

Pantheon Report

Generated at 2017-12-05 21:05:34 (UTC).

Data path: GCE Iowa 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.

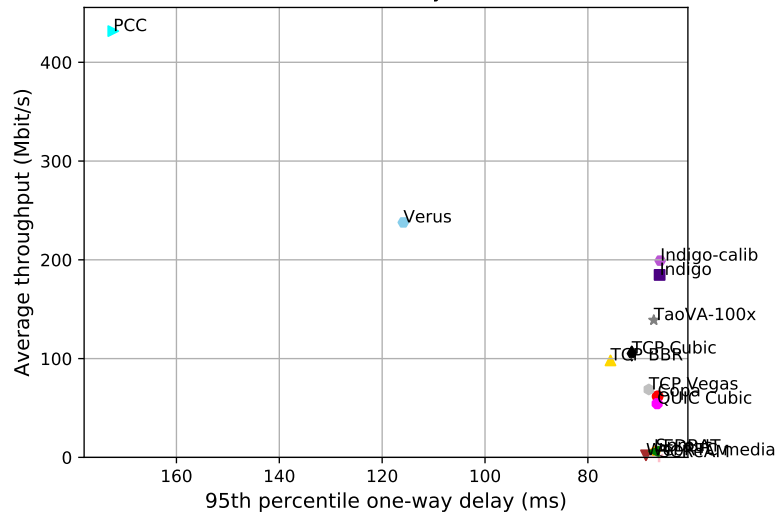
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

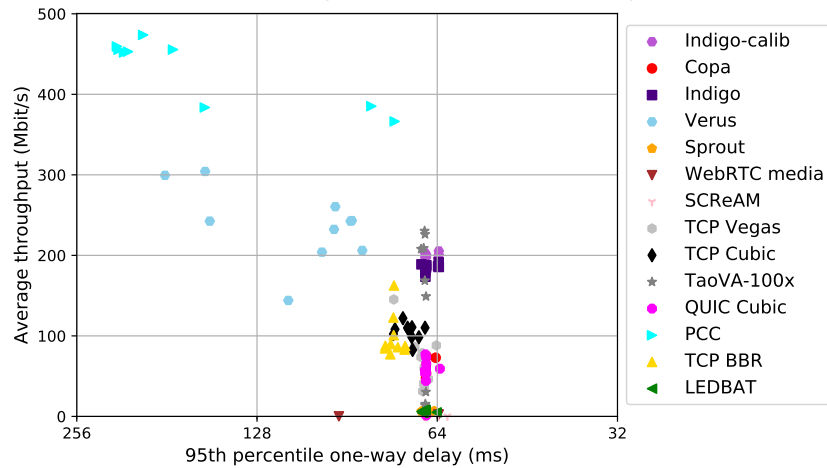
Git summary:

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

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



test from GCE Iowa 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	98.16	75.60	0.06
TCP Cubic	10	105.17	71.47	0.05
LEDBAT	10	5.92	67.16	0.12
PCC	9	431.58	172.28	0.69
QUIC Cubic	10	54.34	66.53	0.39
SCReAM	10	0.22	66.15	0.00
WebRTC media	10	2.06	68.71	0.00
Sprout	9	6.40	66.82	0.08
TaoVA-100x	9	138.97	67.19	0.01
TCP Vegas	10	68.73	68.15	0.04
Verus	10	237.87	115.88	0.62
Copa	6	61.78	66.44	0.04
Indigo	10	184.72	66.05	0.02
Indigo-calib	10	199.19	65.94	0.04

Run 1: Statistics of TCP BBR

Start at: 2017-12-05 18:06:45

End at: 2017-12-05 18:07:15

Below is generated by plot.py at 2017-12-05 20:30:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.11 Mbit/s

95th percentile per-packet one-way delay: 76.675 ms

Loss rate: 0.31%

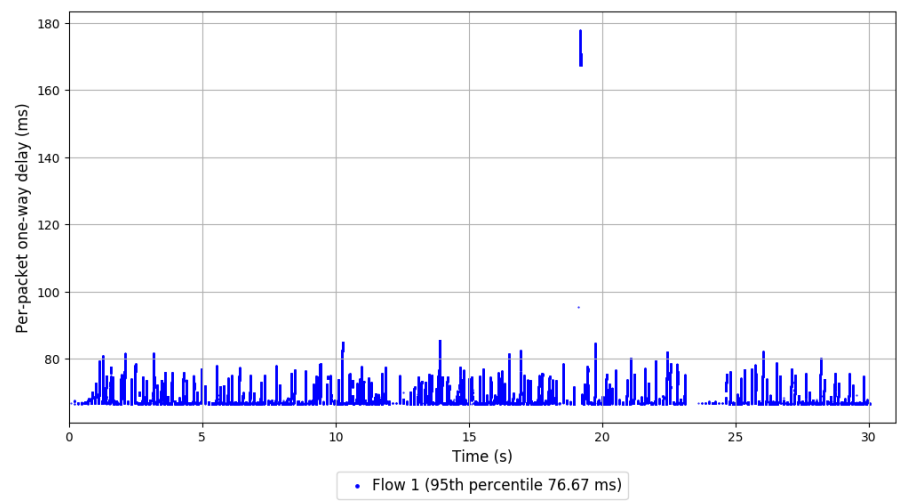
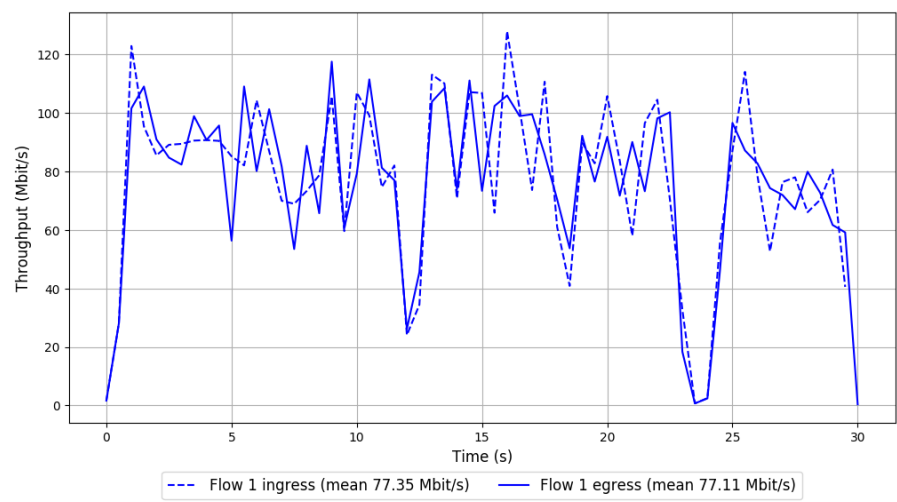
-- Flow 1:

Average throughput: 77.11 Mbit/s

95th percentile per-packet one-way delay: 76.675 ms

Loss rate: 0.31%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 18:17:24

End at: 2017-12-05 18:17:54

Below is generated by plot.py at 2017-12-05 20:30:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.45 Mbit/s

95th percentile per-packet one-way delay: 78.241 ms

Loss rate: 0.11%

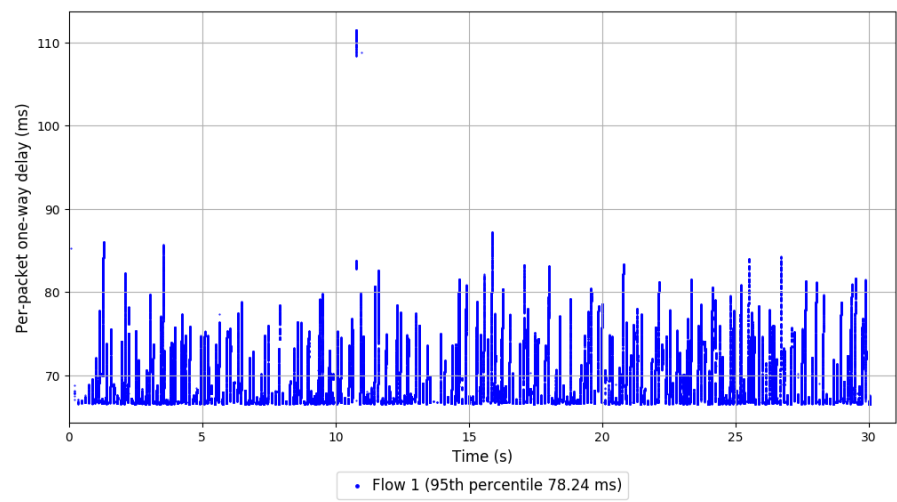
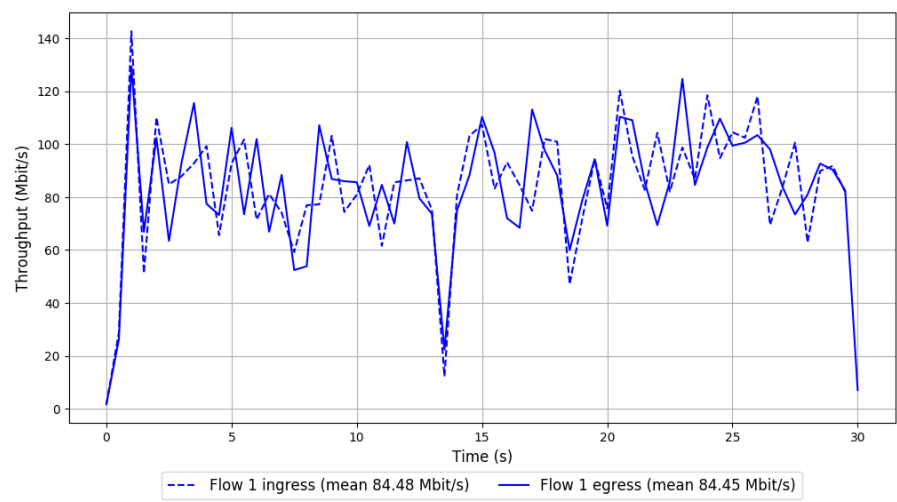
-- Flow 1:

Average throughput: 84.45 Mbit/s

95th percentile per-packet one-way delay: 78.241 ms

Loss rate: 0.11%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 18:28:04

End at: 2017-12-05 18:28:34

Below is generated by plot.py at 2017-12-05 20:30:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.69 Mbit/s

95th percentile per-packet one-way delay: 78.125 ms

Loss rate: 0.09%

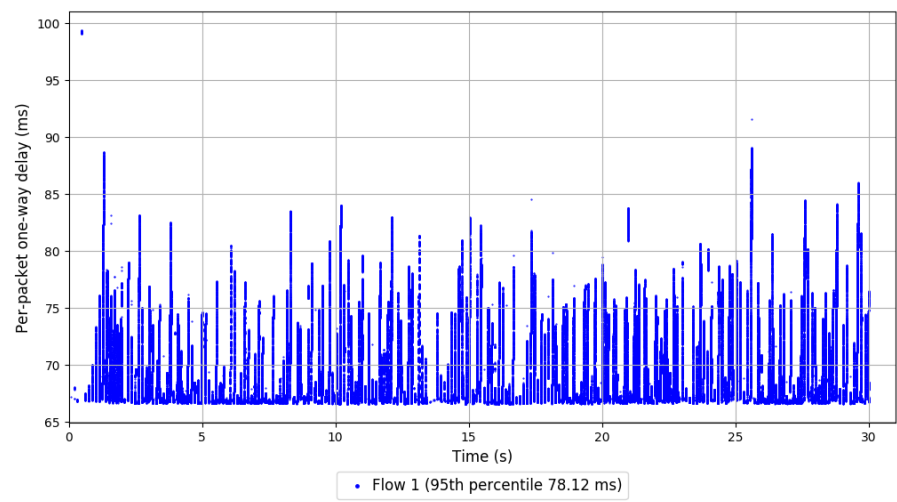
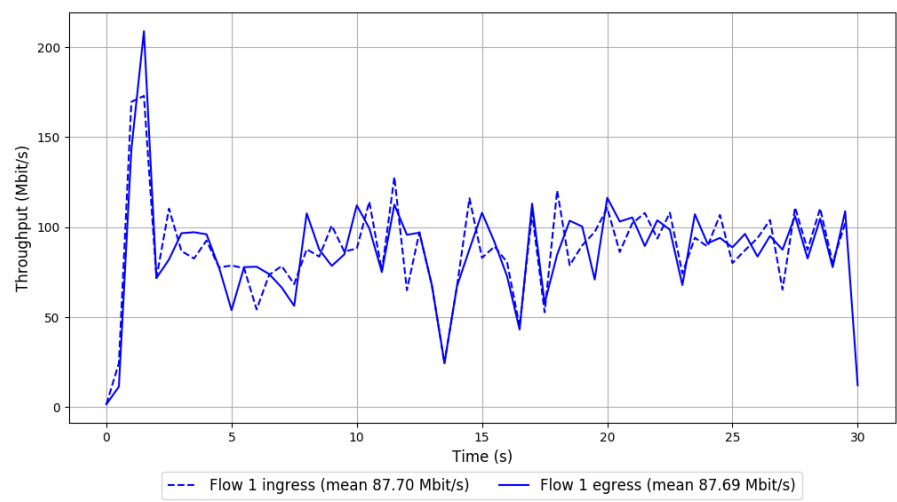
-- Flow 1:

Average throughput: 87.69 Mbit/s

95th percentile per-packet one-way delay: 78.125 ms

Loss rate: 0.09%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-05 18:38:40

End at: 2017-12-05 18:39:11

Below is generated by plot.py at 2017-12-05 20:31:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 162.56 Mbit/s

95th percentile per-packet one-way delay: 75.585 ms

Loss rate: 0.00%

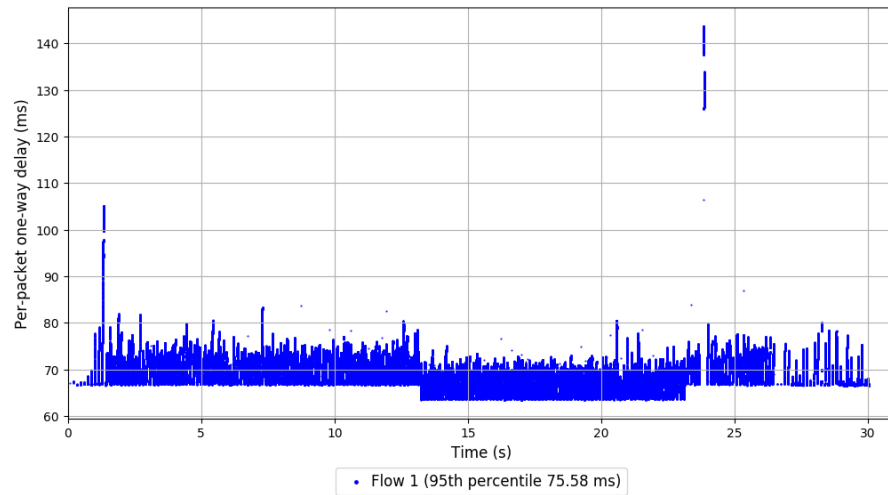
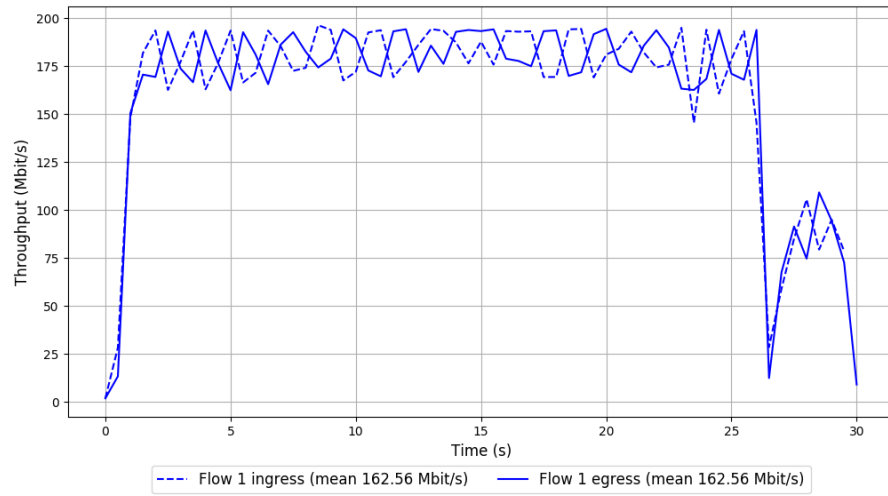
-- Flow 1:

Average throughput: 162.56 Mbit/s

95th percentile per-packet one-way delay: 75.585 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-05 18:48:53

End at: 2017-12-05 18:49:23

Below is generated by plot.py at 2017-12-05 20:31:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.87 Mbit/s

95th percentile per-packet one-way delay: 75.678 ms

Loss rate: 0.08%

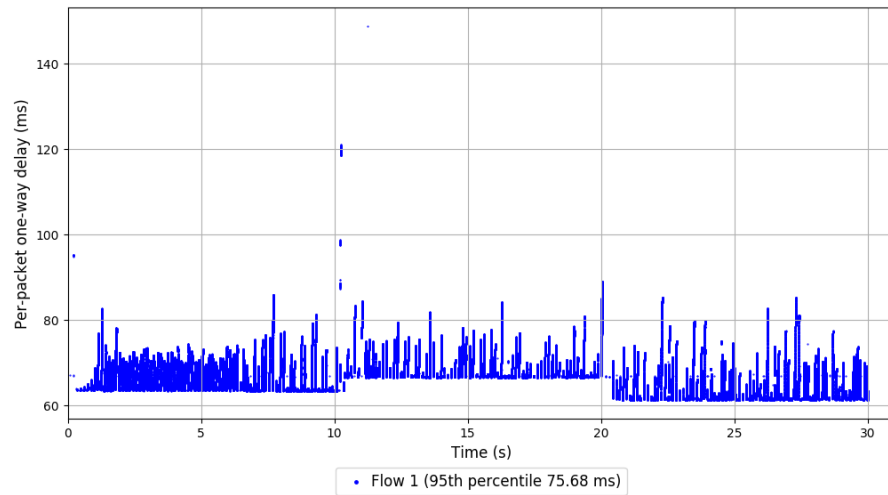
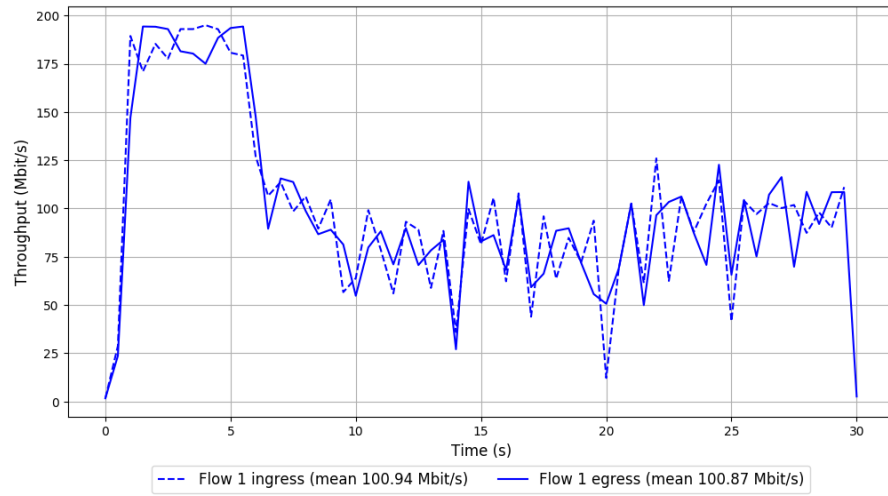
-- Flow 1:

Average throughput: 100.87 Mbit/s

95th percentile per-packet one-way delay: 75.678 ms

Loss rate: 0.08%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-05 18:59:12

End at: 2017-12-05 18:59:42

Below is generated by plot.py at 2017-12-05 20:31:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.73 Mbit/s

95th percentile per-packet one-way delay: 76.519 ms

Loss rate: 0.00%

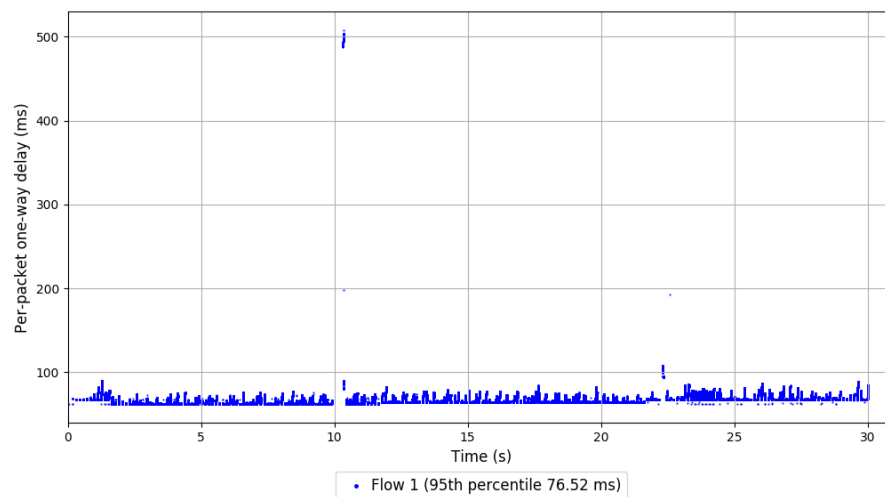
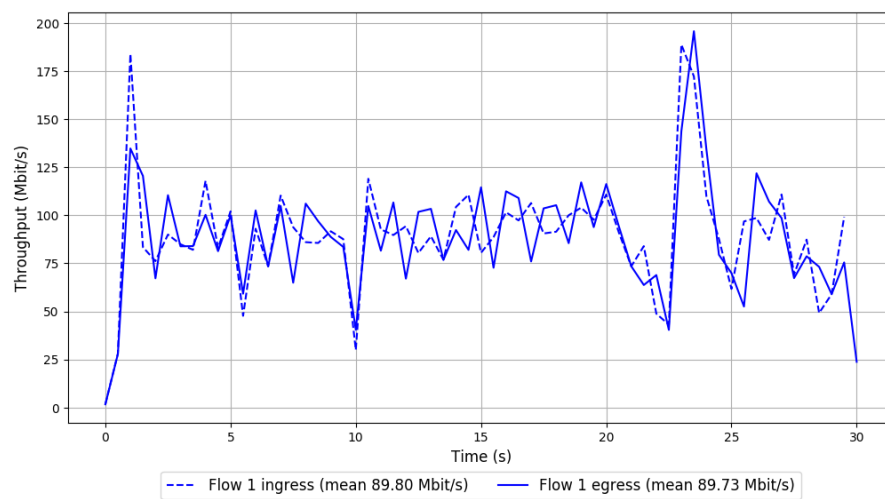
-- Flow 1:

Average throughput: 89.73 Mbit/s

95th percentile per-packet one-way delay: 76.519 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-05 19:09:24

End at: 2017-12-05 19:09:54

Below is generated by plot.py at 2017-12-05 20:31:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.39 Mbit/s

95th percentile per-packet one-way delay: 72.407 ms

Loss rate: 0.00%

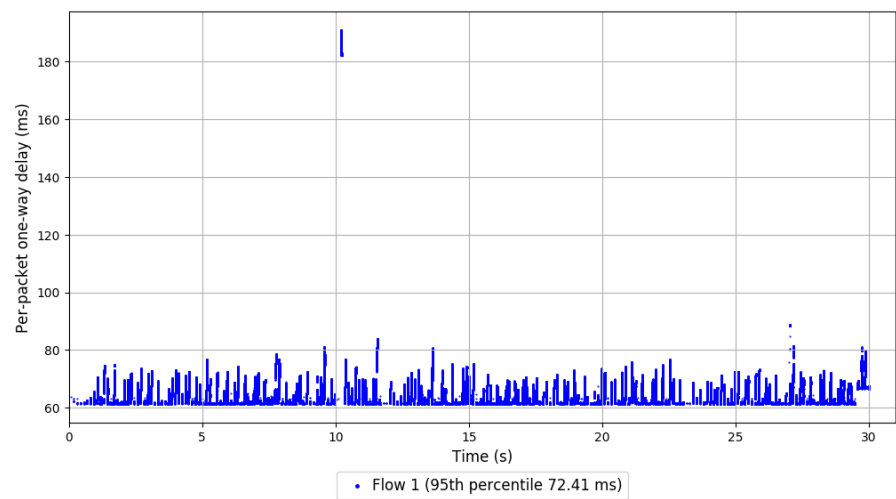
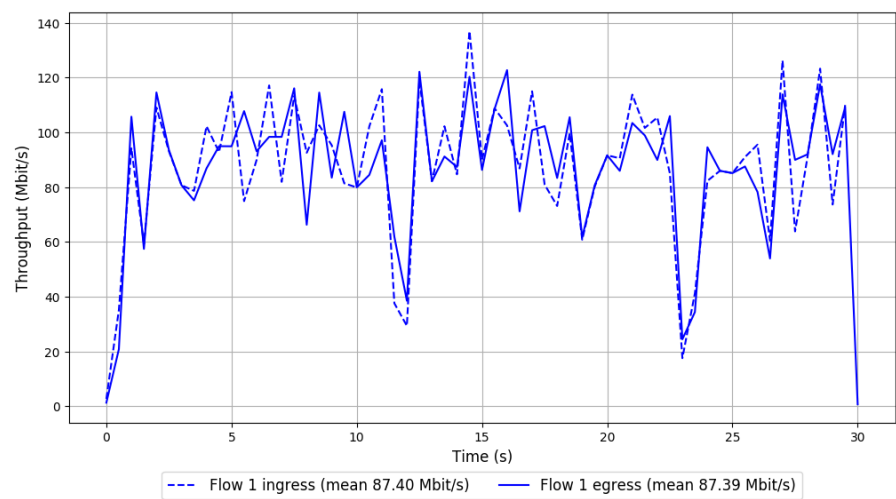
-- Flow 1:

Average throughput: 87.39 Mbit/s

95th percentile per-packet one-way delay: 72.407 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-05 19:19:33

End at: 2017-12-05 19:20:03

Below is generated by plot.py at 2017-12-05 20:31:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.97 Mbit/s

95th percentile per-packet one-way delay: 74.474 ms

Loss rate: 0.00%

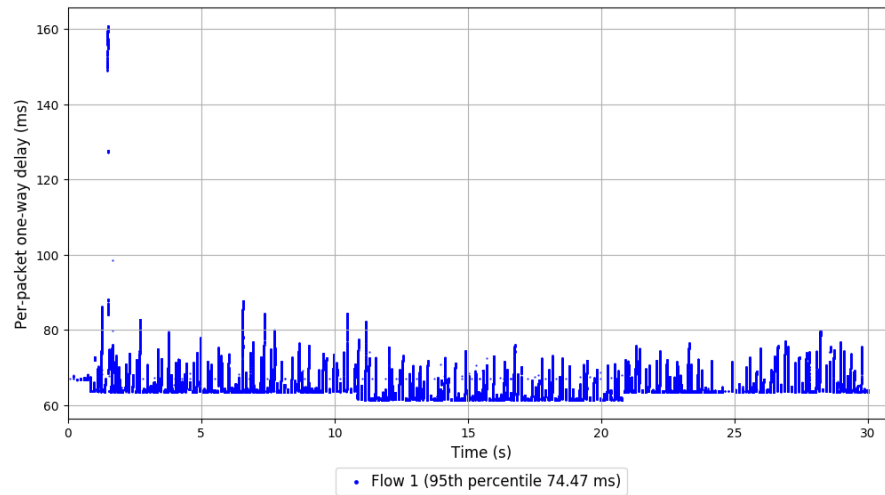
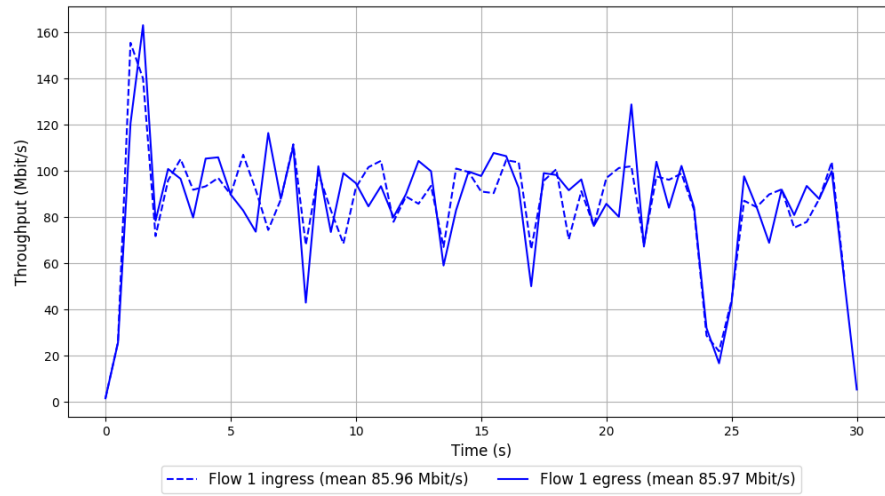
-- Flow 1:

Average throughput: 85.97 Mbit/s

95th percentile per-packet one-way delay: 74.474 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-05 19:30:05

End at: 2017-12-05 19:30:35

Below is generated by plot.py at 2017-12-05 20:32:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.78 Mbit/s

95th percentile per-packet one-way delay: 75.767 ms

Loss rate: 0.01%

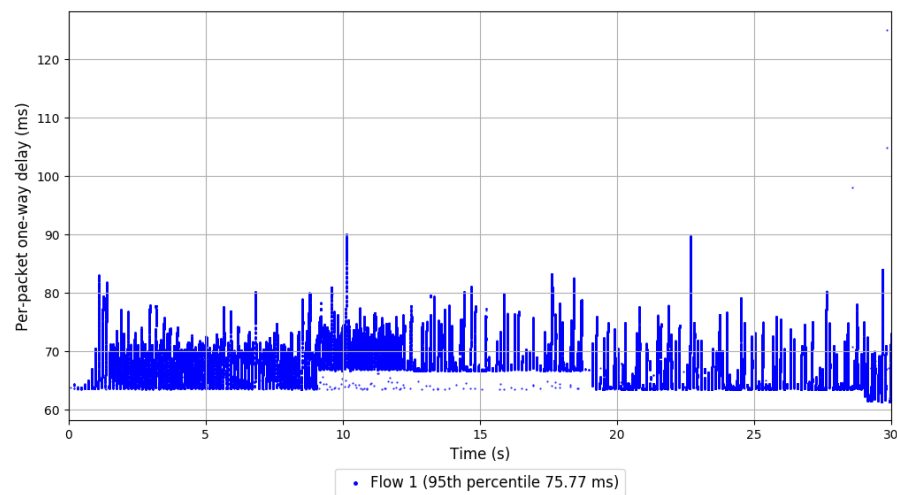
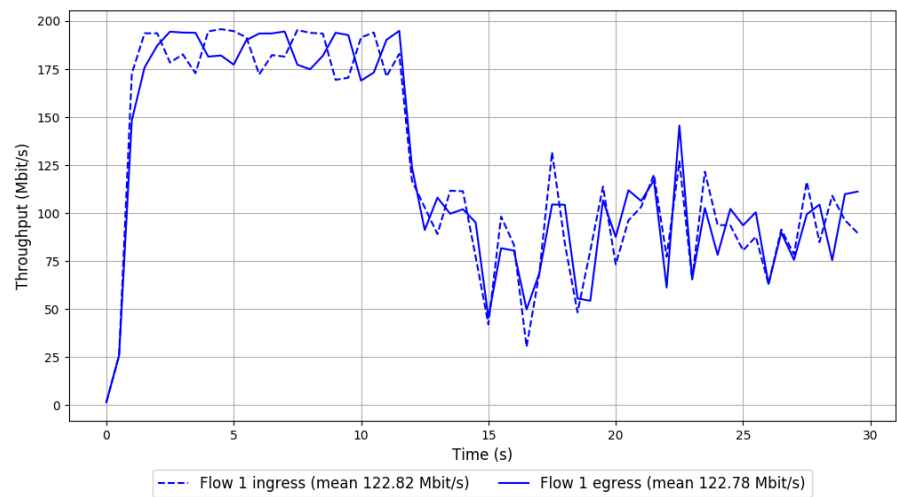
-- Flow 1:

Average throughput: 122.78 Mbit/s

95th percentile per-packet one-way delay: 75.767 ms

Loss rate: 0.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-05 19:40:44

End at: 2017-12-05 19:41:14

Below is generated by plot.py at 2017-12-05 20:32:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.02 Mbit/s

95th percentile per-packet one-way delay: 72.562 ms

Loss rate: 0.01%

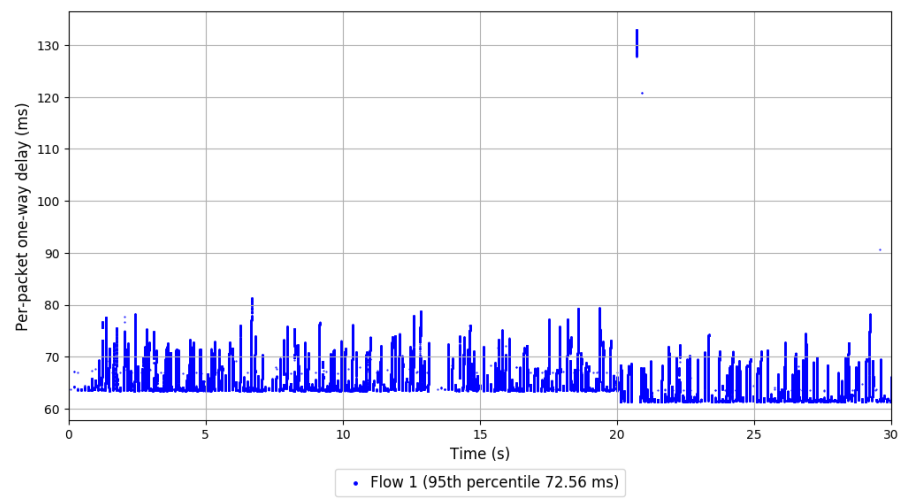
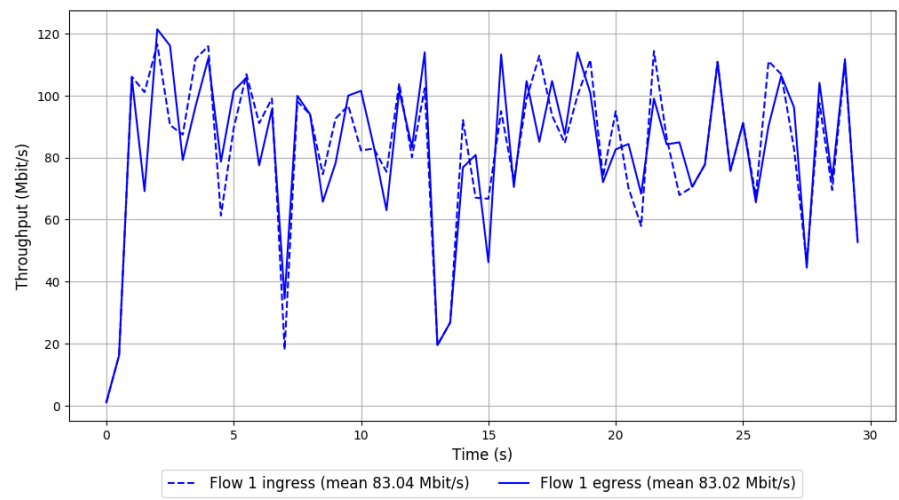
-- Flow 1:

Average throughput: 83.02 Mbit/s

95th percentile per-packet one-way delay: 72.562 ms

Loss rate: 0.01%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 18:08:07

End at: 2017-12-05 18:08:37

Below is generated by plot.py at 2017-12-05 20:32:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.58 Mbit/s

95th percentile per-packet one-way delay: 70.611 ms

Loss rate: 0.02%

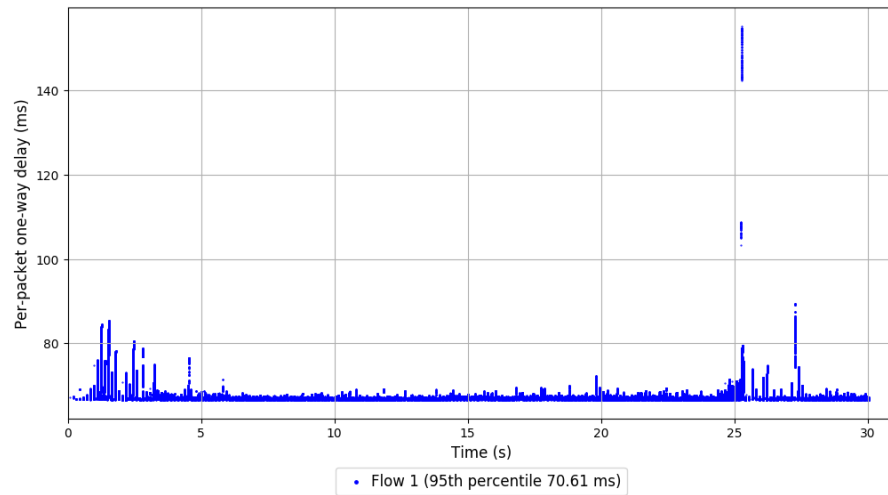
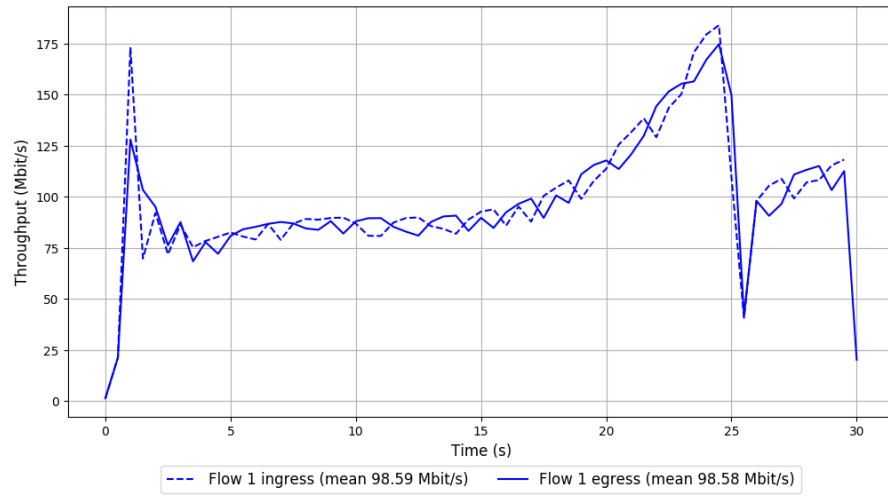
-- Flow 1:

Average throughput: 98.58 Mbit/s

95th percentile per-packet one-way delay: 70.611 ms

Loss rate: 0.02%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 18:18:45

End at: 2017-12-05 18:19:15

Below is generated by plot.py at 2017-12-05 20:32:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.94 Mbit/s

95th percentile per-packet one-way delay: 73.030 ms

Loss rate: 0.00%

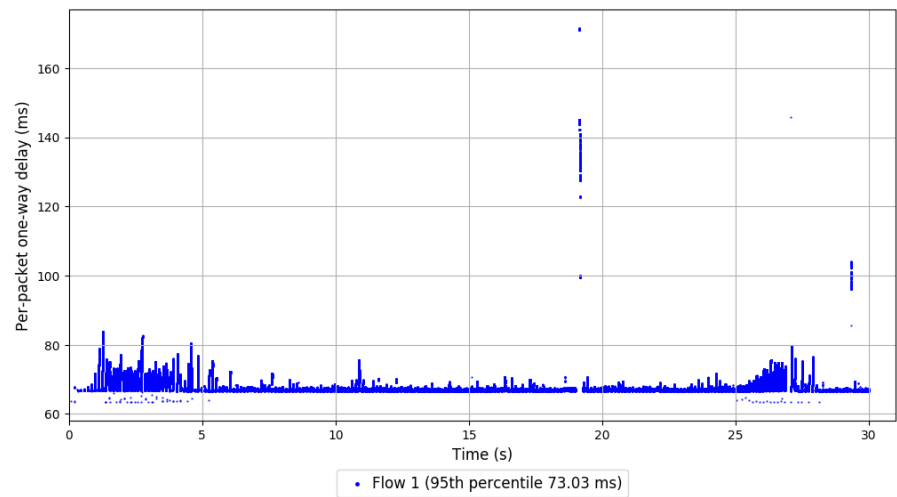
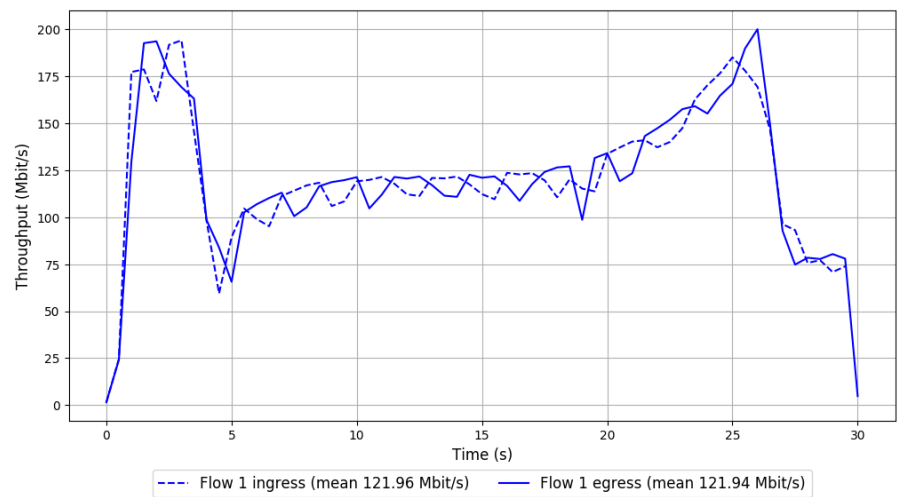
-- Flow 1:

Average throughput: 121.94 Mbit/s

95th percentile per-packet one-way delay: 73.030 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 18:29:26

End at: 2017-12-05 18:29:56

Below is generated by plot.py at 2017-12-05 20:32:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.78 Mbit/s

95th percentile per-packet one-way delay: 71.608 ms

Loss rate: 0.22%

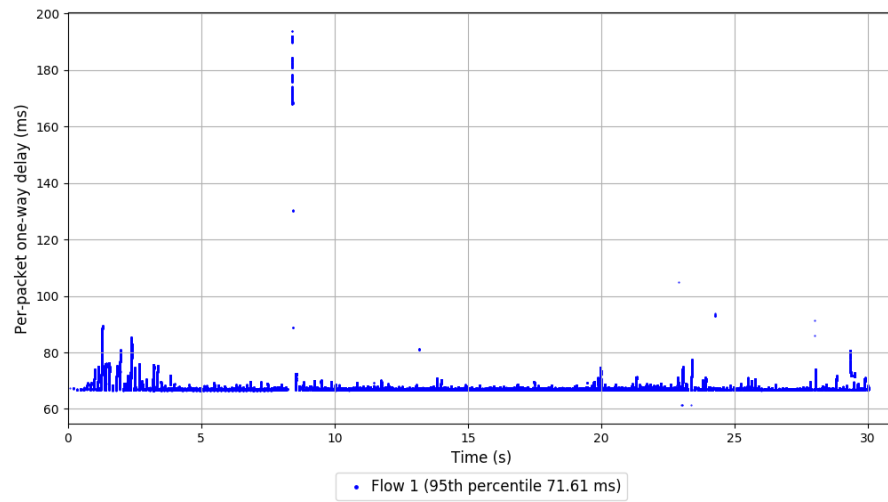
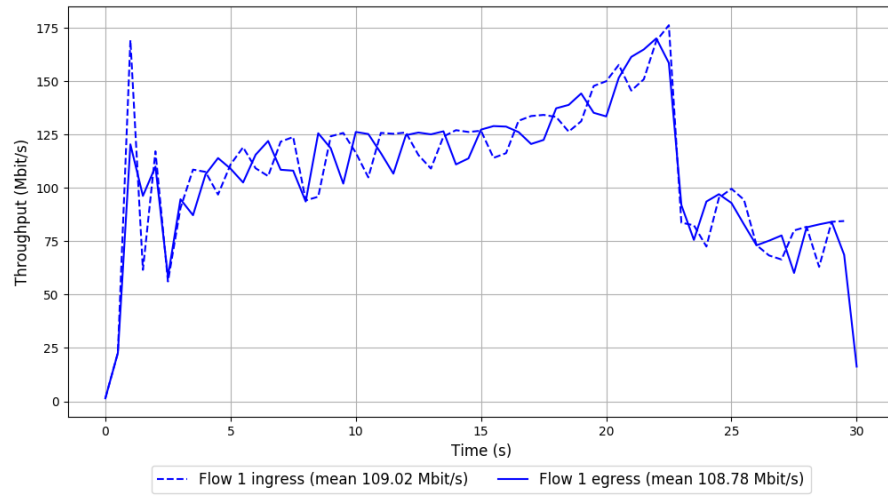
-- Flow 1:

Average throughput: 108.78 Mbit/s

95th percentile per-packet one-way delay: 71.608 ms

Loss rate: 0.22%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-05 18:40:05

End at: 2017-12-05 18:40:35

Below is generated by plot.py at 2017-12-05 20:32:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.14 Mbit/s

95th percentile per-packet one-way delay: 71.742 ms

Loss rate: 0.00%

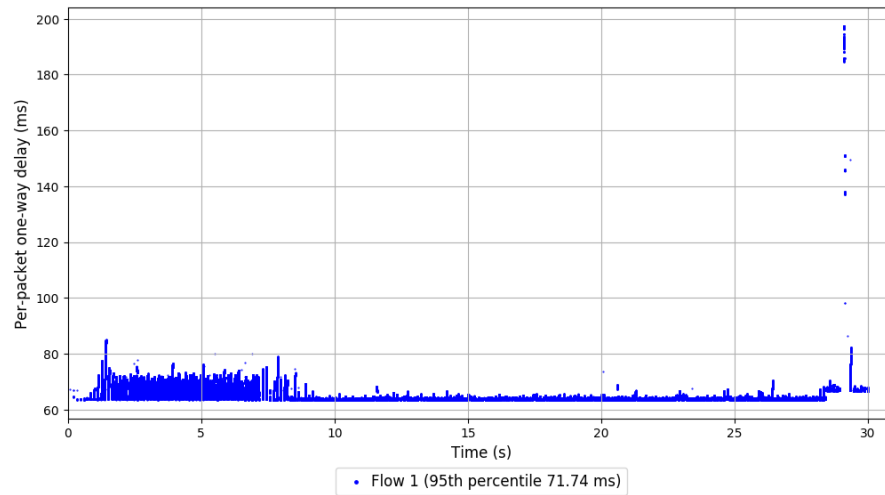
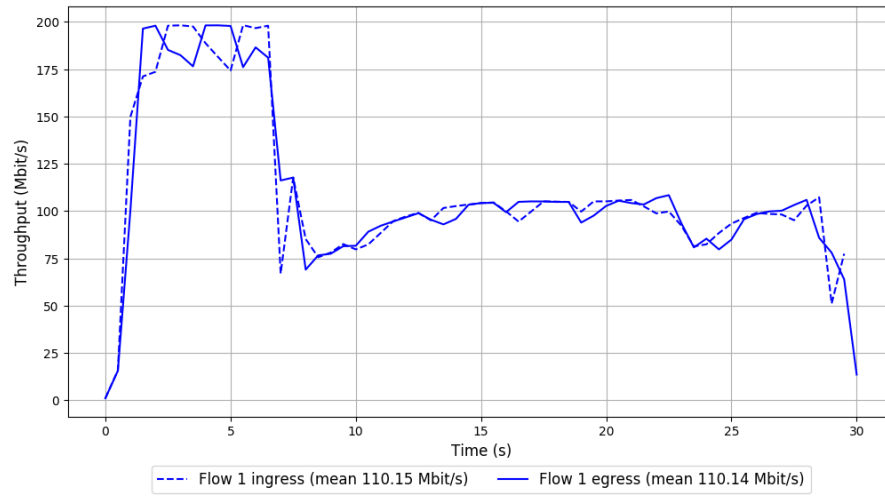
-- Flow 1:

Average throughput: 110.14 Mbit/s

95th percentile per-packet one-way delay: 71.742 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-05 18:50:16

End at: 2017-12-05 18:50:46

Below is generated by plot.py at 2017-12-05 20:32:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.74 Mbit/s

95th percentile per-packet one-way delay: 70.533 ms

Loss rate: 0.04%

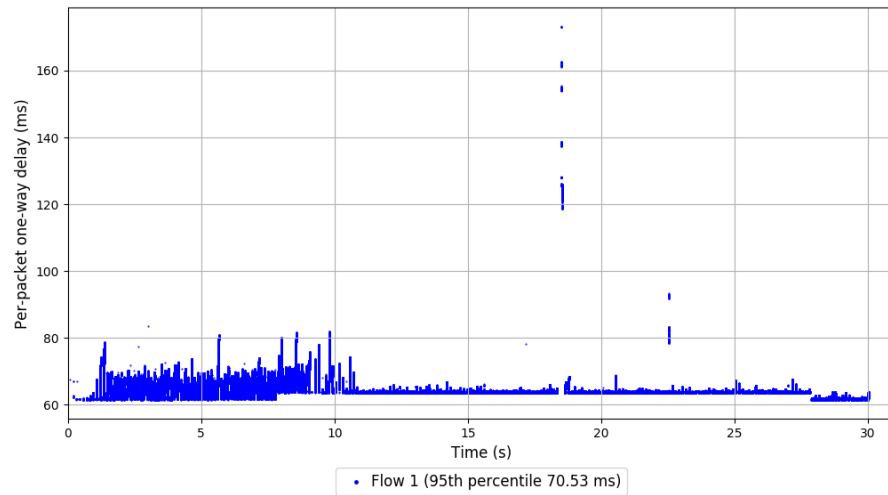
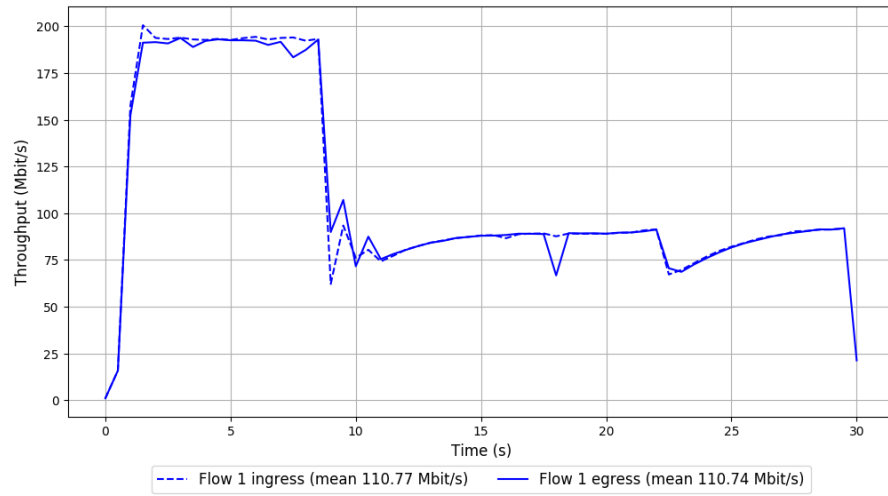
-- Flow 1:

Average throughput: 110.74 Mbit/s

95th percentile per-packet one-way delay: 70.533 ms

Loss rate: 0.04%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-05 19:00:34

End at: 2017-12-05 19:01:04

Below is generated by plot.py at 2017-12-05 20:33:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.22 Mbit/s

95th percentile per-packet one-way delay: 75.292 ms

Loss rate: 0.06%

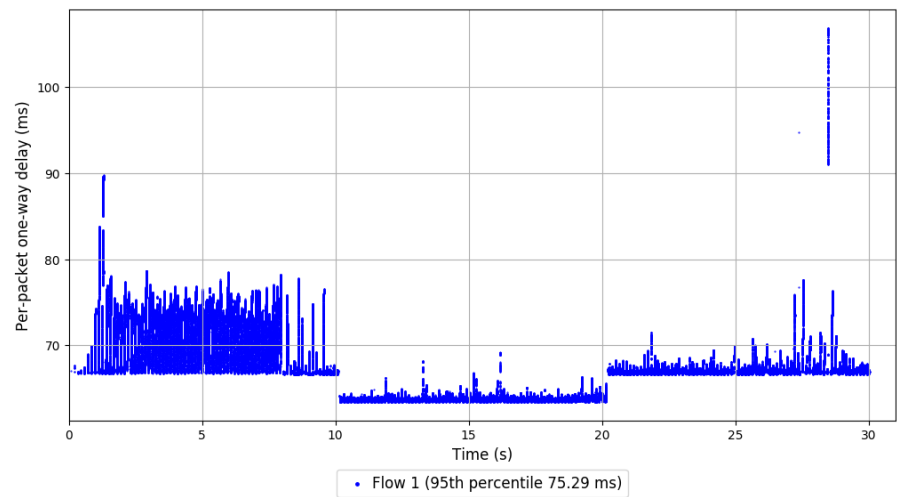
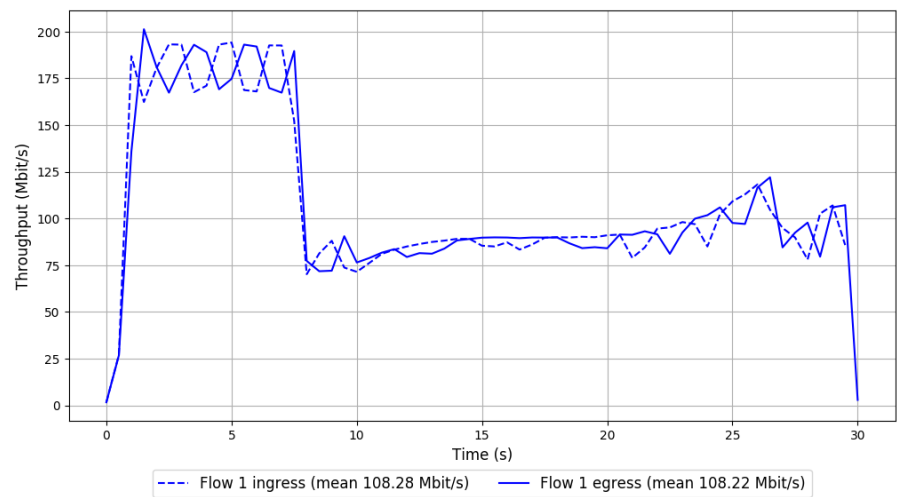
-- Flow 1:

Average throughput: 108.22 Mbit/s

95th percentile per-packet one-way delay: 75.292 ms

Loss rate: 0.06%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-05 19:10:46

End at: 2017-12-05 19:11:16

Below is generated by plot.py at 2017-12-05 20:33:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.13 Mbit/s

