

Pantheon Report

Generated at 2017-11-30 14:29:38 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

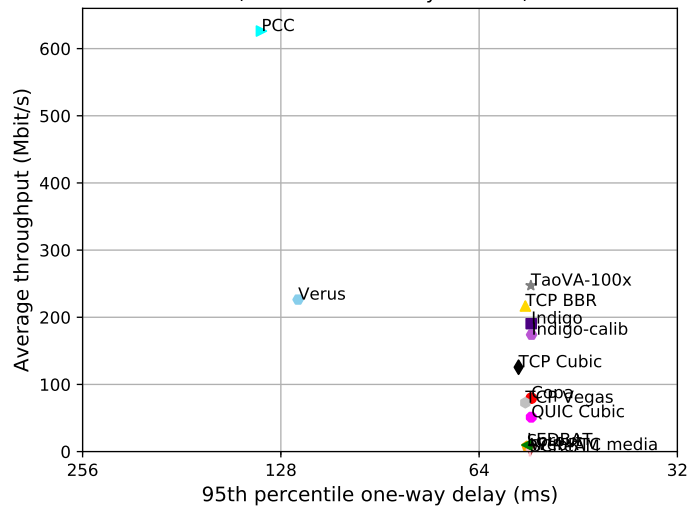
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

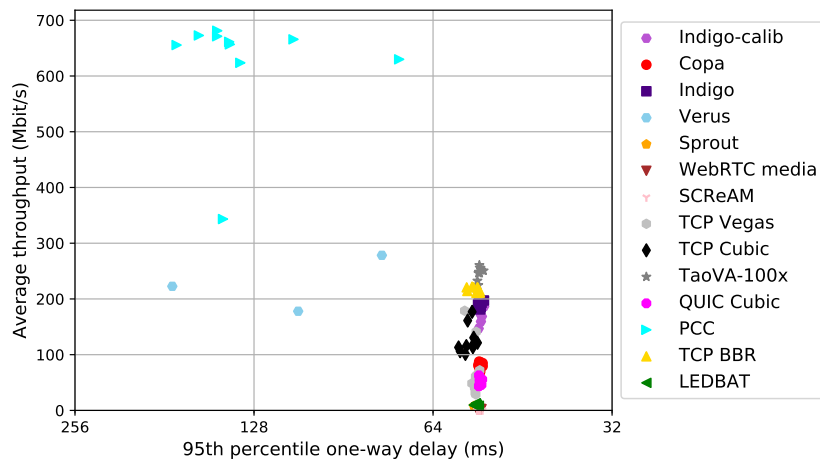
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	216.78	54.45	0.38
TCP Cubic	10	125.62	55.76	0.33
LEDBAT	10	9.76	54.16	0.45
PCC	10	626.16	136.99	1.21
QUIC Cubic	9	51.21	53.34	0.58
SCReAM	10	0.22	53.58	0.35
WebRTC media	10	2.30	53.51	0.40
Sprout	10	7.95	54.17	0.40
TaoVA-100x	10	247.17	53.41	0.39
TCP Vegas	10	72.70	54.45	0.30
Verus	3	226.32	120.51	2.64
Copa	10	79.51	53.34	0.32
Indigo	10	190.53	53.34	0.33
Indigo-calib	10	174.04	53.28	0.26

Run 1: Statistics of TCP BBR

Start at: 2017-11-30 10:22:50

End at: 2017-11-30 10:23:20

Below is generated by plot.py at 2017-11-30 13:47:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.35 Mbit/s

95th percentile per-packet one-way delay: 56.040 ms

Loss rate: 0.36%

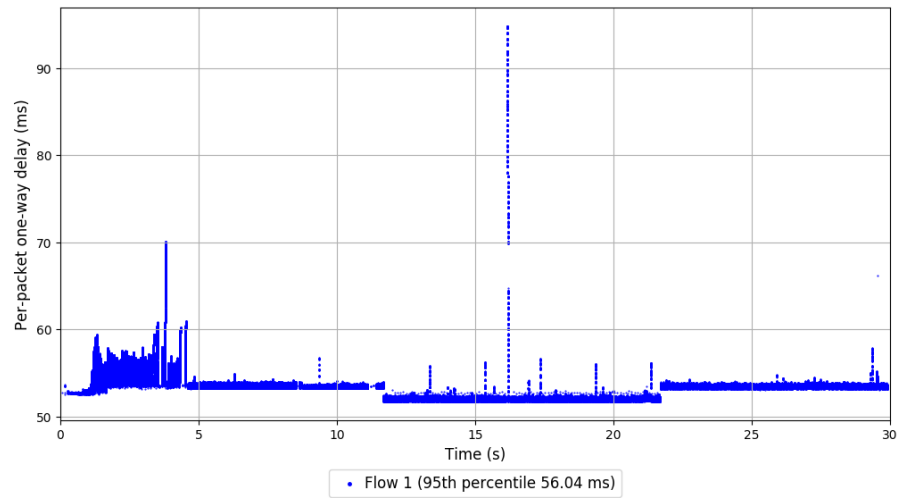
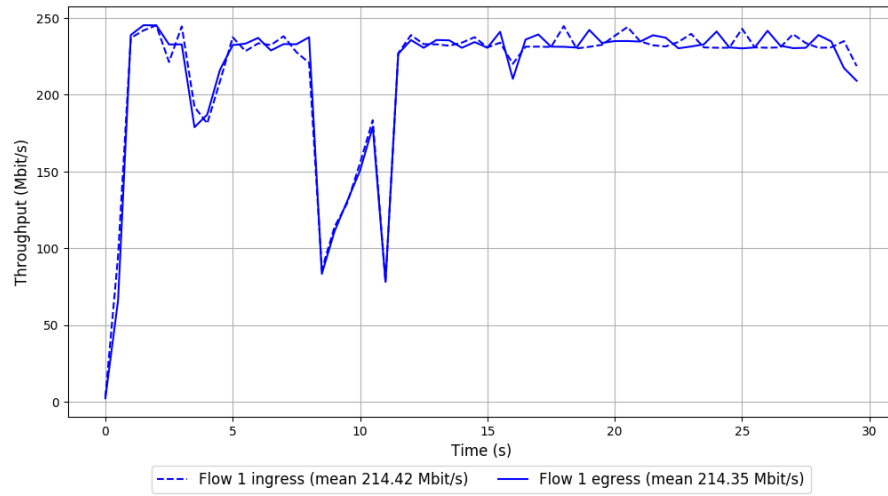
-- Flow 1:

Average throughput: 214.35 Mbit/s

95th percentile per-packet one-way delay: 56.040 ms

Loss rate: 0.36%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-30 10:33:16

End at: 2017-11-30 10:33:46

Below is generated by plot.py at 2017-11-30 13:47:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.97 Mbit/s

95th percentile per-packet one-way delay: 53.825 ms

Loss rate: 0.40%

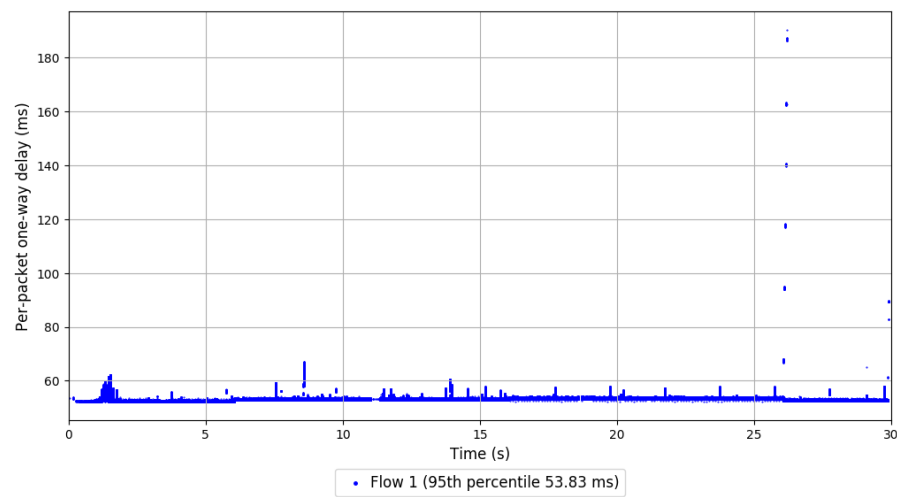
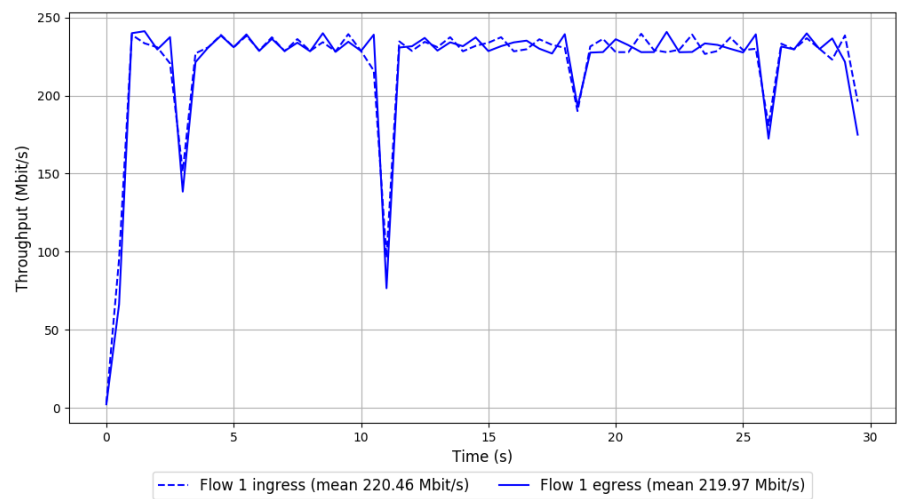
-- Flow 1:

Average throughput: 219.97 Mbit/s

95th percentile per-packet one-way delay: 53.825 ms

Loss rate: 0.40%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-30 10:43:35

End at: 2017-11-30 10:44:05

Below is generated by plot.py at 2017-11-30 13:47:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.15 Mbit/s

95th percentile per-packet one-way delay: 55.023 ms

Loss rate: 0.42%

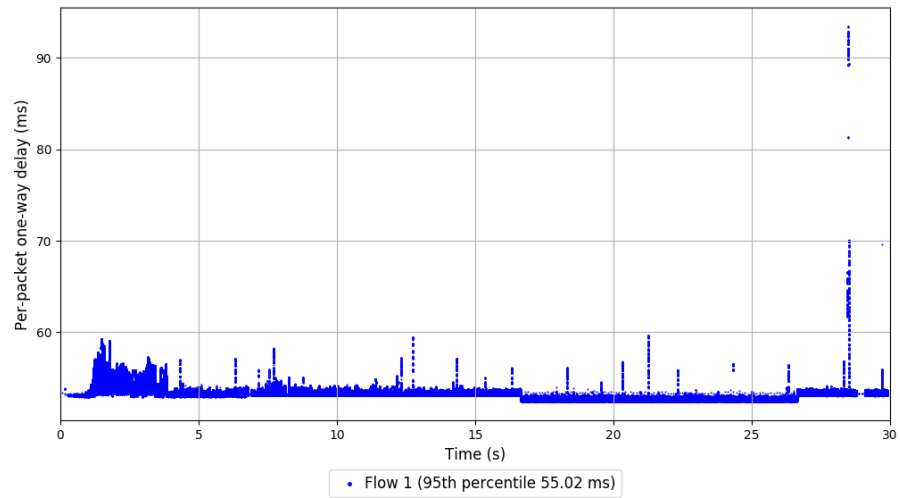
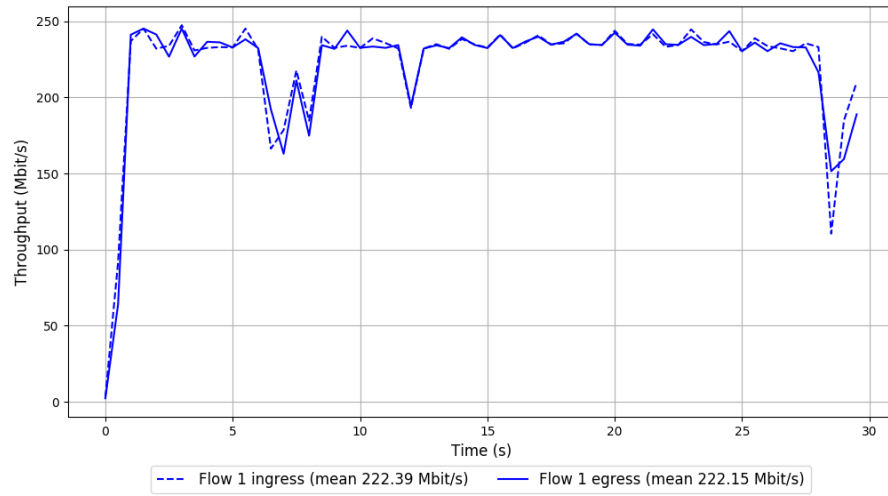
-- Flow 1:

Average throughput: 222.15 Mbit/s

95th percentile per-packet one-way delay: 55.023 ms

Loss rate: 0.42%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-30 10:54:03

End at: 2017-11-30 10:54:33

Below is generated by plot.py at 2017-11-30 13:47:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.04 Mbit/s

95th percentile per-packet one-way delay: 53.895 ms

Loss rate: 0.39%

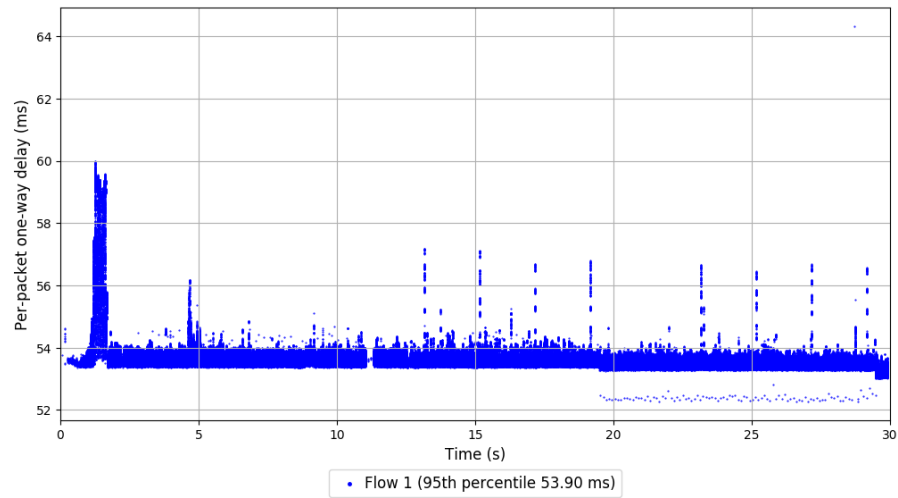
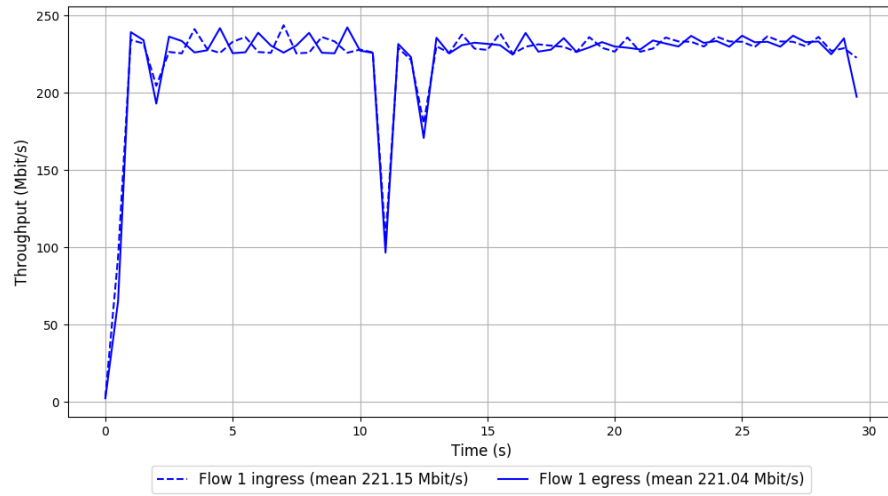
-- Flow 1:

Average throughput: 221.04 Mbit/s

95th percentile per-packet one-way delay: 53.895 ms

Loss rate: 0.39%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-30 11:04:26

End at: 2017-11-30 11:04:56

Below is generated by plot.py at 2017-11-30 13:47:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.15 Mbit/s

95th percentile per-packet one-way delay: 54.116 ms

Loss rate: 0.38%

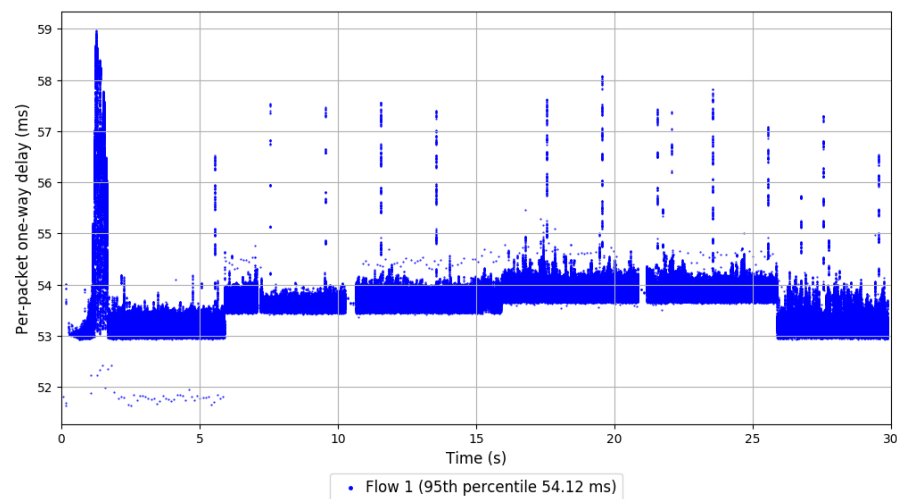
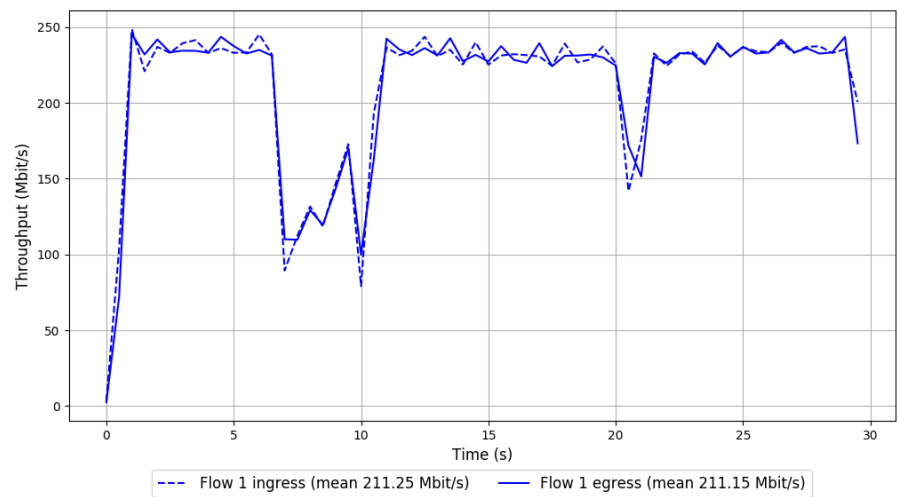
-- Flow 1:

Average throughput: 211.15 Mbit/s

95th percentile per-packet one-way delay: 54.116 ms

Loss rate: 0.38%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-30 11:14:27

End at: 2017-11-30 11:14:57

Below is generated by plot.py at 2017-11-30 13:47:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.03 Mbit/s

95th percentile per-packet one-way delay: 54.718 ms

Loss rate: 0.33%

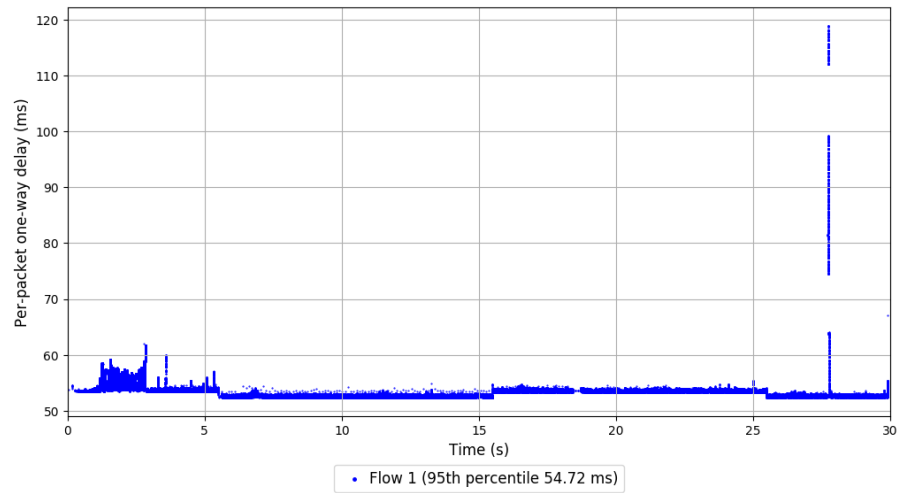
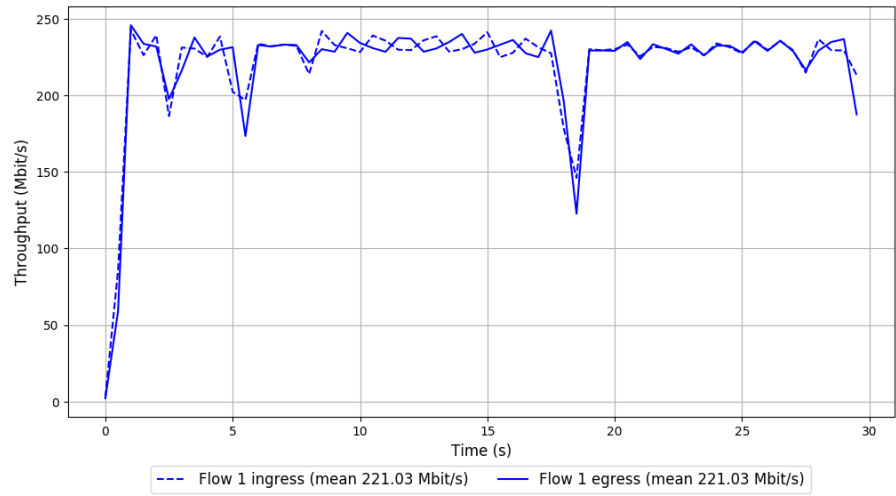
-- Flow 1:

Average throughput: 221.03 Mbit/s

95th percentile per-packet one-way delay: 54.718 ms

Loss rate: 0.33%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-30 11:24:43

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

Below is generated by plot.py at 2017-11-30 13:47:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.69 Mbit/s

95th percentile per-packet one-way delay: 53.815 ms

Loss rate: 0.37%

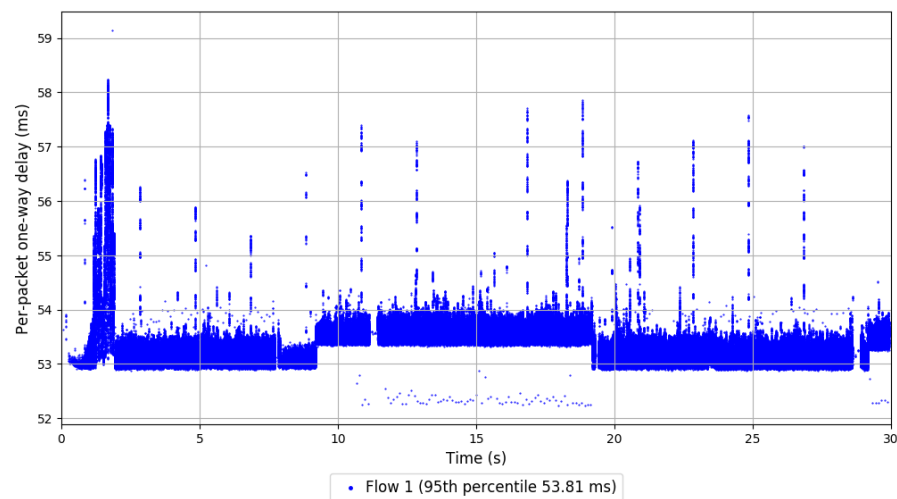
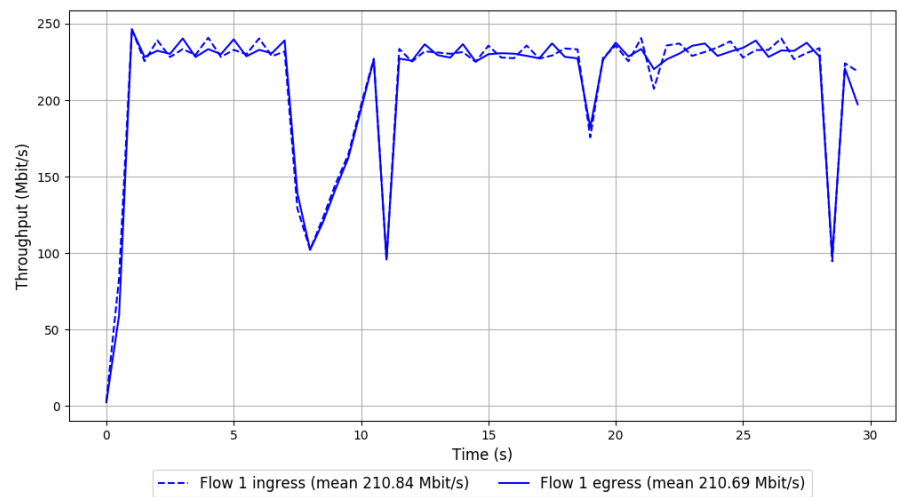
-- Flow 1:

Average throughput: 210.69 Mbit/s

95th percentile per-packet one-way delay: 53.815 ms

Loss rate: 0.37%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-30 11:35:11

End at: 2017-11-30 11:35:42

Below is generated by plot.py at 2017-11-30 13:47:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.17 Mbit/s

95th percentile per-packet one-way delay: 53.464 ms

Loss rate: 0.36%

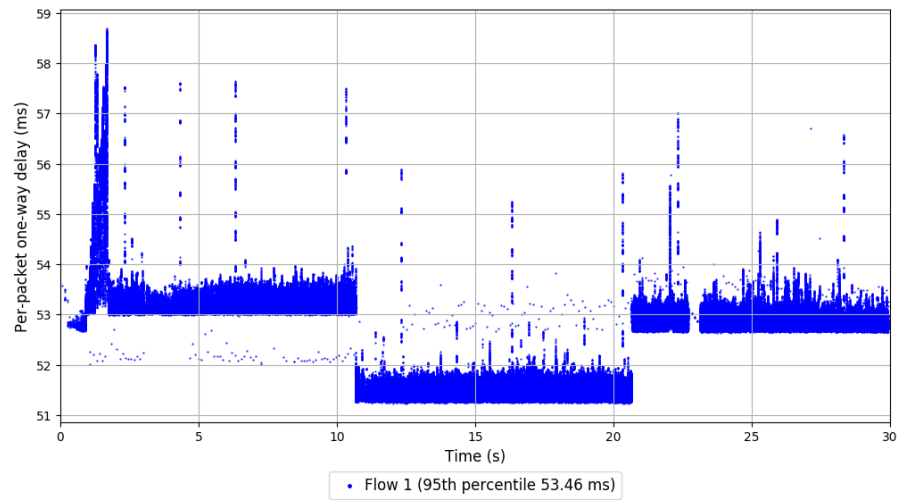
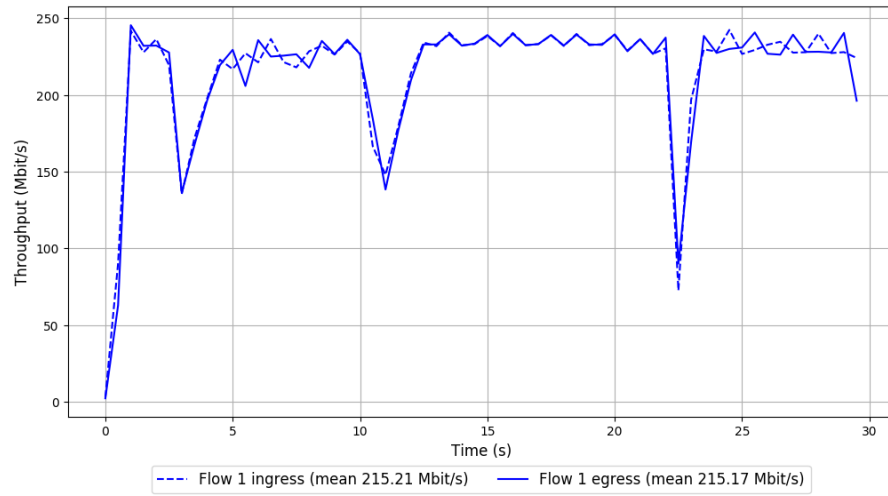
-- Flow 1:

Average throughput: 215.17 Mbit/s

95th percentile per-packet one-way delay: 53.464 ms

Loss rate: 0.36%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

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

End at: 2017-11-30 11:46:15

Below is generated by plot.py at 2017-11-30 13:51:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.86 Mbit/s

95th percentile per-packet one-way delay: 56.188 ms

Loss rate: 0.37%

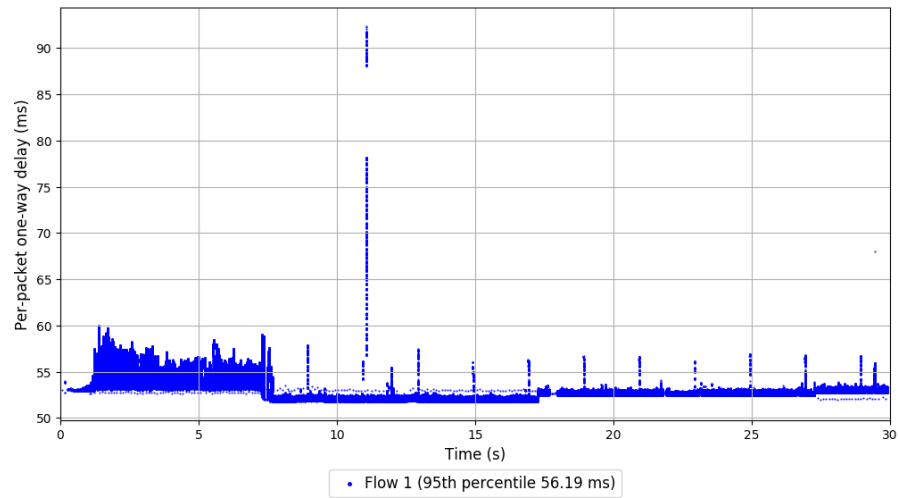
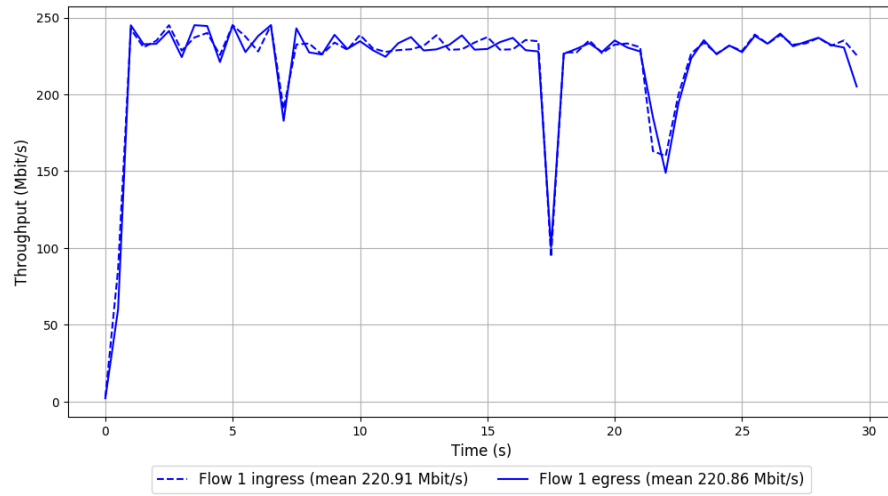
-- Flow 1:

Average throughput: 220.86 Mbit/s

95th percentile per-packet one-way delay: 56.188 ms

Loss rate: 0.37%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

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

End at: 2017-11-30 11:56:41

Below is generated by plot.py at 2017-11-30 13:51:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.37 Mbit/s

95th percentile per-packet one-way delay: 53.371 ms

Loss rate: 0.38%

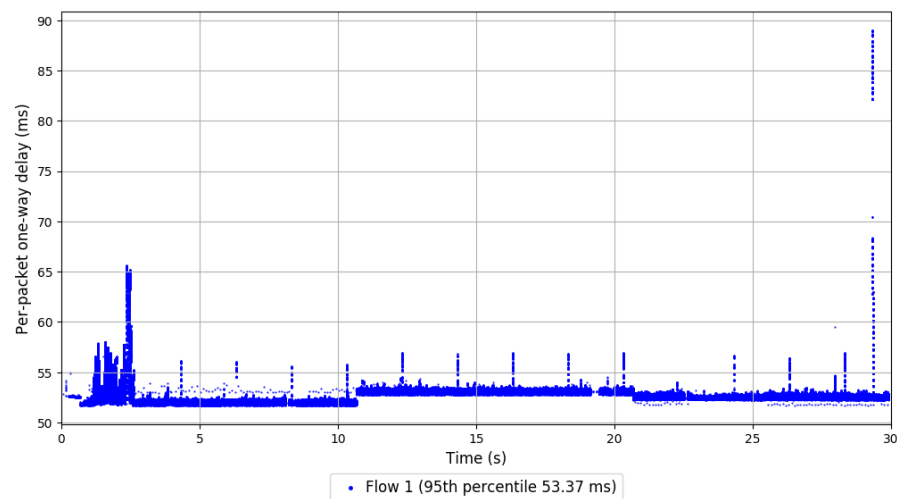
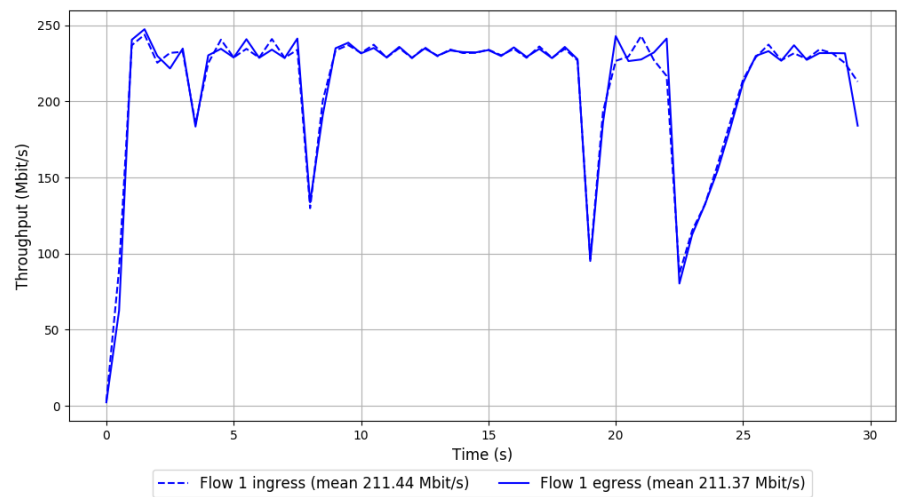
-- Flow 1:

Average throughput: 211.37 Mbit/s

95th percentile per-packet one-way delay: 53.371 ms

Loss rate: 0.38%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-30 10:17:46

End at: 2017-11-30 10:18:16

Below is generated by plot.py at 2017-11-30 13:51:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.00 Mbit/s

95th percentile per-packet one-way delay: 57.978 ms

Loss rate: 0.36%

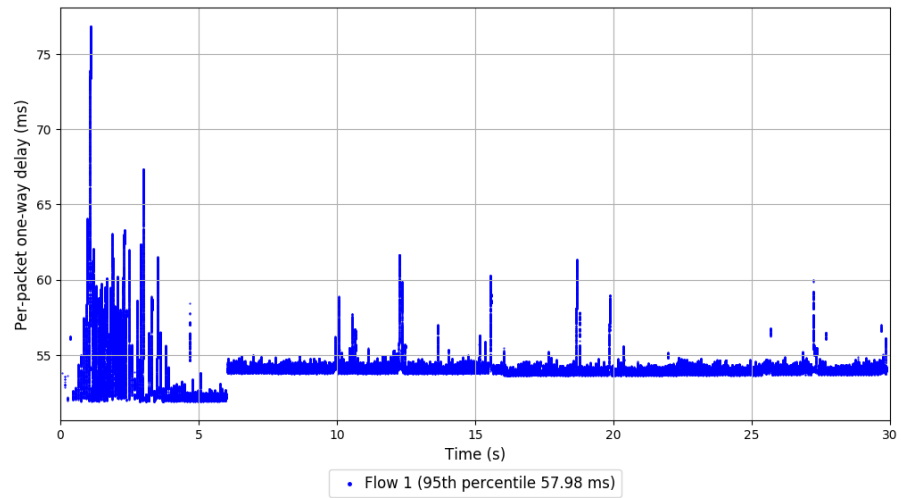
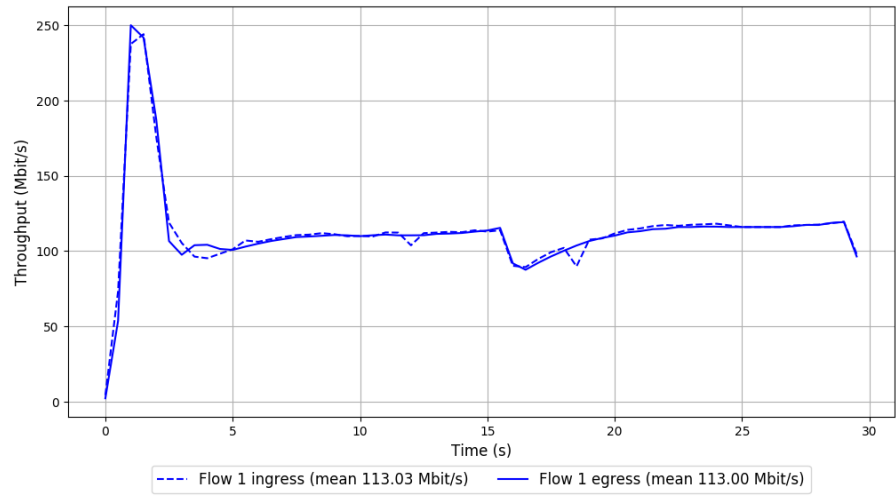
-- Flow 1:

Average throughput: 113.00 Mbit/s

95th percentile per-packet one-way delay: 57.978 ms

Loss rate: 0.36%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-30 10:28:07

End at: 2017-11-30 10:28:37

Below is generated by plot.py at 2017-11-30 13:51:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 161.24 Mbit/s

95th percentile per-packet one-way delay: 55.970 ms

Loss rate: 0.32%

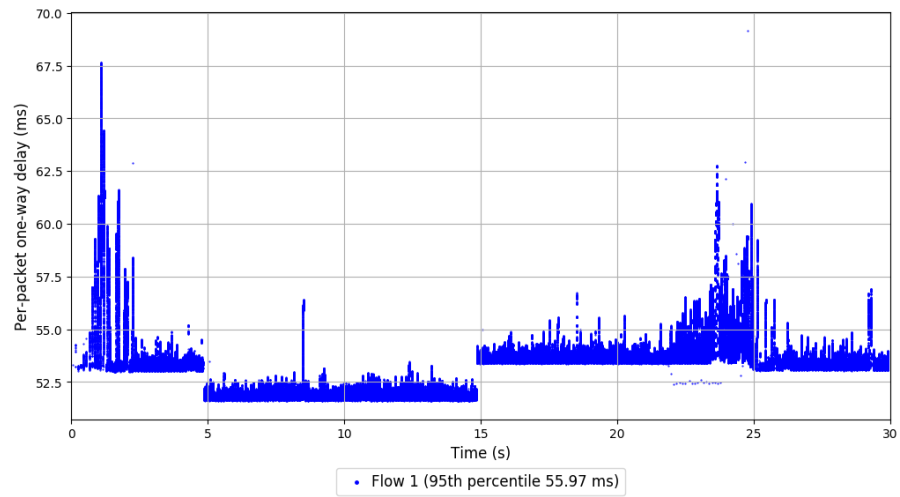
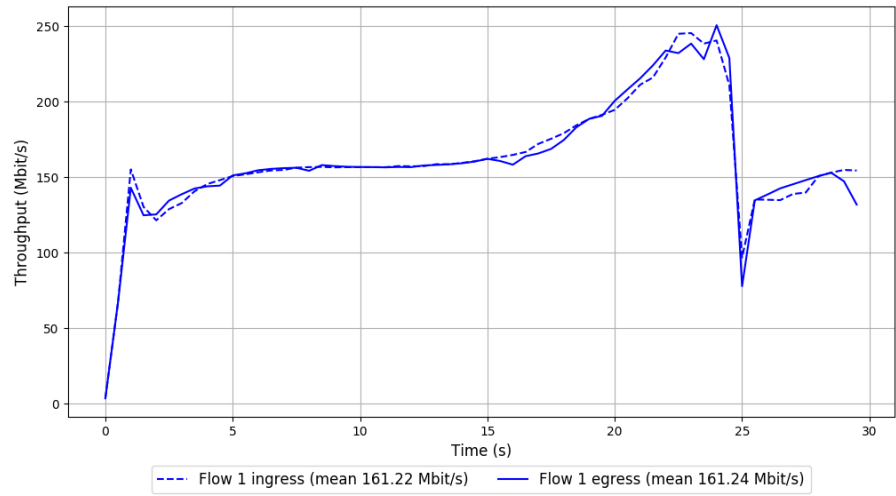
-- Flow 1:

Average throughput: 161.24 Mbit/s

95th percentile per-packet one-way delay: 55.970 ms

Loss rate: 0.32%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-30 10:38:26

End at: 2017-11-30 10:38:56

Below is generated by plot.py at 2017-11-30 13:51:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.44 Mbit/s

95th percentile per-packet one-way delay: 56.255 ms

Loss rate: 0.28%

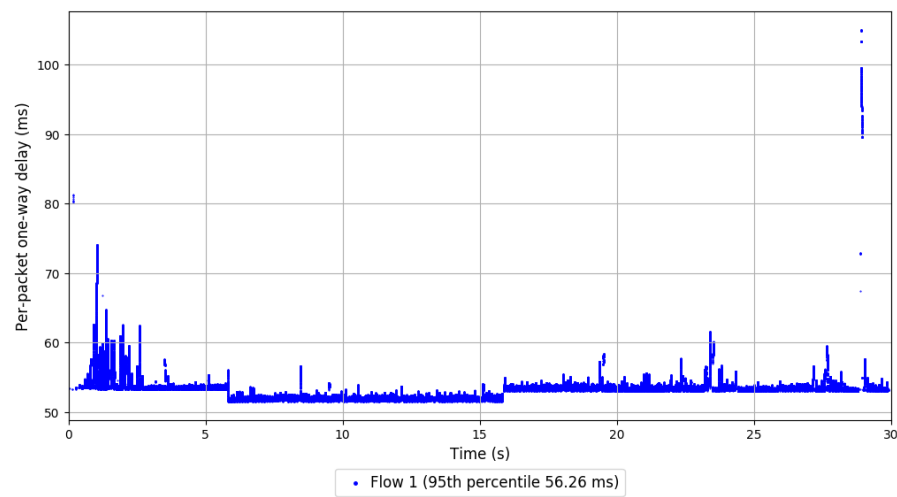
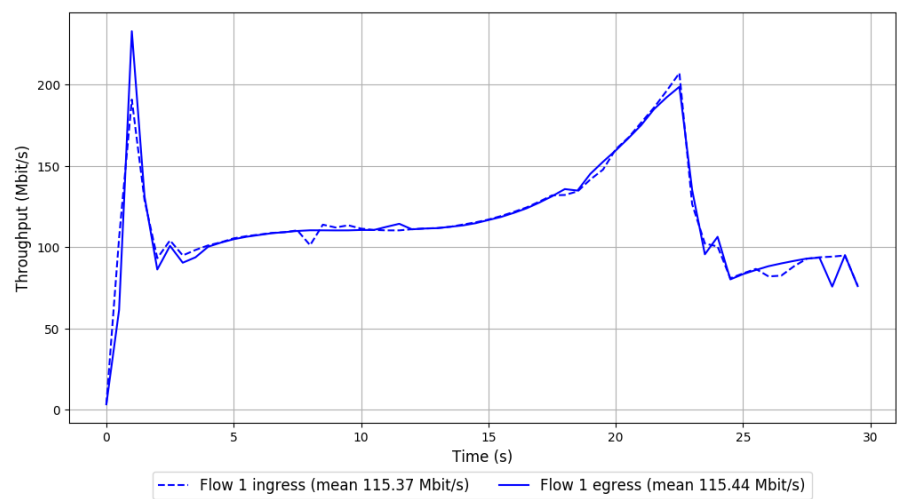
-- Flow 1:

Average throughput: 115.44 Mbit/s

95th percentile per-packet one-way delay: 56.255 ms

Loss rate: 0.28%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-30 10:48:50

End at: 2017-11-30 10:49:20

Below is generated by plot.py at 2017-11-30 13:51:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.53 Mbit/s

95th percentile per-packet one-way delay: 54.849 ms

Loss rate: 0.39%

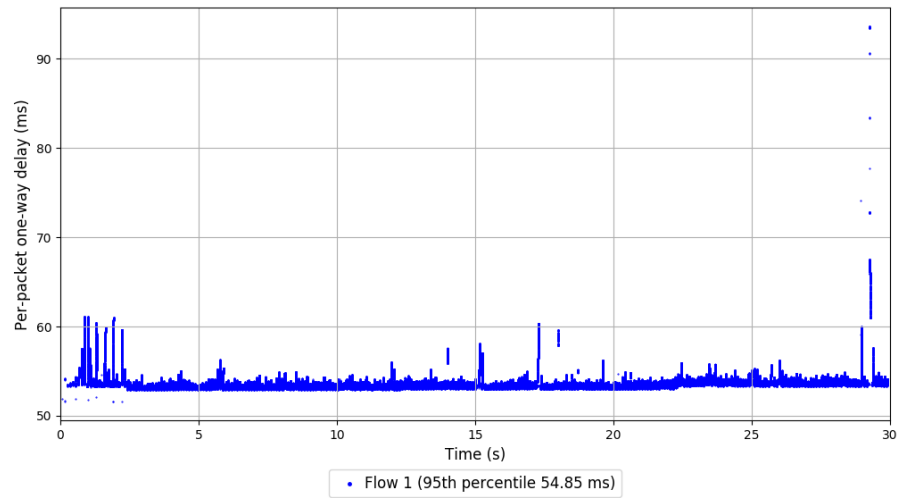
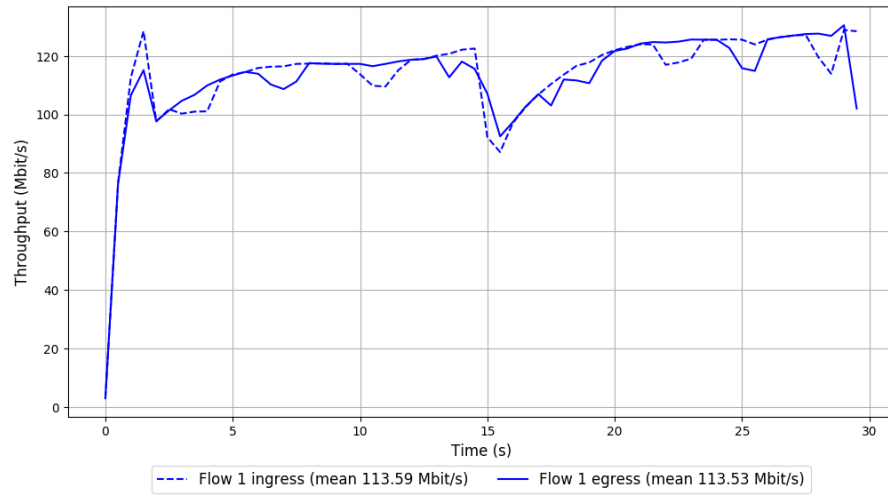
-- Flow 1:

Average throughput: 113.53 Mbit/s

95th percentile per-packet one-way delay: 54.849 ms

Loss rate: 0.39%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-30 10:59:19

End at: 2017-11-30 10:59:49

Below is generated by plot.py at 2017-11-30 13:51:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.86 Mbit/s

95th percentile per-packet one-way delay: 55.014 ms

Loss rate: 0.30%

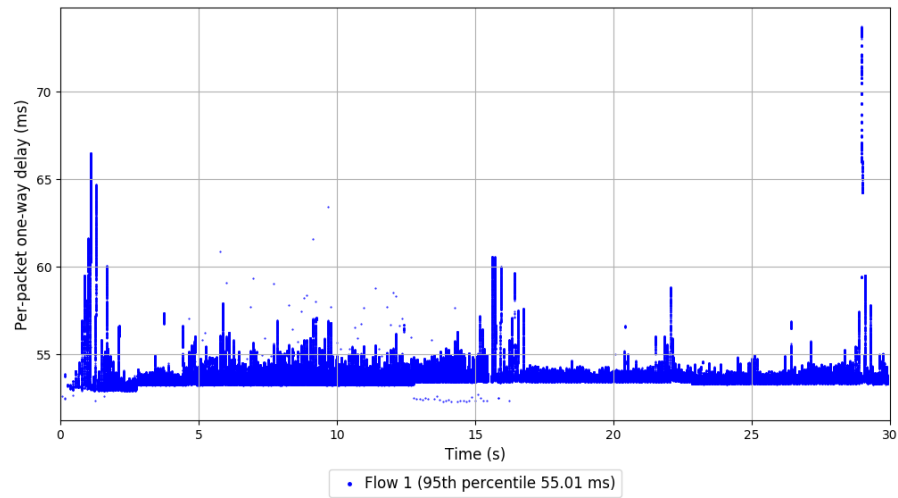
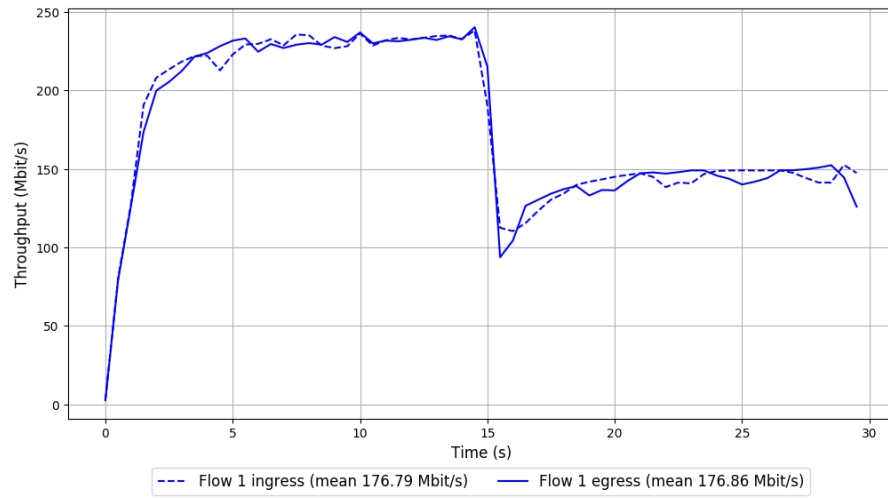
-- Flow 1:

Average throughput: 176.86 Mbit/s

95th percentile per-packet one-way delay: 55.014 ms

Loss rate: 0.30%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-30 11:09:21

End at: 2017-11-30 11:09:51

Below is generated by plot.py at 2017-11-30 13:51:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.35 Mbit/s

95th percentile per-packet one-way delay: 54.680 ms

Loss rate: 0.42%

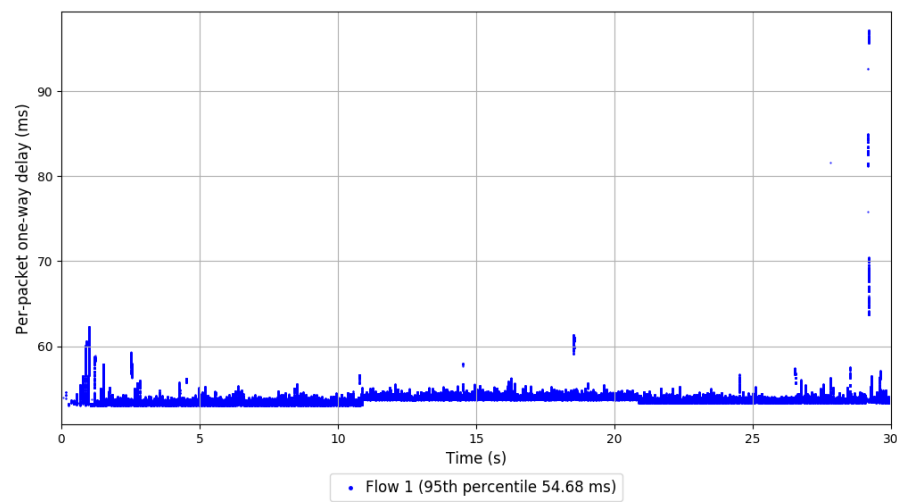
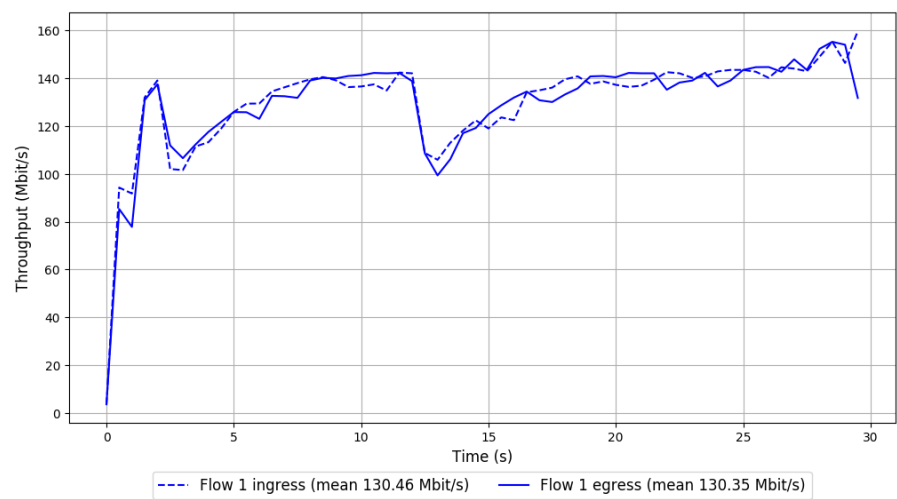
-- Flow 1:

Average throughput: 130.35 Mbit/s

95th percentile per-packet one-way delay: 54.680 ms

Loss rate: 0.42%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-30 11:19:32

End at: 2017-11-30 11:20:02

Below is generated by plot.py at 2017-11-30 13:51:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.95 Mbit/s

