844 ms

Loss rate: 0.00%

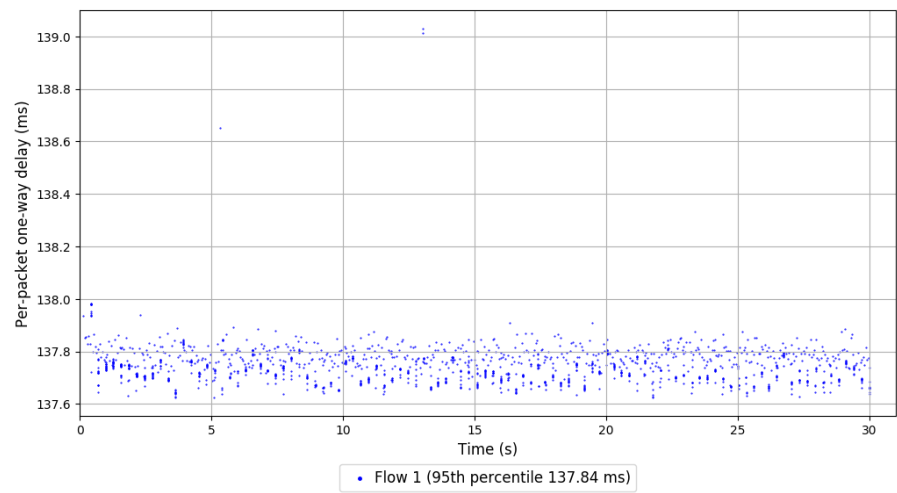
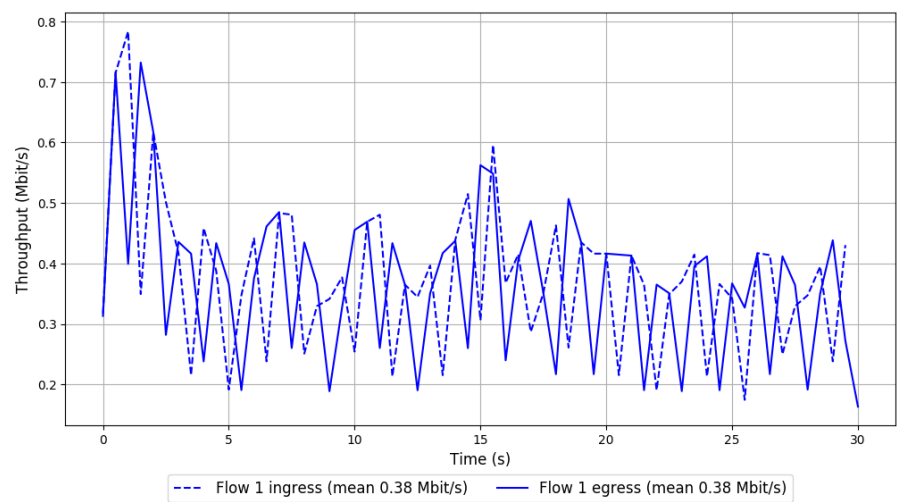
-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.844 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

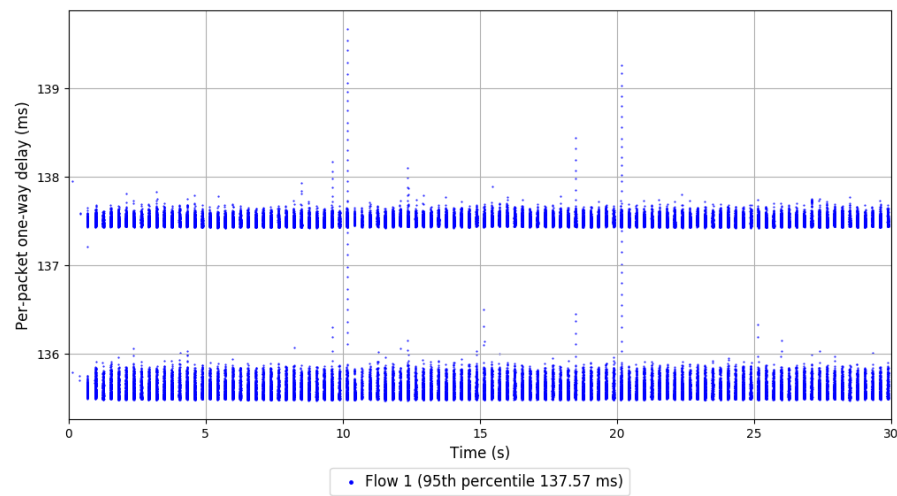
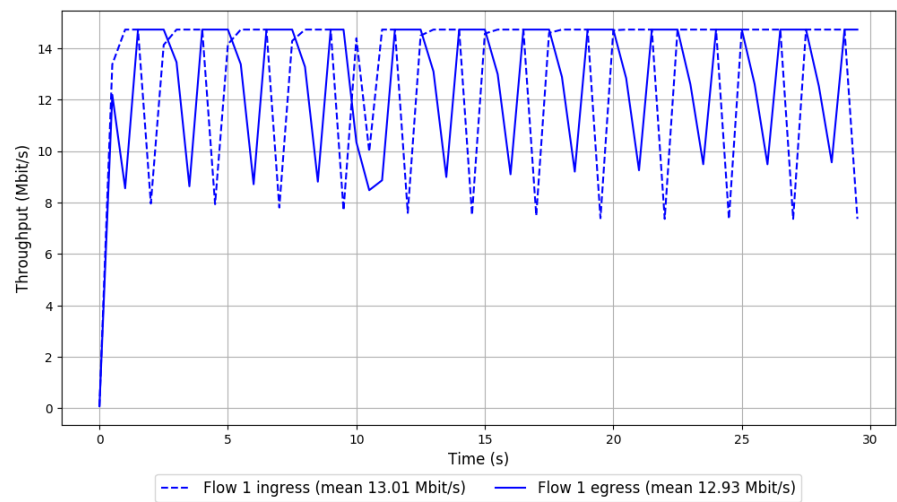


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-08-17 06:33:45
End at: 2017-08-17 06:34:15

# Below is generated by plot.py at 2017-08-17 09:21:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 137.575 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 137.575 ms
Loss rate: 0.57%
```

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

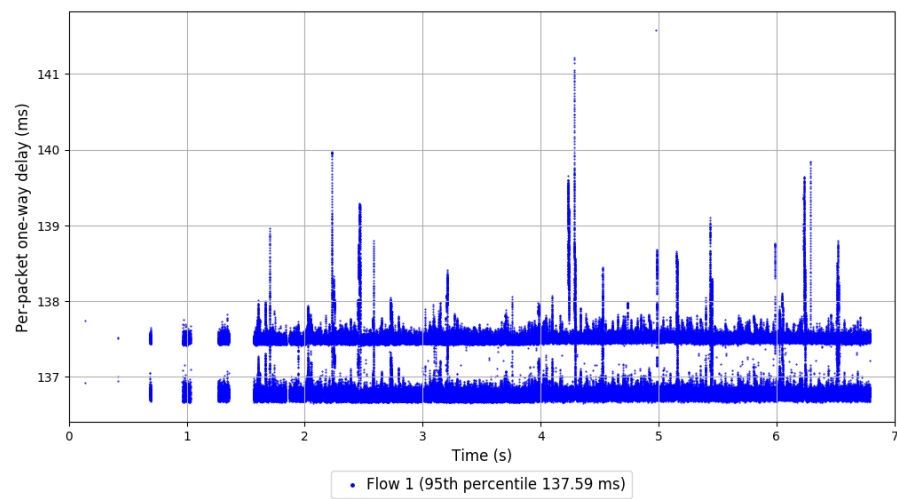
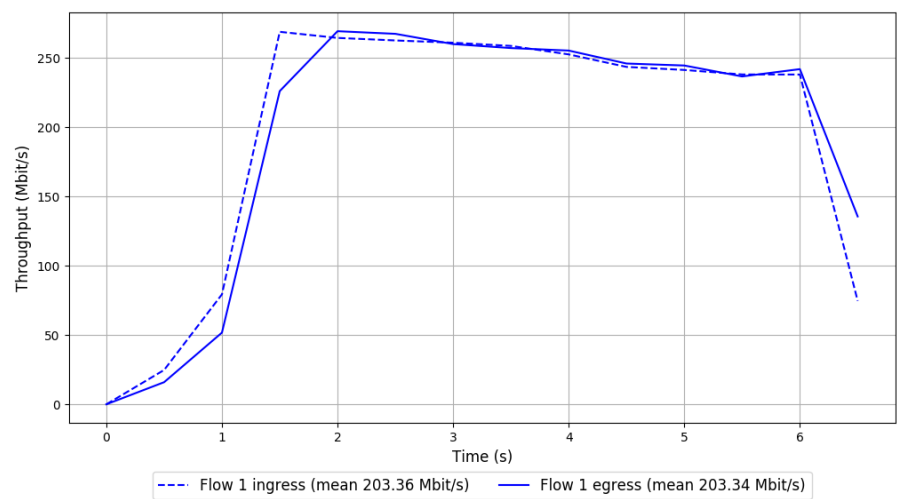


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-17 06:45:07

End at: 2017-08-17 06:45:38

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-08-17 06:56:23

End at: 2017-08-17 06:56:53

Below is generated by plot.py at 2017-08-17 09:21:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.94 Mbit/s

95th percentile per-packet one-way delay: 137.533 ms

Loss rate: 0.68%

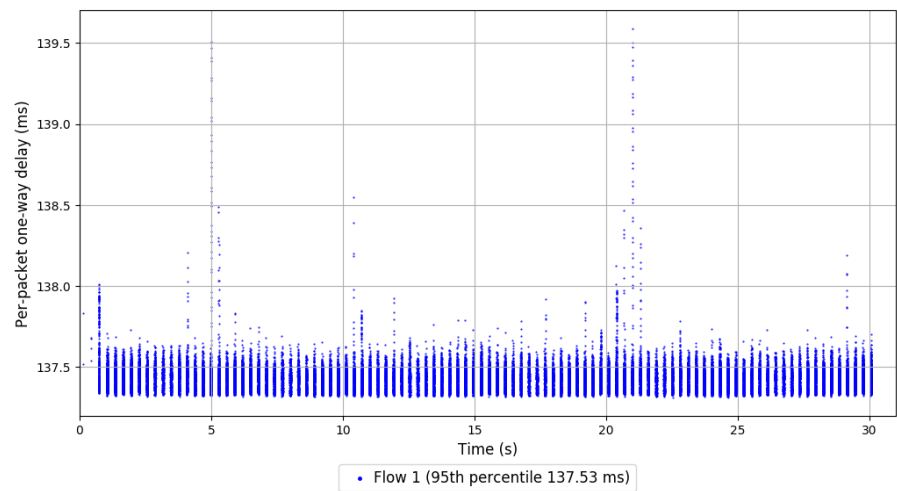
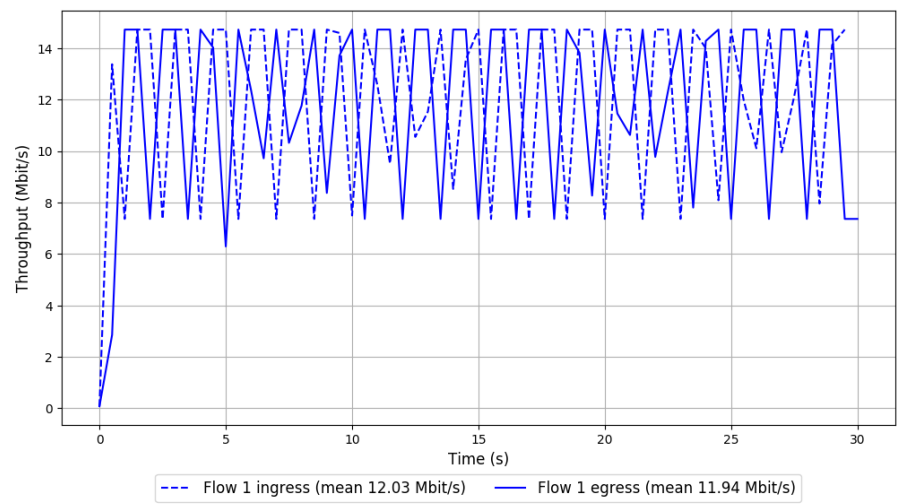
-- Flow 1:

Average throughput: 11.94 Mbit/s

95th percentile per-packet one-way delay: 137.533 ms

Loss rate: 0.68%

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

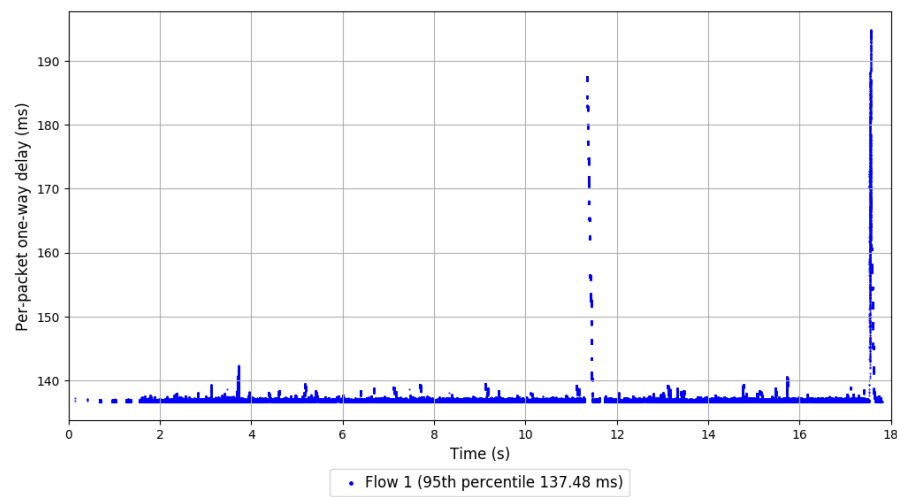
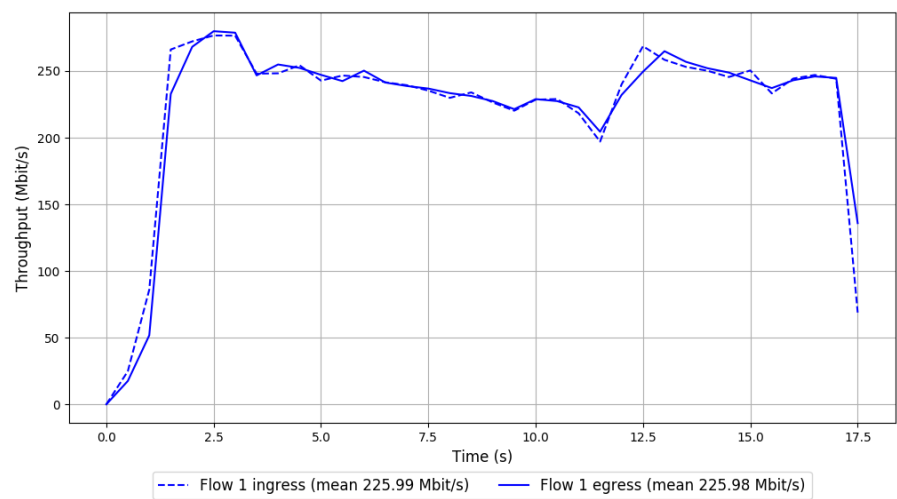


Run 4: Statistics of TaoVA-100x

Start at: 2017-08-17 07:07:45

End at: 2017-08-17 07:08:15

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

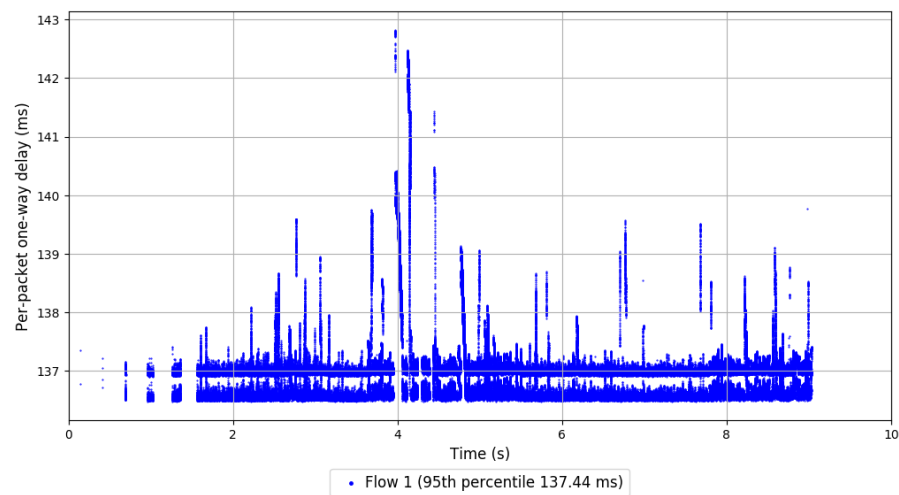
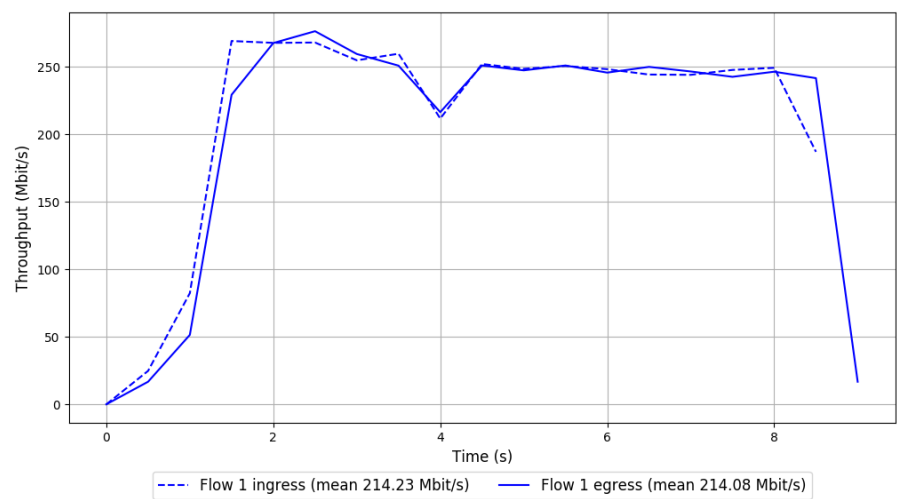


Run 5: Statistics of TaoVA-100x

Start at: 2017-08-17 07:19:13

End at: 2017-08-17 07:19:43

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

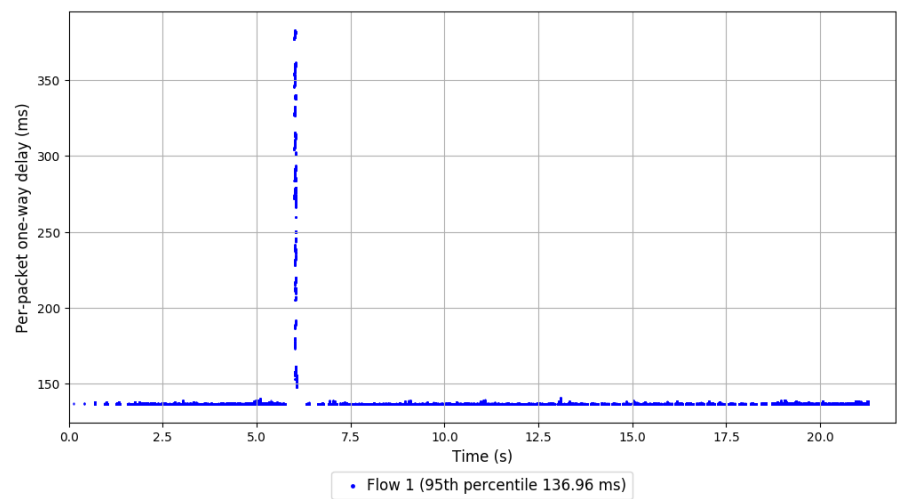
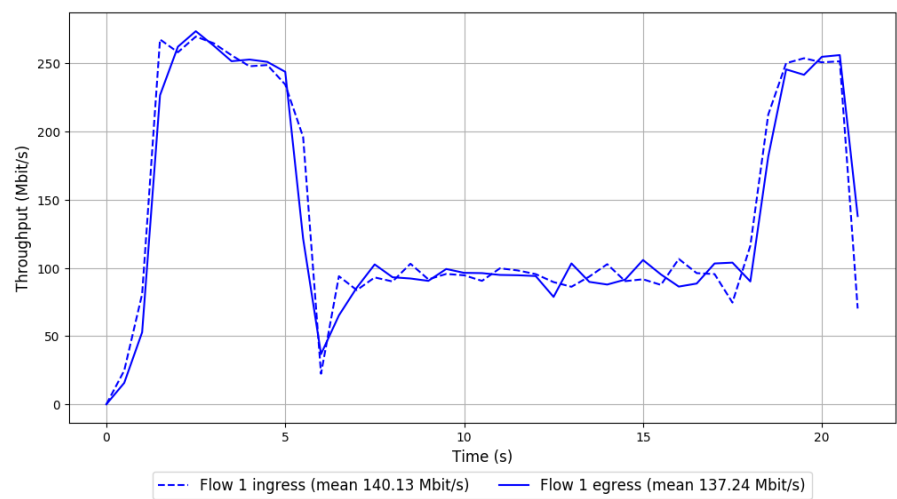


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-17 07:31:03

End at: 2017-08-17 07:31:33