95th percentile per-packet one-way delay: 67.073 ms

Loss rate: 0.03%

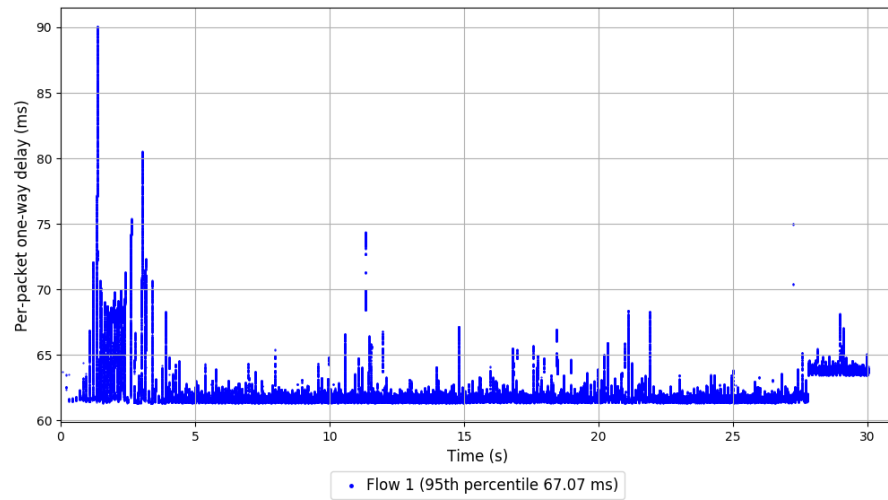
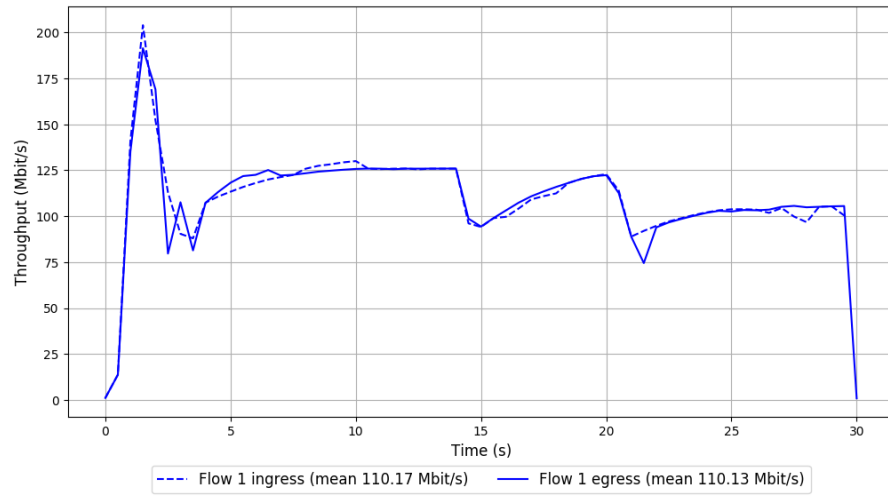
-- Flow 1:

Average throughput: 110.13 Mbit/s

95th percentile per-packet one-way delay: 67.073 ms

Loss rate: 0.03%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-05 19:20:54

End at: 2017-12-05 19:21:24

Below is generated by plot.py at 2017-12-05 20:33:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.26 Mbit/s

95th percentile per-packet one-way delay: 75.758 ms

Loss rate: 0.03%

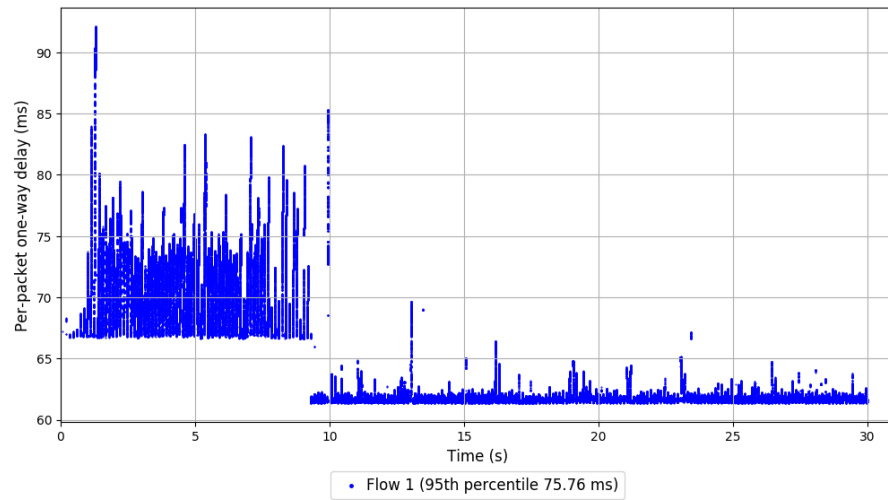
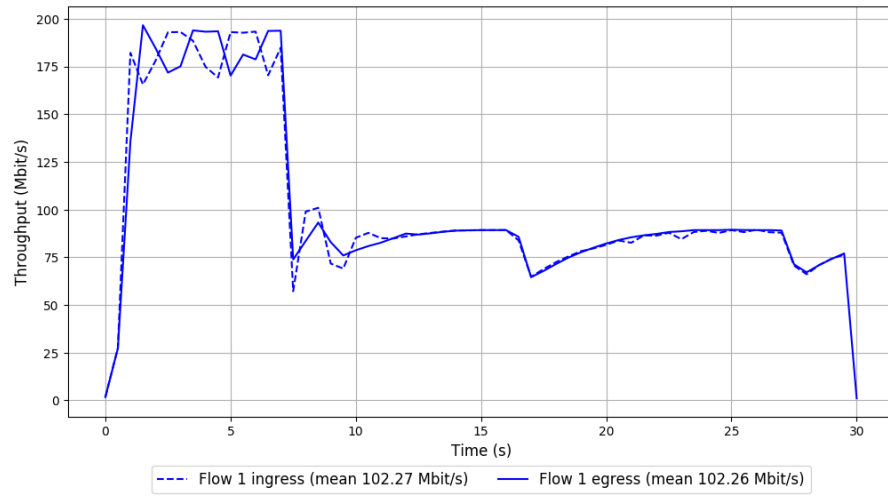
-- Flow 1:

Average throughput: 102.26 Mbit/s

95th percentile per-packet one-way delay: 75.758 ms

Loss rate: 0.03%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-05 19:31:29

End at: 2017-12-05 19:31:59

Below is generated by plot.py at 2017-12-05 20:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.31 Mbit/s

95th percentile per-packet one-way delay: 68.691 ms

Loss rate: 0.12%

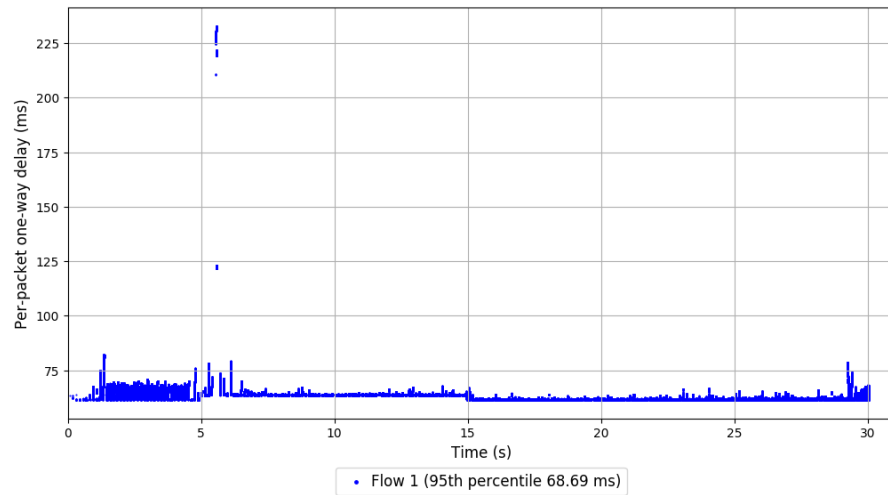
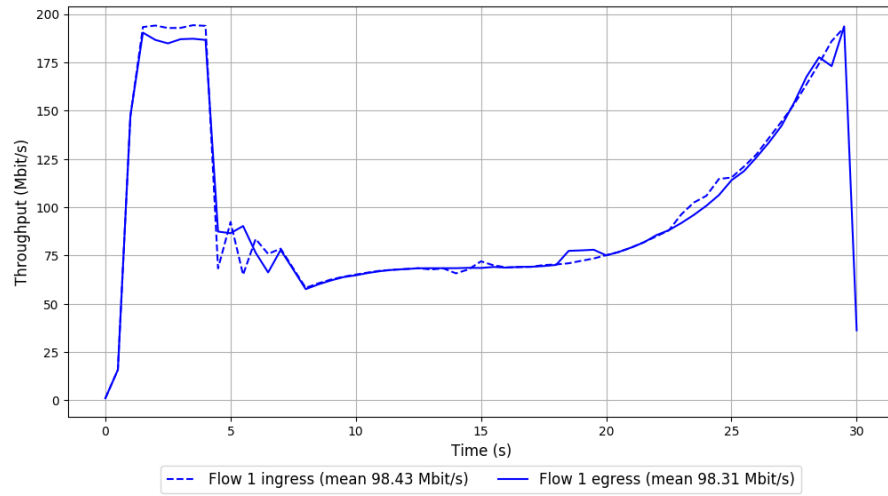
-- Flow 1:

Average throughput: 98.31 Mbit/s

95th percentile per-packet one-way delay: 68.691 ms

Loss rate: 0.12%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-05 19:42:05

End at: 2017-12-05 19:42:35

Below is generated by plot.py at 2017-12-05 20:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.56 Mbit/s

95th percentile per-packet one-way delay: 70.368 ms

Loss rate: 0.00%

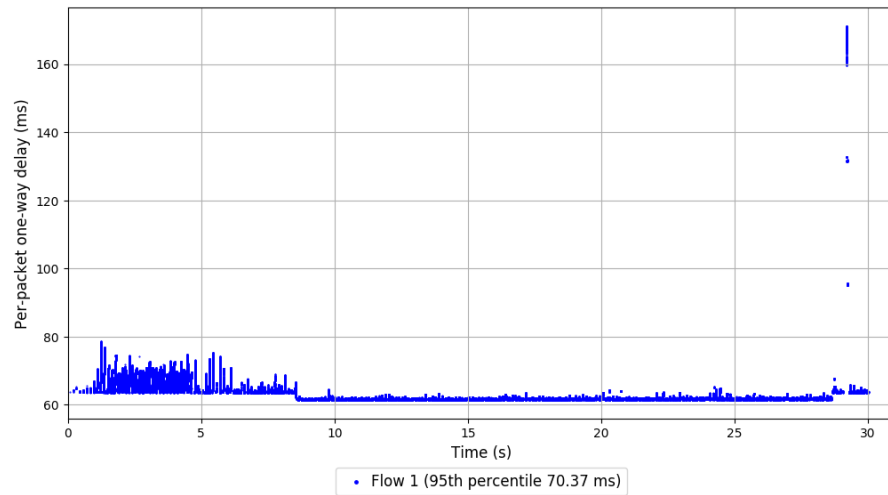
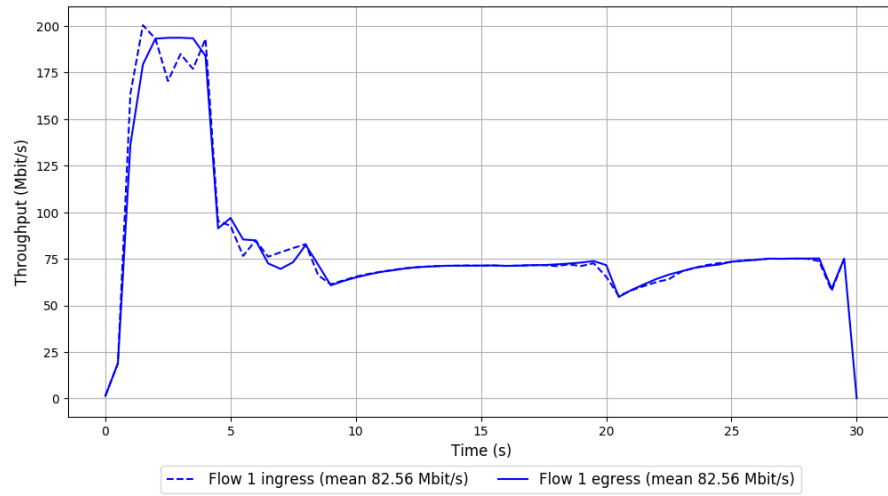
-- Flow 1:

Average throughput: 82.56 Mbit/s

95th percentile per-packet one-way delay: 70.368 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

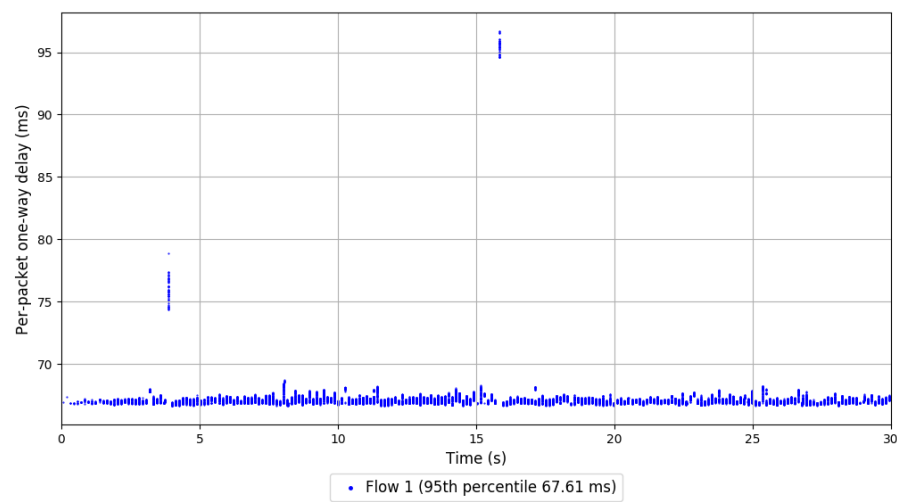
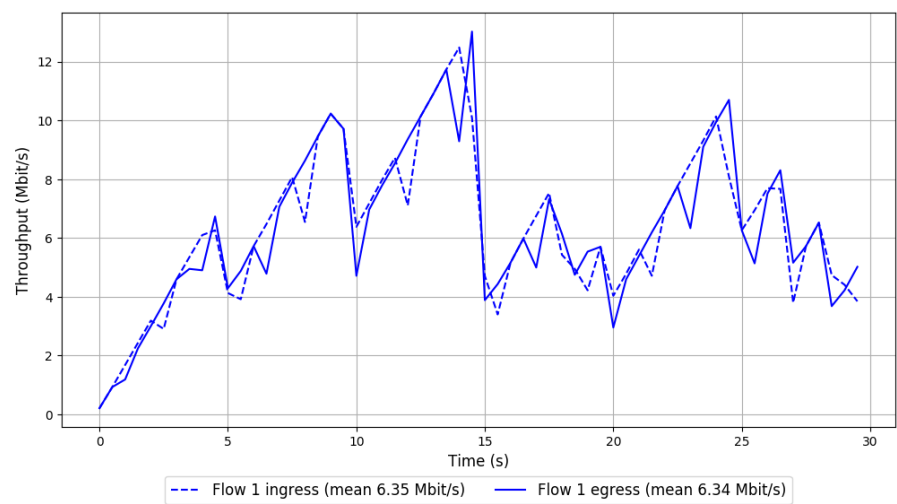


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 18:07:29
End at: 2017-12-05 18:07:59

