

Pantheon Report

Generated at 2017-09-18 07:28:08 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

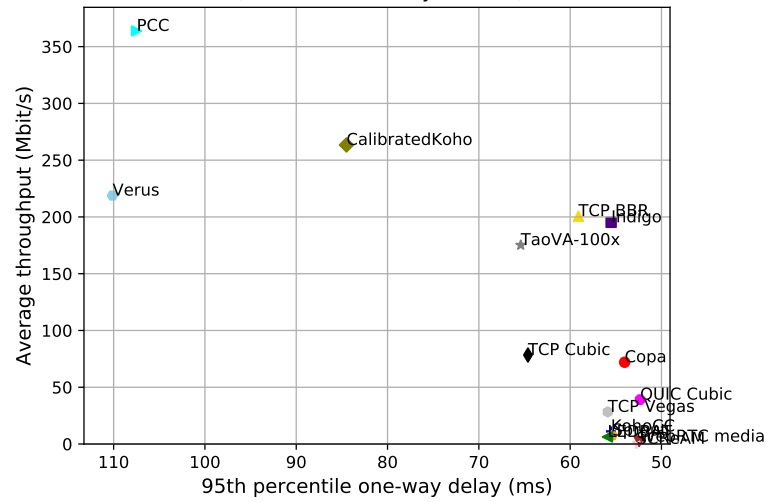
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

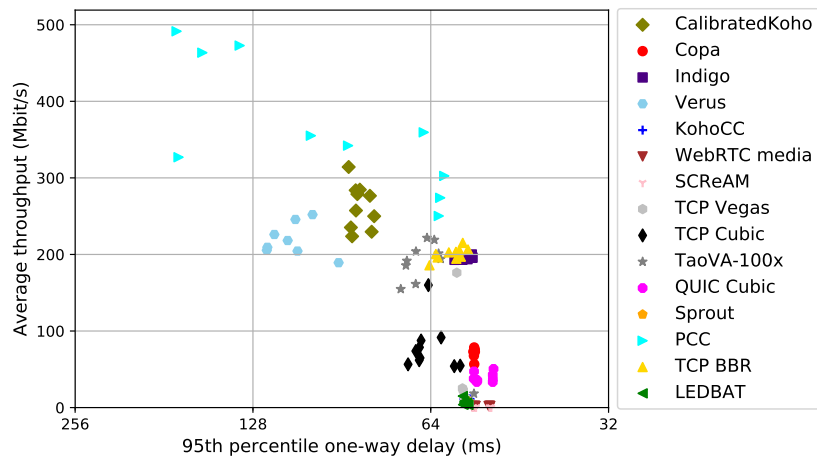
Git summary:

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

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



test from GCE Tokyo Ethernet to GCE Sydney 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	200.73	59.10	0.43
CalibratedKoho	10	263.40	84.50	0.50
Copa	10	72.02	54.03	0.37
TCP Cubic	10	78.37	64.62	0.28
Indigo	10	195.26	55.51	0.40
KohoCC	10	11.12	55.54	0.58
LEDBAT	10	6.25	55.92	1.45
PCC	10	363.83	107.48	1.57
QUIC Cubic	10	39.10	52.34	0.54
SCReAM	10	0.21	52.74	0.39
Sprout	10	7.53	55.39	0.87
TaoVA-100x	10	175.20	65.41	0.58
TCP Vegas	10	28.29	55.88	0.53
Verus	8	218.81	110.13	2.27
WebRTC media	10	2.12	52.44	0.46

Run 1: Statistics of TCP BBR

Start at: 2017-09-18 02:29:22

End at: 2017-09-18 02:29:52

Below is generated by plot.py at 2017-09-18 06:50:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.89 Mbit/s

95th percentile per-packet one-way delay: 64.318 ms

Loss rate: 0.99%

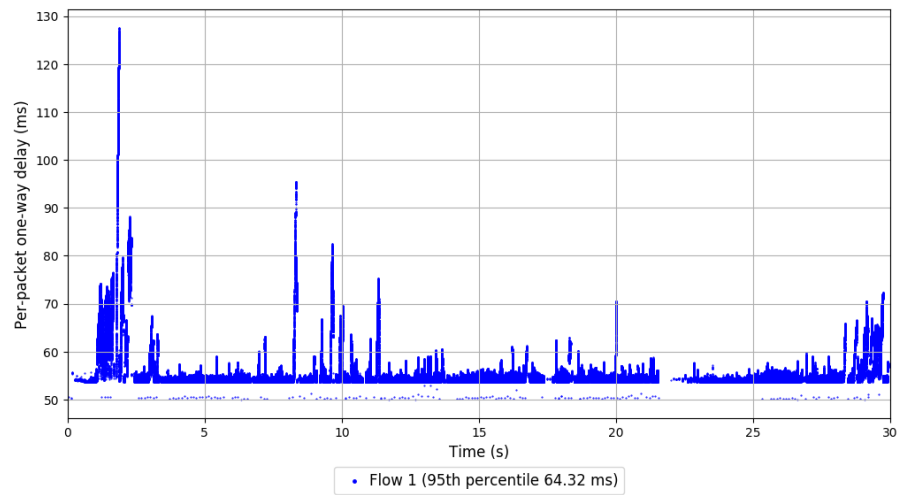
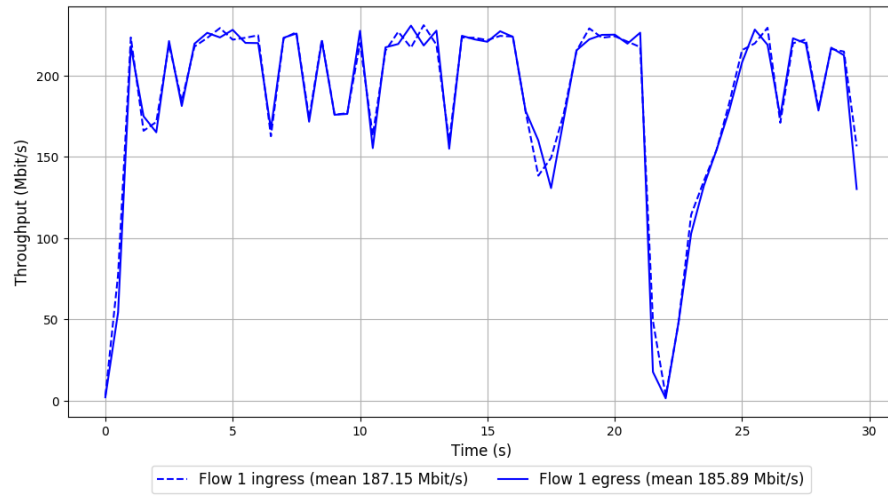
-- Flow 1:

Average throughput: 185.89 Mbit/s

95th percentile per-packet one-way delay: 64.318 ms

Loss rate: 0.99%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-09-18 02:41:03

End at: 2017-09-18 02:41:33

Below is generated by plot.py at 2017-09-18 06:50:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.36 Mbit/s

95th percentile per-packet one-way delay: 57.251 ms

Loss rate: 0.38%

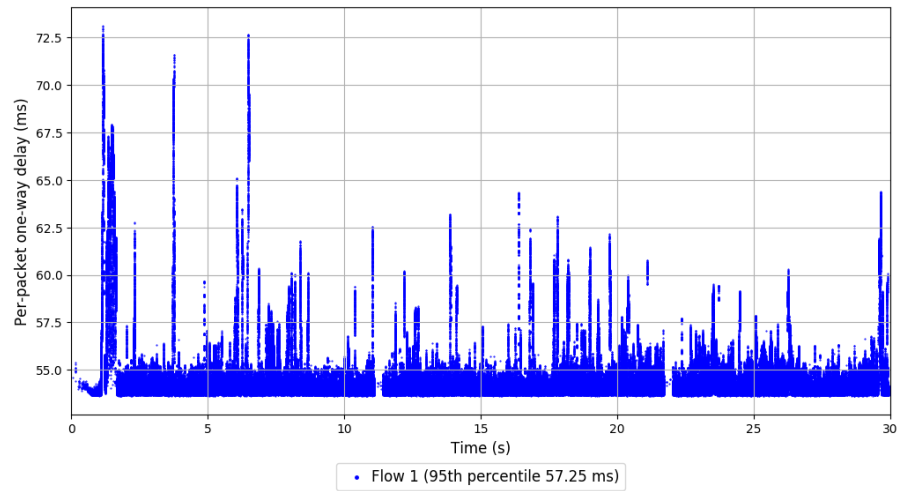
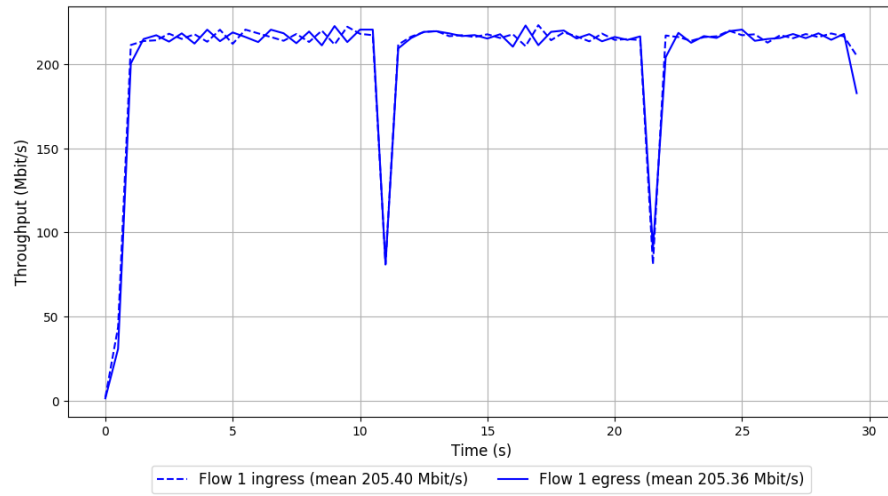
-- Flow 1:

Average throughput: 205.36 Mbit/s

95th percentile per-packet one-way delay: 57.251 ms

Loss rate: 0.38%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-09-18 02:52:29

End at: 2017-09-18 02:52:59

Below is generated by plot.py at 2017-09-18 06:50:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.71 Mbit/s

95th percentile per-packet one-way delay: 59.646 ms

Loss rate: 0.45%

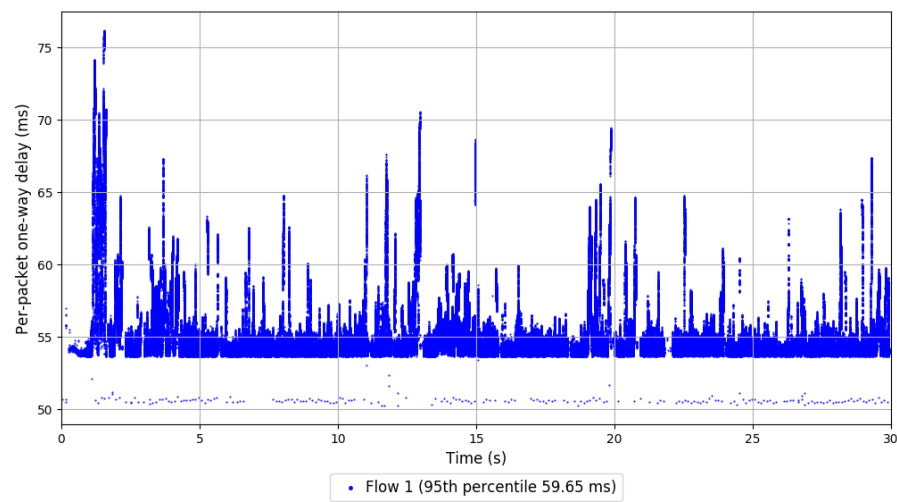
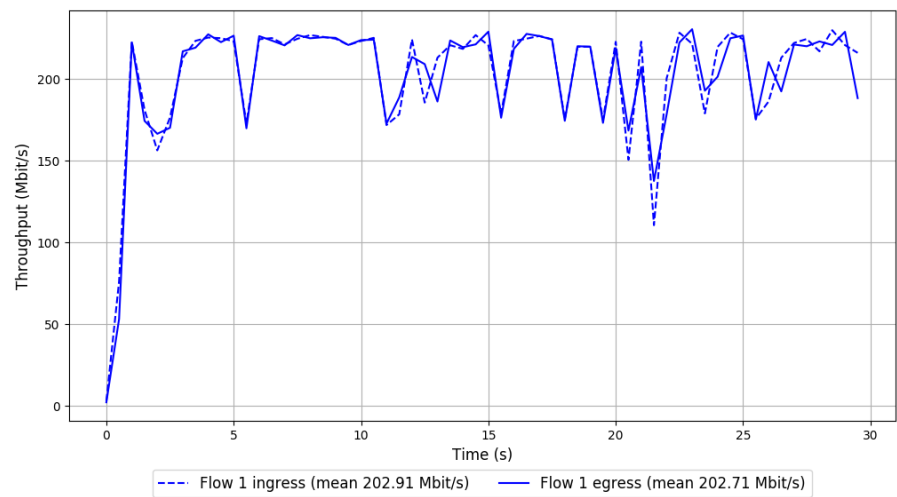
-- Flow 1:

Average throughput: 202.71 Mbit/s

95th percentile per-packet one-way delay: 59.646 ms

Loss rate: 0.45%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-09-18 03:04:06

End at: 2017-09-18 03:04:36

Below is generated by plot.py at 2017-09-18 06:51:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.14 Mbit/s

95th percentile per-packet one-way delay: 56.498 ms

Loss rate: 0.17%

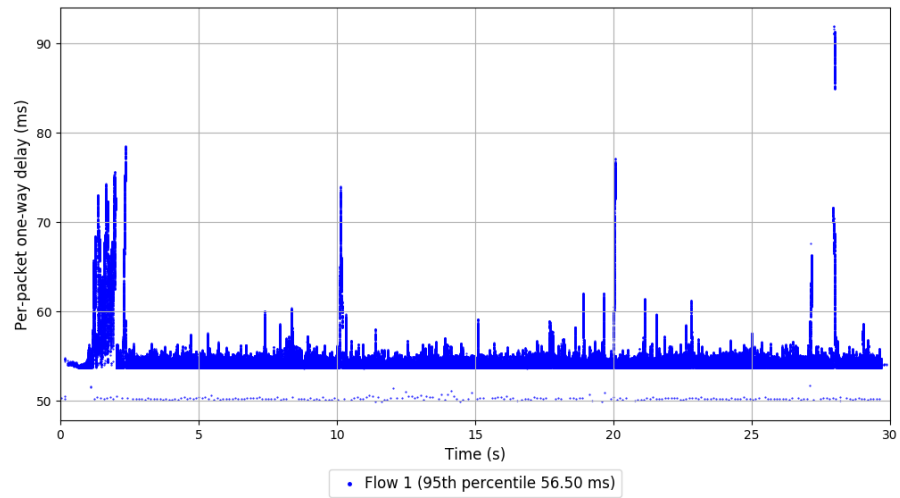
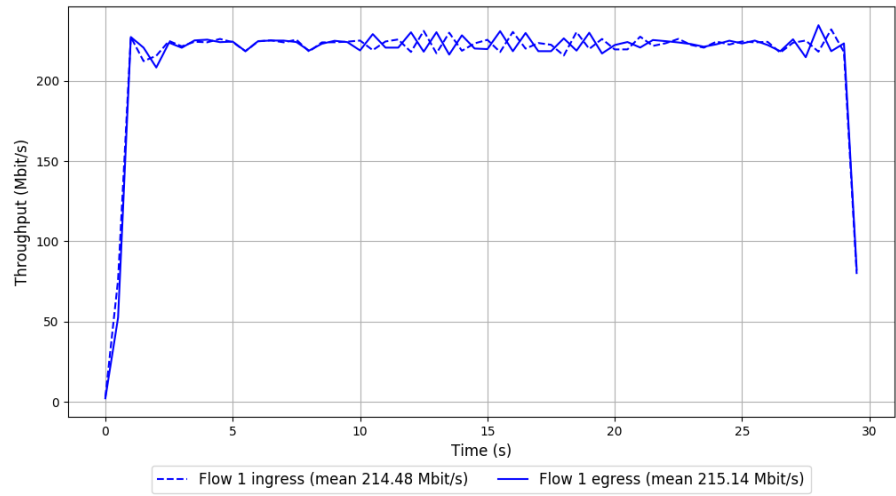
-- Flow 1:

Average throughput: 215.14 Mbit/s

95th percentile per-packet one-way delay: 56.498 ms

Loss rate: 0.17%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-09-18 03:15:42

End at: 2017-09-18 03:16:12

Below is generated by plot.py at 2017-09-18 06:51:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.12 Mbit/s

95th percentile per-packet one-way delay: 56.922 ms

Loss rate: 0.44%

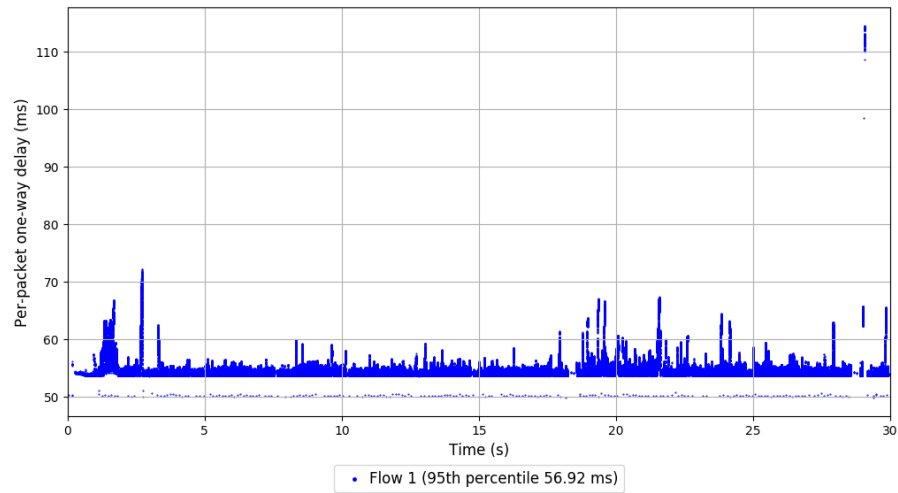
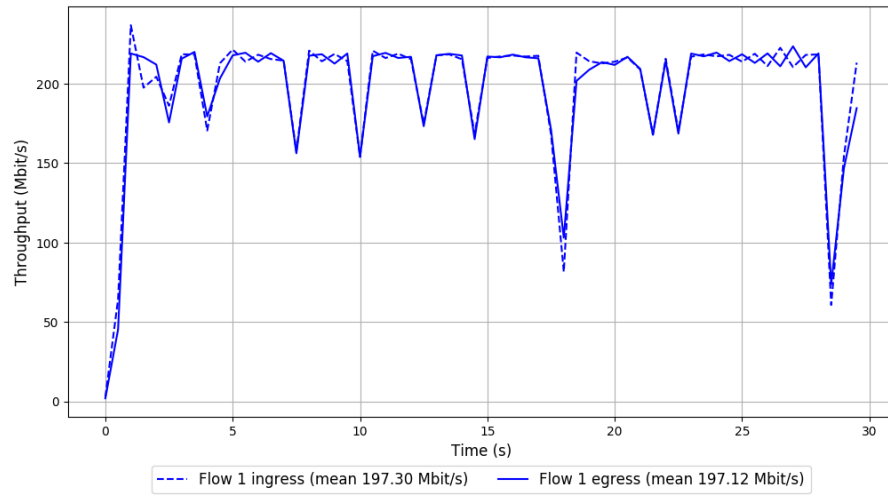
-- Flow 1:

Average throughput: 197.12 Mbit/s

95th percentile per-packet one-way delay: 56.922 ms

Loss rate: 0.44%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-09-18 03:27:04

End at: 2017-09-18 03:27:34

Below is generated by plot.py at 2017-09-18 06:51:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 206.50 Mbit/s

95th percentile per-packet one-way delay: 55.354 ms

Loss rate: 0.41%

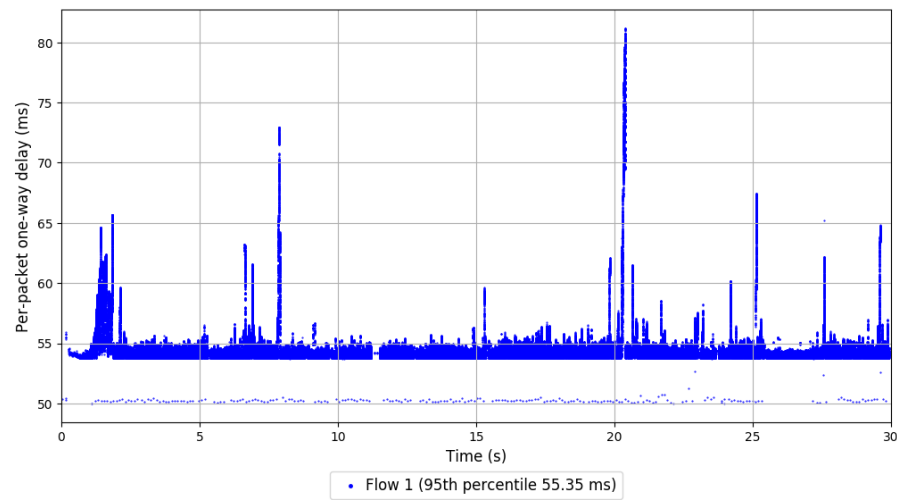
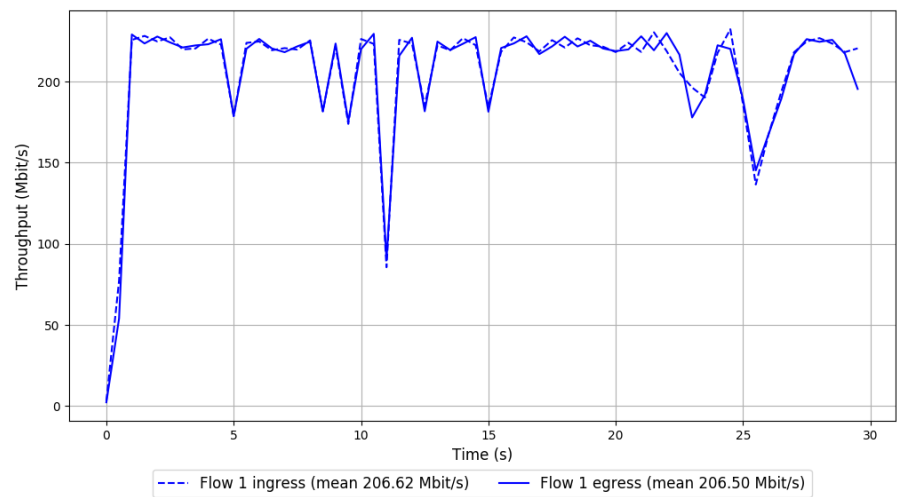
-- Flow 1:

Average throughput: 206.50 Mbit/s

95th percentile per-packet one-way delay: 55.354 ms

Loss rate: 0.41%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-09-18 03:38:28

End at: 2017-09-18 03:38:58

Below is generated by plot.py at 2017-09-18 06:51:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 203.41 Mbit/s

95th percentile per-packet one-way delay: 58.021 ms

Loss rate: 0.25%

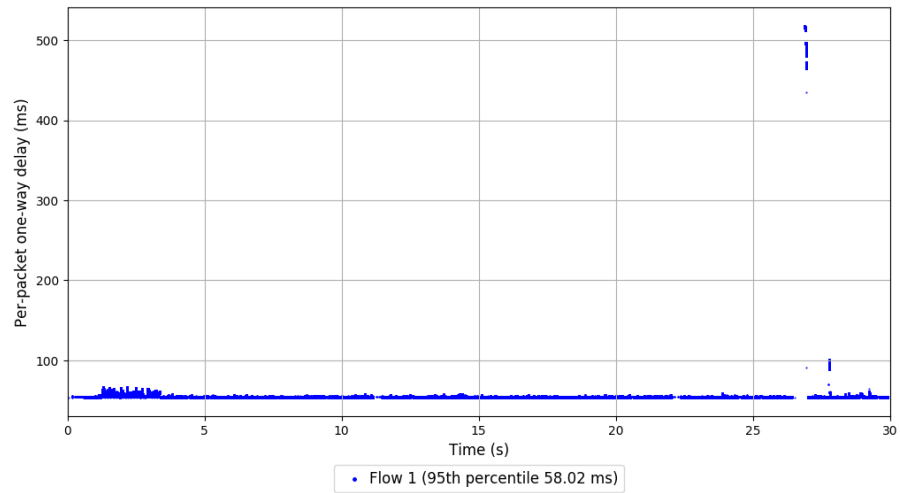
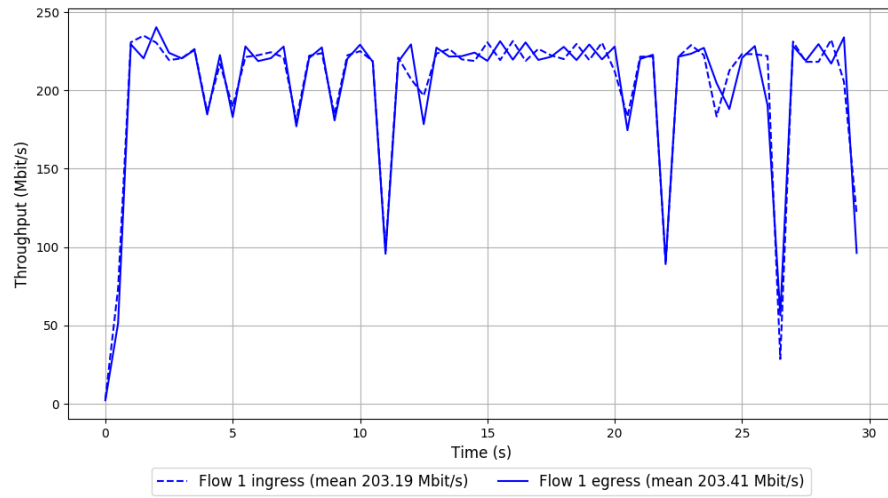
-- Flow 1:

Average throughput: 203.41 Mbit/s

95th percentile per-packet one-way delay: 58.021 ms

Loss rate: 0.25%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-09-18 03:50:07

End at: 2017-09-18 03:50:37

Below is generated by plot.py at 2017-09-18 06:51:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.15 Mbit/s

95th percentile per-packet one-way delay: 62.298 ms

Loss rate: 0.39%

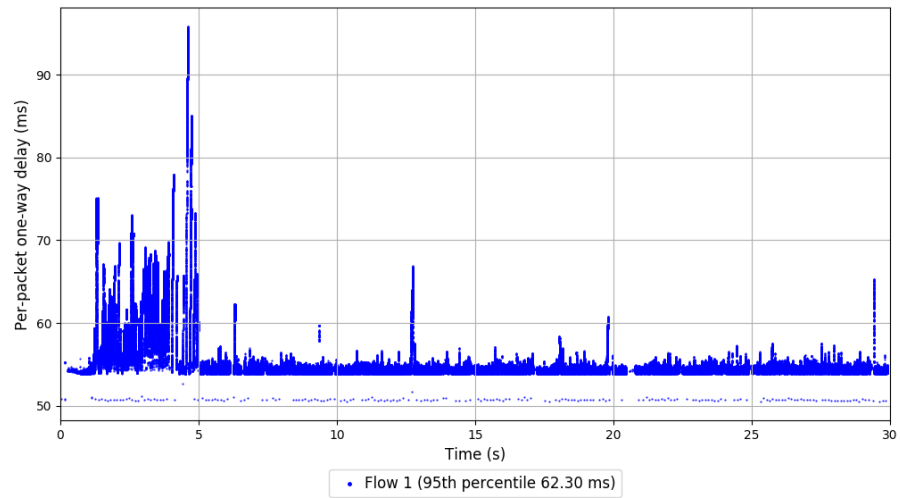
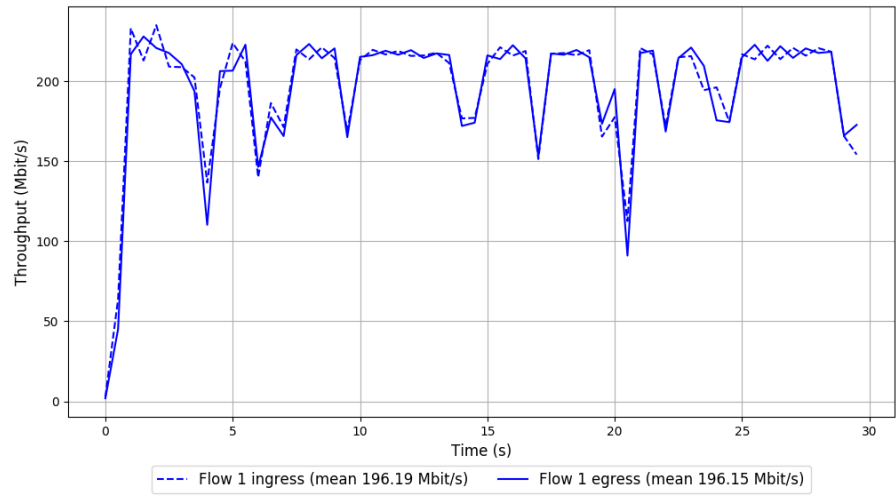
-- Flow 1:

Average throughput: 196.15 Mbit/s

95th percentile per-packet one-way delay: 62.298 ms

Loss rate: 0.39%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-09-18 04:01:24

End at: 2017-09-18 04:01:54

Below is generated by plot.py at 2017-09-18 06:54:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.46 Mbit/s

95th percentile per-packet one-way delay: 57.930 ms

Loss rate: 0.45%

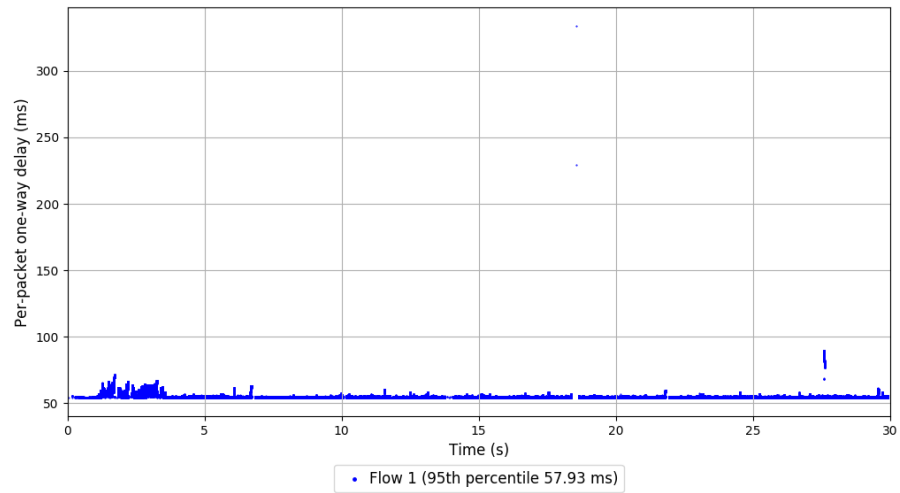
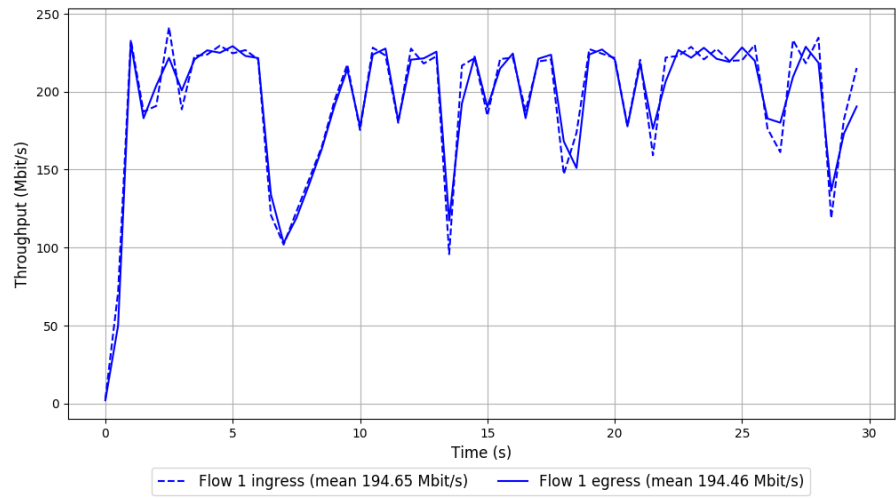
-- Flow 1:

Average throughput: 194.46 Mbit/s

95th percentile per-packet one-way delay: 57.930 ms

Loss rate: 0.45%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-09-18 04:12:32

End at: 2017-09-18 04:13:02

Below is generated by plot.py at 2017-09-18 06:54:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.51 Mbit/s

95th percentile per-packet one-way delay: 62.734 ms

Loss rate: 0.40%

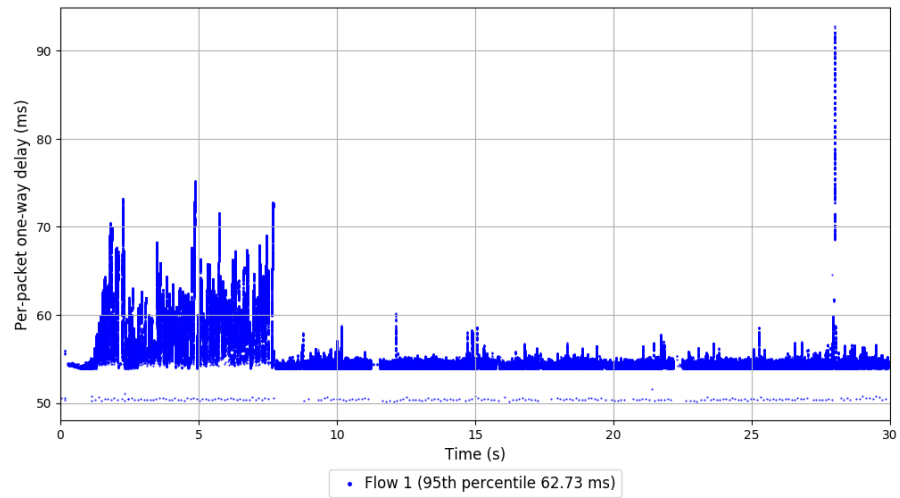
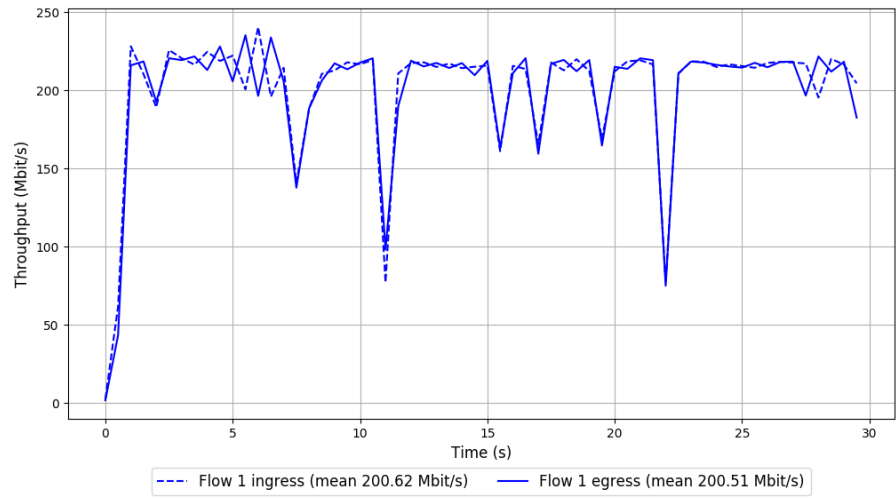
-- Flow 1:

Average throughput: 200.51 Mbit/s

95th percentile per-packet one-way delay: 62.734 ms

Loss rate: 0.40%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-09-18 02:27:43

End at: 2017-09-18 02:28:13

Below is generated by plot.py at 2017-09-18 06:54:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.69 Mbit/s

95th percentile per-packet one-way delay: 86.962 ms

Loss rate: 0.43%

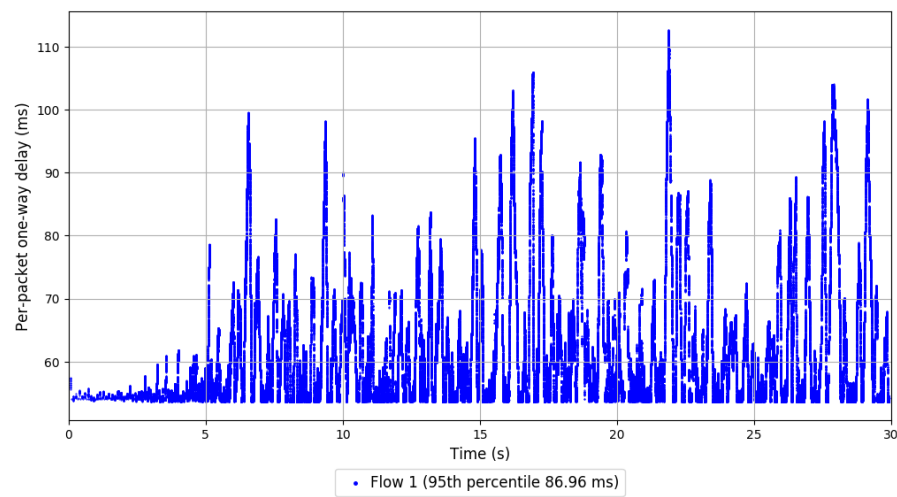
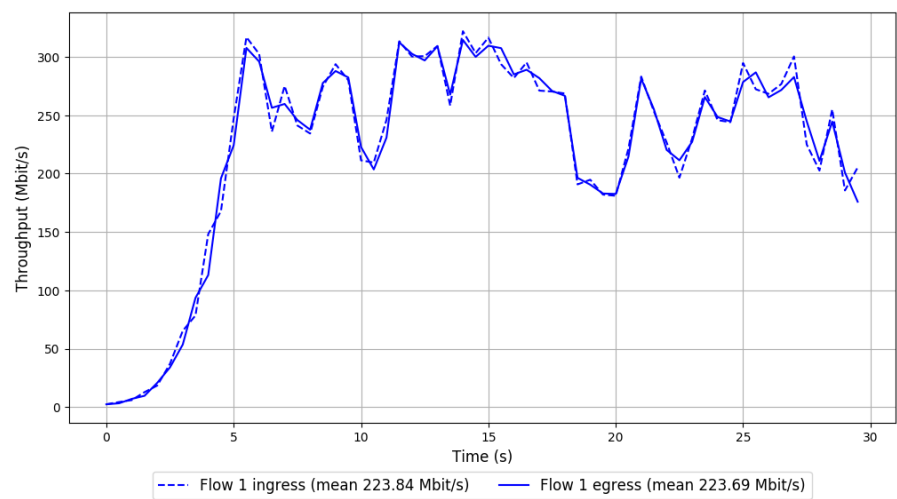
-- Flow 1:

Average throughput: 223.69 Mbit/s

95th percentile per-packet one-way delay: 86.962 ms

Loss rate: 0.43%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-09-18 02:39:22

End at: 2017-09-18 02:39:52

Below is generated by plot.py at 2017-09-18 06:54:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 235.25 Mbit/s

95th percentile per-packet one-way delay: 87.378 ms

Loss rate: 0.50%

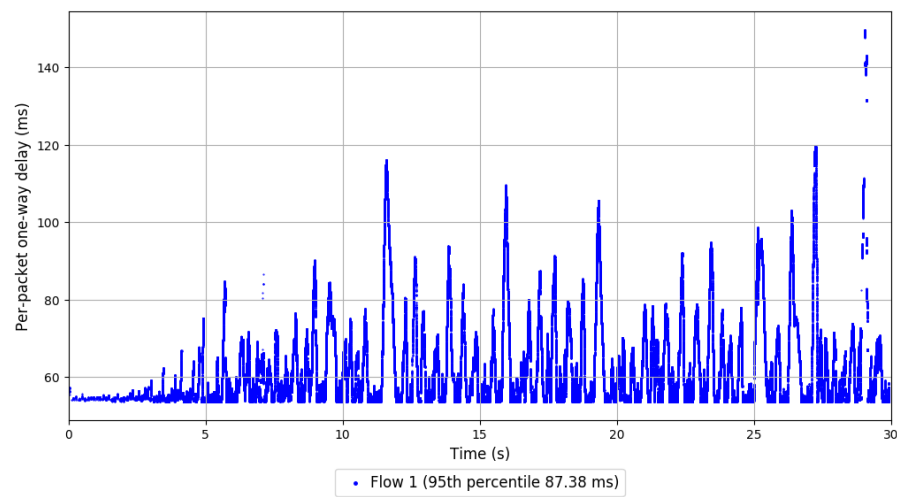
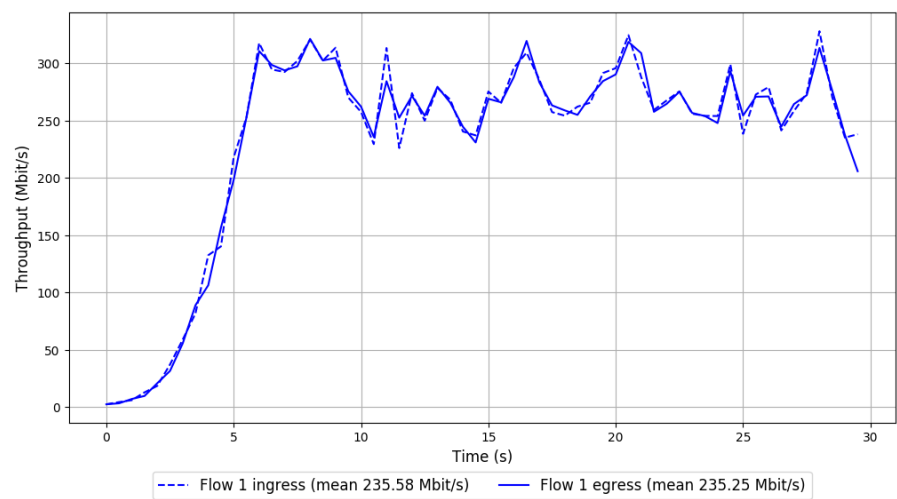
-- Flow 1:

Average throughput: 235.25 Mbit/s

95th percentile per-packet one-way delay: 87.378 ms

Loss rate: 0.50%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-09-18 02:50:48

End at: 2017-09-18 02:51:18

Below is generated by plot.py at 2017-09-18 06:54:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 229.66 Mbit/s

95th percentile per-packet one-way delay: 80.582 ms

Loss rate: 0.50%

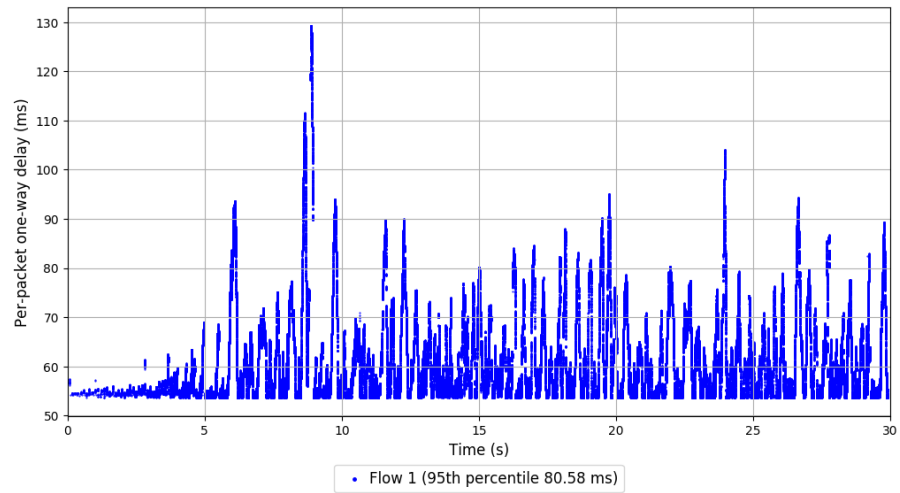
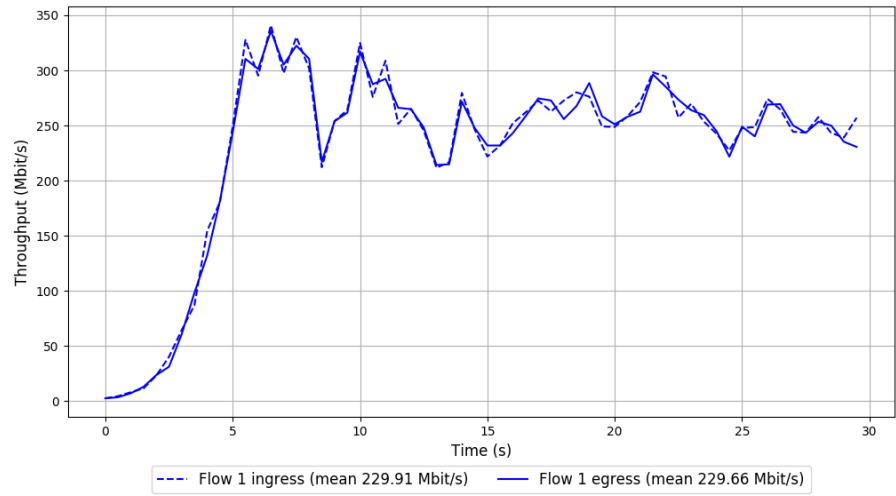
-- Flow 1:

Average throughput: 229.66 Mbit/s

95th percentile per-packet one-way delay: 80.582 ms

Loss rate: 0.50%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-09-18 03:02:23

End at: 2017-09-18 03:02:53

Below is generated by plot.py at 2017-09-18 06:55:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 257.38 Mbit/s

95th percentile per-packet one-way delay: 85.668 ms

Loss rate: 0.58%

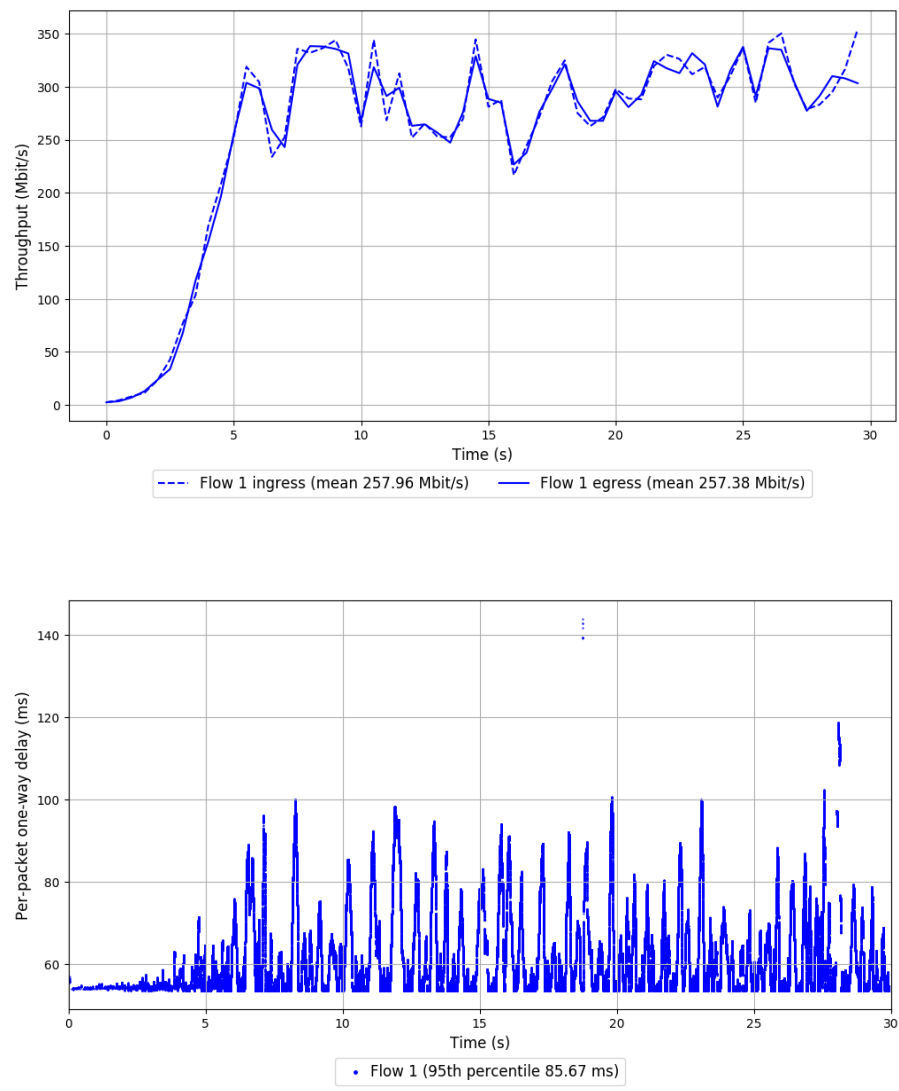
-- Flow 1:

Average throughput: 257.38 Mbit/s

95th percentile per-packet one-way delay: 85.668 ms

Loss rate: 0.58%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-09-18 03:14:00

End at: 2017-09-18 03:14:30

Below is generated by plot.py at 2017-09-18 06:55:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 249.96 Mbit/s

95th percentile per-packet one-way delay: 79.799 ms

Loss rate: 0.57%

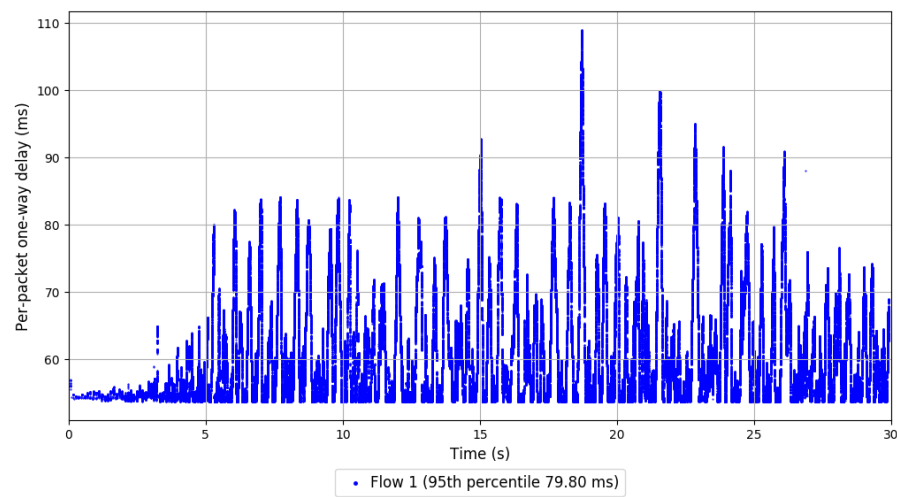
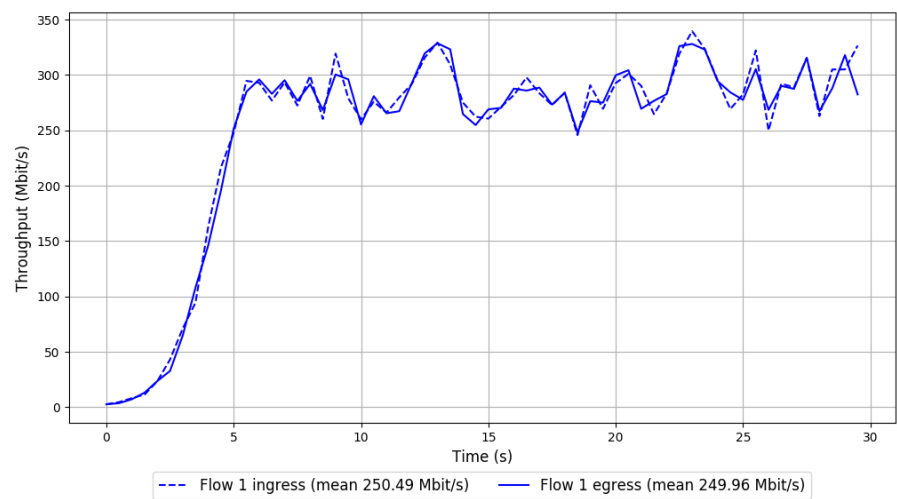
-- Flow 1:

Average throughput: 249.96 Mbit/s

95th percentile per-packet one-way delay: 79.799 ms

Loss rate: 0.57%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-09-18 03:25:21

End at: 2017-09-18 03:25:51

Below is generated by plot.py at 2017-09-18 06:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 314.22 Mbit/s

95th percentile per-packet one-way delay: 88.132 ms

Loss rate: 0.53%

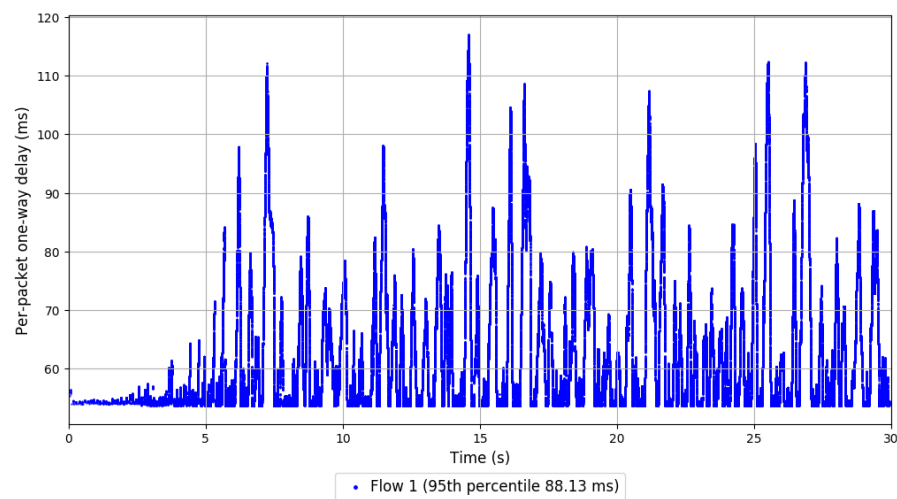
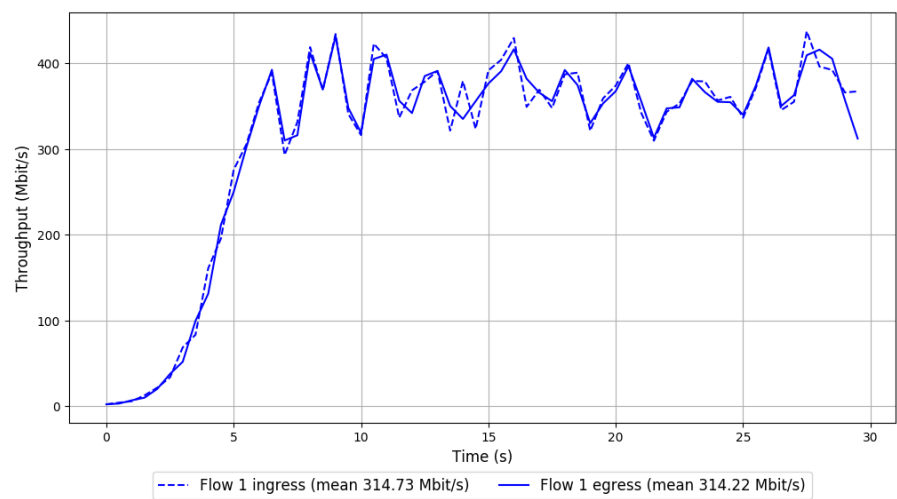
-- Flow 1:

Average throughput: 314.22 Mbit/s

95th percentile per-packet one-way delay: 88.132 ms

Loss rate: 0.53%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-09-18 03:36:48

End at: 2017-09-18 03:37:18

Below is generated by plot.py at 2017-09-18 06:59:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 283.79 Mbit/s

95th percentile per-packet one-way delay: 85.758 ms

Loss rate: 0.48%

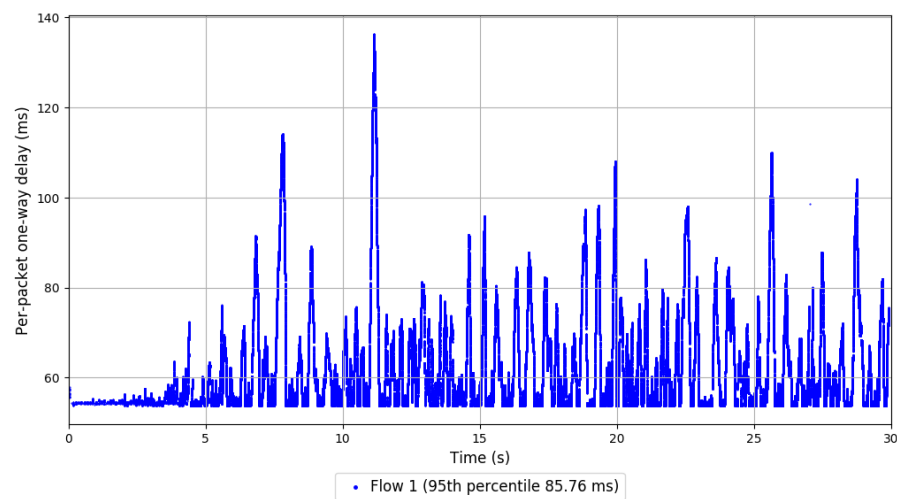
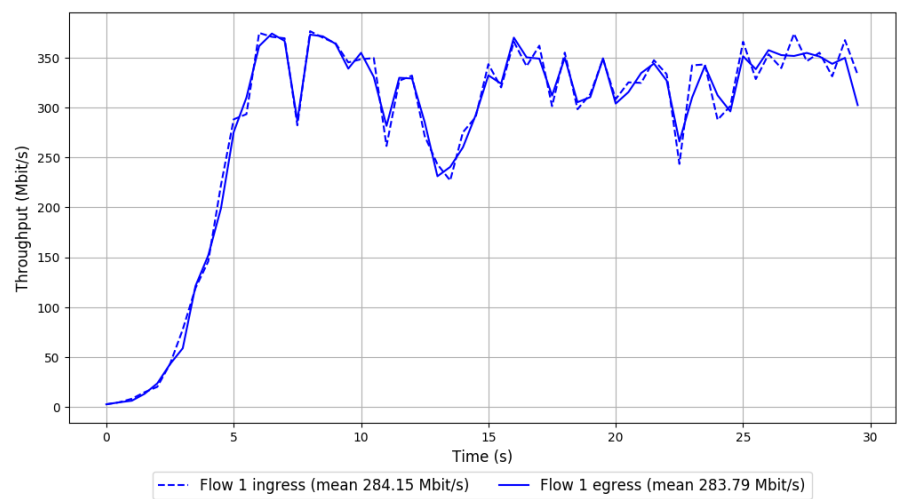
-- Flow 1:

Average throughput: 283.79 Mbit/s

95th percentile per-packet one-way delay: 85.758 ms

Loss rate: 0.48%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-09-18 03:48:26

End at: 2017-09-18 03:48:56

Below is generated by plot.py at 2017-09-18 06:59:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 284.62 Mbit/s

