

Pantheon Report

Generated at 2017-12-05 10:39:43 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

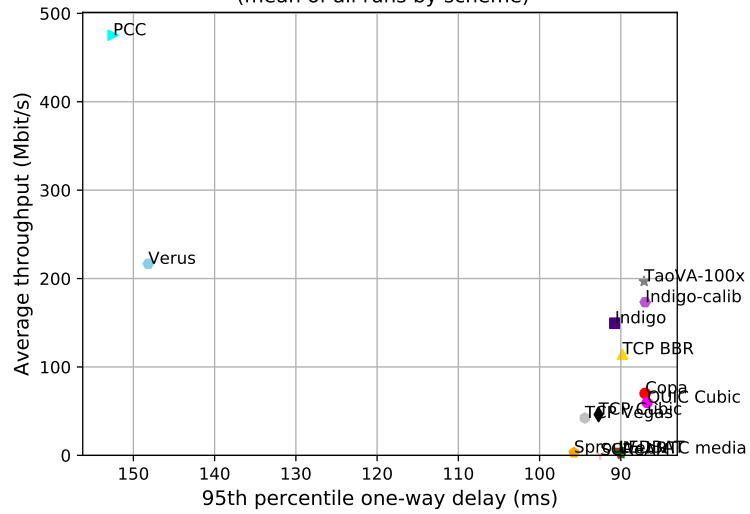
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

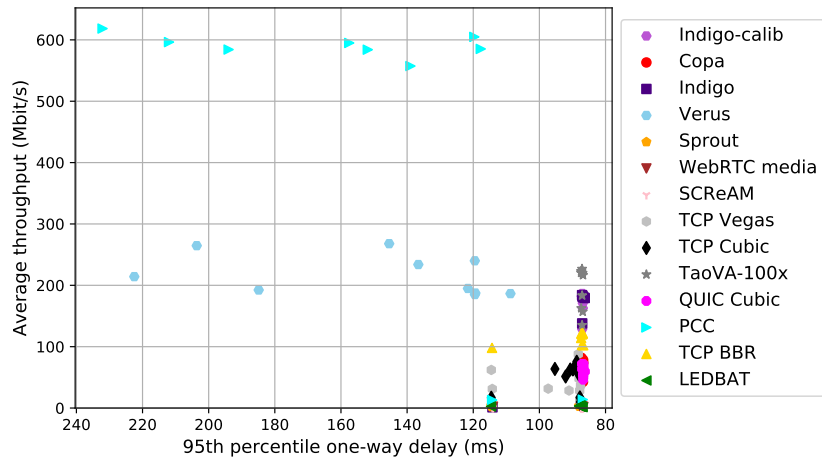
Git summary:

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

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	114.44	89.81	0.81
TCP Cubic	9	46.16	92.74	0.82
LEDBAT	10	2.93	90.24	1.11
PCC	10	475.23	152.50	1.93
QUIC Cubic	9	59.61	86.76	0.86
SCReAM	10	0.20	92.53	0.87
WebRTC media	9	2.10	90.24	0.96
Sprout	10	3.12	95.76	1.54
TaoVA-100x	10	196.79	87.13	0.79
TCP Vegas	10	42.23	94.43	0.59
Verus	10	216.66	148.17	1.75
Copa	10	70.06	87.00	0.70
Indigo	7	149.44	90.73	0.62
Indigo-calib	10	173.27	87.00	0.77

Run 1: Statistics of TCP BBR

Start at: 2017-12-05 06:27:46

End at: 2017-12-05 06:28:16

Below is generated by plot.py at 2017-12-05 10:04:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 114.19 Mbit/s

95th percentile per-packet one-way delay: 87.372 ms

Loss rate: 0.77%

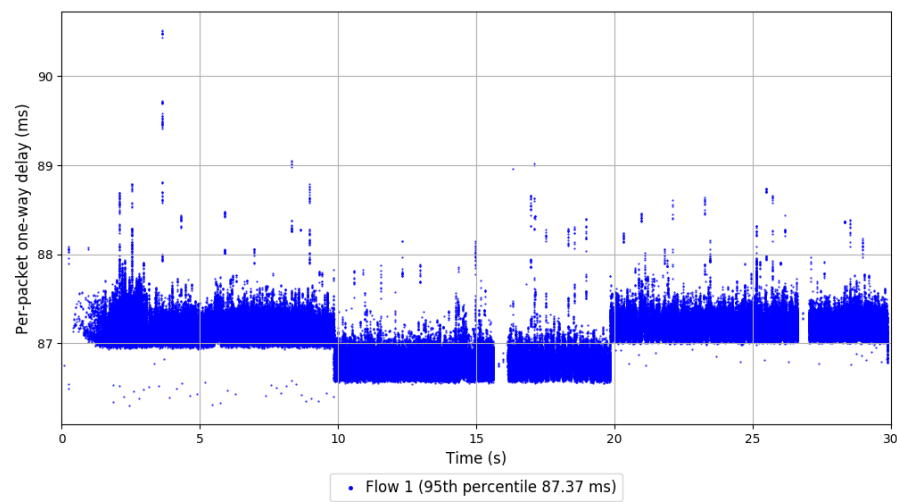
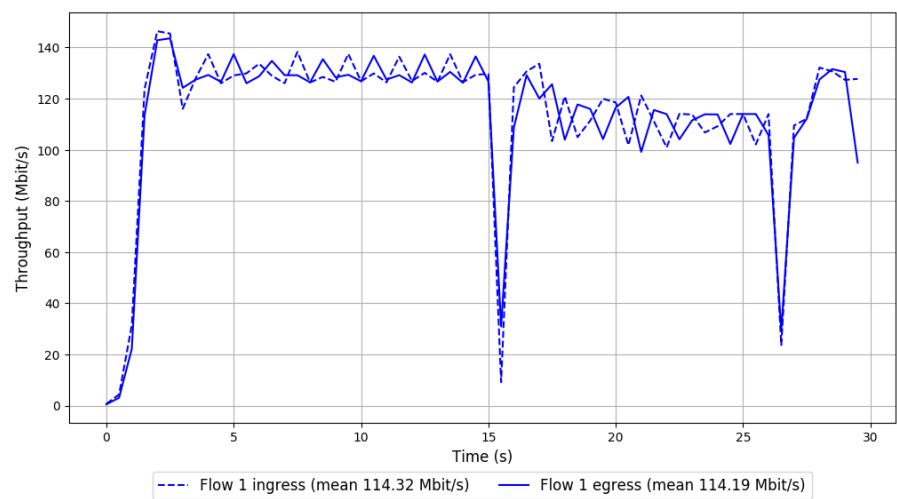
-- Flow 1:

Average throughput: 114.19 Mbit/s

95th percentile per-packet one-way delay: 87.372 ms

Loss rate: 0.77%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 06:38:57

End at: 2017-12-05 06:39:27

Below is generated by plot.py at 2017-12-05 10:04:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.84 Mbit/s

95th percentile per-packet one-way delay: 87.101 ms

Loss rate: 0.82%

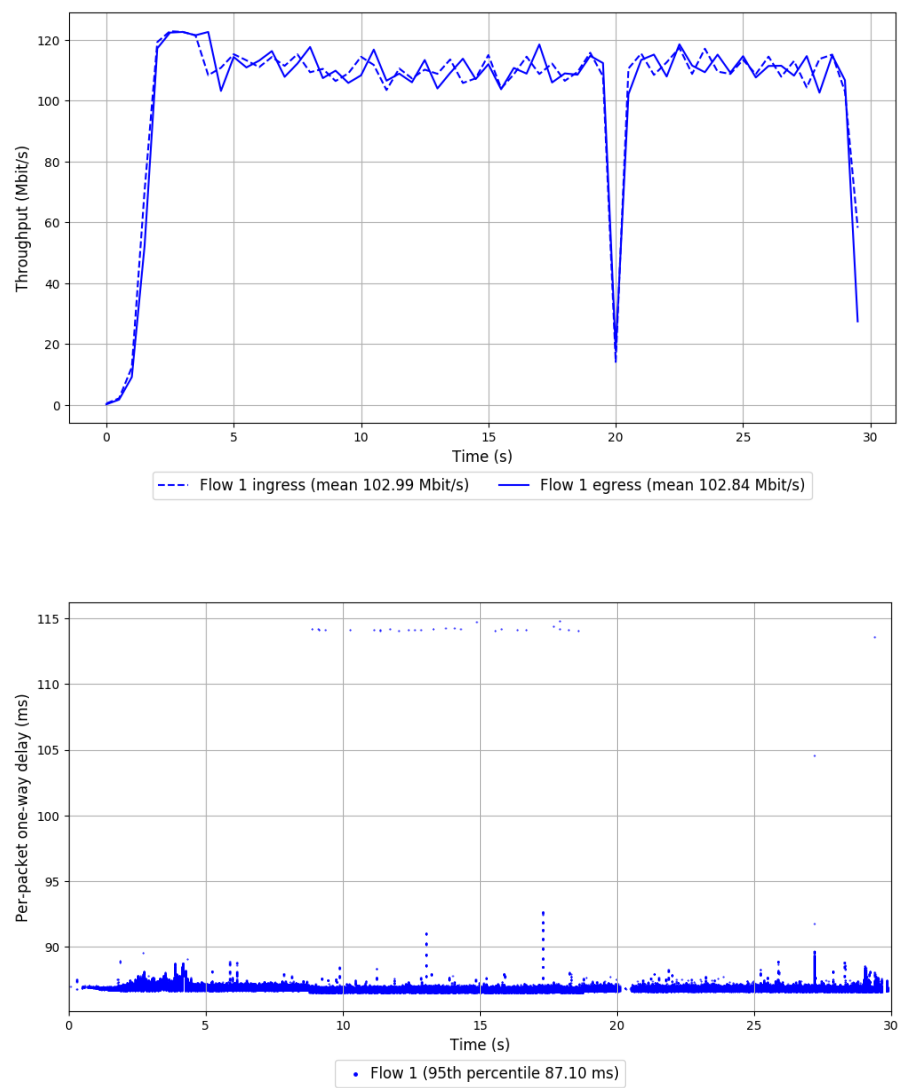
-- Flow 1:

Average throughput: 102.84 Mbit/s

95th percentile per-packet one-way delay: 87.101 ms

Loss rate: 0.82%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 06:49:57

End at: 2017-12-05 06:50:27

Below is generated by plot.py at 2017-12-05 10:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.69 Mbit/s

95th percentile per-packet one-way delay: 86.883 ms

Loss rate: 0.63%

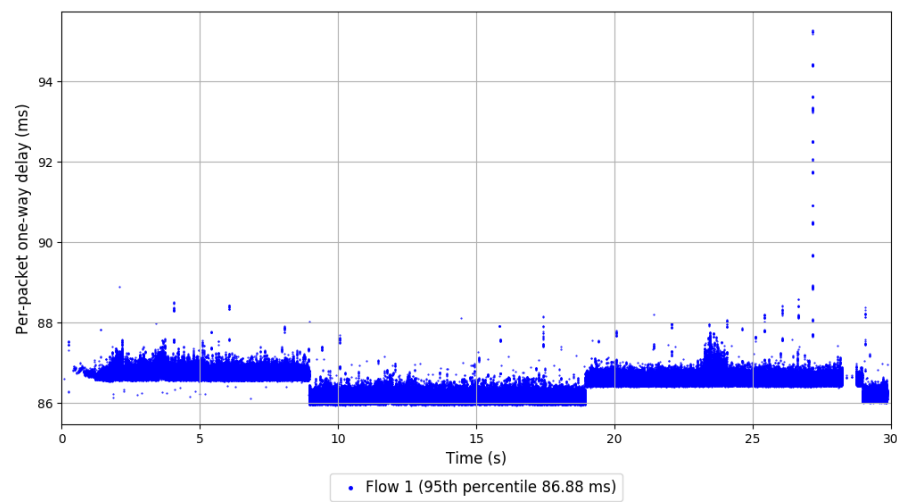
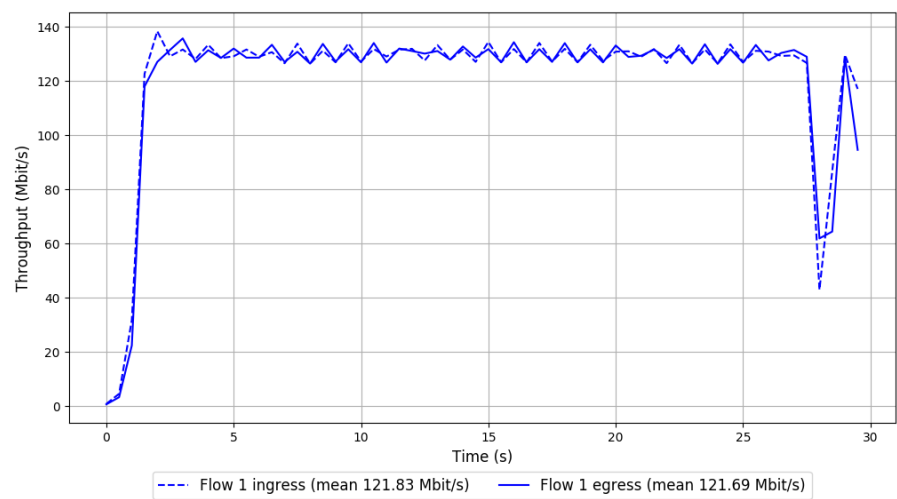
-- Flow 1:

Average throughput: 121.69 Mbit/s

95th percentile per-packet one-way delay: 86.883 ms

Loss rate: 0.63%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-05 07:00:59

End at: 2017-12-05 07:01:29

Below is generated by plot.py at 2017-12-05 10:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.08 Mbit/s

95th percentile per-packet one-way delay: 87.265 ms

Loss rate: 0.83%

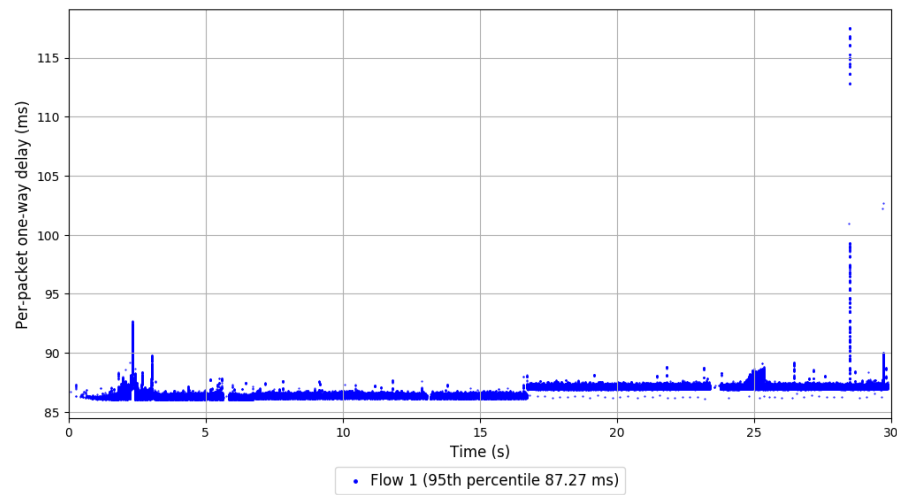
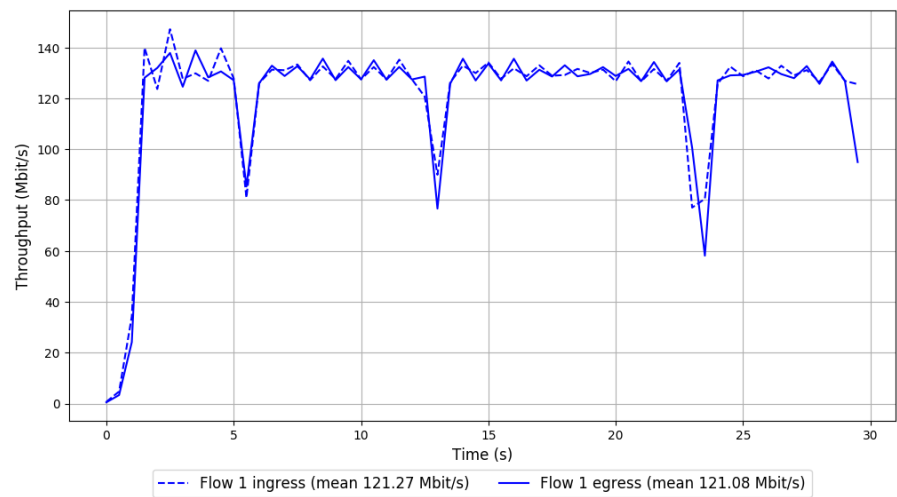
-- Flow 1:

Average throughput: 121.08 Mbit/s

95th percentile per-packet one-way delay: 87.265 ms

Loss rate: 0.83%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-05 07:11:43

End at: 2017-12-05 07:12:13

Below is generated by plot.py at 2017-12-05 10:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.23 Mbit/s

95th percentile per-packet one-way delay: 86.909 ms

Loss rate: 0.94%

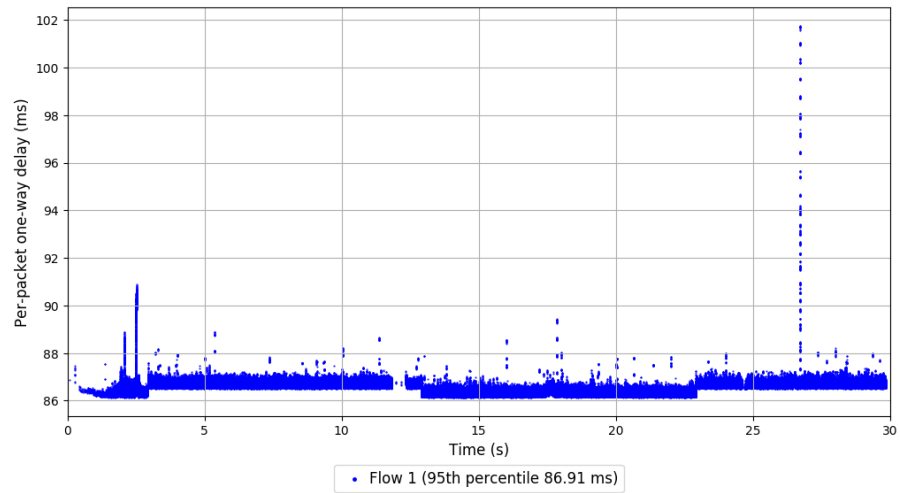
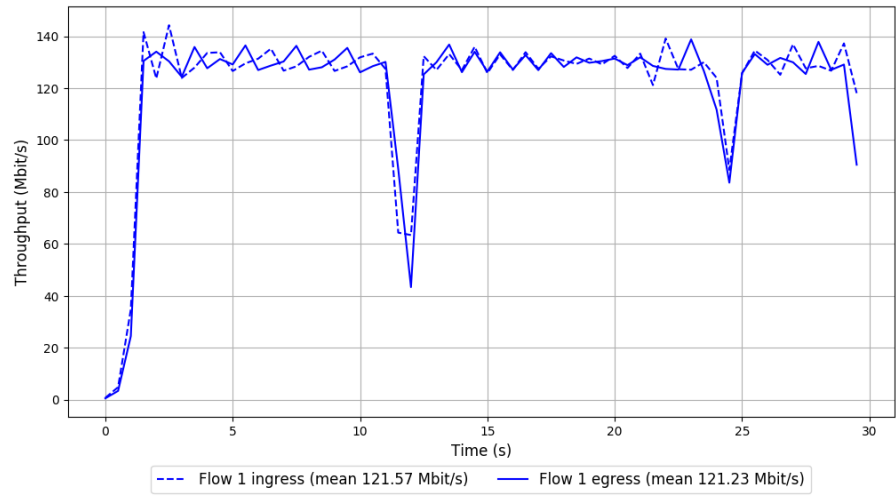
-- Flow 1:

Average throughput: 121.23 Mbit/s

95th percentile per-packet one-way delay: 86.909 ms

Loss rate: 0.94%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-05 07:23:02

End at: 2017-12-05 07:23:32

Below is generated by plot.py at 2017-12-05 10:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.49 Mbit/s

95th percentile per-packet one-way delay: 87.298 ms

Loss rate: 0.69%

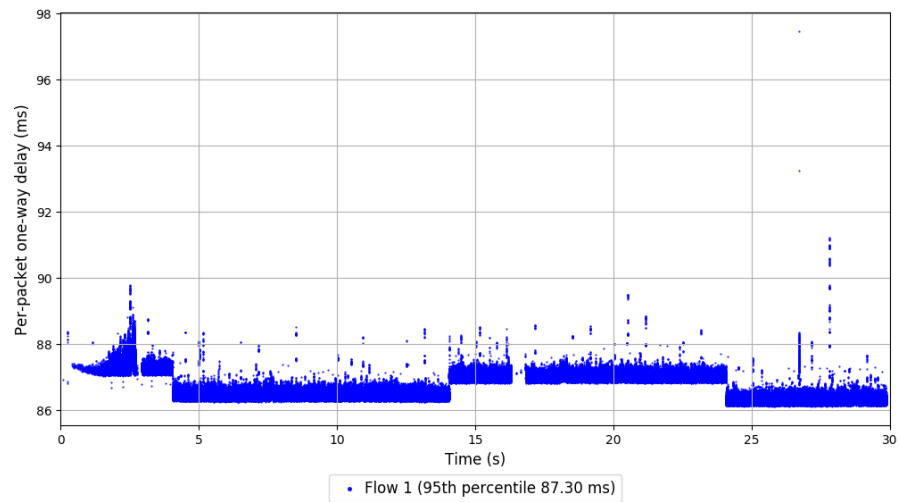
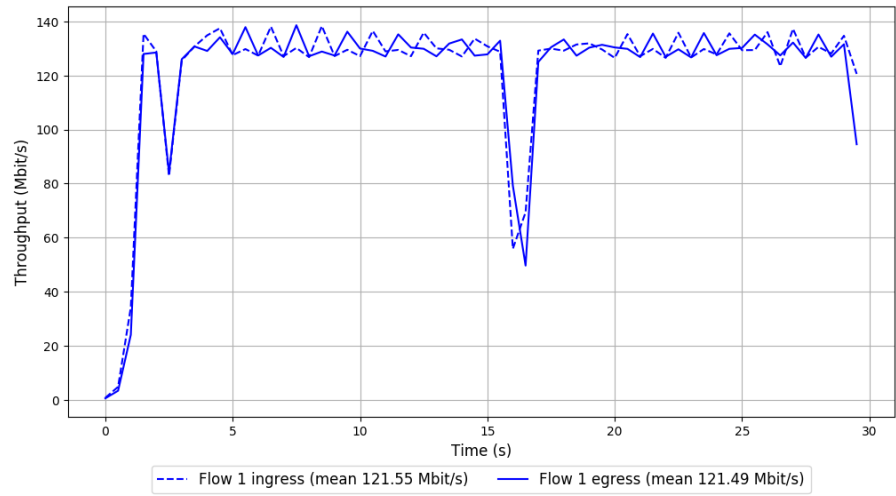
-- Flow 1:

Average throughput: 121.49 Mbit/s

95th percentile per-packet one-way delay: 87.298 ms

Loss rate: 0.69%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-05 07:34:16

End at: 2017-12-05 07:34:46

Below is generated by plot.py at 2017-12-05 10:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.90 Mbit/s

95th percentile per-packet one-way delay: 87.121 ms

Loss rate: 0.94%

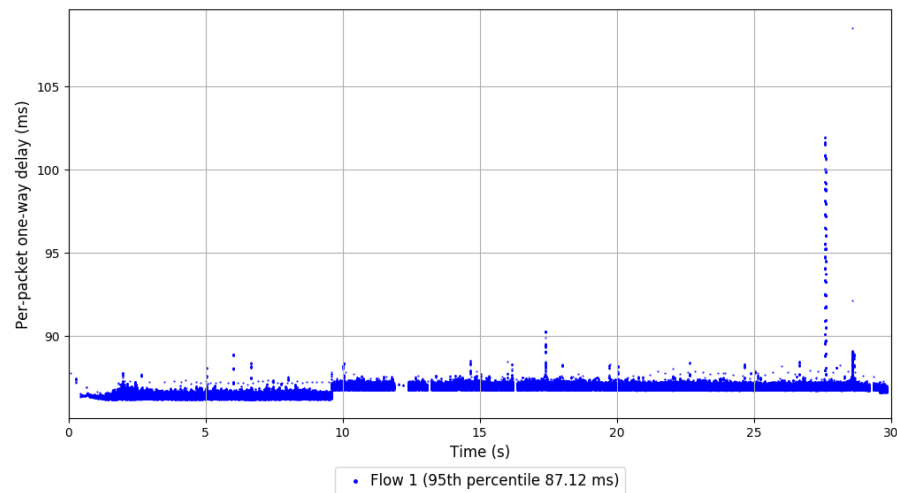
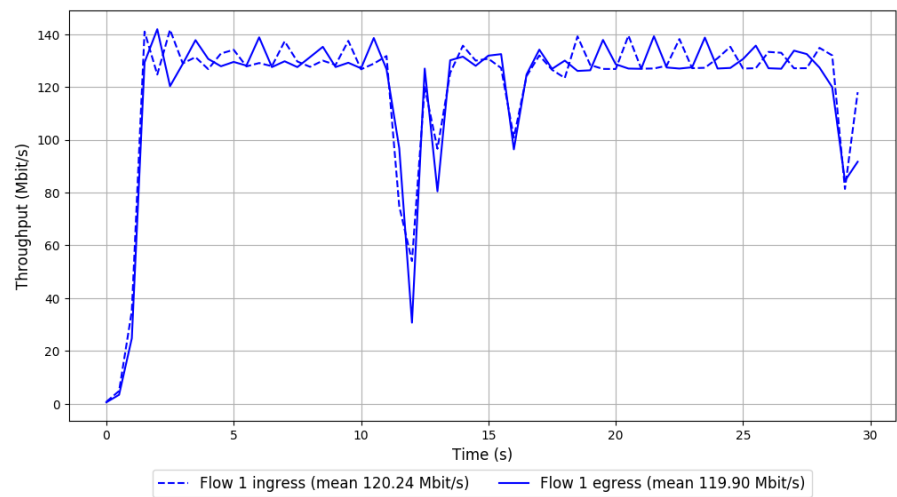
-- Flow 1:

Average throughput: 119.90 Mbit/s

95th percentile per-packet one-way delay: 87.121 ms

Loss rate: 0.94%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-05 07:45:17

End at: 2017-12-05 07:45:47

Below is generated by plot.py at 2017-12-05 10:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.04 Mbit/s

95th percentile per-packet one-way delay: 114.326 ms

Loss rate: 0.71%

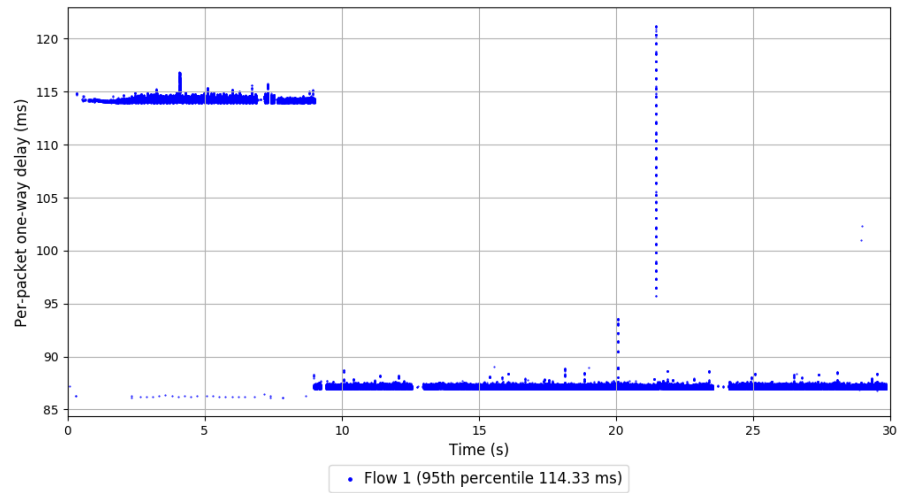
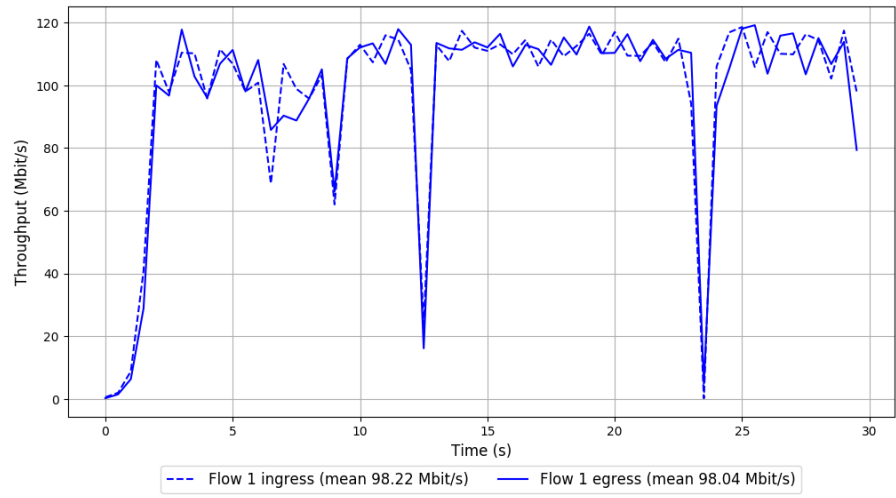
-- Flow 1:

Average throughput: 98.04 Mbit/s

95th percentile per-packet one-way delay: 114.326 ms

Loss rate: 0.71%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-05 07:56:32

End at: 2017-12-05 07:57:02

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.57 Mbit/s

95th percentile per-packet one-way delay: 87.040 ms

Loss rate: 0.64%

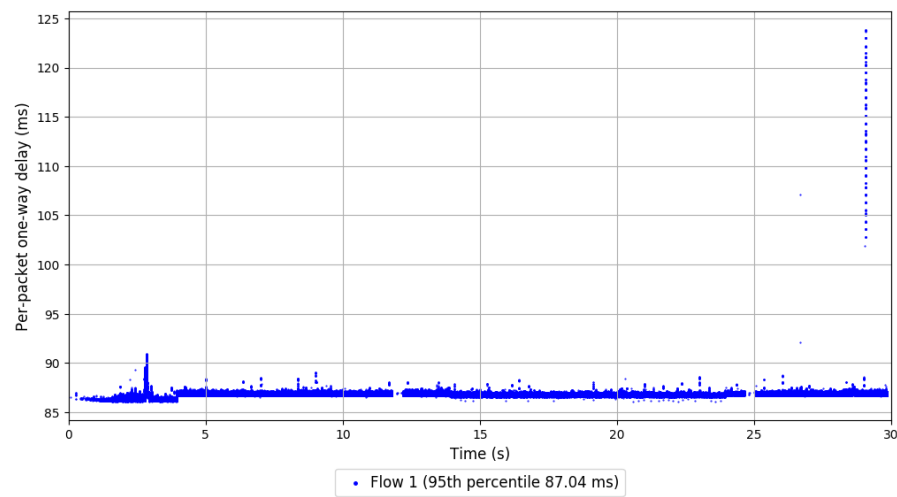
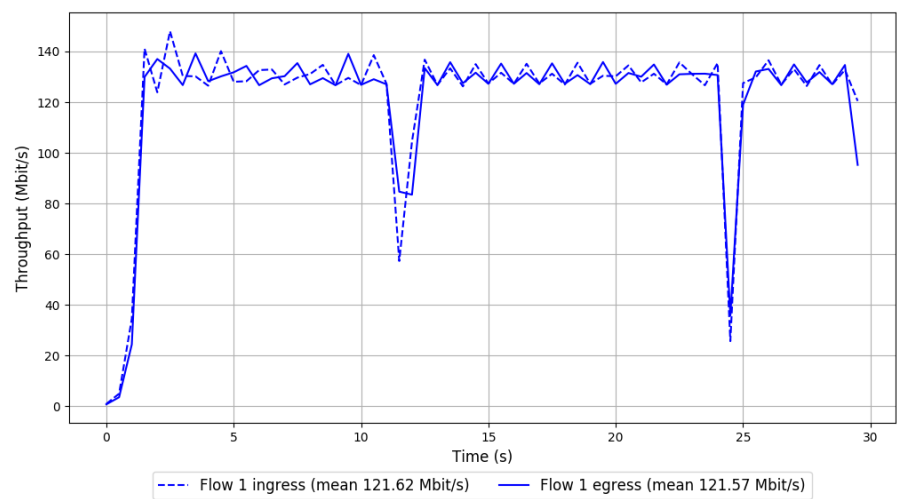
-- Flow 1:

Average throughput: 121.57 Mbit/s

95th percentile per-packet one-way delay: 87.040 ms

Loss rate: 0.64%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

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

End at: 2017-12-05 08:07:48

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.34 Mbit/s

95th percentile per-packet one-way delay: 86.744 ms

Loss rate: 1.11%

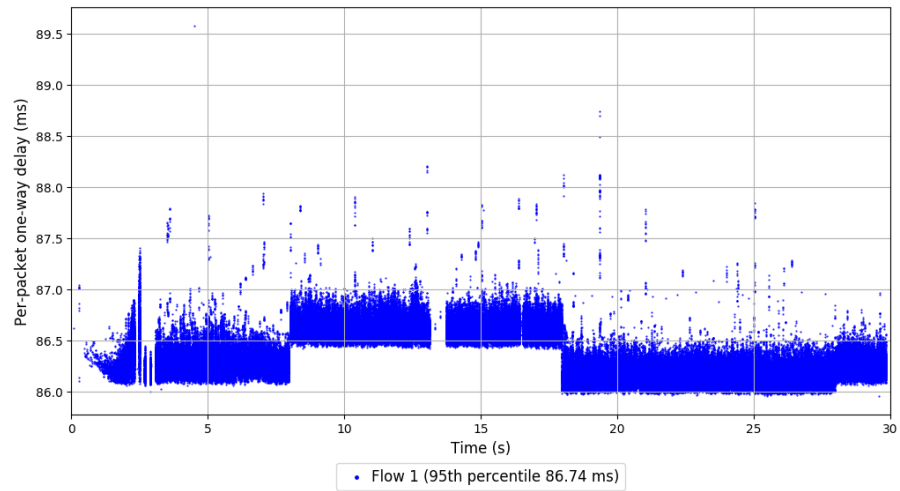
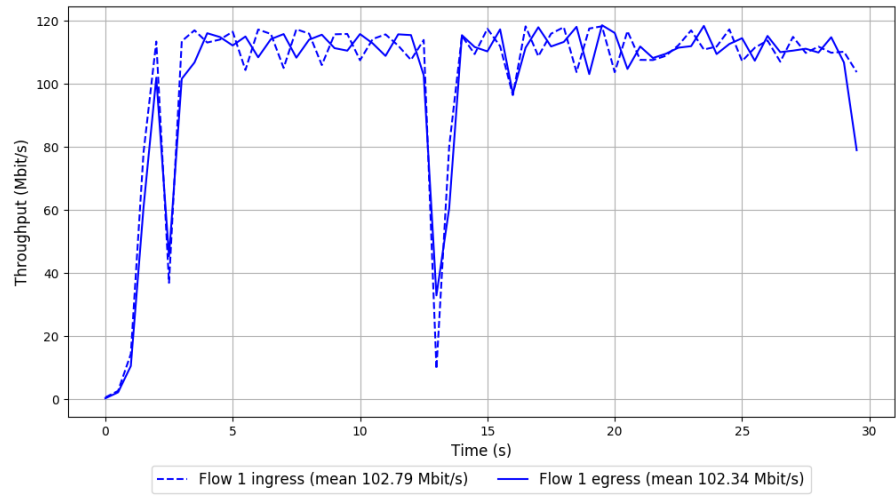
-- Flow 1:

Average throughput: 102.34 Mbit/s

95th percentile per-packet one-way delay: 86.744 ms

Loss rate: 1.11%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 06:19:44

End at: 2017-12-05 06:20:14

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.34 Mbit/s

95th percentile per-packet one-way delay: 88.150 ms

Loss rate: 0.64%

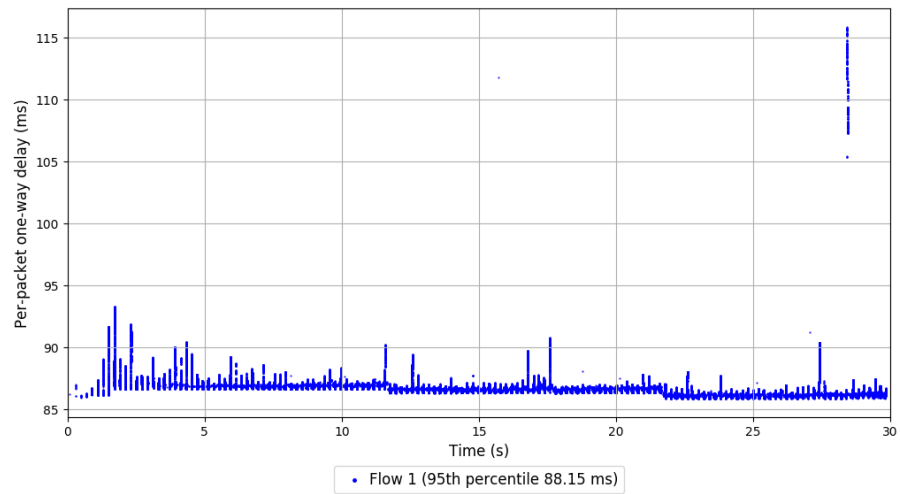
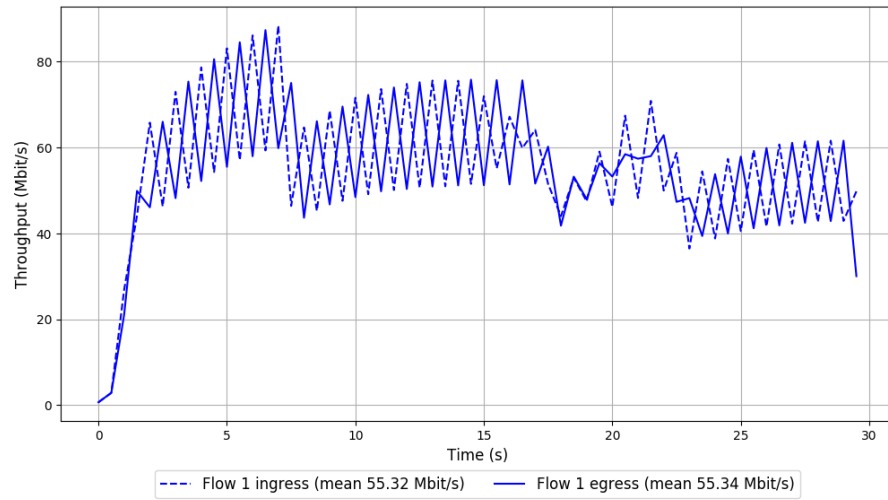
-- Flow 1:

Average throughput: 55.34 Mbit/s

95th percentile per-packet one-way delay: 88.150 ms

Loss rate: 0.64%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 06:30:53

End at: 2017-12-05 06:31:23

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.85 Mbit/s

95th percentile per-packet one-way delay: 87.615 ms

Loss rate: 1.20%

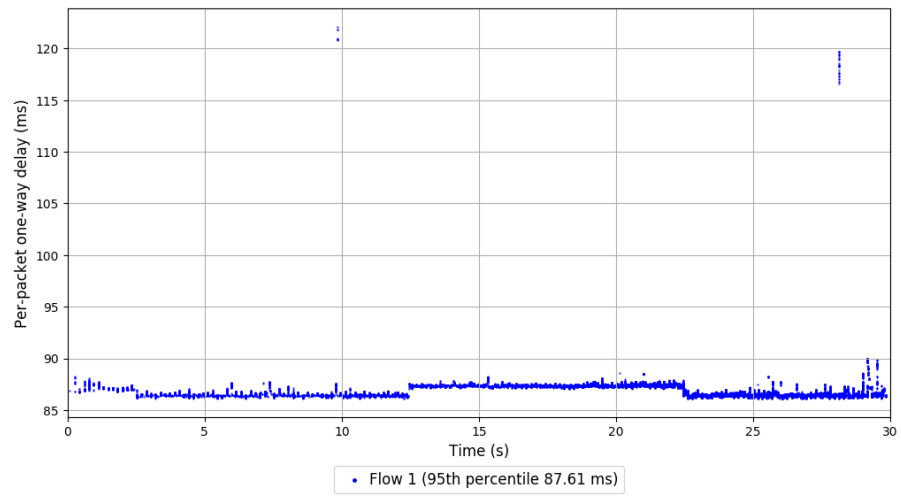
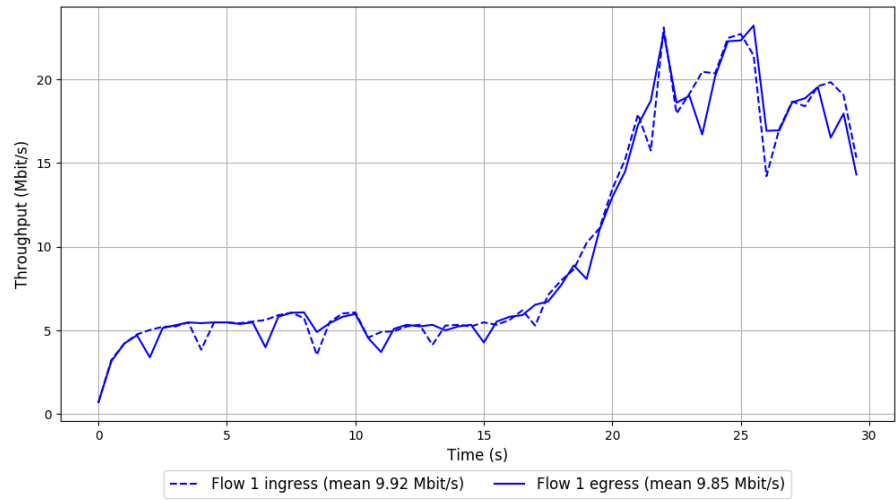
-- Flow 1:

Average throughput: 9.85 Mbit/s

95th percentile per-packet one-way delay: 87.615 ms

Loss rate: 1.20%

Run 2: Report of TCP Cubic — Data Link

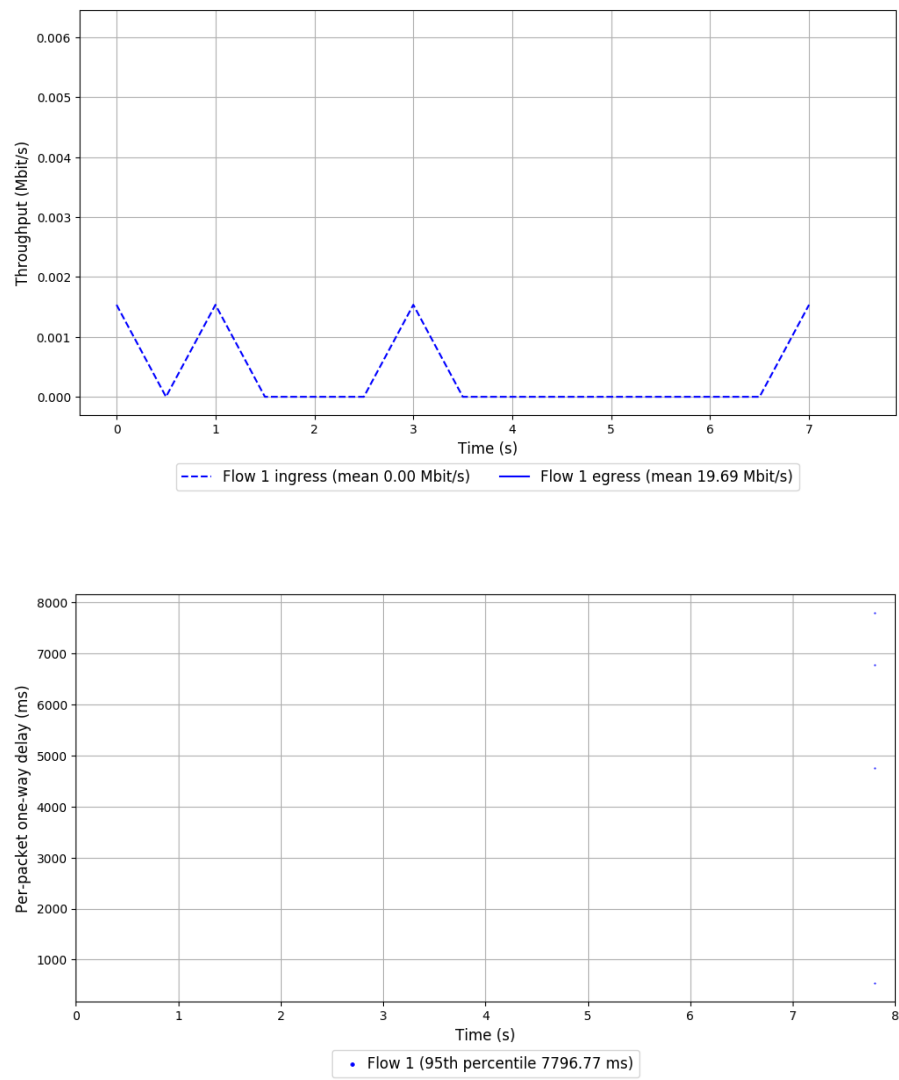


Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 06:42:07

End at: 2017-12-05 06:42:37

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-05 06:53:10

End at: 2017-12-05 06:53:40

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.95 Mbit/s

95th percentile per-packet one-way delay: 89.859 ms

Loss rate: 1.12%

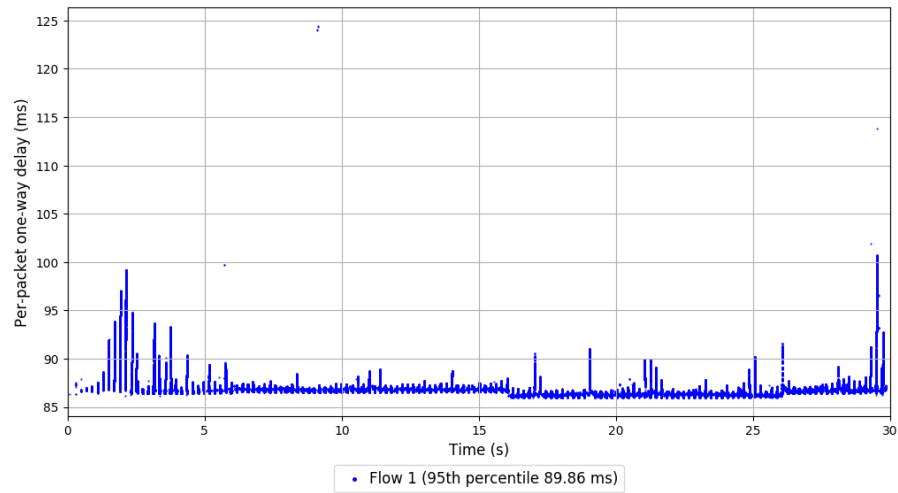
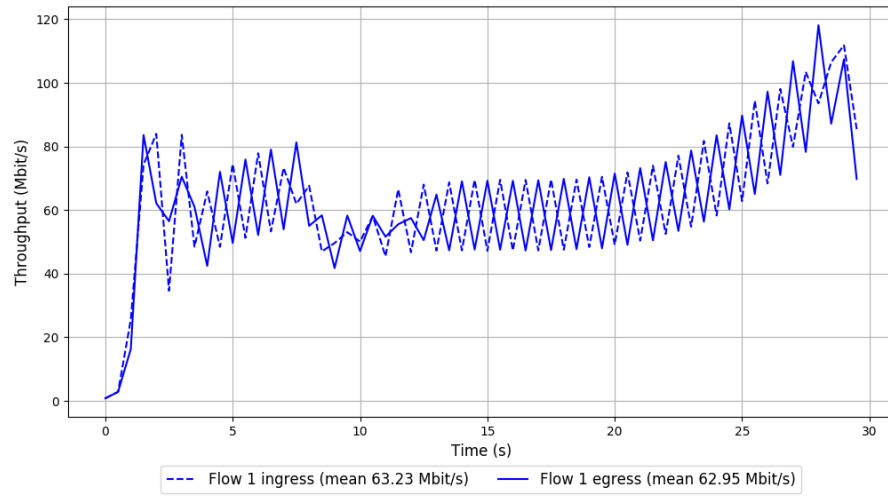
-- Flow 1:

Average throughput: 62.95 Mbit/s

95th percentile per-packet one-way delay: 89.859 ms

Loss rate: 1.12%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-05 07:04:07

End at: 2017-12-05 07:04:37

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.37 Mbit/s

95th percentile per-packet one-way delay: 88.712 ms

Loss rate: 0.47%

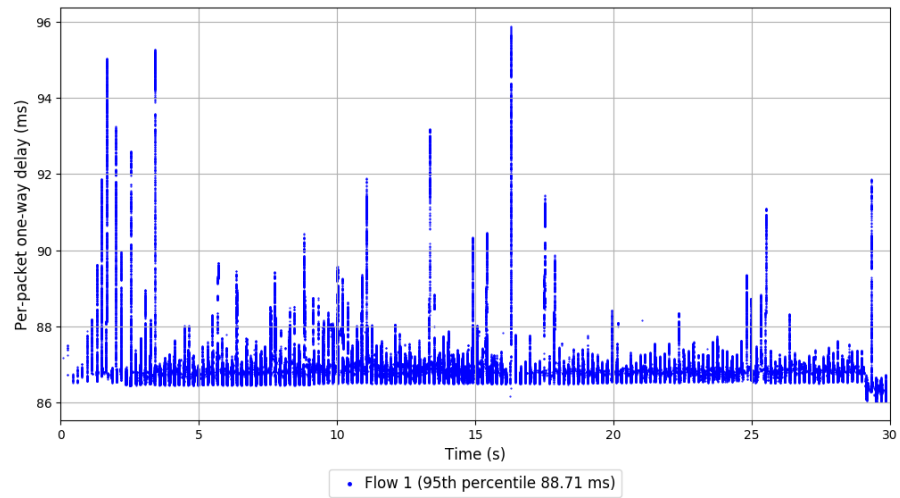
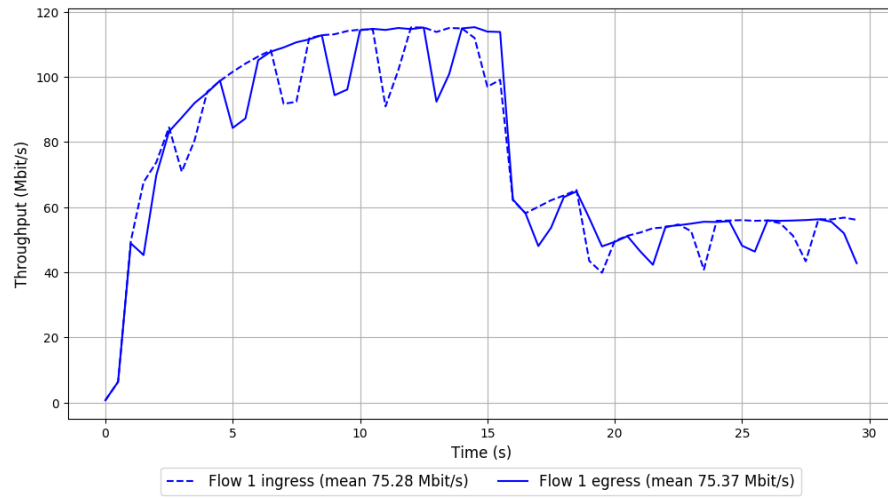
-- Flow 1:

Average throughput: 75.37 Mbit/s

95th percentile per-packet one-way delay: 88.712 ms

Loss rate: 0.47%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-05 07:14:56

End at: 2017-12-05 07:15:26

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.30 Mbit/s

95th percentile per-packet one-way delay: 87.756 ms

Loss rate: 0.64%

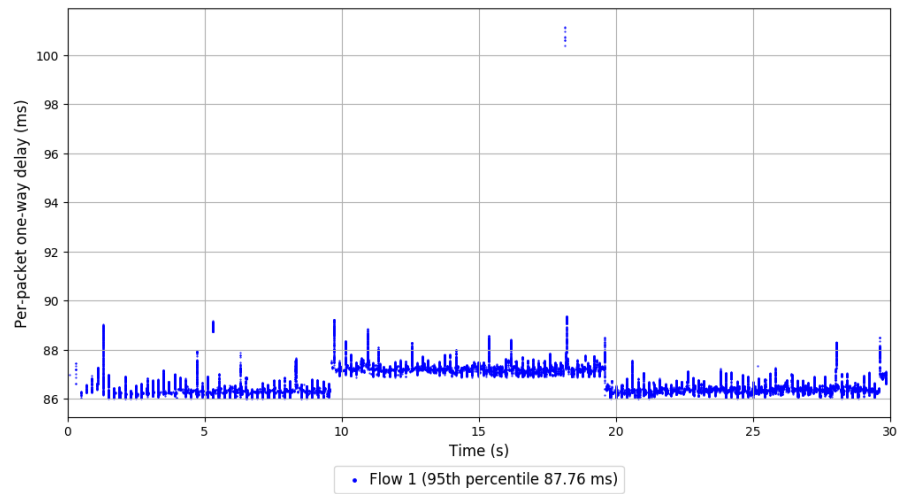
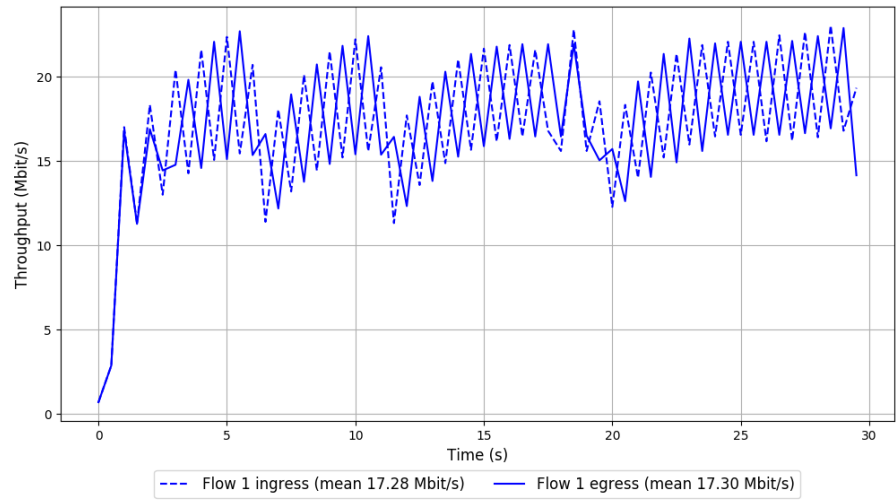
-- Flow 1:

Average throughput: 17.30 Mbit/s

95th percentile per-packet one-way delay: 87.756 ms

Loss rate: 0.64%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-05 07:26:16

End at: 2017-12-05 07:26:46

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.69 Mbit/s

95th percentile per-packet one-way delay: 95.306 ms

Loss rate: 1.25%

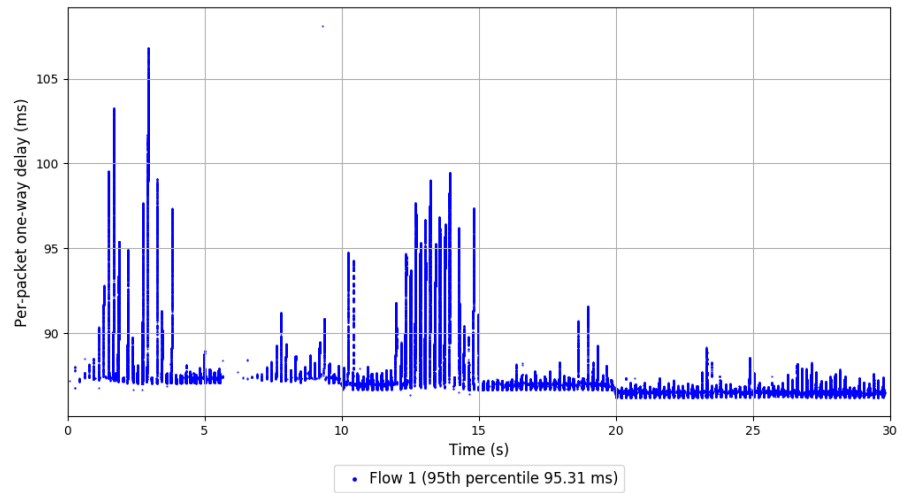
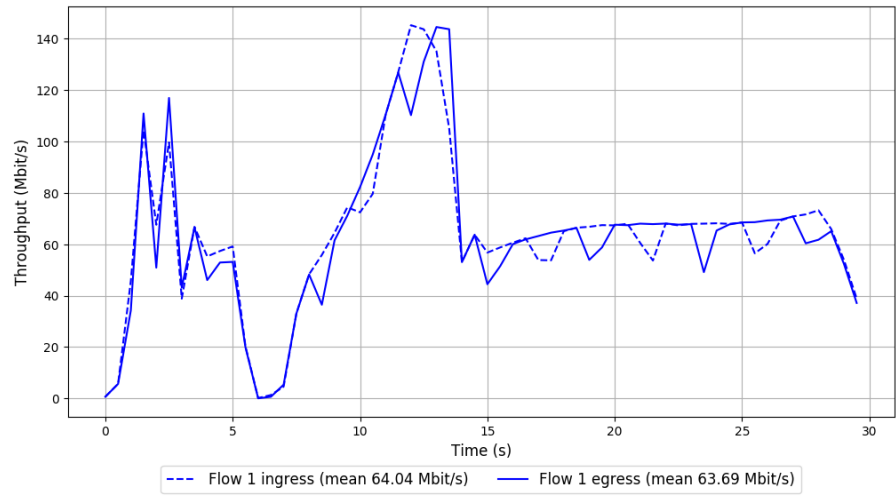
-- Flow 1:

Average throughput: 63.69 Mbit/s

95th percentile per-packet one-way delay: 95.306 ms

Loss rate: 1.25%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-05 07:37:31

End at: 2017-12-05 07:38:01

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.71 Mbit/s

95th percentile per-packet one-way delay: 90.661 ms

Loss rate: 0.88%

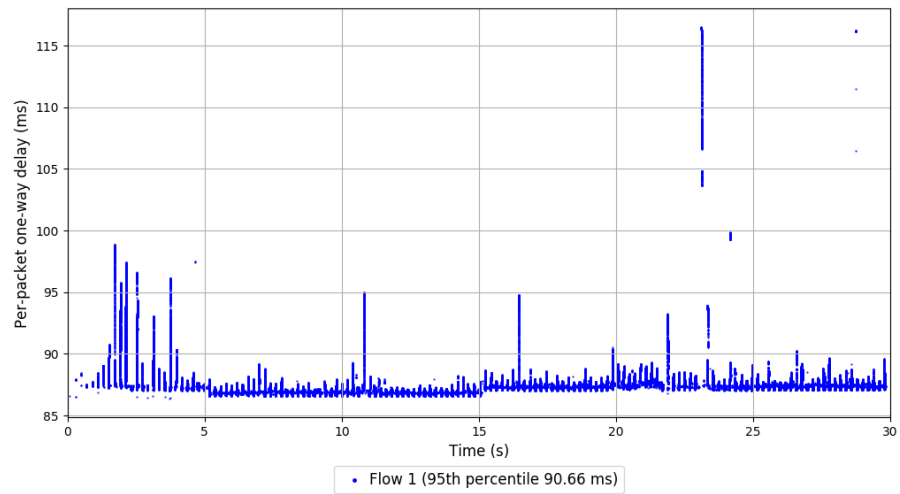
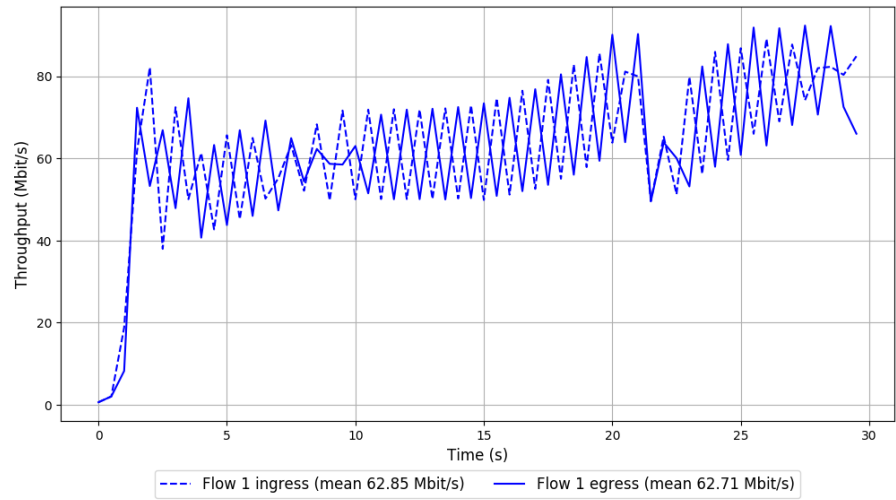
-- Flow 1:

Average throughput: 62.71 Mbit/s

95th percentile per-packet one-way delay: 90.661 ms

Loss rate: 0.88%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-05 07:48:29

End at: 2017-12-05 07:48:59

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.44 Mbit/s

95th percentile per-packet one-way delay: 92.065 ms

Loss rate: 0.50%

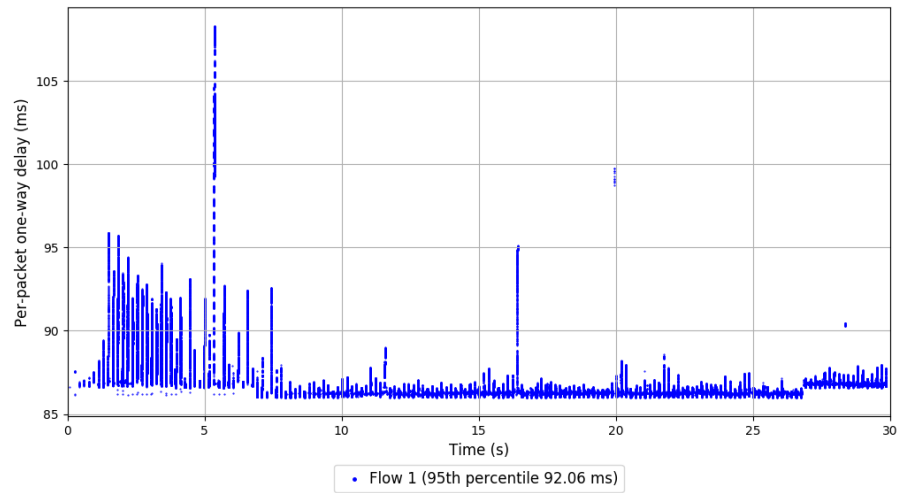
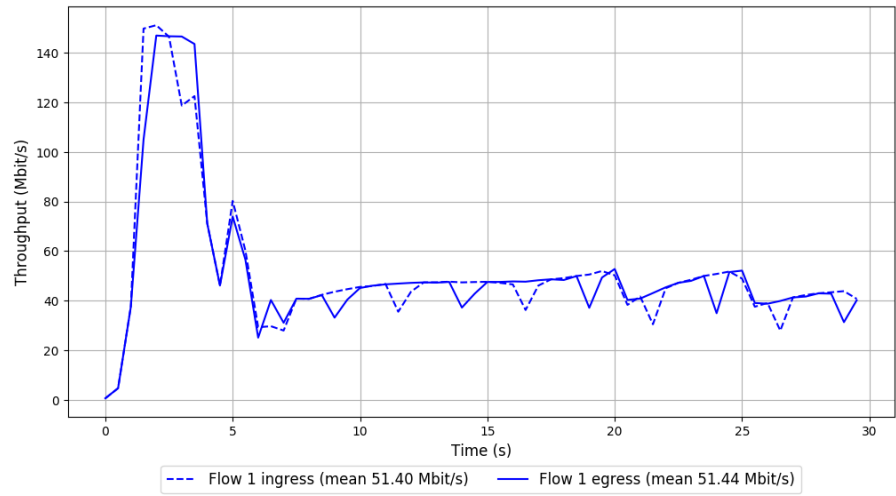
-- Flow 1:

Average throughput: 51.44 Mbit/s

95th percentile per-packet one-way delay: 92.065 ms

Loss rate: 0.50%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-05 07:59:46

End at: 2017-12-05 08:00:16

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.76 Mbit/s

95th percentile per-packet one-way delay: 114.539 ms

Loss rate: 0.71%

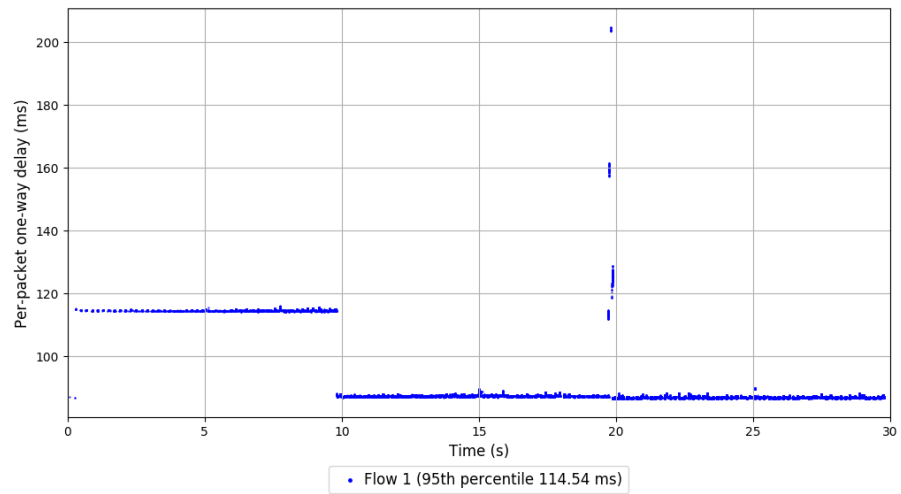
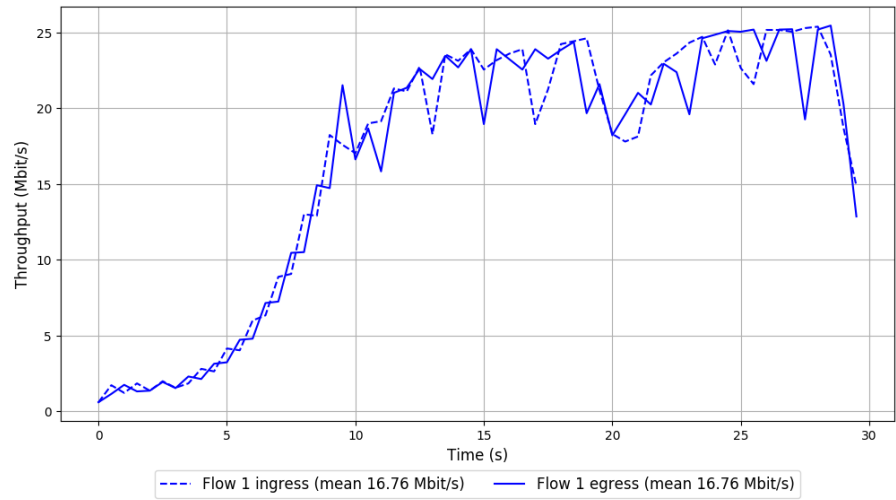
-- Flow 1:

Average throughput: 16.76 Mbit/s

95th percentile per-packet one-way delay: 114.539 ms

Loss rate: 0.71%

Run 10: Report of TCP Cubic — Data Link

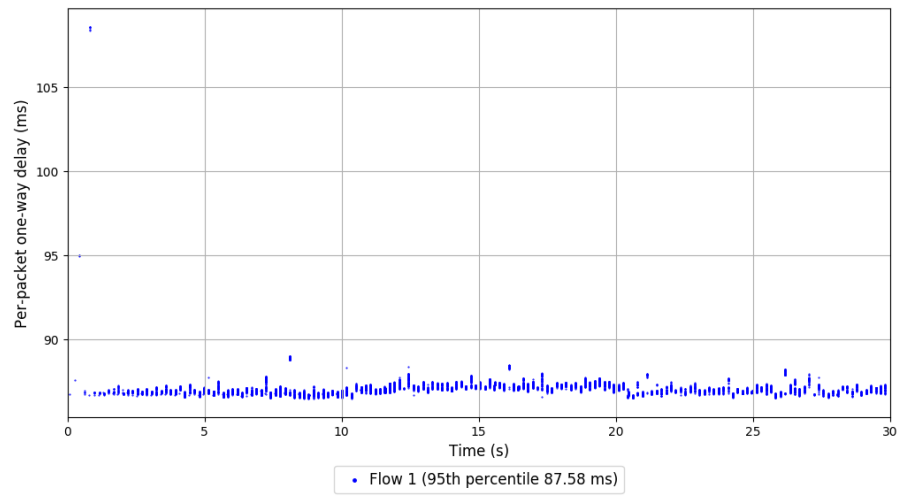
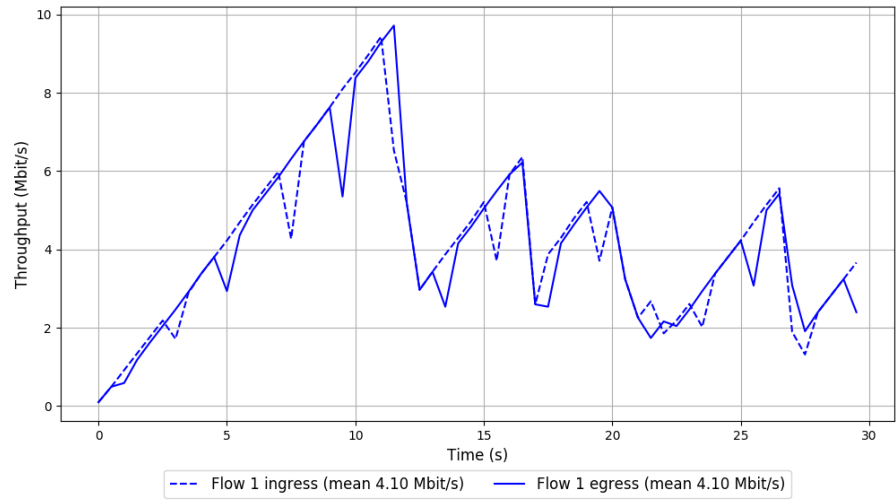


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 06:23:35
End at: 2017-12-05 06:24:05

# Below is generated by plot.py at 2017-12-05 10:06:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 87.583 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 87.583 ms
Loss rate: 0.63%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-05 06:34:42

End at: 2017-12-05 06:35:12

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 87.714 ms

Loss rate: 0.79%

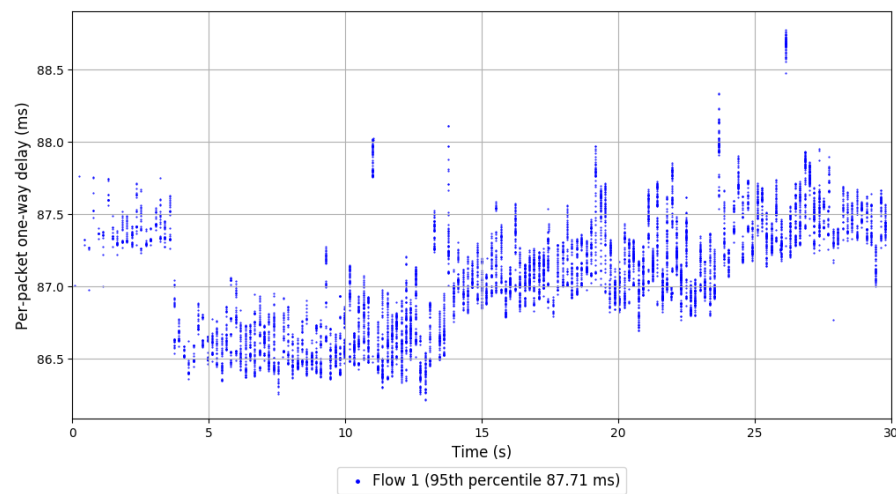
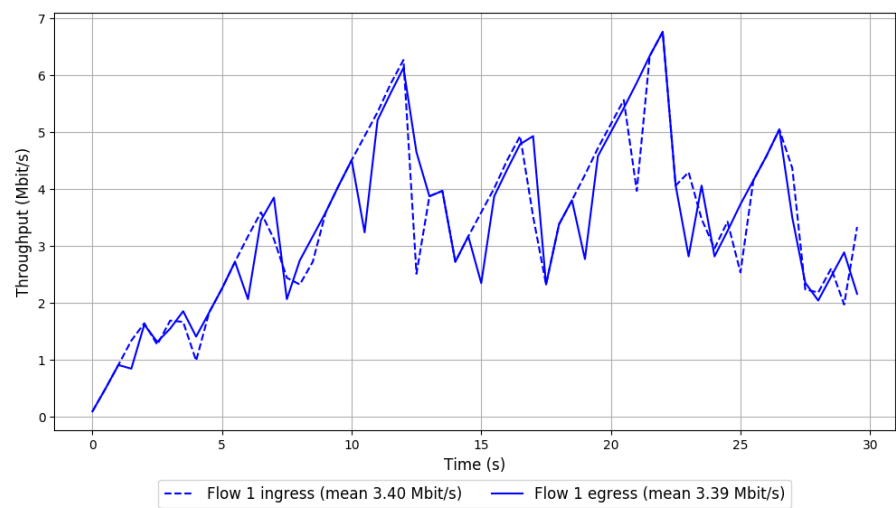
-- Flow 1:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 87.714 ms

Loss rate: 0.79%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 06:45:55

End at: 2017-12-05 06:46:25

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 87.470 ms

Loss rate: 1.14%

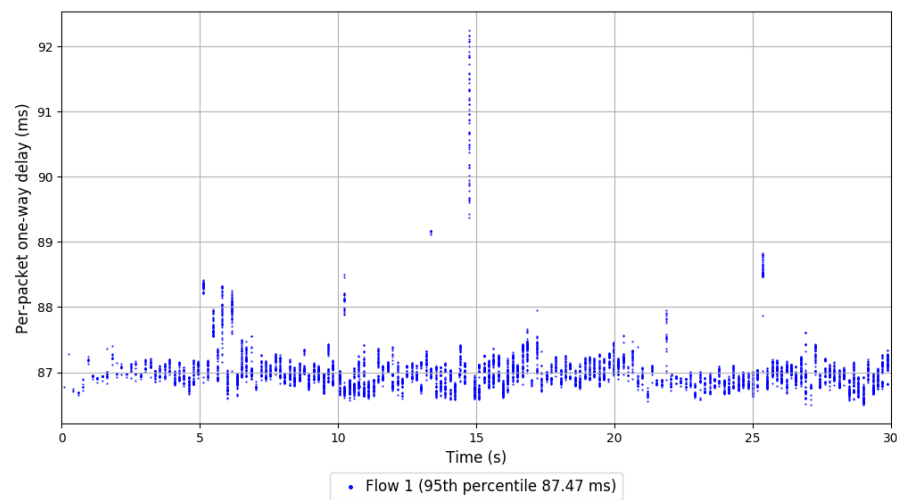
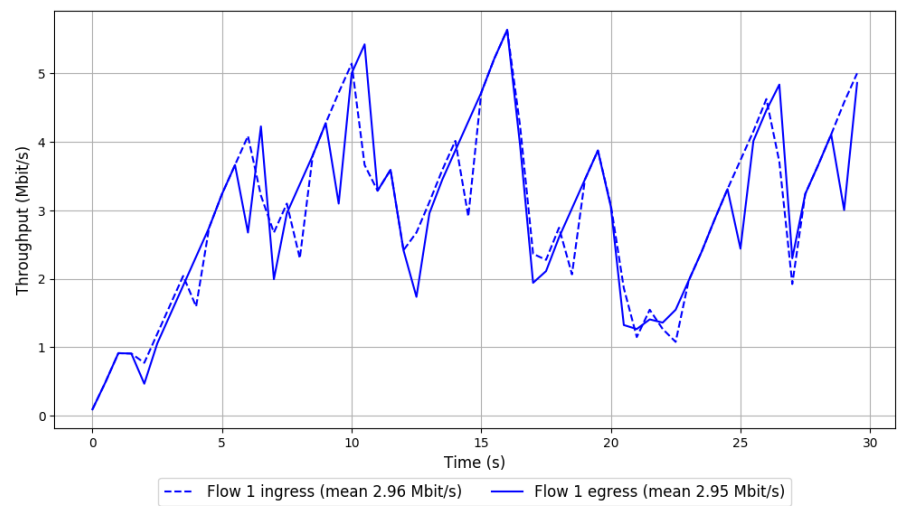
-- Flow 1:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 87.470 ms