# Below is generated by plot.py at 2017-12-05 20:34:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.34 Mbit/s
95th percentile per-packet one-way delay: 67.608 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 6.34 Mbit/s
95th percentile per-packet one-way delay: 67.608 ms
Loss rate: 0.07%
```

Run 1: Report of LEDBAT — Data Link

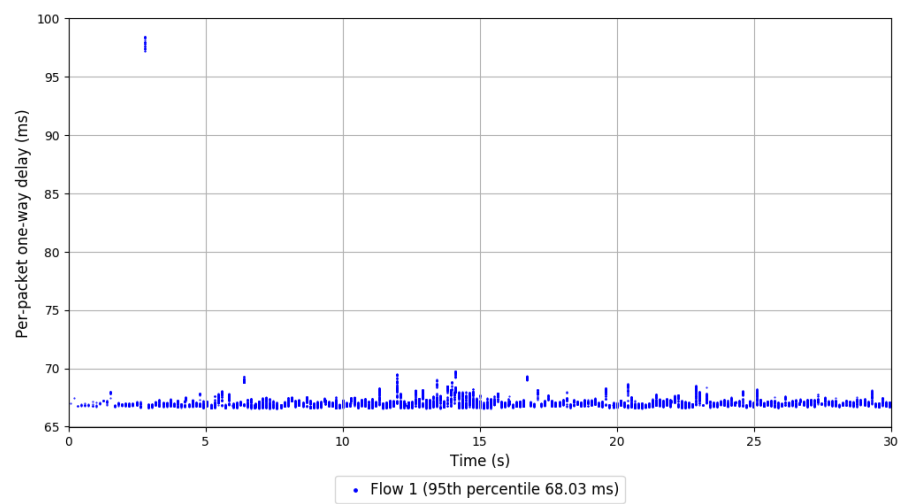
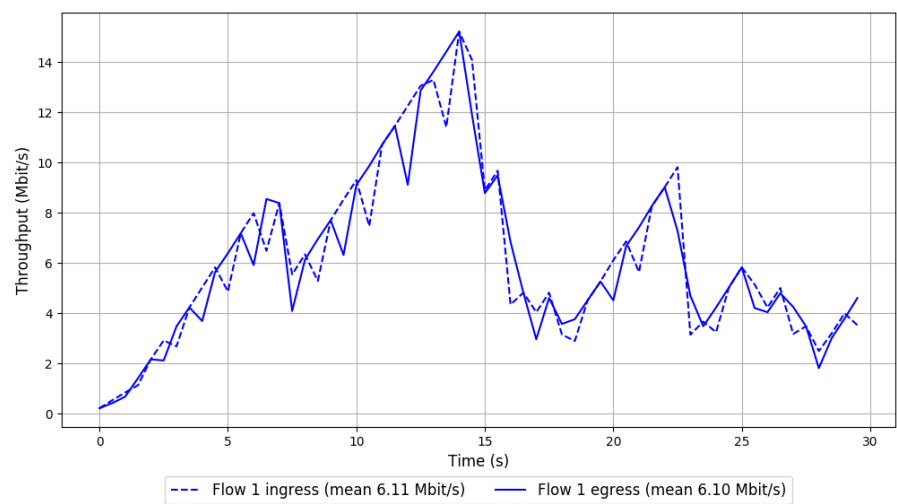


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-05 18:18:07
End at: 2017-12-05 18:18:37

# Below is generated by plot.py at 2017-12-05 20:34:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.10 Mbit/s
95th percentile per-packet one-way delay: 68.027 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 6.10 Mbit/s
95th percentile per-packet one-way delay: 68.027 ms
Loss rate: 0.12%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 18:28:48

End at: 2017-12-05 18:29:18

Below is generated by plot.py at 2017-12-05 20:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 67.468 ms

Loss rate: 0.16%

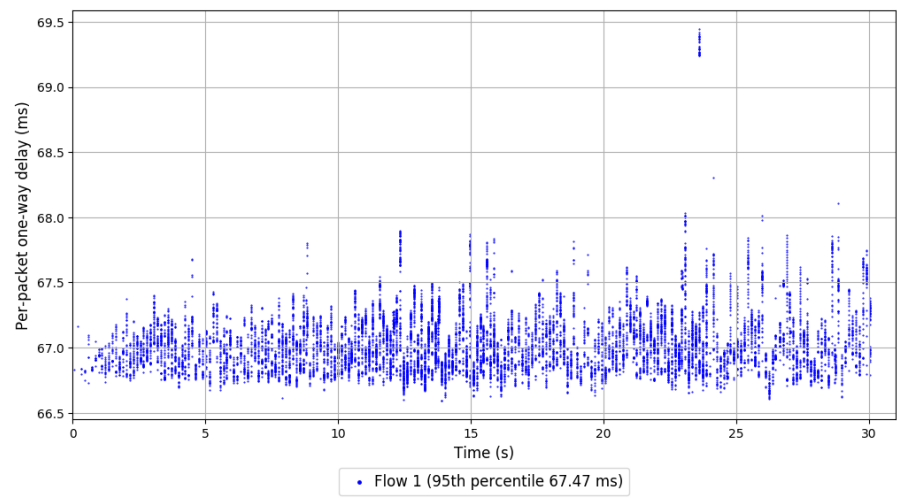
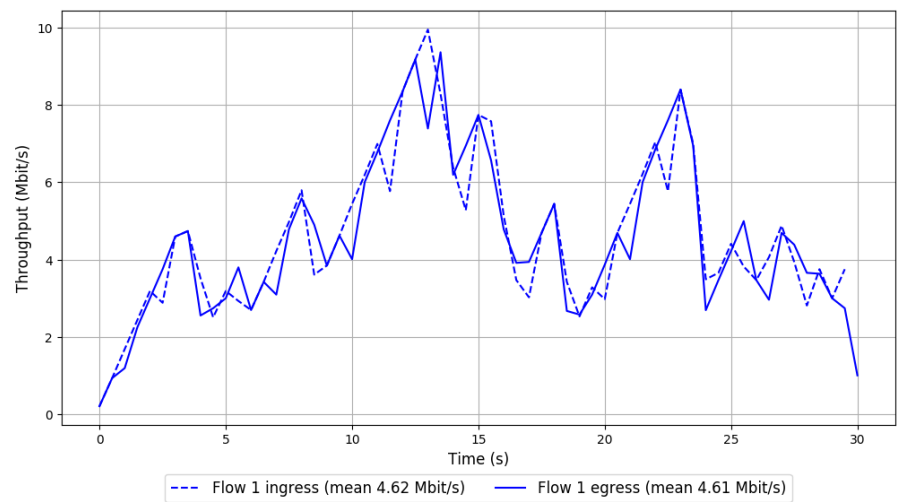
-- Flow 1:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 67.468 ms

Loss rate: 0.16%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-05 18:39:27

End at: 2017-12-05 18:39:57

Below is generated by plot.py at 2017-12-05 20:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 67.516 ms

Loss rate: 0.02%

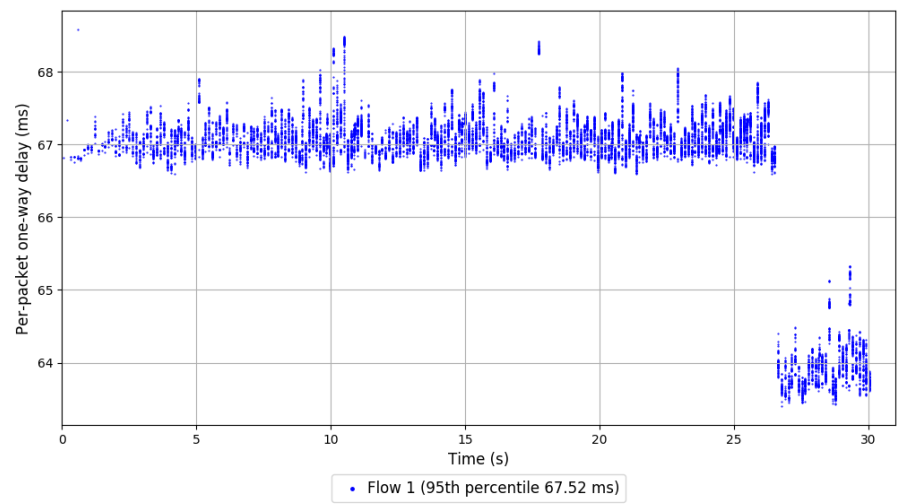
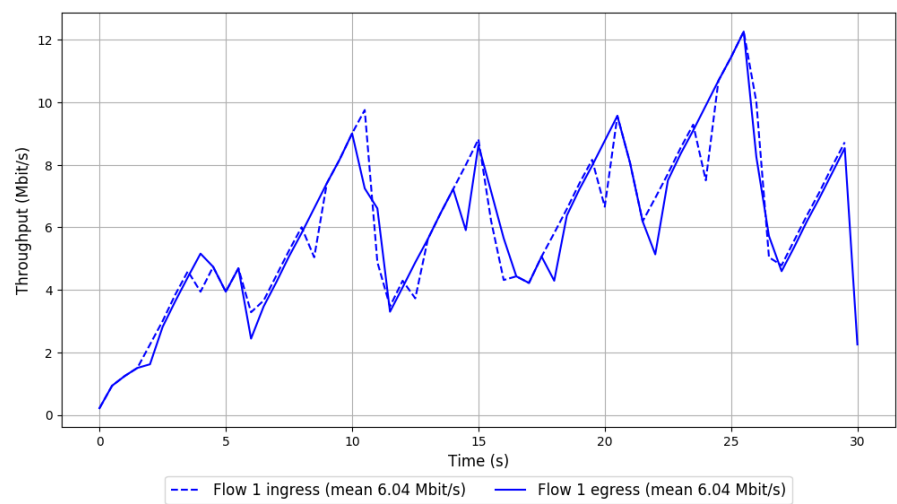
-- Flow 1:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 67.516 ms

Loss rate: 0.02%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-05 18:49:38

End at: 2017-12-05 18:50:08

Below is generated by plot.py at 2017-12-05 20:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 67.387 ms

Loss rate: 0.01%

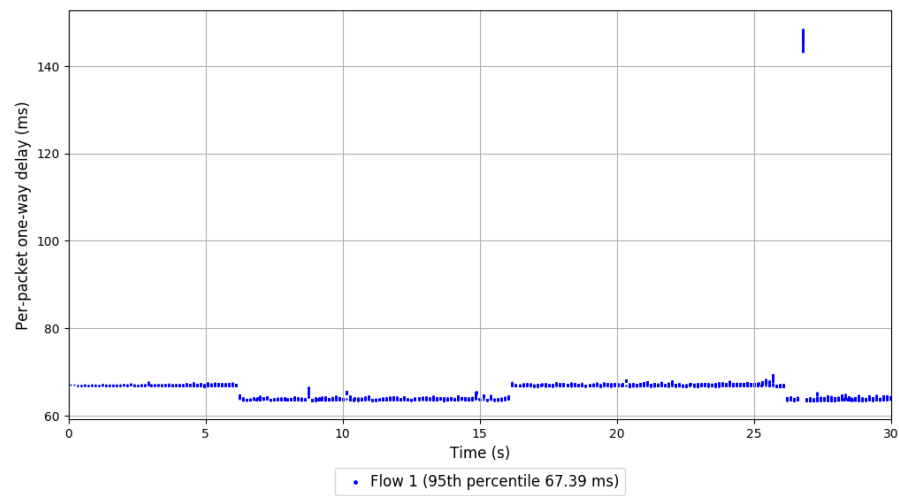
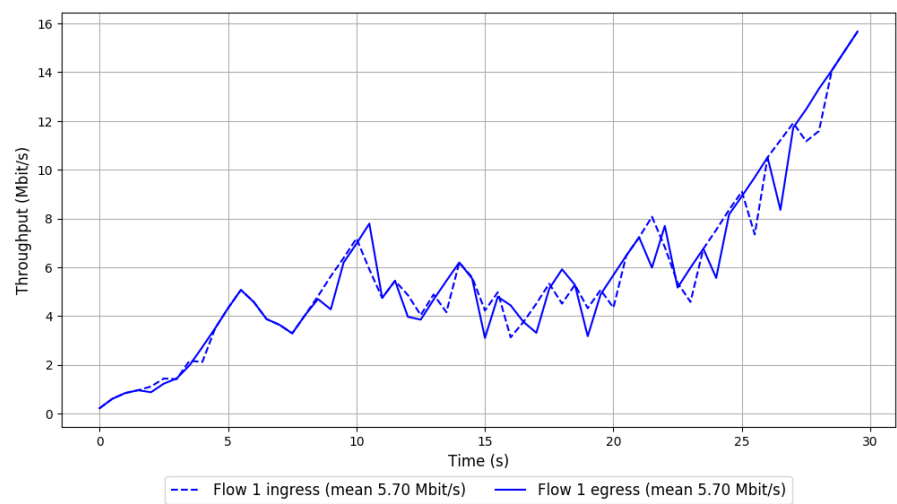
-- Flow 1:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 67.387 ms

Loss rate: 0.01%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-05 18:59:56

End at: 2017-12-05 19:00:26

Below is generated by plot.py at 2017-12-05 20:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.31 Mbit/s

95th percentile per-packet one-way delay: 67.786 ms

Loss rate: 0.73%

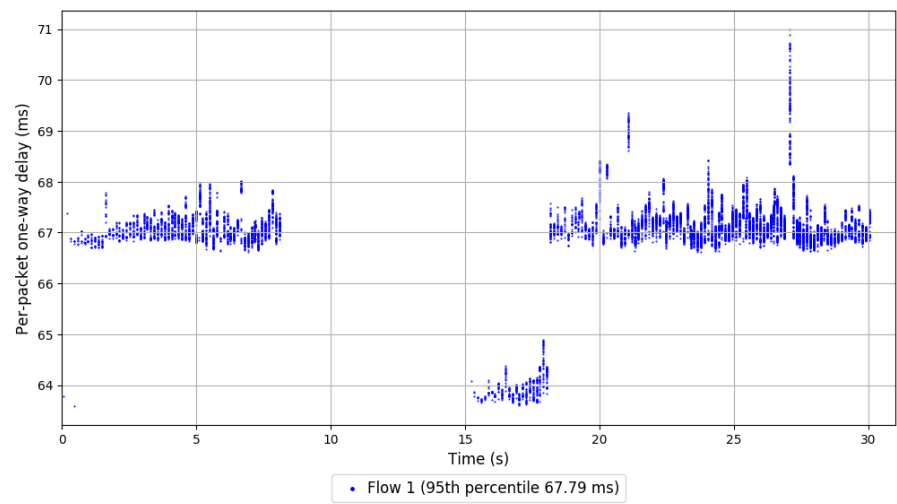
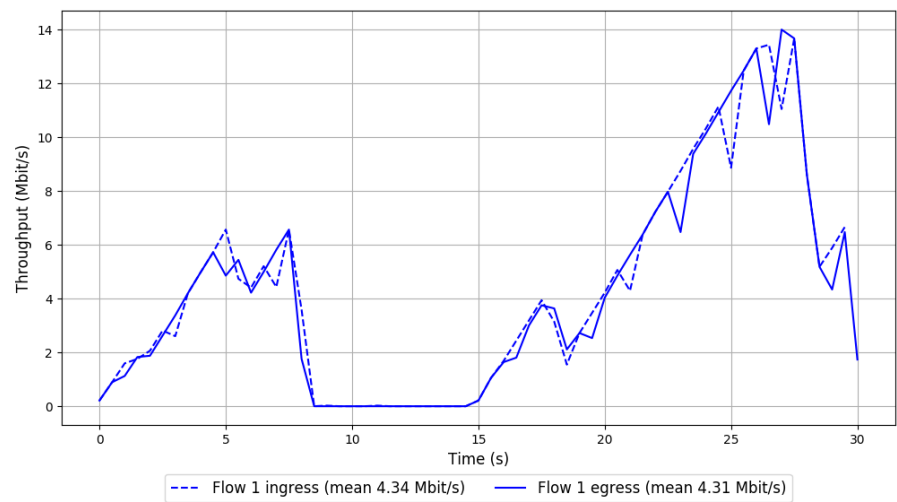
-- Flow 1:

Average throughput: 4.31 Mbit/s

95th percentile per-packet one-way delay: 67.786 ms

Loss rate: 0.73%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-05 19:10:08

End at: 2017-12-05 19:10:38

Below is generated by plot.py at 2017-12-05 20:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.01 Mbit/s

95th percentile per-packet one-way delay: 64.160 ms

Loss rate: 0.04%

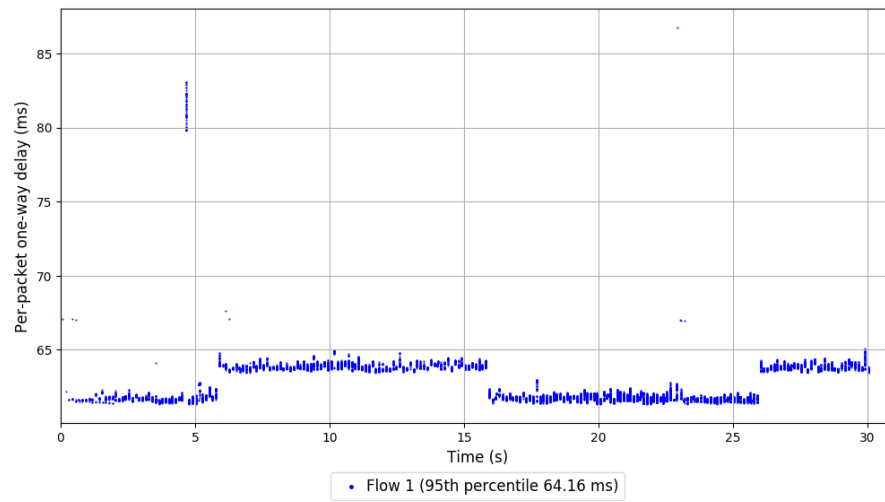
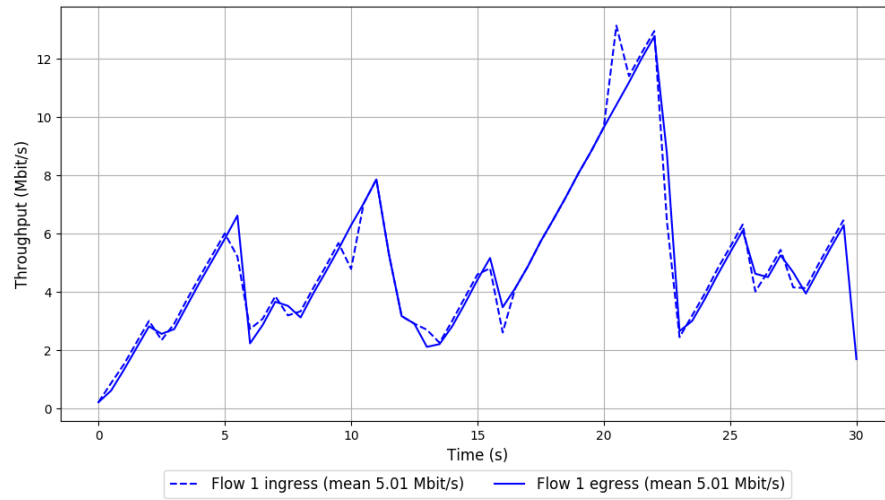
-- Flow 1:

Average throughput: 5.01 Mbit/s

95th percentile per-packet one-way delay: 64.160 ms

Loss rate: 0.04%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-05 19:20:16

End at: 2017-12-05 19:20:46

Below is generated by plot.py at 2017-12-05 20:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 67.301 ms

Loss rate: 0.07%

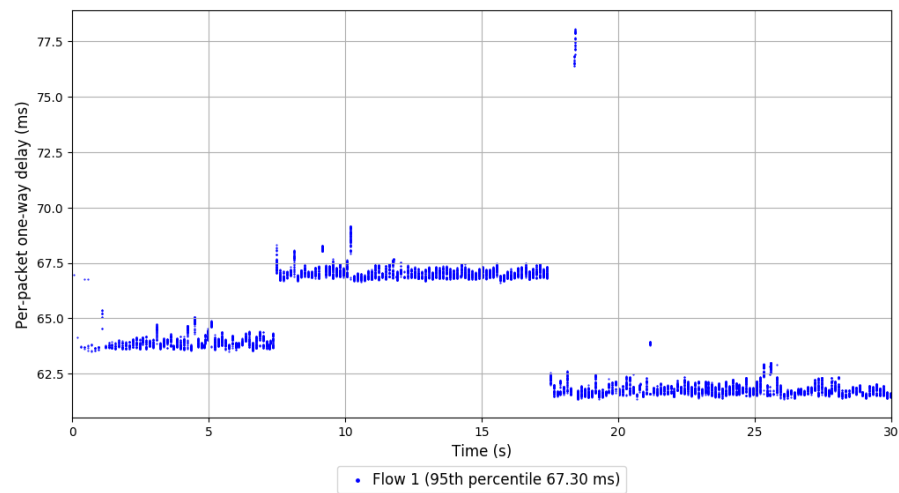
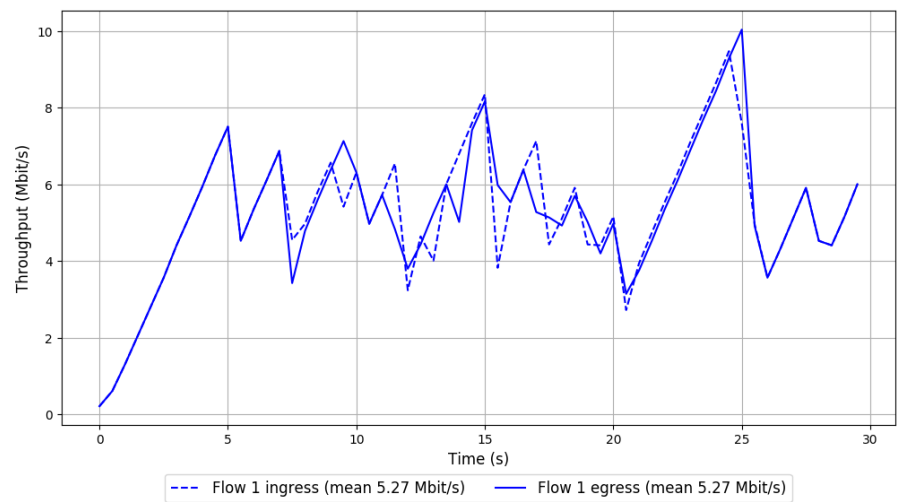
-- Flow 1:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 67.301 ms

Loss rate: 0.07%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-05 19:30:50

End at: 2017-12-05 19:31:20

Below is generated by plot.py at 2017-12-05 20:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 67.448 ms

Loss rate: 0.00%

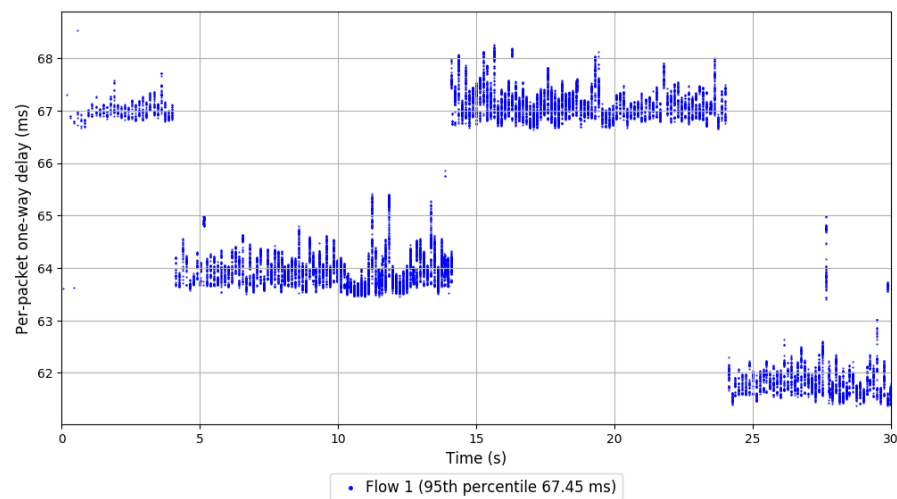
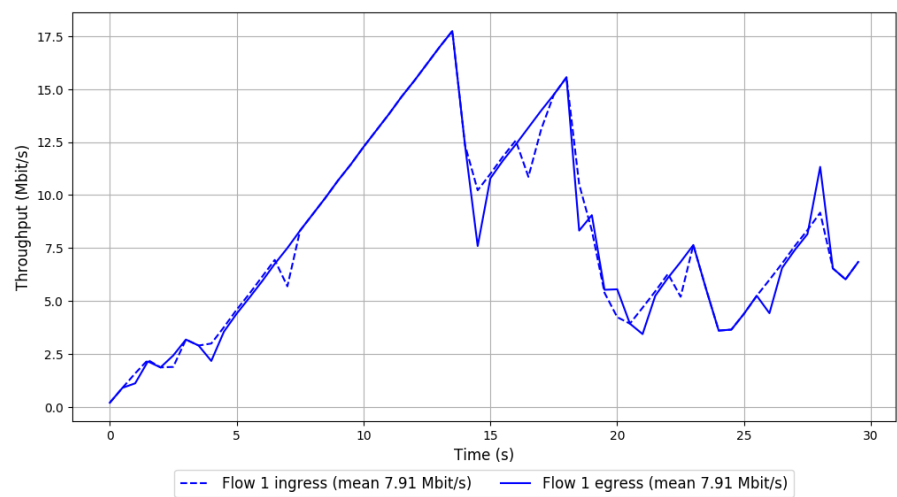
-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 67.448 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-05 19:41:27

End at: 2017-12-05 19:41:57

Below is generated by plot.py at 2017-12-05 20:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 66.908 ms

Loss rate: 0.00%

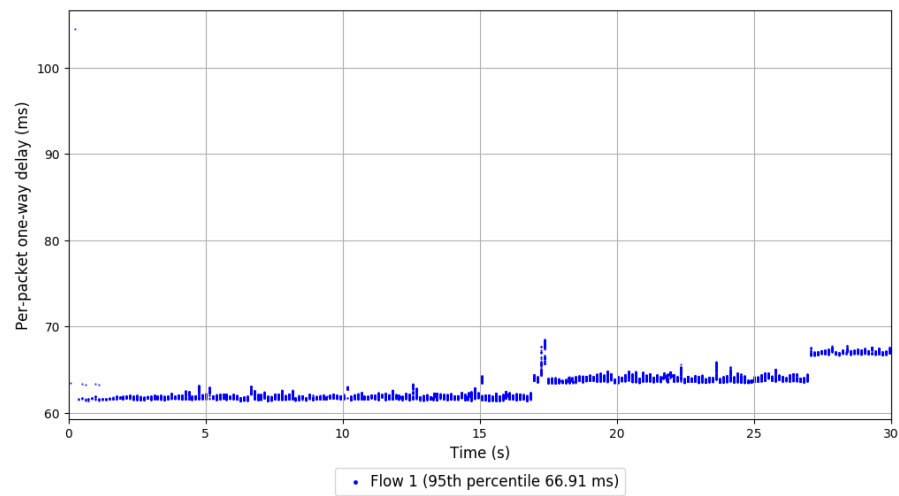
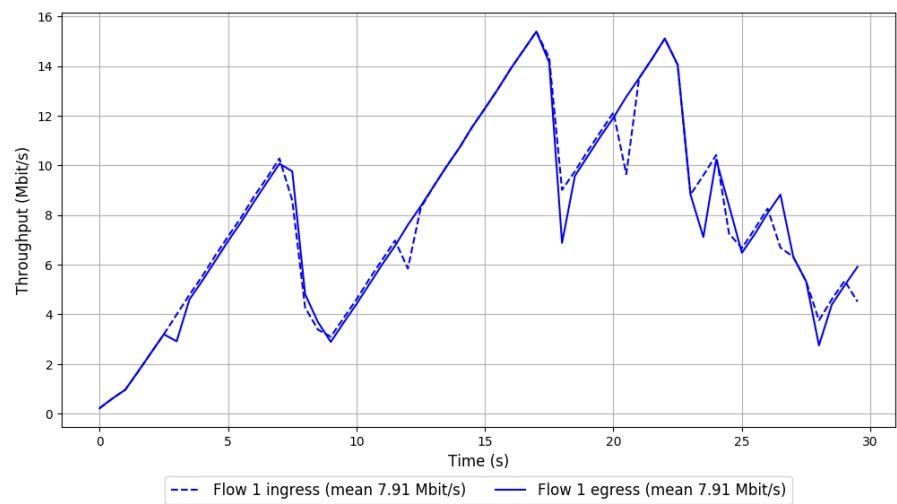
-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 66.908 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

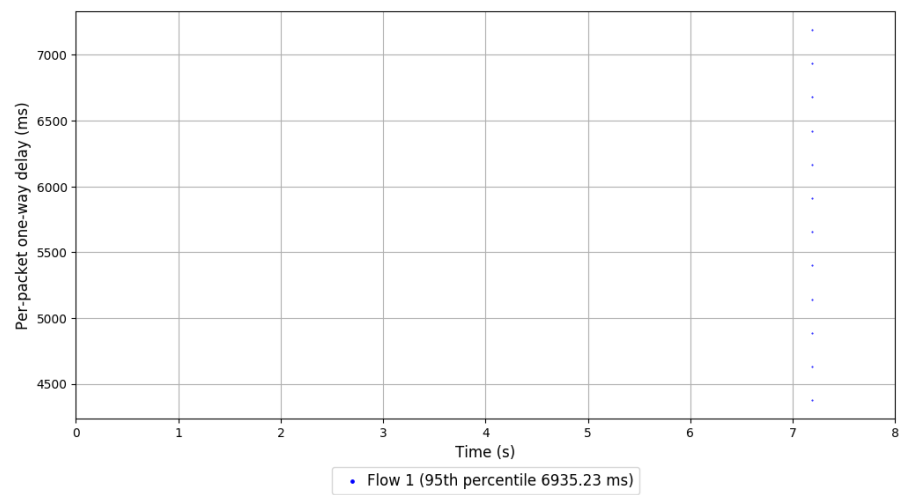
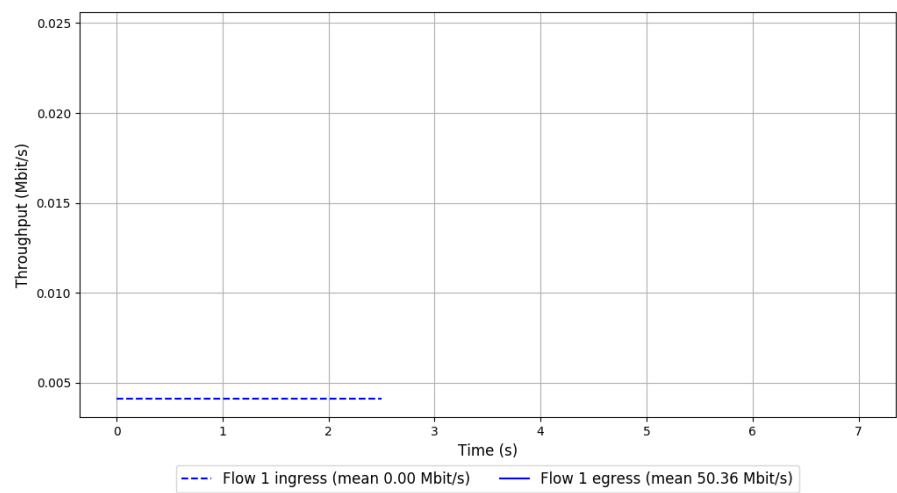


Run 1: Statistics of PCC

Start at: 2017-12-05 18:04:41

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

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-05 18:15:00

End at: 2017-12-05 18:15:30

Below is generated by plot.py at 2017-12-05 20:40:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 366.34 Mbit/s

95th percentile per-packet one-way delay: 75.395 ms

Loss rate: 0.09%

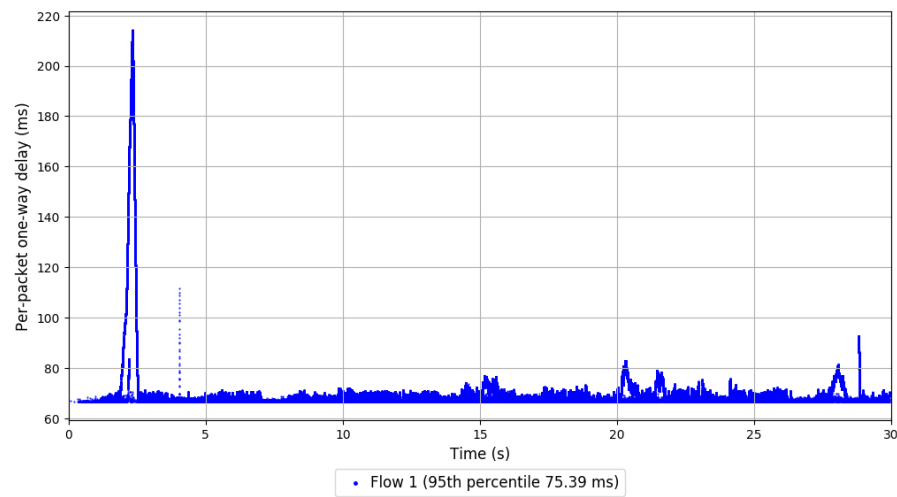
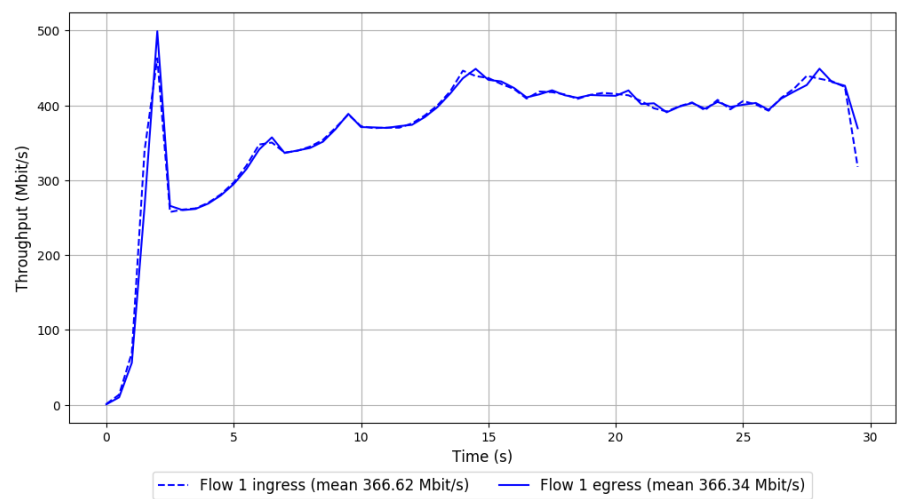
-- Flow 1:

Average throughput: 366.34 Mbit/s

95th percentile per-packet one-way delay: 75.395 ms

Loss rate: 0.09%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-05 18:25:41

End at: 2017-12-05 18:26:11

Below is generated by plot.py at 2017-12-05 20:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 455.42 Mbit/s

95th percentile per-packet one-way delay: 217.952 ms

Loss rate: 0.77%

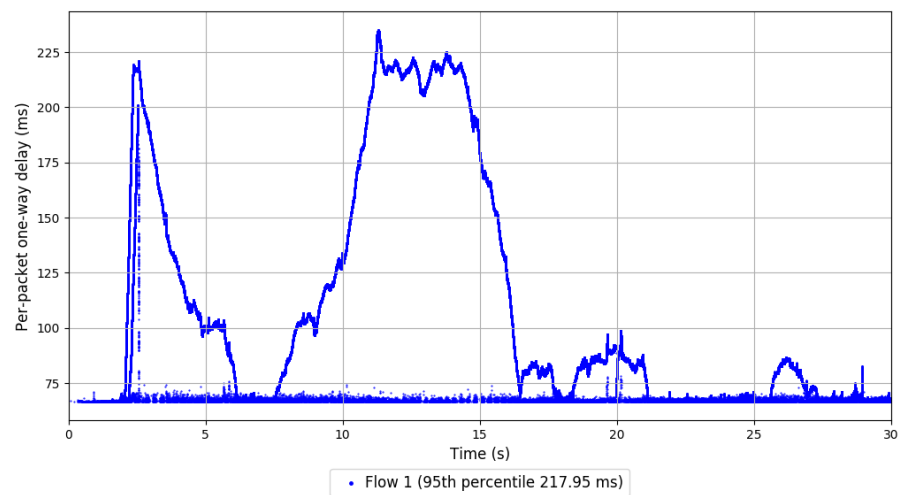
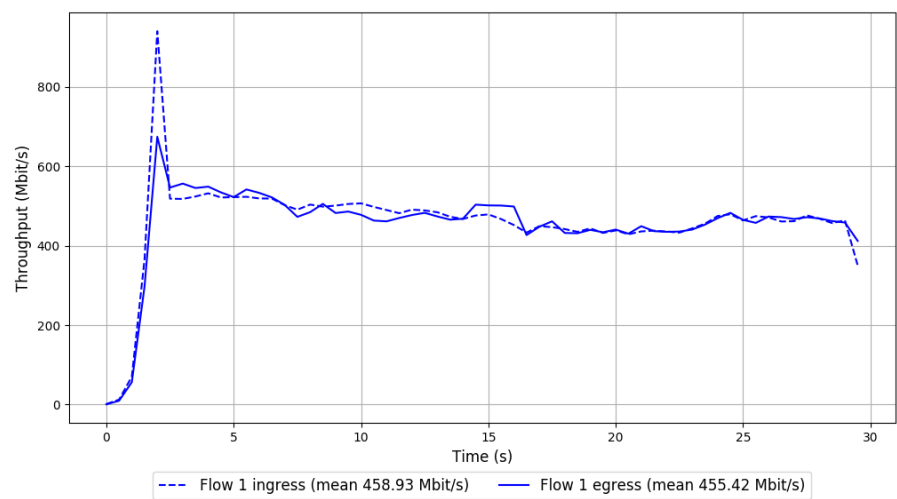
-- Flow 1:

Average throughput: 455.42 Mbit/s

95th percentile per-packet one-way delay: 217.952 ms

Loss rate: 0.77%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-05 18:36:23

End at: 2017-12-05 18:36:53

Below is generated by plot.py at 2017-12-05 20:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 455.56 Mbit/s

95th percentile per-packet one-way delay: 176.832 ms

Loss rate: 0.55%

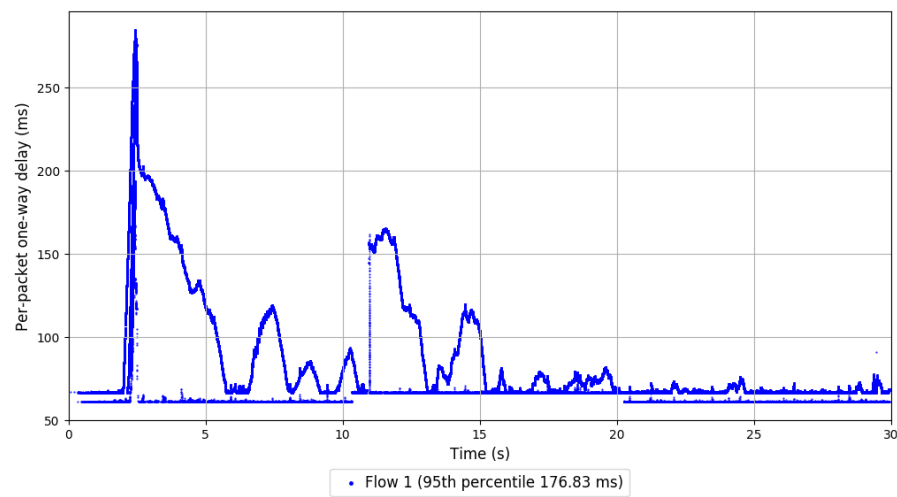
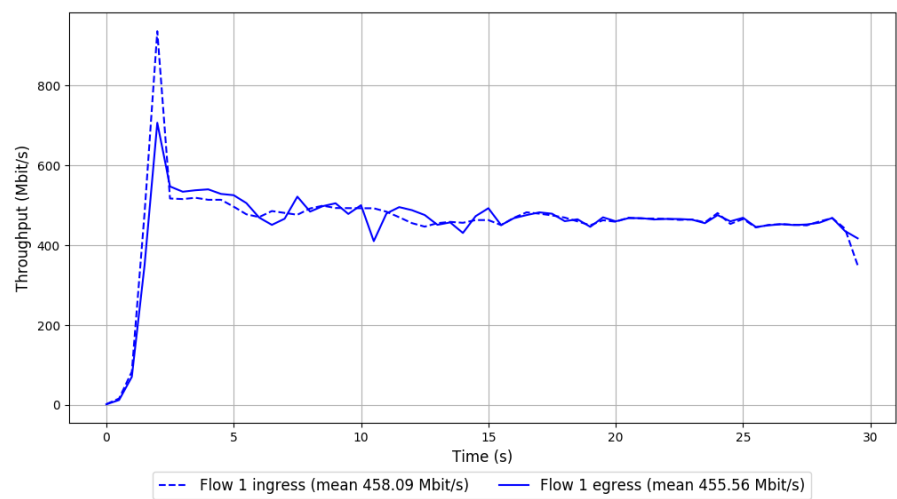
-- Flow 1:

Average throughput: 455.56 Mbit/s

95th percentile per-packet one-way delay: 176.832 ms

Loss rate: 0.55%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-05 18:46:39

End at: 2017-12-05 18:47:09

Below is generated by plot.py at 2017-12-05 20:42:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 473.68 Mbit/s

95th percentile per-packet one-way delay: 198.348 ms

Loss rate: 0.96%

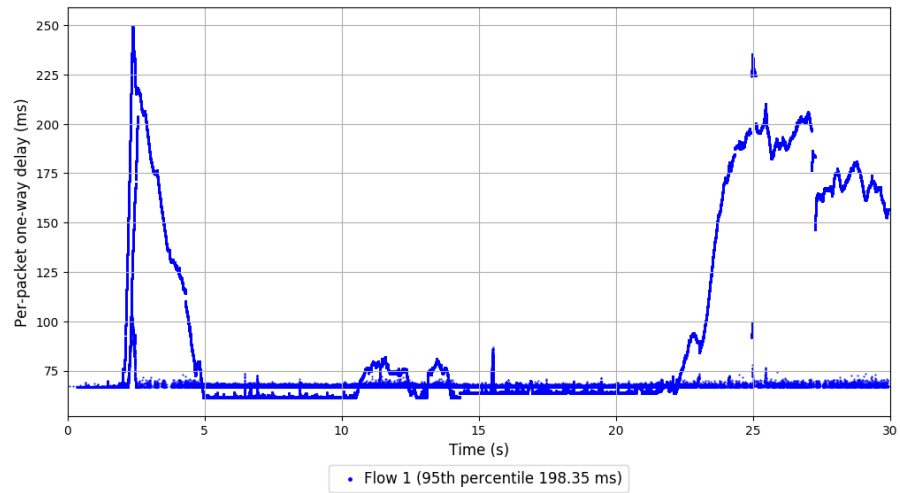
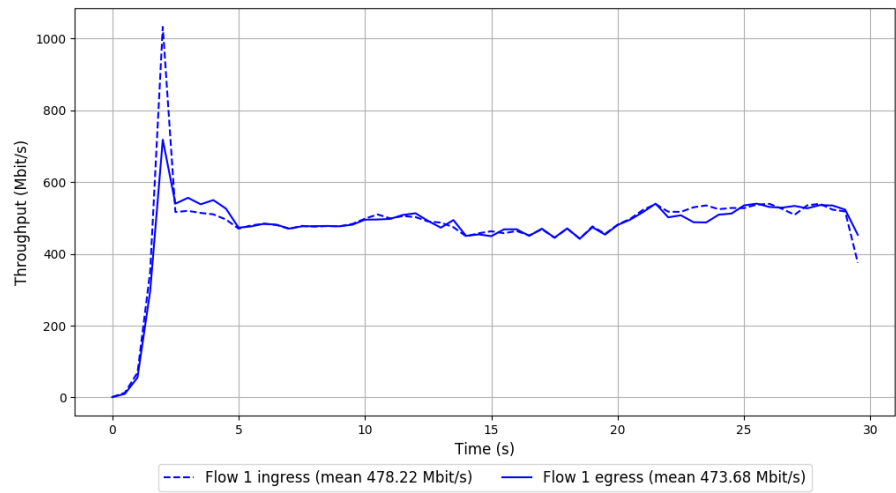
-- Flow 1:

Average throughput: 473.68 Mbit/s

95th percentile per-packet one-way delay: 198.348 ms

Loss rate: 0.96%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-05 18:56:57

End at: 2017-12-05 18:57:27

Below is generated by plot.py at 2017-12-05 20:42:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 451.92 Mbit/s

95th percentile per-packet one-way delay: 213.441 ms

Loss rate: 1.27%

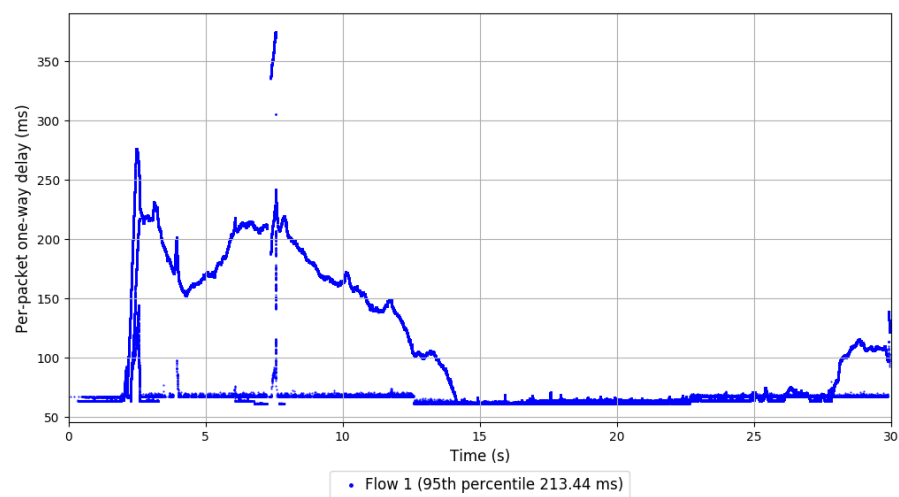
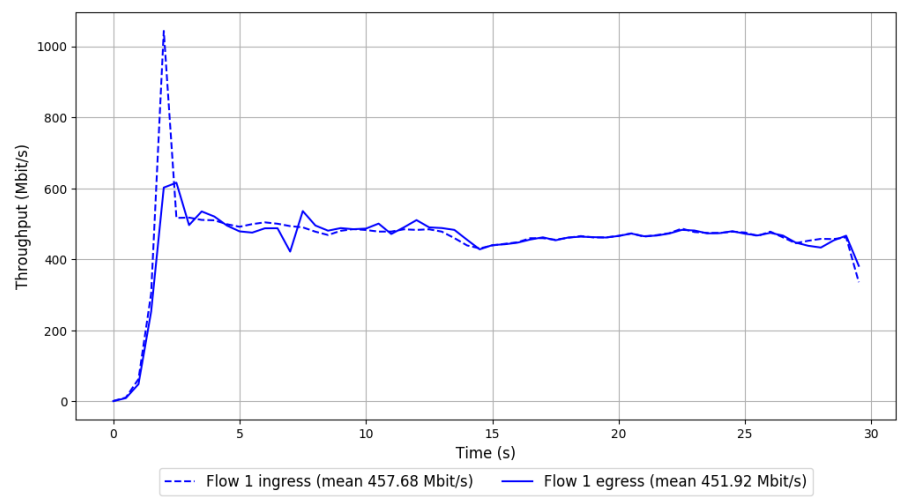
-- Flow 1:

Average throughput: 451.92 Mbit/s

95th percentile per-packet one-way delay: 213.441 ms

Loss rate: 1.27%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-05 19:07:06

End at: 2017-12-05 19:07:36

Below is generated by plot.py at 2017-12-05 20:42:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 383.66 Mbit/s

95th percentile per-packet one-way delay: 156.475 ms

Loss rate: 0.25%

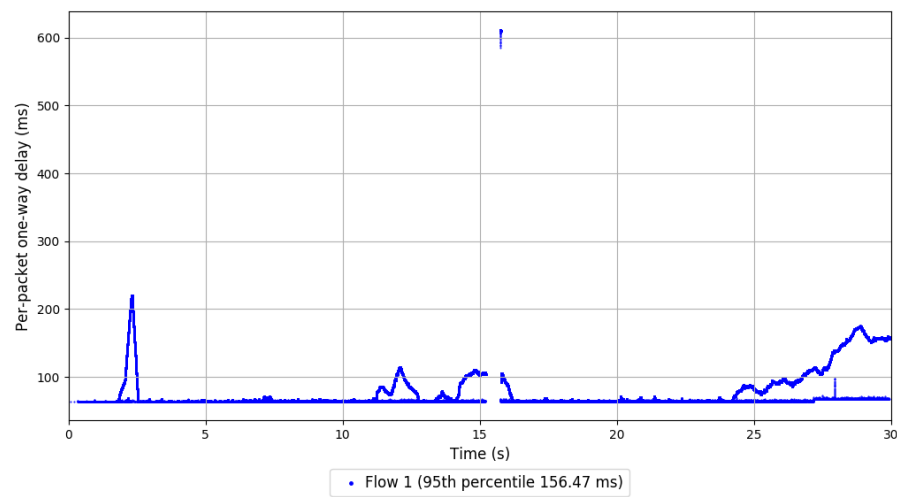
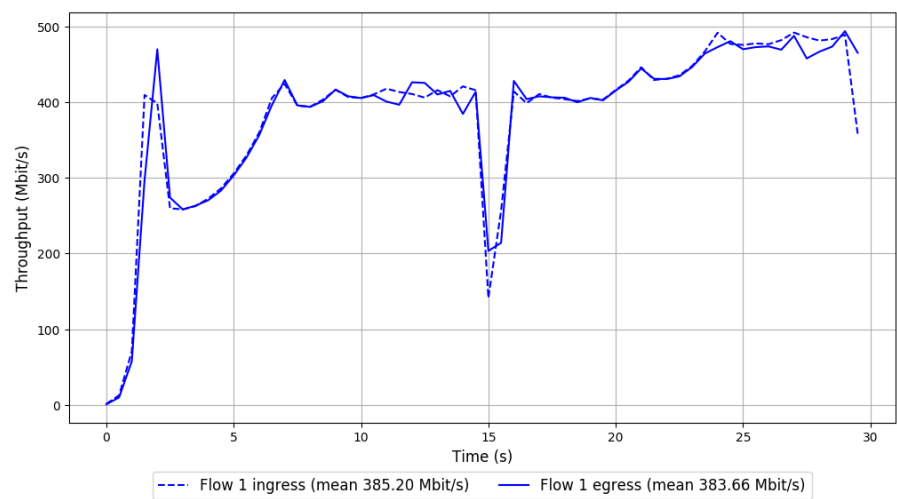
-- Flow 1:

Average throughput: 383.66 Mbit/s

95th percentile per-packet one-way delay: 156.475 ms

Loss rate: 0.25%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-05 19:17:22

End at: 2017-12-05 19:17:52

Below is generated by plot.py at 2017-12-05 20:42:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 385.22 Mbit/s

95th percentile per-packet one-way delay: 82.453 ms

Loss rate: 0.01%

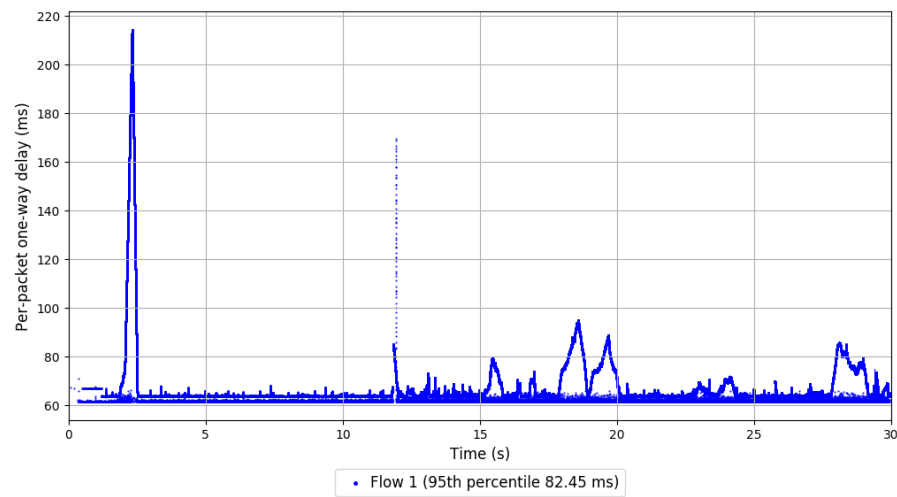
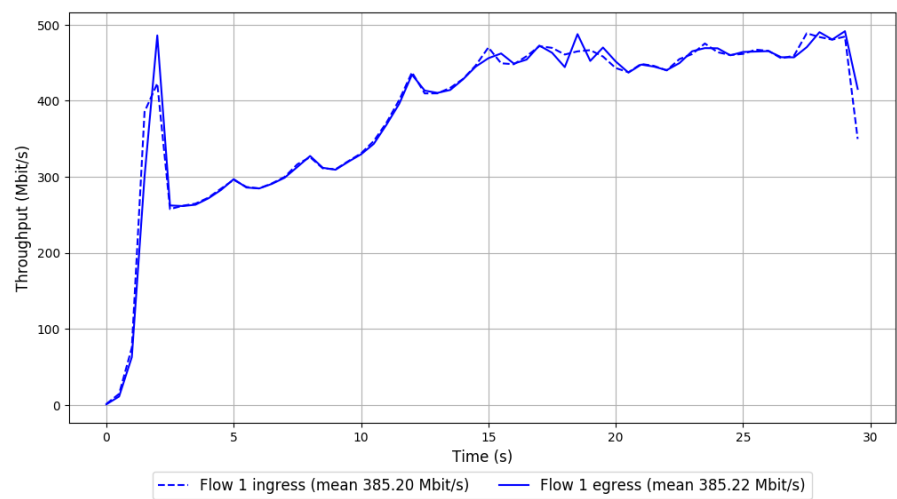
-- Flow 1:

Average throughput: 385.22 Mbit/s

95th percentile per-packet one-way delay: 82.453 ms

Loss rate: 0.01%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-05 19:27:44

End at: 2017-12-05 19:28:14

Below is generated by plot.py at 2017-12-05 20:42:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 452.99 Mbit/s

95th percentile per-packet one-way delay: 210.254 ms

Loss rate: 0.86%

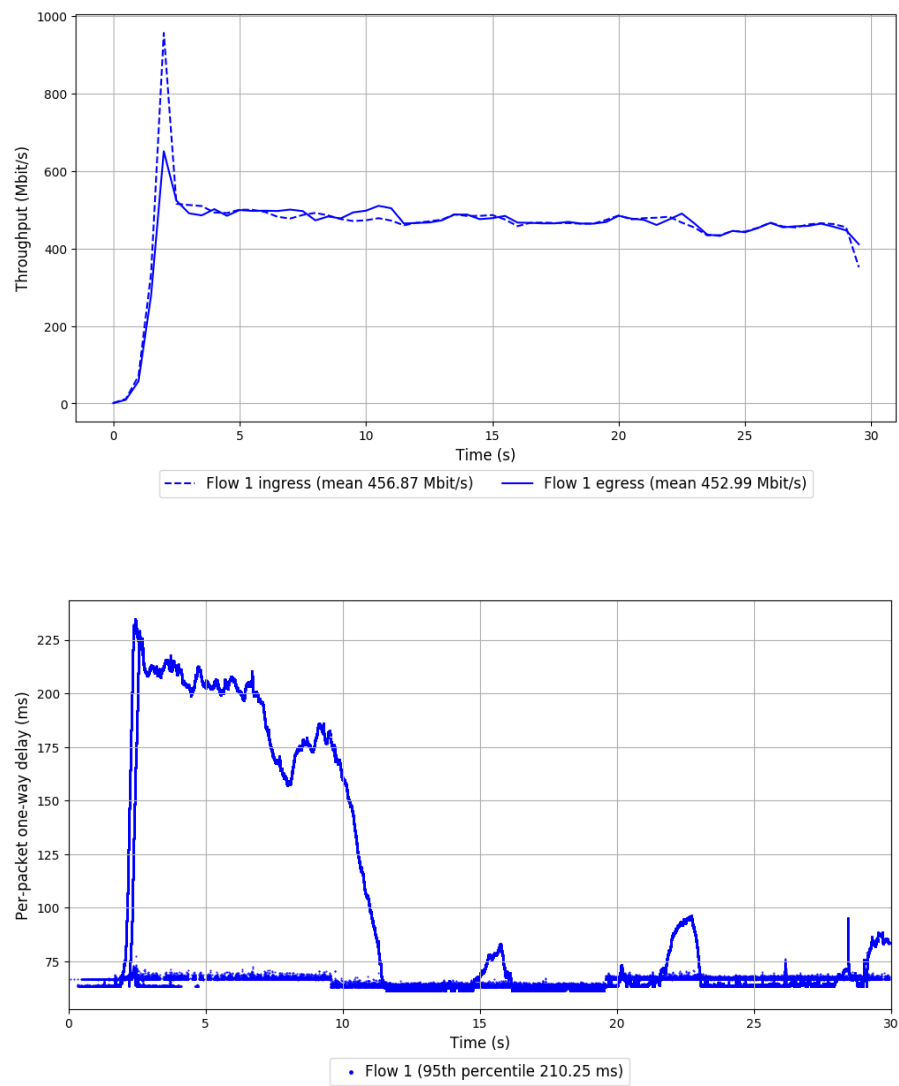
-- Flow 1:

Average throughput: 452.99 Mbit/s

95th percentile per-packet one-way delay: 210.254 ms

Loss rate: 0.86%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-05 19:38:24

End at: 2017-12-05 19:38:54

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 459.47 Mbit/s

95th percentile per-packet one-way delay: 219.398 ms

Loss rate: 1.47%

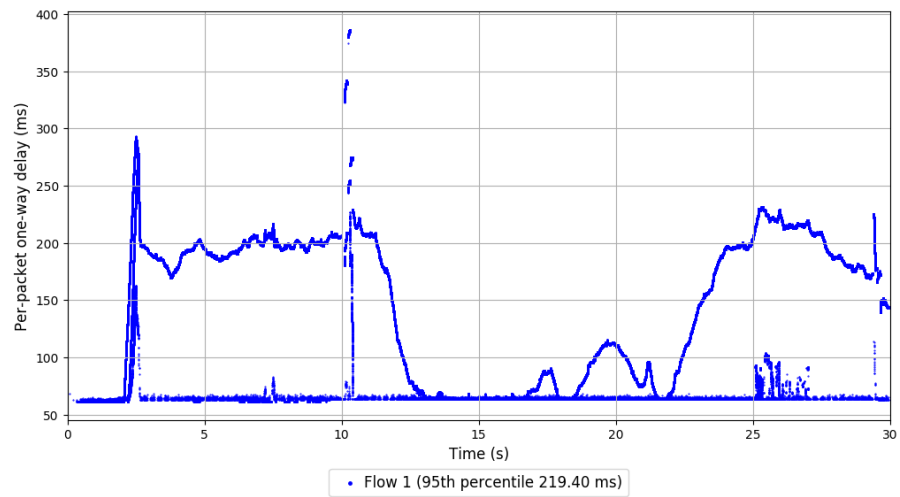
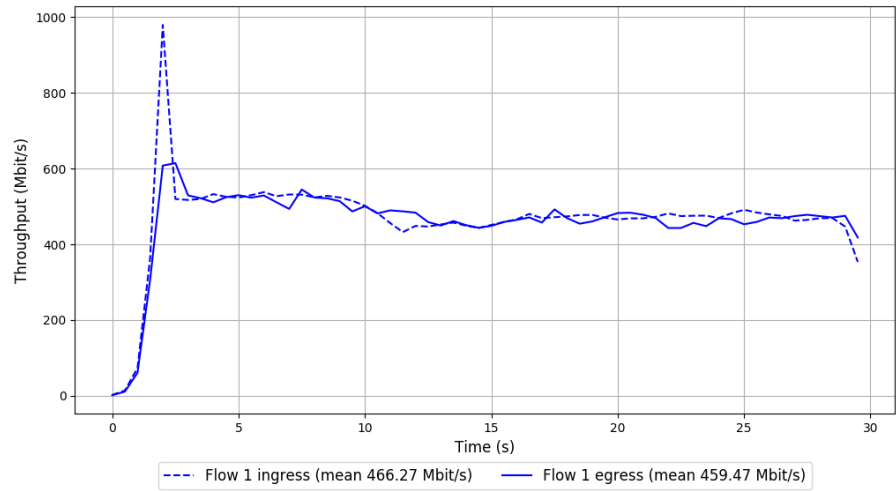
-- Flow 1:

Average throughput: 459.47 Mbit/s

95th percentile per-packet one-way delay: 219.398 ms

Loss rate: 1.47%

Run 10: Report of PCC — Data Link

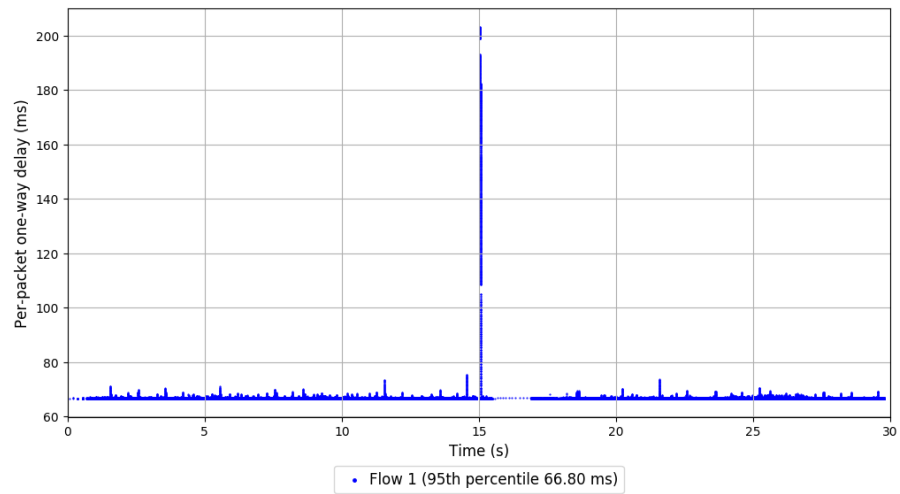
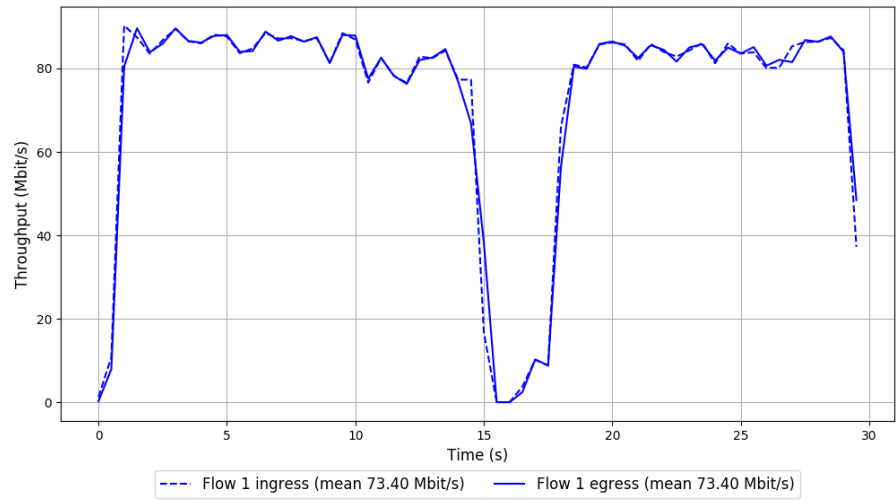


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 18:11:49
End at: 2017-12-05 18:12:19

# Below is generated by plot.py at 2017-12-05 20:49:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.40 Mbit/s
95th percentile per-packet one-way delay: 66.800 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 73.40 Mbit/s
95th percentile per-packet one-way delay: 66.800 ms
Loss rate: 0.01%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 18:22:30

End at: 2017-12-05 18:23:00

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.38 Mbit/s

95th percentile per-packet one-way delay: 66.766 ms

Loss rate: 0.00%

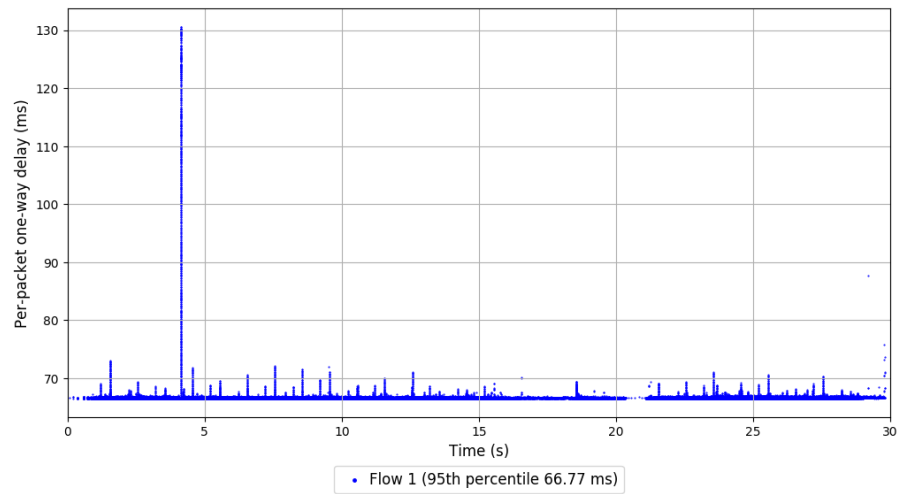
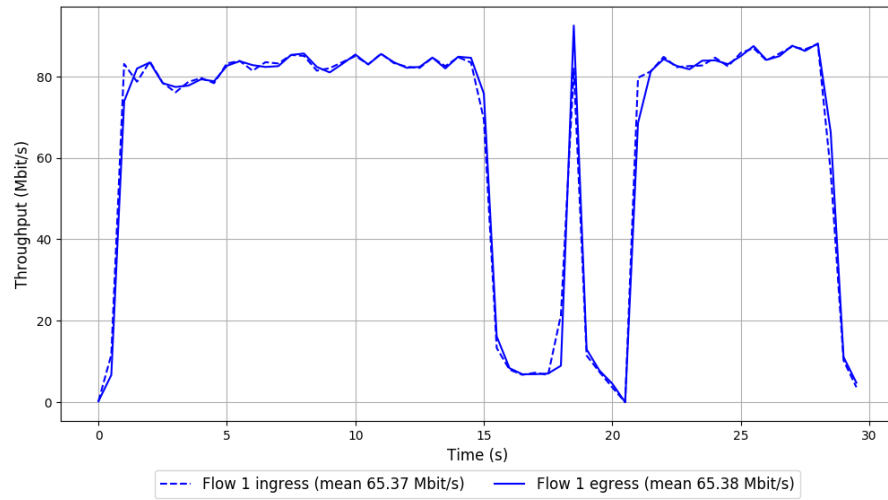
-- Flow 1:

Average throughput: 65.38 Mbit/s

95th percentile per-packet one-way delay: 66.766 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 18:33:14

End at: 2017-12-05 18:33:44

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.09 Mbit/s

95th percentile per-packet one-way delay: 66.852 ms

Loss rate: 0.02%

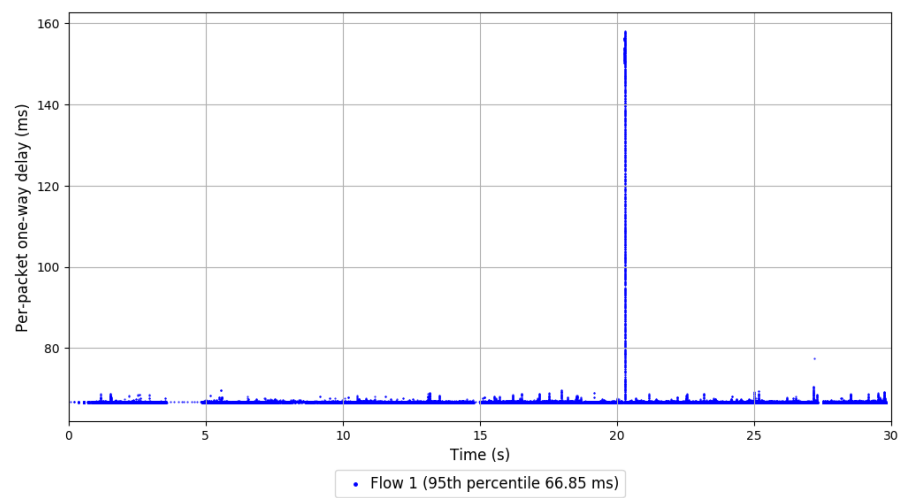
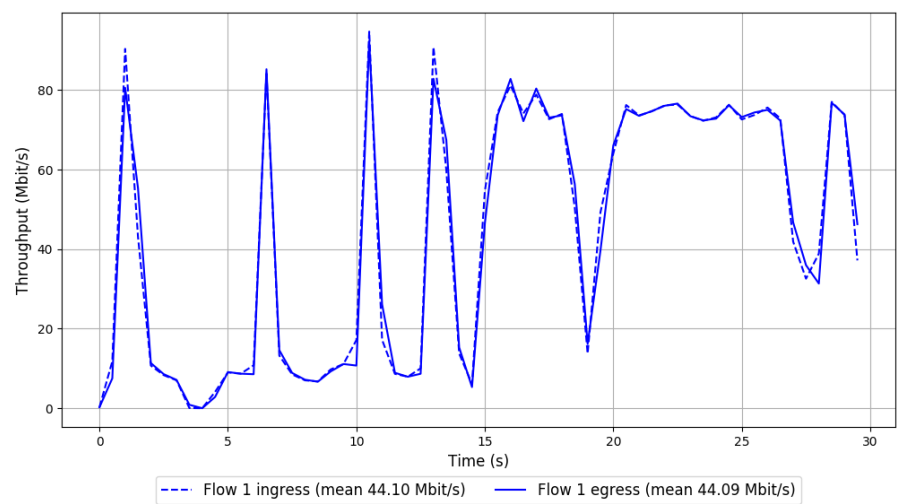
-- Flow 1:

Average throughput: 44.09 Mbit/s

95th percentile per-packet one-way delay: 66.852 ms

Loss rate: 0.02%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-05 18:43:50

End at: 2017-12-05 18:44:20

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.61 Mbit/s

95th percentile per-packet one-way delay: 67.066 ms

Loss rate: 0.01%

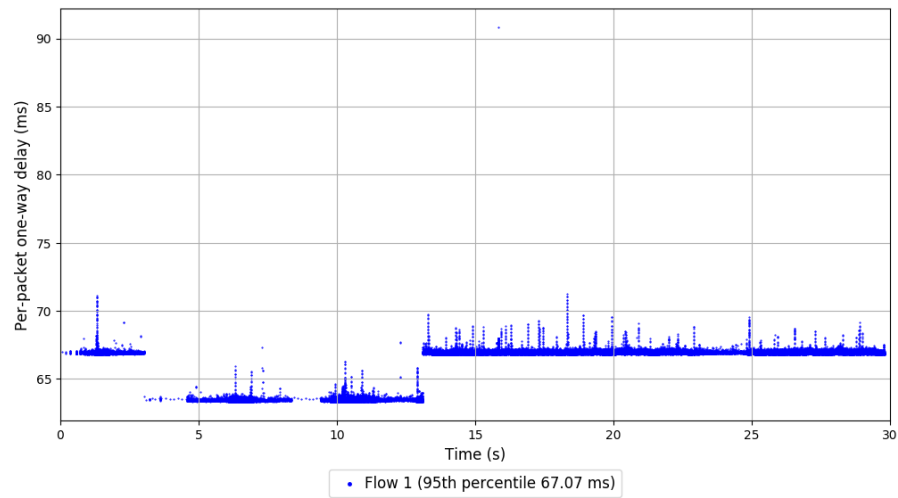
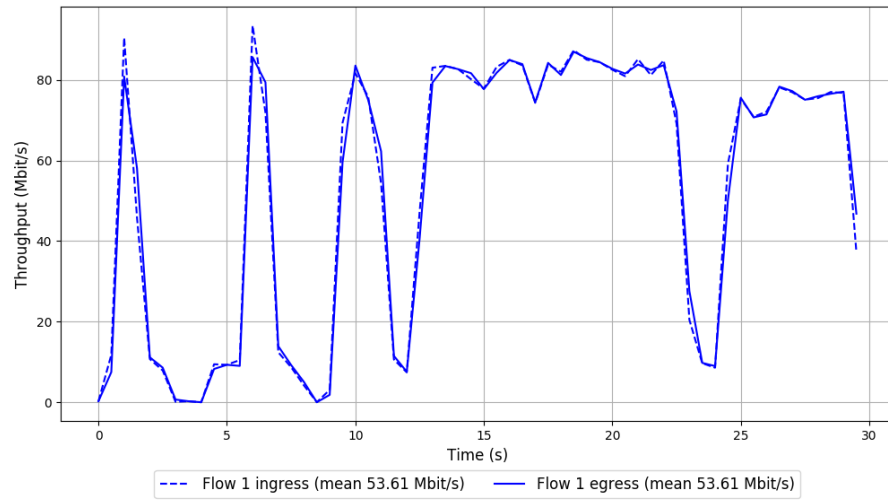
-- Flow 1:

Average throughput: 53.61 Mbit/s

95th percentile per-packet one-way delay: 67.066 ms

Loss rate: 0.01%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-05 18:54:06

End at: 2017-12-05 18:54:36

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.41 Mbit/s

95th percentile per-packet one-way delay: 67.102 ms

Loss rate: 0.00%

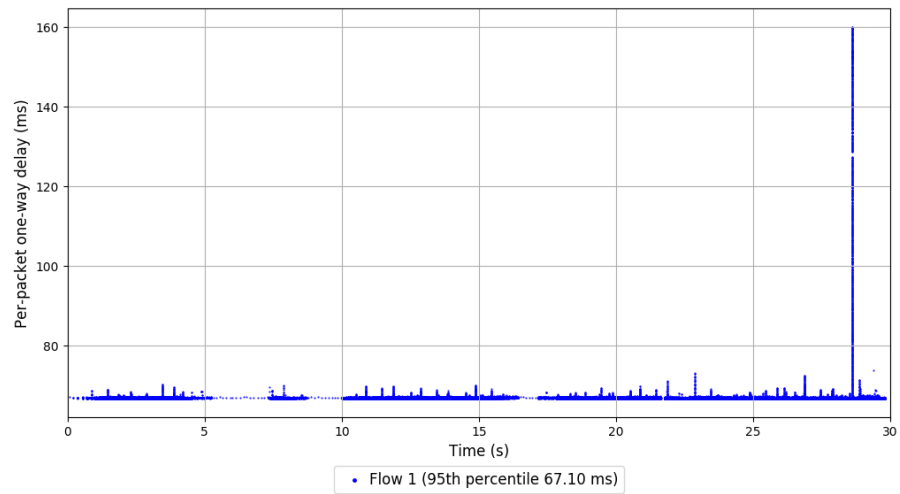
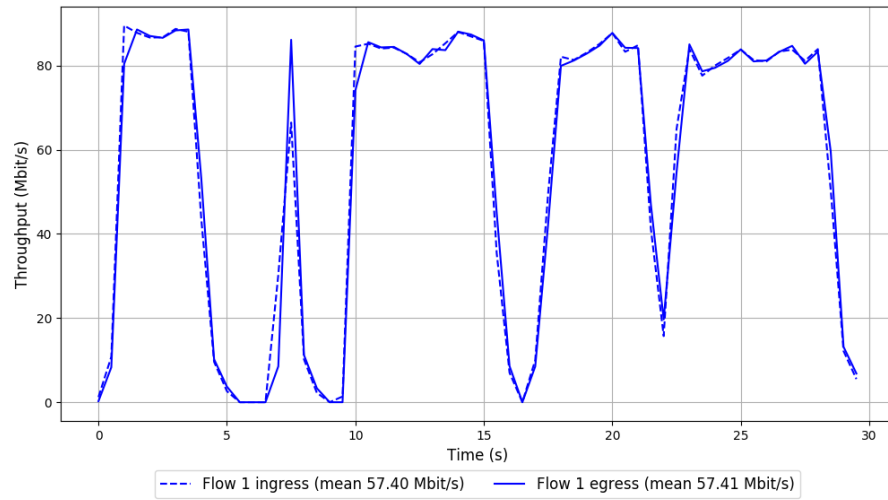
-- Flow 1:

Average throughput: 57.41 Mbit/s

95th percentile per-packet one-way delay: 67.102 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-05 19:04:20

End at: 2017-12-05 19:04:50

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 66.782 ms

Loss rate: 3.80%

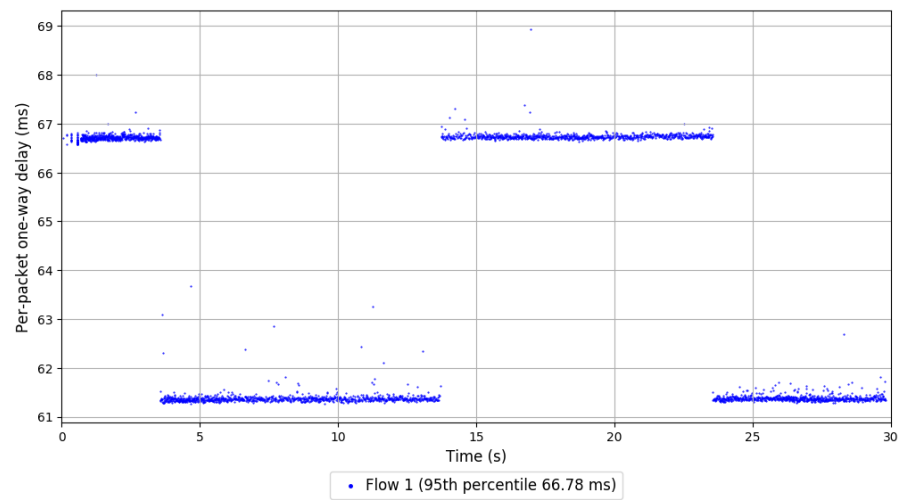
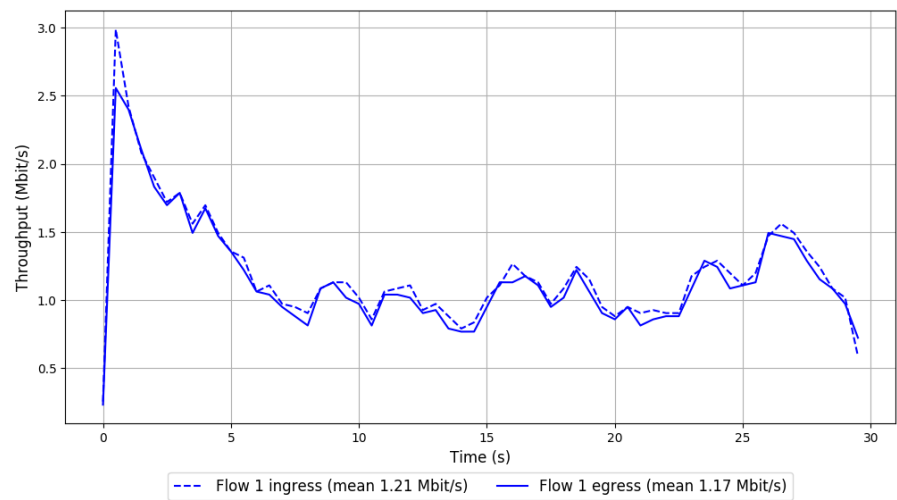
-- Flow 1:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 66.782 ms

Loss rate: 3.80%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-05 19:14:31

End at: 2017-12-05 19:15:01

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.21 Mbit/s

95th percentile per-packet one-way delay: 63.348 ms

Loss rate: 0.00%

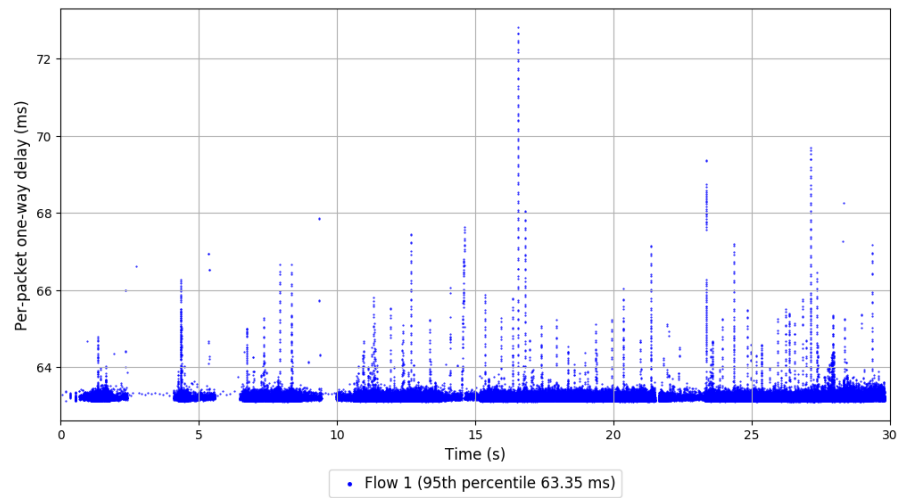
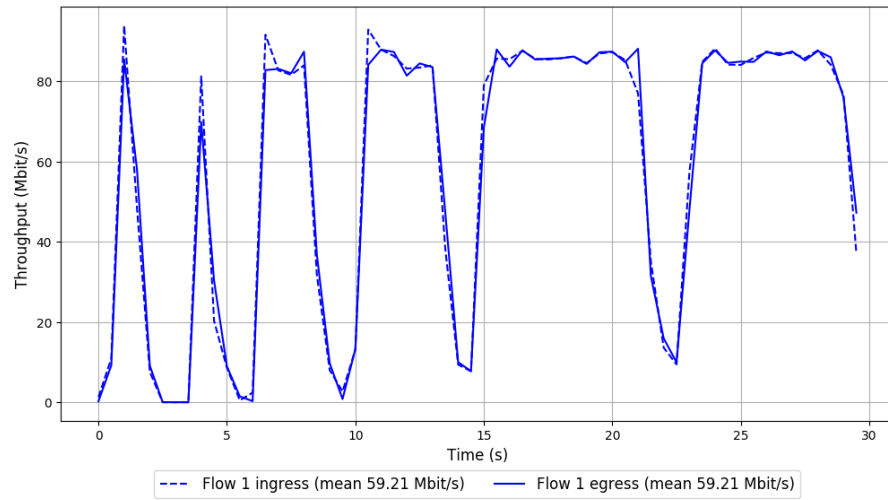
-- Flow 1:

Average throughput: 59.21 Mbit/s

95th percentile per-packet one-way delay: 63.348 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-05 19:24:40

End at: 2017-12-05 19:25:10

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.45 Mbit/s

95th percentile per-packet one-way delay: 66.778 ms

Loss rate: 0.00%

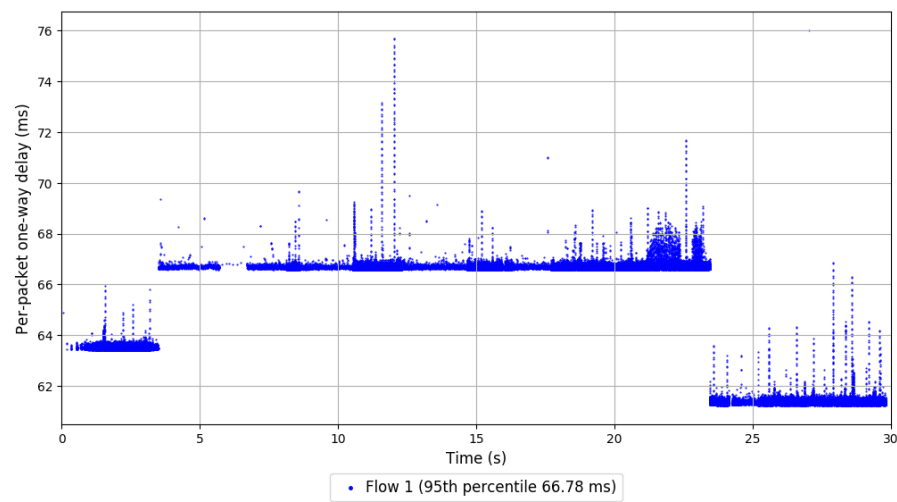
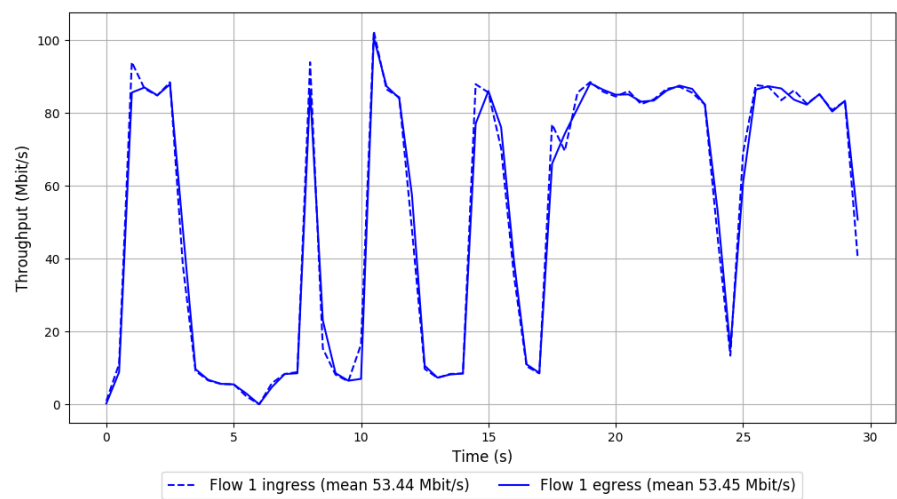
-- Flow 1:

Average throughput: 53.45 Mbit/s

95th percentile per-packet one-way delay: 66.778 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-05 19:35:22

End at: 2017-12-05 19:35:52

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.05 Mbit/s

95th percentile per-packet one-way delay: 66.964 ms

Loss rate: 0.01%

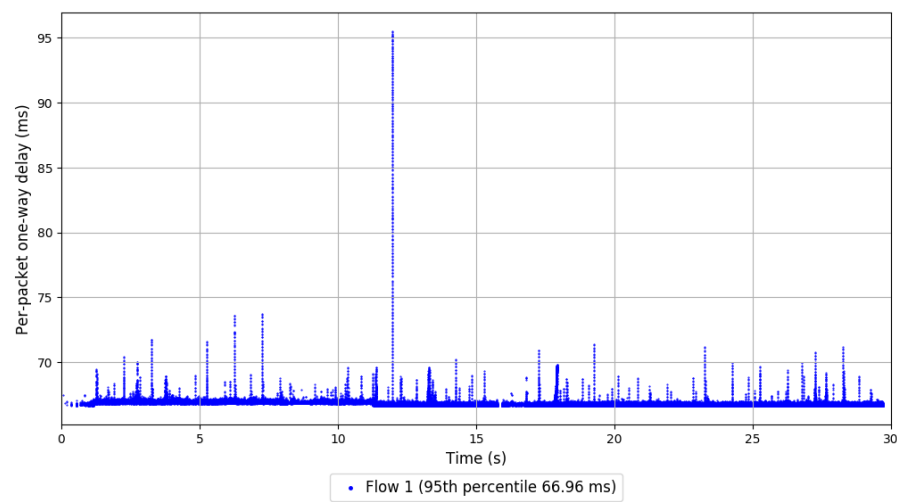
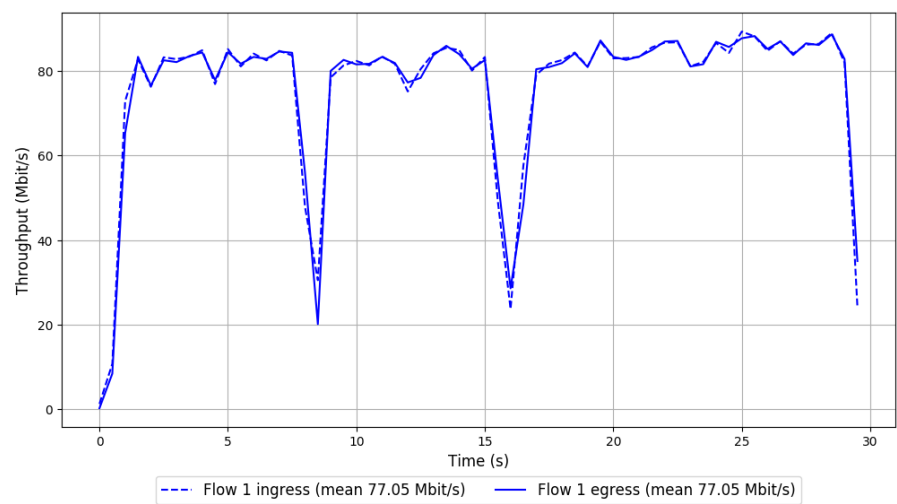
-- Flow 1:

Average throughput: 77.05 Mbit/s

95th percentile per-packet one-way delay: 66.964 ms

Loss rate: 0.01%

Run 9: Report of QUIC Cubic — Data Link

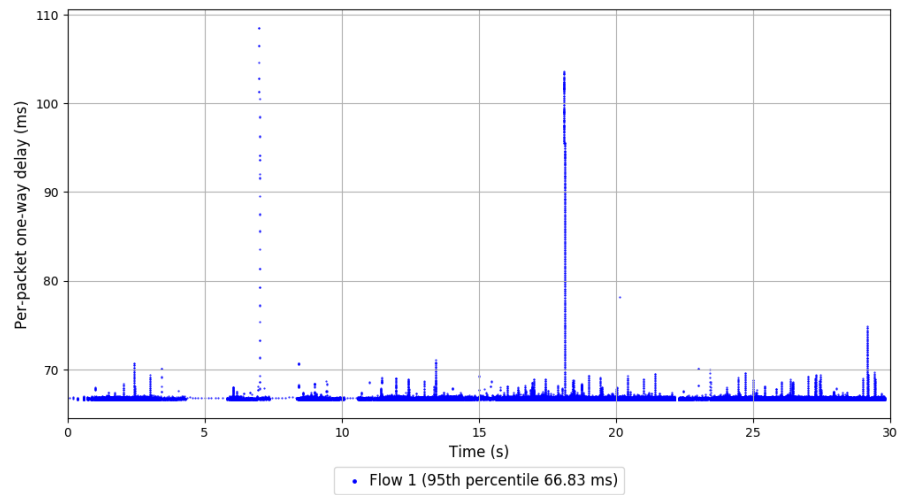
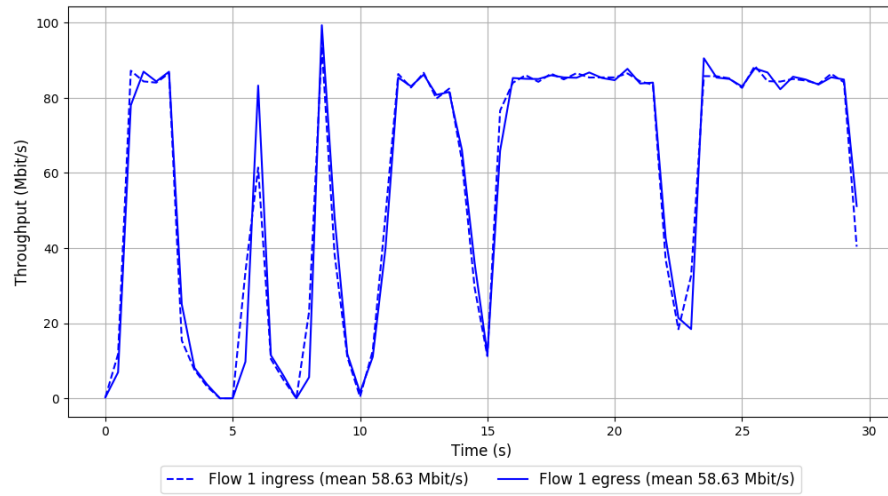


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-05 19:45:46
End at: 2017-12-05 19:46:16

# Below is generated by plot.py at 2017-12-05 20:49:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.63 Mbit/s
95th percentile per-packet one-way delay: 66.827 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 58.63 Mbit/s
95th percentile per-packet one-way delay: 66.827 ms
Loss rate: 0.01%
```

Run 10: Report of QUIC Cubic — Data Link

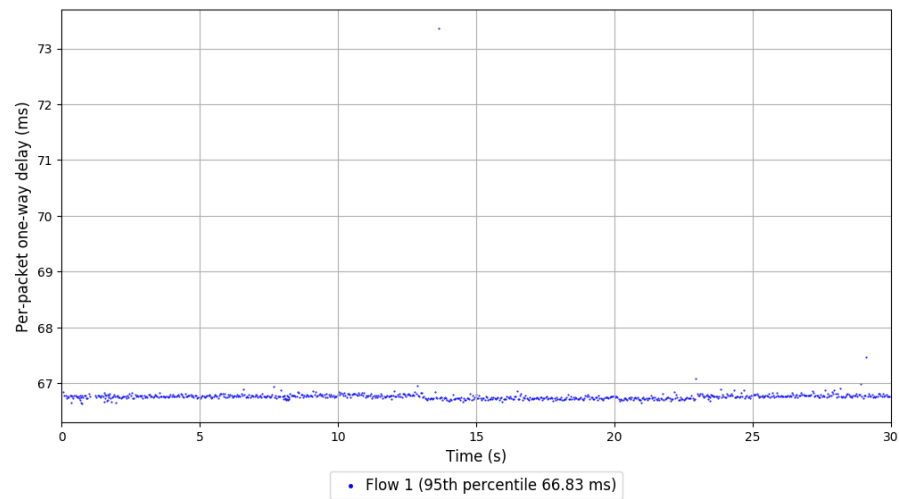
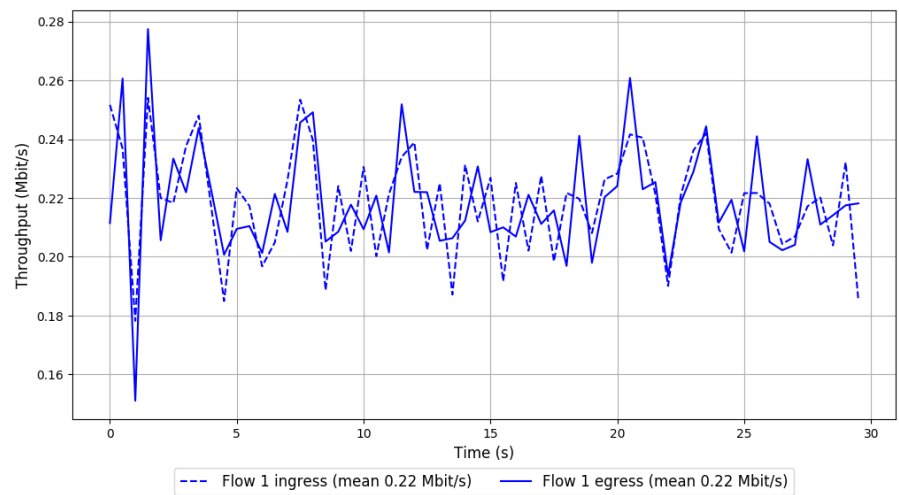


```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 18:08:51
End at: 2017-12-05 18:09:21

# Below is generated by plot.py at 2017-12-05 20:49:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.827 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.827 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

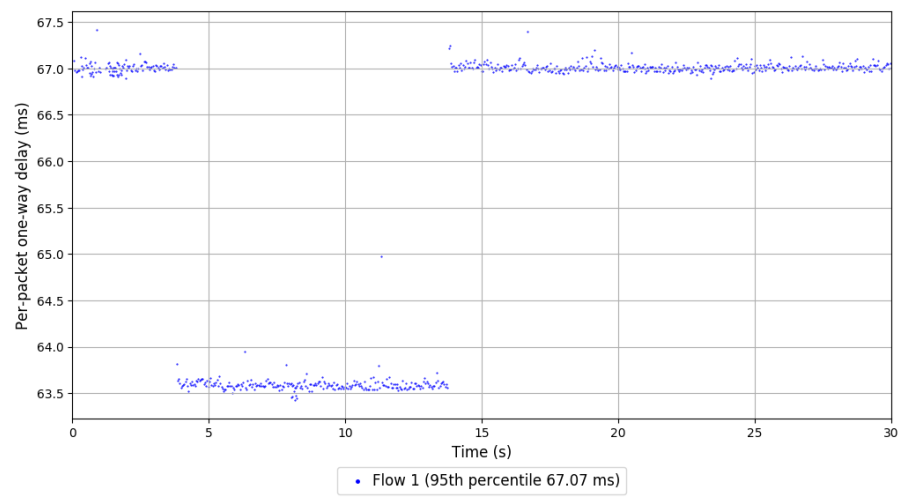
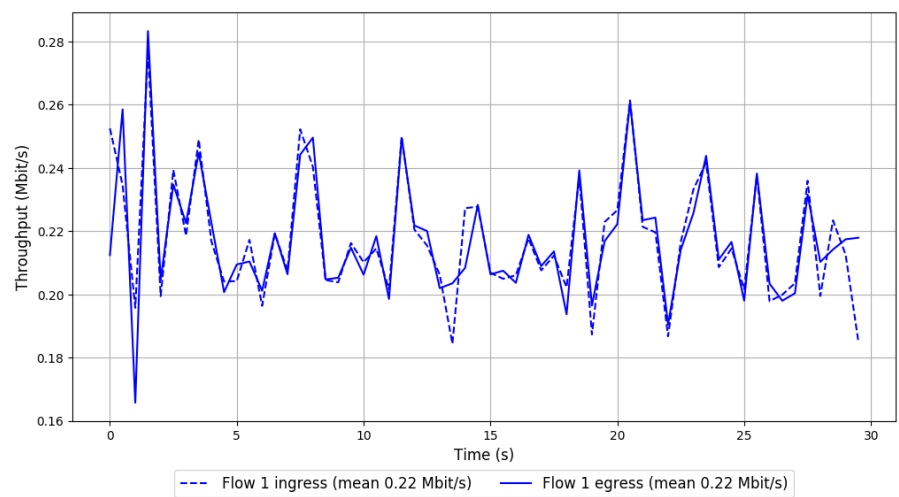