95th percentile per-packet one-way delay: 84.384 ms

Loss rate: 0.45%

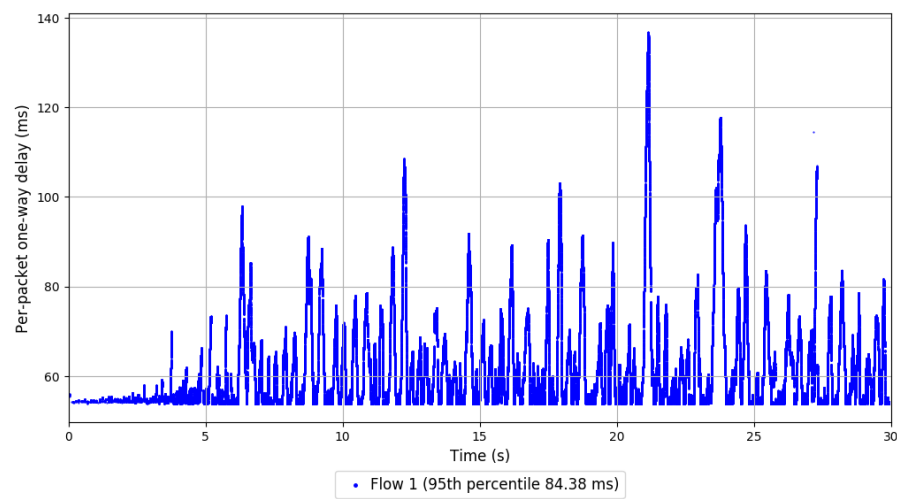
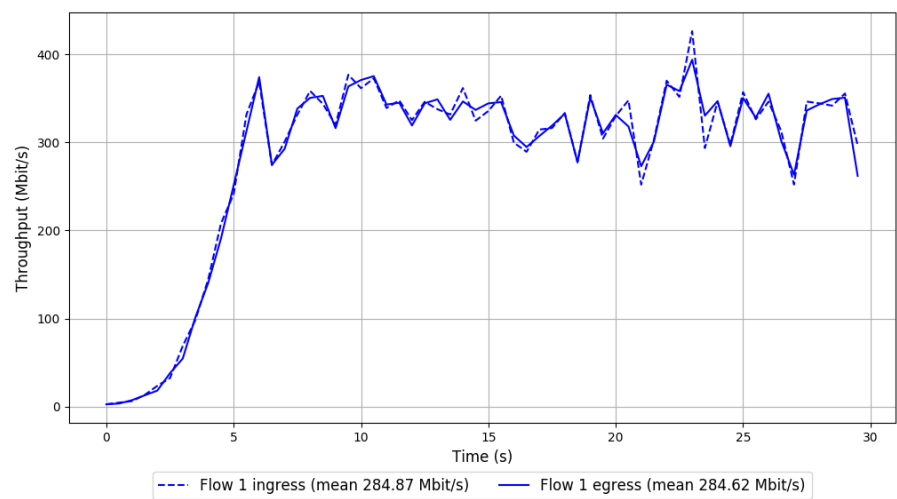
-- Flow 1:

Average throughput: 284.62 Mbit/s

95th percentile per-packet one-way delay: 84.384 ms

Loss rate: 0.45%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-09-18 03:59:44

End at: 2017-09-18 04:00:14

Below is generated by plot.py at 2017-09-18 06:59:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 278.81 Mbit/s

95th percentile per-packet one-way delay: 85.197 ms

Loss rate: 0.51%

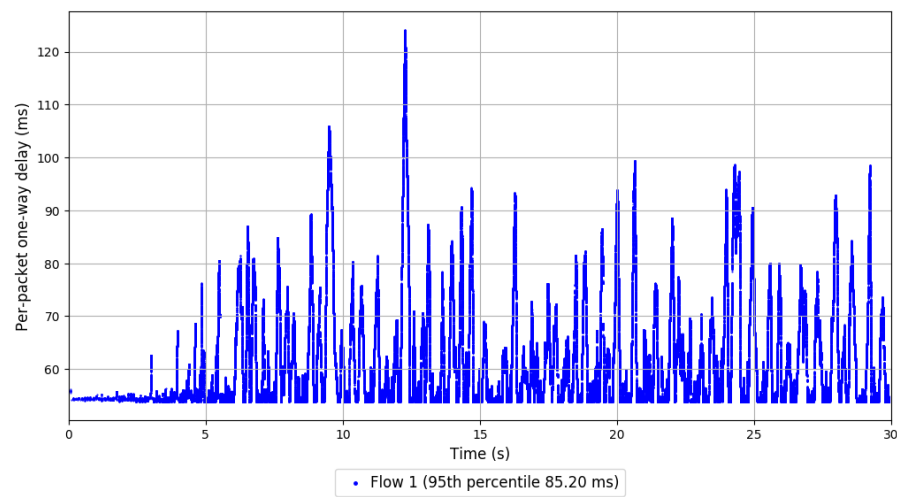
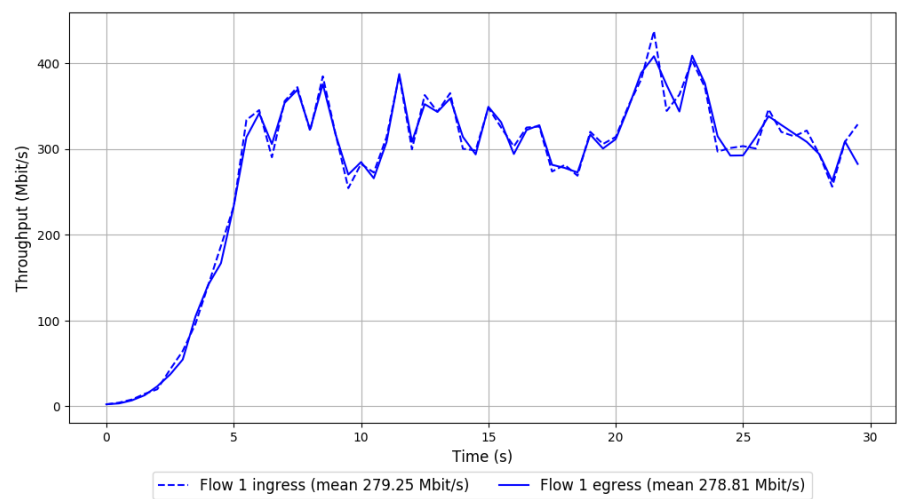
-- Flow 1:

Average throughput: 278.81 Mbit/s

95th percentile per-packet one-way delay: 85.197 ms

Loss rate: 0.51%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-09-18 04:10:52

End at: 2017-09-18 04:11:22

Below is generated by plot.py at 2017-09-18 06:59:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 276.59 Mbit/s

95th percentile per-packet one-way delay: 81.133 ms

Loss rate: 0.49%

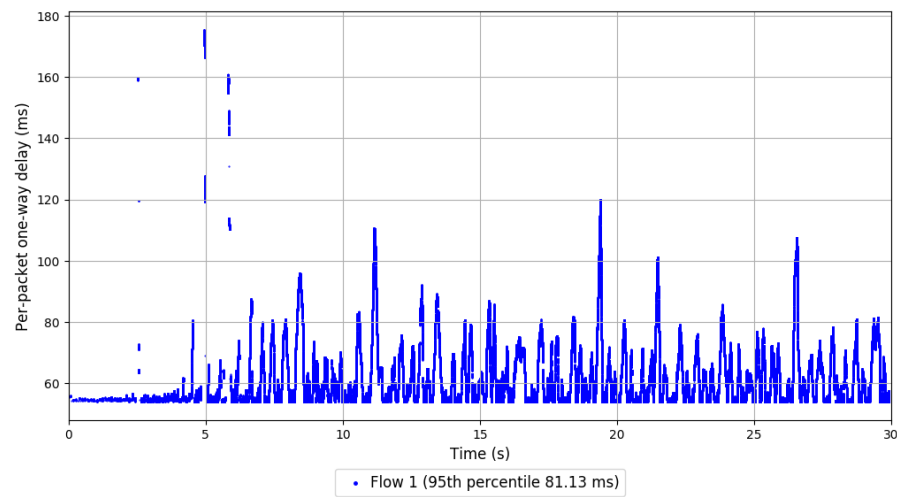
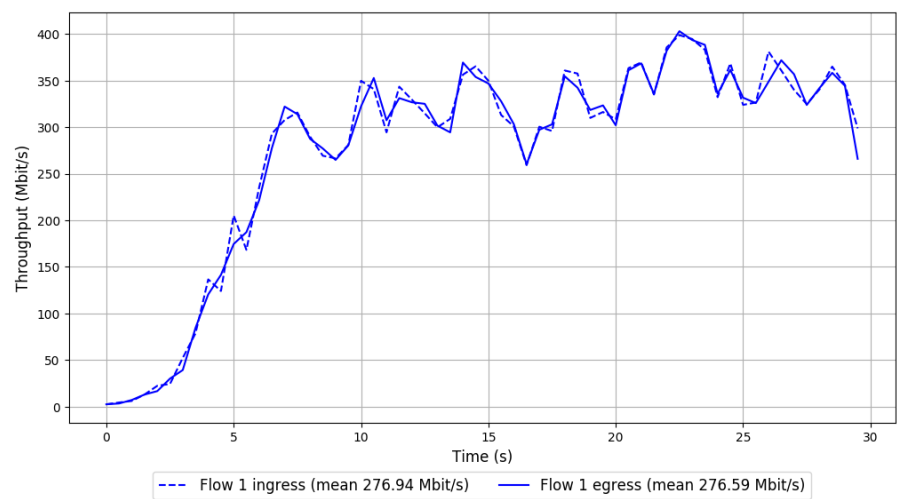
-- Flow 1:

Average throughput: 276.59 Mbit/s

95th percentile per-packet one-way delay: 81.133 ms

Loss rate: 0.49%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-09-18 02:34:28

End at: 2017-09-18 02:34:58

Below is generated by plot.py at 2017-09-18 06:59:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.77 Mbit/s

95th percentile per-packet one-way delay: 54.091 ms

Loss rate: 0.25%

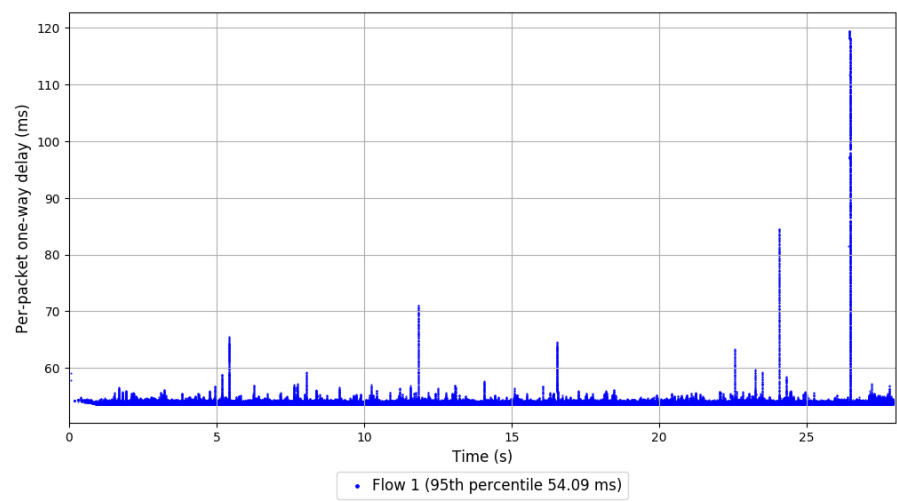
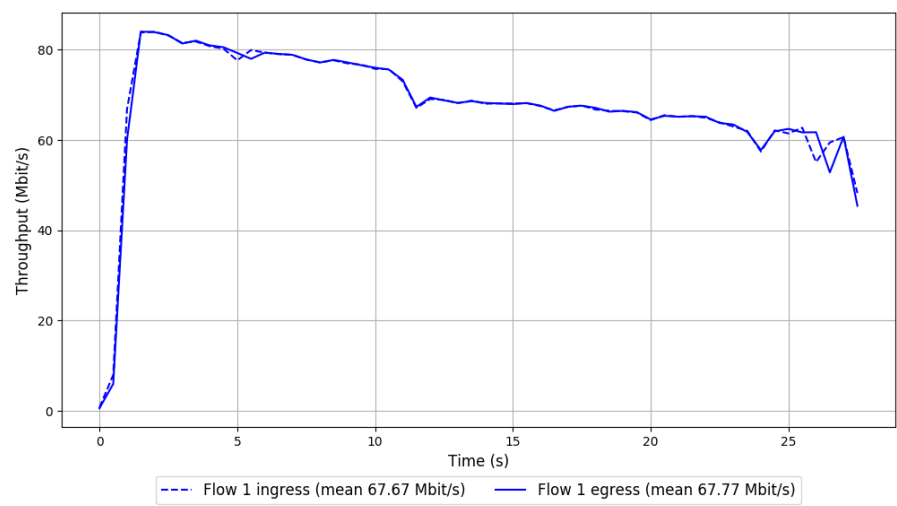
-- Flow 1:

Average throughput: 67.77 Mbit/s

95th percentile per-packet one-way delay: 54.091 ms

Loss rate: 0.25%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-09-18 02:46:03

End at: 2017-09-18 02:46:33

Below is generated by plot.py at 2017-09-18 06:59:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.75 Mbit/s

95th percentile per-packet one-way delay: 54.021 ms

Loss rate: 0.41%

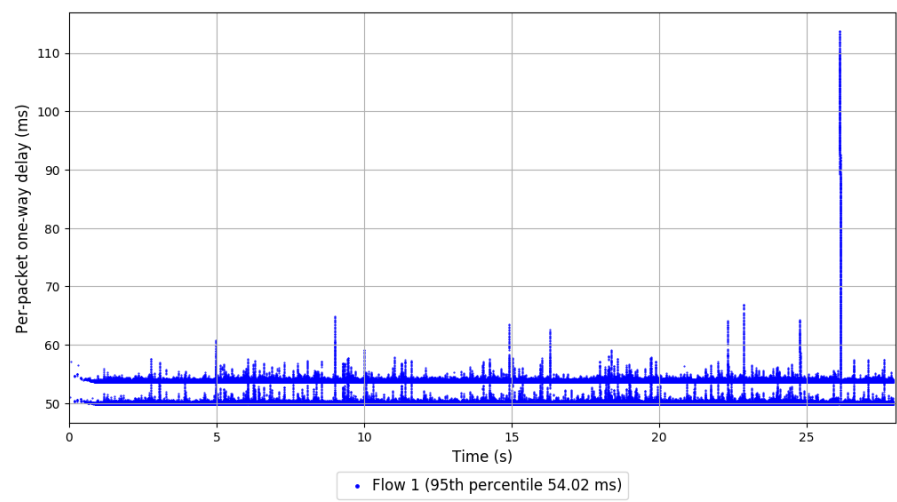
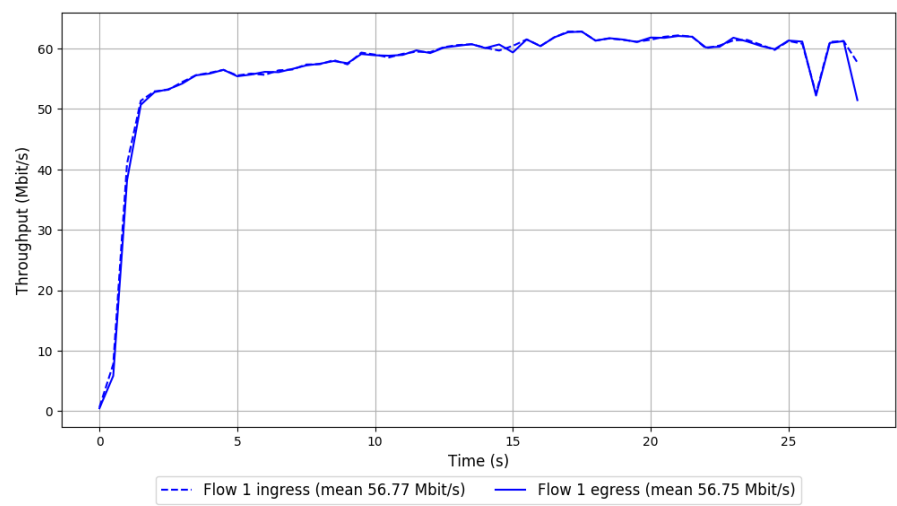
-- Flow 1:

Average throughput: 56.75 Mbit/s

95th percentile per-packet one-way delay: 54.021 ms

Loss rate: 0.41%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-09-18 02:57:36

End at: 2017-09-18 02:58:06

Below is generated by plot.py at 2017-09-18 06:59:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.46 Mbit/s

95th percentile per-packet one-way delay: 53.925 ms

Loss rate: 0.34%

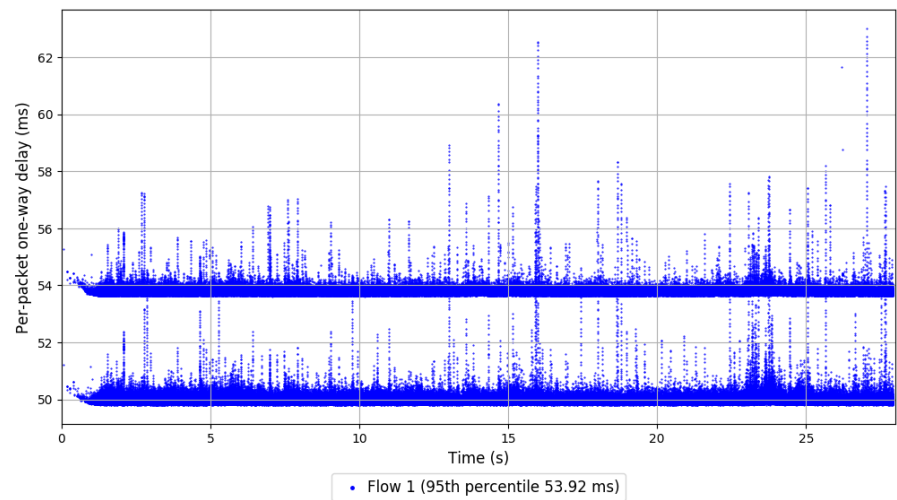
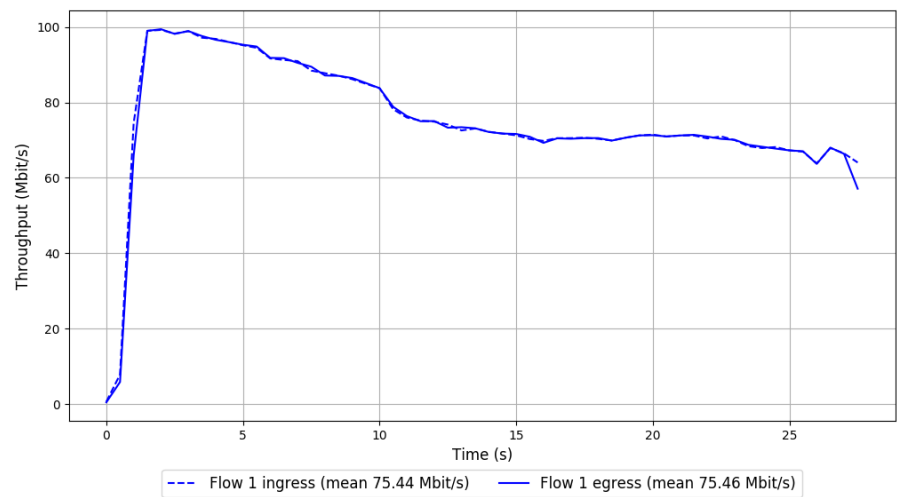
-- Flow 1:

Average throughput: 75.46 Mbit/s

95th percentile per-packet one-way delay: 53.925 ms

Loss rate: 0.34%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-09-18 03:09:11

End at: 2017-09-18 03:09:41

Below is generated by plot.py at 2017-09-18 06:59:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.94 Mbit/s

95th percentile per-packet one-way delay: 53.891 ms

Loss rate: 0.39%

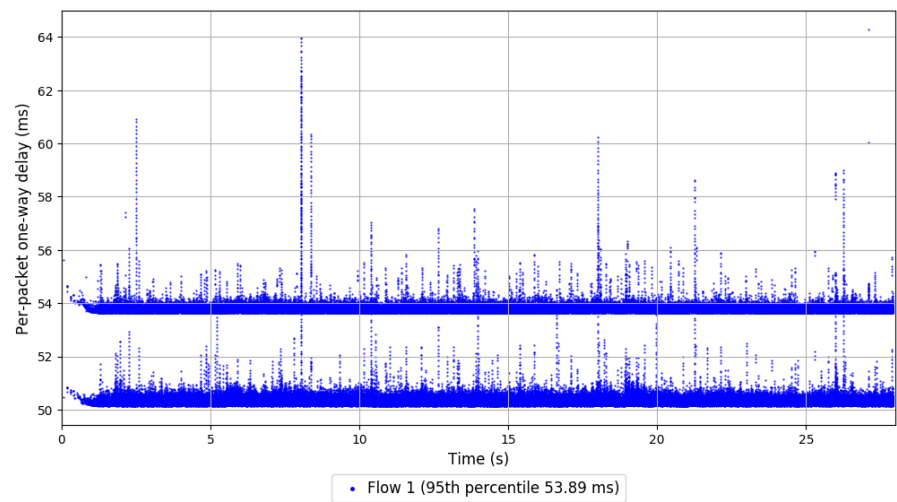
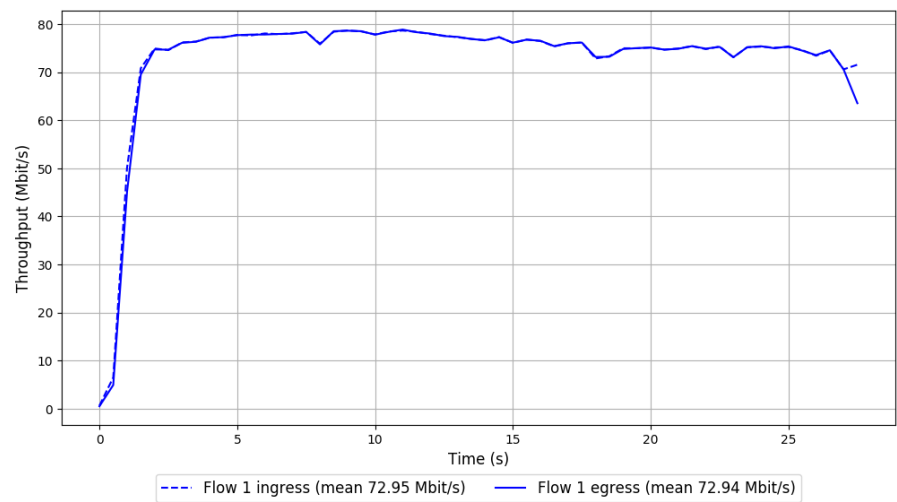
-- Flow 1:

Average throughput: 72.94 Mbit/s

95th percentile per-packet one-way delay: 53.891 ms

Loss rate: 0.39%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-09-18 03:20:31

End at: 2017-09-18 03:21:01

Below is generated by plot.py at 2017-09-18 06:59:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.64 Mbit/s

95th percentile per-packet one-way delay: 53.967 ms

Loss rate: 0.37%

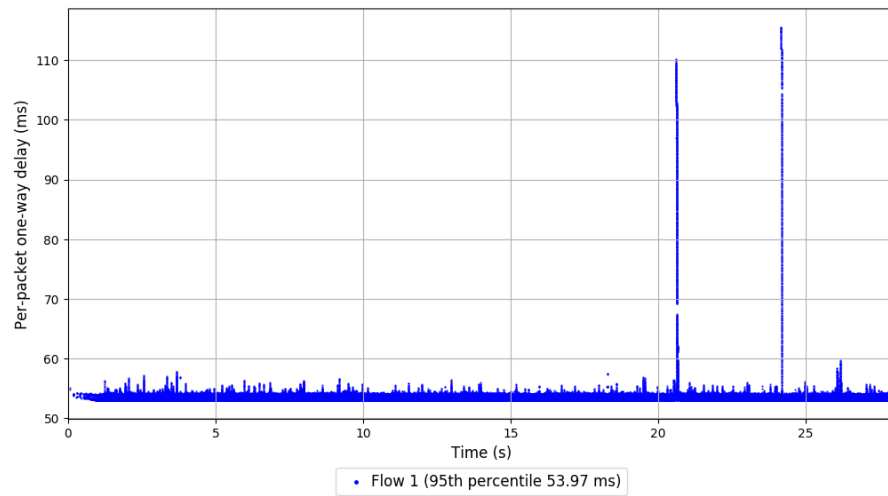
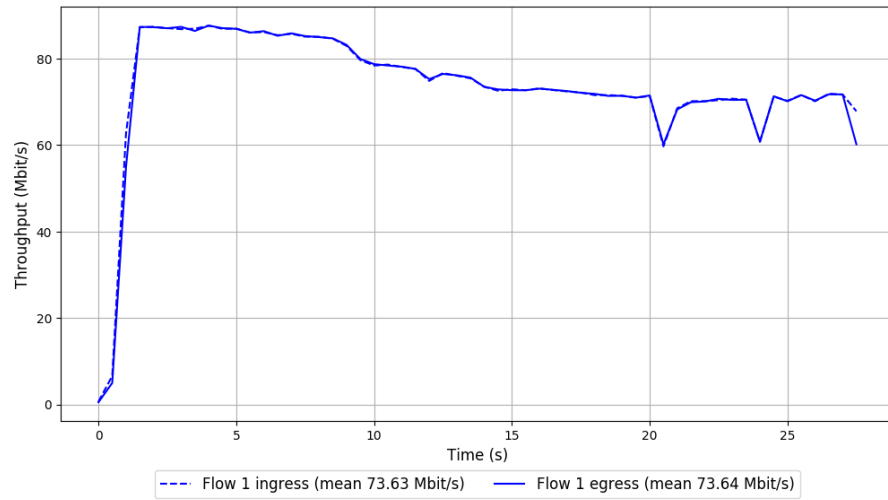
-- Flow 1:

Average throughput: 73.64 Mbit/s

95th percentile per-packet one-way delay: 53.967 ms

Loss rate: 0.37%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-09-18 03:32:01

End at: 2017-09-18 03:32:31

Below is generated by plot.py at 2017-09-18 06:59:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.33 Mbit/s

95th percentile per-packet one-way delay: 54.016 ms

Loss rate: 0.38%

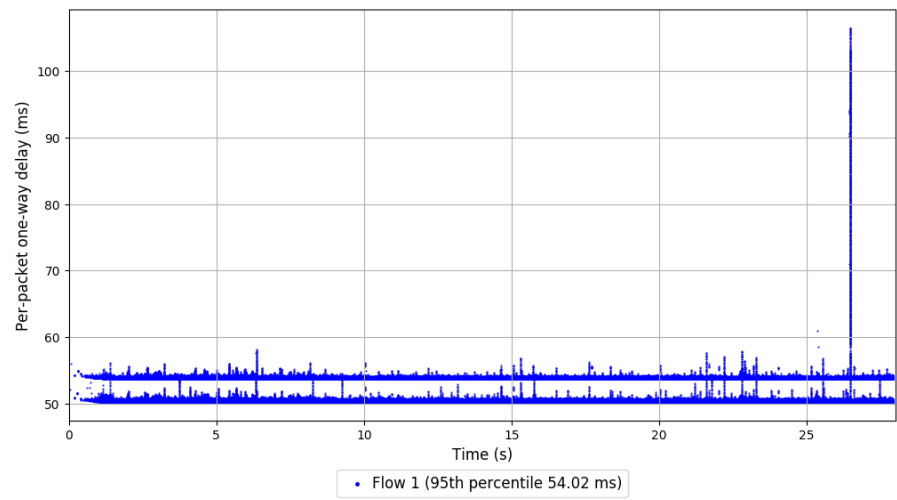
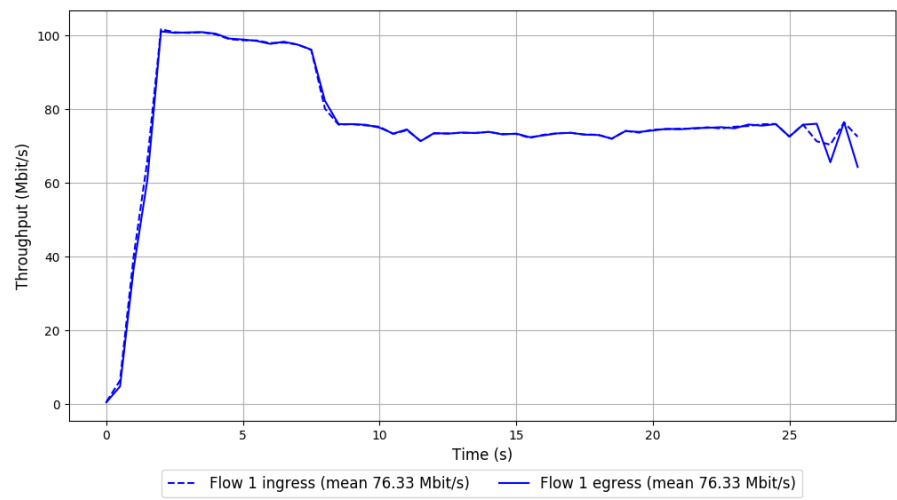
-- Flow 1:

Average throughput: 76.33 Mbit/s

95th percentile per-packet one-way delay: 54.016 ms

Loss rate: 0.38%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-09-18 03:43:34

End at: 2017-09-18 03:44:04

Below is generated by plot.py at 2017-09-18 07:00:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.51 Mbit/s

95th percentile per-packet one-way delay: 54.033 ms

Loss rate: 0.37%

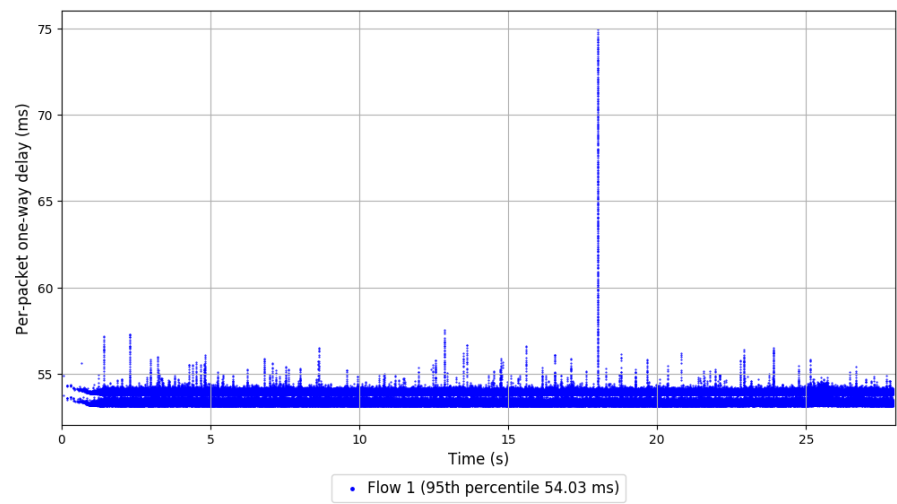
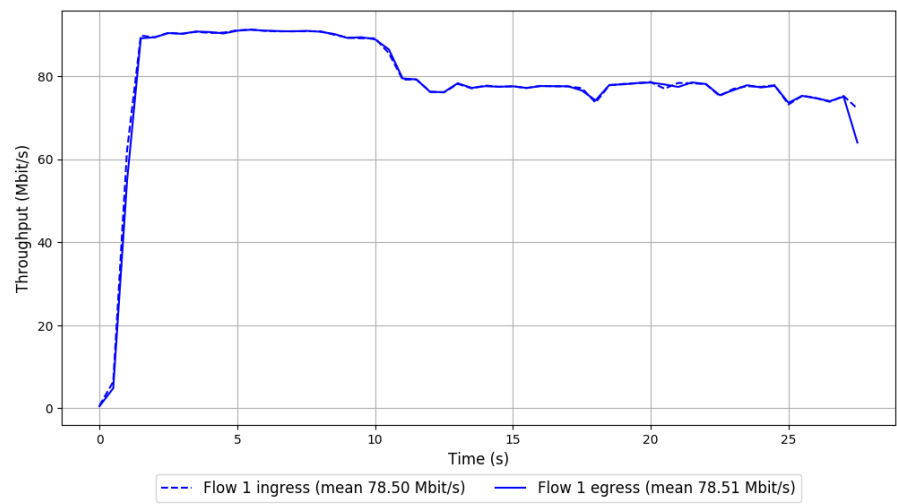
-- Flow 1:

Average throughput: 78.51 Mbit/s

95th percentile per-packet one-way delay: 54.033 ms

Loss rate: 0.37%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-09-18 03:55:12

End at: 2017-09-18 03:55:42

Below is generated by plot.py at 2017-09-18 07:01:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.38 Mbit/s

95th percentile per-packet one-way delay: 54.089 ms

Loss rate: 0.40%

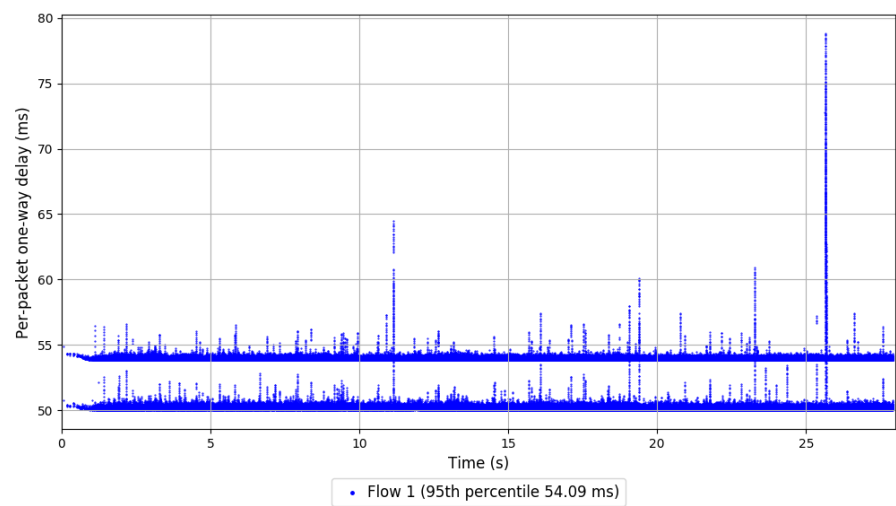
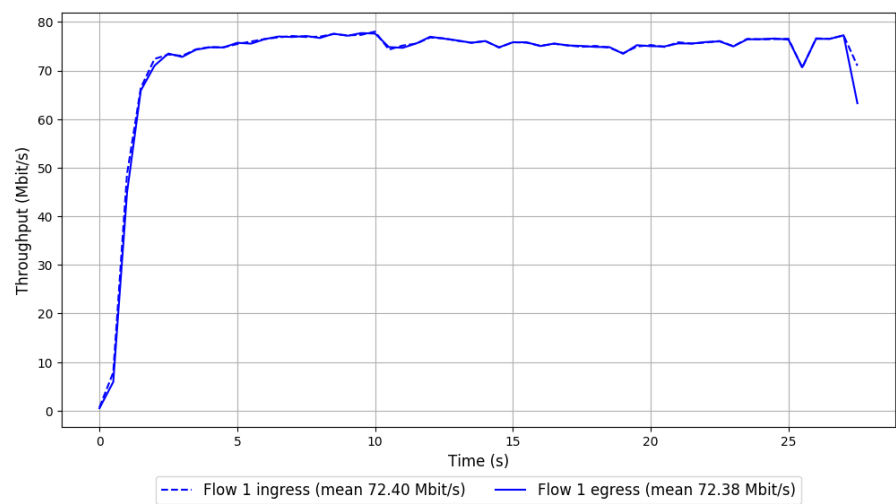
-- Flow 1:

Average throughput: 72.38 Mbit/s

95th percentile per-packet one-way delay: 54.089 ms

Loss rate: 0.40%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-09-18 04:06:08

End at: 2017-09-18 04:06:38

Below is generated by plot.py at 2017-09-18 07:01:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.79 Mbit/s

95th percentile per-packet one-way delay: 54.150 ms

Loss rate: 0.40%

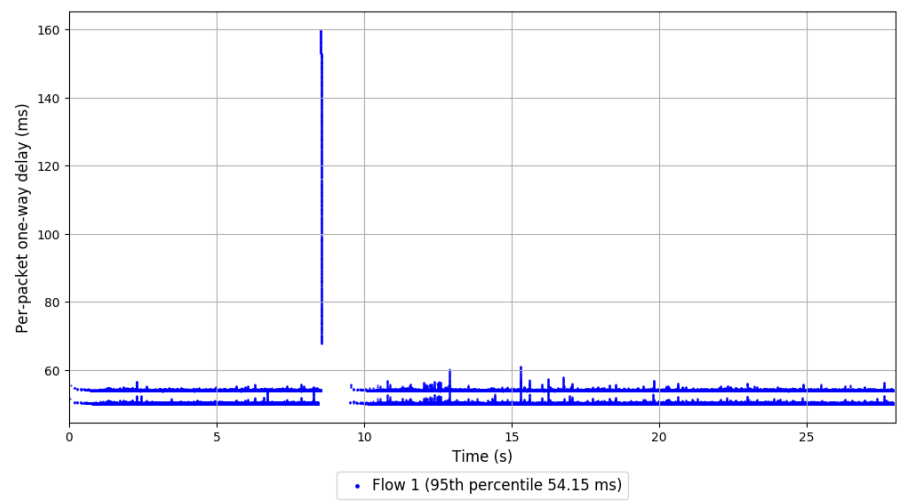
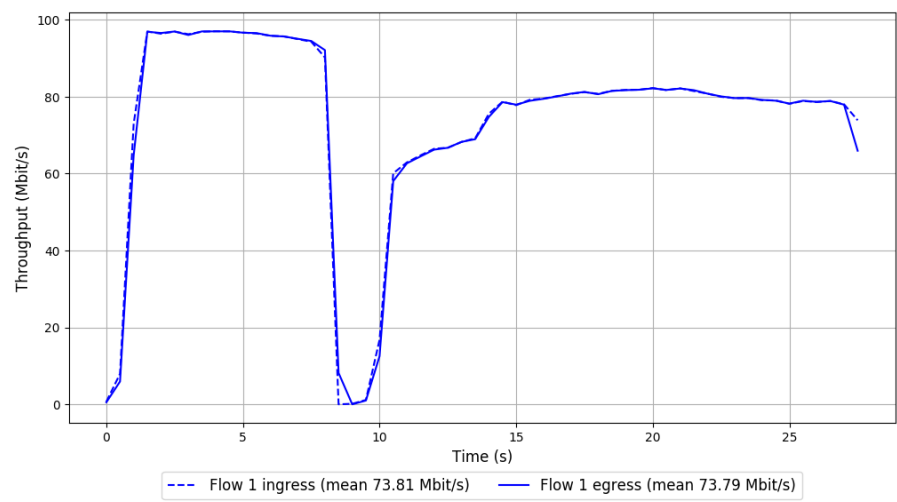
-- Flow 1:

Average throughput: 73.79 Mbit/s

95th percentile per-packet one-way delay: 54.150 ms

Loss rate: 0.40%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-09-18 04:17:33

End at: 2017-09-18 04:18:03

Below is generated by plot.py at 2017-09-18 07:01:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.60 Mbit/s

95th percentile per-packet one-way delay: 54.152 ms

Loss rate: 0.39%

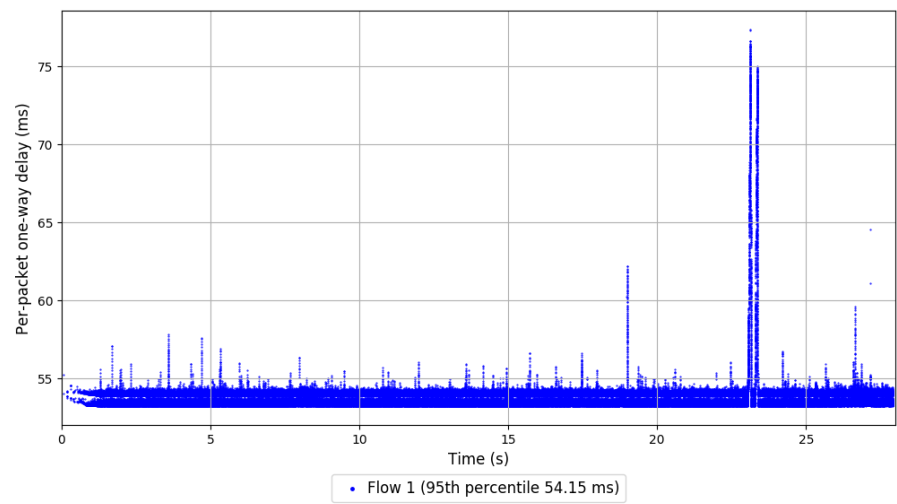
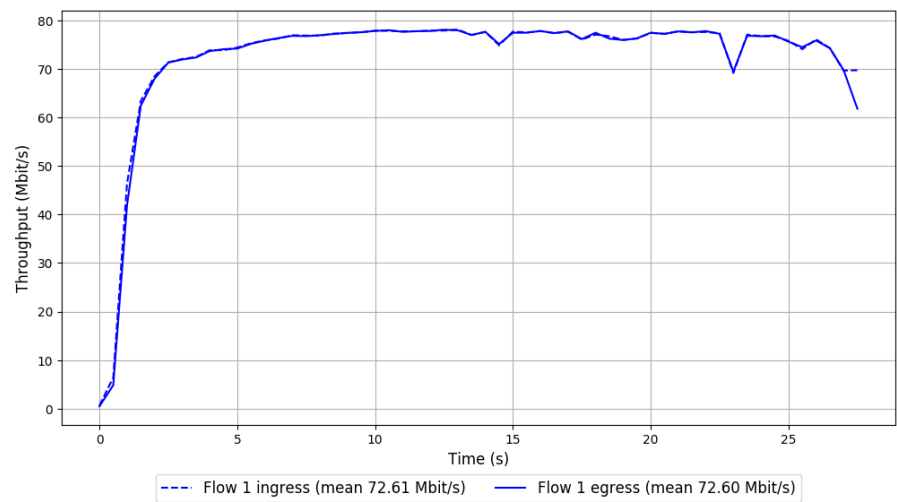
-- Flow 1:

Average throughput: 72.60 Mbit/s

95th percentile per-packet one-way delay: 54.152 ms

Loss rate: 0.39%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-09-18 02:33:46

End at: 2017-09-18 02:34:16

Below is generated by plot.py at 2017-09-18 07:01:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.87 Mbit/s

95th percentile per-packet one-way delay: 66.942 ms

Loss rate: 0.35%

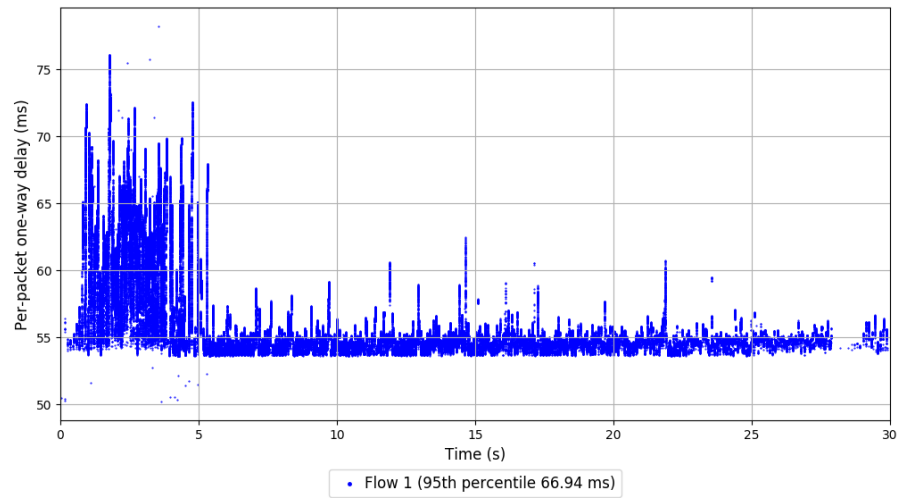
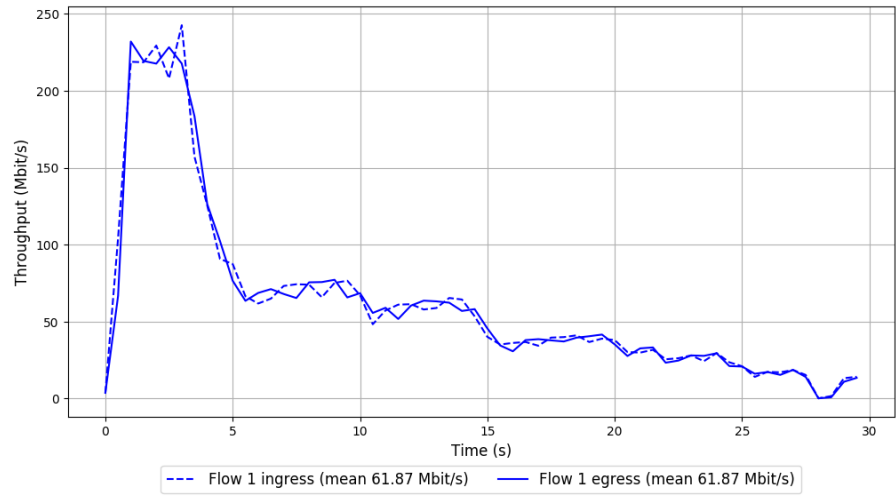
-- Flow 1:

Average throughput: 61.87 Mbit/s

95th percentile per-packet one-way delay: 66.942 ms

Loss rate: 0.35%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-09-18 02:45:21

End at: 2017-09-18 02:45:52

Below is generated by plot.py at 2017-09-18 07:01:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.47 Mbit/s

95th percentile per-packet one-way delay: 69.912 ms

Loss rate: 0.31%

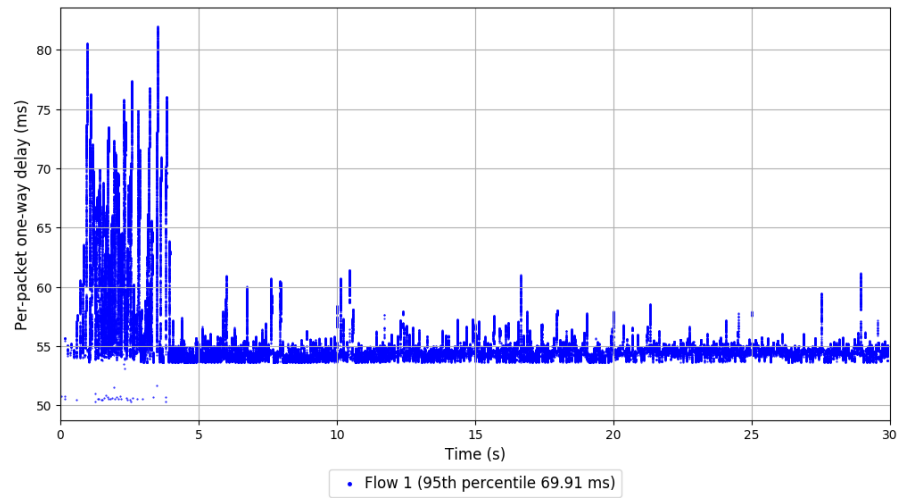
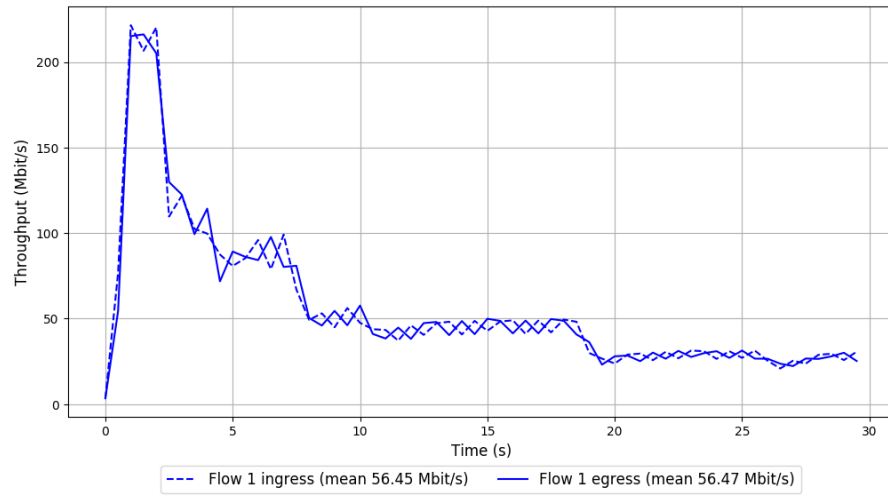
-- Flow 1:

Average throughput: 56.47 Mbit/s

95th percentile per-packet one-way delay: 69.912 ms

Loss rate: 0.31%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-09-18 02:56:53

End at: 2017-09-18 02:57:23

Below is generated by plot.py at 2017-09-18 07:01:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.82 Mbit/s

95th percentile per-packet one-way delay: 67.841 ms

Loss rate: 0.23%

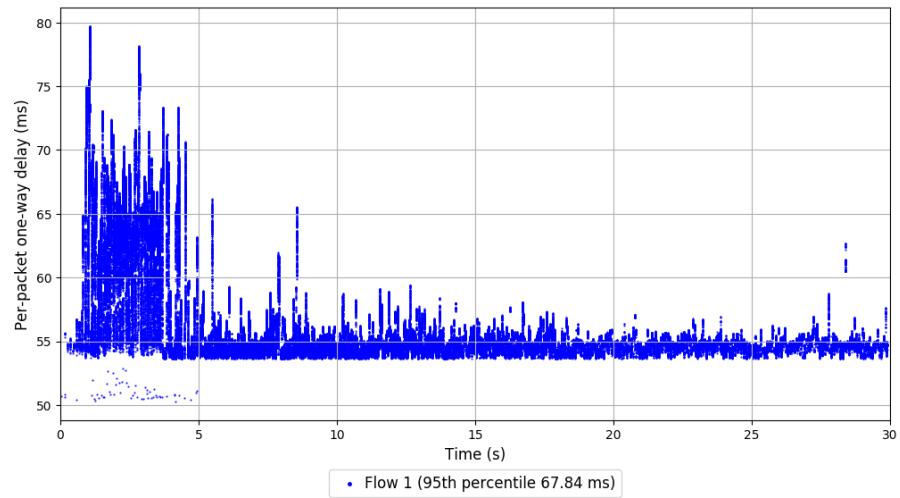
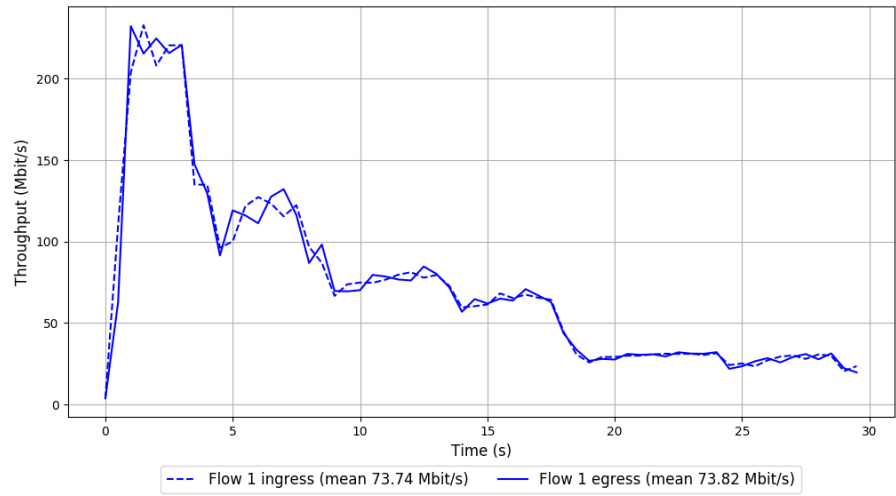
-- Flow 1:

Average throughput: 73.82 Mbit/s

95th percentile per-packet one-way delay: 67.841 ms

Loss rate: 0.23%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-09-18 03:08:28

End at: 2017-09-18 03:08:58

Below is generated by plot.py at 2017-09-18 07:01:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.58 Mbit/s

95th percentile per-packet one-way delay: 66.452 ms

Loss rate: 0.15%

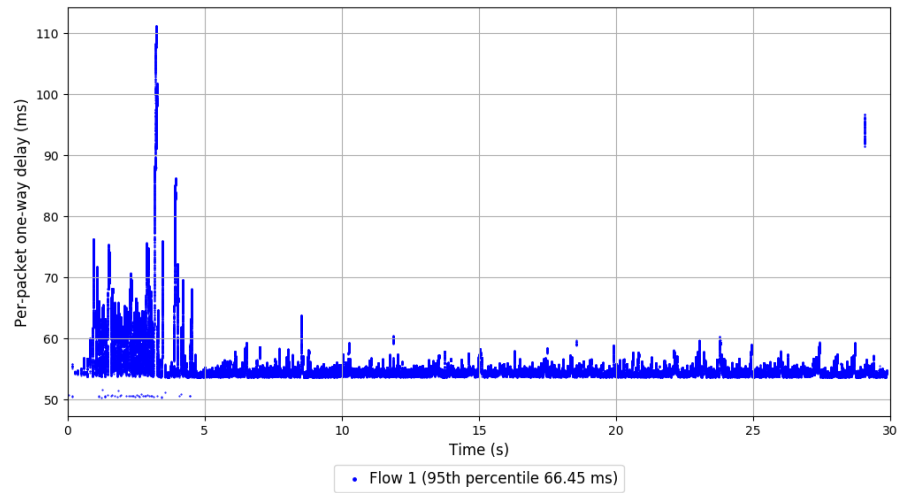
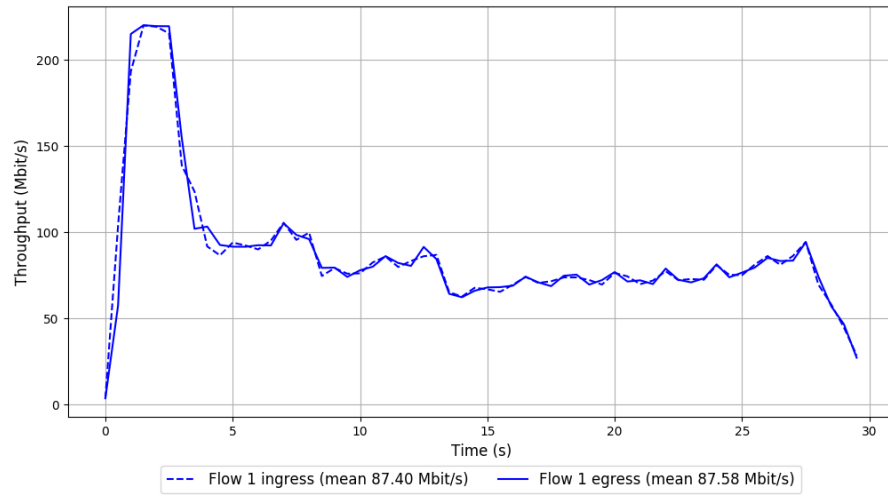
-- Flow 1:

Average throughput: 87.58 Mbit/s

95th percentile per-packet one-way delay: 66.452 ms

Loss rate: 0.15%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-09-18 03:19:49

End at: 2017-09-18 03:20:19

Below is generated by plot.py at 2017-09-18 07:01:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.11 Mbit/s

95th percentile per-packet one-way delay: 58.390 ms

Loss rate: 0.39%

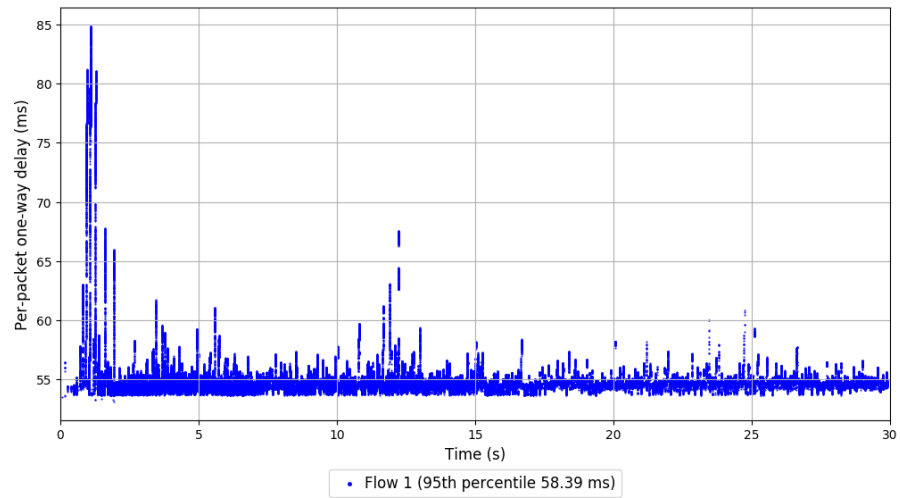
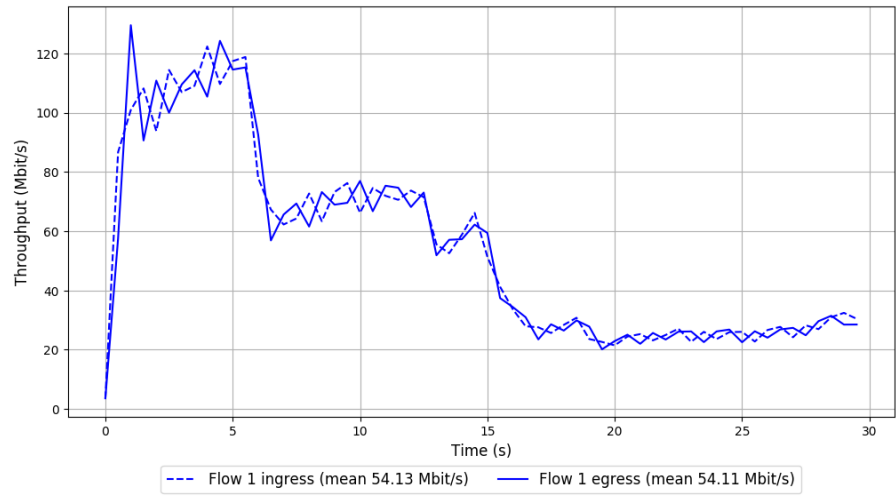
-- Flow 1:

Average throughput: 54.11 Mbit/s

95th percentile per-packet one-way delay: 58.390 ms

Loss rate: 0.39%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-09-18 03:31:20

End at: 2017-09-18 03:31:50

Below is generated by plot.py at 2017-09-18 07:01:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.73 Mbit/s

95th percentile per-packet one-way delay: 57.052 ms

Loss rate: 0.23%

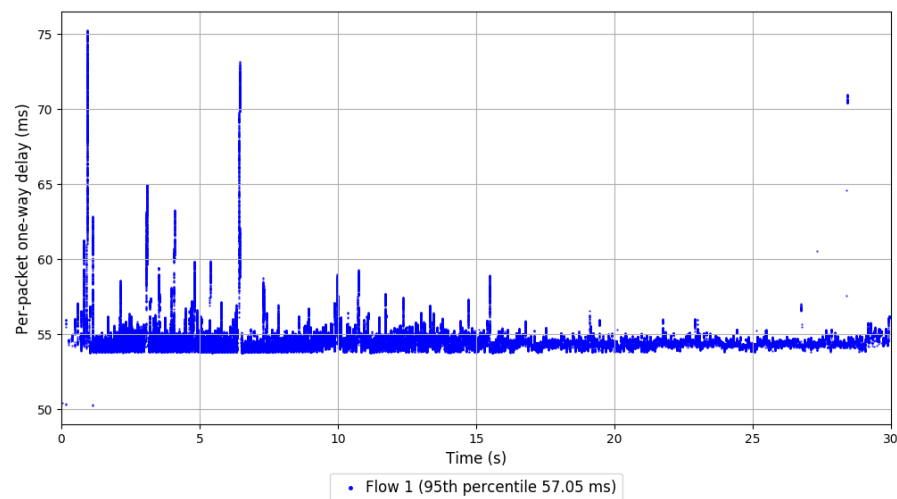
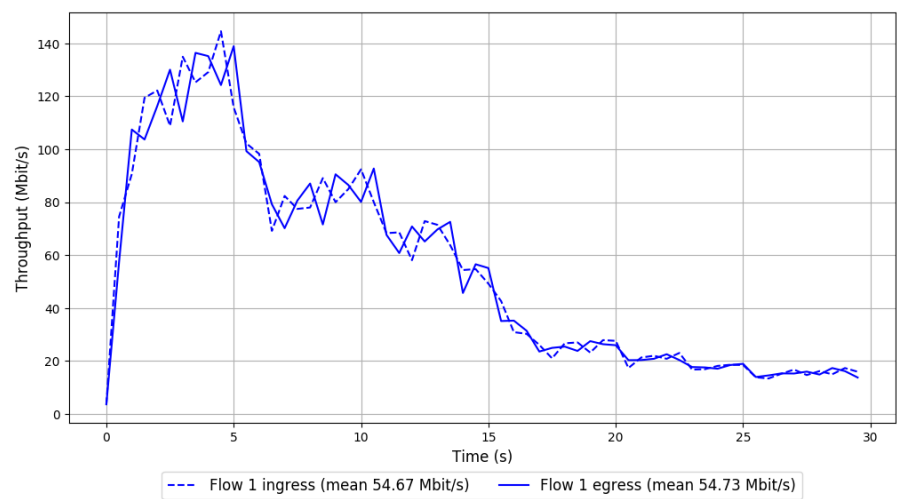
-- Flow 1:

Average throughput: 54.73 Mbit/s

95th percentile per-packet one-way delay: 57.052 ms

Loss rate: 0.23%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-09-18 03:42:47

End at: 2017-09-18 03:43:17

Below is generated by plot.py at 2017-09-18 07:03:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 159.95 Mbit/s

95th percentile per-packet one-way delay: 64.594 ms

Loss rate: 0.52%

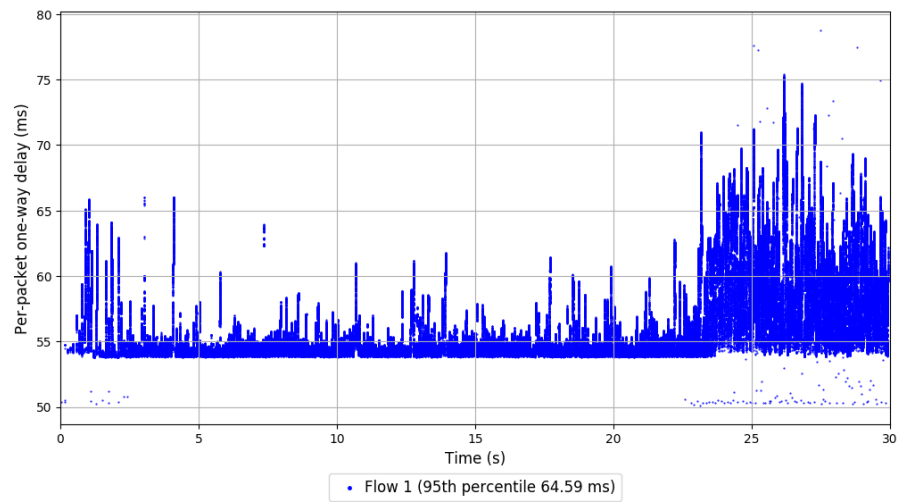
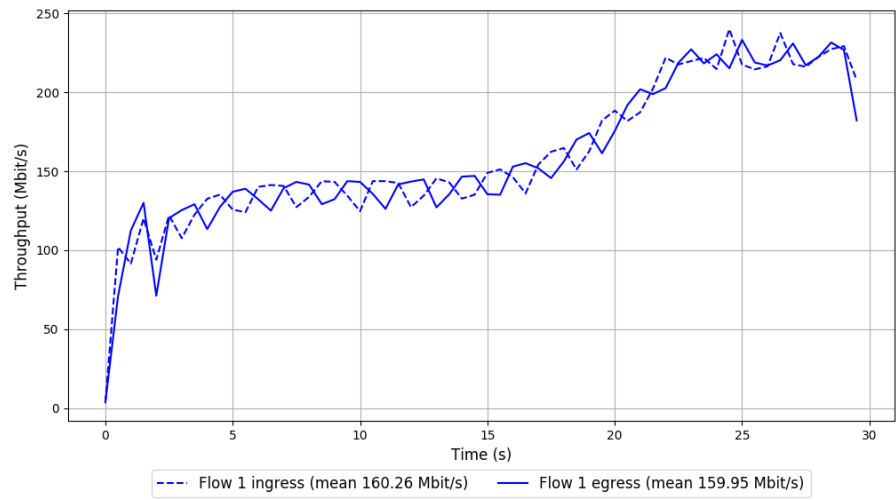
-- Flow 1:

Average throughput: 159.95 Mbit/s

95th percentile per-packet one-way delay: 64.594 ms

Loss rate: 0.52%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-09-18 03:54:29

End at: 2017-09-18 03:54:59

Below is generated by plot.py at 2017-09-18 07:03:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.60 Mbit/s

95th percentile per-packet one-way delay: 61.462 ms

Loss rate: 0.23%

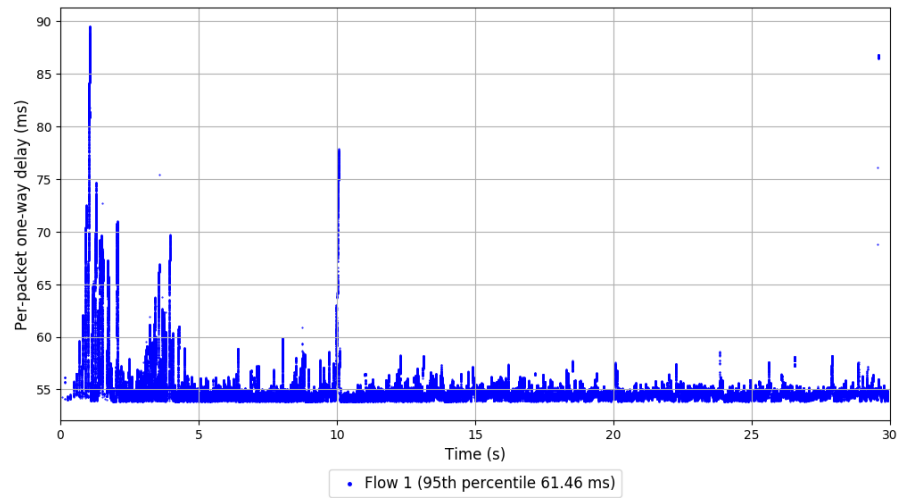
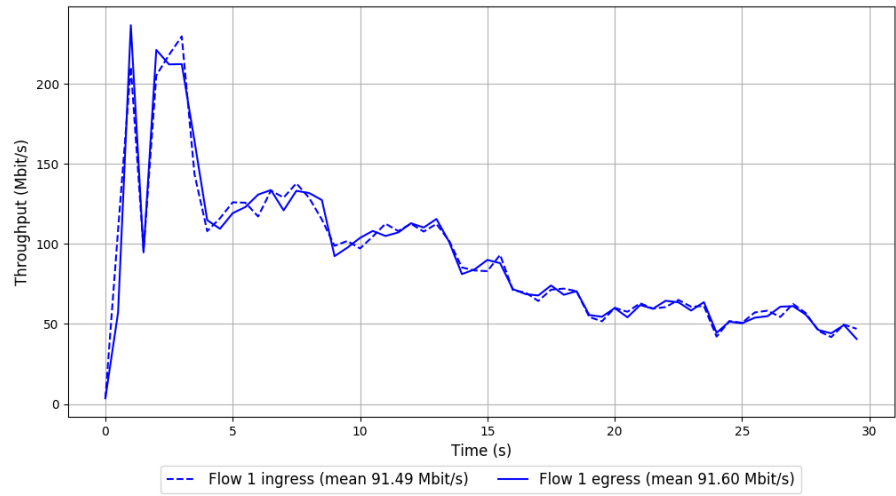
-- Flow 1:

Average throughput: 91.60 Mbit/s

95th percentile per-packet one-way delay: 61.462 ms

Loss rate: 0.23%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-09-18 04:05:26

End at: 2017-09-18 04:05:57

Below is generated by plot.py at 2017-09-18 07:03:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.87 Mbit/s

95th percentile per-packet one-way delay: 66.721 ms

Loss rate: 0.21%

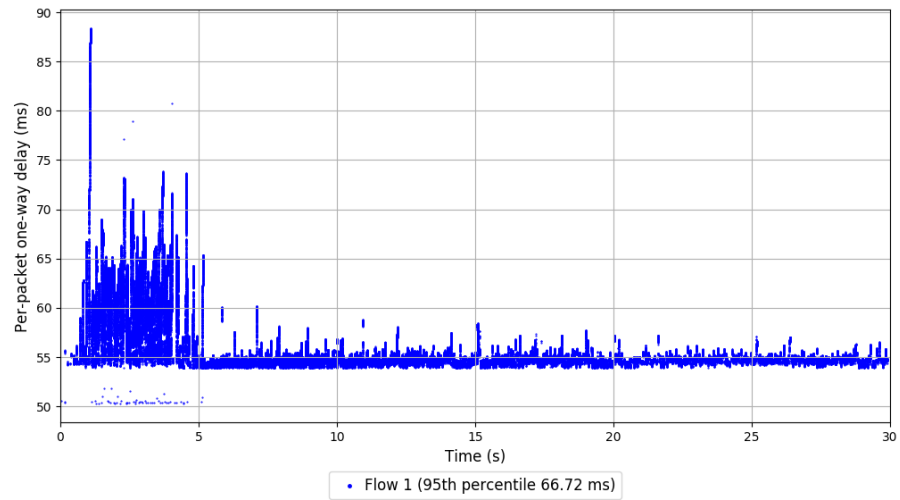
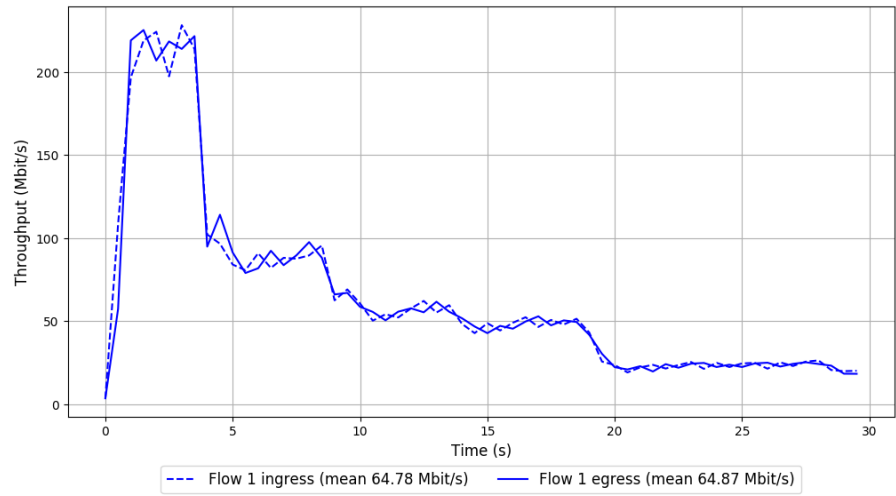
-- Flow 1:

Average throughput: 64.87 Mbit/s

95th percentile per-packet one-way delay: 66.721 ms

Loss rate: 0.21%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-09-18 04:16:50

End at: 2017-09-18 04:17:20

Below is generated by plot.py at 2017-09-18 07:03:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.70 Mbit/s

95th percentile per-packet one-way delay: 66.878 ms

Loss rate: 0.20%

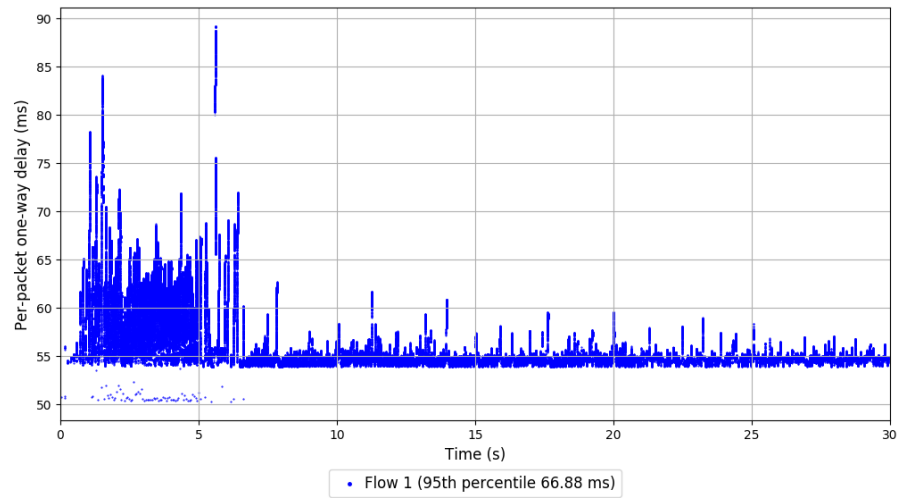
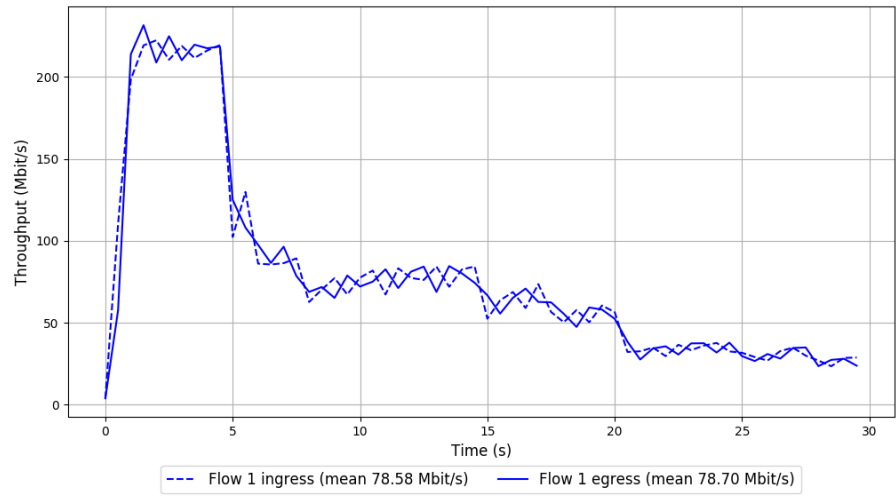
-- Flow 1:

Average throughput: 78.70 Mbit/s

95th percentile per-packet one-way delay: 66.878 ms

Loss rate: 0.20%

Run 10: Report of TCP Cubic — Data Link

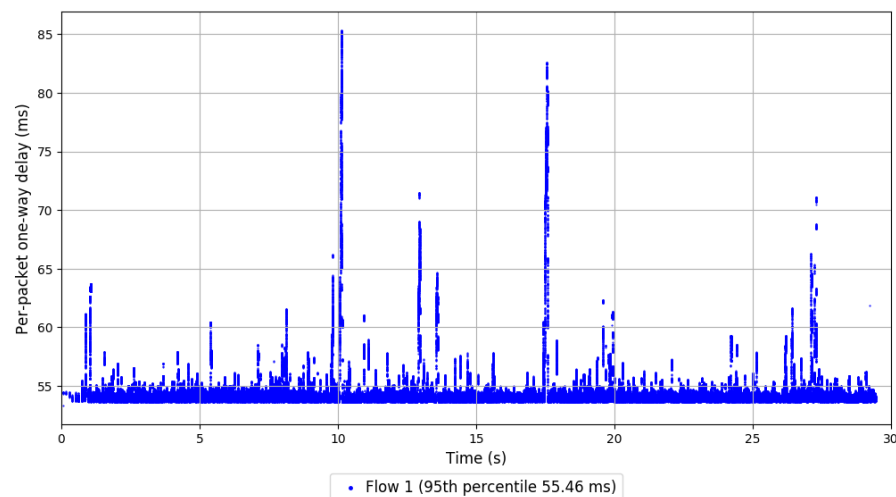
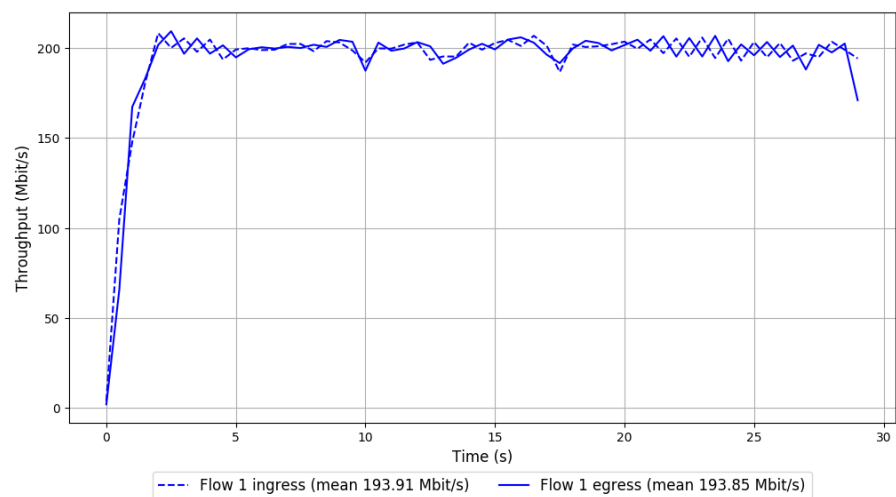


```
Run 1: Statistics of Indigo

Start at: 2017-09-18 02:35:15
End at: 2017-09-18 02:35:45

# Below is generated by plot.py at 2017-09-18 07:04:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.85 Mbit/s
95th percentile per-packet one-way delay: 55.459 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 193.85 Mbit/s
95th percentile per-packet one-way delay: 55.459 ms
Loss rate: 0.39%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-09-18 02:46:48

End at: 2017-09-18 02:47:18

Below is generated by plot.py at 2017-09-18 07:04:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.06 Mbit/s

95th percentile per-packet one-way delay: 56.573 ms

Loss rate: 0.44%

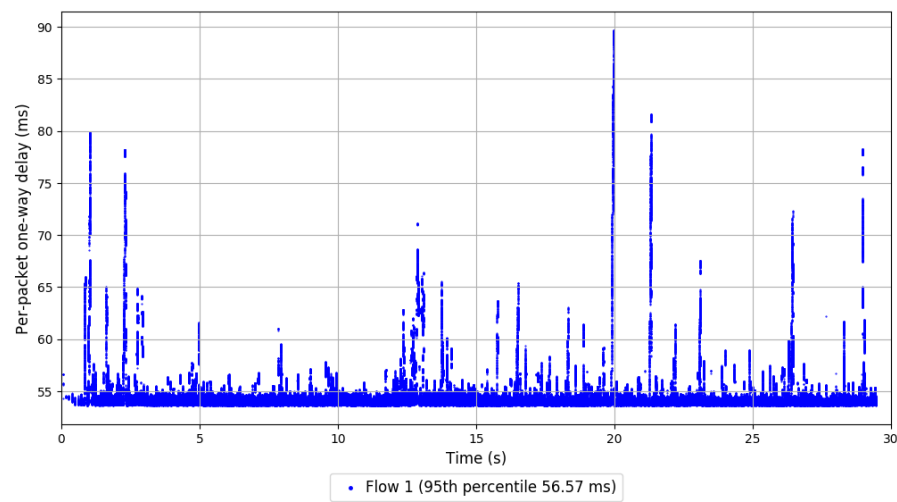
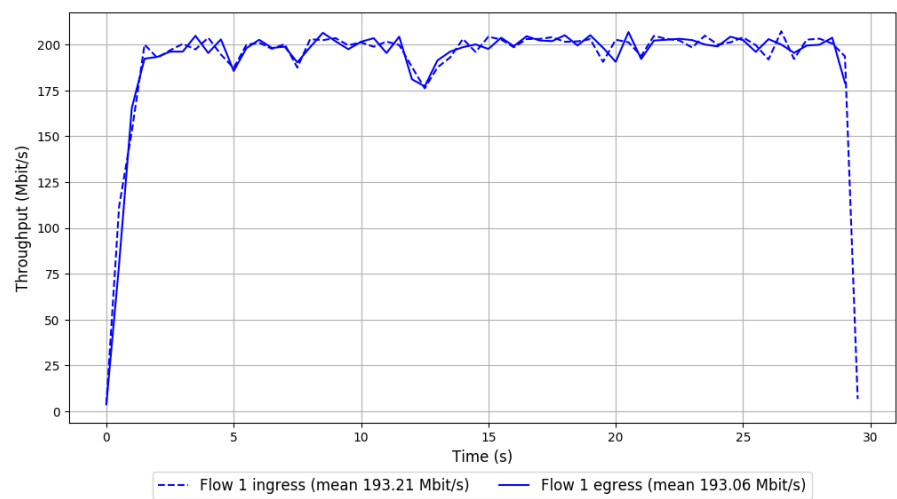
-- Flow 1:

Average throughput: 193.06 Mbit/s

95th percentile per-packet one-way delay: 56.573 ms

Loss rate: 0.44%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-09-18 02:58:22

End at: 2017-09-18 02:58:52

Below is generated by plot.py at 2017-09-18 07:04:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.62 Mbit/s

95th percentile per-packet one-way delay: 56.992 ms

Loss rate: 0.40%

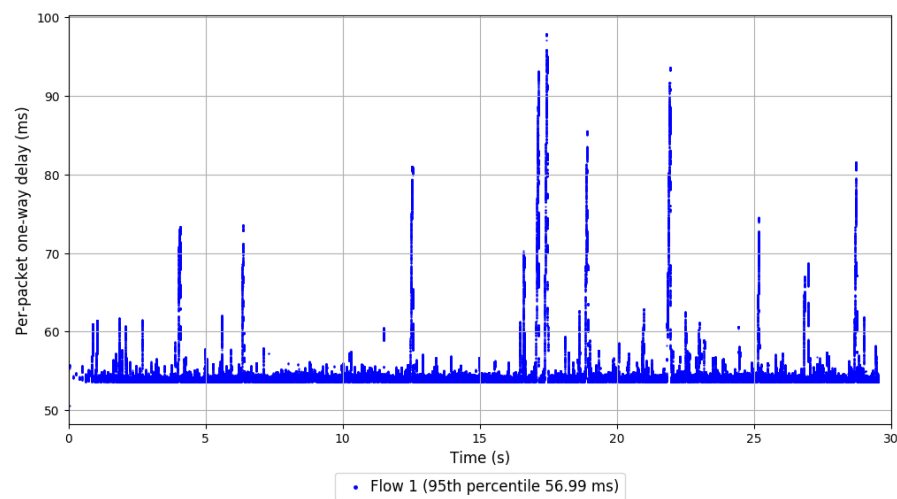
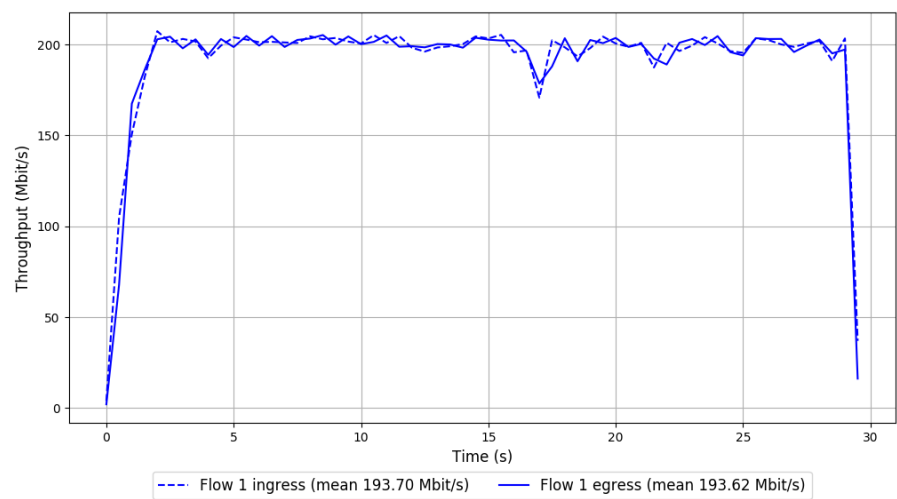
-- Flow 1:

Average throughput: 193.62 Mbit/s

95th percentile per-packet one-way delay: 56.992 ms

Loss rate: 0.40%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-09-18 03:09:58

End at: 2017-09-18 03:10:28

Below is generated by plot.py at 2017-09-18 07:04:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.99 Mbit/s

95th percentile per-packet one-way delay: 58.332 ms

Loss rate: 0.41%

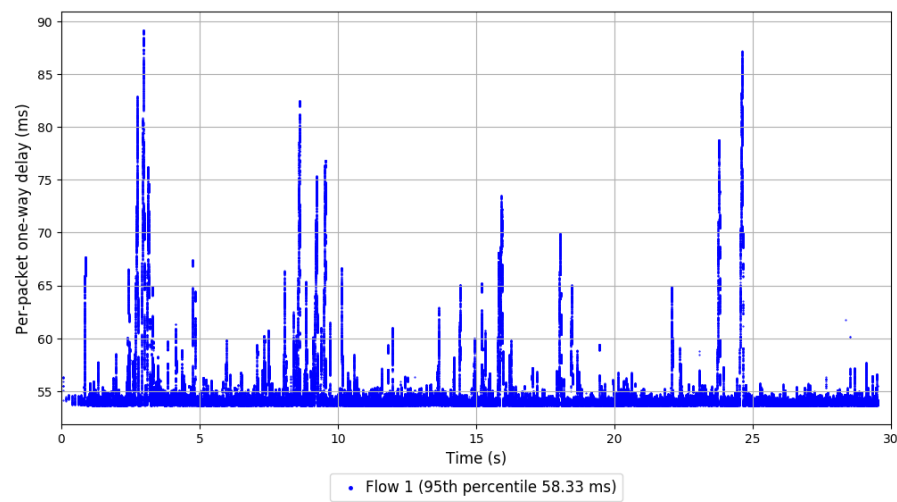
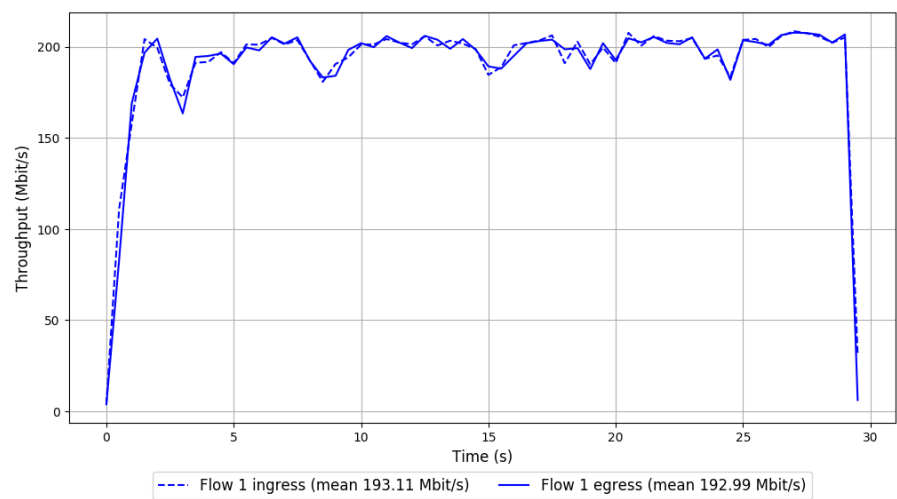
-- Flow 1:

Average throughput: 192.99 Mbit/s

95th percentile per-packet one-way delay: 58.332 ms

Loss rate: 0.41%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-09-18 03:21:17

End at: 2017-09-18 03:21:47

Below is generated by plot.py at 2017-09-18 07:06:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.96 Mbit/s

95th percentile per-packet one-way delay: 55.109 ms

Loss rate: 0.41%

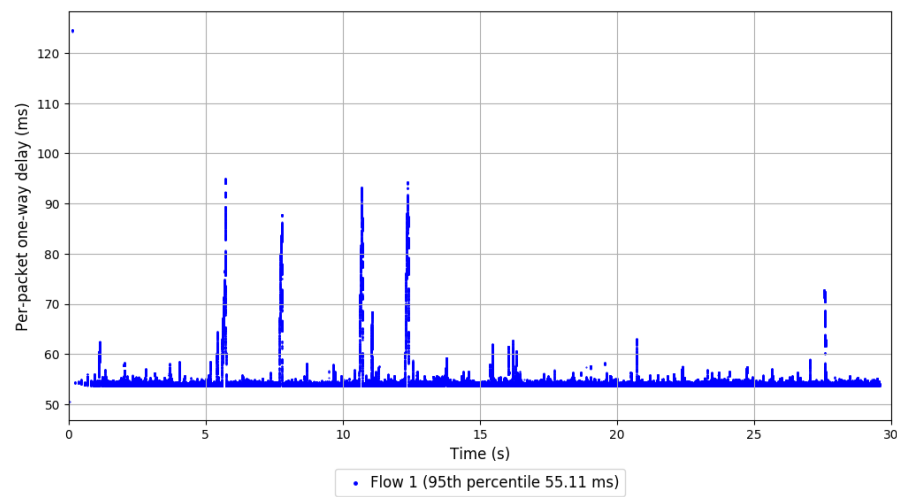
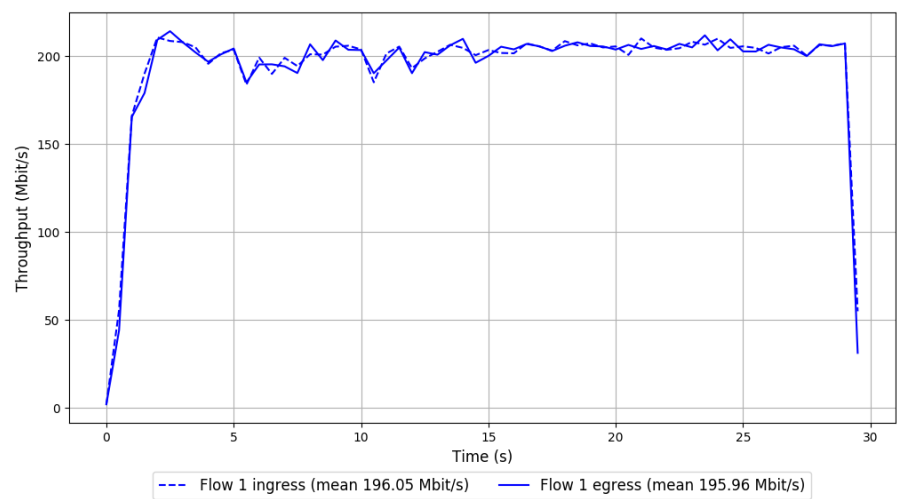
-- Flow 1:

Average throughput: 195.96 Mbit/s

95th percentile per-packet one-way delay: 55.109 ms

Loss rate: 0.41%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-09-18 03:32:47

End at: 2017-09-18 03:33:17

Below is generated by plot.py at 2017-09-18 07:06:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.98 Mbit/s

95th percentile per-packet one-way delay: 54.539 ms

Loss rate: 0.38%

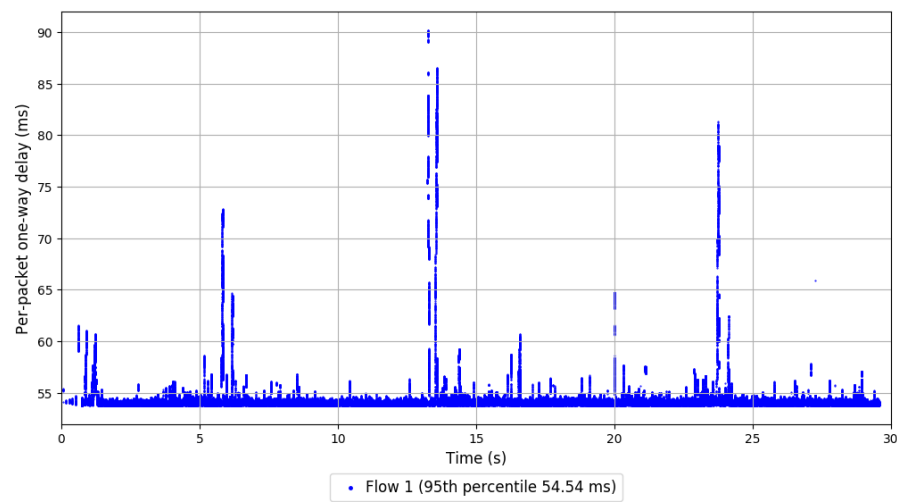
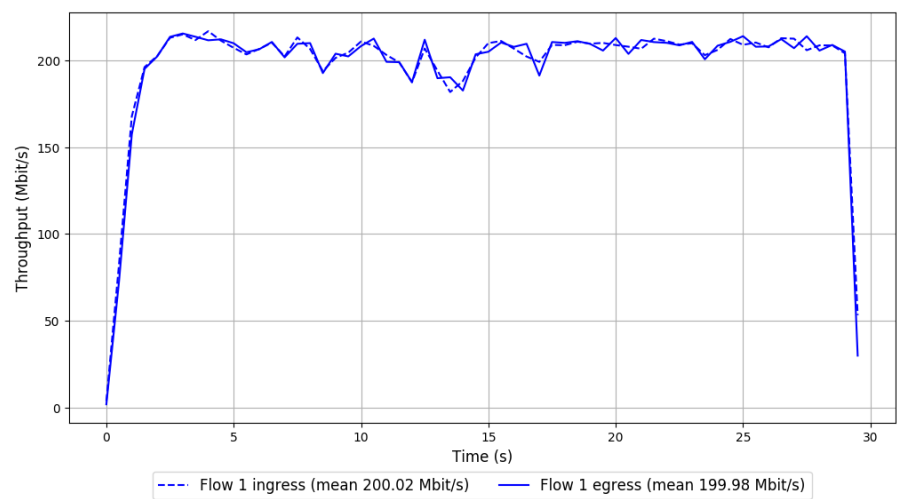
-- Flow 1:

Average throughput: 199.98 Mbit/s

95th percentile per-packet one-way delay: 54.539 ms

Loss rate: 0.38%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-09-18 03:44:20

End at: 2017-09-18 03:44:50

Below is generated by plot.py at 2017-09-18 07:06:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.68 Mbit/s

95th percentile per-packet one-way delay: 54.415 ms

Loss rate: 0.37%

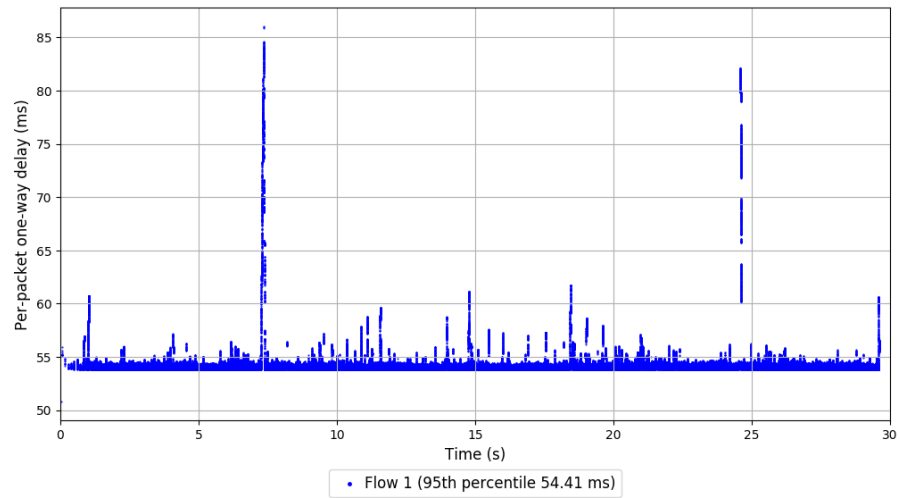
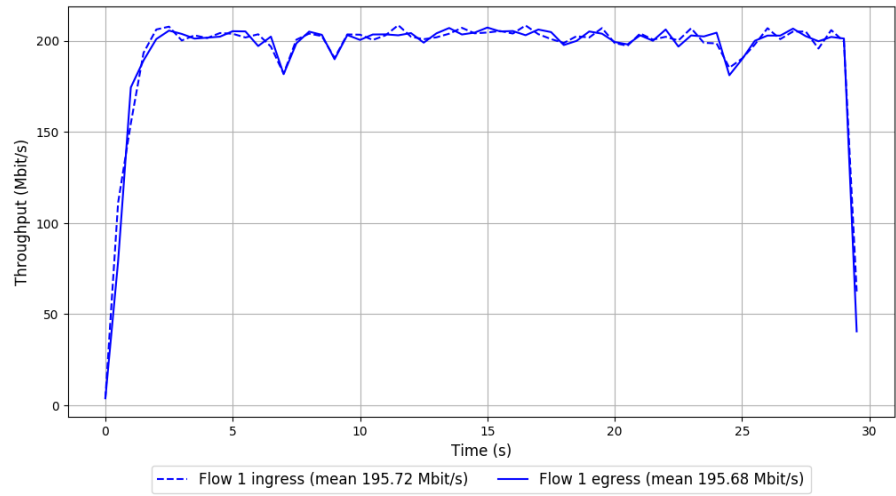
-- Flow 1:

Average throughput: 195.68 Mbit/s

95th percentile per-packet one-way delay: 54.415 ms

Loss rate: 0.37%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-09-18 03:55:57

End at: 2017-09-18 03:56:27

Below is generated by plot.py at 2017-09-18 07:07:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.73 Mbit/s

95th percentile per-packet one-way delay: 54.630 ms

Loss rate: 0.40%

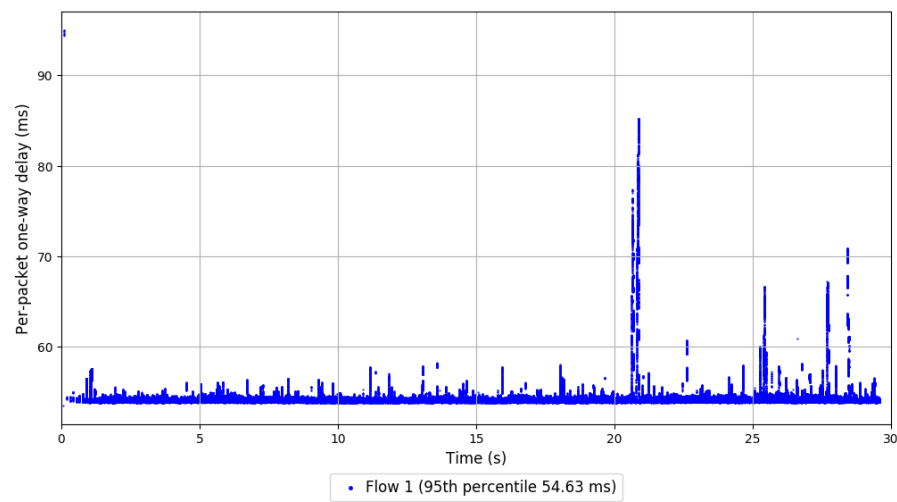
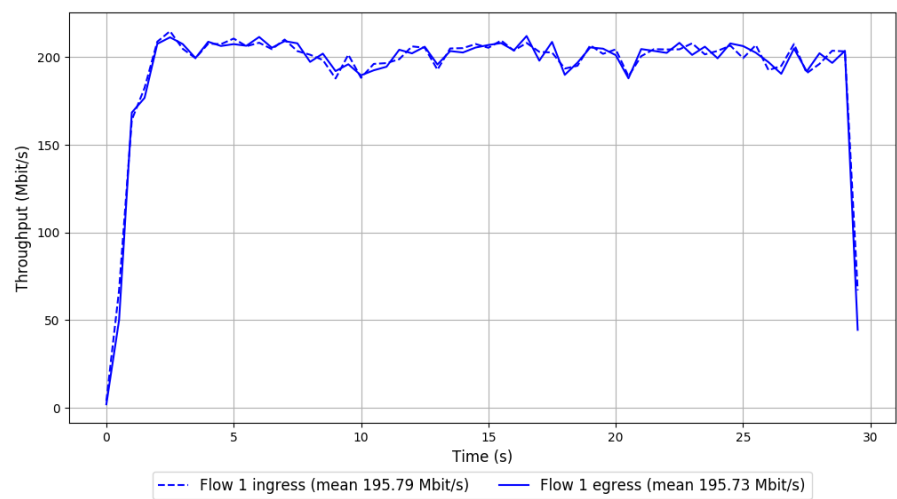
-- Flow 1:

Average throughput: 195.73 Mbit/s

95th percentile per-packet one-way delay: 54.630 ms

Loss rate: 0.40%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-09-18 04:06:54

End at: 2017-09-18 04:07:24

Below is generated by plot.py at 2017-09-18 07:08:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.15 Mbit/s

95th percentile per-packet one-way delay: 54.449 ms

Loss rate: 0.38%

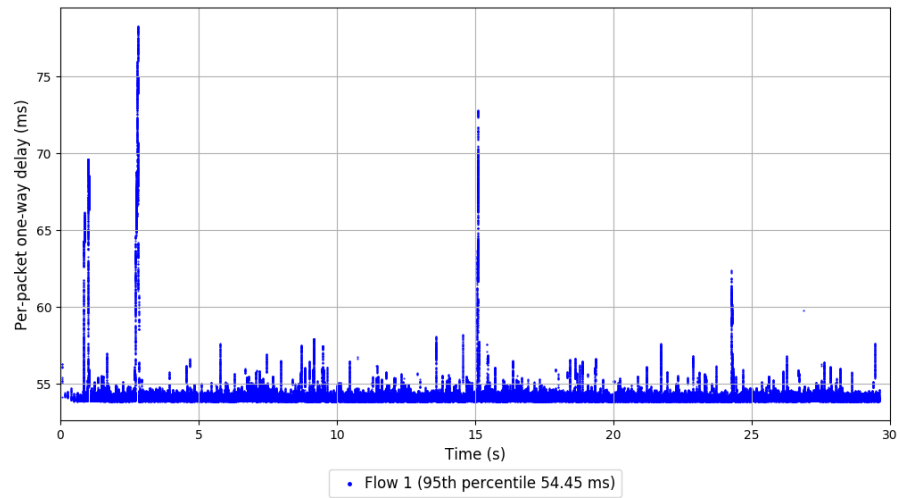
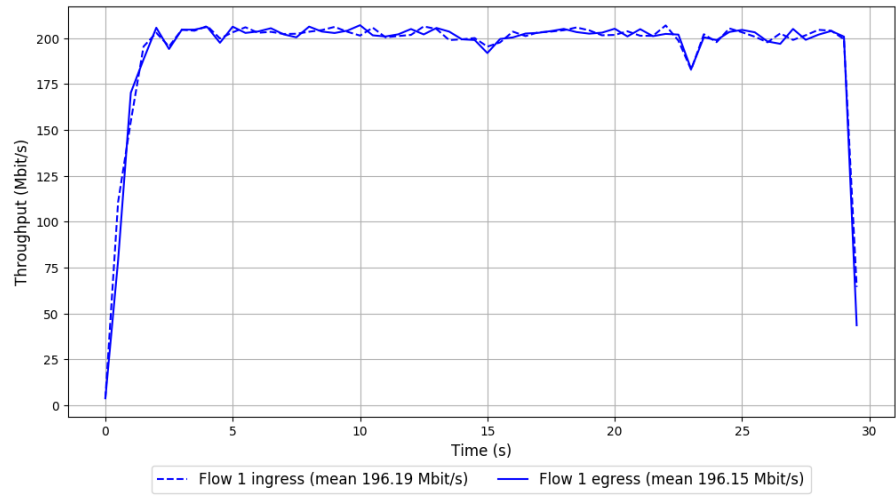
-- Flow 1:

Average throughput: 196.15 Mbit/s

95th percentile per-packet one-way delay: 54.449 ms

Loss rate: 0.38%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-09-18 04:18:19

End at: 2017-09-18 04:18:49

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.62 Mbit/s

95th percentile per-packet one-way delay: 54.629 ms

Loss rate: 0.38%

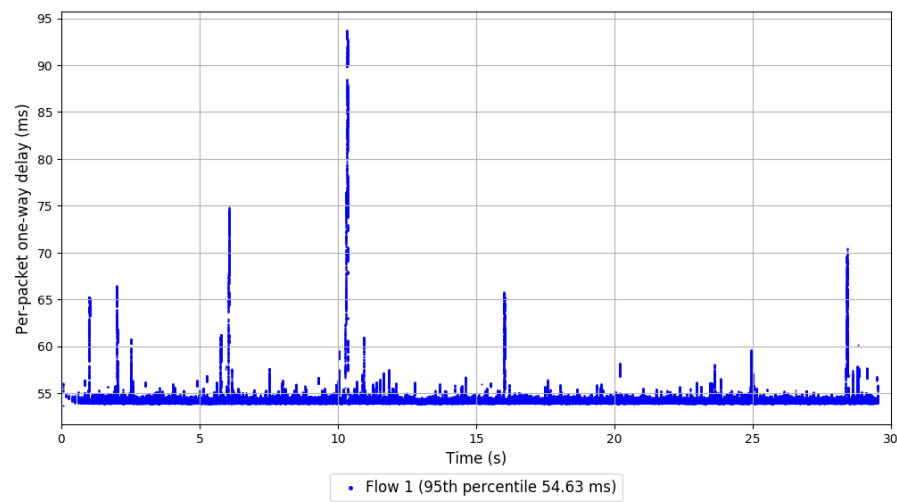
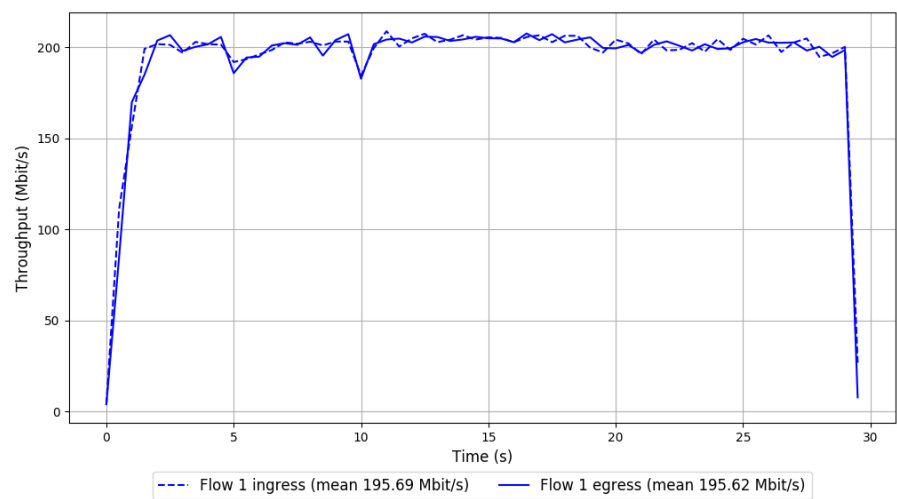
-- Flow 1:

Average throughput: 195.62 Mbit/s

95th percentile per-packet one-way delay: 54.629 ms

Loss rate: 0.38%

Run 10: Report of Indigo — Data Link

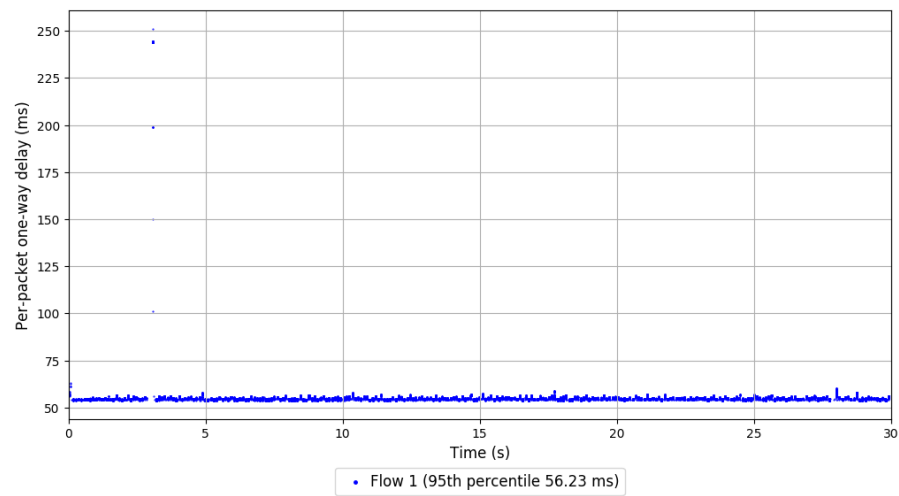
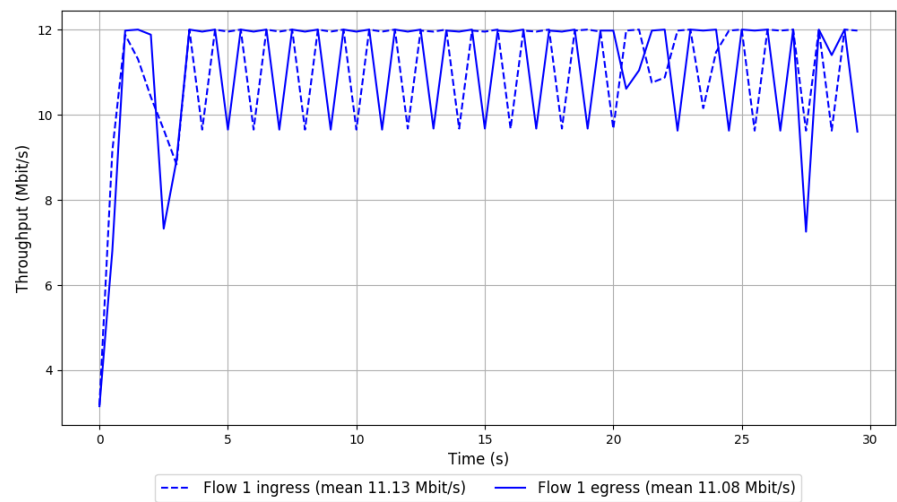


