

Pantheon Report

Generated at 2017-08-11 14:55:01 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

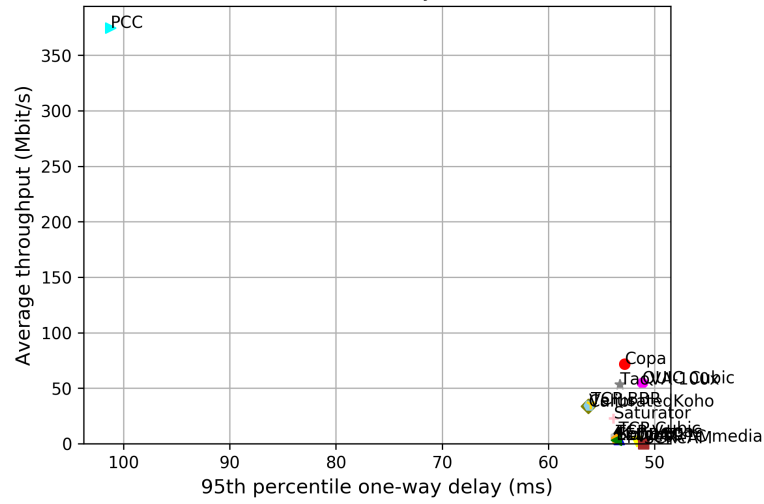
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

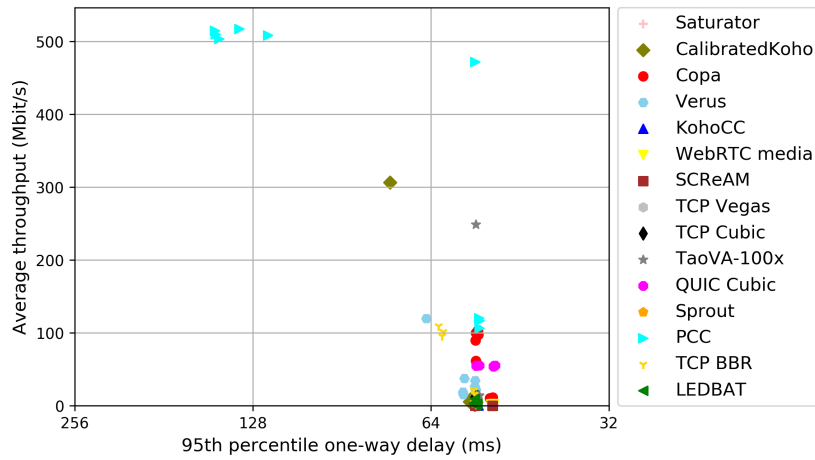
Git summary:

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

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	35.50	56.02	28.73
CalibratedKoho	10	33.81	56.23	62.67
Copa	8	71.87	52.81	22.26
TCP Cubic	10	9.19	53.41	1.77
KohoCC	9	3.91	53.37	63.94
LEDBAT	10	3.29	53.63	3.95
PCC	9	374.62	101.21	3.85
QUIC Cubic	9	54.77	51.17	0.00
Saturator	3	22.68	53.88	0.04
SCReAM	5	0.21	51.04	0.00
Sprout	10	3.99	53.59	17.53
TaoVA-100x	6	53.25	53.28	0.34
TCP Vegas	10	6.28	53.70	1.44
Verus	8	34.56	56.17	70.34
WebRTC media	10	2.27	51.67	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-08-11 12:20:14

End at: 2017-08-11 12:20:44

Below is generated by plot.py at 2017-08-11 14:41:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.77 Mbit/s

95th percentile per-packet one-way delay: 61.003 ms

Loss rate: 4.24%

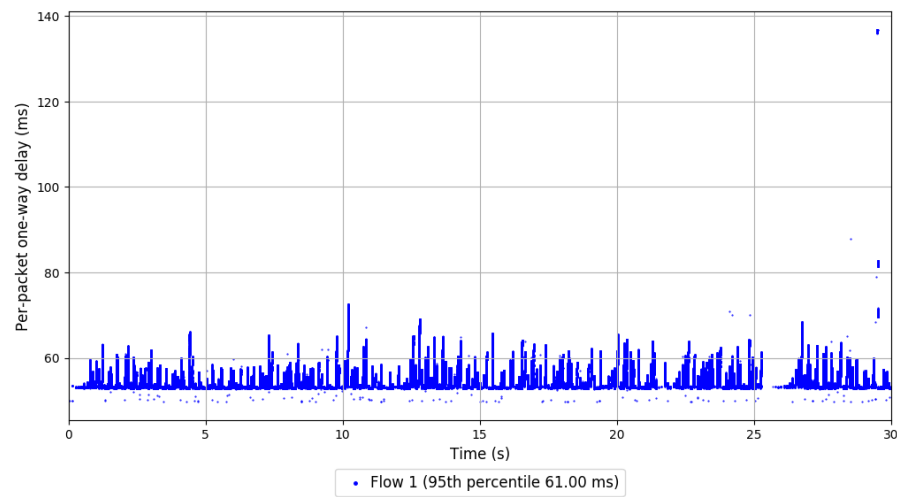
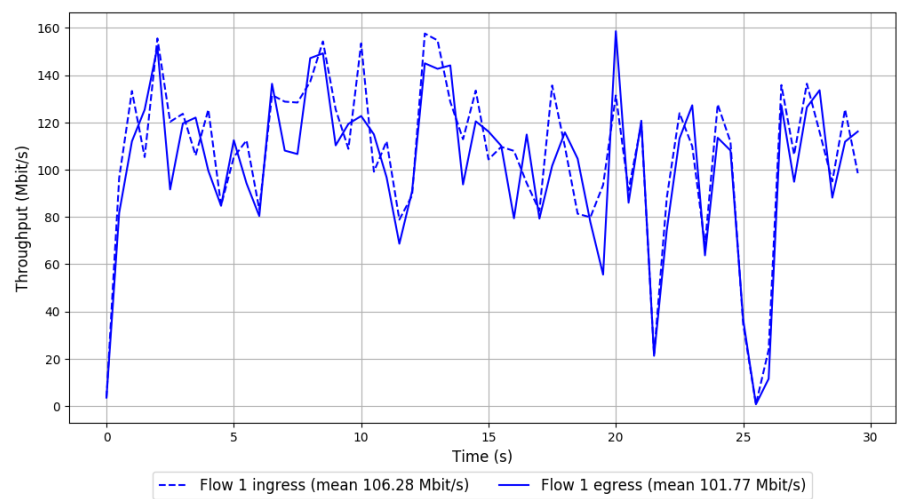
-- Flow 1:

Average throughput: 101.77 Mbit/s

95th percentile per-packet one-way delay: 61.003 ms

Loss rate: 4.24%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-11 12:29:50

End at: 2017-08-11 12:30:20

Below is generated by plot.py at 2017-08-11 14:41:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.73 Mbit/s

95th percentile per-packet one-way delay: 54.171 ms

Loss rate: 39.02%

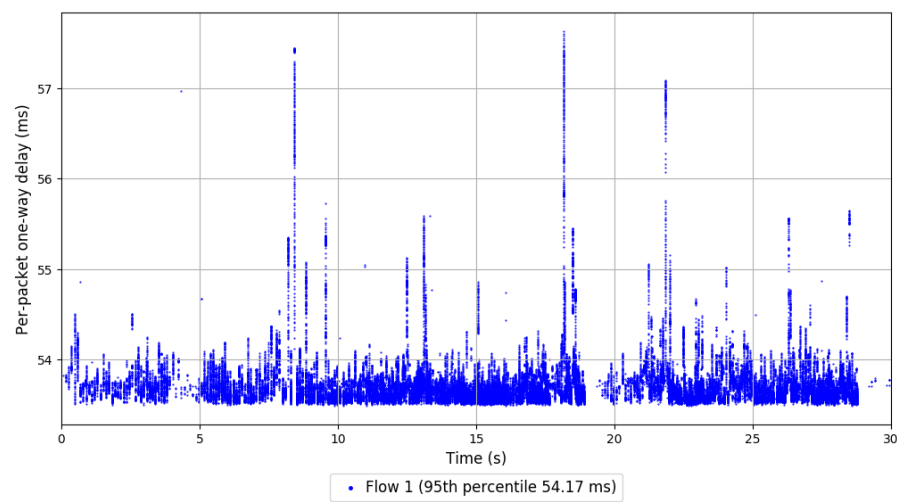
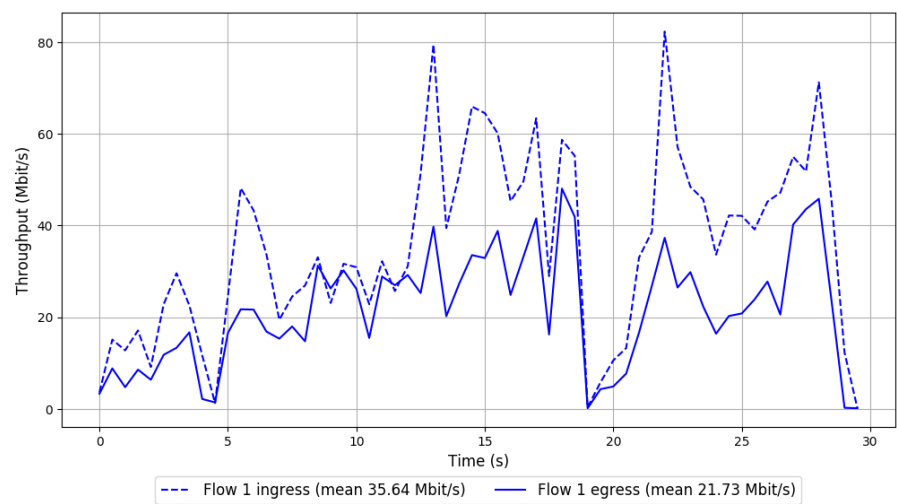
-- Flow 1:

Average throughput: 21.73 Mbit/s

95th percentile per-packet one-way delay: 54.171 ms

Loss rate: 39.02%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-11 12:39:26

End at: 2017-08-11 12:39:56

Below is generated by plot.py at 2017-08-11 14:41:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 53.469 ms

Loss rate: 51.20%

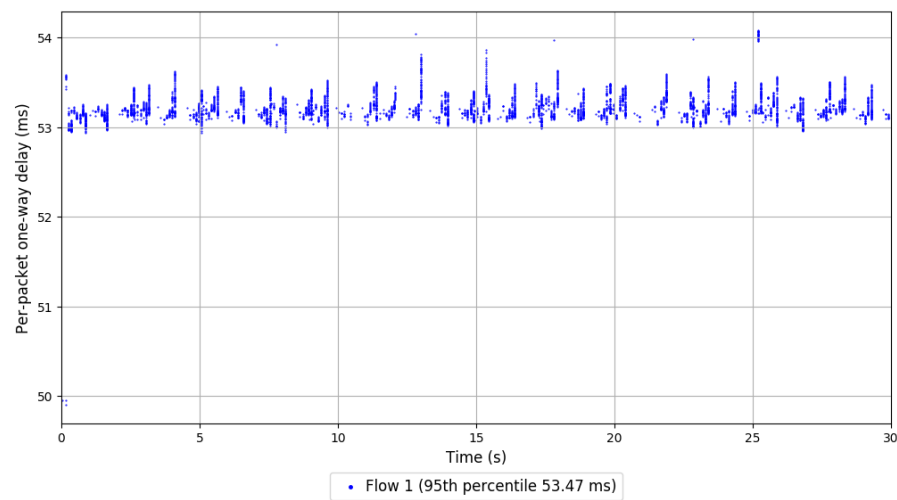
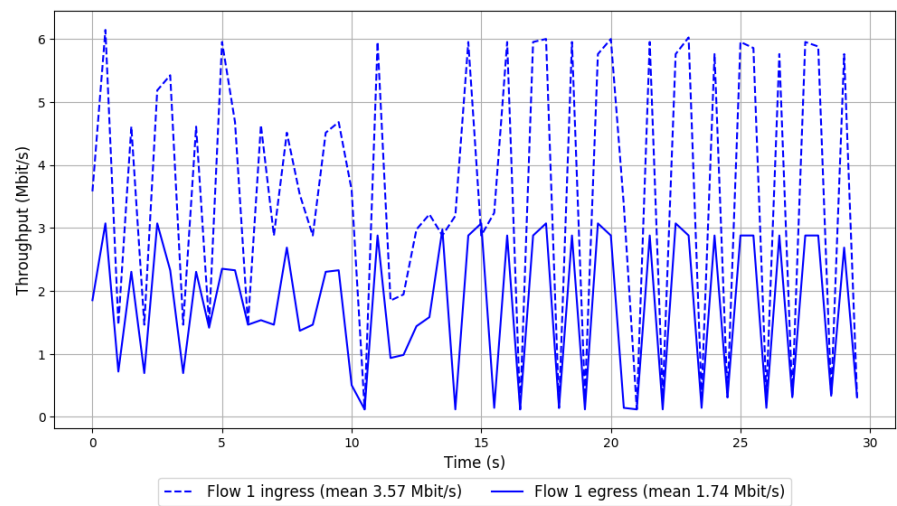
-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 53.469 ms

Loss rate: 51.20%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-11 12:49:44

End at: 2017-08-11 12:50:14

Below is generated by plot.py at 2017-08-11 14:41:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.85 Mbit/s

95th percentile per-packet one-way delay: 61.278 ms

Loss rate: 3.39%

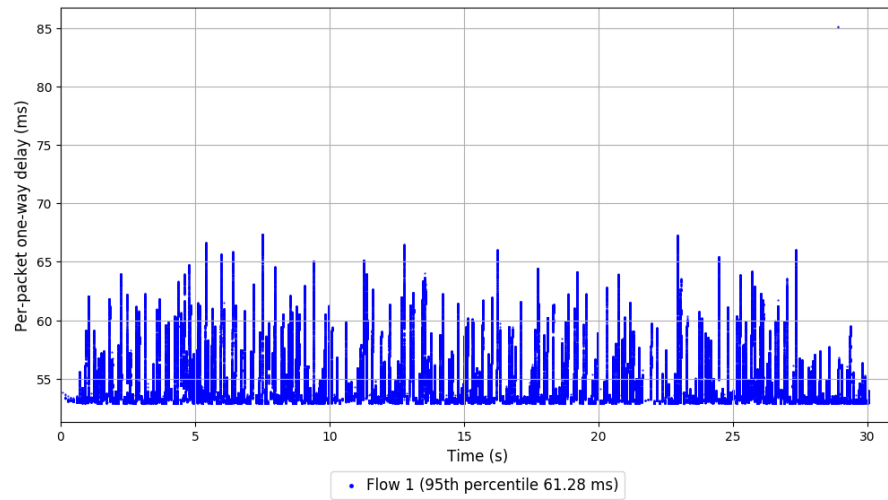
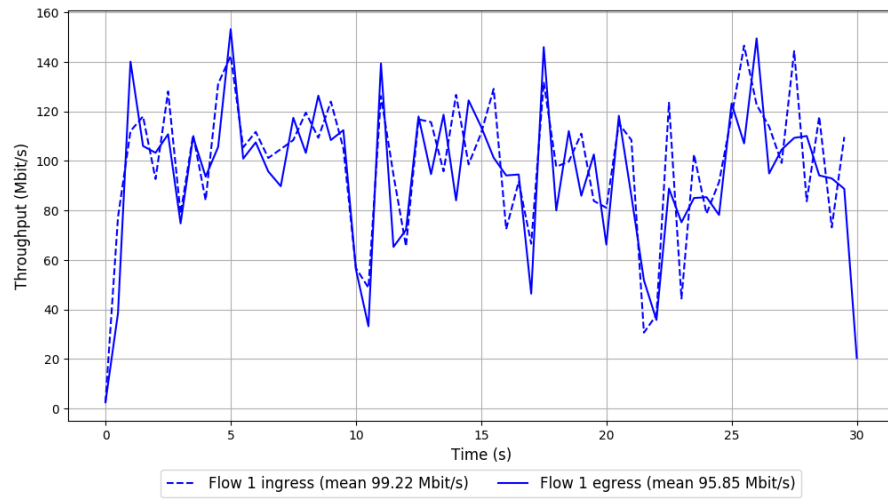
-- Flow 1:

Average throughput: 95.85 Mbit/s

95th percentile per-packet one-way delay: 61.278 ms

Loss rate: 3.39%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

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

End at: 2017-08-11 13:00:29

Below is generated by plot.py at 2017-08-11 14:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.53 Mbit/s

95th percentile per-packet one-way delay: 62.142 ms

Loss rate: 4.48%

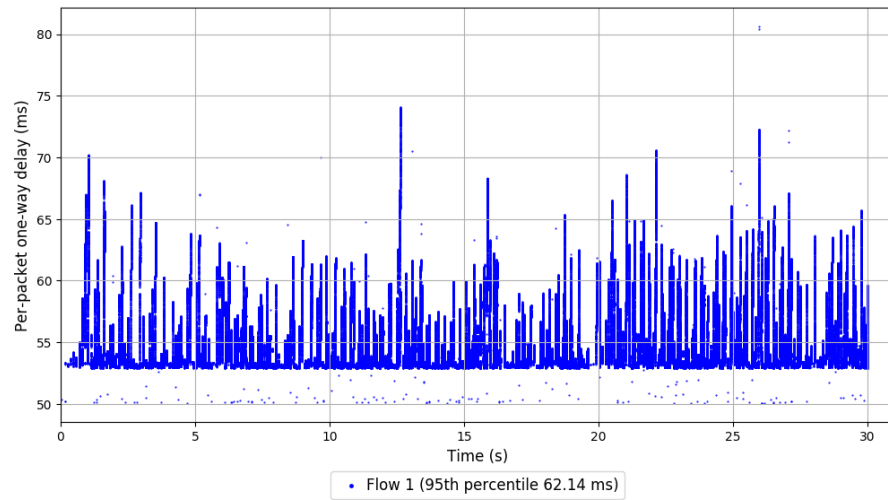
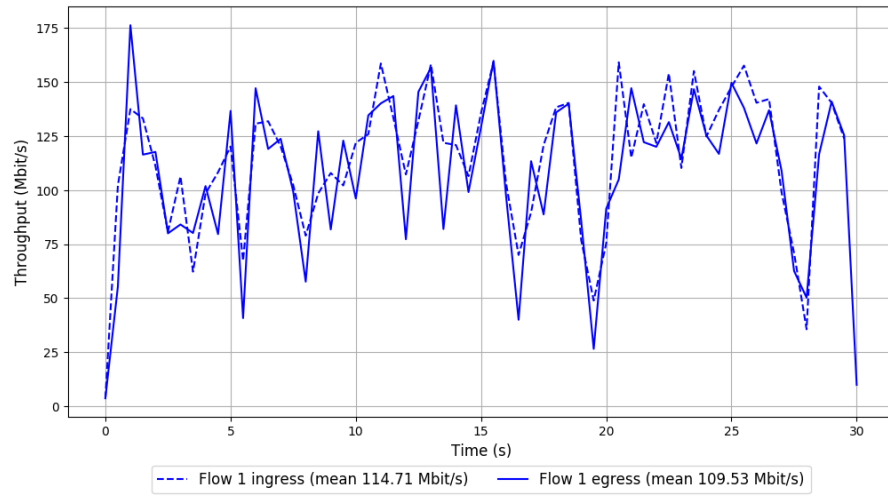
-- Flow 1:

Average throughput: 109.53 Mbit/s

95th percentile per-packet one-way delay: 62.142 ms

Loss rate: 4.48%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-11 13:09:59

End at: 2017-08-11 13:10:29

Below is generated by plot.py at 2017-08-11 14:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 53.341 ms

Loss rate: 32.41%

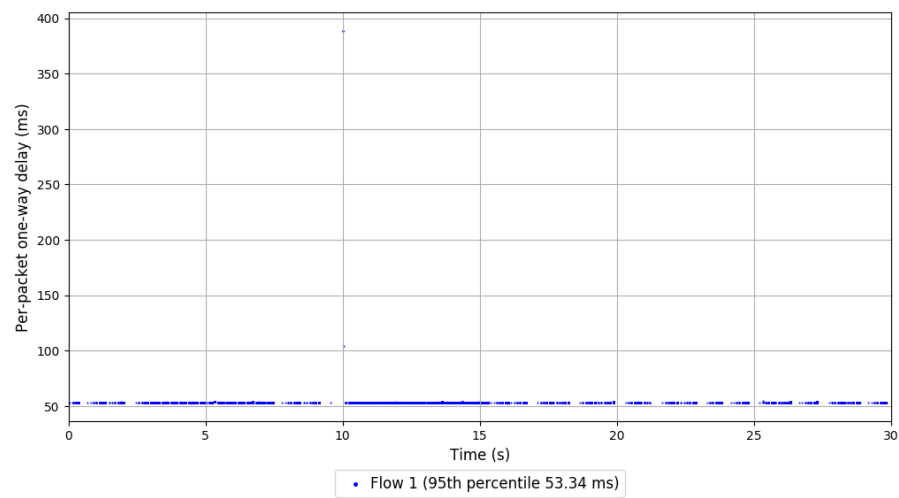
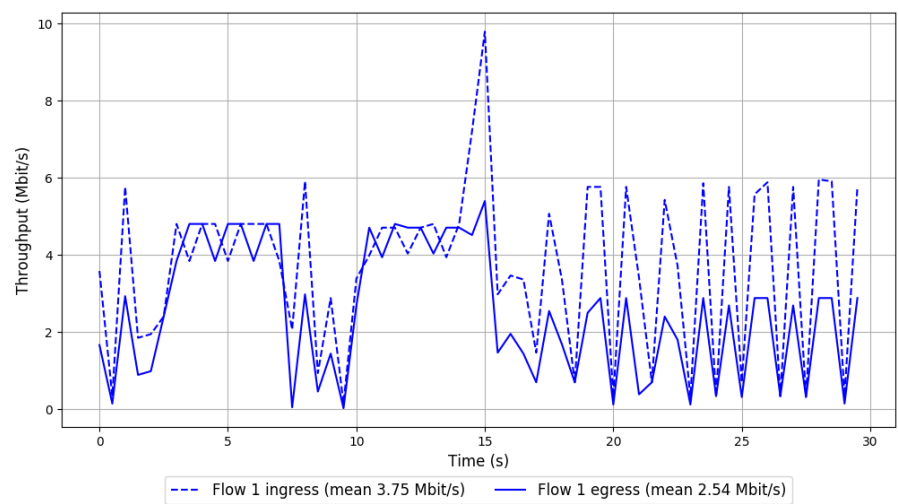
-- Flow 1:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 53.341 ms

Loss rate: 32.41%

Run 6: Report of TCP BBR — Data Link

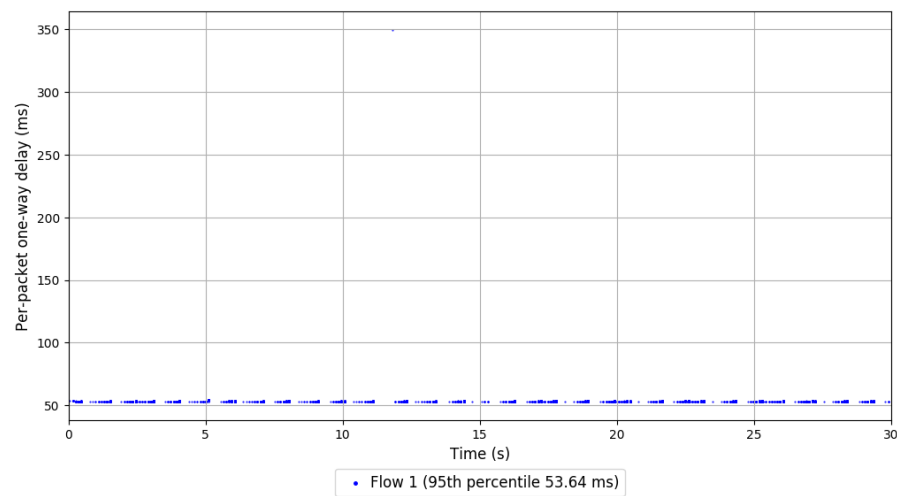
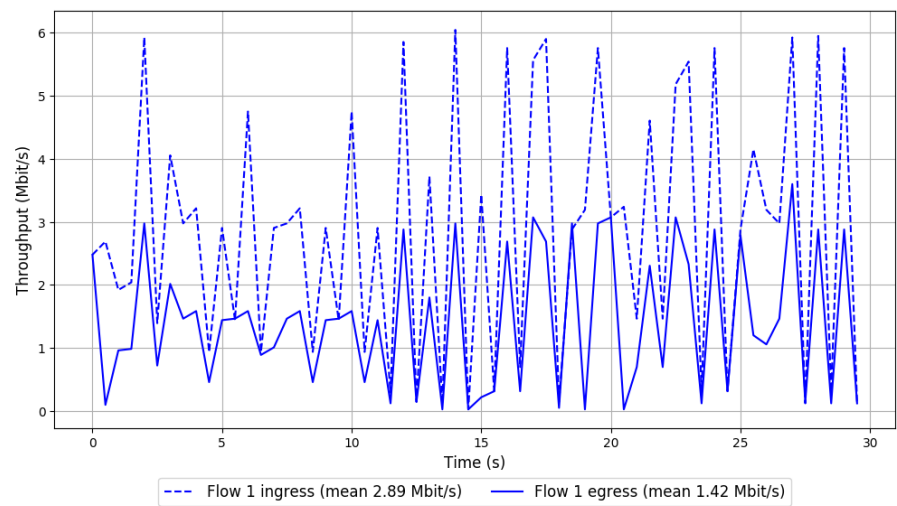


```
Run 7: Statistics of TCP BBR

Start at: 2017-08-11 13:19:58
End at: 2017-08-11 13:20:28

# Below is generated by plot.py at 2017-08-11 14:41:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 53.641 ms
Loss rate: 50.80%
-- Flow 1:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 53.641 ms
Loss rate: 50.80%
```

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-11 13:29:51

End at: 2017-08-11 13:30:21

Below is generated by plot.py at 2017-08-11 14:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.93 Mbit/s

95th percentile per-packet one-way delay: 54.003 ms

Loss rate: 29.30%

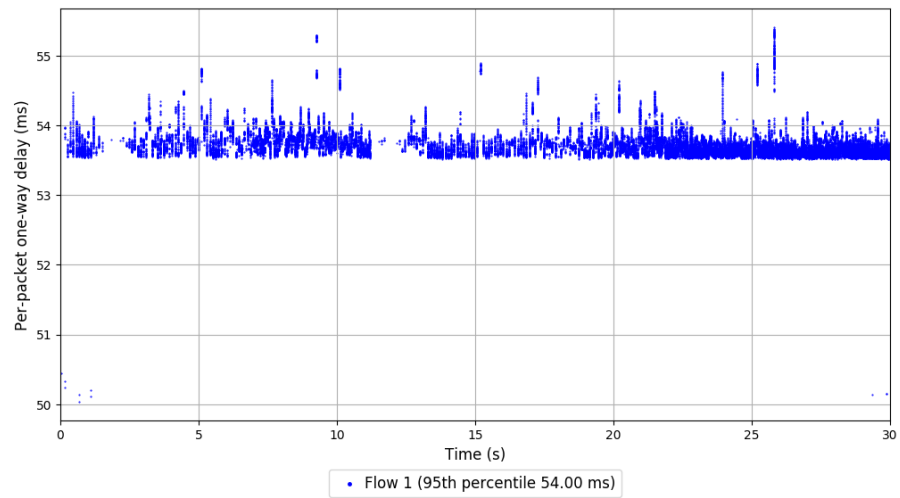
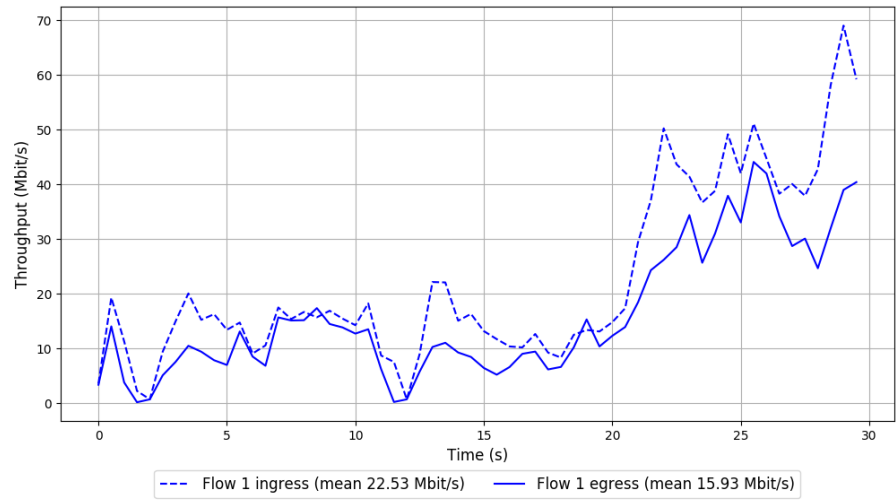
-- Flow 1:

Average throughput: 15.93 Mbit/s

95th percentile per-packet one-way delay: 54.003 ms

Loss rate: 29.30%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-11 13:39:41

End at: 2017-08-11 13:40:11

Below is generated by plot.py at 2017-08-11 14:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 53.717 ms

Loss rate: 42.12%

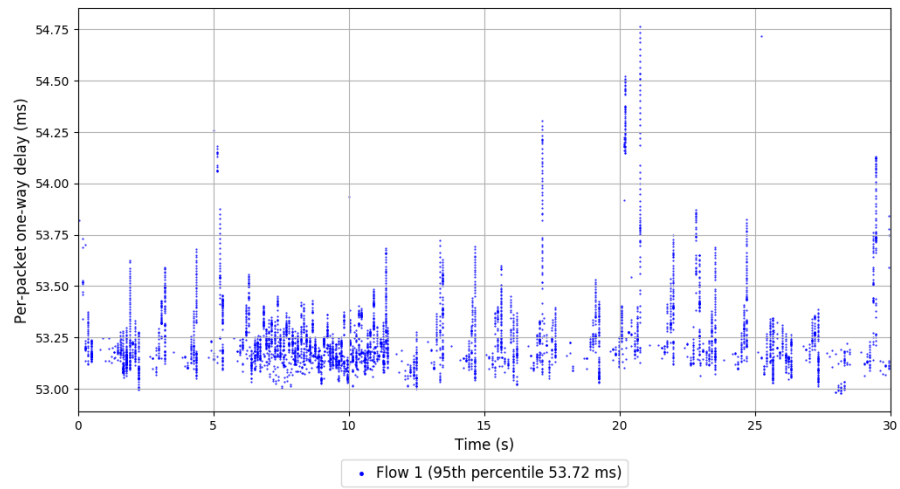
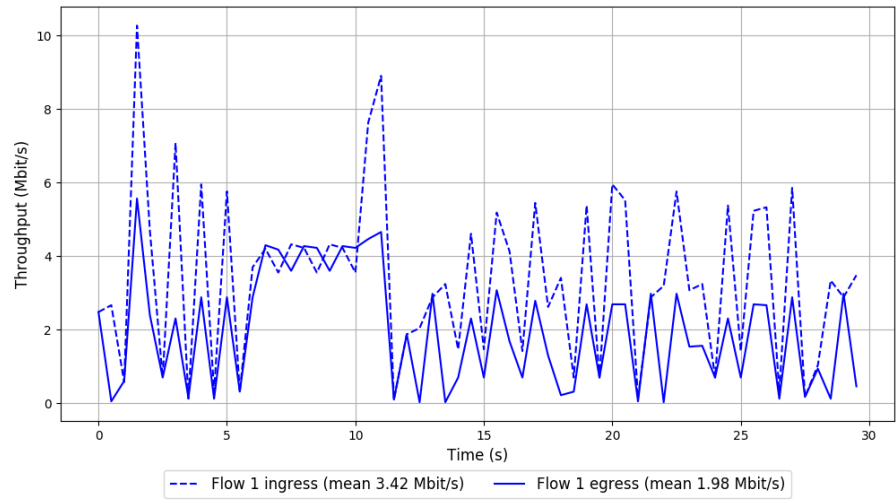
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 53.717 ms

Loss rate: 42.12%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-11 13:49:21

End at: 2017-08-11 13:49:52

Below is generated by plot.py at 2017-08-11 14:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 53.479 ms

Loss rate: 30.29%

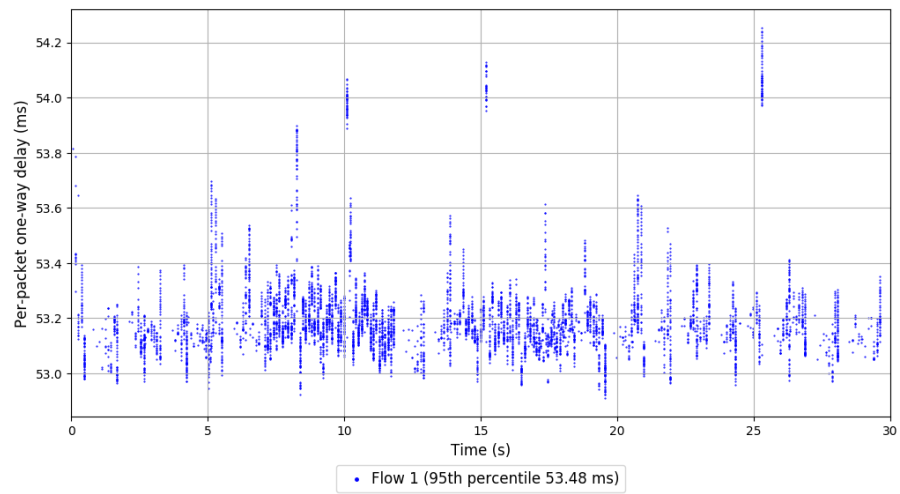
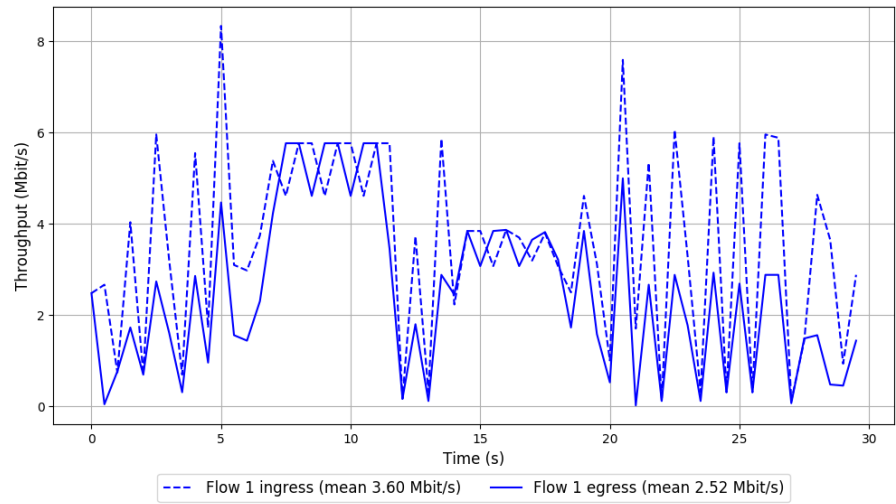
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 53.479 ms

Loss rate: 30.29%

Run 10: Report of TCP BBR — Data Link

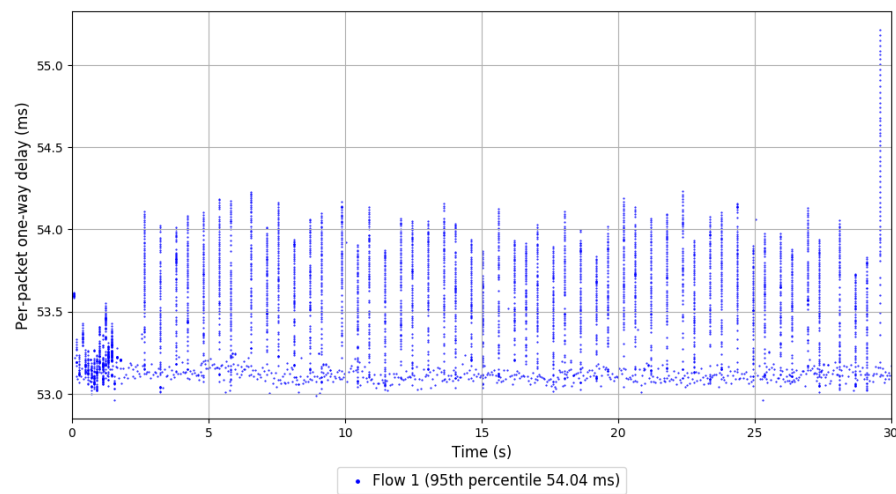
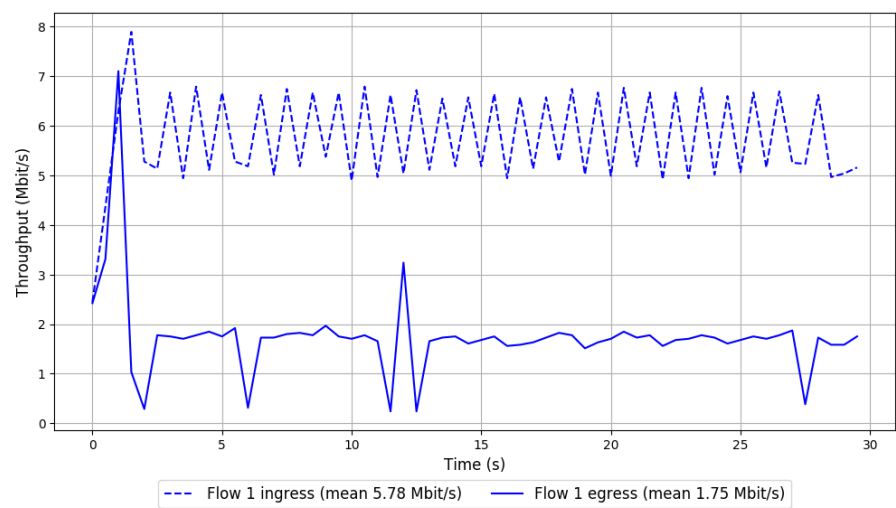


```
Run 1: Statistics of CalibratedKoho

Start at: 2017-08-11 12:22:12
End at: 2017-08-11 12:22:42

# Below is generated by plot.py at 2017-08-11 14:41:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 54.039 ms
Loss rate: 69.72%
-- Flow 1:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 54.039 ms
Loss rate: 69.72%
```

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-11 12:31:46

End at: 2017-08-11 12:32:16

Below is generated by plot.py at 2017-08-11 14:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 54.012 ms

Loss rate: 69.88%

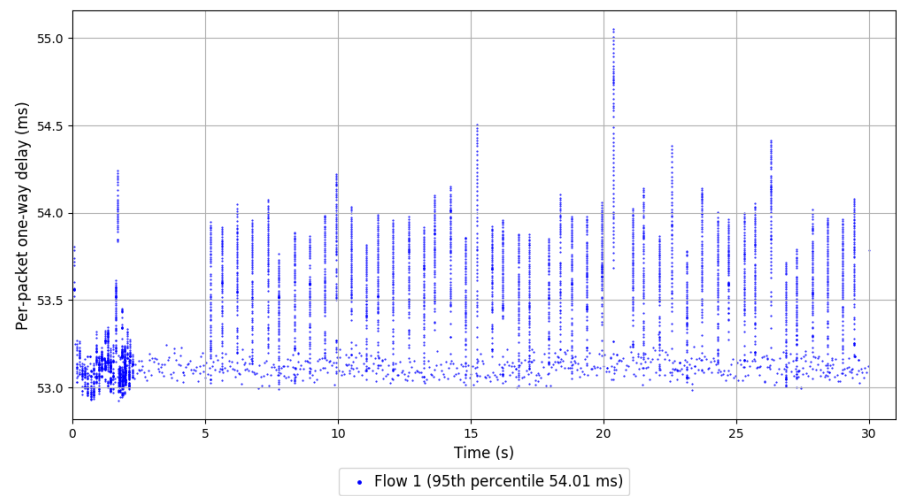
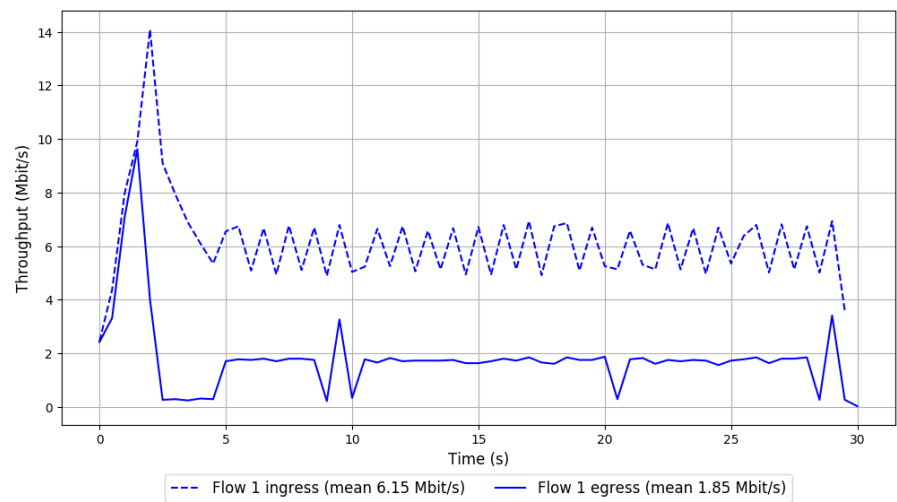
-- Flow 1:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 54.012 ms

Loss rate: 69.88%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-11 12:41:21

End at: 2017-08-11 12:41:51

Below is generated by plot.py at 2017-08-11 14:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 53.880 ms

Loss rate: 69.71%

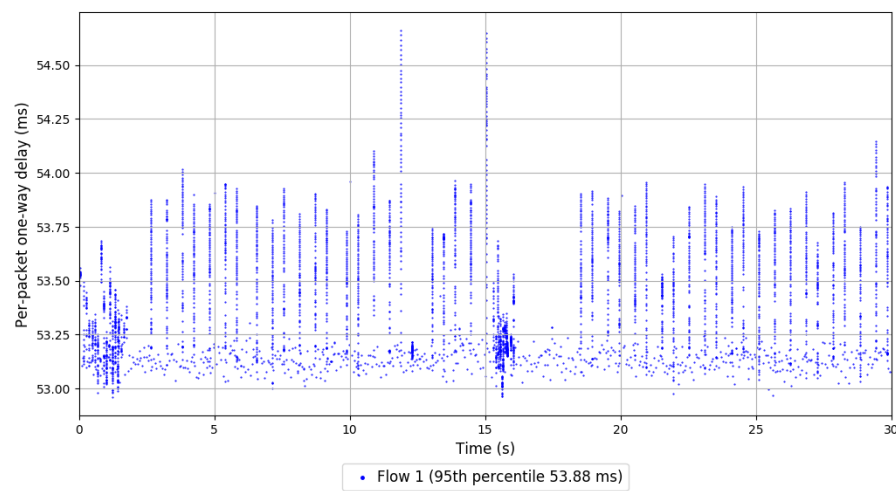
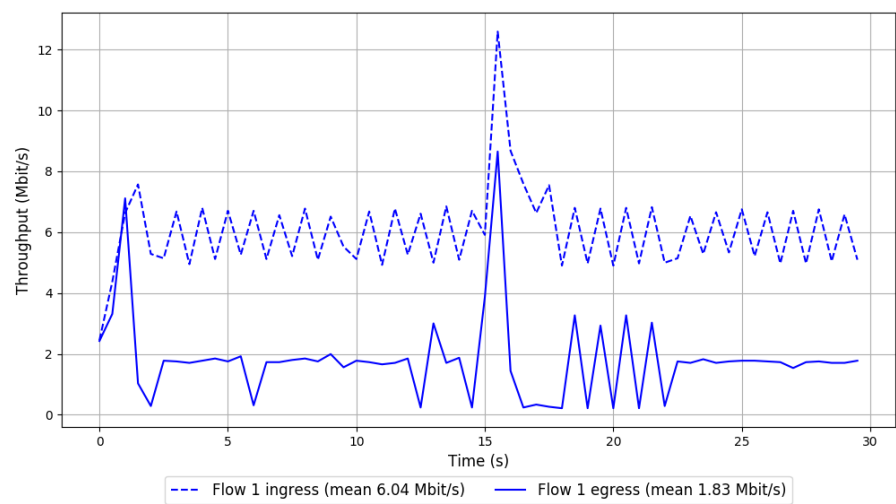
-- Flow 1:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 53.880 ms

Loss rate: 69.71%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-11 12:51:45

End at: 2017-08-11 12:52:15

Below is generated by plot.py at 2017-08-11 14:42:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 306.61 Mbit/s

95th percentile per-packet one-way delay: 75.047 ms

Loss rate: 0.03%

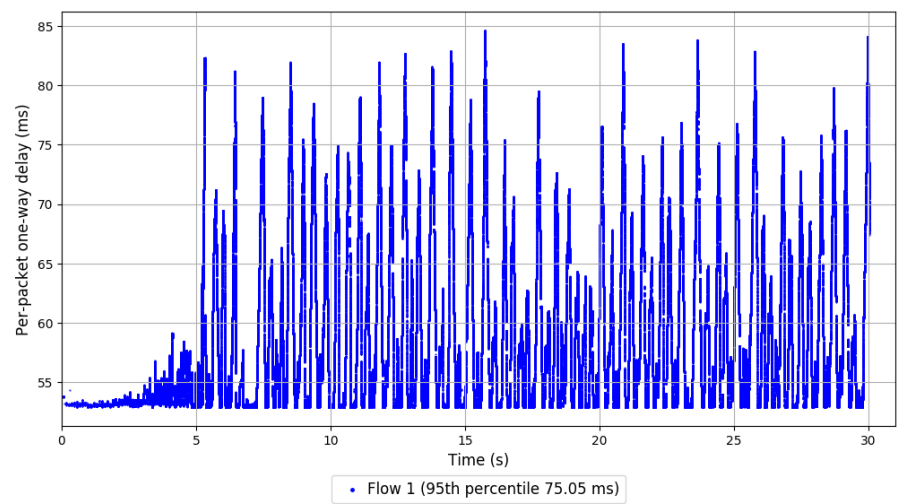
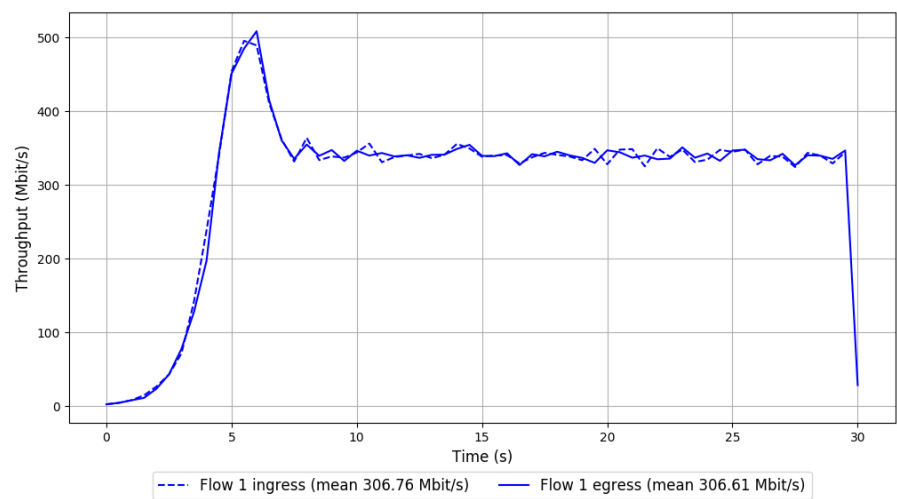
-- Flow 1:

Average throughput: 306.61 Mbit/s

95th percentile per-packet one-way delay: 75.047 ms

Loss rate: 0.03%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-11 13:02:01

End at: 2017-08-11 13:02:31

Below is generated by plot.py at 2017-08-11 14:42:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 53.841 ms

Loss rate: 69.85%

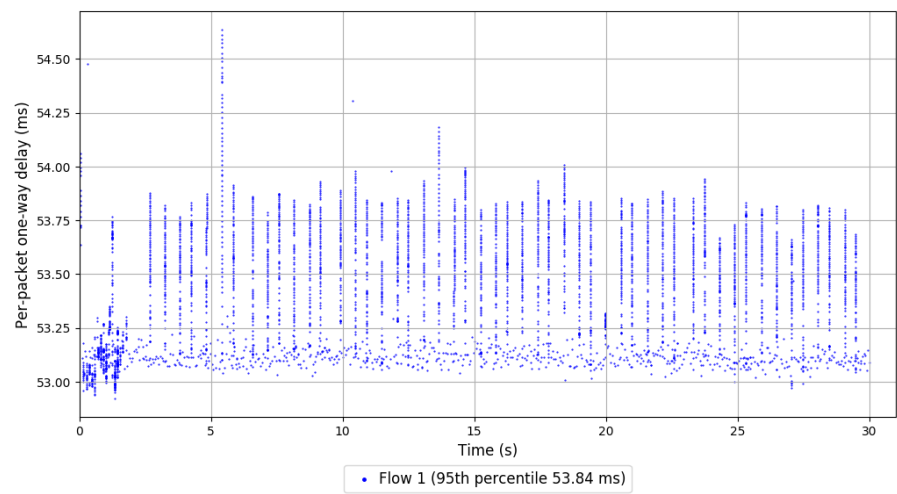
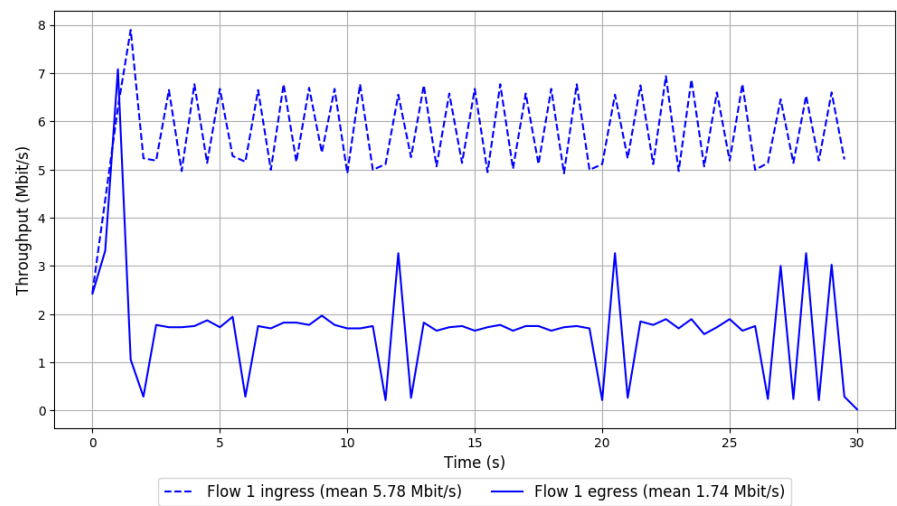
-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 53.841 ms

Loss rate: 69.85%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-11 13:11:54

End at: 2017-08-11 13:12:24

Below is generated by plot.py at 2017-08-11 14:42:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.80 Mbit/s

95th percentile per-packet one-way delay: 54.550 ms

Loss rate: 69.53%

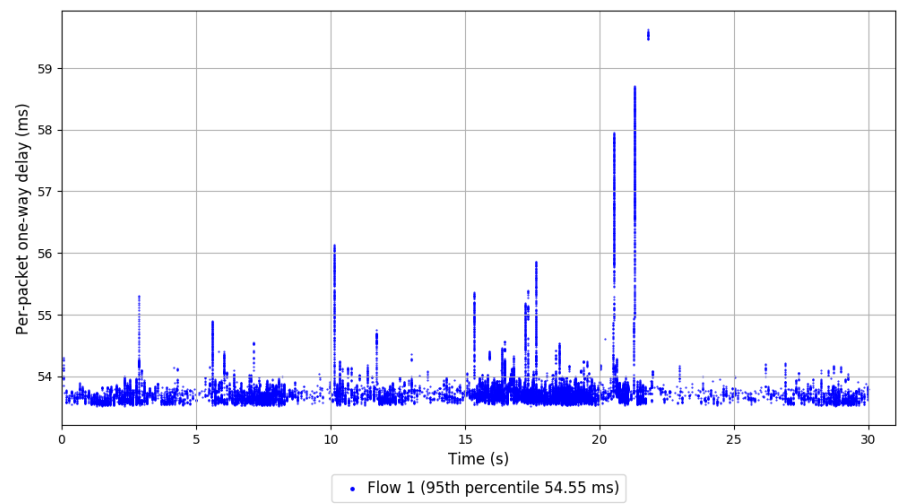
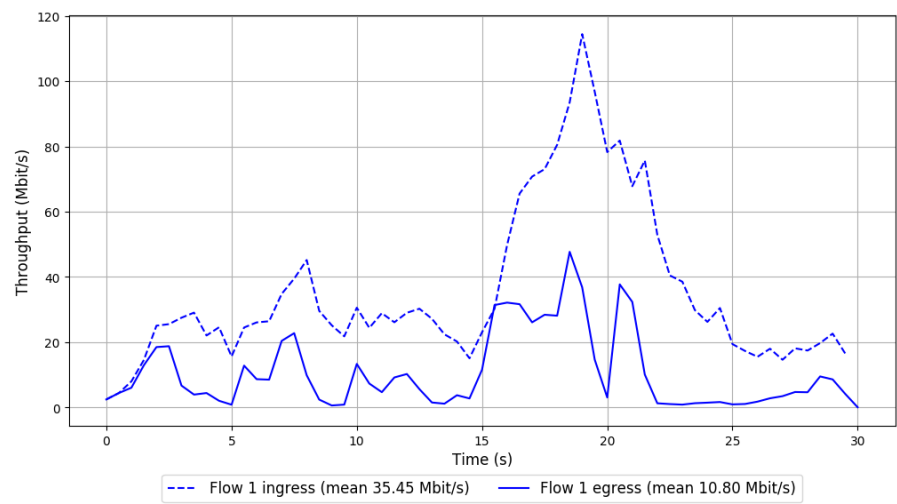
-- Flow 1:

Average throughput: 10.80 Mbit/s

95th percentile per-packet one-way delay: 54.550 ms

Loss rate: 69.53%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-11 13:21:52

End at: 2017-08-11 13:22:22

Below is generated by plot.py at 2017-08-11 14:42:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 53.912 ms

Loss rate: 69.64%

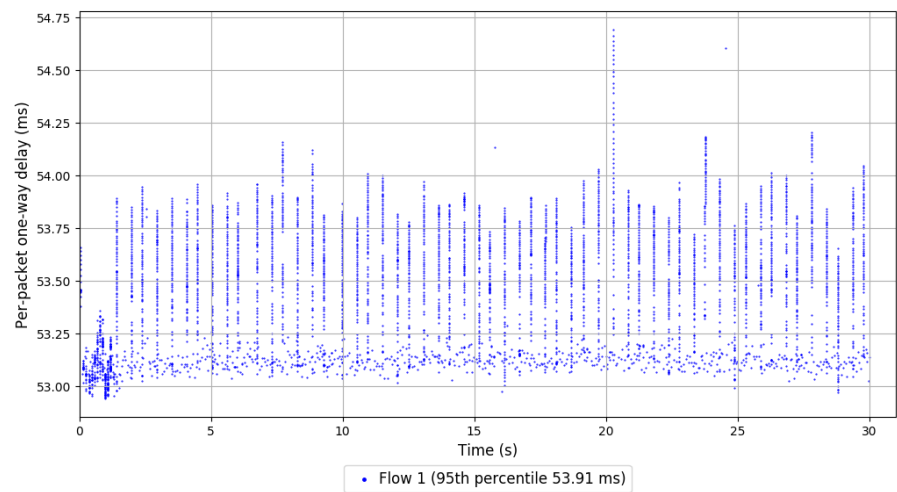
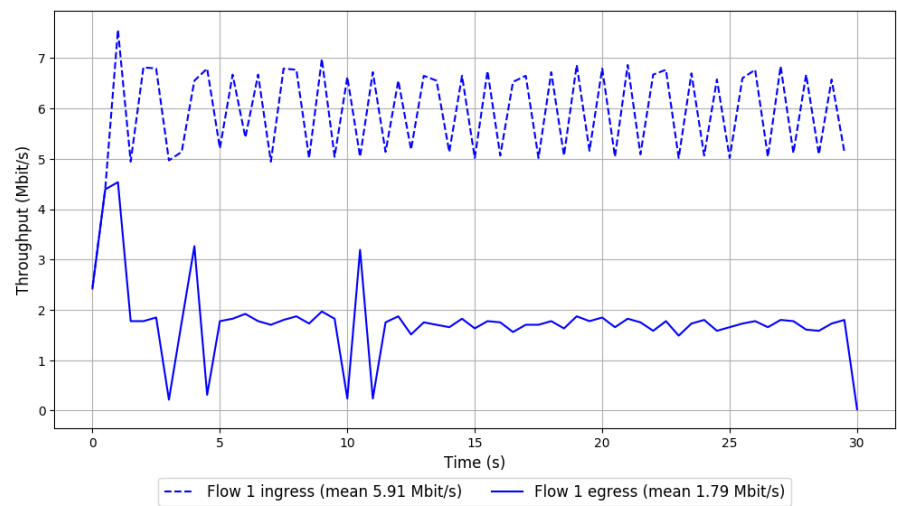
-- Flow 1:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 53.912 ms

Loss rate: 69.64%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-11 13:31:47

End at: 2017-08-11 13:32:17

Below is generated by plot.py at 2017-08-11 14:42:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 54.008 ms

Loss rate: 69.07%

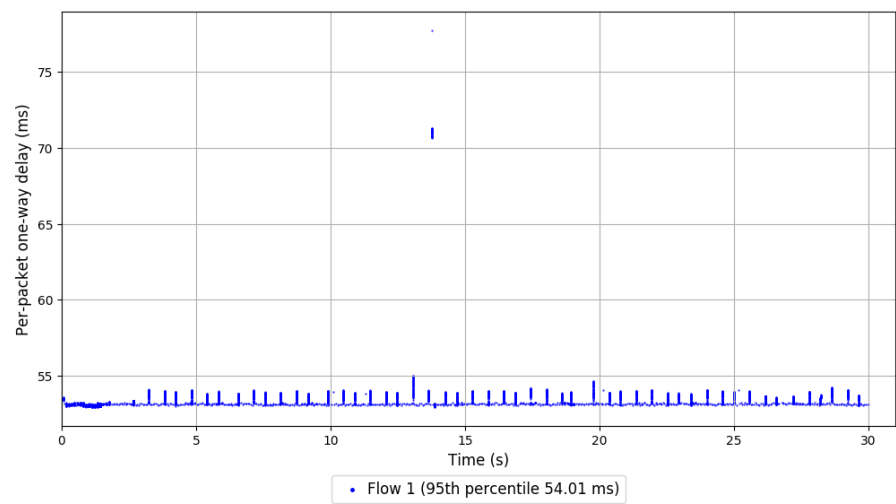
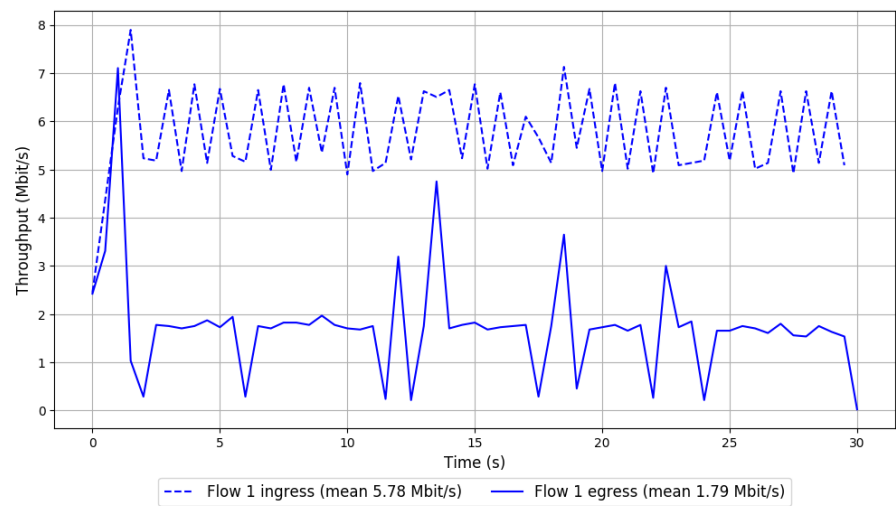
-- Flow 1:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 54.008 ms