```
Run 2: Statistics of SCReAM

Start at: 2017-12-05 18:19:30
End at: 2017-12-05 18:20:00

# Below is generated by plot.py at 2017-12-05 20:49:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.068 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.068 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-05 18:30:10

End at: 2017-12-05 18:30:40

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.043 ms

Loss rate: 0.00%

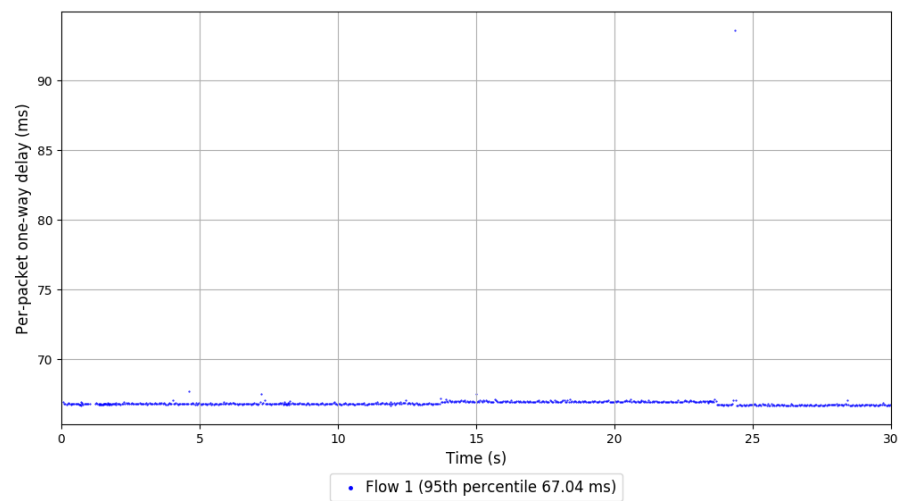
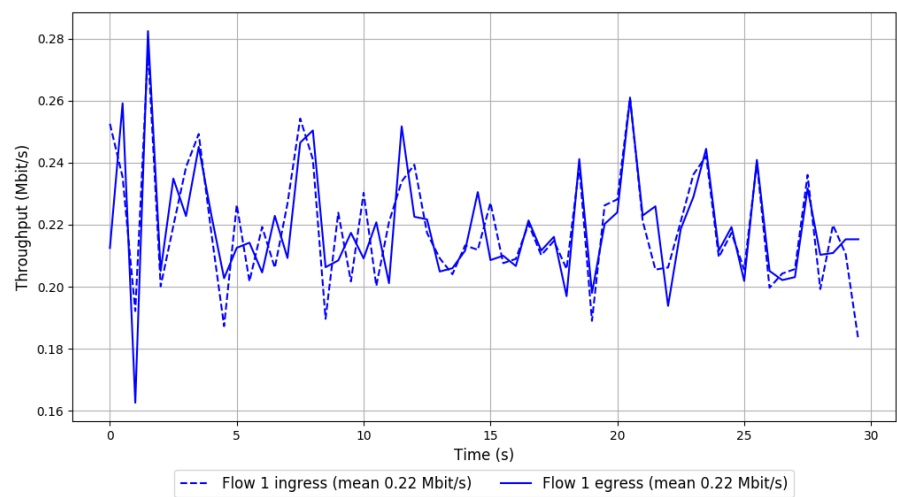
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.043 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-05 18:40:49

End at: 2017-12-05 18:41:20

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.862 ms

Loss rate: 0.00%

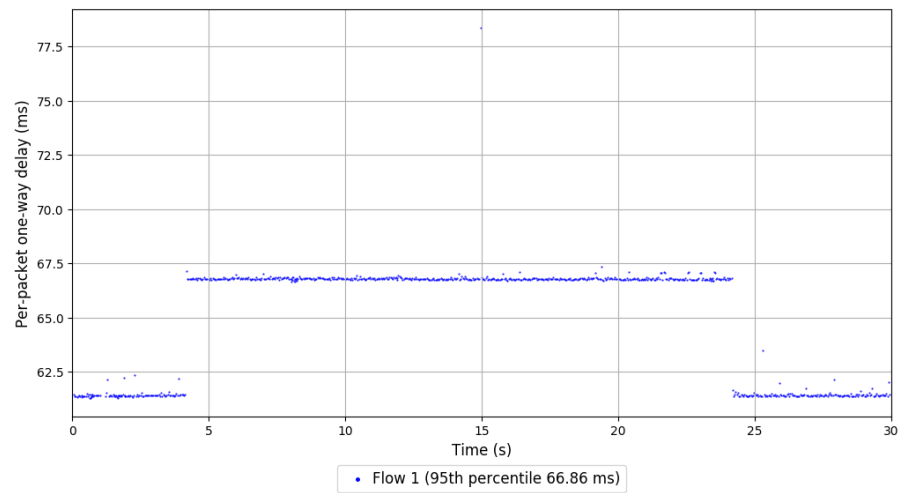
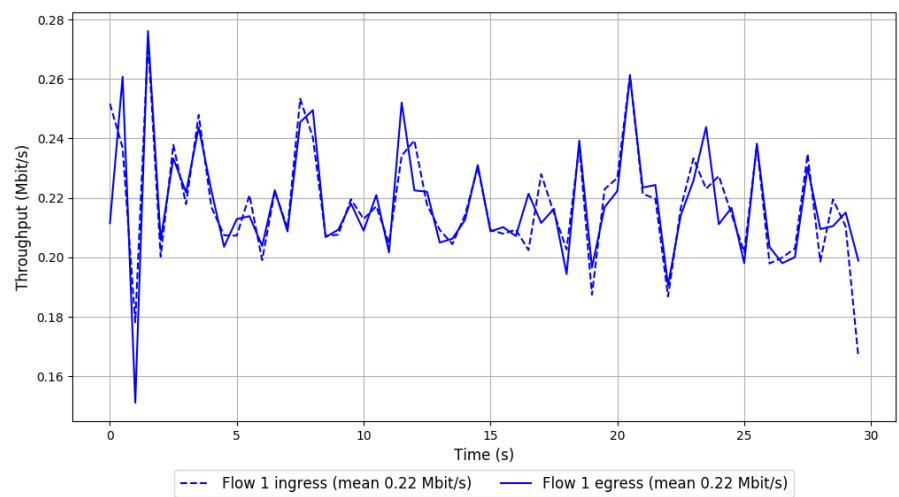
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.862 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-05 18:51:00

End at: 2017-12-05 18:51:30

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.094 ms

Loss rate: 0.00%

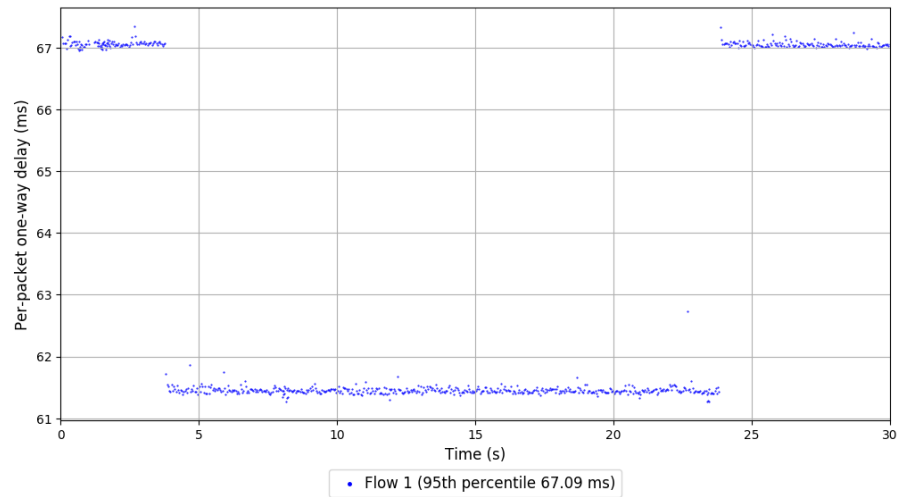
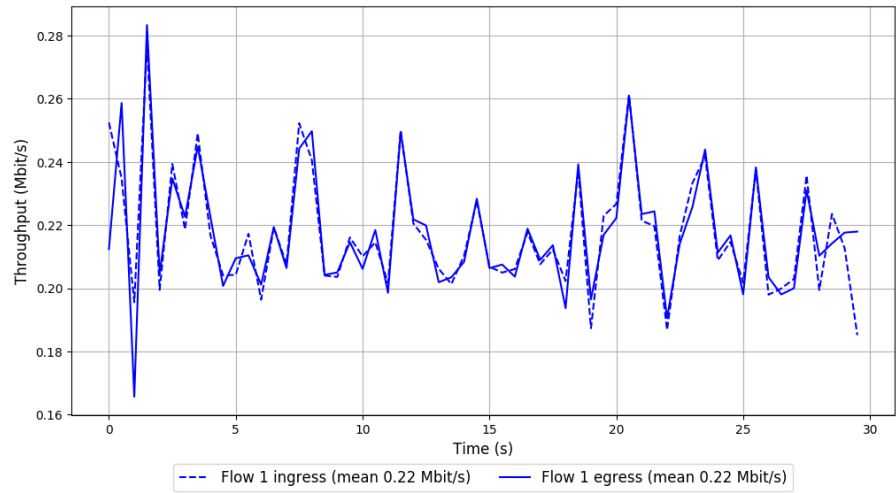
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.094 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-05 19:01:17

End at: 2017-12-05 19:01:47

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.549 ms

Loss rate: 0.00%

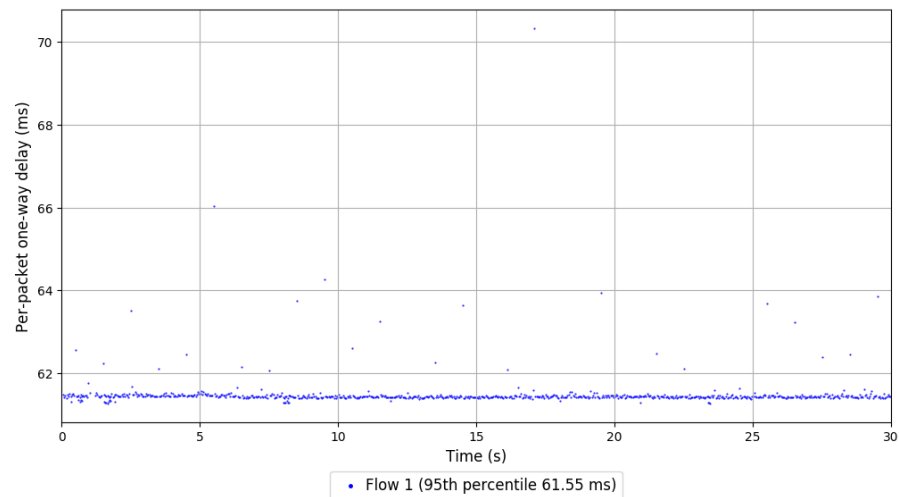
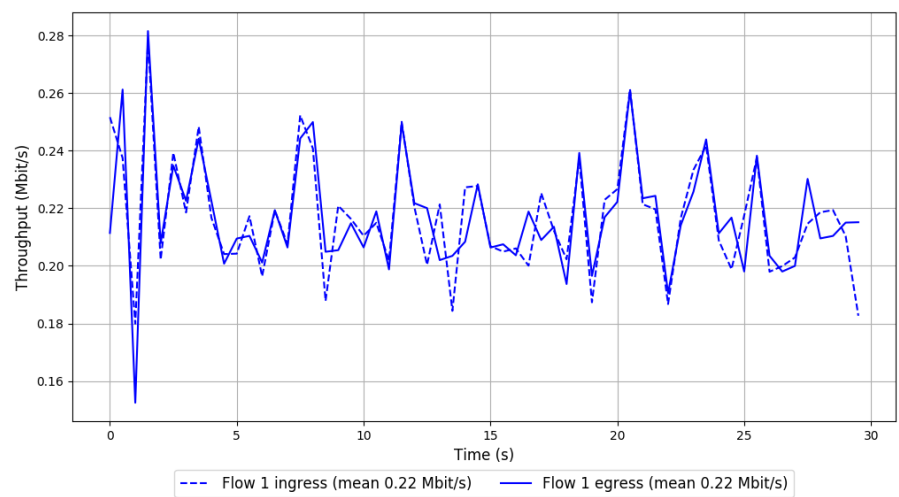
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.549 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-05 19:11:30

End at: 2017-12-05 19:12:00

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.138 ms

Loss rate: 0.00%

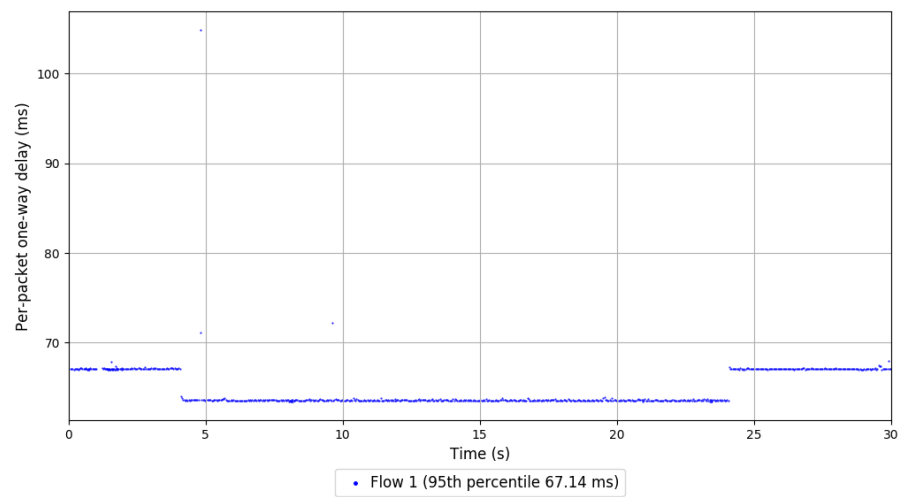
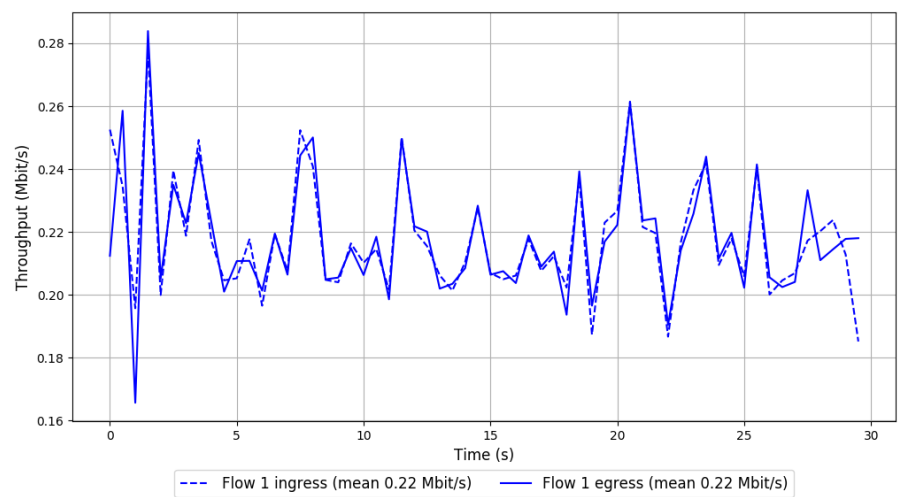
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.138 ms

Loss rate: 0.00%

Run 7: Report of SCRaM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-05 19:21:38

End at: 2017-12-05 19:22:08

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.086 ms

Loss rate: 0.00%

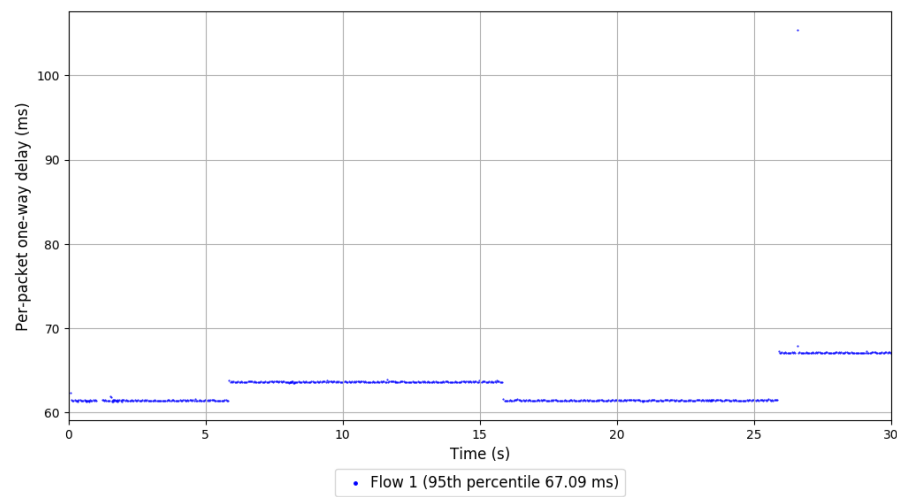
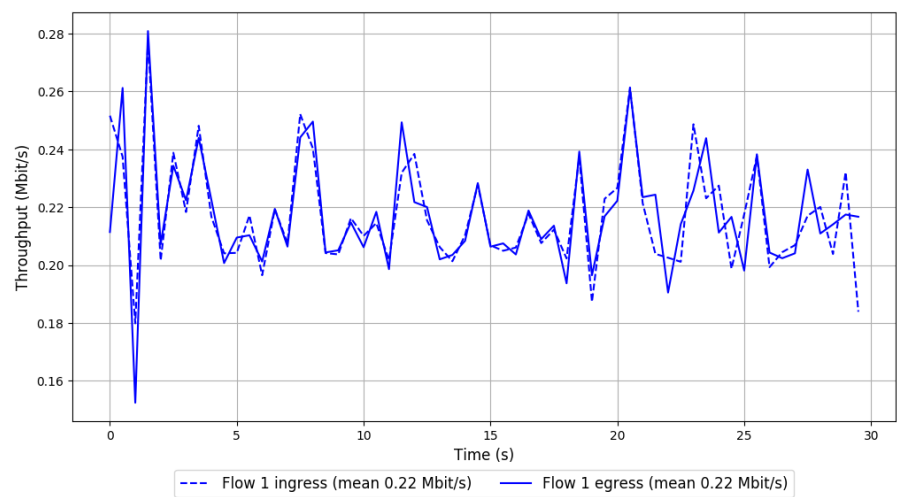
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.086 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-05 19:32:15

End at: 2017-12-05 19:32:45

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.099 ms

Loss rate: 0.00%

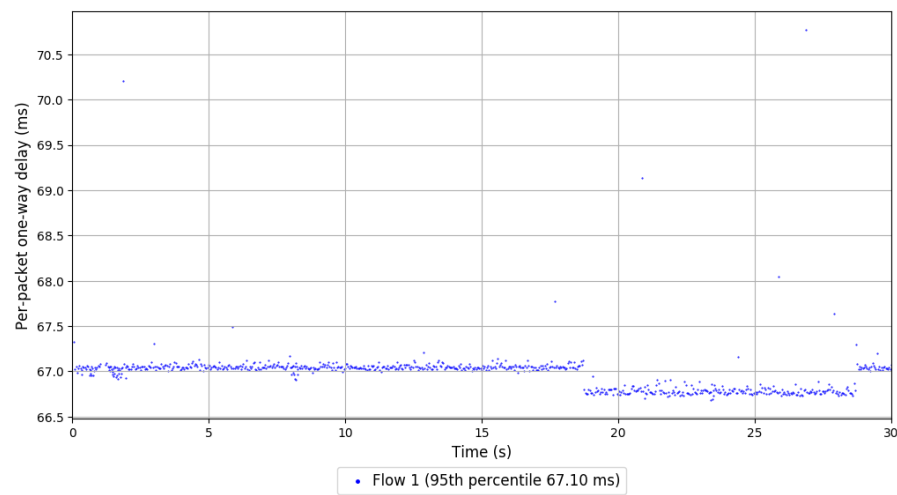
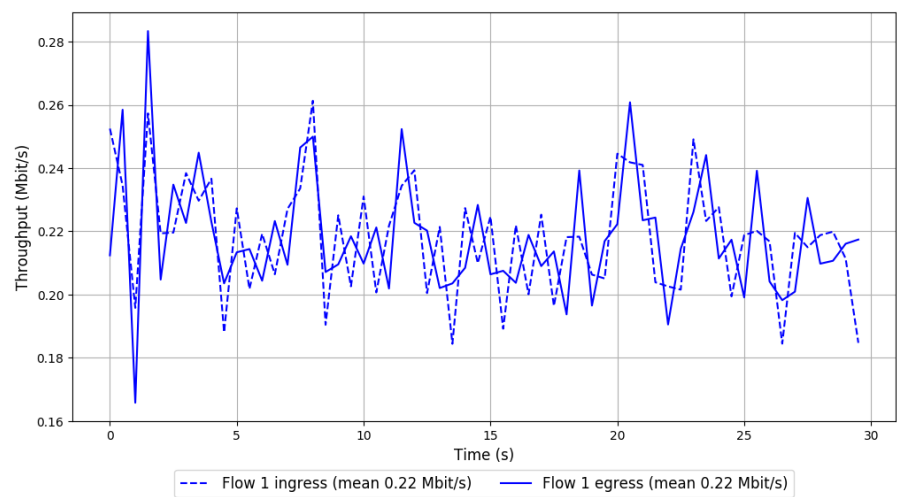
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.099 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-05 19:42:47

End at: 2017-12-05 19:43:17

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.778 ms

Loss rate: 0.00%

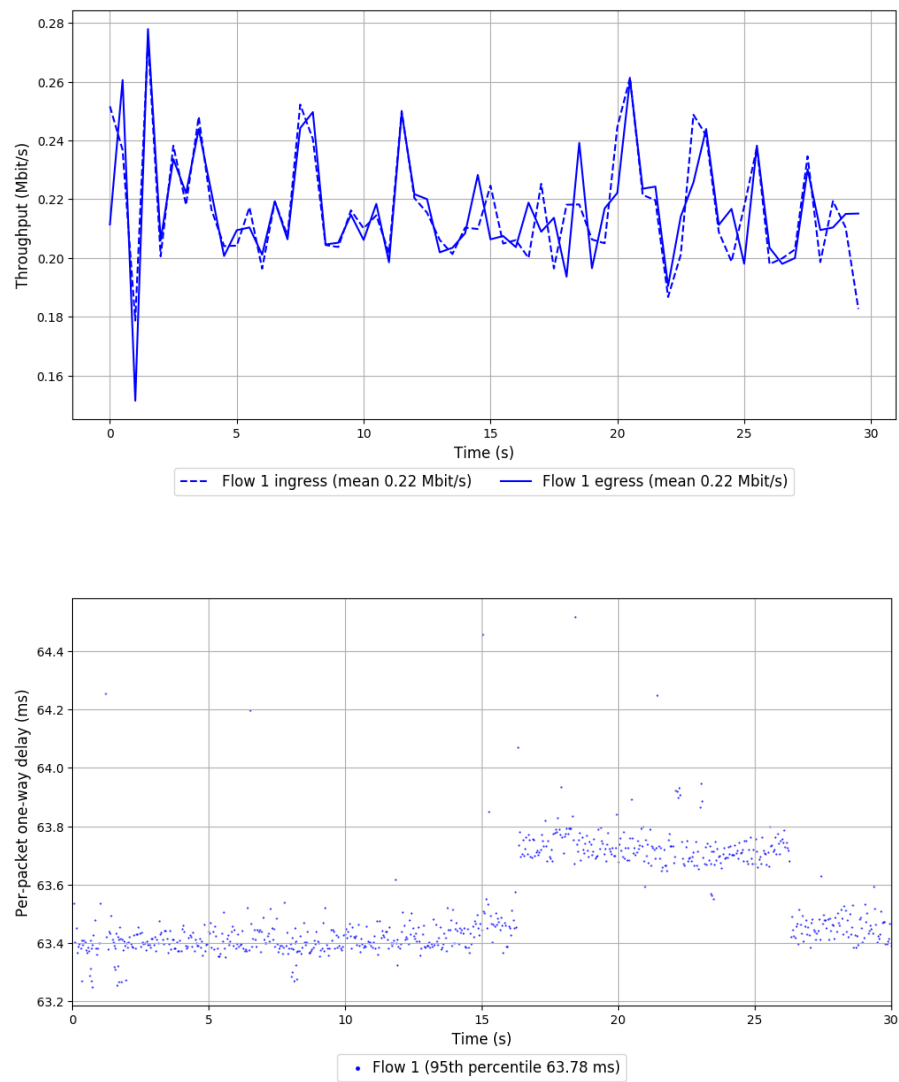
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.778 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

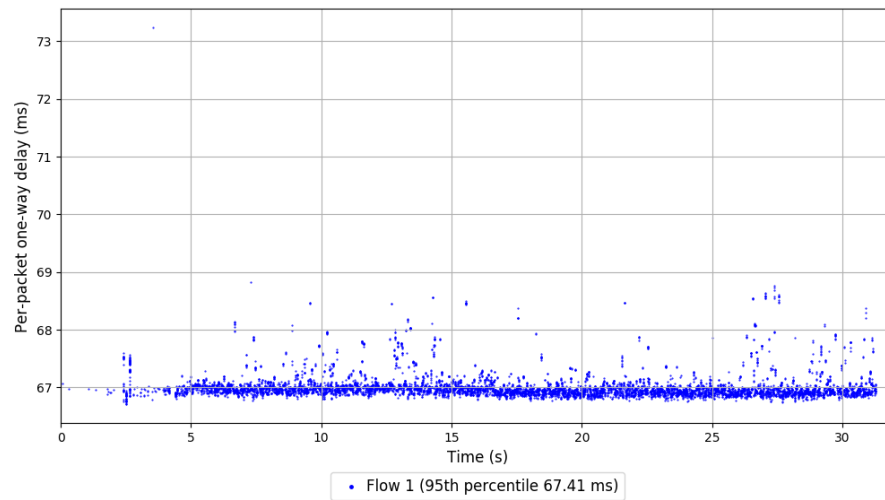
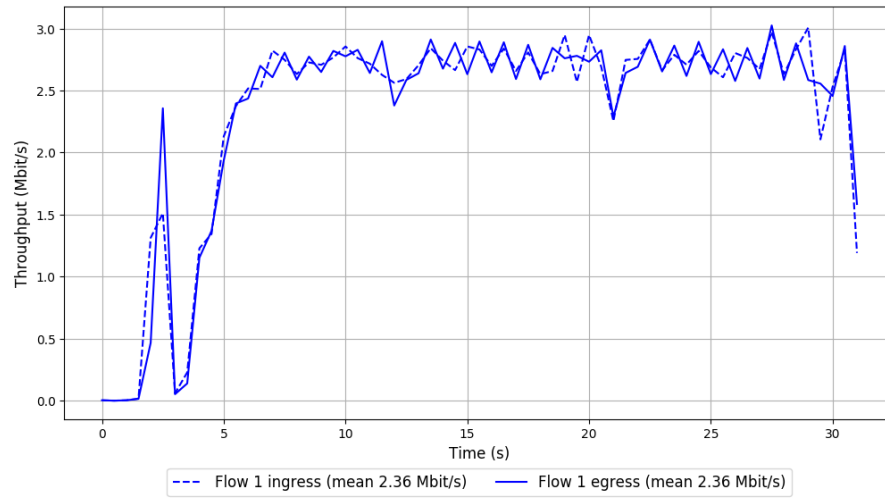


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 18:09:28
End at: 2017-12-05 18:09:59

# Below is generated by plot.py at 2017-12-05 20:49:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 67.405 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 67.405 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-05 18:20:07

End at: 2017-12-05 18:20:38

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 67.164 ms

Loss rate: 0.00%

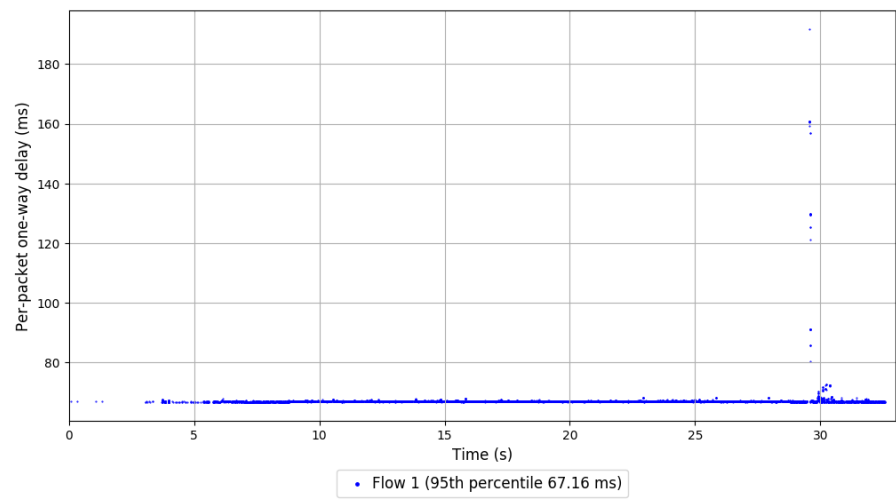
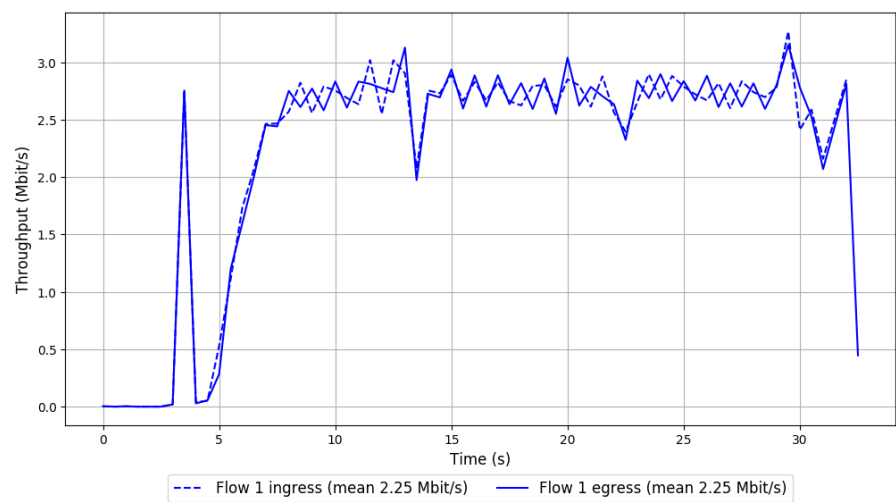
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 67.164 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-05 18:30:48

End at: 2017-12-05 18:31:18

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 67.185 ms

Loss rate: 0.00%

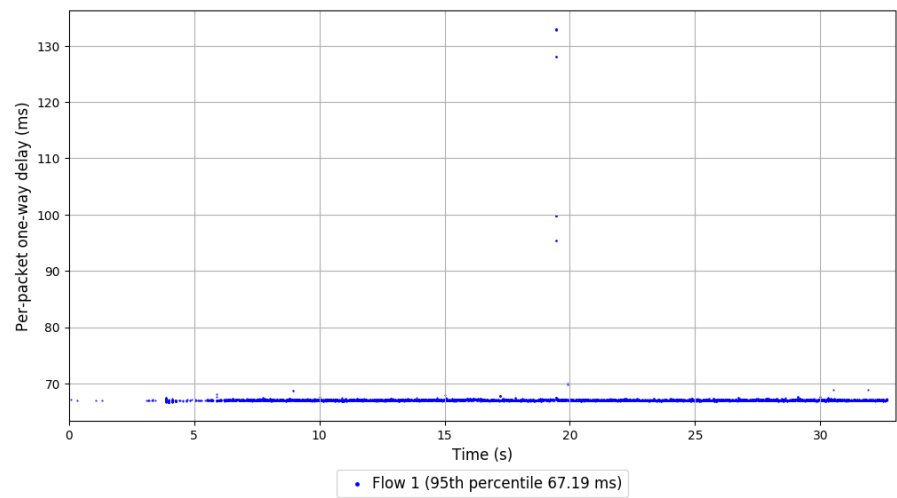
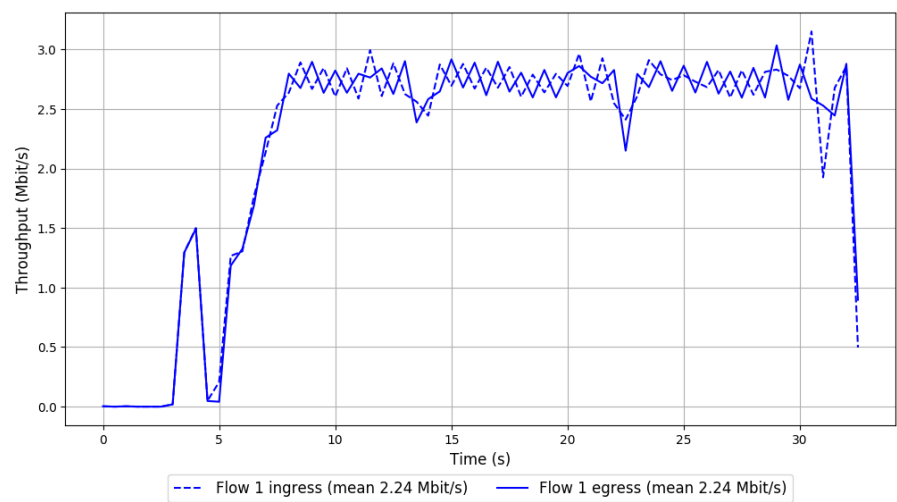
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 67.185 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-05 18:41:27

End at: 2017-12-05 18:41:57

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 93.424 ms

Loss rate: 0.00%

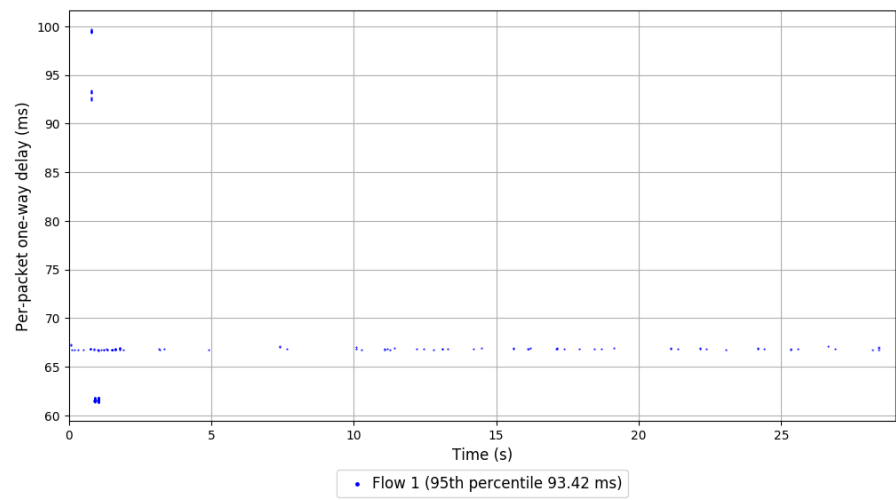
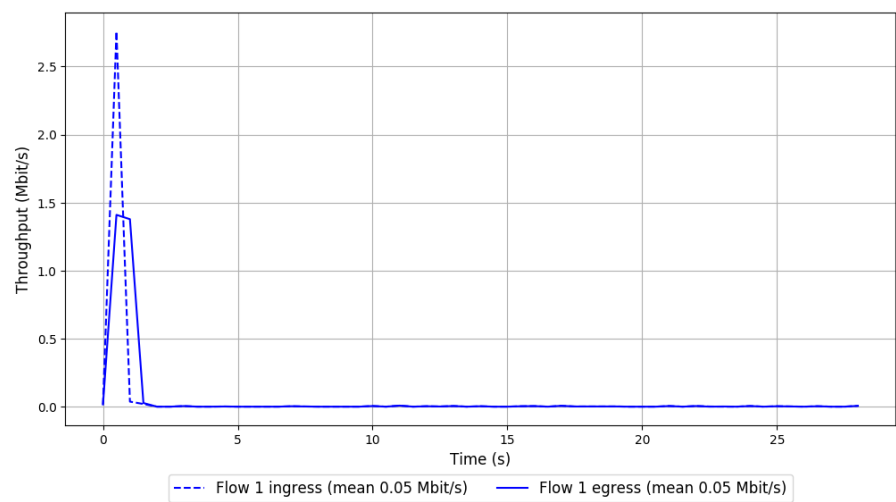
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 93.424 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-05 18:51:37

End at: 2017-12-05 18:52:07

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 66.997 ms

Loss rate: 0.00%

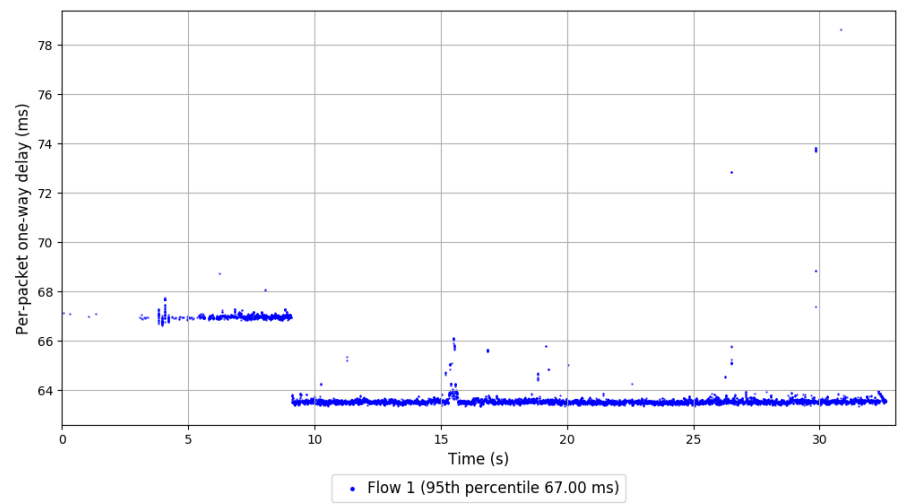
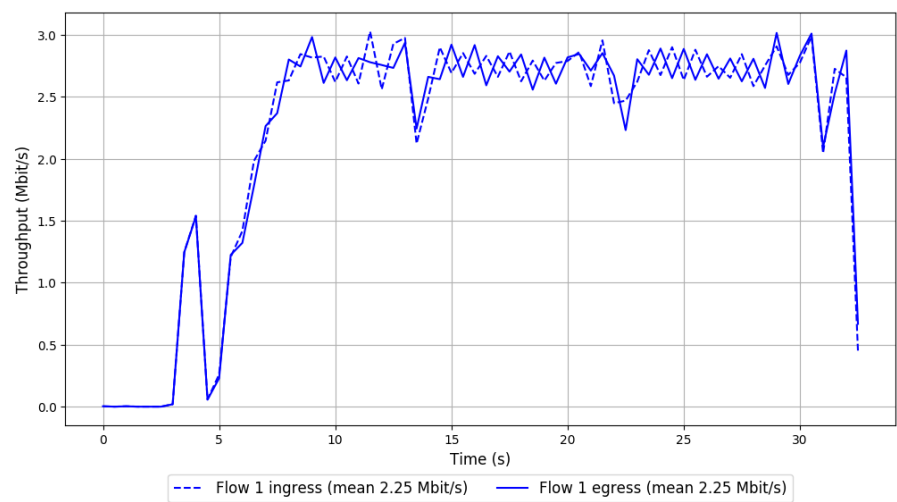
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 66.997 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-05 19:01:55

End at: 2017-12-05 19:02:25

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 66.890 ms

Loss rate: 0.00%

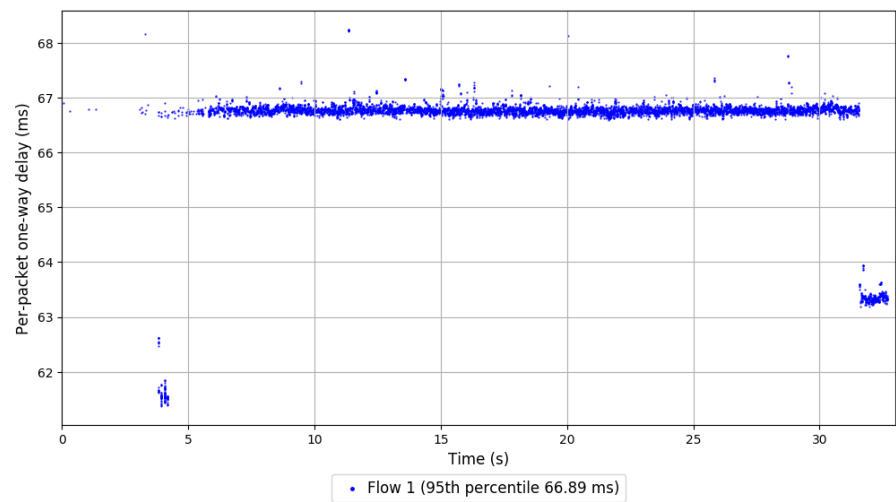
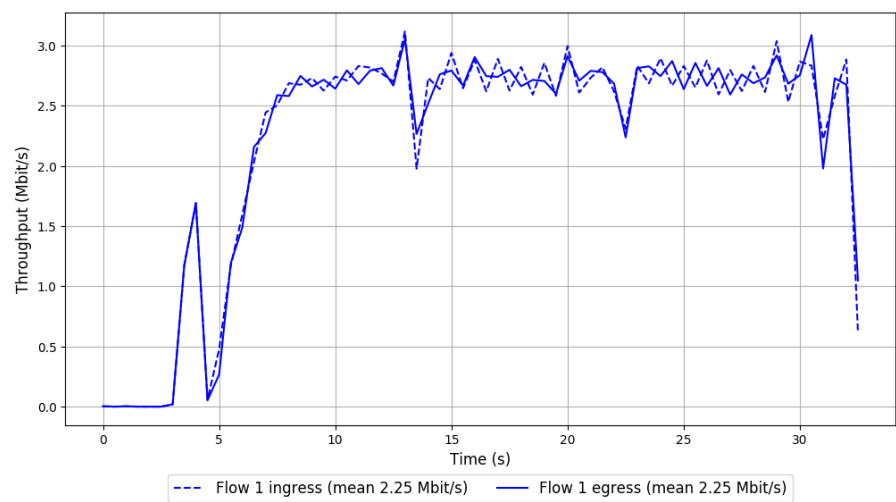
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 66.890 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-05 19:12:07

End at: 2017-12-05 19:12:37

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.699 ms

Loss rate: 0.00%

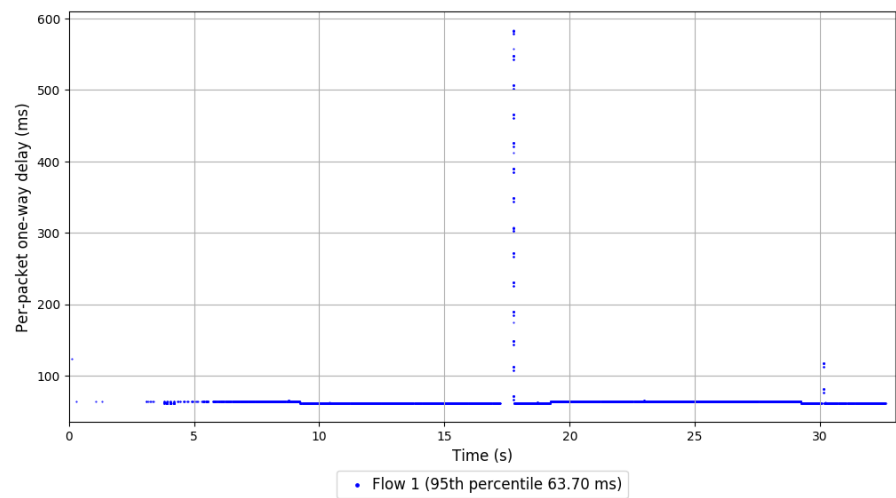
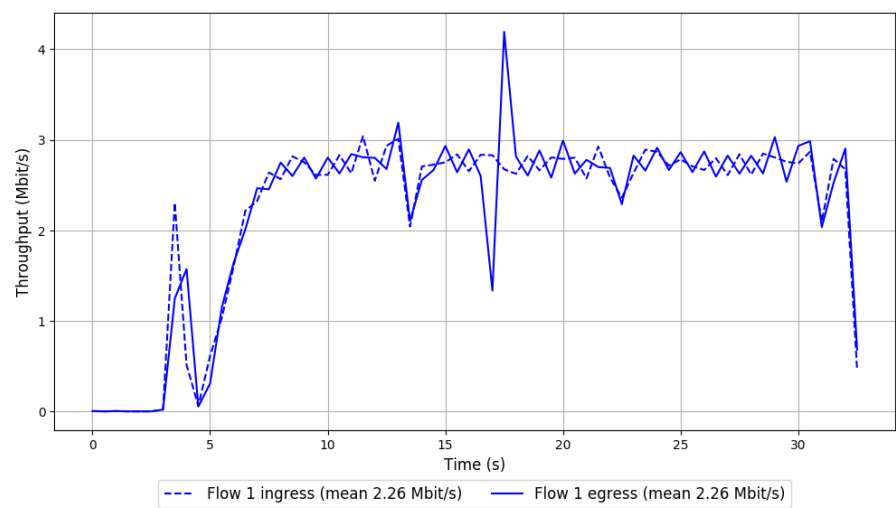
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.699 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-05 19:22:15

End at: 2017-12-05 19:22:45

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 63.722 ms

Loss rate: 0.01%

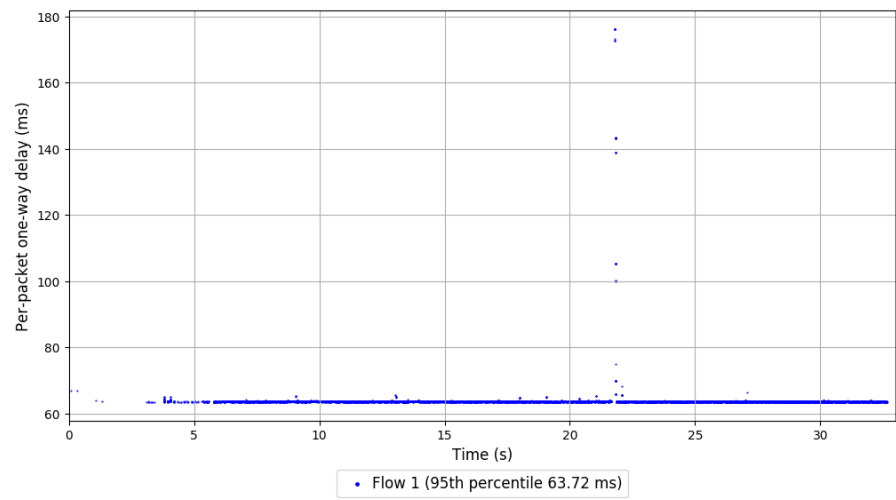
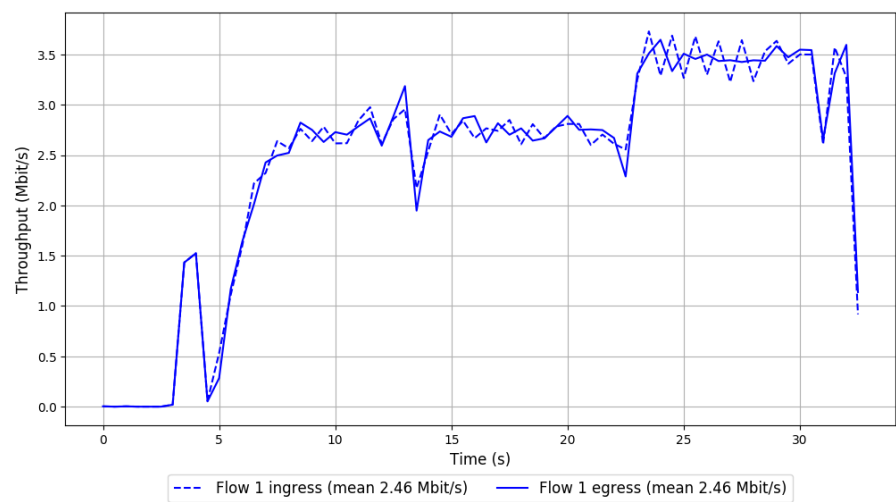
-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 63.722 ms

Loss rate: 0.01%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-05 19:32:52

End at: 2017-12-05 19:33:22

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 66.870 ms

Loss rate: 0.00%

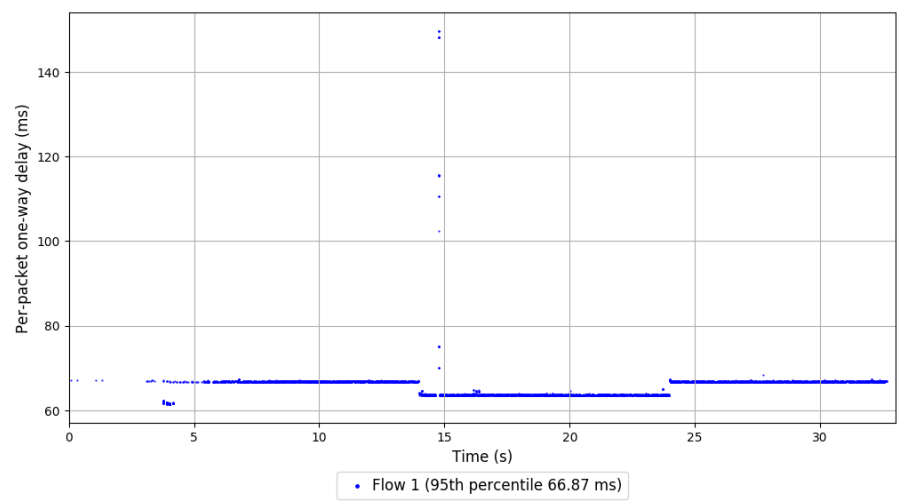
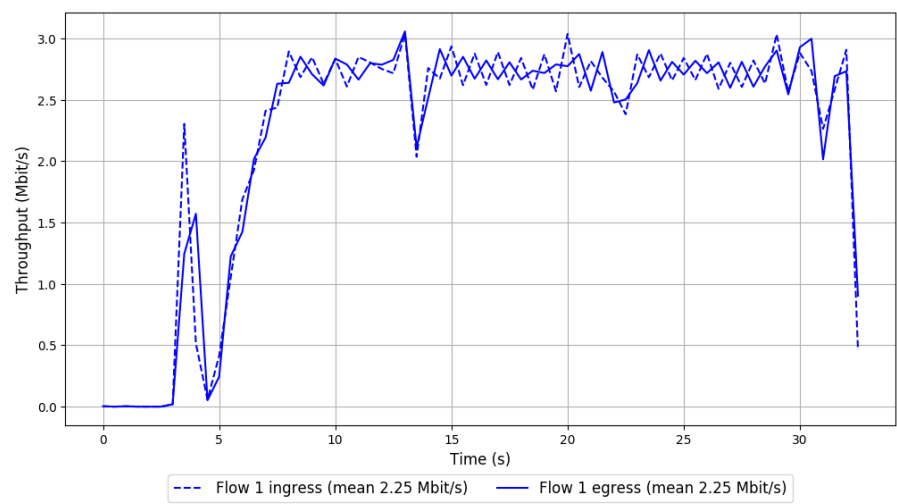
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 66.870 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-05 19:43:25

End at: 2017-12-05 19:43:55

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.696 ms

Loss rate: 0.00%

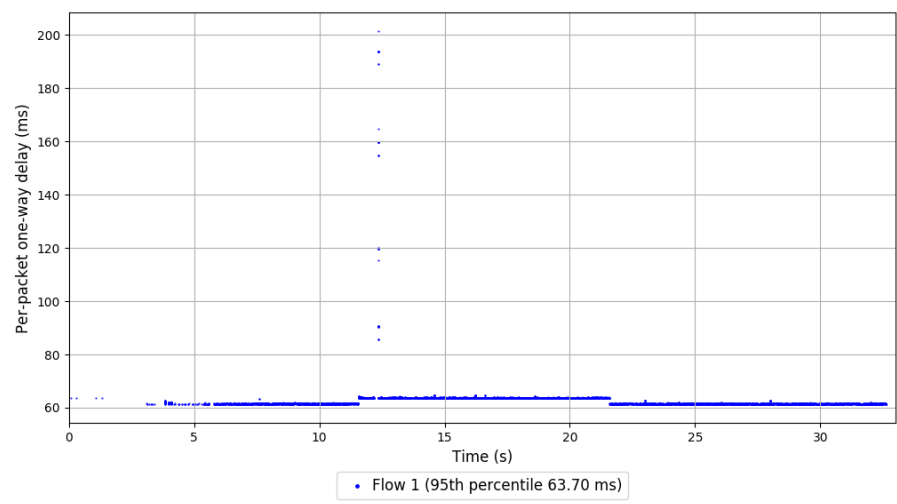
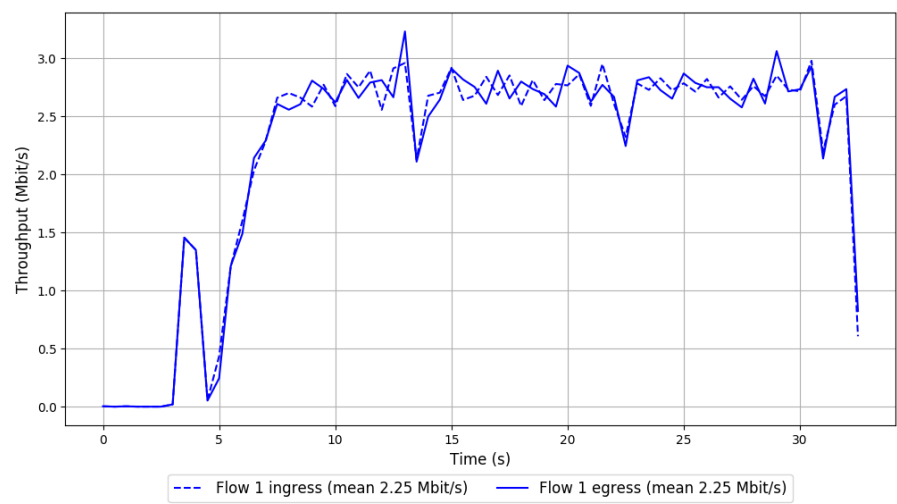
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.696 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

