

Pantheon Report

Generated at 2017-12-05 15:29:53 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

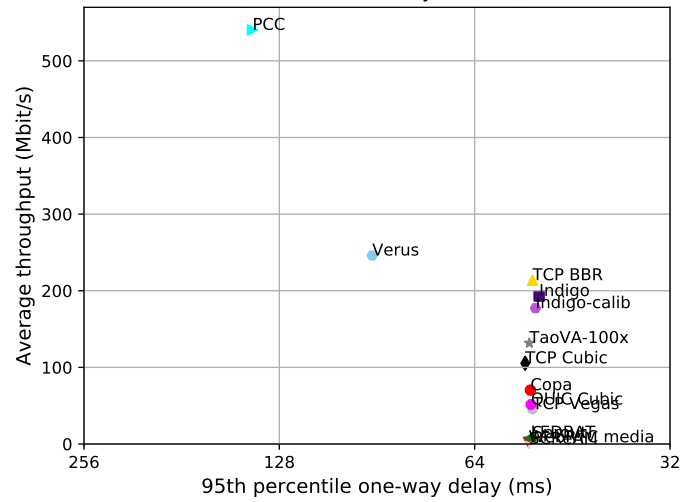
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

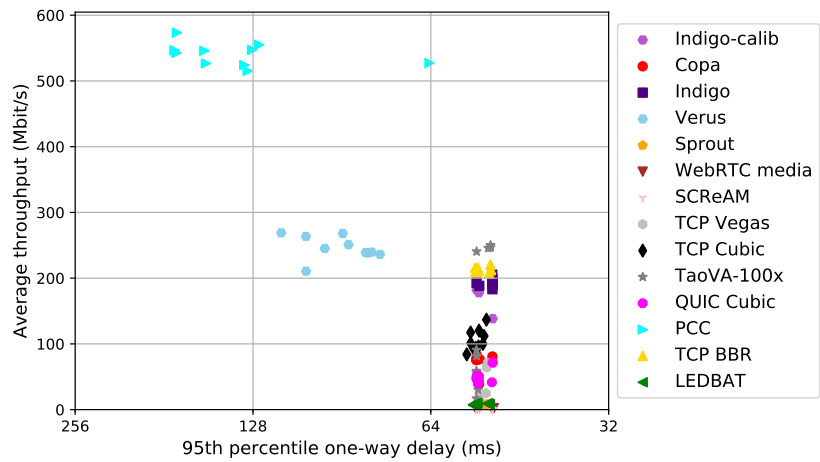
Git summary:

```
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 @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	213.74	52.12	0.37
TCP Cubic	10	105.35	53.50	0.52
LEDBAT	10	8.34	52.46	0.51
PCC	10	540.42	140.79	1.62
QUIC Cubic	10	51.55	52.42	0.51
SCReAM	9	0.20	52.76	0.36
WebRTC media	10	2.28	52.87	0.40
Sprout	10	7.86	52.14	0.49
TaoVA-100x	10	131.75	52.71	0.70
TCP Vegas	5	45.63	52.13	0.30
Verus	10	246.00	92.08	0.73
Copa	10	70.30	52.52	0.30
Indigo	10	193.08	50.92	0.38
Indigo-calib	7	177.35	51.58	0.40

Run 1: Statistics of TCP BBR

Start at: 2017-12-05 11:20:15

End at: 2017-12-05 11:20:45

Below is generated by plot.py at 2017-12-05 14:52:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.81 Mbit/s

95th percentile per-packet one-way delay: 53.375 ms

Loss rate: 0.39%

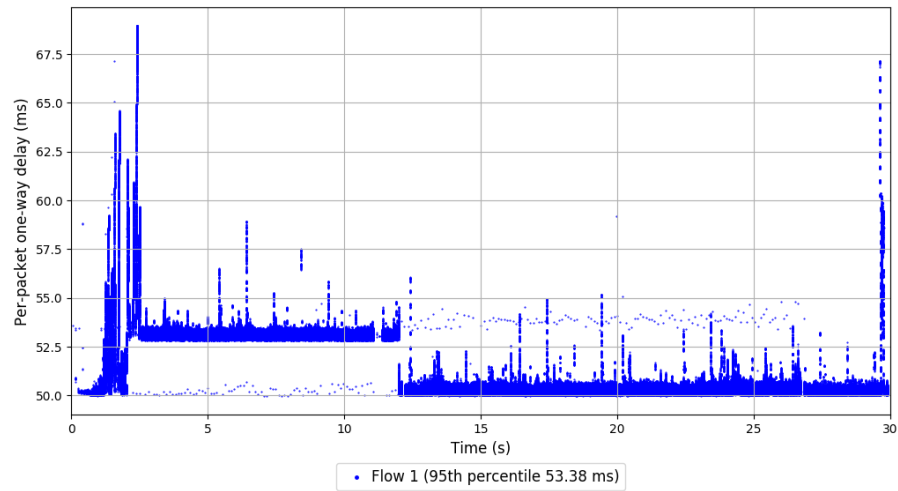
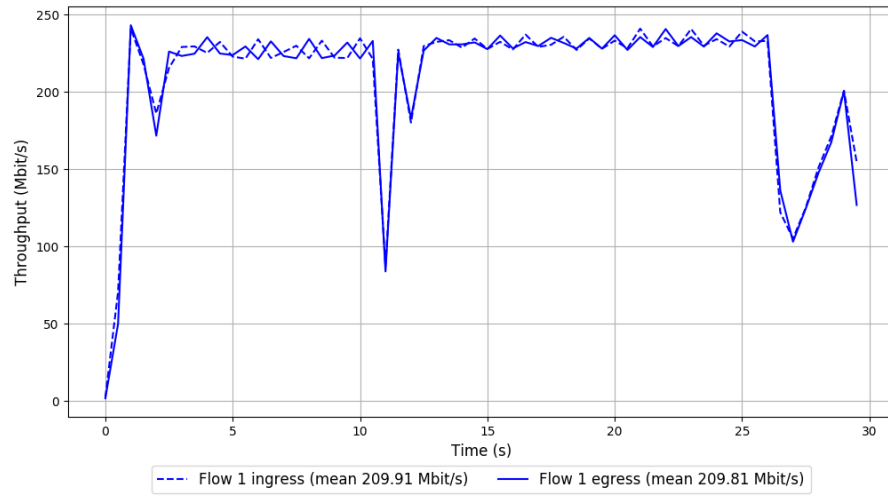
-- Flow 1:

Average throughput: 209.81 Mbit/s

95th percentile per-packet one-way delay: 53.375 ms

Loss rate: 0.39%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 11:30:33

End at: 2017-12-05 11:31:03

Below is generated by plot.py at 2017-12-05 14:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.93 Mbit/s

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

Loss rate: 0.36%

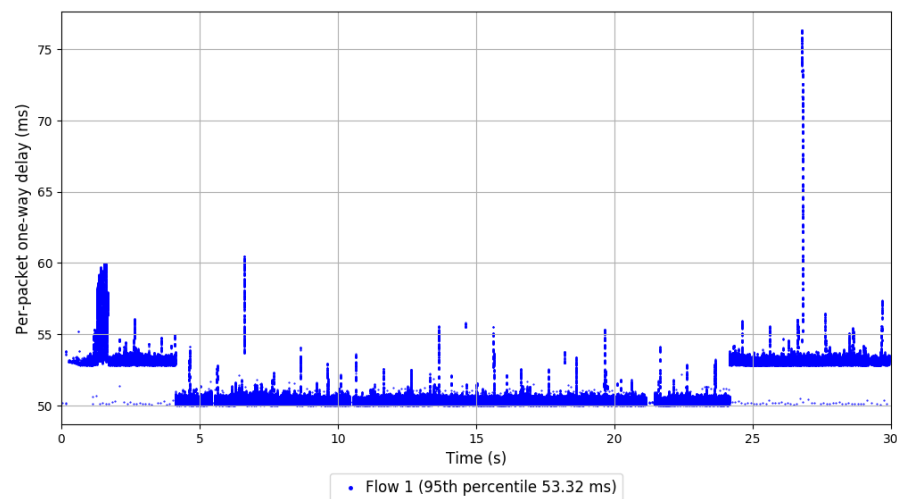
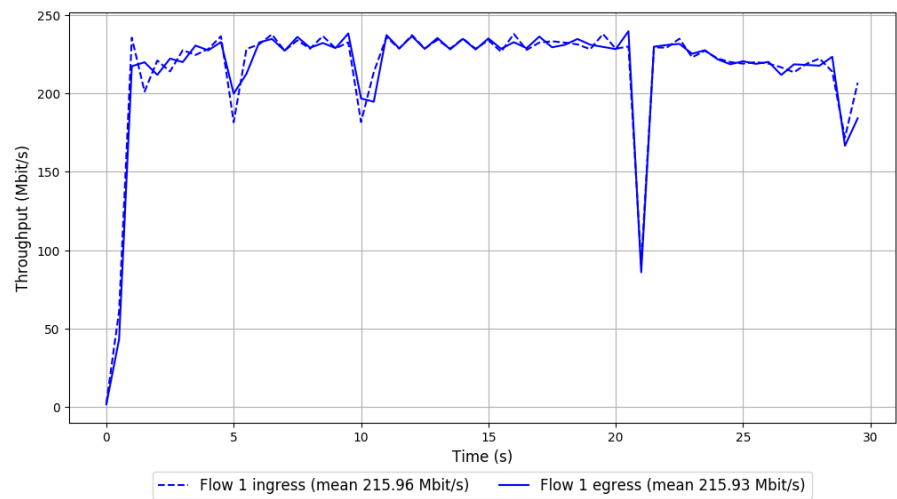
-- Flow 1:

Average throughput: 215.93 Mbit/s

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

Loss rate: 0.36%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 11:41:09

End at: 2017-12-05 11:41:40

Below is generated by plot.py at 2017-12-05 14:52:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.47 Mbit/s

95th percentile per-packet one-way delay: 50.739 ms

Loss rate: 0.35%

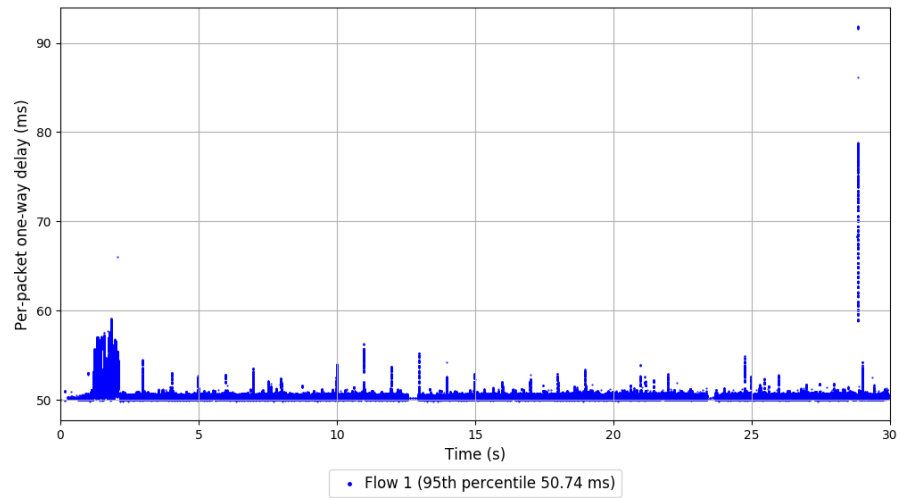
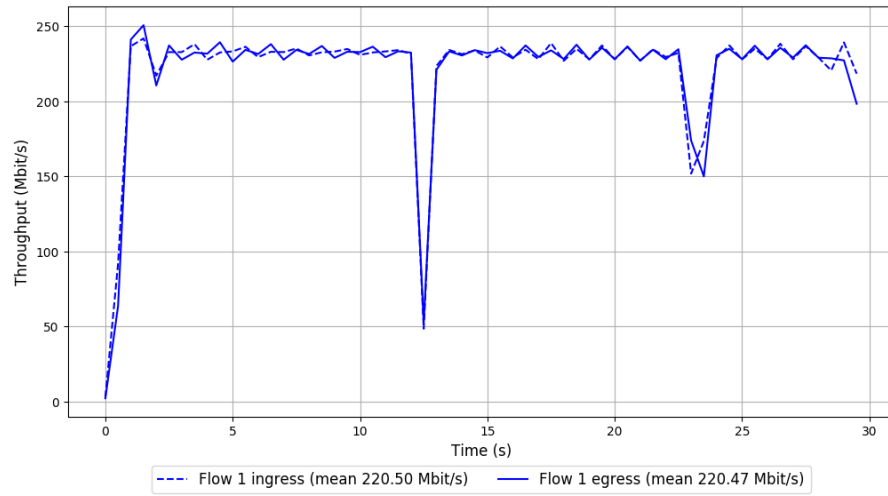
-- Flow 1:

Average throughput: 220.47 Mbit/s

95th percentile per-packet one-way delay: 50.739 ms

Loss rate: 0.35%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-05 11:51:39

End at: 2017-12-05 11:52:09

Below is generated by plot.py at 2017-12-05 14:52:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.12 Mbit/s

95th percentile per-packet one-way delay: 50.629 ms

Loss rate: 0.36%

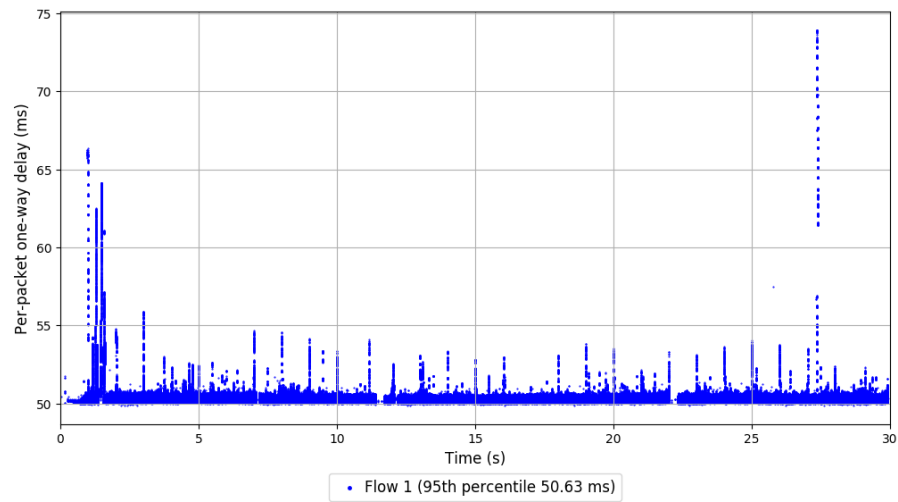
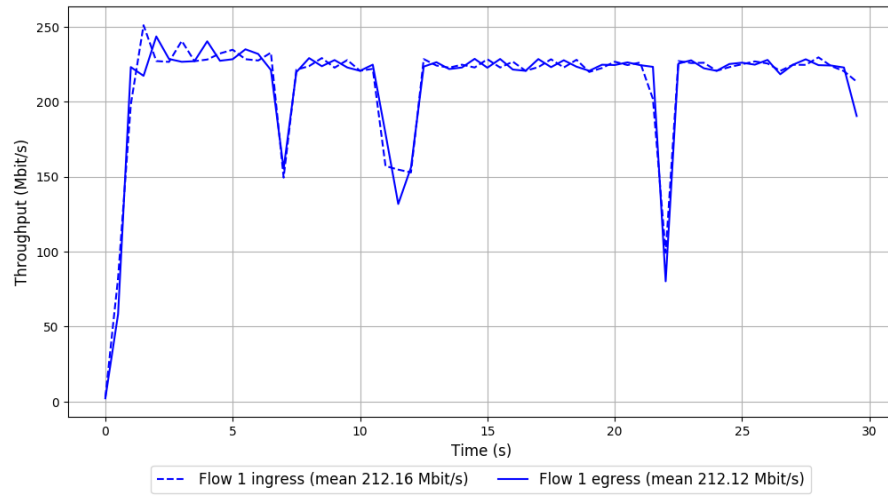
-- Flow 1:

Average throughput: 212.12 Mbit/s

95th percentile per-packet one-way delay: 50.629 ms

Loss rate: 0.36%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-05 12:01:55

End at: 2017-12-05 12:02:25

Below is generated by plot.py at 2017-12-05 14:52:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.14 Mbit/s

95th percentile per-packet one-way delay: 50.622 ms

Loss rate: 0.35%

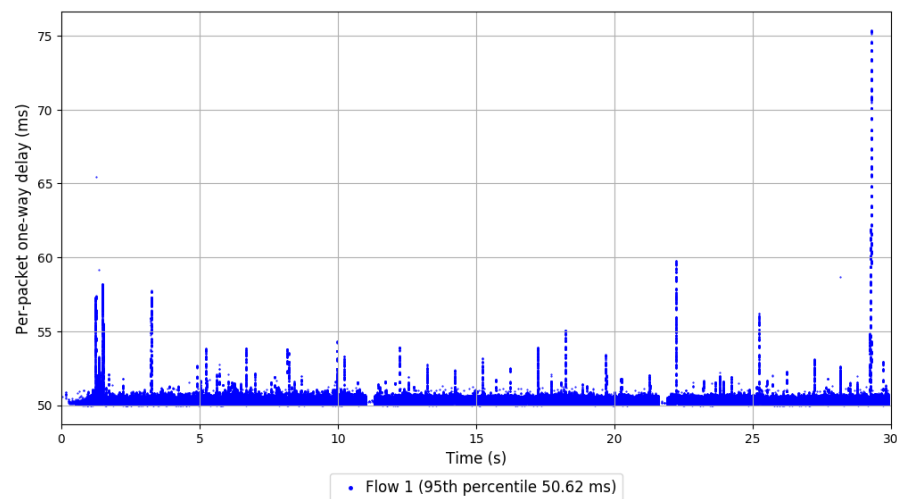
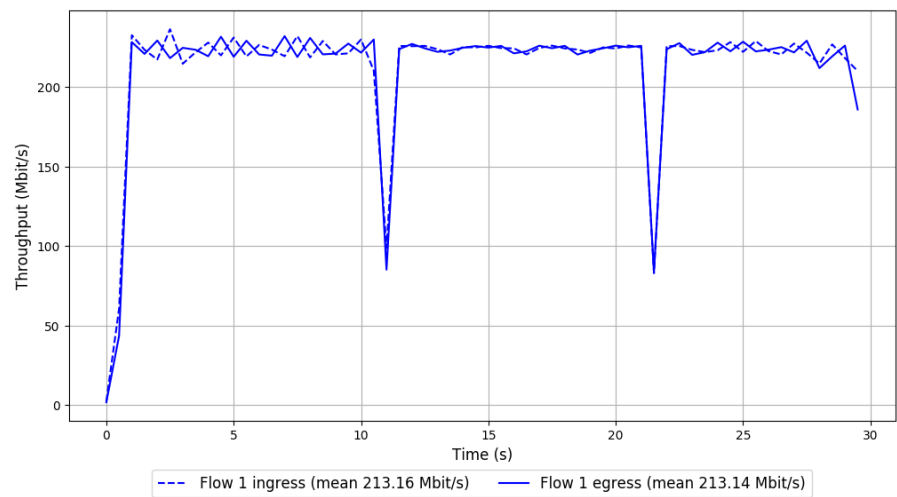
-- Flow 1:

Average throughput: 213.14 Mbit/s

95th percentile per-packet one-way delay: 50.622 ms

Loss rate: 0.35%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-05 12:12:13

End at: 2017-12-05 12:12:43

Below is generated by plot.py at 2017-12-05 14:52:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.48 Mbit/s

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

Loss rate: 0.36%

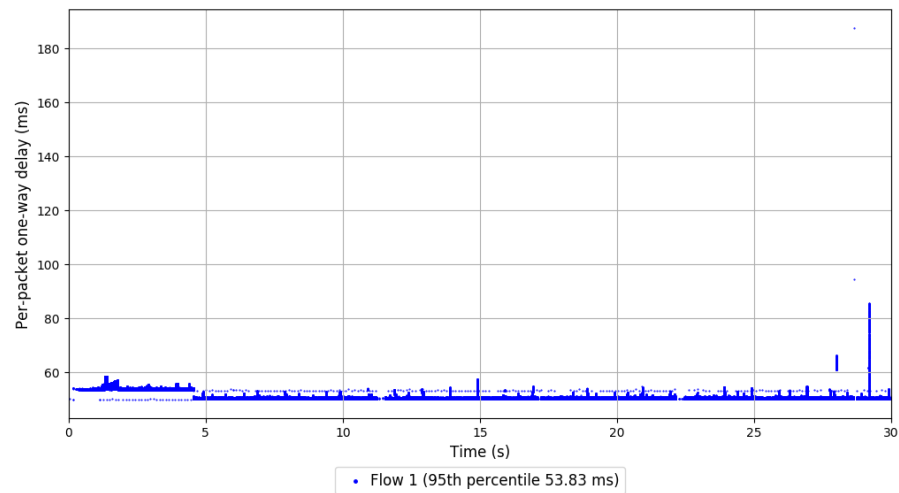
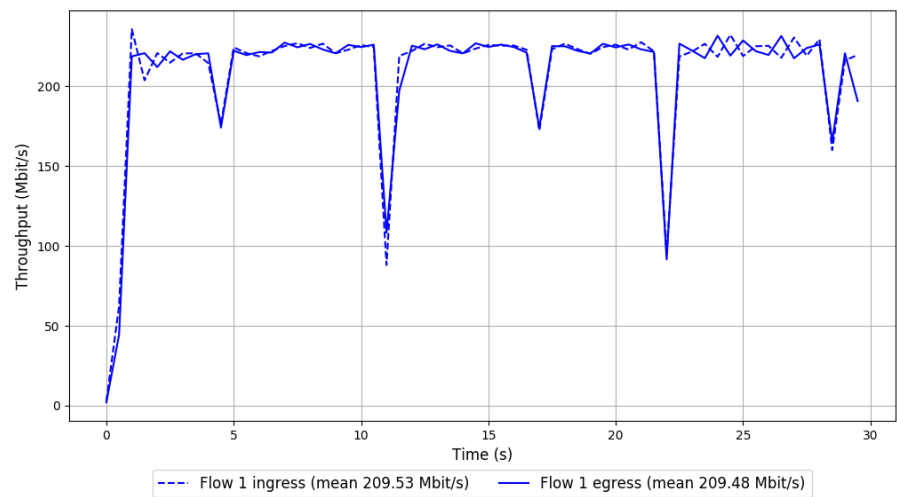
-- Flow 1:

Average throughput: 209.48 Mbit/s

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

Loss rate: 0.36%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-05 12:22:48

End at: 2017-12-05 12:23:18

Below is generated by plot.py at 2017-12-05 14:52:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.25 Mbit/s

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

Loss rate: 0.36%

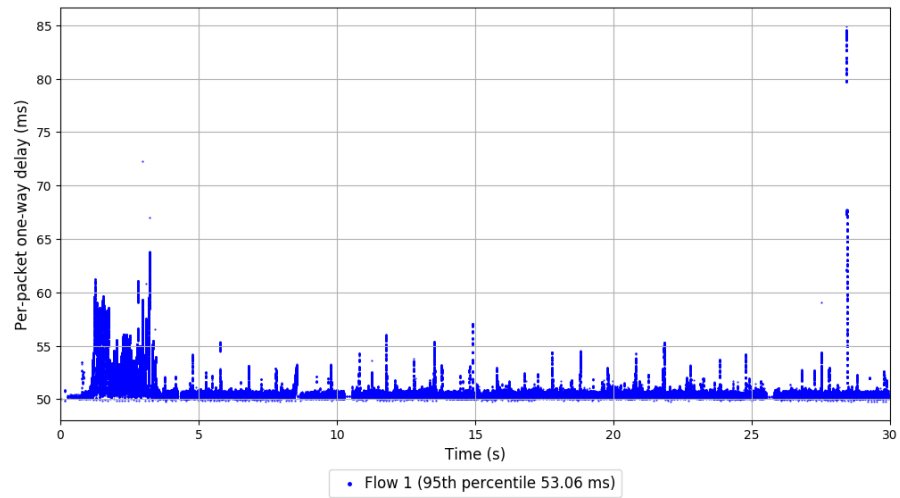
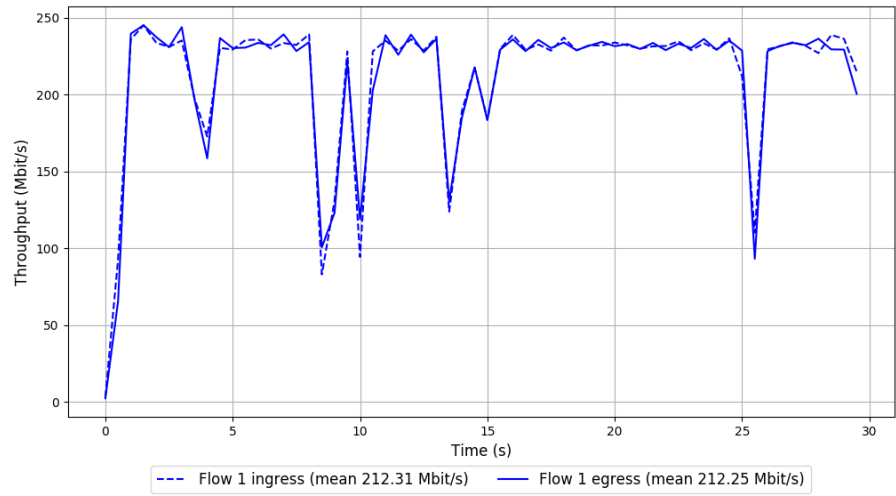
-- Flow 1:

Average throughput: 212.25 Mbit/s

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

Loss rate: 0.36%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-05 12:33:25

End at: 2017-12-05 12:33:55

Below is generated by plot.py at 2017-12-05 14:52:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.70 Mbit/s

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

Loss rate: 0.36%

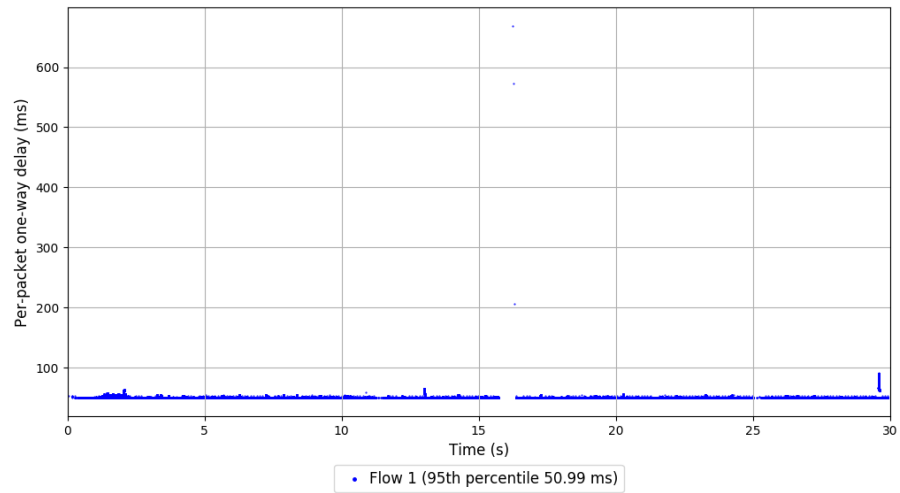
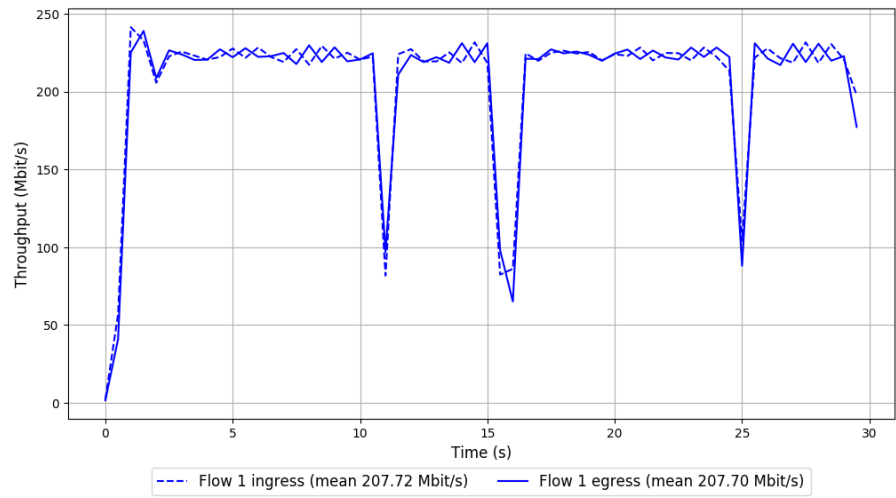
-- Flow 1:

Average throughput: 207.70 Mbit/s

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

Loss rate: 0.36%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-05 12:43:38

End at: 2017-12-05 12:44:08

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.49 Mbit/s

95th percentile per-packet one-way delay: 50.742 ms

Loss rate: 0.43%

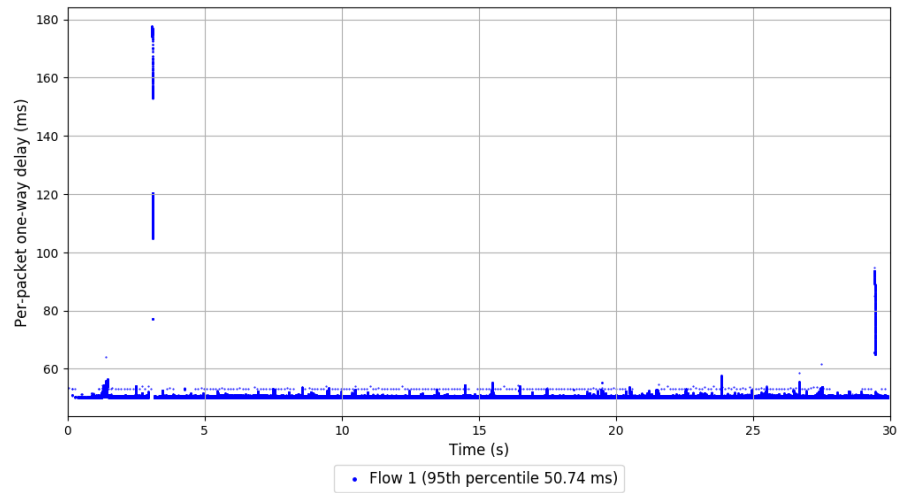
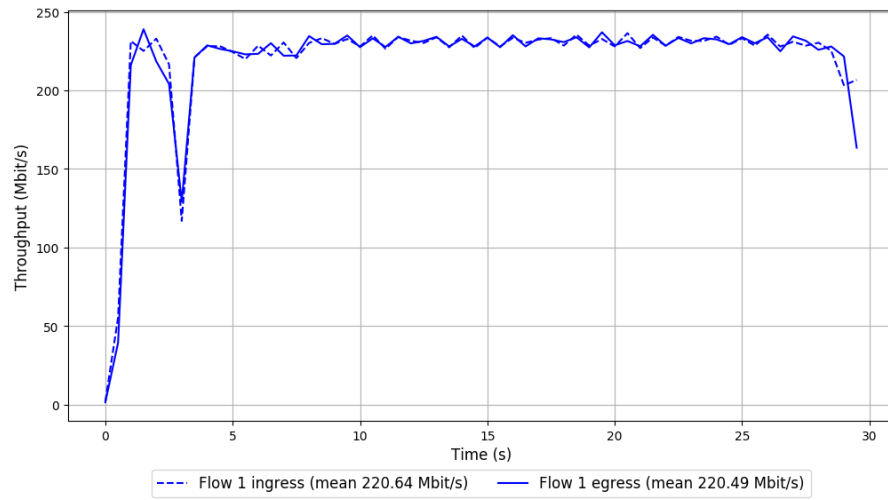
-- Flow 1:

Average throughput: 220.49 Mbit/s

95th percentile per-packet one-way delay: 50.742 ms

Loss rate: 0.43%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-05 12:53:56

End at: 2017-12-05 12:54:26

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.97 Mbit/s

95th percentile per-packet one-way delay: 53.862 ms

Loss rate: 0.37%

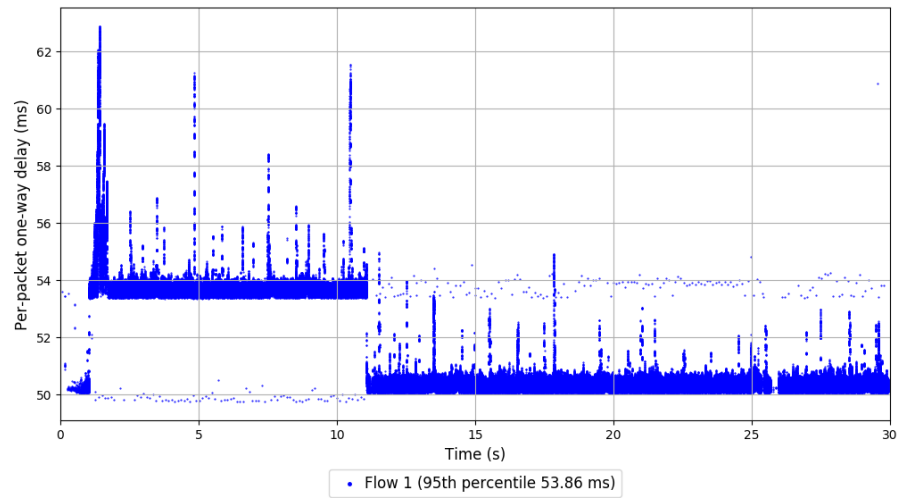
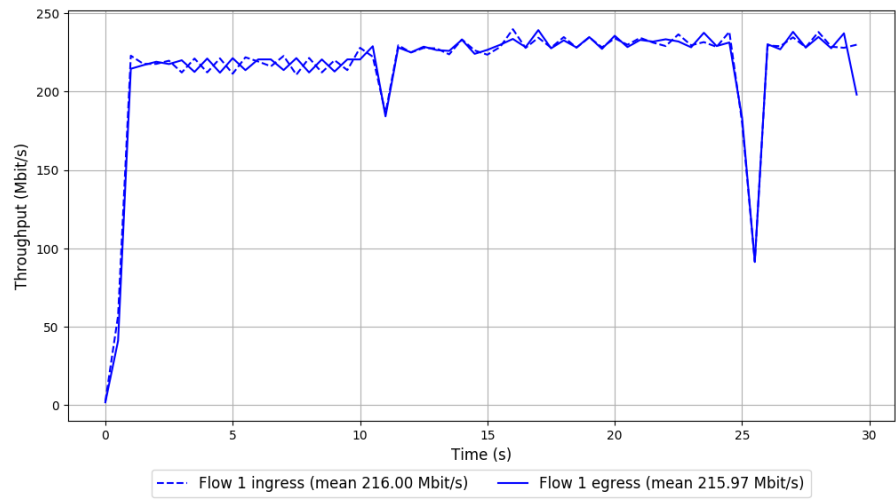
-- Flow 1:

Average throughput: 215.97 Mbit/s

95th percentile per-packet one-way delay: 53.862 ms

Loss rate: 0.37%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 11:21:41

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

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.33 Mbit/s

95th percentile per-packet one-way delay: 54.809 ms

Loss rate: 0.70%

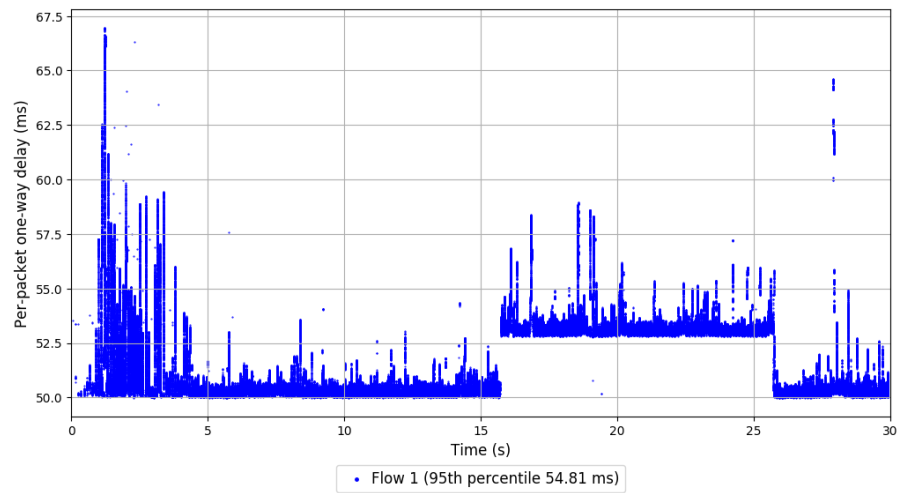
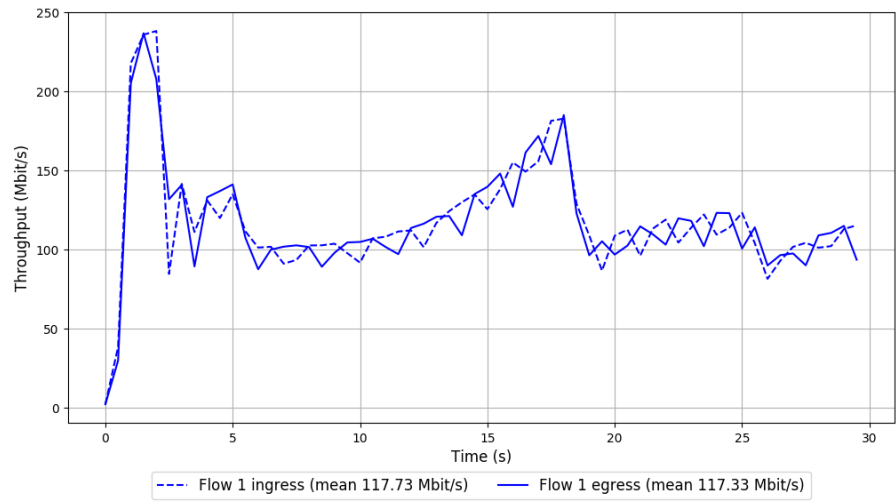
-- Flow 1:

Average throughput: 117.33 Mbit/s

95th percentile per-packet one-way delay: 54.809 ms

Loss rate: 0.70%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 11:31:59

End at: 2017-12-05 11:32:29

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 112.01 Mbit/s

95th percentile per-packet one-way delay: 52.003 ms

Loss rate: 0.66%

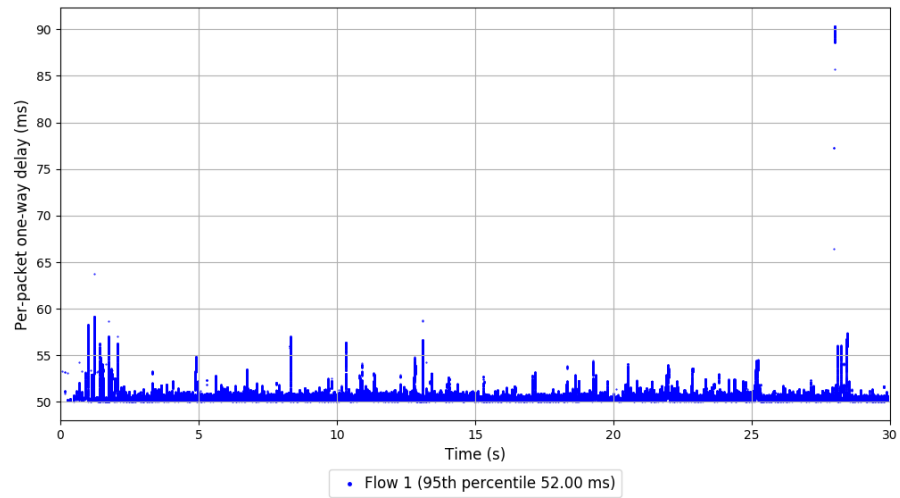
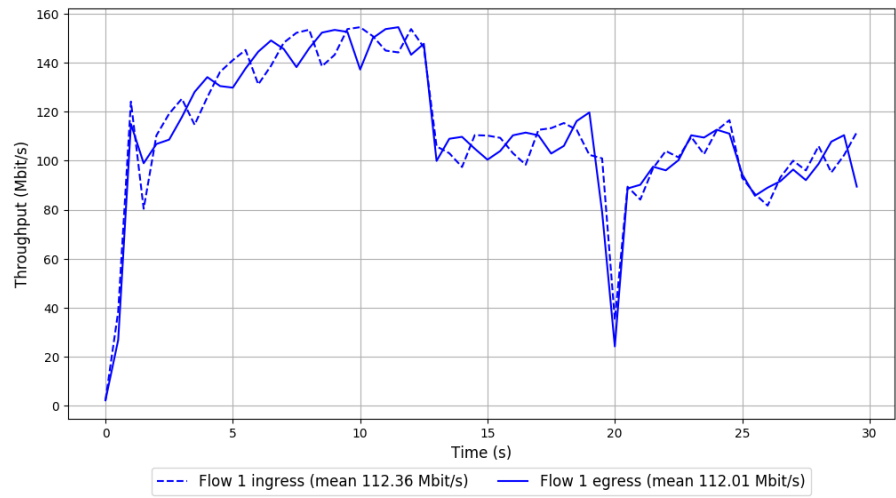
-- Flow 1:

Average throughput: 112.01 Mbit/s

95th percentile per-packet one-way delay: 52.003 ms

Loss rate: 0.66%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 11:42:36

End at: 2017-12-05 11:43:06

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.03 Mbit/s

95th percentile per-packet one-way delay: 54.087 ms

Loss rate: 0.45%

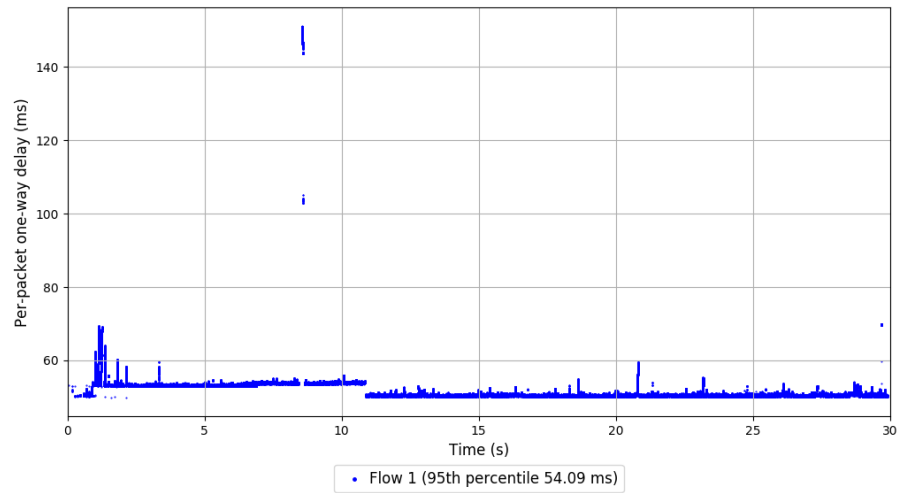
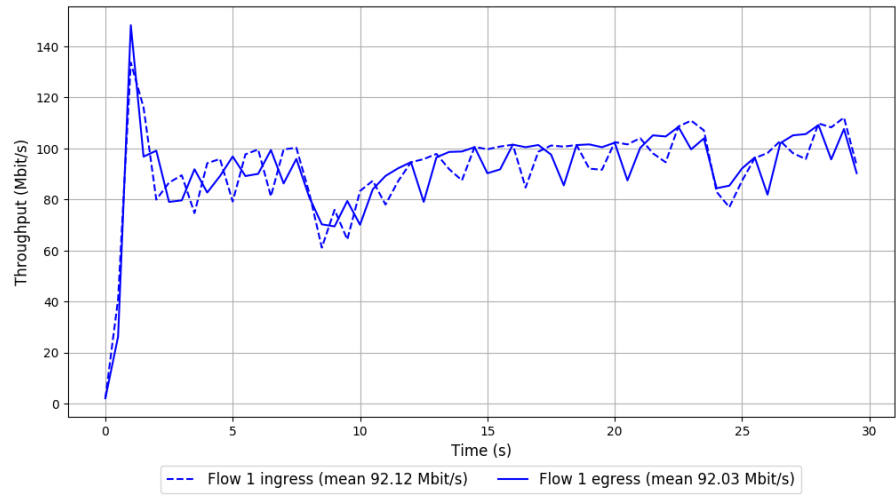
-- Flow 1:

Average throughput: 92.03 Mbit/s

95th percentile per-packet one-way delay: 54.087 ms

Loss rate: 0.45%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-05 11:53:06

End at: 2017-12-05 11:53:36

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.05 Mbit/s

95th percentile per-packet one-way delay: 55.636 ms

Loss rate: 0.69%

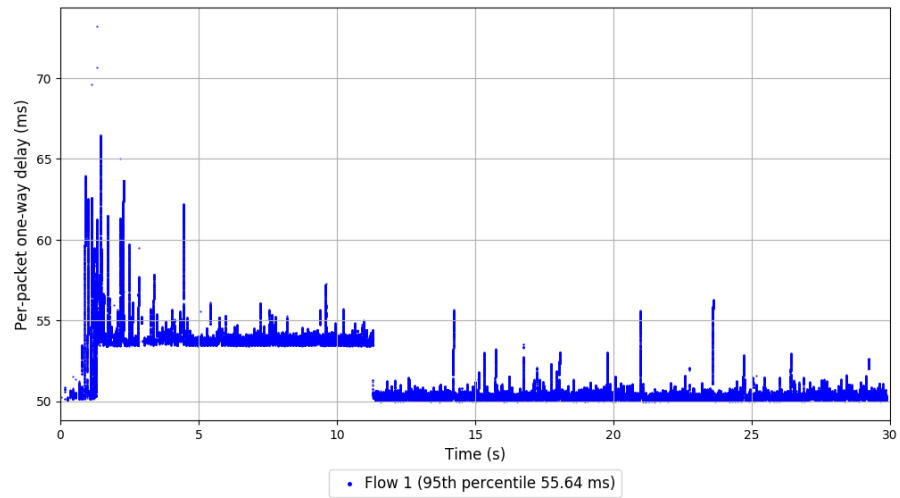
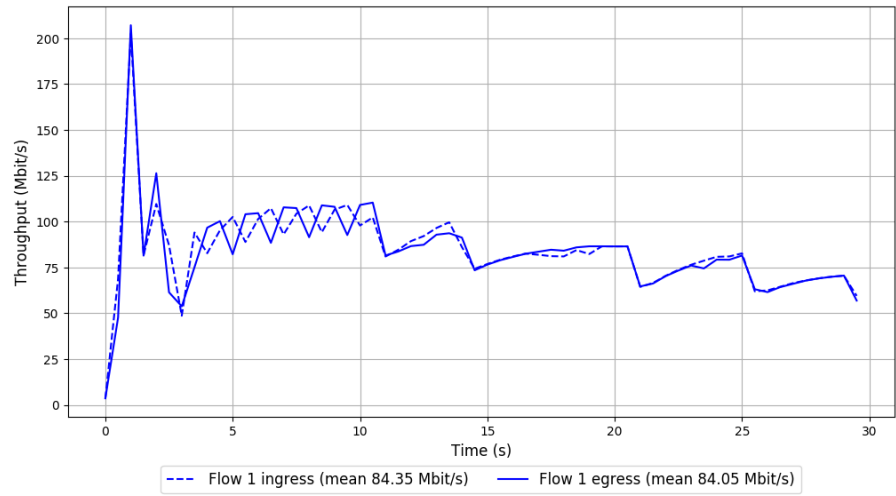
-- Flow 1:

Average throughput: 84.05 Mbit/s

95th percentile per-packet one-way delay: 55.636 ms

Loss rate: 0.69%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-05 12:03:21

End at: 2017-12-05 12:03:51

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 136.82 Mbit/s

95th percentile per-packet one-way delay: 51.528 ms

Loss rate: 0.53%

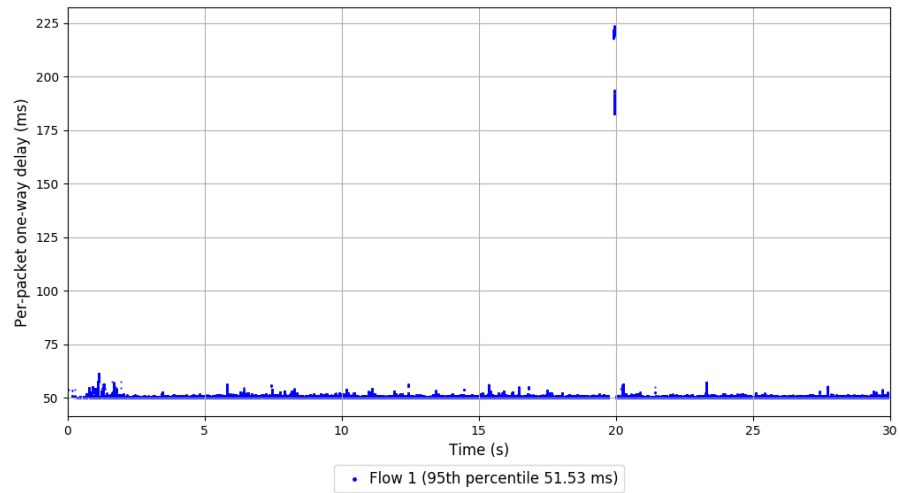
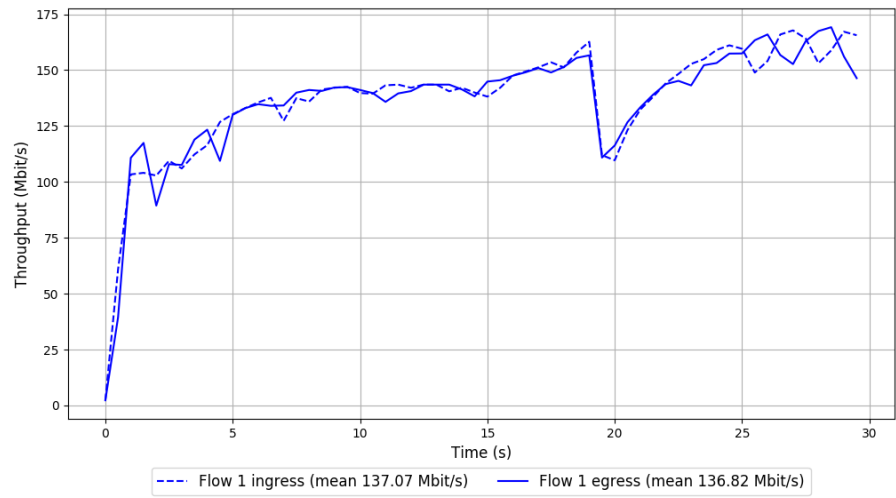
-- Flow 1:

Average throughput: 136.82 Mbit/s

95th percentile per-packet one-way delay: 51.528 ms

Loss rate: 0.53%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-05 12:13:38

End at: 2017-12-05 12:14:08

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.12 Mbit/s

95th percentile per-packet one-way delay: 53.028 ms

Loss rate: 0.33%

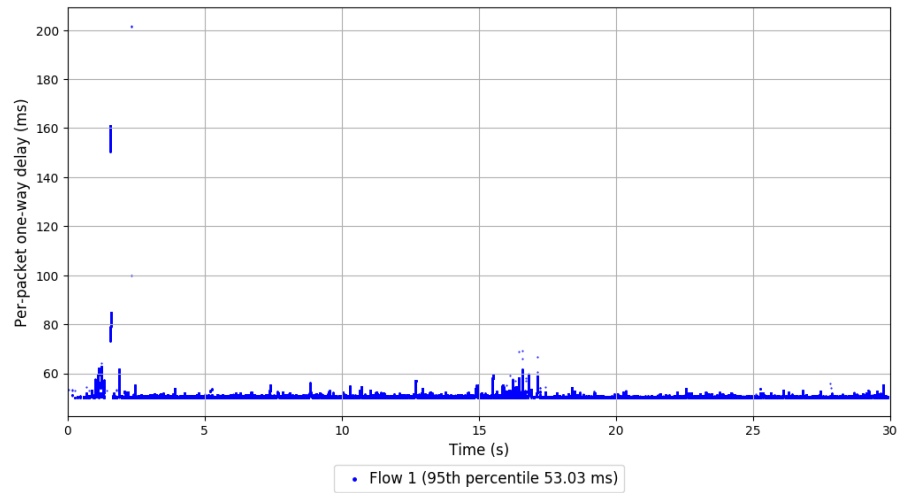
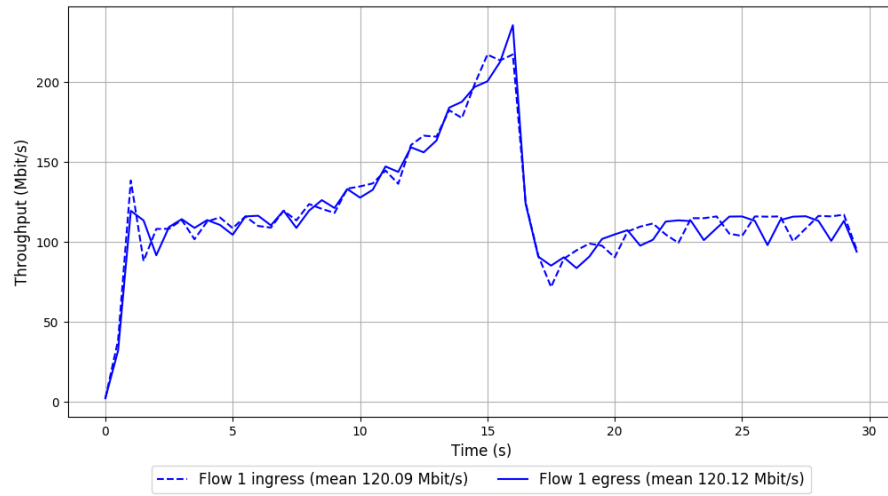
-- Flow 1:

Average throughput: 120.12 Mbit/s

95th percentile per-packet one-way delay: 53.028 ms

Loss rate: 0.33%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-05 12:24:14

End at: 2017-12-05 12:24:44

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.96 Mbit/s

95th percentile per-packet one-way delay: 53.705 ms

Loss rate: 0.81%

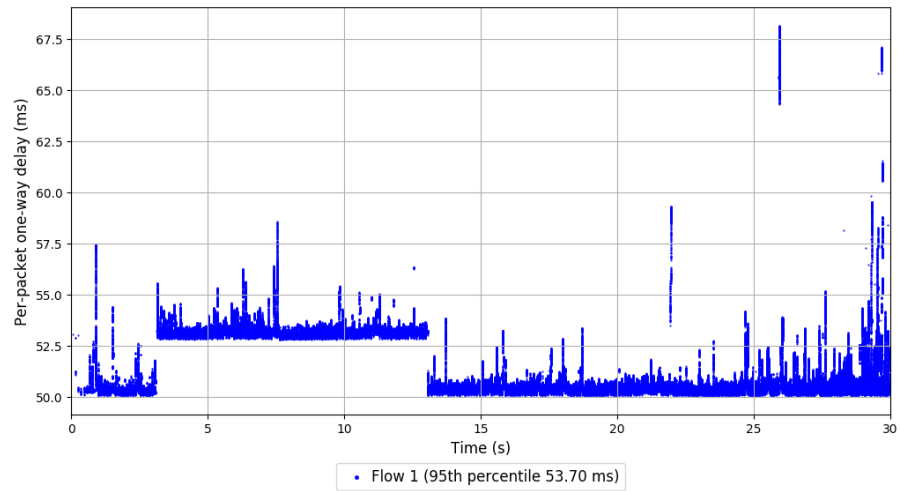
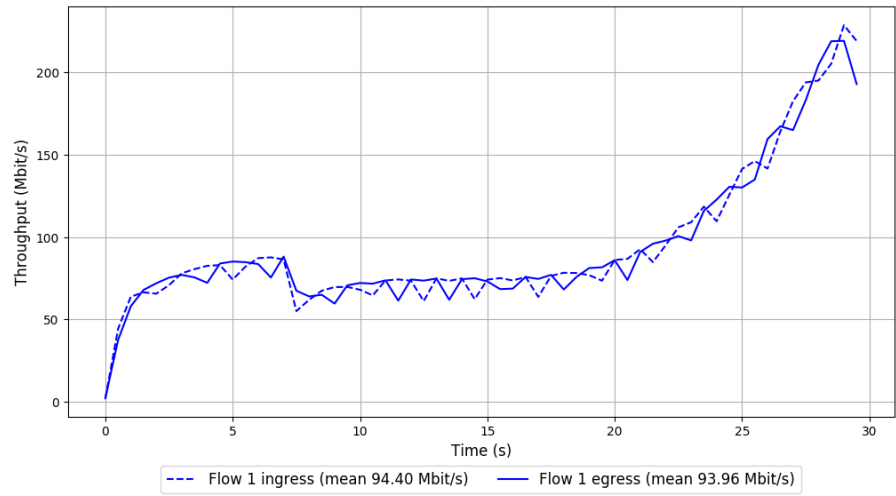
-- Flow 1:

Average throughput: 93.96 Mbit/s

95th percentile per-packet one-way delay: 53.705 ms

Loss rate: 0.81%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-05 12:34:51

End at: 2017-12-05 12:35:21

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.05 Mbit/s

95th percentile per-packet one-way delay: 52.239 ms

Loss rate: 0.43%

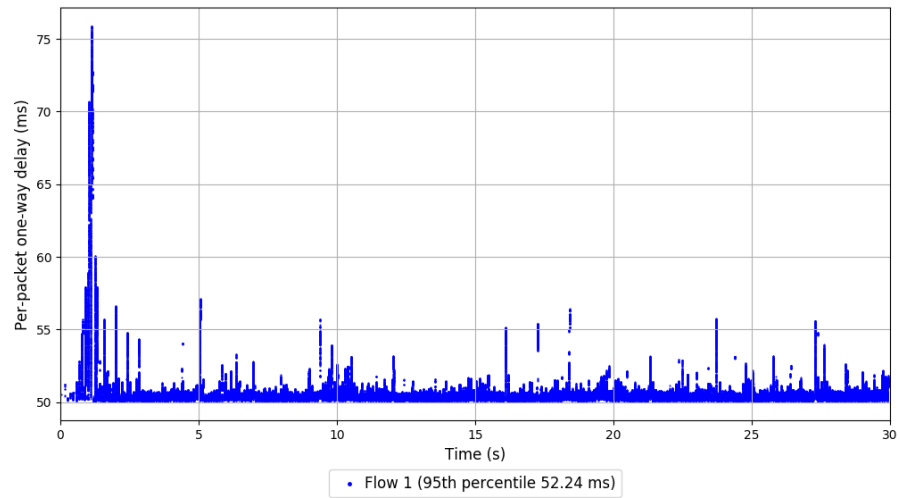
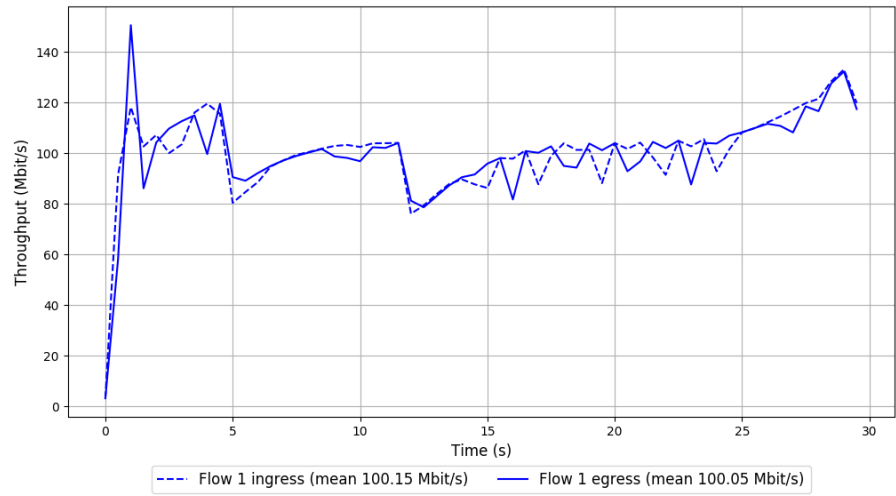
-- Flow 1:

Average throughput: 100.05 Mbit/s

95th percentile per-packet one-way delay: 52.239 ms

Loss rate: 0.43%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-05 12:45:04

End at: 2017-12-05 12:45:34

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.06 Mbit/s

95th percentile per-packet one-way delay: 54.790 ms

Loss rate: 0.30%

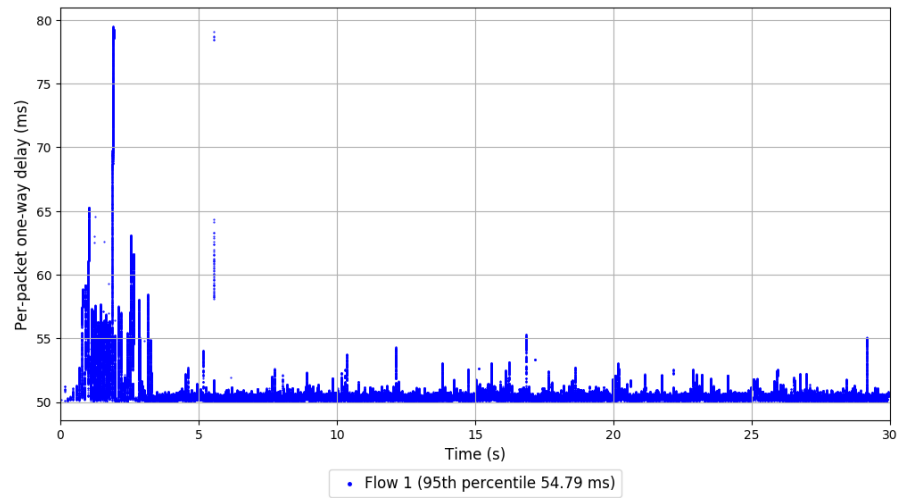
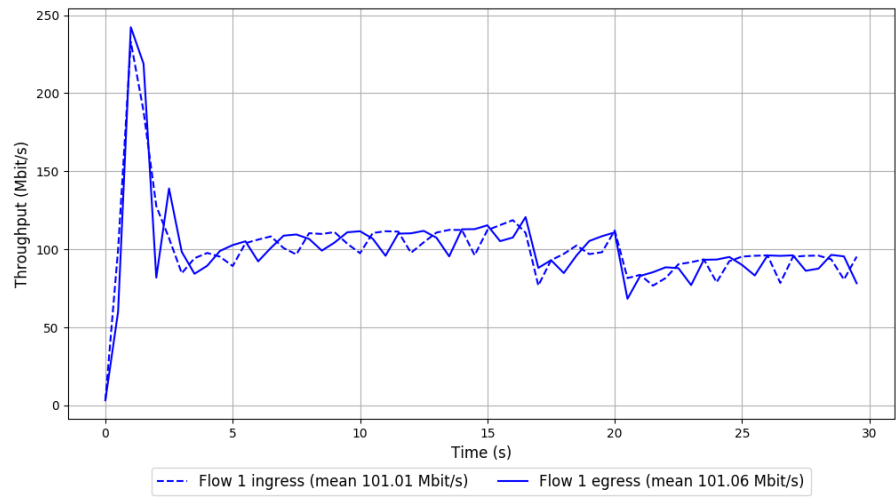
-- Flow 1:

Average throughput: 101.06 Mbit/s

95th percentile per-packet one-way delay: 54.790 ms

Loss rate: 0.30%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-05 12:55:22

End at: 2017-12-05 12:55:52

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.04 Mbit/s

95th percentile per-packet one-way delay: 53.145 ms

Loss rate: 0.34%

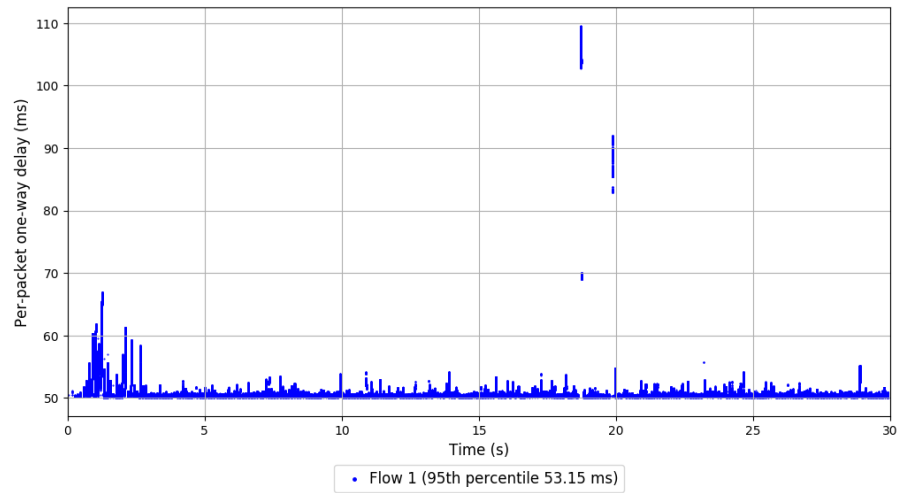
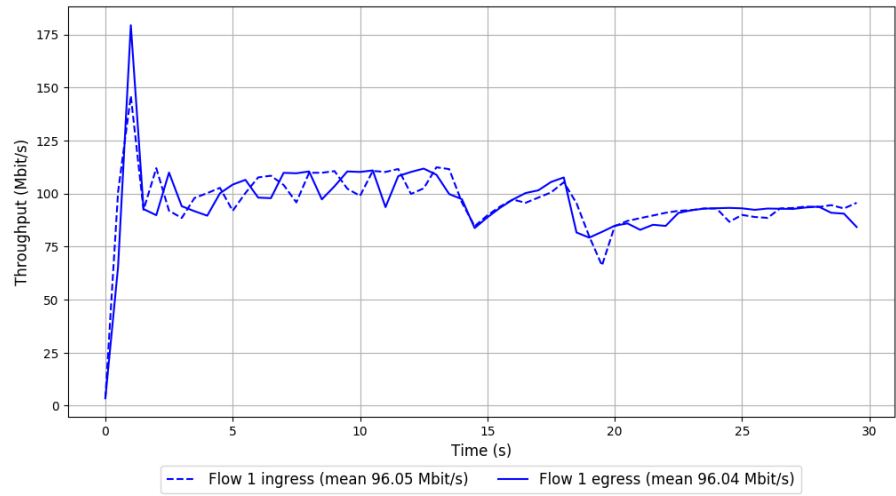
-- Flow 1:

Average throughput: 96.04 Mbit/s

95th percentile per-packet one-way delay: 53.145 ms

Loss rate: 0.34%

Run 10: Report of TCP Cubic — Data Link

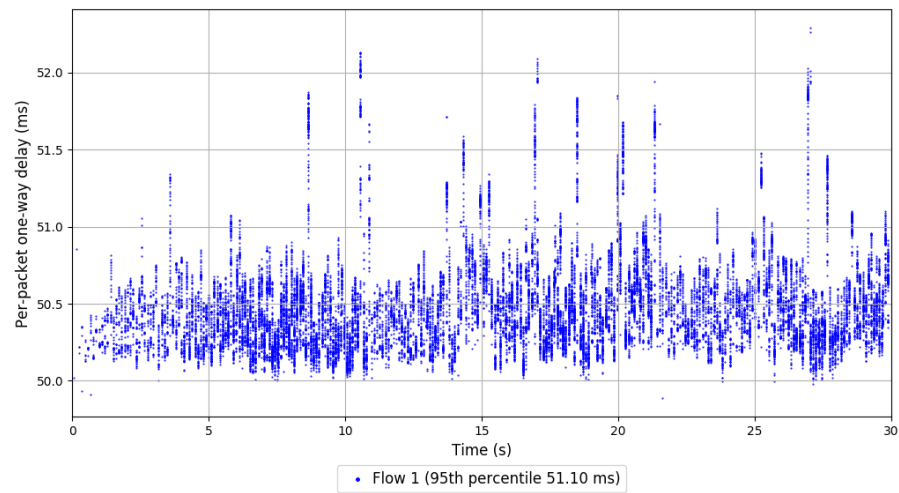
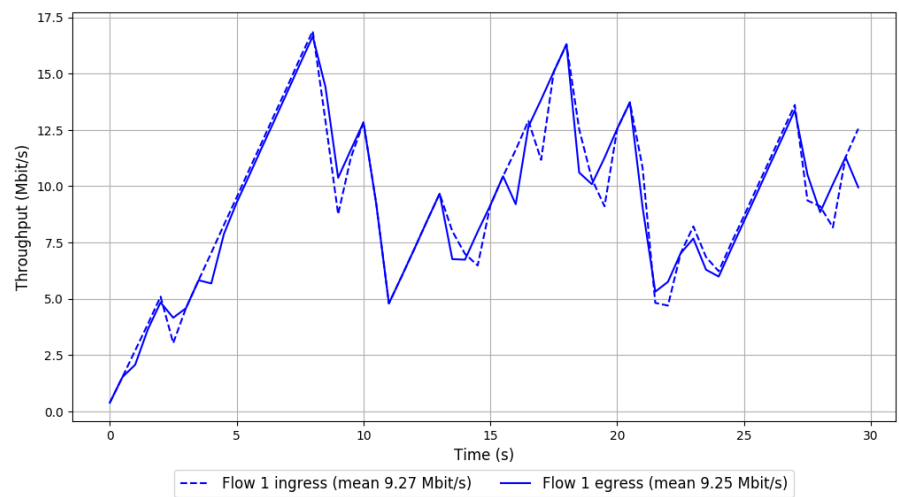


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 11:17:22
End at: 2017-12-05 11:17:52

# Below is generated by plot.py at 2017-12-05 14:55:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 51.103 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 51.103 ms
Loss rate: 0.51%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-05 11:27:43

End at: 2017-12-05 11:28:13

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 50.973 ms

Loss rate: 1.02%

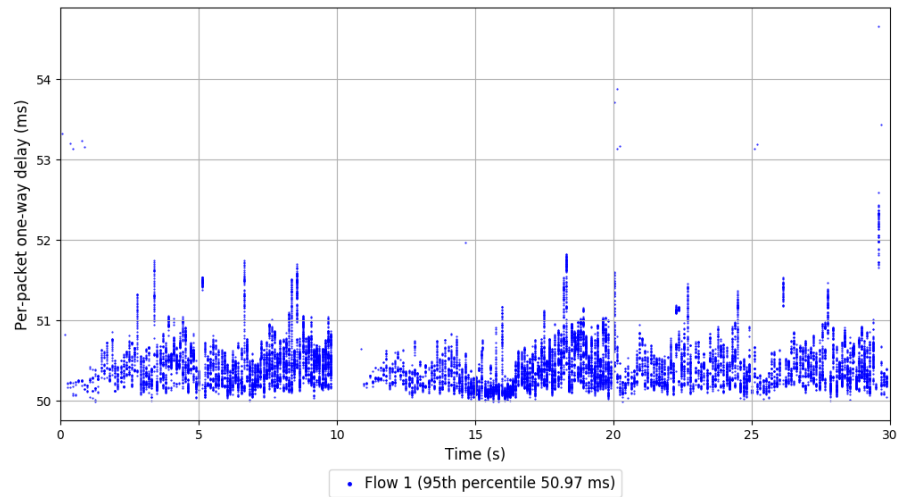
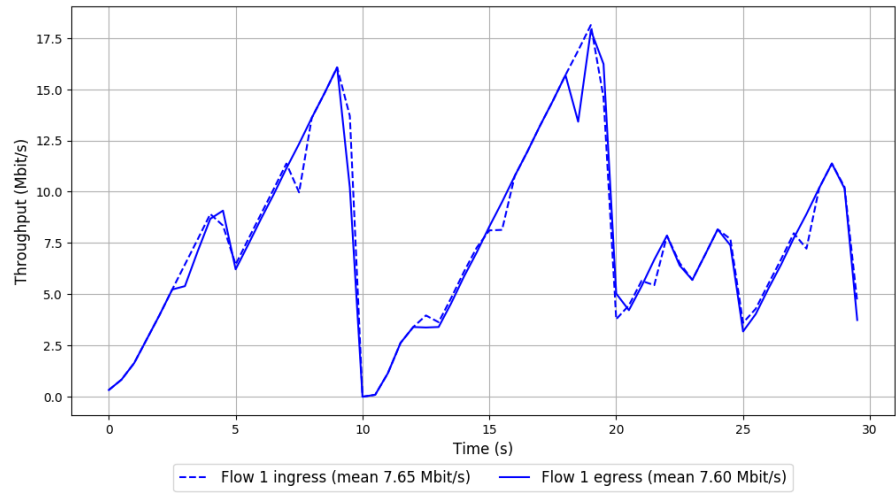
-- Flow 1:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 50.973 ms

Loss rate: 1.02%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 11:38:19

End at: 2017-12-05 11:38:49

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.42 Mbit/s

95th percentile per-packet one-way delay: 50.888 ms

Loss rate: 0.75%

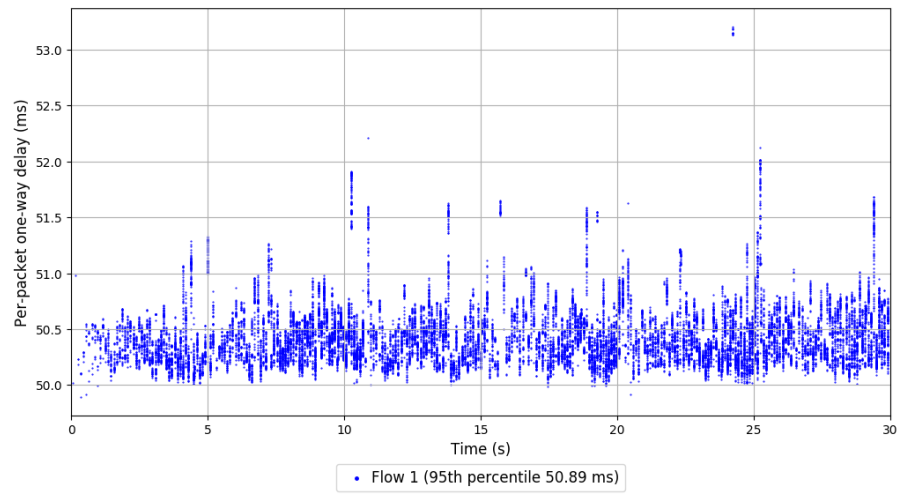
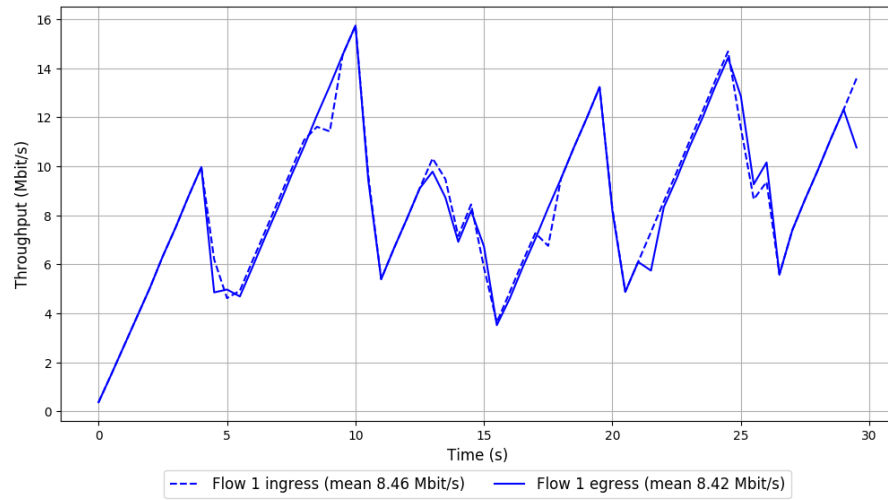
-- Flow 1:

Average throughput: 8.42 Mbit/s

95th percentile per-packet one-way delay: 50.888 ms

Loss rate: 0.75%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-05 11:48:48

End at: 2017-12-05 11:49:18

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 54.201 ms

Loss rate: 0.31%

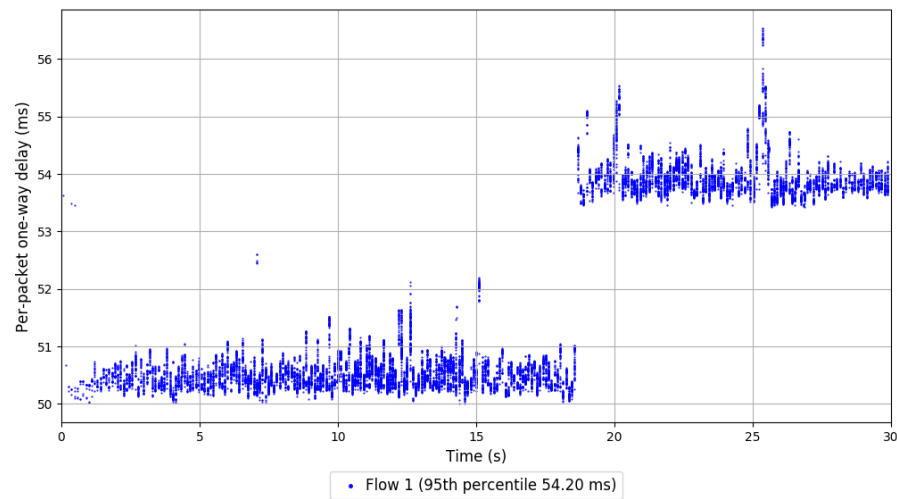
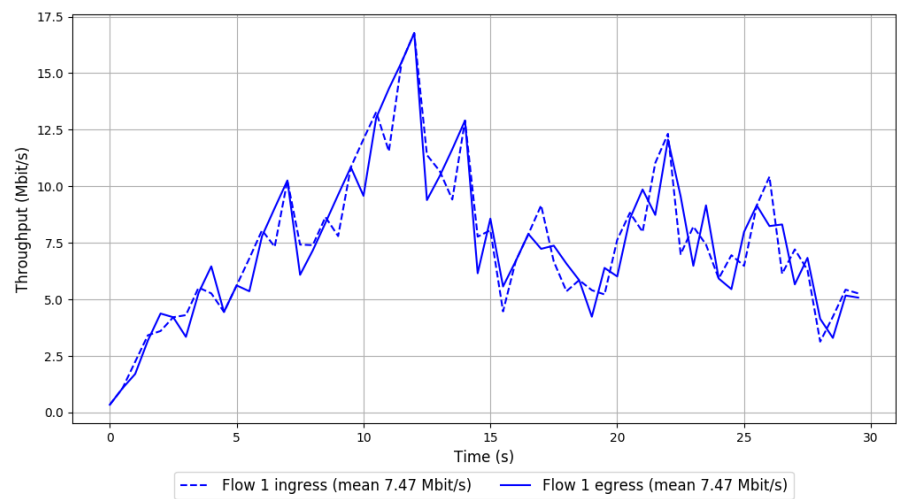
-- Flow 1:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 54.201 ms

Loss rate: 0.31%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-05 11:59:05

End at: 2017-12-05 11:59:35

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.71 Mbit/s

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

Loss rate: 0.49%

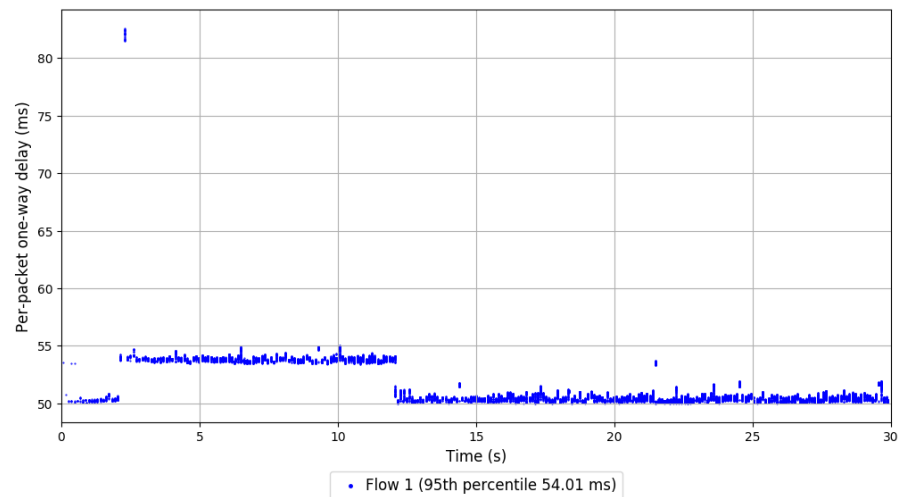
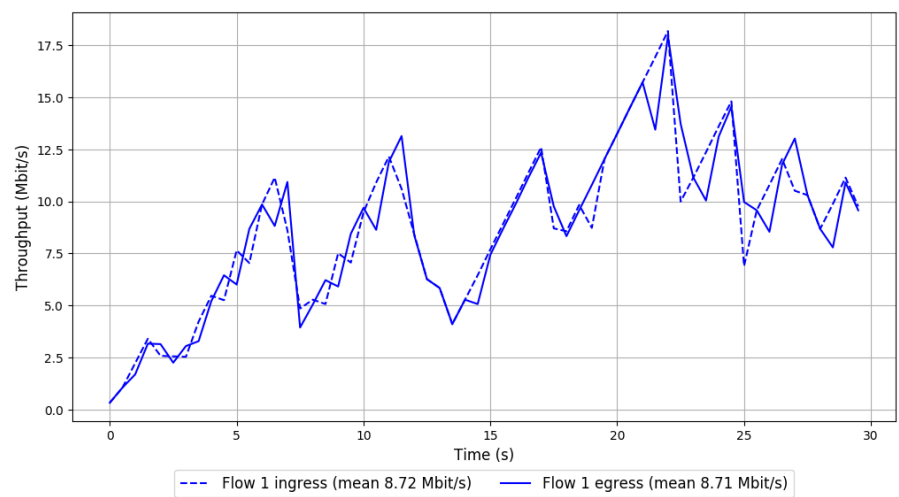
-- Flow 1:

Average throughput: 8.71 Mbit/s

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

Loss rate: 0.49%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-05 12:09:22

End at: 2017-12-05 12:09:53

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 50.912 ms

Loss rate: 0.48%

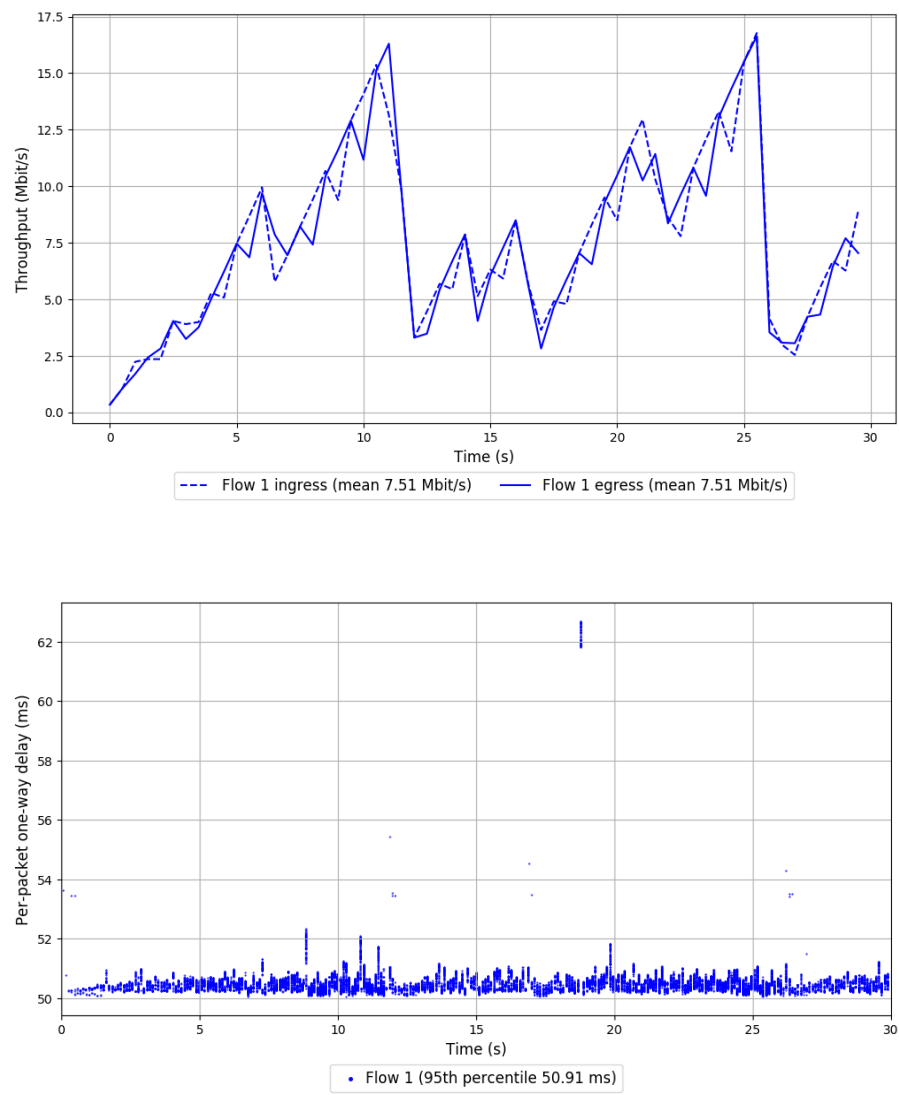
-- Flow 1:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 50.912 ms

Loss rate: 0.48%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-05 12:20:00

End at: 2017-12-05 12:20:30

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.74 Mbit/s

95th percentile per-packet one-way delay: 51.277 ms

Loss rate: 0.27%

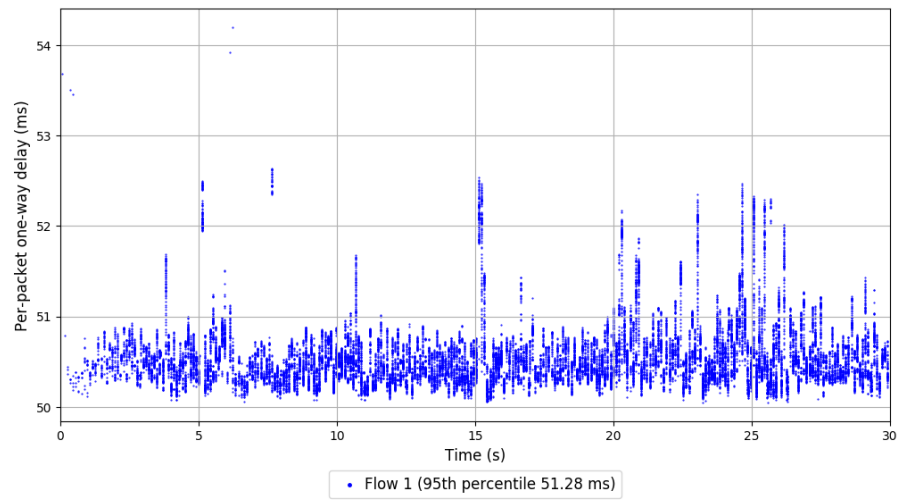
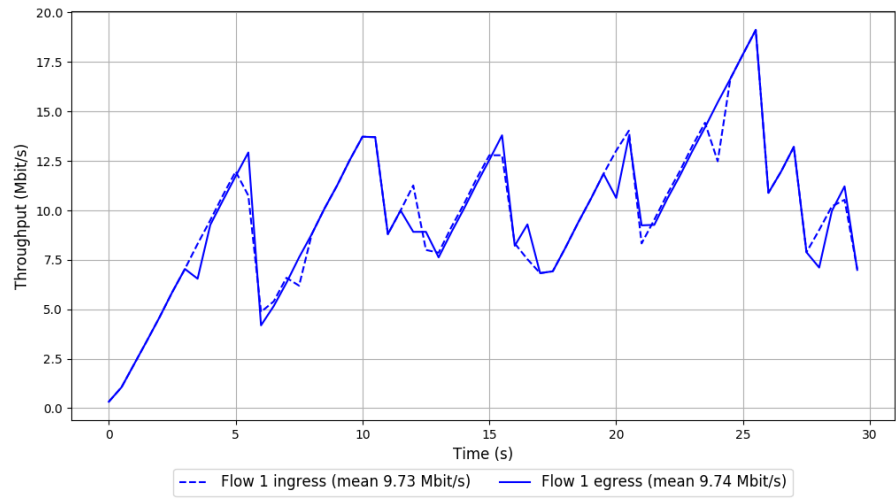
-- Flow 1:

Average throughput: 9.74 Mbit/s

95th percentile per-packet one-way delay: 51.277 ms

Loss rate: 0.27%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-05 12:30:35

End at: 2017-12-05 12:31:05

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.25 Mbit/s

95th percentile per-packet one-way delay: 53.352 ms

Loss rate: 0.37%

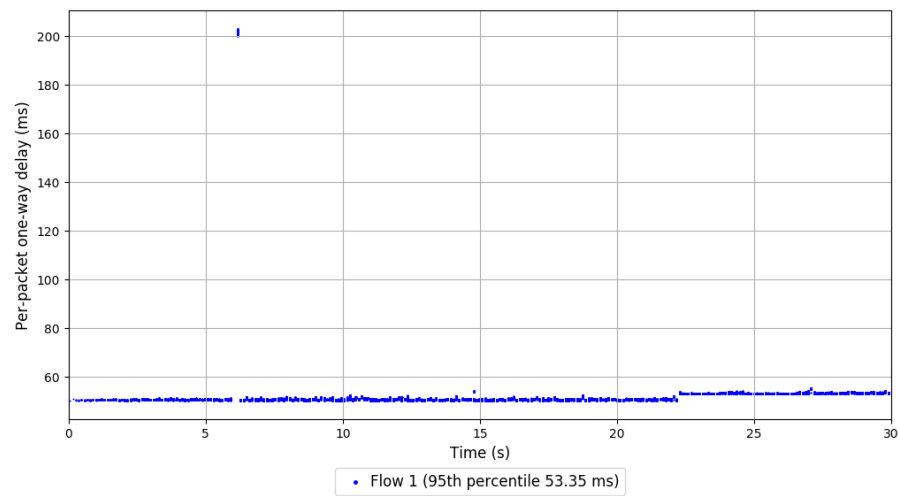
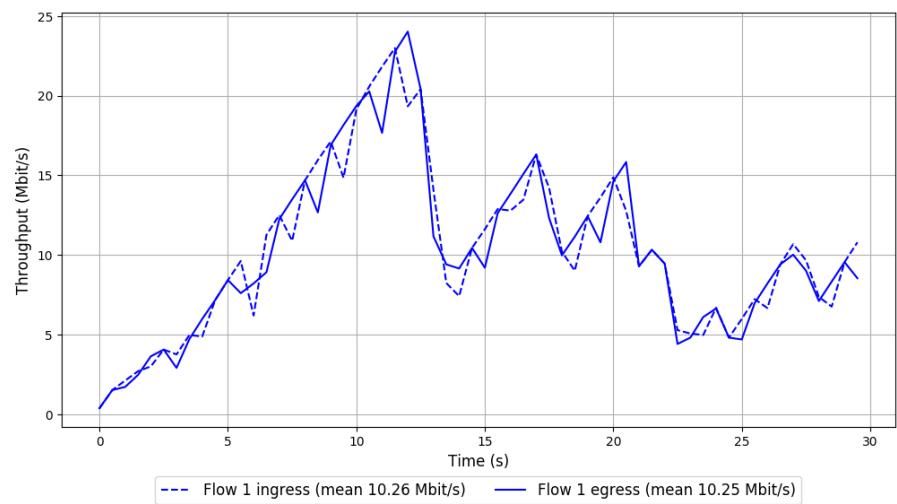
-- Flow 1:

Average throughput: 10.25 Mbit/s

95th percentile per-packet one-way delay: 53.352 ms

Loss rate: 0.37%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-05 12:40:48

End at: 2017-12-05 12:41:18

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.34 Mbit/s

95th percentile per-packet one-way delay: 53.535 ms

Loss rate: 0.25%

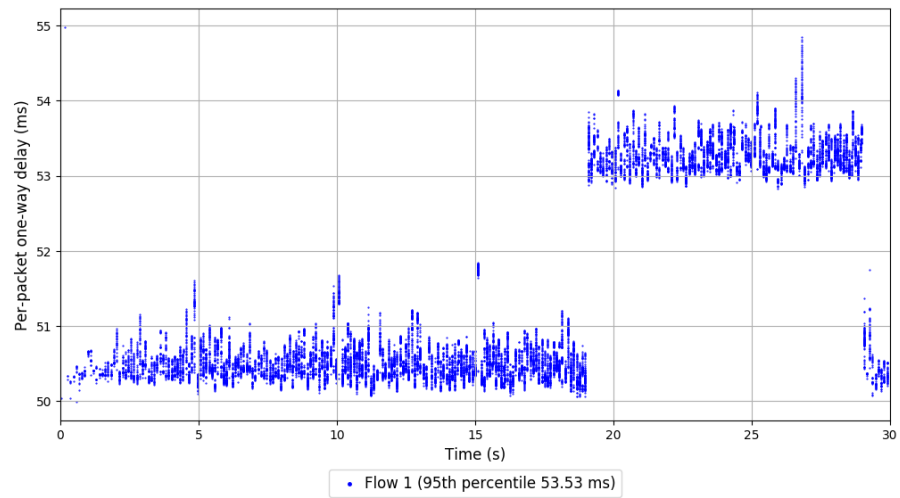
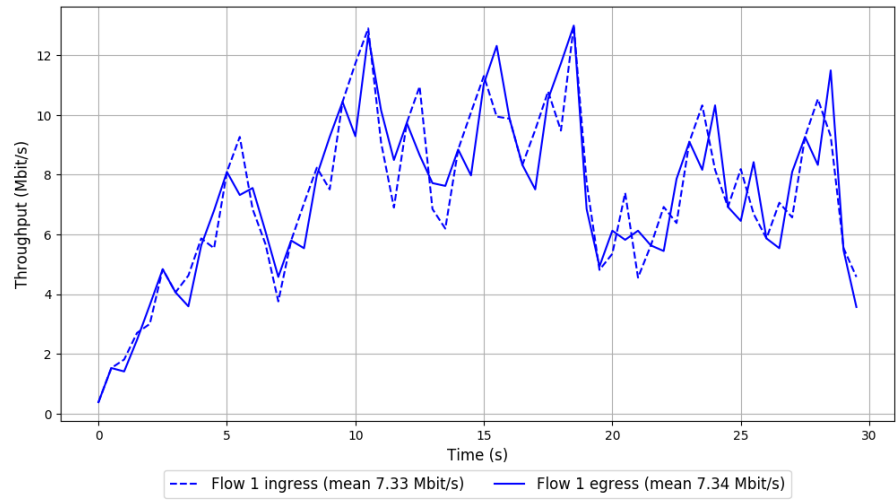
-- Flow 1:

Average throughput: 7.34 Mbit/s

95th percentile per-packet one-way delay: 53.535 ms

Loss rate: 0.25%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

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

End at: 2017-12-05 12:51:35

Below is generated by plot.py at 2017-12-05 14:55:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 54.359 ms

Loss rate: 0.64%

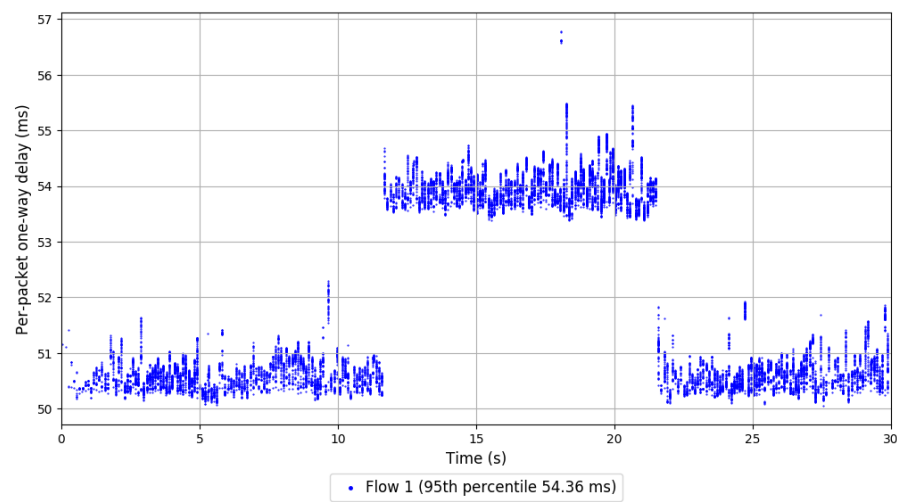
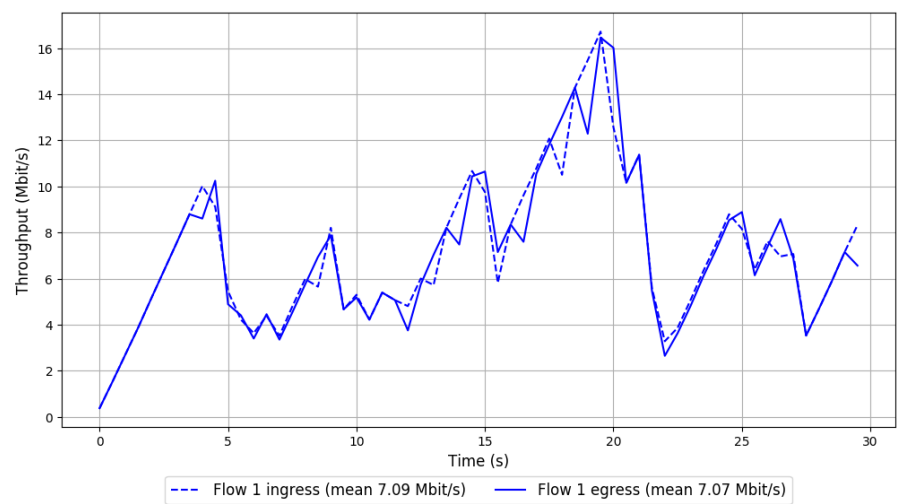
-- Flow 1:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 54.359 ms

Loss rate: 0.64%

Run 10: Report of LEDBAT — Data Link

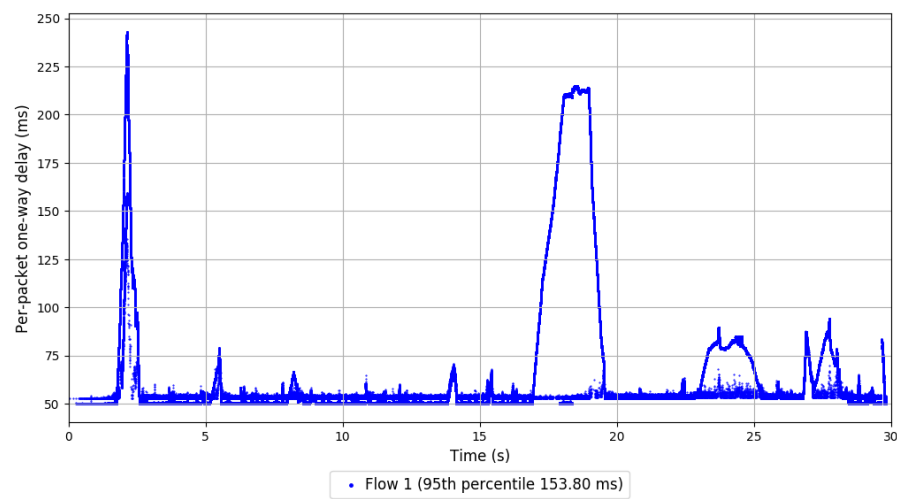
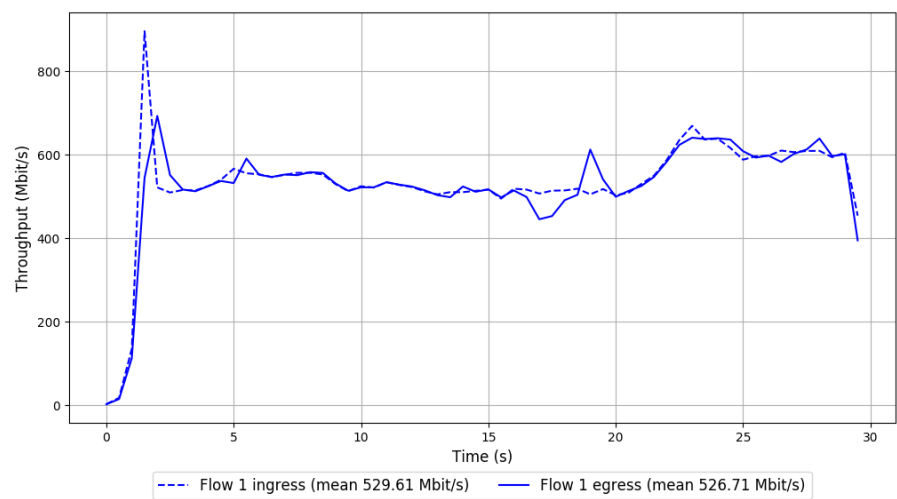