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-08-17 07:42:36

End at: 2017-08-17 07:43:06

Below is generated by plot.py at 2017-08-17 09:23:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.42 Mbit/s

95th percentile per-packet one-way delay: 137.588 ms

Loss rate: 0.12%

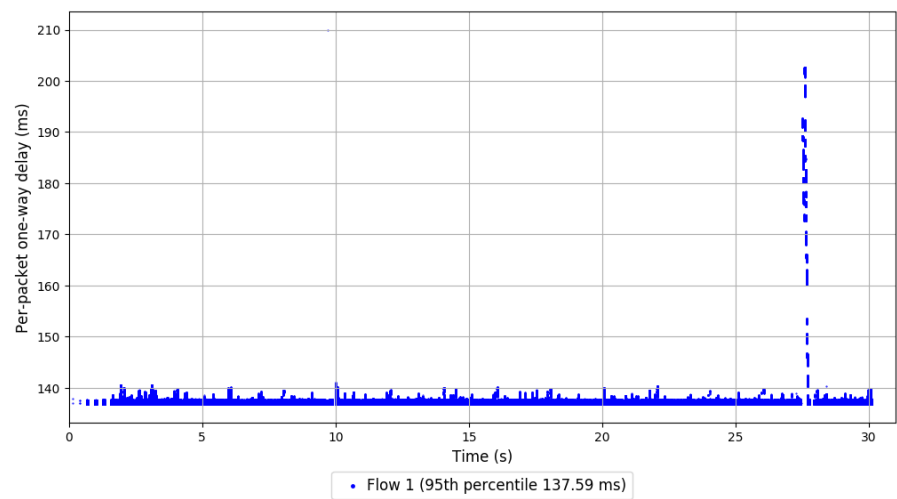
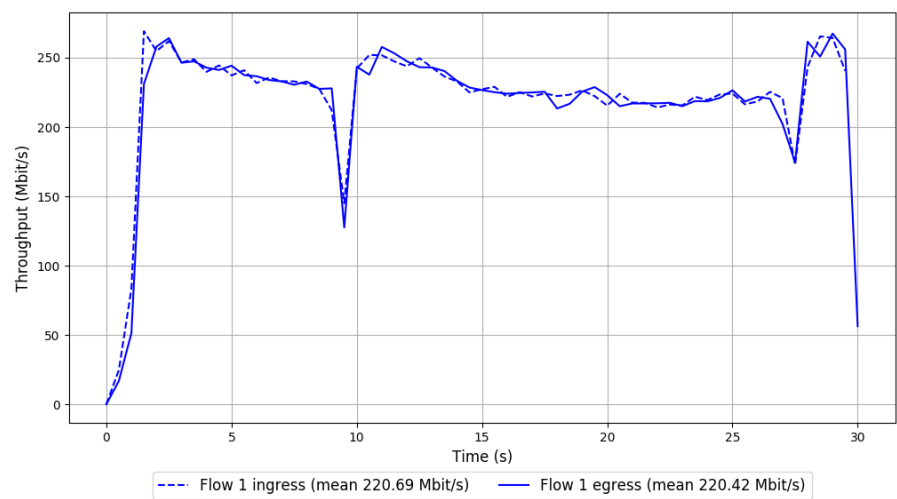
-- Flow 1:

Average throughput: 220.42 Mbit/s

95th percentile per-packet one-way delay: 137.588 ms

Loss rate: 0.12%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-08-17 07:54:16

End at: 2017-08-17 07:54:46

Below is generated by plot.py at 2017-08-17 09:23:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.11 Mbit/s

95th percentile per-packet one-way delay: 139.566 ms

Loss rate: 0.44%

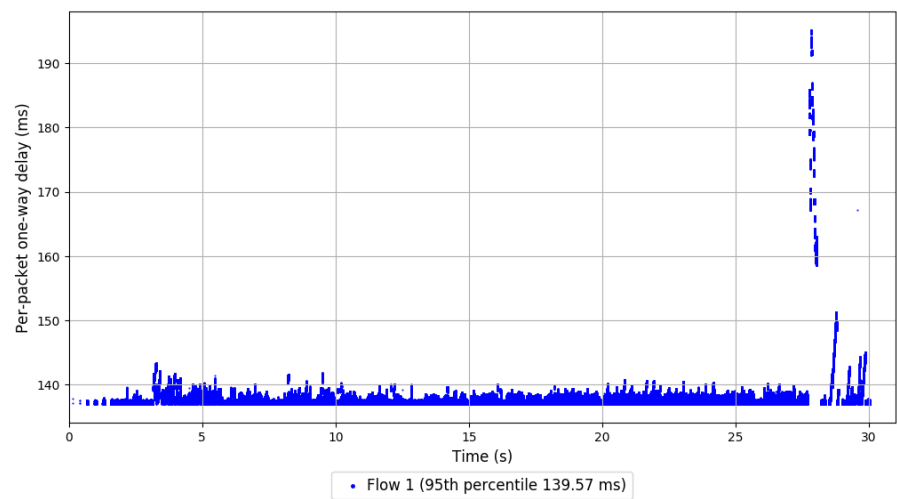
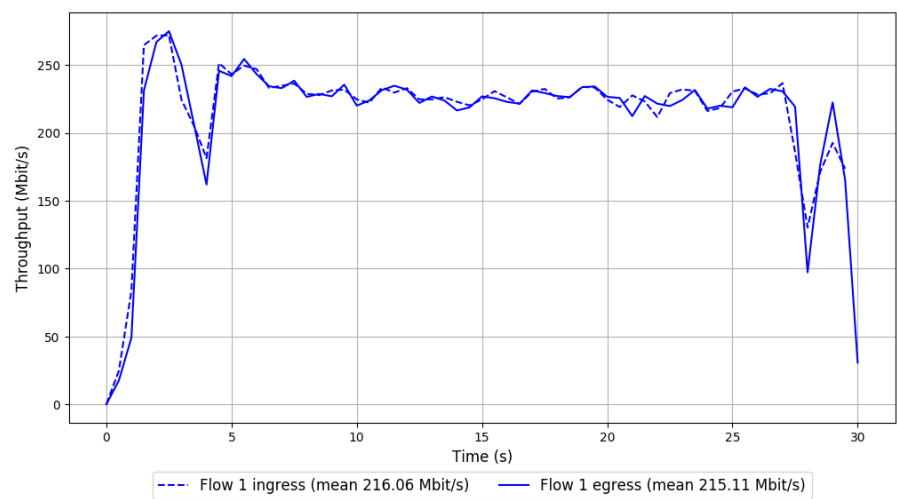
-- Flow 1:

Average throughput: 215.11 Mbit/s

95th percentile per-packet one-way delay: 139.566 ms

Loss rate: 0.44%

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



Run 9: Statistics of TaoVA-100x

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

End at: 2017-08-17 08:06:28

Below is generated by plot.py at 2017-08-17 09:23:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.00 Mbit/s

95th percentile per-packet one-way delay: 137.684 ms

Loss rate: 0.01%

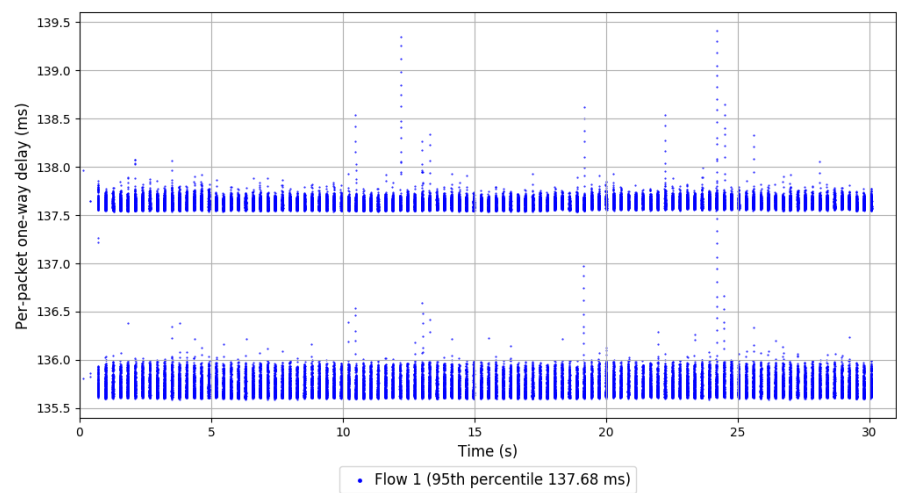
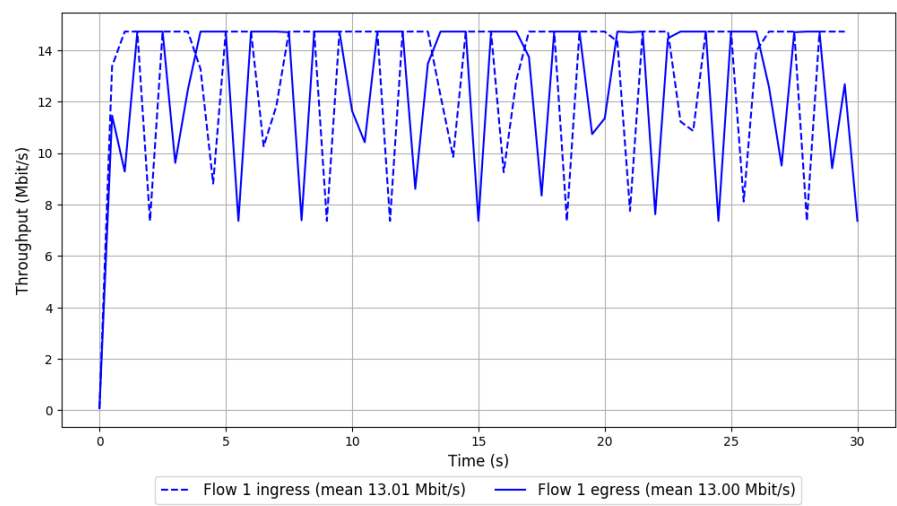
-- Flow 1:

Average throughput: 13.00 Mbit/s

95th percentile per-packet one-way delay: 137.684 ms

Loss rate: 0.01%

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

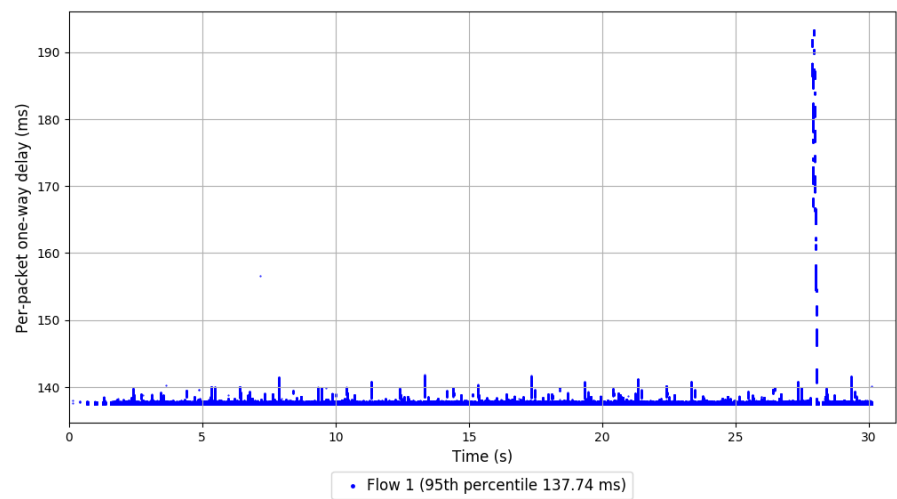
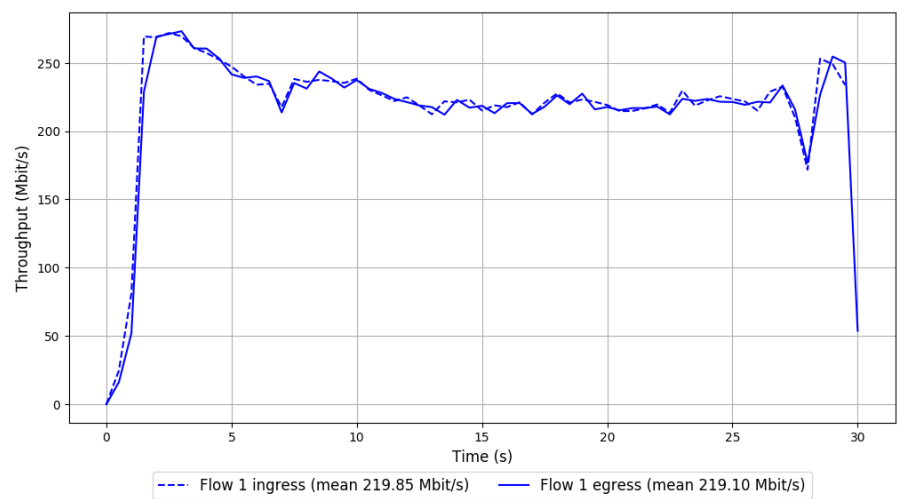


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-17 08:17:15
End at: 2017-08-17 08:17:45

# Below is generated by plot.py at 2017-08-17 09:25:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 219.10 Mbit/s
95th percentile per-packet one-way delay: 137.735 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 219.10 Mbit/s
95th percentile per-packet one-way delay: 137.735 ms