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

End at: 2017-12-05 18:03:33

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.32 Mbit/s

95th percentile per-packet one-way delay: 67.880 ms

Loss rate: 0.03%

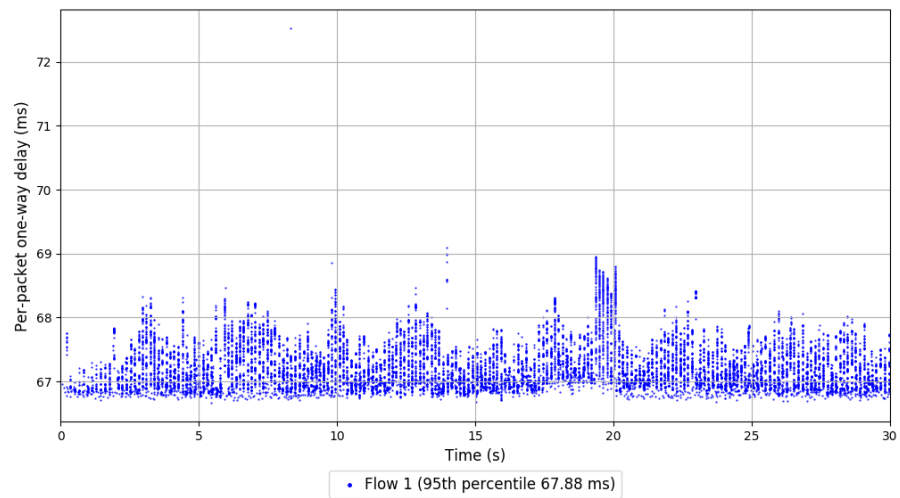
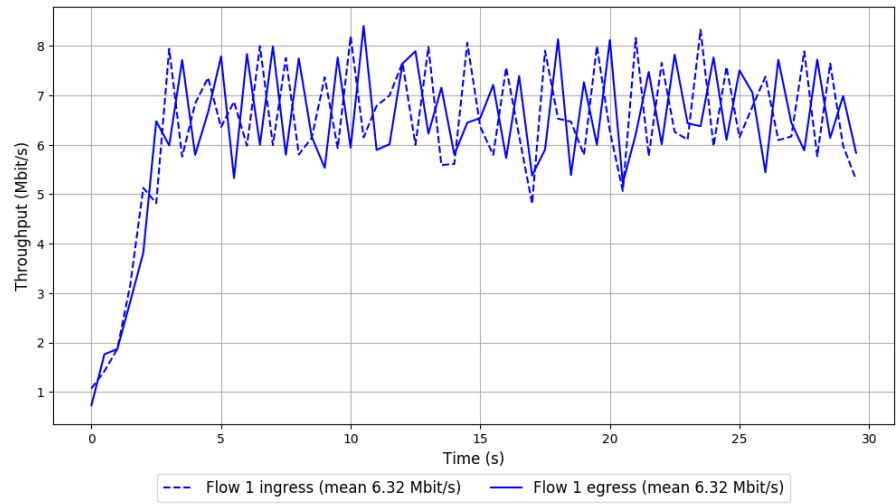
-- Flow 1:

Average throughput: 6.32 Mbit/s

95th percentile per-packet one-way delay: 67.880 ms

Loss rate: 0.03%

Run 1: Report of Sprout — Data Link

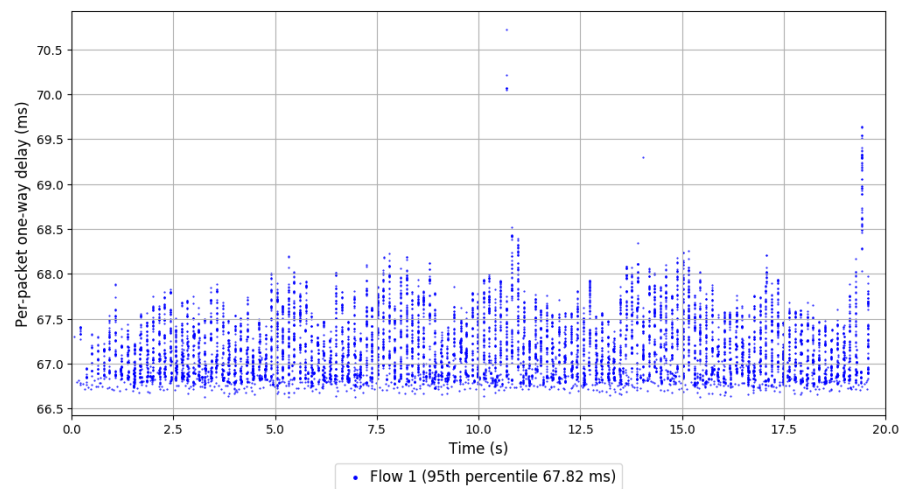
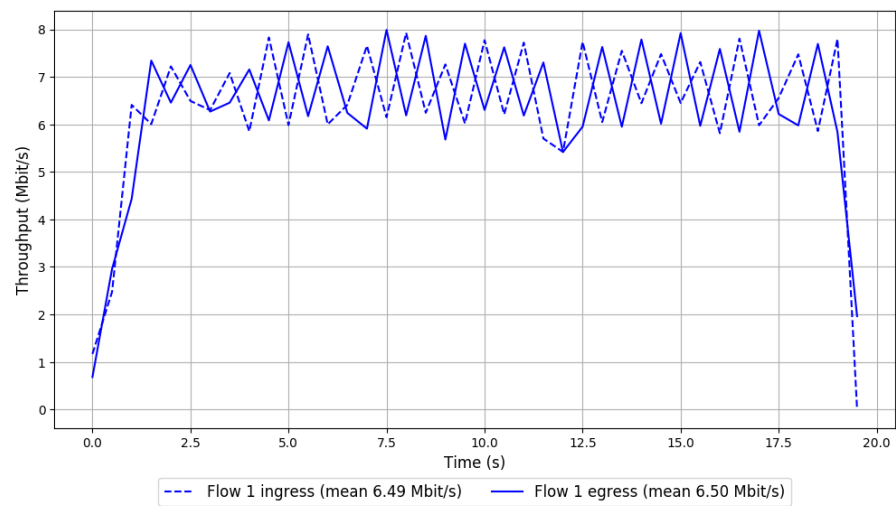


Run 2: Statistics of Sprout

Start at: 2017-12-05 18:13:24

End at: 2017-12-05 18:13:54

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 18:24:02

End at: 2017-12-05 18:24:32

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.40 Mbit/s

95th percentile per-packet one-way delay: 68.000 ms

Loss rate: 0.14%

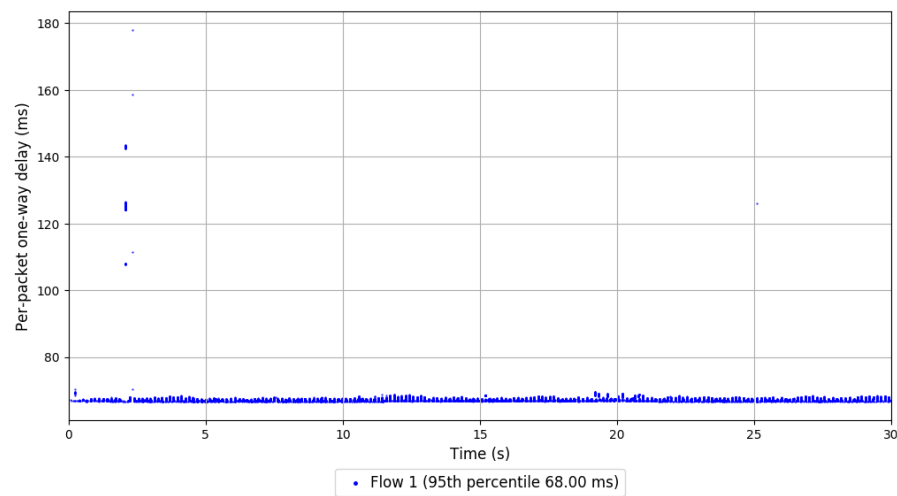
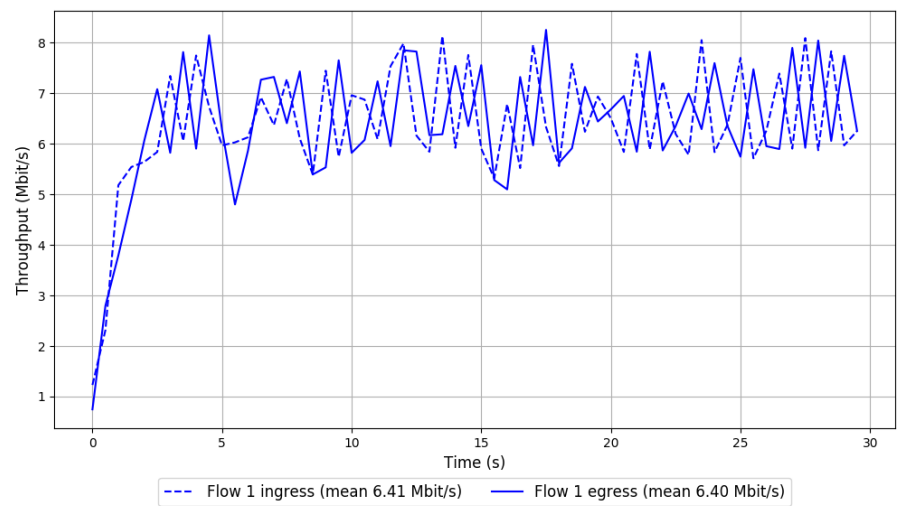
-- Flow 1:

Average throughput: 6.40 Mbit/s

95th percentile per-packet one-way delay: 68.000 ms

Loss rate: 0.14%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-05 18:34:46

End at: 2017-12-05 18:35:16

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.23 Mbit/s

95th percentile per-packet one-way delay: 67.853 ms

Loss rate: 0.00%

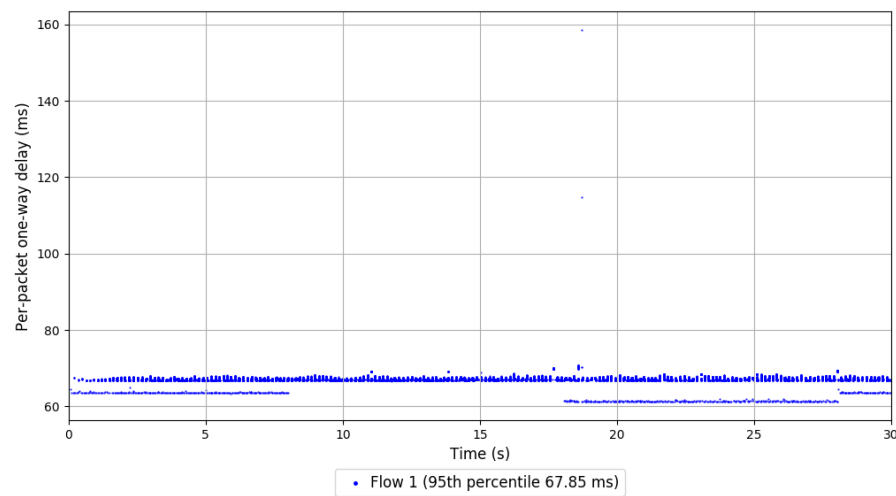
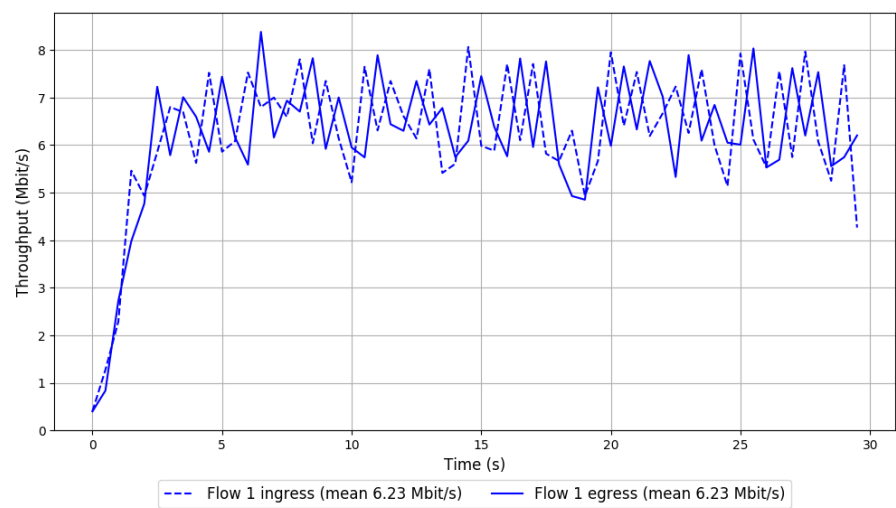
-- Flow 1:

Average throughput: 6.23 Mbit/s

95th percentile per-packet one-way delay: 67.853 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-05 18:45:22

End at: 2017-12-05 18:45:52

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.754 ms

Loss rate: 0.00%

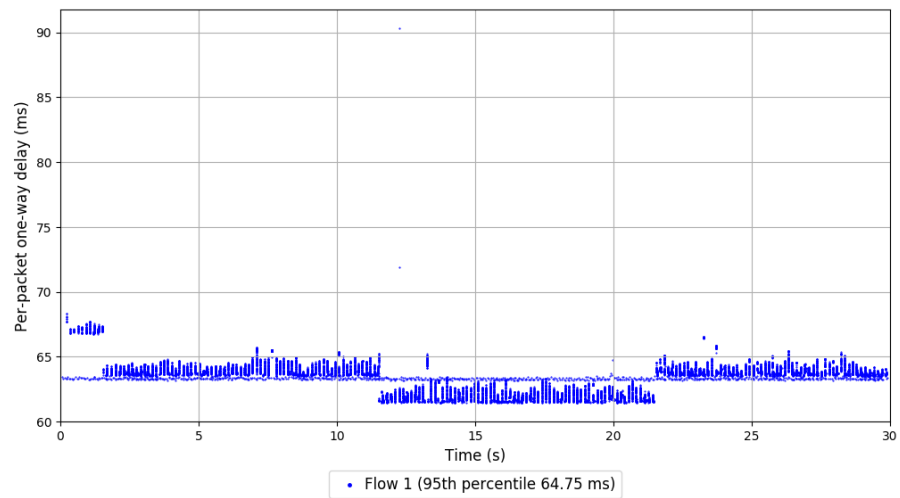
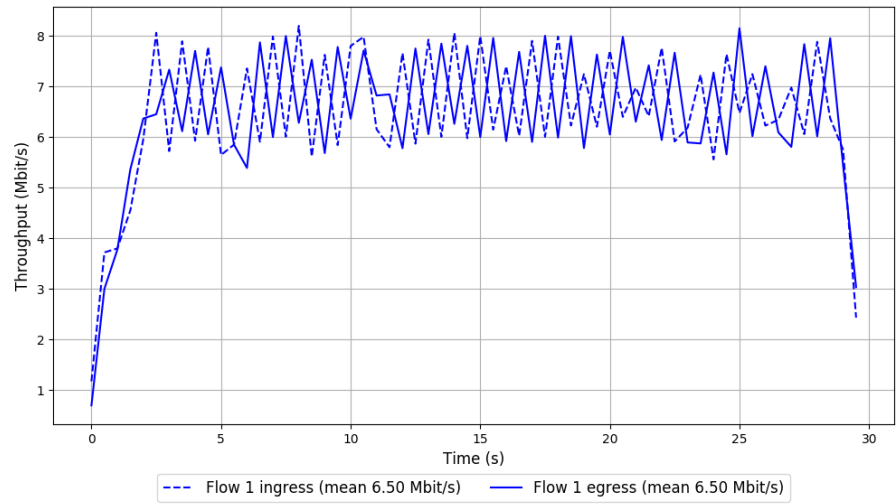
-- Flow 1:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.754 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-05 18:55:38

End at: 2017-12-05 18:56:08

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.25 Mbit/s

95th percentile per-packet one-way delay: 67.829 ms

Loss rate: 0.00%

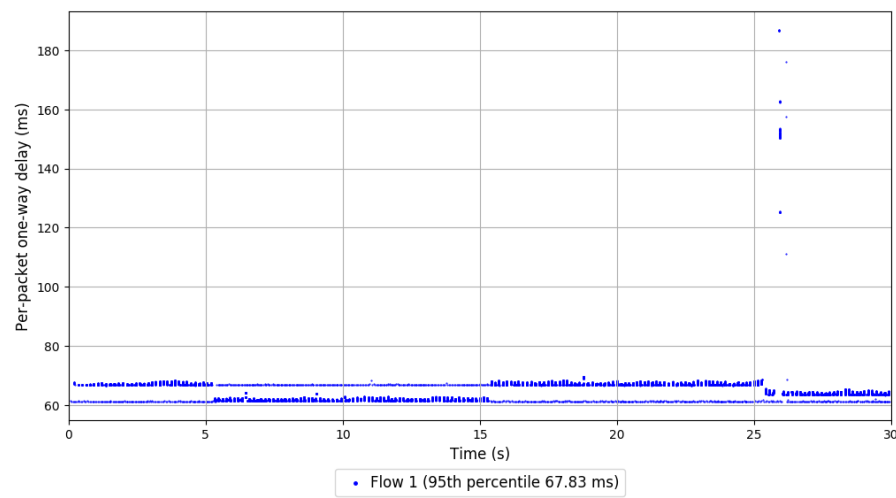
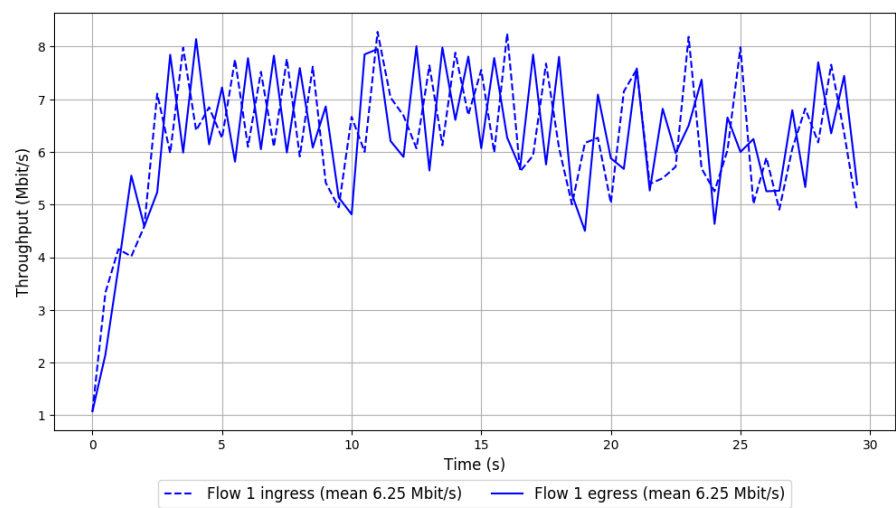
-- Flow 1:

Average throughput: 6.25 Mbit/s

95th percentile per-packet one-way delay: 67.829 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-05 19:05:49

End at: 2017-12-05 19:06:19

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 64.817 ms

Loss rate: 0.00%

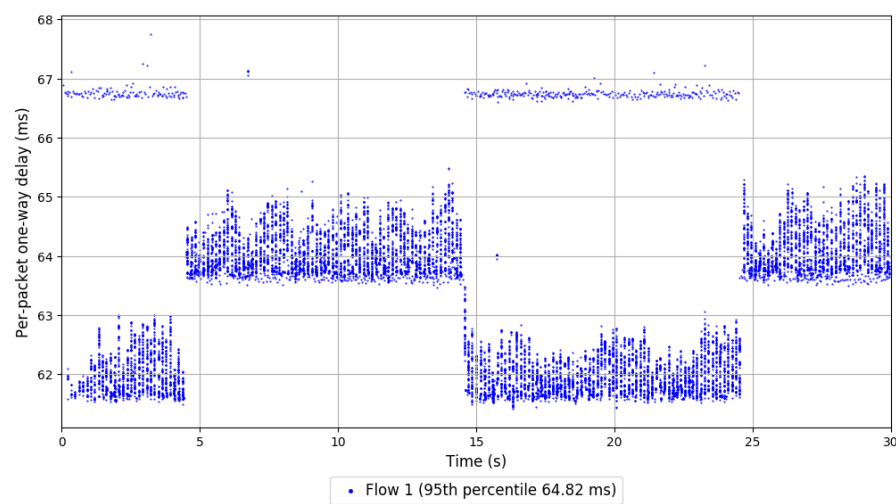
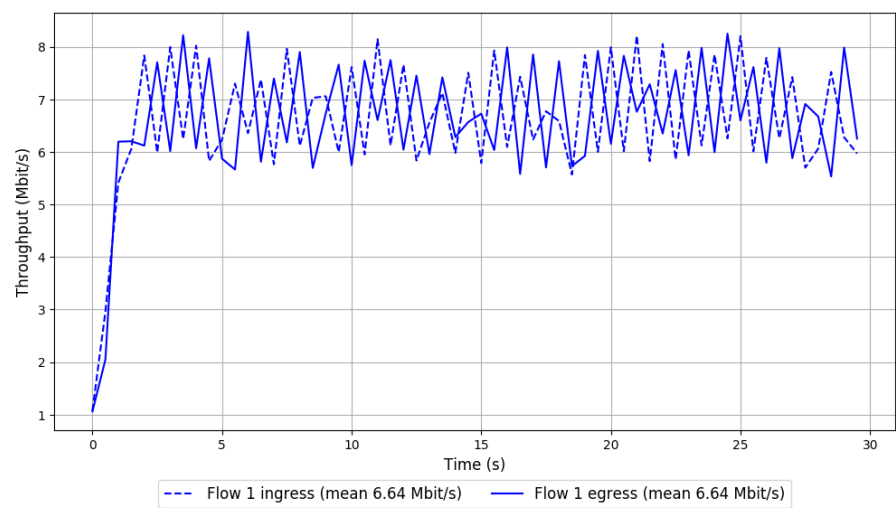
-- Flow 1:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 64.817 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-05 19:16:04

End at: 2017-12-05 19:16:34

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.711 ms

Loss rate: 0.01%

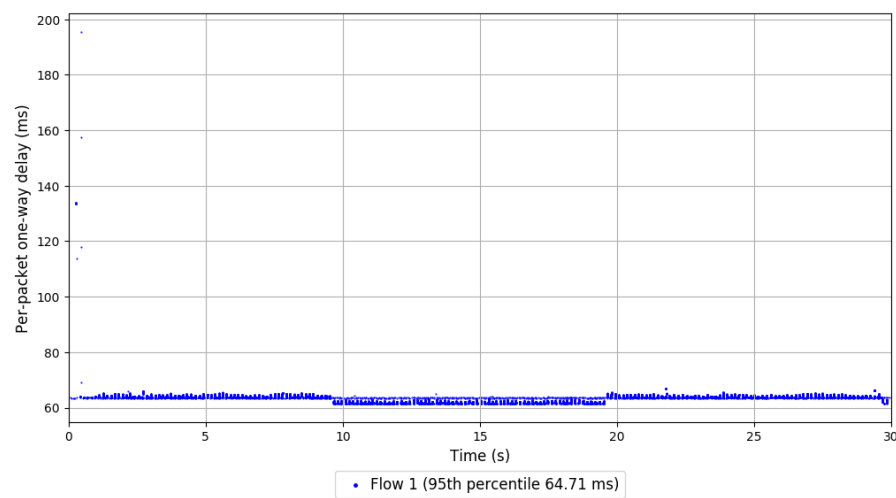
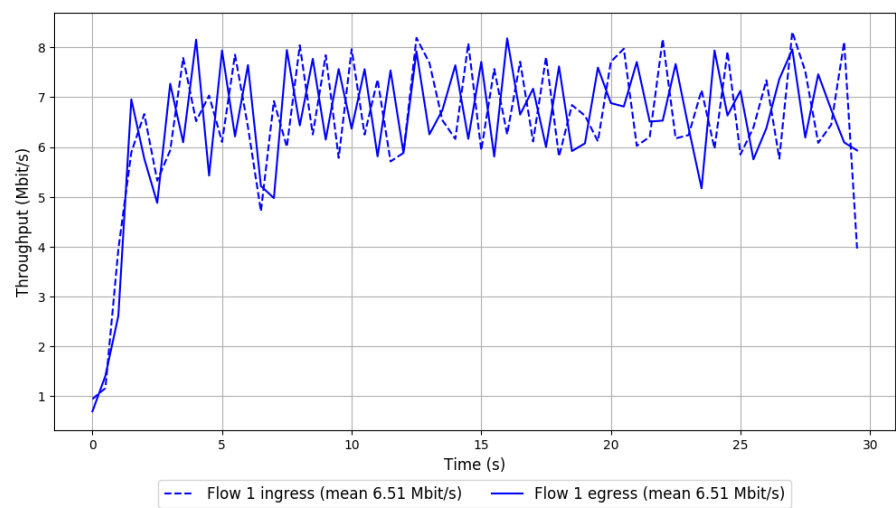
-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.711 ms

Loss rate: 0.01%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-05 19:26:12

End at: 2017-12-05 19:26:42

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.32 Mbit/s

95th percentile per-packet one-way delay: 67.792 ms

Loss rate: 0.00%

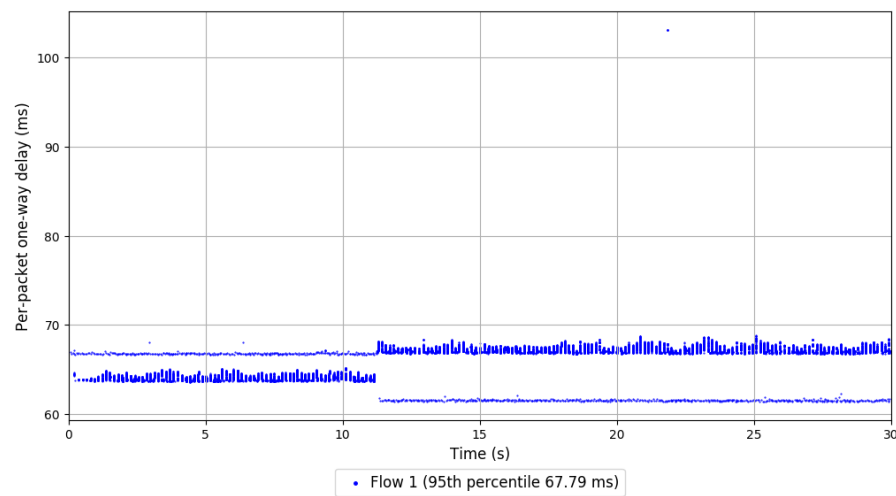
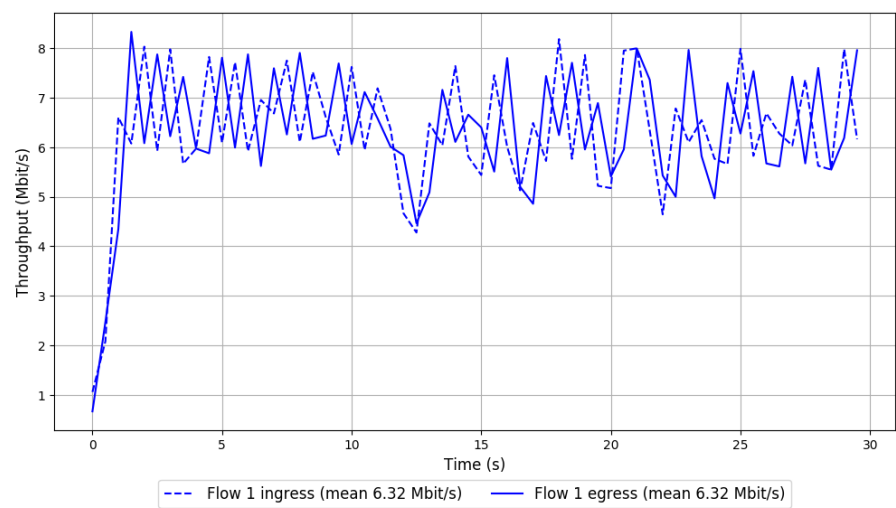
-- Flow 1:

Average throughput: 6.32 Mbit/s

95th percentile per-packet one-way delay: 67.792 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-05 19:36:56

End at: 2017-12-05 19:37:26

Below is generated by plot.py at 2017-12-05 20:49:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 67.706 ms

Loss rate: 0.53%

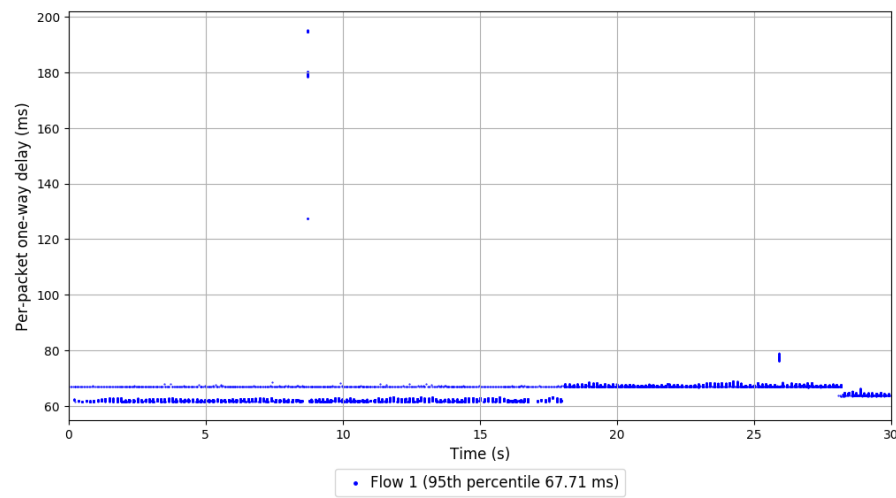
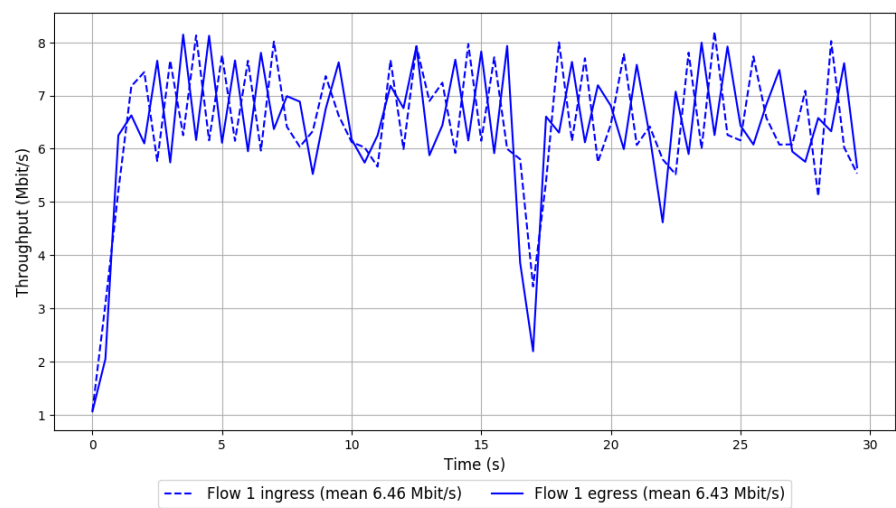
-- Flow 1:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 67.706 ms

Loss rate: 0.53%

Run 10: Report of Sprout — Data Link

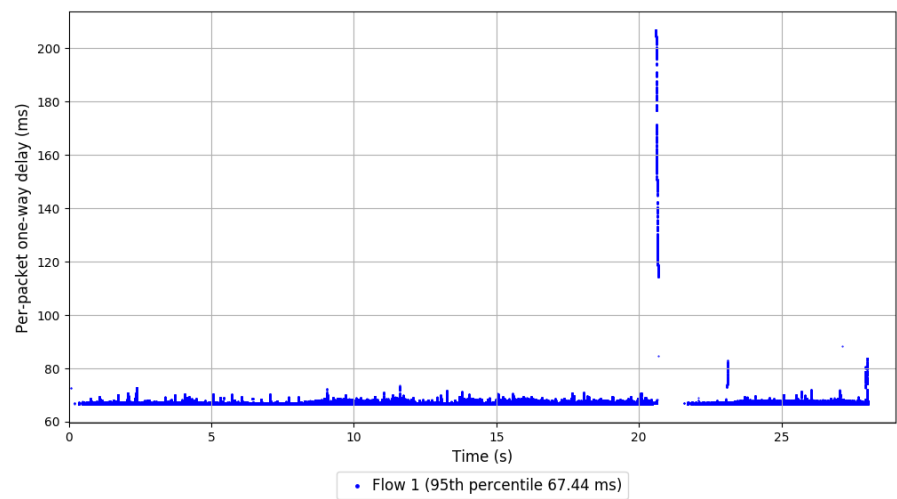
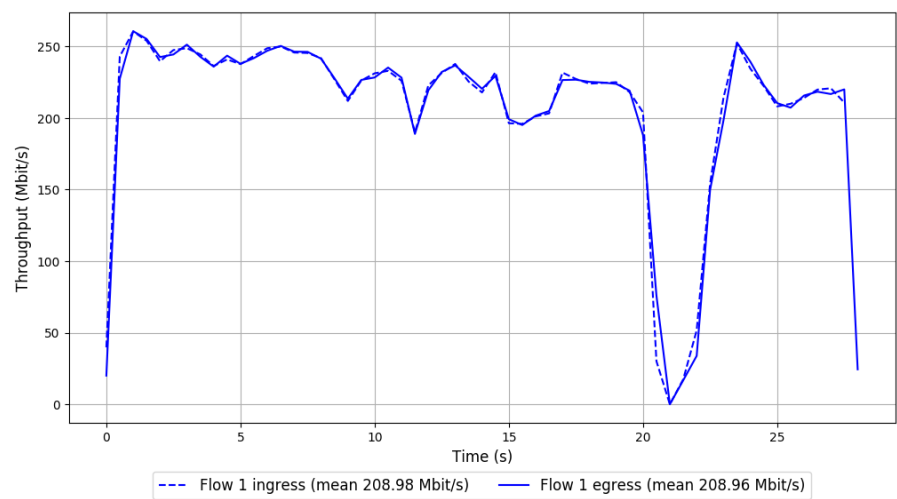


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 18:03:42
End at: 2017-12-05 18:04:12

