

Pantheon Report

Generated at 2017-08-11 14:40:33 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

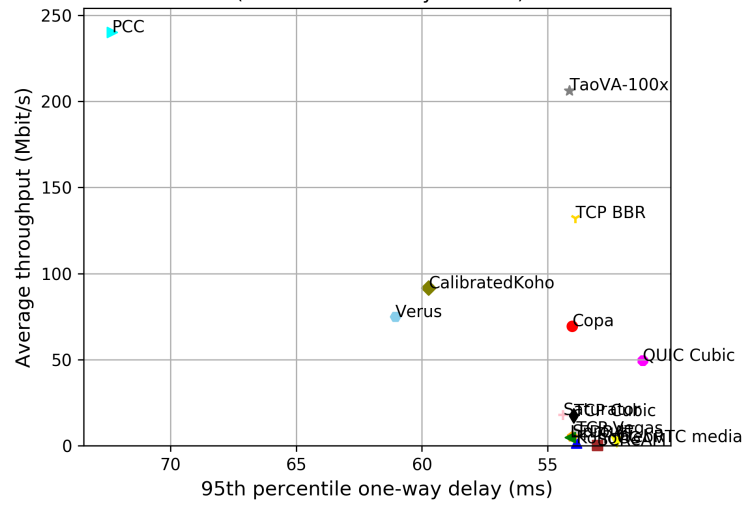
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