```
Run 1: Statistics of PCC

Start at: 2017-12-05 11:23:59
End at: 2017-12-05 11:24:29

# Below is generated by plot.py at 2017-12-05 15:04:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 526.71 Mbit/s
95th percentile per-packet one-way delay: 153.800 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 526.71 Mbit/s
95th percentile per-packet one-way delay: 153.800 ms
Loss rate: 0.89%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-05 11:34:16

End at: 2017-12-05 11:34:46

Below is generated by plot.py at 2017-12-05 15:04:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 515.21 Mbit/s

95th percentile per-packet one-way delay: 130.684 ms

Loss rate: 3.43%

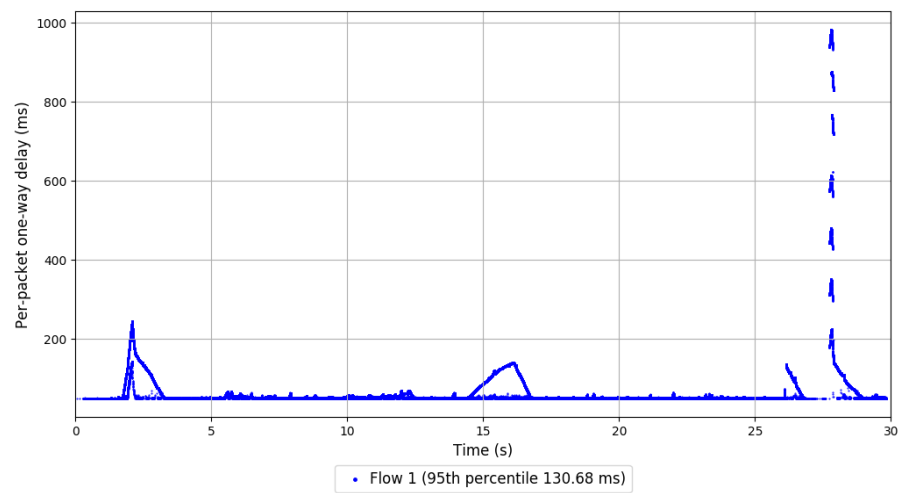
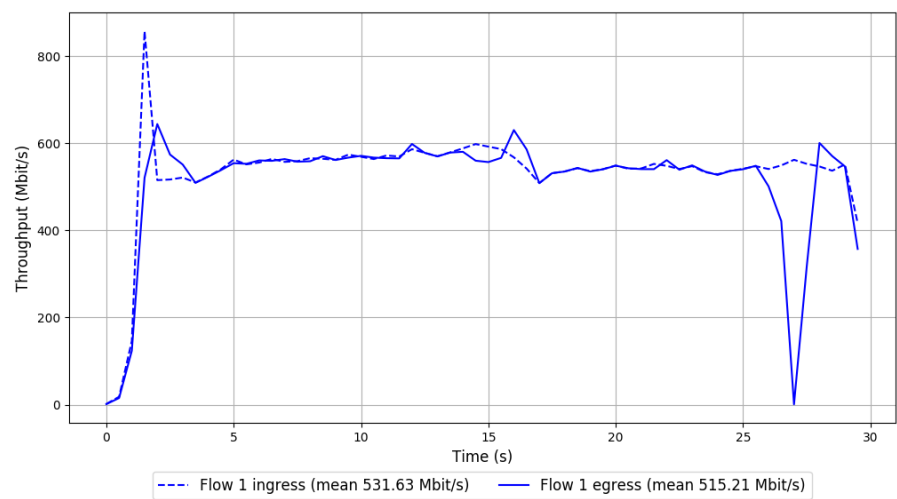
-- Flow 1:

Average throughput: 515.21 Mbit/s

95th percentile per-packet one-way delay: 130.684 ms

Loss rate: 3.43%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-05 11:44:53

End at: 2017-12-05 11:45:23

Below is generated by plot.py at 2017-12-05 15:04:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 527.22 Mbit/s

95th percentile per-packet one-way delay: 64.337 ms

Loss rate: 0.71%

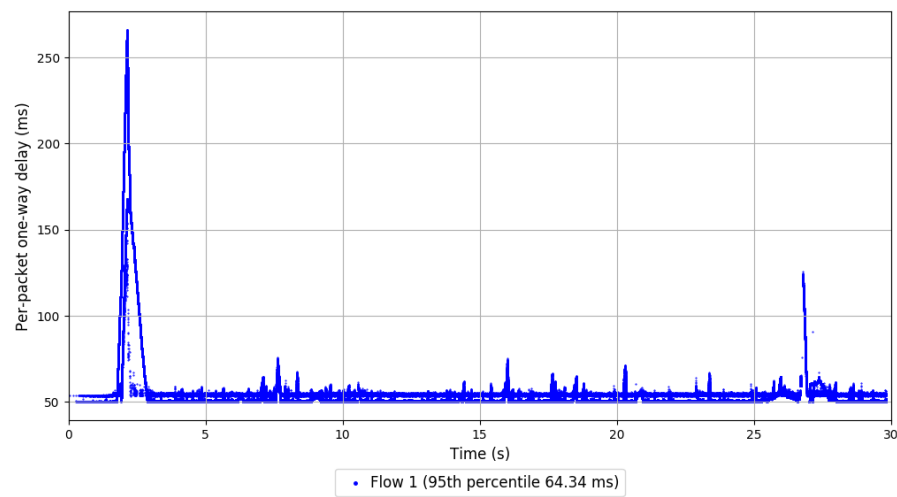
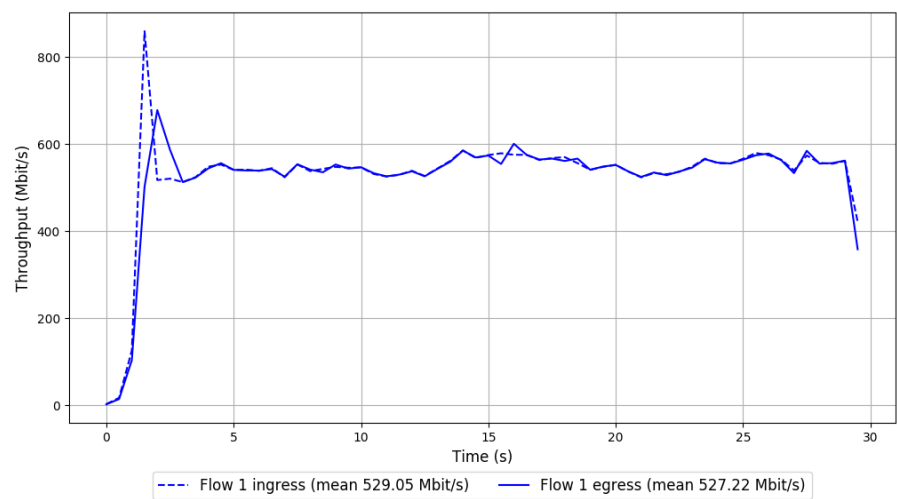
-- Flow 1:

Average throughput: 527.22 Mbit/s

95th percentile per-packet one-way delay: 64.337 ms

Loss rate: 0.71%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-05 11:55:20

End at: 2017-12-05 11:55:50

Below is generated by plot.py at 2017-12-05 15:04:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 546.04 Mbit/s

95th percentile per-packet one-way delay: 154.737 ms

Loss rate: 0.81%

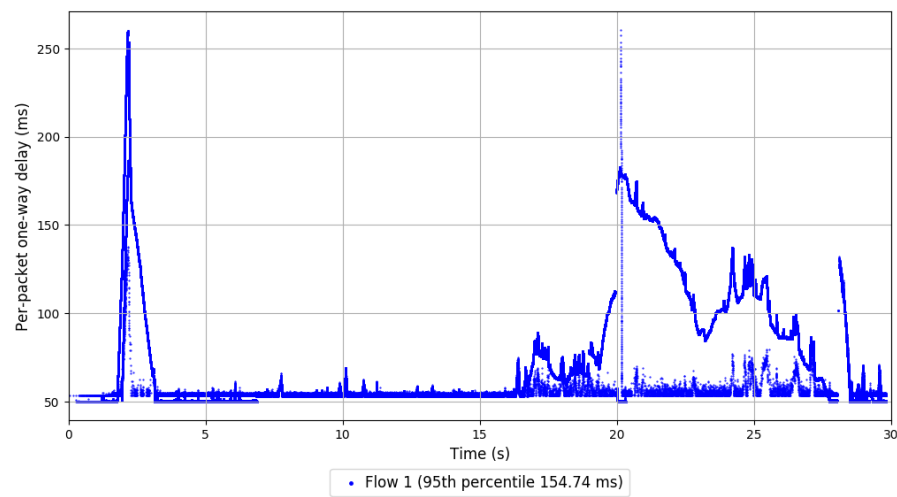
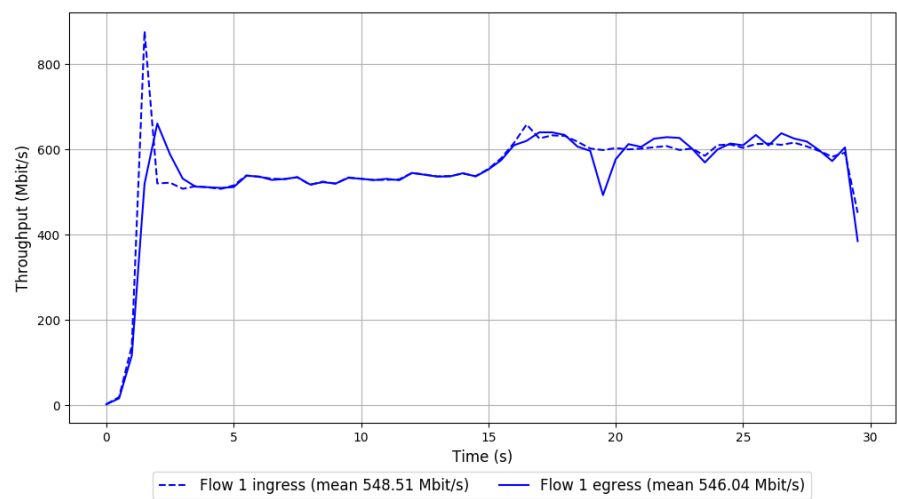
-- Flow 1:

Average throughput: 546.04 Mbit/s

95th percentile per-packet one-way delay: 154.737 ms

Loss rate: 0.81%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-05 12:05:42

End at: 2017-12-05 12:06:12

Below is generated by plot.py at 2017-12-05 15:05:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 546.70 Mbit/s

95th percentile per-packet one-way delay: 173.839 ms

Loss rate: 4.48%

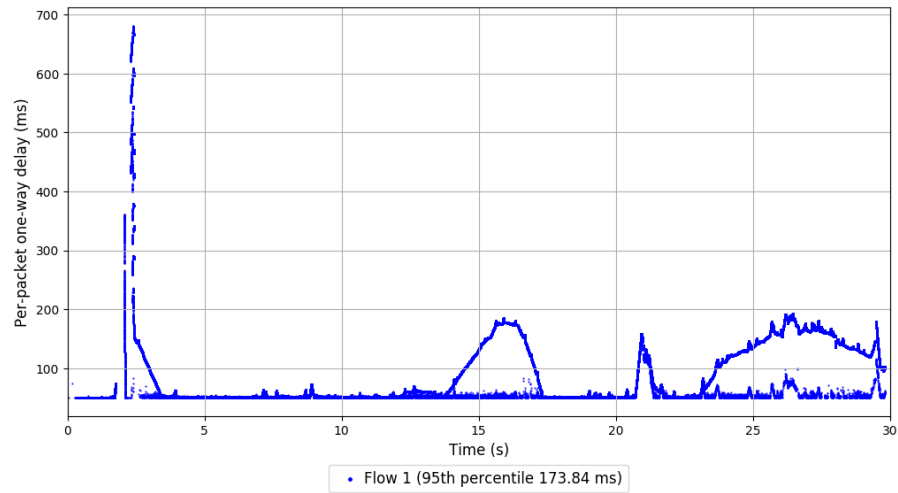
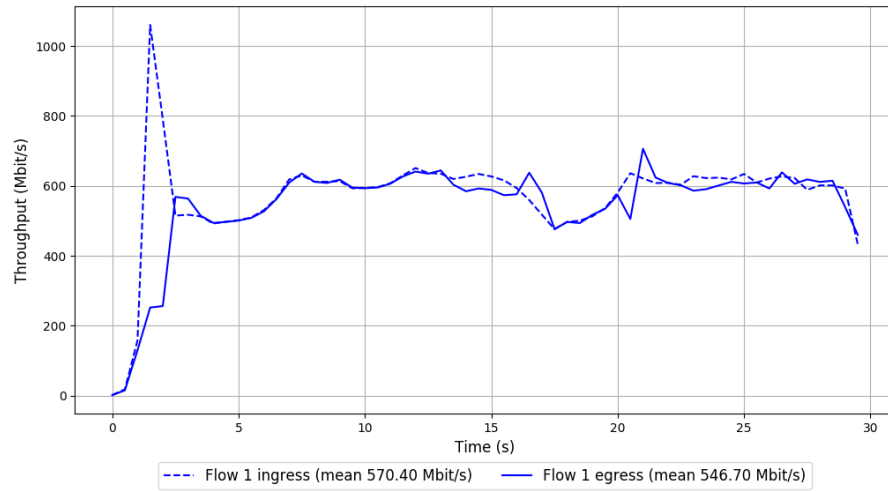
-- Flow 1:

Average throughput: 546.70 Mbit/s

95th percentile per-packet one-way delay: 173.839 ms

Loss rate: 4.48%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-05 12:15:57

End at: 2017-12-05 12:16:27

Below is generated by plot.py at 2017-12-05 15:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 573.36 Mbit/s

95th percentile per-packet one-way delay: 172.183 ms

Loss rate: 1.06%

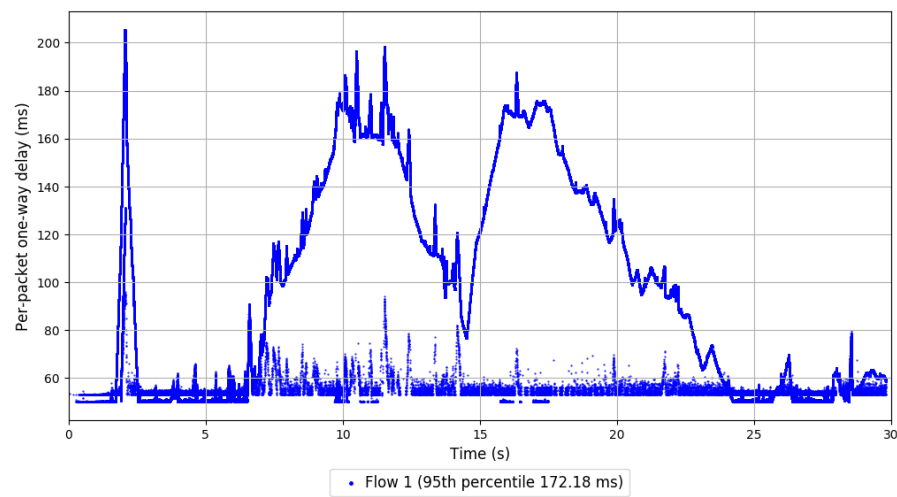
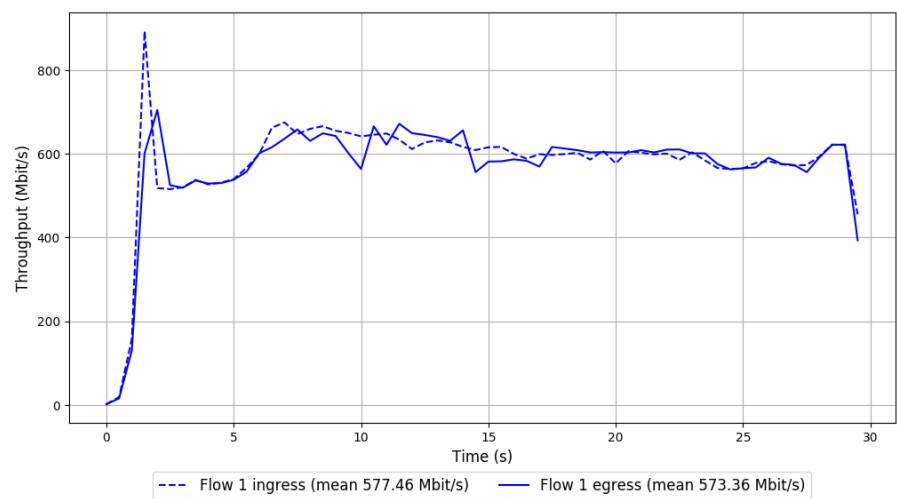
-- Flow 1:

Average throughput: 573.36 Mbit/s

95th percentile per-packet one-way delay: 172.183 ms

Loss rate: 1.06%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-05 12:26:30

End at: 2017-12-05 12:27:00

Below is generated by plot.py at 2017-12-05 15:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 547.15 Mbit/s

95th percentile per-packet one-way delay: 128.429 ms

Loss rate: 0.94%

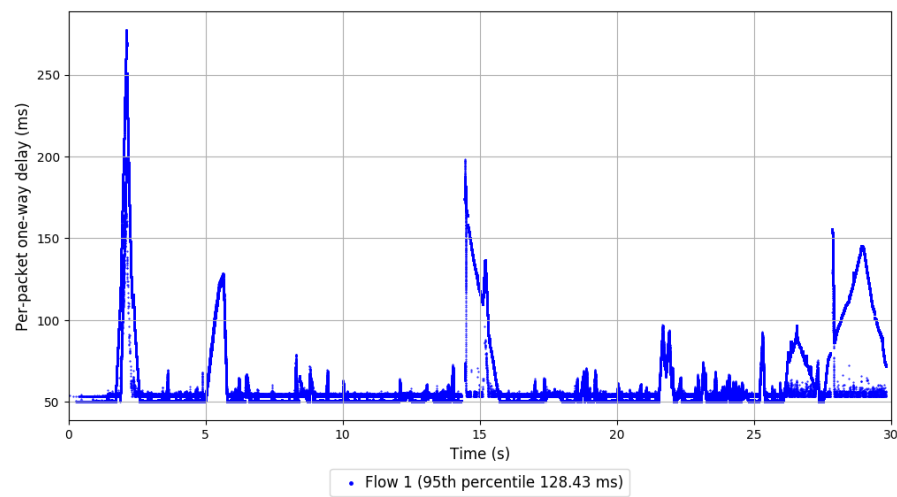
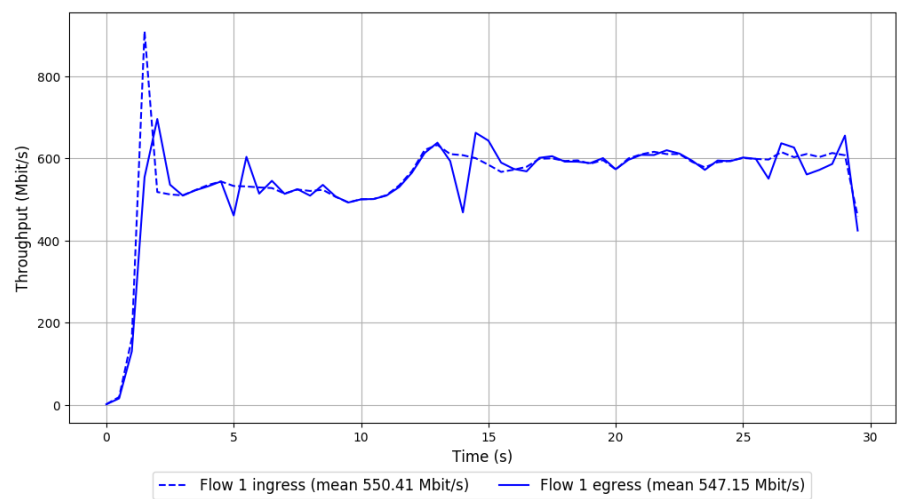
-- Flow 1:

Average throughput: 547.15 Mbit/s

95th percentile per-packet one-way delay: 128.429 ms

Loss rate: 0.94%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-05 12:37:10

End at: 2017-12-05 12:37:40

Below is generated by plot.py at 2017-12-05 15:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 555.02 Mbit/s

95th percentile per-packet one-way delay: 124.959 ms

Loss rate: 1.29%

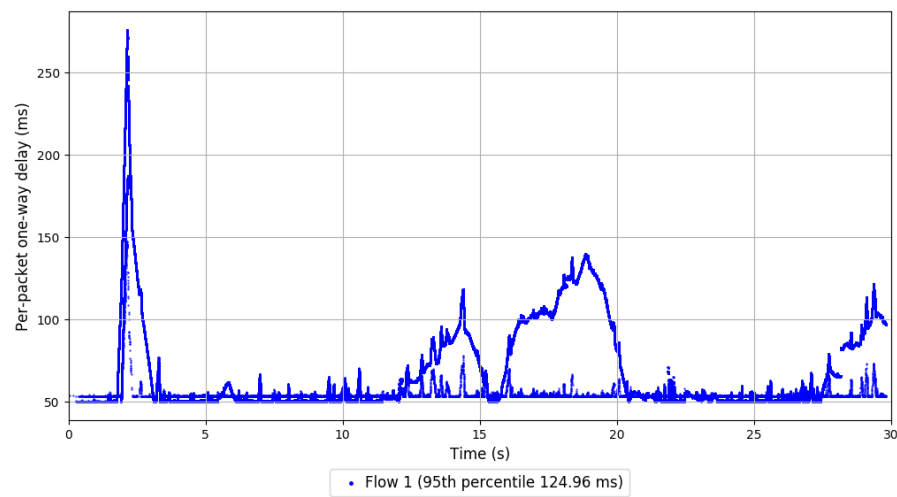
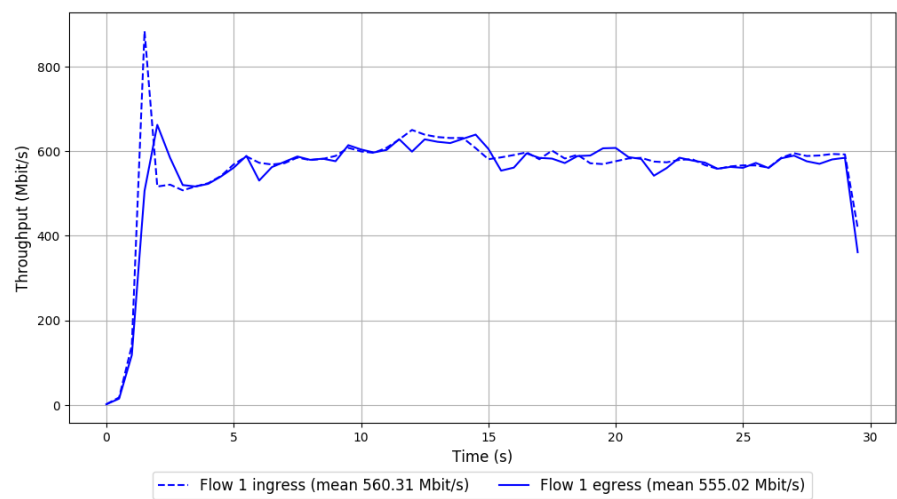
-- Flow 1:

Average throughput: 555.02 Mbit/s

95th percentile per-packet one-way delay: 124.959 ms

Loss rate: 1.29%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-05 12:47:24

End at: 2017-12-05 12:47:54

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 542.64 Mbit/s

95th percentile per-packet one-way delay: 172.443 ms

Loss rate: 1.20%

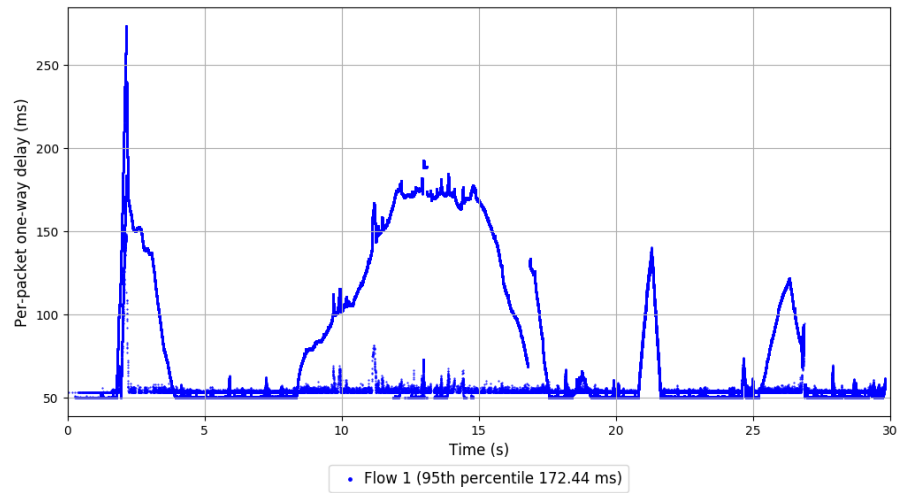
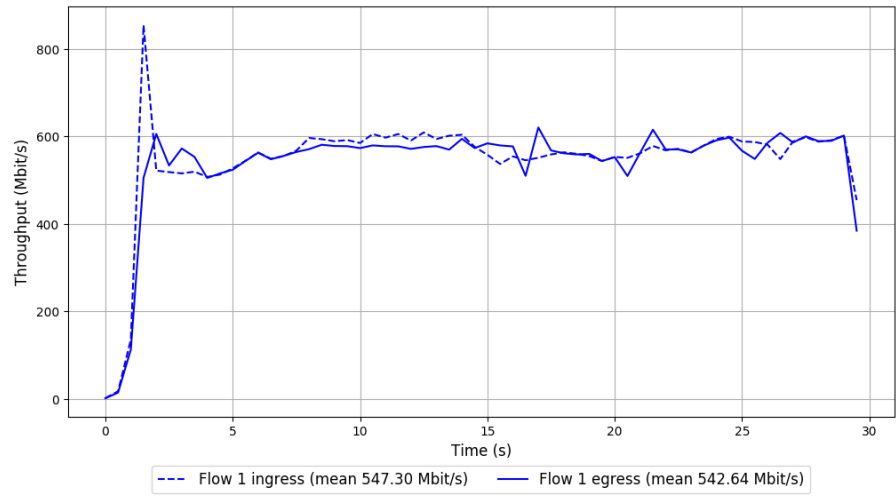
-- Flow 1:

Average throughput: 542.64 Mbit/s

95th percentile per-packet one-way delay: 172.443 ms

Loss rate: 1.20%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-05 12:57:39

End at: 2017-12-05 12:58:09

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 524.14 Mbit/s

95th percentile per-packet one-way delay: 132.446 ms

Loss rate: 1.34%

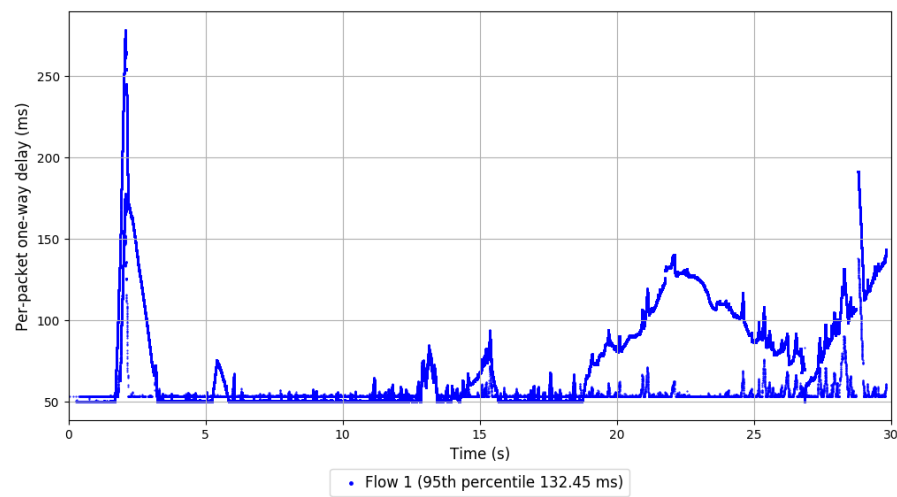
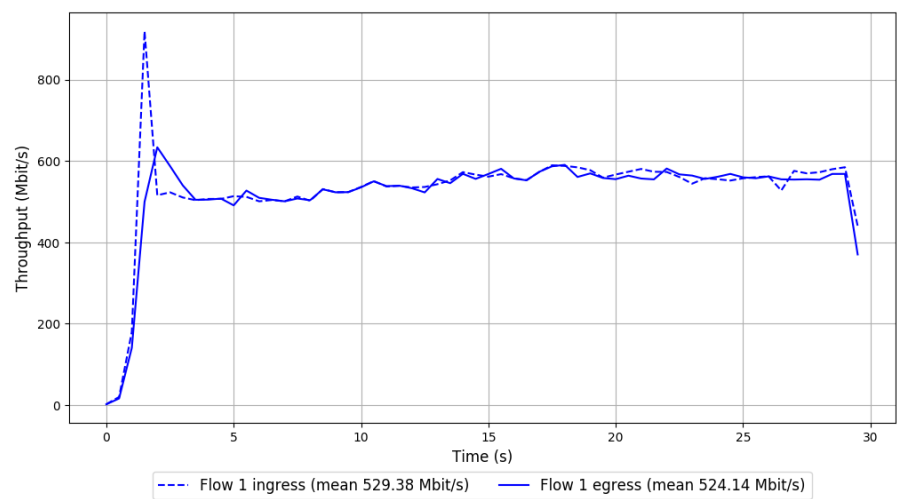
-- Flow 1:

Average throughput: 524.14 Mbit/s

95th percentile per-packet one-way delay: 132.446 ms

Loss rate: 1.34%

Run 10: Report of PCC — Data Link

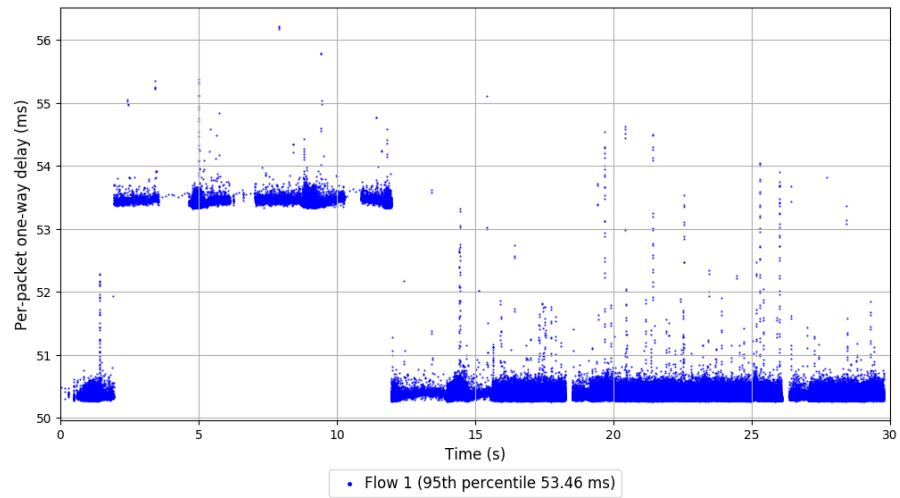
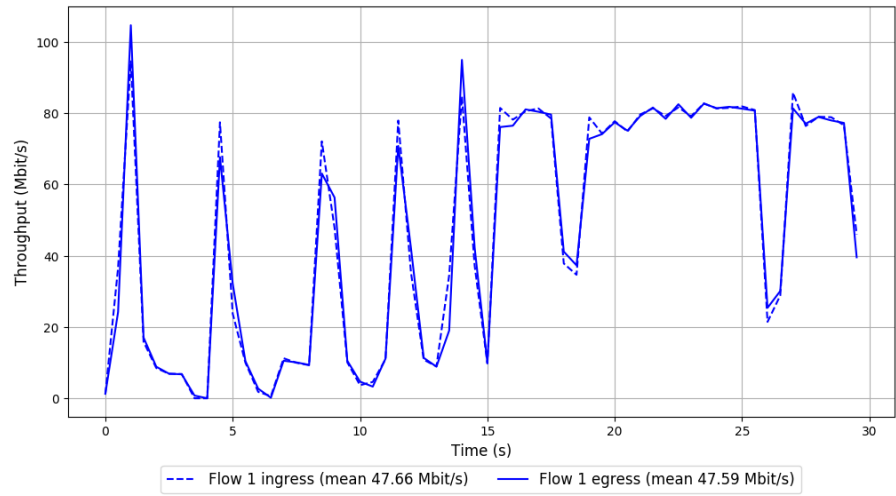


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 11:22:25
End at: 2017-12-05 11:22:55

# Below is generated by plot.py at 2017-12-05 15:14:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.59 Mbit/s
95th percentile per-packet one-way delay: 53.460 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 47.59 Mbit/s
95th percentile per-packet one-way delay: 53.460 ms
Loss rate: 0.50%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 11:32:42

End at: 2017-12-05 11:33:12

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.76 Mbit/s

95th percentile per-packet one-way delay: 53.288 ms

Loss rate: 0.33%

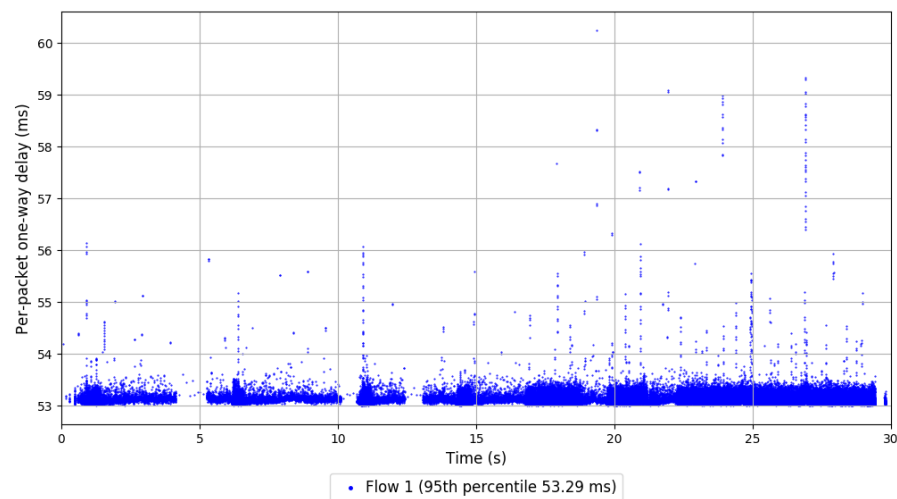
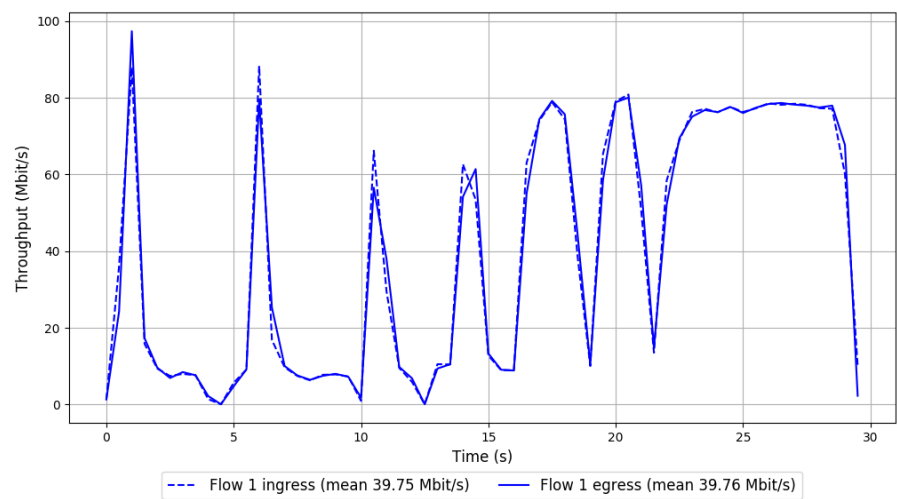
-- Flow 1:

Average throughput: 39.76 Mbit/s

95th percentile per-packet one-way delay: 53.288 ms

Loss rate: 0.33%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 11:43:18

End at: 2017-12-05 11:43:48

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.54 Mbit/s

95th percentile per-packet one-way delay: 50.283 ms

Loss rate: 0.41%

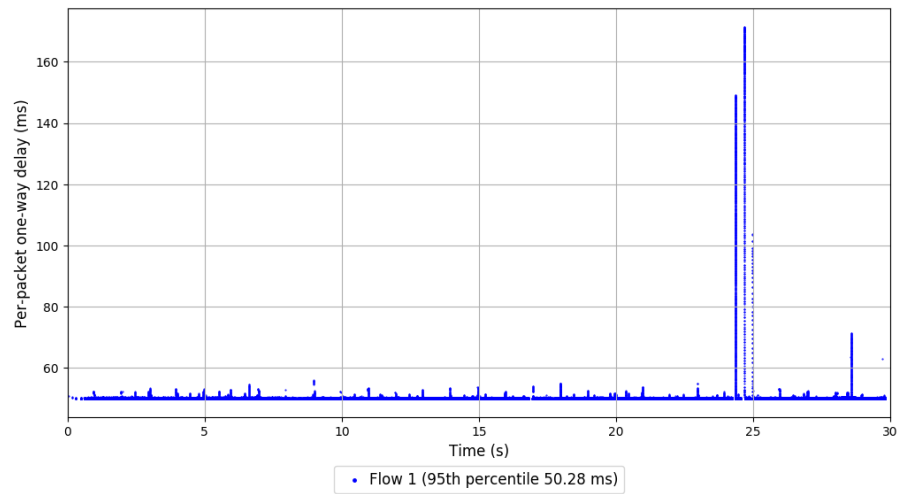
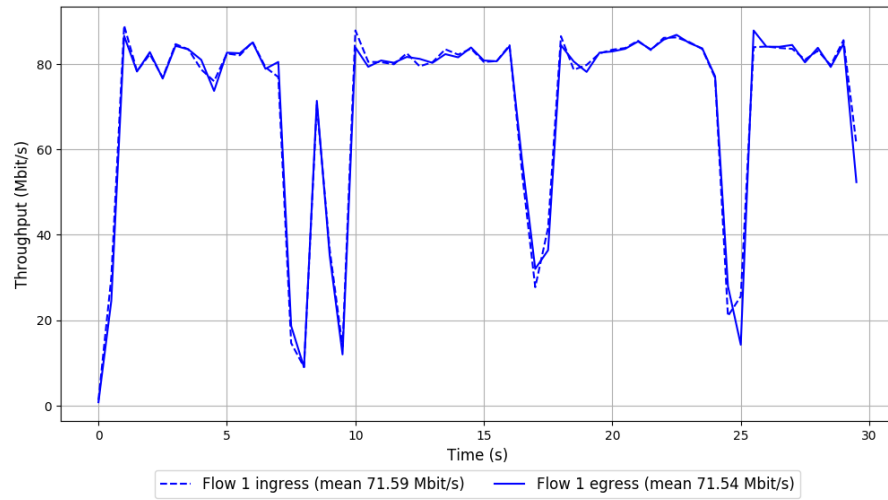
-- Flow 1:

Average throughput: 71.54 Mbit/s

95th percentile per-packet one-way delay: 50.283 ms

Loss rate: 0.41%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-05 11:53:47

End at: 2017-12-05 11:54:17

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.49 Mbit/s

95th percentile per-packet one-way delay: 53.297 ms

Loss rate: 0.55%

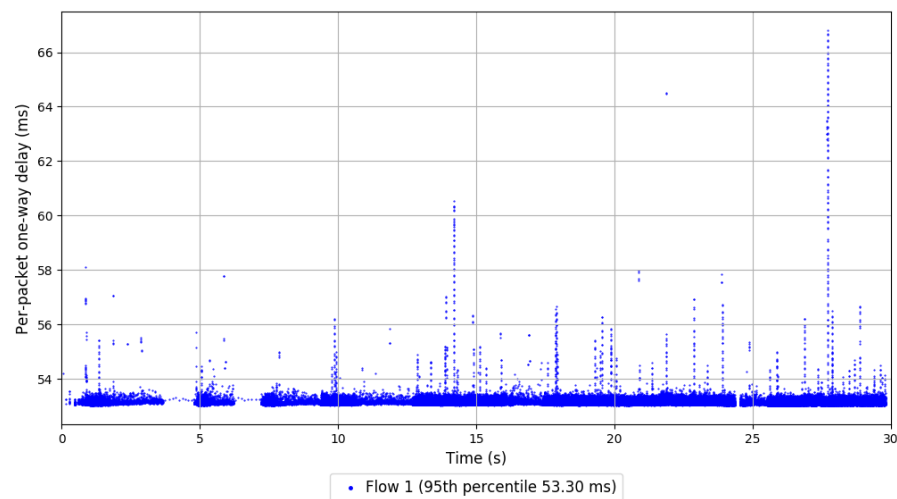
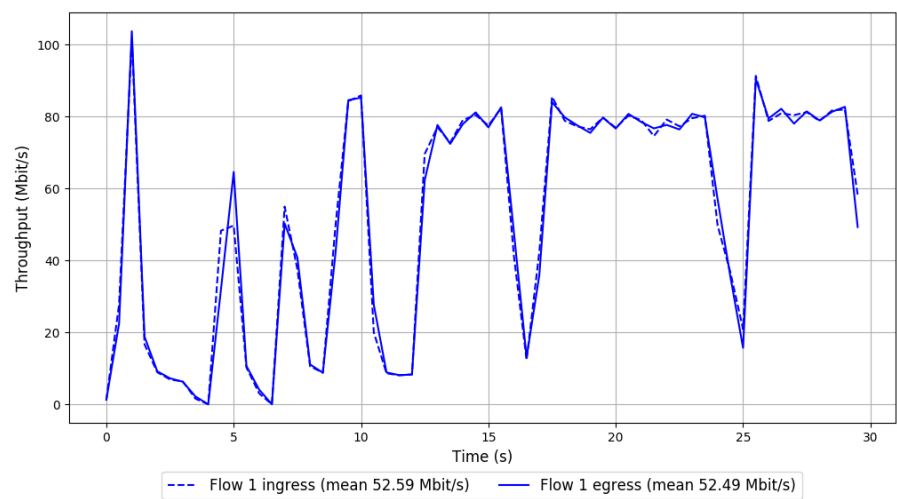
-- Flow 1:

Average throughput: 52.49 Mbit/s

95th percentile per-packet one-way delay: 53.297 ms

Loss rate: 0.55%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-05 12:04:05

End at: 2017-12-05 12:04:35

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.20 Mbit/s

95th percentile per-packet one-way delay: 53.506 ms

Loss rate: 0.49%

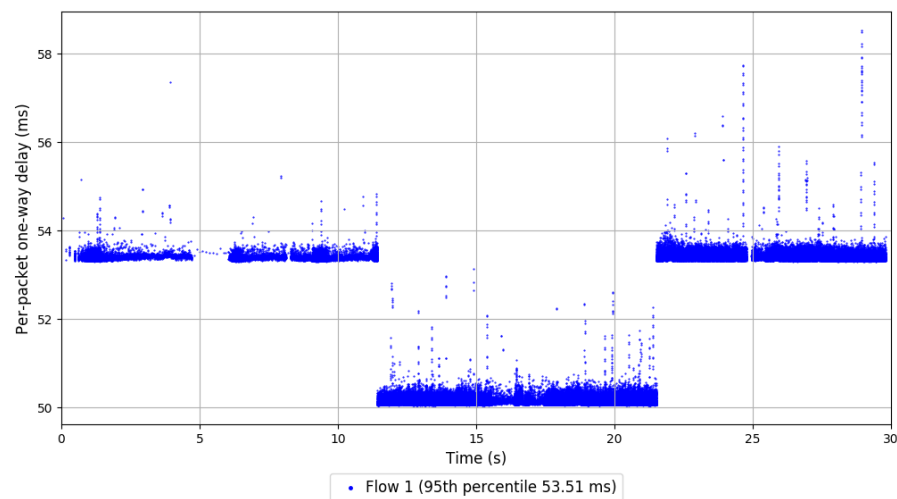
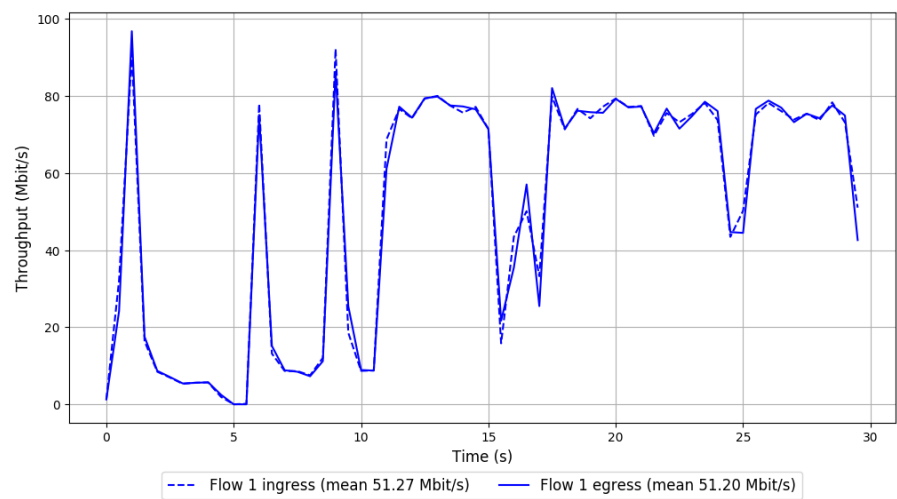
-- Flow 1:

Average throughput: 51.20 Mbit/s

95th percentile per-packet one-way delay: 53.506 ms

Loss rate: 0.49%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-05 12:14:22

End at: 2017-12-05 12:14:52

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.57 Mbit/s

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

Loss rate: 0.64%

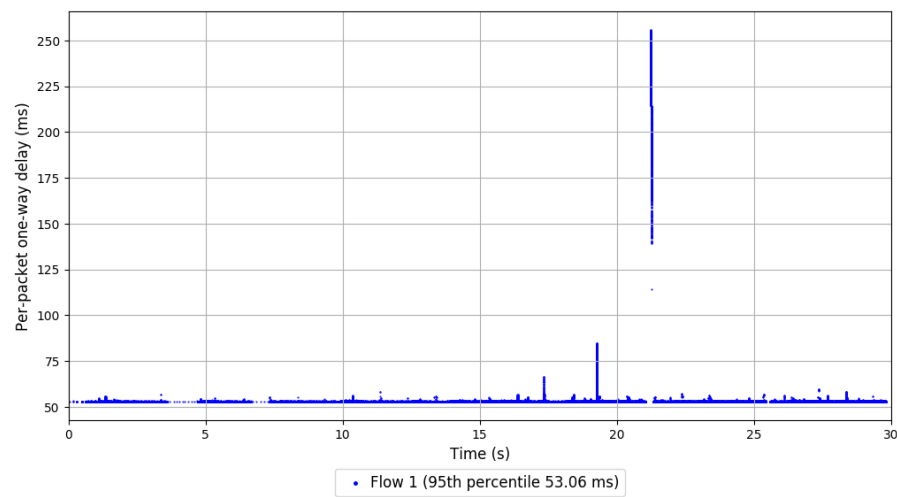
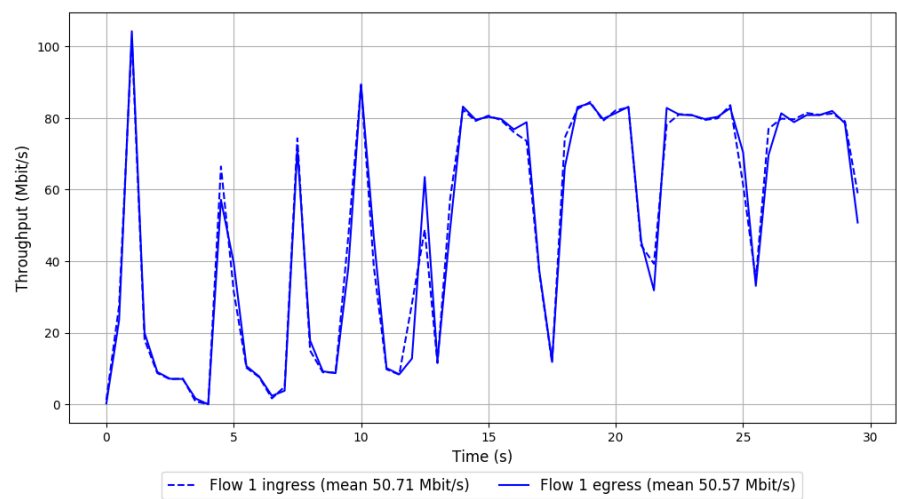
-- Flow 1:

Average throughput: 50.57 Mbit/s

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

Loss rate: 0.64%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-05 12:24:56

End at: 2017-12-05 12:25:26

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.65 Mbit/s

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

Loss rate: 0.58%

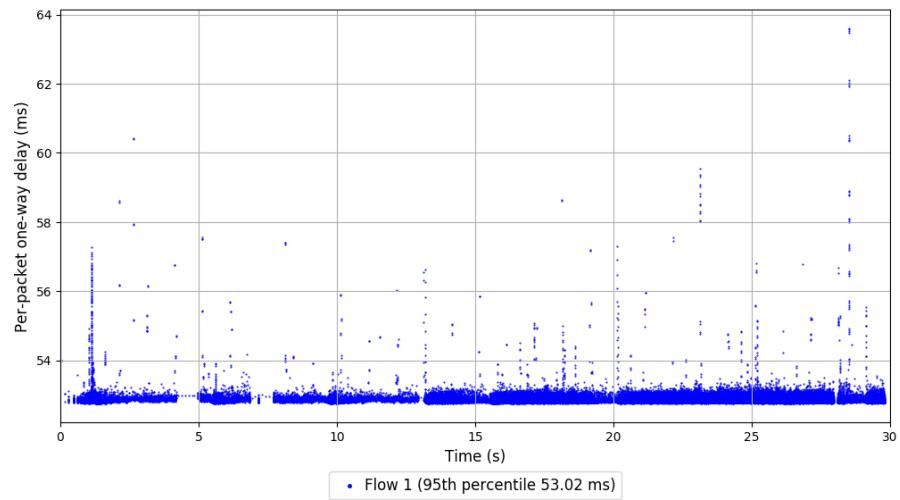
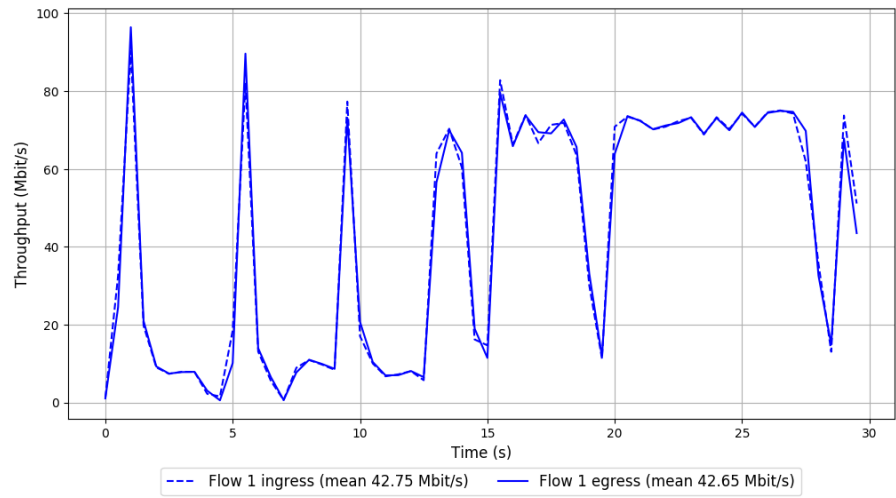
-- Flow 1:

Average throughput: 42.65 Mbit/s

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

Loss rate: 0.58%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-05 12:35:34

End at: 2017-12-05 12:36:04

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.65 Mbit/s

95th percentile per-packet one-way delay: 50.445 ms

Loss rate: 0.65%

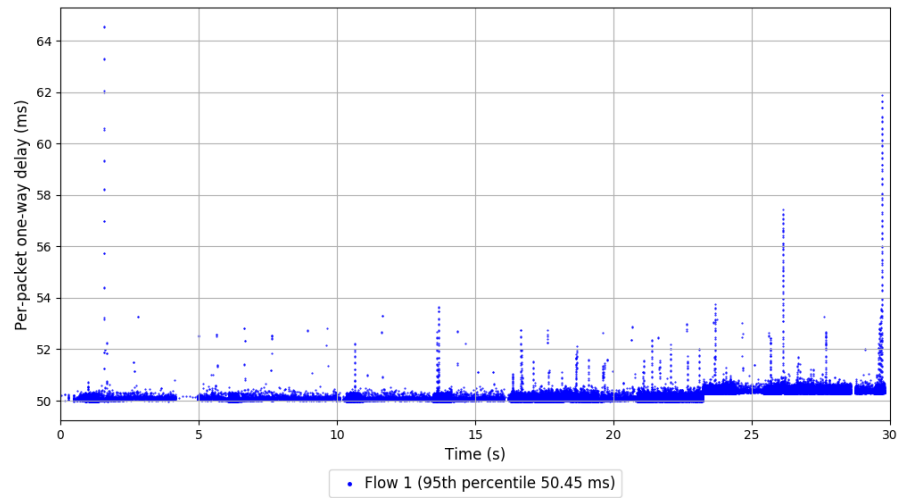
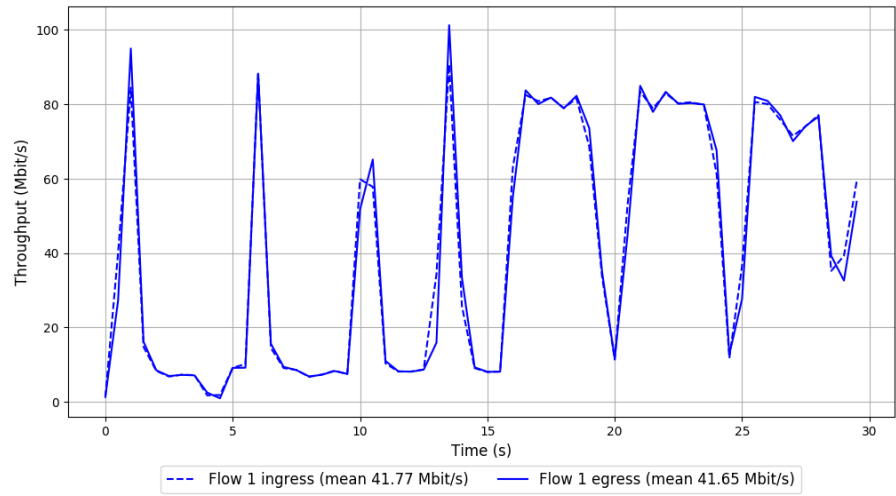
-- Flow 1:

Average throughput: 41.65 Mbit/s

95th percentile per-packet one-way delay: 50.445 ms

Loss rate: 0.65%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-05 12:45:47

End at: 2017-12-05 12:46:17

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.73 Mbit/s

95th percentile per-packet one-way delay: 50.298 ms

Loss rate: 0.35%

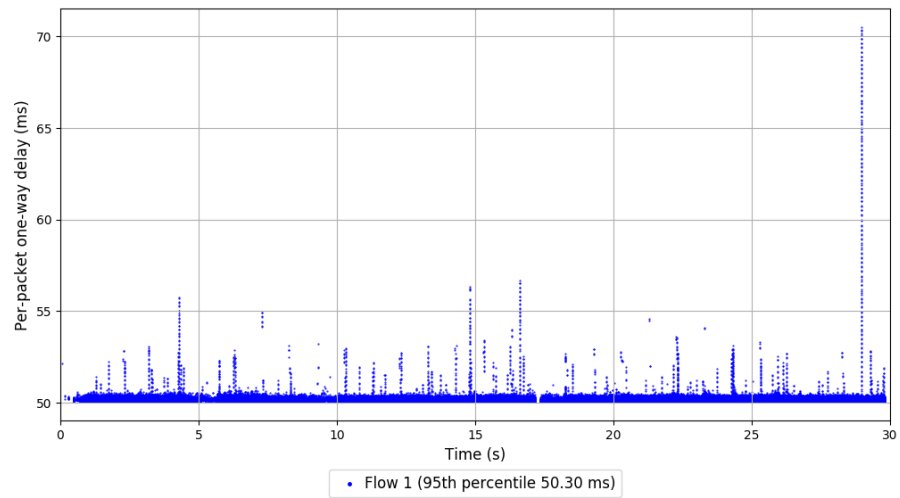
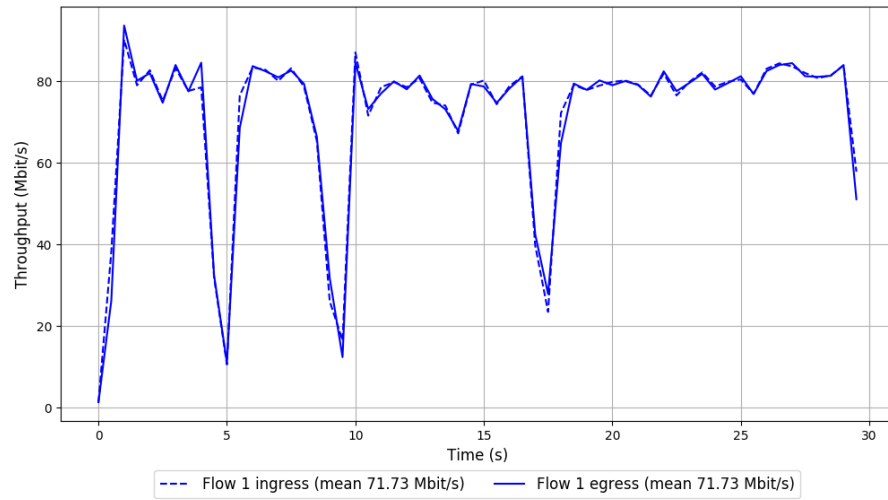
-- Flow 1:

Average throughput: 71.73 Mbit/s

95th percentile per-packet one-way delay: 50.298 ms

Loss rate: 0.35%

Run 9: Report of QUIC Cubic — Data Link

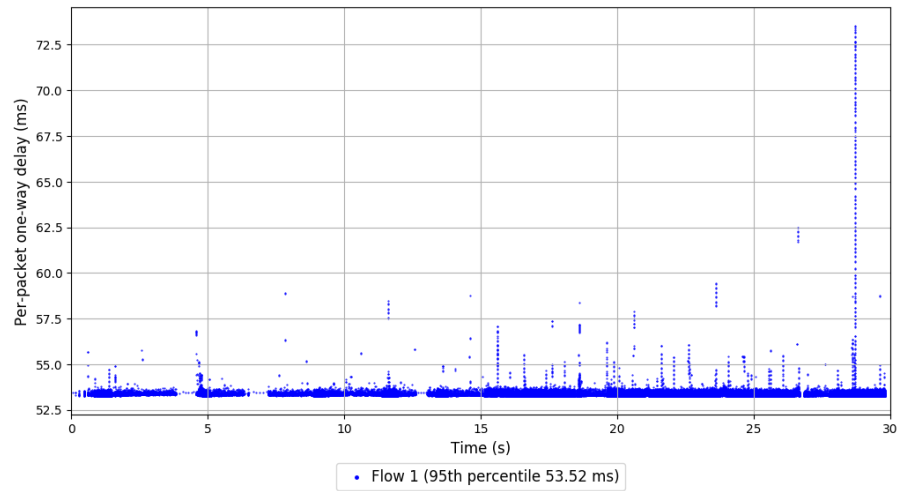
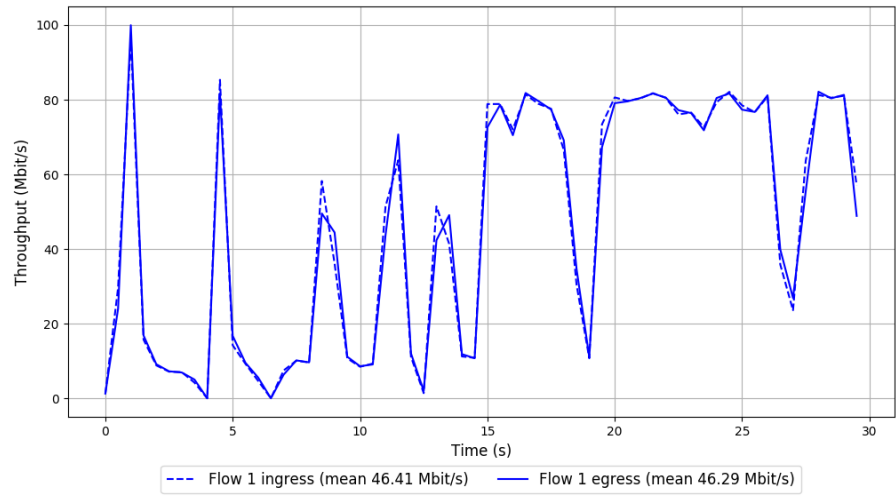


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-05 12:56:05
End at: 2017-12-05 12:56:35

# Below is generated by plot.py at 2017-12-05 15:14:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.29 Mbit/s
95th percentile per-packet one-way delay: 53.515 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 46.29 Mbit/s
95th percentile per-packet one-way delay: 53.515 ms
Loss rate: 0.60%
```

Run 10: Report of QUIC Cubic — Data Link

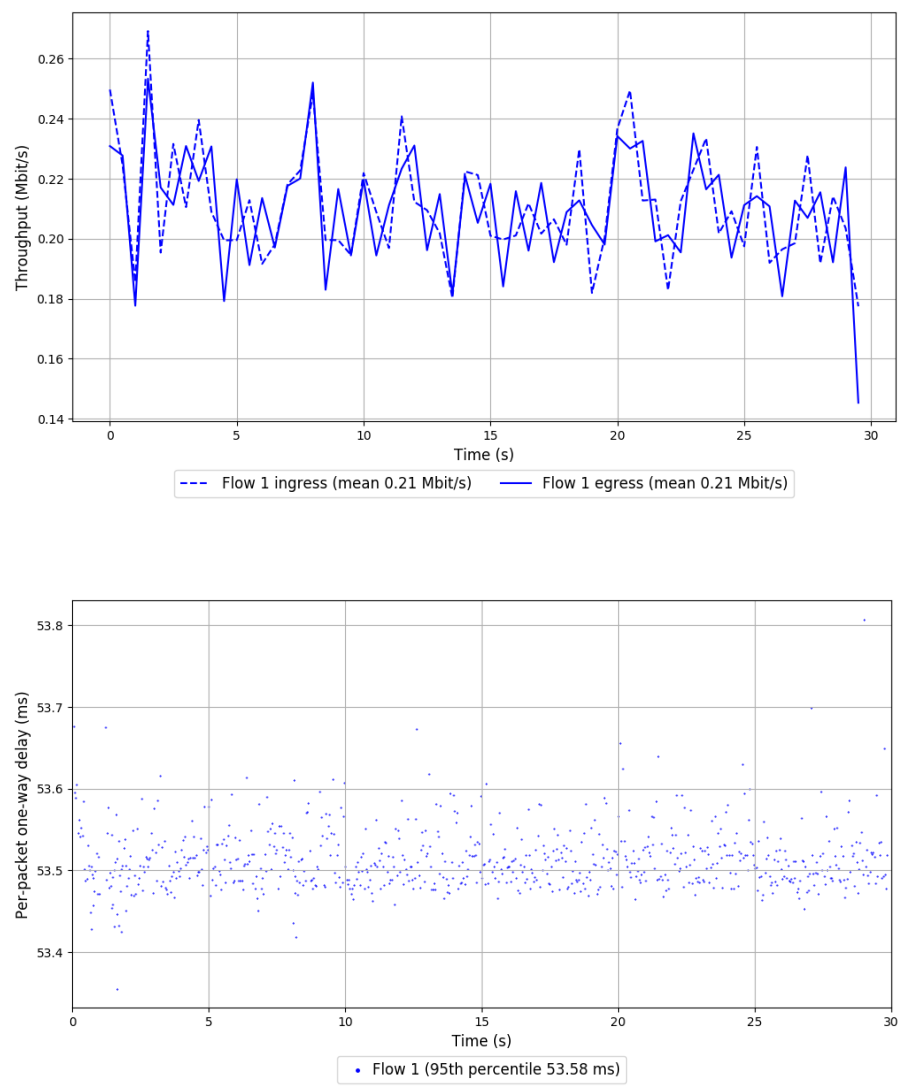


```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 11:24:56
End at: 2017-12-05 11:25:26

# Below is generated by plot.py at 2017-12-05 15:14:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.584 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.584 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