# Below is generated by plot.py at 2017-12-05 20:49:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 208.96 Mbit/s
95th percentile per-packet one-way delay: 67.440 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 208.96 Mbit/s
95th percentile per-packet one-way delay: 67.440 ms
Loss rate: 0.03%
```

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

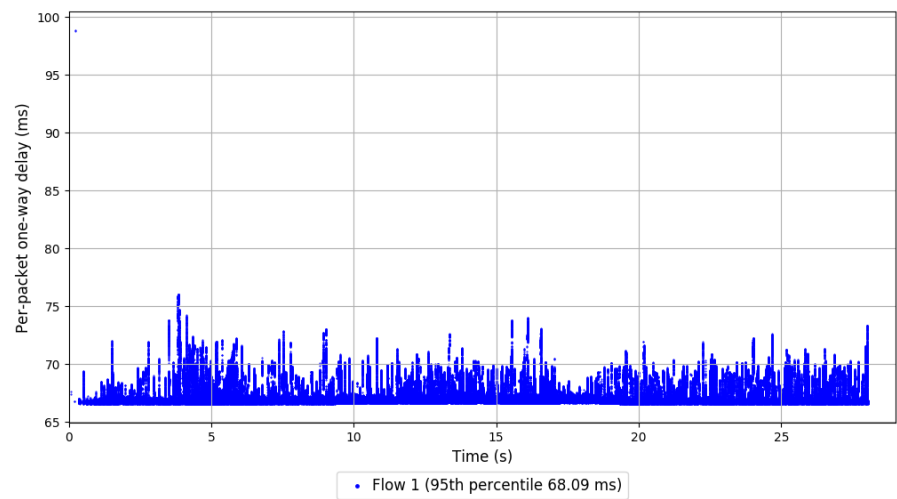
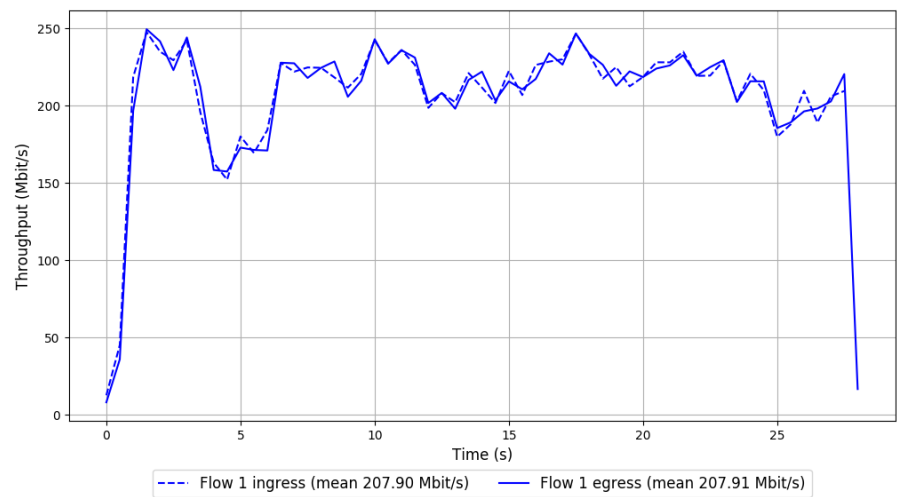


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 18:14:02
End at: 2017-12-05 18:14:32

# Below is generated by plot.py at 2017-12-05 20:49:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.91 Mbit/s
95th percentile per-packet one-way delay: 68.090 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 207.91 Mbit/s
95th percentile per-packet one-way delay: 68.090 ms
Loss rate: 0.01%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 18:24:40

End at: 2017-12-05 18:25:10

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.38 Mbit/s

95th percentile per-packet one-way delay: 67.189 ms

Loss rate: 0.00%

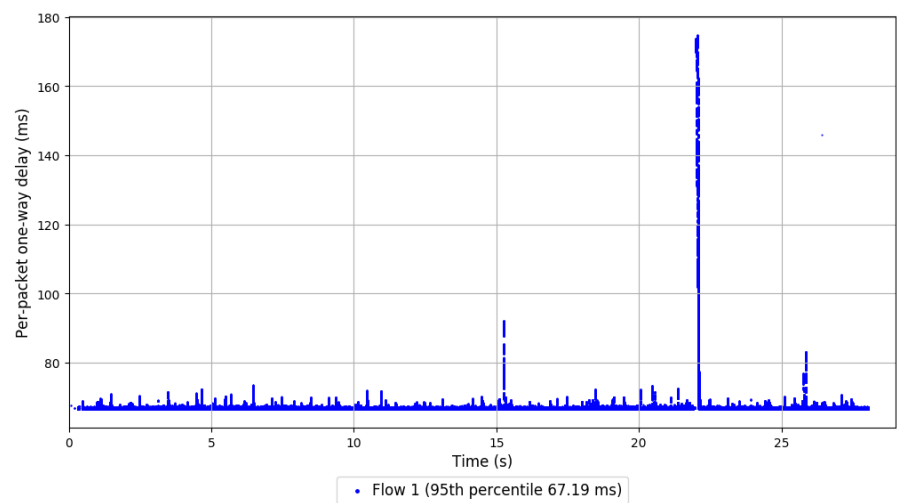
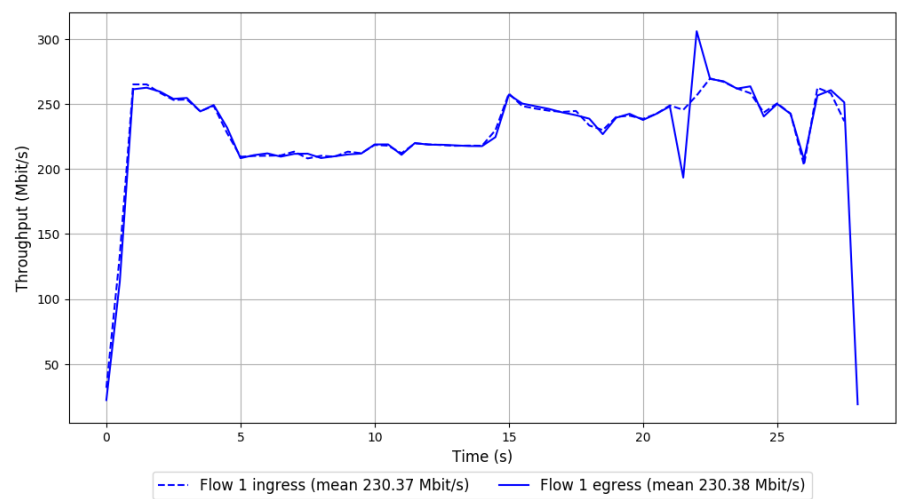
-- Flow 1:

Average throughput: 230.38 Mbit/s

95th percentile per-packet one-way delay: 67.189 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-05 18:35:24

End at: 2017-12-05 18:35:54

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.18 Mbit/s

95th percentile per-packet one-way delay: 67.082 ms

Loss rate: 0.01%

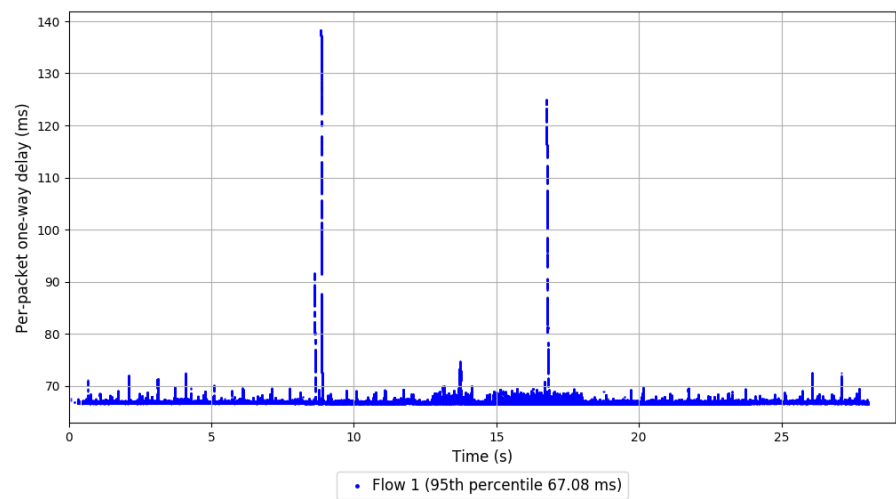
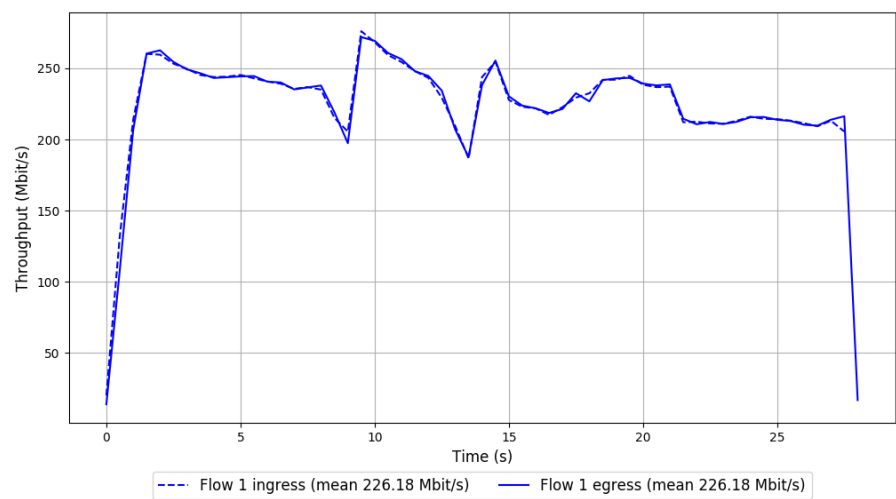
-- Flow 1:

Average throughput: 226.18 Mbit/s

95th percentile per-packet one-way delay: 67.082 ms

Loss rate: 0.01%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-05 18:46:00

End at: 2017-12-05 18:46:30

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.76 Mbit/s

95th percentile per-packet one-way delay: 67.069 ms

Loss rate: 0.01%

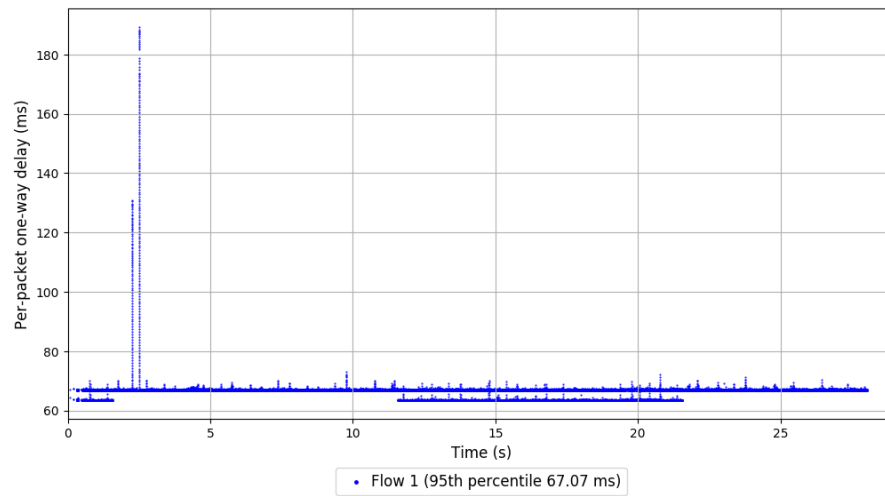
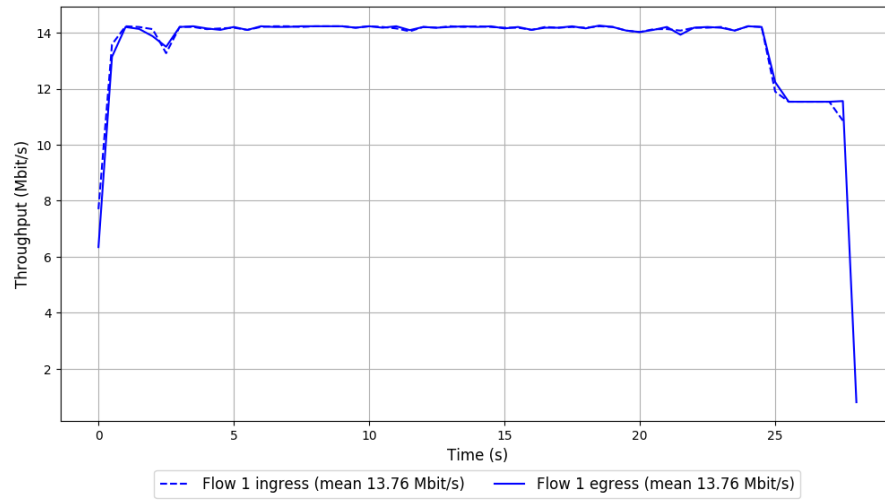
-- Flow 1:

Average throughput: 13.76 Mbit/s

95th percentile per-packet one-way delay: 67.069 ms

Loss rate: 0.01%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-05 18:56:16

End at: 2017-12-05 18:56:46

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.44 Mbit/s

95th percentile per-packet one-way delay: 66.862 ms

Loss rate: 0.00%

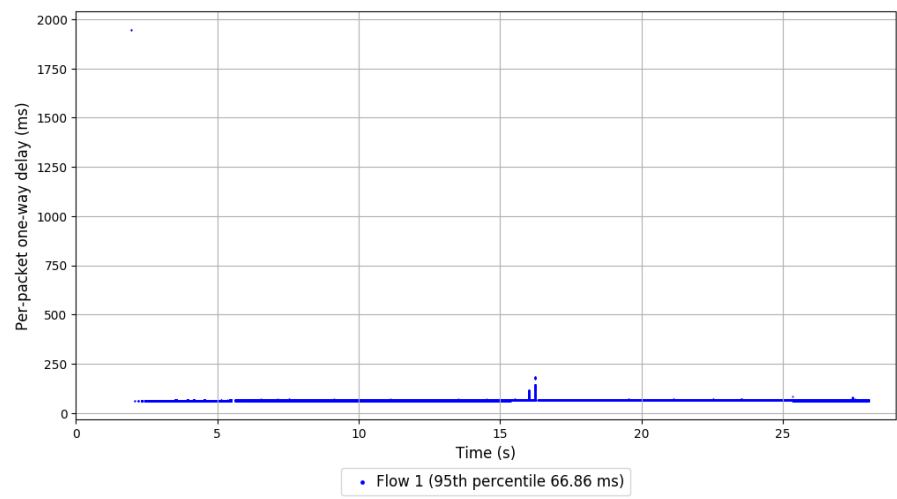
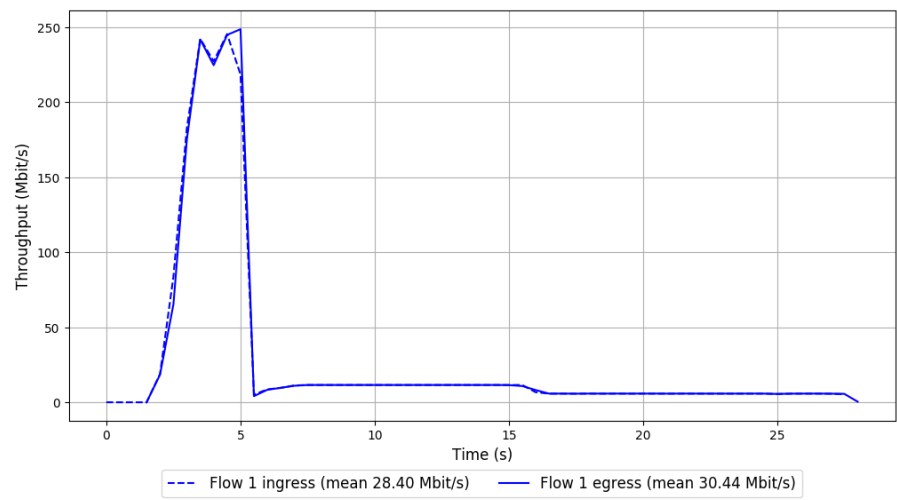
-- Flow 1:

Average throughput: 30.44 Mbit/s

95th percentile per-packet one-way delay: 66.862 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-05 19:06:27

End at: 2017-12-05 19:06:57

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.44 Mbit/s

95th percentile per-packet one-way delay: 66.985 ms

Loss rate: 0.00%

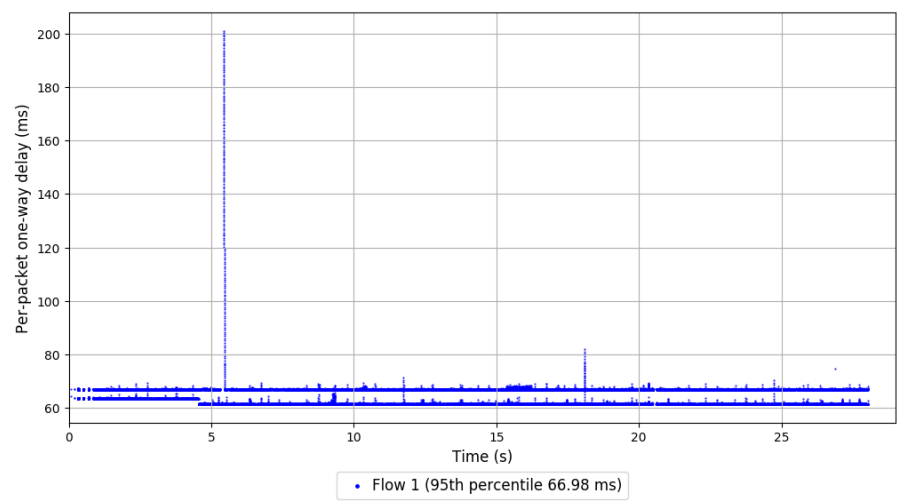
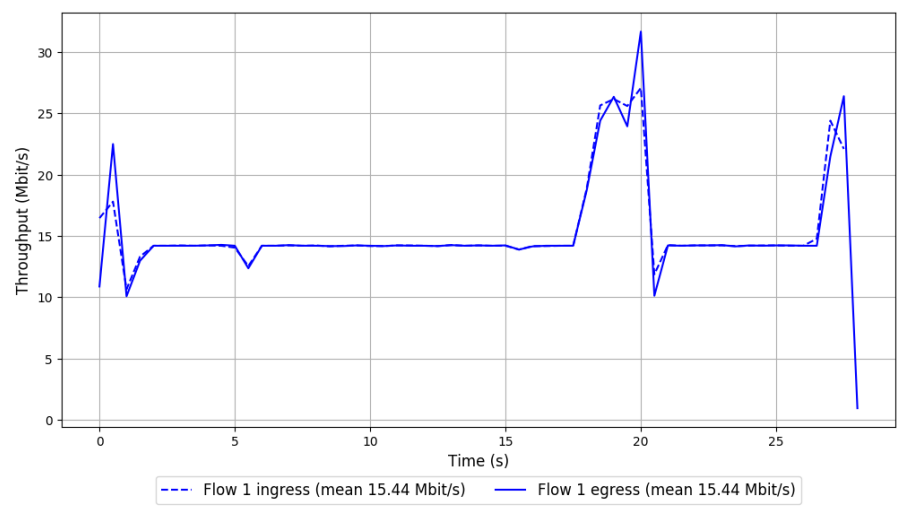
-- Flow 1:

Average throughput: 15.44 Mbit/s

95th percentile per-packet one-way delay: 66.985 ms

Loss rate: 0.00%

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

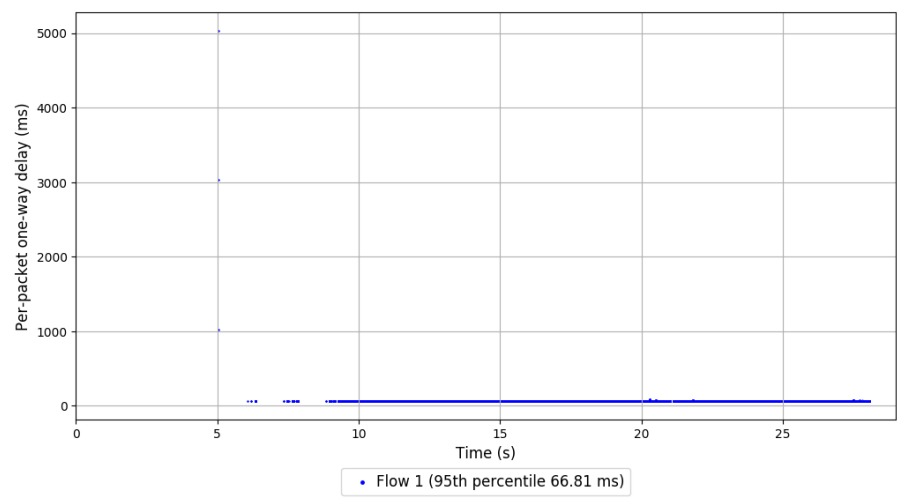
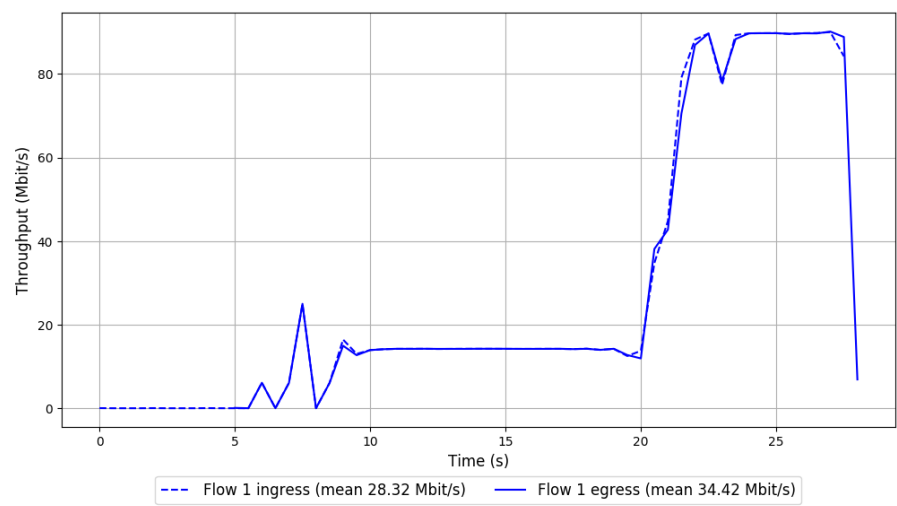


Run 8: Statistics of TaoVA-100x

Start at: 2017-12-05 19:16:42

End at: 2017-12-05 19:17:12

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-05 19:26:50

End at: 2017-12-05 19:27:21

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.64 Mbit/s

95th percentile per-packet one-way delay: 67.136 ms

Loss rate: 0.00%

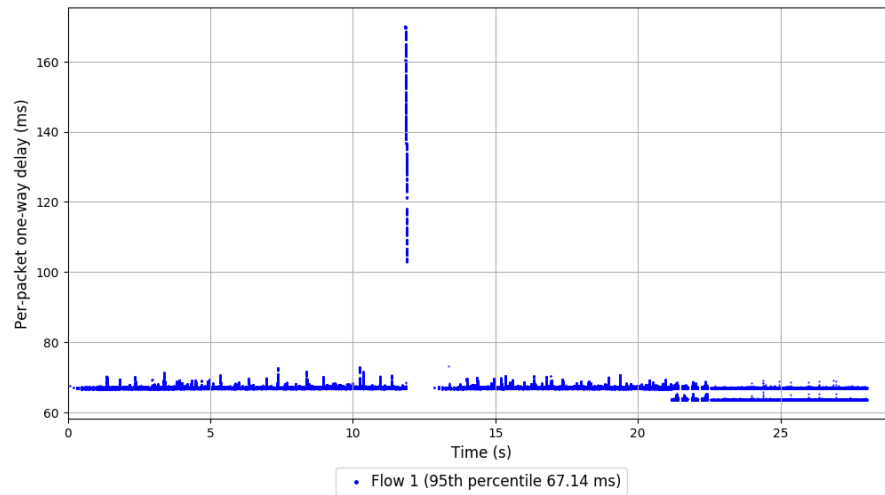
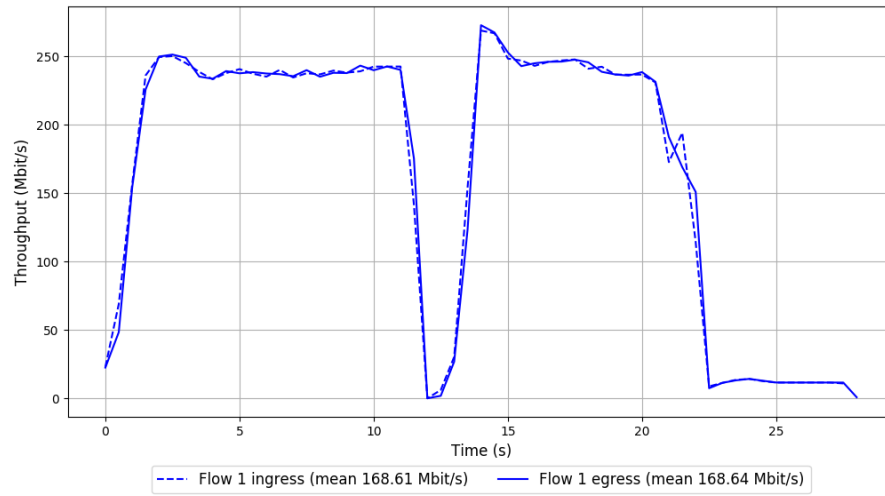
-- Flow 1:

Average throughput: 168.64 Mbit/s

95th percentile per-packet one-way delay: 67.136 ms

Loss rate: 0.00%

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

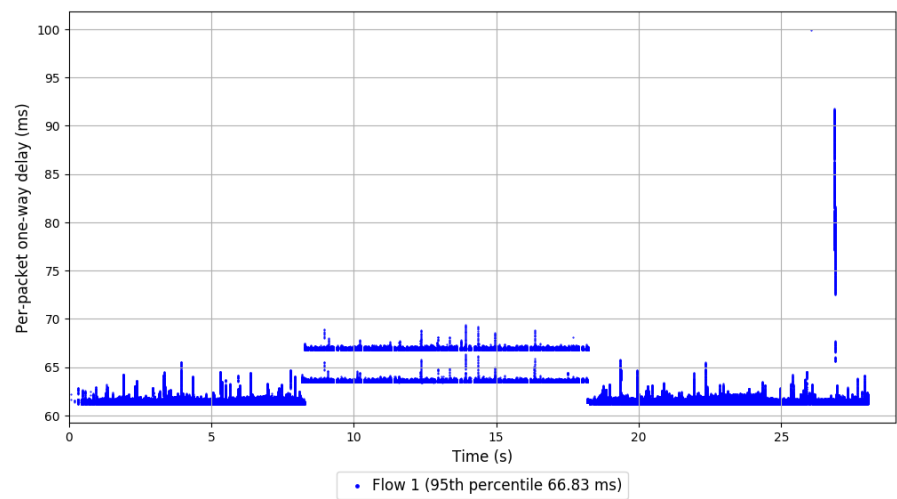
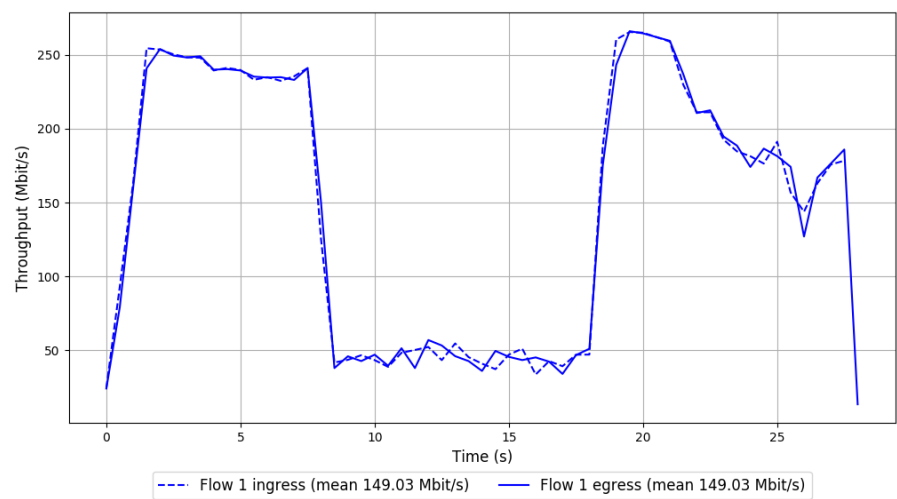


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-05 19:37:34
End at: 2017-12-05 19:38:04

# Below is generated by plot.py at 2017-12-05 20:50:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.03 Mbit/s
95th percentile per-packet one-way delay: 66.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 149.03 Mbit/s
95th percentile per-packet one-way delay: 66.831 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 18:06:02

End at: 2017-12-05 18:06:32

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.29 Mbit/s

95th percentile per-packet one-way delay: 69.785 ms

Loss rate: 0.00%

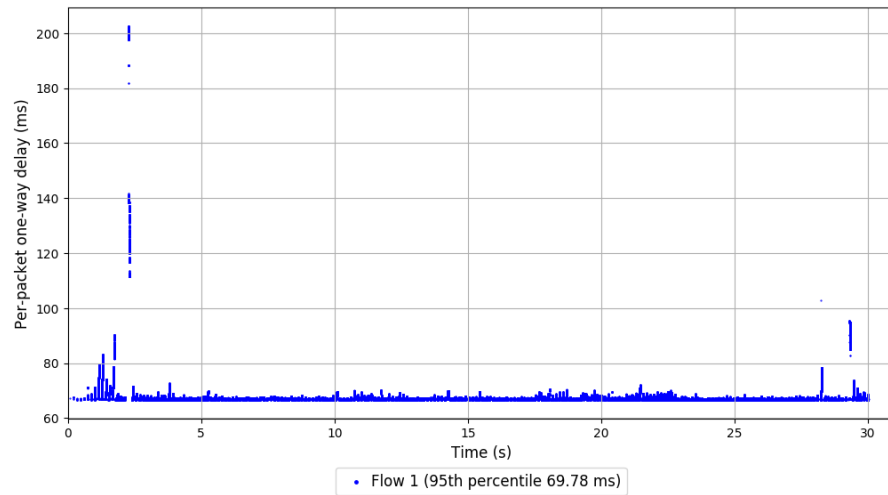
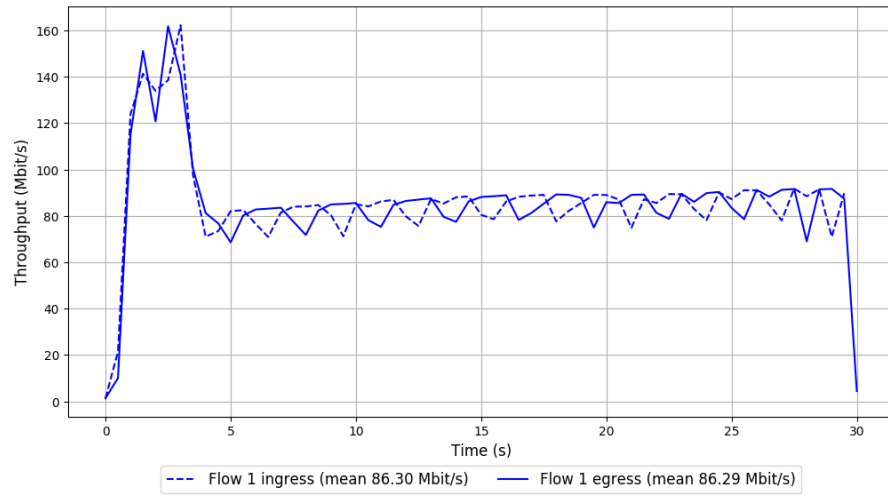
-- Flow 1:

Average throughput: 86.29 Mbit/s

95th percentile per-packet one-way delay: 69.785 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 18:16:37

End at: 2017-12-05 18:17:07

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 145.26 Mbit/s

95th percentile per-packet one-way delay: 75.655 ms

Loss rate: 0.23%

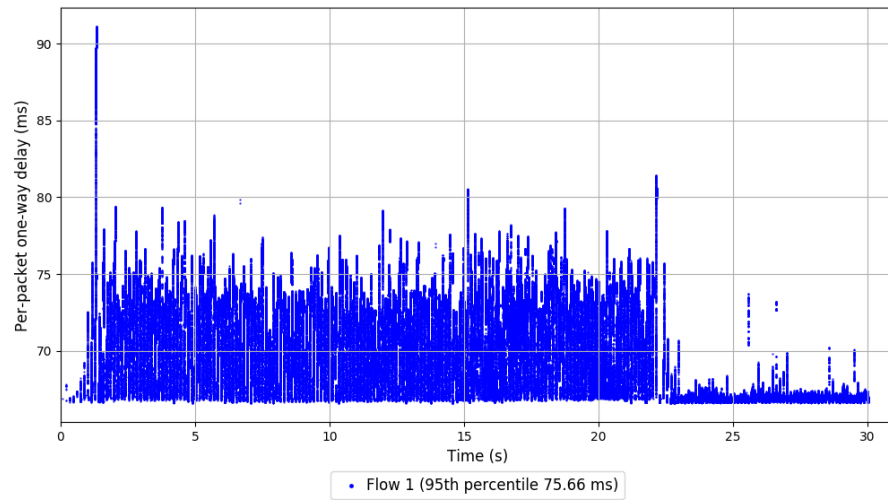
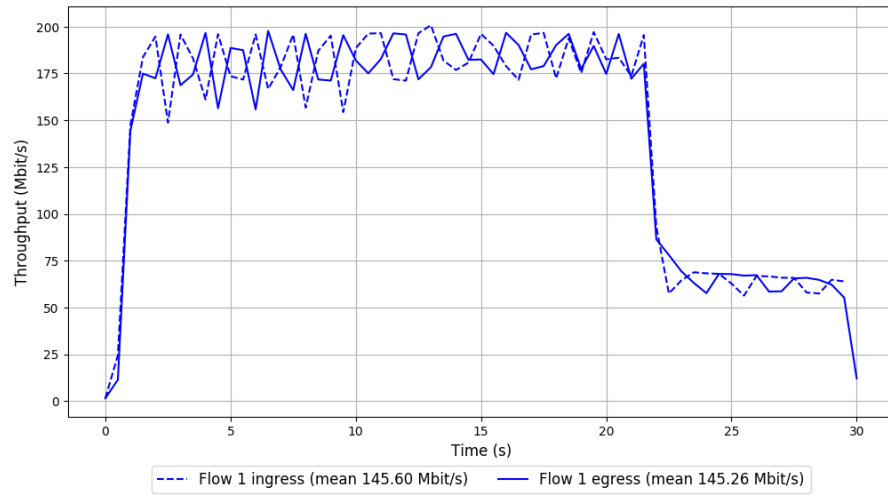
-- Flow 1:

Average throughput: 145.26 Mbit/s

95th percentile per-packet one-way delay: 75.655 ms

Loss rate: 0.23%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 18:27:21

End at: 2017-12-05 18:27:51

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.71 Mbit/s

95th percentile per-packet one-way delay: 68.140 ms

Loss rate: 0.00%

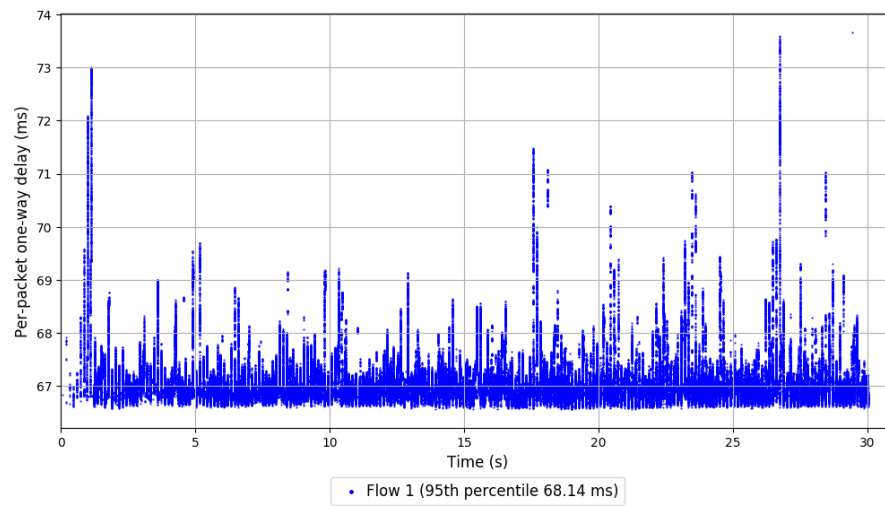
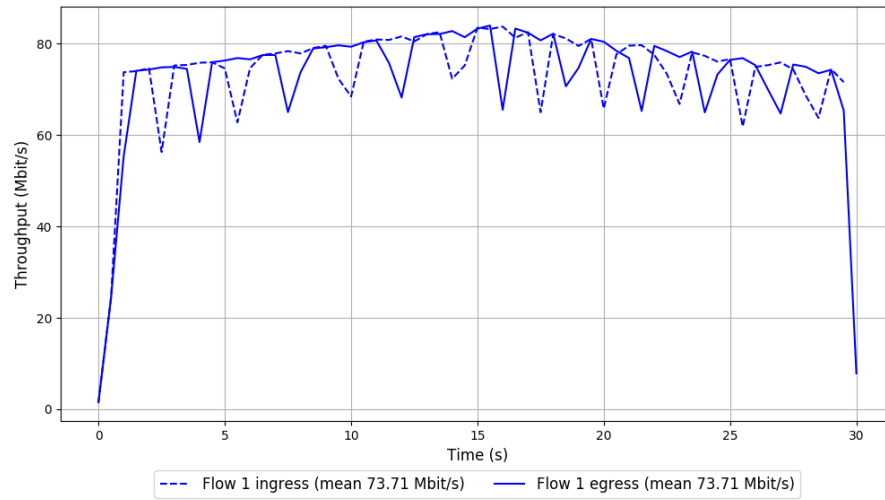
-- Flow 1:

Average throughput: 73.71 Mbit/s

95th percentile per-packet one-way delay: 68.140 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-05 18:38:01

End at: 2017-12-05 18:38:31

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.28 Mbit/s

95th percentile per-packet one-way delay: 67.689 ms

Loss rate: 0.09%

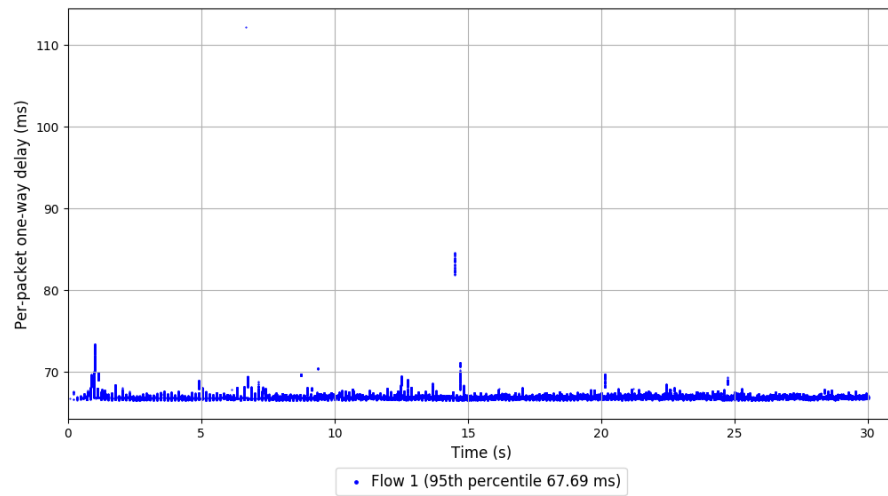
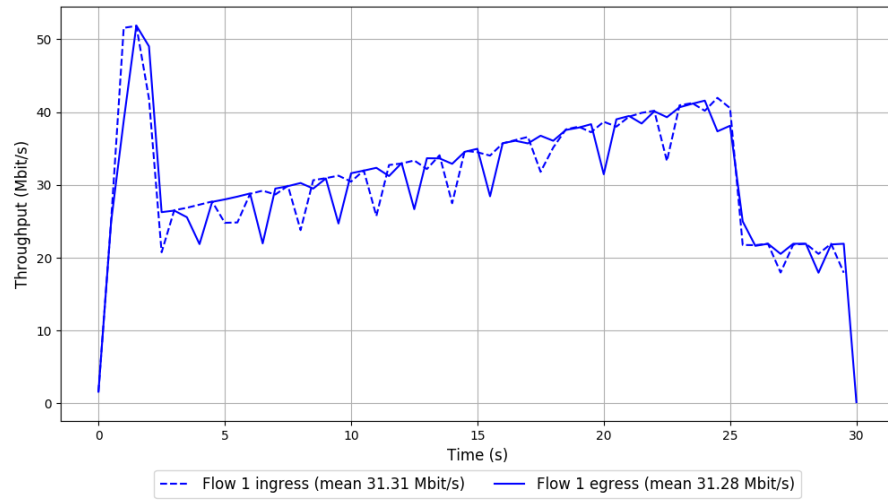
-- Flow 1:

Average throughput: 31.28 Mbit/s

95th percentile per-packet one-way delay: 67.689 ms

Loss rate: 0.09%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-05 18:48:13

End at: 2017-12-05 18:48:43

Below is generated by plot.py at 2017-12-05 20:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.49 Mbit/s

95th percentile per-packet one-way delay: 67.248 ms

Loss rate: 0.09%

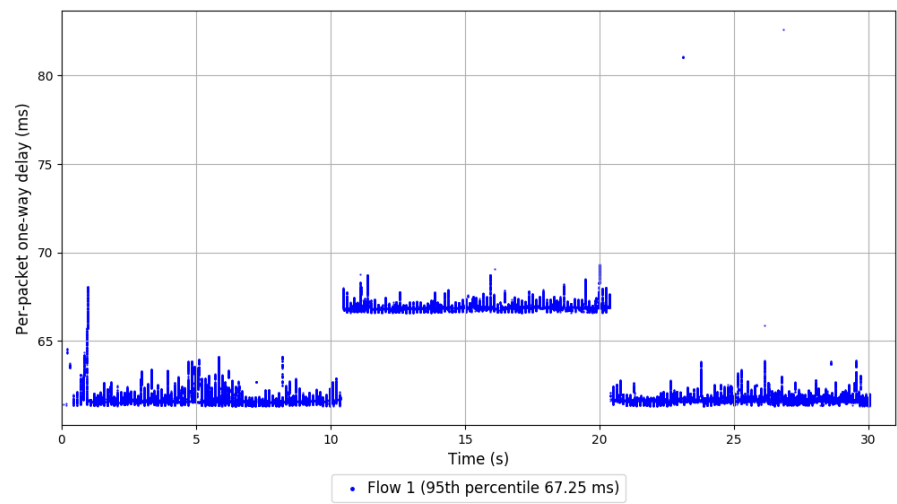
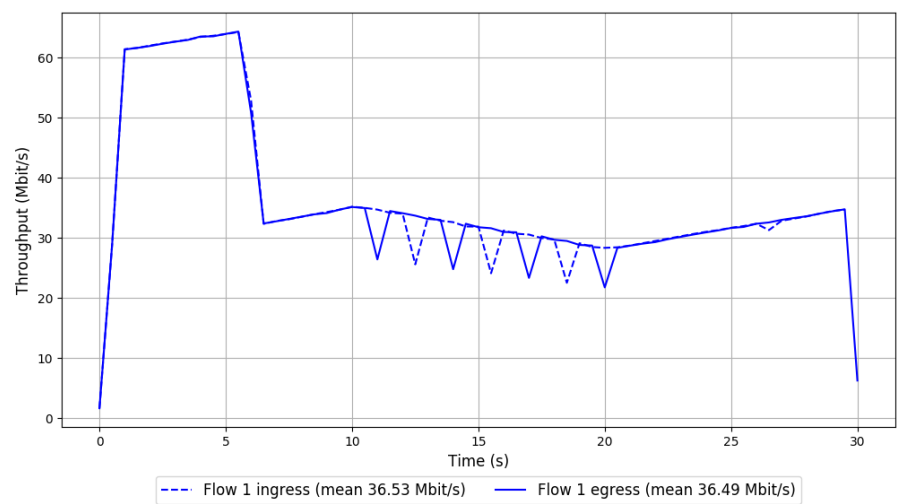
-- Flow 1:

Average throughput: 36.49 Mbit/s

95th percentile per-packet one-way delay: 67.248 ms

Loss rate: 0.09%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-05 18:58:29

End at: 2017-12-05 18:58:59

Below is generated by plot.py at 2017-12-05 20:50:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.68 Mbit/s

95th percentile per-packet one-way delay: 67.797 ms

Loss rate: 0.00%

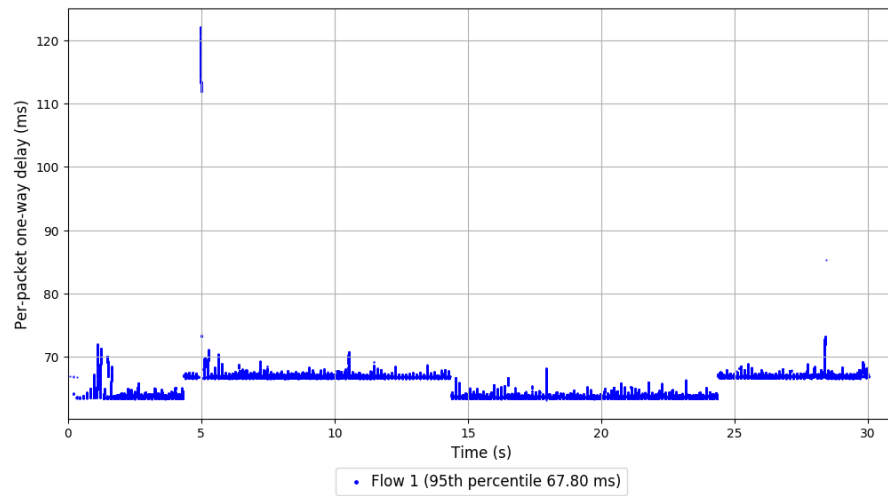
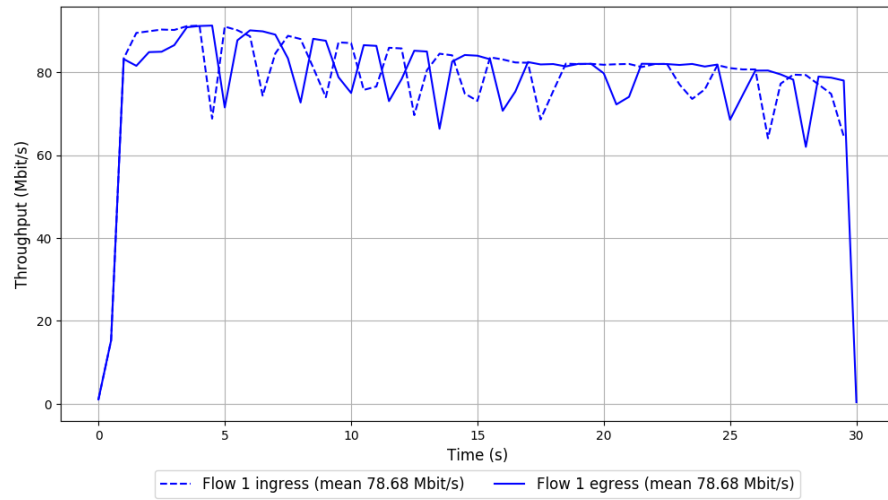
-- Flow 1:

Average throughput: 78.68 Mbit/s

95th percentile per-packet one-way delay: 67.797 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-05 19:08:41

End at: 2017-12-05 19:09:11

Below is generated by plot.py at 2017-12-05 20:50:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.19 Mbit/s

95th percentile per-packet one-way delay: 64.227 ms

Loss rate: 0.00%

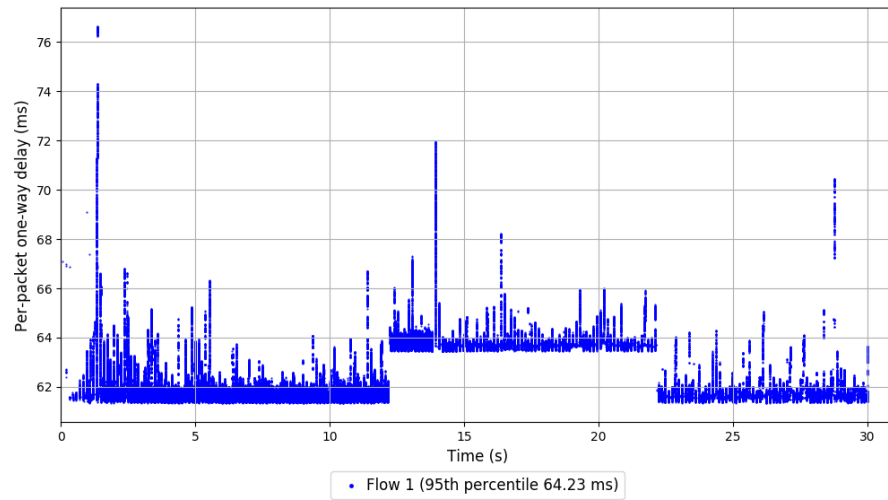
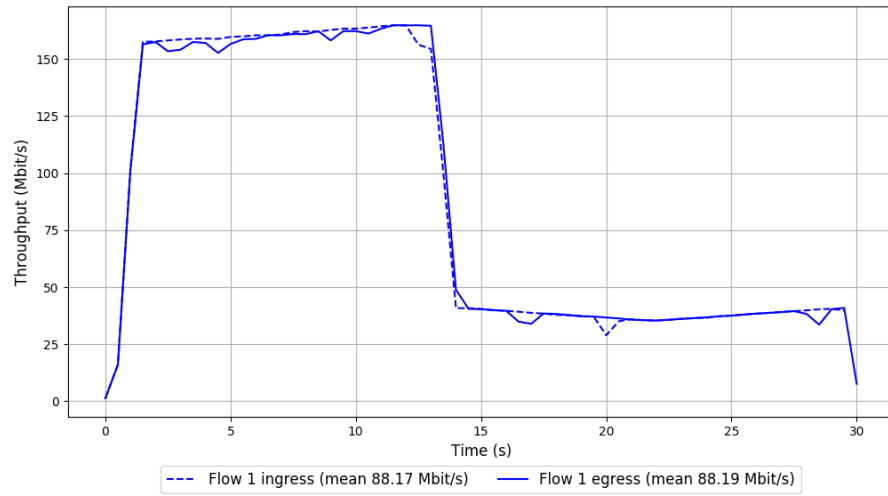
-- Flow 1:

Average throughput: 88.19 Mbit/s

95th percentile per-packet one-way delay: 64.227 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-05 19:18:53

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

Below is generated by plot.py at 2017-12-05 20:50:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.17 Mbit/s

95th percentile per-packet one-way delay: 67.400 ms

Loss rate: 0.00%

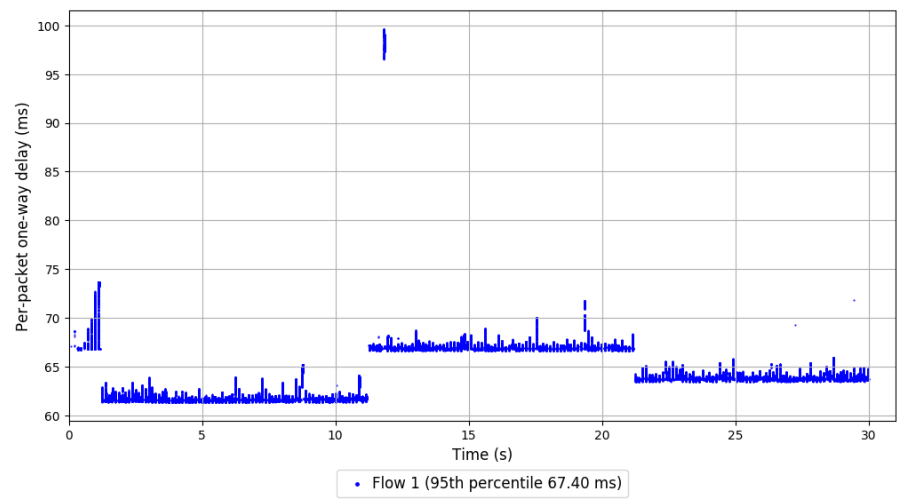
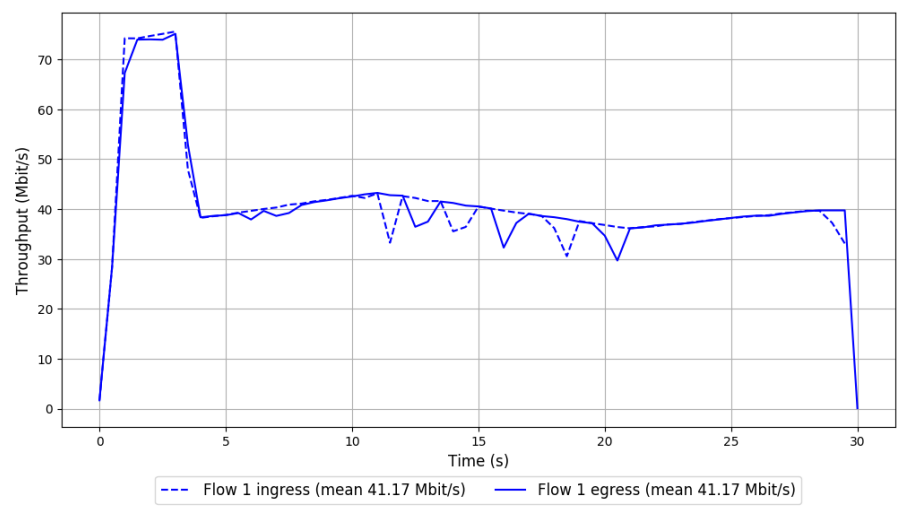
-- Flow 1:

Average throughput: 41.17 Mbit/s

95th percentile per-packet one-way delay: 67.400 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-05 19:29:24

End at: 2017-12-05 19:29:54

Below is generated by plot.py at 2017-12-05 20:50:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.89 Mbit/s

95th percentile per-packet one-way delay: 67.327 ms

Loss rate: 0.03%

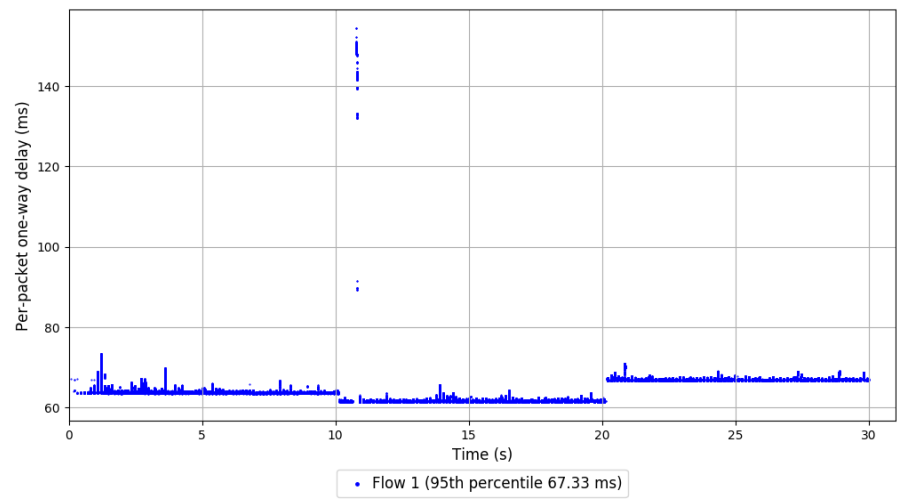
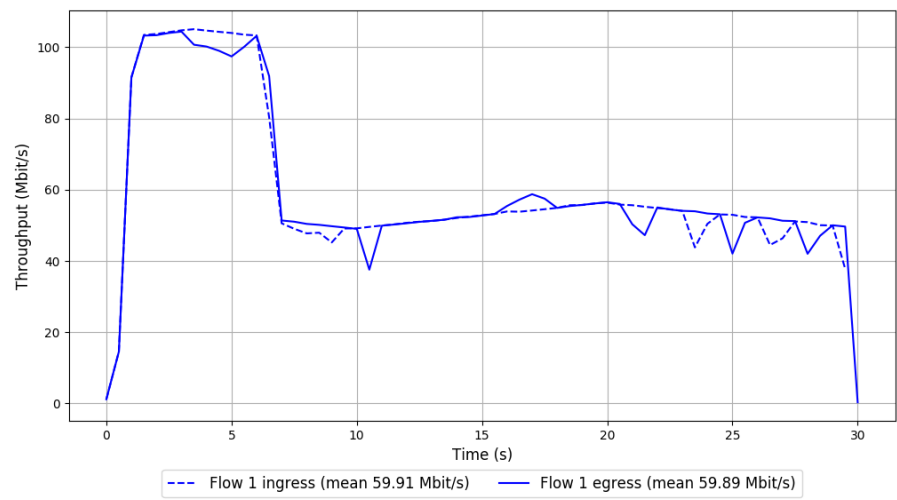
-- Flow 1:

Average throughput: 59.89 Mbit/s

95th percentile per-packet one-way delay: 67.327 ms

Loss rate: 0.03%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-05 19:40:03

End at: 2017-12-05 19:40:33

Below is generated by plot.py at 2017-12-05 20:50:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.32 Mbit/s

95th percentile per-packet one-way delay: 66.234 ms

Loss rate: 0.00%

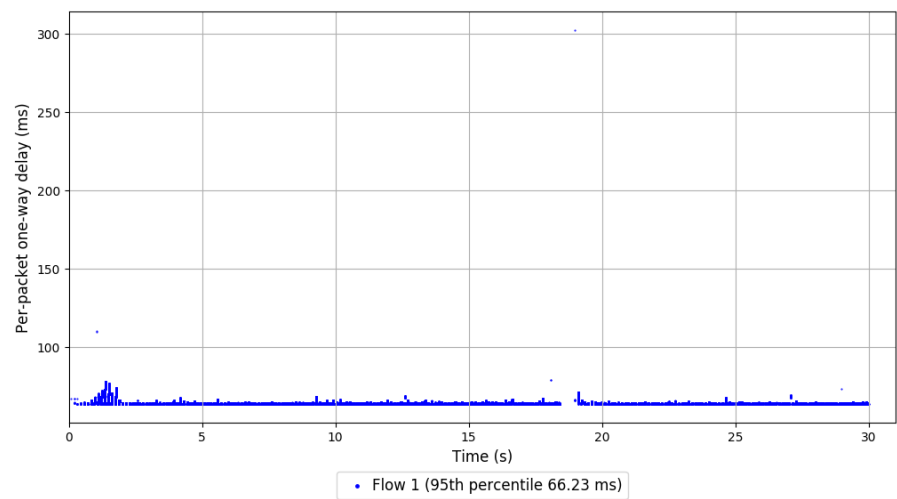
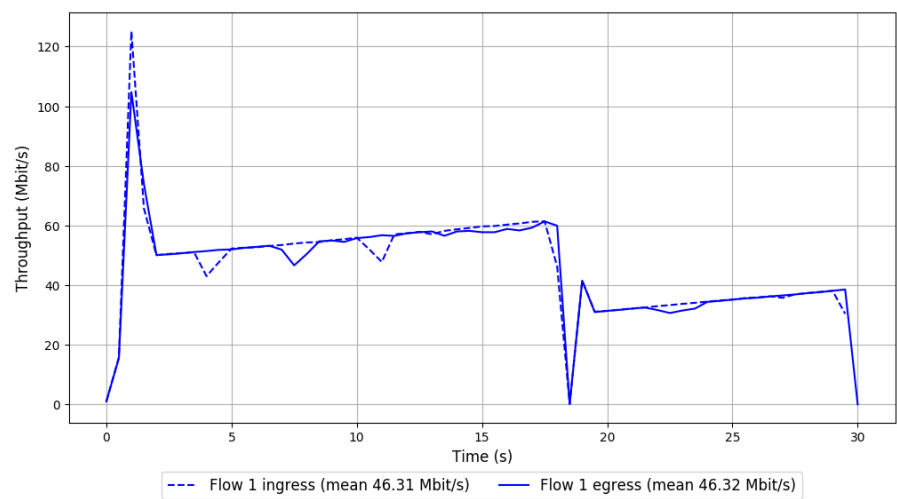
-- Flow 1:

Average throughput: 46.32 Mbit/s

95th percentile per-packet one-way delay: 66.234 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-05 18:11:00

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

Below is generated by plot.py at 2017-12-05 20:52:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 144.02 Mbit/s

95th percentile per-packet one-way delay: 113.491 ms

Loss rate: 0.47%

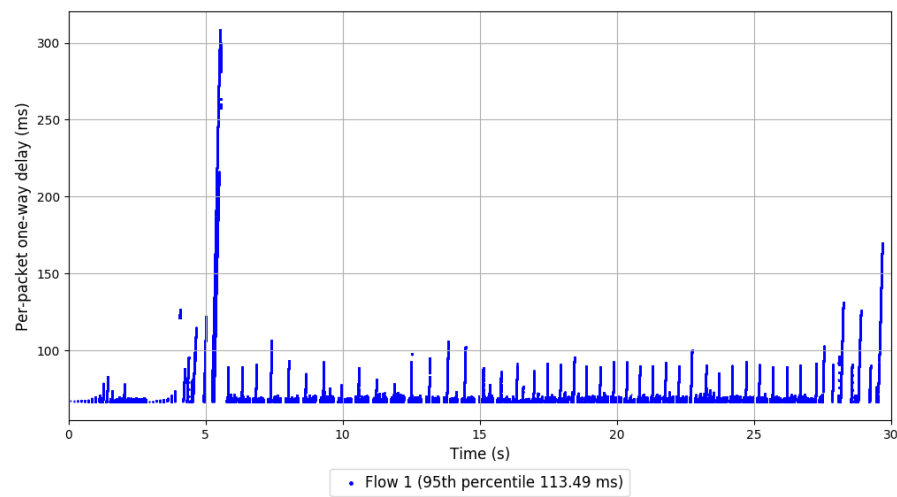
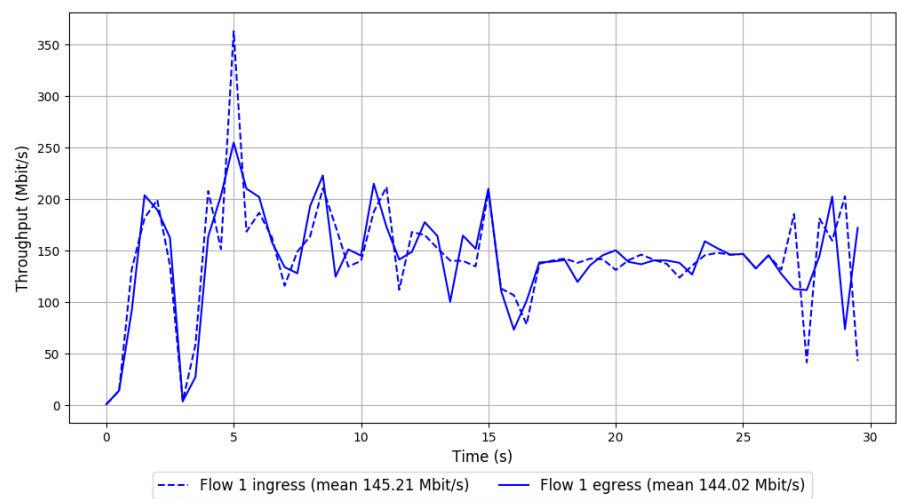
-- Flow 1:

Average throughput: 144.02 Mbit/s

95th percentile per-packet one-way delay: 113.491 ms

Loss rate: 0.47%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-05 18:21:37

End at: 2017-12-05 18:22:07

Below is generated by plot.py at 2017-12-05 20:53:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 203.99 Mbit/s

95th percentile per-packet one-way delay: 99.701 ms

Loss rate: 0.00%

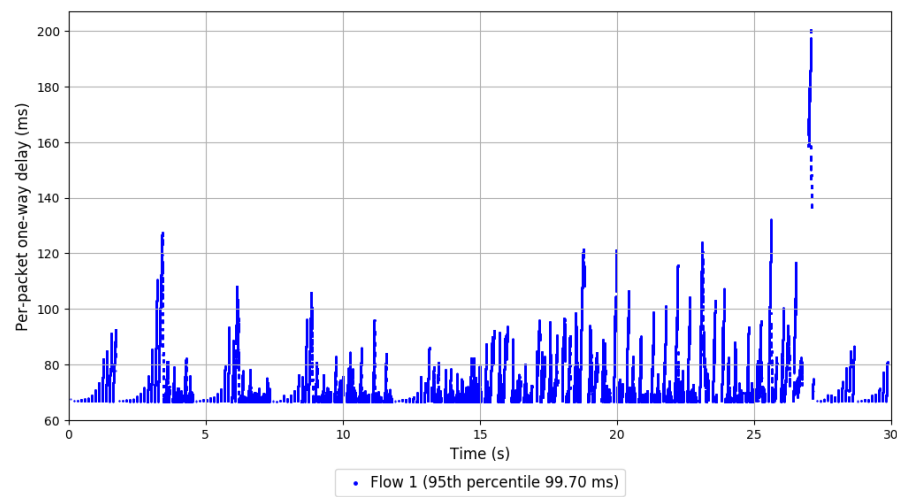
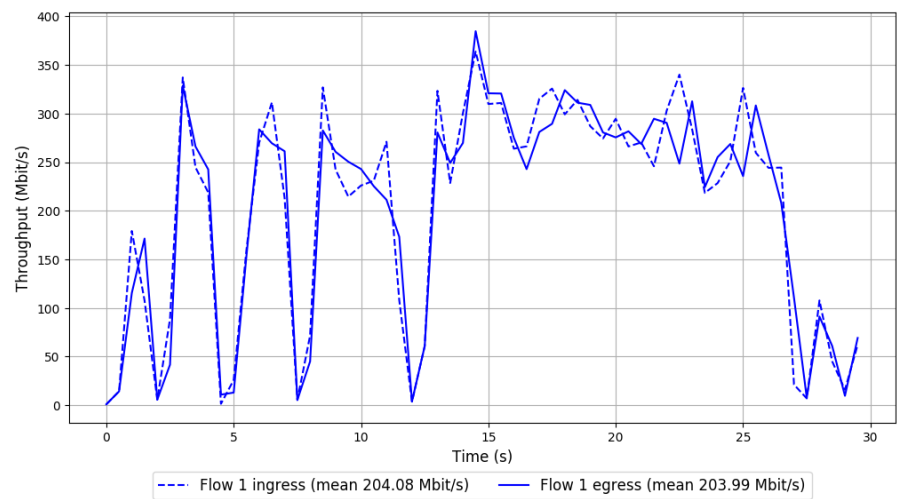
-- Flow 1:

Average throughput: 203.99 Mbit/s

95th percentile per-packet one-way delay: 99.701 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 18:32:18

End at: 2017-12-05 18:32:48

Below is generated by plot.py at 2017-12-05 20:54:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.49 Mbit/s

95th percentile per-packet one-way delay: 89.319 ms

Loss rate: 0.04%

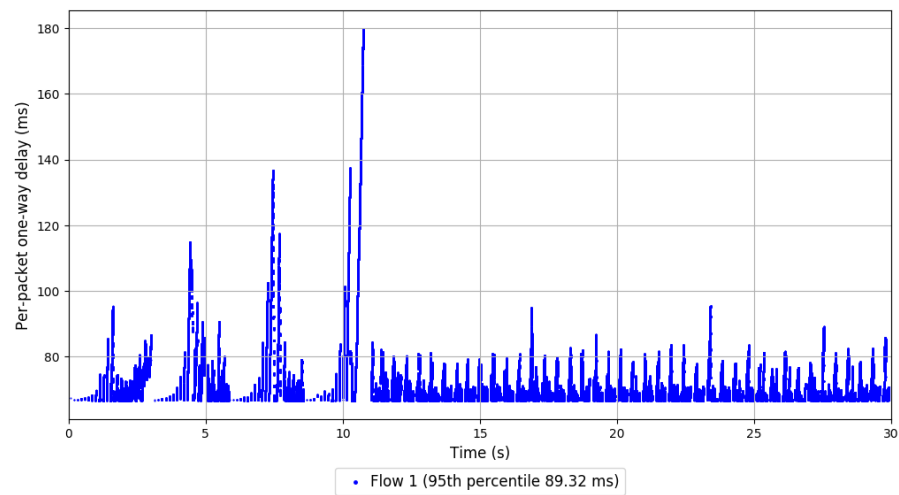
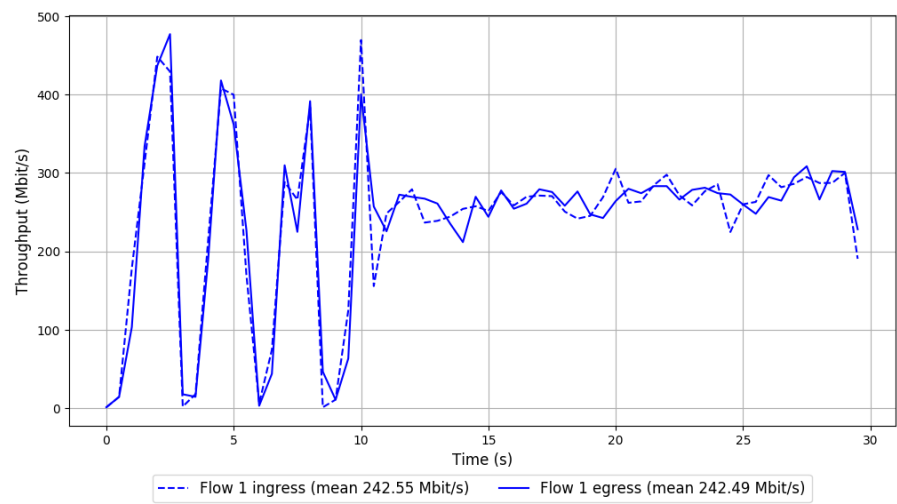
-- Flow 1:

Average throughput: 242.49 Mbit/s

95th percentile per-packet one-way delay: 89.319 ms

Loss rate: 0.04%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-05 18:42:56

End at: 2017-12-05 18:43:26

Below is generated by plot.py at 2017-12-05 20:54:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 232.29 Mbit/s

95th percentile per-packet one-way delay: 95.185 ms

Loss rate: 1.89%

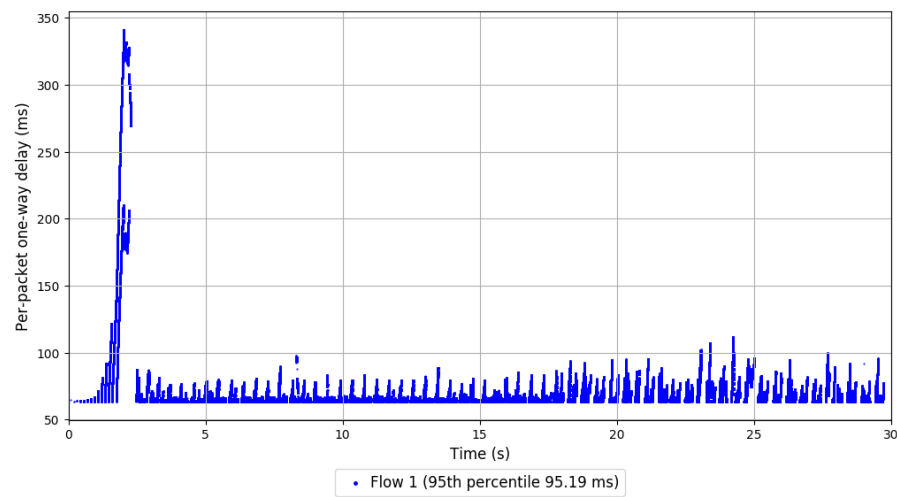
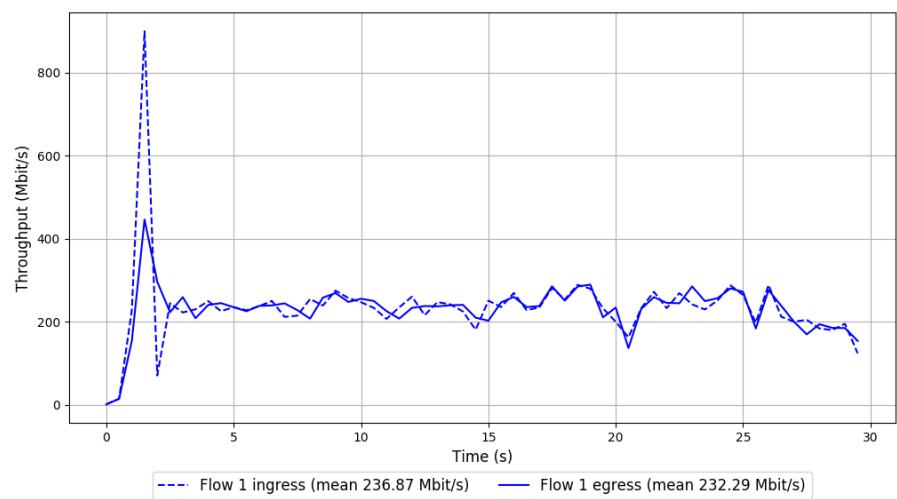
-- Flow 1:

Average throughput: 232.29 Mbit/s

95th percentile per-packet one-way delay: 95.185 ms

Loss rate: 1.89%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-05 18:53:06

End at: 2017-12-05 18:53:36

Below is generated by plot.py at 2017-12-05 20:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 299.43 Mbit/s

95th percentile per-packet one-way delay: 182.363 ms

Loss rate: 0.05%

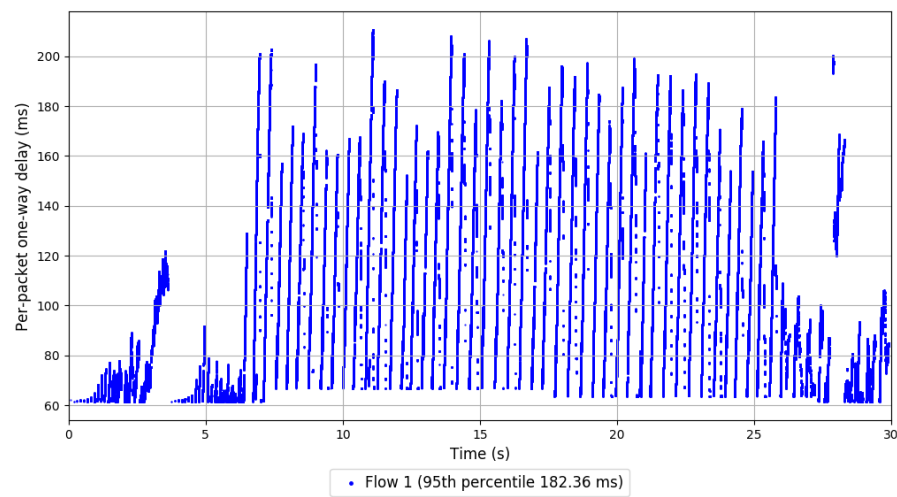
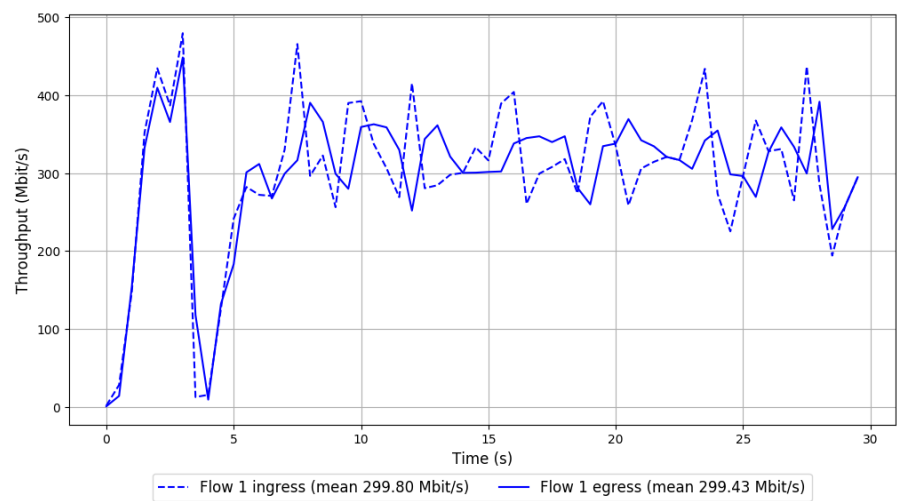
-- Flow 1:

Average throughput: 299.43 Mbit/s

95th percentile per-packet one-way delay: 182.363 ms

Loss rate: 0.05%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-05 19:03:24

End at: 2017-12-05 19:03:54

Below is generated by plot.py at 2017-12-05 20:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 243.18 Mbit/s

95th percentile per-packet one-way delay: 88.866 ms

Loss rate: 0.01%

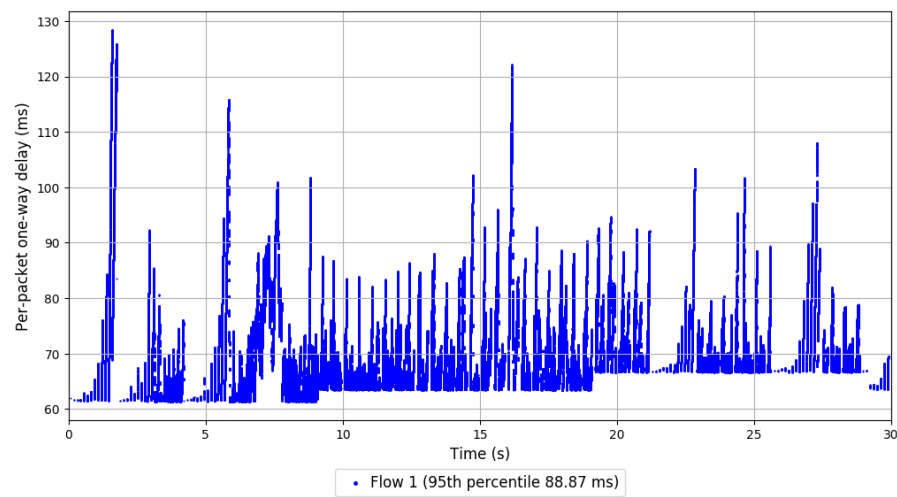
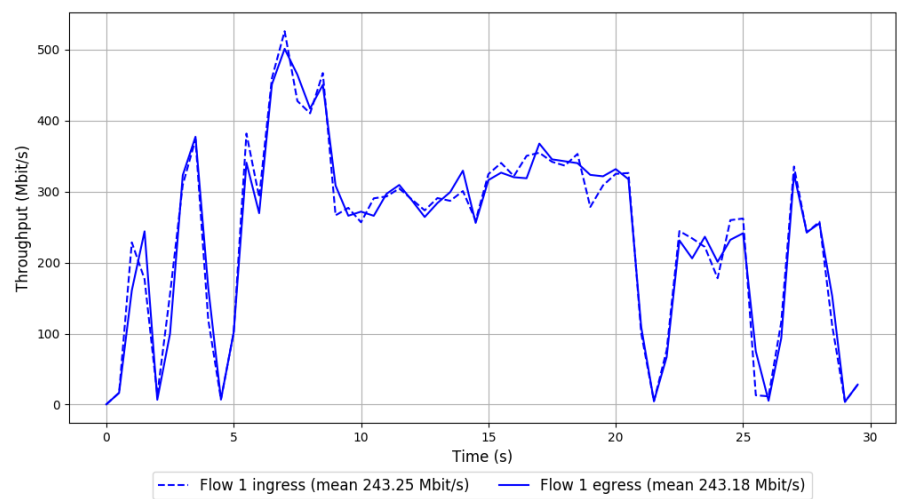
-- Flow 1:

Average throughput: 243.18 Mbit/s

95th percentile per-packet one-way delay: 88.866 ms

Loss rate: 0.01%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-05 19:13:36

End at: 2017-12-05 19:14:06

Below is generated by plot.py at 2017-12-05 20:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.50 Mbit/s

95th percentile per-packet one-way delay: 153.502 ms

Loss rate: 1.55%

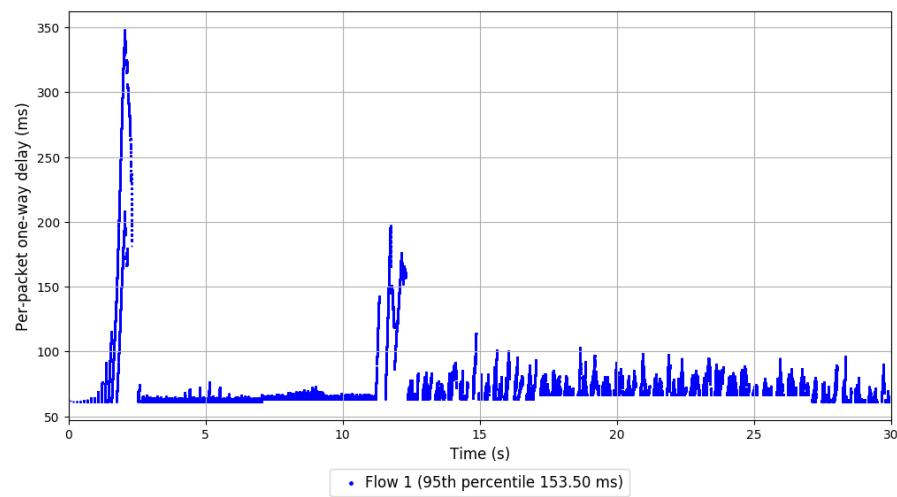
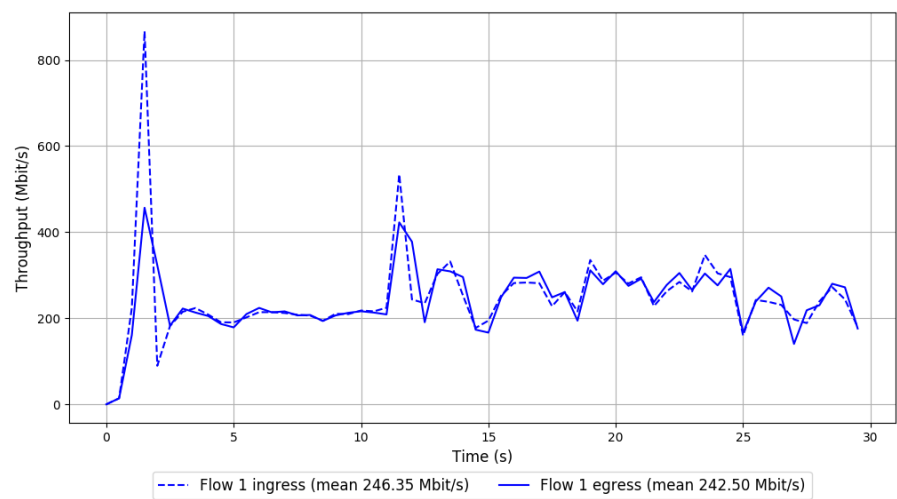
-- Flow 1:

Average throughput: 242.50 Mbit/s

95th percentile per-packet one-way delay: 153.502 ms

Loss rate: 1.55%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-05 19:23:44

End at: 2017-12-05 19:24:14

Below is generated by plot.py at 2017-12-05 20:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.46 Mbit/s

95th percentile per-packet one-way delay: 94.722 ms

Loss rate: 1.74%

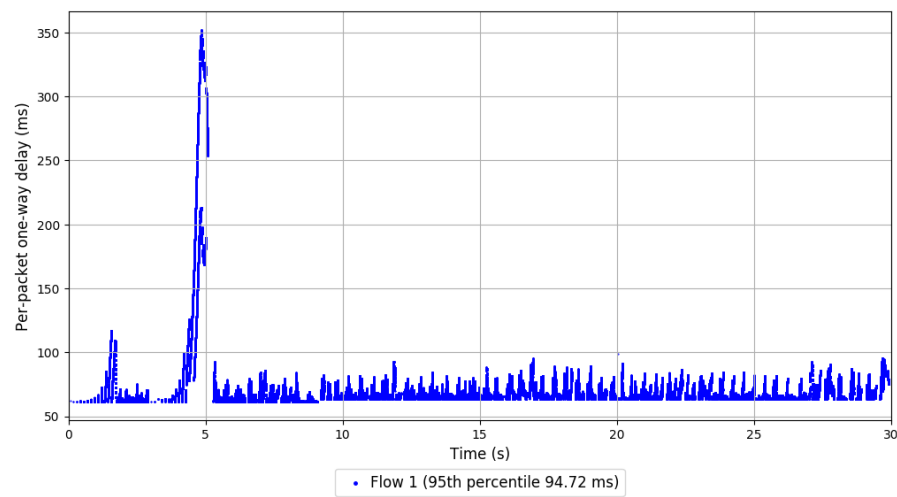
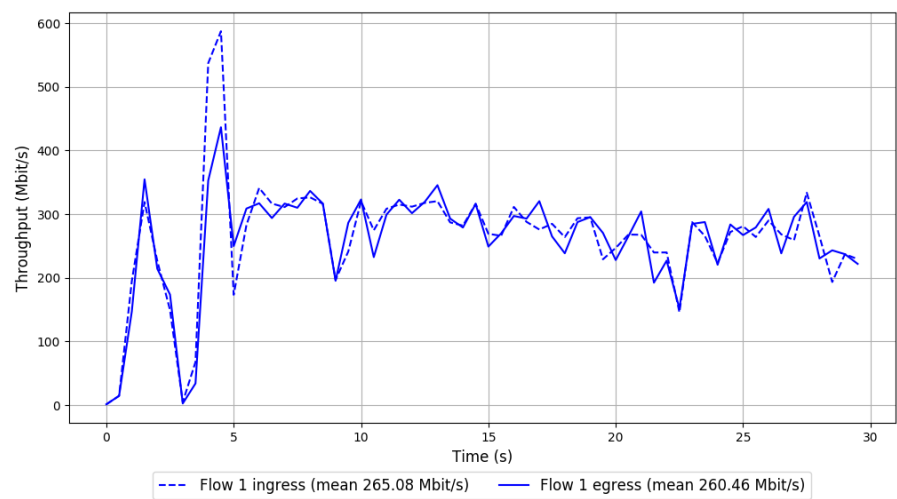
-- Flow 1:

Average throughput: 260.46 Mbit/s

95th percentile per-packet one-way delay: 94.722 ms

Loss rate: 1.74%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-05 19:34:23

End at: 2017-12-05 19:34:53

Below is generated by plot.py at 2017-12-05 20:58:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 304.21 Mbit/s

95th percentile per-packet one-way delay: 156.270 ms

Loss rate: 0.25%

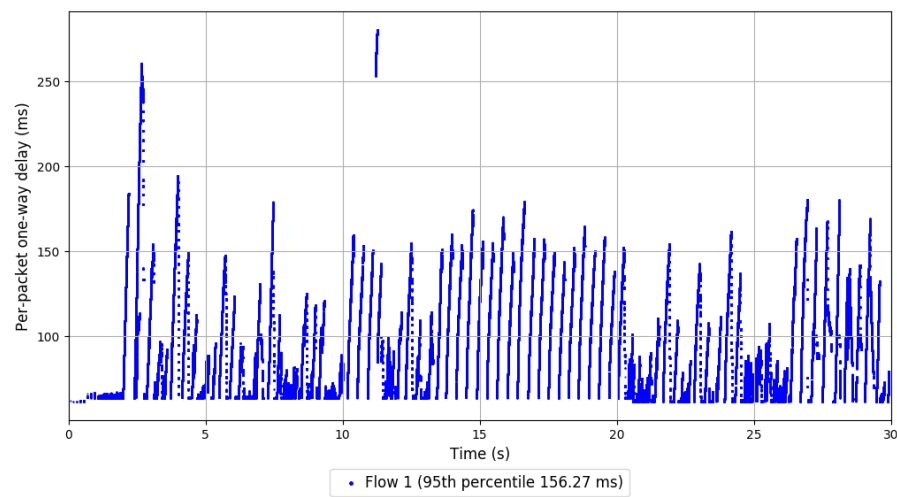
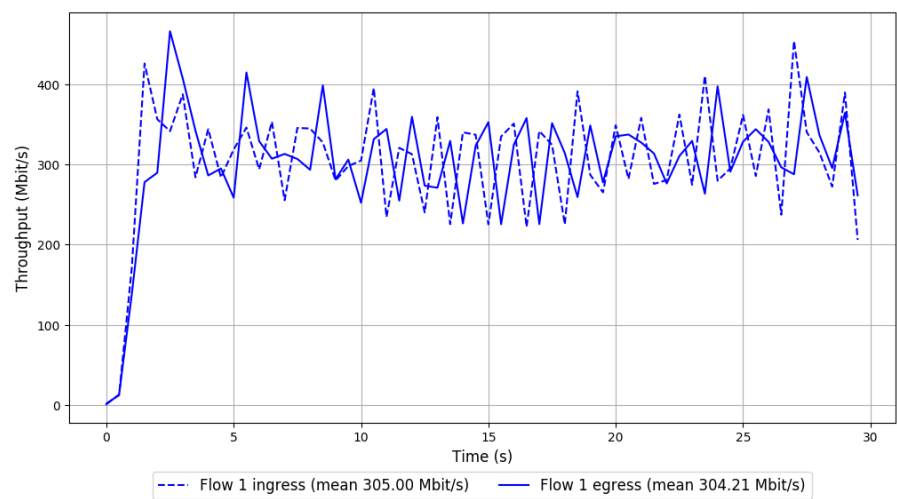
-- Flow 1:

Average throughput: 304.21 Mbit/s

95th percentile per-packet one-way delay: 156.270 ms

Loss rate: 0.25%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-05 19:44:54

End at: 2017-12-05 19:45:24

Below is generated by plot.py at 2017-12-05 20:58:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 206.11 Mbit/s

95th percentile per-packet one-way delay: 85.383 ms

Loss rate: 0.16%

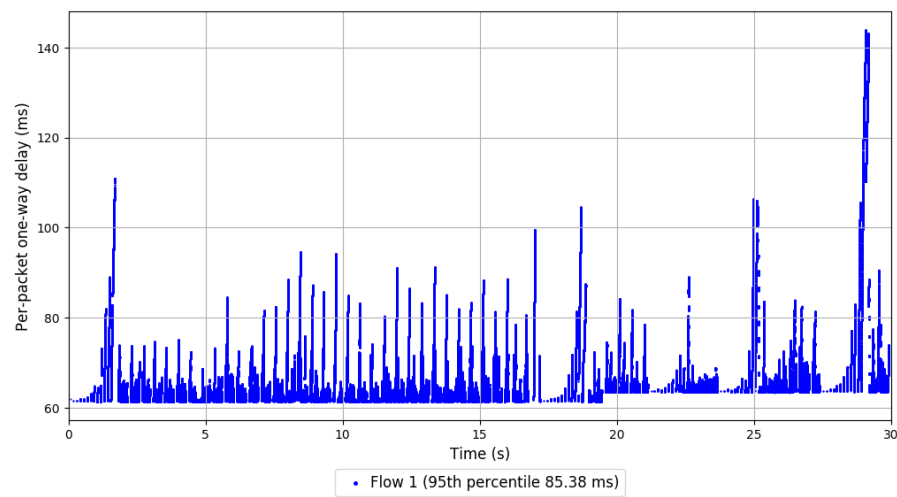
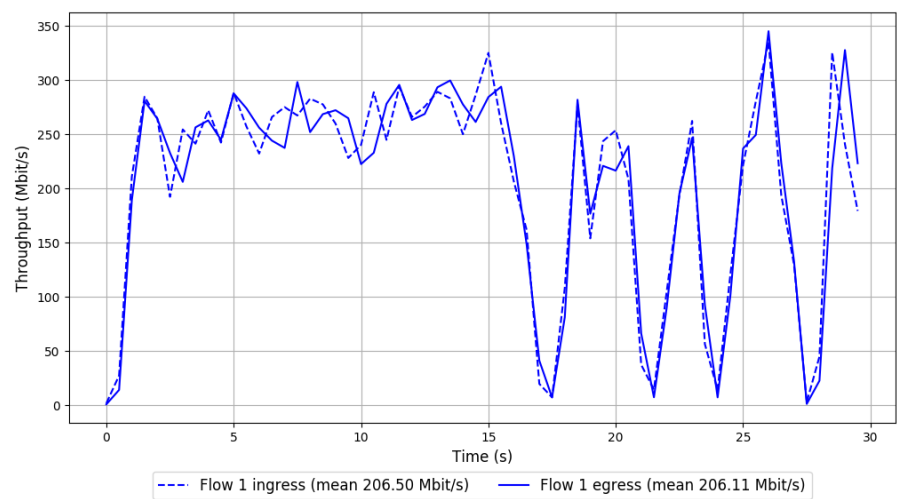
-- Flow 1:

Average throughput: 206.11 Mbit/s

95th percentile per-packet one-way delay: 85.383 ms

Loss rate: 0.16%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

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

End at: 2017-12-05 18:05:48

Below is generated by plot.py at 2017-12-05 20:58:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.86 Mbit/s

95th percentile per-packet one-way delay: 66.989 ms

Loss rate: 0.00%

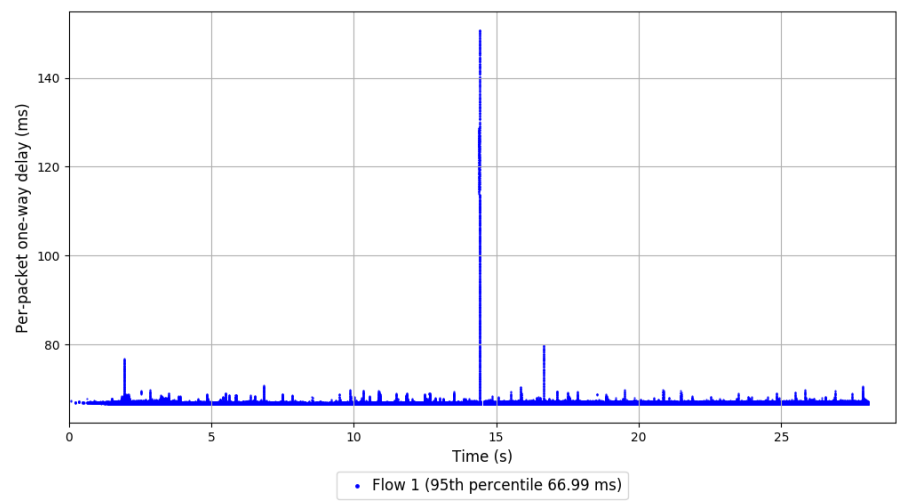
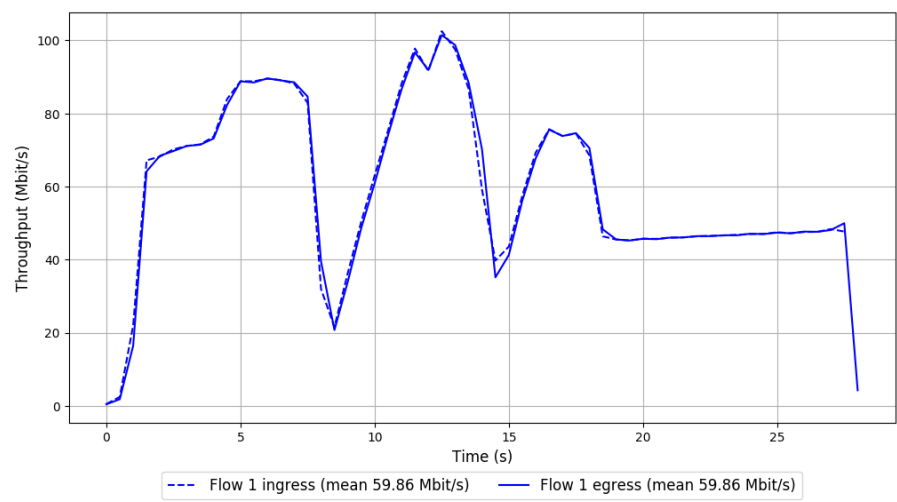
-- Flow 1:

Average throughput: 59.86 Mbit/s

95th percentile per-packet one-way delay: 66.989 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-05 18:15:53

End at: 2017-12-05 18:16:23

Below is generated by plot.py at 2017-12-05 20:58:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.27 Mbit/s

95th percentile per-packet one-way delay: 66.924 ms

Loss rate: 0.02%

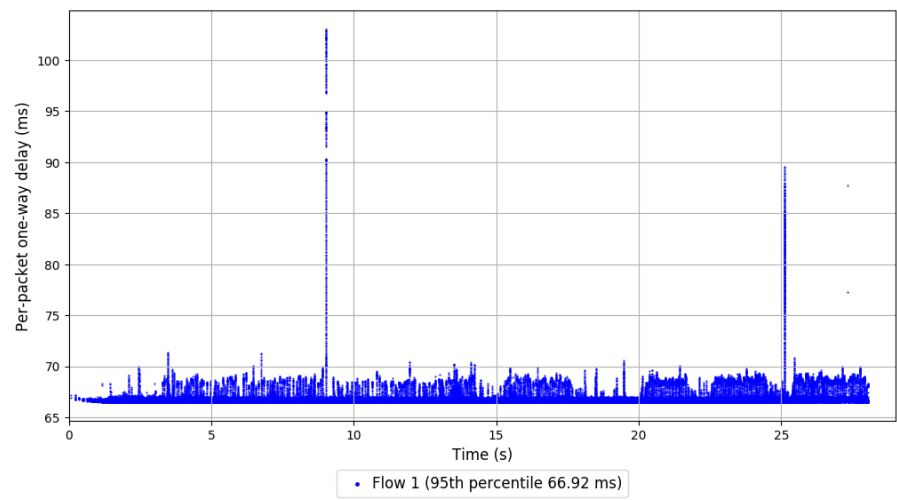
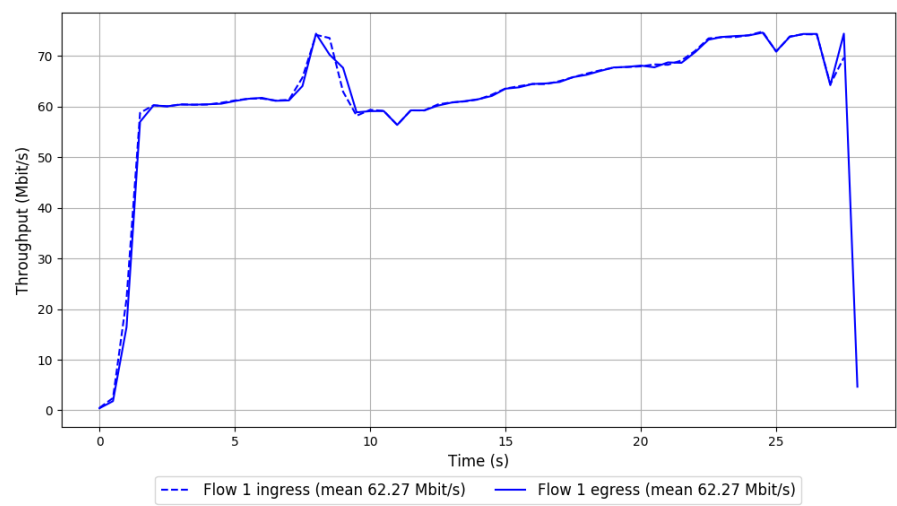
-- Flow 1:

Average throughput: 62.27 Mbit/s

95th percentile per-packet one-way delay: 66.924 ms

Loss rate: 0.02%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-05 18:26:38

End at: 2017-12-05 18:27:08

Below is generated by plot.py at 2017-12-05 20:58:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 66.822 ms

Loss rate: 0.00%

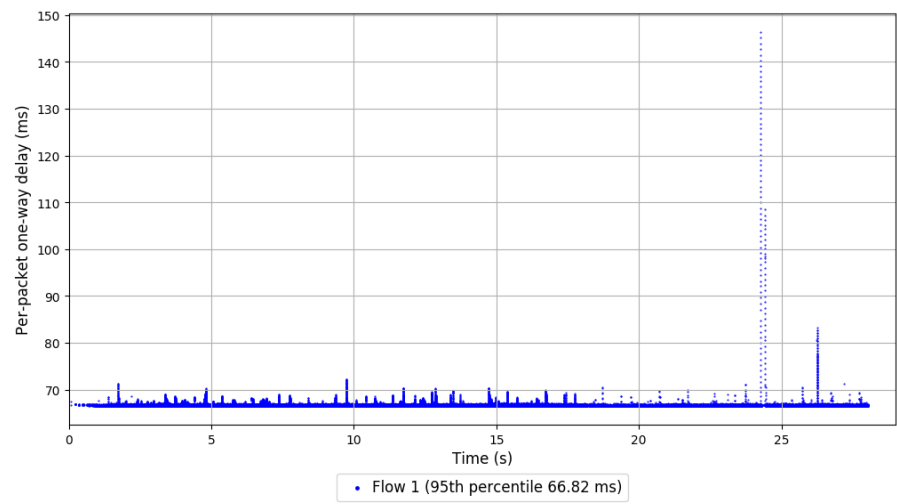
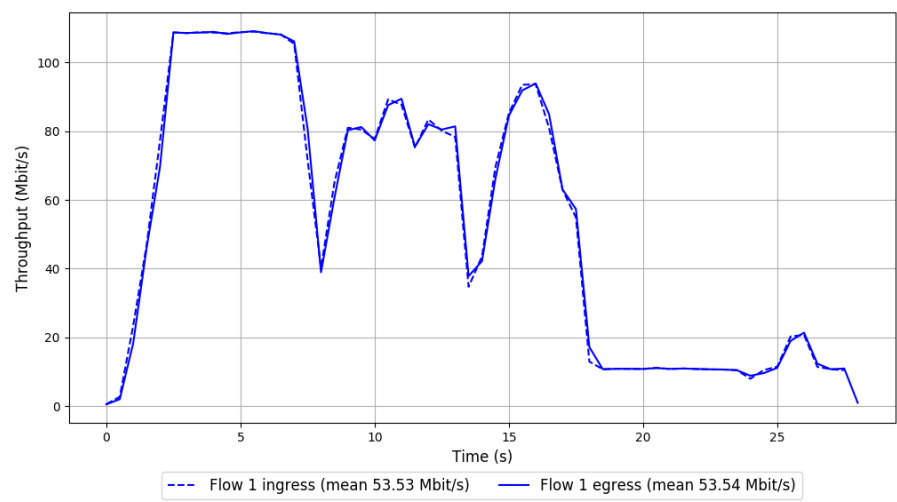
-- Flow 1:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 66.822 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-05 18:37:19

End at: 2017-12-05 18:37:49

Below is generated by plot.py at 2017-12-05 20:58:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.75 Mbit/s

95th percentile per-packet one-way delay: 66.840 ms

Loss rate: 0.19%

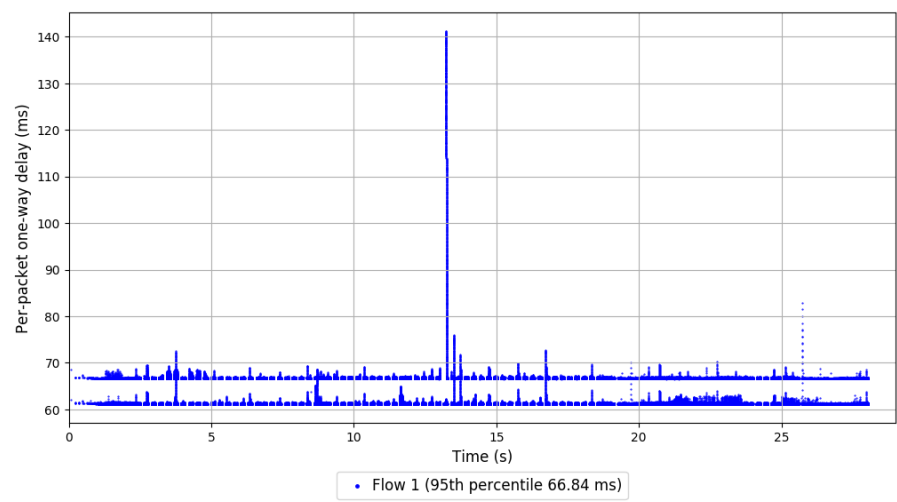
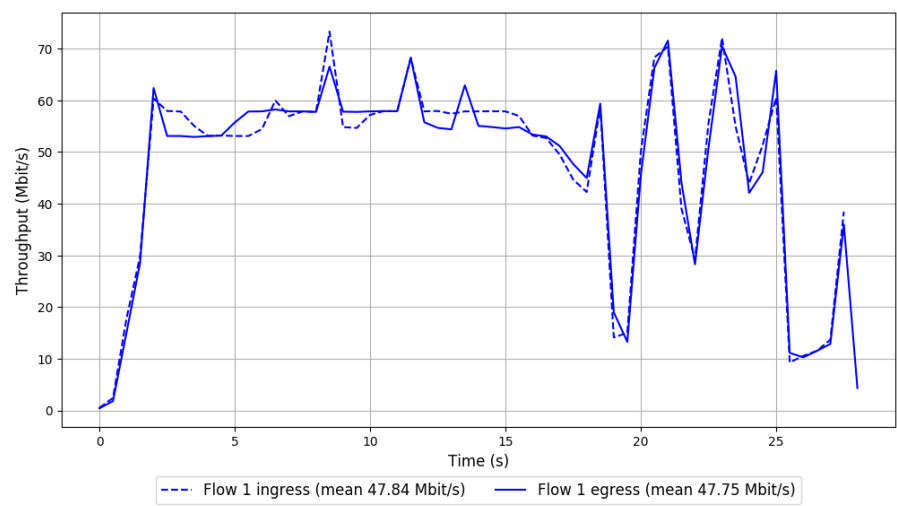
-- Flow 1:

Average throughput: 47.75 Mbit/s

95th percentile per-packet one-way delay: 66.840 ms

Loss rate: 0.19%

Run 4: Report of Copa — Data Link

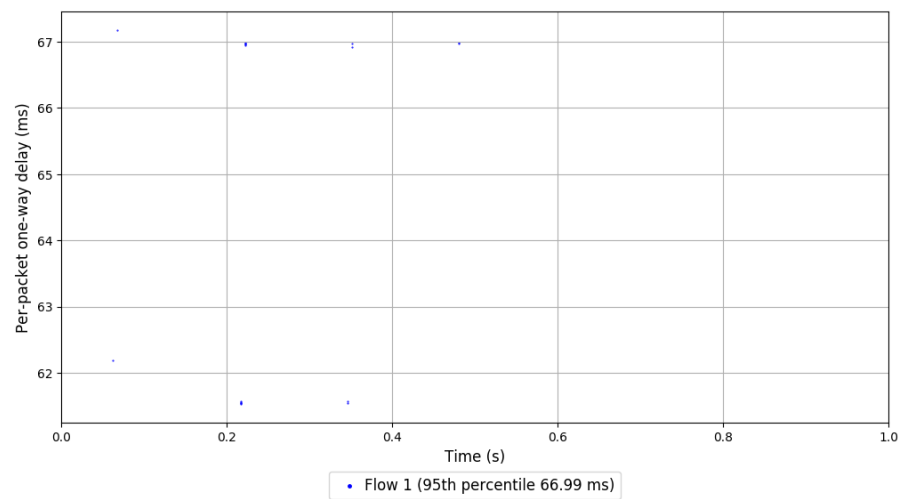
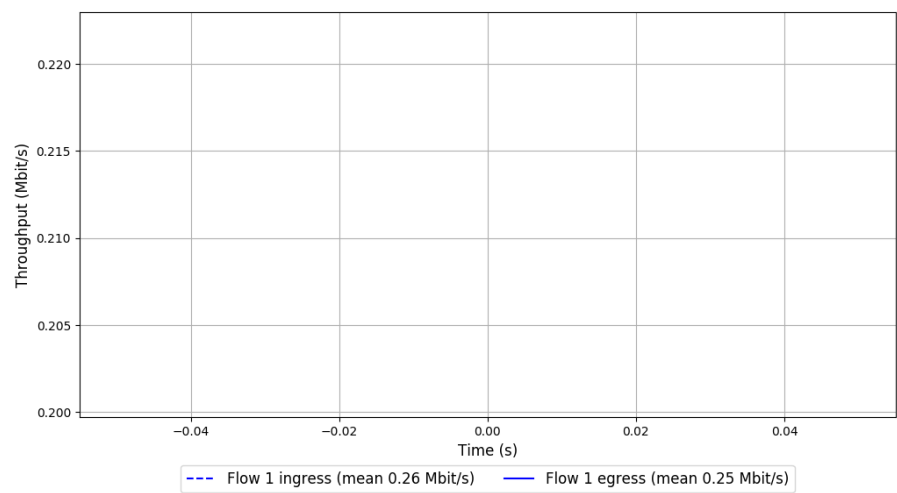


Run 5: Statistics of Copa

Start at: 2017-12-05 18:47:36

End at: 2017-12-05 18:48:06

Run 5: Report of Copa — Data Link

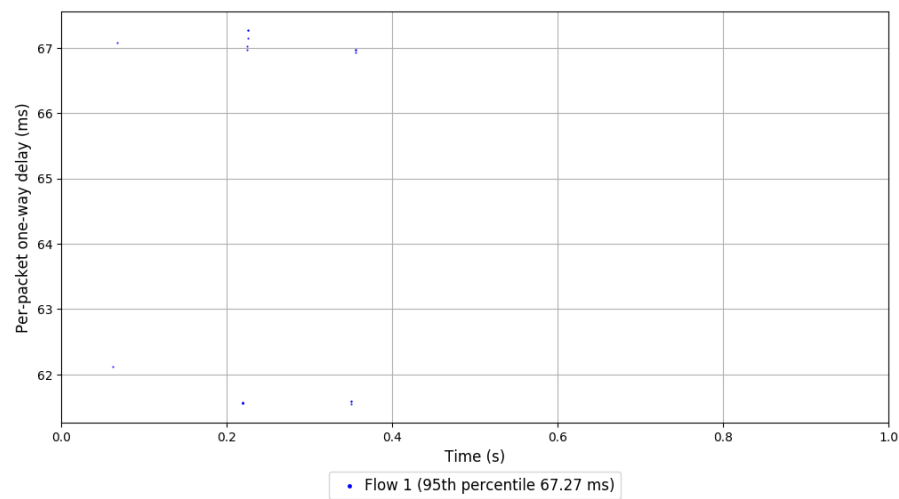
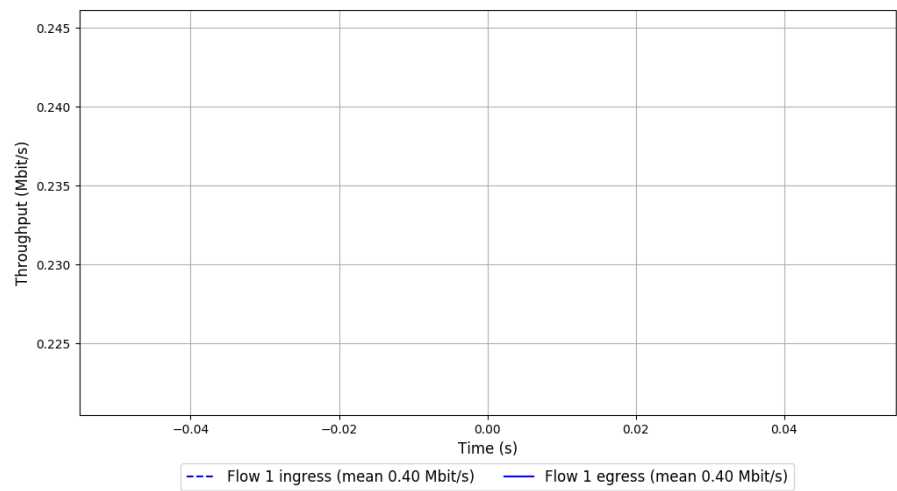


Run 6: Statistics of Copa

Start at: 2017-12-05 18:57:52

End at: 2017-12-05 18:58:22

Run 6: Report of Copa — Data Link

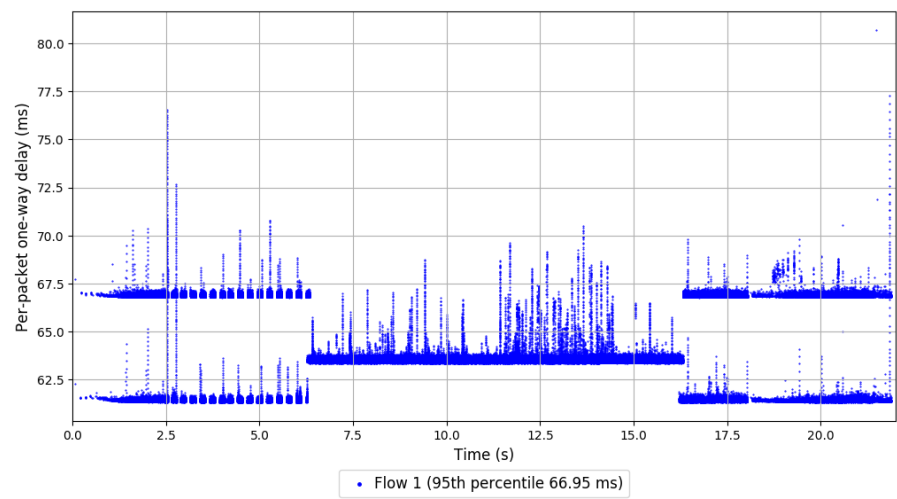
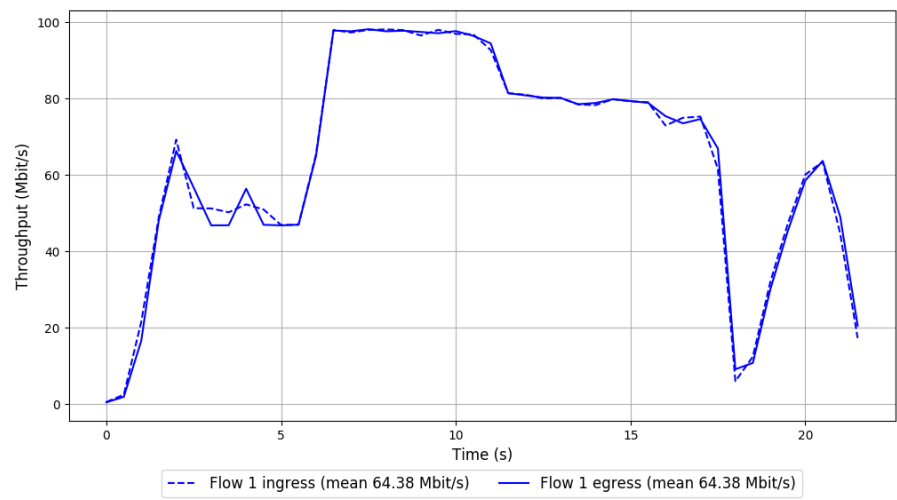


Run 7: Statistics of Copa

Start at: 2017-12-05 19:07:59

End at: 2017-12-05 19:08:29

Run 7: Report of Copa — Data Link

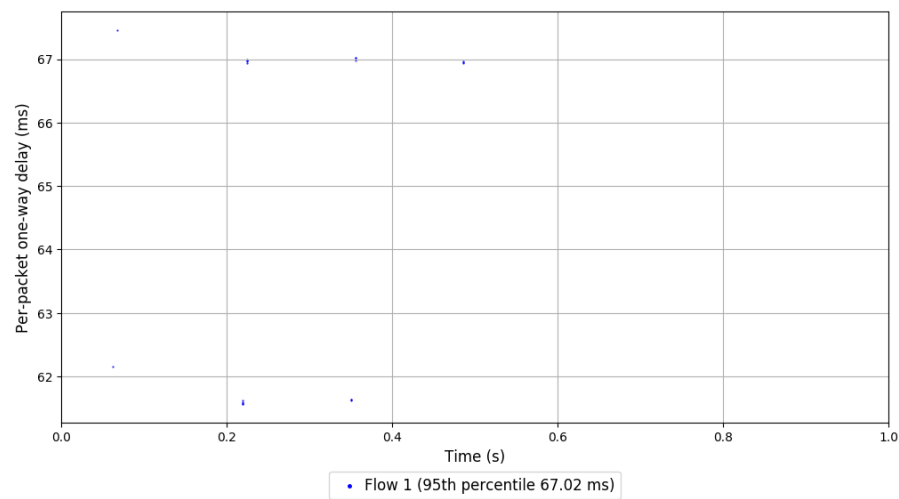
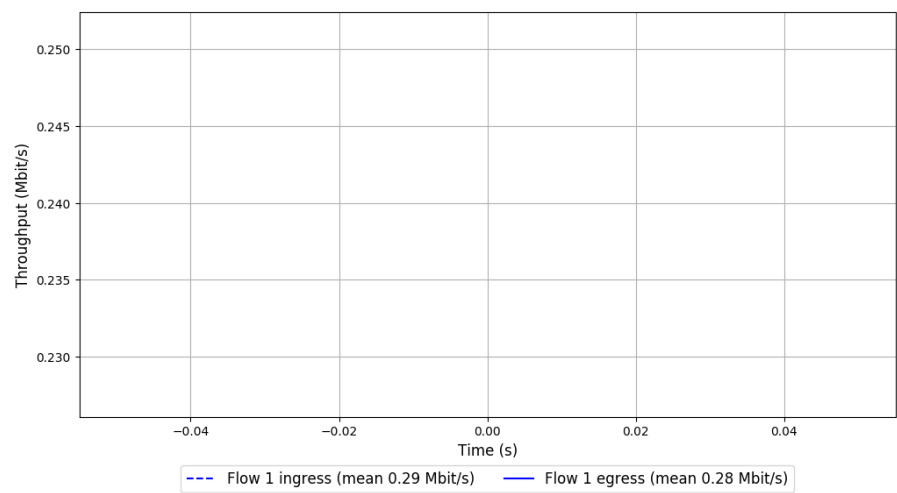


Run 8: Statistics of Copa

Start at: 2017-12-05 19:18:15

End at: 2017-12-05 19:18:45

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-05 19:28:39

End at: 2017-12-05 19:29:09

Below is generated by plot.py at 2017-12-05 20:58:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.91 Mbit/s

95th percentile per-packet one-way delay: 64.386 ms

Loss rate: 0.00%

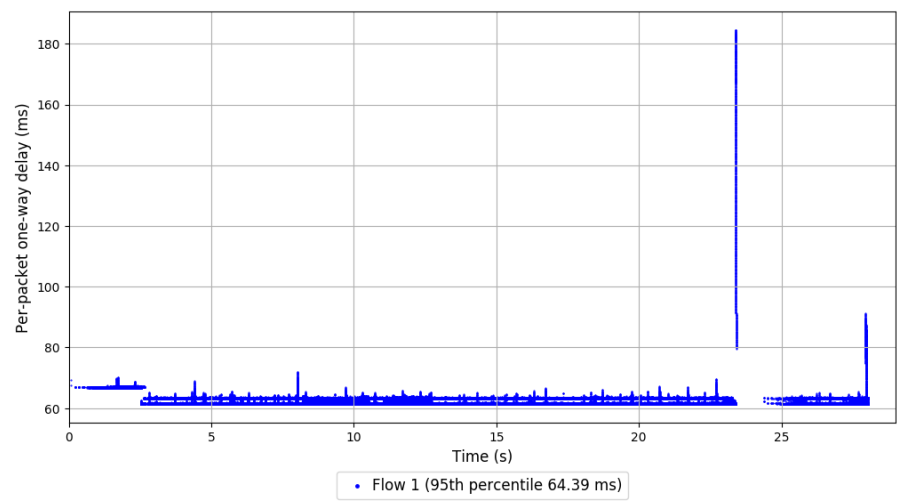
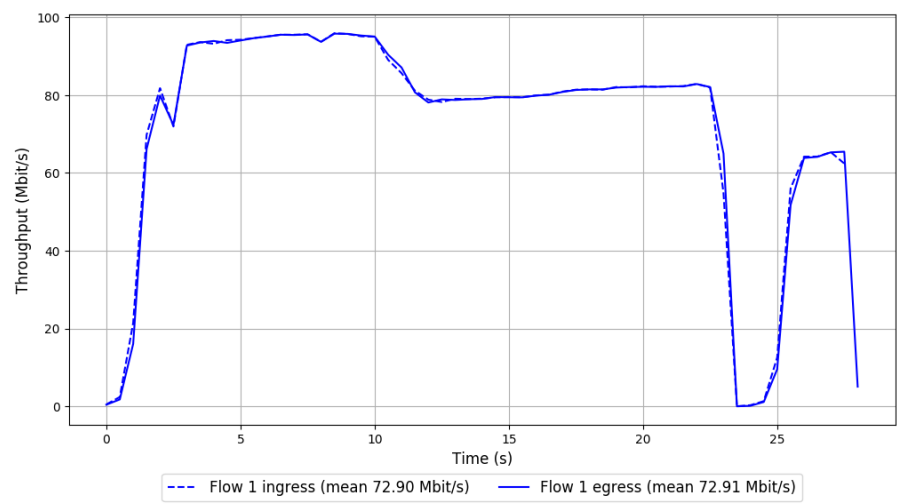
-- Flow 1:

Average throughput: 72.91 Mbit/s

95th percentile per-packet one-way delay: 64.386 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-05 19:39:19

End at: 2017-12-05 19:39:49

Below is generated by plot.py at 2017-12-05 20:58:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.37 Mbit/s

95th percentile per-packet one-way delay: 66.650 ms

Loss rate: 0.01%

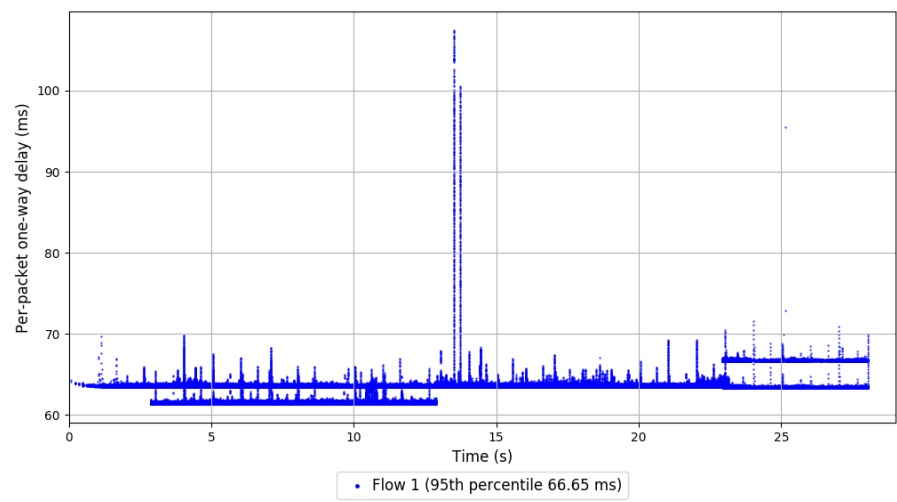
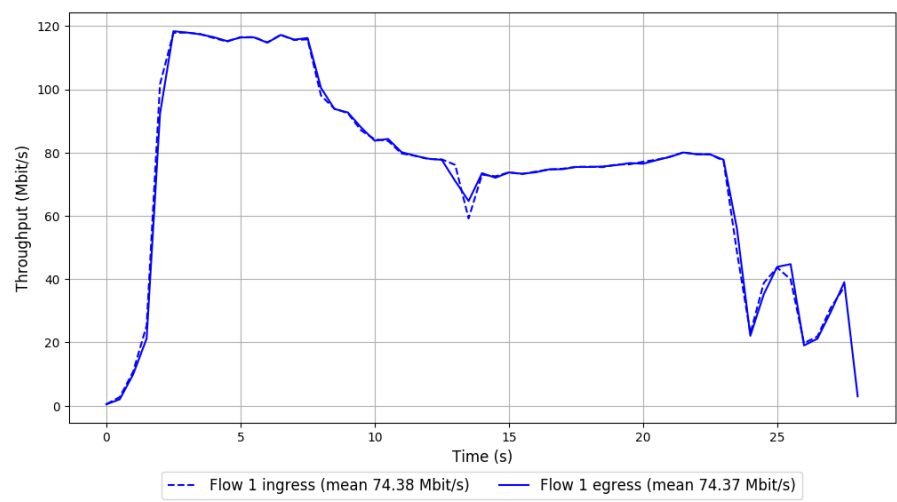
-- Flow 1:

Average throughput: 74.37 Mbit/s

95th percentile per-packet one-way delay: 66.650 ms

Loss rate: 0.01%

Run 10: Report of Copa — Data Link

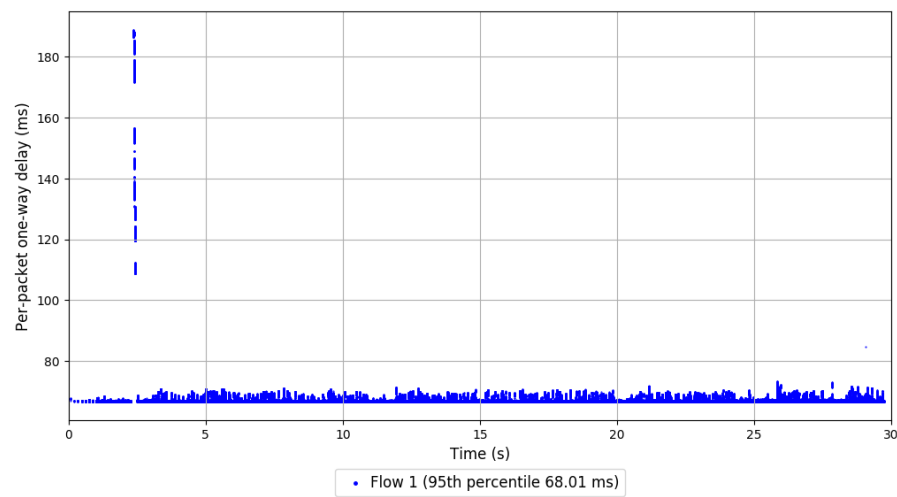
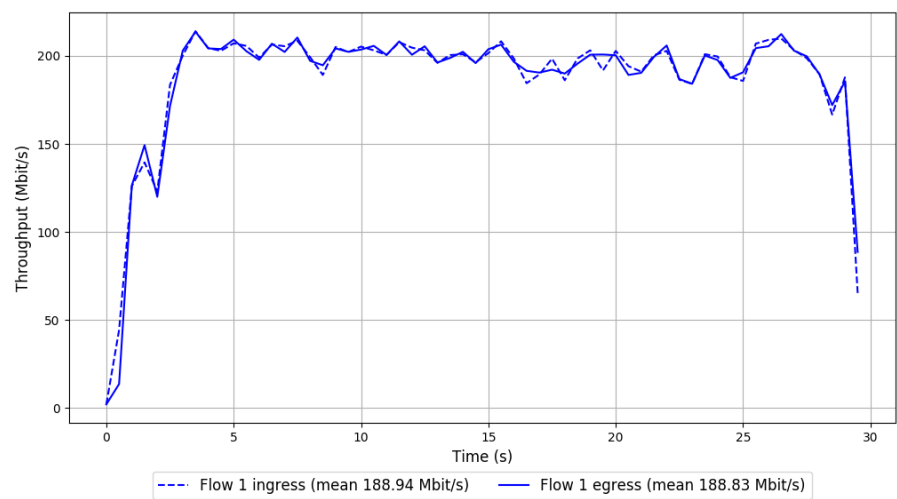


