

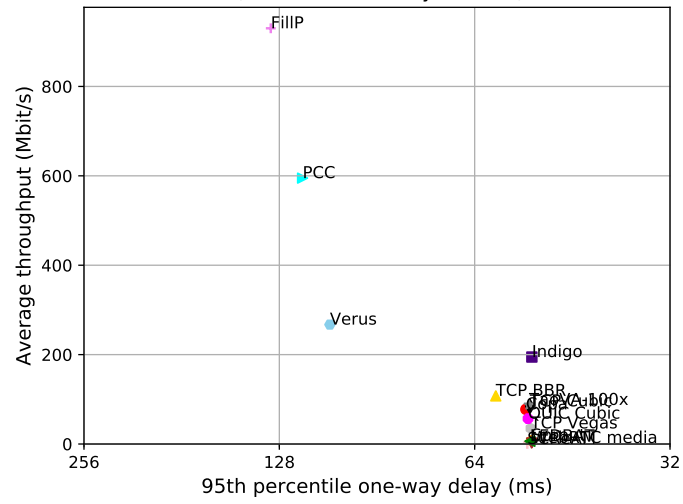
Pantheon Report

Generated at 2017-12-20 06:54:53 (UTC).
Data path: GCE Sydney Ethernet (*local*) → GCE Tokyo Ethernet (*remote*).
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**).

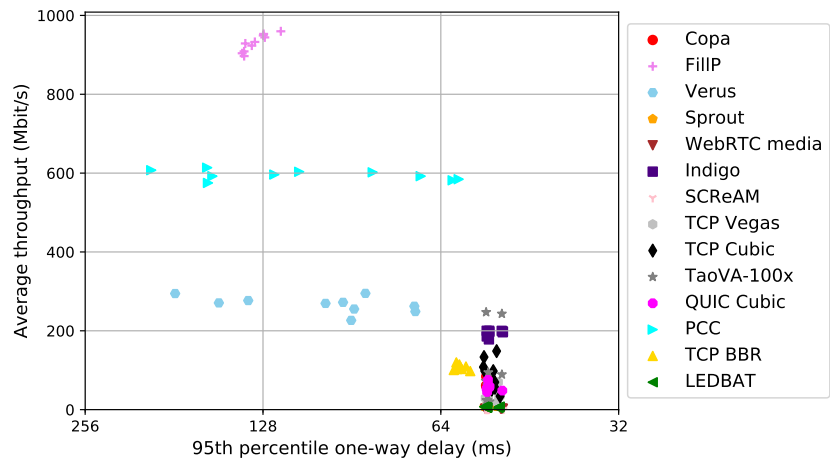
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/llp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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 @ f1a14bffe749737437f61b1eaeab30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	107.68	59.38	0.32
TCP Cubic	10	84.23	52.61	0.20
LEDBAT	10	6.13	52.62	0.64
PCC	10	594.87	117.86	0.71
QUIC Cubic	10	56.74	52.96	0.01
SCReAM	10	0.21	53.10	0.00
WebRTC media	10	2.29	52.28	0.00
Sprout	10	7.76	52.37	0.42
TaoVA-100x	10	87.45	52.78	0.00
TCP Vegas	10	34.93	52.46	0.28
Verus	10	267.15	106.99	0.44
Copa	10	77.57	53.36	0.02
FillP	10	930.09	131.94	3.37
Indigo	9	194.60	52.24	0.04

Run 1: Statistics of TCP BBR

Start at: 2017-12-20 03:11:44

End at: 2017-12-20 03:12:14

Below is generated by plot.py at 2017-12-20 06:01:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.56 Mbit/s

95th percentile per-packet one-way delay: 60.848 ms

Loss rate: 0.81%

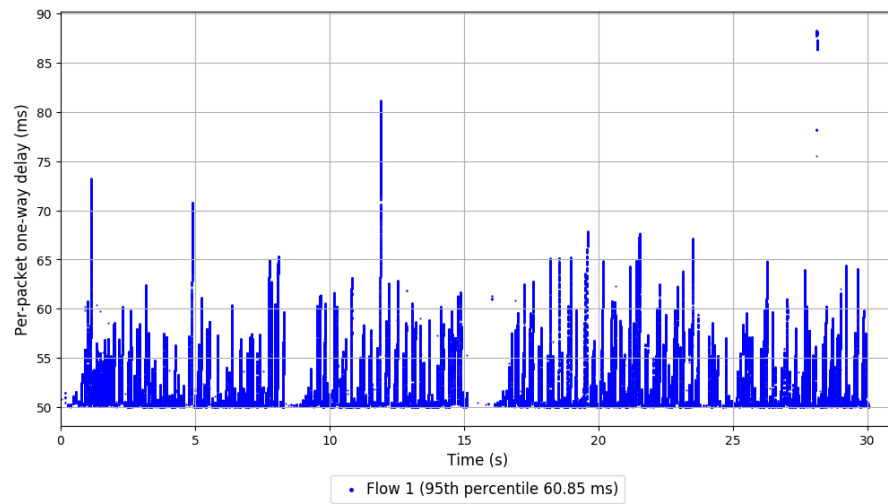
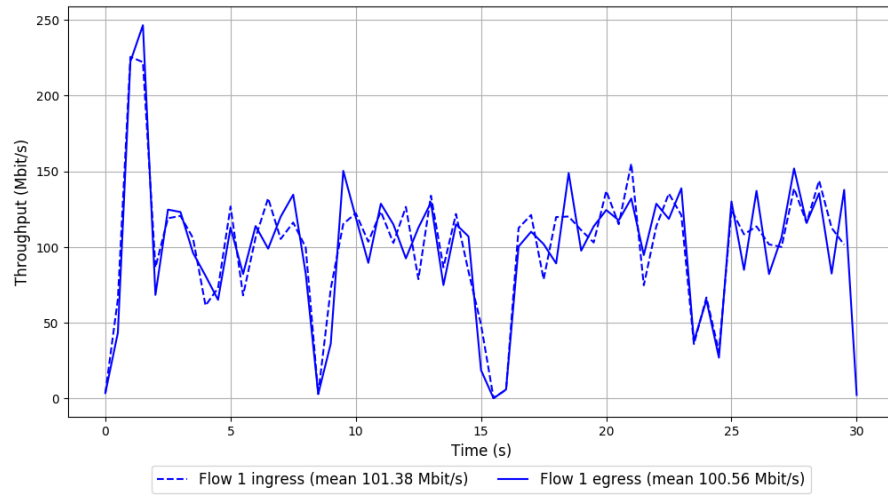
-- Flow 1:

Average throughput: 100.56 Mbit/s

95th percentile per-packet one-way delay: 60.848 ms

Loss rate: 0.81%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-20 03:23:01

End at: 2017-12-20 03:23:31

Below is generated by plot.py at 2017-12-20 06:01:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.54 Mbit/s

95th percentile per-packet one-way delay: 58.030 ms

Loss rate: 0.00%

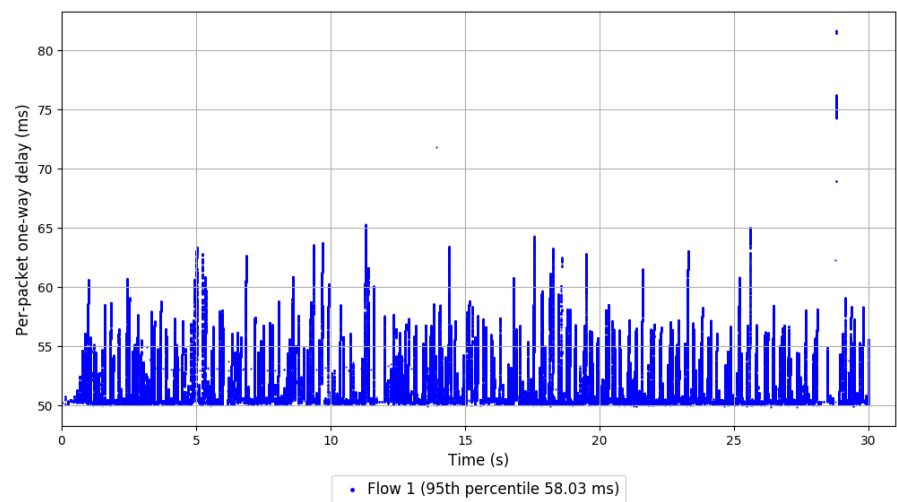
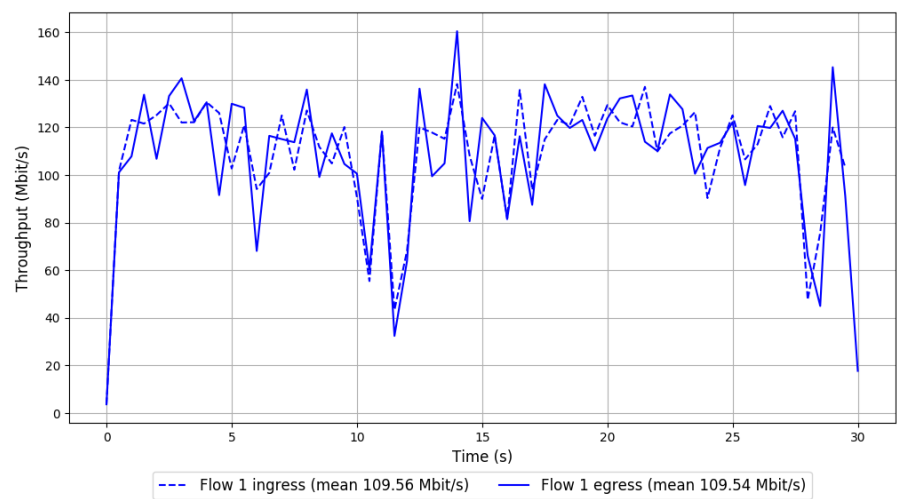
-- Flow 1:

Average throughput: 109.54 Mbit/s

95th percentile per-packet one-way delay: 58.030 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-20 03:34:21

End at: 2017-12-20 03:34:51

Below is generated by plot.py at 2017-12-20 06:01:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.50 Mbit/s

95th percentile per-packet one-way delay: 59.603 ms

Loss rate: 0.00%

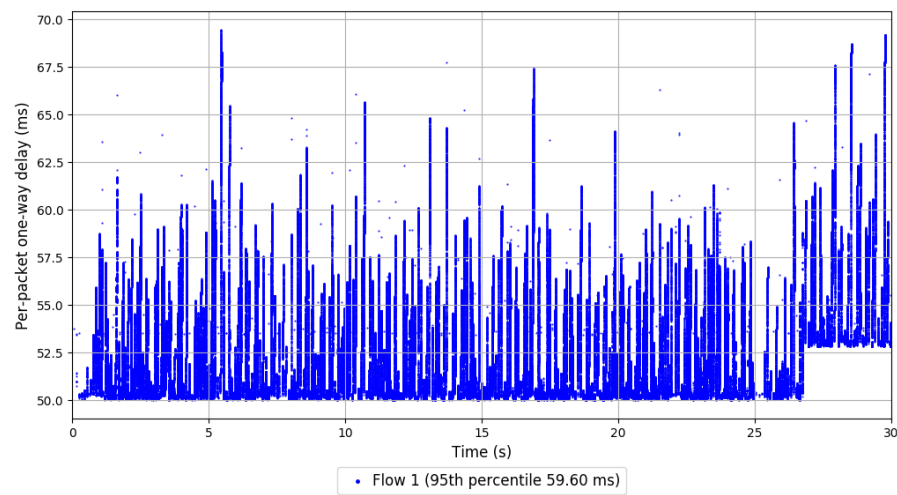
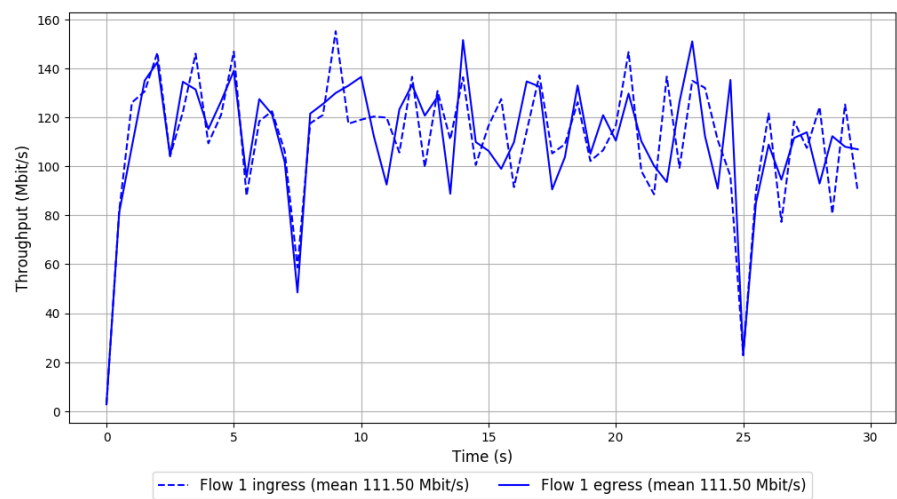
-- Flow 1:

Average throughput: 111.50 Mbit/s

95th percentile per-packet one-way delay: 59.603 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-20 03:45:47

End at: 2017-12-20 03:46:17

Below is generated by plot.py at 2017-12-20 06:01:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.12 Mbit/s

95th percentile per-packet one-way delay: 60.007 ms

Loss rate: 0.62%

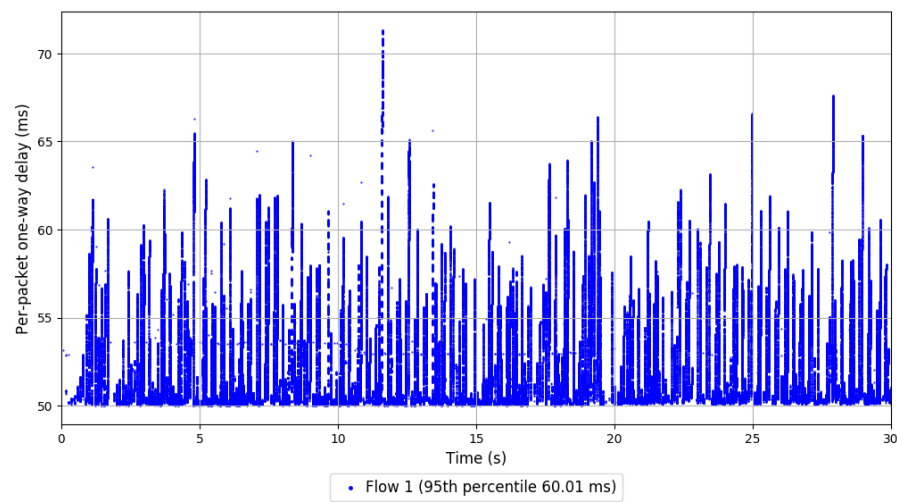
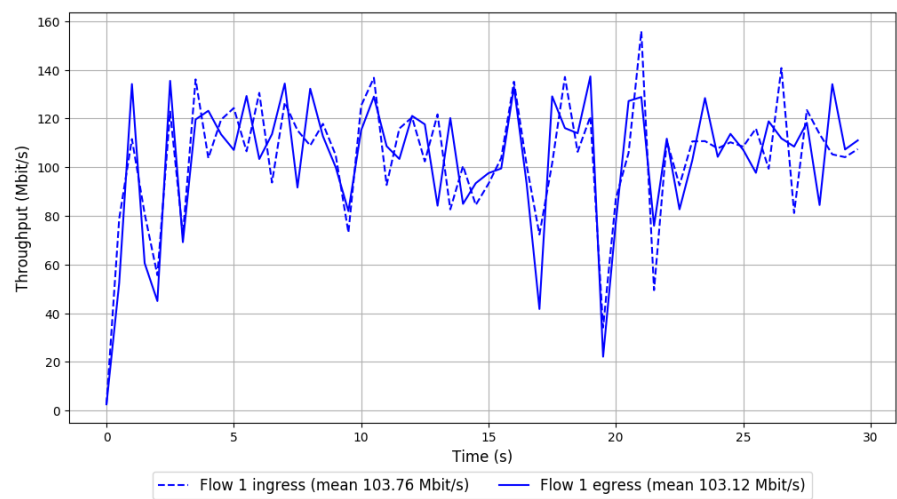
-- Flow 1:

Average throughput: 103.12 Mbit/s

95th percentile per-packet one-way delay: 60.007 ms

Loss rate: 0.62%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-20 03:57:16

End at: 2017-12-20 03:57:46

Below is generated by plot.py at 2017-12-20 06:01:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.96 Mbit/s

95th percentile per-packet one-way delay: 59.243 ms

Loss rate: 0.10%

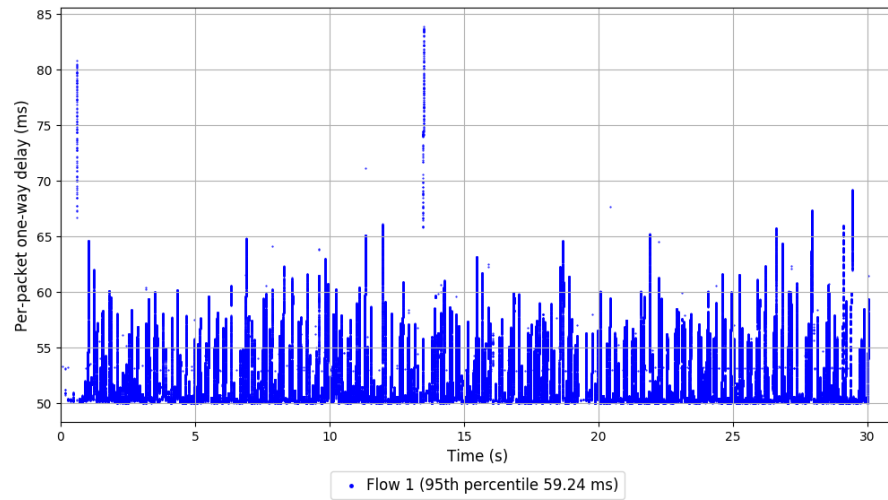
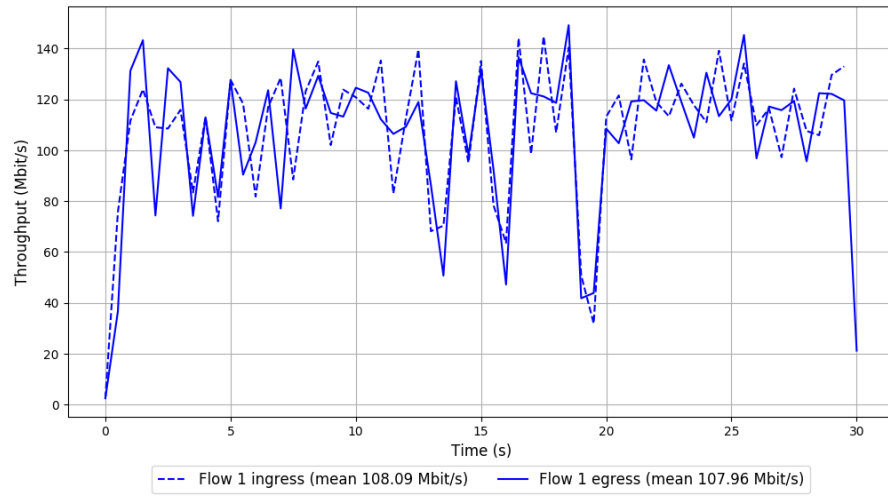
-- Flow 1:

Average throughput: 107.96 Mbit/s

95th percentile per-packet one-way delay: 59.243 ms

Loss rate: 0.10%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-20 04:08:36

End at: 2017-12-20 04:09:06

Below is generated by plot.py at 2017-12-20 06:02:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.00 Mbit/s

95th percentile per-packet one-way delay: 60.240 ms

Loss rate: 0.06%

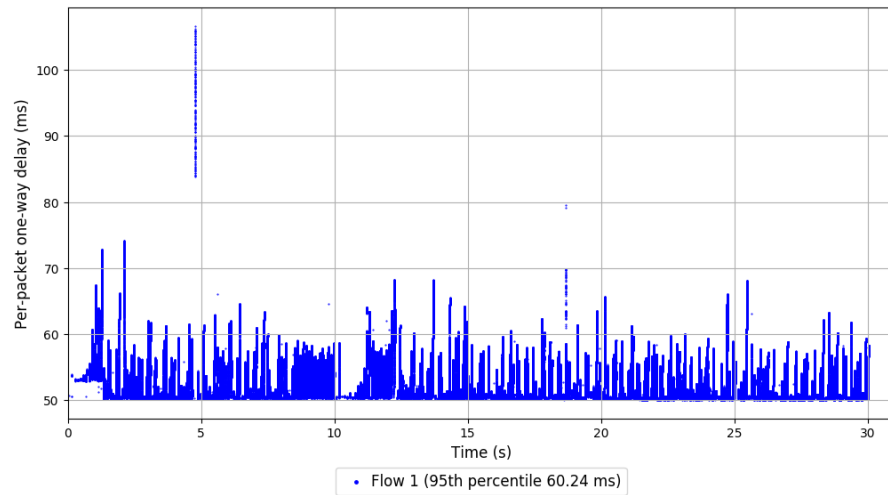
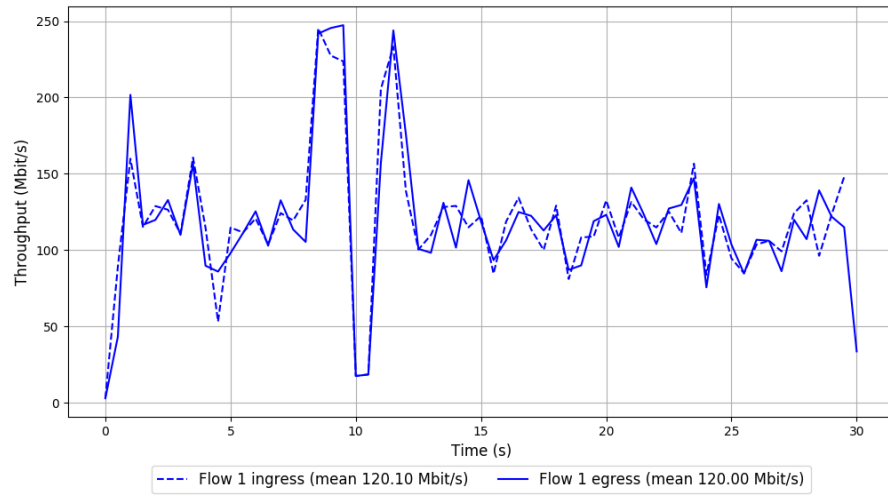
-- Flow 1:

Average throughput: 120.00 Mbit/s

95th percentile per-packet one-way delay: 60.240 ms

Loss rate: 0.06%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-20 04:20:09

End at: 2017-12-20 04:20:39

Below is generated by plot.py at 2017-12-20 06:02:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 114.78 Mbit/s

95th percentile per-packet one-way delay: 59.530 ms

Loss rate: 0.04%

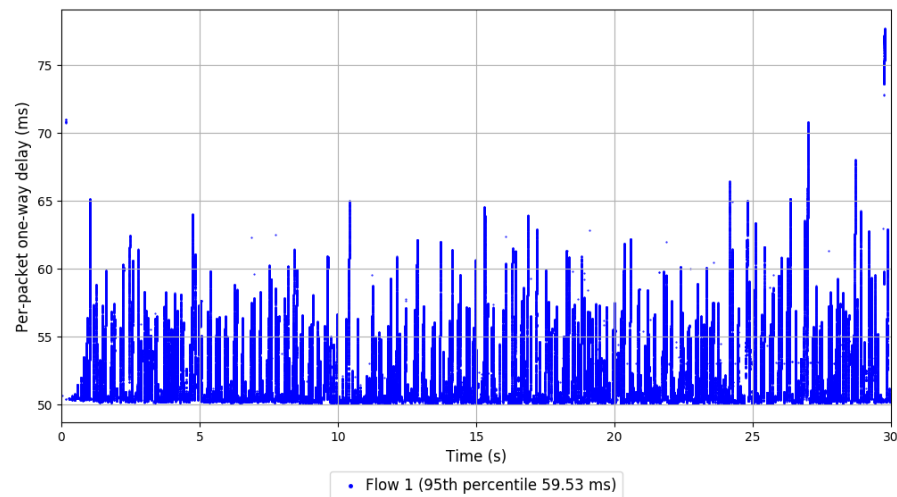
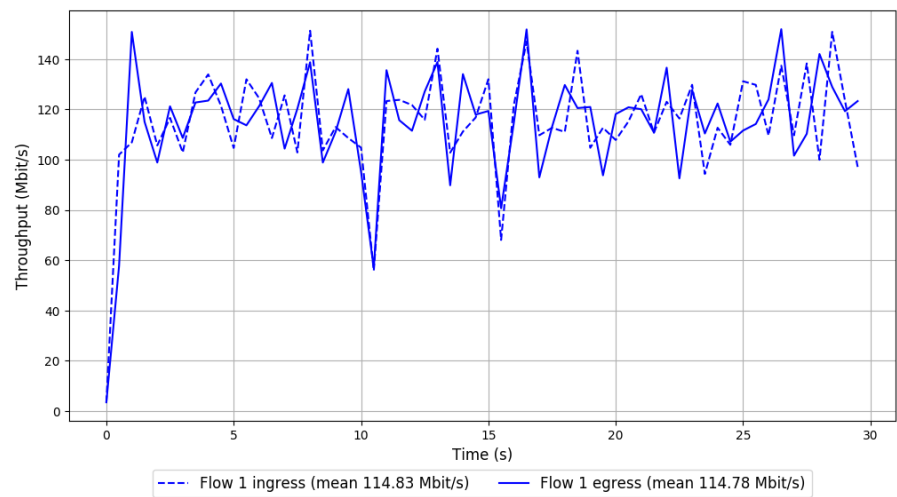
-- Flow 1:

Average throughput: 114.78 Mbit/s

95th percentile per-packet one-way delay: 59.530 ms

Loss rate: 0.04%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-20 04:31:31

End at: 2017-12-20 04:32:01

Below is generated by plot.py at 2017-12-20 06:02:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.35 Mbit/s

95th percentile per-packet one-way delay: 60.207 ms

Loss rate: 0.18%

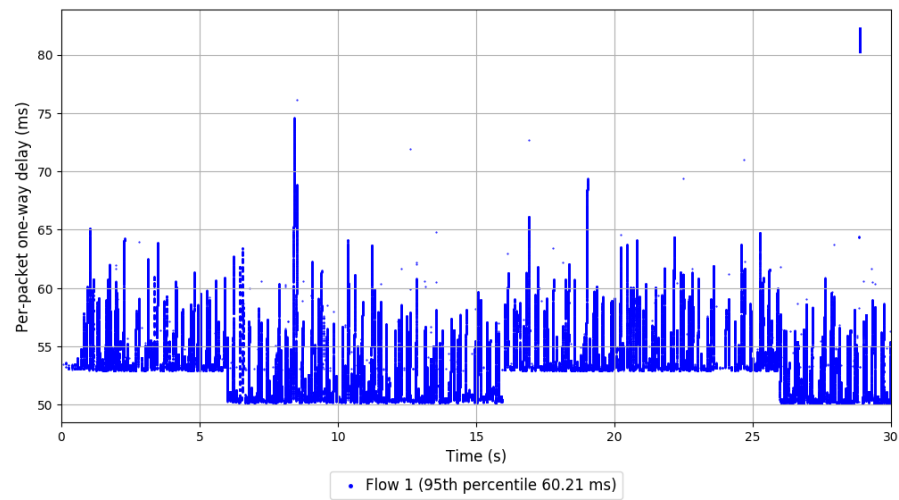
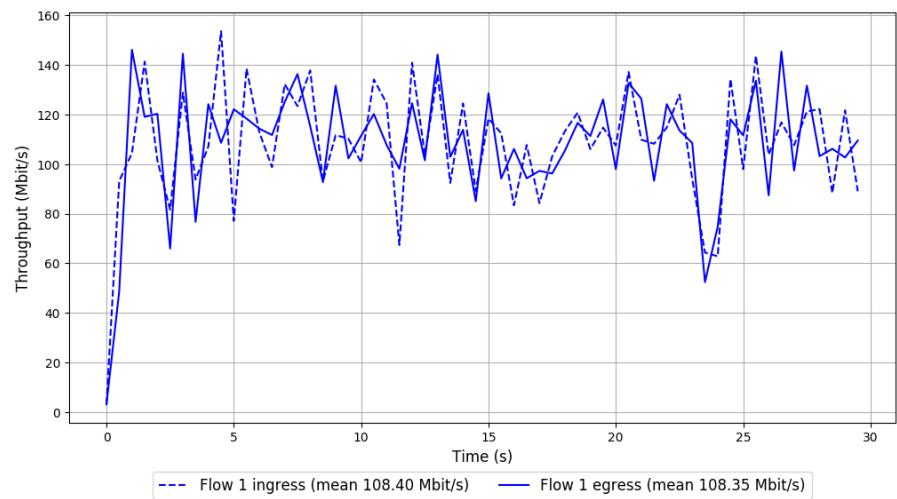
-- Flow 1:

Average throughput: 108.35 Mbit/s

95th percentile per-packet one-way delay: 60.207 ms

Loss rate: 0.18%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-20 04:42:54

End at: 2017-12-20 04:43:24

Below is generated by plot.py at 2017-12-20 06:03:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.20 Mbit/s

95th percentile per-packet one-way delay: 59.039 ms

Loss rate: 1.09%

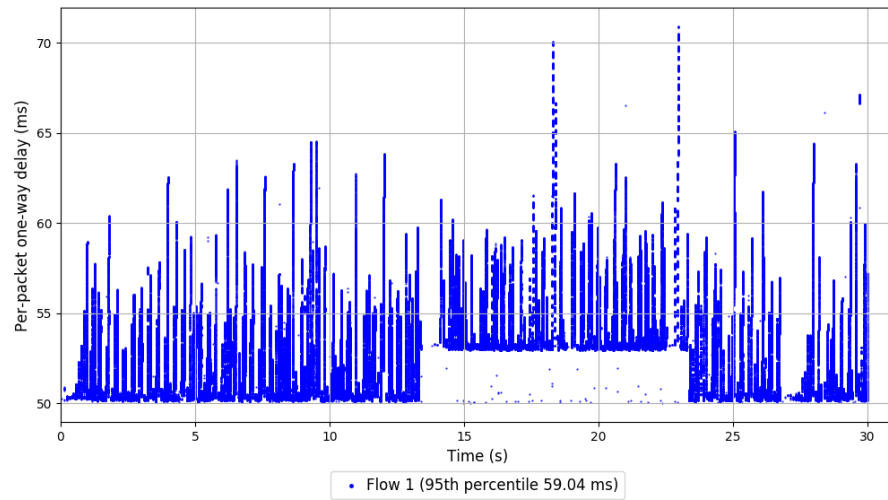
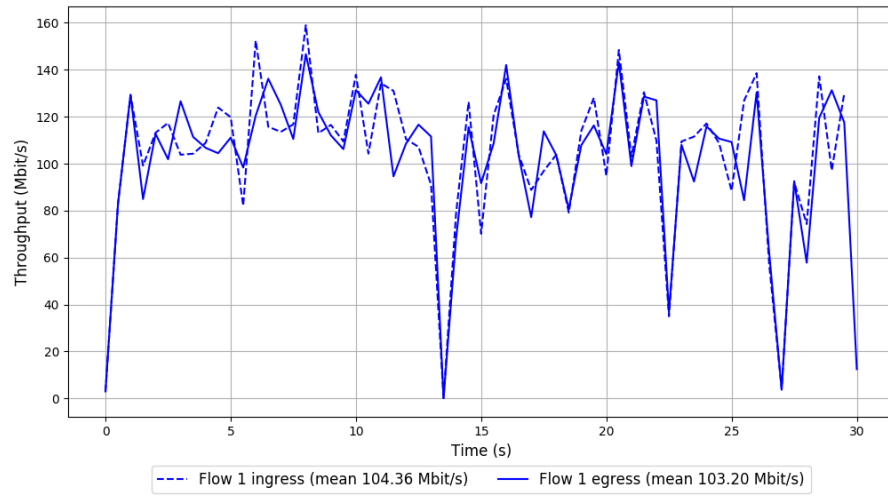
-- Flow 1:

Average throughput: 103.20 Mbit/s

95th percentile per-packet one-way delay: 59.039 ms

Loss rate: 1.09%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-20 04:54:33

End at: 2017-12-20 04:55:03

Below is generated by plot.py at 2017-12-20 06:03:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.81 Mbit/s

95th percentile per-packet one-way delay: 57.068 ms

Loss rate: 0.29%

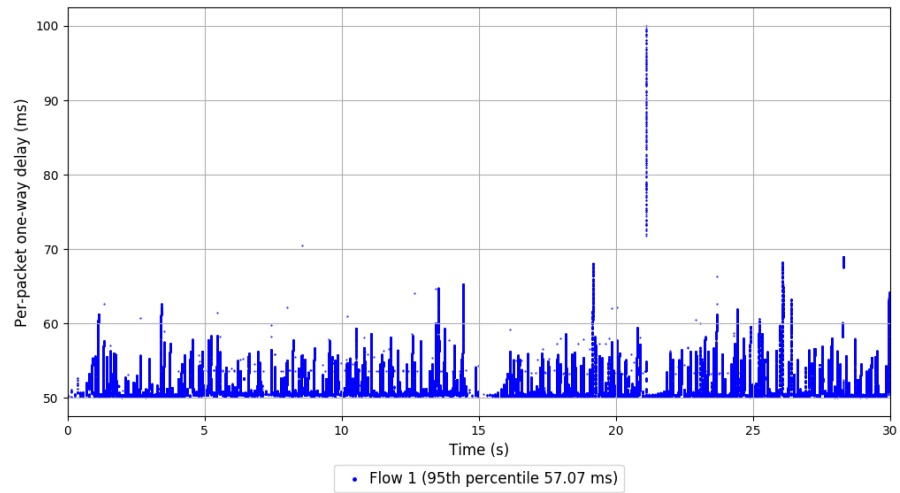
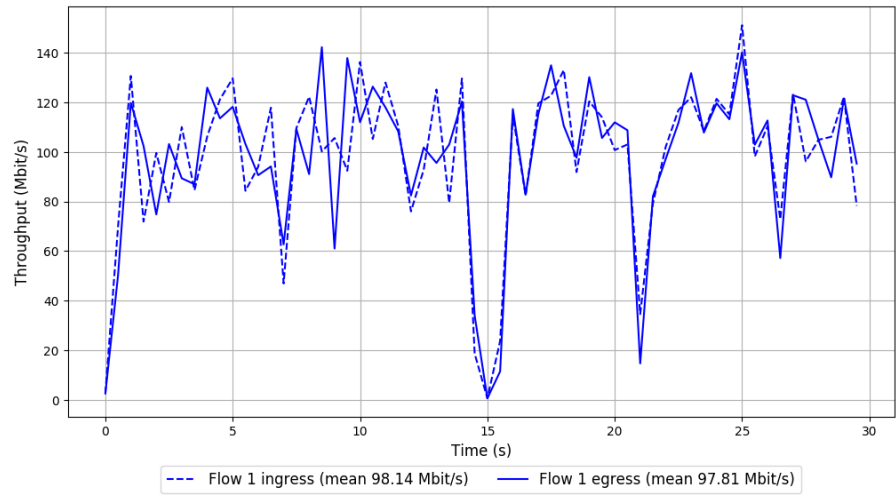
-- Flow 1:

Average throughput: 97.81 Mbit/s

95th percentile per-packet one-way delay: 57.068 ms

Loss rate: 0.29%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-20 03:04:08

End at: 2017-12-20 03:04:38

Below is generated by plot.py at 2017-12-20 06:03:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.47 Mbit/s

95th percentile per-packet one-way delay: 51.832 ms

Loss rate: 0.57%

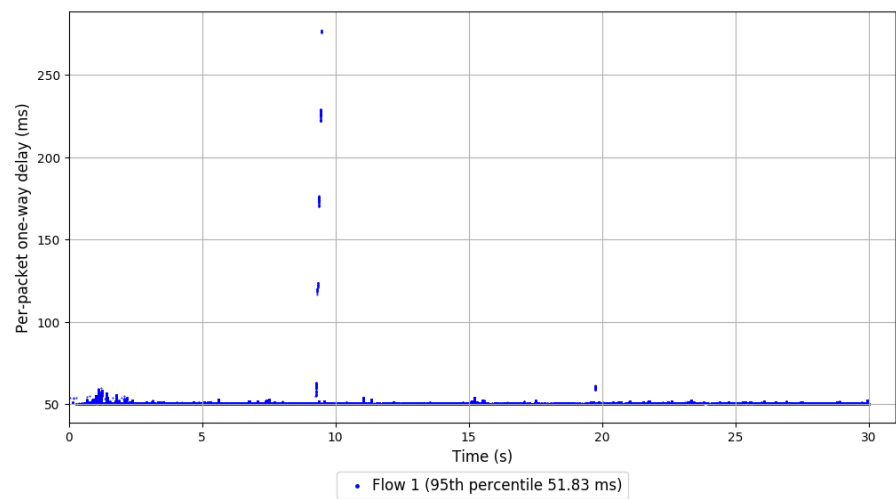
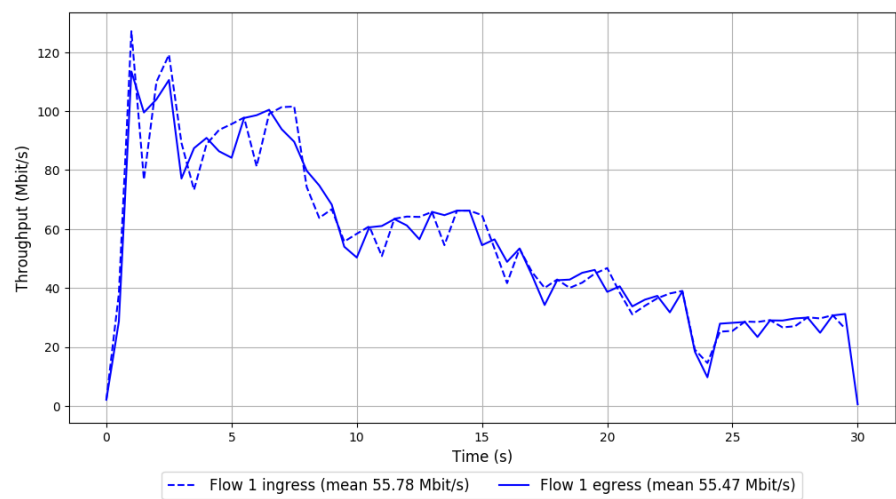
-- Flow 1:

Average throughput: 55.47 Mbit/s

95th percentile per-packet one-way delay: 51.832 ms

Loss rate: 0.57%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-20 03:15:31

End at: 2017-12-20 03:16:01

Below is generated by plot.py at 2017-12-20 06:03:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.99 Mbit/s

95th percentile per-packet one-way delay: 52.474 ms

Loss rate: 0.24%

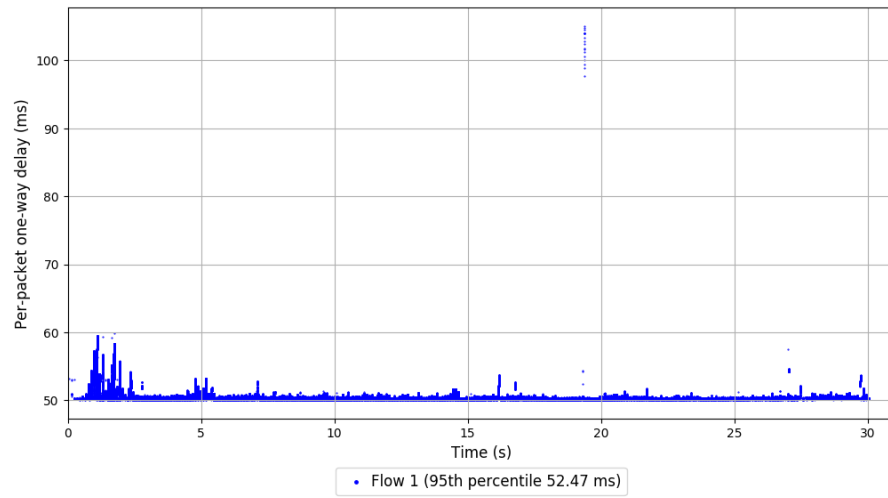
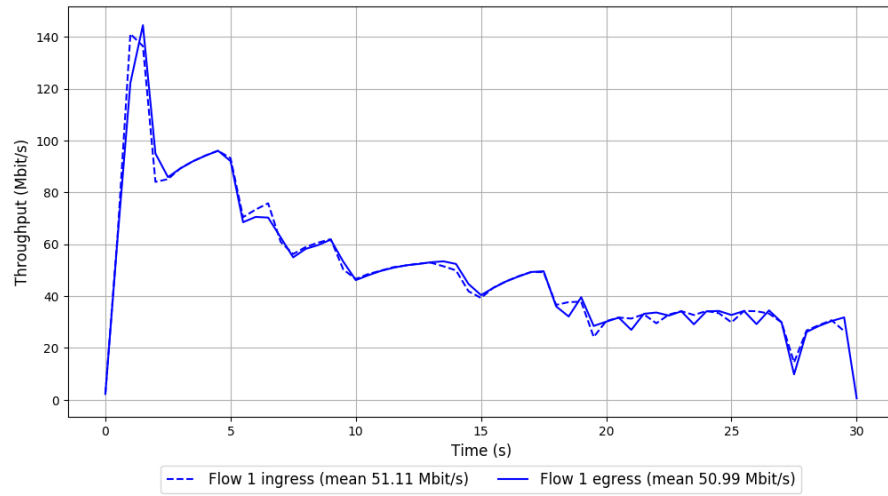
-- Flow 1:

Average throughput: 50.99 Mbit/s

95th percentile per-packet one-way delay: 52.474 ms

Loss rate: 0.24%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-20 03:26:48

End at: 2017-12-20 03:27:18

Below is generated by plot.py at 2017-12-20 06:03:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.19 Mbit/s

95th percentile per-packet one-way delay: 50.796 ms

Loss rate: 0.11%

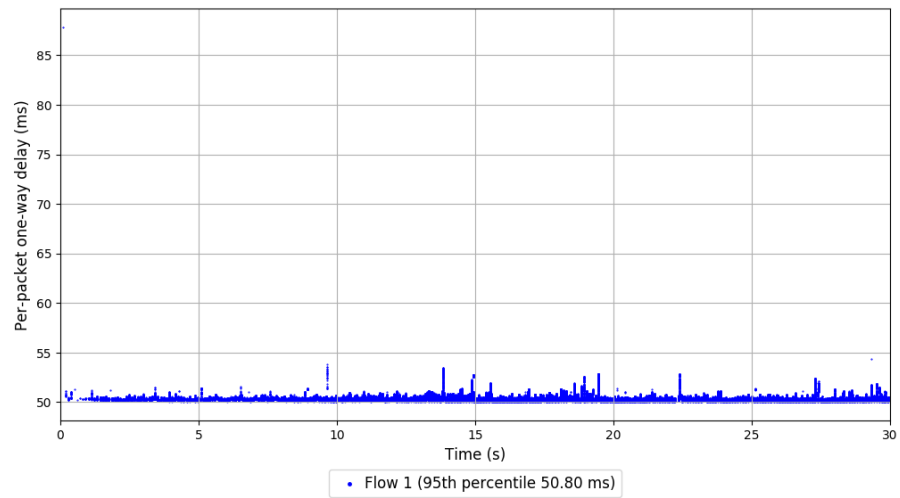
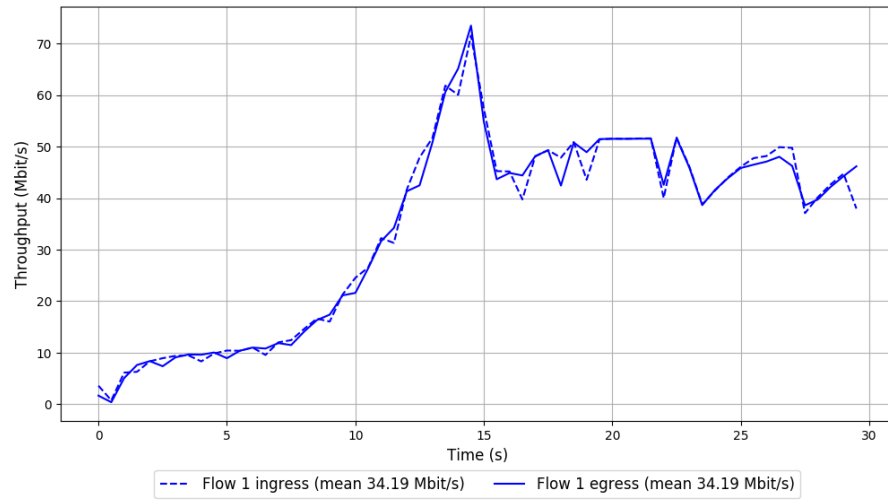
-- Flow 1:

Average throughput: 34.19 Mbit/s

95th percentile per-packet one-way delay: 50.796 ms

Loss rate: 0.11%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-20 03:38:09

End at: 2017-12-20 03:38:39

Below is generated by plot.py at 2017-12-20 06:03:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.92 Mbit/s

95th percentile per-packet one-way delay: 54.210 ms

Loss rate: 0.31%

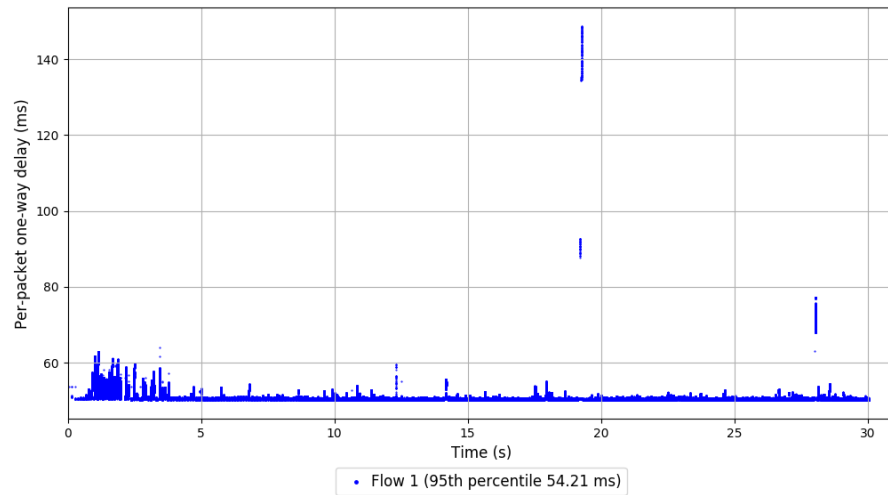
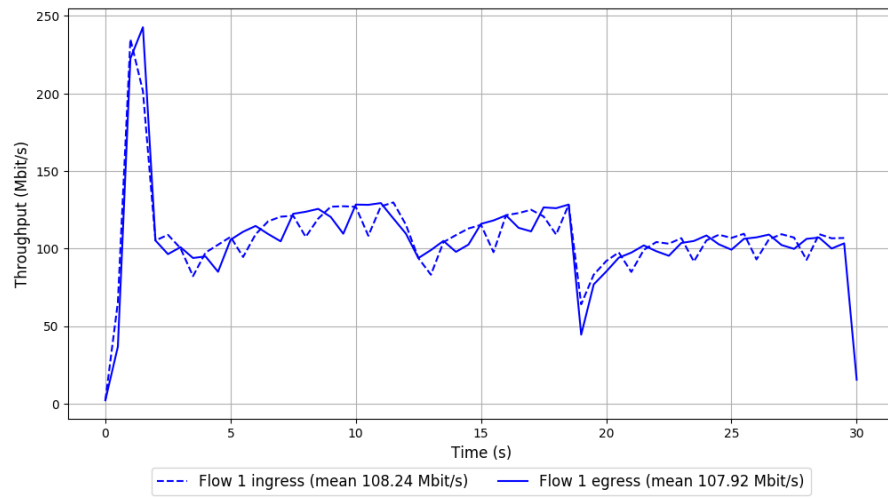
-- Flow 1:

Average throughput: 107.92 Mbit/s

95th percentile per-packet one-way delay: 54.210 ms

Loss rate: 0.31%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-20 03:49:34

End at: 2017-12-20 03:50:04

Below is generated by plot.py at 2017-12-20 06:04:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 133.33 Mbit/s

95th percentile per-packet one-way delay: 54.084 ms

Loss rate: 0.23%

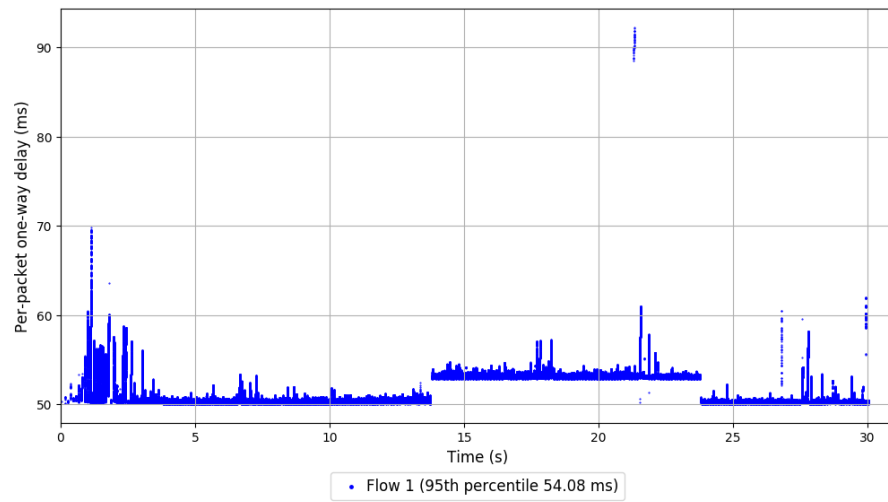
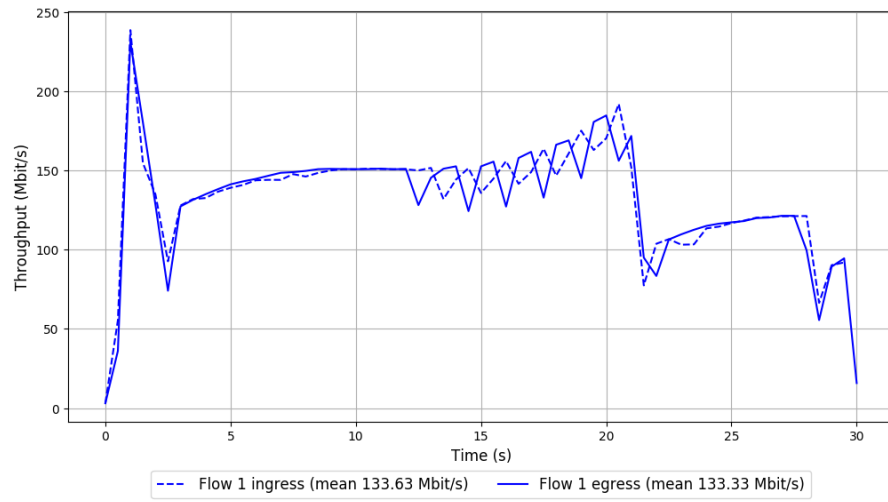
-- Flow 1:

Average throughput: 133.33 Mbit/s

95th percentile per-packet one-way delay: 54.084 ms

Loss rate: 0.23%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-20 04:01:03

End at: 2017-12-20 04:01:33

Below is generated by plot.py at 2017-12-20 06:04:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.72 Mbit/s

95th percentile per-packet one-way delay: 52.166 ms

Loss rate: 0.01%

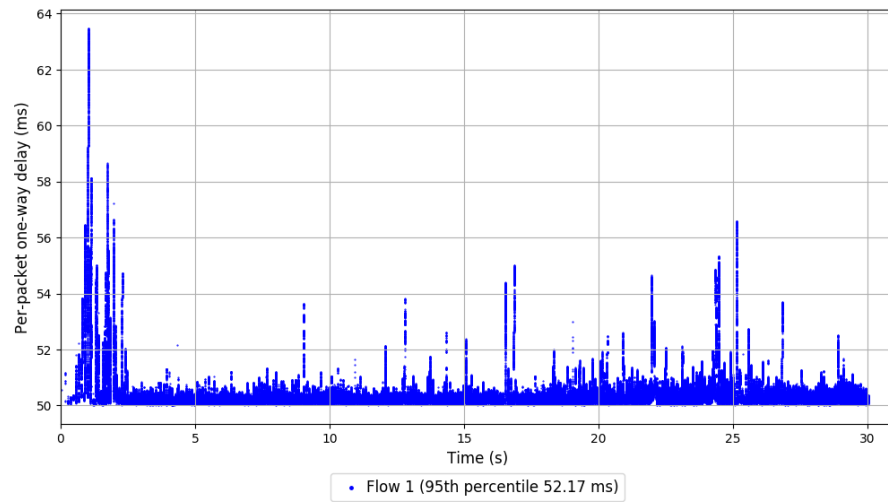
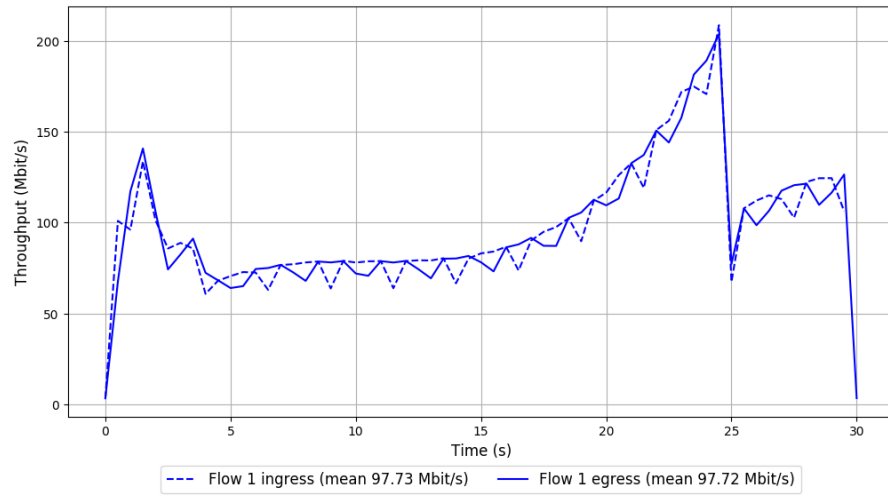
-- Flow 1:

Average throughput: 97.72 Mbit/s

95th percentile per-packet one-way delay: 52.166 ms

Loss rate: 0.01%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-20 04:12:23

End at: 2017-12-20 04:12:53

Below is generated by plot.py at 2017-12-20 06:04:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.52 Mbit/s