Loss rate: 0.34%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-17 06:28:33

End at: 2017-08-17 06:29:03

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.69 Mbit/s

95th percentile per-packet one-way delay: 138.924 ms

Loss rate: 0.01%

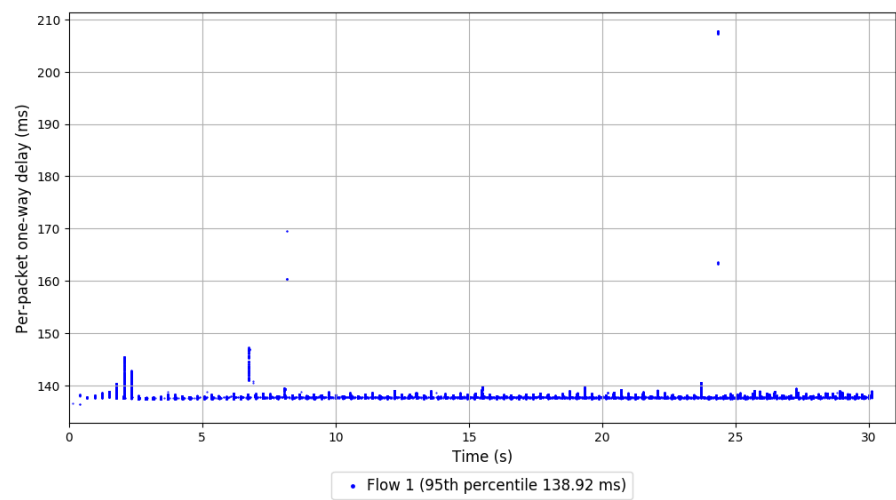
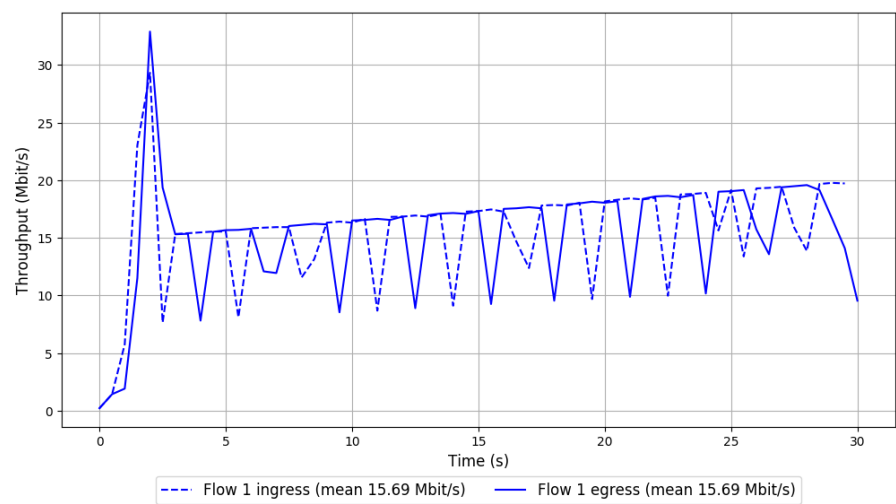
-- Flow 1:

Average throughput: 15.69 Mbit/s

95th percentile per-packet one-way delay: 138.924 ms

Loss rate: 0.01%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-17 06:39:58

End at: 2017-08-17 06:40:28

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 137.869 ms

Loss rate: 1.12%

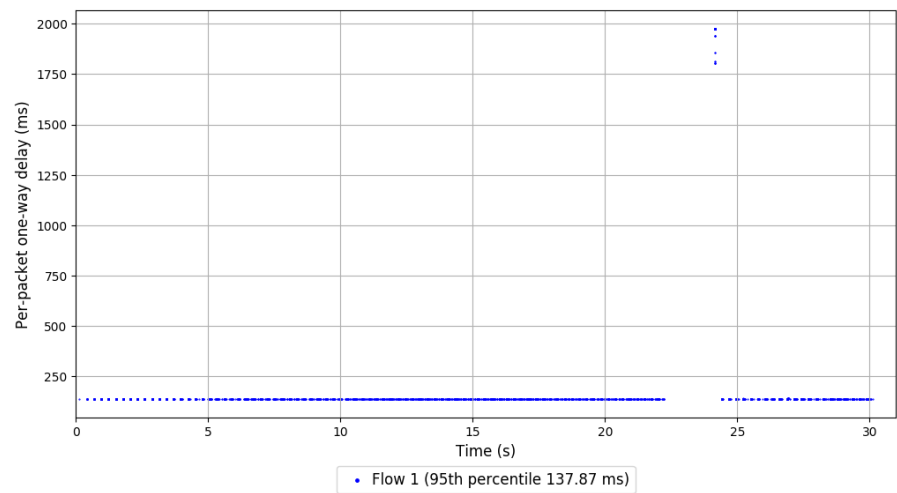
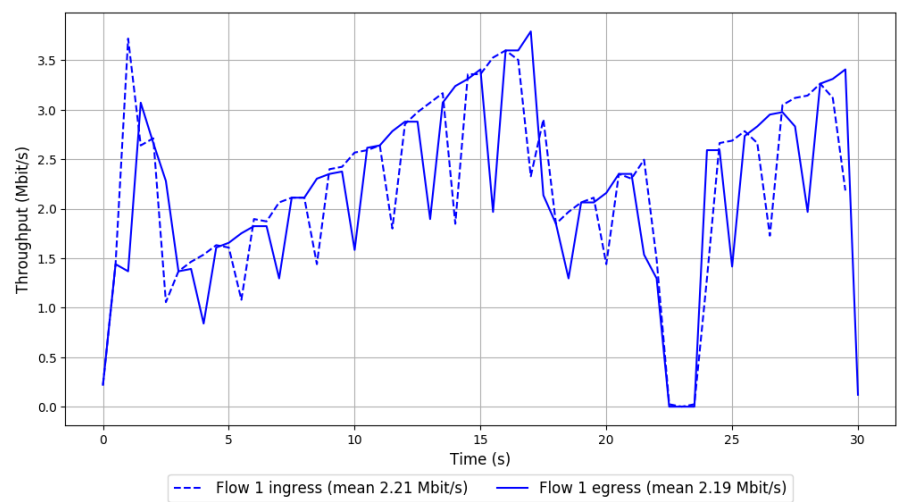
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 137.869 ms

Loss rate: 1.12%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-17 06:51:14

End at: 2017-08-17 06:51:44

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 138.017 ms

Loss rate: 6.21%

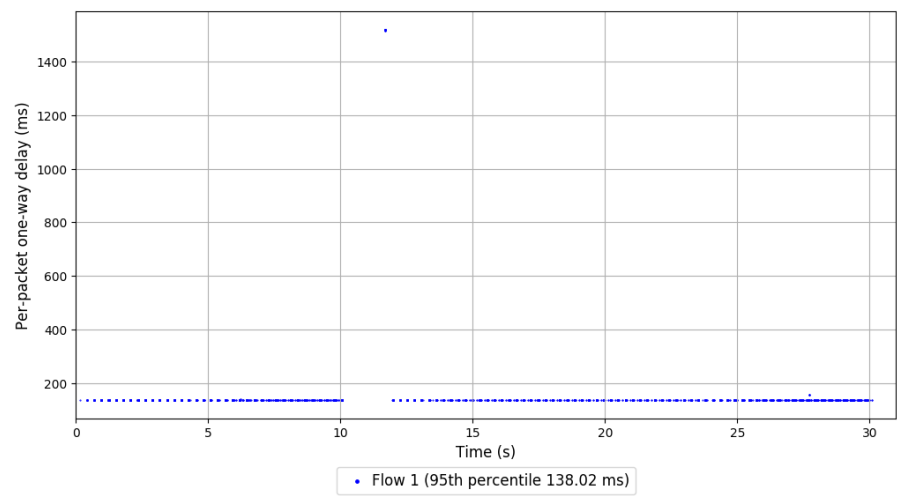
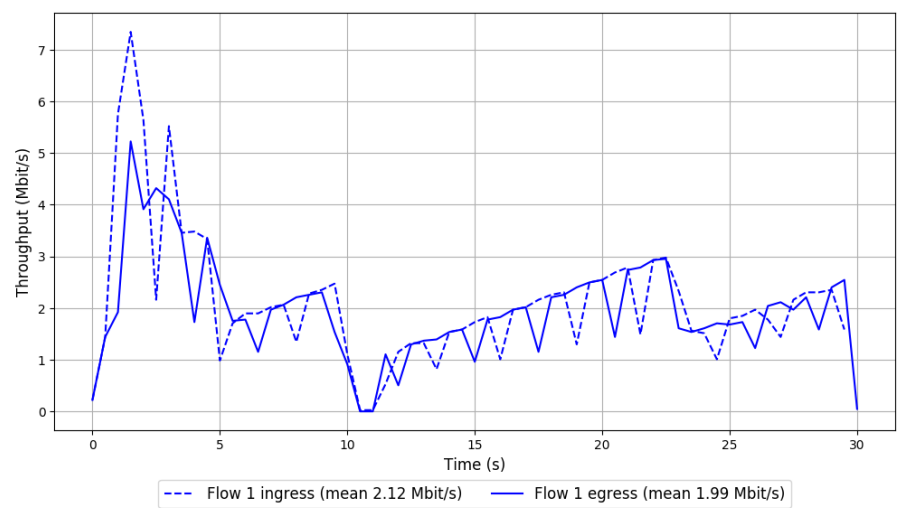
-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 138.017 ms

Loss rate: 6.21%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-17 07:02:28

End at: 2017-08-17 07:02:58

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 138.053 ms

Loss rate: 0.08%

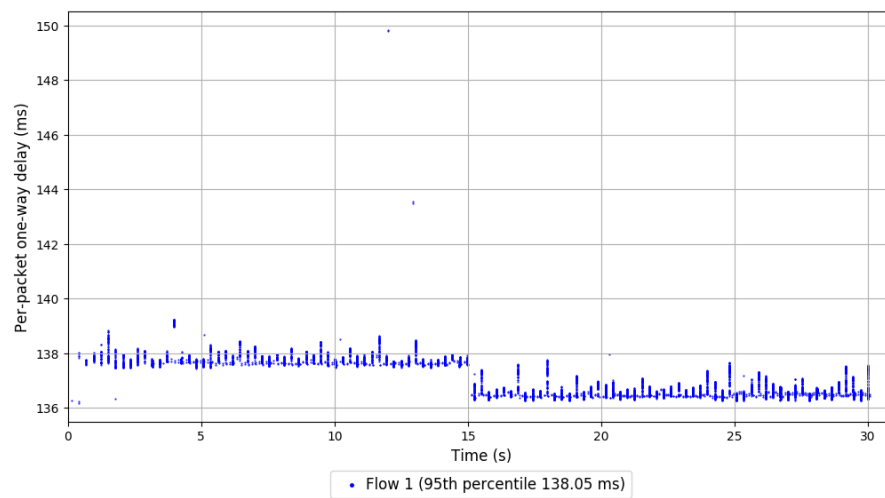
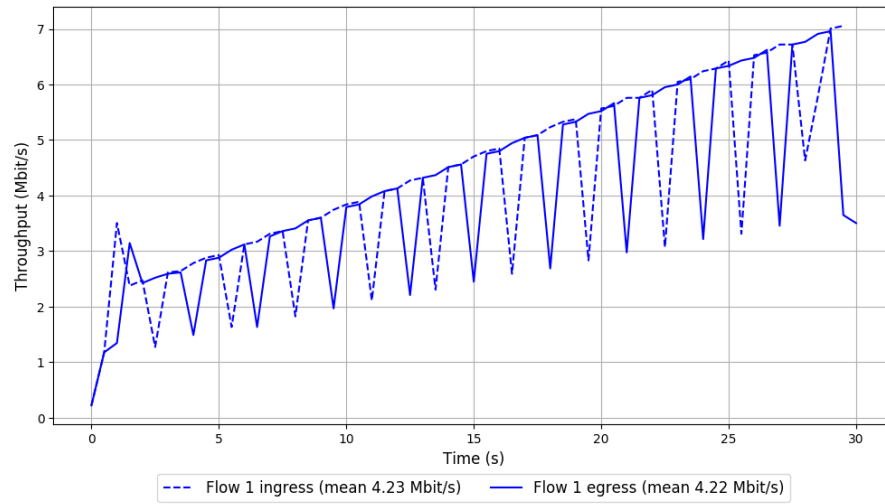
-- Flow 1:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 138.053 ms

Loss rate: 0.08%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-17 07:14:02

End at: 2017-08-17 07:14:32

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.16 Mbit/s

95th percentile per-packet one-way delay: 137.878 ms

Loss rate: 0.12%

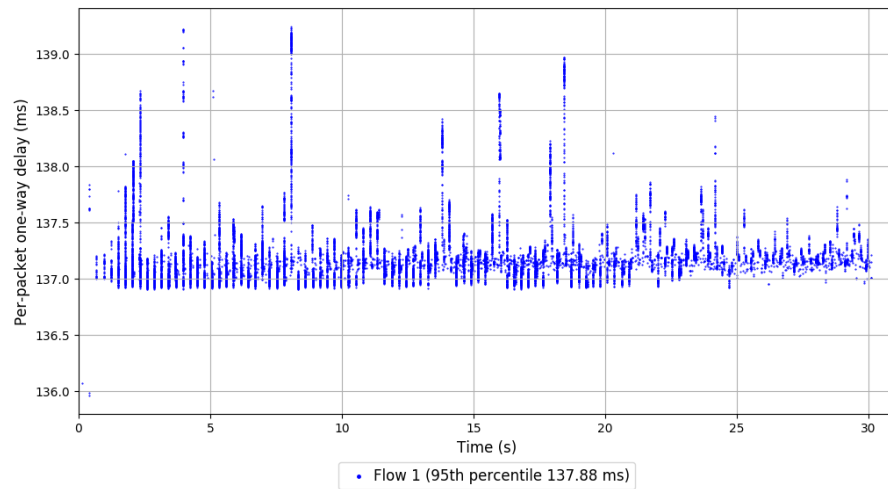
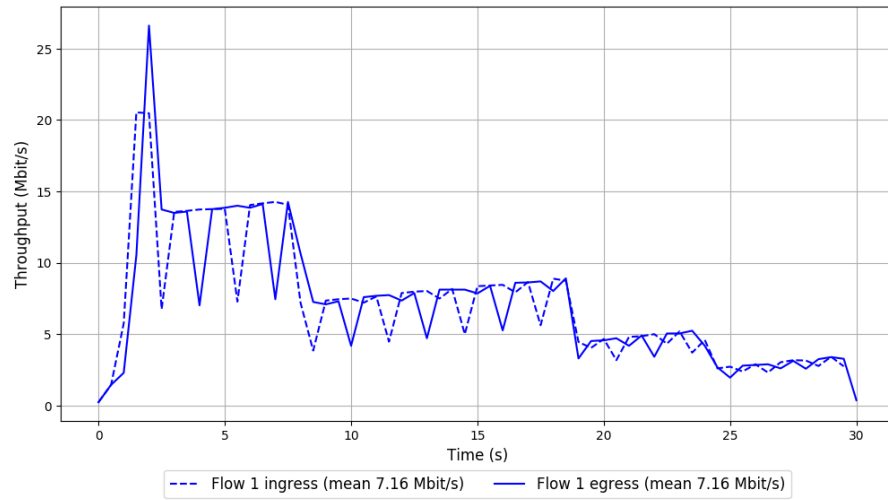
-- Flow 1:

Average throughput: 7.16 Mbit/s

95th percentile per-packet one-way delay: 137.878 ms

Loss rate: 0.12%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-17 07:25:51

End at: 2017-08-17 07:26:21

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.37 Mbit/s