Loss rate: 69.07%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-11 13:41:36

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

Below is generated by plot.py at 2017-08-11 14:42:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 54.032 ms

Loss rate: 69.03%

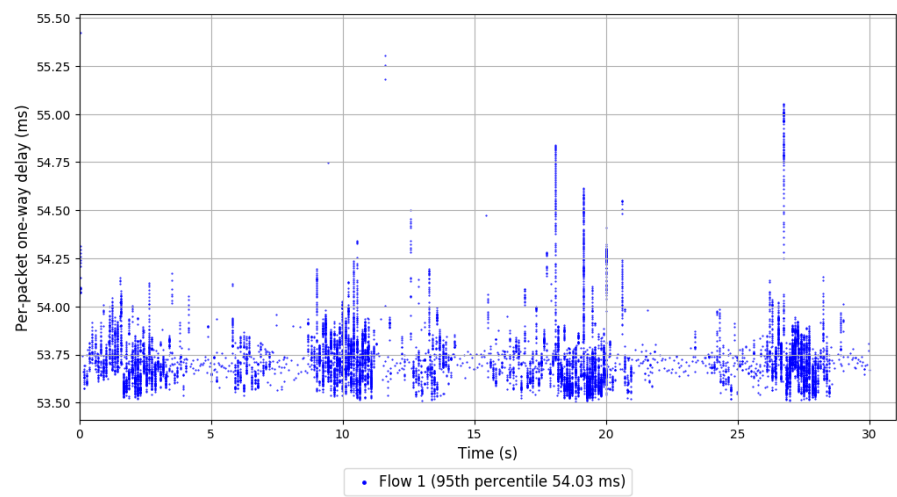
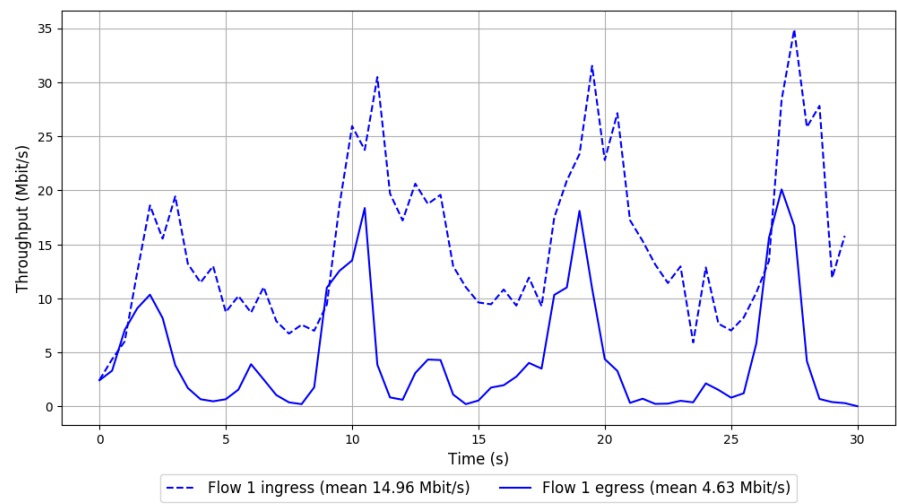
-- Flow 1:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 54.032 ms

Loss rate: 69.03%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-11 13:51:16

End at: 2017-08-11 13:51:46

Below is generated by plot.py at 2017-08-11 14:42:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 55.017 ms

Loss rate: 70.25%

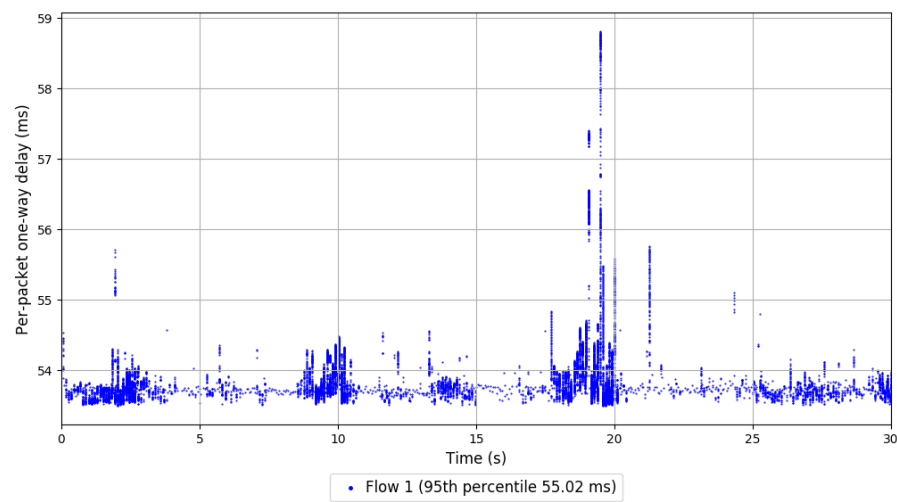
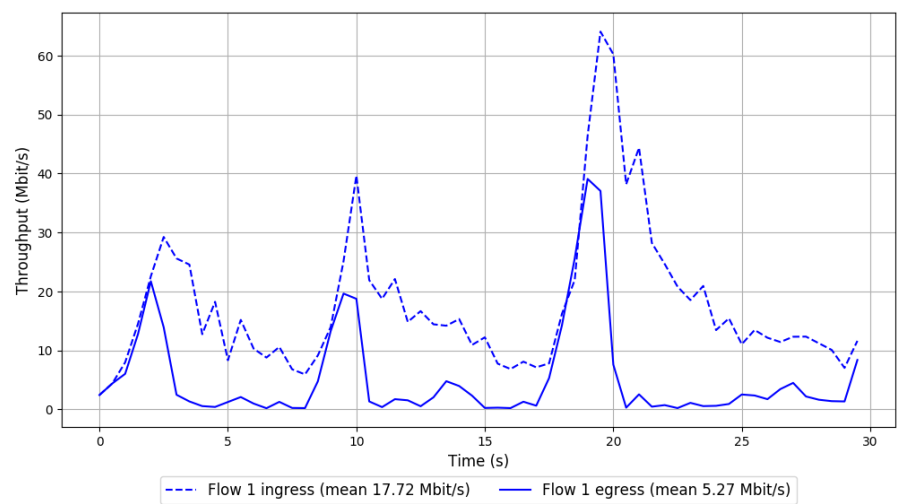
-- Flow 1:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 55.017 ms

Loss rate: 70.25%

Run 10: Report of CalibratedKoho — Data Link

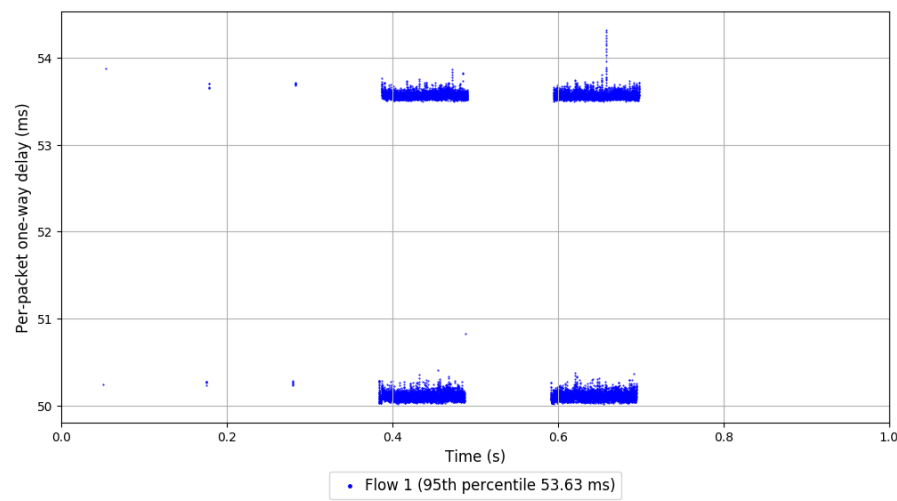
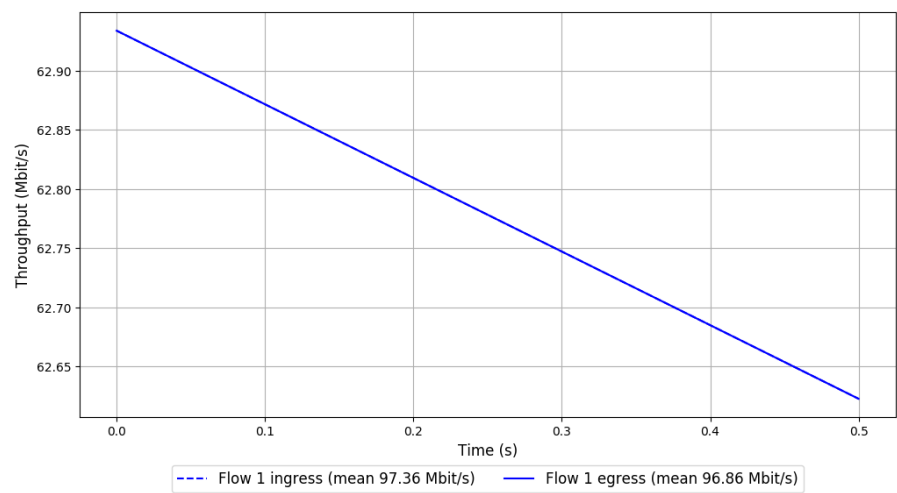


Run 1: Statistics of Copa

Start at: 2017-08-11 12:23:27

End at: 2017-08-11 12:23:57

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-11 12:33:01

End at: 2017-08-11 12:33:31

Below is generated by plot.py at 2017-08-11 14:42:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.84 Mbit/s

95th percentile per-packet one-way delay: 53.696 ms

Loss rate: 0.20%

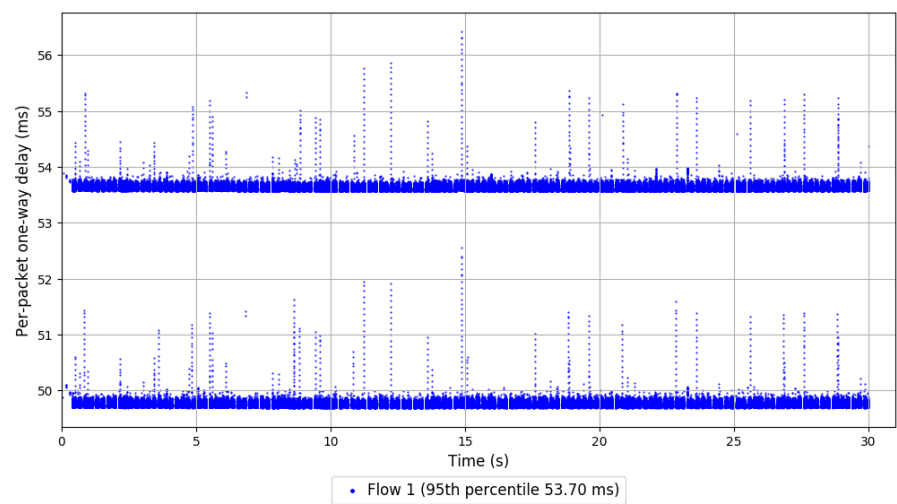
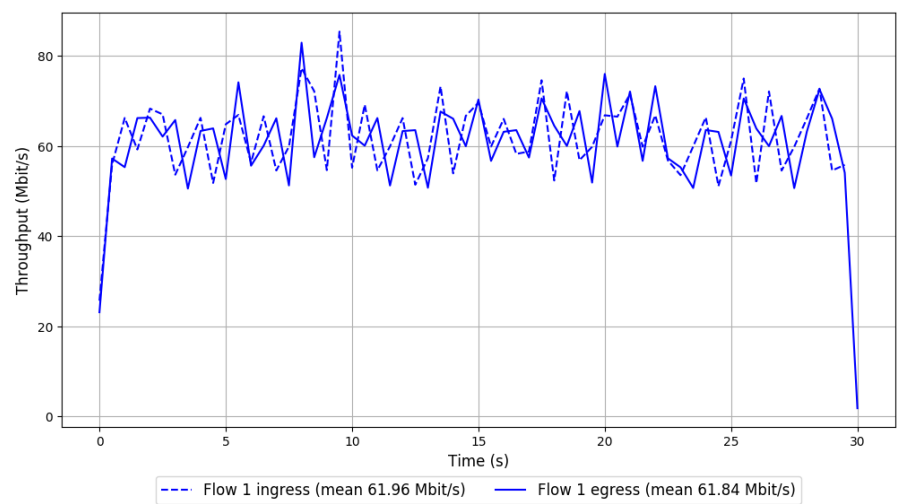
-- Flow 1:

Average throughput: 61.84 Mbit/s

95th percentile per-packet one-way delay: 53.696 ms

Loss rate: 0.20%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-11 12:42:36

End at: 2017-08-11 12:43:06

Below is generated by plot.py at 2017-08-11 14:43:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.68 Mbit/s

95th percentile per-packet one-way delay: 53.204 ms

Loss rate: 0.00%

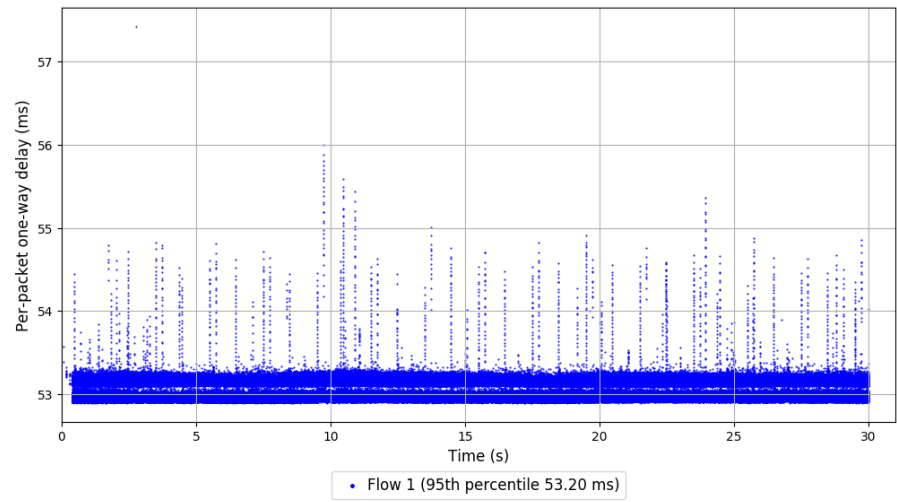
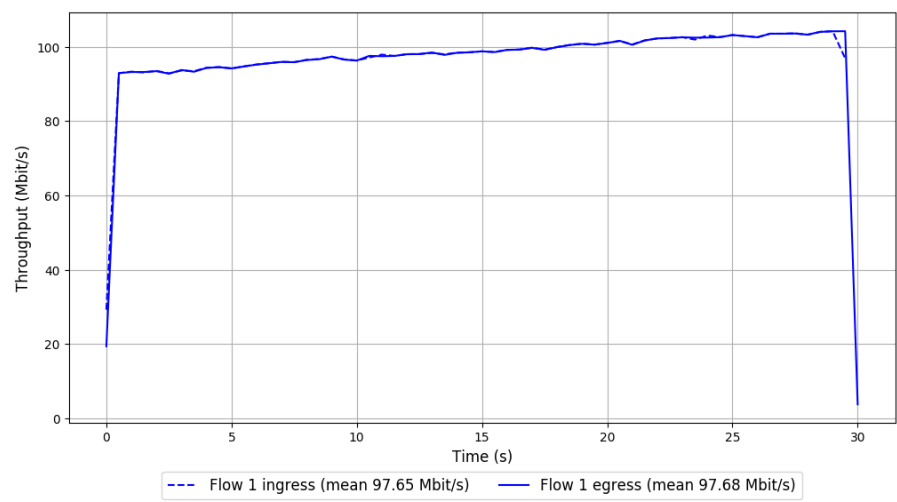
-- Flow 1:

Average throughput: 97.68 Mbit/s

95th percentile per-packet one-way delay: 53.204 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-11 12:53:20

End at: 2017-08-11 12:53:50

Below is generated by plot.py at 2017-08-11 14:43:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.38 Mbit/s

95th percentile per-packet one-way delay: 50.873 ms

Loss rate: 87.88%

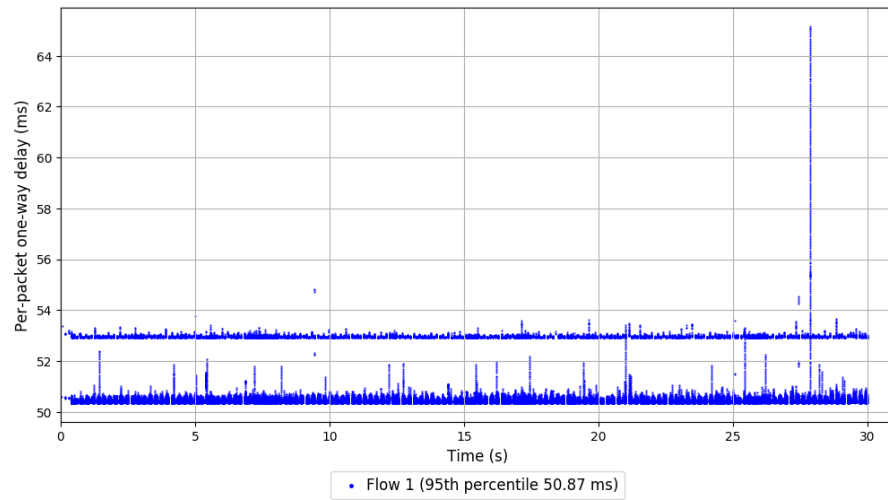
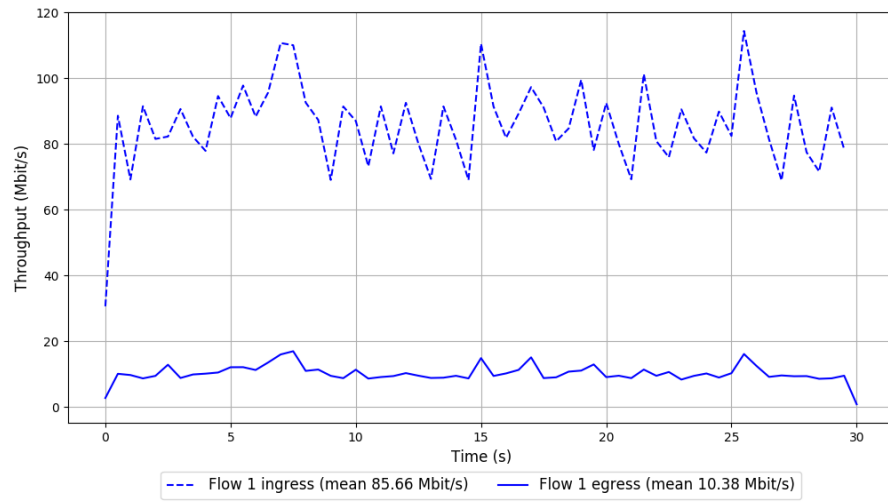
-- Flow 1:

Average throughput: 10.38 Mbit/s

95th percentile per-packet one-way delay: 50.873 ms

Loss rate: 87.88%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-11 13:03:16

End at: 2017-08-11 13:03:46

Below is generated by plot.py at 2017-08-11 14:43:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.98 Mbit/s

95th percentile per-packet one-way delay: 53.802 ms

Loss rate: 0.01%

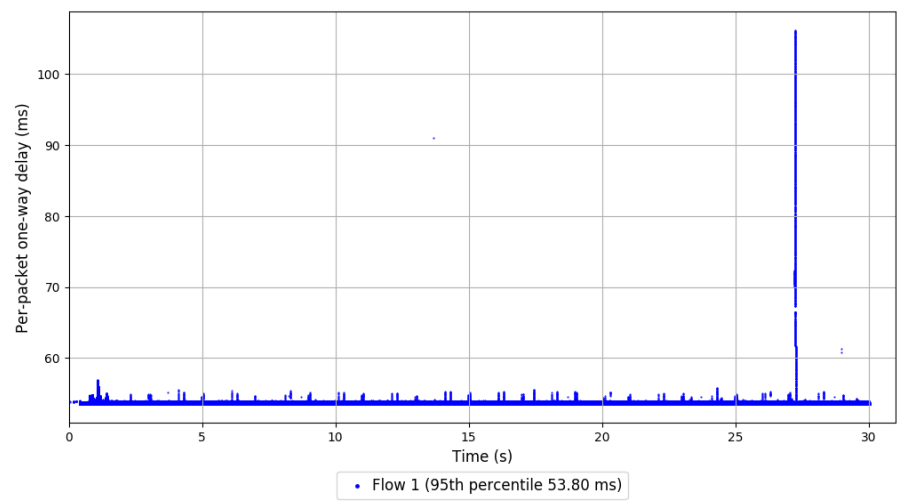
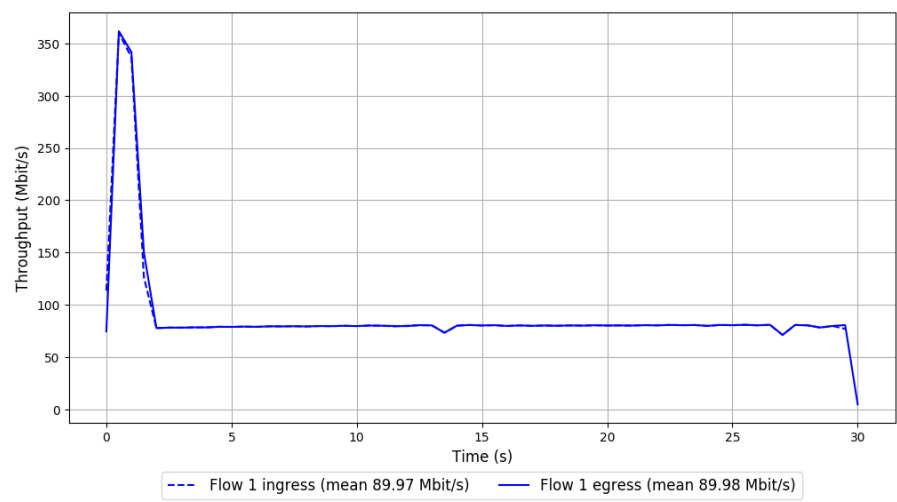
-- Flow 1:

Average throughput: 89.98 Mbit/s

95th percentile per-packet one-way delay: 53.802 ms

Loss rate: 0.01%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-11 13:13:10

End at: 2017-08-11 13:13:40

Below is generated by plot.py at 2017-08-11 14:43:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.88 Mbit/s

95th percentile per-packet one-way delay: 53.272 ms

Loss rate: 0.00%

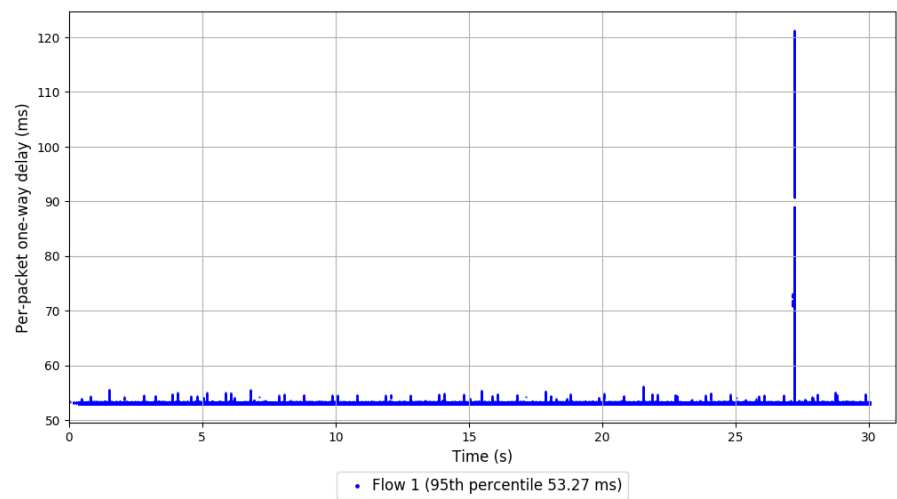
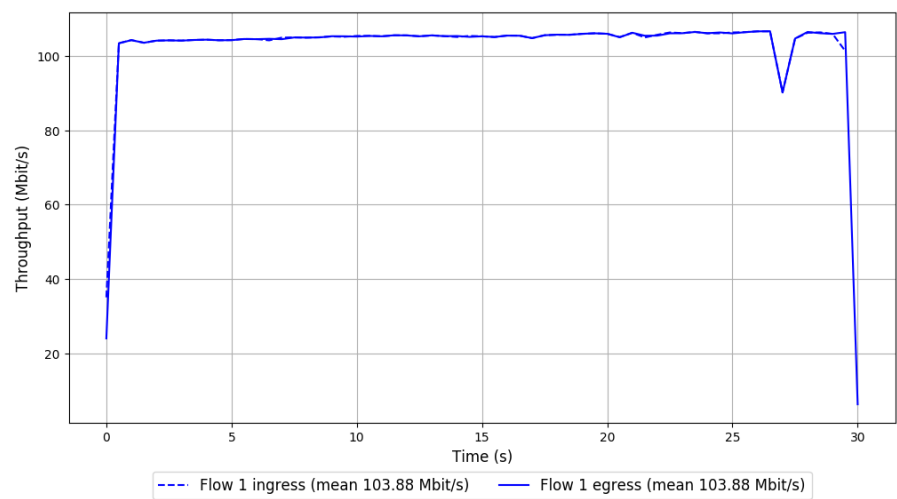
-- Flow 1:

Average throughput: 103.88 Mbit/s

95th percentile per-packet one-way delay: 53.272 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link

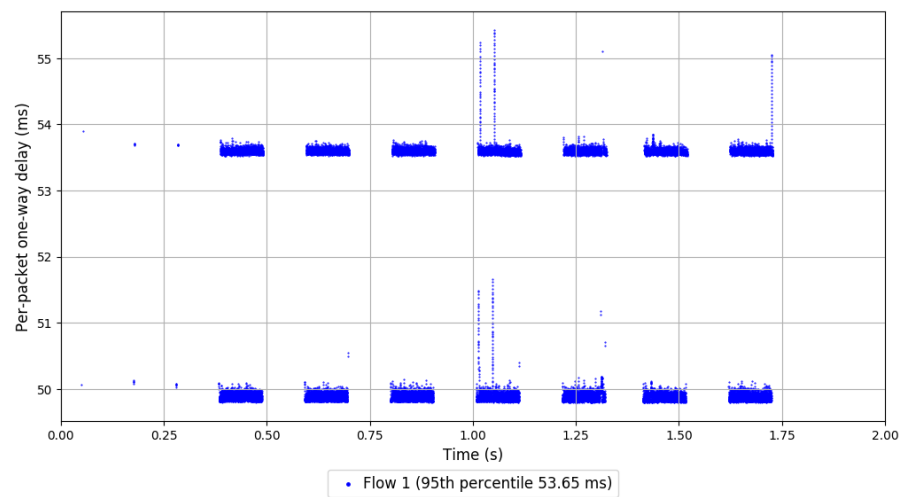
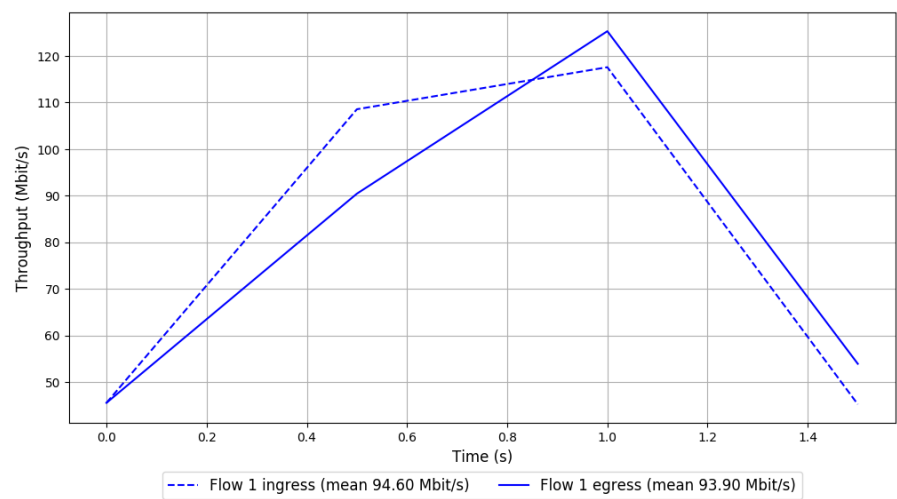


Run 7: Statistics of Copa

Start at: 2017-08-11 13:23:07

End at: 2017-08-11 13:23:37

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-11 13:33:02

End at: 2017-08-11 13:33:32

Below is generated by plot.py at 2017-08-11 14:44:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.36 Mbit/s

95th percentile per-packet one-way delay: 50.313 ms

Loss rate: 89.96%

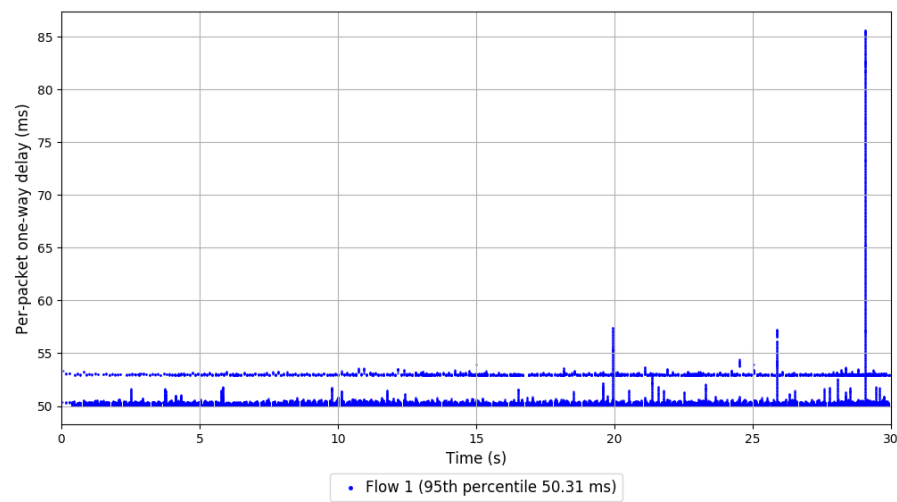
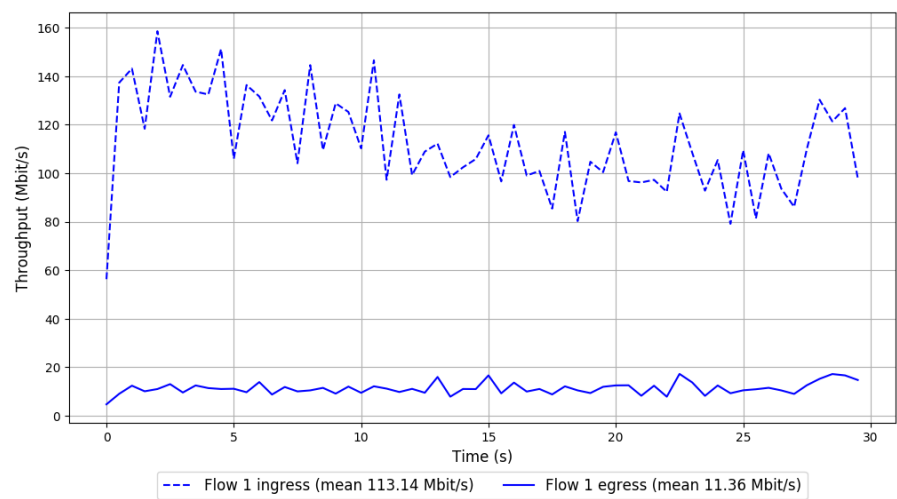
-- Flow 1:

Average throughput: 11.36 Mbit/s

95th percentile per-packet one-way delay: 50.313 ms

Loss rate: 89.96%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-11 13:42:52

End at: 2017-08-11 13:43:22

Below is generated by plot.py at 2017-08-11 14:44:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.14 Mbit/s

95th percentile per-packet one-way delay: 53.708 ms

Loss rate: 0.03%

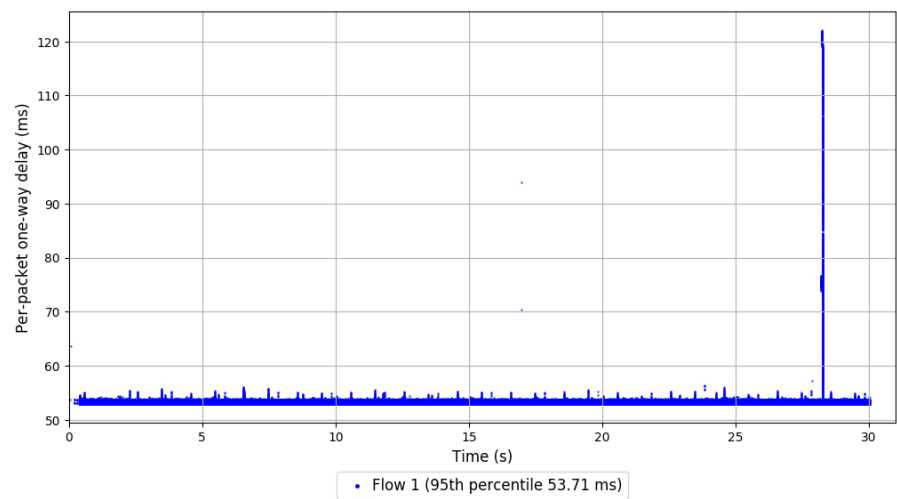
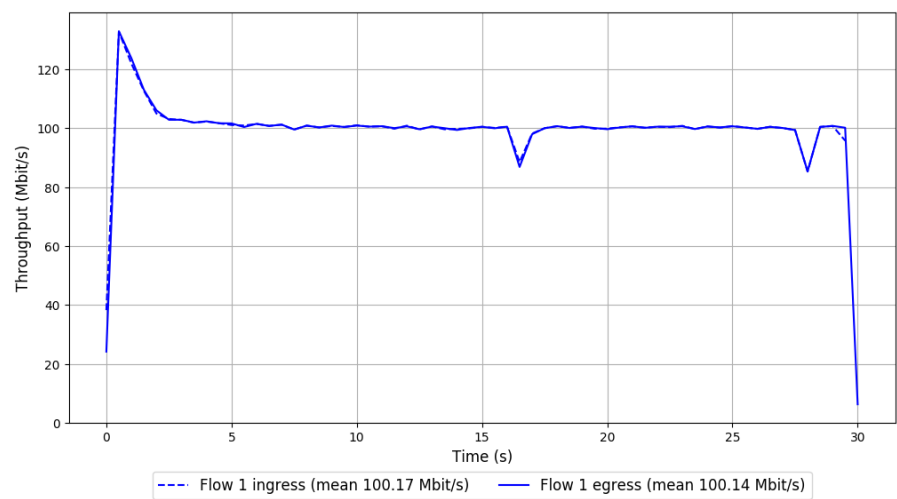
-- Flow 1:

Average throughput: 100.14 Mbit/s

95th percentile per-packet one-way delay: 53.708 ms

Loss rate: 0.03%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-11 13:52:32

End at: 2017-08-11 13:53:02

Below is generated by plot.py at 2017-08-11 14:44:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 99.72 Mbit/s

95th percentile per-packet one-way delay: 53.642 ms

Loss rate: 0.00%

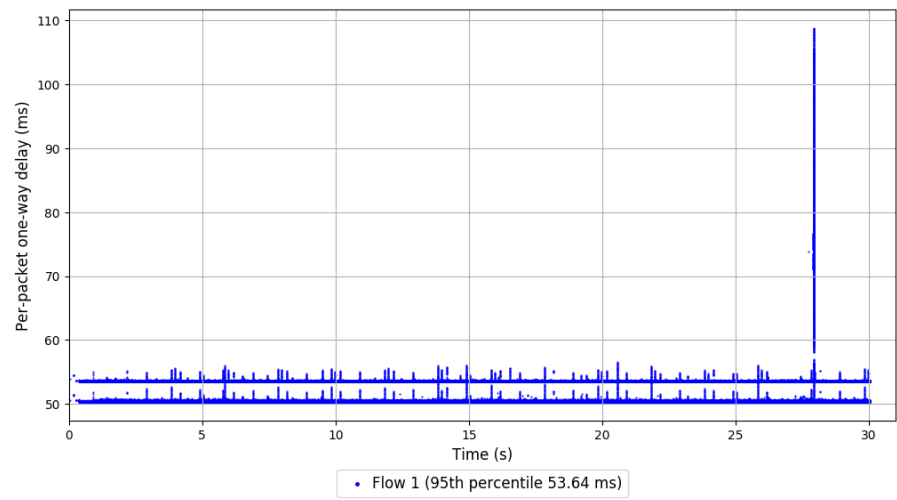
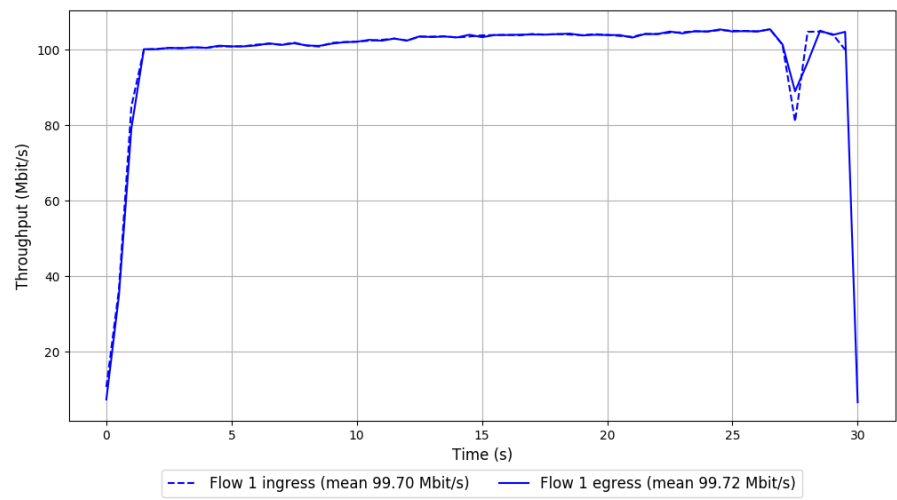
-- Flow 1:

Average throughput: 99.72 Mbit/s

95th percentile per-packet one-way delay: 53.642 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-11 12:25:23

End at: 2017-08-11 12:25:53

Below is generated by plot.py at 2017-08-11 14:44:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.81 Mbit/s

95th percentile per-packet one-way delay: 53.442 ms

Loss rate: 2.89%

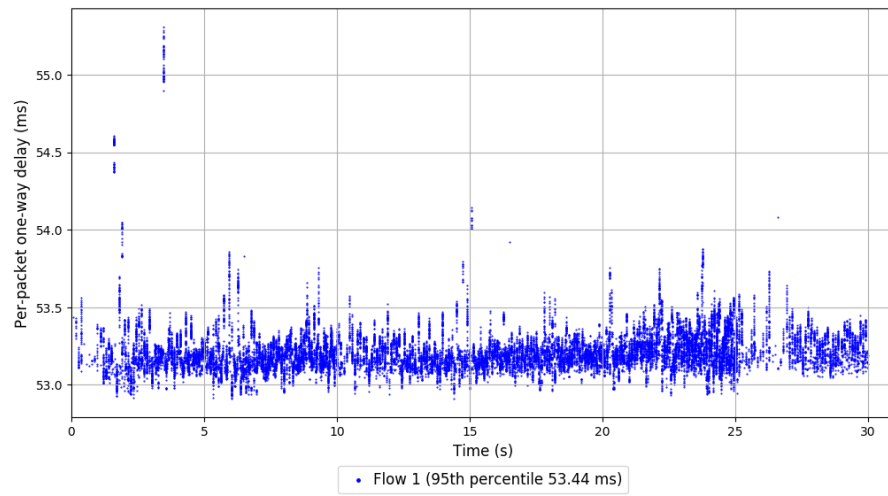
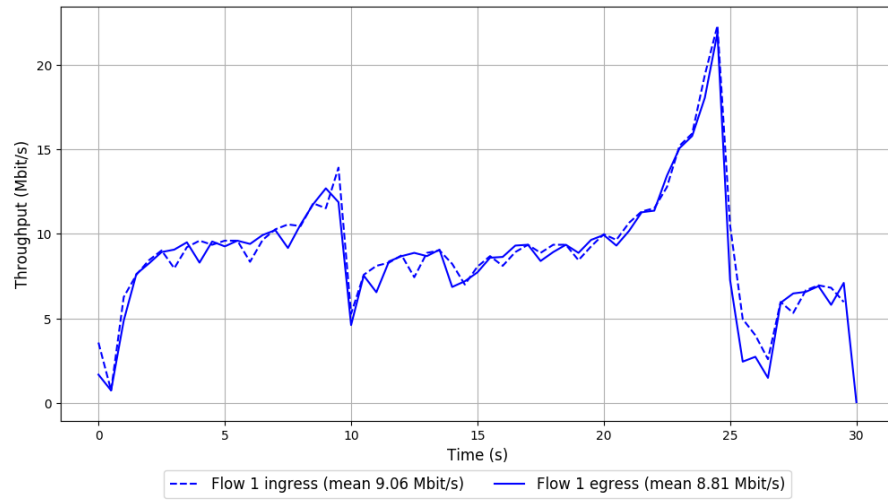
-- Flow 1:

Average throughput: 8.81 Mbit/s

95th percentile per-packet one-way delay: 53.442 ms

Loss rate: 2.89%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-11 12:34:58

End at: 2017-08-11 12:35:28

Below is generated by plot.py at 2017-08-11 14:44:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.31 Mbit/s

95th percentile per-packet one-way delay: 53.361 ms

Loss rate: 0.69%

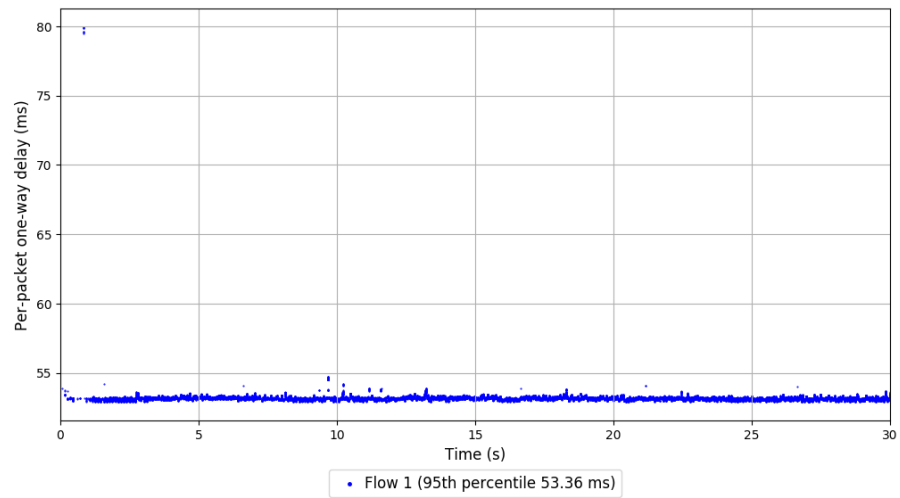
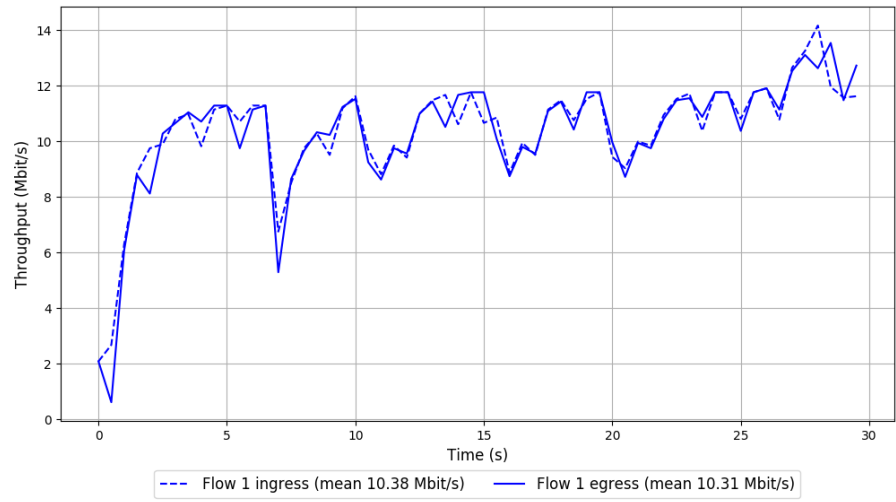
-- Flow 1:

Average throughput: 10.31 Mbit/s

95th percentile per-packet one-way delay: 53.361 ms

Loss rate: 0.69%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-11 12:45:00

End at: 2017-08-11 12:45:30

Below is generated by plot.py at 2017-08-11 14:44:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.00 Mbit/s

95th percentile per-packet one-way delay: 53.296 ms

Loss rate: 1.04%

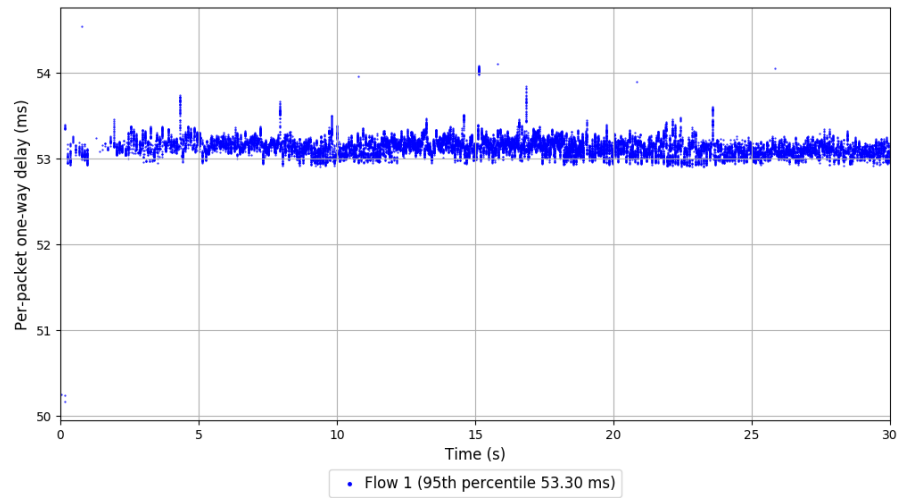
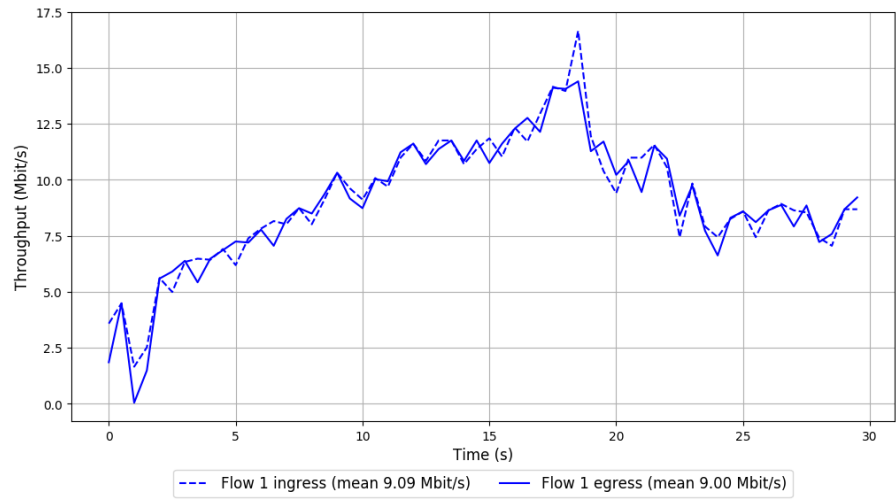
-- Flow 1:

Average throughput: 9.00 Mbit/s

95th percentile per-packet one-way delay: 53.296 ms

Loss rate: 1.04%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-11 12:55:16

End at: 2017-08-11 12:55:46

Below is generated by plot.py at 2017-08-11 14:44:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.67 Mbit/s

95th percentile per-packet one-way delay: 53.284 ms

Loss rate: 2.09%

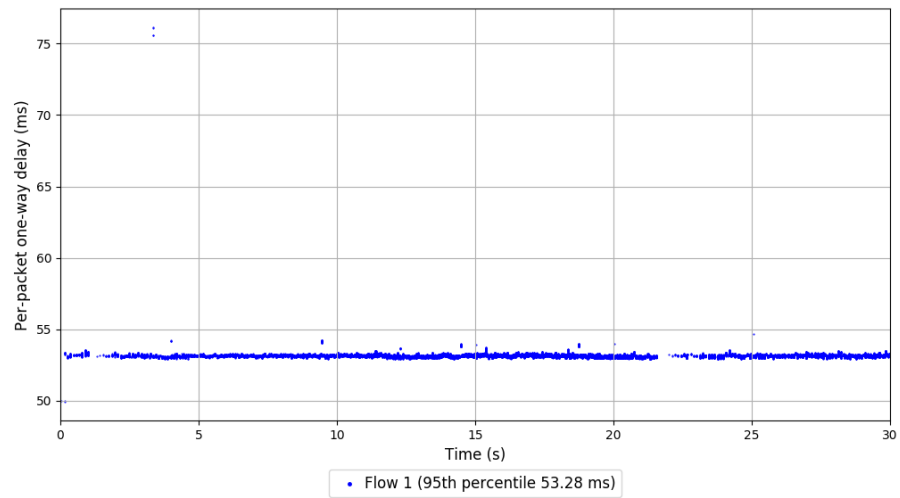
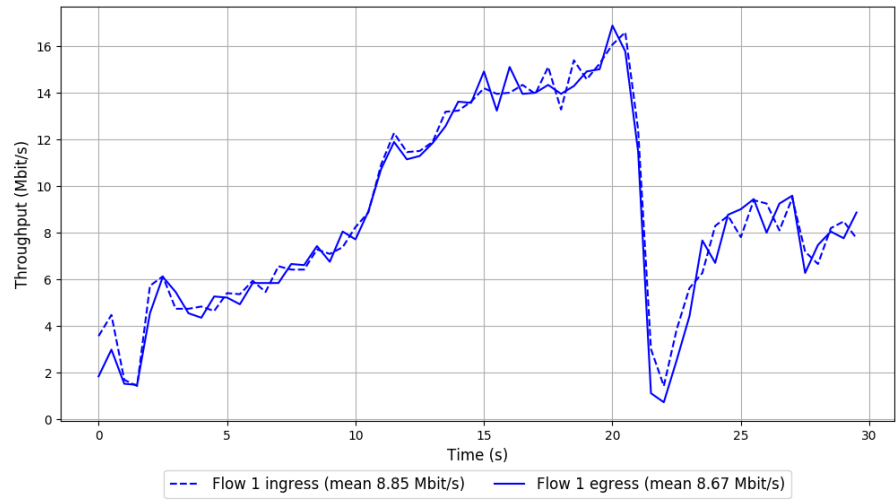
-- Flow 1:

Average throughput: 8.67 Mbit/s

95th percentile per-packet one-way delay: 53.284 ms

Loss rate: 2.09%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-11 13:05:15

End at: 2017-08-11 13:05:45

Below is generated by plot.py at 2017-08-11 14:44:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 53.362 ms

Loss rate: 2.69%

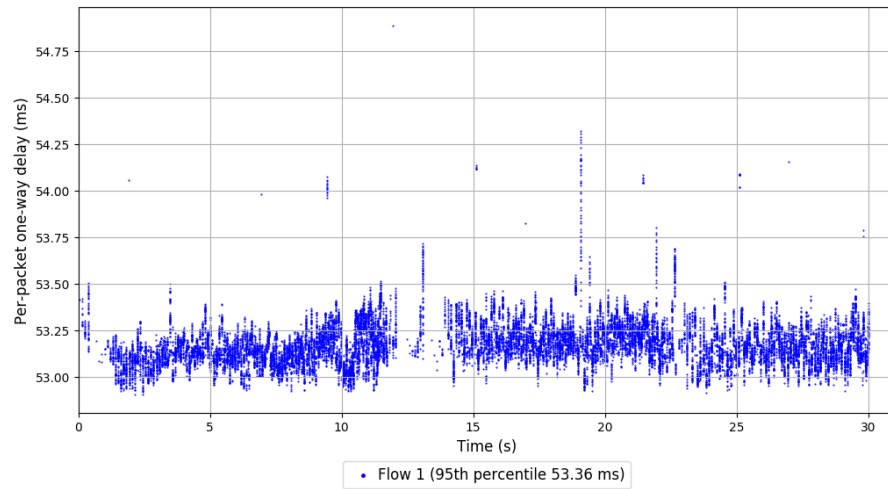
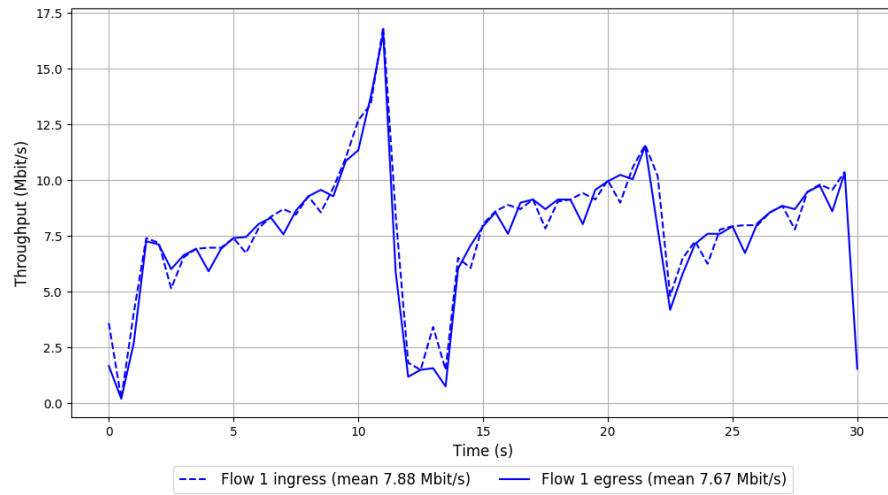
-- Flow 1:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 53.362 ms

Loss rate: 2.69%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-11 13:15:12

End at: 2017-08-11 13:15:42

Below is generated by plot.py at 2017-08-11 14:44:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 53.926 ms

Loss rate: 0.20%

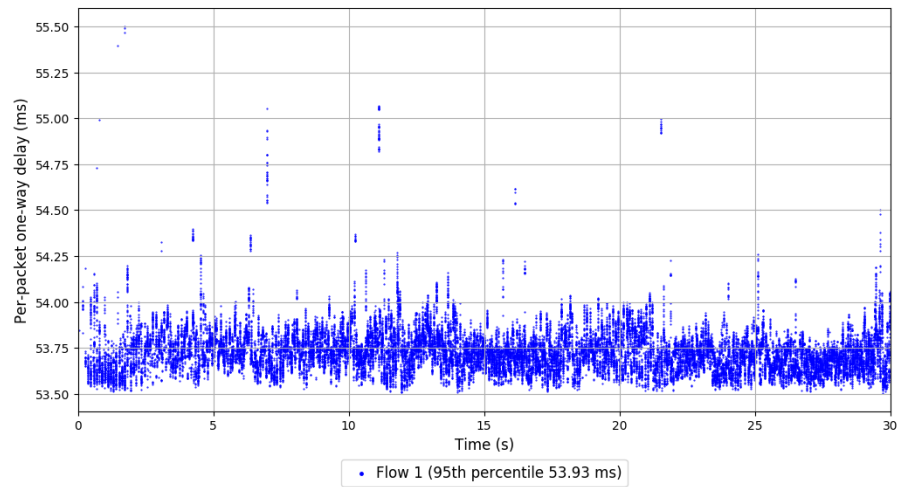
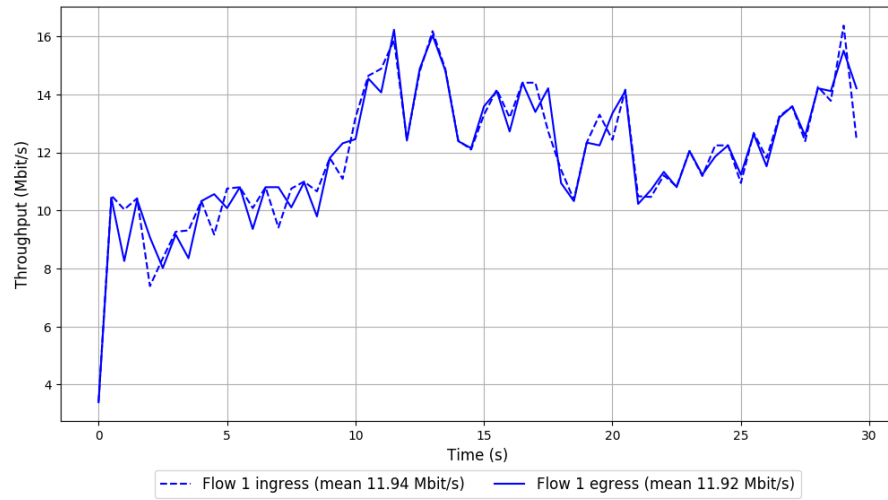
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 53.926 ms

Loss rate: 0.20%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-11 13:25:00

End at: 2017-08-11 13:25:30

Below is generated by plot.py at 2017-08-11 14:44:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 53.323 ms