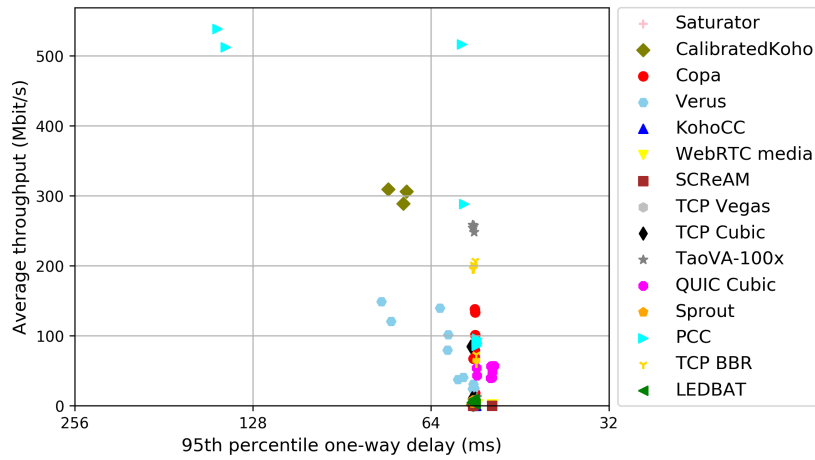
Git summary:

```
branch: master @ 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 Tokyo Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	132.14	53.89	6.52
CalibratedKoho	10	91.69	59.73	49.24
Copa	9	69.44	54.02	31.02
TCP Cubic	9	17.44	53.96	2.17
KohoCC	10	1.59	53.86	84.08
LEDBAT	10	4.82	54.11	3.15
PCC	10	239.96	72.33	4.25
QUIC Cubic	8	49.47	51.22	0.43
Saturator	4	17.90	54.38	12.80
SCReAM	3	0.22	53.02	0.33
Sprout	10	5.36	54.03	11.72
TaoVA-100x	5	206.23	54.13	0.41
TCP Vegas	9	7.20	53.86	1.50
Verus	10	74.84	61.06	42.70
WebRTC media	7	2.21	52.24	0.56

Run 1: Statistics of TCP BBR

Start at: 2017-08-11 10:38:59

End at: 2017-08-11 10:39:29

Below is generated by plot.py at 2017-08-11 14:24:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.84 Mbit/s

95th percentile per-packet one-way delay: 54.199 ms

Loss rate: 0.55%

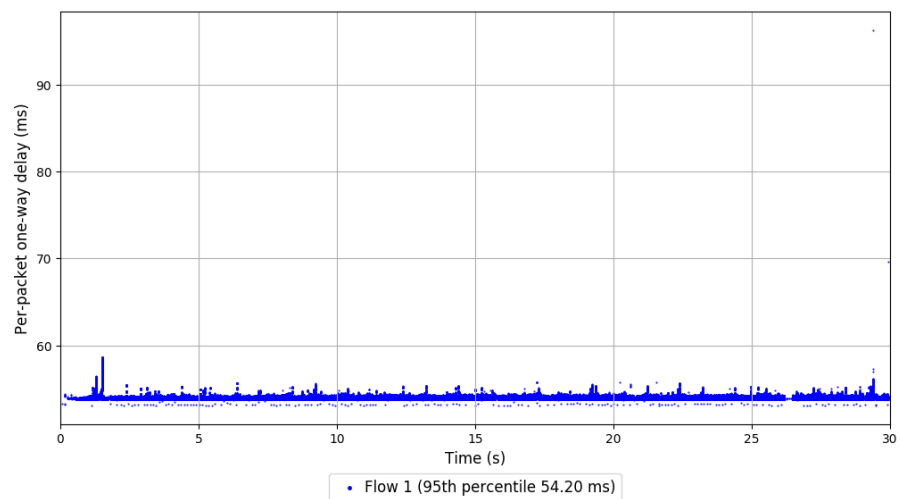
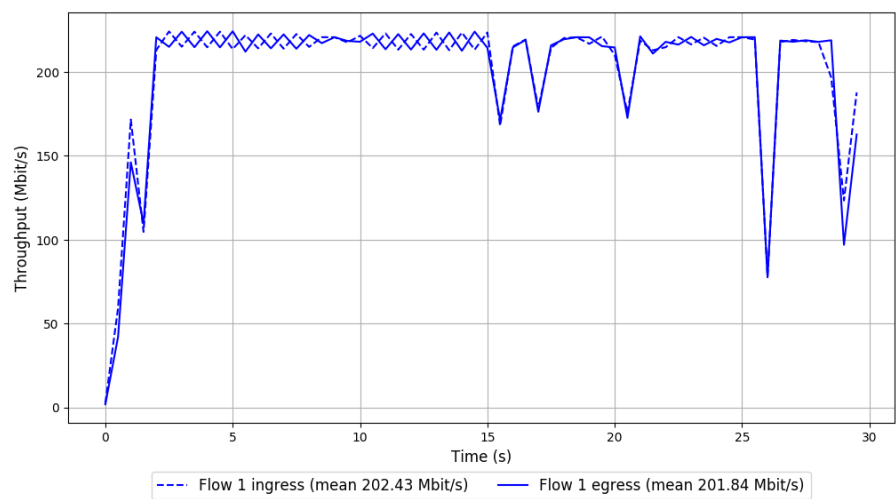
-- Flow 1:

Average throughput: 201.84 Mbit/s

95th percentile per-packet one-way delay: 54.199 ms

Loss rate: 0.55%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-11 10:49:20

End at: 2017-08-11 10:49:50

Below is generated by plot.py at 2017-08-11 14:24:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.34 Mbit/s

95th percentile per-packet one-way delay: 53.658 ms

Loss rate: 12.18%

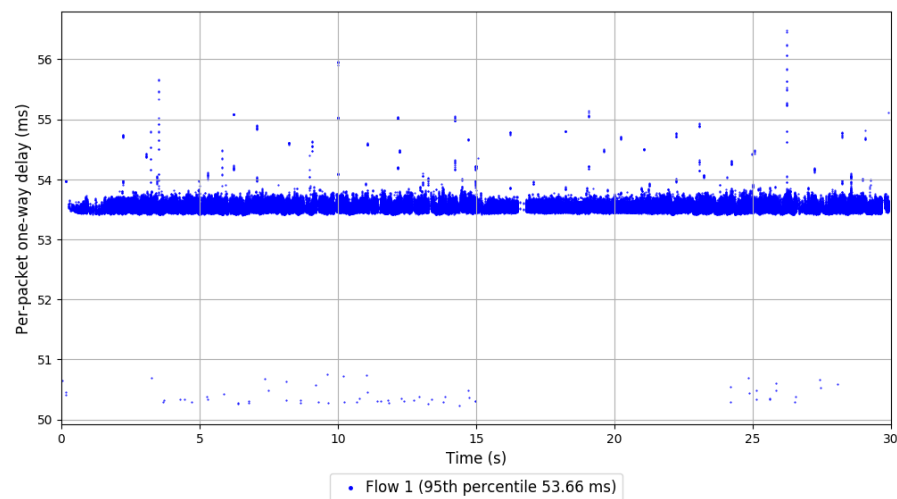
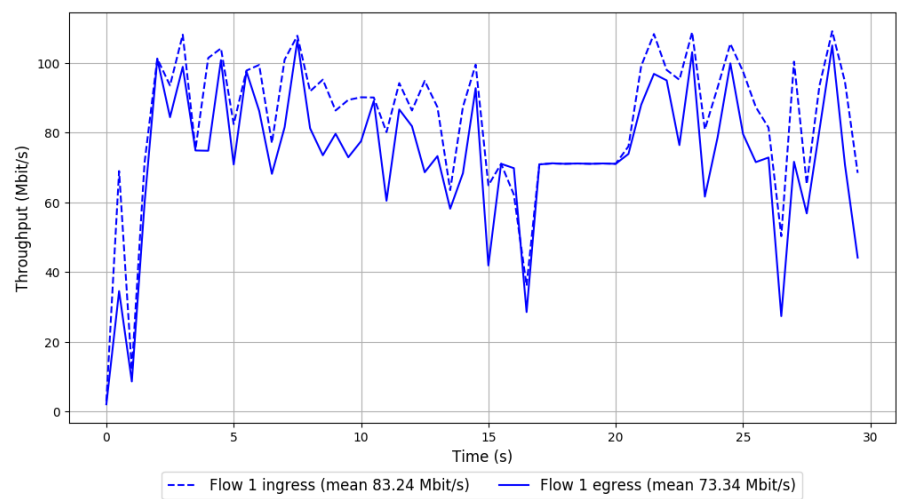
-- Flow 1:

Average throughput: 73.34 Mbit/s

95th percentile per-packet one-way delay: 53.658 ms

Loss rate: 12.18%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-11 10:59:54

End at: 2017-08-11 11:00:25

Below is generated by plot.py at 2017-08-11 14:24:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.50 Mbit/s

95th percentile per-packet one-way delay: 53.625 ms

Loss rate: 12.21%

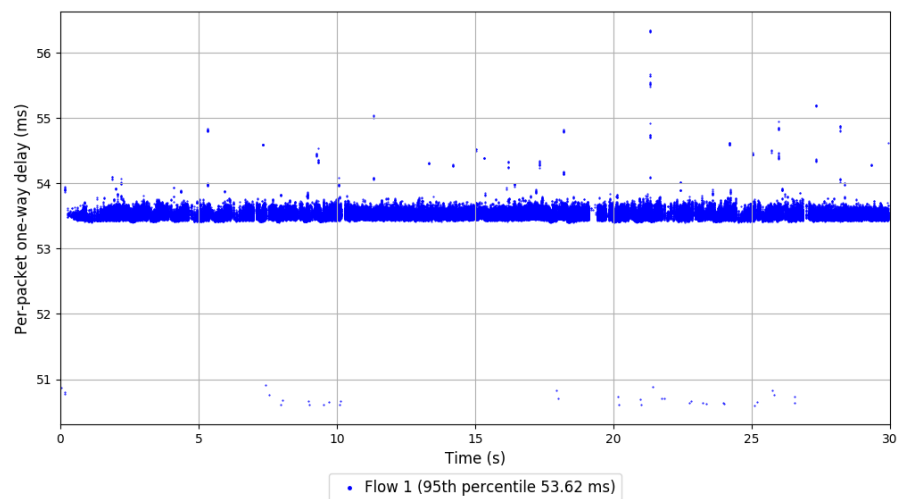
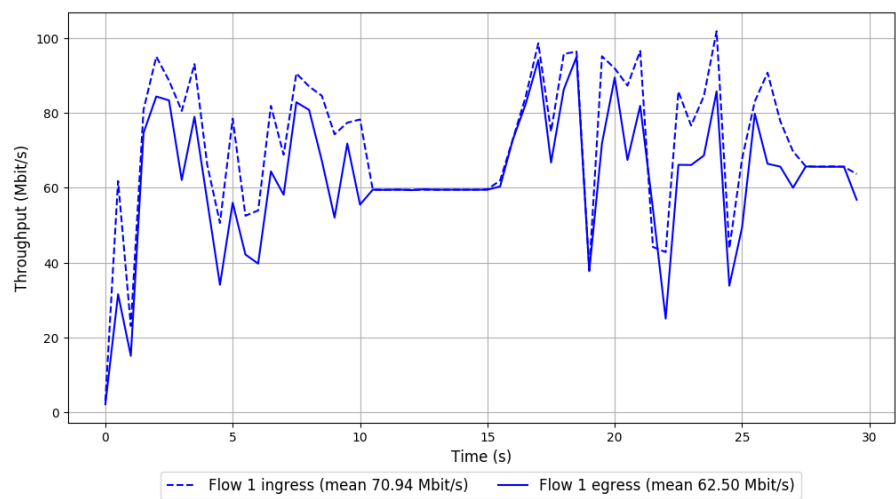
-- Flow 1:

Average throughput: 62.50 Mbit/s

95th percentile per-packet one-way delay: 53.625 ms

Loss rate: 12.21%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-11 11:10:01

End at: 2017-08-11 11:10:31

Below is generated by plot.py at 2017-08-11 14:24:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.06 Mbit/s

95th percentile per-packet one-way delay: 53.657 ms

Loss rate: 12.38%

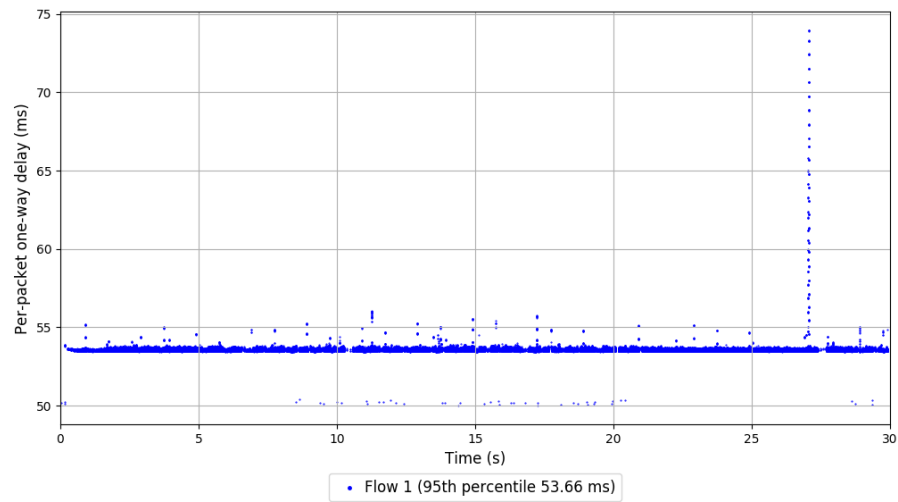
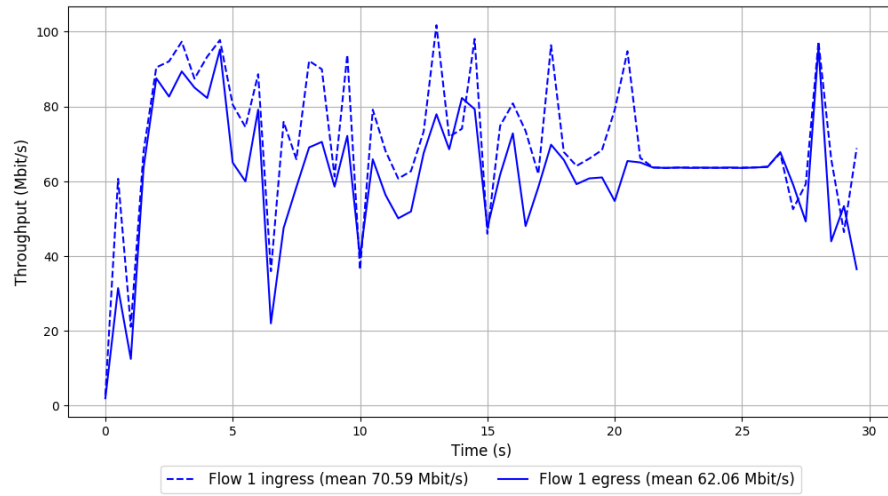
-- Flow 1:

Average throughput: 62.06 Mbit/s

95th percentile per-packet one-way delay: 53.657 ms

Loss rate: 12.38%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

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

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

Below is generated by plot.py at 2017-08-11 14:24:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.09 Mbit/s

95th percentile per-packet one-way delay: 54.110 ms

Loss rate: 0.70%

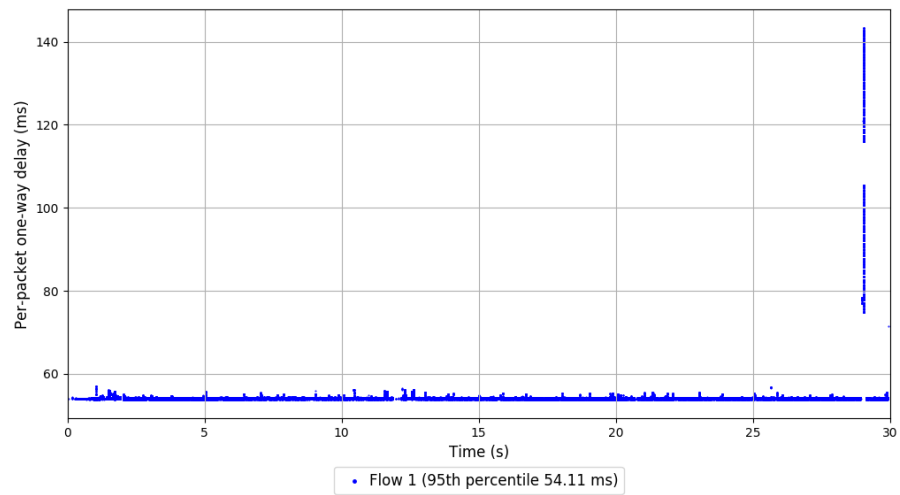
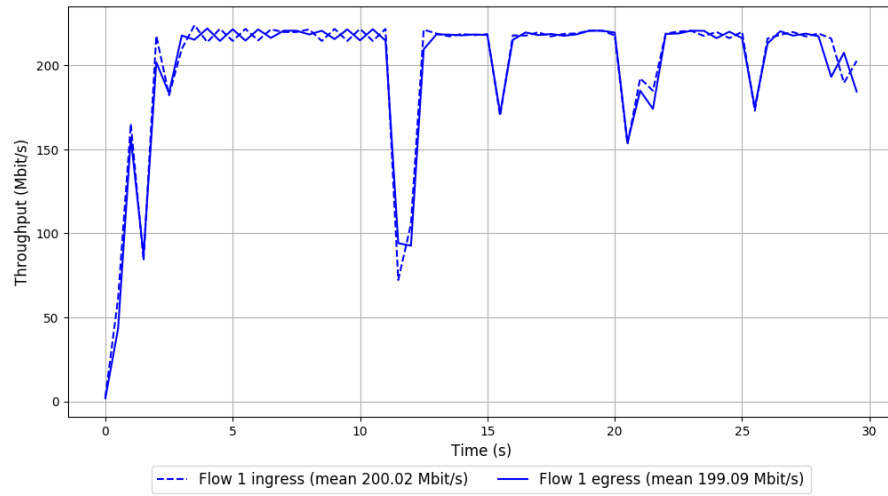
-- Flow 1:

Average throughput: 199.09 Mbit/s

95th percentile per-packet one-way delay: 54.110 ms

Loss rate: 0.70%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

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

End at: 2017-08-11 11:30:38

Below is generated by plot.py at 2017-08-11 14:24:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.65 Mbit/s

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

Loss rate: 13.25%

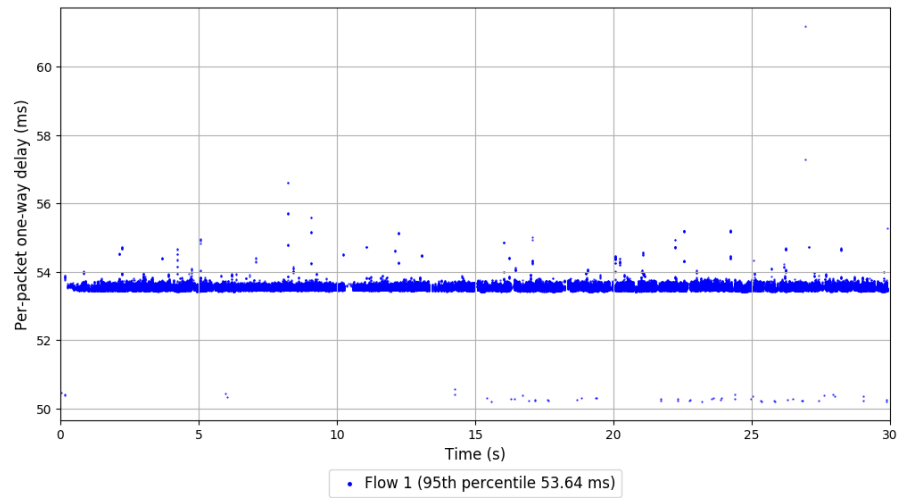
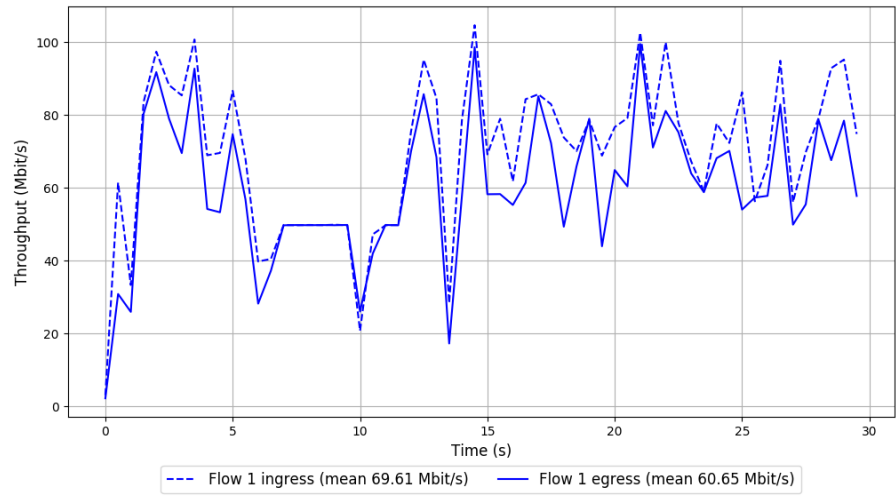
-- Flow 1:

Average throughput: 60.65 Mbit/s

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

Loss rate: 13.25%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-11 11:39:52

End at: 2017-08-11 11:40:22

Below is generated by plot.py at 2017-08-11 14:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.77 Mbit/s

95th percentile per-packet one-way delay: 54.397 ms

Loss rate: 0.60%

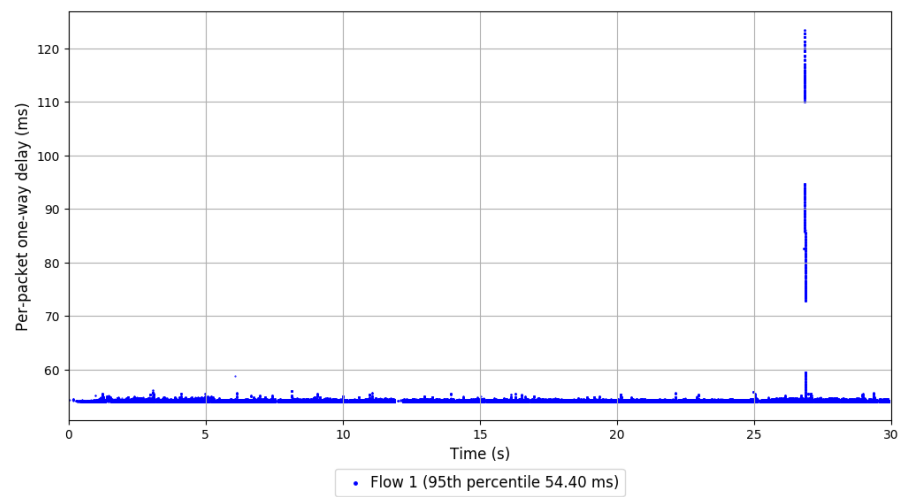
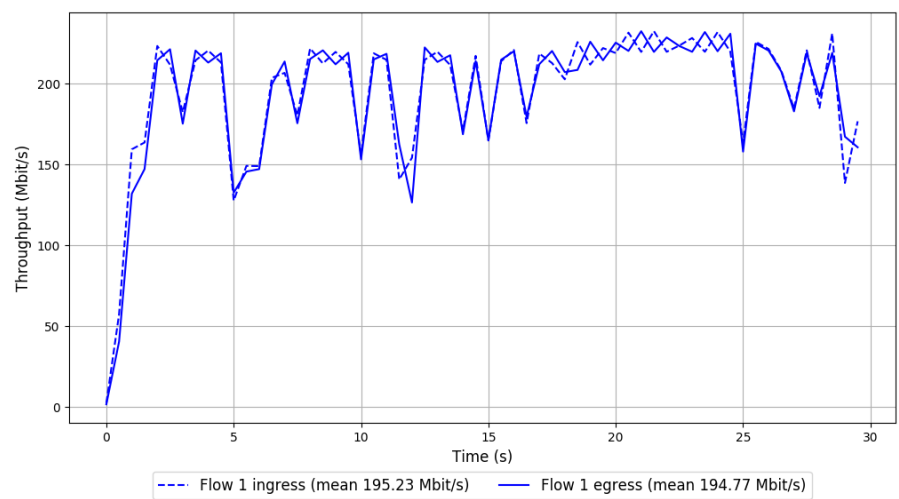
-- Flow 1:

Average throughput: 194.77 Mbit/s

95th percentile per-packet one-way delay: 54.397 ms

Loss rate: 0.60%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-11 11:50:20

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

Below is generated by plot.py at 2017-08-11 14:25:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.05 Mbit/s

95th percentile per-packet one-way delay: 53.847 ms

Loss rate: 0.40%

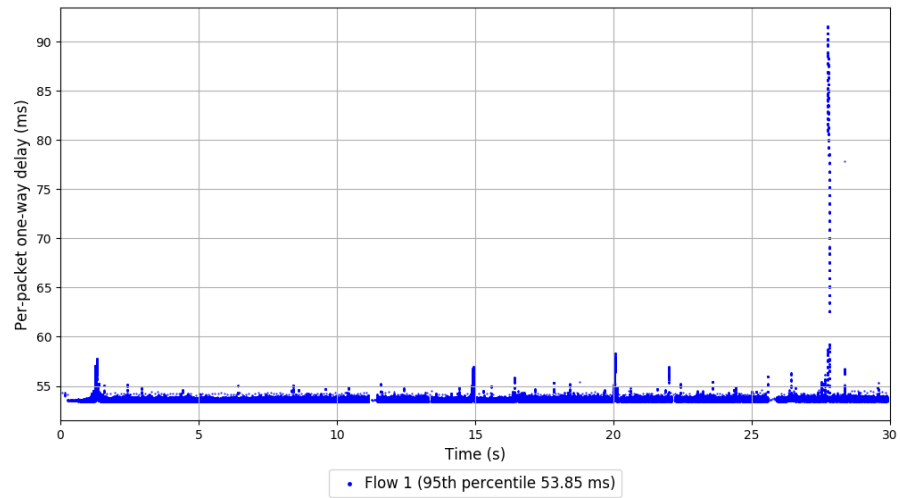
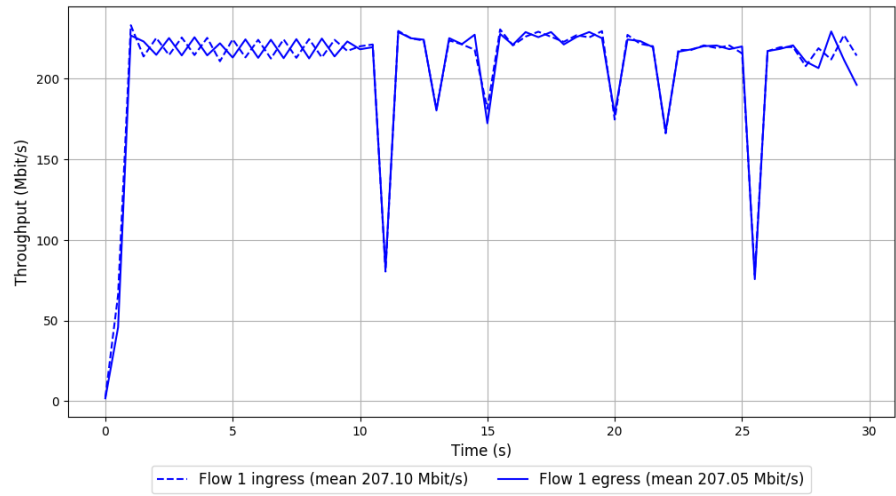
-- Flow 1:

Average throughput: 207.05 Mbit/s

95th percentile per-packet one-way delay: 53.847 ms

Loss rate: 0.40%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-11 12:00:39

End at: 2017-08-11 12:01:09

Below is generated by plot.py at 2017-08-11 14:25:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.59 Mbit/s

95th percentile per-packet one-way delay: 53.615 ms

Loss rate: 12.38%

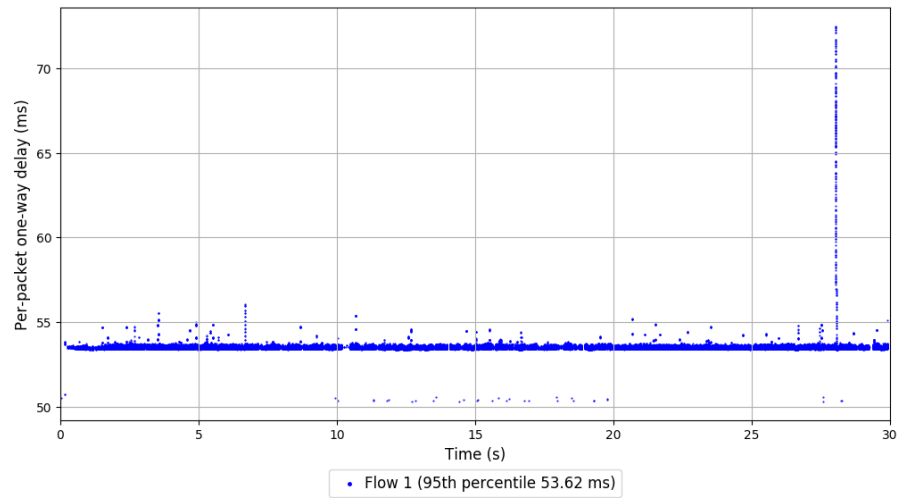
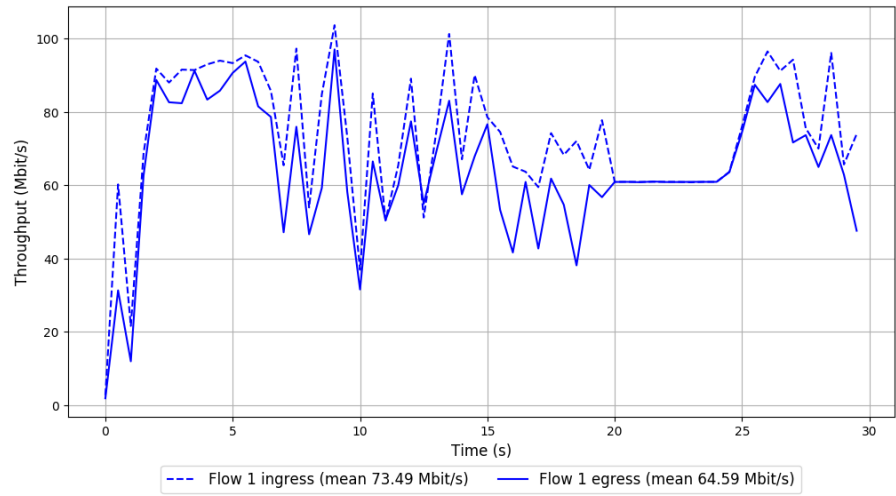
-- Flow 1:

Average throughput: 64.59 Mbit/s

95th percentile per-packet one-way delay: 53.615 ms

Loss rate: 12.38%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-11 12:10:20

End at: 2017-08-11 12:10:50

Below is generated by plot.py at 2017-08-11 14:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.50 Mbit/s

95th percentile per-packet one-way delay: 54.173 ms

Loss rate: 0.53%

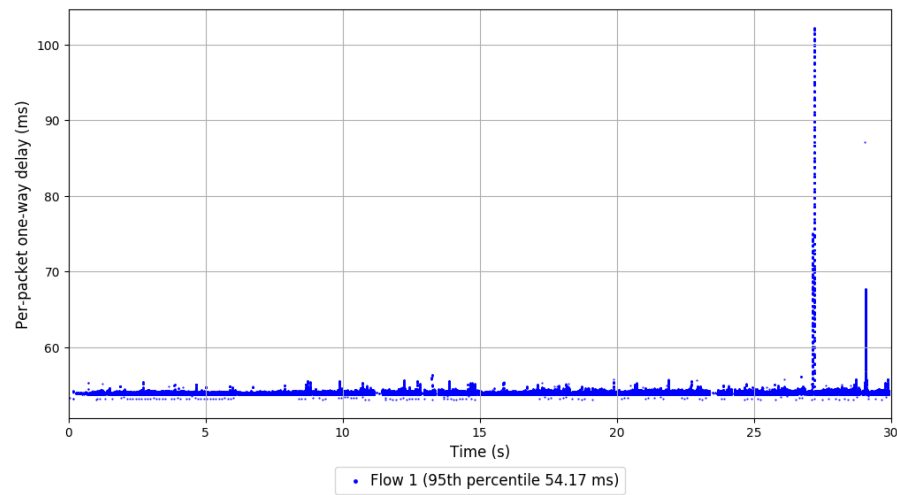
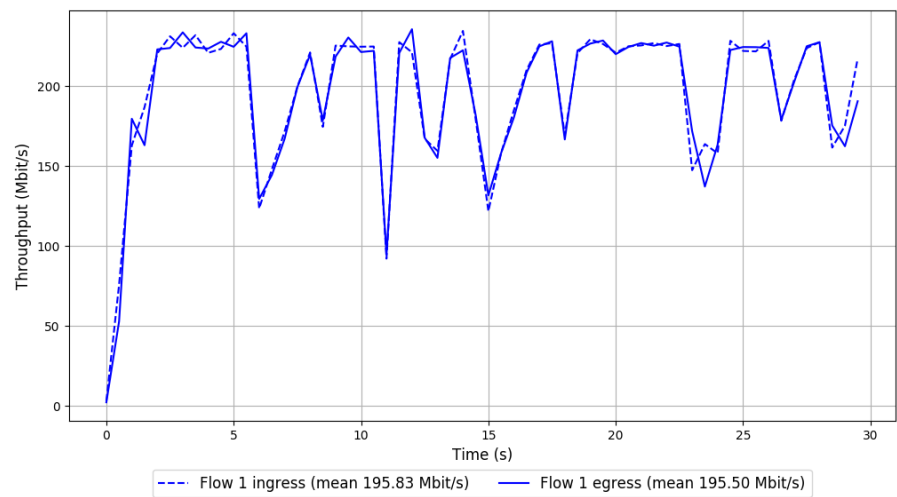
-- Flow 1:

Average throughput: 195.50 Mbit/s

95th percentile per-packet one-way delay: 54.173 ms

Loss rate: 0.53%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-11 10:40:24

End at: 2017-08-11 10:40:54

Below is generated by plot.py at 2017-08-11 14:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 54.251 ms

Loss rate: 70.04%

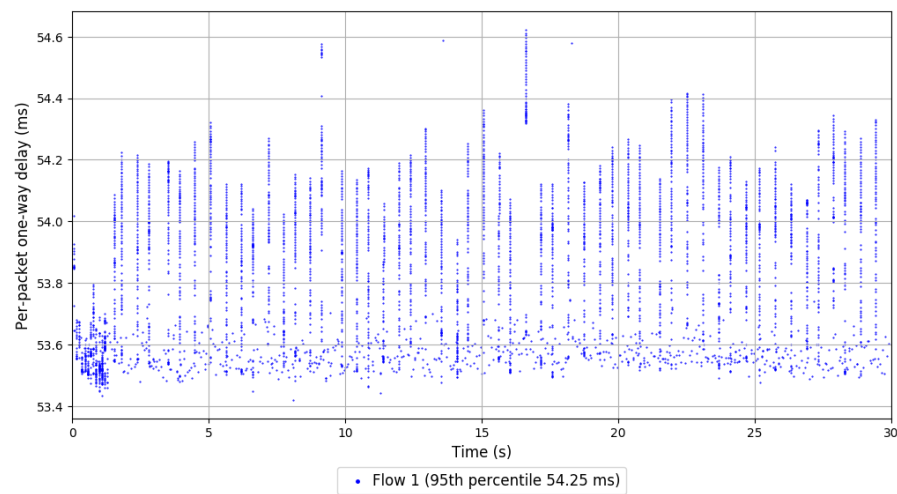
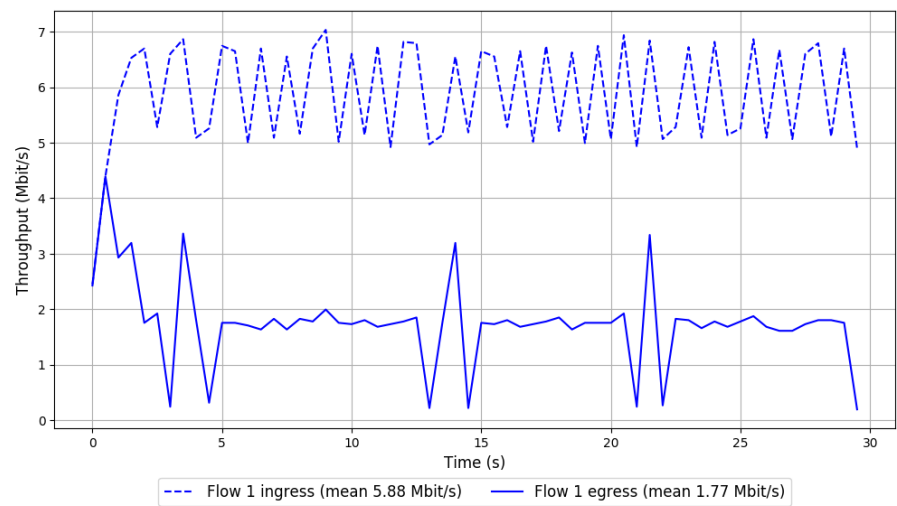
-- Flow 1:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 54.251 ms

Loss rate: 70.04%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-11 10:50:39

End at: 2017-08-11 10:51:09

Below is generated by plot.py at 2017-08-11 14:26:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 309.45 Mbit/s

95th percentile per-packet one-way delay: 75.601 ms

Loss rate: 0.43%

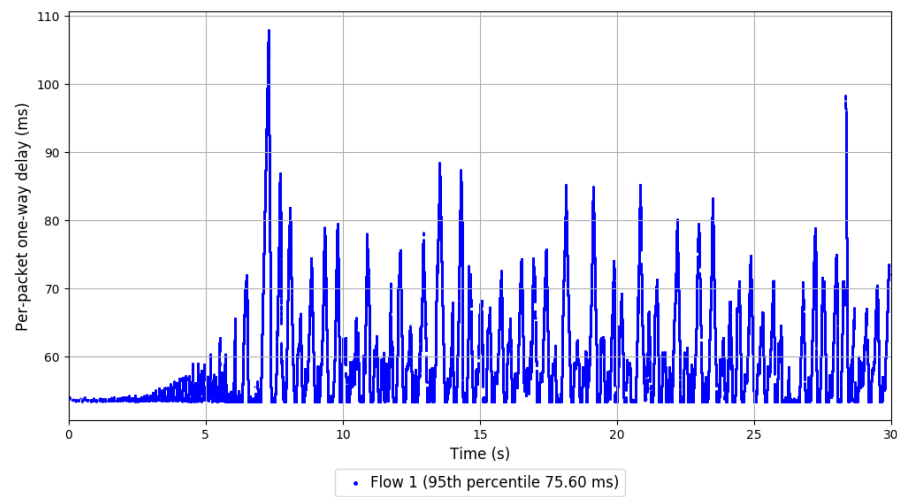
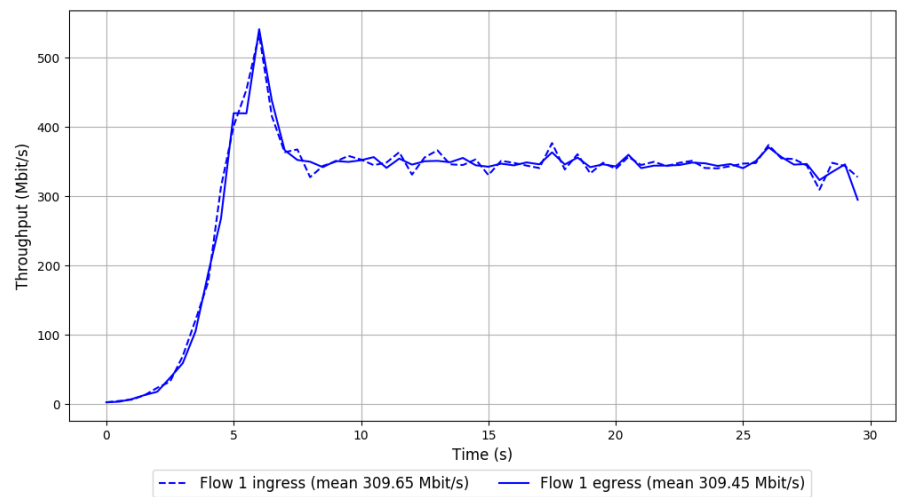
-- Flow 1:

Average throughput: 309.45 Mbit/s

95th percentile per-packet one-way delay: 75.601 ms

Loss rate: 0.43%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

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

End at: 2017-08-11 11:01:43

Below is generated by plot.py at 2017-08-11 14:26:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 54.259 ms

Loss rate: 69.89%

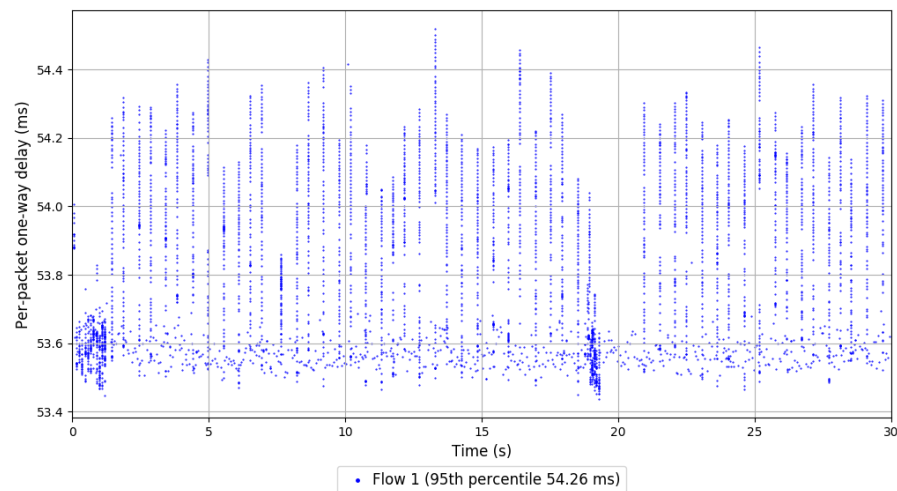
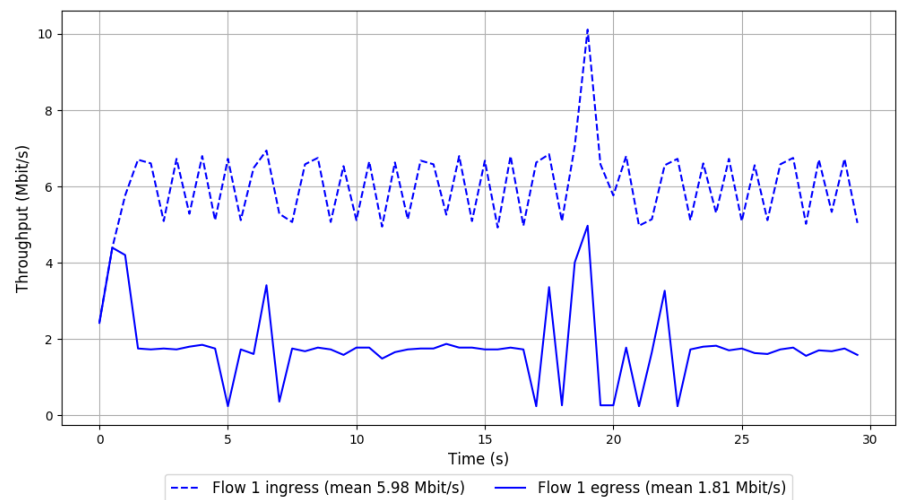
-- Flow 1:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 54.259 ms

Loss rate: 69.89%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

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

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

Below is generated by plot.py at 2017-08-11 14:26:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 54.357 ms

Loss rate: 69.87%

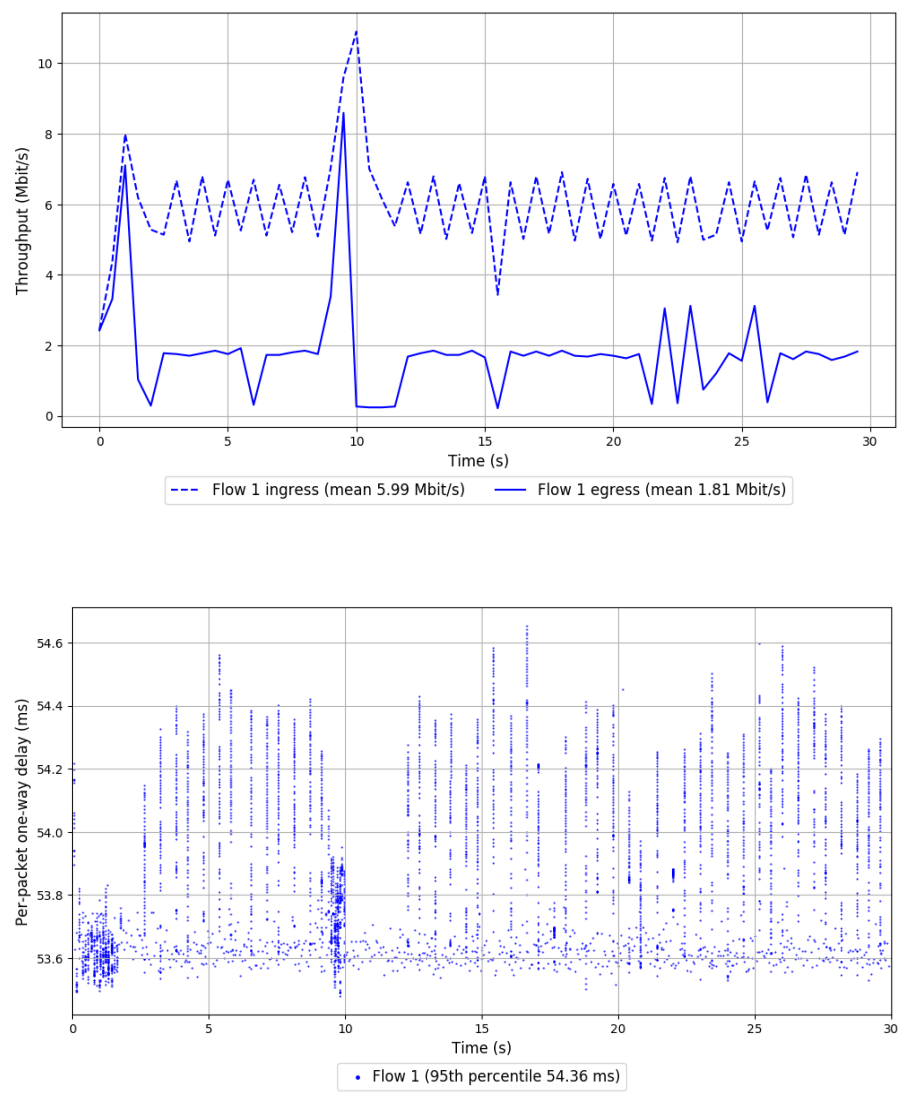
-- Flow 1:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 54.357 ms

Loss rate: 69.87%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-11 11:21:10

End at: 2017-08-11 11:21:40

Below is generated by plot.py at 2017-08-11 14:26:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 288.59 Mbit/s

95th percentile per-packet one-way delay: 71.277 ms

Loss rate: 0.71%

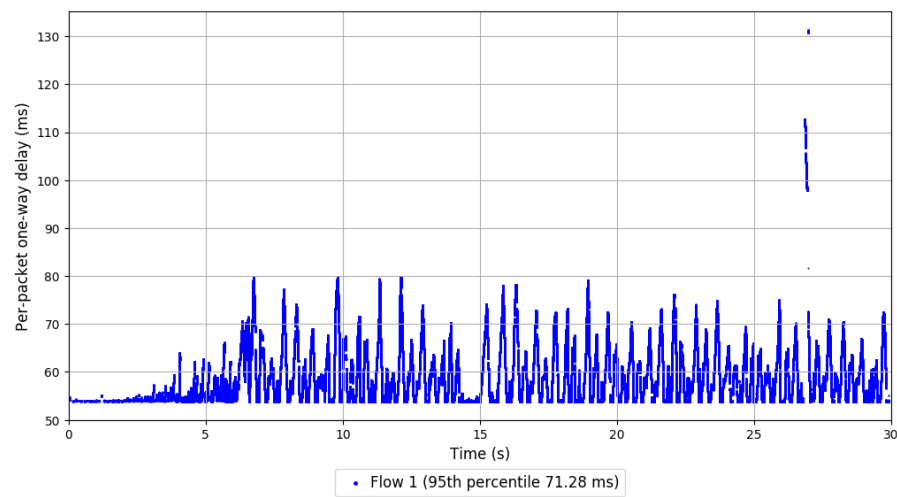
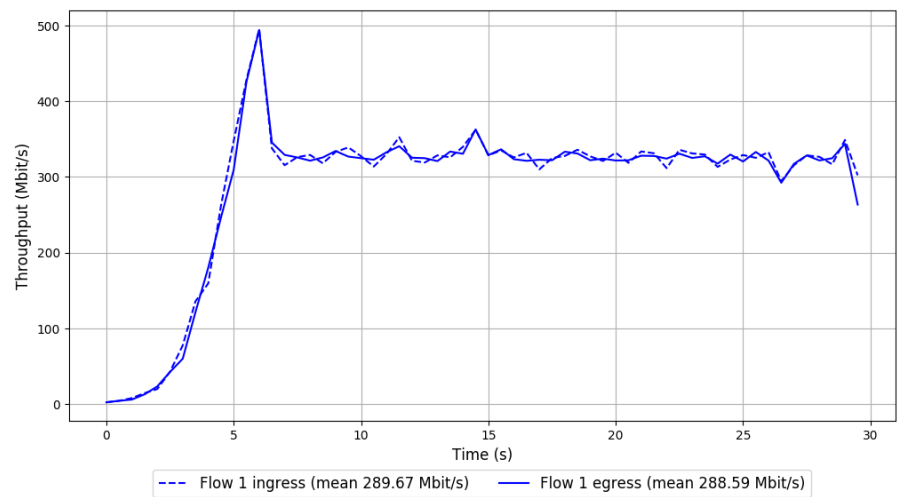
-- Flow 1:

Average throughput: 288.59 Mbit/s

95th percentile per-packet one-way delay: 71.277 ms

Loss rate: 0.71%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-11 11:31:26

End at: 2017-08-11 11:31:56

Below is generated by plot.py at 2017-08-11 14:26:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 54.320 ms

Loss rate: 69.90%

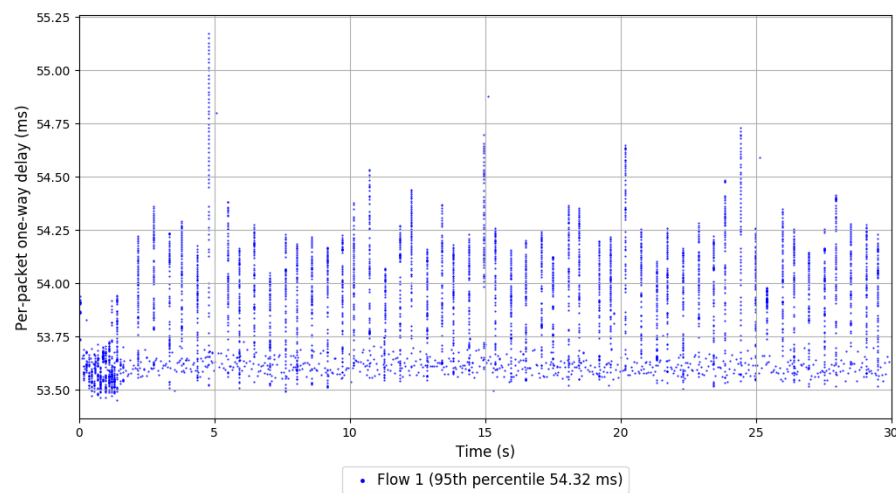
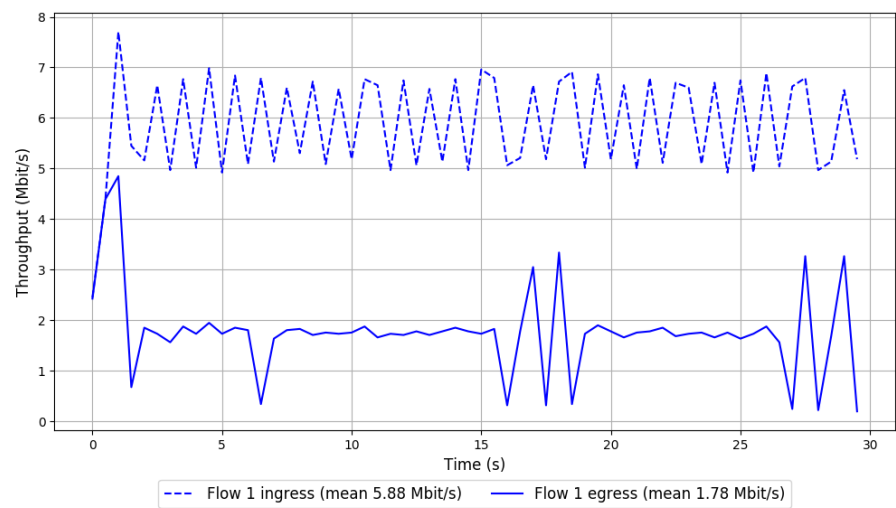
-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 54.320 ms

Loss rate: 69.90%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-11 11:41:17

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

Below is generated by plot.py at 2017-08-11 14:26:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 54.321 ms

Loss rate: 69.87%

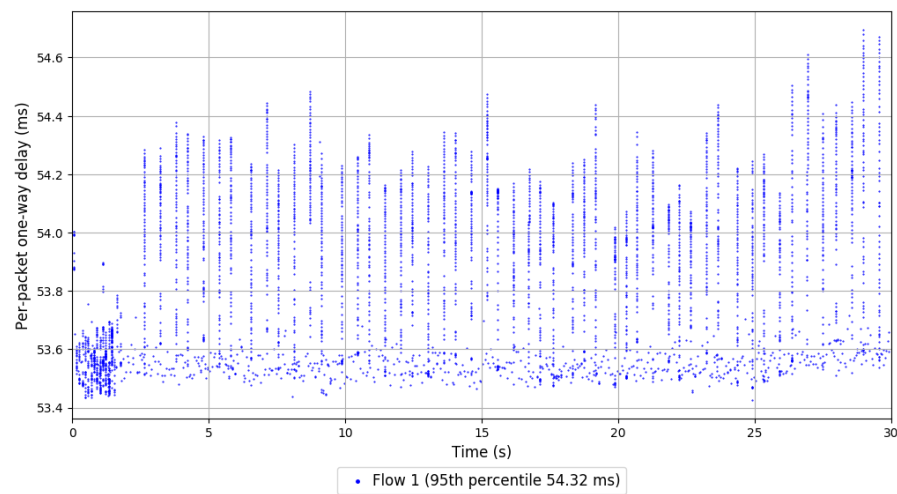
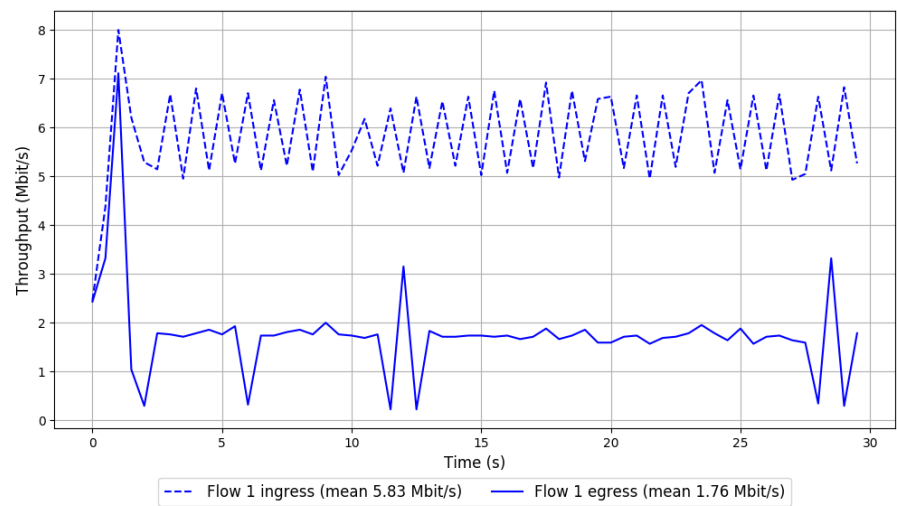
-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 54.321 ms

Loss rate: 69.87%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

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

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

Below is generated by plot.py at 2017-08-11 14:27:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 306.37 Mbit/s

95th percentile per-packet one-way delay: 70.375 ms

Loss rate: 2.04%

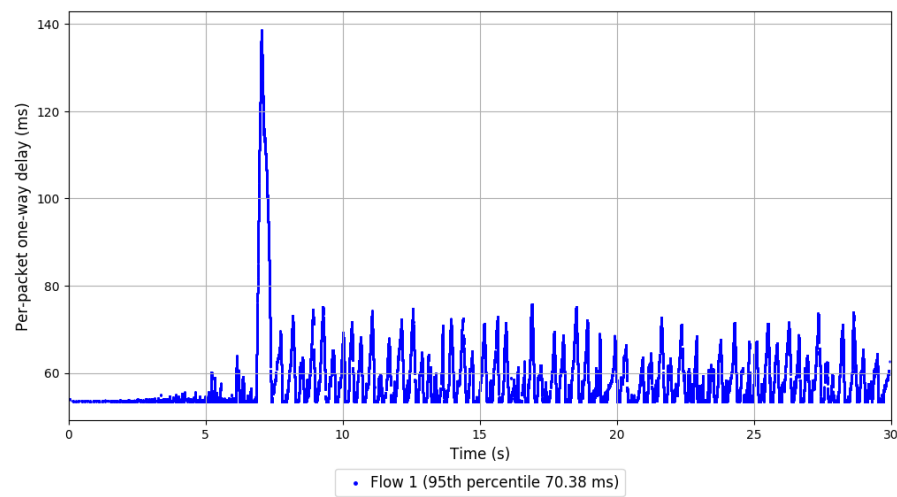
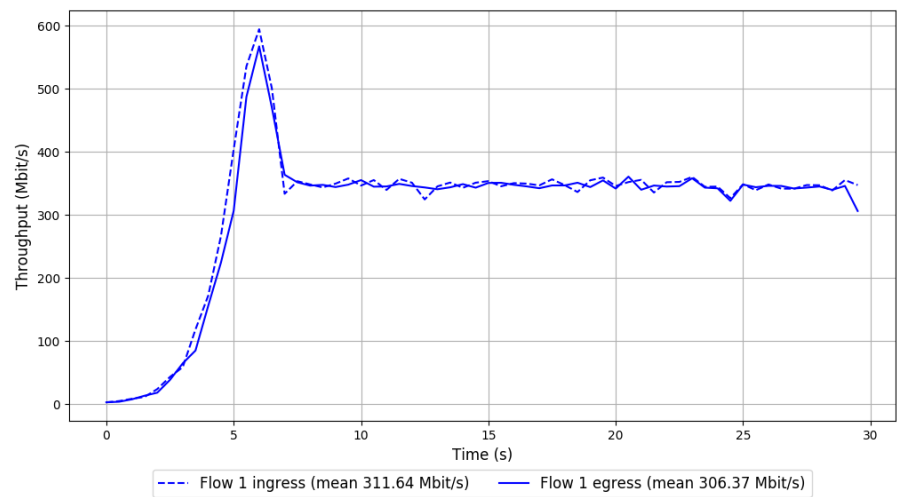
-- Flow 1:

Average throughput: 306.37 Mbit/s

95th percentile per-packet one-way delay: 70.375 ms

Loss rate: 2.04%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-11 12:01:58

End at: 2017-08-11 12:02:28

Below is generated by plot.py at 2017-08-11 14:27:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 54.337 ms

Loss rate: 69.79%

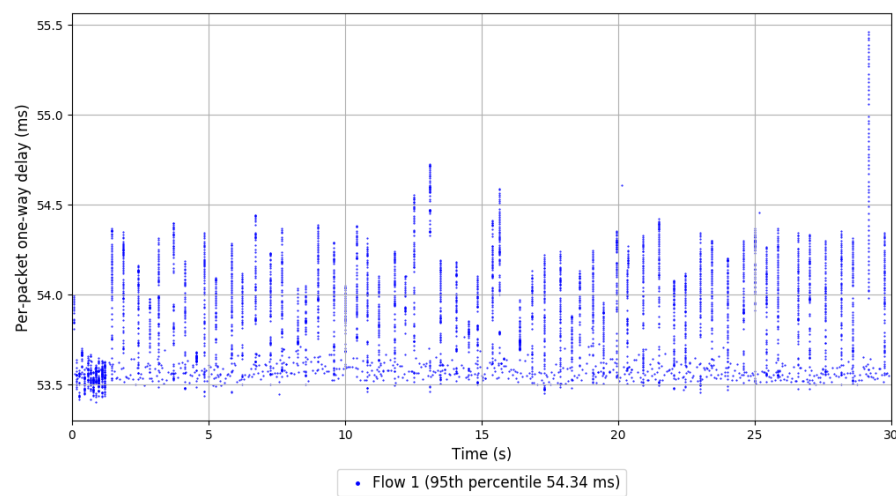
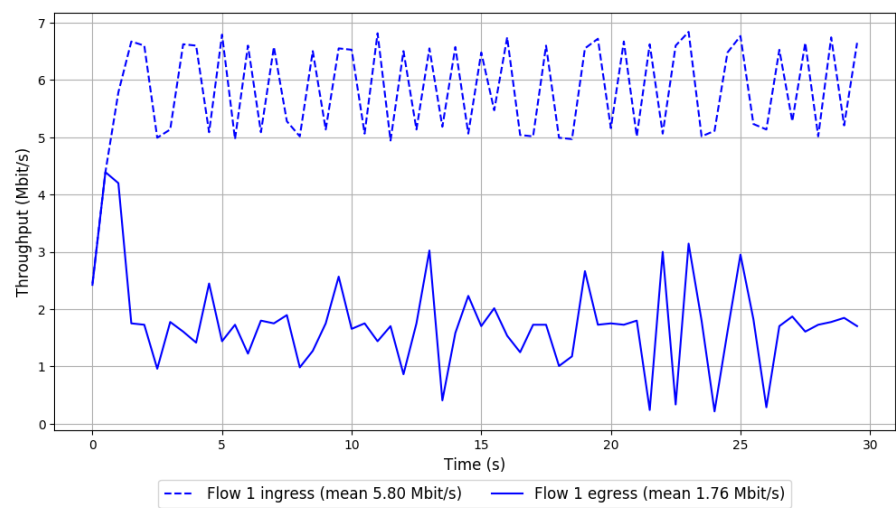
-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 54.337 ms

Loss rate: 69.79%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

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

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

Below is generated by plot.py at 2017-08-11 14:27:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 54.248 ms

Loss rate: 69.84%

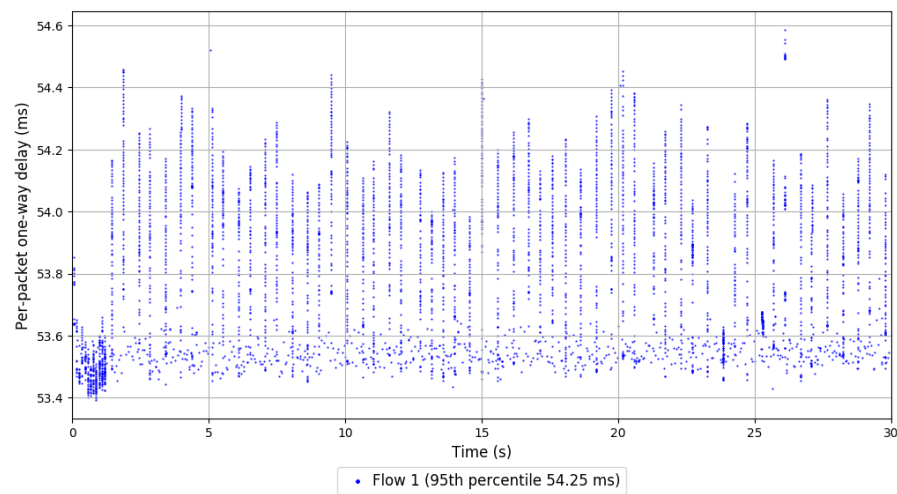
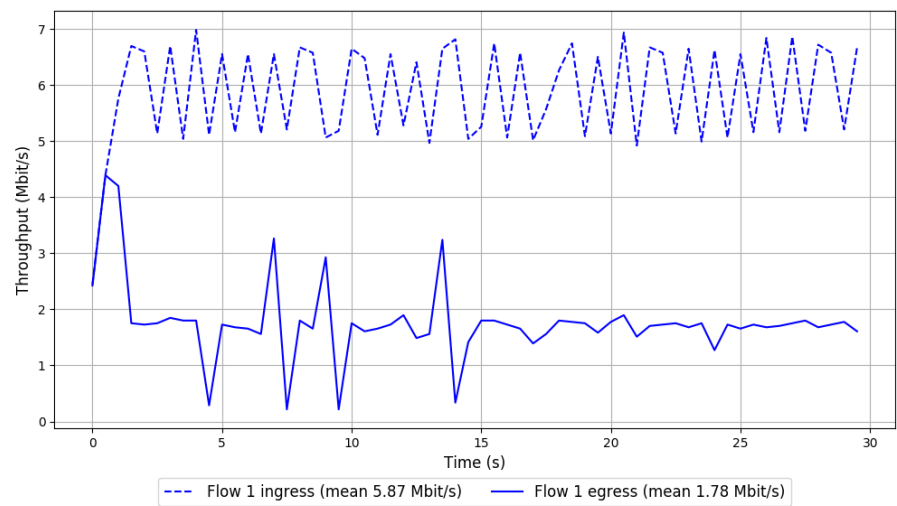
-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 54.248 ms

Loss rate: 69.84%

Run 10: Report of CalibratedKoho — Data Link

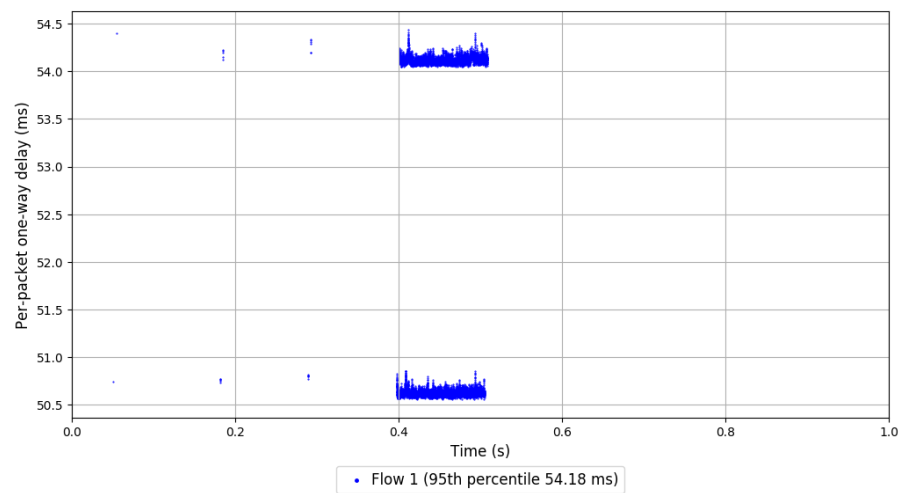
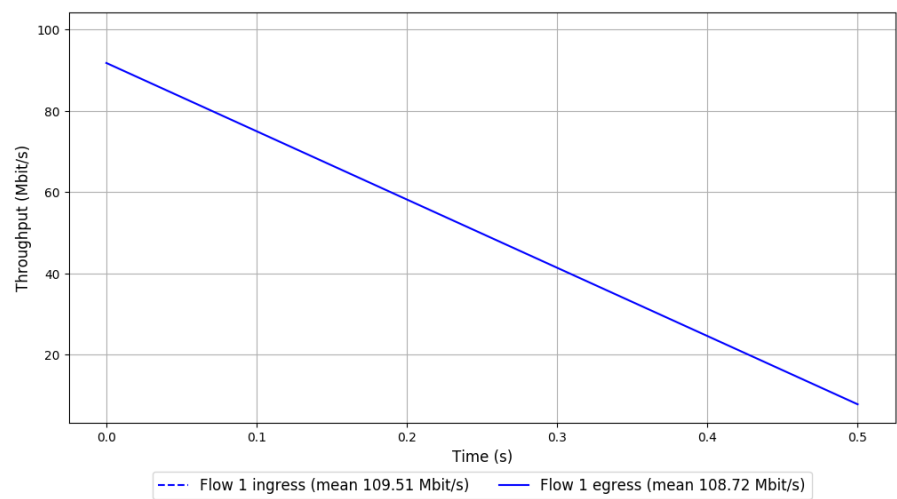


Run 1: Statistics of Copa

Start at: 2017-08-11 10:45:33

End at: 2017-08-11 10:46:03

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-11 10:55:56

End at: 2017-08-11 10:56:26

Below is generated by plot.py at 2017-08-11 14:27:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 133.36 Mbit/s

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

Loss rate: 0.38%

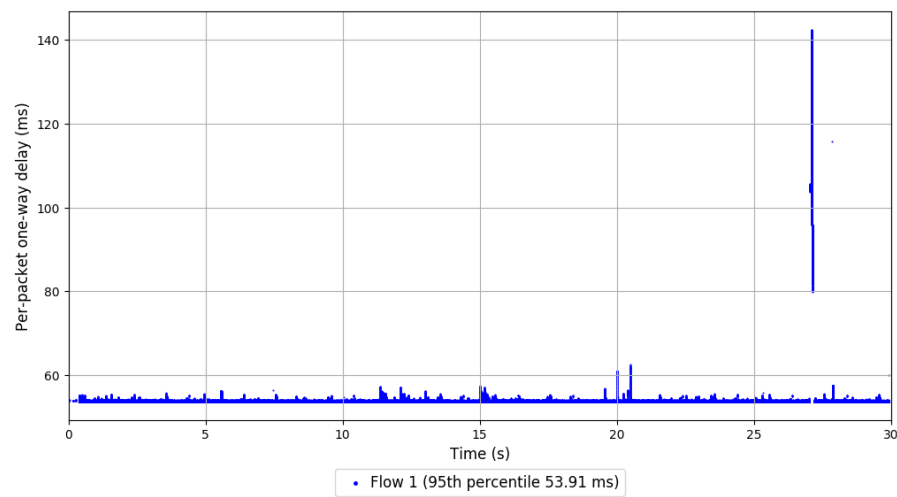
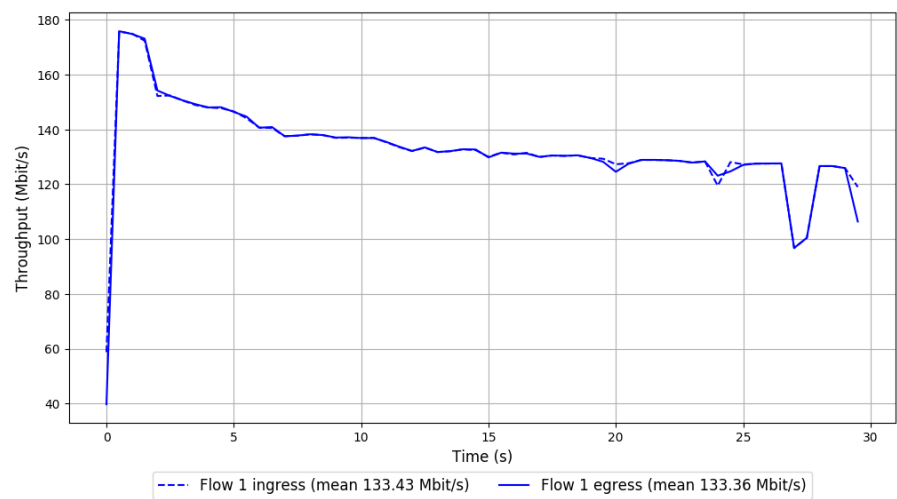
-- Flow 1:

Average throughput: 133.36 Mbit/s

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

Loss rate: 0.38%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

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

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

Below is generated by plot.py at 2017-08-11 14:27:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.45 Mbit/s

95th percentile per-packet one-way delay: 54.234 ms

Loss rate: 0.36%

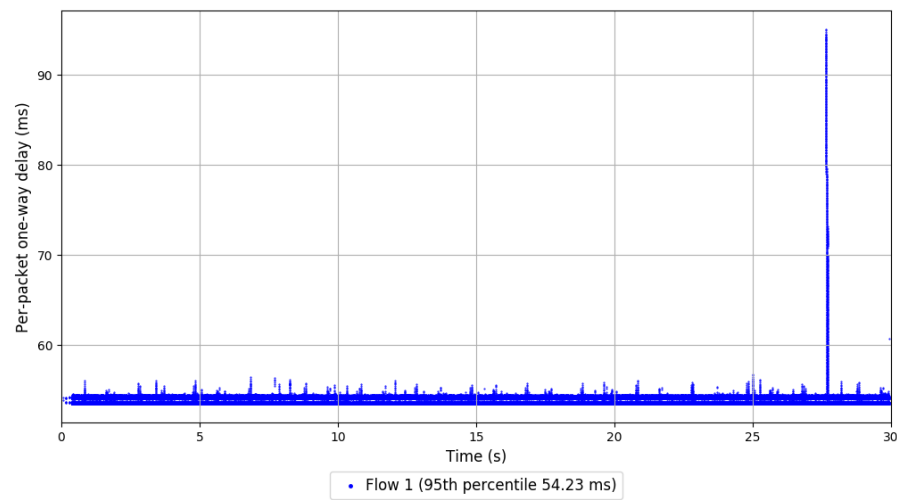
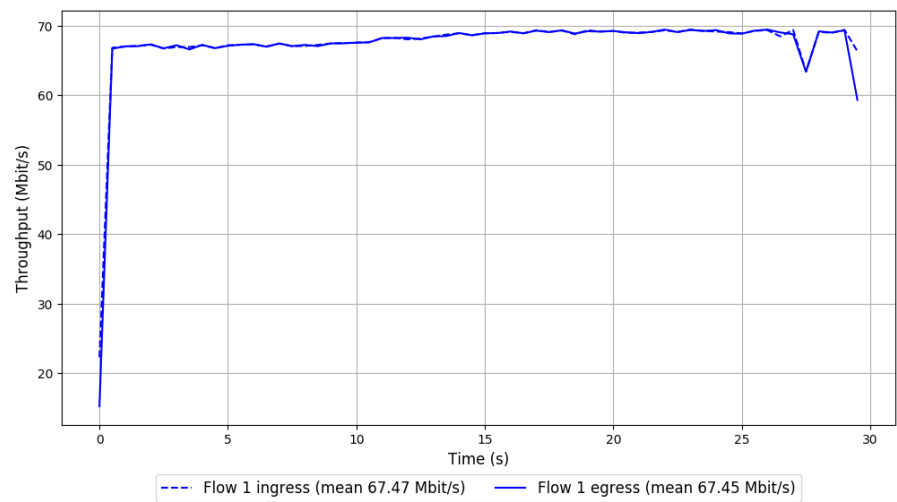
-- Flow 1:

Average throughput: 67.45 Mbit/s

95th percentile per-packet one-way delay: 54.234 ms

Loss rate: 0.36%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-11 11:15:53

End at: 2017-08-11 11:16:23

Below is generated by plot.py at 2017-08-11 14:27:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.26 Mbit/s

95th percentile per-packet one-way delay: 54.338 ms

Loss rate: 89.10%

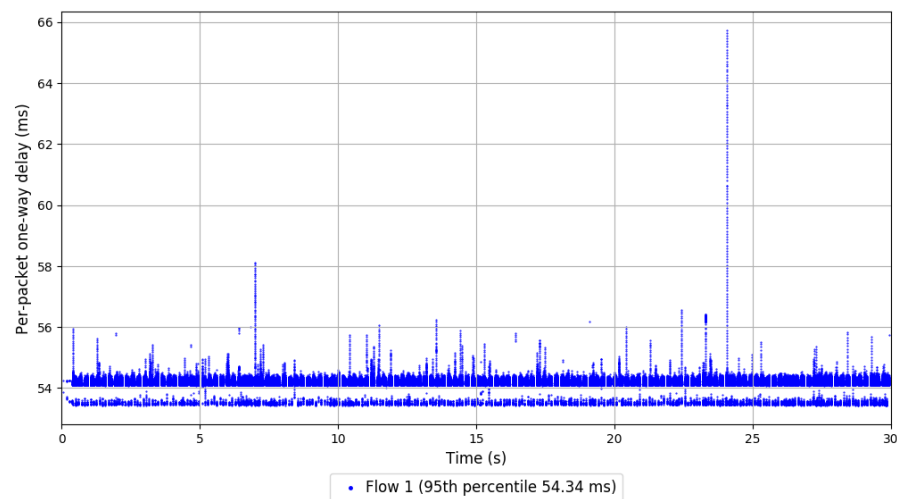
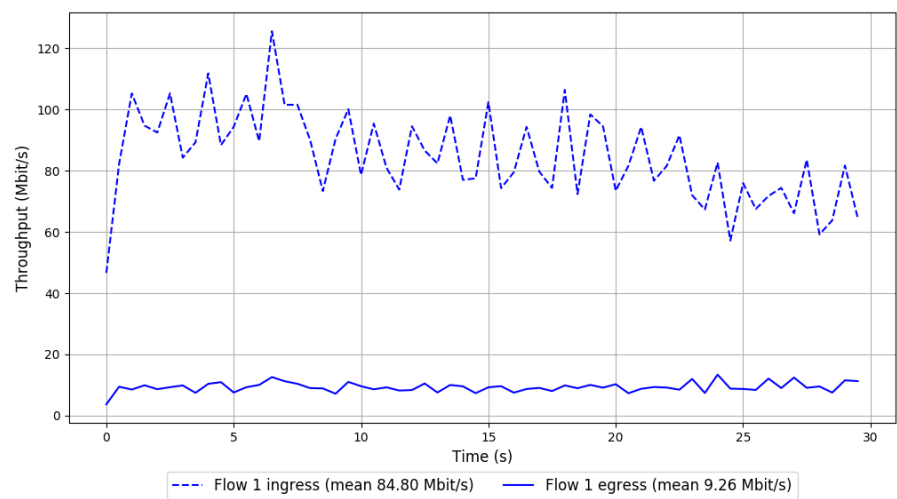
-- Flow 1:

Average throughput: 9.26 Mbit/s

95th percentile per-packet one-way delay: 54.338 ms

Loss rate: 89.10%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-11 11:26:14

End at: 2017-08-11 11:26:44

Below is generated by plot.py at 2017-08-11 14:28:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.64 Mbit/s

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

Loss rate: 20.60%

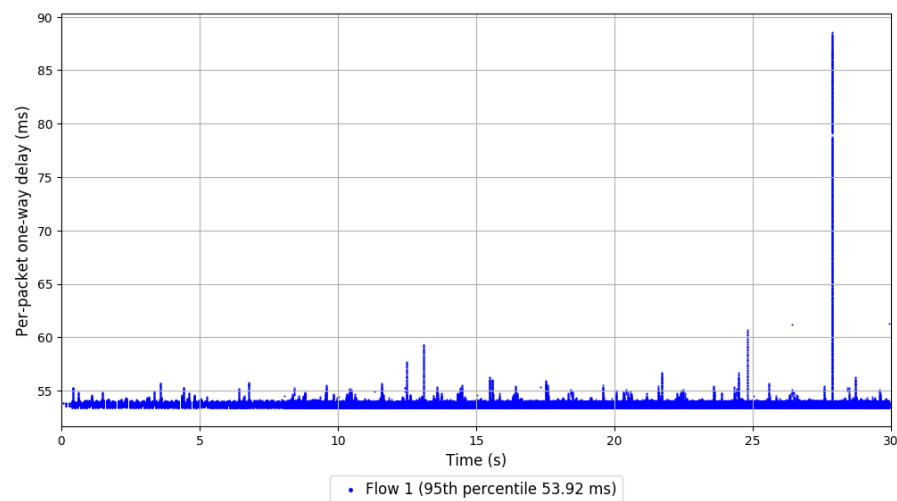
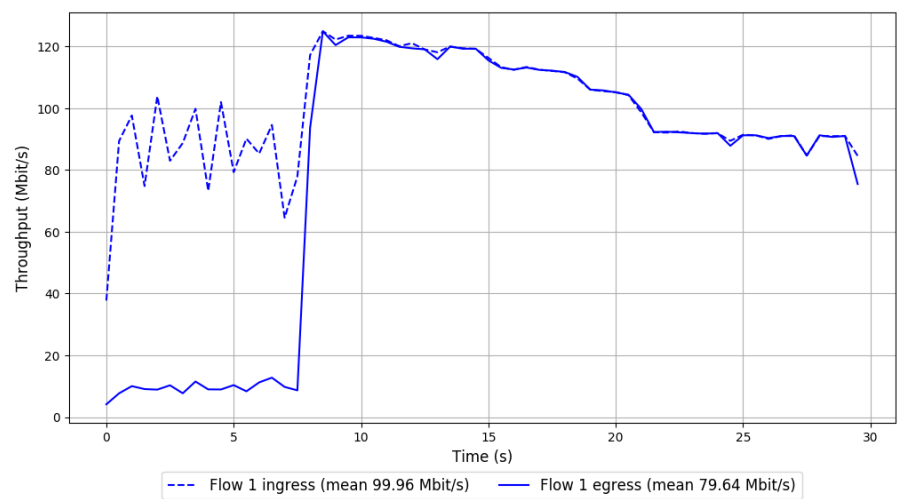
-- Flow 1:

Average throughput: 79.64 Mbit/s

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

Loss rate: 20.60%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-11 11:36:00

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

Below is generated by plot.py at 2017-08-11 14:28:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.11 Mbit/s

95th percentile per-packet one-way delay: 53.864 ms

Loss rate: 76.76%

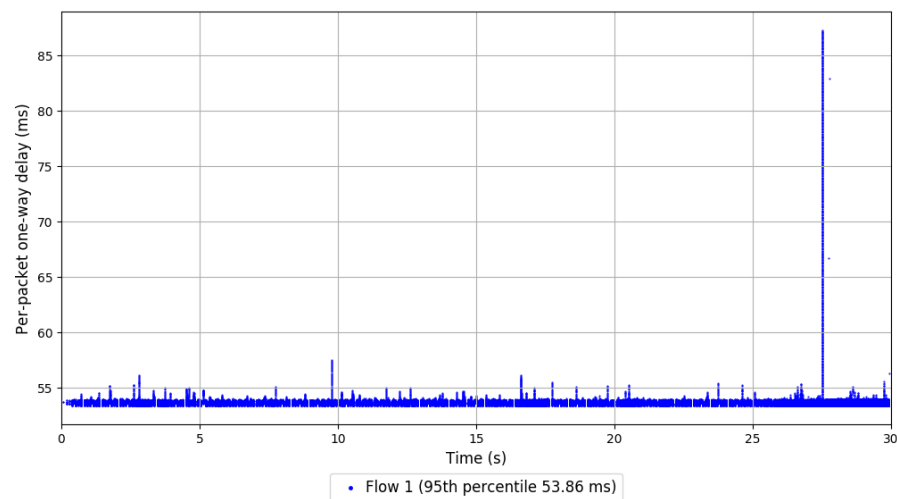
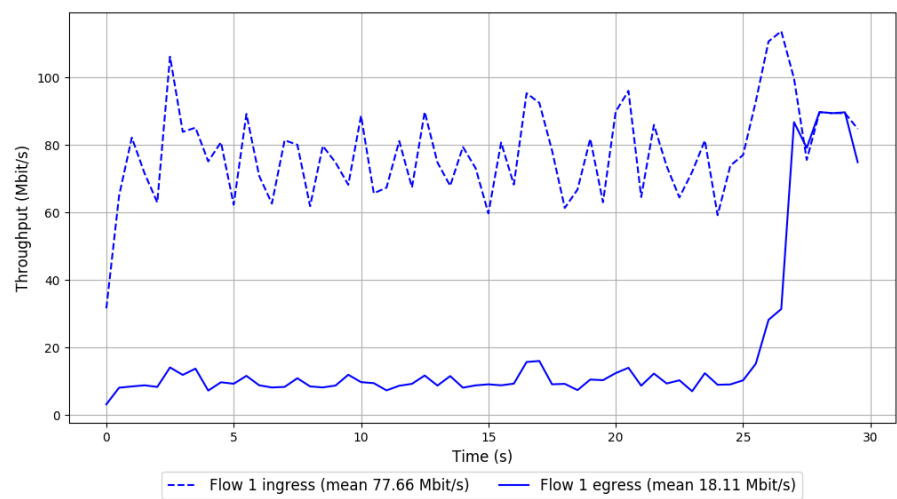
-- Flow 1:

Average throughput: 18.11 Mbit/s

95th percentile per-packet one-way delay: 53.864 ms

Loss rate: 76.76%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-11 11:46:27

End at: 2017-08-11 11:46:57

Below is generated by plot.py at 2017-08-11 14:28:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.37 Mbit/s

95th percentile per-packet one-way delay: 53.919 ms

Loss rate: 0.48%

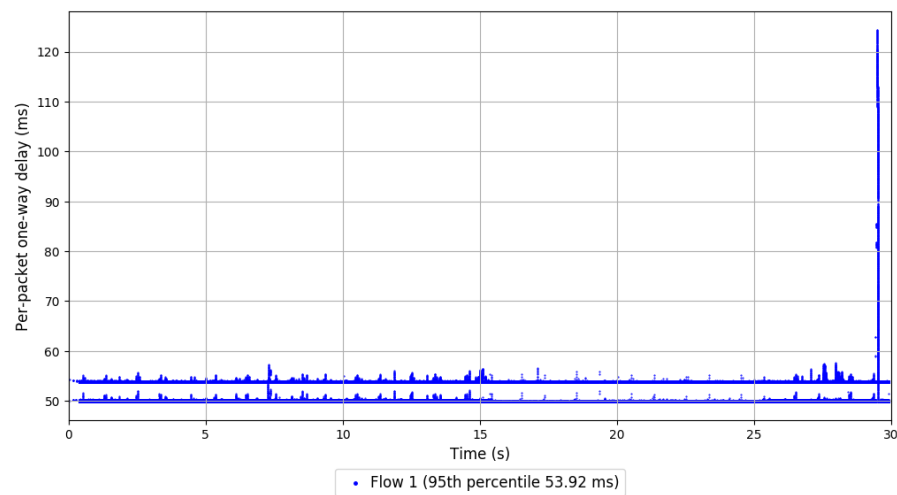
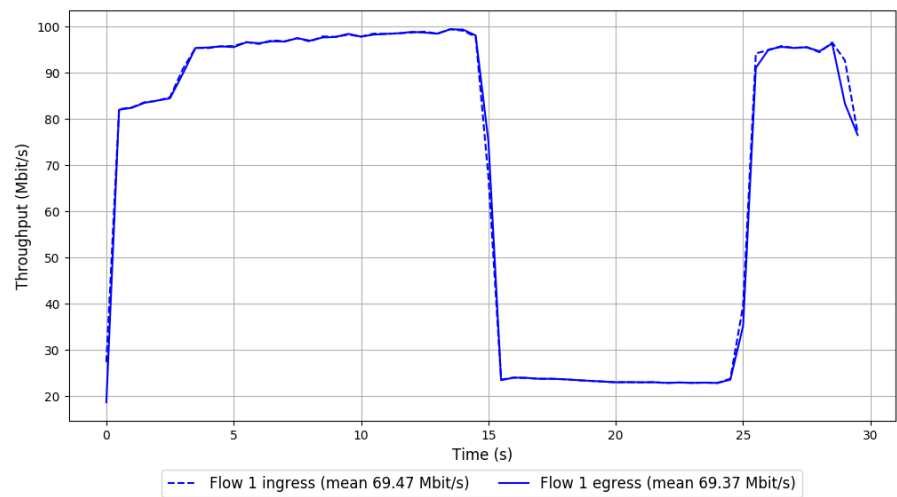
-- Flow 1:

Average throughput: 69.37 Mbit/s

95th percentile per-packet one-way delay: 53.919 ms

Loss rate: 0.48%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-11 11:56:42

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

Below is generated by plot.py at 2017-08-11 14:29:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 137.96 Mbit/s

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

Loss rate: 0.34%

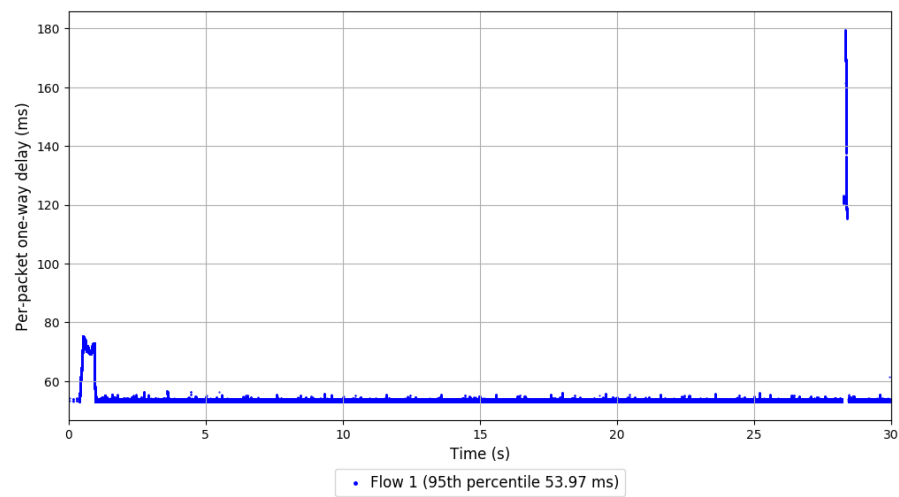
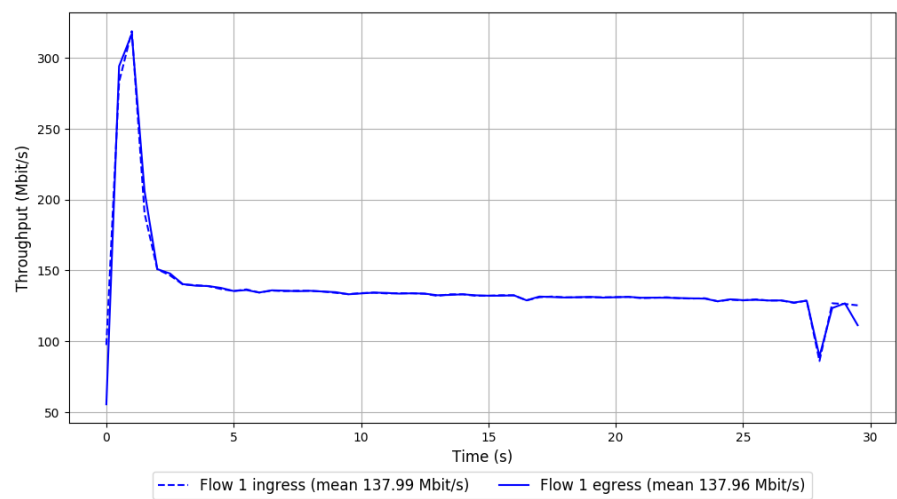
-- Flow 1:

Average throughput: 137.96 Mbit/s

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

Loss rate: 0.34%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-11 12:06:26

End at: 2017-08-11 12:06:56

Below is generated by plot.py at 2017-08-11 14:29:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.88 Mbit/s

95th percentile per-packet one-way delay: 53.860 ms

Loss rate: 0.48%

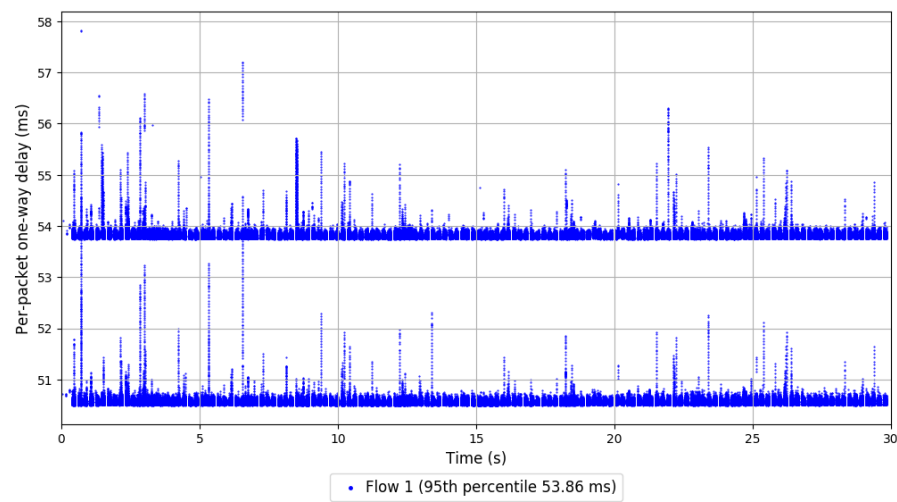
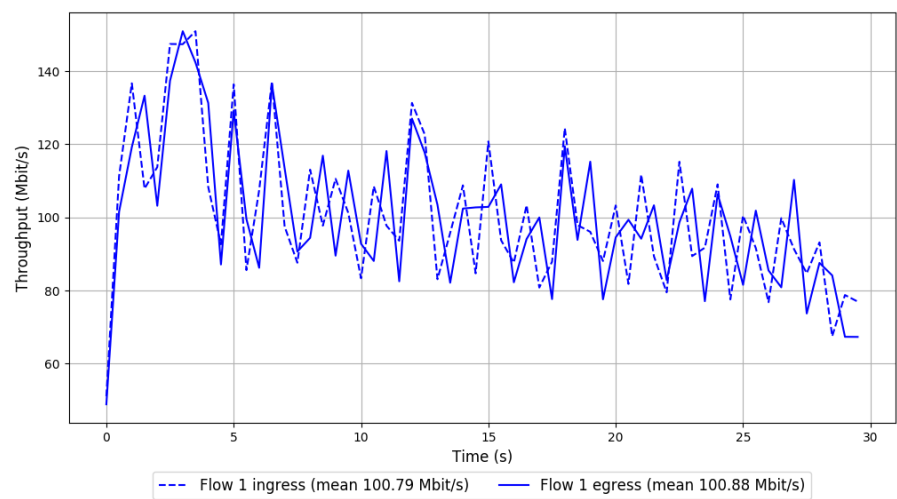
-- Flow 1:

Average throughput: 100.88 Mbit/s

95th percentile per-packet one-way delay: 53.860 ms

Loss rate: 0.48%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-11 12:16:17

End at: 2017-08-11 12:16:47

Below is generated by plot.py at 2017-08-11 14:29:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.95 Mbit/s

95th percentile per-packet one-way delay: 54.159 ms

Loss rate: 90.66%

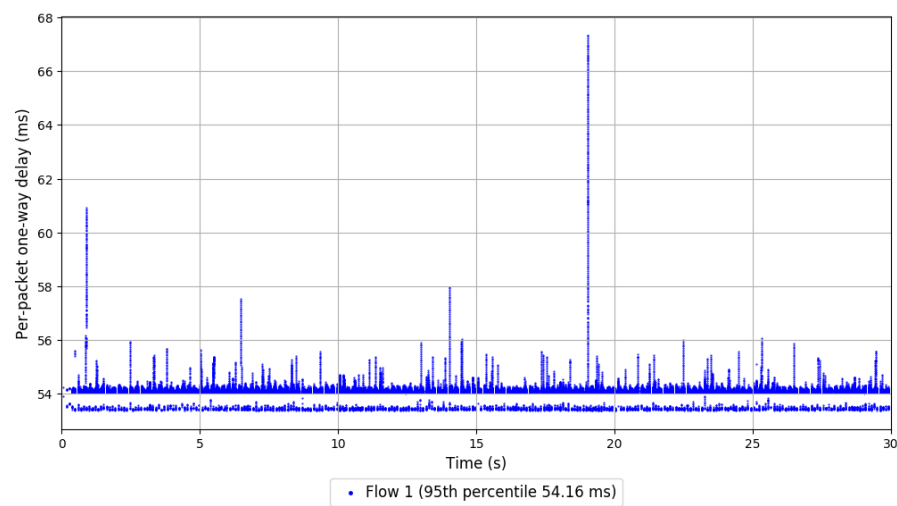
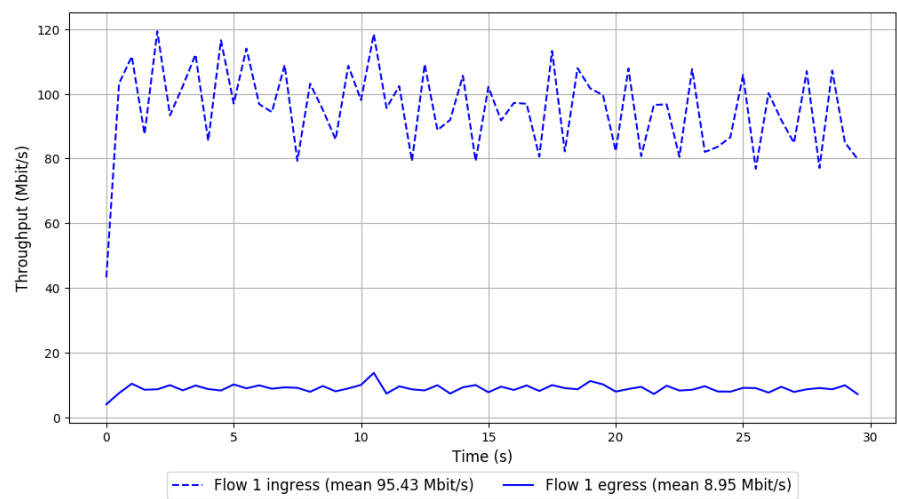
-- Flow 1:

Average throughput: 8.95 Mbit/s

95th percentile per-packet one-way delay: 54.159 ms

Loss rate: 90.66%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-11 10:42:40

End at: 2017-08-11 10:43:10

Below is generated by plot.py at 2017-08-11 14:29:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.11 Mbit/s

95th percentile per-packet one-way delay: 54.460 ms

Loss rate: 1.06%

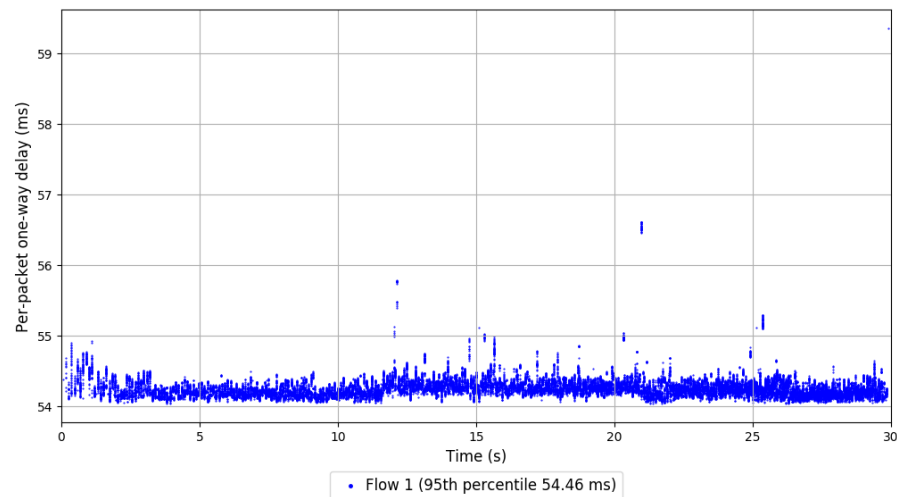
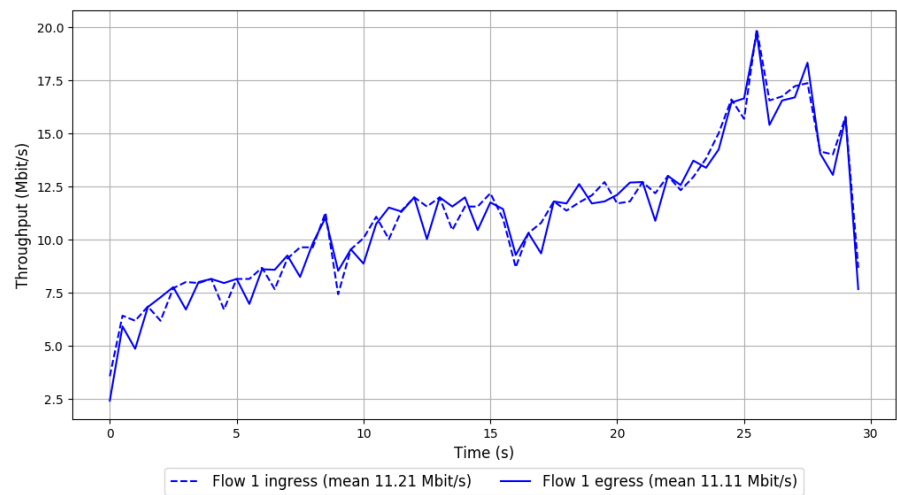
-- Flow 1:

Average throughput: 11.11 Mbit/s

95th percentile per-packet one-way delay: 54.460 ms

Loss rate: 1.06%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-11 10:53:14

End at: 2017-08-11 10:53:44

Below is generated by plot.py at 2017-08-11 14:29:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.50 Mbit/s

95th percentile per-packet one-way delay: 53.707 ms

Loss rate: 2.30%

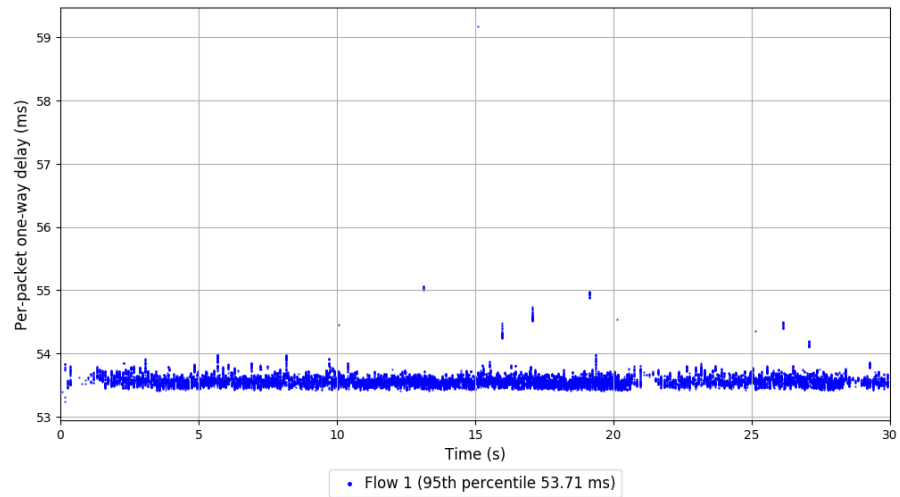
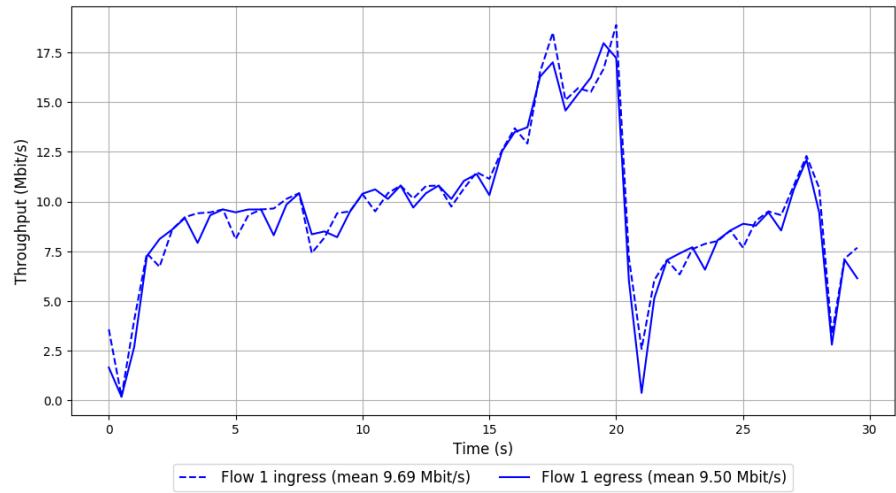
-- Flow 1:

Average throughput: 9.50 Mbit/s

95th percentile per-packet one-way delay: 53.707 ms

Loss rate: 2.30%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-11 11:03:28

End at: 2017-08-11 11:03:58

Below is generated by plot.py at 2017-08-11 14:29:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.89 Mbit/s

95th percentile per-packet one-way delay: 53.756 ms

Loss rate: 2.79%

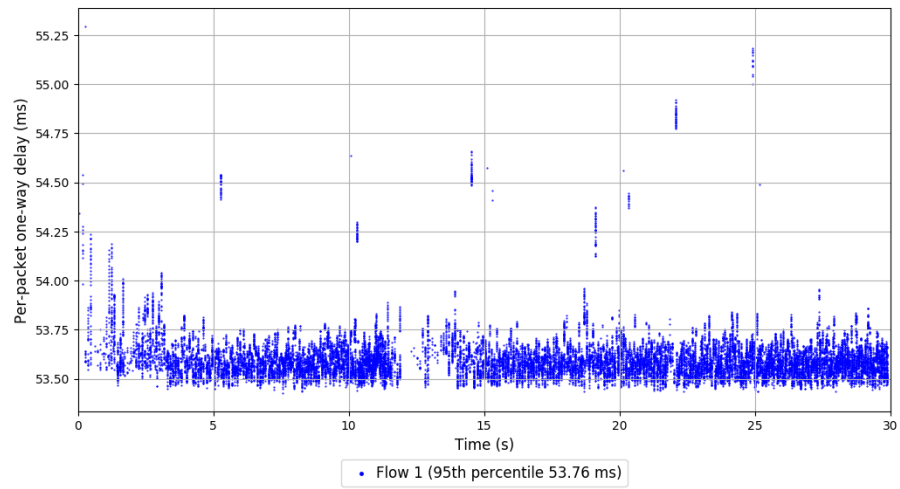
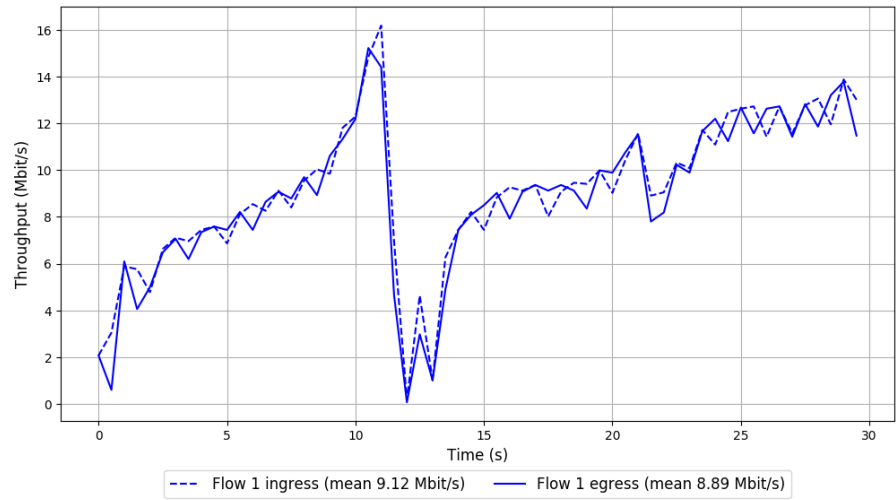
-- Flow 1:

Average throughput: 8.89 Mbit/s

95th percentile per-packet one-way delay: 53.756 ms

Loss rate: 2.79%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2017-08-11 14:29:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.22 Mbit/s

95th percentile per-packet one-way delay: 53.840 ms

Loss rate: 1.17%

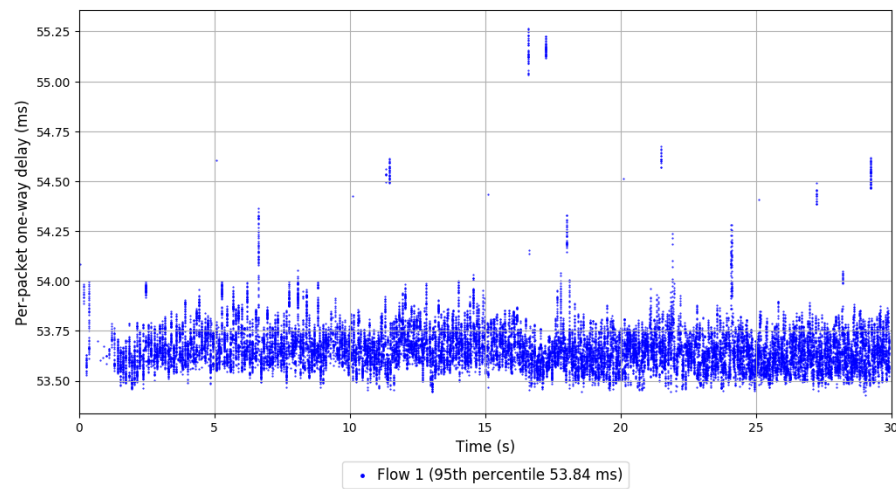
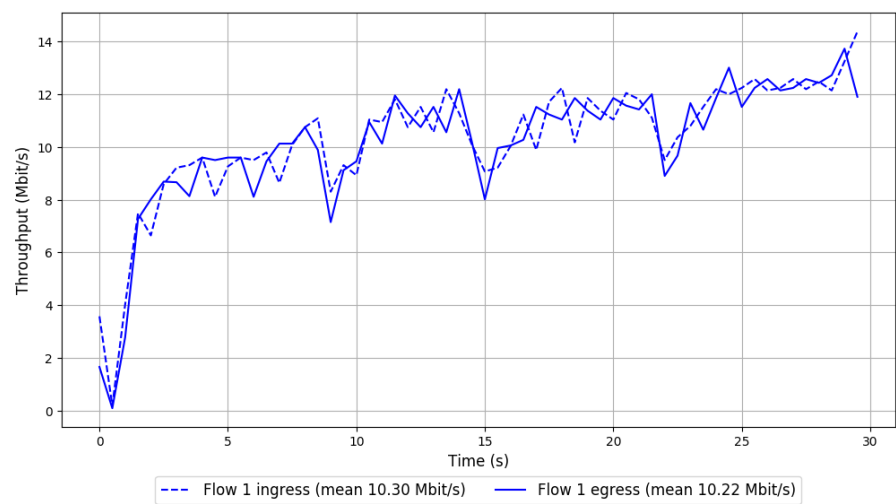
-- Flow 1:

Average throughput: 10.22 Mbit/s

95th percentile per-packet one-way delay: 53.840 ms

Loss rate: 1.17%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-11 11:23:20

End at: 2017-08-11 11:23:50

Below is generated by plot.py at 2017-08-11 14:29:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.78 Mbit/s

95th percentile per-packet one-way delay: 53.864 ms

Loss rate: 1.82%

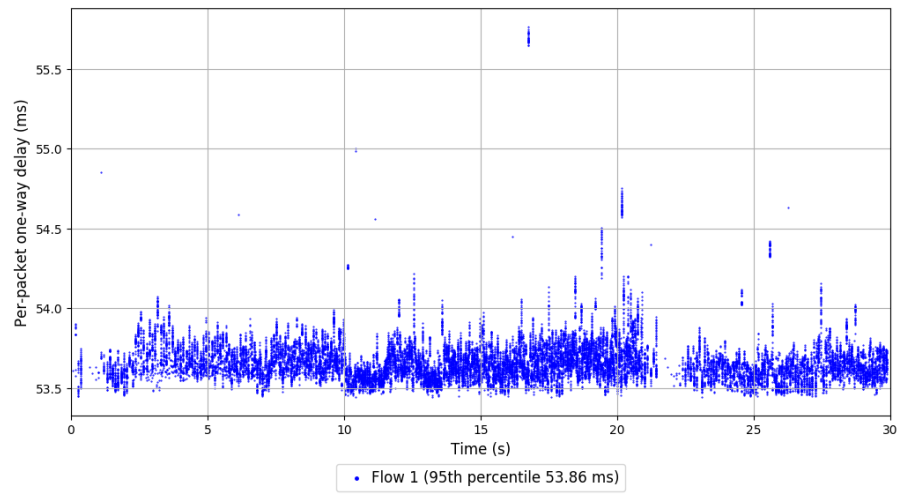
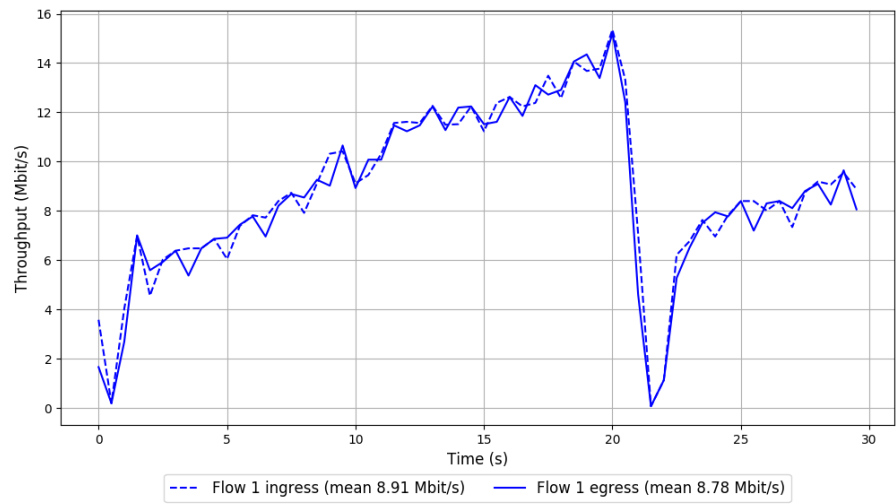
-- Flow 1:

Average throughput: 8.78 Mbit/s

95th percentile per-packet one-way delay: 53.864 ms

Loss rate: 1.82%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-11 11:33:18

End at: 2017-08-11 11:33:48

Below is generated by plot.py at 2017-08-11 14:29:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.88 Mbit/s

95th percentile per-packet one-way delay: 54.766 ms

Loss rate: 0.66%

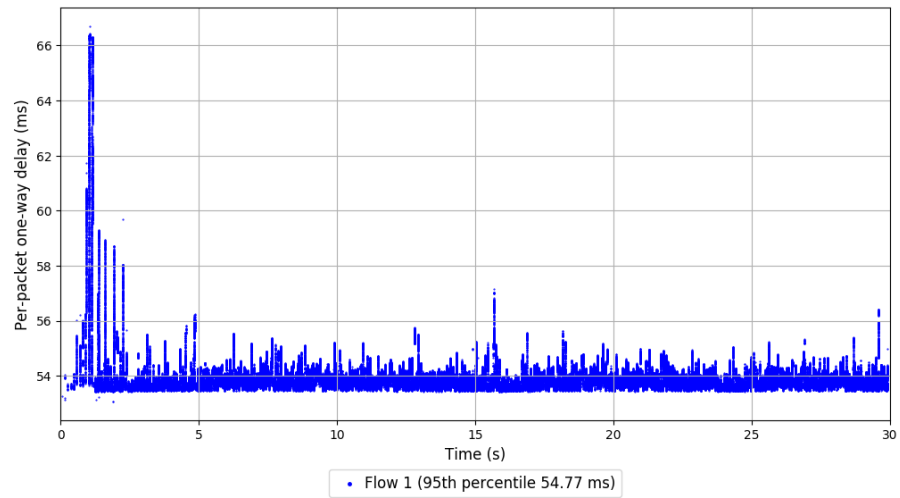
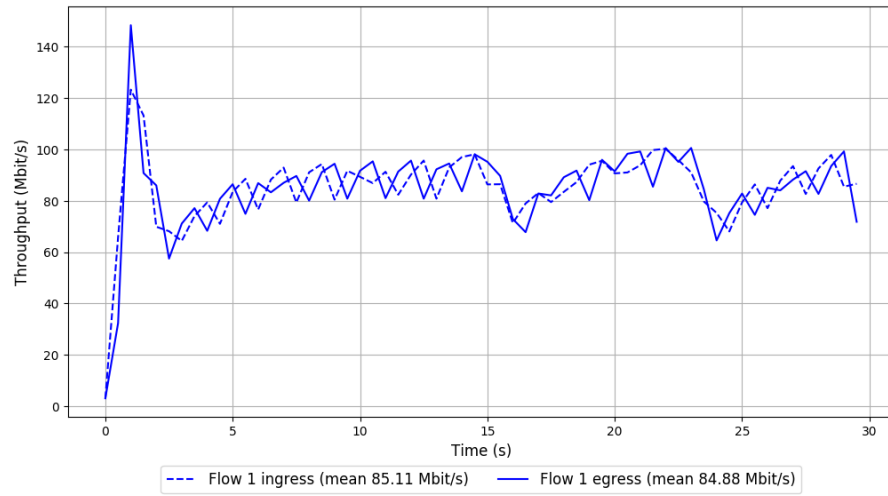
-- Flow 1:

Average throughput: 84.88 Mbit/s

95th percentile per-packet one-way delay: 54.766 ms

Loss rate: 0.66%

Run 6: Report of TCP Cubic — Data Link

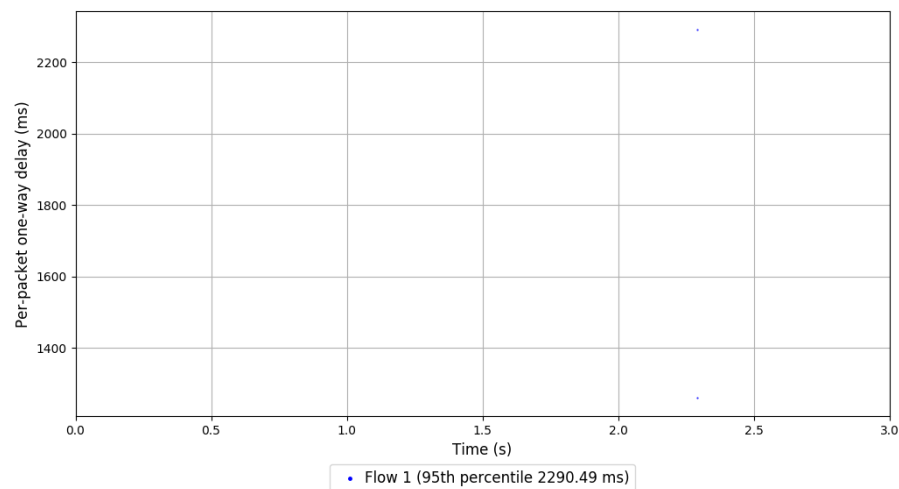
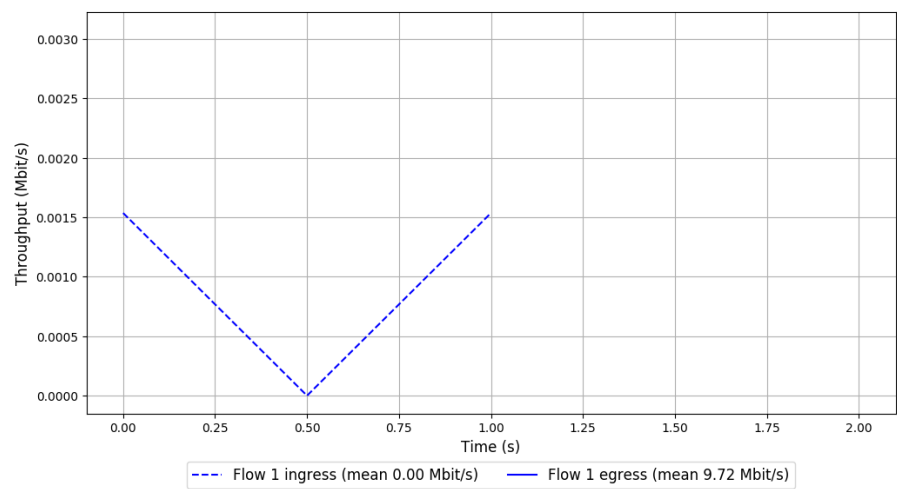


Run 7: Statistics of TCP Cubic

Start at: 2017-08-11 11:43:33

End at: 2017-08-11 11:44:03

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-11 11:53:59

End at: 2017-08-11 11:54:29

Below is generated by plot.py at 2017-08-11 14:29:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.29 Mbit/s

95th percentile per-packet one-way delay: 53.732 ms

Loss rate: 2.61%

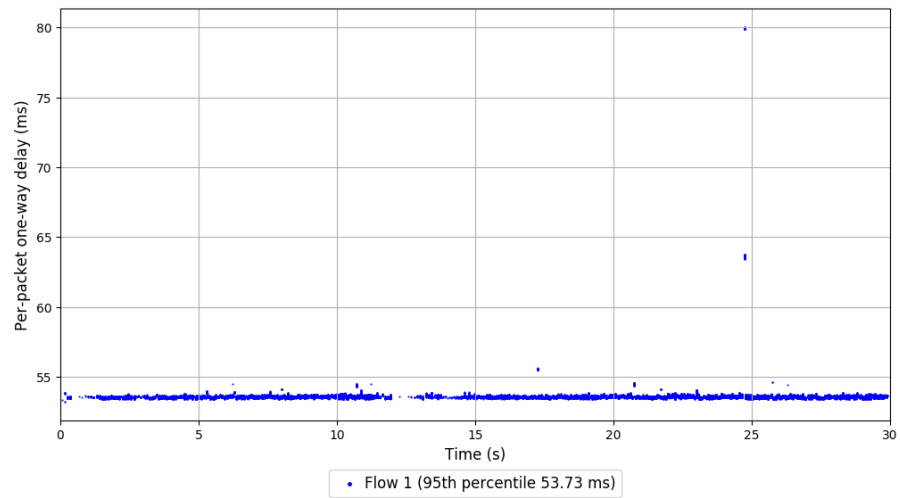
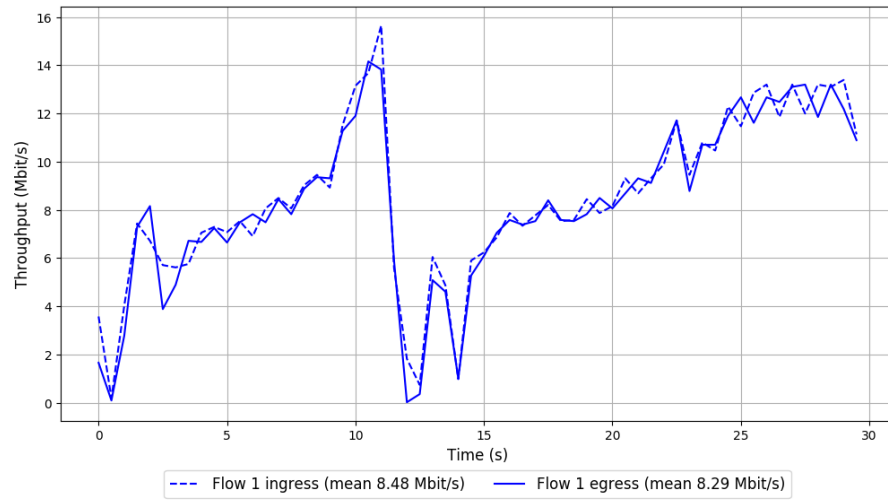
-- Flow 1:

Average throughput: 8.29 Mbit/s

95th percentile per-packet one-way delay: 53.732 ms

Loss rate: 2.61%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-11 12:03:49

End at: 2017-08-11 12:04:19

Below is generated by plot.py at 2017-08-11 14:29:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.85 Mbit/s

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

Loss rate: 3.98%

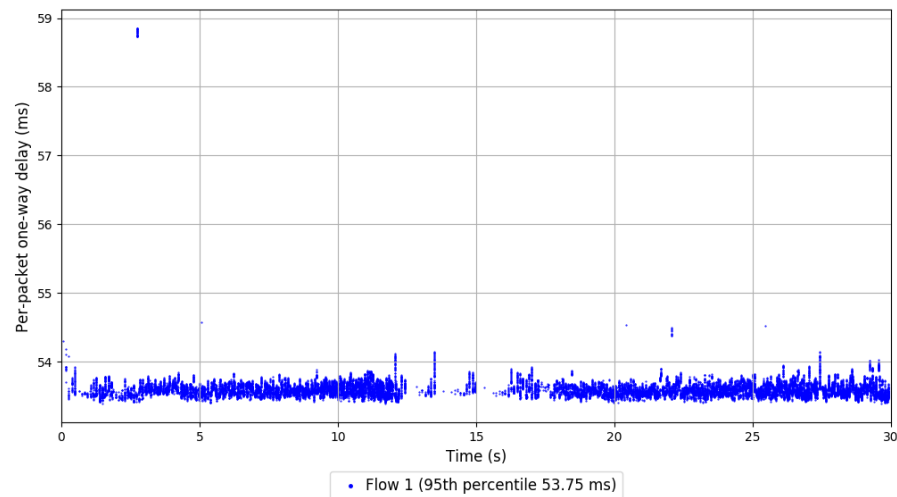
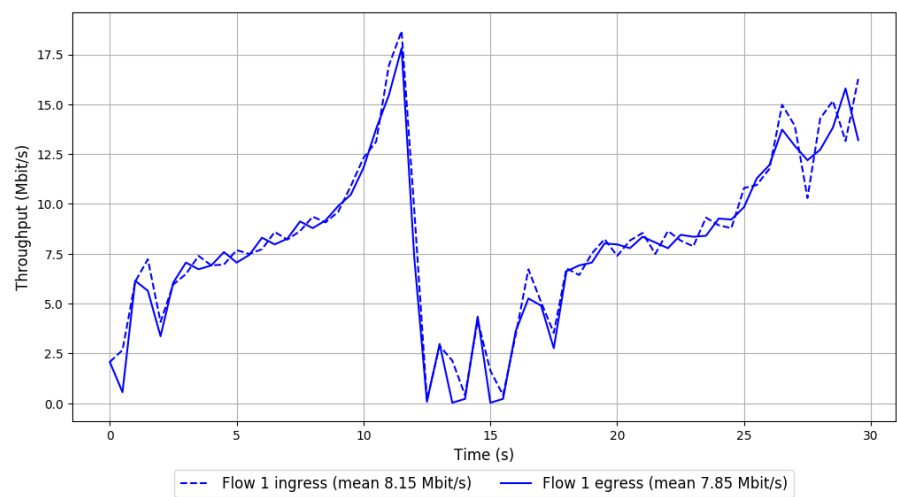
-- Flow 1:

Average throughput: 7.85 Mbit/s

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

Loss rate: 3.98%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-11 12:13:36

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

Below is generated by plot.py at 2017-08-11 14:29:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 53.776 ms

Loss rate: 3.12%

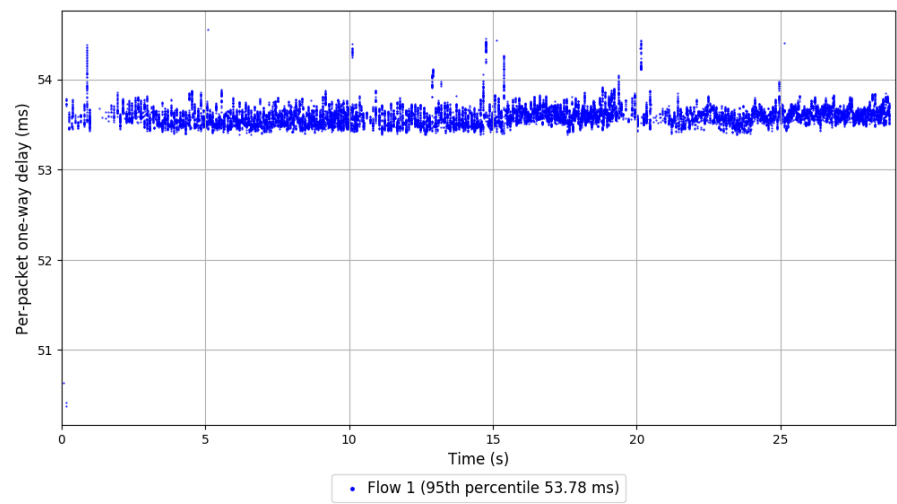
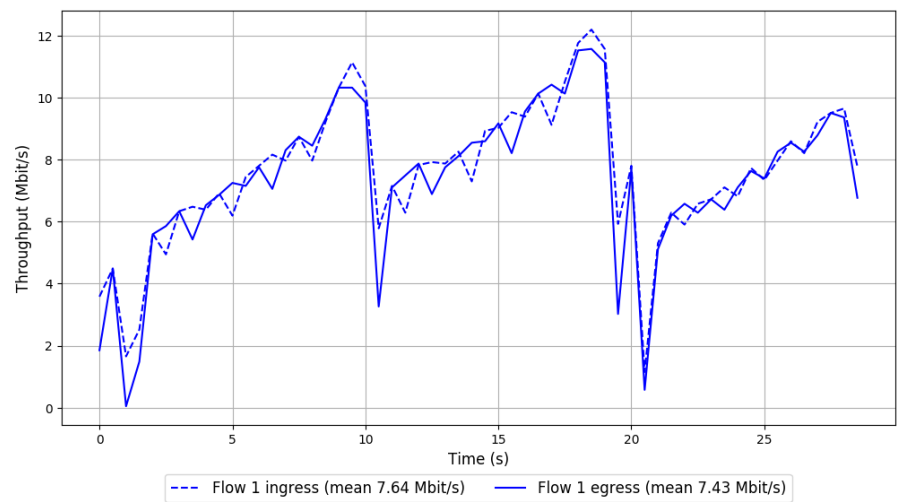
-- Flow 1:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 53.776 ms

Loss rate: 3.12%

Run 10: Report of TCP Cubic — Data Link

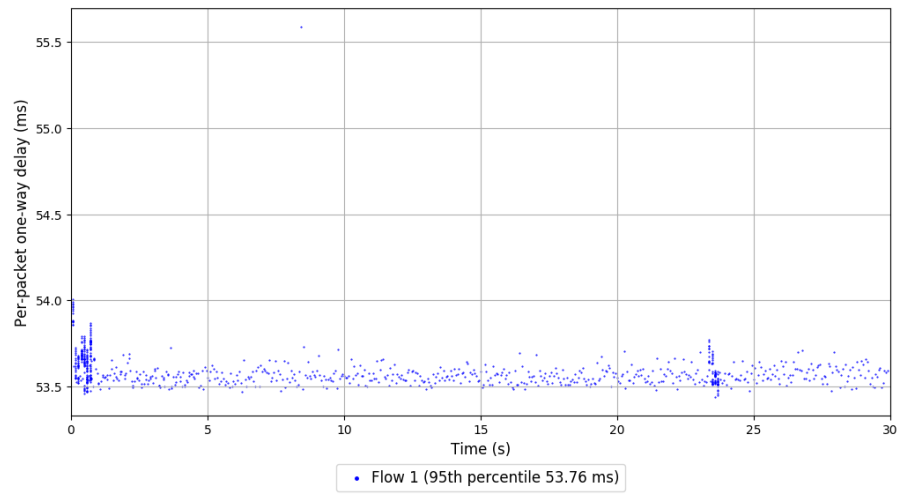
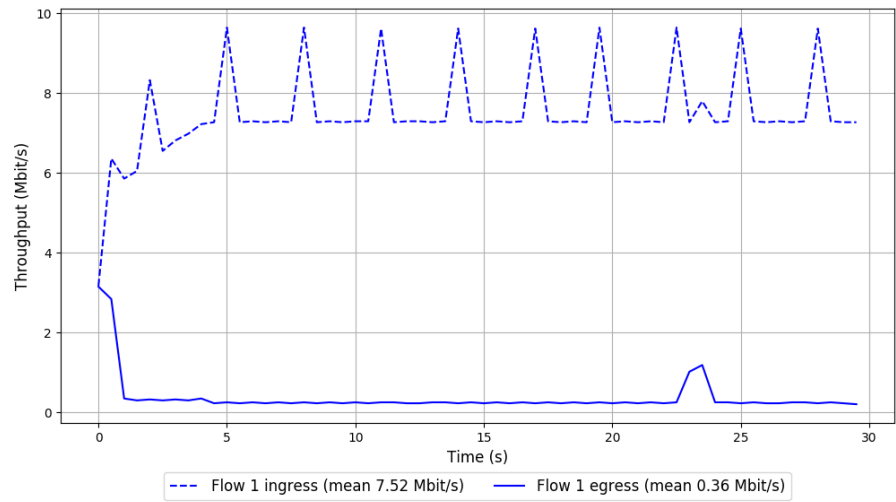