95th percentile per-packet one-way delay: 137.698 ms

Loss rate: 1.03%

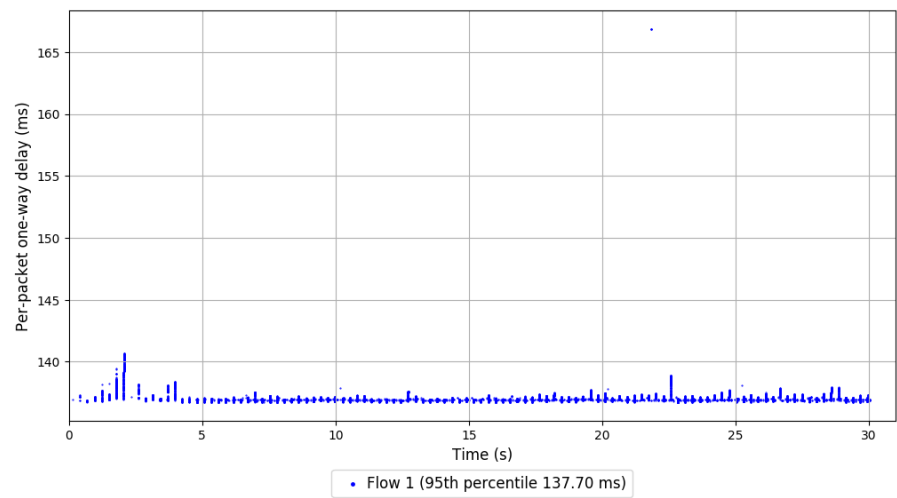
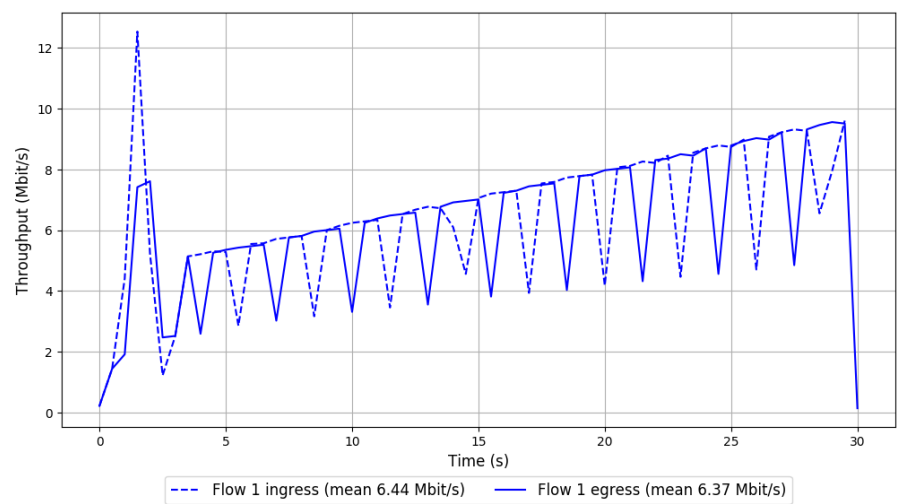
-- Flow 1:

Average throughput: 6.37 Mbit/s

95th percentile per-packet one-way delay: 137.698 ms

Loss rate: 1.03%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-17 07:37:26

End at: 2017-08-17 07:37:56

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 137.783 ms

Loss rate: 0.91%

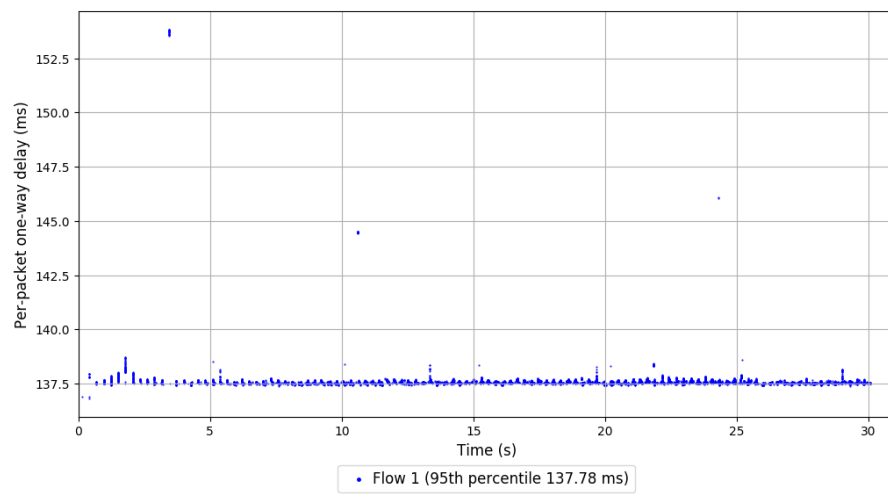
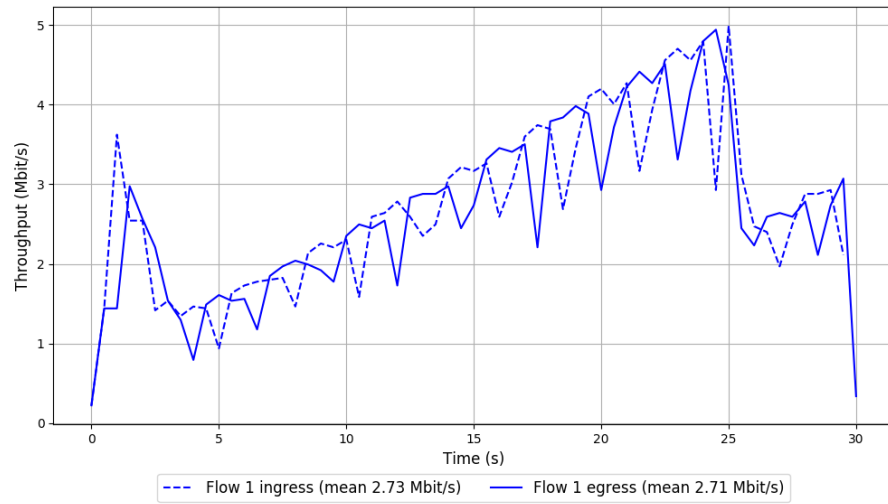
-- Flow 1:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 137.783 ms

Loss rate: 0.91%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-17 07:49:09

End at: 2017-08-17 07:49:39

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 137.726 ms

Loss rate: 1.14%

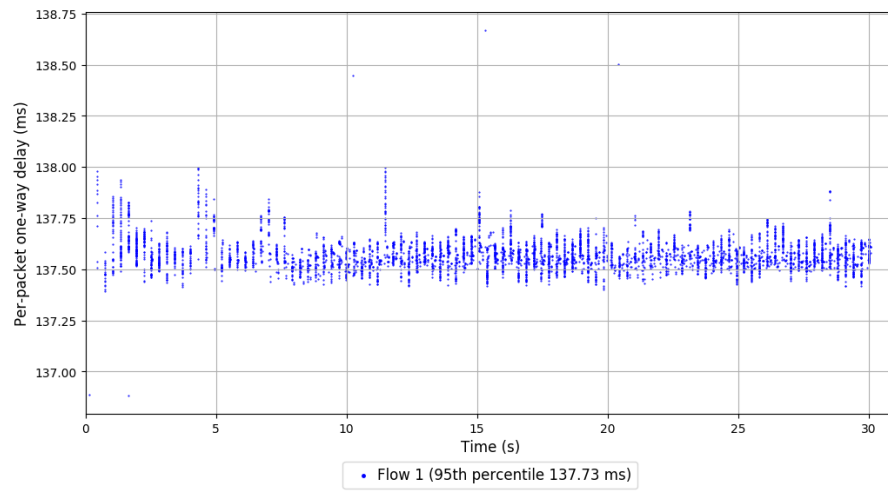
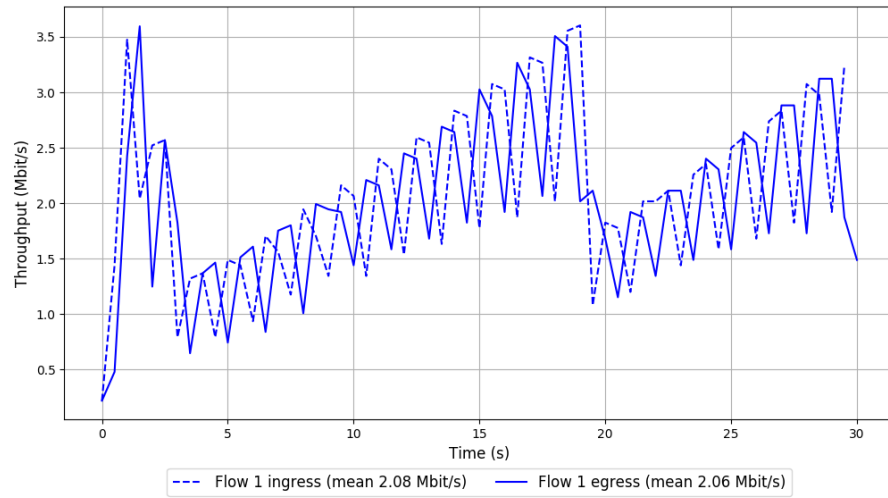
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 137.726 ms

Loss rate: 1.14%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-17 08:00:49

End at: 2017-08-17 08:01:19

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.76 Mbit/s

95th percentile per-packet one-way delay: 137.326 ms

Loss rate: 0.22%

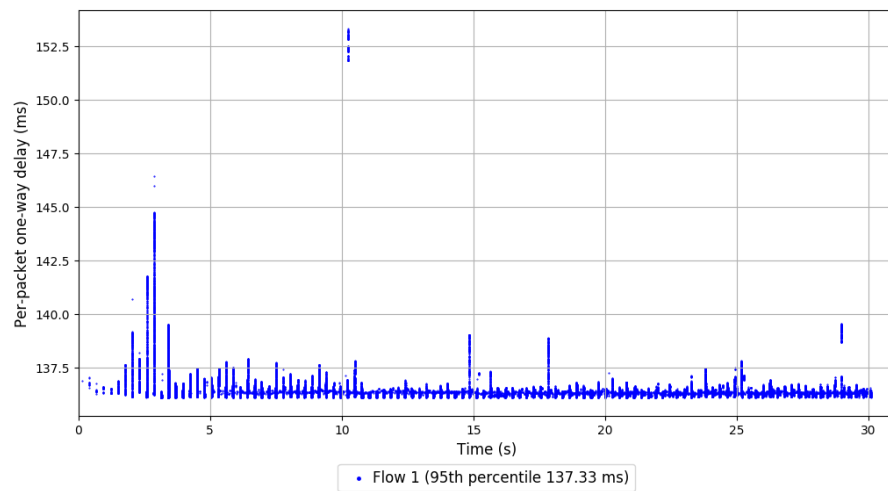
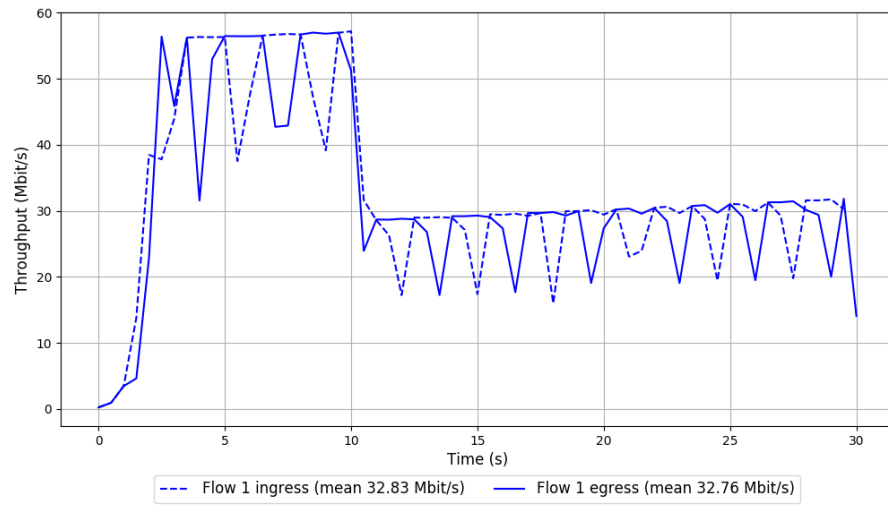
-- Flow 1:

Average throughput: 32.76 Mbit/s

95th percentile per-packet one-way delay: 137.326 ms

Loss rate: 0.22%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-17 08:12:06

End at: 2017-08-17 08:12:36

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.99 Mbit/s

95th percentile per-packet one-way delay: 138.283 ms

Loss rate: 0.02%

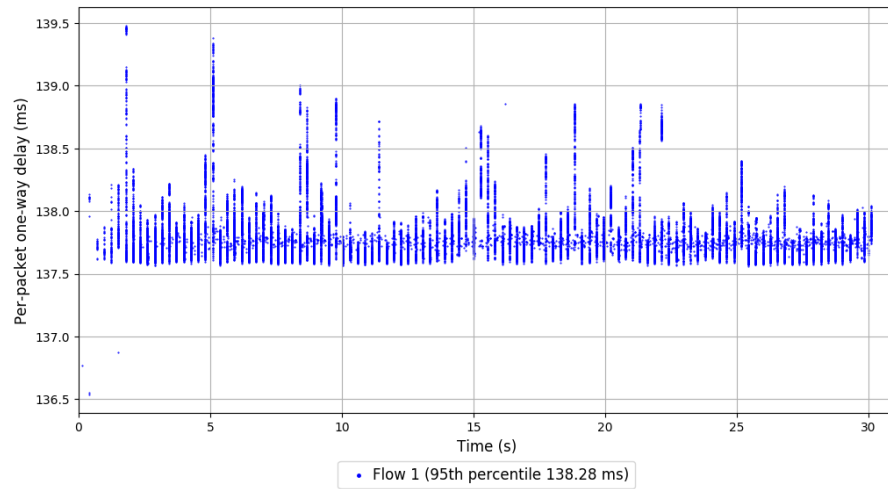
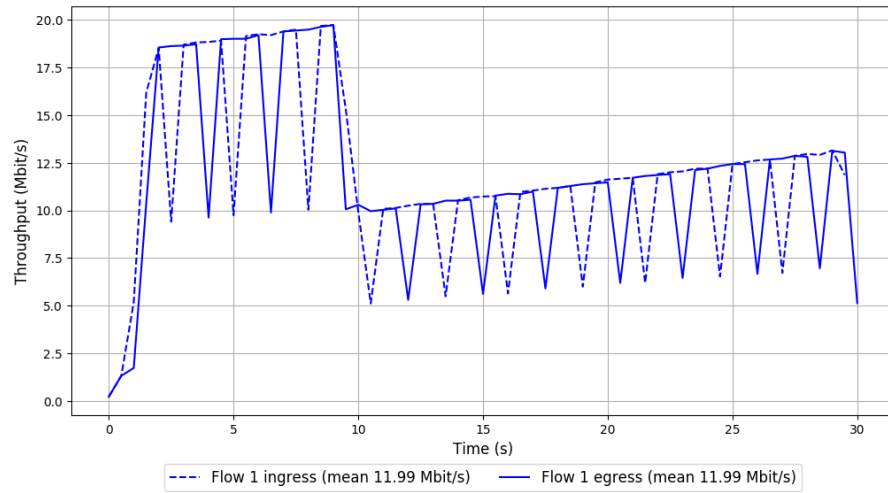
-- Flow 1:

Average throughput: 11.99 Mbit/s

95th percentile per-packet one-way delay: 138.283 ms

Loss rate: 0.02%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-17 06:30:03

End at: 2017-08-17 06:30:33

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.71 Mbit/s

95th percentile per-packet one-way delay: 196.188 ms

Loss rate: 2.34%