Loss rate: 0.81%

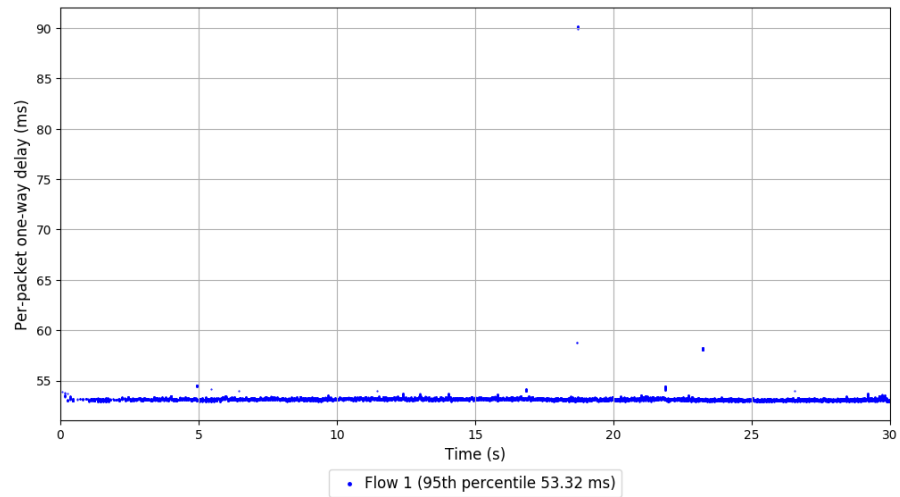
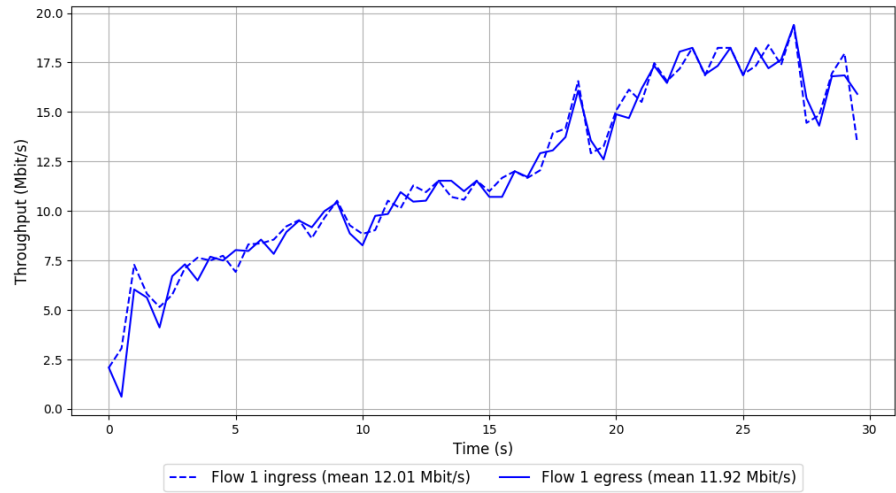
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 53.323 ms

Loss rate: 0.81%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-11 13:35:01

End at: 2017-08-11 13:35:31

Below is generated by plot.py at 2017-08-11 14:44:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.41 Mbit/s

95th percentile per-packet one-way delay: 53.321 ms

Loss rate: 1.55%

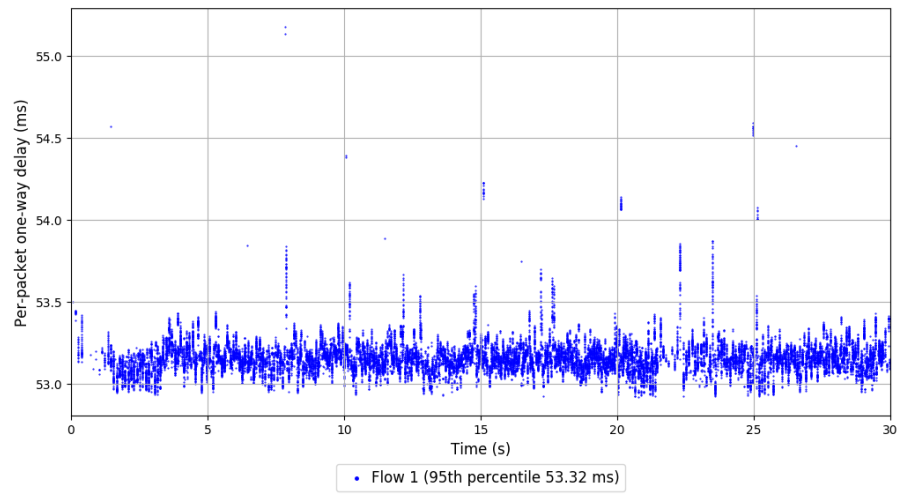
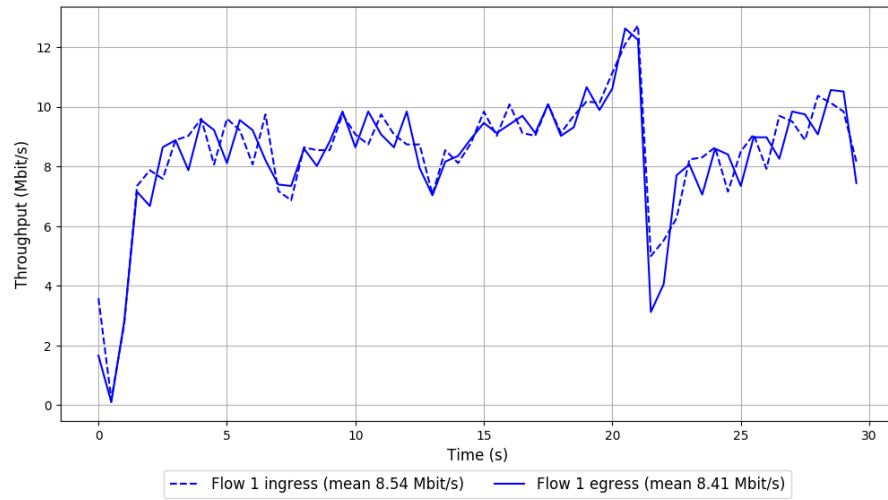
-- Flow 1:

Average throughput: 8.41 Mbit/s

95th percentile per-packet one-way delay: 53.321 ms

Loss rate: 1.55%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-11 13:44:53

End at: 2017-08-11 13:45:23

Below is generated by plot.py at 2017-08-11 14:44:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 53.378 ms

Loss rate: 2.93%

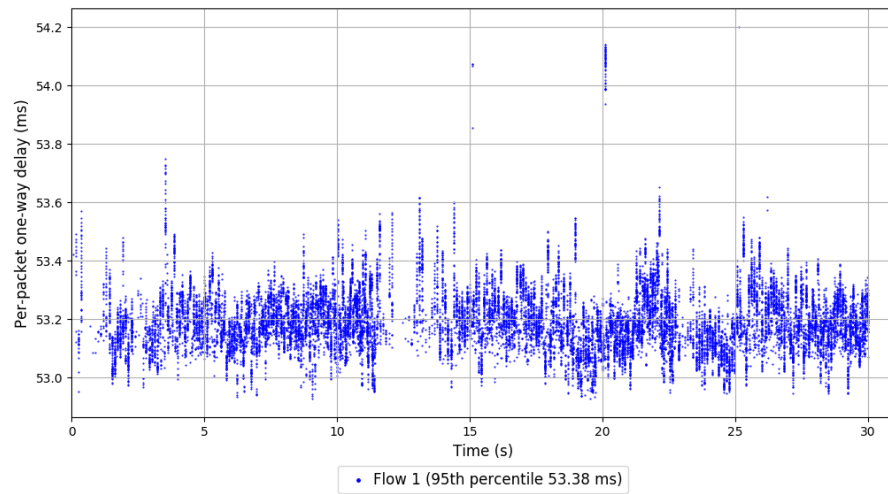
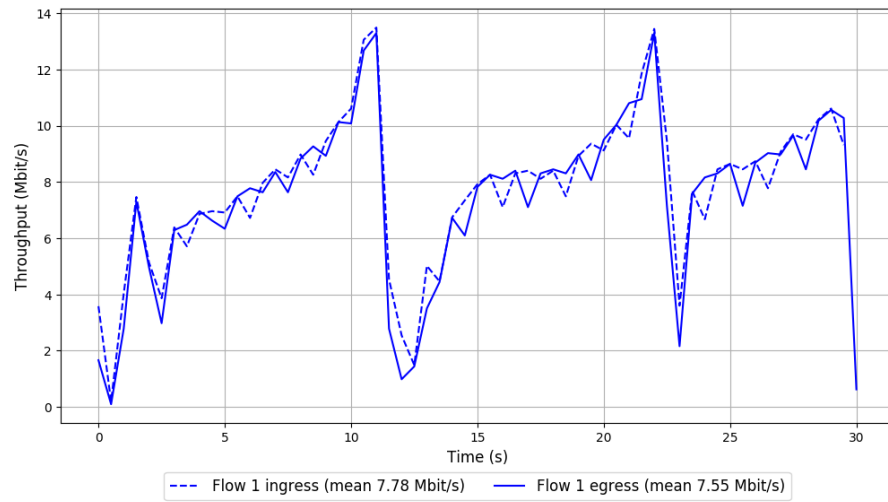
-- Flow 1:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 53.378 ms

Loss rate: 2.93%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-11 13:54:34

End at: 2017-08-11 13:55:04

Below is generated by plot.py at 2017-08-11 14:44:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 53.378 ms

Loss rate: 2.80%

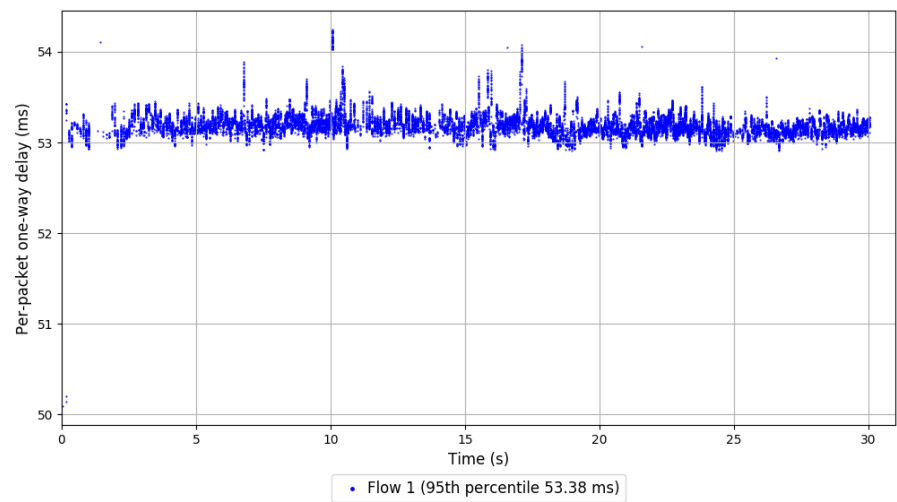
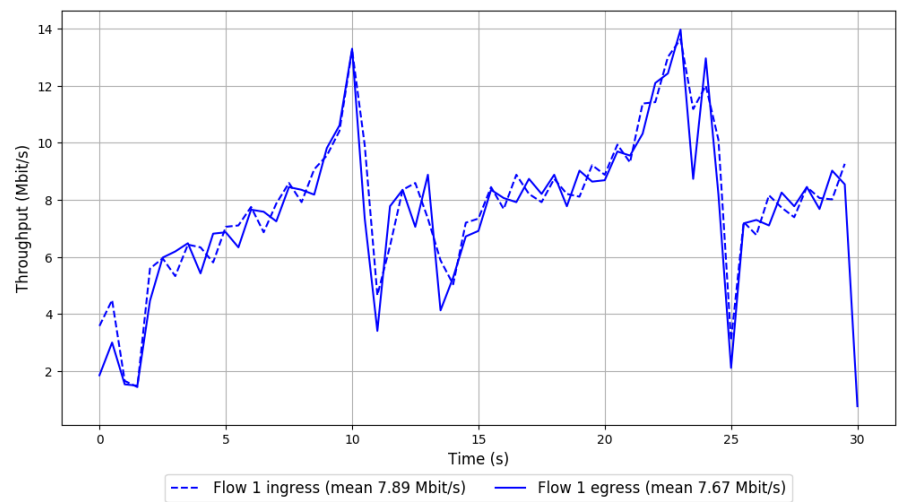
-- Flow 1:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 53.378 ms

Loss rate: 2.80%

Run 10: Report of TCP Cubic — Data Link

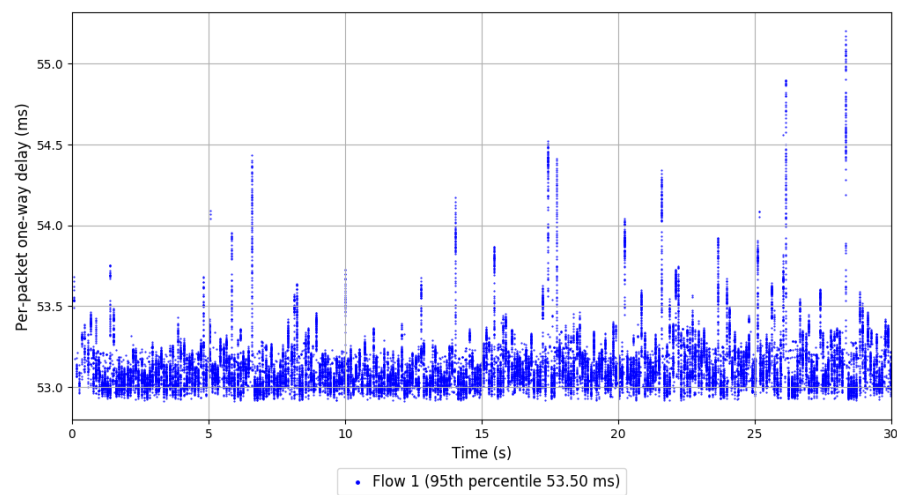
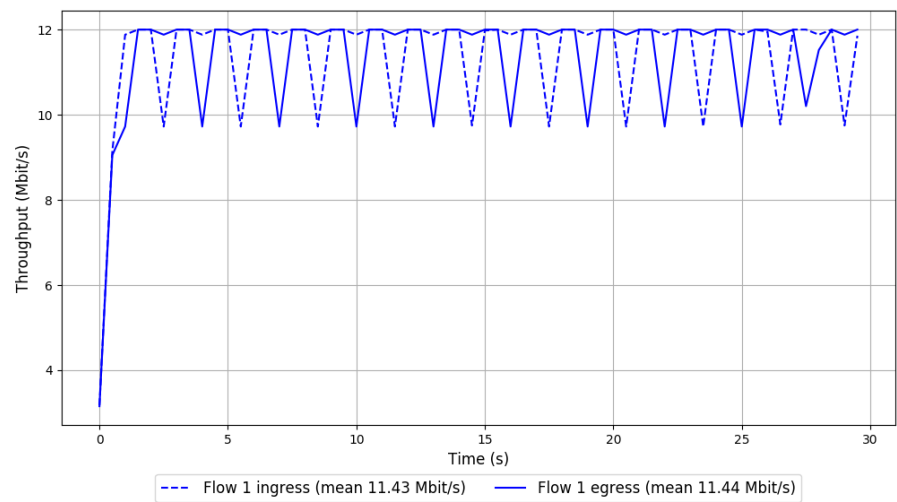


```
Run 1: Statistics of KohoCC

Start at: 2017-08-11 12:19:36
End at: 2017-08-11 12:20:06

# Below is generated by plot.py at 2017-08-11 14:44:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.44 Mbit/s
95th percentile per-packet one-way delay: 53.496 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.44 Mbit/s
95th percentile per-packet one-way delay: 53.496 ms
Loss rate: 0.00%
```


Run 1: Report of KohoCC — Data Link

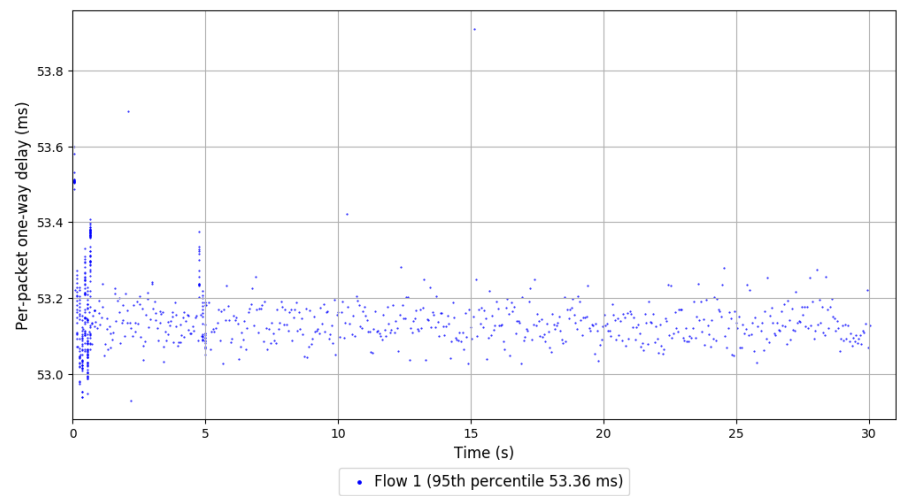
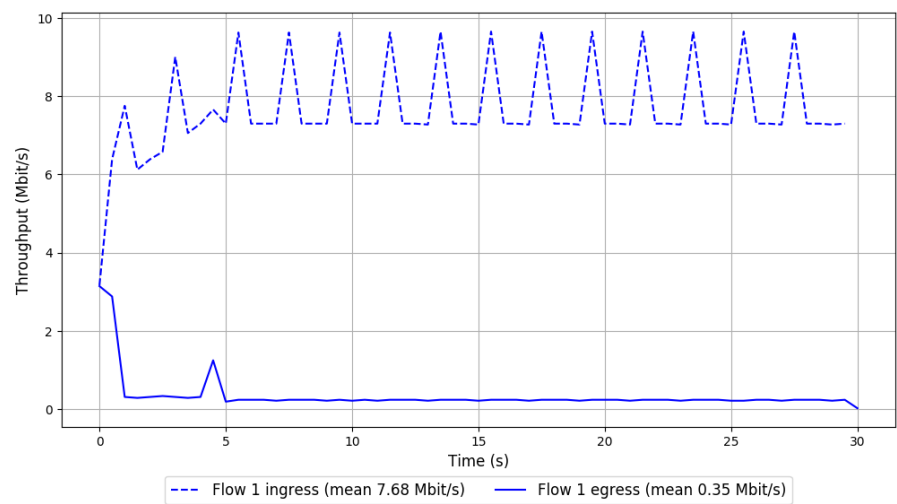


```
Run 2: Statistics of KohoCC

Start at: 2017-08-11 12:29:13
End at: 2017-08-11 12:29:43

# Below is generated by plot.py at 2017-08-11 14:44:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 53.364 ms
Loss rate: 95.42%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 53.364 ms
Loss rate: 95.42%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-11 12:38:48

End at: 2017-08-11 12:39:18

Below is generated by plot.py at 2017-08-11 14:45:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.94 Mbit/s

95th percentile per-packet one-way delay: 53.264 ms

Loss rate: 0.71%

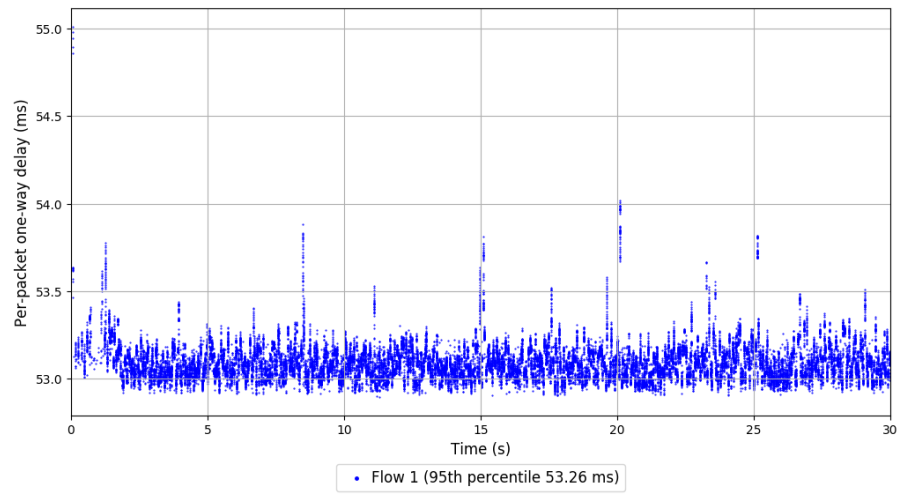
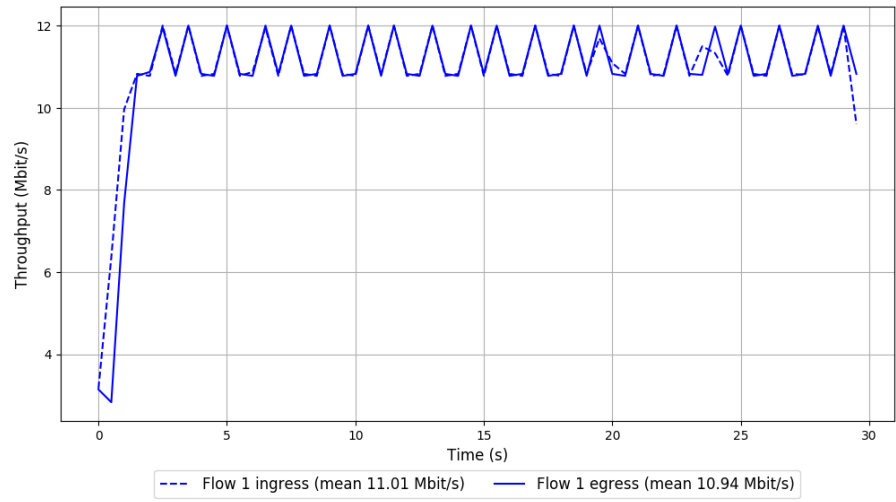
-- Flow 1:

Average throughput: 10.94 Mbit/s

95th percentile per-packet one-way delay: 53.264 ms

Loss rate: 0.71%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-11 12:49:07

End at: 2017-08-11 12:49:37

Below is generated by plot.py at 2017-08-11 14:45:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 53.180 ms

Loss rate: 95.63%

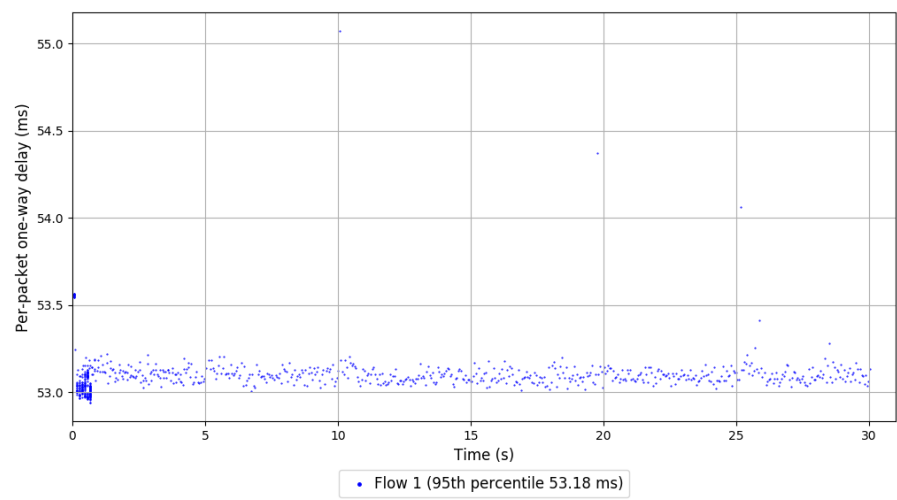
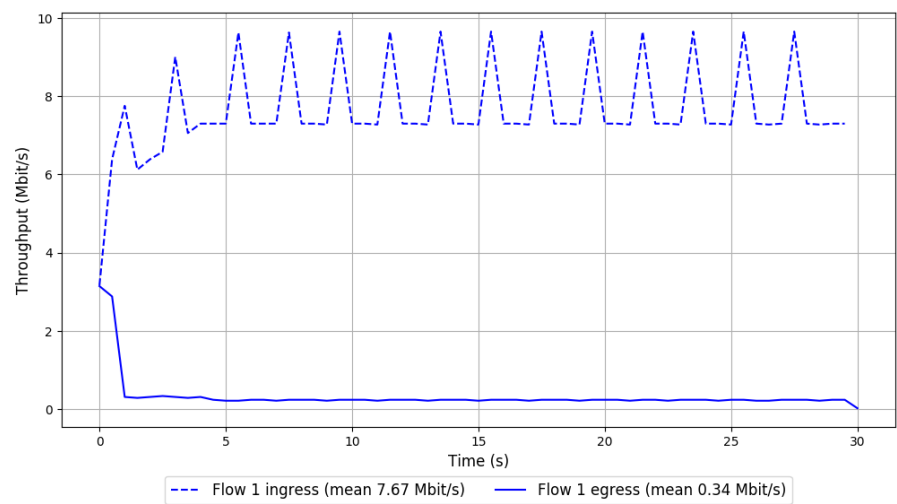
-- Flow 1:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 53.180 ms

Loss rate: 95.63%

Run 4: Report of KohoCC — Data Link

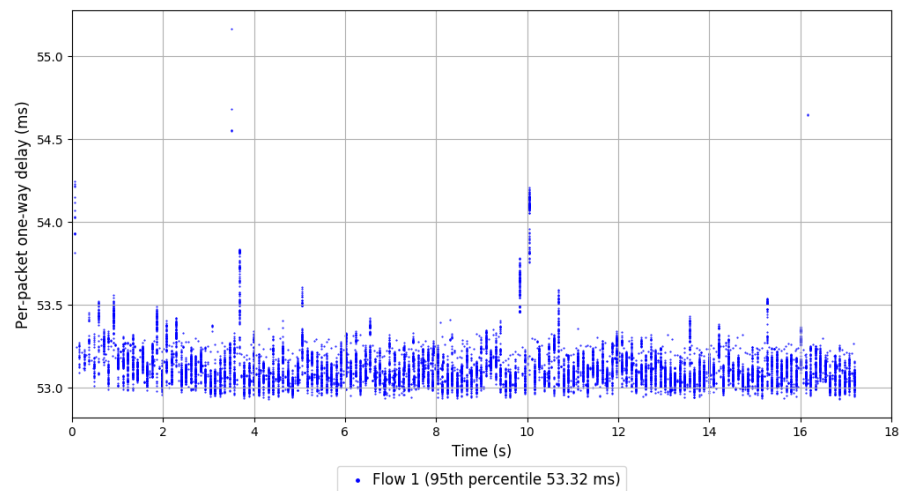
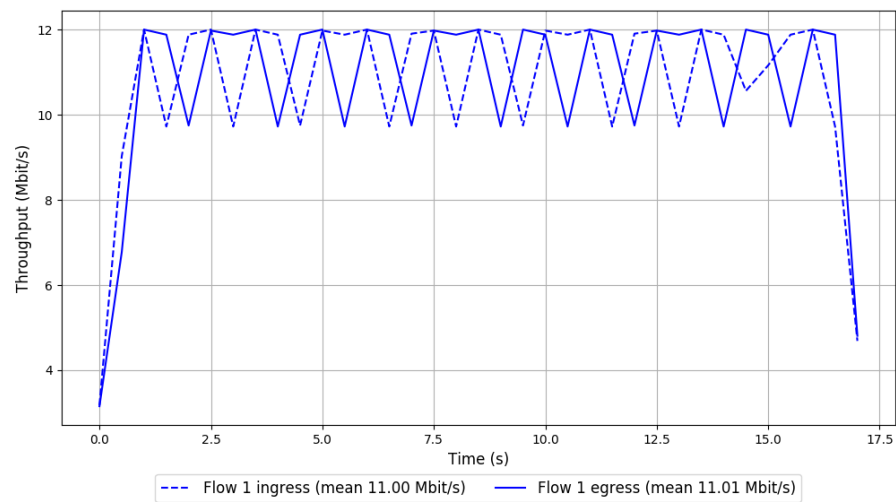


Run 5: Statistics of KohoCC

Start at: 2017-08-11 12:59:21

End at: 2017-08-11 12:59:51

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-11 13:09:21

End at: 2017-08-11 13:09:51

Below is generated by plot.py at 2017-08-11 14:45:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.78 Mbit/s

95th percentile per-packet one-way delay: 53.917 ms

Loss rate: 1.84%

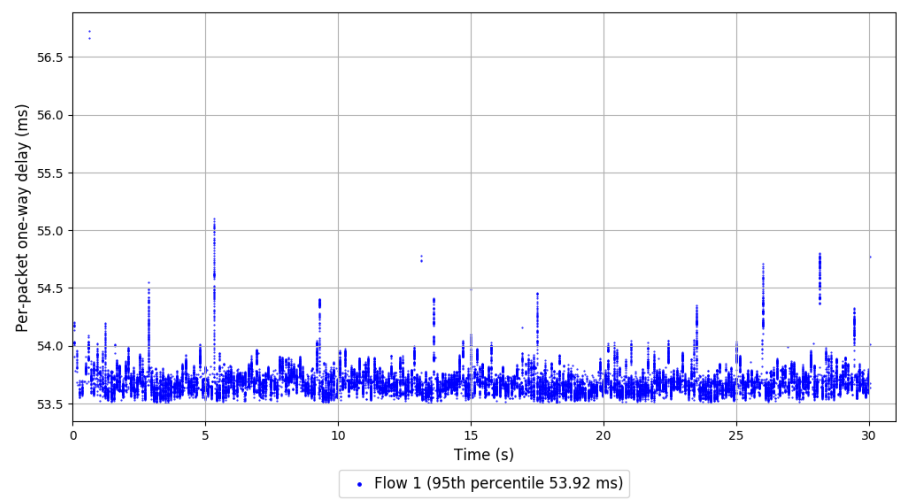
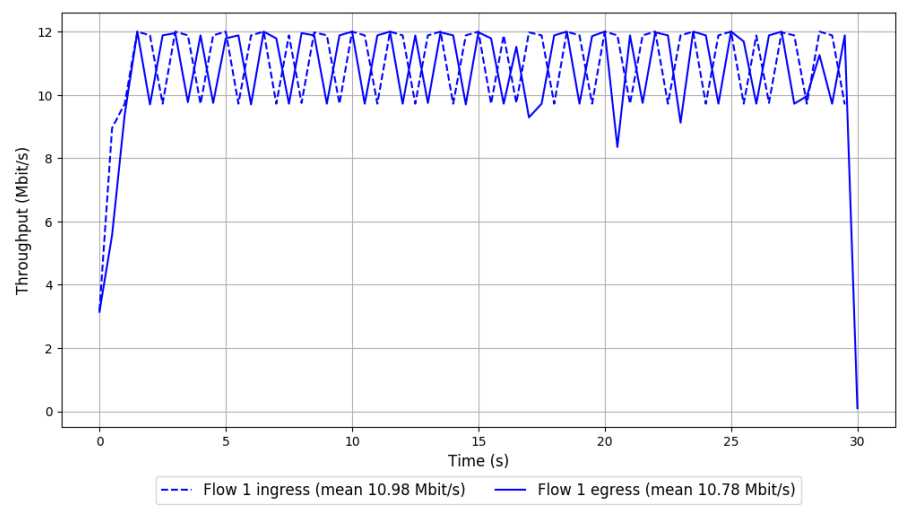
-- Flow 1:

Average throughput: 10.78 Mbit/s

95th percentile per-packet one-way delay: 53.917 ms

Loss rate: 1.84%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-11 13:19:20

End at: 2017-08-11 13:19:50

Below is generated by plot.py at 2017-08-11 14:45:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 53.223 ms

Loss rate: 95.63%

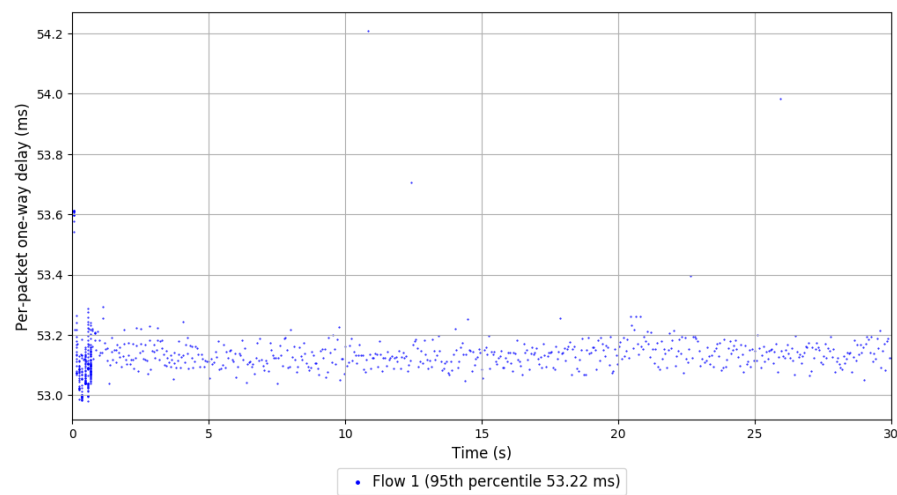
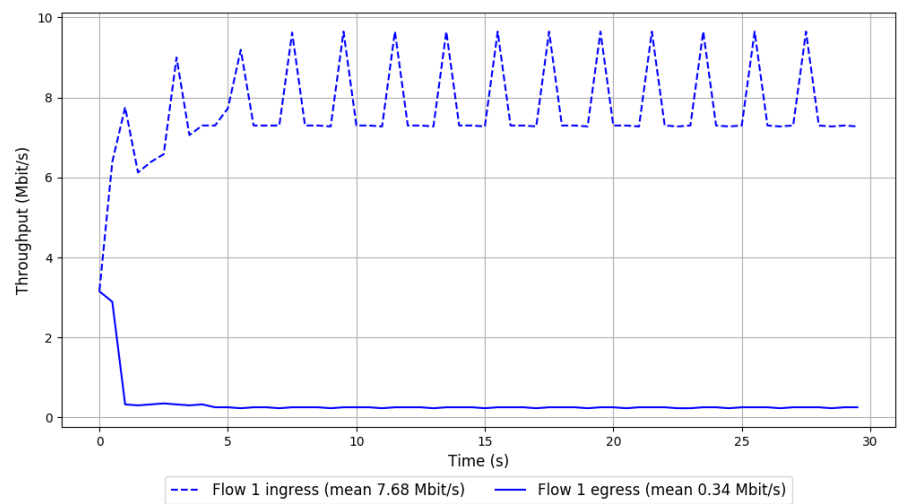
-- Flow 1:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 53.223 ms

Loss rate: 95.63%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-11 13:29:14

End at: 2017-08-11 13:29:44

Below is generated by plot.py at 2017-08-11 14:45:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 53.272 ms

Loss rate: 95.59%

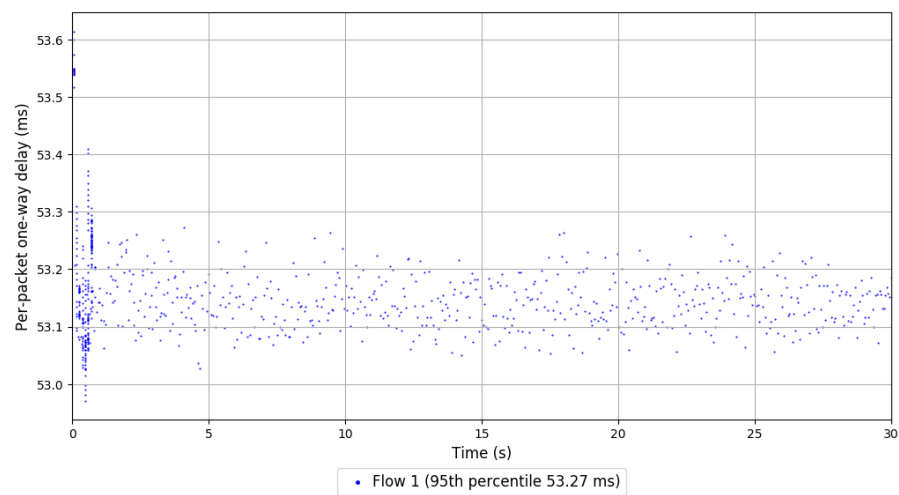
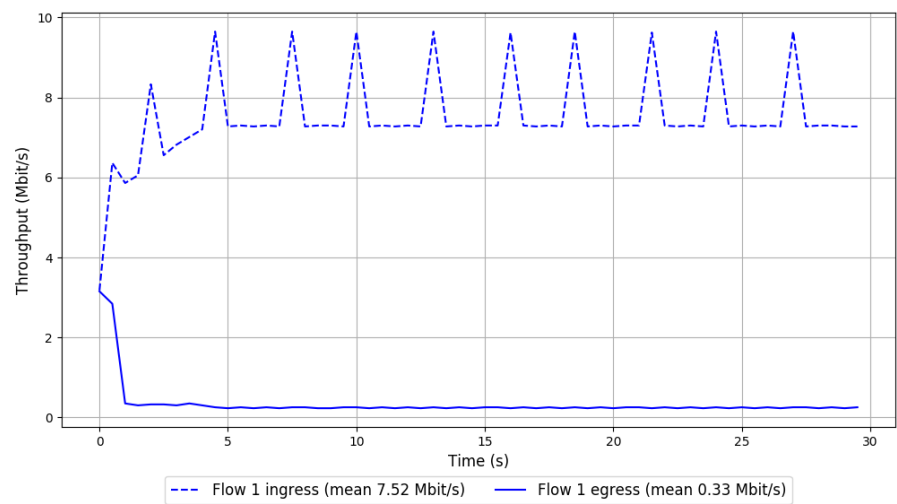
-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 53.272 ms

Loss rate: 95.59%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-11 13:39:04

End at: 2017-08-11 13:39:34

Below is generated by plot.py at 2017-08-11 14:45:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 53.210 ms

Loss rate: 95.61%

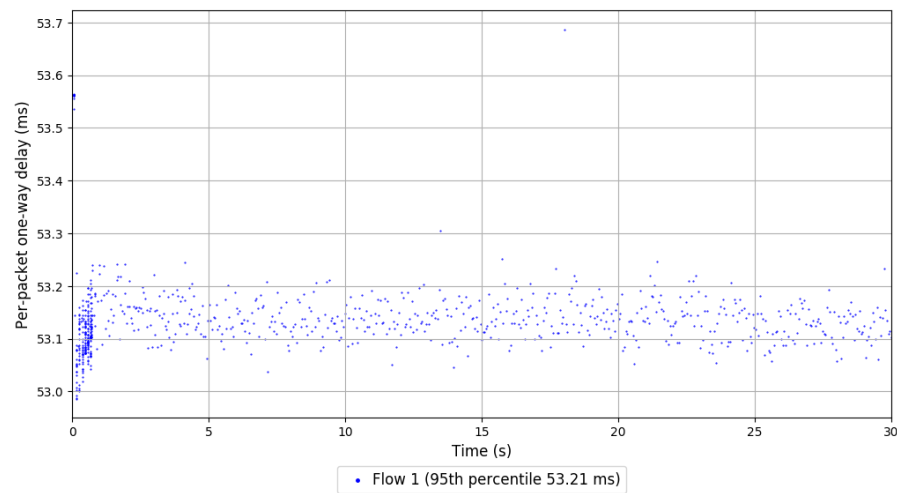
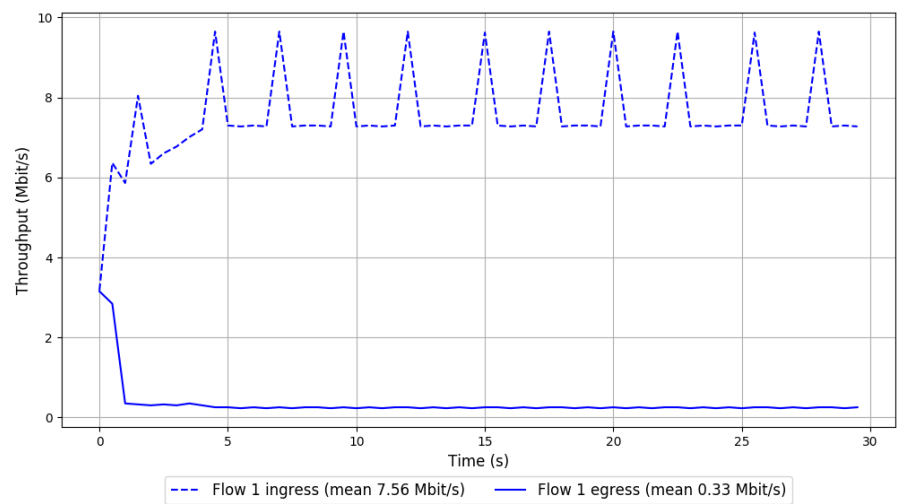
-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 53.210 ms

Loss rate: 95.61%

Run 9: Report of KohoCC — Data Link

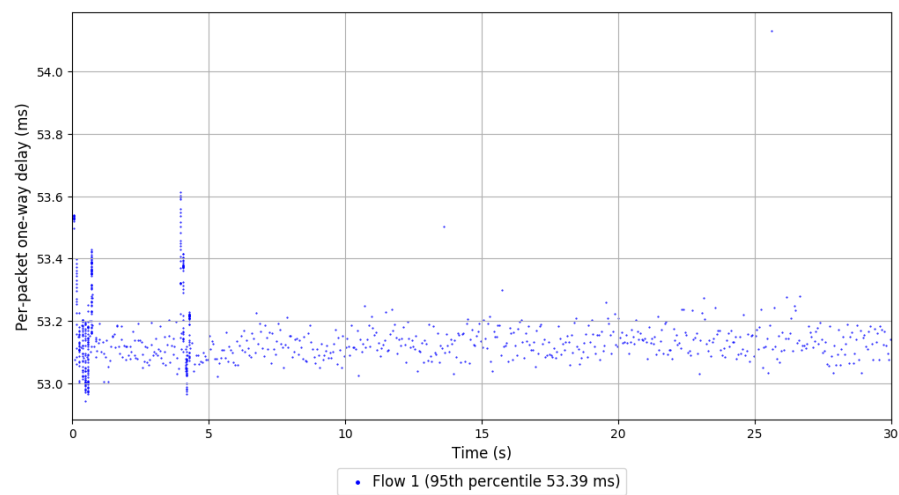
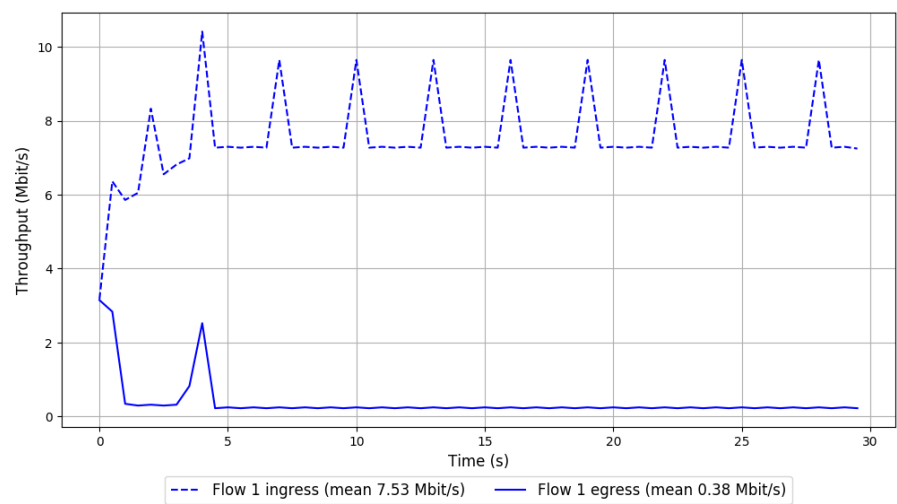


```
Run 10: Statistics of KohoCC

Start at: 2017-08-11 13:48:44
End at: 2017-08-11 13:49:14

# Below is generated by plot.py at 2017-08-11 14:45:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 53.393 ms
Loss rate: 95.02%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 53.393 ms
Loss rate: 95.02%
```

Run 10: Report of KohoCC — Data Link

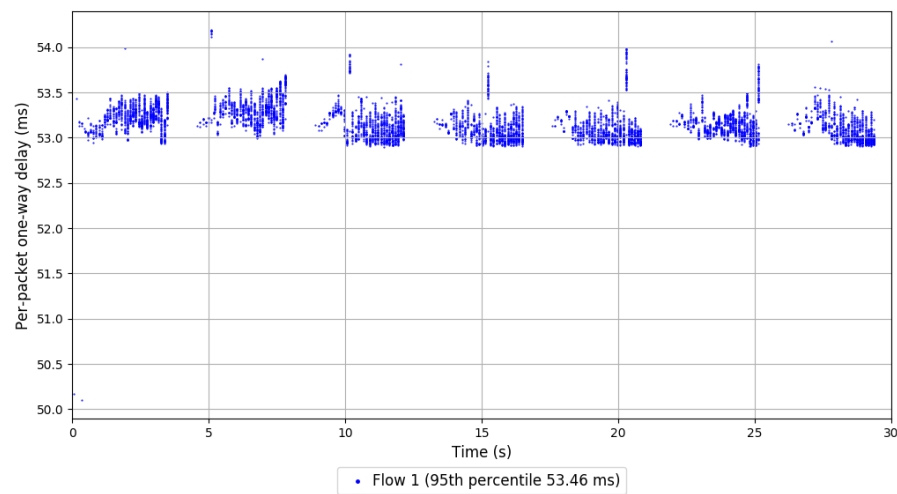
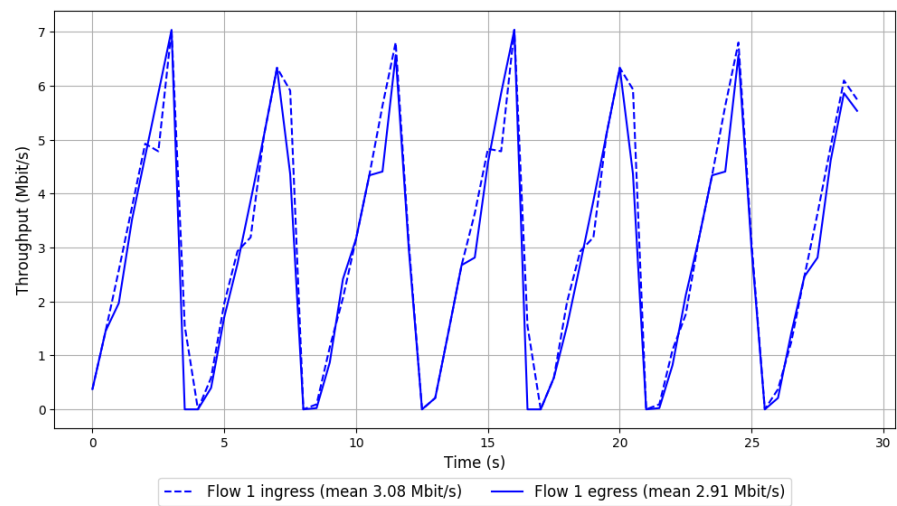


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-11 12:20:58
End at: 2017-08-11 12:21:28

# Below is generated by plot.py at 2017-08-11 14:45:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 53.462 ms
Loss rate: 6.00%
-- Flow 1:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 53.462 ms
Loss rate: 6.00%
```

Run 1: Report of LEDBAT — Data Link

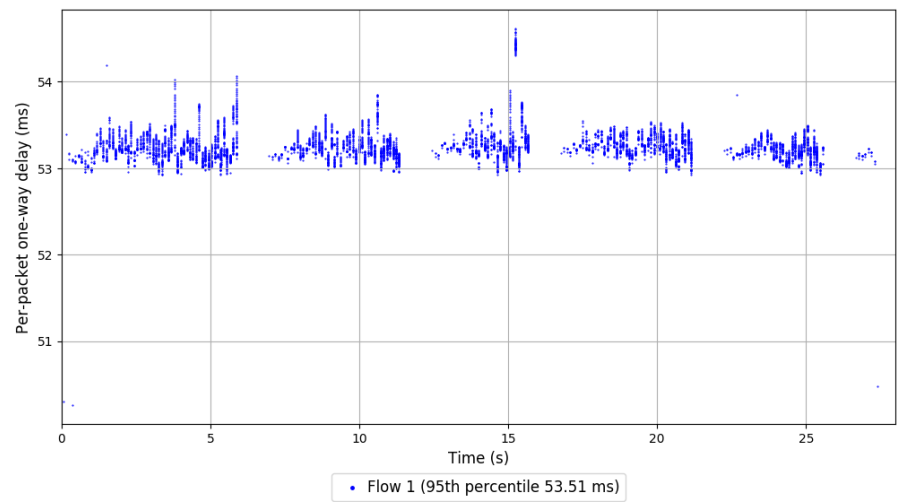
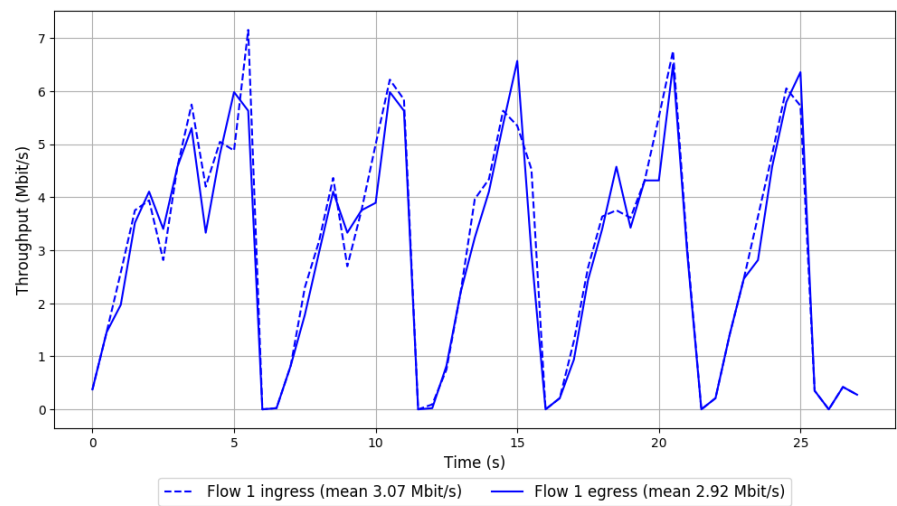


```
Run 2: Statistics of LEDBAT

Start at: 2017-08-11 12:30:29
End at: 2017-08-11 12:30:59

# Below is generated by plot.py at 2017-08-11 14:45:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 53.510 ms
Loss rate: 4.74%
-- Flow 1:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 53.510 ms
Loss rate: 4.74%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-11 12:40:03

End at: 2017-08-11 12:40:33

Below is generated by plot.py at 2017-08-11 14:45:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 53.446 ms

Loss rate: 5.53%

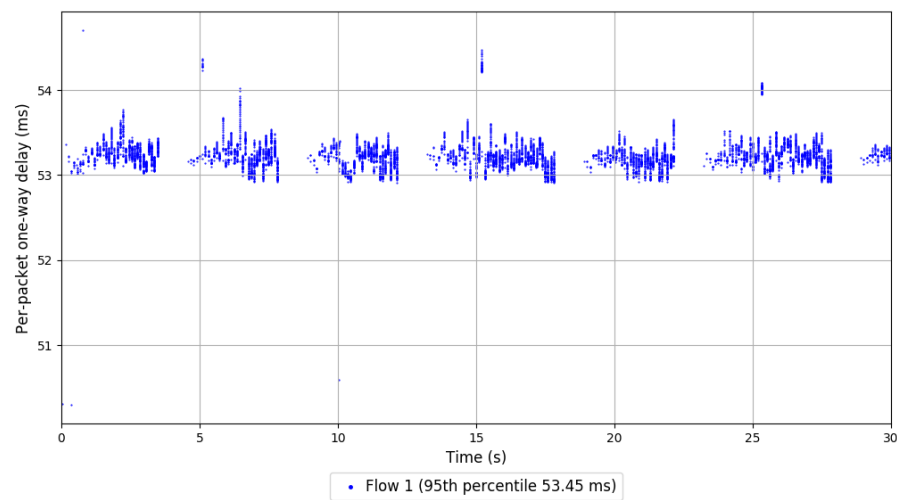
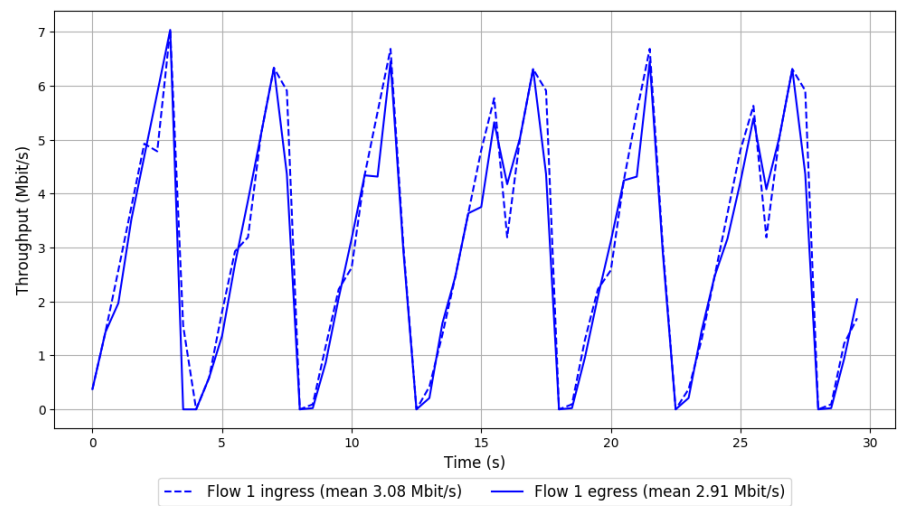
-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 53.446 ms

Loss rate: 5.53%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-11 12:50:27

End at: 2017-08-11 12:50:58

Below is generated by plot.py at 2017-08-11 14:45:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 53.463 ms

Loss rate: 5.59%

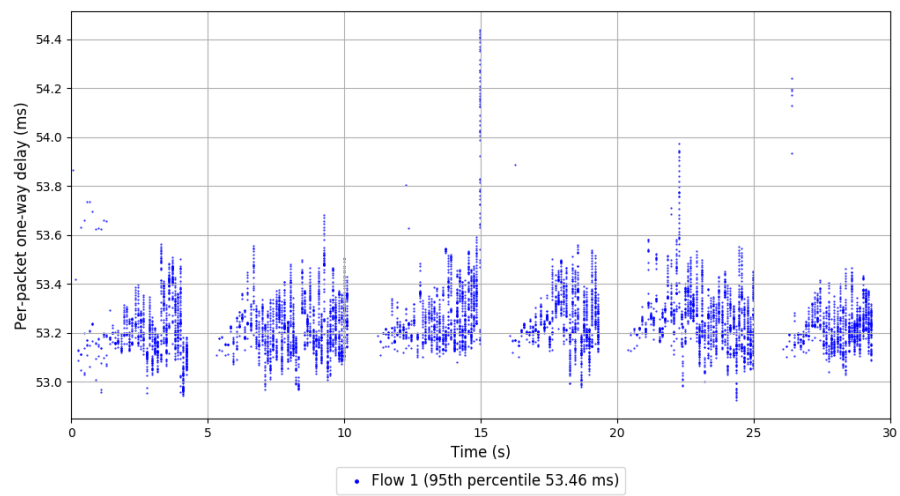
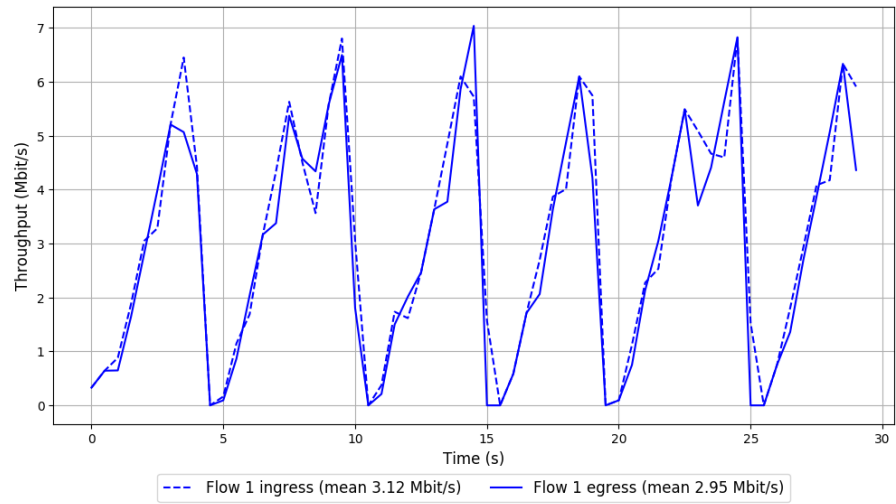
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 53.463 ms

Loss rate: 5.59%

Run 4: Report of LEDBAT — Data Link

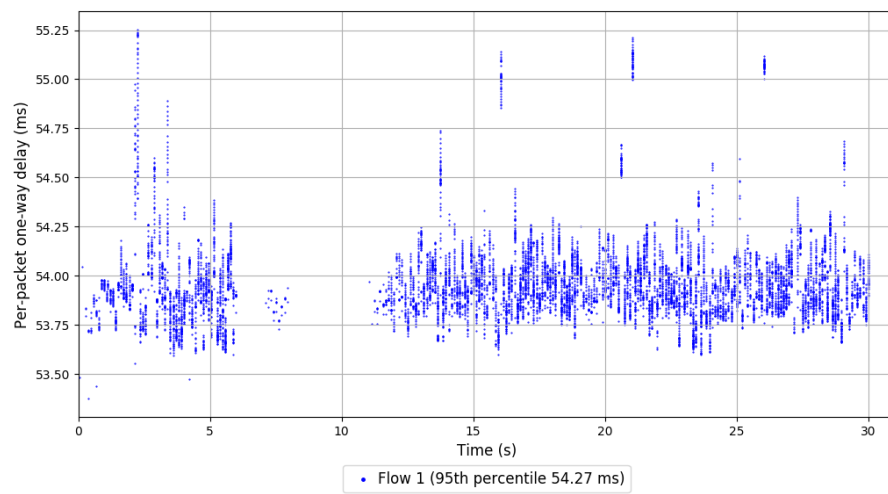
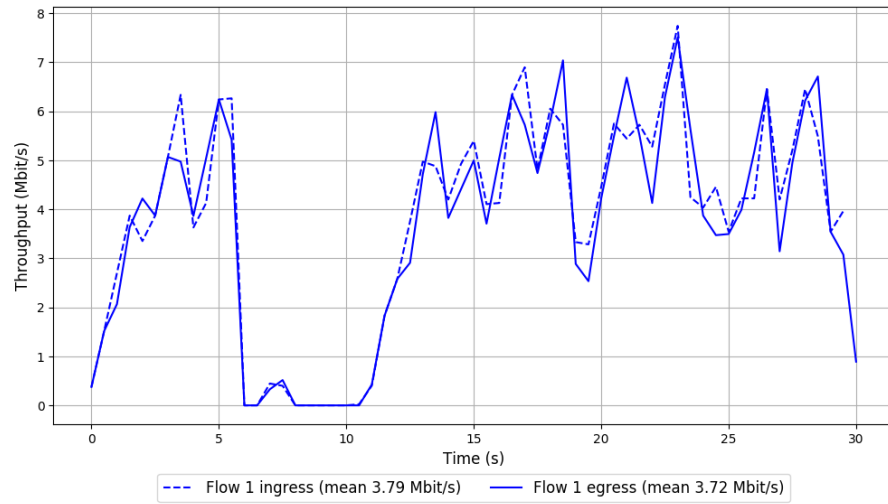