```
Run 1: Statistics of KohoCC

Start at: 2017-09-18 02:30:52
End at: 2017-09-18 02:31:22

# Below is generated by plot.py at 2017-09-18 07:08:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.08 Mbit/s
95th percentile per-packet one-way delay: 56.235 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 11.08 Mbit/s
95th percentile per-packet one-way delay: 56.235 ms
Loss rate: 0.80%
```

Run 1: Report of KohoCC — Data Link



Run 2: Statistics of KohoCC

Start at: 2017-09-18 02:42:31

End at: 2017-09-18 02:43:01

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.24 Mbit/s

95th percentile per-packet one-way delay: 55.432 ms

Loss rate: 0.48%

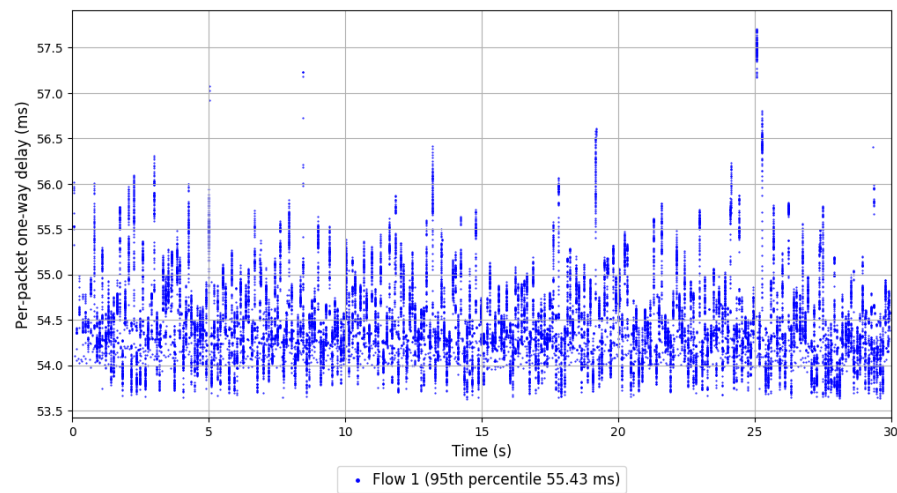
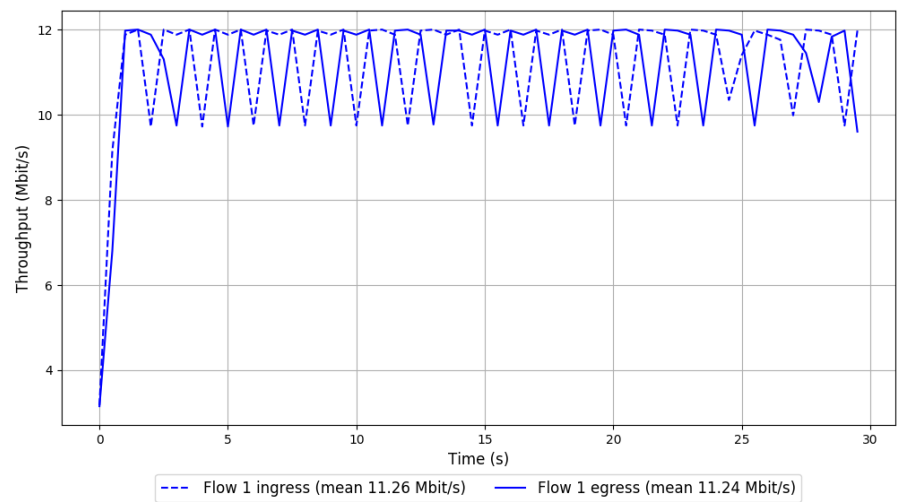
-- Flow 1:

Average throughput: 11.24 Mbit/s

95th percentile per-packet one-way delay: 55.432 ms

Loss rate: 0.48%

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-09-18 02:54:00

End at: 2017-09-18 02:54:30

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.15 Mbit/s

95th percentile per-packet one-way delay: 55.746 ms

Loss rate: 1.01%

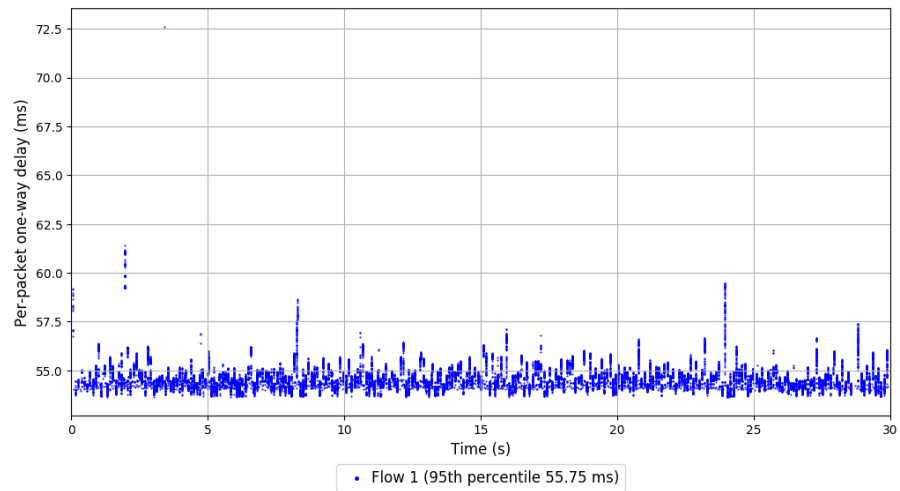
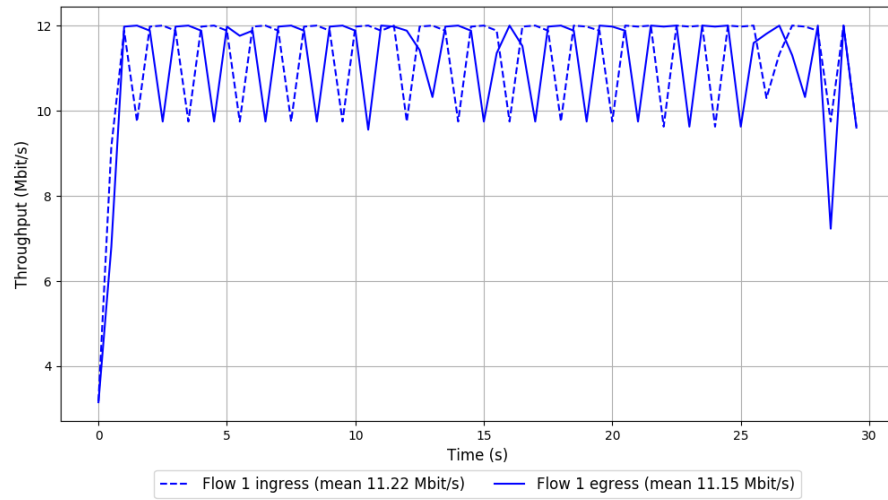
-- Flow 1:

Average throughput: 11.15 Mbit/s

95th percentile per-packet one-way delay: 55.746 ms

Loss rate: 1.01%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-09-18 03:05:35

End at: 2017-09-18 03:06:05

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.16 Mbit/s

95th percentile per-packet one-way delay: 55.642 ms

Loss rate: 0.47%

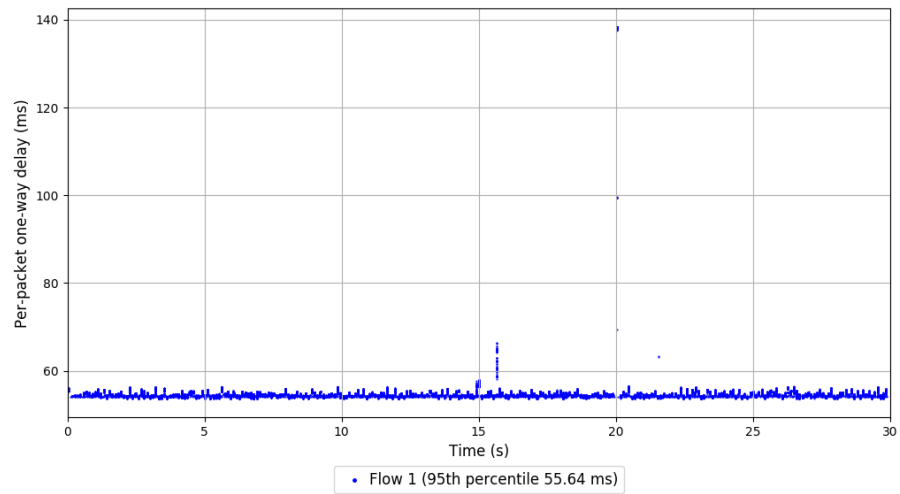
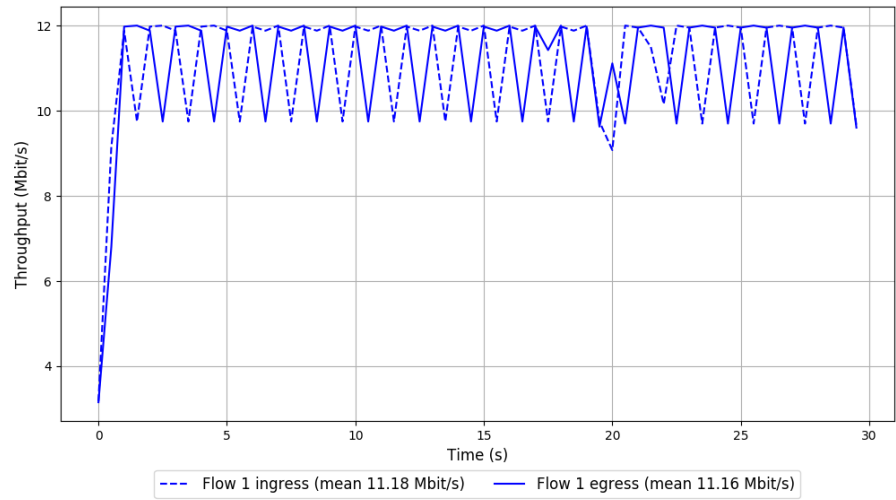
-- Flow 1:

Average throughput: 11.16 Mbit/s

95th percentile per-packet one-way delay: 55.642 ms

Loss rate: 0.47%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-09-18 03:17:11

End at: 2017-09-18 03:17:41

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.24 Mbit/s

95th percentile per-packet one-way delay: 55.760 ms

Loss rate: 0.56%

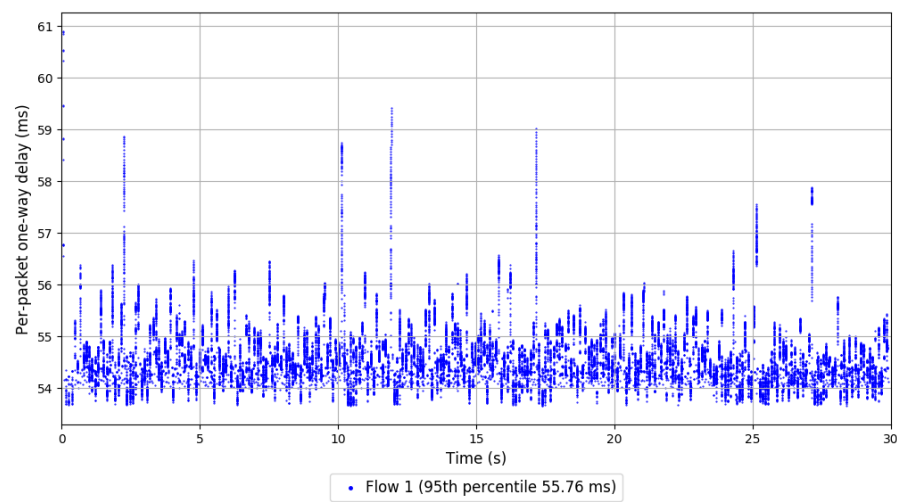
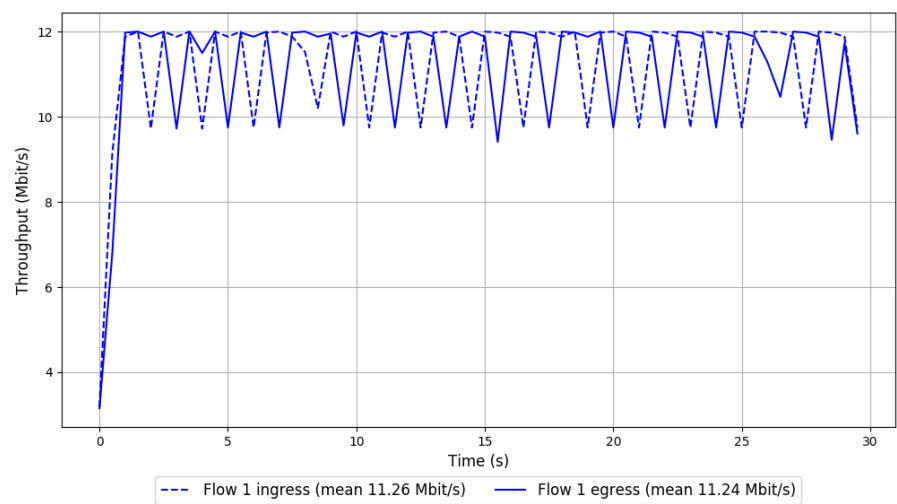
-- Flow 1:

Average throughput: 11.24 Mbit/s

95th percentile per-packet one-way delay: 55.760 ms

Loss rate: 0.56%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-09-18 03:28:30

End at: 2017-09-18 03:29:01

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.29 Mbit/s

95th percentile per-packet one-way delay: 54.921 ms

Loss rate: 0.54%

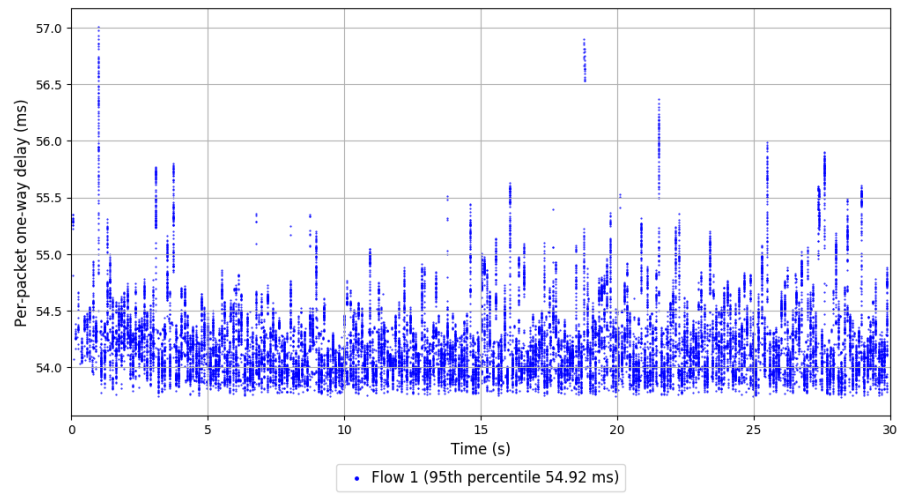
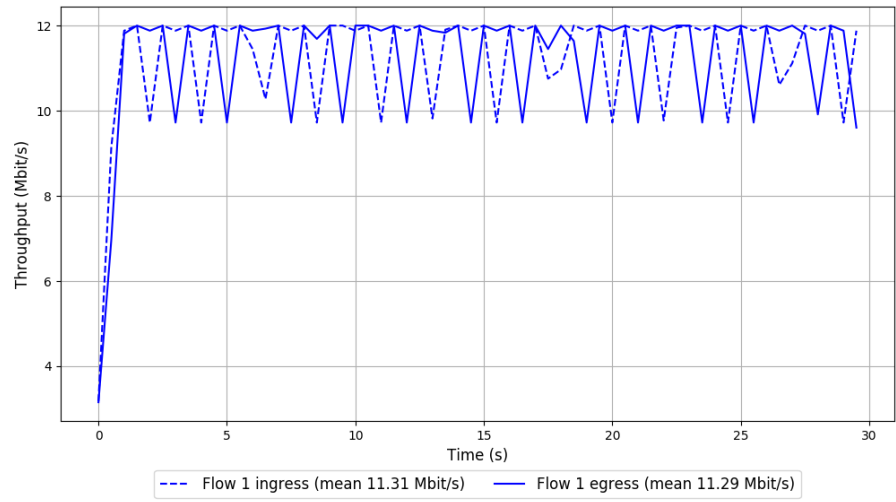
-- Flow 1:

Average throughput: 11.29 Mbit/s

95th percentile per-packet one-way delay: 54.921 ms

Loss rate: 0.54%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-09-18 03:39:55

End at: 2017-09-18 03:40:25

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.92 Mbit/s

95th percentile per-packet one-way delay: 55.546 ms

Loss rate: 0.52%

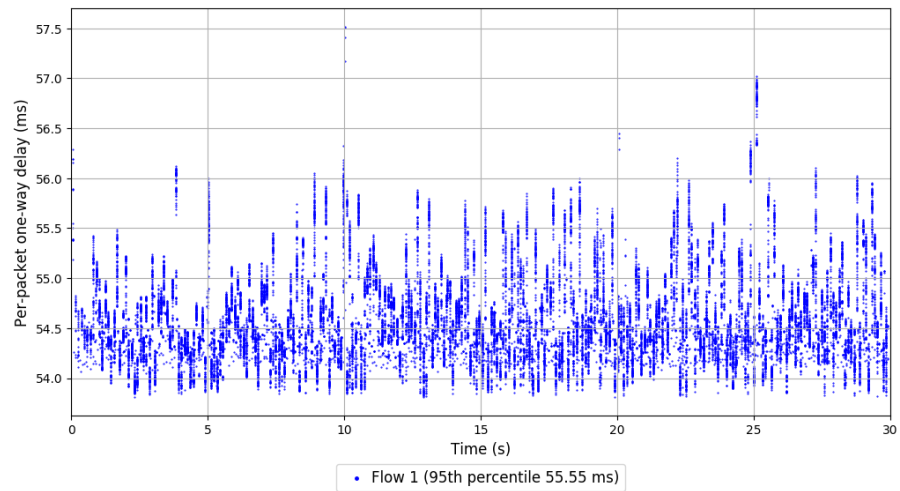
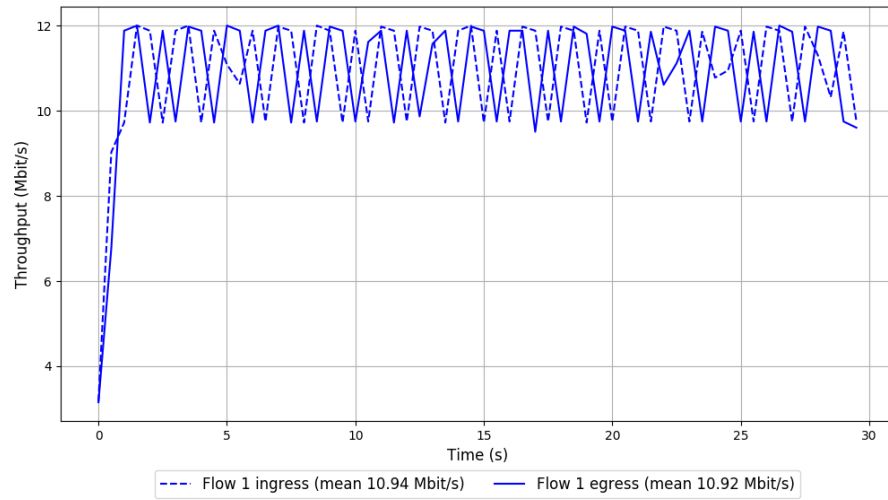
-- Flow 1:

Average throughput: 10.92 Mbit/s

95th percentile per-packet one-way delay: 55.546 ms

Loss rate: 0.52%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-09-18 03:51:33

End at: 2017-09-18 03:52:03

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.84 Mbit/s

95th percentile per-packet one-way delay: 55.492 ms

Loss rate: 0.57%

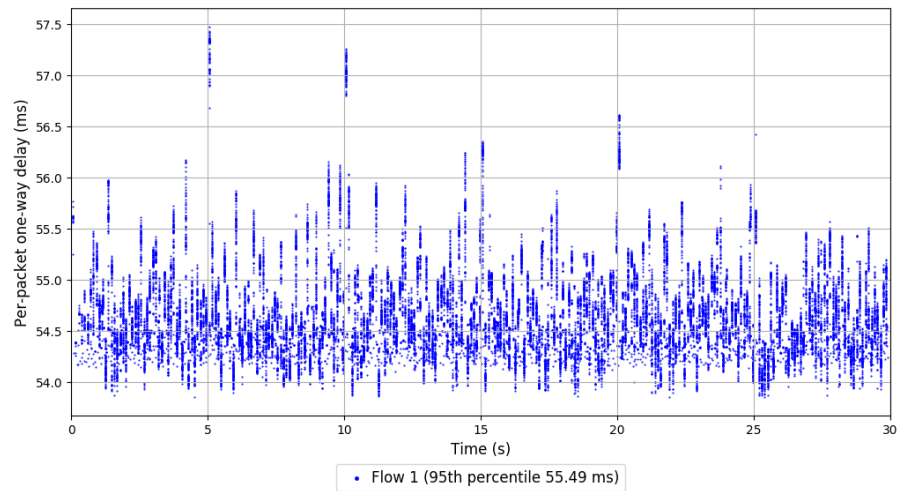
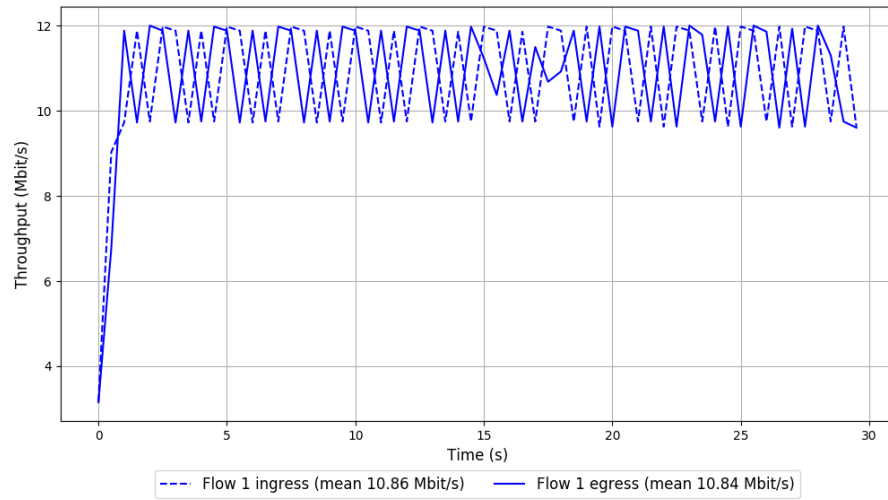
-- Flow 1:

Average throughput: 10.84 Mbit/s

95th percentile per-packet one-way delay: 55.492 ms

Loss rate: 0.57%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-09-18 04:02:50

End at: 2017-09-18 04:03:20

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.29 Mbit/s

95th percentile per-packet one-way delay: 55.318 ms

Loss rate: 0.45%

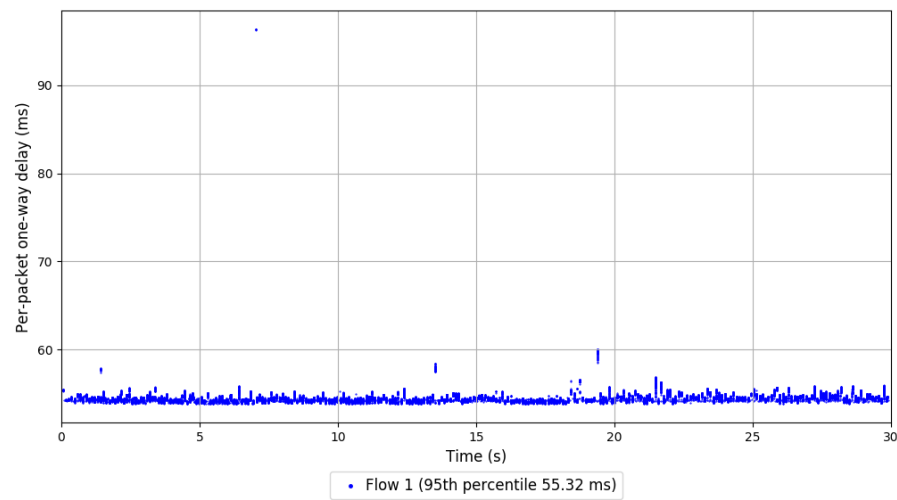
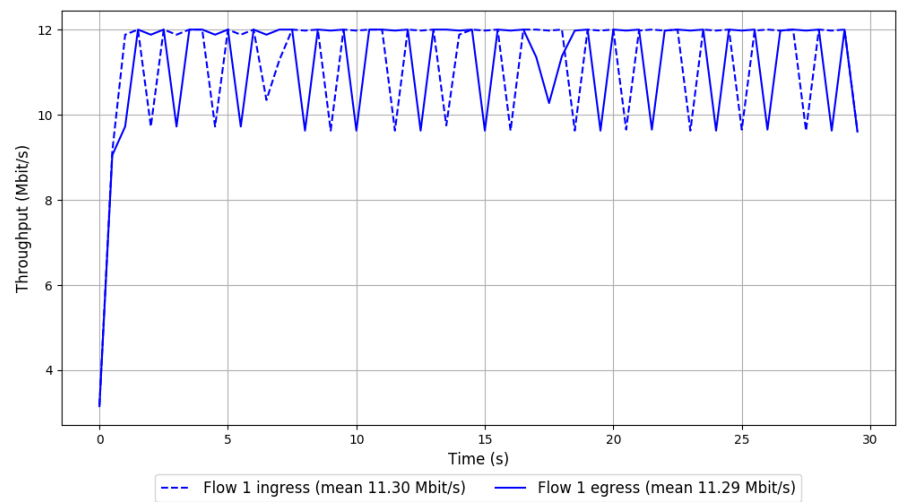
-- Flow 1:

Average throughput: 11.29 Mbit/s

95th percentile per-packet one-way delay: 55.318 ms

Loss rate: 0.45%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-09-18 04:13:58

End at: 2017-09-18 04:14:28

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.97 Mbit/s

95th percentile per-packet one-way delay: 55.338 ms

Loss rate: 0.44%

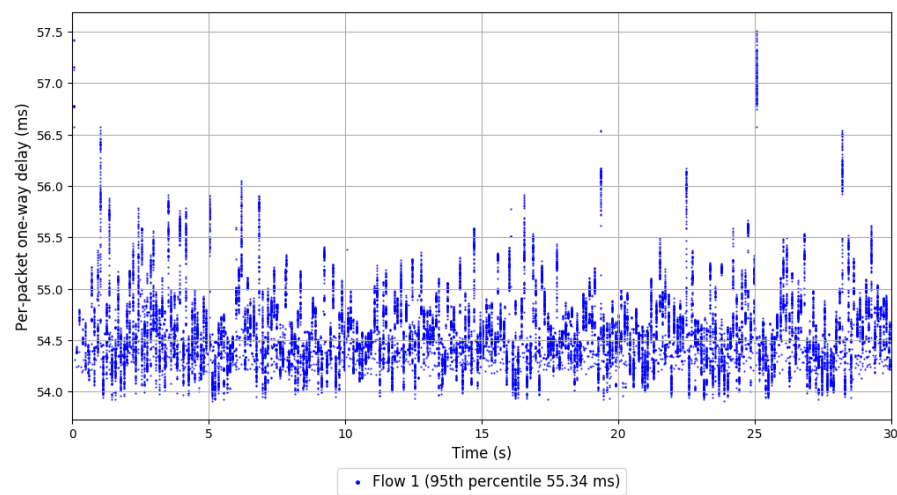
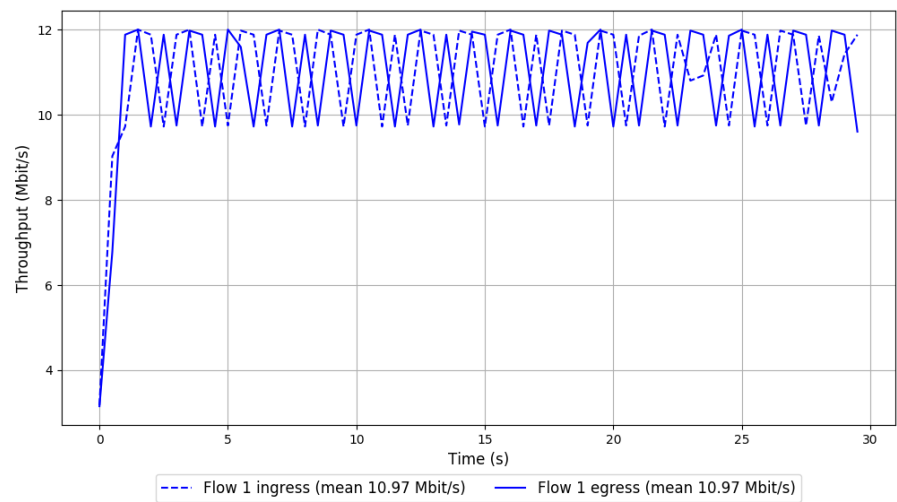
-- Flow 1:

Average throughput: 10.97 Mbit/s

95th percentile per-packet one-way delay: 55.338 ms

Loss rate: 0.44%

Run 10: Report of KohoCC — Data Link

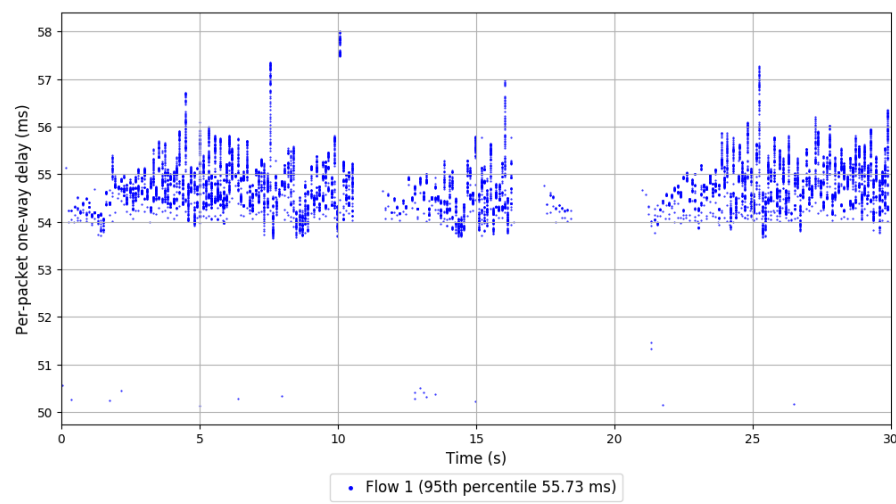
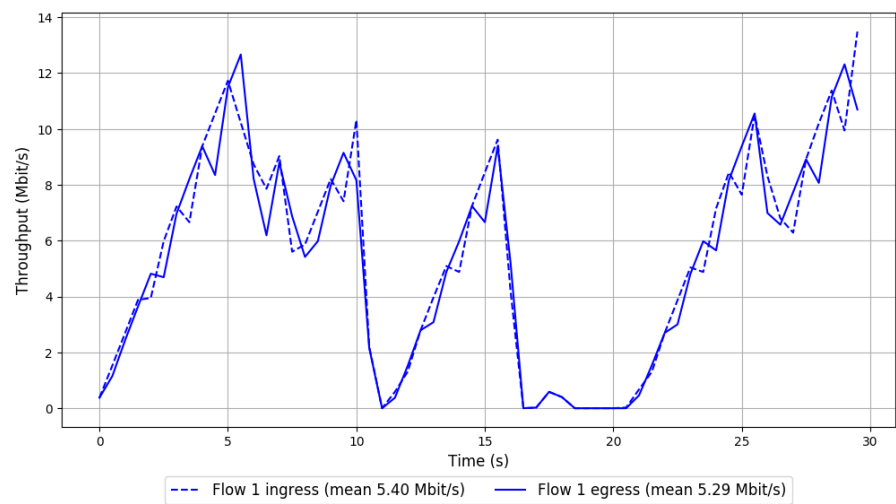


```
Run 1: Statistics of LEDBAT

Start at: 2017-09-18 02:32:30
End at: 2017-09-18 02:33:00

# Below is generated by plot.py at 2017-09-18 07:08:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 55.725 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 55.725 ms
Loss rate: 2.24%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-09-18 02:44:06

End at: 2017-09-18 02:44:36

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 56.431 ms

Loss rate: 1.44%

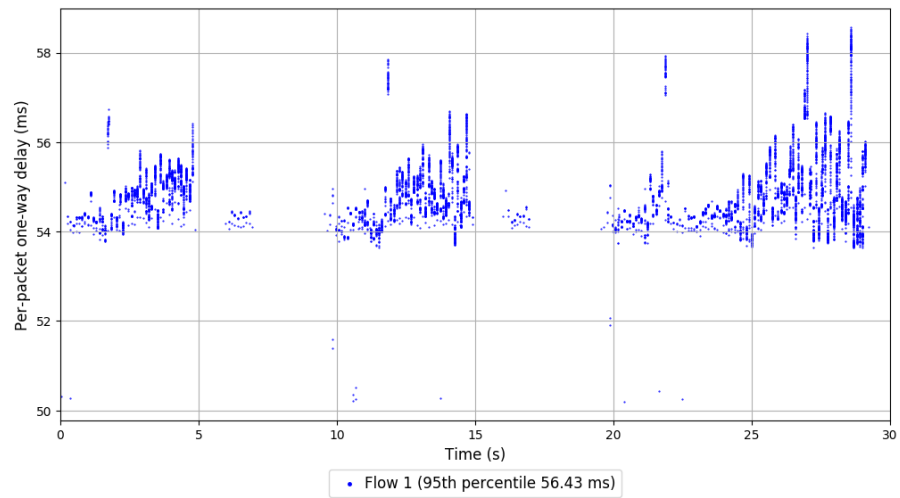
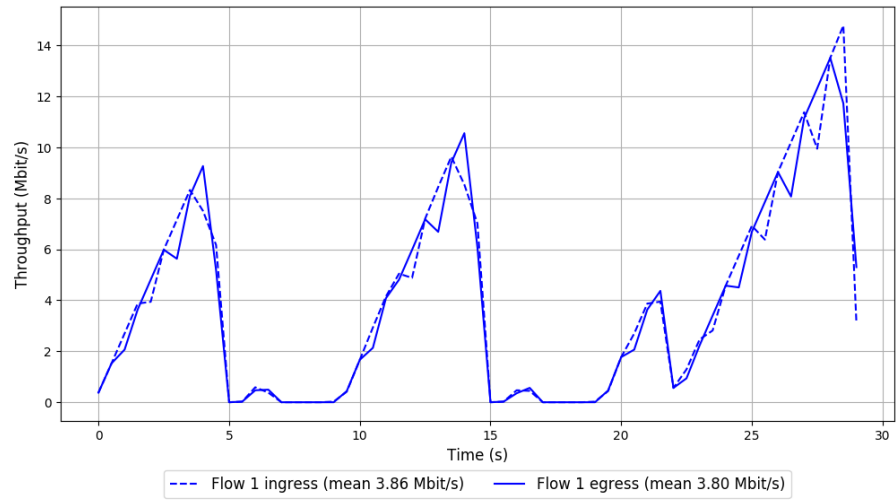
-- Flow 1:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 56.431 ms

Loss rate: 1.44%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-09-18 02:55:36

End at: 2017-09-18 02:56:06

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 56.266 ms

Loss rate: 1.67%

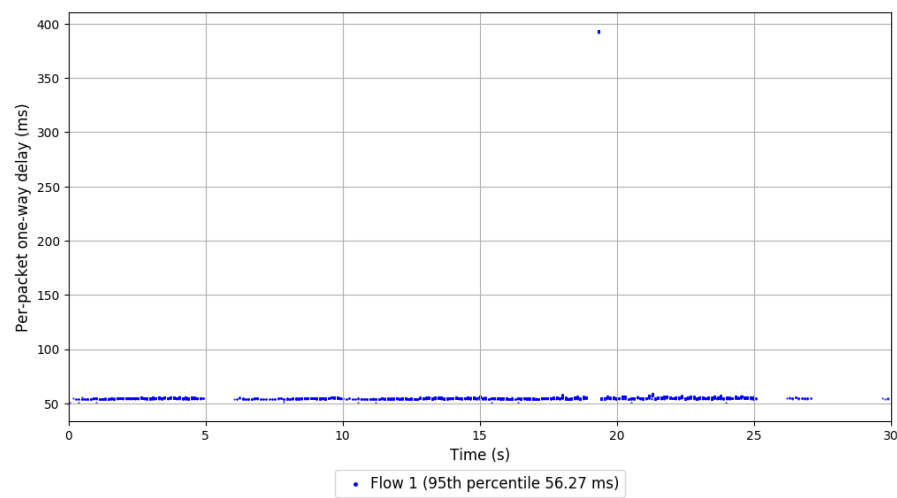
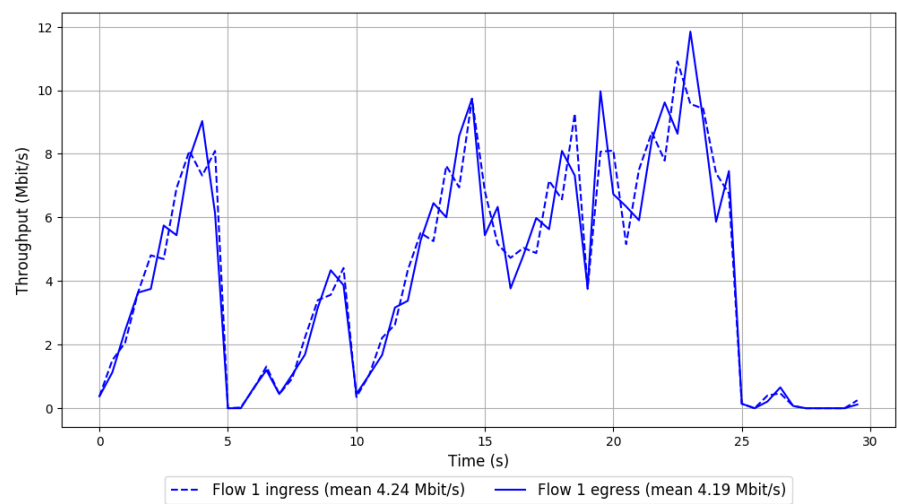
-- Flow 1:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 56.266 ms

Loss rate: 1.67%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-09-18 03:07:11

End at: 2017-09-18 03:07:41

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.98 Mbit/s

95th percentile per-packet one-way delay: 56.477 ms

Loss rate: 0.43%

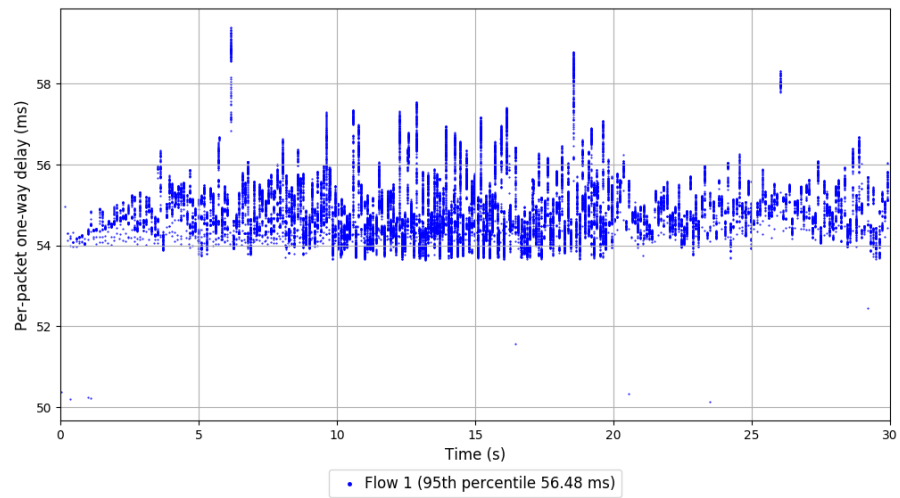
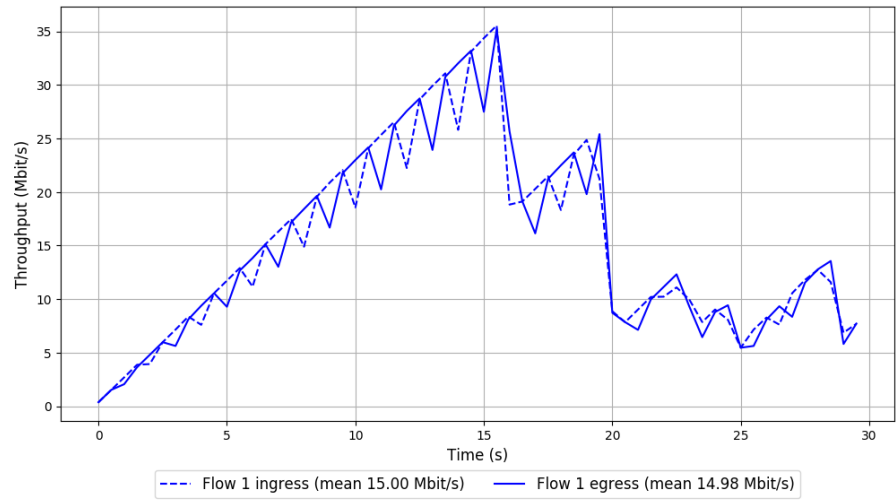
-- Flow 1:

Average throughput: 14.98 Mbit/s

95th percentile per-packet one-way delay: 56.477 ms

Loss rate: 0.43%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-09-18 03:18:33

End at: 2017-09-18 03:19:03

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.24 Mbit/s

95th percentile per-packet one-way delay: 56.162 ms

Loss rate: 1.32%

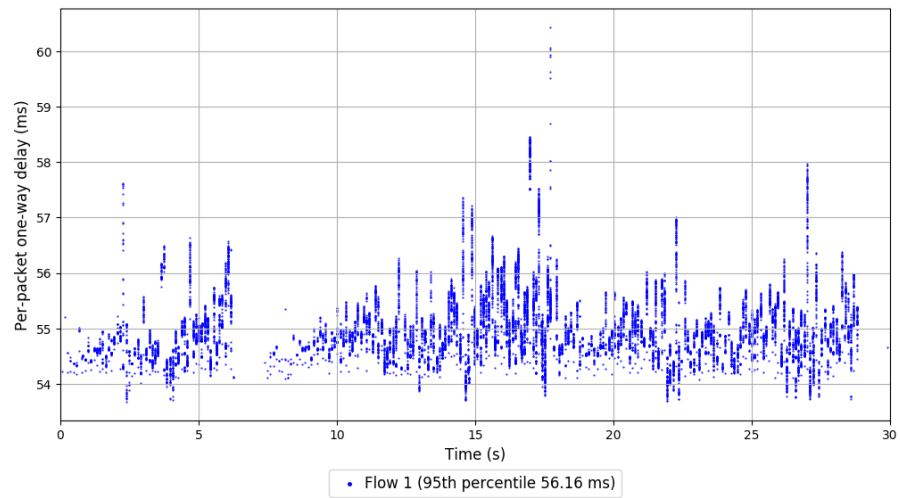
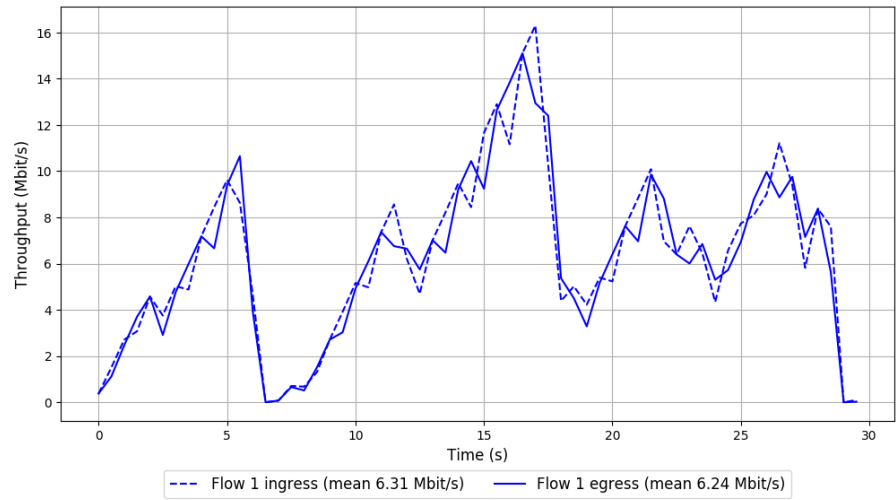
-- Flow 1:

Average throughput: 6.24 Mbit/s

95th percentile per-packet one-way delay: 56.162 ms

Loss rate: 1.32%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-09-18 03:30:03

End at: 2017-09-18 03:30:33

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 55.257 ms

Loss rate: 1.59%

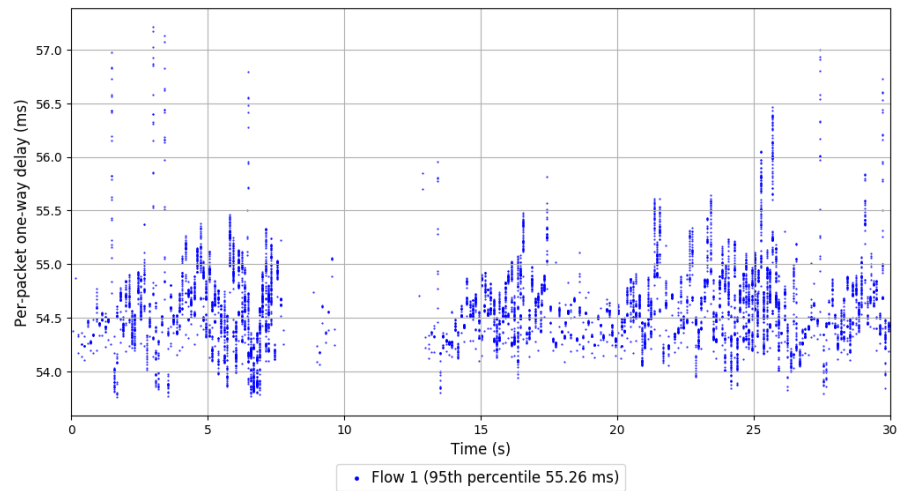
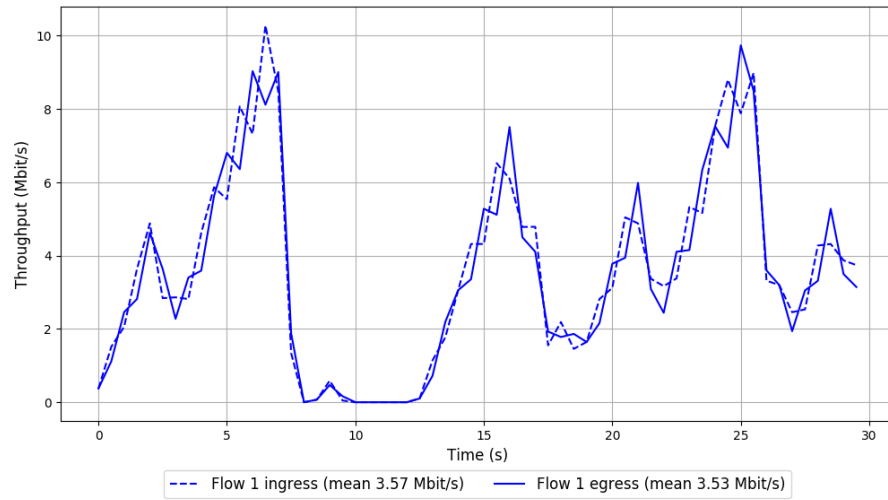
-- Flow 1:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 55.257 ms

Loss rate: 1.59%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-09-18 03:41:31

End at: 2017-09-18 03:42:01

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.47 Mbit/s

95th percentile per-packet one-way delay: 55.619 ms

Loss rate: 1.36%

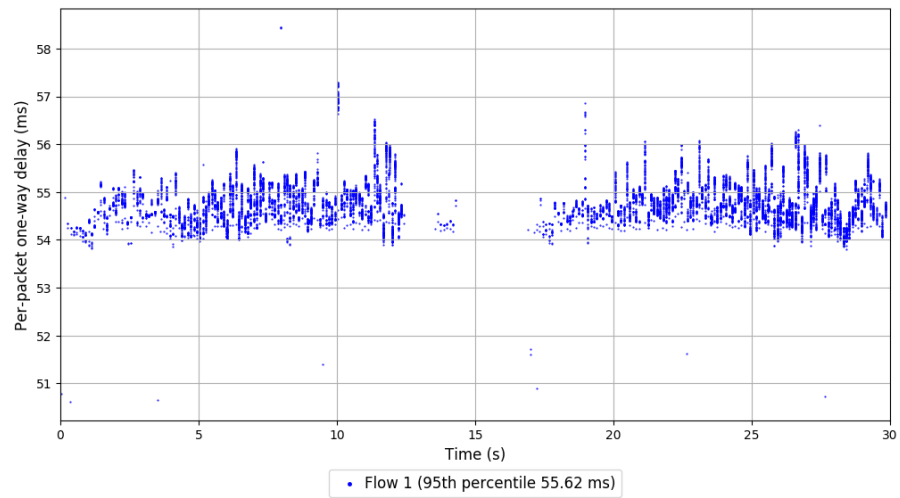
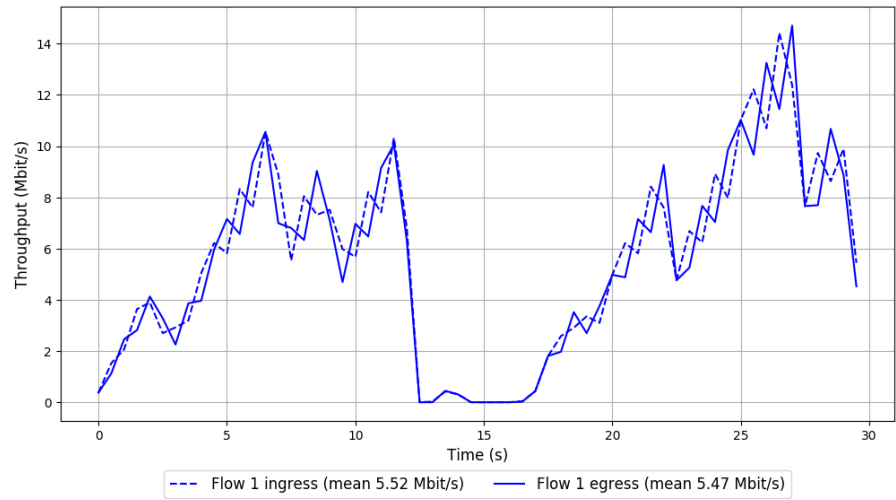
-- Flow 1:

Average throughput: 5.47 Mbit/s

95th percentile per-packet one-way delay: 55.619 ms

Loss rate: 1.36%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-09-18 03:53:04

End at: 2017-09-18 03:53:34

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.70 Mbit/s

95th percentile per-packet one-way delay: 55.534 ms

Loss rate: 1.51%

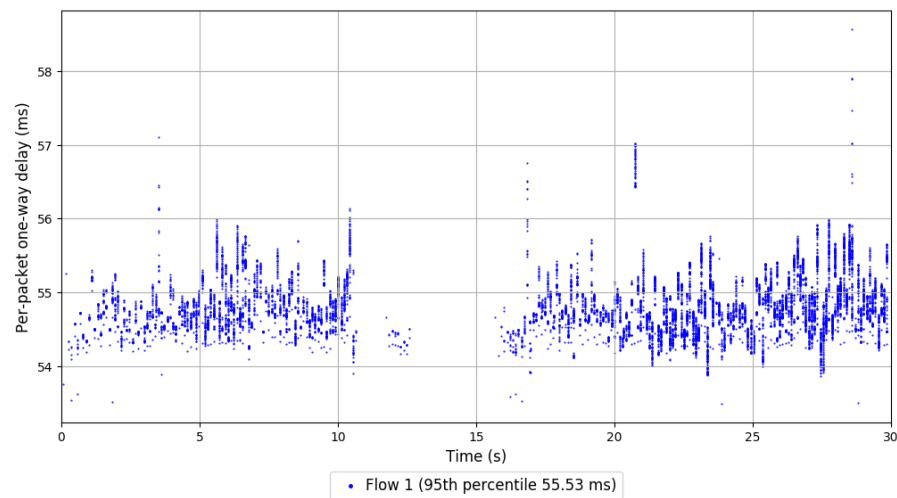
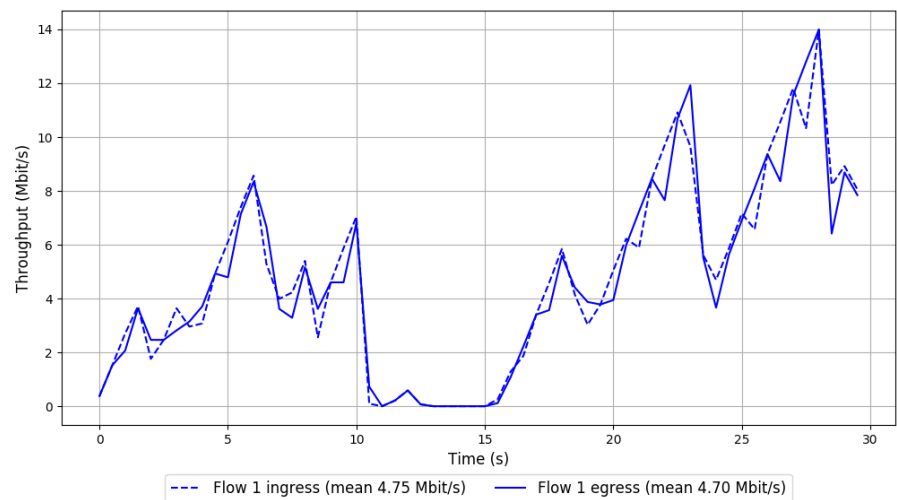
-- Flow 1:

Average throughput: 4.70 Mbit/s

95th percentile per-packet one-way delay: 55.534 ms

Loss rate: 1.51%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-09-18 04:04:11

End at: 2017-09-18 04:04:41

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 55.568 ms

Loss rate: 1.81%

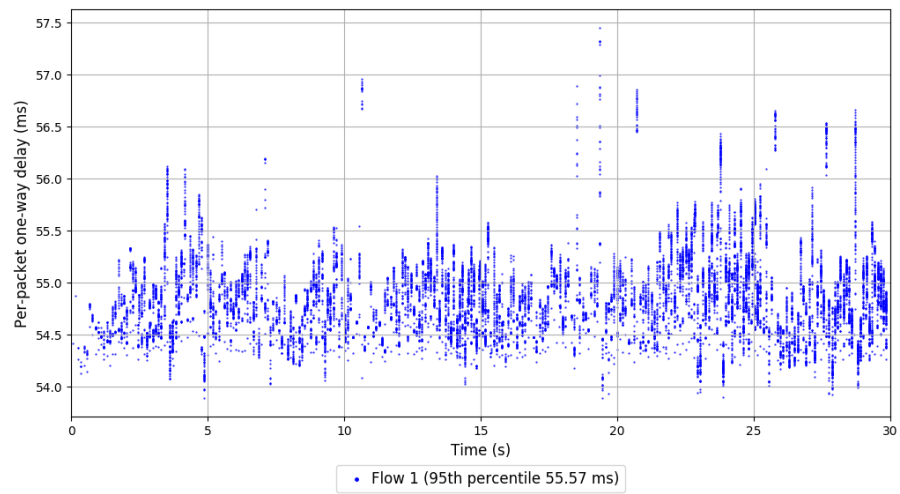
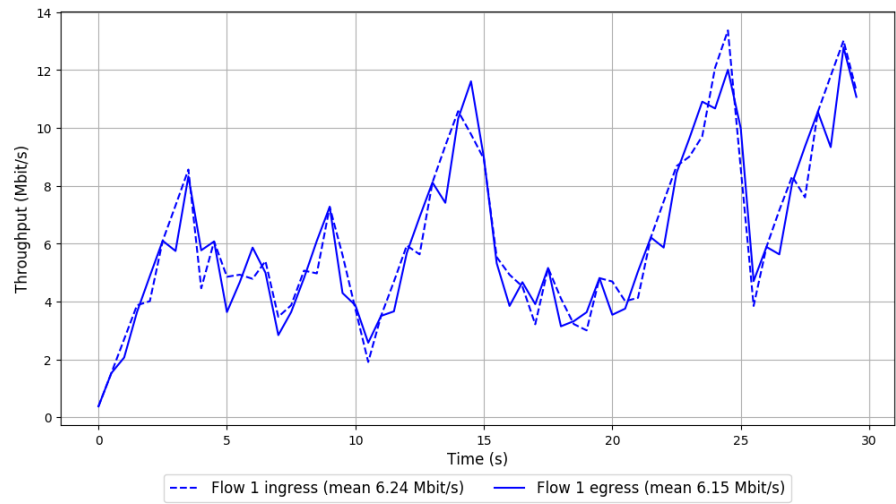
-- Flow 1:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 55.568 ms

Loss rate: 1.81%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-09-18 04:15:34

End at: 2017-09-18 04:16:04

Below is generated by plot.py at 2017-09-18 07:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.19 Mbit/s

95th percentile per-packet one-way delay: 56.153 ms

Loss rate: 1.12%

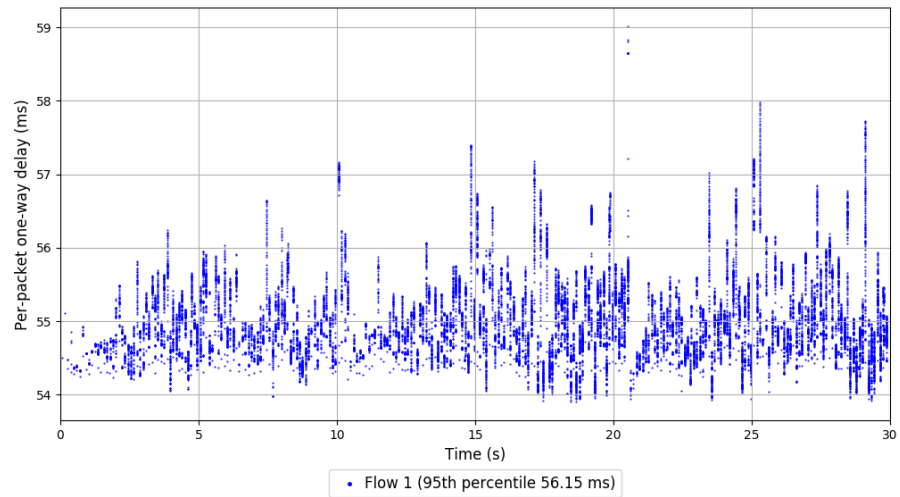
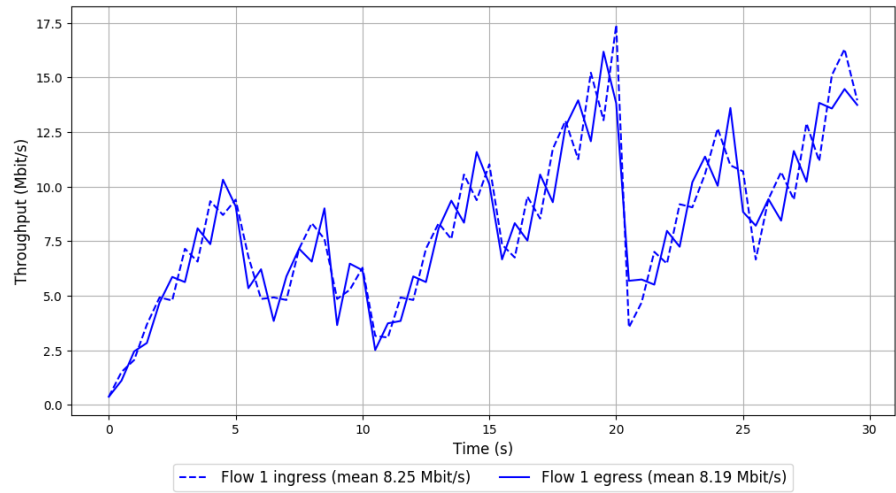
-- Flow 1:

Average throughput: 8.19 Mbit/s

95th percentile per-packet one-way delay: 56.153 ms

Loss rate: 1.12%

Run 10: Report of LEDBAT — Data Link

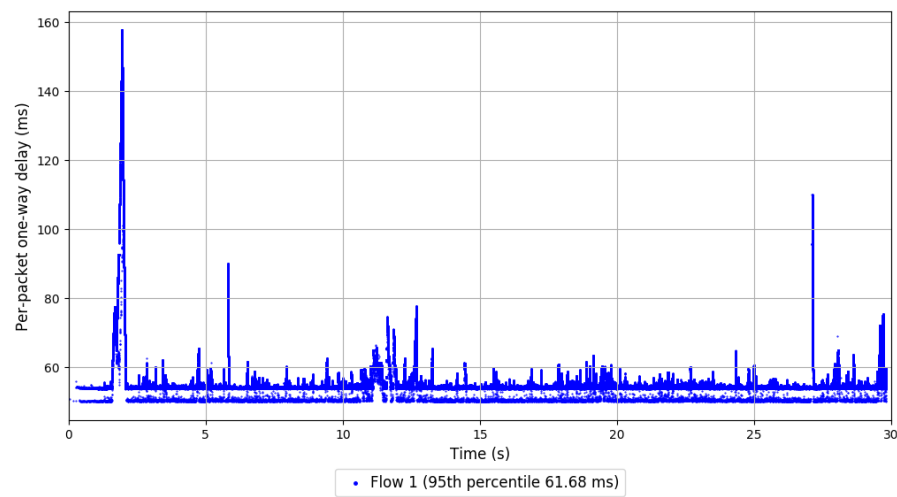
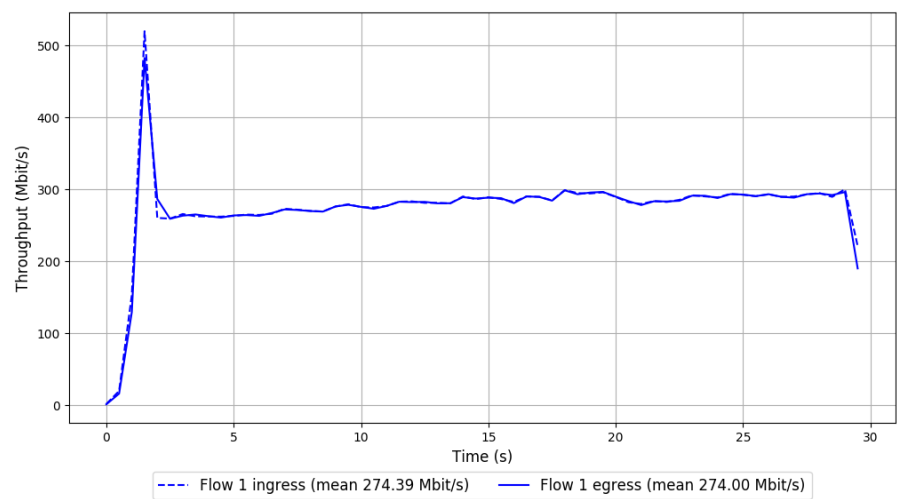


```
Run 1: Statistics of PCC

Start at: 2017-09-18 02:26:50
End at: 2017-09-18 02:27:20

# Below is generated by plot.py at 2017-09-18 07:11:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 274.00 Mbit/s
95th percentile per-packet one-way delay: 61.684 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 274.00 Mbit/s
95th percentile per-packet one-way delay: 61.684 ms
Loss rate: 0.49%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-09-18 02:38:27

End at: 2017-09-18 02:38:57

Below is generated by plot.py at 2017-09-18 07:12:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 342.13 Mbit/s

95th percentile per-packet one-way delay: 88.333 ms

Loss rate: 0.47%

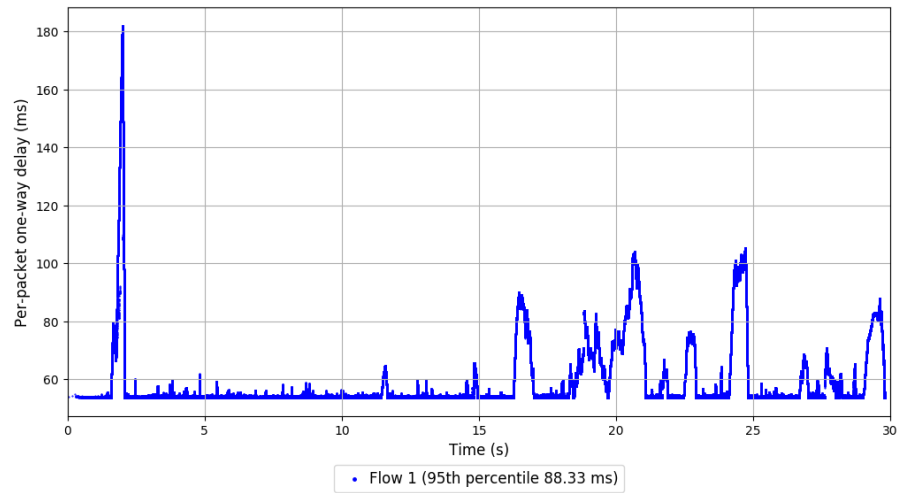
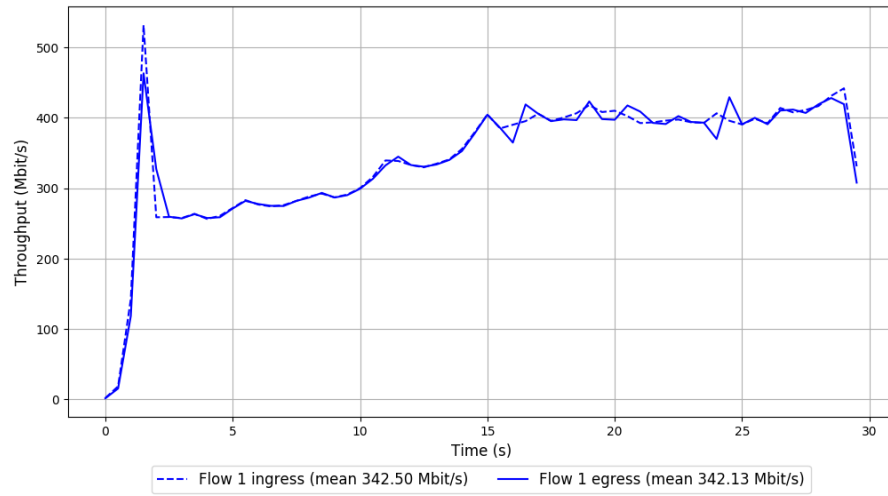
-- Flow 1:

Average throughput: 342.13 Mbit/s

95th percentile per-packet one-way delay: 88.333 ms

Loss rate: 0.47%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-09-18 02:49:58

End at: 2017-09-18 02:50:28

Below is generated by plot.py at 2017-09-18 07:12:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 250.24 Mbit/s

95th percentile per-packet one-way delay: 62.026 ms

Loss rate: 1.91%

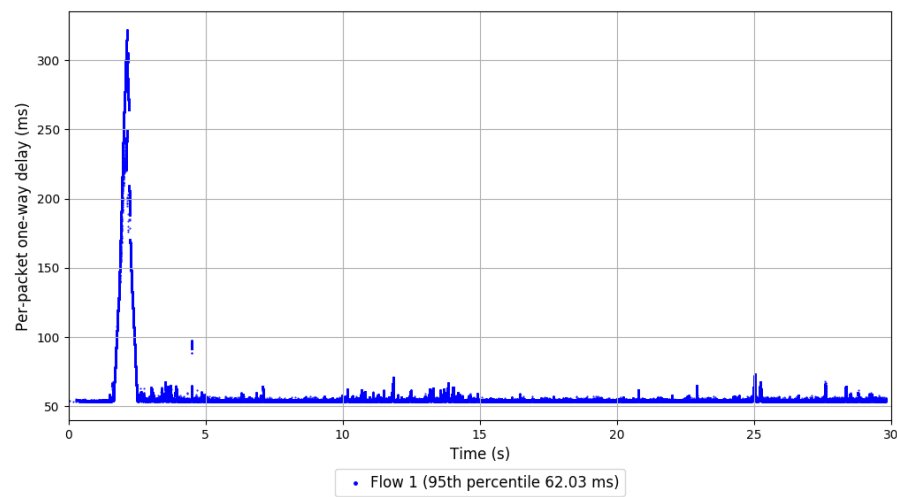
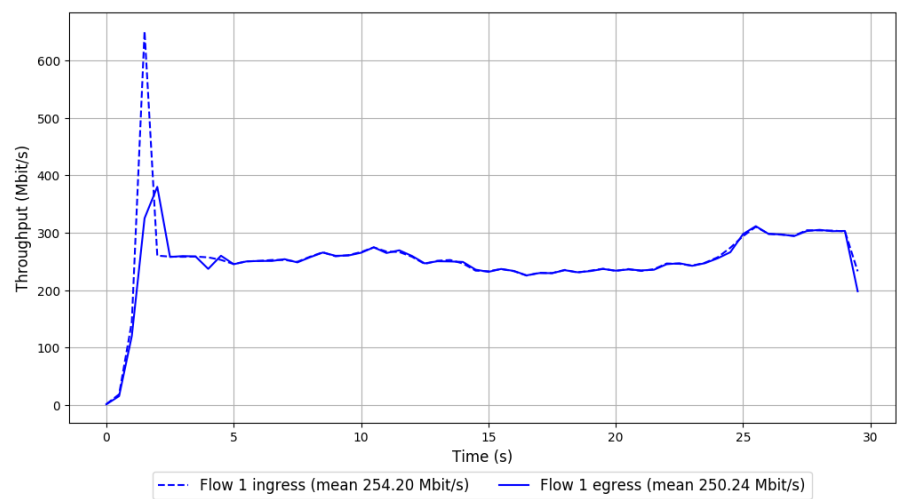
-- Flow 1:

Average throughput: 250.24 Mbit/s

95th percentile per-packet one-way delay: 62.026 ms

Loss rate: 1.91%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-09-18 03:01:29

End at: 2017-09-18 03:01:59

Below is generated by plot.py at 2017-09-18 07:13:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 355.11 Mbit/s

95th percentile per-packet one-way delay: 102.131 ms

Loss rate: 0.76%

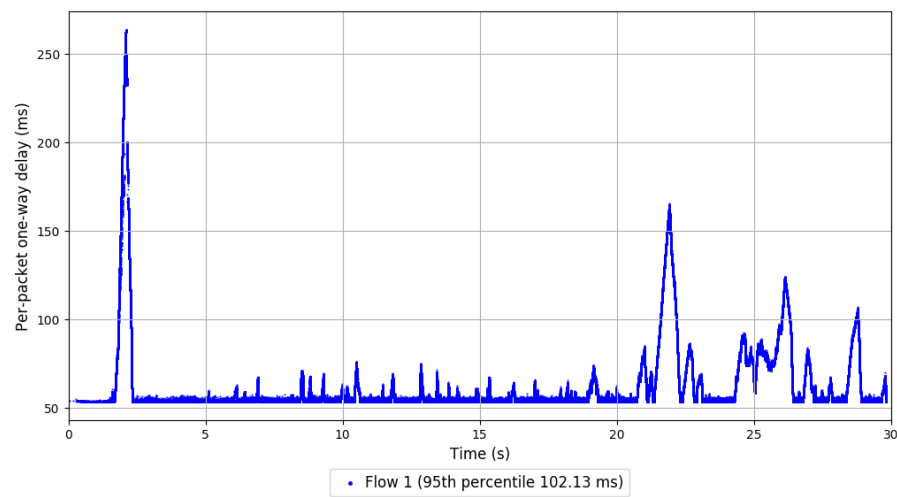
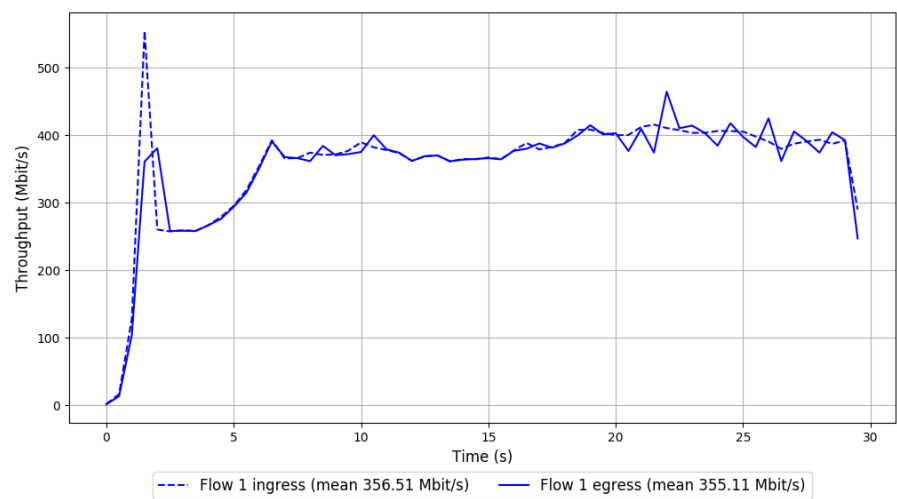
-- Flow 1:

Average throughput: 355.11 Mbit/s

95th percentile per-packet one-way delay: 102.131 ms

Loss rate: 0.76%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-09-18 03:13:07

End at: 2017-09-18 03:13:37

Below is generated by plot.py at 2017-09-18 07:13:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 326.97 Mbit/s

95th percentile per-packet one-way delay: 171.058 ms

Loss rate: 1.22%

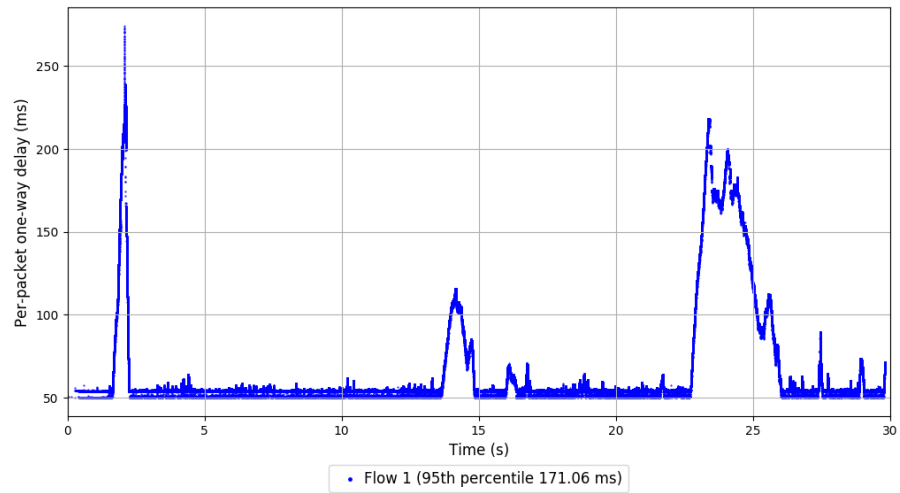
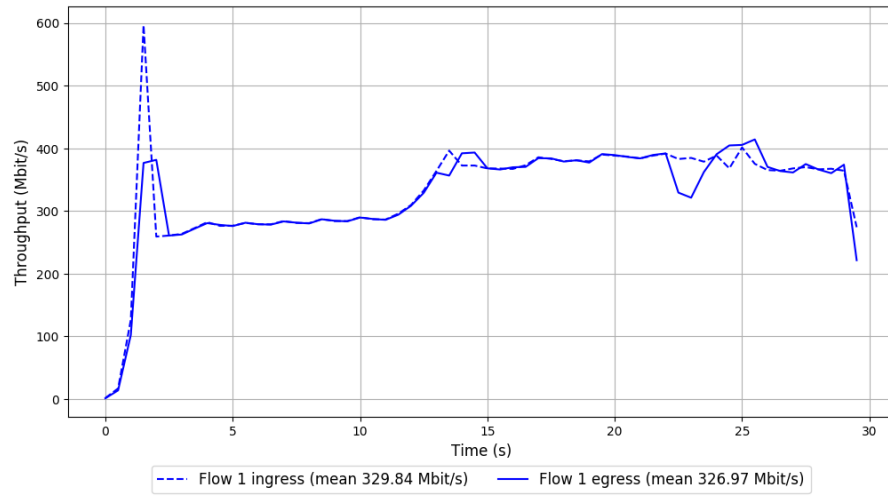
-- Flow 1:

Average throughput: 326.97 Mbit/s

95th percentile per-packet one-way delay: 171.058 ms

Loss rate: 1.22%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-09-18 03:24:22

End at: 2017-09-18 03:24:52

Below is generated by plot.py at 2017-09-18 07:16:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 472.81 Mbit/s

95th percentile per-packet one-way delay: 134.797 ms

Loss rate: 2.65%

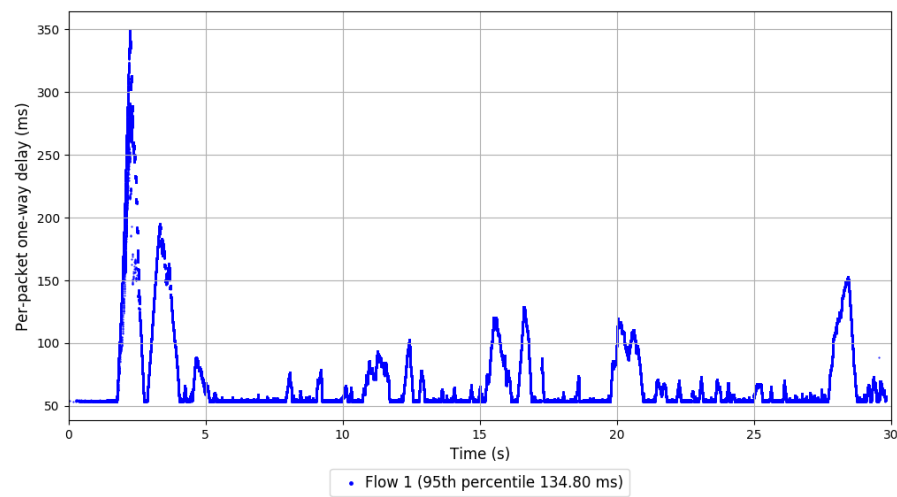
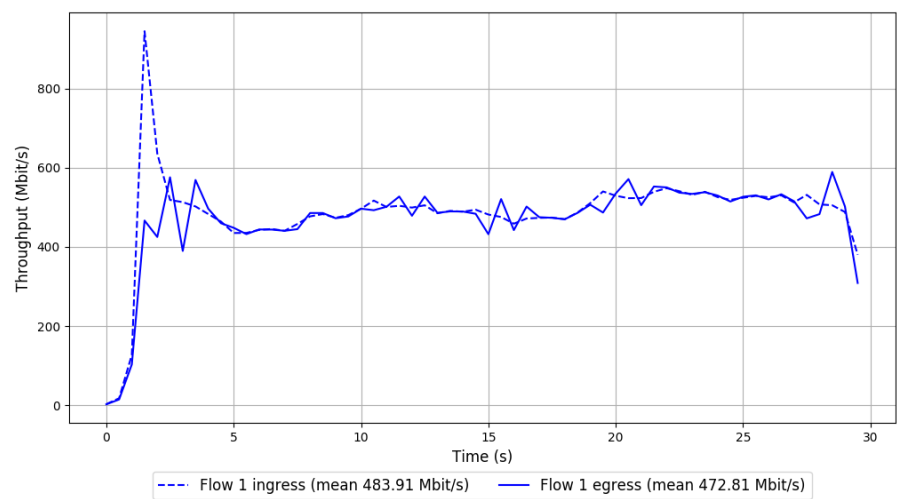
-- Flow 1:

Average throughput: 472.81 Mbit/s

95th percentile per-packet one-way delay: 134.797 ms

Loss rate: 2.65%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-09-18 03:35:54

End at: 2017-09-18 03:36:24

Below is generated by plot.py at 2017-09-18 07:16:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 359.47 Mbit/s

95th percentile per-packet one-way delay: 65.771 ms

Loss rate: 0.46%

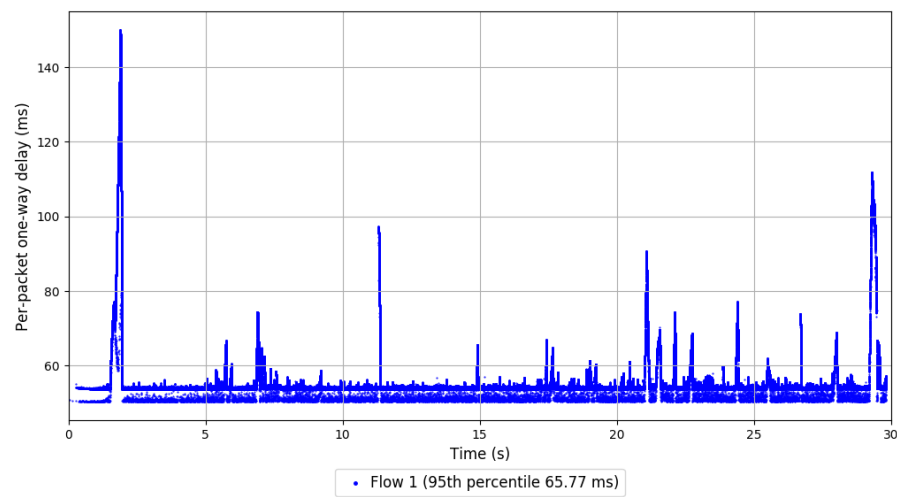
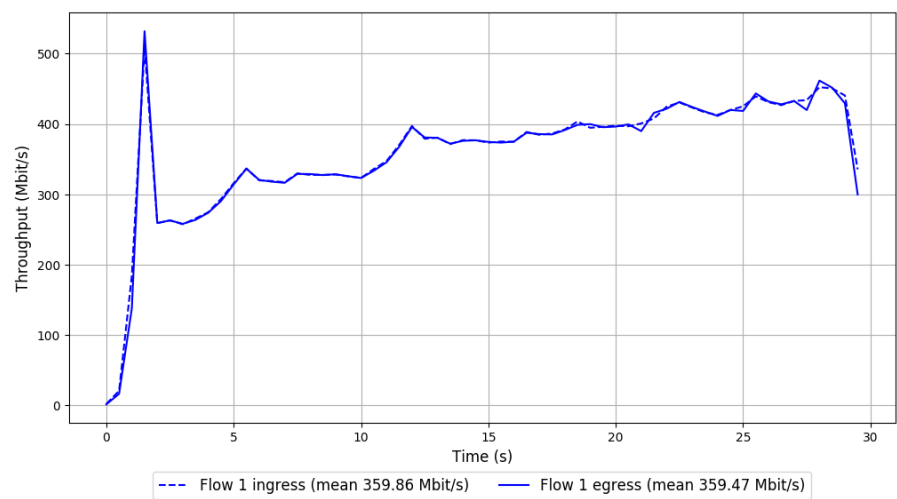
-- Flow 1:

Average throughput: 359.47 Mbit/s

95th percentile per-packet one-way delay: 65.771 ms

Loss rate: 0.46%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-09-18 03:47:27

End at: 2017-09-18 03:47:57

Below is generated by plot.py at 2017-09-18 07:17:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 491.46 Mbit/s

95th percentile per-packet one-way delay: 172.382 ms

Loss rate: 3.57%

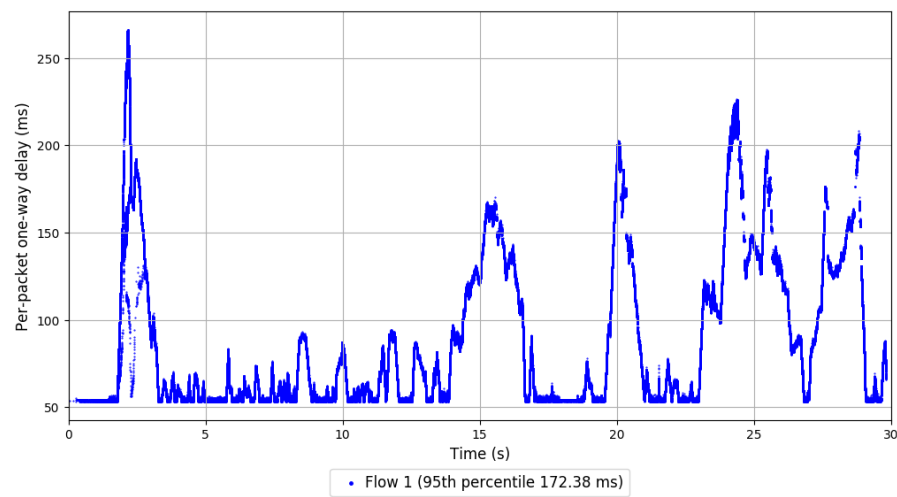
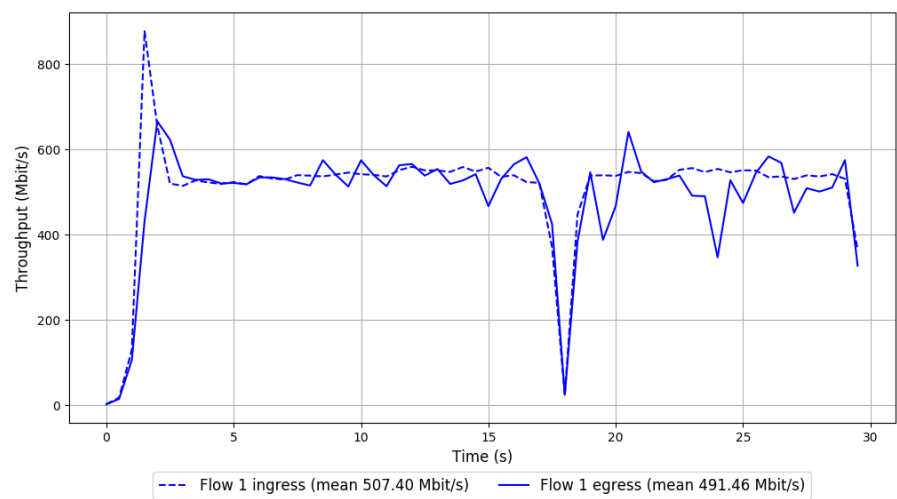
-- Flow 1:

Average throughput: 491.46 Mbit/s

95th percentile per-packet one-way delay: 172.382 ms

Loss rate: 3.57%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-09-18 03:58:45

End at: 2017-09-18 03:59:15

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 463.52 Mbit/s

95th percentile per-packet one-way delay: 155.904 ms

Loss rate: 3.20%

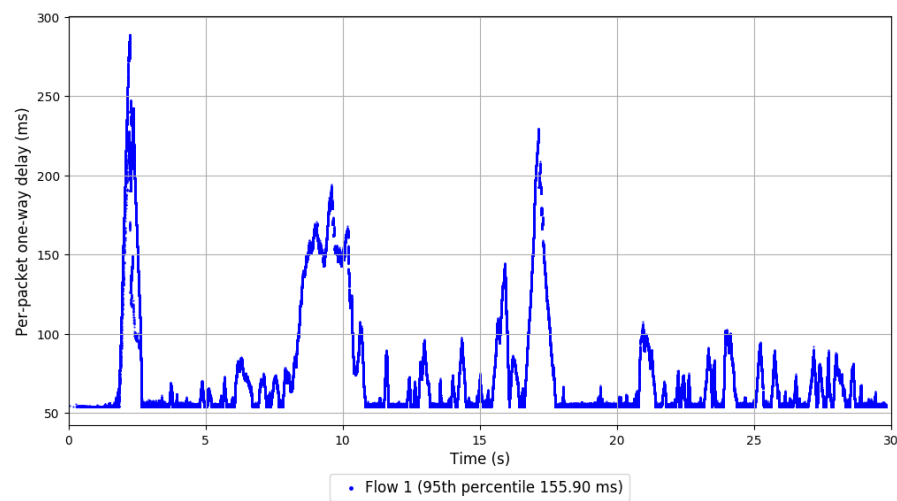
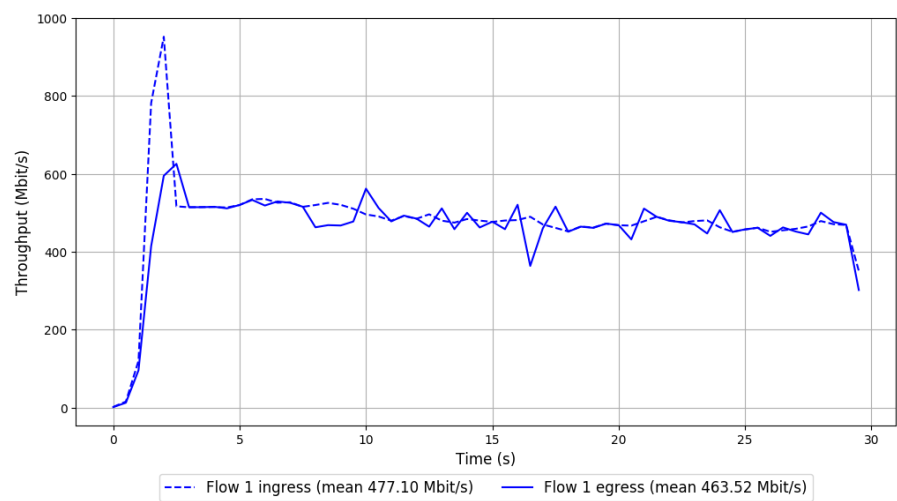
-- Flow 1:

Average throughput: 463.52 Mbit/s

95th percentile per-packet one-way delay: 155.904 ms

Loss rate: 3.20%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-09-18 04:10:01

End at: 2017-09-18 04:10:31

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 302.59 Mbit/s

95th percentile per-packet one-way delay: 60.708 ms

Loss rate: 0.95%

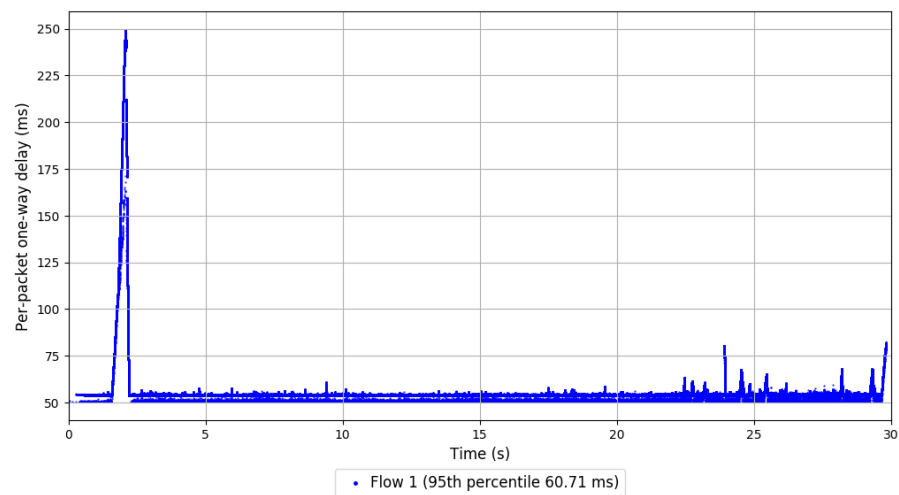
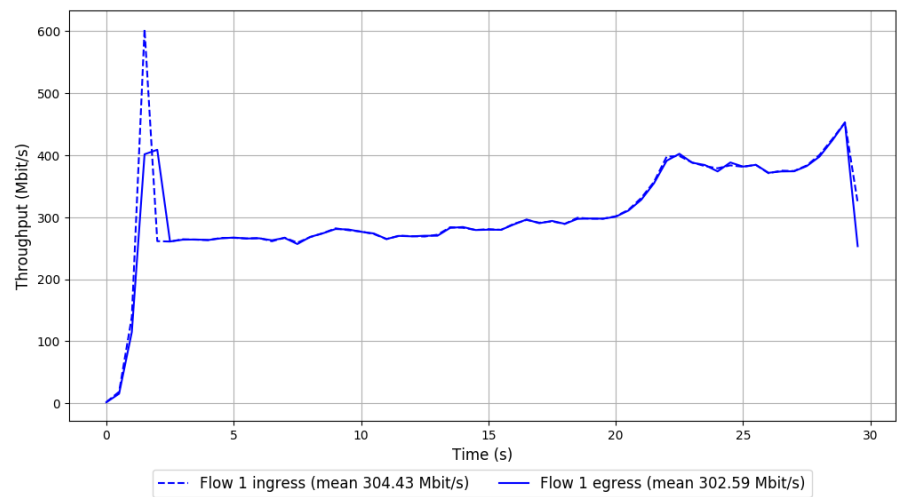
-- Flow 1:

Average throughput: 302.59 Mbit/s

95th percentile per-packet one-way delay: 60.708 ms

Loss rate: 0.95%

Run 10: Report of PCC — Data Link

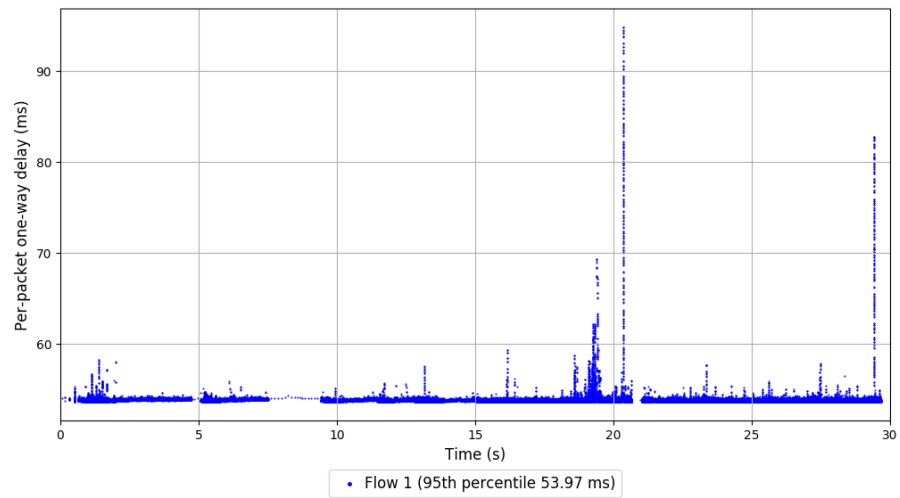
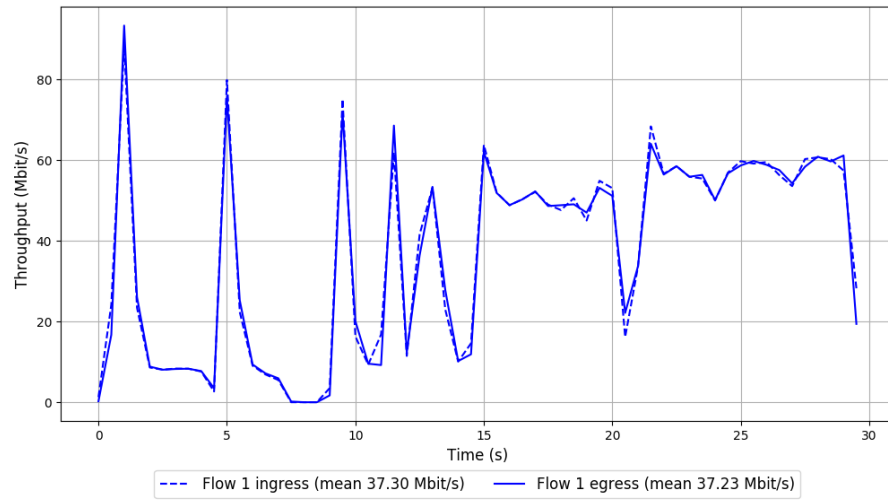


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-18 02:28:42
End at: 2017-09-18 02:29:12

# Below is generated by plot.py at 2017-09-18 07:20:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.23 Mbit/s
95th percentile per-packet one-way delay: 53.968 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 37.23 Mbit/s
95th percentile per-packet one-way delay: 53.968 ms
Loss rate: 0.54%
```


Run 1: Report of QUIC Cubic — Data Link

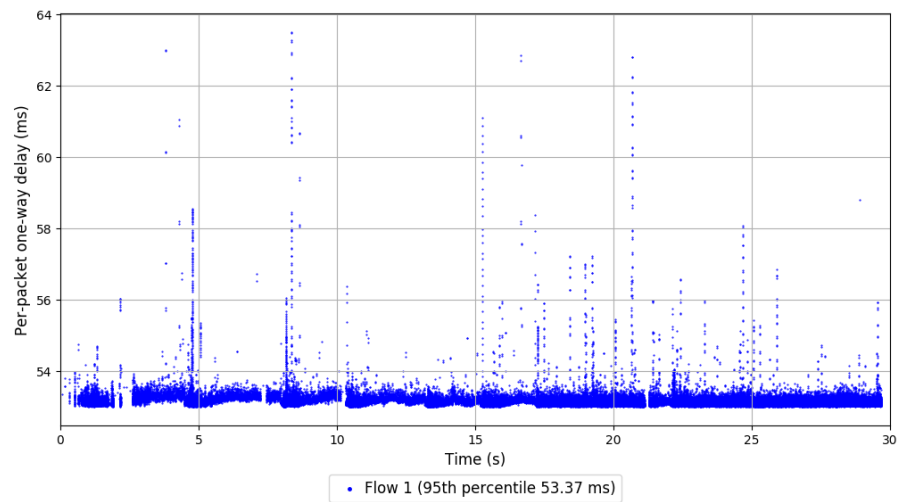
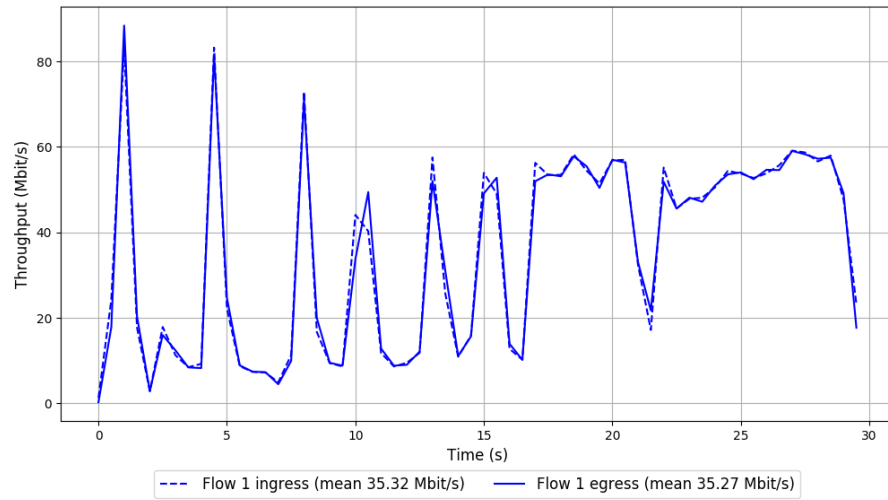


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-18 02:40:23
End at: 2017-09-18 02:40:53

# Below is generated by plot.py at 2017-09-18 07:20:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.27 Mbit/s
95th percentile per-packet one-way delay: 53.370 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 35.27 Mbit/s
95th percentile per-packet one-way delay: 53.370 ms
Loss rate: 0.50%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-09-18 02:51:47

End at: 2017-09-18 02:52:18

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.91 Mbit/s

95th percentile per-packet one-way delay: 50.259 ms

Loss rate: 0.43%

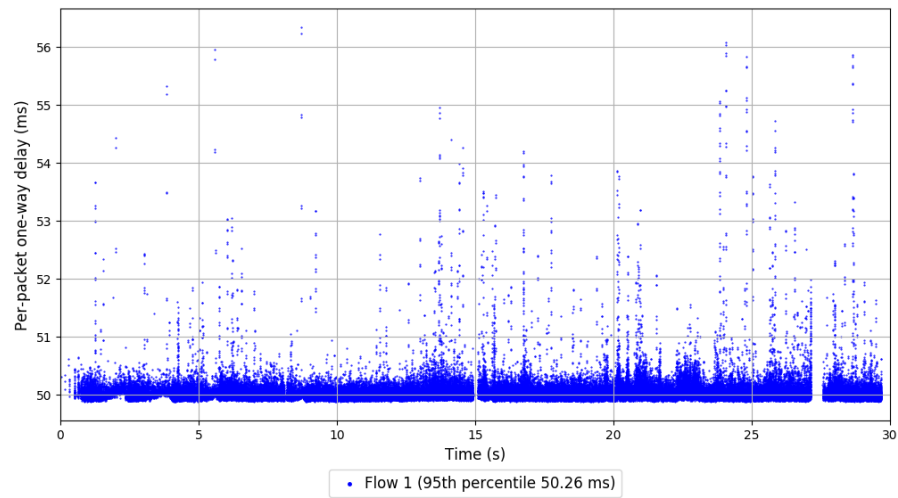
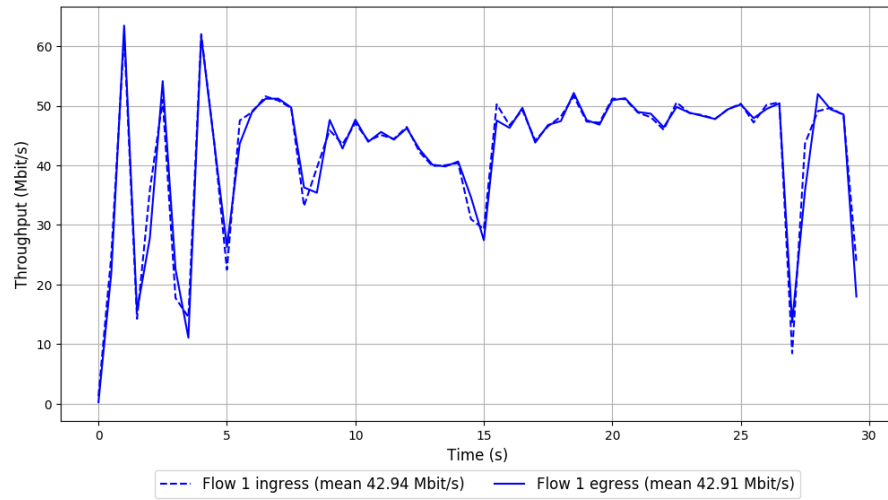
-- Flow 1:

Average throughput: 42.91 Mbit/s

95th percentile per-packet one-way delay: 50.259 ms

Loss rate: 0.43%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-09-18 03:03:25

End at: 2017-09-18 03:03:55

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.51 Mbit/s

95th percentile per-packet one-way delay: 50.106 ms

Loss rate: 0.35%

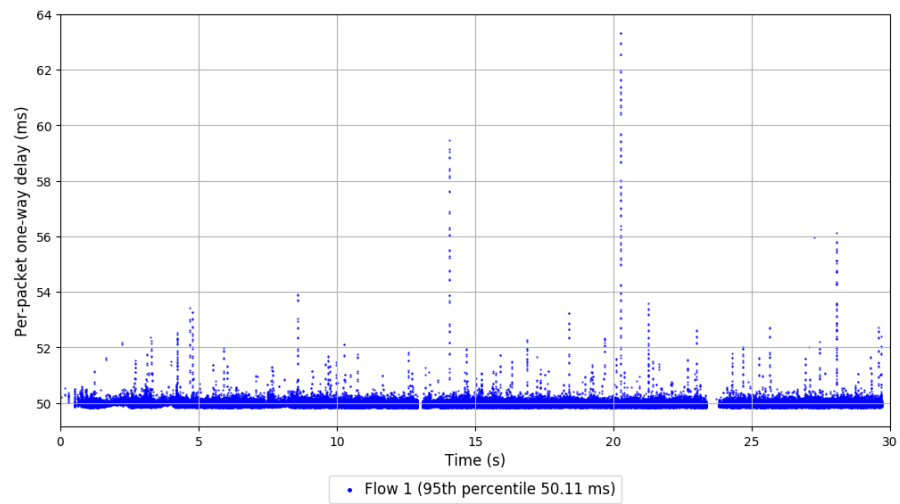
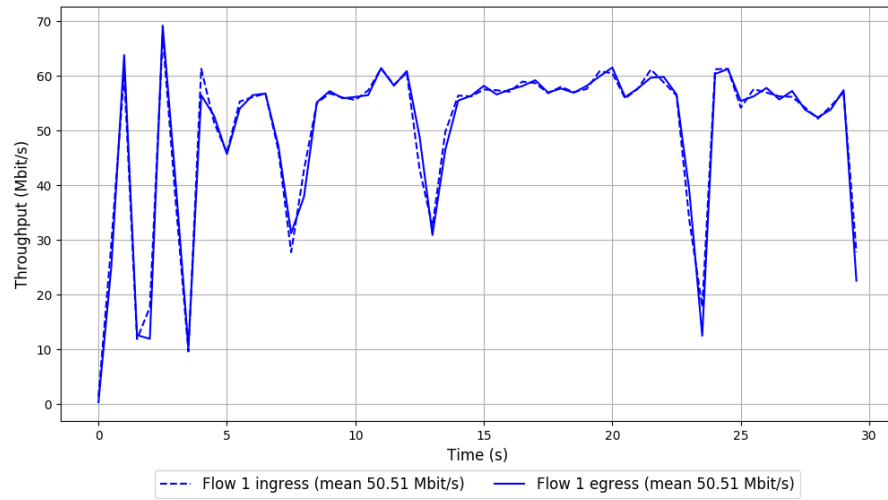
-- Flow 1:

Average throughput: 50.51 Mbit/s

95th percentile per-packet one-way delay: 50.106 ms

Loss rate: 0.35%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-09-18 03:15:01

End at: 2017-09-18 03:15:31

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.20 Mbit/s

95th percentile per-packet one-way delay: 54.064 ms

Loss rate: 0.43%

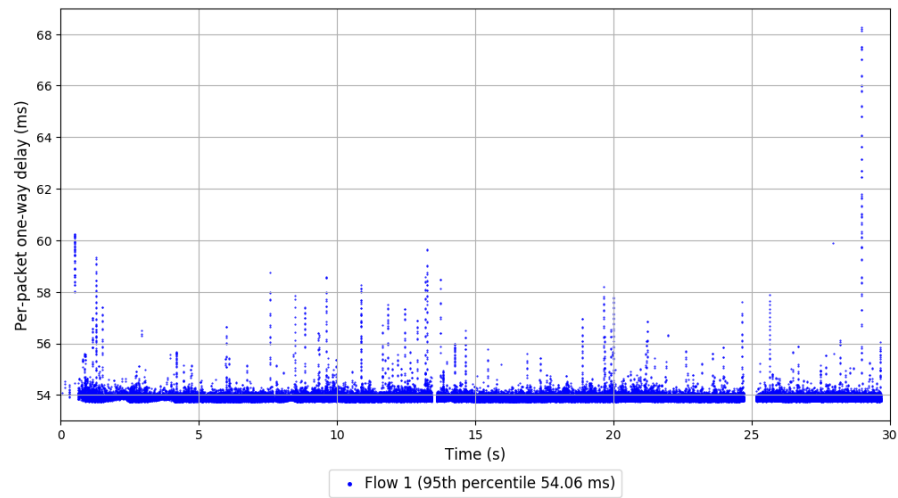
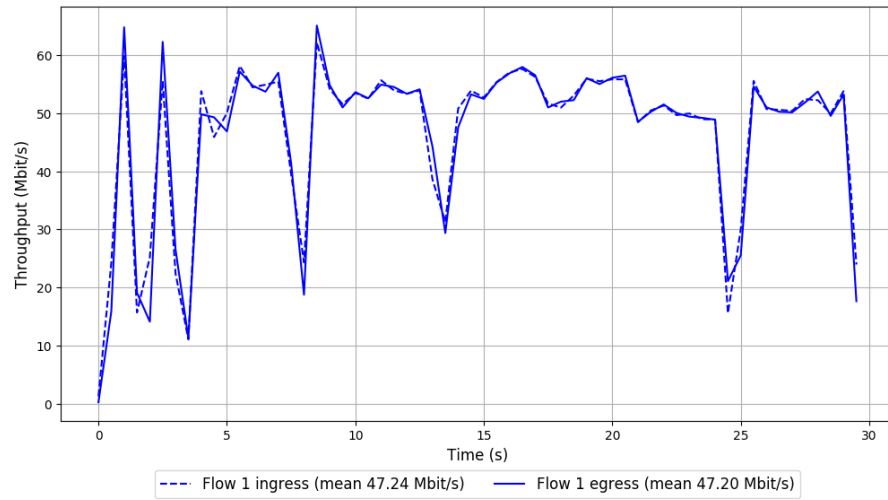
-- Flow 1:

Average throughput: 47.20 Mbit/s

95th percentile per-packet one-way delay: 54.064 ms

Loss rate: 0.43%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-09-18 03:26:24

End at: 2017-09-18 03:26:54

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.02 Mbit/s

95th percentile per-packet one-way delay: 50.240 ms

Loss rate: 0.65%

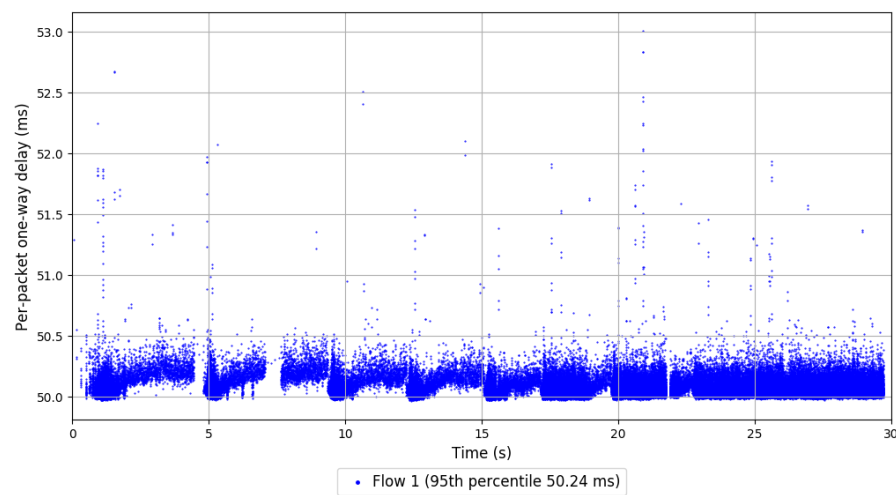
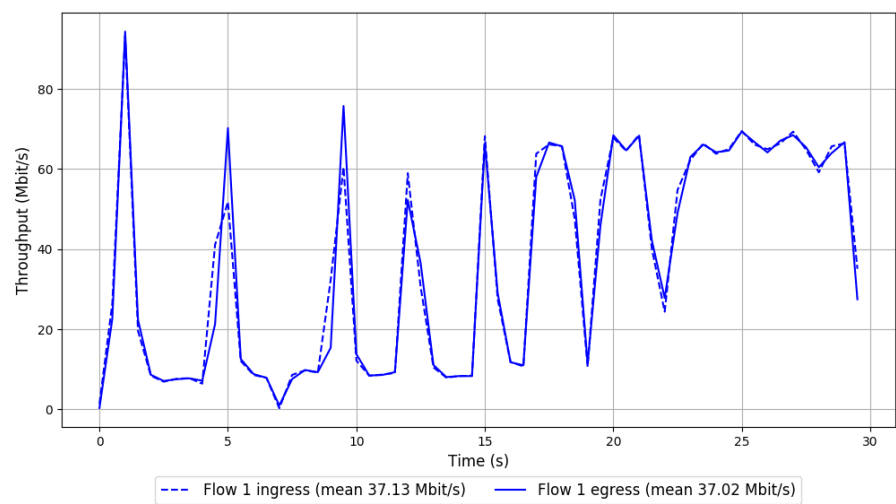
-- Flow 1:

Average throughput: 37.02 Mbit/s

95th percentile per-packet one-way delay: 50.240 ms

Loss rate: 0.65%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-09-18 03:37:48

End at: 2017-09-18 03:38:18

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.38 Mbit/s

95th percentile per-packet one-way delay: 50.265 ms

Loss rate: 0.63%

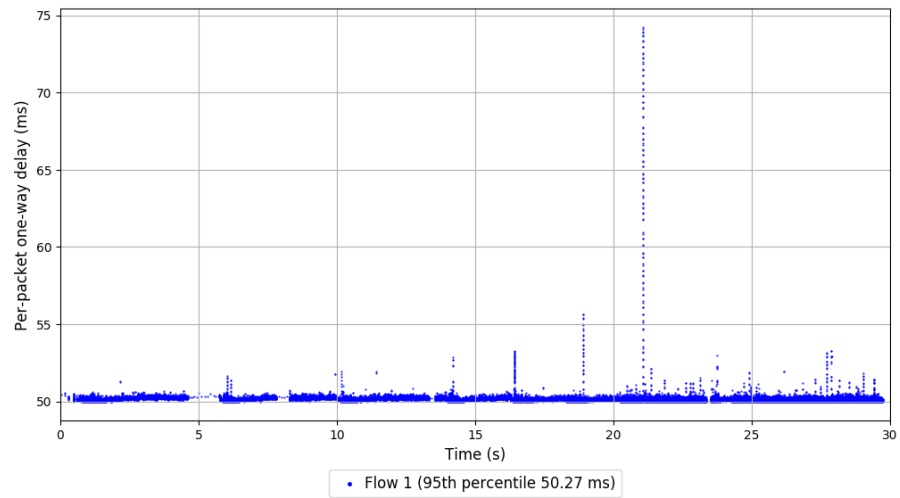
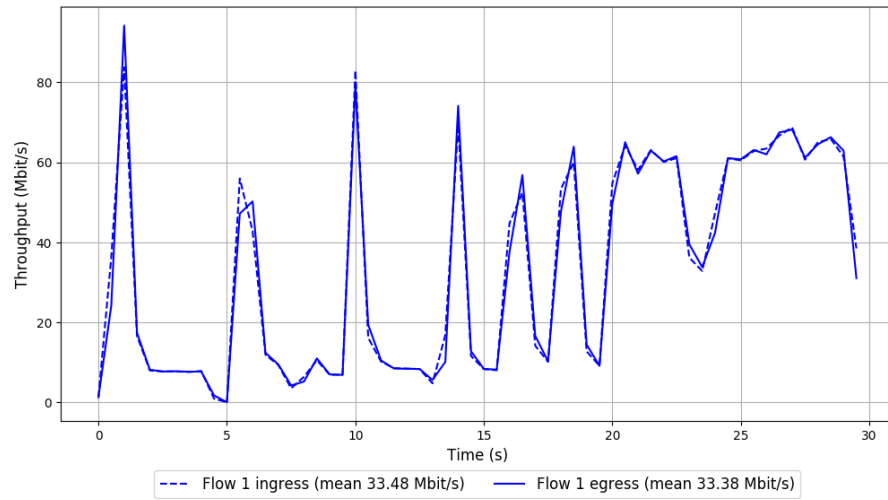
-- Flow 1:

Average throughput: 33.38 Mbit/s

95th percentile per-packet one-way delay: 50.265 ms

Loss rate: 0.63%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-09-18 03:49:27

End at: 2017-09-18 03:49:57

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.42 Mbit/s

95th percentile per-packet one-way delay: 53.488 ms

Loss rate: 0.74%

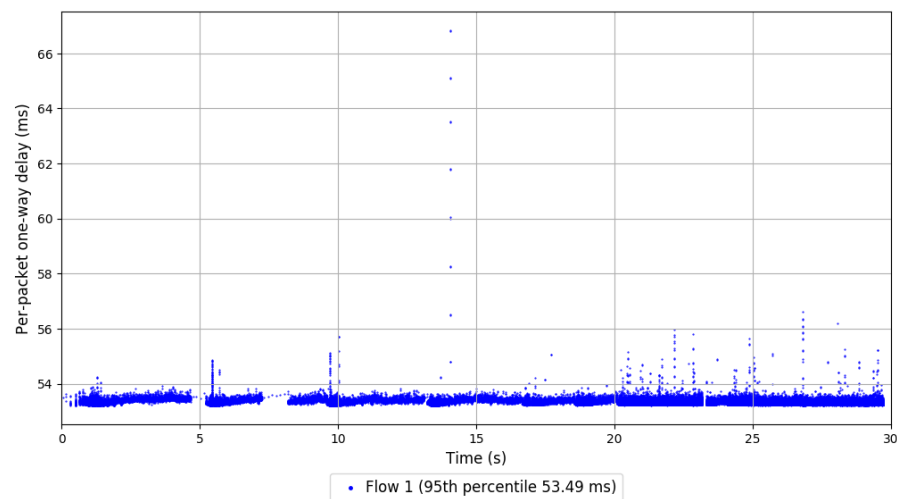
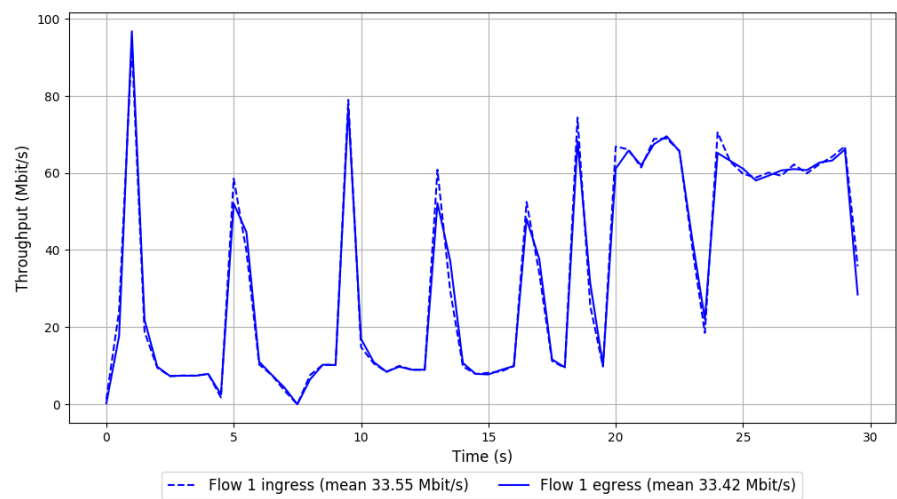
-- Flow 1:

Average throughput: 33.42 Mbit/s

95th percentile per-packet one-way delay: 53.488 ms

Loss rate: 0.74%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-09-18 04:00:44

End at: 2017-09-18 04:01:14

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.23 Mbit/s

95th percentile per-packet one-way delay: 53.508 ms

Loss rate: 0.62%

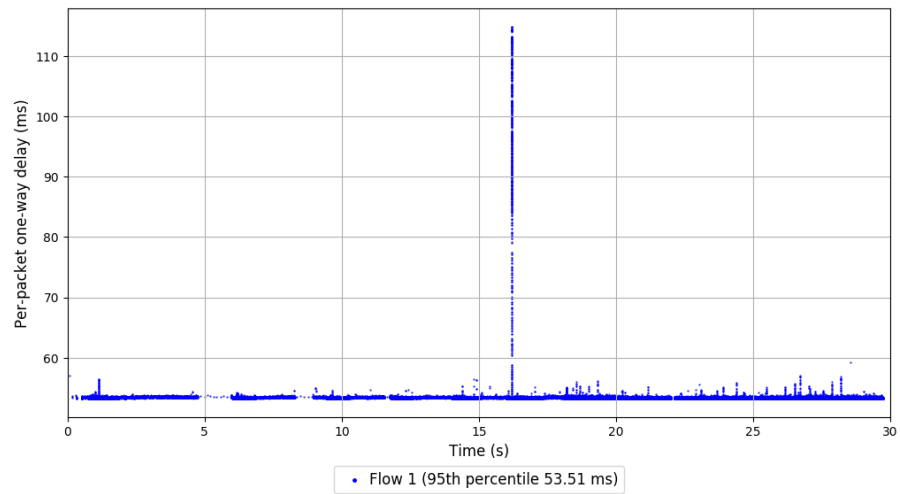
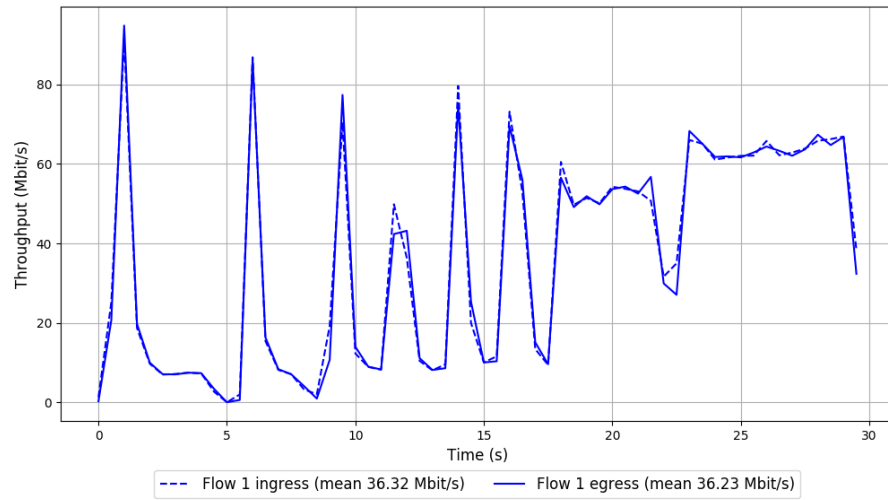
-- Flow 1:

Average throughput: 36.23 Mbit/s

95th percentile per-packet one-way delay: 53.508 ms

Loss rate: 0.62%

Run 9: Report of QUIC Cubic — Data Link

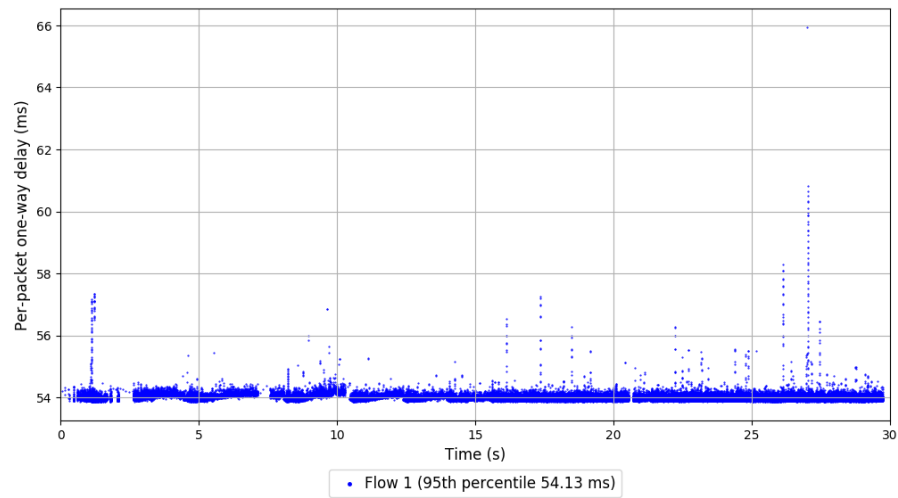
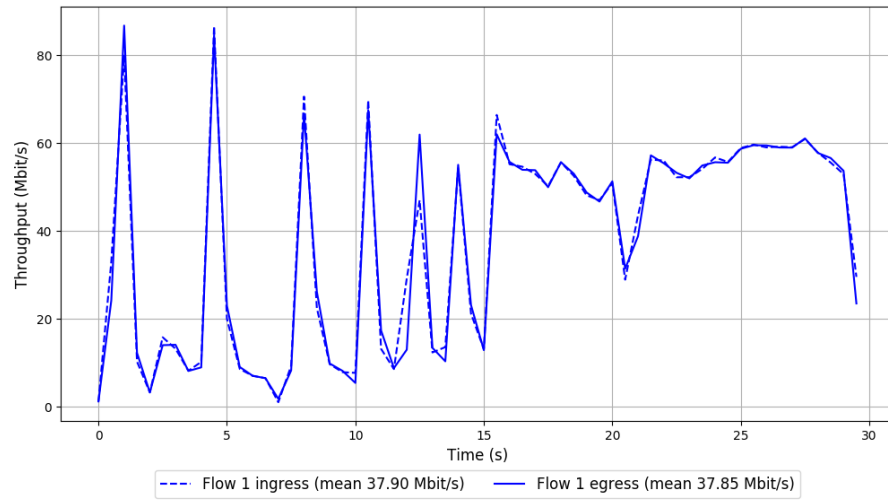


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-18 04:11:51
End at: 2017-09-18 04:12:21

# Below is generated by plot.py at 2017-09-18 07:20:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.85 Mbit/s
95th percentile per-packet one-way delay: 54.130 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 37.85 Mbit/s
95th percentile per-packet one-way delay: 54.130 ms
Loss rate: 0.48%
```

Run 10: Report of QUIC Cubic — Data Link

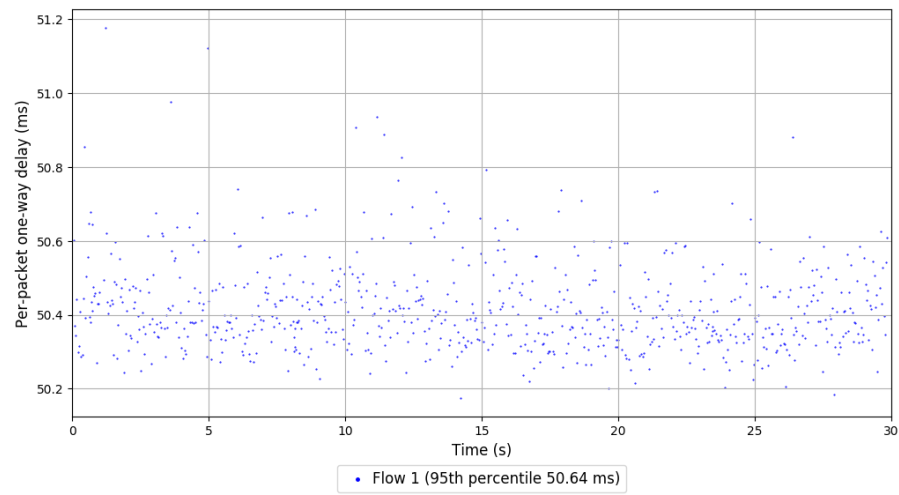
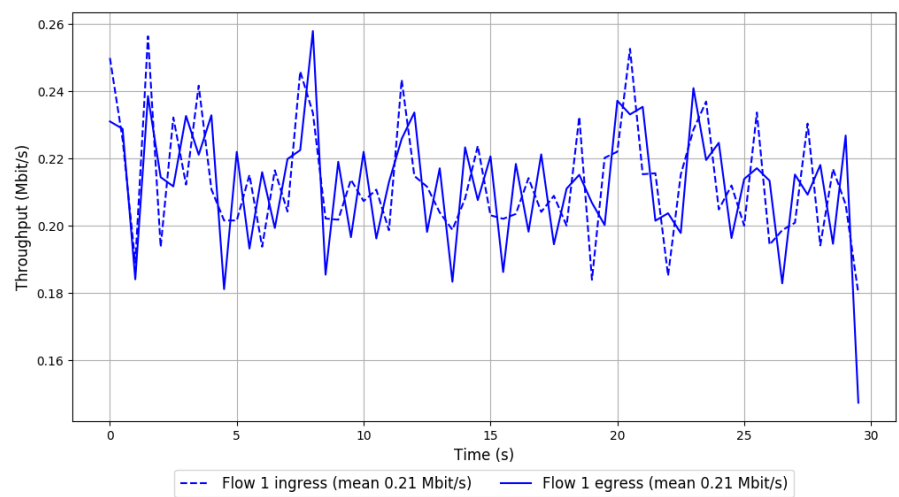


```
Run 1: Statistics of SCReAM

Start at: 2017-09-18 02:30:15
End at: 2017-09-18 02:30:45

# Below is generated by plot.py at 2017-09-18 07:20:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.638 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.638 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