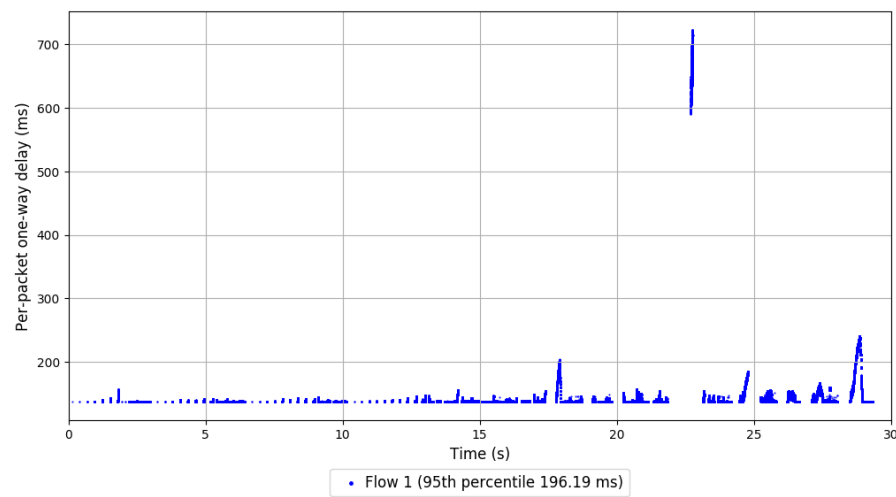
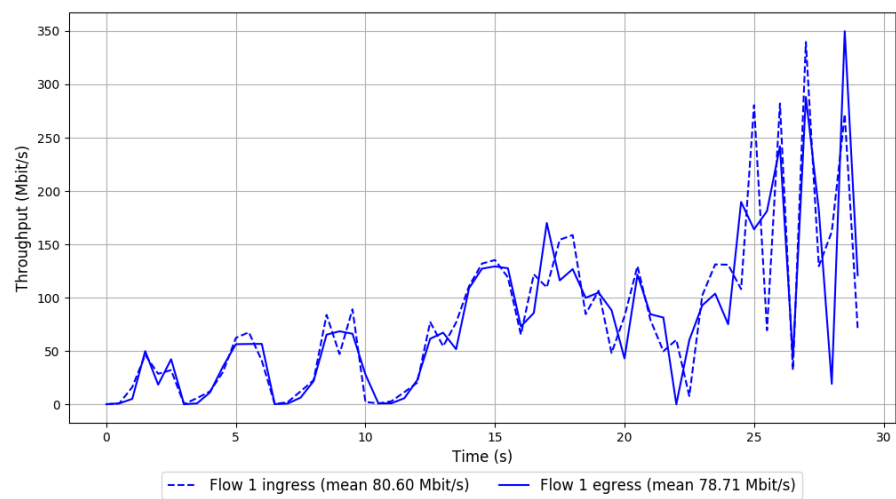
-- Flow 1:

Average throughput: 78.71 Mbit/s

95th percentile per-packet one-way delay: 196.188 ms

Loss rate: 2.34%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-17 06:41:27

End at: 2017-08-17 06:41:57

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.51 Mbit/s

95th percentile per-packet one-way delay: 158.535 ms

Loss rate: 0.58%

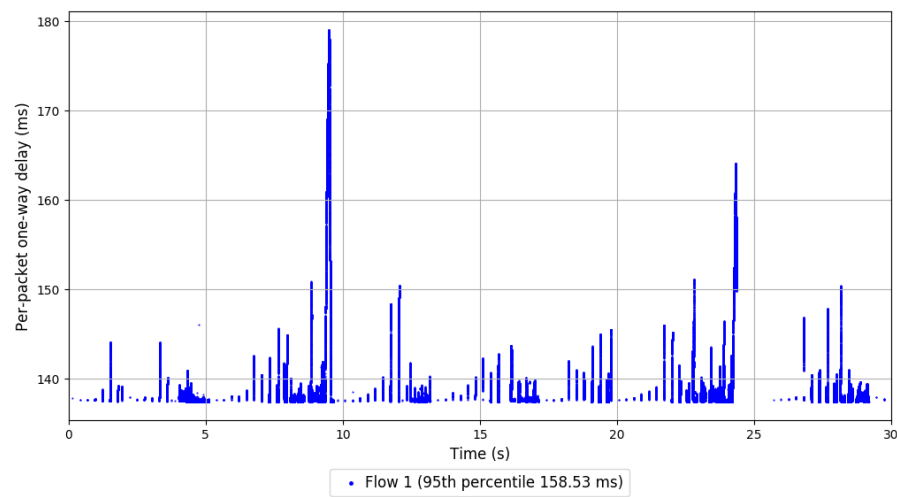
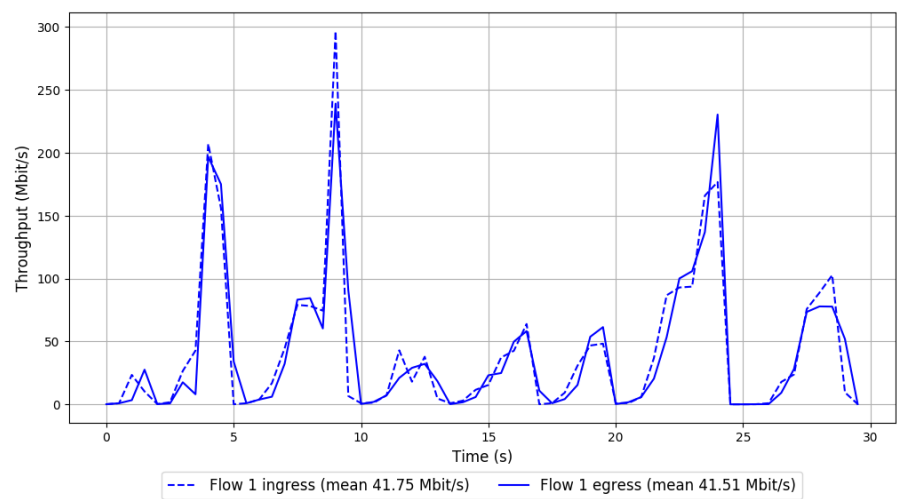
-- Flow 1:

Average throughput: 41.51 Mbit/s

95th percentile per-packet one-way delay: 158.535 ms

Loss rate: 0.58%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-17 06:52:41

End at: 2017-08-17 06:53:11

Below is generated by plot.py at 2017-08-17 09:25:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.29 Mbit/s

95th percentile per-packet one-way delay: 140.028 ms

Loss rate: 73.01%

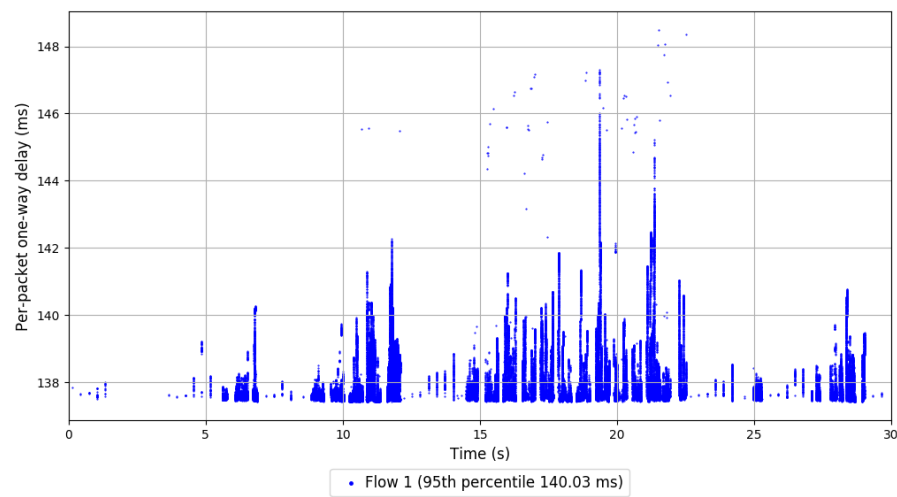
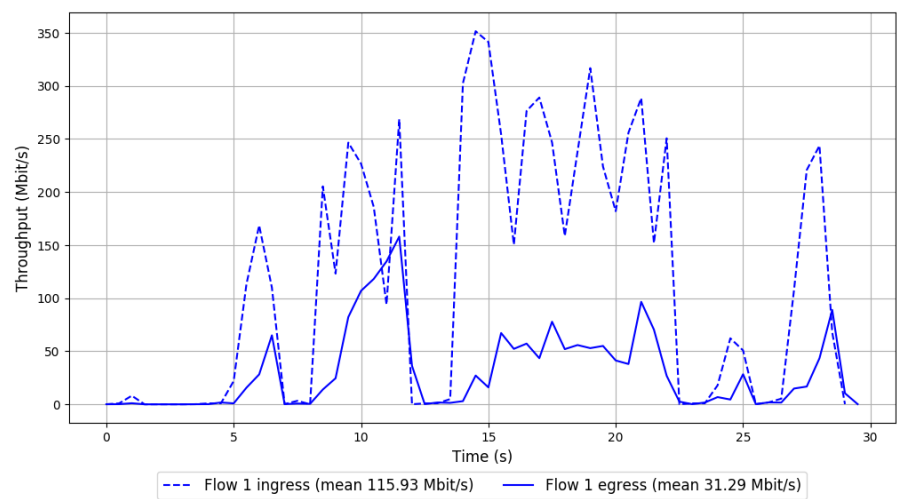
-- Flow 1:

Average throughput: 31.29 Mbit/s

95th percentile per-packet one-way delay: 140.028 ms

Loss rate: 73.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-17 07:03:55

End at: 2017-08-17 07:04:25

Below is generated by plot.py at 2017-08-17 09:25:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.71 Mbit/s

95th percentile per-packet one-way delay: 192.364 ms

Loss rate: 2.02%

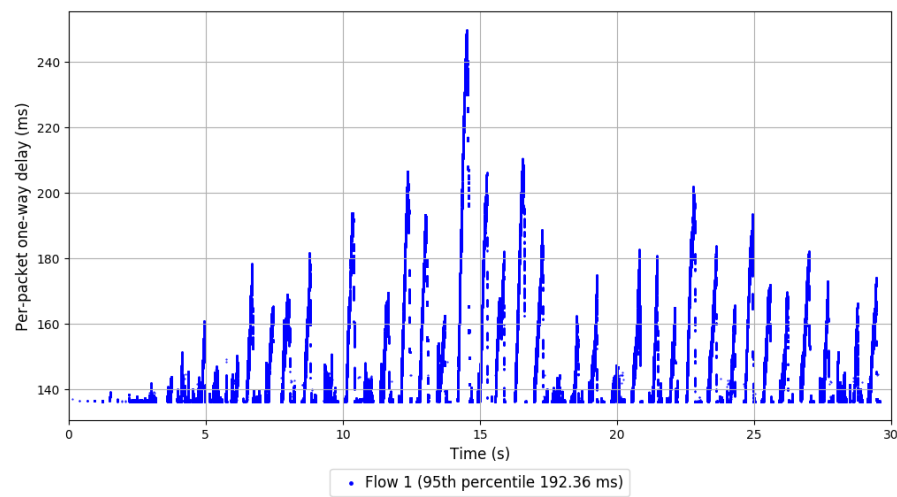
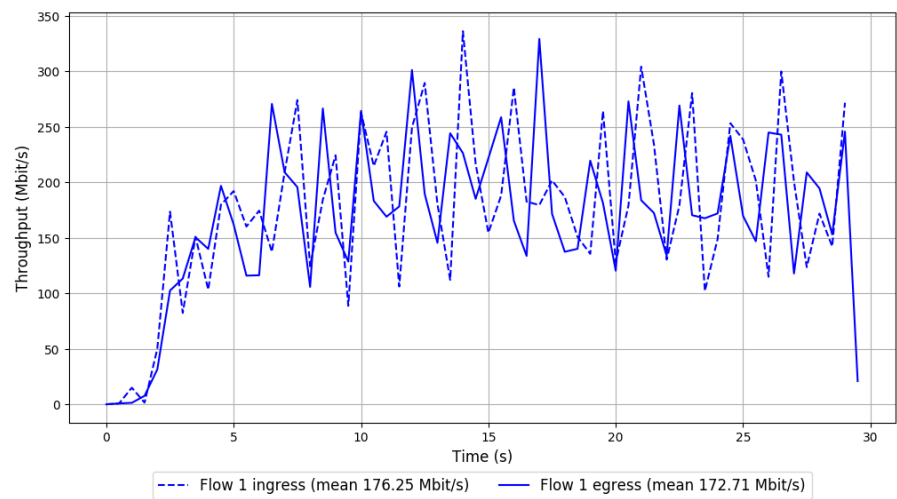
-- Flow 1:

Average throughput: 172.71 Mbit/s

95th percentile per-packet one-way delay: 192.364 ms

Loss rate: 2.02%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-17 07:15:30

End at: 2017-08-17 07:16:00

Below is generated by plot.py at 2017-08-17 09:25:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.93 Mbit/s

95th percentile per-packet one-way delay: 229.335 ms

Loss rate: 6.44%

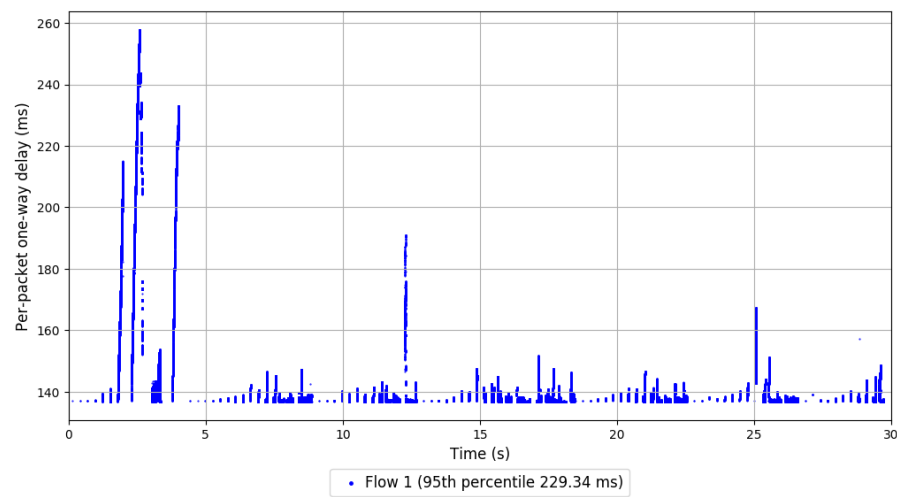
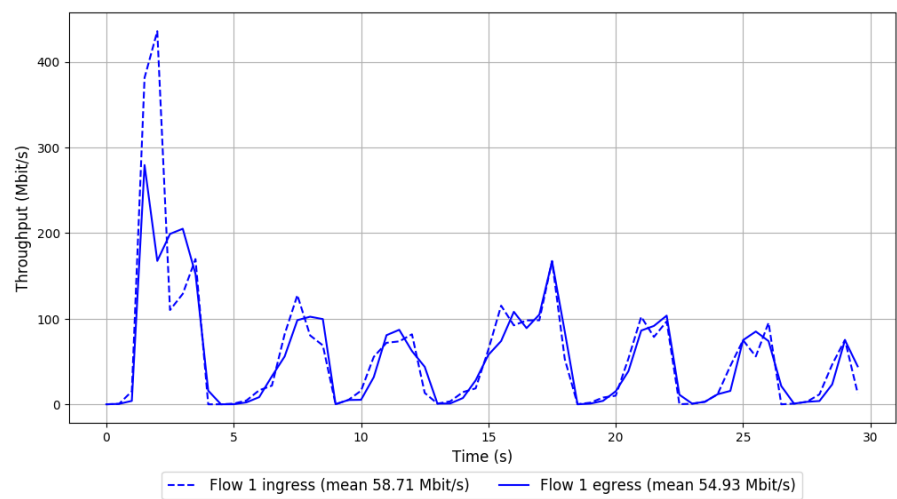
-- Flow 1:

Average throughput: 54.93 Mbit/s

95th percentile per-packet one-way delay: 229.335 ms