Loss rate: 1.14%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-05 06:56:59

End at: 2017-12-05 06:57:29

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.31 Mbit/s

95th percentile per-packet one-way delay: 87.395 ms

Loss rate: 0.52%

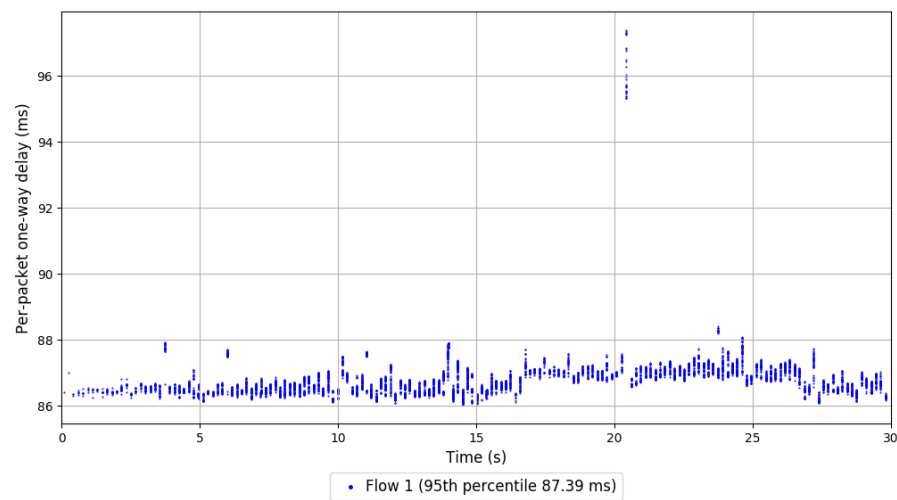
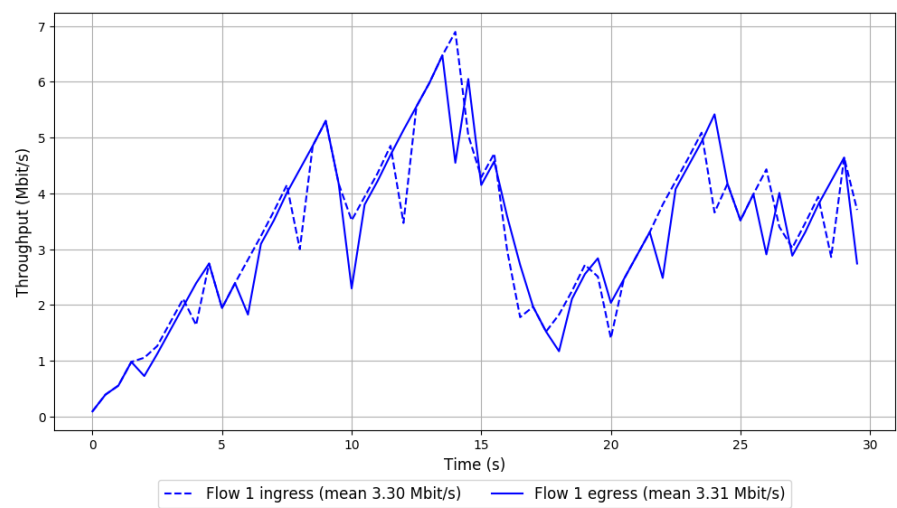
-- Flow 1:

Average throughput: 3.31 Mbit/s

95th percentile per-packet one-way delay: 87.395 ms

Loss rate: 0.52%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-05 07:07:36

End at: 2017-12-05 07:08:06

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 86.935 ms

Loss rate: 1.58%

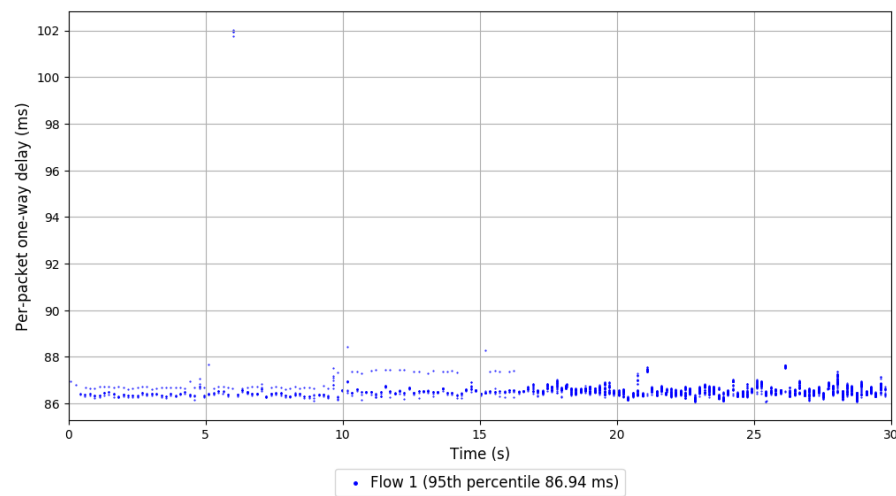
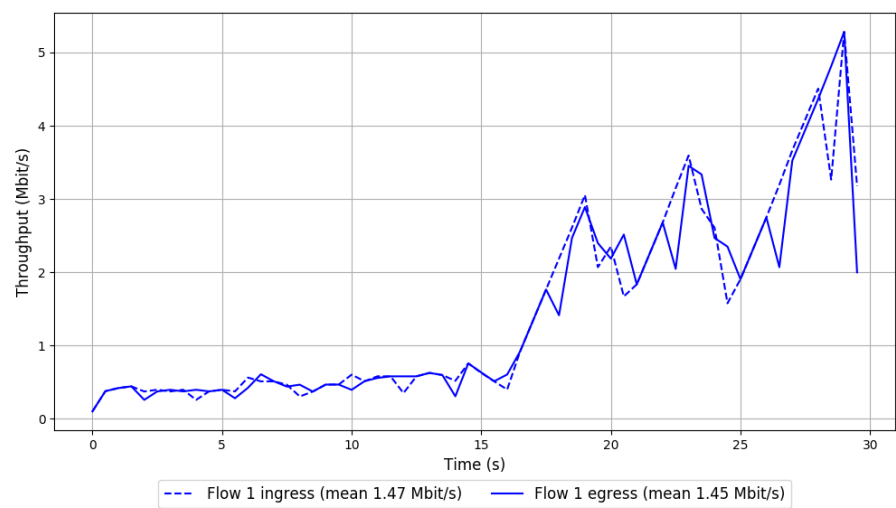
-- Flow 1:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 86.935 ms

Loss rate: 1.58%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-05 07:18:47

End at: 2017-12-05 07:19:17

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 87.579 ms

Loss rate: 0.63%

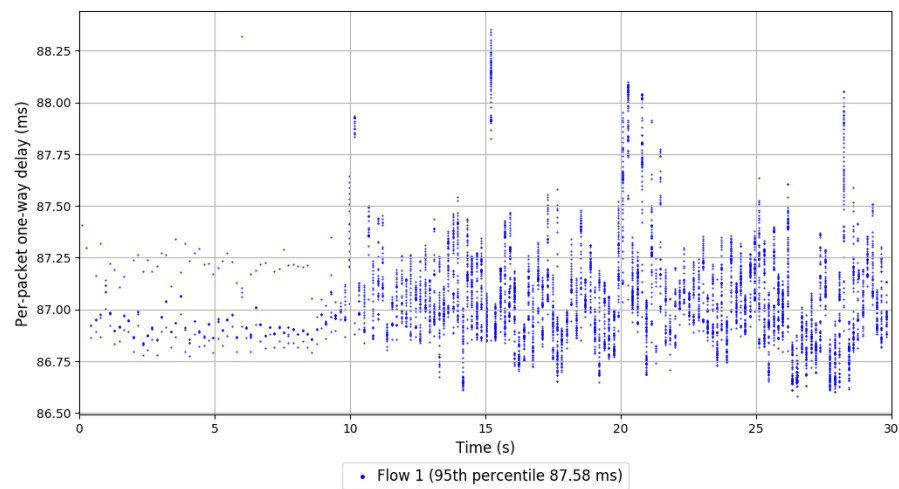
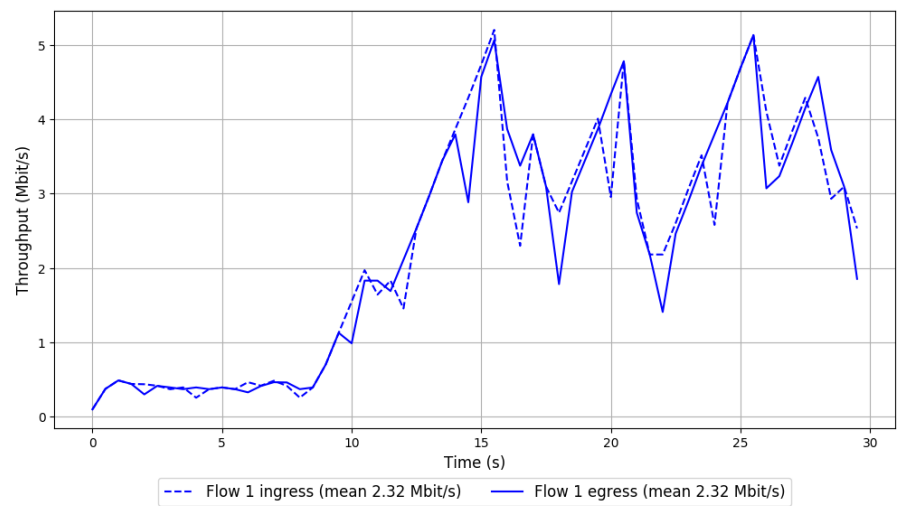
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 87.579 ms

Loss rate: 0.63%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-05 07:30:06

End at: 2017-12-05 07:30:36

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 88.010 ms

Loss rate: 0.68%

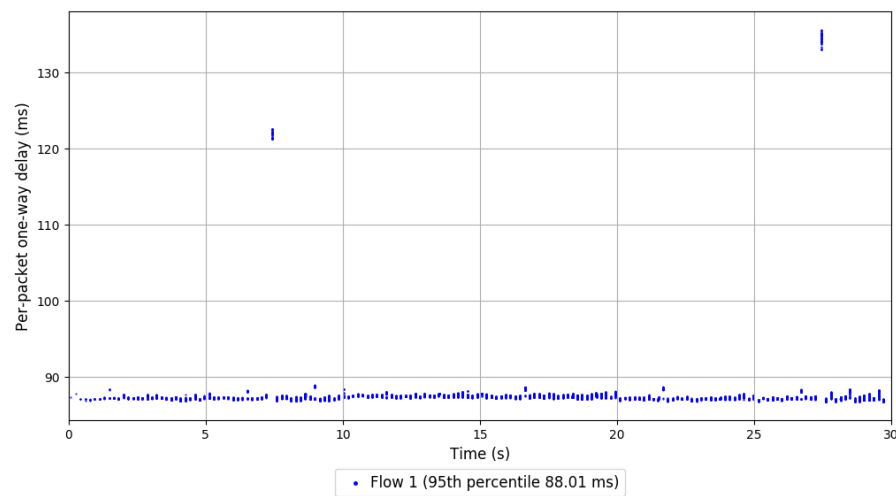
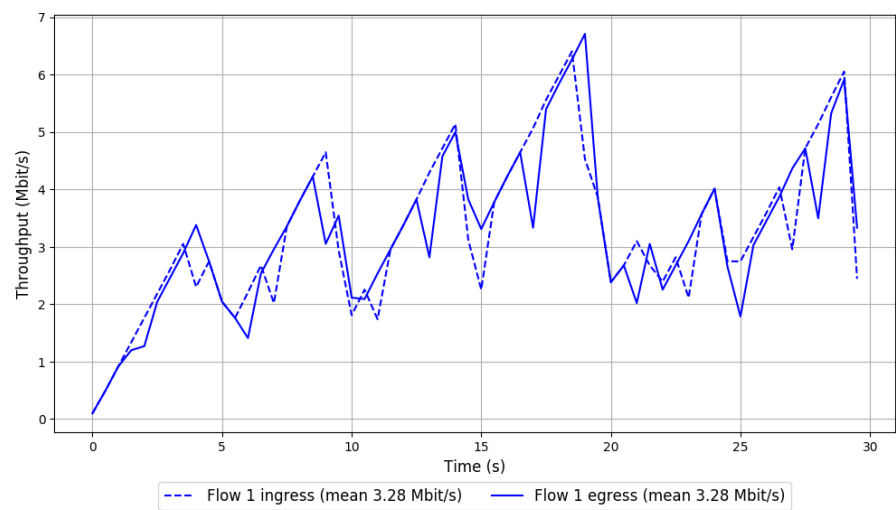
-- Flow 1:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 88.010 ms

Loss rate: 0.68%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-05 07:41:22

End at: 2017-12-05 07:41:52

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 87.559 ms

Loss rate: 1.11%

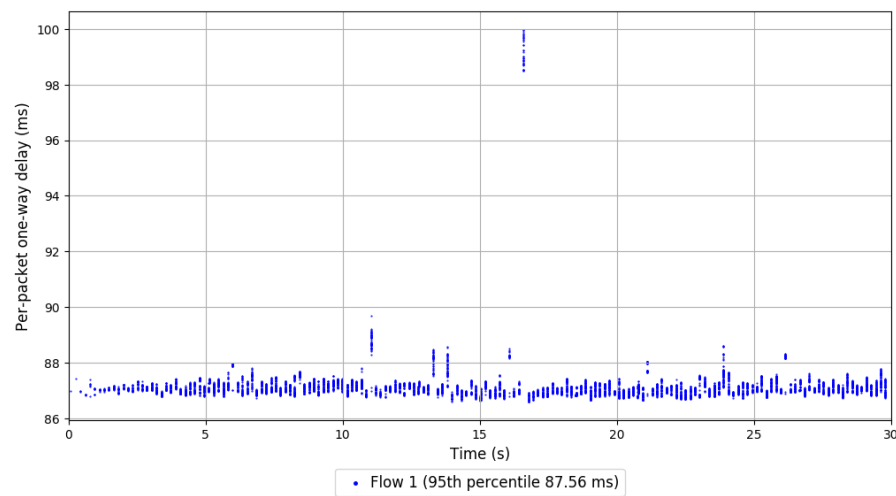
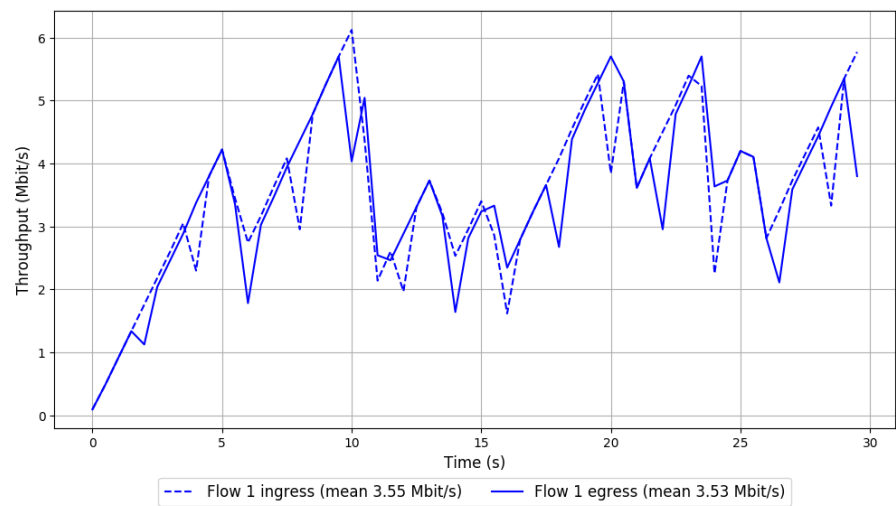
-- Flow 1:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 87.559 ms

Loss rate: 1.11%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-05 07:52:20

End at: 2017-12-05 07:52:50

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 87.476 ms

Loss rate: 1.83%

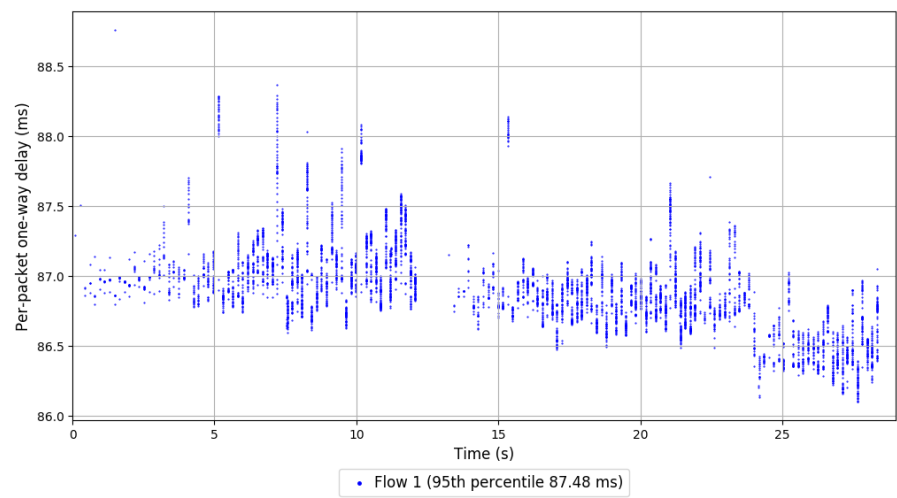
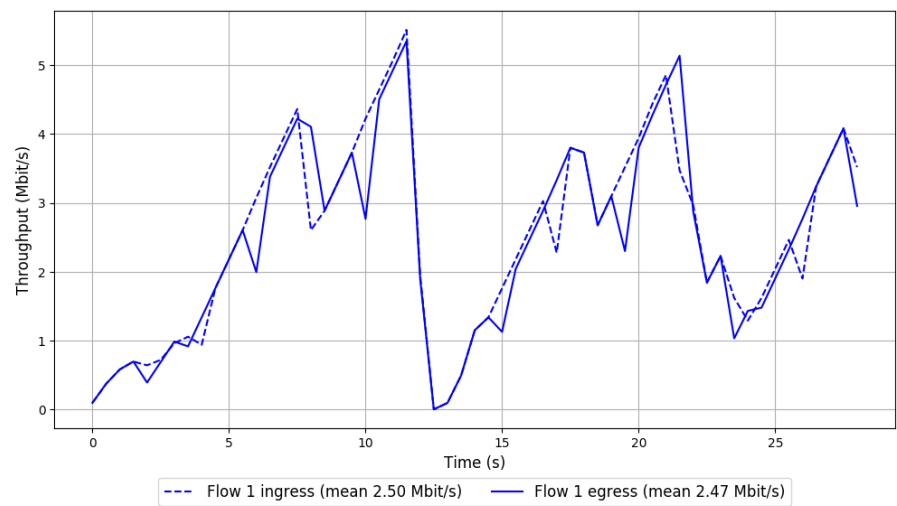
-- Flow 1:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 87.476 ms

Loss rate: 1.83%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

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

End at: 2017-12-05 08:03:41

Below is generated by plot.py at 2017-12-05 10:06:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 114.638 ms

Loss rate: 2.20%

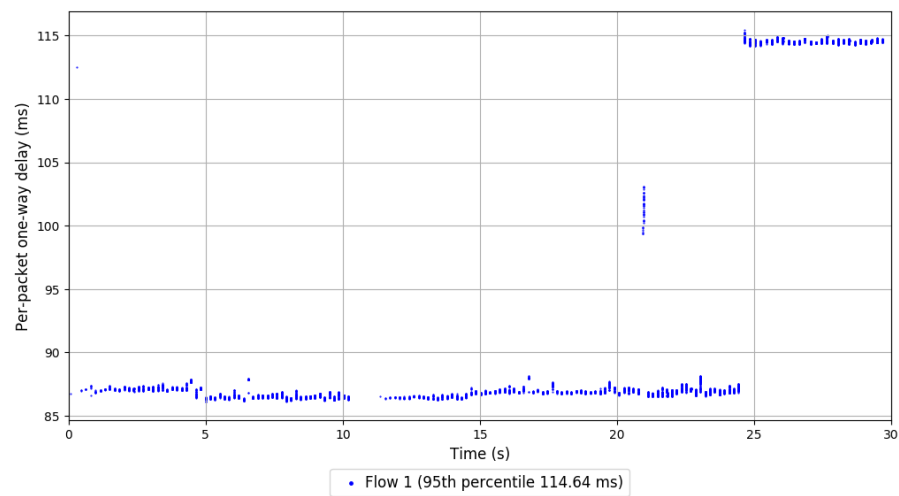
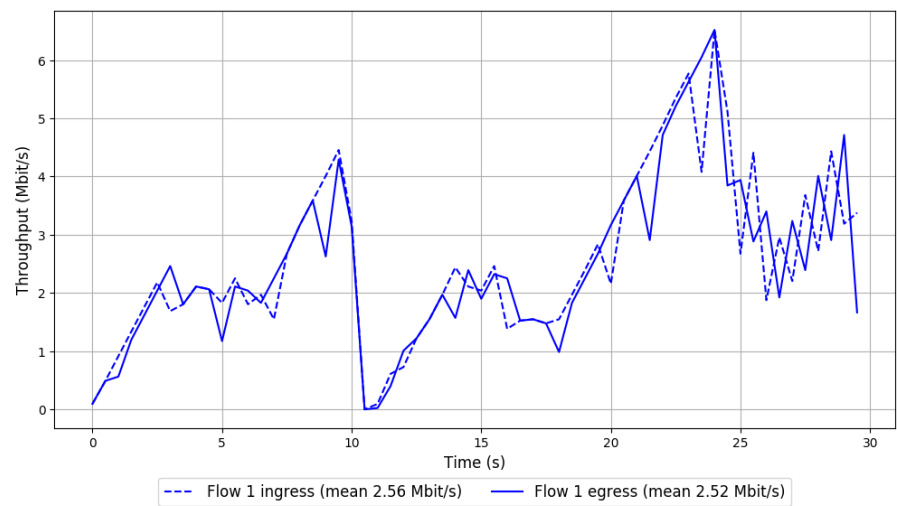
-- Flow 1:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 114.638 ms