```
Run 1: Statistics of Indigo

Start at: 2017-12-05 18:12:32
End at: 2017-12-05 18:13:02

# Below is generated by plot.py at 2017-12-05 20:59:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.83 Mbit/s
95th percentile per-packet one-way delay: 68.014 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 188.83 Mbit/s
95th percentile per-packet one-way delay: 68.014 ms
Loss rate: 0.06%
```

Run 1: Report of Indigo — Data Link

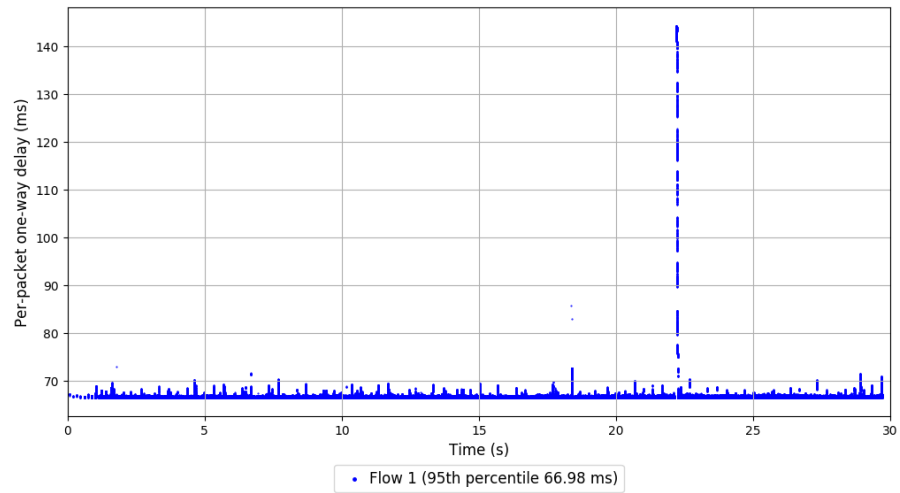
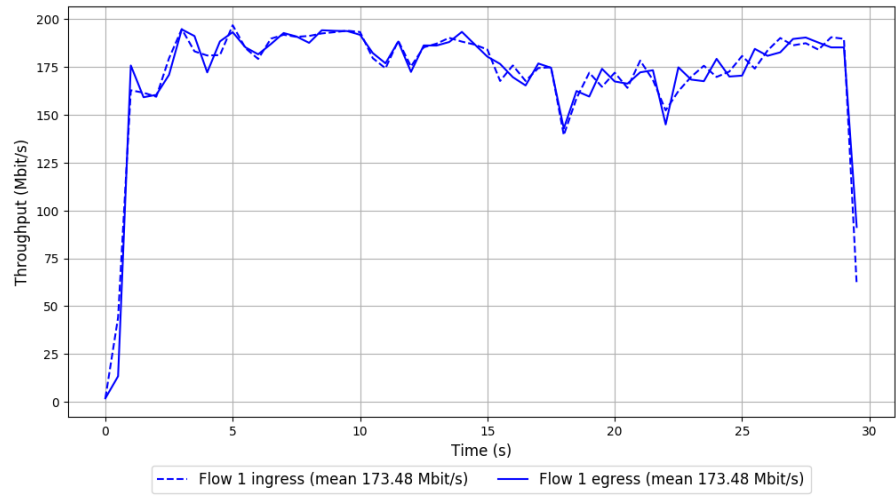


```
Run 2: Statistics of Indigo

Start at: 2017-12-05 18:23:12
End at: 2017-12-05 18:23:42

# Below is generated by plot.py at 2017-12-05 20:59:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 173.48 Mbit/s
95th percentile per-packet one-way delay: 66.982 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 173.48 Mbit/s
95th percentile per-packet one-way delay: 66.982 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-05 18:33:55

End at: 2017-12-05 18:34:25

Below is generated by plot.py at 2017-12-05 20:59:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.35 Mbit/s