Loss rate: 6.44%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-17 07:27:21

End at: 2017-08-17 07:27:51

Below is generated by plot.py at 2017-08-17 09:25:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.27 Mbit/s

95th percentile per-packet one-way delay: 265.459 ms

Loss rate: 2.66%

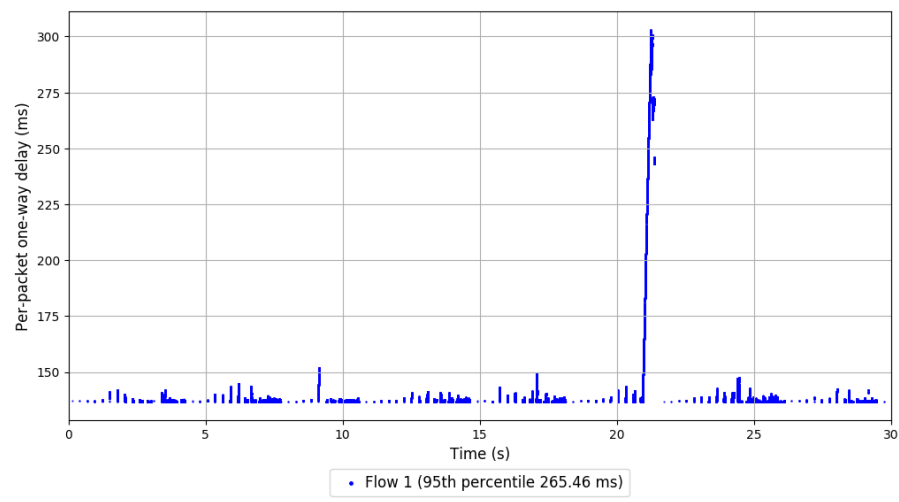
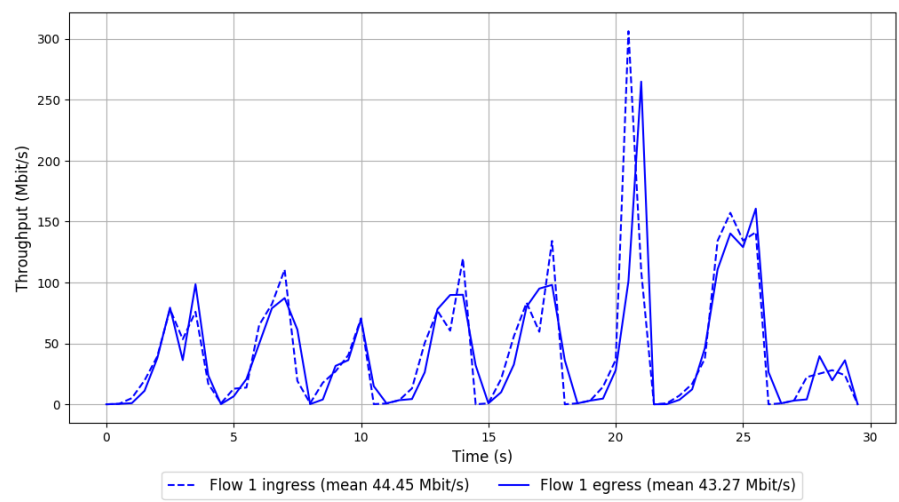
-- Flow 1:

Average throughput: 43.27 Mbit/s

95th percentile per-packet one-way delay: 265.459 ms

Loss rate: 2.66%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-17 07:38:52

End at: 2017-08-17 07:39:22

Below is generated by plot.py at 2017-08-17 09:25:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.61 Mbit/s

95th percentile per-packet one-way delay: 150.652 ms

Loss rate: 63.16%

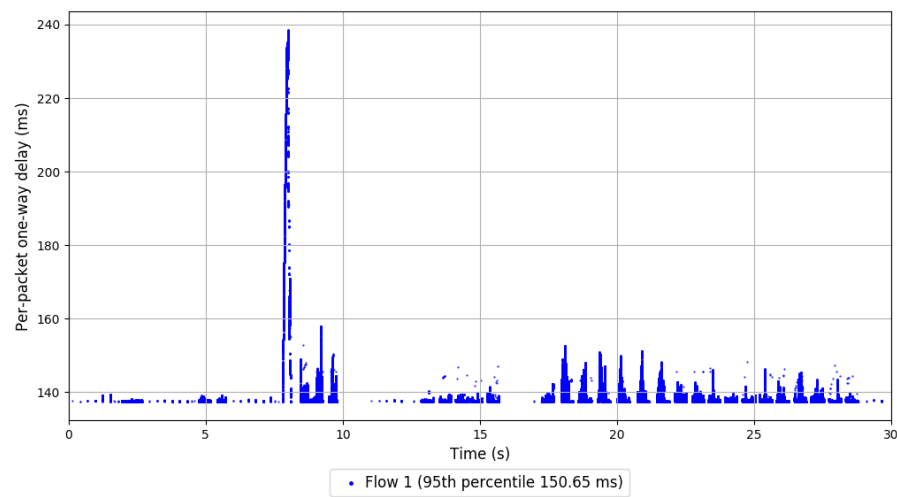
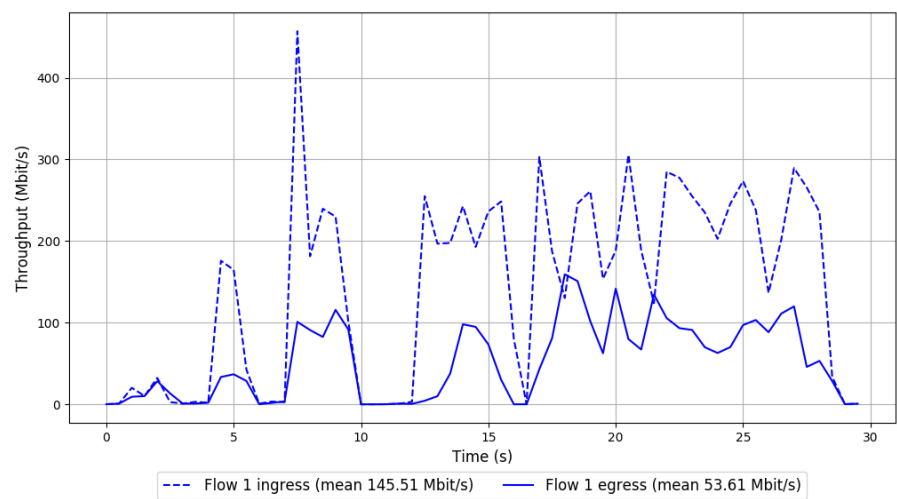
-- Flow 1:

Average throughput: 53.61 Mbit/s

95th percentile per-packet one-way delay: 150.652 ms

Loss rate: 63.16%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-17 07:50:35

End at: 2017-08-17 07:51:05

Below is generated by plot.py at 2017-08-17 09:25:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.28 Mbit/s

95th percentile per-packet one-way delay: 138.179 ms

Loss rate: 83.39%

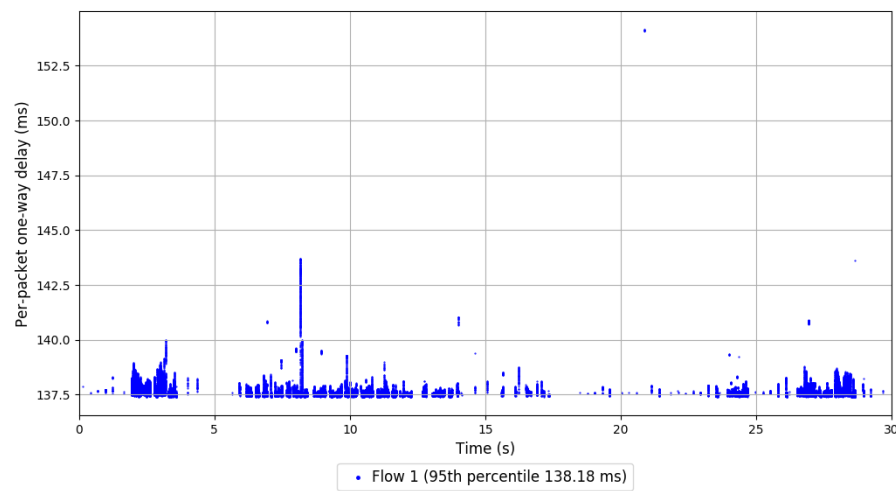
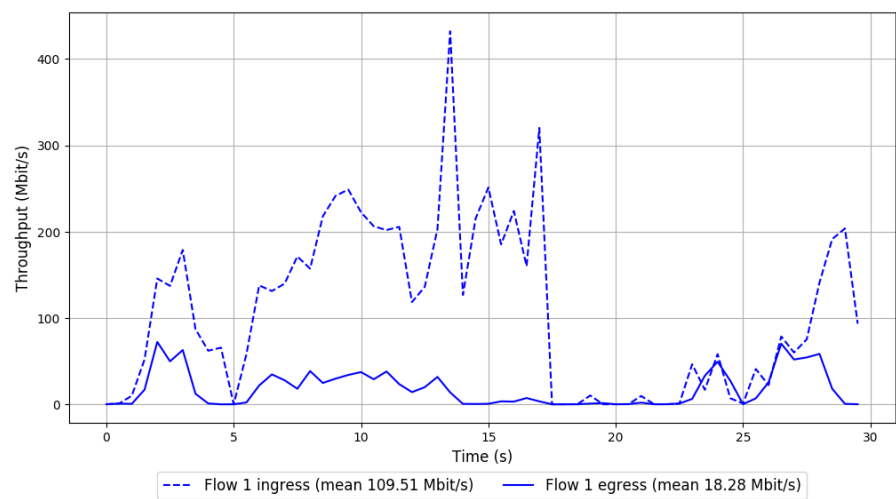
-- Flow 1:

Average throughput: 18.28 Mbit/s

95th percentile per-packet one-way delay: 138.179 ms

Loss rate: 83.39%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-17 08:02:17

End at: 2017-08-17 08:02:47

Below is generated by plot.py at 2017-08-17 09:25:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.12 Mbit/s

95th percentile per-packet one-way delay: 139.016 ms

Loss rate: 41.06%

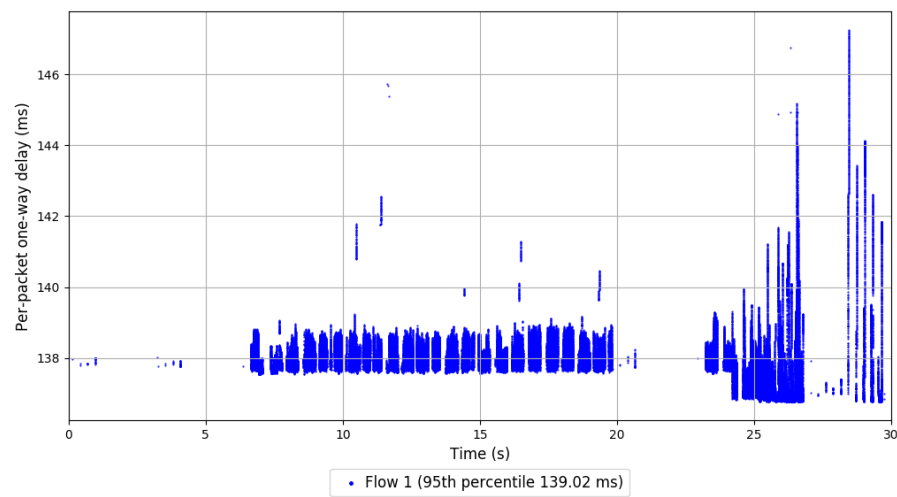
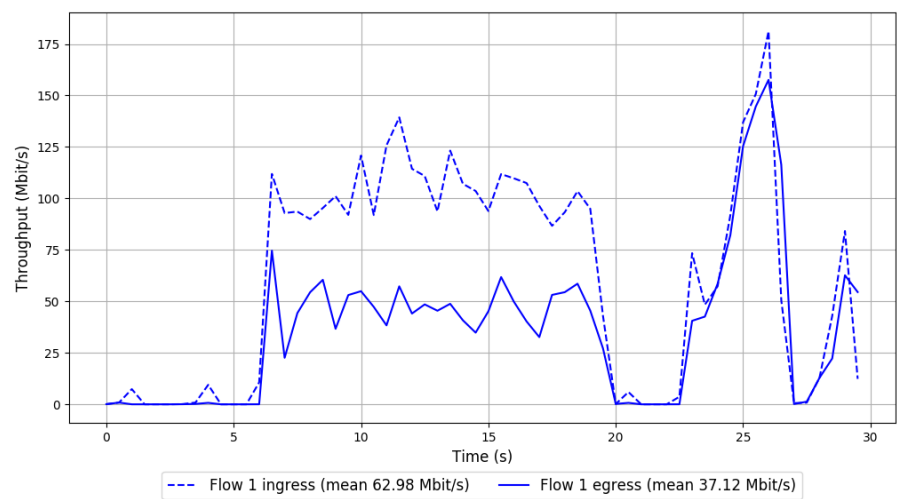
-- Flow 1:

Average throughput: 37.12 Mbit/s

95th percentile per-packet one-way delay: 139.016 ms

Loss rate: 41.06%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-17 08:13:33

End at: 2017-08-17 08:14:03