95th percentile per-packet one-way delay: 54.865 ms

Loss rate: 0.37%

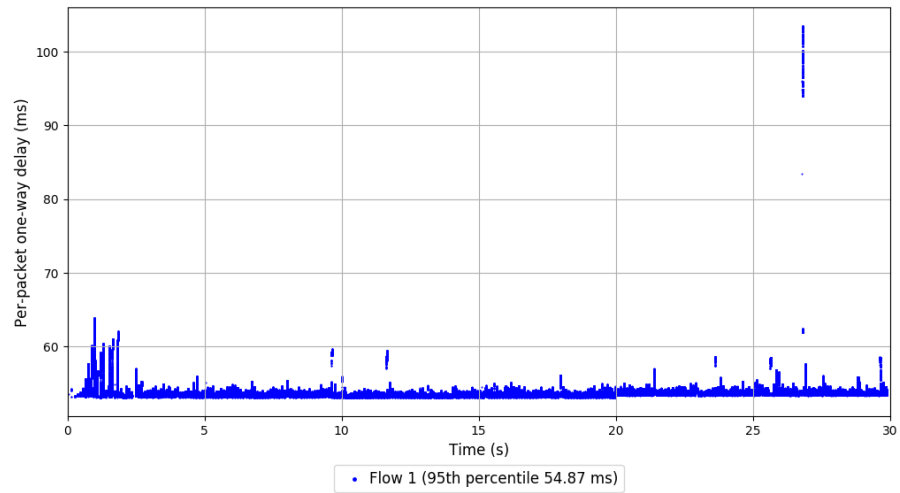
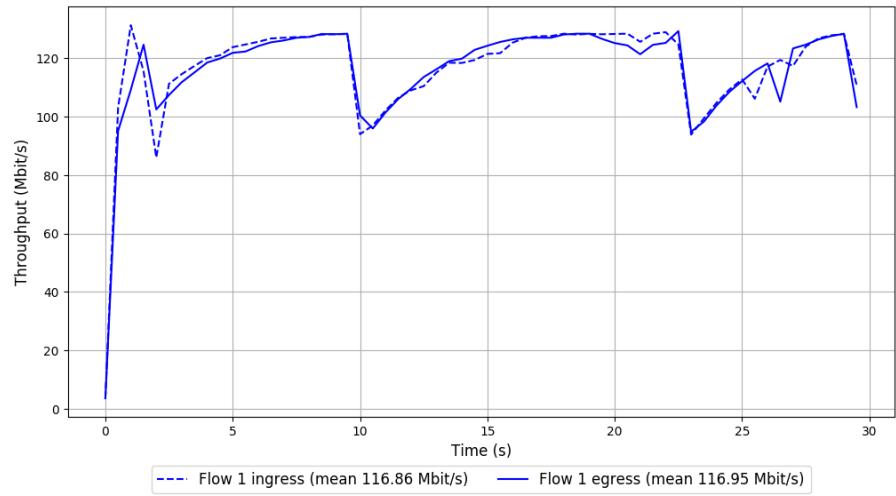
-- Flow 1:

Average throughput: 116.95 Mbit/s

95th percentile per-packet one-way delay: 54.865 ms

Loss rate: 0.37%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-30 11:29:57

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

Below is generated by plot.py at 2017-11-30 13:51:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 106.18 Mbit/s

95th percentile per-packet one-way delay: 57.626 ms

Loss rate: 0.28%

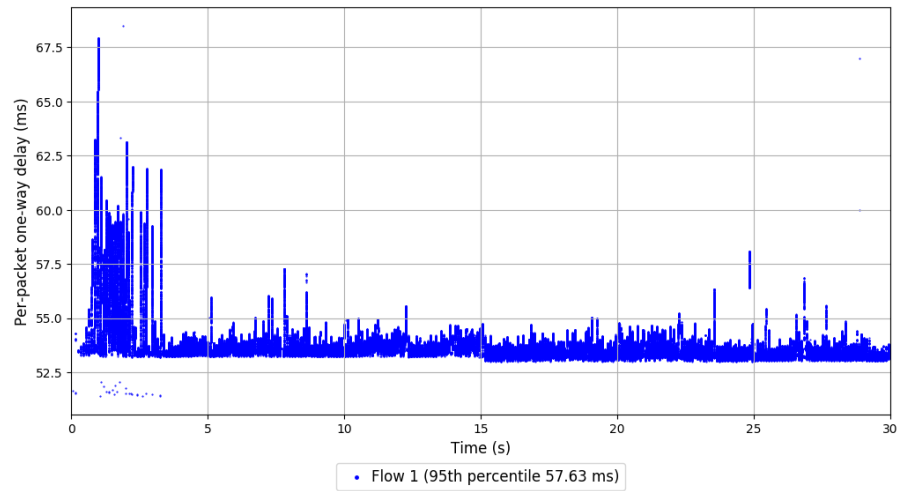
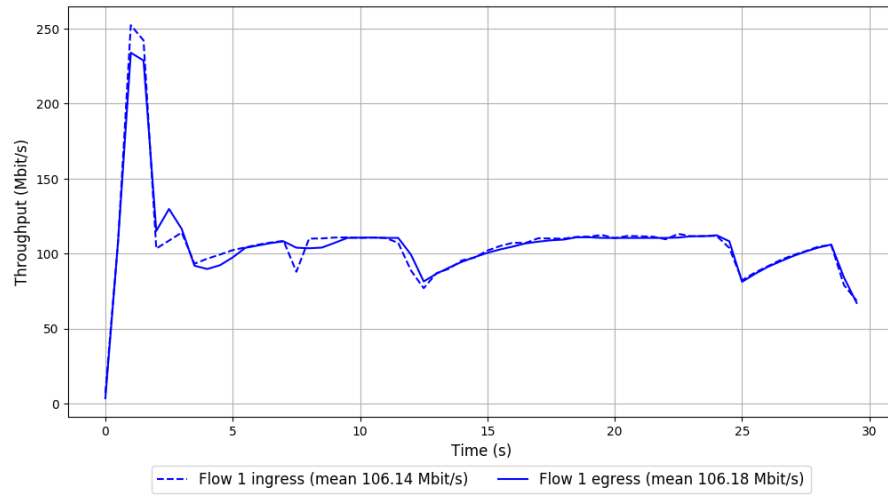
-- Flow 1:

Average throughput: 106.18 Mbit/s

95th percentile per-packet one-way delay: 57.626 ms

Loss rate: 0.28%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-30 11:40:36

End at: 2017-11-30 11:41:06

Below is generated by plot.py at 2017-11-30 13:51:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.28 Mbit/s

95th percentile per-packet one-way delay: 56.464 ms

Loss rate: 0.27%

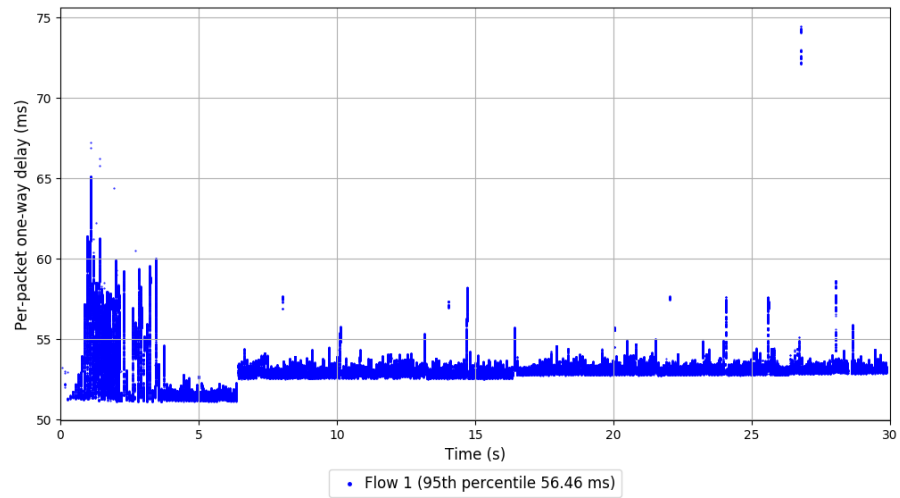
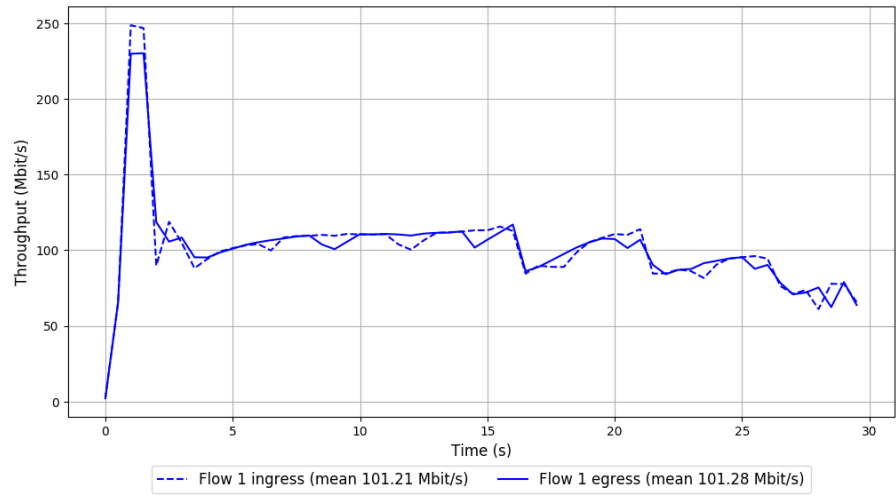
-- Flow 1:

Average throughput: 101.28 Mbit/s

95th percentile per-packet one-way delay: 56.464 ms

Loss rate: 0.27%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-30 11:51:01

End at: 2017-11-30 11:51:31

Below is generated by plot.py at 2017-11-30 13:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.33 Mbit/s

95th percentile per-packet one-way delay: 53.882 ms

Loss rate: 0.31%

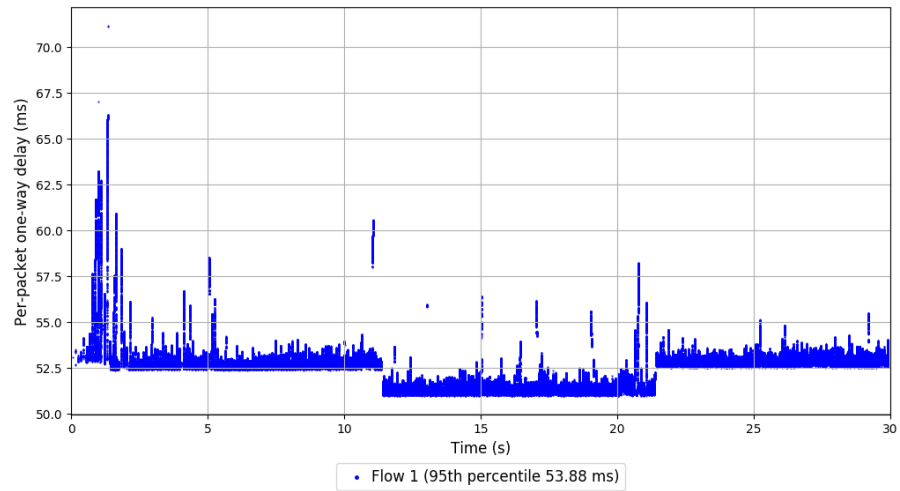
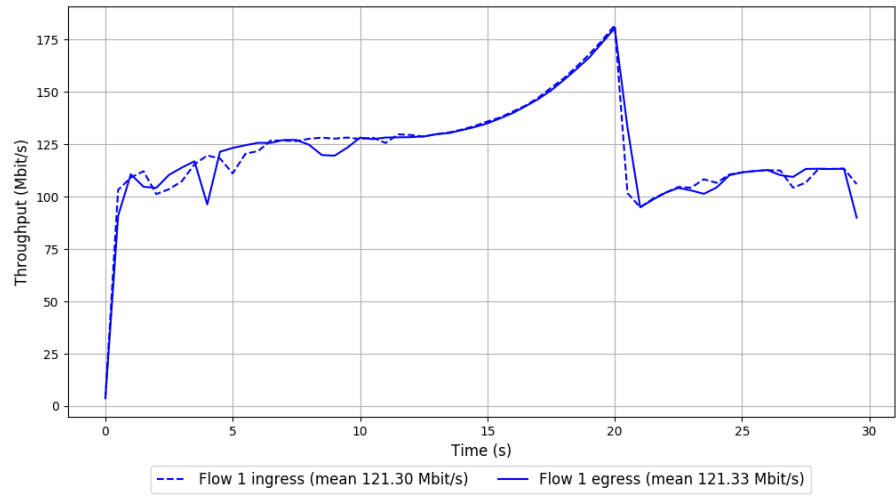
-- Flow 1:

Average throughput: 121.33 Mbit/s

95th percentile per-packet one-way delay: 53.882 ms

Loss rate: 0.31%

Run 10: Report of TCP Cubic — Data Link

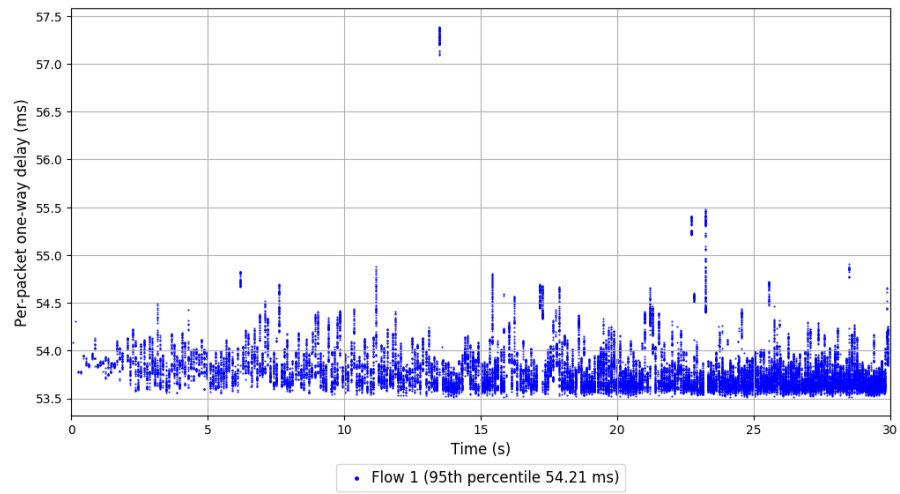
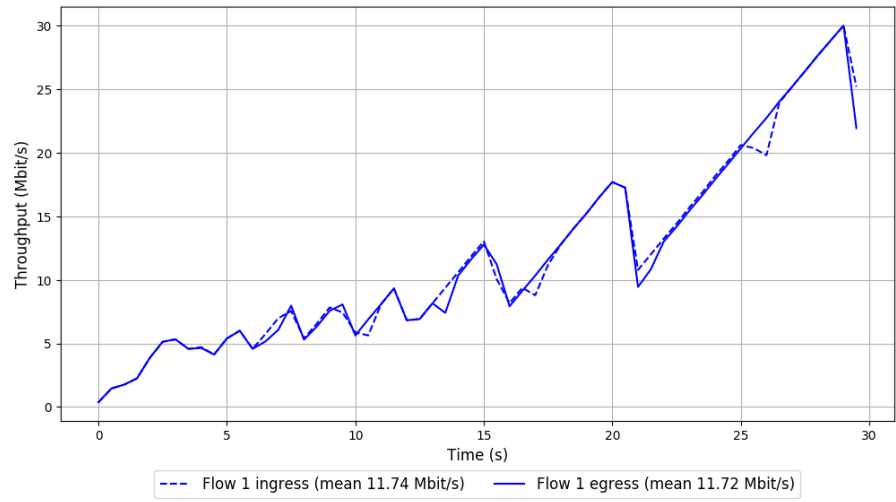


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-30 10:15:02
End at: 2017-11-30 10:15:32