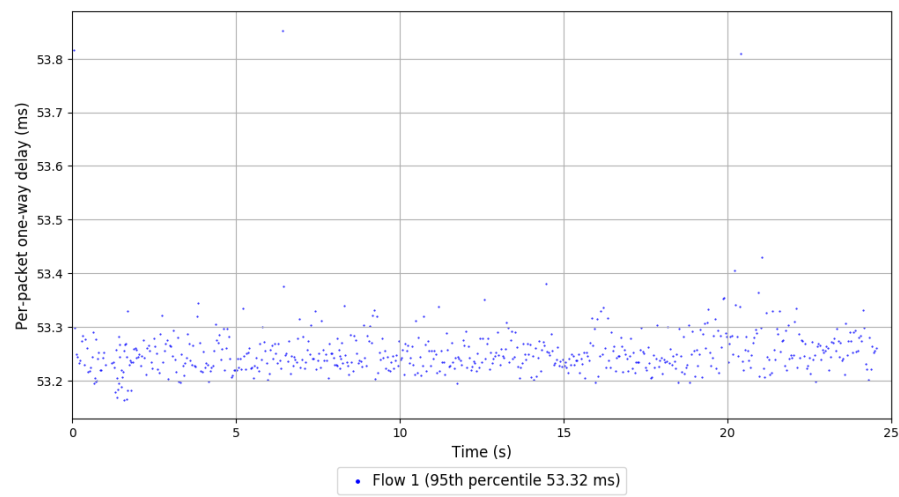
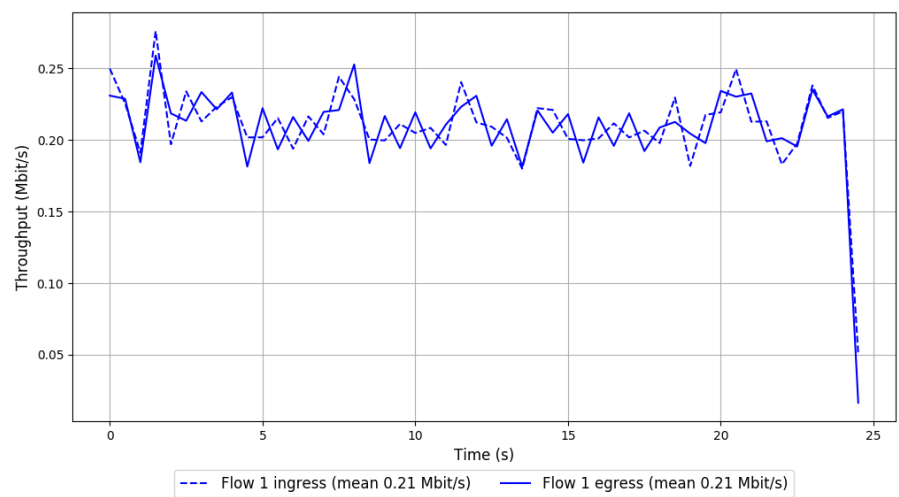


```
Run 2: Statistics of SCReAM

Start at: 2017-12-05 11:35:14
End at: 2017-12-05 11:35:44

# Below is generated by plot.py at 2017-12-05 15:14:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.319 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.319 ms
Loss rate: 0.48%
```

Run 2: Report of SReAM — Data Link

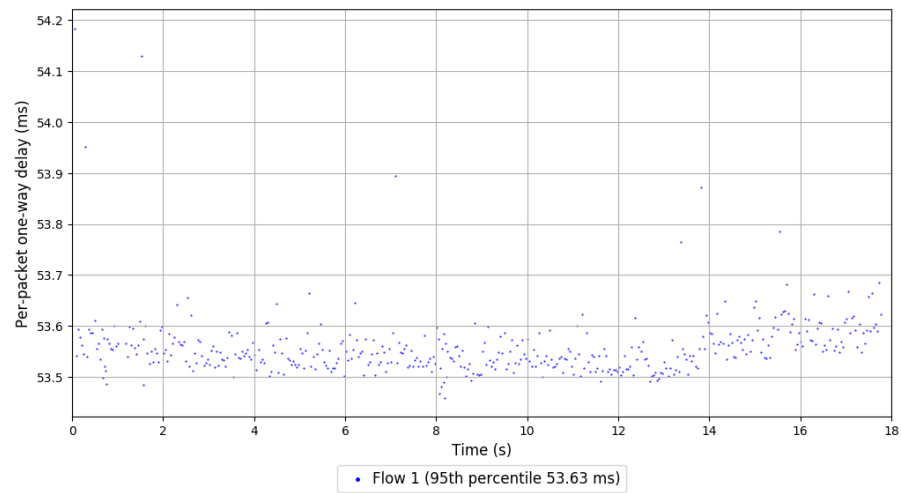
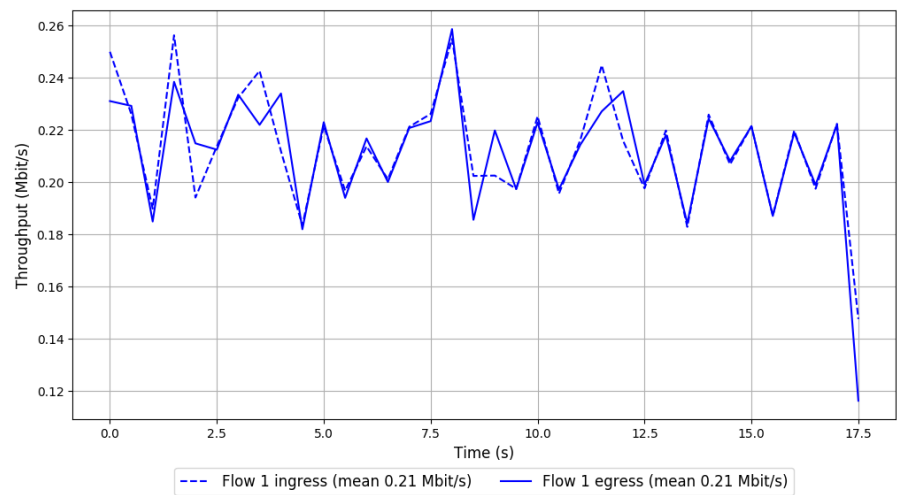


Run 3: Statistics of SReAM

Start at: 2017-12-05 11:45:51

End at: 2017-12-05 11:46:21

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-05 11:56:19

End at: 2017-12-05 11:56:49

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.38%

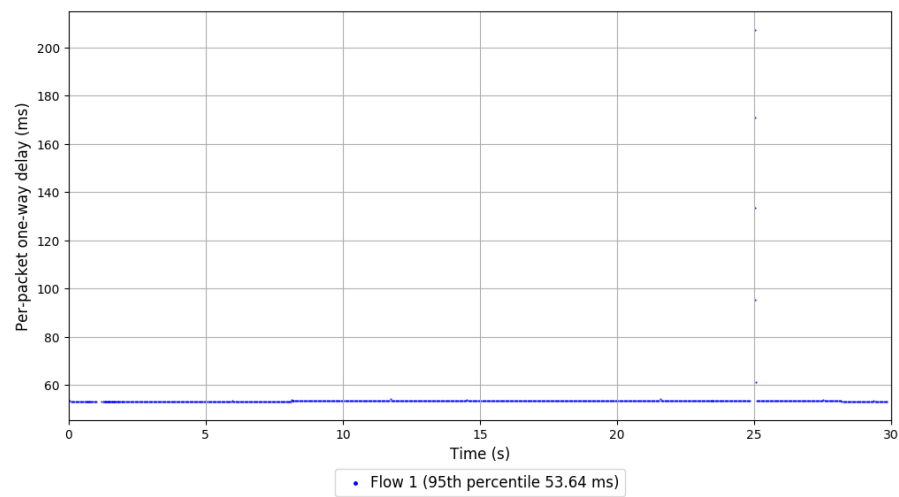
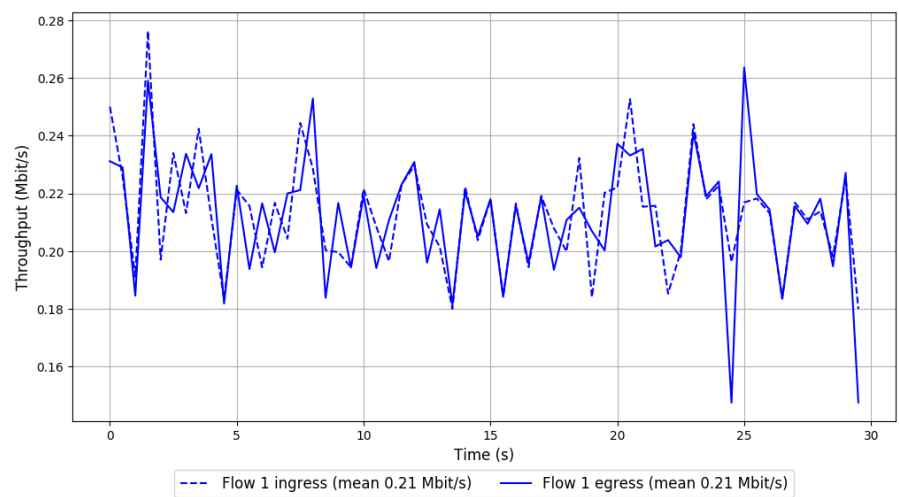
-- Flow 1:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-05 12:06:40

End at: 2017-12-05 12:07:10

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.598 ms

Loss rate: 0.38%

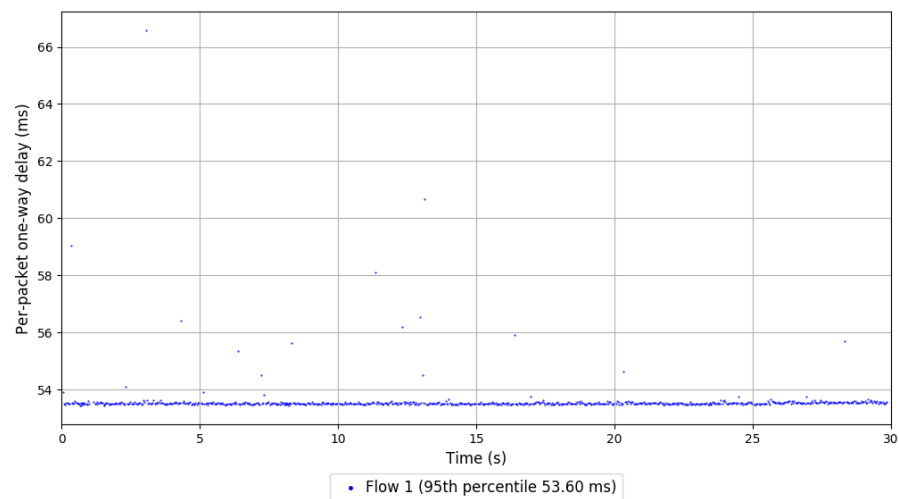
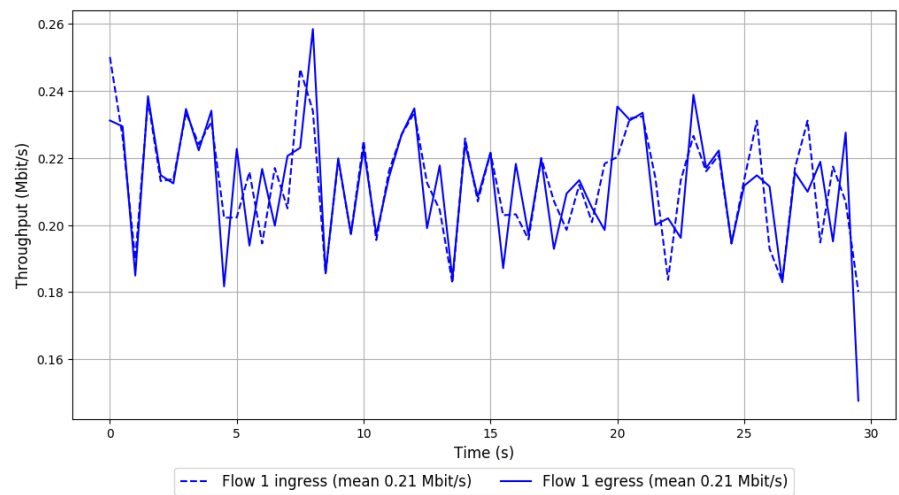
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.598 ms

Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-05 12:16:56

End at: 2017-12-05 12:17:26

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.412 ms

Loss rate: 0.38%

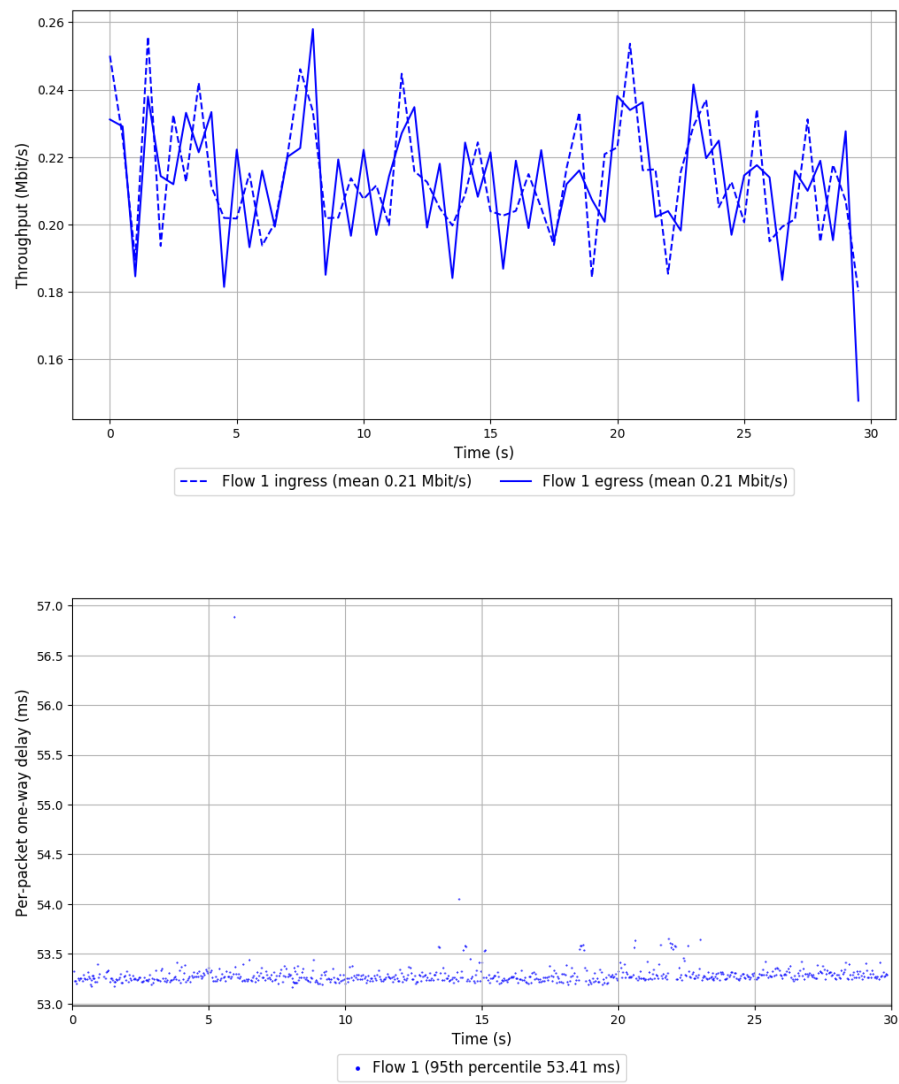
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.412 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-05 12:27:29

End at: 2017-12-05 12:27:59

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 50.370 ms

Loss rate: 0.22%

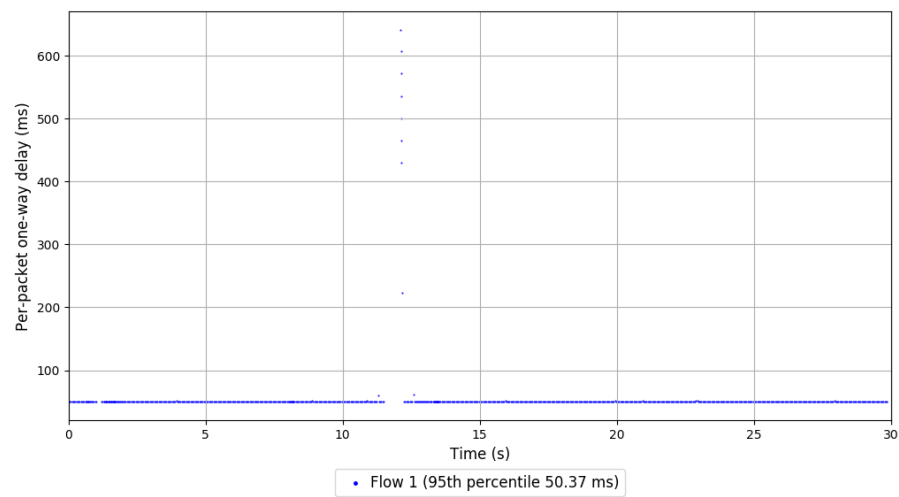
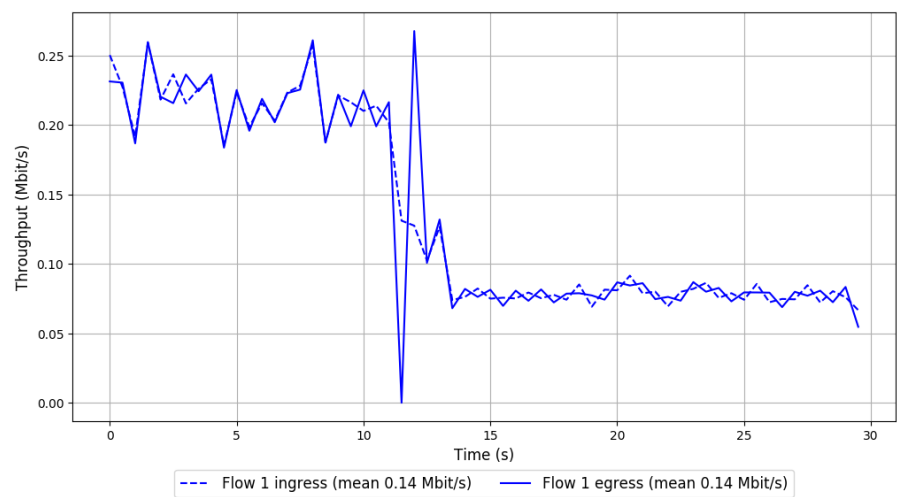
-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 50.370 ms

Loss rate: 0.22%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-05 12:38:09

End at: 2017-12-05 12:38:39

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.091 ms

Loss rate: 0.38%

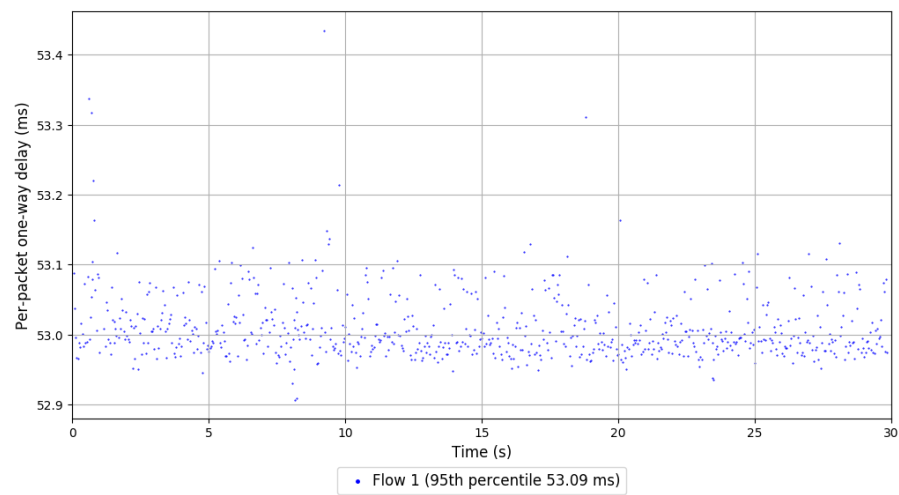
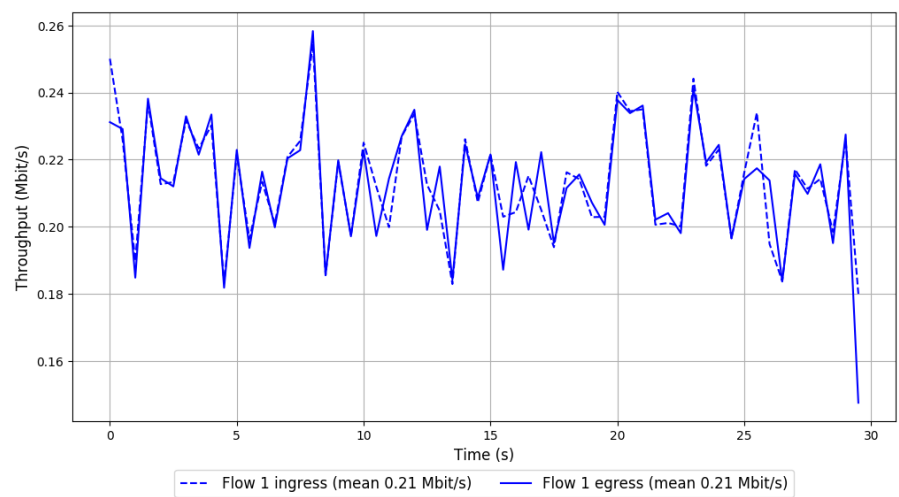
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.091 ms

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-05 12:48:23

End at: 2017-12-05 12:48:53

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.226 ms

Loss rate: 0.26%

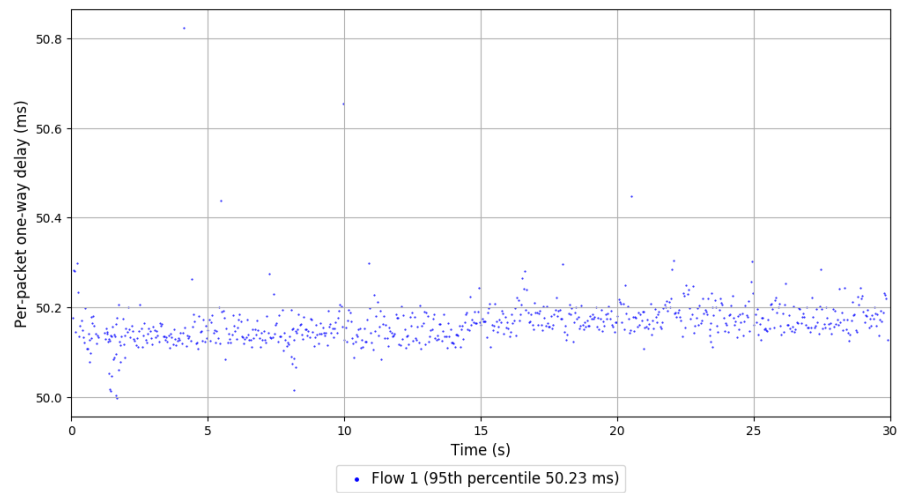
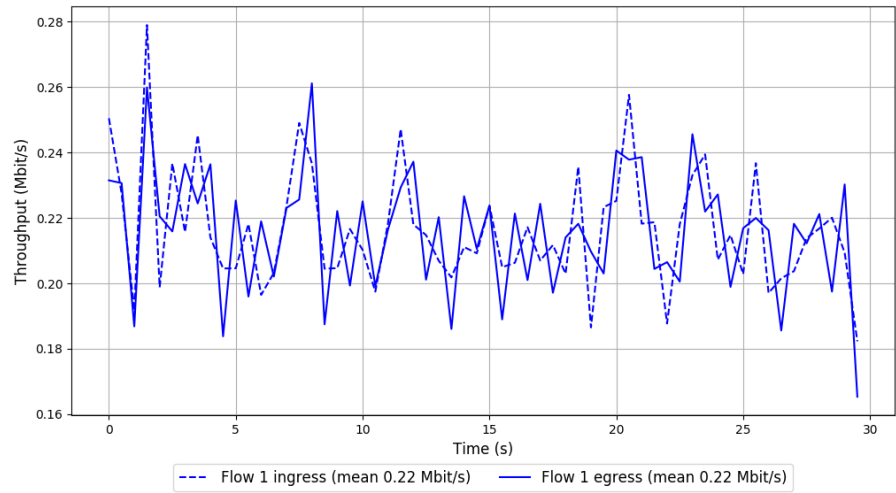
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.226 ms

Loss rate: 0.26%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-05 12:58:37

End at: 2017-12-05 12:59:07

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.638 ms

Loss rate: 0.38%

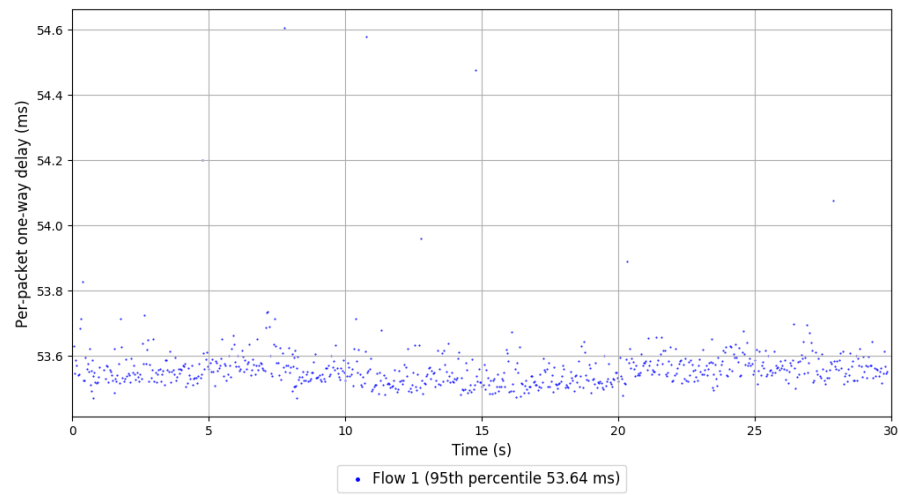
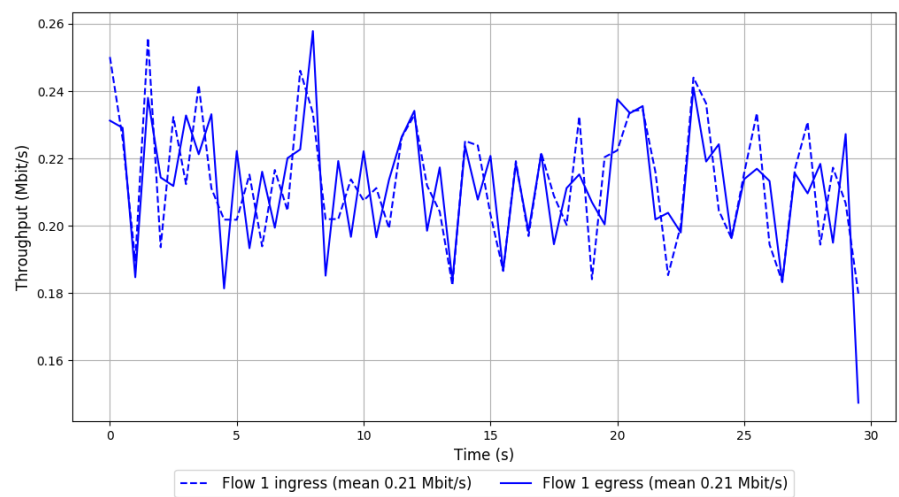
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.638 ms

Loss rate: 0.38%

Run 10: Report of SReAM — Data Link

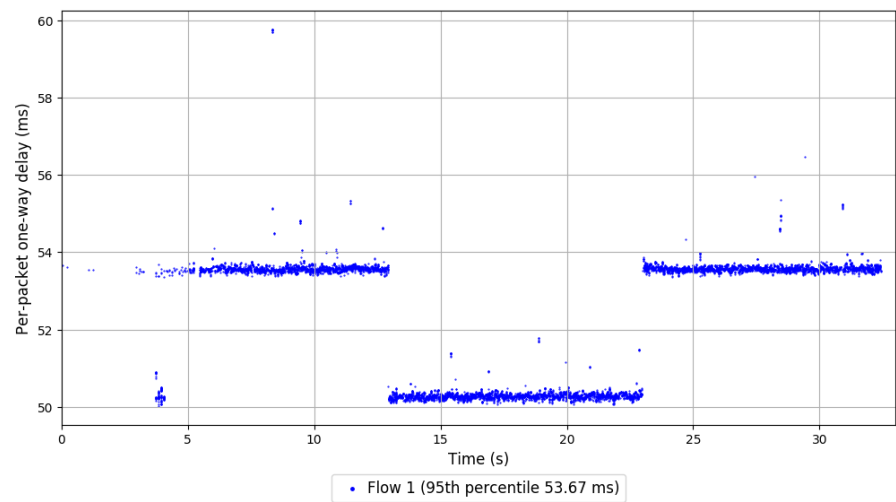
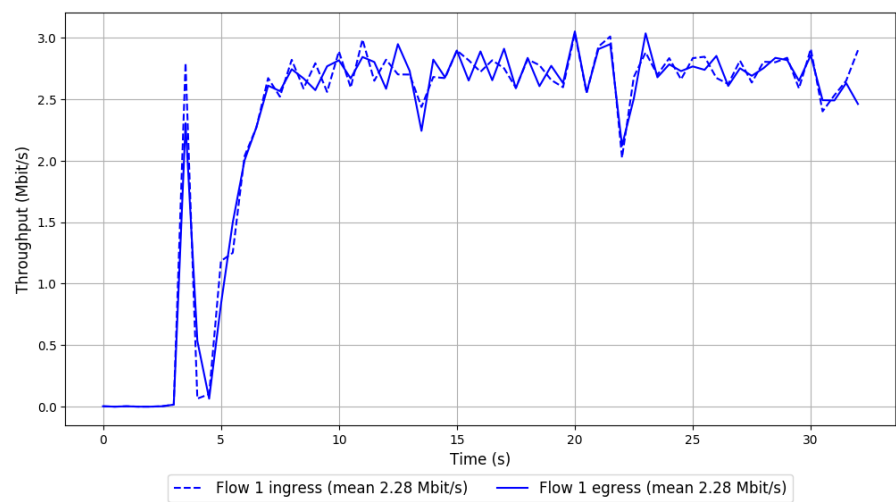


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 11:18:57
End at: 2017-12-05 11:19:27