Loss rate: 2.20%

Run 10: Report of LEDBAT — Data Link

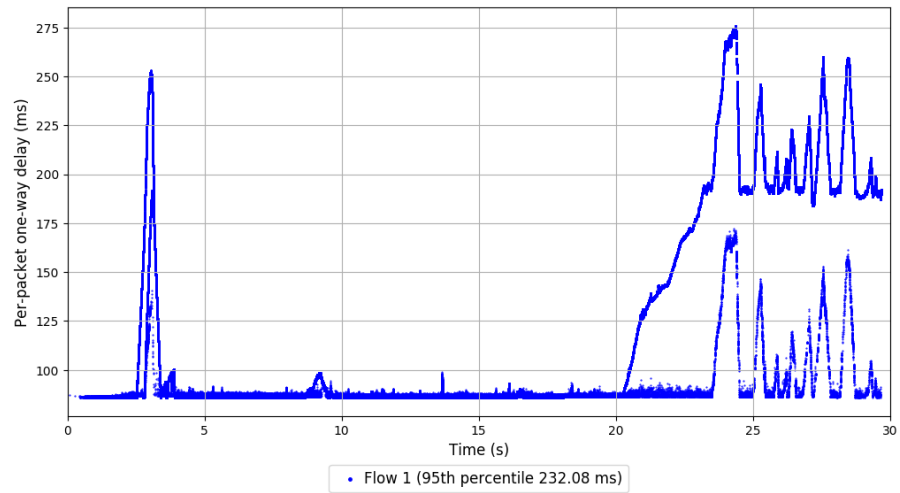
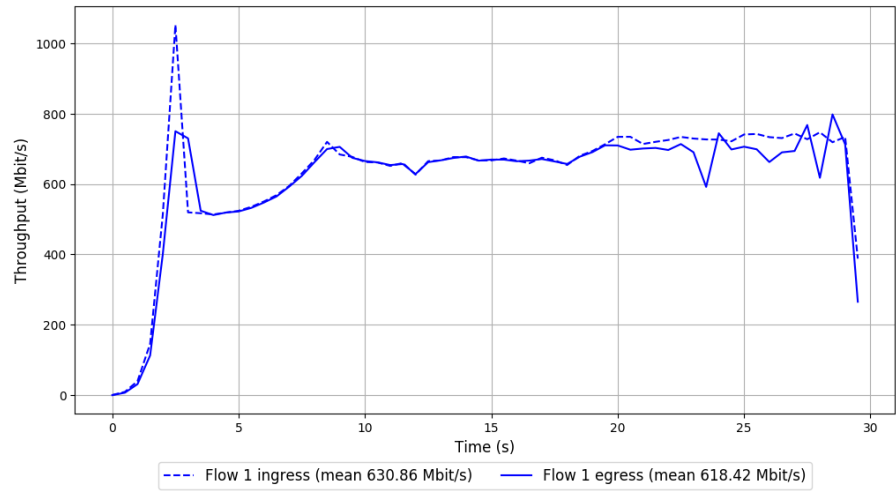


```
Run 1: Statistics of PCC

Start at: 2017-12-05 06:20:28
End at: 2017-12-05 06:20:58

# Below is generated by plot.py at 2017-12-05 10:16:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 618.42 Mbit/s
95th percentile per-packet one-way delay: 232.083 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 618.42 Mbit/s
95th percentile per-packet one-way delay: 232.083 ms
Loss rate: 2.63%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-05 06:31:34

End at: 2017-12-05 06:32:04

Below is generated by plot.py at 2017-12-05 10:16:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 584.02 Mbit/s

95th percentile per-packet one-way delay: 151.886 ms

Loss rate: 1.29%

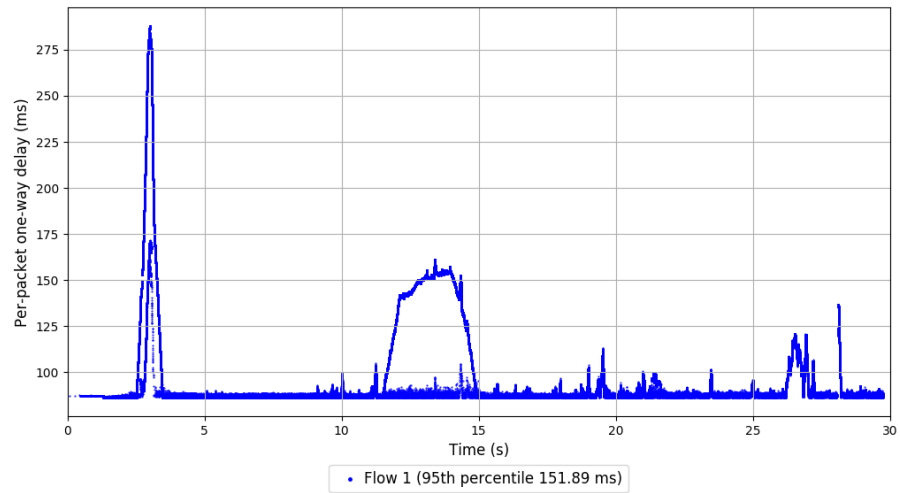
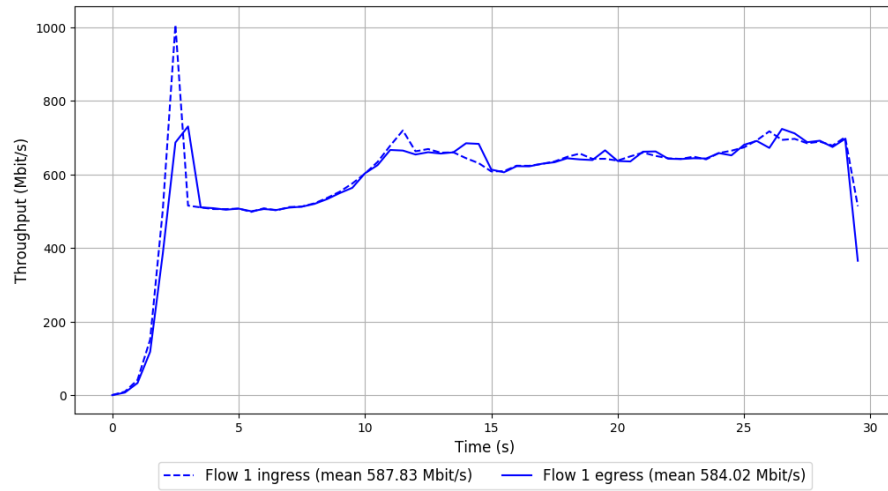
-- Flow 1:

Average throughput: 584.02 Mbit/s

95th percentile per-packet one-way delay: 151.886 ms

Loss rate: 1.29%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-05 06:42:46

End at: 2017-12-05 06:43:16

Below is generated by plot.py at 2017-12-05 10:16:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 594.99 Mbit/s

95th percentile per-packet one-way delay: 157.502 ms

Loss rate: 1.30%

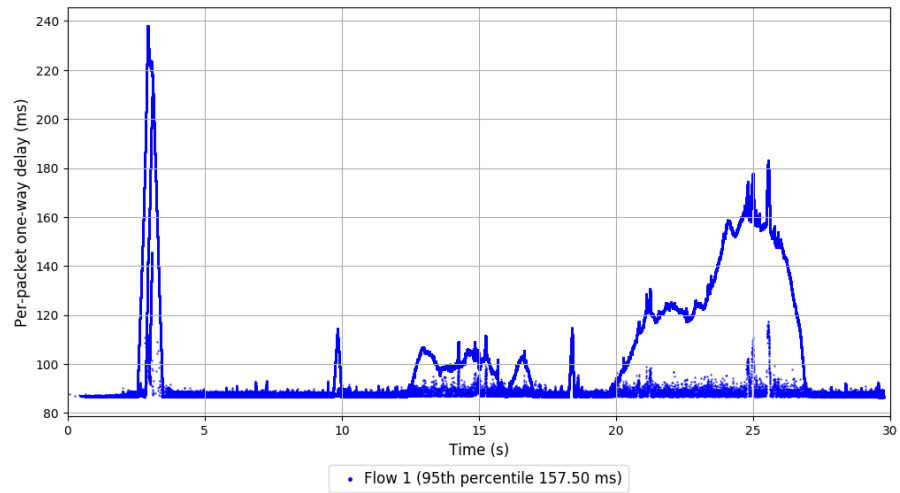
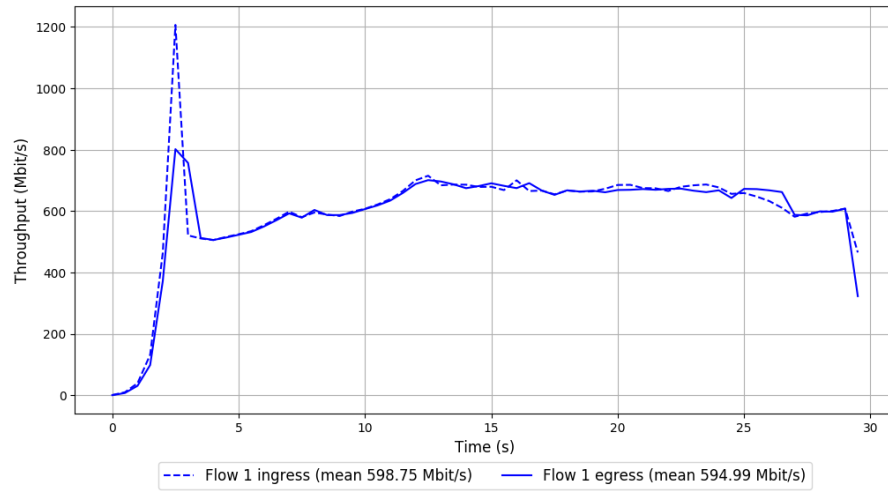
-- Flow 1:

Average throughput: 594.99 Mbit/s

95th percentile per-packet one-way delay: 157.502 ms

Loss rate: 1.30%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-05 06:53:54

End at: 2017-12-05 06:54:24

Below is generated by plot.py at 2017-12-05 10:16:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 557.35 Mbit/s

95th percentile per-packet one-way delay: 138.986 ms

Loss rate: 2.22%

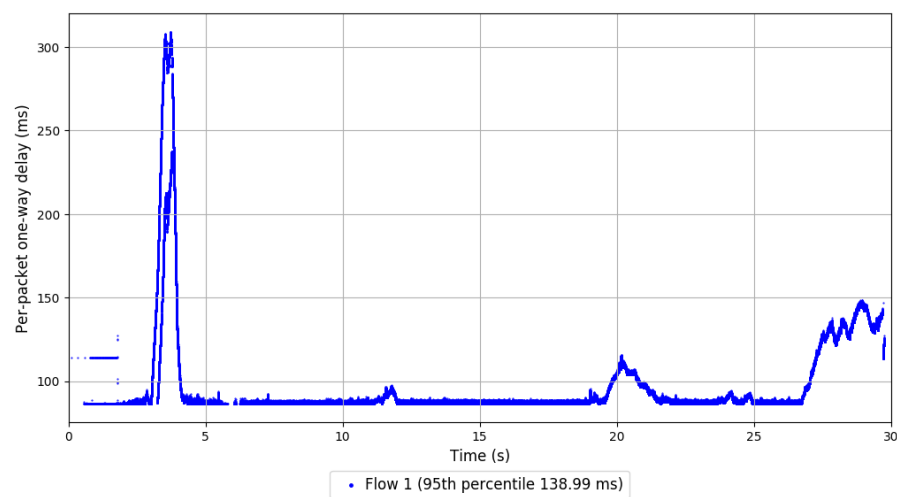
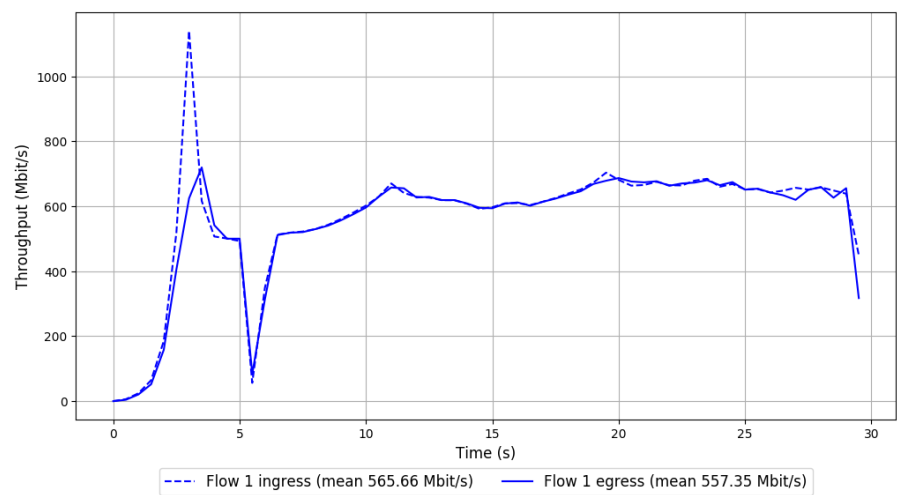
-- Flow 1:

Average throughput: 557.35 Mbit/s

95th percentile per-packet one-way delay: 138.986 ms

Loss rate: 2.22%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-05 07:04:52

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

Below is generated by plot.py at 2017-12-05 10:16:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.73 Mbit/s

95th percentile per-packet one-way delay: 86.872 ms

Loss rate: 3.63%

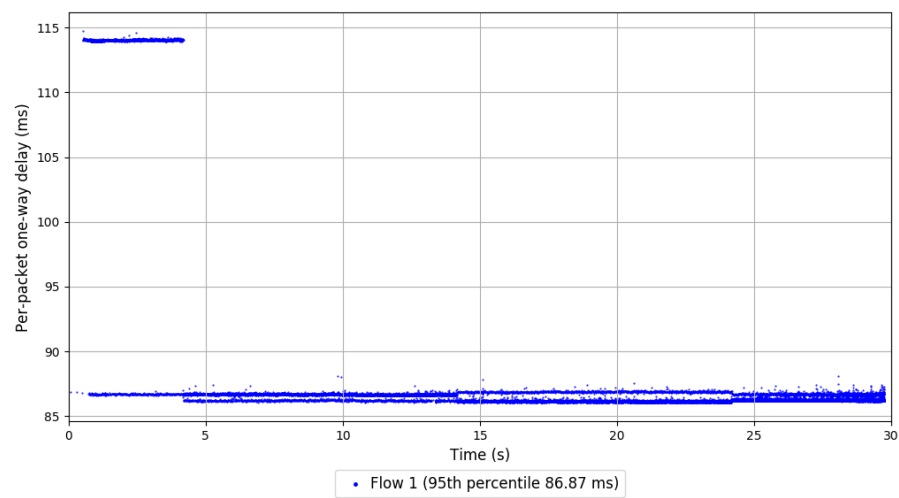
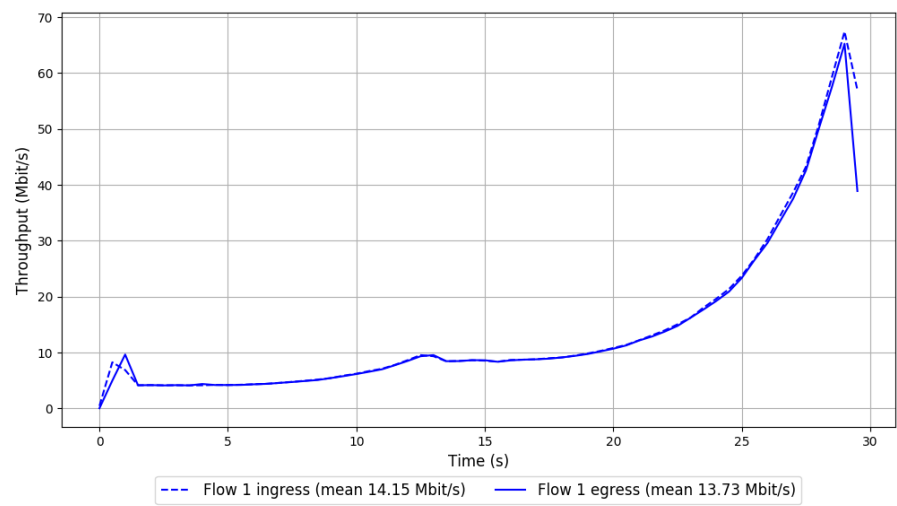
-- Flow 1:

Average throughput: 13.73 Mbit/s

95th percentile per-packet one-way delay: 86.872 ms

Loss rate: 3.63%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-05 07:15:38

End at: 2017-12-05 07:16:08

Below is generated by plot.py at 2017-12-05 10:16:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 585.26 Mbit/s

95th percentile per-packet one-way delay: 117.722 ms

Loss rate: 1.52%

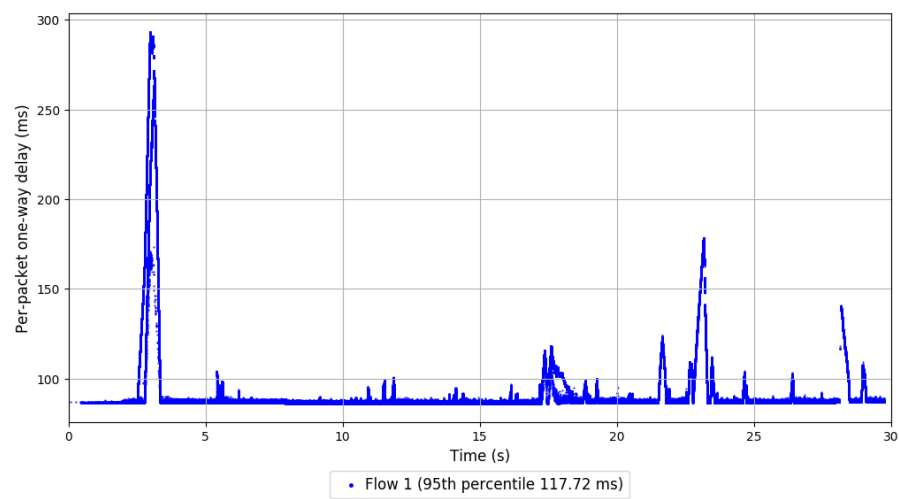
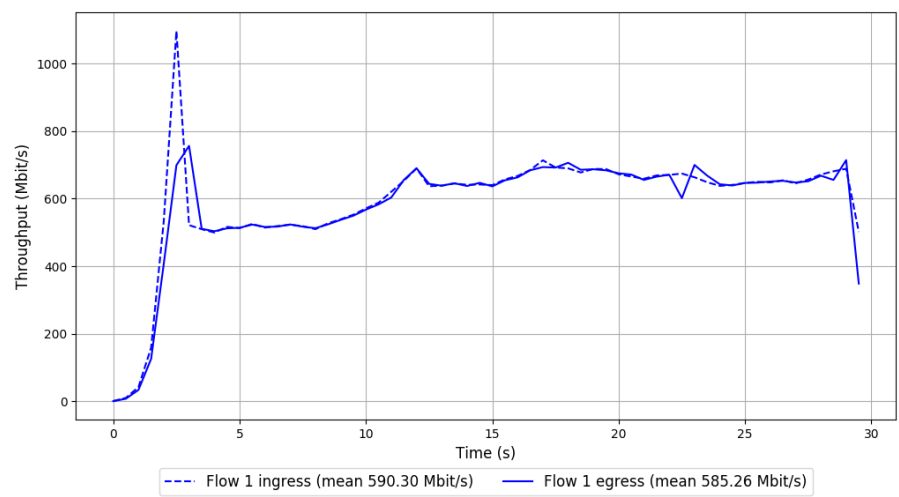
-- Flow 1:

Average throughput: 585.26 Mbit/s

95th percentile per-packet one-way delay: 117.722 ms

Loss rate: 1.52%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-05 07:27:00

End at: 2017-12-05 07:27:30

Below is generated by plot.py at 2017-12-05 10:16:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 584.22 Mbit/s

95th percentile per-packet one-way delay: 193.966 ms

Loss rate: 1.65%

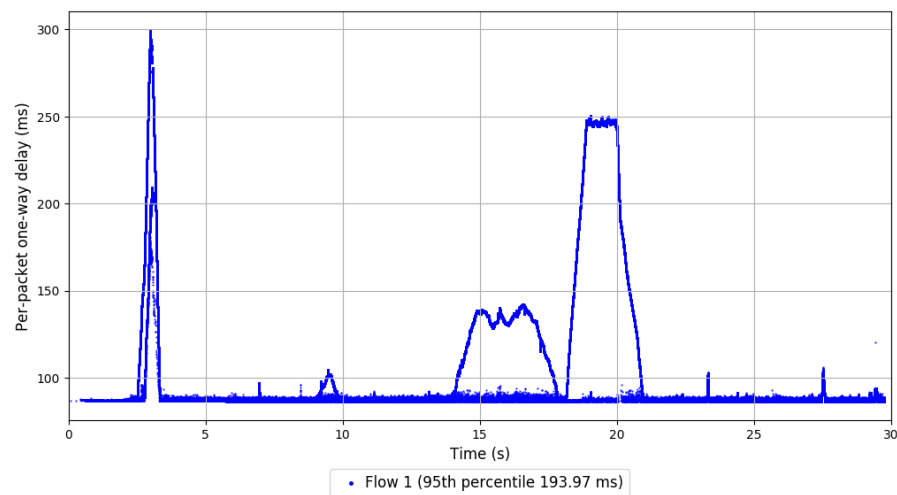
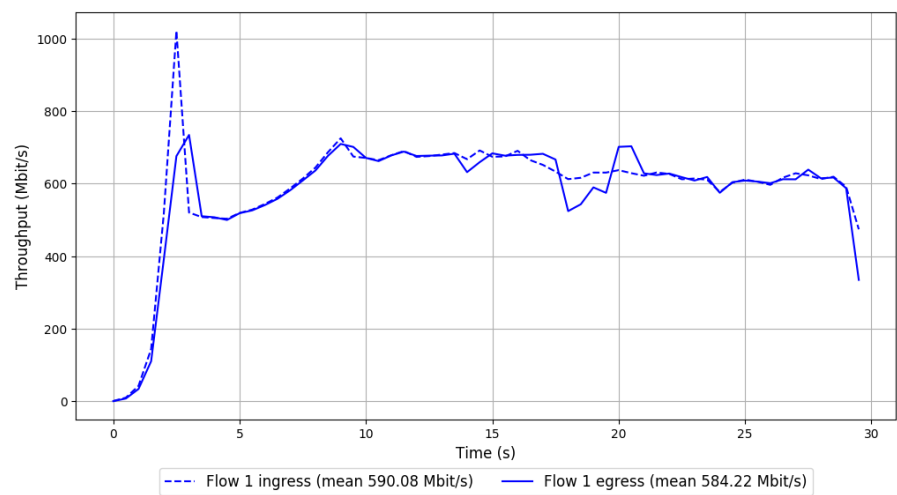
-- Flow 1:

Average throughput: 584.22 Mbit/s

95th percentile per-packet one-way delay: 193.966 ms

Loss rate: 1.65%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-05 07:38:15

End at: 2017-12-05 07:38:45

Below is generated by plot.py at 2017-12-05 10:16:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 604.91 Mbit/s

95th percentile per-packet one-way delay: 119.669 ms

Loss rate: 1.15%

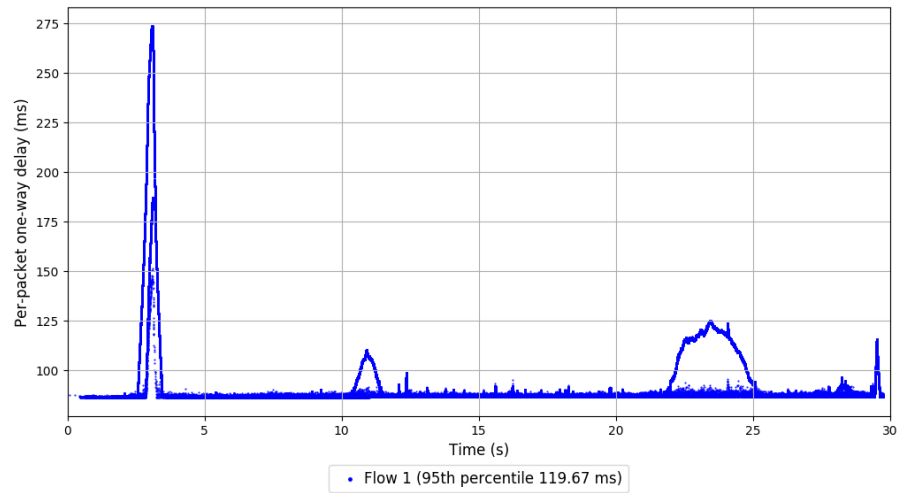
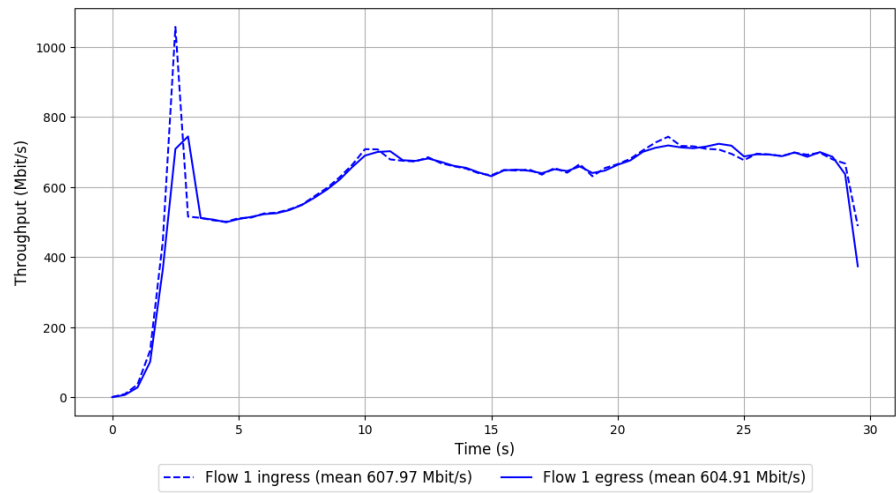
-- Flow 1:

Average throughput: 604.91 Mbit/s

95th percentile per-packet one-way delay: 119.669 ms

Loss rate: 1.15%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-05 07:49:13

End at: 2017-12-05 07:49:43

Below is generated by plot.py at 2017-12-05 10:16:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 596.39 Mbit/s

95th percentile per-packet one-way delay: 211.996 ms

Loss rate: 2.78%

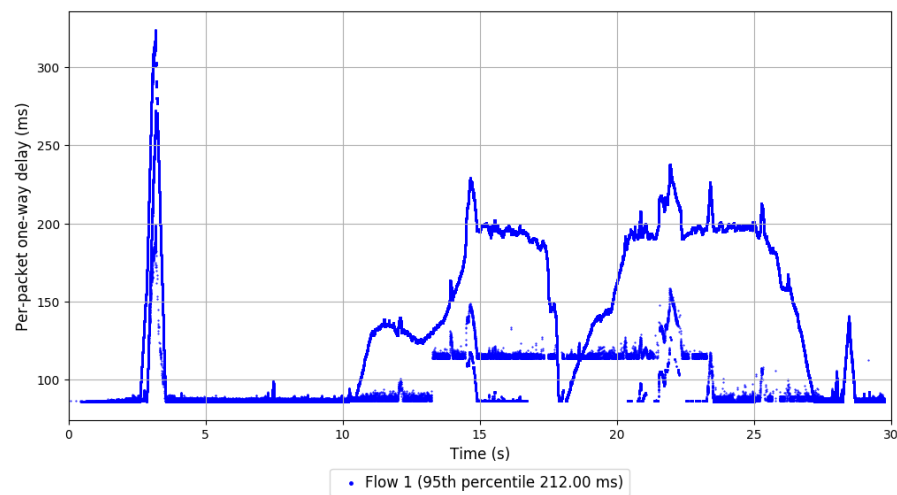
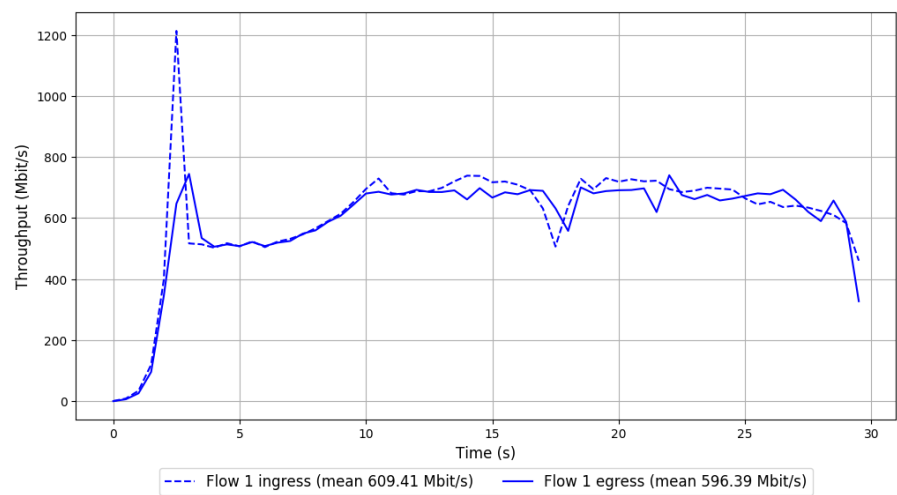
-- Flow 1:

Average throughput: 596.39 Mbit/s

95th percentile per-packet one-way delay: 211.996 ms

Loss rate: 2.78%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-05 08:00:28

End at: 2017-12-05 08:00:58

Below is generated by plot.py at 2017-12-05 10:16:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.03 Mbit/s

95th percentile per-packet one-way delay: 114.293 ms

Loss rate: 1.15%

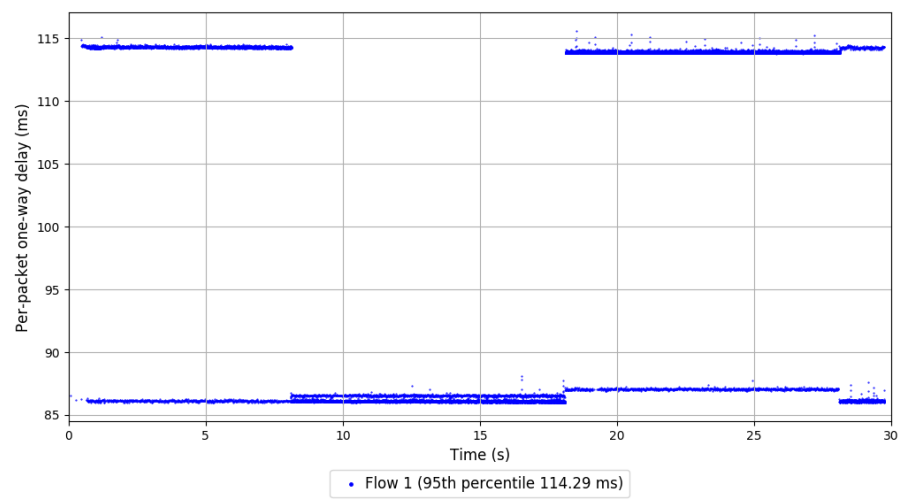