```
Run 5: Statistics of LEDBAT

Start at: 2017-08-11 13:00:43
End at: 2017-08-11 13:01:13

# Below is generated by plot.py at 2017-08-11 14:45:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.72 Mbit/s
95th percentile per-packet one-way delay: 54.266 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 3.72 Mbit/s
95th percentile per-packet one-way delay: 54.266 ms
Loss rate: 1.66%
```

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-11 13:10:37

End at: 2017-08-11 13:11:07

Below is generated by plot.py at 2017-08-11 14:45:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.736 ms

Loss rate: 0.00%

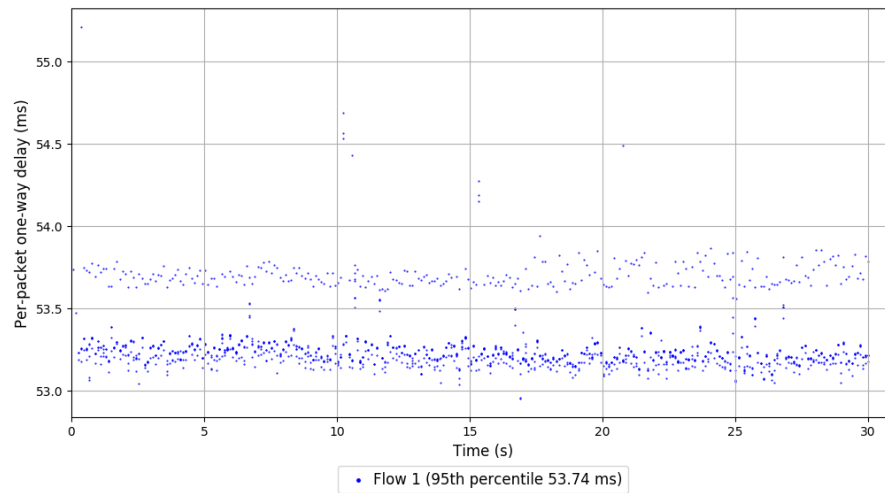
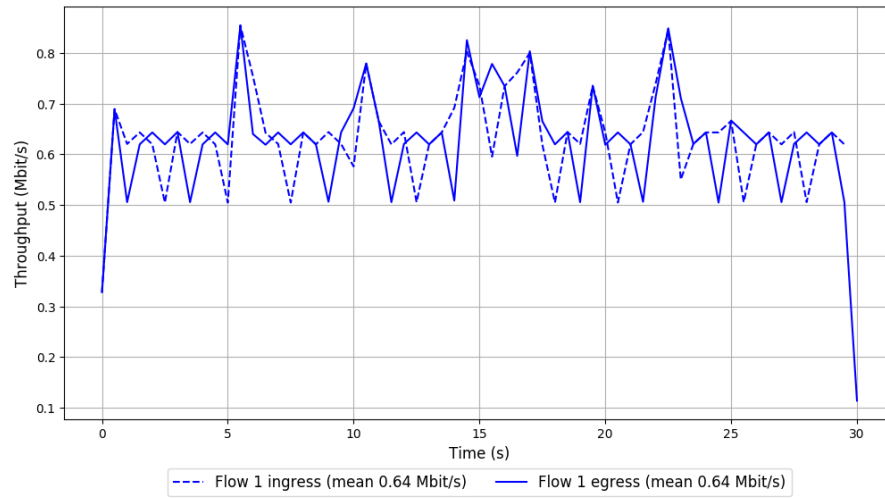
-- Flow 1:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.736 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-11 13:20:35

End at: 2017-08-11 13:21:05

Below is generated by plot.py at 2017-08-11 14:45:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 53.509 ms

Loss rate: 5.13%

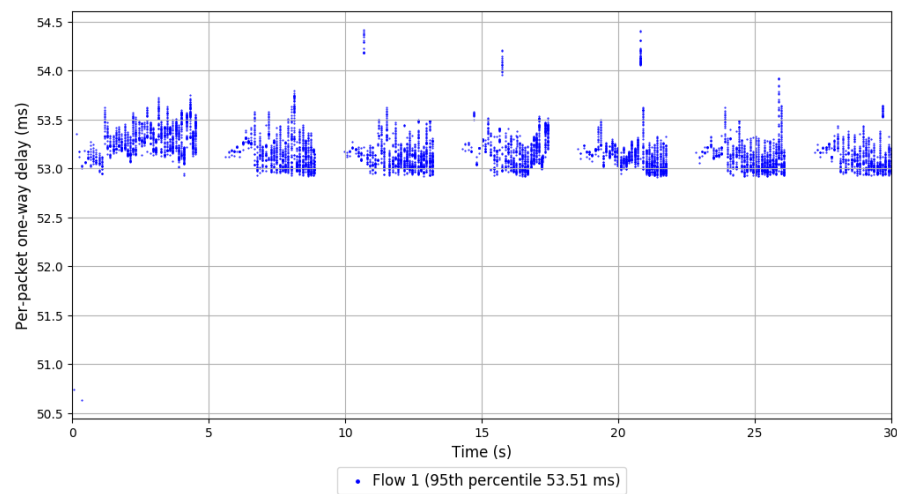
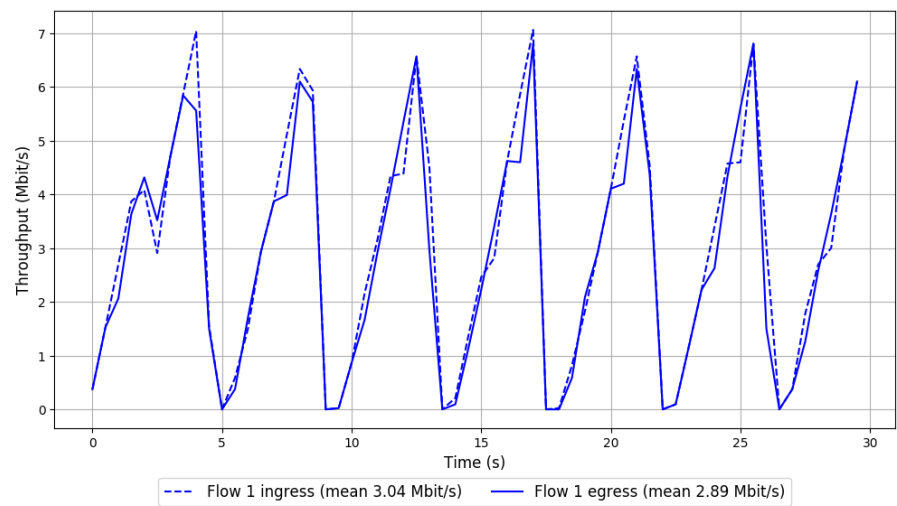
-- Flow 1:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 53.509 ms

Loss rate: 5.13%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-11 13:30:30

End at: 2017-08-11 13:31:00

Below is generated by plot.py at 2017-08-11 14:45:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 53.406 ms

Loss rate: 4.96%

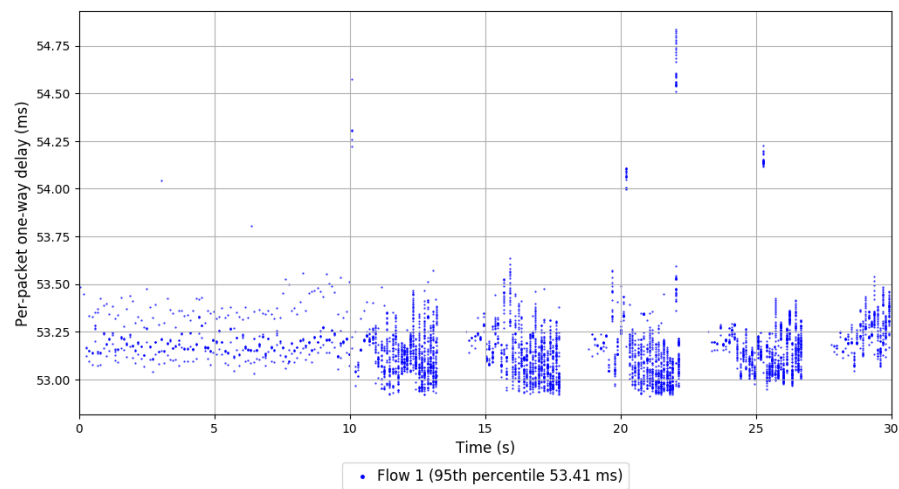
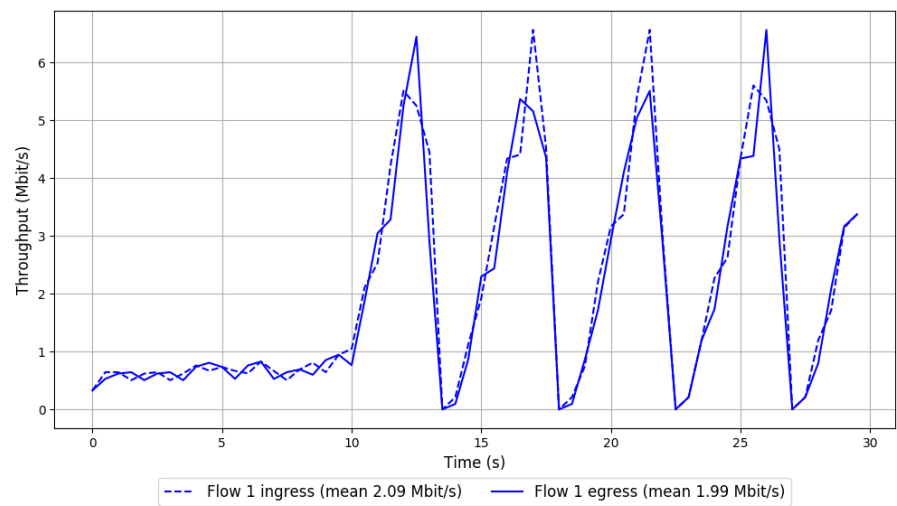
-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 53.406 ms

Loss rate: 4.96%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-11 13:40:18

End at: 2017-08-11 13:40:48

Below is generated by plot.py at 2017-08-11 14:45:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.23 Mbit/s

95th percentile per-packet one-way delay: 53.929 ms

Loss rate: 0.31%

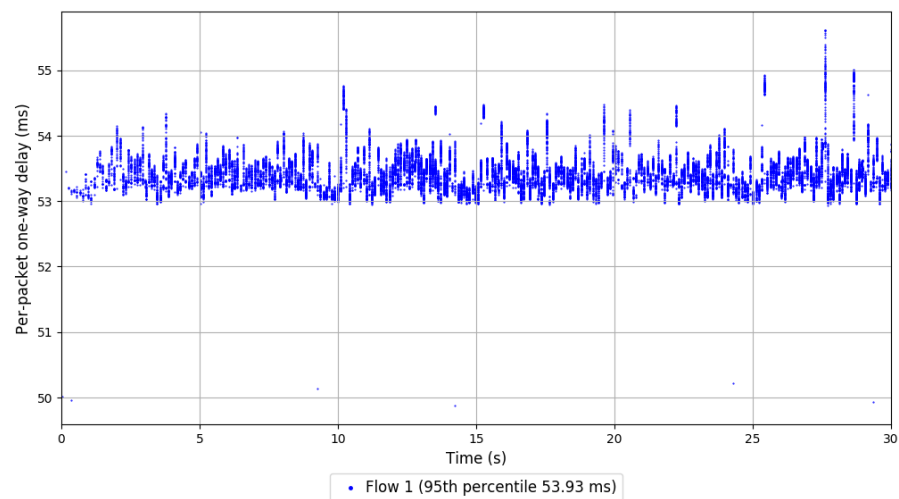
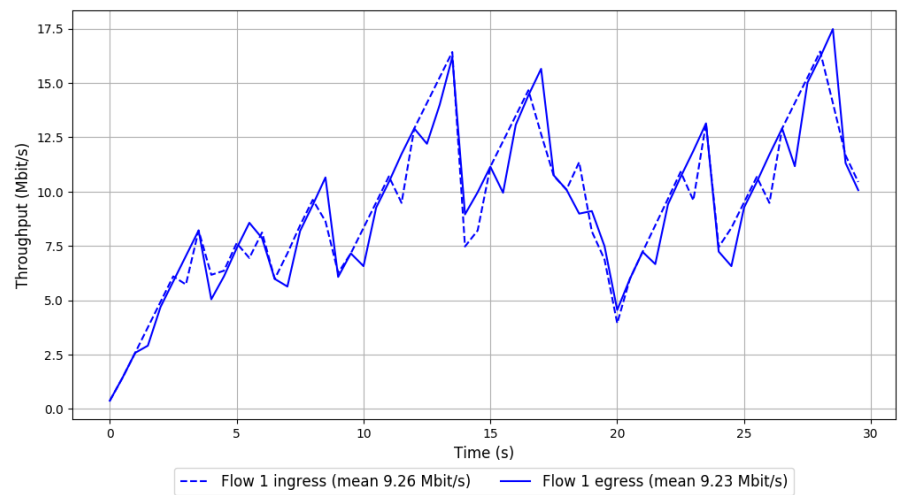
-- Flow 1:

Average throughput: 9.23 Mbit/s

95th percentile per-packet one-way delay: 53.929 ms

Loss rate: 0.31%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-11 13:49:59

End at: 2017-08-11 13:50:29

Below is generated by plot.py at 2017-08-11 14:45:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 53.531 ms

Loss rate: 5.57%

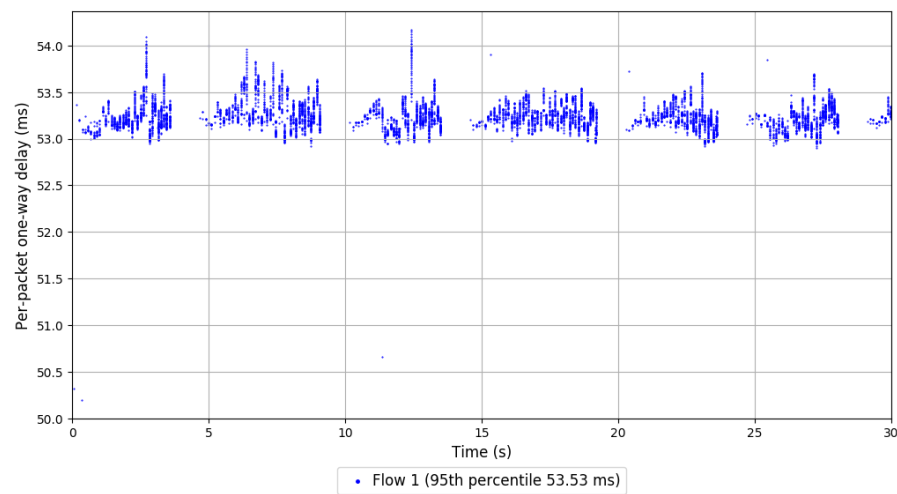
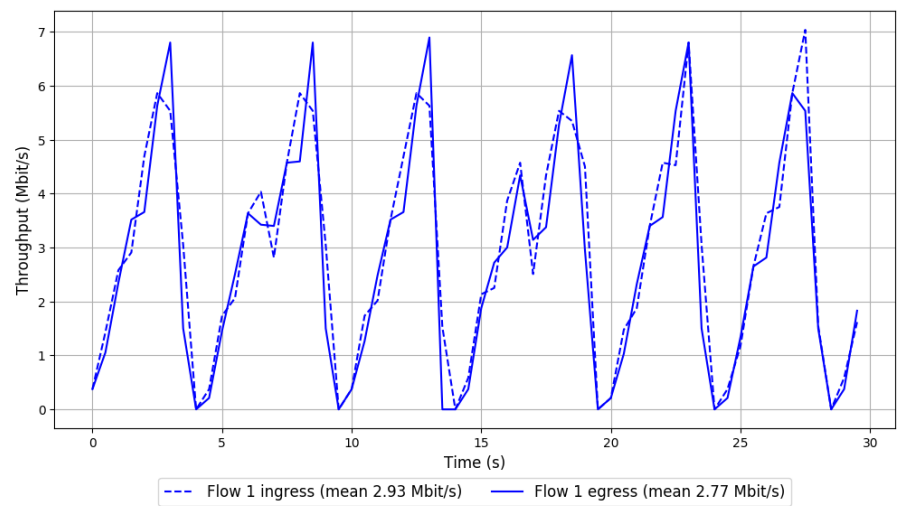
-- Flow 1:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 53.531 ms

Loss rate: 5.57%

Run 10: Report of LEDBAT — Data Link

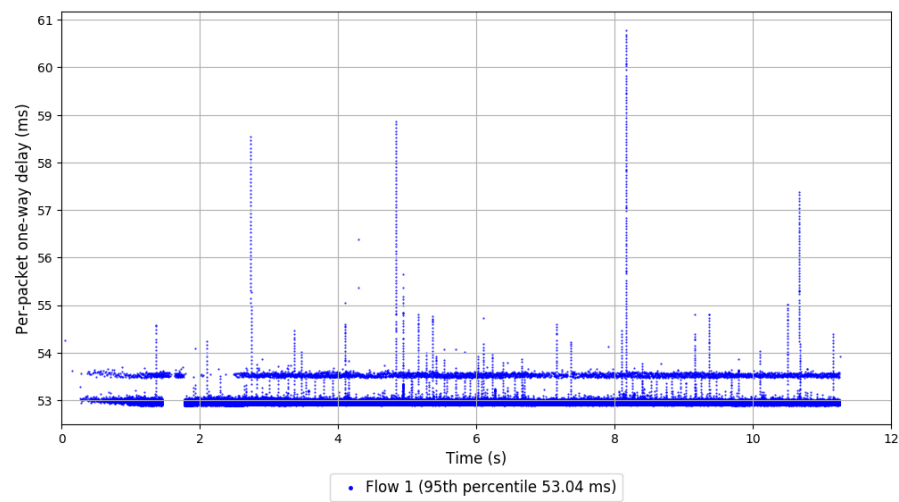
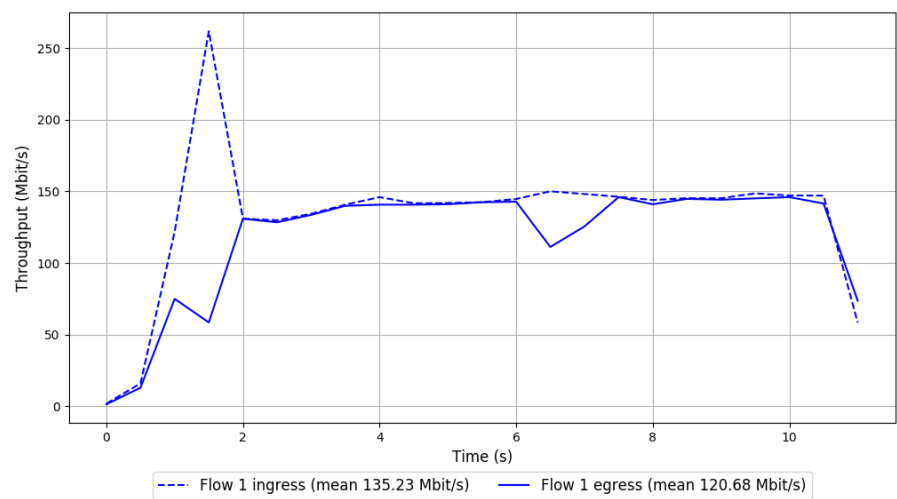


Run 1: Statistics of PCC

Start at: 2017-08-11 12:17:02

End at: 2017-08-11 12:17:32

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-11 12:26:37

End at: 2017-08-11 12:27:07

Below is generated by plot.py at 2017-08-11 14:45:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.50 Mbit/s

95th percentile per-packet one-way delay: 53.023 ms

Loss rate: 5.76%

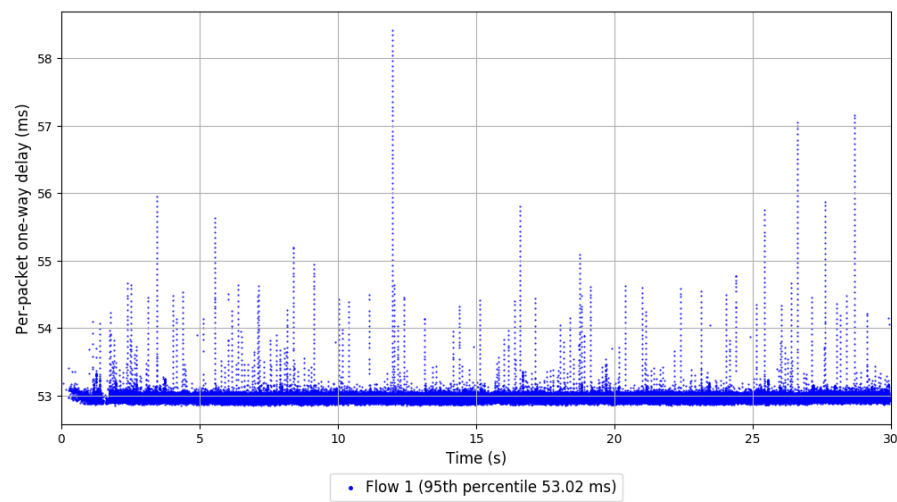
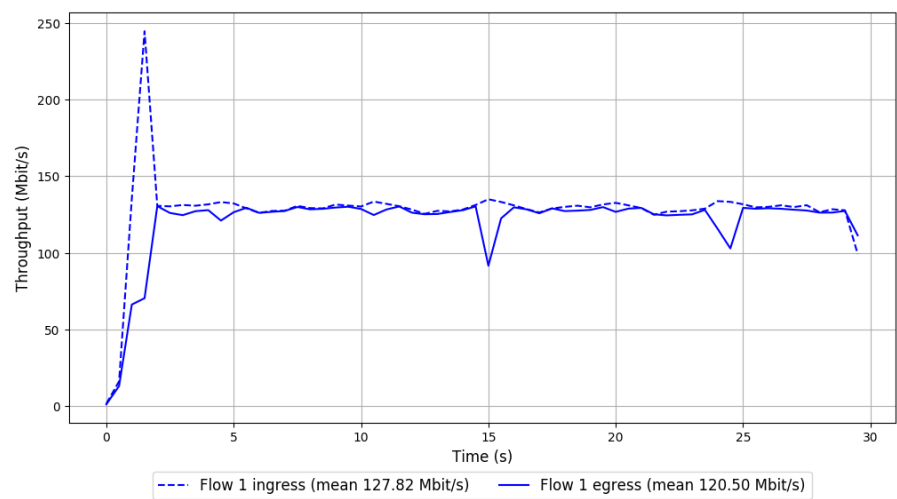
-- Flow 1:

Average throughput: 120.50 Mbit/s

95th percentile per-packet one-way delay: 53.023 ms

Loss rate: 5.76%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-11 12:36:12

End at: 2017-08-11 12:36:42

Below is generated by plot.py at 2017-08-11 14:45:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 106.58 Mbit/s

95th percentile per-packet one-way delay: 53.013 ms

Loss rate: 3.78%

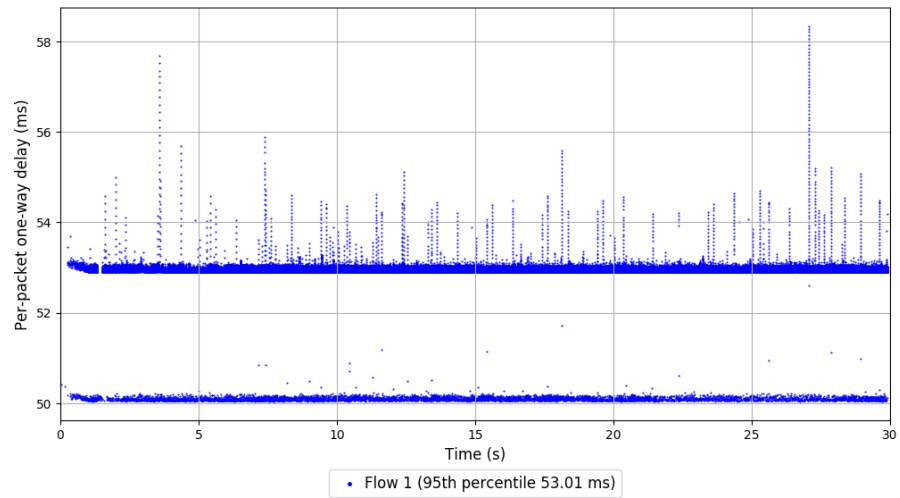
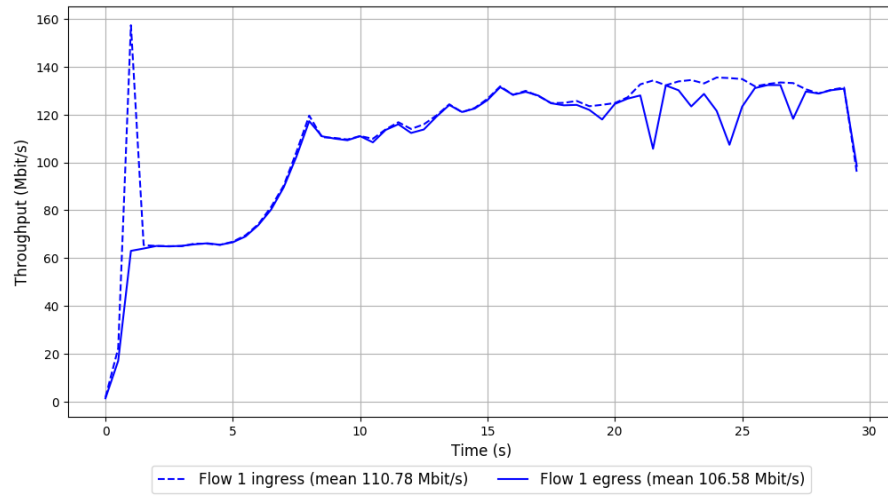
-- Flow 1:

Average throughput: 106.58 Mbit/s

95th percentile per-packet one-way delay: 53.013 ms

Loss rate: 3.78%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-11 12:46:15

End at: 2017-08-11 12:46:45

Below is generated by plot.py at 2017-08-11 14:47:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 508.78 Mbit/s

95th percentile per-packet one-way delay: 120.616 ms

Loss rate: 0.56%

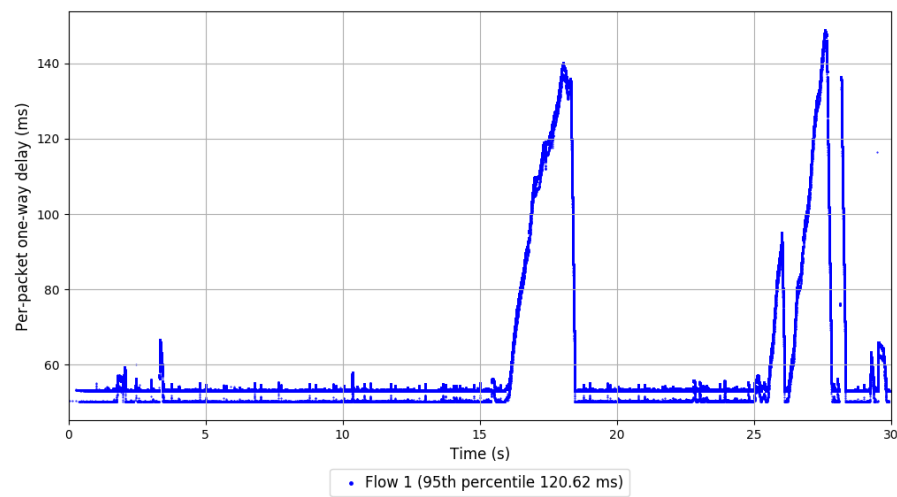
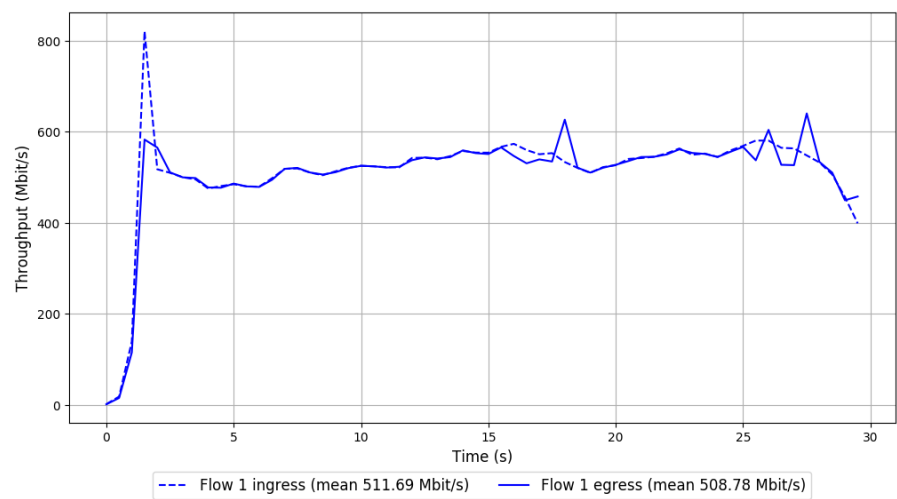
-- Flow 1:

Average throughput: 508.78 Mbit/s

95th percentile per-packet one-way delay: 120.616 ms

Loss rate: 0.56%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-11 12:56:30

End at: 2017-08-11 12:57:01

Below is generated by plot.py at 2017-08-11 14:47:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 472.35 Mbit/s

95th percentile per-packet one-way delay: 53.890 ms

Loss rate: 6.41%

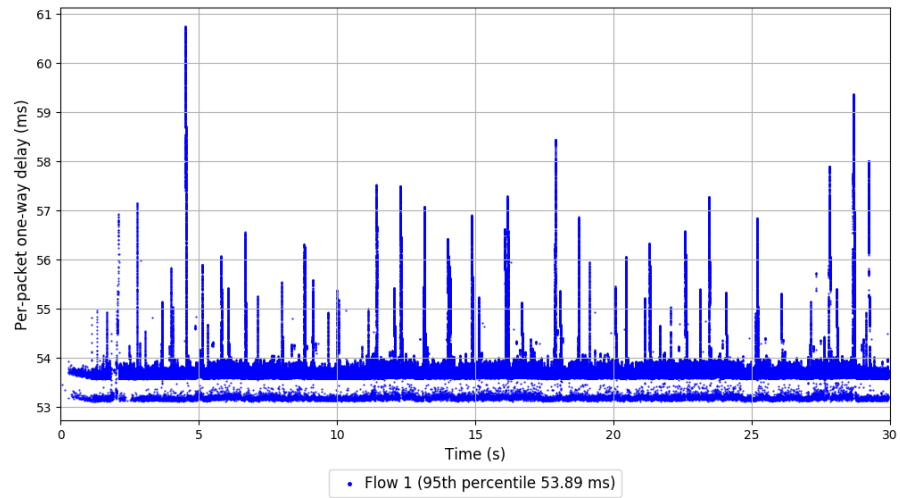
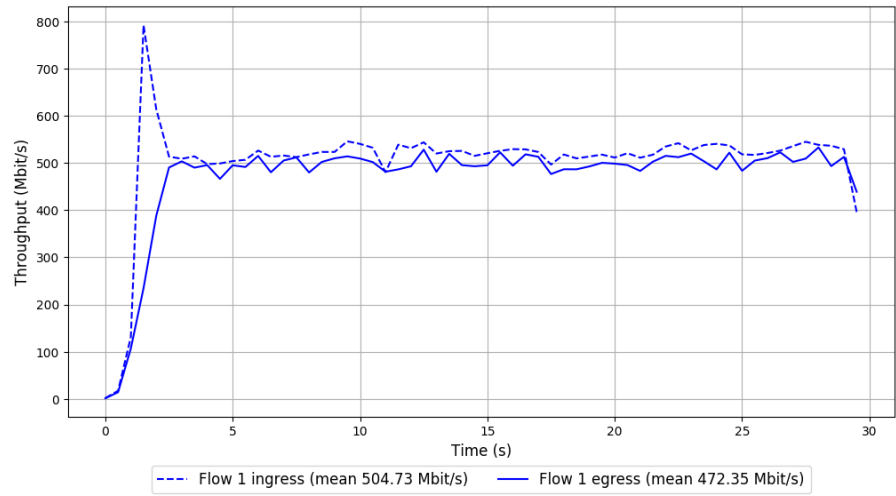
-- Flow 1:

Average throughput: 472.35 Mbit/s

95th percentile per-packet one-way delay: 53.890 ms

Loss rate: 6.41%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-11 13:06:30

End at: 2017-08-11 13:07:00

Below is generated by plot.py at 2017-08-11 14:48:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 517.38 Mbit/s

95th percentile per-packet one-way delay: 134.916 ms

Loss rate: 0.67%

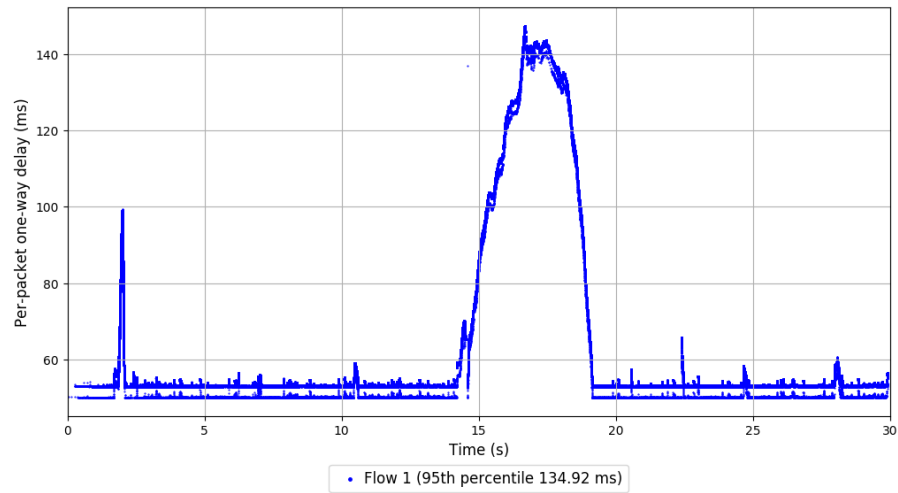
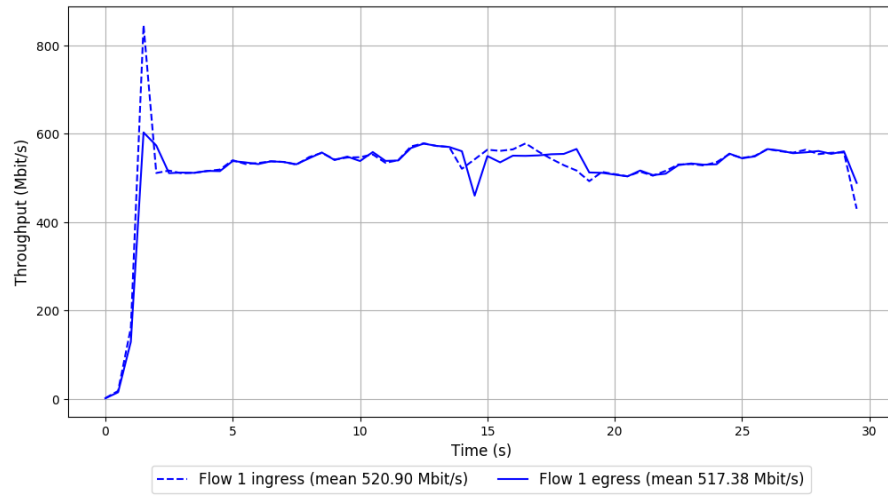
-- Flow 1:

Average throughput: 517.38 Mbit/s

95th percentile per-packet one-way delay: 134.916 ms

Loss rate: 0.67%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-11 13:16:29

End at: 2017-08-11 13:16:59

Below is generated by plot.py at 2017-08-11 14:49:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 509.85 Mbit/s

95th percentile per-packet one-way delay: 147.903 ms

Loss rate: 1.18%

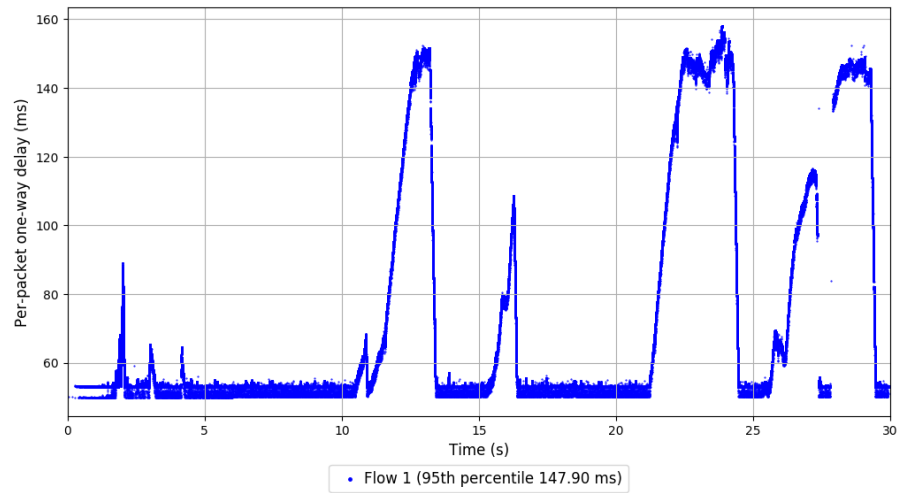
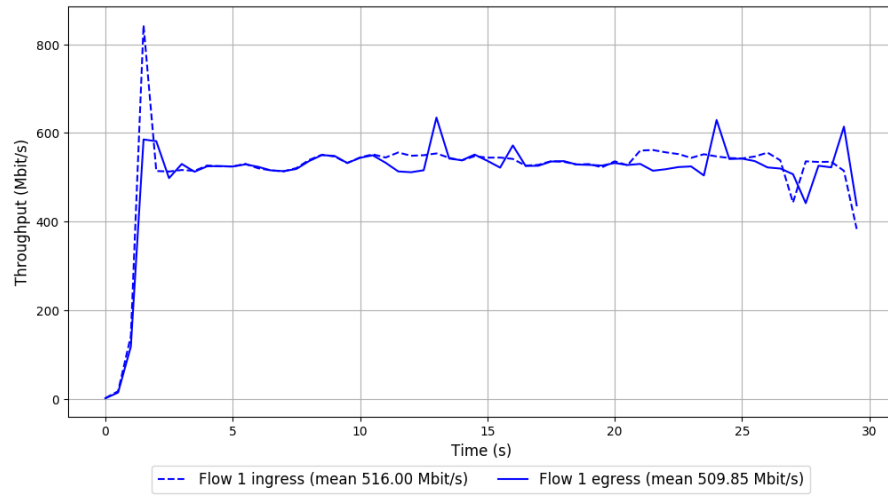
-- Flow 1:

Average throughput: 509.85 Mbit/s

95th percentile per-packet one-way delay: 147.903 ms

Loss rate: 1.18%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-11 13:26:17

End at: 2017-08-11 13:26:47

Below is generated by plot.py at 2017-08-11 14:50:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 515.19 Mbit/s

95th percentile per-packet one-way delay: 148.456 ms

Loss rate: 2.77%

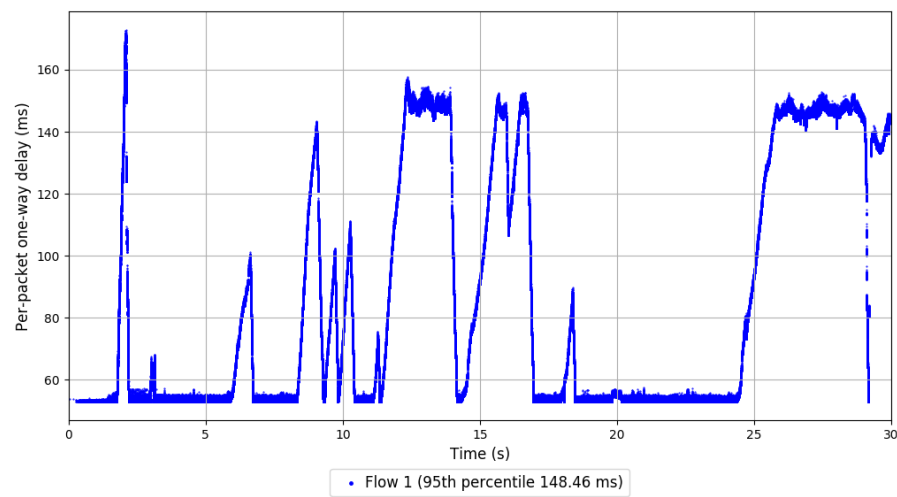
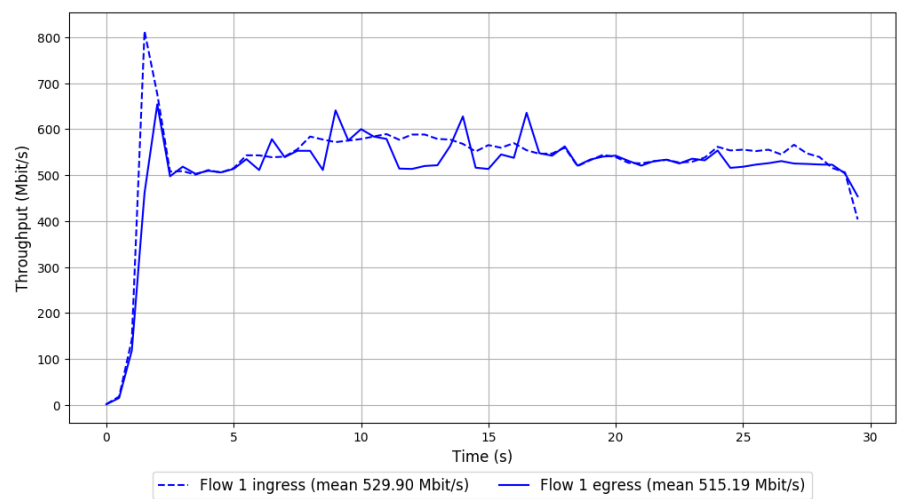
-- Flow 1:

Average throughput: 515.19 Mbit/s

95th percentile per-packet one-way delay: 148.456 ms

Loss rate: 2.77%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-11 13:36:15

End at: 2017-08-11 13:36:46

Below is generated by plot.py at 2017-08-11 14:50:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 503.89 Mbit/s

95th percentile per-packet one-way delay: 146.014 ms

Loss rate: 1.06%

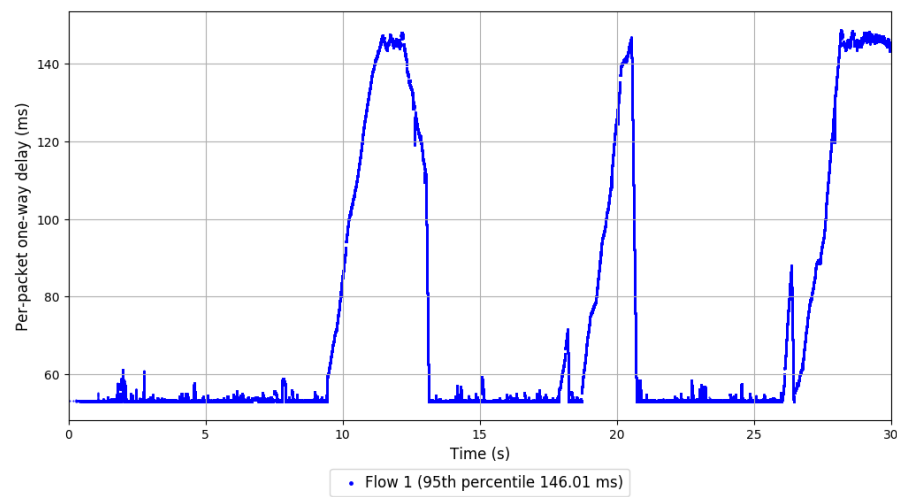
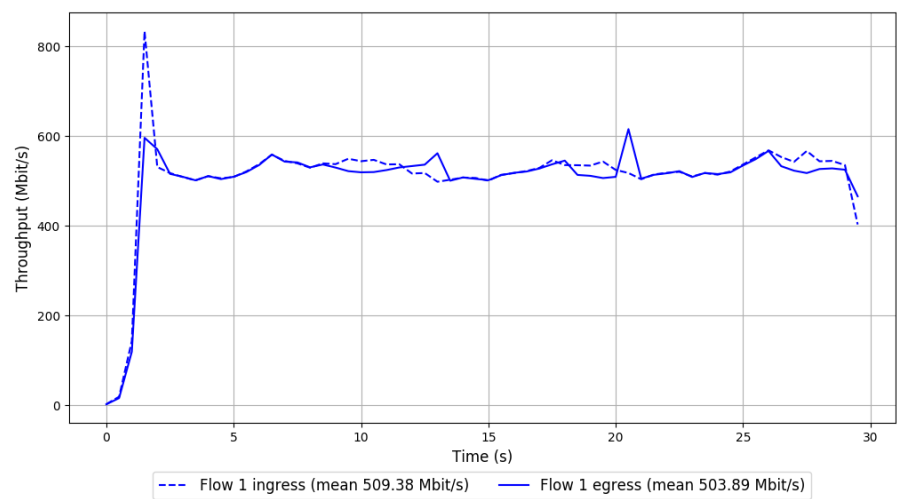
-- Flow 1:

Average throughput: 503.89 Mbit/s

95th percentile per-packet one-way delay: 146.014 ms

Loss rate: 1.06%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-11 13:46:07

End at: 2017-08-11 13:46:37

Below is generated by plot.py at 2017-08-11 14:51:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.06 Mbit/s

95th percentile per-packet one-way delay: 53.018 ms

Loss rate: 12.43%

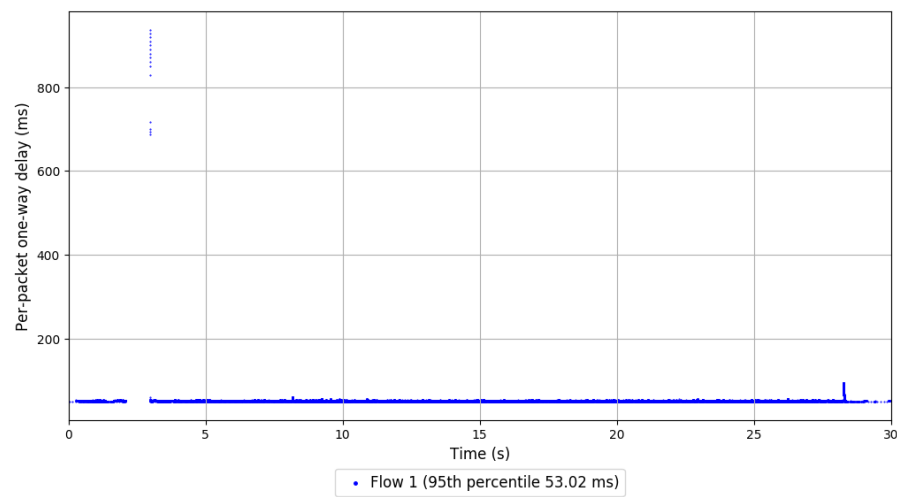
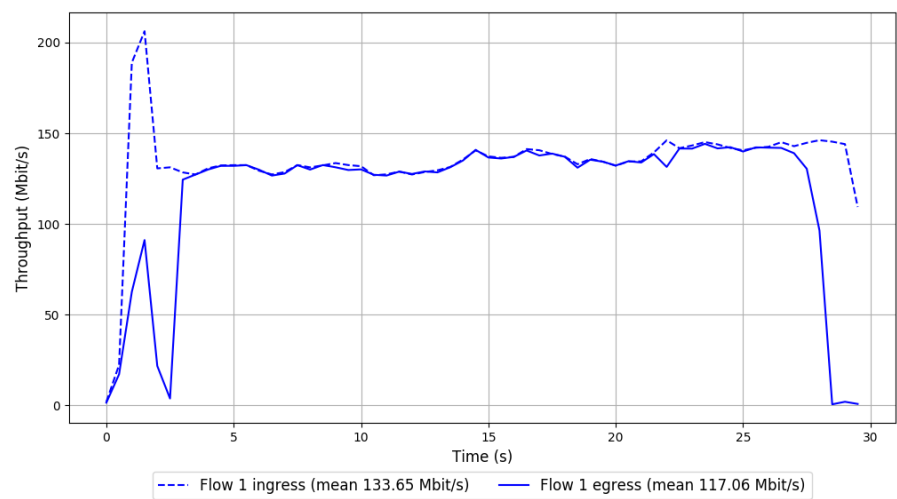
-- Flow 1:

Average throughput: 117.06 Mbit/s

95th percentile per-packet one-way delay: 53.018 ms

Loss rate: 12.43%

Run 10: Report of PCC — Data Link

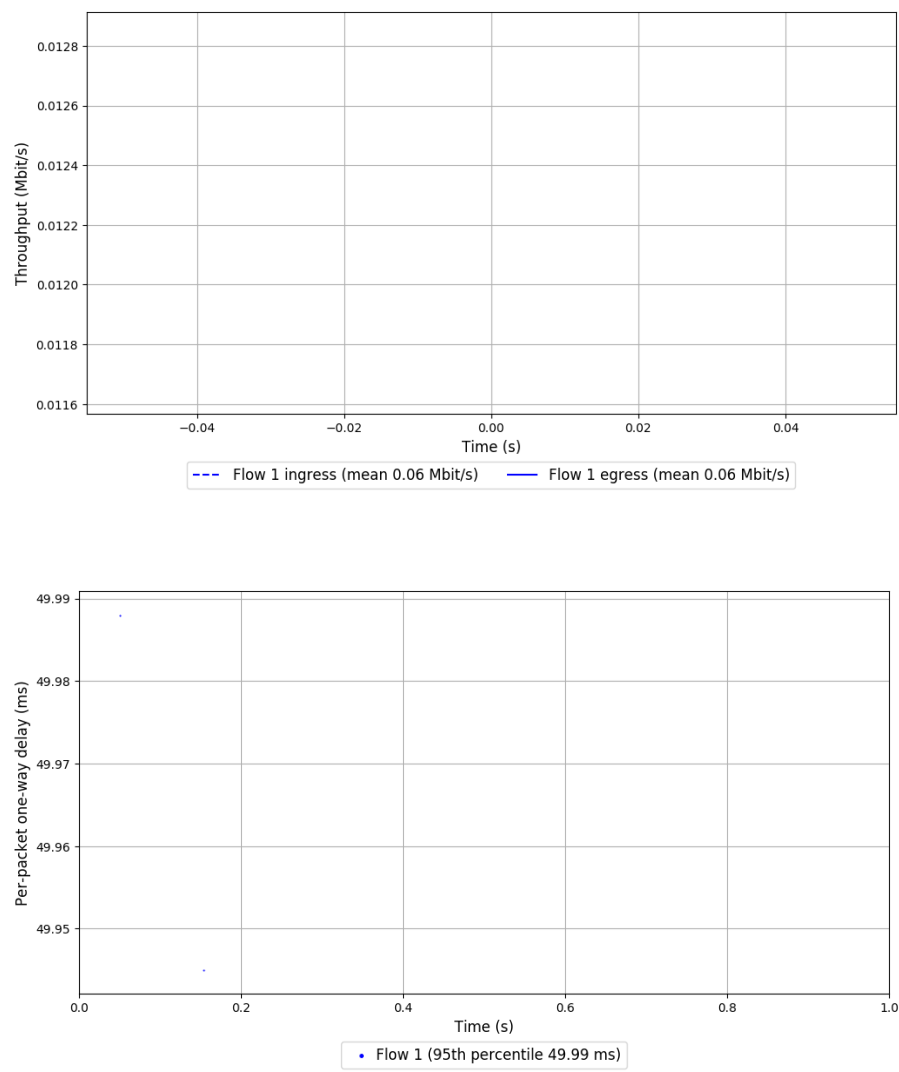


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-11 12:21:35

End at: 2017-08-11 12:22:05

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-11 12:31:06