```
Run 1: Statistics of KohoCC

Start at: 2017-08-11 10:39:47
End at: 2017-08-11 10:40:17

# Below is generated by plot.py at 2017-08-11 14:29:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 53.759 ms
Loss rate: 95.23%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 53.759 ms
Loss rate: 95.23%
```


Run 1: Report of KohoCC — Data Link

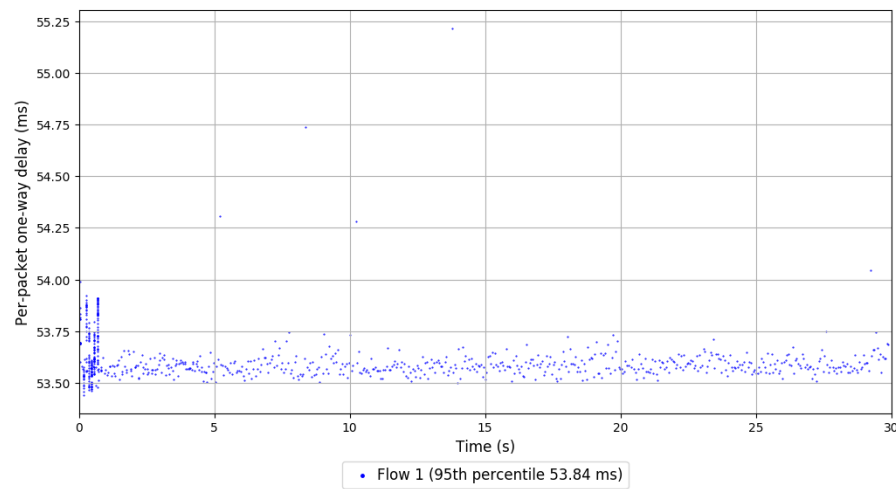
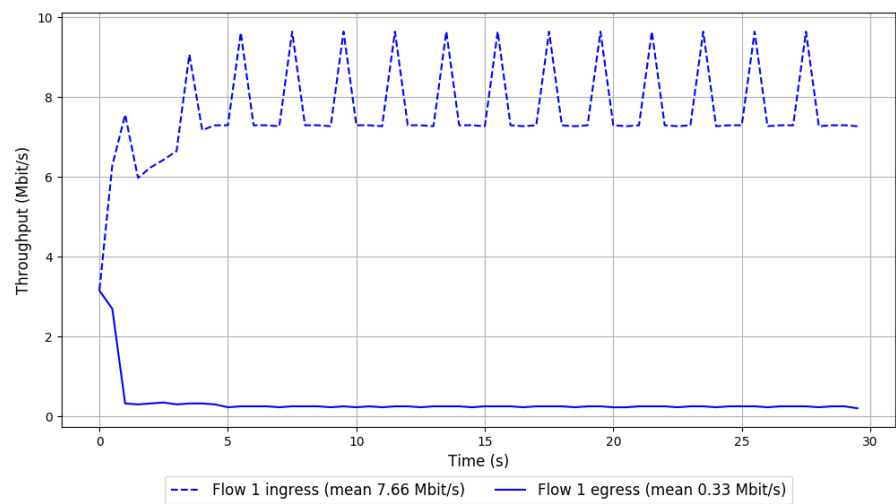


```
Run 2: Statistics of KohoCC

Start at: 2017-08-11 10:50:01
End at: 2017-08-11 10:50:31

# Below is generated by plot.py at 2017-08-11 14:29:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 53.837 ms
Loss rate: 95.67%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 53.837 ms
Loss rate: 95.67%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-11 11:00:36

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

Below is generated by plot.py at 2017-08-11 14:29:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 53.952 ms

Loss rate: 95.44%

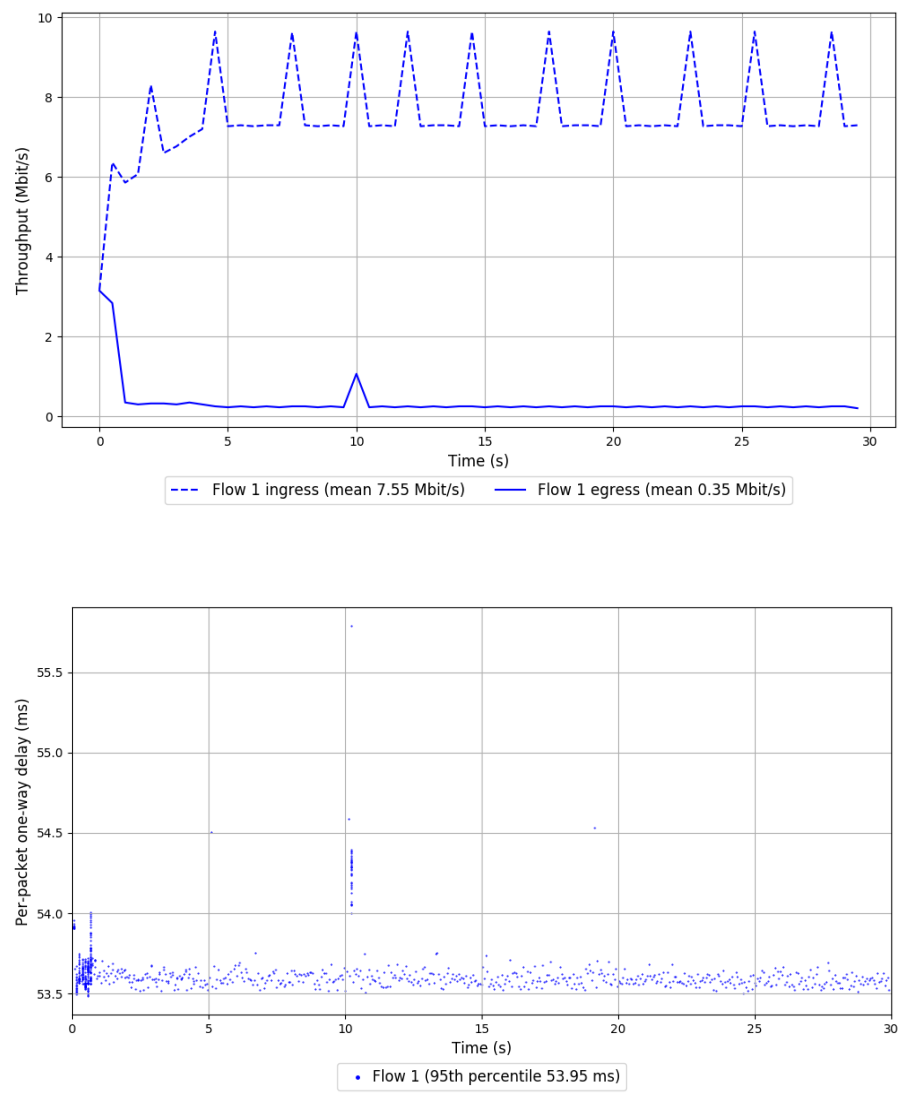
-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 53.952 ms

Loss rate: 95.44%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-11 11:10:42

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

Below is generated by plot.py at 2017-08-11 14:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 53.886 ms

Loss rate: 75.60%

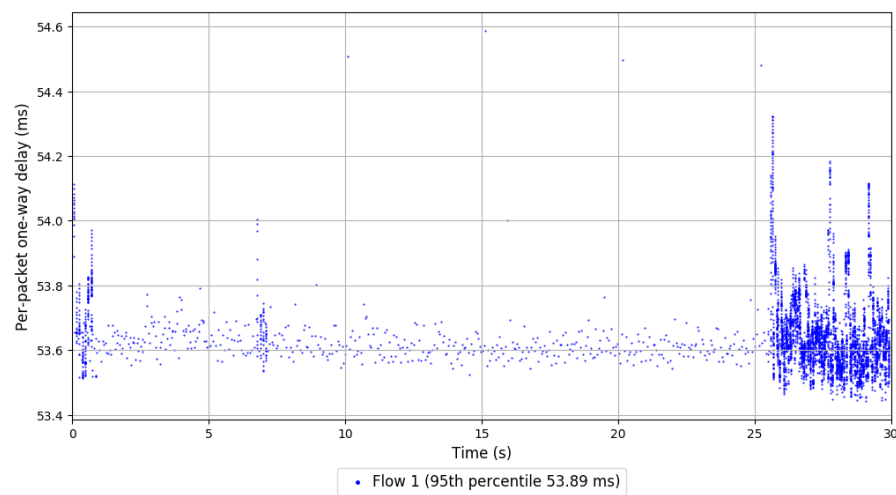
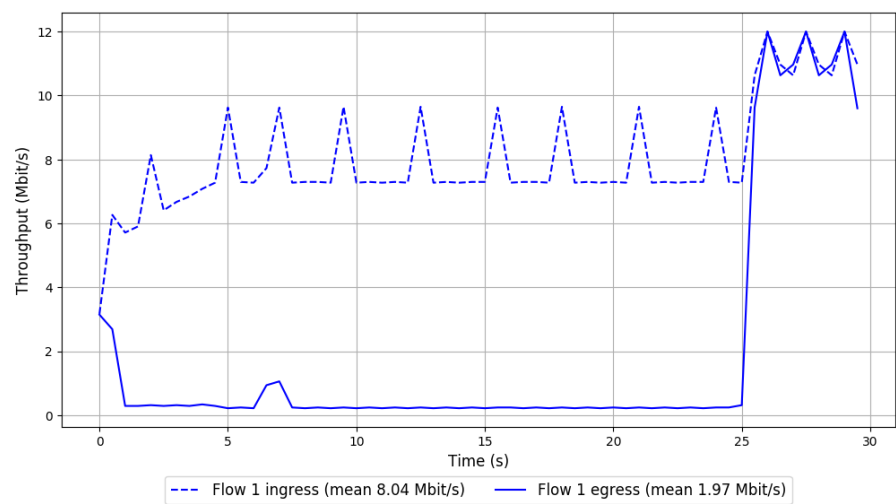
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 53.886 ms

Loss rate: 75.60%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

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

End at: 2017-08-11 11:21:02

Below is generated by plot.py at 2017-08-11 14:29:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 53.834 ms

Loss rate: 95.31%

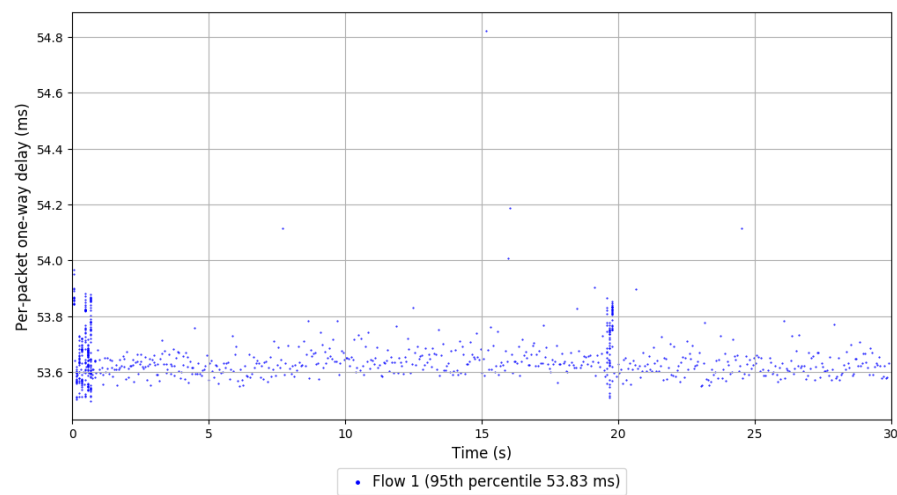
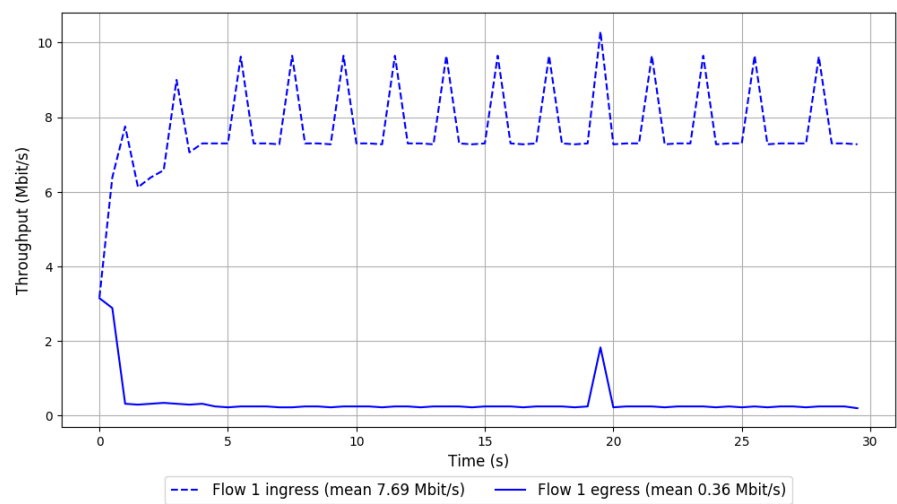
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 53.834 ms

Loss rate: 95.31%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-11 11:30:49

End at: 2017-08-11 11:31:19

Below is generated by plot.py at 2017-08-11 14:29:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 53.709 ms

Loss rate: 95.62%

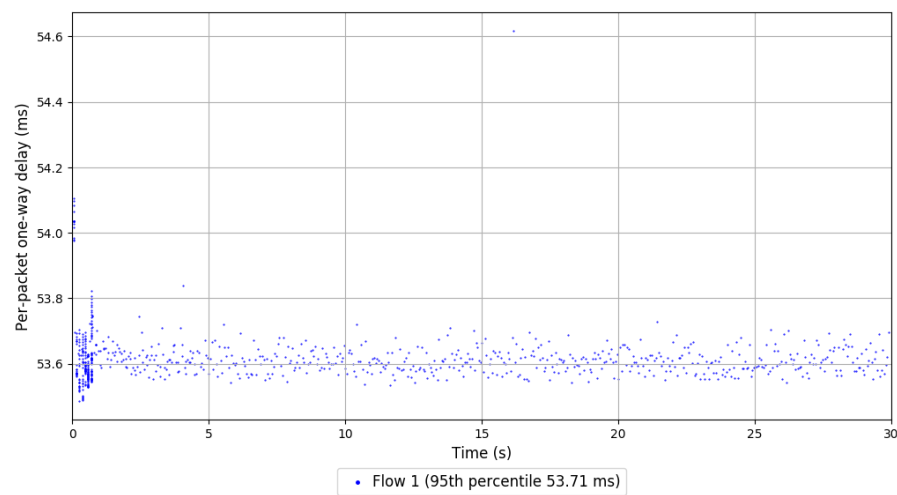
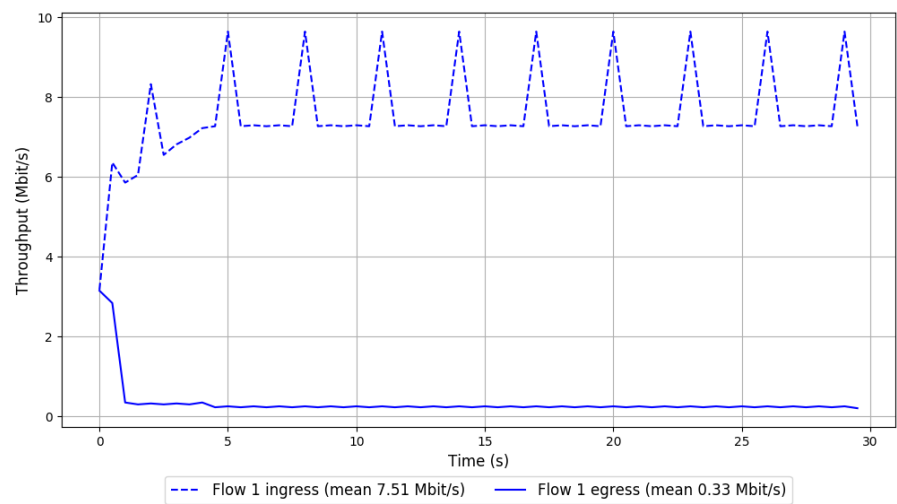
-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 53.709 ms

Loss rate: 95.62%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

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

End at: 2017-08-11 11:41:09

Below is generated by plot.py at 2017-08-11 14:30:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.19 Mbit/s

95th percentile per-packet one-way delay: 54.098 ms

Loss rate: 1.01%

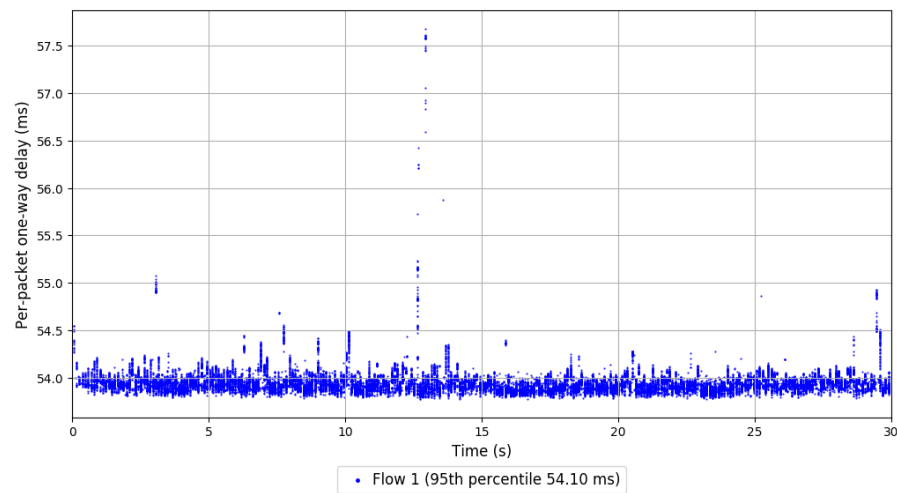
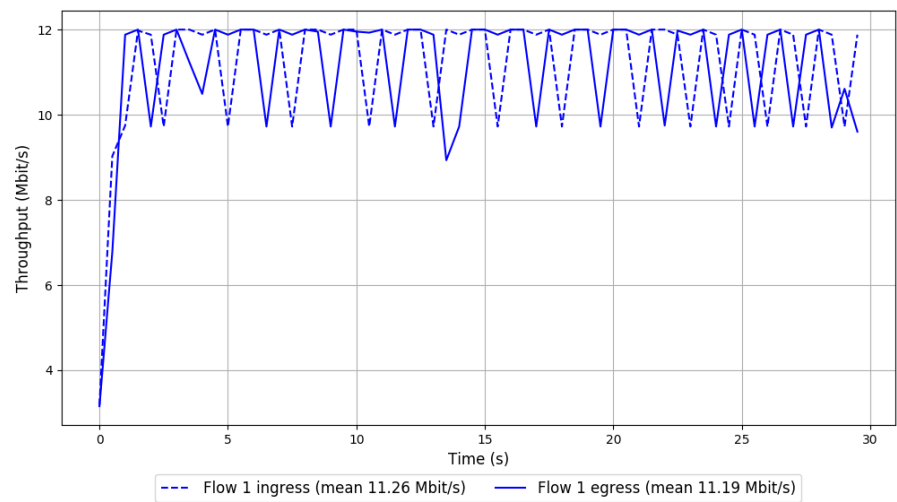
-- Flow 1:

Average throughput: 11.19 Mbit/s

95th percentile per-packet one-way delay: 54.098 ms

Loss rate: 1.01%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

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

End at: 2017-08-11 11:51:38

Below is generated by plot.py at 2017-08-11 14:30:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.33 Mbit/s

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

Loss rate: 95.66%

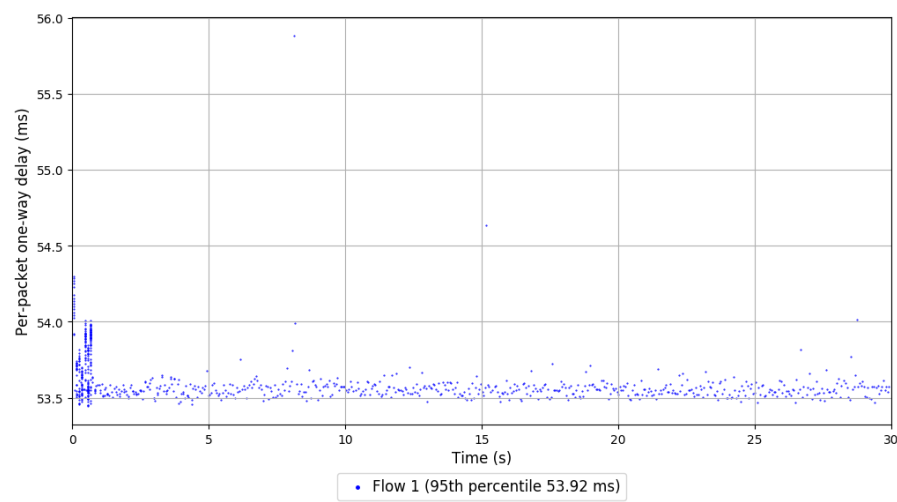
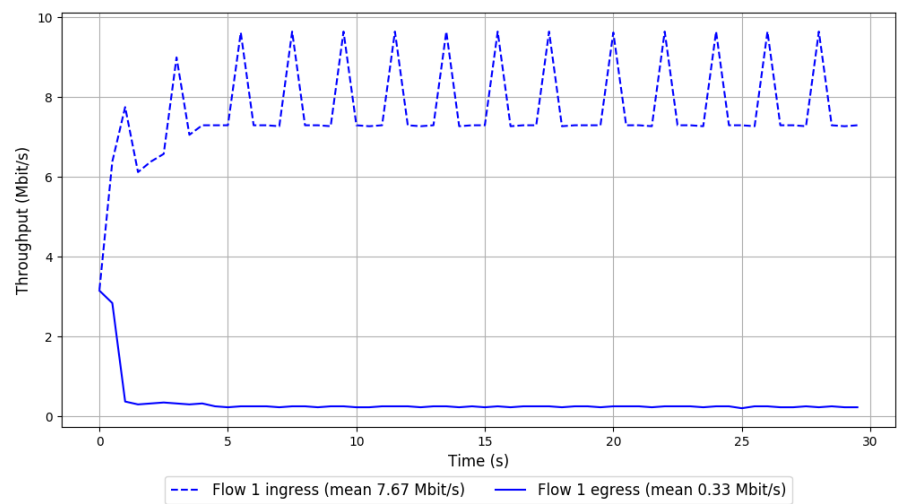
-- Flow 1:

Average throughput: 0.33 Mbit/s

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

Loss rate: 95.66%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-11 12:01:20

End at: 2017-08-11 12:01:50

Below is generated by plot.py at 2017-08-11 14:30:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 53.918 ms

Loss rate: 95.66%

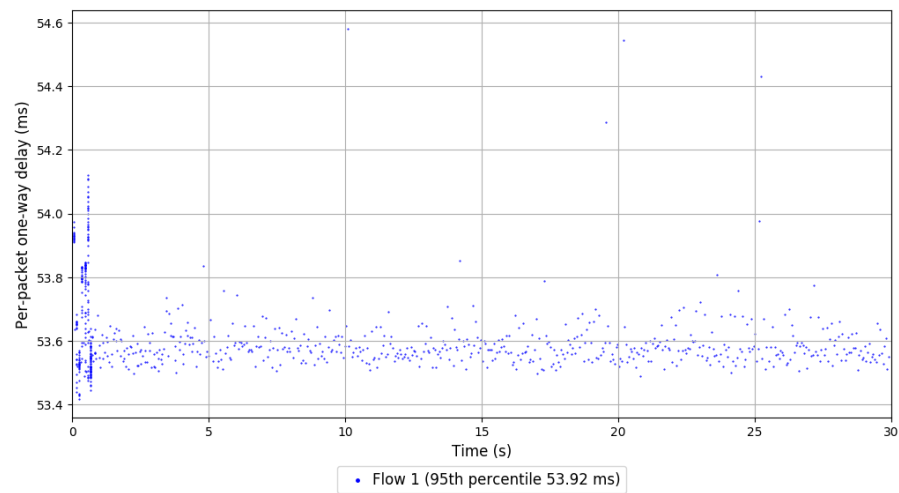
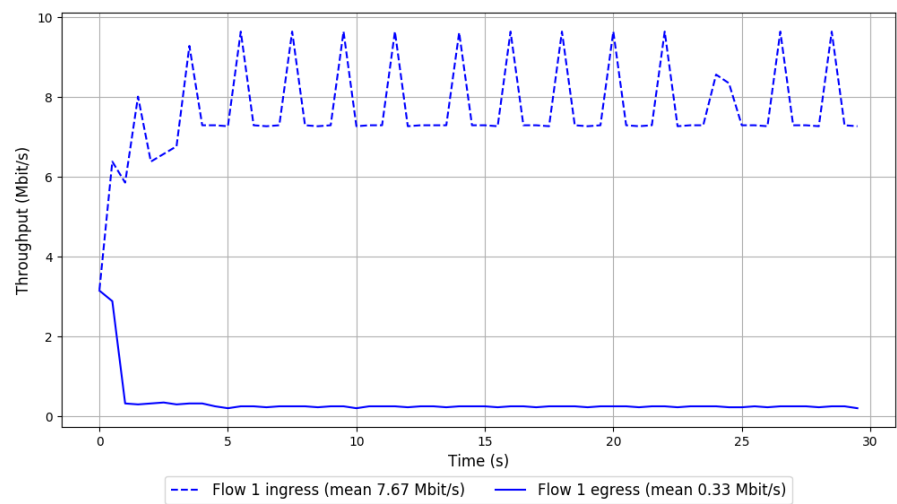
-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 53.918 ms

Loss rate: 95.66%

Run 9: Report of KohoCC — Data Link

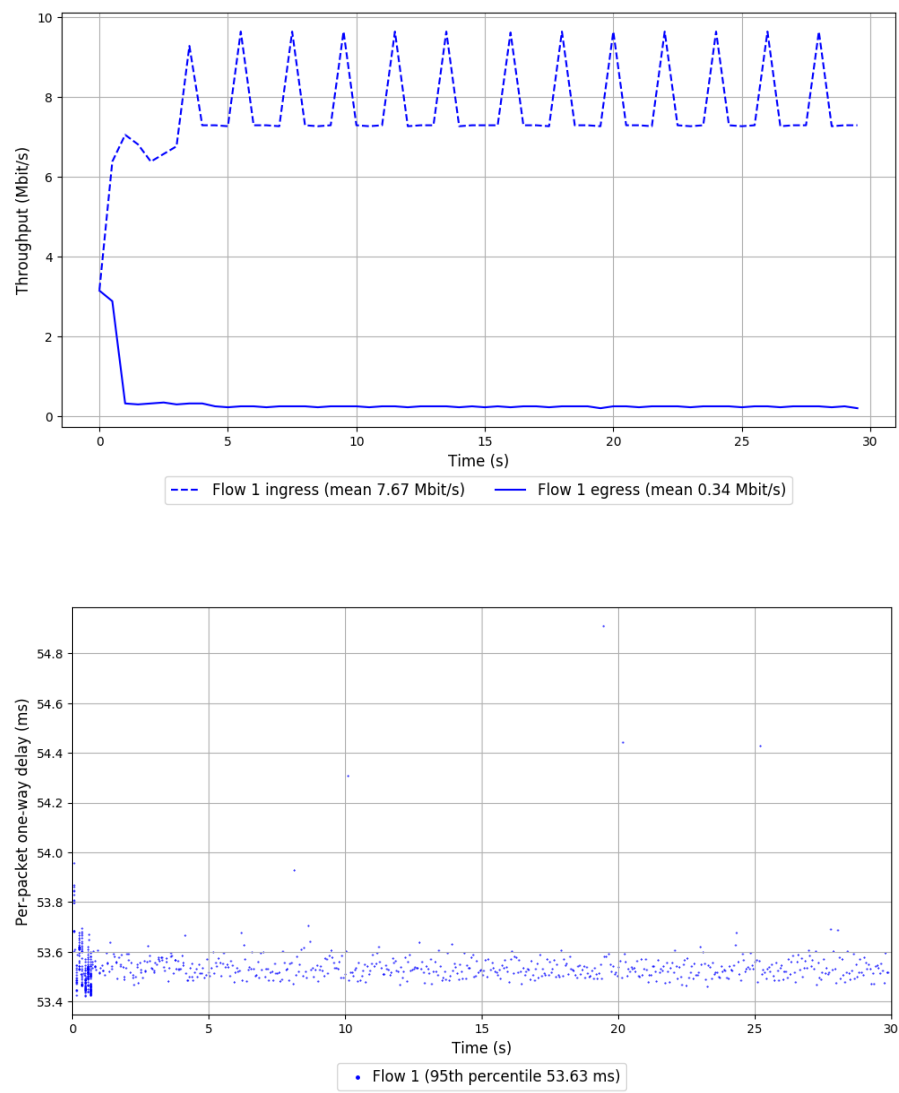


```
Run 10: Statistics of KohoCC

Start at: 2017-08-11 12:11:07
End at: 2017-08-11 12:11:37

# Below is generated by plot.py at 2017-08-11 14:30:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 53.634 ms
Loss rate: 95.65%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 53.634 ms
Loss rate: 95.65%
```

Run 10: Report of KohoCC — Data Link

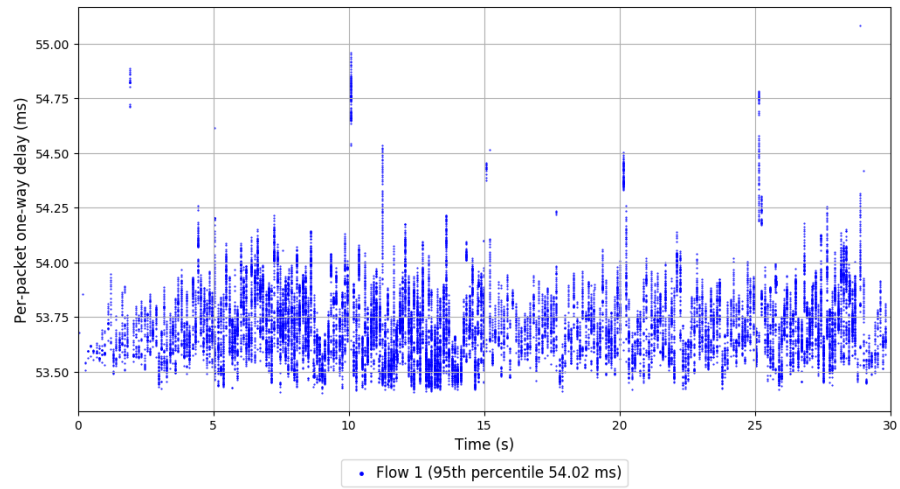
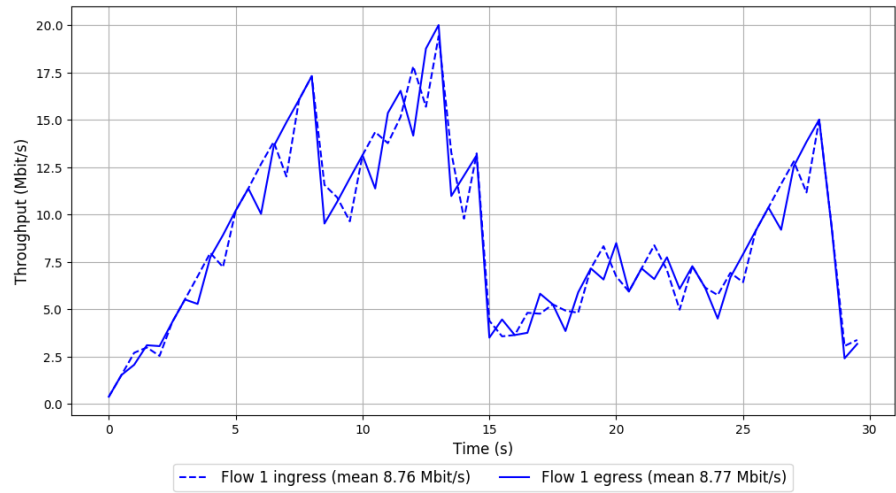


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-11 10:38:21
End at: 2017-08-11 10:38:51

# Below is generated by plot.py at 2017-08-11 14:30:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 54.016 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 54.016 ms
Loss rate: 0.20%
```

Run 1: Report of LEDBAT — Data Link

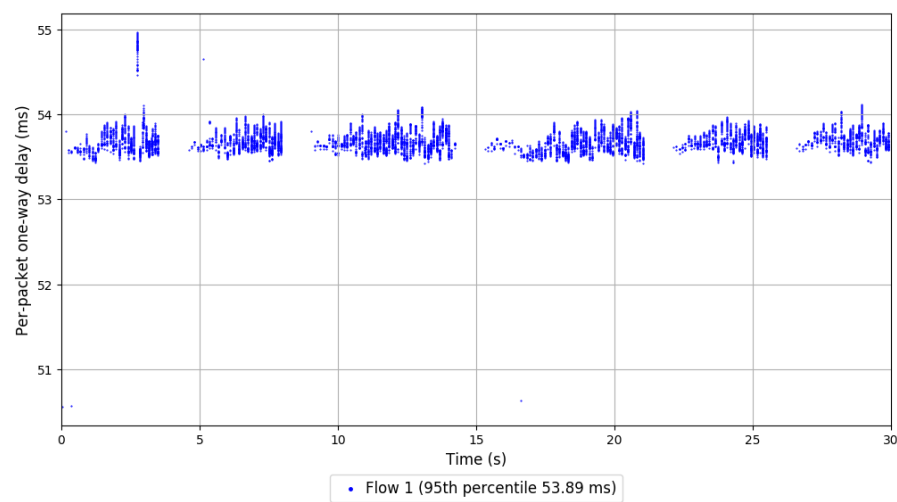
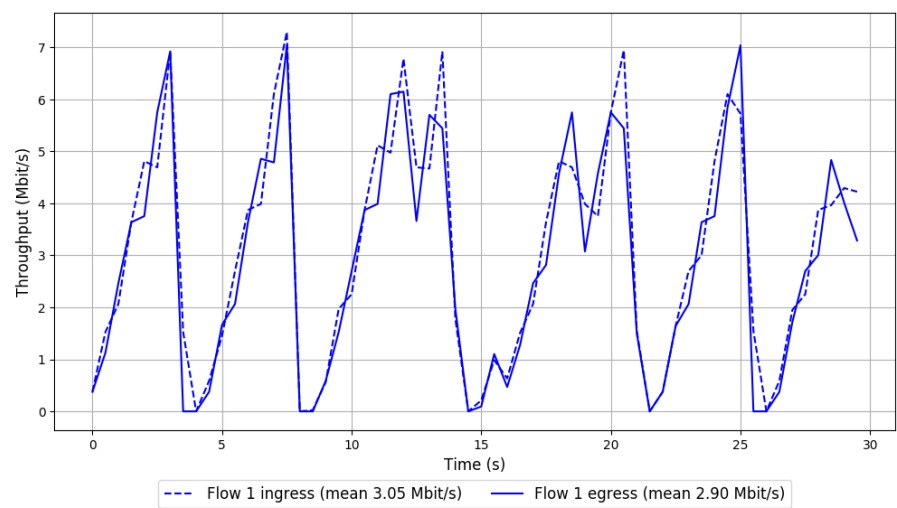


```
Run 2: Statistics of LEDBAT

Start at: 2017-08-11 10:48:42
End at: 2017-08-11 10:49:12

# Below is generated by plot.py at 2017-08-11 14:30:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 53.888 ms
Loss rate: 5.16%
-- Flow 1:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 53.888 ms
Loss rate: 5.16%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-11 10:59:17

End at: 2017-08-11 10:59:47

Below is generated by plot.py at 2017-08-11 14:30:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.86 Mbit/s

95th percentile per-packet one-way delay: 54.345 ms

Loss rate: 1.09%

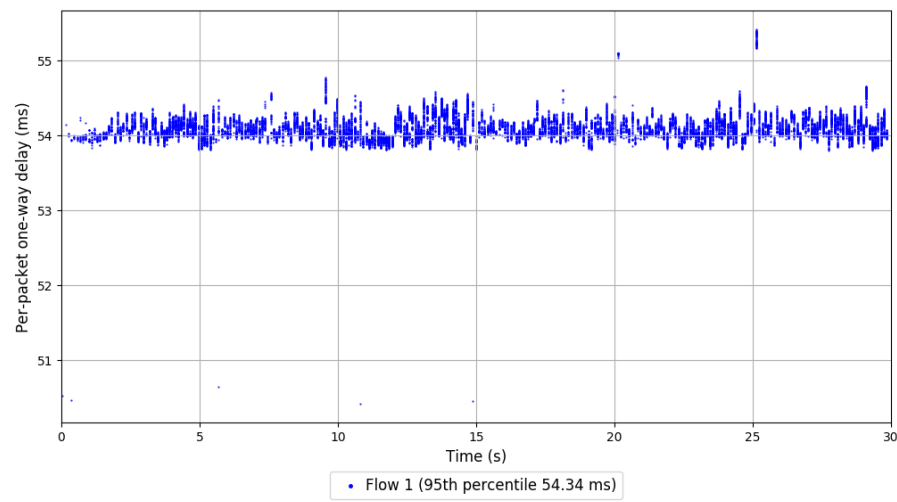
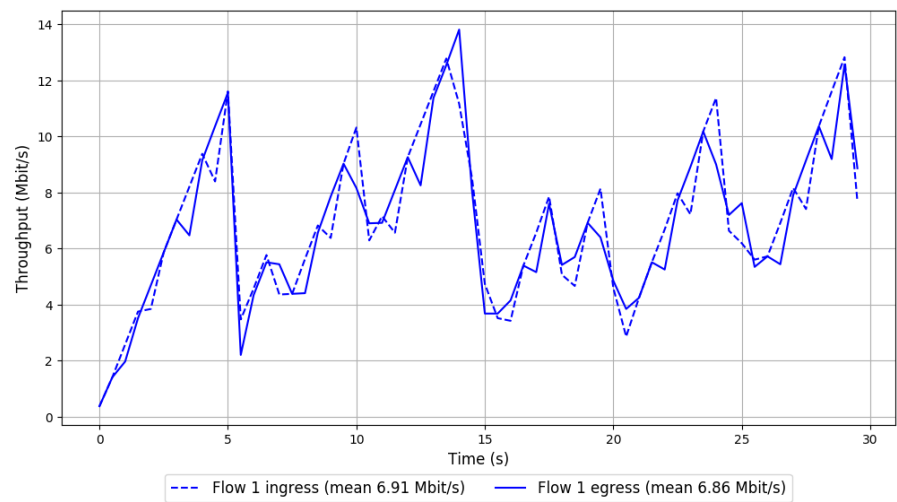
-- Flow 1:

Average throughput: 6.86 Mbit/s

95th percentile per-packet one-way delay: 54.345 ms

Loss rate: 1.09%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-11 11:09:23

End at: 2017-08-11 11:09:53

Below is generated by plot.py at 2017-08-11 14:30:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 54.657 ms

Loss rate: 1.49%

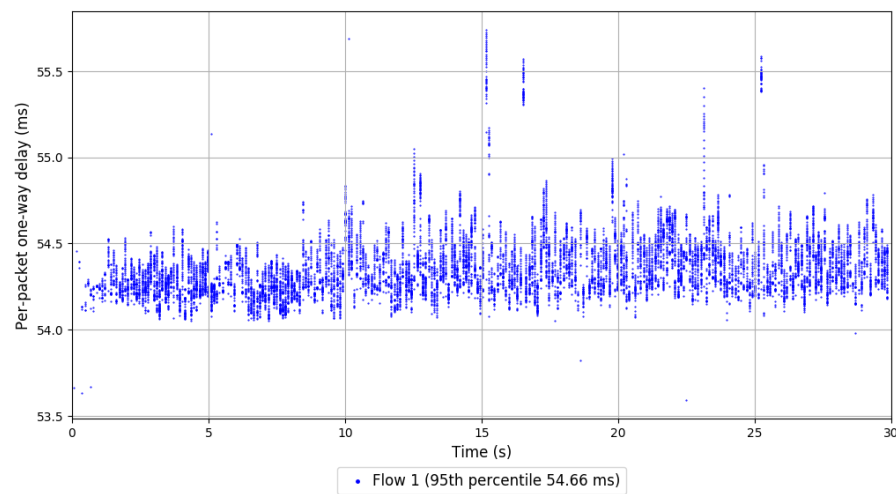
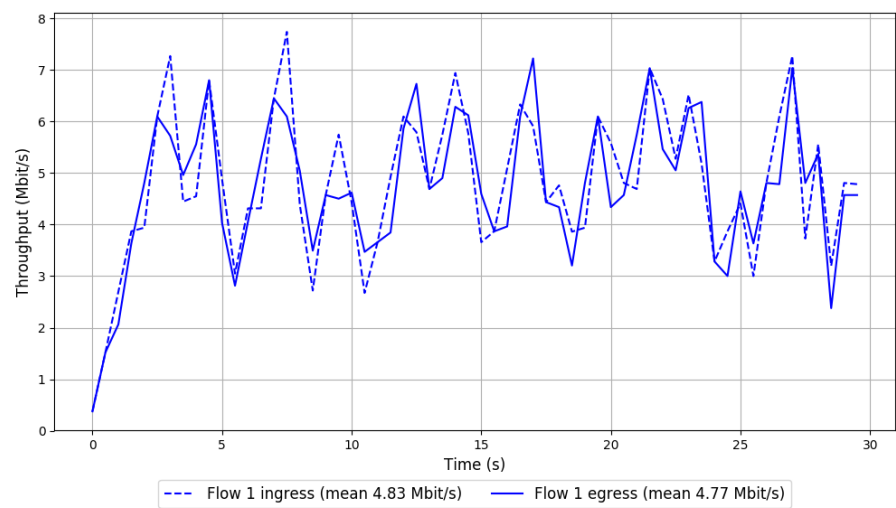
-- Flow 1:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 54.657 ms

Loss rate: 1.49%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

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

End at: 2017-08-11 11:19:37

Below is generated by plot.py at 2017-08-11 14:30:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.56 Mbit/s

95th percentile per-packet one-way delay: 54.235 ms

Loss rate: 0.25%

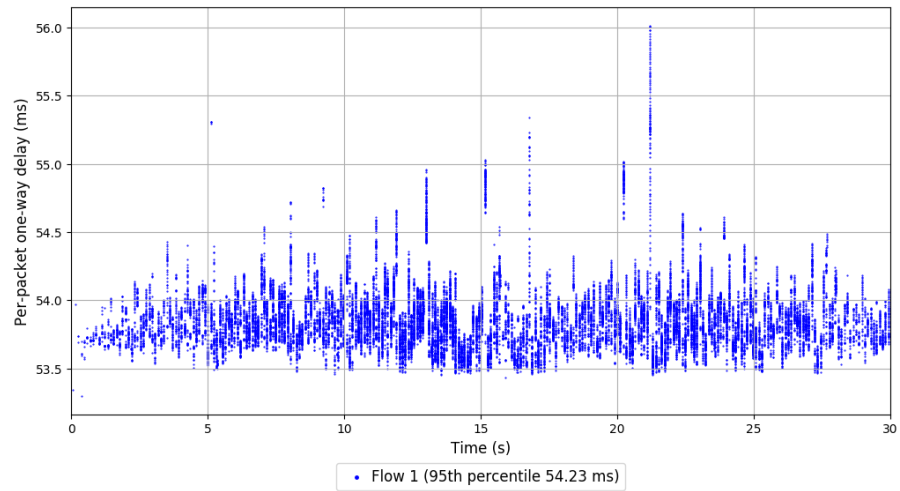
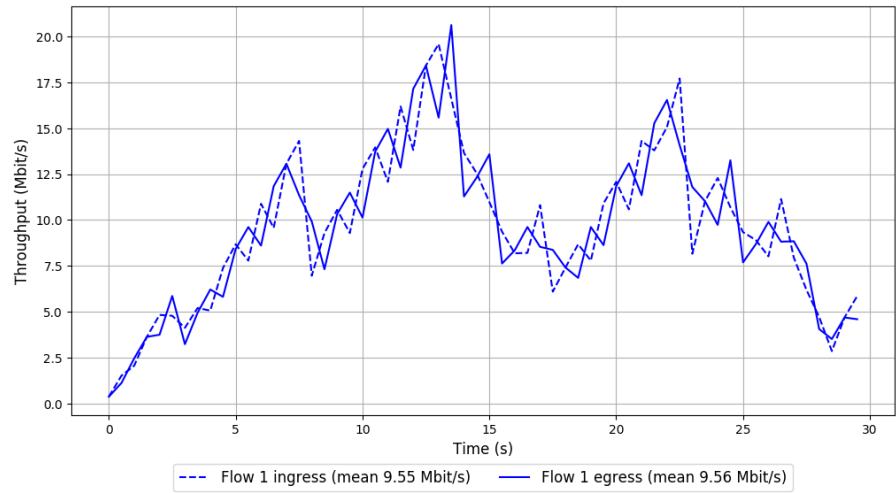
-- Flow 1:

Average throughput: 9.56 Mbit/s

95th percentile per-packet one-way delay: 54.235 ms

Loss rate: 0.25%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-11 11:29:30

End at: 2017-08-11 11:30:00

Below is generated by plot.py at 2017-08-11 14:30:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.74 Mbit/s

95th percentile per-packet one-way delay: 54.013 ms

Loss rate: 5.41%

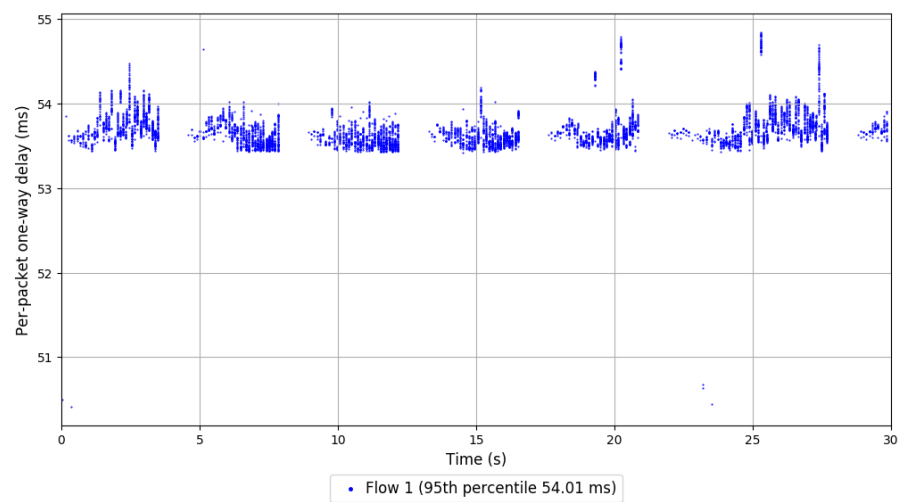
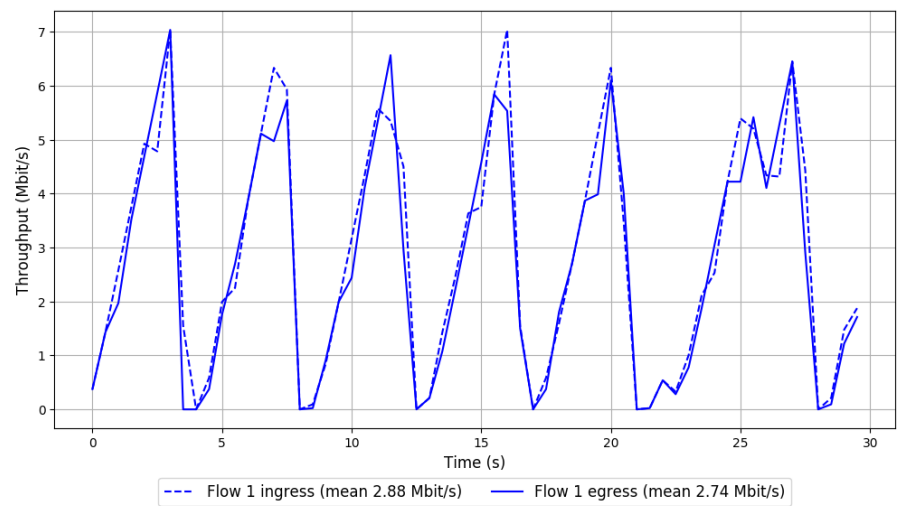
-- Flow 1:

Average throughput: 2.74 Mbit/s

95th percentile per-packet one-way delay: 54.013 ms

Loss rate: 5.41%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-11 11:39:14

End at: 2017-08-11 11:39:44

Below is generated by plot.py at 2017-08-11 14:30:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 54.272 ms

Loss rate: 1.52%

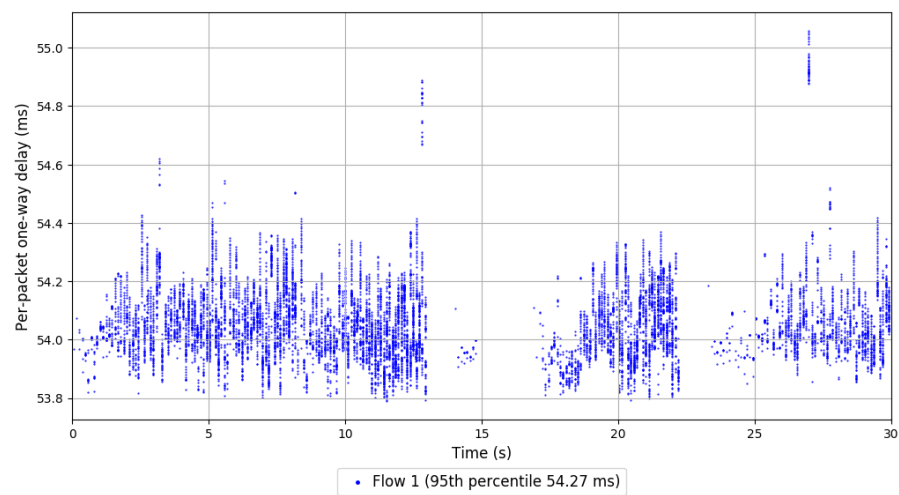
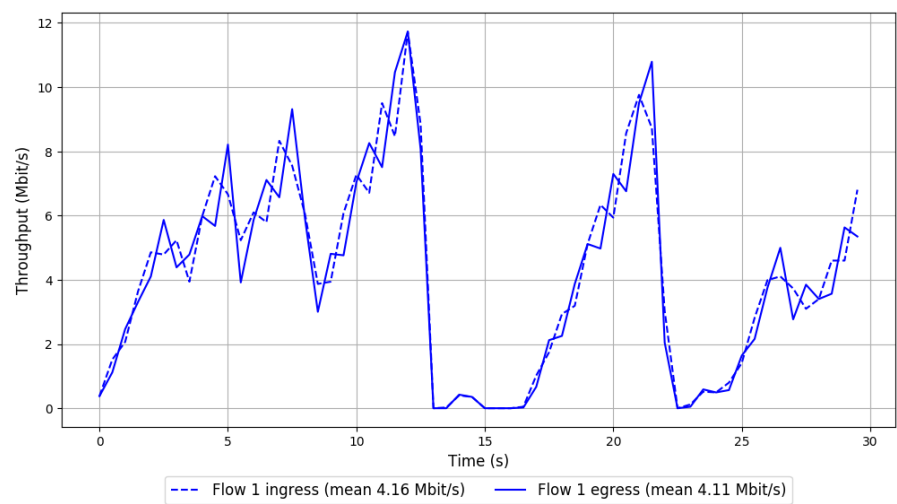
-- Flow 1:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 54.272 ms

Loss rate: 1.52%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-11 11:49:43

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

Below is generated by plot.py at 2017-08-11 14:30:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 53.972 ms

Loss rate: 5.99%

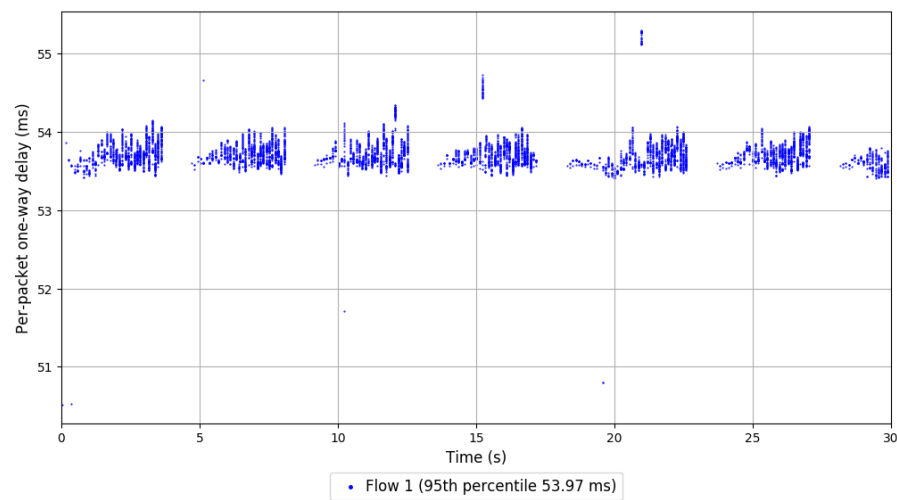
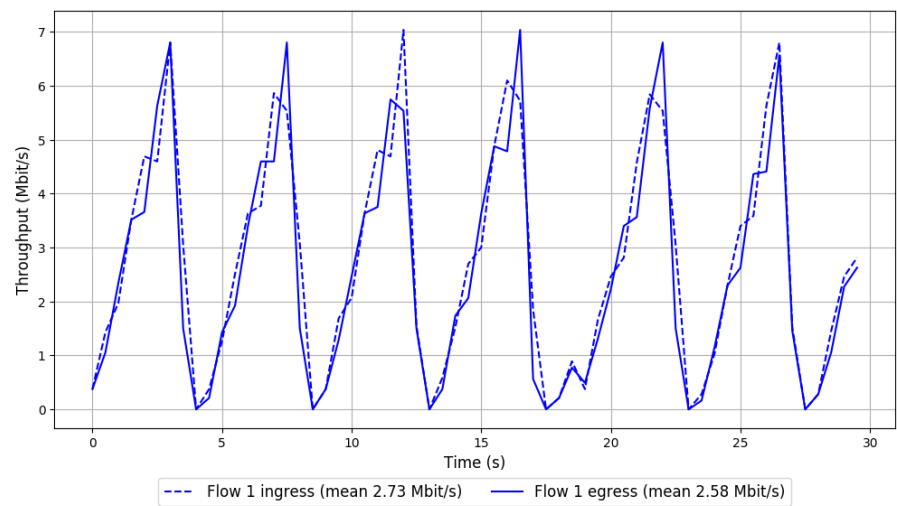
-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 53.972 ms

Loss rate: 5.99%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-11 12:00:02

End at: 2017-08-11 12:00:32

Below is generated by plot.py at 2017-08-11 14:30:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 53.811 ms

Loss rate: 5.37%

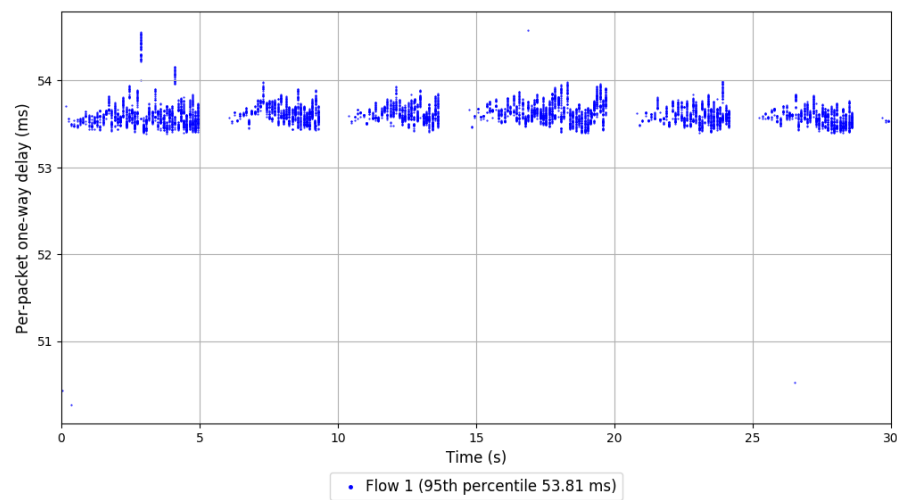
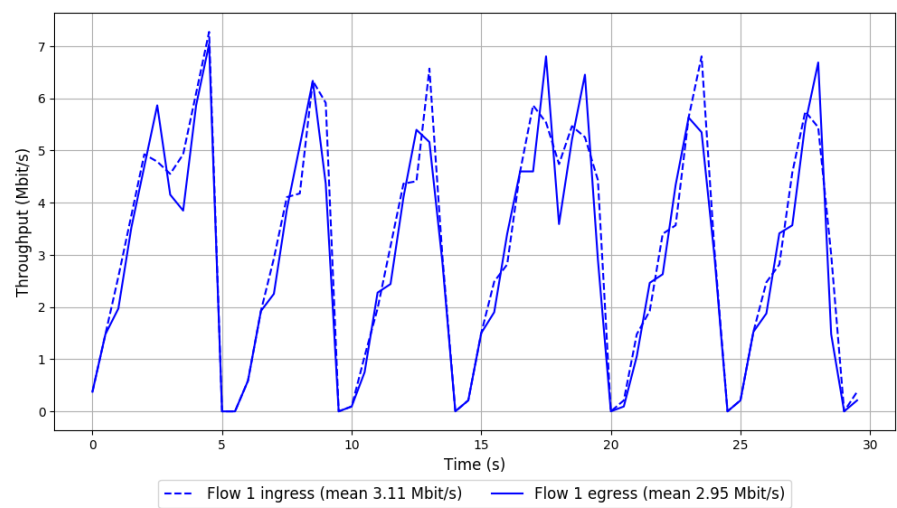
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 53.811 ms

Loss rate: 5.37%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-11 12:09:42

End at: 2017-08-11 12:10:12

Below is generated by plot.py at 2017-08-11 14:30:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 53.888 ms

Loss rate: 4.98%

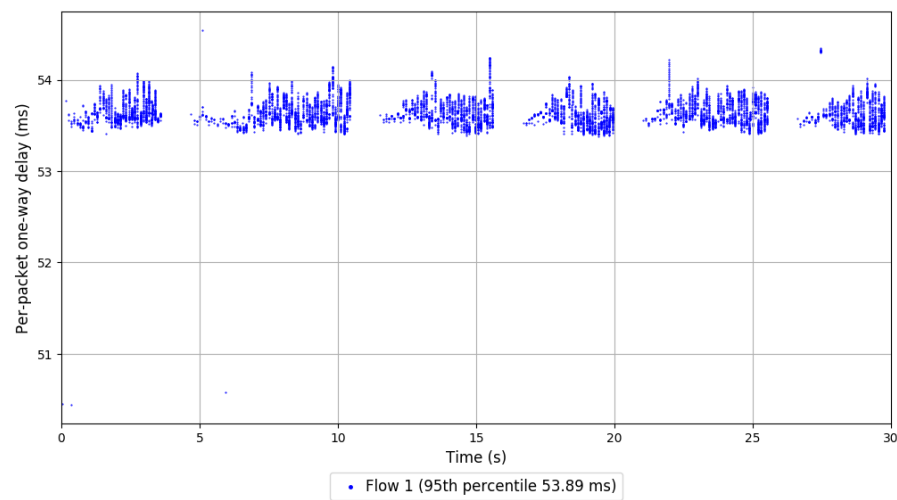
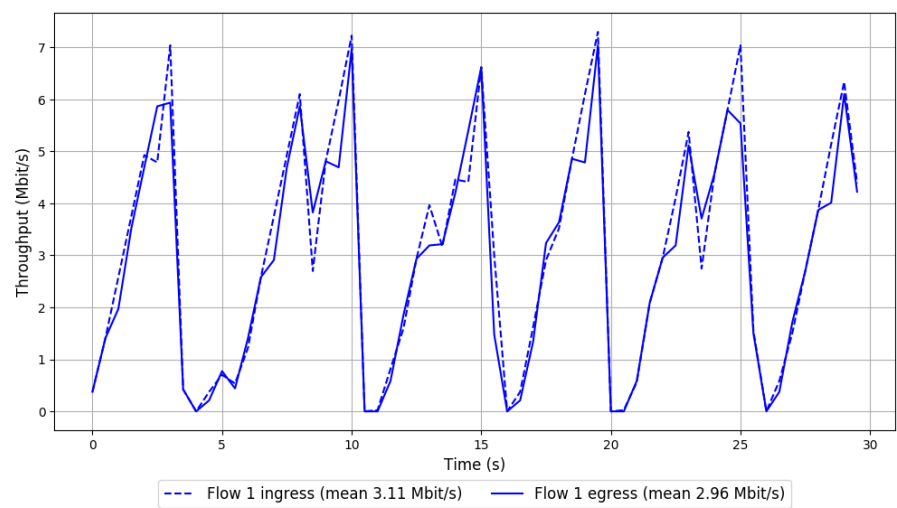
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 53.888 ms

Loss rate: 4.98%

Run 10: Report of LEDBAT — Data Link

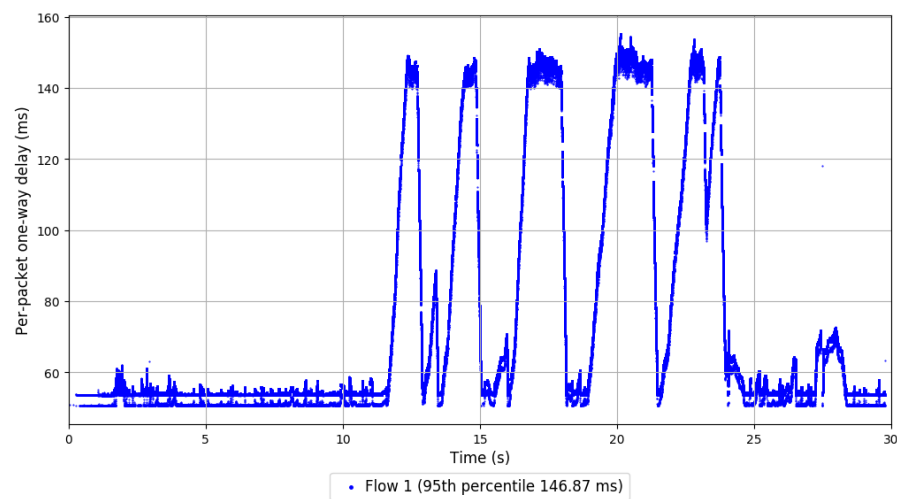
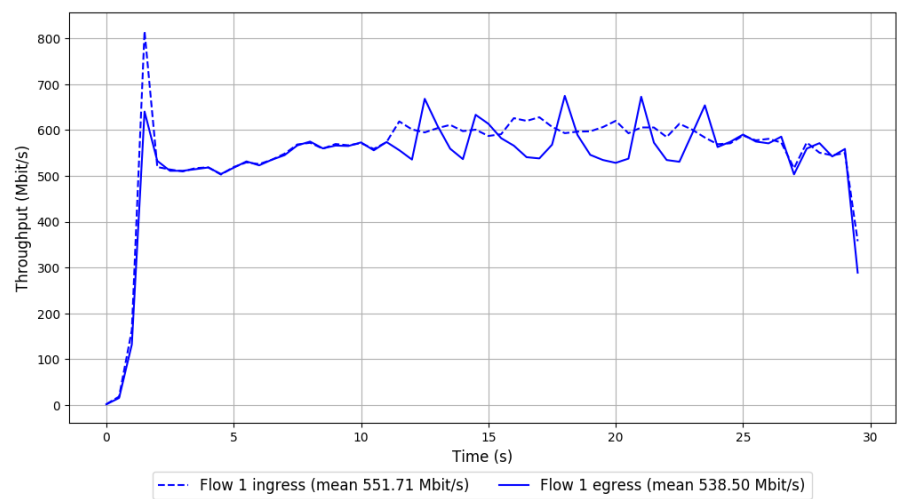


```
Run 1: Statistics of PCC

Start at: 2017-08-11 10:44:35
End at: 2017-08-11 10:45:05

# Below is generated by plot.py at 2017-08-11 14:31:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 538.50 Mbit/s
95th percentile per-packet one-way delay: 146.871 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 538.50 Mbit/s
95th percentile per-packet one-way delay: 146.871 ms
Loss rate: 2.71%
```


Run 1: Report of PCC — Data Link

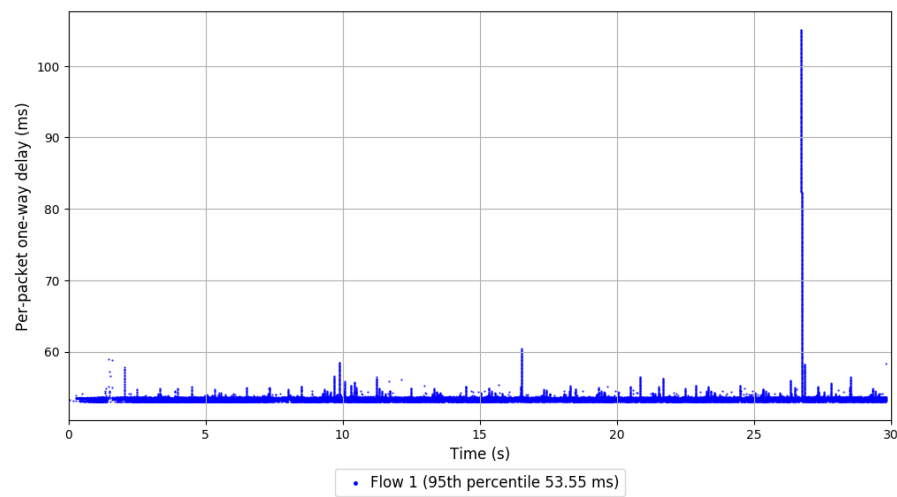
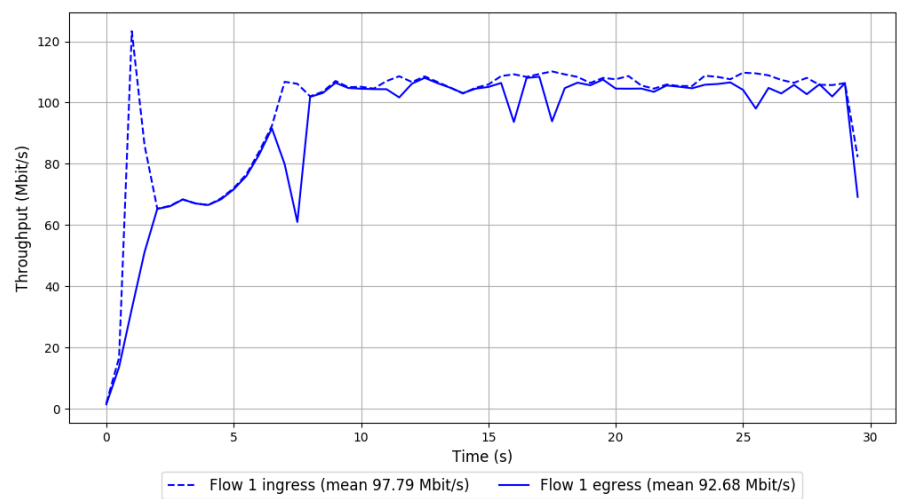


```
Run 2: Statistics of PCC

Start at: 2017-08-11 10:55:15
End at: 2017-08-11 10:55:45

# Below is generated by plot.py at 2017-08-11 14:31:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.68 Mbit/s
95th percentile per-packet one-way delay: 53.545 ms
Loss rate: 5.59%
-- Flow 1:
Average throughput: 92.68 Mbit/s
95th percentile per-packet one-way delay: 53.545 ms
Loss rate: 5.59%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

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

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

Below is generated by plot.py at 2017-08-11 14:31:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.16 Mbit/s

95th percentile per-packet one-way delay: 53.566 ms

Loss rate: 3.42%

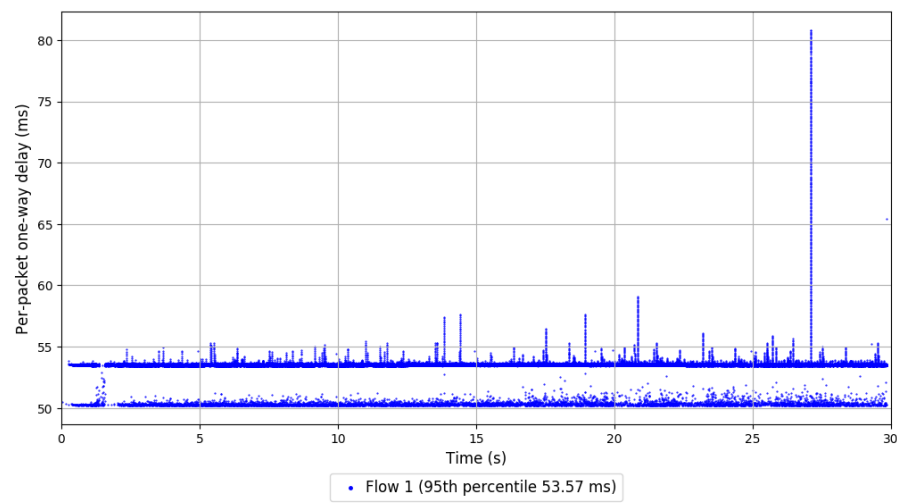
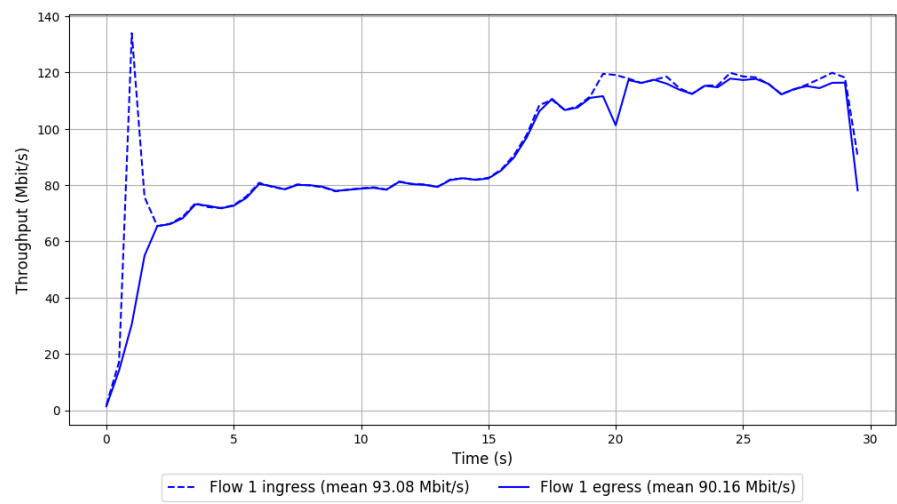
-- Flow 1:

Average throughput: 90.16 Mbit/s

95th percentile per-packet one-way delay: 53.566 ms

Loss rate: 3.42%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

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

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

Below is generated by plot.py at 2017-08-11 14:31:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.52 Mbit/s

95th percentile per-packet one-way delay: 53.563 ms

Loss rate: 8.15%

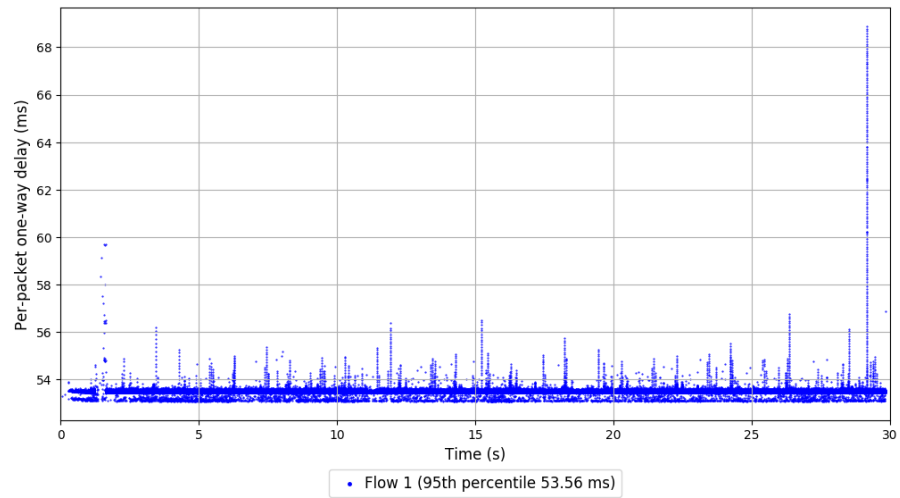
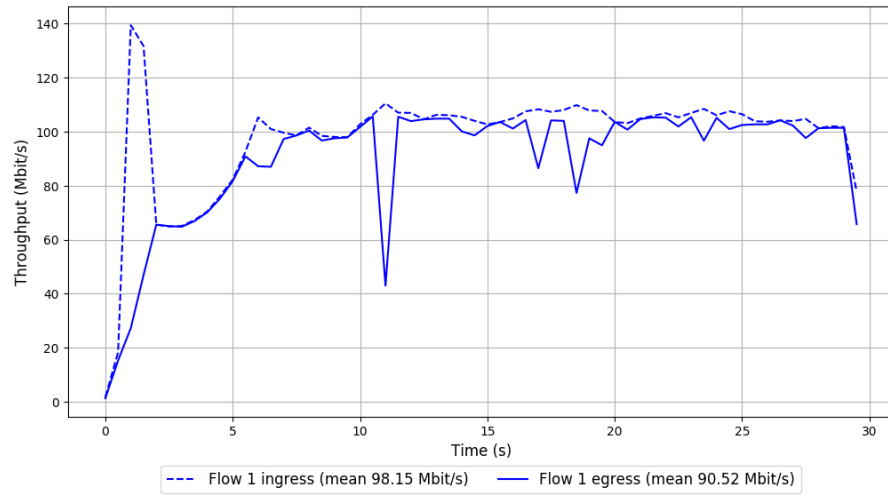
-- Flow 1:

Average throughput: 90.52 Mbit/s

95th percentile per-packet one-way delay: 53.563 ms

Loss rate: 8.15%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-11 11:25:19

End at: 2017-08-11 11:25:49

Below is generated by plot.py at 2017-08-11 14:32:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 512.20 Mbit/s

95th percentile per-packet one-way delay: 142.228 ms

Loss rate: 2.96%

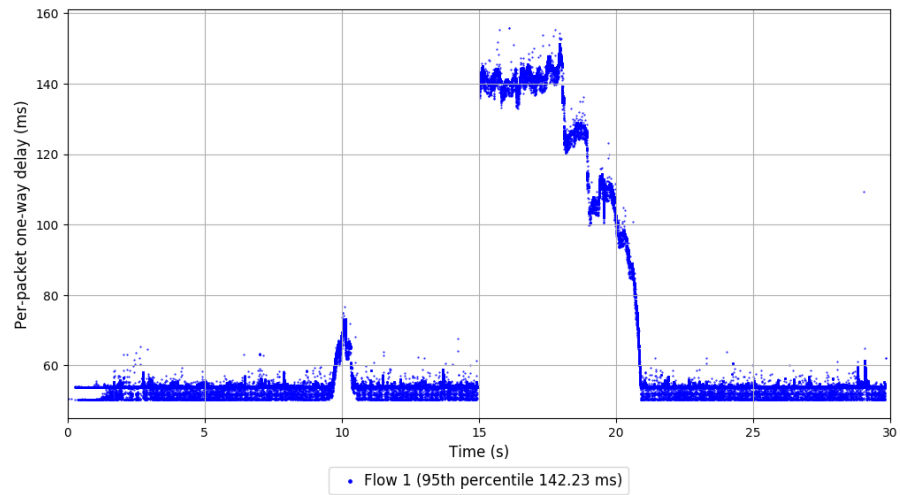
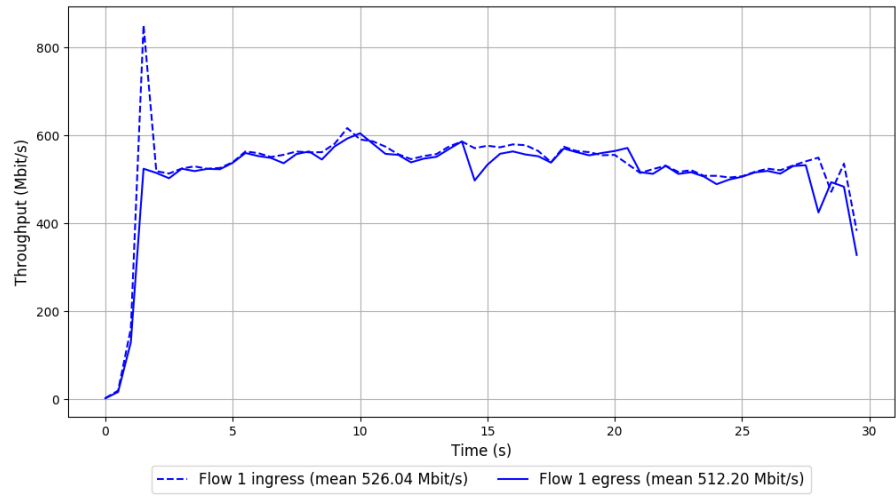
-- Flow 1:

Average throughput: 512.20 Mbit/s

95th percentile per-packet one-way delay: 142.228 ms

Loss rate: 2.96%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-11 11:35:19

End at: 2017-08-11 11:35:49

Below is generated by plot.py at 2017-08-11 14:32:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.84 Mbit/s

95th percentile per-packet one-way delay: 53.540 ms

Loss rate: 5.79%

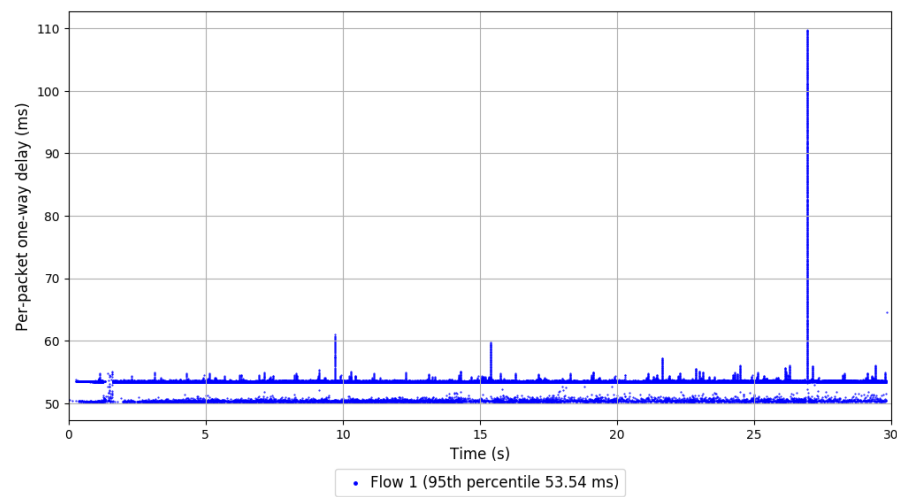
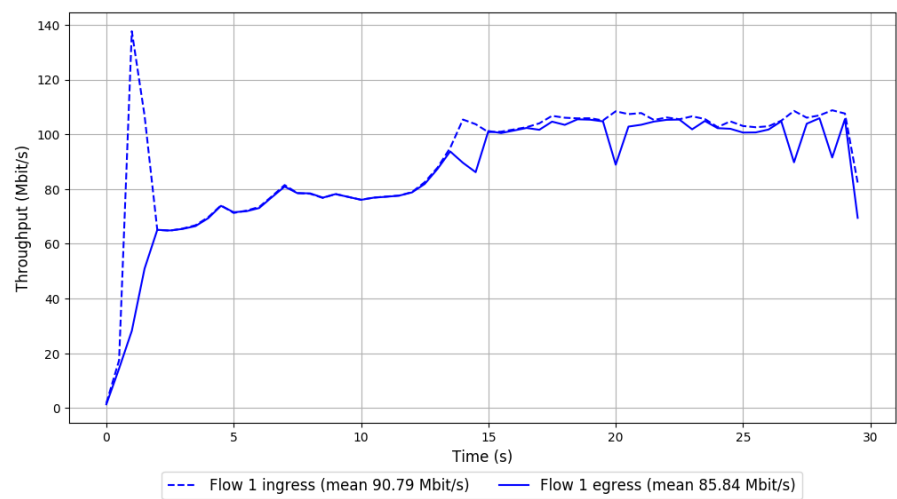
-- Flow 1:

Average throughput: 85.84 Mbit/s

95th percentile per-packet one-way delay: 53.540 ms

Loss rate: 5.79%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-11 11:45:31

End at: 2017-08-11 11:46:01

Below is generated by plot.py at 2017-08-11 14:33:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 516.25 Mbit/s

95th percentile per-packet one-way delay: 56.732 ms

Loss rate: 1.15%

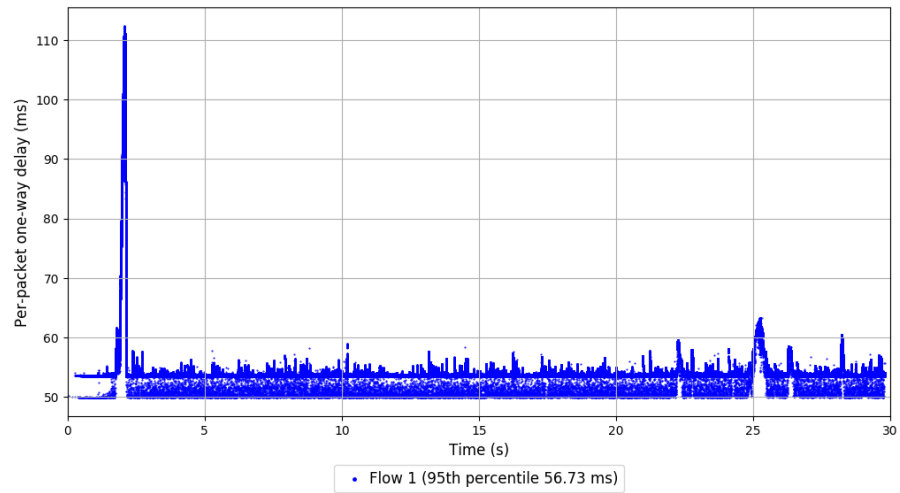
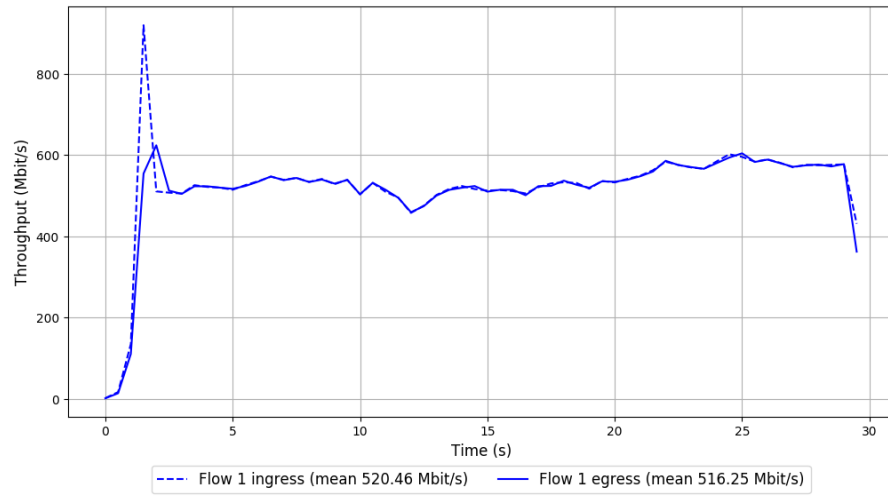
-- Flow 1:

Average throughput: 516.25 Mbit/s

95th percentile per-packet one-way delay: 56.732 ms

Loss rate: 1.15%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

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

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

Below is generated by plot.py at 2017-08-11 14:33:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 288.36 Mbit/s

95th percentile per-packet one-way delay: 56.239 ms

Loss rate: 0.64%

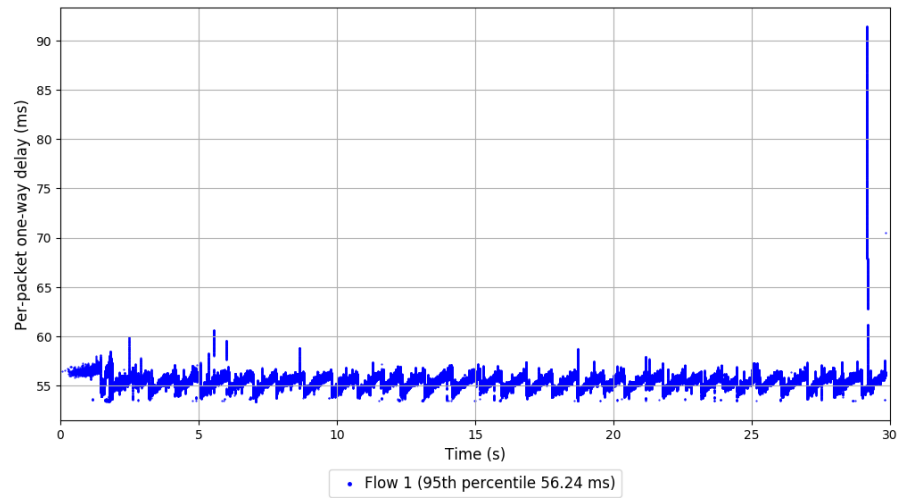
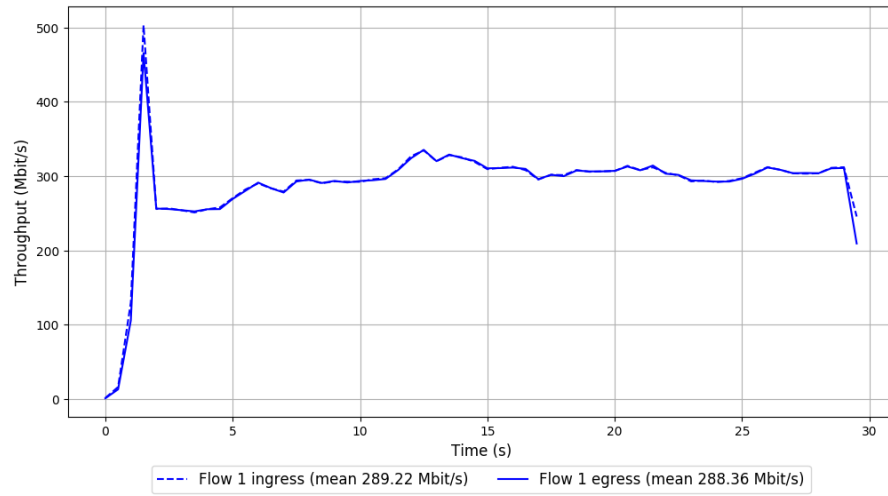
-- Flow 1:

Average throughput: 288.36 Mbit/s

95th percentile per-packet one-way delay: 56.239 ms

Loss rate: 0.64%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-11 12:05:46

End at: 2017-08-11 12:06:16

Below is generated by plot.py at 2017-08-11 14:34:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.99 Mbit/s

95th percentile per-packet one-way delay: 53.519 ms

Loss rate: 6.30%

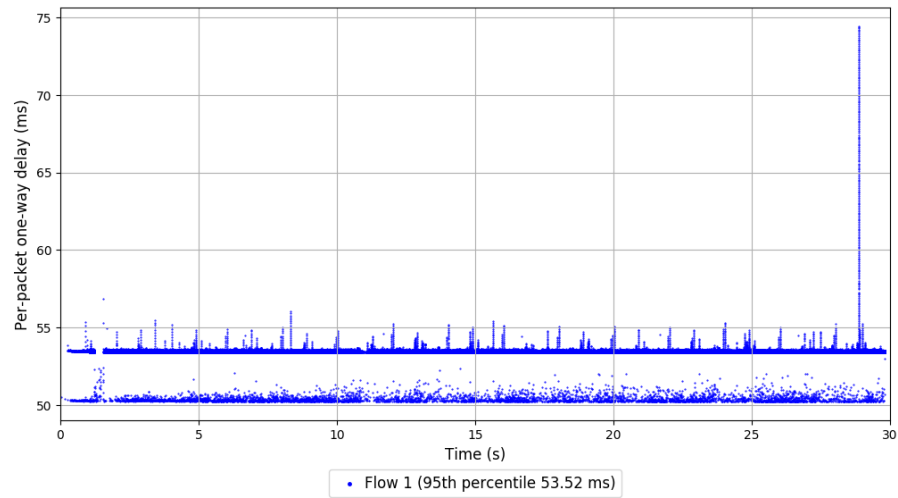
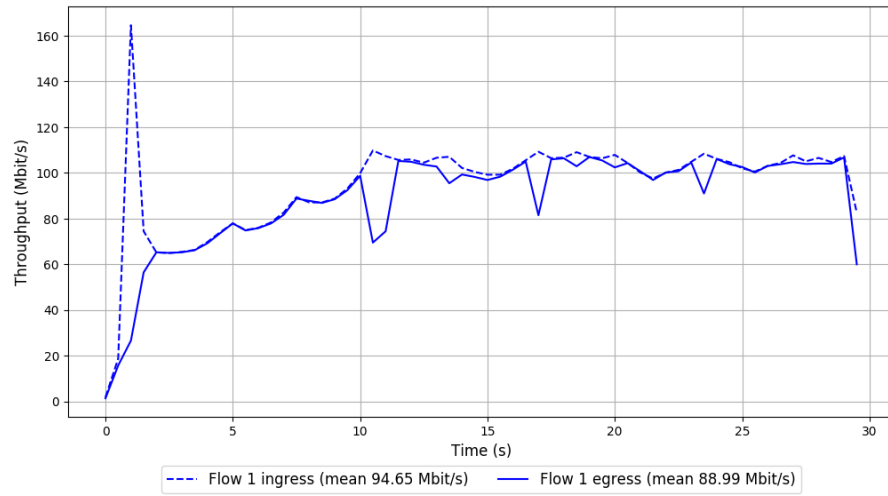
-- Flow 1:

Average throughput: 88.99 Mbit/s

95th percentile per-packet one-way delay: 53.519 ms

Loss rate: 6.30%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-11 12:15:36

End at: 2017-08-11 12:16:06

Below is generated by plot.py at 2017-08-11 14:34:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.07 Mbit/s

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

Loss rate: 5.79%

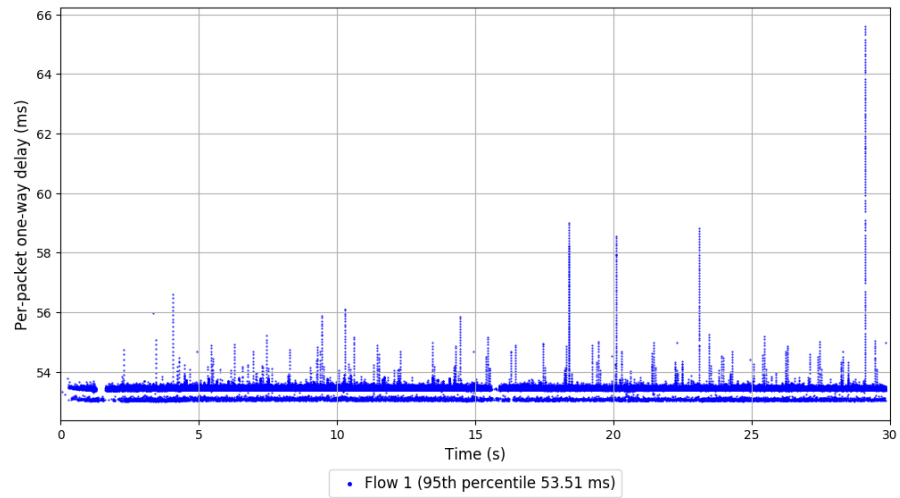
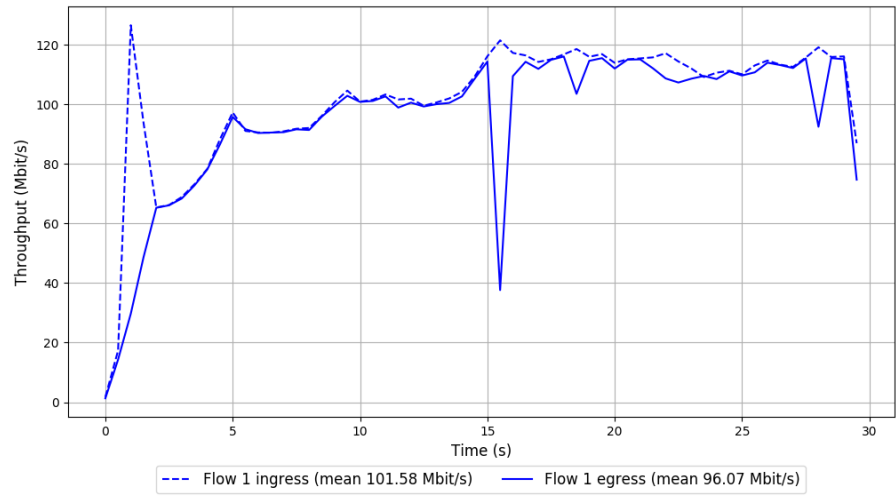
-- Flow 1:

Average throughput: 96.07 Mbit/s

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

Loss rate: 5.79%

Run 10: Report of PCC — Data Link

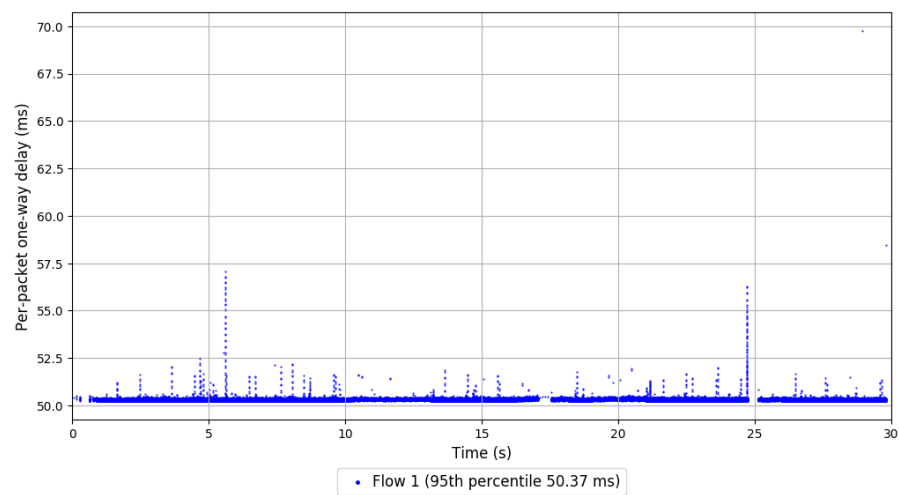
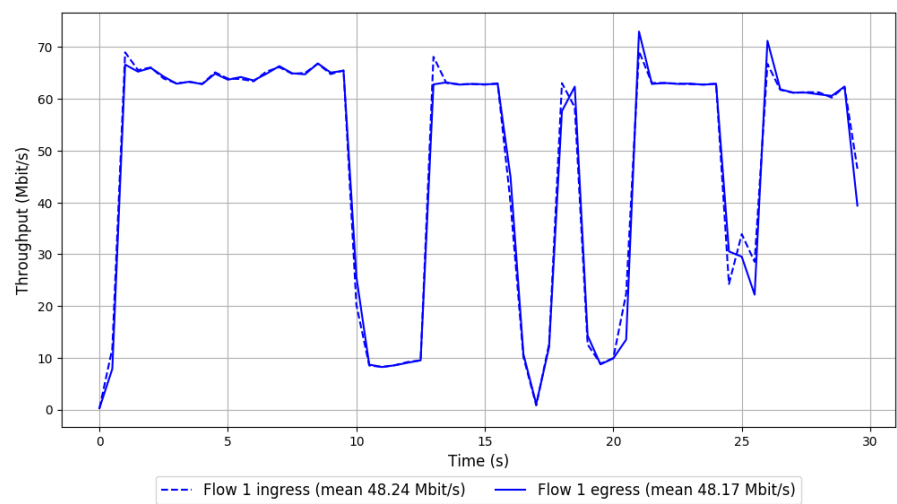


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-11 10:36:26
End at: 2017-08-11 10:36:56

# Below is generated by plot.py at 2017-08-11 14:34:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.17 Mbit/s
95th percentile per-packet one-way delay: 50.365 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 48.17 Mbit/s
95th percentile per-packet one-way delay: 50.365 ms
Loss rate: 0.46%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-11 10:46:47

End at: 2017-08-11 10:47:17

Below is generated by plot.py at 2017-08-11 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.88 Mbit/s

95th percentile per-packet one-way delay: 53.550 ms

Loss rate: 0.39%

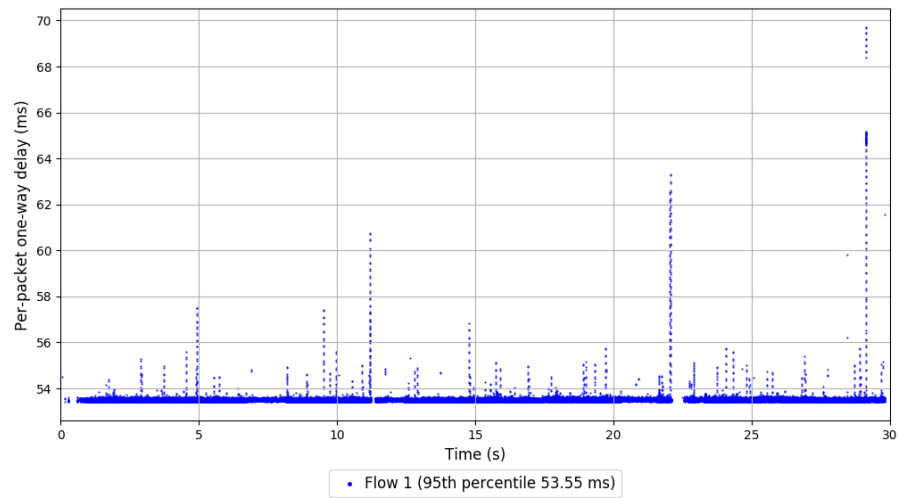
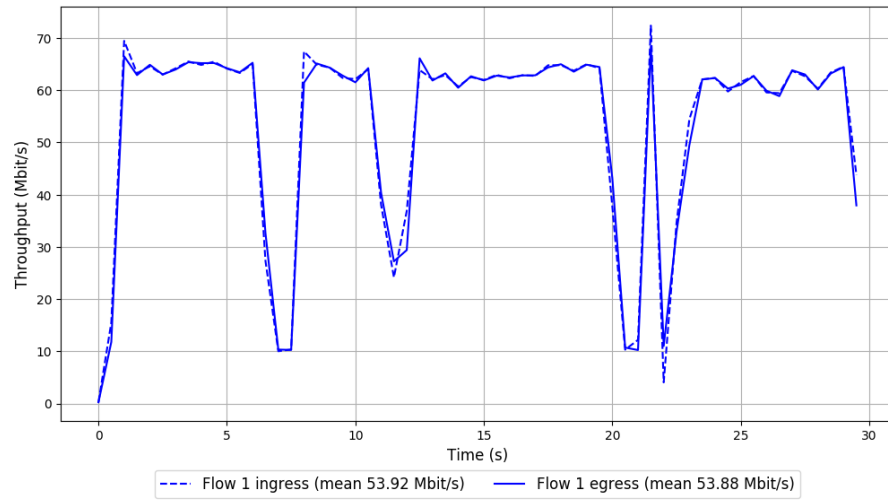
-- Flow 1:

Average throughput: 53.88 Mbit/s

95th percentile per-packet one-way delay: 53.550 ms

Loss rate: 0.39%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-11 10:57:23

End at: 2017-08-11 10:57:53

Below is generated by plot.py at 2017-08-11 14:34:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.85 Mbit/s

95th percentile per-packet one-way delay: 50.460 ms

Loss rate: 0.45%

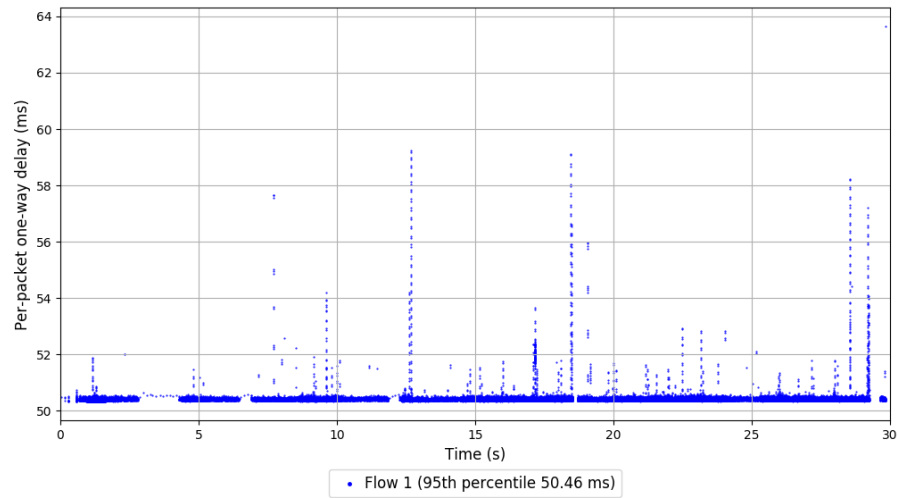
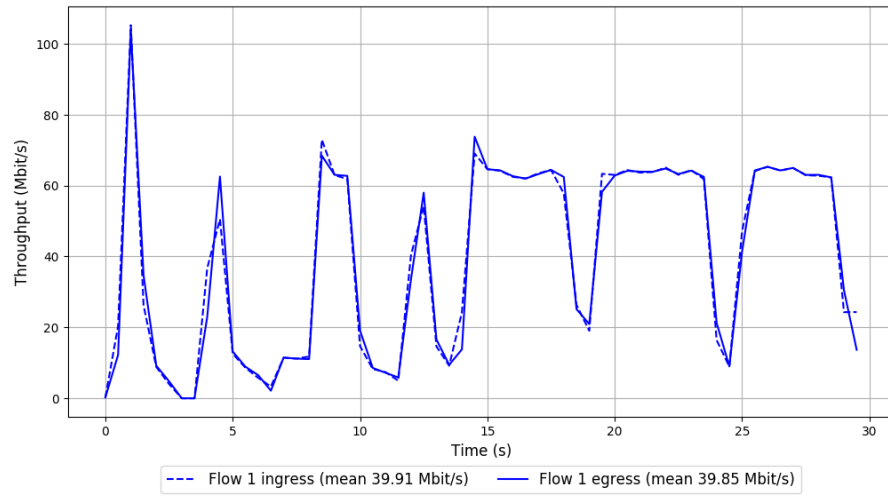
-- Flow 1:

Average throughput: 39.85 Mbit/s

95th percentile per-packet one-way delay: 50.460 ms

Loss rate: 0.45%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2017-08-11 14:34:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.07 Mbit/s

95th percentile per-packet one-way delay: 53.529 ms

Loss rate: 0.57%

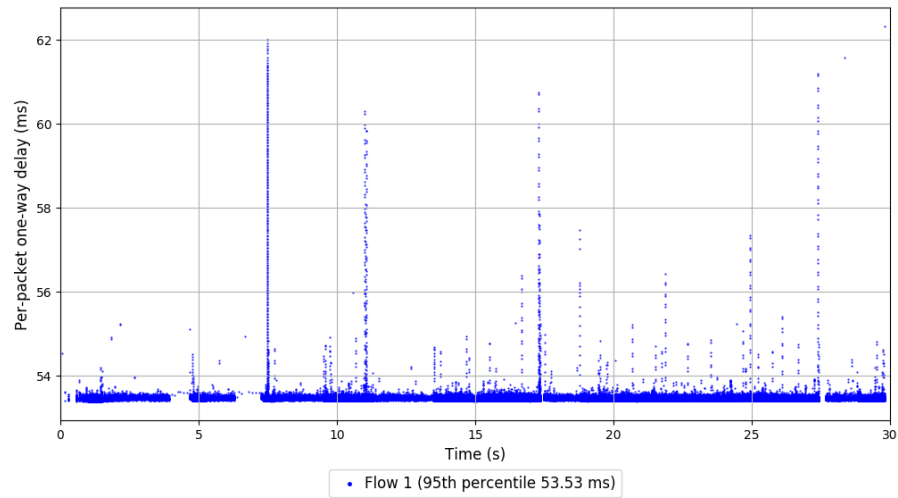
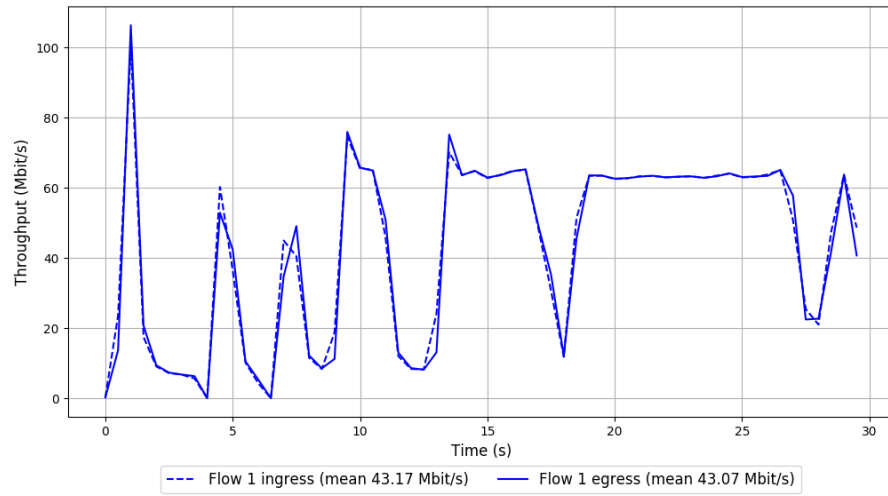
-- Flow 1:

Average throughput: 43.07 Mbit/s

95th percentile per-packet one-way delay: 53.529 ms

Loss rate: 0.57%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2017-08-11 14:34:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.77 Mbit/s

95th percentile per-packet one-way delay: 50.755 ms

Loss rate: 0.40%

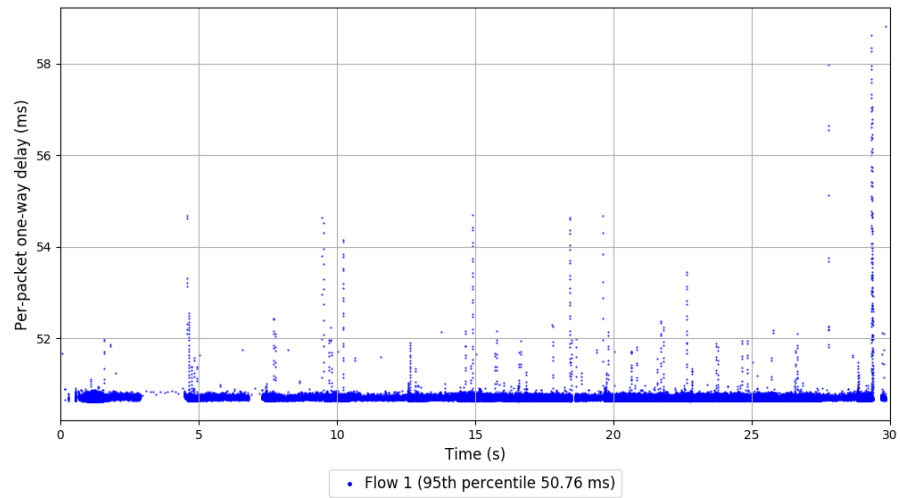
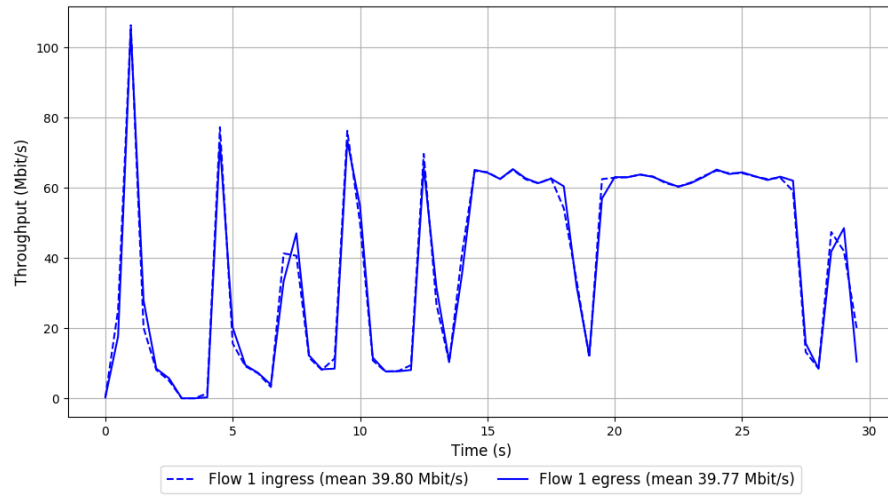
-- Flow 1:

Average throughput: 39.77 Mbit/s

95th percentile per-packet one-way delay: 50.755 ms

Loss rate: 0.40%

Run 5: Report of QUIC Cubic — Data Link

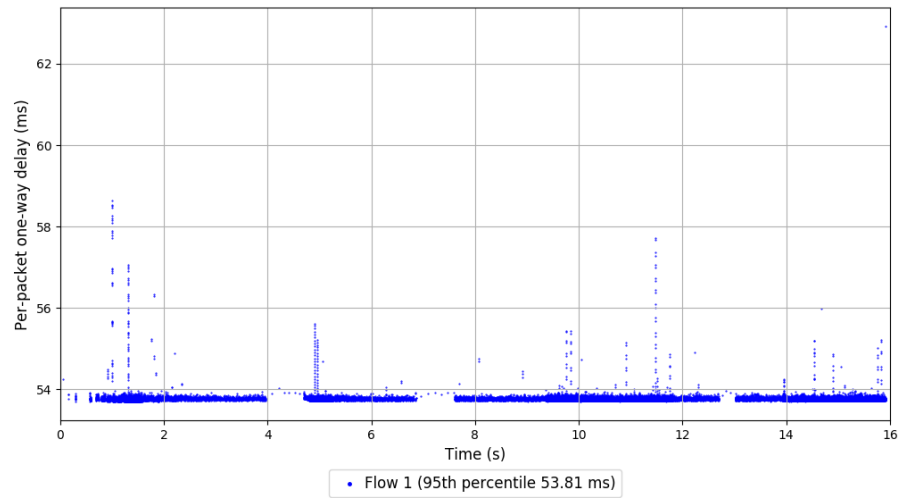
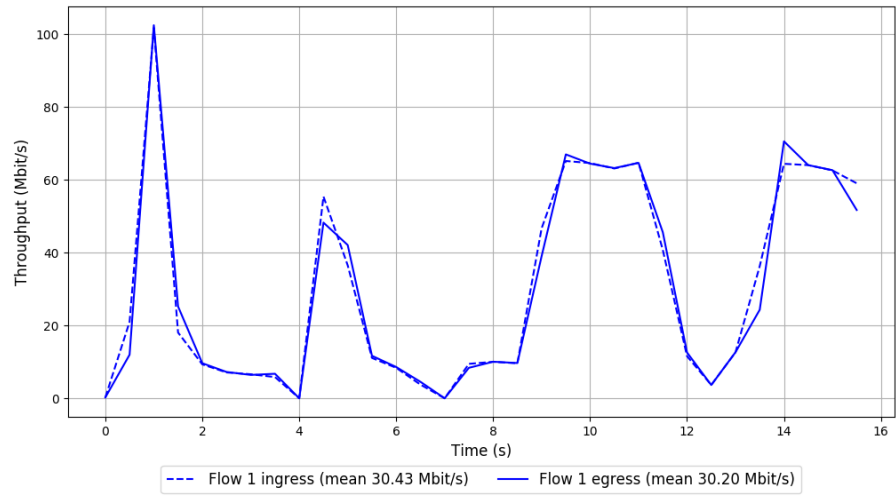


Run 6: Statistics of QUIC Cubic

Start at: 2017-08-11 11:27:37

End at: 2017-08-11 11:28:07

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-11 11:37:19

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

Below is generated by plot.py at 2017-08-11 14:34:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.18 Mbit/s

95th percentile per-packet one-way delay: 50.035 ms

Loss rate: 0.36%

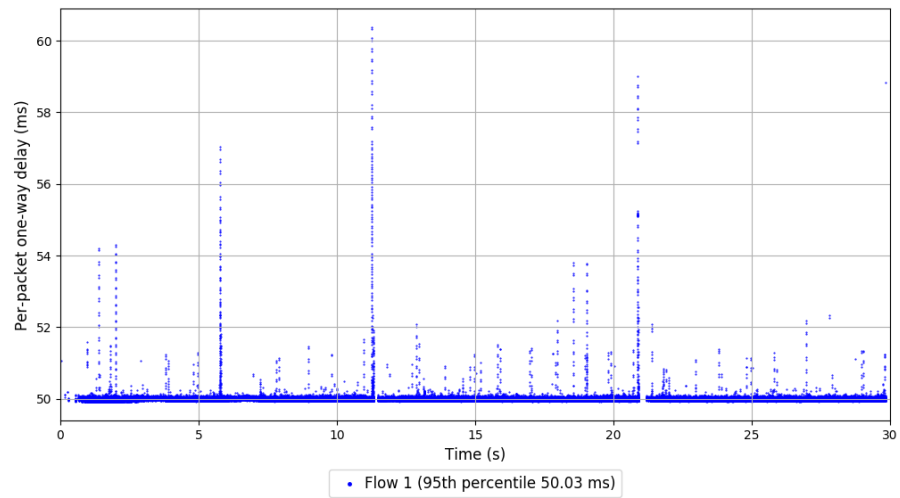
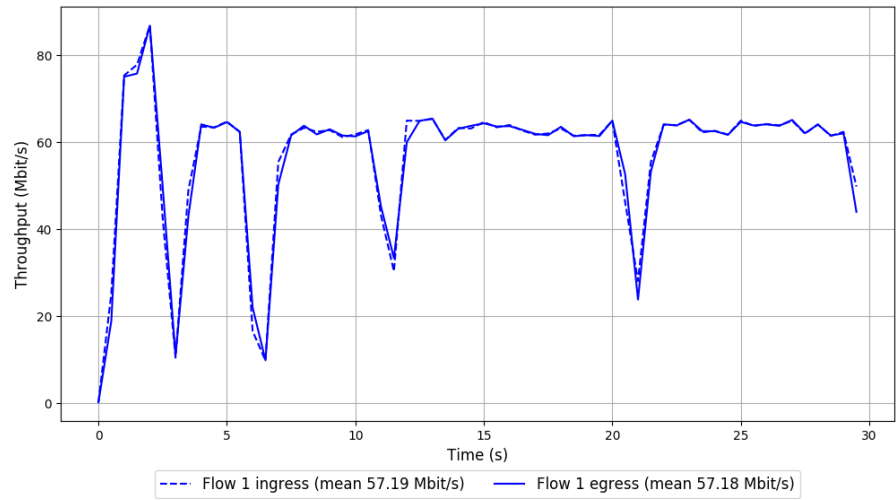
-- Flow 1:

Average throughput: 57.18 Mbit/s

95th percentile per-packet one-way delay: 50.035 ms

Loss rate: 0.36%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2017-08-11 14:34:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.65 Mbit/s

95th percentile per-packet one-way delay: 50.664 ms

Loss rate: 0.40%

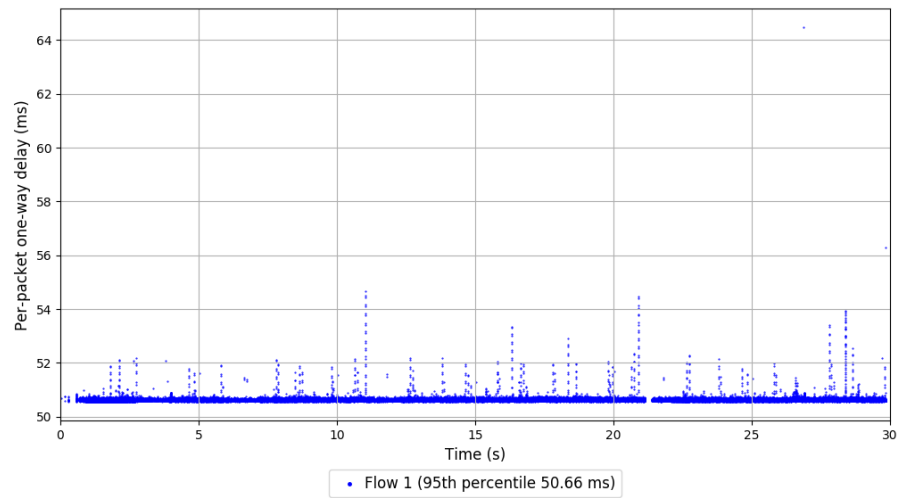
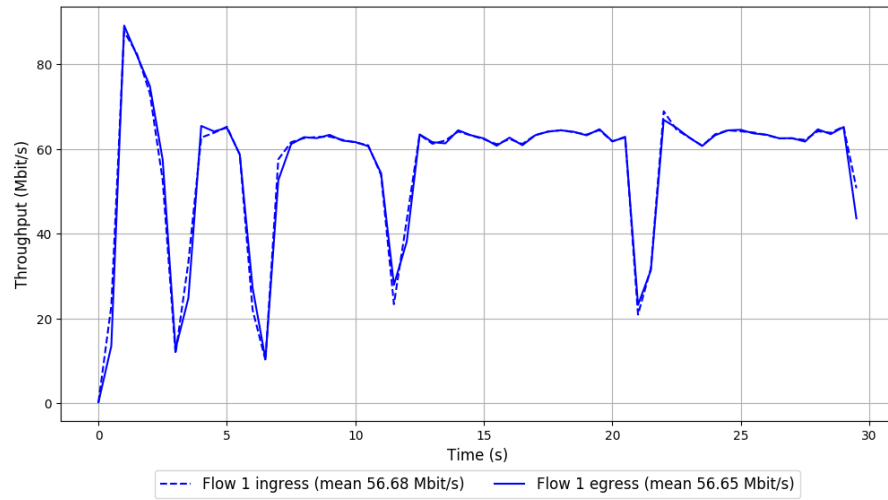
-- Flow 1:

Average throughput: 56.65 Mbit/s

95th percentile per-packet one-way delay: 50.664 ms

Loss rate: 0.40%

Run 8: Report of QUIC Cubic — Data Link

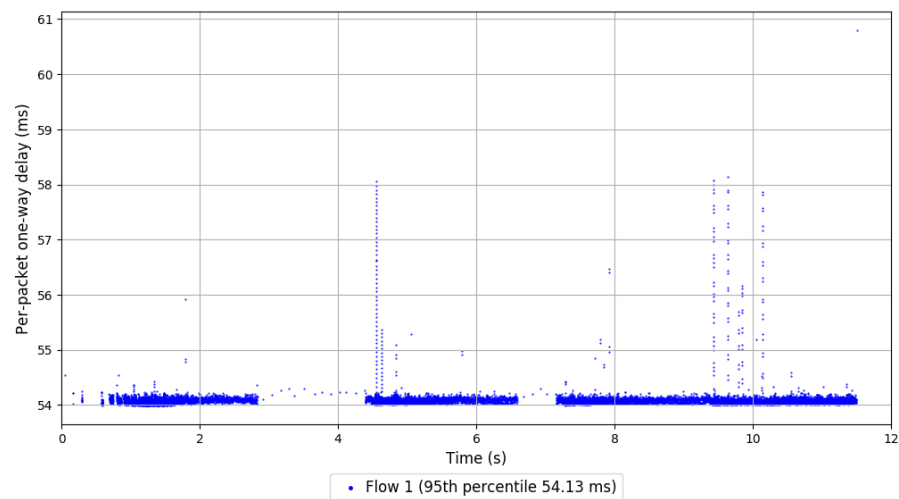
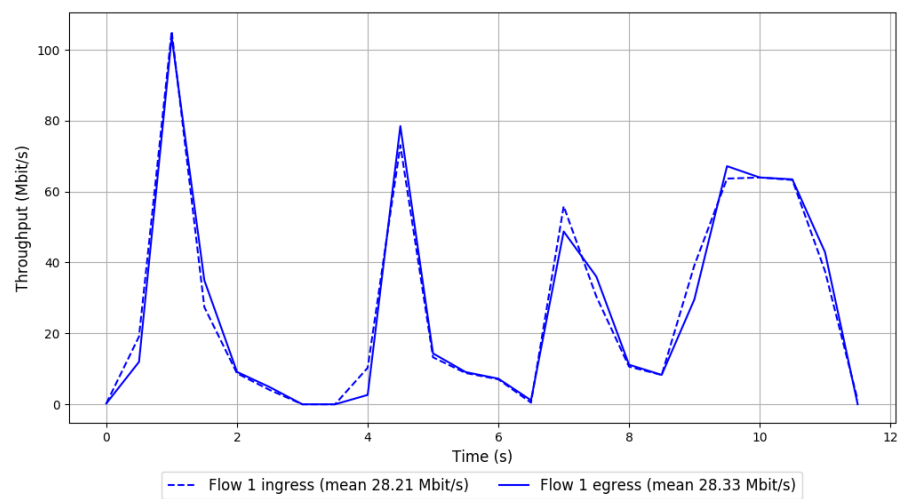


Run 9: Statistics of QUIC Cubic

Start at: 2017-08-11 11:58:10

End at: 2017-08-11 11:58:40

Run 9: Report of QUIC Cubic — Data Link

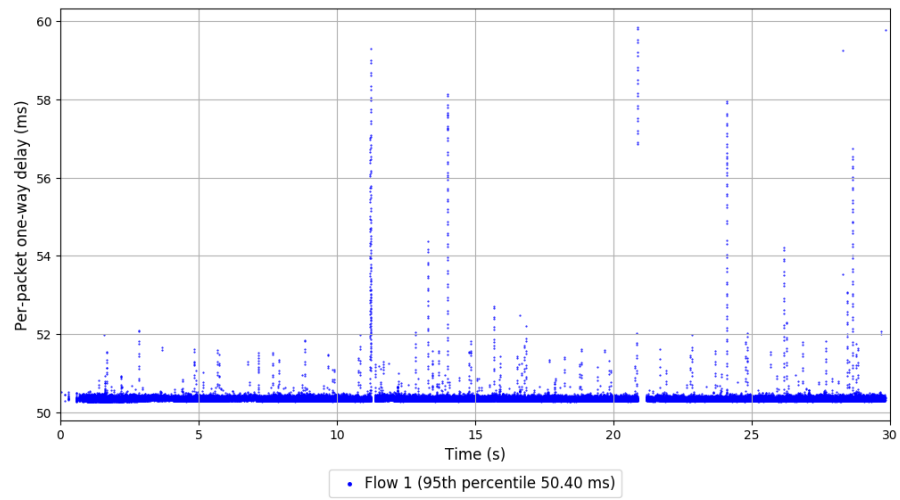
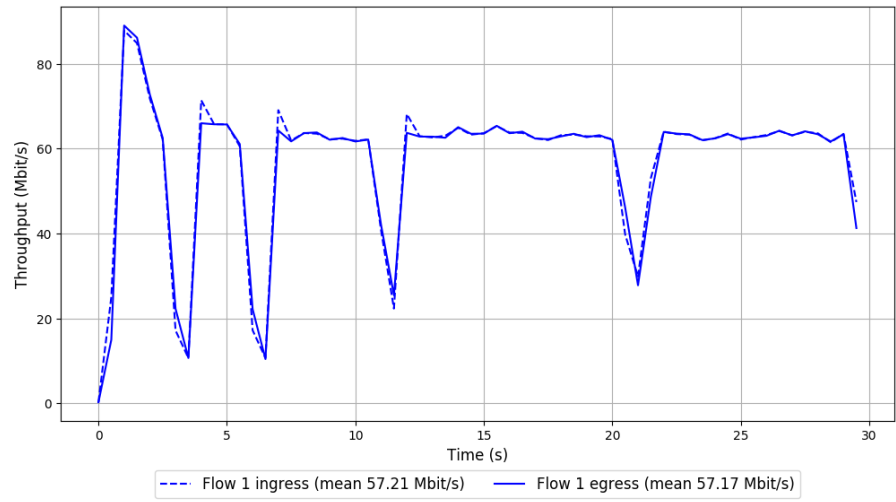


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-11 12:07:47
End at: 2017-08-11 12:08:17

# Below is generated by plot.py at 2017-08-11 14:35:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.17 Mbit/s
95th percentile per-packet one-way delay: 50.395 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 57.17 Mbit/s
95th percentile per-packet one-way delay: 50.395 ms
Loss rate: 0.37%
```