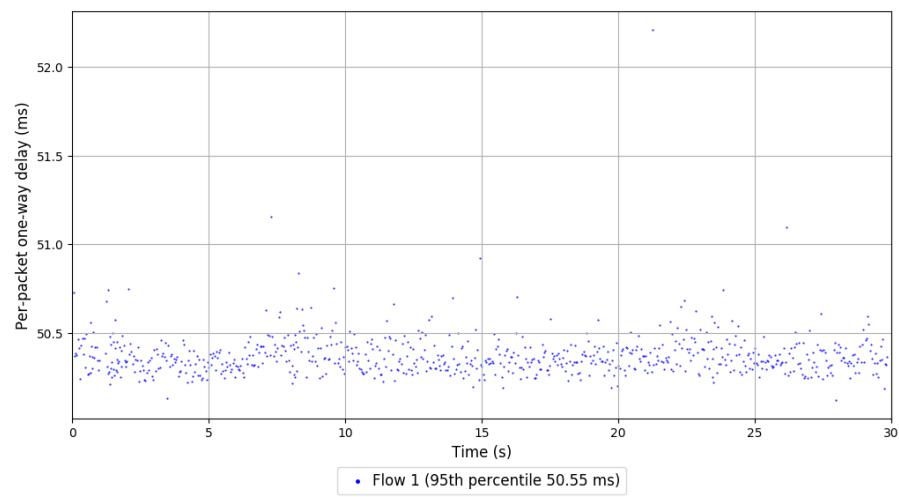
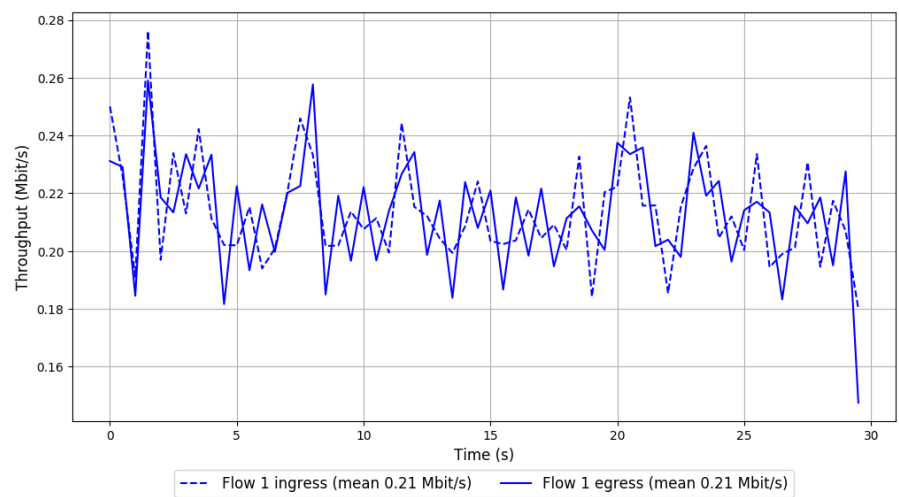


```
Run 2: Statistics of SCReAM

Start at: 2017-09-18 02:41:54
End at: 2017-09-18 02:42:24

# Below is generated by plot.py at 2017-09-18 07:20:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.548 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.548 ms
Loss rate: 0.38%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-09-18 02:53:22

End at: 2017-09-18 02:53:52

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.854 ms

Loss rate: 0.51%

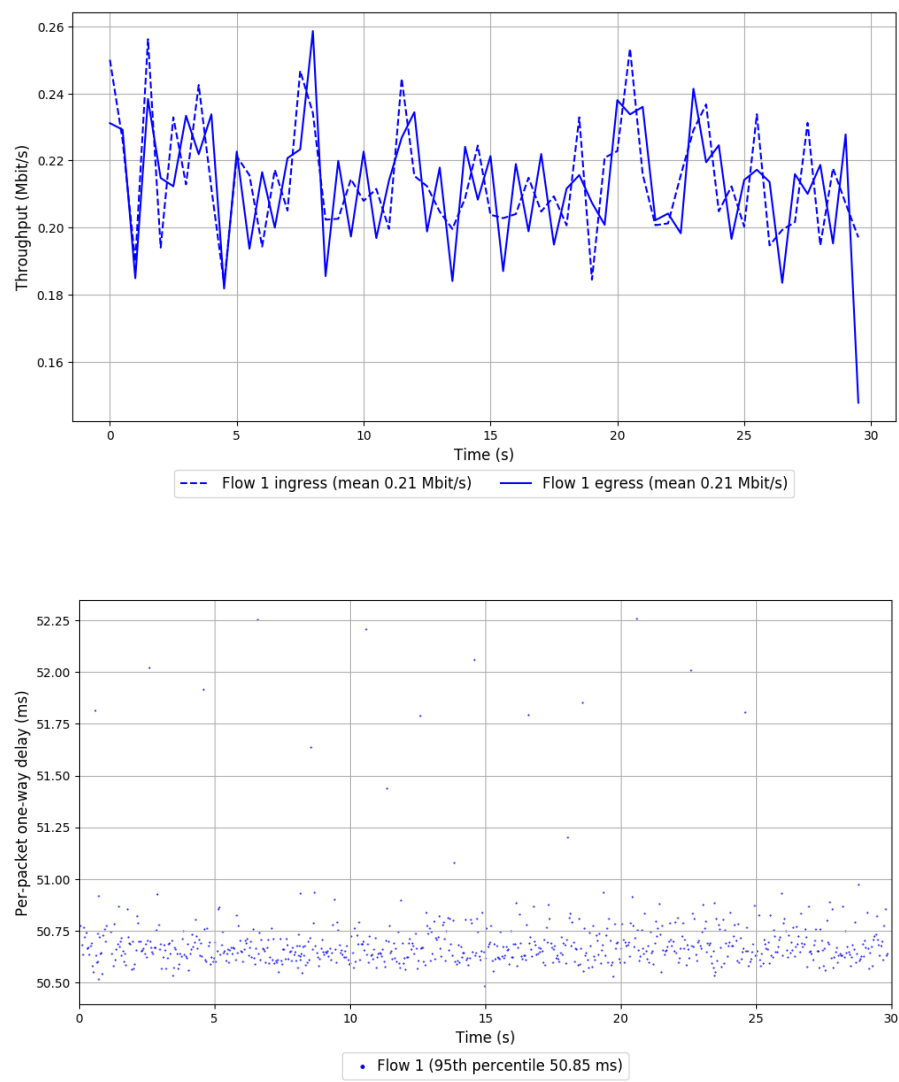
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.854 ms

Loss rate: 0.51%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-09-18 03:04:58

End at: 2017-09-18 03:05:28

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.178 ms

Loss rate: 0.38%

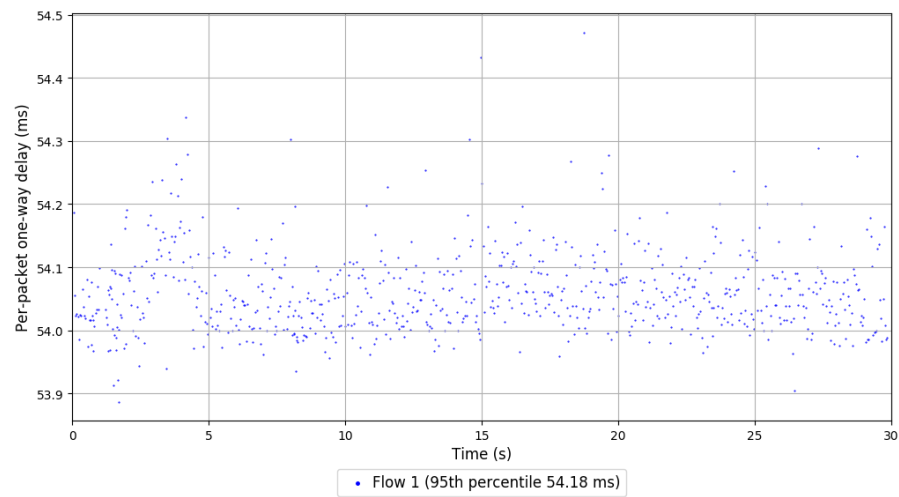
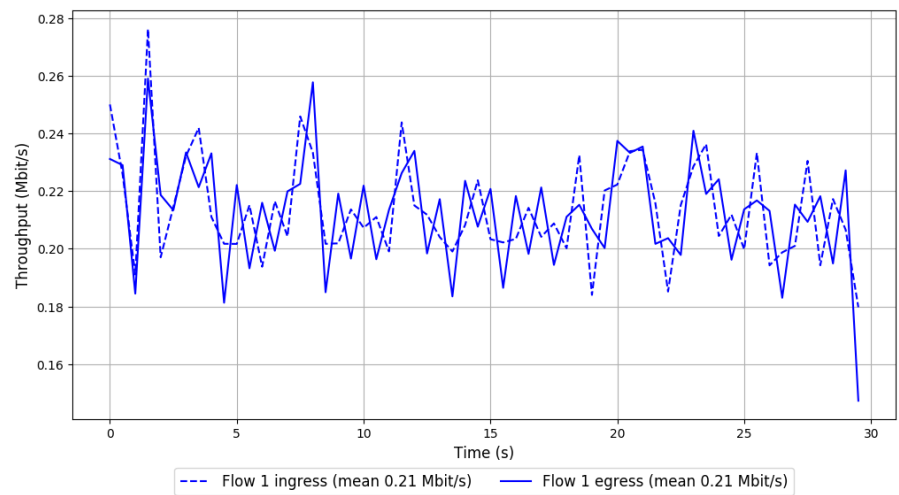
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.178 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-09-18 03:16:33

End at: 2017-09-18 03:17:03

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.886 ms

Loss rate: 0.38%

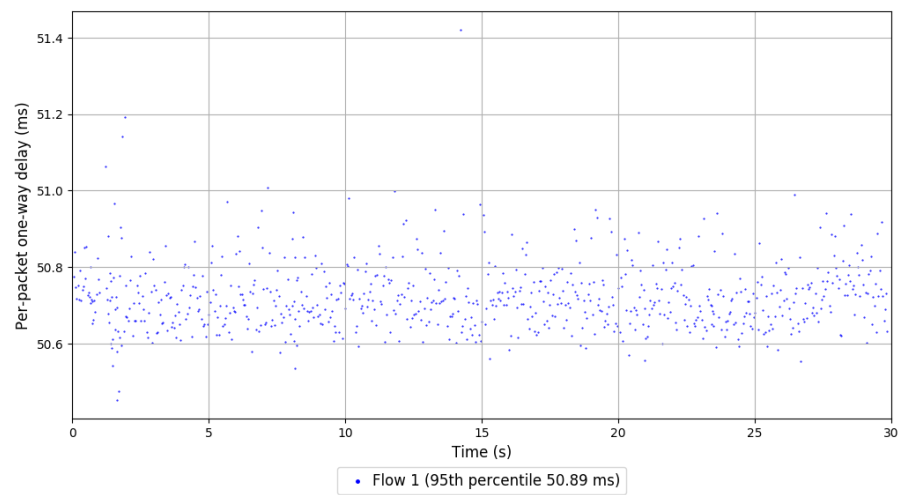
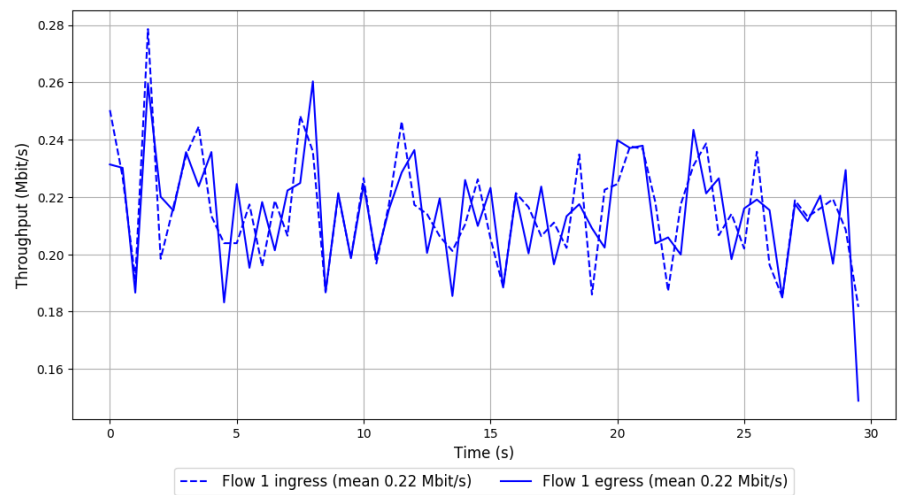
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.886 ms

Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-09-18 03:27:53

End at: 2017-09-18 03:28:23

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.232 ms

Loss rate: 0.38%

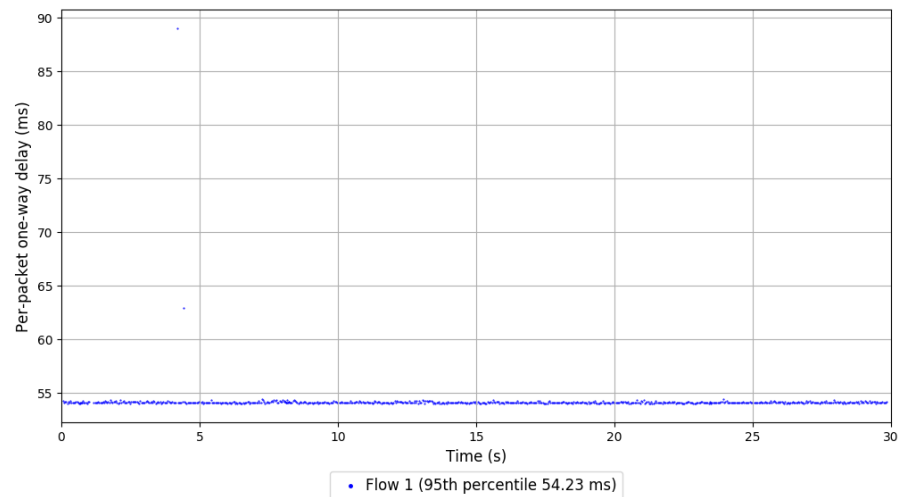
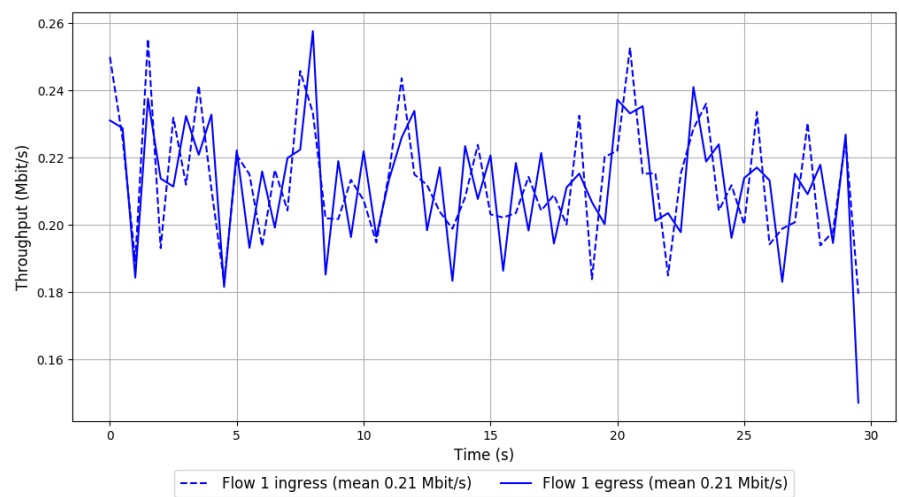
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.232 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-09-18 03:39:18

End at: 2017-09-18 03:39:48

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.652 ms

Loss rate: 0.38%

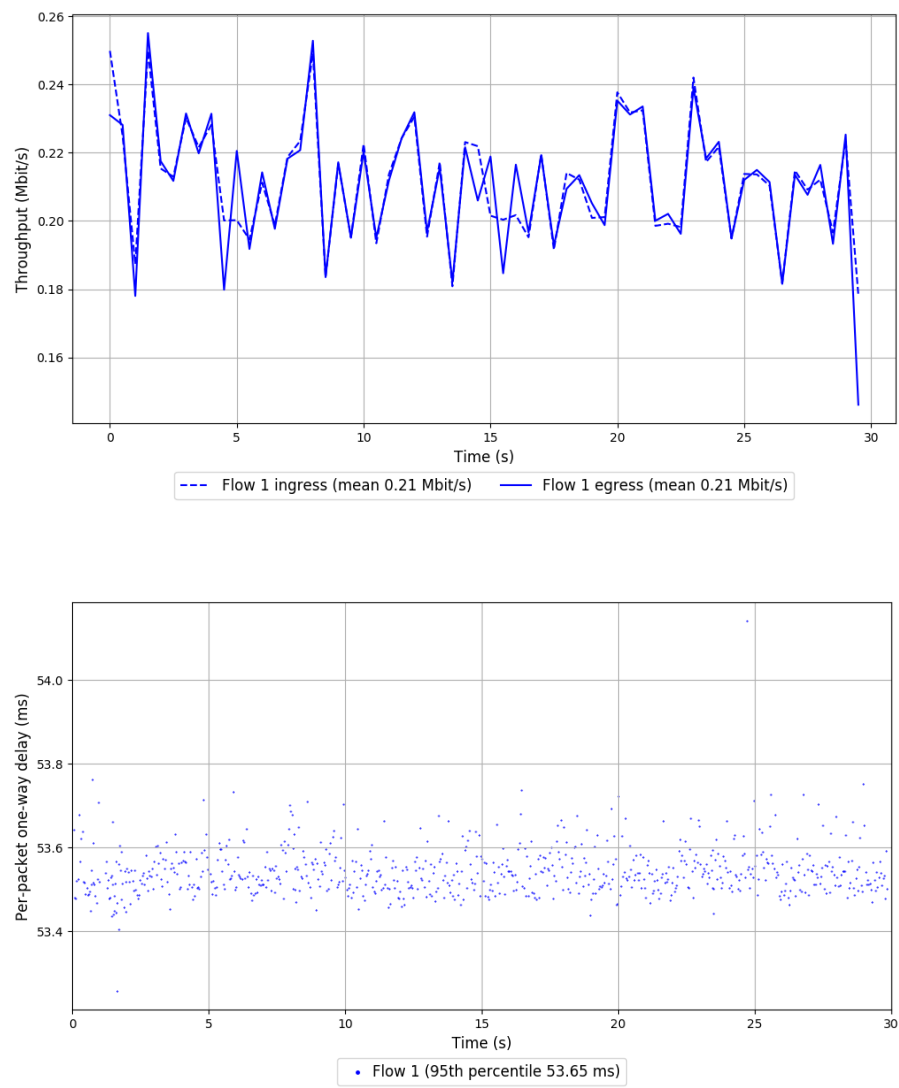
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.652 ms

Loss rate: 0.38%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-09-18 03:50:56

End at: 2017-09-18 03:51:26

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.405 ms

Loss rate: 0.38%

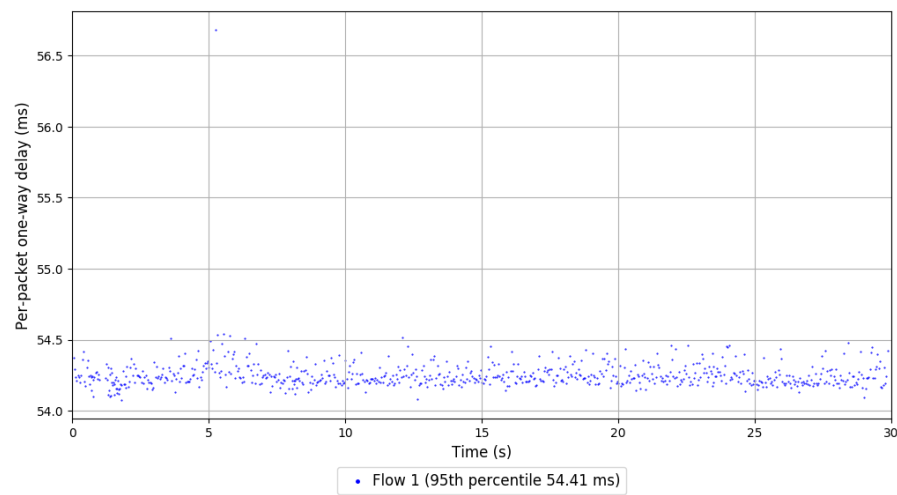
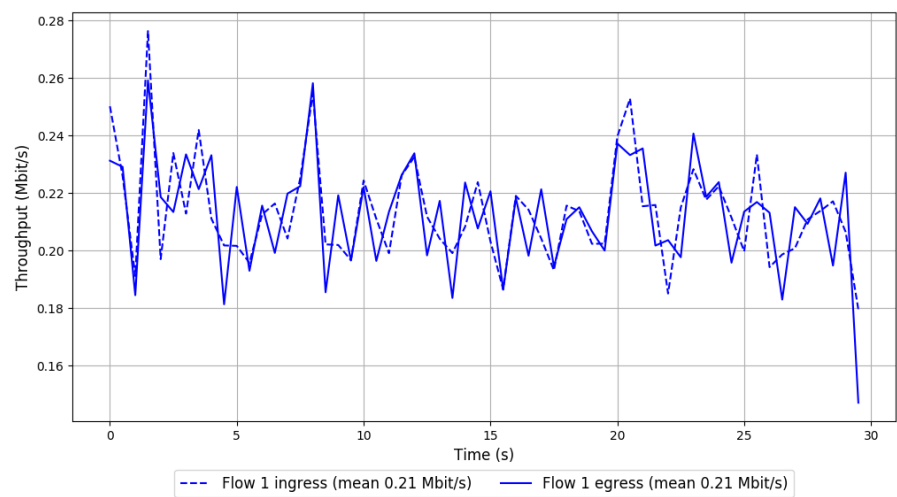
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.405 ms

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-09-18 04:02:13

End at: 2017-09-18 04:02:43

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.311 ms

Loss rate: 0.38%

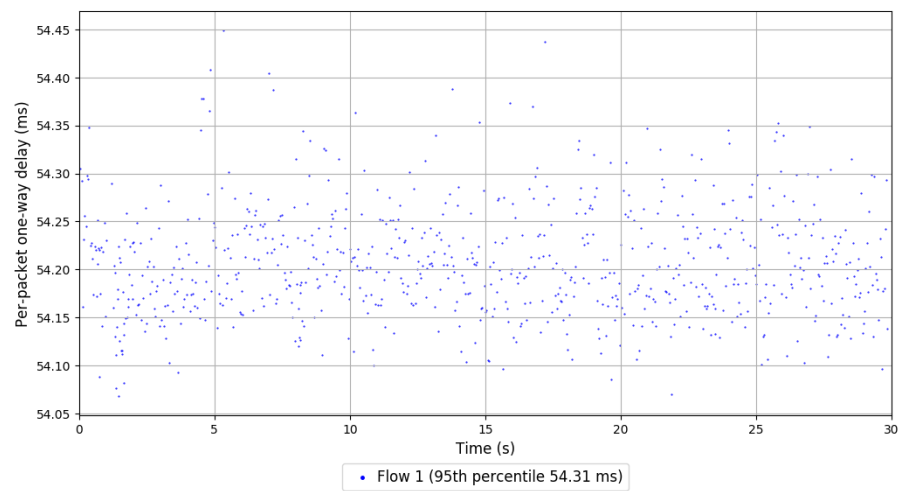
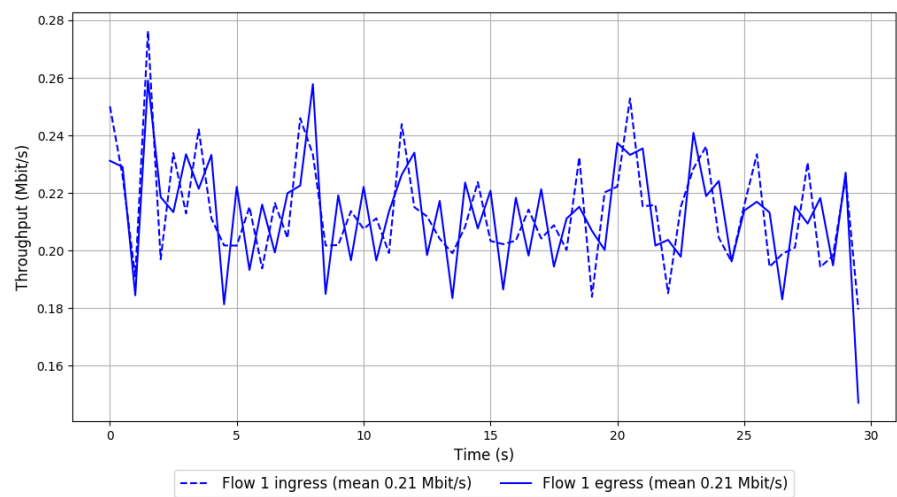
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.311 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-09-18 04:13:21

End at: 2017-09-18 04:13:51

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.723 ms

Loss rate: 0.38%

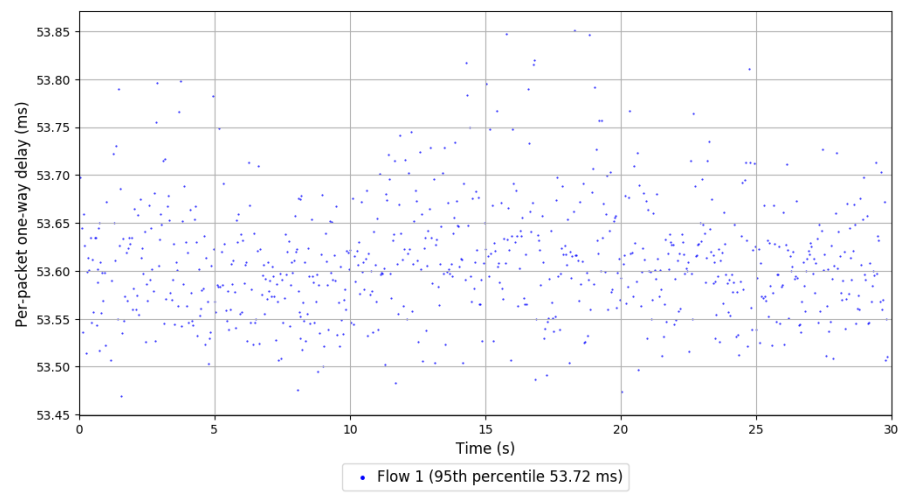
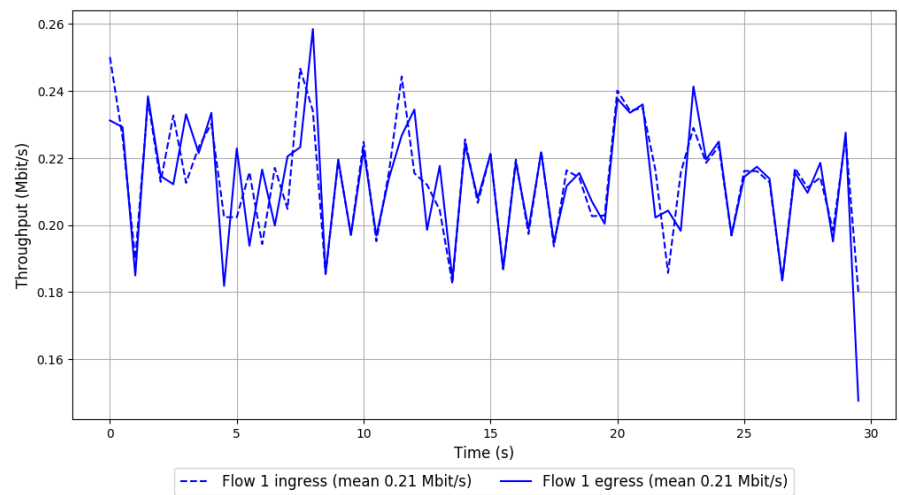
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.723 ms

Loss rate: 0.38%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-09-18 02:36:11

End at: 2017-09-18 02:36:41

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 55.418 ms

Loss rate: 1.19%

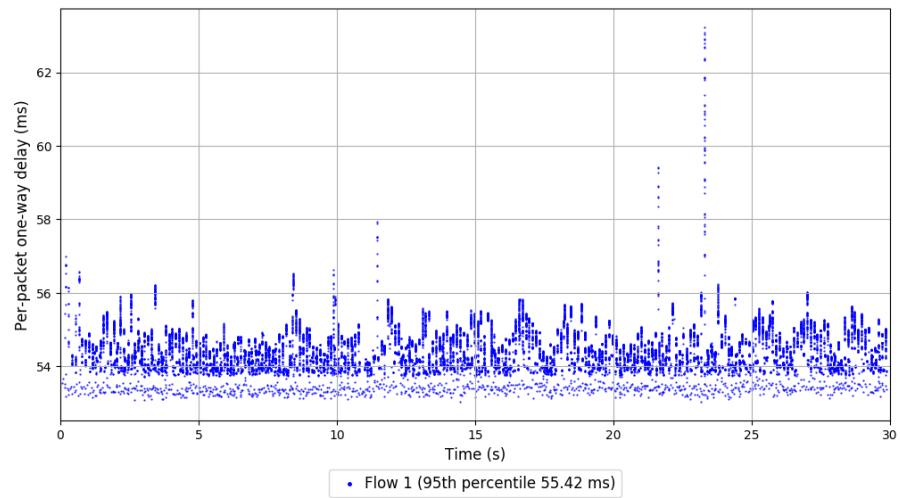
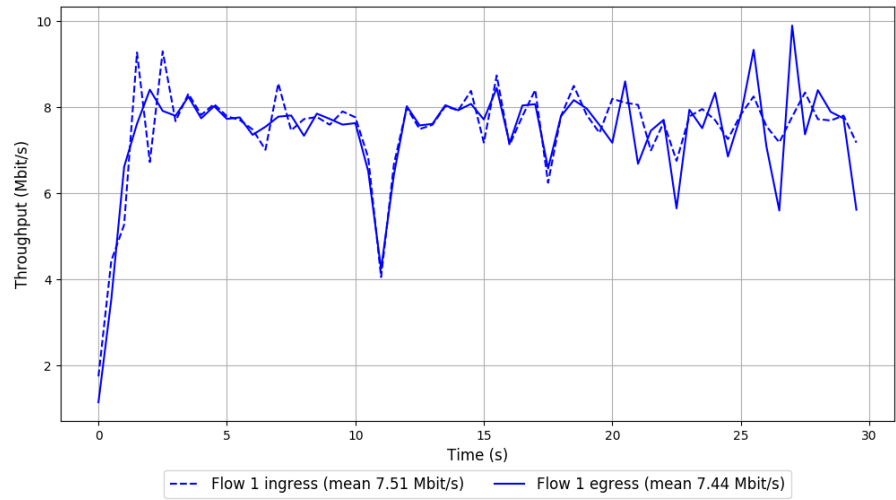
-- Flow 1:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 55.418 ms

Loss rate: 1.19%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-09-18 02:47:43

End at: 2017-09-18 02:48:13

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 55.727 ms

Loss rate: 1.45%

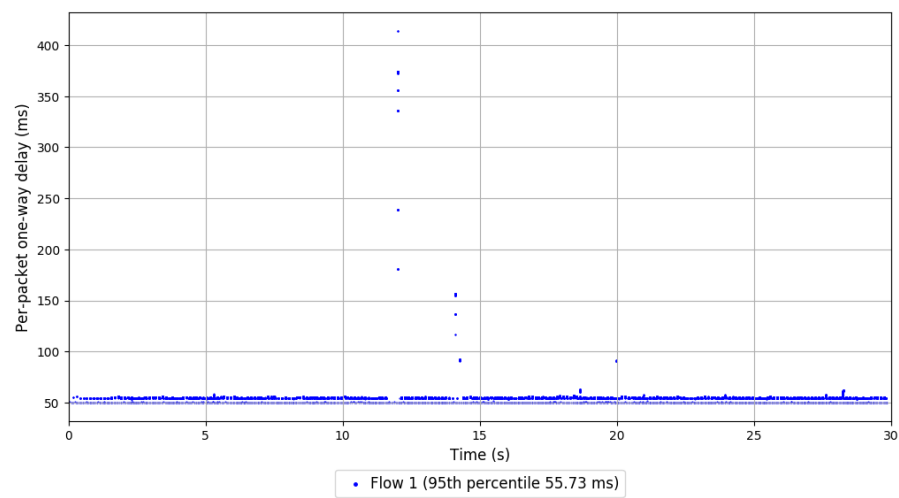
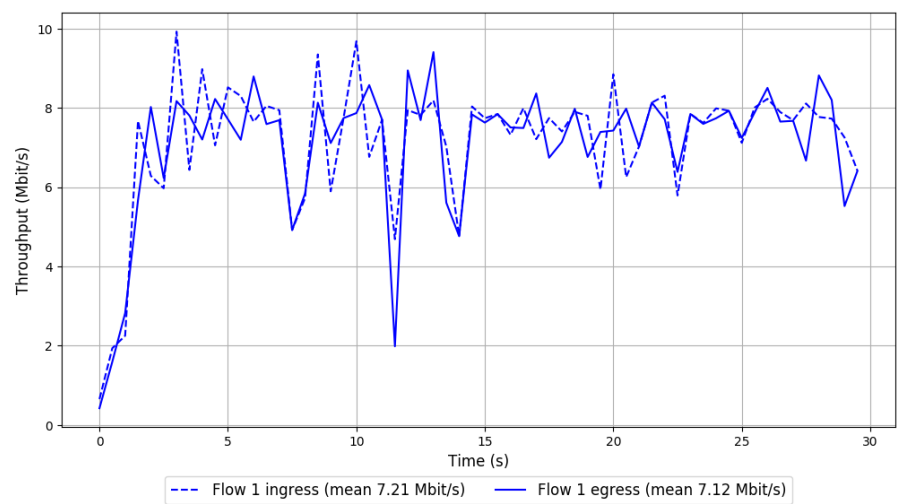
-- Flow 1:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 55.727 ms

Loss rate: 1.45%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-09-18 02:59:18

End at: 2017-09-18 02:59:48

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 55.434 ms

Loss rate: 0.67%

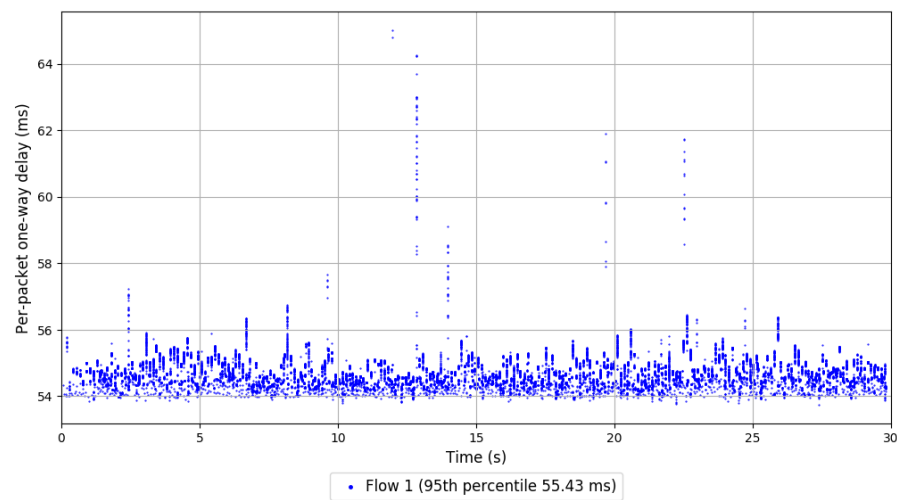
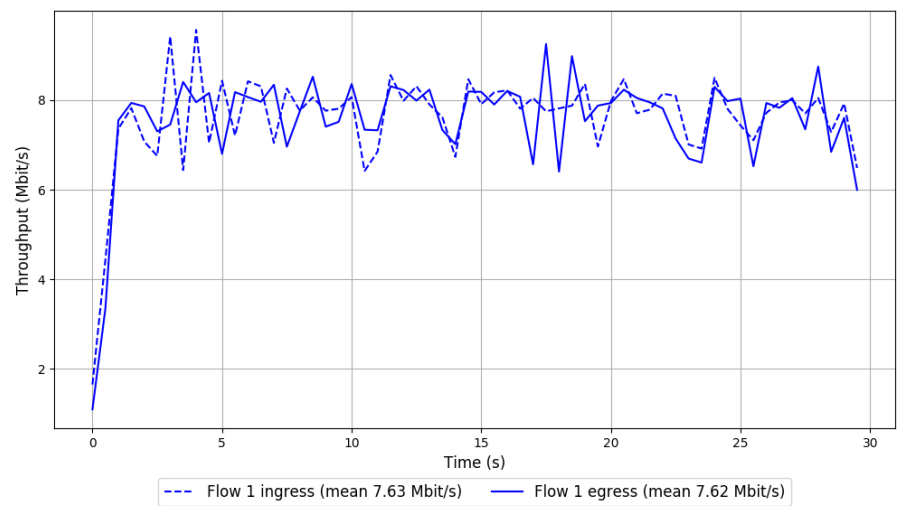
-- Flow 1:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 55.434 ms

Loss rate: 0.67%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-09-18 03:10:53

End at: 2017-09-18 03:11:23

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.41 Mbit/s

95th percentile per-packet one-way delay: 55.423 ms

Loss rate: 1.58%

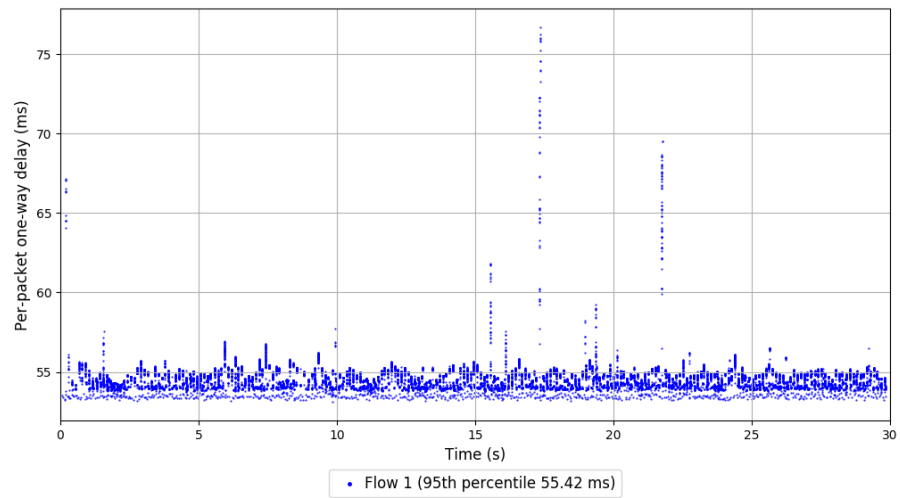
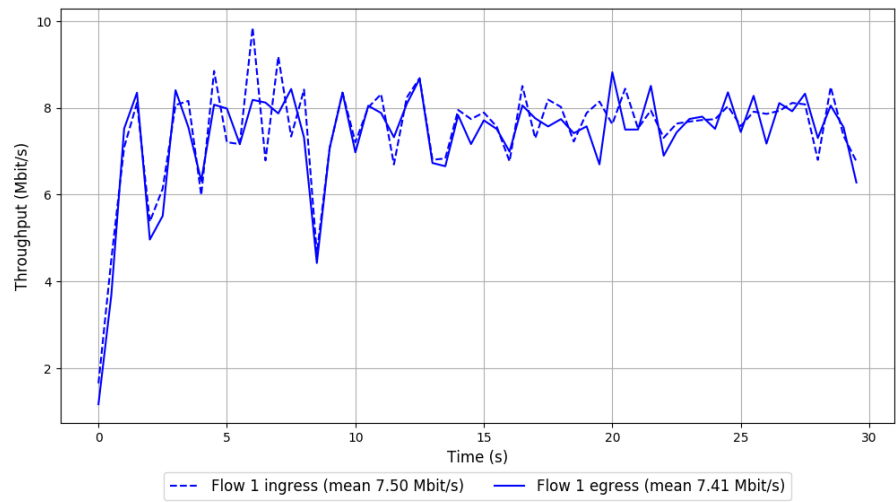
-- Flow 1:

Average throughput: 7.41 Mbit/s

95th percentile per-packet one-way delay: 55.423 ms

Loss rate: 1.58%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-09-18 03:22:11

End at: 2017-09-18 03:22:41

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 55.372 ms

Loss rate: 0.57%

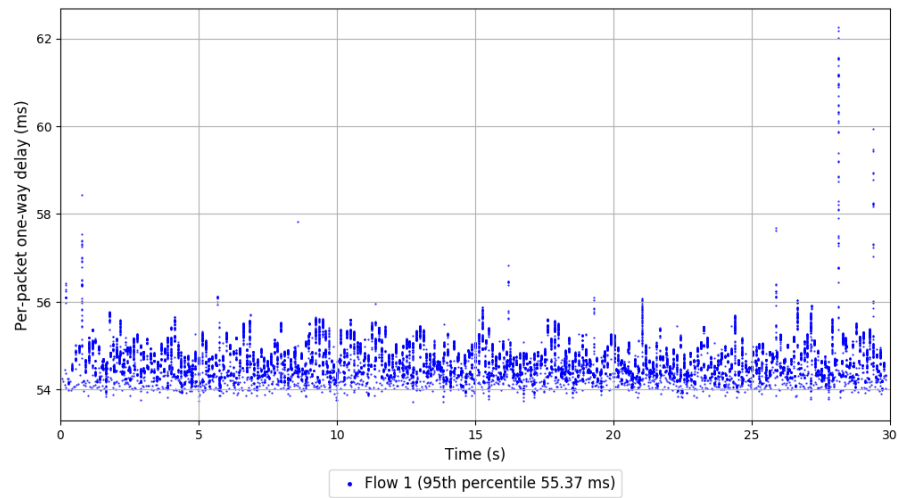
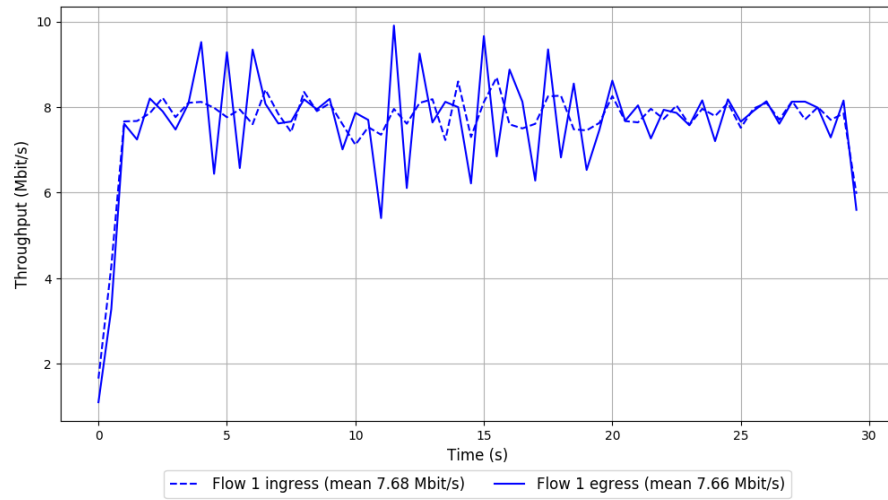
-- Flow 1:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 55.372 ms

Loss rate: 0.57%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-09-18 03:33:40

End at: 2017-09-18 03:34:10

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 55.263 ms

Loss rate: 0.45%

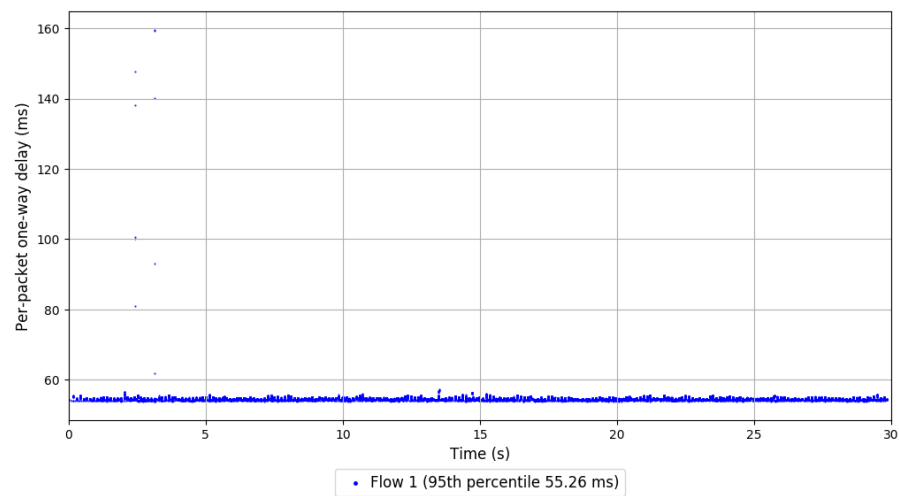
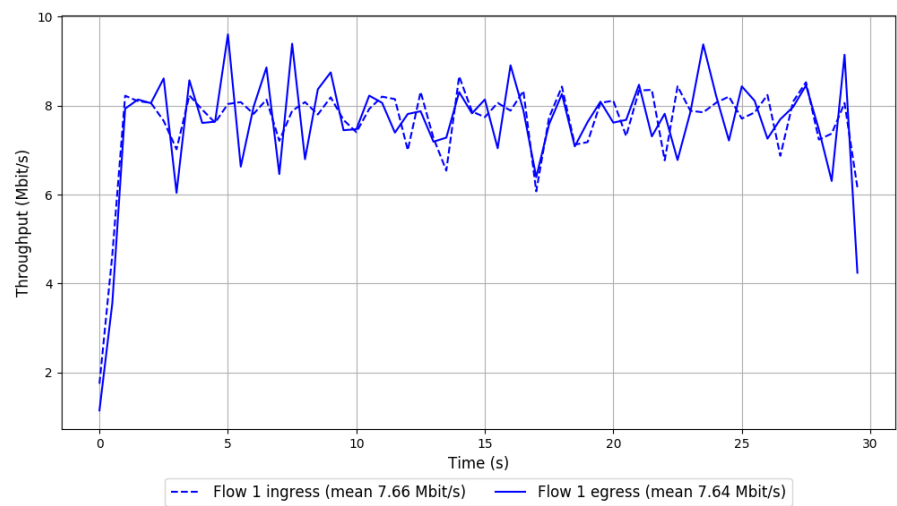
-- Flow 1:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 55.263 ms

Loss rate: 0.45%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-09-18 03:45:13

End at: 2017-09-18 03:45:43

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 55.223 ms

Loss rate: 0.61%

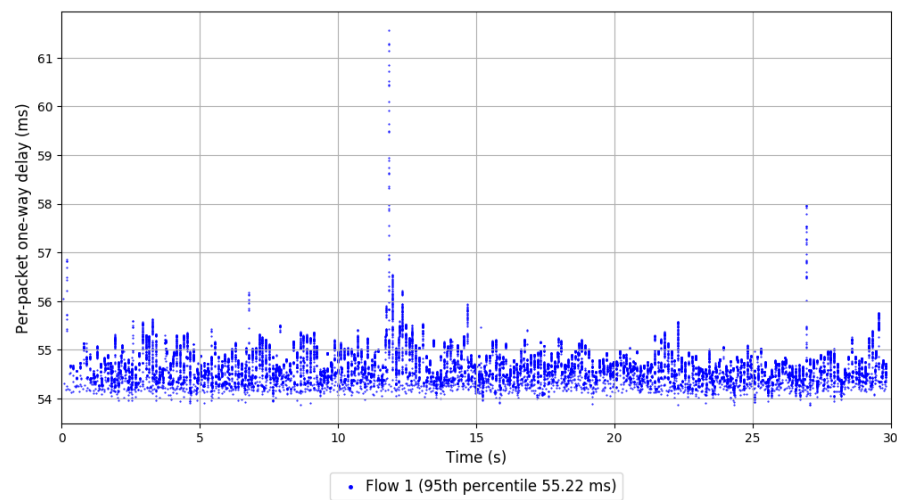
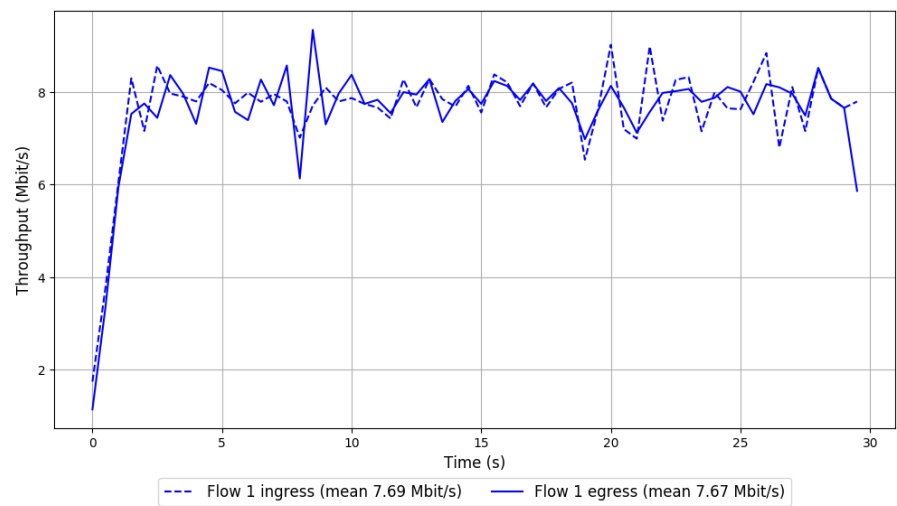
-- Flow 1:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 55.223 ms

Loss rate: 0.61%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-09-18 03:56:50

End at: 2017-09-18 03:57:20

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 55.245 ms

Loss rate: 0.67%

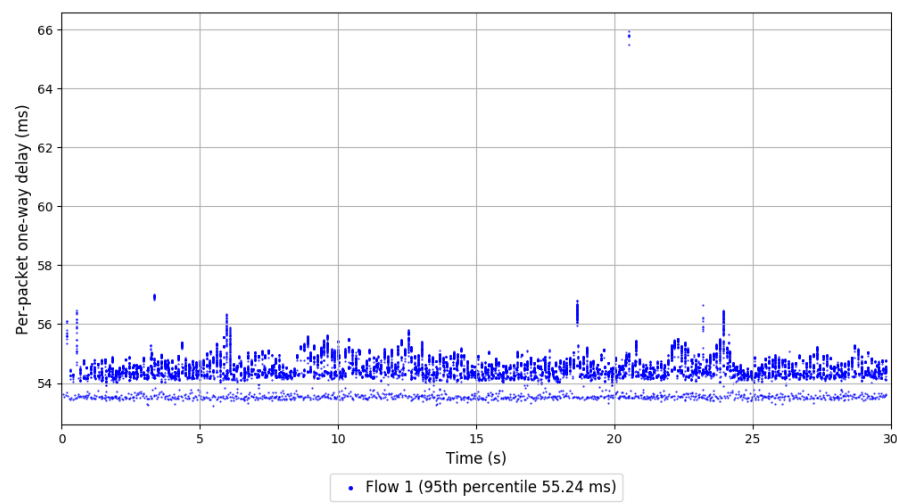
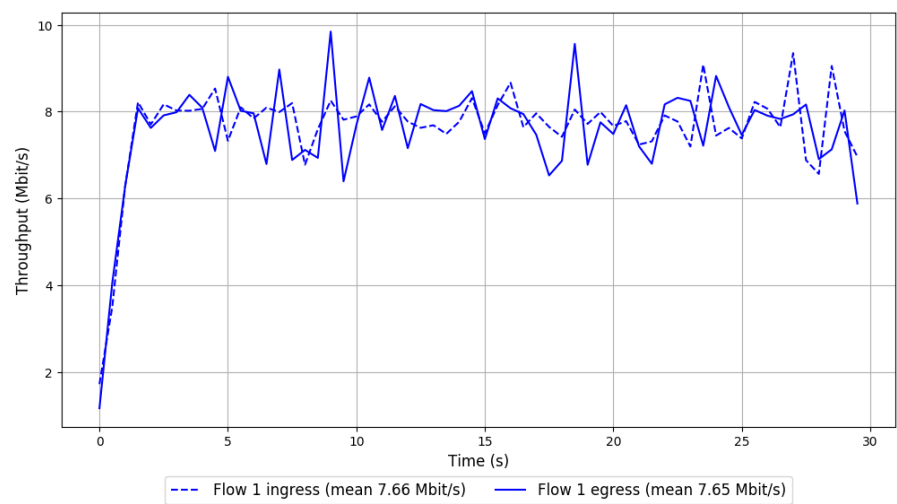
-- Flow 1:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 55.245 ms

Loss rate: 0.67%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-09-18 04:07:47

End at: 2017-09-18 04:08:17

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 55.489 ms

Loss rate: 0.72%

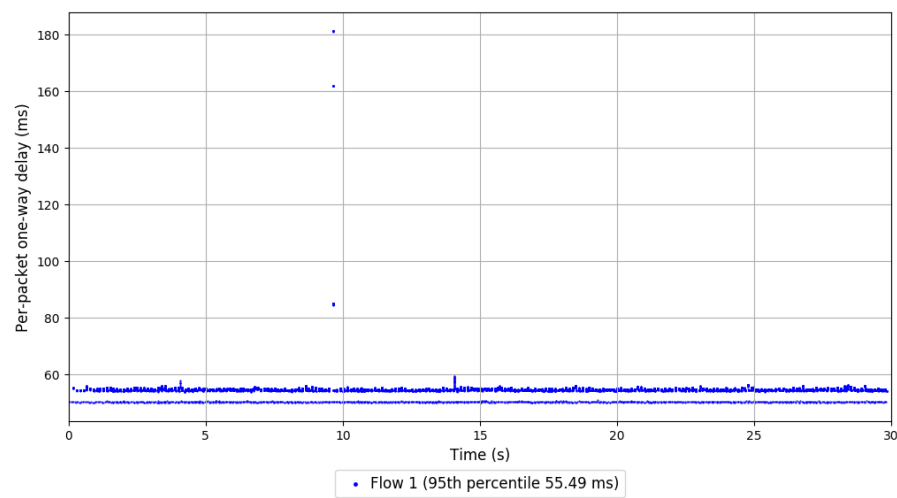
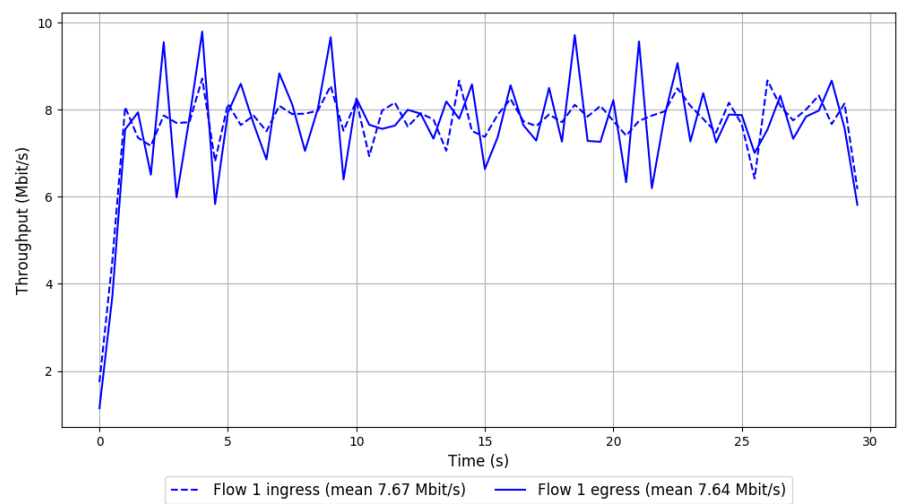
-- Flow 1:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 55.489 ms

Loss rate: 0.72%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-09-18 04:19:13

End at: 2017-09-18 04:19:43

Below is generated by plot.py at 2017-09-18 07:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 55.289 ms

Loss rate: 0.83%

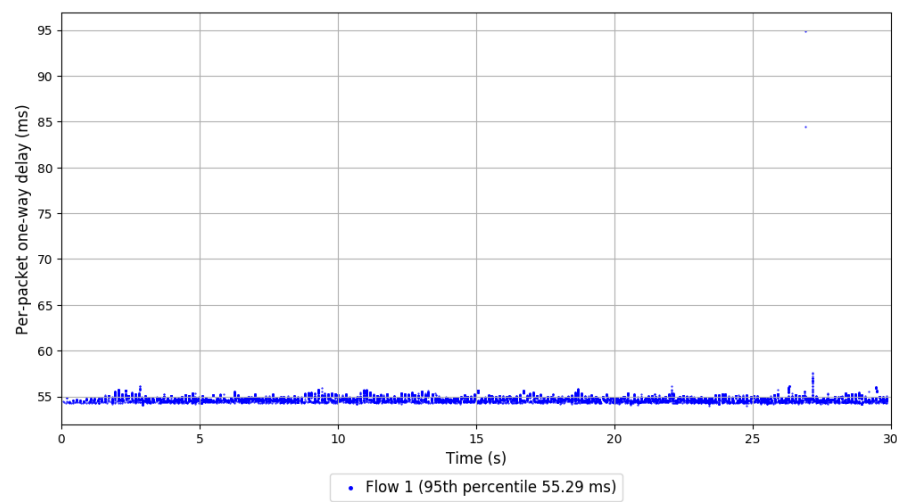
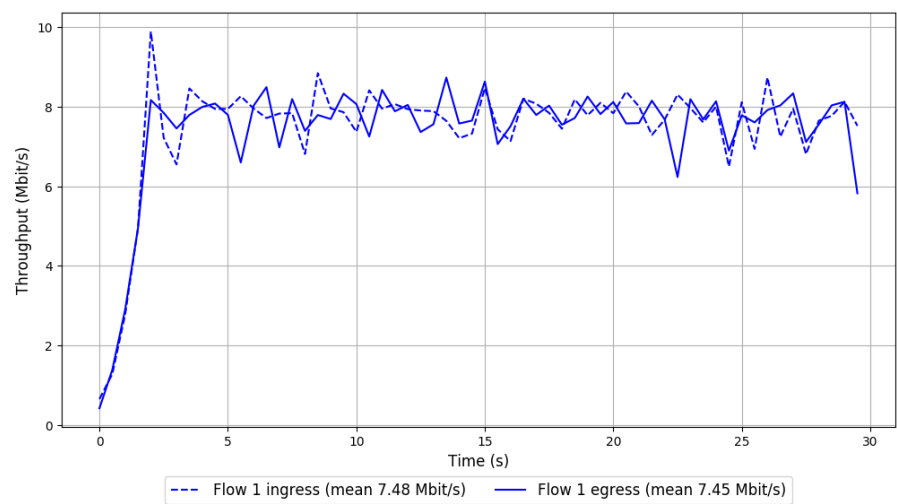
-- Flow 1:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 55.289 ms

Loss rate: 0.83%

Run 10: Report of Sprout — Data Link

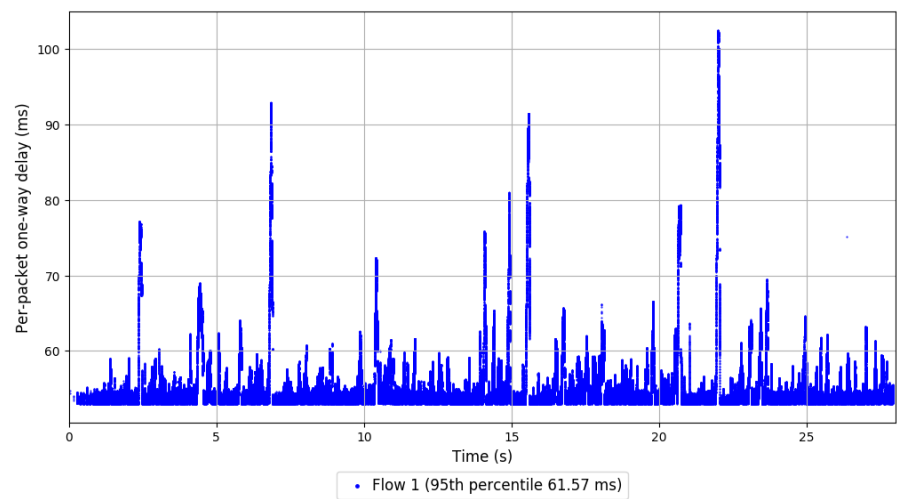
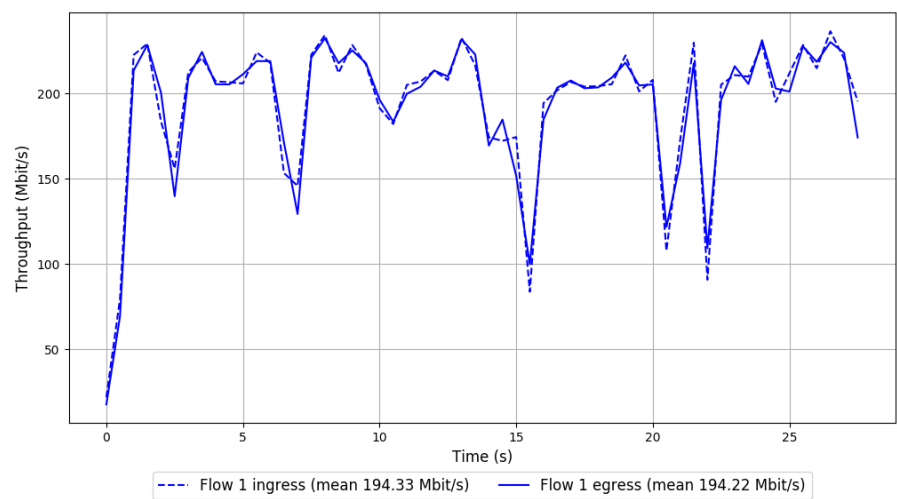


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-09-18 02:36:49
End at: 2017-09-18 02:37:19

# Below is generated by plot.py at 2017-09-18 07:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.22 Mbit/s
95th percentile per-packet one-way delay: 61.569 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 194.22 Mbit/s
95th percentile per-packet one-way delay: 61.569 ms
Loss rate: 0.45%
```