# Below is generated by plot.py at 2017-11-30 13:52:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.72 Mbit/s
95th percentile per-packet one-way delay: 54.208 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 11.72 Mbit/s
95th percentile per-packet one-way delay: 54.208 ms
Loss rate: 0.48%
```


Run 1: Report of LEDBAT — Data Link

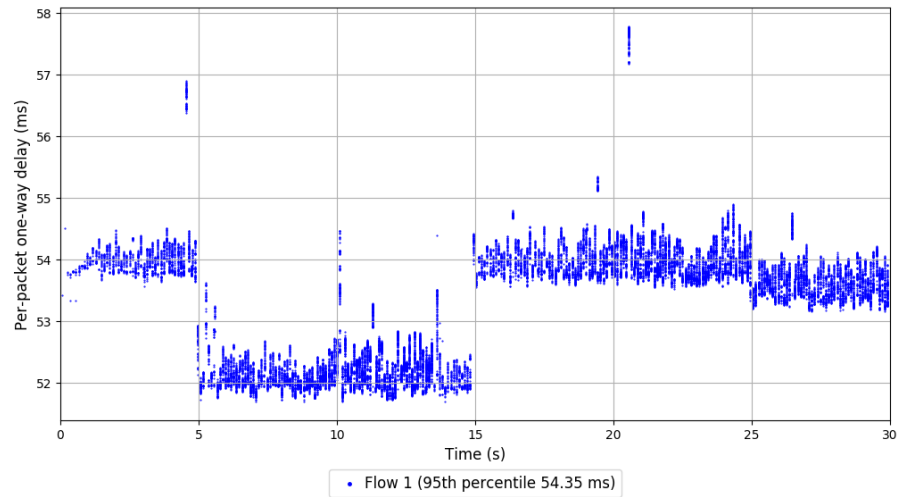
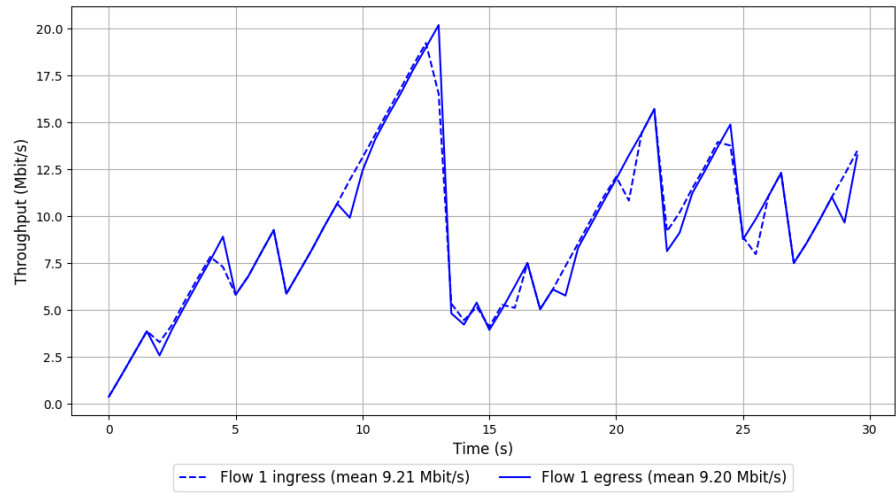


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-30 10:25:27
End at: 2017-11-30 10:25:57

# Below is generated by plot.py at 2017-11-30 13:52:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.20 Mbit/s
95th percentile per-packet one-way delay: 54.349 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 9.20 Mbit/s
95th percentile per-packet one-way delay: 54.349 ms
Loss rate: 0.51%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-30 10:35:55

End at: 2017-11-30 10:36:25

Below is generated by plot.py at 2017-11-30 13:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 54.006 ms

Loss rate: 0.47%

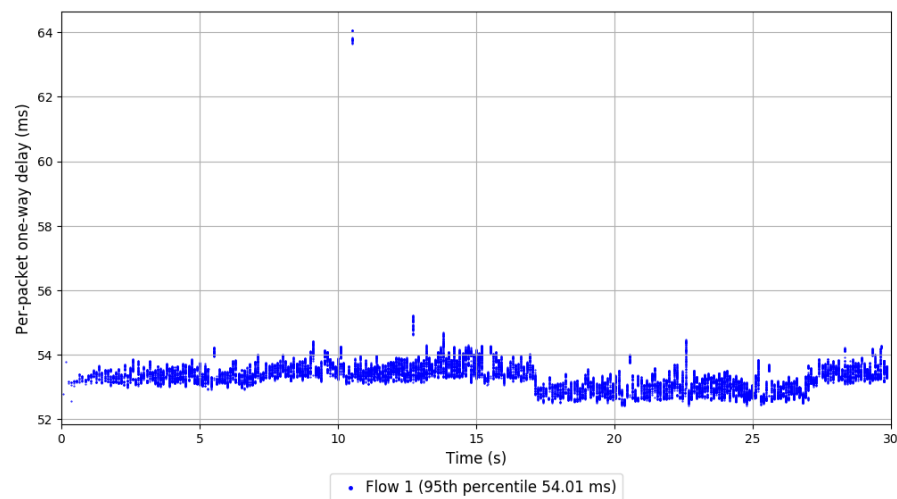
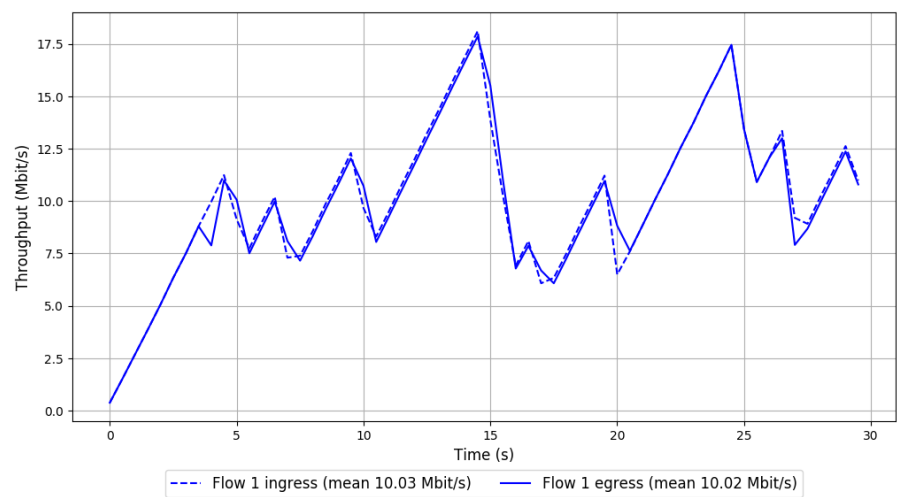
-- Flow 1:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 54.006 ms

Loss rate: 0.47%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-30 10:46:14

End at: 2017-11-30 10:46:44

Below is generated by plot.py at 2017-11-30 13:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.40 Mbit/s

95th percentile per-packet one-way delay: 54.200 ms

Loss rate: 0.16%

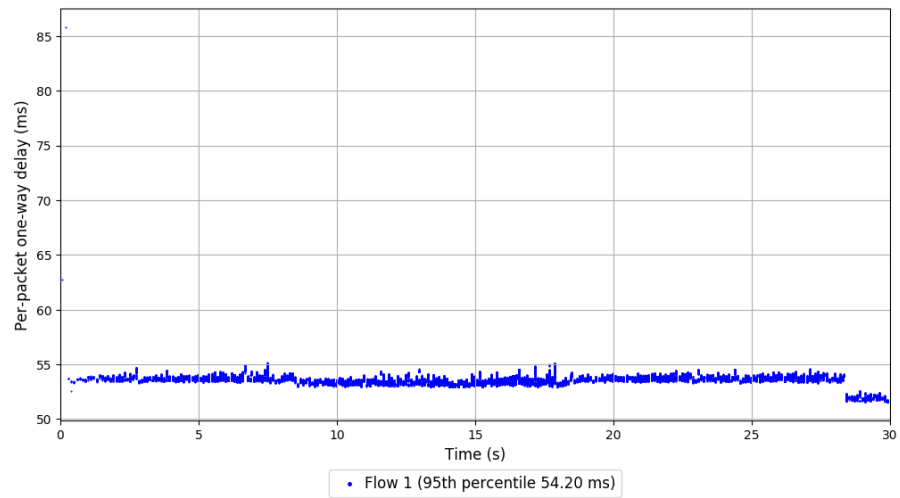
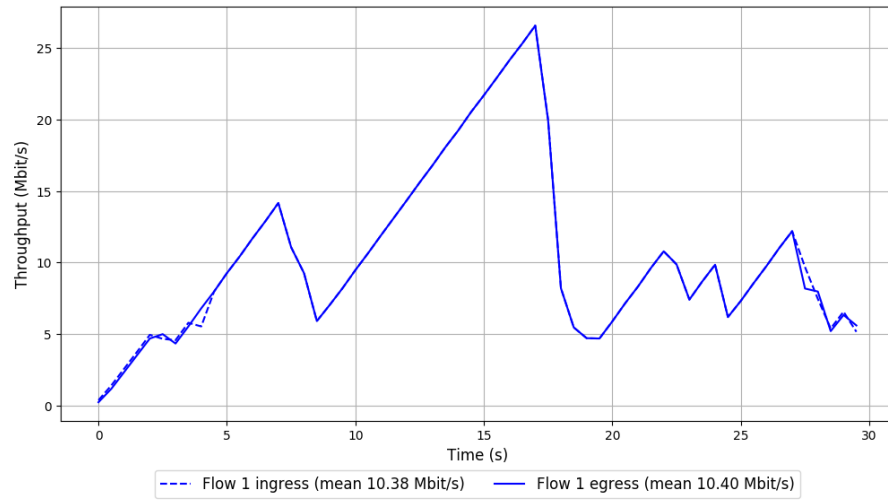
-- Flow 1:

Average throughput: 10.40 Mbit/s

95th percentile per-packet one-way delay: 54.200 ms

Loss rate: 0.16%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-30 10:56:42

End at: 2017-11-30 10:57:12

Below is generated by plot.py at 2017-11-30 13:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.42 Mbit/s

95th percentile per-packet one-way delay: 53.957 ms

Loss rate: 0.58%

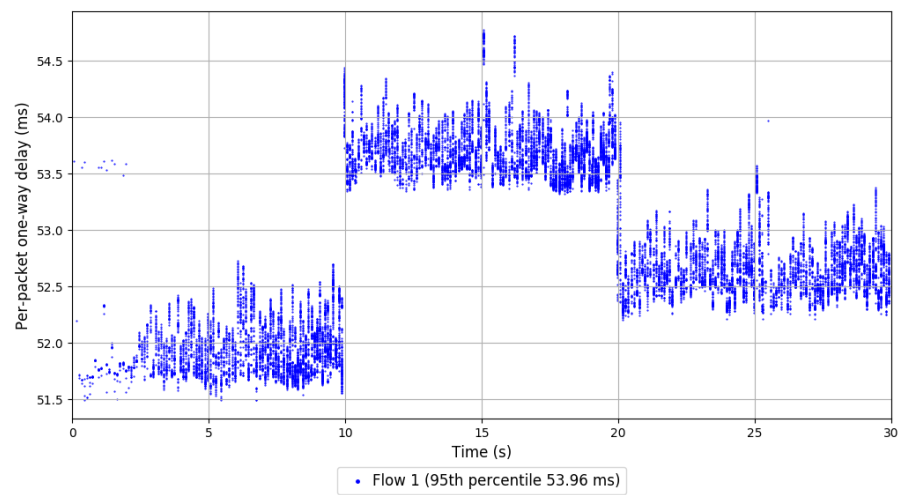
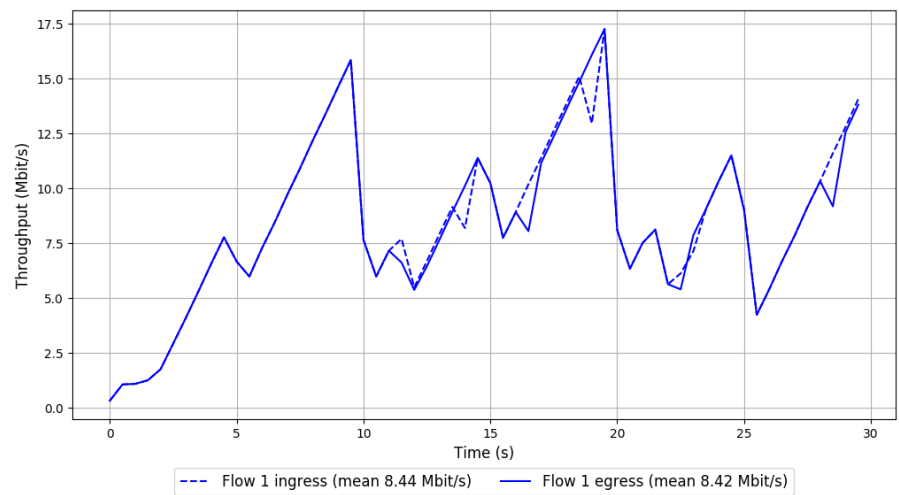
-- Flow 1:

Average throughput: 8.42 Mbit/s

95th percentile per-packet one-way delay: 53.957 ms

Loss rate: 0.58%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-30 11:06:53

End at: 2017-11-30 11:07:23

Below is generated by plot.py at 2017-11-30 13:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.65 Mbit/s

95th percentile per-packet one-way delay: 54.695 ms

Loss rate: 0.45%

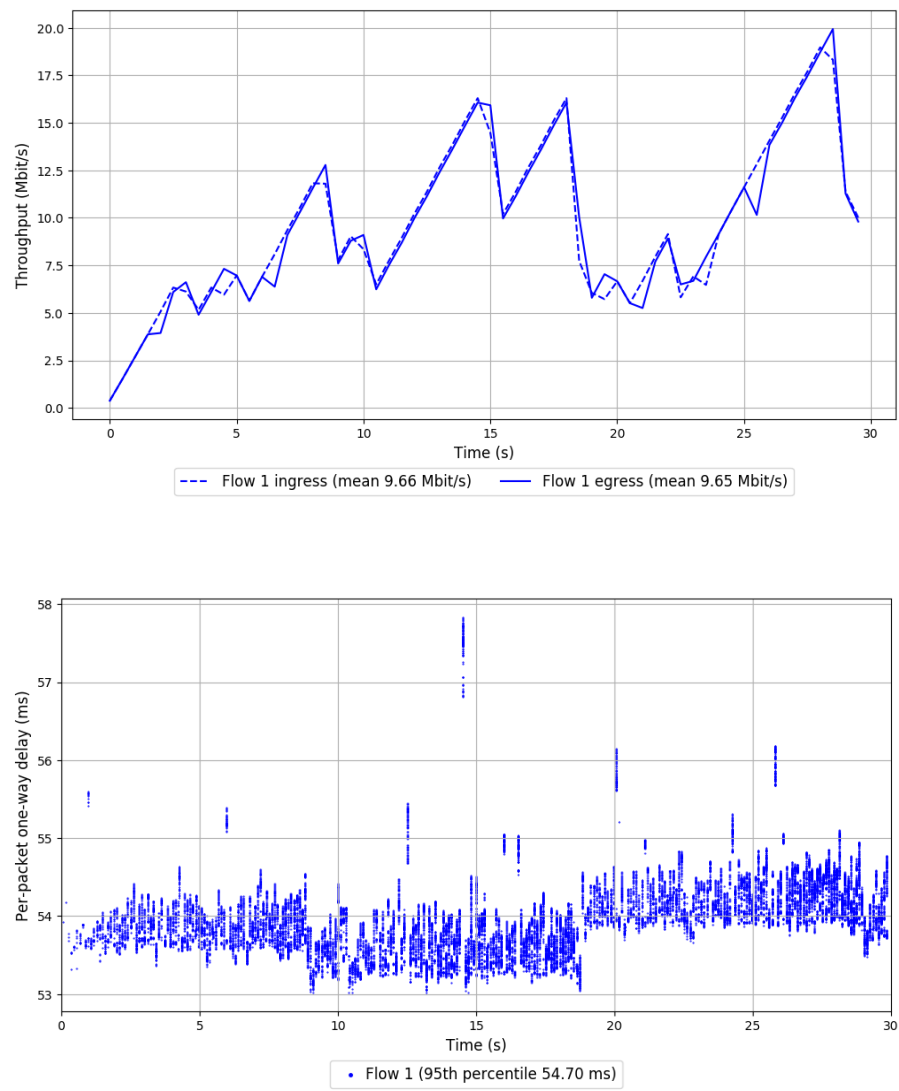
-- Flow 1:

Average throughput: 9.65 Mbit/s

95th percentile per-packet one-way delay: 54.695 ms

Loss rate: 0.45%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-30 11:17:03

End at: 2017-11-30 11:17:33

Below is generated by plot.py at 2017-11-30 13:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.91 Mbit/s

95th percentile per-packet one-way delay: 54.408 ms

Loss rate: 0.29%

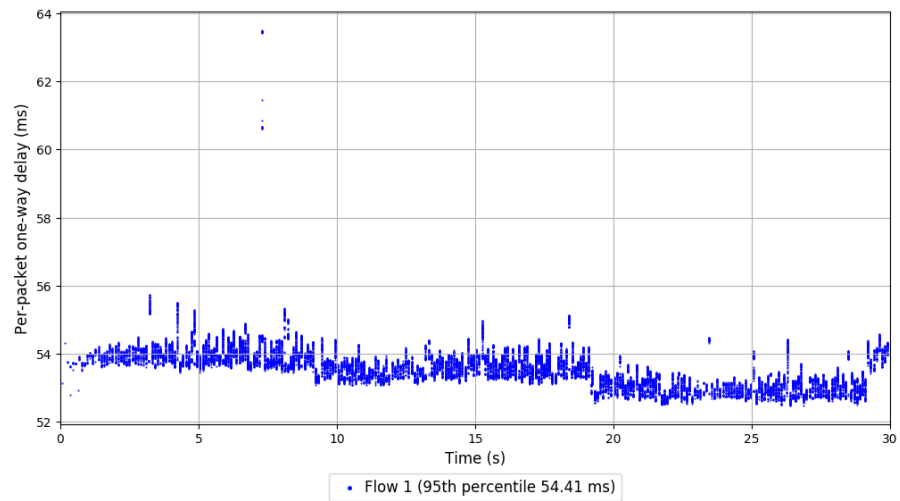
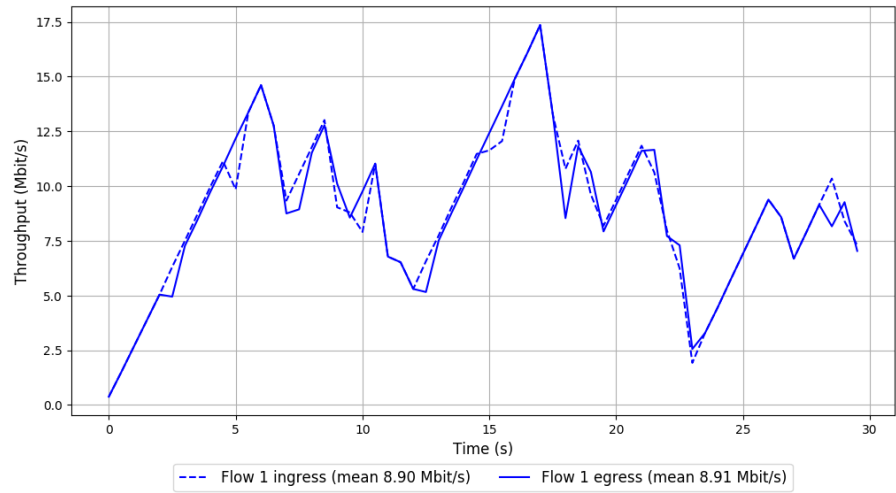
-- Flow 1:

Average throughput: 8.91 Mbit/s

95th percentile per-packet one-way delay: 54.408 ms

Loss rate: 0.29%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-30 11:27:21

End at: 2017-11-30 11:27:51

Below is generated by plot.py at 2017-11-30 13:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.92 Mbit/s

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

Loss rate: 0.71%

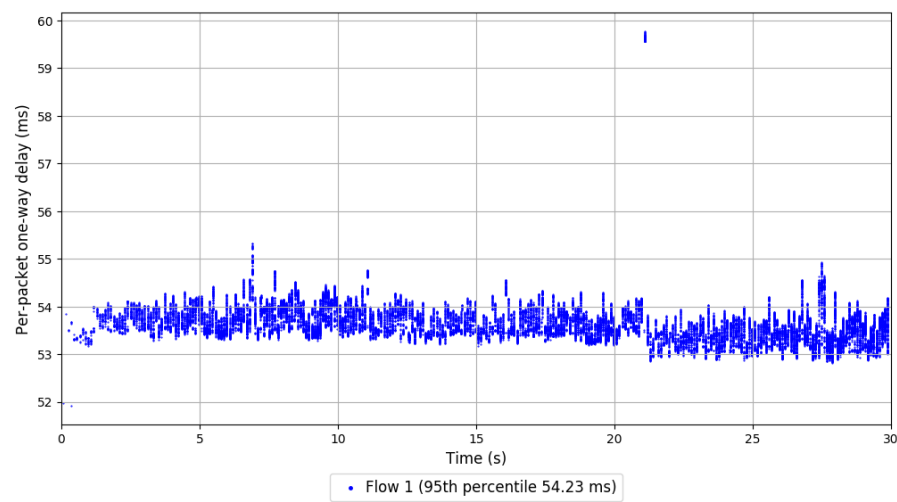
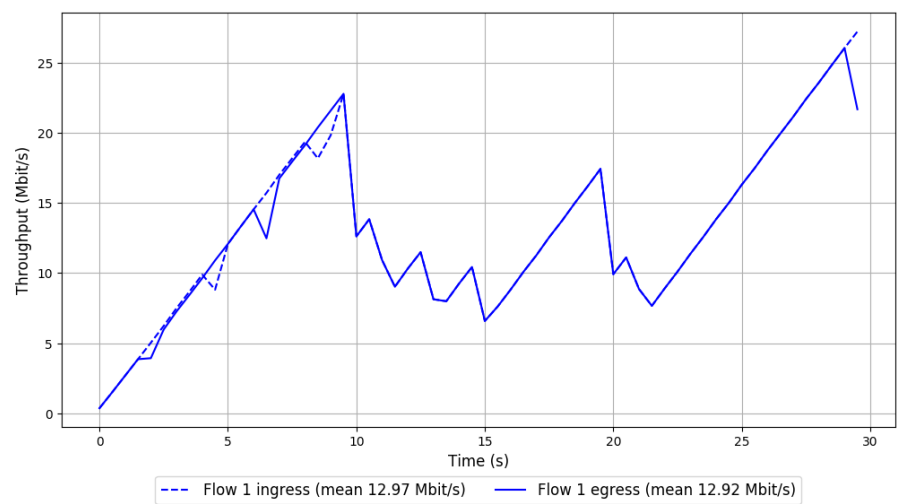
-- Flow 1:

Average throughput: 12.92 Mbit/s

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

Loss rate: 0.71%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-30 11:37:49

End at: 2017-11-30 11:38:19

Below is generated by plot.py at 2017-11-30 13:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 53.956 ms

Loss rate: 0.58%

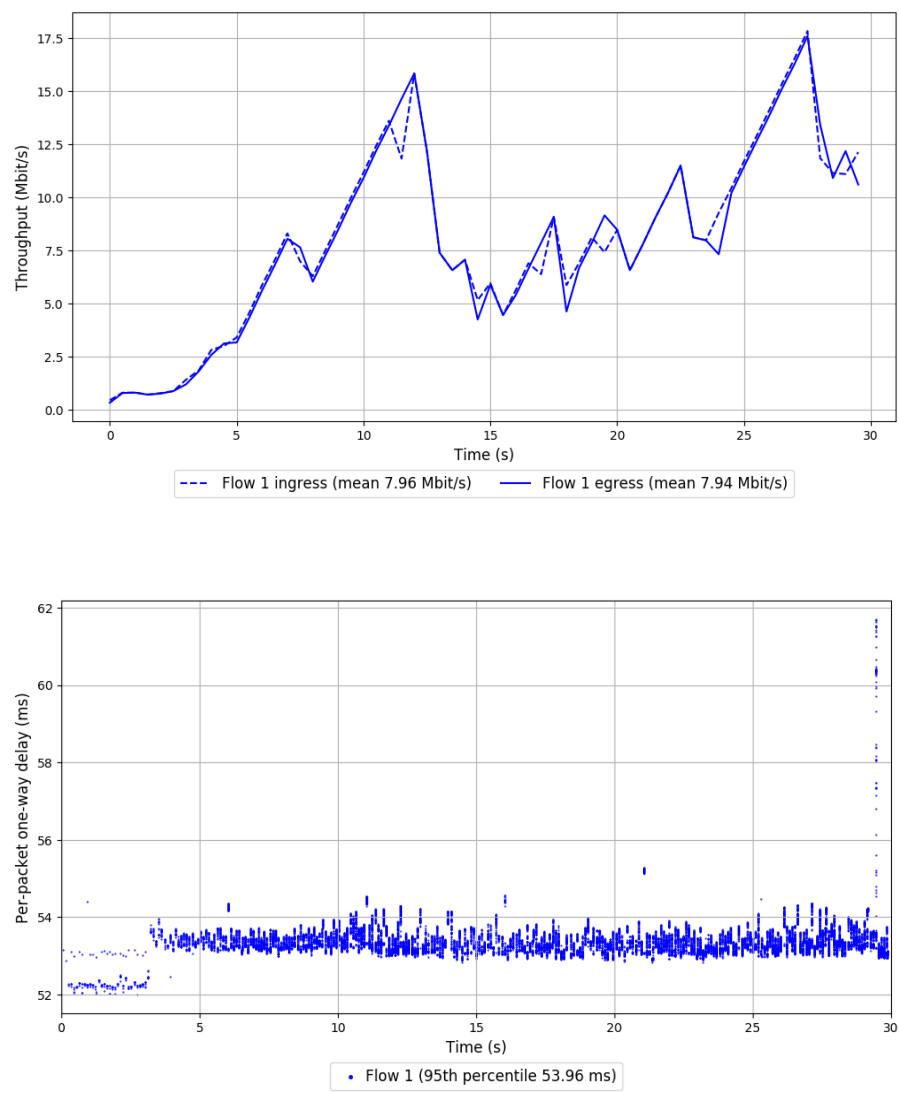
-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 53.956 ms

Loss rate: 0.58%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-30 11:48:24

End at: 2017-11-30 11:48:54

Below is generated by plot.py at 2017-11-30 13:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.38 Mbit/s

95th percentile per-packet one-way delay: 53.601 ms

Loss rate: 0.30%

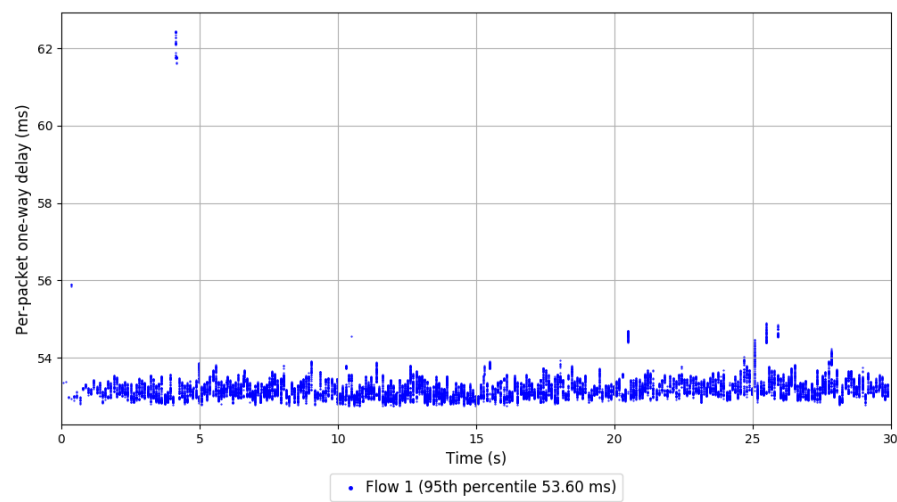
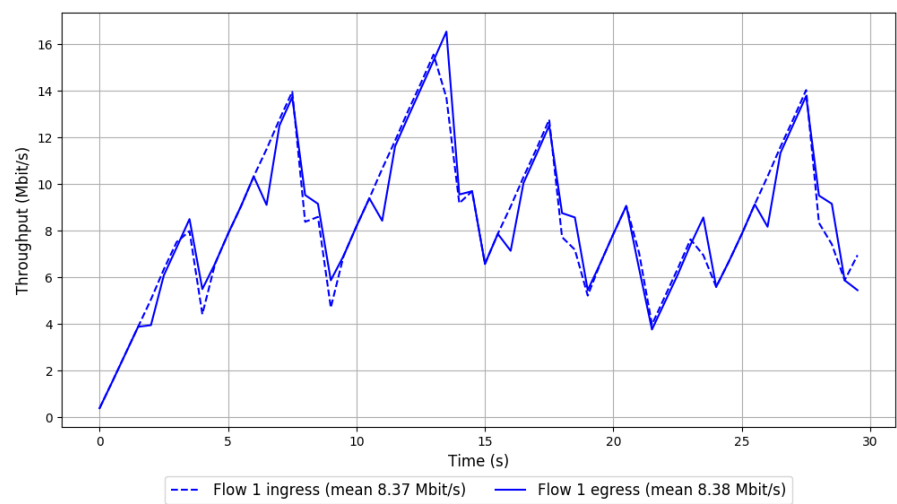
-- Flow 1:

Average throughput: 8.38 Mbit/s

95th percentile per-packet one-way delay: 53.601 ms

Loss rate: 0.30%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2017-11-30 10:14:02

End at: 2017-11-30 10:14:32

Below is generated by plot.py at 2017-11-30 14:01:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 629.91 Mbit/s

95th percentile per-packet one-way delay: 72.962 ms

Loss rate: 0.48%

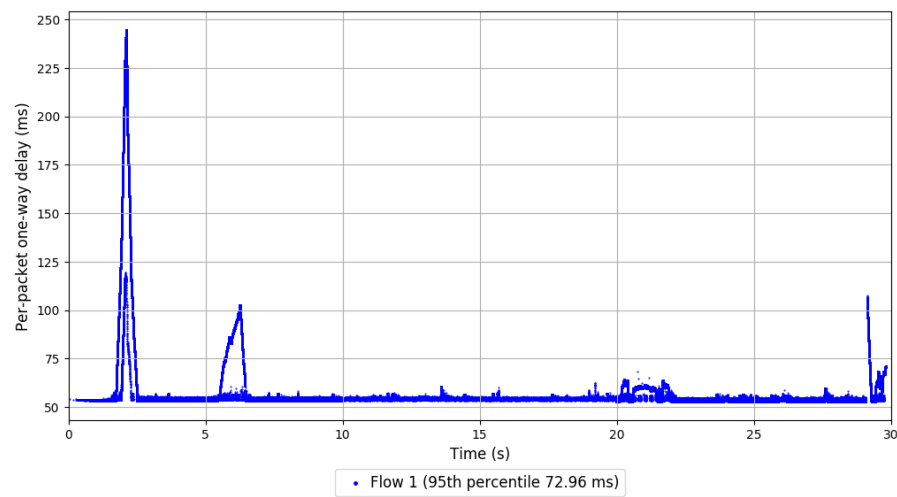
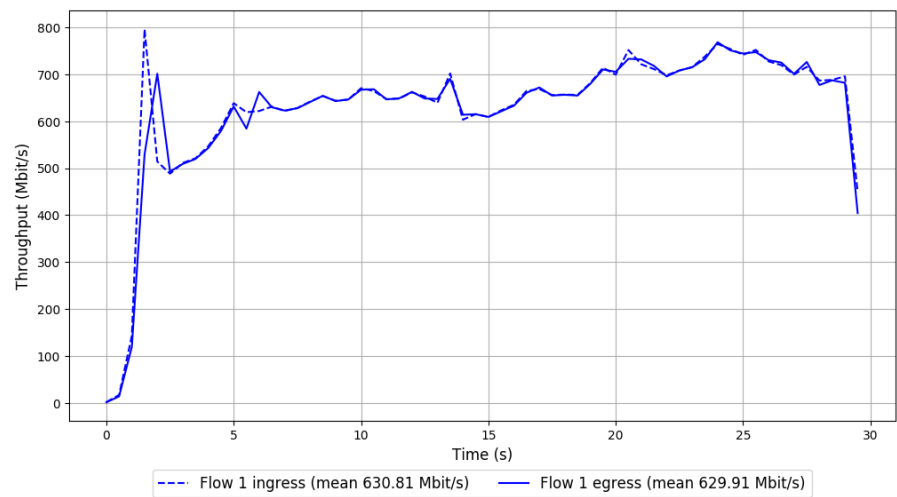
-- Flow 1:

Average throughput: 629.91 Mbit/s

95th percentile per-packet one-way delay: 72.962 ms

Loss rate: 0.48%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-30 10:24:27

End at: 2017-11-30 10:24:57

Below is generated by plot.py at 2017-11-30 14:02:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 656.79 Mbit/s

95th percentile per-packet one-way delay: 140.552 ms

Loss rate: 0.48%

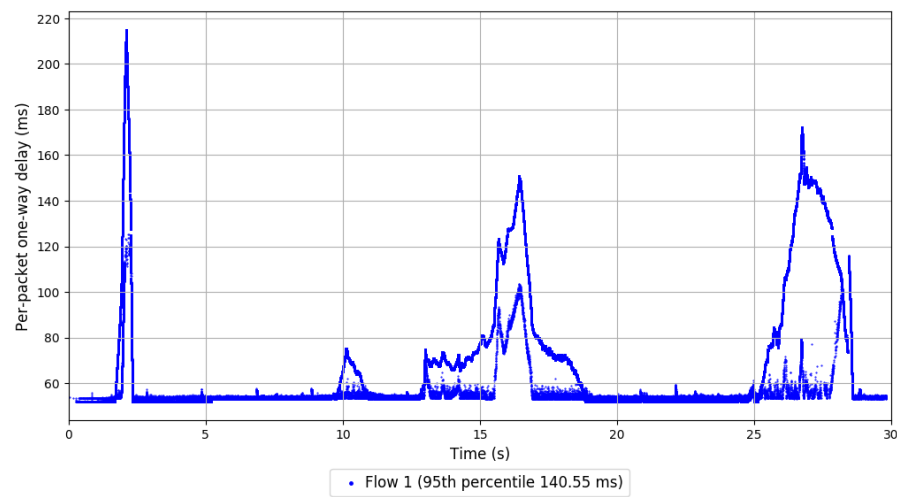
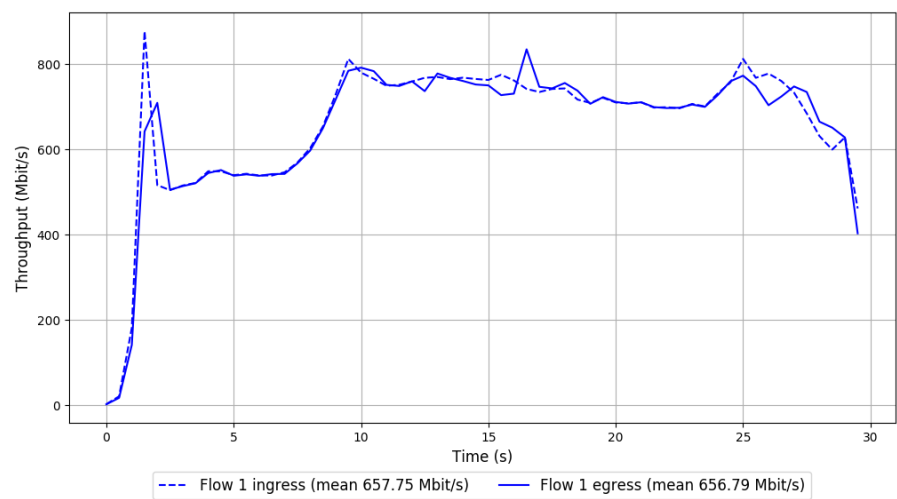
-- Flow 1:

Average throughput: 656.79 Mbit/s

95th percentile per-packet one-way delay: 140.552 ms

Loss rate: 0.48%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-30 10:34:54

End at: 2017-11-30 10:35:24

Below is generated by plot.py at 2017-11-30 14:02:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 681.26 Mbit/s

95th percentile per-packet one-way delay: 147.580 ms

Loss rate: 0.70%

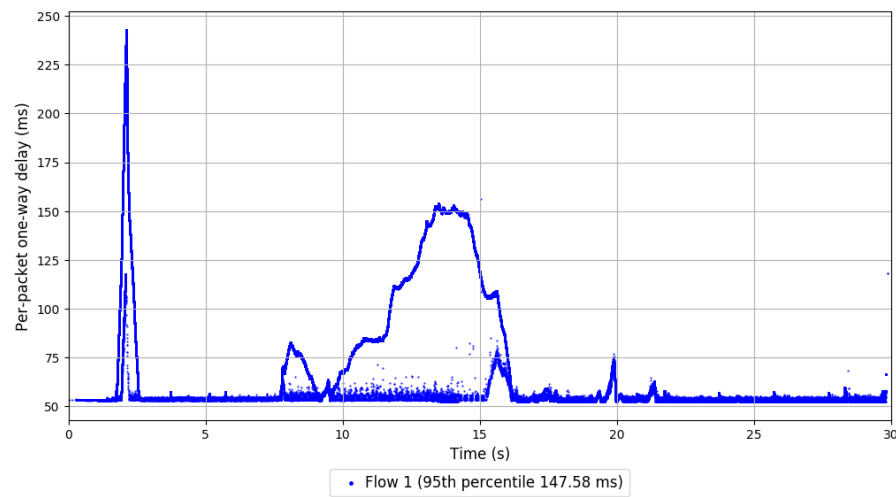
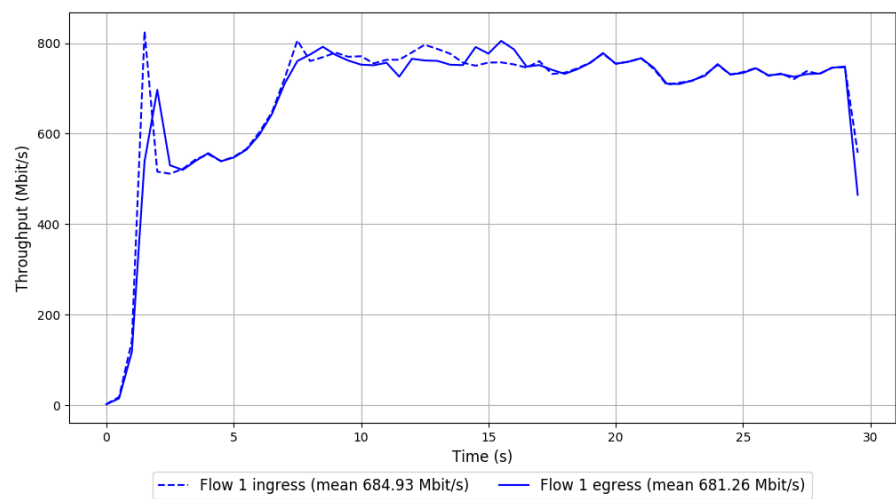
-- Flow 1:

Average throughput: 681.26 Mbit/s

95th percentile per-packet one-way delay: 147.580 ms

Loss rate: 0.70%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-30 10:45:12

End at: 2017-11-30 10:45:43

Below is generated by plot.py at 2017-11-30 14:02:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 671.25 Mbit/s

95th percentile per-packet one-way delay: 147.622 ms

Loss rate: 0.98%

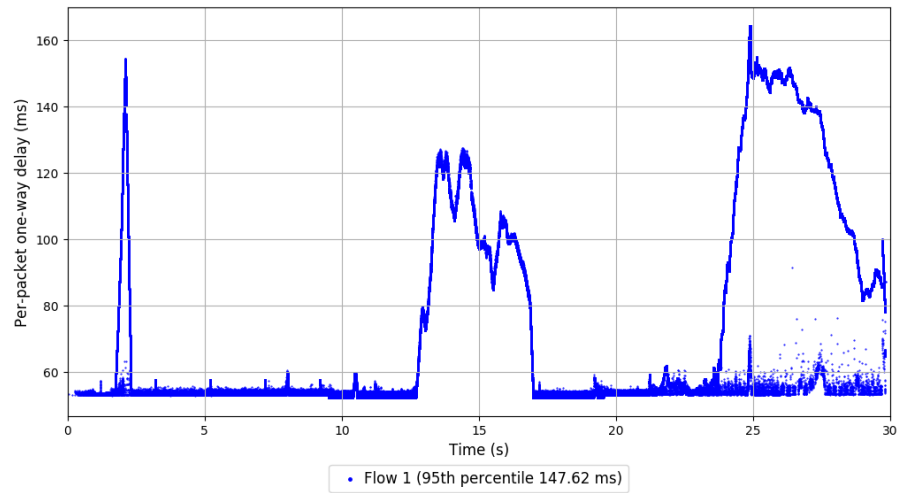
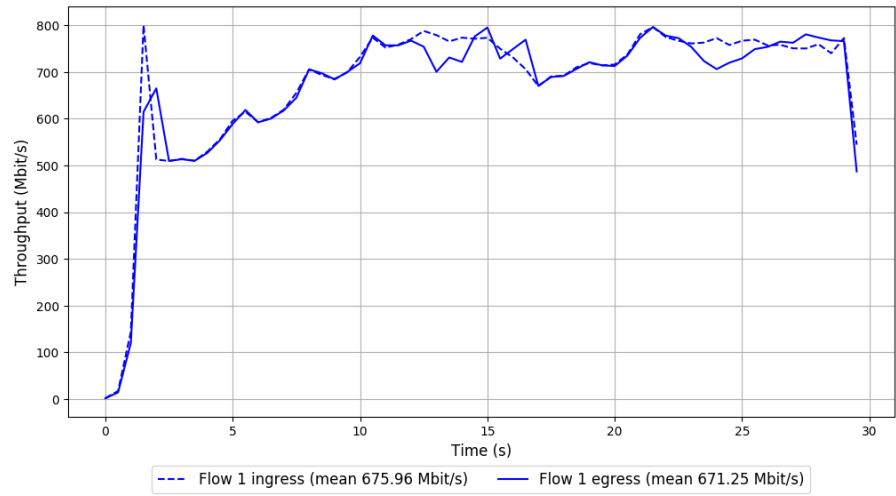
-- Flow 1:

Average throughput: 671.25 Mbit/s

95th percentile per-packet one-way delay: 147.622 ms

Loss rate: 0.98%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-30 10:55:41

End at: 2017-11-30 10:56:11

Below is generated by plot.py at 2017-11-30 14:02:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 665.79 Mbit/s

95th percentile per-packet one-way delay: 109.839 ms

Loss rate: 0.43%

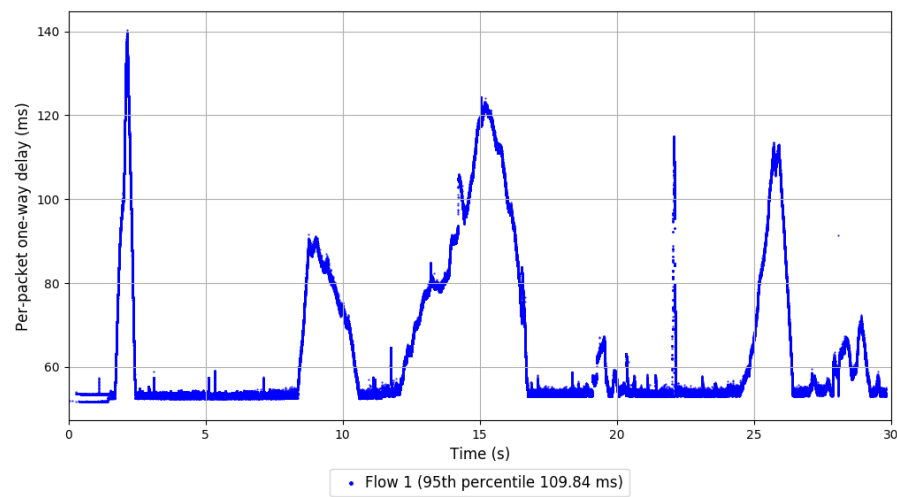
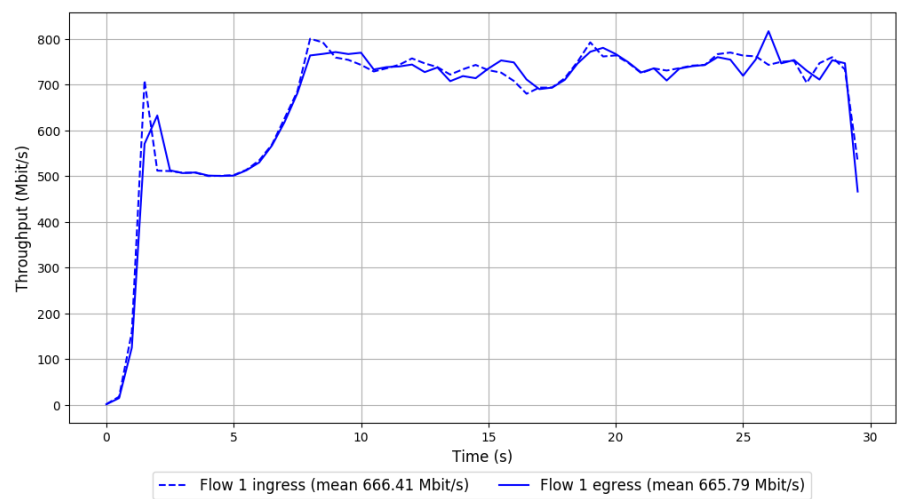
-- Flow 1:

Average throughput: 665.79 Mbit/s

95th percentile per-packet one-way delay: 109.839 ms

Loss rate: 0.43%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-30 11:06:04

End at: 2017-11-30 11:06:34

Below is generated by plot.py at 2017-11-30 14:02:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 343.36 Mbit/s

95th percentile per-packet one-way delay: 144.329 ms

Loss rate: 1.81%

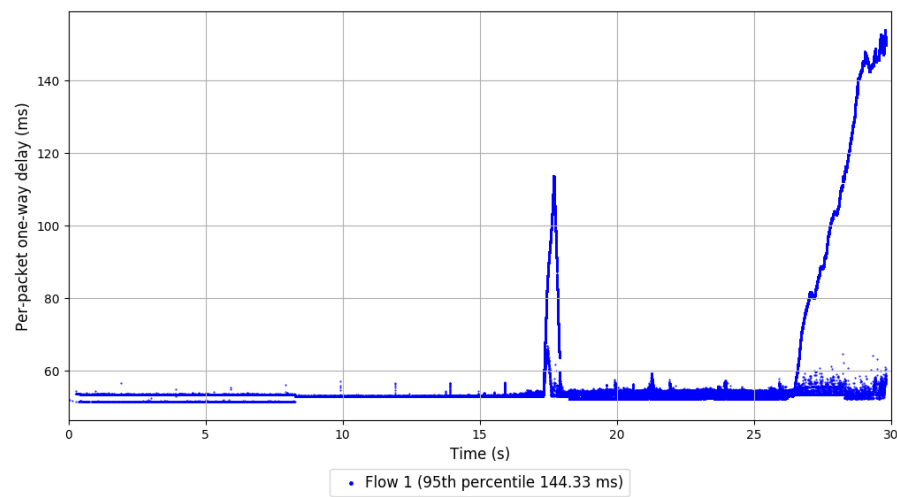
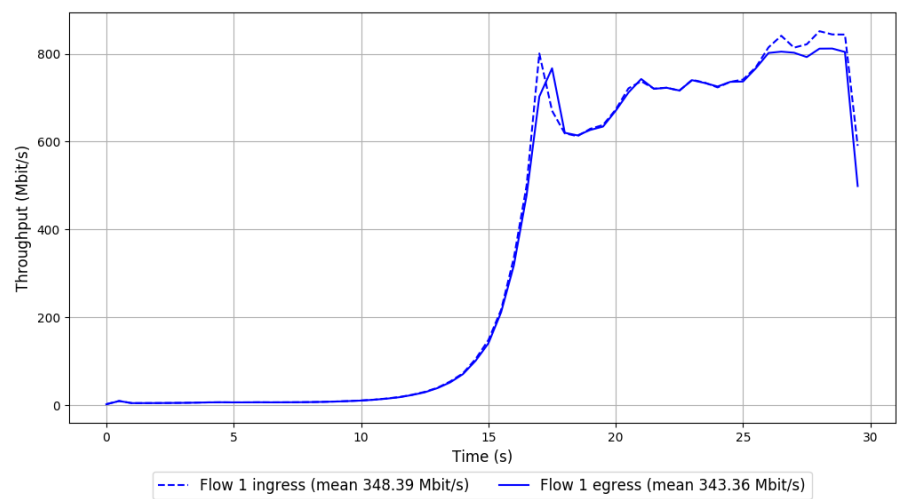
-- Flow 1:

Average throughput: 343.36 Mbit/s

95th percentile per-packet one-way delay: 144.329 ms

Loss rate: 1.81%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-30 11:16:04

End at: 2017-11-30 11:16:34

Below is generated by plot.py at 2017-11-30 14:02:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 623.67 Mbit/s

95th percentile per-packet one-way delay: 134.964 ms

Loss rate: 2.48%

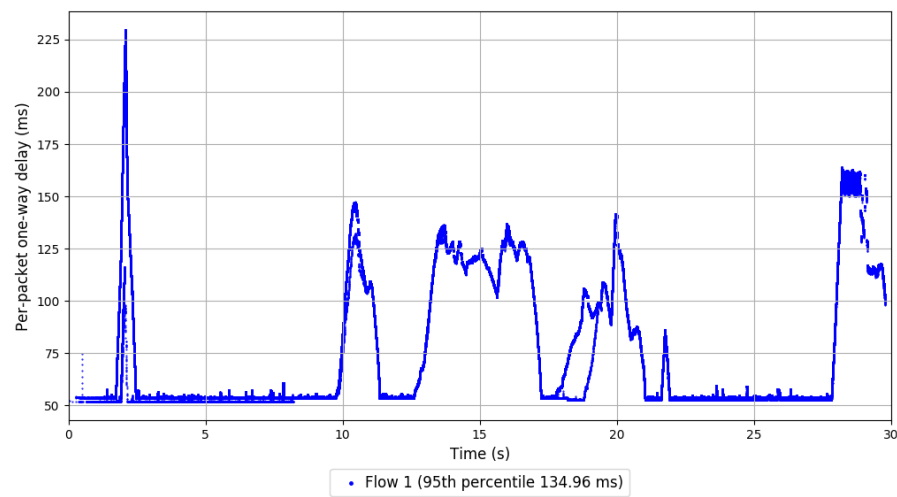
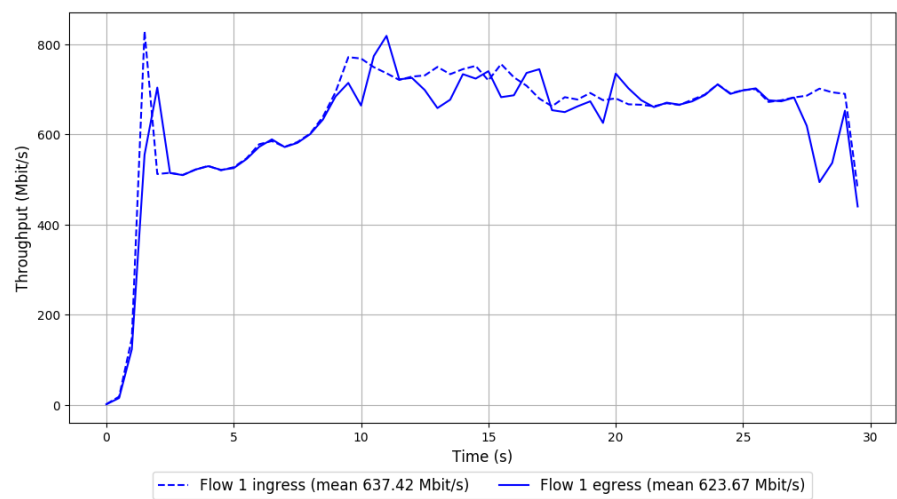
-- Flow 1:

Average throughput: 623.67 Mbit/s

95th percentile per-packet one-way delay: 134.964 ms

Loss rate: 2.48%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-30 11:26:20

End at: 2017-11-30 11:26:50

Below is generated by plot.py at 2017-11-30 14:03:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 655.52 Mbit/s

95th percentile per-packet one-way delay: 172.719 ms

Loss rate: 3.36%

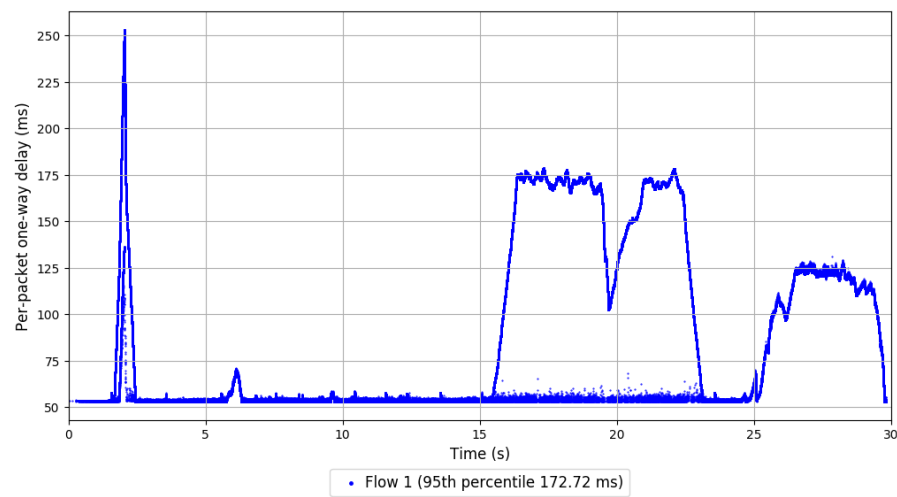
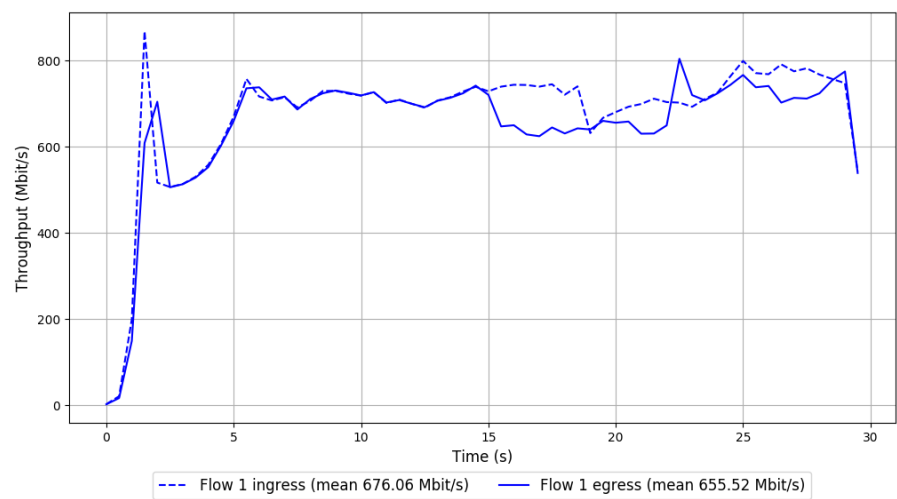
-- Flow 1:

Average throughput: 655.52 Mbit/s

95th percentile per-packet one-way delay: 172.719 ms

Loss rate: 3.36%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-30 11:36:48

End at: 2017-11-30 11:37:18

Below is generated by plot.py at 2017-11-30 14:11:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 661.29 Mbit/s

95th percentile per-packet one-way delay: 140.906 ms

Loss rate: 0.52%

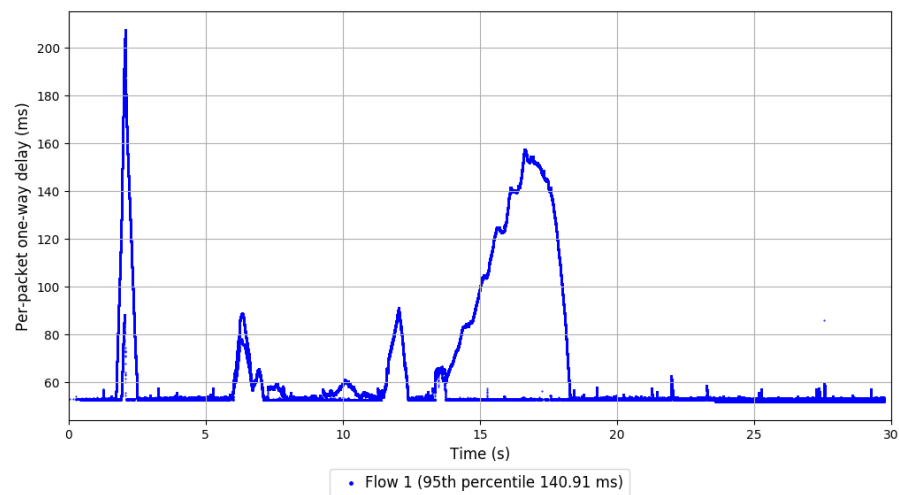
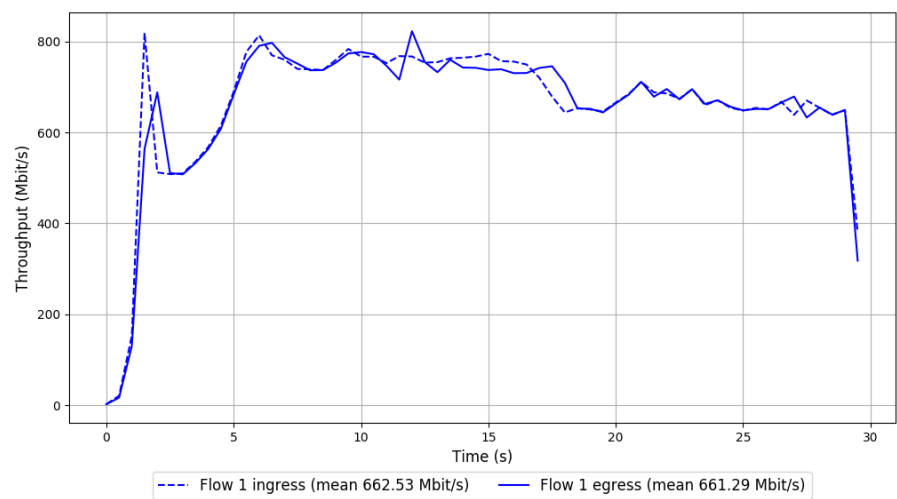
-- Flow 1:

Average throughput: 661.29 Mbit/s

95th percentile per-packet one-way delay: 140.906 ms

Loss rate: 0.52%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-30 11:47:23

End at: 2017-11-30 11:47:53

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 672.75 Mbit/s

95th percentile per-packet one-way delay: 158.465 ms

Loss rate: 0.83%

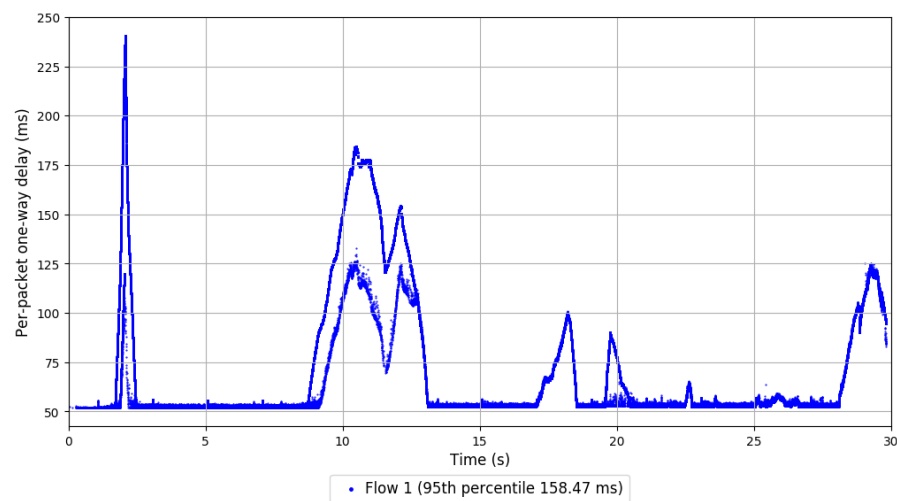
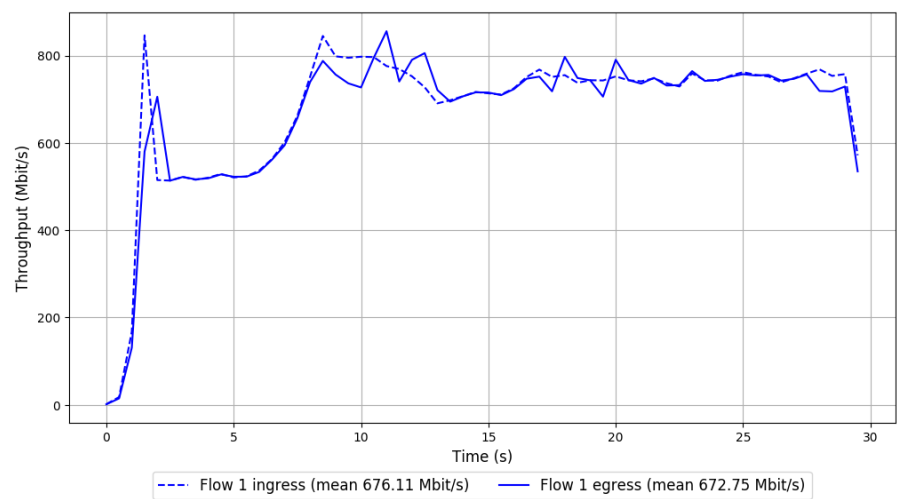
-- Flow 1:

Average throughput: 672.75 Mbit/s

95th percentile per-packet one-way delay: 158.465 ms

Loss rate: 0.83%

Run 10: Report of PCC — Data Link

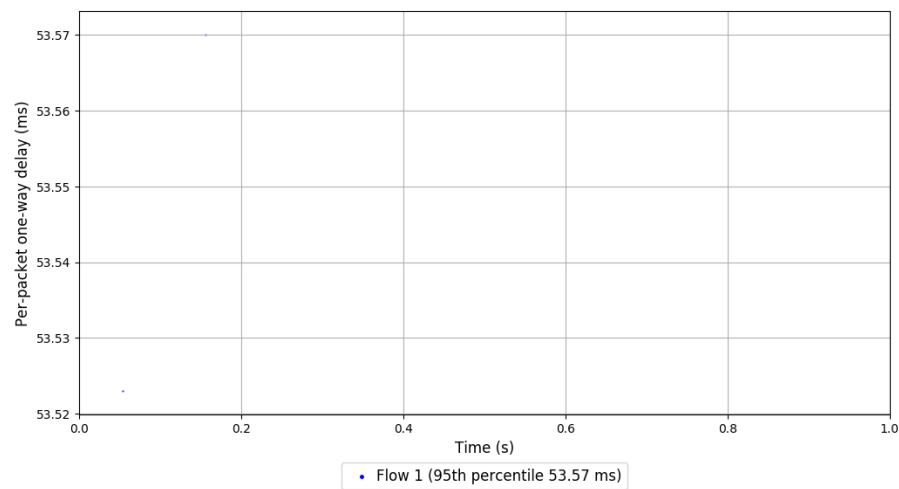
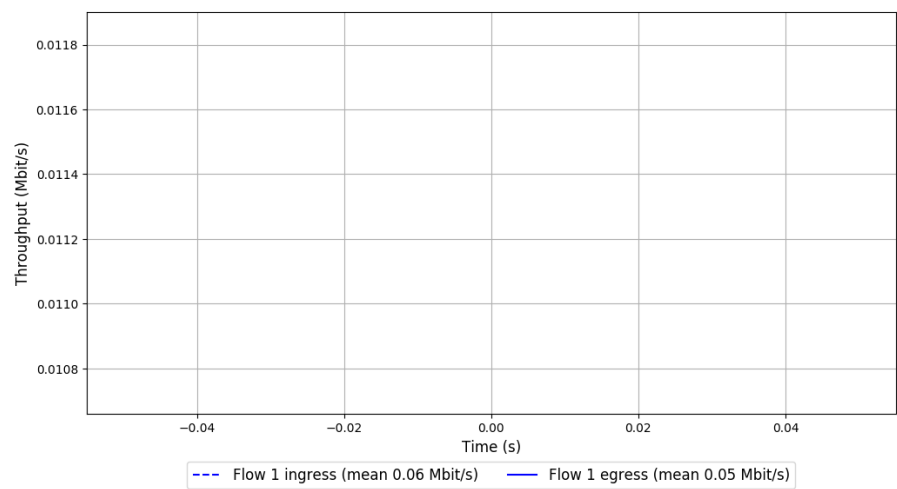


Run 1: Statistics of QUIC Cubic

Start at: 2017-11-30 10:18:29

End at: 2017-11-30 10:18:59

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-30 10:28:52

End at: 2017-11-30 10:29:22

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.36 Mbit/s

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

Loss rate: 0.62%

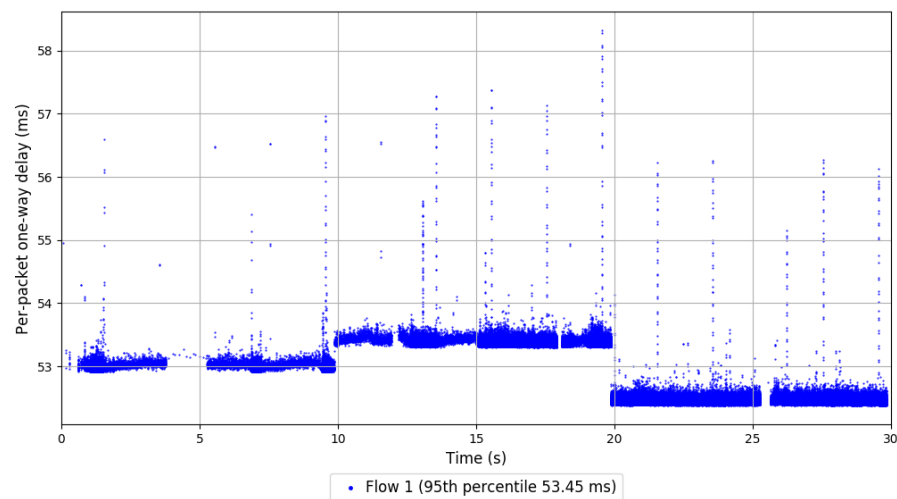
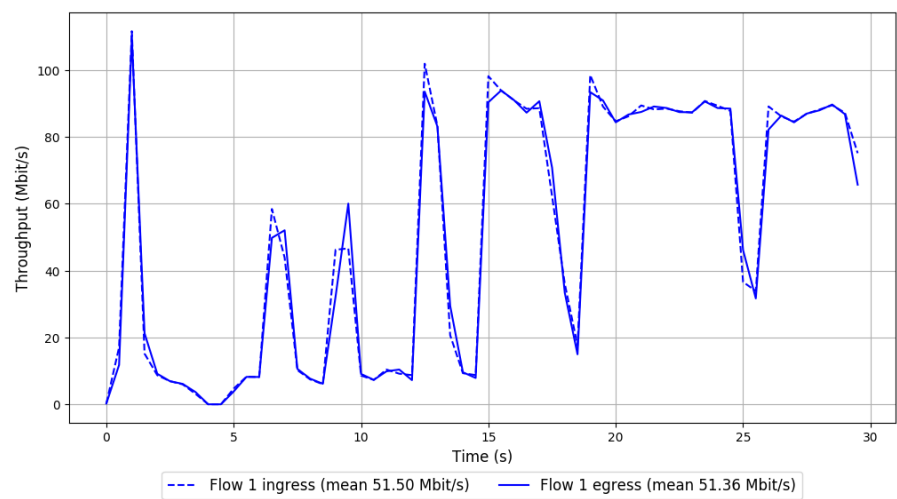
-- Flow 1:

Average throughput: 51.36 Mbit/s

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

Loss rate: 0.62%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-30 10:39:09

End at: 2017-11-30 10:39:39

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.28 Mbit/s

95th percentile per-packet one-way delay: 53.450 ms

Loss rate: 0.52%

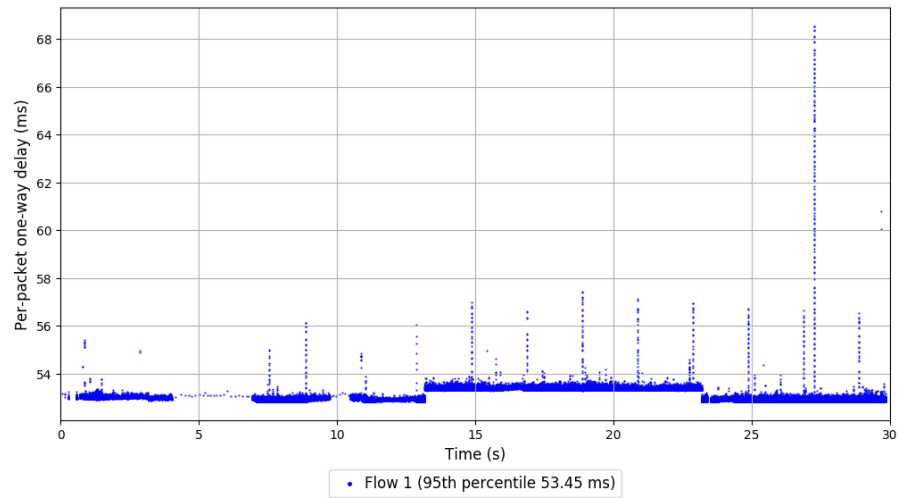
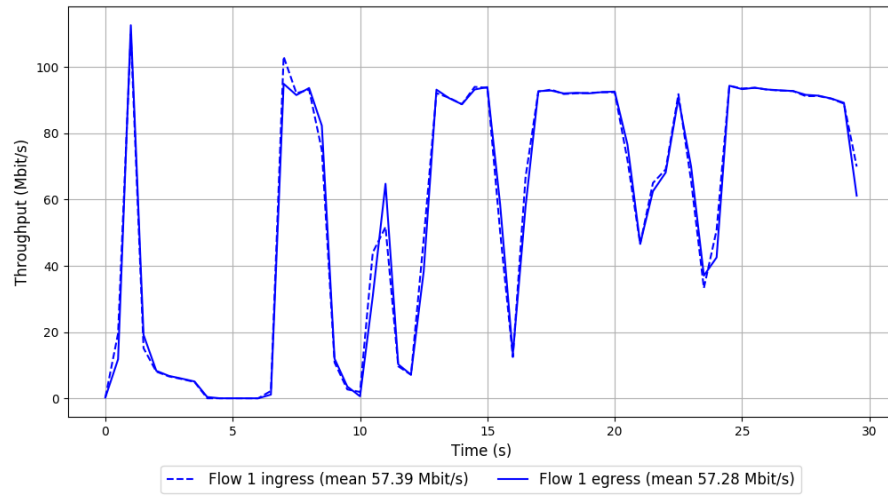
-- Flow 1:

Average throughput: 57.28 Mbit/s

95th percentile per-packet one-way delay: 53.450 ms

Loss rate: 0.52%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-30 10:49:32

End at: 2017-11-30 10:50:02

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.28 Mbit/s

95th percentile per-packet one-way delay: 53.306 ms

Loss rate: 0.60%

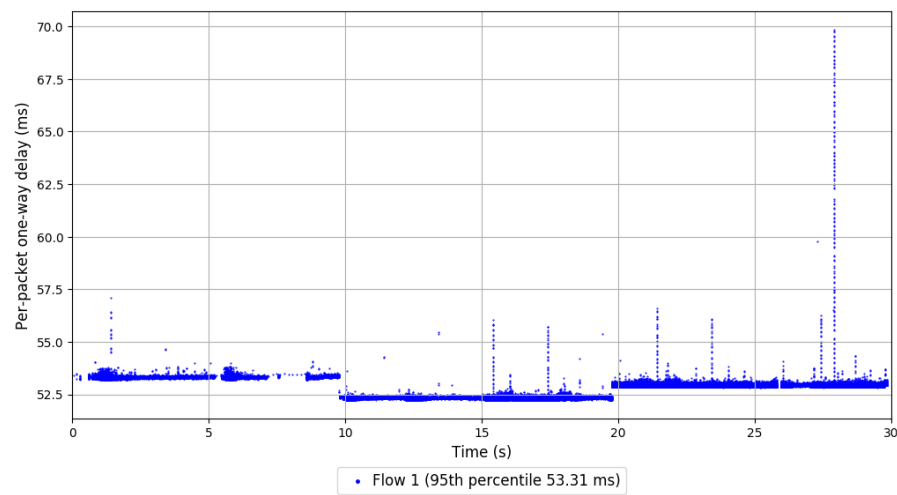
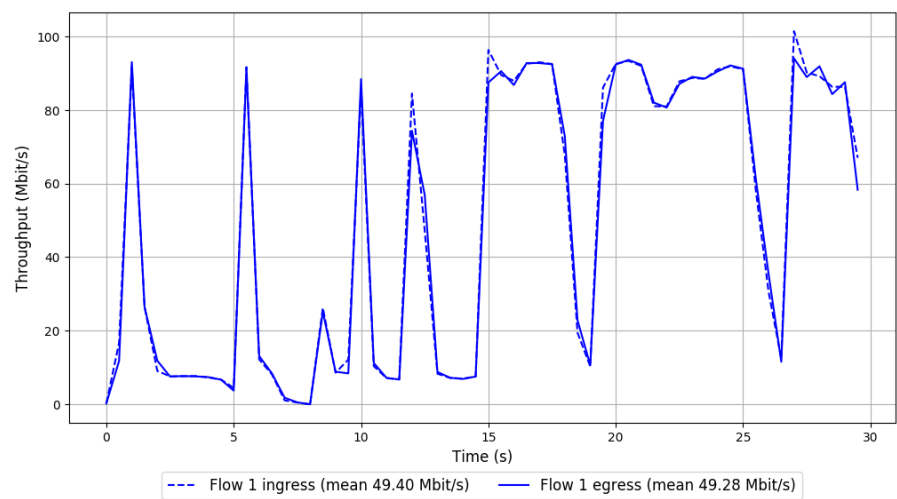
-- Flow 1:

Average throughput: 49.28 Mbit/s

95th percentile per-packet one-way delay: 53.306 ms

Loss rate: 0.60%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-30 11:00:05

End at: 2017-11-30 11:00:35

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.62 Mbit/s

95th percentile per-packet one-way delay: 53.594 ms

Loss rate: 0.63%

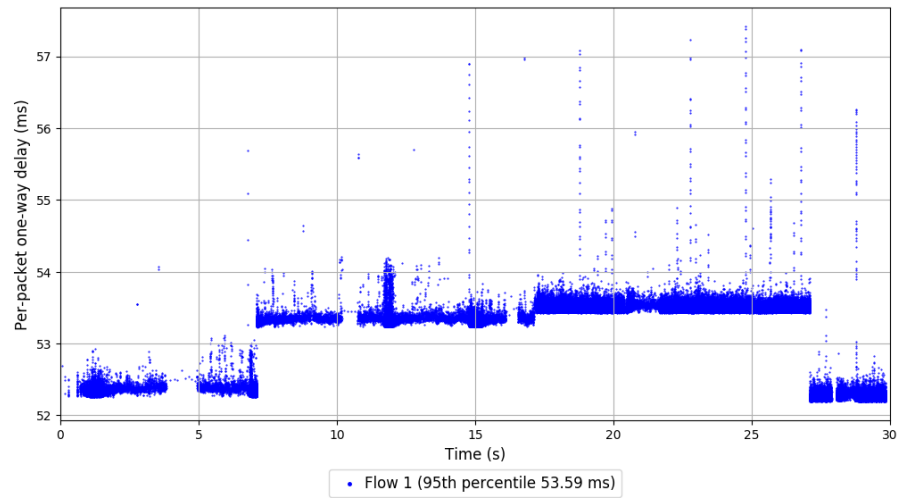
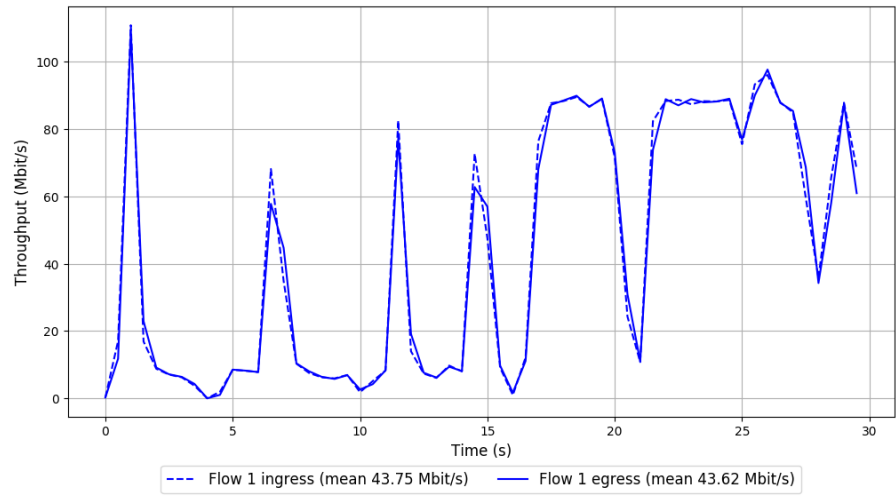
-- Flow 1:

Average throughput: 43.62 Mbit/s

95th percentile per-packet one-way delay: 53.594 ms

Loss rate: 0.63%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-30 11:10:05

End at: 2017-11-30 11:10:35

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.36 Mbit/s

95th percentile per-packet one-way delay: 53.584 ms

Loss rate: 0.75%

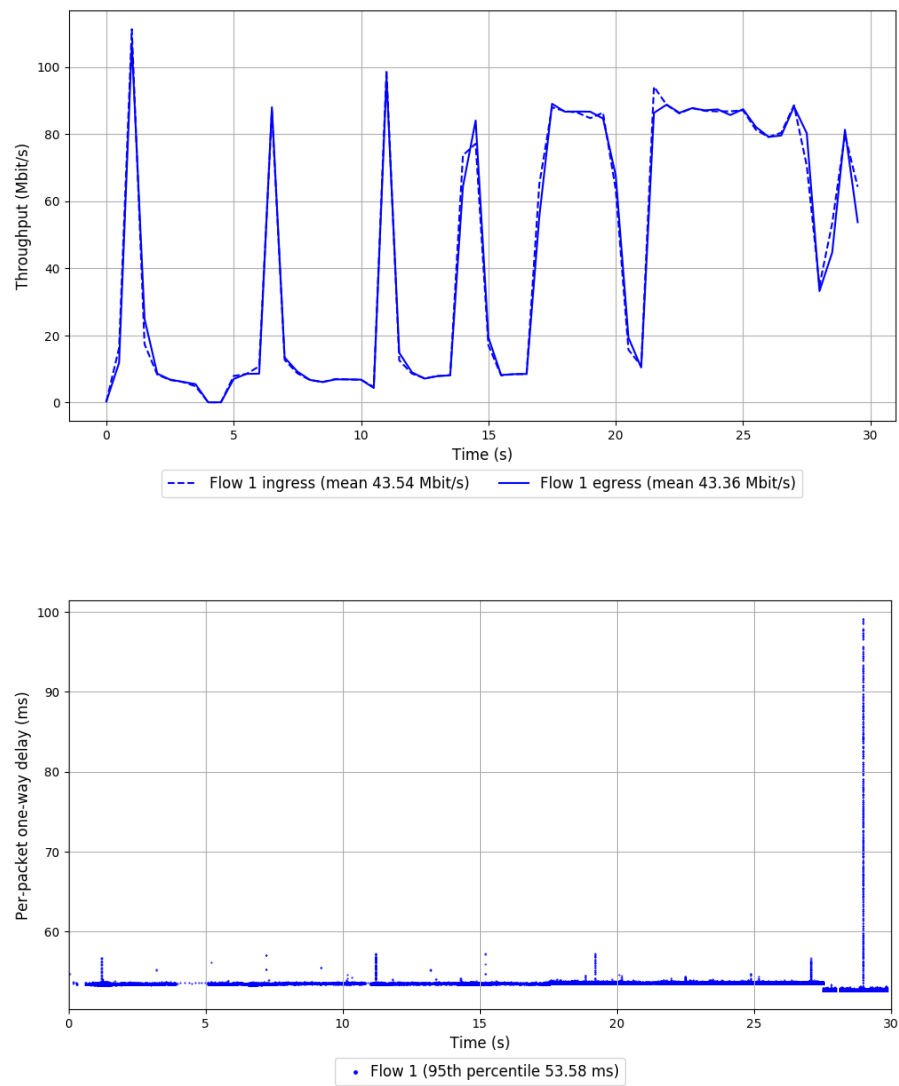
-- Flow 1:

Average throughput: 43.36 Mbit/s

95th percentile per-packet one-way delay: 53.584 ms

Loss rate: 0.75%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-30 11:20:15

End at: 2017-11-30 11:20:45

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.99 Mbit/s

95th percentile per-packet one-way delay: 53.574 ms

Loss rate: 0.47%

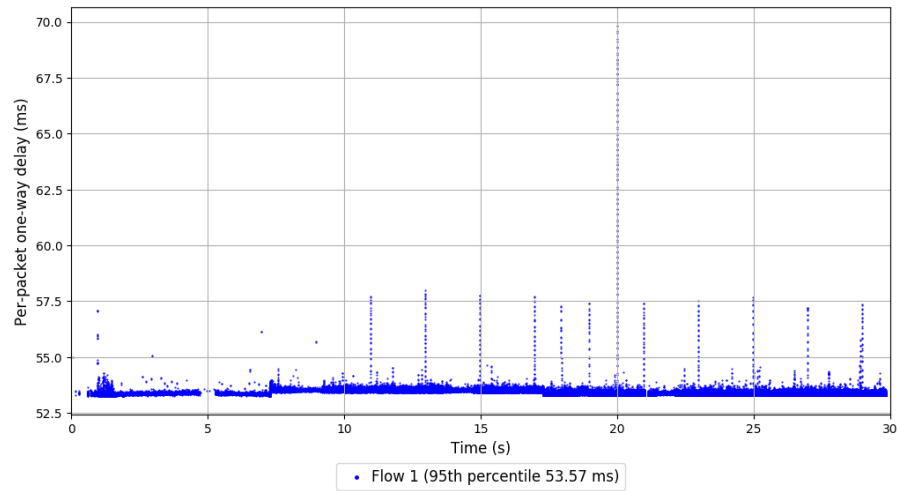
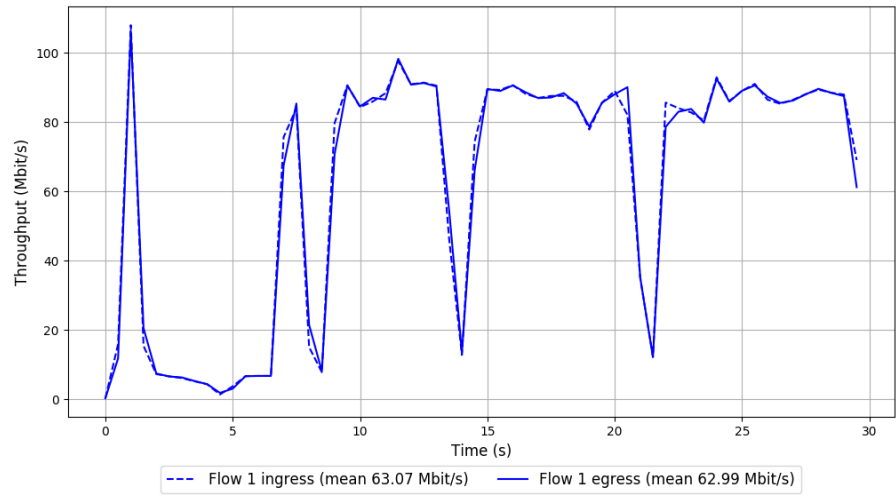
-- Flow 1:

Average throughput: 62.99 Mbit/s

95th percentile per-packet one-way delay: 53.574 ms

Loss rate: 0.47%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-30 11:30:39

End at: 2017-11-30 11:31:09

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.53 Mbit/s

95th percentile per-packet one-way delay: 53.111 ms

Loss rate: 0.59%

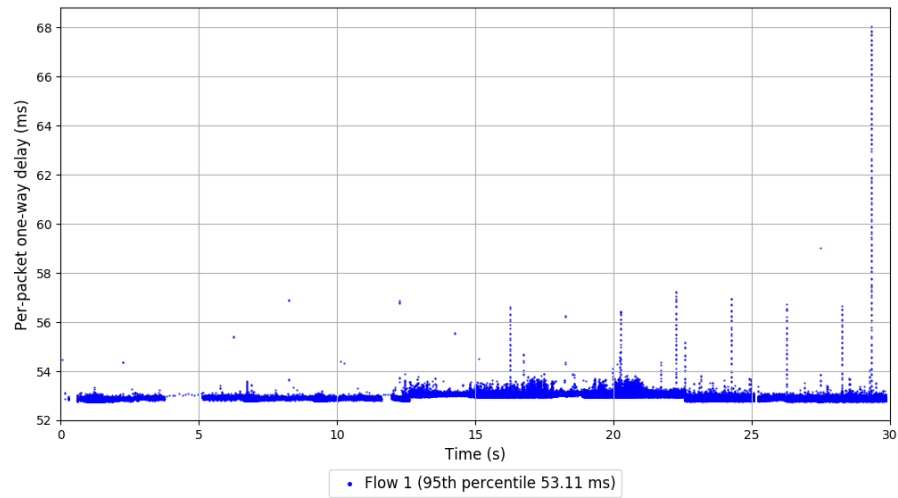
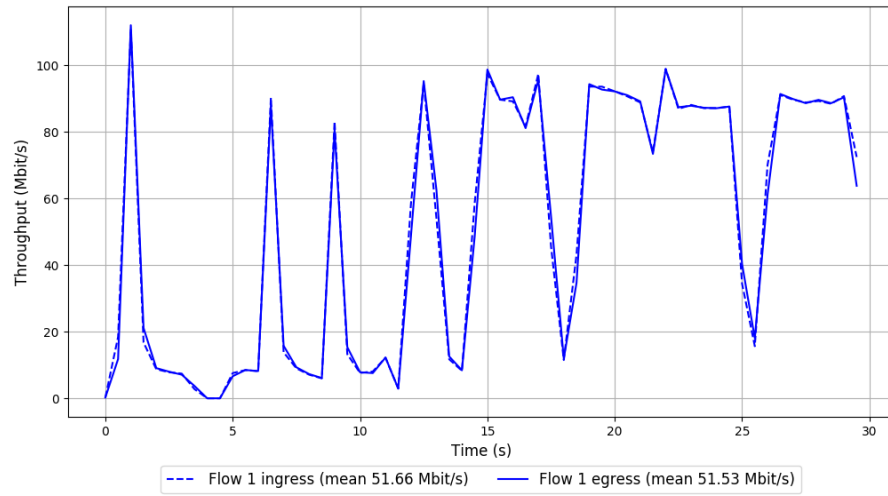
-- Flow 1:

Average throughput: 51.53 Mbit/s

95th percentile per-packet one-way delay: 53.111 ms

Loss rate: 0.59%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-30 11:41:18

End at: 2017-11-30 11:41:48

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.72 Mbit/s

95th percentile per-packet one-way delay: 53.060 ms

Loss rate: 0.56%

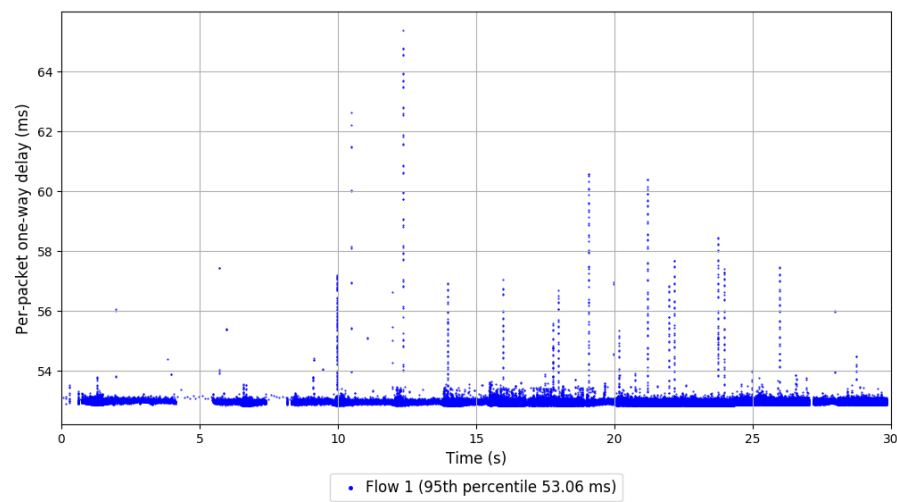
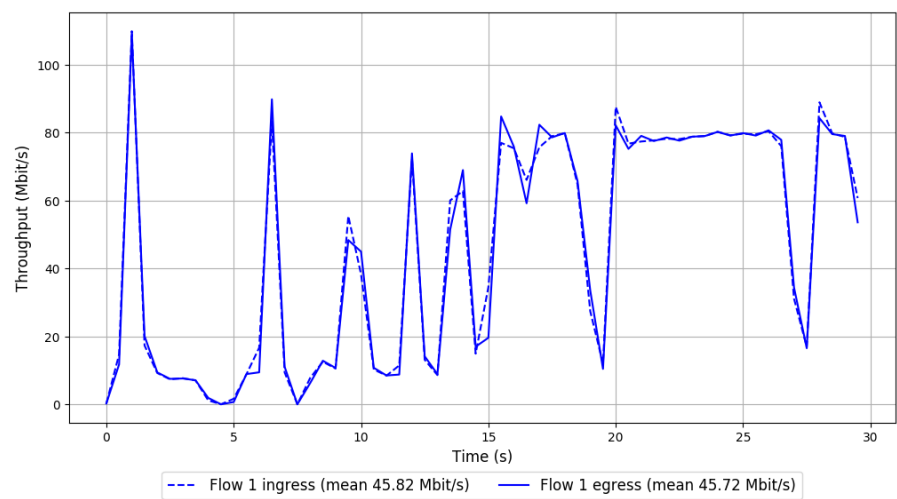
-- Flow 1:

Average throughput: 45.72 Mbit/s

95th percentile per-packet one-way delay: 53.060 ms

Loss rate: 0.56%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-30 11:51:44

End at: 2017-11-30 11:52:14

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.71 Mbit/s

95th percentile per-packet one-way delay: 52.904 ms

Loss rate: 0.47%

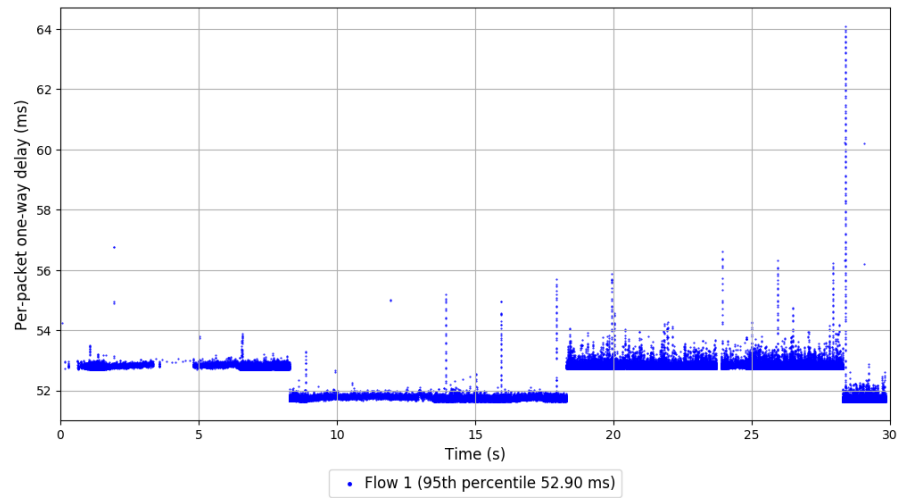
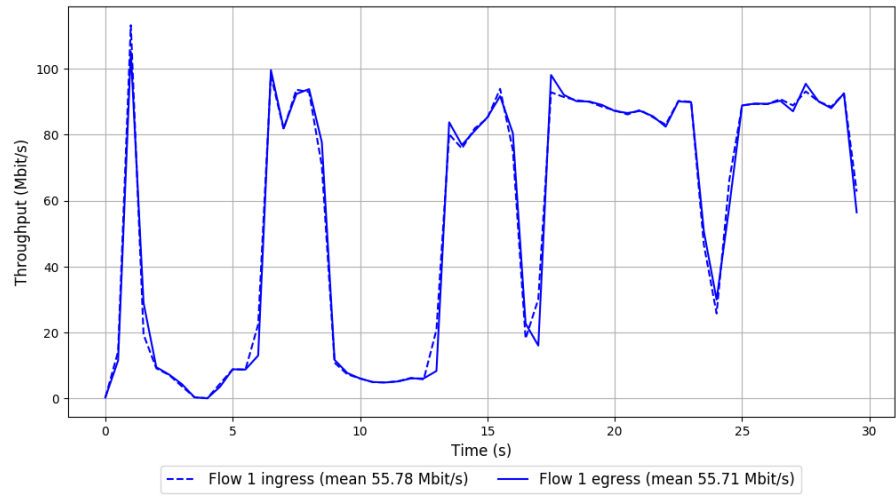
-- Flow 1:

Average throughput: 55.71 Mbit/s

95th percentile per-packet one-way delay: 52.904 ms

Loss rate: 0.47%

Run 10: Report of QUIC Cubic — Data Link

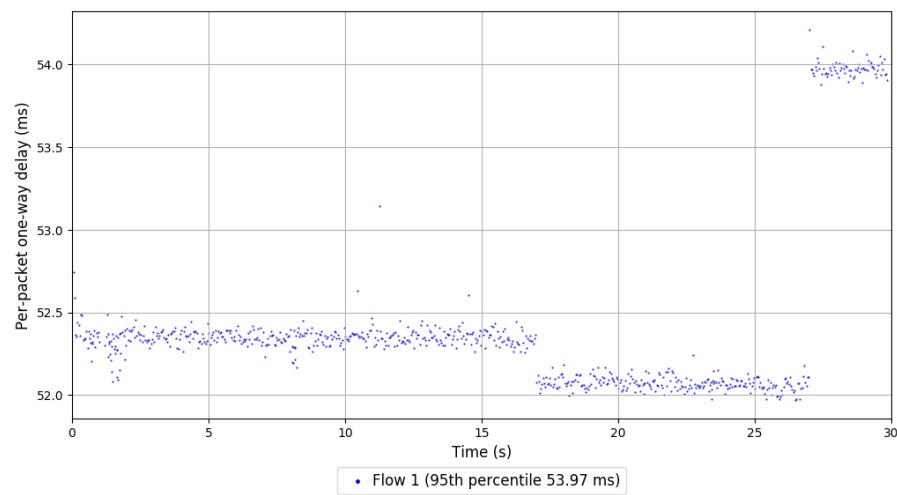
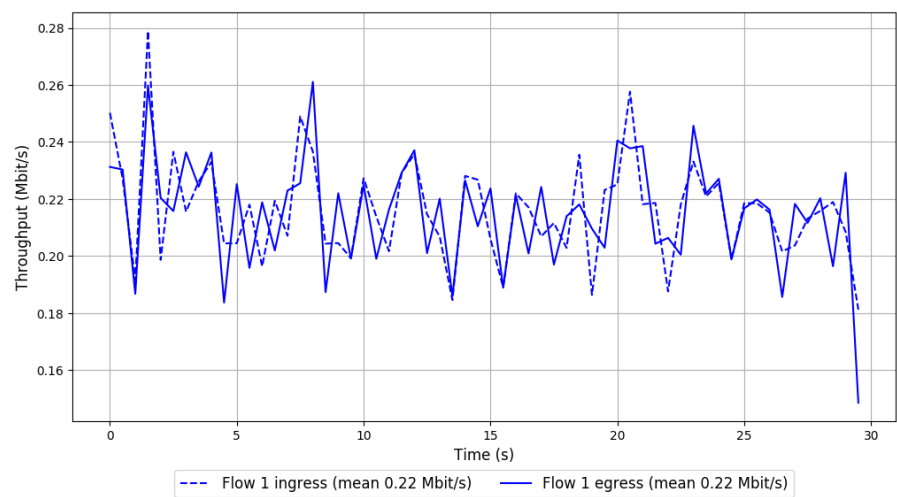