Run 10: Report of QUIC Cubic — Data Link

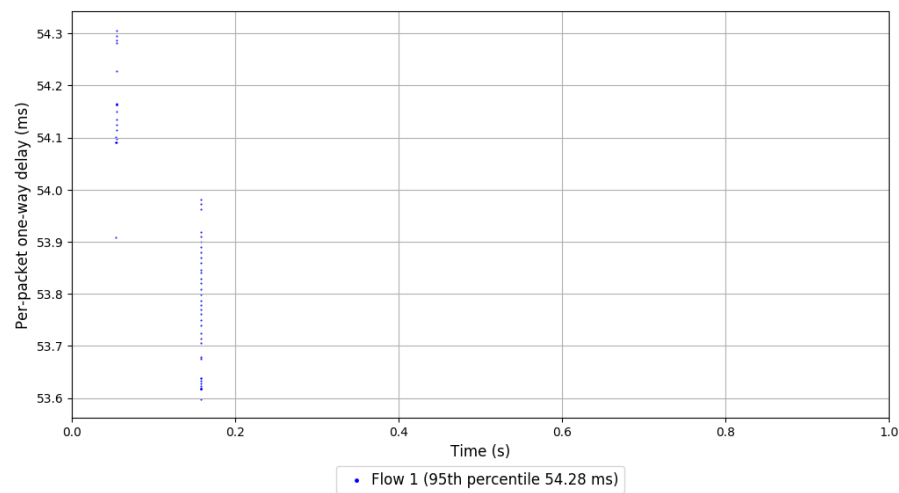
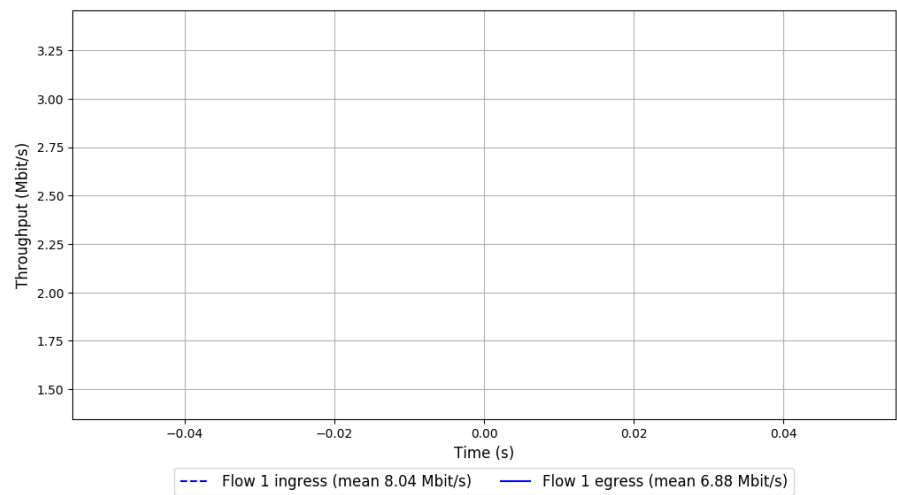


Run 1: Statistics of Saturator

Start at: 2017-08-11 10:43:18

End at: 2017-08-11 10:43:48

Run 1: Report of Saturator — Data Link

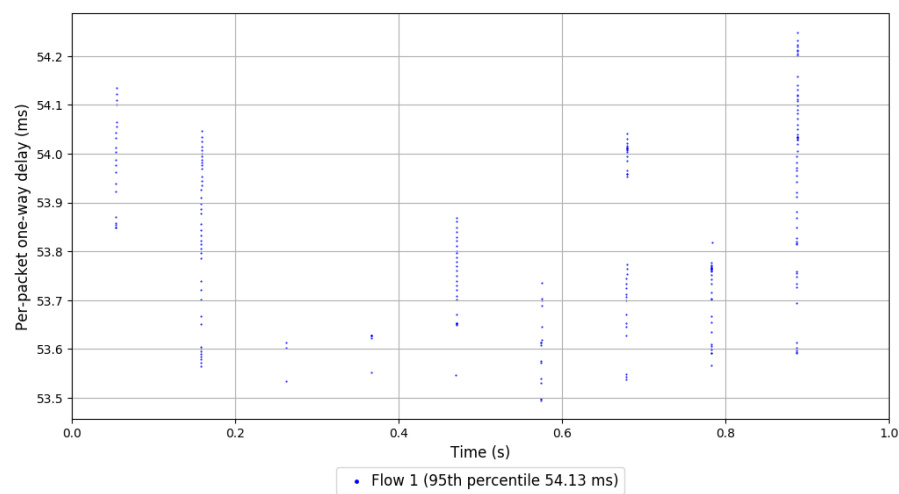
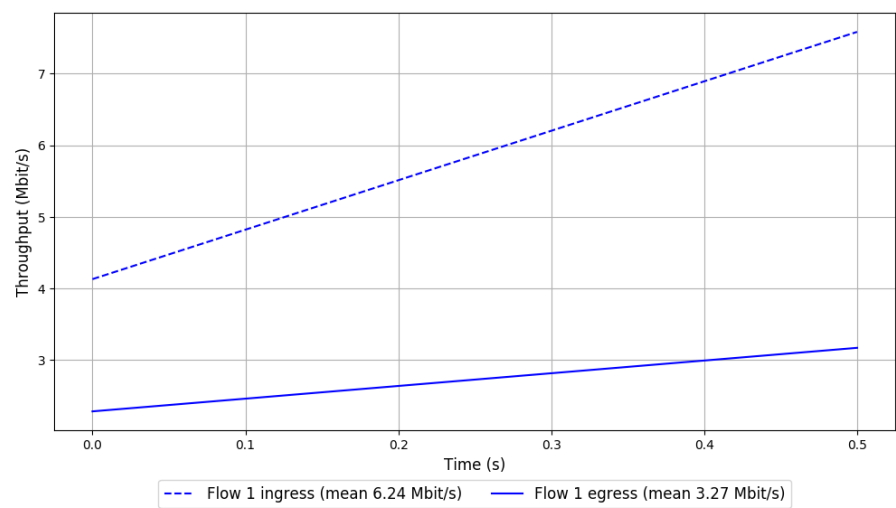


Run 2: Statistics of Saturator

Start at: 2017-08-11 10:53:51

End at: 2017-08-11 10:54:21

Run 2: Report of Saturator — Data Link



Run 3: Statistics of Saturator

Start at: 2017-08-11 11:04:05

End at: 2017-08-11 11:04:35

Below is generated by plot.py at 2017-08-11 14:35:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.50 Mbit/s

95th percentile per-packet one-way delay: 54.745 ms

Loss rate: 49.44%

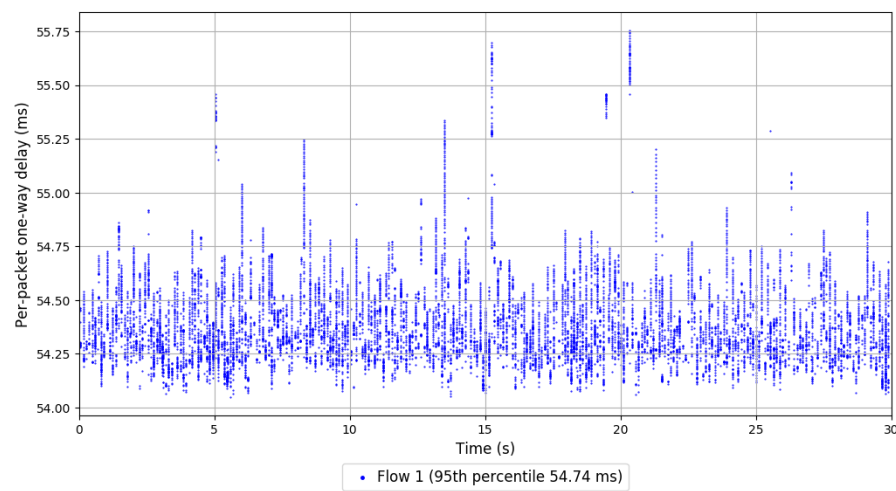
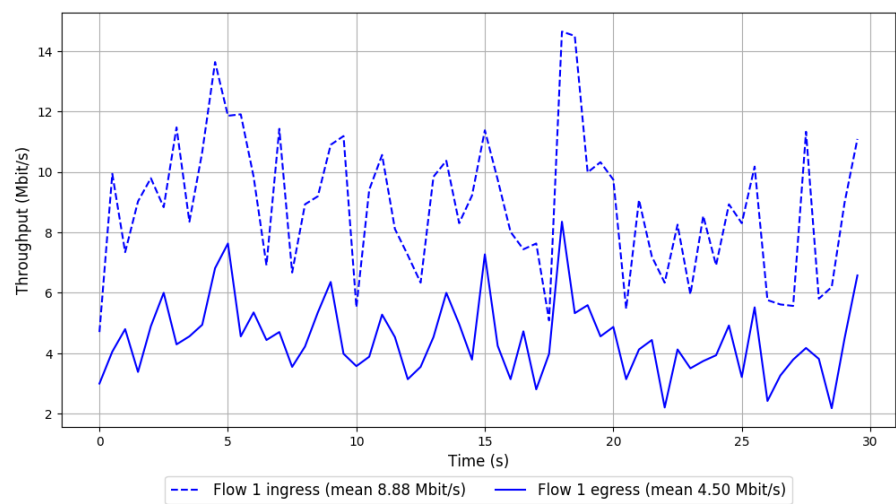
-- Flow 1:

Average throughput: 4.50 Mbit/s

95th percentile per-packet one-way delay: 54.745 ms

Loss rate: 49.44%

Run 3: Report of Saturator — Data Link

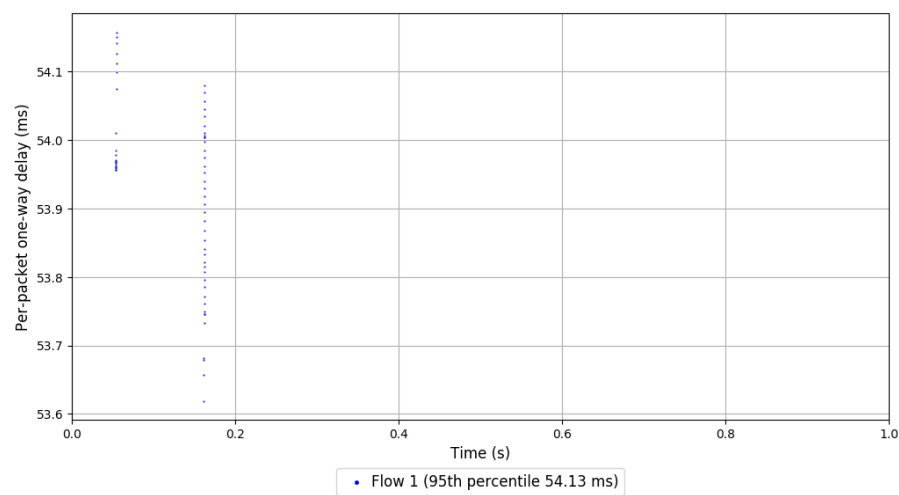
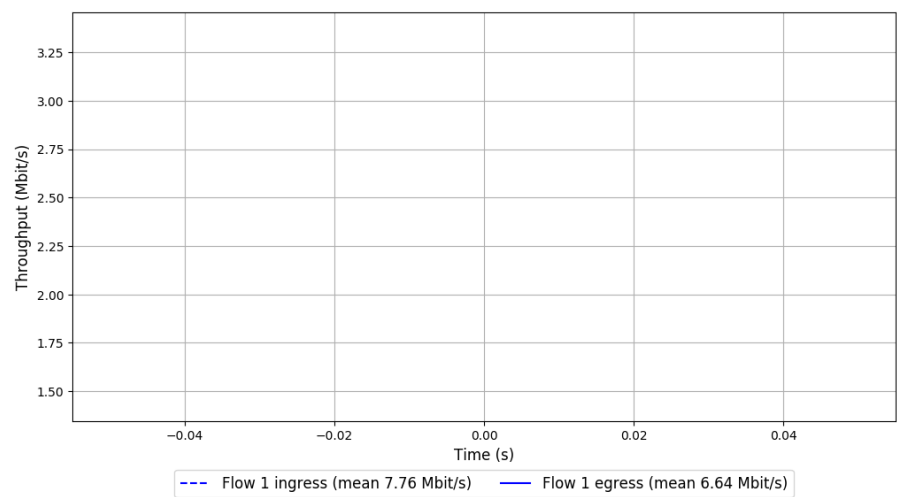


Run 4: Statistics of Saturator

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

End at: 2017-08-11 11:14:18

Run 4: Report of Saturator — Data Link

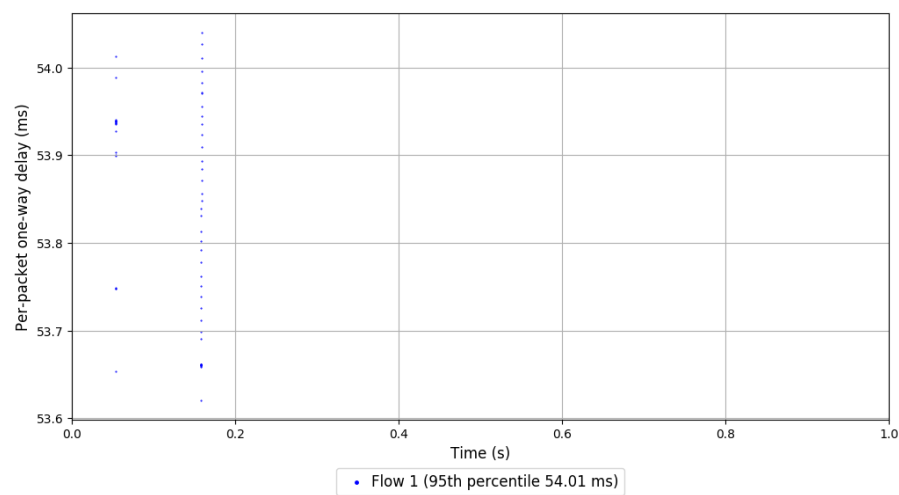
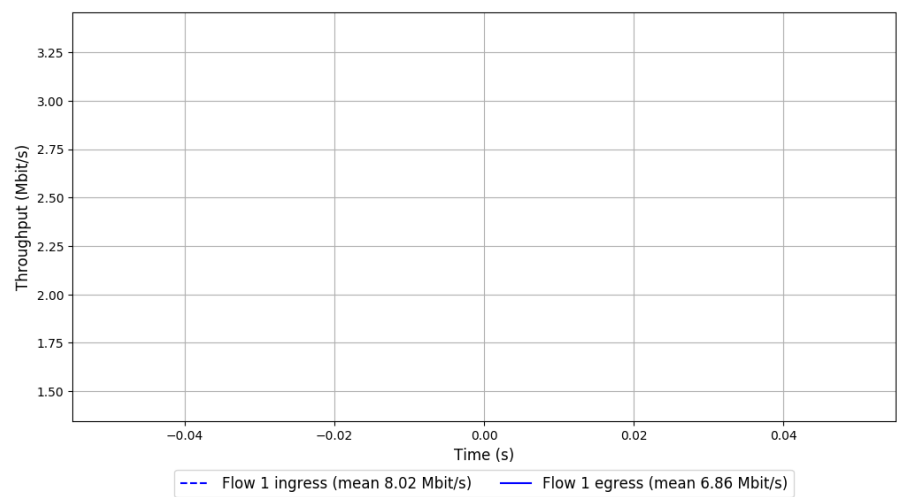


Run 5: Statistics of Saturator

Start at: 2017-08-11 11:23:58

End at: 2017-08-11 11:24:28

Run 5: Report of Saturator — Data Link

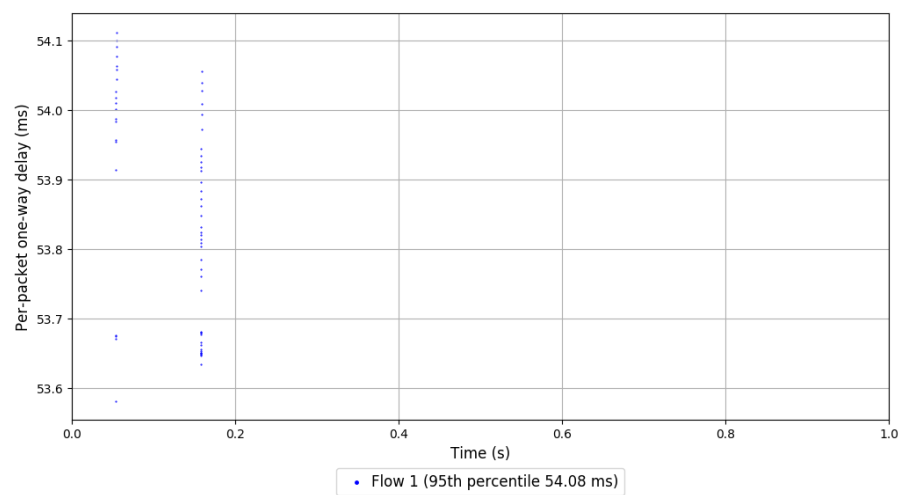
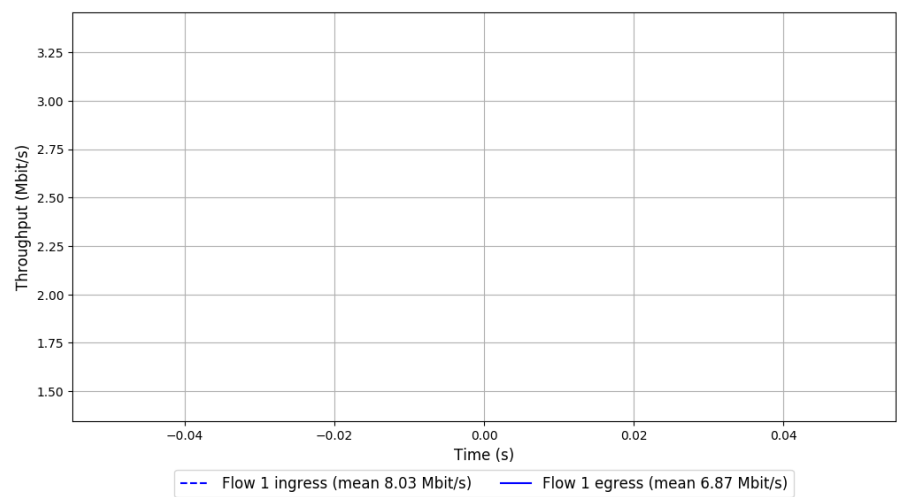


Run 6: Statistics of Saturator

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

End at: 2017-08-11 11:34:29

Run 6: Report of Saturator — Data Link

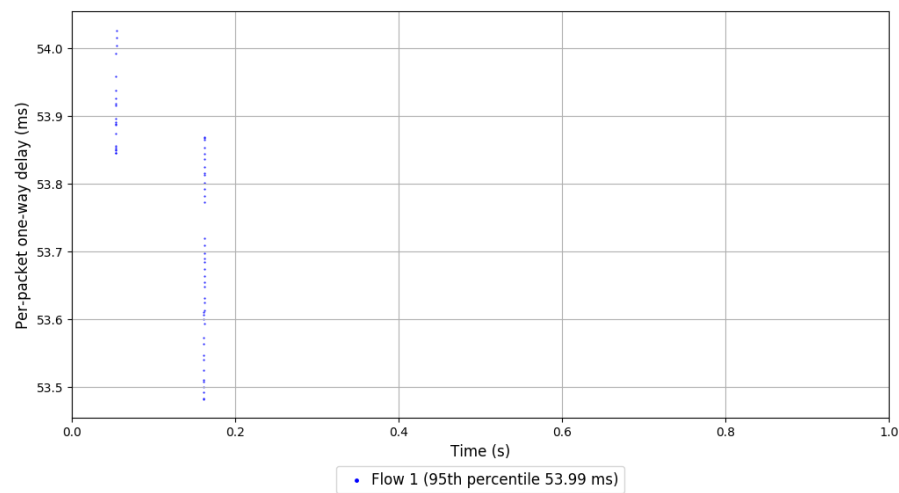
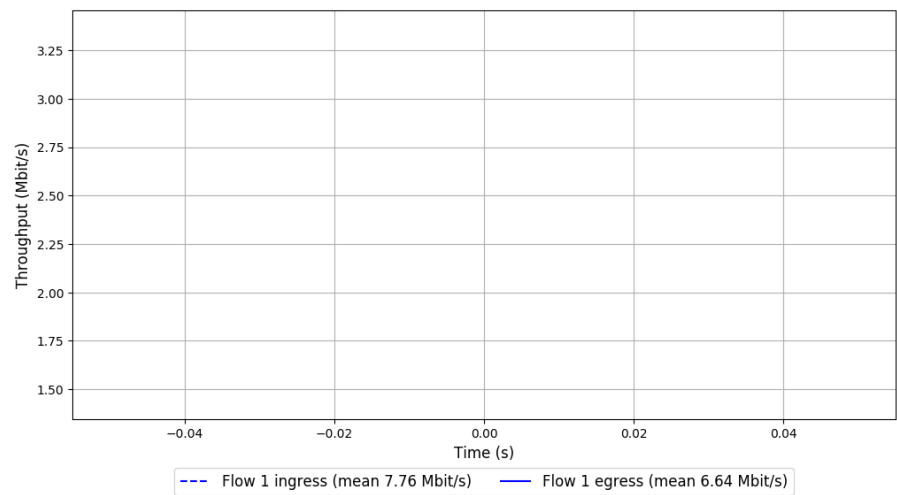


Run 7: Statistics of Saturator

Start at: 2017-08-11 11:44:10

End at: 2017-08-11 11:44:40

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-11 11:54:36

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

Below is generated by plot.py at 2017-08-11 14:35:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.28 Mbit/s

95th percentile per-packet one-way delay: 54.124 ms

Loss rate: 0.36%

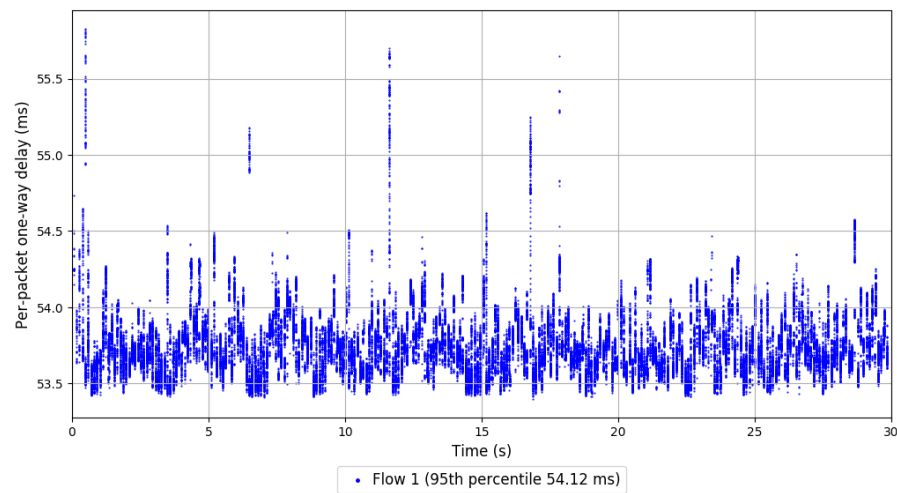
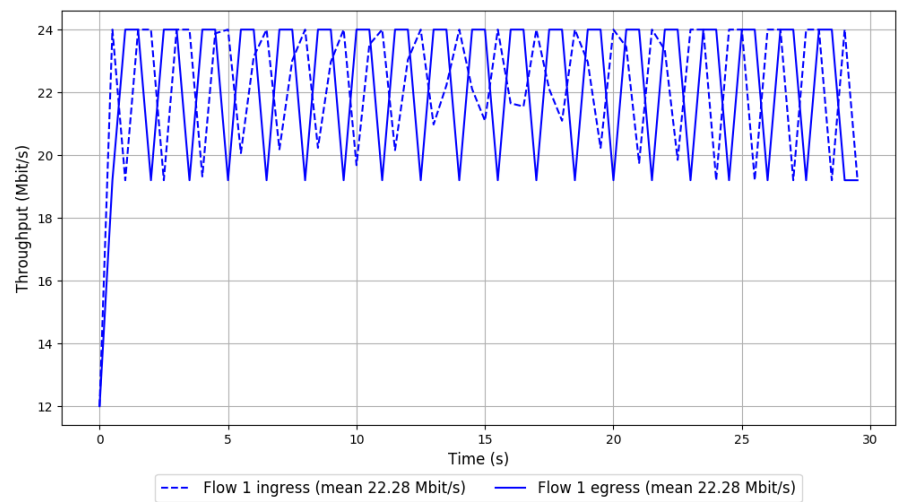
-- Flow 1:

Average throughput: 22.28 Mbit/s

95th percentile per-packet one-way delay: 54.124 ms

Loss rate: 0.36%

Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

Start at: 2017-08-11 12:04:27

End at: 2017-08-11 12:04:57

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.76 Mbit/s

95th percentile per-packet one-way delay: 54.352 ms

Loss rate: 0.50%

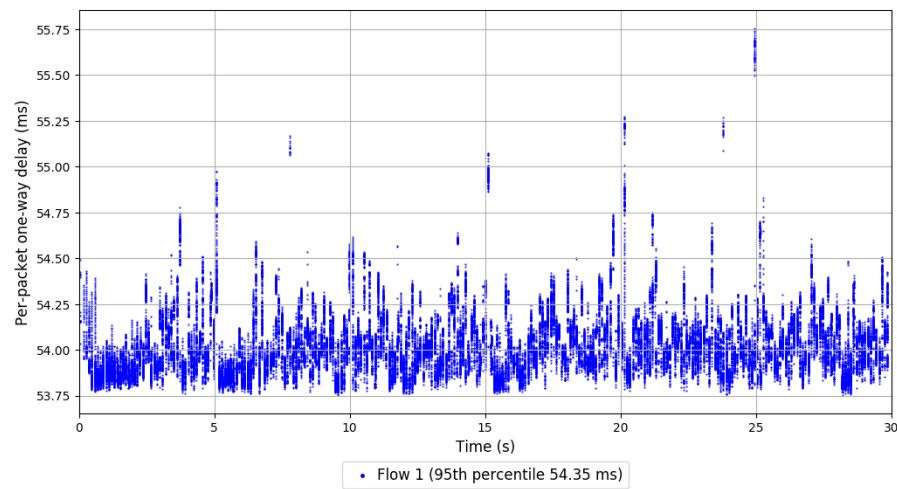
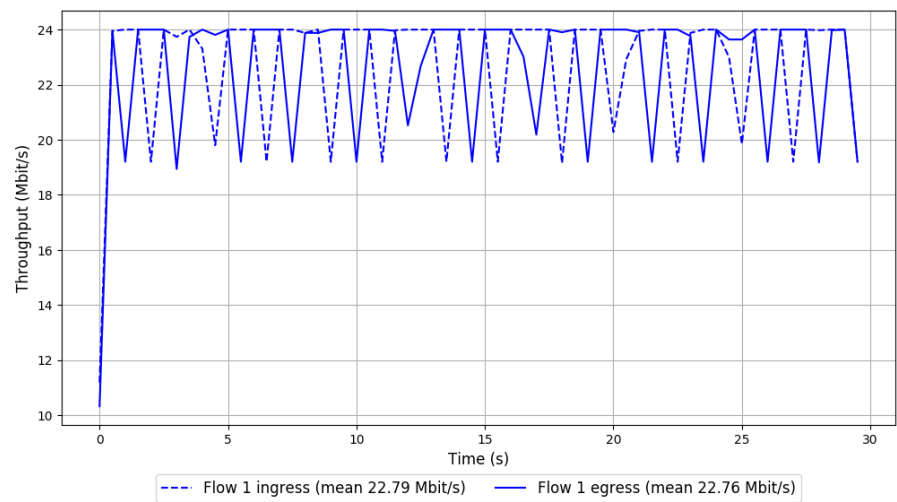
-- Flow 1:

Average throughput: 22.76 Mbit/s

95th percentile per-packet one-way delay: 54.352 ms

Loss rate: 0.50%

Run 9: Report of Saturator — Data Link



Run 10: Statistics of Saturator

Start at: 2017-08-11 12:14:15

End at: 2017-08-11 12:14:45

Below is generated by plot.py at 2017-08-11 14:35:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.04 Mbit/s

95th percentile per-packet one-way delay: 54.317 ms

Loss rate: 0.90%

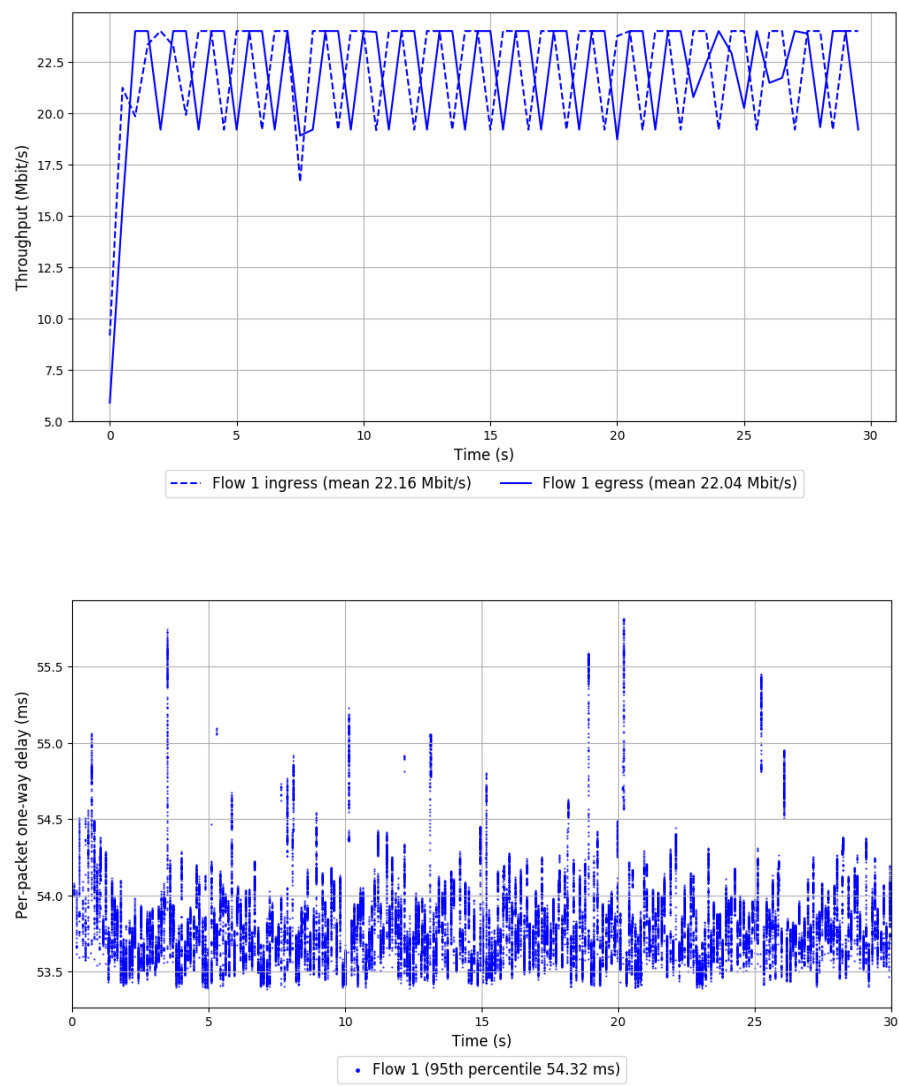
-- Flow 1:

Average throughput: 22.04 Mbit/s

95th percentile per-packet one-way delay: 54.317 ms

Loss rate: 0.90%

Run 10: Report of Saturator — Data Link

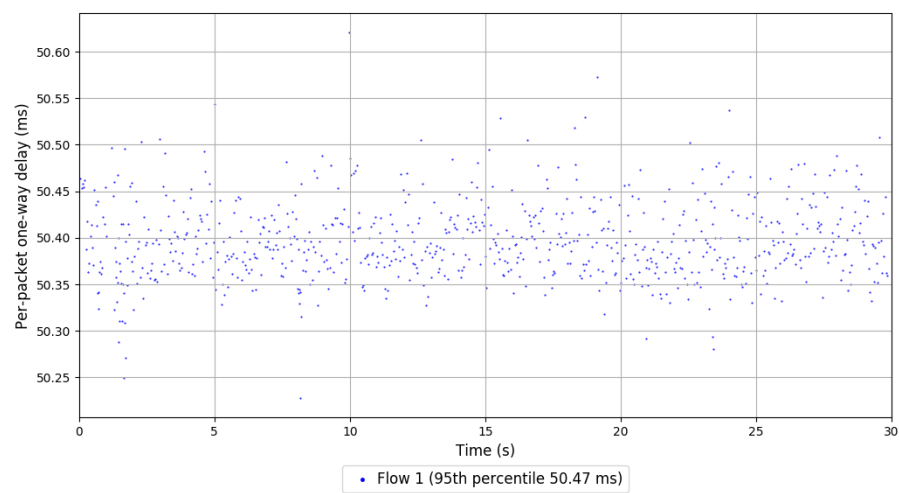
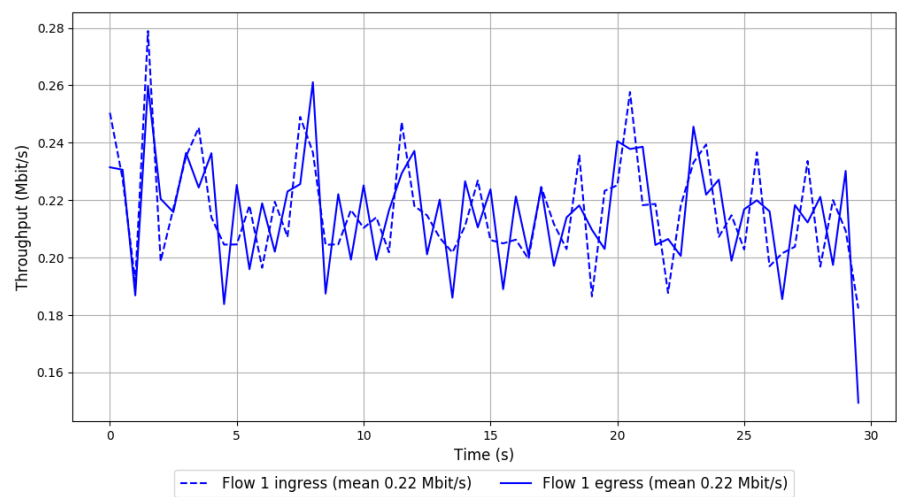


```
Run 1: Statistics of SCReAM

Start at: 2017-08-11 10:35:49
End at: 2017-08-11 10:36:19

# Below is generated by plot.py at 2017-08-11 14:35:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.472 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.472 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

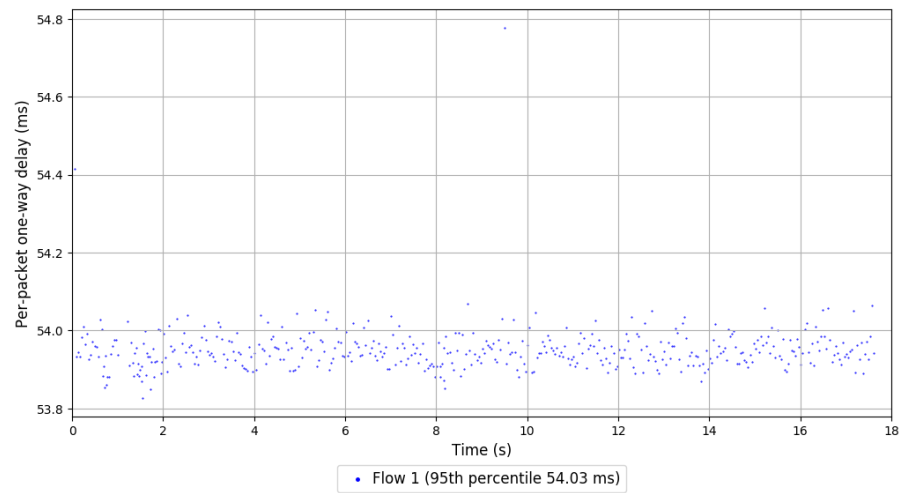
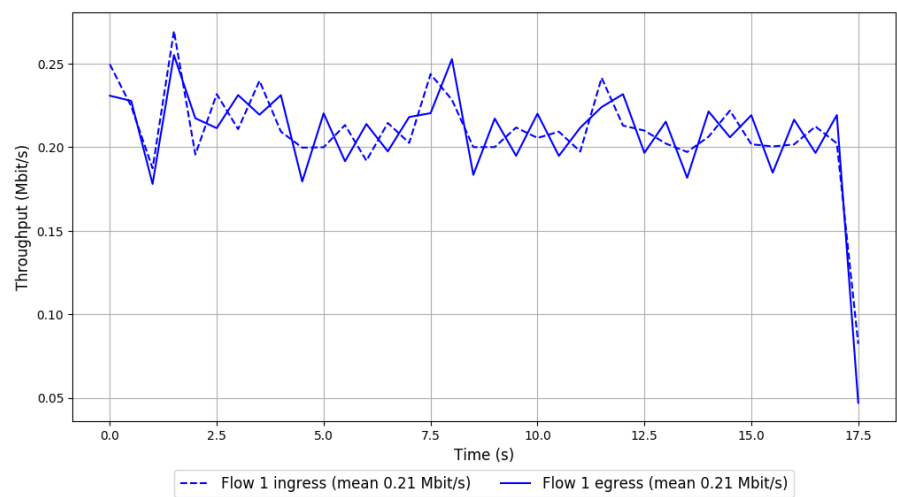


Run 2: Statistics of SReAM

Start at: 2017-08-11 10:46:10

End at: 2017-08-11 10:46:40

Run 2: Report of SReAM — Data Link

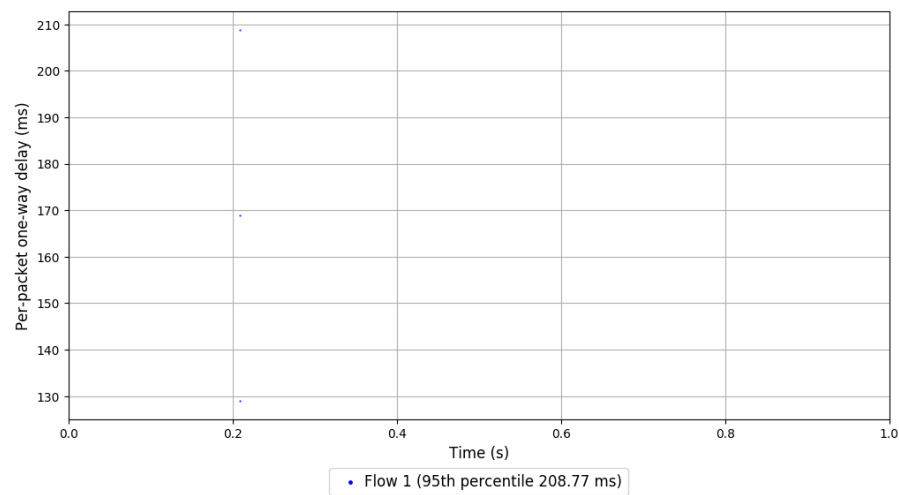
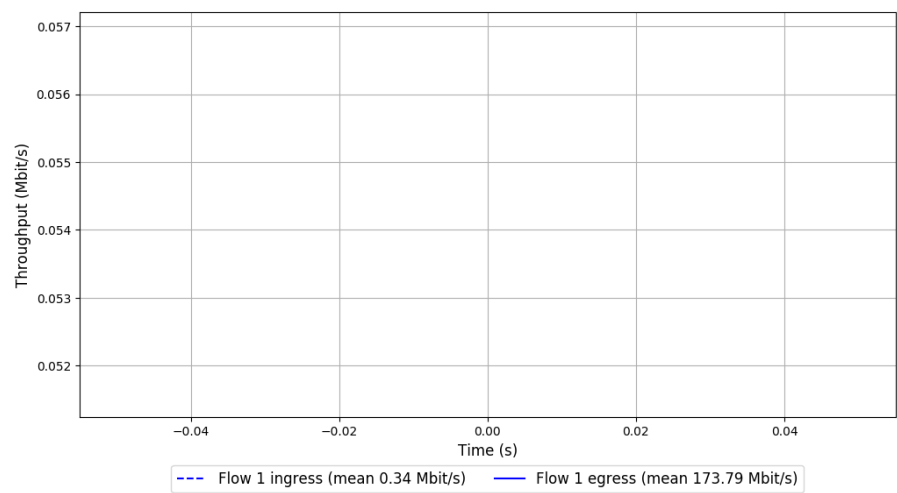


Run 3: Statistics of SCReAM

Start at: 2017-08-11 10:56:46

End at: 2017-08-11 10:57:16

Run 3: Report of SReAM — Data Link

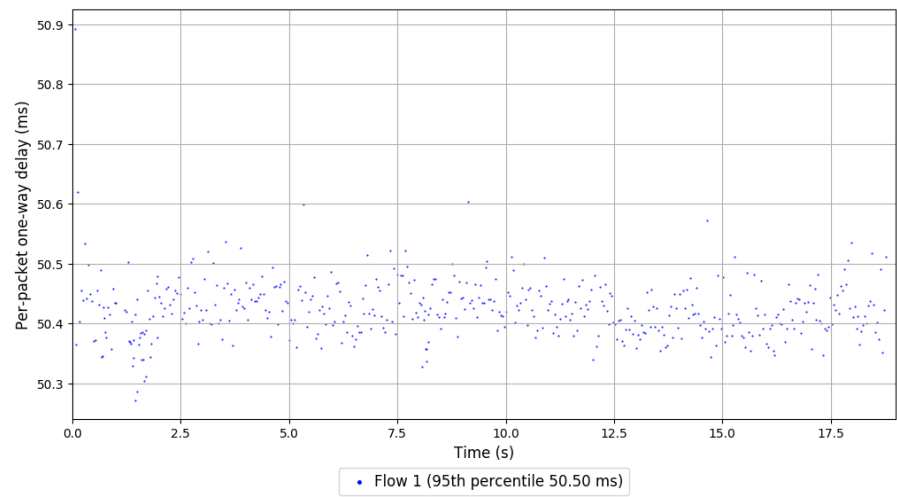
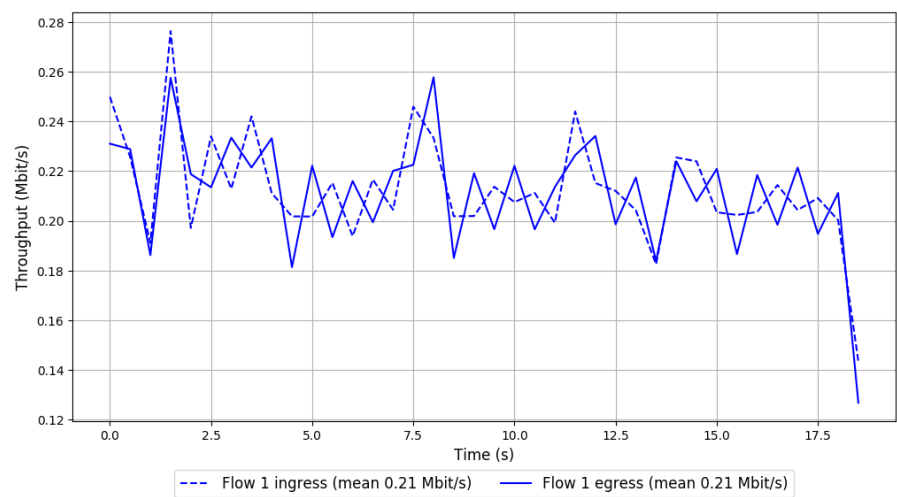


Run 4: Statistics of SCReAM

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

End at: 2017-08-11 11:07:22

Run 4: Report of SReAM — Data Link

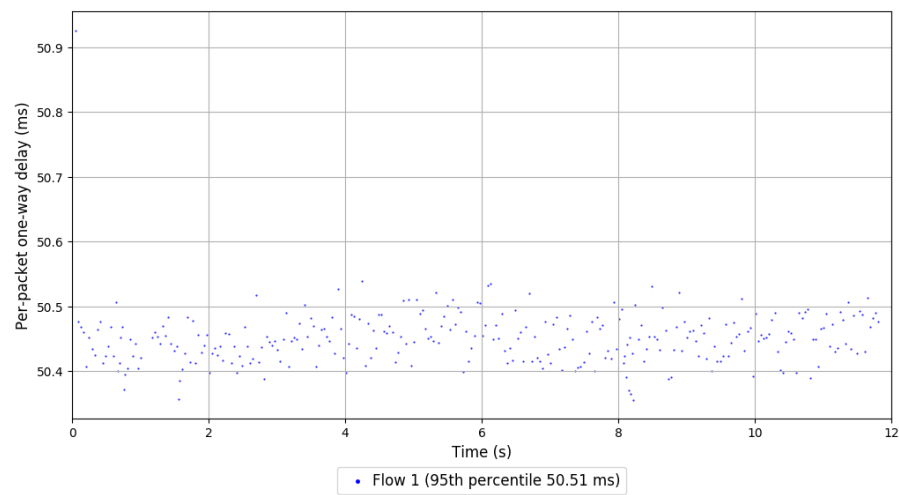
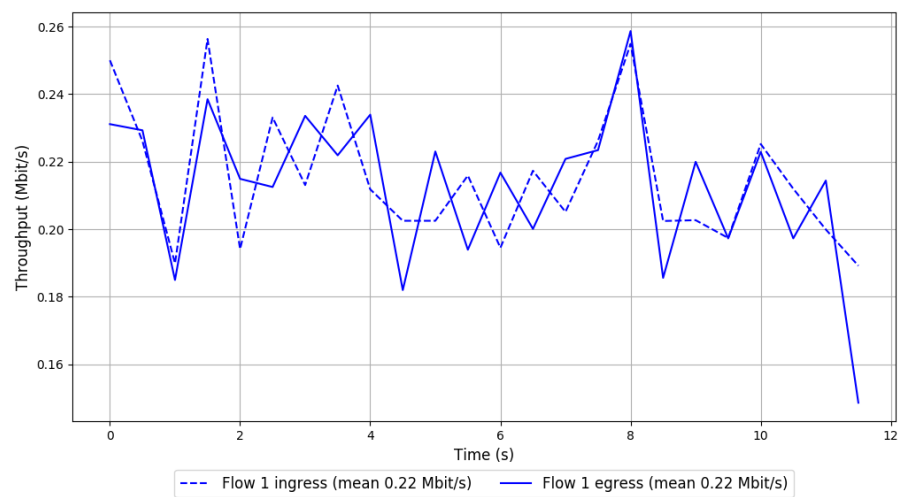


Run 5: Statistics of SReAM

Start at: 2017-08-11 11:16:35

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

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-11 11:27:00

End at: 2017-08-11 11:27:30

Below is generated by plot.py at 2017-08-11 14:35:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 54.309 ms

Loss rate: 0.37%

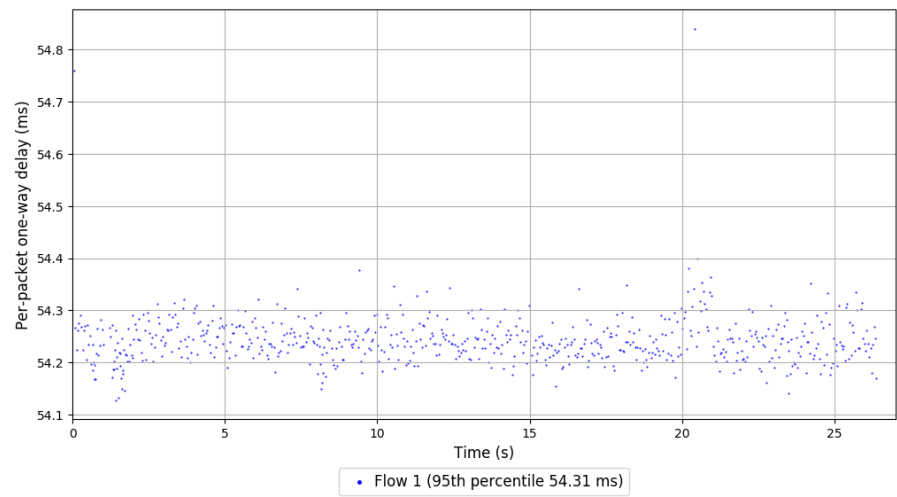
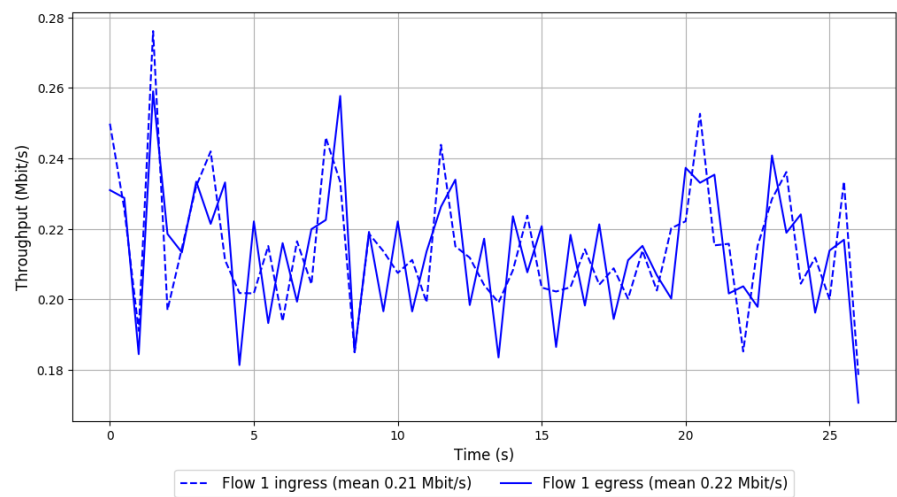
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 54.309 ms

Loss rate: 0.37%

Run 6: Report of SReAM — Data Link

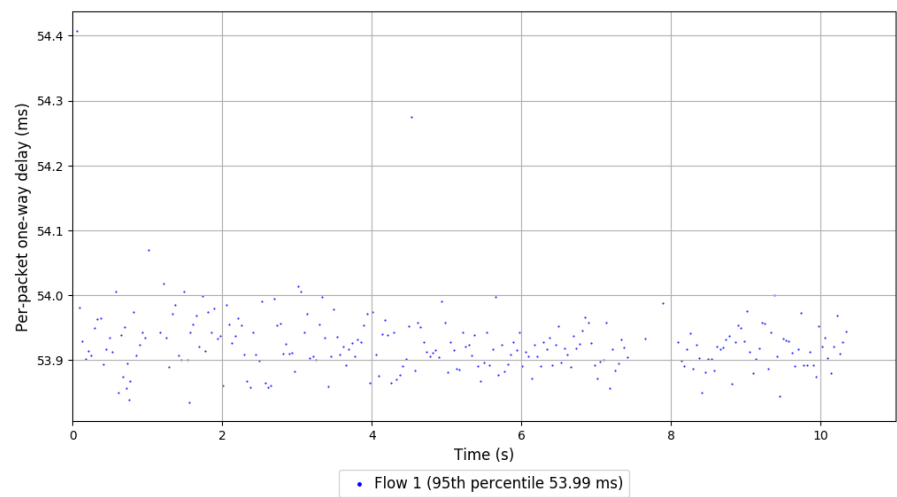
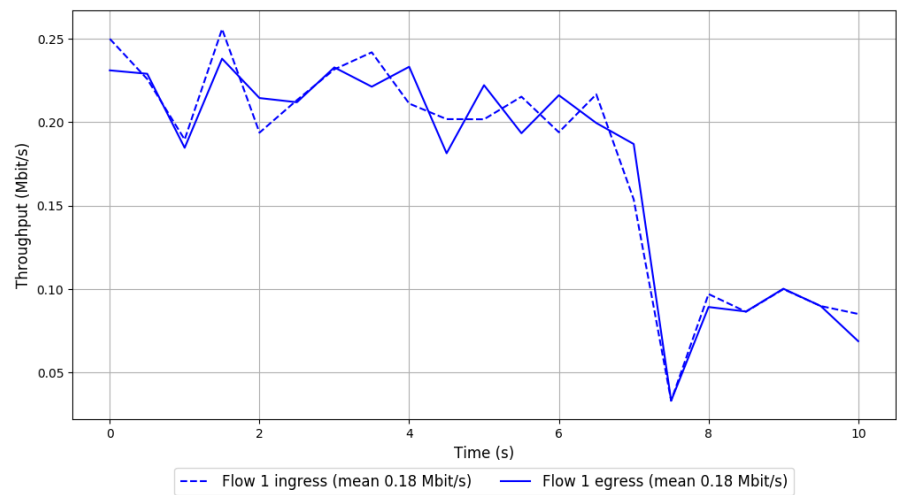


Run 7: Statistics of SCReAM

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

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

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

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

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

Below is generated by plot.py at 2017-08-11 14:35:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.265 ms

Loss rate: 0.25%

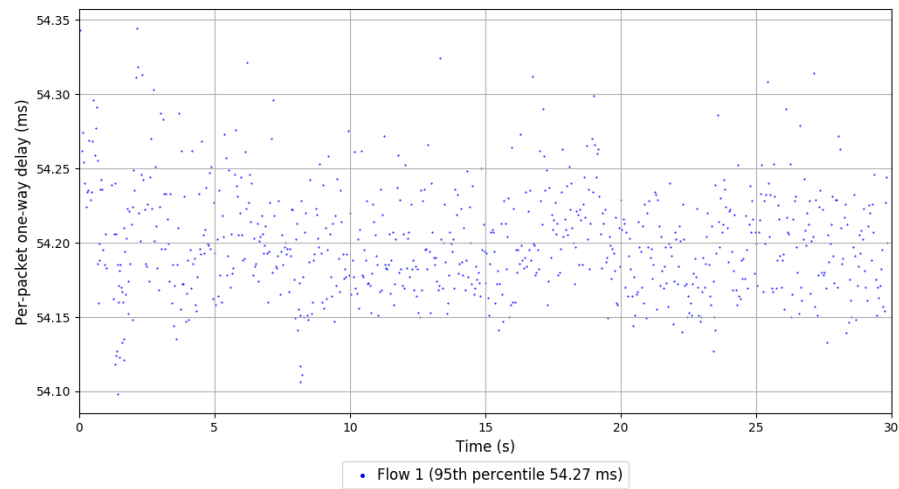
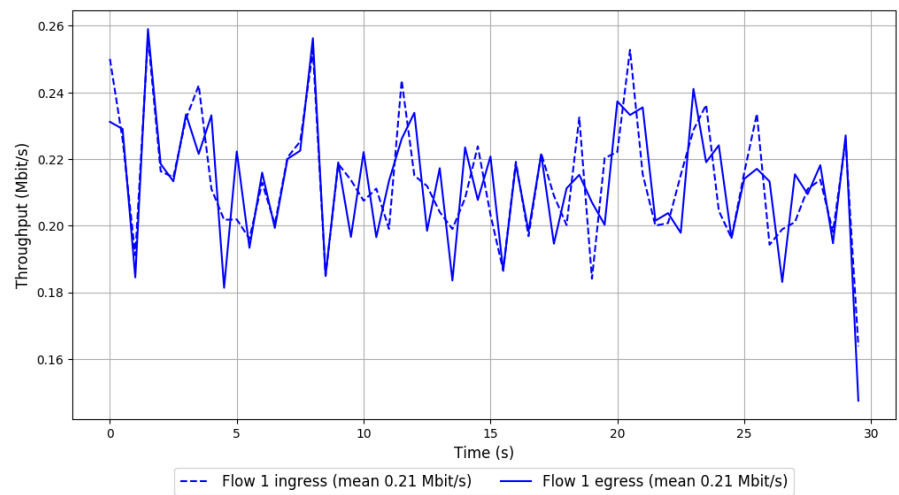
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.265 ms

Loss rate: 0.25%

Run 8: Report of SReAM — Data Link

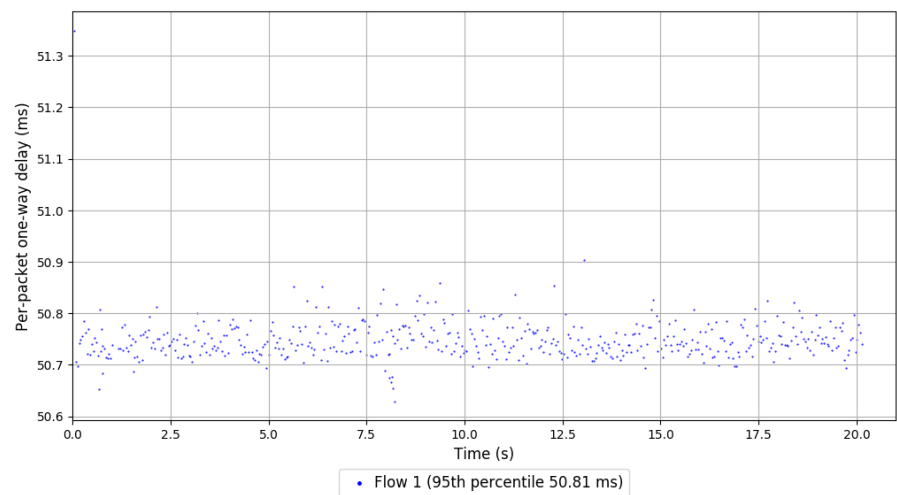
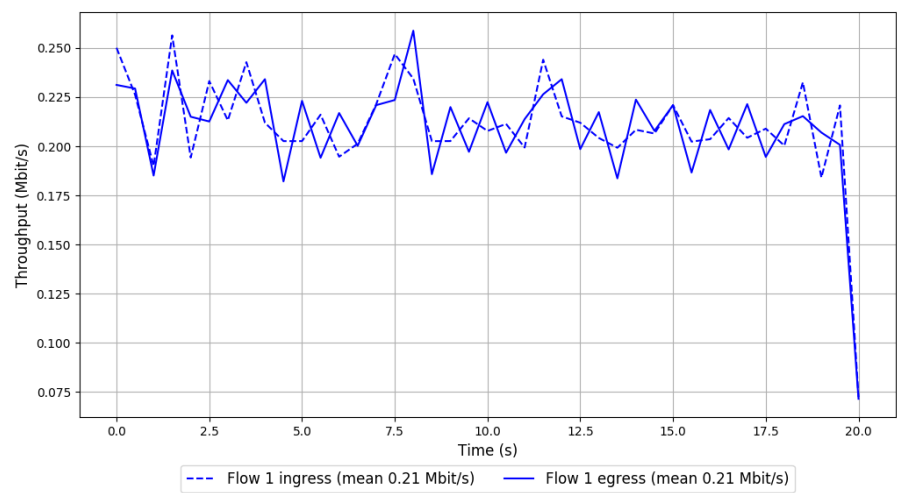


Run 9: Statistics of SCReAM

Start at: 2017-08-11 11:57:33

End at: 2017-08-11 11:58:03

Run 9: Report of SReAM — Data Link

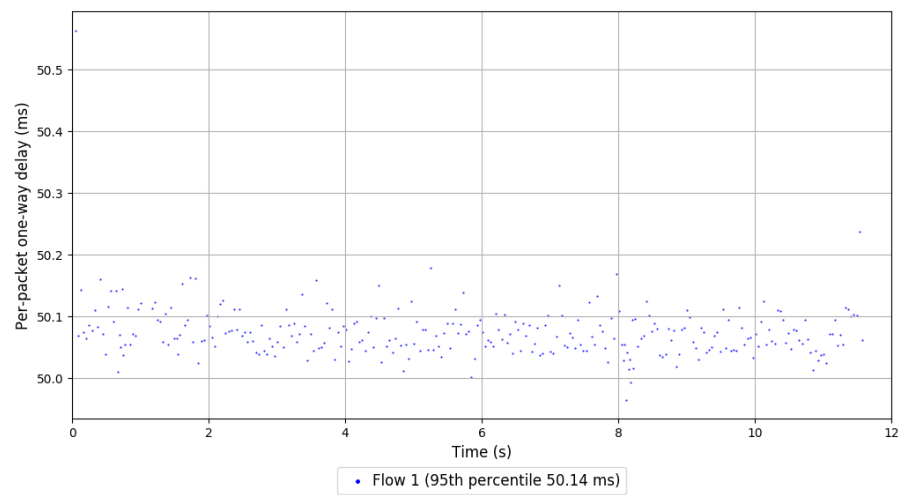
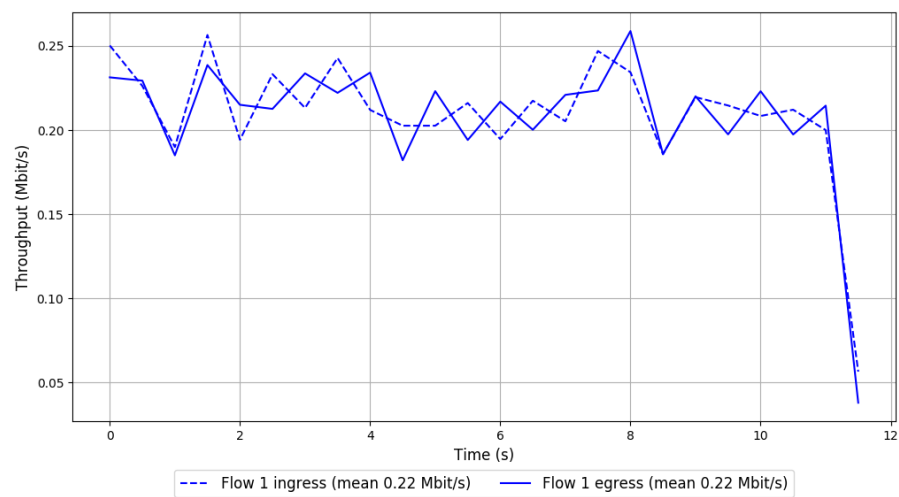


Run 10: Statistics of SReAM

Start at: 2017-08-11 12:07:10

End at: 2017-08-11 12:07:40

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-08-11 10:37:06

End at: 2017-08-11 10:37:36

Below is generated by plot.py at 2017-08-11 14:35:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 53.902 ms

Loss rate: 4.91%

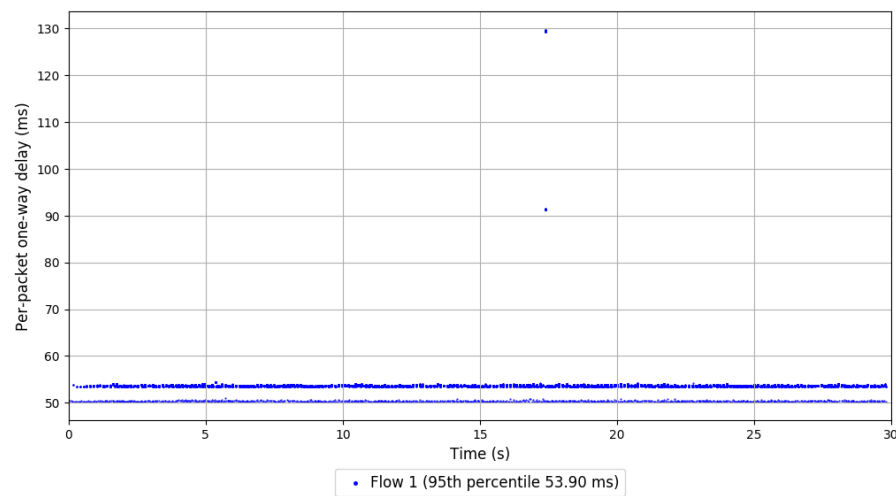
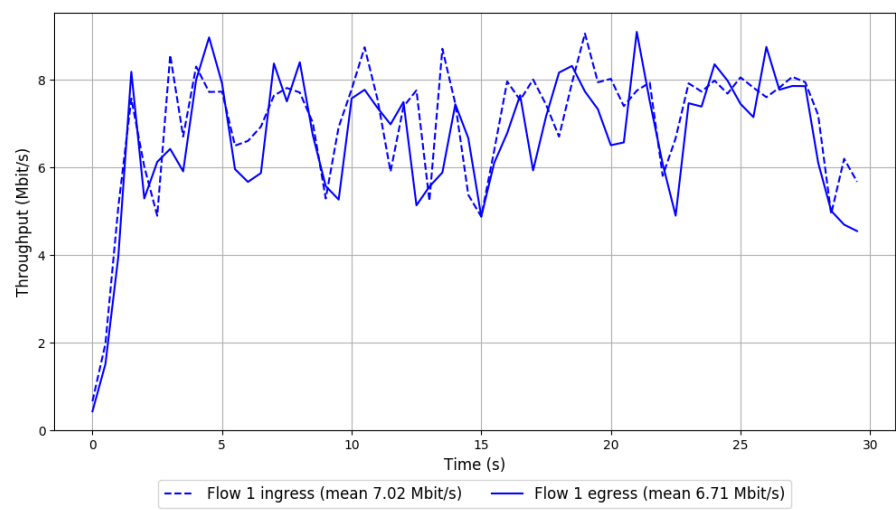
-- Flow 1:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 53.902 ms

Loss rate: 4.91%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-11 10:47:27

End at: 2017-08-11 10:47:57

Below is generated by plot.py at 2017-08-11 14:35:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.97 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 17.33%

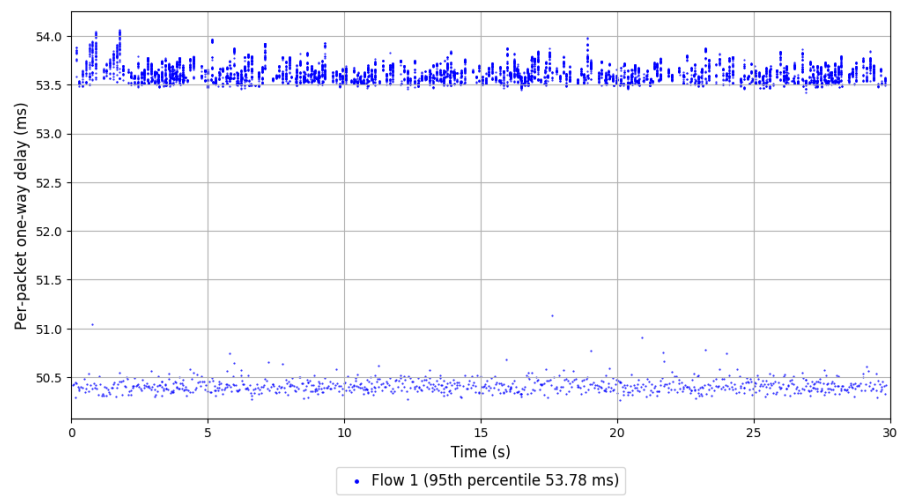
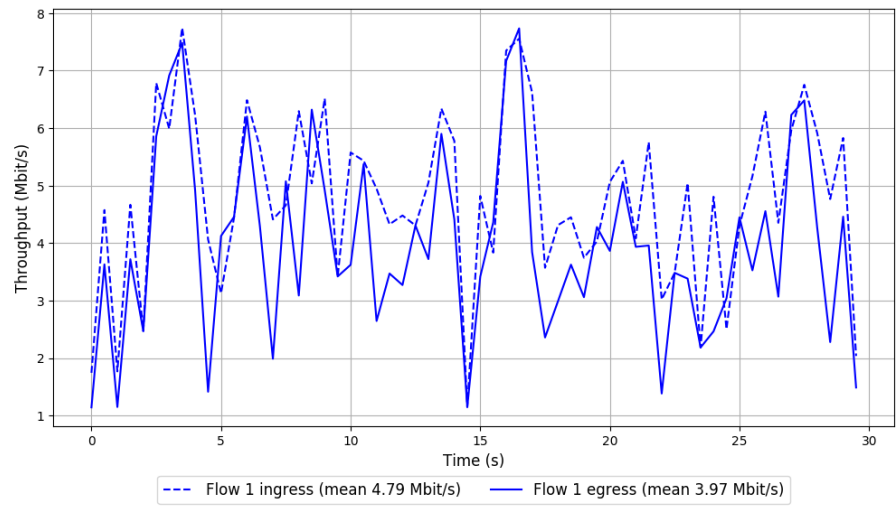
-- Flow 1:

Average throughput: 3.97 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 17.33%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-11 10:58:02

End at: 2017-08-11 10:58:32

Below is generated by plot.py at 2017-08-11 14:35:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 54.250 ms

Loss rate: 5.42%

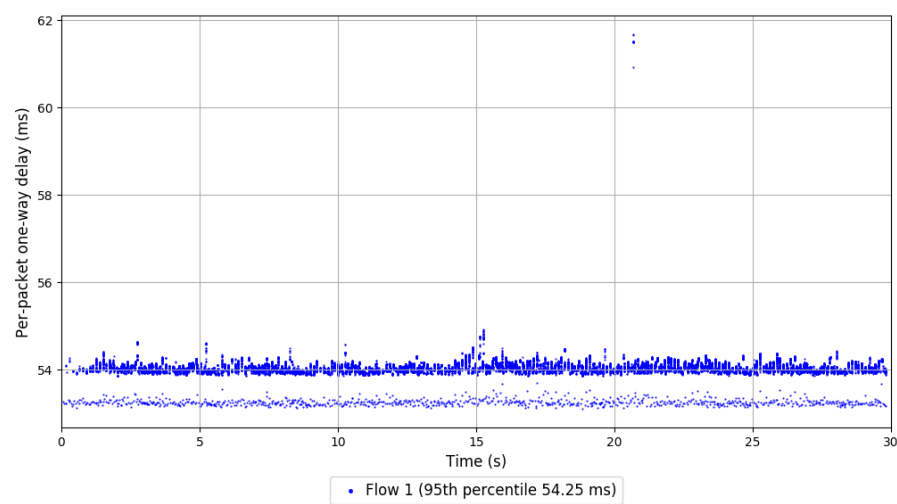
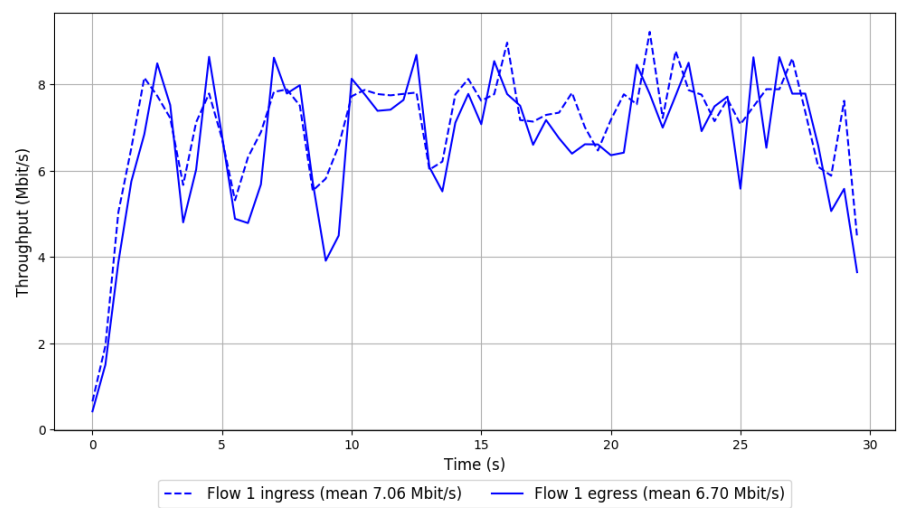
-- Flow 1:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 54.250 ms

Loss rate: 5.42%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

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

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

Below is generated by plot.py at 2017-08-11 14:35:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 54.225 ms

Loss rate: 21.19%

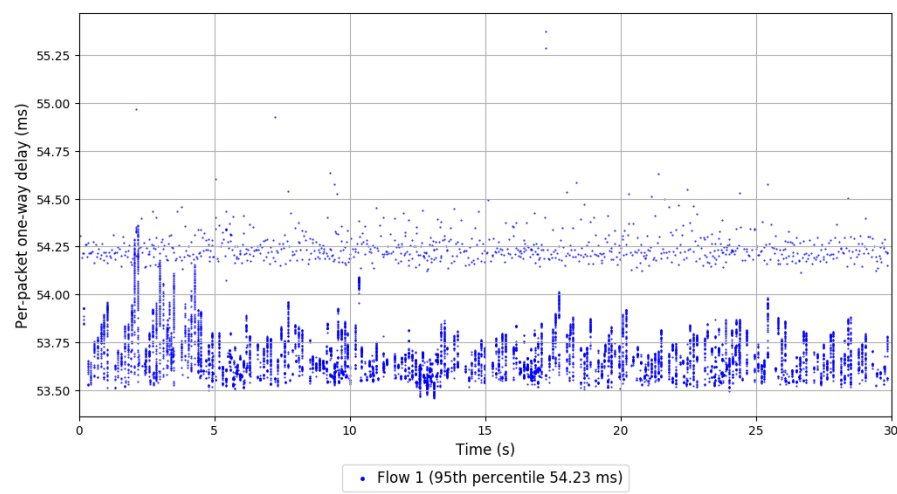
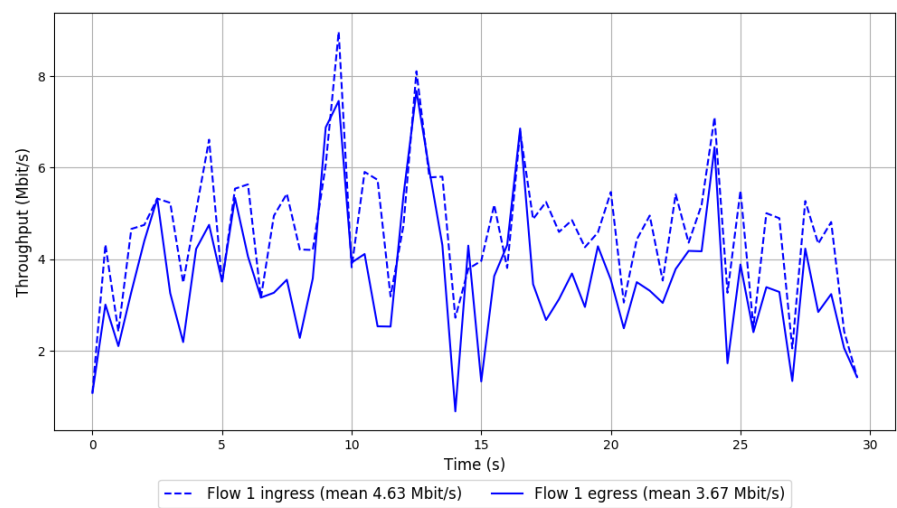
-- Flow 1:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 54.225 ms

Loss rate: 21.19%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

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

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

Below is generated by plot.py at 2017-08-11 14:35:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 54.477 ms

Loss rate: 0.41%

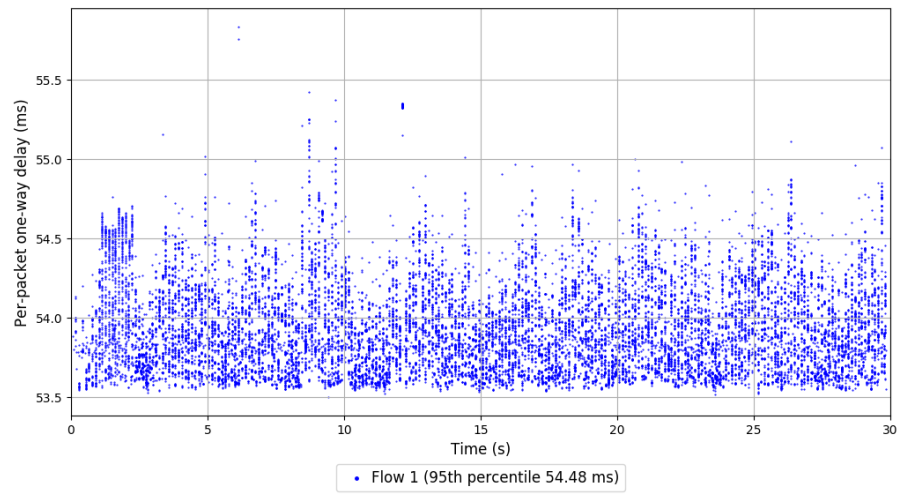
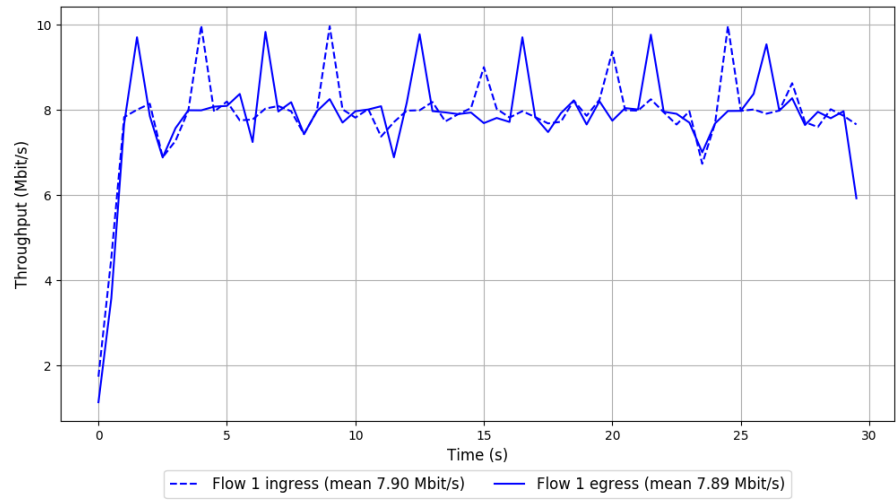
-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 54.477 ms

Loss rate: 0.41%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-11 11:28:15

End at: 2017-08-11 11:28:45

Below is generated by plot.py at 2017-08-11 14:35:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.57 Mbit/s

95th percentile per-packet one-way delay: 53.898 ms

Loss rate: 15.53%

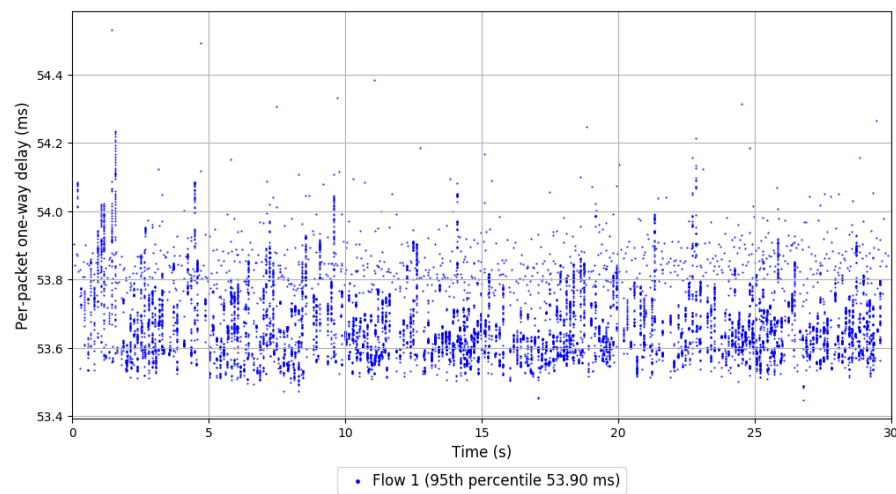
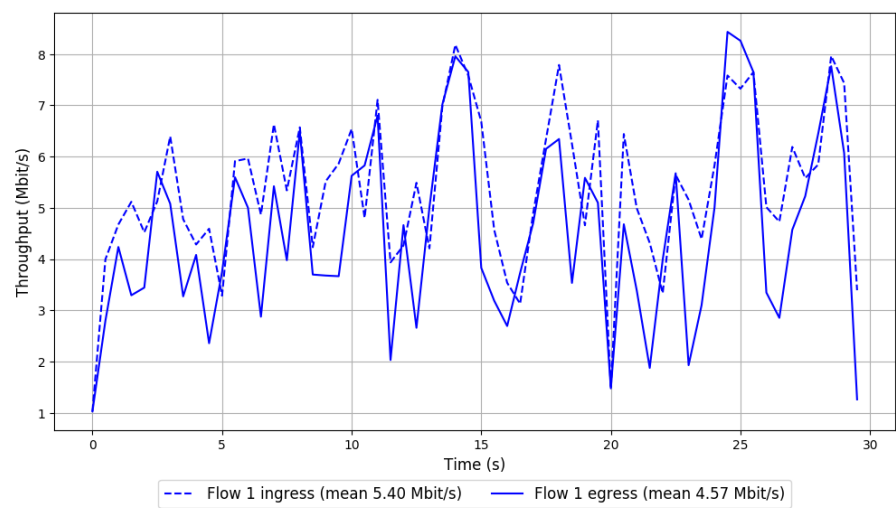
-- Flow 1:

Average throughput: 4.57 Mbit/s

95th percentile per-packet one-way delay: 53.898 ms

Loss rate: 15.53%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-11 11:37:59

End at: 2017-08-11 11:38:29

Below is generated by plot.py at 2017-08-11 14:35:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 53.819 ms

Loss rate: 16.65%

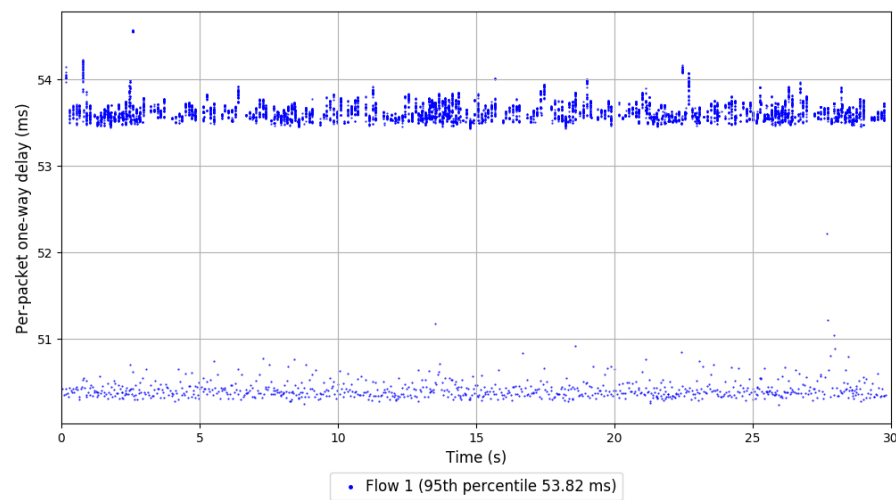
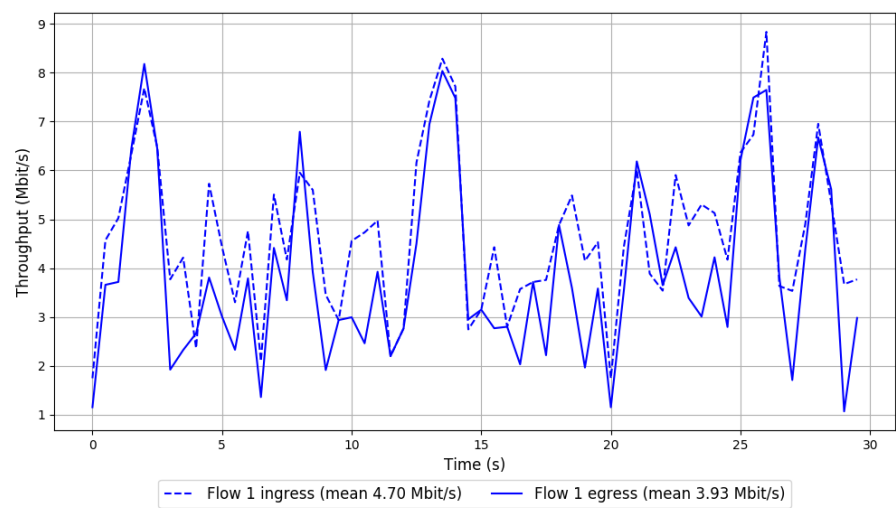
-- Flow 1:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 53.819 ms

Loss rate: 16.65%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-11 11:48:28

End at: 2017-08-11 11:48:58

Below is generated by plot.py at 2017-08-11 14:35:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 53.775 ms

Loss rate: 17.66%

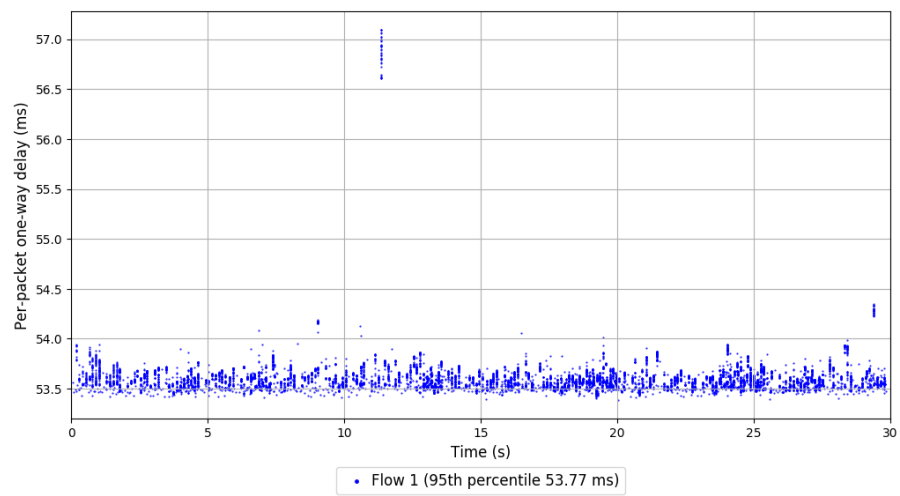
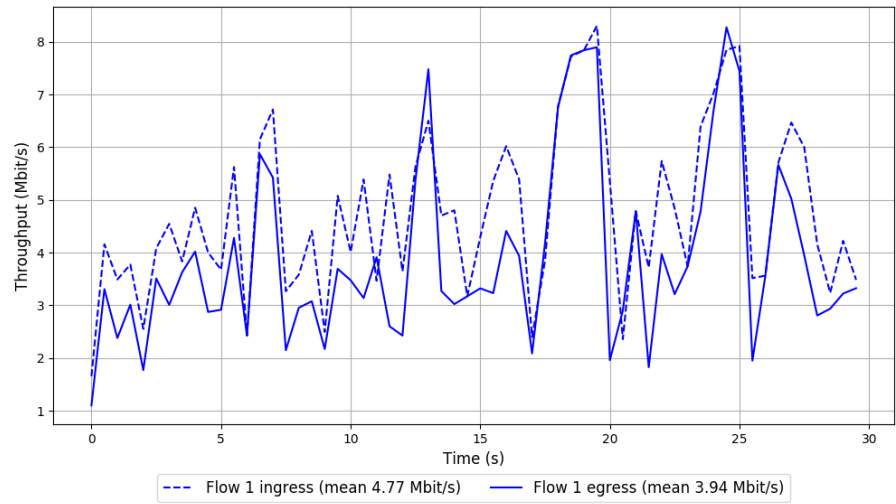
-- Flow 1:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 53.775 ms

Loss rate: 17.66%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-11 11:58:47

End at: 2017-08-11 11:59:17

Below is generated by plot.py at 2017-08-11 14:35:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 17.71%

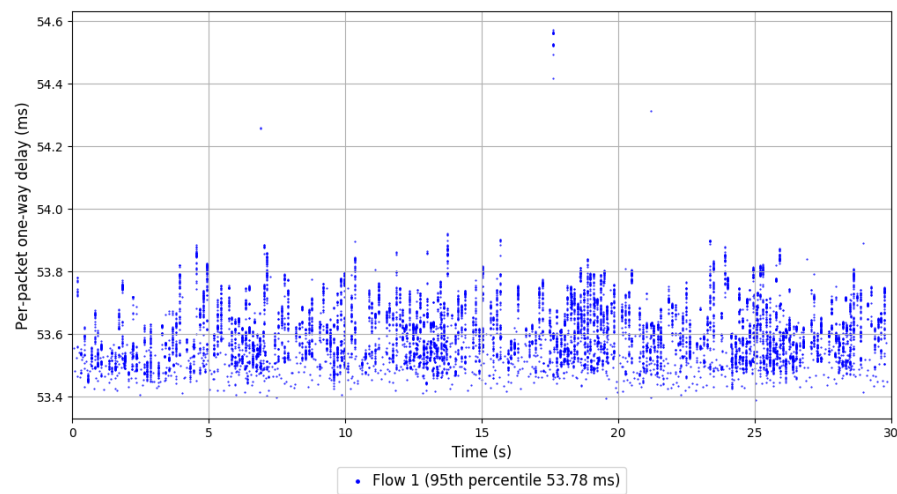
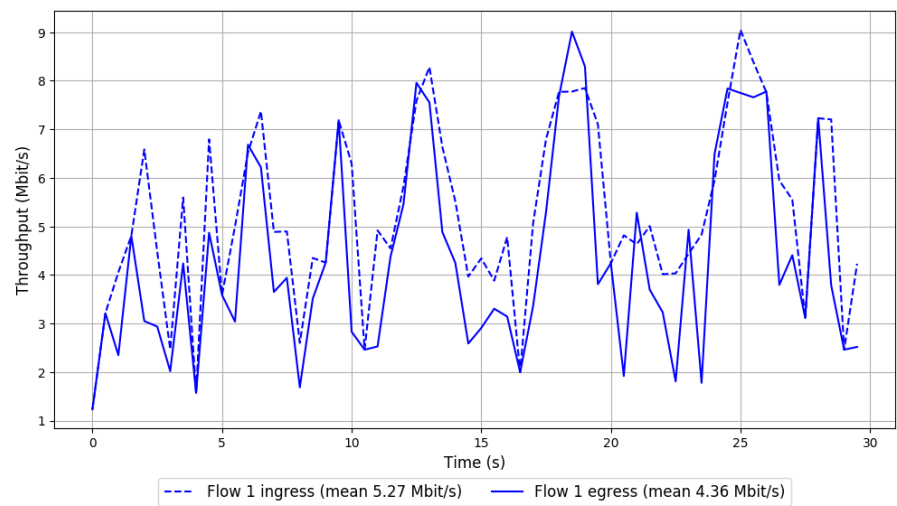
-- Flow 1:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 17.71%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

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

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

Below is generated by plot.py at 2017-08-11 14:35:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 54.345 ms

Loss rate: 0.42%

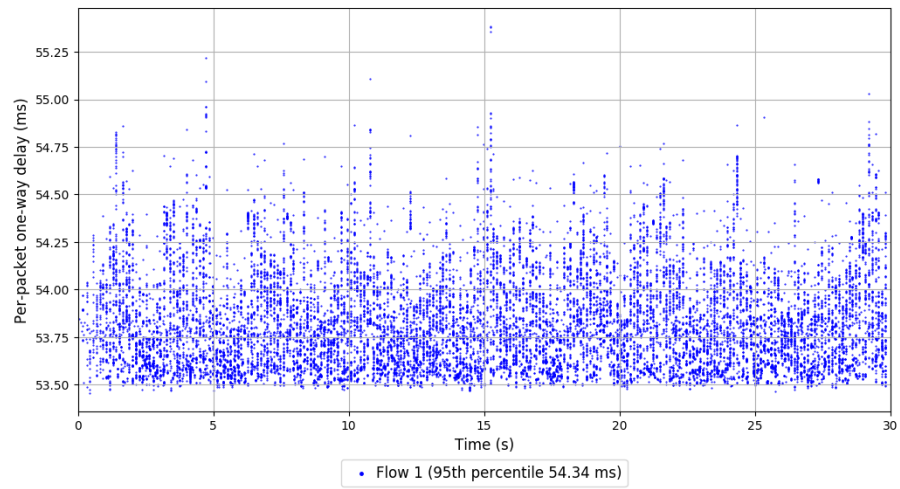
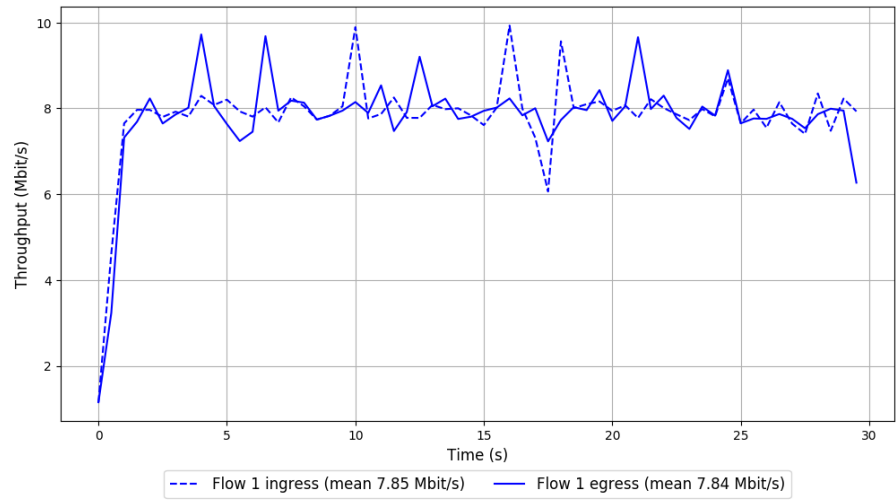
-- Flow 1:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 54.345 ms

Loss rate: 0.42%

Run 10: Report of Sprout — Data Link

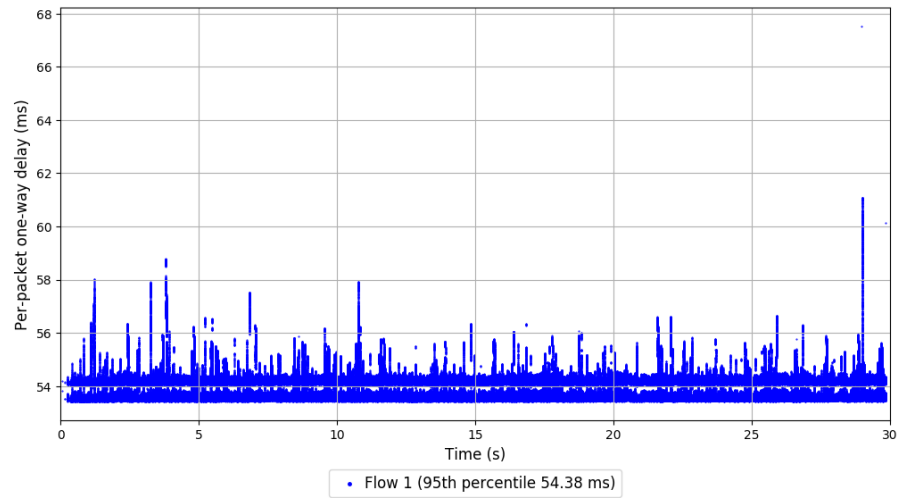
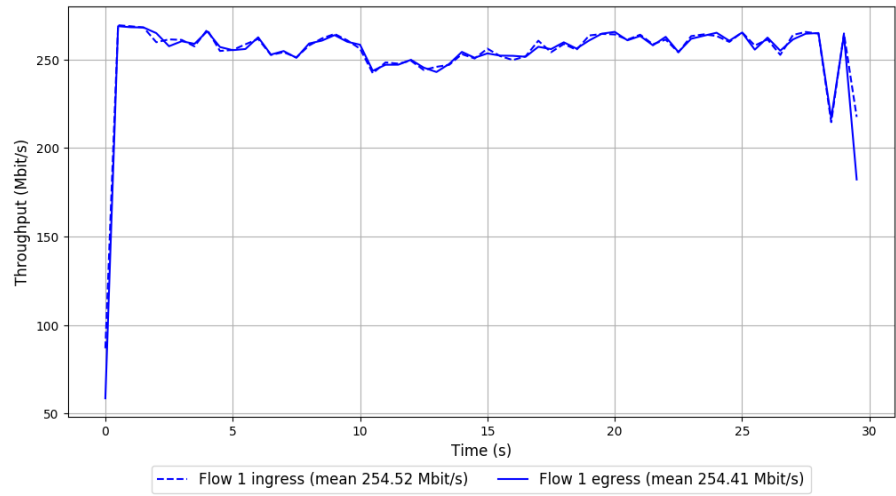


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-08-11 10:41:39
End at: 2017-08-11 10:42:09

# Below is generated by plot.py at 2017-08-11 14:37:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 254.41 Mbit/s
95th percentile per-packet one-way delay: 54.382 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 254.41 Mbit/s
95th percentile per-packet one-way delay: 54.382 ms
Loss rate: 0.42%
```