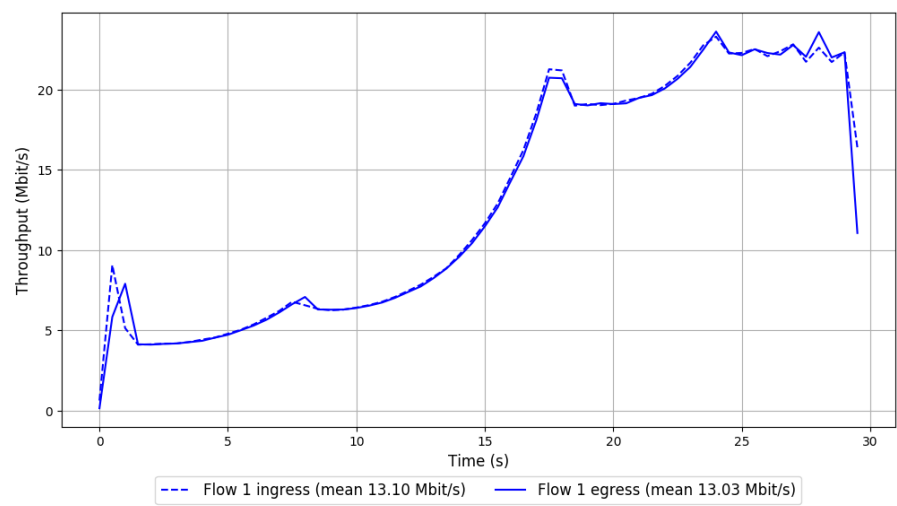
-- Flow 1:

Average throughput: 13.03 Mbit/s

95th percentile per-packet one-way delay: 114.293 ms

Loss rate: 1.15%

Run 10: Report of PCC — Data Link

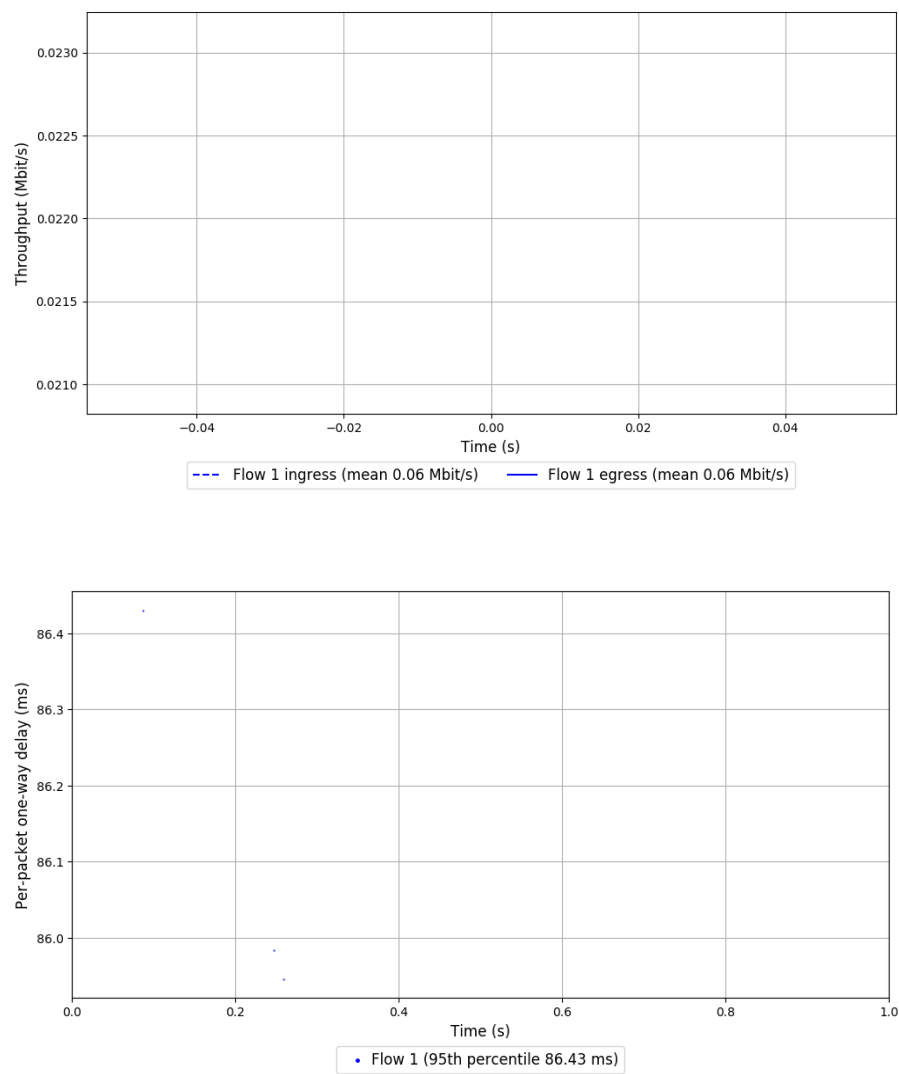


Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 06:18:24

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

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 06:29:28

End at: 2017-12-05 06:29:58

Below is generated by plot.py at 2017-12-05 10:17:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.42 Mbit/s

95th percentile per-packet one-way delay: 86.643 ms

Loss rate: 0.85%

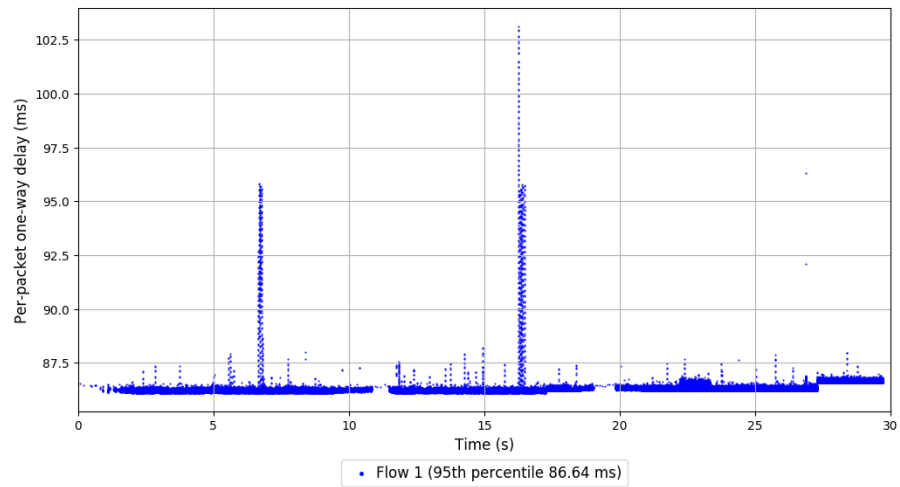
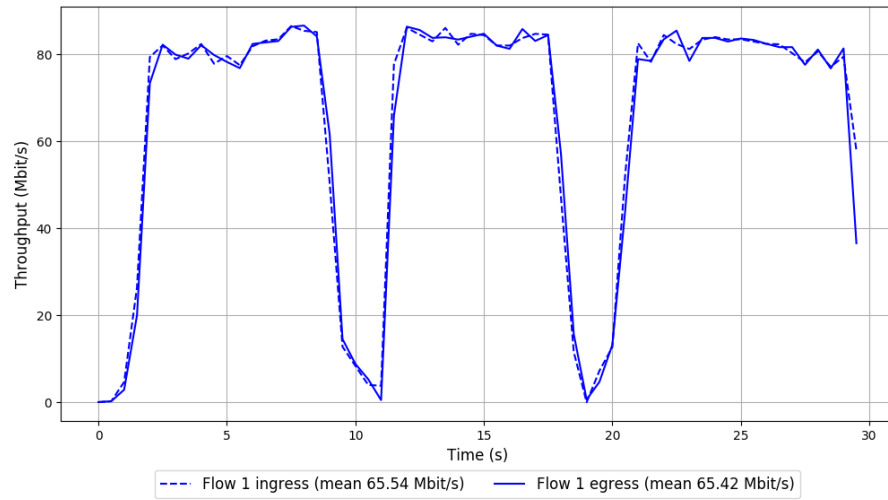
-- Flow 1:

Average throughput: 65.42 Mbit/s

95th percentile per-packet one-way delay: 86.643 ms

Loss rate: 0.85%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 06:40:42

End at: 2017-12-05 06:41:12

Below is generated by plot.py at 2017-12-05 10:17:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.72 Mbit/s

95th percentile per-packet one-way delay: 87.111 ms

Loss rate: 0.85%

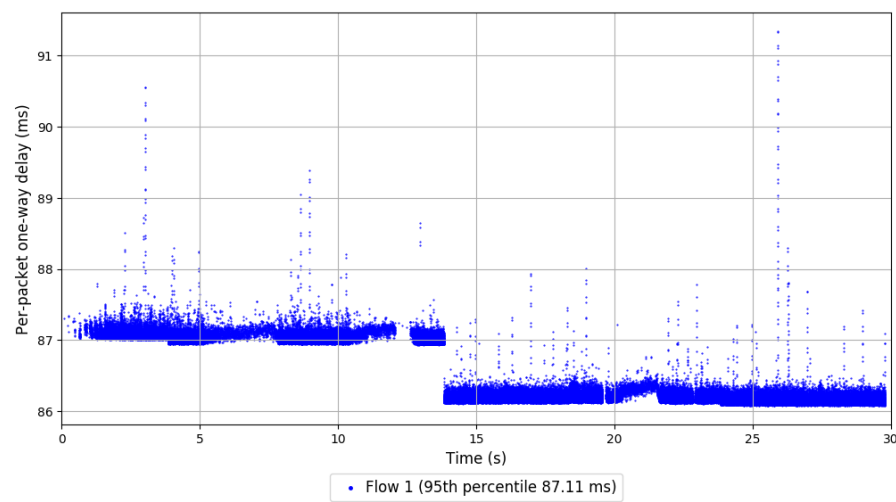
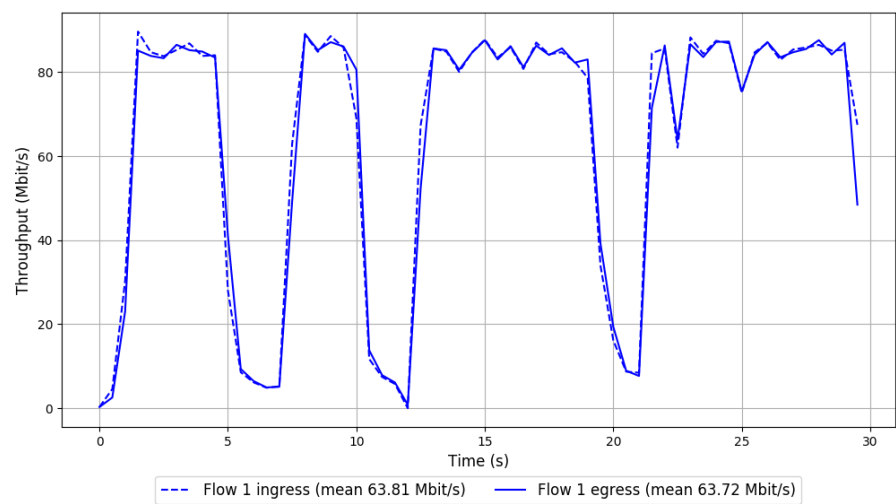
-- Flow 1:

Average throughput: 63.72 Mbit/s

95th percentile per-packet one-way delay: 87.111 ms

Loss rate: 0.85%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-05 06:51:45

End at: 2017-12-05 06:52:15

Below is generated by plot.py at 2017-12-05 10:17:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.41 Mbit/s

95th percentile per-packet one-way delay: 86.230 ms

Loss rate: 0.78%

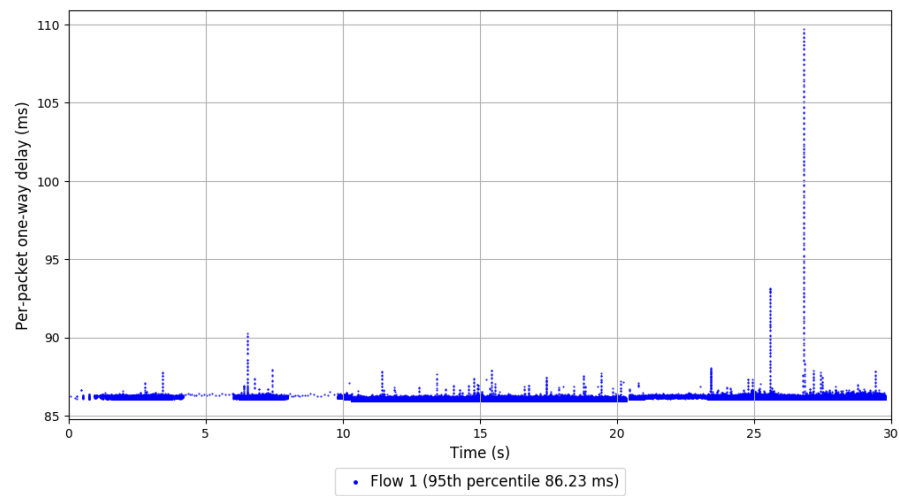
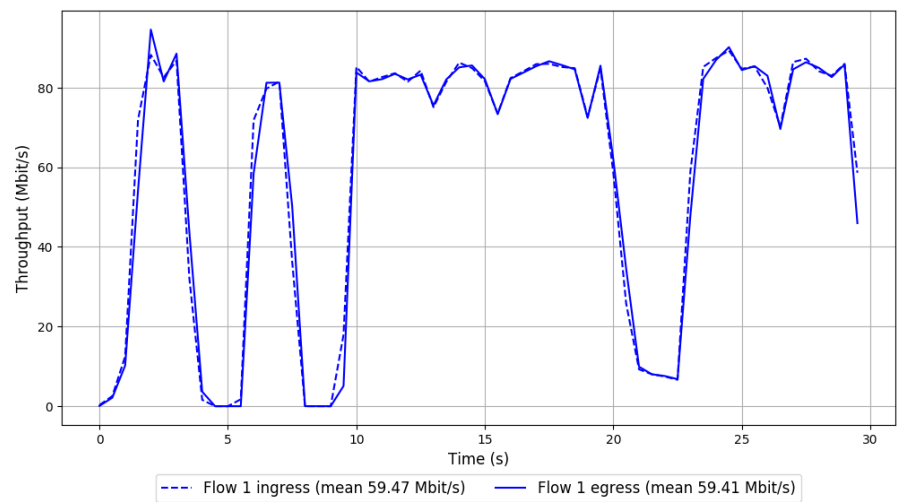
-- Flow 1:

Average throughput: 59.41 Mbit/s

95th percentile per-packet one-way delay: 86.230 ms

Loss rate: 0.78%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-05 07:02:43

End at: 2017-12-05 07:03:13

Below is generated by plot.py at 2017-12-05 10:17:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.17 Mbit/s

95th percentile per-packet one-way delay: 86.709 ms

Loss rate: 1.12%

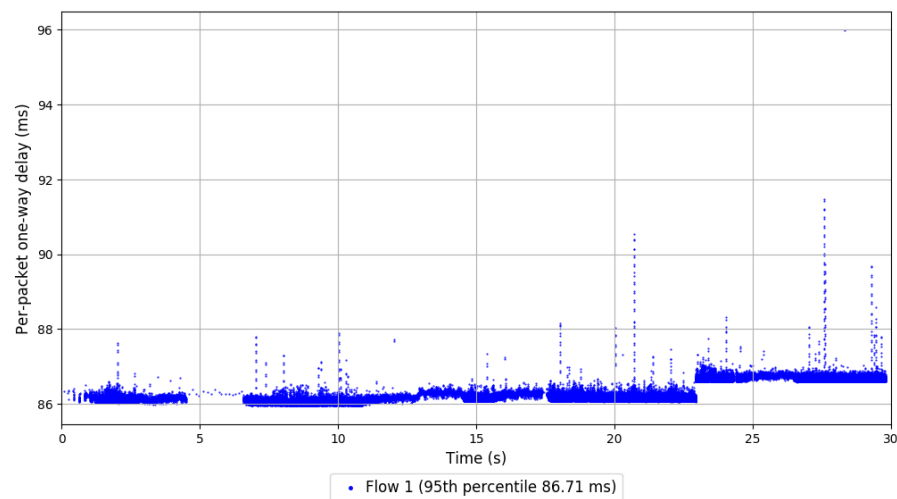
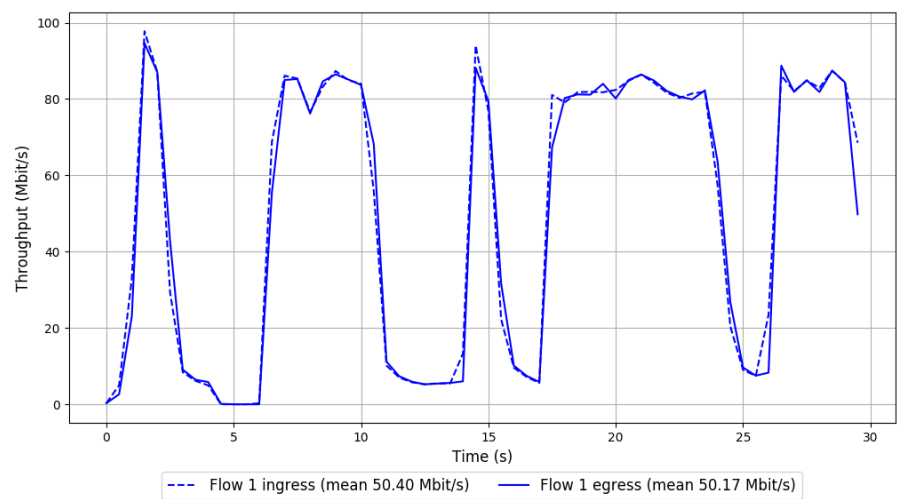
-- Flow 1:

Average throughput: 50.17 Mbit/s

95th percentile per-packet one-way delay: 86.709 ms

Loss rate: 1.12%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-05 07:13:32

End at: 2017-12-05 07:14:02

Below is generated by plot.py at 2017-12-05 10:17:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.72 Mbit/s

95th percentile per-packet one-way delay: 86.734 ms

Loss rate: 0.86%

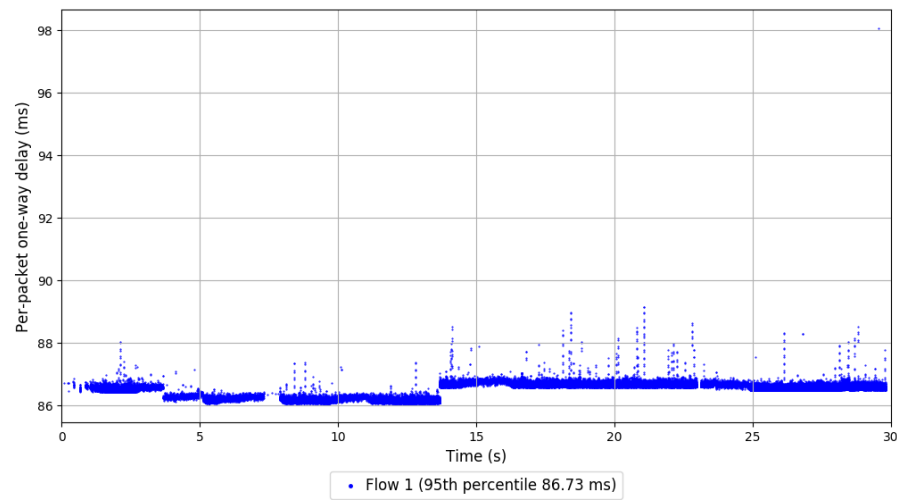
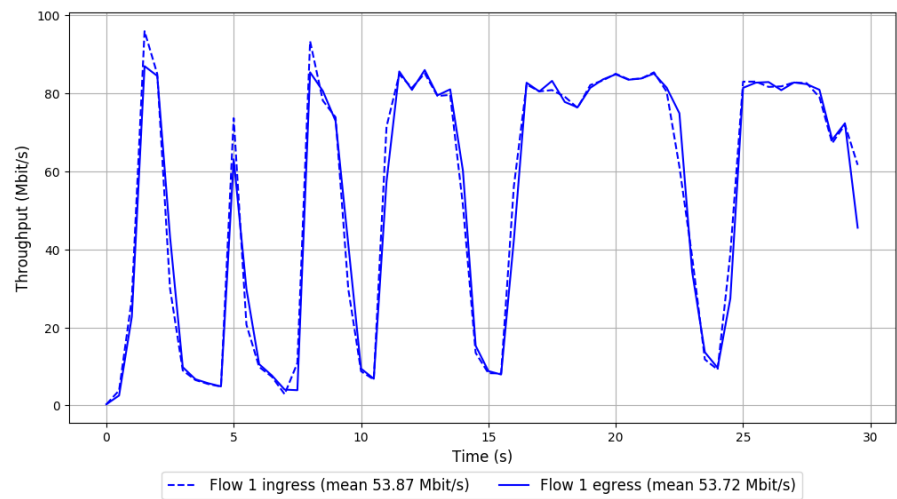
-- Flow 1:

Average throughput: 53.72 Mbit/s

95th percentile per-packet one-way delay: 86.734 ms

Loss rate: 0.86%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-05 07:24:52

End at: 2017-12-05 07:25:22

Below is generated by plot.py at 2017-12-05 10:17:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.28 Mbit/s

95th percentile per-packet one-way delay: 86.844 ms

Loss rate: 0.97%

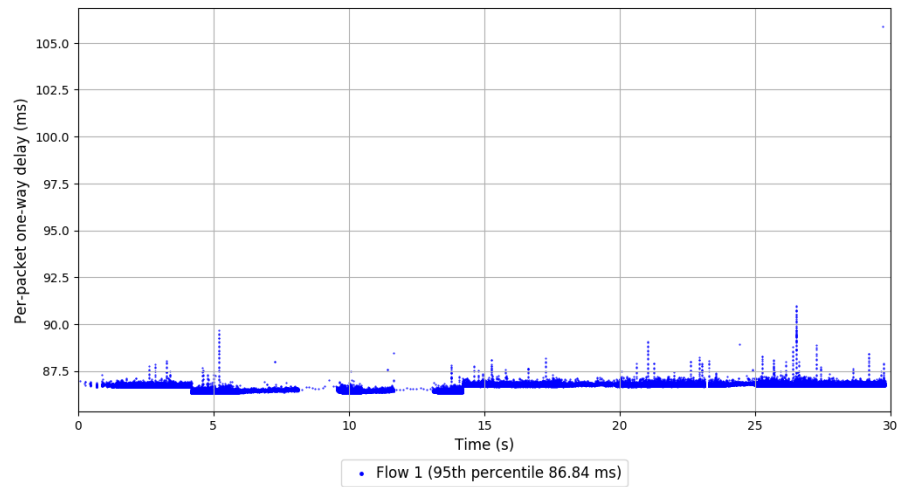
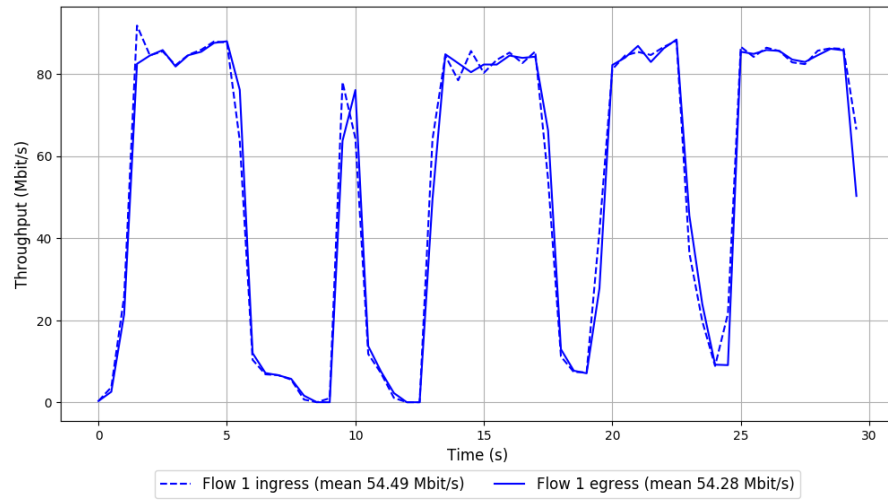
-- Flow 1:

Average throughput: 54.28 Mbit/s

95th percentile per-packet one-way delay: 86.844 ms

Loss rate: 0.97%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-05 07:36:05

End at: 2017-12-05 07:36:35

Below is generated by plot.py at 2017-12-05 10:18:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.95 Mbit/s

95th percentile per-packet one-way delay: 87.138 ms

Loss rate: 0.75%

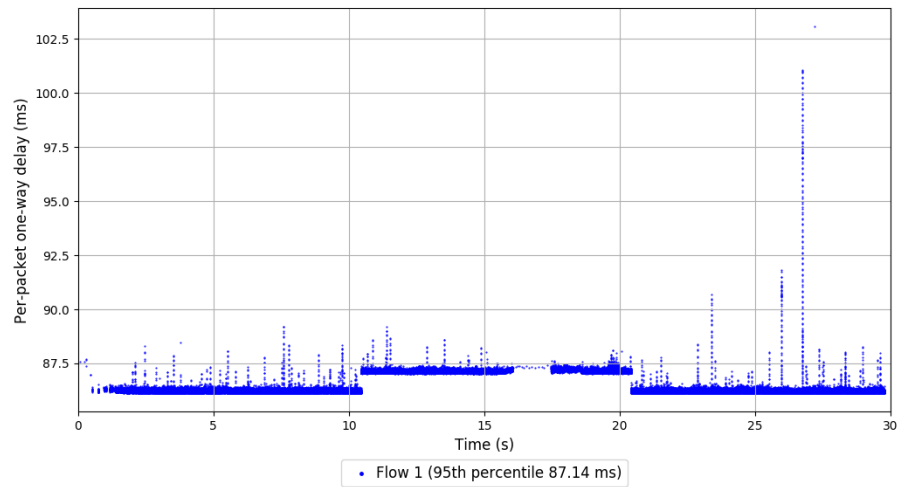
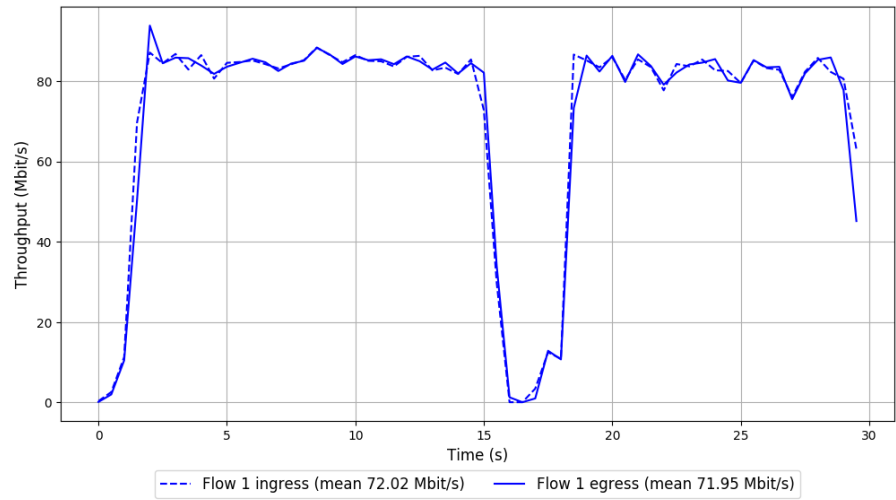
-- Flow 1:

Average throughput: 71.95 Mbit/s

95th percentile per-packet one-way delay: 87.138 ms

Loss rate: 0.75%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

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

End at: 2017-12-05 07:47:35

Below is generated by plot.py at 2017-12-05 10:18:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.11 Mbit/s

95th percentile per-packet one-way delay: 86.778 ms

Loss rate: 0.88%

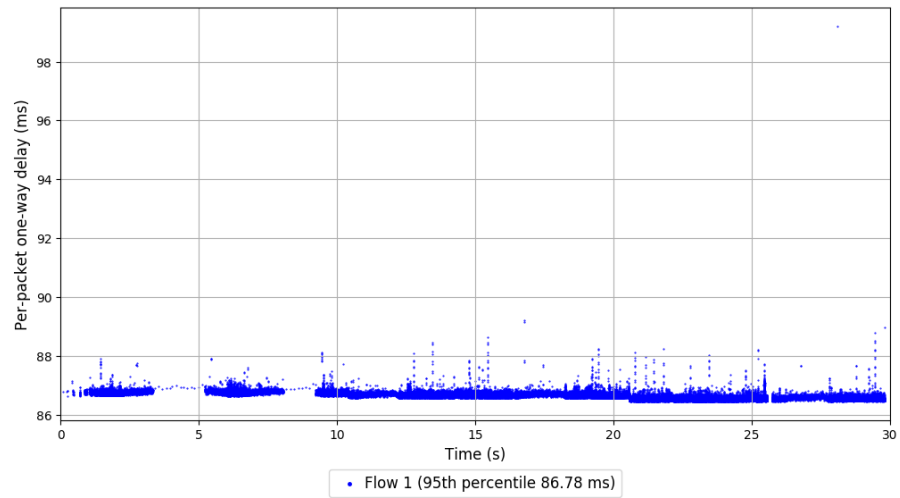
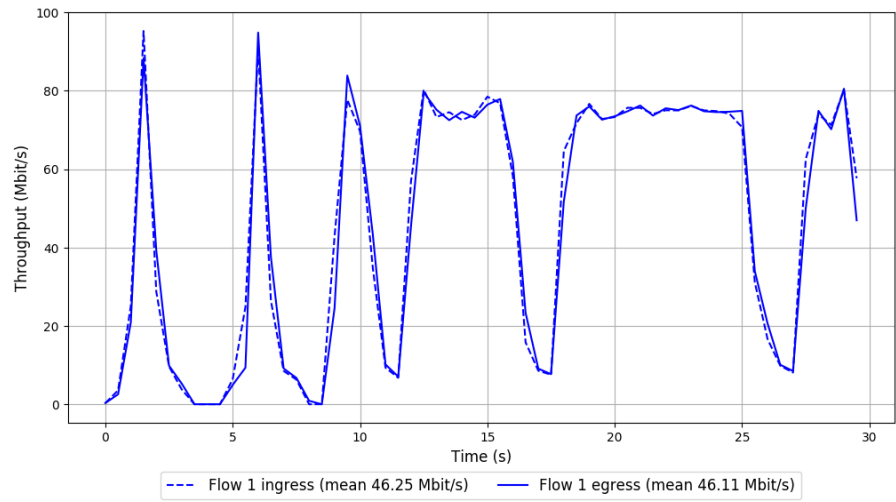
-- Flow 1:

Average throughput: 46.11 Mbit/s

95th percentile per-packet one-way delay: 86.778 ms

Loss rate: 0.88%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-05 07:58:21

End at: 2017-12-05 07:58:51

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.70 Mbit/s

95th percentile per-packet one-way delay: 86.640 ms

Loss rate: 0.71%

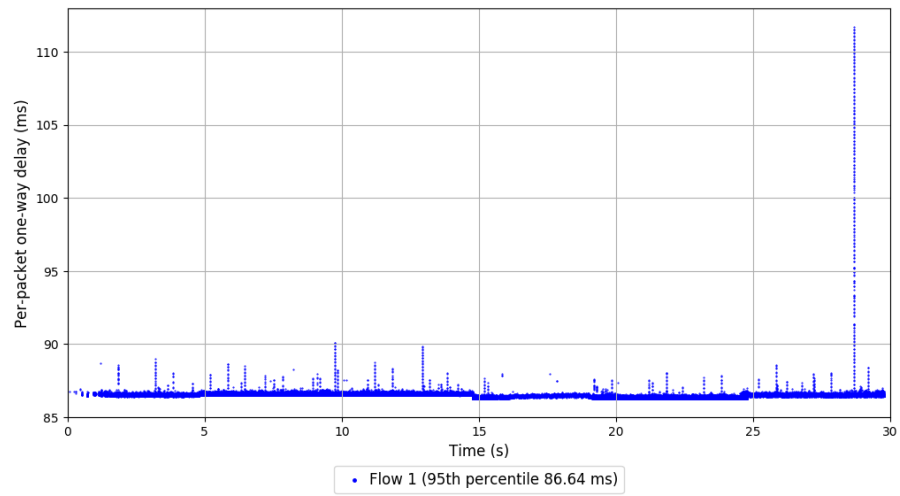
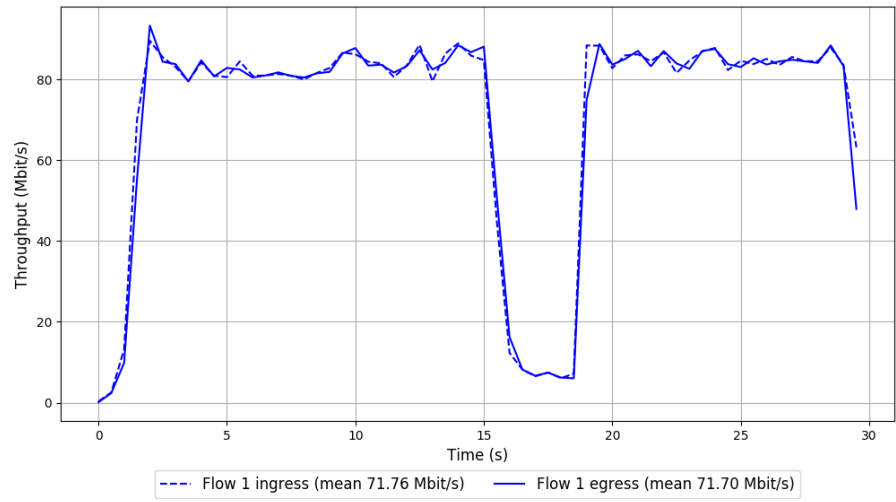
-- Flow 1:

Average throughput: 71.70 Mbit/s

95th percentile per-packet one-way delay: 86.640 ms

Loss rate: 0.71%

Run 10: Report of QUIC Cubic — Data Link

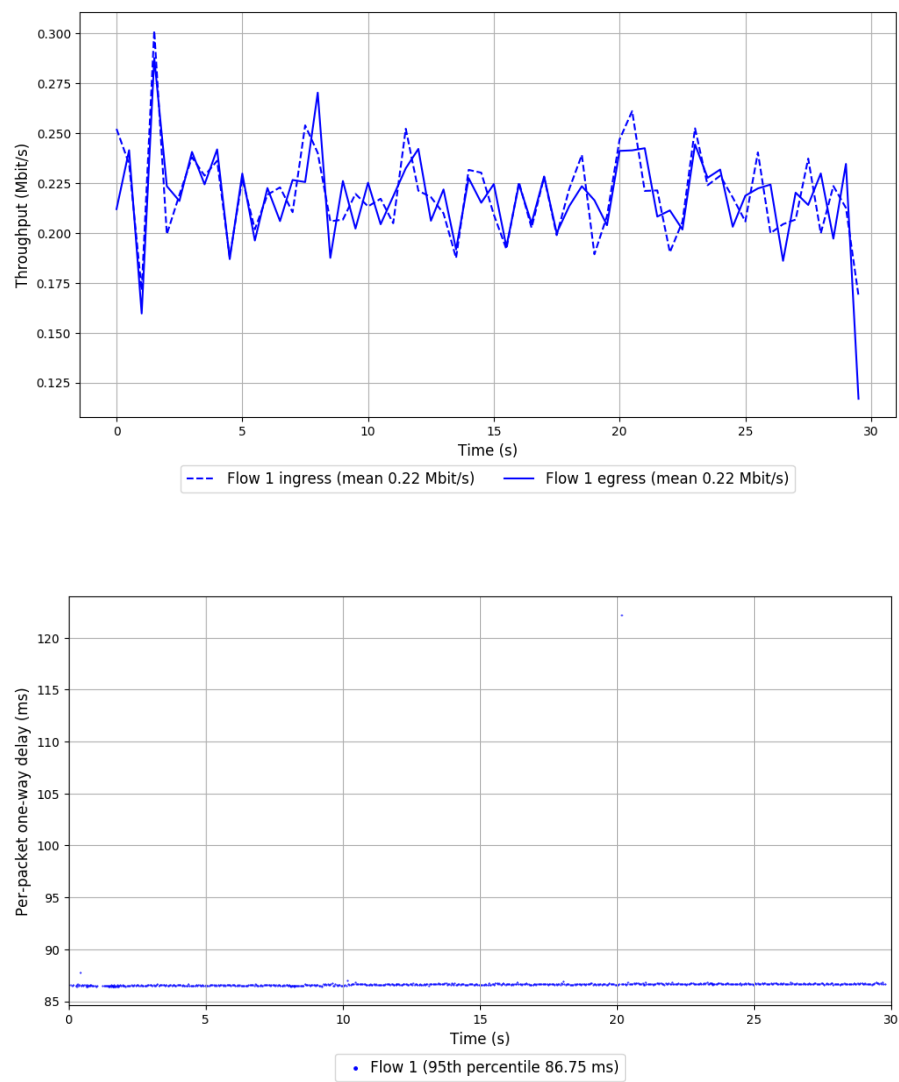