# Below is generated by plot.py at 2017-12-05 15:14:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.675 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.675 ms
Loss rate: 0.45%
```

Run 1: Report of WebRTC media — Data Link

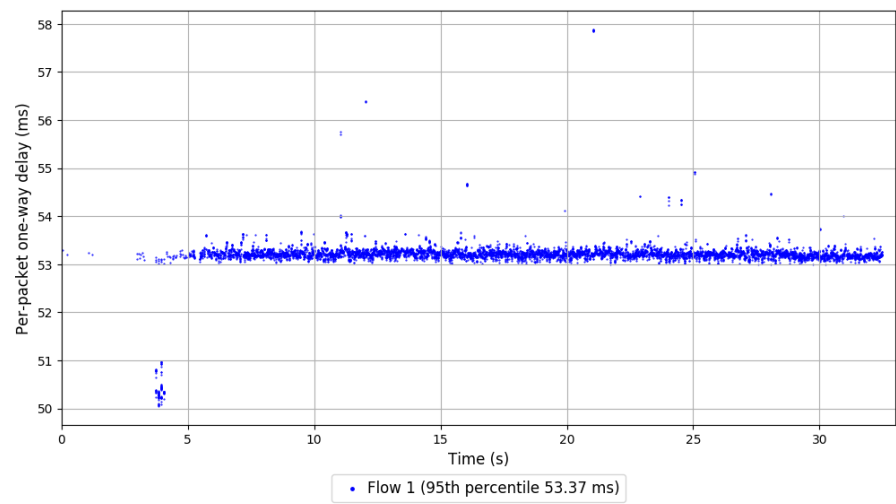
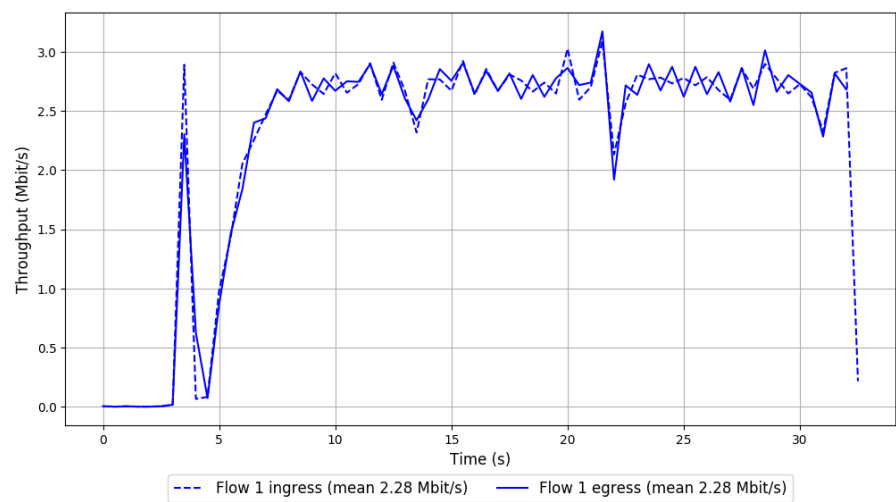


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-05 11:29:11
End at: 2017-12-05 11:29:41

# Below is generated by plot.py at 2017-12-05 15:14:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.365 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.365 ms
Loss rate: 0.41%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-05 11:39:47

End at: 2017-12-05 11:40:17

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 53.129 ms

Loss rate: 0.46%

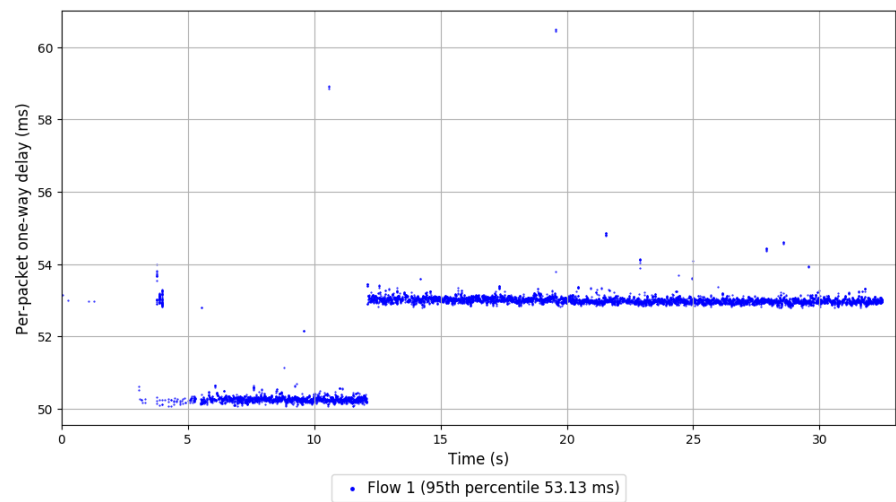
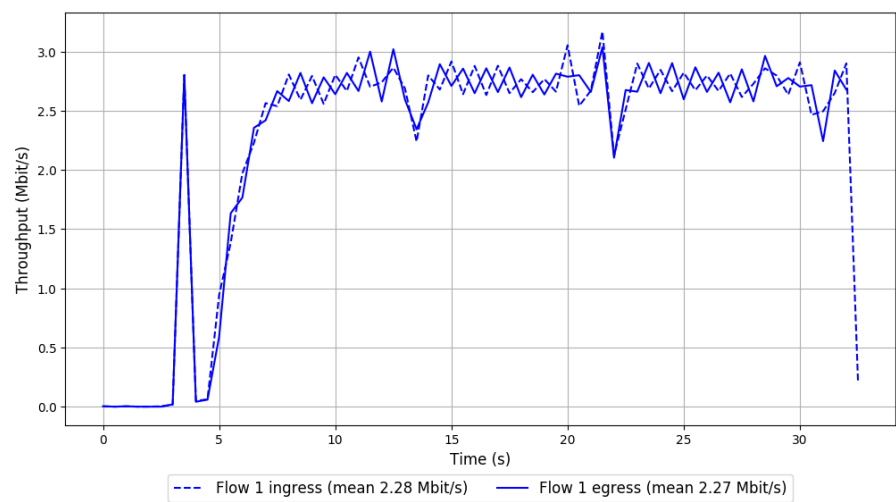
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 53.129 ms

Loss rate: 0.46%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-05 11:50:18

End at: 2017-12-05 11:50:48

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.348 ms

Loss rate: 0.30%

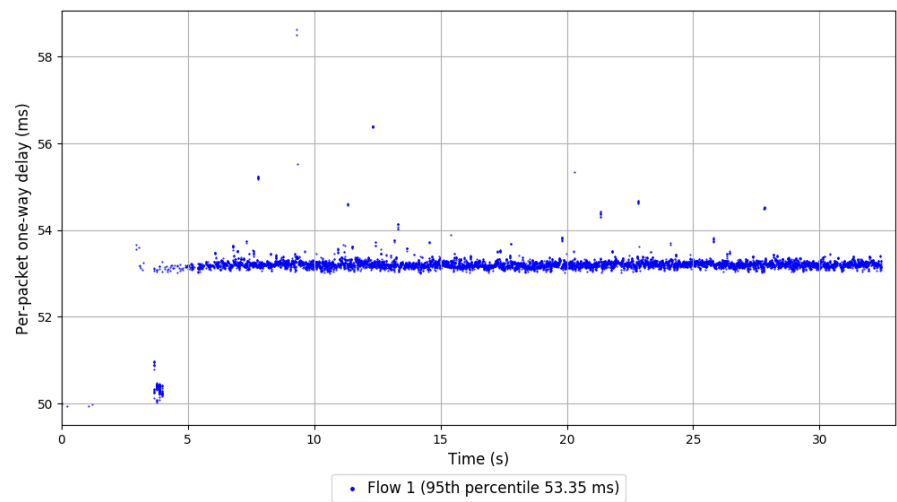
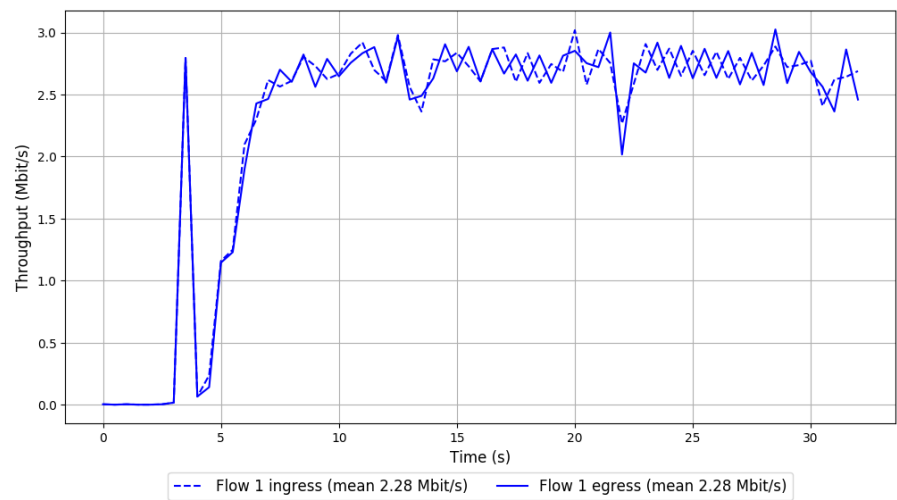
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.348 ms

Loss rate: 0.30%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-05 12:00:33

End at: 2017-12-05 12:01:03

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 50.433 ms

Loss rate: 0.46%

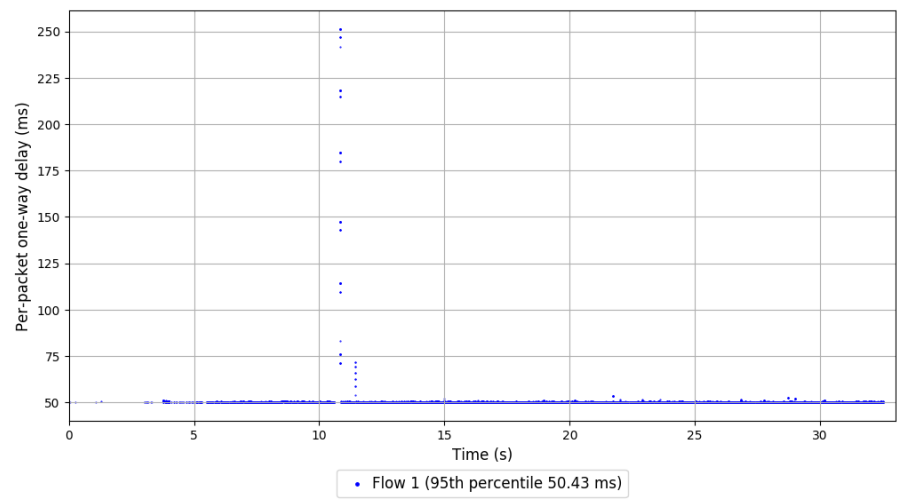
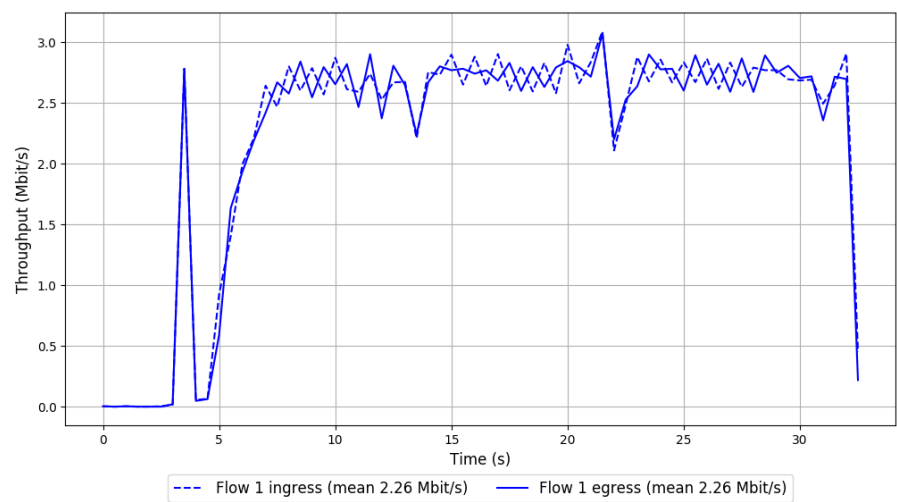
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 50.433 ms

Loss rate: 0.46%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-05 12:10:51

End at: 2017-12-05 12:11:21

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.602 ms

Loss rate: 0.29%

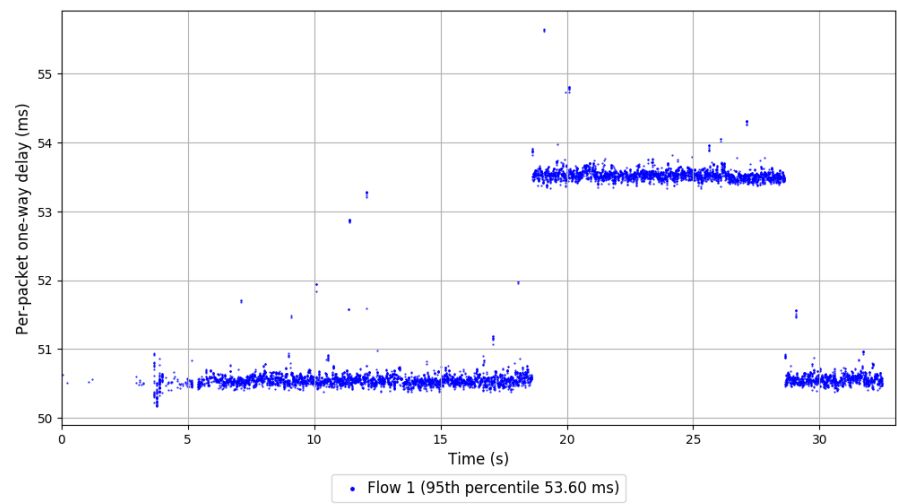
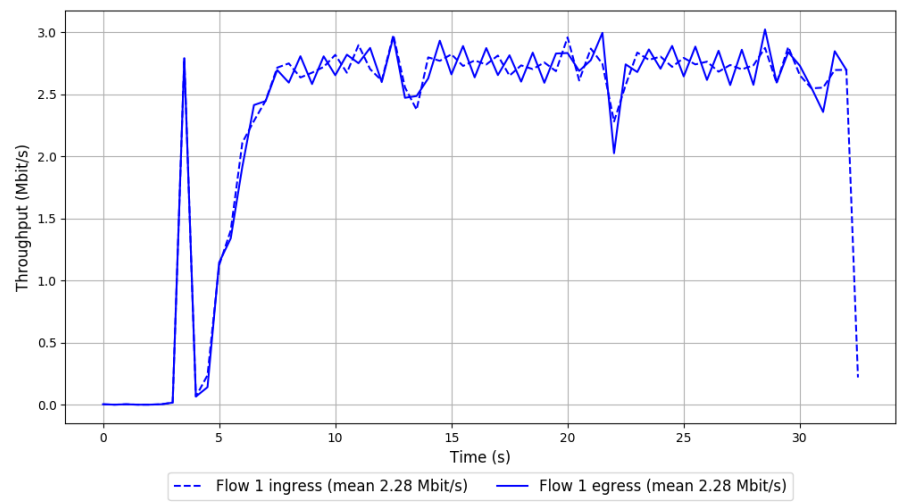
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.602 ms

Loss rate: 0.29%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-05 12:21:29

End at: 2017-12-05 12:21:59

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.684 ms

Loss rate: 0.45%

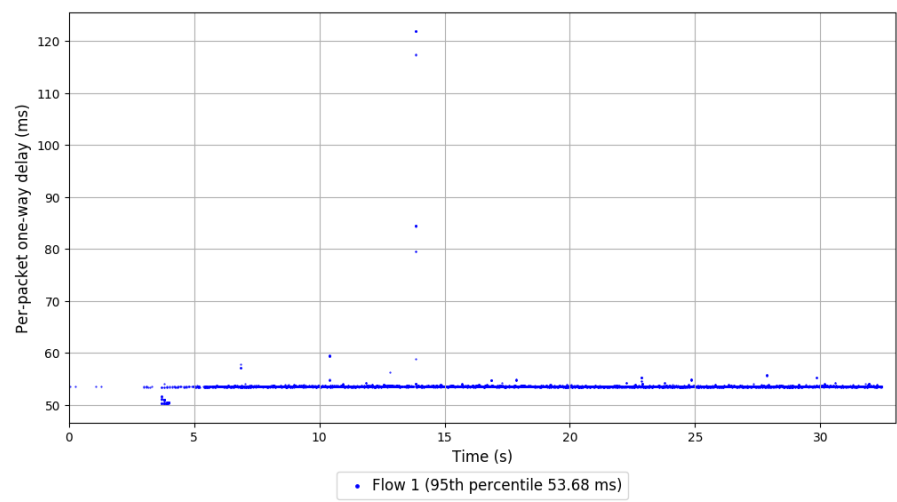
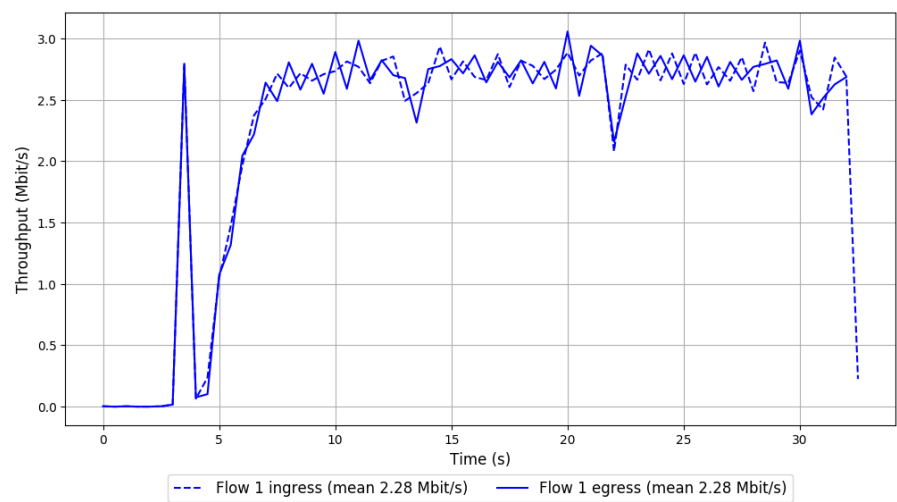
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.684 ms

Loss rate: 0.45%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-05 12:32:03

End at: 2017-12-05 12:32:33

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

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

Loss rate: 0.36%

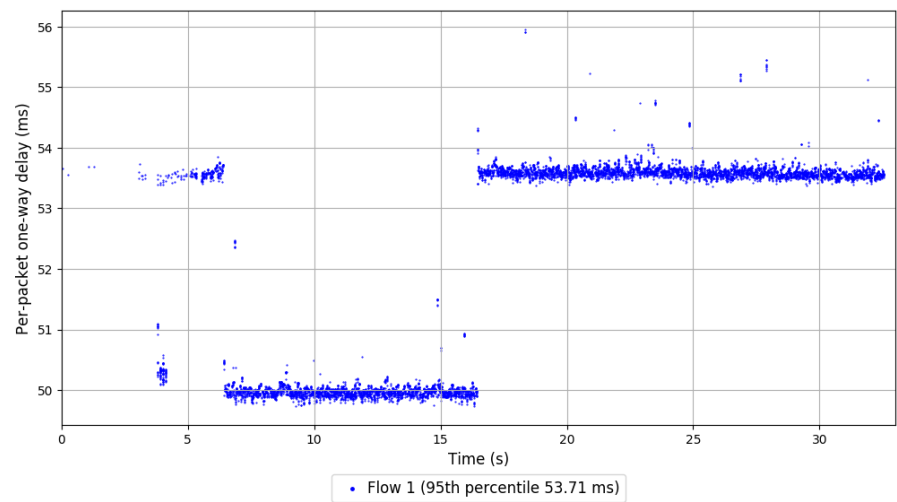
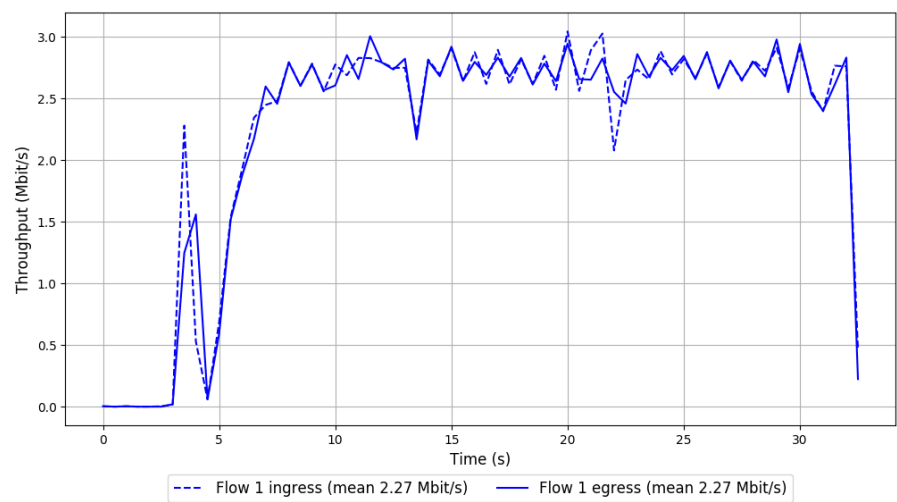
-- Flow 1:

Average throughput: 2.27 Mbit/s

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

Loss rate: 0.36%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-05 12:42:16

End at: 2017-12-05 12:42:46

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.067 ms

Loss rate: 0.40%

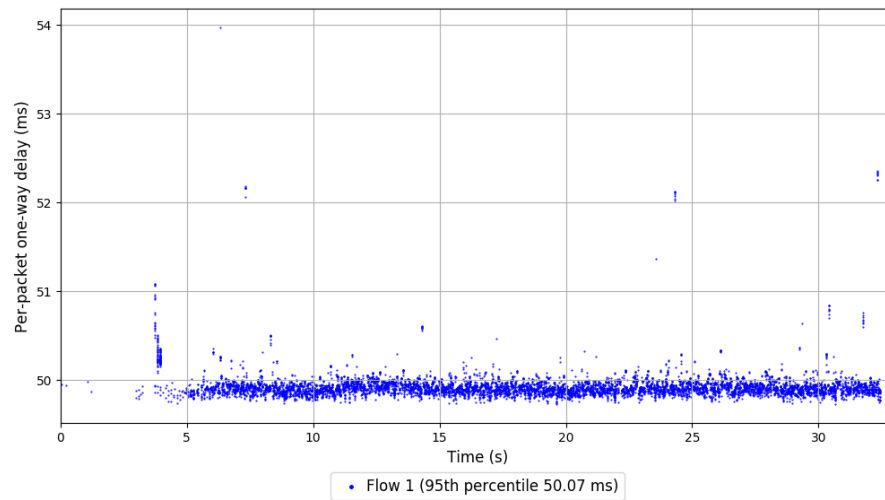
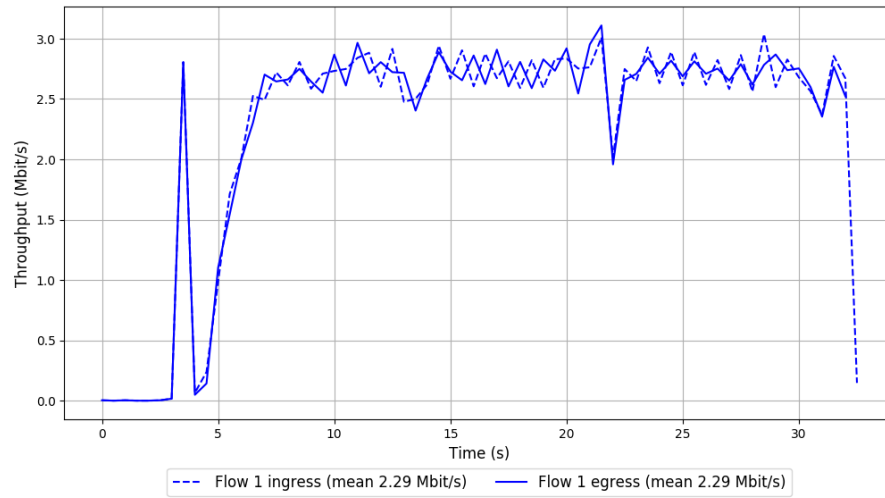
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.067 ms

Loss rate: 0.40%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-05 12:52:35

End at: 2017-12-05 12:53:05

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.653 ms

Loss rate: 0.40%

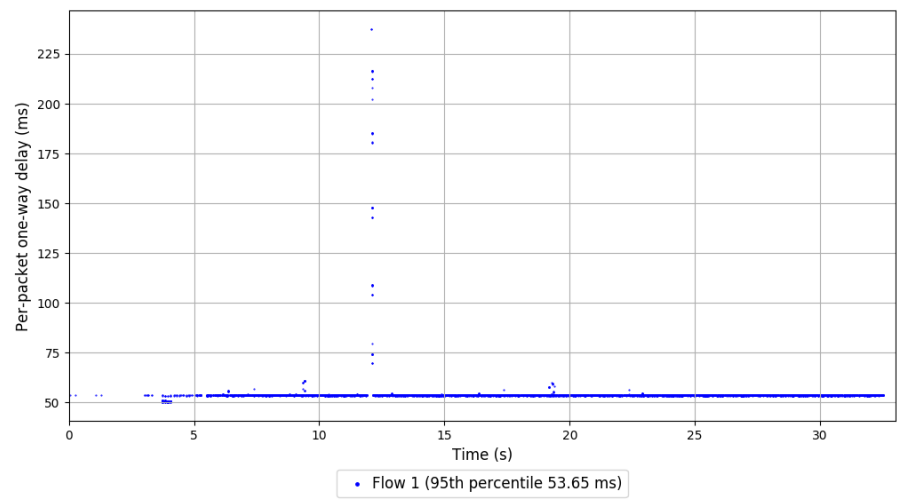
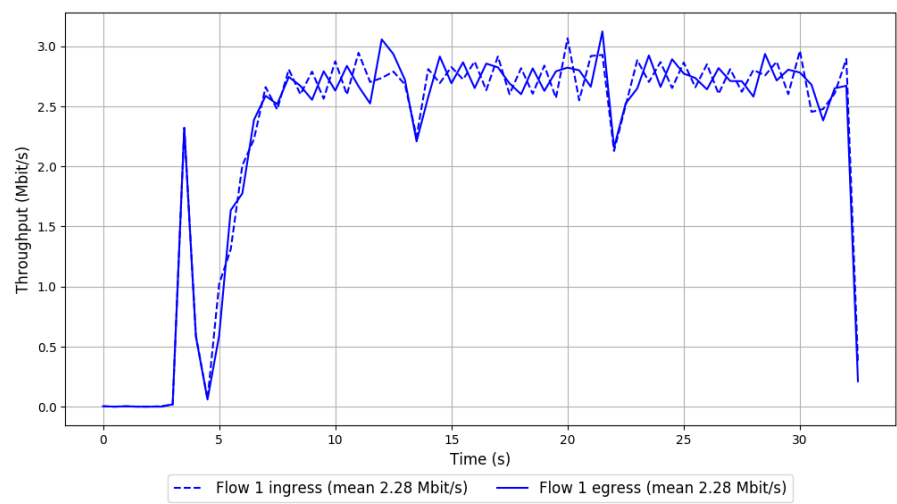
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.653 ms

Loss rate: 0.40%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-05 11:21:04

End at: 2017-12-05 11:21:34

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 53.334 ms

Loss rate: 0.53%

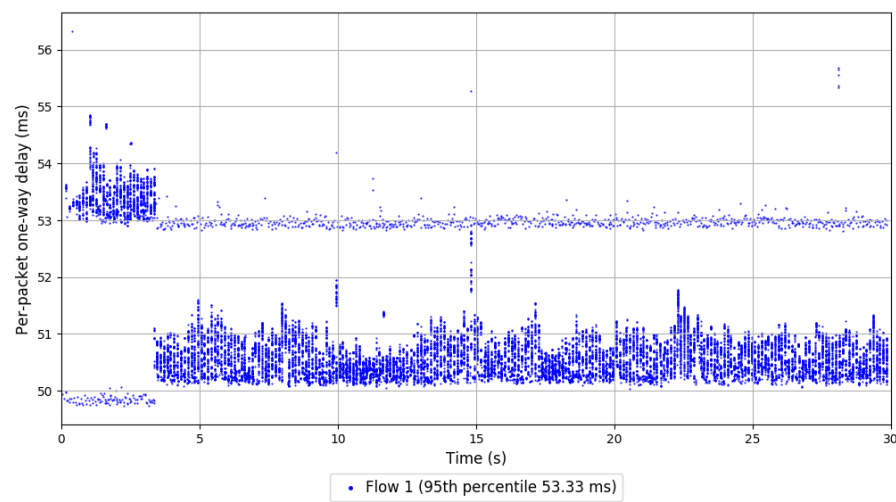
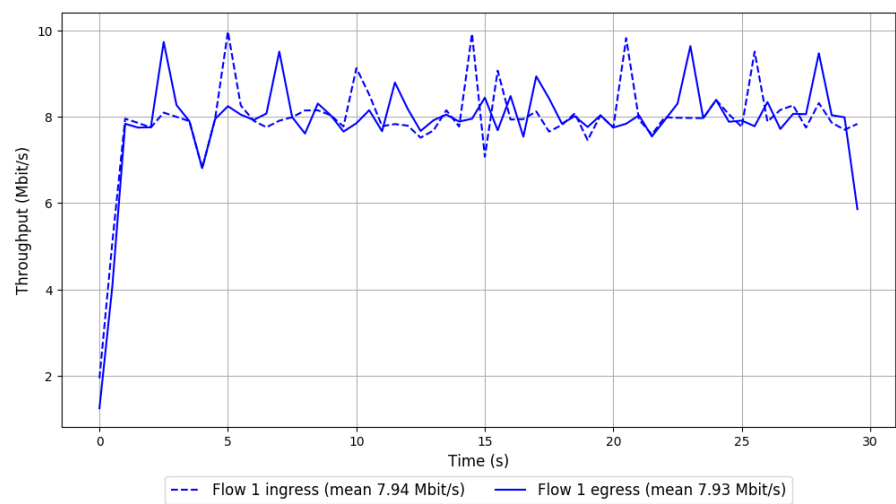
-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 53.334 ms

Loss rate: 0.53%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-05 11:31:22

End at: 2017-12-05 11:31:52

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.177 ms

Loss rate: 0.43%

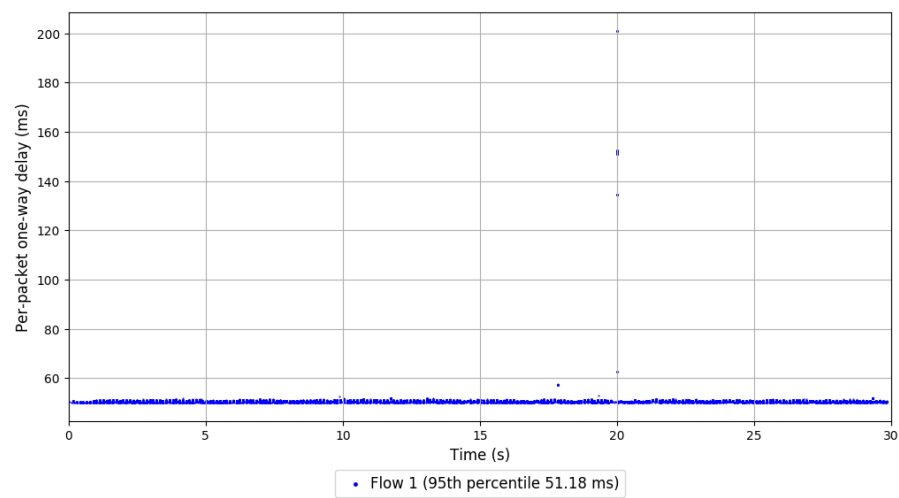
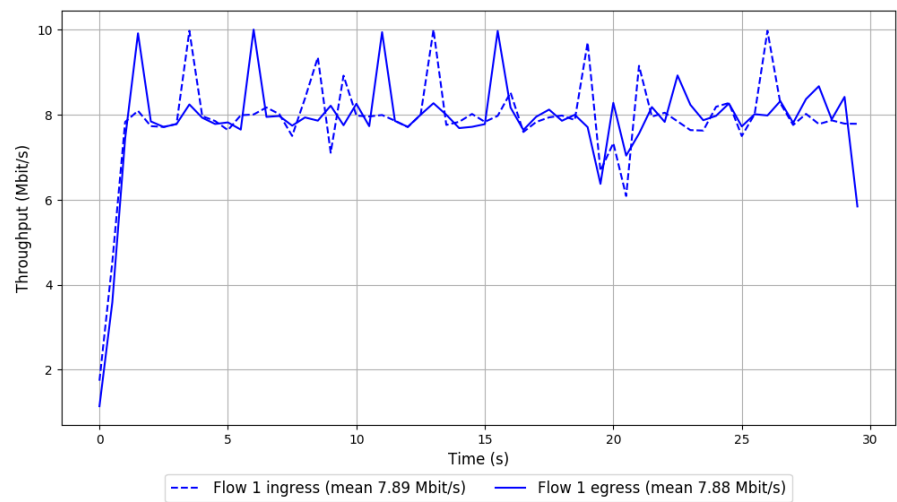
-- Flow 1:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.177 ms

Loss rate: 0.43%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 11:41:58

End at: 2017-12-05 11:42:28

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 51.684 ms

Loss rate: 0.42%

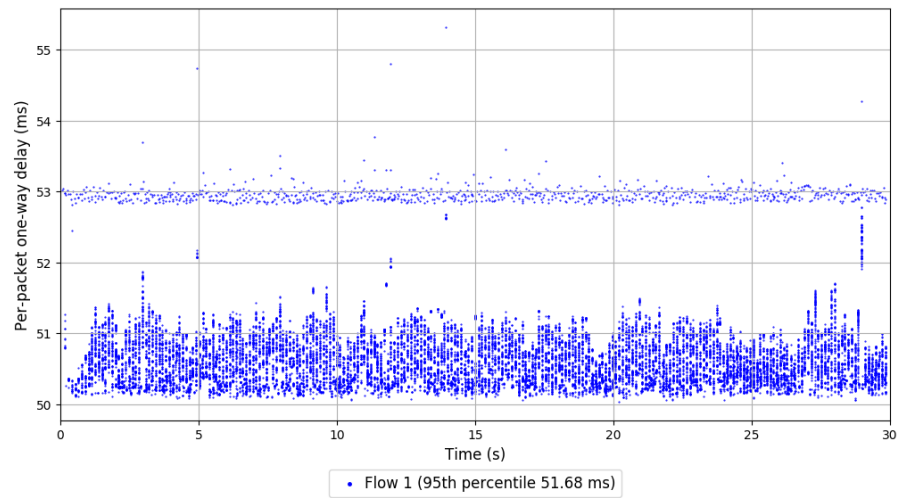
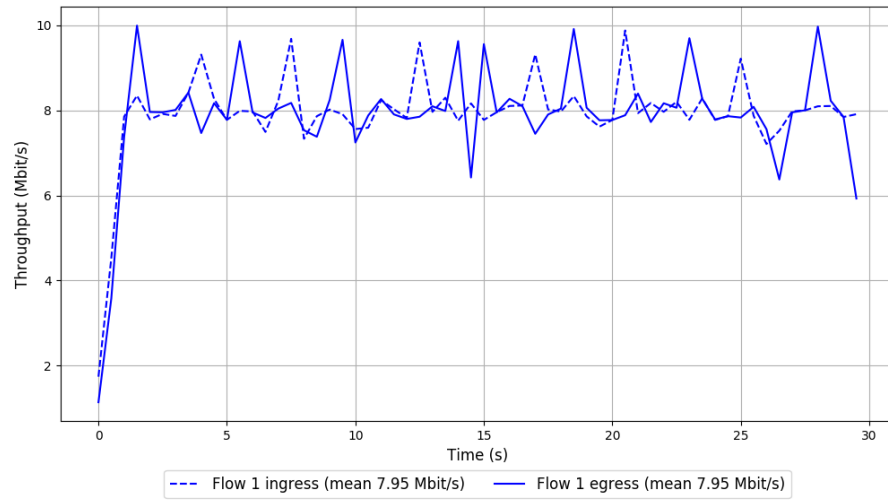
-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 51.684 ms

Loss rate: 0.42%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-05 11:52:28

End at: 2017-12-05 11:52:58

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.826 ms

Loss rate: 0.49%

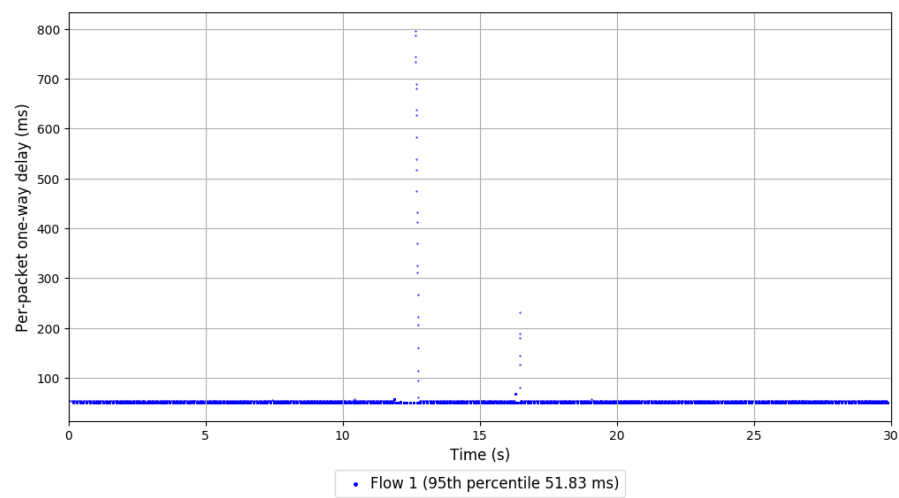
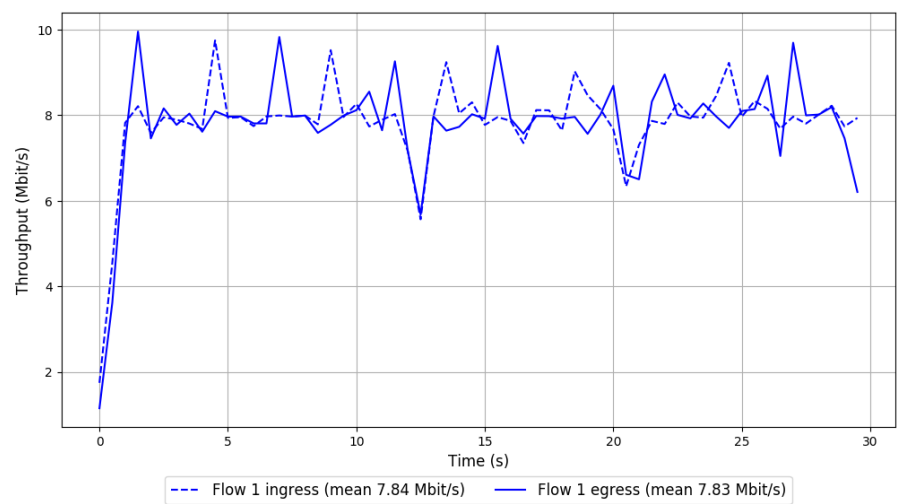
-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.826 ms

Loss rate: 0.49%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-05 12:02:43

End at: 2017-12-05 12:03:13

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 51.168 ms

Loss rate: 0.82%

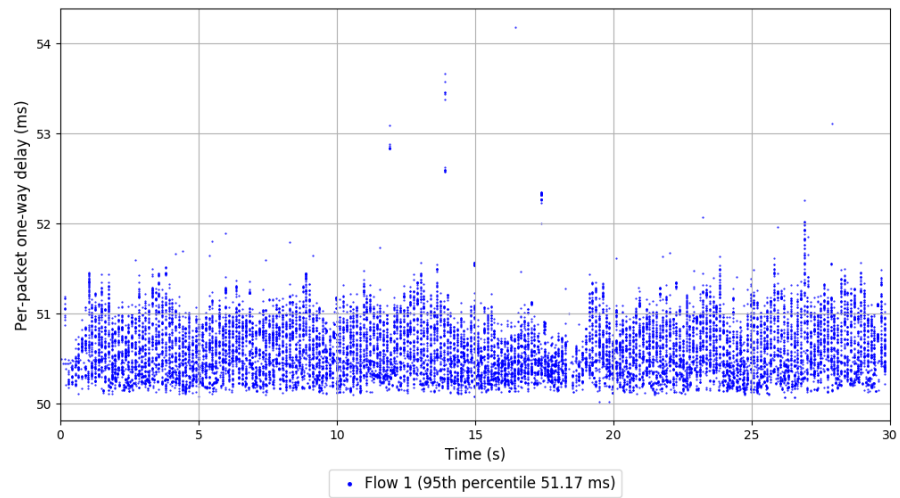
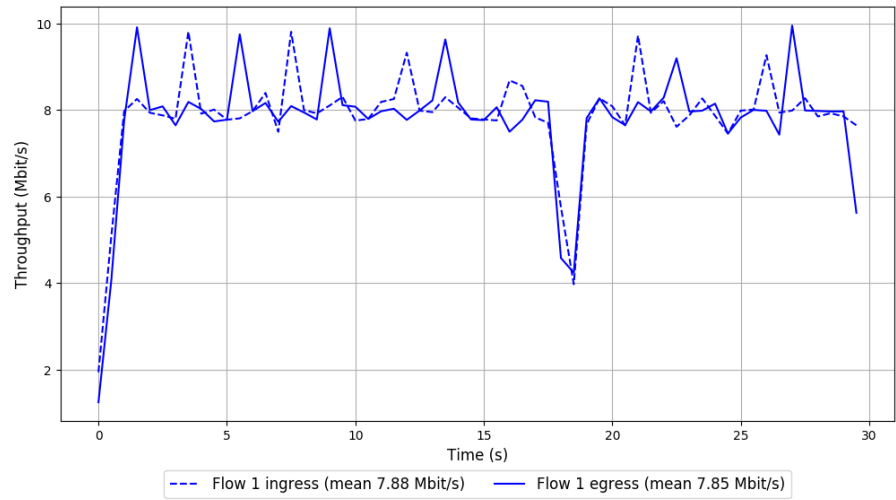
-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 51.168 ms

Loss rate: 0.82%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-05 12:13:01

End at: 2017-12-05 12:13:31

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 51.139 ms

Loss rate: 0.44%

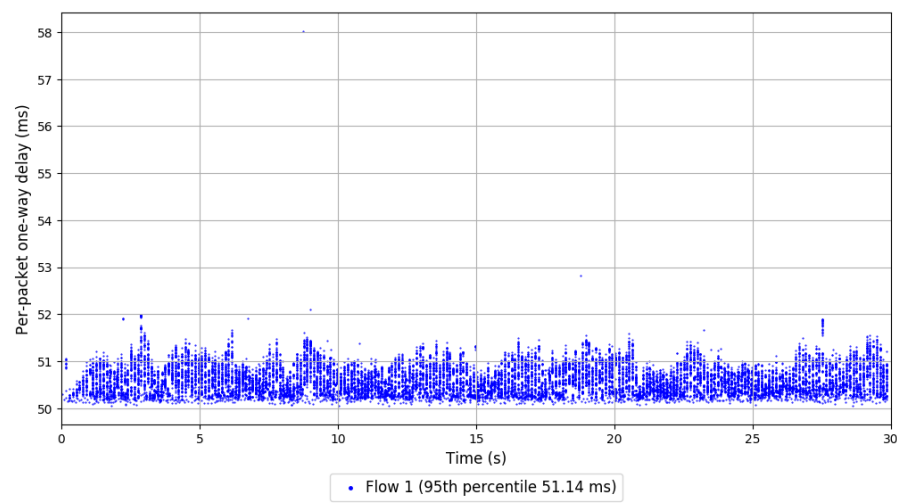
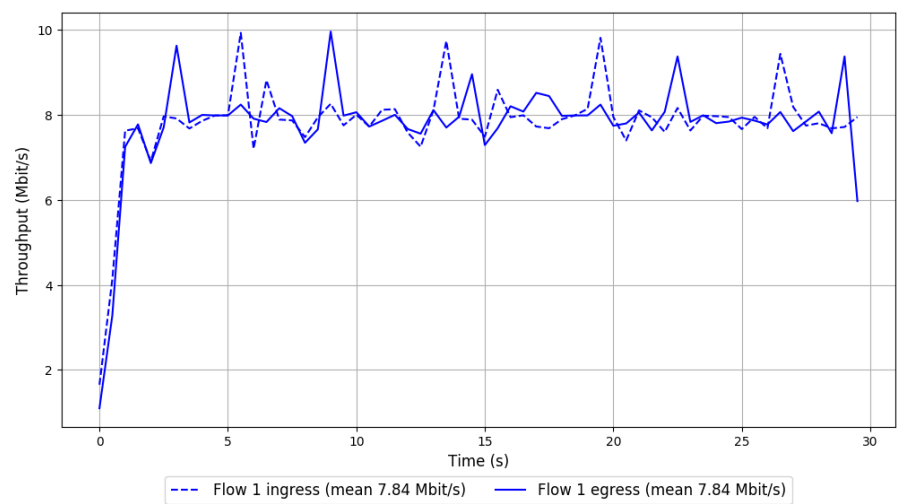
-- Flow 1:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 51.139 ms

Loss rate: 0.44%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-05 12:23:36

End at: 2017-12-05 12:24:06

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 53.739 ms

Loss rate: 0.39%

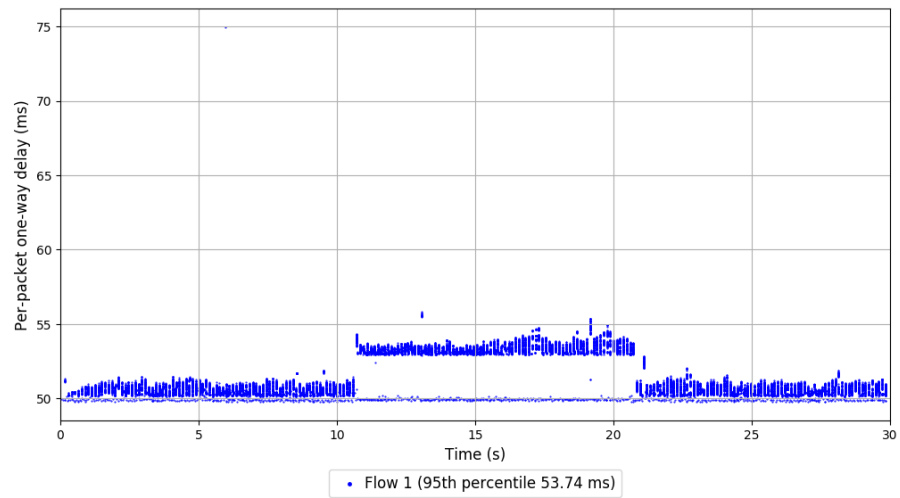
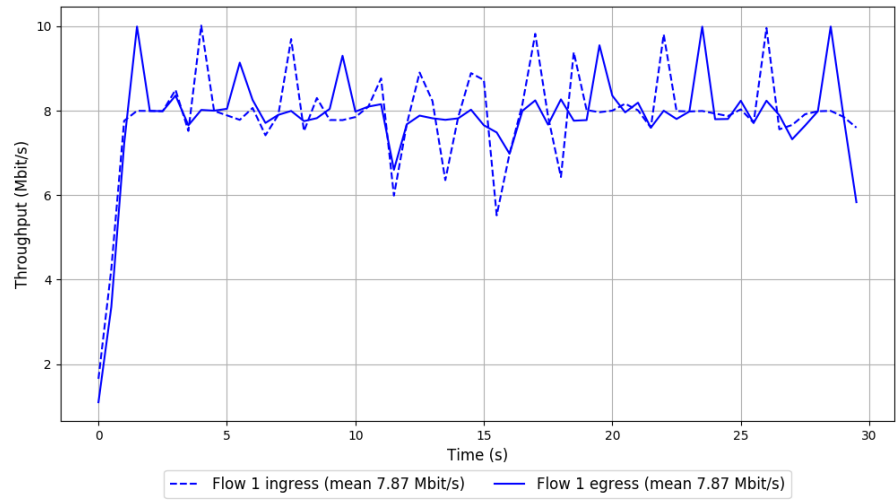
-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 53.739 ms

Loss rate: 0.39%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-05 12:34:13

End at: 2017-12-05 12:34:43

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 53.734 ms

Loss rate: 0.47%

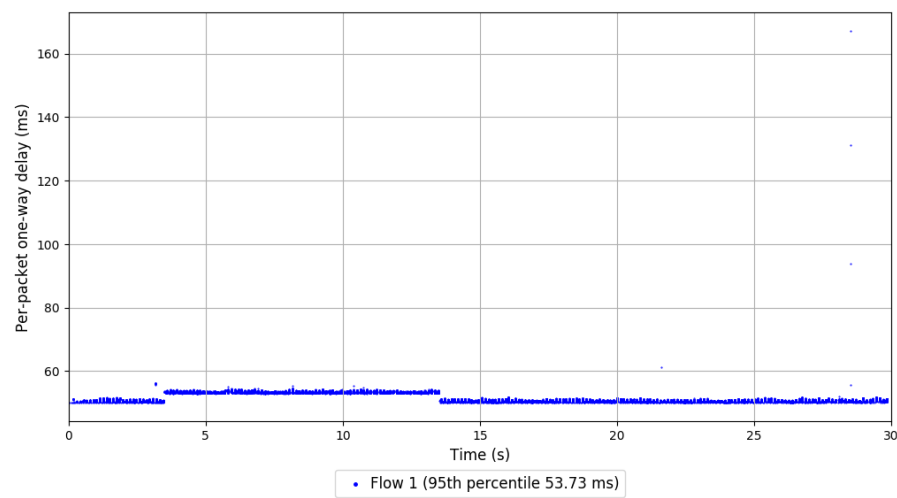
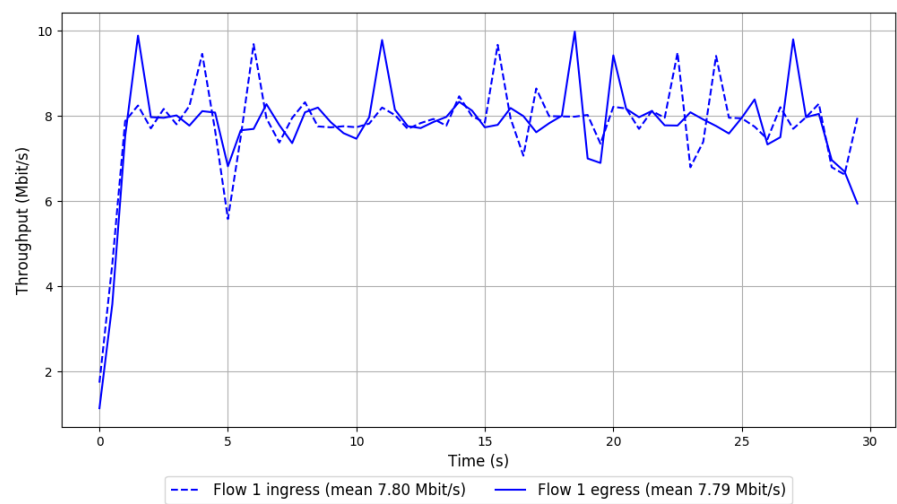
-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 53.734 ms

Loss rate: 0.47%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-05 12:44:27

End at: 2017-12-05 12:44:57

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 51.260 ms

Loss rate: 0.46%

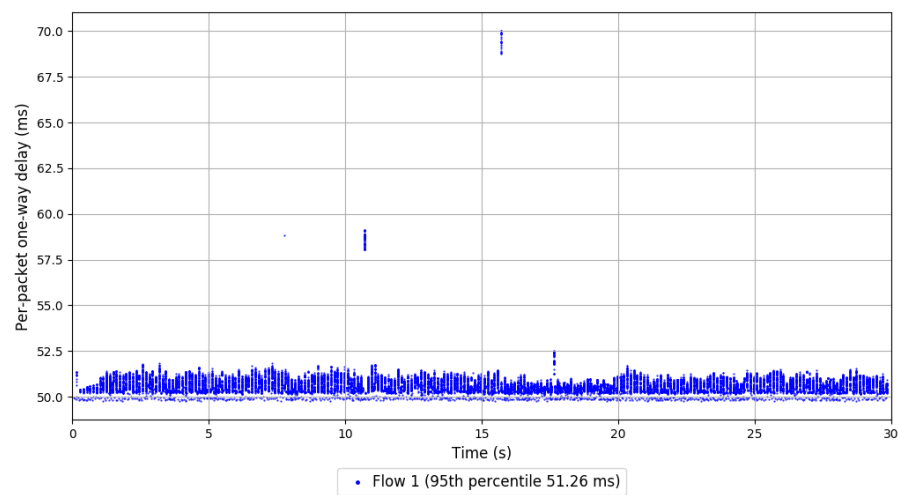
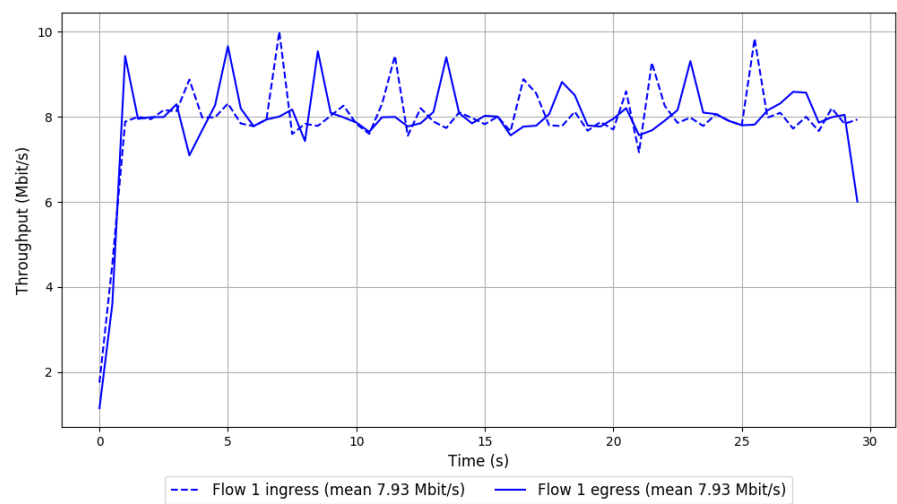
-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 51.260 ms

Loss rate: 0.46%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-05 12:54:45

End at: 2017-12-05 12:55:15

Below is generated by plot.py at 2017-12-05 15:14:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 52.330 ms

Loss rate: 0.44%

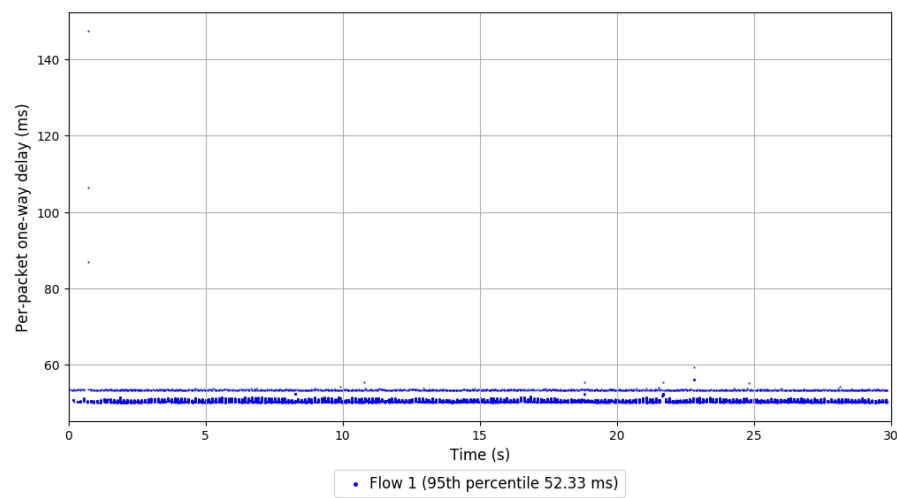
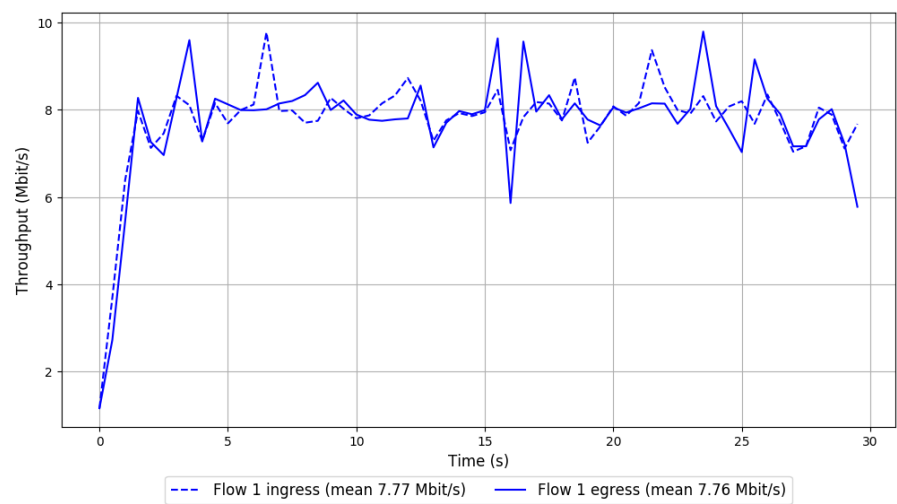
-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 52.330 ms

Loss rate: 0.44%

Run 10: Report of Sprout — Data Link

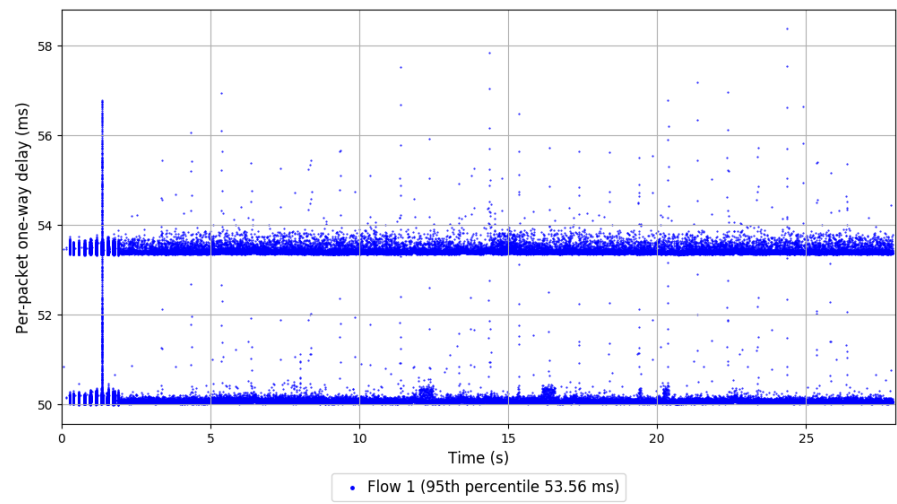
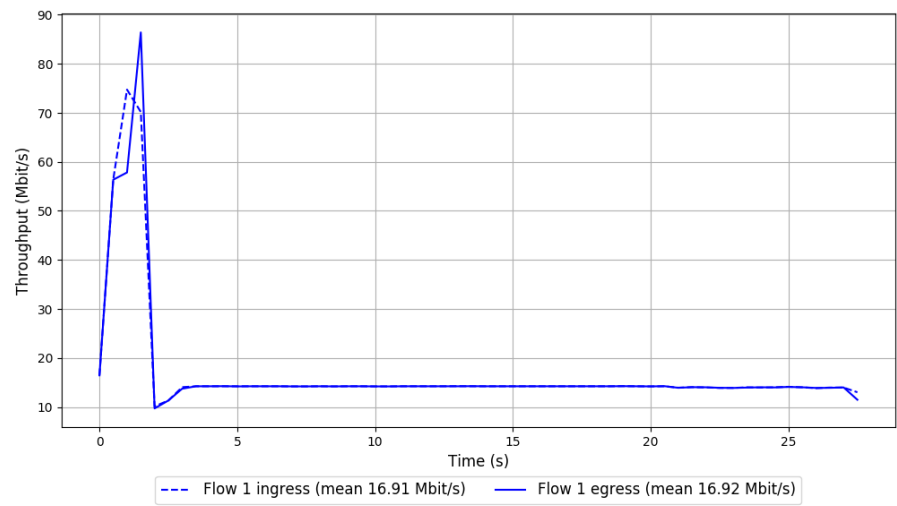


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 11:26:23
End at: 2017-12-05 11:26:53

# Below is generated by plot.py at 2017-12-05 15:14:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.92 Mbit/s
95th percentile per-packet one-way delay: 53.561 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 16.92 Mbit/s
95th percentile per-packet one-way delay: 53.561 ms
Loss rate: 0.31%
```

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

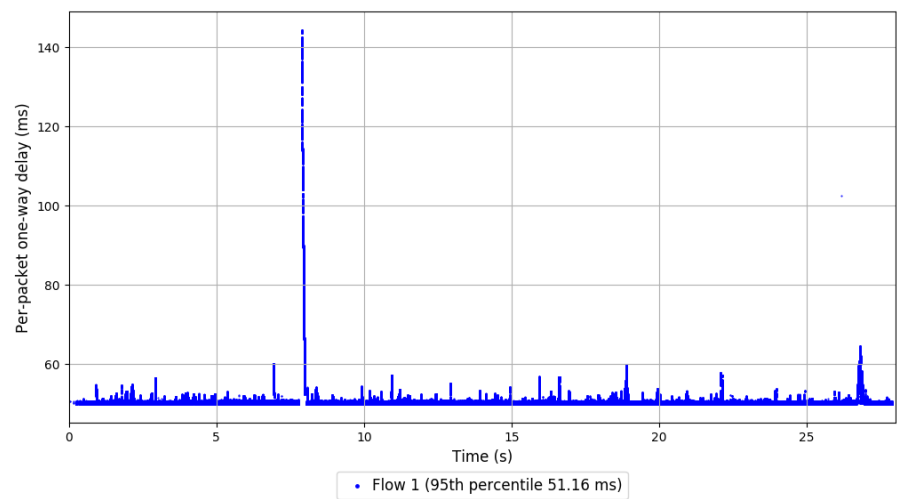
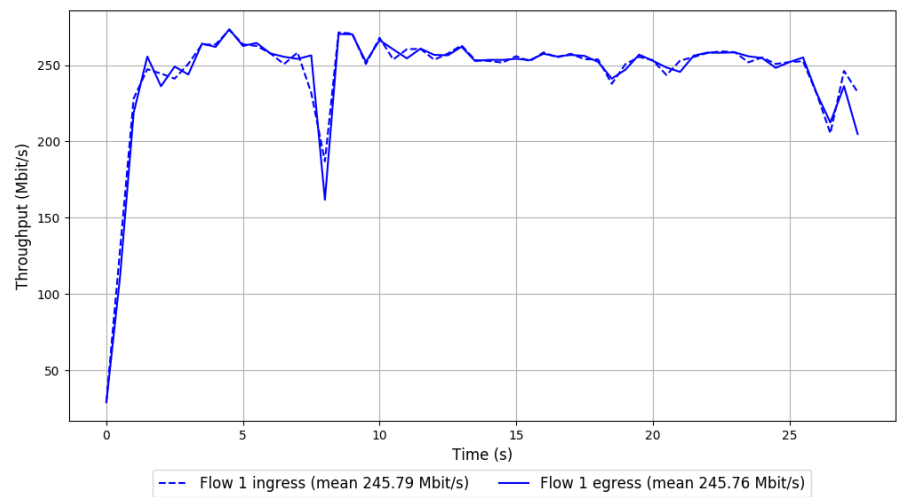


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 11:36:41
End at: 2017-12-05 11:37:11

# Below is generated by plot.py at 2017-12-05 15:14:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 245.76 Mbit/s
95th percentile per-packet one-way delay: 51.163 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 245.76 Mbit/s
95th percentile per-packet one-way delay: 51.163 ms
Loss rate: 0.39%
```

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

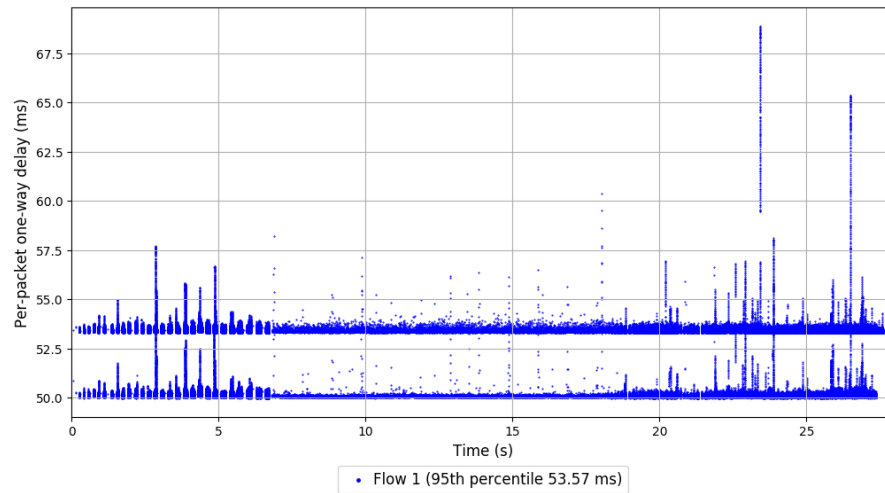
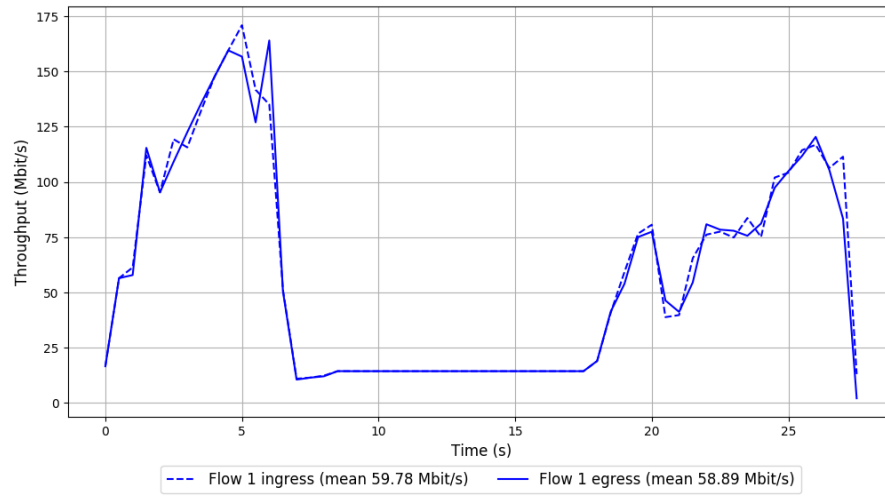


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 11:47:15
End at: 2017-12-05 11:47:45

# Below is generated by plot.py at 2017-12-05 15:14:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.89 Mbit/s
95th percentile per-packet one-way delay: 53.569 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 58.89 Mbit/s
95th percentile per-packet one-way delay: 53.569 ms
Loss rate: 1.49%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-05 11:57:46

End at: 2017-12-05 11:58:16

Below is generated by plot.py at 2017-12-05 15:14:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.01 Mbit/s

95th percentile per-packet one-way delay: 53.549 ms

Loss rate: 0.71%

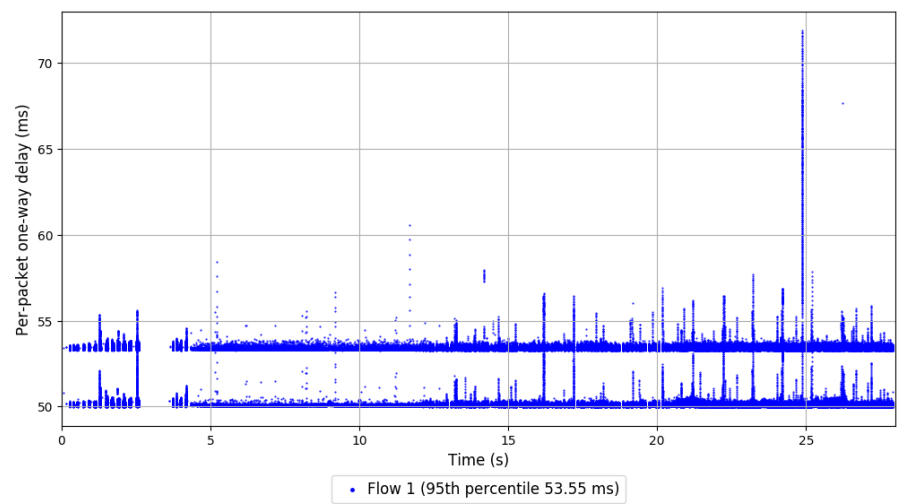
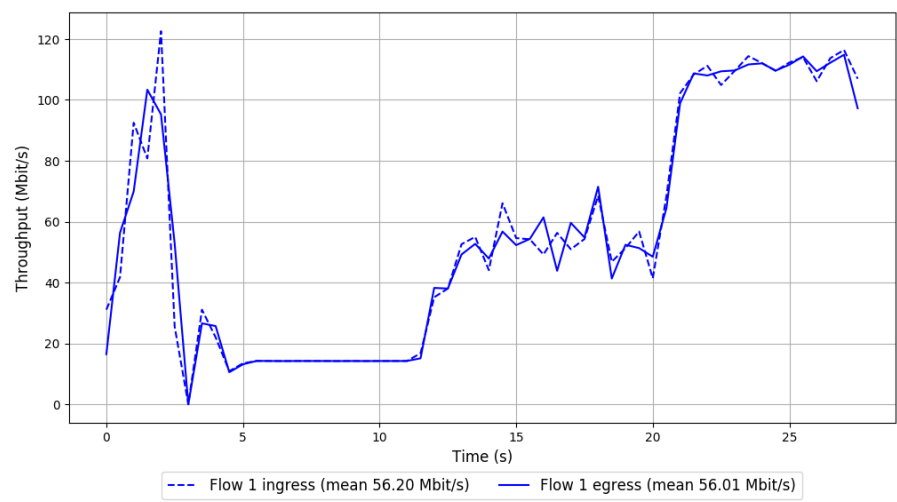
-- Flow 1:

Average throughput: 56.01 Mbit/s

95th percentile per-packet one-way delay: 53.549 ms

Loss rate: 0.71%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-05 12:08:01

End at: 2017-12-05 12:08:31

Below is generated by plot.py at 2017-12-05 15:14:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.91 Mbit/s

95th percentile per-packet one-way delay: 53.562 ms

Loss rate: 0.45%

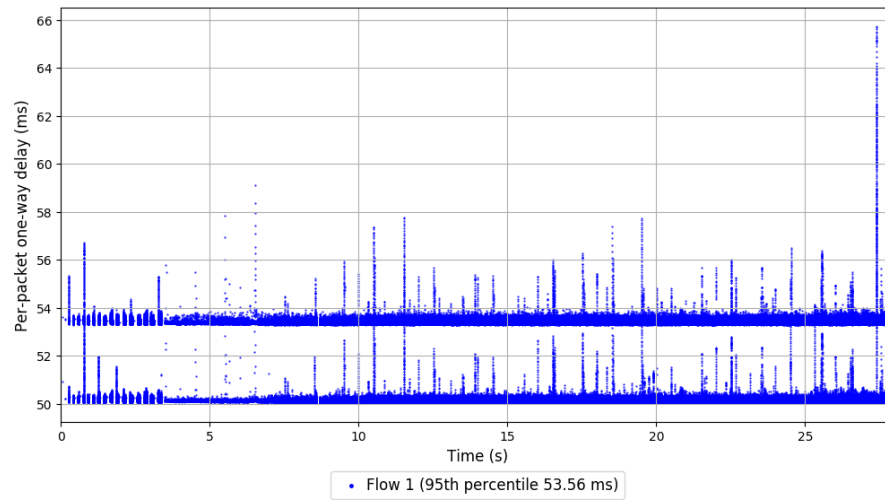
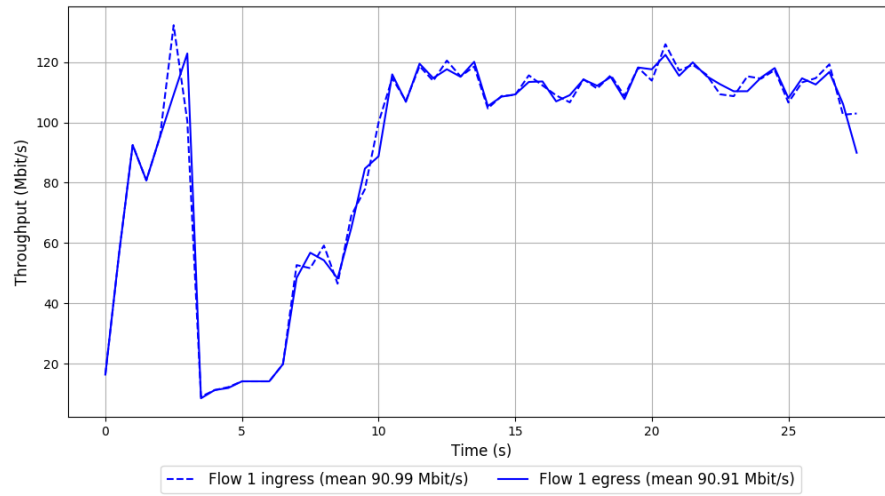
-- Flow 1:

Average throughput: 90.91 Mbit/s

95th percentile per-packet one-way delay: 53.562 ms

Loss rate: 0.45%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-05 12:18:23

End at: 2017-12-05 12:18:53

Below is generated by plot.py at 2017-12-05 15:15:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 246.60 Mbit/s

95th percentile per-packet one-way delay: 50.709 ms

Loss rate: 0.38%

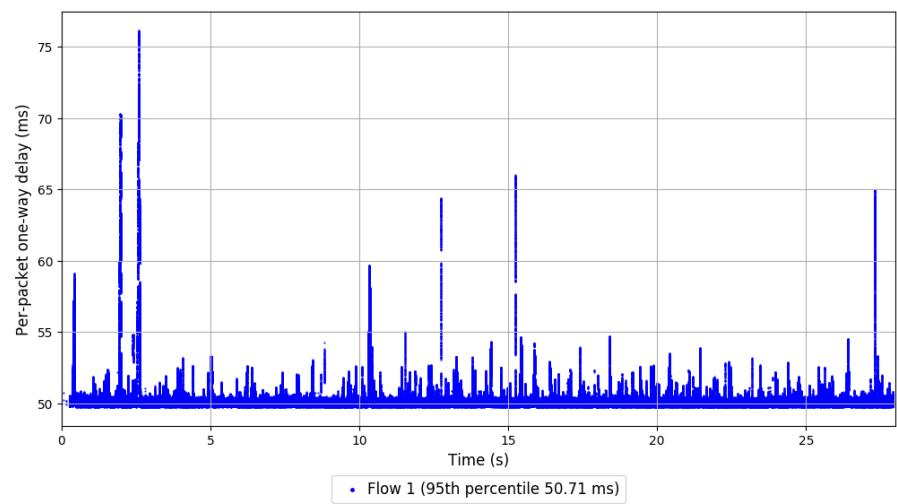
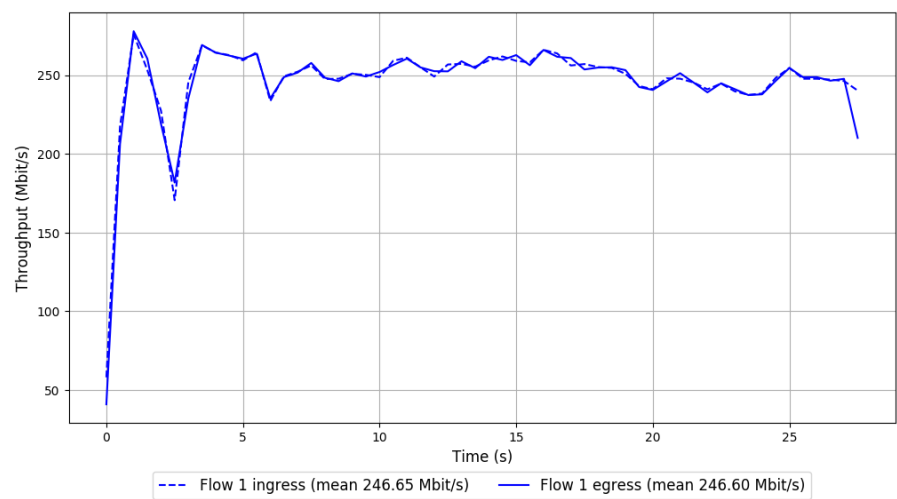
-- Flow 1:

Average throughput: 246.60 Mbit/s

95th percentile per-packet one-way delay: 50.709 ms

Loss rate: 0.38%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-05 12:28:56

End at: 2017-12-05 12:29:26

Below is generated by plot.py at 2017-12-05 15:15:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 250.06 Mbit/s

95th percentile per-packet one-way delay: 50.717 ms

Loss rate: 0.37%

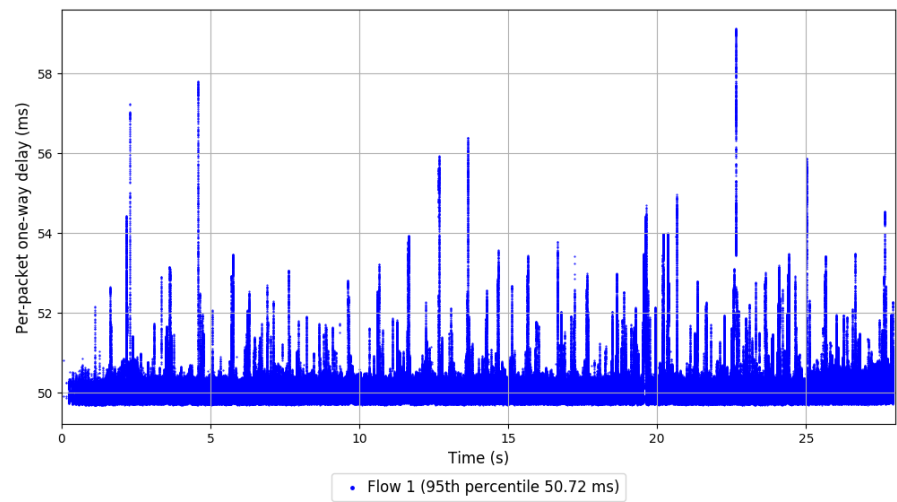
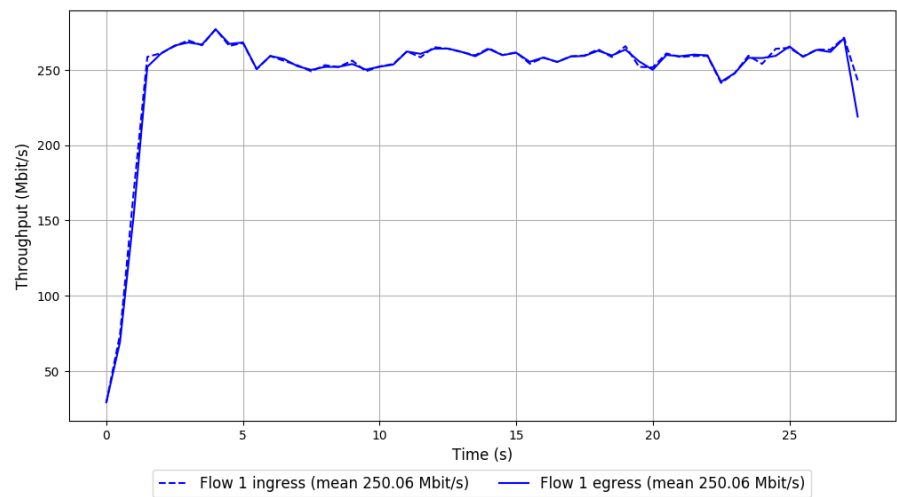
-- Flow 1:

Average throughput: 250.06 Mbit/s

95th percentile per-packet one-way delay: 50.717 ms

Loss rate: 0.37%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-05 12:39:31

End at: 2017-12-05 12:40:01

Below is generated by plot.py at 2017-12-05 15:15:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.32 Mbit/s

95th percentile per-packet one-way delay: 53.231 ms

Loss rate: 1.95%

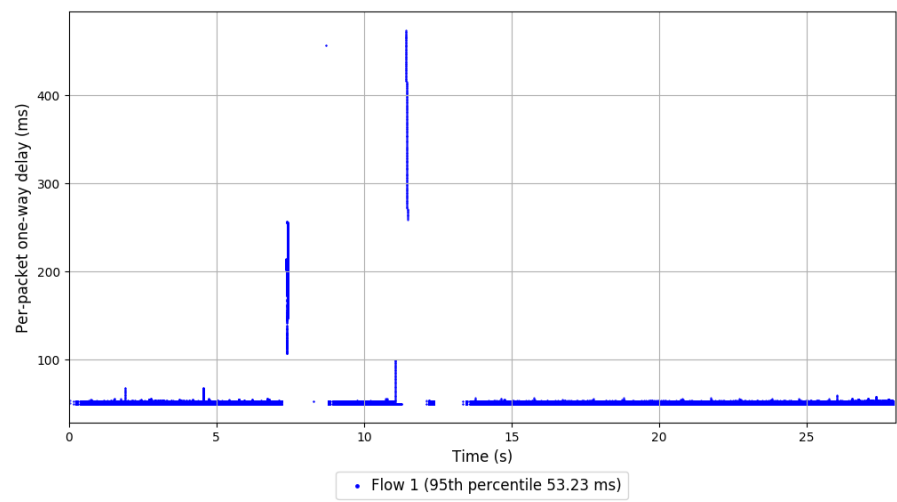
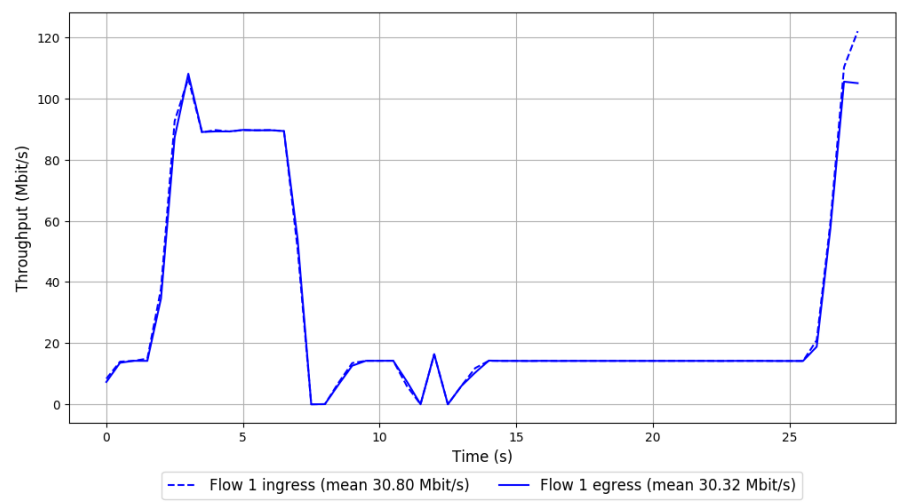
-- Flow 1:

Average throughput: 30.32 Mbit/s

95th percentile per-packet one-way delay: 53.231 ms

Loss rate: 1.95%

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

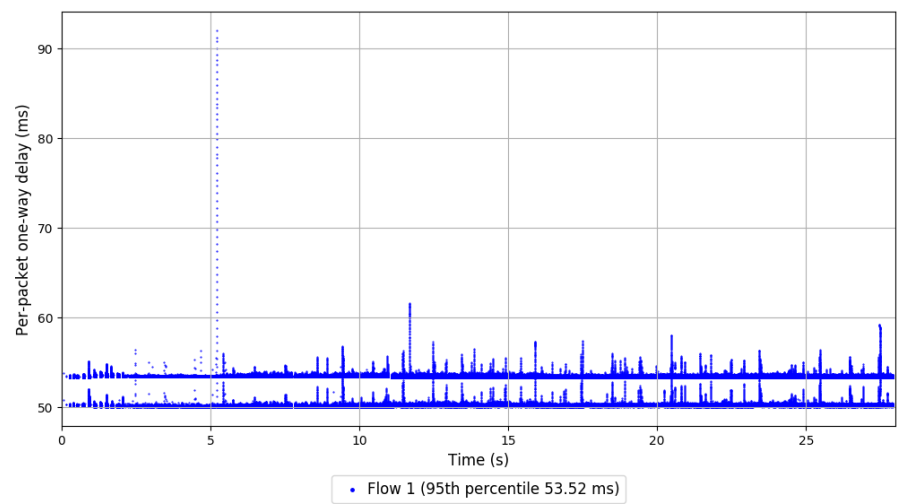
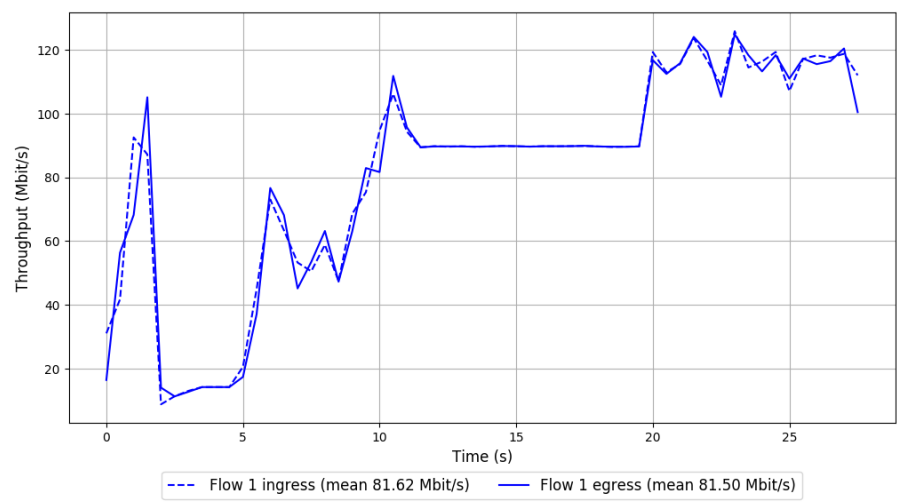


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-12-05 12:49:44
End at: 2017-12-05 12:50:14

# Below is generated by plot.py at 2017-12-05 15:15:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.50 Mbit/s
95th percentile per-packet one-way delay: 53.517 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 81.50 Mbit/s
95th percentile per-packet one-way delay: 53.517 ms
Loss rate: 0.51%
```