95th percentile per-packet one-way delay: 53.289 ms

Loss rate: 0.43%

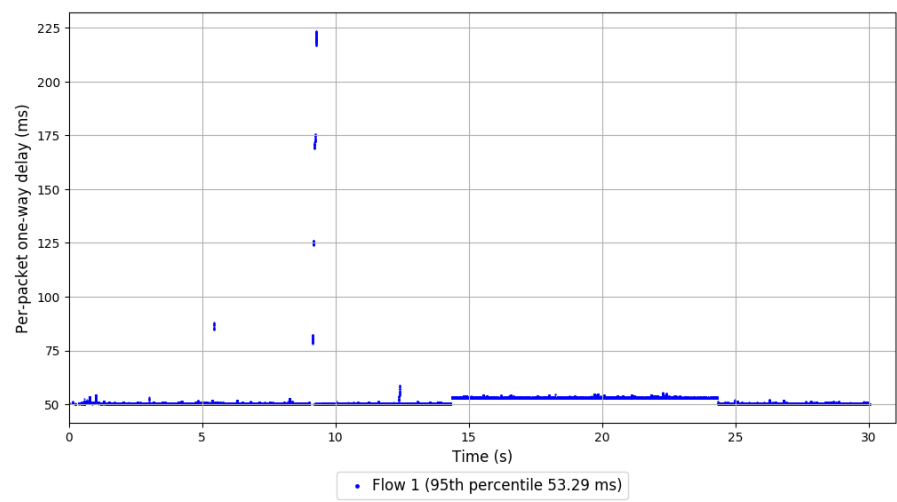
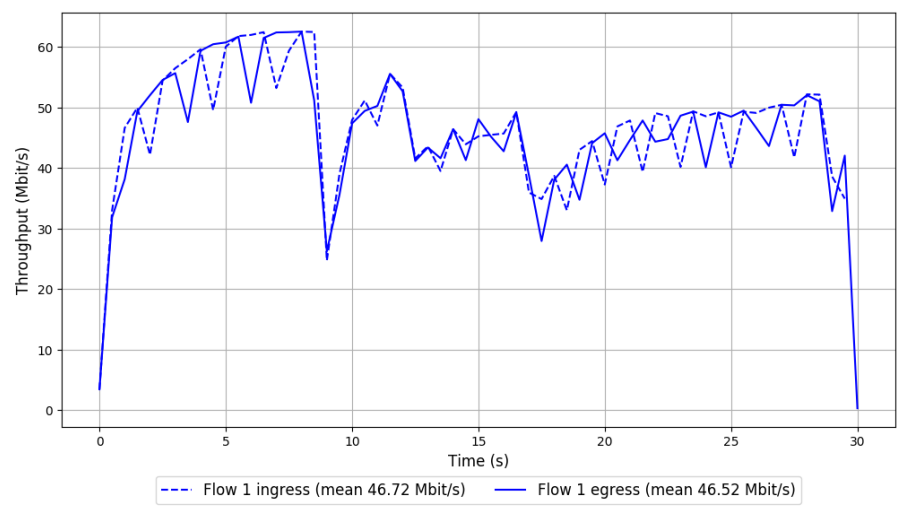
-- Flow 1:

Average throughput: 46.52 Mbit/s

95th percentile per-packet one-way delay: 53.289 ms

Loss rate: 0.43%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-20 04:23:57

End at: 2017-12-20 04:24:27

Below is generated by plot.py at 2017-12-20 06:04:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.09 Mbit/s

95th percentile per-packet one-way delay: 53.934 ms

Loss rate: 0.03%

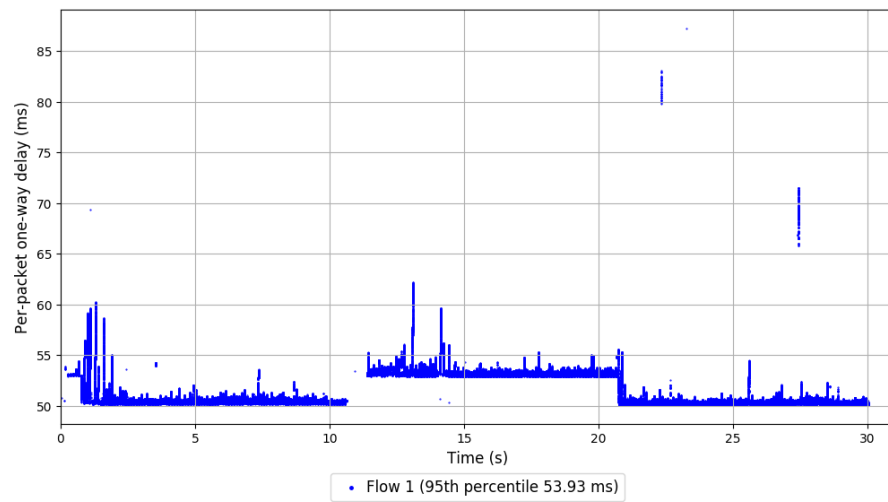
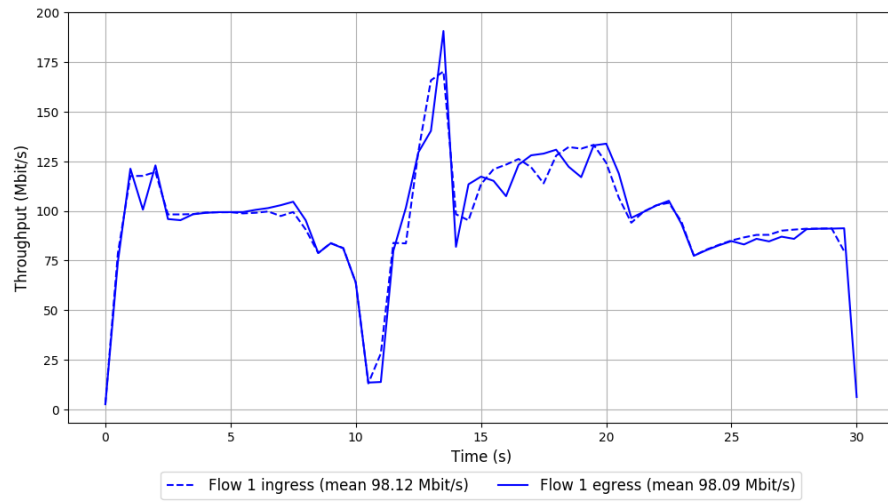
-- Flow 1:

Average throughput: 98.09 Mbit/s

95th percentile per-packet one-way delay: 53.934 ms

Loss rate: 0.03%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-20 04:35:20

End at: 2017-12-20 04:35:50

Below is generated by plot.py at 2017-12-20 06:04:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.57 Mbit/s

95th percentile per-packet one-way delay: 51.858 ms

Loss rate: 0.03%

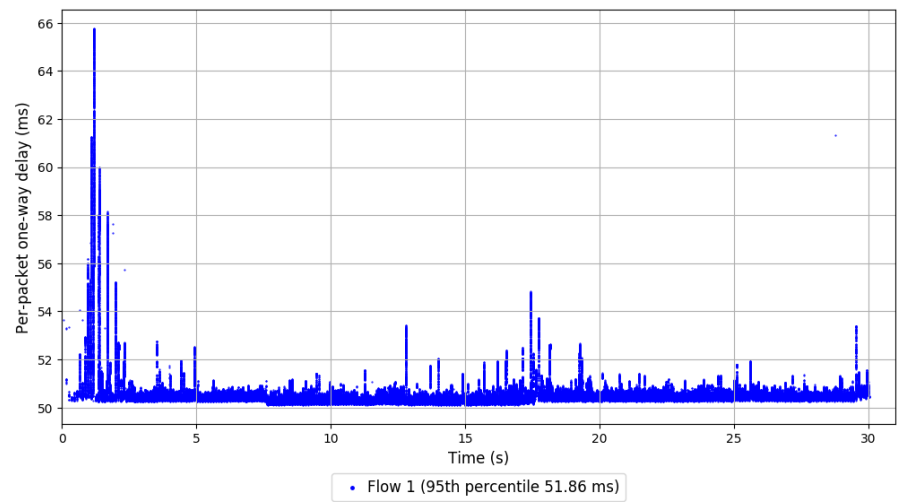
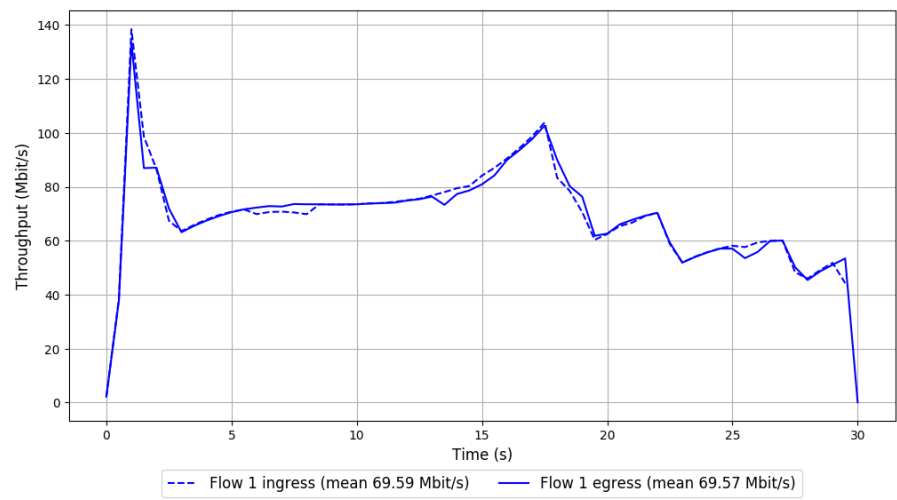
-- Flow 1:

Average throughput: 69.57 Mbit/s

95th percentile per-packet one-way delay: 51.858 ms

Loss rate: 0.03%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-20 04:46:42

End at: 2017-12-20 04:47:12

Below is generated by plot.py at 2017-12-20 06:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.46 Mbit/s

95th percentile per-packet one-way delay: 51.492 ms

Loss rate: 0.00%

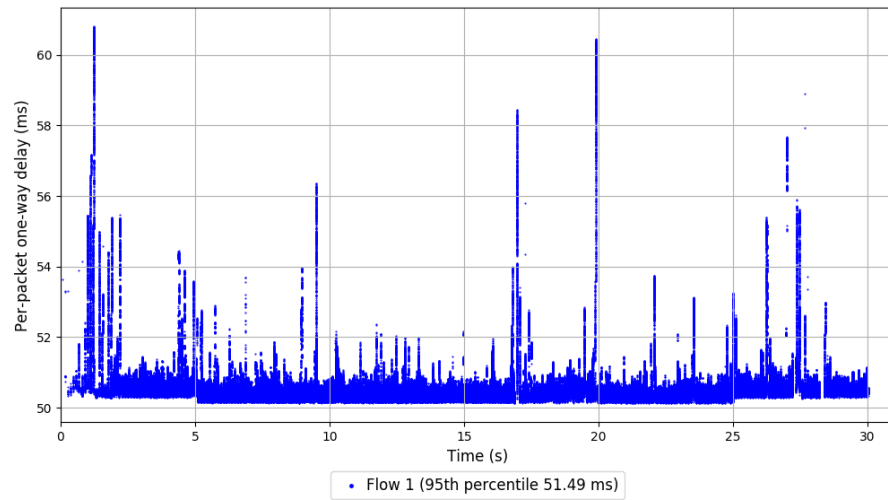
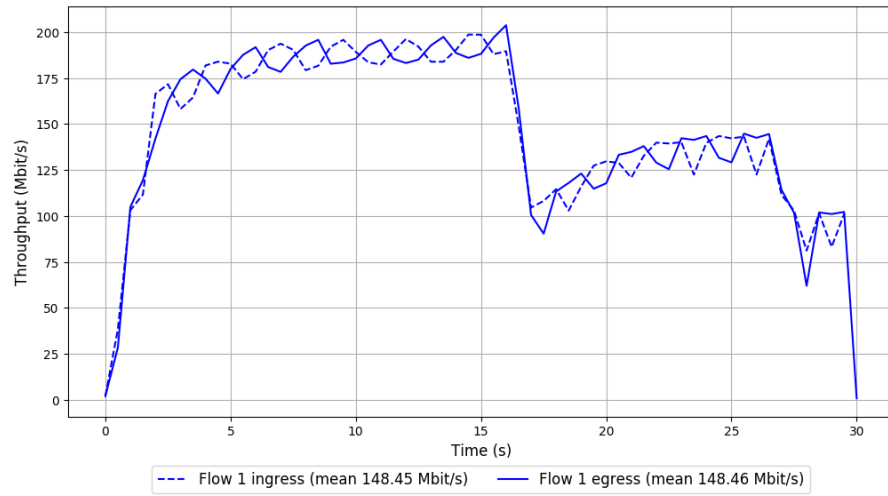
-- Flow 1:

Average throughput: 148.46 Mbit/s

95th percentile per-packet one-way delay: 51.492 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

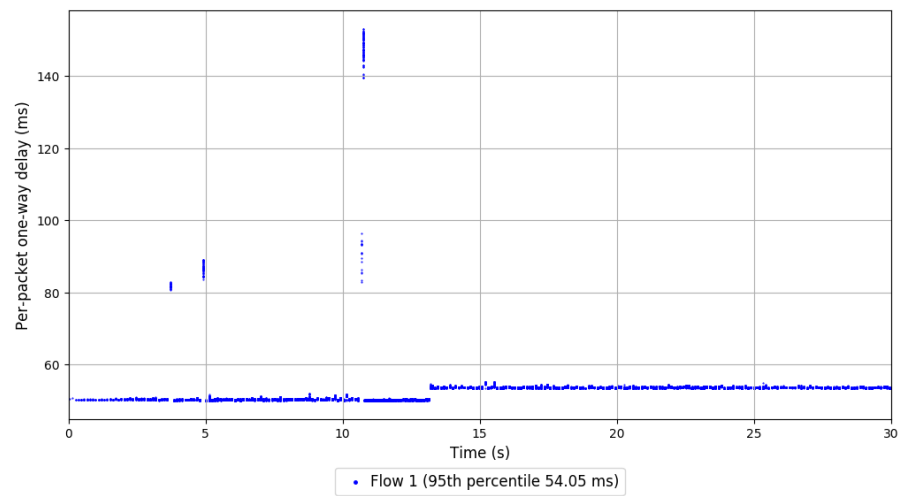
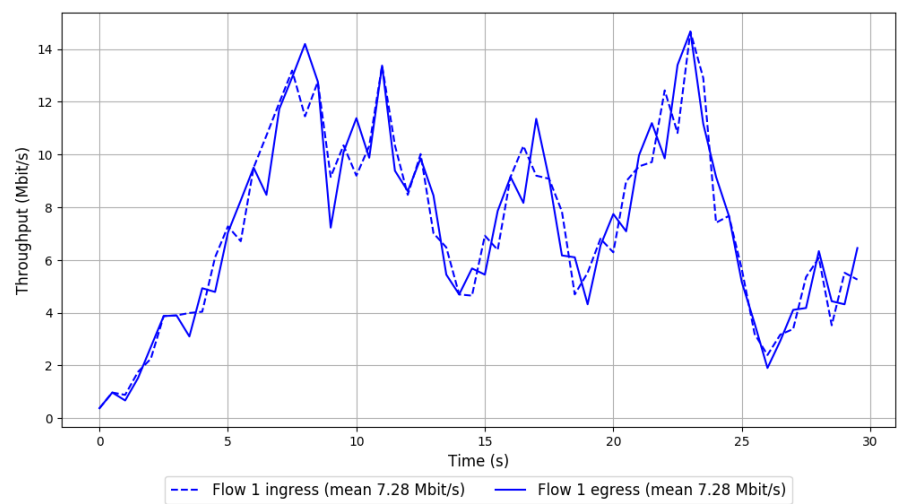


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-20 03:01:04
End at: 2017-12-20 03:01:34

# Below is generated by plot.py at 2017-12-20 06:05:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 54.053 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 54.053 ms
Loss rate: 0.08%
```

Run 1: Report of LEDBAT — Data Link

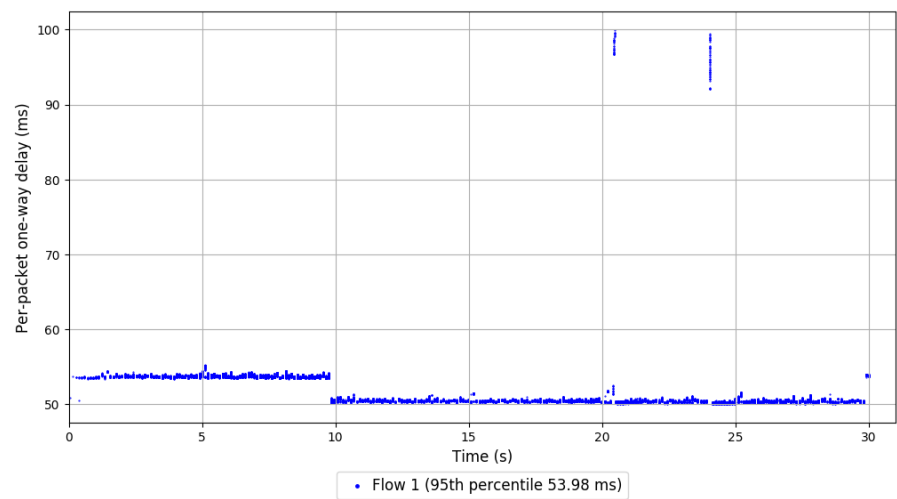
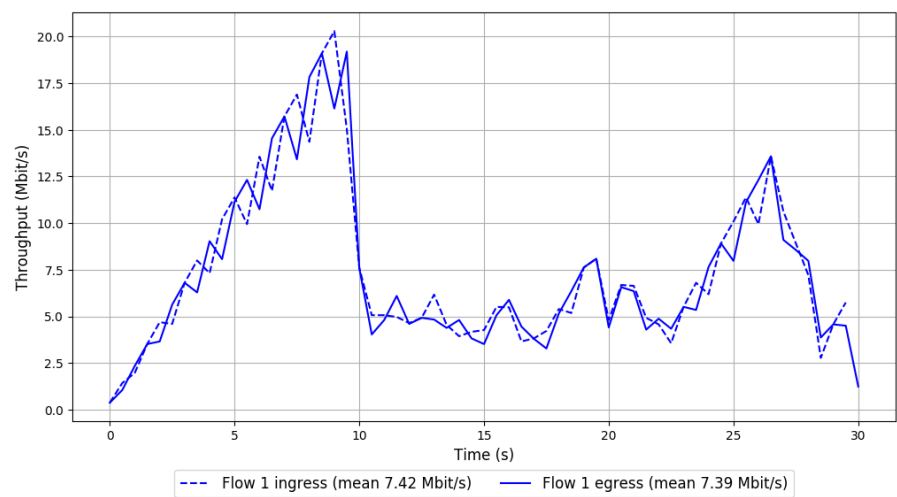


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-20 03:12:28
End at: 2017-12-20 03:12:58

# Below is generated by plot.py at 2017-12-20 06:05:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: 53.983 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: 53.983 ms
Loss rate: 0.36%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-20 03:23:45

End at: 2017-12-20 03:24:15

Below is generated by plot.py at 2017-12-20 06:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 53.521 ms

Loss rate: 1.15%

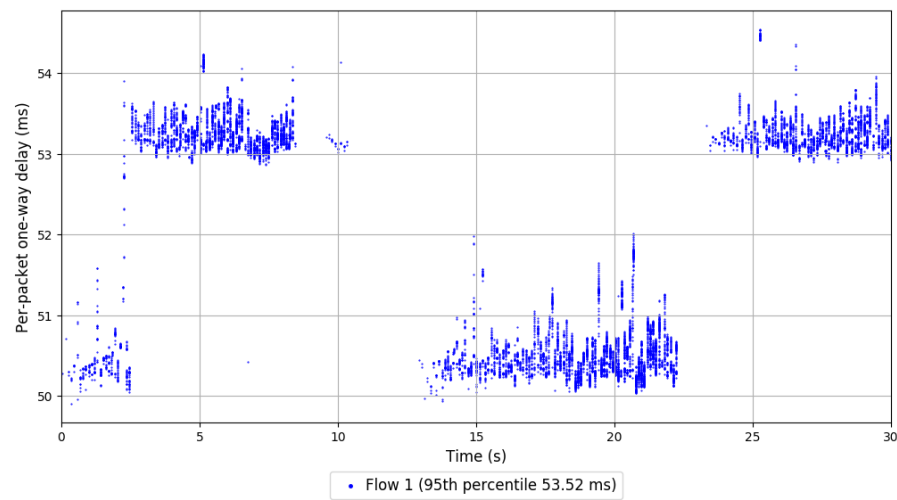
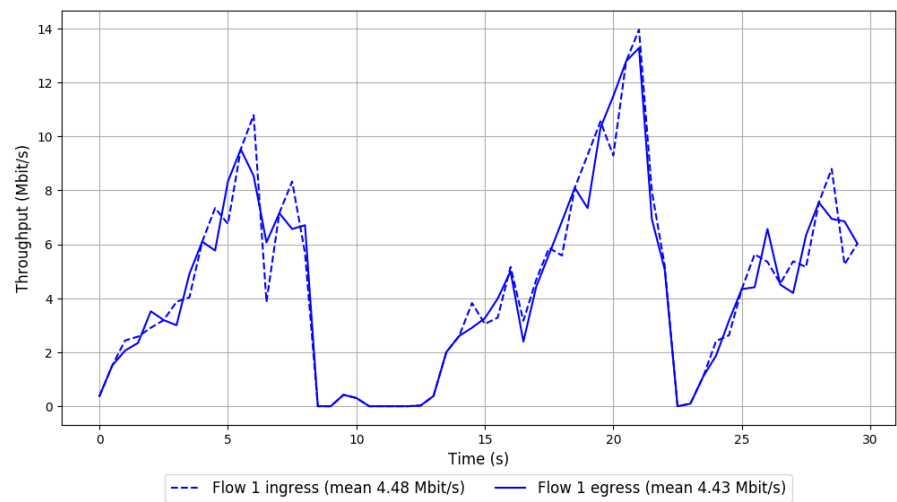
-- Flow 1:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 53.521 ms

Loss rate: 1.15%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-20 03:35:05

End at: 2017-12-20 03:35:35

Below is generated by plot.py at 2017-12-20 06:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 50.885 ms

Loss rate: 0.19%

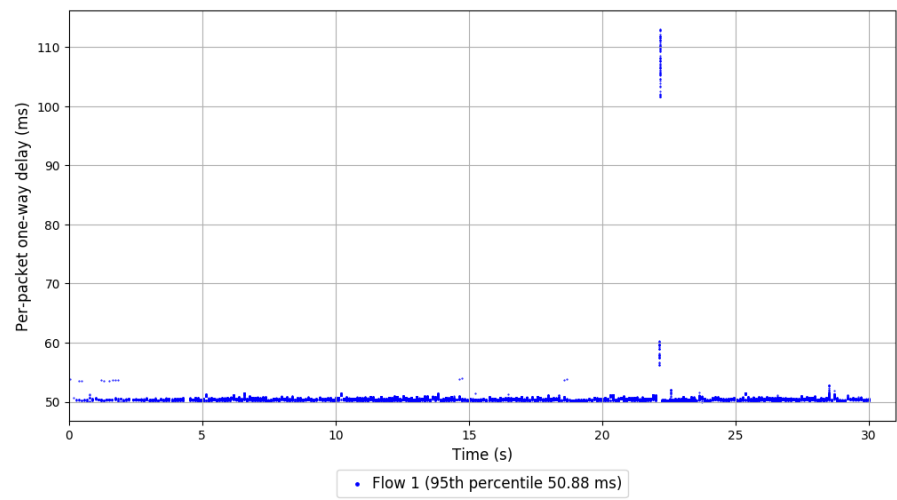
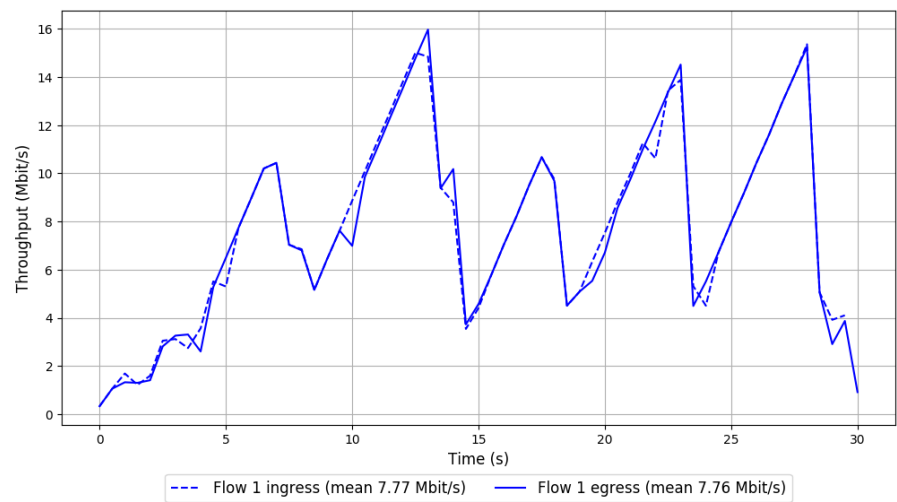
-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 50.885 ms

Loss rate: 0.19%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-20 03:46:31

End at: 2017-12-20 03:47:01

Below is generated by plot.py at 2017-12-20 06:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.17 Mbit/s

95th percentile per-packet one-way delay: 50.972 ms

Loss rate: 0.69%

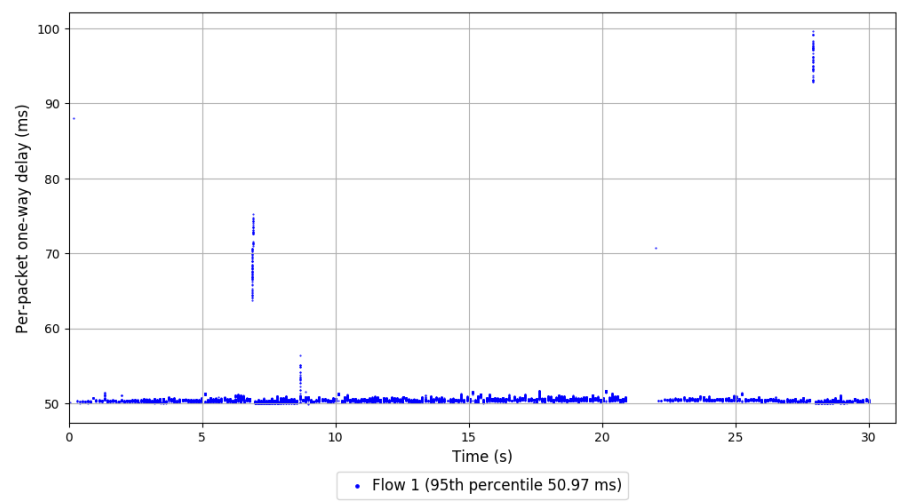
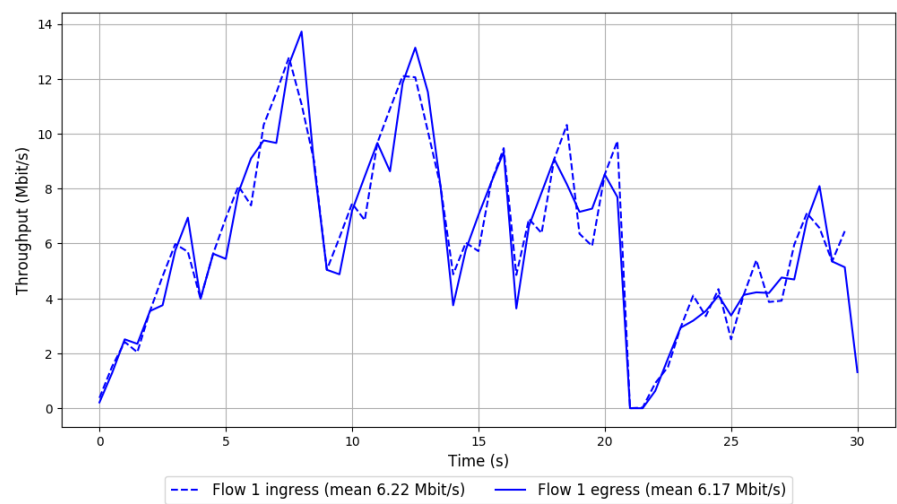
-- Flow 1:

Average throughput: 6.17 Mbit/s

95th percentile per-packet one-way delay: 50.972 ms

Loss rate: 0.69%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-20 03:57:59

End at: 2017-12-20 03:58:30

Below is generated by plot.py at 2017-12-20 06:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 51.080 ms

Loss rate: 0.64%

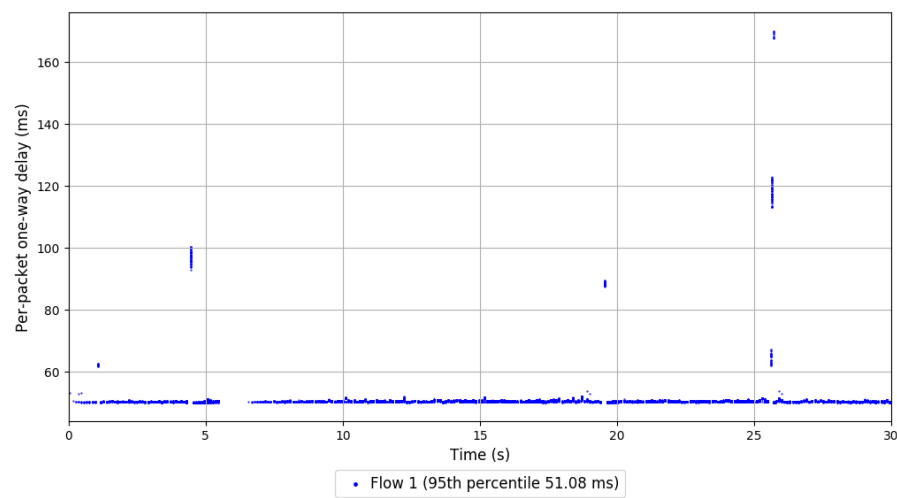
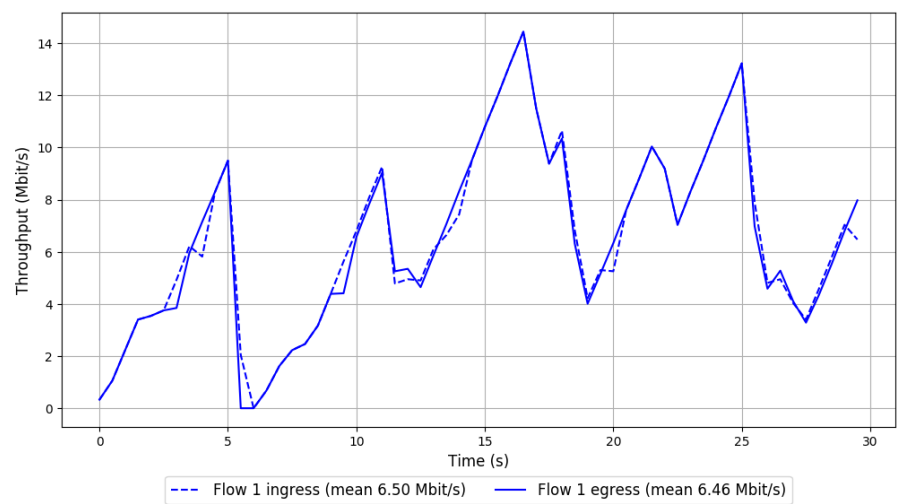
-- Flow 1:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 51.080 ms

Loss rate: 0.64%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-20 04:09:20

End at: 2017-12-20 04:09:51

Below is generated by plot.py at 2017-12-20 06:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.72 Mbit/s

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

Loss rate: 0.11%

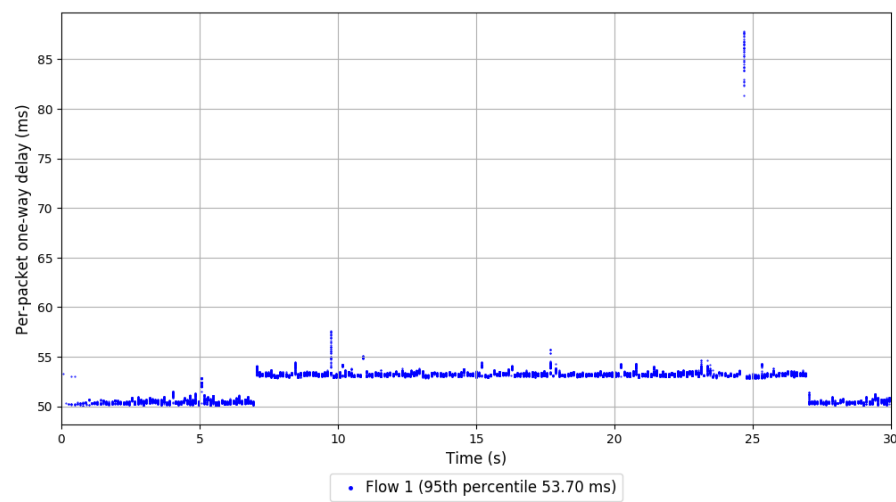
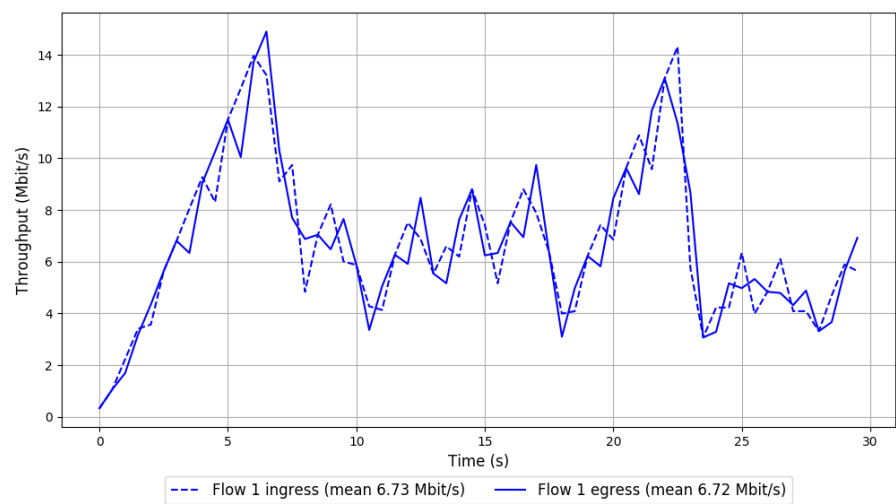
-- Flow 1:

Average throughput: 6.72 Mbit/s

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

Loss rate: 0.11%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-20 04:20:53

End at: 2017-12-20 04:21:23

Below is generated by plot.py at 2017-12-20 06:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.71 Mbit/s

95th percentile per-packet one-way delay: 53.368 ms

Loss rate: 0.57%

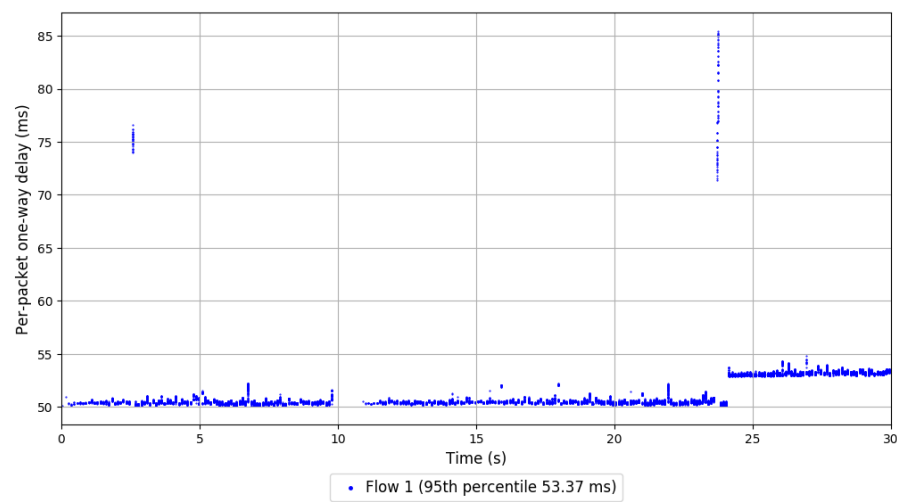
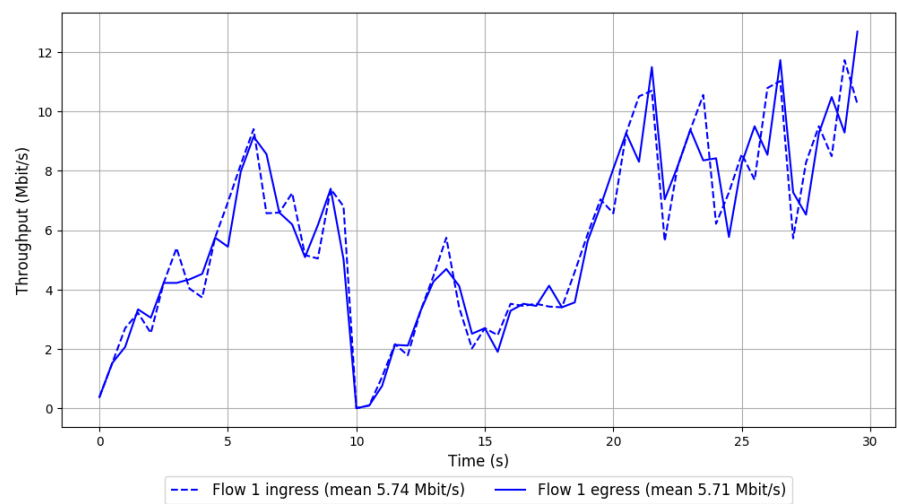
-- Flow 1:

Average throughput: 5.71 Mbit/s

95th percentile per-packet one-way delay: 53.368 ms

Loss rate: 0.57%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-20 04:32:16

End at: 2017-12-20 04:32:46

Below is generated by plot.py at 2017-12-20 06:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.51 Mbit/s

95th percentile per-packet one-way delay: 53.473 ms

Loss rate: 1.34%

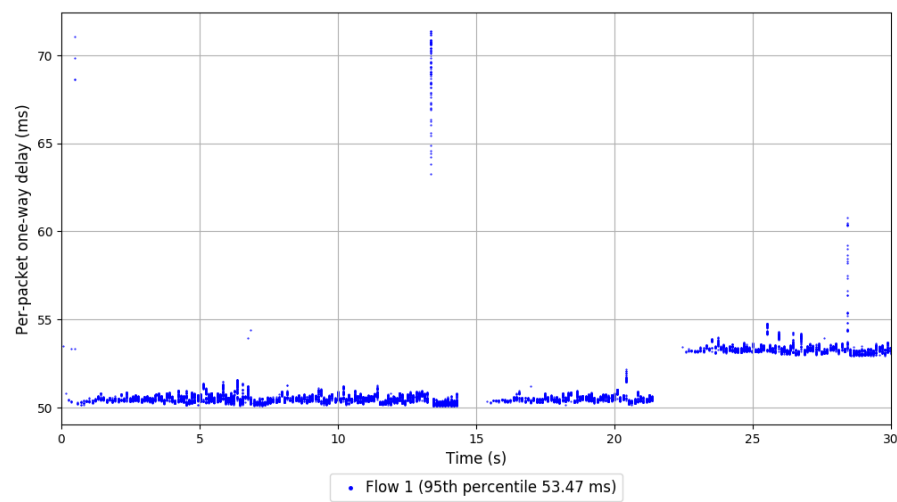
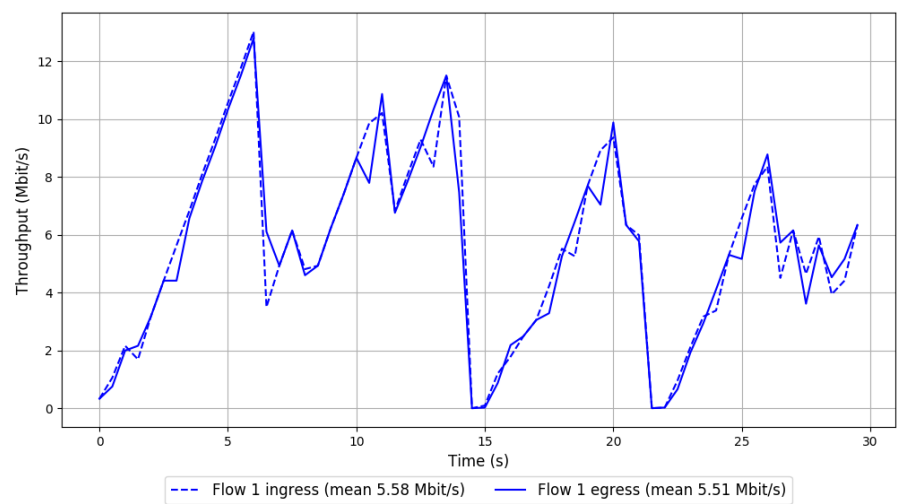
-- Flow 1:

Average throughput: 5.51 Mbit/s

95th percentile per-packet one-way delay: 53.473 ms

Loss rate: 1.34%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-20 04:43:38

End at: 2017-12-20 04:44:08

Below is generated by plot.py at 2017-12-20 06:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 51.160 ms

Loss rate: 1.30%

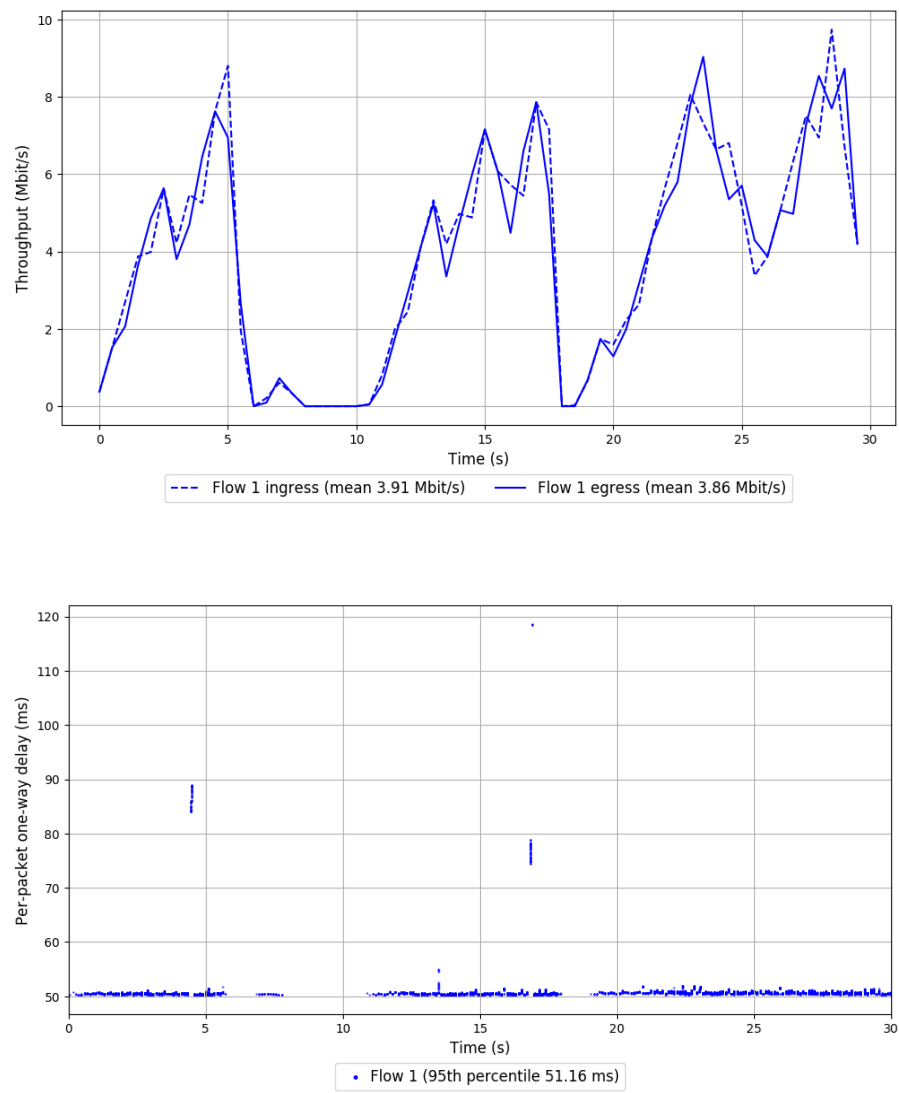
-- Flow 1:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 51.160 ms

Loss rate: 1.30%

Run 10: Report of LEDBAT — Data Link

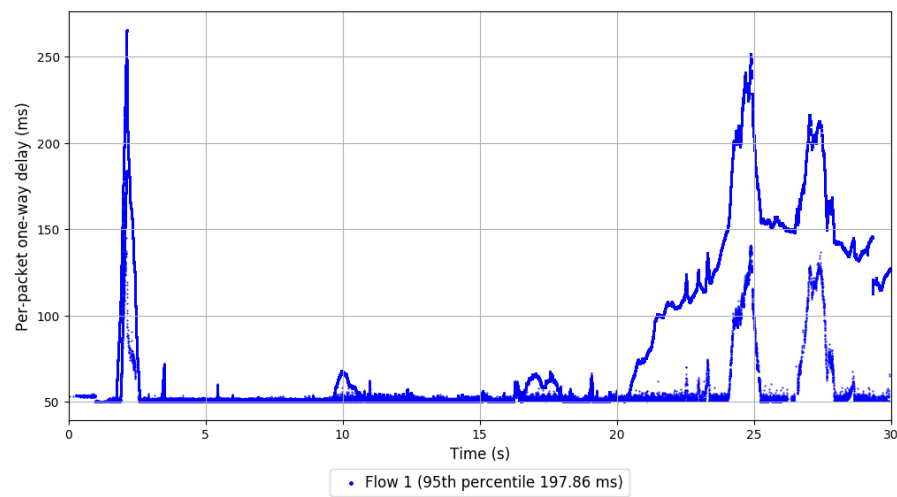
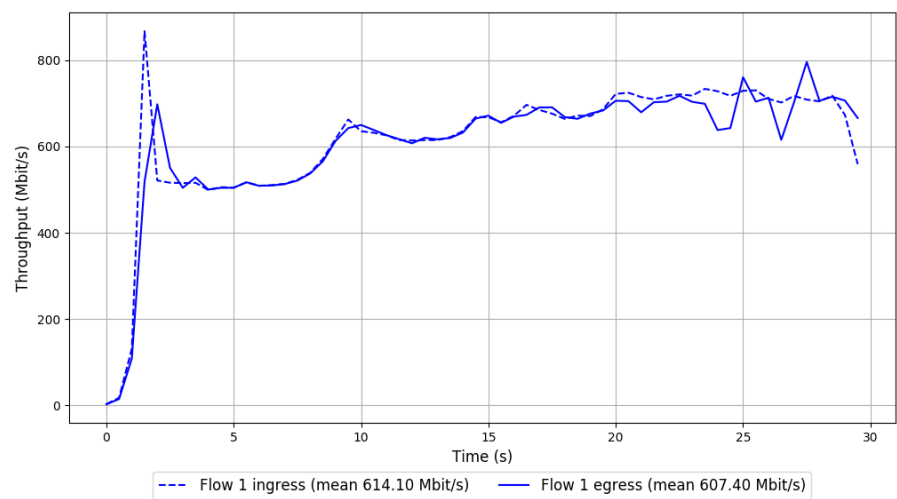


```
Run 1: Statistics of PCC

Start at: 2017-12-20 03:10:06
End at: 2017-12-20 03:10:36

# Below is generated by plot.py at 2017-12-20 06:14:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 607.40 Mbit/s
95th percentile per-packet one-way delay: 197.862 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 607.40 Mbit/s
95th percentile per-packet one-way delay: 197.862 ms
Loss rate: 0.98%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-20 03:21:23

End at: 2017-12-20 03:21:53

Below is generated by plot.py at 2017-12-20 06:14:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 592.24 Mbit/s

95th percentile per-packet one-way delay: 69.217 ms

Loss rate: 0.28%

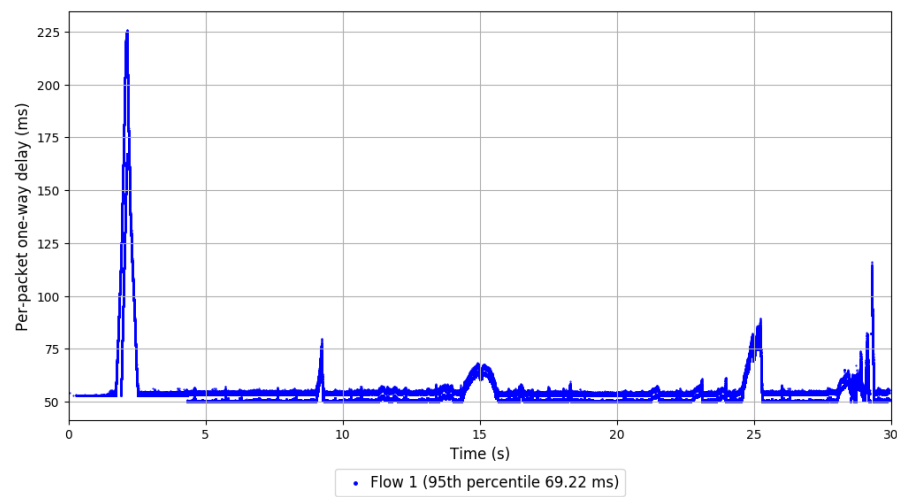
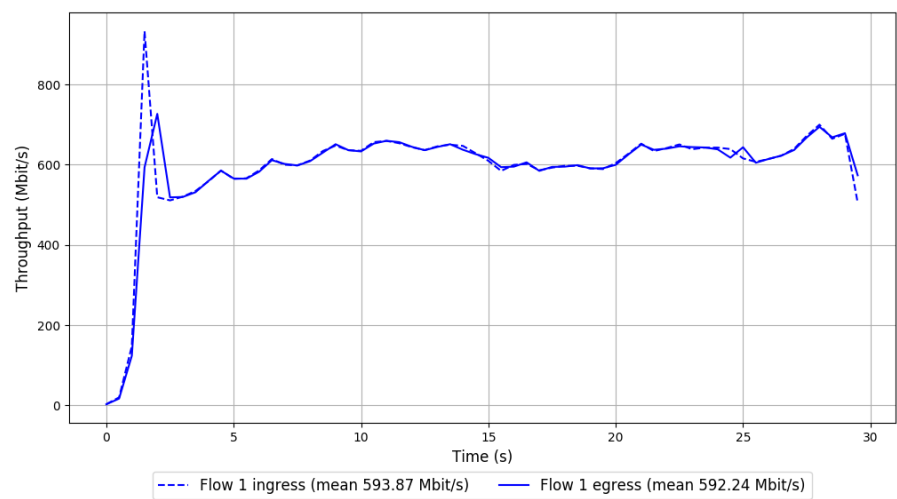
-- Flow 1:

Average throughput: 592.24 Mbit/s

95th percentile per-packet one-way delay: 69.217 ms

Loss rate: 0.28%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-20 03:32:42

End at: 2017-12-20 03:33:12

Below is generated by plot.py at 2017-12-20 06:14:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 575.07 Mbit/s

95th percentile per-packet one-way delay: 158.620 ms

Loss rate: 1.89%

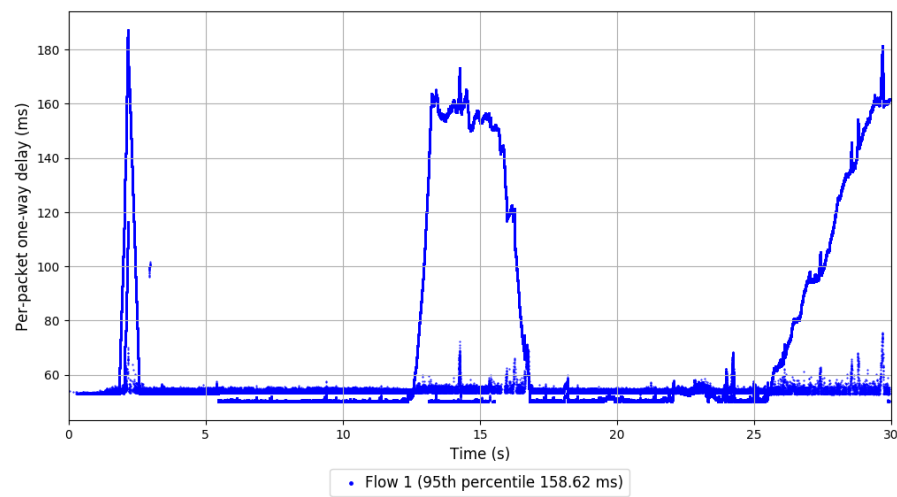
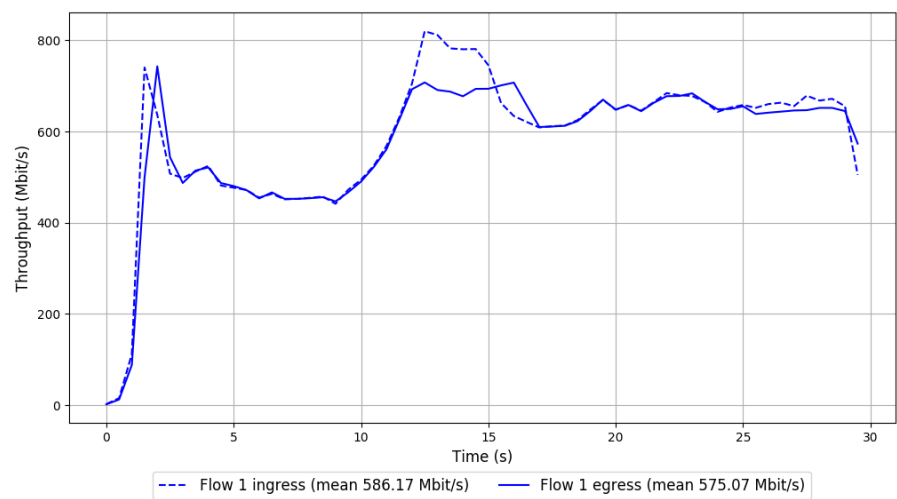
-- Flow 1:

Average throughput: 575.07 Mbit/s

95th percentile per-packet one-way delay: 158.620 ms

Loss rate: 1.89%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-20 03:44:09

End at: 2017-12-20 03:44:39

Below is generated by plot.py at 2017-12-20 06:14:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 602.02 Mbit/s

95th percentile per-packet one-way delay: 83.457 ms

Loss rate: 0.33%

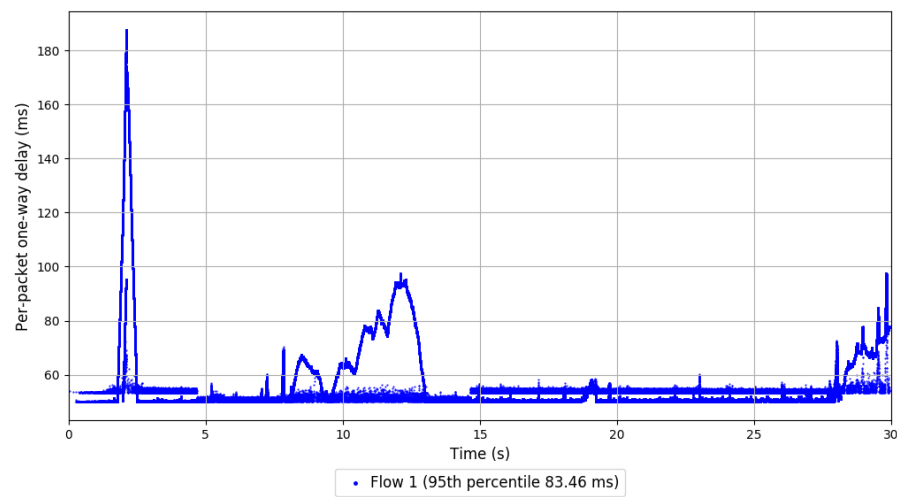
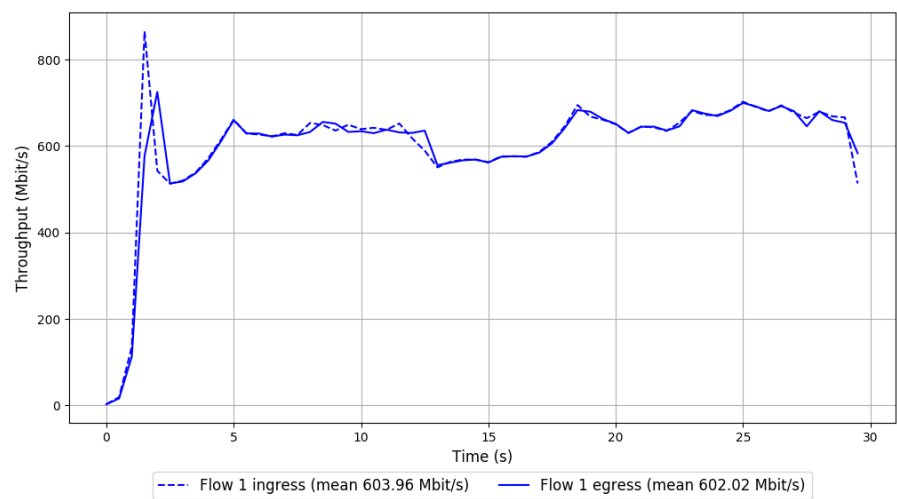
-- Flow 1:

Average throughput: 602.02 Mbit/s

95th percentile per-packet one-way delay: 83.457 ms

Loss rate: 0.33%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-20 03:55:37

End at: 2017-12-20 03:56:07

Below is generated by plot.py at 2017-12-20 06:14:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 603.37 Mbit/s

95th percentile per-packet one-way delay: 111.150 ms

Loss rate: 0.50%

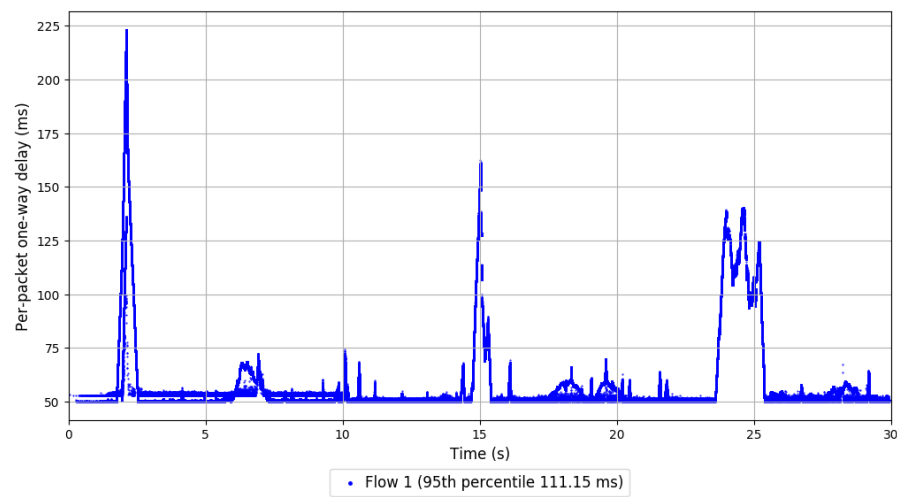
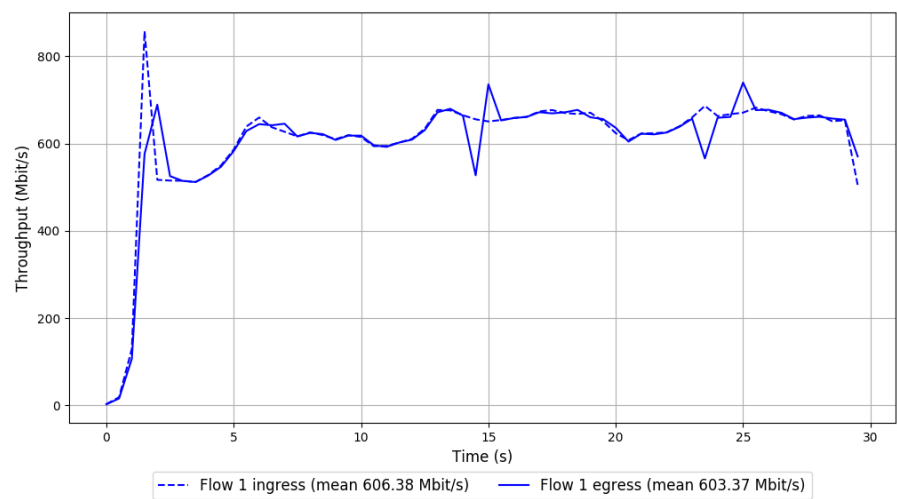
-- Flow 1:

Average throughput: 603.37 Mbit/s

95th percentile per-packet one-way delay: 111.150 ms

Loss rate: 0.50%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-20 04:06:59

End at: 2017-12-20 04:07:29

Below is generated by plot.py at 2017-12-20 06:14:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 596.35 Mbit/s

95th percentile per-packet one-way delay: 122.459 ms

Loss rate: 1.17%

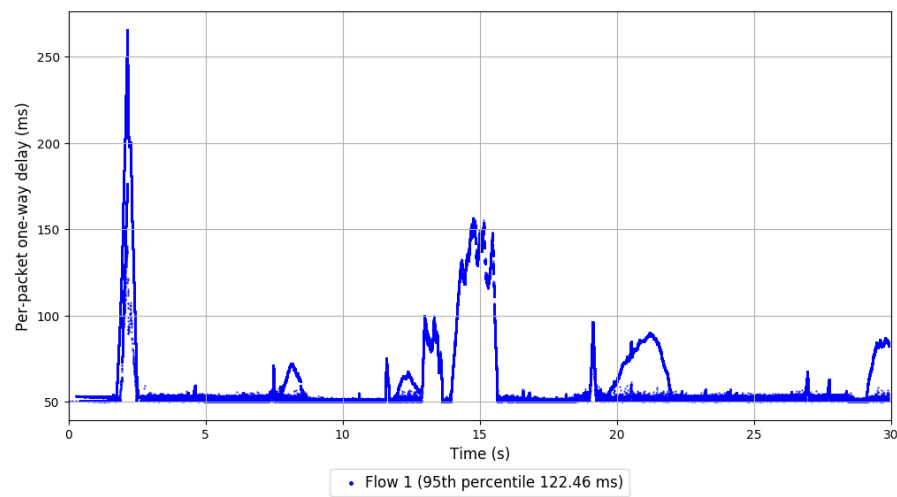
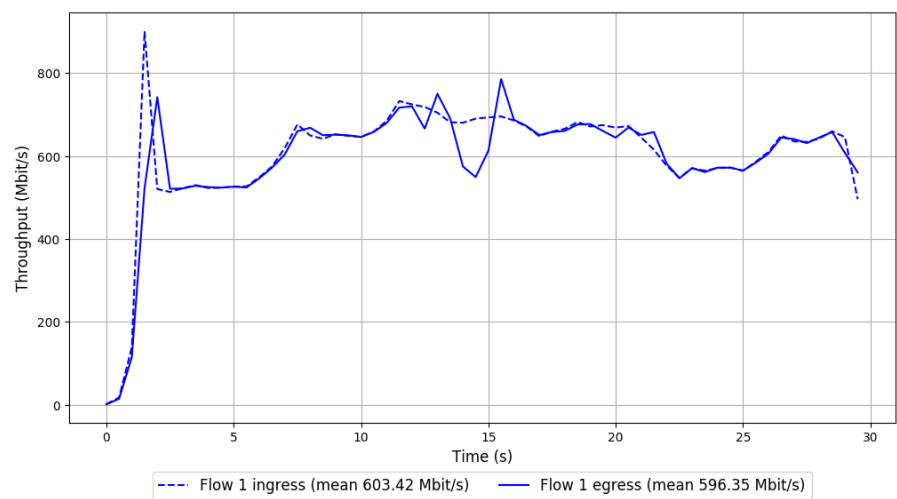
-- Flow 1:

Average throughput: 596.35 Mbit/s

95th percentile per-packet one-way delay: 122.459 ms

Loss rate: 1.17%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-20 04:18:32

End at: 2017-12-20 04:19:02

Below is generated by plot.py at 2017-12-20 06:14:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 581.77 Mbit/s

95th percentile per-packet one-way delay: 61.114 ms

Loss rate: 0.18%

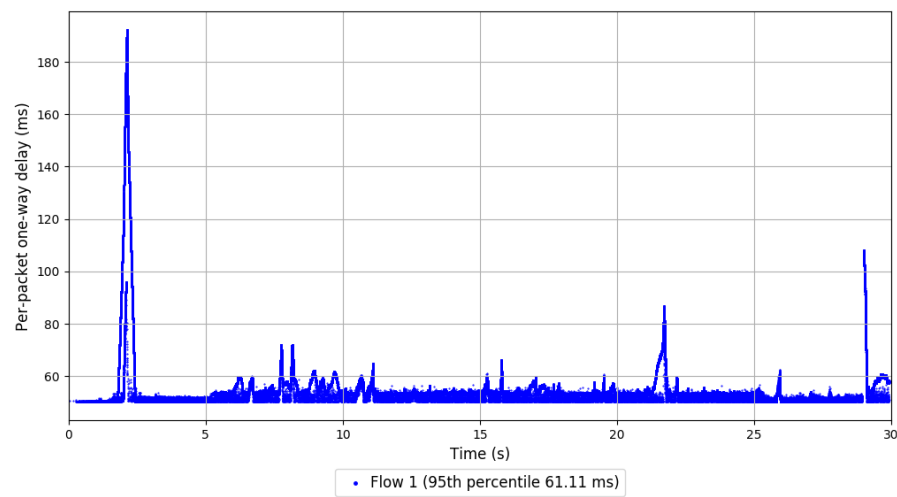
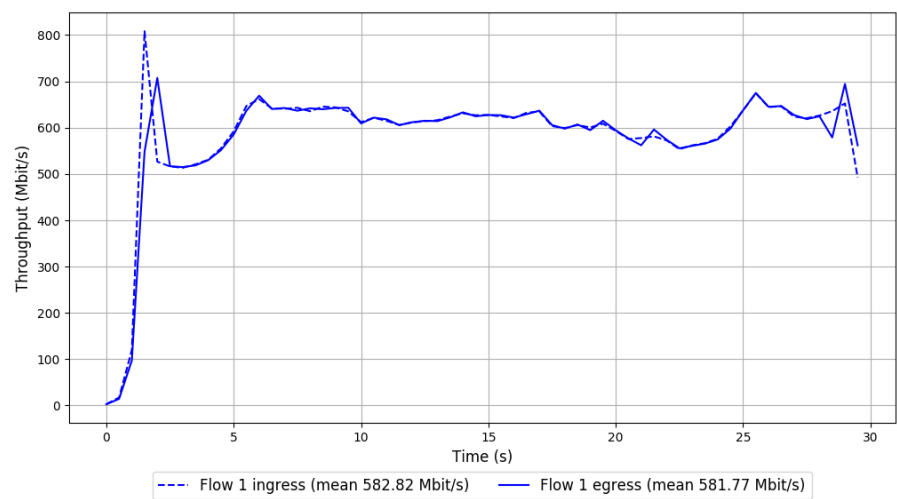
-- Flow 1:

Average throughput: 581.77 Mbit/s

95th percentile per-packet one-way delay: 61.114 ms

Loss rate: 0.18%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-20 04:29:52

End at: 2017-12-20 04:30:22

Below is generated by plot.py at 2017-12-20 06:17:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 613.81 Mbit/s

95th percentile per-packet one-way delay: 159.103 ms

Loss rate: 1.04%

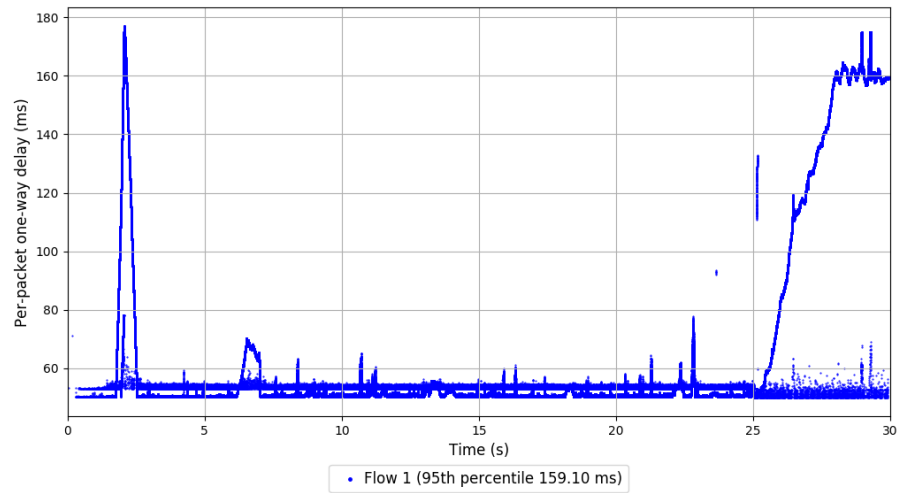
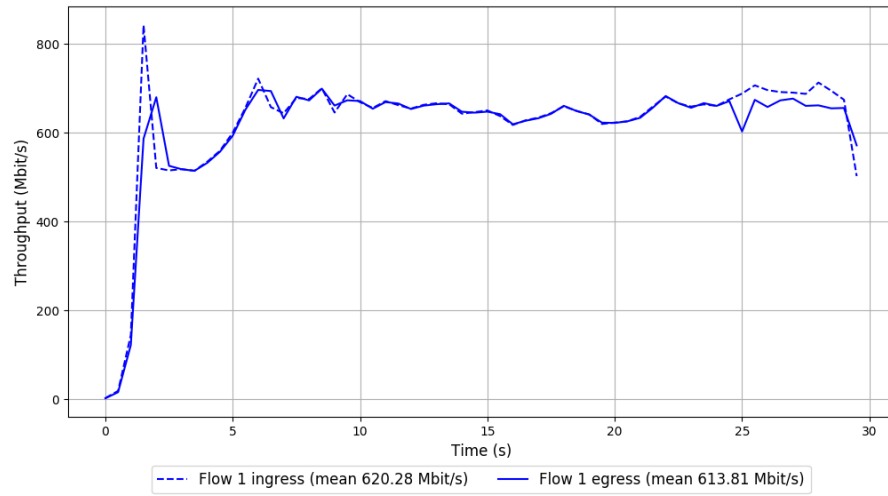
-- Flow 1:

Average throughput: 613.81 Mbit/s

95th percentile per-packet one-way delay: 159.103 ms

Loss rate: 1.04%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-20 04:41:17

End at: 2017-12-20 04:41:47

Below is generated by plot.py at 2017-12-20 06:24:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 592.14 Mbit/s

95th percentile per-packet one-way delay: 155.898 ms

Loss rate: 0.36%

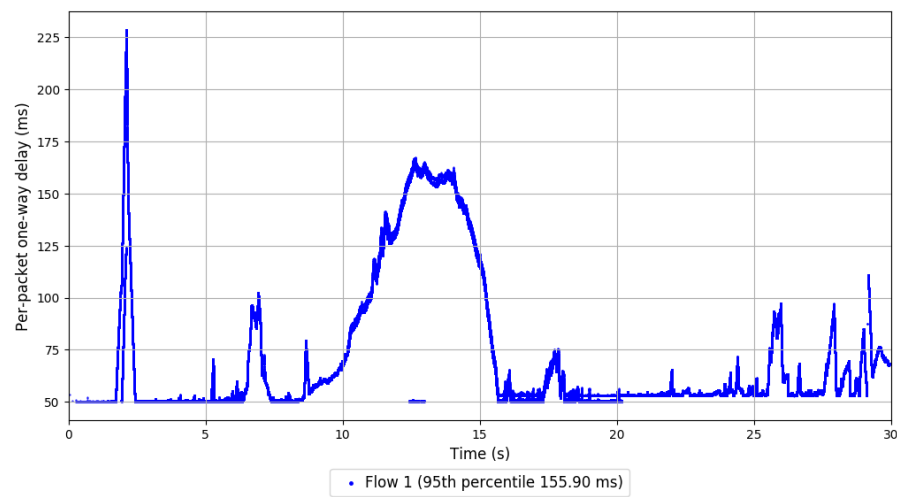
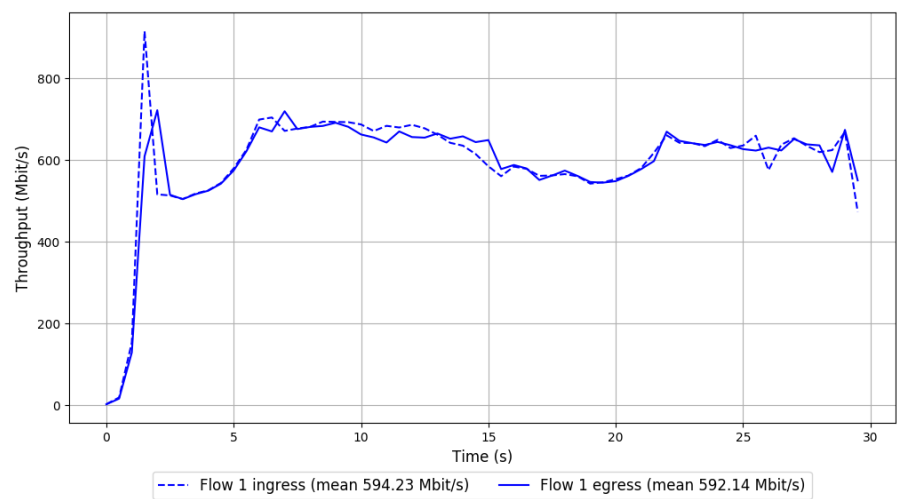
-- Flow 1:

Average throughput: 592.14 Mbit/s

95th percentile per-packet one-way delay: 155.898 ms

Loss rate: 0.36%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-20 04:52:56

End at: 2017-12-20 04:53:26

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 584.51 Mbit/s

95th percentile per-packet one-way delay: 59.695 ms

Loss rate: 0.36%

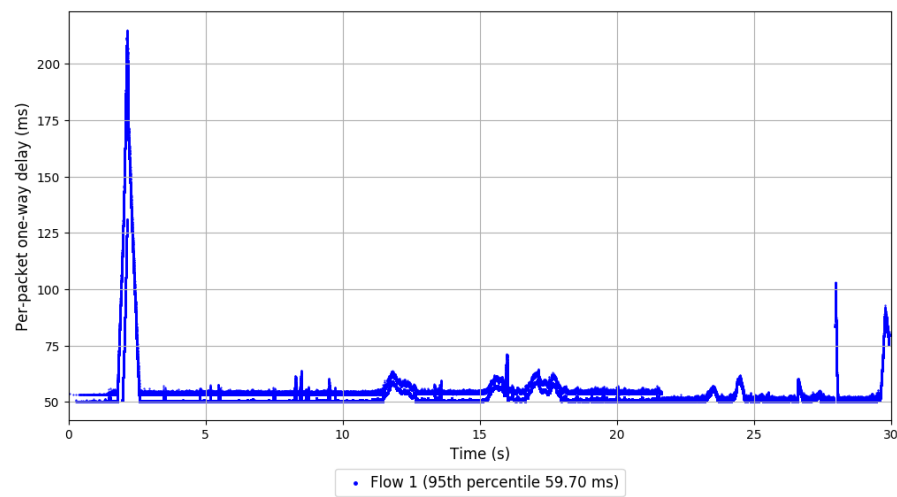
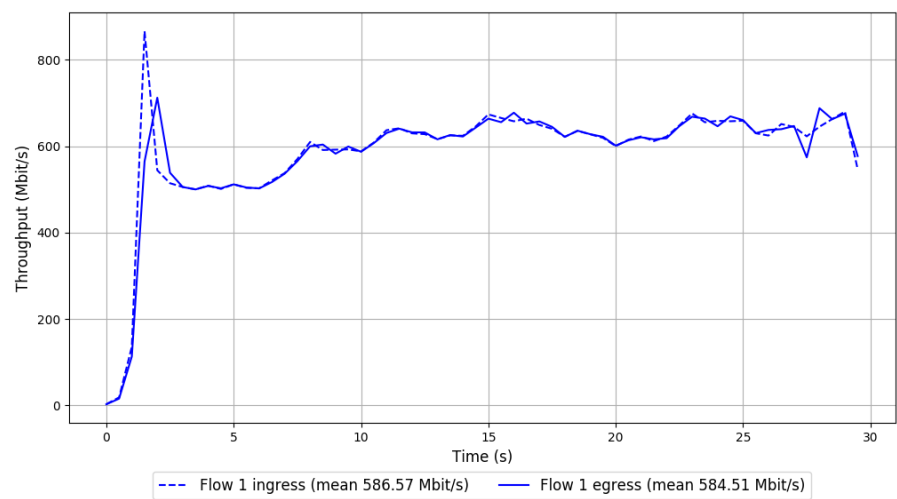
-- Flow 1:

Average throughput: 584.51 Mbit/s

95th percentile per-packet one-way delay: 59.695 ms

Loss rate: 0.36%

Run 10: Report of PCC — Data Link

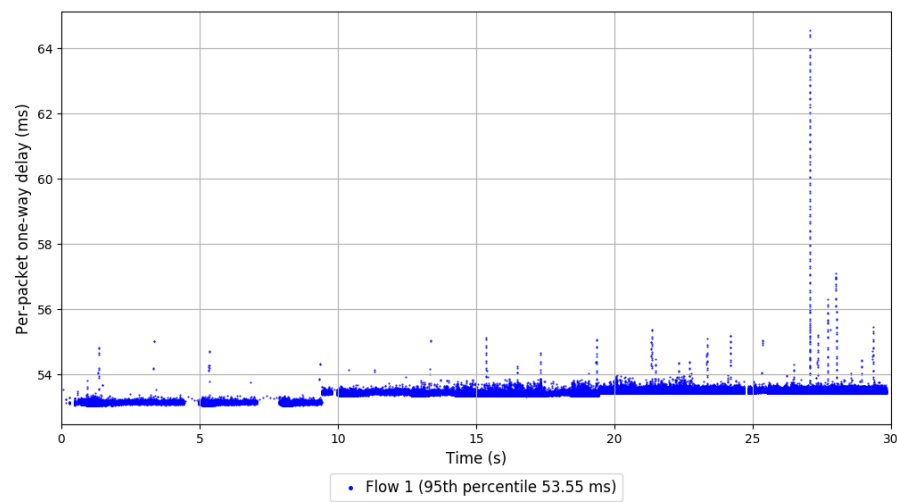
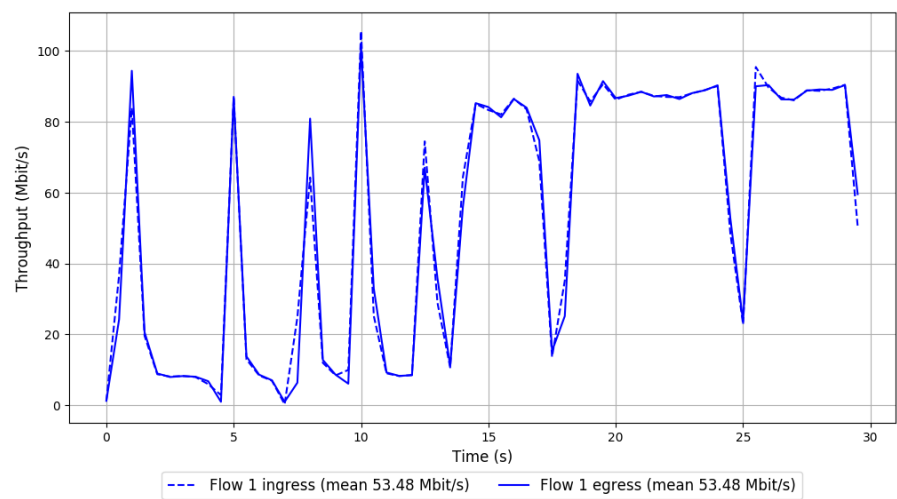


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-20 03:04:48
End at: 2017-12-20 03:05:18

# Below is generated by plot.py at 2017-12-20 06:24:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.48 Mbit/s
95th percentile per-packet one-way delay: 53.549 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 53.48 Mbit/s
95th percentile per-packet one-way delay: 53.549 ms
Loss rate: 0.02%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-20 03:16:10

End at: 2017-12-20 03:16:40

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.01 Mbit/s

95th percentile per-packet one-way delay: 53.167 ms

Loss rate: 0.00%

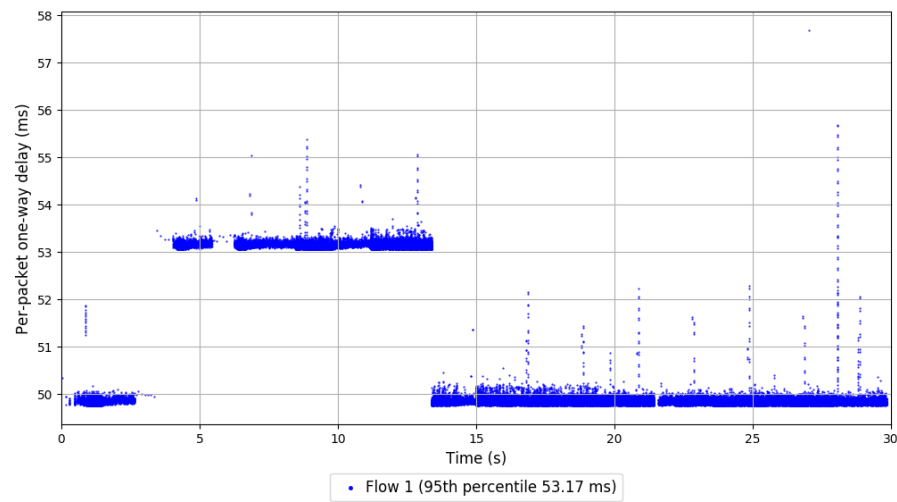
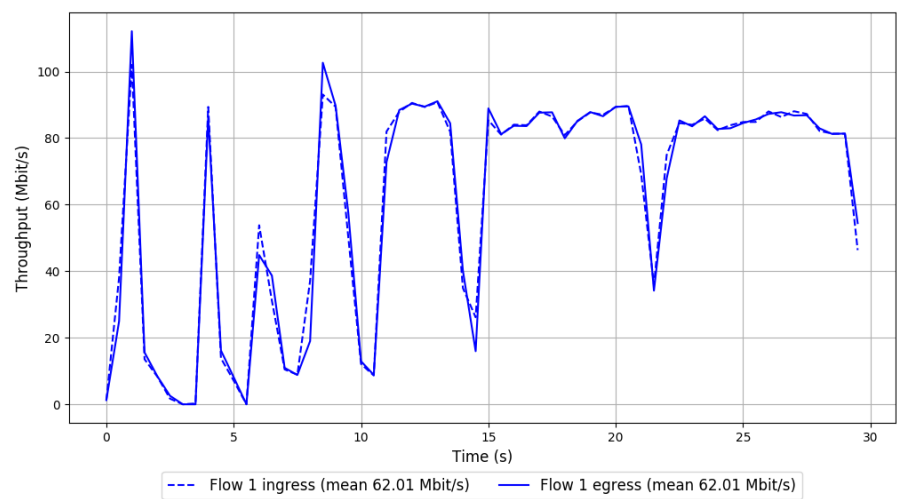
-- Flow 1:

Average throughput: 62.01 Mbit/s

95th percentile per-packet one-way delay: 53.167 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-20 03:27:27

End at: 2017-12-20 03:27:57

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.85 Mbit/s

95th percentile per-packet one-way delay: 53.414 ms

Loss rate: 0.01%

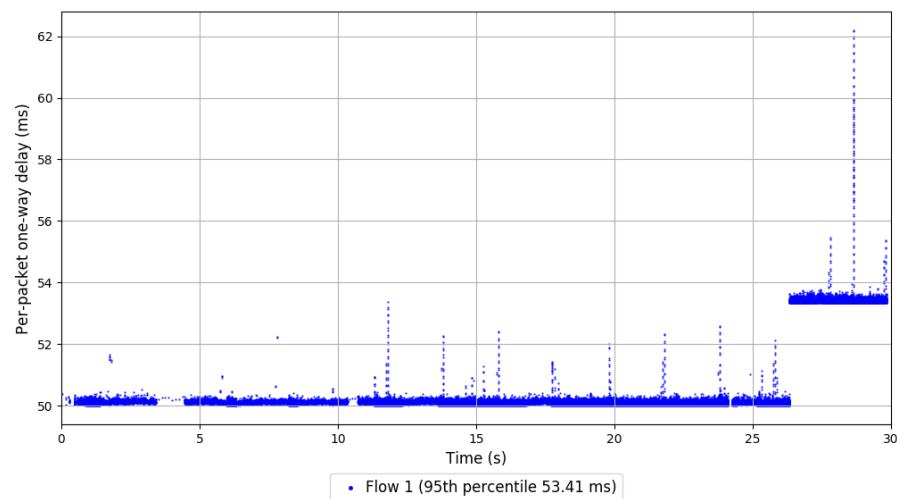
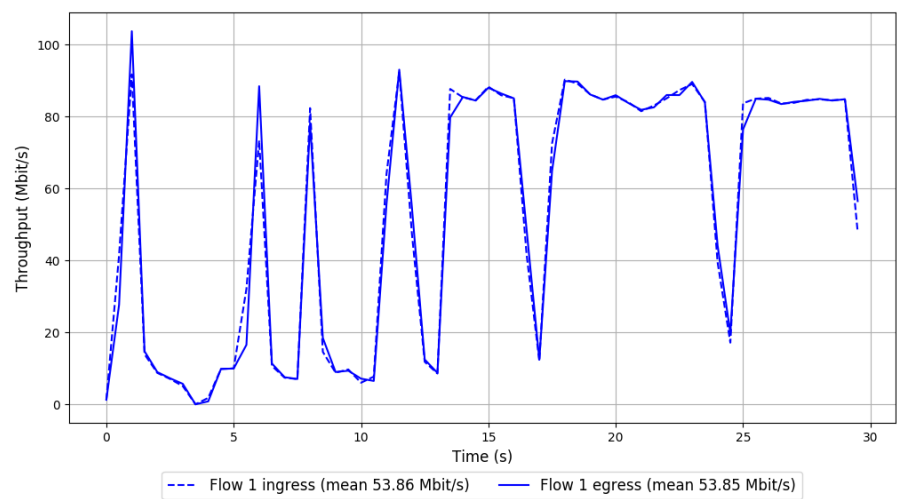
-- Flow 1:

Average throughput: 53.85 Mbit/s

95th percentile per-packet one-way delay: 53.414 ms

Loss rate: 0.01%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-20 03:38:51

End at: 2017-12-20 03:39:21

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.79 Mbit/s

95th percentile per-packet one-way delay: 53.429 ms

Loss rate: 0.02%

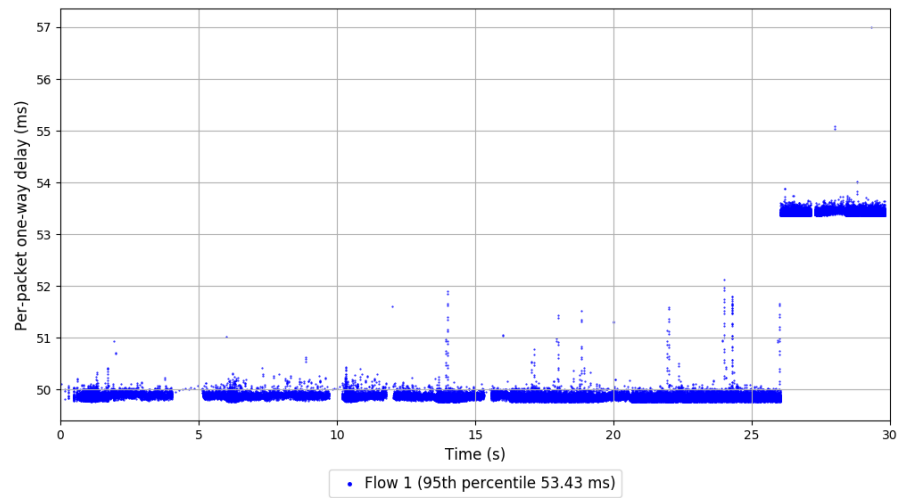
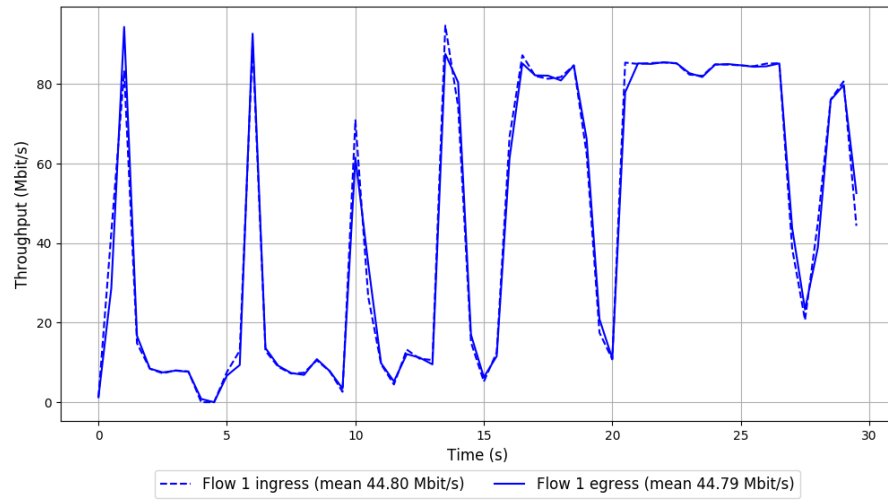
-- Flow 1:

Average throughput: 44.79 Mbit/s

95th percentile per-packet one-way delay: 53.429 ms

Loss rate: 0.02%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-20 03:50:17

End at: 2017-12-20 03:50:47

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.42 Mbit/s

95th percentile per-packet one-way delay: 53.010 ms

Loss rate: 0.01%

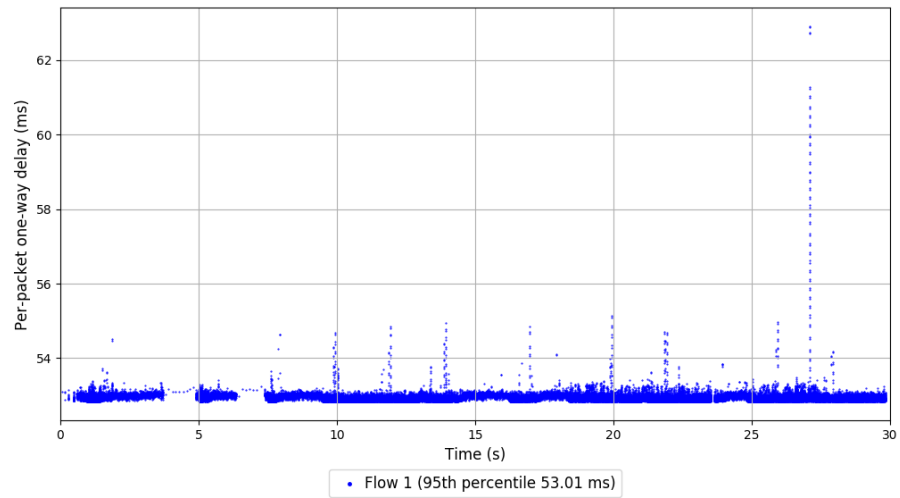
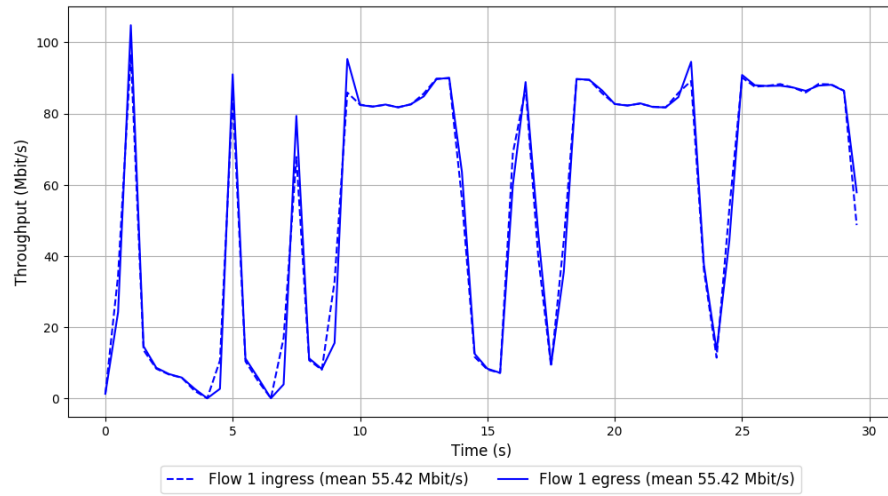
-- Flow 1:

Average throughput: 55.42 Mbit/s

95th percentile per-packet one-way delay: 53.010 ms

Loss rate: 0.01%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-20 04:01:45

End at: 2017-12-20 04:02:15

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.90 Mbit/s

95th percentile per-packet one-way delay: 53.189 ms

Loss rate: 0.00%

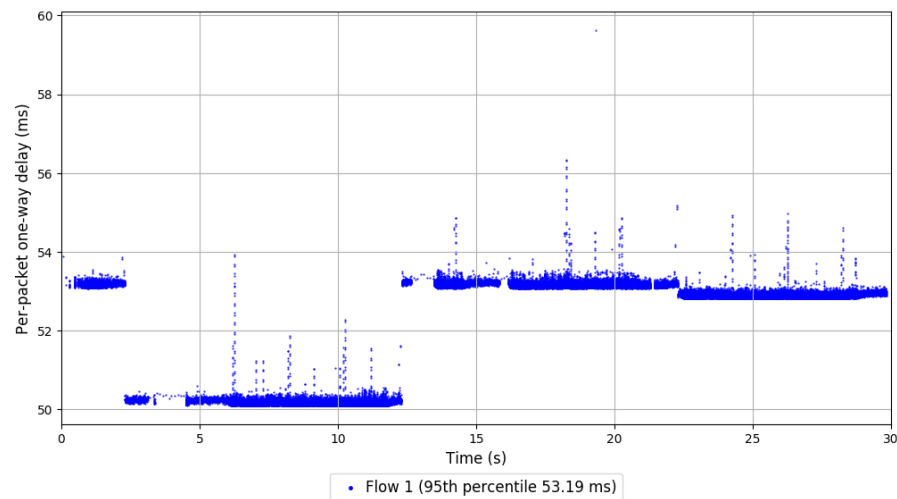
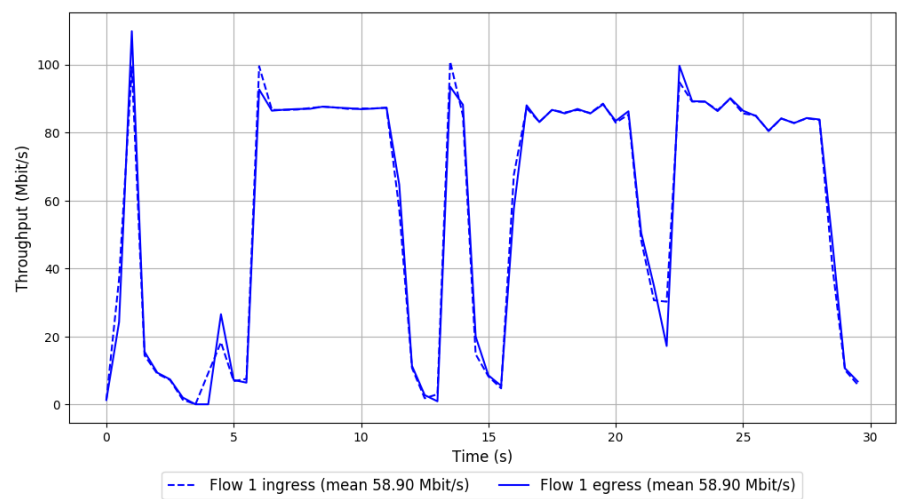
-- Flow 1:

Average throughput: 58.90 Mbit/s

95th percentile per-packet one-way delay: 53.189 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-20 04:13:03

End at: 2017-12-20 04:13:33

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.94 Mbit/s

95th percentile per-packet one-way delay: 52.917 ms

Loss rate: 0.00%

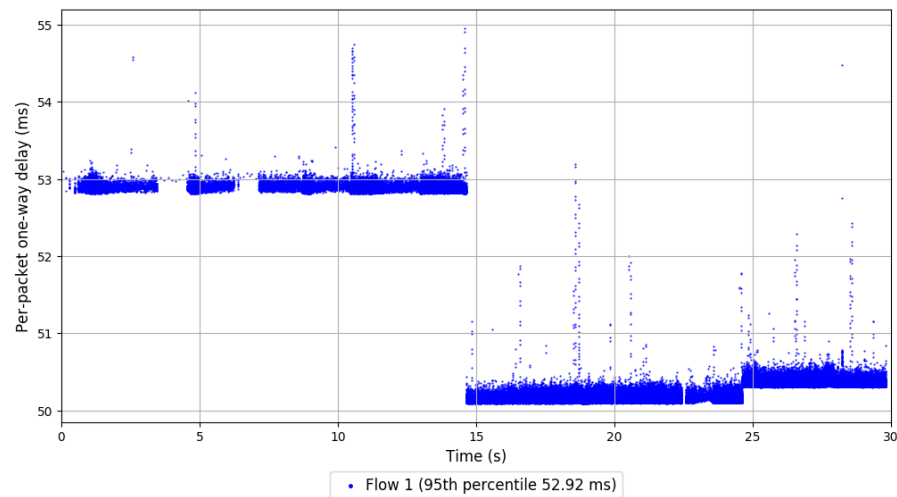
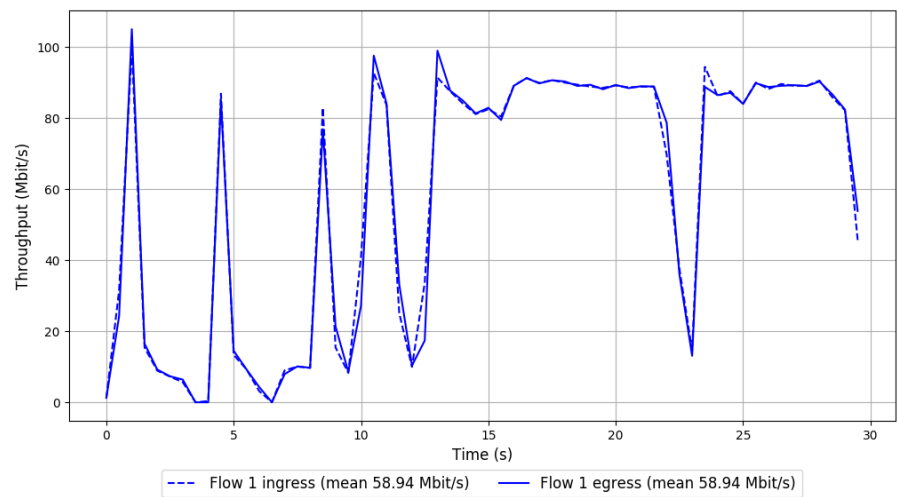
-- Flow 1:

Average throughput: 58.94 Mbit/s

95th percentile per-packet one-way delay: 52.917 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-20 04:24:39

End at: 2017-12-20 04:25:09

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.40 Mbit/s

95th percentile per-packet one-way delay: 53.259 ms

Loss rate: 0.01%

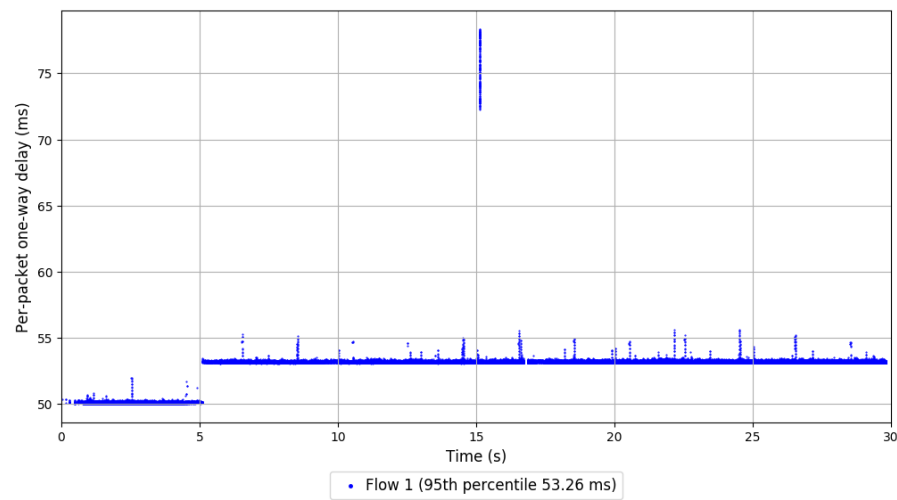
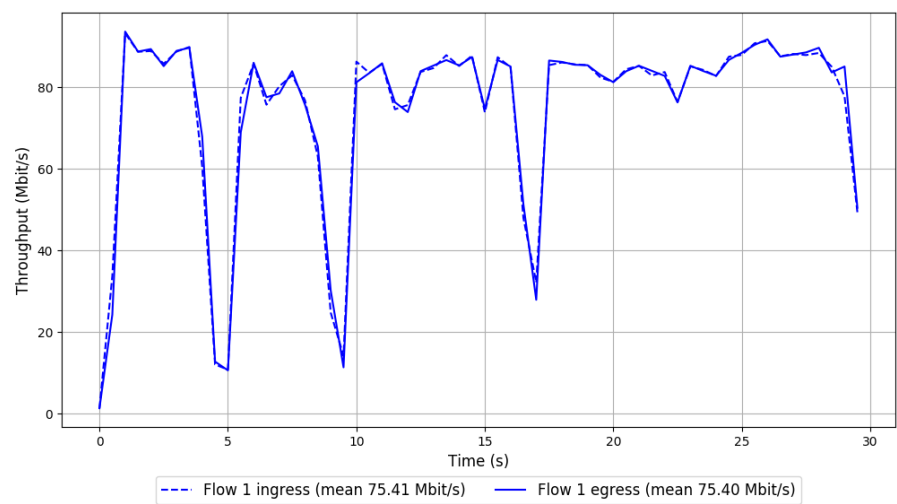
-- Flow 1:

Average throughput: 75.40 Mbit/s

95th percentile per-packet one-way delay: 53.259 ms

Loss rate: 0.01%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-20 04:36:01

End at: 2017-12-20 04:36:31

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.32 Mbit/s

95th percentile per-packet one-way delay: 53.315 ms

Loss rate: 0.00%

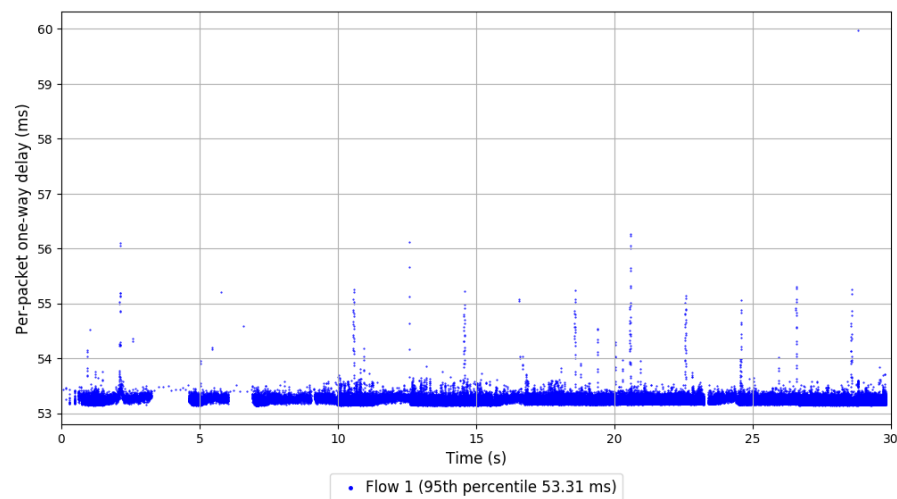
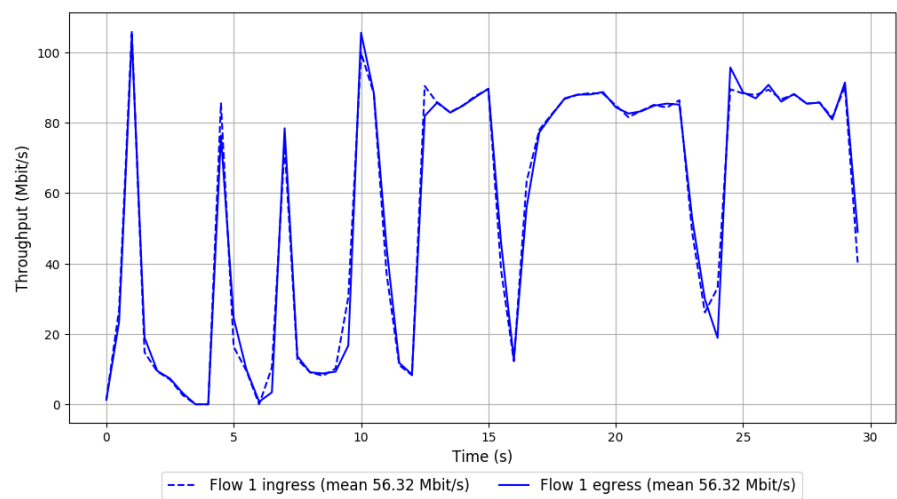
-- Flow 1:

Average throughput: 56.32 Mbit/s

95th percentile per-packet one-way delay: 53.315 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

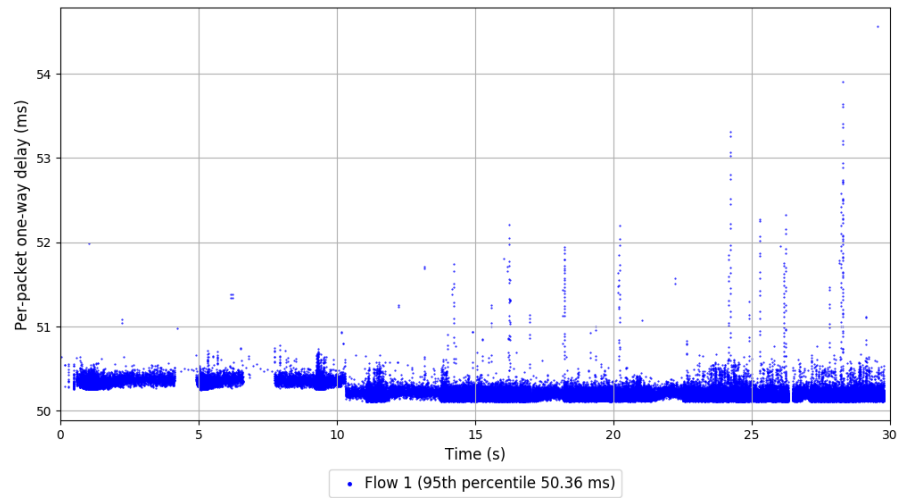
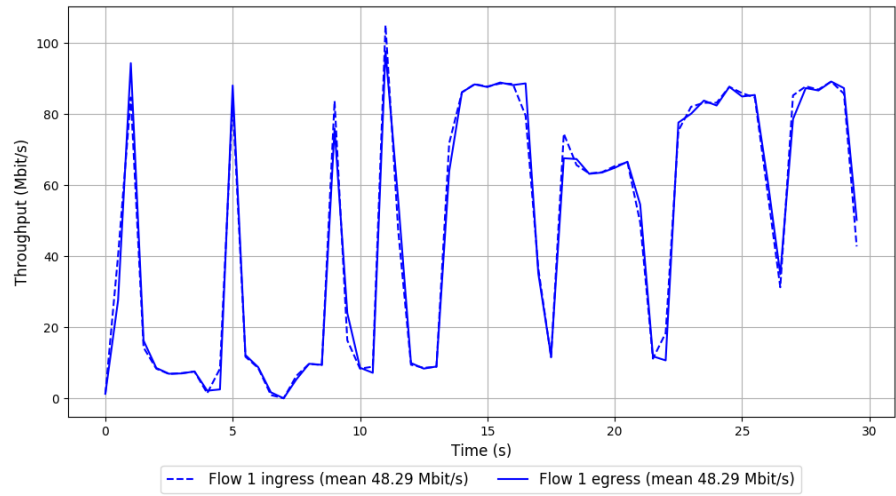


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-20 04:47:27
End at: 2017-12-20 04:47:57

# Below is generated by plot.py at 2017-12-20 06:24:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.29 Mbit/s
95th percentile per-packet one-way delay: 50.360 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.29 Mbit/s
95th percentile per-packet one-way delay: 50.360 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

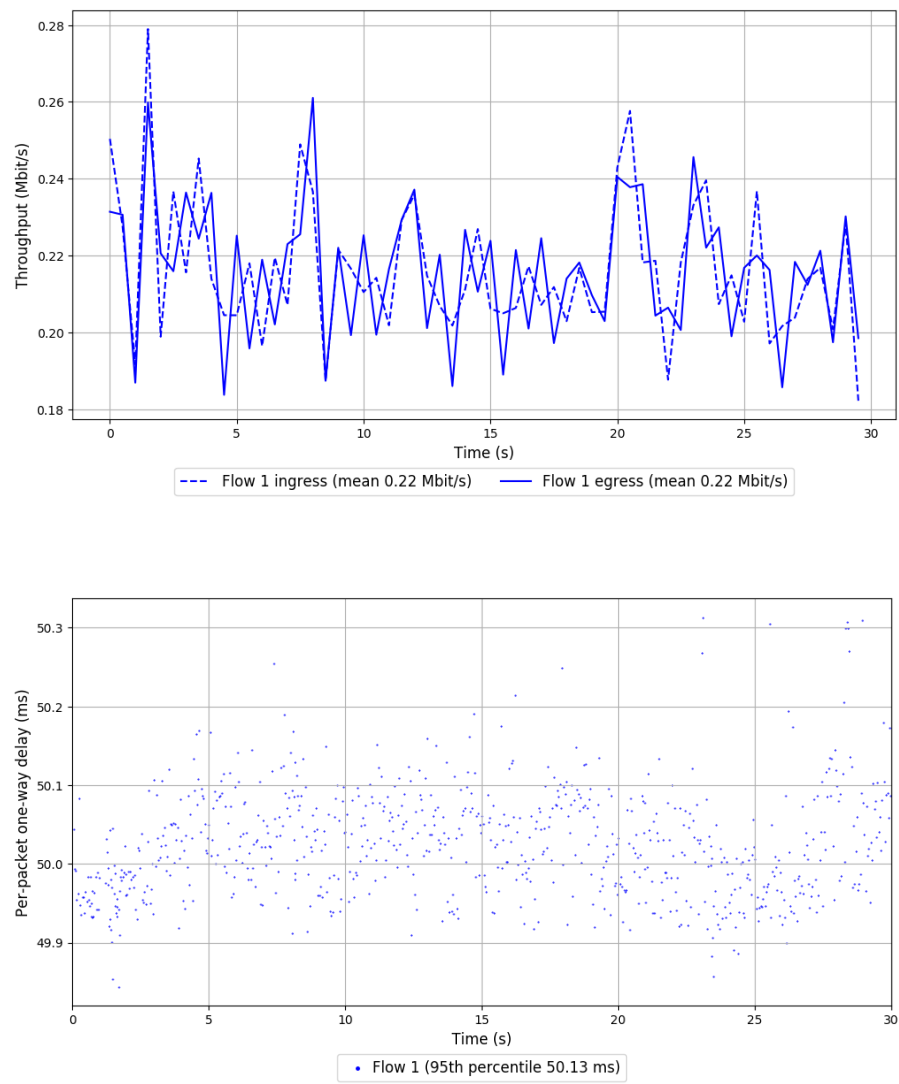


```
Run 1: Statistics of SCReAM

Start at: 2017-12-20 03:03:31
End at: 2017-12-20 03:04:01

# Below is generated by plot.py at 2017-12-20 06:24:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.133 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.133 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

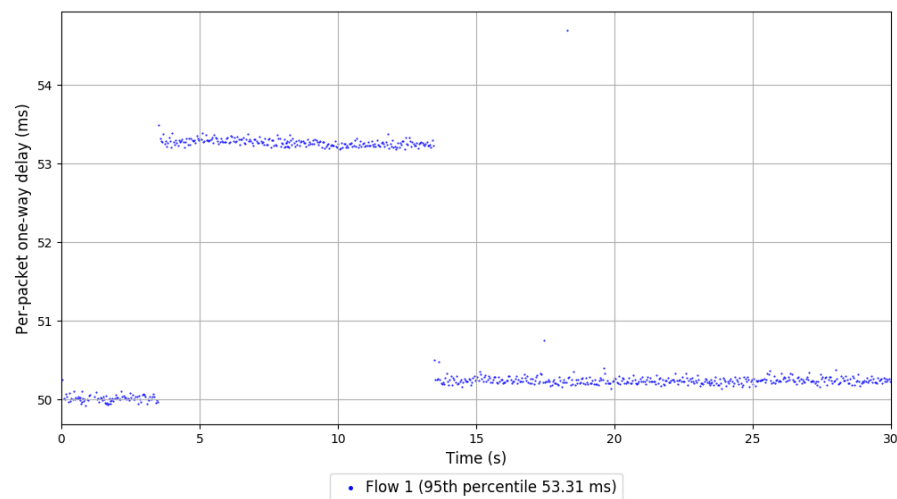
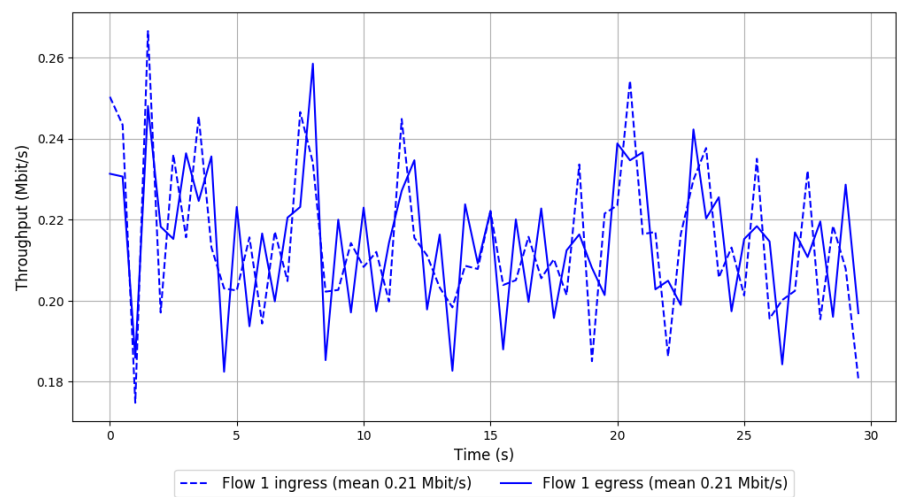