```
Run 1: Statistics of SCReAM

Start at: 2017-11-30 10:19:05
End at: 2017-11-30 10:19:35

# Below is generated by plot.py at 2017-11-30 14:13:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.967 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.967 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

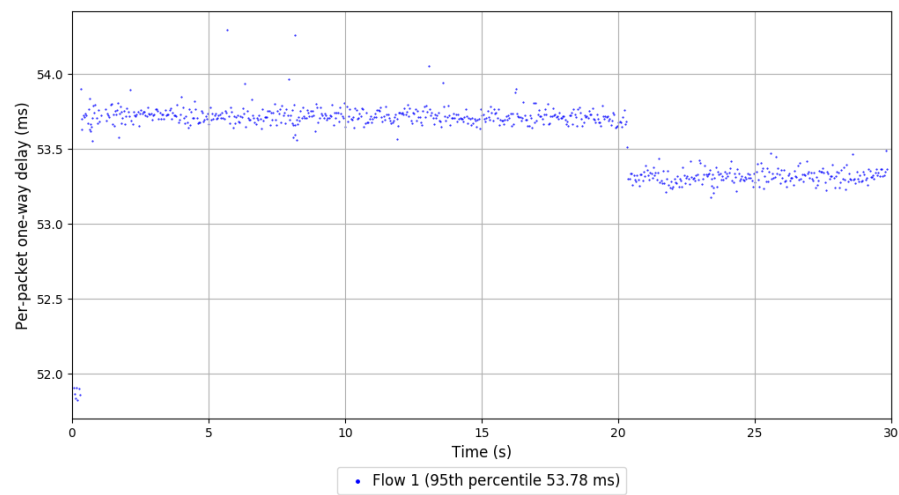
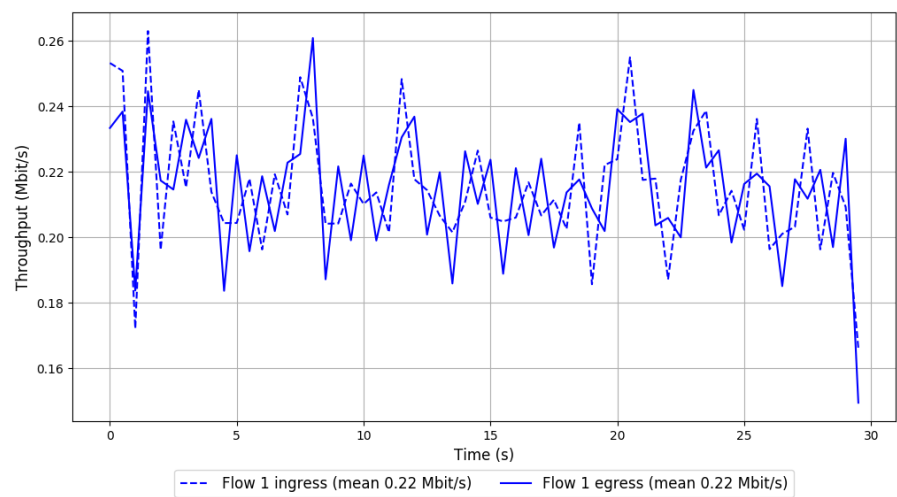


```
Run 2: Statistics of SCReAM

Start at: 2017-11-30 10:29:32
End at: 2017-11-30 10:30:02

# Below is generated by plot.py at 2017-11-30 14:13:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.784 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.784 ms
Loss rate: 0.25%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-30 10:39:49

End at: 2017-11-30 10:40:19

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.287 ms

Loss rate: 0.38%

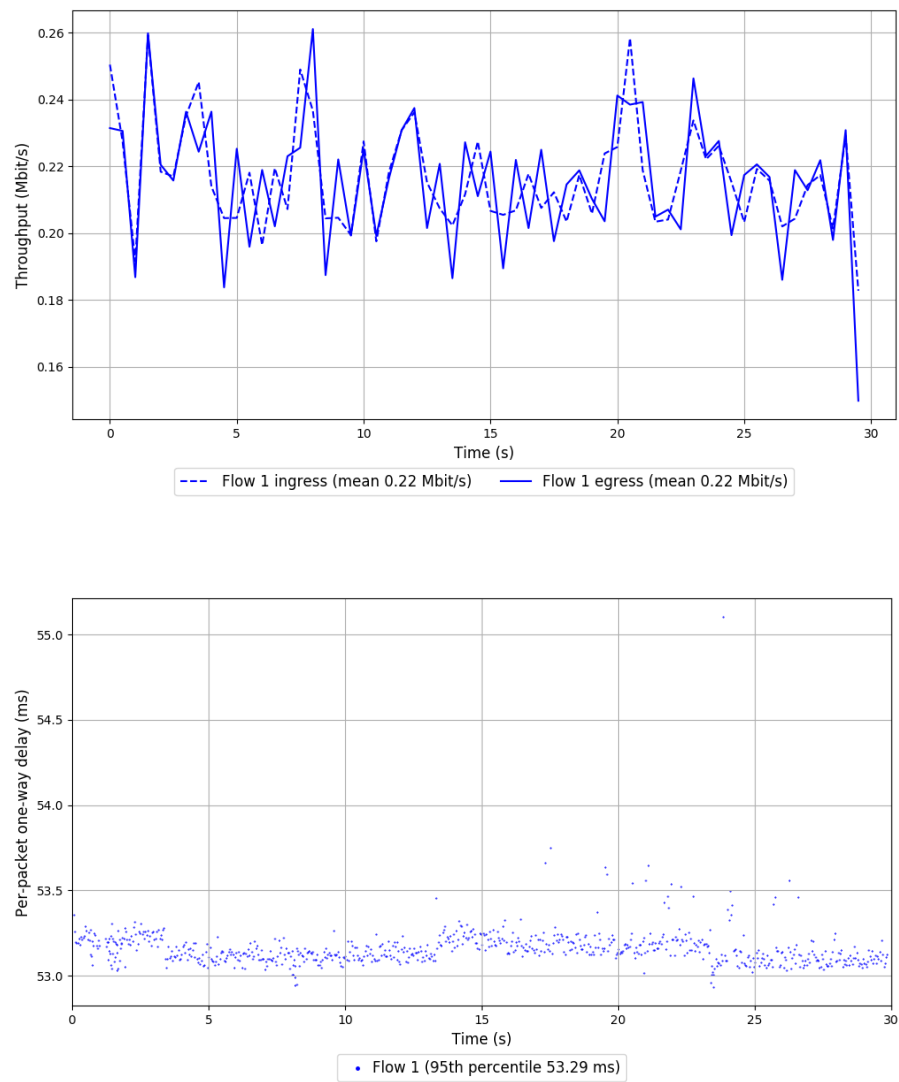
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.287 ms

Loss rate: 0.38%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-30 10:50:12

End at: 2017-11-30 10:50:42

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.698 ms

Loss rate: 0.38%

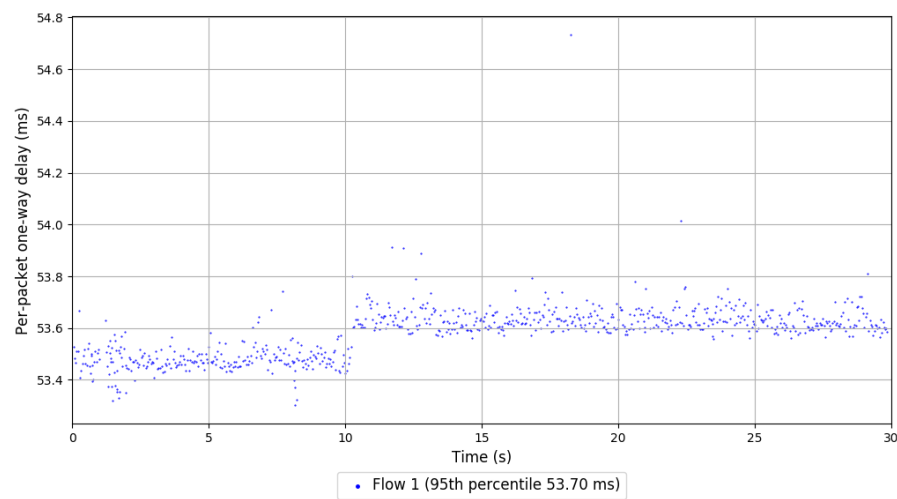
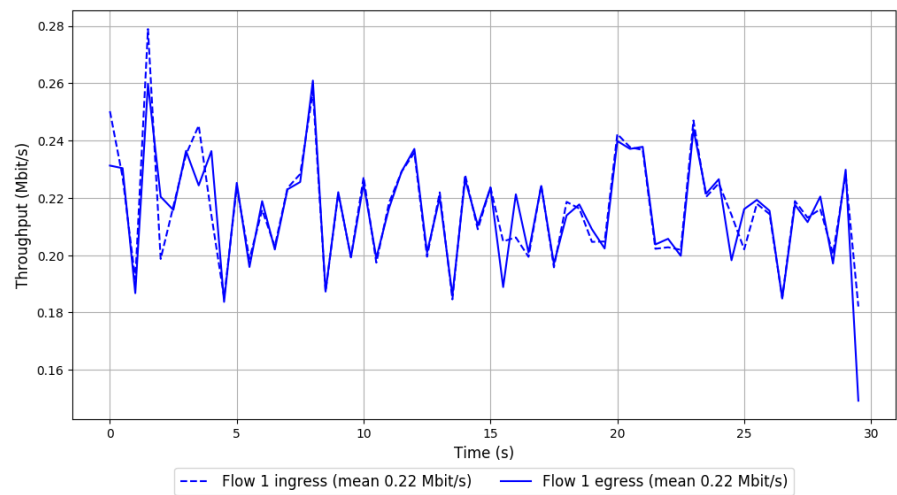
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.698 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-30 11:00:44

End at: 2017-11-30 11:01:14

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

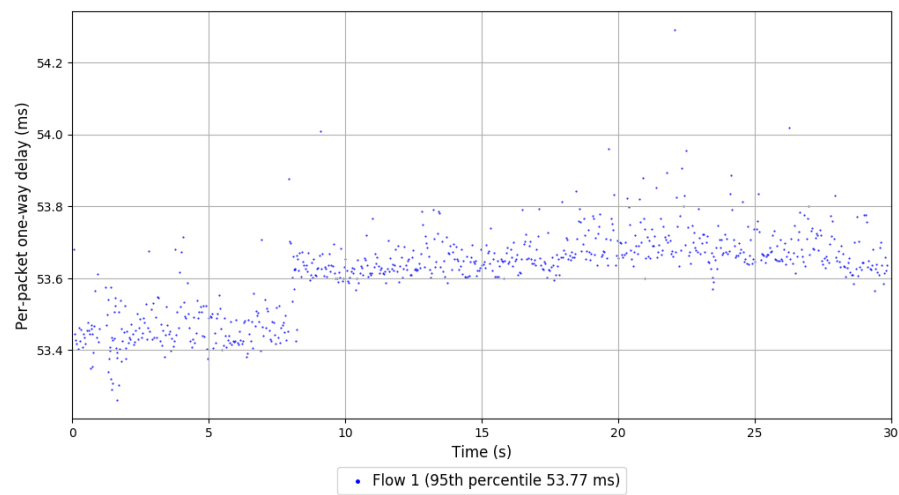
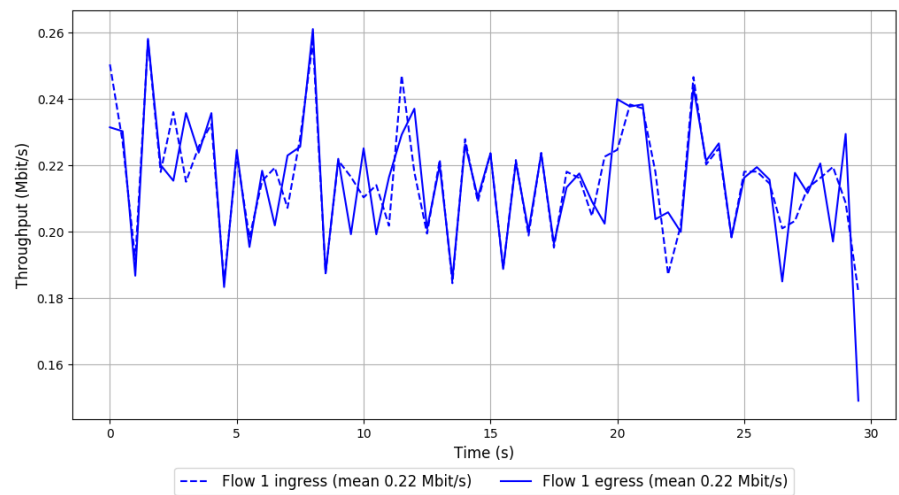
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-30 11:10:44

End at: 2017-11-30 11:11:14

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.786 ms

Loss rate: 0.38%

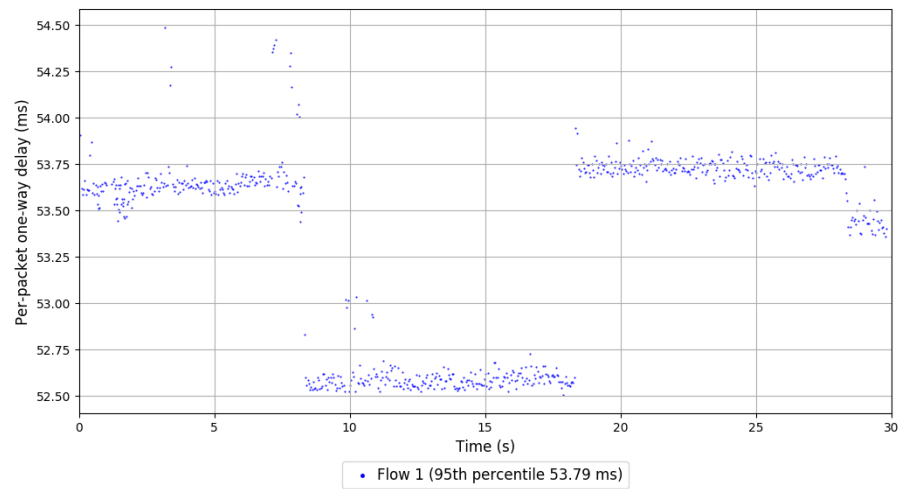
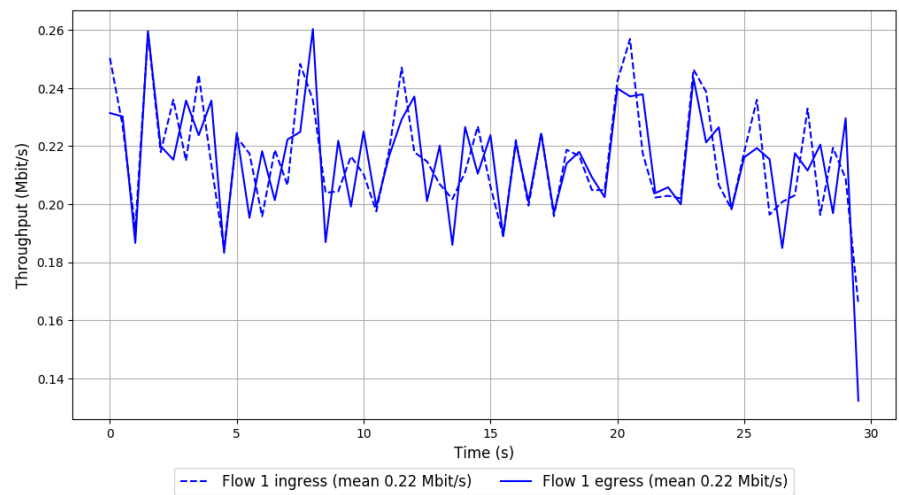
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.786 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-30 11:20:55

End at: 2017-11-30 11:21:25

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.956 ms

Loss rate: 0.38%

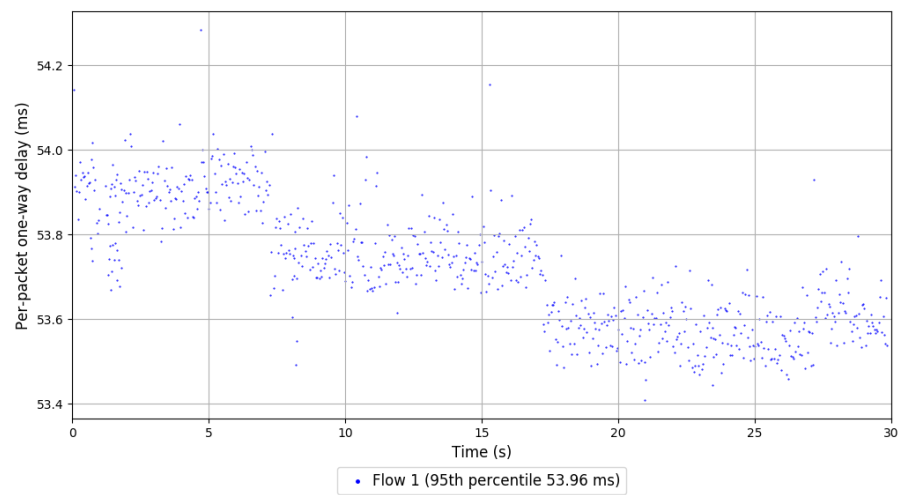
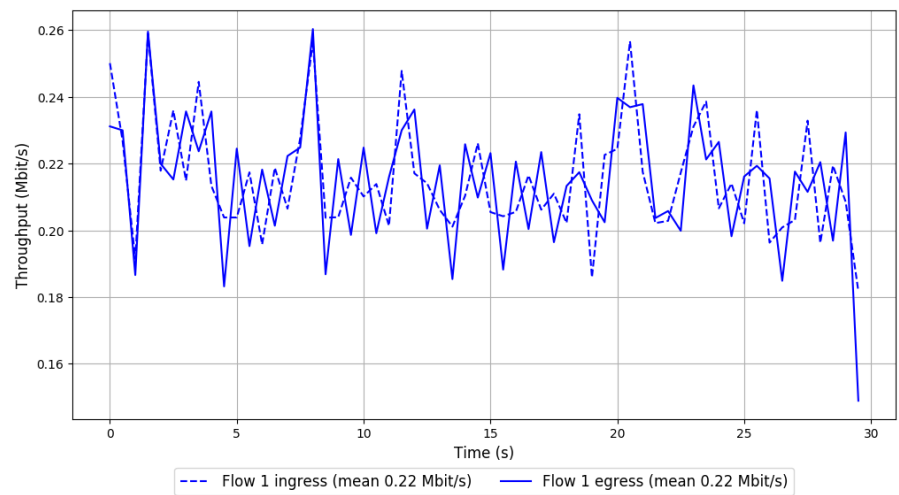
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.956 ms

Loss rate: 0.38%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-30 11:31:19

End at: 2017-11-30 11:31:49

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.415 ms

Loss rate: 0.38%

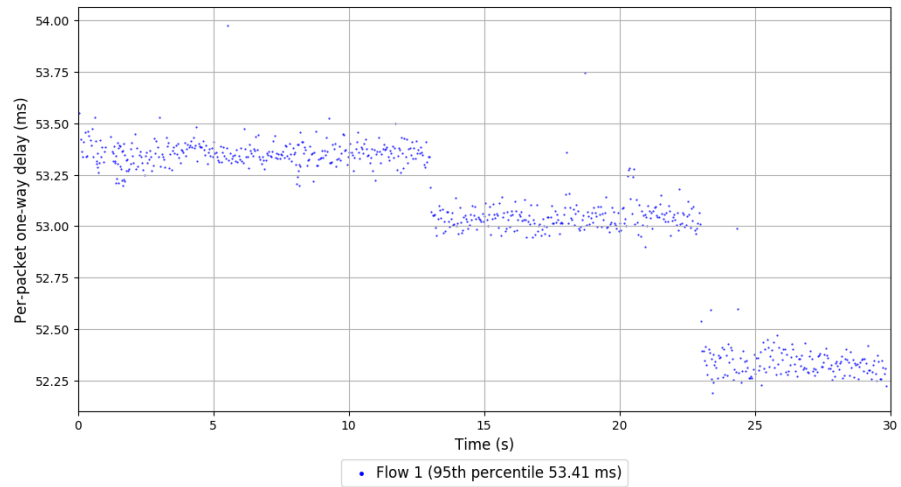
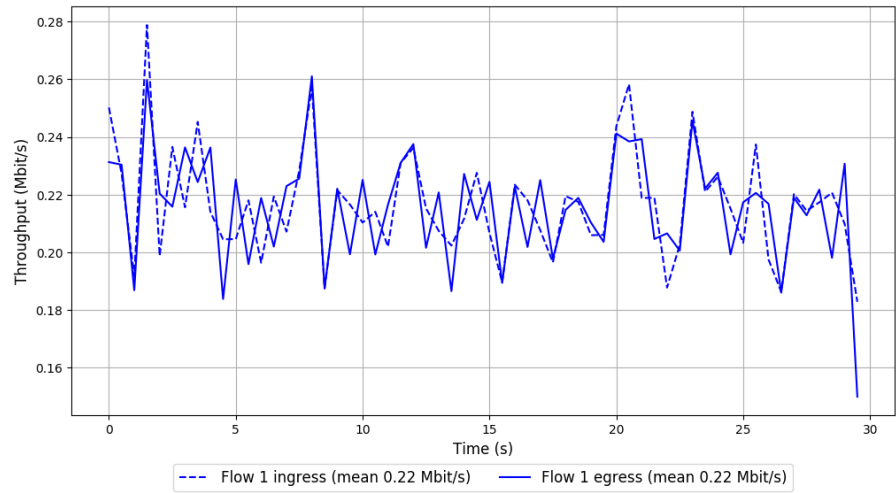
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.415 ms

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-30 11:41:57

End at: 2017-11-30 11:42:27

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.300 ms

Loss rate: 0.38%

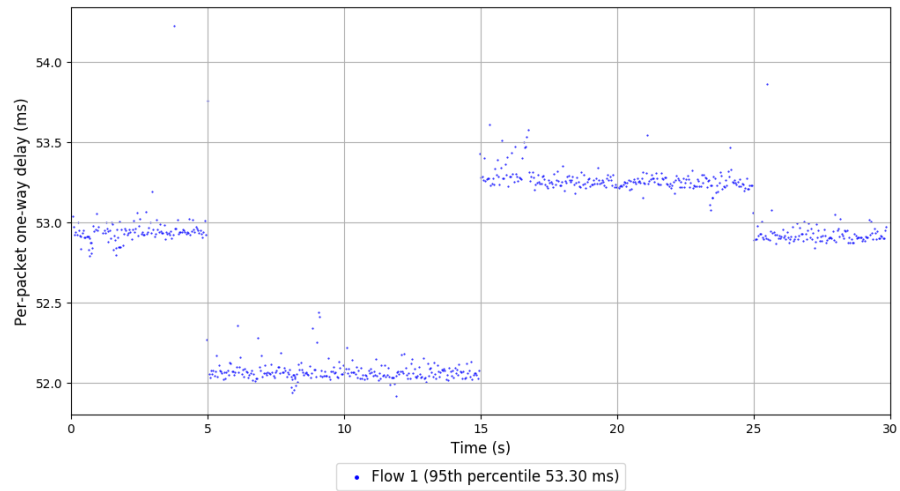
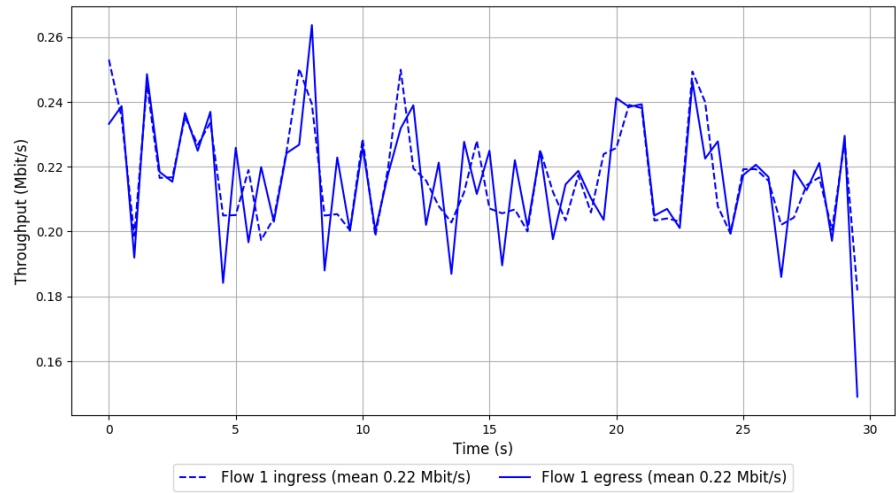
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.300 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-11-30 11:52:24

End at: 2017-11-30 11:52:54

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 52.843 ms

Loss rate: 0.25%

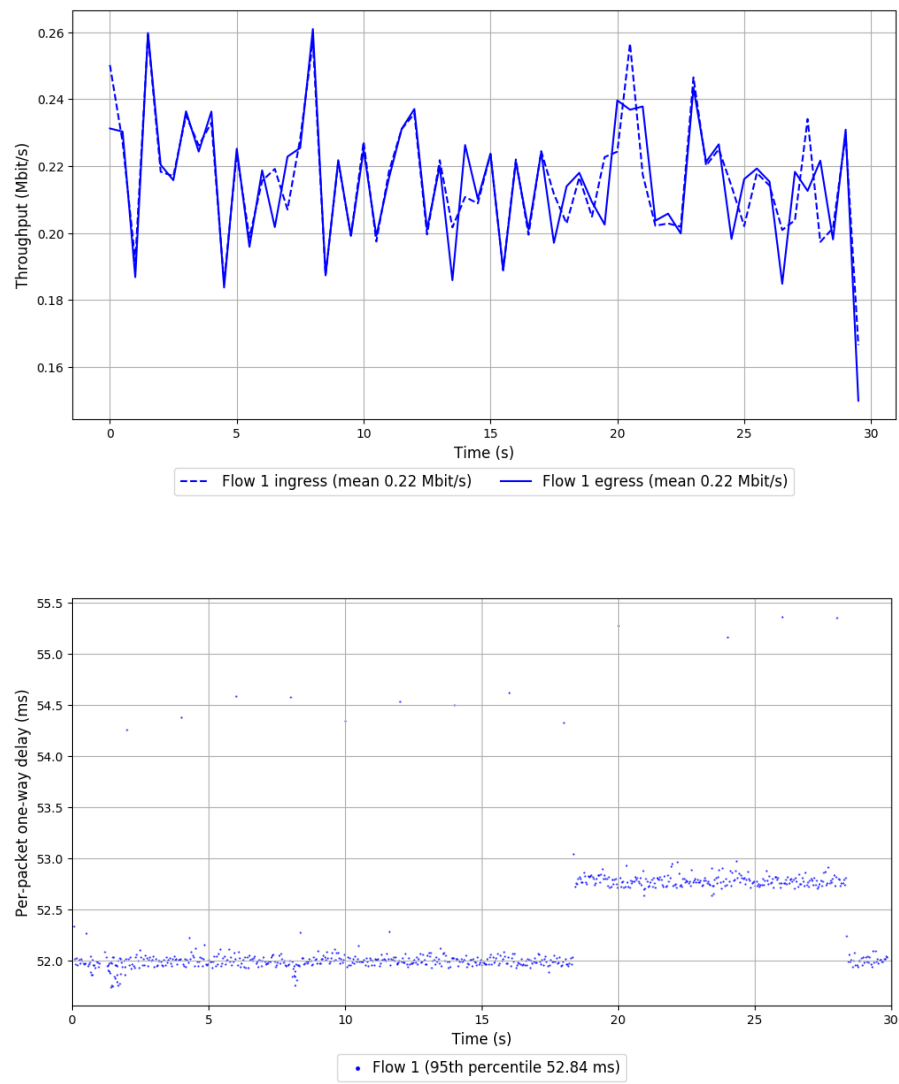
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 52.843 ms

Loss rate: 0.25%

Run 10: Report of SReAM — Data Link

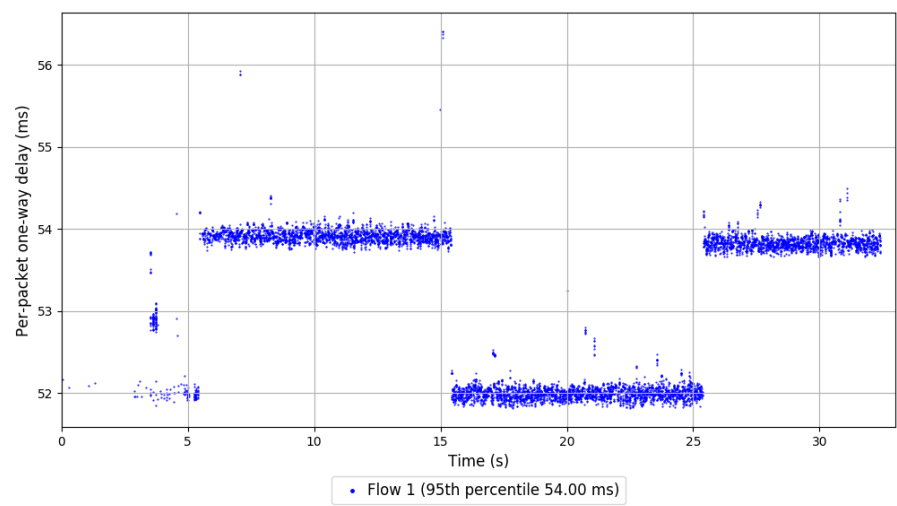
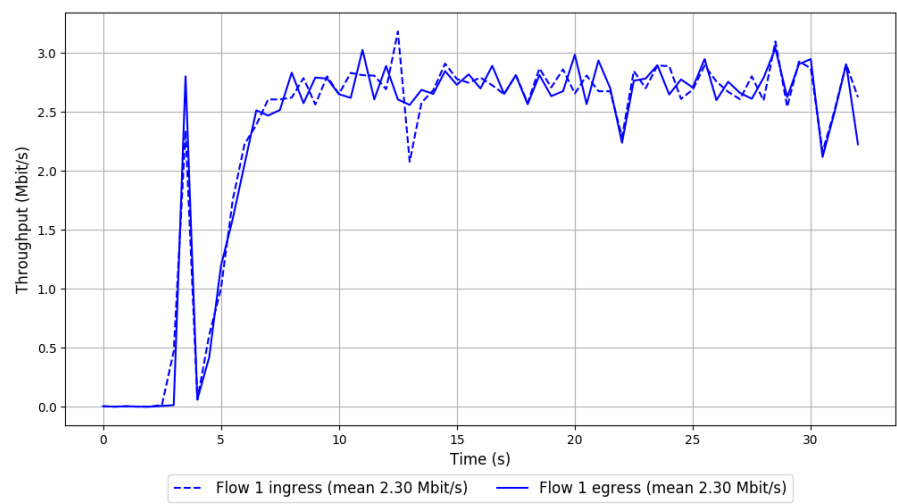


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-30 10:17:09
End at: 2017-11-30 10:17:39

# Below is generated by plot.py at 2017-11-30 14:13:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 53.999 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 53.999 ms
Loss rate: 0.41%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-30 10:27:30

End at: 2017-11-30 10:28:00

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 53.758 ms

Loss rate: 0.32%

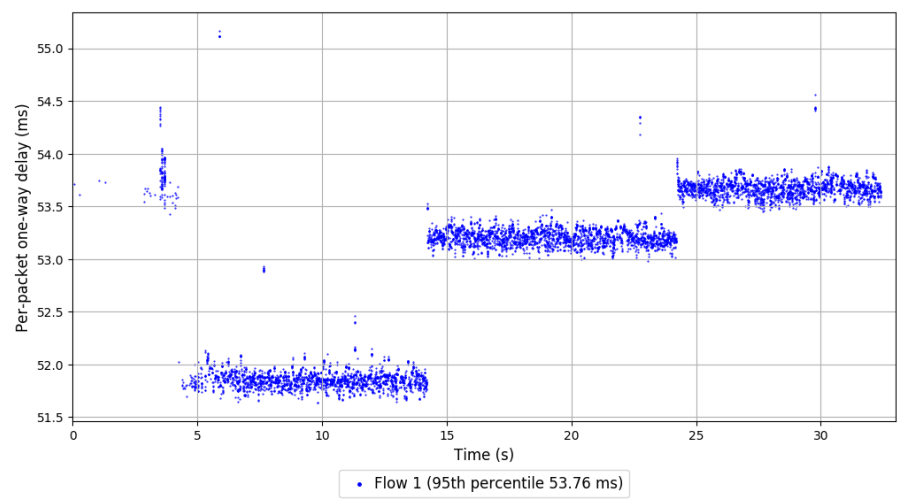
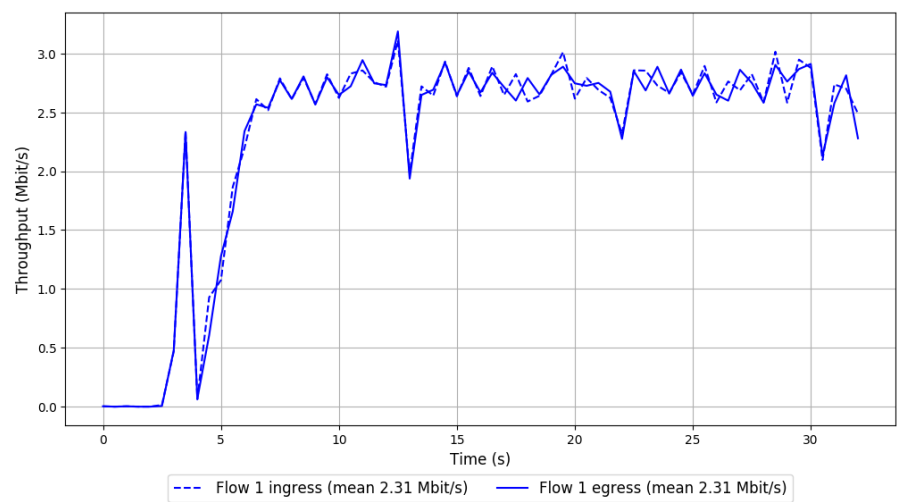
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 53.758 ms

Loss rate: 0.32%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-30 10:37:49

End at: 2017-11-30 10:38:19

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.126 ms

Loss rate: 0.47%

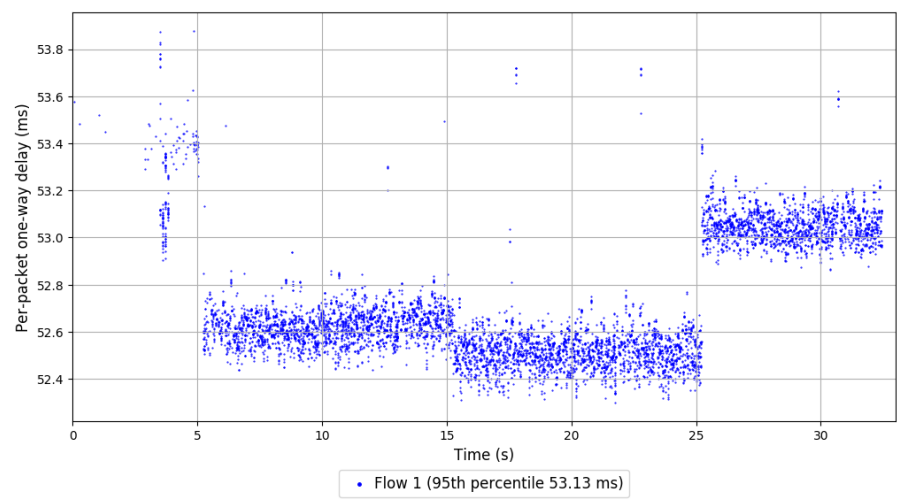
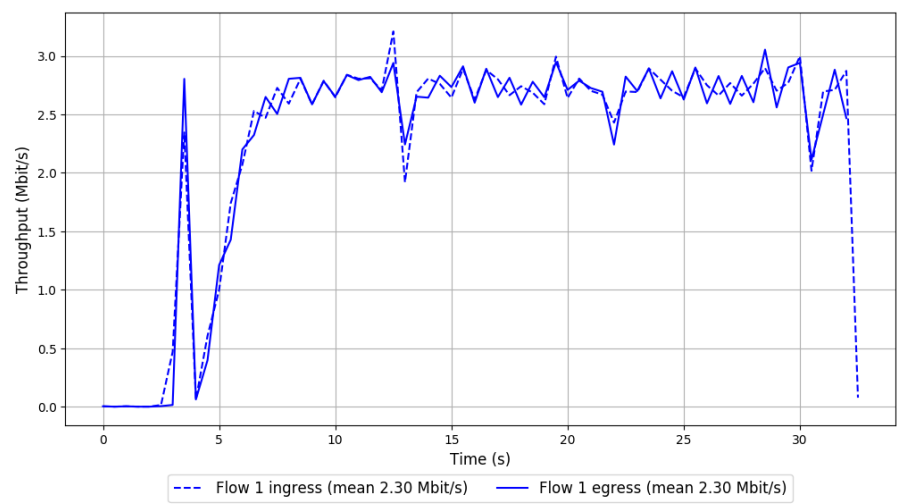
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.126 ms

Loss rate: 0.47%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-30 10:48:13

End at: 2017-11-30 10:48:43

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.597 ms

Loss rate: 0.46%

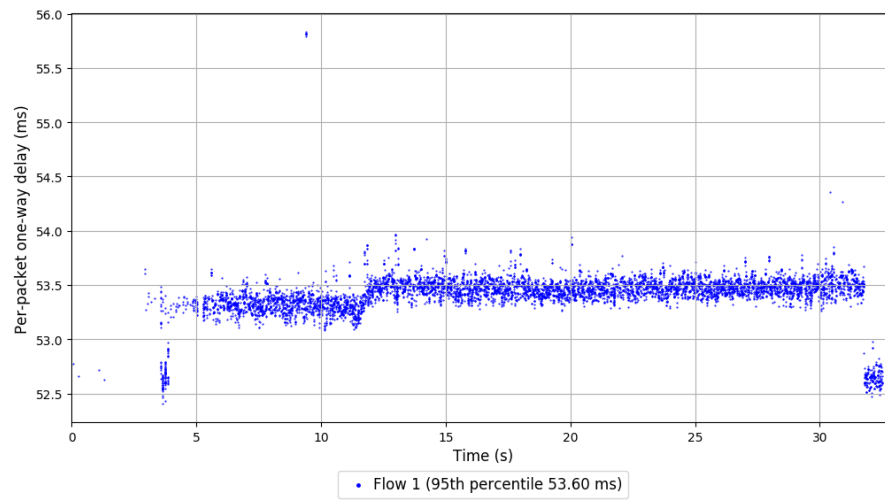
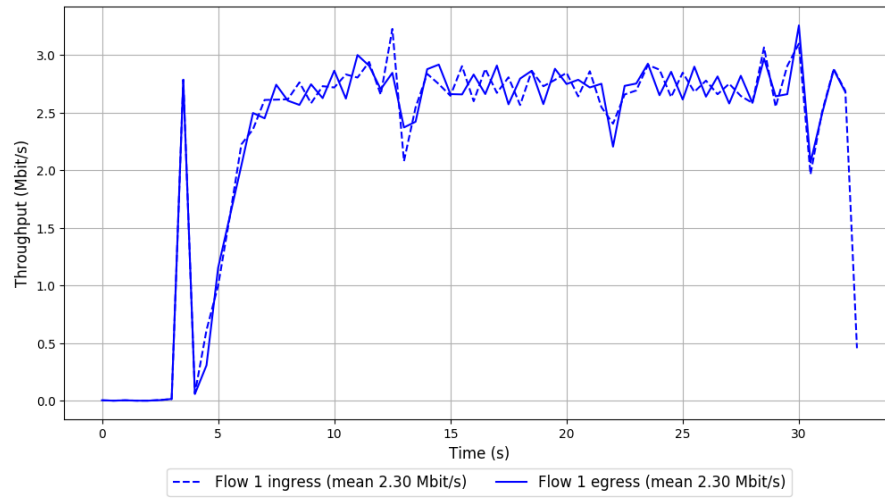
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.597 ms

Loss rate: 0.46%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-30 10:58:42

End at: 2017-11-30 10:59:13

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.677 ms

Loss rate: 0.46%

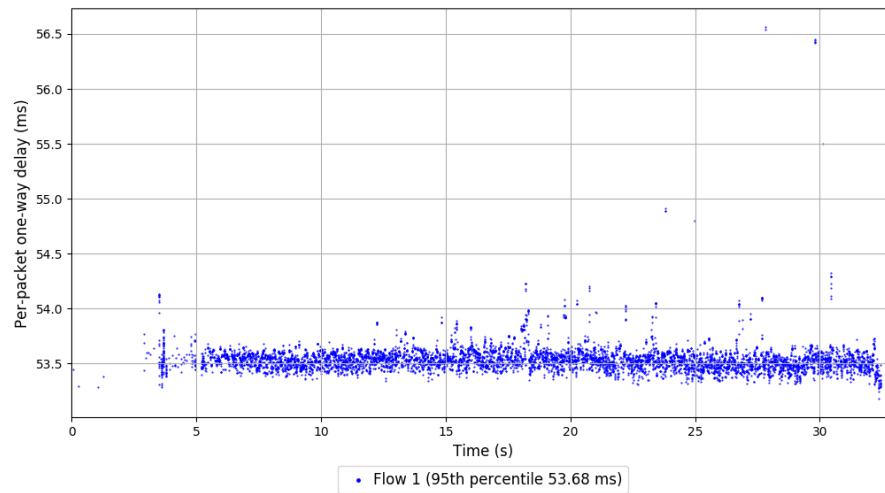
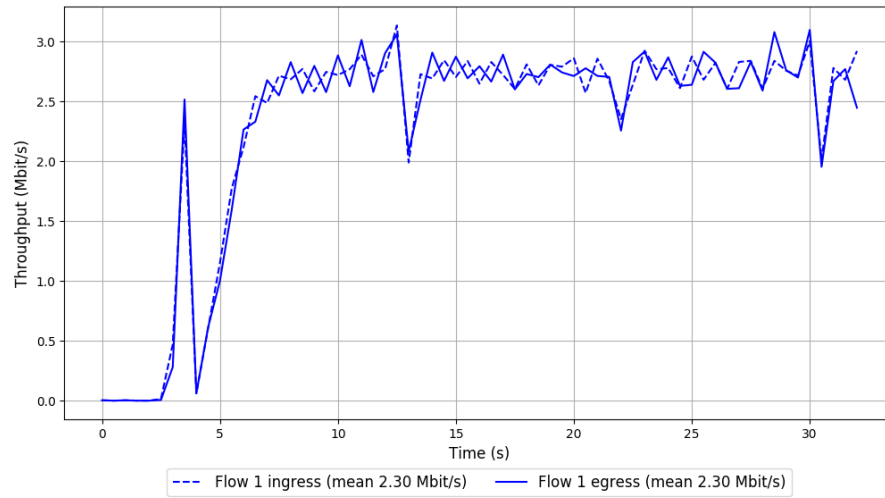
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.677 ms

Loss rate: 0.46%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-30 11:08:44

End at: 2017-11-30 11:09:14

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.763 ms

Loss rate: 0.36%

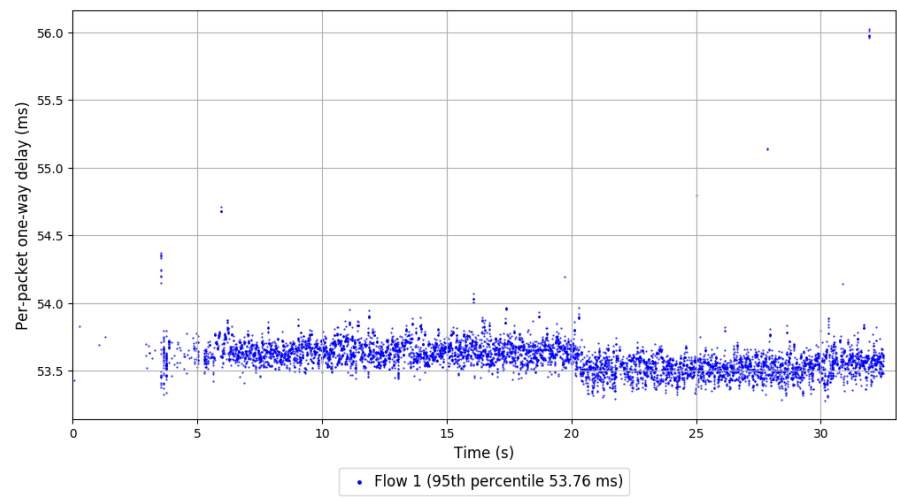
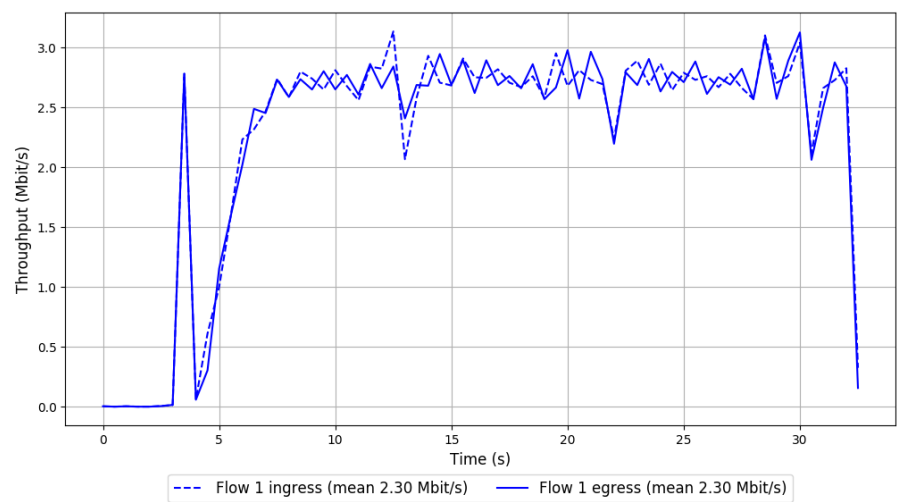
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.763 ms

Loss rate: 0.36%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-30 11:18:55

End at: 2017-11-30 11:19:25

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.675 ms

Loss rate: 0.45%

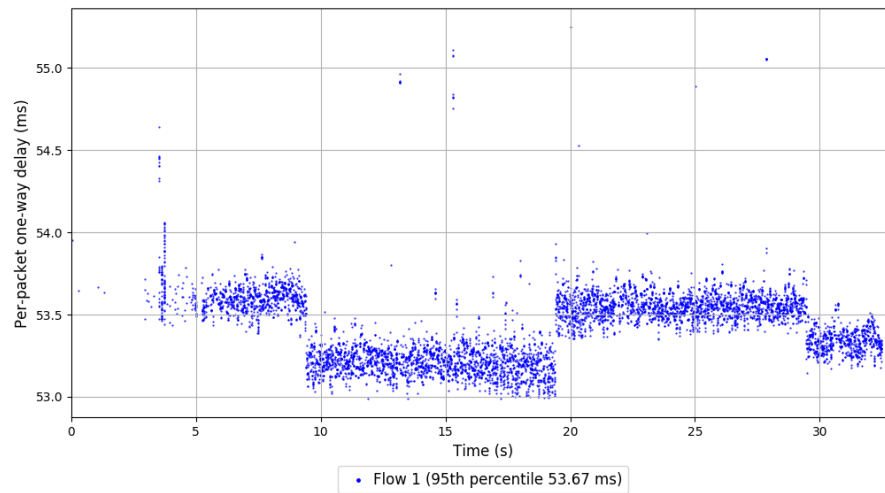
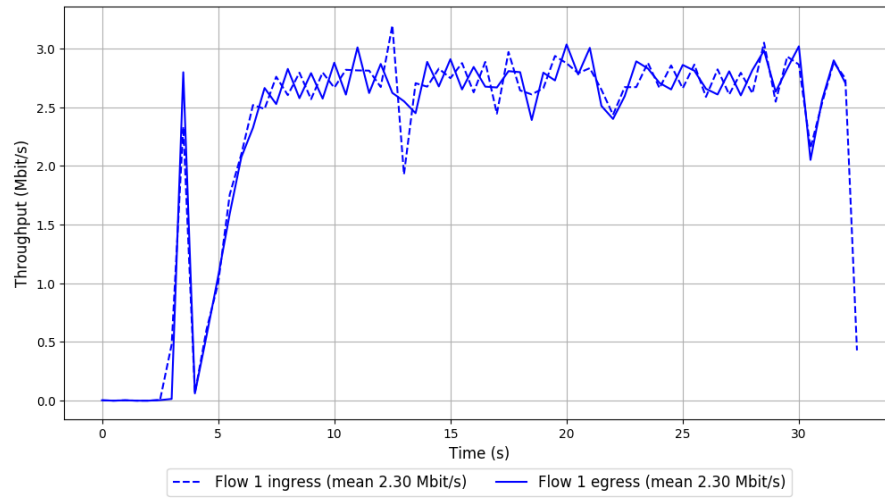
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.675 ms

Loss rate: 0.45%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-30 11:29:20

End at: 2017-11-30 11:29:50

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

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

Loss rate: 0.31%

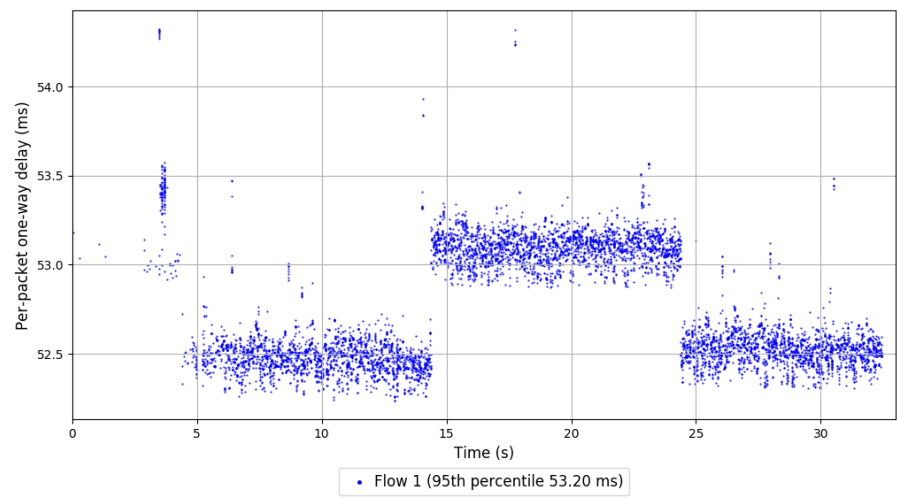
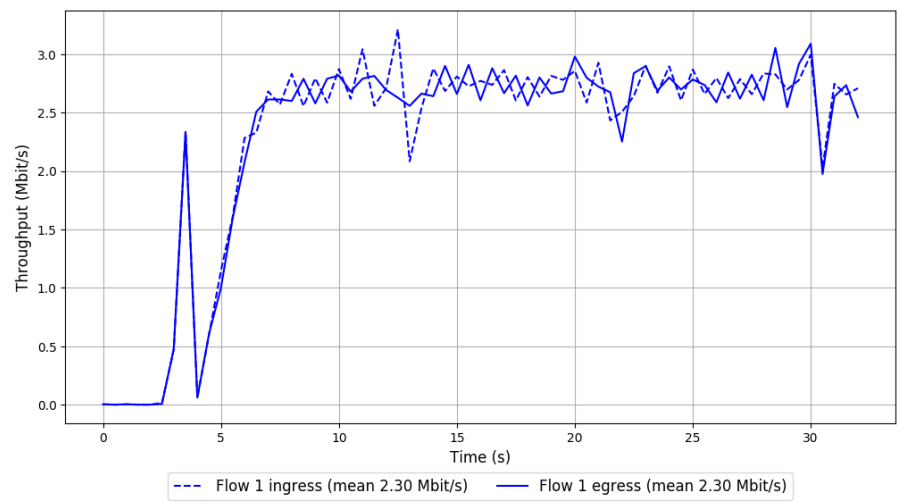
-- Flow 1:

Average throughput: 2.30 Mbit/s

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

Loss rate: 0.31%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-30 11:39:59

End at: 2017-11-30 11:40:29

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

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

Loss rate: 0.35%

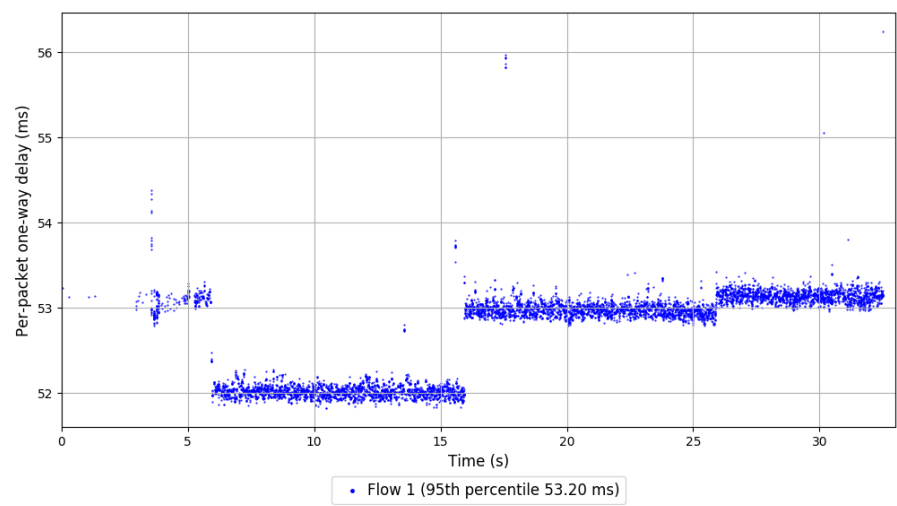
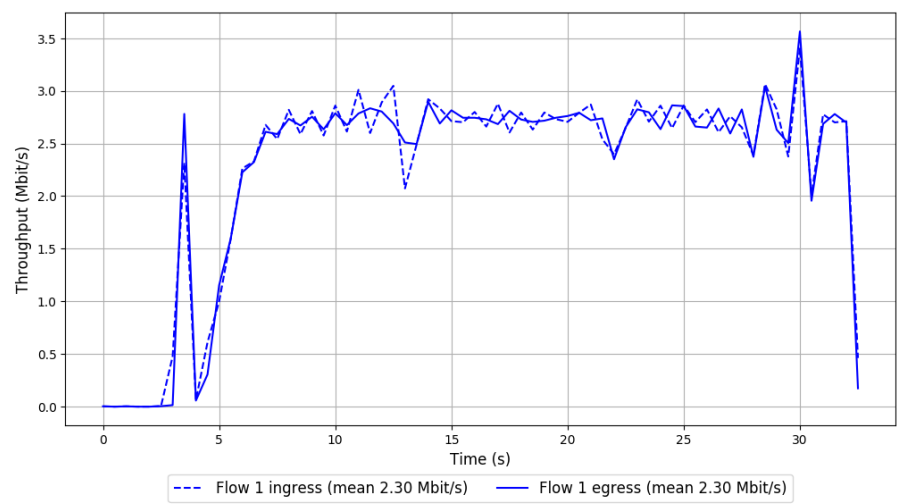
-- Flow 1:

Average throughput: 2.30 Mbit/s

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

Loss rate: 0.35%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-30 11:50:24

End at: 2017-11-30 11:50:54

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.064 ms

Loss rate: 0.42%

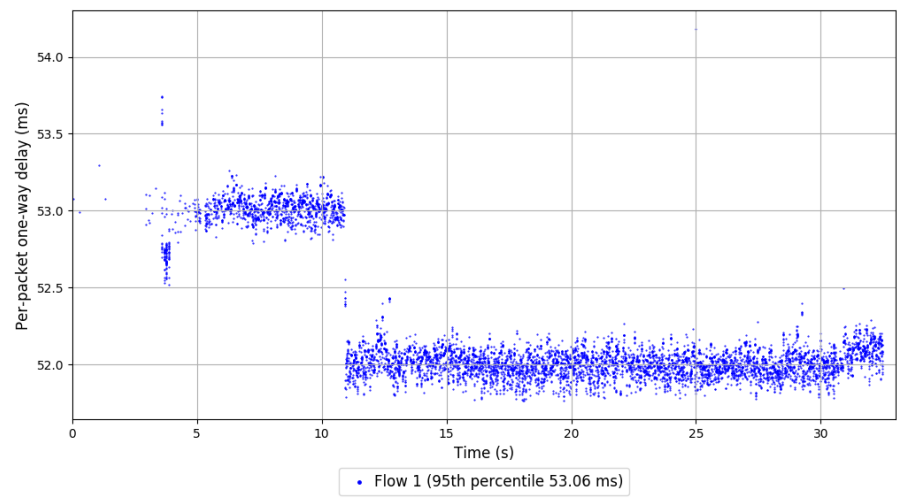
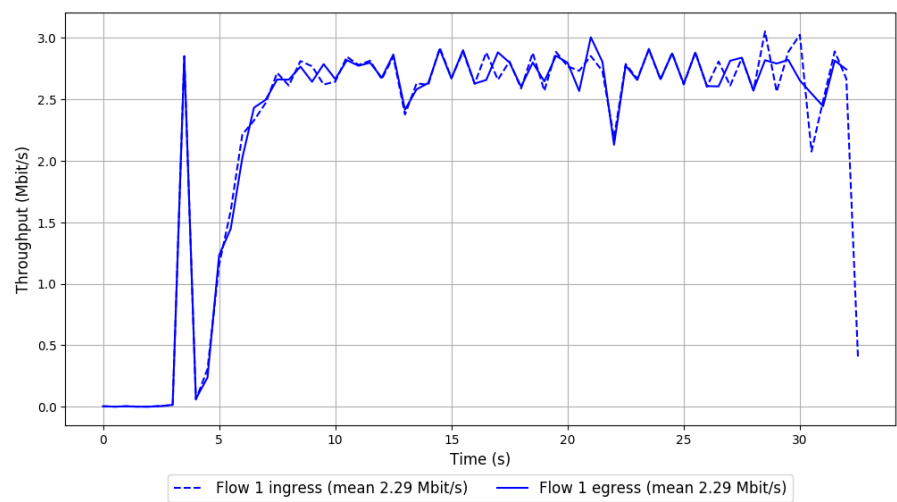
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.064 ms

Loss rate: 0.42%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-11-30 10:16:32

End at: 2017-11-30 10:17:02

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 54.665 ms

Loss rate: 0.43%

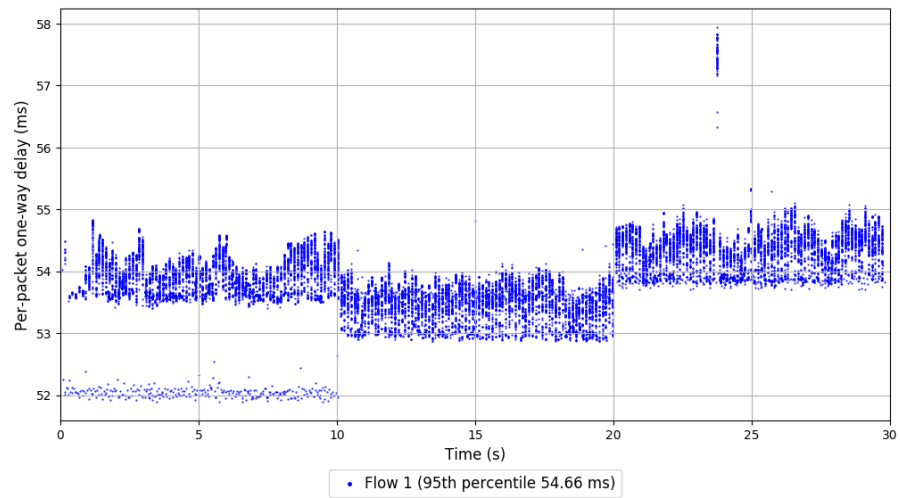
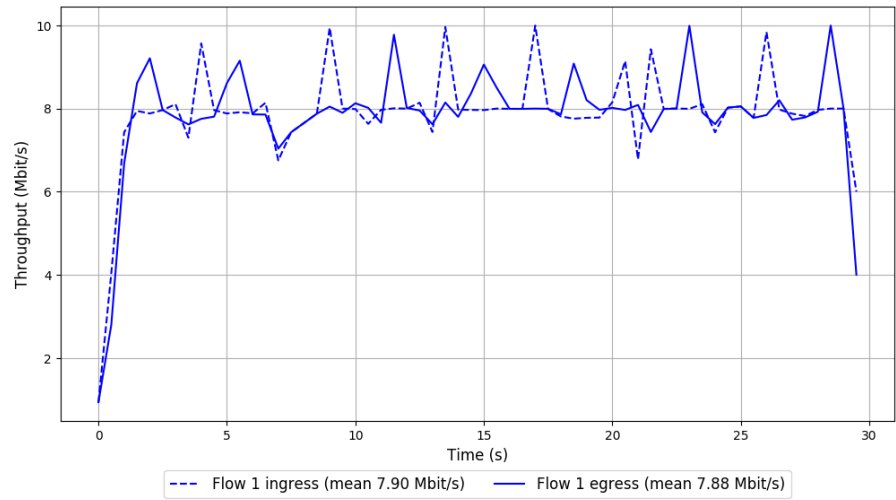
-- Flow 1:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 54.665 ms

Loss rate: 0.43%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-30 10:26:53

End at: 2017-11-30 10:27:23

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 54.170 ms

Loss rate: 0.50%

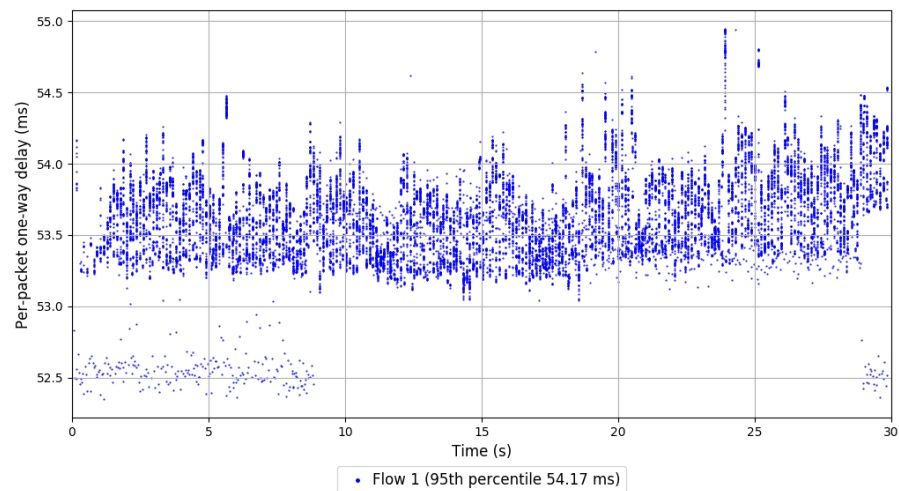
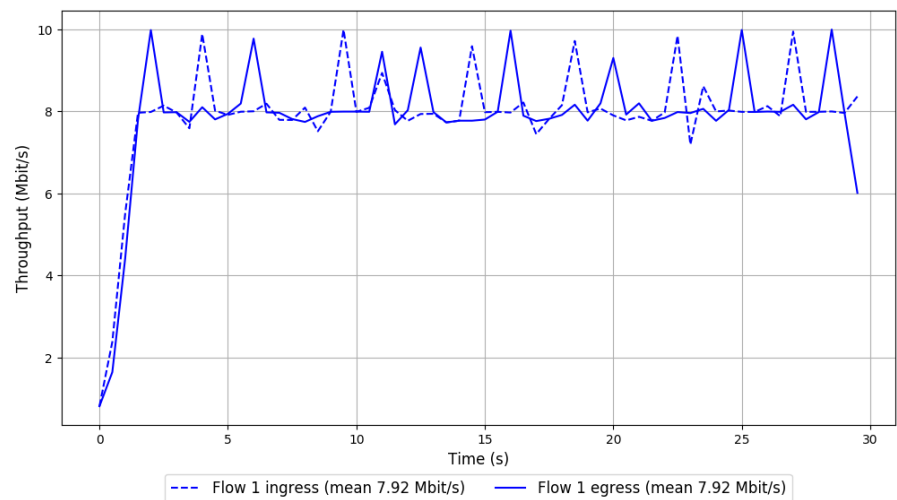
-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 54.170 ms

Loss rate: 0.50%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-30 10:37:12

End at: 2017-11-30 10:37:42

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 53.806 ms

Loss rate: 0.00%

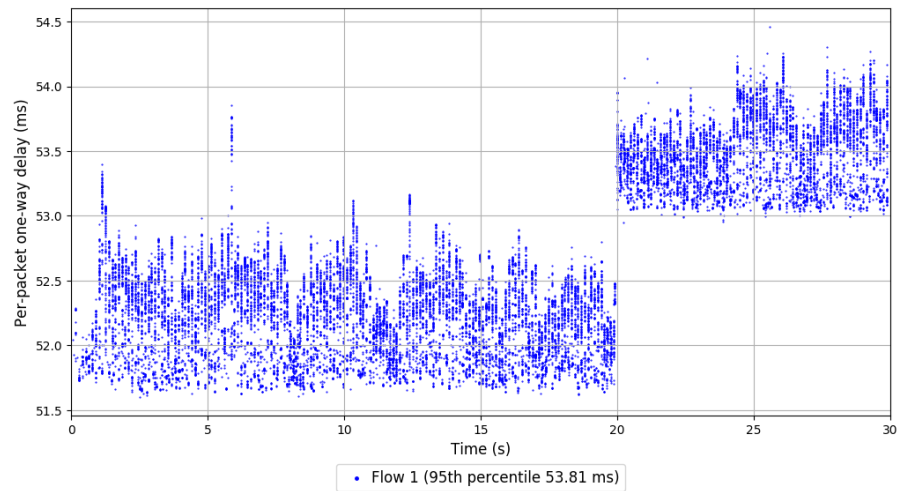
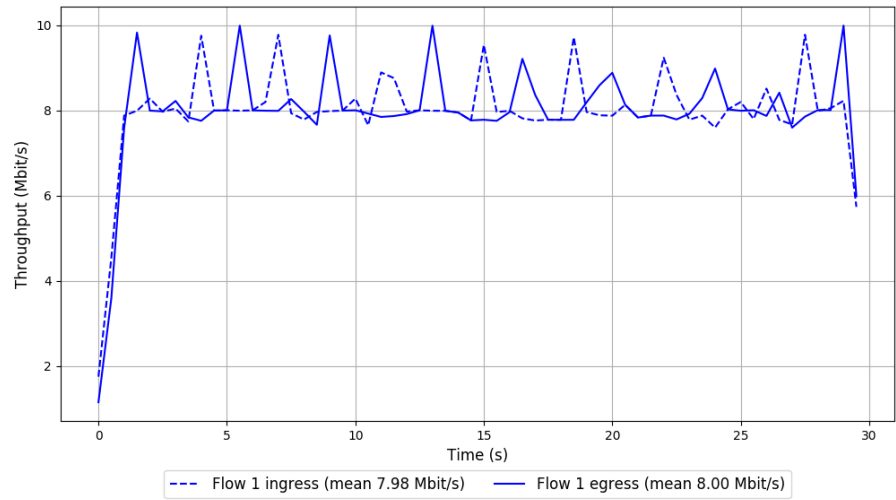
-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 53.806 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-30 10:47:36

End at: 2017-11-30 10:48:06

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 54.115 ms

Loss rate: 0.41%

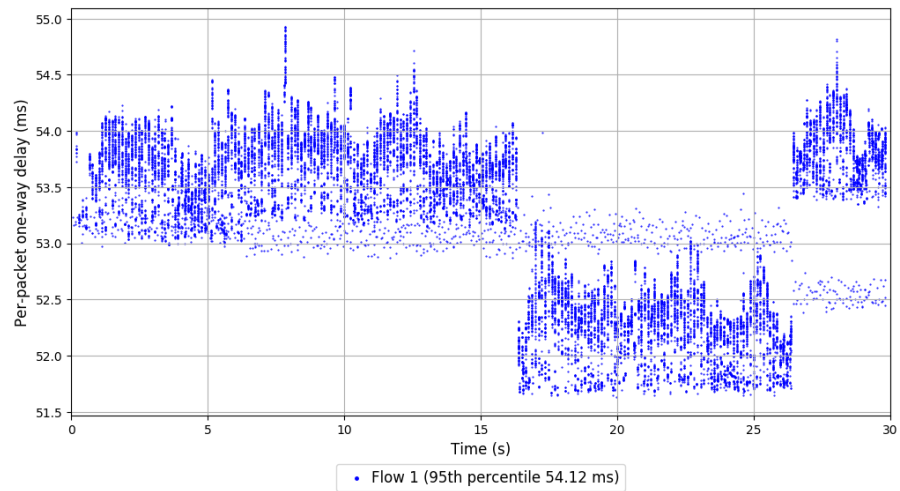
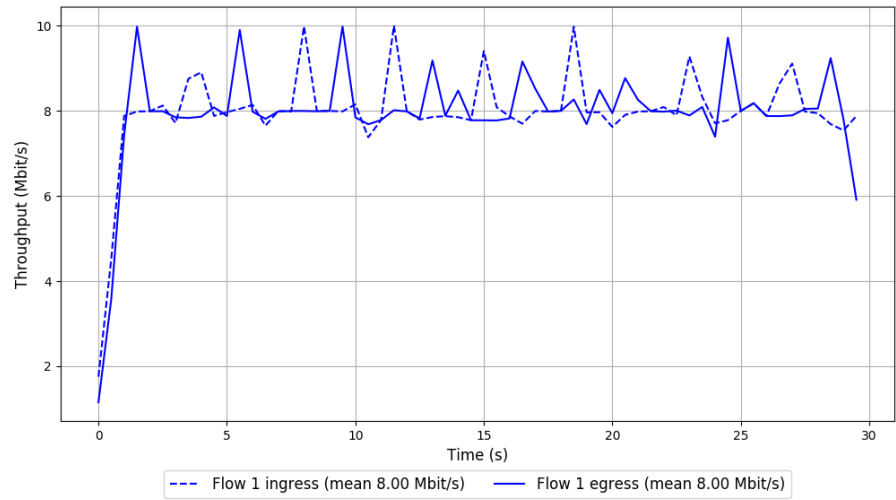
-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 54.115 ms

Loss rate: 0.41%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-30 10:58:05

End at: 2017-11-30 10:58:35

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.99 Mbit/s

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

Loss rate: 0.42%

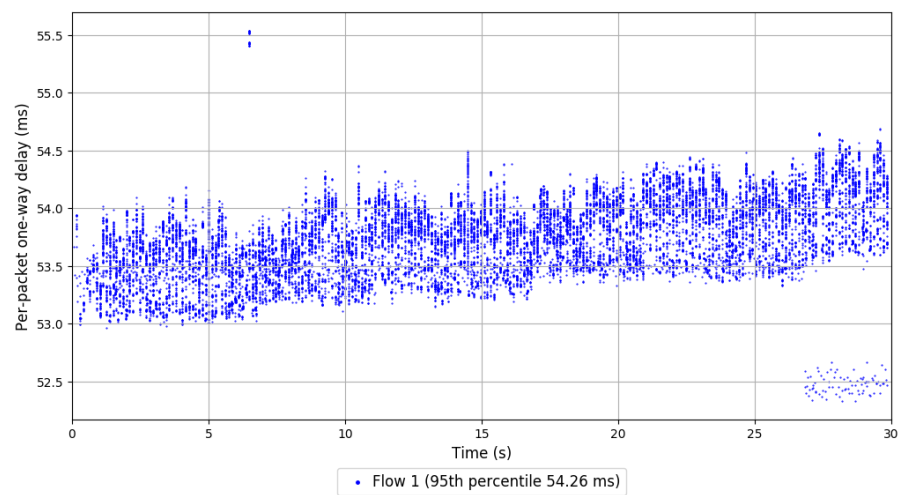
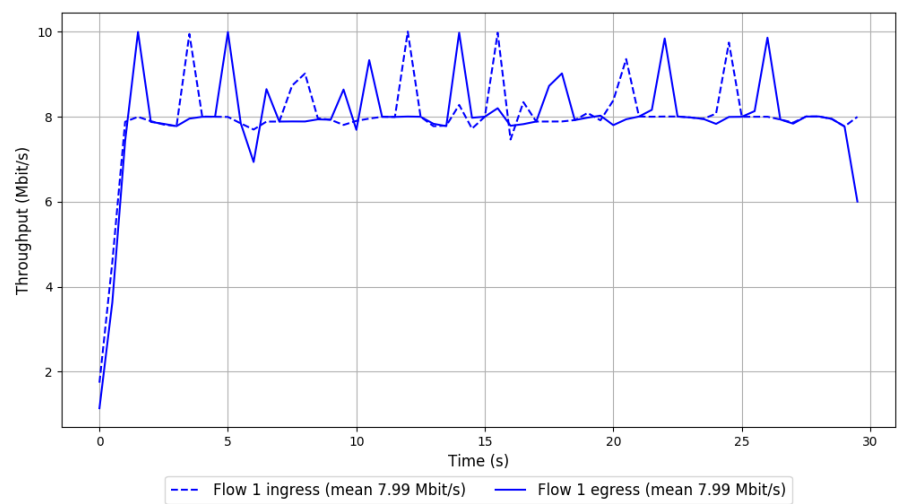
-- Flow 1:

Average throughput: 7.99 Mbit/s

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

Loss rate: 0.42%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-30 11:08:07

End at: 2017-11-30 11:08:37

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 54.388 ms

Loss rate: 0.43%

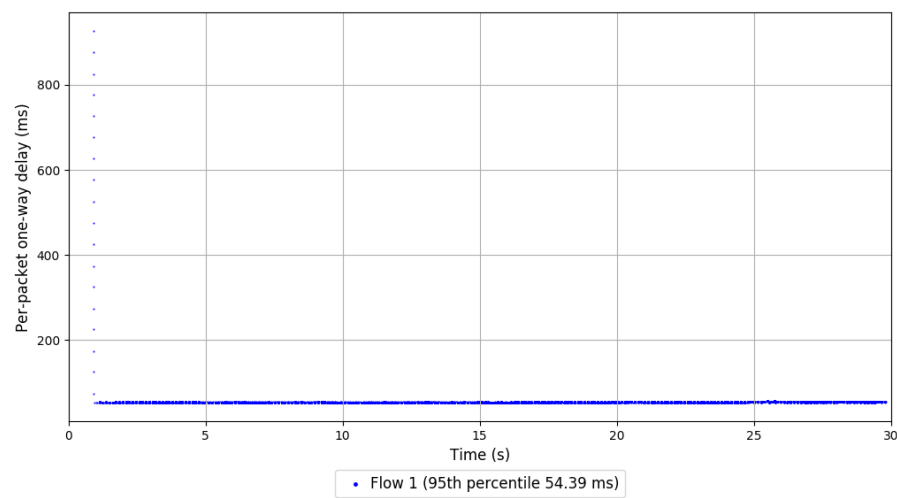
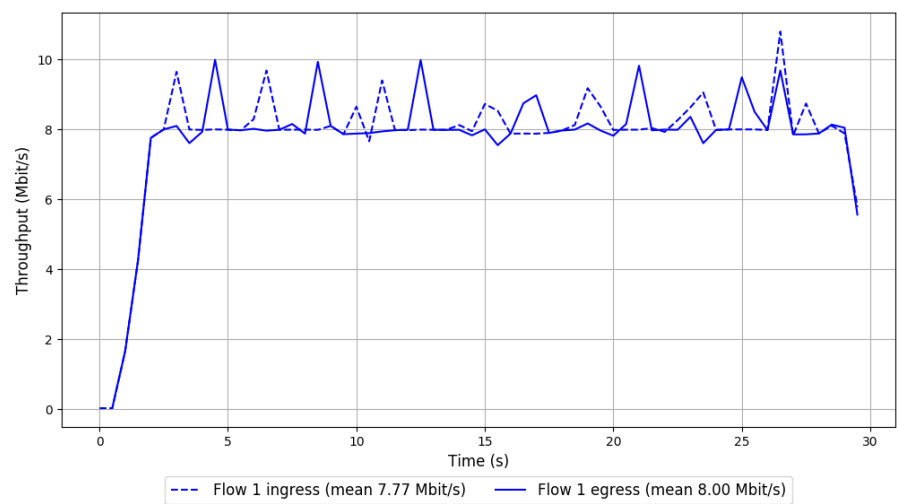
-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 54.388 ms

Loss rate: 0.43%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-30 11:18:18

End at: 2017-11-30 11:18:48

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 54.438 ms

Loss rate: 0.37%

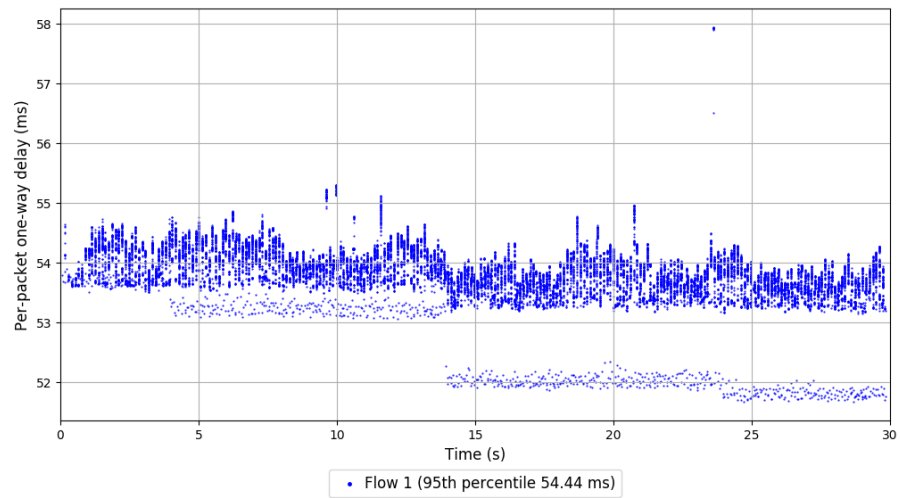
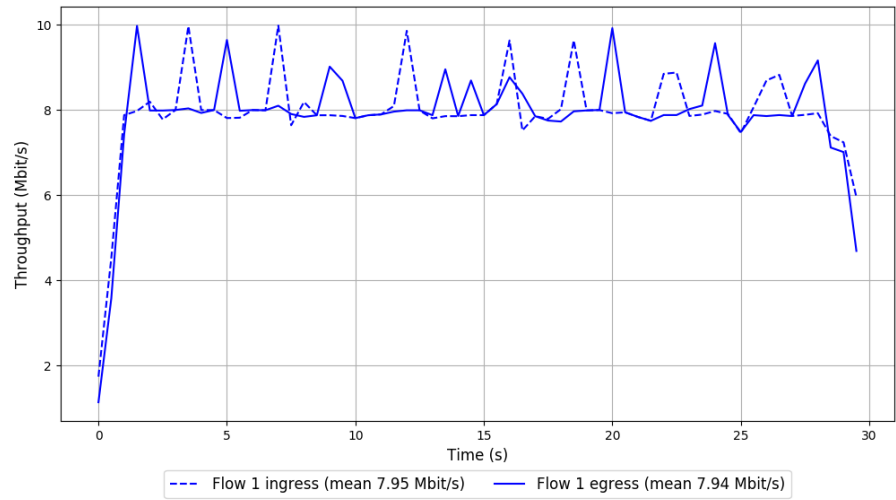
-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 54.438 ms

Loss rate: 0.37%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-30 11:28:43

End at: 2017-11-30 11:29:13

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 54.154 ms

Loss rate: 0.43%

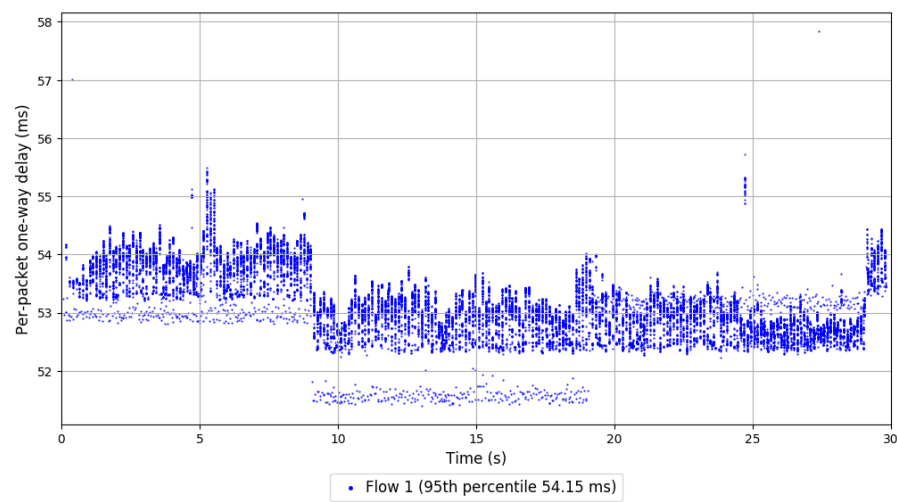
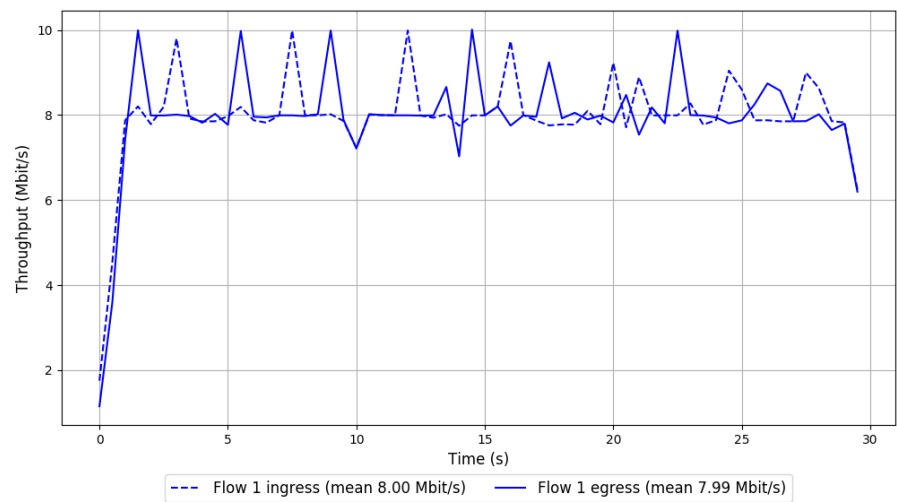
-- Flow 1:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 54.154 ms

Loss rate: 0.43%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-30 11:39:21

End at: 2017-11-30 11:39:51

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 54.018 ms

Loss rate: 0.63%

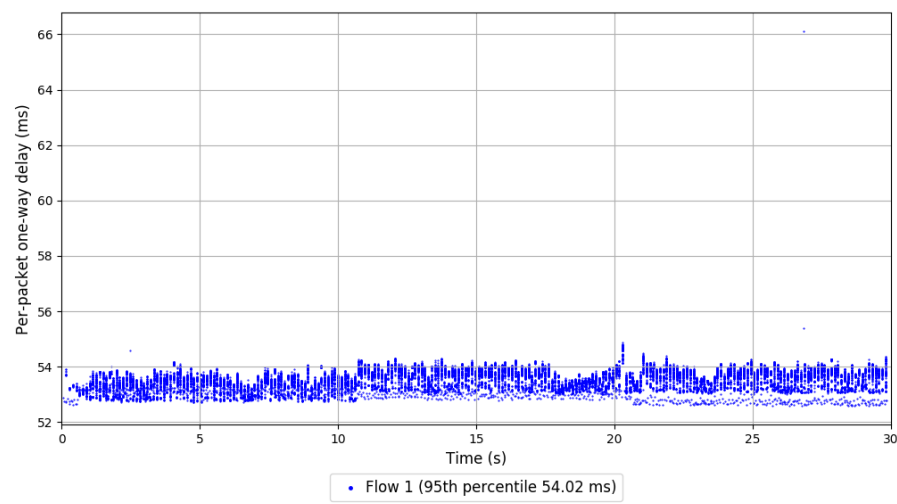
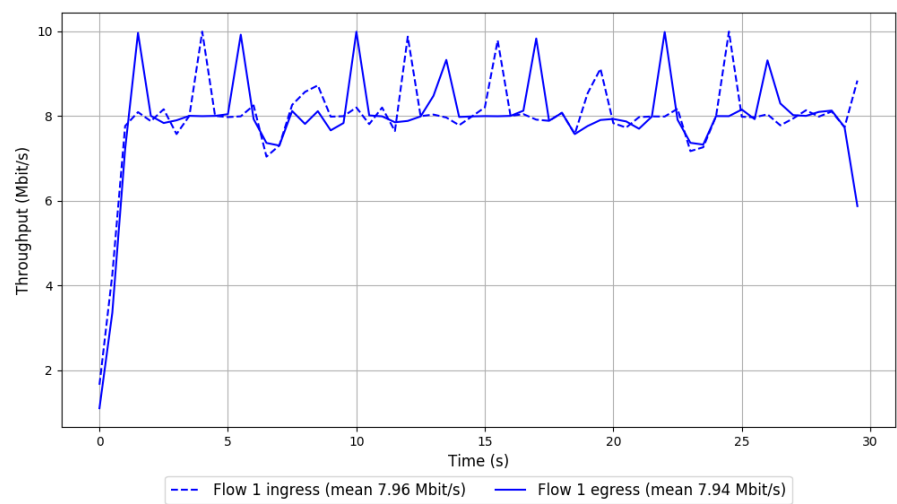
-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 54.018 ms

Loss rate: 0.63%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-30 11:49:47

End at: 2017-11-30 11:50:17

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 53.685 ms

Loss rate: 0.41%

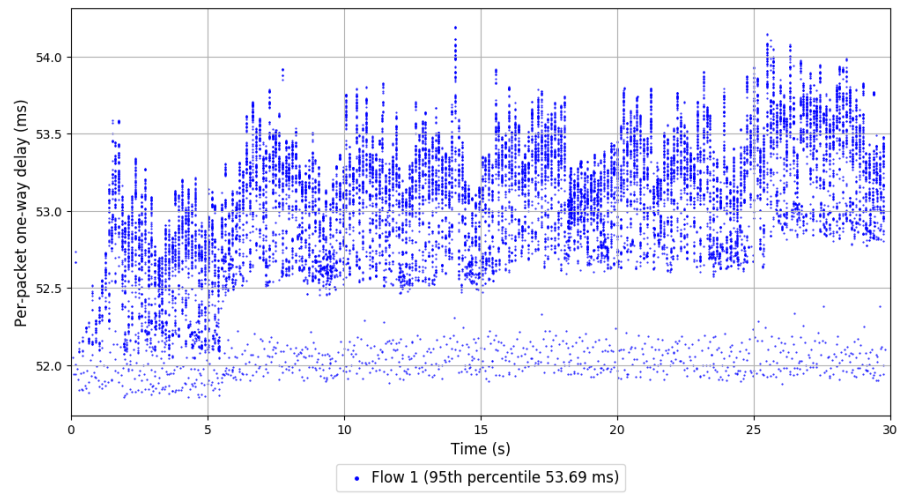
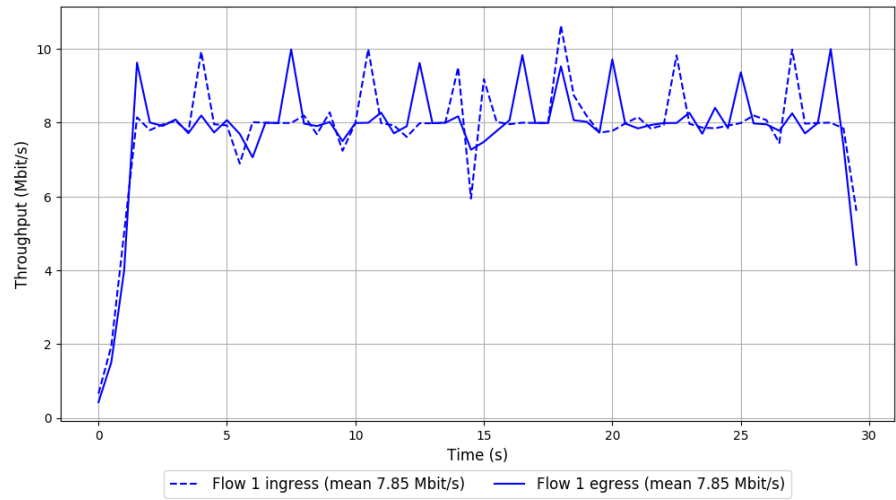
-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 53.685 ms

Loss rate: 0.41%

Run 10: Report of Sprout — Data Link

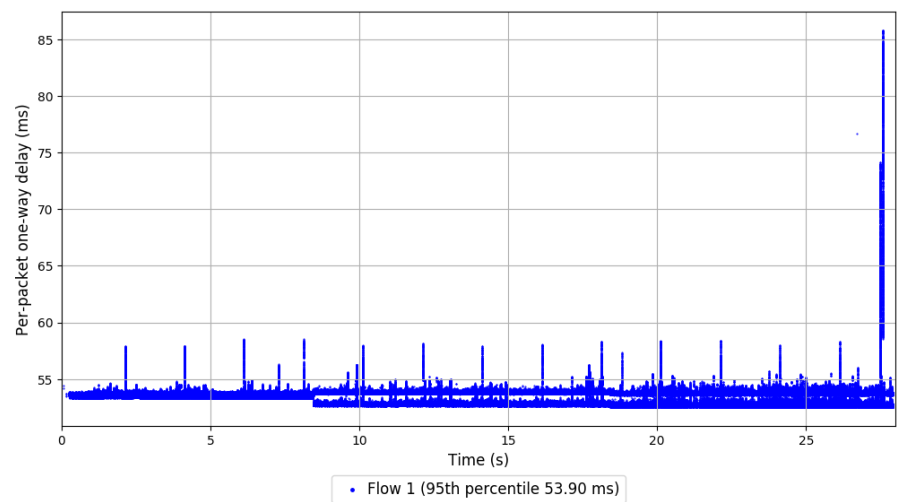
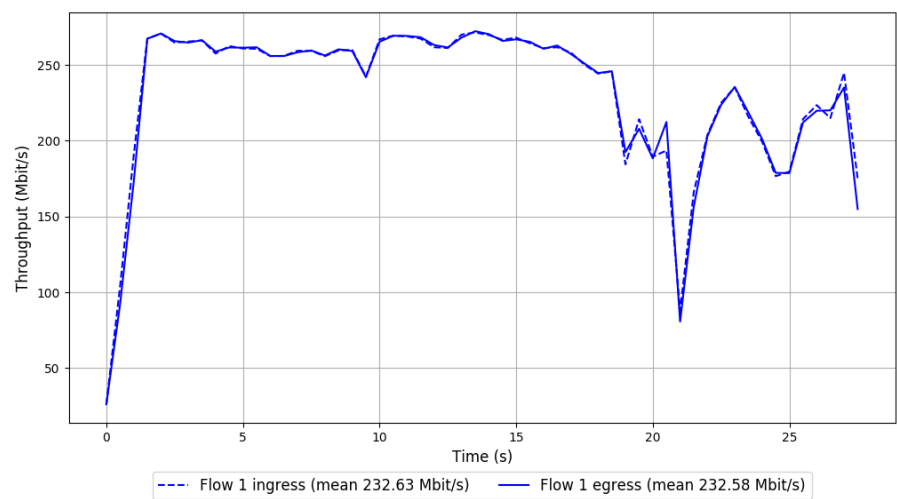


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-30 10:19:42
End at: 2017-11-30 10:20:12

# Below is generated by plot.py at 2017-11-30 14:13:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.58 Mbit/s
95th percentile per-packet one-way delay: 53.899 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 232.58 Mbit/s
95th percentile per-packet one-way delay: 53.899 ms
Loss rate: 0.39%
```