Below is generated by plot.py at 2017-08-17 09:25:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.00 Mbit/s

95th percentile per-packet one-way delay: 144.277 ms

Loss rate: 84.41%

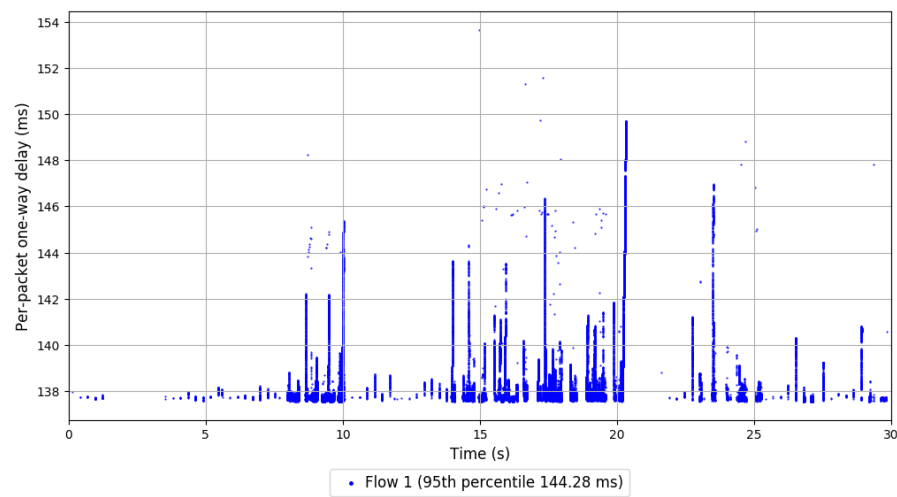
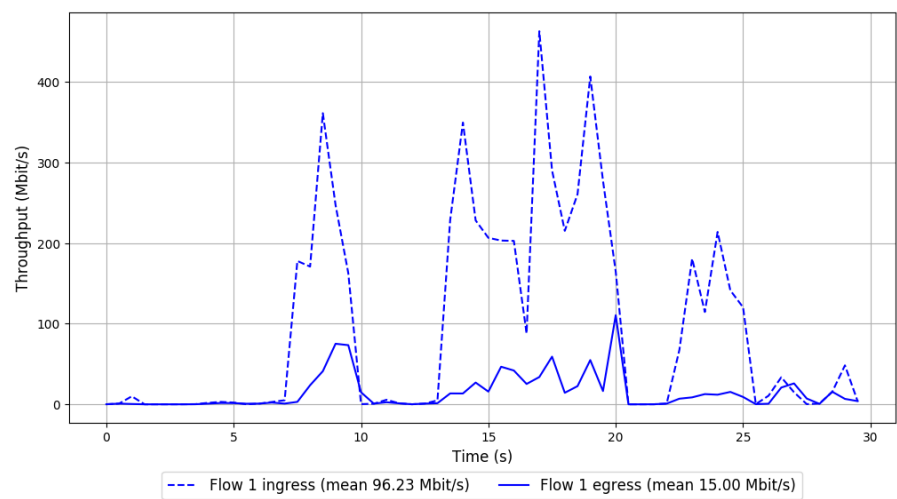
-- Flow 1:

Average throughput: 15.00 Mbit/s

95th percentile per-packet one-way delay: 144.277 ms

Loss rate: 84.41%

Run 10: Report of Verus — Data Link

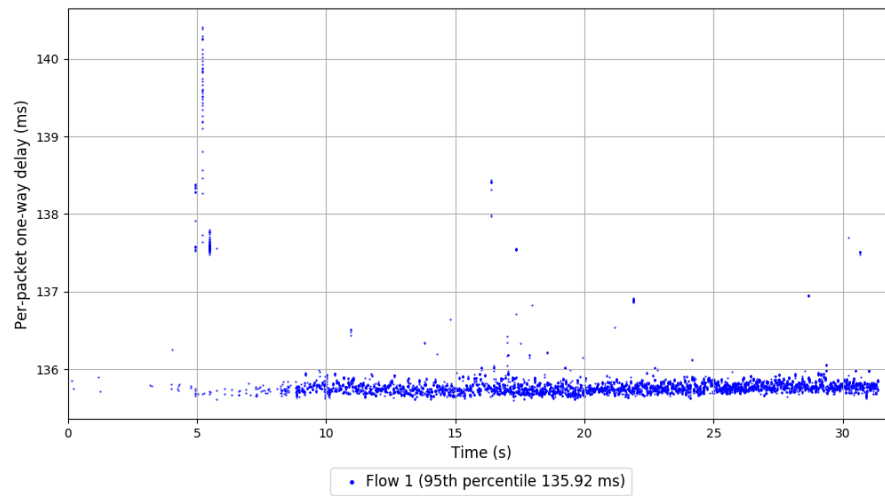
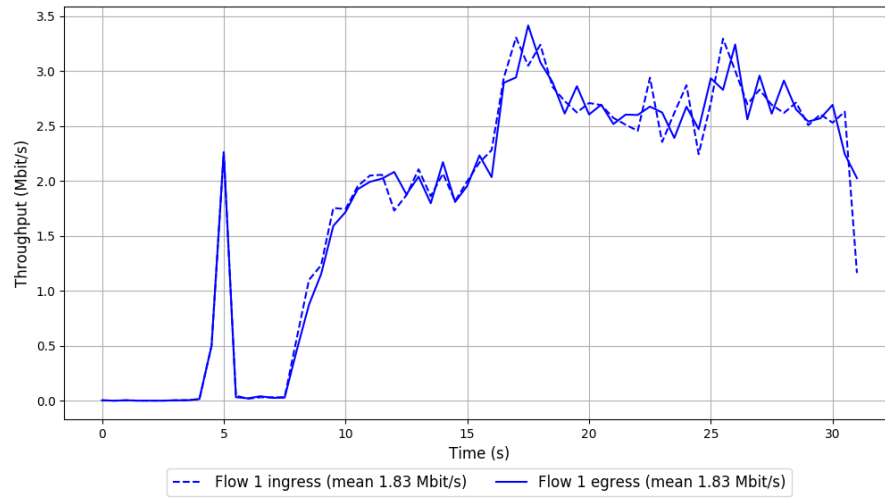


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-17 06:30:52
End at: 2017-08-17 06:31:22

# Below is generated by plot.py at 2017-08-17 09:25:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 135.920 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 135.920 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-17 06:42:14

End at: 2017-08-17 06:42:44

Below is generated by plot.py at 2017-08-17 09:25:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 137.381 ms

Loss rate: 0.00%

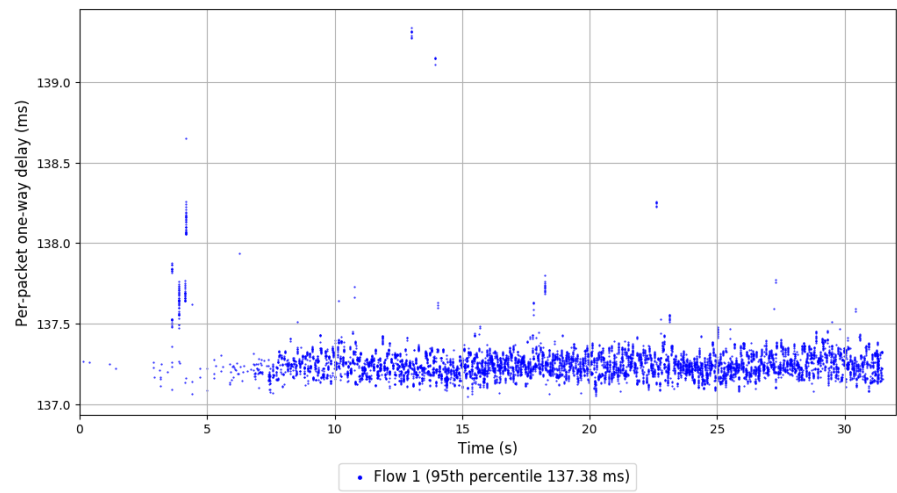
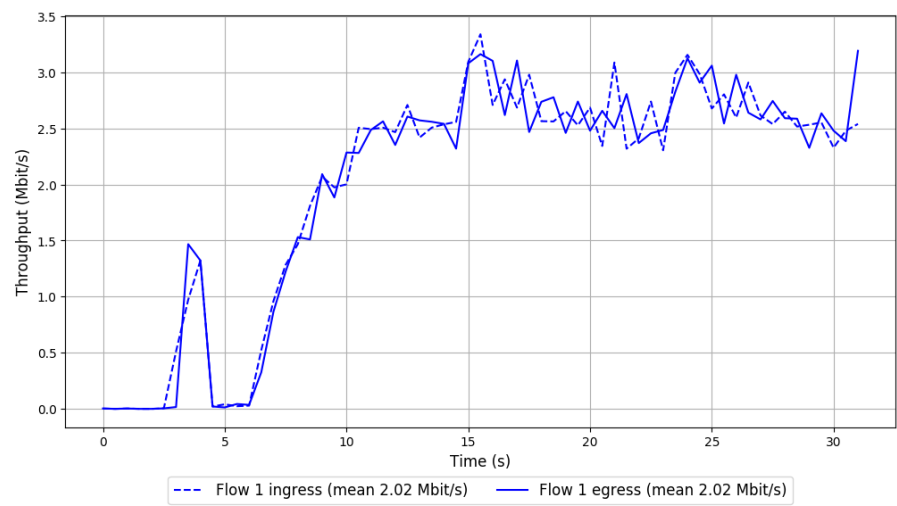
-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 137.381 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-17 06:53:29

End at: 2017-08-17 06:53:59

Below is generated by plot.py at 2017-08-17 09:25:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 137.736 ms

Loss rate: 0.00%

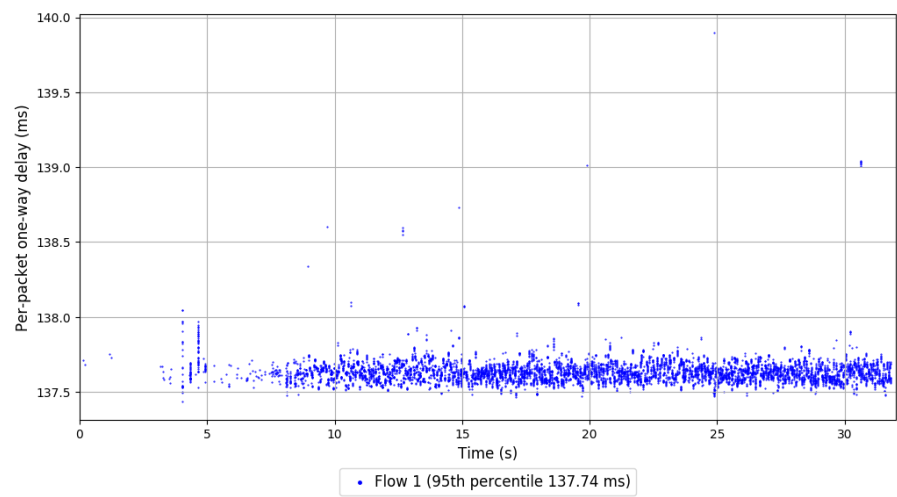
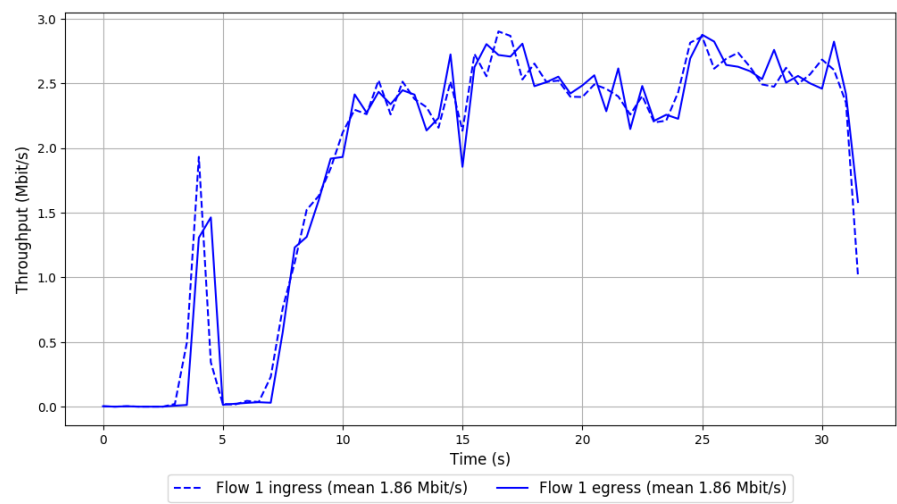
-- Flow 1:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 137.736 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-17 07:04:52

End at: 2017-08-17 07:05:22

Below is generated by plot.py at 2017-08-17 09:25:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 136.968 ms

Loss rate: 0.00%

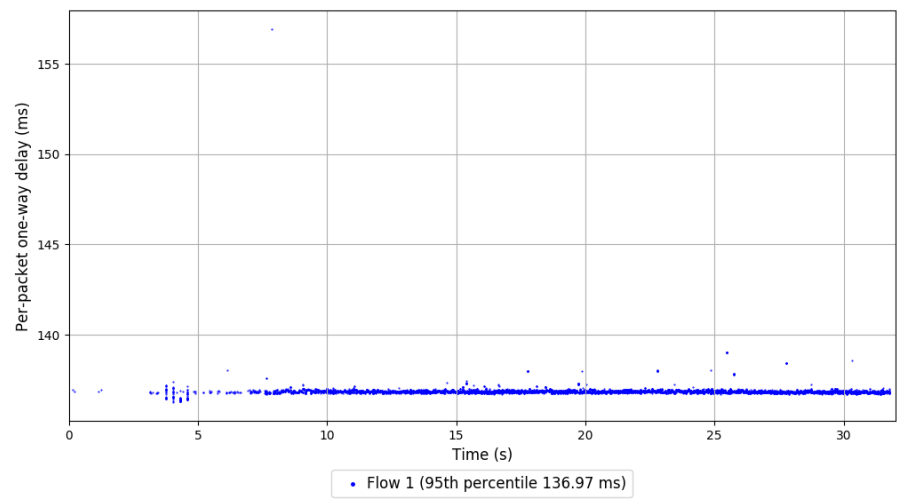
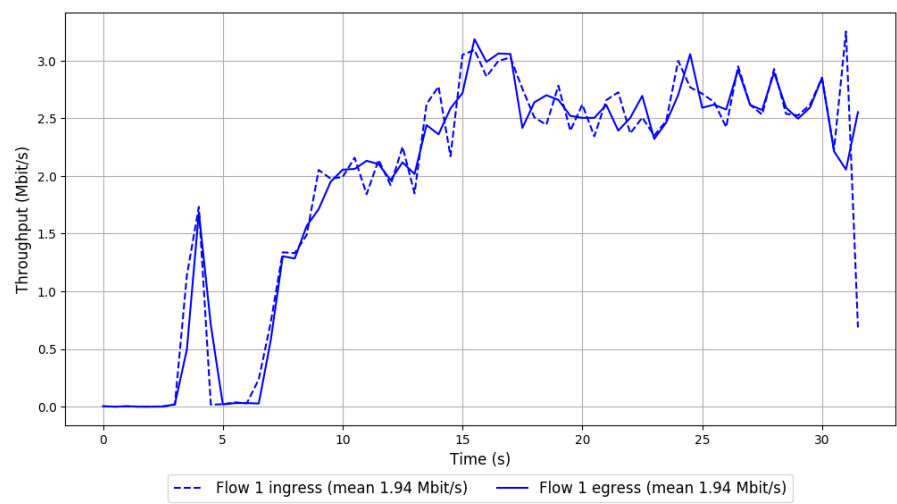
-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 136.968 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-17 07:16:18

End at: 2017-08-17 07:16:48

Below is generated by plot.py at 2017-08-17 09:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 136.081 ms