```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 06:22:56
End at: 2017-12-05 06:23:26

# Below is generated by plot.py at 2017-12-05 10:18:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.749 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.749 ms
Loss rate: 0.64%
```

Run 1: Report of SReAM — Data Link

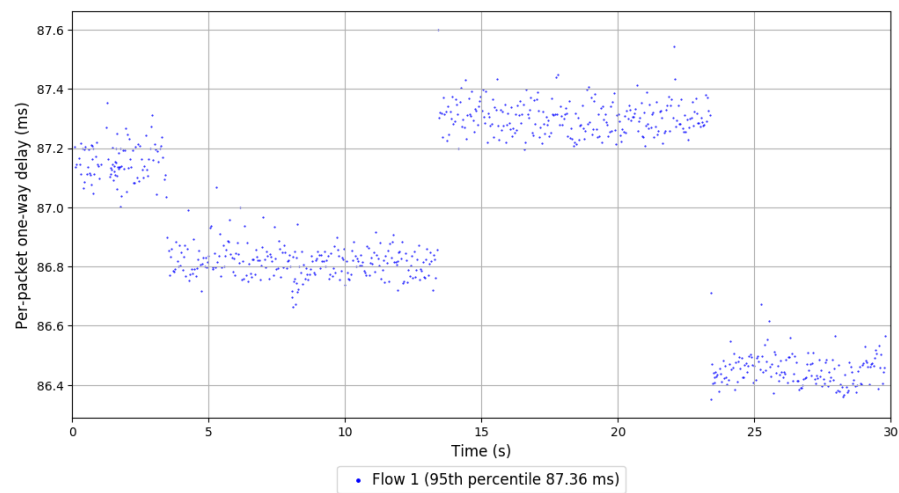
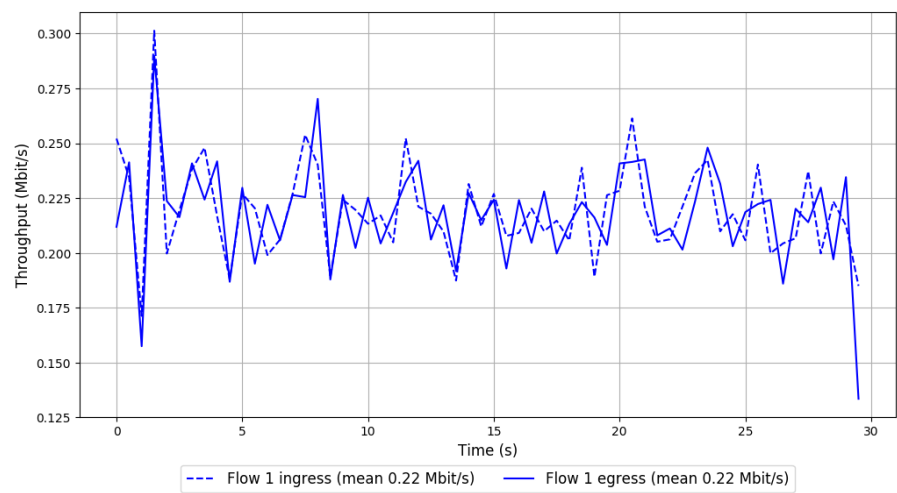


```
Run 2: Statistics of SCReAM

Start at: 2017-12-05 06:34:02
End at: 2017-12-05 06:34:32

# Below is generated by plot.py at 2017-12-05 10:18:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.358 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.358 ms
Loss rate: 0.64%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-05 06:45:15

End at: 2017-12-05 06:45:45

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.235 ms

Loss rate: 0.64%

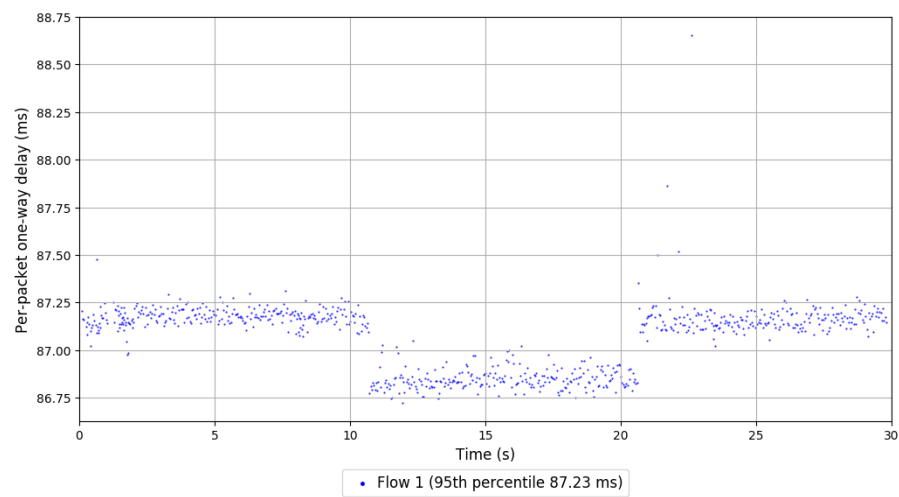
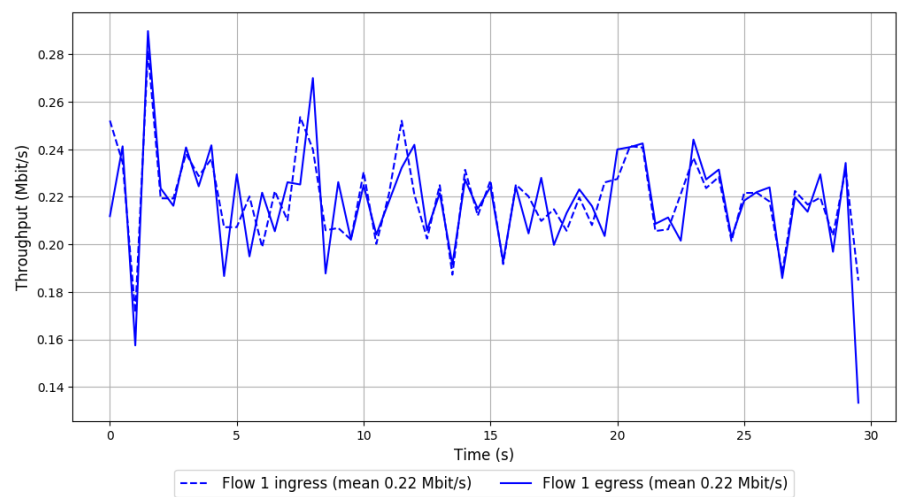
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.235 ms

Loss rate: 0.64%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-05 06:56:19

End at: 2017-12-05 06:56:49

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 87.156 ms

Loss rate: 2.78%

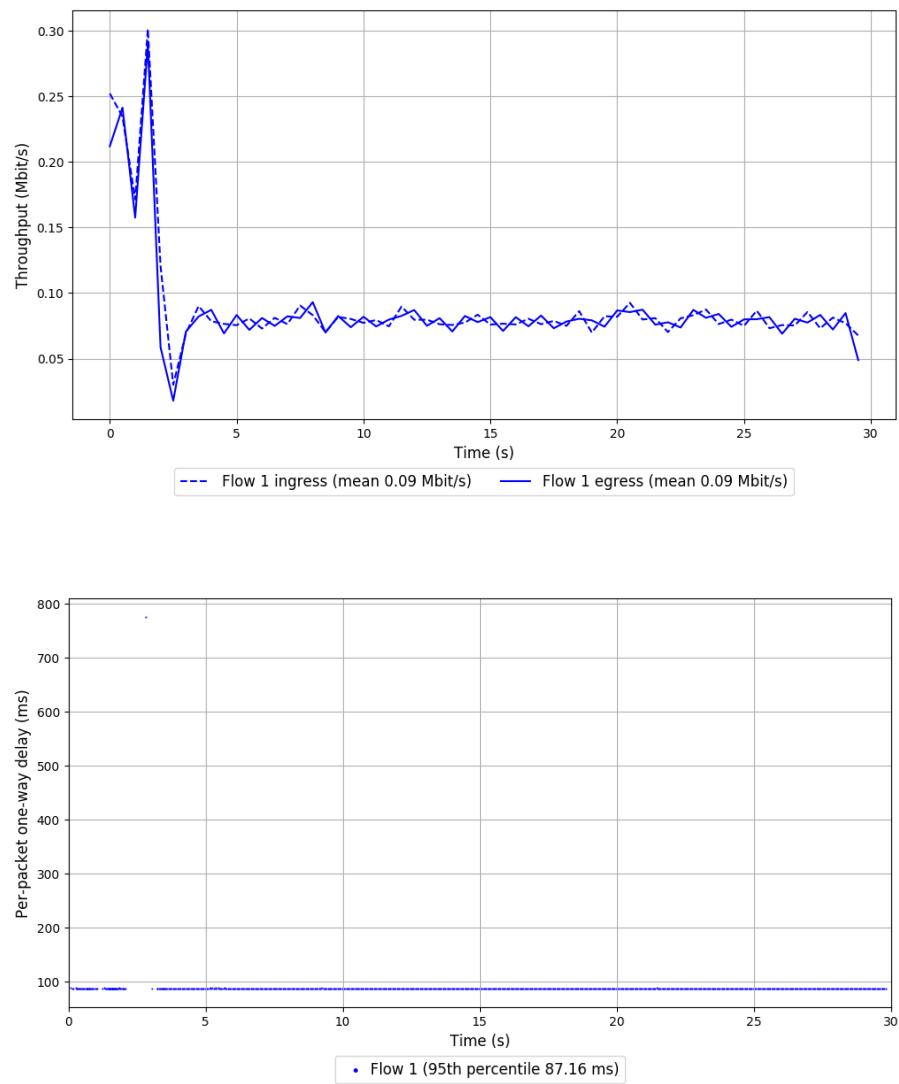
-- Flow 1:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 87.156 ms

Loss rate: 2.78%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-05 07:06:57