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

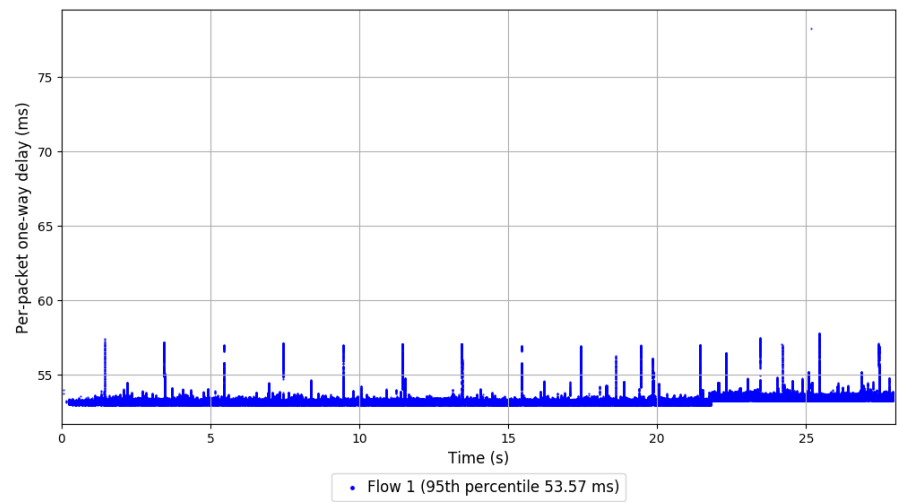
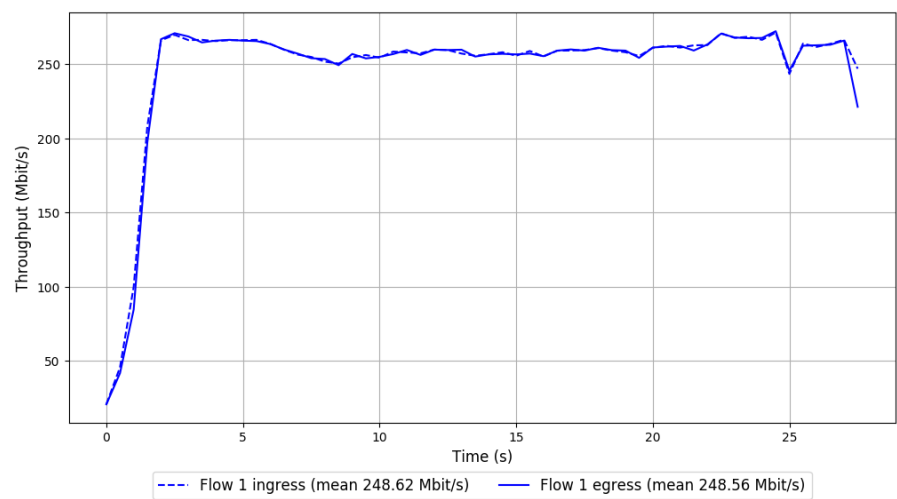


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-30 10:30:08
End at: 2017-11-30 10:30:38

# Below is generated by plot.py at 2017-11-30 14:13:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.56 Mbit/s
95th percentile per-packet one-way delay: 53.570 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 248.56 Mbit/s
95th percentile per-packet one-way delay: 53.570 ms
Loss rate: 0.38%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-30 10:40:25

End at: 2017-11-30 10:40:55

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 254.86 Mbit/s

95th percentile per-packet one-way delay: 53.225 ms

Loss rate: 0.40%

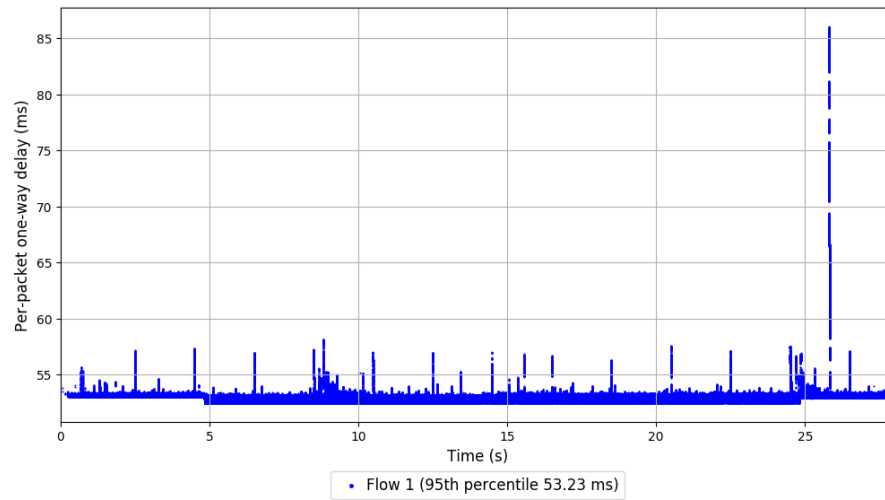
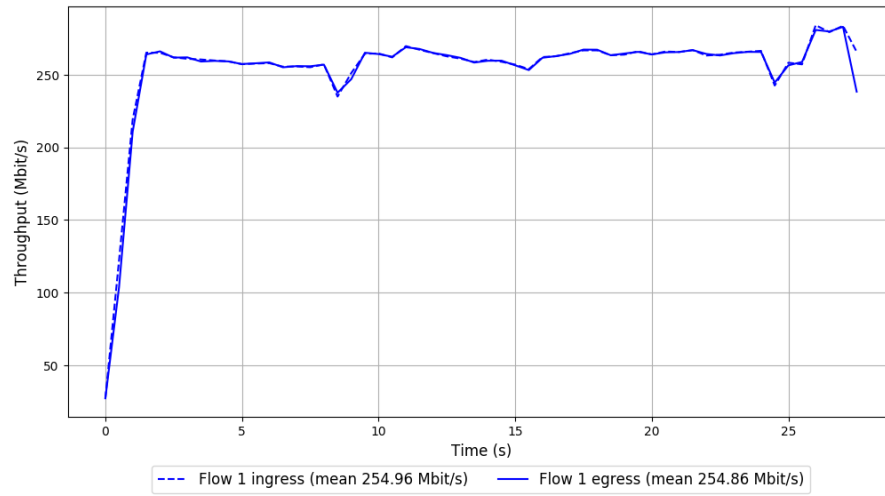
-- Flow 1:

Average throughput: 254.86 Mbit/s

95th percentile per-packet one-way delay: 53.225 ms

Loss rate: 0.40%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-30 10:50:48

End at: 2017-11-30 10:51:18

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.56 Mbit/s

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

Loss rate: 0.39%

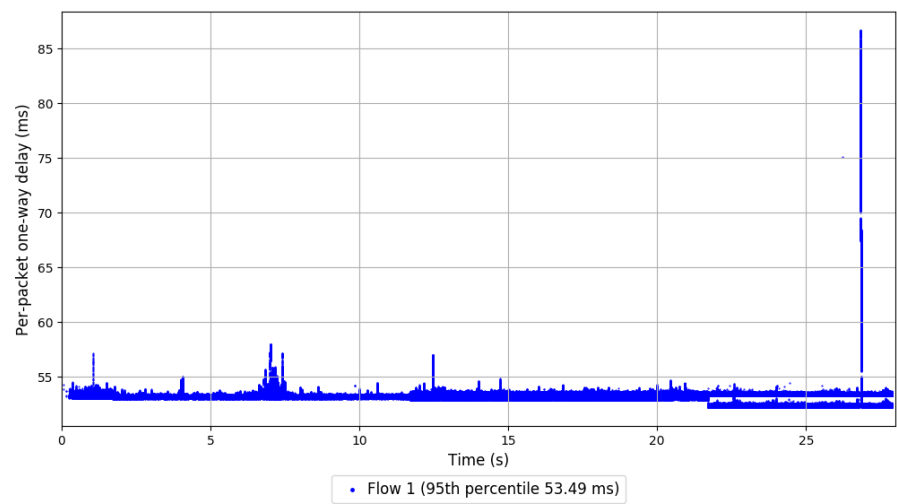
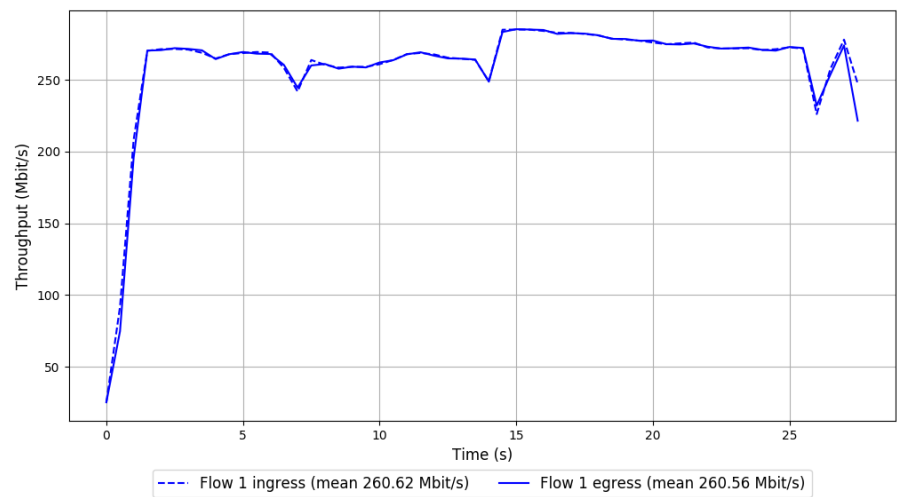
-- Flow 1:

Average throughput: 260.56 Mbit/s

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

Loss rate: 0.39%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-30 11:01:21

End at: 2017-11-30 11:01:51

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 224.58 Mbit/s

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

Loss rate: 0.44%

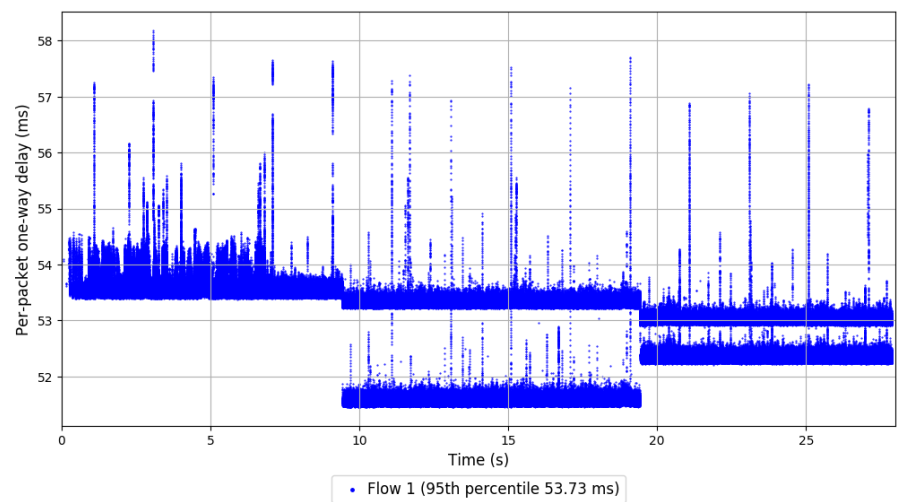
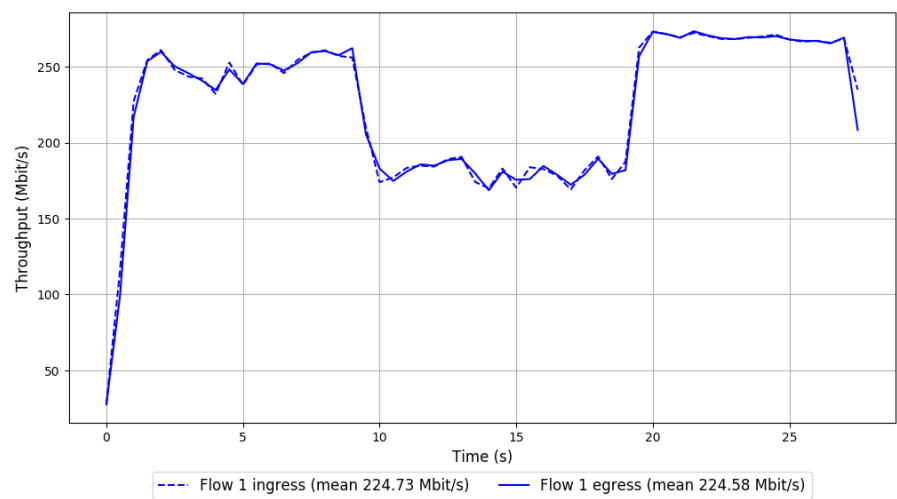
-- Flow 1:

Average throughput: 224.58 Mbit/s

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

Loss rate: 0.44%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-30 11:11:20

End at: 2017-11-30 11:11:50

Below is generated by plot.py at 2017-11-30 14:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 246.24 Mbit/s

95th percentile per-packet one-way delay: 53.679 ms

Loss rate: 0.39%

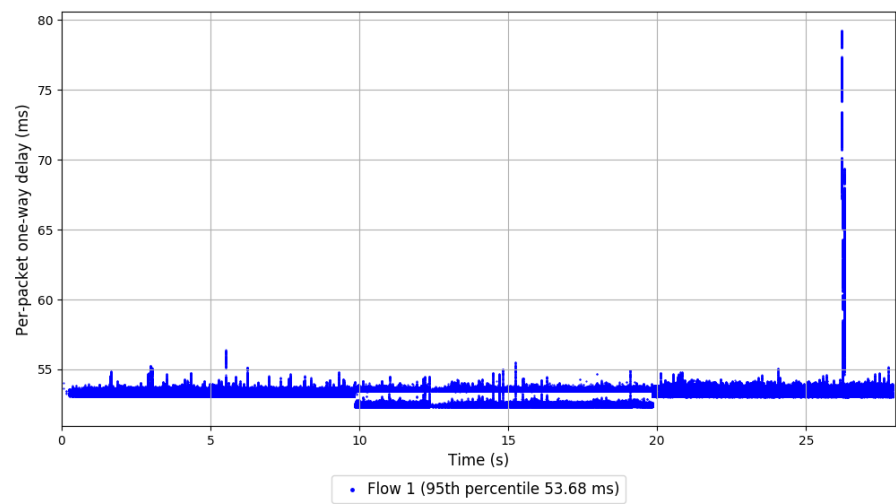
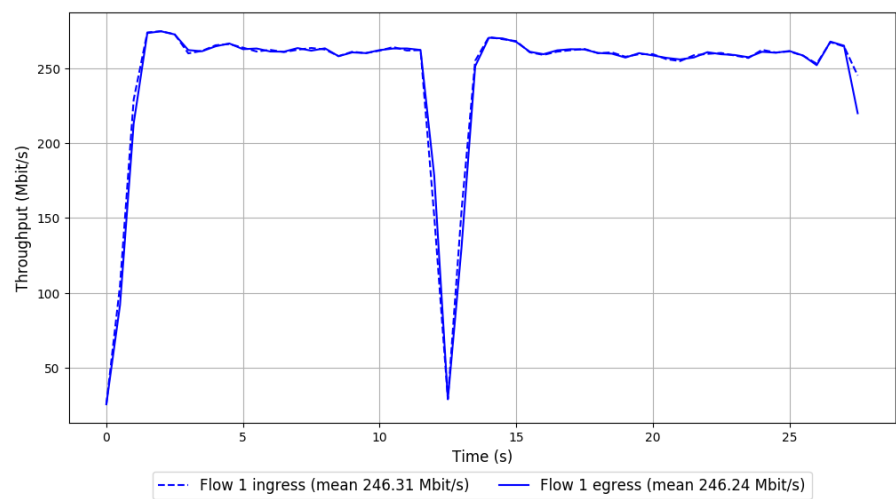
-- Flow 1:

Average throughput: 246.24 Mbit/s

95th percentile per-packet one-way delay: 53.679 ms

Loss rate: 0.39%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-30 11:21:32

End at: 2017-11-30 11:22:02

Below is generated by plot.py at 2017-11-30 14:17:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 255.94 Mbit/s