```
Run 2: Statistics of SCReAM

Start at: 2017-12-20 03:14:54
End at: 2017-12-20 03:15:24

# Below is generated by plot.py at 2017-12-20 06:24:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.307 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.307 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-20 03:26:12

End at: 2017-12-20 03:26:42

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

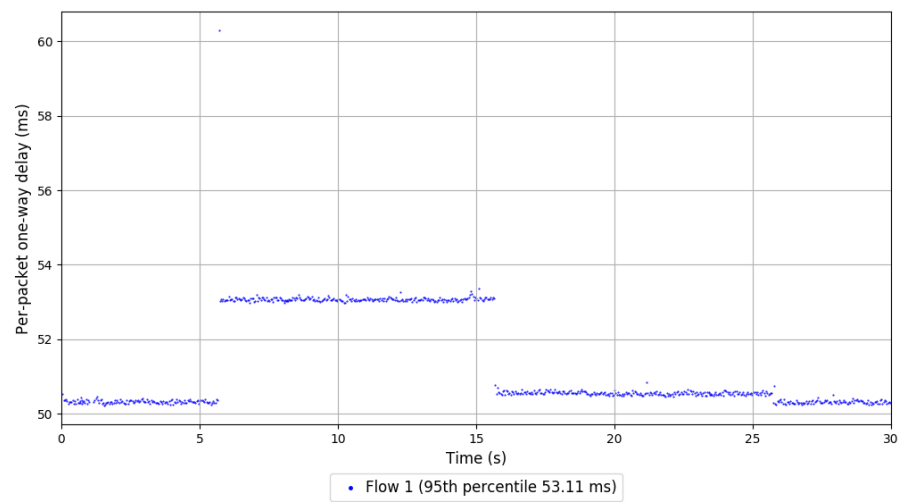
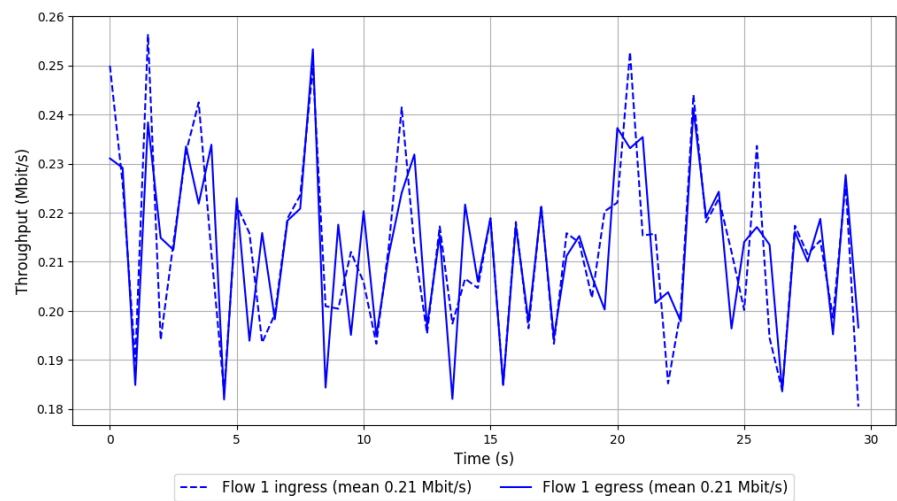
-- Flow 1:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-20 03:37:32

End at: 2017-12-20 03:38:02

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.553 ms

Loss rate: 0.00%

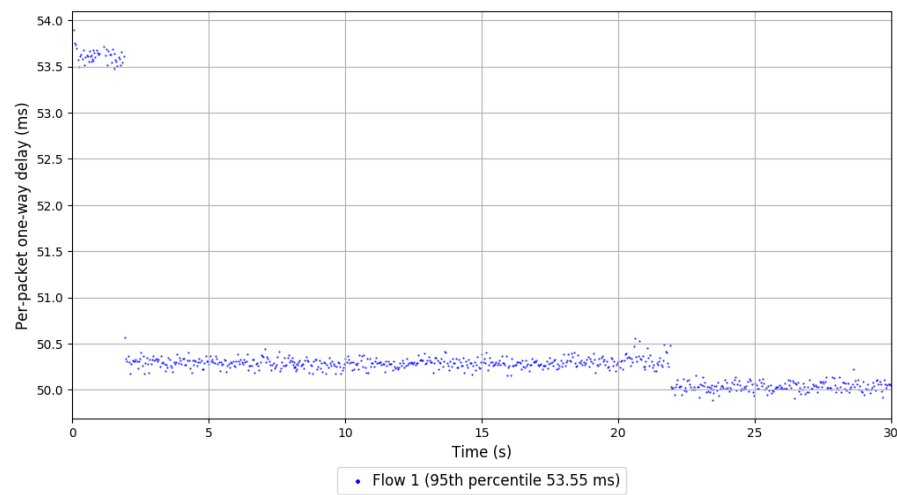
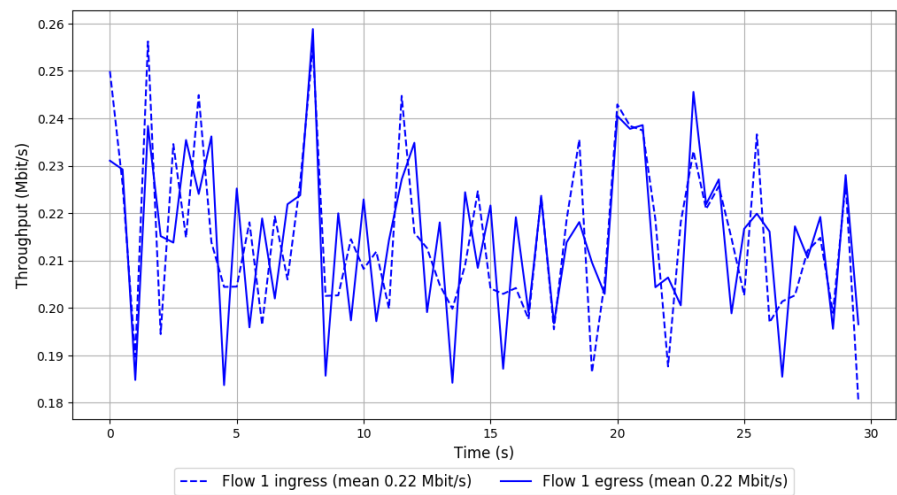
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.553 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-20 03:48:57

End at: 2017-12-20 03:49:27

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.630 ms

Loss rate: 0.00%

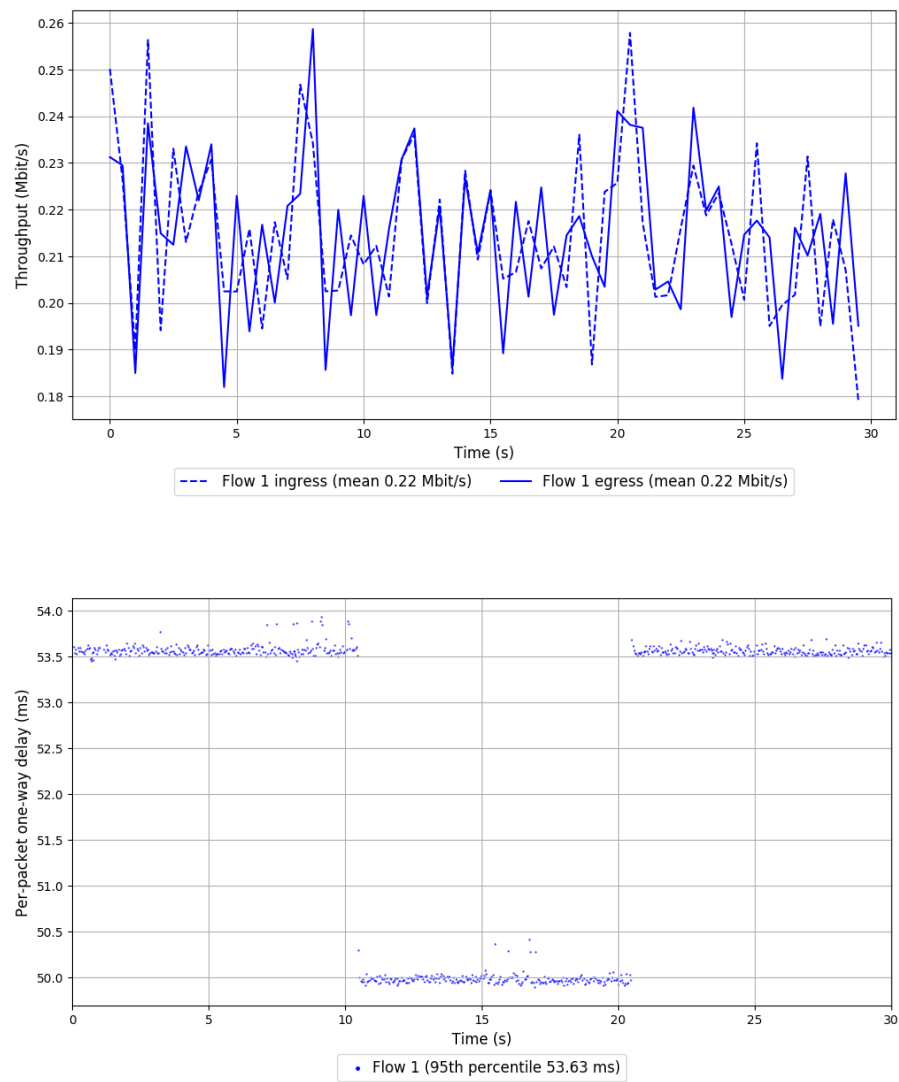
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.630 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-20 04:00:26

End at: 2017-12-20 04:00:56

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.146 ms

Loss rate: 0.00%

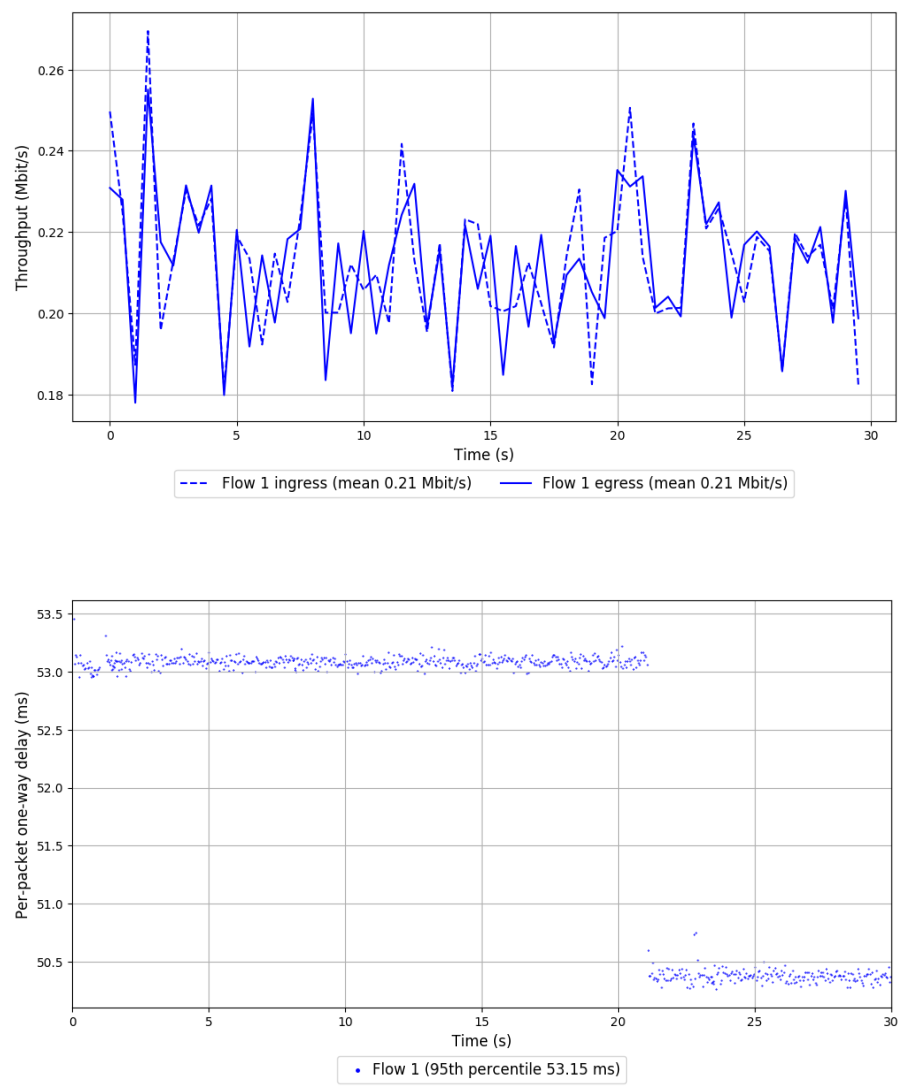
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.146 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-20 04:11:46

End at: 2017-12-20 04:12:16

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.669 ms

Loss rate: 0.00%

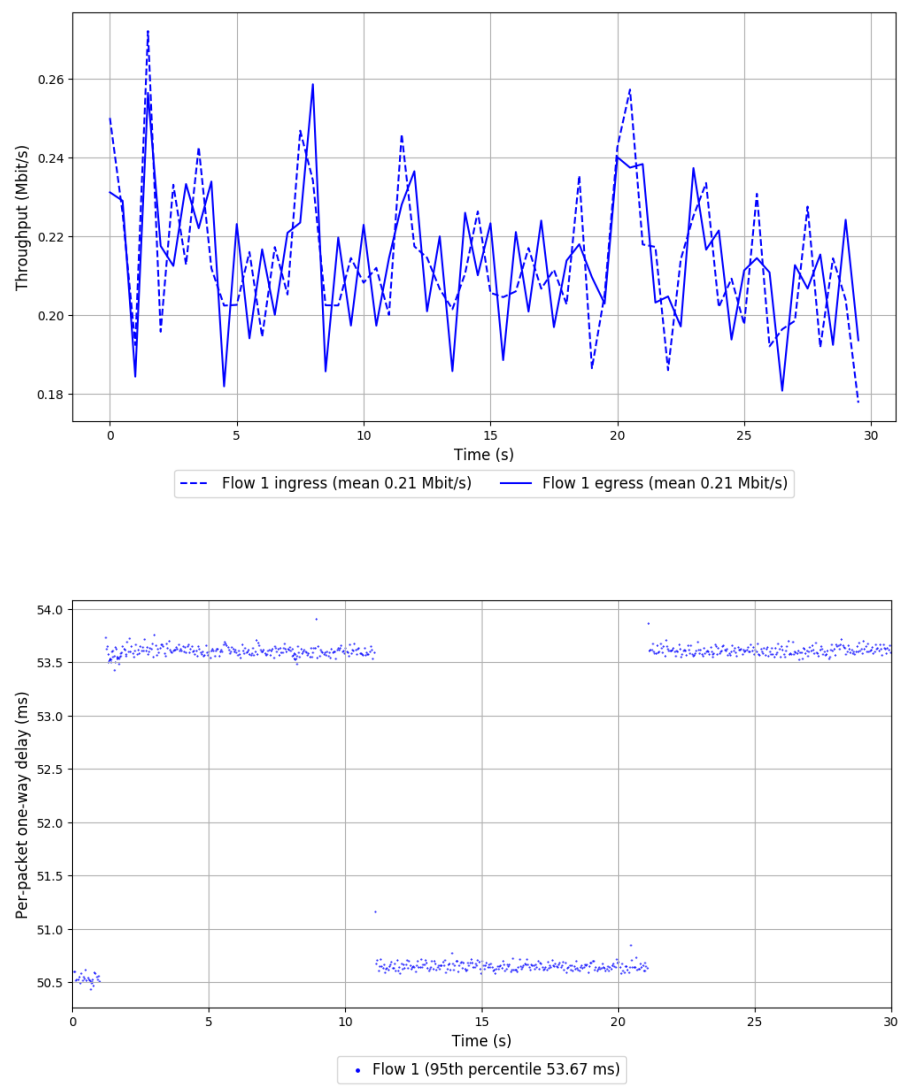
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.669 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-20 04:23:20

End at: 2017-12-20 04:23:50

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.172 ms

Loss rate: 0.00%

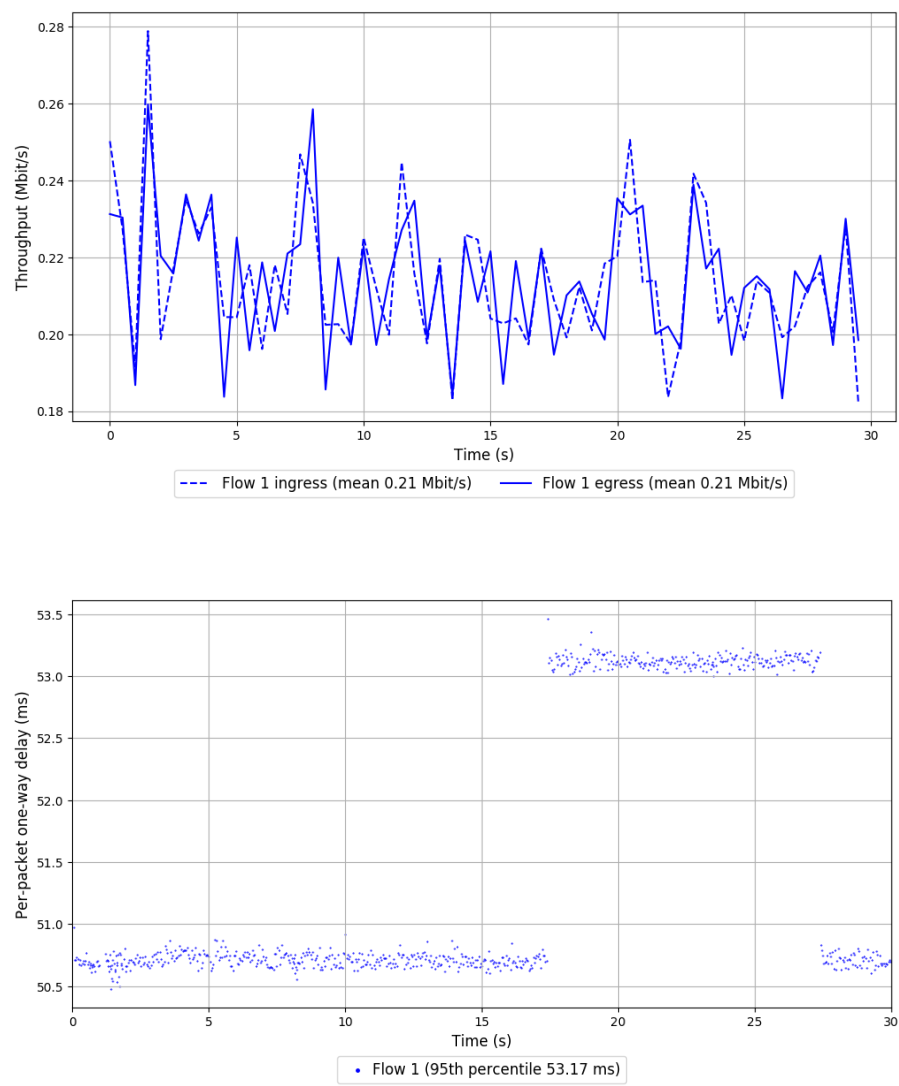
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.172 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-20 04:34:42

End at: 2017-12-20 04:35:12

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.439 ms

Loss rate: 0.00%

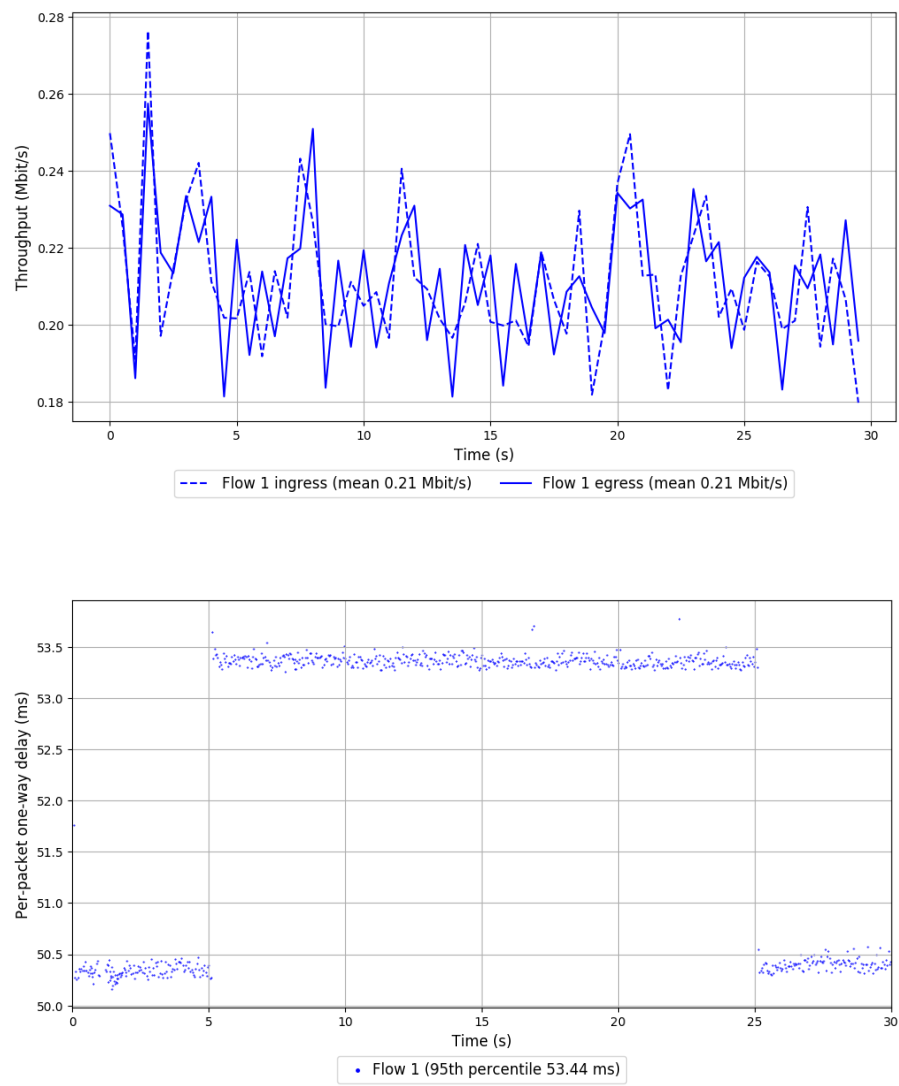
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.439 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-20 04:46:06

End at: 2017-12-20 04:46:36

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.824 ms

Loss rate: 0.00%

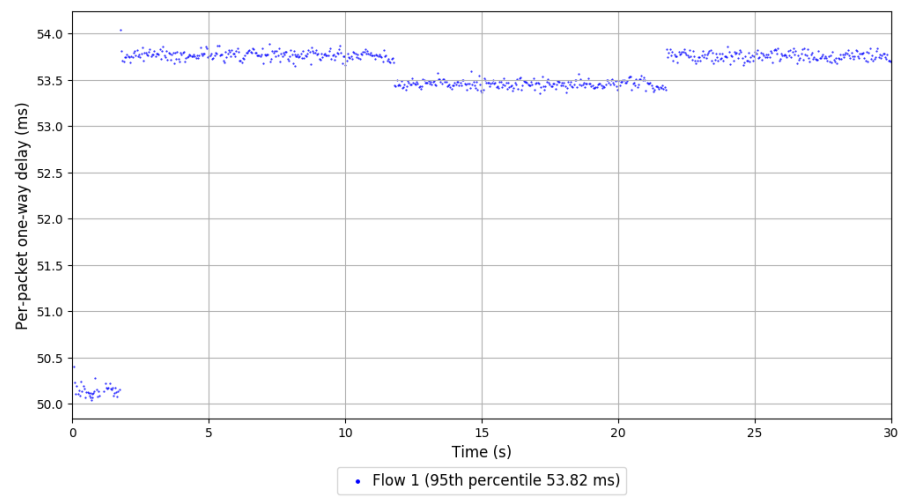
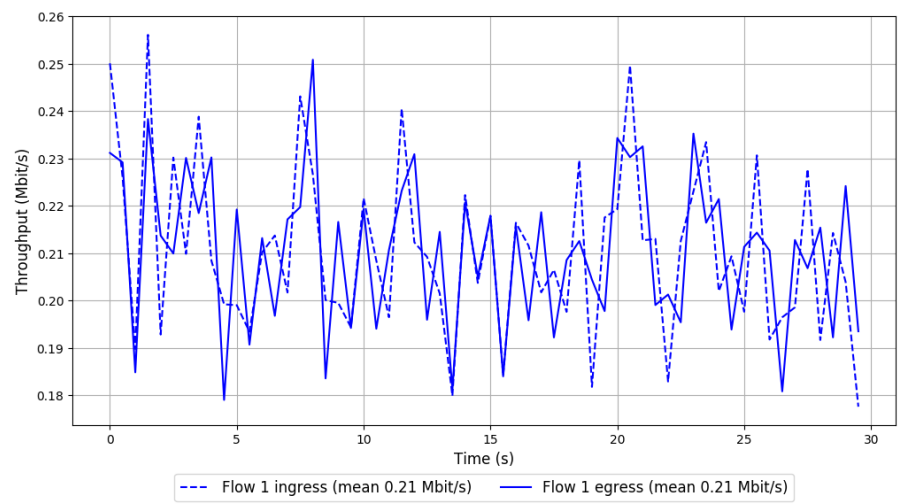
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.824 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

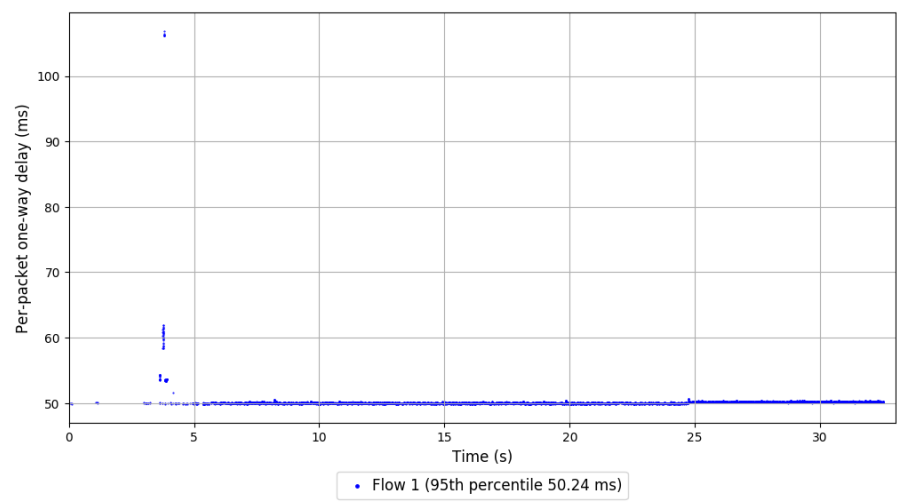
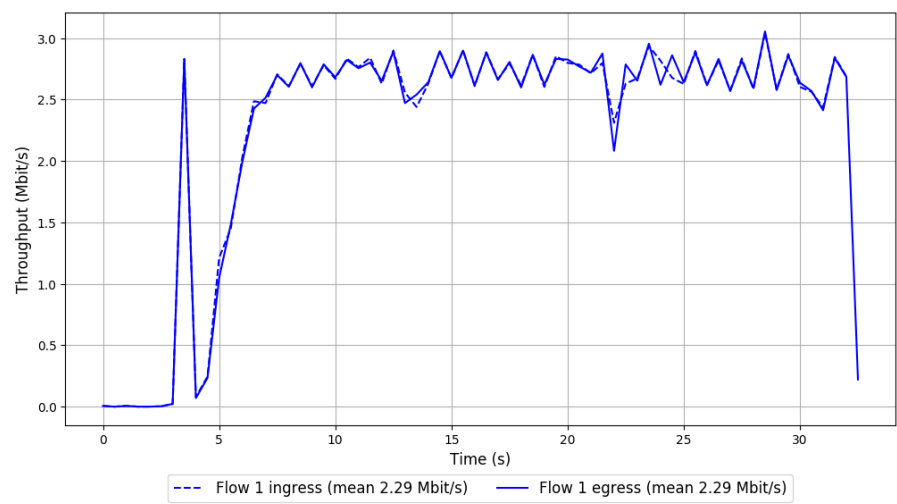


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-20 03:01:42
End at: 2017-12-20 03:02:12

# Below is generated by plot.py at 2017-12-20 06:24:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.245 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.245 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

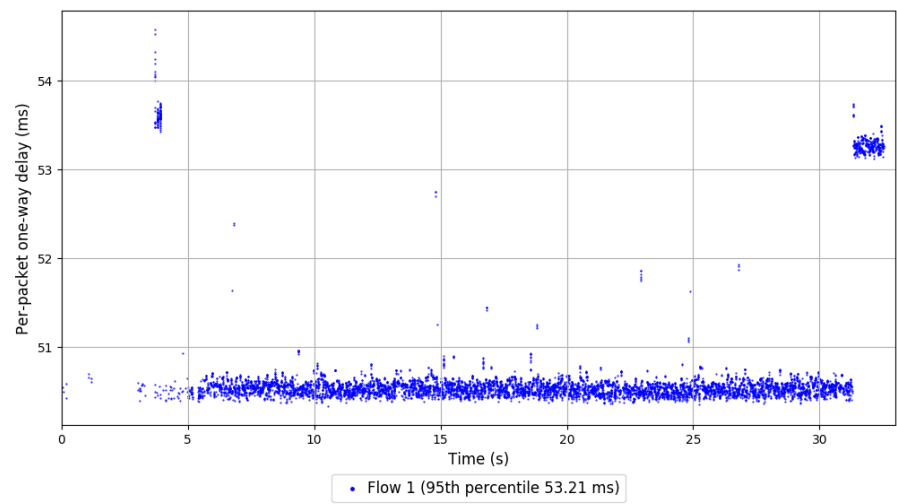
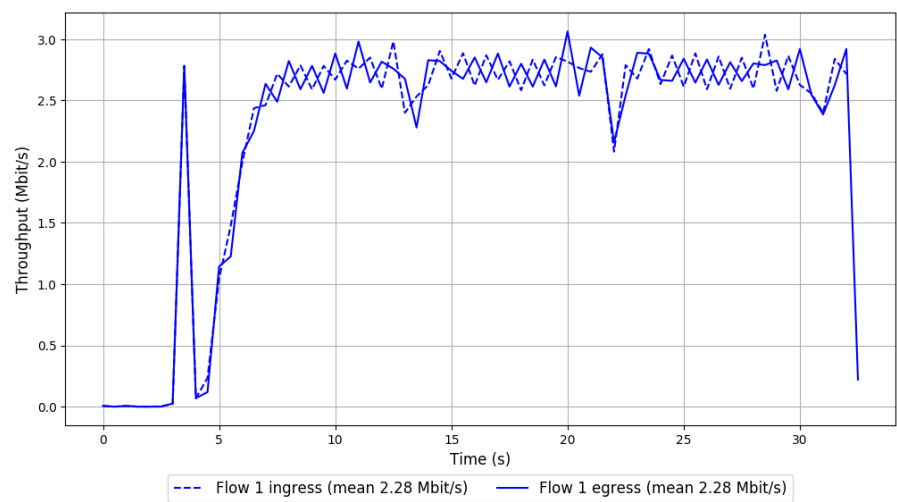


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-20 03:13:05
End at: 2017-12-20 03:13:35

# Below is generated by plot.py at 2017-12-20 06:24:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.213 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.213 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-20 03:24:22

End at: 2017-12-20 03:24:52

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.376 ms

Loss rate: 0.00%

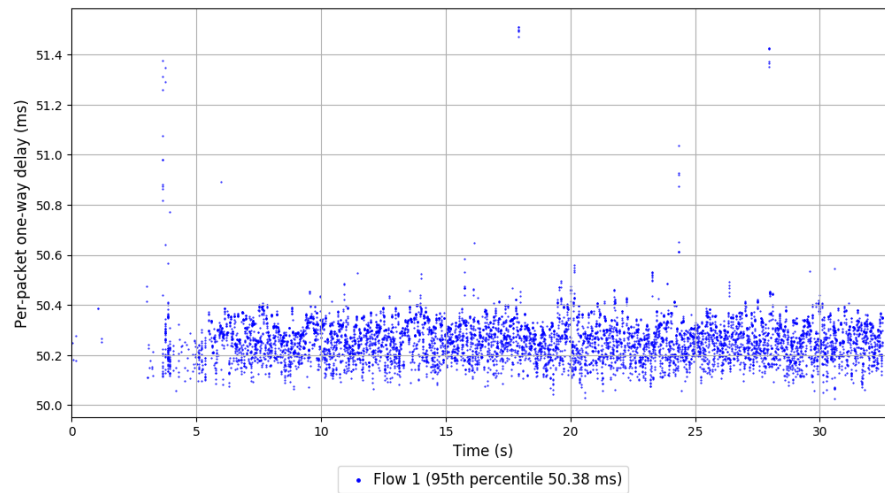
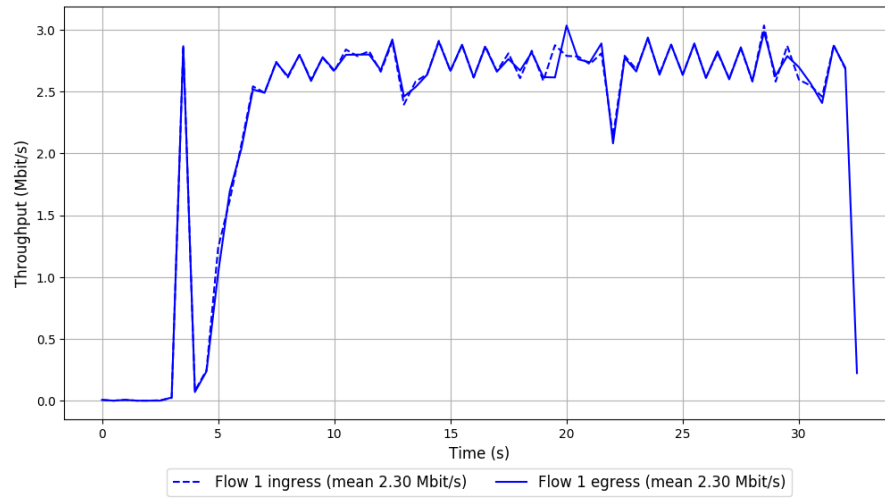
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.376 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-20 03:35:42

End at: 2017-12-20 03:36:12

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.461 ms

Loss rate: 0.00%

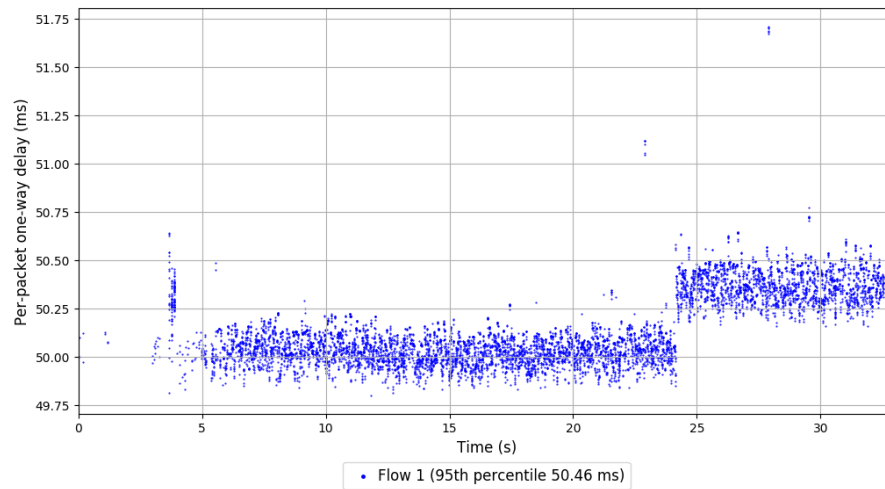
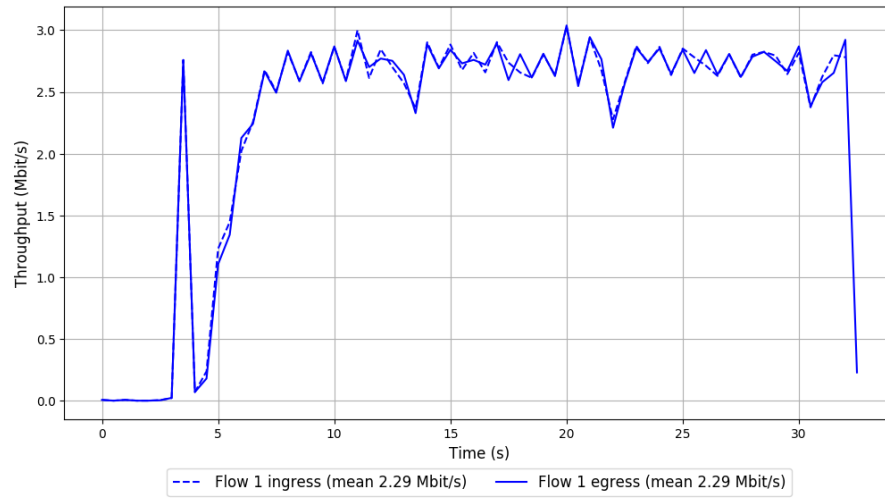
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.461 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-20 03:47:08

End at: 2017-12-20 03:47:38

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.799 ms

Loss rate: 0.00%

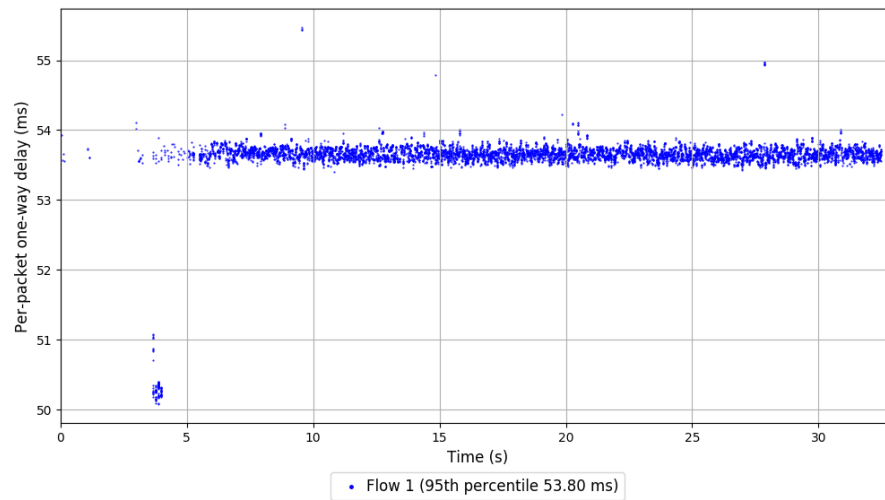
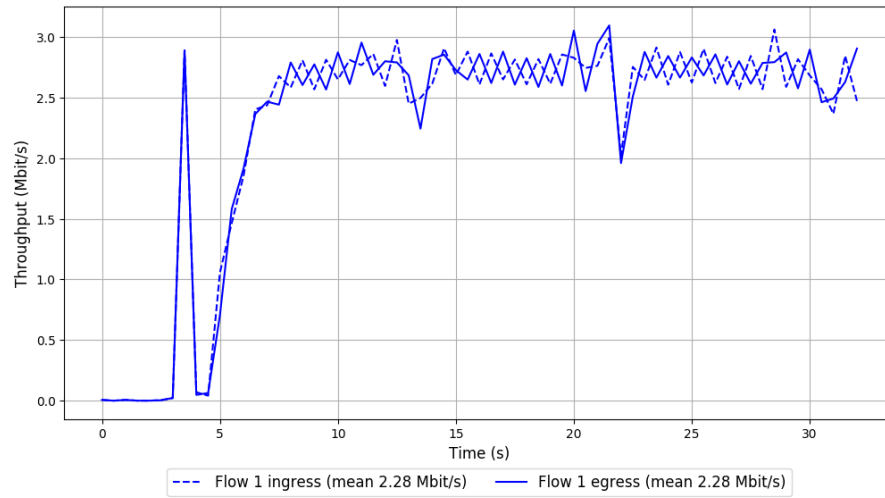
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.799 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-20 03:58:37

End at: 2017-12-20 03:59:07

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.672 ms

Loss rate: 0.00%

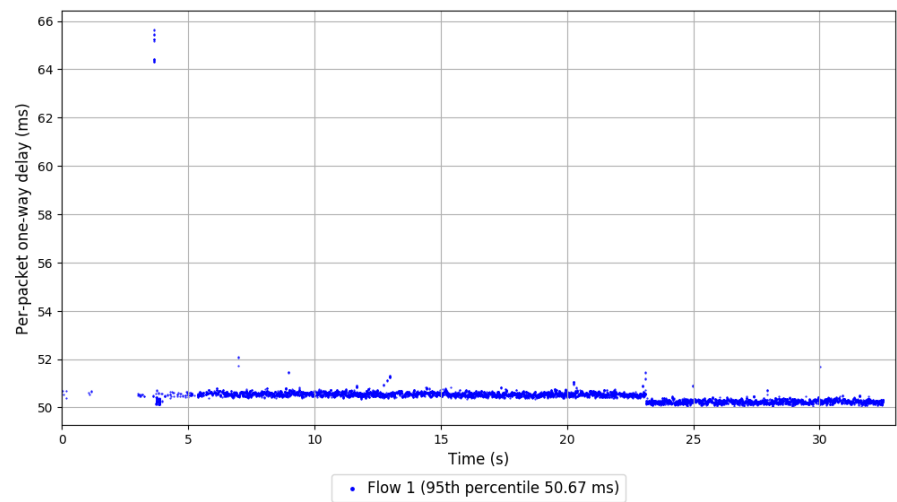
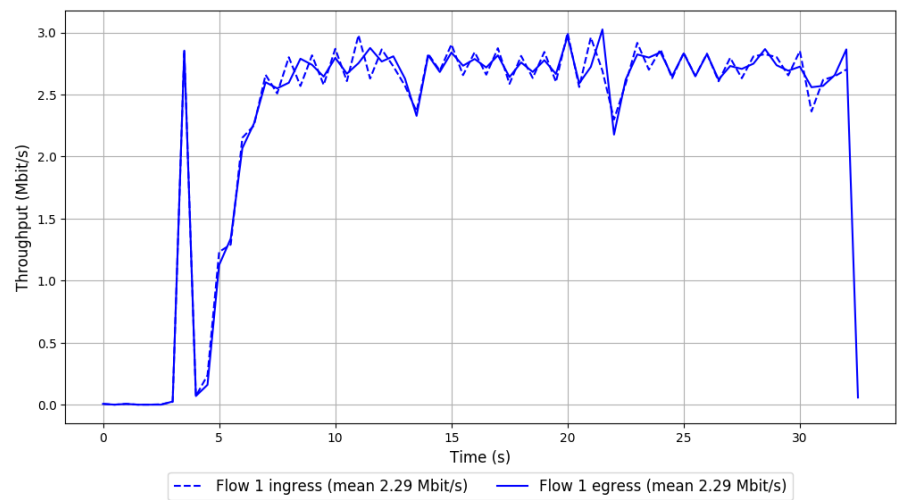
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.672 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-20 04:09:58

End at: 2017-12-20 04:10:28

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

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

Loss rate: 0.00%

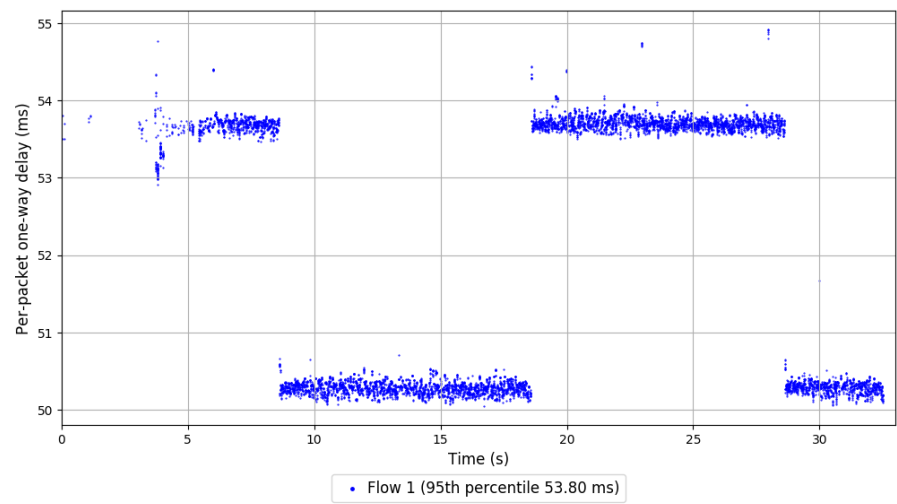
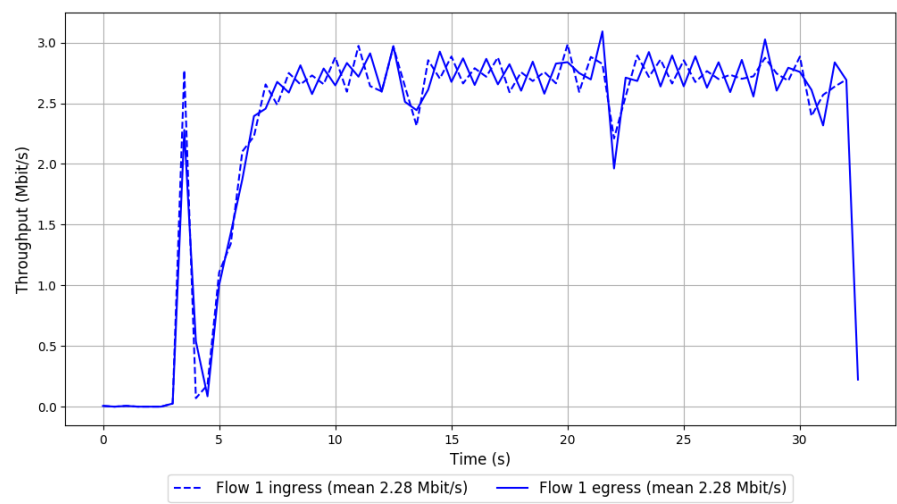
-- Flow 1:

Average throughput: 2.28 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-20 04:21:31

End at: 2017-12-20 04:22:01

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.419 ms

Loss rate: 0.00%

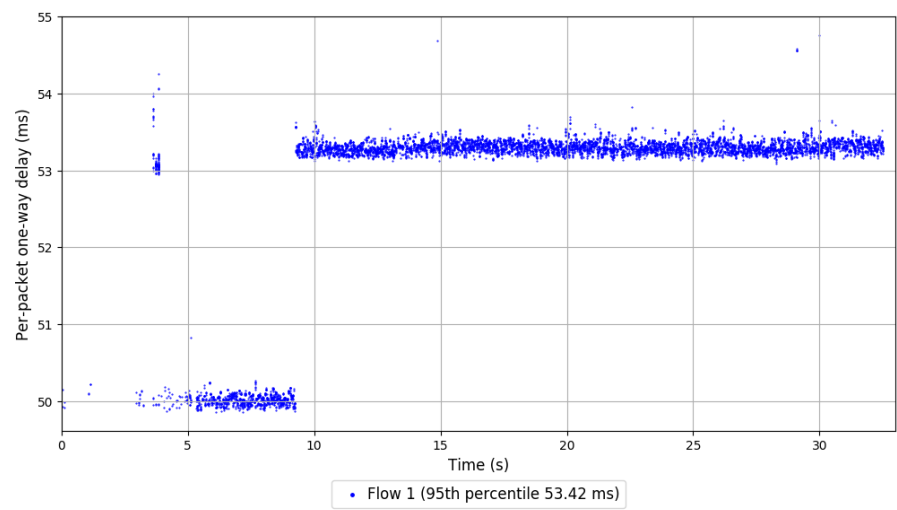
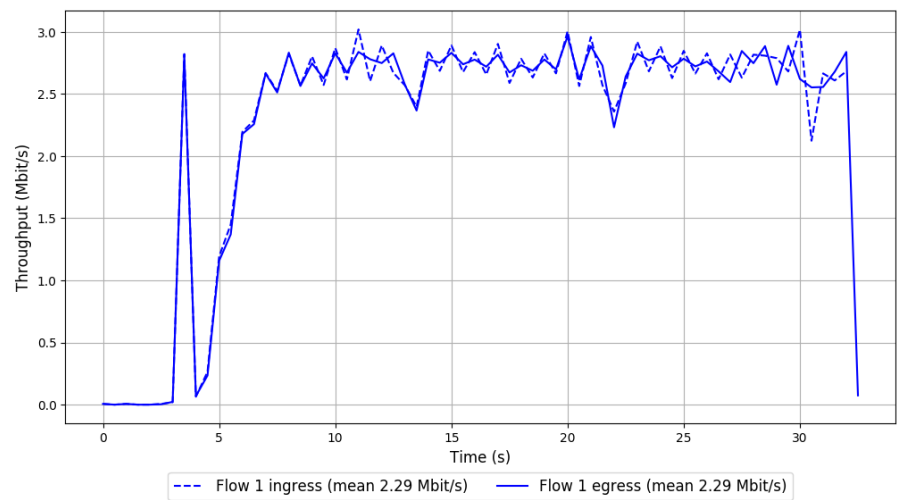
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.419 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-20 04:32:53

End at: 2017-12-20 04:33:23

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.374 ms

Loss rate: 0.00%

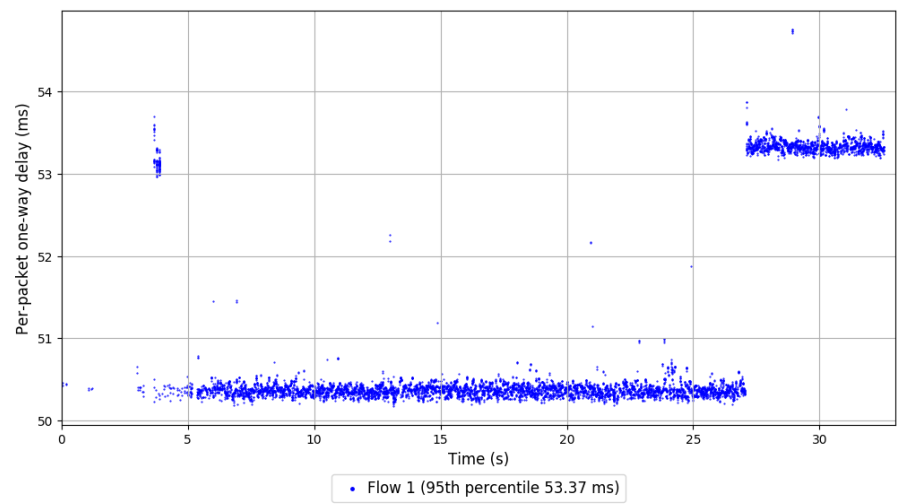
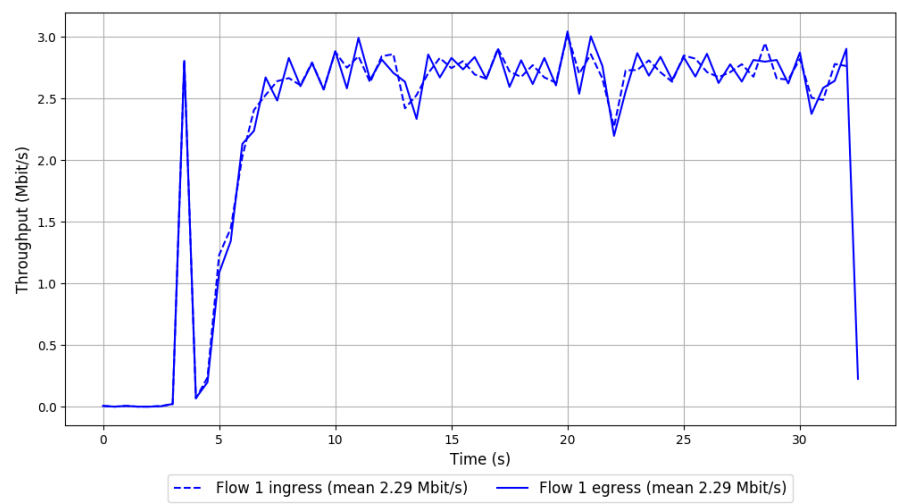
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.374 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-20 04:44:15