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

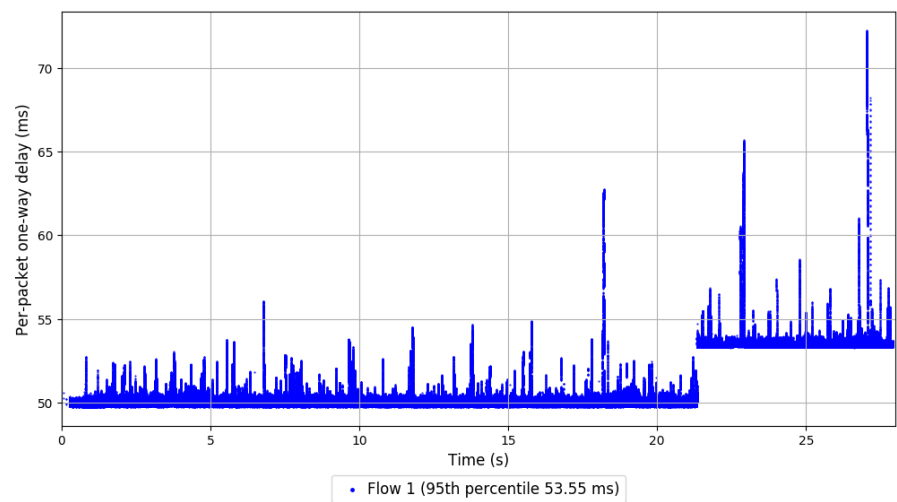
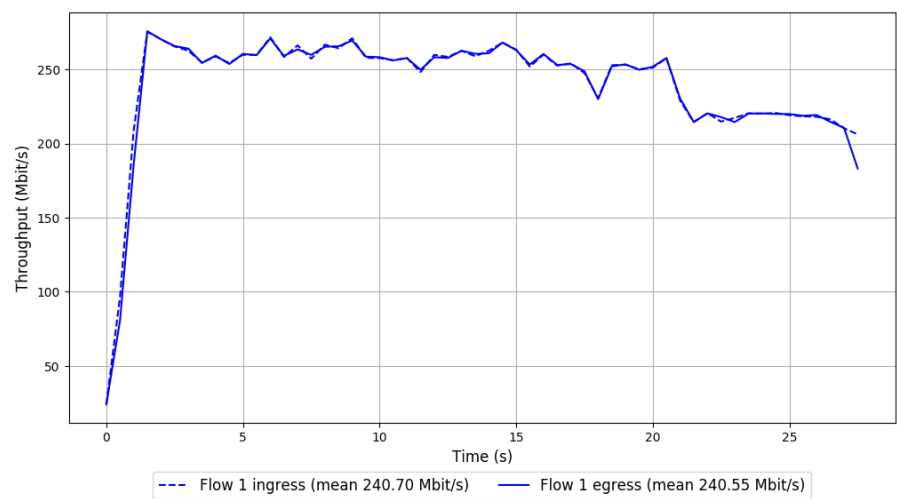


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-05 13:00:04
End at: 2017-12-05 13:00:34

# Below is generated by plot.py at 2017-12-05 15:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 240.55 Mbit/s
95th percentile per-packet one-way delay: 53.548 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 240.55 Mbit/s
95th percentile per-packet one-way delay: 53.548 ms
Loss rate: 0.43%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 11:16:32

End at: 2017-12-05 11:17:02

Below is generated by plot.py at 2017-12-05 15:17:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.25 Mbit/s

95th percentile per-packet one-way delay: 53.268 ms

Loss rate: 0.12%

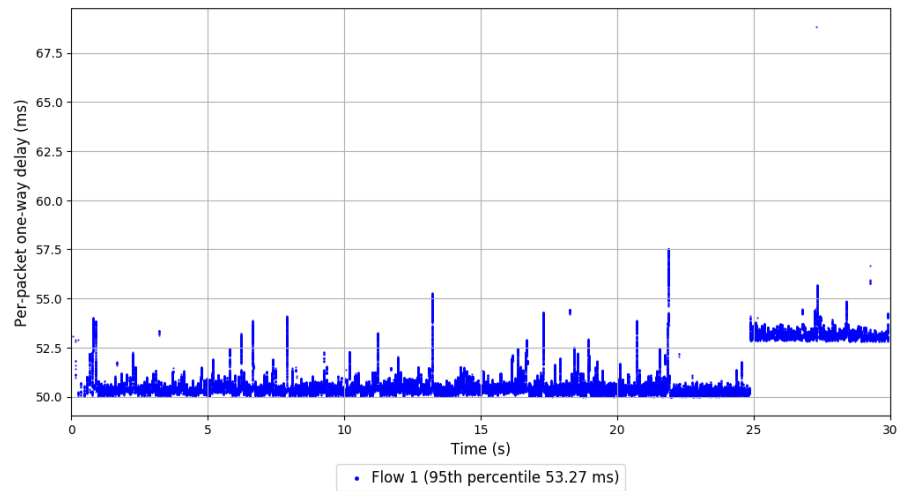
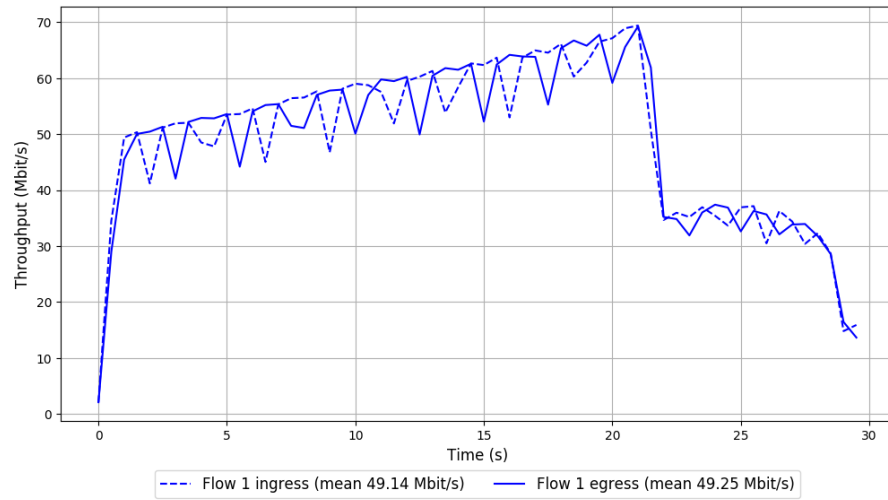
-- Flow 1:

Average throughput: 49.25 Mbit/s

95th percentile per-packet one-way delay: 53.268 ms

Loss rate: 0.12%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 11:27:02

End at: 2017-12-05 11:27:32

Below is generated by plot.py at 2017-12-05 15:17:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.90 Mbit/s

95th percentile per-packet one-way delay: 51.464 ms

Loss rate: 0.18%

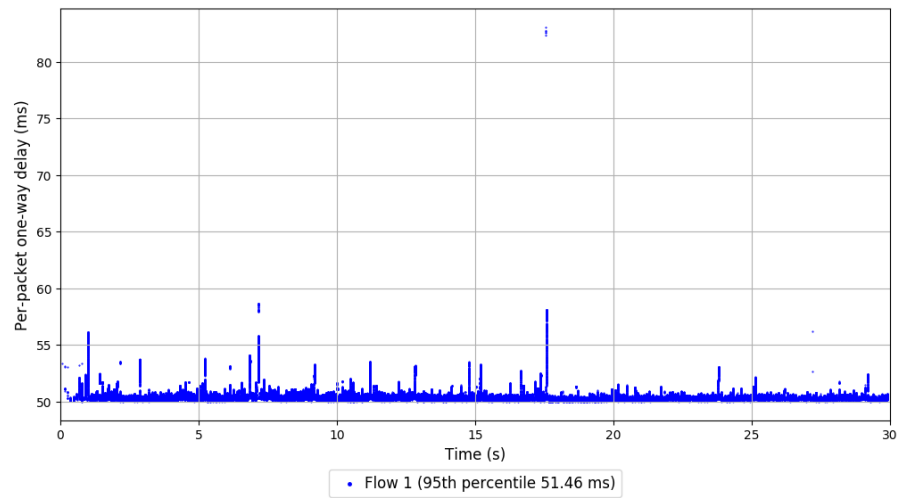
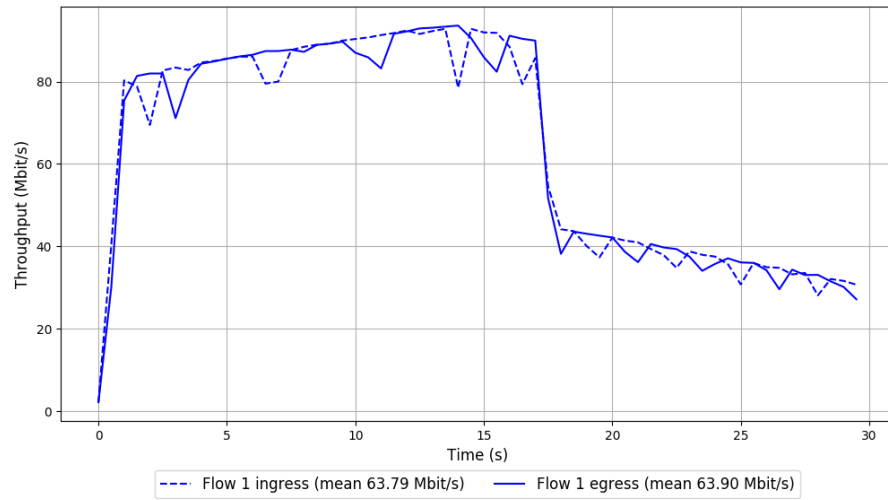
-- Flow 1:

Average throughput: 63.90 Mbit/s

95th percentile per-packet one-way delay: 51.464 ms

Loss rate: 0.18%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 11:37:41

End at: 2017-12-05 11:38:11

Below is generated by plot.py at 2017-12-05 15:17:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.64 Mbit/s

95th percentile per-packet one-way delay: 52.997 ms

Loss rate: 0.64%

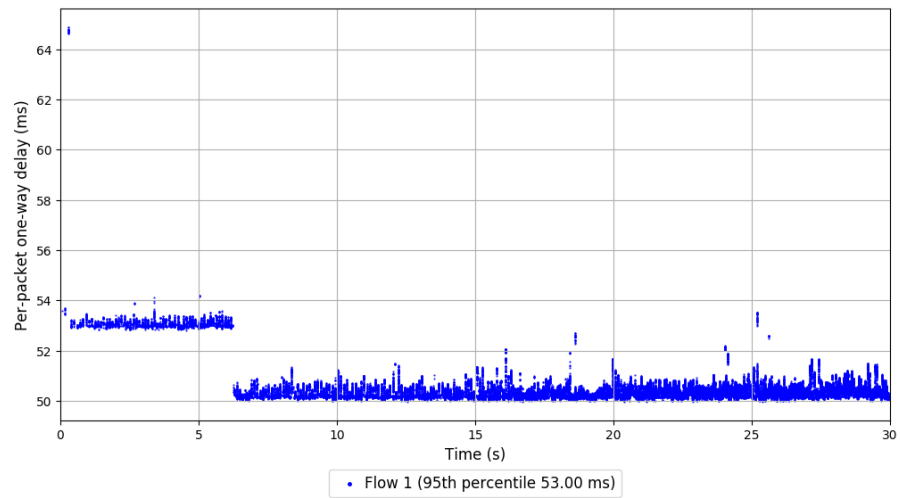
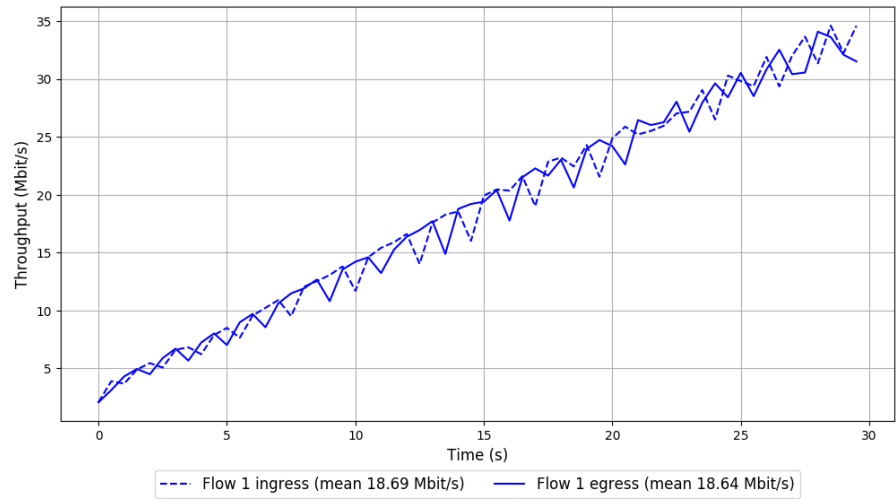
-- Flow 1:

Average throughput: 18.64 Mbit/s

95th percentile per-packet one-way delay: 52.997 ms

Loss rate: 0.64%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-05 11:48:06

End at: 2017-12-05 11:48:36

Below is generated by plot.py at 2017-12-05 15:17:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.45 Mbit/s

95th percentile per-packet one-way delay: 51.297 ms

Loss rate: 0.14%

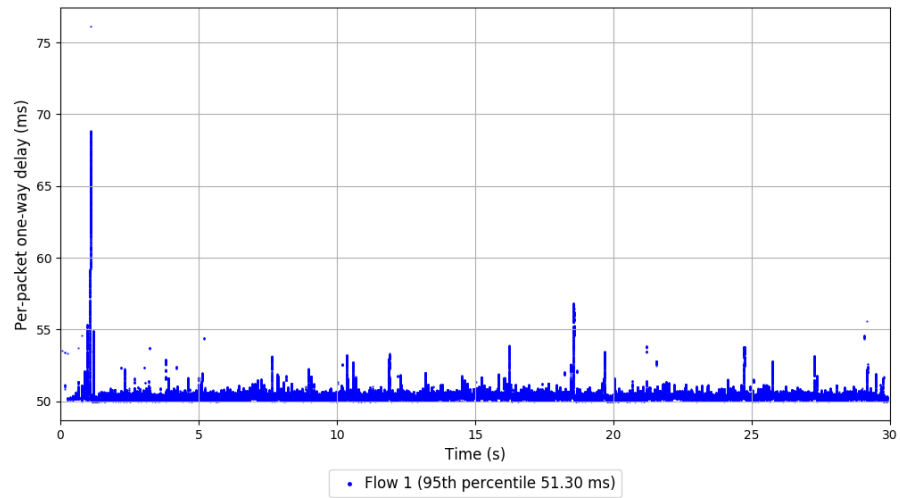
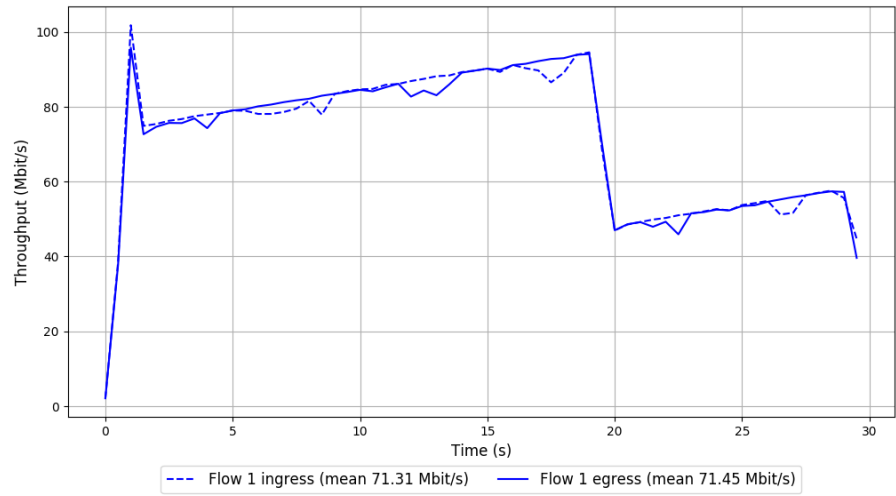
-- Flow 1:

Average throughput: 71.45 Mbit/s

95th percentile per-packet one-way delay: 51.297 ms

Loss rate: 0.14%

Run 4: Report of TCP Vegas — Data Link

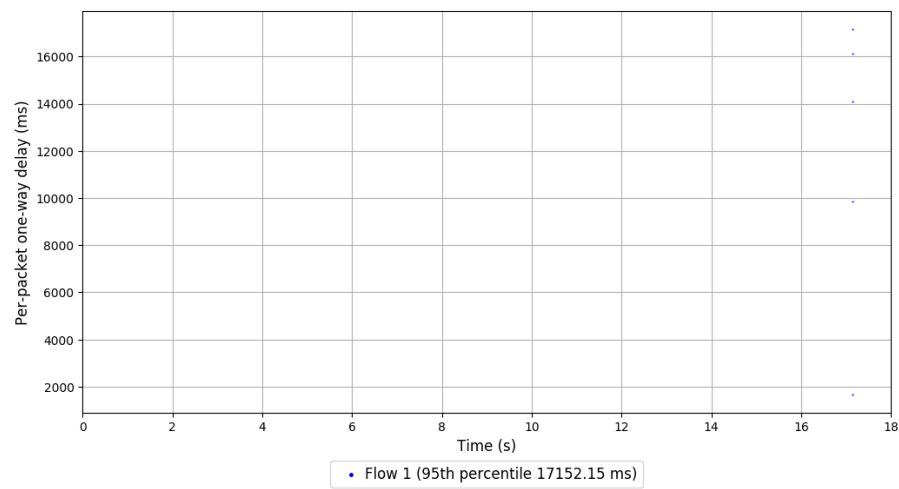
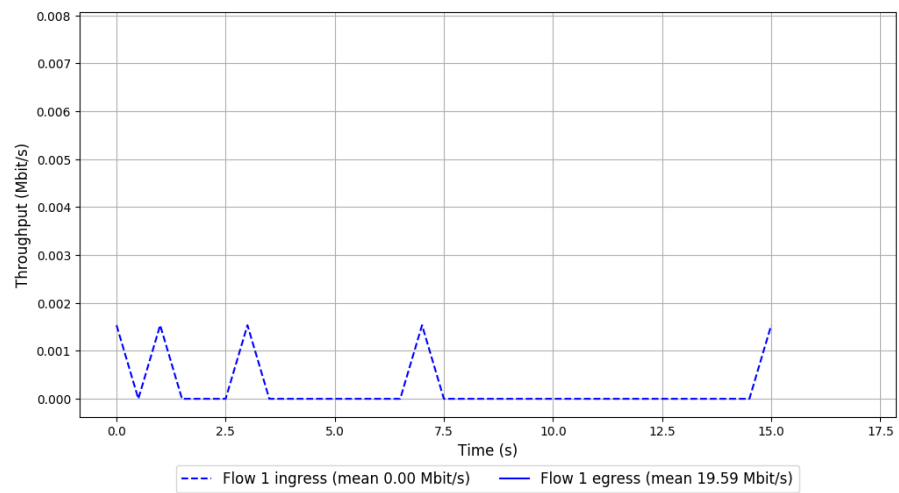


Run 5: Statistics of TCP Vegas

Start at: 2017-12-05 11:58:28

End at: 2017-12-05 11:58:58

Run 5: Report of TCP Vegas — Data Link

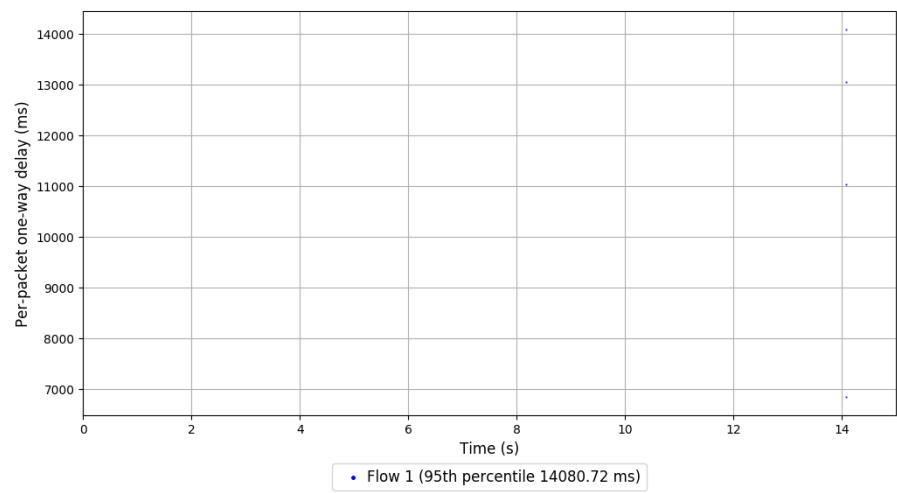
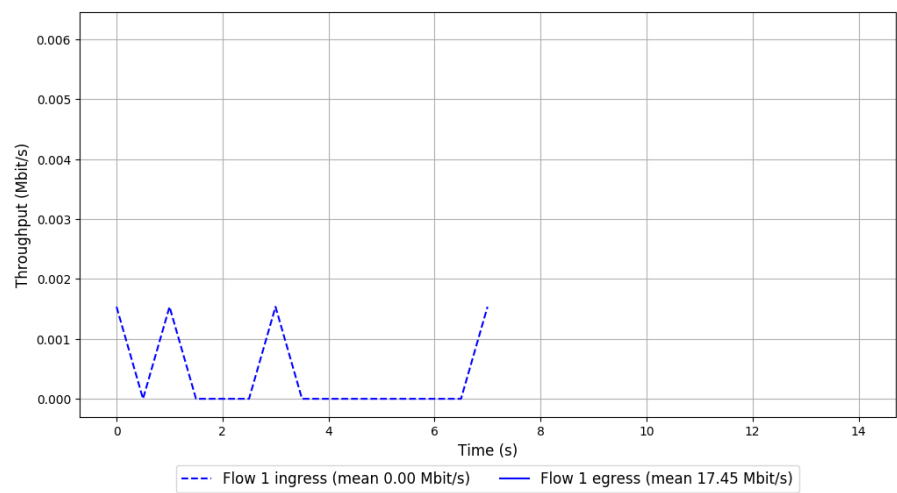


Run 6: Statistics of TCP Vegas

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

End at: 2017-12-05 12:09:16

Run 6: Report of TCP Vegas — Data Link

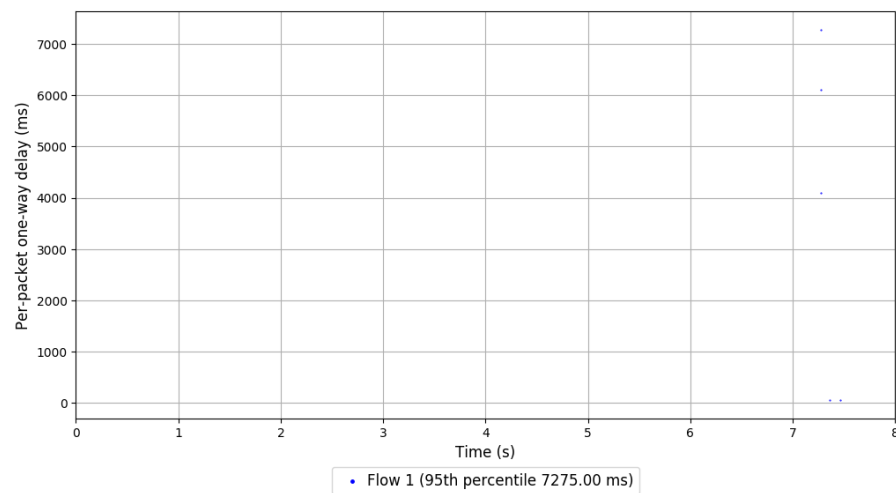
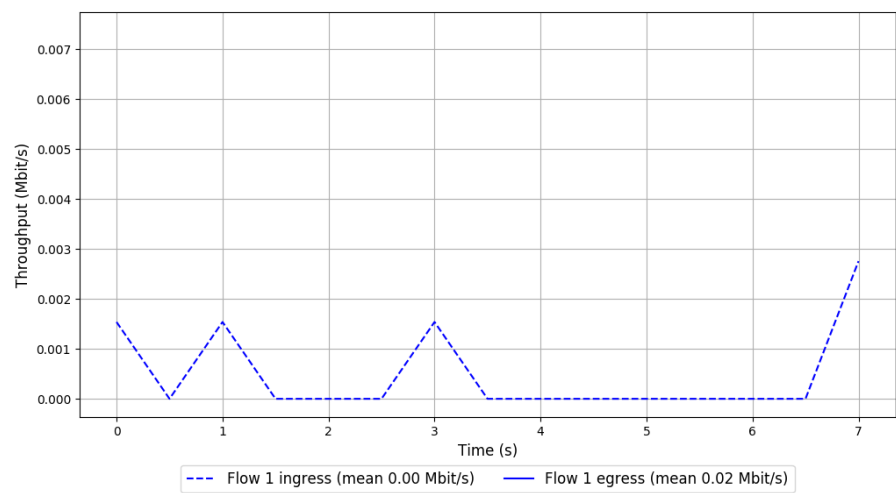


Run 7: Statistics of TCP Vegas

Start at: 2017-12-05 12:19:23

End at: 2017-12-05 12:19:53

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-05 12:29:56

End at: 2017-12-05 12:30:26

Below is generated by plot.py at 2017-12-05 15:17:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.89 Mbit/s

95th percentile per-packet one-way delay: 51.605 ms

Loss rate: 0.42%

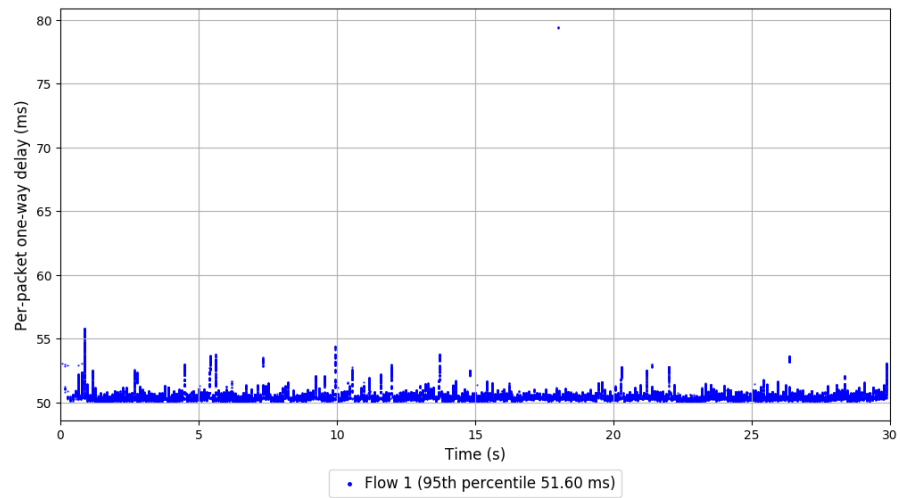
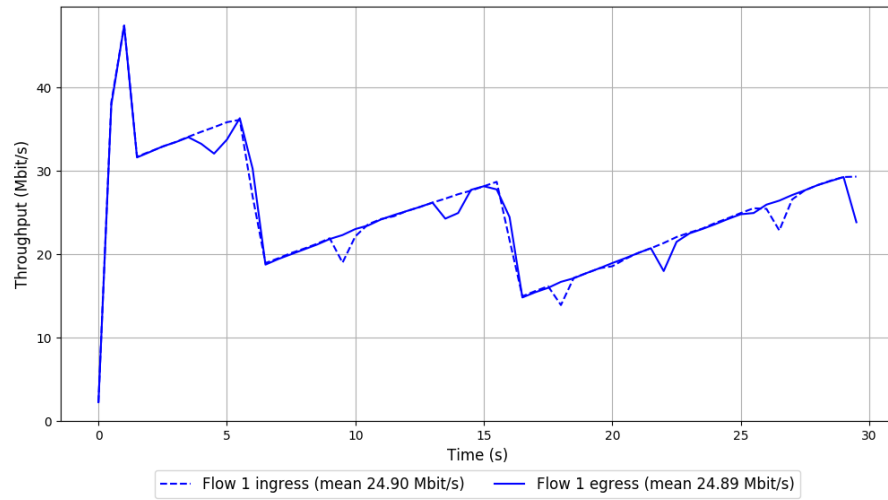
-- Flow 1:

Average throughput: 24.89 Mbit/s

95th percentile per-packet one-way delay: 51.605 ms

Loss rate: 0.42%

Run 8: Report of TCP Vegas — Data Link

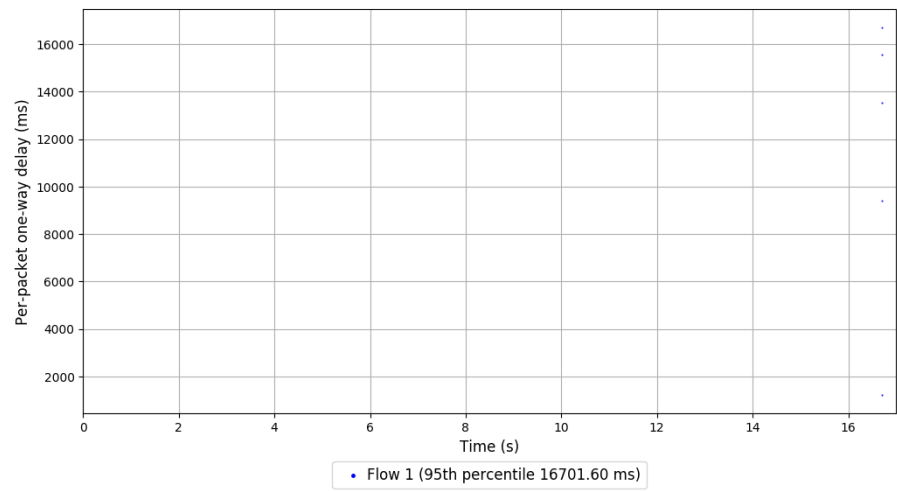
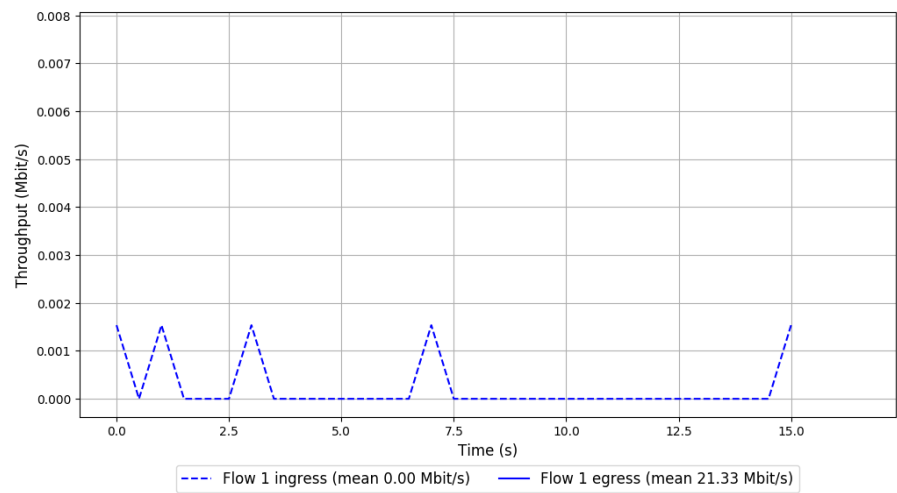


Run 9: Statistics of TCP Vegas

Start at: 2017-12-05 12:40:11

End at: 2017-12-05 12:40:41

Run 9: Report of TCP Vegas — Data Link

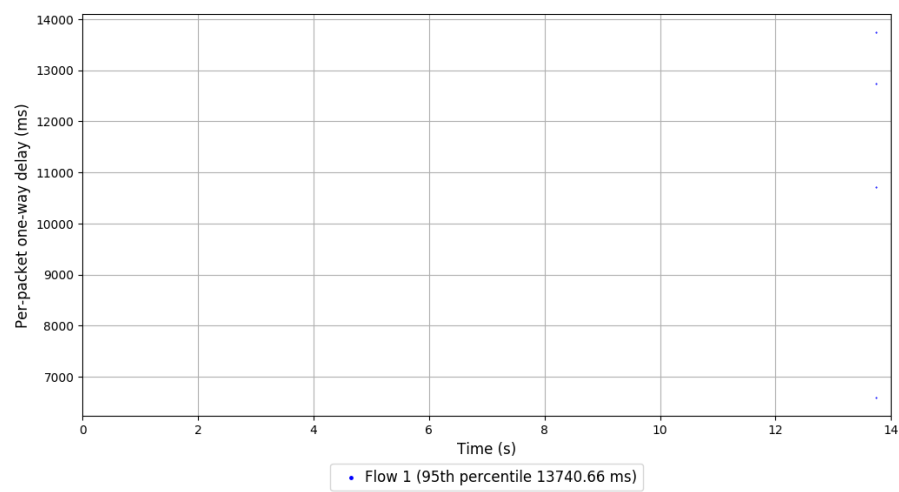
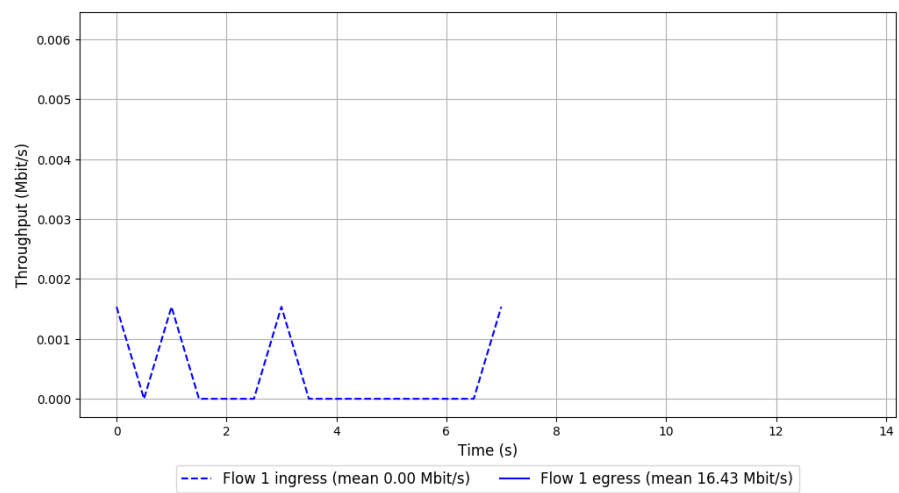


Run 10: Statistics of TCP Vegas

Start at: 2017-12-05 12:50:29

End at: 2017-12-05 12:50:59

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-05 11:23:05

End at: 2017-12-05 11:23:35

Below is generated by plot.py at 2017-12-05 15:17:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 238.93 Mbit/s

95th percentile per-packet one-way delay: 82.492 ms

Loss rate: 0.63%

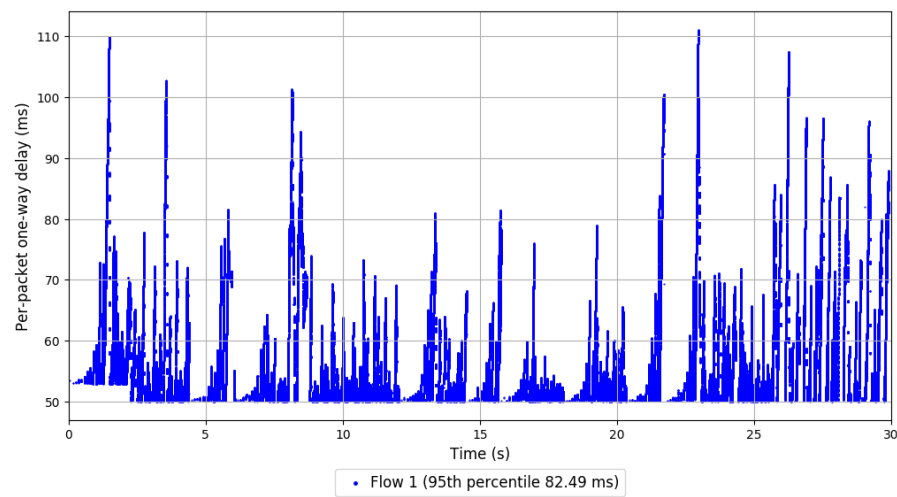
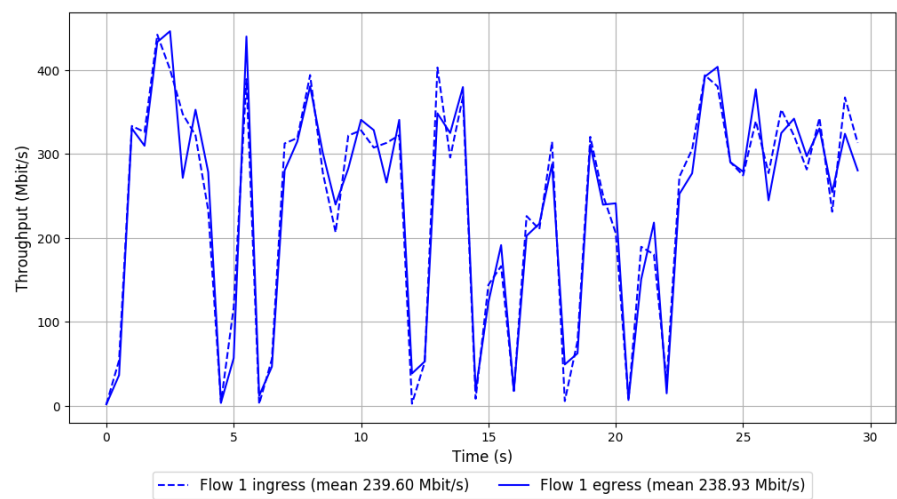
-- Flow 1:

Average throughput: 238.93 Mbit/s

95th percentile per-packet one-way delay: 82.492 ms

Loss rate: 0.63%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-05 11:33:22

End at: 2017-12-05 11:33:52

Below is generated by plot.py at 2017-12-05 15:17:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 239.59 Mbit/s

95th percentile per-packet one-way delay: 80.558 ms

Loss rate: 0.33%

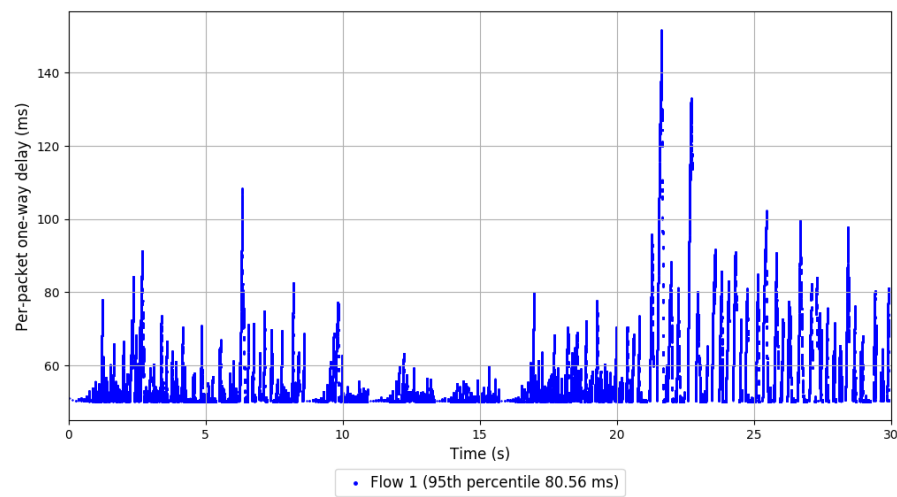
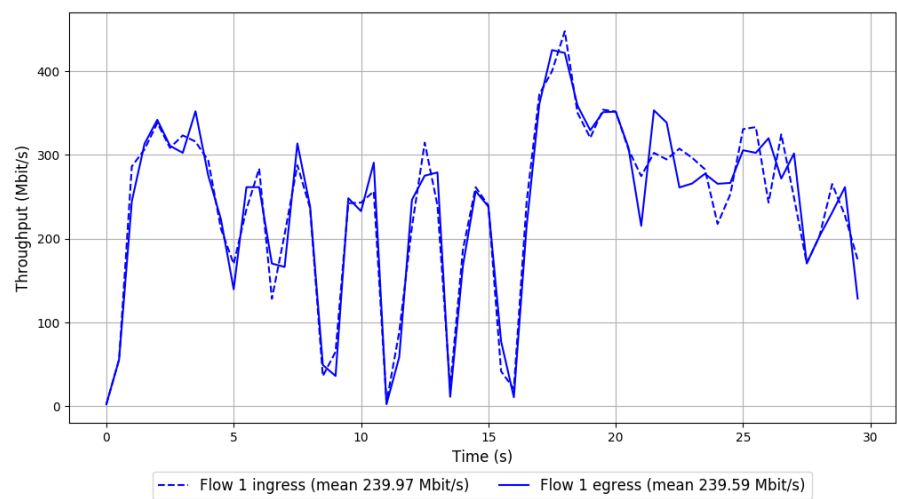
-- Flow 1:

Average throughput: 239.59 Mbit/s

95th percentile per-packet one-way delay: 80.558 ms

Loss rate: 0.33%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 11:44:00

End at: 2017-12-05 11:44:30

Below is generated by plot.py at 2017-12-05 15:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 238.34 Mbit/s

95th percentile per-packet one-way delay: 81.676 ms

Loss rate: 0.45%

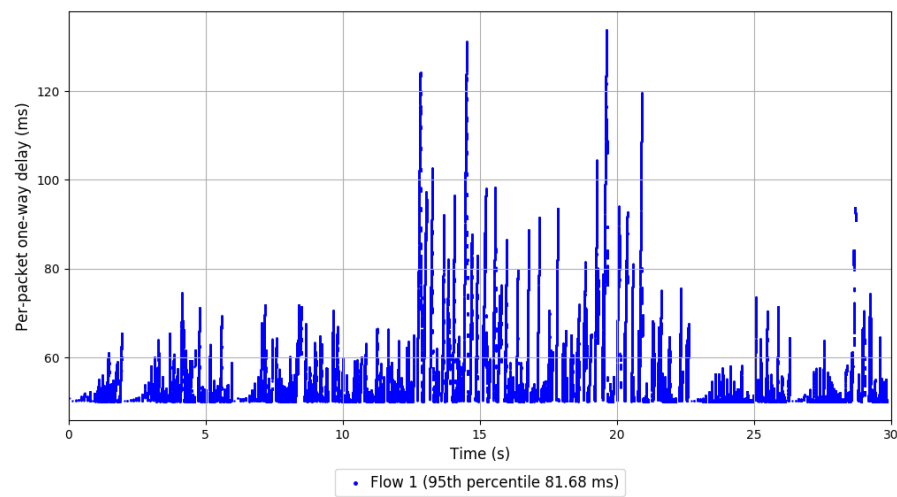
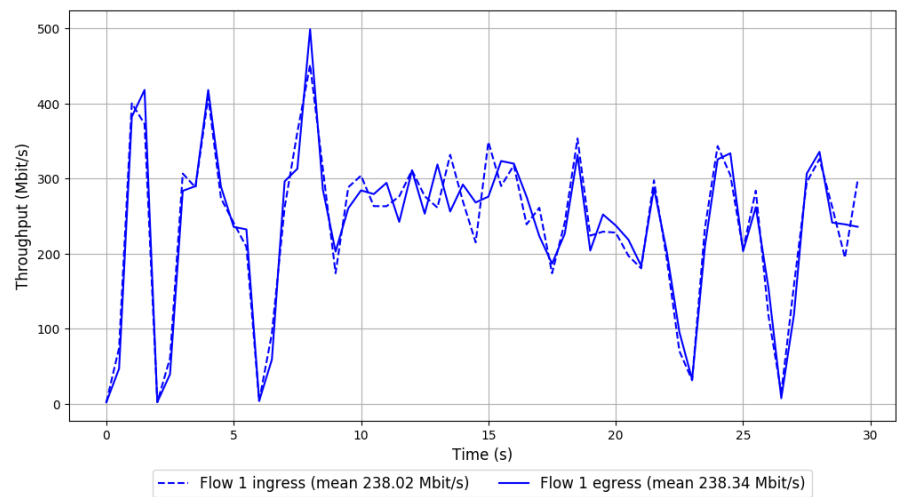
-- Flow 1:

Average throughput: 238.34 Mbit/s

95th percentile per-packet one-way delay: 81.676 ms

Loss rate: 0.45%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-05 11:54:28

End at: 2017-12-05 11:54:58

Below is generated by plot.py at 2017-12-05 15:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.57 Mbit/s

95th percentile per-packet one-way delay: 104.096 ms

Loss rate: 0.22%

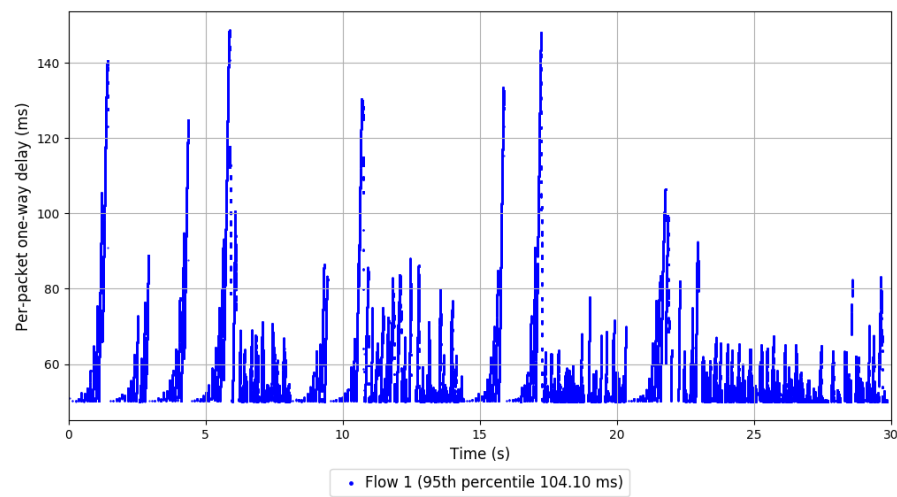
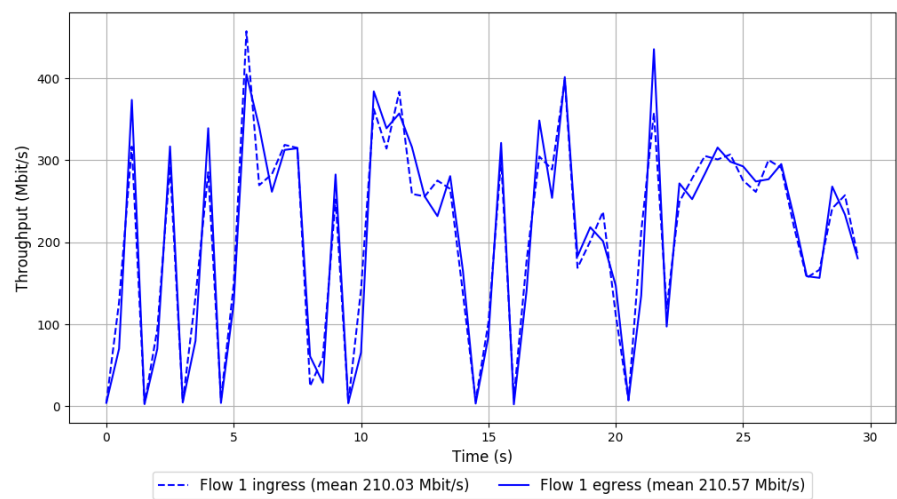
-- Flow 1:

Average throughput: 210.57 Mbit/s

95th percentile per-packet one-way delay: 104.096 ms

Loss rate: 0.22%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-05 12:04:46

End at: 2017-12-05 12:05:16

Below is generated by plot.py at 2017-12-05 15:19:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 268.95 Mbit/s

95th percentile per-packet one-way delay: 114.656 ms

Loss rate: 0.62%

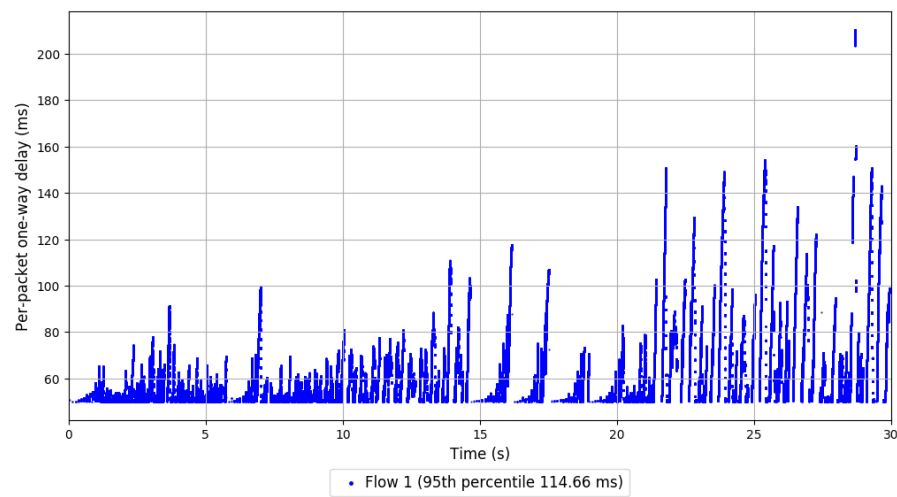
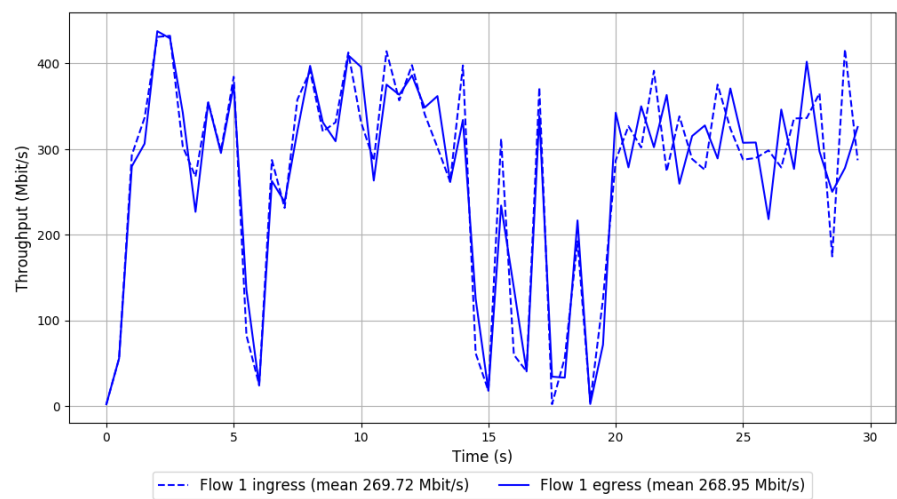
-- Flow 1:

Average throughput: 268.95 Mbit/s

95th percentile per-packet one-way delay: 114.656 ms

Loss rate: 0.62%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-05 12:15:02

End at: 2017-12-05 12:15:32

Below is generated by plot.py at 2017-12-05 15:19:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 250.87 Mbit/s

95th percentile per-packet one-way delay: 88.200 ms

Loss rate: 2.35%

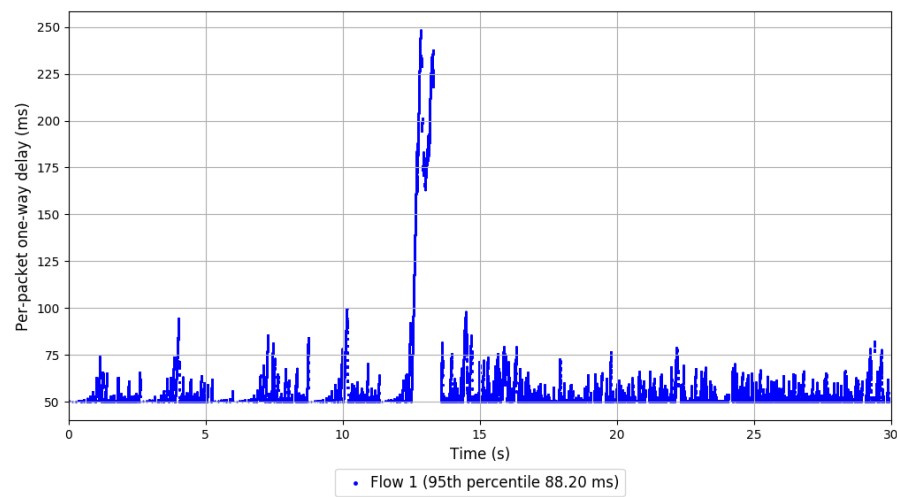
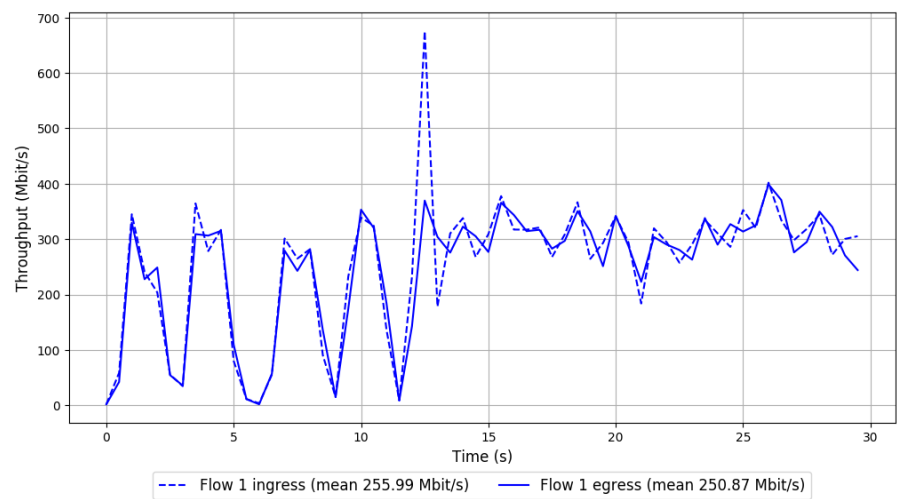
-- Flow 1:

Average throughput: 250.87 Mbit/s

95th percentile per-packet one-way delay: 88.200 ms

Loss rate: 2.35%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-05 12:25:36

End at: 2017-12-05 12:26:06

Below is generated by plot.py at 2017-12-05 15:19:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 236.13 Mbit/s

95th percentile per-packet one-way delay: 77.998 ms

Loss rate: 0.40%

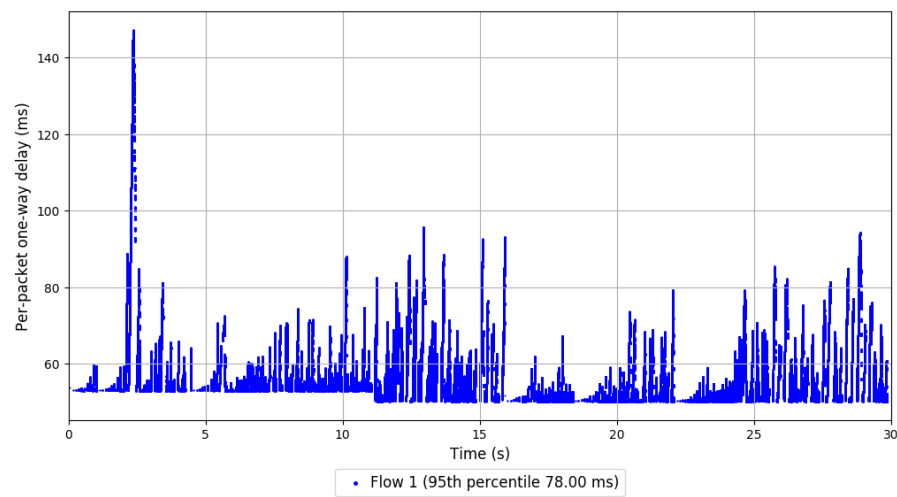
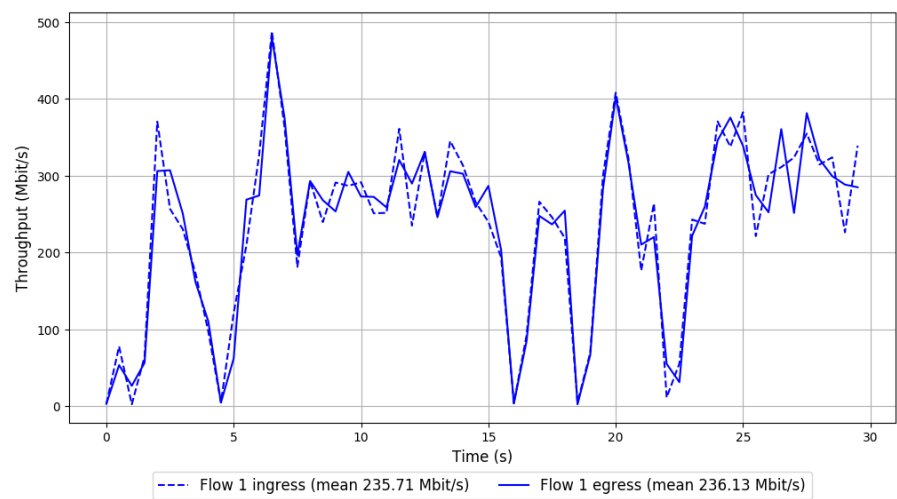
-- Flow 1:

Average throughput: 236.13 Mbit/s

95th percentile per-packet one-way delay: 77.998 ms

Loss rate: 0.40%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-05 12:36:13

End at: 2017-12-05 12:36:43

Below is generated by plot.py at 2017-12-05 15:21:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 267.97 Mbit/s

95th percentile per-packet one-way delay: 90.199 ms

Loss rate: 0.95%

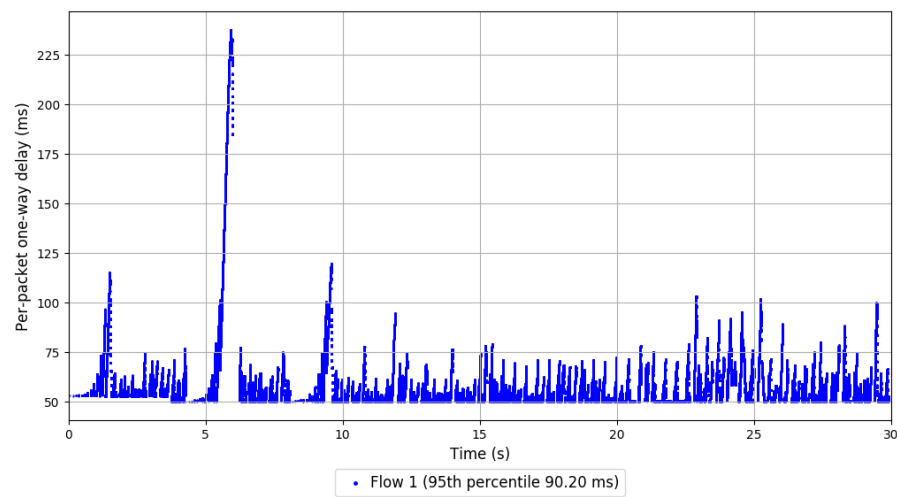
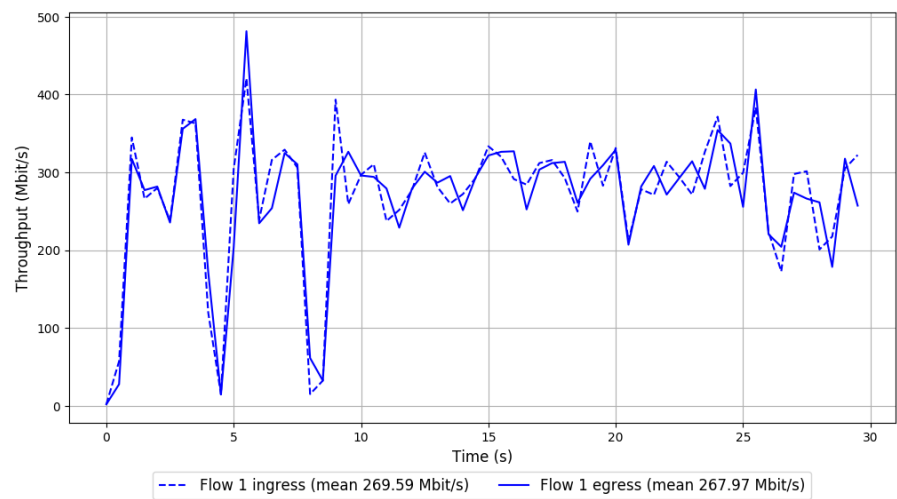
-- Flow 1:

Average throughput: 267.97 Mbit/s

95th percentile per-packet one-way delay: 90.199 ms

Loss rate: 0.95%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-05 12:46:29

End at: 2017-12-05 12:46:59

Below is generated by plot.py at 2017-12-05 15:21:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 263.41 Mbit/s

95th percentile per-packet one-way delay: 104.135 ms

Loss rate: 0.75%

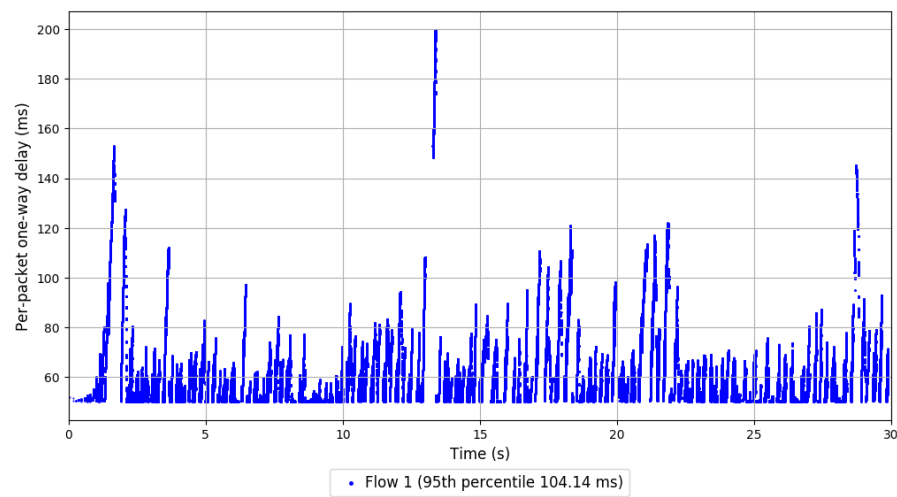
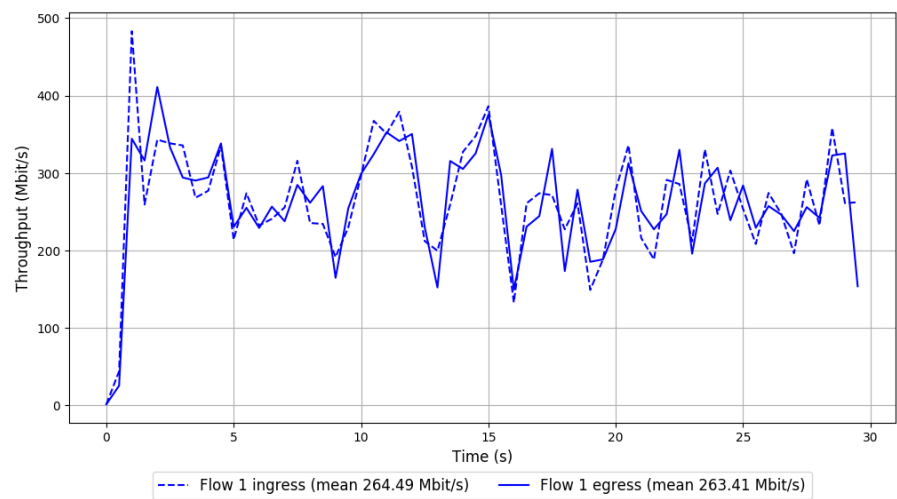
-- Flow 1:

Average throughput: 263.41 Mbit/s

95th percentile per-packet one-way delay: 104.135 ms

Loss rate: 0.75%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-05 12:56:45

End at: 2017-12-05 12:57:15

Below is generated by plot.py at 2017-12-05 15:21:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.26 Mbit/s

95th percentile per-packet one-way delay: 96.774 ms

Loss rate: 0.60%

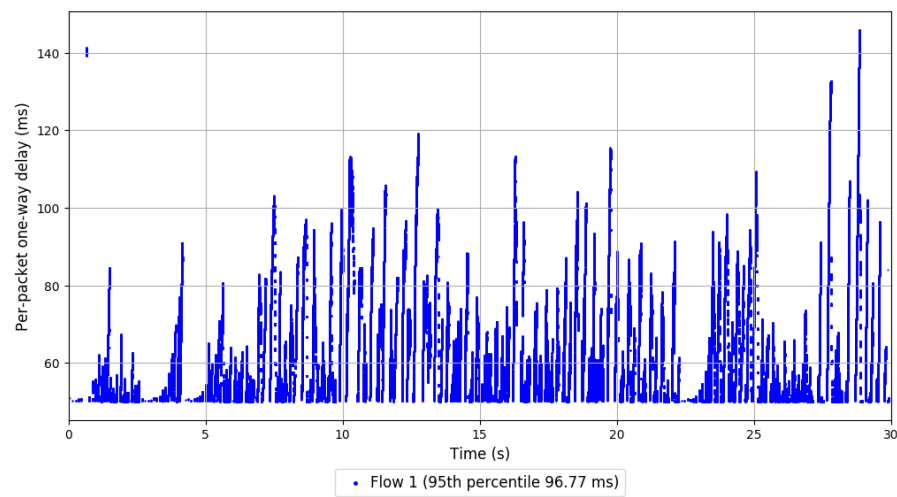
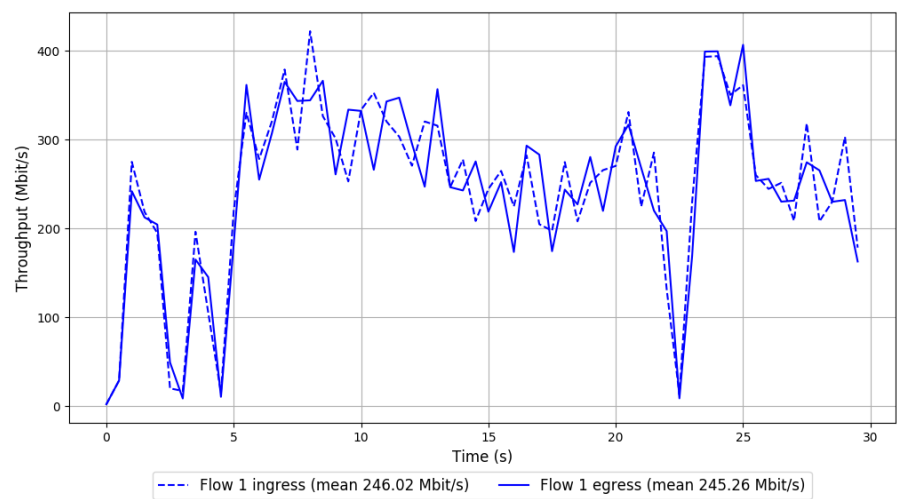
-- Flow 1:

Average throughput: 245.26 Mbit/s

95th percentile per-packet one-way delay: 96.774 ms

Loss rate: 0.60%

Run 10: Report of Verus — Data Link

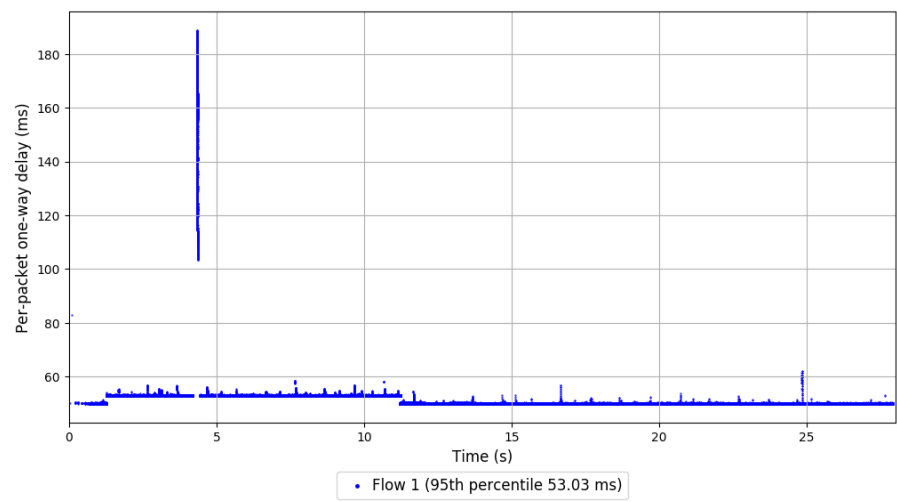
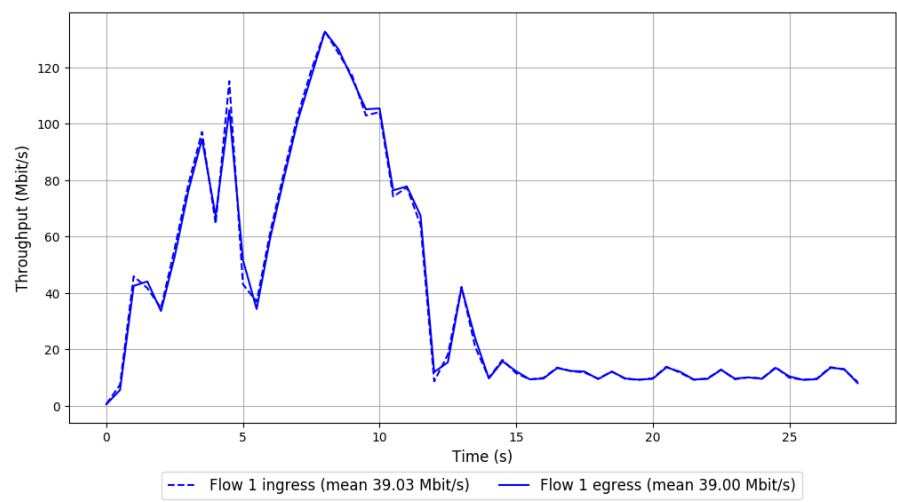


```
Run 1: Statistics of Copa

Start at: 2017-12-05 11:19:34
End at: 2017-12-05 11:20:04

# Below is generated by plot.py at 2017-12-05 15:21:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.00 Mbit/s
95th percentile per-packet one-way delay: 53.035 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 39.00 Mbit/s
95th percentile per-packet one-way delay: 53.035 ms
Loss rate: 0.43%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-05 11:29:48

End at: 2017-12-05 11:30:18

Below is generated by plot.py at 2017-12-05 15:21:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.80 Mbit/s

95th percentile per-packet one-way delay: 53.524 ms

Loss rate: 0.44%

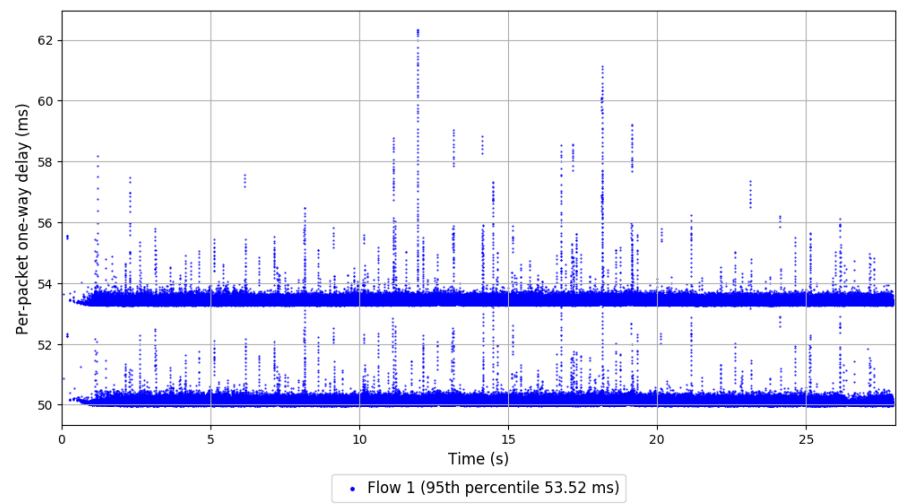
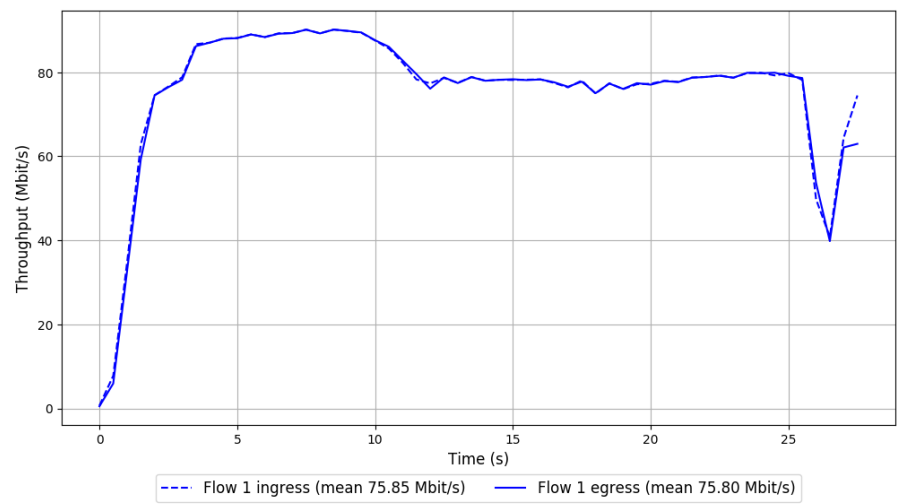
-- Flow 1:

Average throughput: 75.80 Mbit/s

95th percentile per-packet one-way delay: 53.524 ms

Loss rate: 0.44%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-05 11:40:25

End at: 2017-12-05 11:40:55

Below is generated by plot.py at 2017-12-05 15:21:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.79 Mbit/s

95th percentile per-packet one-way delay: 52.920 ms

Loss rate: 0.36%

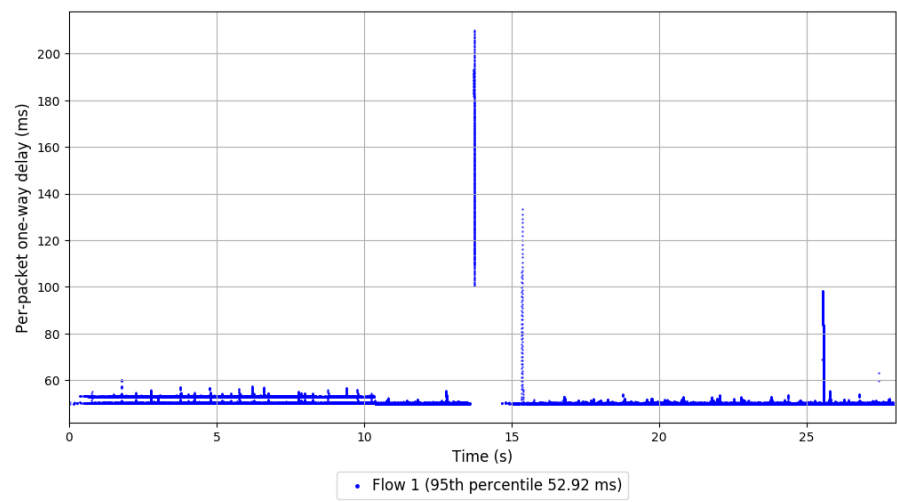
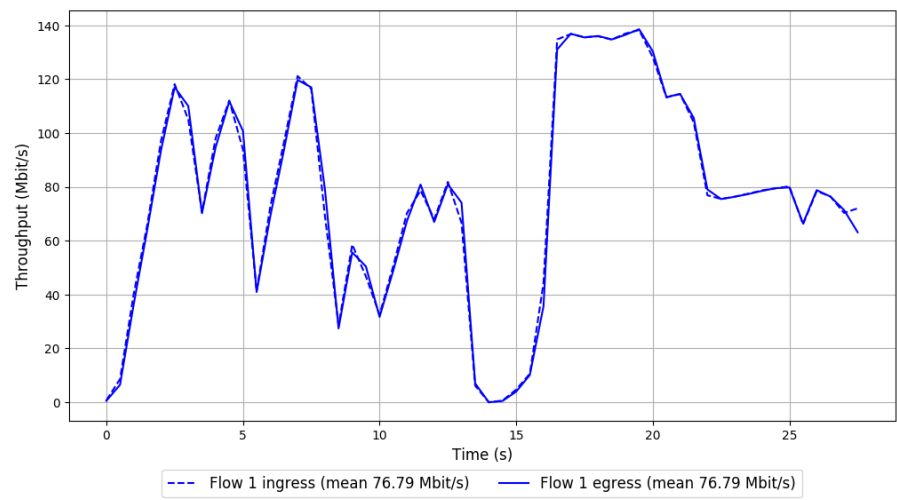
-- Flow 1:

Average throughput: 76.79 Mbit/s

95th percentile per-packet one-way delay: 52.920 ms

Loss rate: 0.36%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-05 11:50:55

End at: 2017-12-05 11:51:25

Below is generated by plot.py at 2017-12-05 15:21:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.45 Mbit/s

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

Loss rate: 0.36%

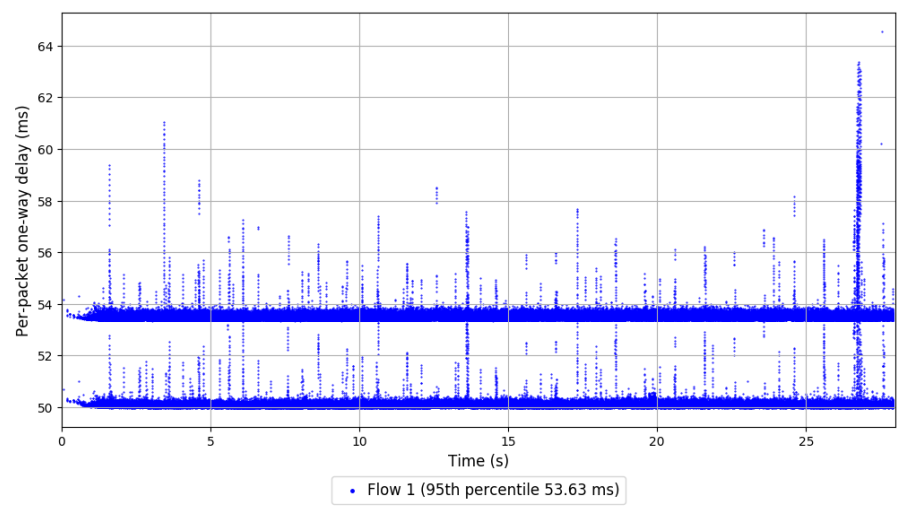
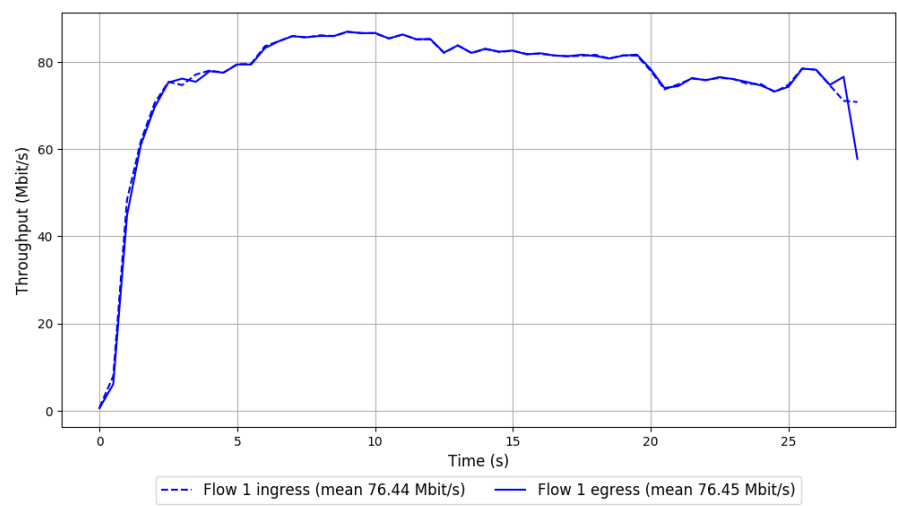
-- Flow 1:

Average throughput: 76.45 Mbit/s

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

Loss rate: 0.36%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-05 12:01:11

End at: 2017-12-05 12:01:41

Below is generated by plot.py at 2017-12-05 15:21:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.34 Mbit/s

95th percentile per-packet one-way delay: 53.602 ms

Loss rate: 0.37%

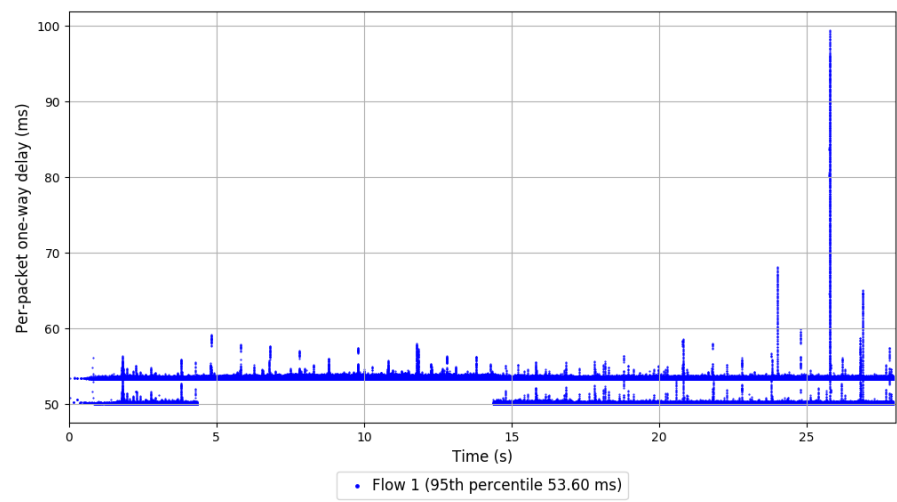
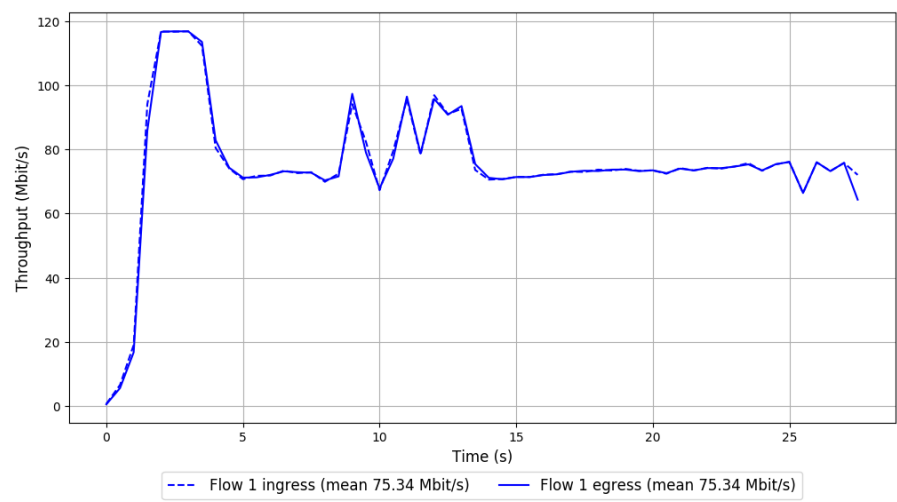
-- Flow 1:

Average throughput: 75.34 Mbit/s

95th percentile per-packet one-way delay: 53.602 ms

Loss rate: 0.37%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-05 12:11:28

End at: 2017-12-05 12:11:58

Below is generated by plot.py at 2017-12-05 15:21:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.71 Mbit/s

95th percentile per-packet one-way delay: 50.539 ms

Loss rate: 0.21%

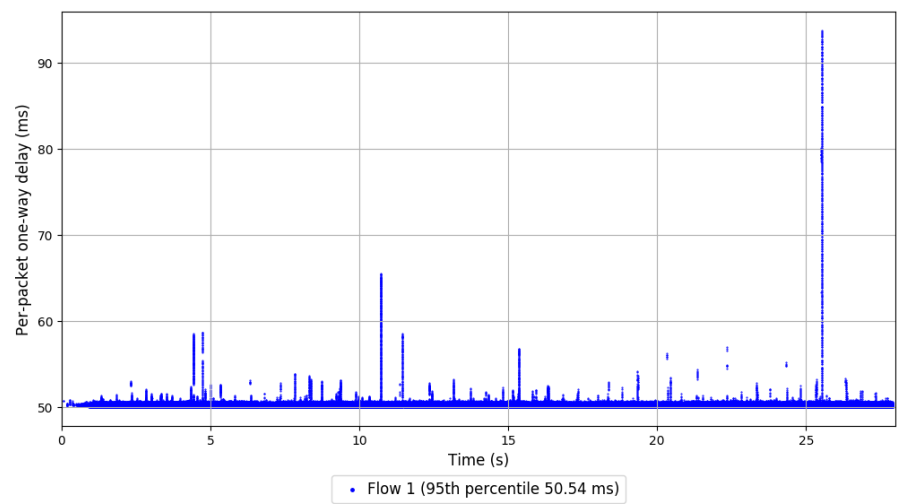
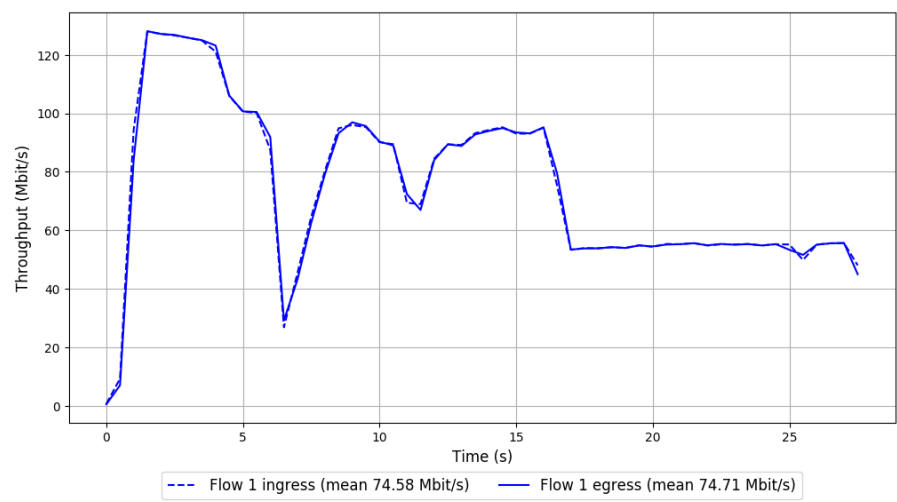
-- Flow 1:

Average throughput: 74.71 Mbit/s

95th percentile per-packet one-way delay: 50.539 ms

Loss rate: 0.21%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-05 12:22:06

End at: 2017-12-05 12:22:36

Below is generated by plot.py at 2017-12-05 15:22:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.95 Mbit/s

95th percentile per-packet one-way delay: 53.542 ms

Loss rate: 0.09%

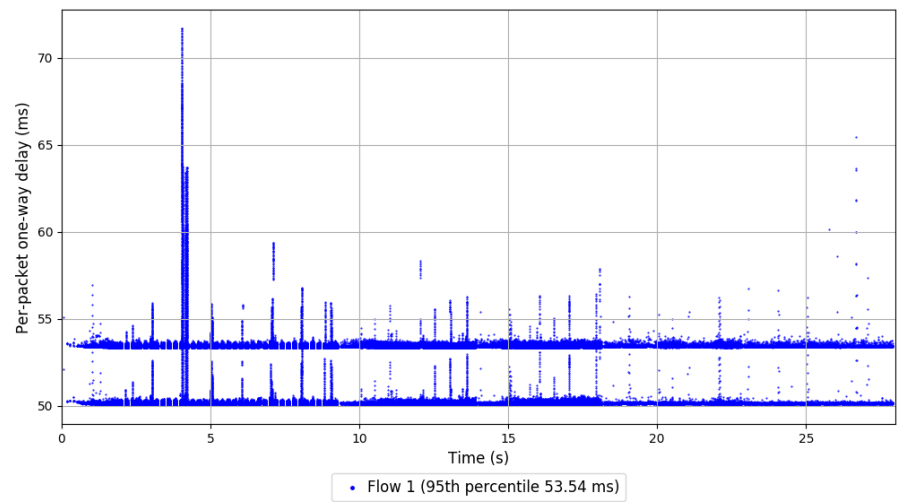
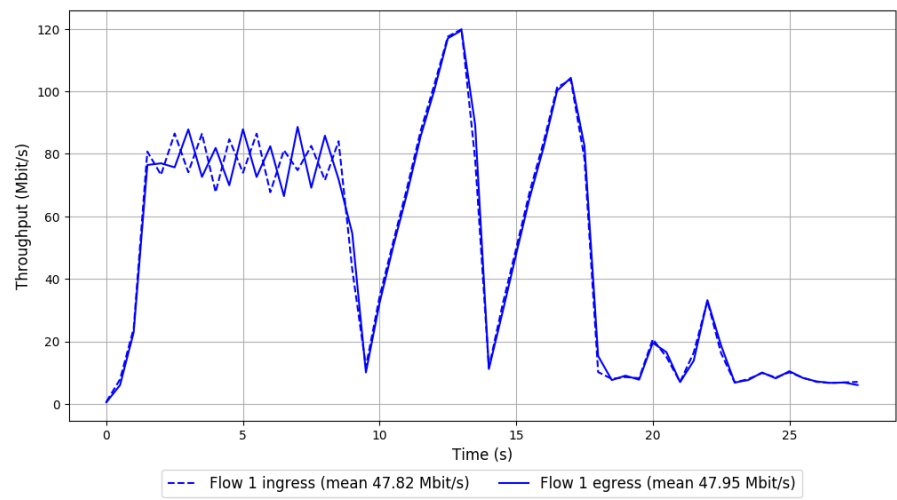
-- Flow 1:

Average throughput: 47.95 Mbit/s

95th percentile per-packet one-way delay: 53.542 ms

Loss rate: 0.09%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-05 12:32:40

End at: 2017-12-05 12:33:10

Below is generated by plot.py at 2017-12-05 15:23:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.80 Mbit/s

95th percentile per-packet one-way delay: 50.344 ms

Loss rate: 0.35%

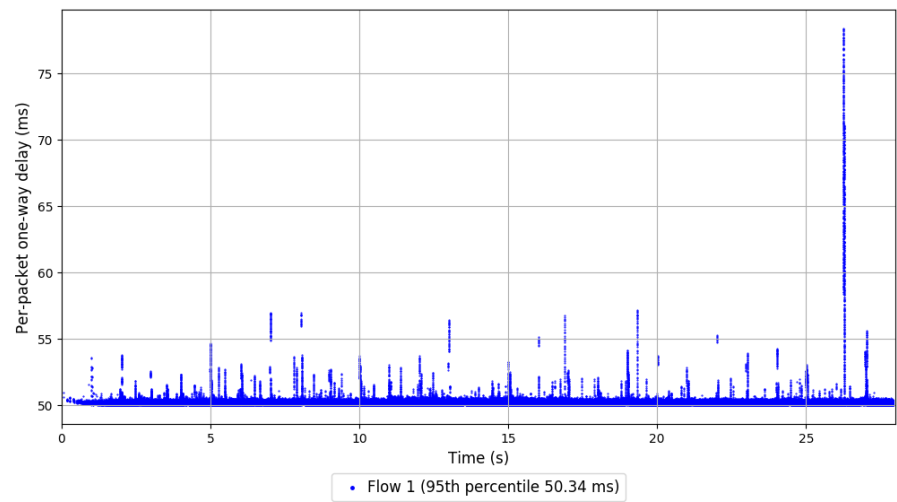
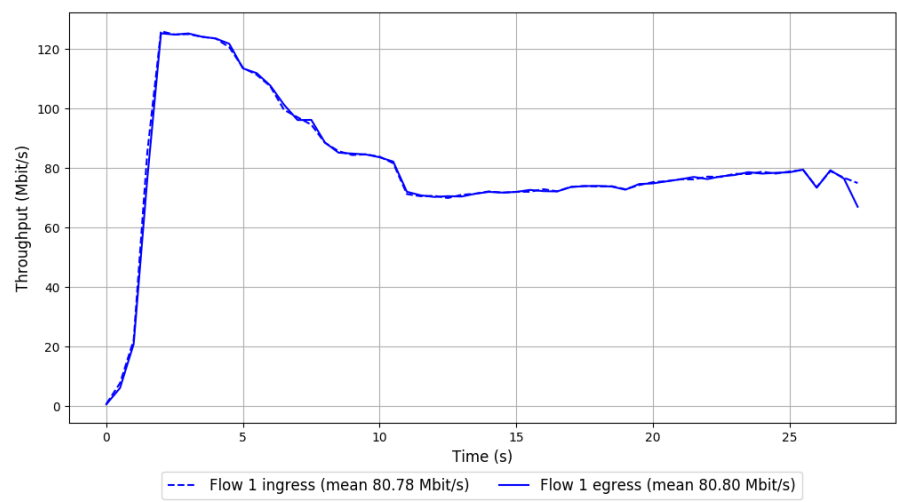
-- Flow 1:

Average throughput: 80.80 Mbit/s

95th percentile per-packet one-way delay: 50.344 ms

Loss rate: 0.35%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-05 12:42:53

End at: 2017-12-05 12:43:23

Below is generated by plot.py at 2017-12-05 15:24:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.82 Mbit/s

95th percentile per-packet one-way delay: 53.507 ms

Loss rate: 0.37%

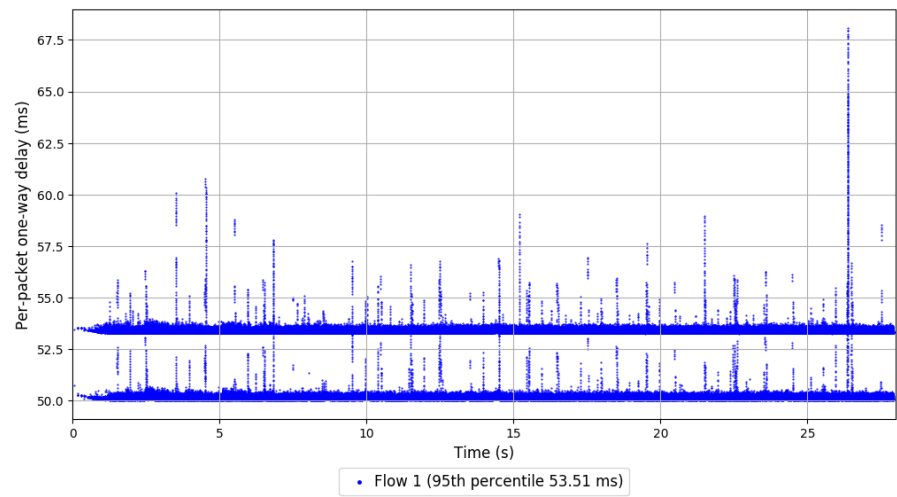
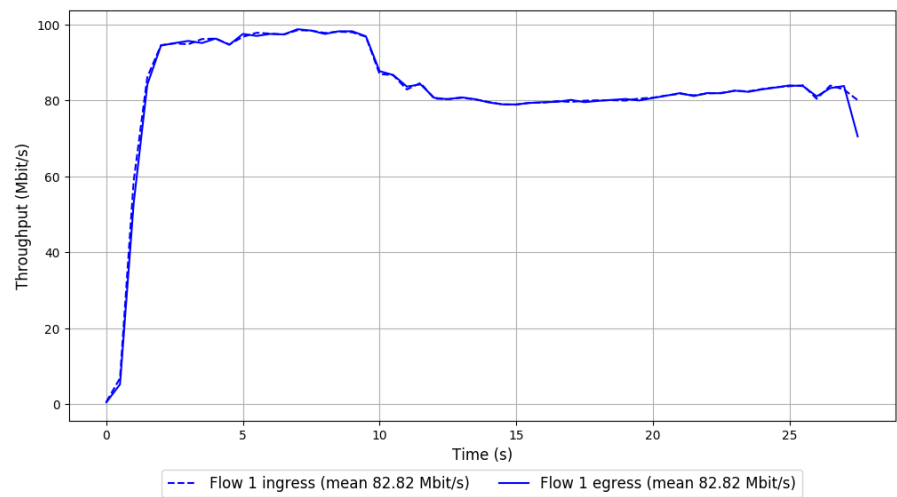
-- Flow 1:

Average throughput: 82.82 Mbit/s

95th percentile per-packet one-way delay: 53.507 ms

Loss rate: 0.37%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-05 12:53:12

End at: 2017-12-05 12:53:42

Below is generated by plot.py at 2017-12-05 15:24:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.30 Mbit/s

95th percentile per-packet one-way delay: 50.524 ms

Loss rate: 0.05%

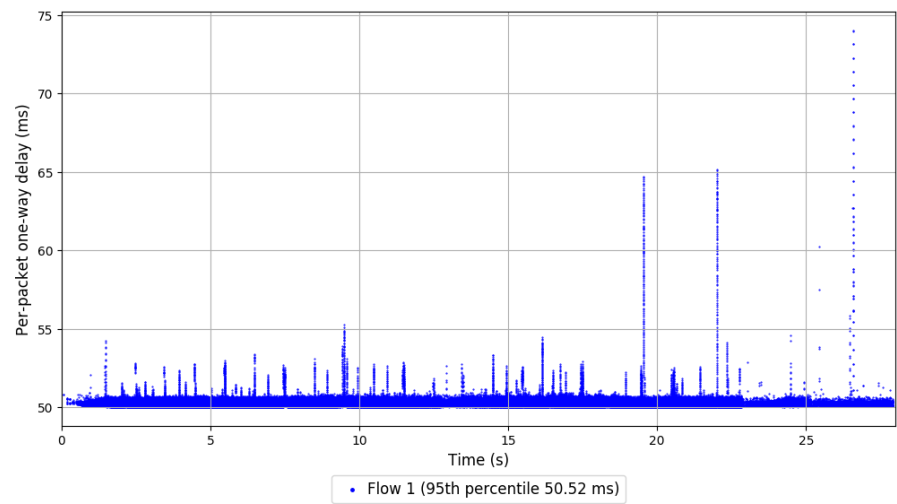
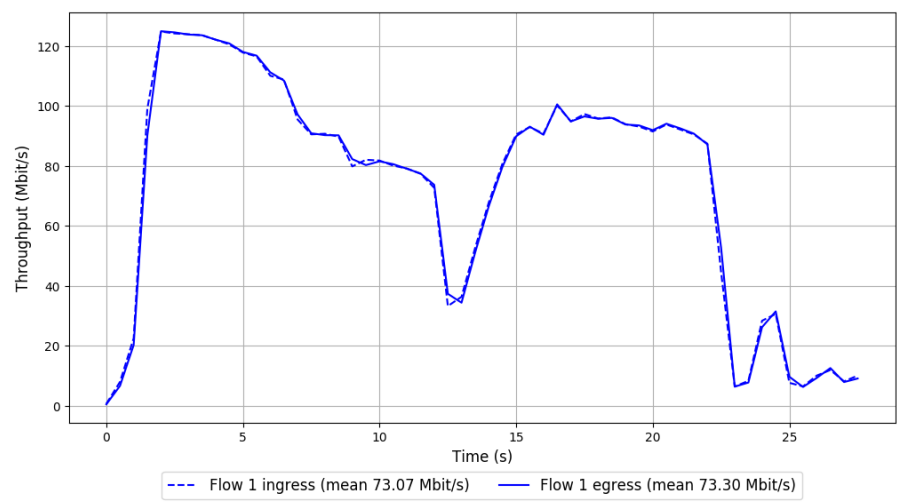
-- Flow 1:

Average throughput: 73.30 Mbit/s

95th percentile per-packet one-way delay: 50.524 ms

Loss rate: 0.05%

Run 10: Report of Copa — Data Link

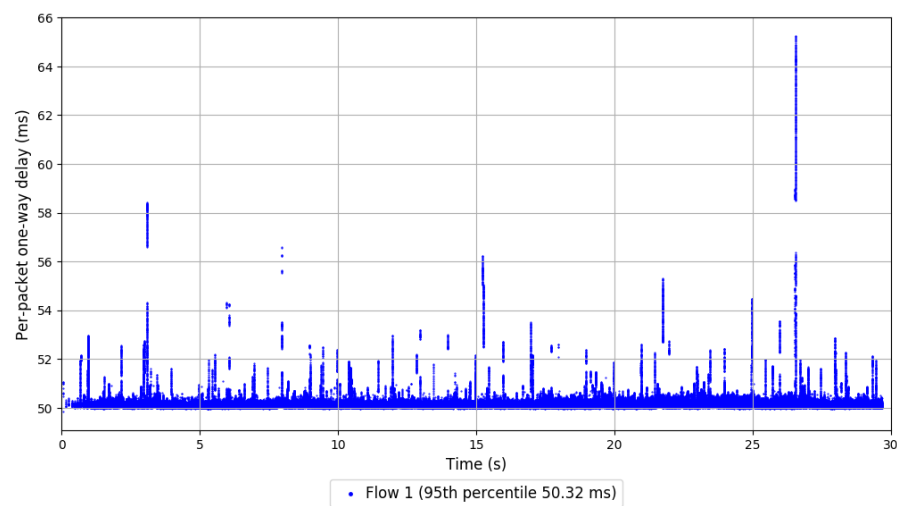
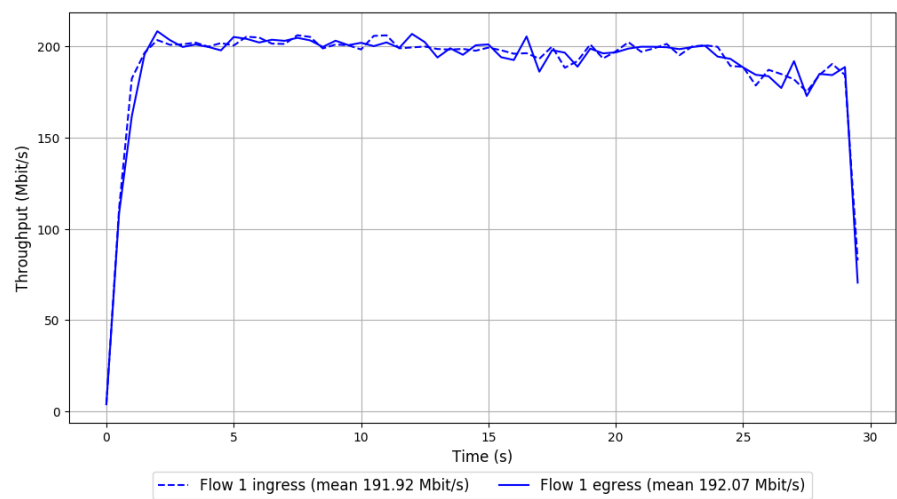


```
Run 1: Statistics of Indigo

Start at: 2017-12-05 11:18:01
End at: 2017-12-05 11:18:31

# Below is generated by plot.py at 2017-12-05 15:24:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.07 Mbit/s
95th percentile per-packet one-way delay: 50.317 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 192.07 Mbit/s
95th percentile per-packet one-way delay: 50.317 ms
Loss rate: 0.27%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-05 11:28:21

End at: 2017-12-05 11:28:51

Below is generated by plot.py at 2017-12-05 15:24:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.28 Mbit/s

95th percentile per-packet one-way delay: 53.004 ms

Loss rate: 0.59%

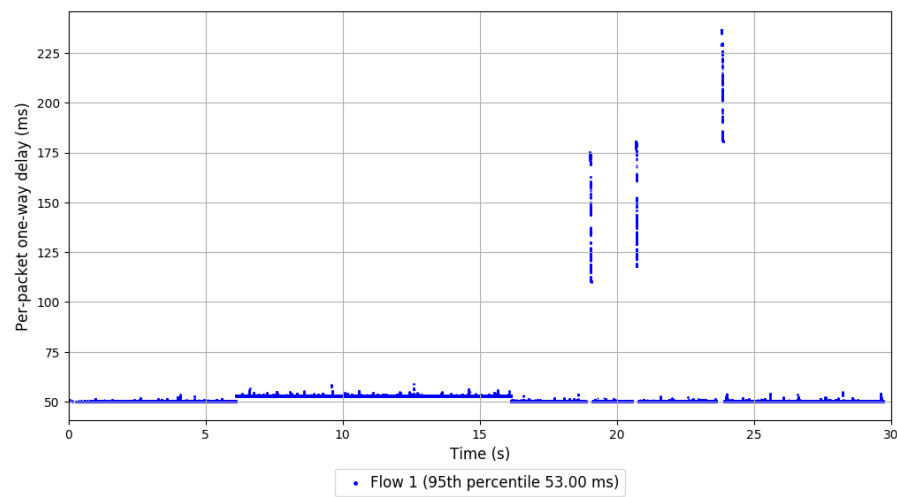
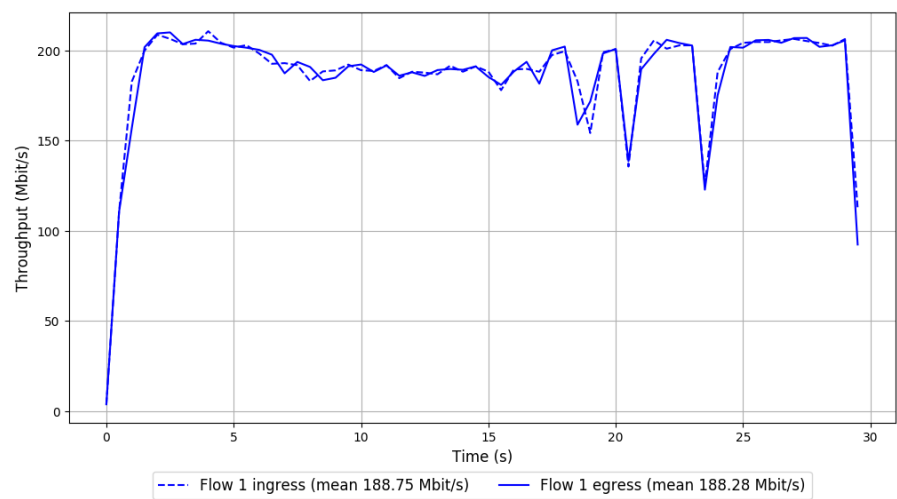
-- Flow 1:

Average throughput: 188.28 Mbit/s

95th percentile per-packet one-way delay: 53.004 ms

Loss rate: 0.59%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-05 11:38:57

End at: 2017-12-05 11:39:27

Below is generated by plot.py at 2017-12-05 15:24:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.30 Mbit/s

95th percentile per-packet one-way delay: 50.314 ms

Loss rate: 0.34%

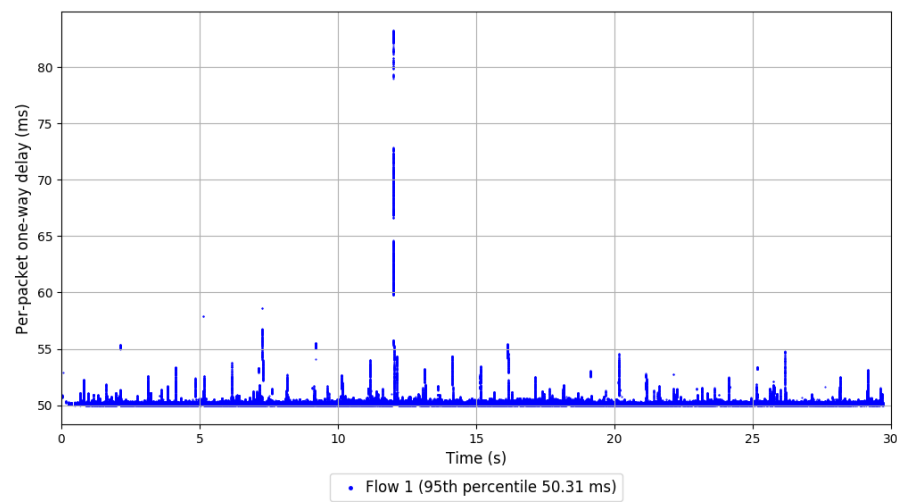
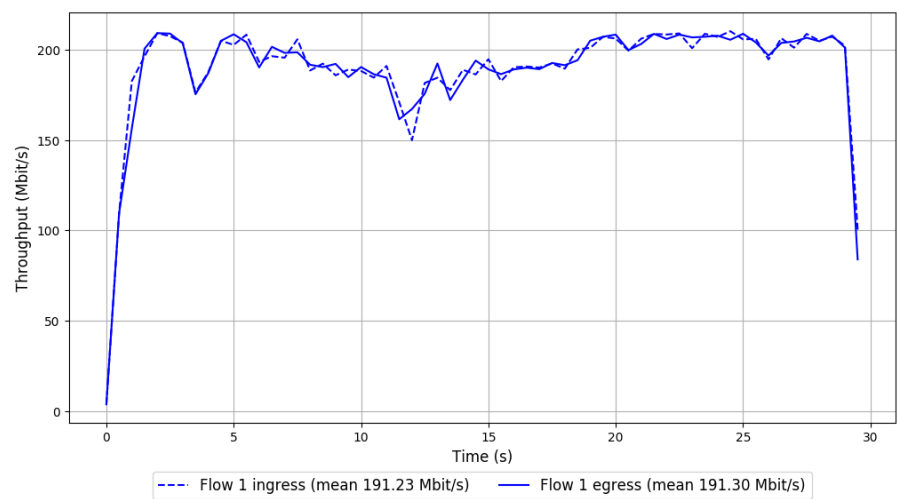
-- Flow 1:

Average throughput: 191.30 Mbit/s

95th percentile per-packet one-way delay: 50.314 ms

Loss rate: 0.34%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-05 11:49:26

End at: 2017-12-05 11:49:56

Below is generated by plot.py at 2017-12-05 15:25:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.93 Mbit/s

95th percentile per-packet one-way delay: 50.295 ms

Loss rate: 0.36%

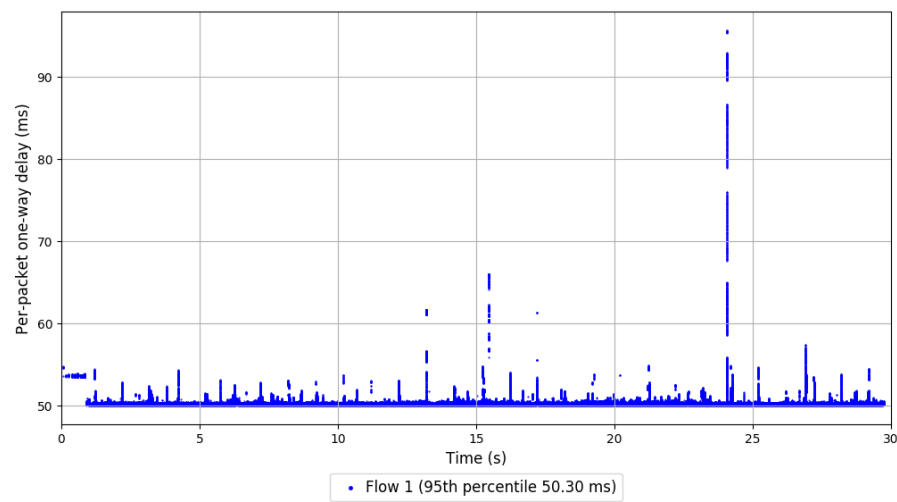
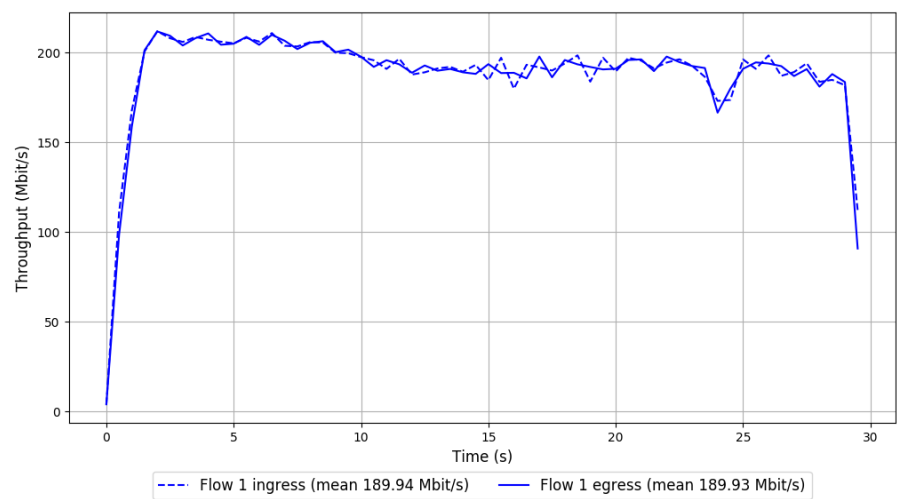
-- Flow 1:

Average throughput: 189.93 Mbit/s

95th percentile per-packet one-way delay: 50.295 ms

Loss rate: 0.36%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-05 11:59:43

End at: 2017-12-05 12:00:13

Below is generated by plot.py at 2017-12-05 15:25:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.03 Mbit/s

95th percentile per-packet one-way delay: 53.549 ms

Loss rate: 0.35%

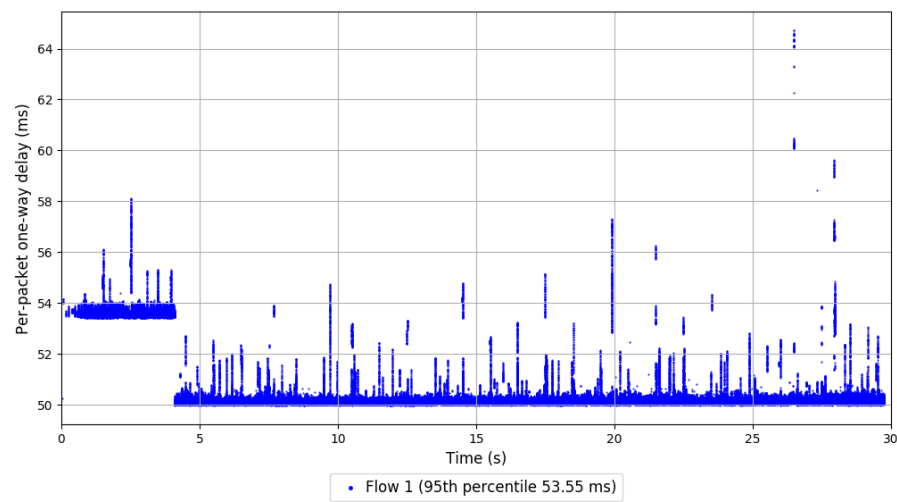
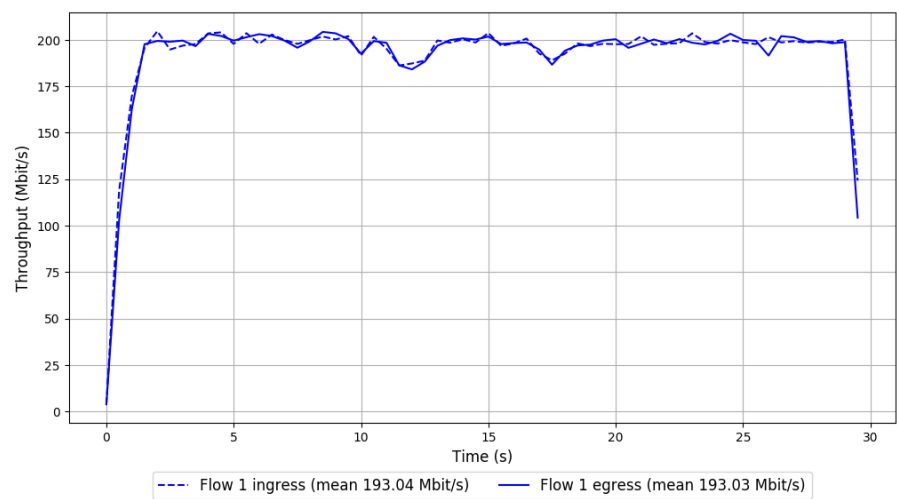
-- Flow 1:

Average throughput: 193.03 Mbit/s

95th percentile per-packet one-way delay: 53.549 ms

Loss rate: 0.35%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-05 12:10:00

End at: 2017-12-05 12:10:30

Below is generated by plot.py at 2017-12-05 15:27:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.46 Mbit/s

95th percentile per-packet one-way delay: 50.345 ms

Loss rate: 0.37%

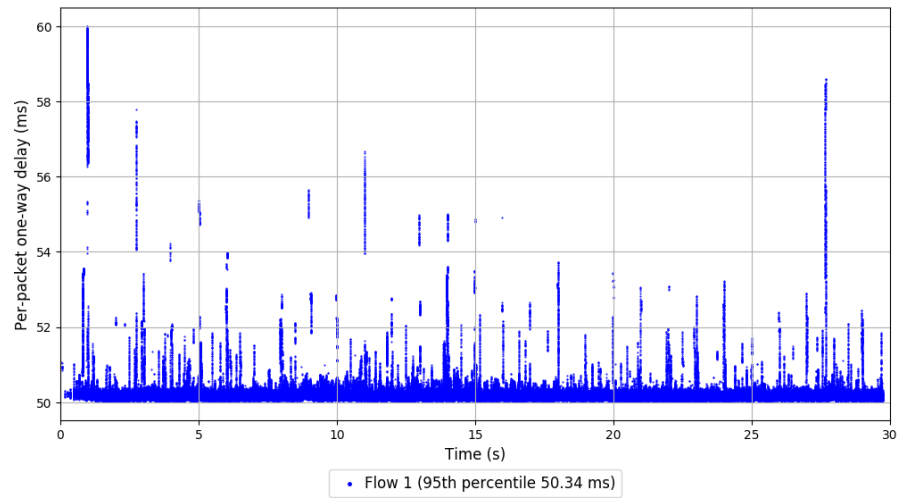
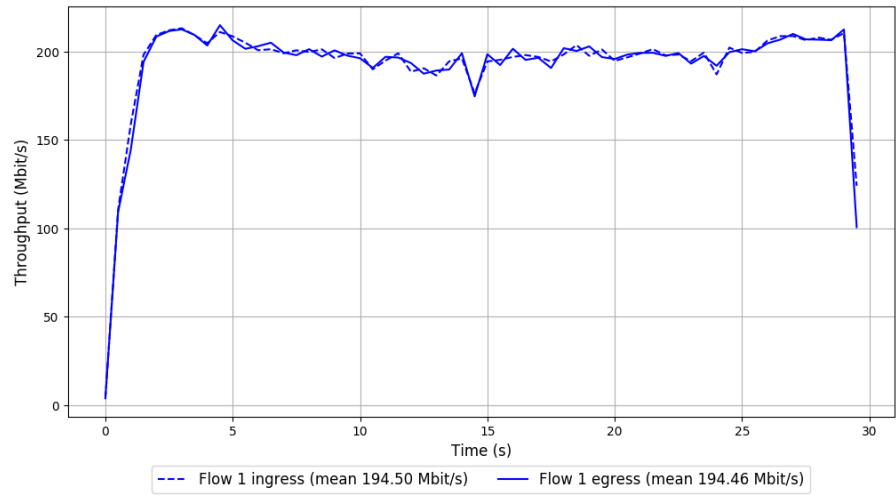
-- Flow 1:

Average throughput: 194.46 Mbit/s

95th percentile per-packet one-way delay: 50.345 ms

Loss rate: 0.37%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-05 12:20:38

End at: 2017-12-05 12:21:08

Below is generated by plot.py at 2017-12-05 15:27:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.37 Mbit/s

95th percentile per-packet one-way delay: 50.384 ms

Loss rate: 0.37%

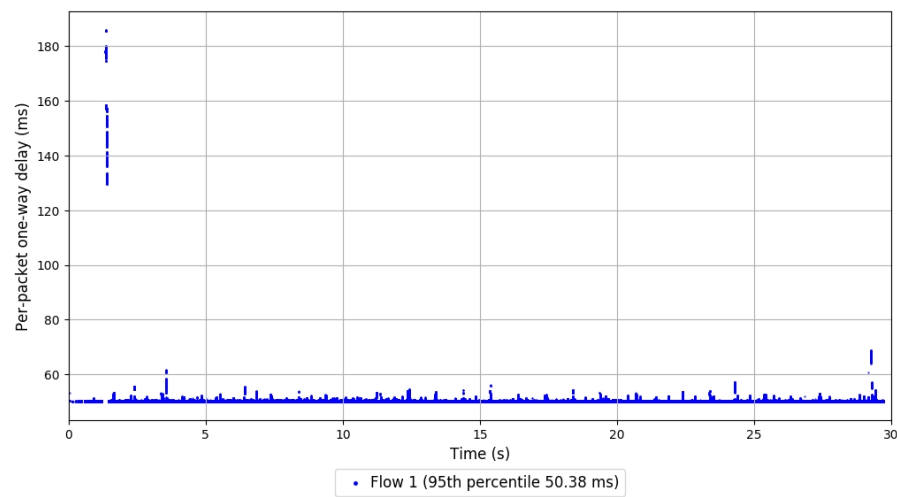
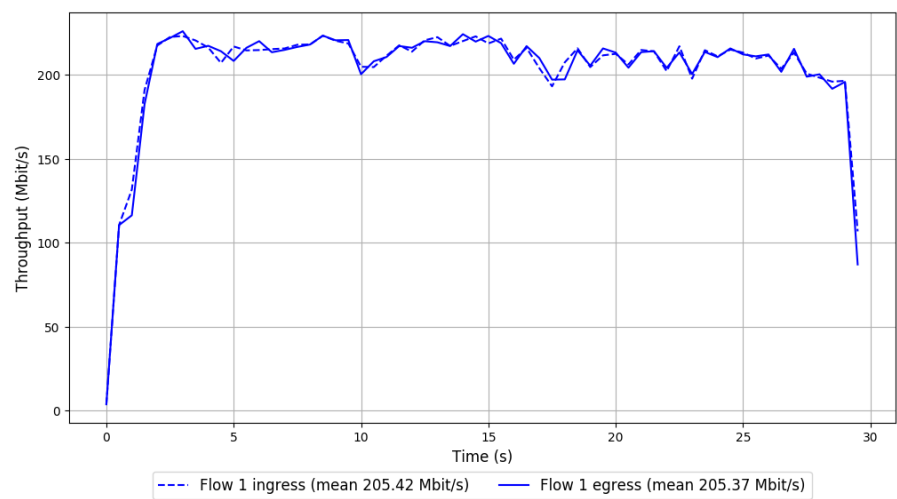
-- Flow 1:

Average throughput: 205.37 Mbit/s

95th percentile per-packet one-way delay: 50.384 ms

Loss rate: 0.37%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-05 12:31:13

End at: 2017-12-05 12:31:43

Below is generated by plot.py at 2017-12-05 15:27:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.56 Mbit/s

95th percentile per-packet one-way delay: 50.327 ms

Loss rate: 0.50%

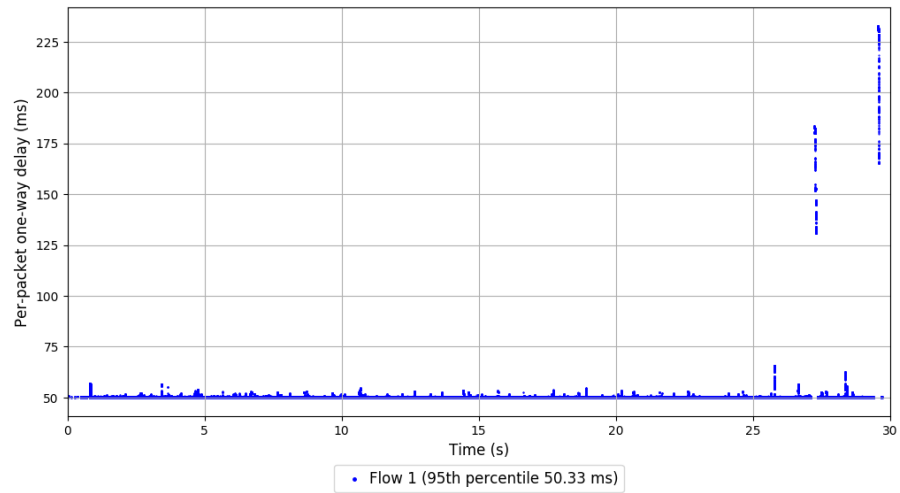
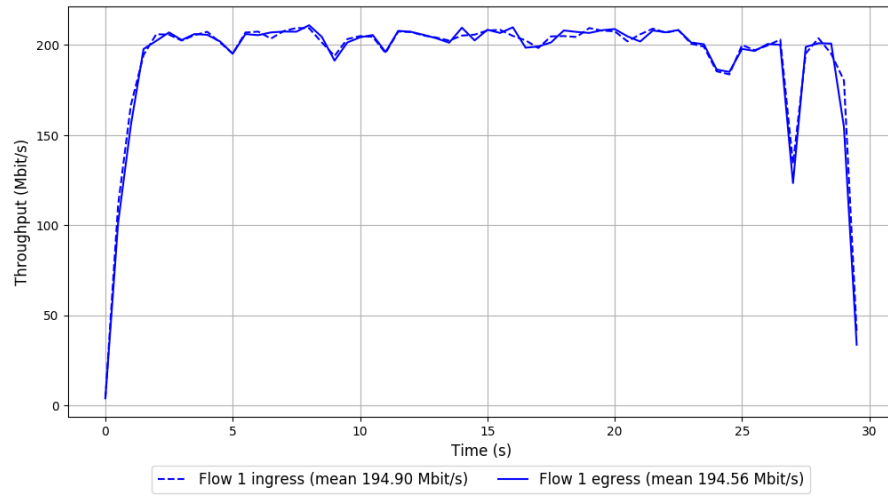
-- Flow 1:

Average throughput: 194.56 Mbit/s

95th percentile per-packet one-way delay: 50.327 ms

Loss rate: 0.50%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-05 12:41:26

End at: 2017-12-05 12:41:56

Below is generated by plot.py at 2017-12-05 15:27:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.21 Mbit/s

95th percentile per-packet one-way delay: 50.342 ms

Loss rate: 0.35%

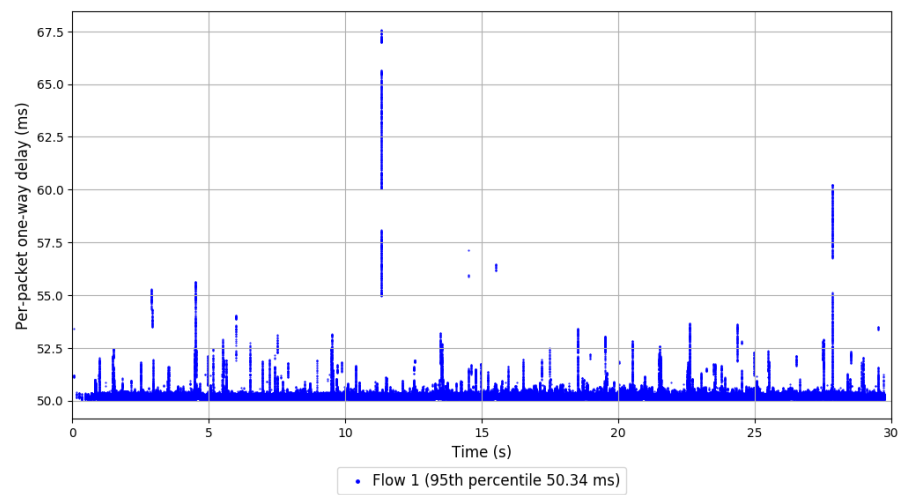
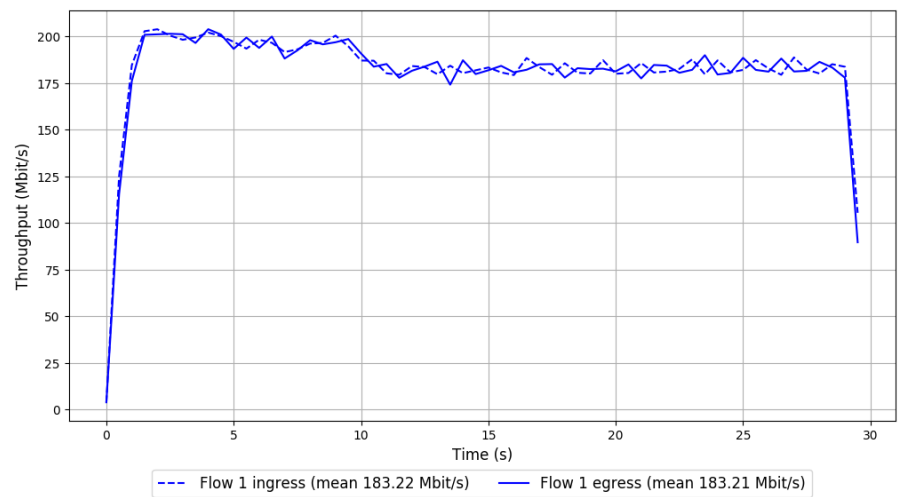
-- Flow 1:

Average throughput: 183.21 Mbit/s

95th percentile per-packet one-way delay: 50.342 ms

Loss rate: 0.35%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-05 12:51:43

End at: 2017-12-05 12:52:13

Below is generated by plot.py at 2017-12-05 15:28:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.63 Mbit/s

95th percentile per-packet one-way delay: 50.308 ms

Loss rate: 0.30%

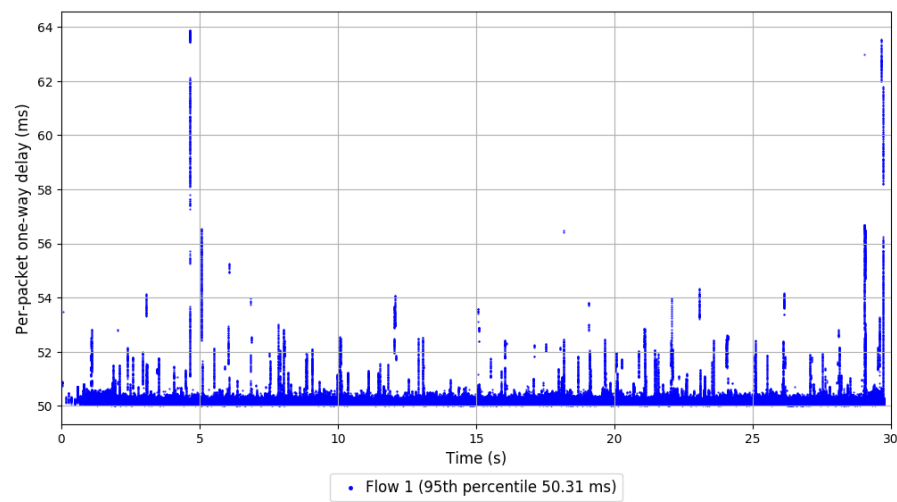
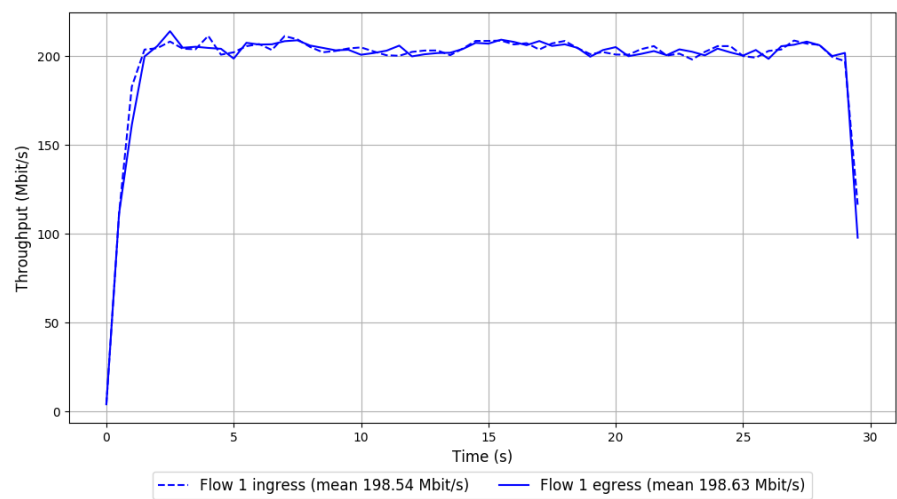
-- Flow 1:

Average throughput: 198.63 Mbit/s

95th percentile per-packet one-way delay: 50.308 ms

Loss rate: 0.30%

Run 10: Report of Indigo — Data Link

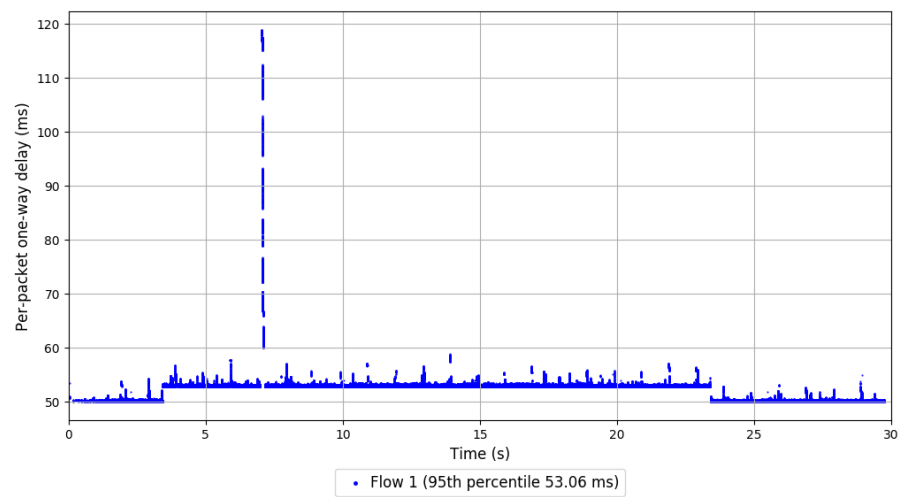
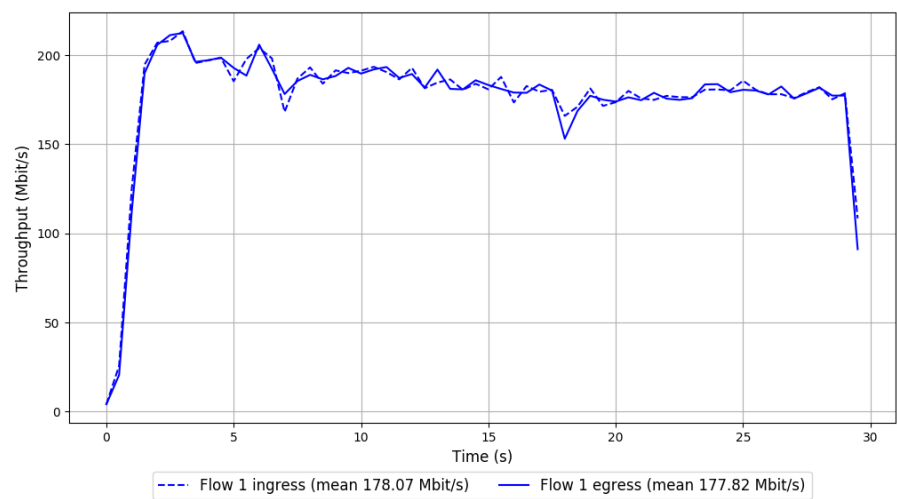


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 11:25:33
End at: 2017-12-05 11:26:03

# Below is generated by plot.py at 2017-12-05 15:28:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.82 Mbit/s
95th percentile per-packet one-way delay: 53.059 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 177.82 Mbit/s
95th percentile per-packet one-way delay: 53.059 ms
Loss rate: 0.48%
```

Run 1: Report of Indigo-calib — Data Link

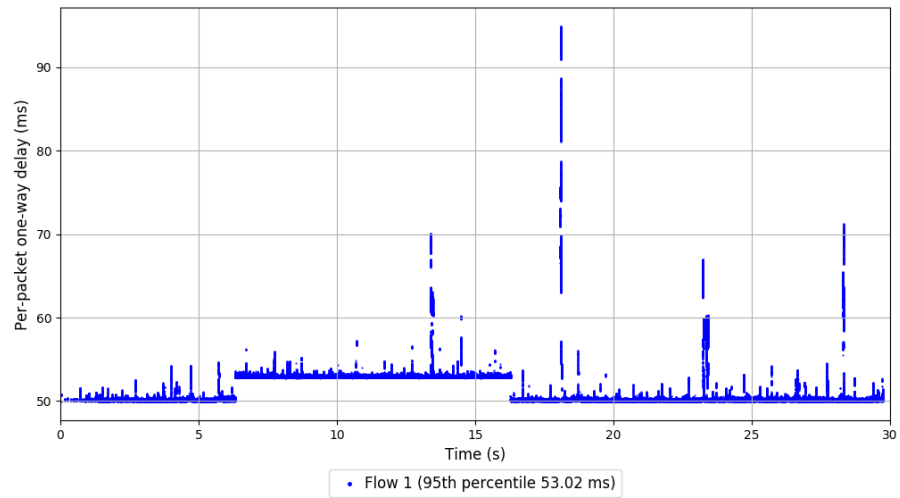
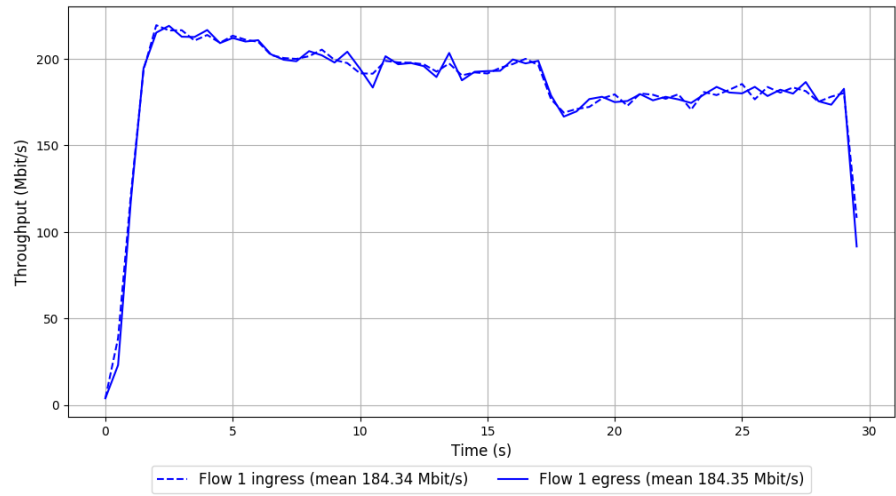


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 11:35:51
End at: 2017-12-05 11:36:21

# Below is generated by plot.py at 2017-12-05 15:28:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.35 Mbit/s
95th percentile per-packet one-way delay: 53.021 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 184.35 Mbit/s
95th percentile per-packet one-way delay: 53.021 ms
Loss rate: 0.33%
```

Run 2: Report of Indigo-calib — Data Link

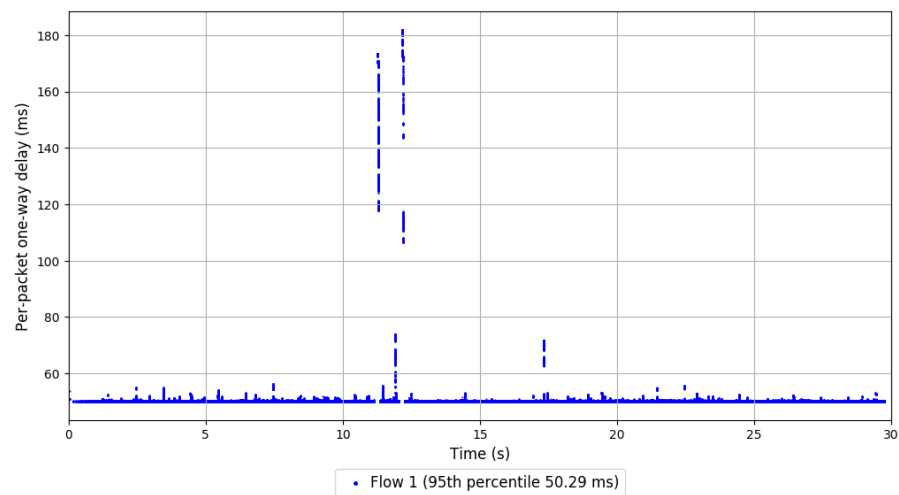
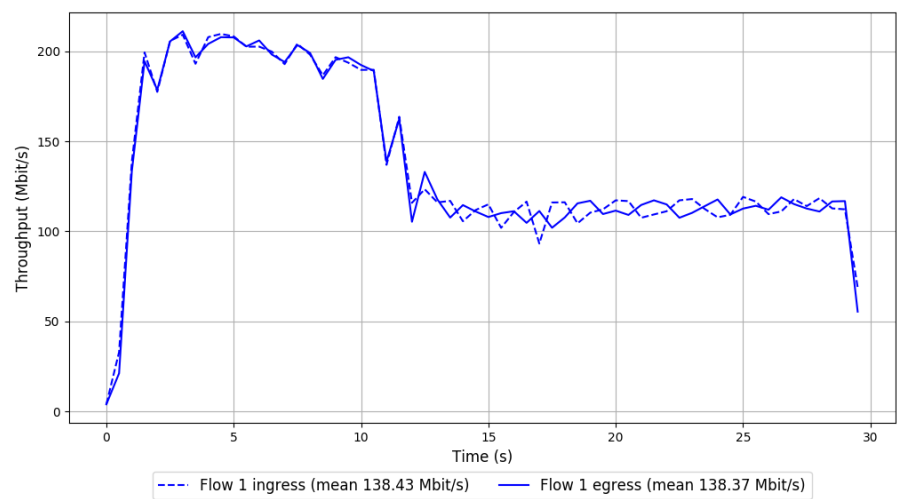


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 11:46:28
End at: 2017-12-05 11:46:58

# Below is generated by plot.py at 2017-12-05 15:28:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 138.37 Mbit/s
95th percentile per-packet one-way delay: 50.293 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 138.37 Mbit/s
95th percentile per-packet one-way delay: 50.293 ms
Loss rate: 0.38%
```

Run 3: Report of Indigo-calib — Data Link

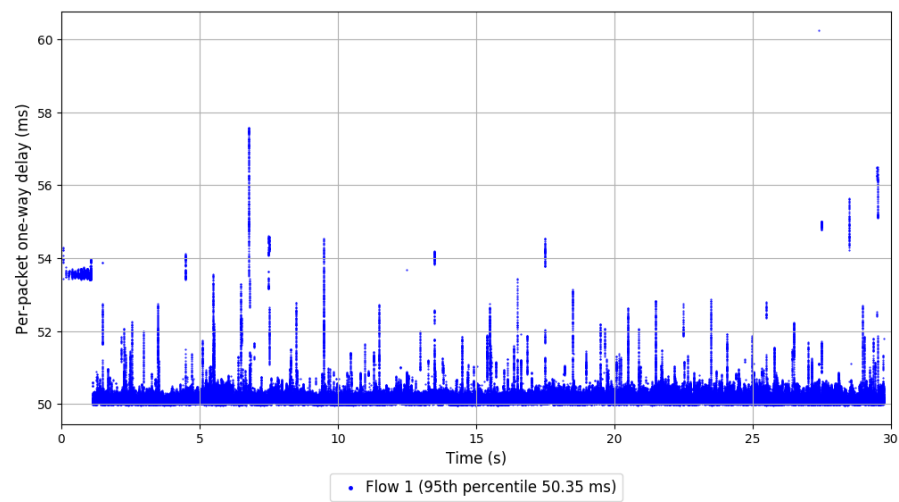
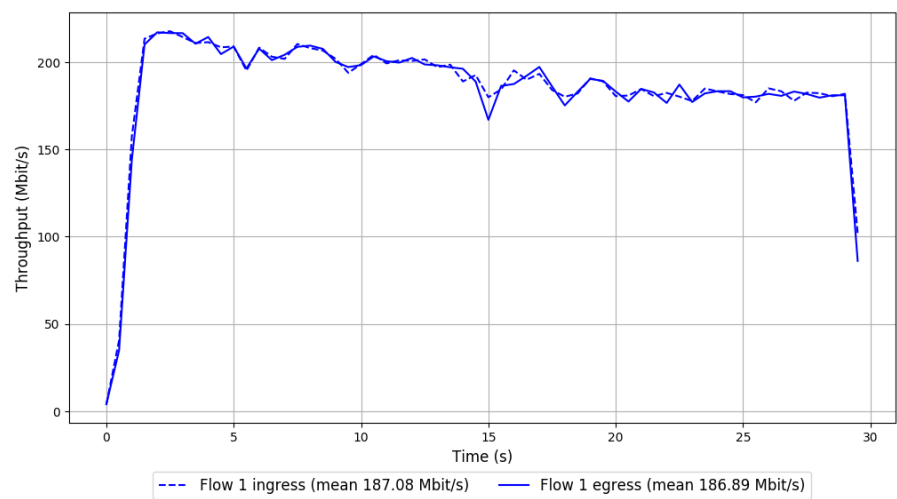


```
Run 4: Statistics of Indigo-calib

Start at: 2017-12-05 11:56:56
End at: 2017-12-05 11:57:26

# Below is generated by plot.py at 2017-12-05 15:29:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.89 Mbit/s
95th percentile per-packet one-way delay: 50.348 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 186.89 Mbit/s
95th percentile per-packet one-way delay: 50.348 ms
Loss rate: 0.45%
```

Run 4: Report of Indigo-calib — Data Link

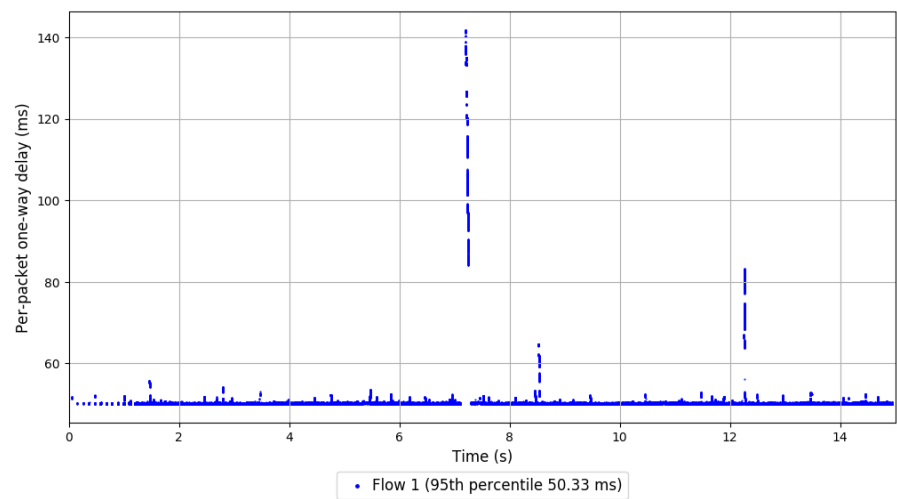
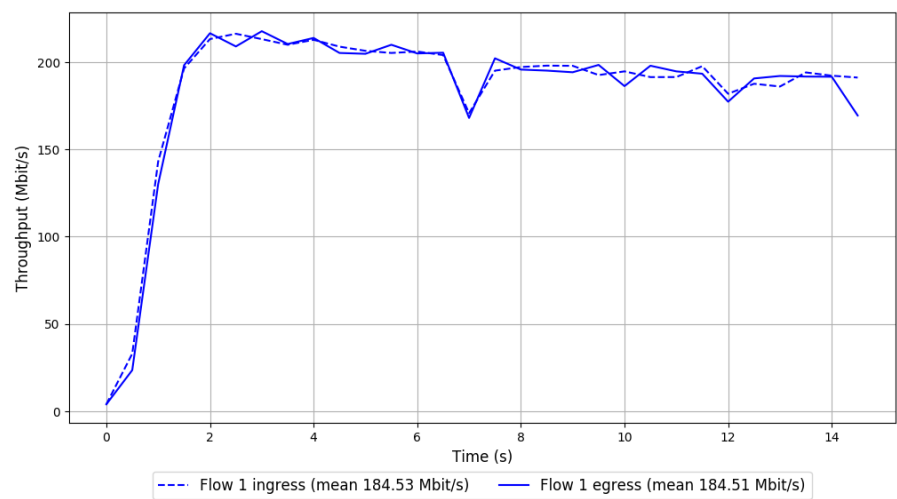


Run 5: Statistics of Indigo-calib

Start at: 2017-12-05 12:07:17

End at: 2017-12-05 12:07:47

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-05 12:17:33

End at: 2017-12-05 12:18:03

Below is generated by plot.py at 2017-12-05 15:29:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.79 Mbit/s

95th percentile per-packet one-way delay: 50.416 ms

Loss rate: 0.45%

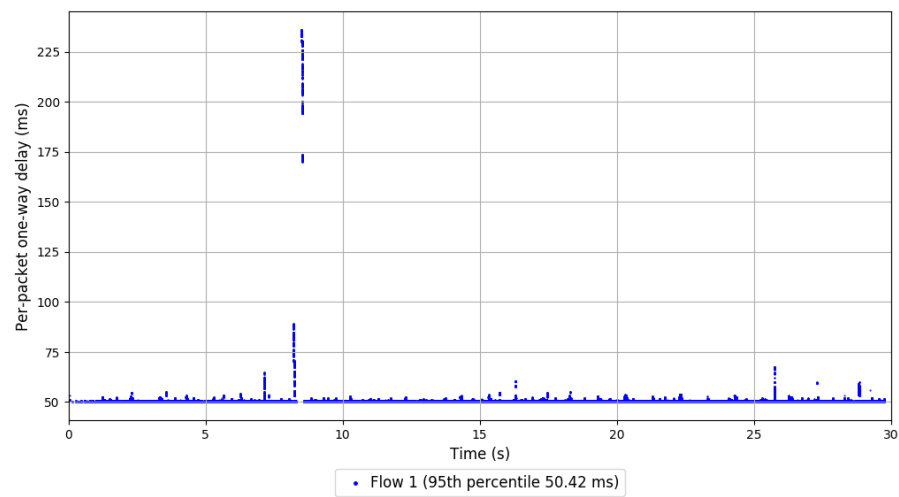
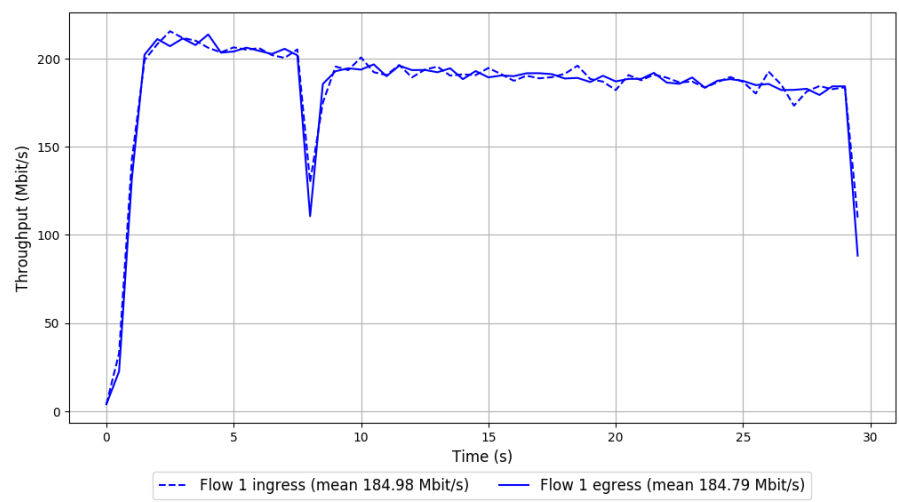
-- Flow 1:

Average throughput: 184.79 Mbit/s

95th percentile per-packet one-way delay: 50.416 ms

Loss rate: 0.45%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-05 12:28:06

End at: 2017-12-05 12:28:36

Below is generated by plot.py at 2017-12-05 15:29:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.12 Mbit/s

95th percentile per-packet one-way delay: 50.355 ms

Loss rate: 0.34%

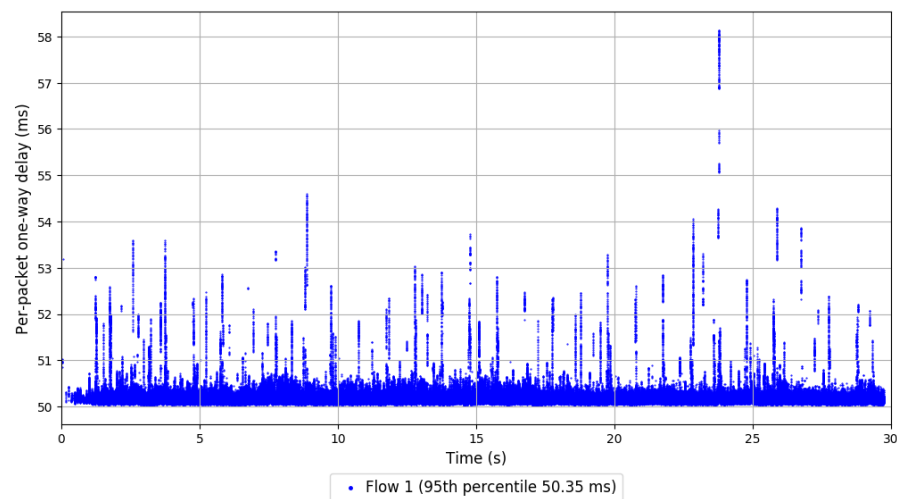
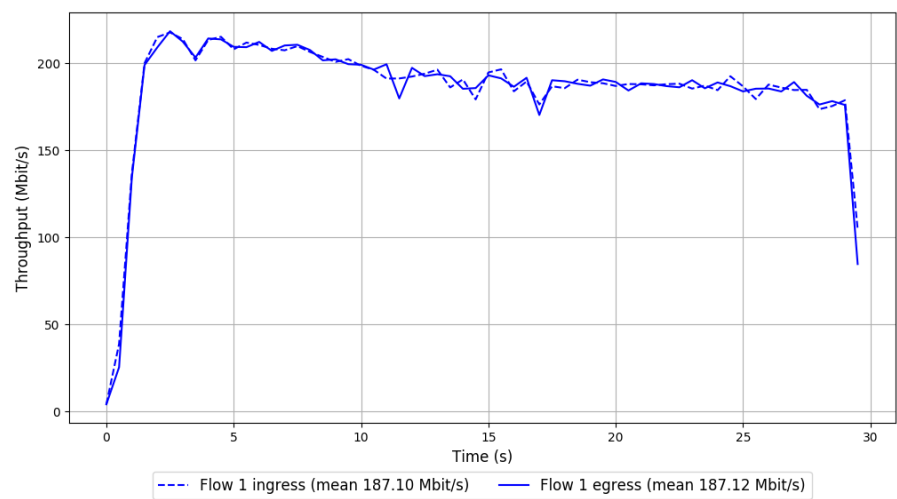
-- Flow 1:

Average throughput: 187.12 Mbit/s

95th percentile per-packet one-way delay: 50.355 ms

Loss rate: 0.34%

Run 7: Report of Indigo-calib — Data Link

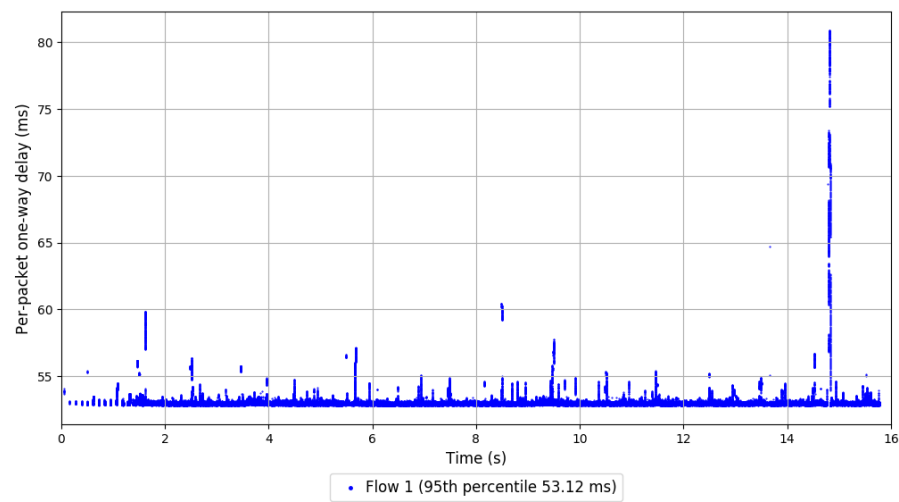
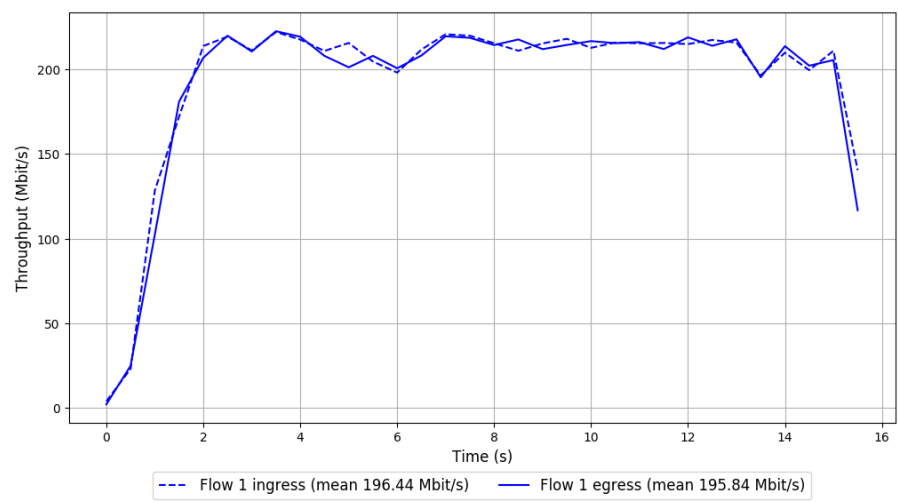


Run 8: Statistics of Indigo-calib

Start at: 2017-12-05 12:38:46

End at: 2017-12-05 12:39:16

Run 8: Report of Indigo-calib — Data Link

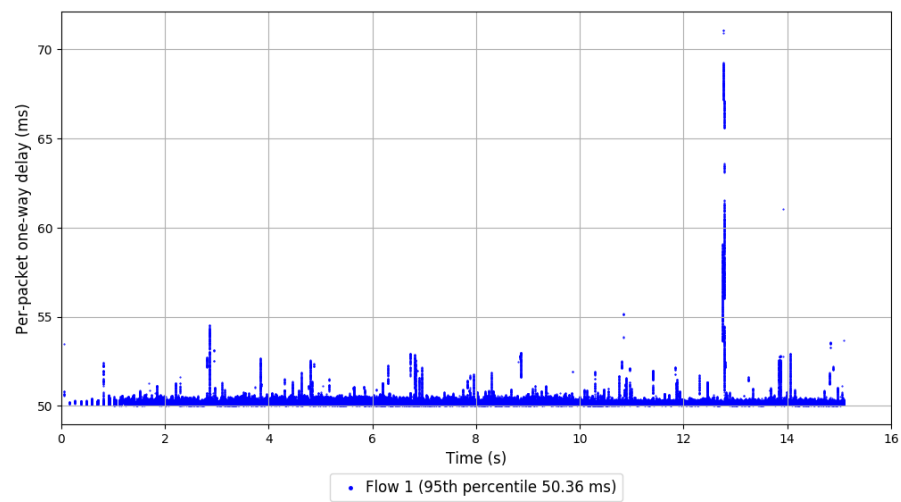
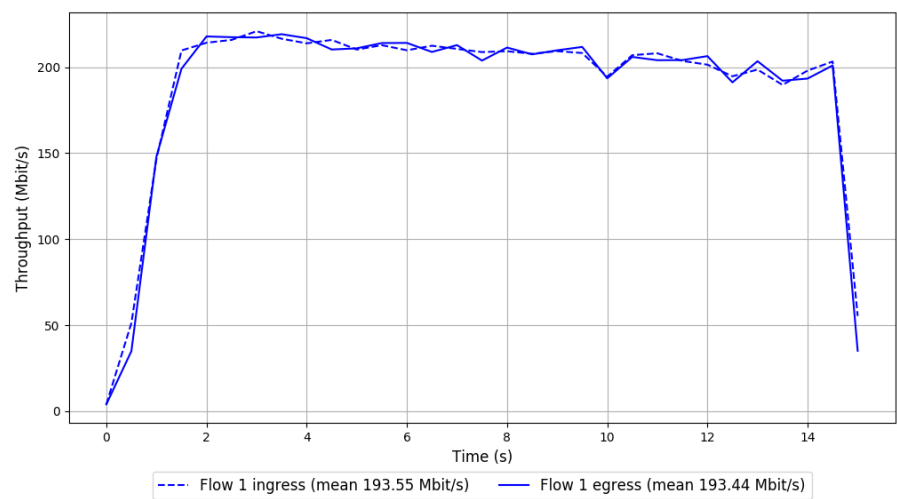


Run 9: Statistics of Indigo-calib

Start at: 2017-12-05 12:49:00

End at: 2017-12-05 12:49:30

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-05 12:59:14

End at: 2017-12-05 12:59:44

Below is generated by plot.py at 2017-12-05 15:29:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.08 Mbit/s

95th percentile per-packet one-way delay: 53.548 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 182.08 Mbit/s

95th percentile per-packet one-way delay: 53.548 ms

Loss rate: 0.34%

Run 10: Report of Indigo-calib — Data Link