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

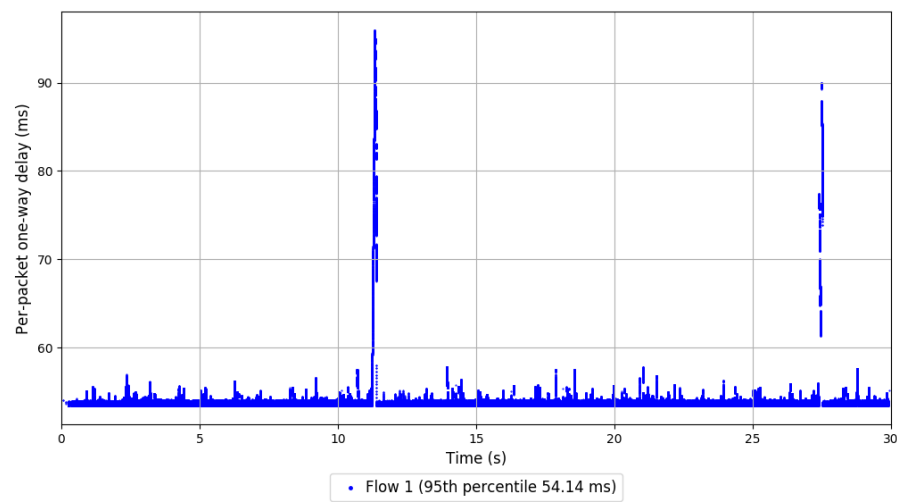
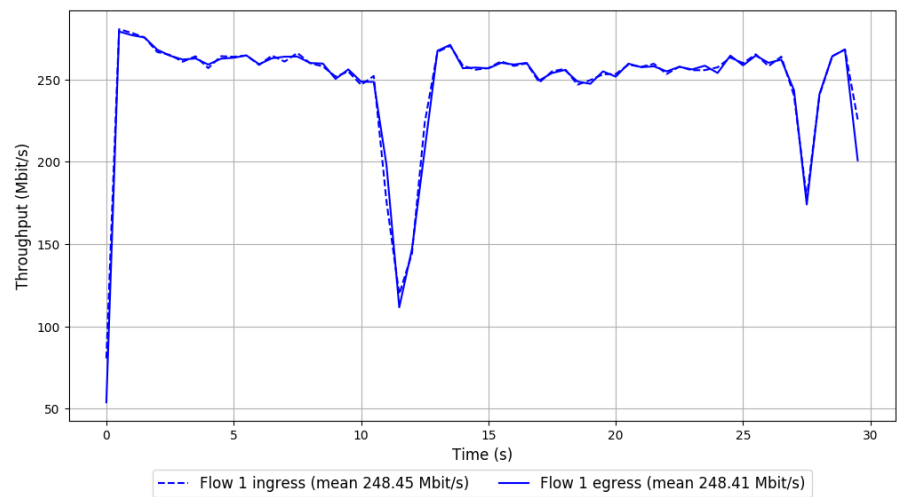


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-08-11 10:52:13
End at: 2017-08-11 10:52:43

# Below is generated by plot.py at 2017-08-11 14:37:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.41 Mbit/s
95th percentile per-packet one-way delay: 54.140 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 248.41 Mbit/s
95th percentile per-packet one-way delay: 54.140 ms
Loss rate: 0.36%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-08-11 11:02:27

End at: 2017-08-11 11:02:57

Below is generated by plot.py at 2017-08-11 14:38:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 258.59 Mbit/s

95th percentile per-packet one-way delay: 54.395 ms

Loss rate: 0.53%

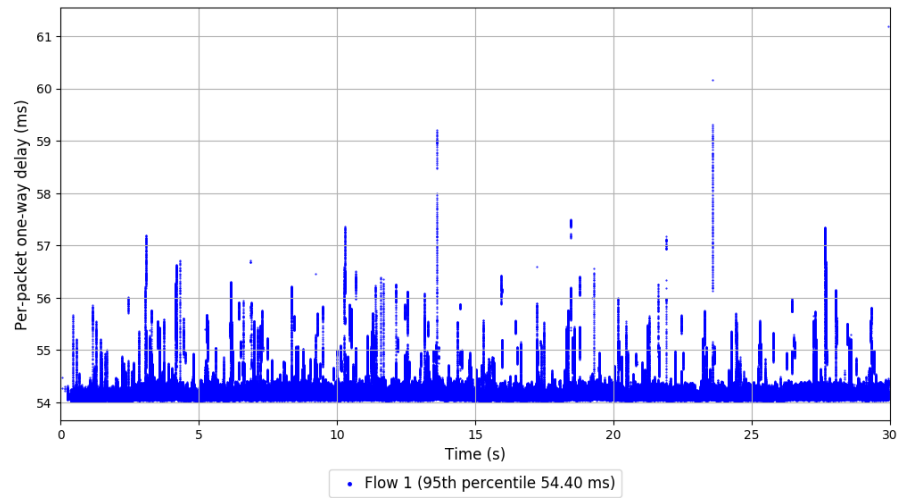
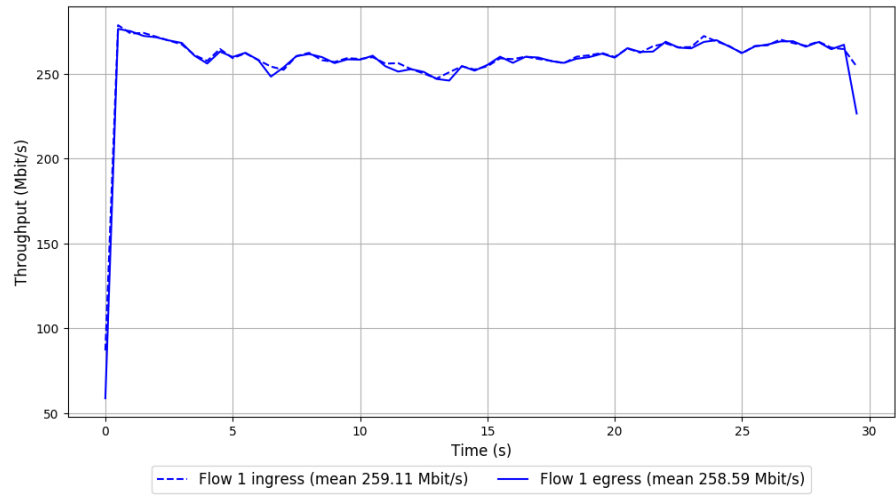
-- Flow 1:

Average throughput: 258.59 Mbit/s

95th percentile per-packet one-way delay: 54.395 ms

Loss rate: 0.53%

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

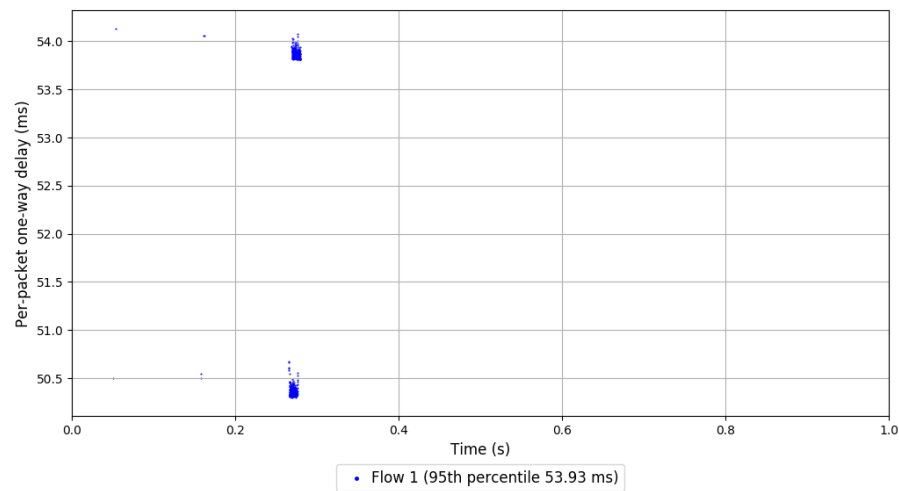
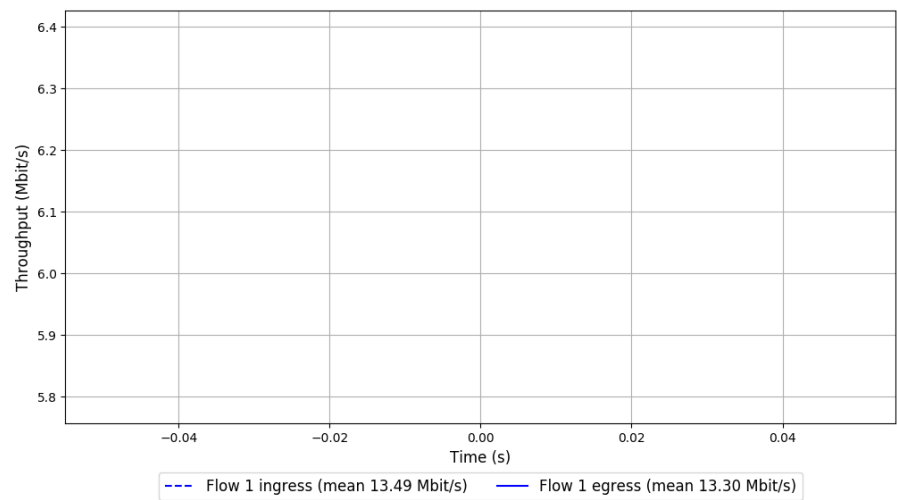


Run 4: Statistics of TaoVA-100x

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

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

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

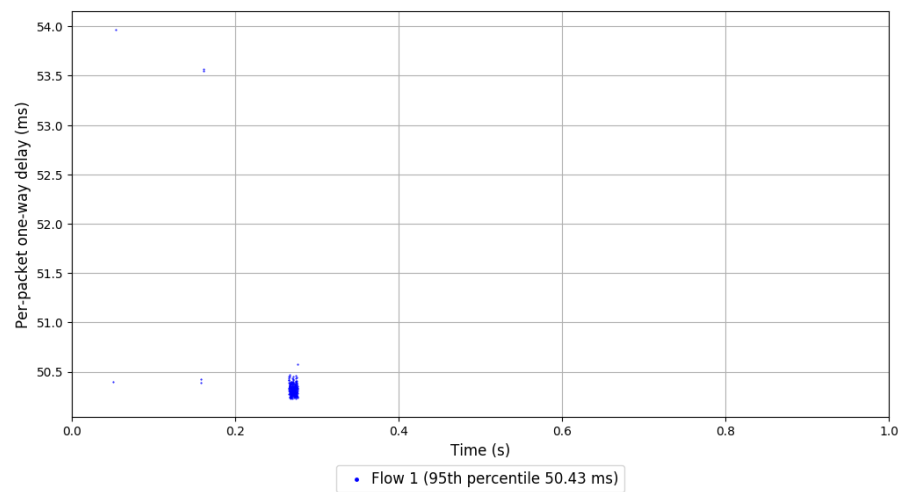
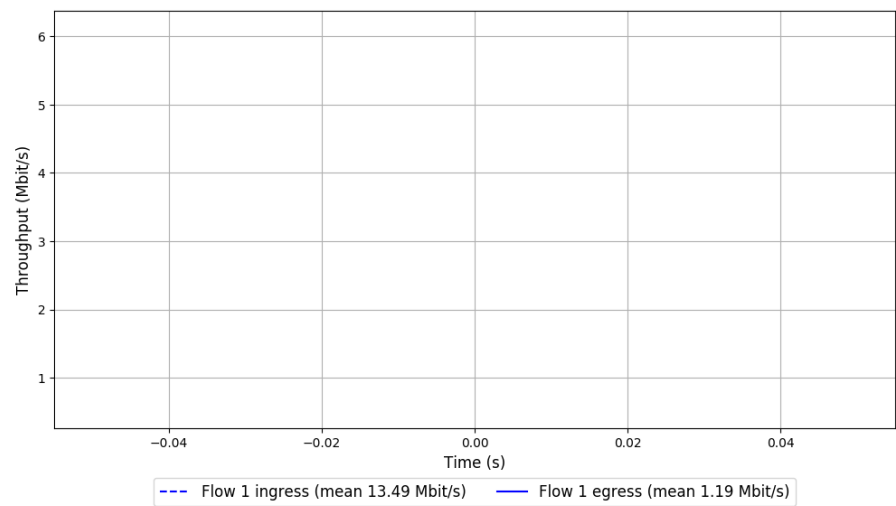


Run 5: Statistics of TaoVA-100x

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

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

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

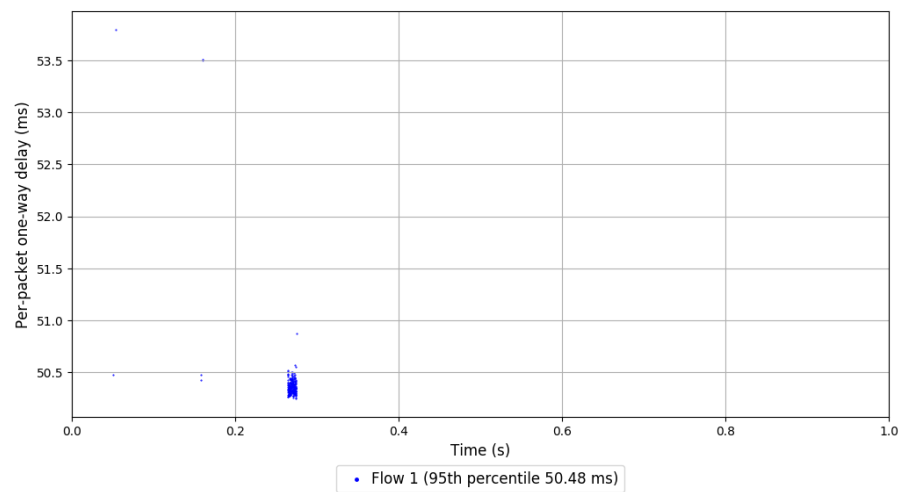
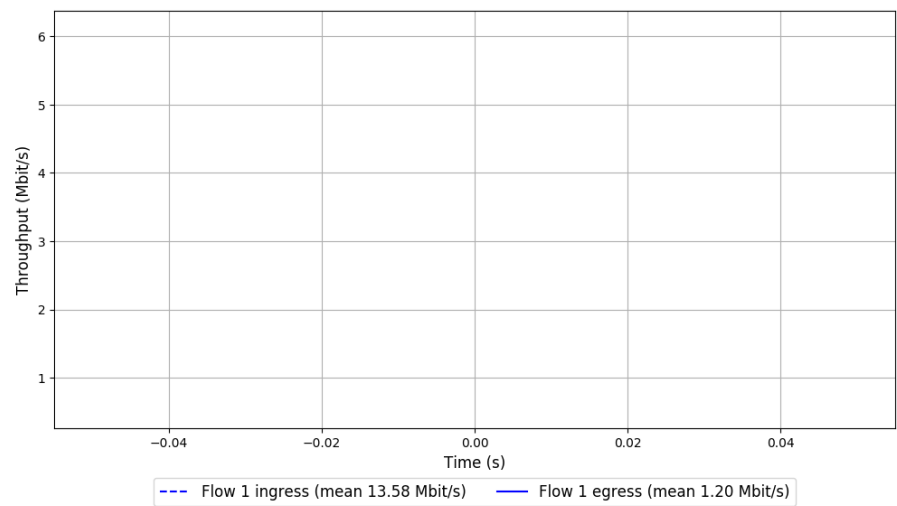


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-11 11:32:41

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

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

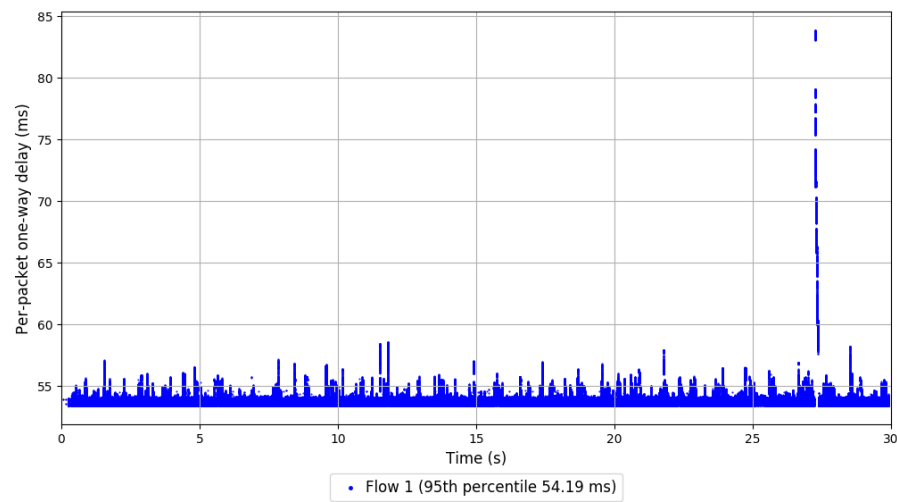
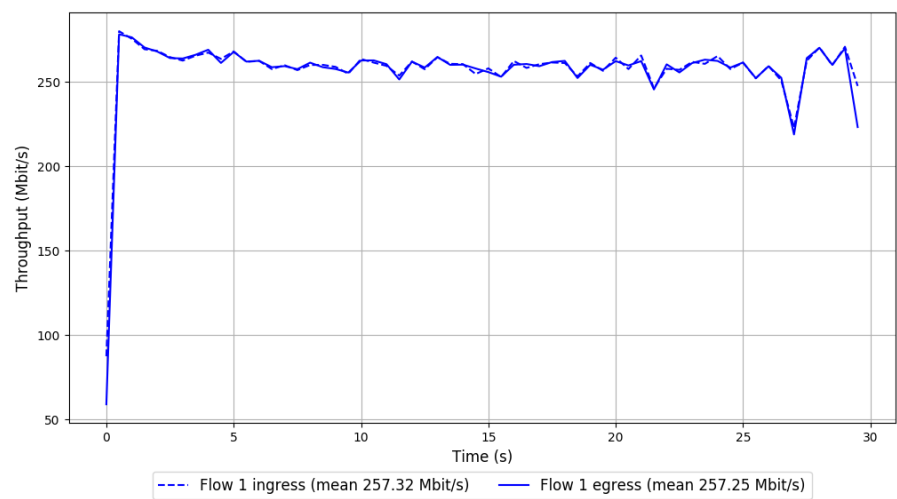


```
Run 7: Statistics of TaoVA-100x

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

# Below is generated by plot.py at 2017-08-11 14:38:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 257.25 Mbit/s
95th percentile per-packet one-way delay: 54.187 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 257.25 Mbit/s
95th percentile per-packet one-way delay: 54.187 ms
Loss rate: 0.37%
```


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



Run 8: Statistics of TaoVA-100x

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

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

Below is generated by plot.py at 2017-08-11 14:38:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.48 Mbit/s

95th percentile per-packet one-way delay: 53.536 ms

Loss rate: 0.35%

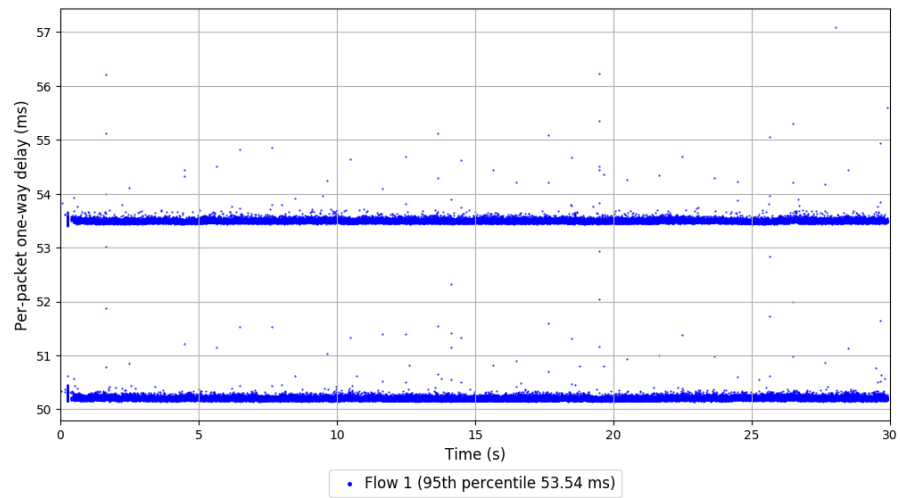
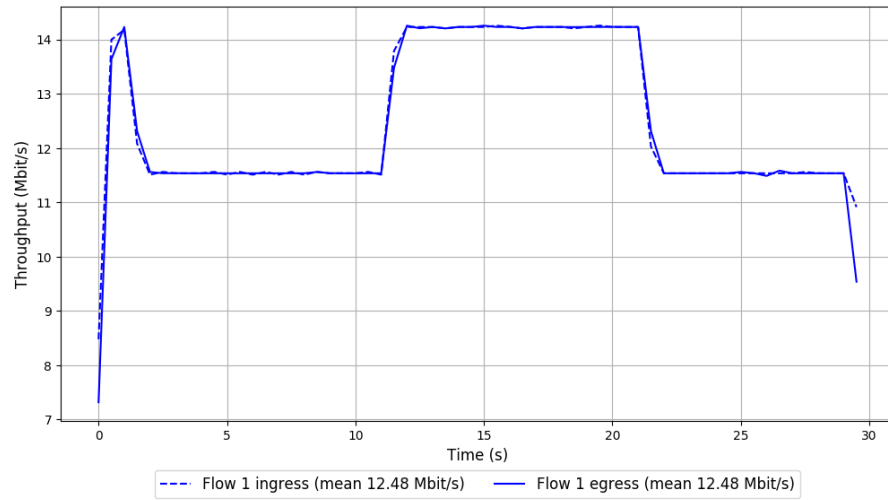
-- Flow 1:

Average throughput: 12.48 Mbit/s

95th percentile per-packet one-way delay: 53.536 ms

Loss rate: 0.35%

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

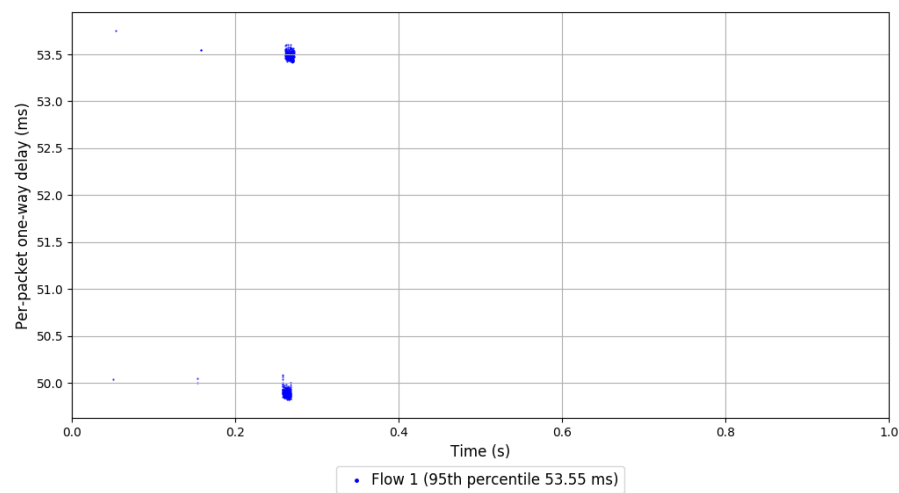
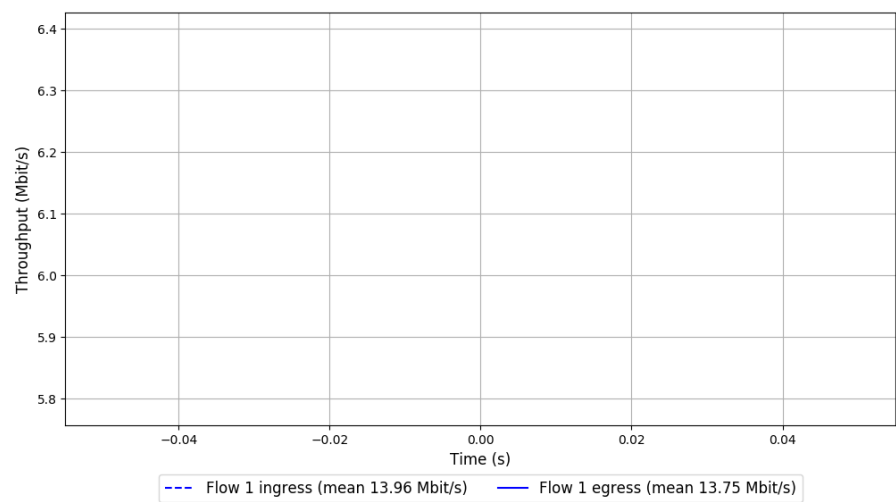


Run 9: Statistics of TaoVA-100x

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

End at: 2017-08-11 12:03:42

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

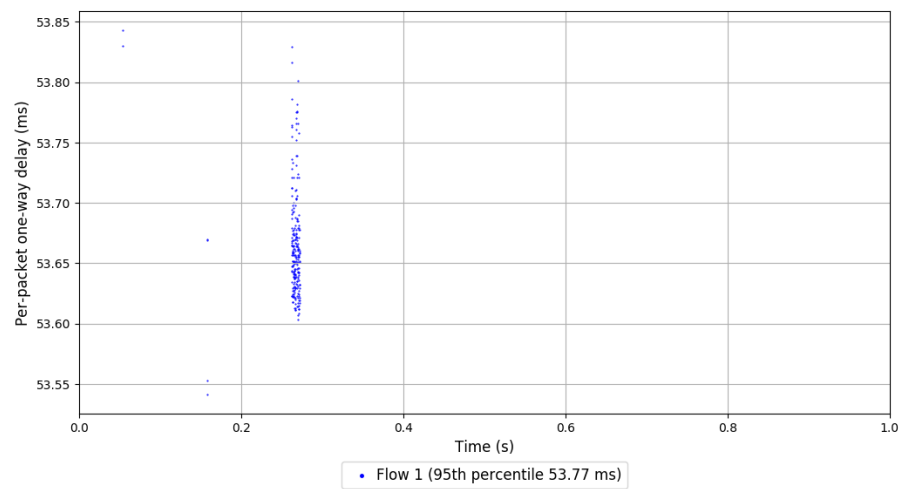
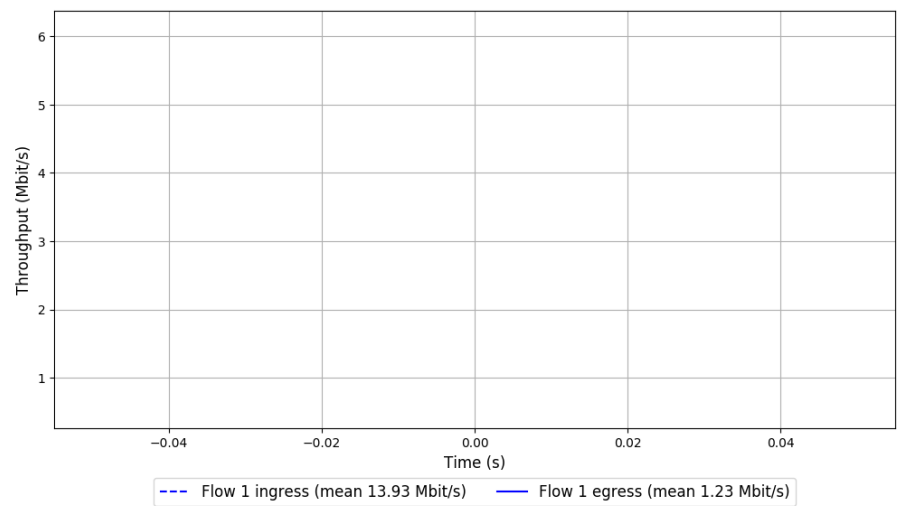


Run 10: Statistics of TaoVA-100x

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

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

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-11 10:37:44

End at: 2017-08-11 10:38:14

Below is generated by plot.py at 2017-08-11 14:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.72 Mbit/s

95th percentile per-packet one-way delay: 53.933 ms

Loss rate: 0.71%

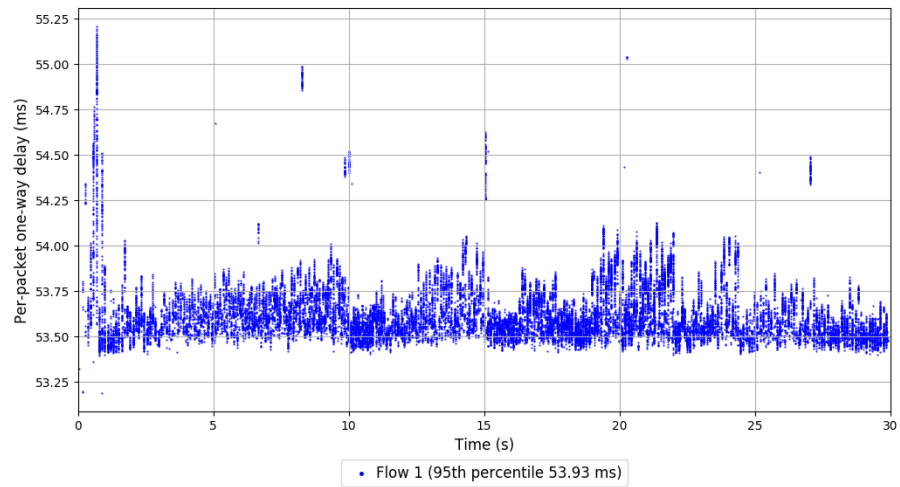
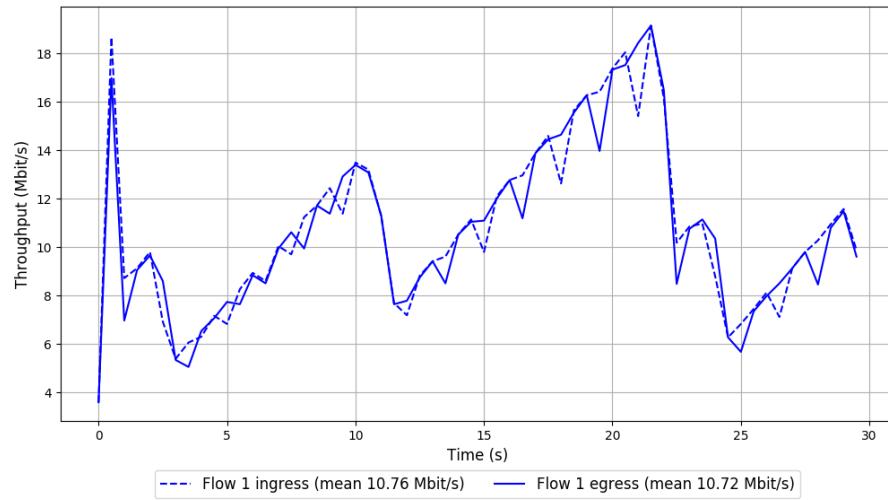
-- Flow 1:

Average throughput: 10.72 Mbit/s

95th percentile per-packet one-way delay: 53.933 ms

Loss rate: 0.71%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-11 10:48:04

End at: 2017-08-11 10:48:34

Below is generated by plot.py at 2017-08-11 14:38:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 53.760 ms

Loss rate: 0.88%

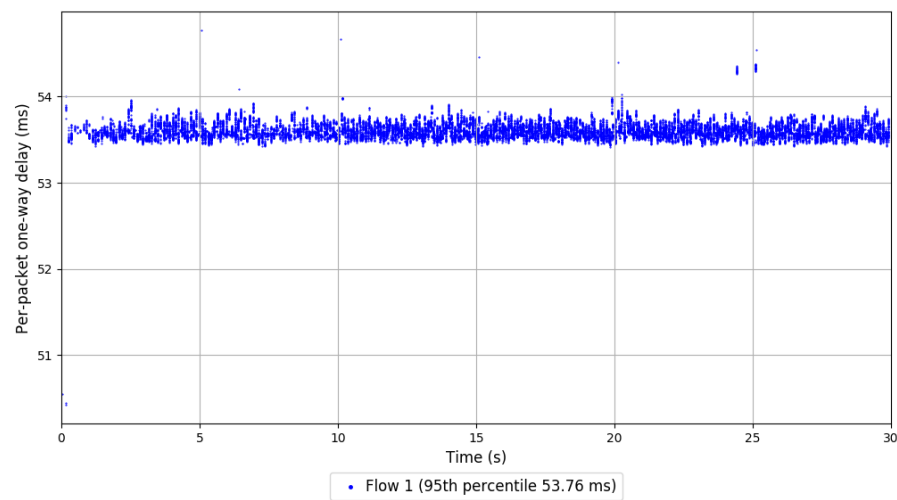
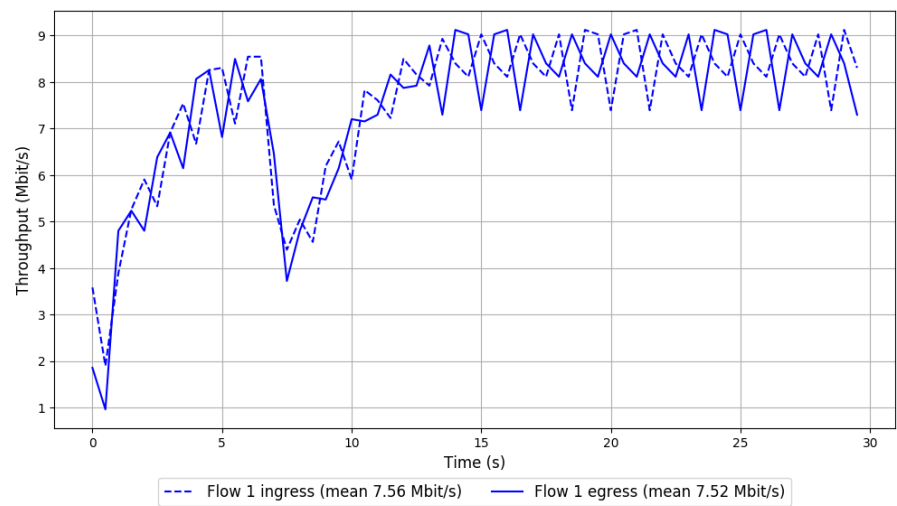
-- Flow 1:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 53.760 ms

Loss rate: 0.88%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-11 10:58:39

End at: 2017-08-11 10:59:09

Below is generated by plot.py at 2017-08-11 14:38:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 54.401 ms

Loss rate: 1.64%

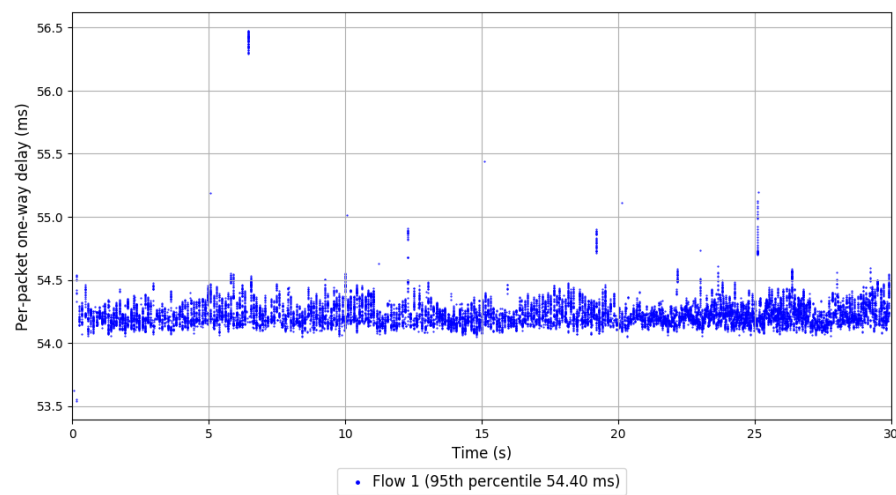
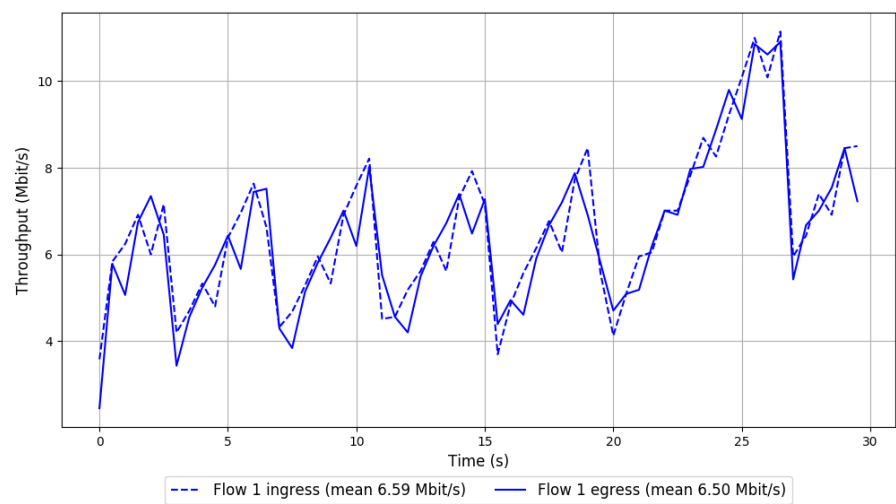
-- Flow 1:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 54.401 ms

Loss rate: 1.64%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

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

End at: 2017-08-11 11:09:16

Below is generated by plot.py at 2017-08-11 14:38:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.18 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 1.16%

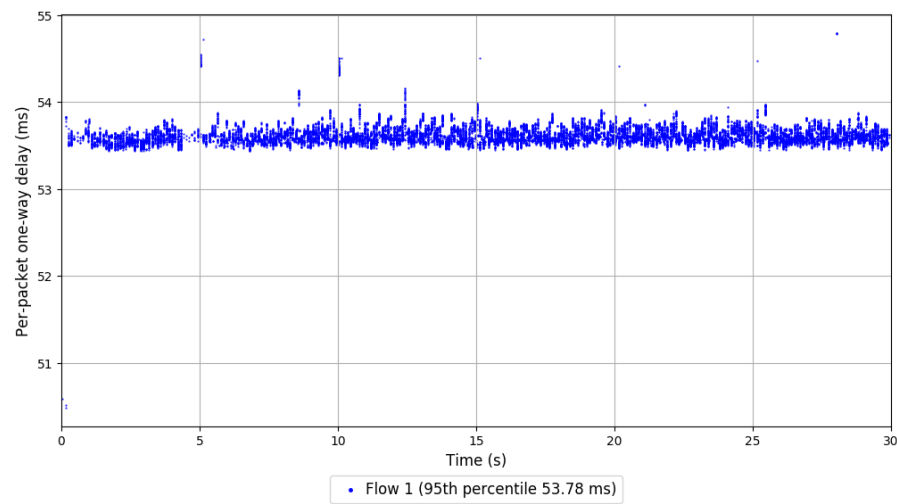
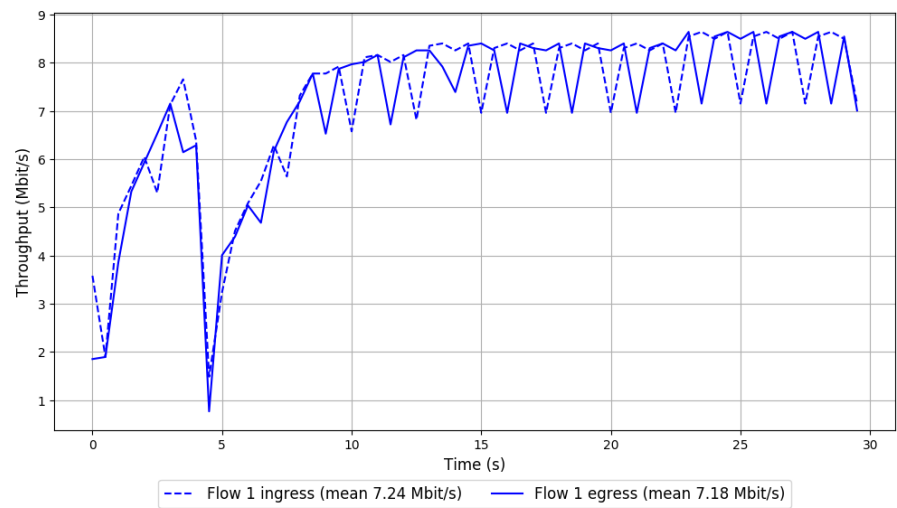
-- Flow 1:

Average throughput: 7.18 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 1.16%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-11 11:18:29

End at: 2017-08-11 11:18:59

Below is generated by plot.py at 2017-08-11 14:38:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.68 Mbit/s

95th percentile per-packet one-way delay: 53.782 ms

Loss rate: 2.30%

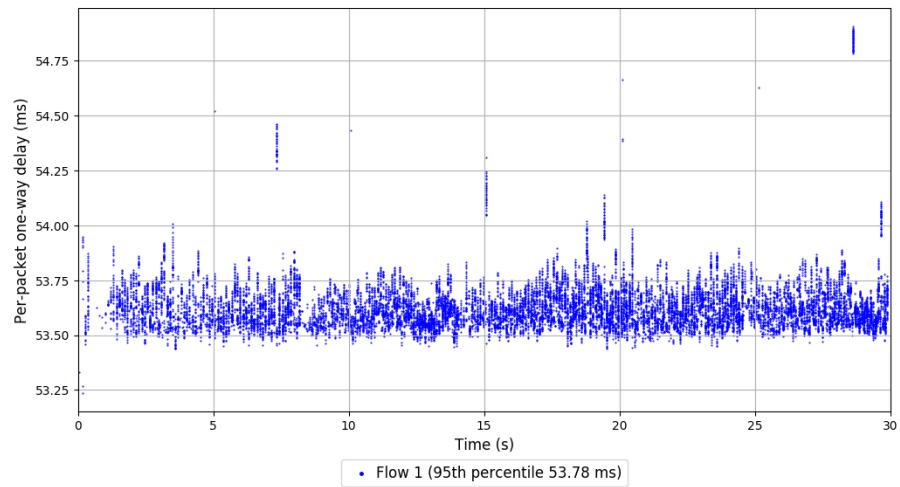
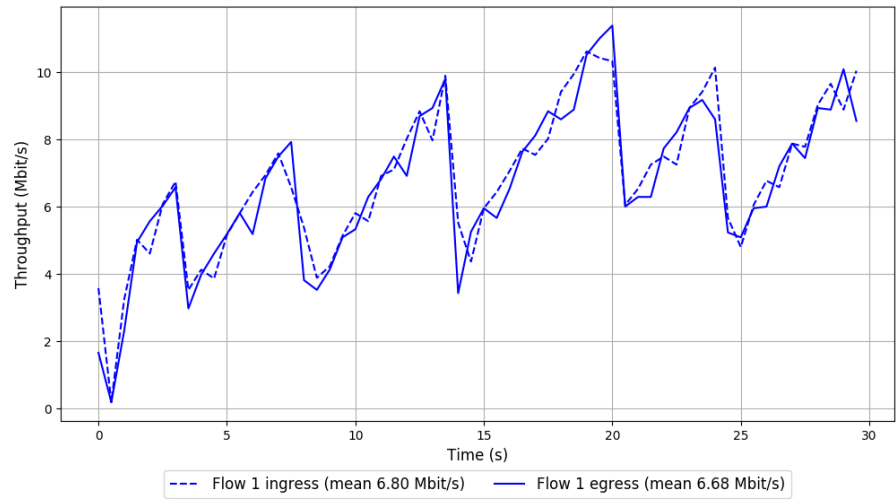
-- Flow 1:

Average throughput: 6.68 Mbit/s

95th percentile per-packet one-way delay: 53.782 ms

Loss rate: 2.30%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-11 11:28:53

End at: 2017-08-11 11:29:23

Below is generated by plot.py at 2017-08-11 14:38:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 53.833 ms

Loss rate: 2.49%

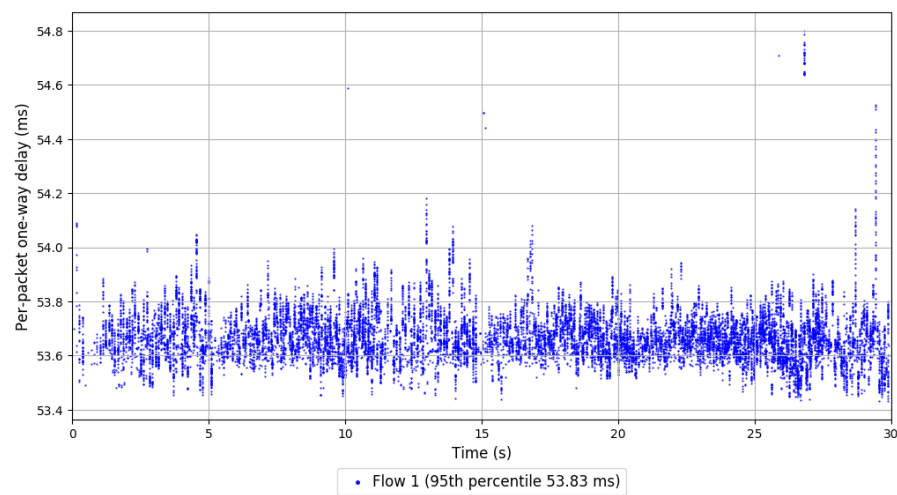
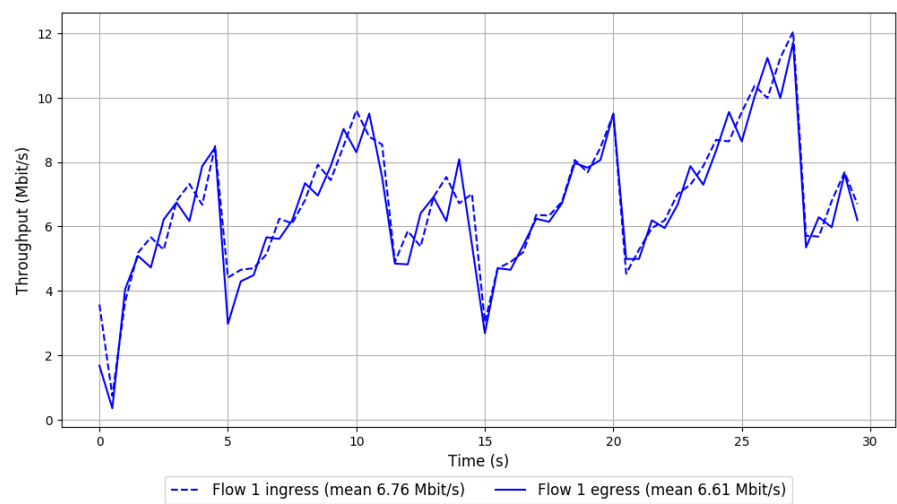
-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 53.833 ms

Loss rate: 2.49%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-11 11:38:36

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

Below is generated by plot.py at 2017-08-11 14:38:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.62 Mbit/s

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

Loss rate: 1.32%

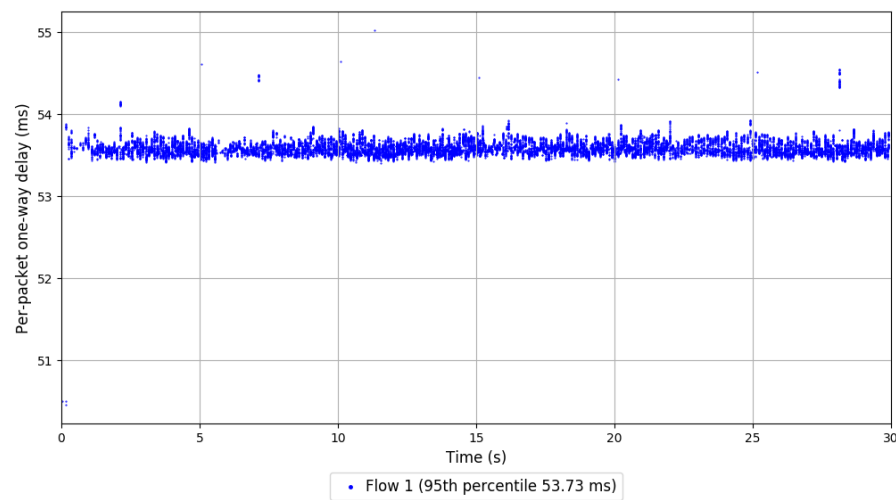
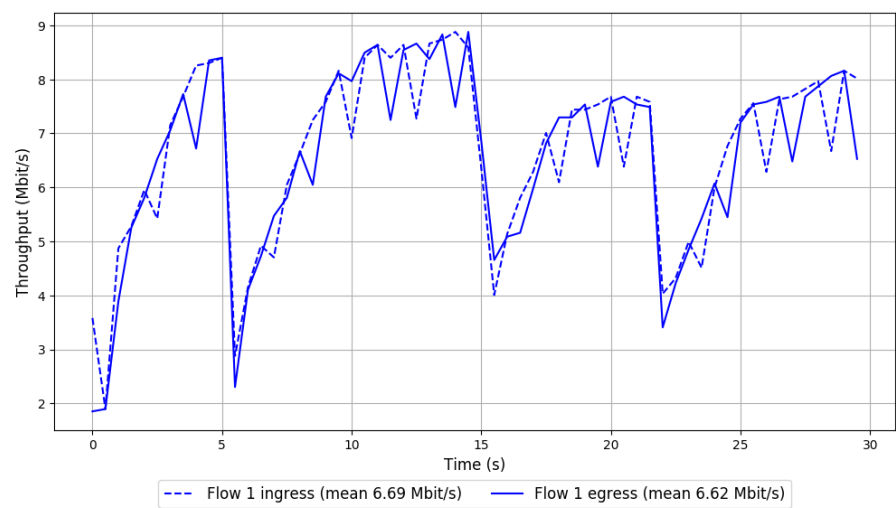
-- Flow 1:

Average throughput: 6.62 Mbit/s

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

Loss rate: 1.32%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

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

End at: 2017-08-11 11:49:35

Below is generated by plot.py at 2017-08-11 14:38:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.89 Mbit/s

95th percentile per-packet one-way delay: 53.801 ms

Loss rate: 1.44%

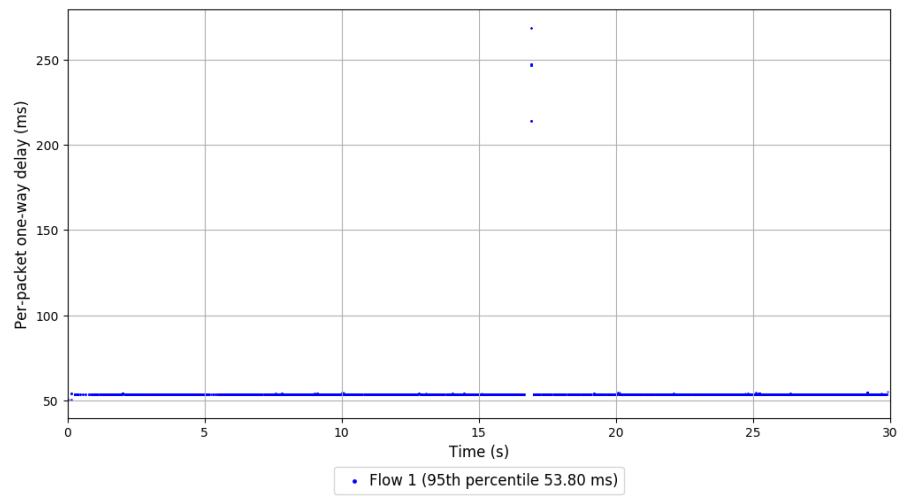
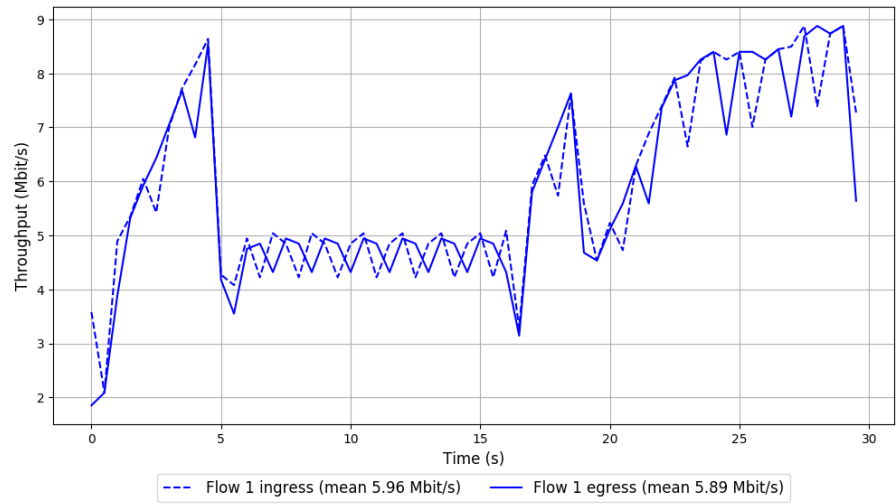
-- Flow 1:

Average throughput: 5.89 Mbit/s

95th percentile per-packet one-way delay: 53.801 ms

Loss rate: 1.44%

Run 8: Report of TCP Vegas — Data Link

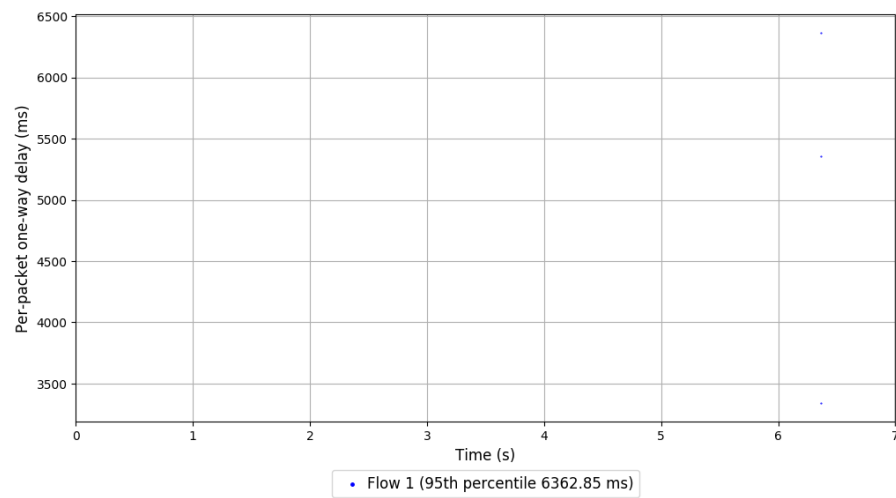
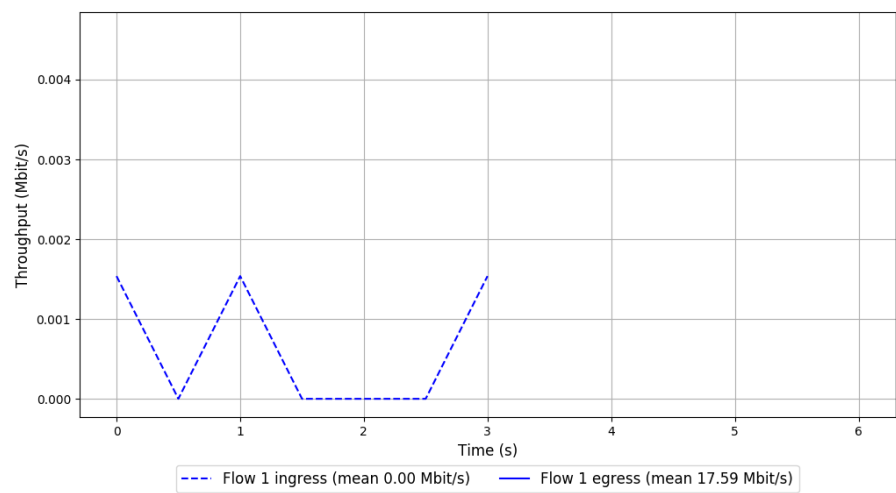


Run 9: Statistics of TCP Vegas

Start at: 2017-08-11 11:59:25

End at: 2017-08-11 11:59:55

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-11 12:09:05

End at: 2017-08-11 12:09:35

Below is generated by plot.py at 2017-08-11 14:38:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.10 Mbit/s

95th percentile per-packet one-way delay: 53.733 ms

Loss rate: 1.58%

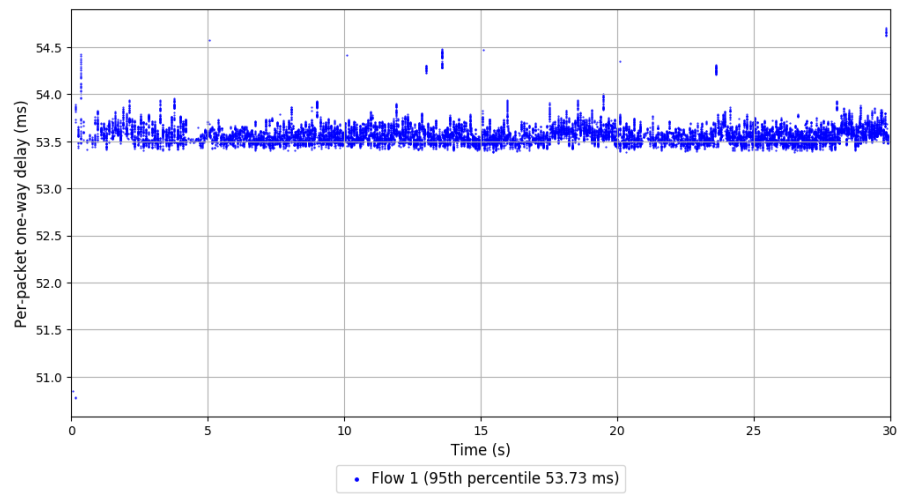
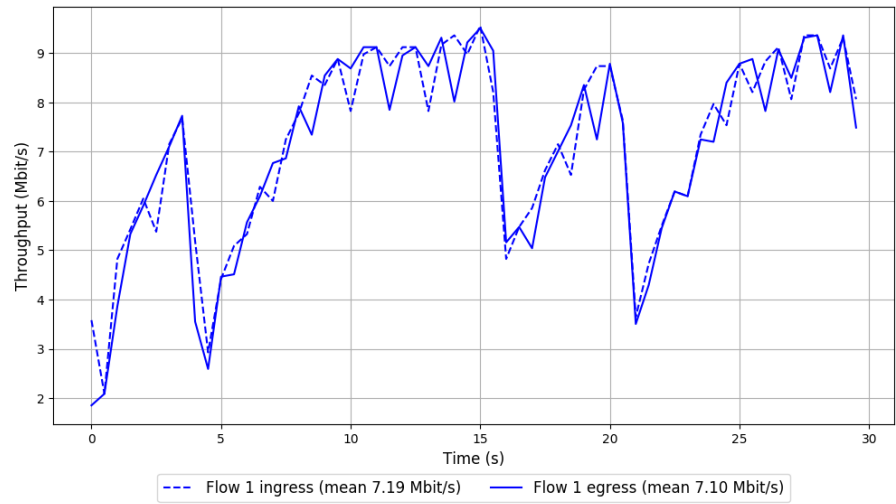
-- Flow 1:

Average throughput: 7.10 Mbit/s

95th percentile per-packet one-way delay: 53.733 ms

Loss rate: 1.58%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-11 10:43:54

End at: 2017-08-11 10:44:24

Below is generated by plot.py at 2017-08-11 14:39:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.83 Mbit/s