End at: 2017-08-11 12:31:36

Below is generated by plot.py at 2017-08-11 14:51:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.24 Mbit/s

95th percentile per-packet one-way delay: 49.814 ms

Loss rate: 0.00%

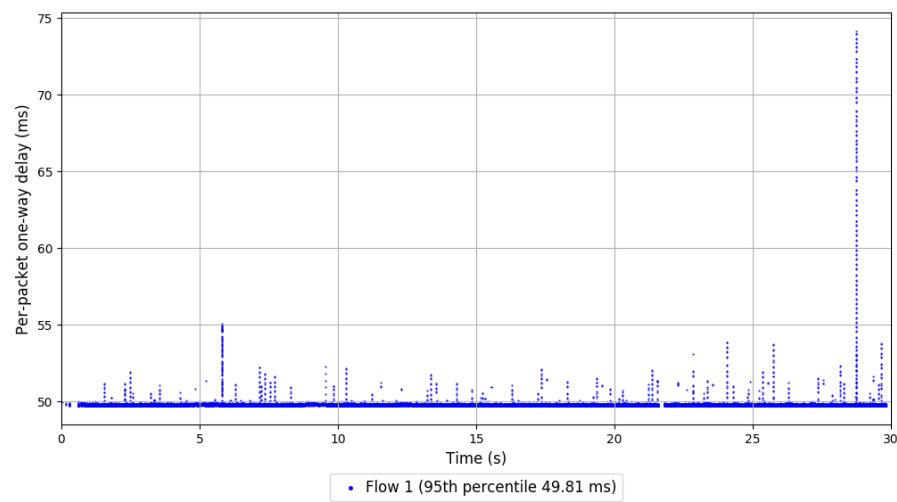
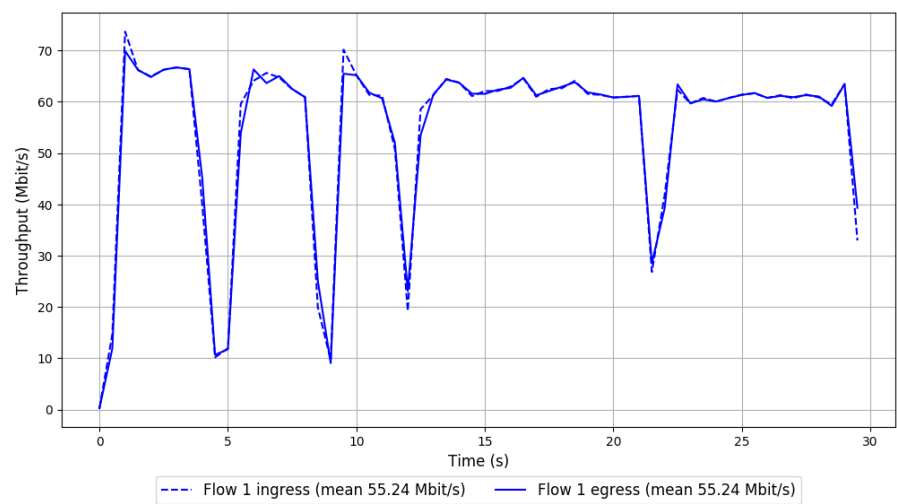
-- Flow 1:

Average throughput: 55.24 Mbit/s

95th percentile per-packet one-way delay: 49.814 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-11 12:40:41

End at: 2017-08-11 12:41:11

Below is generated by plot.py at 2017-08-11 14:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.73 Mbit/s

95th percentile per-packet one-way delay: 53.617 ms

Loss rate: 0.00%

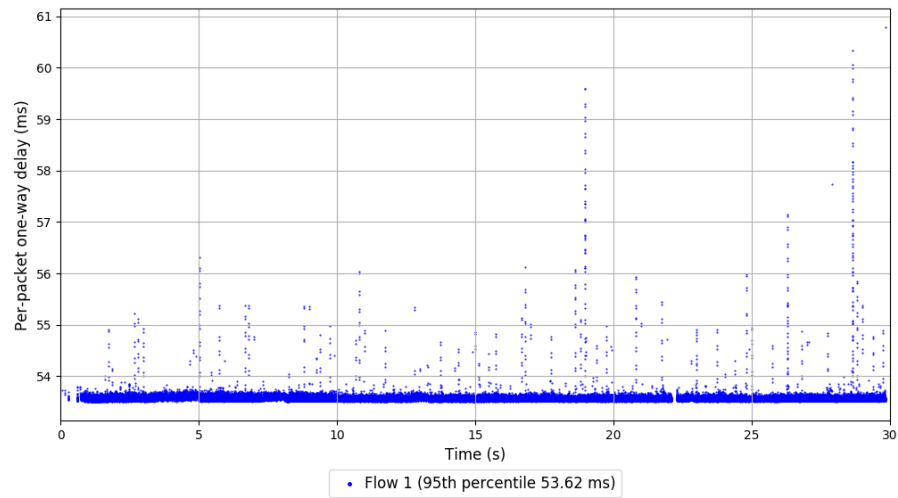
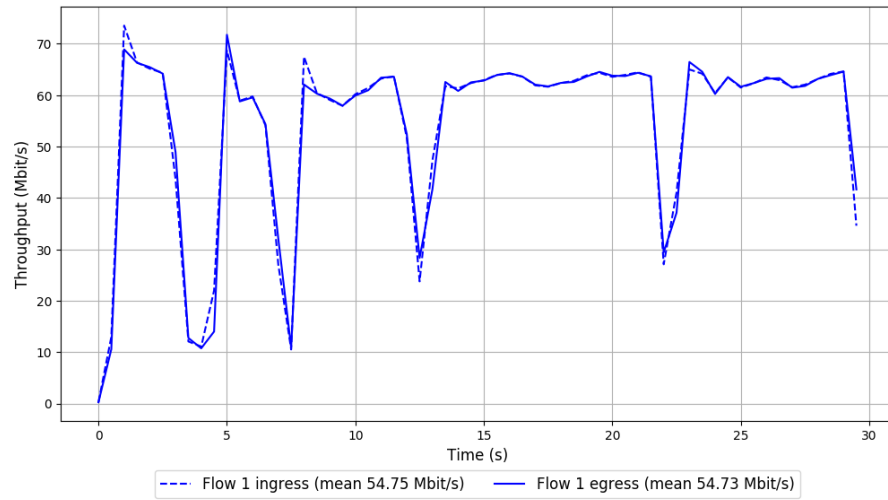
-- Flow 1:

Average throughput: 54.73 Mbit/s

95th percentile per-packet one-way delay: 53.617 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-11 12:51:05

End at: 2017-08-11 12:51:35

Below is generated by plot.py at 2017-08-11 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.36 Mbit/s

95th percentile per-packet one-way delay: 50.134 ms

Loss rate: 0.00%

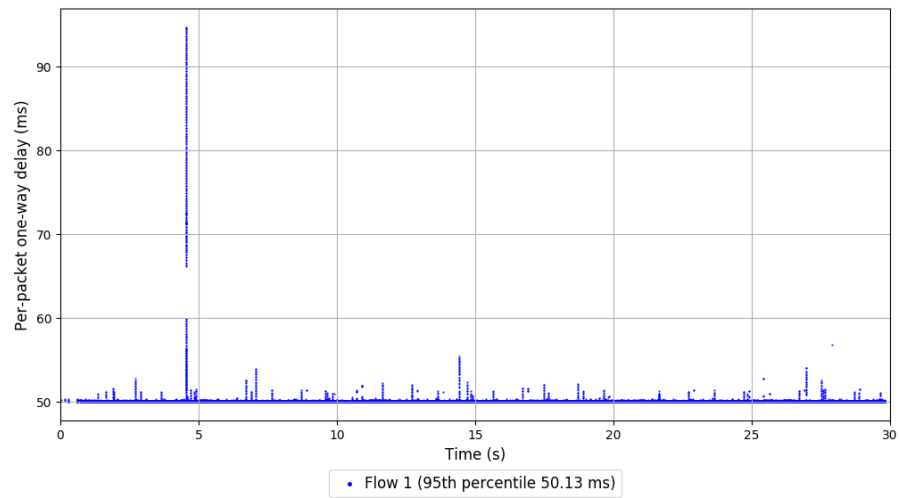
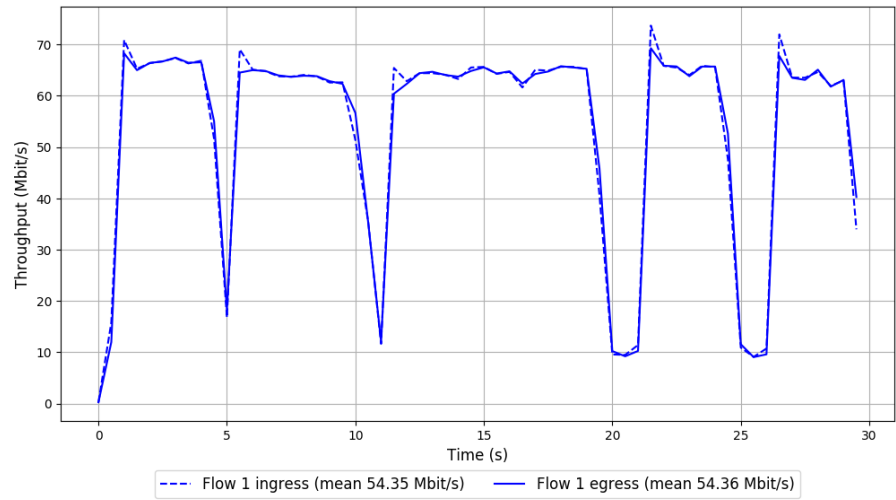
-- Flow 1:

Average throughput: 54.36 Mbit/s

95th percentile per-packet one-way delay: 50.134 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-11 13:01:20

End at: 2017-08-11 13:01:50

Below is generated by plot.py at 2017-08-11 14:51:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.66 Mbit/s

95th percentile per-packet one-way delay: 50.135 ms

Loss rate: 0.00%

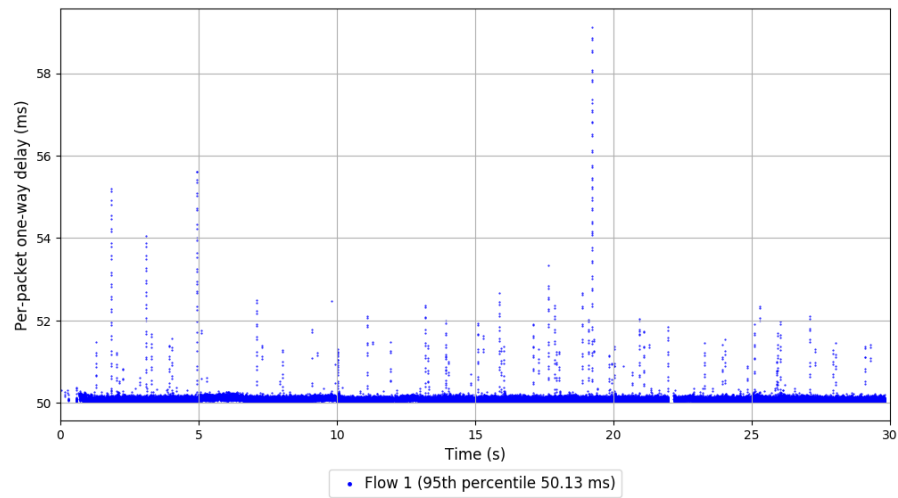
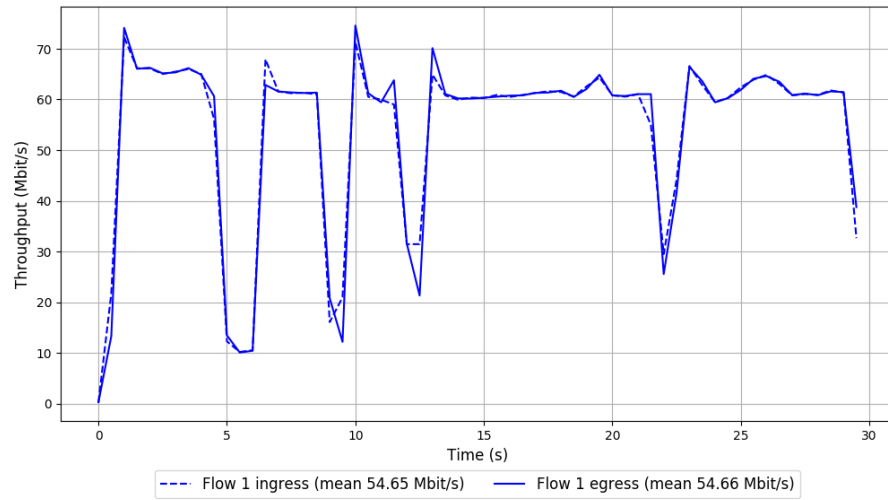
-- Flow 1:

Average throughput: 54.66 Mbit/s

95th percentile per-packet one-way delay: 50.135 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-11 13:11:14

End at: 2017-08-11 13:11:44

Below is generated by plot.py at 2017-08-11 14:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.25 Mbit/s

95th percentile per-packet one-way delay: 50.145 ms

Loss rate: 0.00%

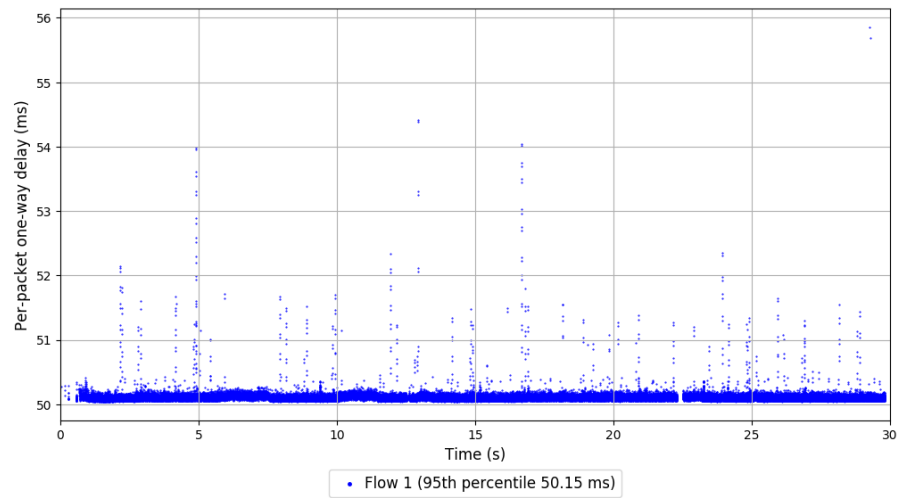
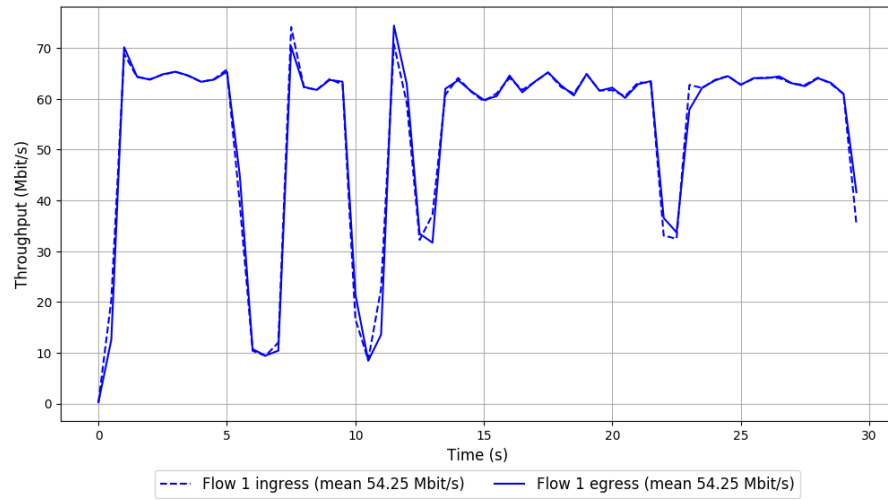
-- Flow 1:

Average throughput: 54.25 Mbit/s

95th percentile per-packet one-way delay: 50.145 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-11 13:21:12

End at: 2017-08-11 13:21:42

Below is generated by plot.py at 2017-08-11 14:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.34 Mbit/s

95th percentile per-packet one-way delay: 53.622 ms

Loss rate: 0.00%

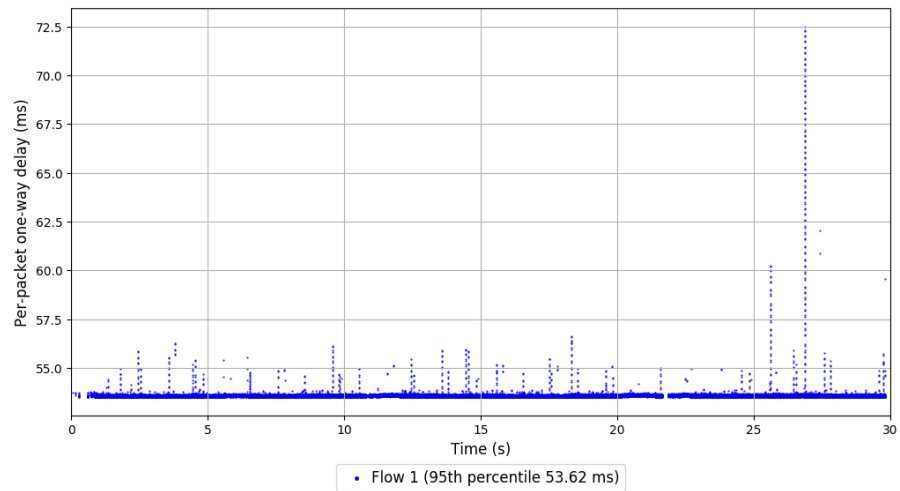
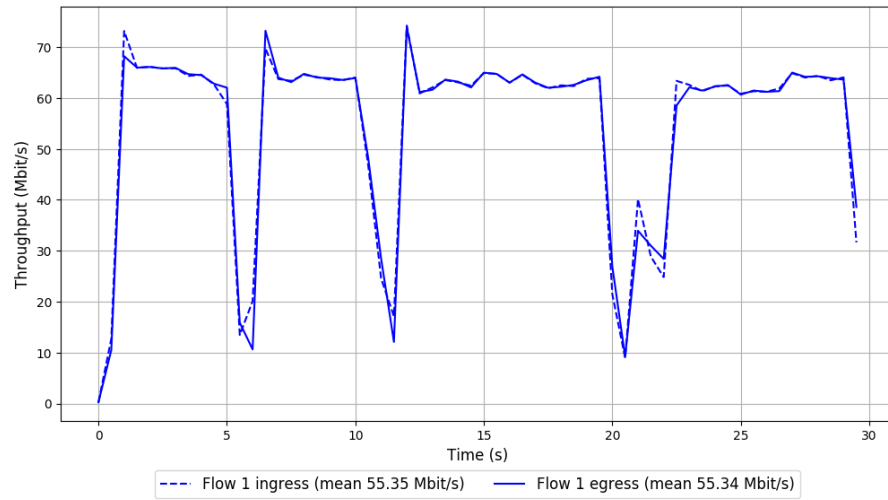
-- Flow 1:

Average throughput: 55.34 Mbit/s

95th percentile per-packet one-way delay: 53.622 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

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

End at: 2017-08-11 13:31:37

Below is generated by plot.py at 2017-08-11 14:51:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 52.996 ms

Loss rate: 0.00%

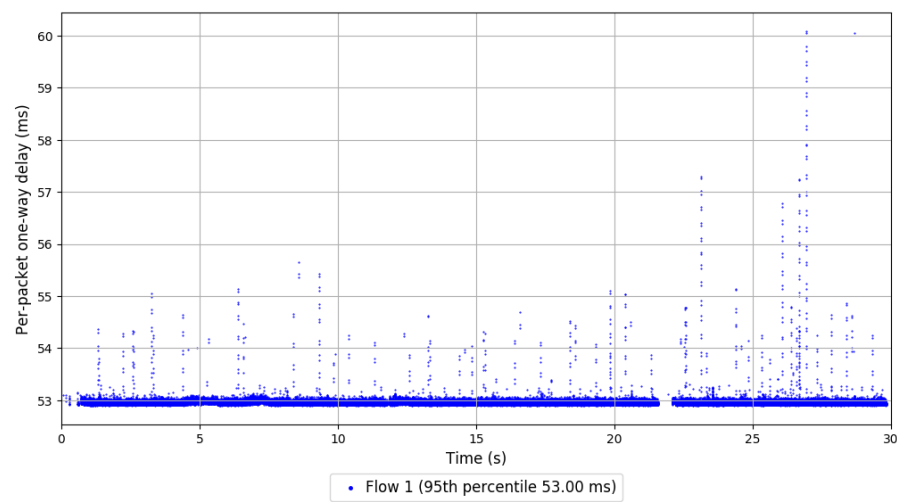
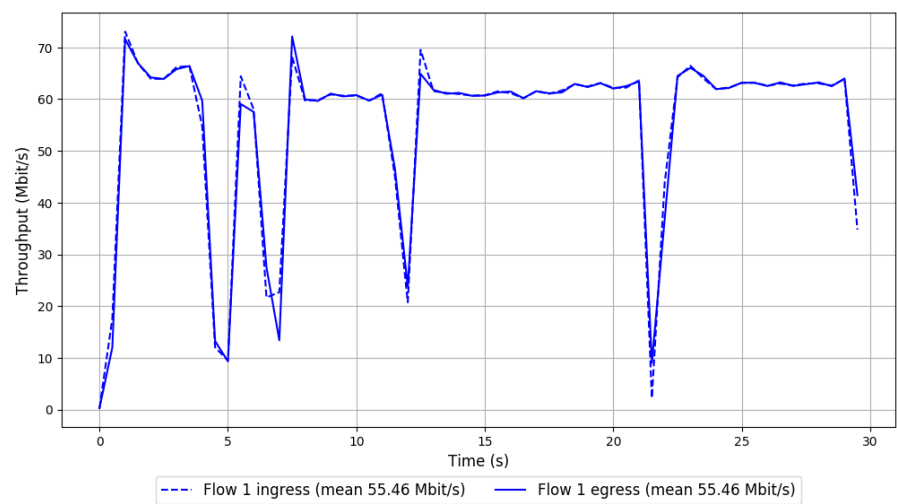
-- Flow 1:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 52.996 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-11 13:40:56

End at: 2017-08-11 13:41:26

Below is generated by plot.py at 2017-08-11 14:51:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.15 Mbit/s

95th percentile per-packet one-way delay: 49.912 ms

Loss rate: 0.00%

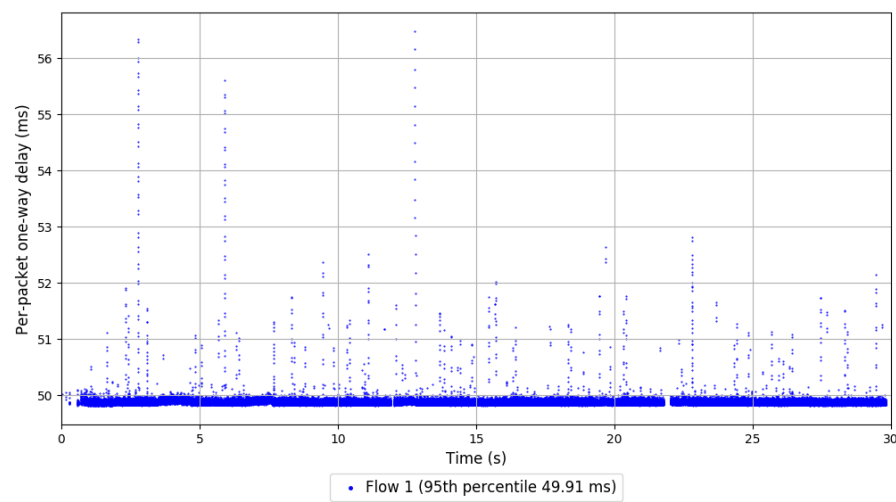
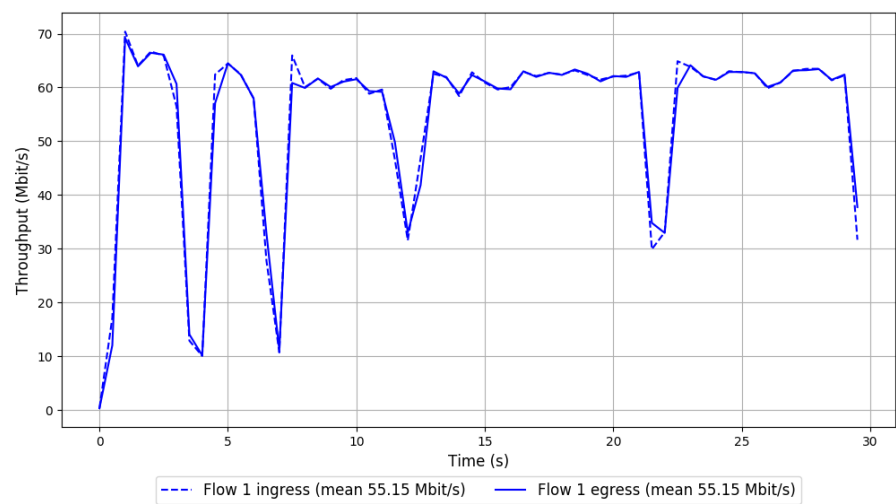
-- Flow 1:

Average throughput: 55.15 Mbit/s

95th percentile per-packet one-way delay: 49.912 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

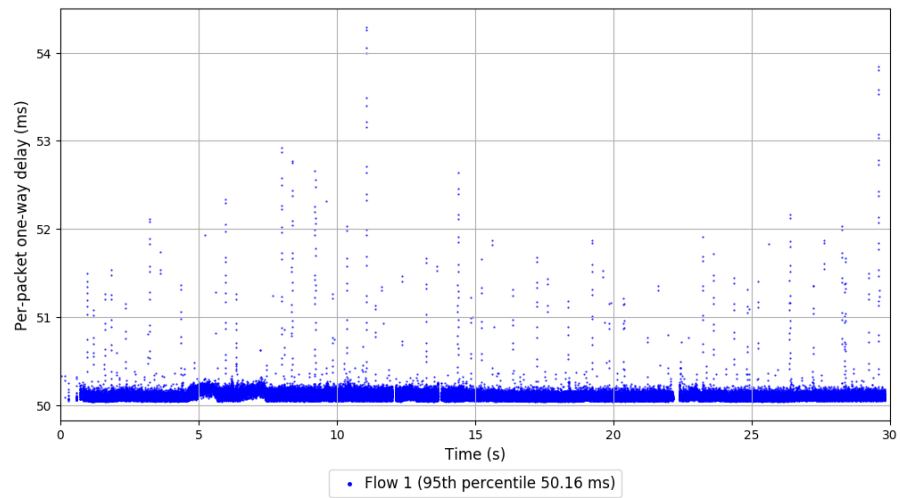
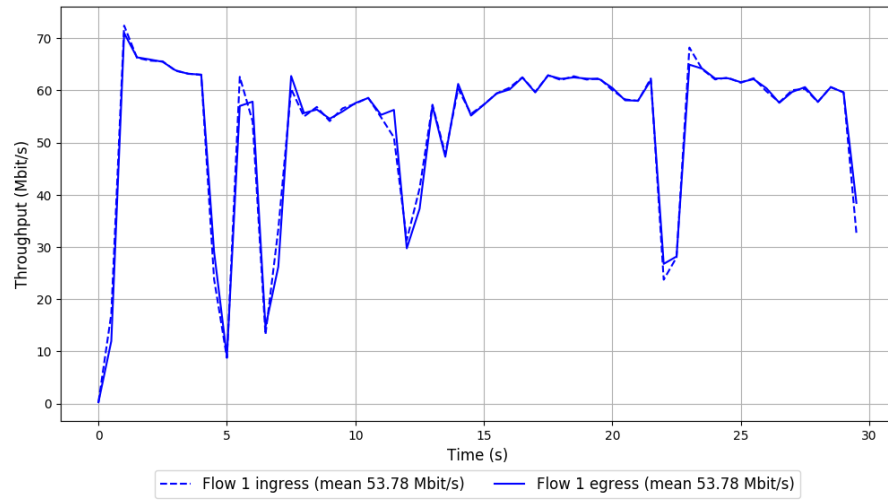


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-11 13:50:36
End at: 2017-08-11 13:51:06

# Below is generated by plot.py at 2017-08-11 14:51:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.78 Mbit/s
95th percentile per-packet one-way delay: 50.158 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.78 Mbit/s
95th percentile per-packet one-way delay: 50.158 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

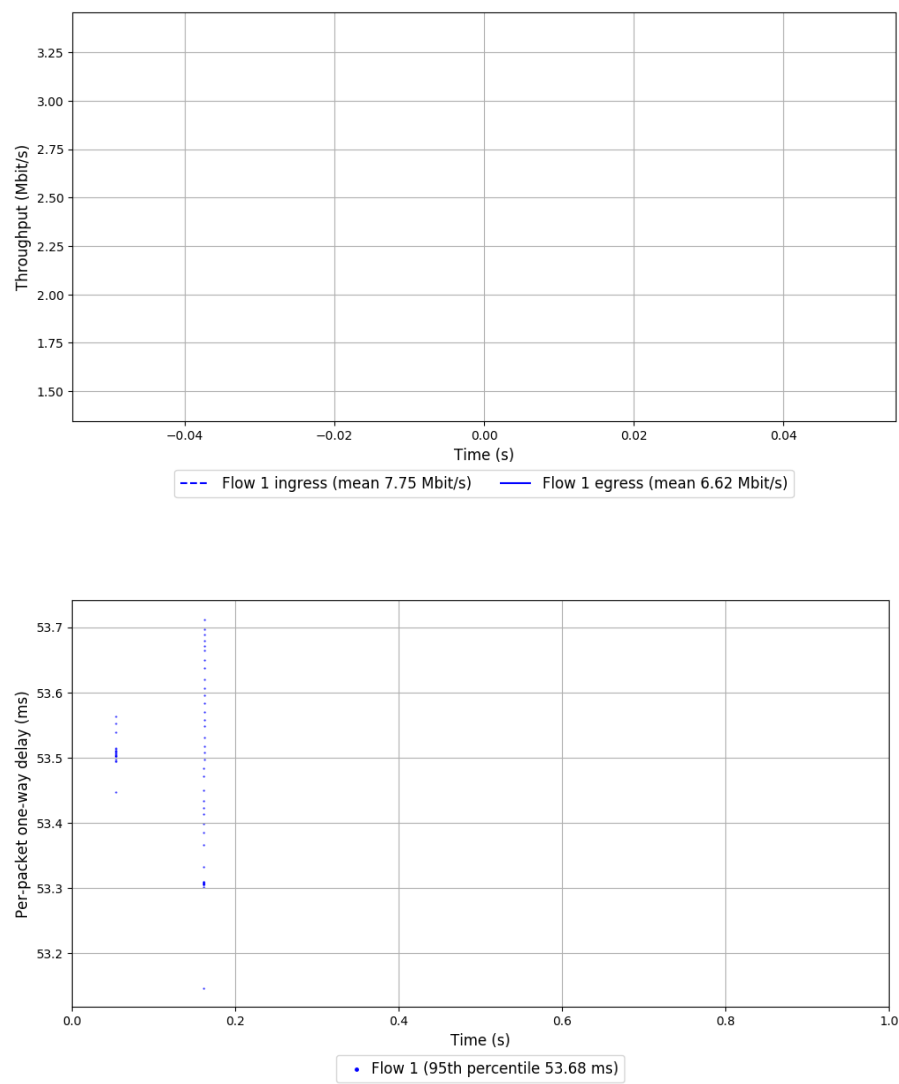


Run 1: Statistics of Saturator

Start at: 2017-08-11 12:26:01

End at: 2017-08-11 12:26:31

Run 1: Report of Saturator — Data Link

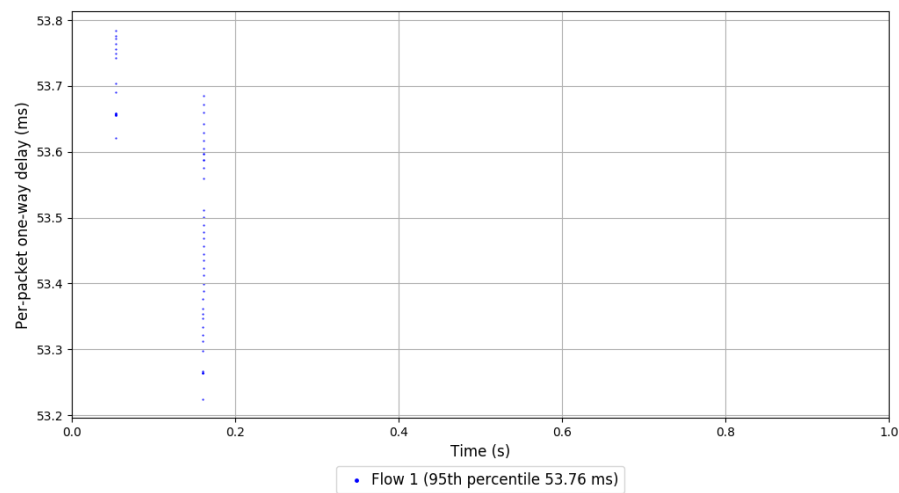
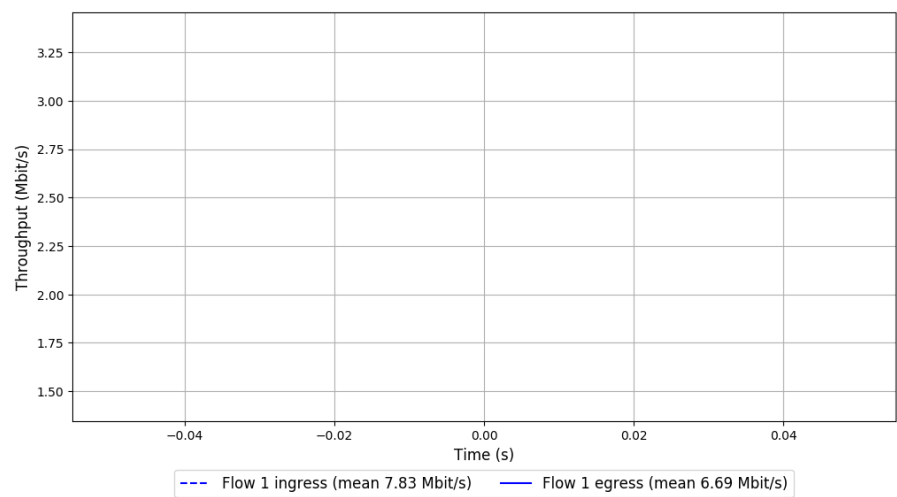


Run 2: Statistics of Saturator

Start at: 2017-08-11 12:35:35

End at: 2017-08-11 12:36:05

Run 2: Report of Saturator — Data Link

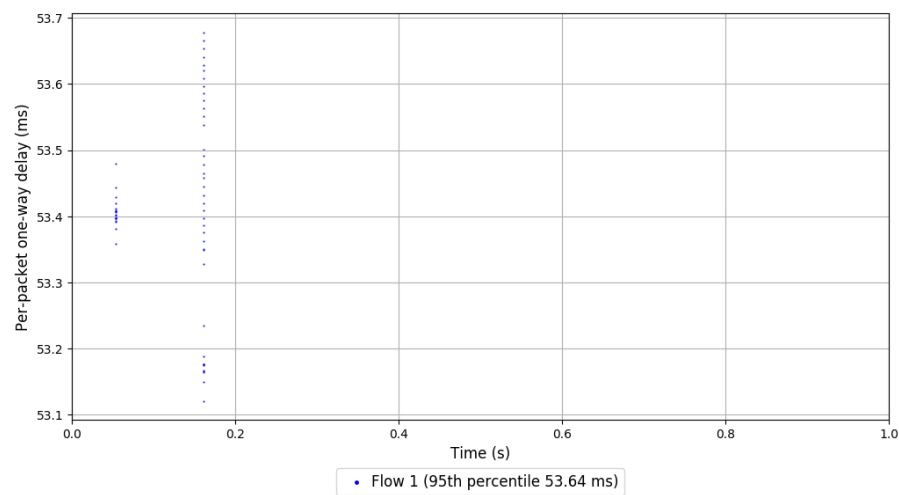
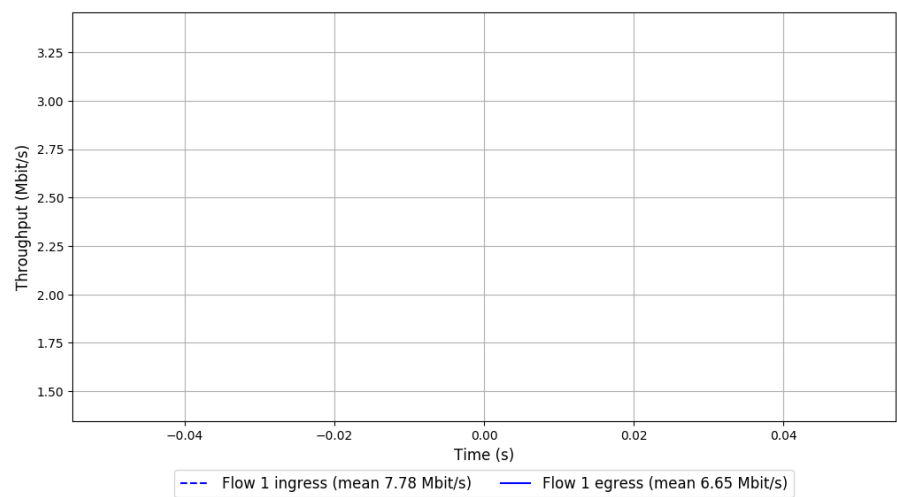


Run 3: Statistics of Saturator

Start at: 2017-08-11 12:45:38

End at: 2017-08-11 12:46:08

Run 3: Report of Saturator — Data Link

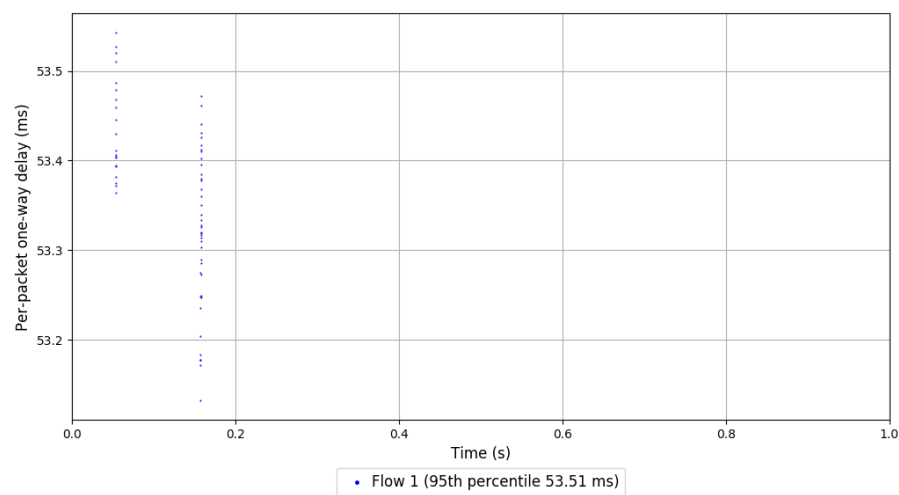
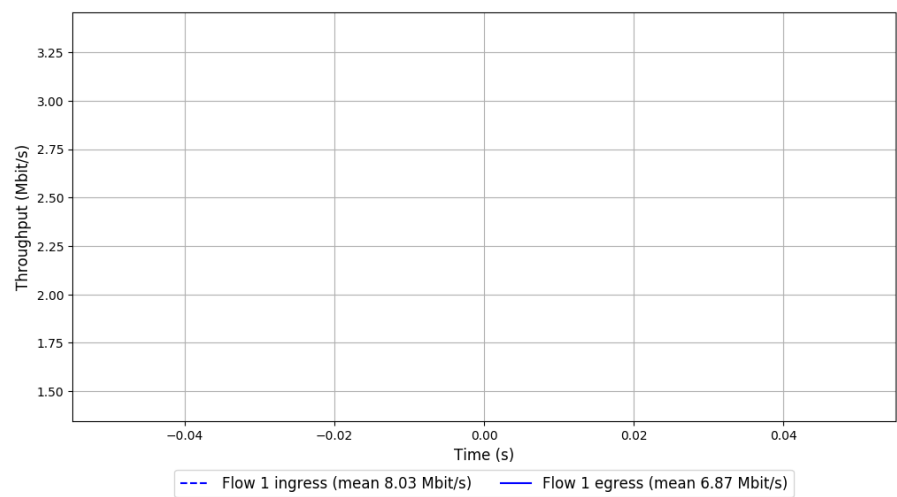


Run 4: Statistics of Saturator

Start at: 2017-08-11 12:55:54

End at: 2017-08-11 12:56:24

Run 4: Report of Saturator — Data Link

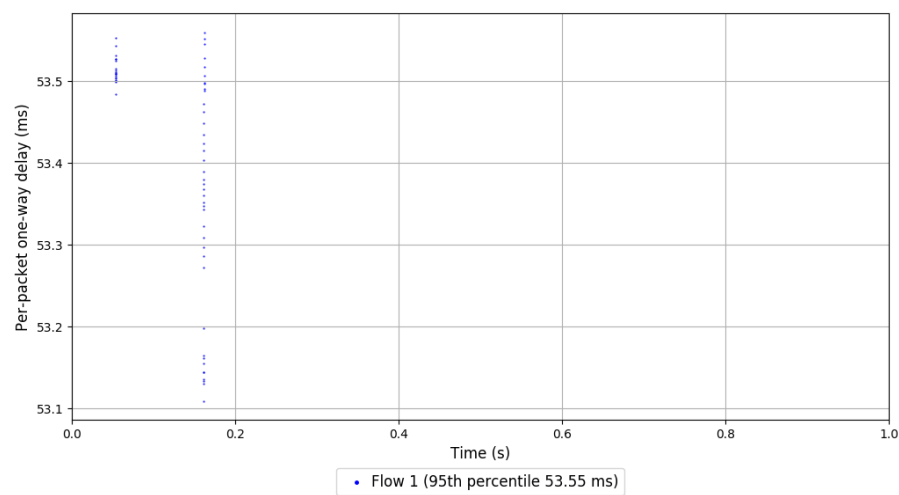
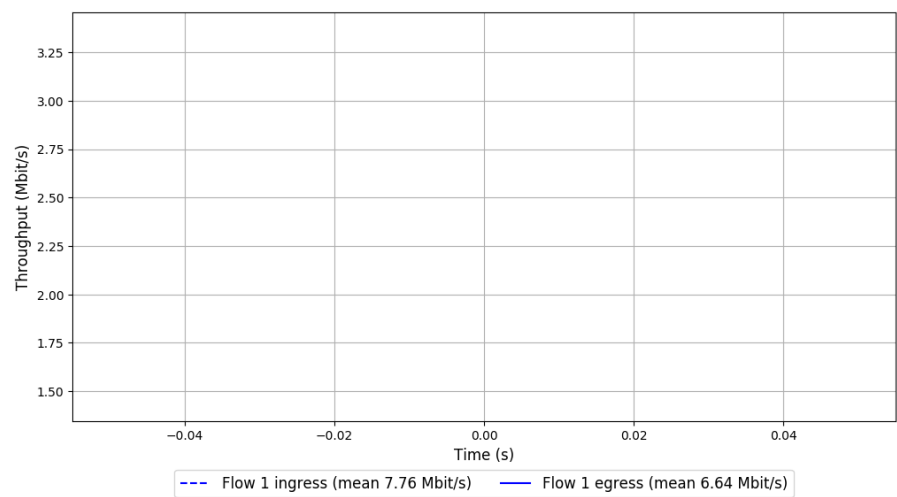


Run 5: Statistics of Saturator

Start at: 2017-08-11 13:05:53

End at: 2017-08-11 13:06:23

Run 5: Report of Saturator — Data Link



Run 6: Statistics of Saturator

Start at: 2017-08-11 13:15:50

End at: 2017-08-11 13:16:20

Below is generated by plot.py at 2017-08-11 14:52:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.95 Mbit/s

95th percentile per-packet one-way delay: 53.753 ms

Loss rate: 0.01%

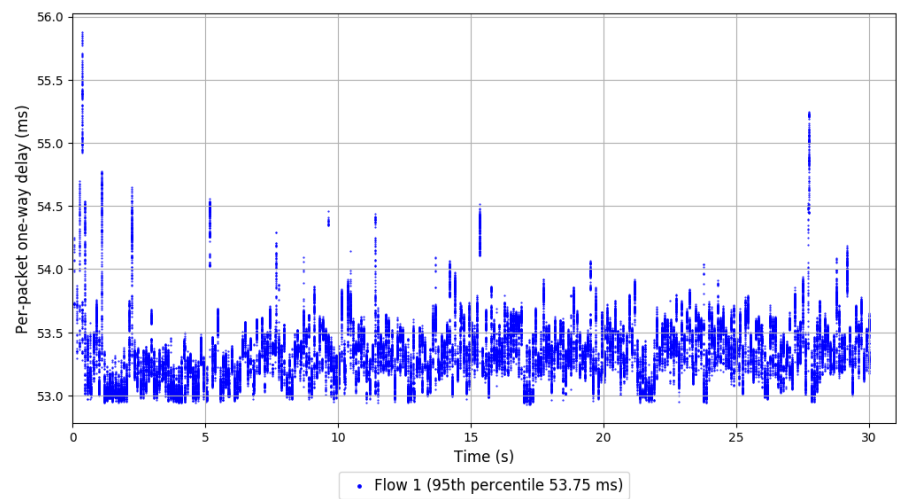
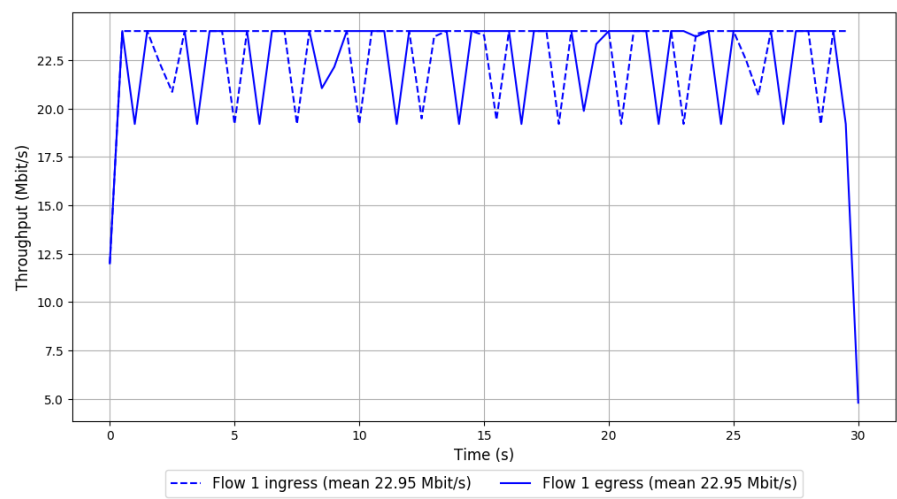
-- Flow 1:

Average throughput: 22.95 Mbit/s

95th percentile per-packet one-way delay: 53.753 ms

Loss rate: 0.01%

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: 2017-08-11 13:25:38

End at: 2017-08-11 13:26:08

Below is generated by plot.py at 2017-08-11 14:52:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.95 Mbit/s

95th percentile per-packet one-way delay: 54.004 ms

Loss rate: 0.06%

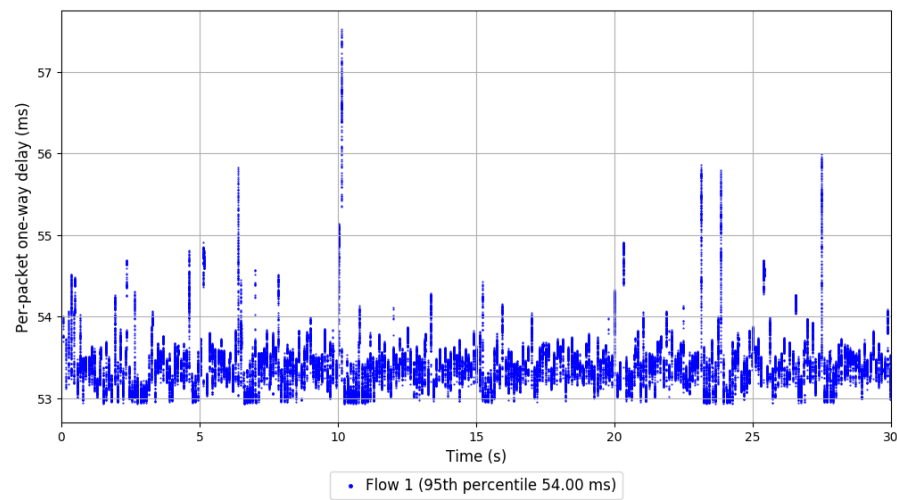
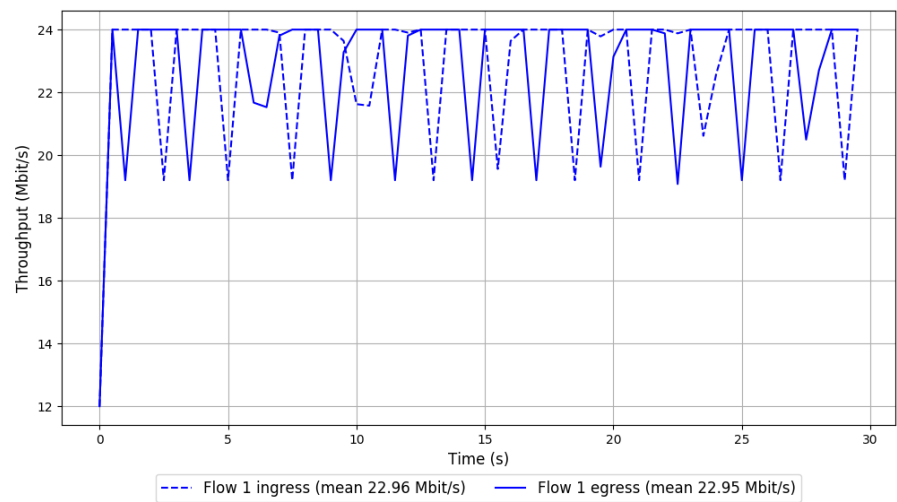
-- Flow 1:

Average throughput: 22.95 Mbit/s

95th percentile per-packet one-way delay: 54.004 ms

Loss rate: 0.06%

Run 7: Report of Saturator — Data Link

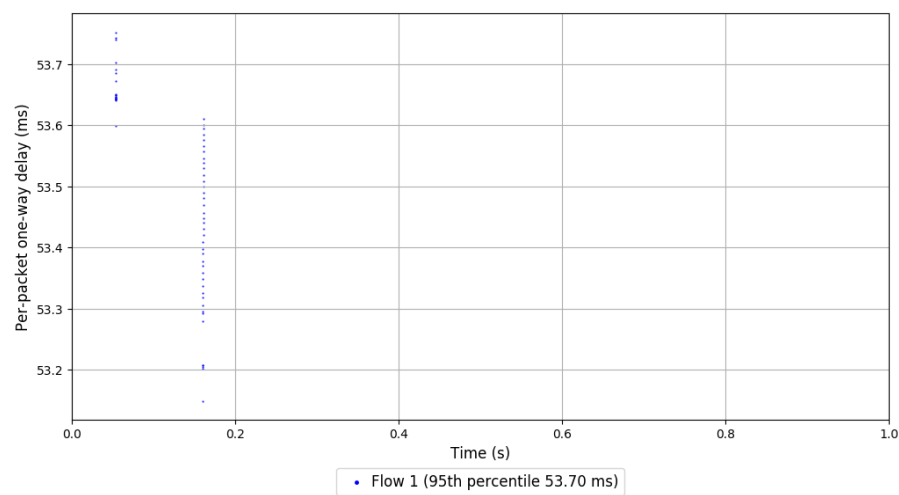
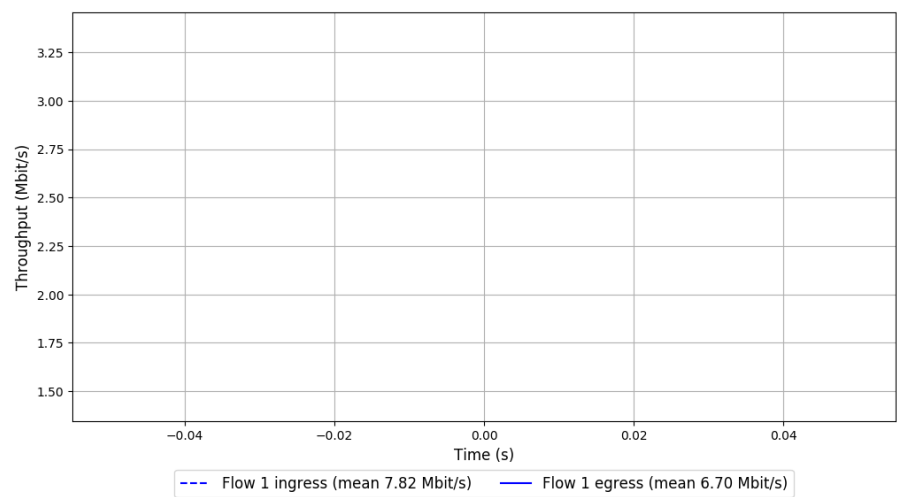


Run 8: Statistics of Saturator

Start at: 2017-08-11 13:35:39

End at: 2017-08-11 13:36:09

Run 8: Report of Saturator — Data Link

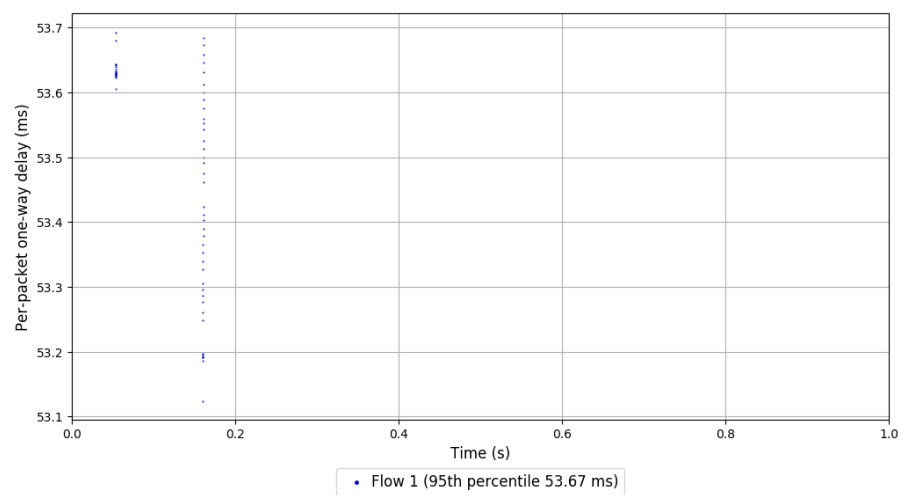
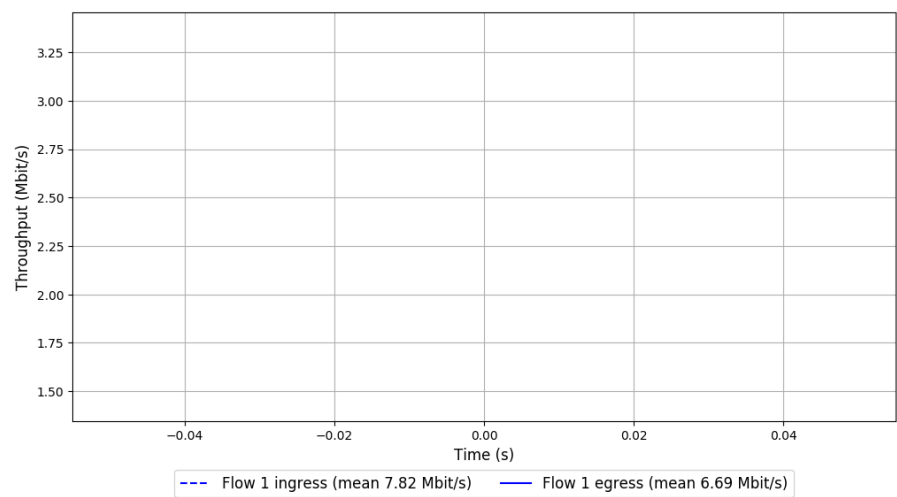


Run 9: Statistics of Saturator

Start at: 2017-08-11 13:45:30

End at: 2017-08-11 13:46:00

Run 9: Report of Saturator — Data Link



Run 10: Statistics of Saturator

Start at: 2017-08-11 13:55:12

End at: 2017-08-11 13:55:42

Below is generated by plot.py at 2017-08-11 14:52:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.14 Mbit/s

95th percentile per-packet one-way delay: 53.877 ms

Loss rate: 0.05%

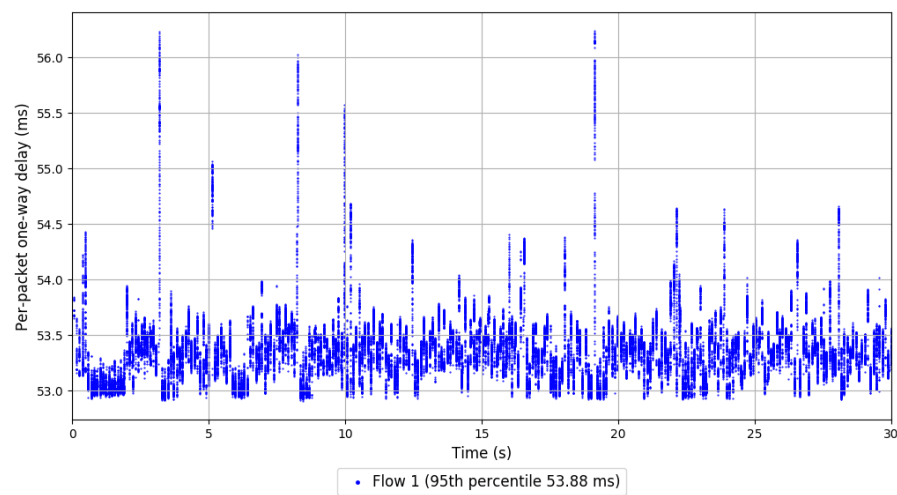
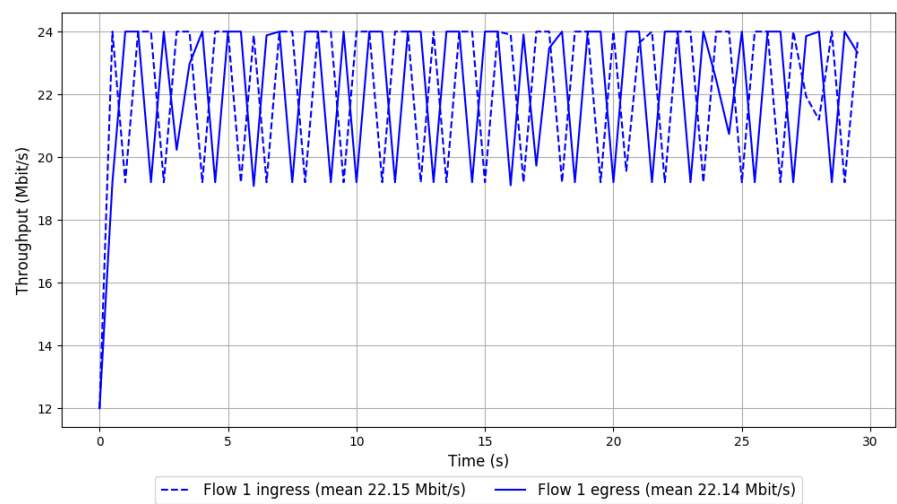
-- Flow 1:

Average throughput: 22.14 Mbit/s

95th percentile per-packet one-way delay: 53.877 ms

Loss rate: 0.05%

Run 10: Report of Saturator — Data Link

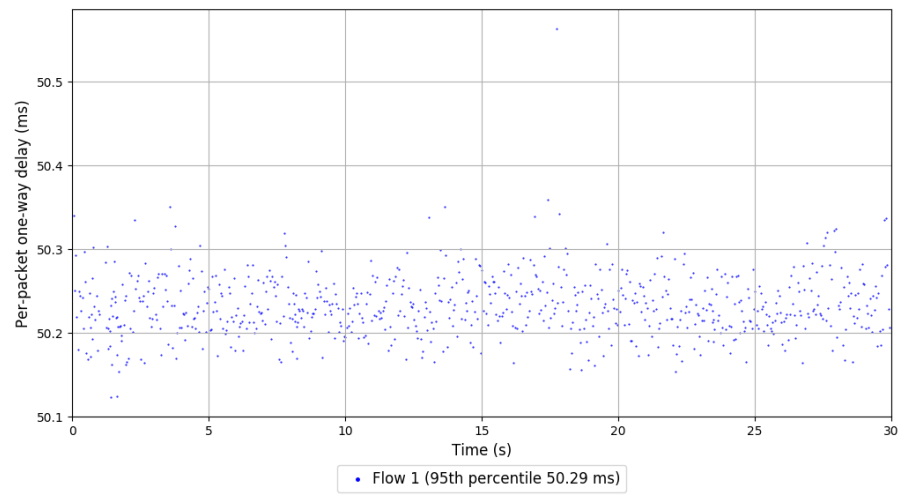
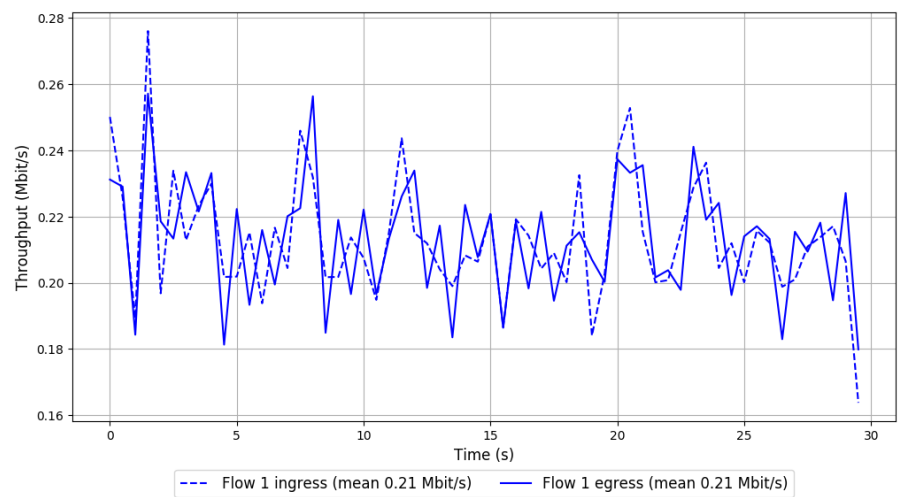