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

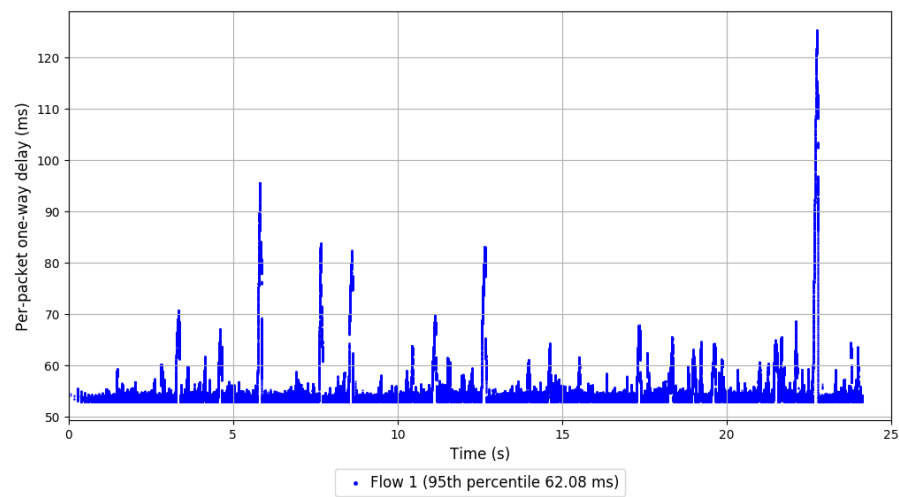
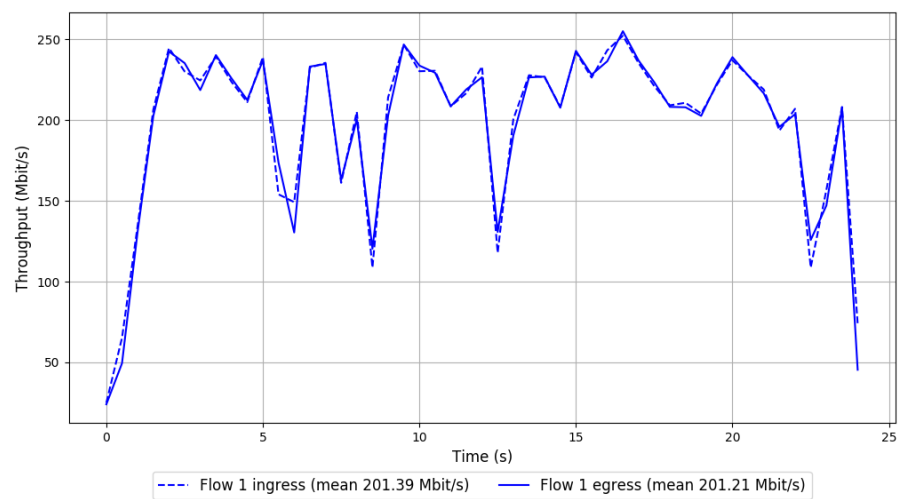


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-09-18 02:48:21
End at: 2017-09-18 02:48:51

# Below is generated by plot.py at 2017-09-18 07:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 201.21 Mbit/s
95th percentile per-packet one-way delay: 62.081 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 201.21 Mbit/s
95th percentile per-packet one-way delay: 62.081 ms
Loss rate: 0.53%
```

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

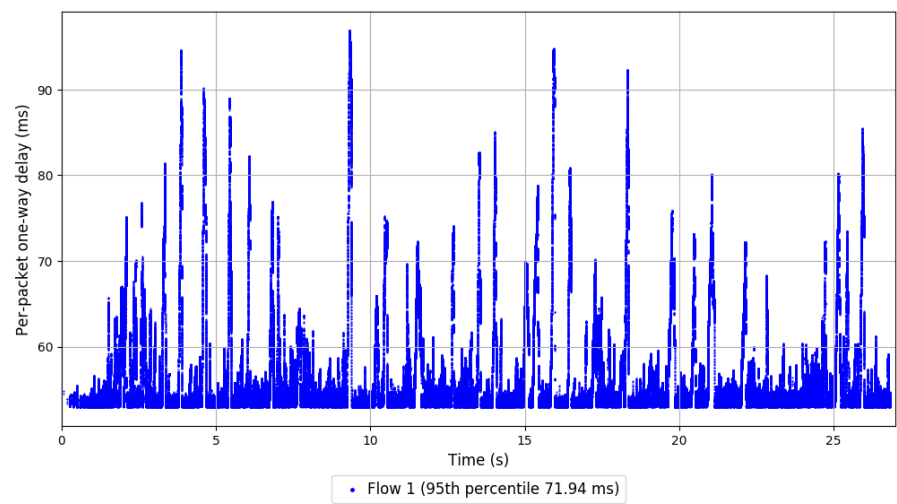
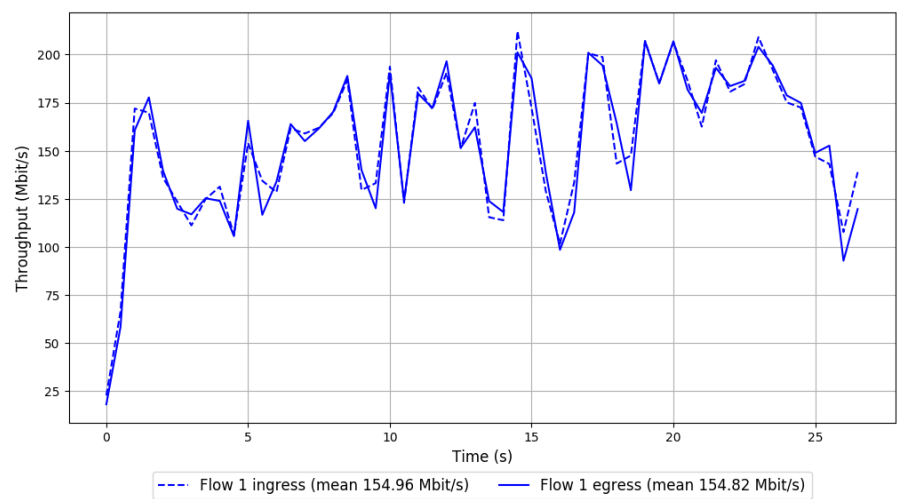


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-09-18 02:59:56
End at: 2017-09-18 03:00:26

# Below is generated by plot.py at 2017-09-18 07:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 154.82 Mbit/s
95th percentile per-packet one-way delay: 71.942 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 154.82 Mbit/s
95th percentile per-packet one-way delay: 71.942 ms
Loss rate: 0.50%
```


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

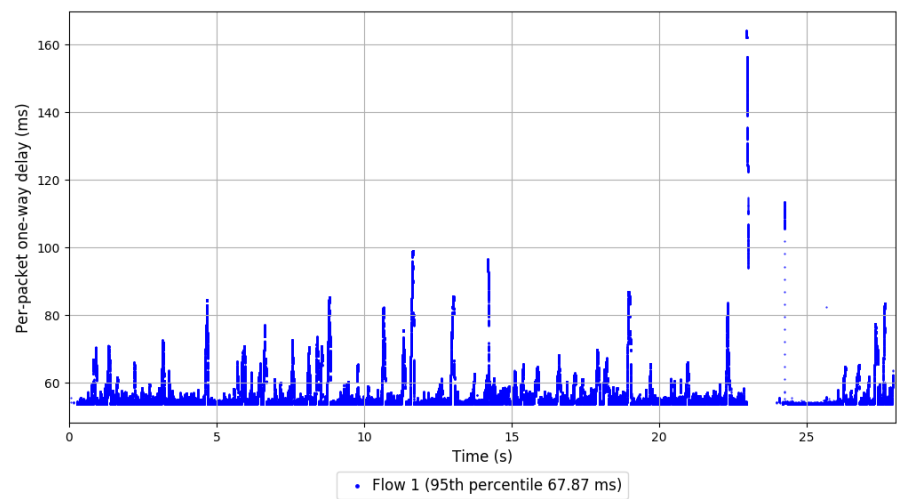
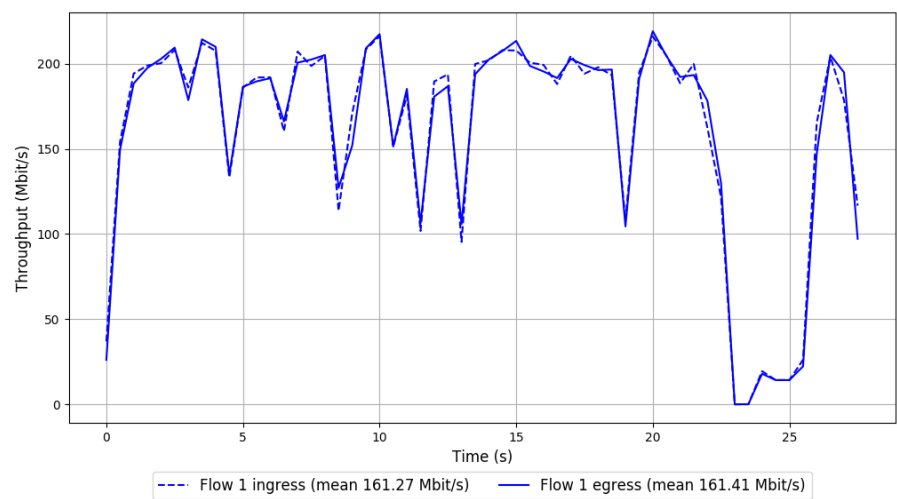


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-09-18 03:11:31
End at: 2017-09-18 03:12:01

# Below is generated by plot.py at 2017-09-18 07:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 161.41 Mbit/s
95th percentile per-packet one-way delay: 67.868 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 161.41 Mbit/s
95th percentile per-packet one-way delay: 67.868 ms
Loss rate: 0.30%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-09-18 03:22:49

End at: 2017-09-18 03:23:19

Below is generated by plot.py at 2017-09-18 07:21:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.62 Mbit/s

95th percentile per-packet one-way delay: 70.503 ms

Loss rate: 0.55%

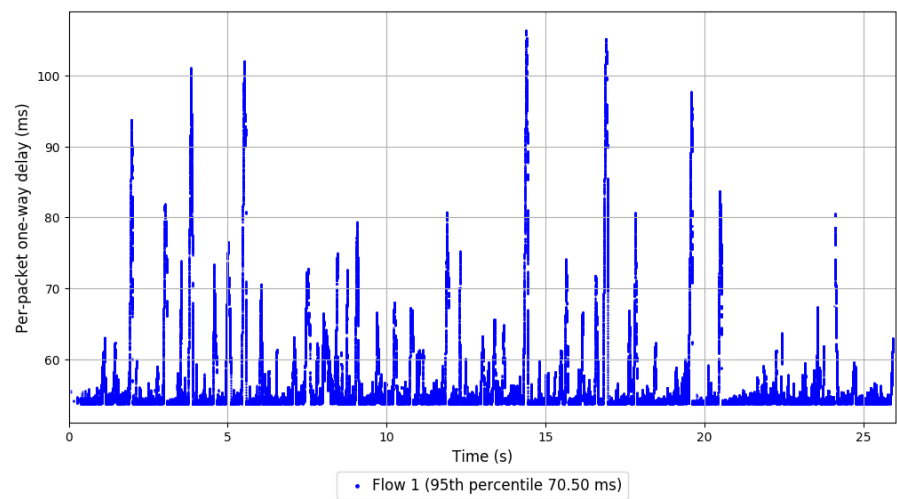
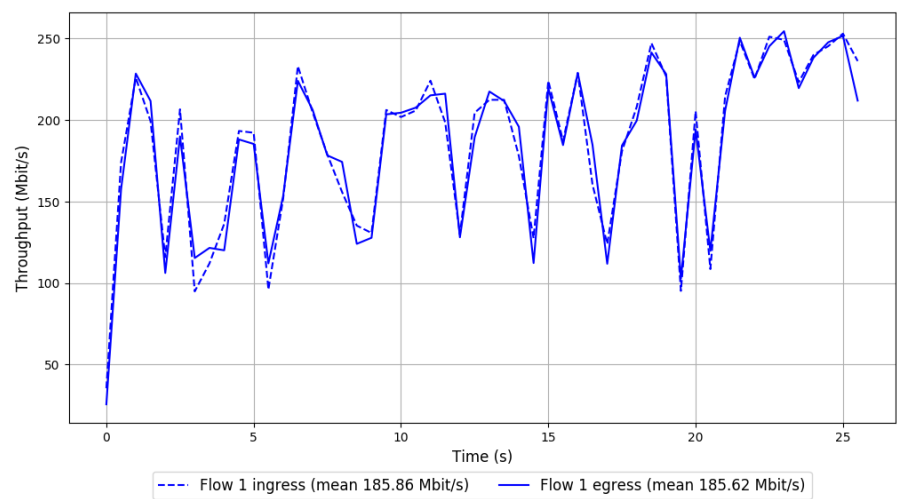
-- Flow 1:

Average throughput: 185.62 Mbit/s

95th percentile per-packet one-way delay: 70.503 ms

Loss rate: 0.55%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-09-18 03:34:18

End at: 2017-09-18 03:34:48

Below is generated by plot.py at 2017-09-18 07:23:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.64 Mbit/s

95th percentile per-packet one-way delay: 64.938 ms

Loss rate: 0.48%

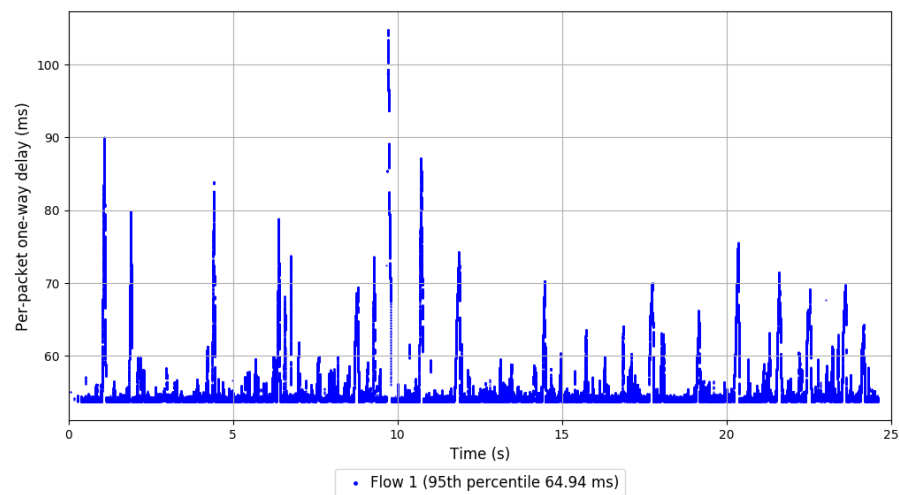
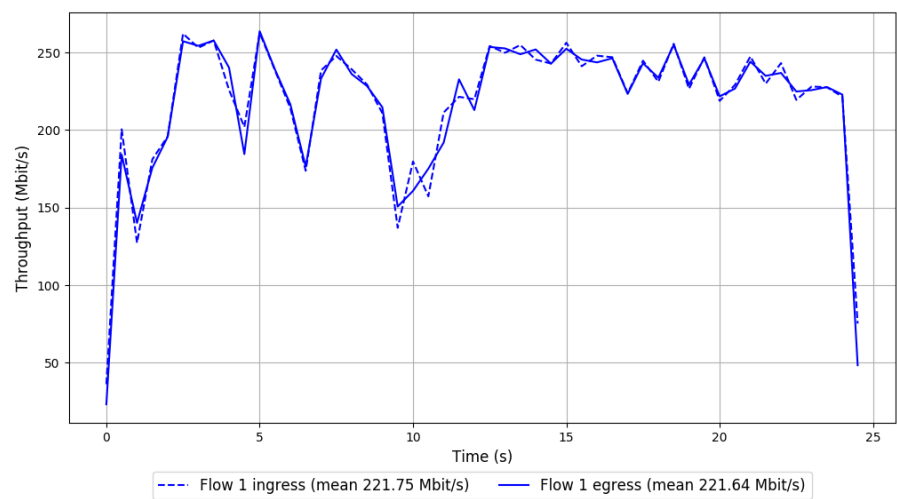
-- Flow 1:

Average throughput: 221.64 Mbit/s

95th percentile per-packet one-way delay: 64.938 ms

Loss rate: 0.48%

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

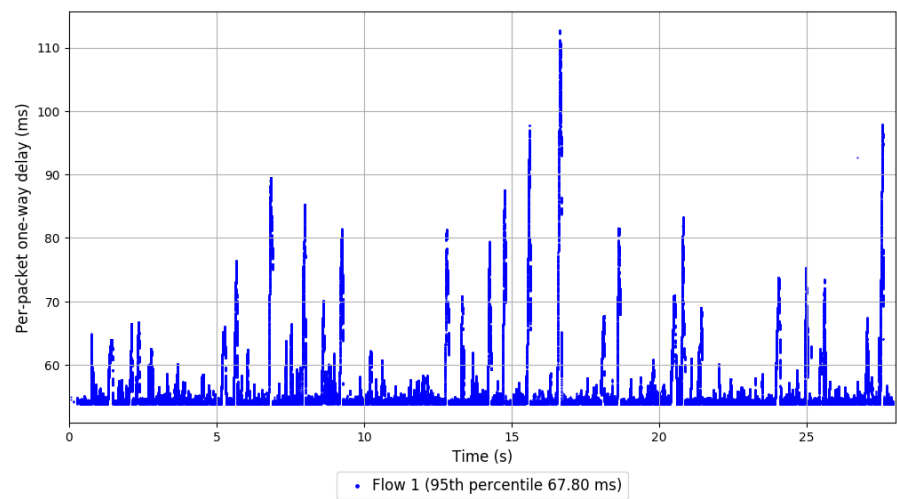
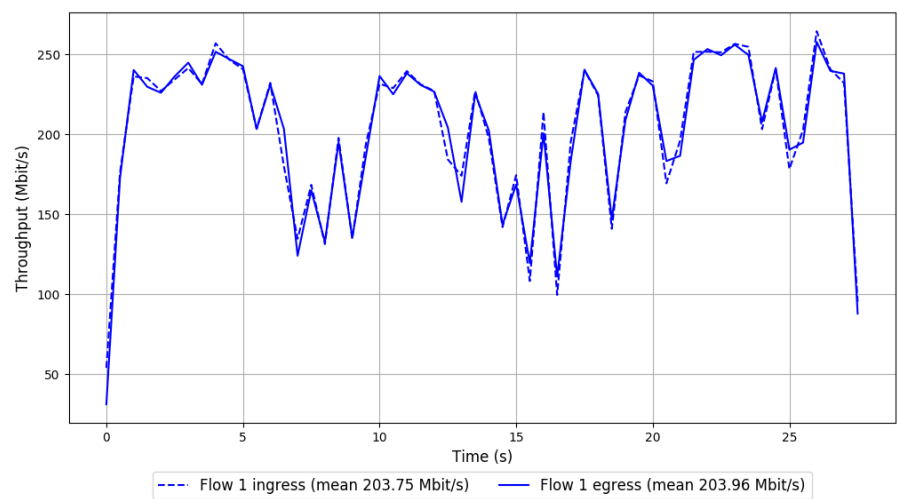


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-09-18 03:45:51
End at: 2017-09-18 03:46:21

# Below is generated by plot.py at 2017-09-18 07:25:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.96 Mbit/s
95th percentile per-packet one-way delay: 67.796 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 203.96 Mbit/s
95th percentile per-packet one-way delay: 67.796 ms
Loss rate: 0.29%
```


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



Run 8: Statistics of TaoVA-100x

Start at: 2017-09-18 03:57:28

End at: 2017-09-18 03:57:58

Below is generated by plot.py at 2017-09-18 07:25:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.26 Mbit/s

95th percentile per-packet one-way delay: 54.079 ms

Loss rate: 1.79%

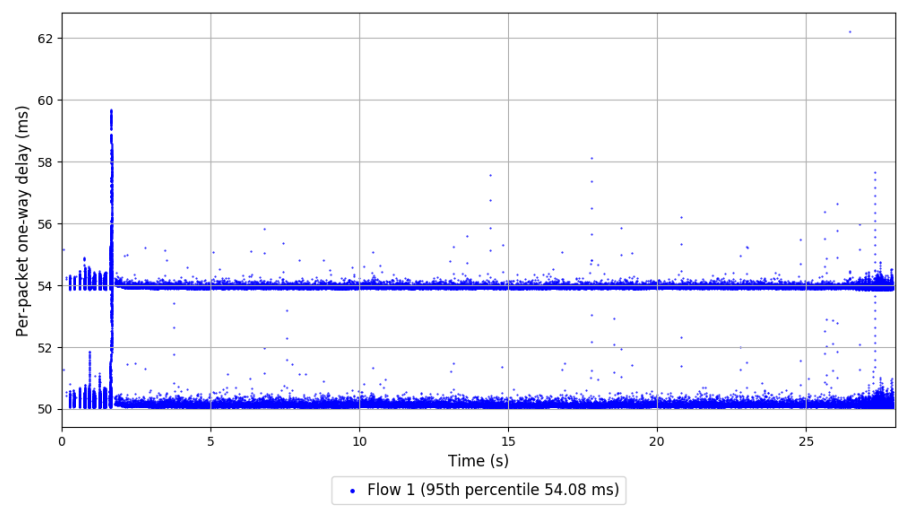
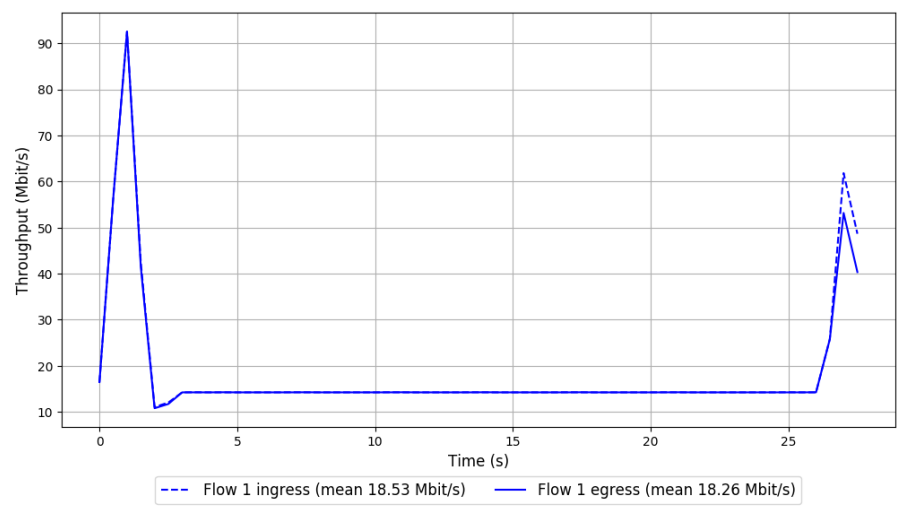
-- Flow 1:

Average throughput: 18.26 Mbit/s

95th percentile per-packet one-way delay: 54.079 ms

Loss rate: 1.79%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-09-18 04:08:24

End at: 2017-09-18 04:08:54

Below is generated by plot.py at 2017-09-18 07:26:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.09 Mbit/s

95th percentile per-packet one-way delay: 63.119 ms

Loss rate: 0.44%

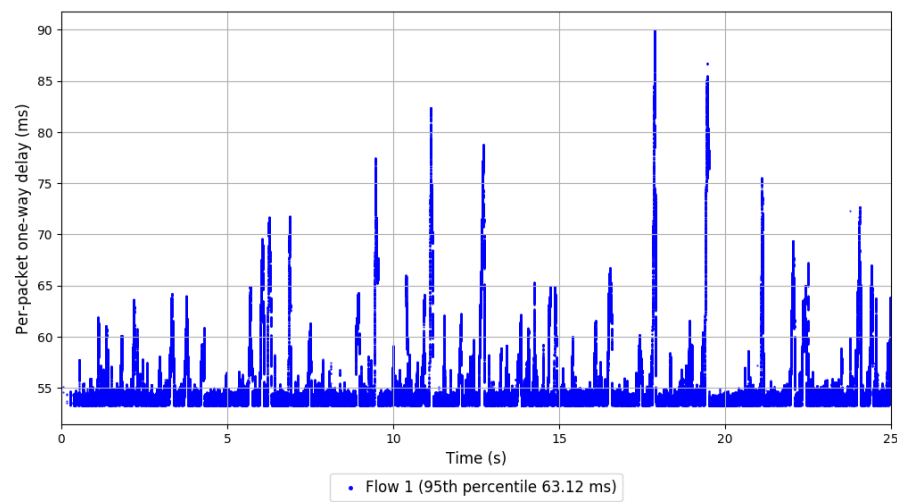
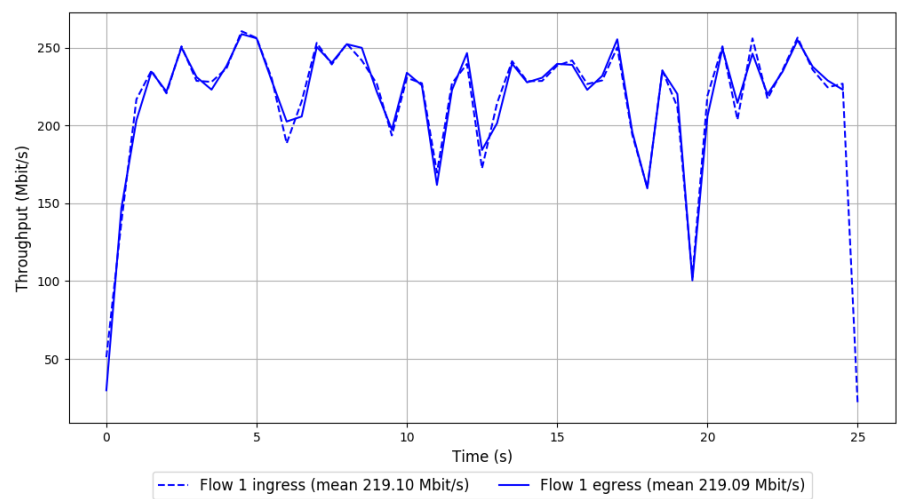
-- Flow 1:

Average throughput: 219.09 Mbit/s

95th percentile per-packet one-way delay: 63.119 ms

Loss rate: 0.44%

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

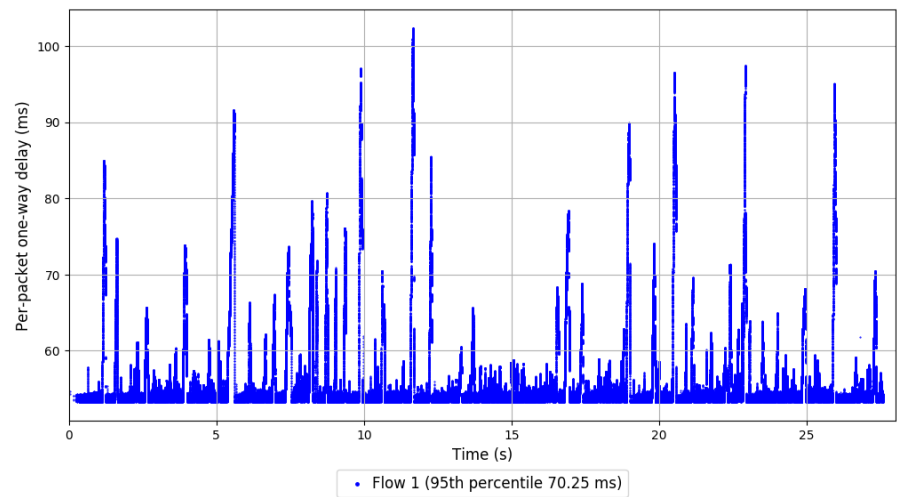
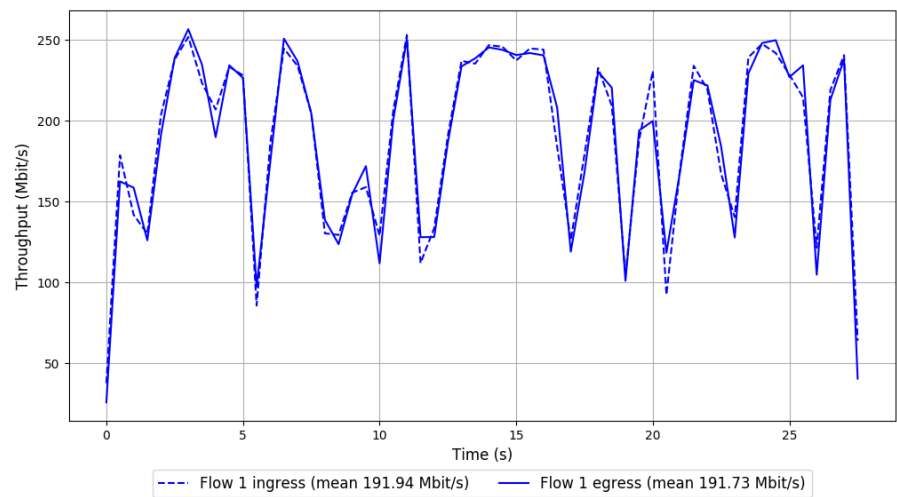


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-09-18 04:19:51
End at: 2017-09-18 04:20:21

# Below is generated by plot.py at 2017-09-18 07:26:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.73 Mbit/s
95th percentile per-packet one-way delay: 70.250 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 191.73 Mbit/s
95th percentile per-packet one-way delay: 70.250 ms
Loss rate: 0.50%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-09-18 02:33:08

End at: 2017-09-18 02:33:38

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.93 Mbit/s

95th percentile per-packet one-way delay: 56.165 ms

Loss rate: 0.43%

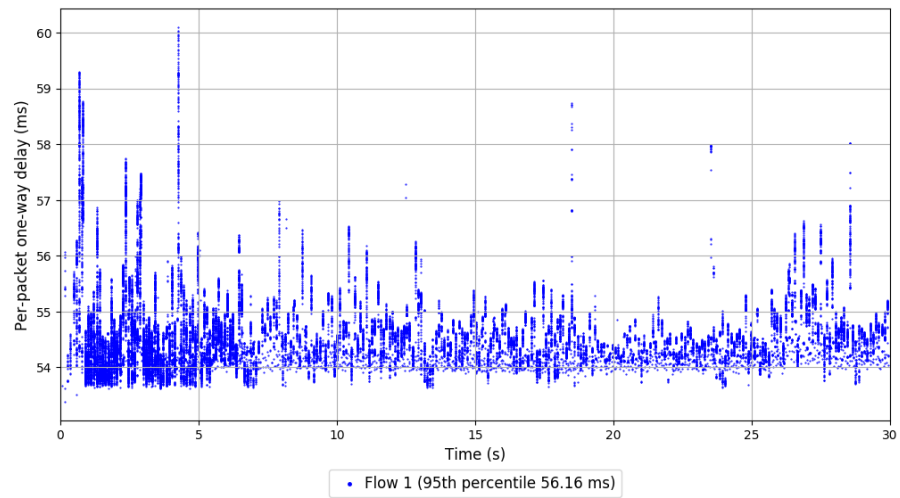
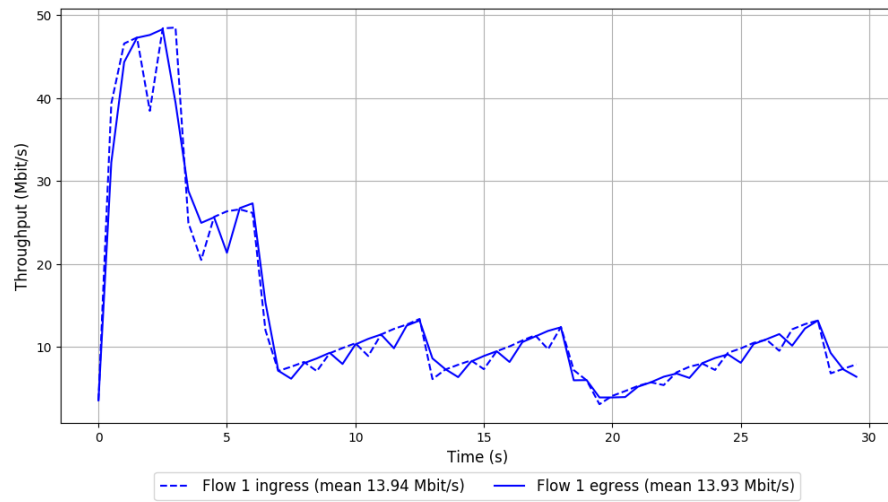
-- Flow 1:

Average throughput: 13.93 Mbit/s

95th percentile per-packet one-way delay: 56.165 ms

Loss rate: 0.43%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-09-18 02:44:43

End at: 2017-09-18 02:45:13

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 55.461 ms

Loss rate: 0.77%

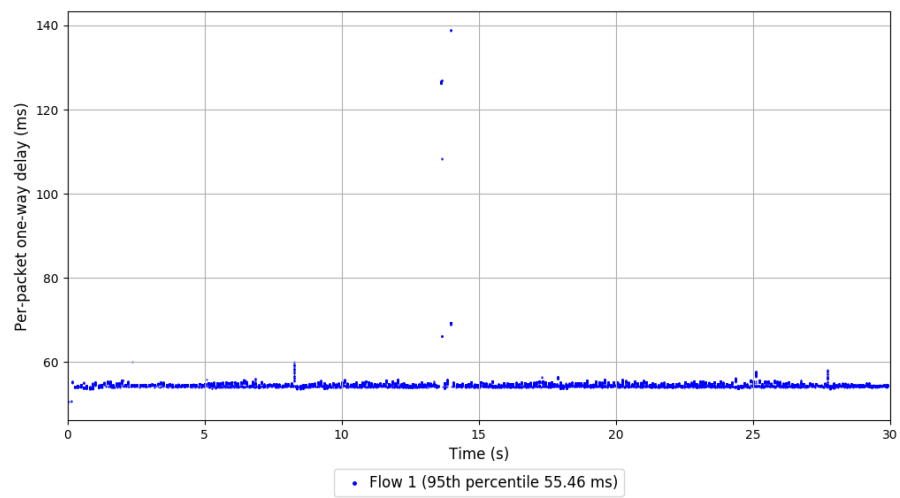
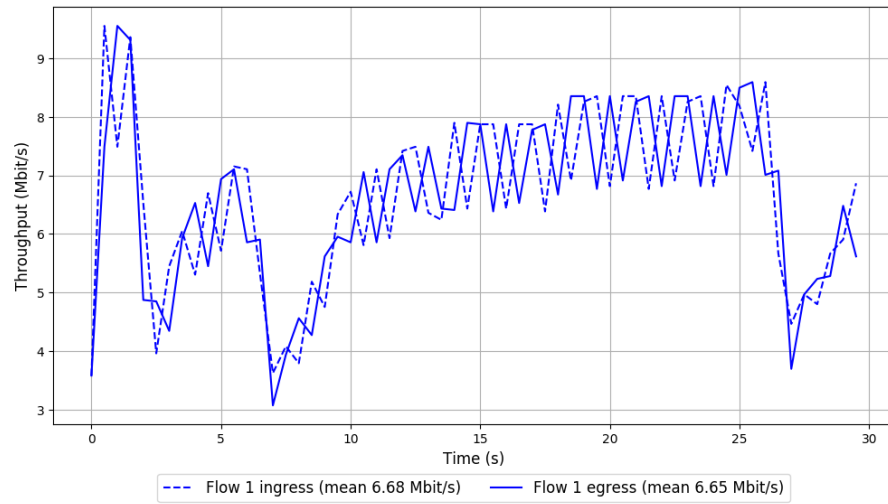
-- Flow 1:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 55.461 ms

Loss rate: 0.77%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-09-18 02:56:14

End at: 2017-09-18 02:56:44

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.08 Mbit/s

95th percentile per-packet one-way delay: 56.557 ms

Loss rate: 0.31%

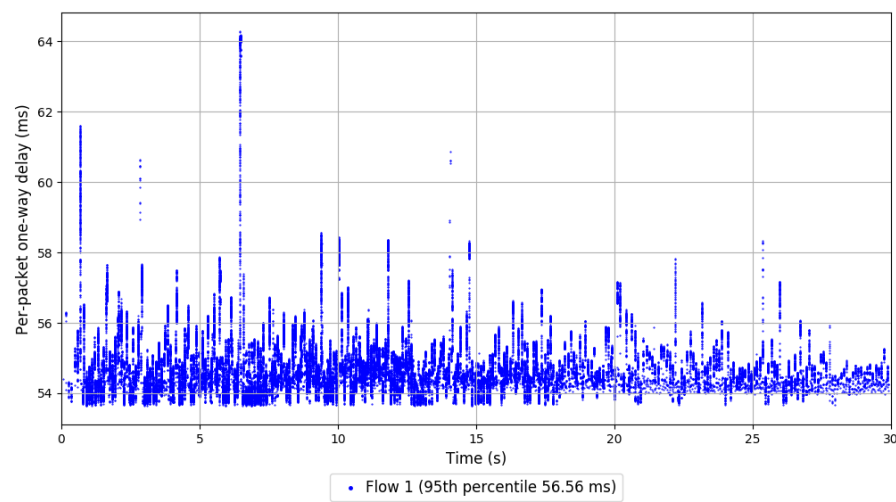
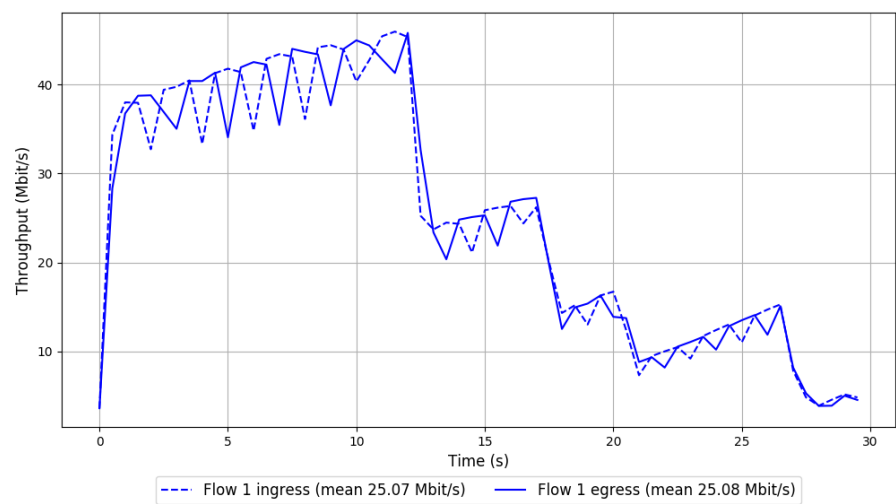
-- Flow 1:

Average throughput: 25.08 Mbit/s

95th percentile per-packet one-way delay: 56.557 ms

Loss rate: 0.31%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-09-18 03:07:49

End at: 2017-09-18 03:08:19

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 55.125 ms

Loss rate: 0.47%

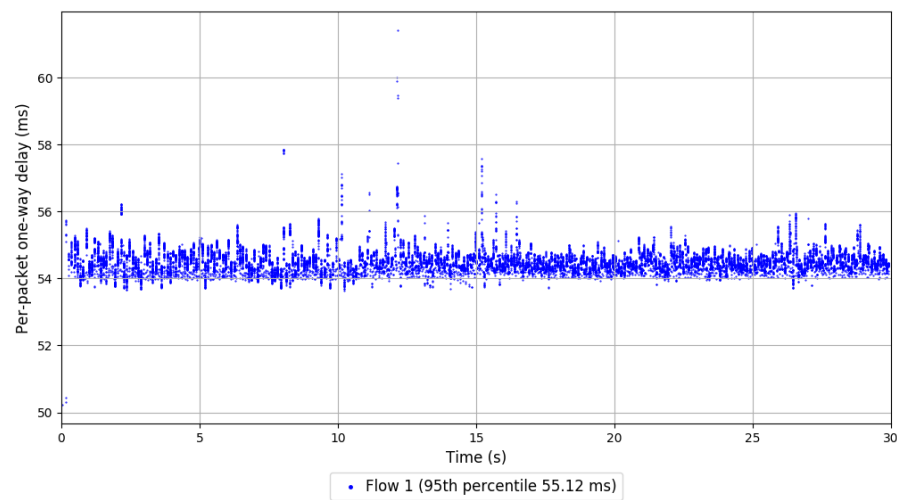
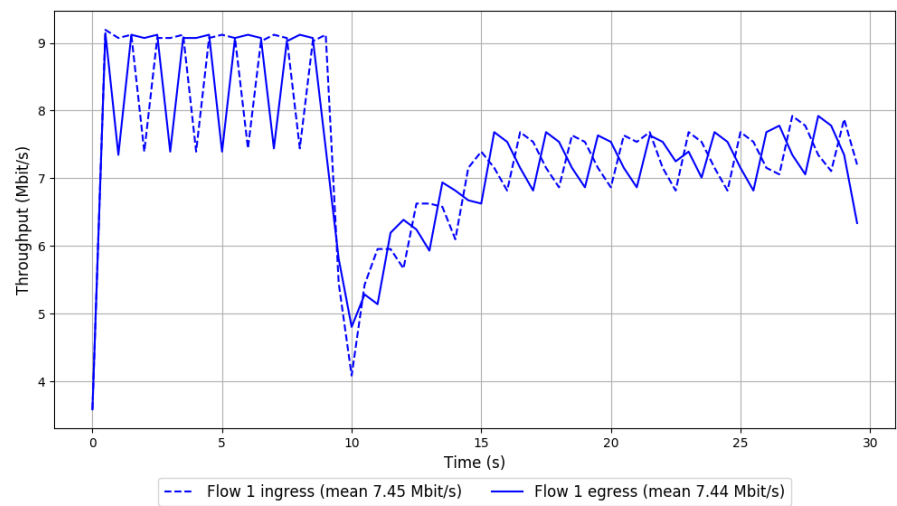
-- Flow 1:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 55.125 ms

Loss rate: 0.47%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-09-18 03:19:11

End at: 2017-09-18 03:19:41

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.83 Mbit/s

95th percentile per-packet one-way delay: 55.749 ms

Loss rate: 0.70%

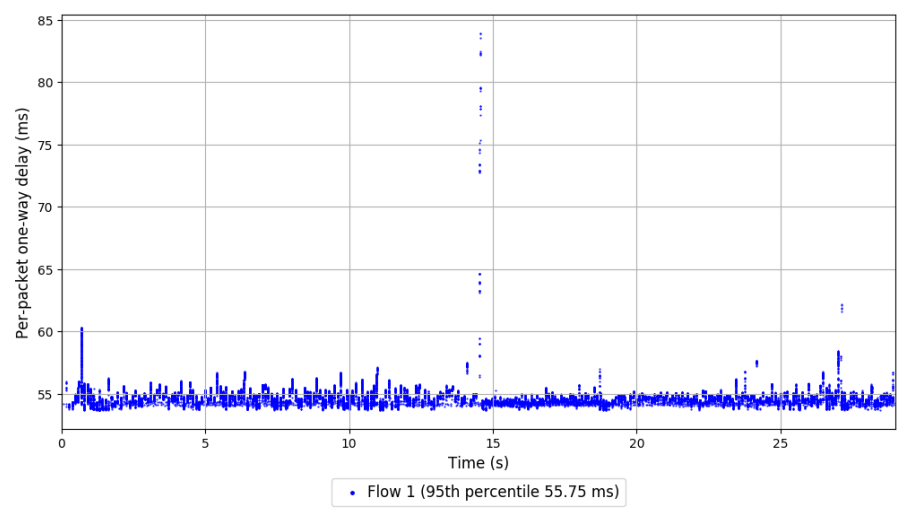
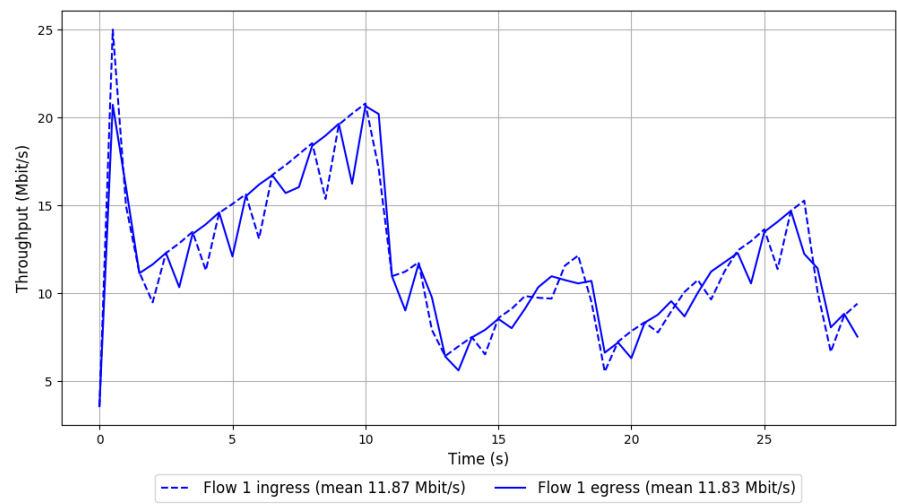
-- Flow 1:

Average throughput: 11.83 Mbit/s

95th percentile per-packet one-way delay: 55.749 ms

Loss rate: 0.70%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-09-18 03:30:41

End at: 2017-09-18 03:31:11

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.41 Mbit/s

95th percentile per-packet one-way delay: 56.375 ms

Loss rate: 0.32%

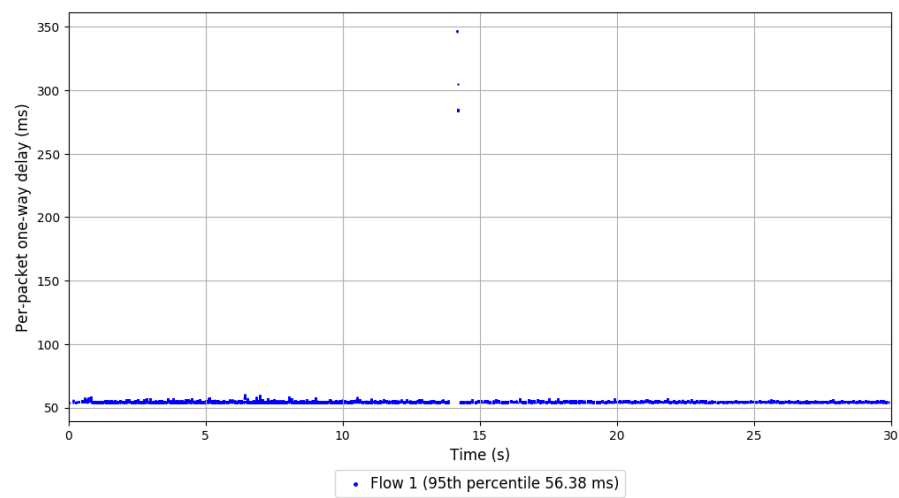
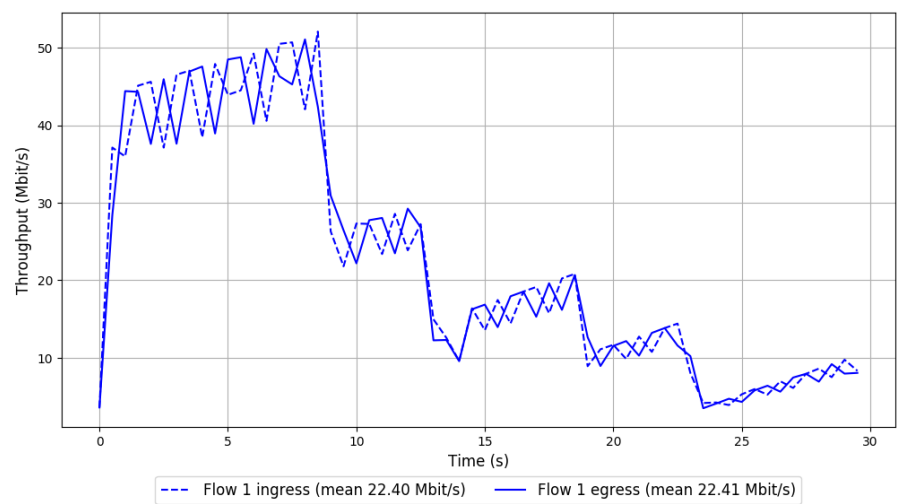
-- Flow 1:

Average throughput: 22.41 Mbit/s

95th percentile per-packet one-way delay: 56.375 ms

Loss rate: 0.32%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-09-18 03:42:09

End at: 2017-09-18 03:42:39

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 55.179 ms

Loss rate: 0.61%

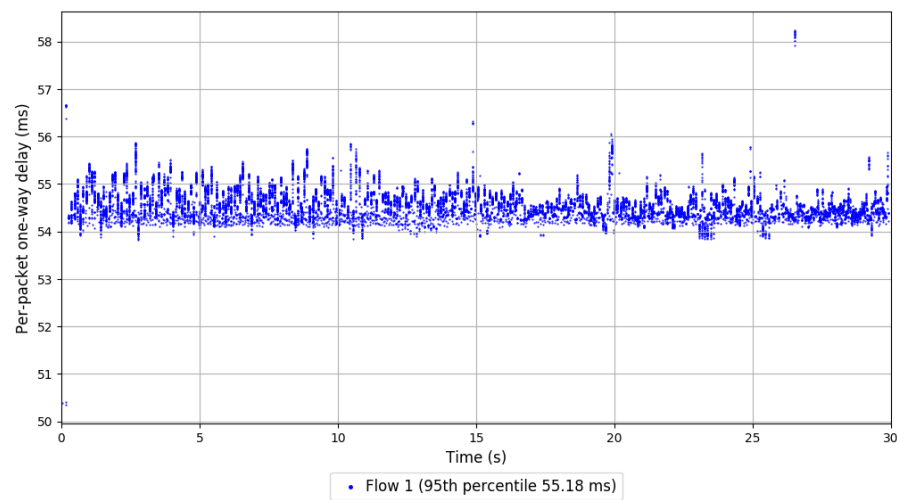
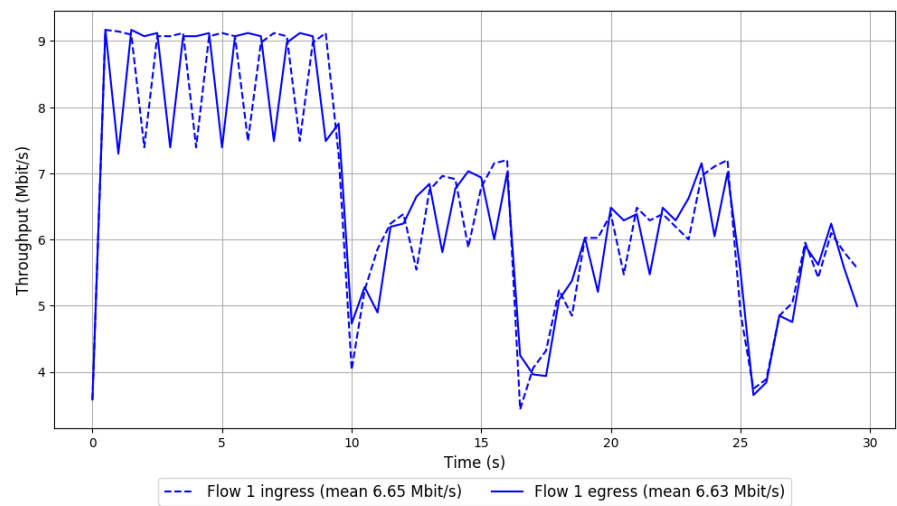
-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 55.179 ms

Loss rate: 0.61%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-09-18 03:53:42

End at: 2017-09-18 03:54:12

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.14 Mbit/s

95th percentile per-packet one-way delay: 57.819 ms

Loss rate: 0.39%

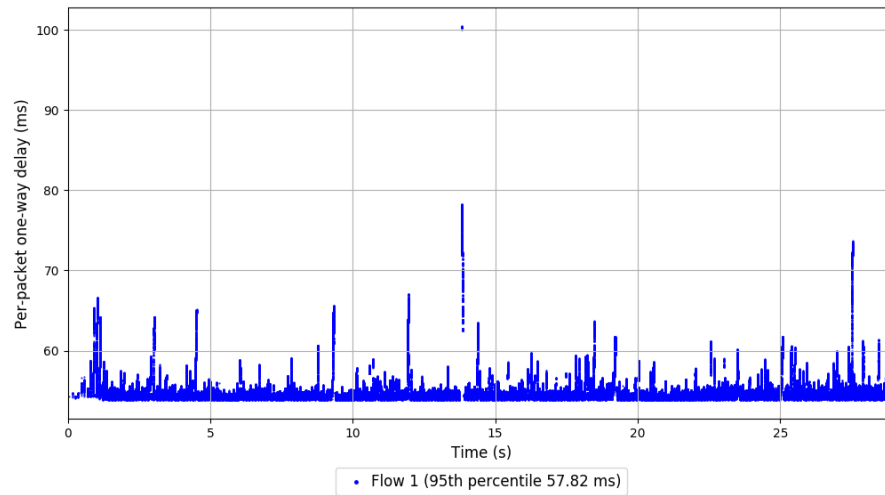
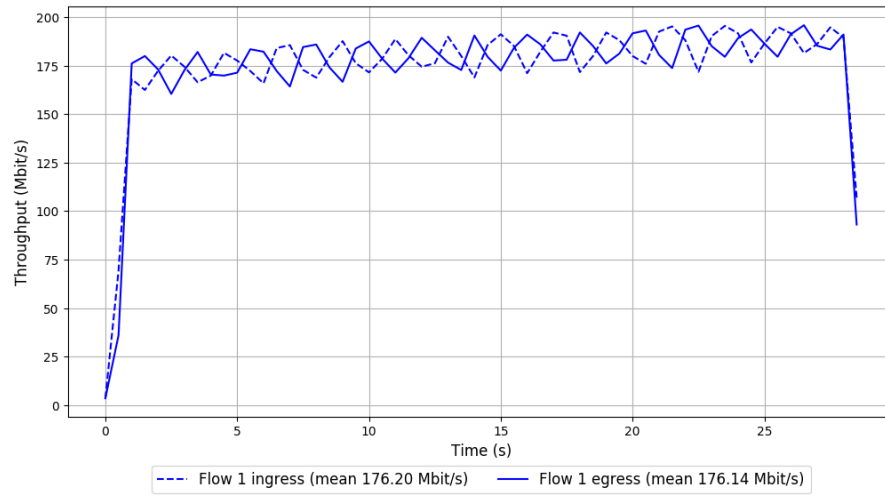
-- Flow 1:

Average throughput: 176.14 Mbit/s

95th percentile per-packet one-way delay: 57.819 ms

Loss rate: 0.39%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-09-18 04:04:49

End at: 2017-09-18 04:05:19

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 55.282 ms

Loss rate: 0.59%

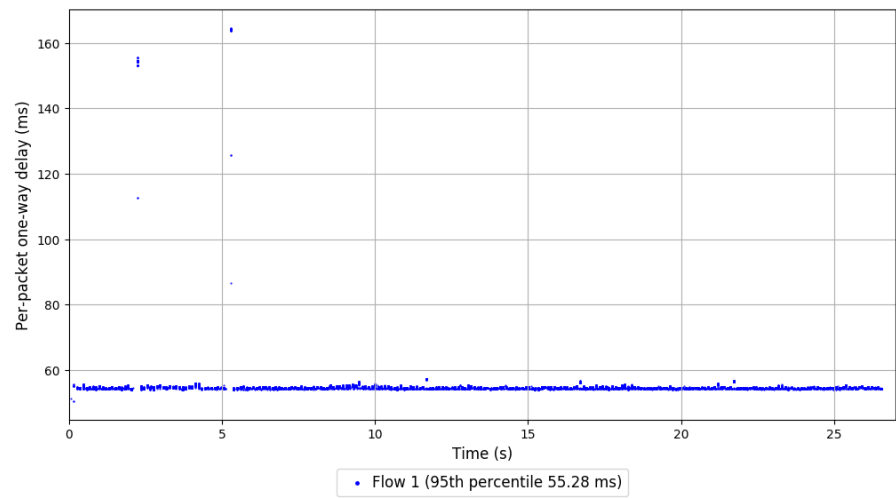
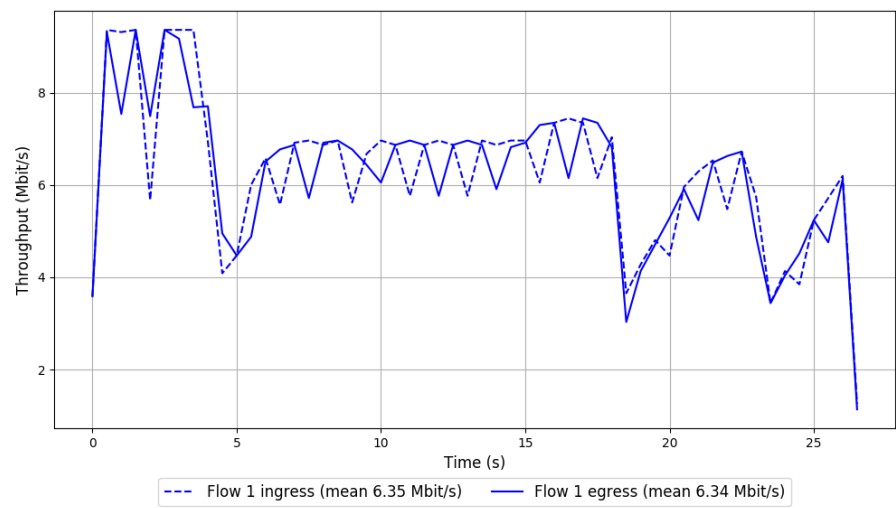
-- Flow 1:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 55.282 ms

Loss rate: 0.59%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-09-18 04:16:12

End at: 2017-09-18 04:16:42

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 55.107 ms

Loss rate: 0.71%

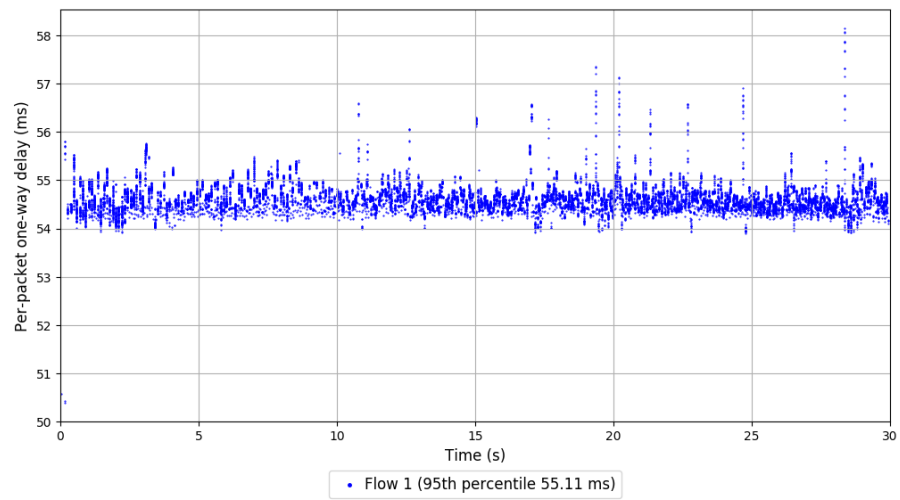
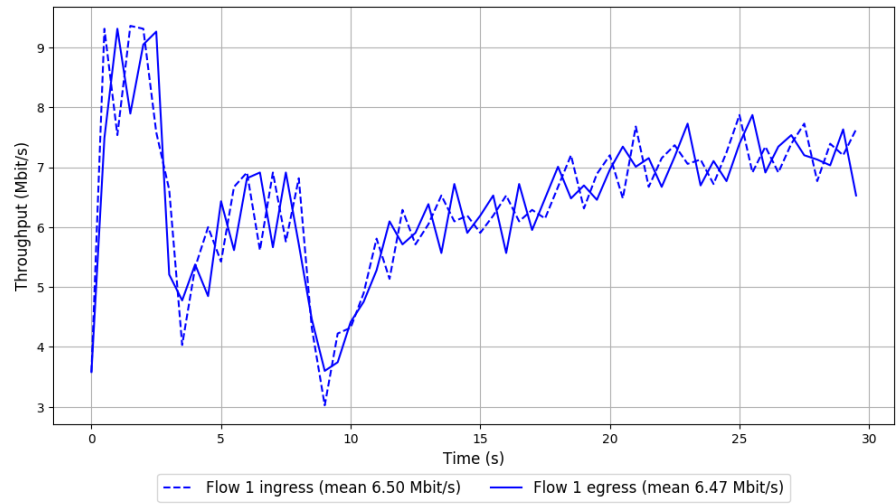
-- Flow 1:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 55.107 ms

Loss rate: 0.71%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-09-18 02:31:31

End at: 2017-09-18 02:32:01

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.20 Mbit/s

95th percentile per-packet one-way delay: 111.792 ms

Loss rate: 2.47%

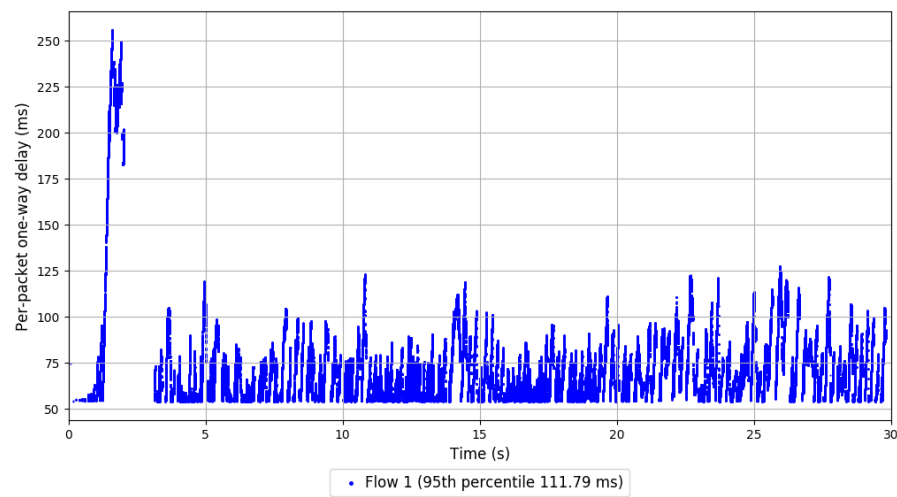
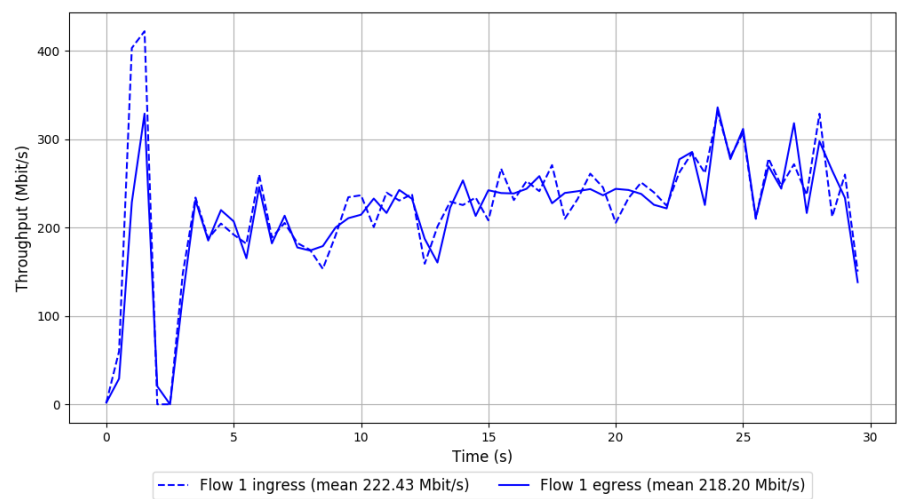
-- Flow 1:

Average throughput: 218.20 Mbit/s

95th percentile per-packet one-way delay: 111.792 ms

Loss rate: 2.47%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-09-18 02:43:10

End at: 2017-09-18 02:43:40

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 204.43 Mbit/s

95th percentile per-packet one-way delay: 107.593 ms

Loss rate: 2.99%

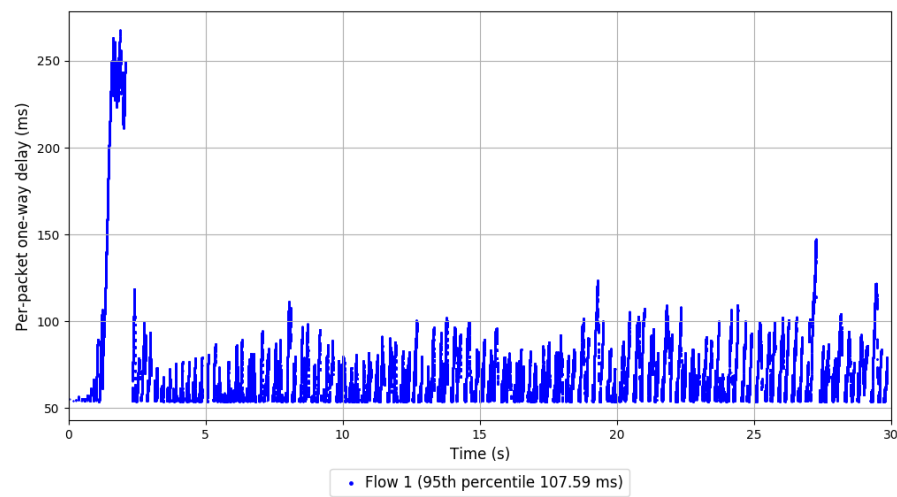
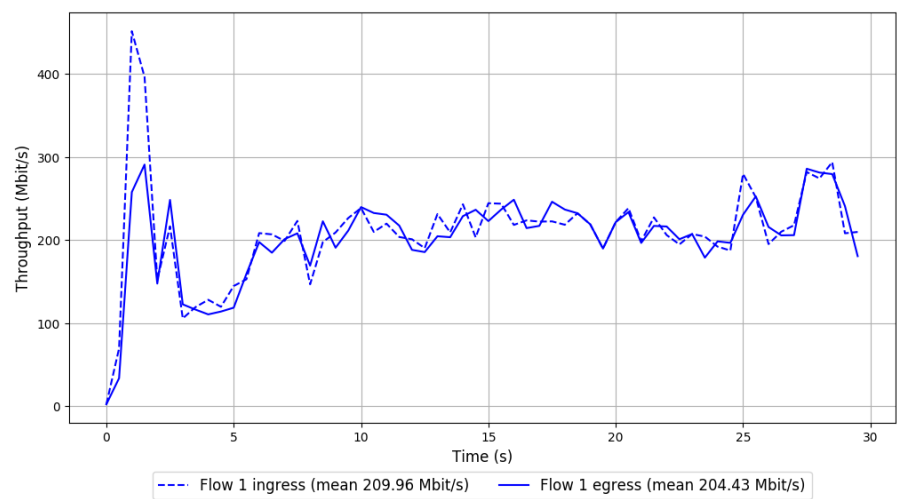
-- Flow 1:

Average throughput: 204.43 Mbit/s

95th percentile per-packet one-way delay: 107.593 ms

Loss rate: 2.99%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-09-18 02:54:38

End at: 2017-09-18 02:55:08

Below is generated by plot.py at 2017-09-18 07:26:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.34 Mbit/s

95th percentile per-packet one-way delay: 121.000 ms

Loss rate: 2.87%

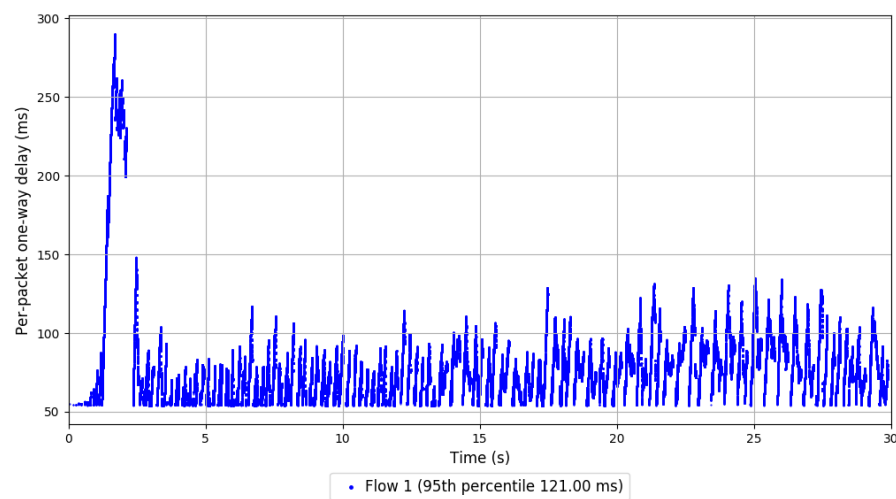
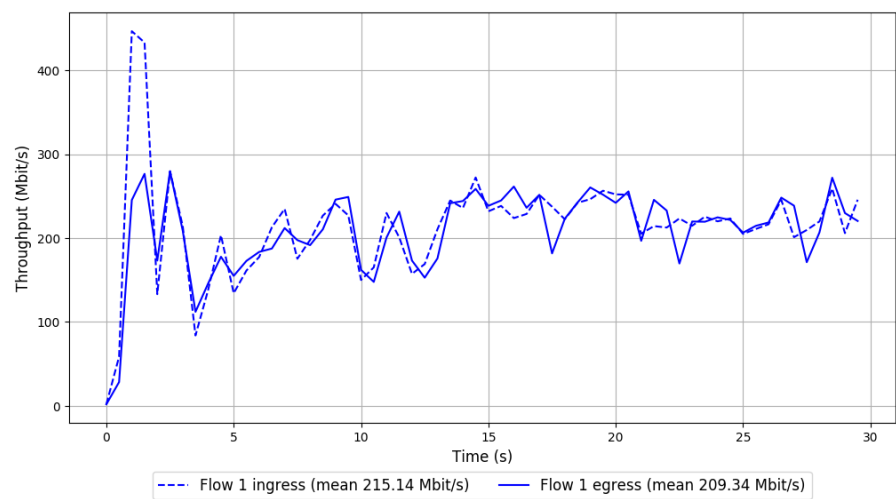
-- Flow 1:

Average throughput: 209.34 Mbit/s

95th percentile per-packet one-way delay: 121.000 ms

Loss rate: 2.87%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-09-18 03:06:14

End at: 2017-09-18 03:06:44

Below is generated by plot.py at 2017-09-18 07:27:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.07 Mbit/s

95th percentile per-packet one-way delay: 117.752 ms

Loss rate: 2.89%

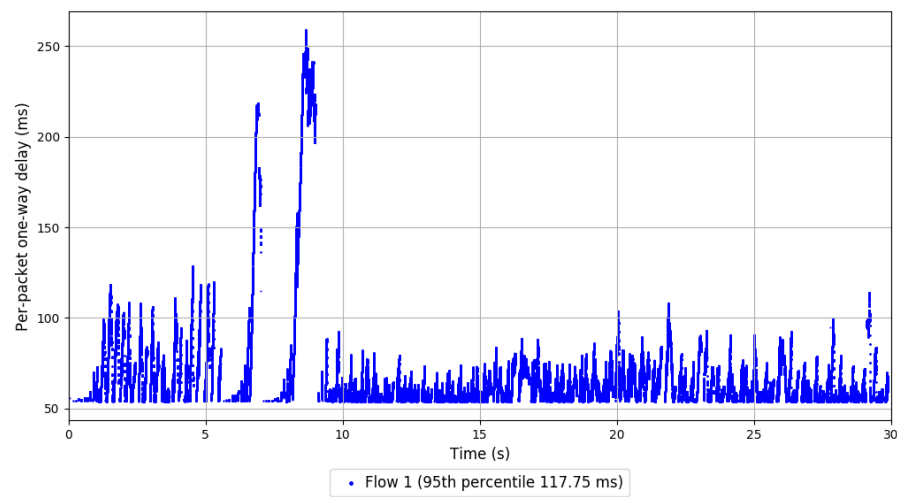
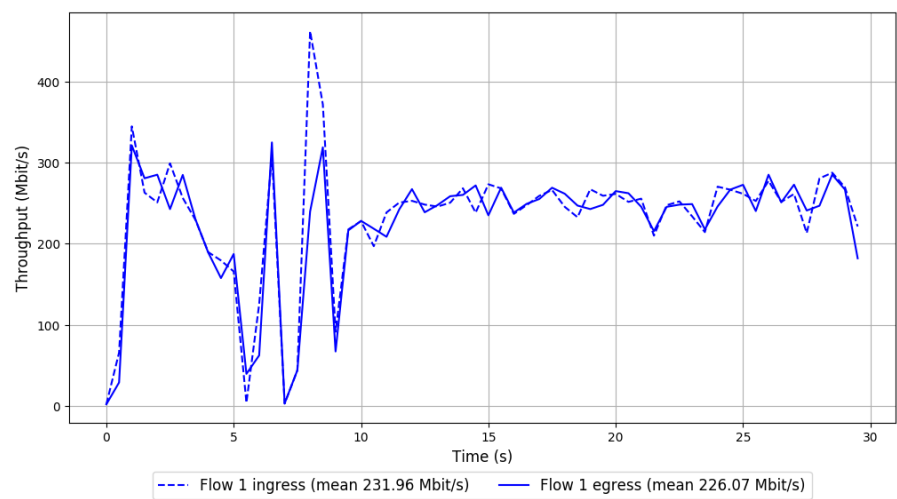
-- Flow 1:

Average throughput: 226.07 Mbit/s

95th percentile per-packet one-way delay: 117.752 ms

Loss rate: 2.89%

Run 4: Report of Verus — Data Link

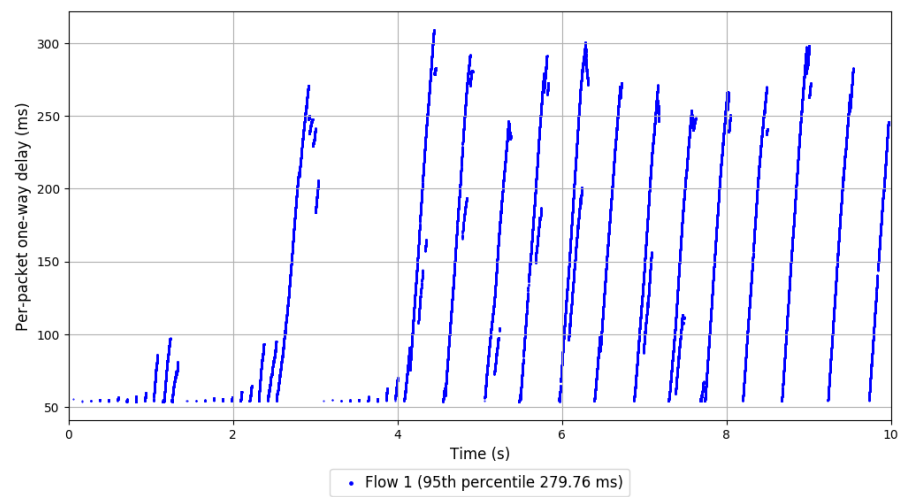
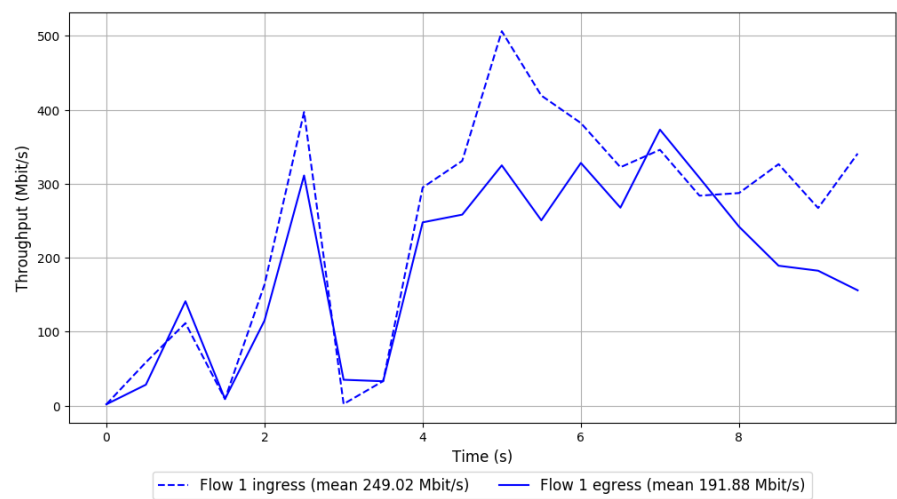


Run 5: Statistics of Verus

Start at: 2017-09-18 03:17:49

End at: 2017-09-18 03:18:19

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-09-18 03:29:09

End at: 2017-09-18 03:29:39

Below is generated by plot.py at 2017-09-18 07:27:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.45 Mbit/s

95th percentile per-packet one-way delay: 121.280 ms

Loss rate: 1.25%

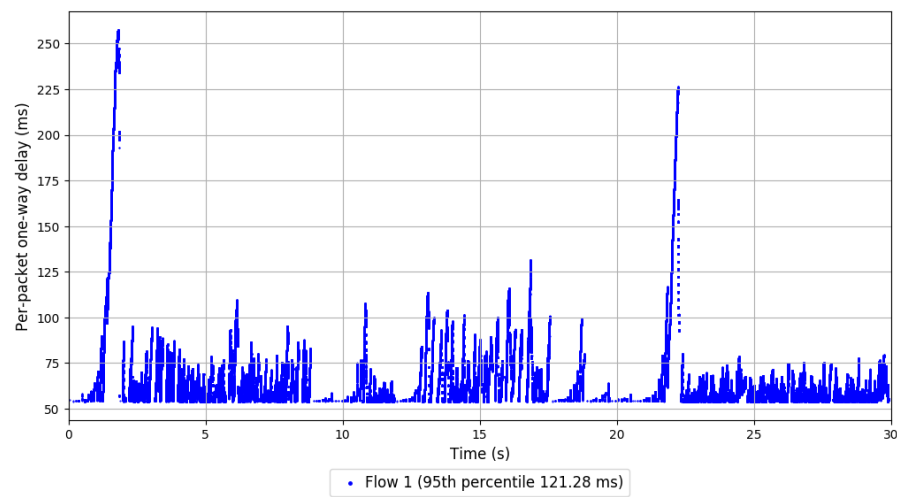
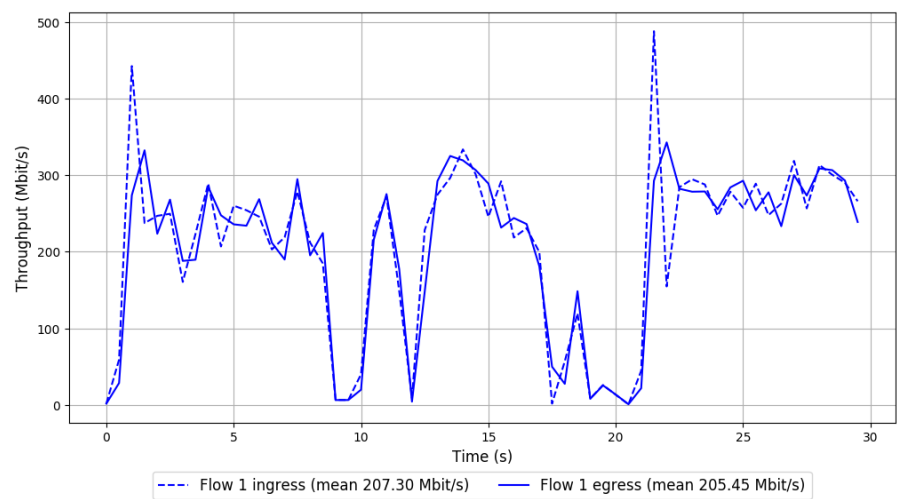
-- Flow 1:

Average throughput: 205.45 Mbit/s

95th percentile per-packet one-way delay: 121.280 ms

Loss rate: 1.25%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-09-18 03:40:33

End at: 2017-09-18 03:41:03

Below is generated by plot.py at 2017-09-18 07:28:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.03 Mbit/s

95th percentile per-packet one-way delay: 101.465 ms

Loss rate: 1.12%

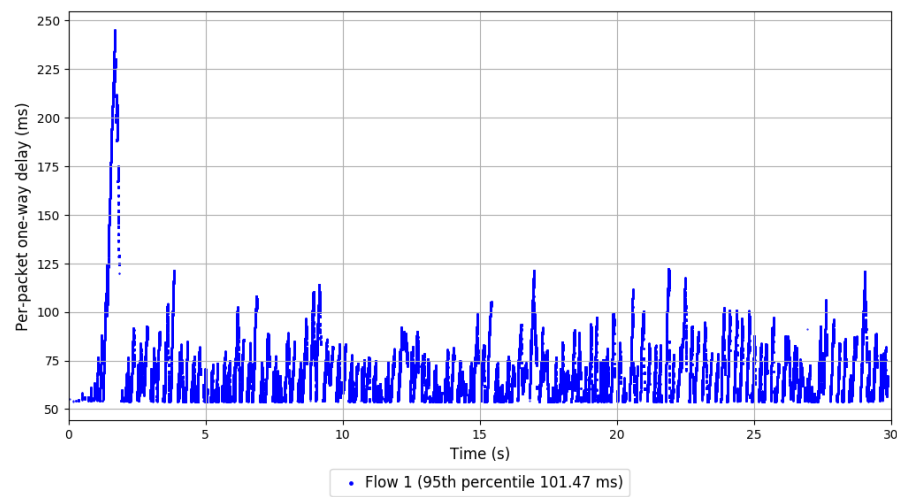
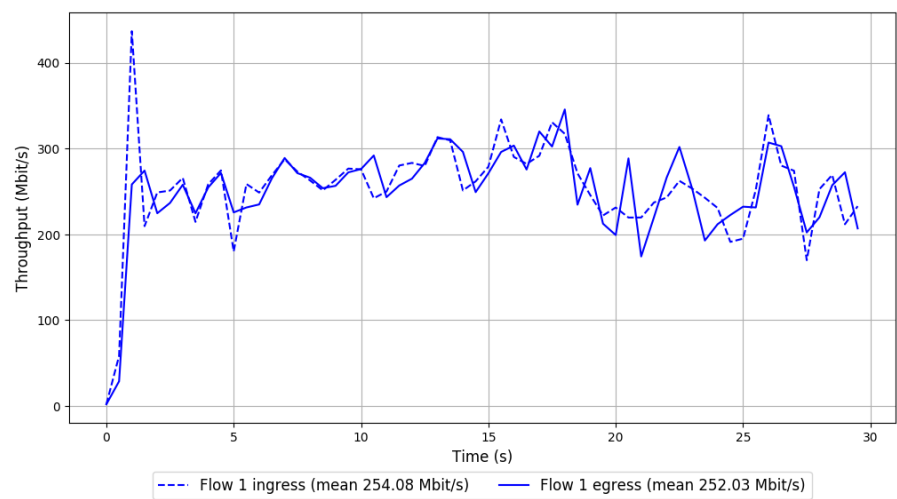
-- Flow 1:

Average throughput: 252.03 Mbit/s

95th percentile per-packet one-way delay: 101.465 ms

Loss rate: 1.12%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-09-18 03:52:12

End at: 2017-09-18 03:52:42

Below is generated by plot.py at 2017-09-18 07:28:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.24 Mbit/s

95th percentile per-packet one-way delay: 91.654 ms

Loss rate: 3.10%

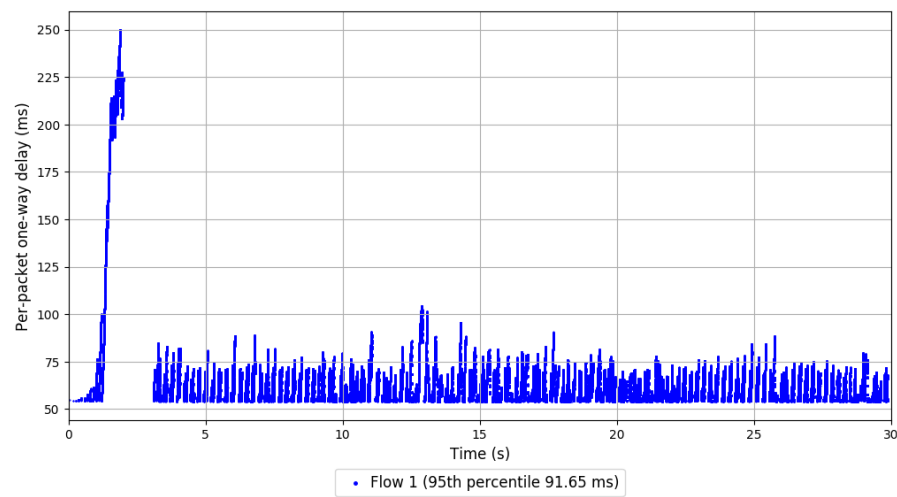
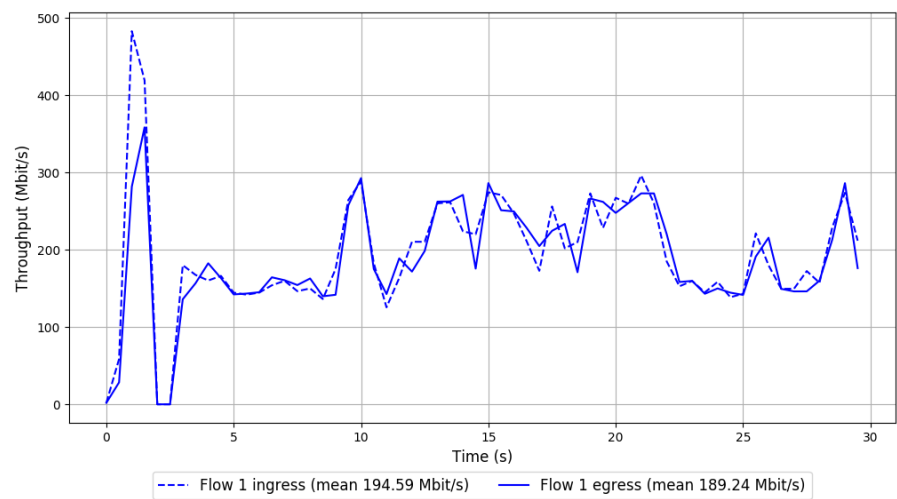
-- Flow 1:

Average throughput: 189.24 Mbit/s

95th percentile per-packet one-way delay: 91.654 ms

Loss rate: 3.10%

Run 8: Report of Verus — Data Link

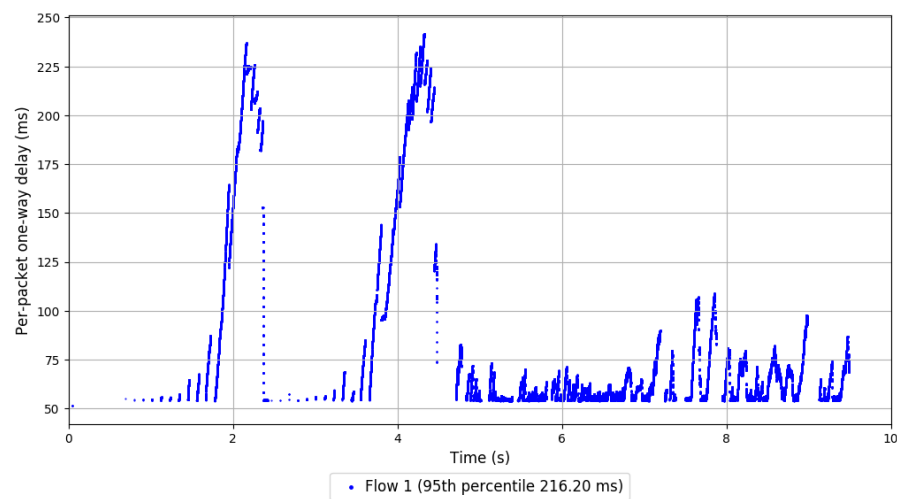
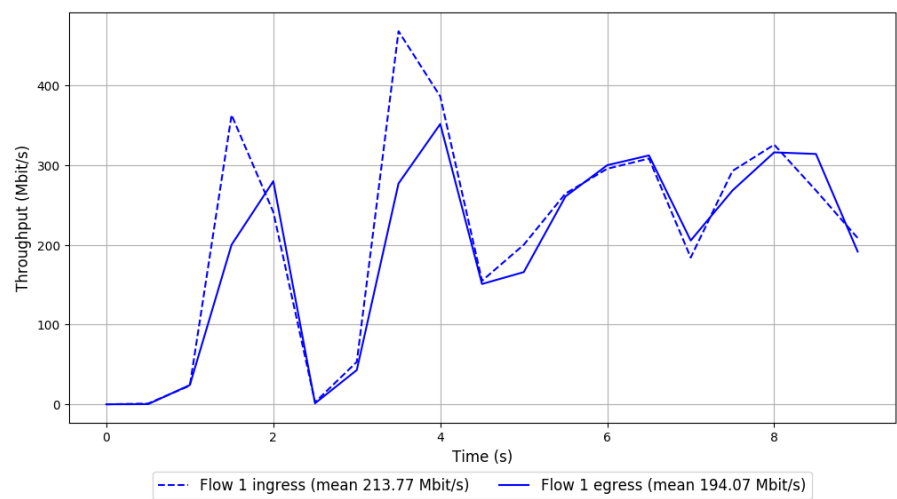


Run 9: Statistics of Verus

Start at: 2017-09-18 04:03:28

End at: 2017-09-18 04:03:58

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-09-18 04:14:37

End at: 2017-09-18 04:15:07

Below is generated by plot.py at 2017-09-18 07:28:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.71 Mbit/s

95th percentile per-packet one-way delay: 108.473 ms

Loss rate: 1.44%

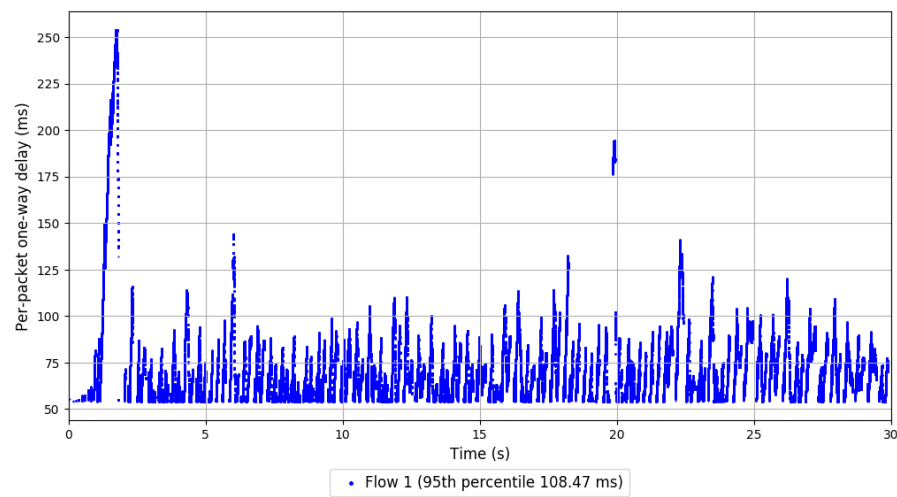
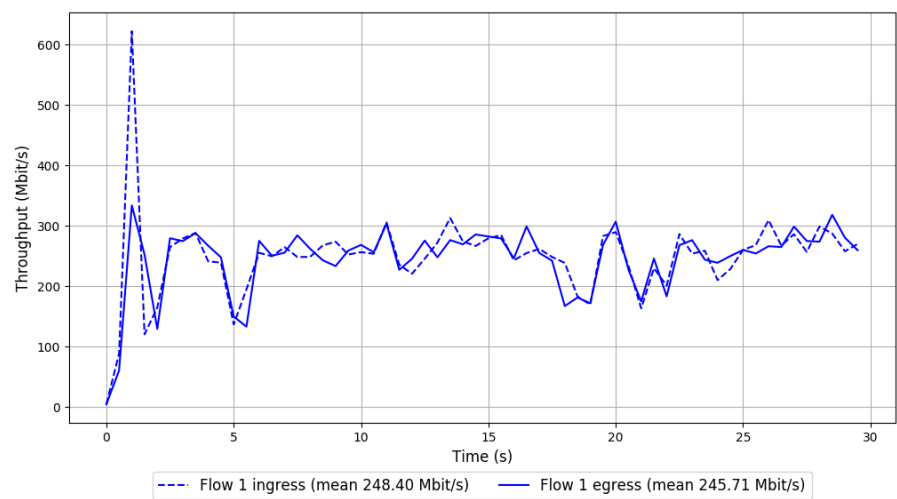
-- Flow 1:

Average throughput: 245.71 Mbit/s

95th percentile per-packet one-way delay: 108.473 ms

Loss rate: 1.44%

Run 10: Report of Verus — Data Link

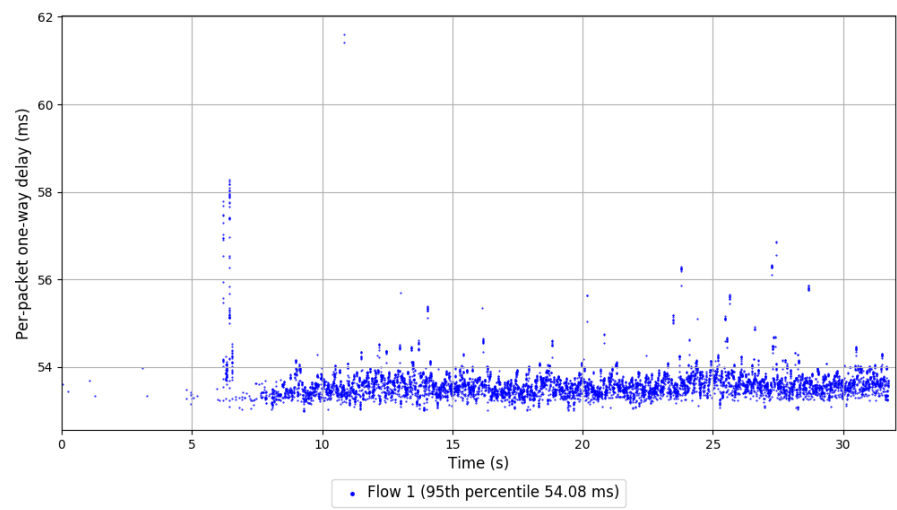
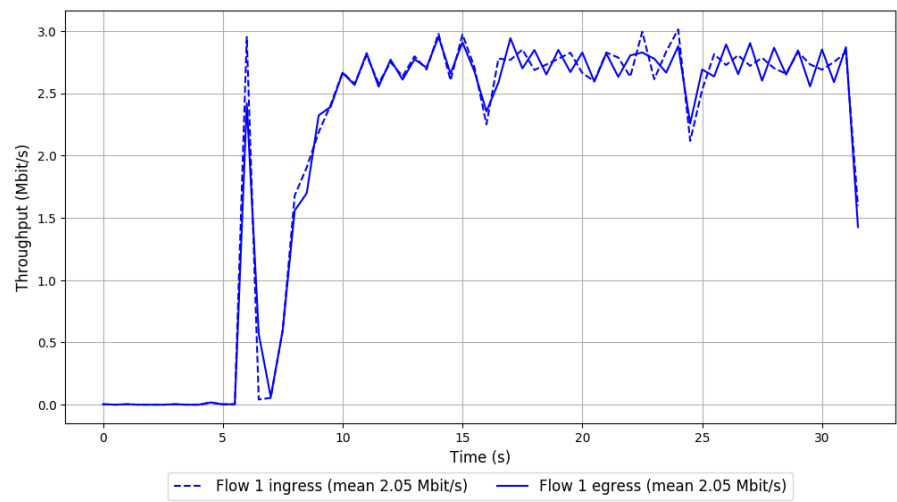