95th percentile per-packet one-way delay: 53.411 ms

Loss rate: 0.48%

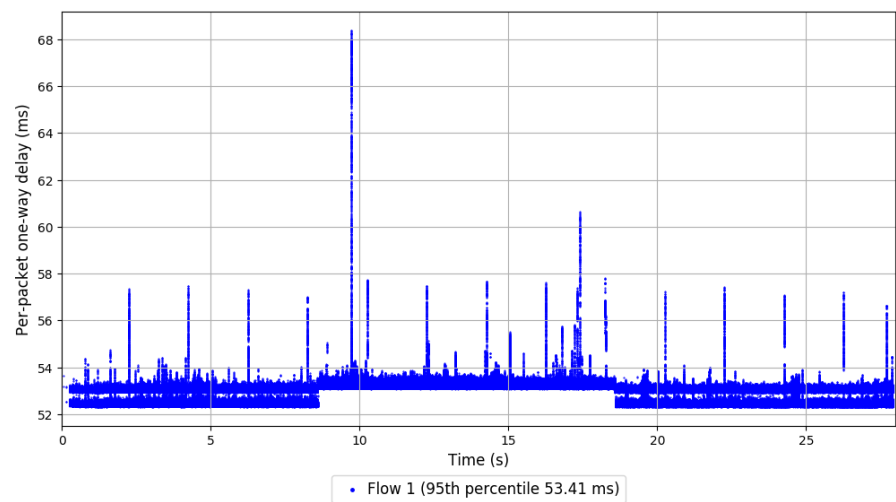
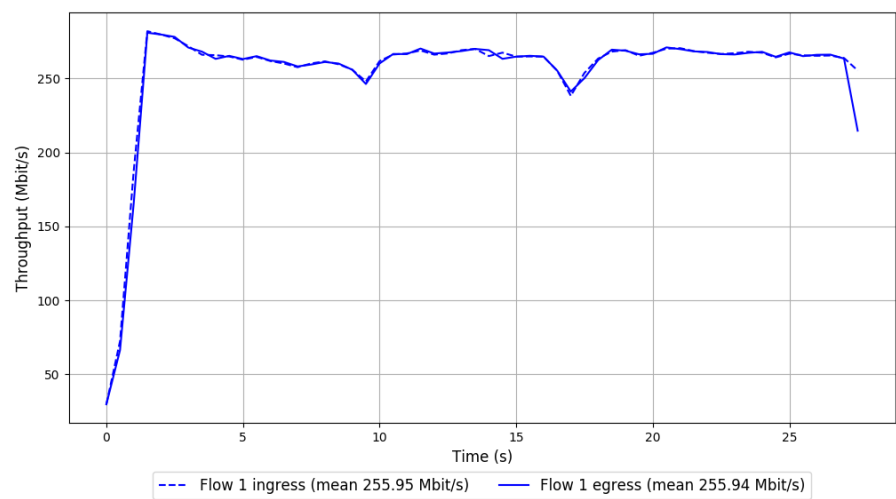
-- Flow 1:

Average throughput: 255.94 Mbit/s

95th percentile per-packet one-way delay: 53.411 ms

Loss rate: 0.48%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-30 11:31:56

End at: 2017-11-30 11:32:26

Below is generated by plot.py at 2017-11-30 14:17:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 246.29 Mbit/s

95th percentile per-packet one-way delay: 53.415 ms

Loss rate: 0.40%

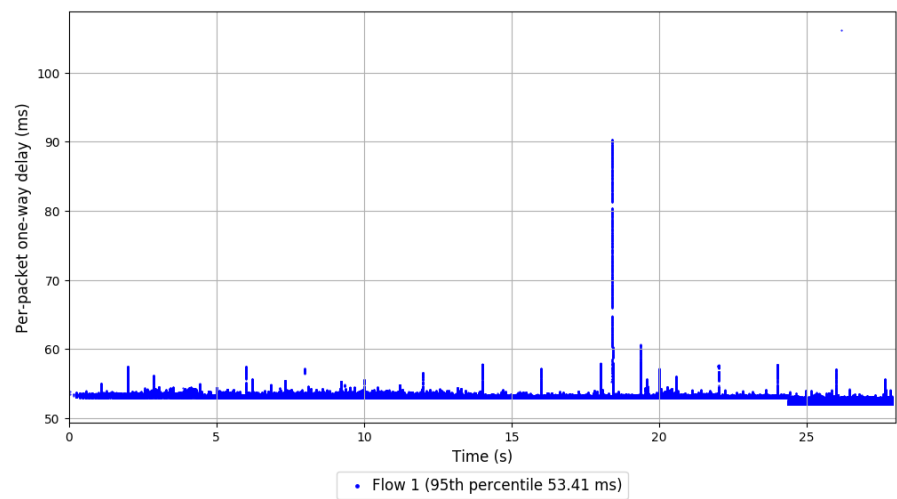
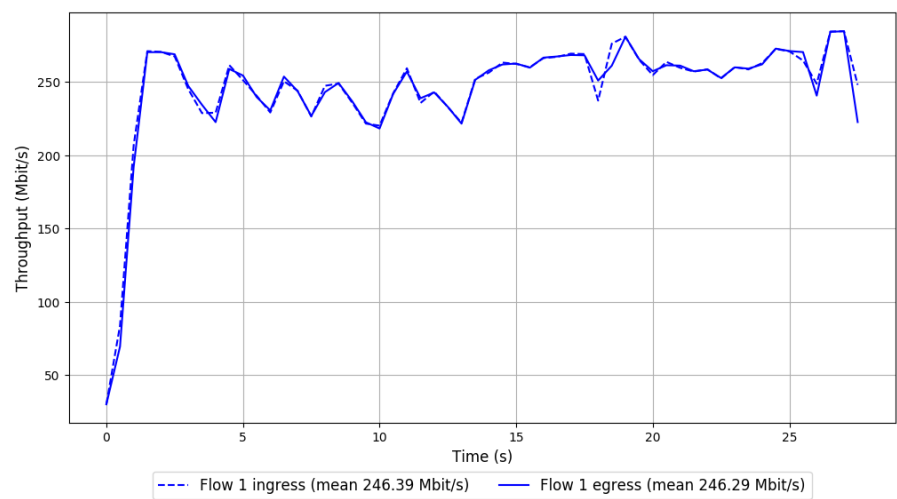
-- Flow 1:

Average throughput: 246.29 Mbit/s

95th percentile per-packet one-way delay: 53.415 ms

Loss rate: 0.40%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-30 11:42:34

End at: 2017-11-30 11:43:04

Below is generated by plot.py at 2017-11-30 14:18:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 251.34 Mbit/s

95th percentile per-packet one-way delay: 53.073 ms

Loss rate: 0.27%

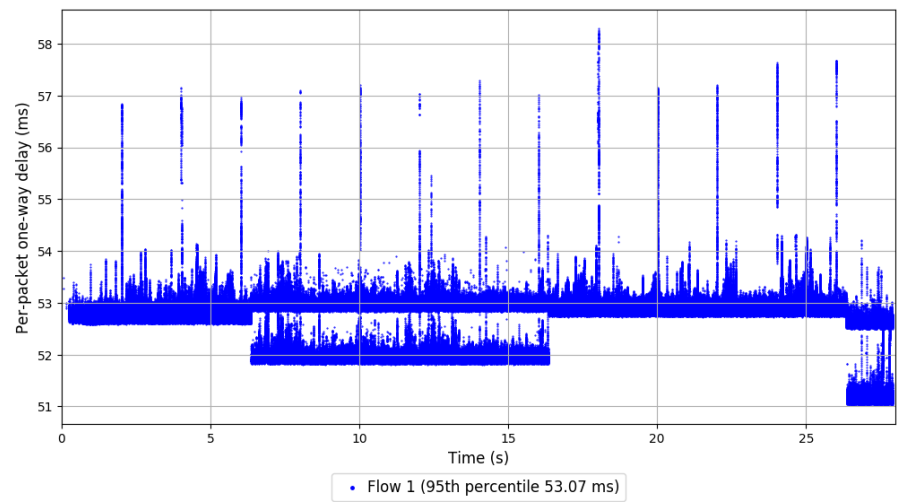
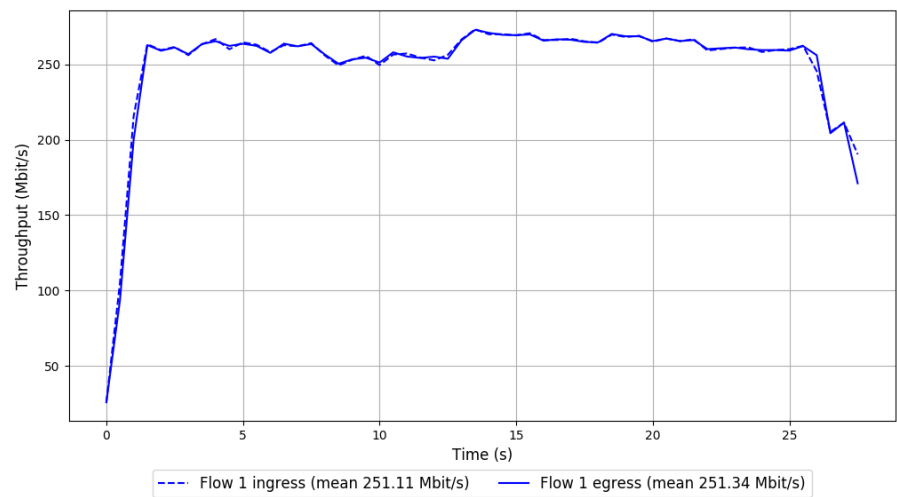
-- Flow 1:

Average throughput: 251.34 Mbit/s

95th percentile per-packet one-way delay: 53.073 ms

Loss rate: 0.27%

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

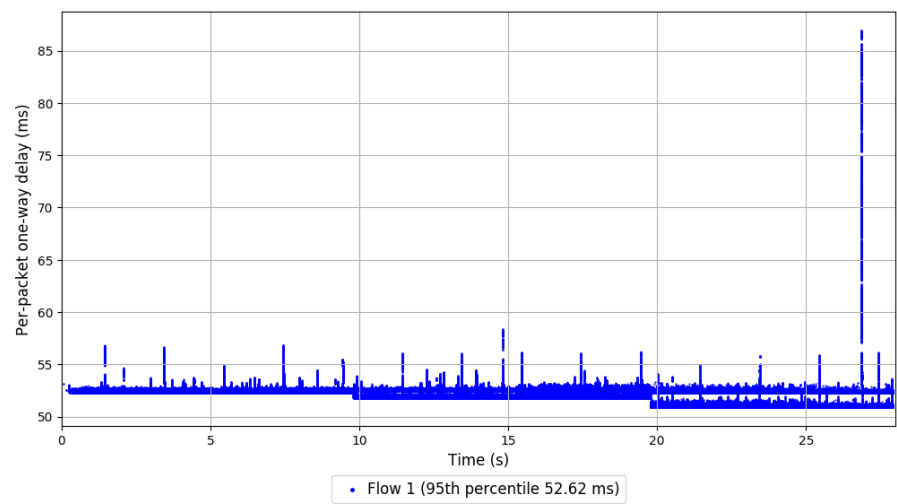
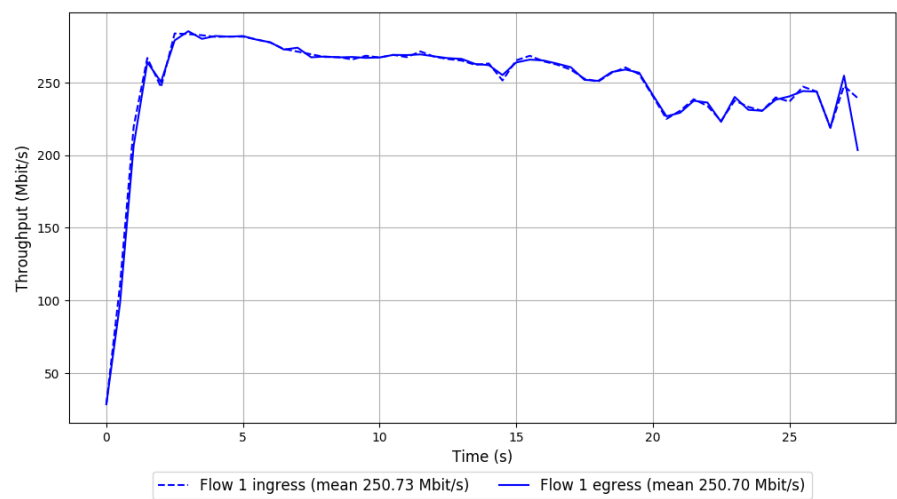


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-30 11:53:00
End at: 2017-11-30 11:53:30

# Below is generated by plot.py at 2017-11-30 14:18:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 250.70 Mbit/s
95th percentile per-packet one-way delay: 52.623 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 250.70 Mbit/s
95th percentile per-packet one-way delay: 52.623 ms
Loss rate: 0.38%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-30 10:20:38

End at: 2017-11-30 10:21:08

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.49 Mbit/s

95th percentile per-packet one-way delay: 55.058 ms

Loss rate: 0.24%

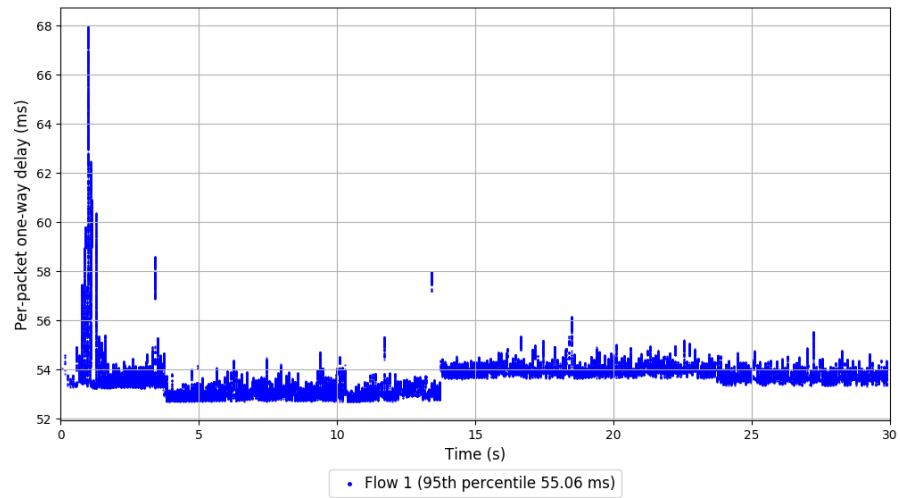
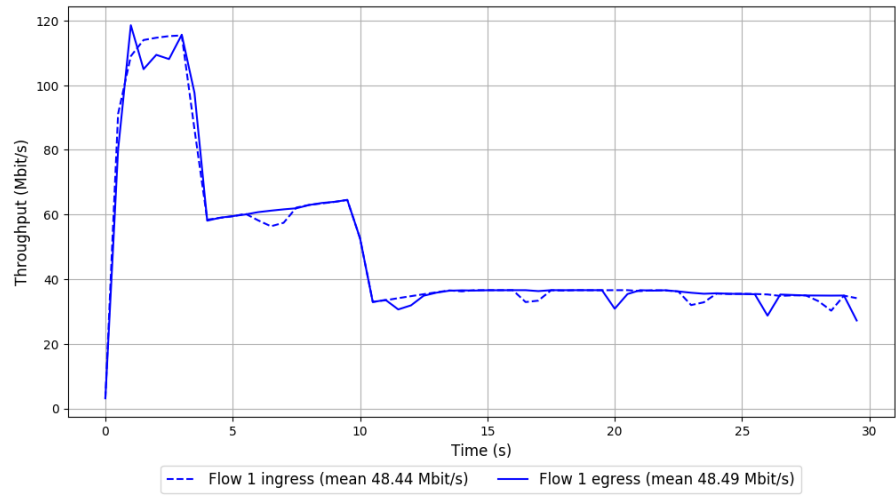
-- Flow 1:

Average throughput: 48.49 Mbit/s

95th percentile per-packet one-way delay: 55.058 ms

Loss rate: 0.24%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-30 10:31:06

End at: 2017-11-30 10:31:36

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.85 Mbit/s

95th percentile per-packet one-way delay: 54.237 ms

Loss rate: 0.35%

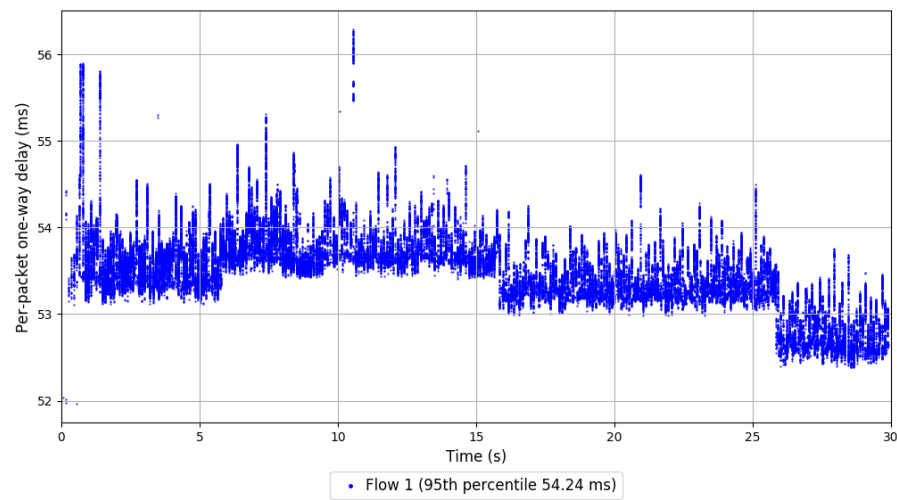
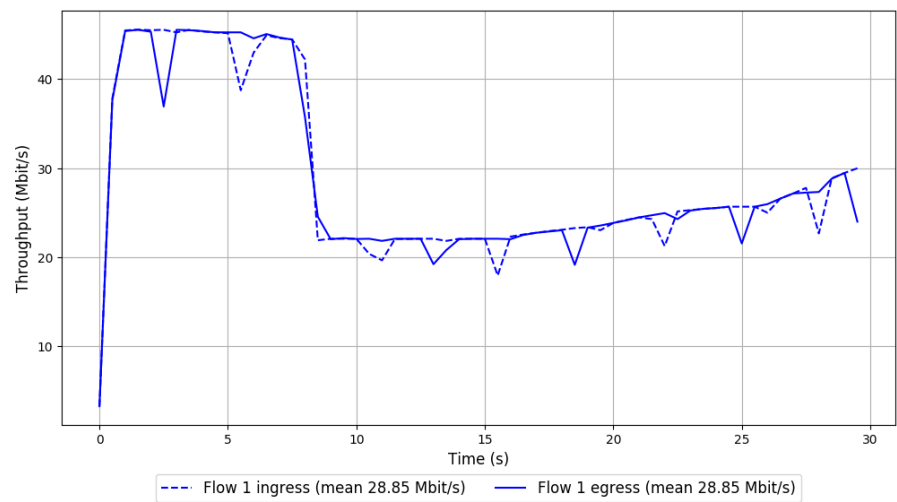
-- Flow 1:

Average throughput: 28.85 Mbit/s

95th percentile per-packet one-way delay: 54.237 ms

Loss rate: 0.35%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-30 10:41:24

End at: 2017-11-30 10:41:54

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.56 Mbit/s

95th percentile per-packet one-way delay: 53.984 ms

Loss rate: 0.25%

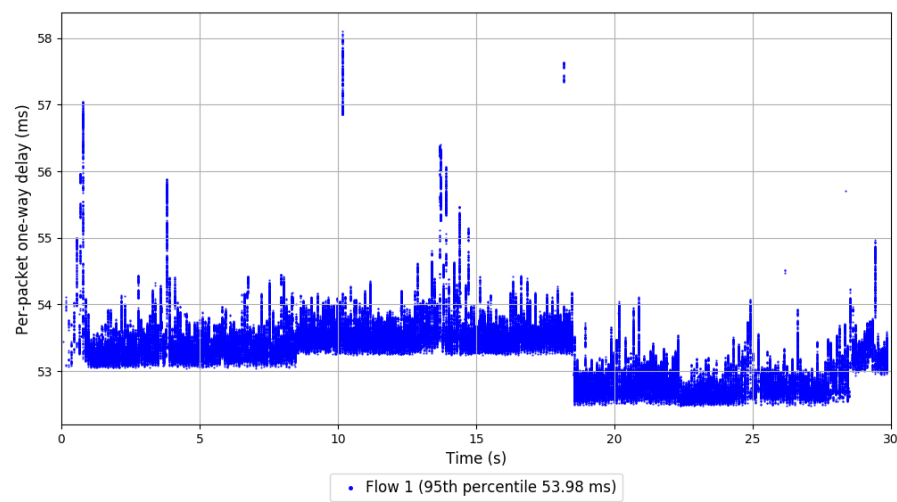
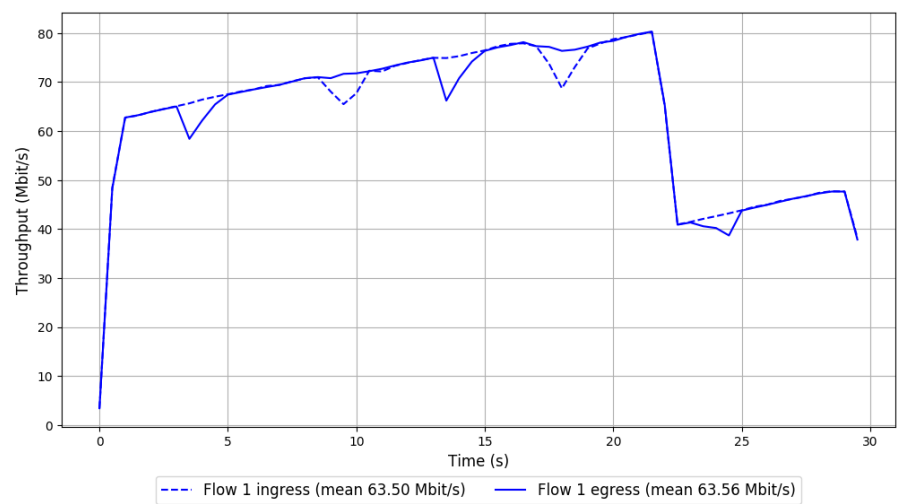
-- Flow 1:

Average throughput: 63.56 Mbit/s

95th percentile per-packet one-way delay: 53.984 ms

Loss rate: 0.25%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-30 10:51:47

End at: 2017-11-30 10:52:17

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 141.05 Mbit/s

95th percentile per-packet one-way delay: 54.165 ms

Loss rate: 0.36%

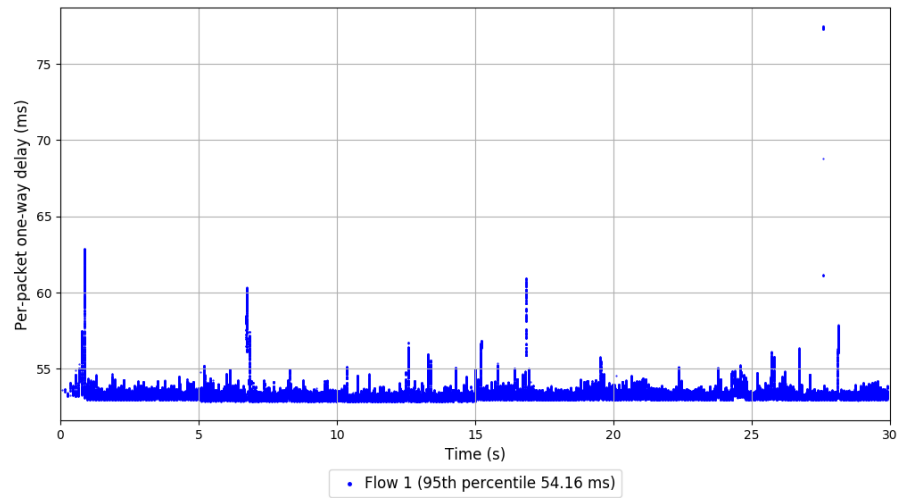
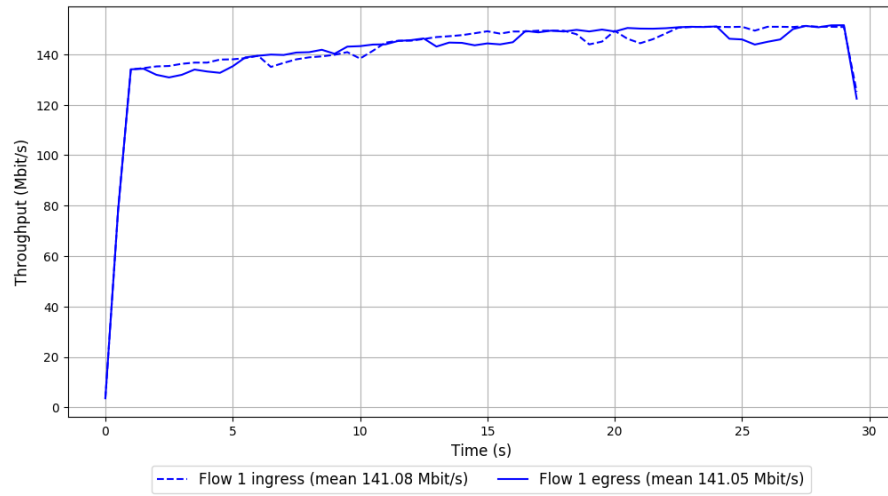
-- Flow 1:

Average throughput: 141.05 Mbit/s

95th percentile per-packet one-way delay: 54.165 ms

Loss rate: 0.36%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-30 11:02:16

End at: 2017-11-30 11:02:46

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.65 Mbit/s

95th percentile per-packet one-way delay: 54.499 ms

Loss rate: 0.31%

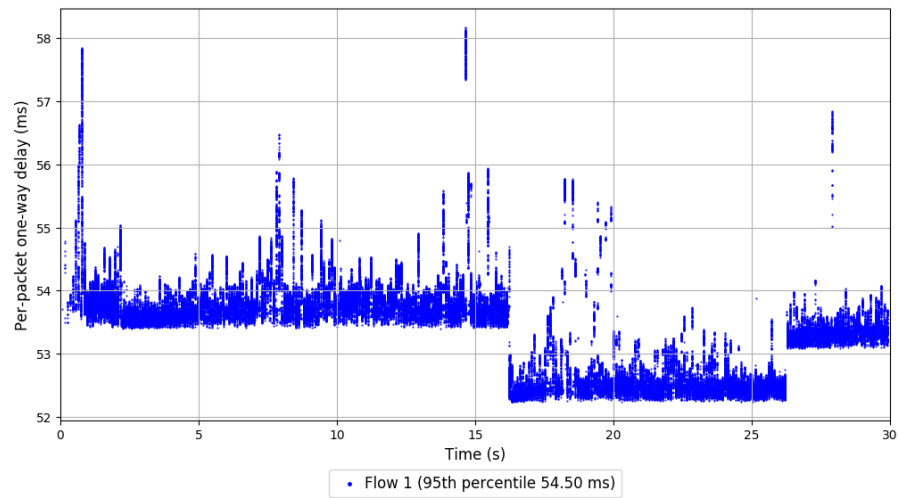
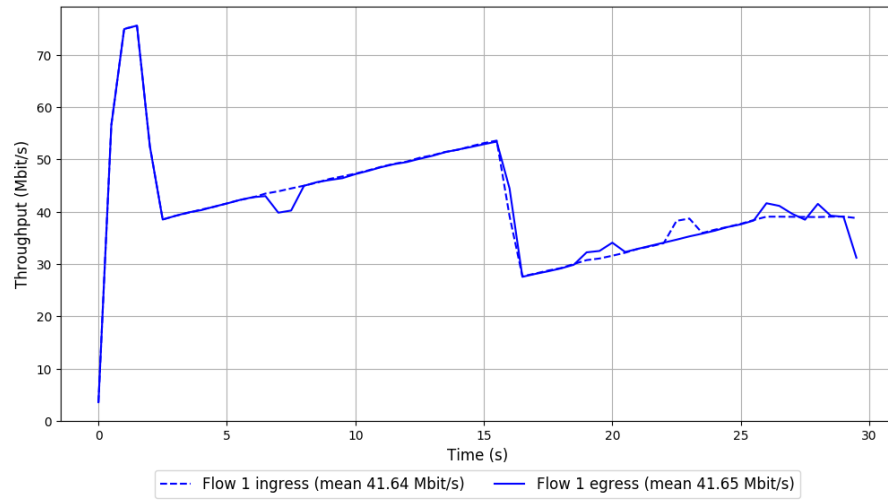
-- Flow 1:

Average throughput: 41.65 Mbit/s

95th percentile per-packet one-way delay: 54.499 ms

Loss rate: 0.31%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-30 11:12:18

End at: 2017-11-30 11:12:48

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.84 Mbit/s

95th percentile per-packet one-way delay: 54.374 ms

Loss rate: 0.32%

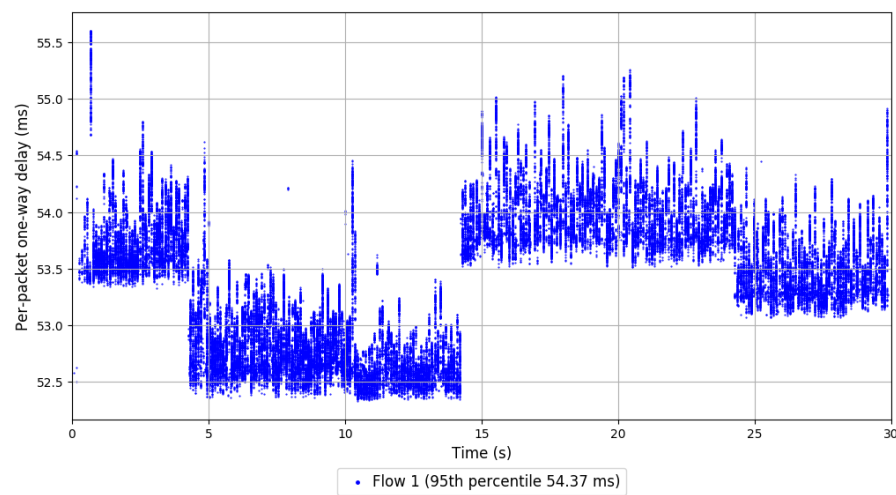
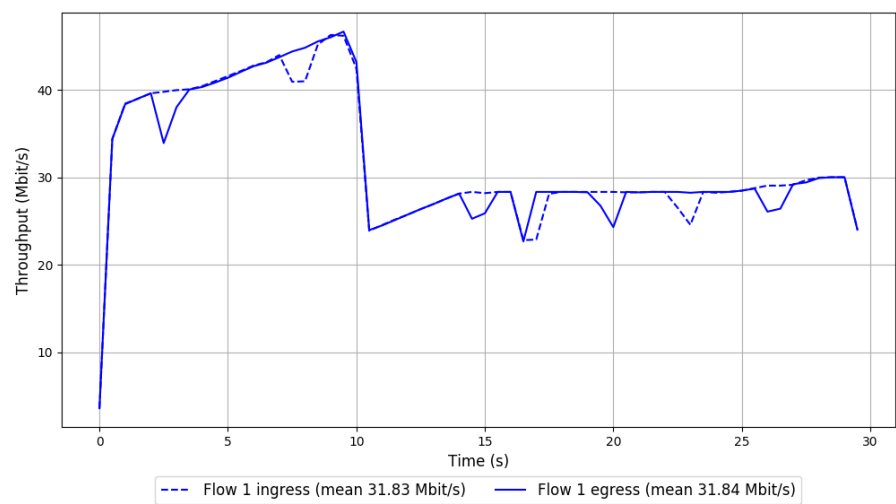
-- Flow 1:

Average throughput: 31.84 Mbit/s

95th percentile per-packet one-way delay: 54.374 ms

Loss rate: 0.32%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-30 11:22:30

End at: 2017-11-30 11:23:00

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.65 Mbit/s

95th percentile per-packet one-way delay: 54.293 ms

Loss rate: 0.27%

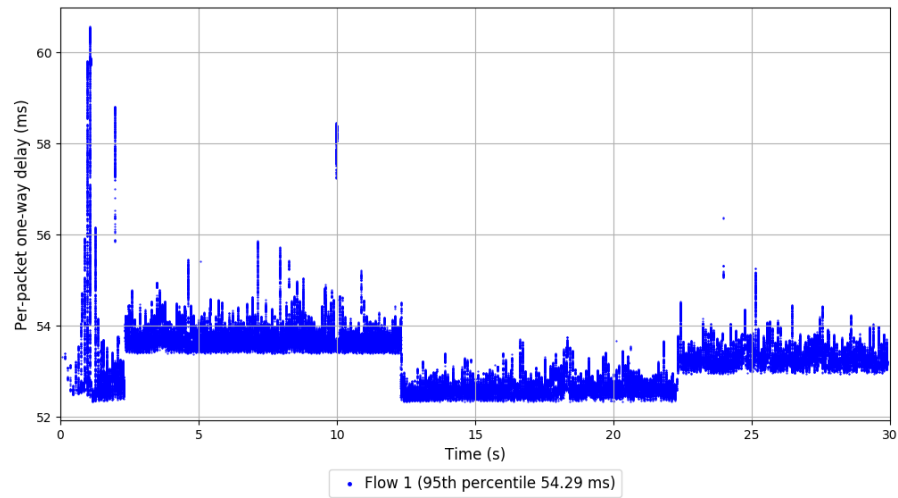
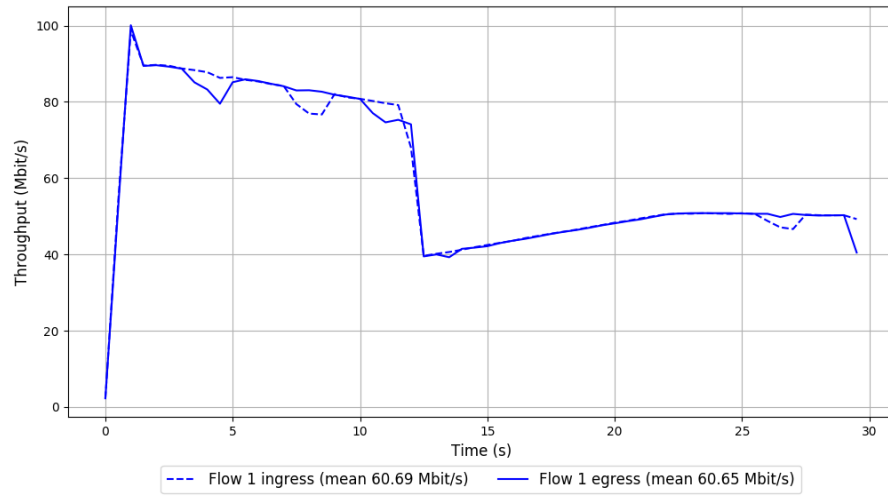
-- Flow 1:

Average throughput: 60.65 Mbit/s

95th percentile per-packet one-way delay: 54.293 ms

Loss rate: 0.27%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-30 11:32:53

End at: 2017-11-30 11:33:23

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.82 Mbit/s

95th percentile per-packet one-way delay: 56.629 ms

Loss rate: 0.36%

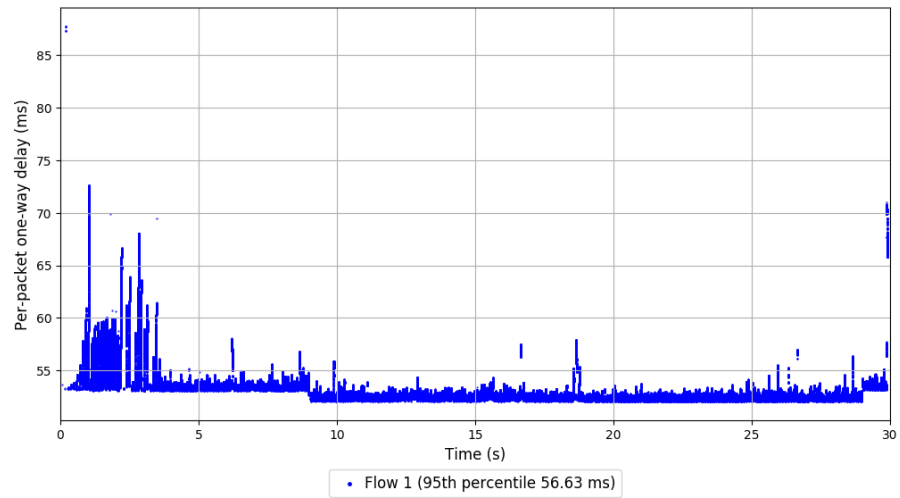
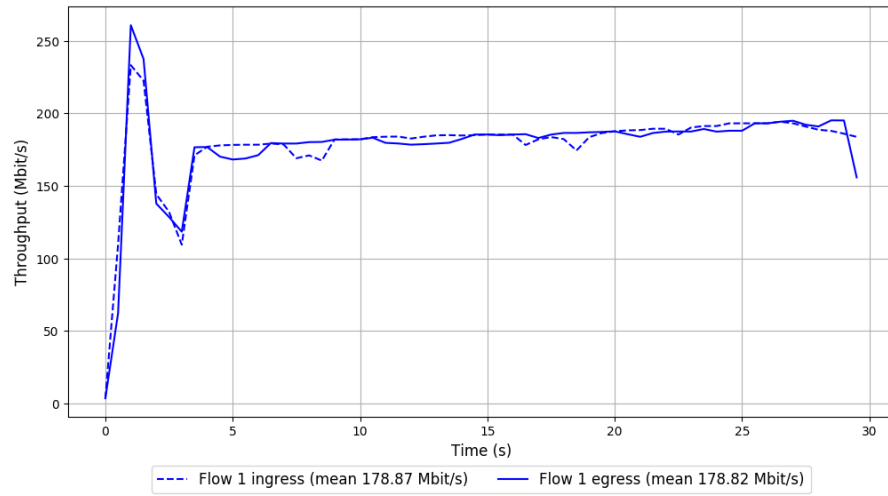
-- Flow 1:

Average throughput: 178.82 Mbit/s

95th percentile per-packet one-way delay: 56.629 ms

Loss rate: 0.36%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-30 11:43:33

End at: 2017-11-30 11:44:03

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.17 Mbit/s

95th percentile per-packet one-way delay: 53.885 ms

Loss rate: 0.26%

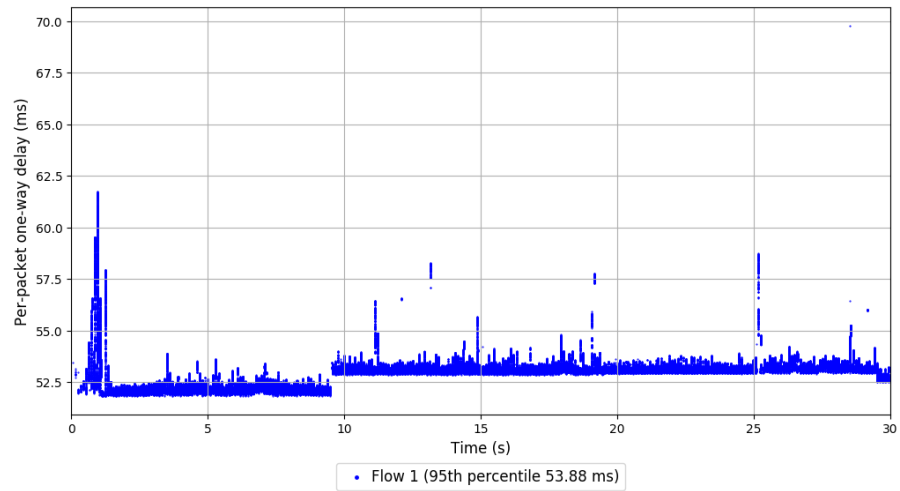
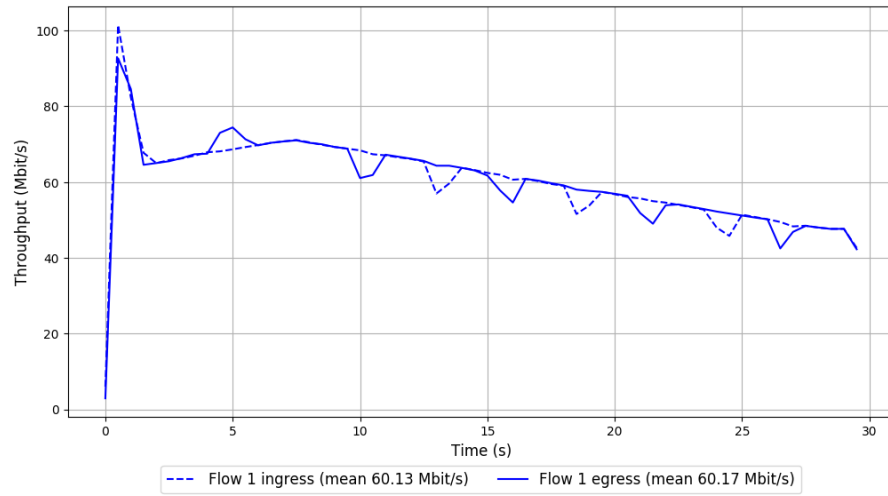
-- Flow 1:

Average throughput: 60.17 Mbit/s

95th percentile per-packet one-way delay: 53.885 ms

Loss rate: 0.26%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-30 11:53:58

End at: 2017-11-30 11:54:28

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.95 Mbit/s

95th percentile per-packet one-way delay: 53.422 ms

Loss rate: 0.25%

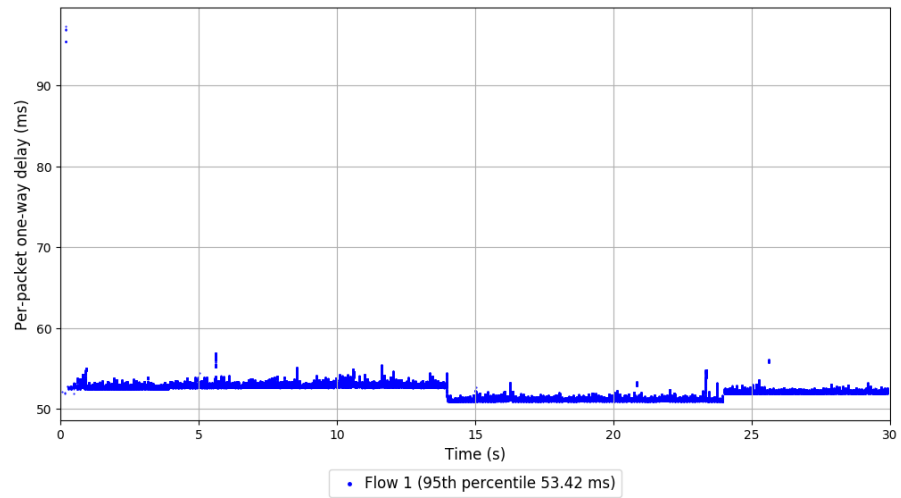
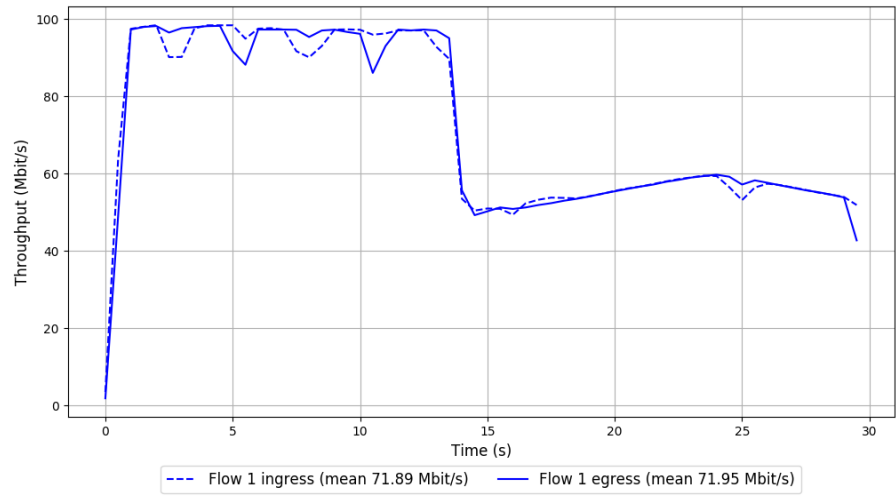
-- Flow 1:

Average throughput: 71.95 Mbit/s

95th percentile per-packet one-way delay: 53.422 ms

Loss rate: 0.25%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-30 10:15:40

End at: 2017-11-30 10:16:10

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.69 Mbit/s

95th percentile per-packet one-way delay: 175.635 ms

Loss rate: 5.69%

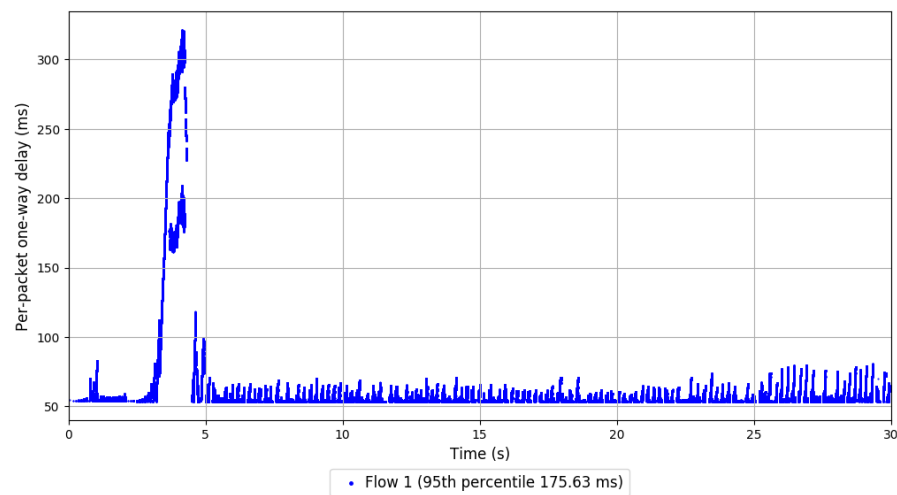
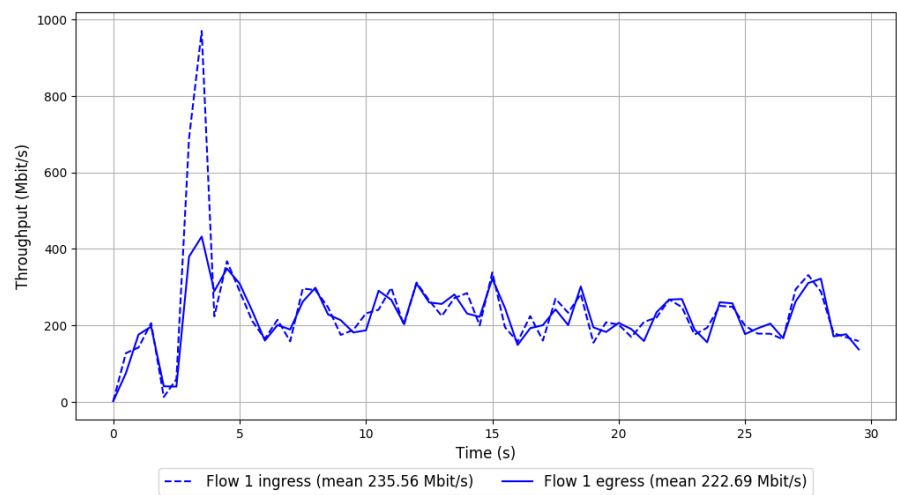
-- Flow 1:

Average throughput: 222.69 Mbit/s

95th percentile per-packet one-way delay: 175.635 ms

Loss rate: 5.69%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-30 10:26:05

End at: 2017-11-30 10:26:35

Below is generated by plot.py at 2017-11-30 14:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.96 Mbit/s

95th percentile per-packet one-way delay: 107.884 ms

Loss rate: 0.85%

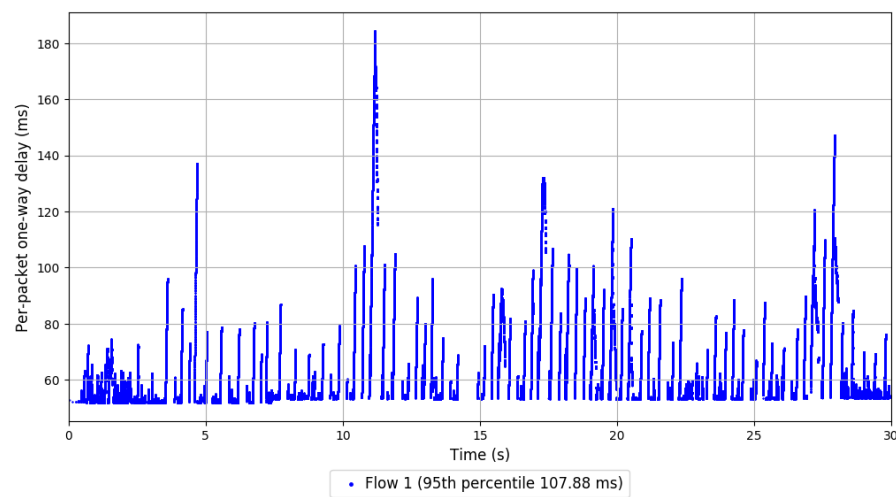
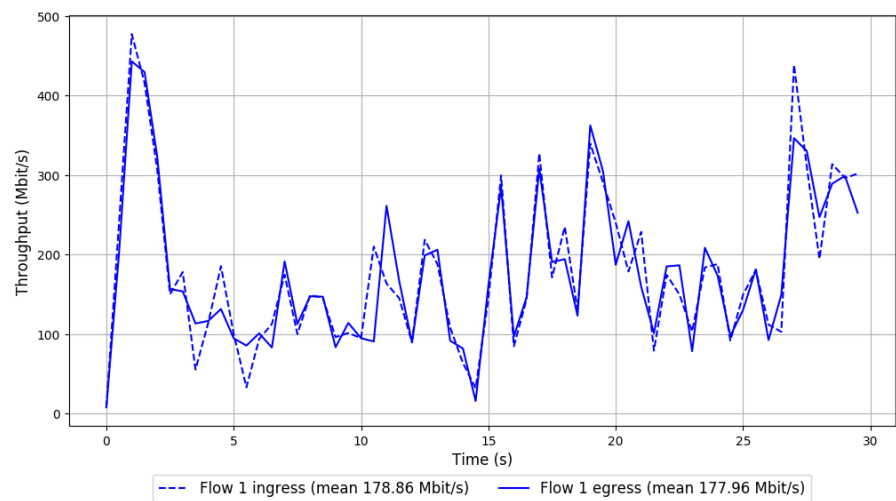
-- Flow 1:

Average throughput: 177.96 Mbit/s

95th percentile per-packet one-way delay: 107.884 ms

Loss rate: 0.85%

Run 2: Report of Verus — Data Link

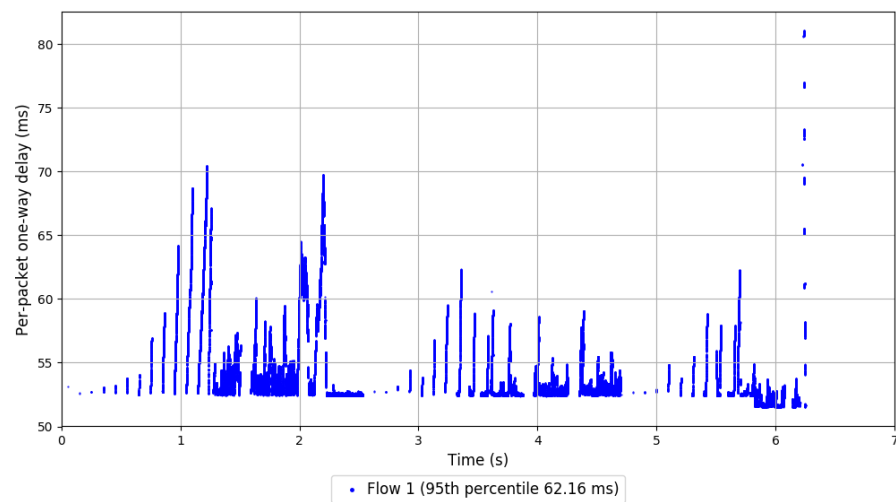
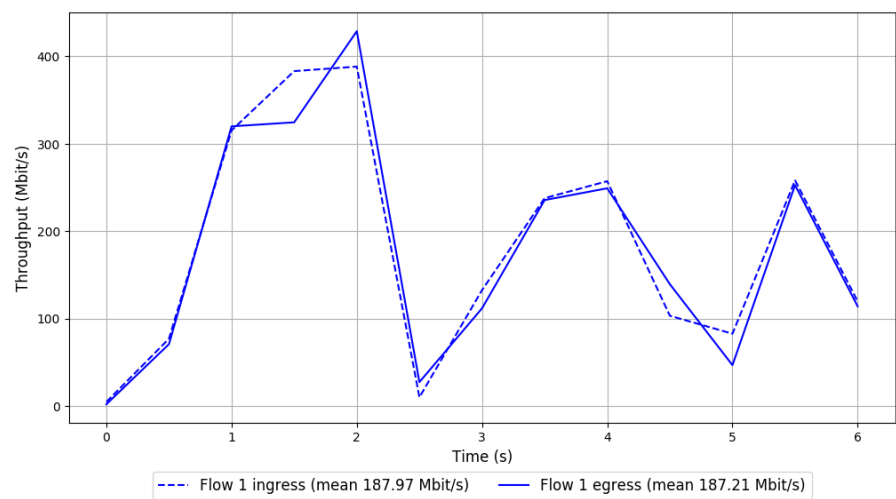


Run 3: Statistics of Verus

Start at: 2017-11-30 10:36:33

End at: 2017-11-30 10:37:03

Run 3: Report of Verus — Data Link

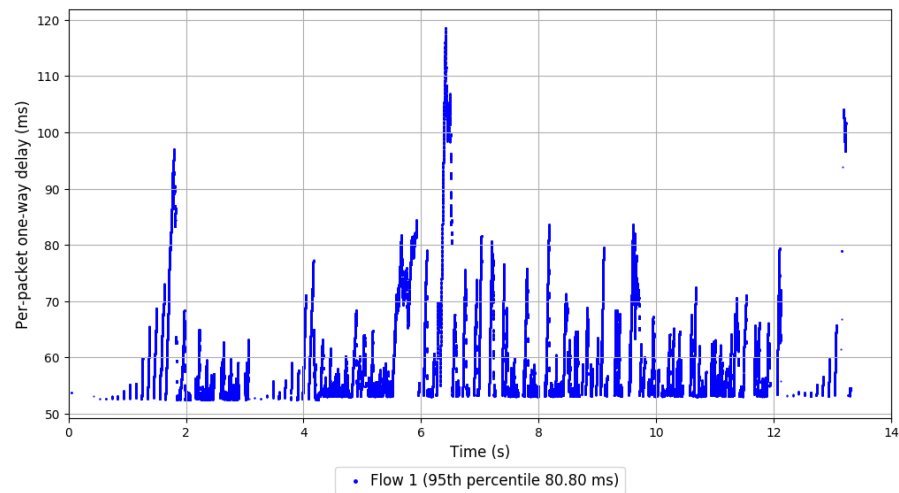
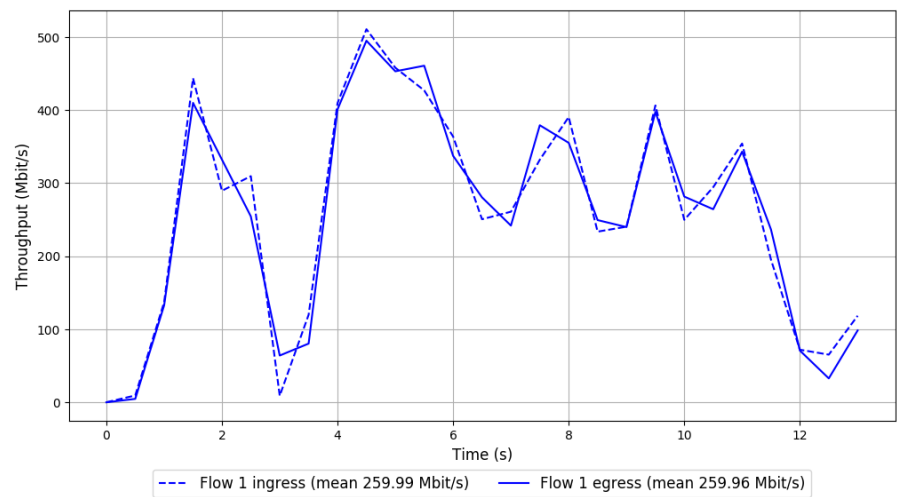