```
Run 1: Statistics of SCReAM

Start at: 2017-08-11 12:18:59
End at: 2017-08-11 12:19:29

# Below is generated by plot.py at 2017-08-11 14:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.292 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.292 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

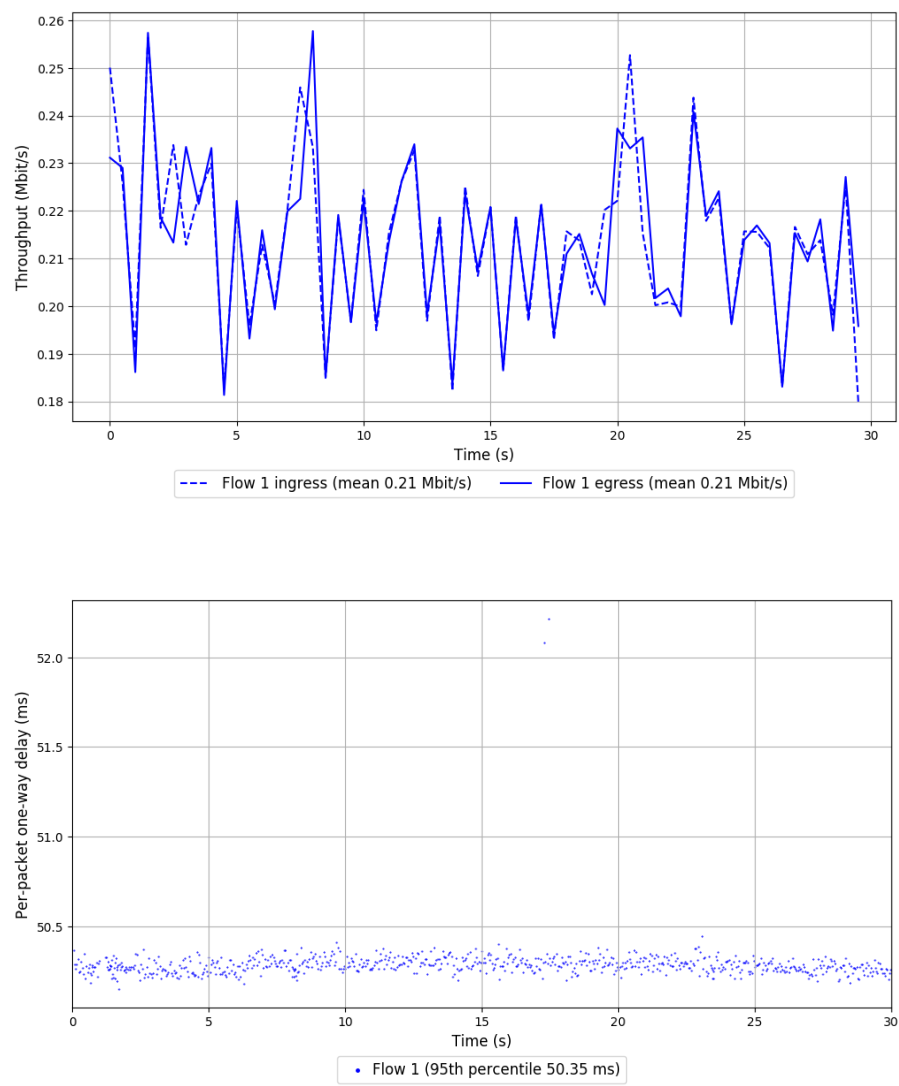


```
Run 2: Statistics of SCReAM

Start at: 2017-08-11 12:28:36
End at: 2017-08-11 12:29:06

# Below is generated by plot.py at 2017-08-11 14:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.354 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.354 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

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

End at: 2017-08-11 12:38:41

Below is generated by plot.py at 2017-08-11 14:52:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.334 ms

Loss rate: 0.00%

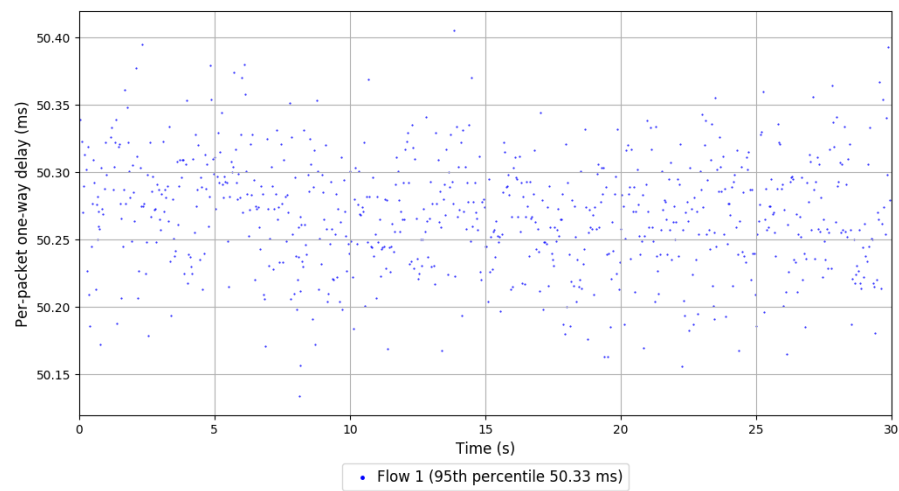
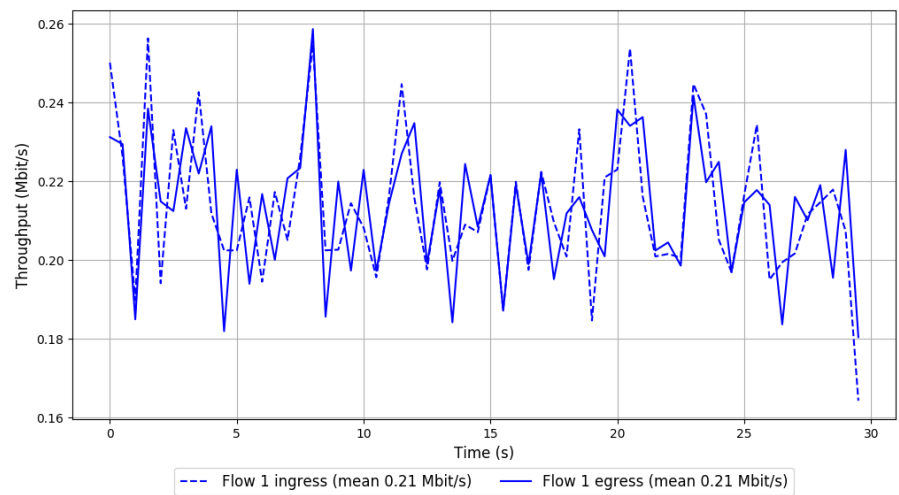
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.334 ms

Loss rate: 0.00%

Run 3: Report of SCRaM — Data Link

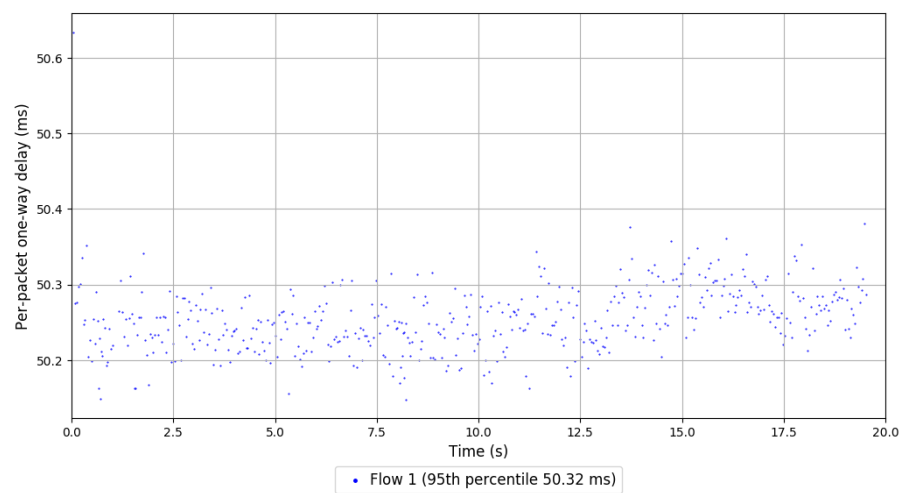
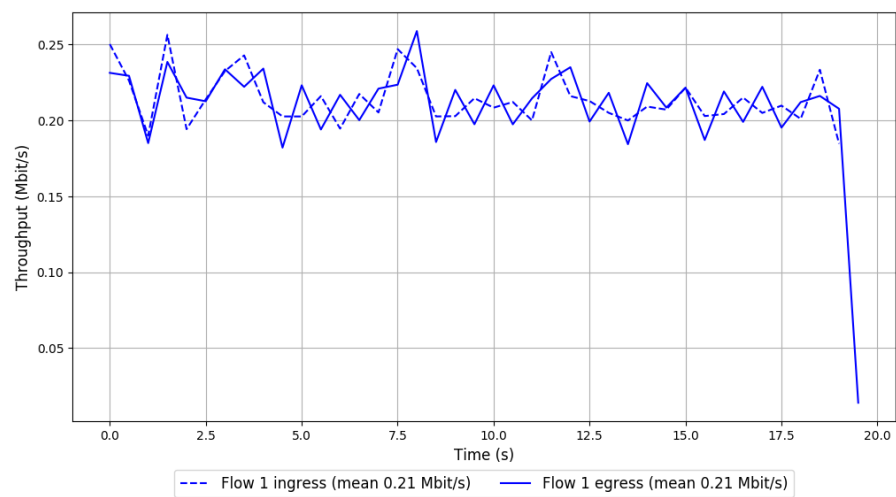


Run 4: Statistics of SCReAM

Start at: 2017-08-11 12:48:30

End at: 2017-08-11 12:49:00

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-11 12:58:44

End at: 2017-08-11 12:59:14

Below is generated by plot.py at 2017-08-11 14:52:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.356 ms

Loss rate: 0.00%

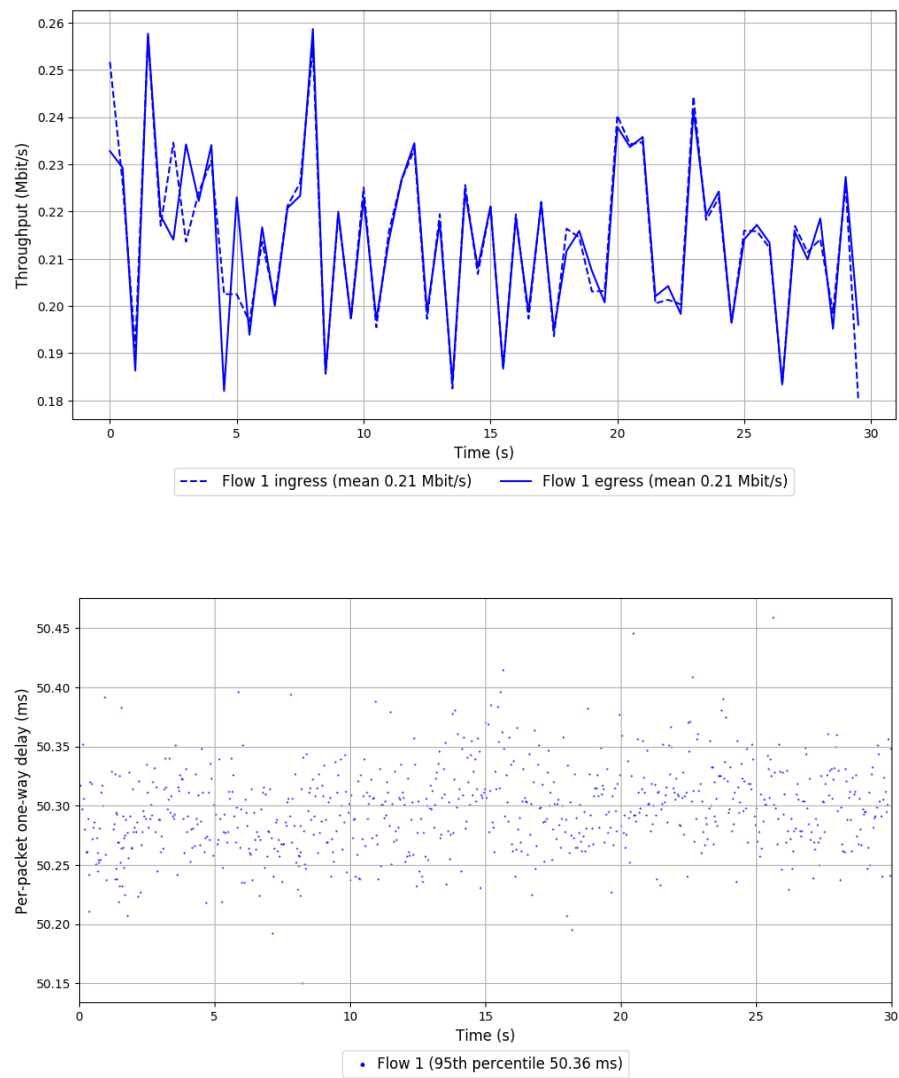
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.356 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

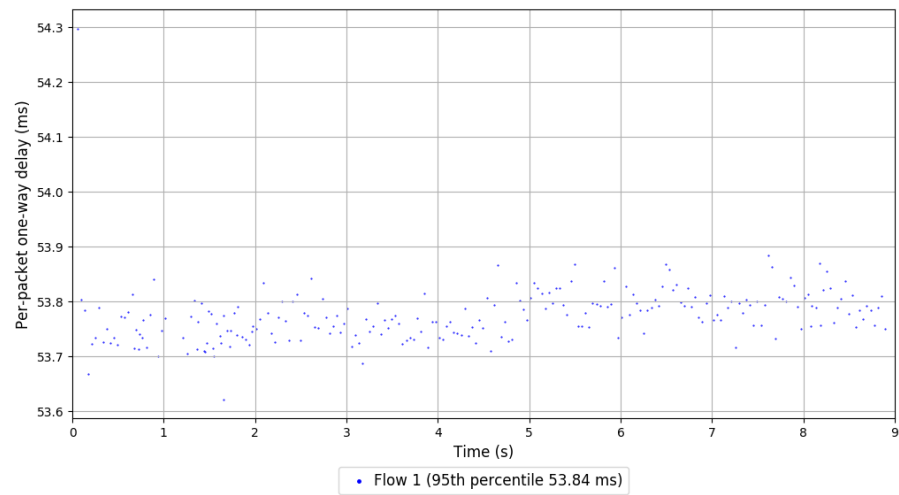
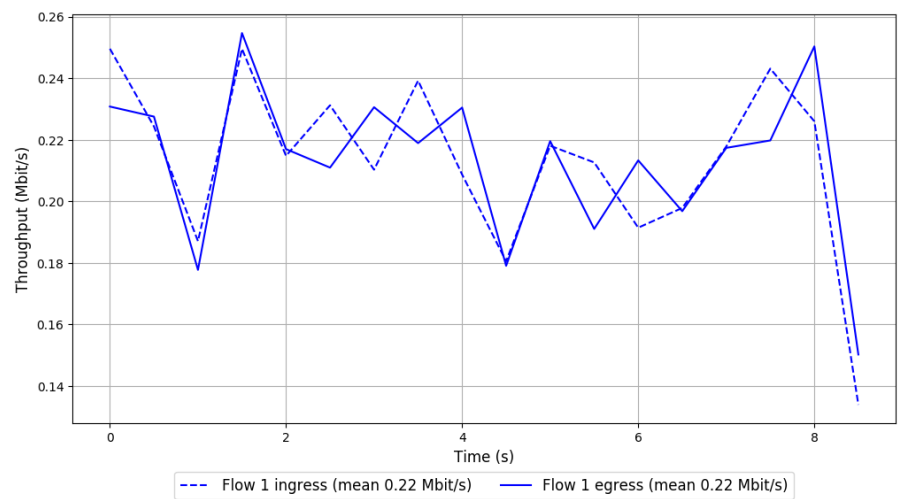


Run 6: Statistics of SCReAM

Start at: 2017-08-11 13:08:44

End at: 2017-08-11 13:09:14

Run 6: Report of SReAM — Data Link

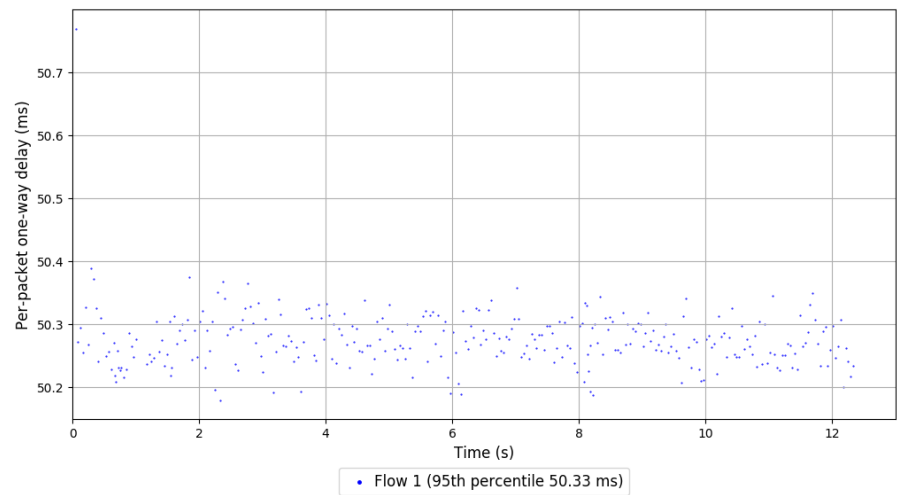
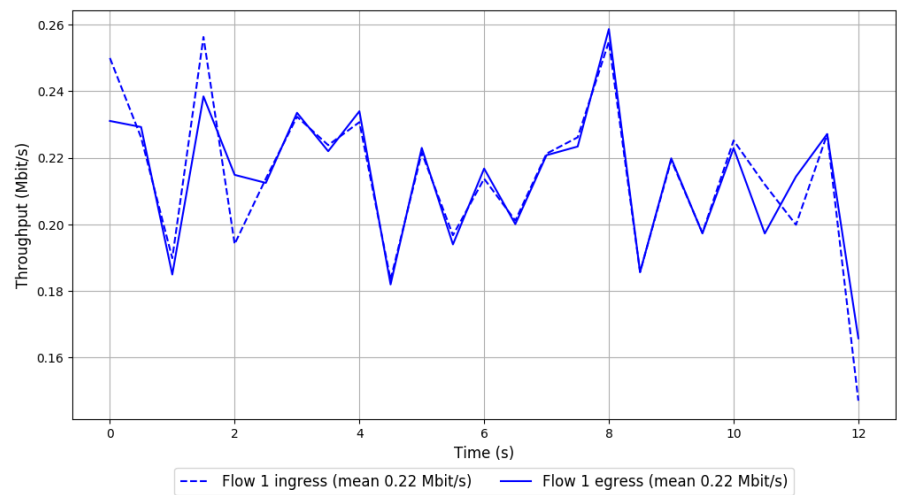


Run 7: Statistics of SCReAM

Start at: 2017-08-11 13:18:43

End at: 2017-08-11 13:19:13

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-11 13:28:37

End at: 2017-08-11 13:29:07

Below is generated by plot.py at 2017-08-11 14:52:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.845 ms

Loss rate: 0.00%

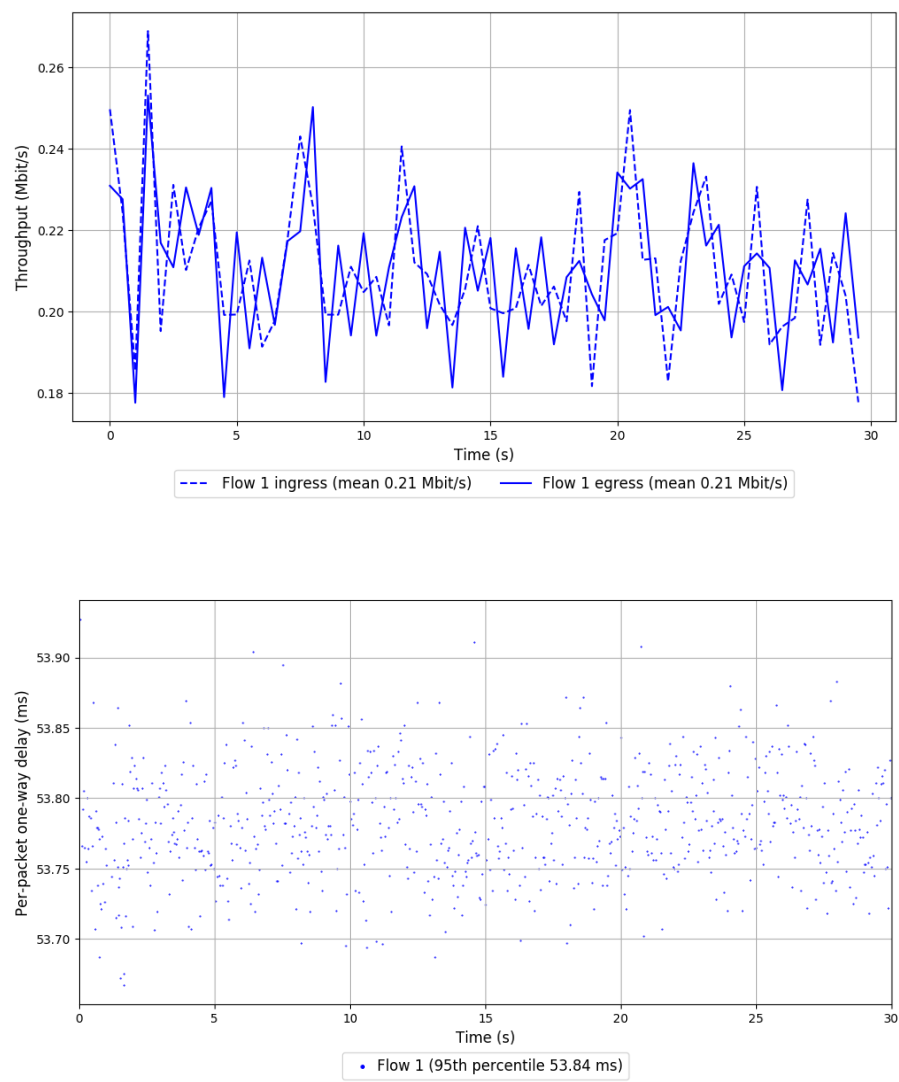
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.845 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

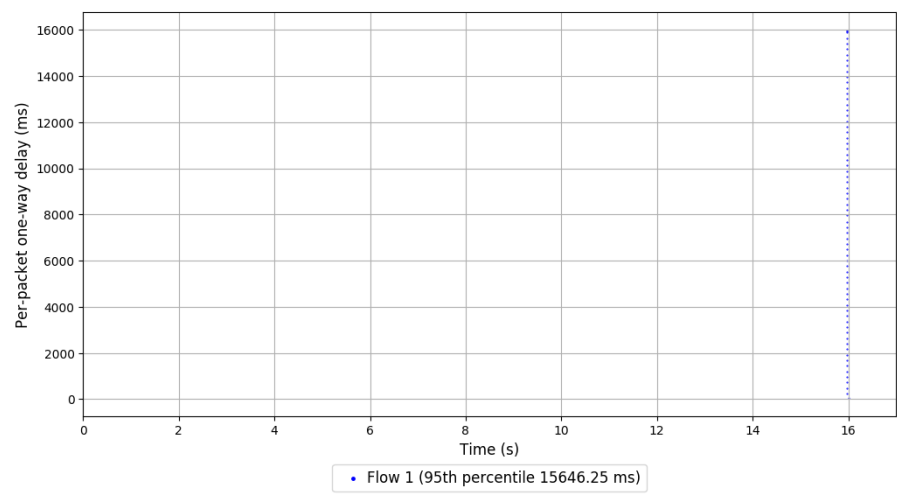
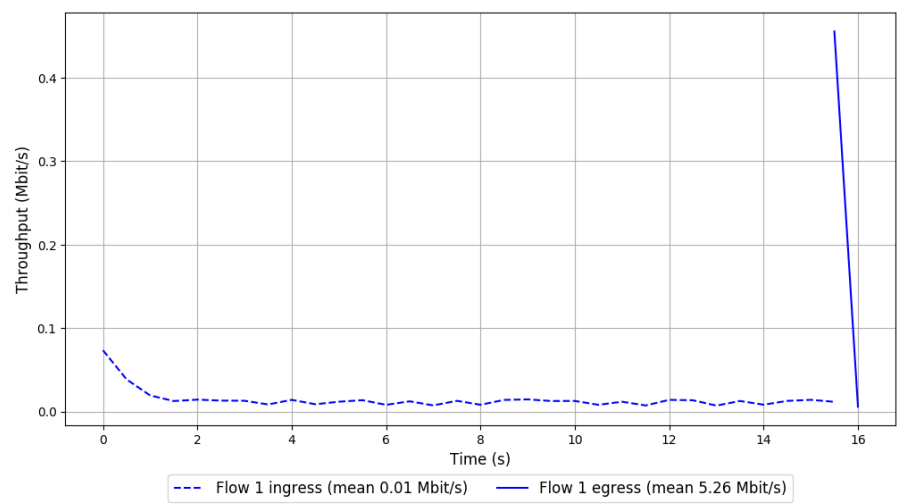


Run 9: Statistics of SReAM

Start at: 2017-08-11 13:38:27

End at: 2017-08-11 13:38:57

Run 9: Report of SReAM — Data Link

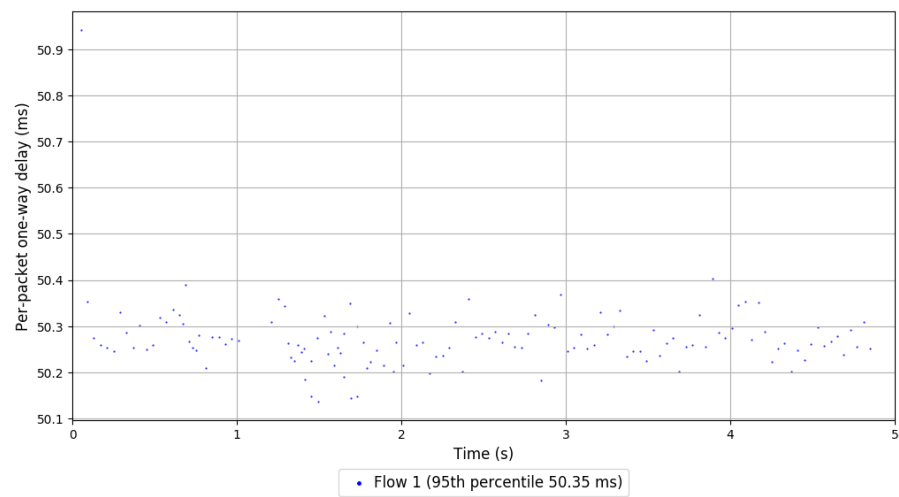
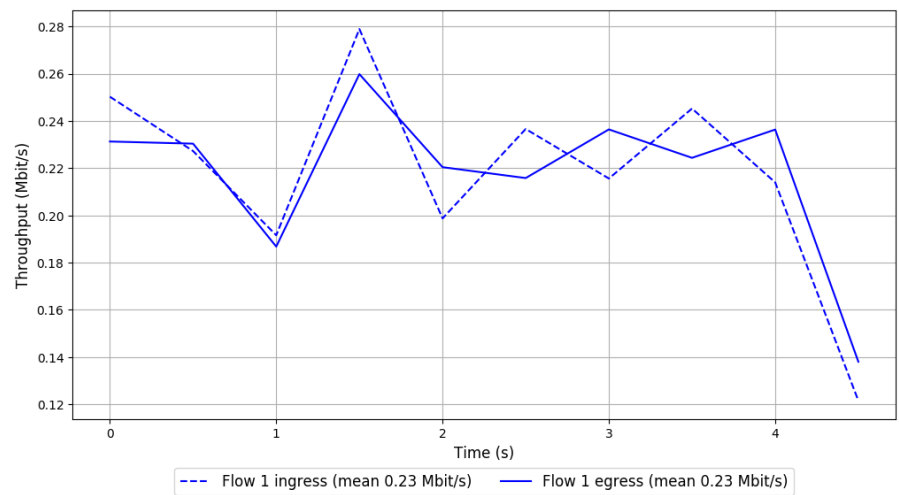


Run 10: Statistics of SCReAM

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

End at: 2017-08-11 13:48:38

Run 10: Report of SReAM — Data Link

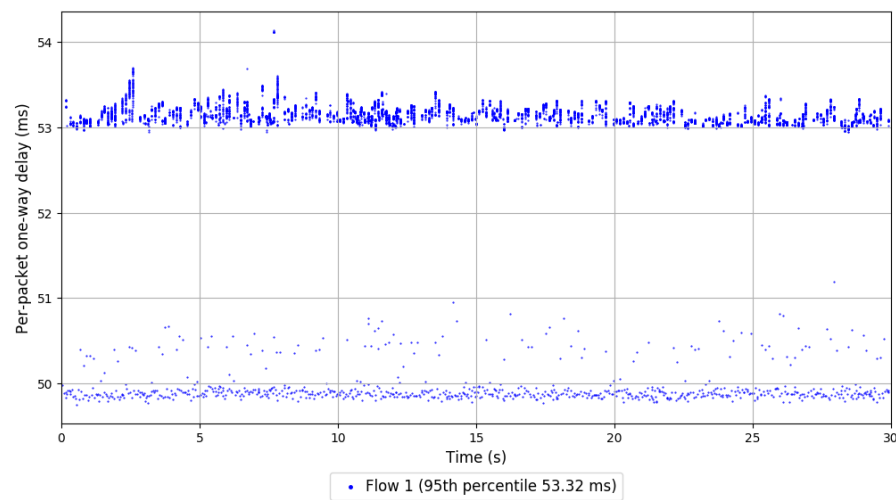
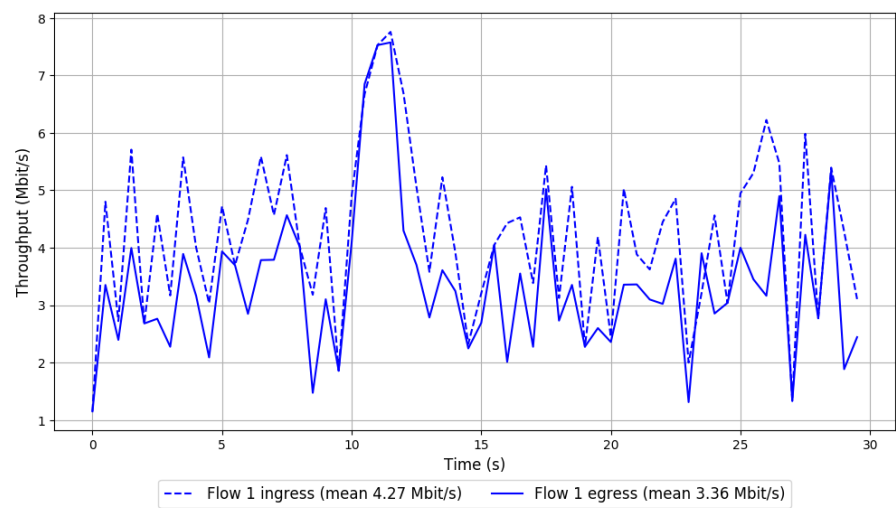


```
Run 1: Statistics of Sprout

Start at: 2017-08-11 12:17:41
End at: 2017-08-11 12:18:11

# Below is generated by plot.py at 2017-08-11 14:52:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 53.324 ms
Loss rate: 21.22%
-- Flow 1:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 53.324 ms
Loss rate: 21.22%
```


Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-11 12:27:19

End at: 2017-08-11 12:27:49

Below is generated by plot.py at 2017-08-11 14:52:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 53.729 ms

Loss rate: 16.36%

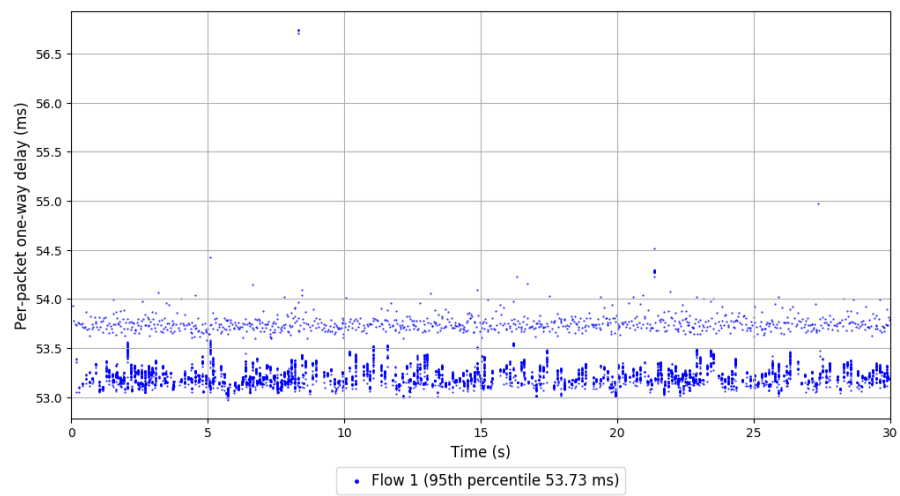
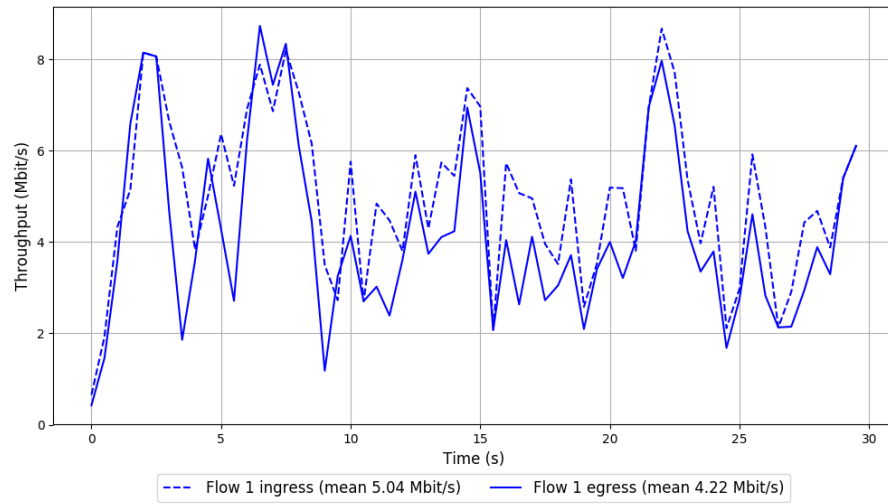
-- Flow 1:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 53.729 ms

Loss rate: 16.36%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-11 12:36:53

End at: 2017-08-11 12:37:23

Below is generated by plot.py at 2017-08-11 14:52:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 54.047 ms

Loss rate: 15.95%

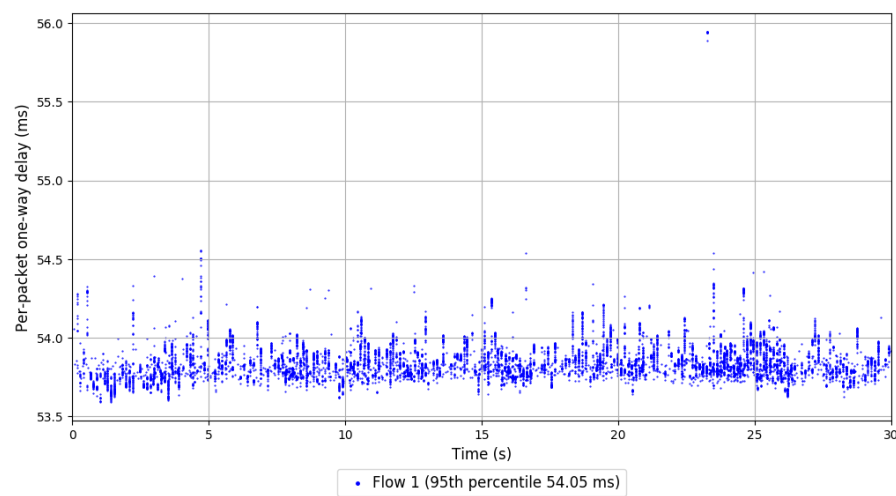
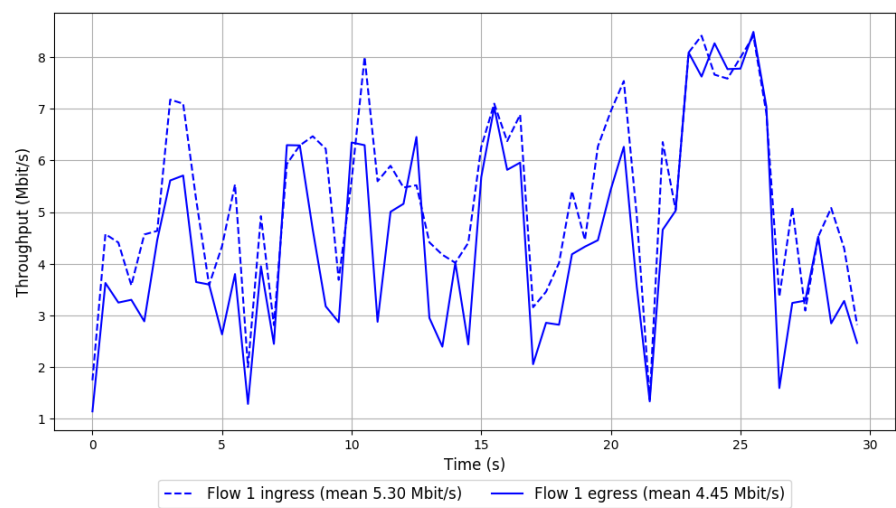
-- Flow 1:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 54.047 ms

Loss rate: 15.95%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

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

End at: 2017-08-11 12:47:41

Below is generated by plot.py at 2017-08-11 14:52:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 23.56%

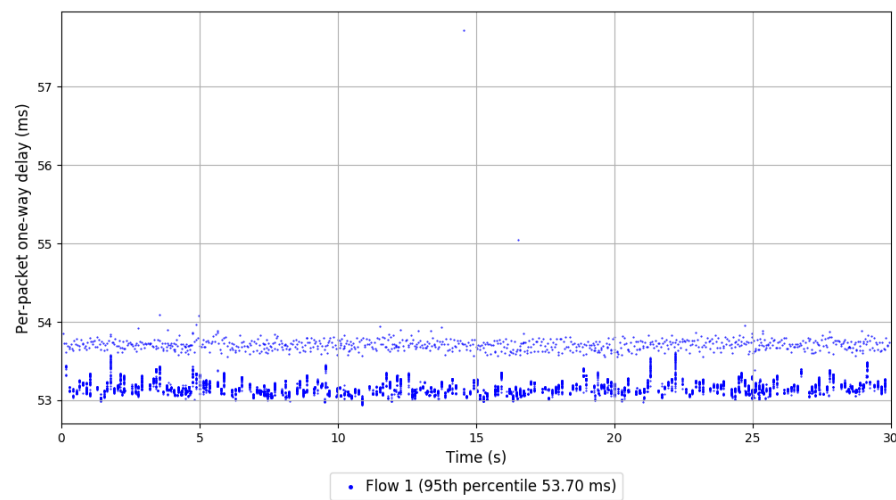
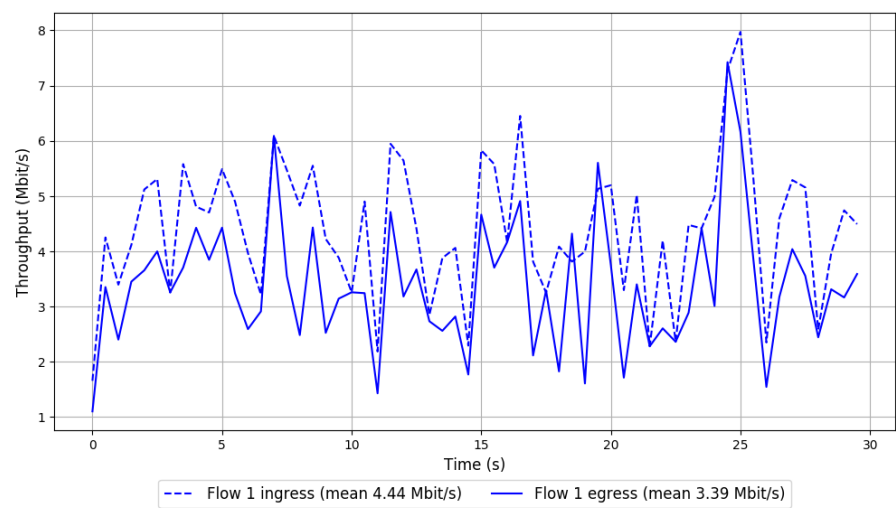
-- Flow 1:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 23.56%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-11 12:57:25

End at: 2017-08-11 12:57:55

Below is generated by plot.py at 2017-08-11 14:52:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 53.362 ms

Loss rate: 18.35%

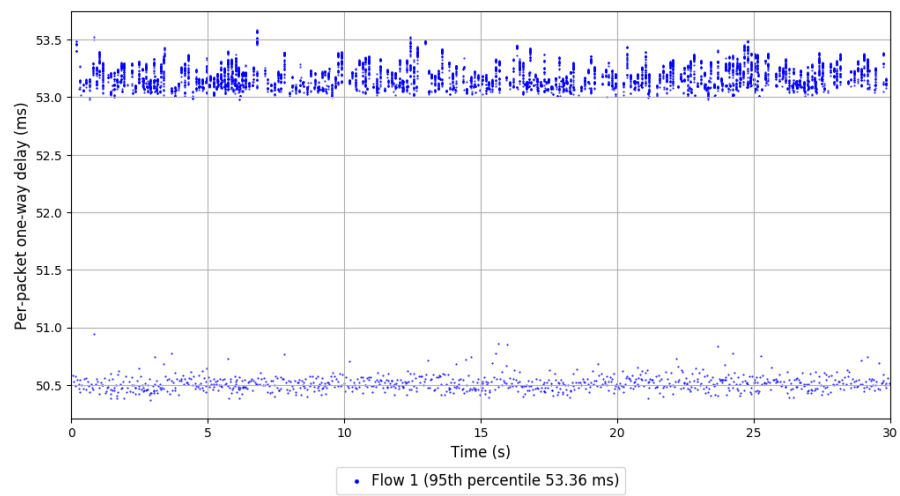
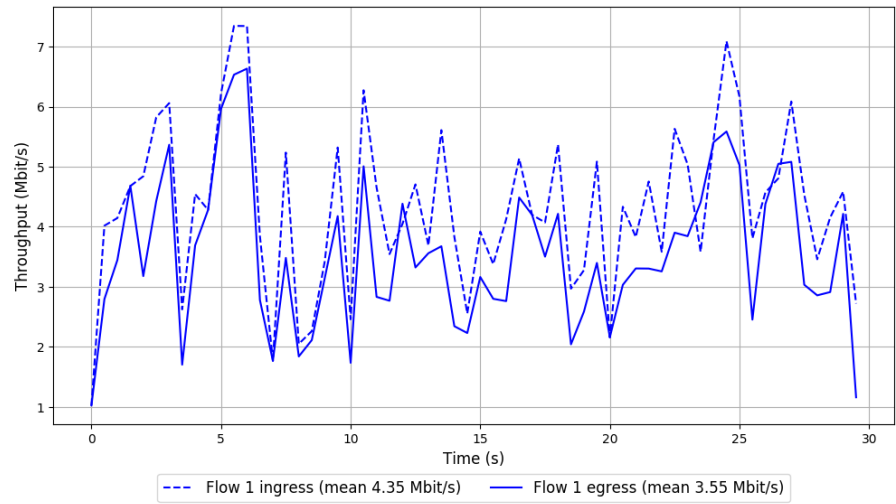
-- Flow 1:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 53.362 ms

Loss rate: 18.35%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-11 13:07:27

End at: 2017-08-11 13:07:57

Below is generated by plot.py at 2017-08-11 14:52:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 53.974 ms

Loss rate: 15.12%

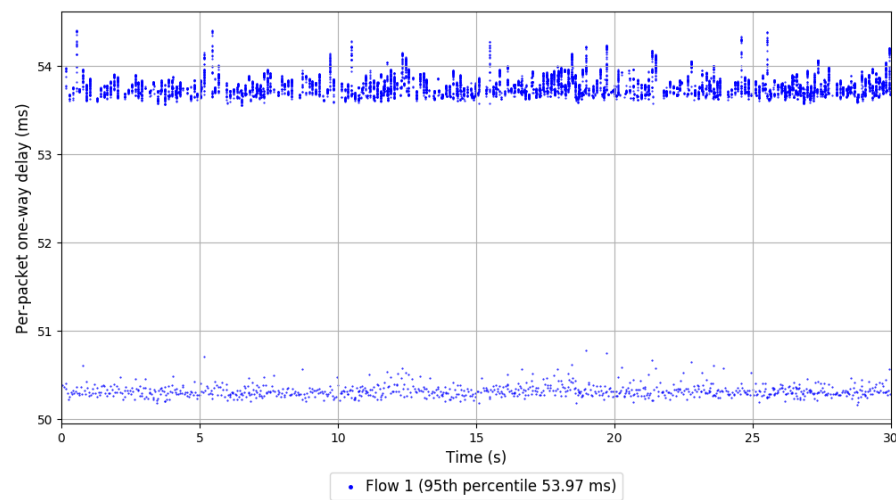
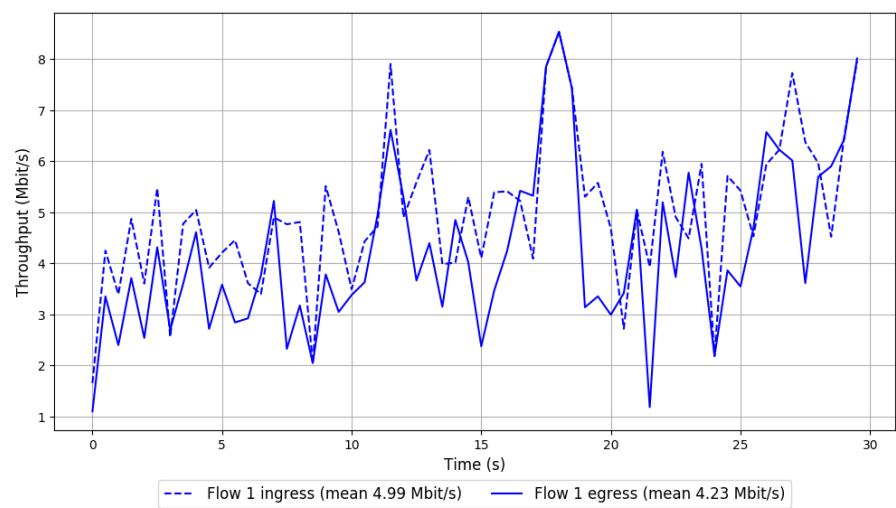
-- Flow 1:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 53.974 ms

Loss rate: 15.12%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-11 13:17:25

End at: 2017-08-11 13:17:55

Below is generated by plot.py at 2017-08-11 14:52:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 53.242 ms

Loss rate: 19.26%

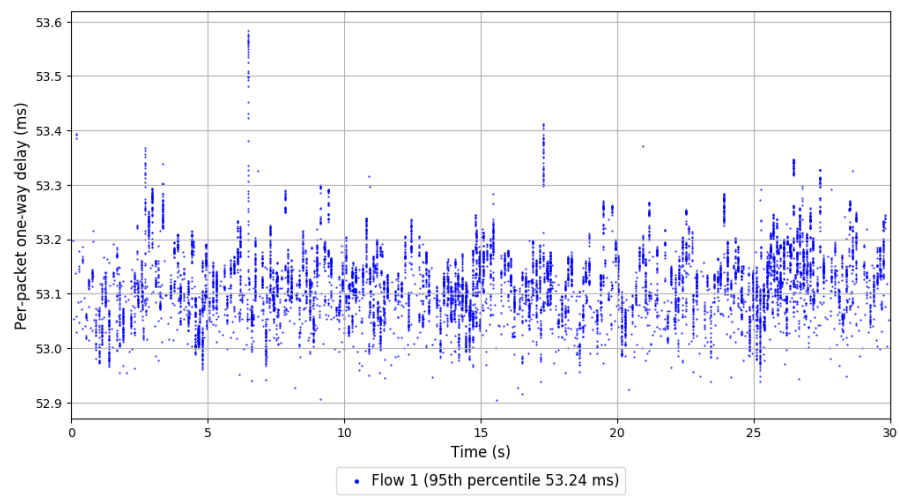
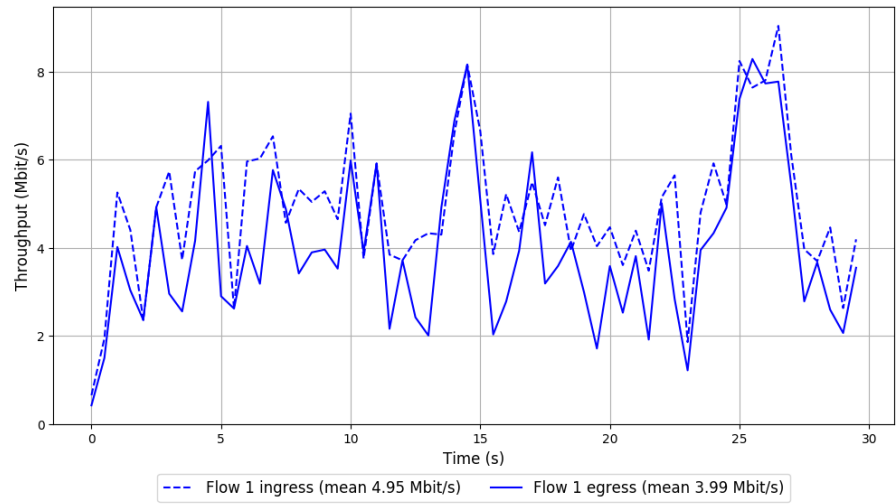
-- Flow 1:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 53.242 ms

Loss rate: 19.26%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-11 13:27:14

End at: 2017-08-11 13:27:44

Below is generated by plot.py at 2017-08-11 14:52:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 53.445 ms

Loss rate: 17.13%

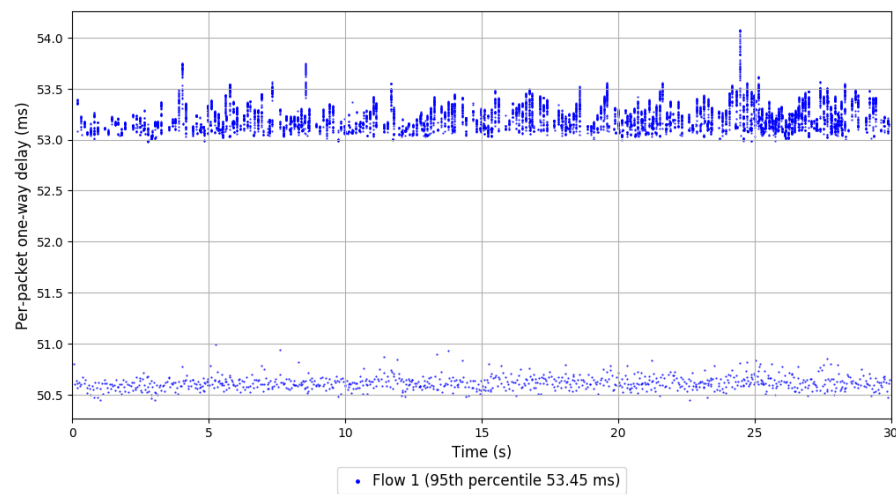
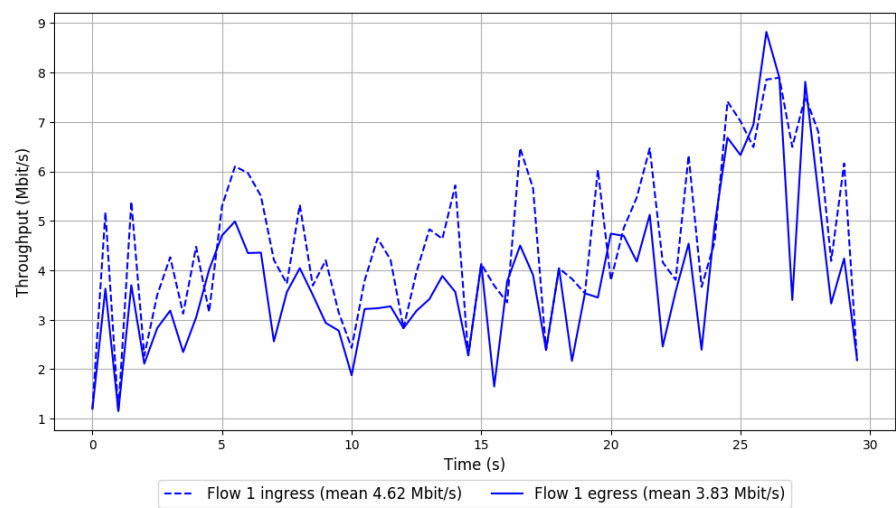
-- Flow 1:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 53.445 ms

Loss rate: 17.13%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-11 13:37:11

End at: 2017-08-11 13:37:41

Below is generated by plot.py at 2017-08-11 14:52:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 53.406 ms

Loss rate: 15.73%

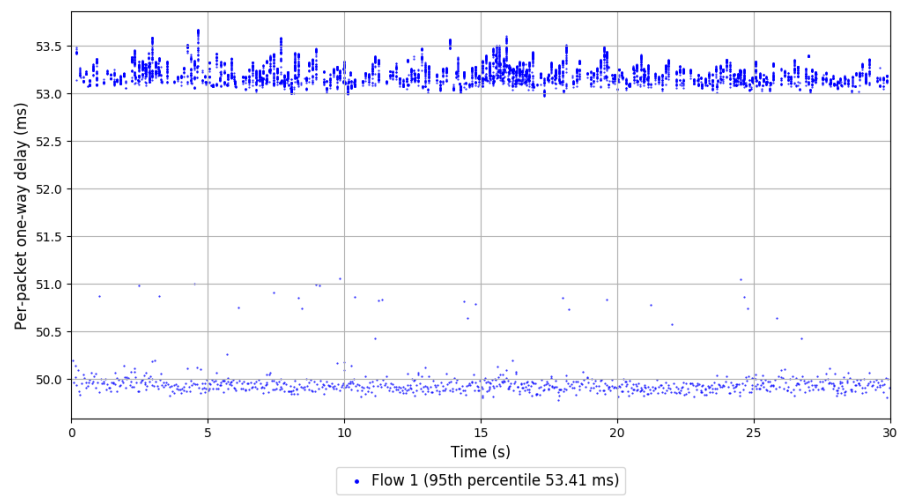
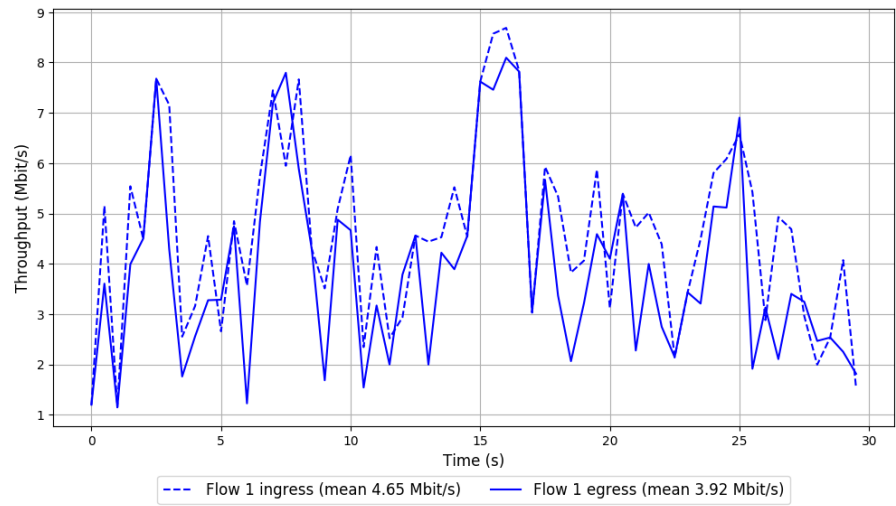
-- Flow 1:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 53.406 ms

Loss rate: 15.73%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-11 13:46:49

End at: 2017-08-11 13:47:19

Below is generated by plot.py at 2017-08-11 14:52:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.92 Mbit/s

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

Loss rate: 12.66%

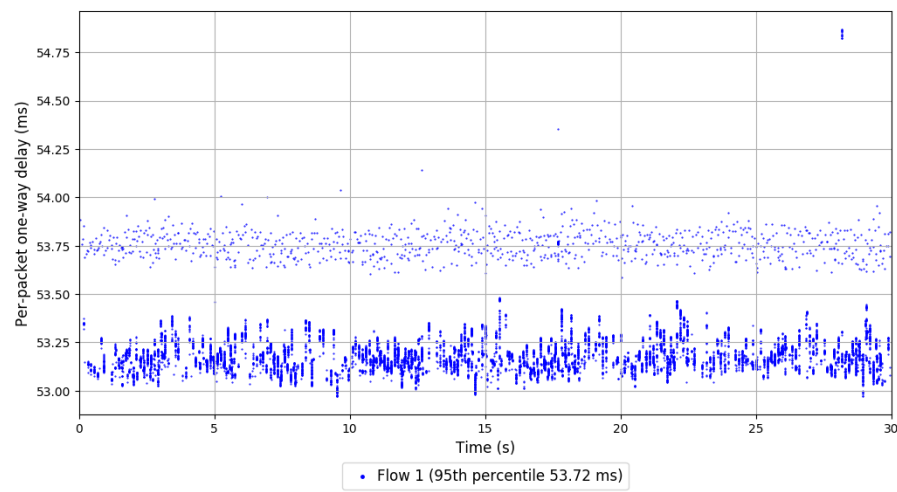
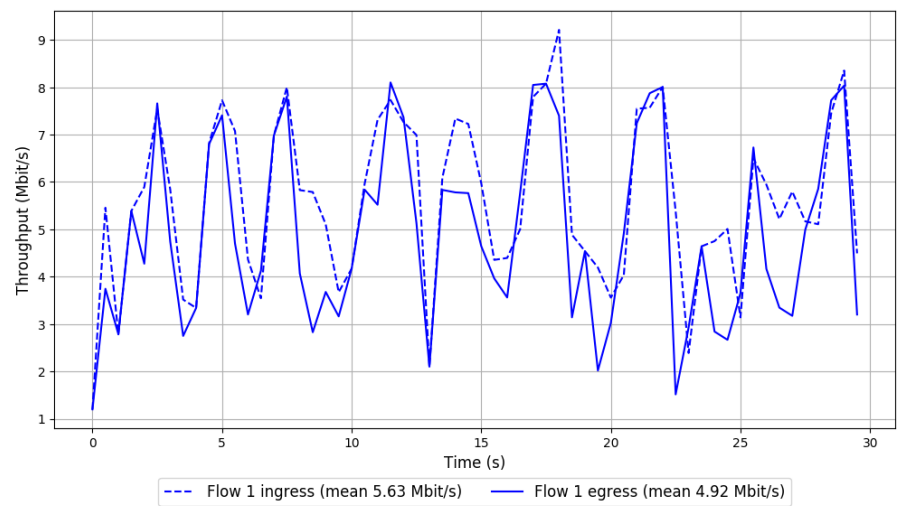
-- Flow 1:

Average throughput: 4.92 Mbit/s

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

Loss rate: 12.66%

Run 10: Report of Sprout — Data Link

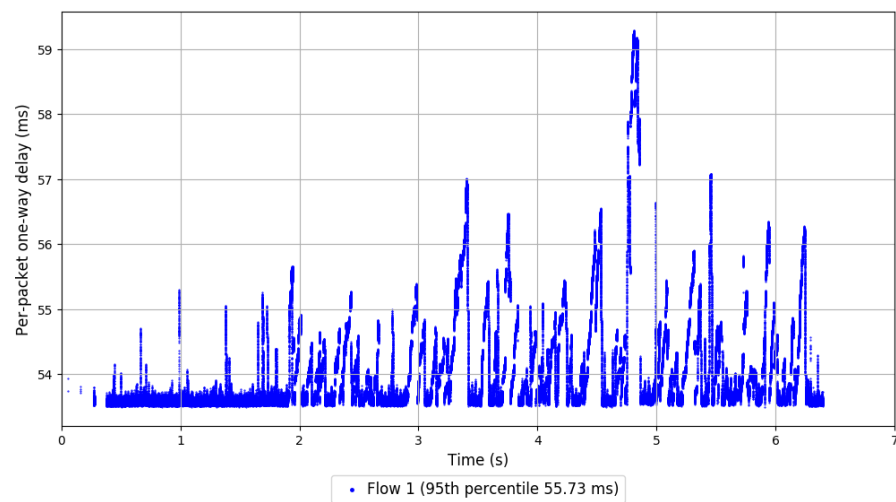
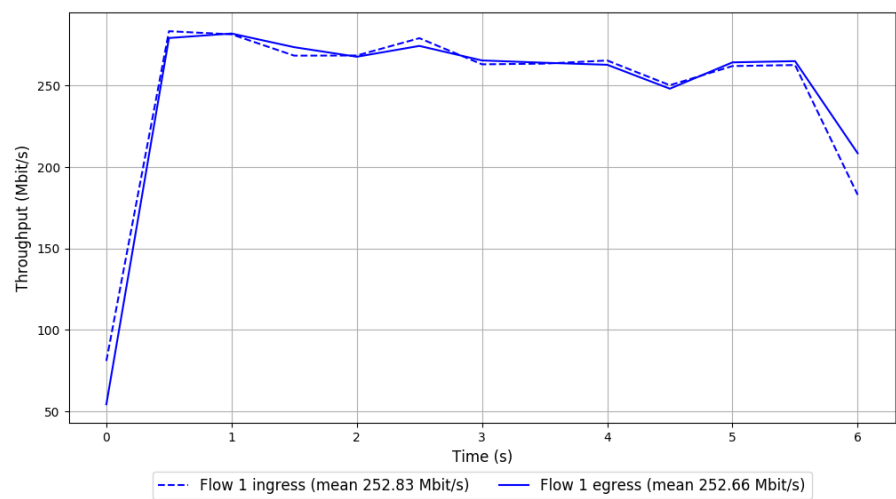


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-11 12:24:41

End at: 2017-08-11 12:25:11

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

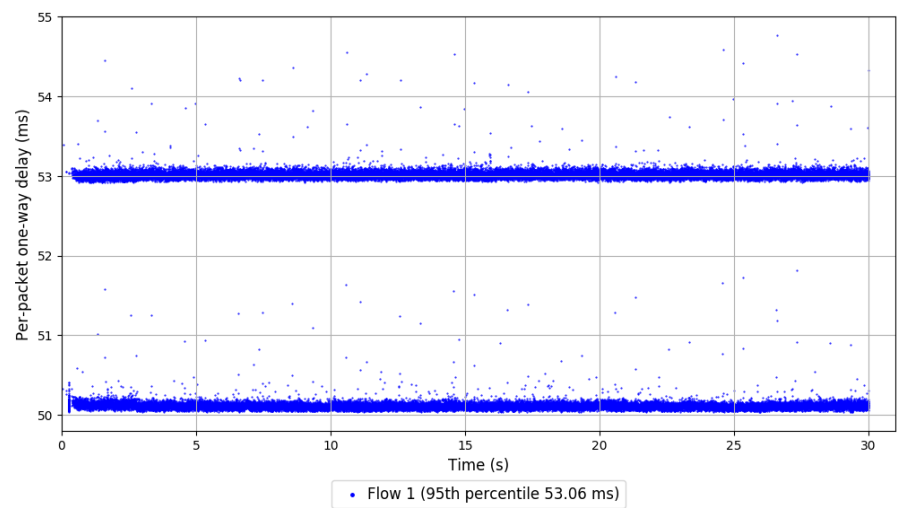
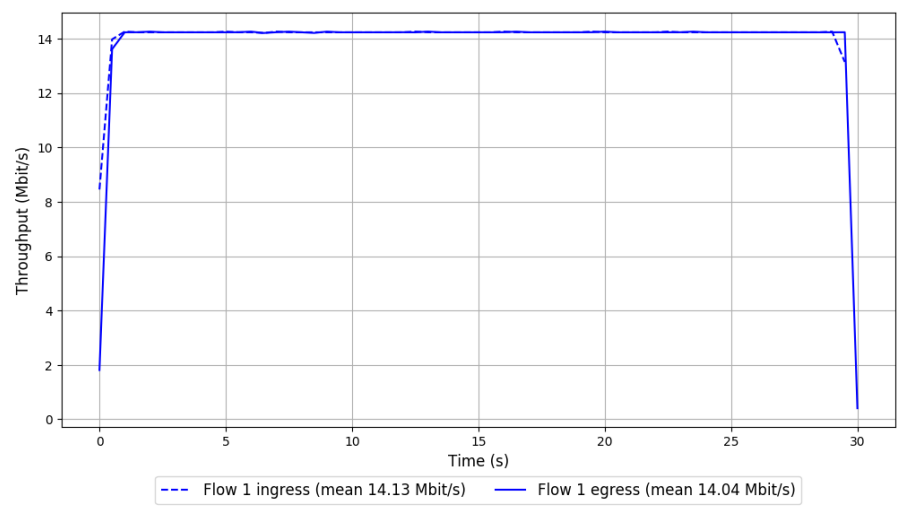


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-08-11 12:34:19
End at: 2017-08-11 12:34:49

# Below is generated by plot.py at 2017-08-11 14:52:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.04 Mbit/s
95th percentile per-packet one-way delay: 53.065 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 14.04 Mbit/s
95th percentile per-packet one-way delay: 53.065 ms
Loss rate: 0.65%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-08-11 12:44:00

End at: 2017-08-11 12:44:30

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 249.12 Mbit/s

95th percentile per-packet one-way delay: 53.728 ms

Loss rate: 0.11%

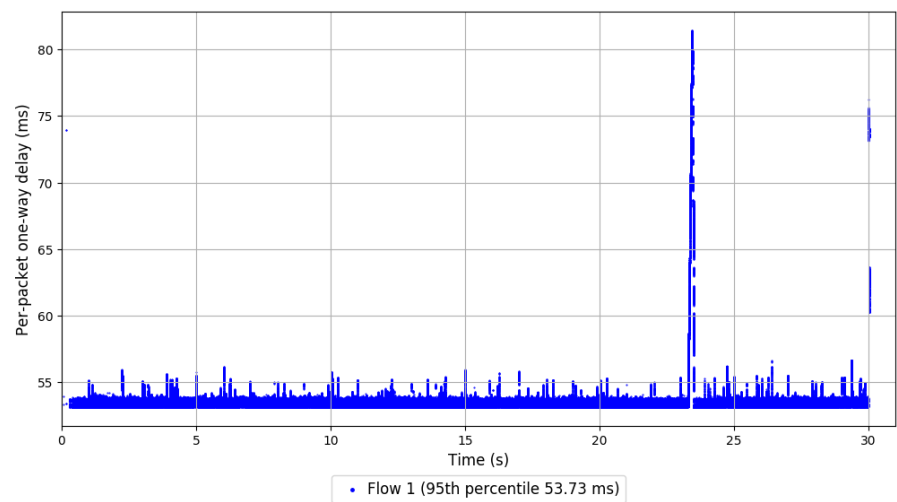
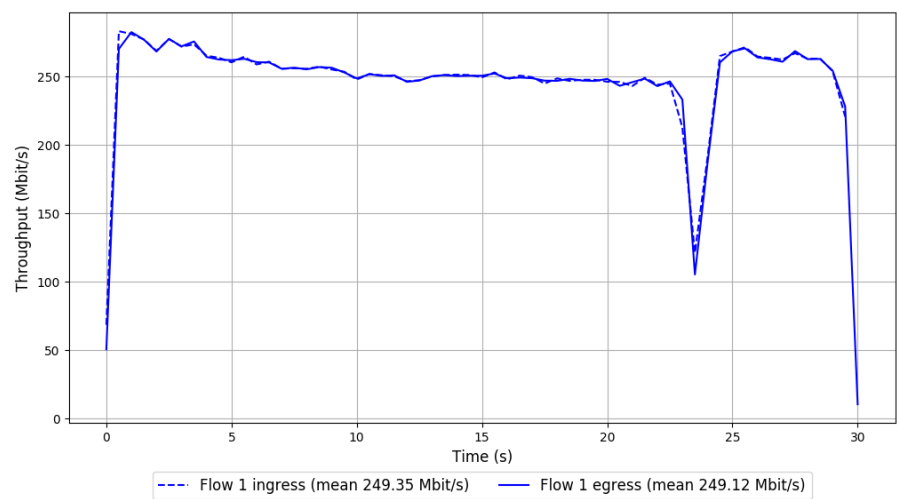
-- Flow 1:

Average throughput: 249.12 Mbit/s

95th percentile per-packet one-way delay: 53.728 ms

Loss rate: 0.11%

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

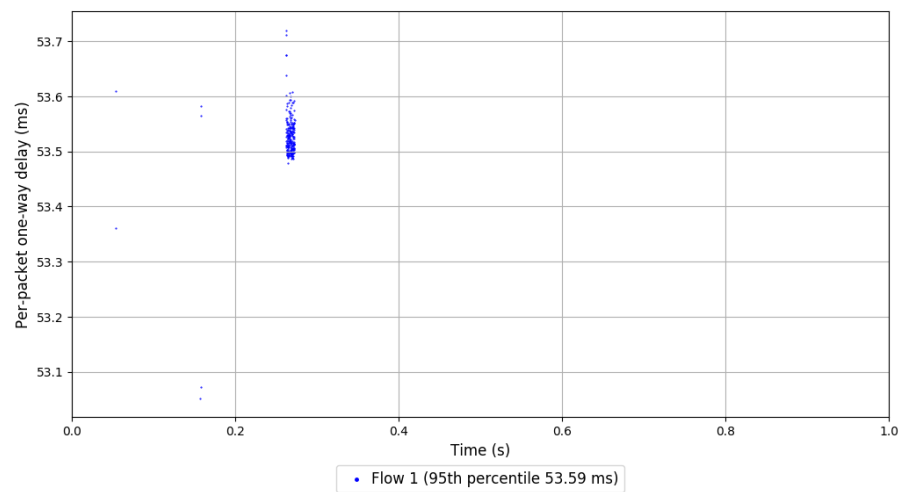
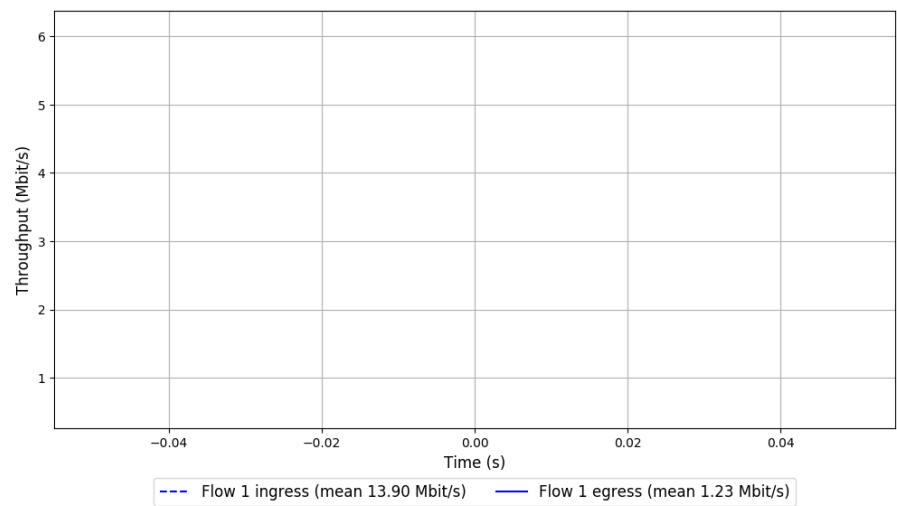


Run 4: Statistics of TaoVA-100x

Start at: 2017-08-11 12:54:39

End at: 2017-08-11 12:55:09

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

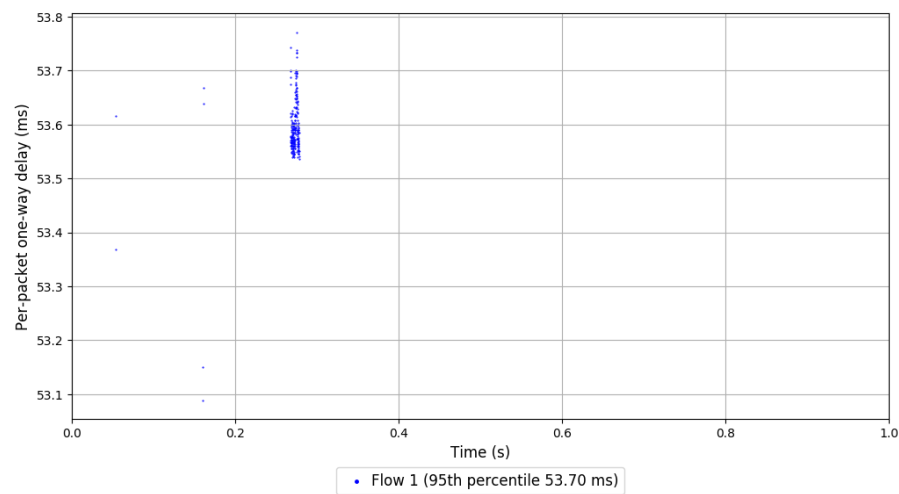
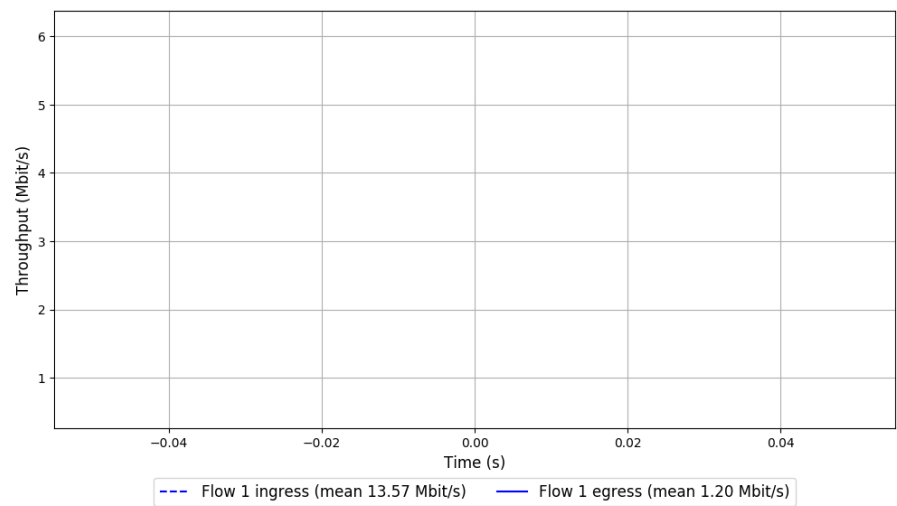


Run 5: Statistics of TaoVA-100x

Start at: 2017-08-11 13:04:38

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

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-08-11 13:14:34

End at: 2017-08-11 13:15:04

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.03 Mbit/s

95th percentile per-packet one-way delay: 53.066 ms

Loss rate: 0.65%

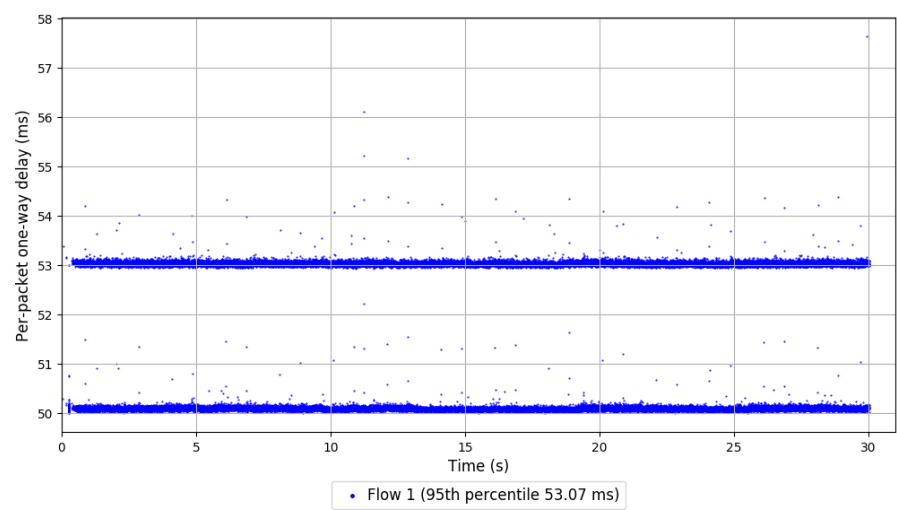
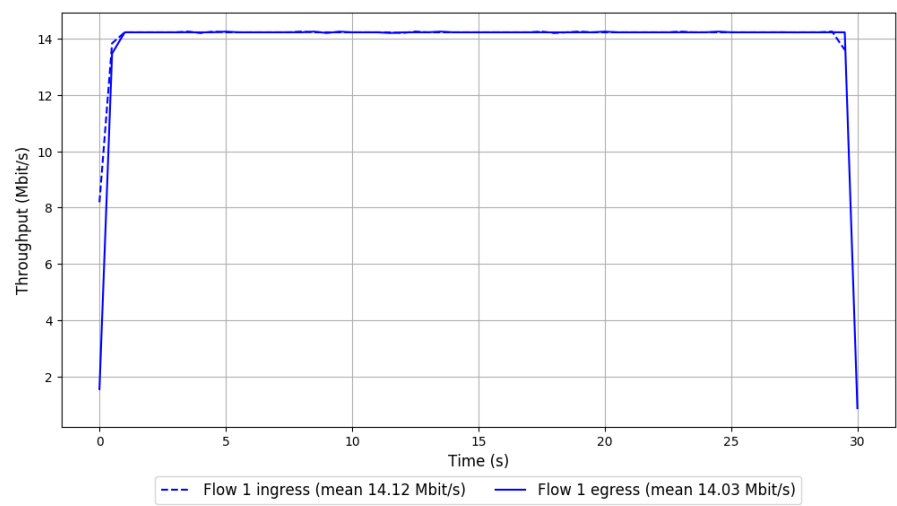
-- Flow 1:

Average throughput: 14.03 Mbit/s

95th percentile per-packet one-way delay: 53.066 ms

Loss rate: 0.65%

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

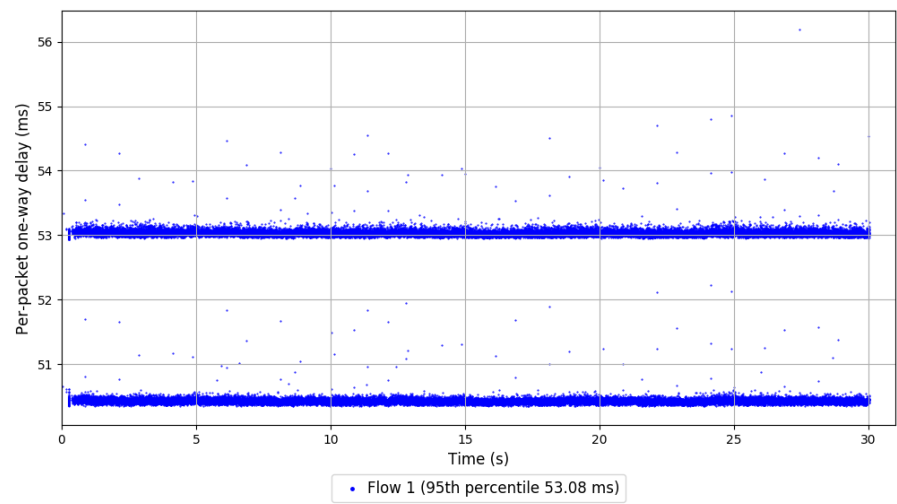
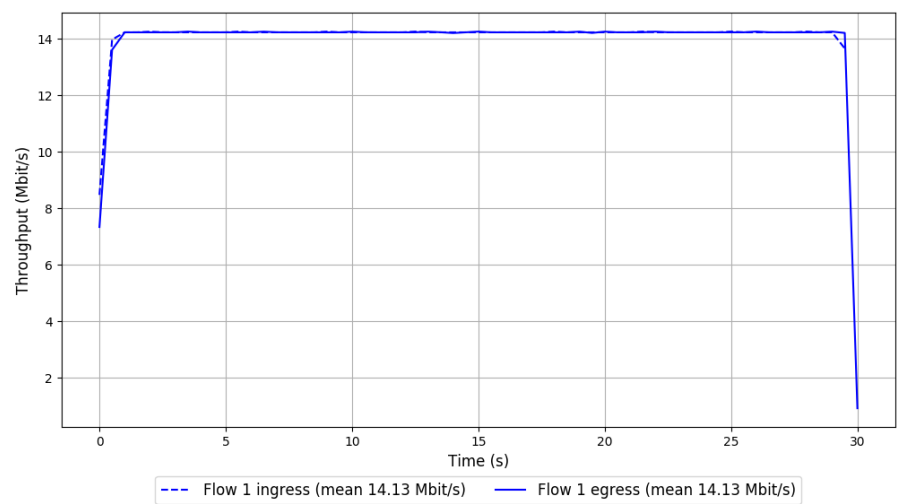


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-08-11 13:24:22
End at: 2017-08-11 13:24:52

# Below is generated by plot.py at 2017-08-11 14:54:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.13 Mbit/s
95th percentile per-packet one-way delay: 53.082 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 14.13 Mbit/s
95th percentile per-packet one-way delay: 53.082 ms
Loss rate: 0.00%
```