End at: 2017-12-20 04:44:45

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.475 ms

Loss rate: 0.00%

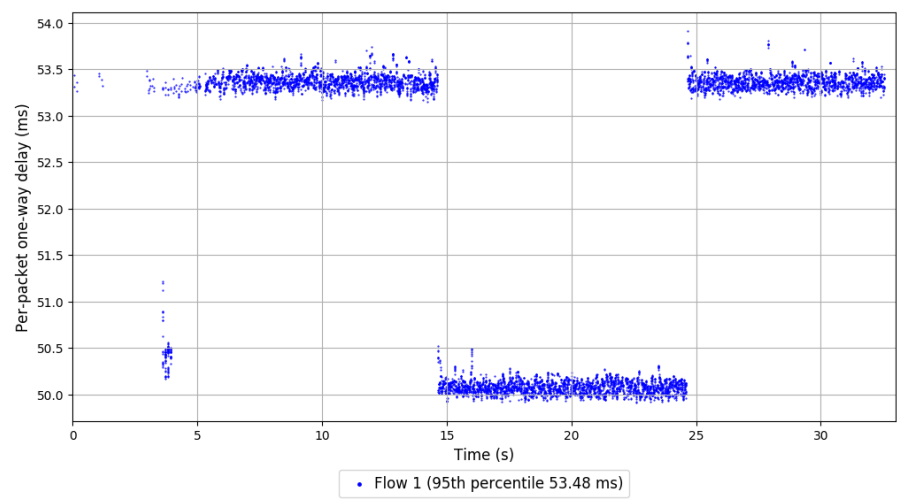
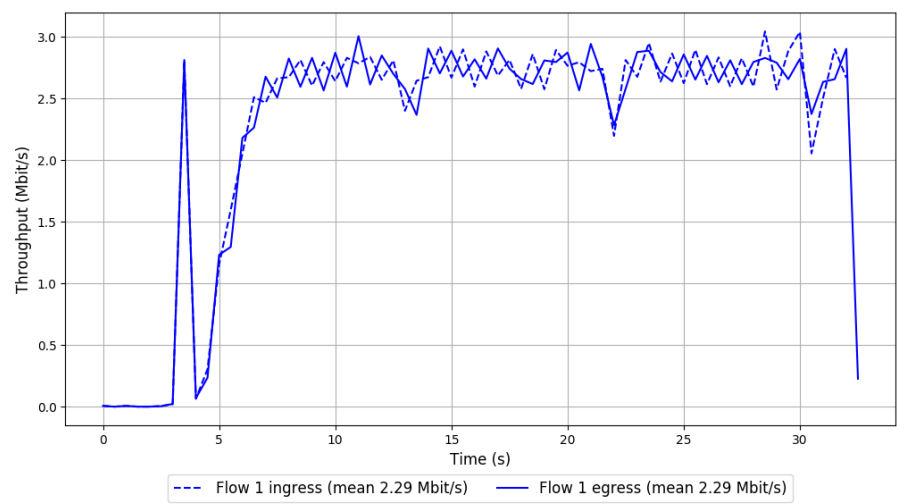
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.475 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-20 03:05:28

End at: 2017-12-20 03:05:58

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 53.517 ms

Loss rate: 1.14%

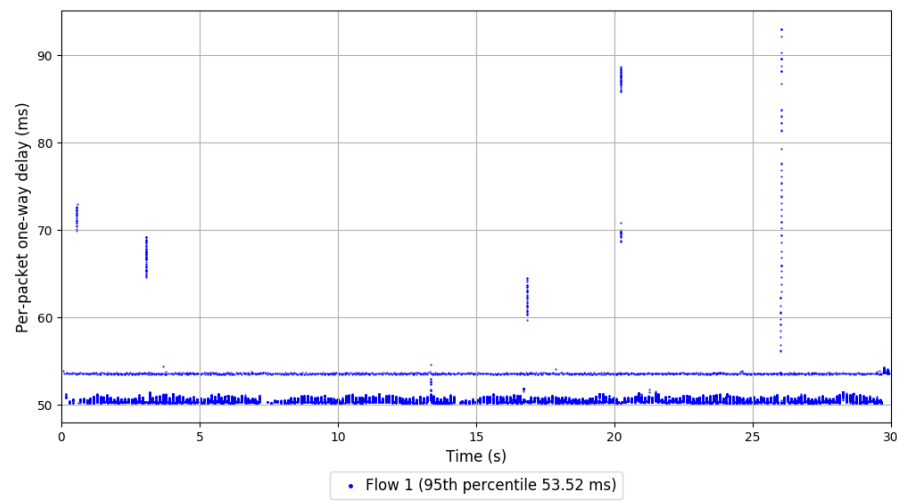
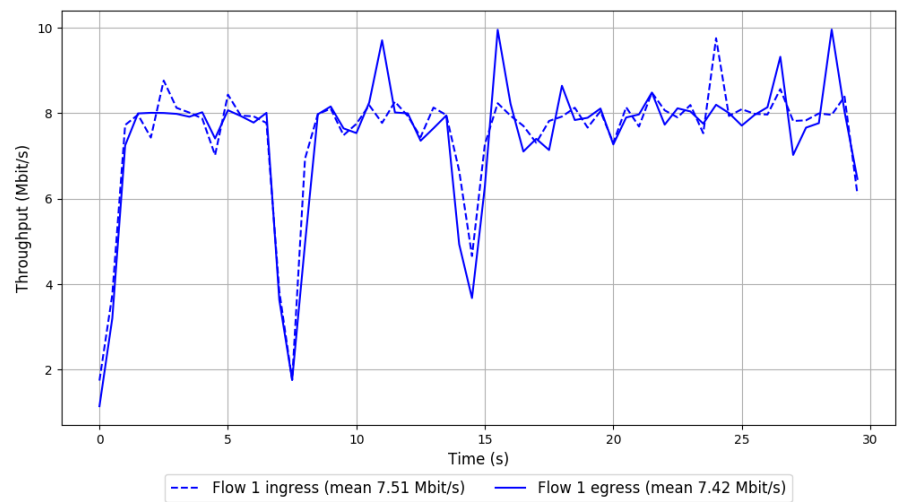
-- Flow 1:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 53.517 ms

Loss rate: 1.14%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-20 03:16:51

End at: 2017-12-20 03:17:21

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 51.203 ms

Loss rate: 0.79%

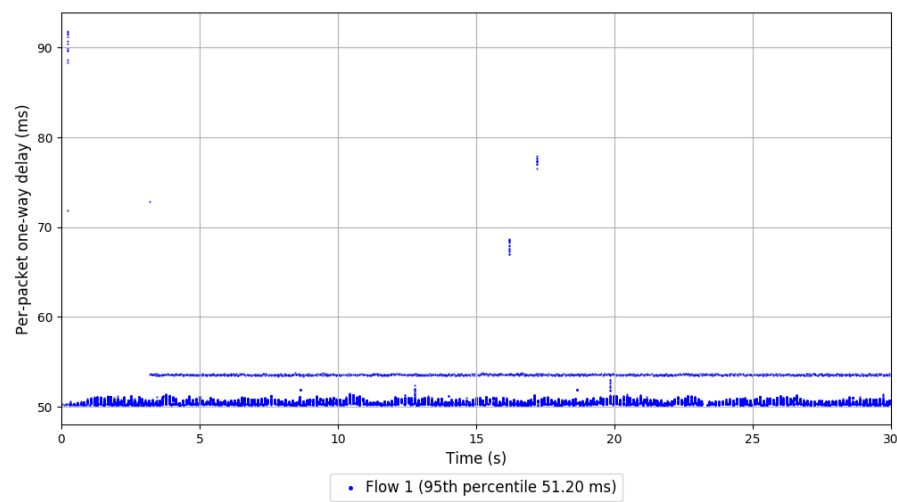
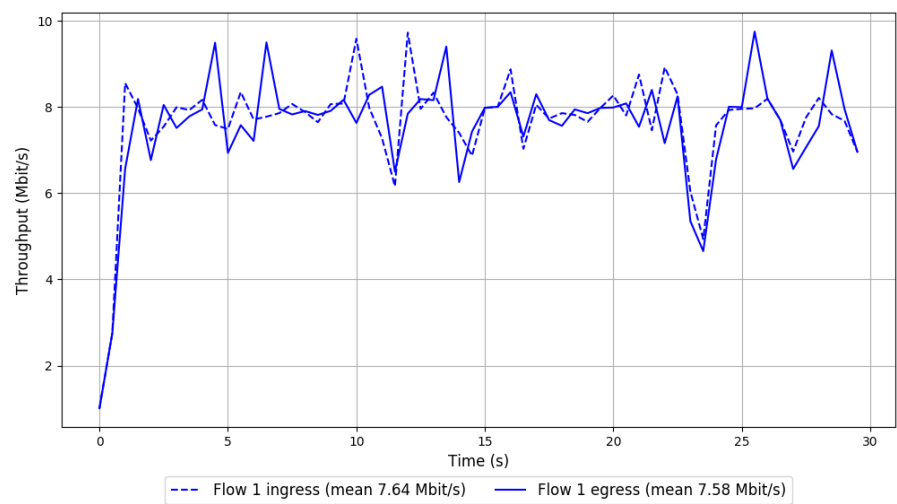
-- Flow 1:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 51.203 ms

Loss rate: 0.79%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-20 03:28:07

End at: 2017-12-20 03:28:37

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 51.132 ms

Loss rate: 0.51%

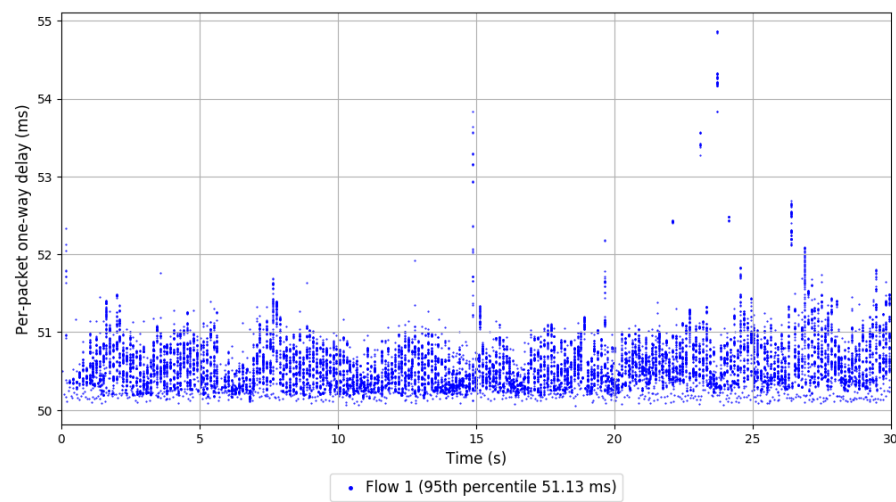
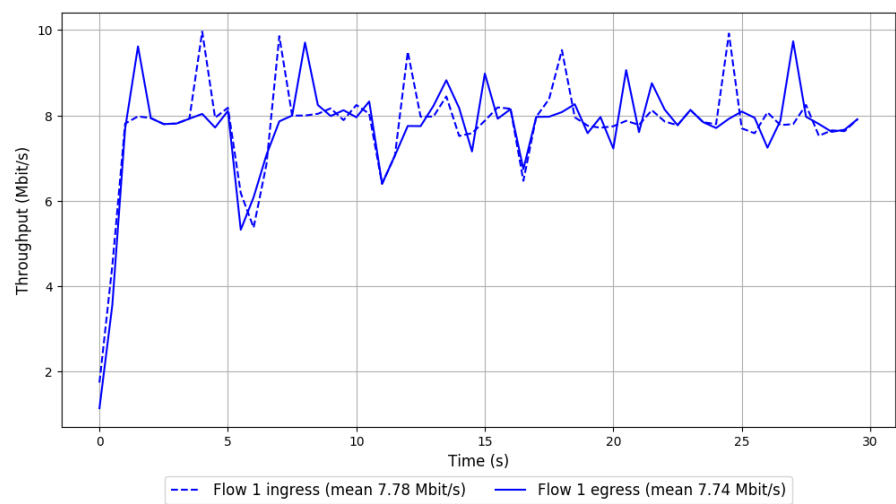
-- Flow 1:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 51.132 ms

Loss rate: 0.51%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-20 03:39:31

End at: 2017-12-20 03:40:01

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 53.665 ms

Loss rate: 0.44%

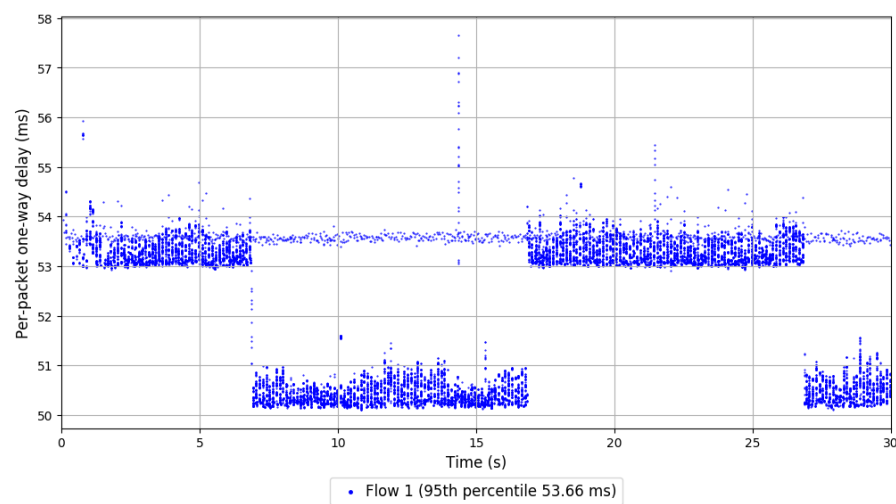
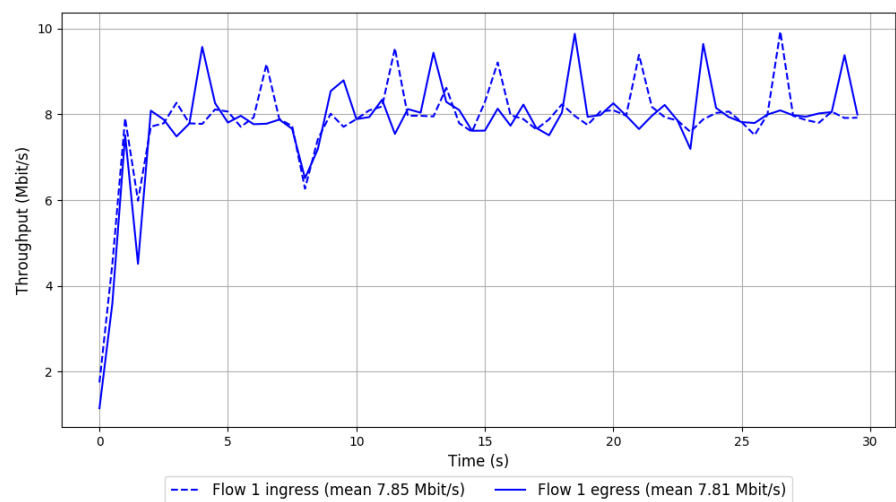
-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 53.665 ms

Loss rate: 0.44%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-20 03:50:57

End at: 2017-12-20 03:51:27

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.008 ms

Loss rate: 0.08%

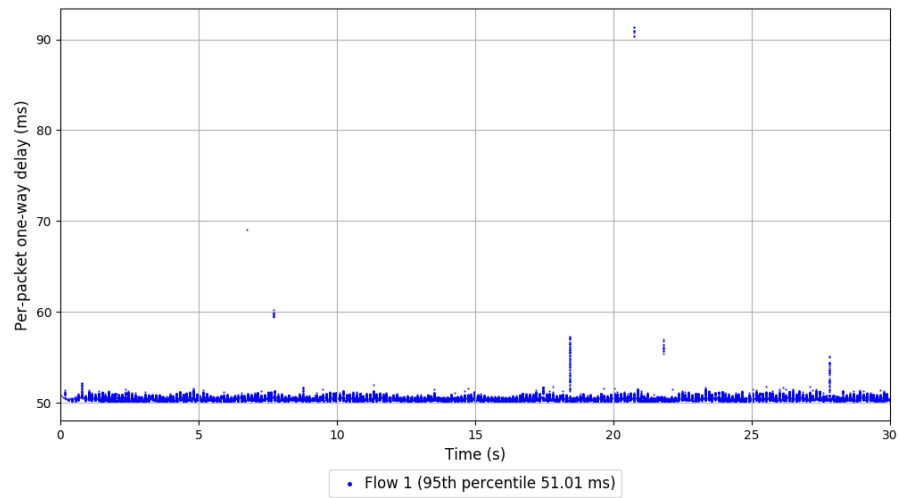
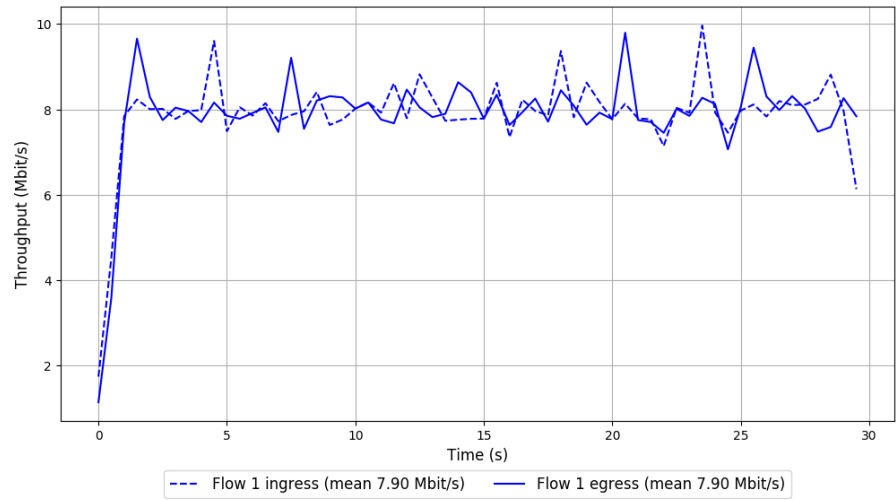
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.008 ms

Loss rate: 0.08%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-20 04:02:25

End at: 2017-12-20 04:02:55

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 53.769 ms

Loss rate: 0.03%

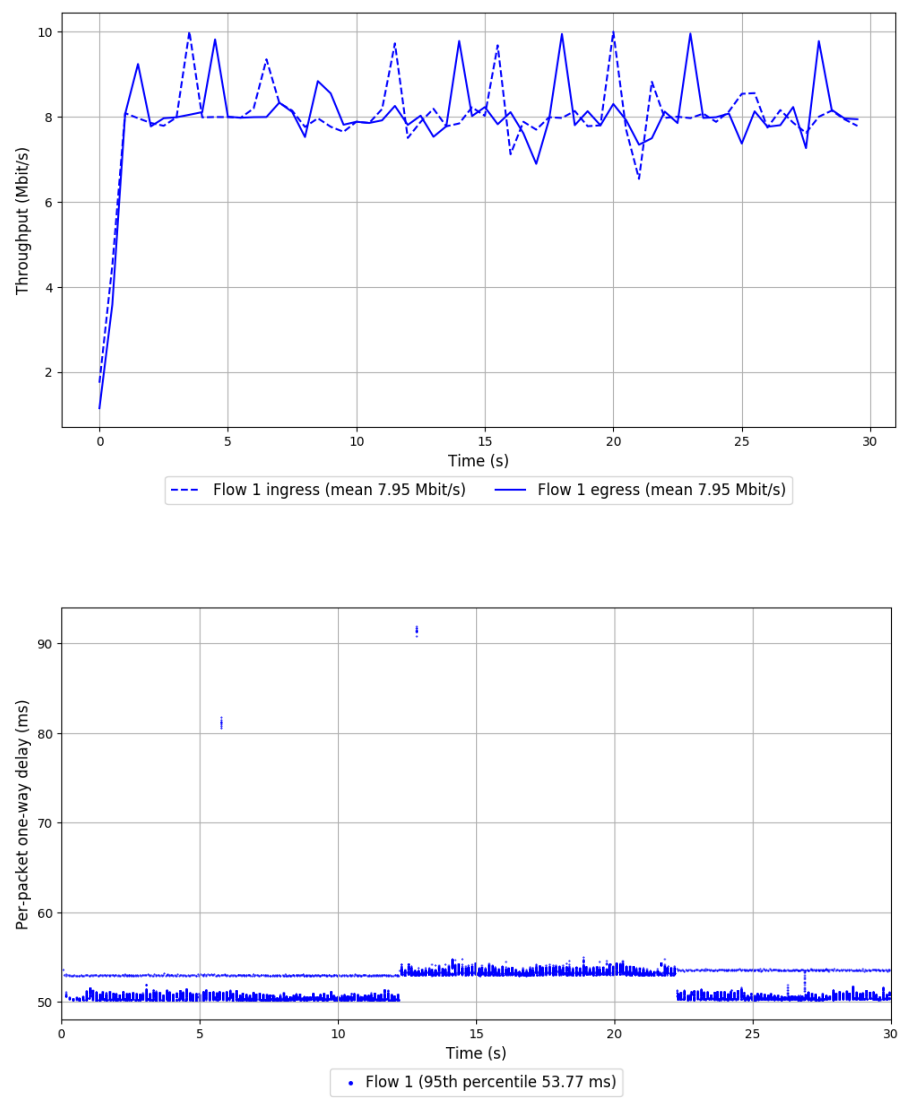
-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 53.769 ms

Loss rate: 0.03%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-20 04:13:43

End at: 2017-12-20 04:14:13

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 52.862 ms

Loss rate: 0.06%

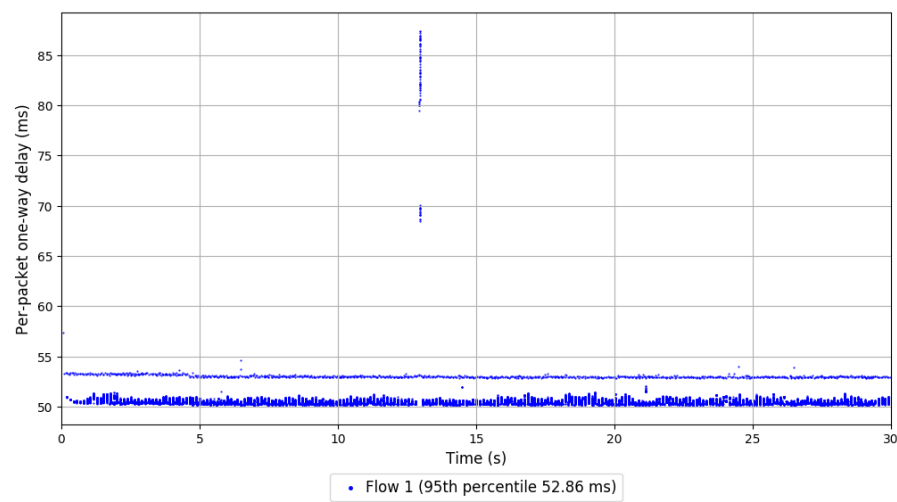
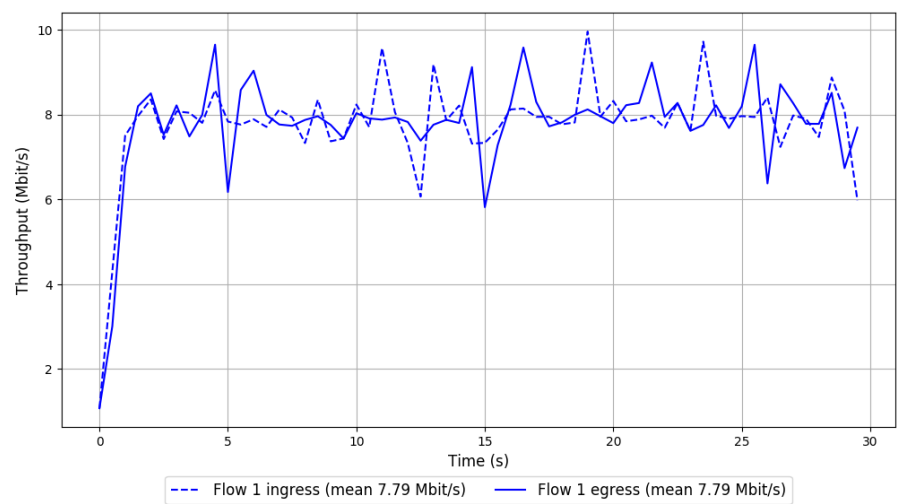
-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 52.862 ms

Loss rate: 0.06%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-20 04:25:20

End at: 2017-12-20 04:25:50

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 53.973 ms

Loss rate: 0.08%

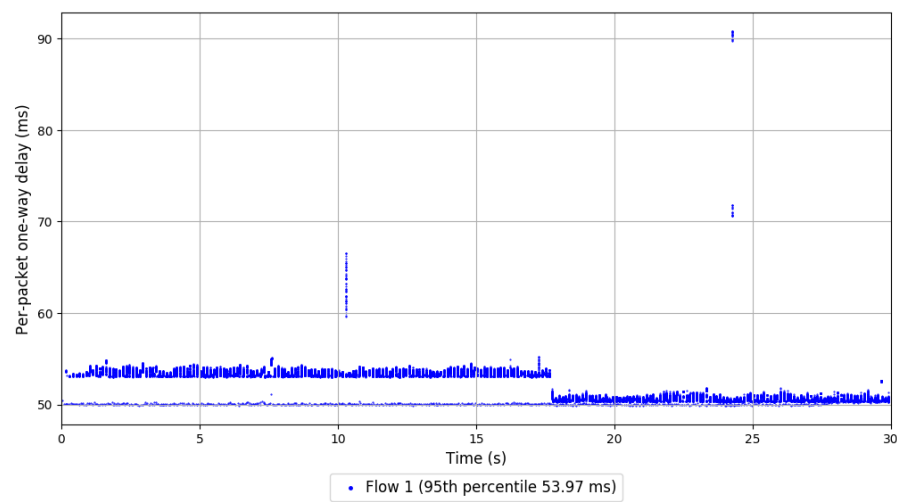
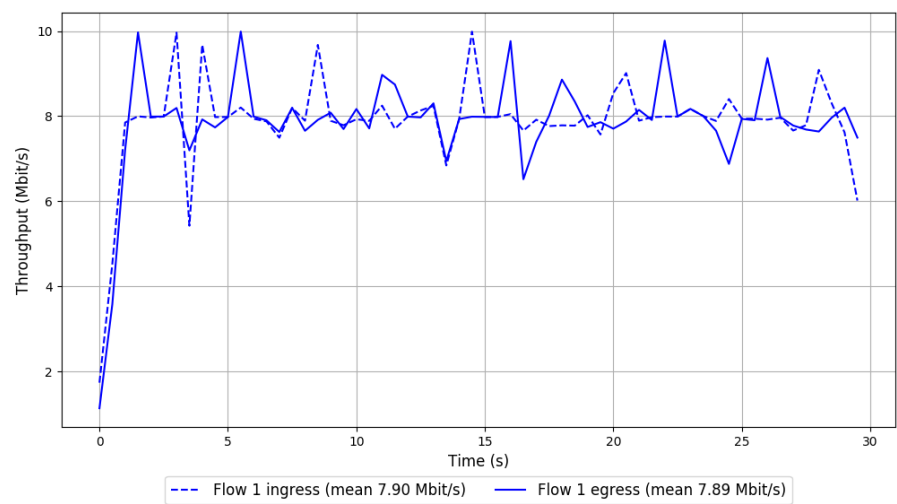
-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 53.973 ms

Loss rate: 0.08%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-20 04:36:41

End at: 2017-12-20 04:37:11

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 51.373 ms

Loss rate: 0.97%

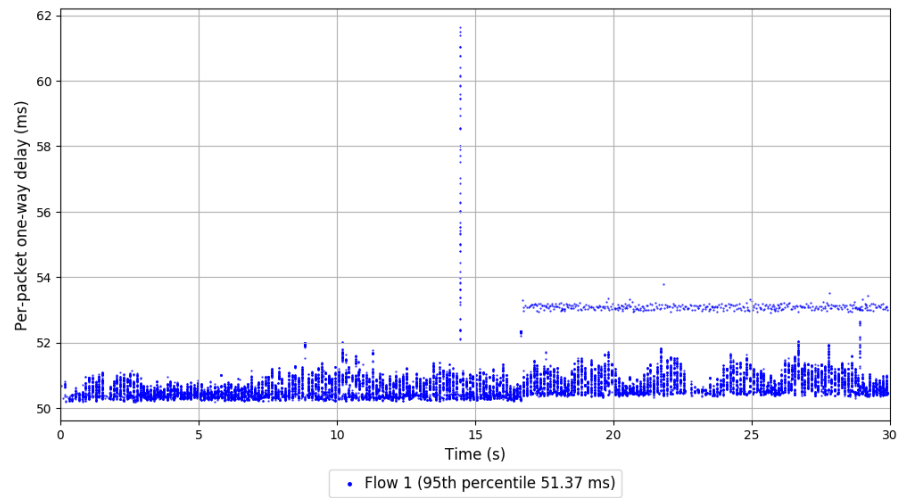
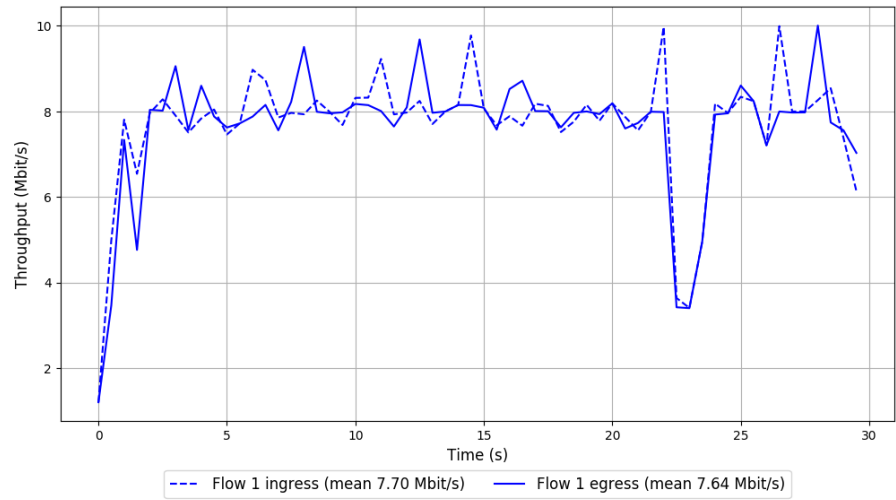
-- Flow 1:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 51.373 ms

Loss rate: 0.97%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-20 04:48:07

End at: 2017-12-20 04:48:37

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 51.187 ms

Loss rate: 0.11%

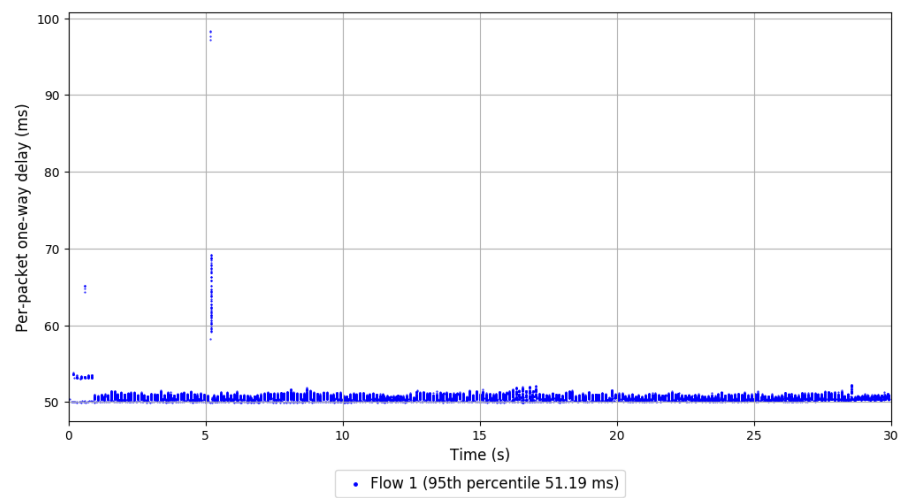
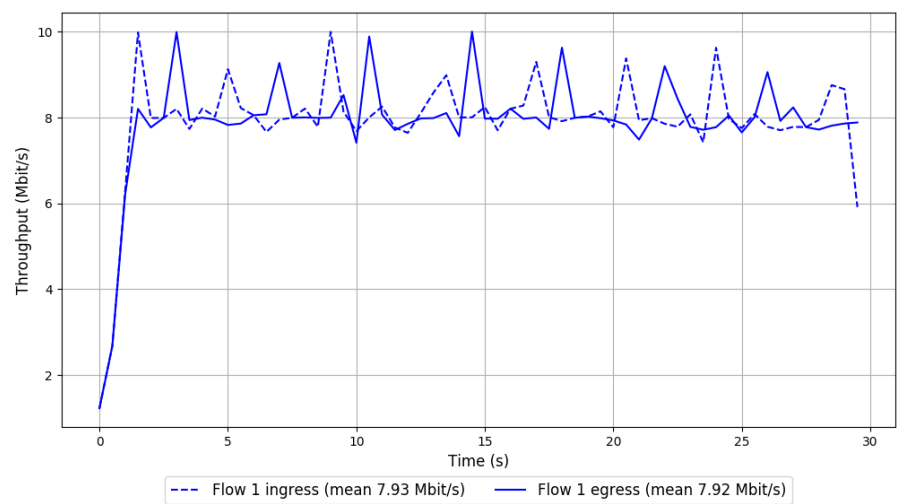
-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 51.187 ms

Loss rate: 0.11%

Run 10: Report of Sprout — Data Link

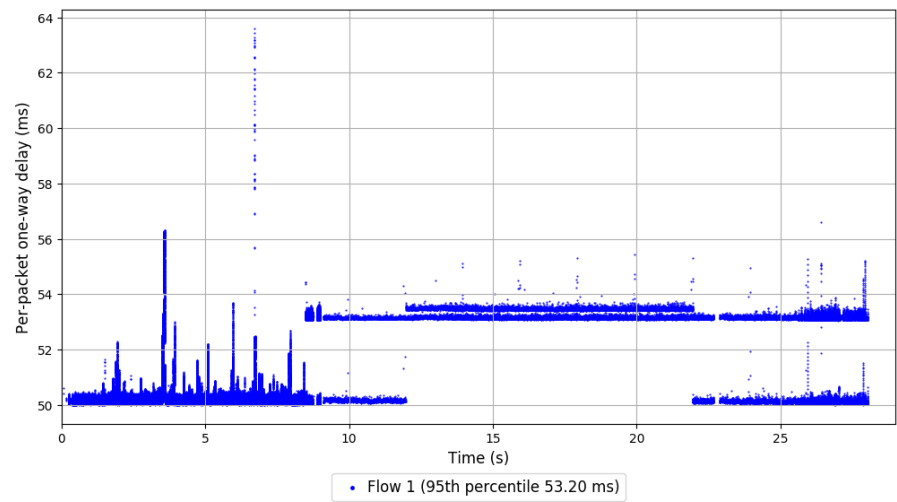
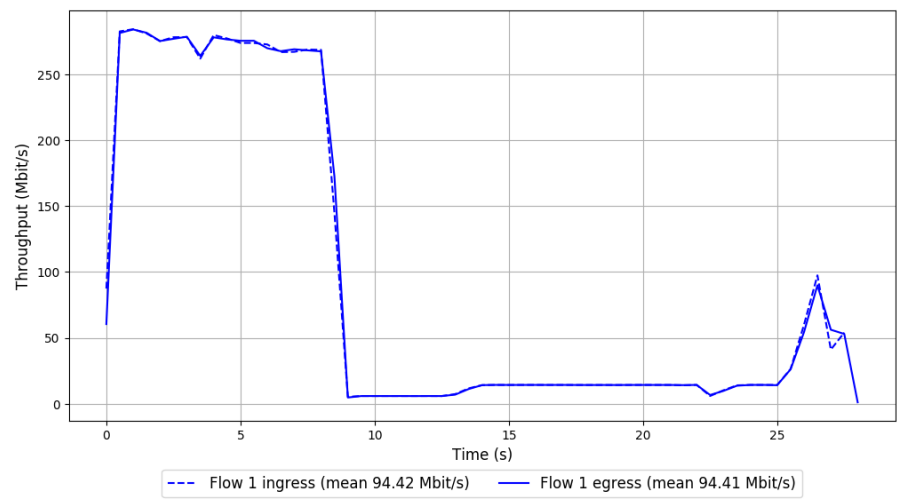


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-20 03:07:43
End at: 2017-12-20 03:08:13