Run 4: Statistics of Verus

Start at: 2017-11-30 10:46:51

End at: 2017-11-30 10:47:21

Run 4: Report of Verus — Data Link

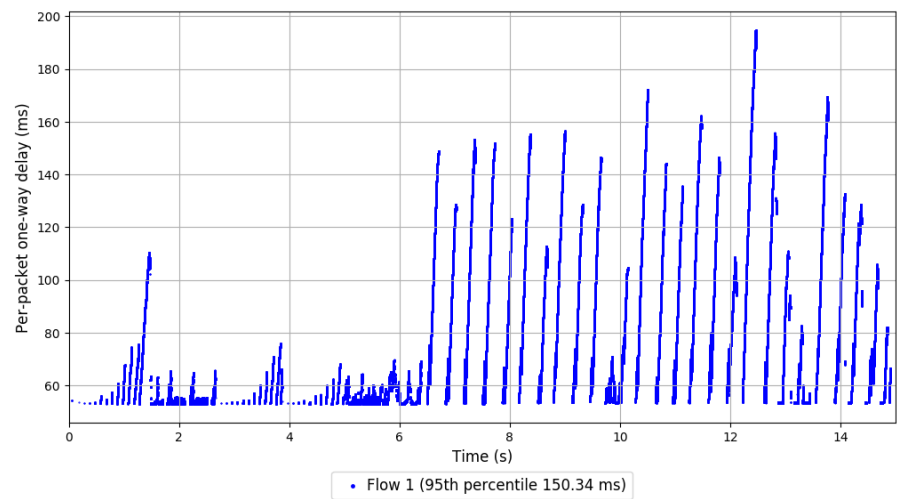
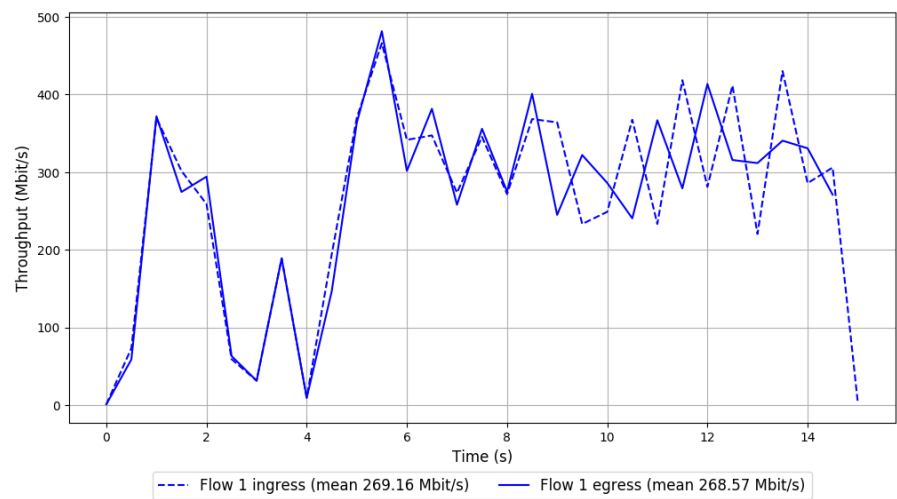


Run 5: Statistics of Verus

Start at: 2017-11-30 10:57:20

End at: 2017-11-30 10:57:50

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-30 11:07:31

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

Run 6: Report of Verus — Data Link

Figure is missing

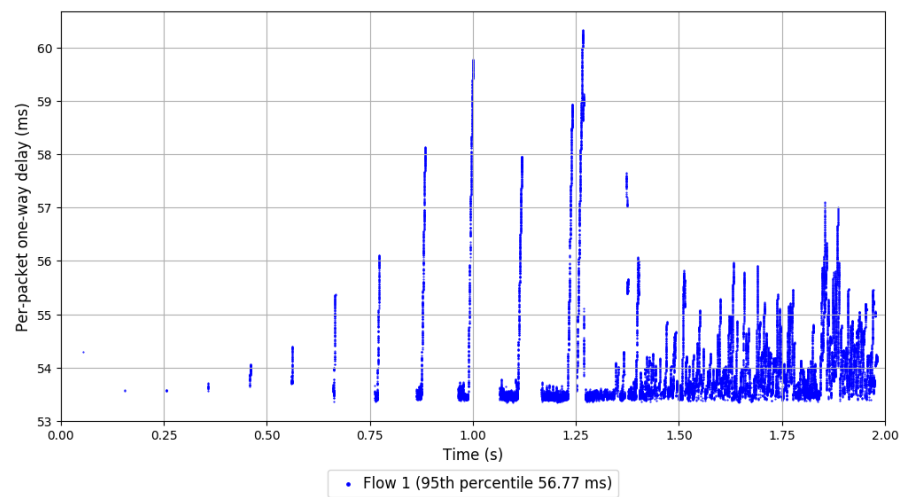
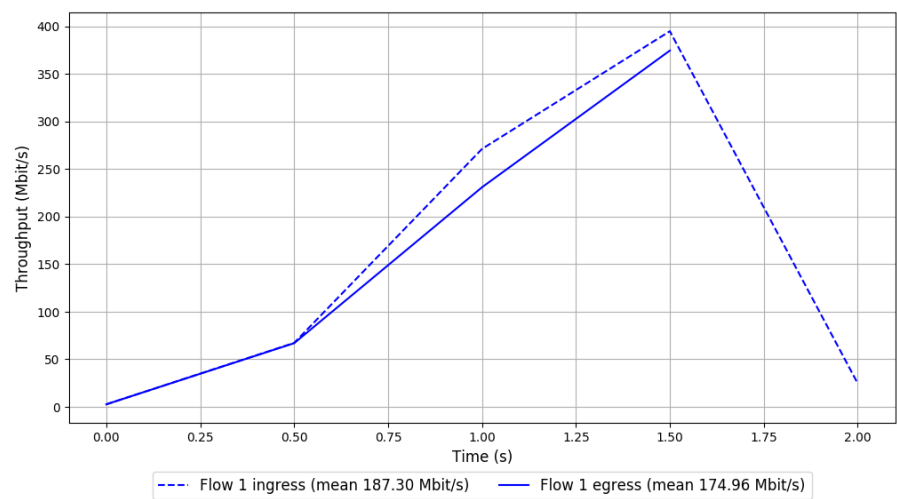
Figure is missing

Run 7: Statistics of Verus

Start at: 2017-11-30 11:17:40

End at: 2017-11-30 11:18:11

Run 7: Report of Verus — Data Link

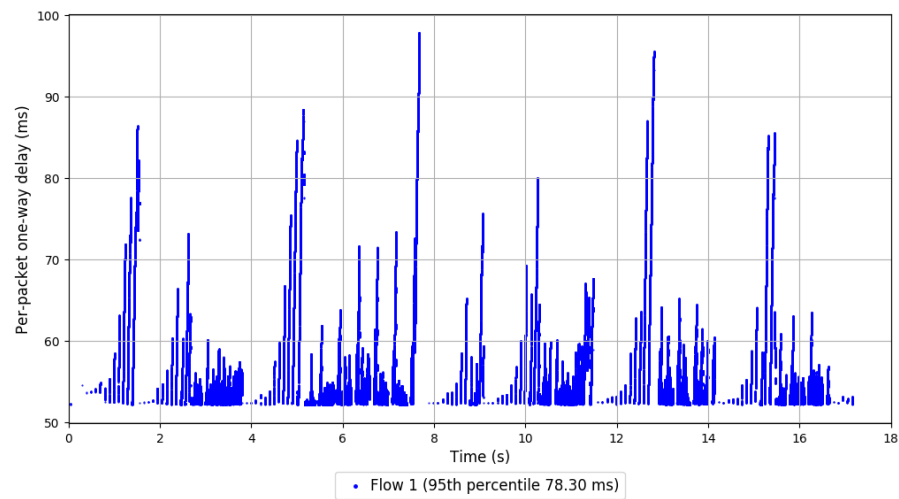
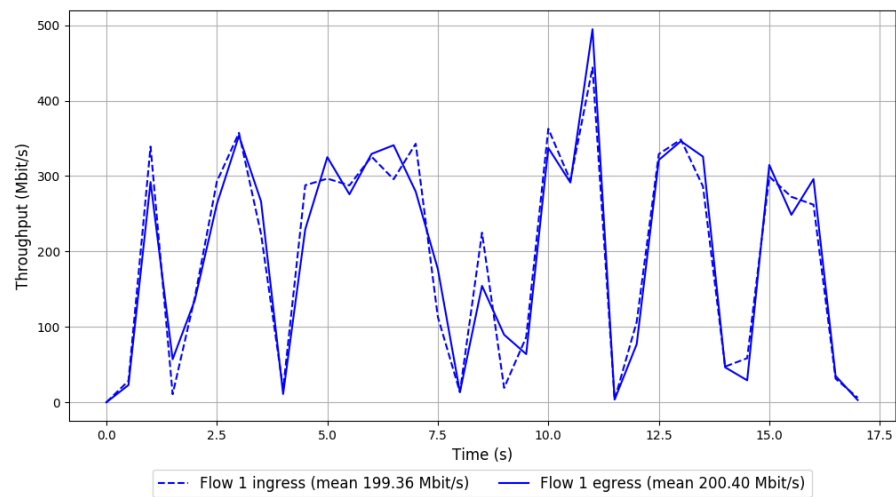


Run 8: Statistics of Verus

Start at: 2017-11-30 11:27:59

End at: 2017-11-30 11:28:29

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-30 11:38:26

End at: 2017-11-30 11:38:56

Below is generated by plot.py at 2017-11-30 14:22:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 278.31 Mbit/s

95th percentile per-packet one-way delay: 78.021 ms

Loss rate: 1.37%

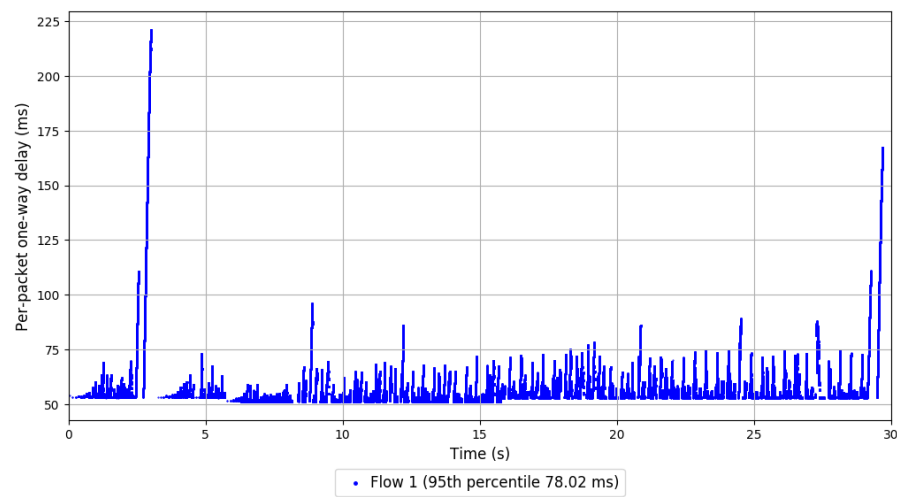
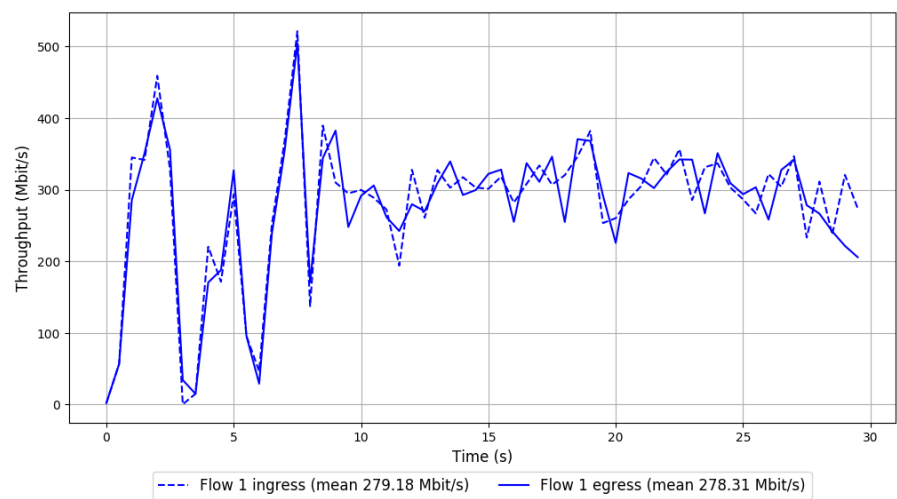
-- Flow 1:

Average throughput: 278.31 Mbit/s

95th percentile per-packet one-way delay: 78.021 ms

Loss rate: 1.37%

Run 9: Report of Verus — Data Link

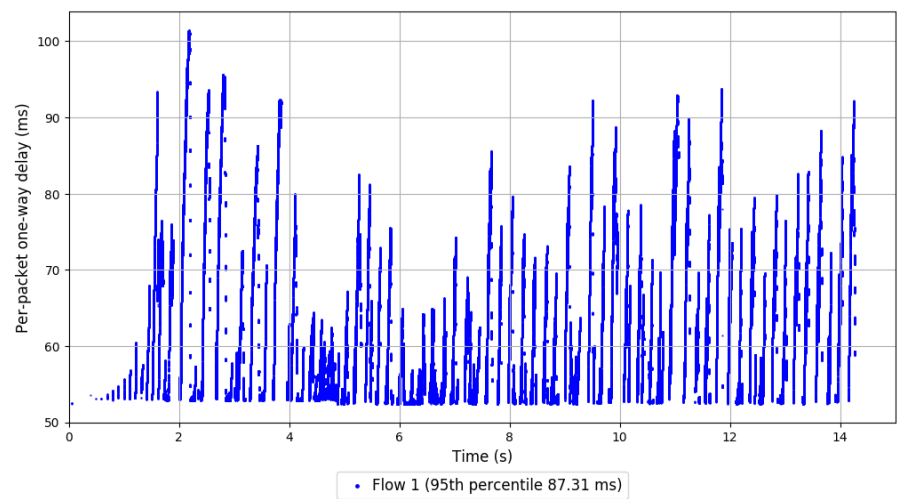
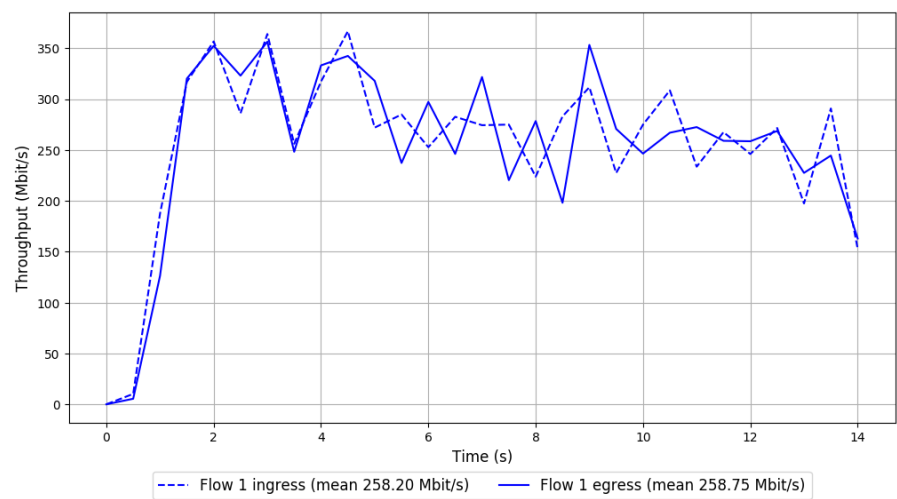


Run 10: Statistics of Verus

Start at: 2017-11-30 11:49:02

End at: 2017-11-30 11:49:32

Run 10: Report of Verus — Data Link

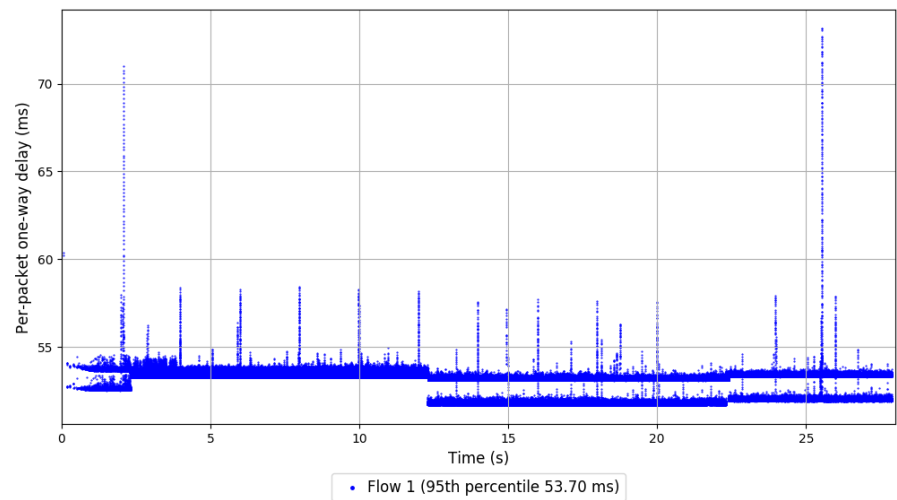
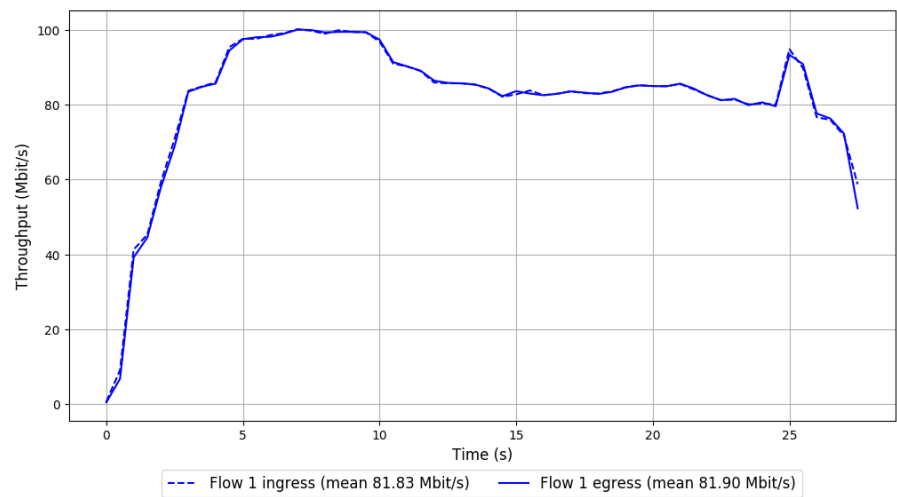


```
Run 1: Statistics of Copa

Start at: 2017-11-30 10:21:18
End at: 2017-11-30 10:21:48

# Below is generated by plot.py at 2017-11-30 14:22:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.90 Mbit/s
95th percentile per-packet one-way delay: 53.697 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 81.90 Mbit/s
95th percentile per-packet one-way delay: 53.697 ms
Loss rate: 0.30%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-30 10:31:45

End at: 2017-11-30 10:32:15

Below is generated by plot.py at 2017-11-30 14:22:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.36 Mbit/s

95th percentile per-packet one-way delay: 53.427 ms

Loss rate: 0.33%

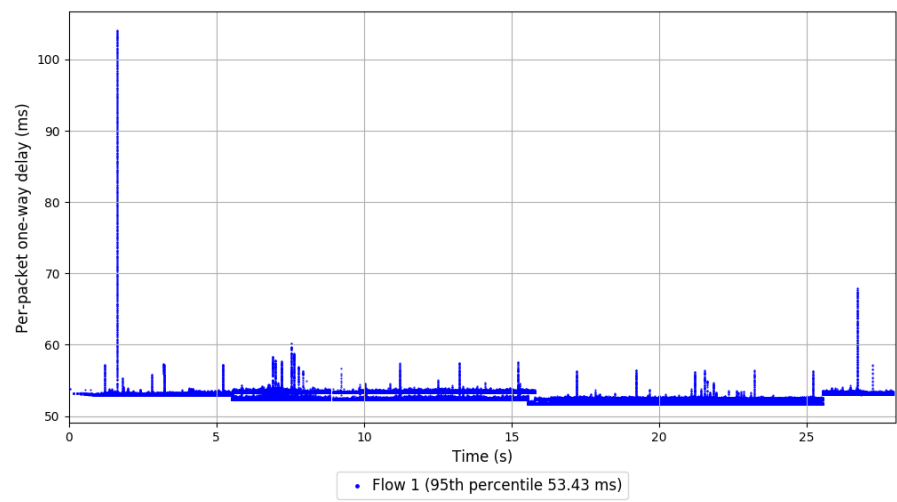
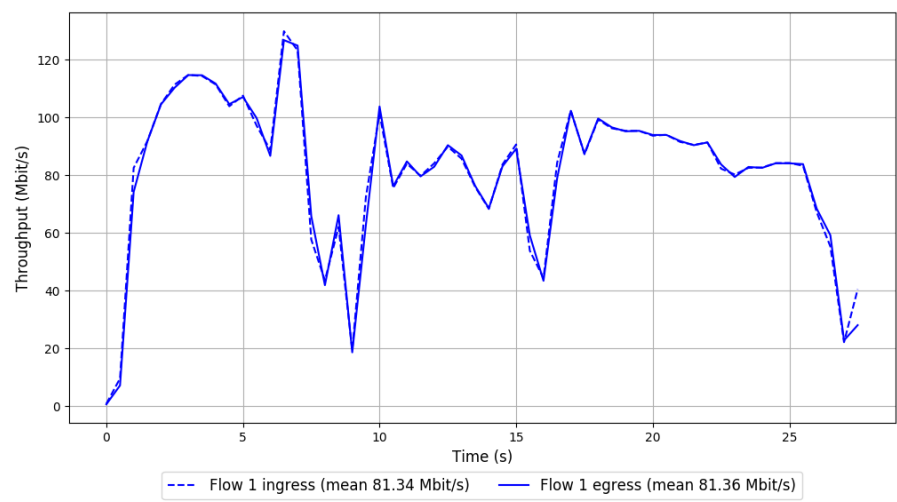
-- Flow 1:

Average throughput: 81.36 Mbit/s

95th percentile per-packet one-way delay: 53.427 ms

Loss rate: 0.33%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-30 10:42:04

End at: 2017-11-30 10:42:34

Below is generated by plot.py at 2017-11-30 14:22:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.41 Mbit/s

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

Loss rate: 0.07%

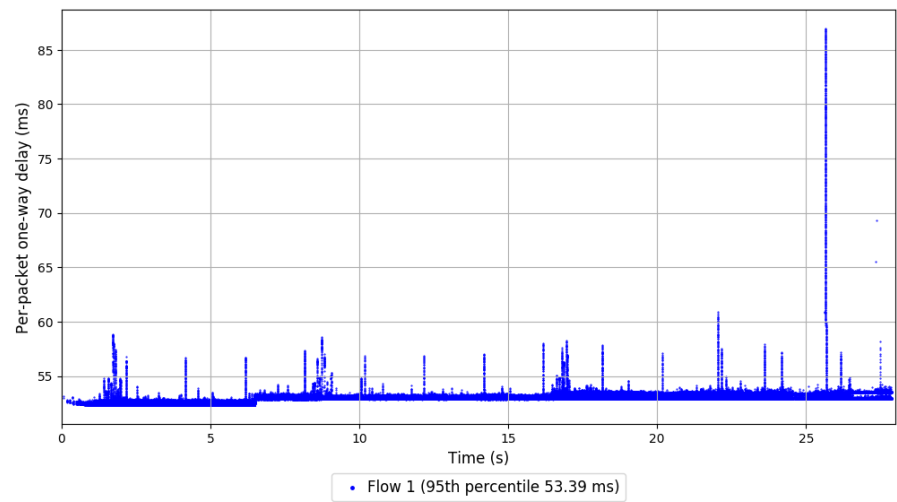
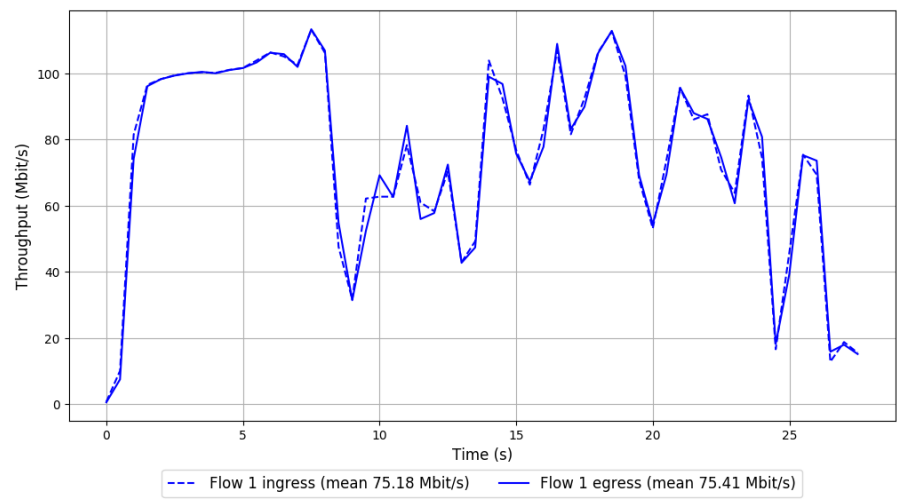
-- Flow 1:

Average throughput: 75.41 Mbit/s

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

Loss rate: 0.07%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-30 10:52:31

End at: 2017-11-30 10:53:01

Below is generated by plot.py at 2017-11-30 14:22:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.17 Mbit/s

95th percentile per-packet one-way delay: 53.335 ms

Loss rate: 0.14%

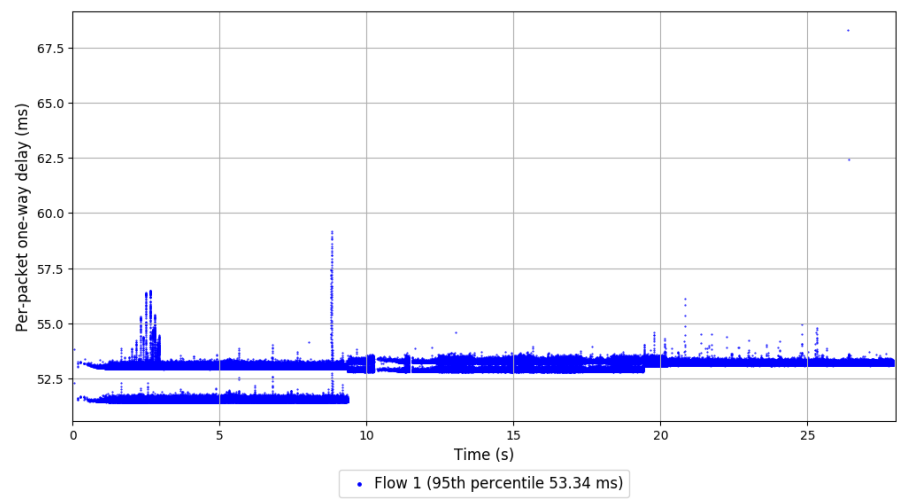
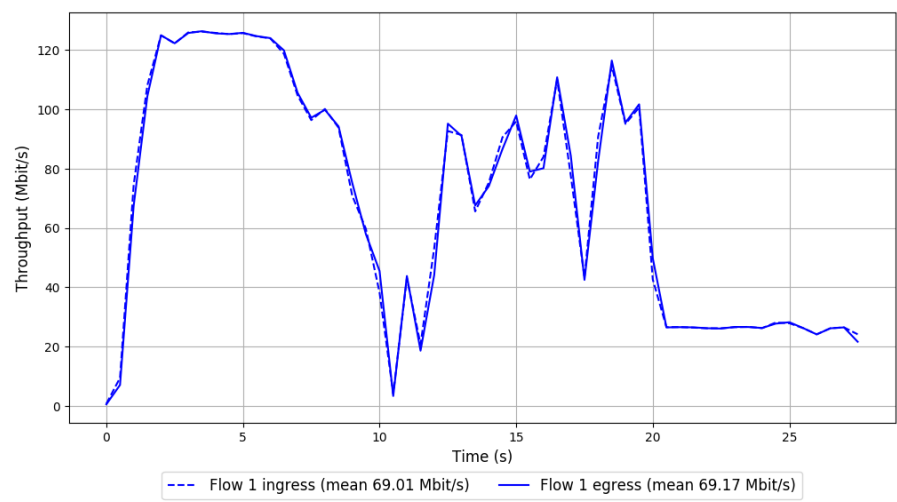
-- Flow 1:

Average throughput: 69.17 Mbit/s

95th percentile per-packet one-way delay: 53.335 ms

Loss rate: 0.14%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-30 11:02:55

End at: 2017-11-30 11:03:25

Below is generated by plot.py at 2017-11-30 14:22:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.53 Mbit/s

95th percentile per-packet one-way delay: 53.390 ms

Loss rate: 0.57%

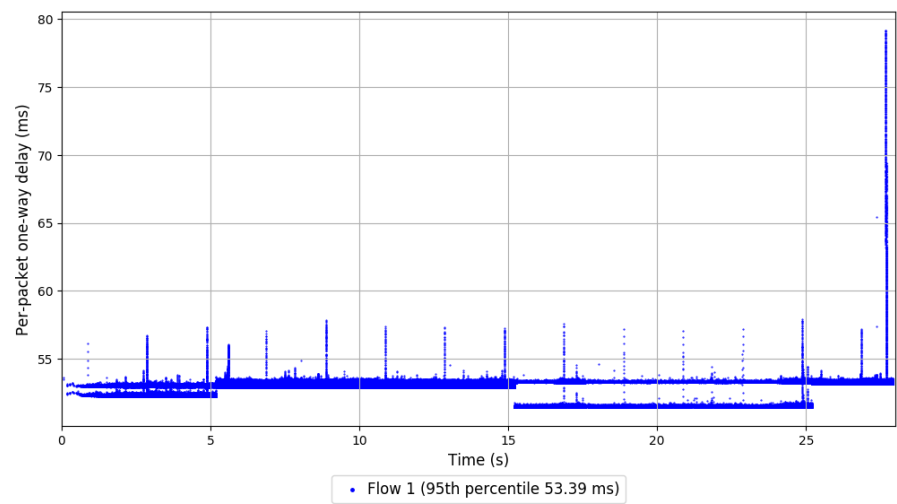
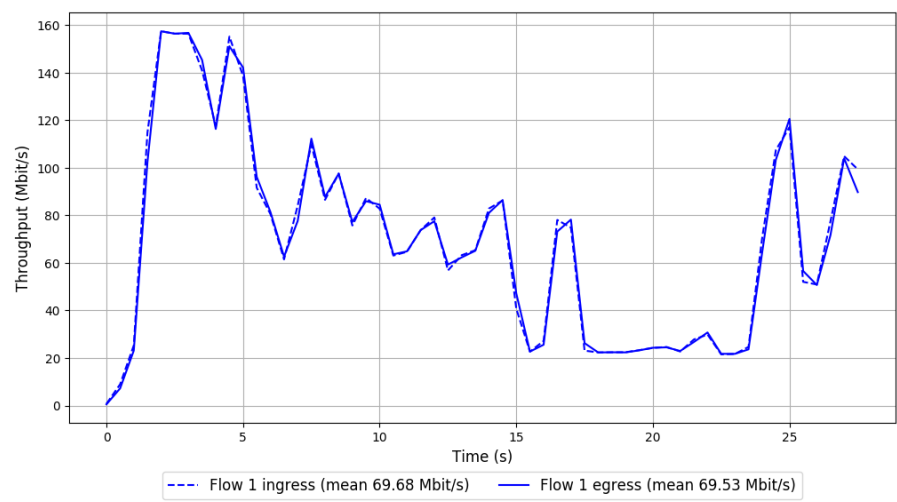
-- Flow 1:

Average throughput: 69.53 Mbit/s

95th percentile per-packet one-way delay: 53.390 ms

Loss rate: 0.57%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

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

End at: 2017-11-30 11:13:26

Below is generated by plot.py at 2017-11-30 14:22:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.48 Mbit/s

95th percentile per-packet one-way delay: 53.650 ms

Loss rate: 0.49%

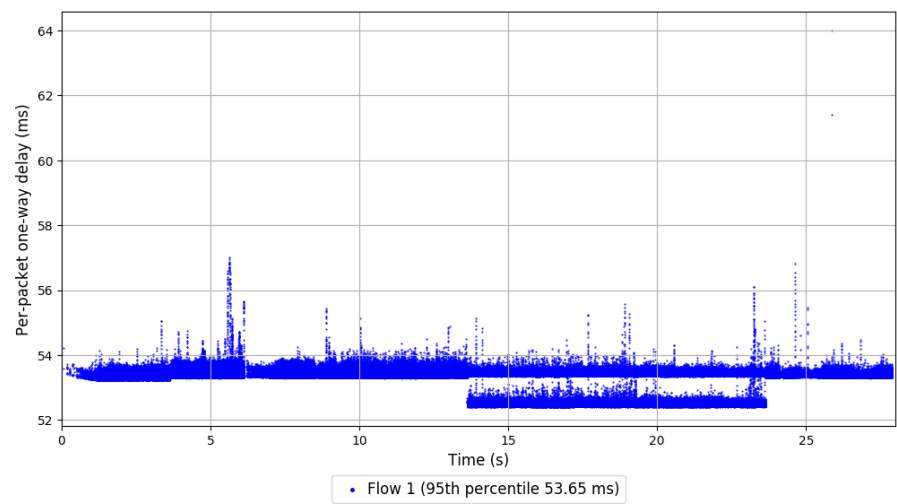
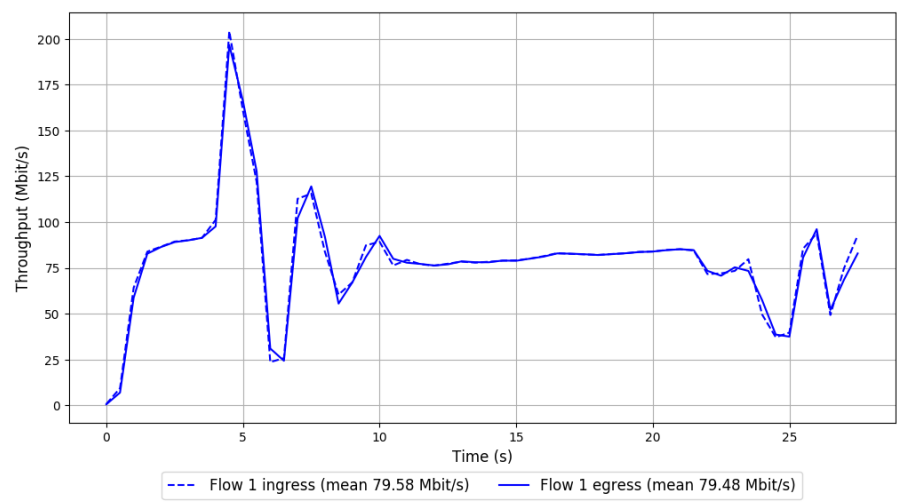
-- Flow 1:

Average throughput: 79.48 Mbit/s

95th percentile per-packet one-way delay: 53.650 ms

Loss rate: 0.49%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-30 11:23:10

End at: 2017-11-30 11:23:40

Below is generated by plot.py at 2017-11-30 14:22:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.63 Mbit/s

95th percentile per-packet one-way delay: 53.541 ms

Loss rate: 0.40%

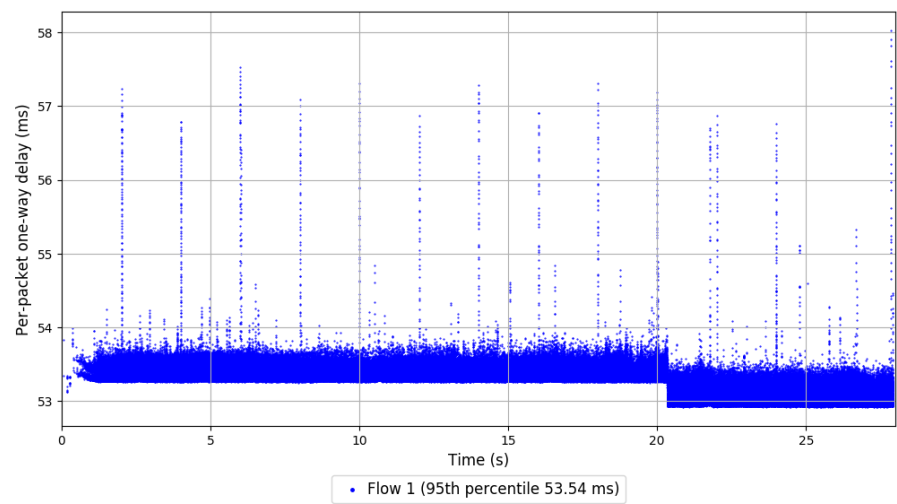
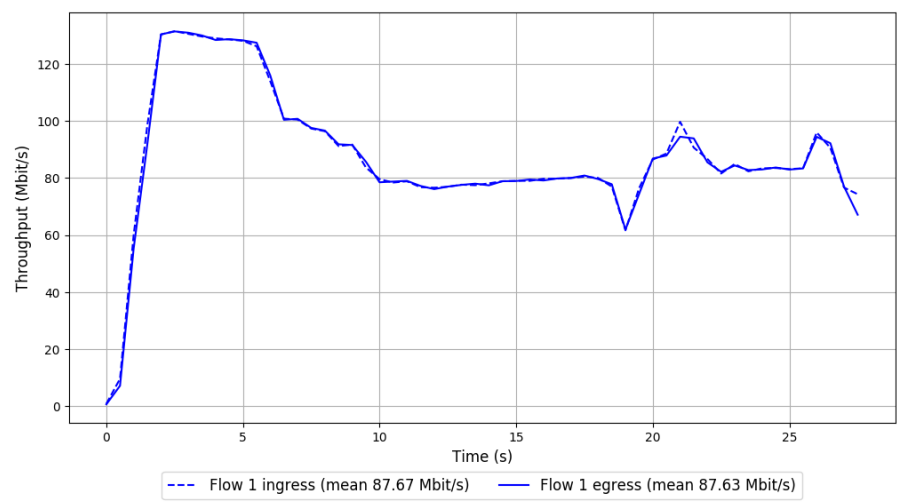
-- Flow 1:

Average throughput: 87.63 Mbit/s

95th percentile per-packet one-way delay: 53.541 ms

Loss rate: 0.40%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-30 11:33:39

End at: 2017-11-30 11:34:09

Below is generated by plot.py at 2017-11-30 14:22:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.46 Mbit/s

95th percentile per-packet one-way delay: 53.276 ms

Loss rate: 0.37%

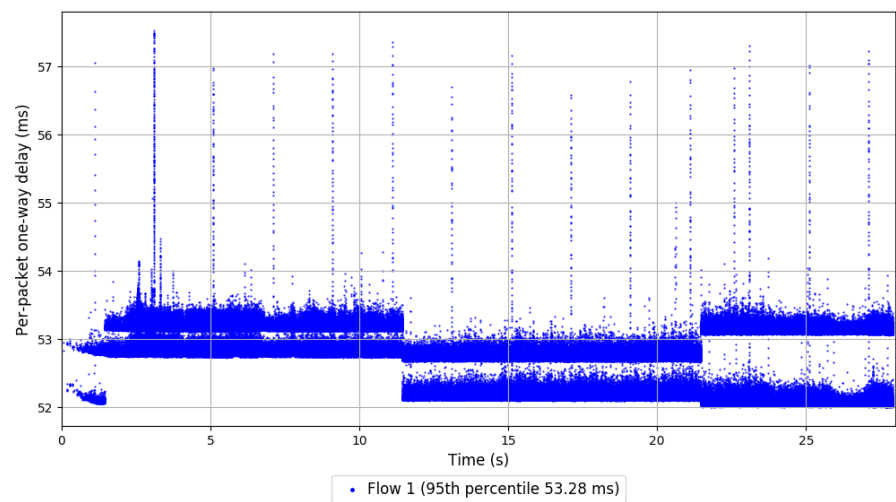
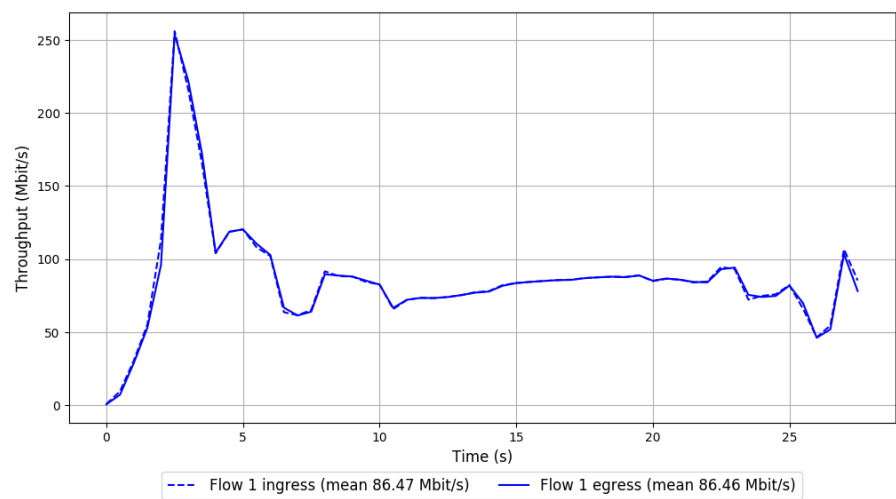
-- Flow 1:

Average throughput: 86.46 Mbit/s

95th percentile per-packet one-way delay: 53.276 ms

Loss rate: 0.37%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-30 11:44:13

End at: 2017-11-30 11:44:43

Below is generated by plot.py at 2017-11-30 14:22:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.88 Mbit/s

95th percentile per-packet one-way delay: 52.823 ms

Loss rate: 0.17%

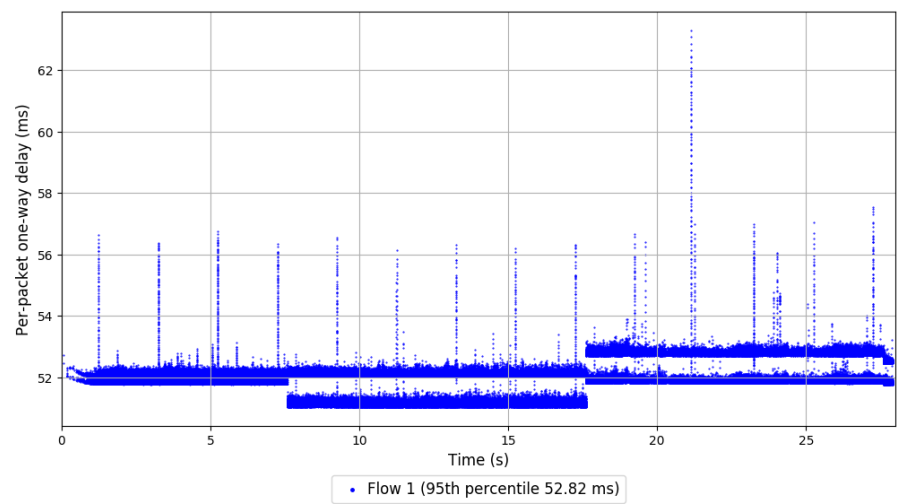
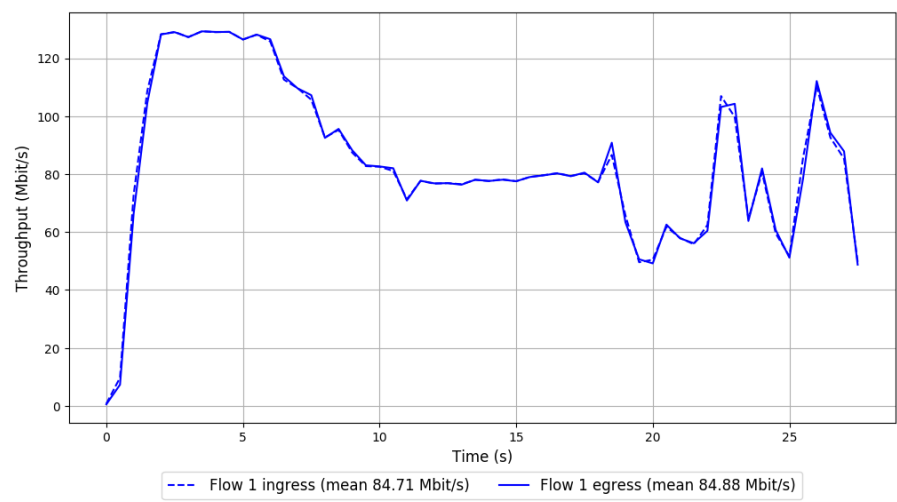
-- Flow 1:

Average throughput: 84.88 Mbit/s

95th percentile per-packet one-way delay: 52.823 ms

Loss rate: 0.17%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-30 11:54:39

End at: 2017-11-30 11:55:09

Below is generated by plot.py at 2017-11-30 14:22:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.28 Mbit/s

95th percentile per-packet one-way delay: 52.820 ms

Loss rate: 0.33%

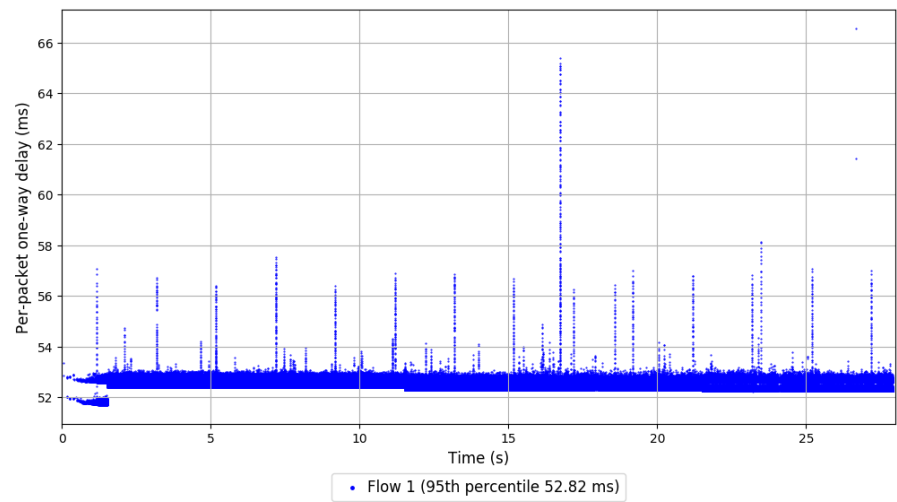
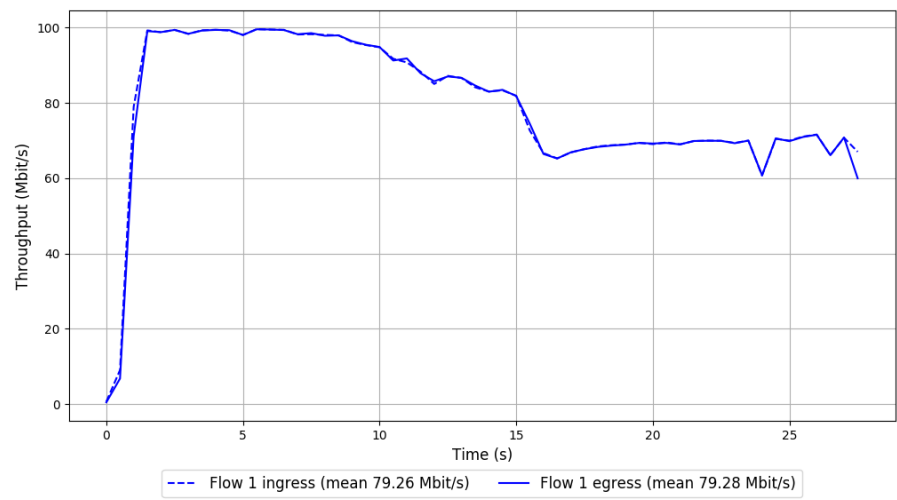
-- Flow 1:

Average throughput: 79.28 Mbit/s

95th percentile per-packet one-way delay: 52.820 ms

Loss rate: 0.33%

Run 10: Report of Copa — Data Link

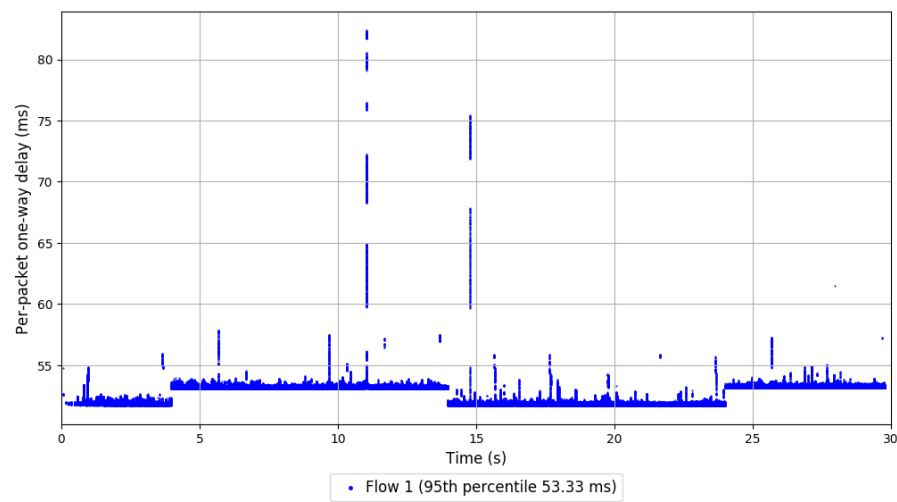
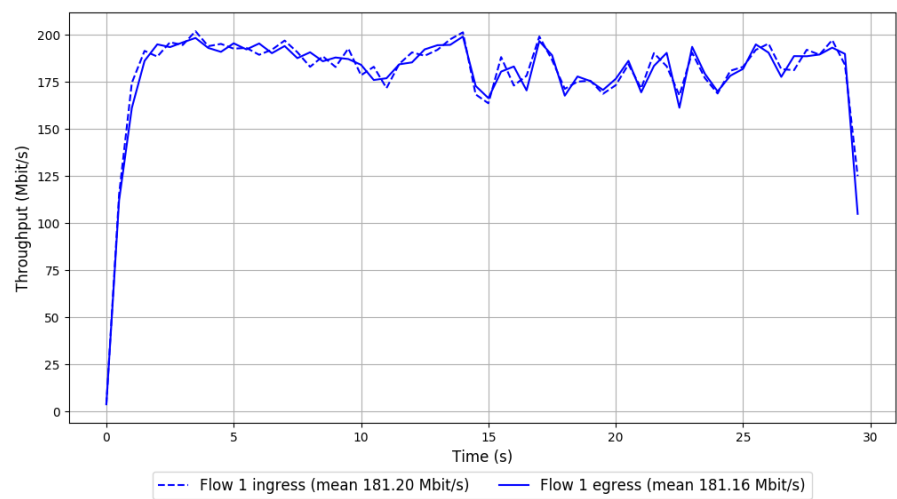


```
Run 1: Statistics of Indigo

Start at: 2017-11-30 10:23:38
End at: 2017-11-30 10:24:08

# Below is generated by plot.py at 2017-11-30 14:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.16 Mbit/s
95th percentile per-packet one-way delay: 53.327 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 181.16 Mbit/s
95th percentile per-packet one-way delay: 53.327 ms
Loss rate: 0.36%
```


Run 1: Report of Indigo — Data Link

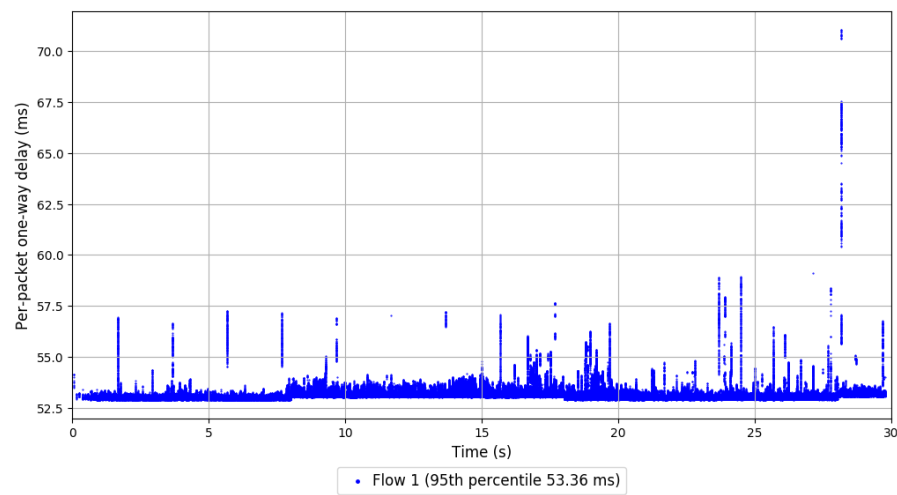
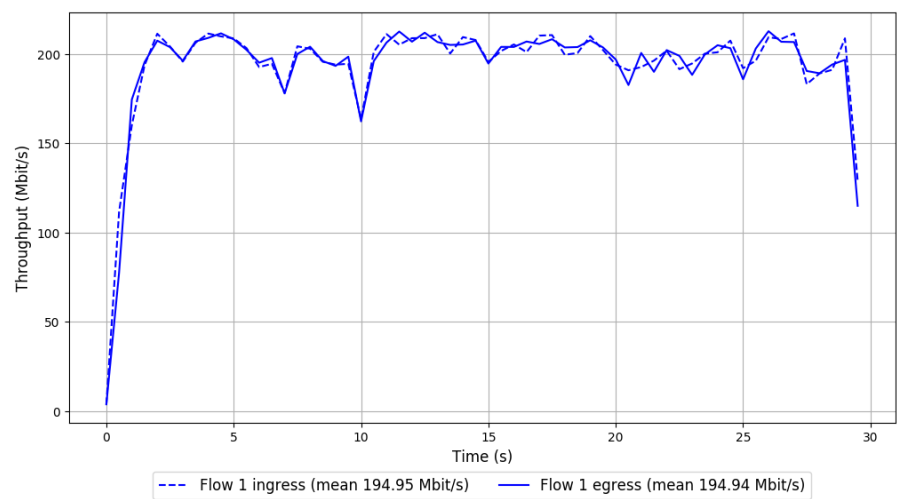


```
Run 2: Statistics of Indigo

Start at: 2017-11-30 10:34:04
End at: 2017-11-30 10:34:34

# Below is generated by plot.py at 2017-11-30 14:24:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.94 Mbit/s
95th percentile per-packet one-way delay: 53.356 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 194.94 Mbit/s
95th percentile per-packet one-way delay: 53.356 ms
Loss rate: 0.34%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-30 10:44:23

End at: 2017-11-30 10:44:53

Below is generated by plot.py at 2017-11-30 14:25:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.75 Mbit/s