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



Run 8: Statistics of TaoVA-100x

Start at: 2017-08-11 13:34:22

End at: 2017-08-11 13:34:52

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.03 Mbit/s

95th percentile per-packet one-way delay: 53.062 ms

Loss rate: 0.65%

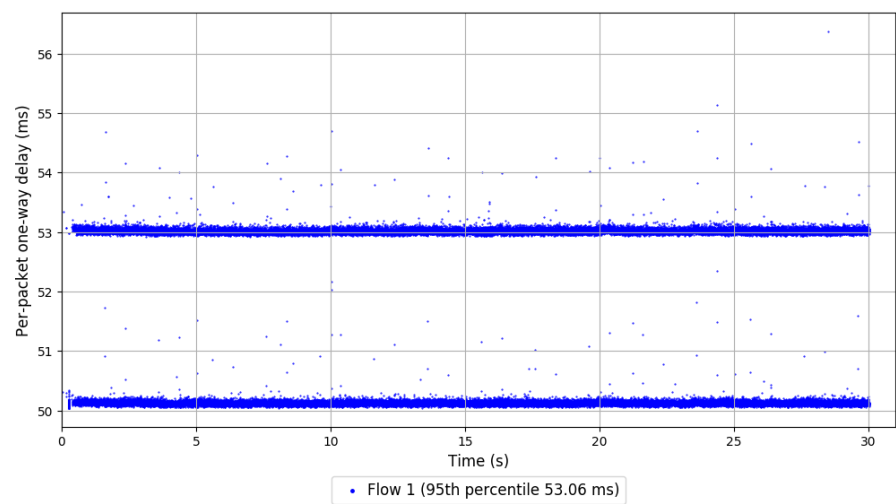
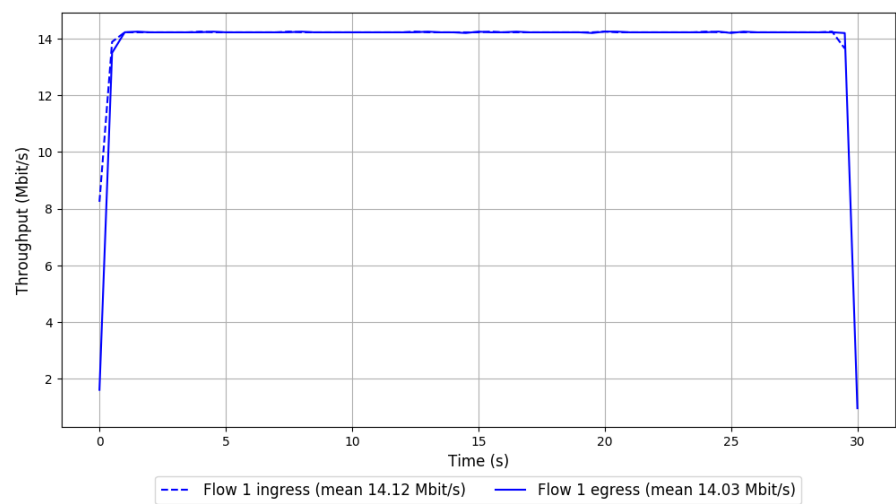
-- Flow 1:

Average throughput: 14.03 Mbit/s

95th percentile per-packet one-way delay: 53.062 ms

Loss rate: 0.65%

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

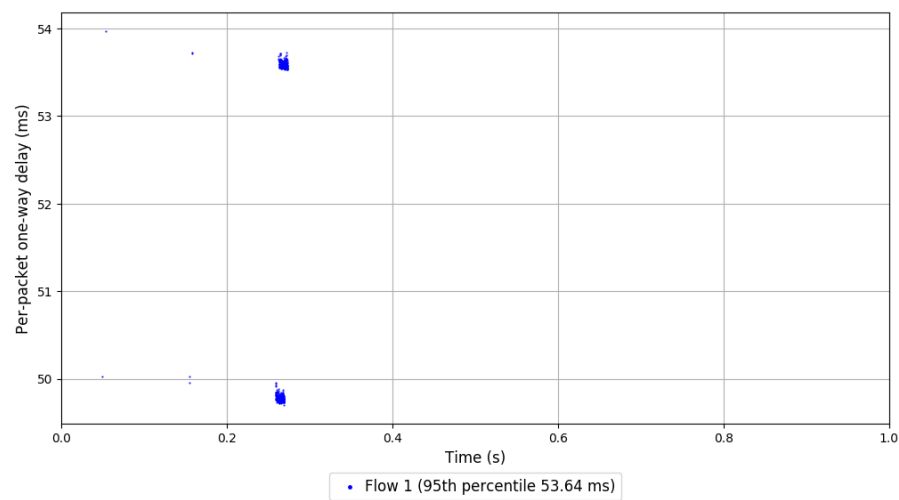
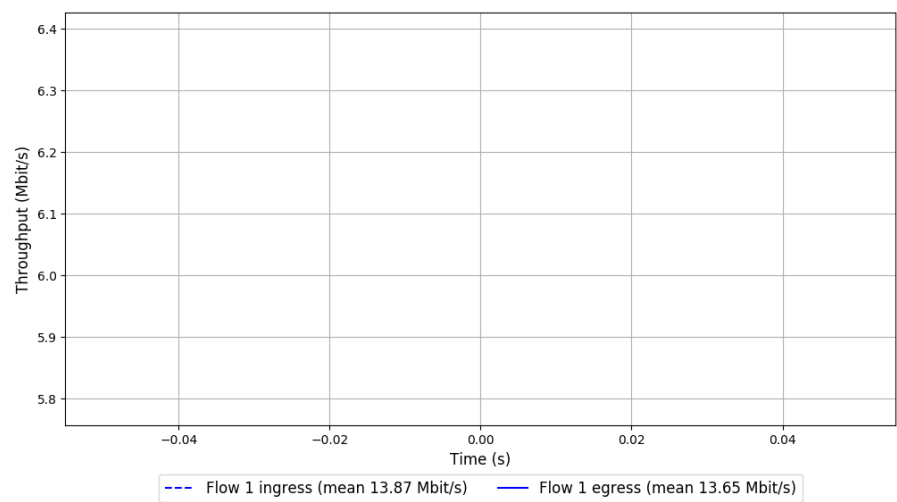


Run 9: Statistics of TaoVA-100x

Start at: 2017-08-11 13:44:16

End at: 2017-08-11 13:44:46

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

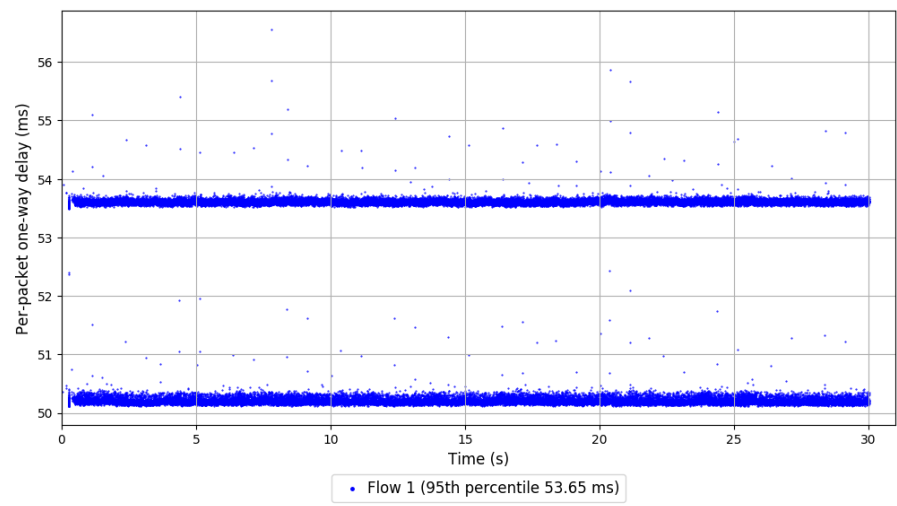
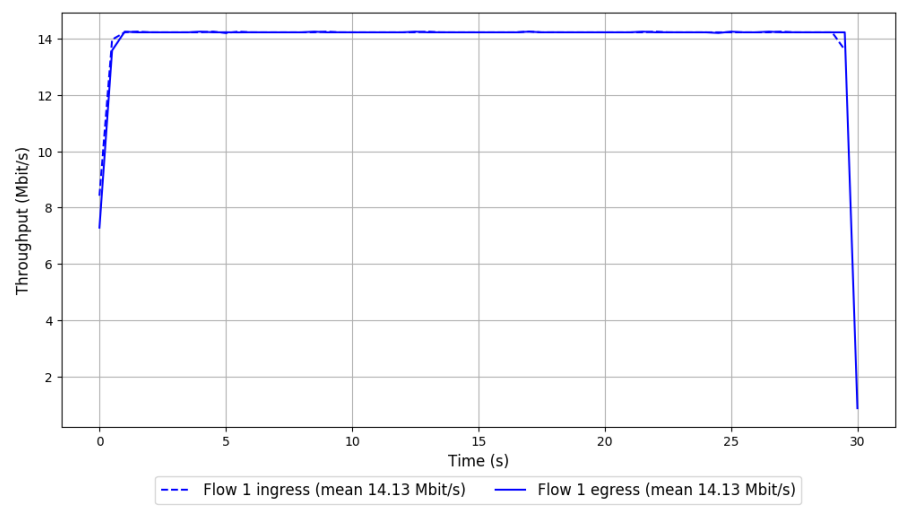


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-11 13:53:56
End at: 2017-08-11 13:54:26

# Below is generated by plot.py at 2017-08-11 14:54:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.13 Mbit/s
95th percentile per-packet one-way delay: 53.653 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 14.13 Mbit/s
95th percentile per-packet one-way delay: 53.653 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-11 12:22:49

End at: 2017-08-11 12:23:19

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.07 Mbit/s

95th percentile per-packet one-way delay: 53.278 ms

Loss rate: 2.30%

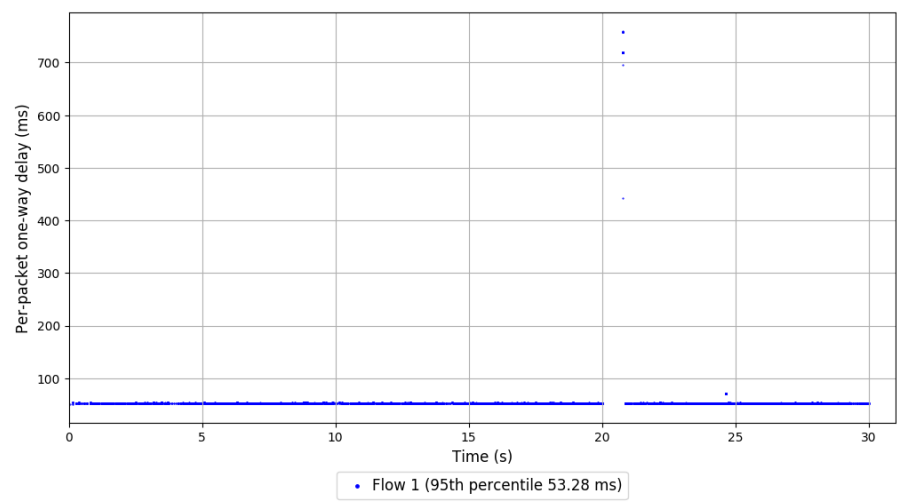
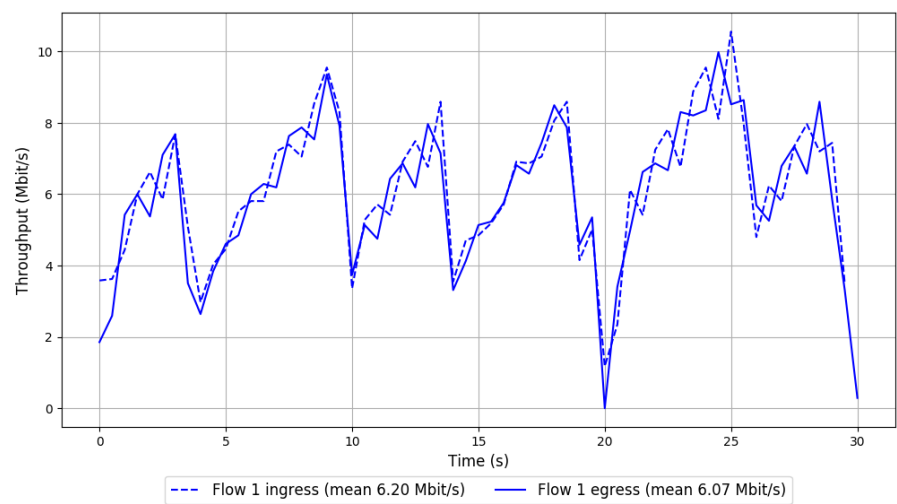
-- Flow 1:

Average throughput: 6.07 Mbit/s

95th percentile per-packet one-way delay: 53.278 ms

Loss rate: 2.30%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-11 12:32:24

End at: 2017-08-11 12:32:54

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.05 Mbit/s

95th percentile per-packet one-way delay: 53.987 ms

Loss rate: 1.14%

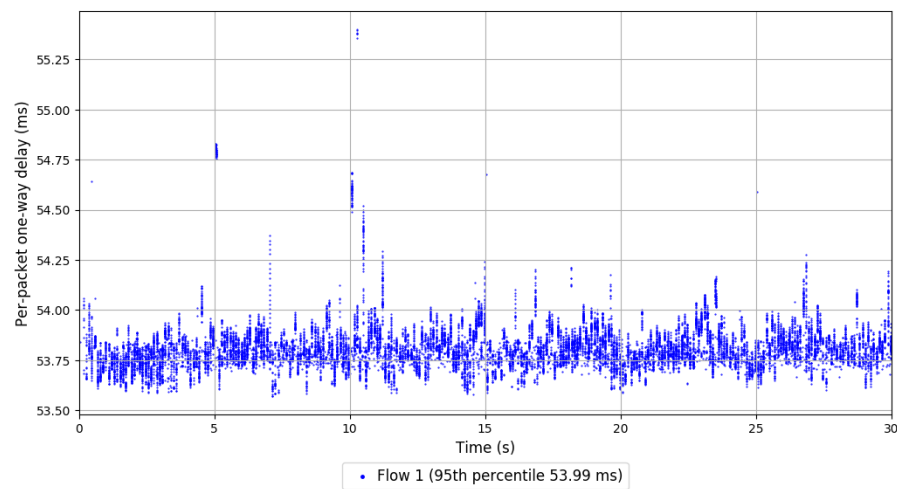
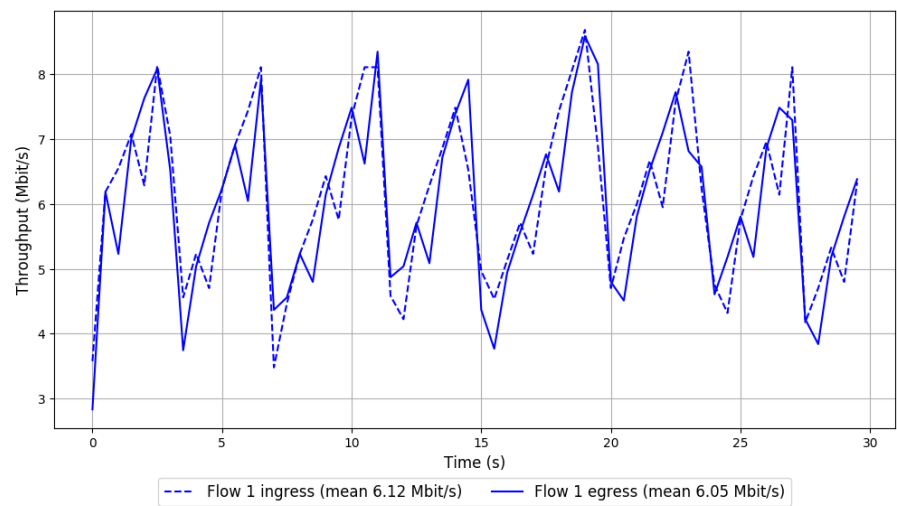
-- Flow 1:

Average throughput: 6.05 Mbit/s

95th percentile per-packet one-way delay: 53.987 ms

Loss rate: 1.14%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-11 12:41:59

End at: 2017-08-11 12:42:29

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 53.997 ms

Loss rate: 0.89%

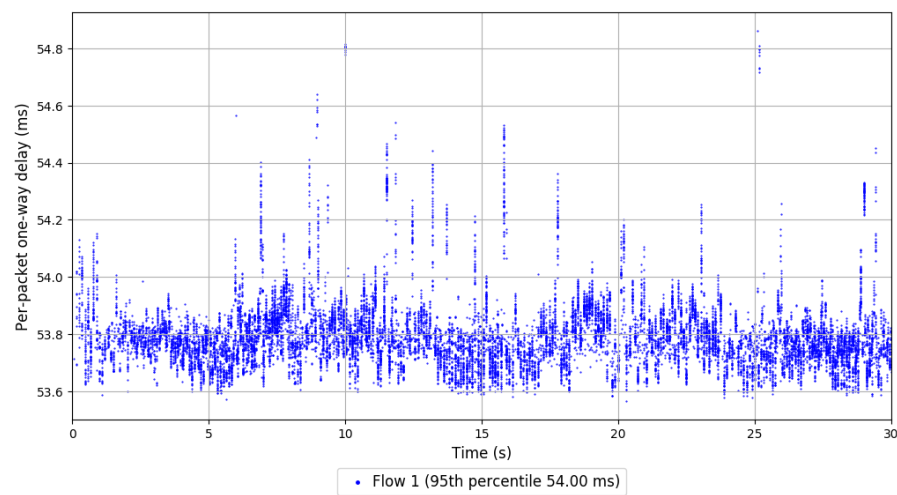
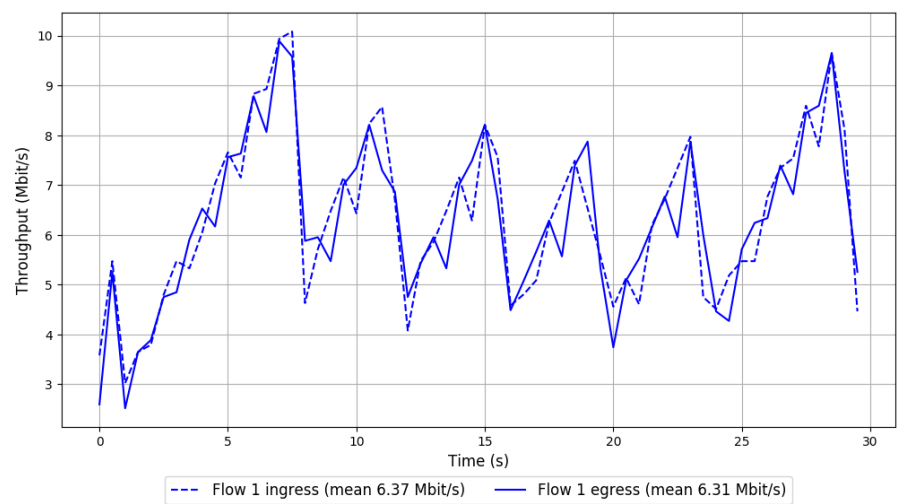
-- Flow 1:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 53.997 ms

Loss rate: 0.89%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-11 12:52:43

End at: 2017-08-11 12:53:13

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 53.319 ms

Loss rate: 2.69%

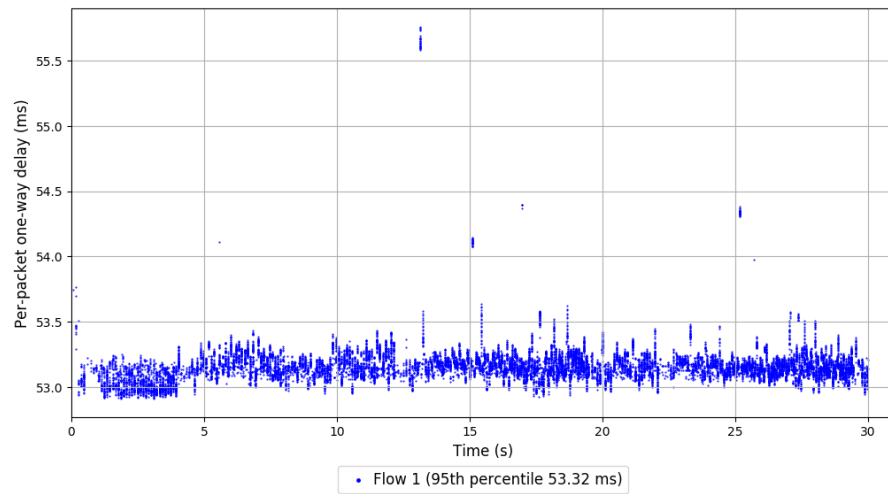
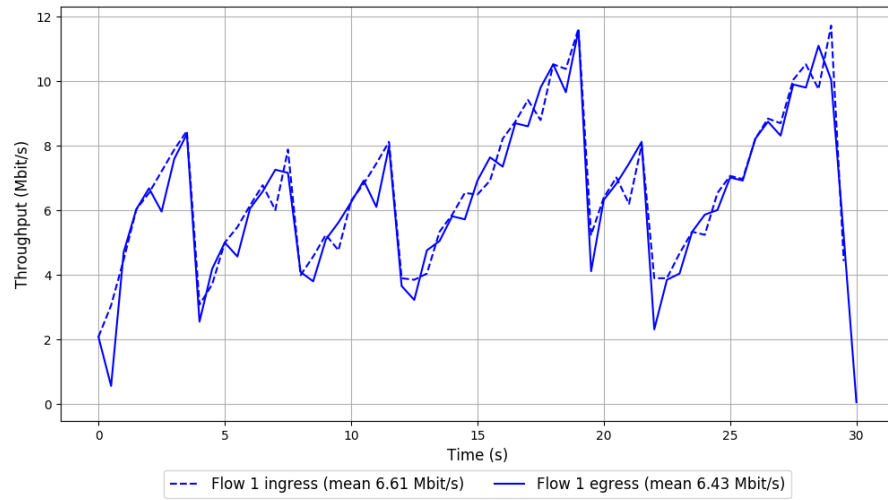
-- Flow 1:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 53.319 ms

Loss rate: 2.69%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-11 13:02:38

End at: 2017-08-11 13:03:08

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.52 Mbit/s

95th percentile per-packet one-way delay: 53.923 ms

Loss rate: 1.23%

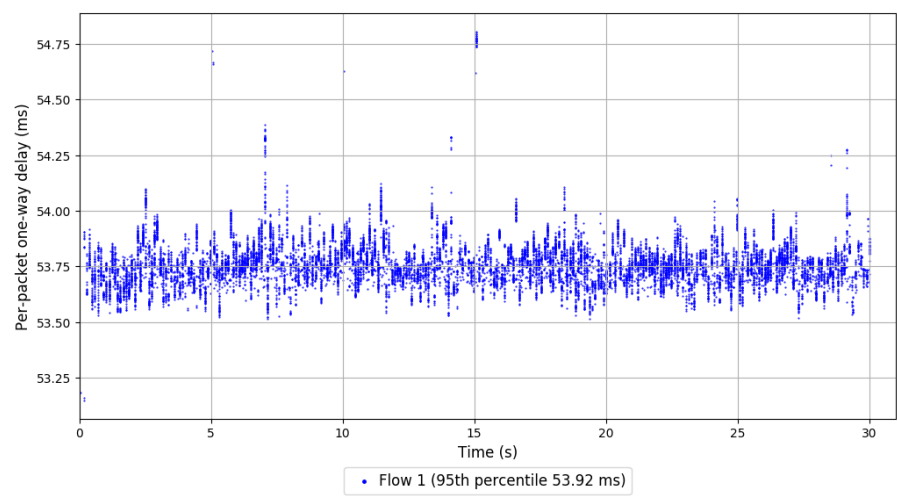
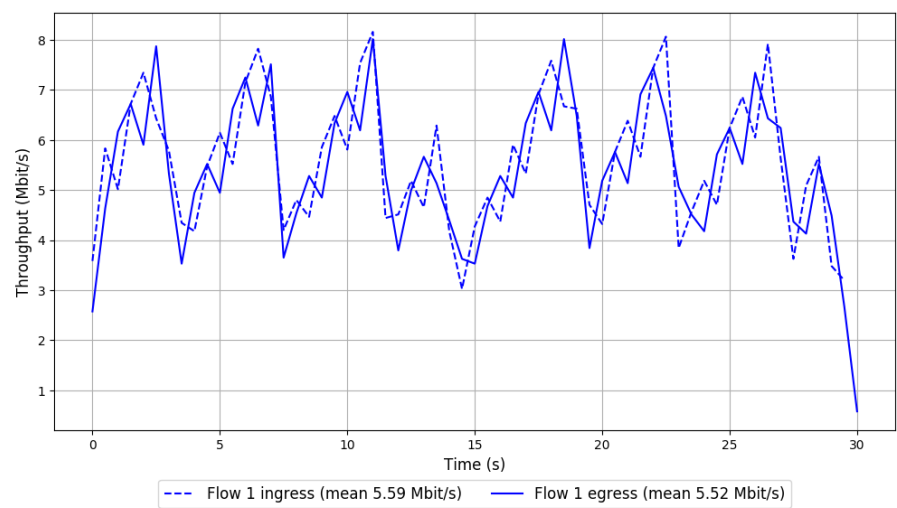
-- Flow 1:

Average throughput: 5.52 Mbit/s

95th percentile per-packet one-way delay: 53.923 ms

Loss rate: 1.23%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-11 13:12:32

End at: 2017-08-11 13:13:02

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 53.872 ms

Loss rate: 0.12%

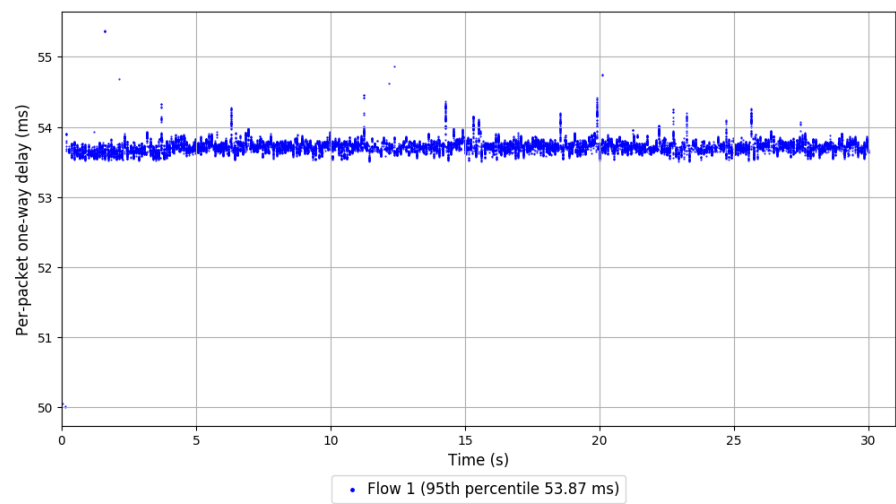
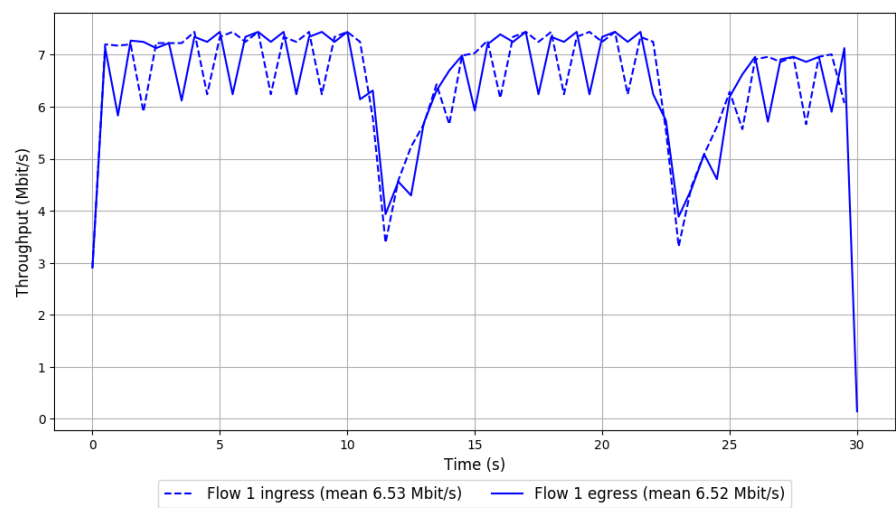
-- Flow 1:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 53.872 ms

Loss rate: 0.12%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-11 13:22:29

End at: 2017-08-11 13:22:59

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.41 Mbit/s

95th percentile per-packet one-way delay: 53.964 ms

Loss rate: 0.39%

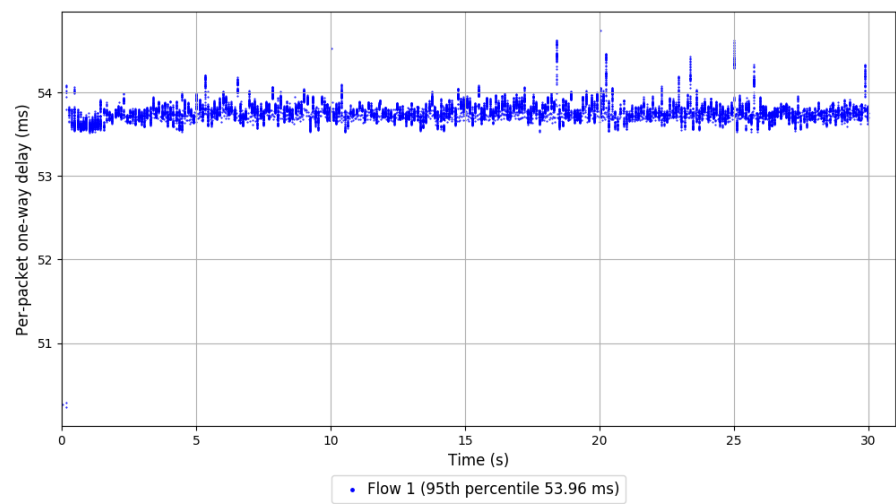
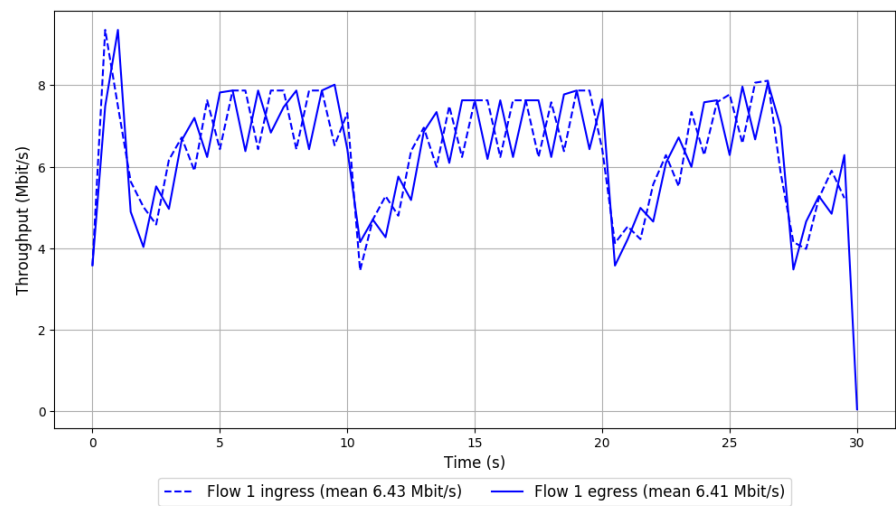
-- Flow 1:

Average throughput: 6.41 Mbit/s

95th percentile per-packet one-way delay: 53.964 ms

Loss rate: 0.39%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-11 13:32:25

End at: 2017-08-11 13:32:55

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 53.905 ms

Loss rate: 0.13%

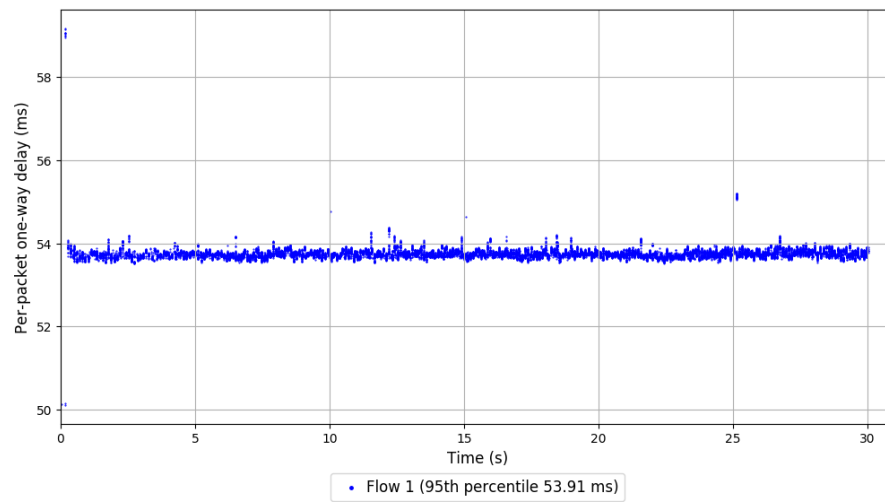
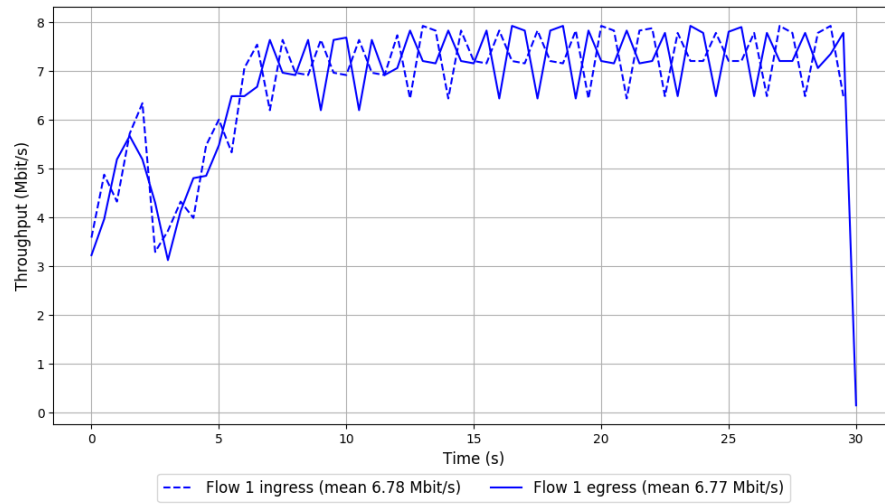
-- Flow 1:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 53.905 ms

Loss rate: 0.13%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-11 13:42:15

End at: 2017-08-11 13:42:45

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.17 Mbit/s

95th percentile per-packet one-way delay: 53.357 ms

Loss rate: 2.98%

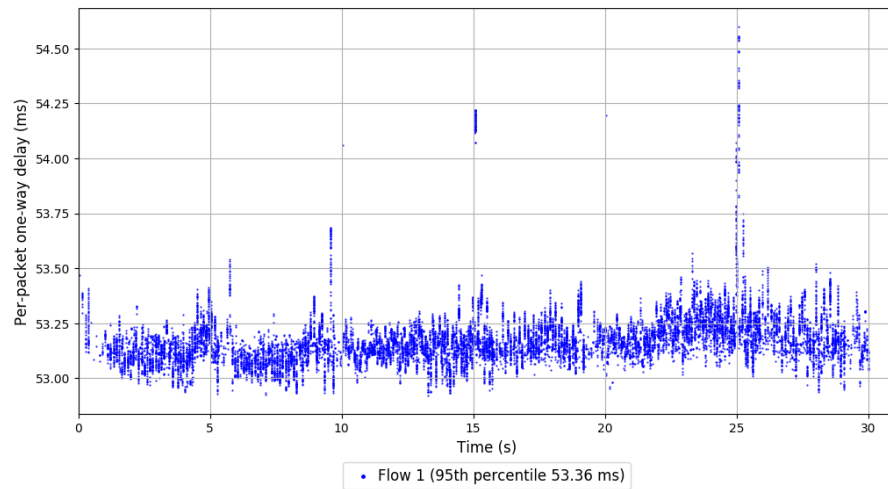
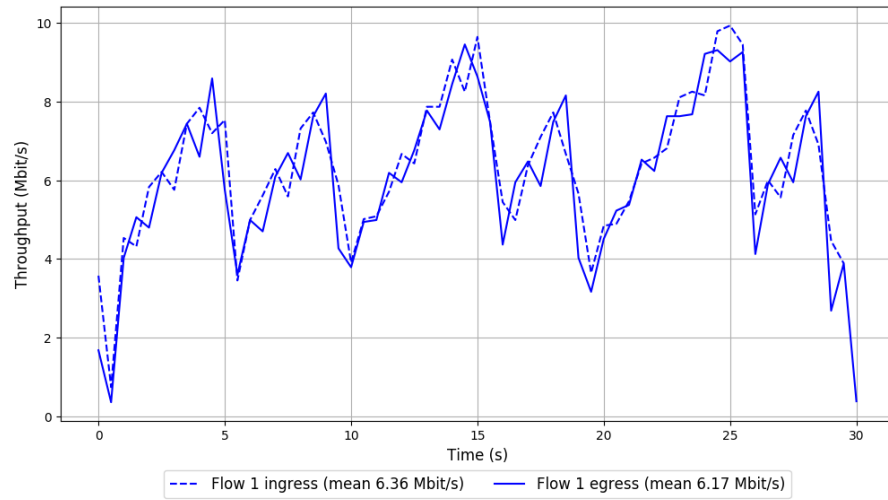
-- Flow 1:

Average throughput: 6.17 Mbit/s

95th percentile per-packet one-way delay: 53.357 ms

Loss rate: 2.98%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-11 13:51:54

End at: 2017-08-11 13:52:24

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 53.387 ms

Loss rate: 2.56%

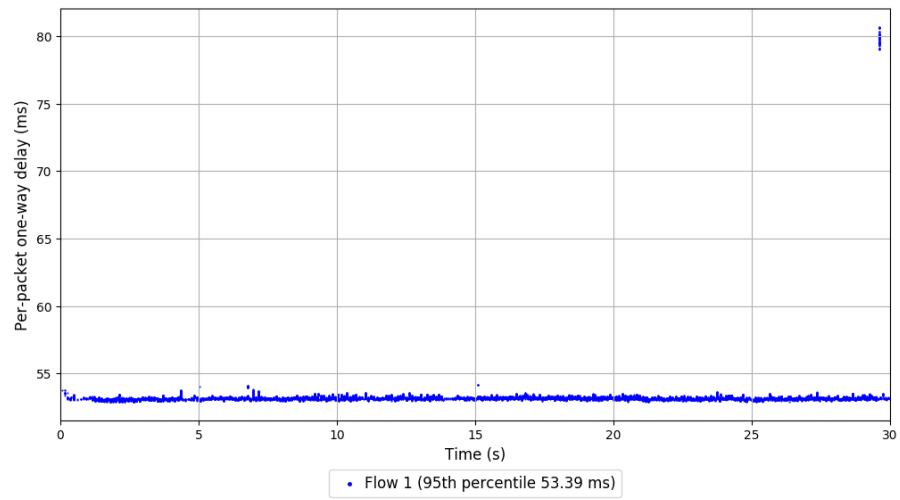
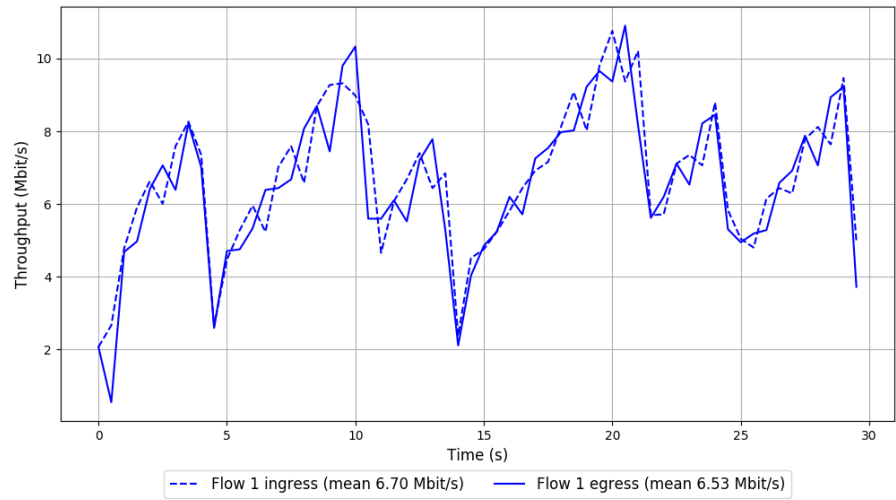
-- Flow 1:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 53.387 ms

Loss rate: 2.56%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-11 12:18:18