# Below is generated by plot.py at 2017-12-20 06:24:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.41 Mbit/s
95th percentile per-packet one-way delay: 53.195 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 94.41 Mbit/s
95th percentile per-packet one-way delay: 53.195 ms
Loss rate: 0.01%
```

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

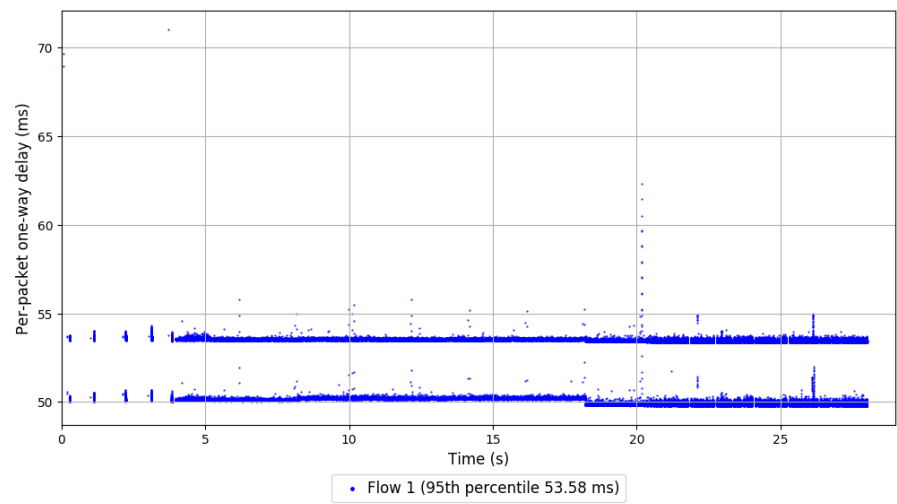
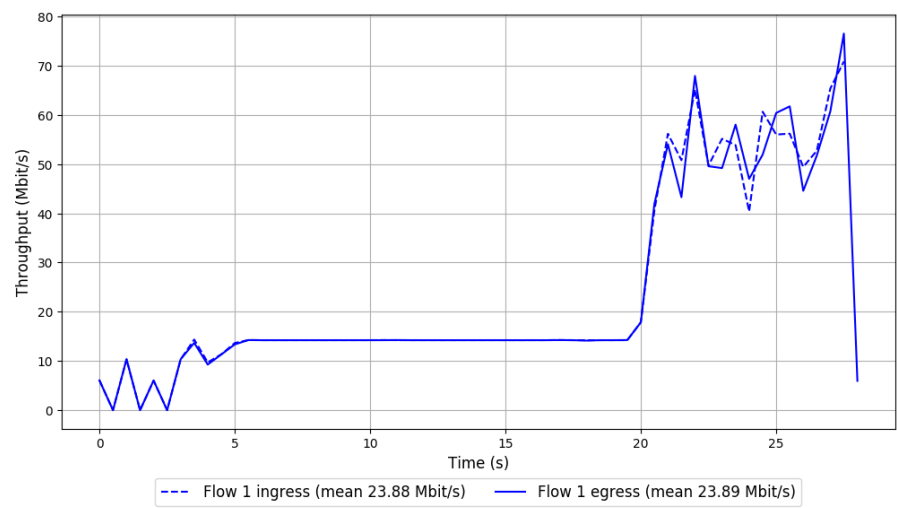


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-20 03:19:07
End at: 2017-12-20 03:19:37

# Below is generated by plot.py at 2017-12-20 06:24:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.89 Mbit/s
95th percentile per-packet one-way delay: 53.579 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.89 Mbit/s
95th percentile per-packet one-way delay: 53.579 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-20 03:30:24

End at: 2017-12-20 03:30:54

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.27 Mbit/s

95th percentile per-packet one-way delay: 52.956 ms

Loss rate: 0.00%

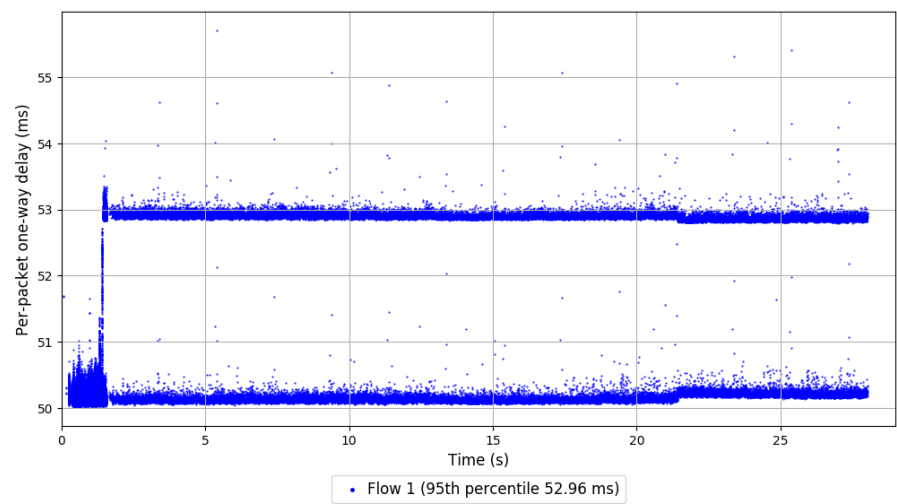
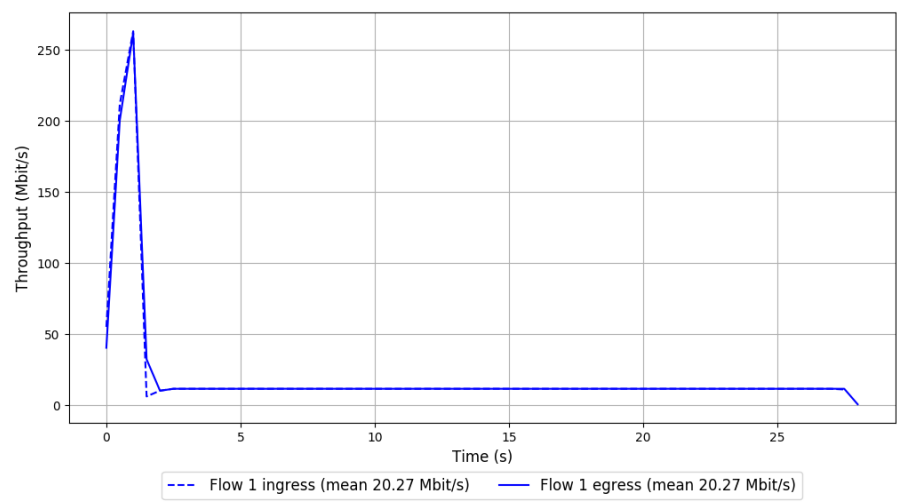
-- Flow 1:

Average throughput: 20.27 Mbit/s

95th percentile per-packet one-way delay: 52.956 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-20 03:41:47

End at: 2017-12-20 03:42:17

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.18 Mbit/s

95th percentile per-packet one-way delay: 50.446 ms

Loss rate: 0.00%

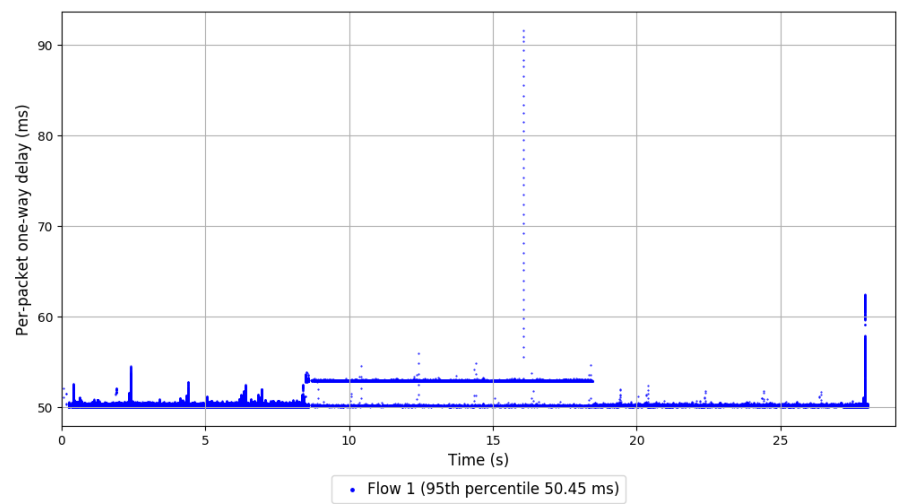
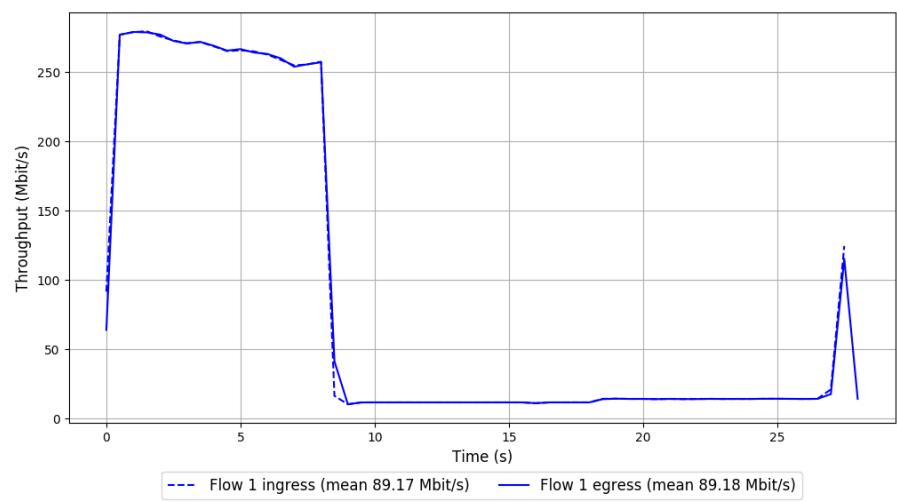
-- Flow 1:

Average throughput: 89.18 Mbit/s

95th percentile per-packet one-way delay: 50.446 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-20 03:53:13

End at: 2017-12-20 03:53:43

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.14 Mbit/s

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

Loss rate: 0.00%

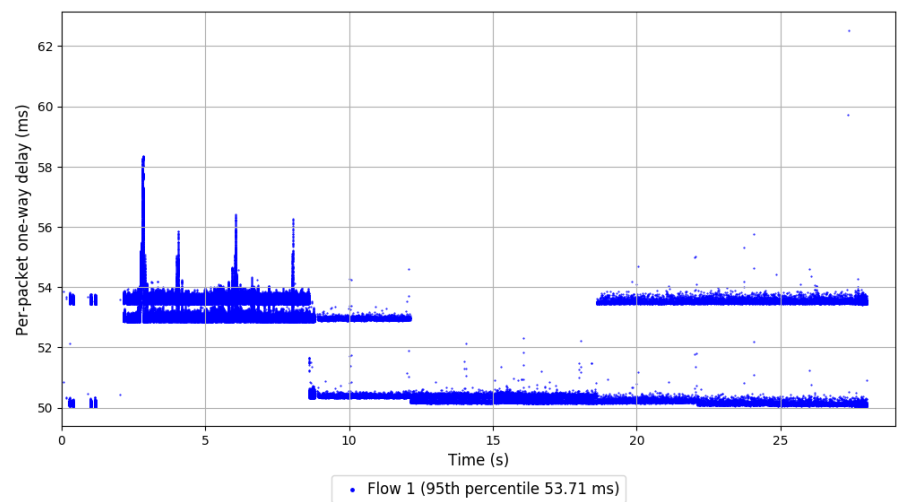
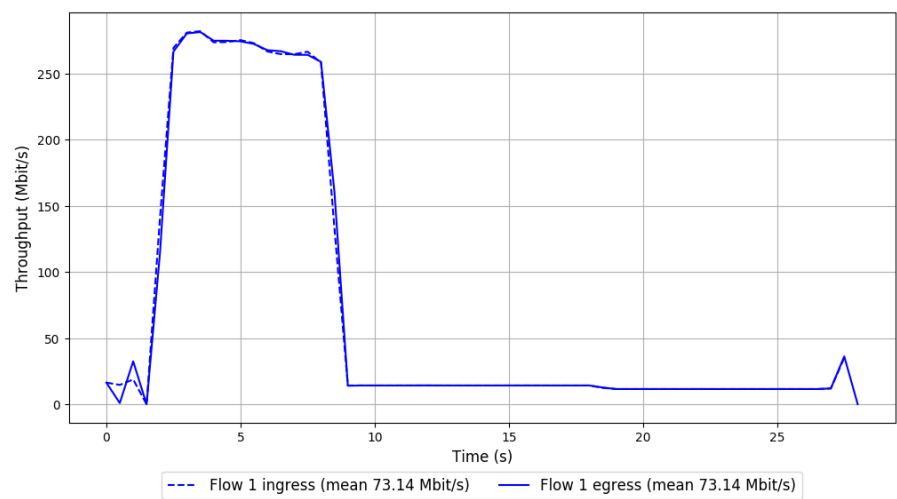
-- Flow 1:

Average throughput: 73.14 Mbit/s

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

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-20 04:04:42

End at: 2017-12-20 04:05:12

Below is generated by plot.py at 2017-12-20 06:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.04 Mbit/s

95th percentile per-packet one-way delay: 53.205 ms

Loss rate: 0.00%

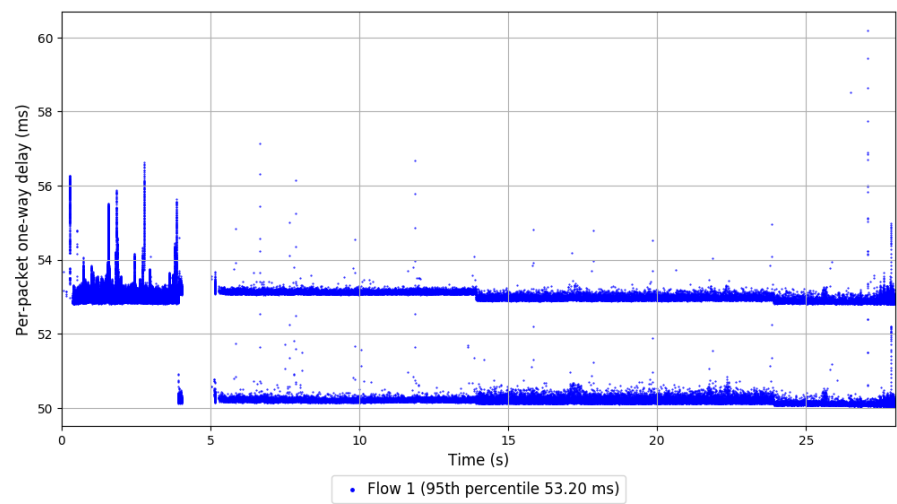
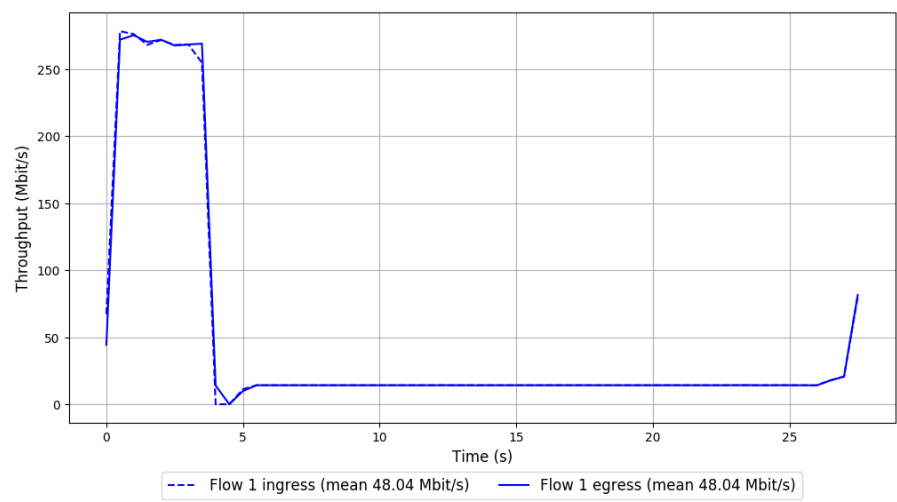
-- Flow 1:

Average throughput: 48.04 Mbit/s

95th percentile per-packet one-way delay: 53.205 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-20 04:15:59

End at: 2017-12-20 04:16:29

Below is generated by plot.py at 2017-12-20 06:24:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 243.21 Mbit/s

95th percentile per-packet one-way delay: 50.450 ms

Loss rate: 0.00%

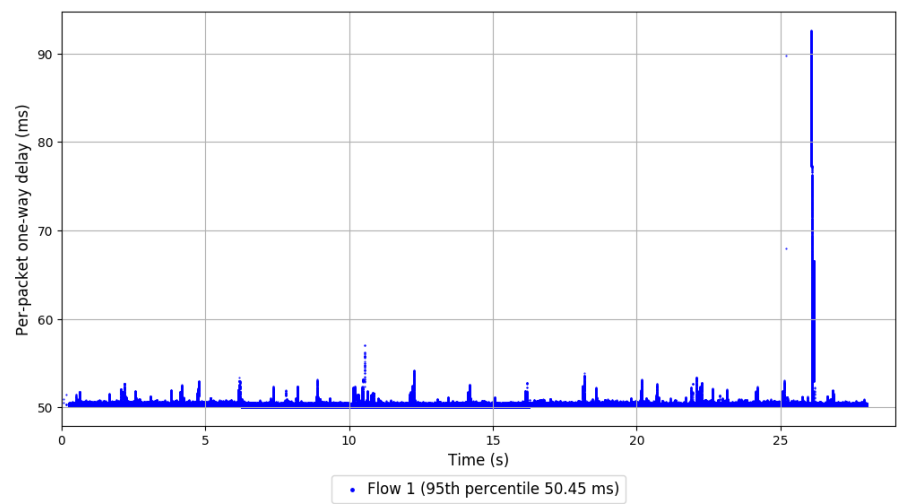
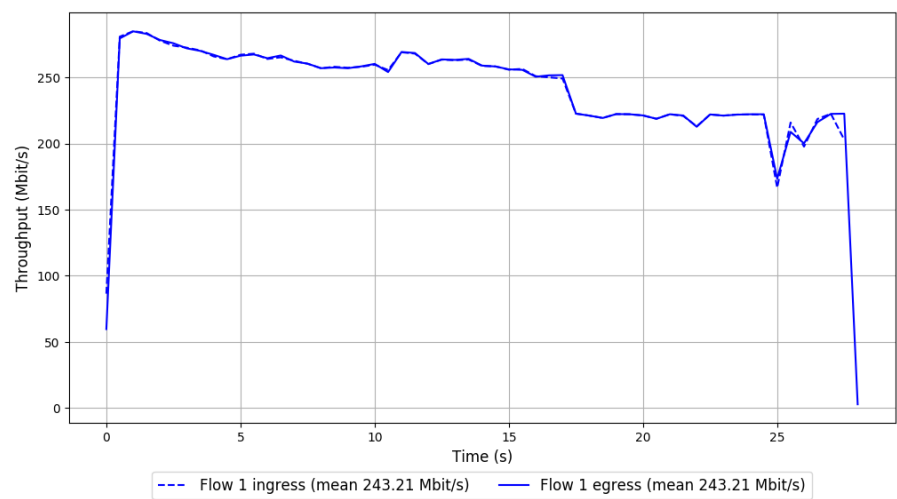
-- Flow 1:

Average throughput: 243.21 Mbit/s

95th percentile per-packet one-way delay: 50.450 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-20 04:27:35

End at: 2017-12-20 04:28:05

Below is generated by plot.py at 2017-12-20 06:24:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.62 Mbit/s

95th percentile per-packet one-way delay: 53.267 ms

Loss rate: 0.00%

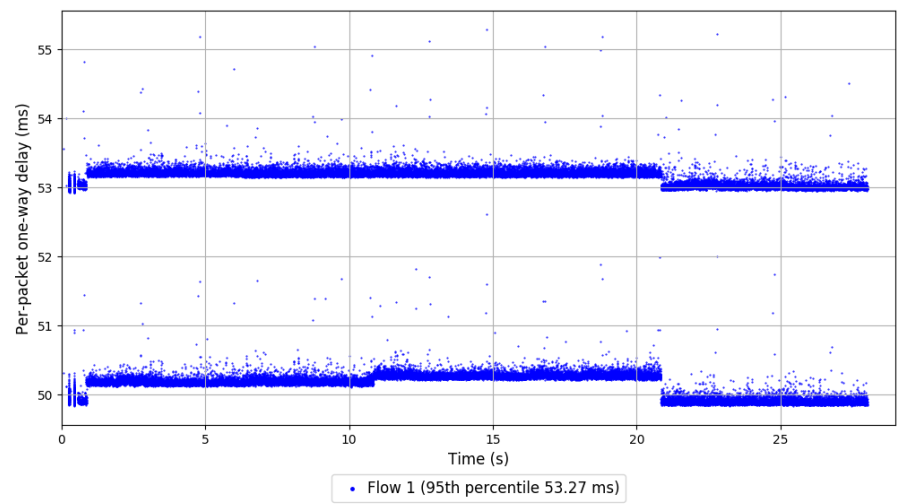
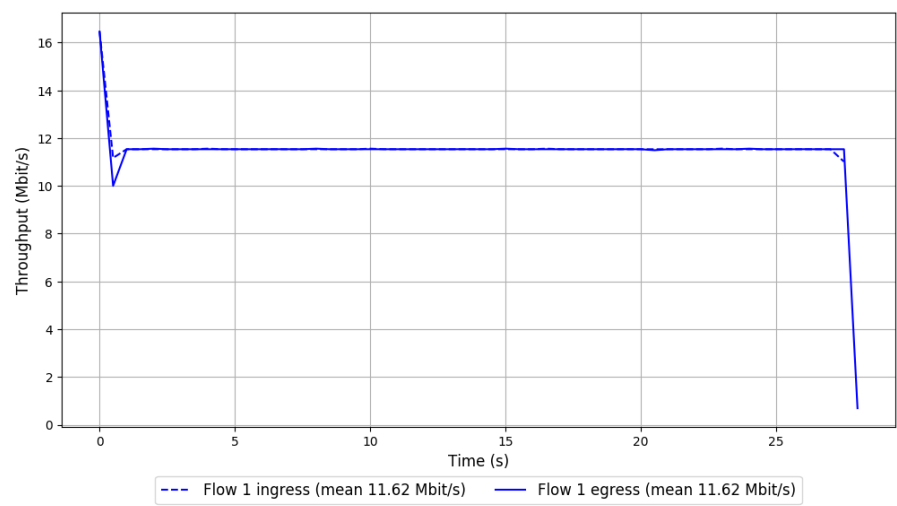
-- Flow 1:

Average throughput: 11.62 Mbit/s

95th percentile per-packet one-way delay: 53.267 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-20 04:38:58

End at: 2017-12-20 04:39:28

Below is generated by plot.py at 2017-12-20 06:24:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.45 Mbit/s

95th percentile per-packet one-way delay: 53.324 ms

Loss rate: 0.00%

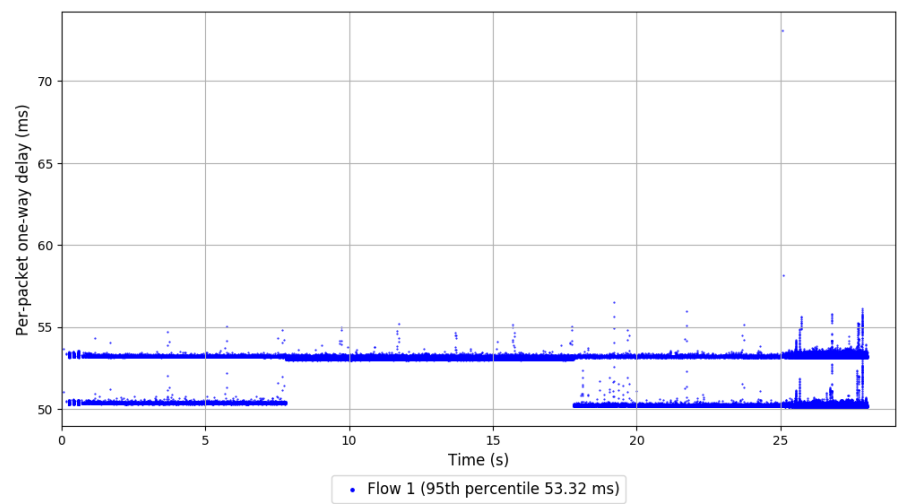
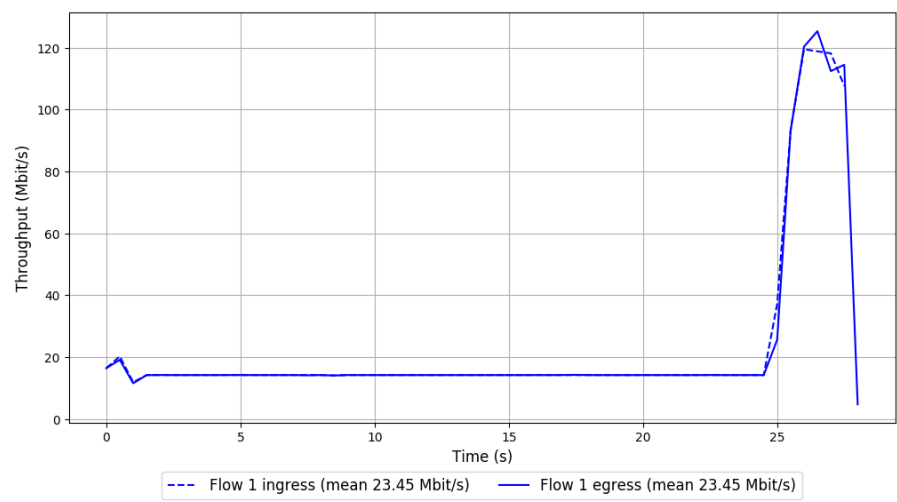
-- Flow 1:

Average throughput: 23.45 Mbit/s

95th percentile per-packet one-way delay: 53.324 ms

Loss rate: 0.00%

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

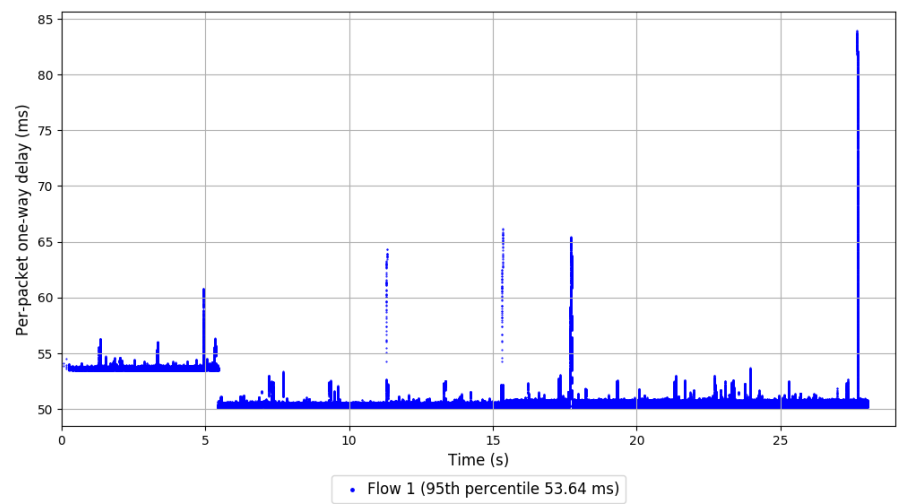
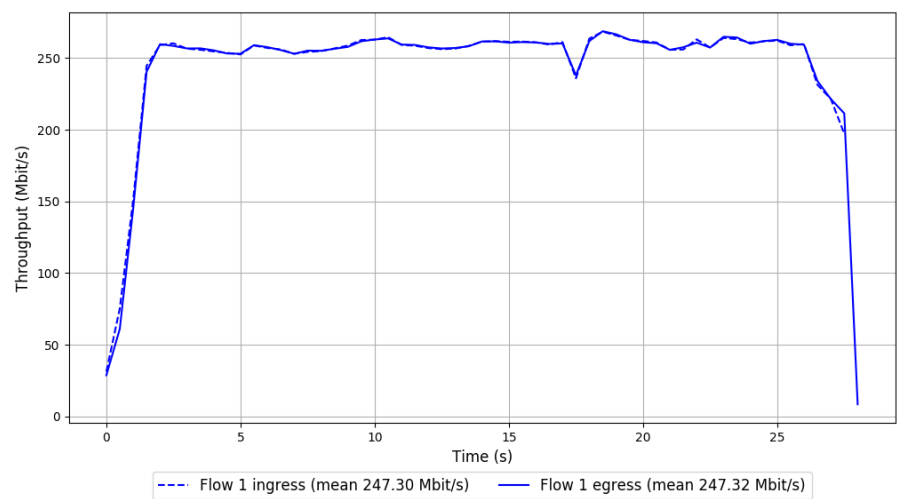


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-20 04:50:20
End at: 2017-12-20 04:50:50

# Below is generated by plot.py at 2017-12-20 06:25:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 247.32 Mbit/s
95th percentile per-packet one-way delay: 53.639 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 247.32 Mbit/s
95th percentile per-packet one-way delay: 53.639 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-20 03:11:05

End at: 2017-12-20 03:11:35

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.27 Mbit/s

95th percentile per-packet one-way delay: 53.796 ms

Loss rate: 0.23%

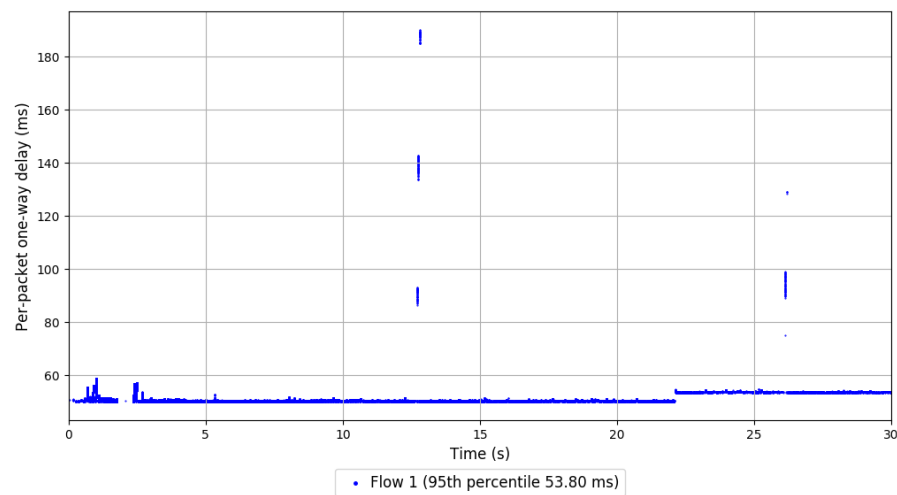
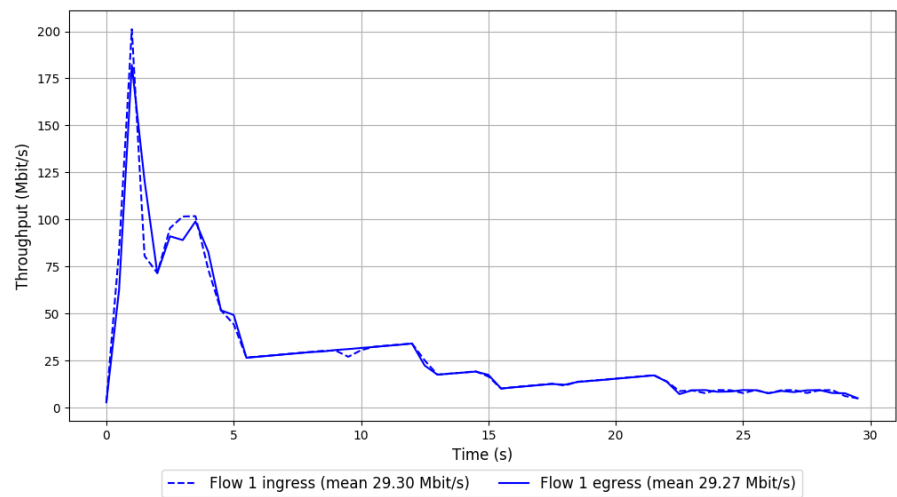
-- Flow 1:

Average throughput: 29.27 Mbit/s

95th percentile per-packet one-way delay: 53.796 ms

Loss rate: 0.23%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-20 03:22:21

End at: 2017-12-20 03:22:52

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.96 Mbit/s

95th percentile per-packet one-way delay: 52.972 ms

Loss rate: 0.07%

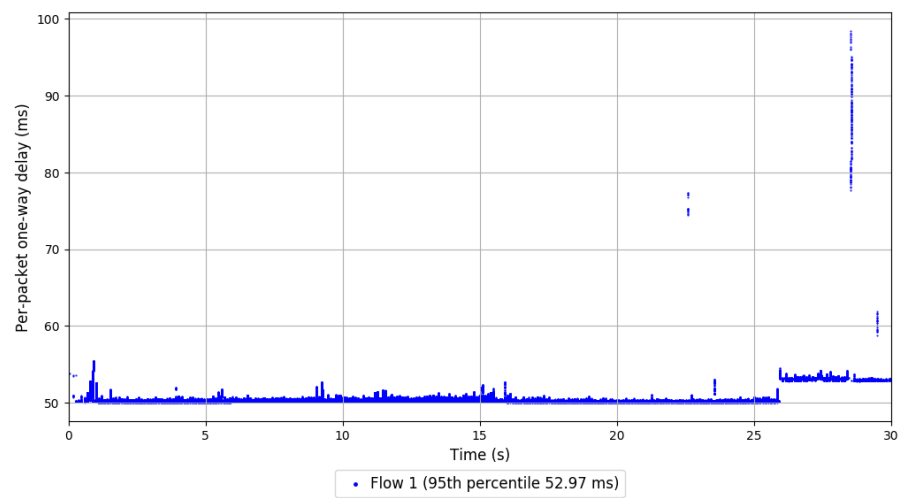
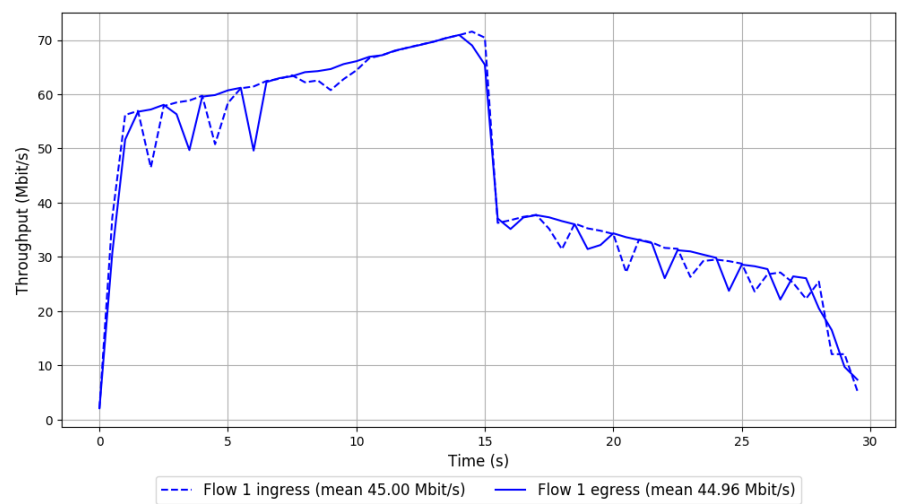
-- Flow 1:

Average throughput: 44.96 Mbit/s

95th percentile per-packet one-way delay: 52.972 ms

Loss rate: 0.07%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-20 03:33:40

End at: 2017-12-20 03:34:10

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.83 Mbit/s

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

Loss rate: 0.10%

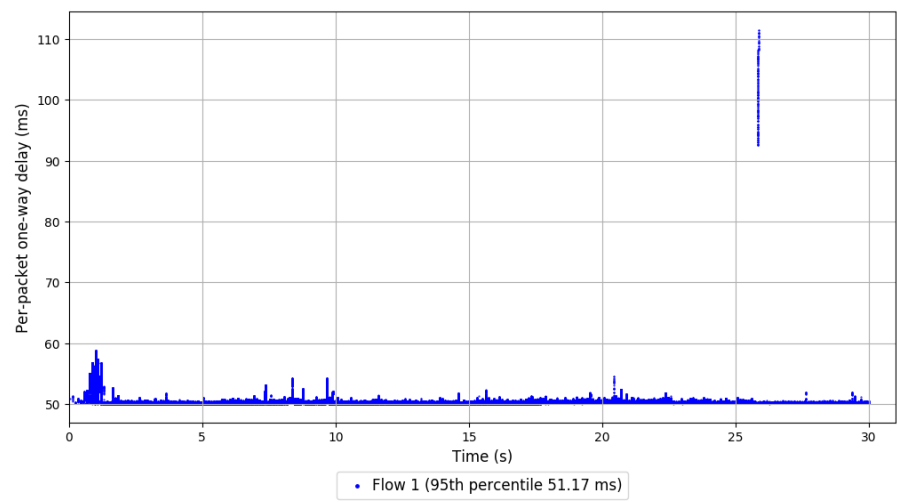
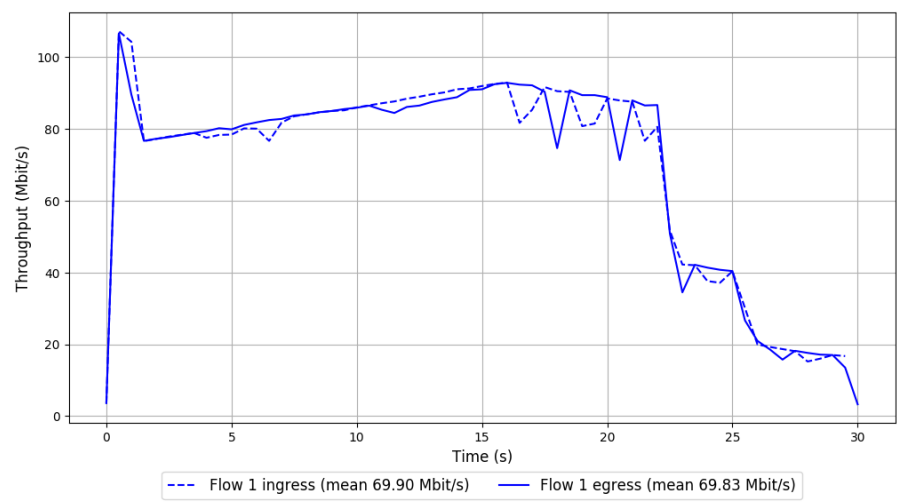
-- Flow 1:

Average throughput: 69.83 Mbit/s

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

Loss rate: 0.10%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-20 03:45:08

End at: 2017-12-20 03:45:38

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.53 Mbit/s

95th percentile per-packet one-way delay: 50.782 ms

Loss rate: 0.05%

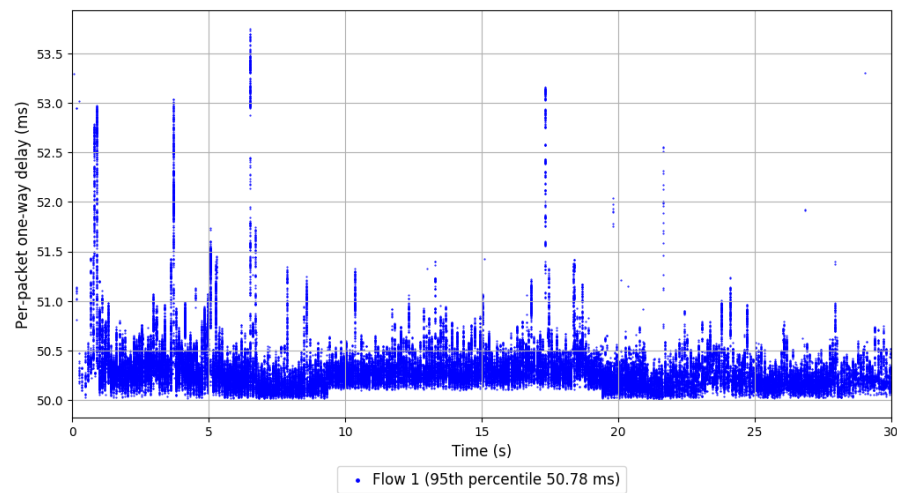
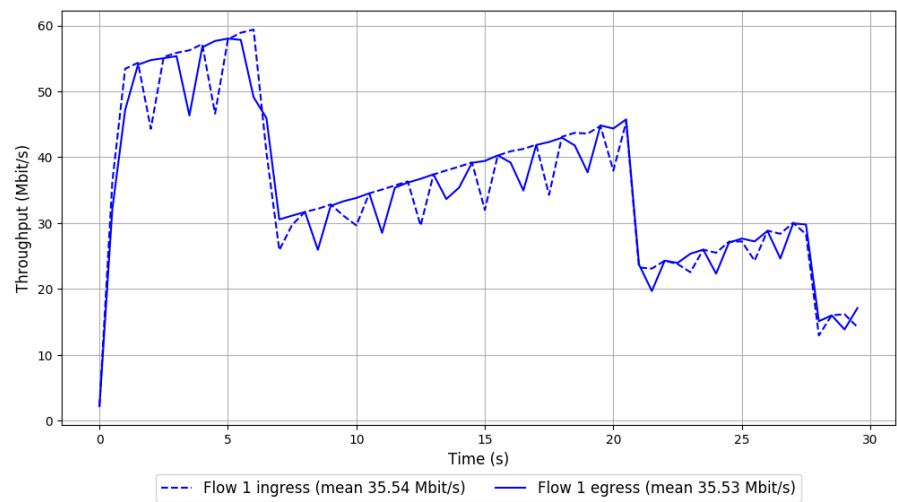
-- Flow 1:

Average throughput: 35.53 Mbit/s

95th percentile per-packet one-way delay: 50.782 ms

Loss rate: 0.05%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-20 03:56:36

End at: 2017-12-20 03:57:06

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.22 Mbit/s

95th percentile per-packet one-way delay: 51.009 ms

Loss rate: 0.01%

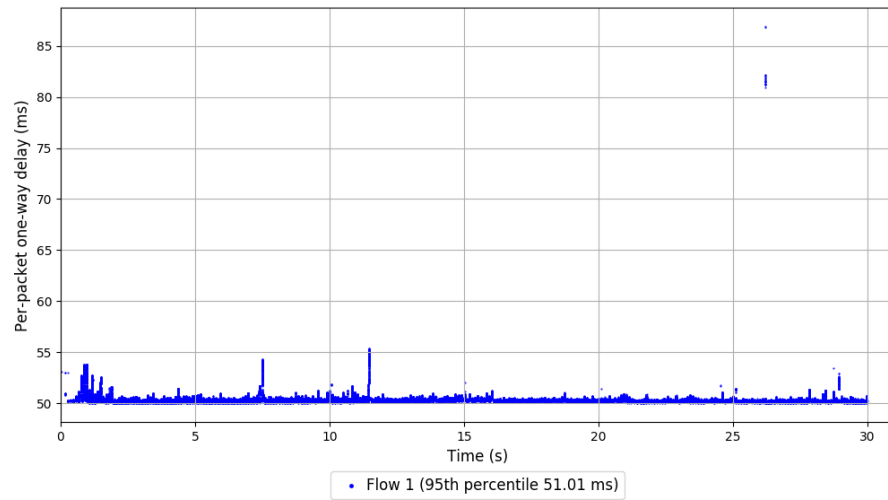
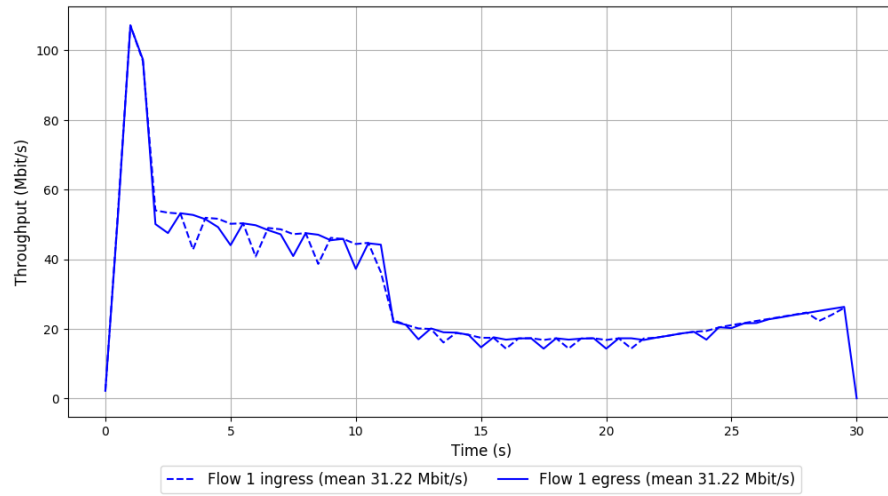
-- Flow 1:

Average throughput: 31.22 Mbit/s

95th percentile per-packet one-way delay: 51.009 ms

Loss rate: 0.01%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-20 04:07:57

End at: 2017-12-20 04:08:27

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.49 Mbit/s

95th percentile per-packet one-way delay: 53.202 ms

Loss rate: 0.57%

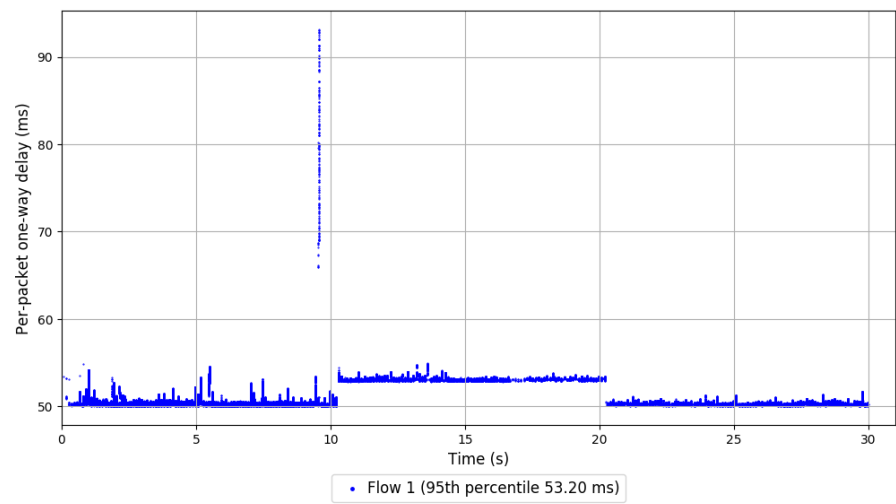
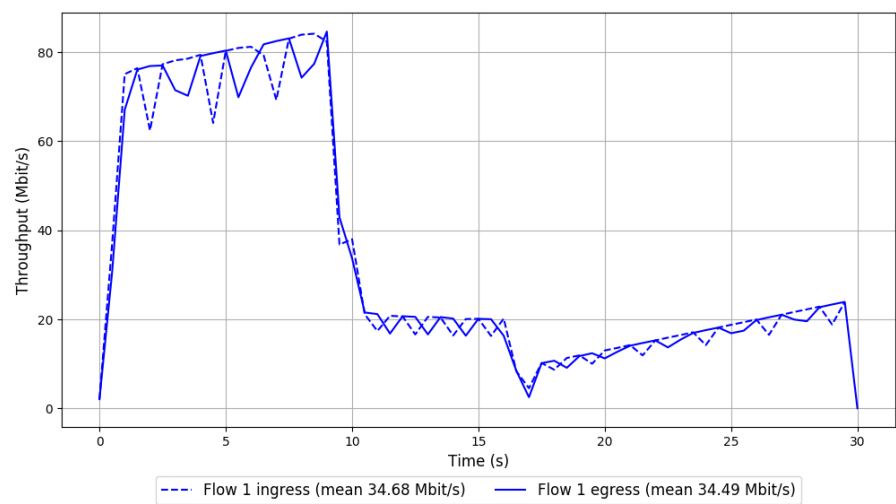
-- Flow 1:

Average throughput: 34.49 Mbit/s

95th percentile per-packet one-way delay: 53.202 ms

Loss rate: 0.57%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-20 04:19:30

End at: 2017-12-20 04:20:00

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.29 Mbit/s

95th percentile per-packet one-way delay: 53.385 ms

Loss rate: 0.32%

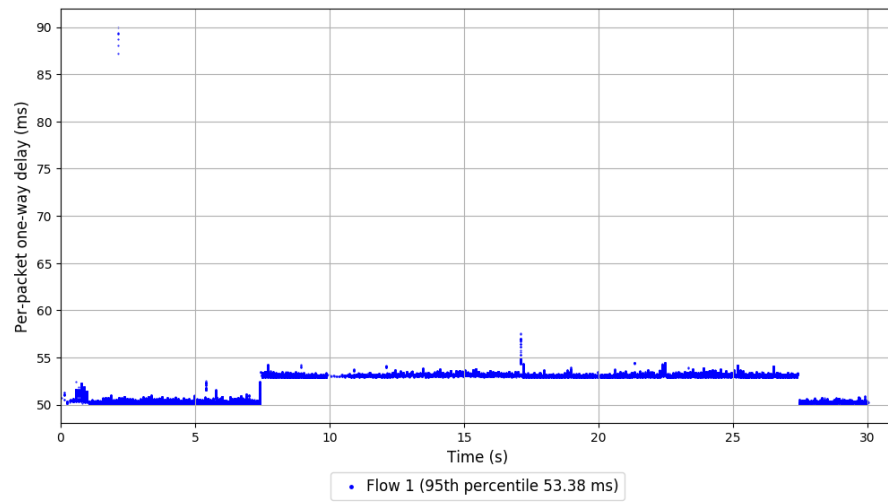
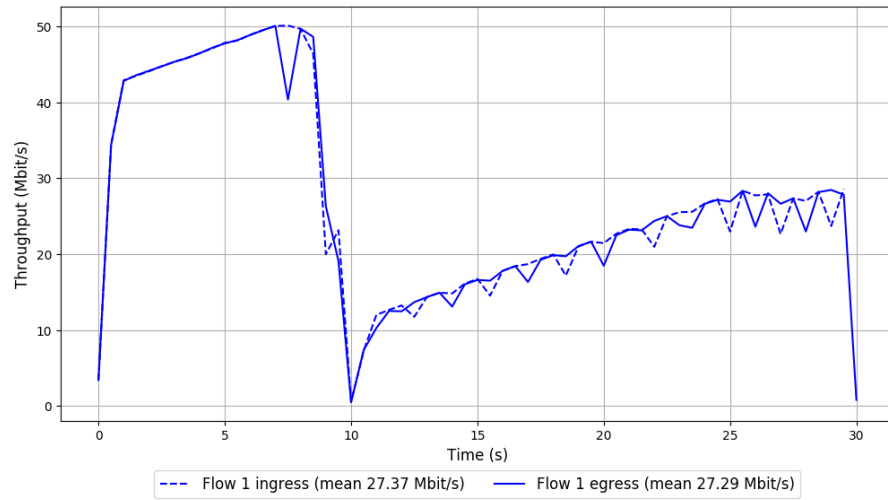
-- Flow 1:

Average throughput: 27.29 Mbit/s

95th percentile per-packet one-way delay: 53.385 ms

Loss rate: 0.32%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-20 04:30:52

End at: 2017-12-20 04:31:22

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.93 Mbit/s

95th percentile per-packet one-way delay: 53.436 ms

Loss rate: 0.05%

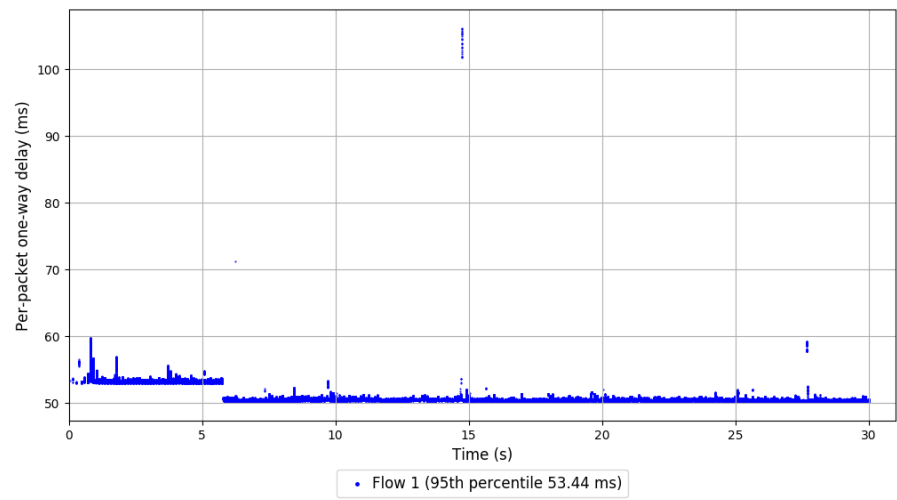
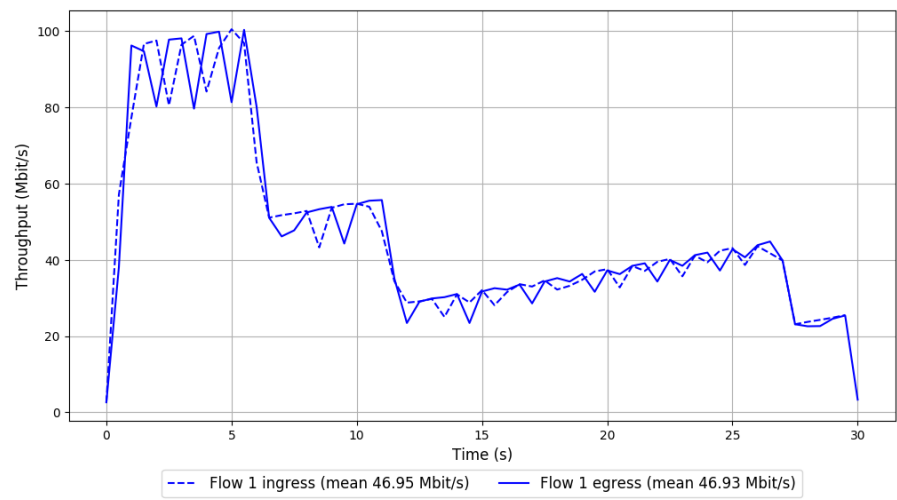
-- Flow 1:

Average throughput: 46.93 Mbit/s

95th percentile per-packet one-way delay: 53.436 ms

Loss rate: 0.05%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-20 04:42:16

End at: 2017-12-20 04:42:46

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.29 Mbit/s

95th percentile per-packet one-way delay: 53.467 ms

Loss rate: 1.25%

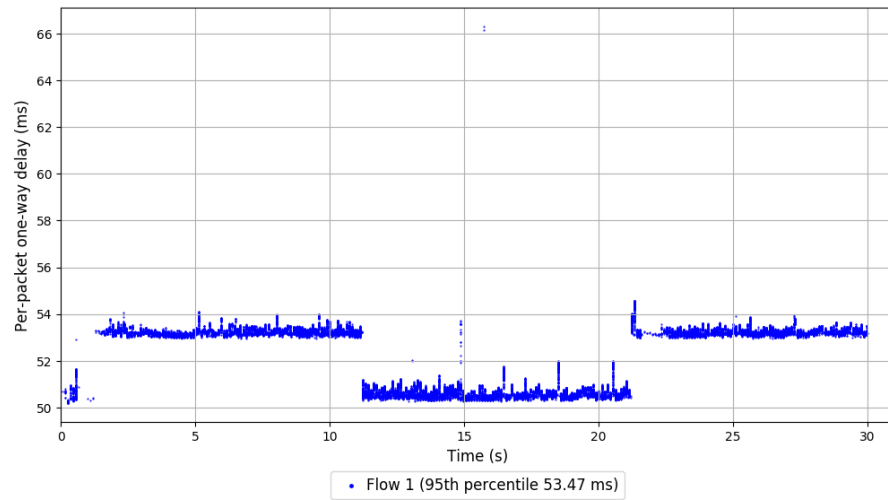
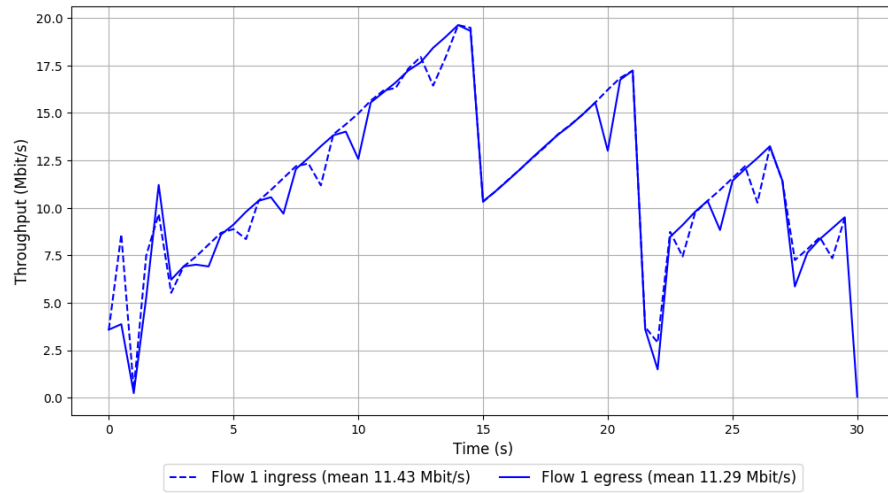
-- Flow 1:

Average throughput: 11.29 Mbit/s

95th percentile per-packet one-way delay: 53.467 ms

Loss rate: 1.25%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-20 04:53:55

End at: 2017-12-20 04:54:25

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.46 Mbit/s

95th percentile per-packet one-way delay: 51.396 ms

Loss rate: 0.17%

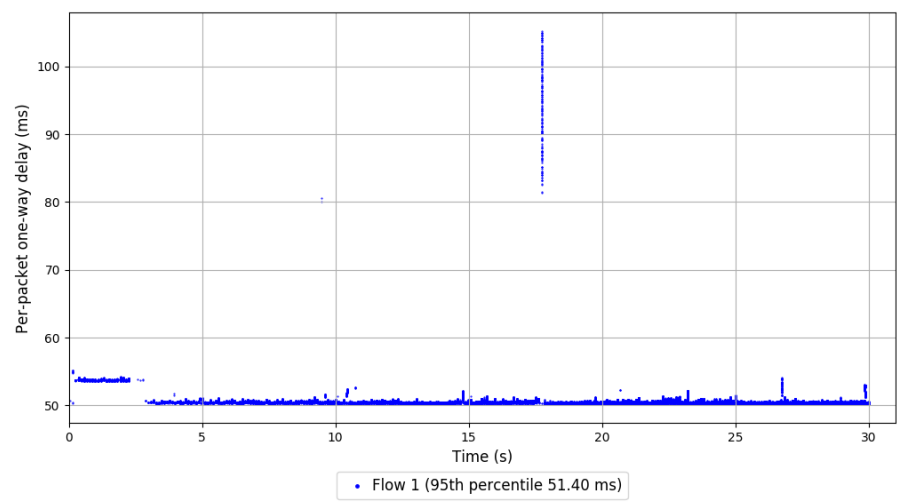
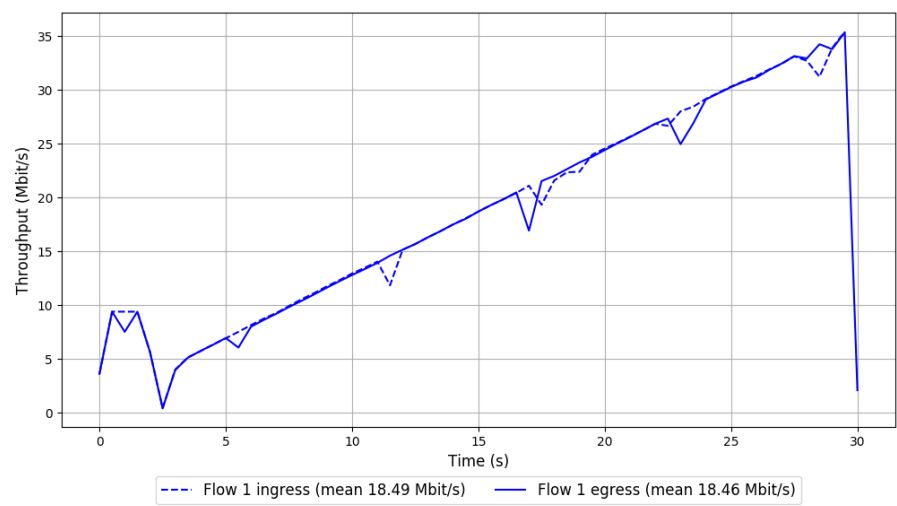
-- Flow 1:

Average throughput: 18.46 Mbit/s

95th percentile per-packet one-way delay: 51.396 ms

Loss rate: 0.17%

Run 10: Report of TCP Vegas — Data Link

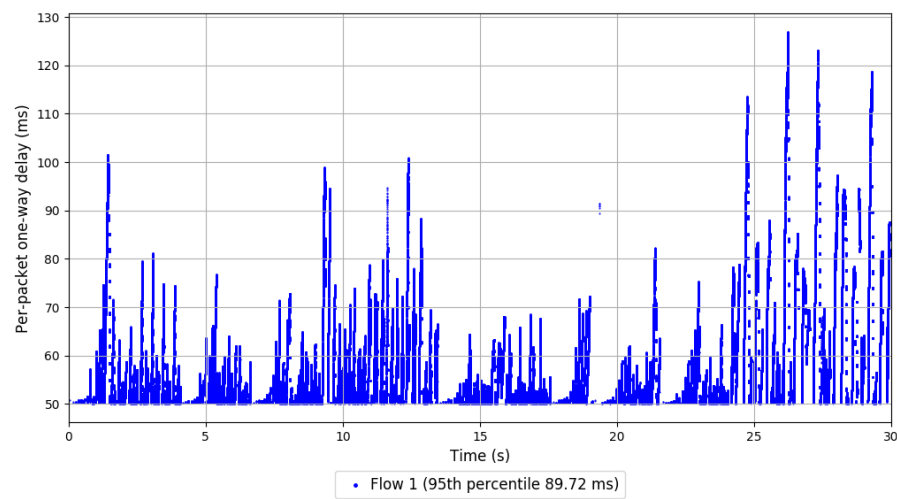
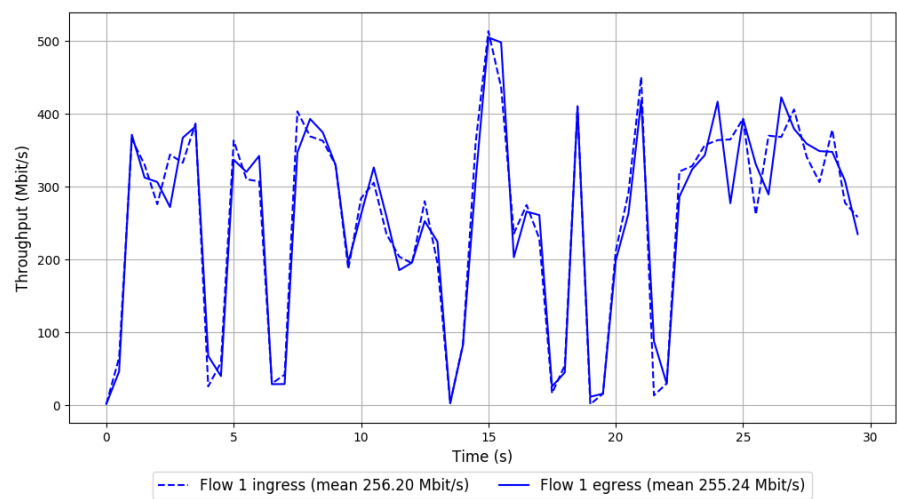