```
Run 1: Statistics of WebRTC media

Start at: 2017-09-18 02:26:12
End at: 2017-09-18 02:26:42

# Below is generated by plot.py at 2017-09-18 07:28:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 54.083 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 54.083 ms
Loss rate: 0.39%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-09-18 02:37:49

End at: 2017-09-18 02:38:19

Below is generated by plot.py at 2017-09-18 07:28:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 50.987 ms

Loss rate: 0.51%

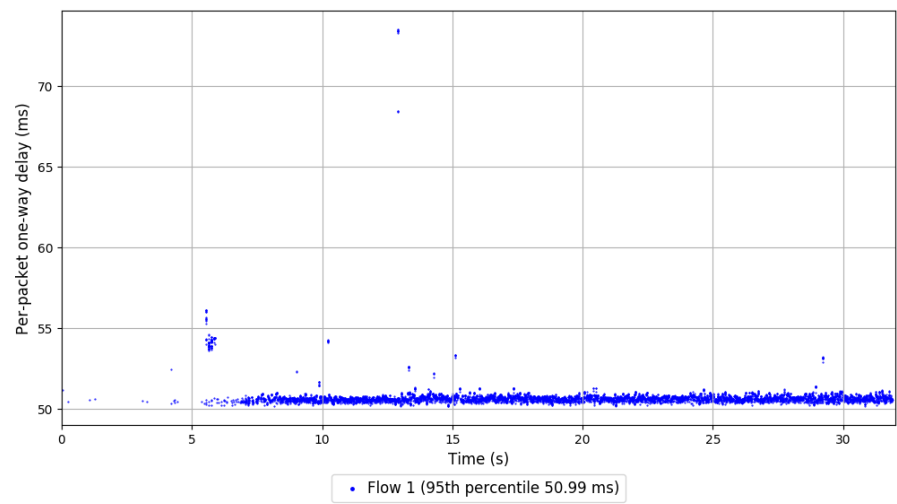
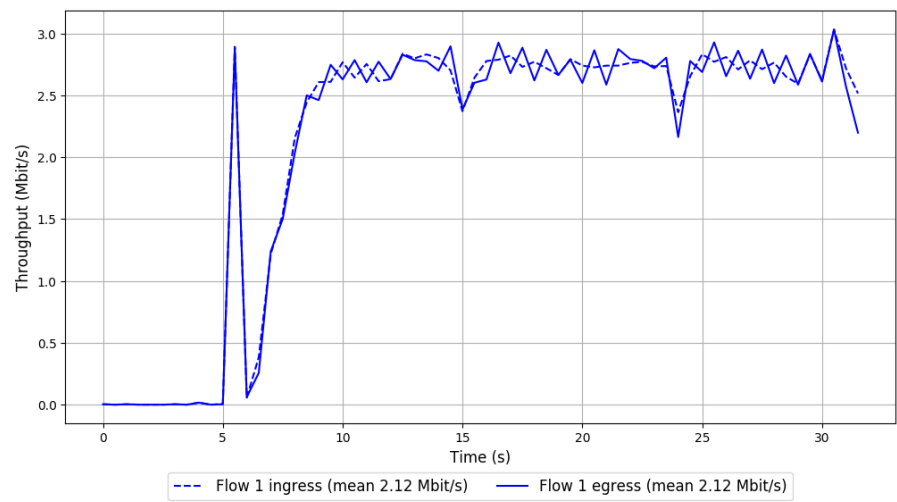
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 50.987 ms

Loss rate: 0.51%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-09-18 02:49:20

End at: 2017-09-18 02:49:50

Below is generated by plot.py at 2017-09-18 07:28:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 53.826 ms

Loss rate: 0.47%

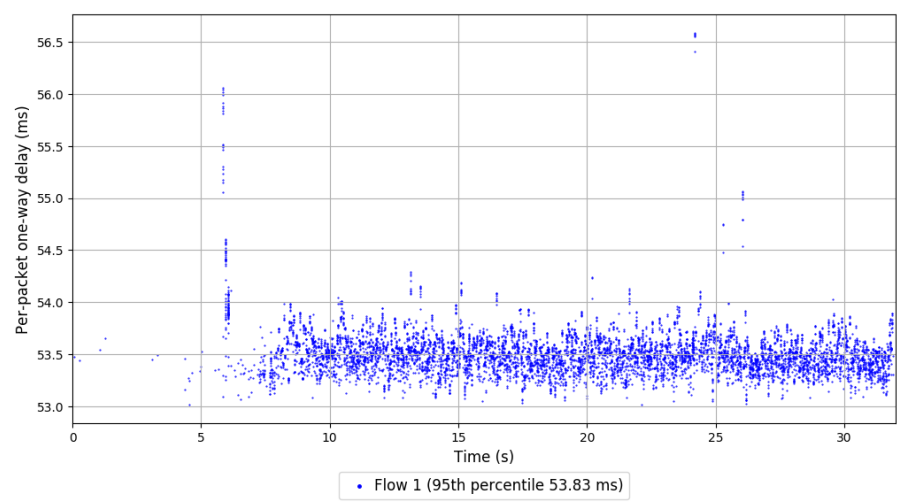
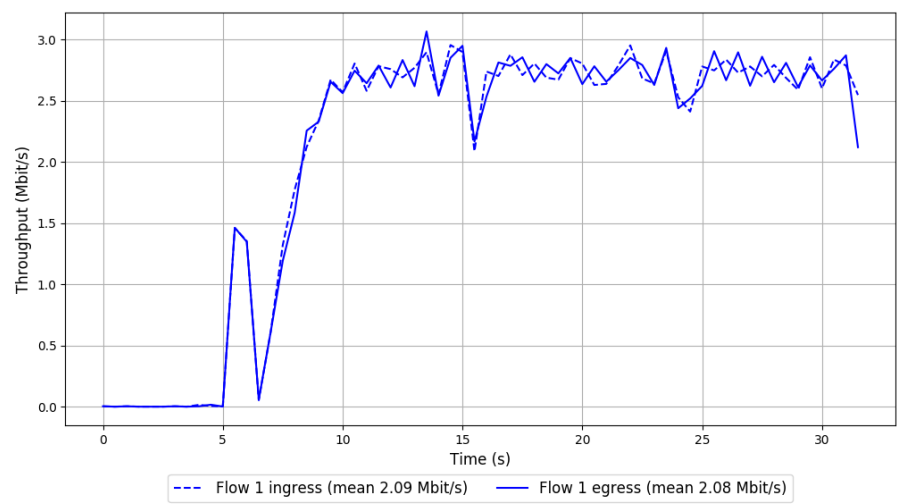
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 53.826 ms

Loss rate: 0.47%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-09-18 03:00:51

End at: 2017-09-18 03:01:21

Below is generated by plot.py at 2017-09-18 07:28:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 50.775 ms

Loss rate: 0.33%

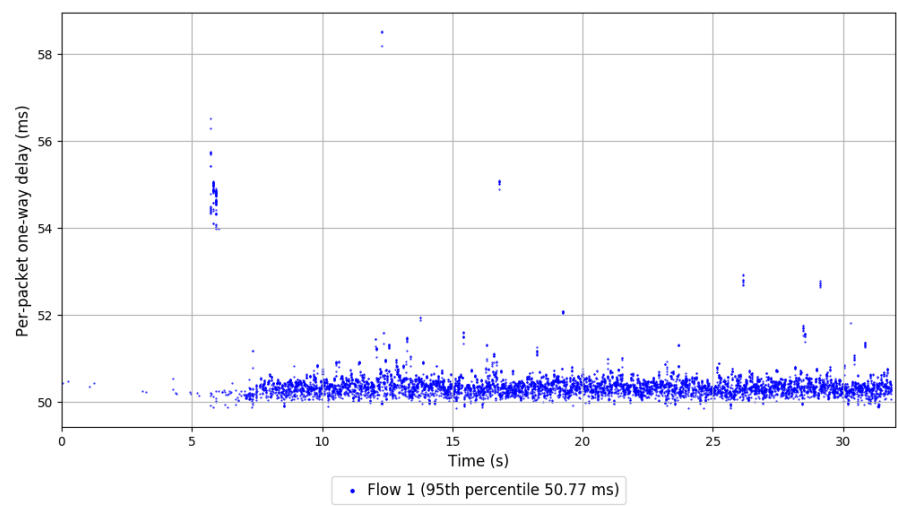
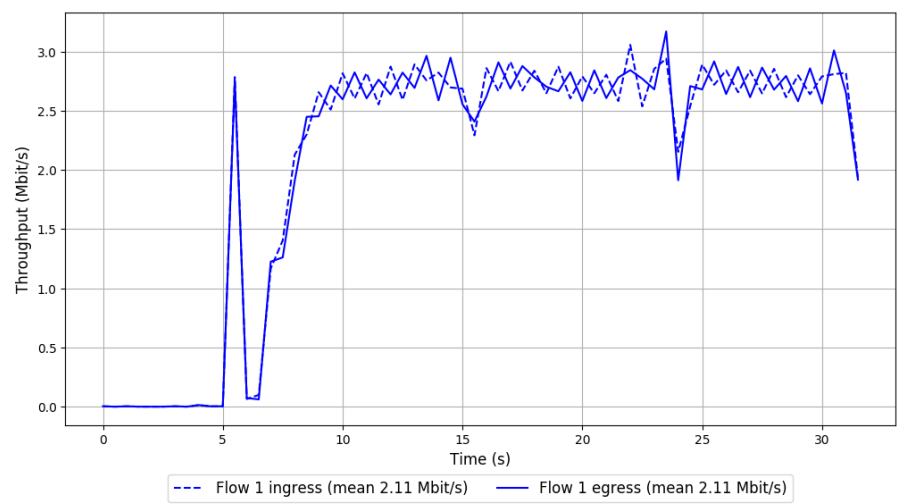
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 50.775 ms

Loss rate: 0.33%

Run 4: Report of WebRTC media — Data Link

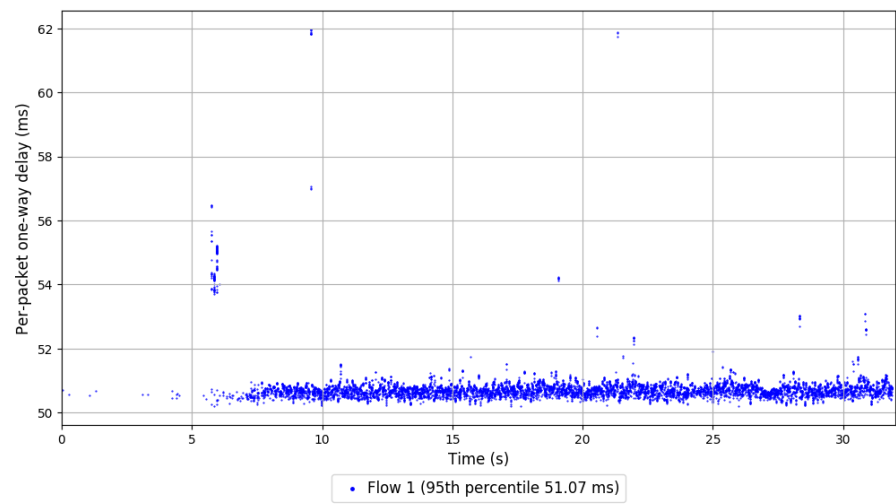
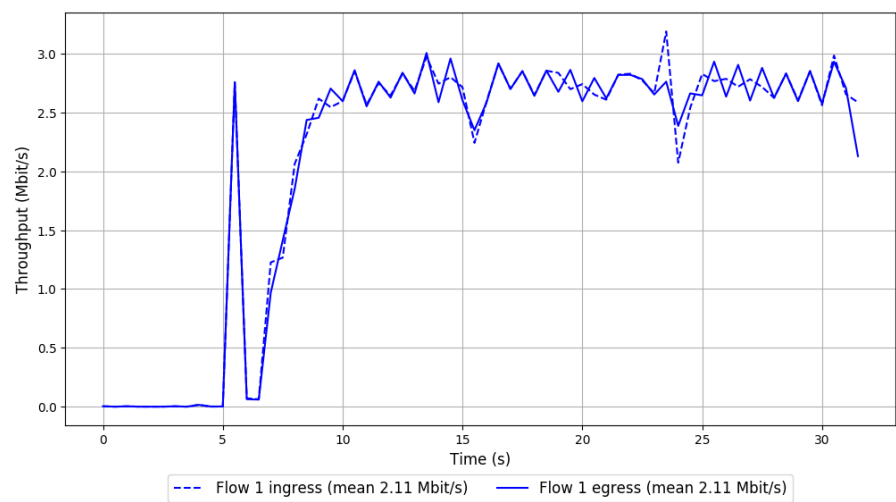


```
Run 5: Statistics of WebRTC media

Start at: 2017-09-18 03:12:29
End at: 2017-09-18 03:12:59

# Below is generated by plot.py at 2017-09-18 07:28:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 51.074 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 51.074 ms
Loss rate: 0.50%
```


Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-09-18 03:23:45

End at: 2017-09-18 03:24:15

Below is generated by plot.py at 2017-09-18 07:28:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 53.765 ms

Loss rate: 0.45%

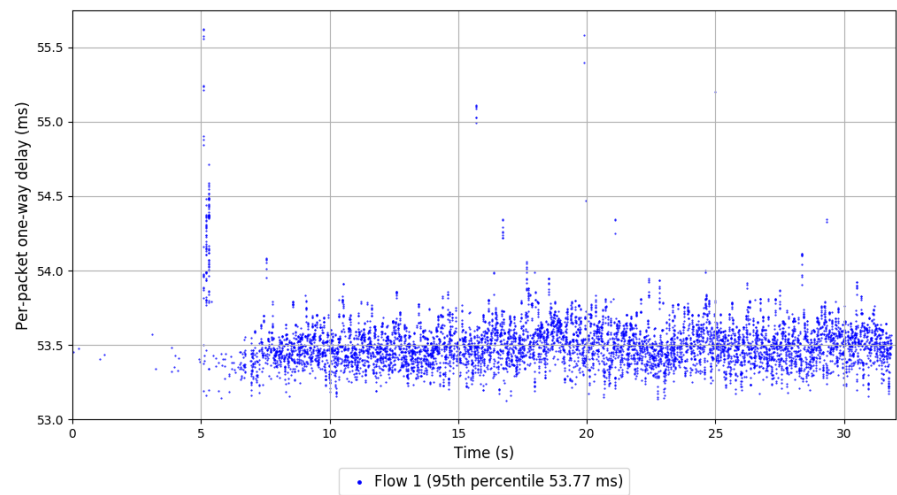
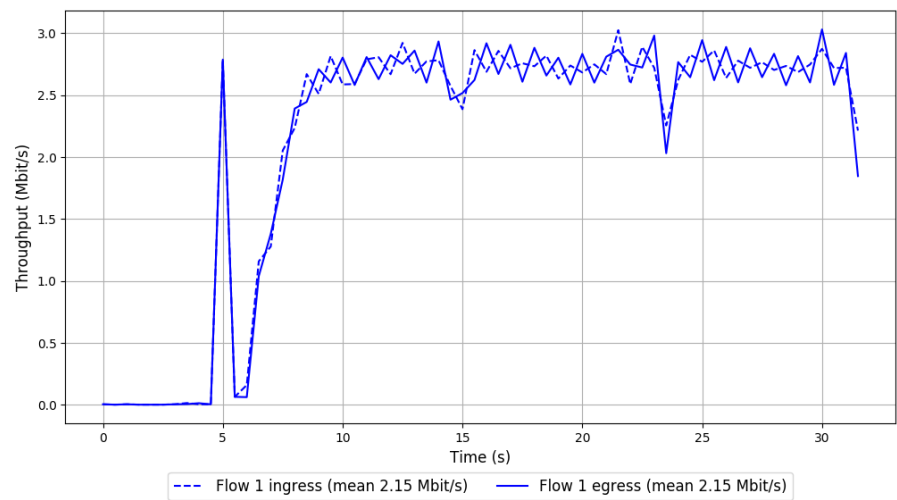
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 53.765 ms

Loss rate: 0.45%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-09-18 03:35:17

End at: 2017-09-18 03:35:47

Below is generated by plot.py at 2017-09-18 07:28:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 54.475 ms

Loss rate: 0.72%

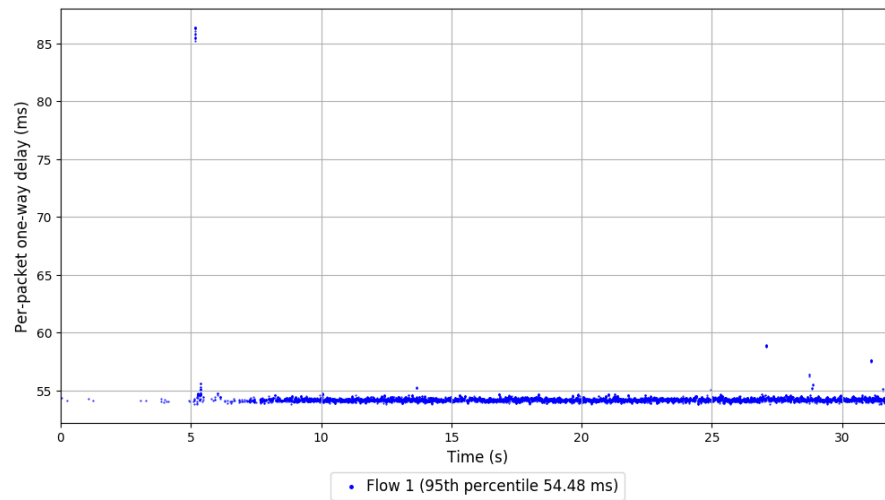
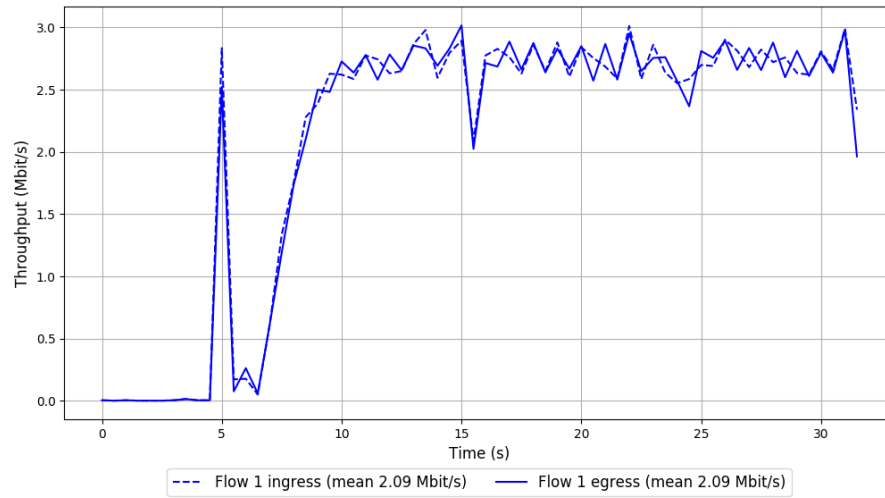
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 54.475 ms

Loss rate: 0.72%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-09-18 03:46:50

End at: 2017-09-18 03:47:20

Below is generated by plot.py at 2017-09-18 07:28:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 53.838 ms

Loss rate: 0.46%

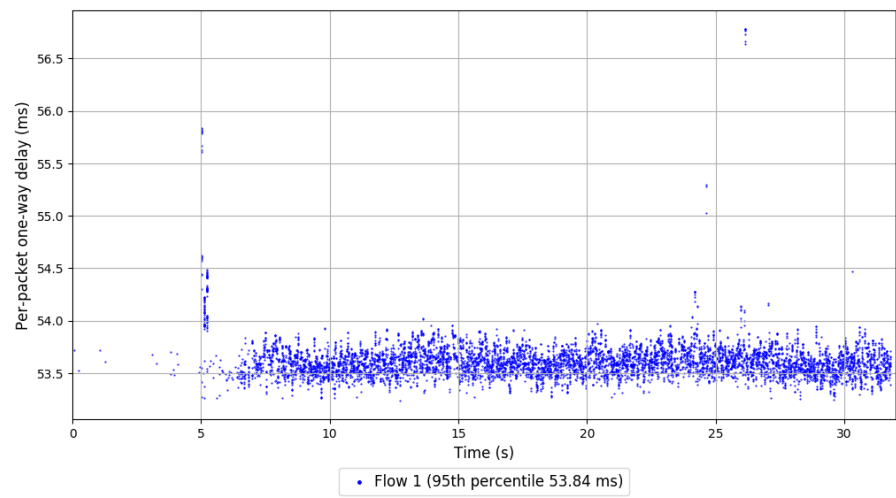
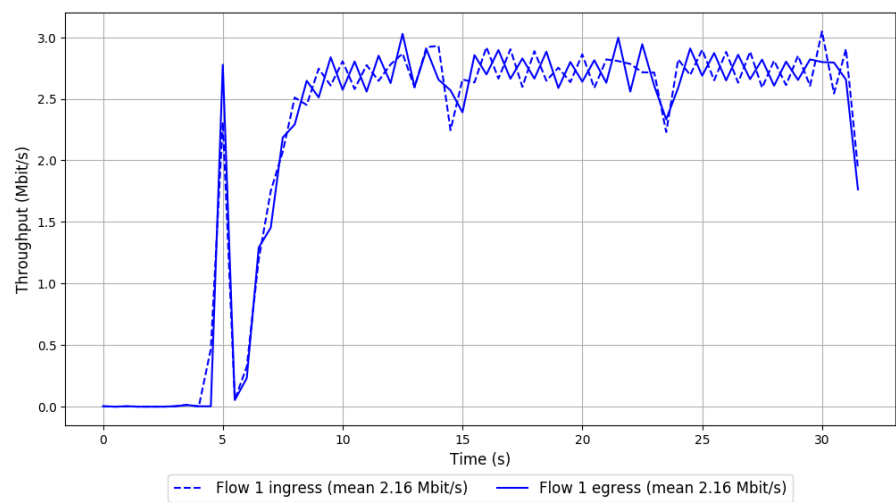
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 53.838 ms

Loss rate: 0.46%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-09-18 03:58:08

End at: 2017-09-18 03:58:38

Below is generated by plot.py at 2017-09-18 07:28:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 50.773 ms

Loss rate: 0.34%

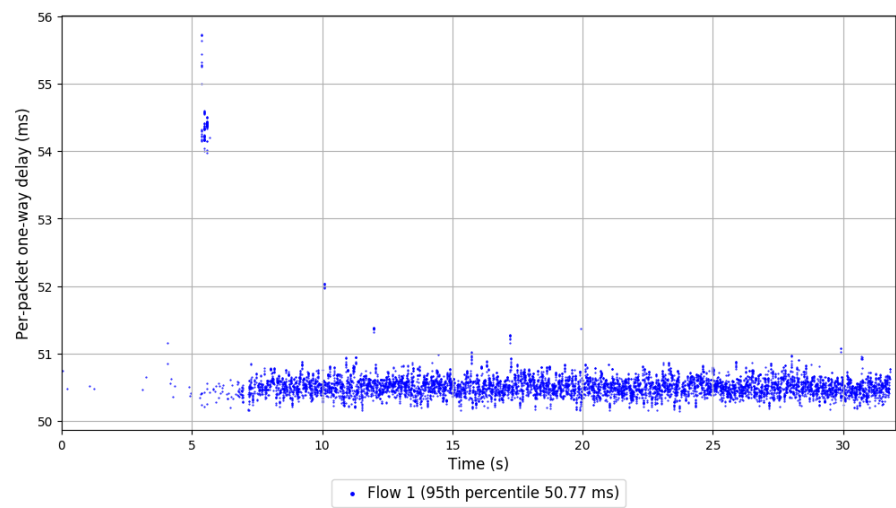
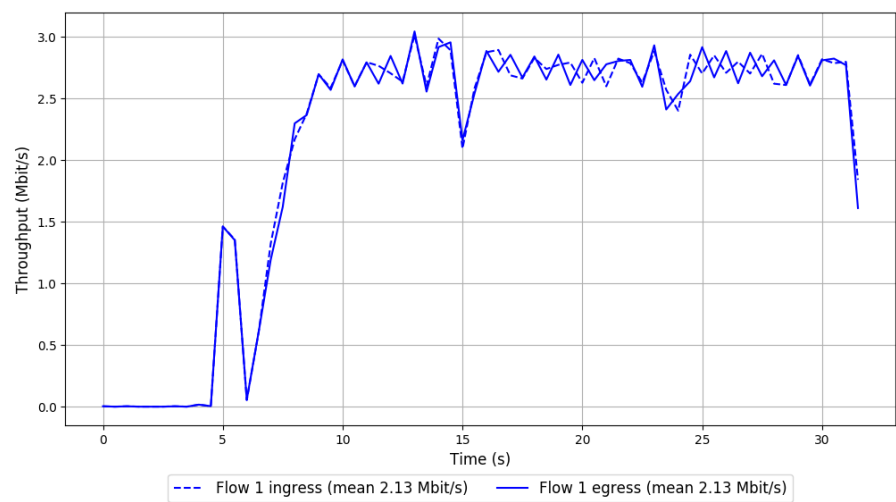
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 50.773 ms

Loss rate: 0.34%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-09-18 04:09:23

End at: 2017-09-18 04:09:53

Below is generated by plot.py at 2017-09-18 07:28:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 50.815 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 50.815 ms

Loss rate: 0.41%

Run 10: Report of WebRTC media — Data Link