End at: 2017-08-11 12:18:48

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.56 Mbit/s

95th percentile per-packet one-way delay: 53.850 ms

Loss rate: 63.57%

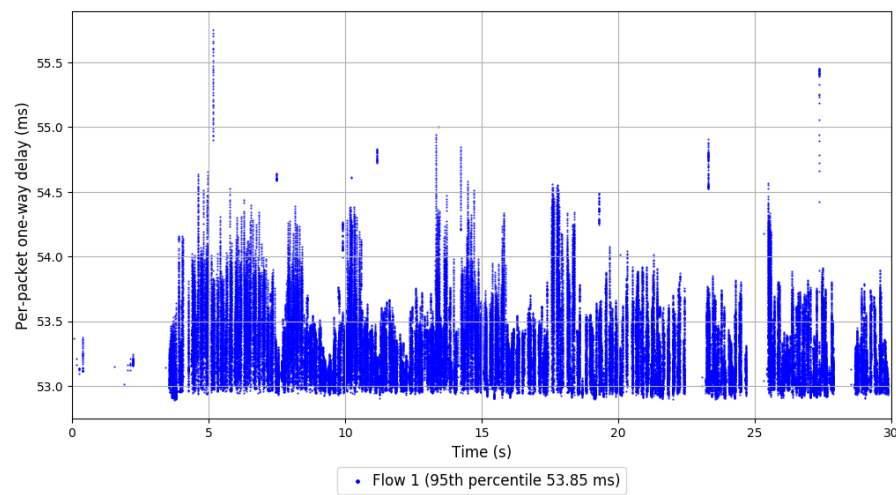
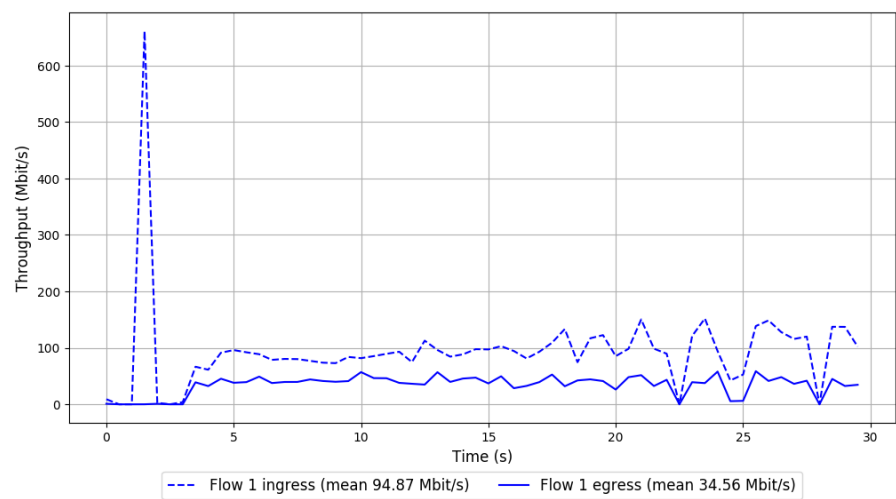
-- Flow 1:

Average throughput: 34.56 Mbit/s

95th percentile per-packet one-way delay: 53.850 ms

Loss rate: 63.57%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-11 12:27:57

End at: 2017-08-11 12:28:27

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.21 Mbit/s

95th percentile per-packet one-way delay: 53.690 ms

Loss rate: 74.41%

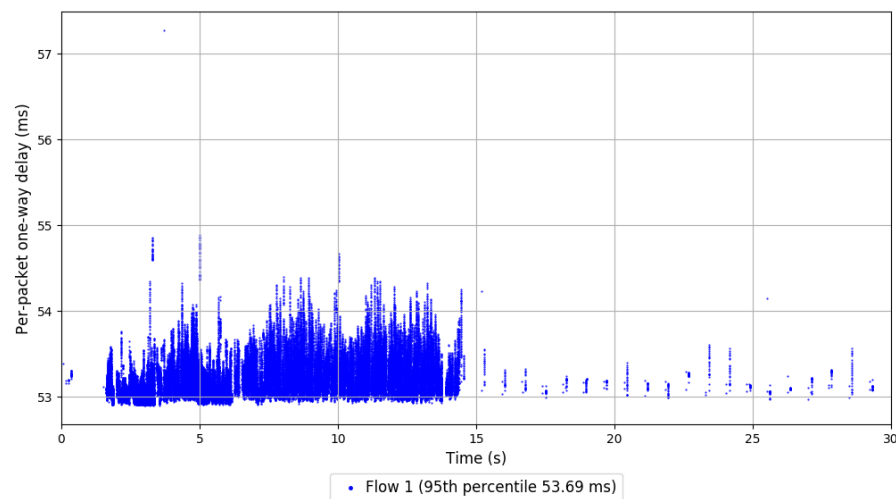
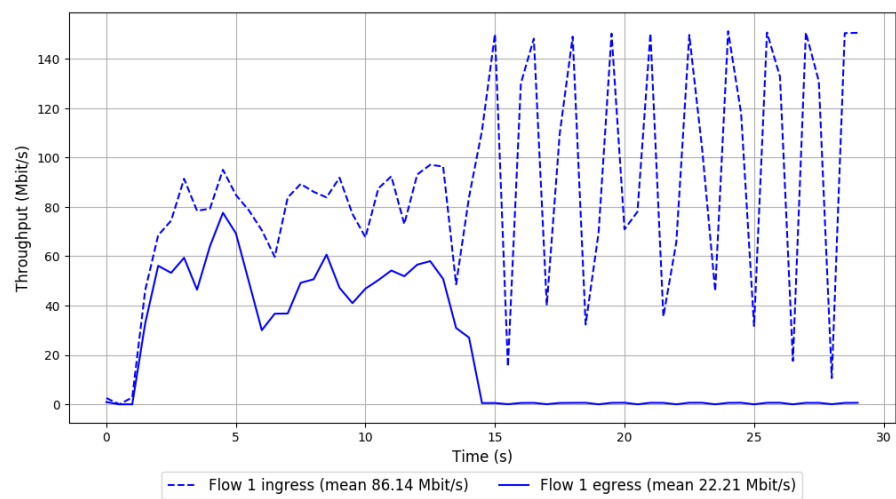
-- Flow 1:

Average throughput: 22.21 Mbit/s

95th percentile per-packet one-way delay: 53.690 ms

Loss rate: 74.41%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-11 12:37:31

End at: 2017-08-11 12:38:01

Below is generated by plot.py at 2017-08-11 14:54:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.82 Mbit/s

95th percentile per-packet one-way delay: 53.960 ms

Loss rate: 71.49%

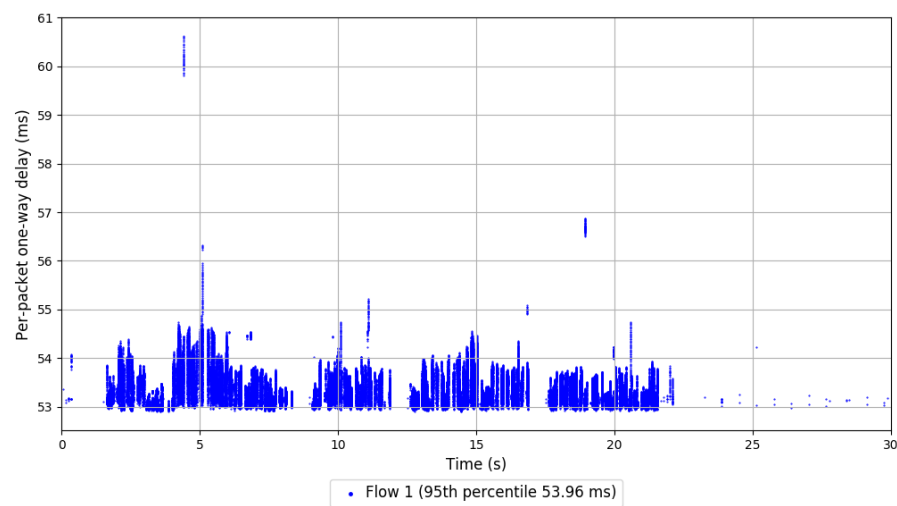
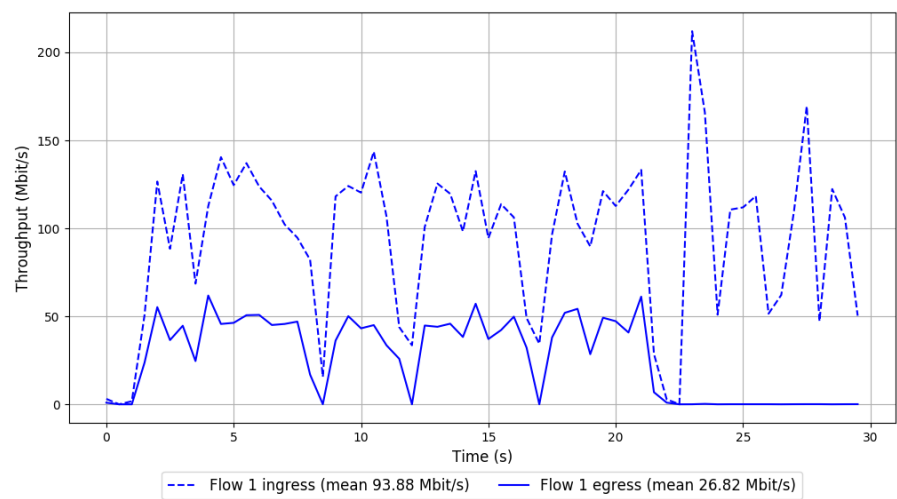
-- Flow 1:

Average throughput: 26.82 Mbit/s

95th percentile per-packet one-way delay: 53.960 ms

Loss rate: 71.49%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-11 12:47:48

End at: 2017-08-11 12:48:18

Below is generated by plot.py at 2017-08-11 14:54:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.31 Mbit/s

95th percentile per-packet one-way delay: 56.402 ms

Loss rate: 93.04%

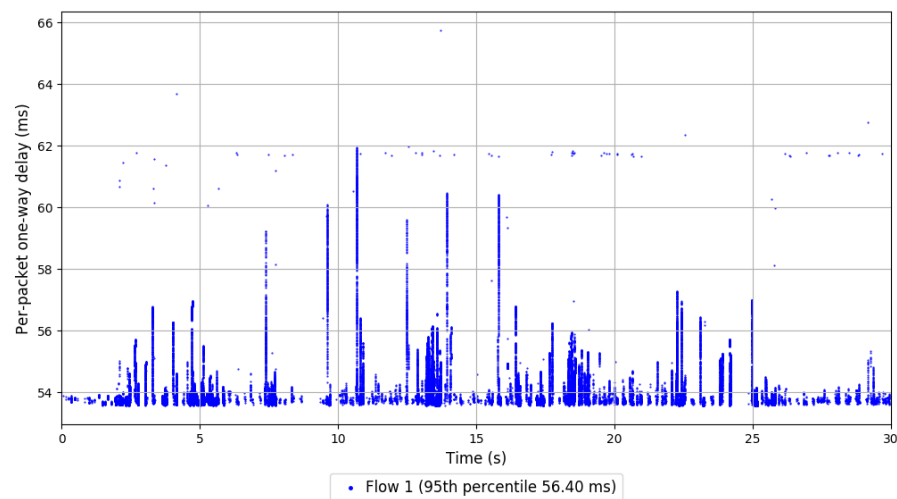
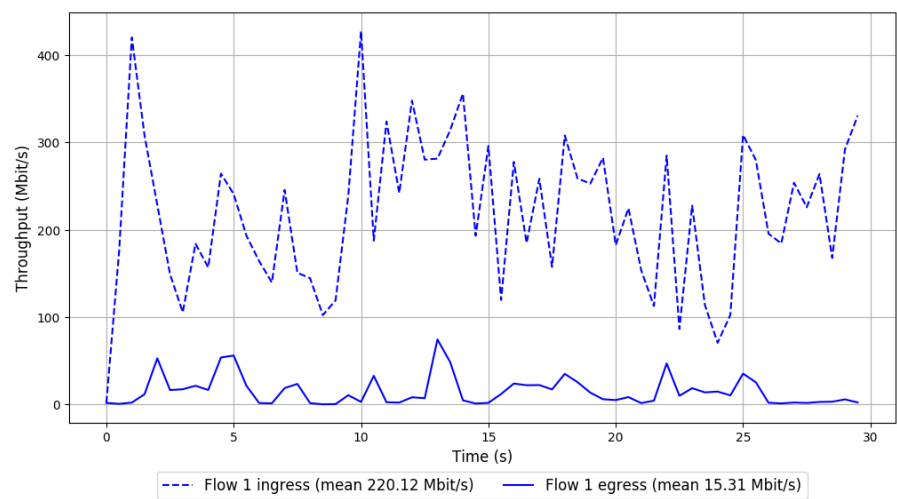
-- Flow 1:

Average throughput: 15.31 Mbit/s

95th percentile per-packet one-way delay: 56.402 ms

Loss rate: 93.04%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-11 12:58:02

End at: 2017-08-11 12:58:32

Below is generated by plot.py at 2017-08-11 14:54:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.92 Mbit/s

95th percentile per-packet one-way delay: 56.527 ms

Loss rate: 90.43%

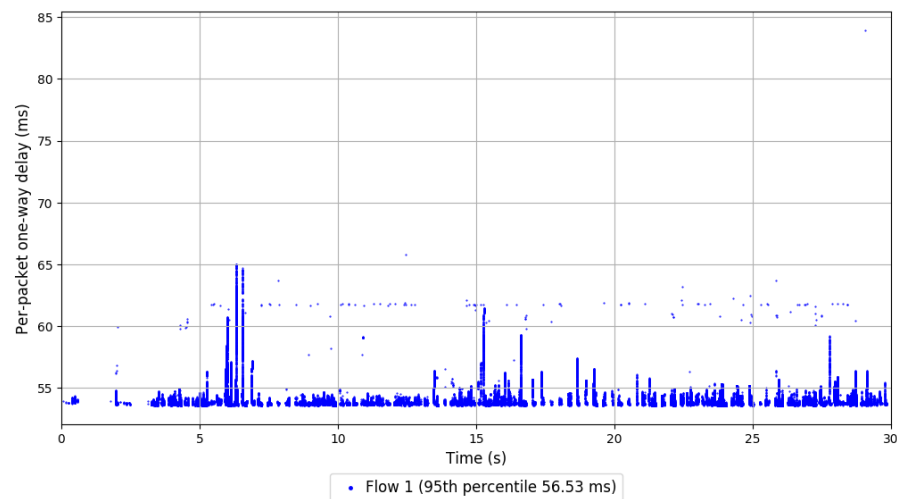
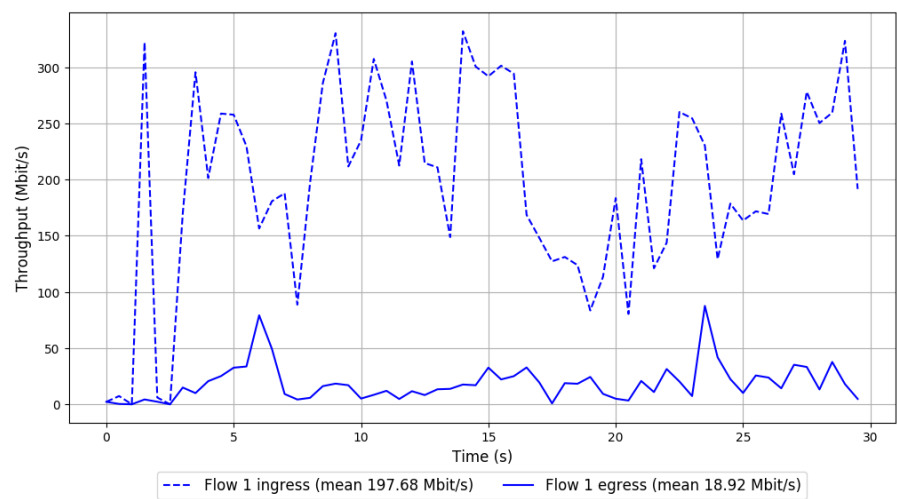
-- Flow 1:

Average throughput: 18.92 Mbit/s

95th percentile per-packet one-way delay: 56.527 ms

Loss rate: 90.43%

Run 5: Report of Verus — Data Link

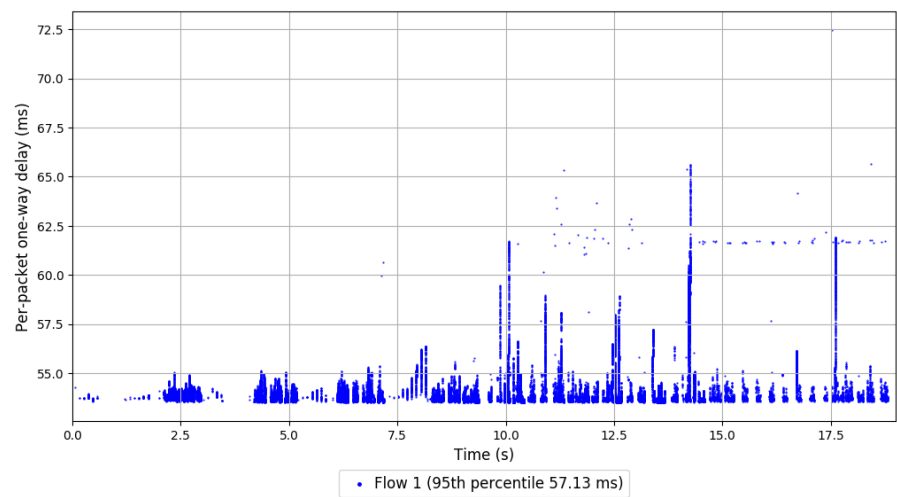
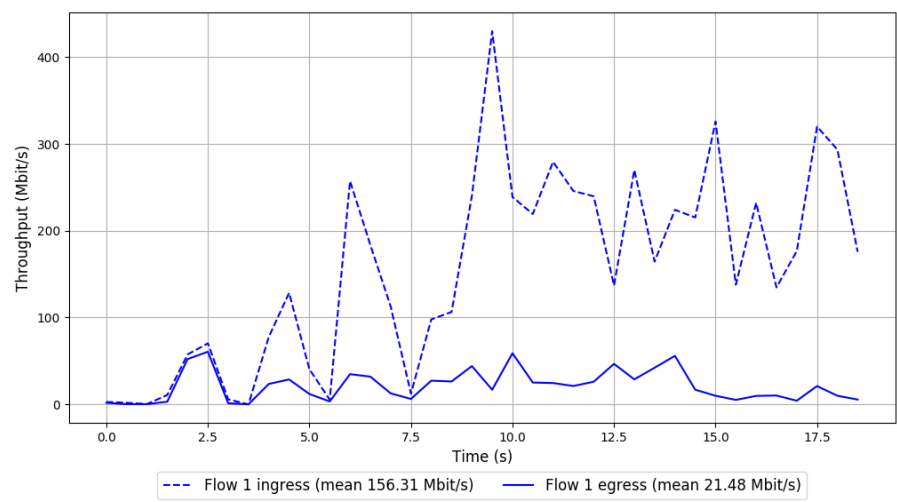


Run 6: Statistics of Verus

Start at: 2017-08-11 13:08:05

End at: 2017-08-11 13:08:35

Run 6: Report of Verus — Data Link

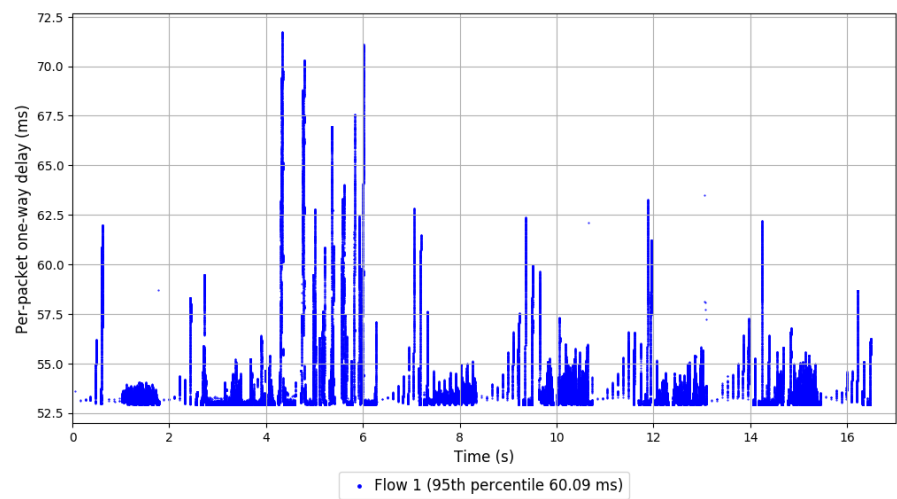
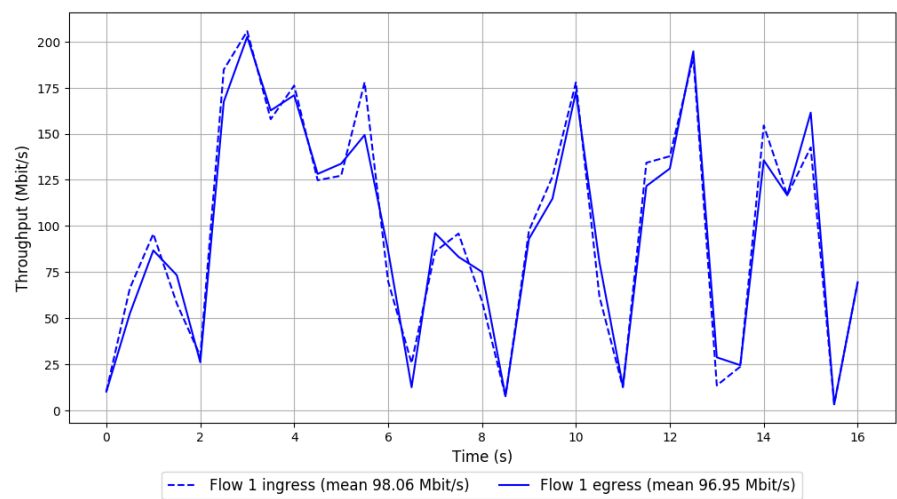


Run 7: Statistics of Verus

Start at: 2017-08-11 13:18:02

End at: 2017-08-11 13:18:32

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-11 13:27:51

End at: 2017-08-11 13:28:21

Below is generated by plot.py at 2017-08-11 14:54:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.78 Mbit/s

95th percentile per-packet one-way delay: 65.196 ms

Loss rate: 0.69%

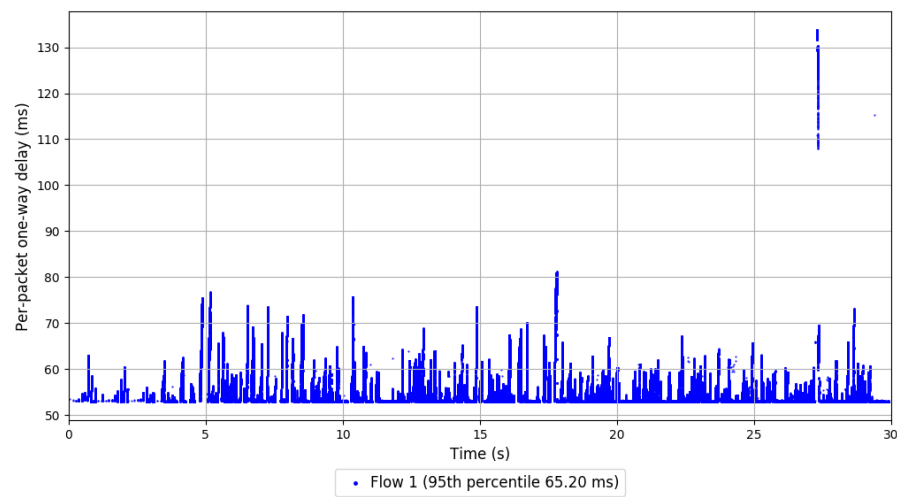
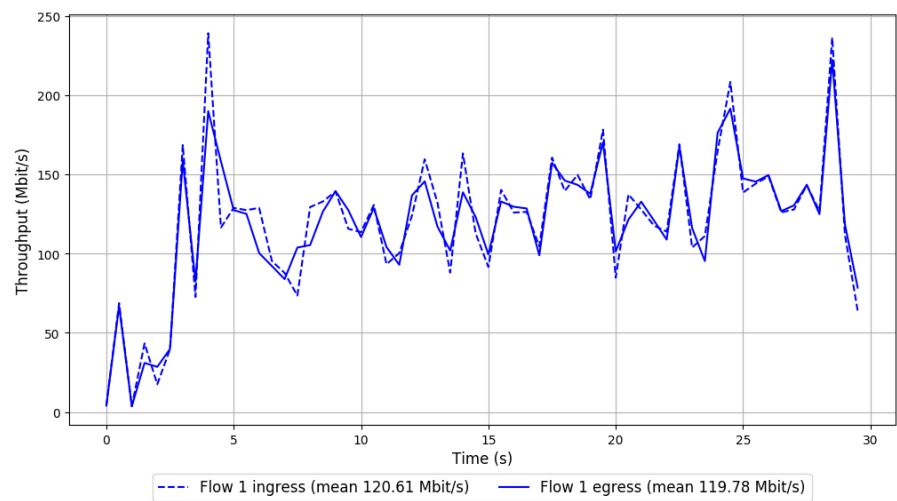
-- Flow 1:

Average throughput: 119.78 Mbit/s

95th percentile per-packet one-way delay: 65.196 ms

Loss rate: 0.69%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-11 13:37:49

End at: 2017-08-11 13:38:19

Below is generated by plot.py at 2017-08-11 14:54:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 53.579 ms

Loss rate: 98.18%

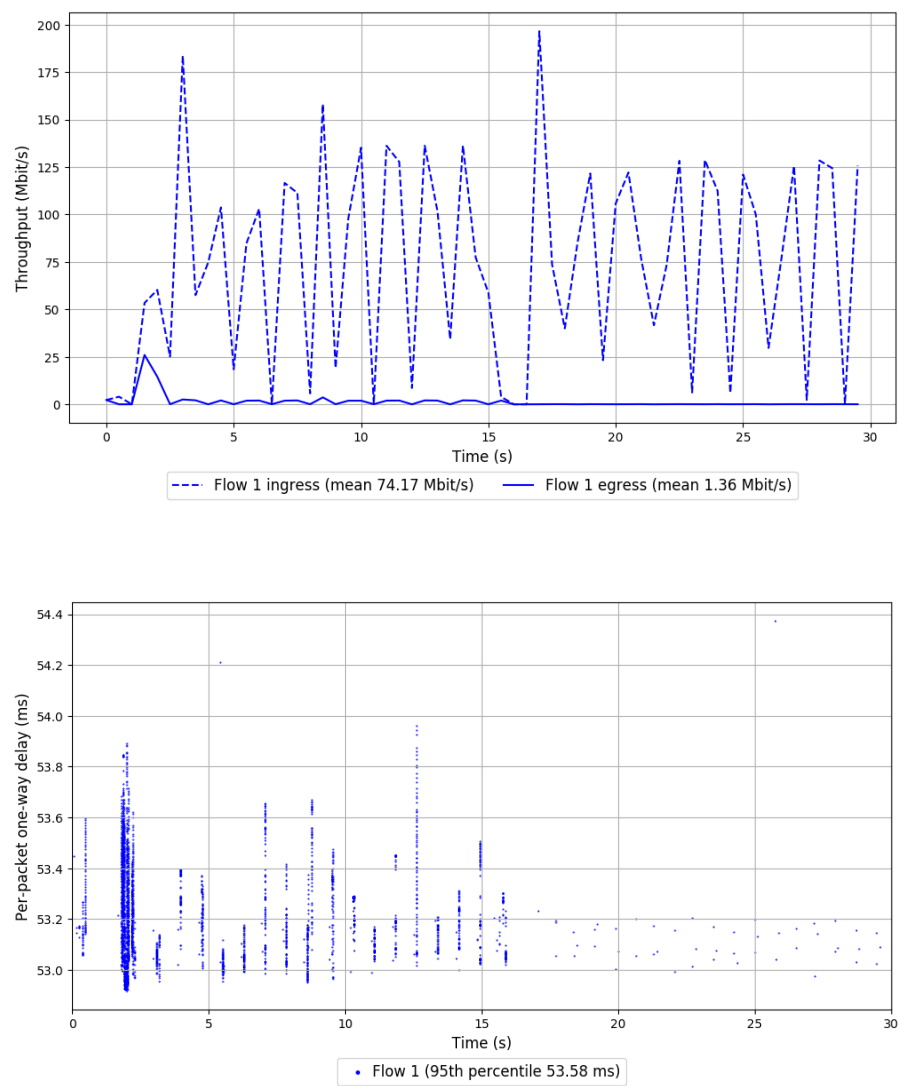
-- Flow 1:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 53.579 ms

Loss rate: 98.18%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-11 13:47:26

End at: 2017-08-11 13:47:56

Below is generated by plot.py at 2017-08-11 14:54:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.50 Mbit/s

95th percentile per-packet one-way delay: 56.154 ms

Loss rate: 70.95%

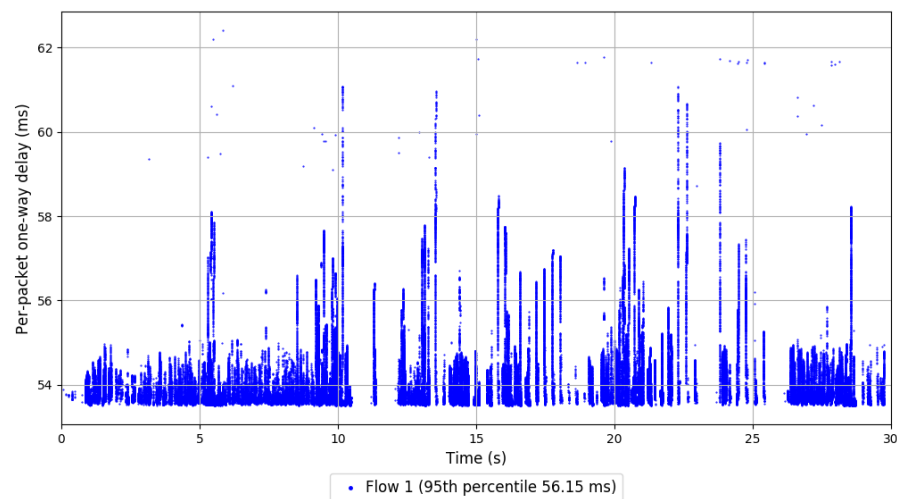
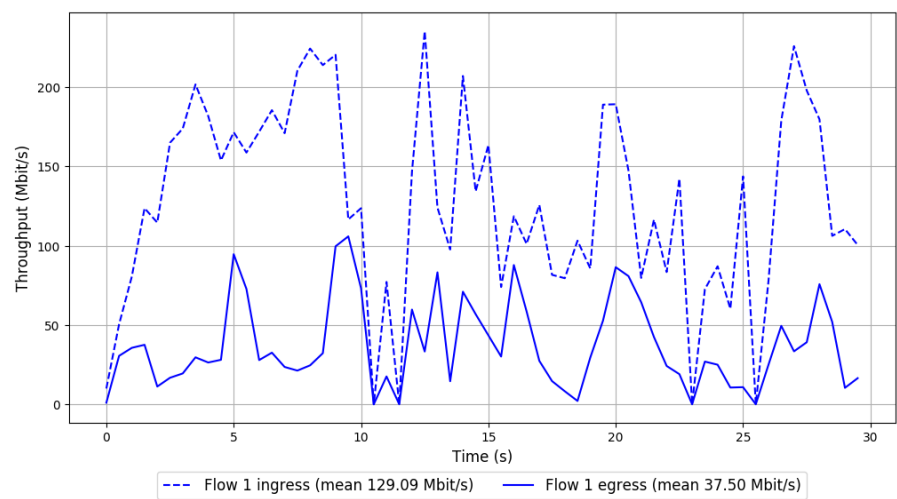
-- Flow 1:

Average throughput: 37.50 Mbit/s

95th percentile per-packet one-way delay: 56.154 ms

Loss rate: 70.95%

Run 10: Report of Verus — Data Link

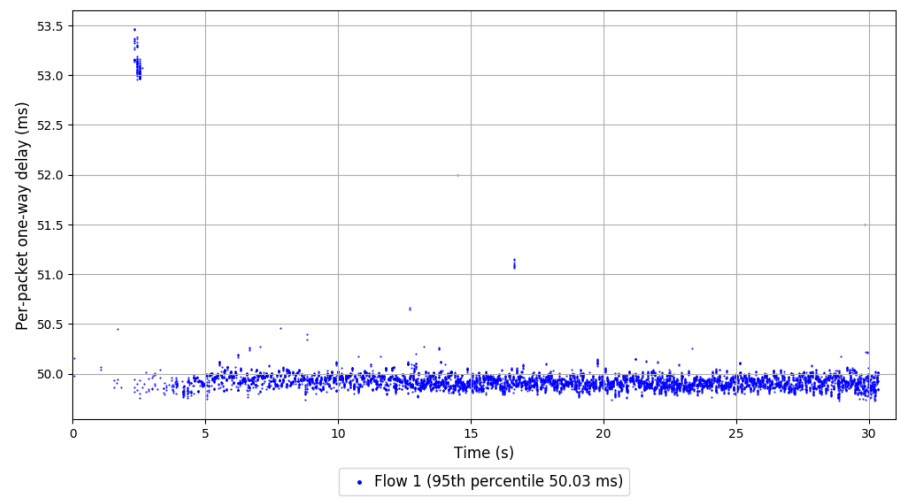
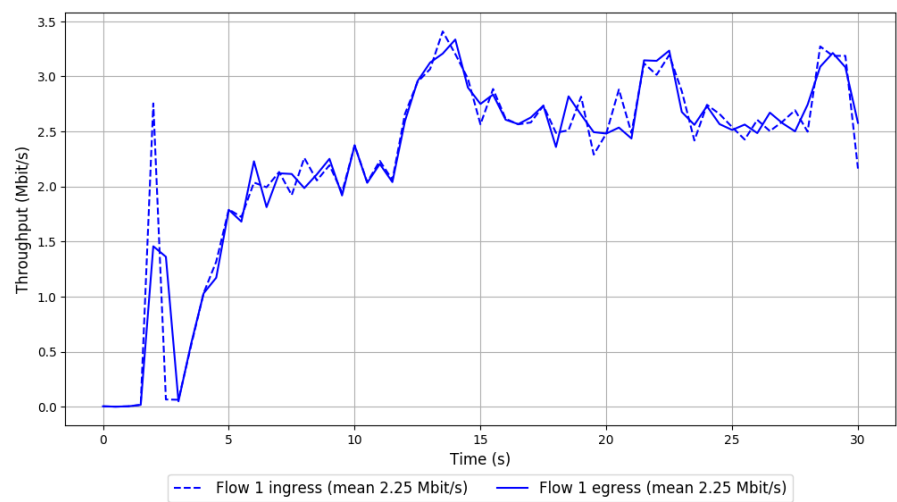


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-11 12:24:04
End at: 2017-08-11 12:24:34

# Below is generated by plot.py at 2017-08-11 14:54:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 50.034 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 50.034 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-11 12:33:42

End at: 2017-08-11 12:34:12

Below is generated by plot.py at 2017-08-11 14:54:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 50.377 ms

Loss rate: 0.00%

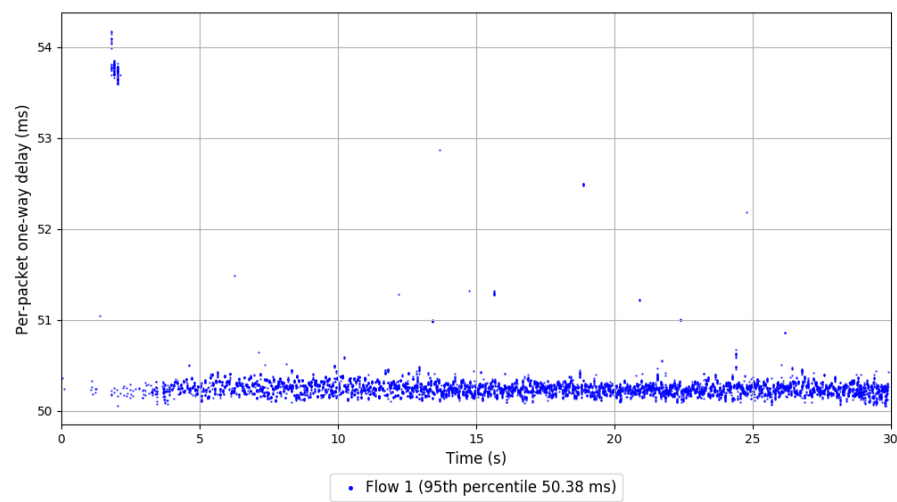
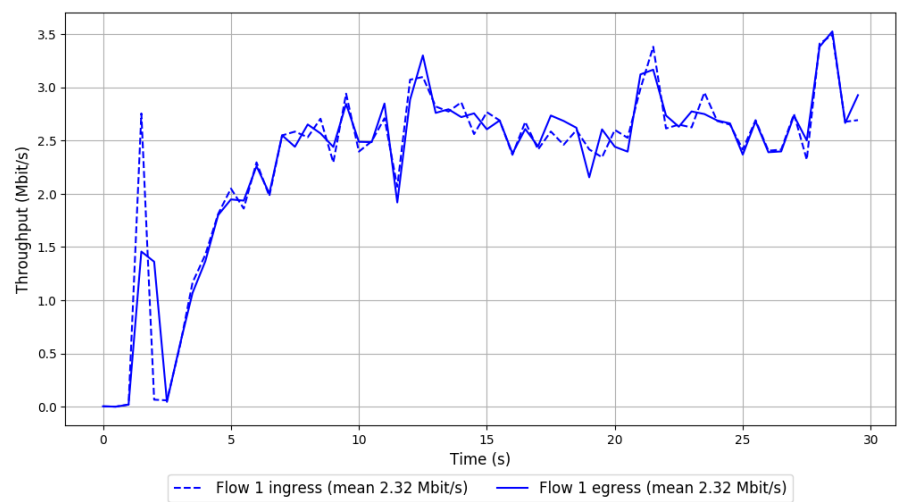
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 50.377 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-11 12:43:22

End at: 2017-08-11 12:43:52

Below is generated by plot.py at 2017-08-11 14:54:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 53.828 ms

Loss rate: 0.00%

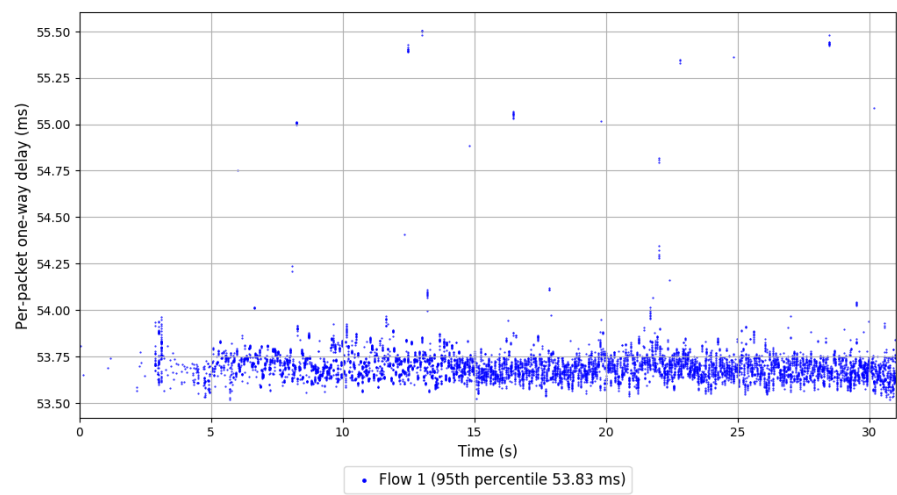
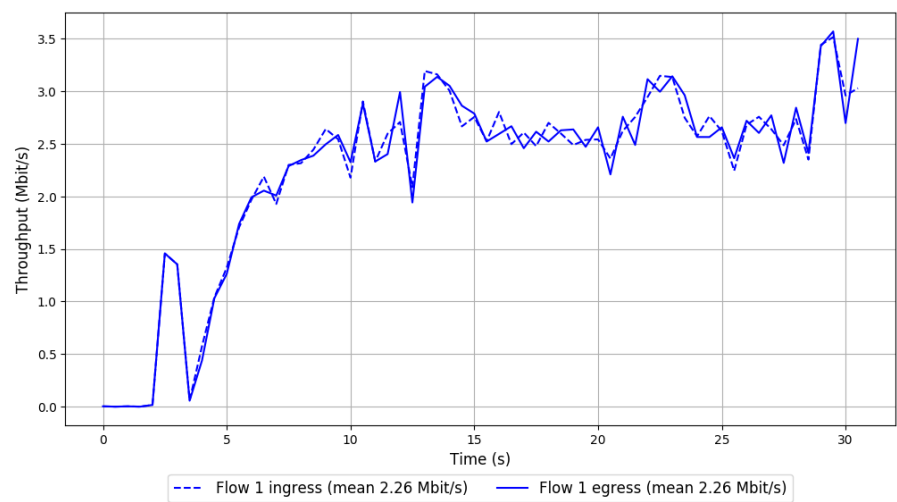
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 53.828 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-11 12:54:02

End at: 2017-08-11 12:54:32

Below is generated by plot.py at 2017-08-11 14:54:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 50.118 ms

Loss rate: 0.00%

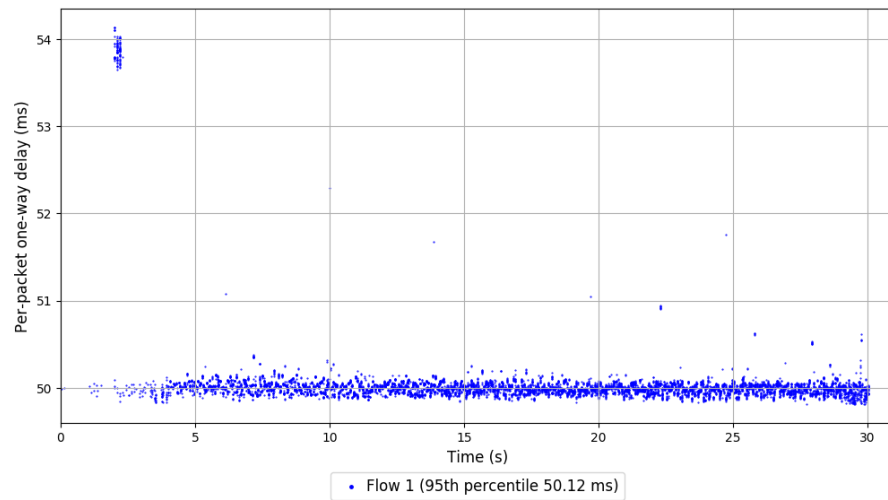
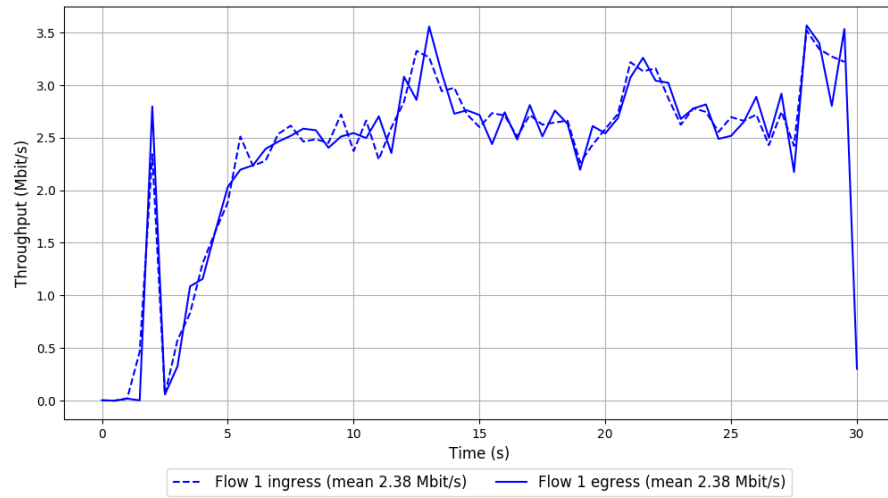
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 50.118 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-11 13:04:01

End at: 2017-08-11 13:04:31

Below is generated by plot.py at 2017-08-11 14:54:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.504 ms

Loss rate: 0.00%

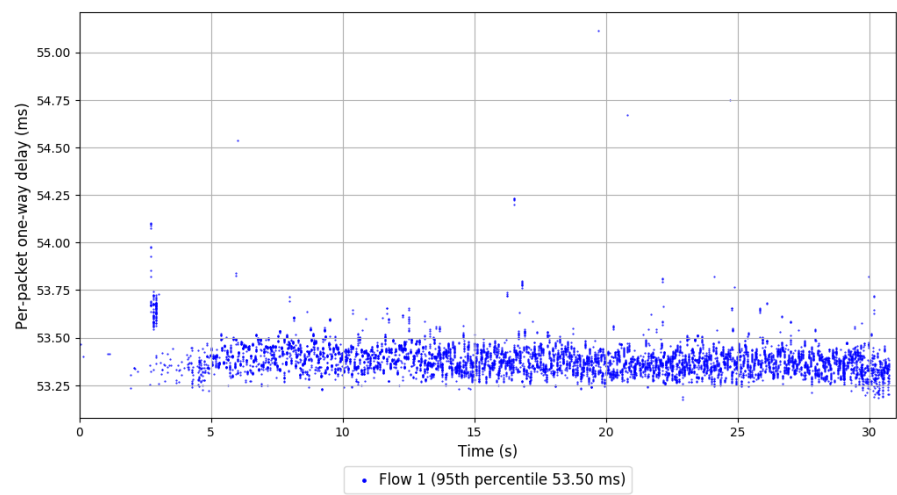
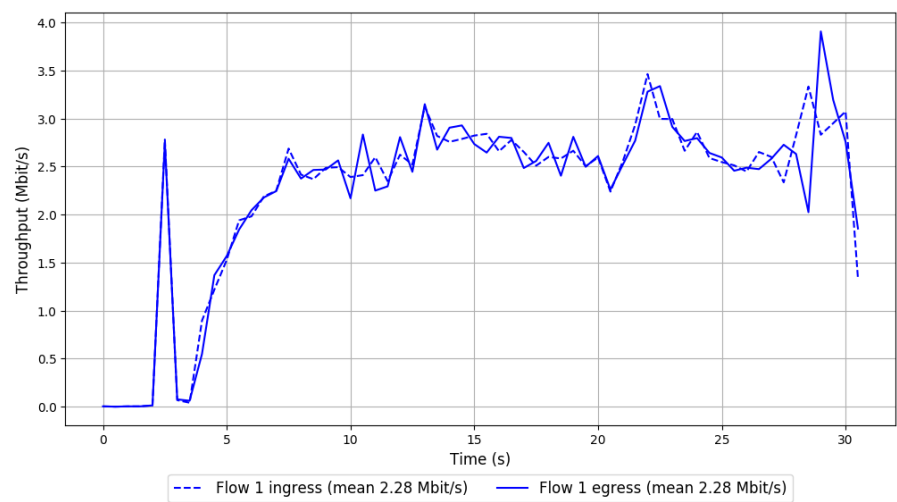
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.504 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-11 13:13:57

End at: 2017-08-11 13:14:27

Below is generated by plot.py at 2017-08-11 14:54:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 53.820 ms

Loss rate: 0.00%

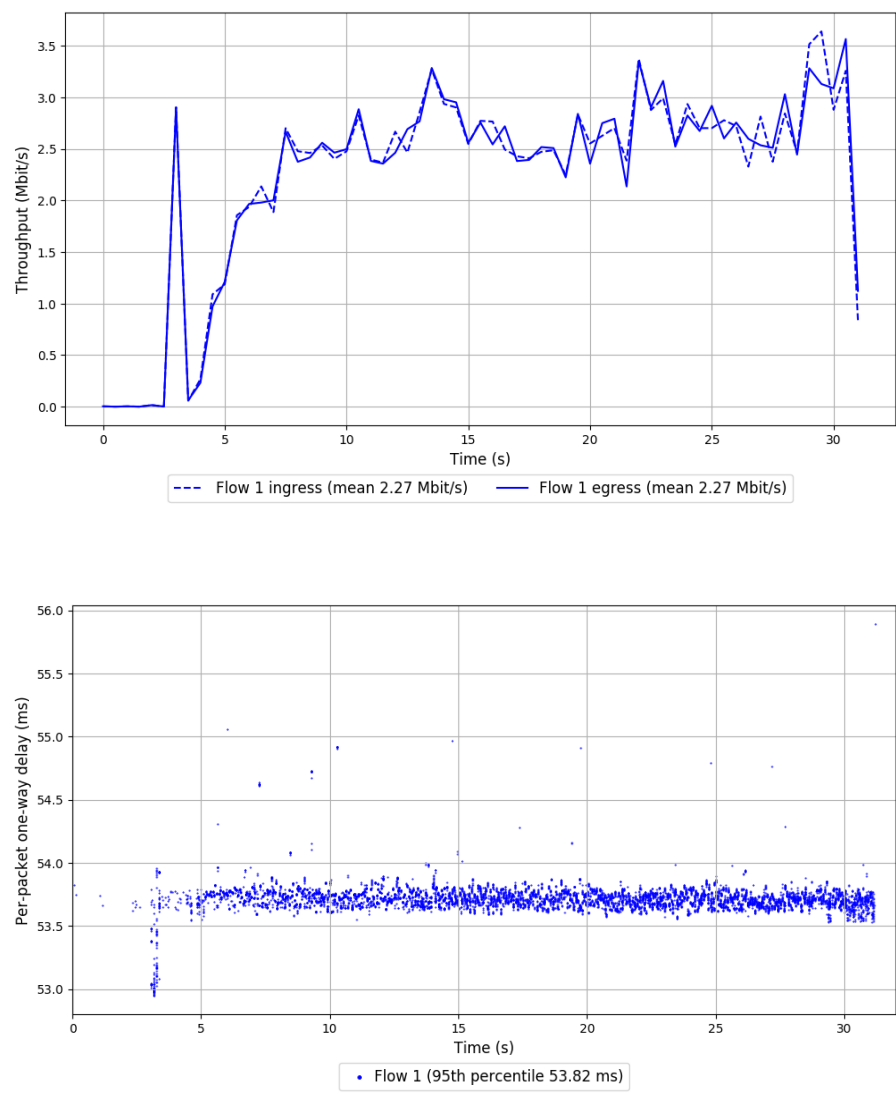
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 53.820 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-11 13:23:45

End at: 2017-08-11 13:24:15

Below is generated by plot.py at 2017-08-11 14:54:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.379 ms

Loss rate: 0.00%

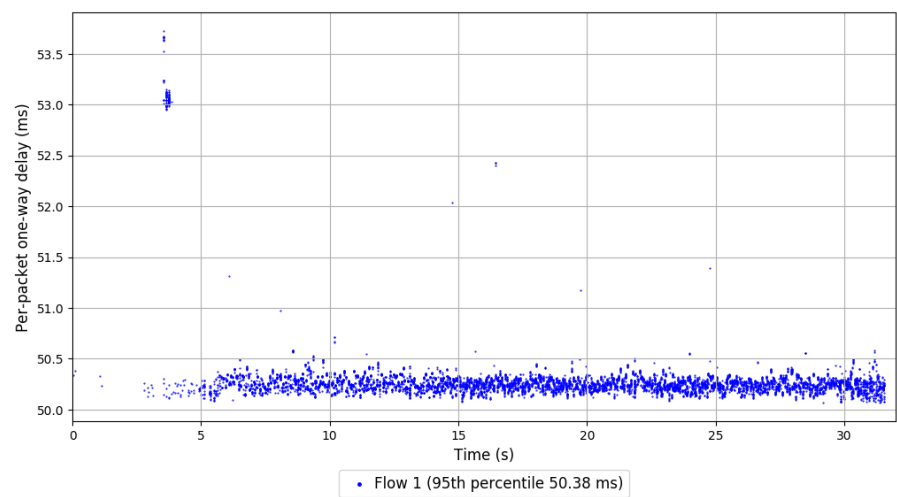
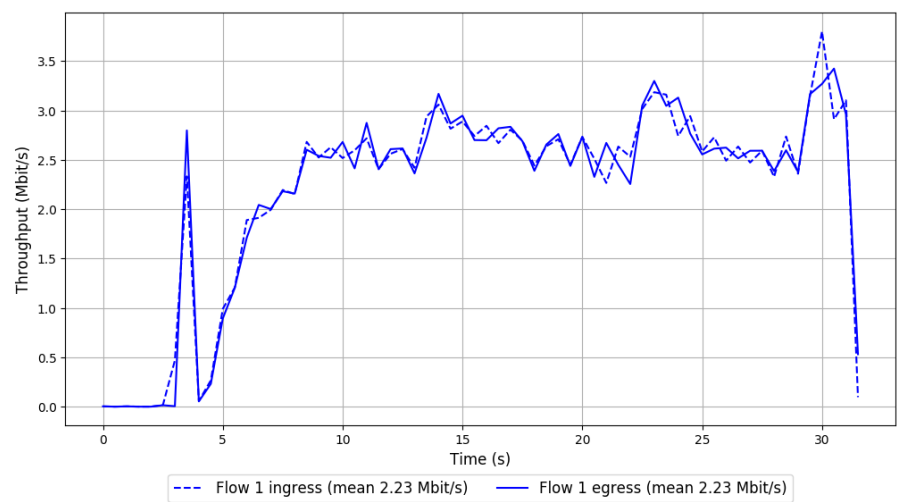
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.379 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-11 13:33:45

End at: 2017-08-11 13:34:15

Below is generated by plot.py at 2017-08-11 14:54:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.109 ms

Loss rate: 0.00%

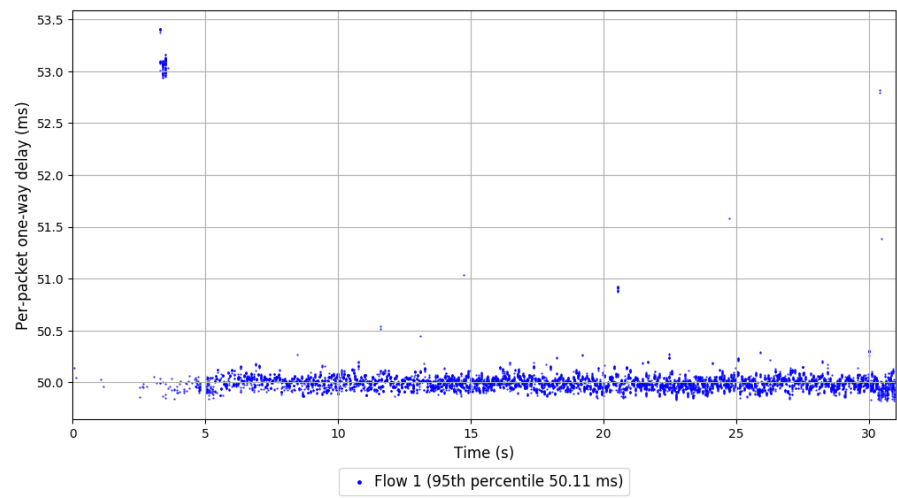
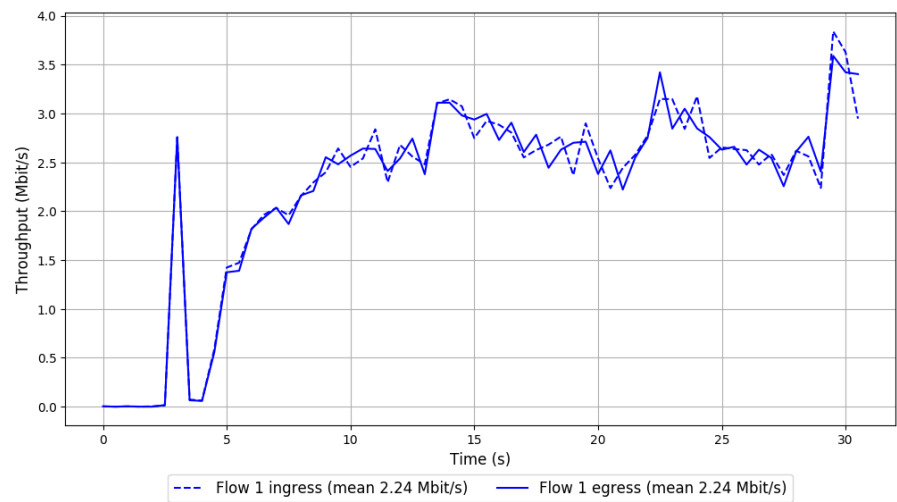
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.109 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-11 13:43:38

End at: 2017-08-11 13:44:09

Below is generated by plot.py at 2017-08-11 14:54:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 53.821 ms

Loss rate: 0.00%

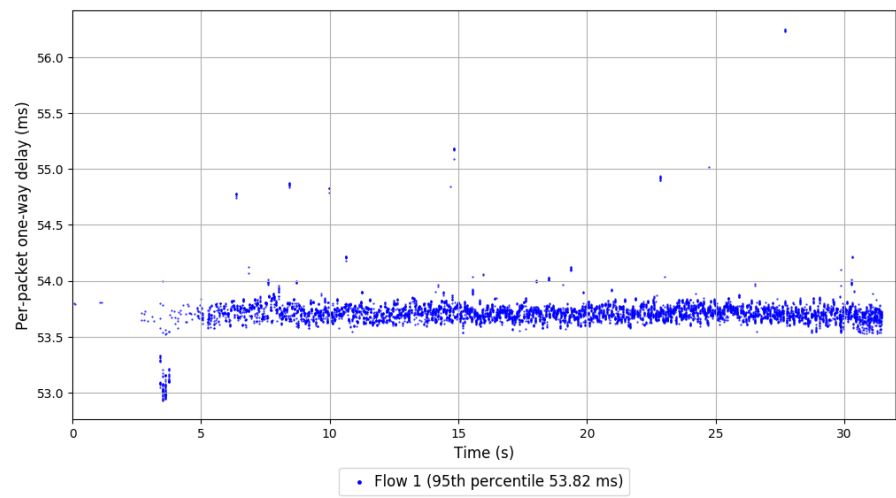
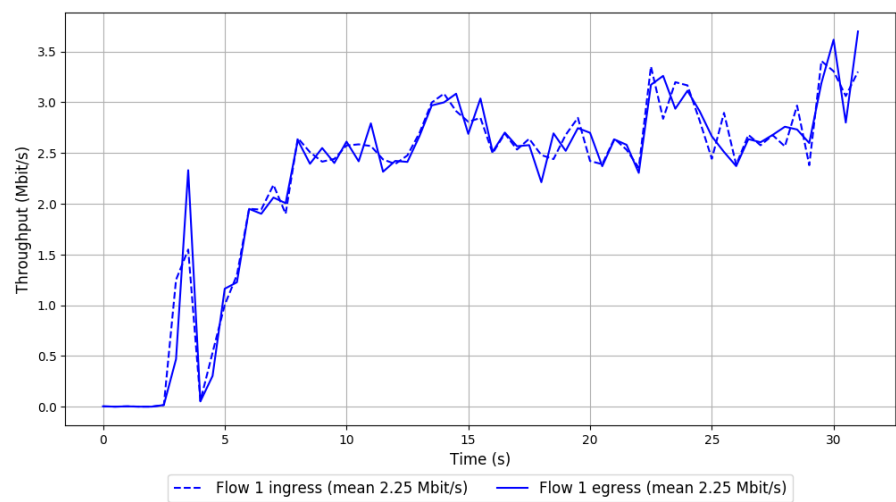
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 53.821 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-11 13:53:18

End at: 2017-08-11 13:53:48

Below is generated by plot.py at 2017-08-11 14:54:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