```
Run 1: Statistics of Verus

Start at: 2017-12-20 03:09:13
End at: 2017-12-20 03:09:43

# Below is generated by plot.py at 2017-12-20 06:25:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 255.24 Mbit/s
95th percentile per-packet one-way delay: 89.717 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 255.24 Mbit/s
95th percentile per-packet one-way delay: 89.717 ms
Loss rate: 0.34%
```

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-20 03:20:28

End at: 2017-12-20 03:20:58

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 269.50 Mbit/s

95th percentile per-packet one-way delay: 100.301 ms

Loss rate: 0.02%

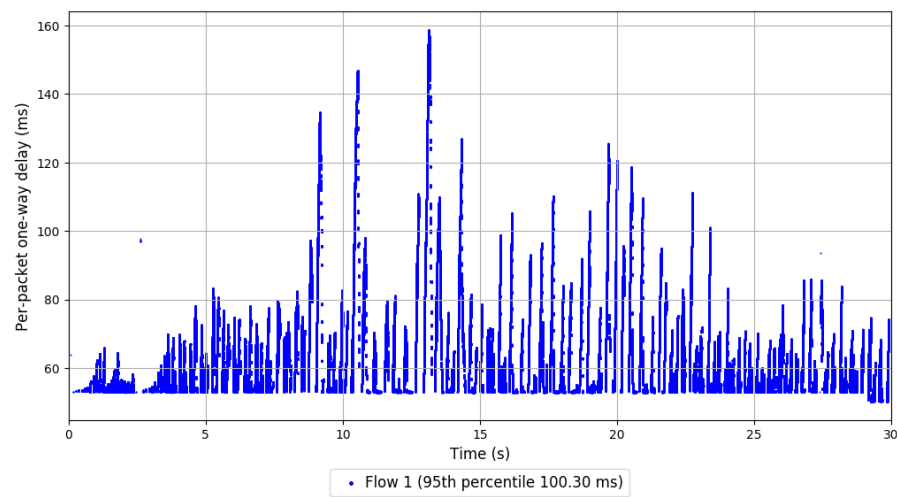
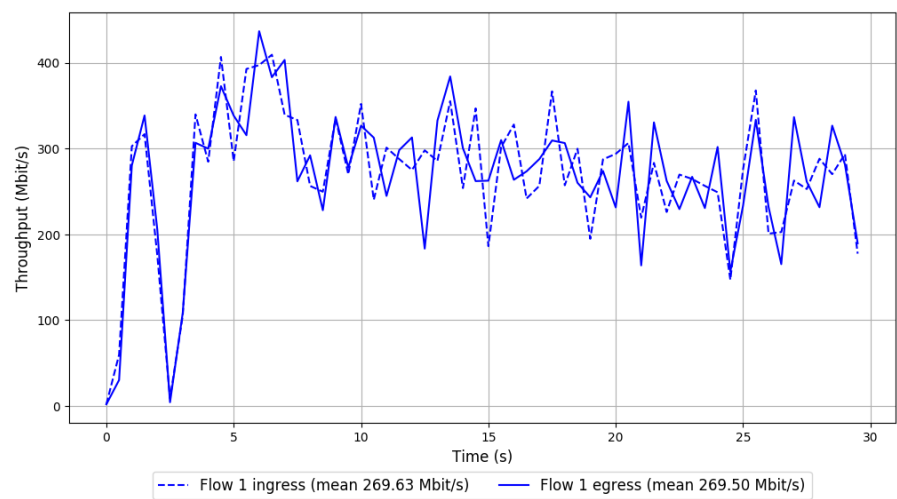
-- Flow 1:

Average throughput: 269.50 Mbit/s

95th percentile per-packet one-way delay: 100.301 ms

Loss rate: 0.02%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-20 03:31:47

End at: 2017-12-20 03:32:17

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 276.74 Mbit/s

95th percentile per-packet one-way delay: 135.590 ms

Loss rate: 0.78%

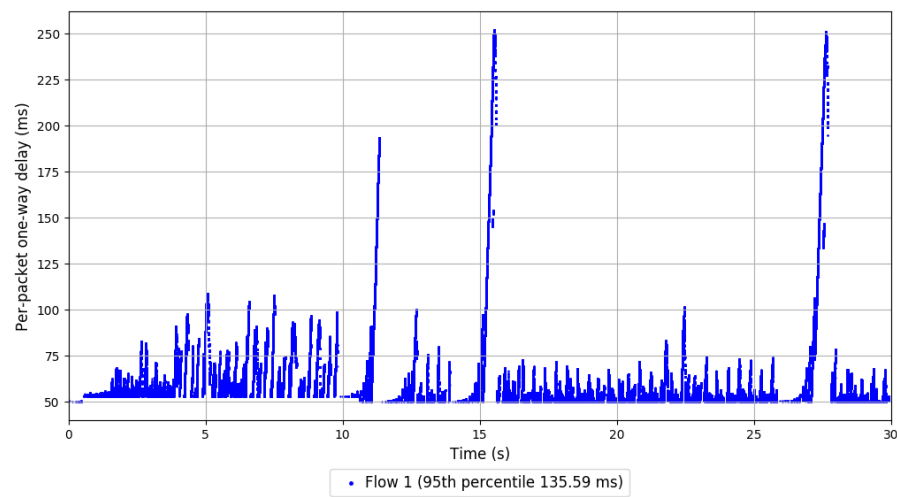
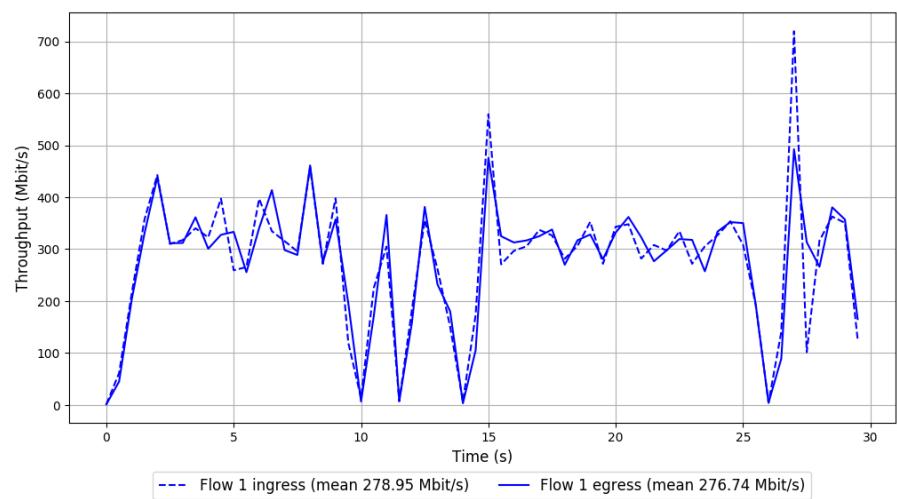
-- Flow 1:

Average throughput: 276.74 Mbit/s

95th percentile per-packet one-way delay: 135.590 ms

Loss rate: 0.78%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-20 03:43:16

End at: 2017-12-20 03:43:46

Below is generated by plot.py at 2017-12-20 06:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 248.88 Mbit/s

95th percentile per-packet one-way delay: 70.682 ms

Loss rate: 0.10%

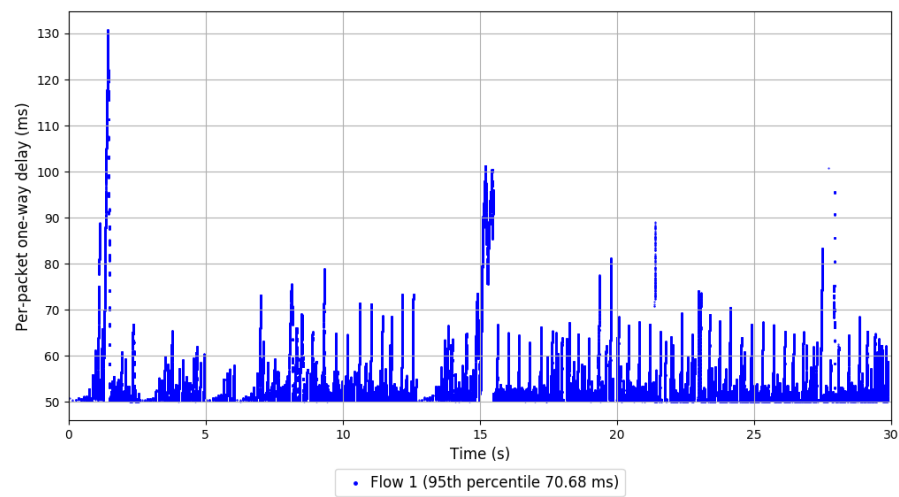
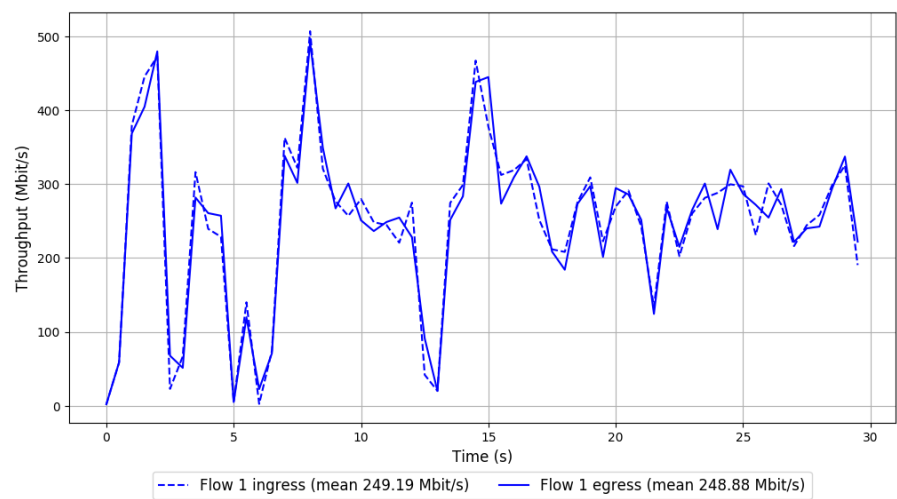
-- Flow 1:

Average throughput: 248.88 Mbit/s

95th percentile per-packet one-way delay: 70.682 ms

Loss rate: 0.10%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-20 03:54:41

End at: 2017-12-20 03:55:11

Below is generated by plot.py at 2017-12-20 06:29:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 294.92 Mbit/s

95th percentile per-packet one-way delay: 85.864 ms

Loss rate: 0.49%

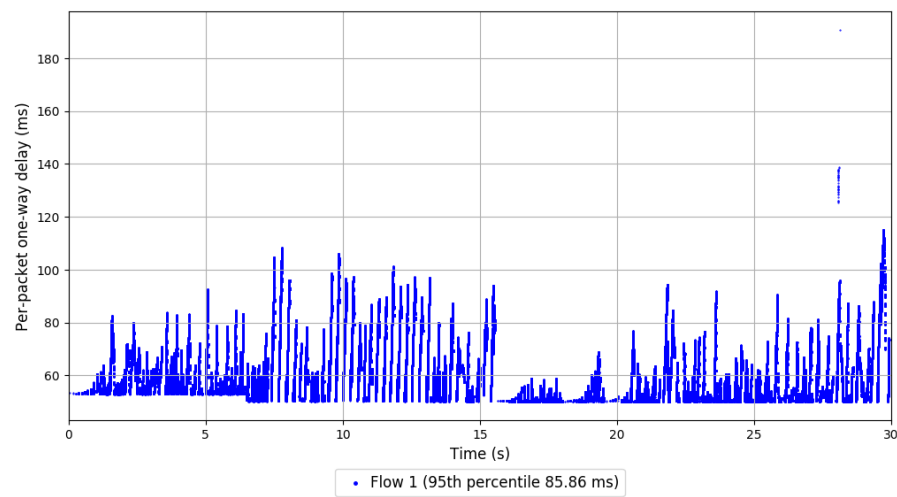
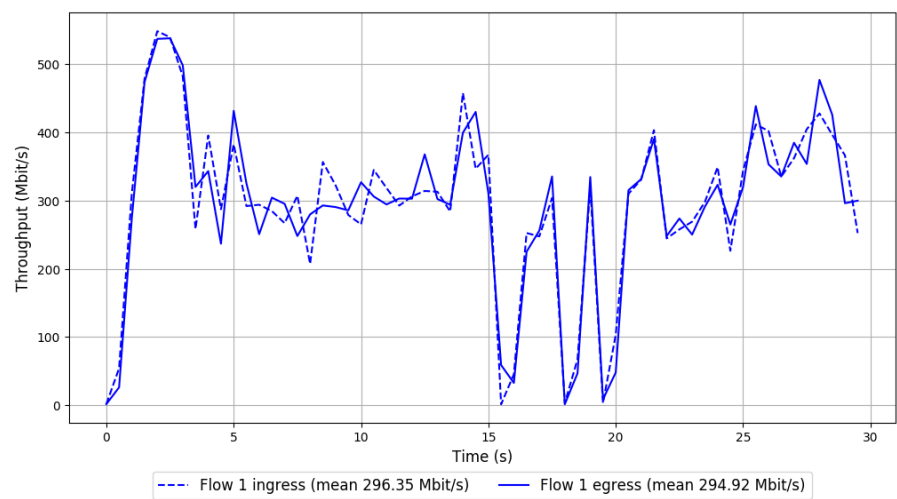
-- Flow 1:

Average throughput: 294.92 Mbit/s

95th percentile per-packet one-way delay: 85.864 ms

Loss rate: 0.49%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-20 04:06:05

End at: 2017-12-20 04:06:35

Below is generated by plot.py at 2017-12-20 06:29:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 262.30 Mbit/s

95th percentile per-packet one-way delay: 70.957 ms

Loss rate: 0.25%

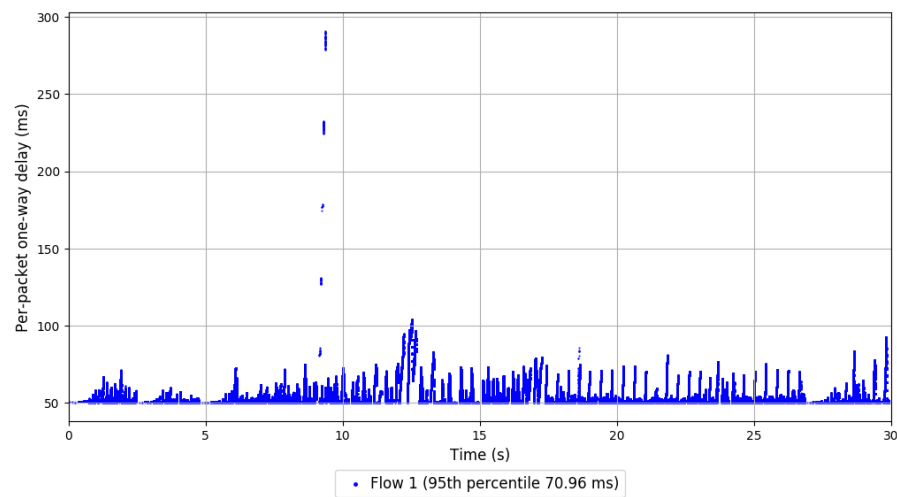
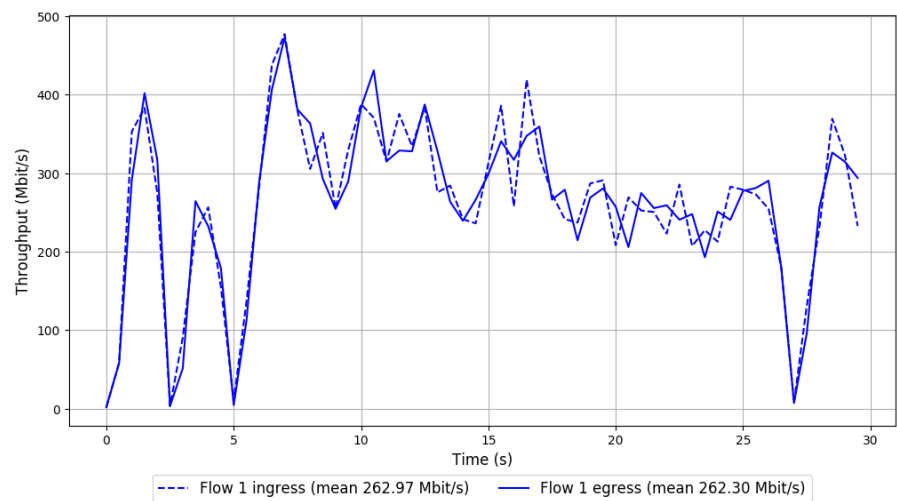
-- Flow 1:

Average throughput: 262.30 Mbit/s

95th percentile per-packet one-way delay: 70.957 ms

Loss rate: 0.25%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-20 04:17:40

End at: 2017-12-20 04:18:10

Below is generated by plot.py at 2017-12-20 06:29:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.48 Mbit/s

95th percentile per-packet one-way delay: 90.760 ms

Loss rate: 0.38%

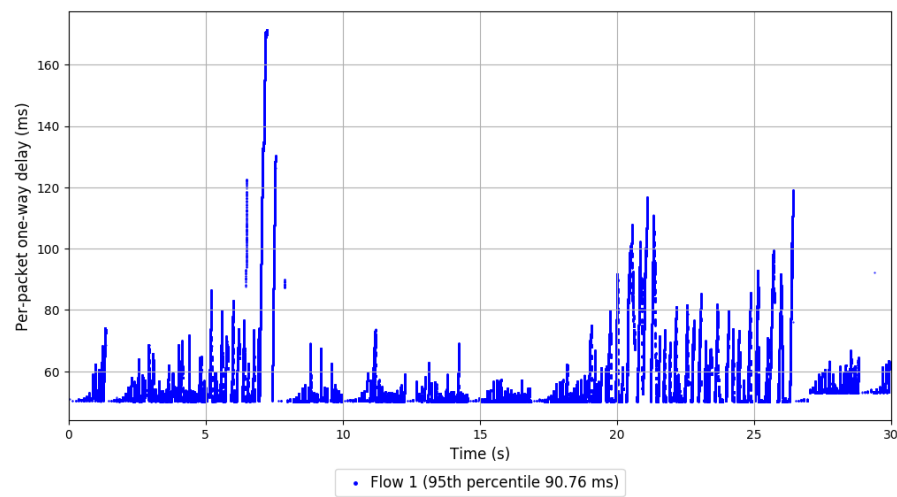
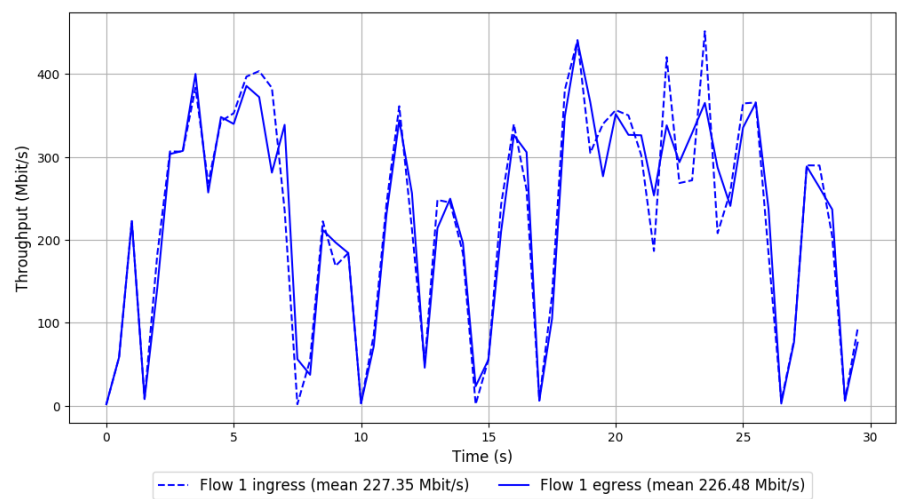
-- Flow 1:

Average throughput: 226.48 Mbit/s

95th percentile per-packet one-way delay: 90.760 ms

Loss rate: 0.38%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-20 04:28:57

End at: 2017-12-20 04:29:27

Below is generated by plot.py at 2017-12-20 06:29:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 270.77 Mbit/s

95th percentile per-packet one-way delay: 152.026 ms

Loss rate: 1.41%

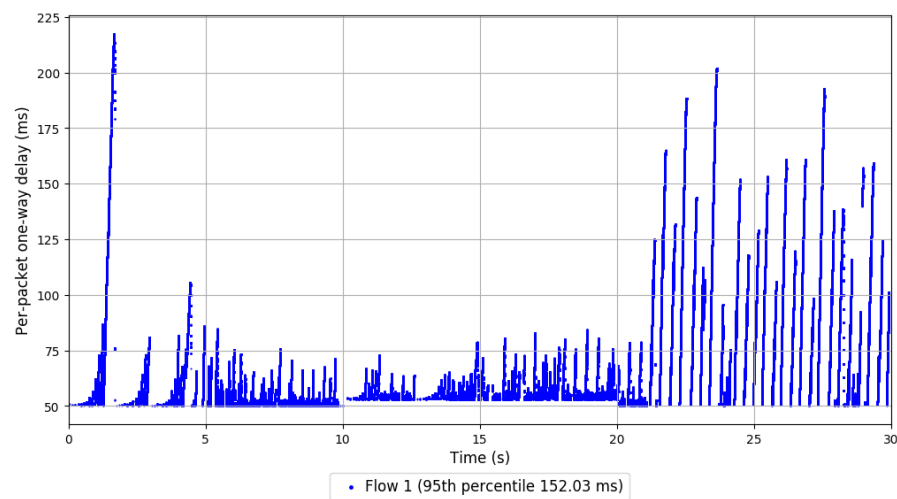
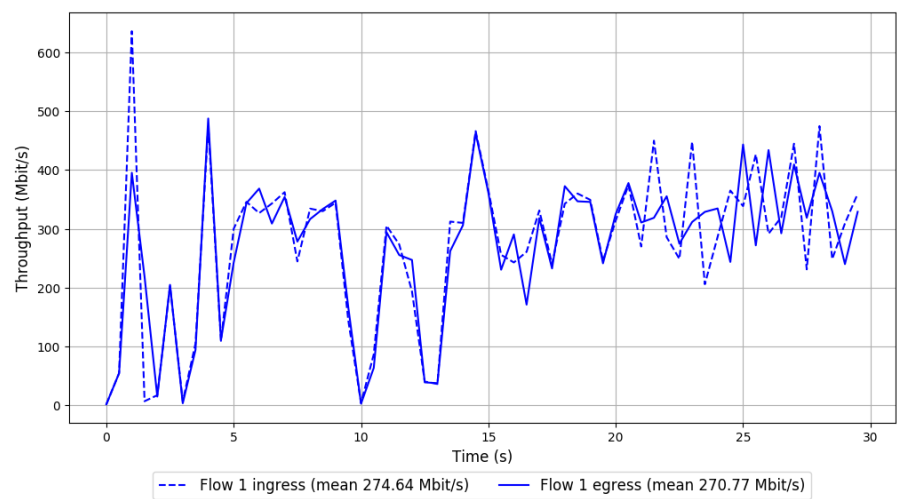
-- Flow 1:

Average throughput: 270.77 Mbit/s

95th percentile per-packet one-way delay: 152.026 ms

Loss rate: 1.41%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-20 04:40:21

End at: 2017-12-20 04:40:51

Below is generated by plot.py at 2017-12-20 06:29:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 294.50 Mbit/s

95th percentile per-packet one-way delay: 180.276 ms

Loss rate: 0.45%

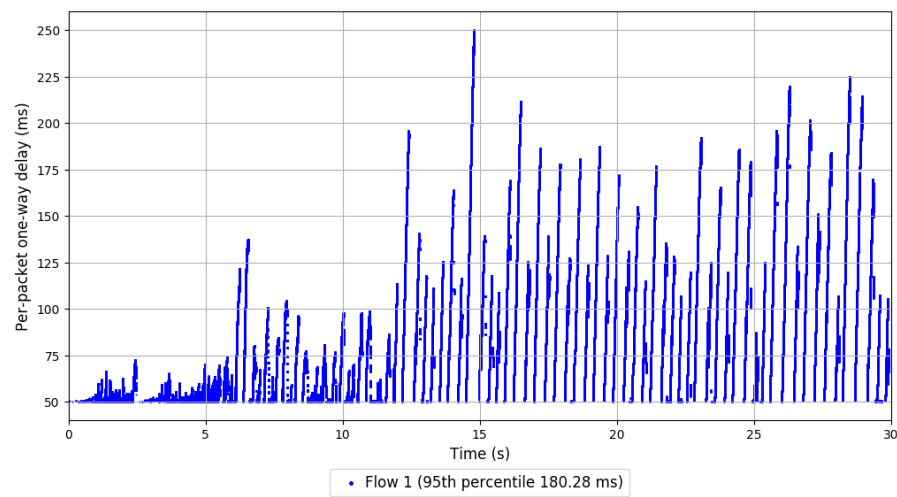
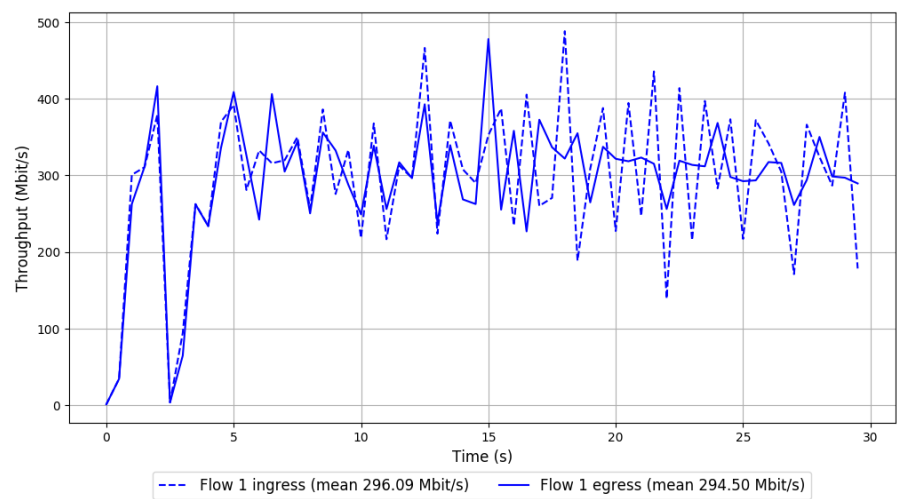
-- Flow 1:

Average throughput: 294.50 Mbit/s

95th percentile per-packet one-way delay: 180.276 ms

Loss rate: 0.45%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-20 04:52:01

End at: 2017-12-20 04:52:31

Below is generated by plot.py at 2017-12-20 06:29:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 272.21 Mbit/s

95th percentile per-packet one-way delay: 93.688 ms

Loss rate: 0.14%

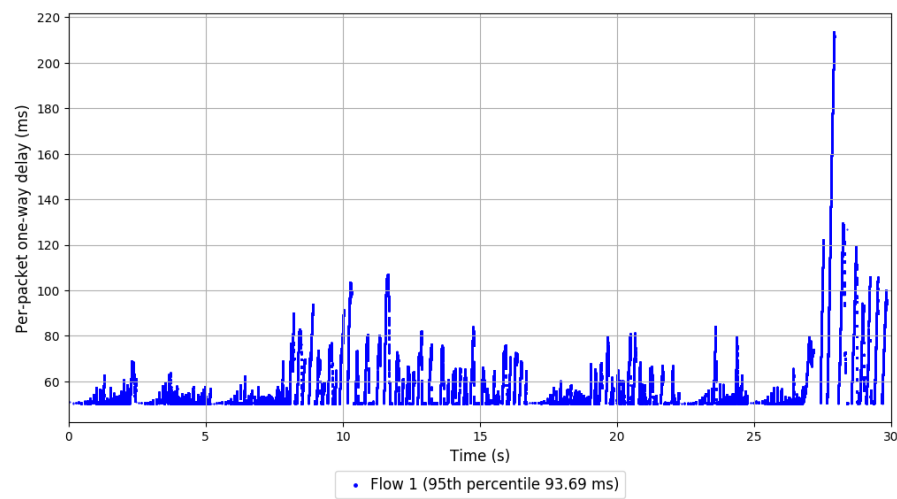
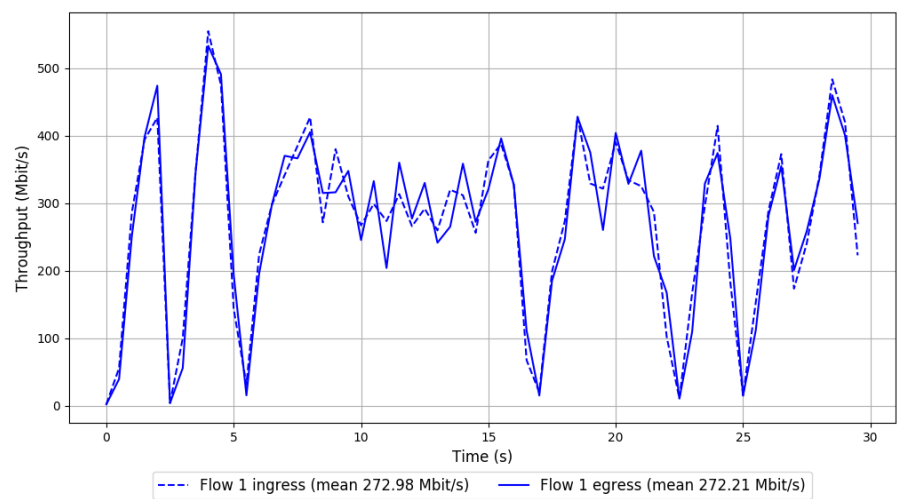
-- Flow 1:

Average throughput: 272.21 Mbit/s

95th percentile per-packet one-way delay: 93.688 ms

Loss rate: 0.14%

Run 10: Report of Verus — Data Link

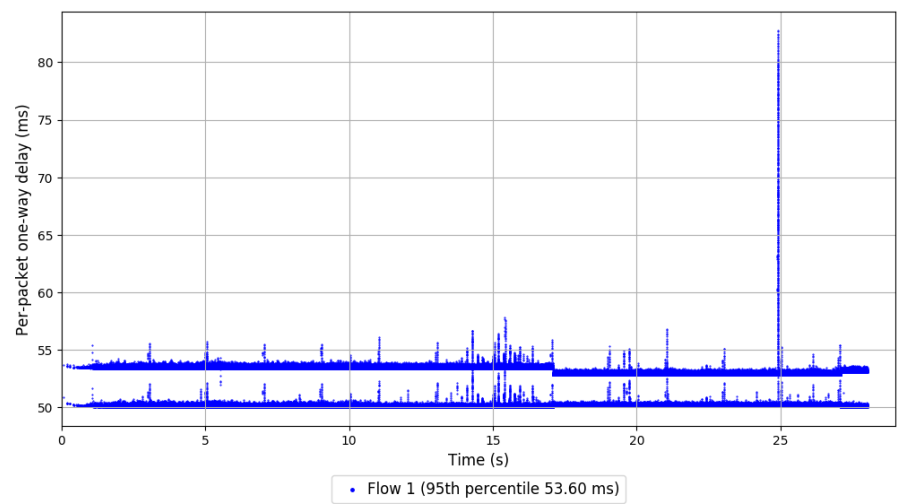
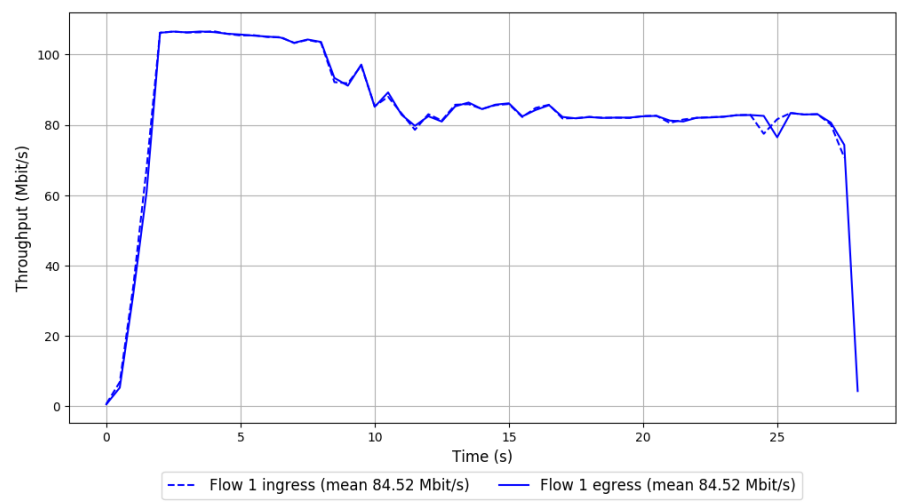


```
Run 1: Statistics of Copa

Start at: 2017-12-20 03:08:28
End at: 2017-12-20 03:08:58

# Below is generated by plot.py at 2017-12-20 06:29:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.52 Mbit/s
95th percentile per-packet one-way delay: 53.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.52 Mbit/s
95th percentile per-packet one-way delay: 53.598 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-20 03:19:46

End at: 2017-12-20 03:20:16

Below is generated by plot.py at 2017-12-20 06:29:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.38 Mbit/s

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

Loss rate: 0.00%

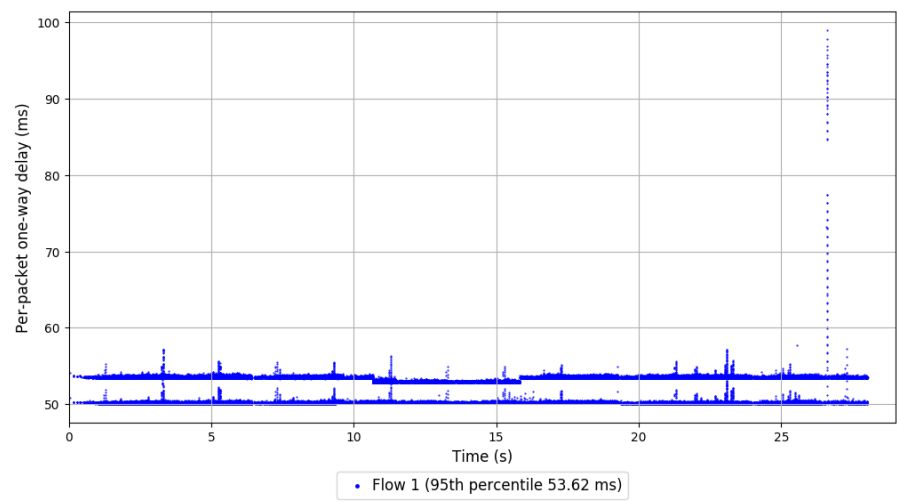
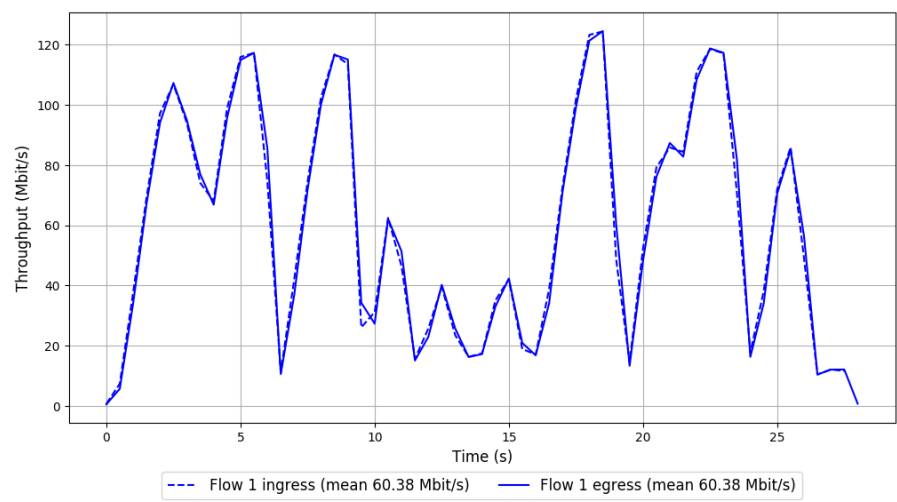
-- Flow 1:

Average throughput: 60.38 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-20 03:31:03

End at: 2017-12-20 03:31:33

Below is generated by plot.py at 2017-12-20 06:30:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.66 Mbit/s

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

Loss rate: 0.15%

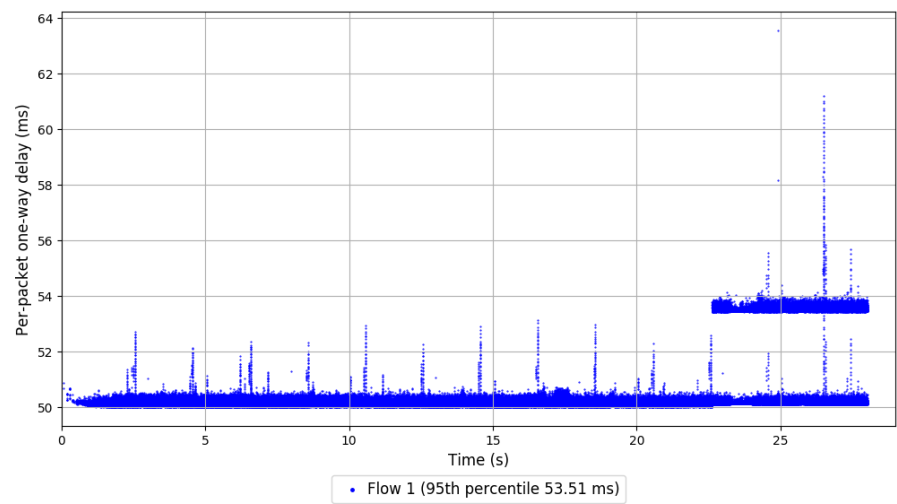
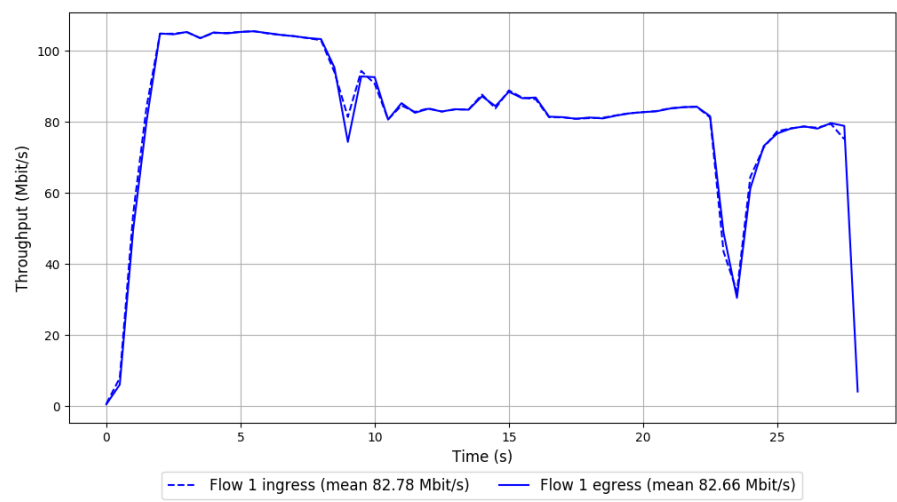
-- Flow 1:

Average throughput: 82.66 Mbit/s

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

Loss rate: 0.15%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-20 03:42:31

End at: 2017-12-20 03:43:02

Below is generated by plot.py at 2017-12-20 06:30:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.33 Mbit/s

95th percentile per-packet one-way delay: 53.451 ms

Loss rate: 0.00%

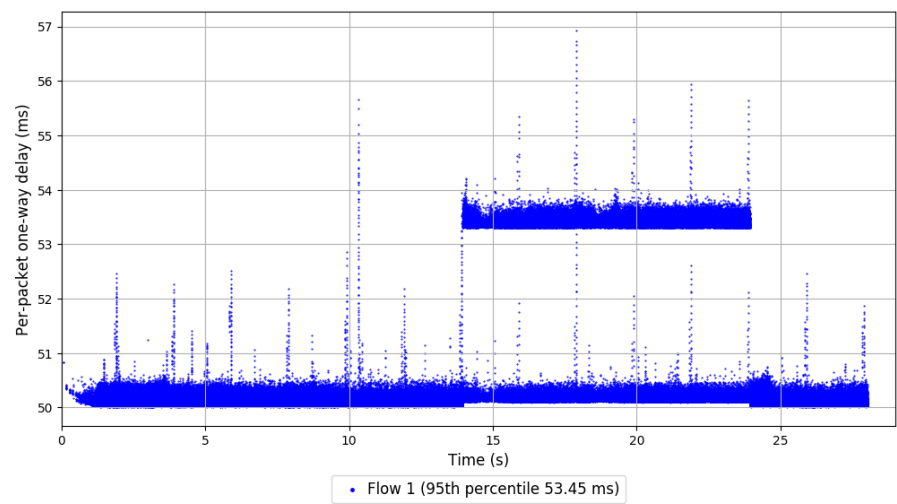
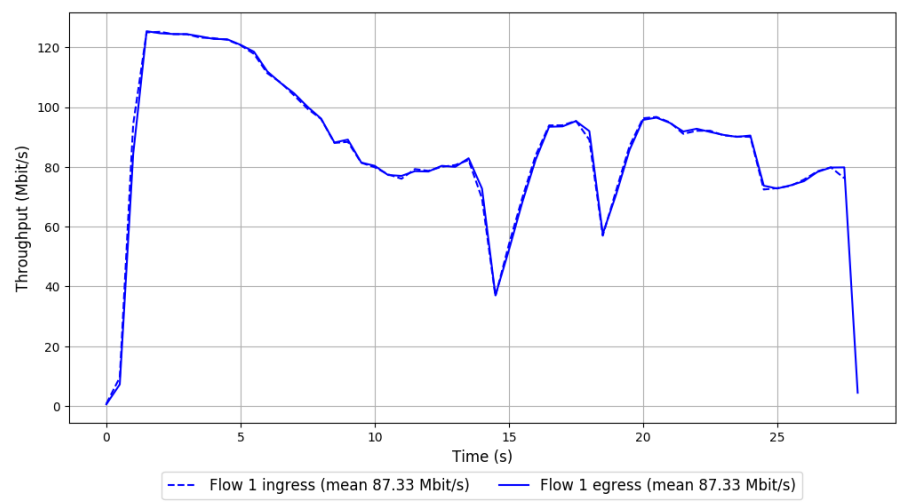
-- Flow 1:

Average throughput: 87.33 Mbit/s

95th percentile per-packet one-way delay: 53.451 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-20 03:53:57

End at: 2017-12-20 03:54:27

Below is generated by plot.py at 2017-12-20 06:31:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.17 Mbit/s

95th percentile per-packet one-way delay: 53.159 ms

Loss rate: 0.01%

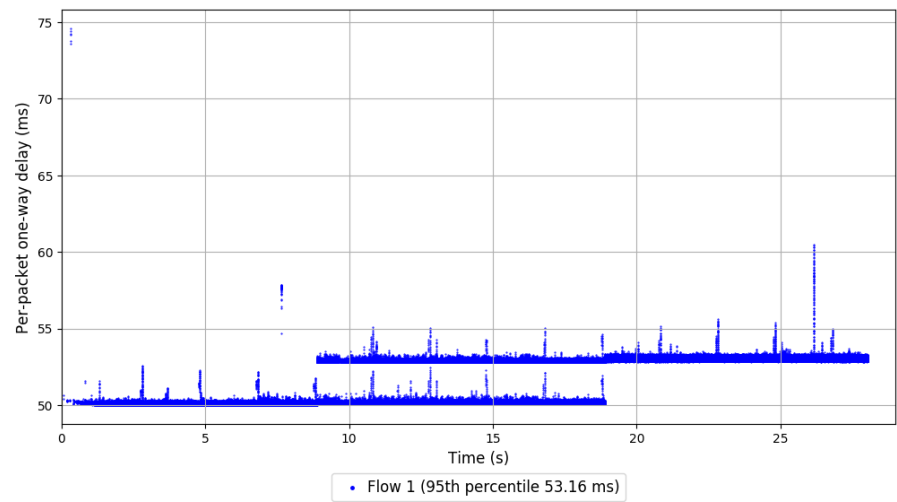
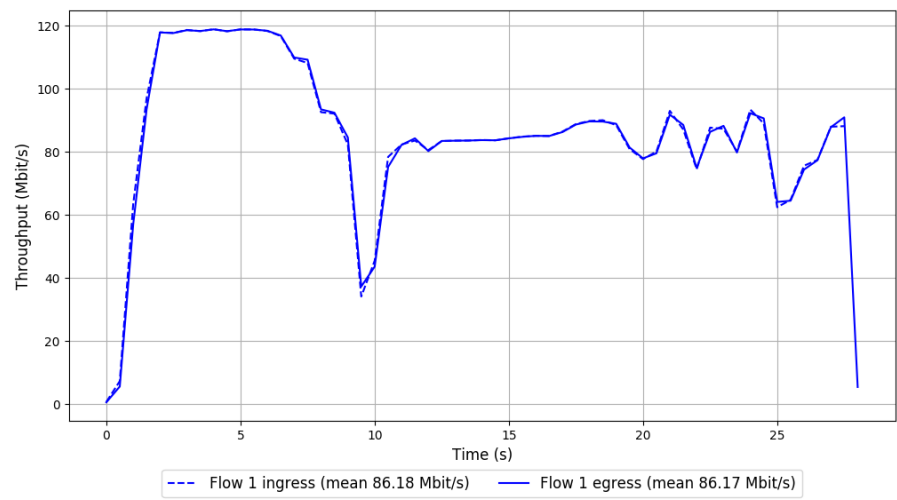
-- Flow 1:

Average throughput: 86.17 Mbit/s

95th percentile per-packet one-way delay: 53.159 ms

Loss rate: 0.01%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-20 04:05:23

End at: 2017-12-20 04:05:53

Below is generated by plot.py at 2017-12-20 06:31:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.47 Mbit/s

95th percentile per-packet one-way delay: 53.042 ms

Loss rate: 0.00%

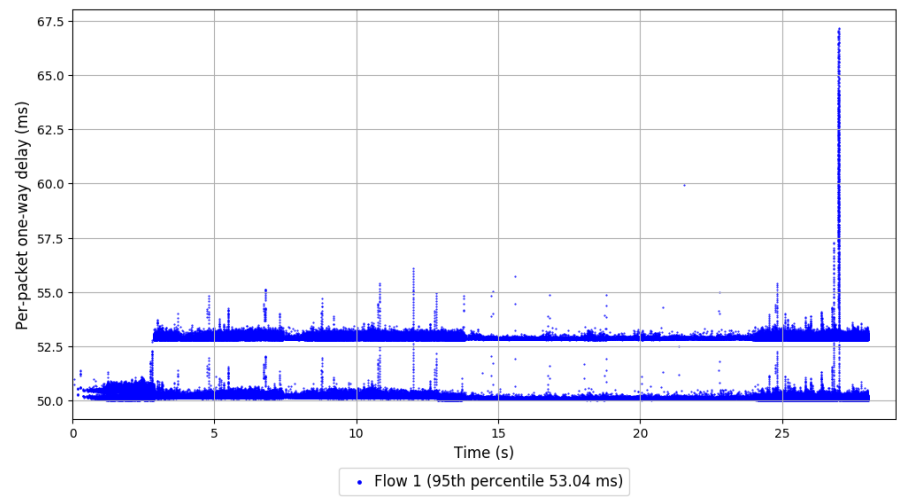
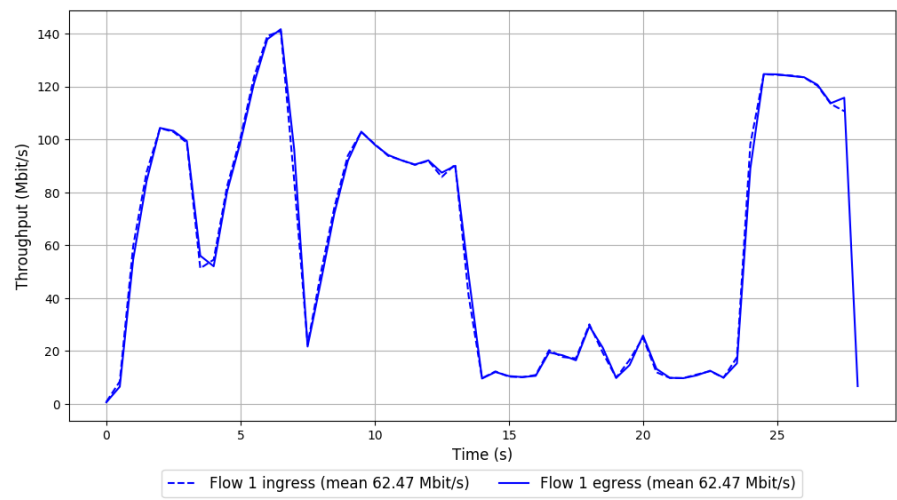
-- Flow 1:

Average throughput: 62.47 Mbit/s

95th percentile per-packet one-way delay: 53.042 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-20 04:16:56

End at: 2017-12-20 04:17:26

Below is generated by plot.py at 2017-12-20 06:31:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.53 Mbit/s

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

Loss rate: 0.00%

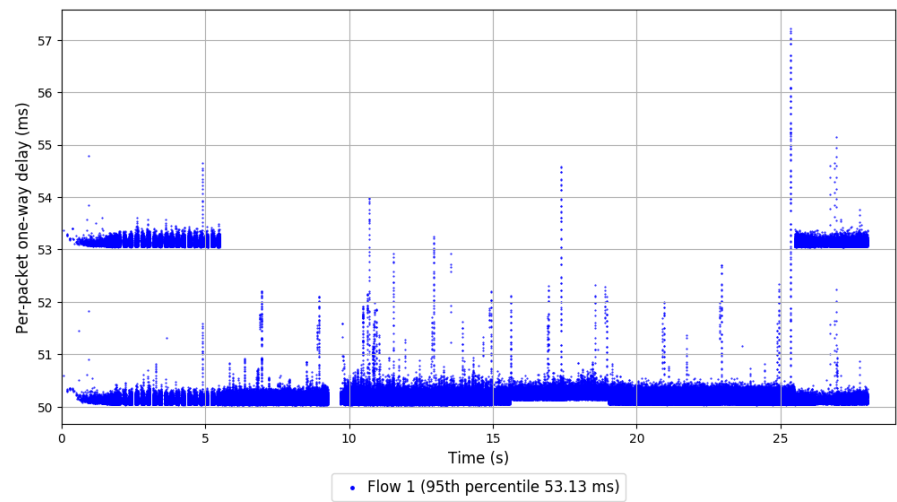
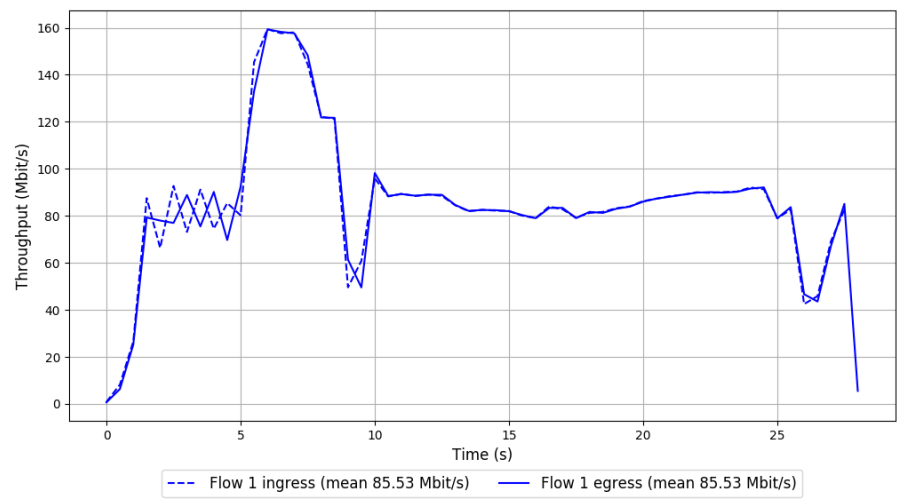
-- Flow 1:

Average throughput: 85.53 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-20 04:28:13

End at: 2017-12-20 04:28:43

Below is generated by plot.py at 2017-12-20 06:31:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.30 Mbit/s

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

Loss rate: 0.00%

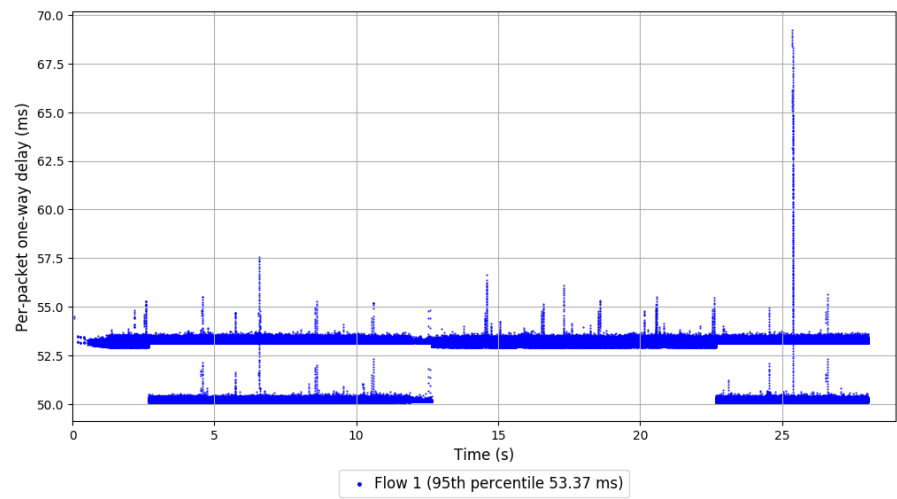
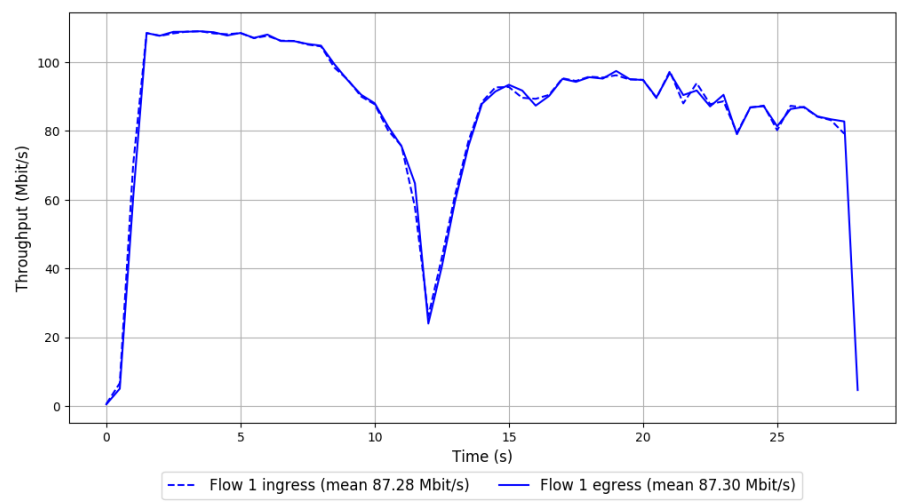
-- Flow 1:

Average throughput: 87.30 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-20 04:39:37

End at: 2017-12-20 04:40:07

Below is generated by plot.py at 2017-12-20 06:31:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.44 Mbit/s

95th percentile per-packet one-way delay: 53.121 ms

Loss rate: 0.00%

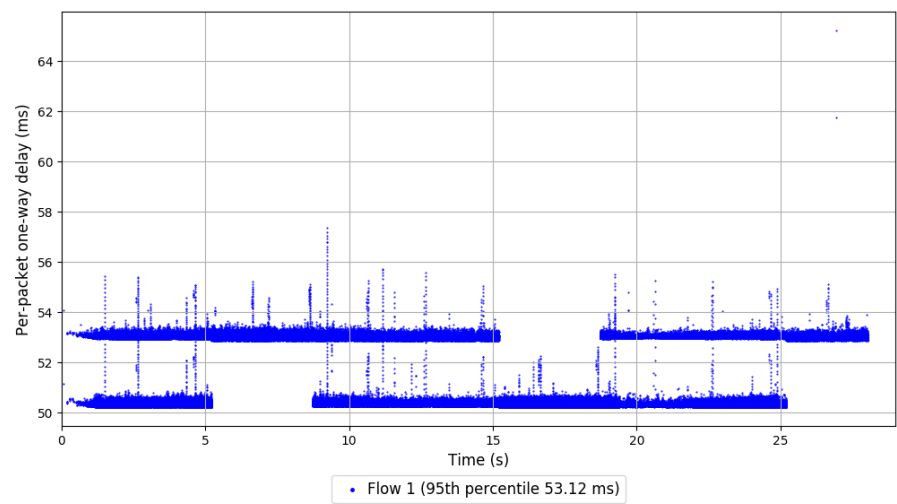
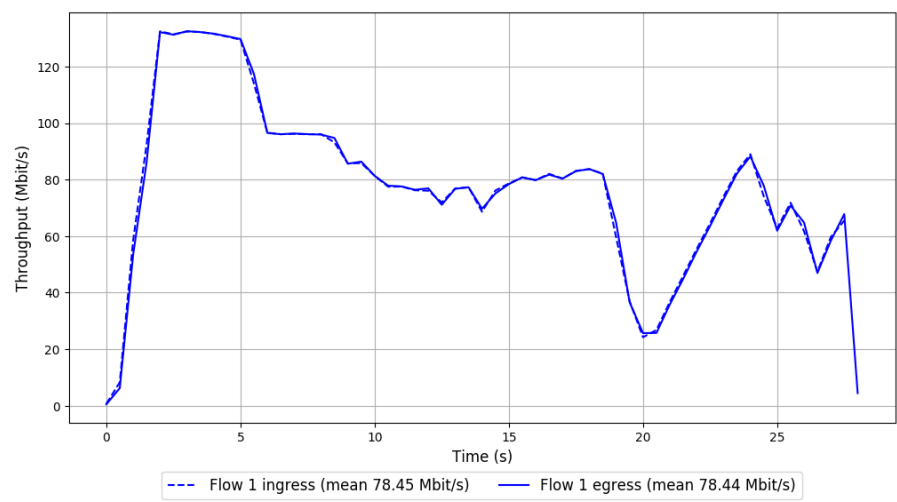
-- Flow 1:

Average throughput: 78.44 Mbit/s

95th percentile per-packet one-way delay: 53.121 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-20 04:51:18

End at: 2017-12-20 04:51:48

Below is generated by plot.py at 2017-12-20 06:31:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.86 Mbit/s

95th percentile per-packet one-way delay: 53.649 ms

Loss rate: 0.00%

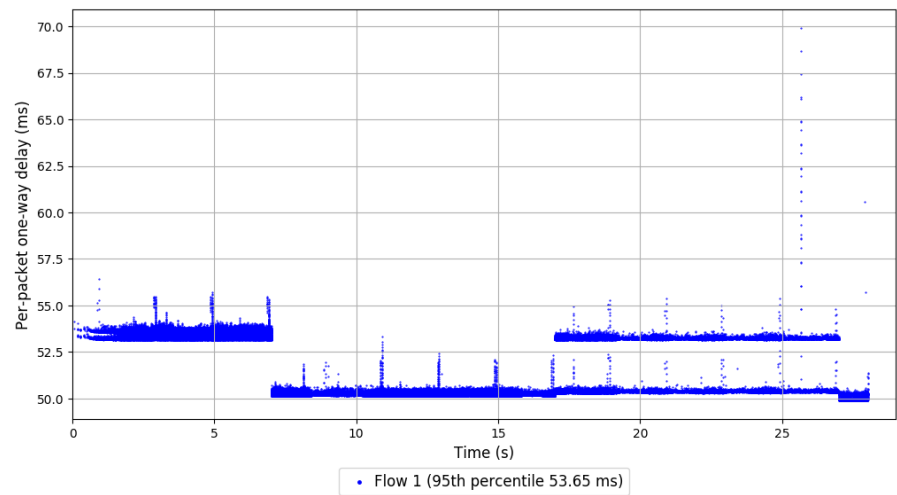
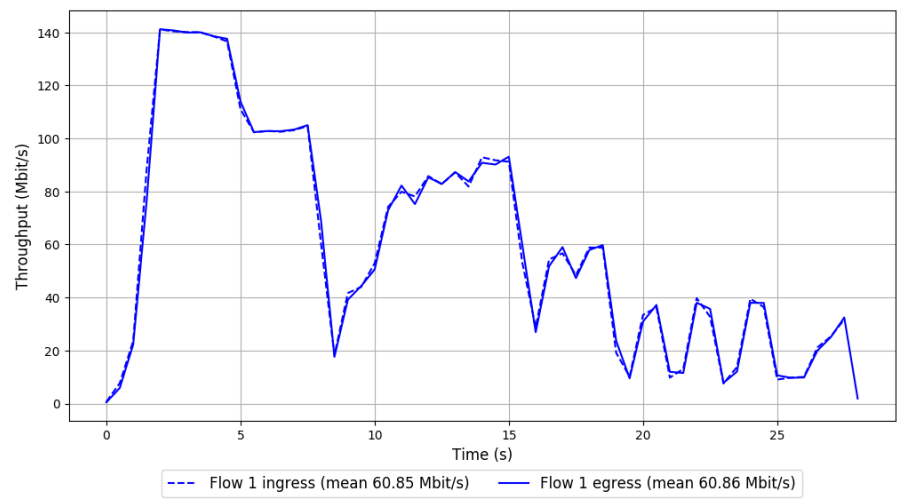
-- Flow 1:

Average throughput: 60.86 Mbit/s

95th percentile per-packet one-way delay: 53.649 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