95th percentile per-packet one-way delay: 53.583 ms

Loss rate: 0.37%

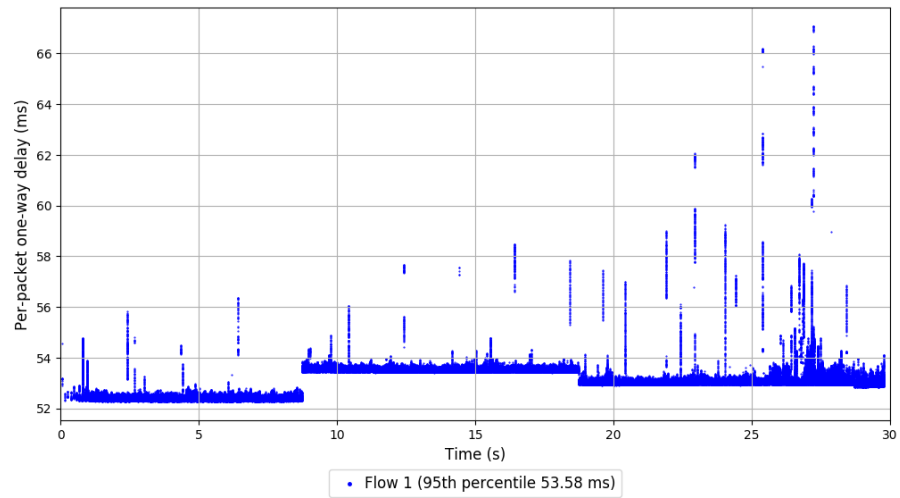
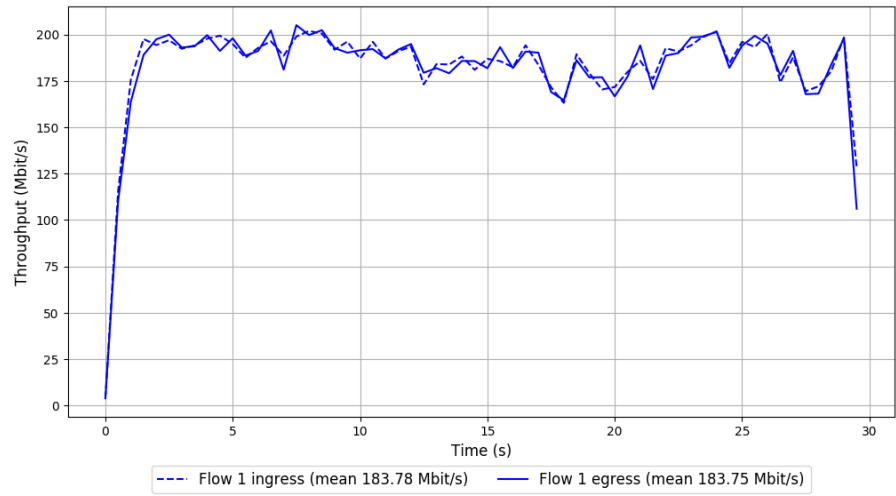
-- Flow 1:

Average throughput: 183.75 Mbit/s

95th percentile per-packet one-way delay: 53.583 ms

Loss rate: 0.37%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-30 10:54:51

End at: 2017-11-30 10:55:21

Below is generated by plot.py at 2017-11-30 14:25:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.15 Mbit/s

95th percentile per-packet one-way delay: 53.564 ms

Loss rate: 0.35%

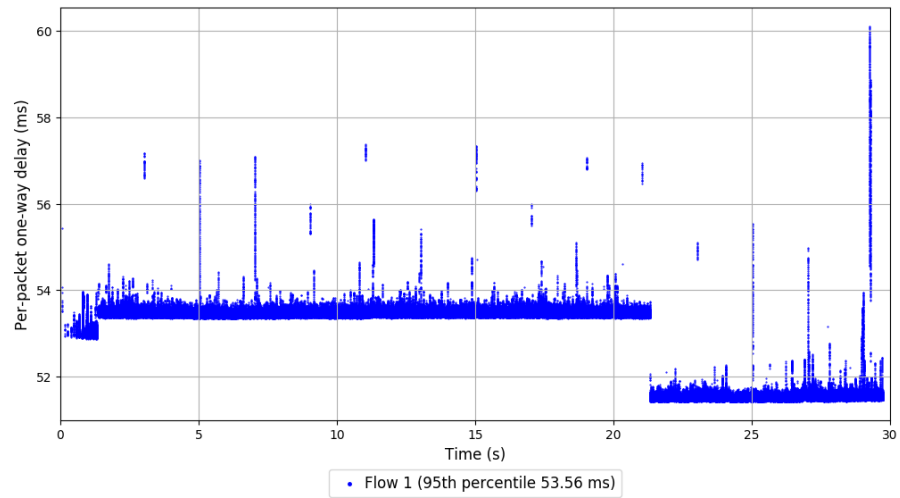
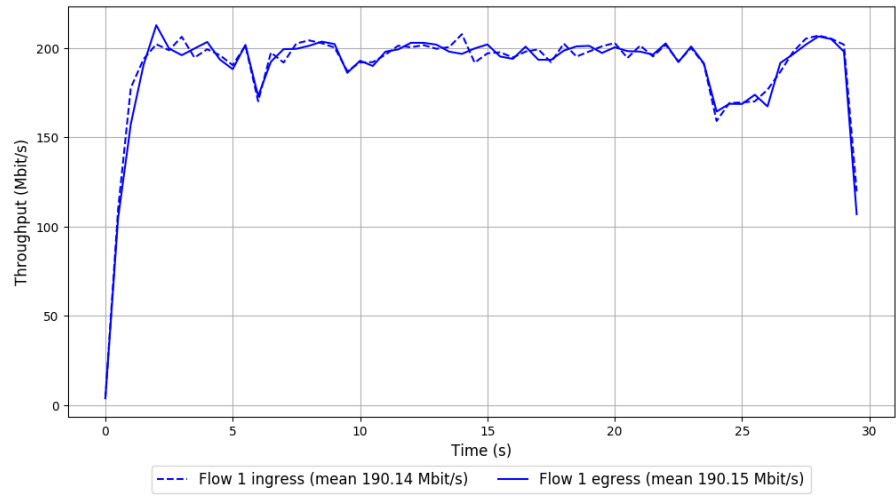
-- Flow 1:

Average throughput: 190.15 Mbit/s

95th percentile per-packet one-way delay: 53.564 ms

Loss rate: 0.35%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-30 11:05:14

End at: 2017-11-30 11:05:44

Below is generated by plot.py at 2017-11-30 14:25:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.14 Mbit/s

95th percentile per-packet one-way delay: 53.582 ms

Loss rate: 0.34%

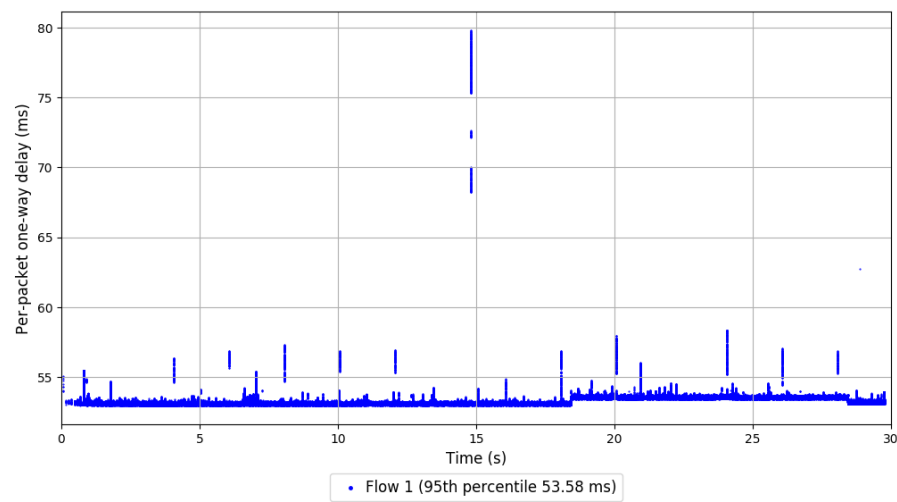
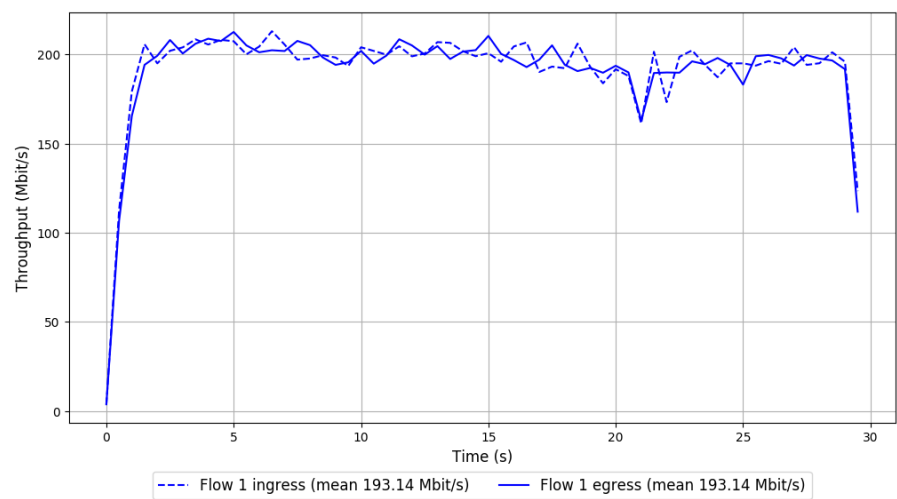
-- Flow 1:

Average throughput: 193.14 Mbit/s

95th percentile per-packet one-way delay: 53.582 ms

Loss rate: 0.34%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-30 11:15:14

End at: 2017-11-30 11:15:44

Below is generated by plot.py at 2017-11-30 14:26:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.57 Mbit/s

95th percentile per-packet one-way delay: 53.766 ms

Loss rate: 0.29%

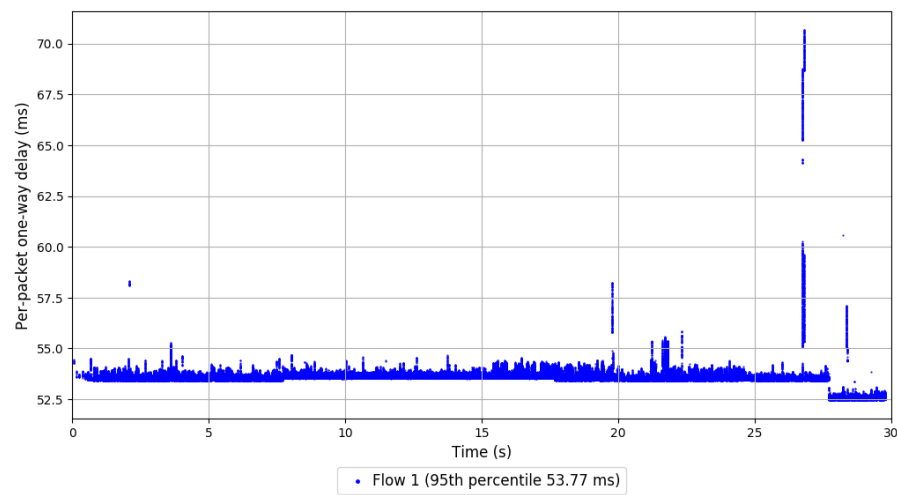
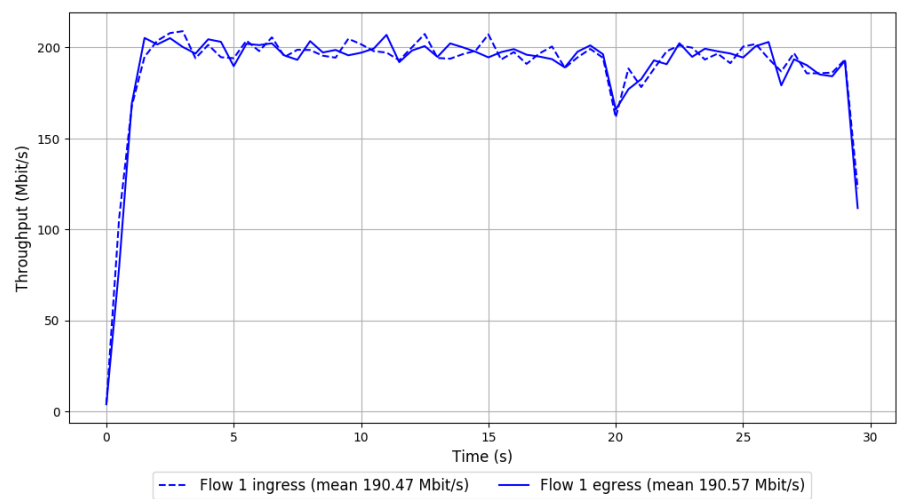
-- Flow 1:

Average throughput: 190.57 Mbit/s

95th percentile per-packet one-way delay: 53.766 ms

Loss rate: 0.29%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-30 11:25:30

End at: 2017-11-30 11:26:00

Below is generated by plot.py at 2017-11-30 14:26:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.36 Mbit/s

95th percentile per-packet one-way delay: 53.449 ms

Loss rate: 0.34%

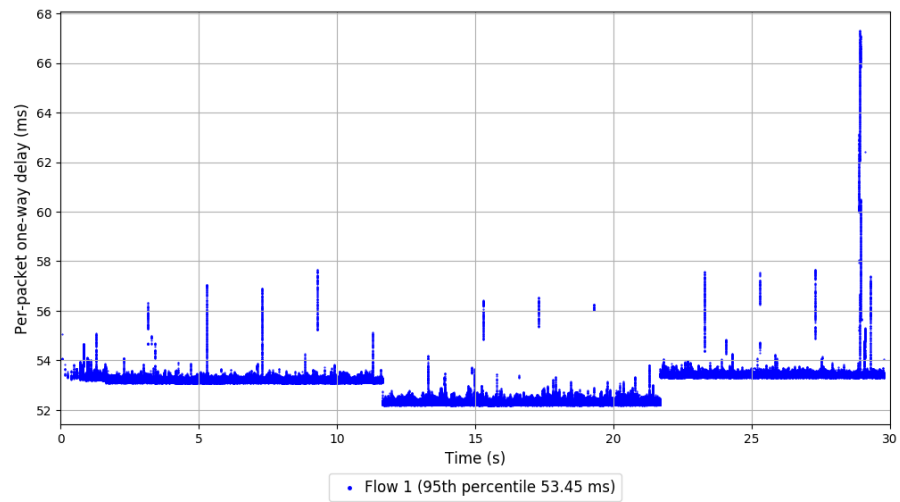
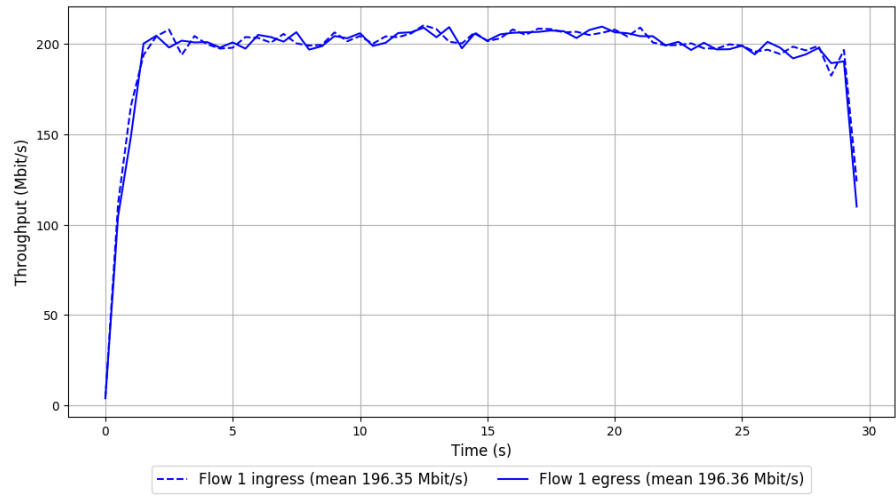
-- Flow 1:

Average throughput: 196.36 Mbit/s

95th percentile per-packet one-way delay: 53.449 ms

Loss rate: 0.34%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-30 11:35:59

End at: 2017-11-30 11:36:29

Below is generated by plot.py at 2017-11-30 14:26:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.03 Mbit/s

95th percentile per-packet one-way delay: 53.222 ms

Loss rate: 0.26%

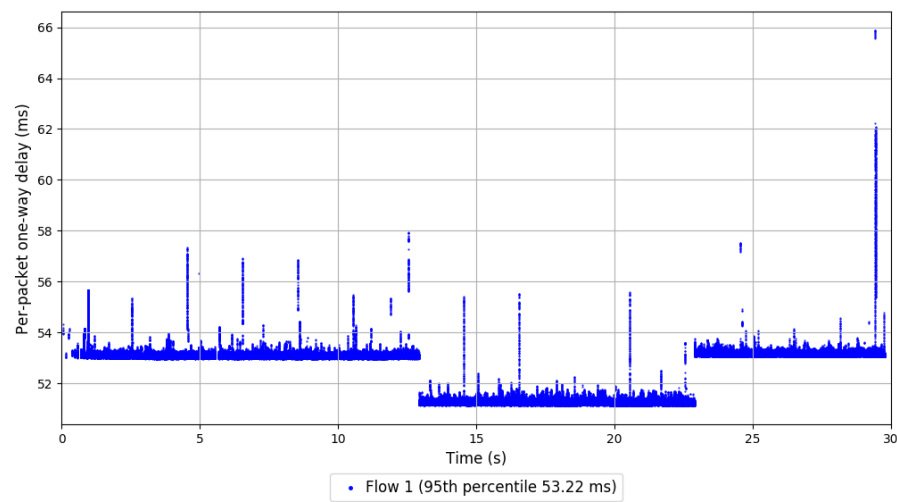
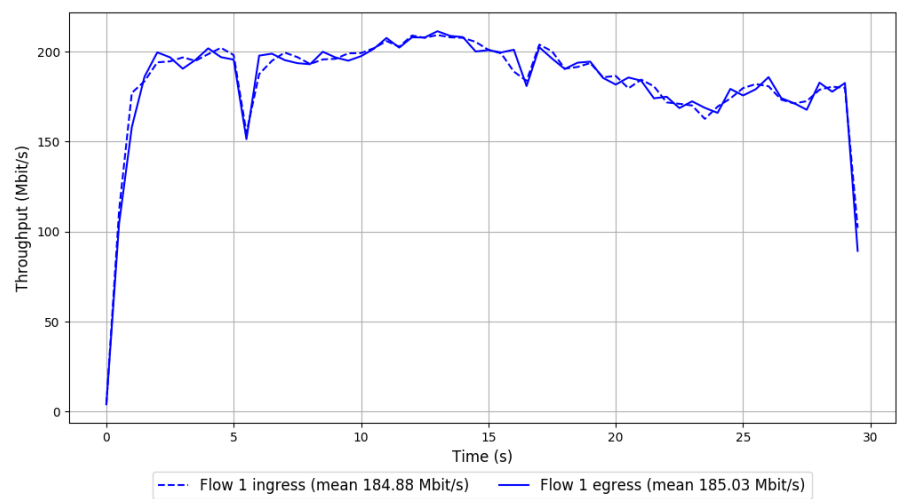
-- Flow 1:

Average throughput: 185.03 Mbit/s

95th percentile per-packet one-way delay: 53.222 ms

Loss rate: 0.26%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-30 11:46:33

End at: 2017-11-30 11:47:03

Below is generated by plot.py at 2017-11-30 14:27:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.96 Mbit/s

95th percentile per-packet one-way delay: 53.035 ms

Loss rate: 0.35%

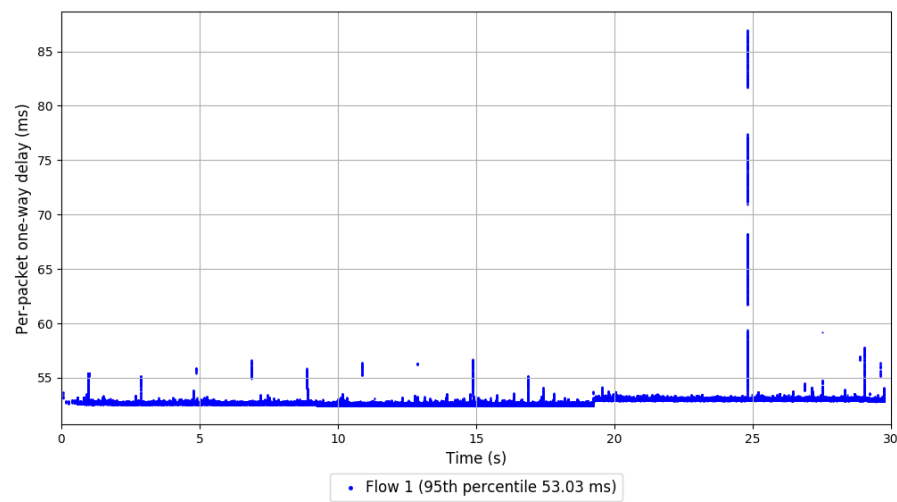
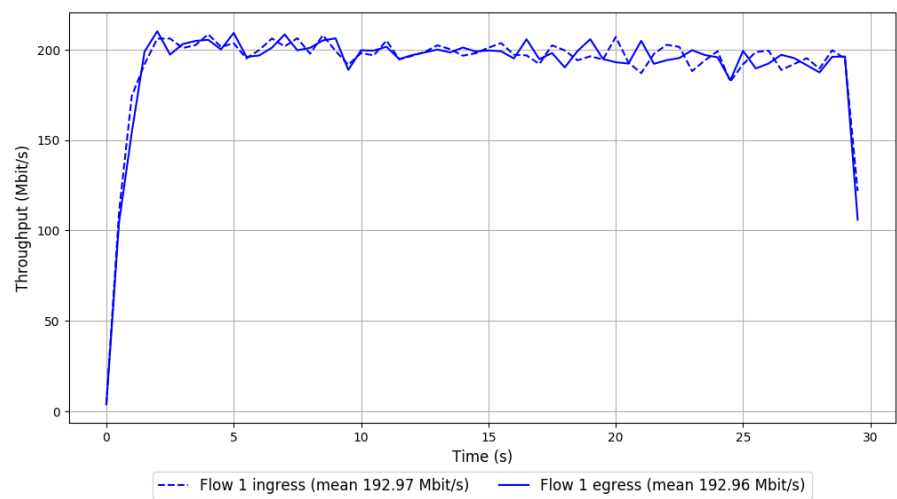
-- Flow 1:

Average throughput: 192.96 Mbit/s

95th percentile per-packet one-way delay: 53.035 ms

Loss rate: 0.35%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-30 11:56:59

End at: 2017-11-30 11:57:29

Below is generated by plot.py at 2017-11-30 14:28:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.22 Mbit/s

95th percentile per-packet one-way delay: 52.549 ms

Loss rate: 0.32%

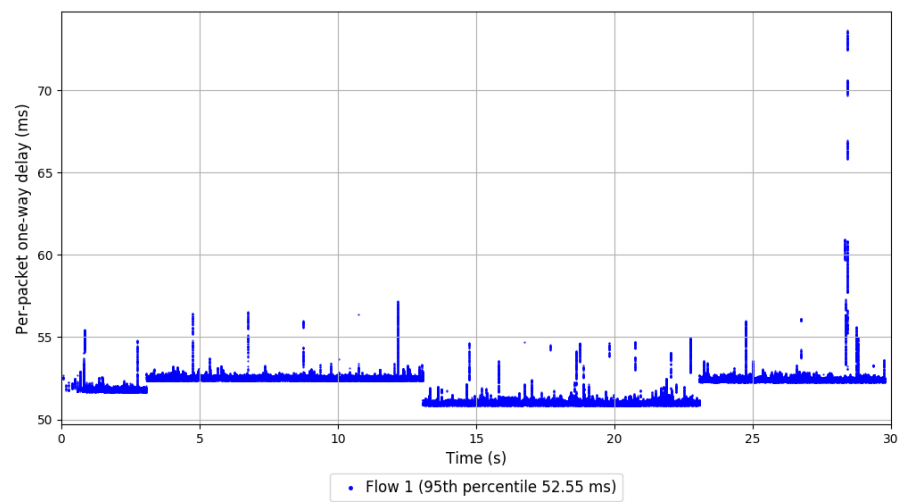
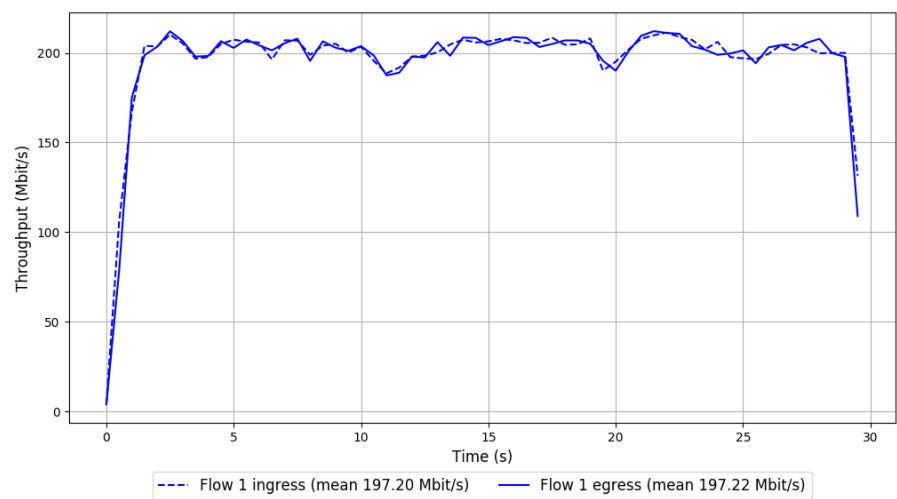
-- Flow 1:

Average throughput: 197.22 Mbit/s

95th percentile per-packet one-way delay: 52.549 ms

Loss rate: 0.32%

Run 10: Report of Indigo — Data Link

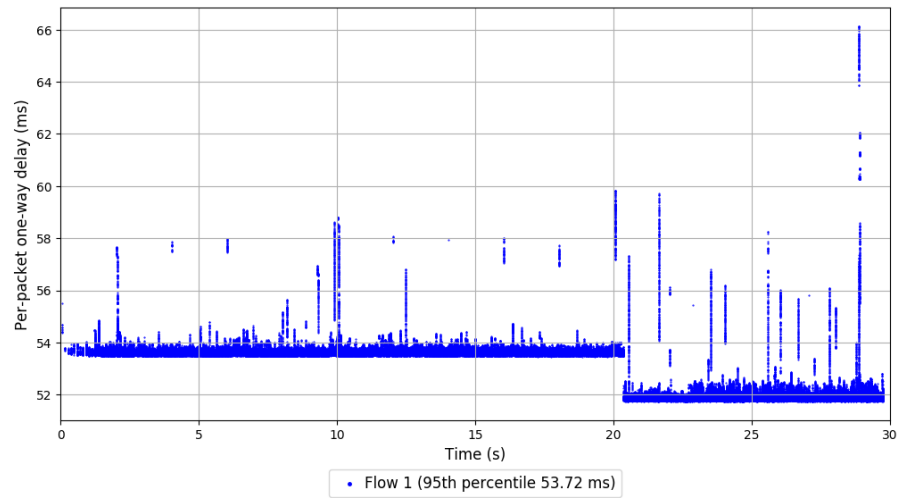
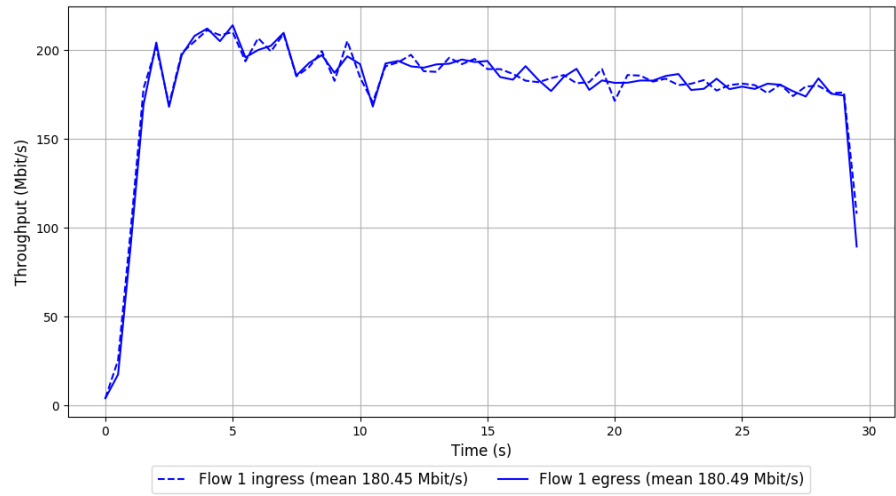


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-30 10:22:02
End at: 2017-11-30 10:22:32

# Below is generated by plot.py at 2017-11-30 14:28:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.49 Mbit/s
95th percentile per-packet one-way delay: 53.716 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 180.49 Mbit/s
95th percentile per-packet one-way delay: 53.716 ms
Loss rate: 0.33%
```

Run 1: Report of Indigo-calib — Data Link

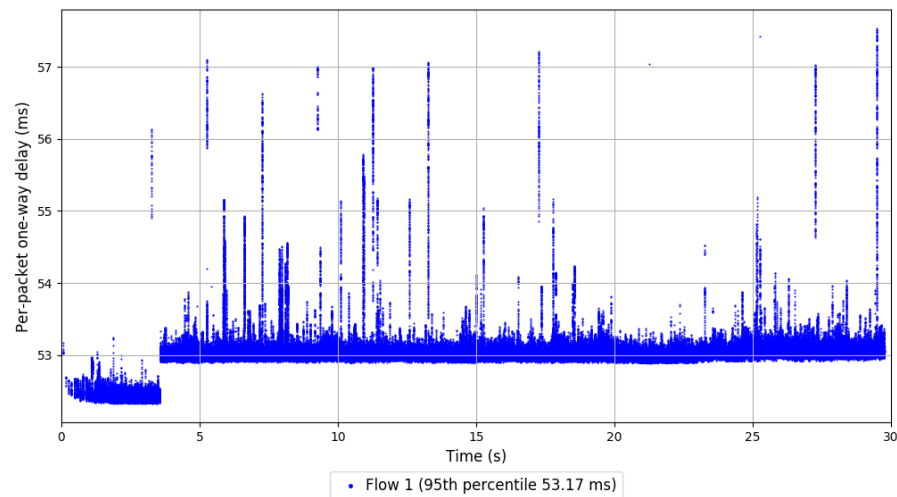
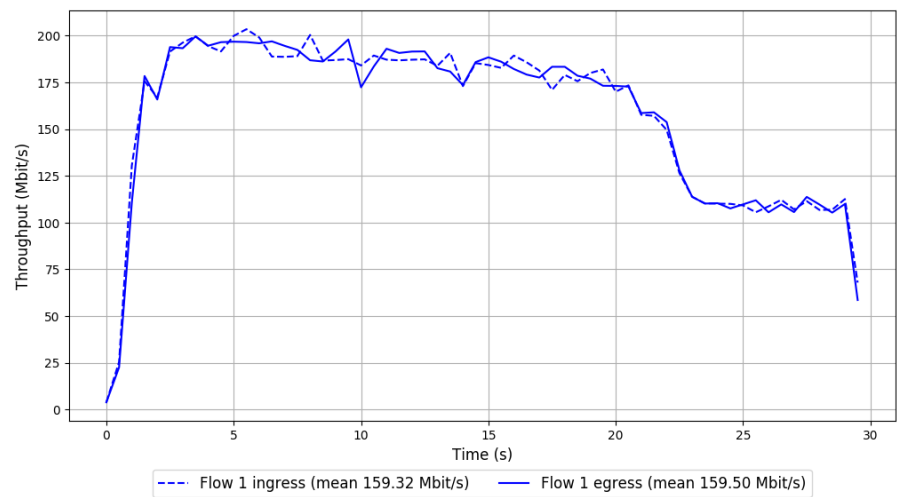


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-30 10:32:28
End at: 2017-11-30 10:32:58

# Below is generated by plot.py at 2017-11-30 14:28:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 159.50 Mbit/s
95th percentile per-packet one-way delay: 53.166 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 159.50 Mbit/s
95th percentile per-packet one-way delay: 53.166 ms
Loss rate: 0.24%
```

Run 2: Report of Indigo-calib — Data Link

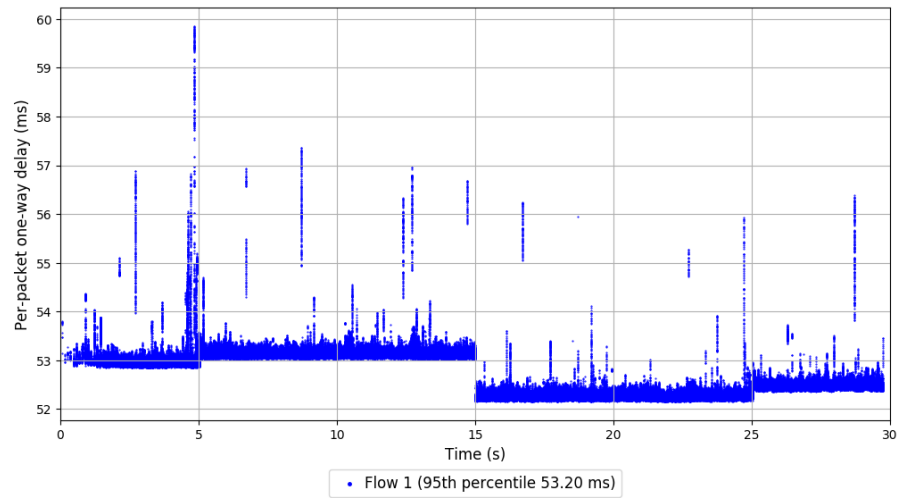
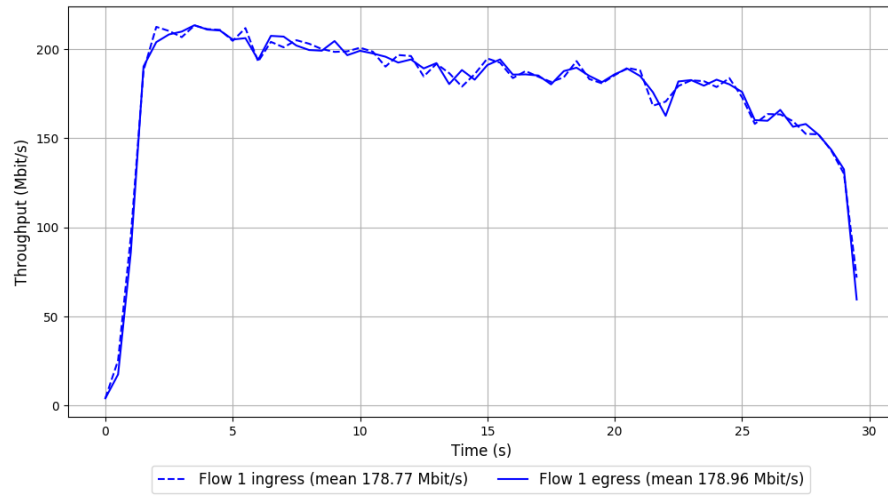


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-30 10:42:47
End at: 2017-11-30 10:43:17

# Below is generated by plot.py at 2017-11-30 14:28:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 178.96 Mbit/s
95th percentile per-packet one-way delay: 53.200 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 178.96 Mbit/s
95th percentile per-packet one-way delay: 53.200 ms
Loss rate: 0.23%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-30 10:53:13

End at: 2017-11-30 10:53:43

Below is generated by plot.py at 2017-11-30 14:28:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.58 Mbit/s

95th percentile per-packet one-way delay: 53.600 ms

Loss rate: 0.32%

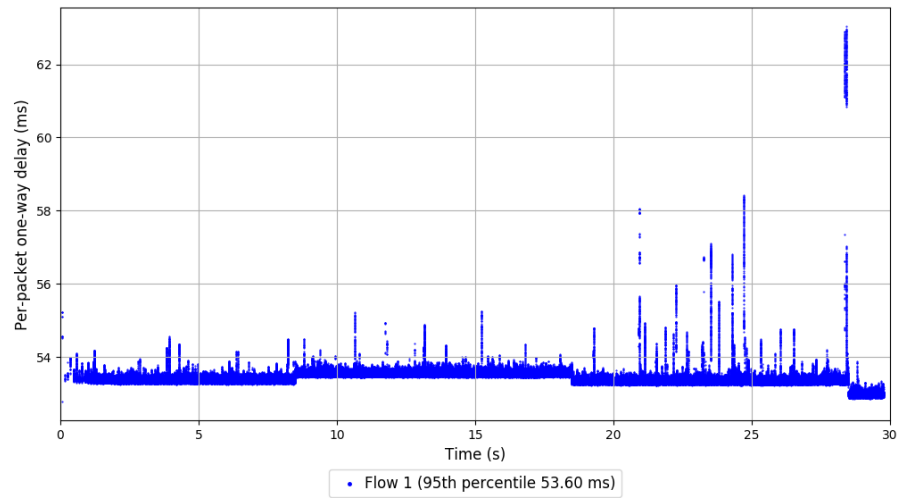
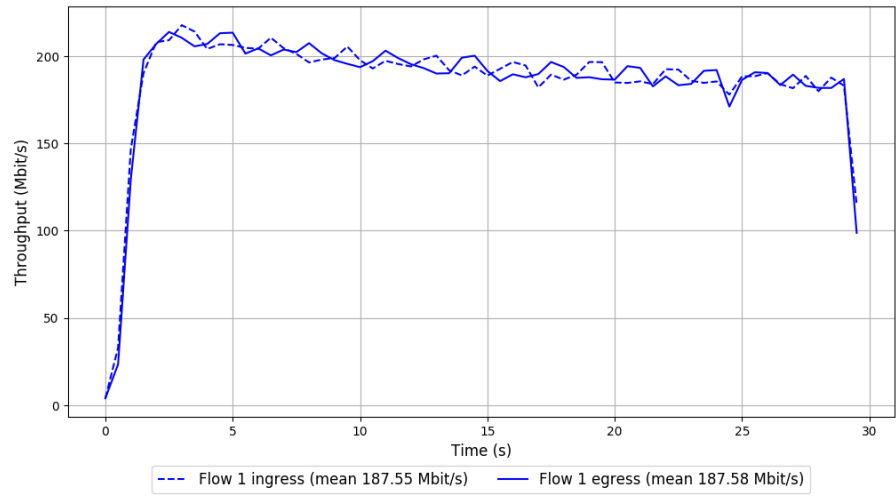
-- Flow 1:

Average throughput: 187.58 Mbit/s

95th percentile per-packet one-way delay: 53.600 ms

Loss rate: 0.32%

Run 4: Report of Indigo-calib — Data Link

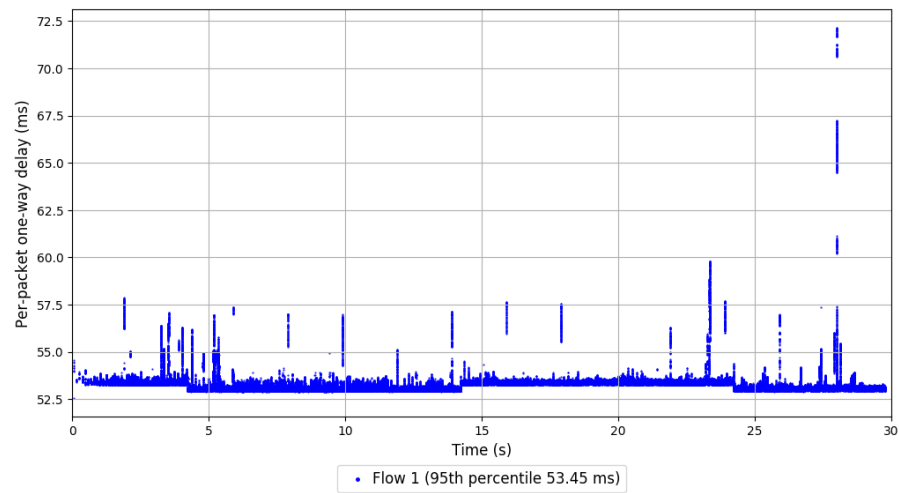
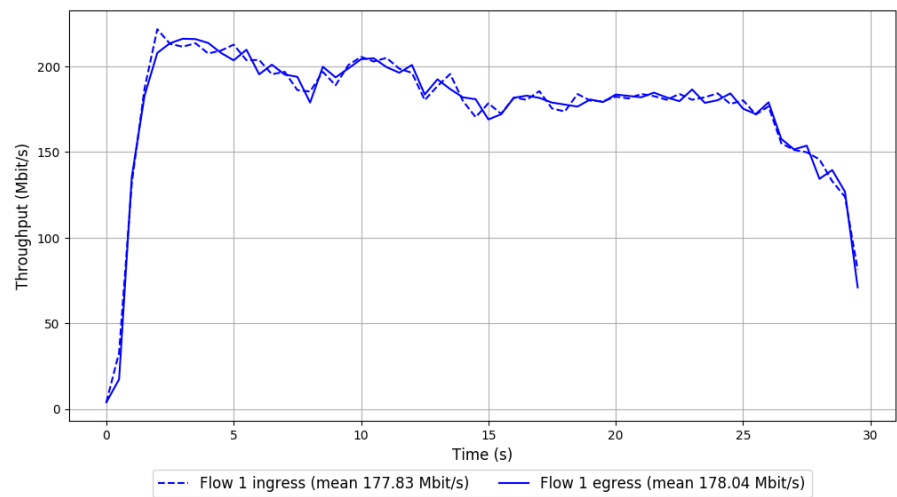


```
Run 5: Statistics of Indigo-calib

Start at: 2017-11-30 11:03:38
End at: 2017-11-30 11:04:08

# Below is generated by plot.py at 2017-11-30 14:28:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 178.04 Mbit/s
95th percentile per-packet one-way delay: 53.455 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 178.04 Mbit/s
95th percentile per-packet one-way delay: 53.455 ms
Loss rate: 0.22%
```

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-30 11:13:40

End at: 2017-11-30 11:14:10

Below is generated by plot.py at 2017-11-30 14:28:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 146.96 Mbit/s

95th percentile per-packet one-way delay: 53.632 ms

Loss rate: 0.24%

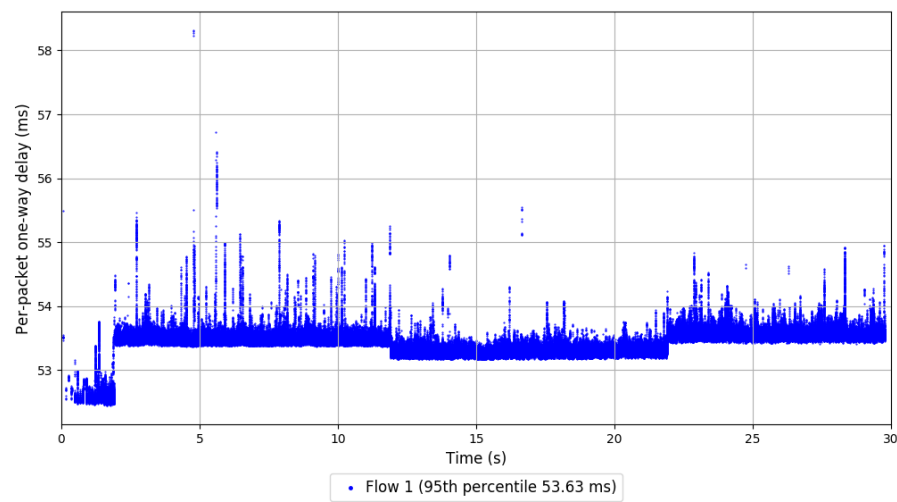
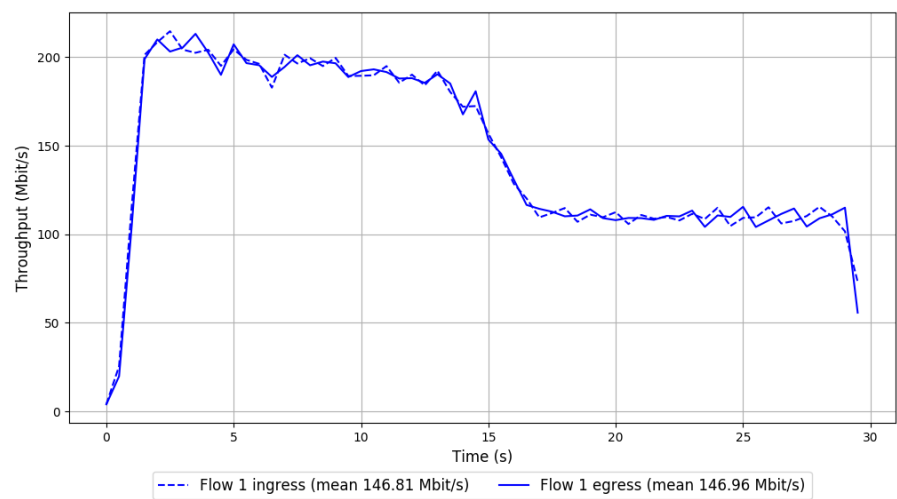
-- Flow 1:

Average throughput: 146.96 Mbit/s

95th percentile per-packet one-way delay: 53.632 ms

Loss rate: 0.24%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-30 11:23:54

End at: 2017-11-30 11:24:24

Below is generated by plot.py at 2017-11-30 14:29:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.75 Mbit/s

95th percentile per-packet one-way delay: 53.280 ms

Loss rate: 0.22%

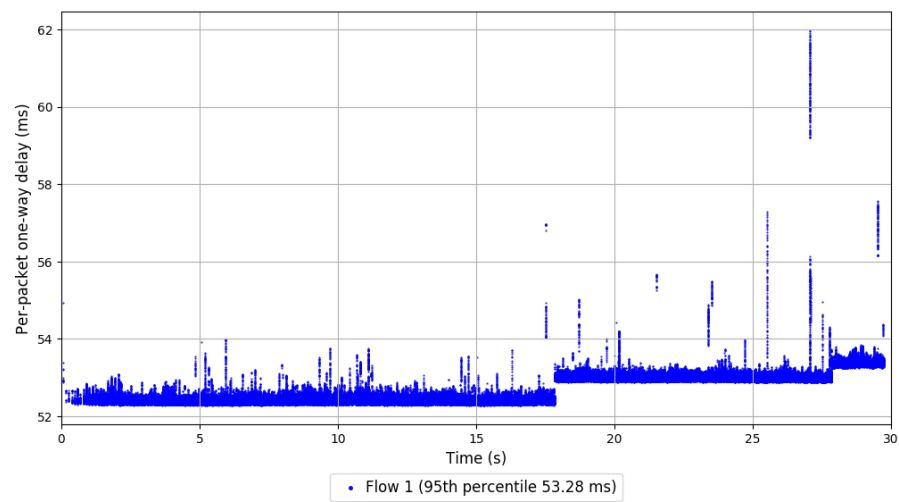
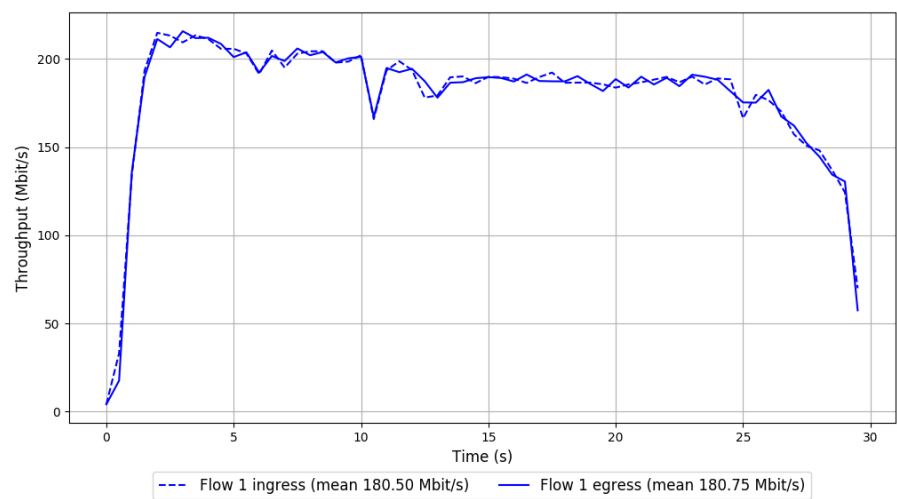
-- Flow 1:

Average throughput: 180.75 Mbit/s

95th percentile per-packet one-way delay: 53.280 ms

Loss rate: 0.22%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-30 11:34:23

End at: 2017-11-30 11:34:53

Below is generated by plot.py at 2017-11-30 14:29:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.02 Mbit/s

95th percentile per-packet one-way delay: 53.270 ms

Loss rate: 0.23%

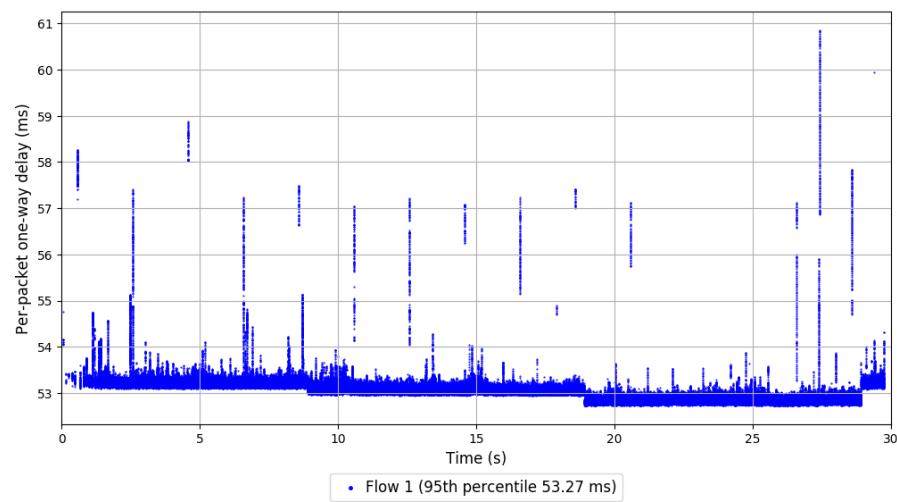
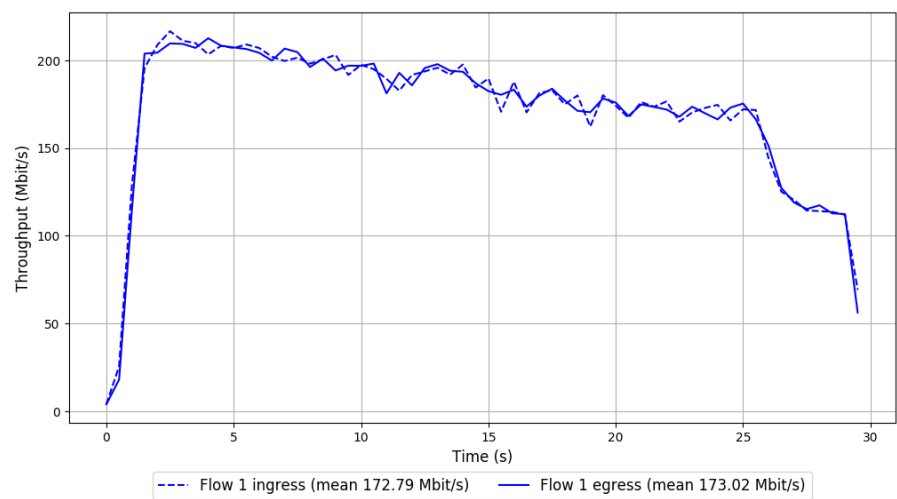
-- Flow 1:

Average throughput: 173.02 Mbit/s

95th percentile per-packet one-way delay: 53.270 ms

Loss rate: 0.23%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-30 11:44:57

End at: 2017-11-30 11:45:27

Below is generated by plot.py at 2017-11-30 14:29:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.60 Mbit/s

95th percentile per-packet one-way delay: 52.970 ms

Loss rate: 0.22%

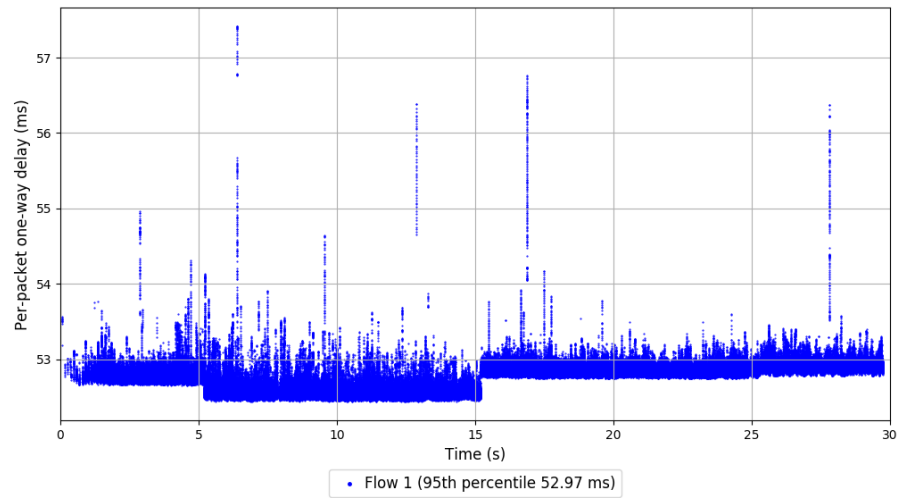
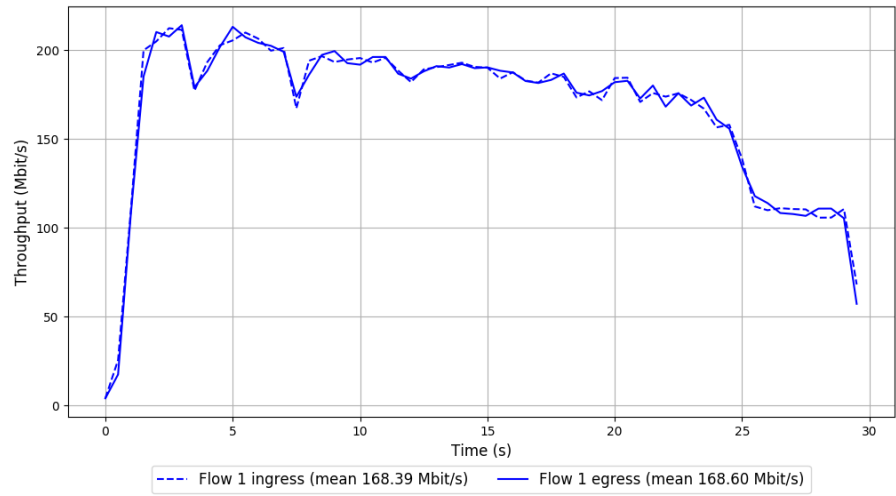
-- Flow 1:

Average throughput: 168.60 Mbit/s

95th percentile per-packet one-way delay: 52.970 ms

Loss rate: 0.22%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-30 11:55:22

End at: 2017-11-30 11:55:52

Below is generated by plot.py at 2017-11-30 14:29:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.51 Mbit/s

95th percentile per-packet one-way delay: 52.503 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 186.51 Mbit/s

95th percentile per-packet one-way delay: 52.503 ms

Loss rate: 0.31%

Run 10: Report of Indigo-calib — Data Link