95th percentile per-packet one-way delay: 54.270 ms

Loss rate: 59.01%

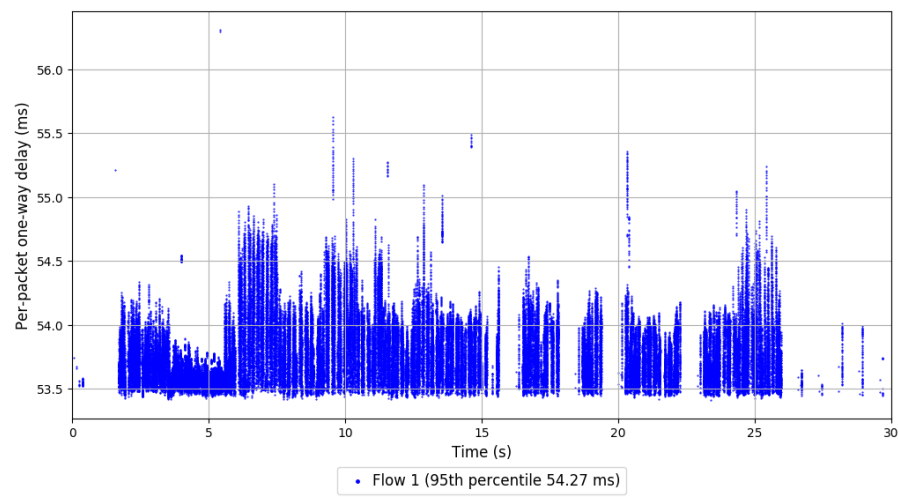
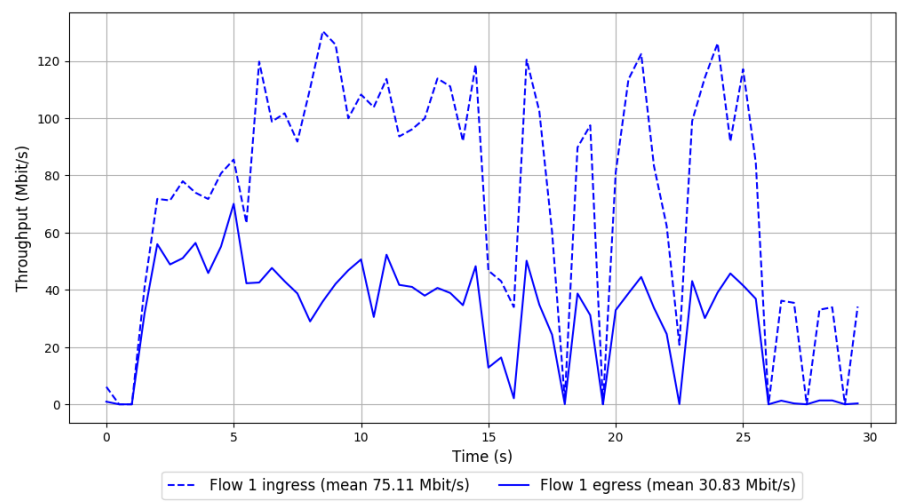
-- Flow 1:

Average throughput: 30.83 Mbit/s

95th percentile per-packet one-way delay: 54.270 ms

Loss rate: 59.01%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-11 10:54:28

End at: 2017-08-11 10:54:58

Below is generated by plot.py at 2017-08-11 14:39:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.58 Mbit/s

95th percentile per-packet one-way delay: 77.639 ms

Loss rate: 1.59%

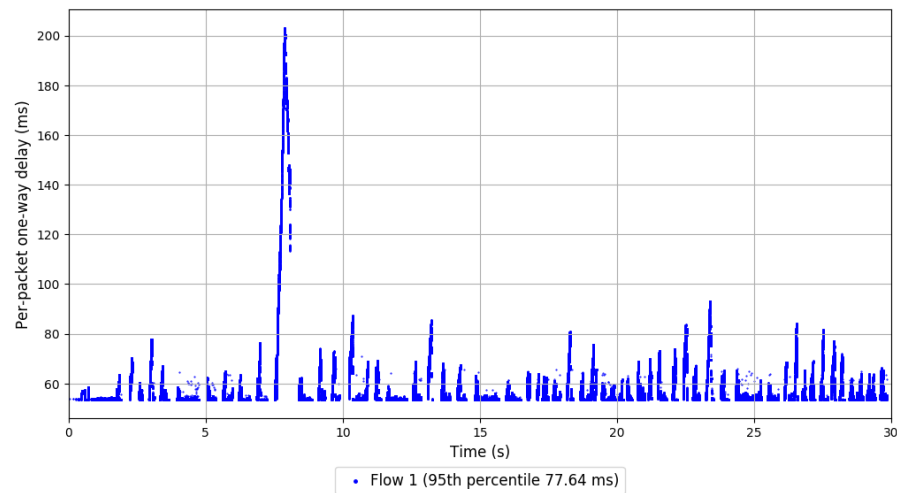
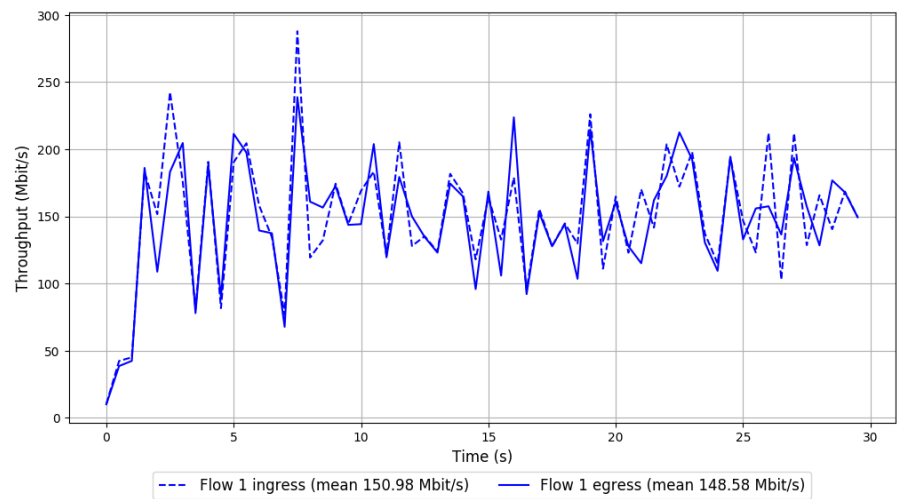
-- Flow 1:

Average throughput: 148.58 Mbit/s

95th percentile per-packet one-way delay: 77.639 ms

Loss rate: 1.59%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-11 11:04:43

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

Below is generated by plot.py at 2017-08-11 14:39:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.63 Mbit/s

95th percentile per-packet one-way delay: 74.700 ms

Loss rate: 1.98%

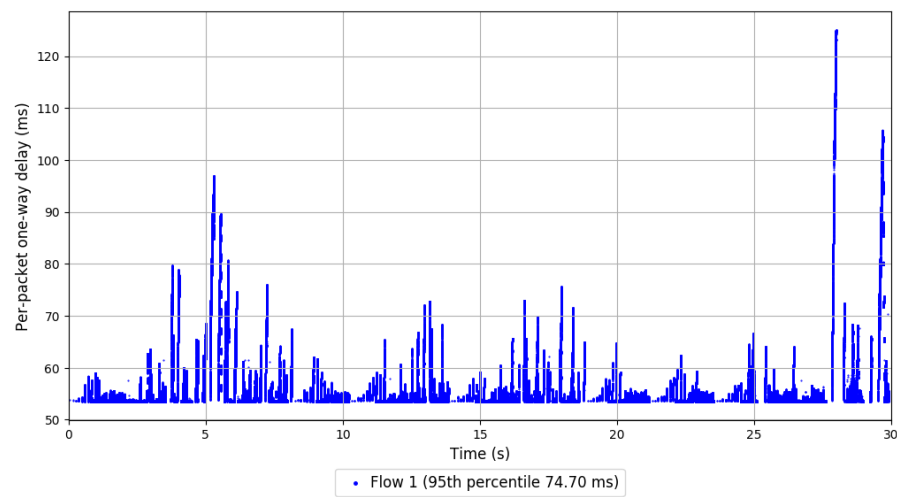
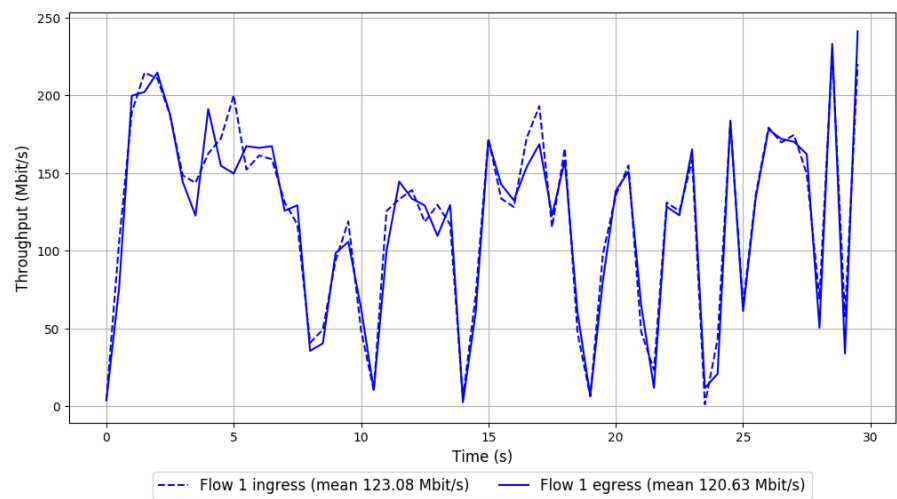
-- Flow 1:

Average throughput: 120.63 Mbit/s

95th percentile per-packet one-way delay: 74.700 ms

Loss rate: 1.98%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-11 11:14:25

End at: 2017-08-11 11:14:55

Below is generated by plot.py at 2017-08-11 14:39:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.72 Mbit/s

95th percentile per-packet one-way delay: 61.754 ms

Loss rate: 18.43%

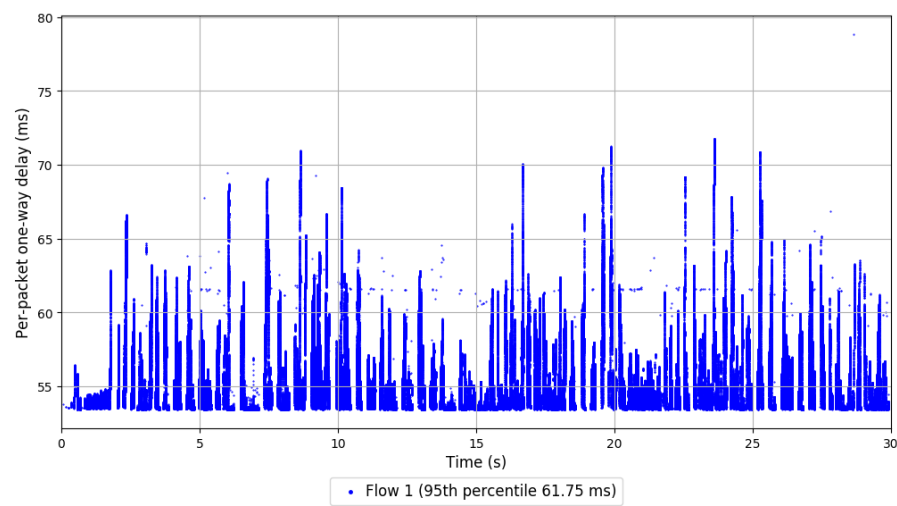
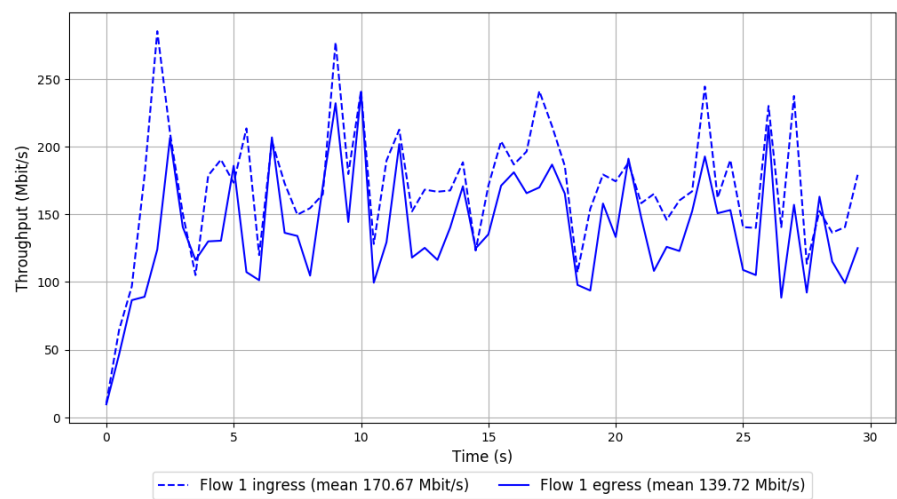
-- Flow 1:

Average throughput: 139.72 Mbit/s

95th percentile per-packet one-way delay: 61.754 ms

Loss rate: 18.43%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-11 11:24:35

End at: 2017-08-11 11:25:05

Below is generated by plot.py at 2017-08-11 14:39:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.59 Mbit/s

95th percentile per-packet one-way delay: 56.434 ms

Loss rate: 83.15%

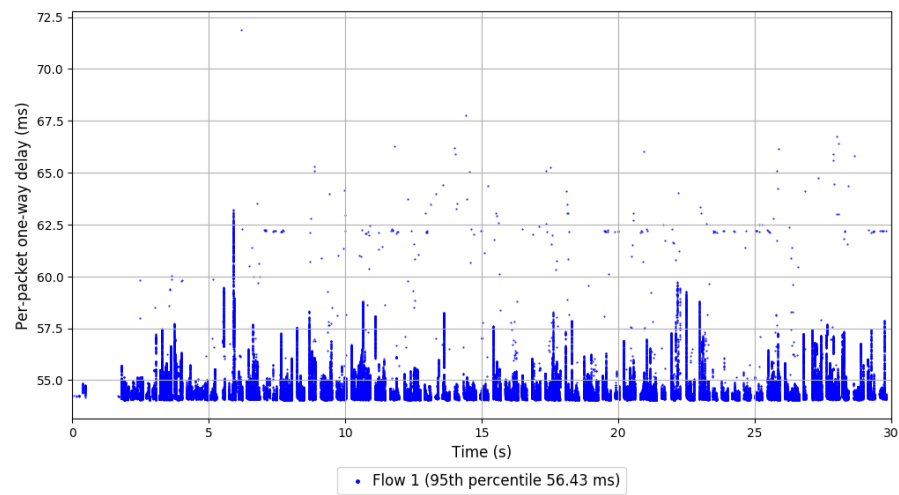
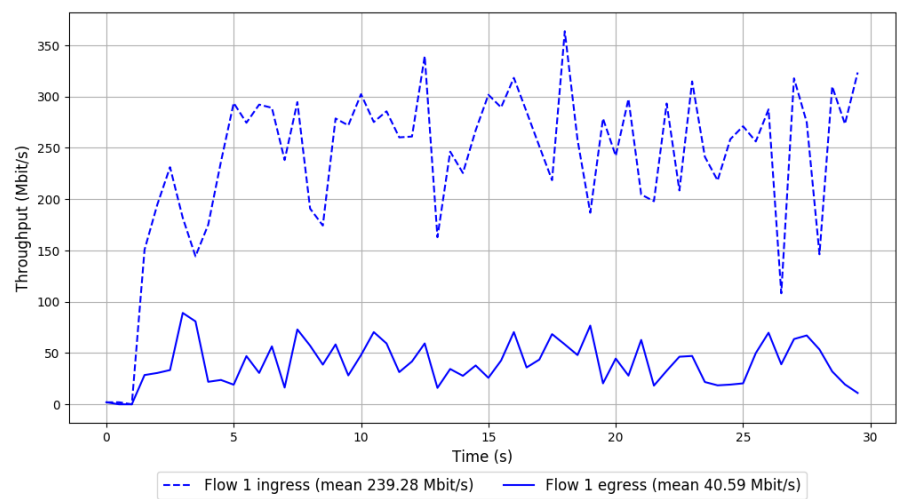
-- Flow 1:

Average throughput: 40.59 Mbit/s

95th percentile per-packet one-way delay: 56.434 ms

Loss rate: 83.15%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-11 11:34:36

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

Below is generated by plot.py at 2017-08-11 14:39:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.35 Mbit/s

95th percentile per-packet one-way delay: 57.578 ms

Loss rate: 82.33%

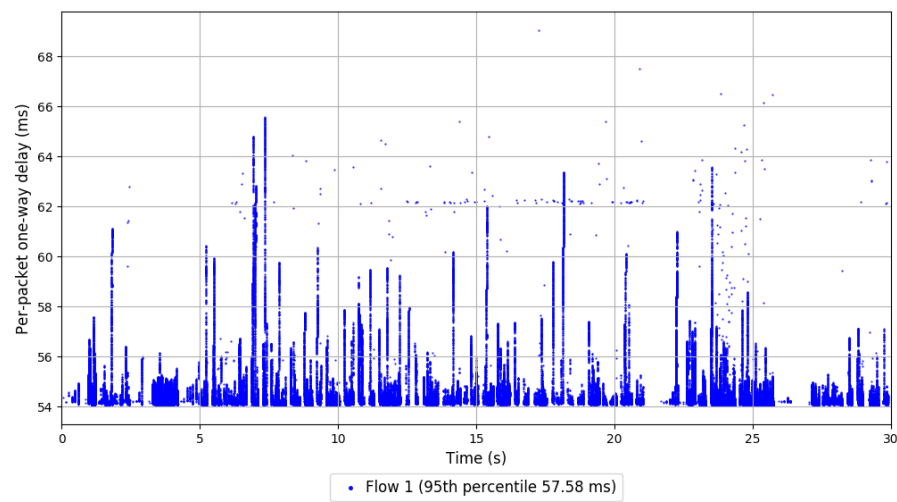
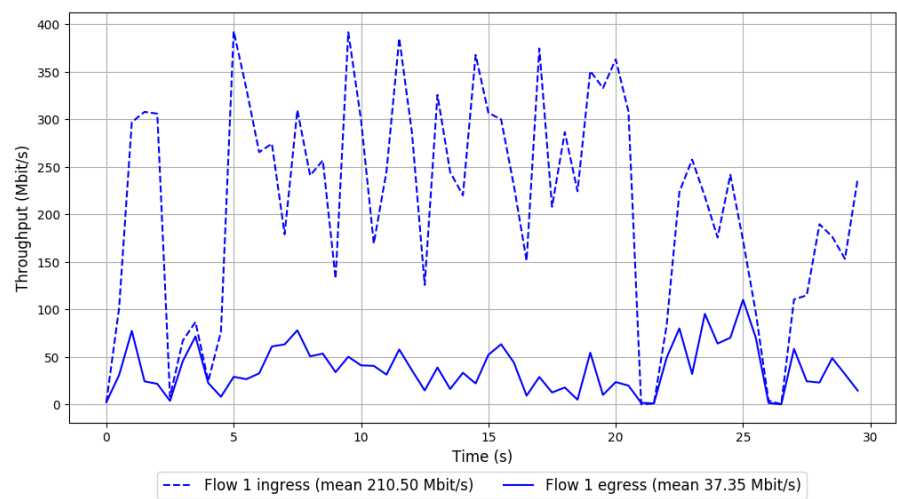
-- Flow 1:

Average throughput: 37.35 Mbit/s

95th percentile per-packet one-way delay: 57.578 ms

Loss rate: 82.33%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-11 11:44:46

End at: 2017-08-11 11:45:16

Below is generated by plot.py at 2017-08-11 14:40:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.61 Mbit/s

95th percentile per-packet one-way delay: 59.835 ms

Loss rate: 29.73%

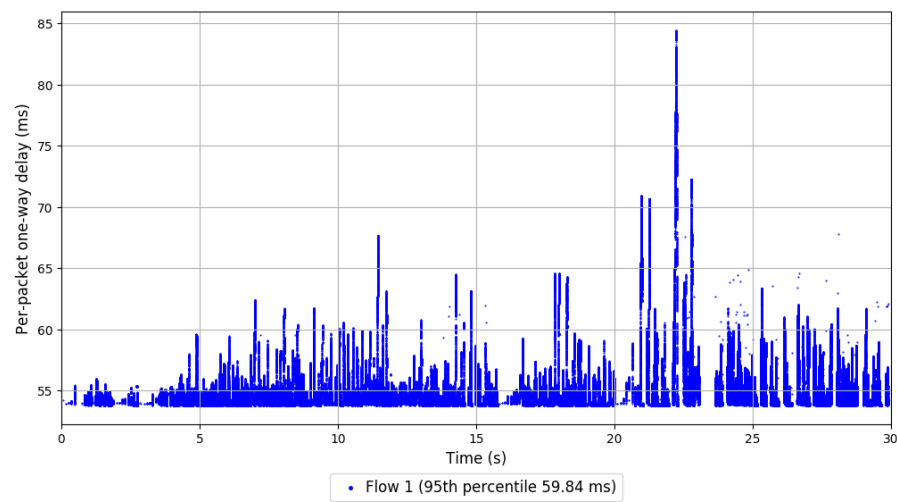
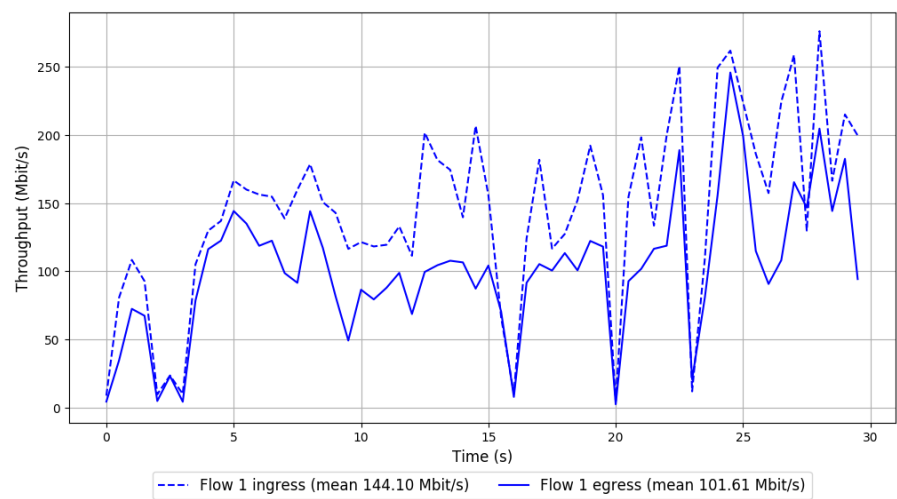
-- Flow 1:

Average throughput: 101.61 Mbit/s

95th percentile per-packet one-way delay: 59.835 ms

Loss rate: 29.73%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-11 11:55:15

End at: 2017-08-11 11:55:45

Below is generated by plot.py at 2017-08-11 14:40:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.97 Mbit/s

95th percentile per-packet one-way delay: 54.369 ms

Loss rate: 72.42%

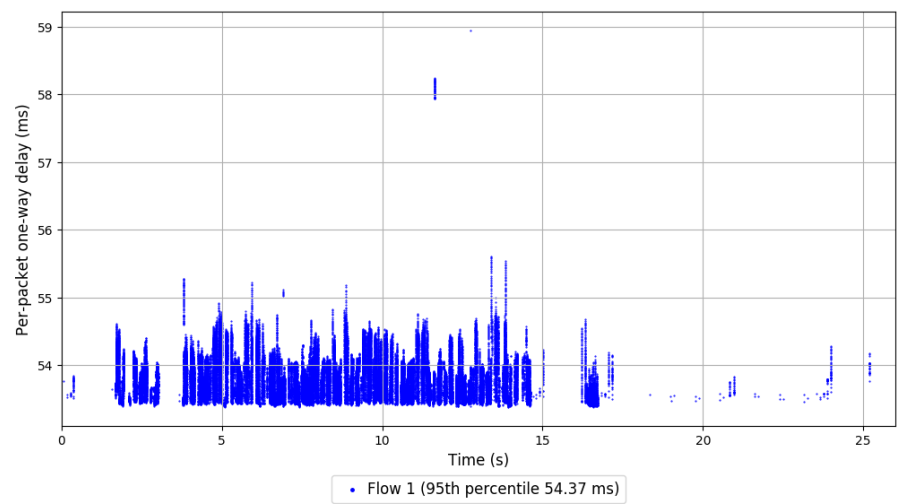
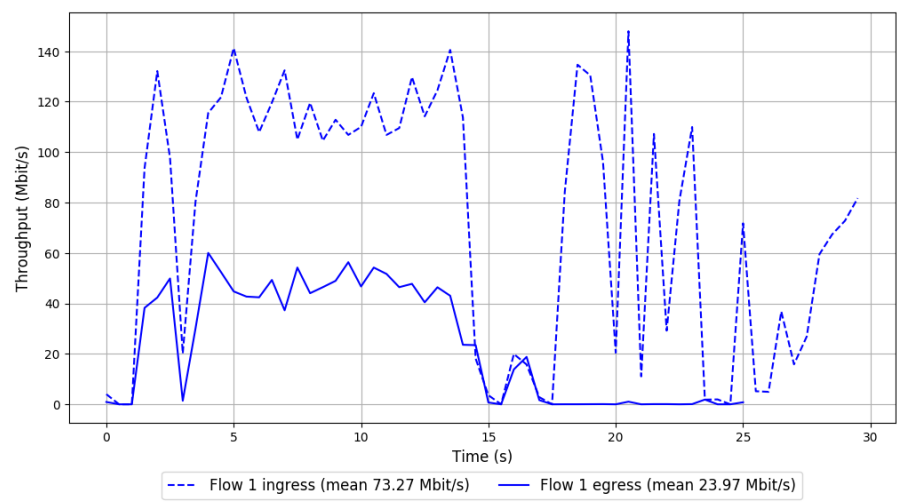
-- Flow 1:

Average throughput: 23.97 Mbit/s

95th percentile per-packet one-way delay: 54.369 ms

Loss rate: 72.42%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-11 12:05:06

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

Below is generated by plot.py at 2017-08-11 14:40:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.44 Mbit/s

95th percentile per-packet one-way delay: 54.019 ms

Loss rate: 58.12%

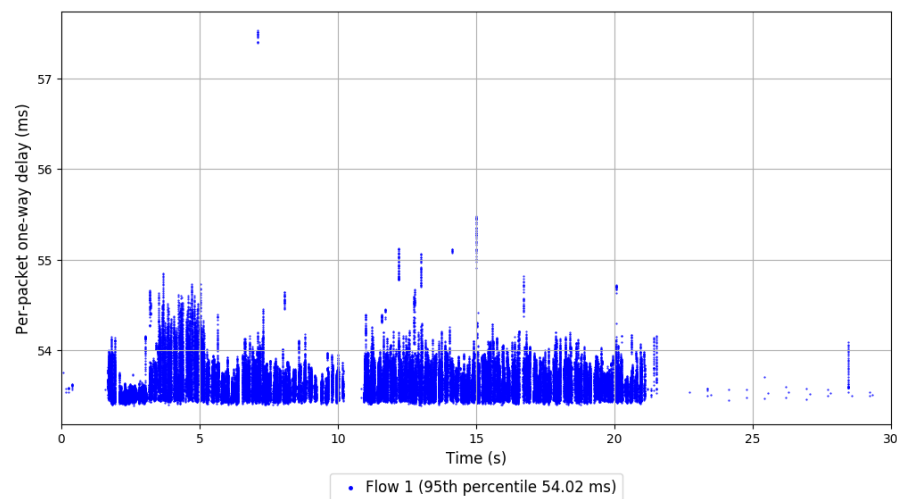
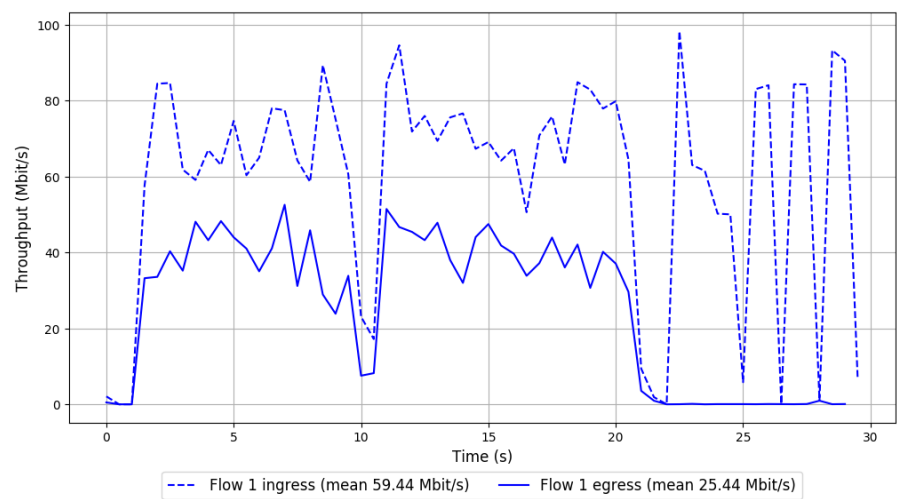
-- Flow 1:

Average throughput: 25.44 Mbit/s

95th percentile per-packet one-way delay: 54.019 ms

Loss rate: 58.12%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-11 12:14:53

End at: 2017-08-11 12:15:23

Below is generated by plot.py at 2017-08-11 14:40:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.66 Mbit/s

95th percentile per-packet one-way delay: 59.971 ms

Loss rate: 20.26%

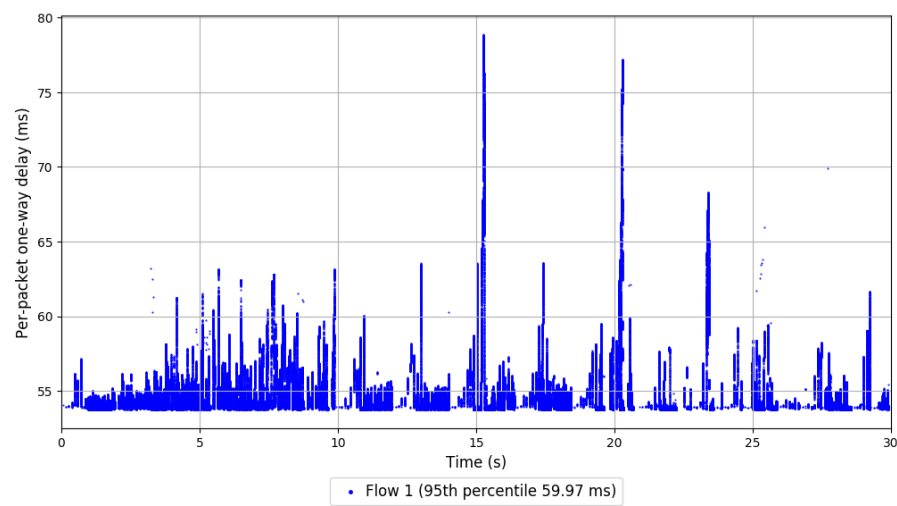
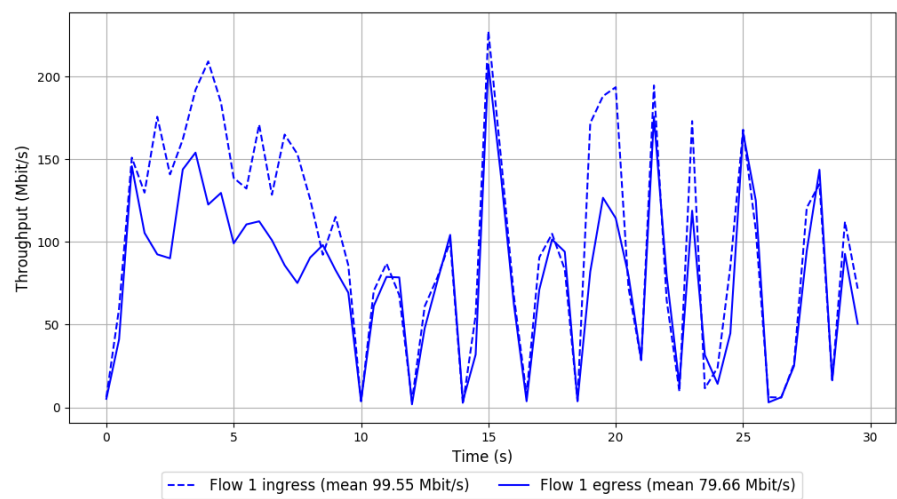
-- Flow 1:

Average throughput: 79.66 Mbit/s

95th percentile per-packet one-way delay: 59.971 ms

Loss rate: 20.26%

Run 10: Report of Verus — Data Link

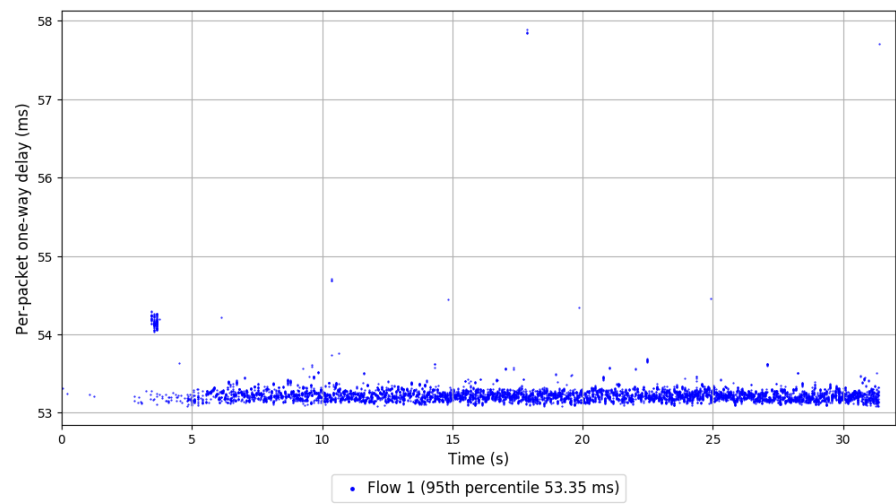
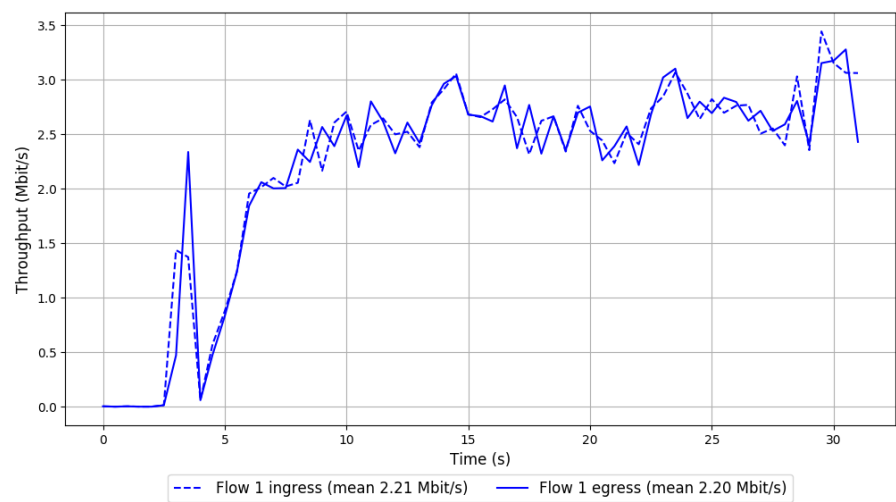


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-11 10:41:02
End at: 2017-08-11 10:41:32

# Below is generated by plot.py at 2017-08-11 14:40:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 53.355 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 53.355 ms
Loss rate: 0.62%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-11 10:51:36

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

Below is generated by plot.py at 2017-08-11 14:40:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 50.230 ms

Loss rate: 0.37%

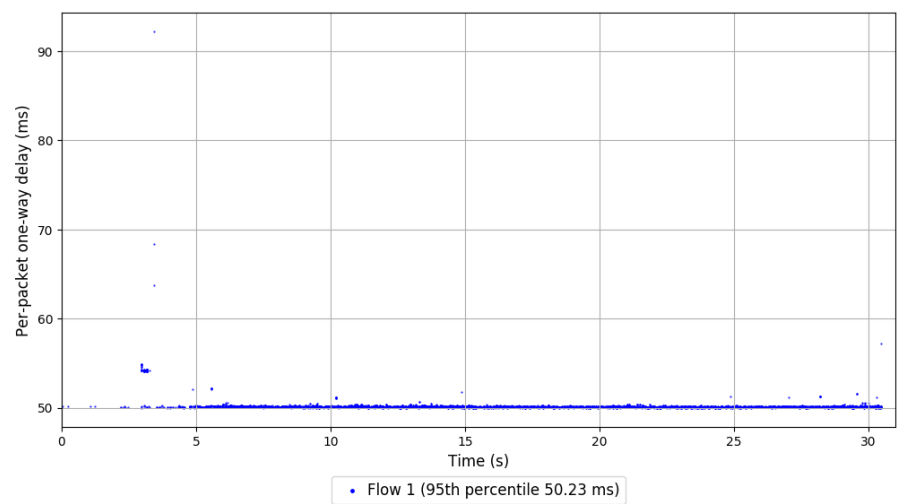
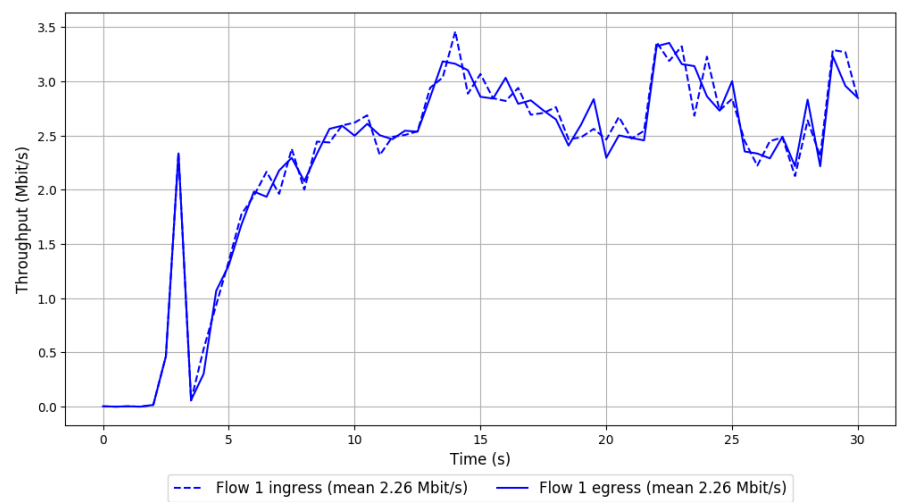
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 50.230 ms

Loss rate: 0.37%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-11 11:01:50

End at: 2017-08-11 11:02:20

Below is generated by plot.py at 2017-08-11 14:40:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 50.558 ms

Loss rate: 0.69%

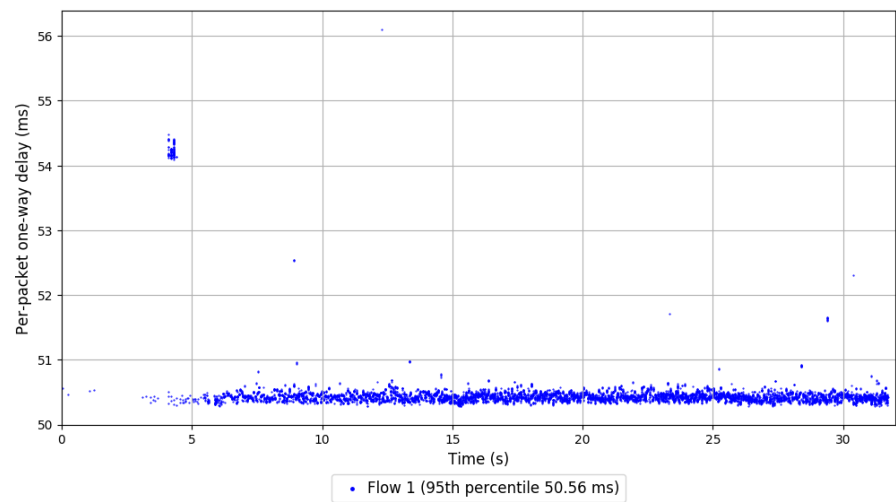
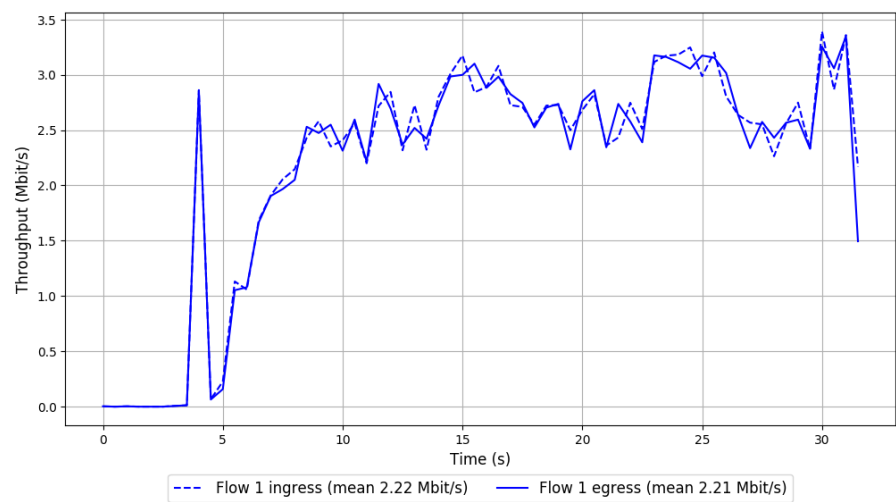
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 50.558 ms

Loss rate: 0.69%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2017-08-11 14:40:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 53.393 ms

Loss rate: 0.62%

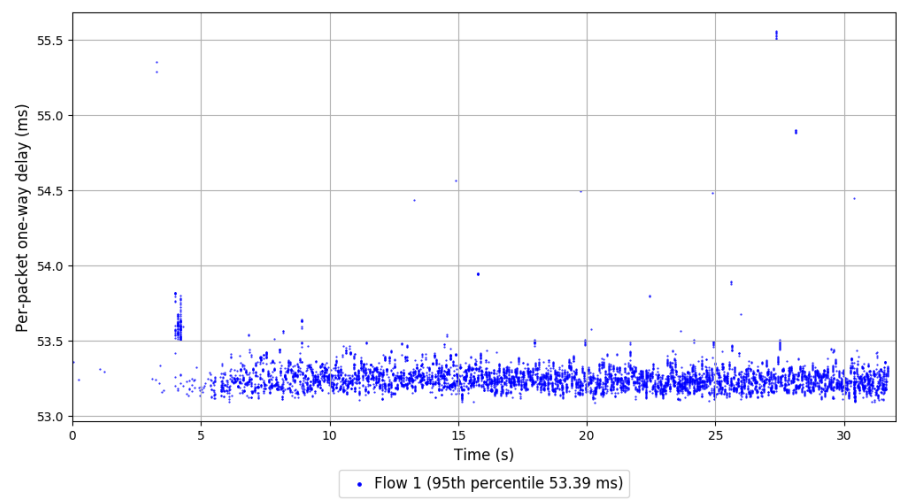
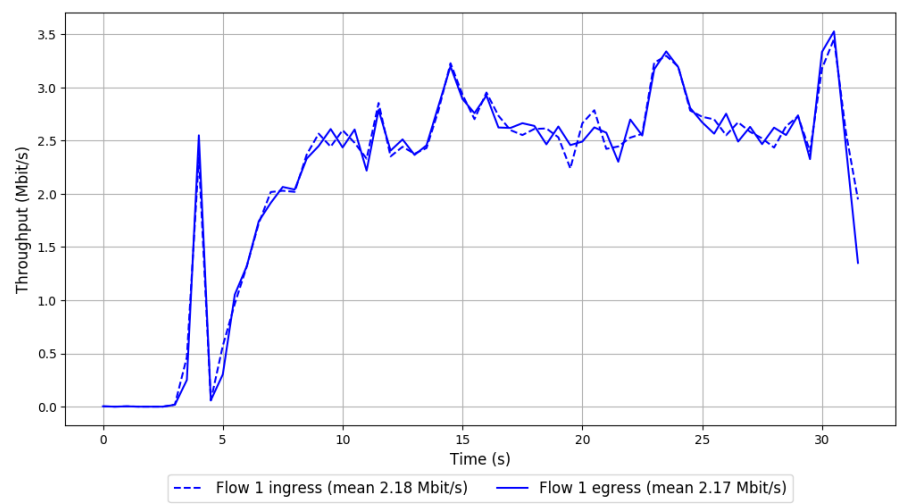
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 53.393 ms

Loss rate: 0.62%

Run 4: Report of WebRTC media — Data Link

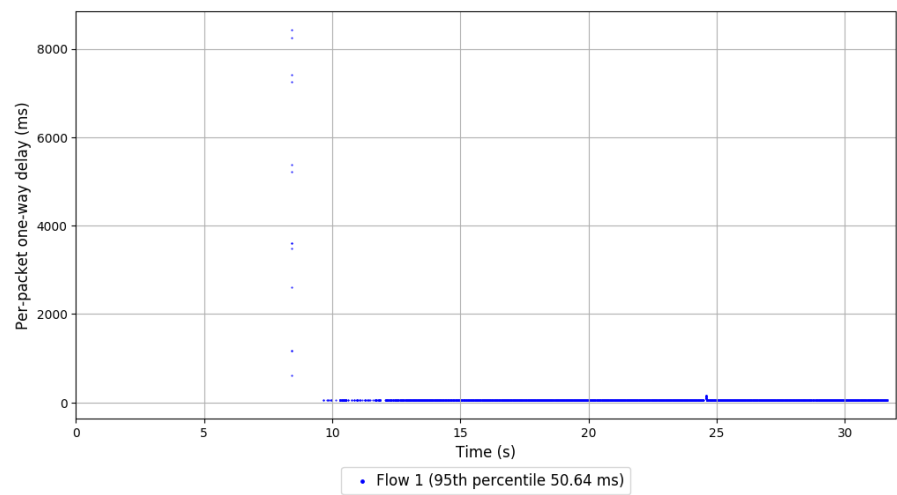
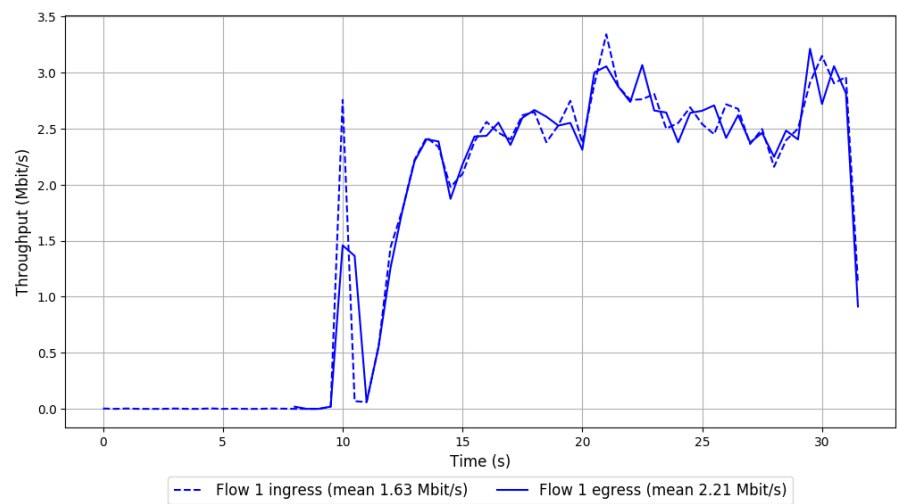


Run 5: Statistics of WebRTC media

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

End at: 2017-08-11 11:22:36

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-11 11:32:04

End at: 2017-08-11 11:32:34

Below is generated by plot.py at 2017-08-11 14:40:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 50.492 ms

Loss rate: 0.41%

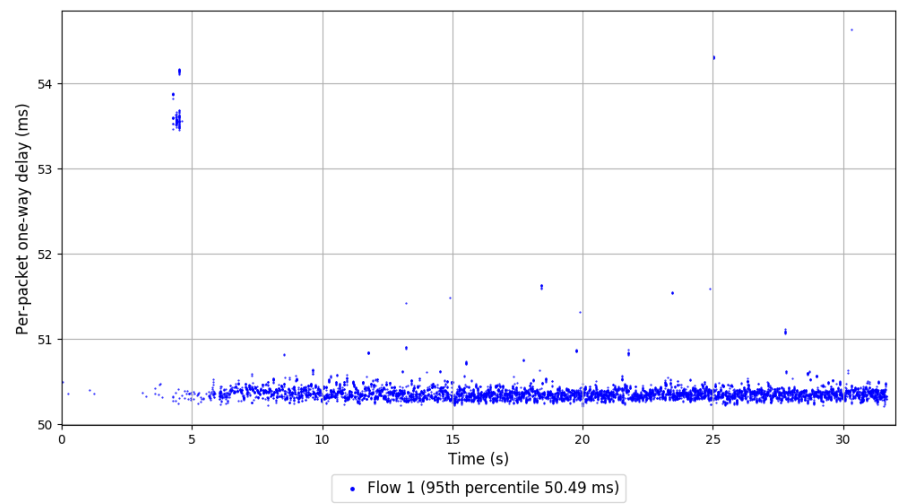
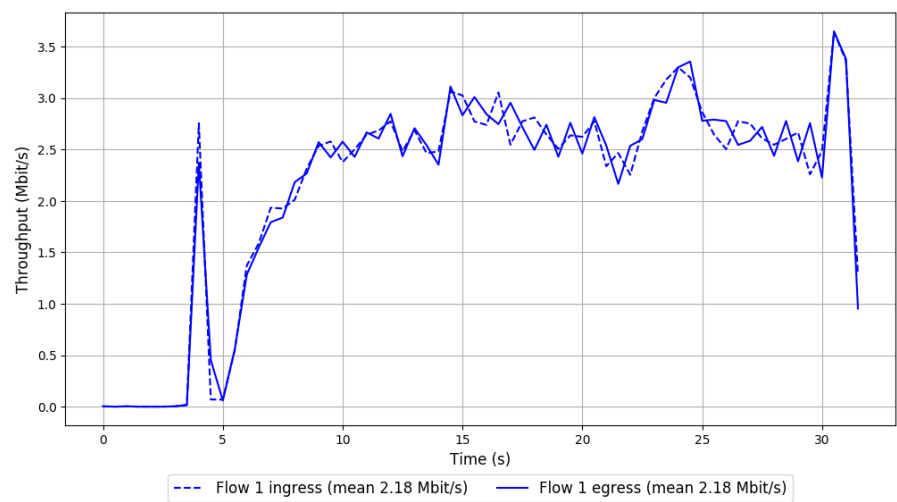
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 50.492 ms

Loss rate: 0.41%

Run 6: Report of WebRTC media — Data Link

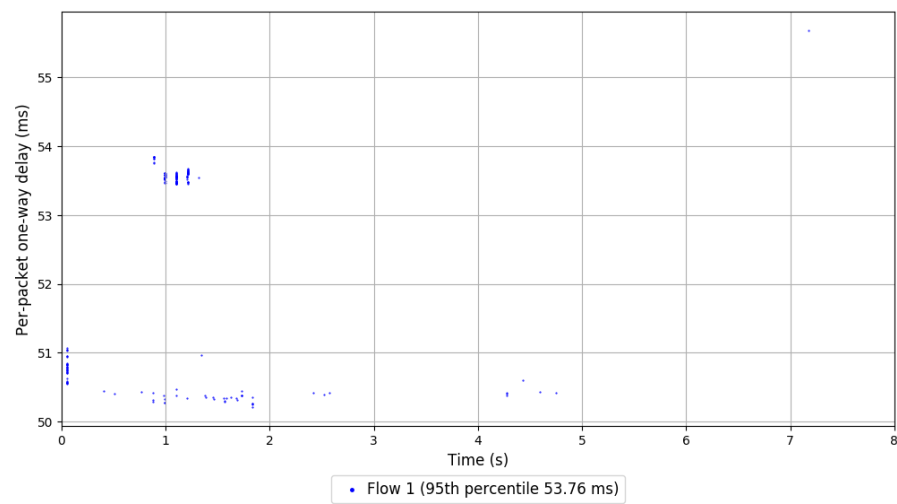
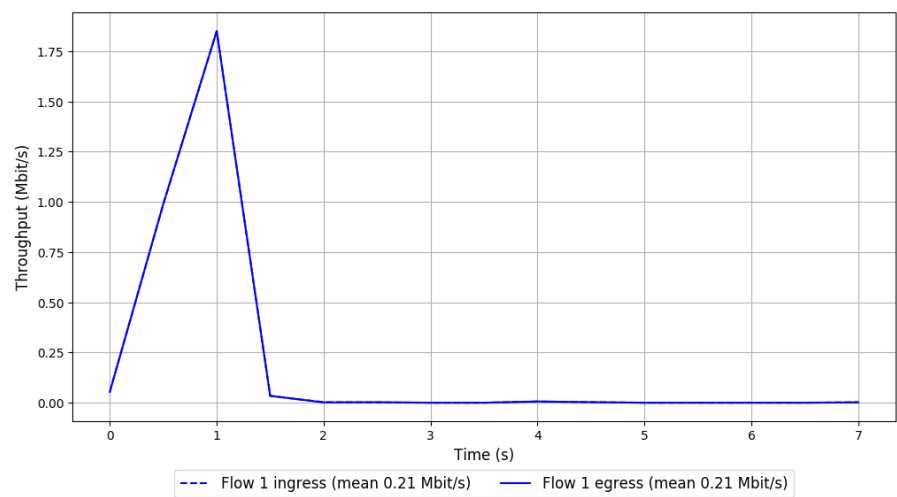


Run 7: Statistics of WebRTC media

Start at: 2017-08-11 11:41:54

End at: 2017-08-11 11:42:24

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2017-08-11 14:40:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.655 ms

Loss rate: 0.57%

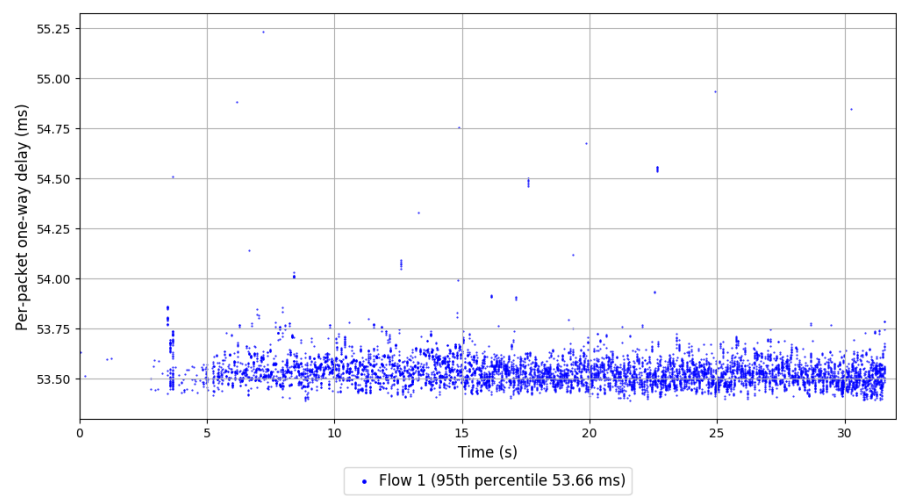
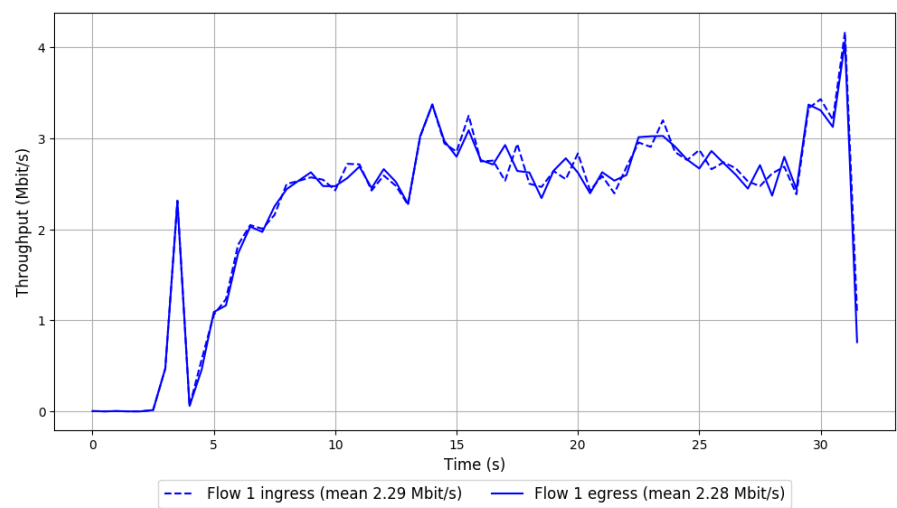
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.655 ms

Loss rate: 0.57%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-11 12:02:35

End at: 2017-08-11 12:03:05

Below is generated by plot.py at 2017-08-11 14:40:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 54.019 ms

Loss rate: 0.62%

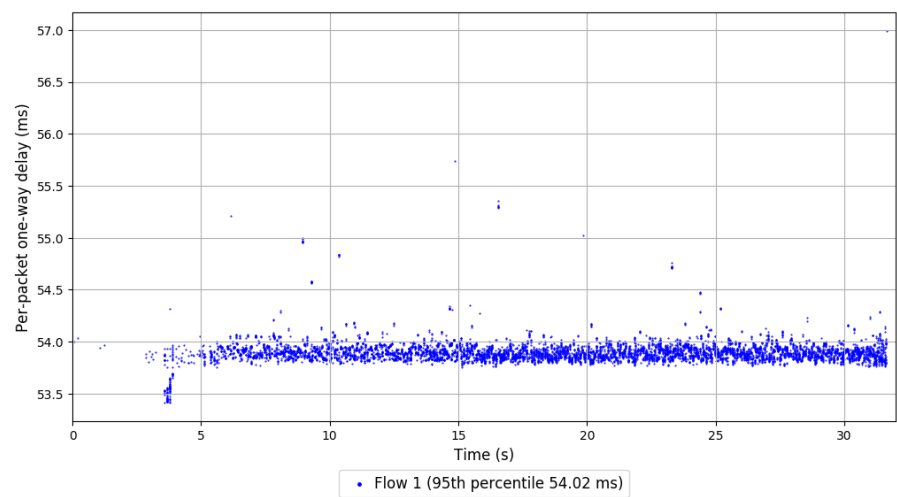
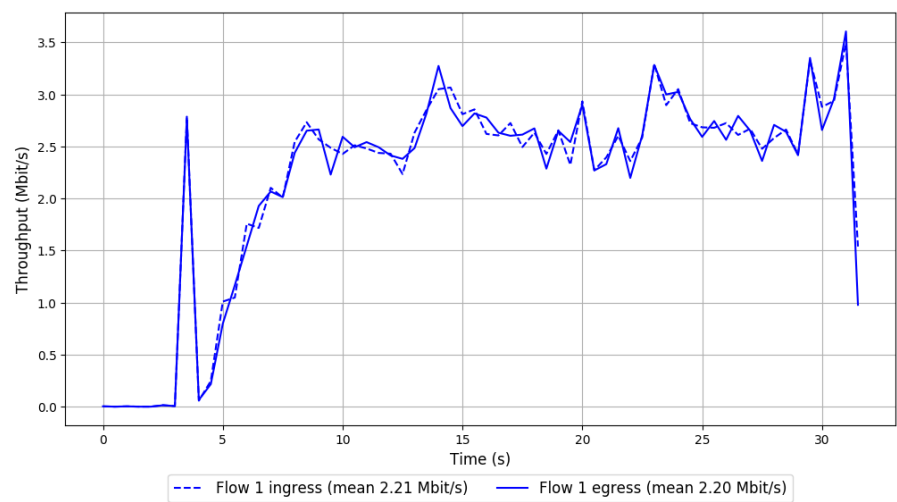
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 54.019 ms

Loss rate: 0.62%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

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

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

Run 10: Report of WebRTC media — Data Link