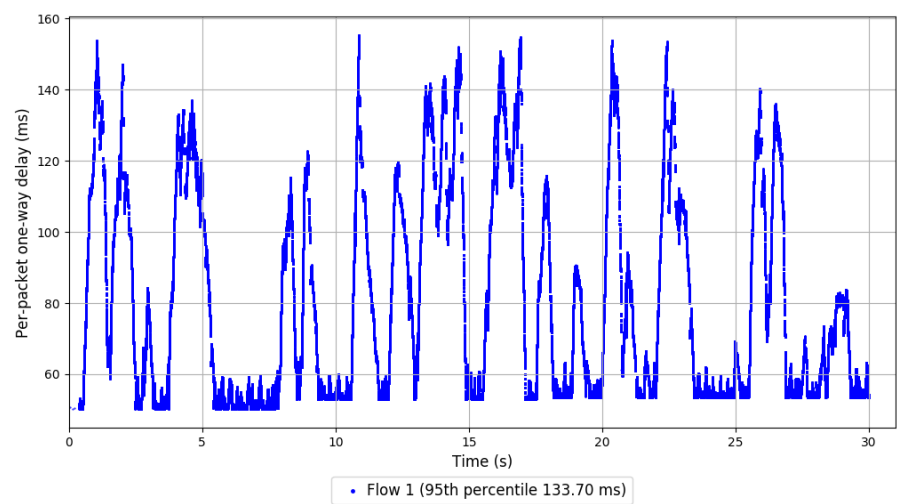
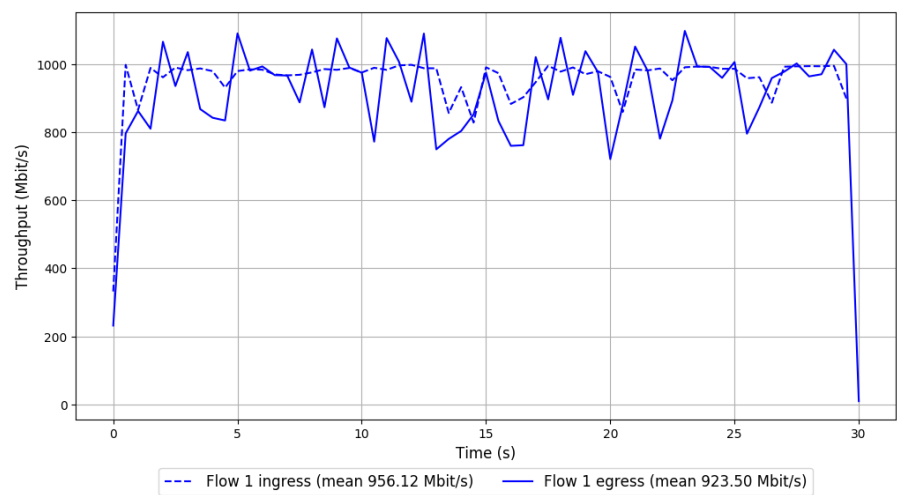


```
Run 1: Statistics of FillP

Start at: 2017-12-20 03:02:19
End at: 2017-12-20 03:02:49

# Below is generated by plot.py at 2017-12-20 06:47:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 923.50 Mbit/s
95th percentile per-packet one-way delay: 133.702 ms
Loss rate: 3.41%
-- Flow 1:
Average throughput: 923.50 Mbit/s
95th percentile per-packet one-way delay: 133.702 ms
Loss rate: 3.41%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2017-12-20 03:13:43

End at: 2017-12-20 03:14:13

Below is generated by plot.py at 2017-12-20 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 928.89 Mbit/s

95th percentile per-packet one-way delay: 137.122 ms

Loss rate: 3.91%

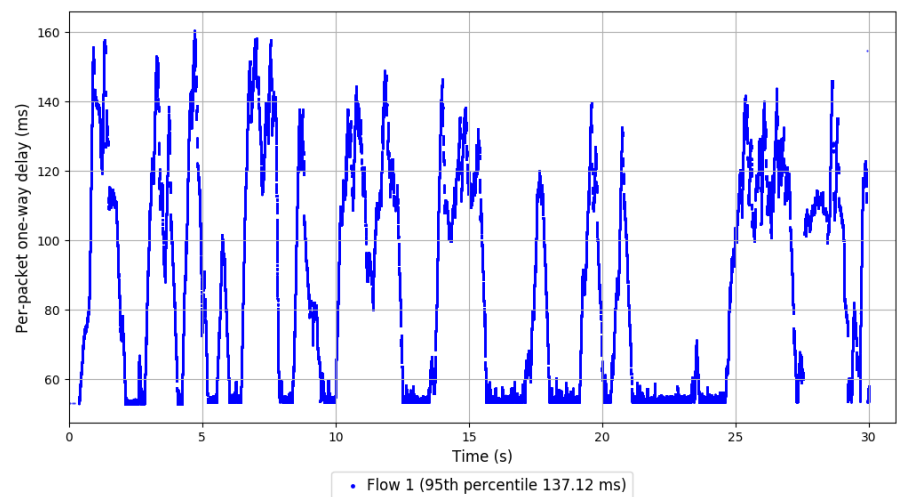
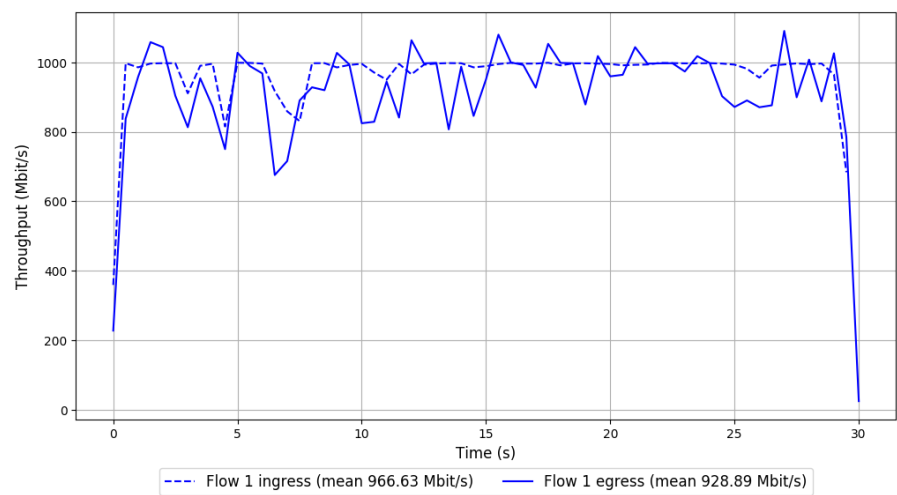
-- Flow 1:

Average throughput: 928.89 Mbit/s

95th percentile per-packet one-way delay: 137.122 ms

Loss rate: 3.91%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2017-12-20 03:25:00

End at: 2017-12-20 03:25:30

Below is generated by plot.py at 2017-12-20 06:47:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 959.75 Mbit/s

95th percentile per-packet one-way delay: 119.405 ms

Loss rate: 1.67%

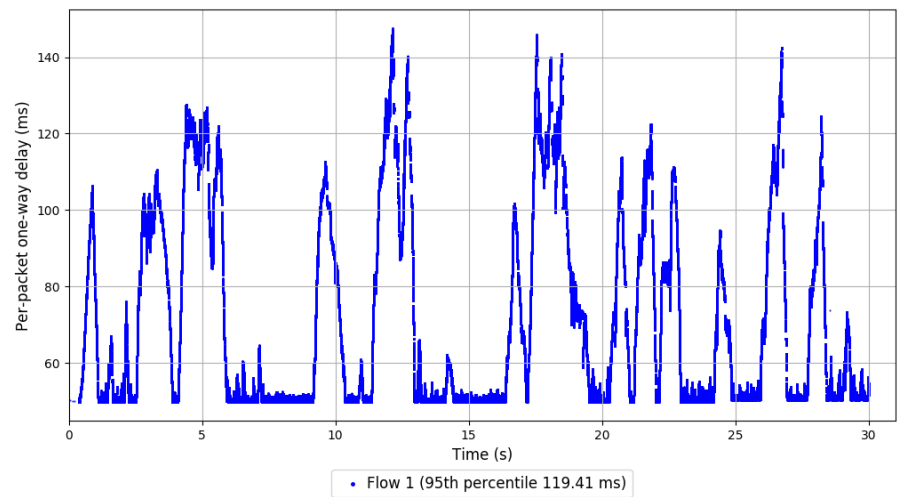
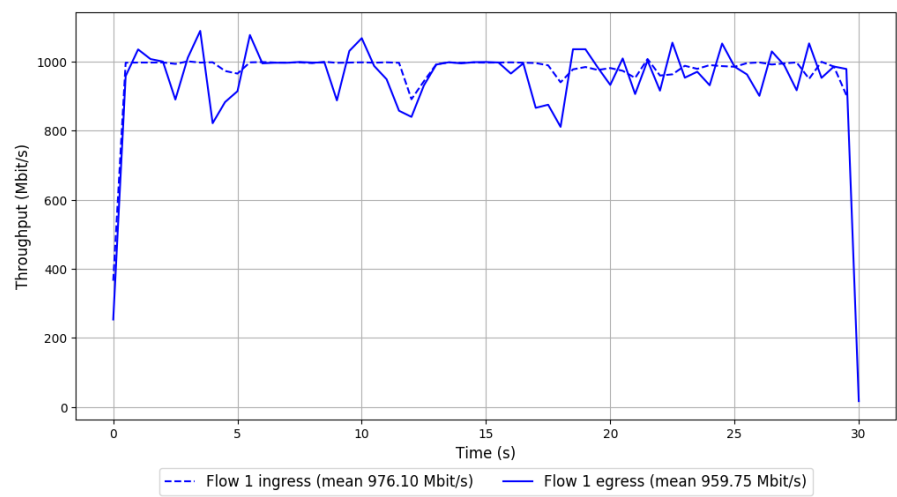
-- Flow 1:

Average throughput: 959.75 Mbit/s

95th percentile per-packet one-way delay: 119.405 ms

Loss rate: 1.67%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2017-12-20 03:36:20

End at: 2017-12-20 03:36:50

Below is generated by plot.py at 2017-12-20 06:48:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 949.23 Mbit/s

95th percentile per-packet one-way delay: 127.876 ms

Loss rate: 2.60%

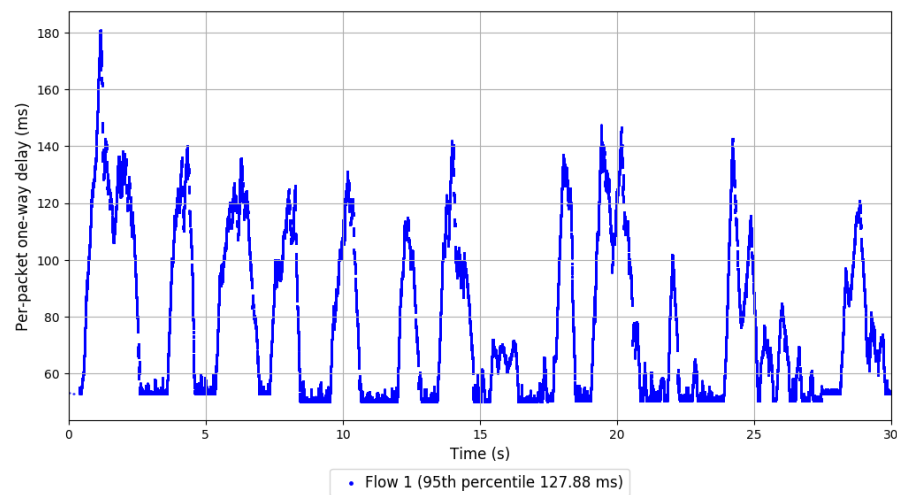
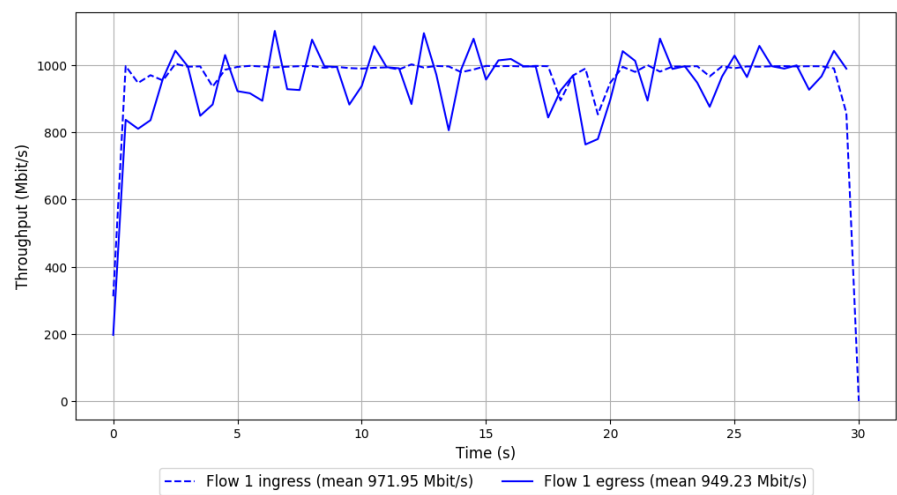
-- Flow 1:

Average throughput: 949.23 Mbit/s

95th percentile per-packet one-way delay: 127.876 ms

Loss rate: 2.60%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2017-12-20 03:47:46

End at: 2017-12-20 03:48:16

Below is generated by plot.py at 2017-12-20 06:48:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 896.85 Mbit/s

95th percentile per-packet one-way delay: 137.755 ms

Loss rate: 5.01%

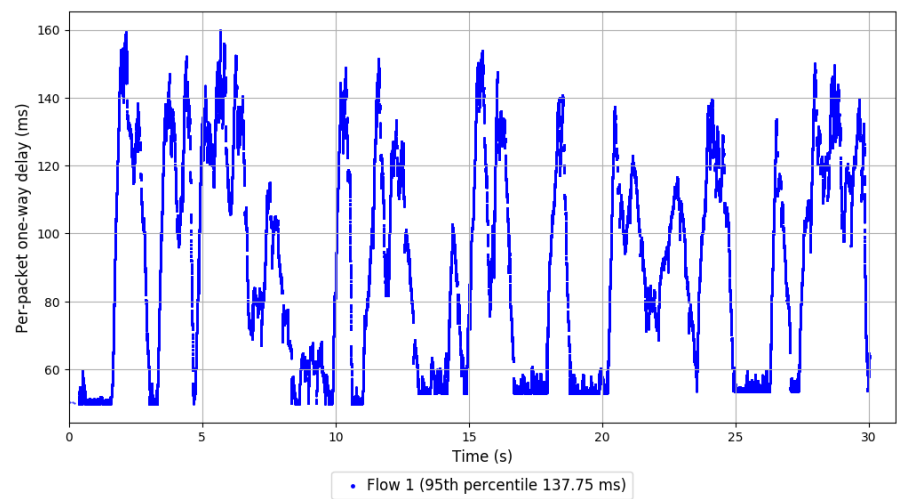
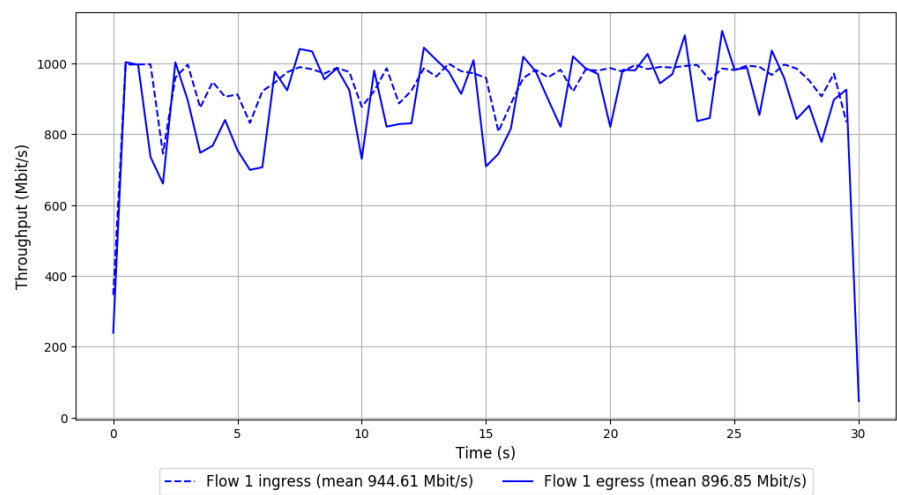
-- Flow 1:

Average throughput: 896.85 Mbit/s

95th percentile per-packet one-way delay: 137.755 ms

Loss rate: 5.01%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2017-12-20 03:59:14

End at: 2017-12-20 03:59:44

Below is generated by plot.py at 2017-12-20 06:48:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 944.22 Mbit/s

95th percentile per-packet one-way delay: 127.106 ms

Loss rate: 2.62%

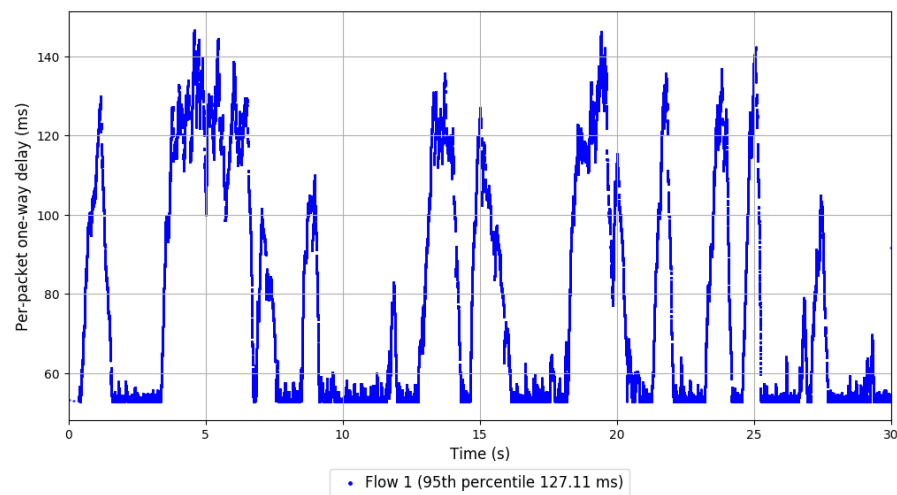
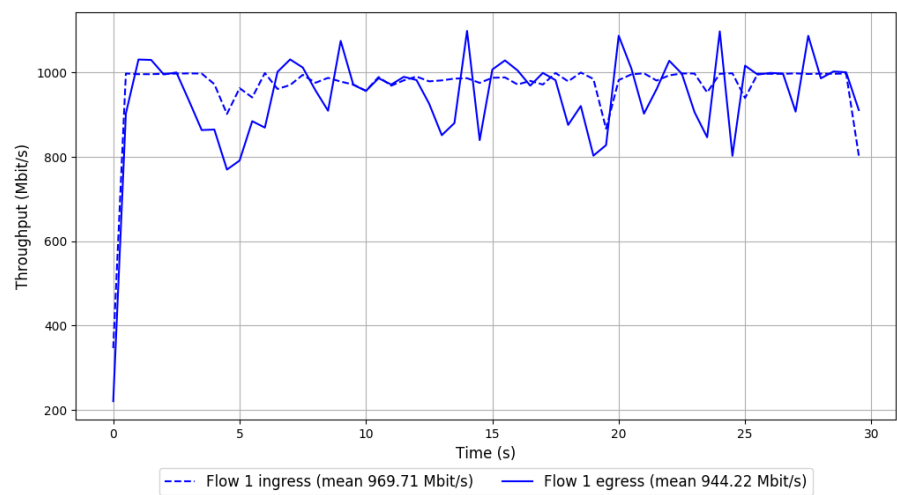
-- Flow 1:

Average throughput: 944.22 Mbit/s

95th percentile per-packet one-way delay: 127.106 ms

Loss rate: 2.62%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2017-12-20 04:10:35

End at: 2017-12-20 04:11:05

Below is generated by plot.py at 2017-12-20 06:48:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 904.00 Mbit/s

95th percentile per-packet one-way delay: 138.812 ms

Loss rate: 5.12%

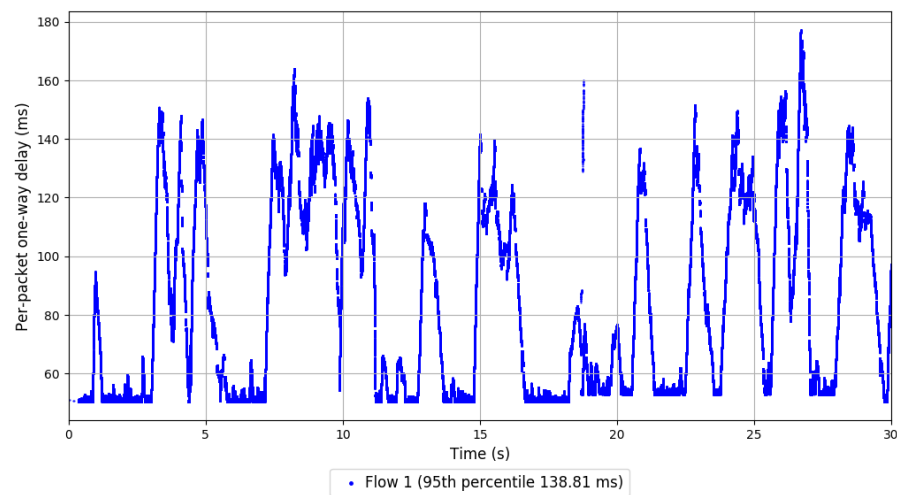
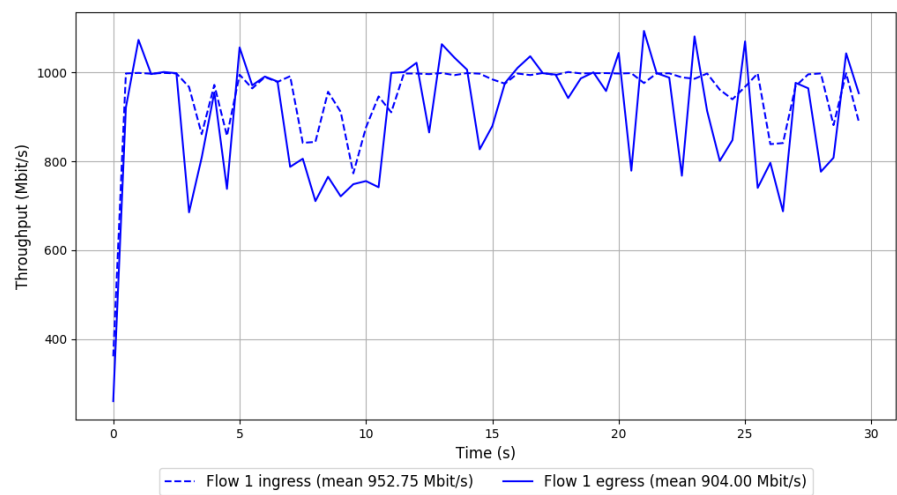
-- Flow 1:

Average throughput: 904.00 Mbit/s

95th percentile per-packet one-way delay: 138.812 ms

Loss rate: 5.12%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2017-12-20 04:22:08

End at: 2017-12-20 04:22:38

Below is generated by plot.py at 2017-12-20 06:48:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 932.73 Mbit/s

95th percentile per-packet one-way delay: 132.130 ms

Loss rate: 2.95%

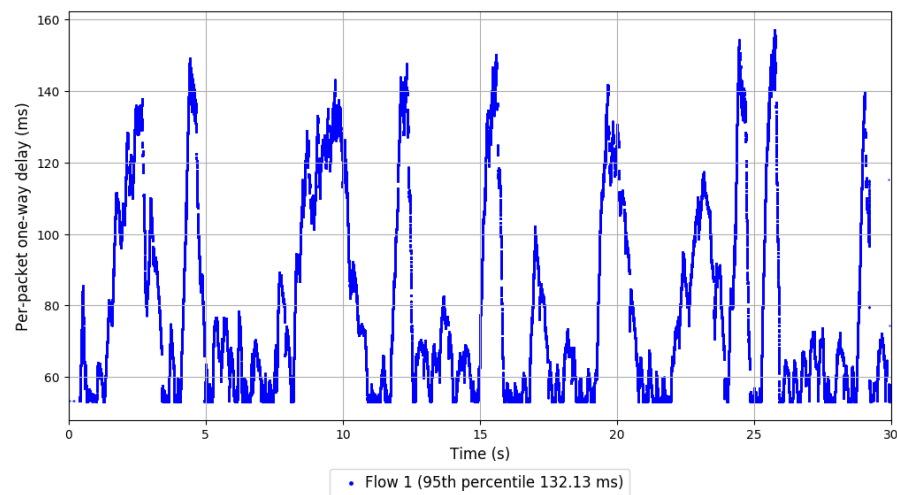
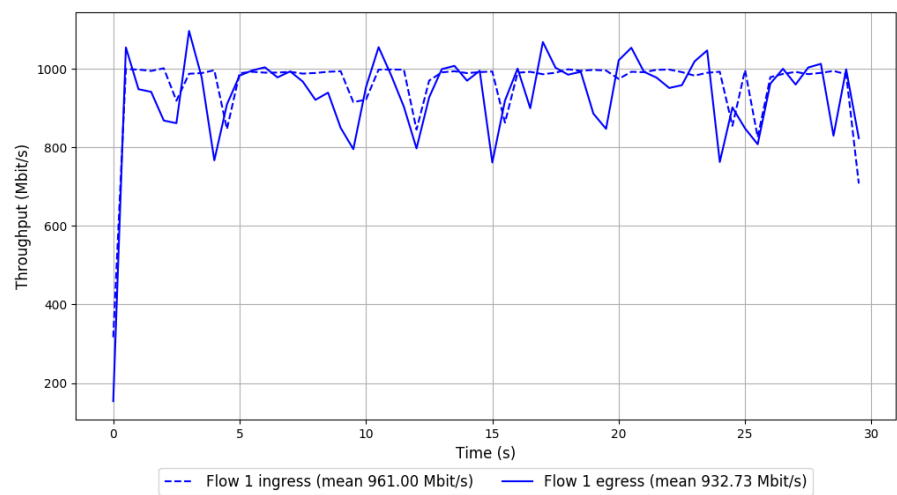
-- Flow 1:

Average throughput: 932.73 Mbit/s

95th percentile per-packet one-way delay: 132.130 ms

Loss rate: 2.95%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2017-12-20 04:33:30

End at: 2017-12-20 04:34:00

Below is generated by plot.py at 2017-12-20 06:54:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 908.74 Mbit/s

95th percentile per-packet one-way delay: 137.799 ms

Loss rate: 4.51%

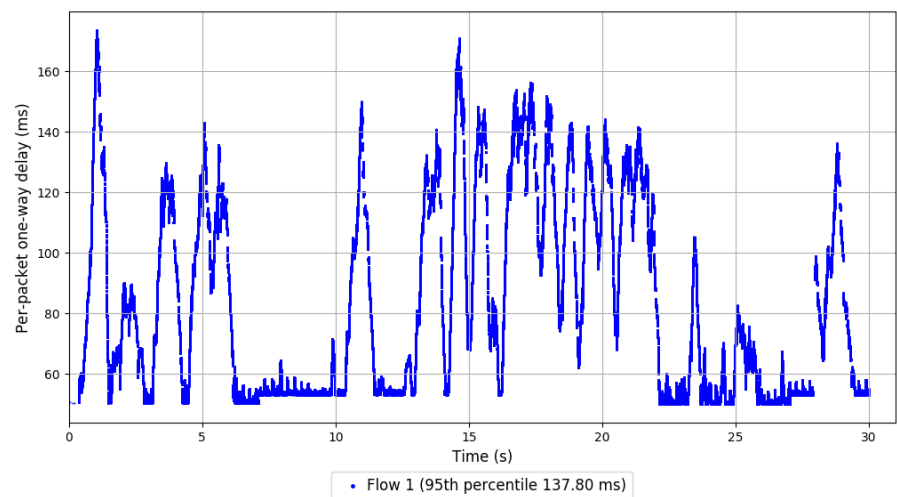
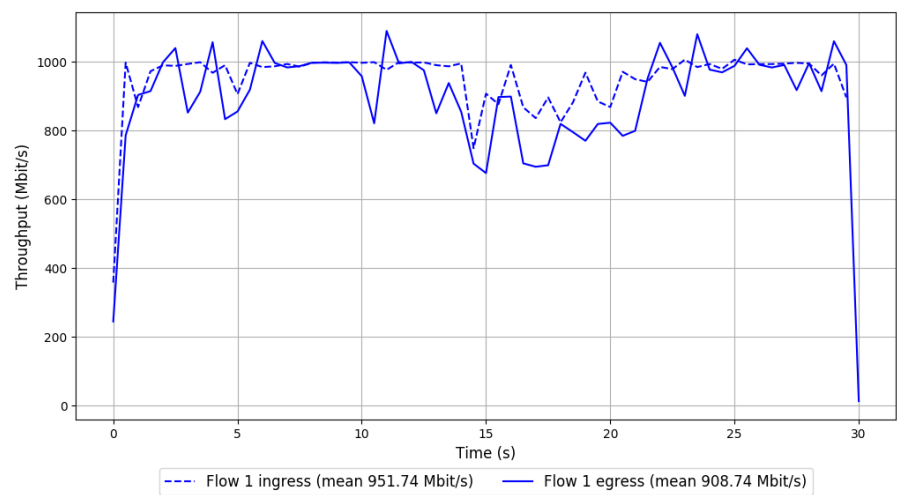
-- Flow 1:

Average throughput: 908.74 Mbit/s

95th percentile per-packet one-way delay: 137.799 ms

Loss rate: 4.51%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2017-12-20 04:44:53

End at: 2017-12-20 04:45:23

Below is generated by plot.py at 2017-12-20 06:54:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 953.03 Mbit/s

95th percentile per-packet one-way delay: 127.683 ms

Loss rate: 1.88%

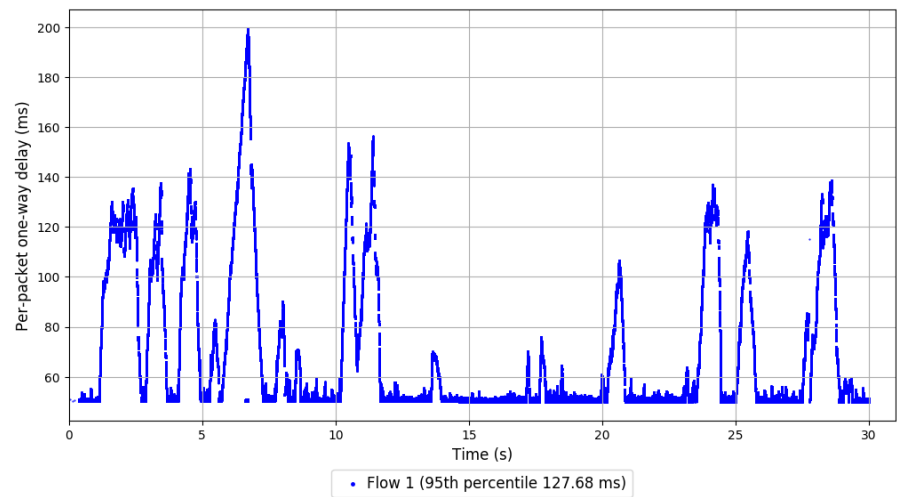
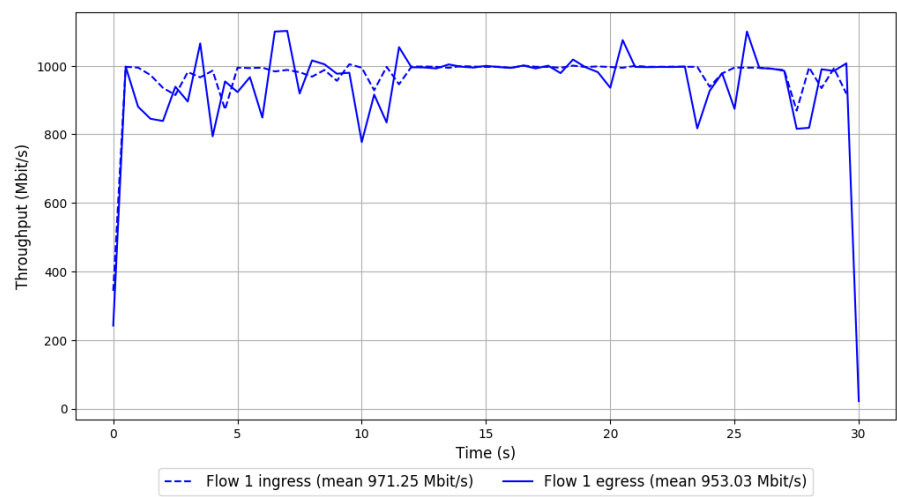
-- Flow 1:

Average throughput: 953.03 Mbit/s

95th percentile per-packet one-way delay: 127.683 ms

Loss rate: 1.88%

Run 10: Report of FillP — Data Link

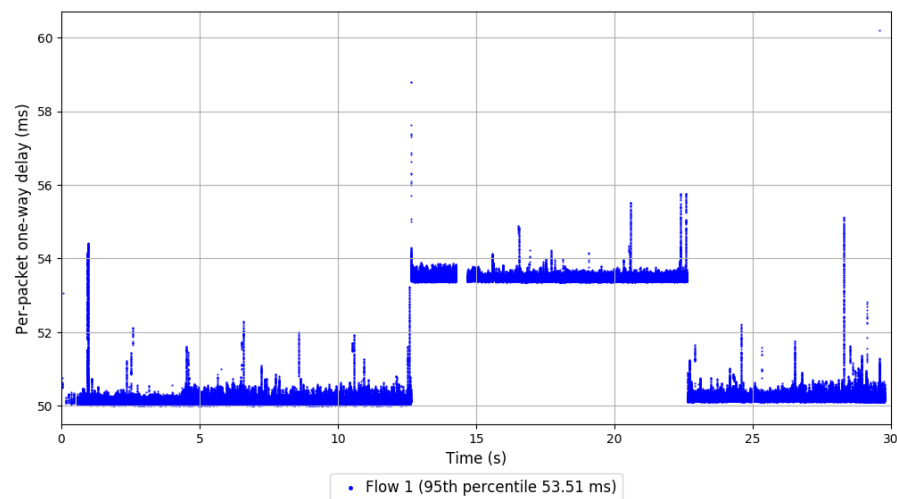
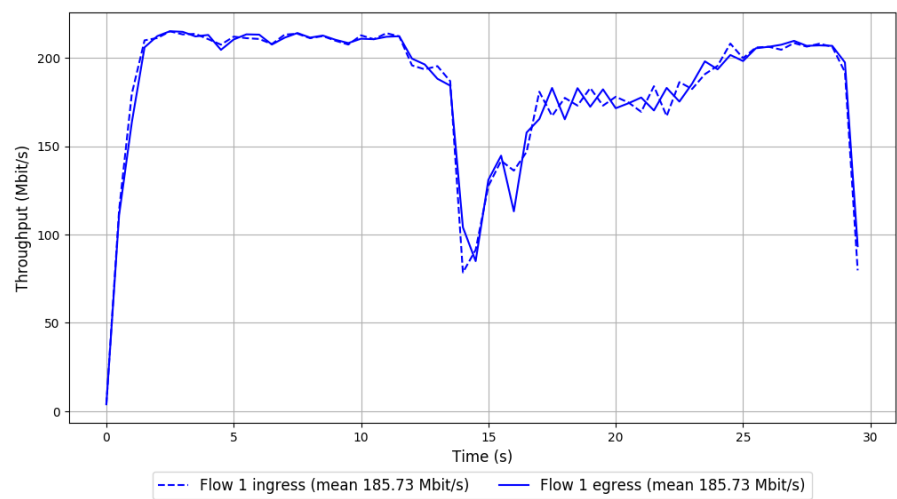


```
Run 1: Statistics of Indigo

Start at: 2017-12-20 03:06:55
End at: 2017-12-20 03:07:25

# Below is generated by plot.py at 2017-12-20 06:54:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 185.73 Mbit/s
95th percentile per-packet one-way delay: 53.508 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.73 Mbit/s
95th percentile per-packet one-way delay: 53.508 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-20 03:18:18

End at: 2017-12-20 03:18:48

Below is generated by plot.py at 2017-12-20 06:54:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.09 Mbit/s

95th percentile per-packet one-way delay: 53.522 ms

Loss rate: 0.00%

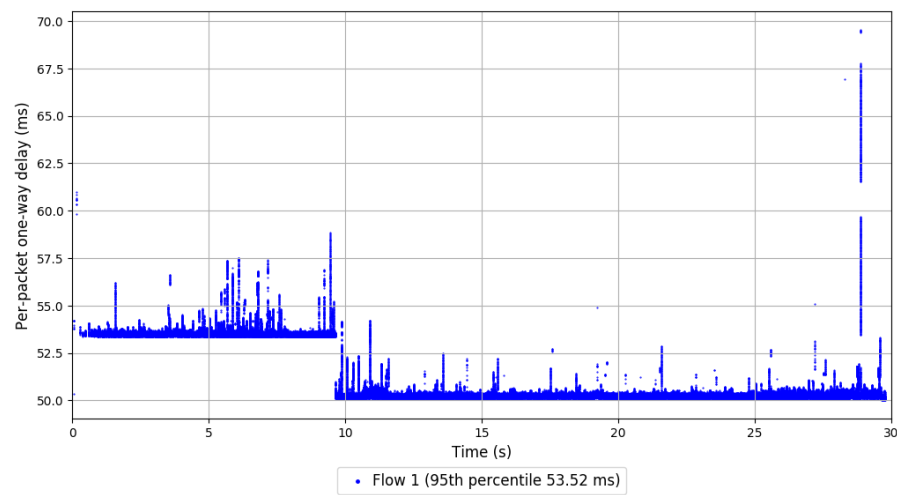
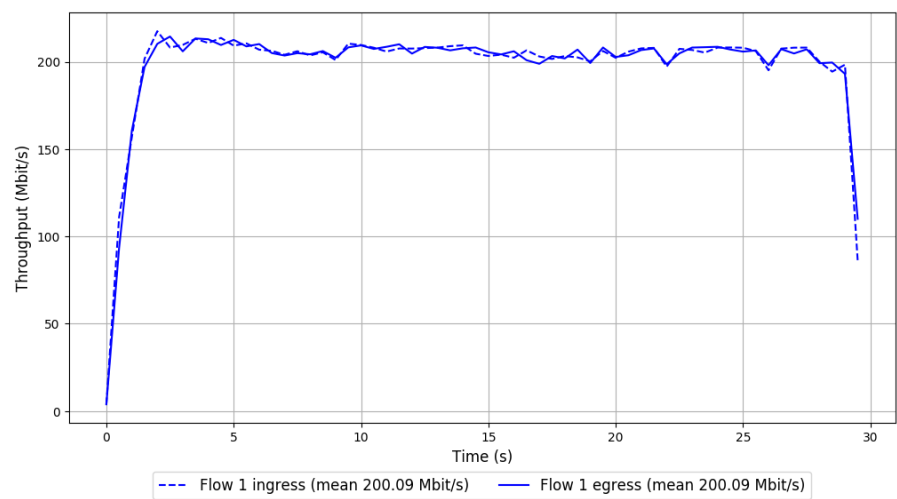
-- Flow 1:

Average throughput: 200.09 Mbit/s

95th percentile per-packet one-way delay: 53.522 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-20 03:29:34

End at: 2017-12-20 03:30:04

Below is generated by plot.py at 2017-12-20 06:54:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.02 Mbit/s

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

Loss rate: 0.00%

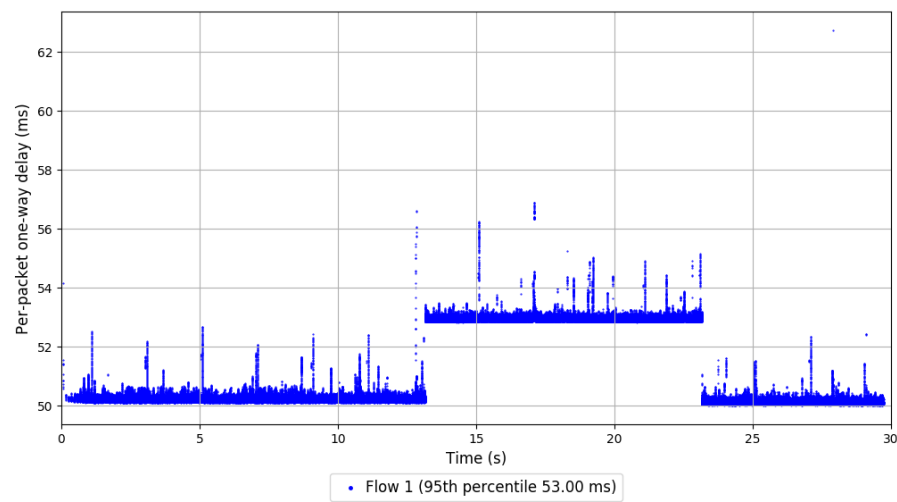
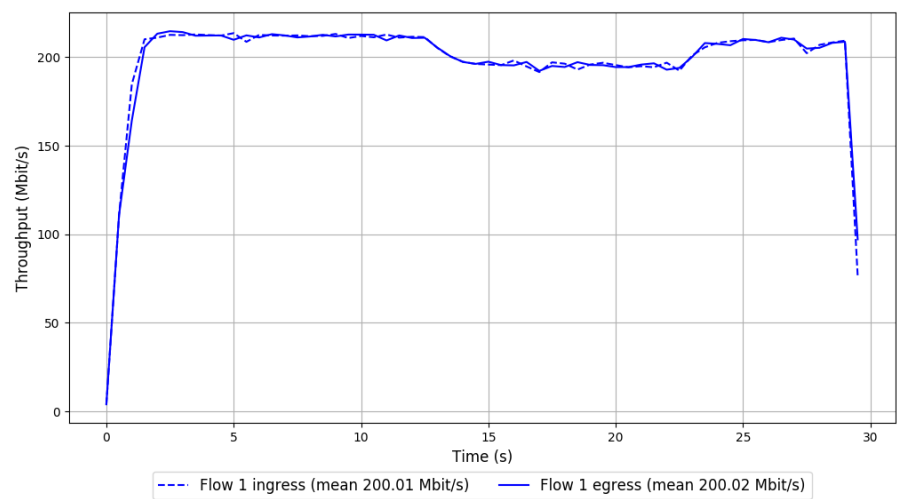
-- Flow 1:

Average throughput: 200.02 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-20 03:40:57

End at: 2017-12-20 03:41:27

Below is generated by plot.py at 2017-12-20 06:54:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.21 Mbit/s

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

Loss rate: 0.00%

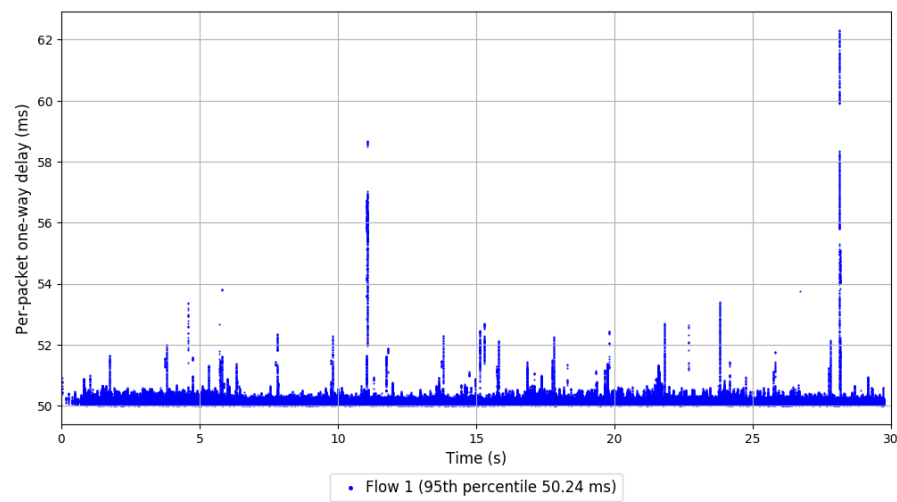
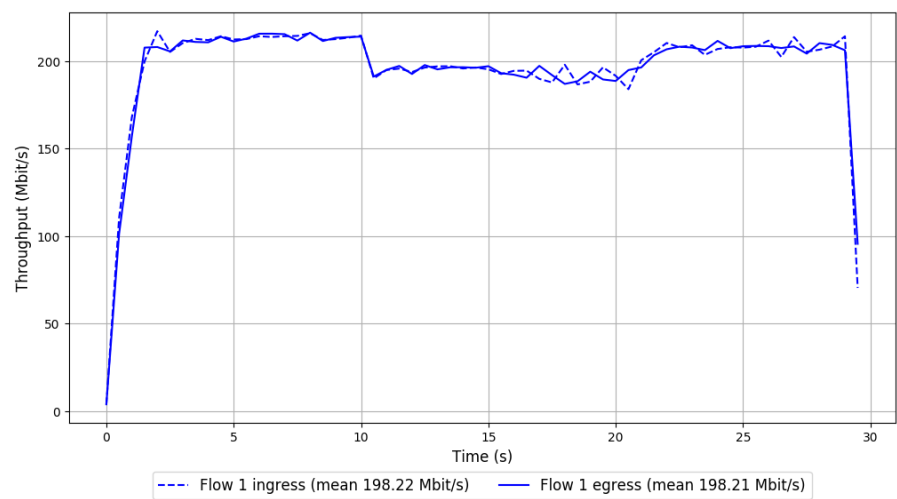
-- Flow 1:

Average throughput: 198.21 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-20 03:52:24

End at: 2017-12-20 03:52:54

Below is generated by plot.py at 2017-12-20 06:54:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.33 Mbit/s

95th percentile per-packet one-way delay: 50.274 ms

Loss rate: 0.00%

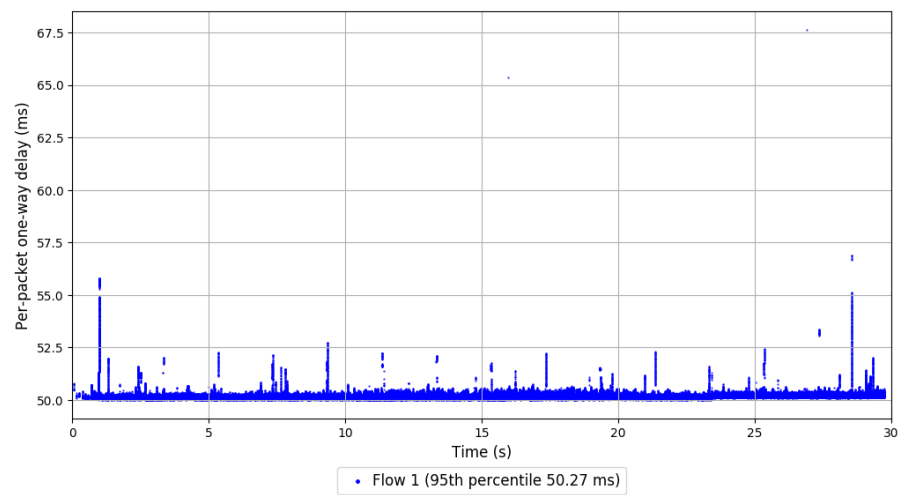
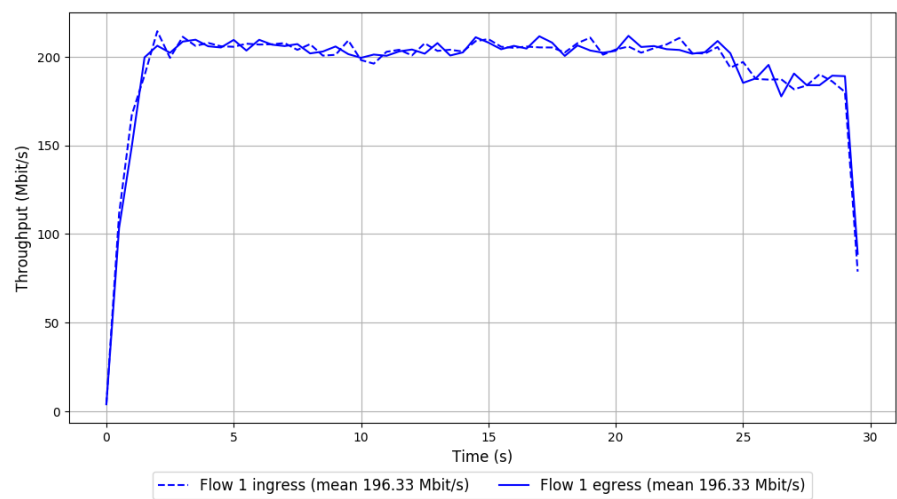
-- Flow 1:

Average throughput: 196.33 Mbit/s

95th percentile per-packet one-way delay: 50.274 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-20 04:03:52

End at: 2017-12-20 04:04:22

Below is generated by plot.py at 2017-12-20 06:54:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.33 Mbit/s

95th percentile per-packet one-way delay: 52.973 ms

Loss rate: 0.01%

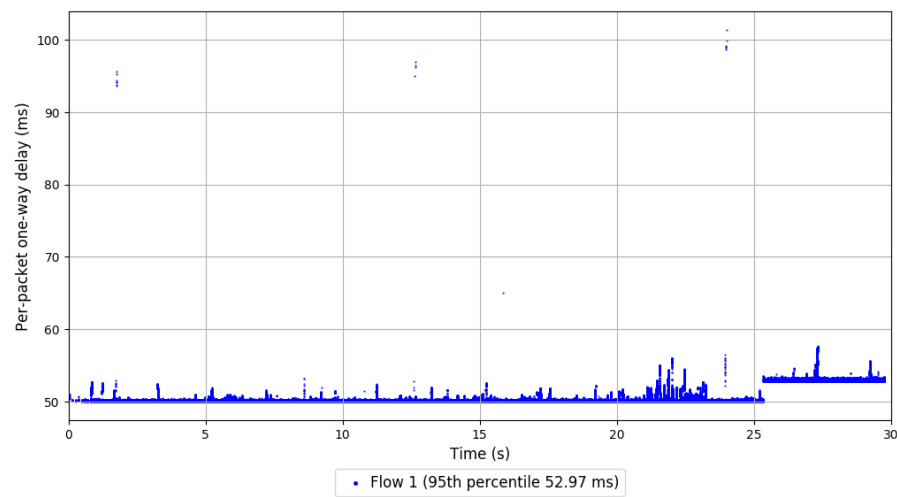
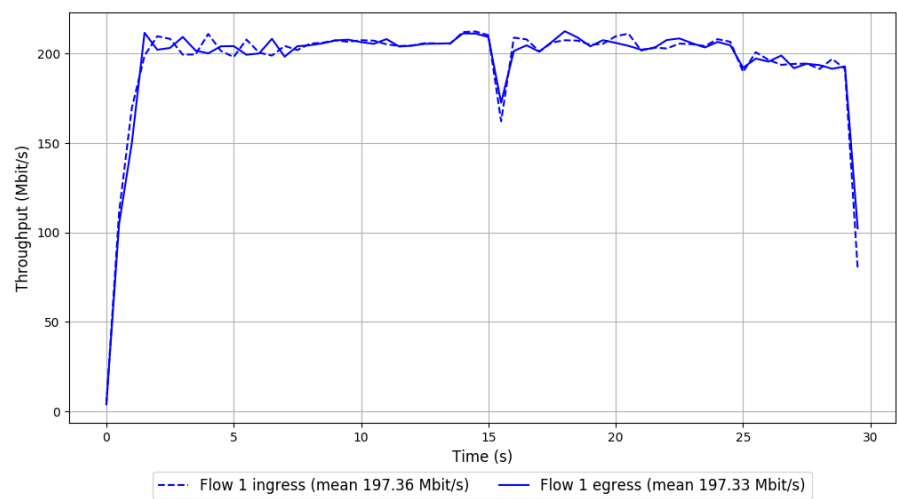
-- Flow 1:

Average throughput: 197.33 Mbit/s

95th percentile per-packet one-way delay: 52.973 ms

Loss rate: 0.01%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-20 04:15:09

End at: 2017-12-20 04:15:39

Below is generated by plot.py at 2017-12-20 06:54:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.90 Mbit/s

95th percentile per-packet one-way delay: 50.475 ms

Loss rate: 0.00%

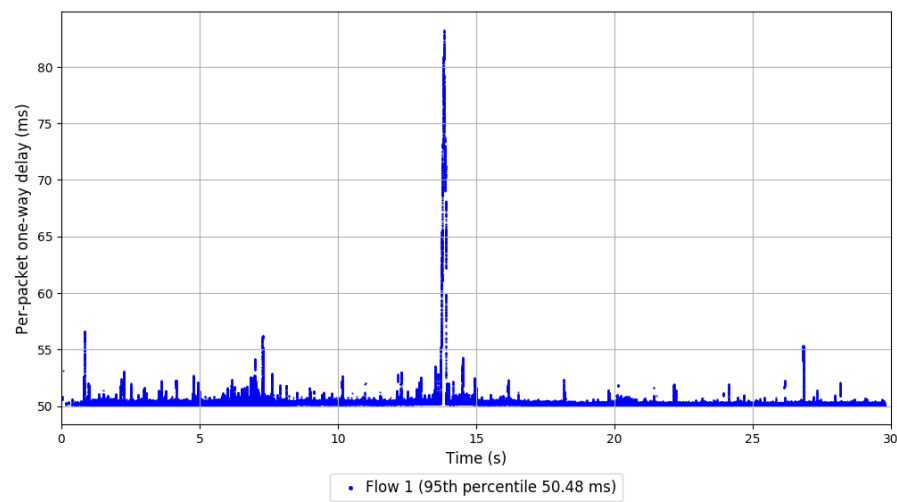
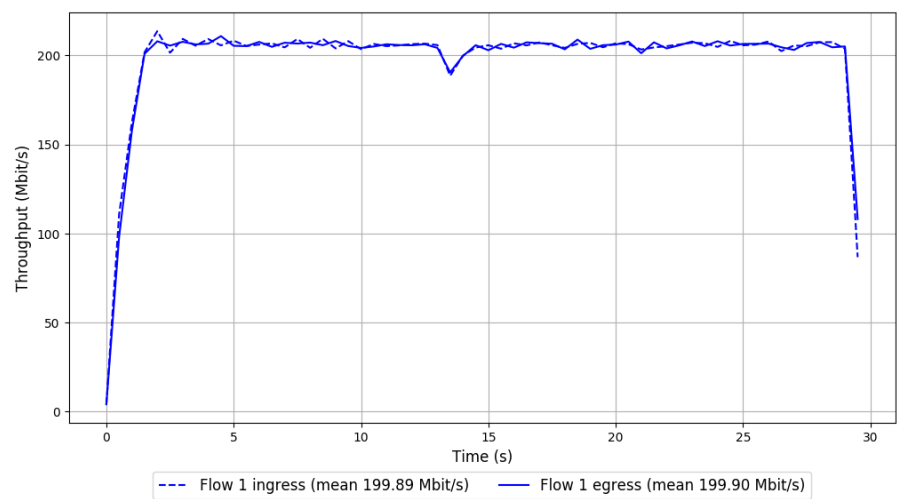
-- Flow 1:

Average throughput: 199.90 Mbit/s

95th percentile per-packet one-way delay: 50.475 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-20 04:26:46

End at: 2017-12-20 04:27:16

Below is generated by plot.py at 2017-12-20 06:54:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.27 Mbit/s

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

Loss rate: 0.07%

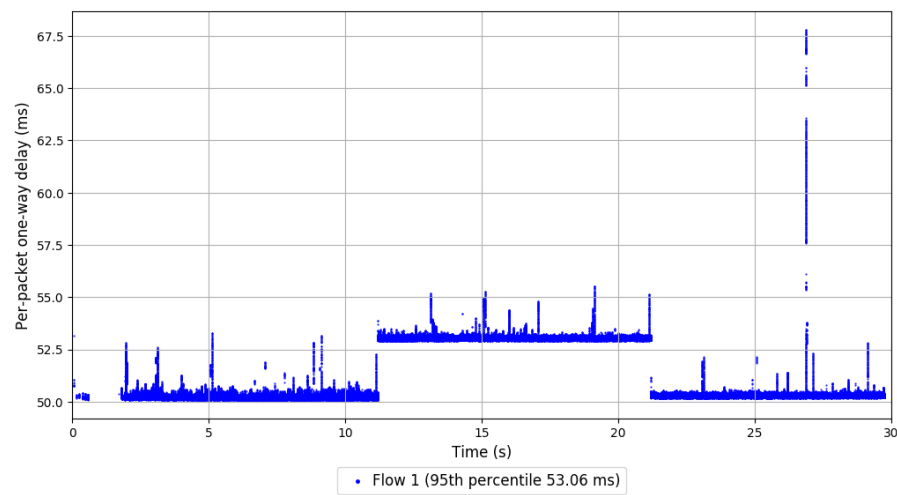
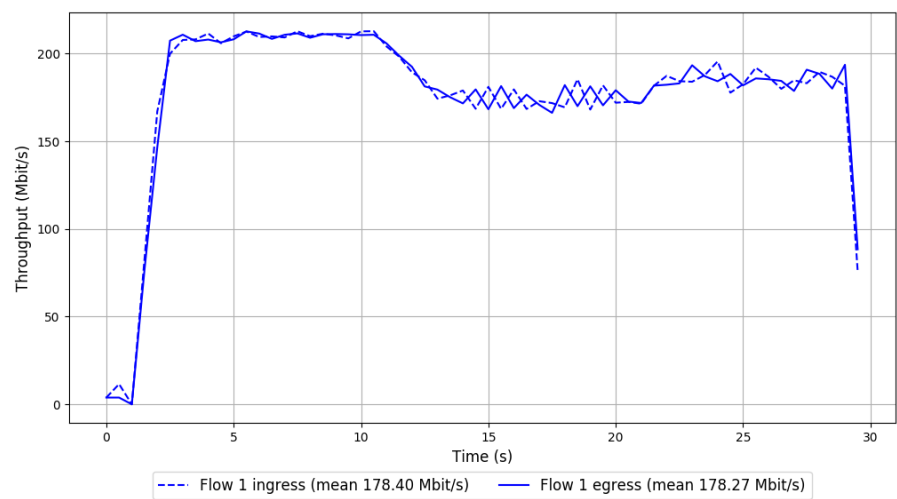
-- Flow 1:

Average throughput: 178.27 Mbit/s

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

Loss rate: 0.07%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-20 04:38:08

End at: 2017-12-20 04:38:38

Below is generated by plot.py at 2017-12-20 06:54:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.48 Mbit/s

95th percentile per-packet one-way delay: 53.139 ms

Loss rate: 0.25%

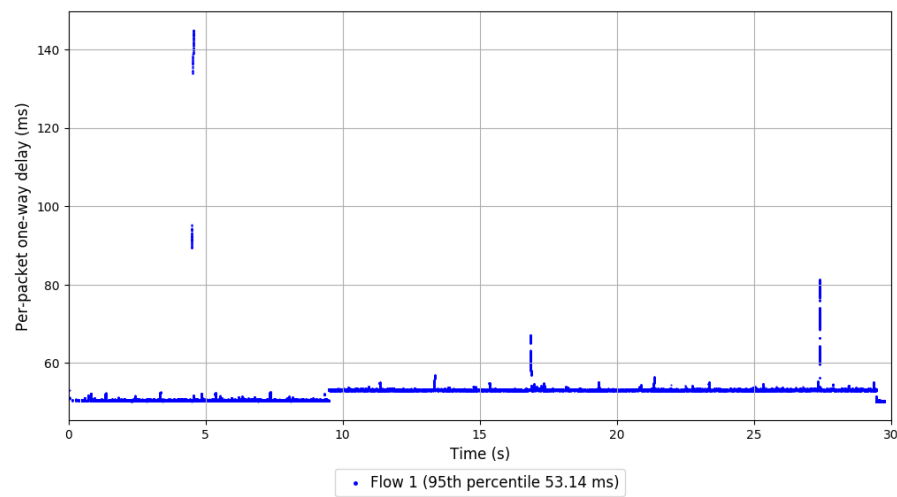
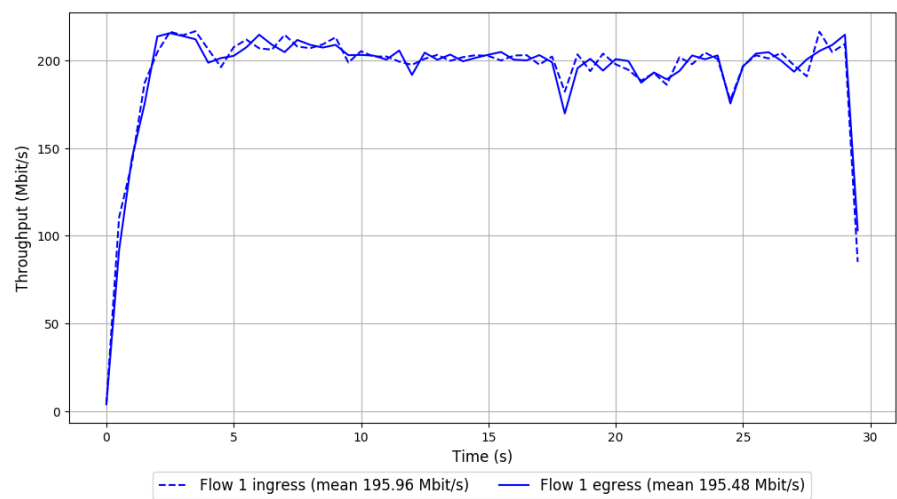
-- Flow 1:

Average throughput: 195.48 Mbit/s

95th percentile per-packet one-way delay: 53.139 ms

Loss rate: 0.25%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-20 04:49:34

End at: 2017-12-20 04:50:04

Run 10: Report of Indigo — Data Link