95th percentile per-packet one-way delay: 66.982 ms

Loss rate: 0.01%

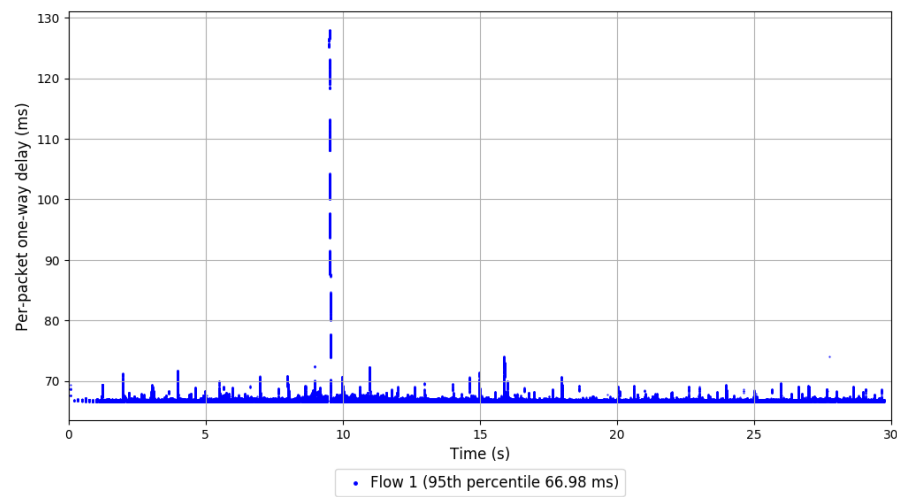
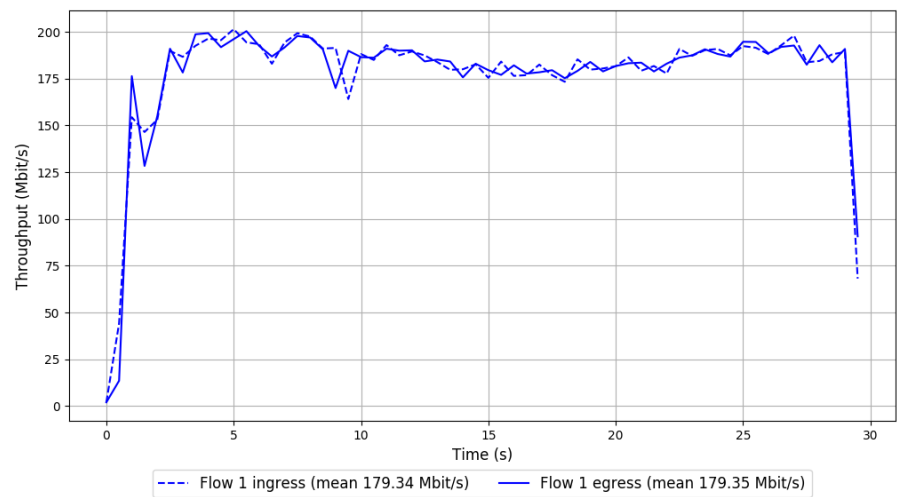
-- Flow 1:

Average throughput: 179.35 Mbit/s

95th percentile per-packet one-way delay: 66.982 ms

Loss rate: 0.01%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-05 18:44:31

End at: 2017-12-05 18:45:01

Below is generated by plot.py at 2017-12-05 21:00:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.70 Mbit/s

95th percentile per-packet one-way delay: 66.870 ms

Loss rate: 0.00%

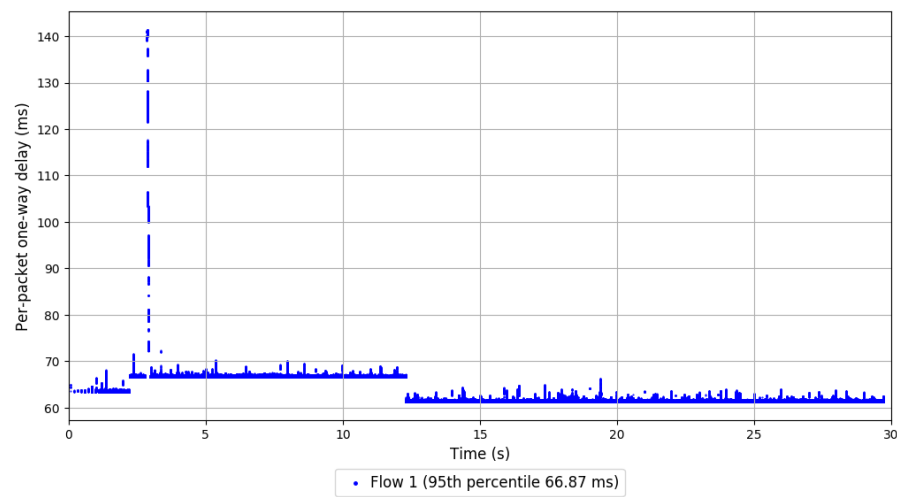
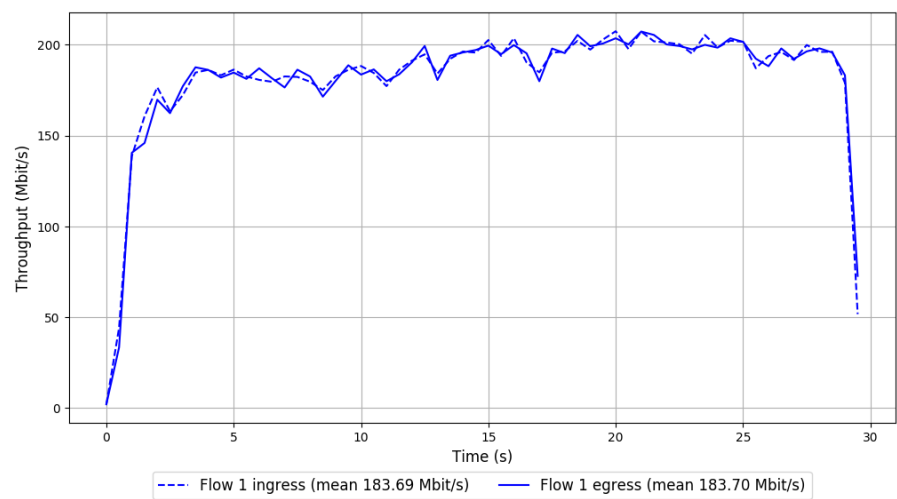
-- Flow 1:

Average throughput: 183.70 Mbit/s

95th percentile per-packet one-way delay: 66.870 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-05 18:54:47

End at: 2017-12-05 18:55:17

Below is generated by plot.py at 2017-12-05 21:00:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.73 Mbit/s

95th percentile per-packet one-way delay: 66.734 ms

Loss rate: 0.10%

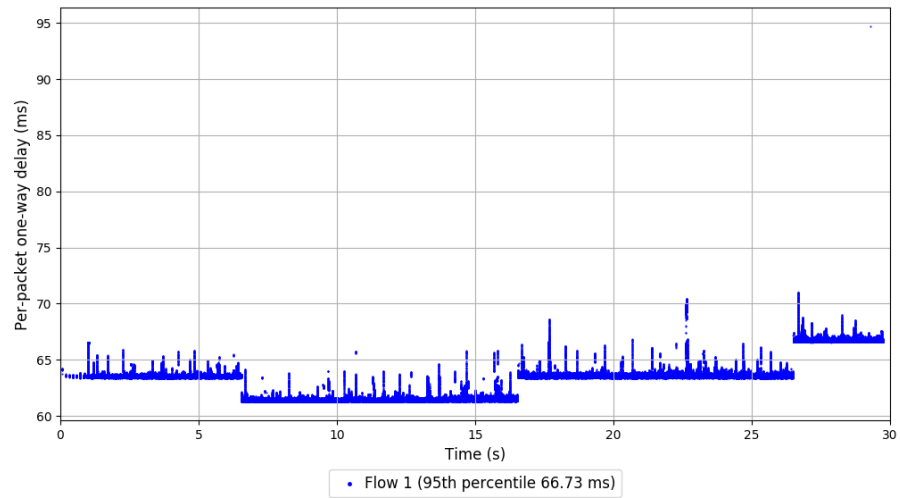
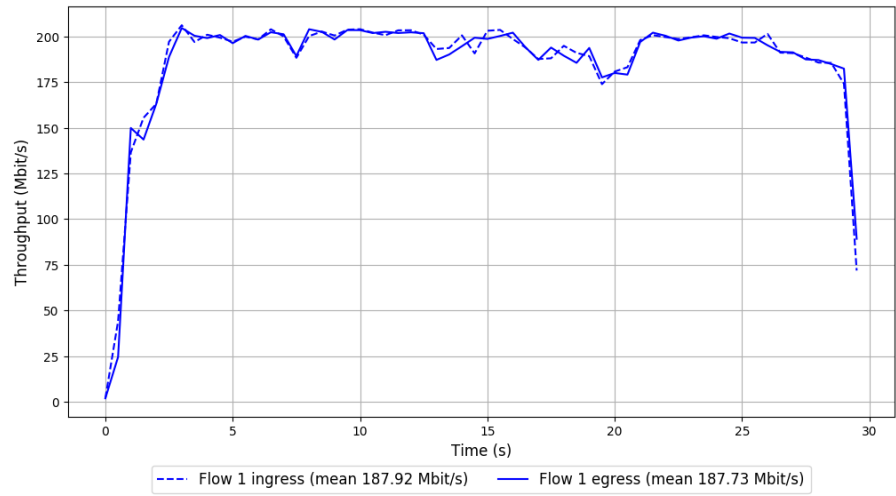
-- Flow 1:

Average throughput: 187.73 Mbit/s

95th percentile per-packet one-way delay: 66.734 ms

Loss rate: 0.10%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-05 19:04:58

End at: 2017-12-05 19:05:28

Below is generated by plot.py at 2017-12-05 21:01:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.42 Mbit/s

95th percentile per-packet one-way delay: 66.825 ms

Loss rate: 0.00%

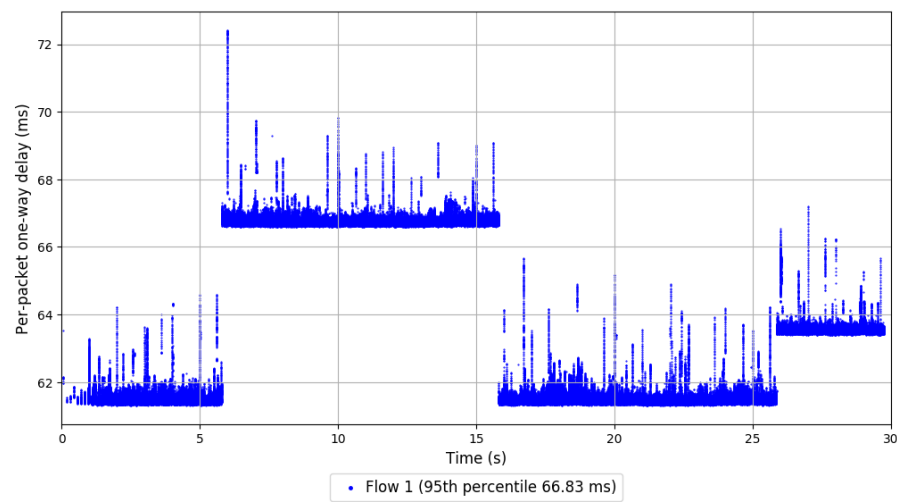
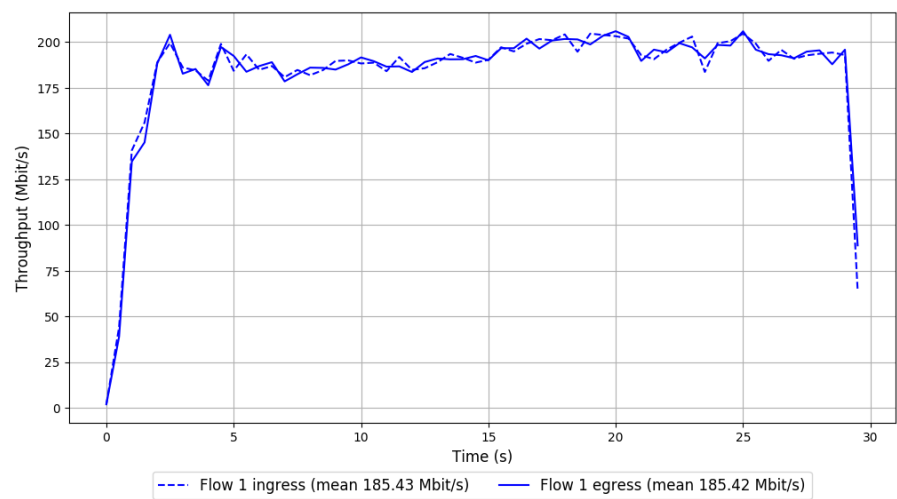
-- Flow 1:

Average throughput: 185.42 Mbit/s

95th percentile per-packet one-way delay: 66.825 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-05 19:15:12

End at: 2017-12-05 19:15:43

Below is generated by plot.py at 2017-12-05 21:01:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.45 Mbit/s

95th percentile per-packet one-way delay: 63.790 ms

Loss rate: 0.00%

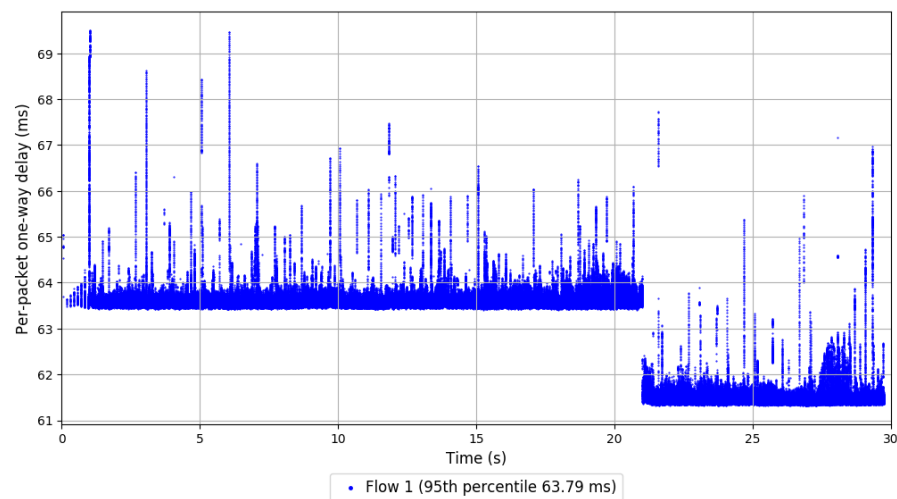
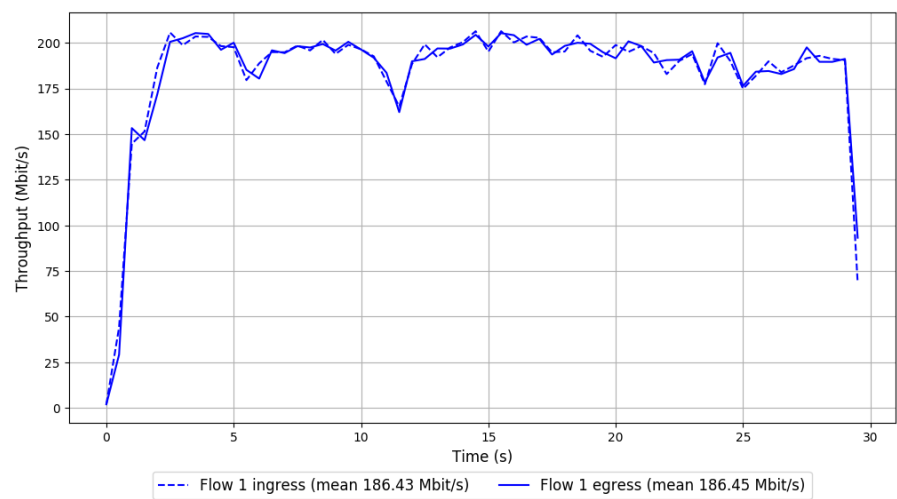
-- Flow 1:

Average throughput: 186.45 Mbit/s

95th percentile per-packet one-way delay: 63.790 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-05 19:25:21

End at: 2017-12-05 19:25:51

Below is generated by plot.py at 2017-12-05 21:01:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.59 Mbit/s

95th percentile per-packet one-way delay: 63.624 ms

Loss rate: 0.02%

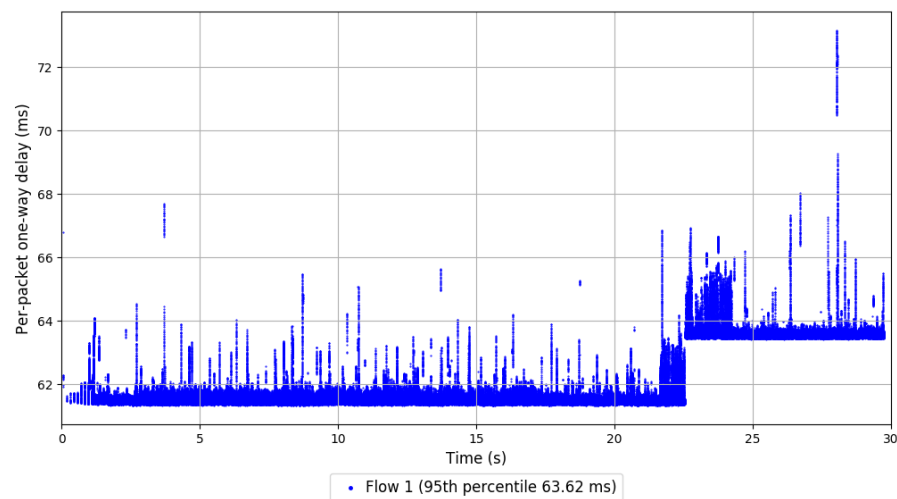
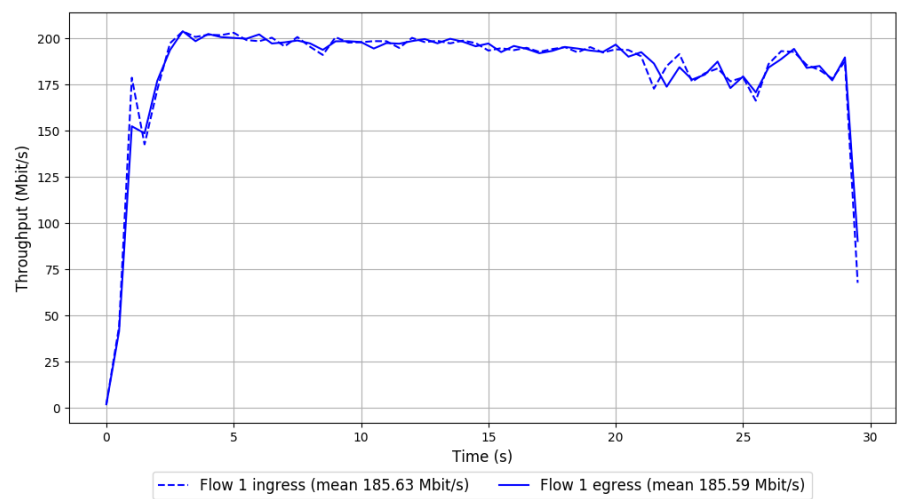
-- Flow 1:

Average throughput: 185.59 Mbit/s

95th percentile per-packet one-way delay: 63.624 ms

Loss rate: 0.02%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-05 19:36:04

End at: 2017-12-05 19:36:34

Below is generated by plot.py at 2017-12-05 21:02:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.45 Mbit/s

95th percentile per-packet one-way delay: 63.652 ms

Loss rate: 0.00%

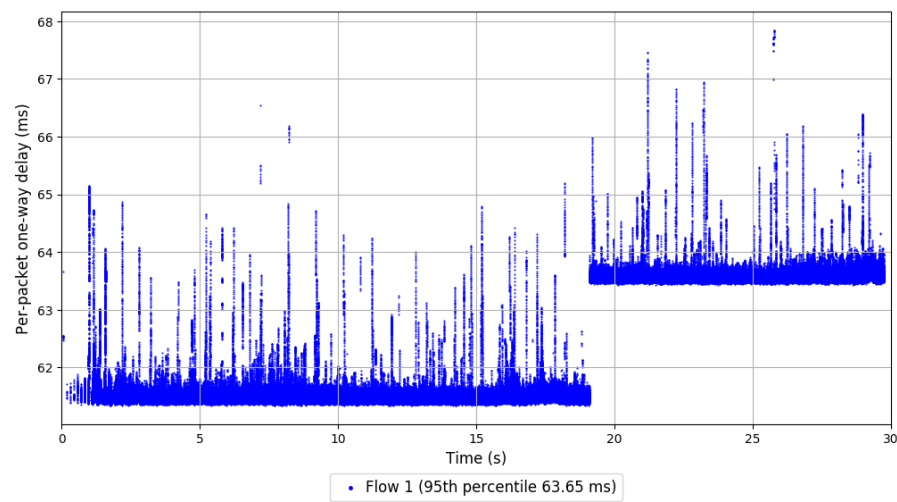
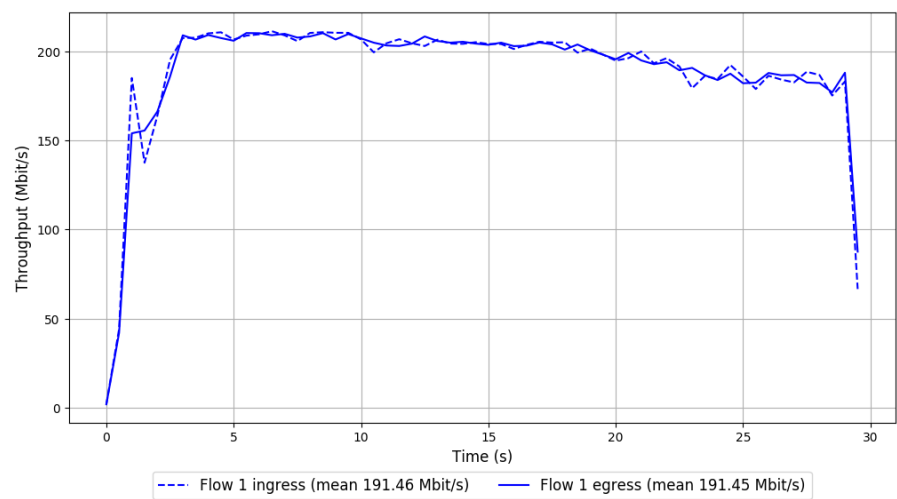
-- Flow 1:

Average throughput: 191.45 Mbit/s

95th percentile per-packet one-way delay: 63.652 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-05 19:46:27

End at: 2017-12-05 19:46:57

Below is generated by plot.py at 2017-12-05 21:02:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.22 Mbit/s

95th percentile per-packet one-way delay: 67.017 ms

Loss rate: 0.02%

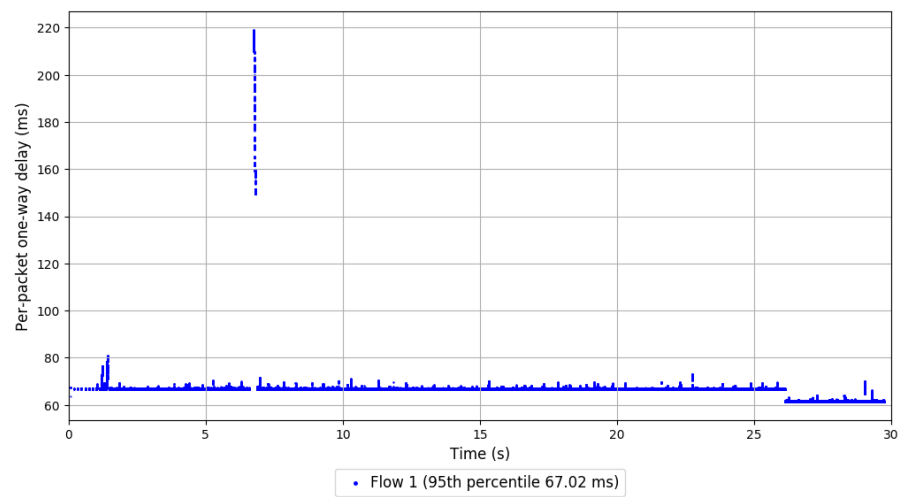
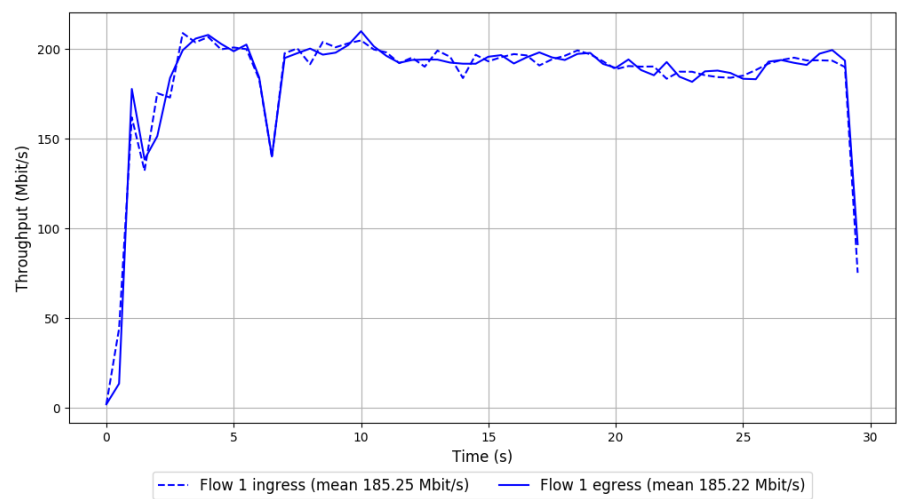
-- Flow 1:

Average throughput: 185.22 Mbit/s

95th percentile per-packet one-way delay: 67.017 ms

Loss rate: 0.02%

Run 10: Report of Indigo — Data Link

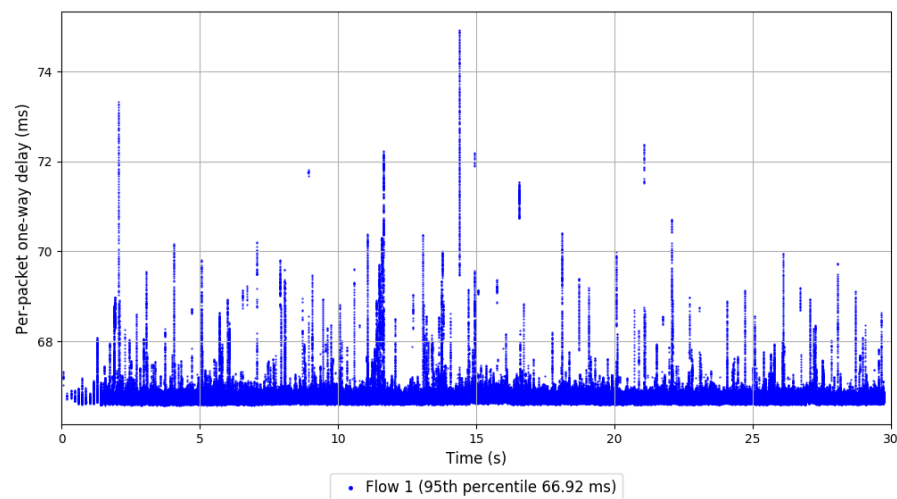
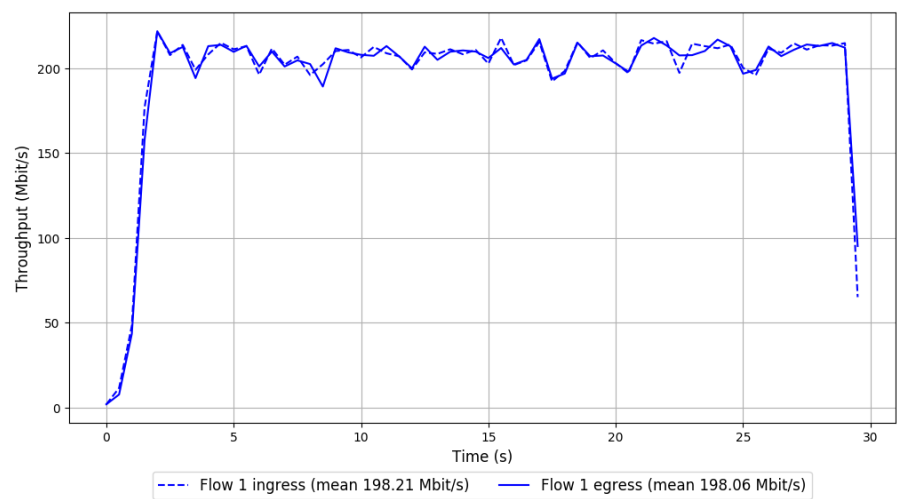


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 18:10:06
End at: 2017-12-05 18:10:36

# Below is generated by plot.py at 2017-12-05 21:03:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 198.06 Mbit/s
95th percentile per-packet one-way delay: 66.922 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 198.06 Mbit/s
95th percentile per-packet one-way delay: 66.922 ms
Loss rate: 0.08%
```

Run 1: Report of Indigo-calib — Data Link

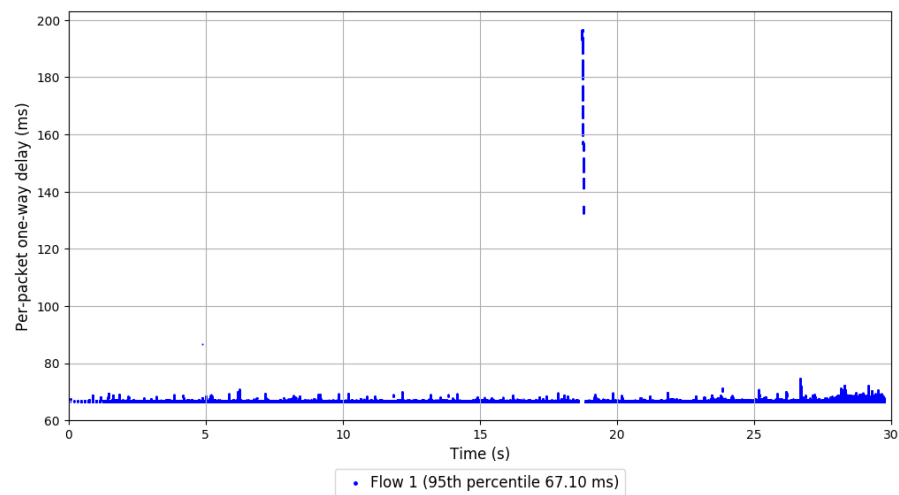
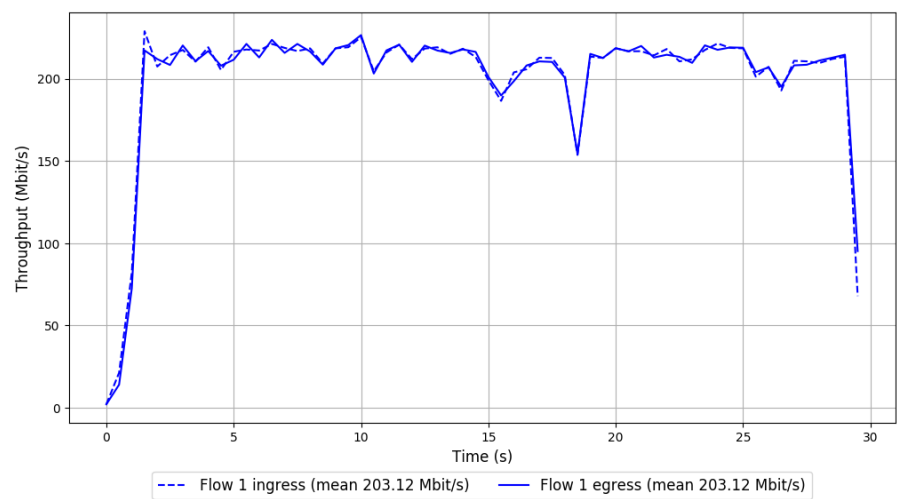


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 18:20:45
End at: 2017-12-05 18:21:15

# Below is generated by plot.py at 2017-12-05 21:03:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.12 Mbit/s
95th percentile per-packet one-way delay: 67.100 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.12 Mbit/s
95th percentile per-packet one-way delay: 67.100 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

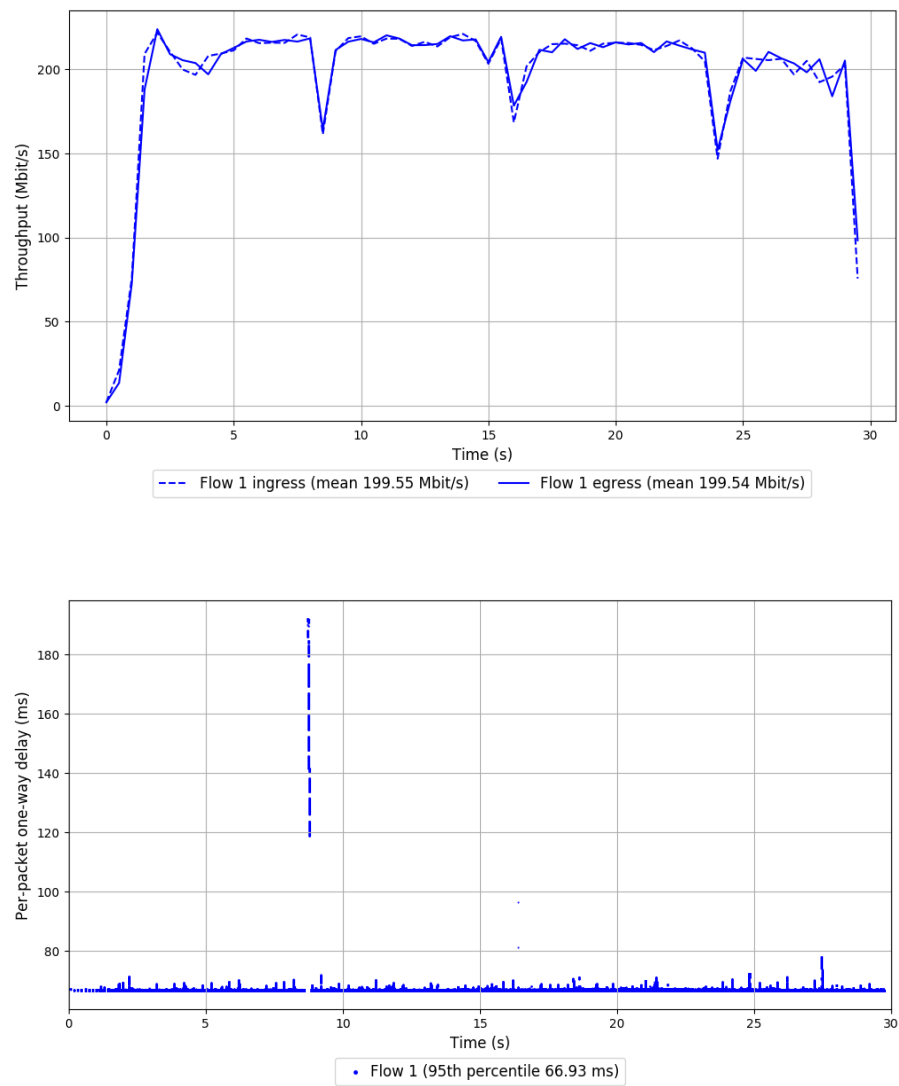


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 18:31:25
End at: 2017-12-05 18:31:55

# Below is generated by plot.py at 2017-12-05 21:04:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 199.54 Mbit/s
95th percentile per-packet one-way delay: 66.929 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 199.54 Mbit/s
95th percentile per-packet one-way delay: 66.929 ms
Loss rate: 0.01%
```

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-05 18:42:04

End at: 2017-12-05 18:42:34

Below is generated by plot.py at 2017-12-05 21:04:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.19 Mbit/s

95th percentile per-packet one-way delay: 63.701 ms

Loss rate: 0.14%

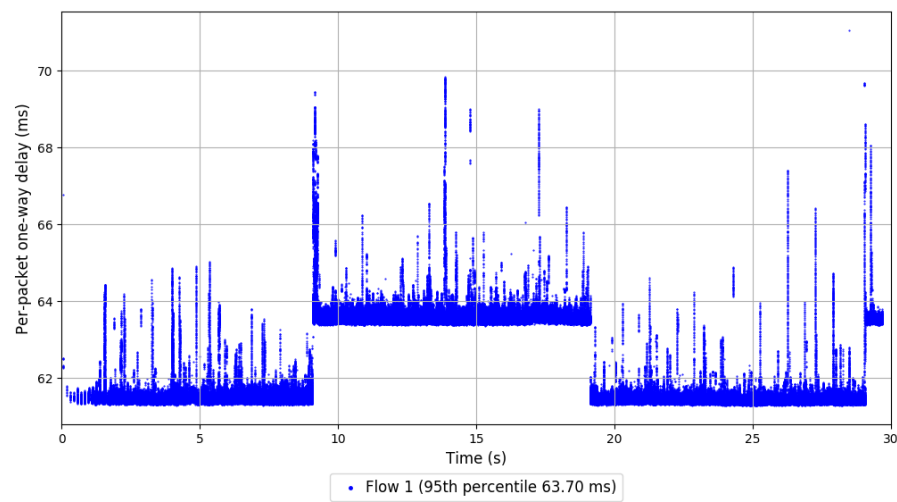
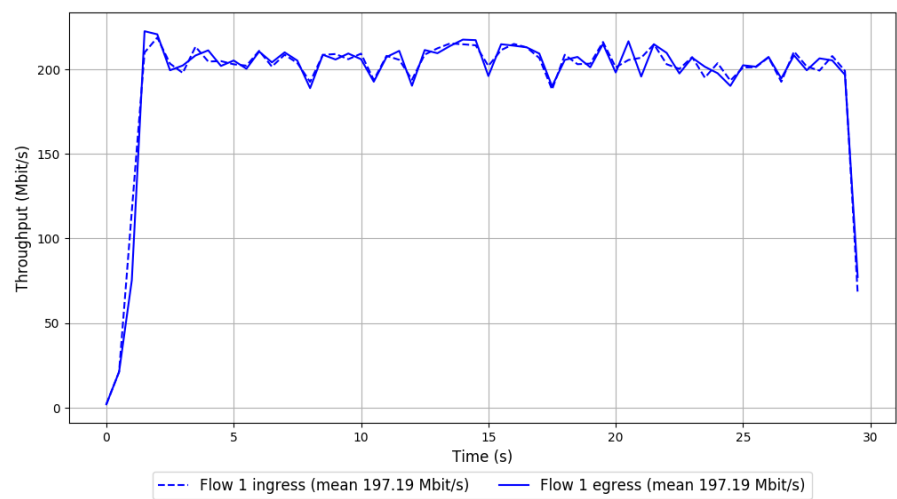
-- Flow 1:

Average throughput: 197.19 Mbit/s

95th percentile per-packet one-way delay: 63.701 ms

Loss rate: 0.14%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-05 18:52:15

End at: 2017-12-05 18:52:45

Below is generated by plot.py at 2017-12-05 21:05:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.92 Mbit/s

95th percentile per-packet one-way delay: 63.612 ms

Loss rate: 0.12%

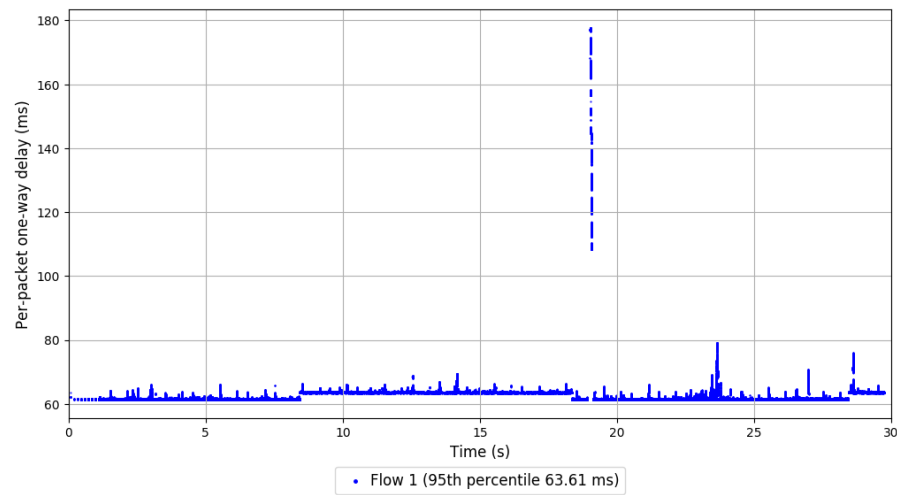
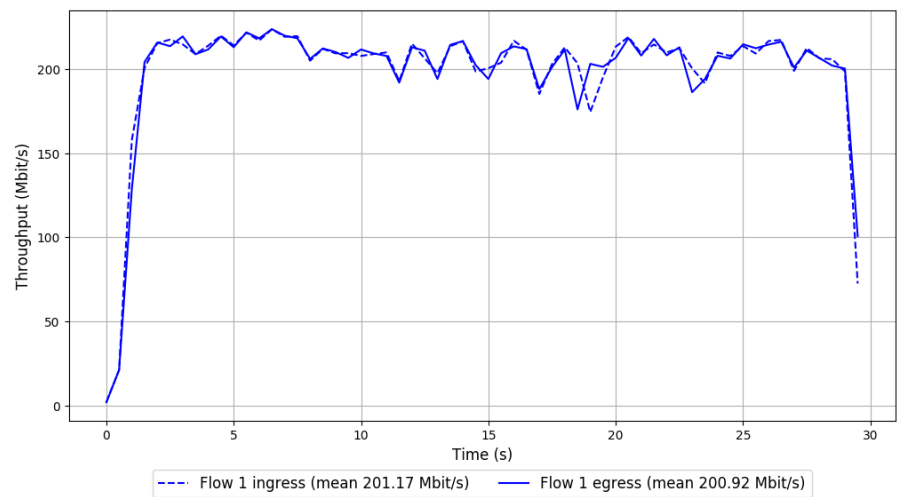
-- Flow 1:

Average throughput: 200.92 Mbit/s

95th percentile per-packet one-way delay: 63.612 ms

Loss rate: 0.12%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-05 19:02:33

End at: 2017-12-05 19:03:03

Below is generated by plot.py at 2017-12-05 21:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.48 Mbit/s

95th percentile per-packet one-way delay: 63.616 ms

Loss rate: 0.00%

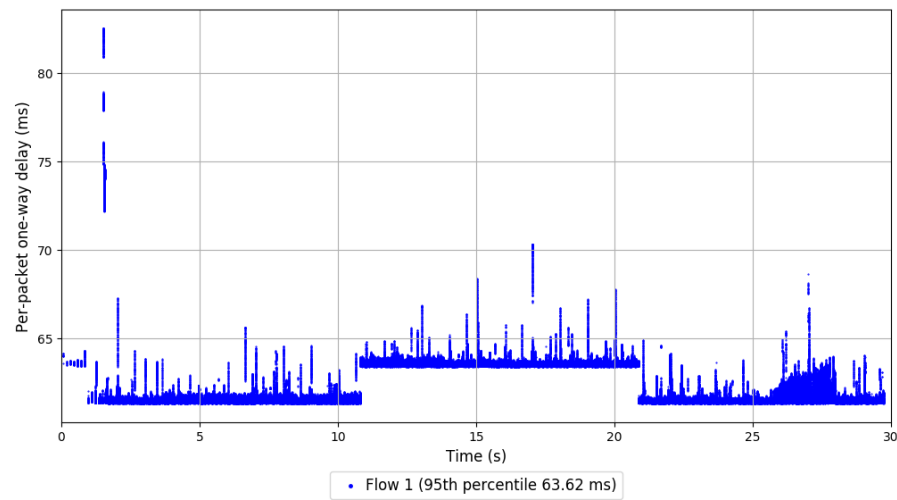
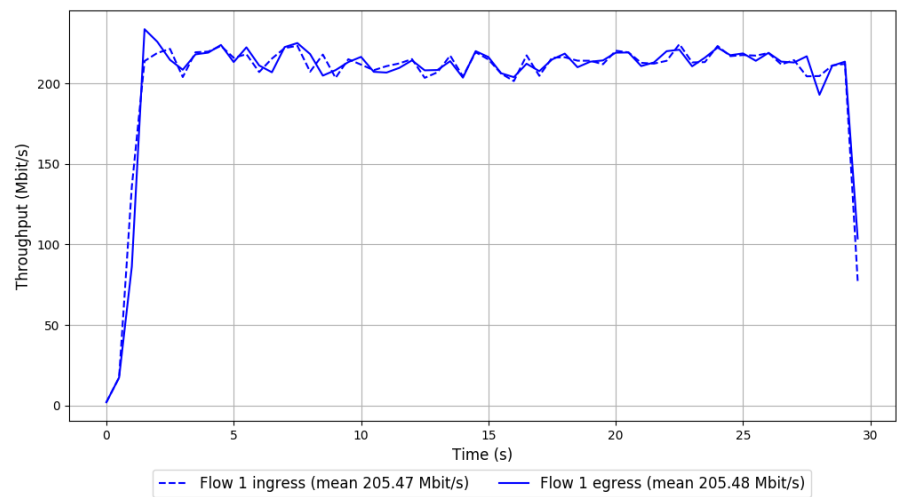
-- Flow 1:

Average throughput: 205.48 Mbit/s

95th percentile per-packet one-way delay: 63.616 ms

Loss rate: 0.00%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-05 19:12:45

End at: 2017-12-05 19:13:15

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.25 Mbit/s

95th percentile per-packet one-way delay: 66.804 ms

Loss rate: 0.00%

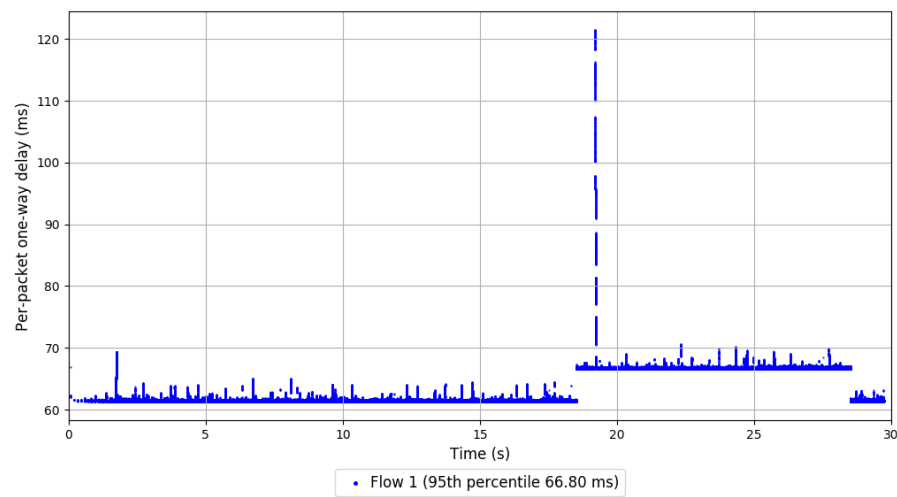
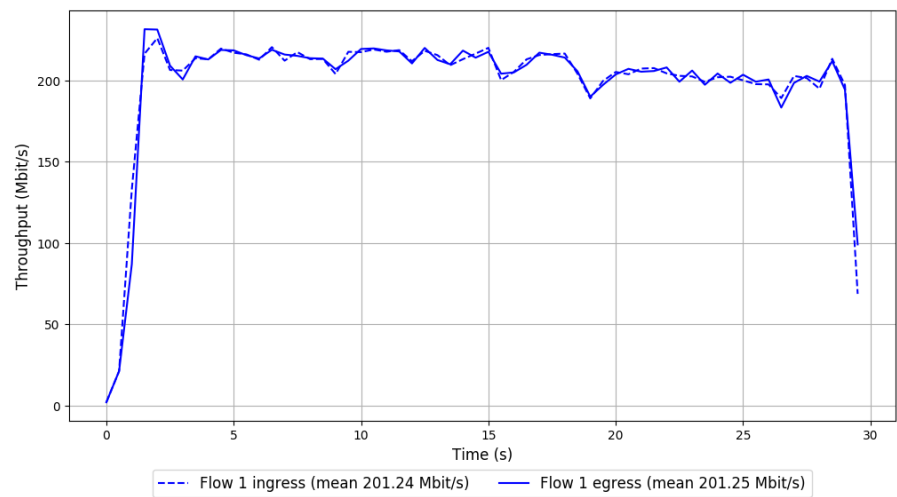
-- Flow 1:

Average throughput: 201.25 Mbit/s

95th percentile per-packet one-way delay: 66.804 ms

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-05 19:22:53

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

Below is generated by plot.py at 2017-12-05 21:05:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.69 Mbit/s

95th percentile per-packet one-way delay: 66.812 ms

Loss rate: 0.00%

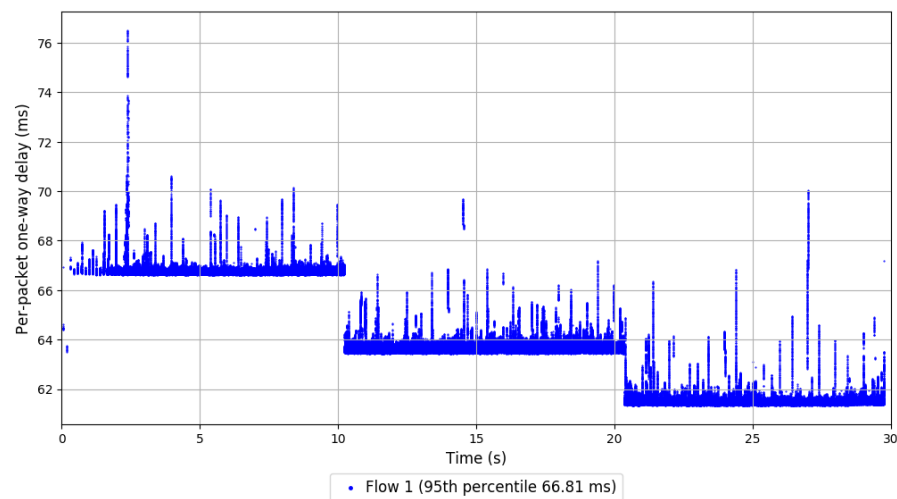
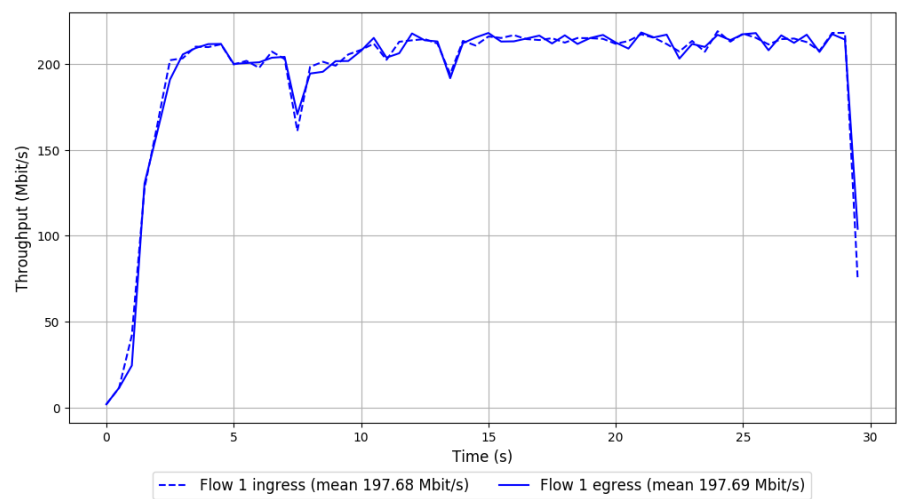
-- Flow 1:

Average throughput: 197.69 Mbit/s

95th percentile per-packet one-way delay: 66.812 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-05 19:33:30

End at: 2017-12-05 19:34:00

Below is generated by plot.py at 2017-12-05 21:05:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.96 Mbit/s

95th percentile per-packet one-way delay: 66.981 ms

Loss rate: 0.00%

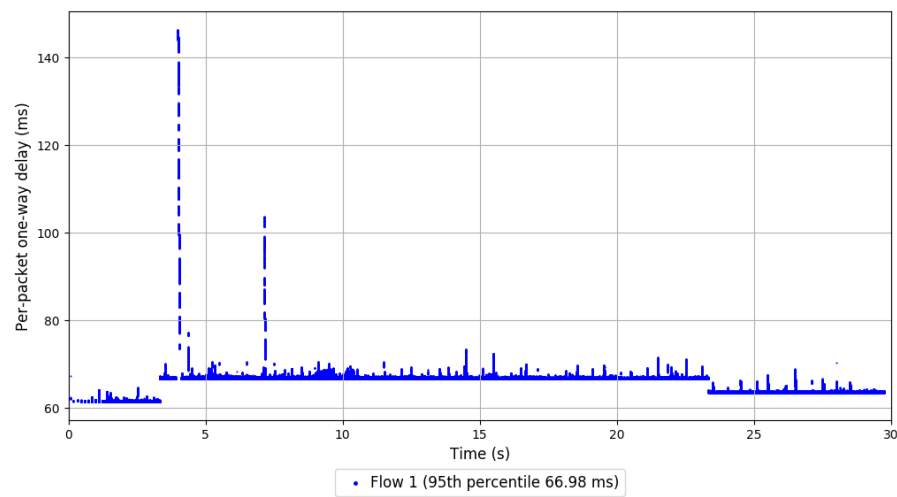
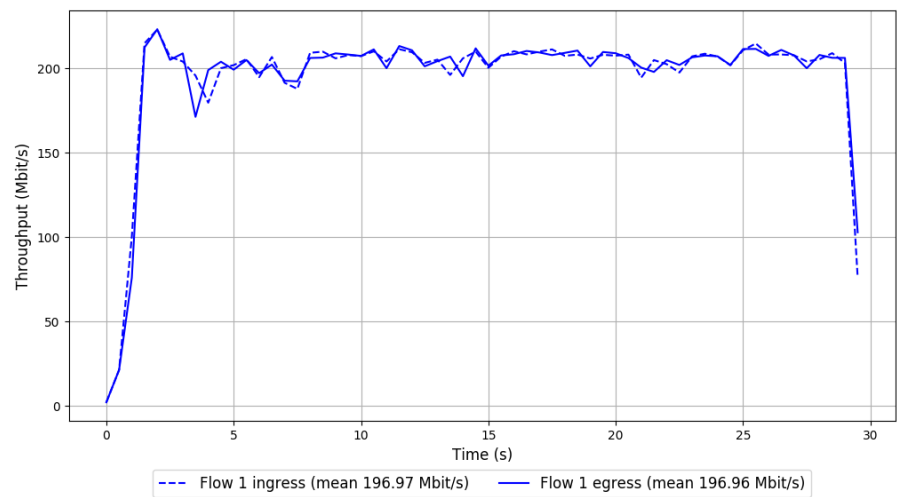
-- Flow 1:

Average throughput: 196.96 Mbit/s

95th percentile per-packet one-way delay: 66.981 ms

Loss rate: 0.00%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-05 19:44:03

End at: 2017-12-05 19:44:33

Below is generated by plot.py at 2017-12-05 21:05:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.73 Mbit/s

95th percentile per-packet one-way delay: 66.891 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 191.73 Mbit/s

95th percentile per-packet one-way delay: 66.891 ms

Loss rate: 0.03%

Run 10: Report of Indigo-calib — Data Link