Loss rate: 0.00%

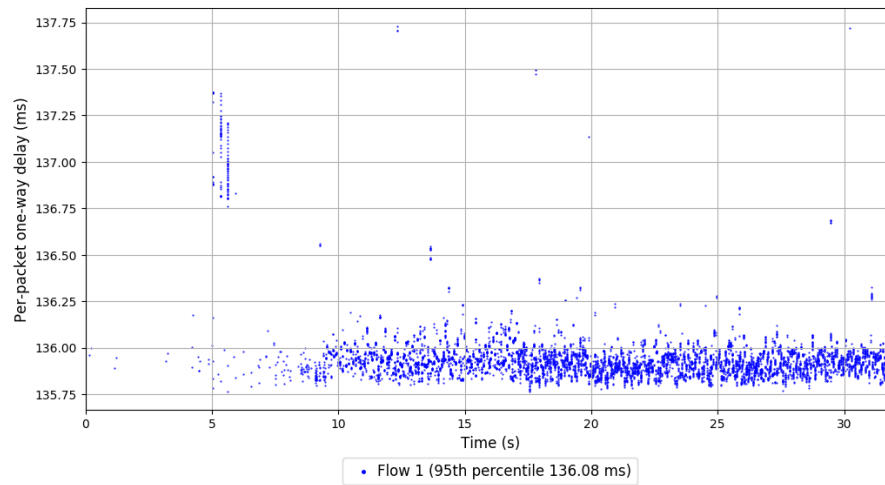
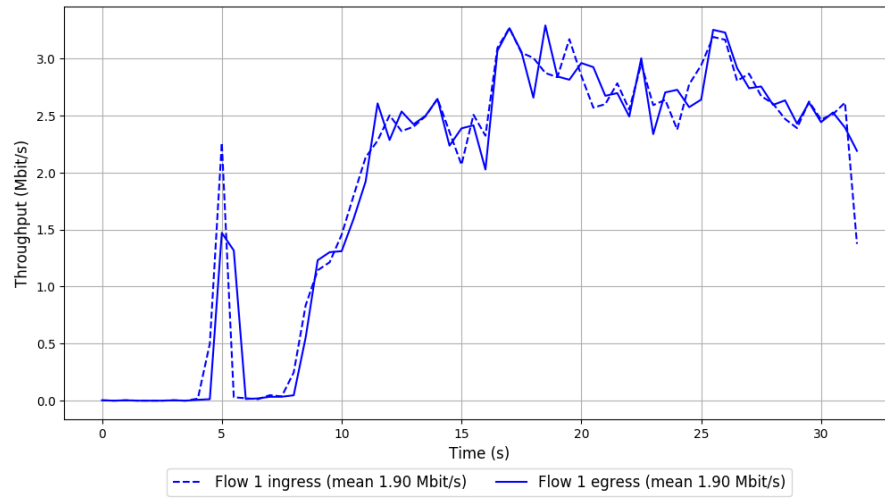
-- Flow 1:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 136.081 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-17 07:28:07

End at: 2017-08-17 07:28:37

Below is generated by plot.py at 2017-08-17 09:25:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 136.981 ms

Loss rate: 0.00%

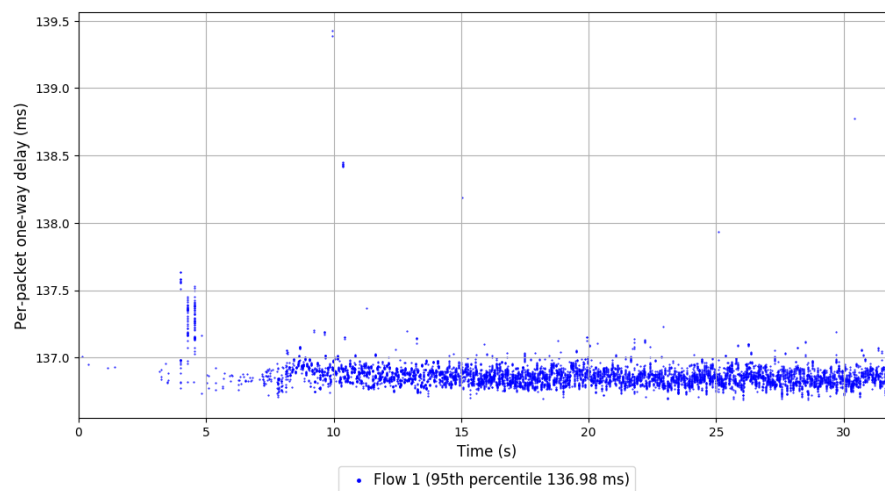
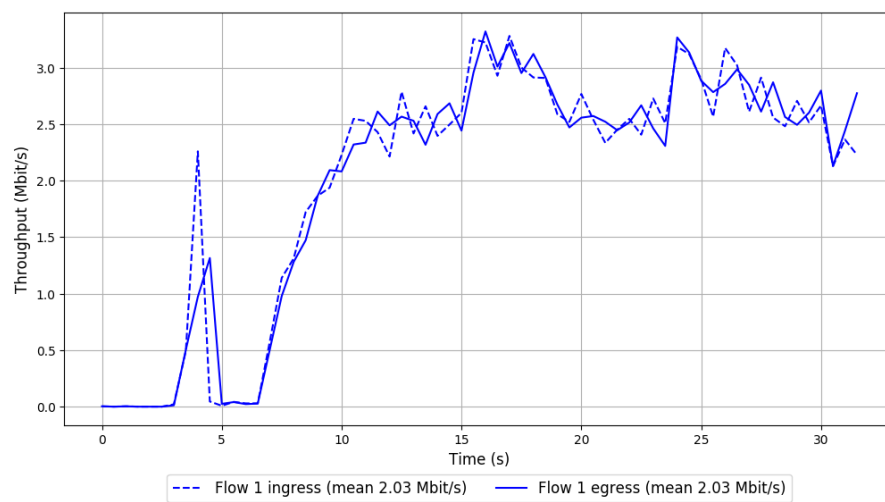
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 136.981 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-17 07:39:42

End at: 2017-08-17 07:40:12

Below is generated by plot.py at 2017-08-17 09:25:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 137.296 ms

Loss rate: 0.00%

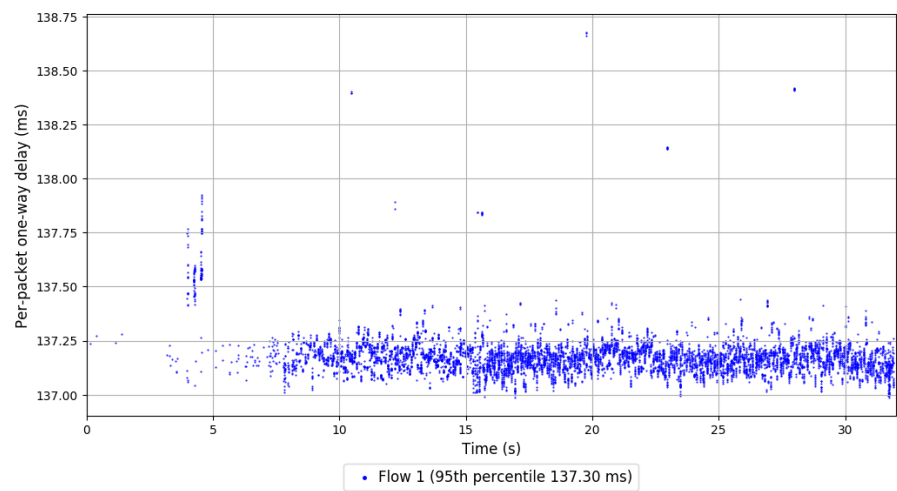
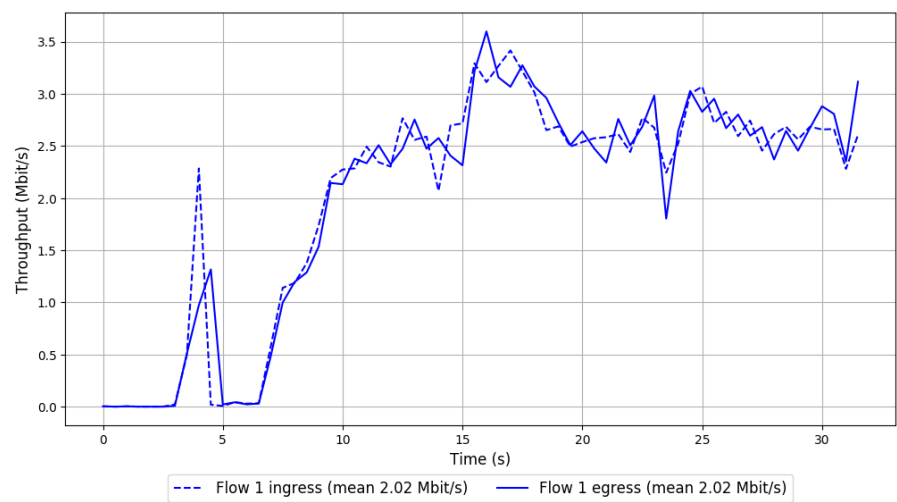
-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 137.296 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-17 07:51:21

End at: 2017-08-17 07:51:51

Below is generated by plot.py at 2017-08-17 09:25:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 136.905 ms

Loss rate: 0.00%

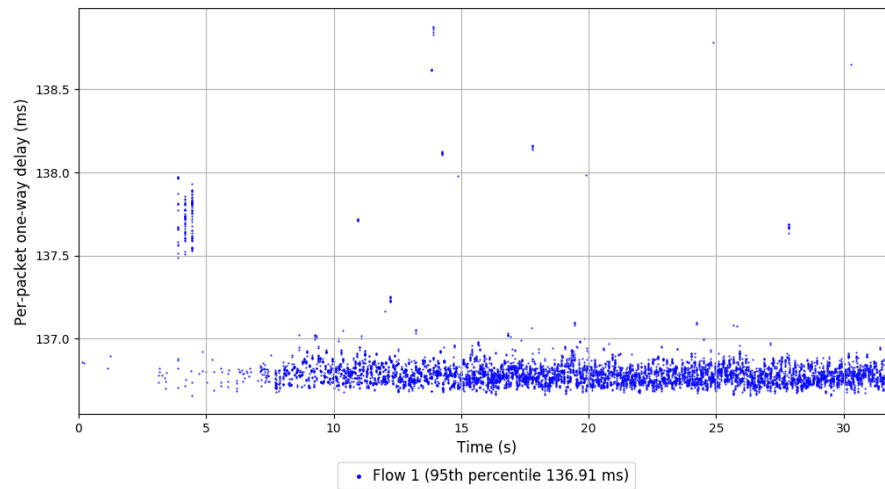
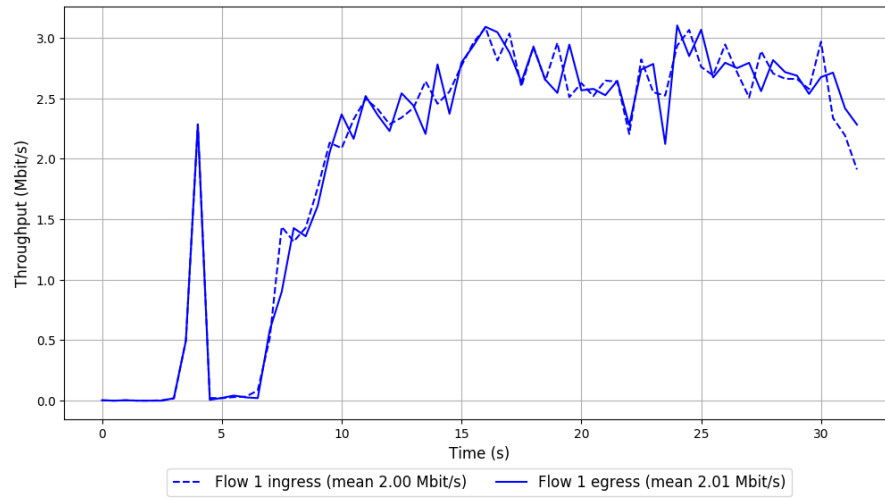
-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 136.905 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-17 08:03:04

End at: 2017-08-17 08:03:34

Below is generated by plot.py at 2017-08-17 09:25:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 136.711 ms

Loss rate: 0.01%

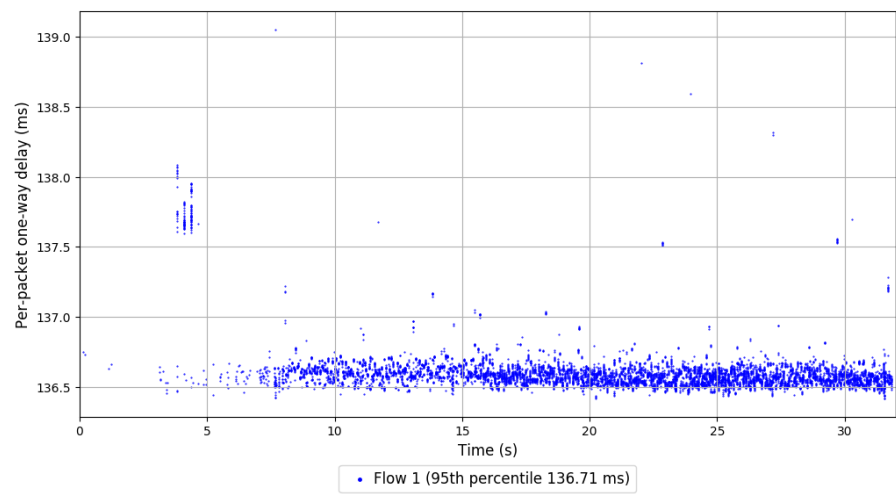
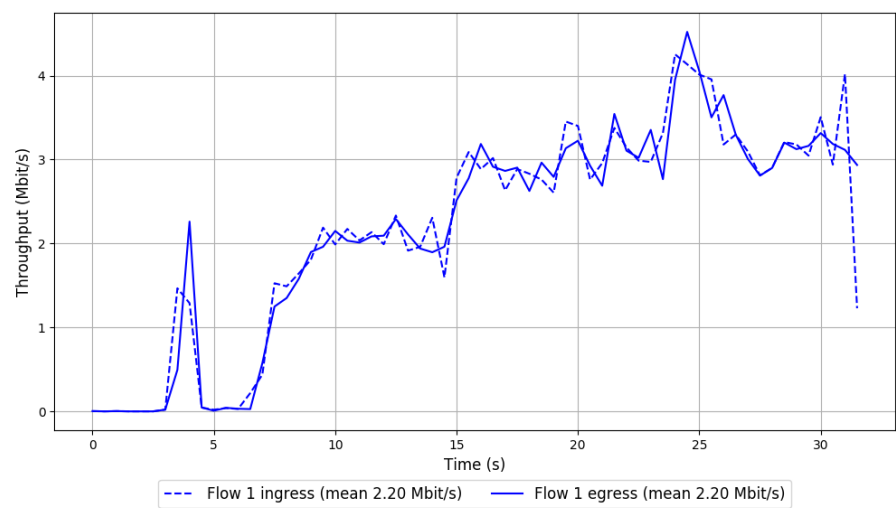
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 136.711 ms

Loss rate: 0.01%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-17 08:14:19

End at: 2017-08-17 08:14:49

Below is generated by plot.py at 2017-08-17 09:25:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 136.875 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 136.875 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