End at: 2017-12-05 07:07:27

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.271 ms

Loss rate: 0.76%

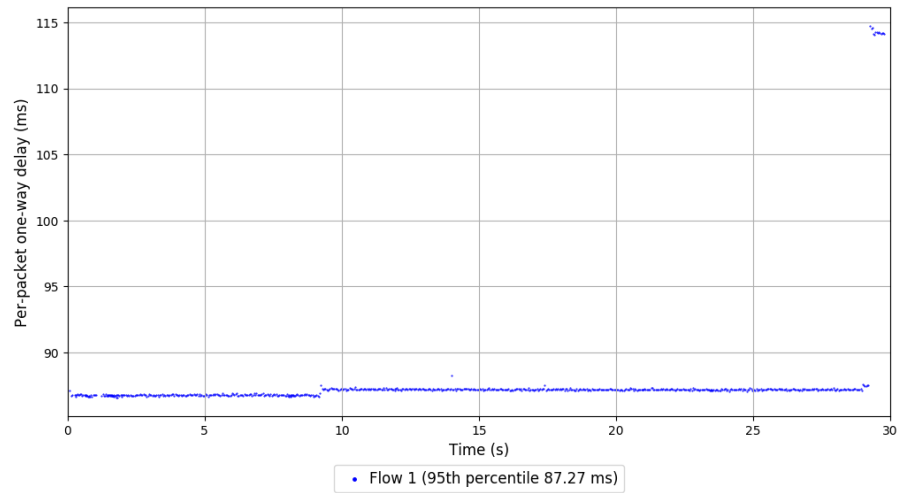
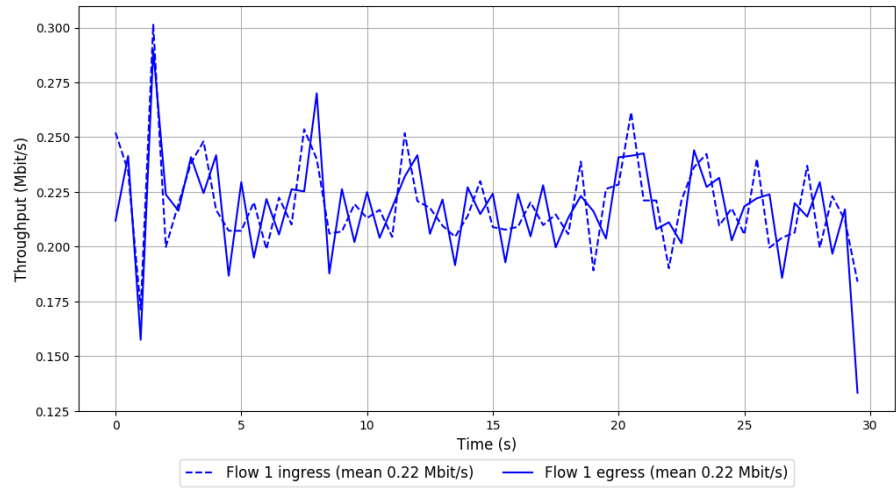
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.271 ms

Loss rate: 0.76%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

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

End at: 2017-12-05 07:18:38

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.962 ms

Loss rate: 0.64%

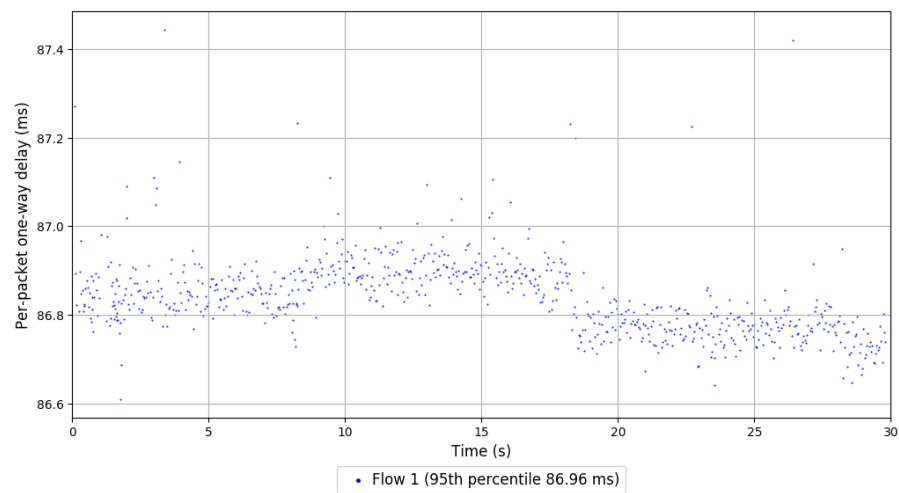
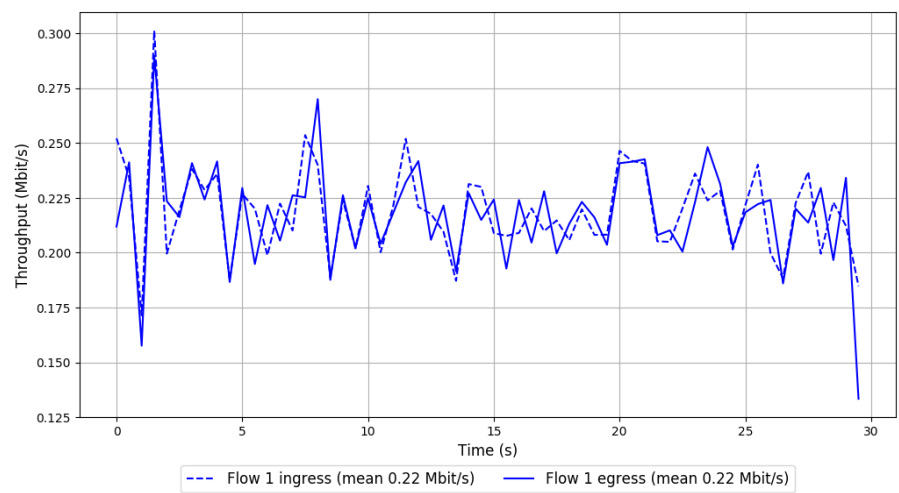
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.962 ms

Loss rate: 0.64%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-05 07:29:26

End at: 2017-12-05 07:29:56

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.033 ms

Loss rate: 0.77%

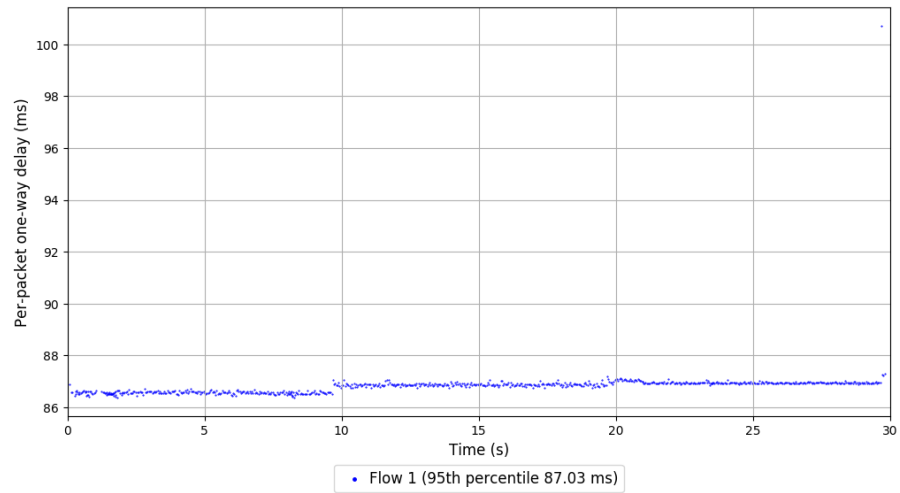
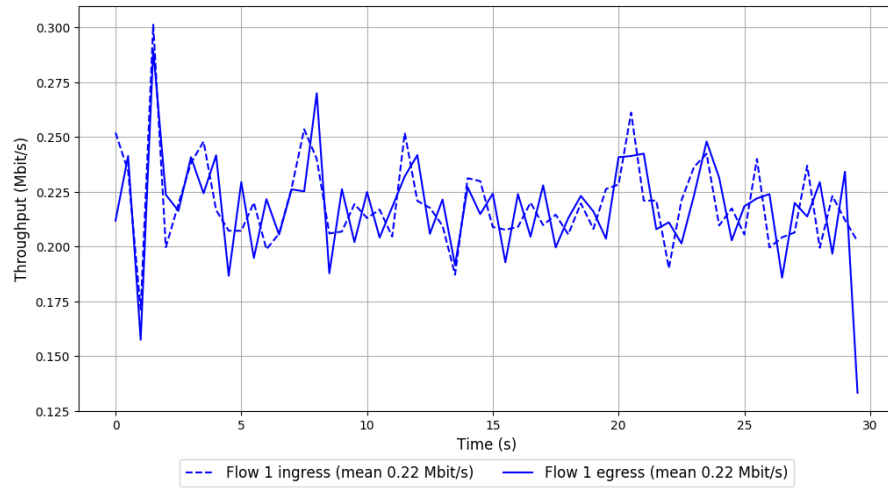
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.033 ms

Loss rate: 0.77%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-05 07:40:42

End at: 2017-12-05 07:41:12

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.370 ms

Loss rate: 0.64%

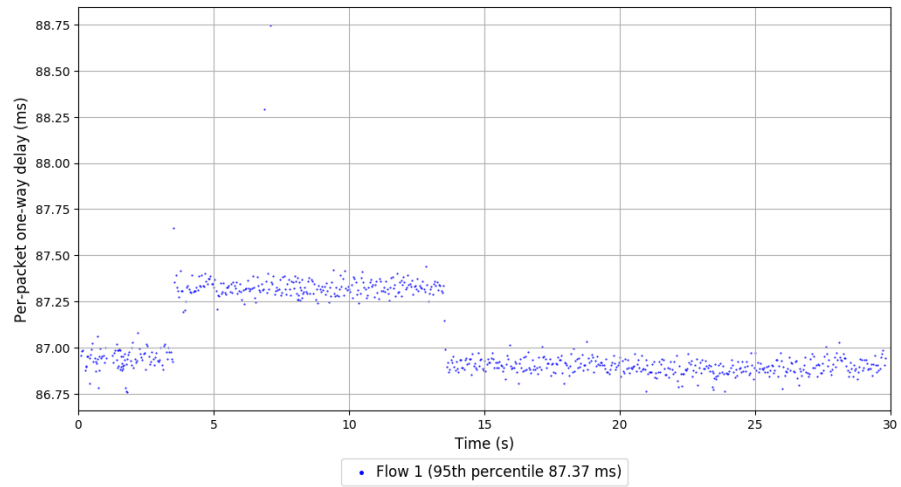
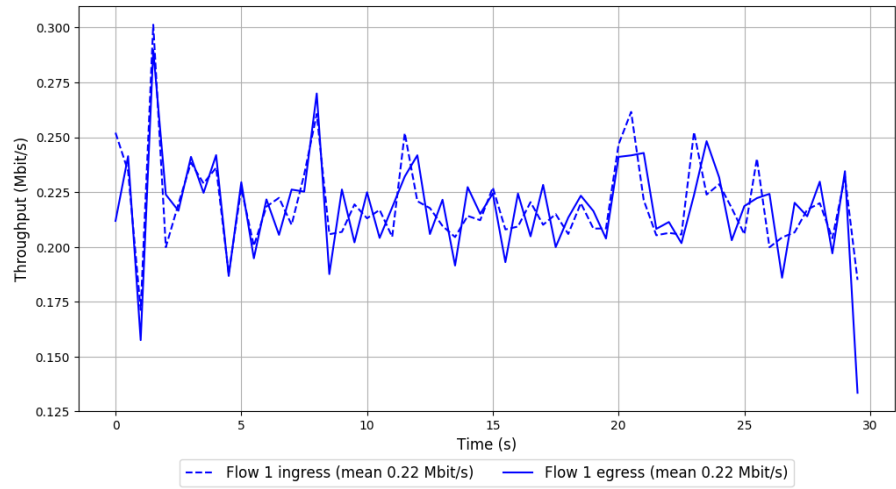
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.370 ms

Loss rate: 0.64%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-05 07:51:41

End at: 2017-12-05 07:52:11

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.163 ms

Loss rate: 0.59%

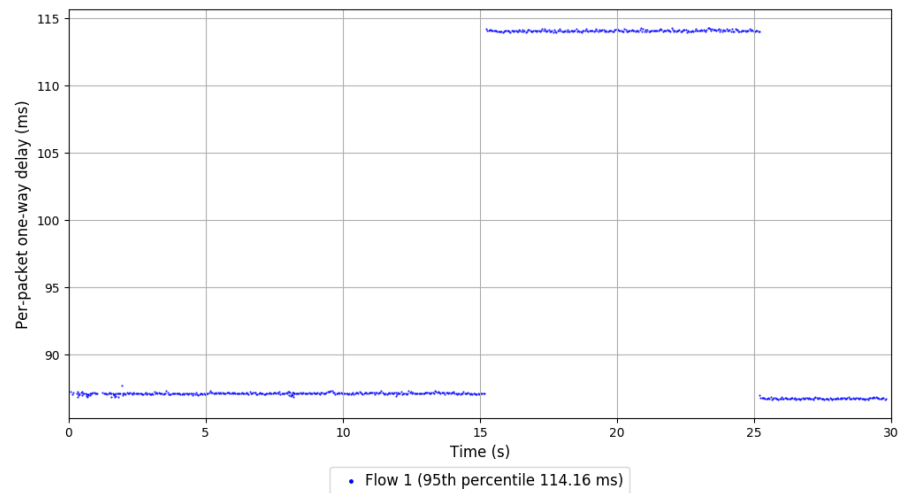
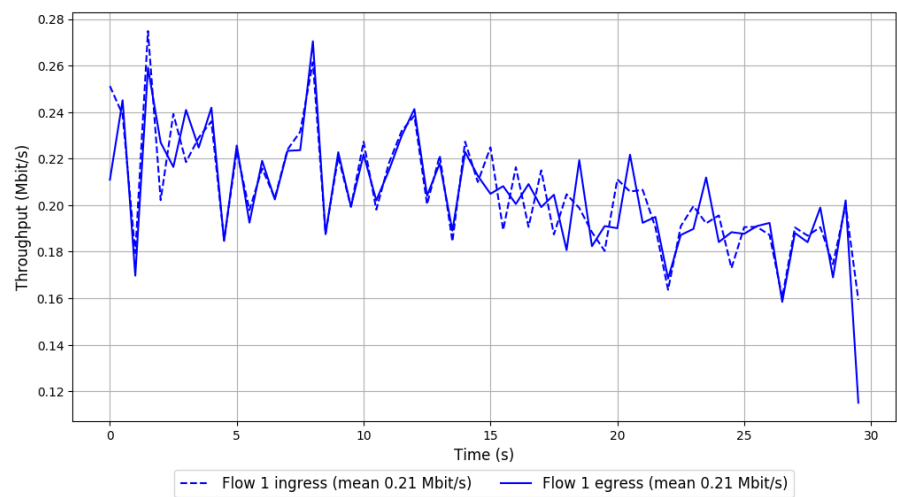
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.163 ms

Loss rate: 0.59%

Run 9: Report of SReAM — Data Link

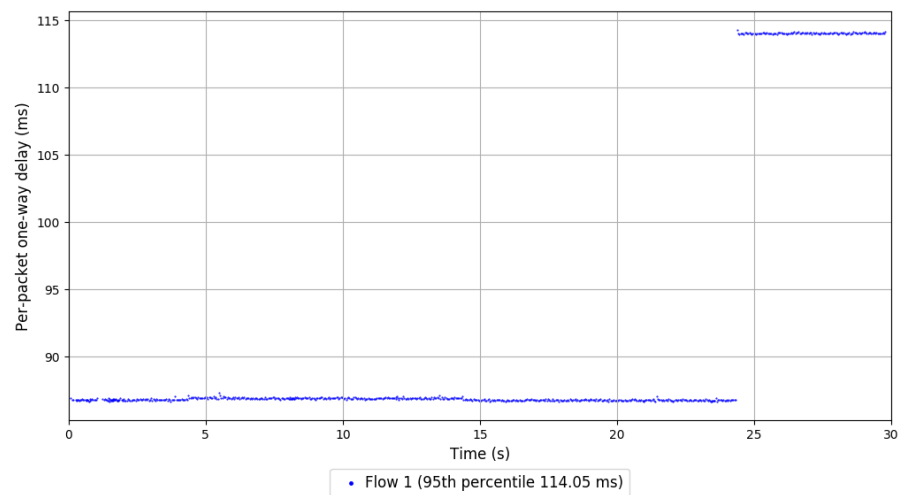
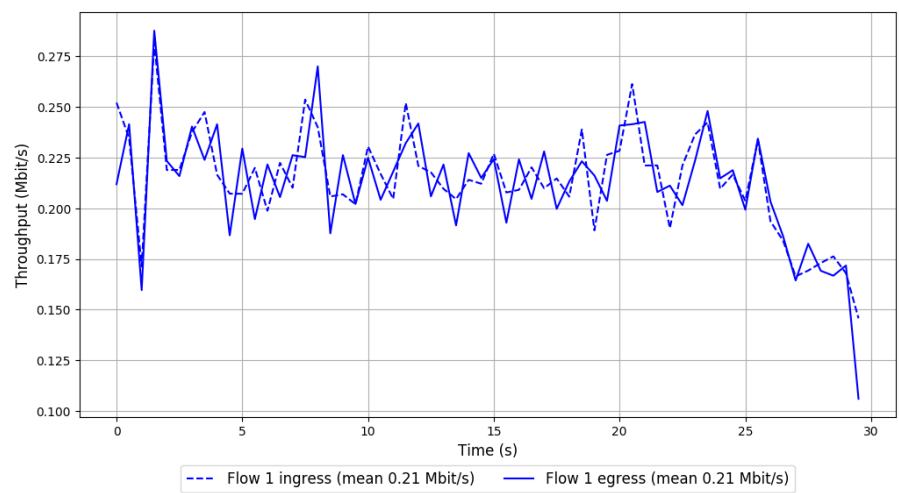


```
Run 10: Statistics of SReAM

Start at: 2017-12-05 08:02:31
End at: 2017-12-05 08:03:02

# Below is generated by plot.py at 2017-12-05 10:18:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.047 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.047 ms
Loss rate: 0.62%
```

Run 10: Report of SReAM — Data Link

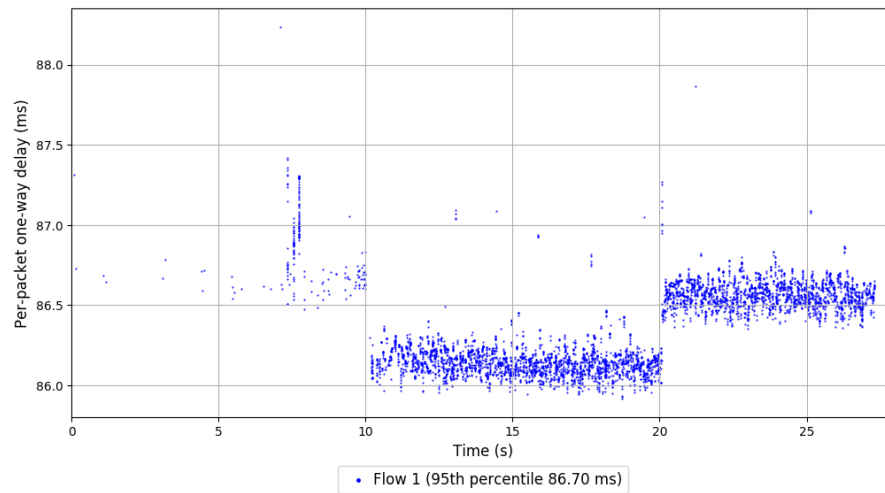
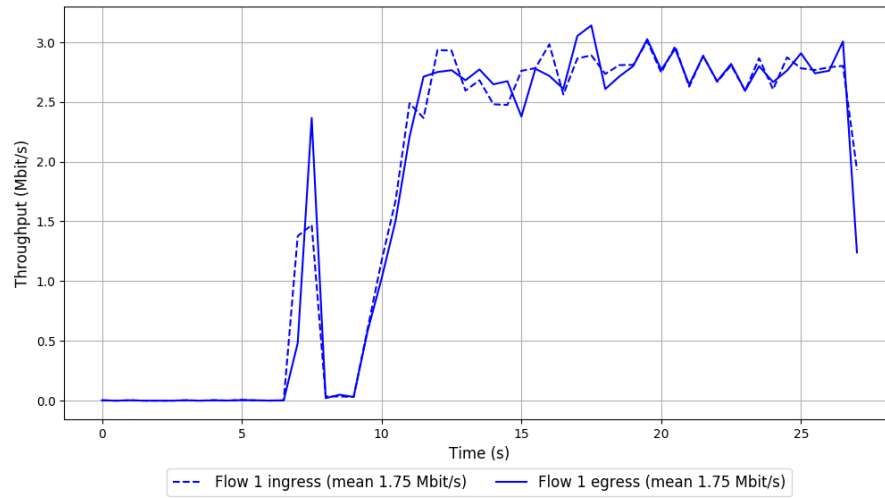


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 06:21:33
End at: 2017-12-05 06:22:03

# Below is generated by plot.py at 2017-12-05 10:18:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 86.700 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 86.700 ms
Loss rate: 1.00%
```

Run 1: Report of WebRTC media — Data Link

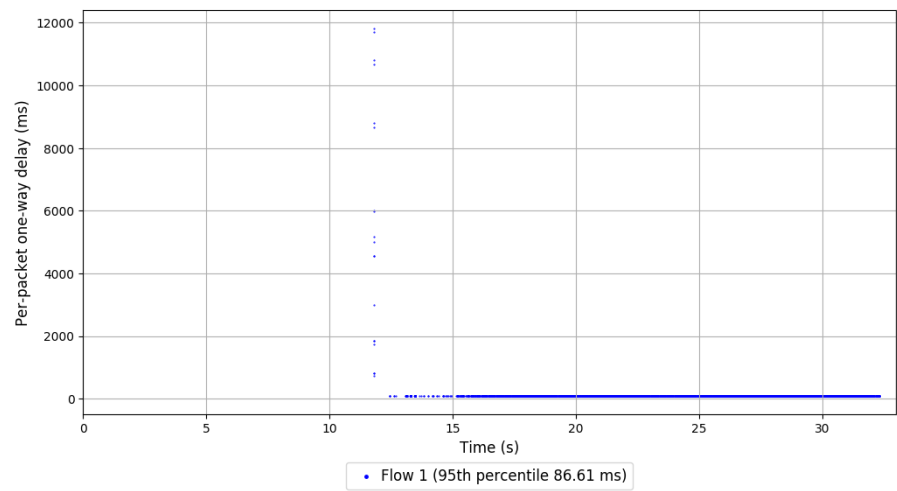
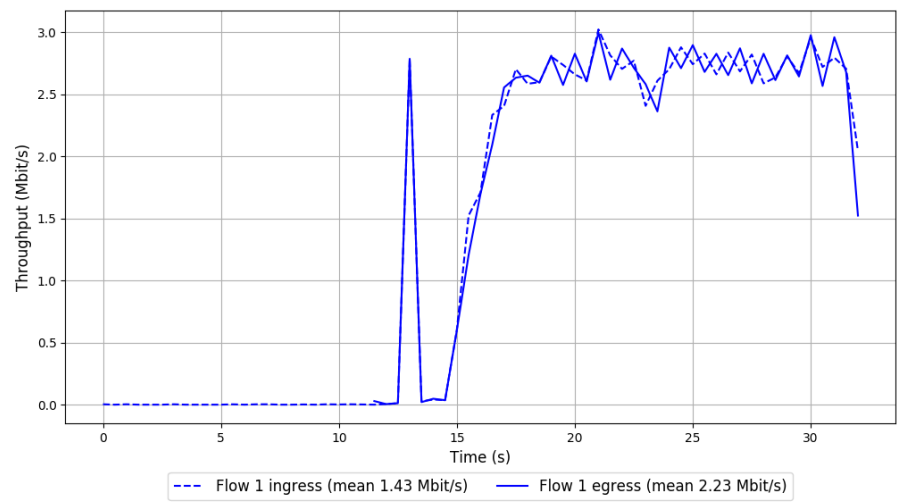


Run 2: Statistics of WebRTC media

Start at: 2017-12-05 06:32:40

End at: 2017-12-05 06:33:10

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-05 06:43:51

End at: 2017-12-05 06:44:21

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.984 ms

Loss rate: 0.87%

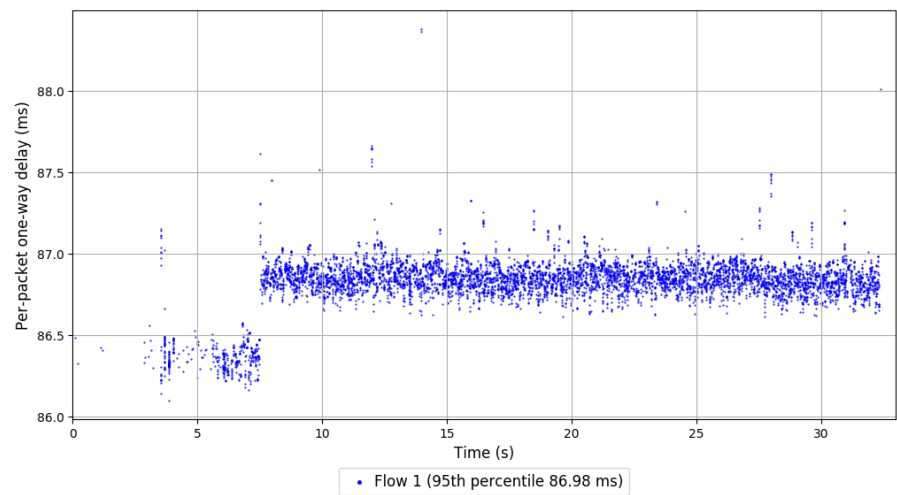
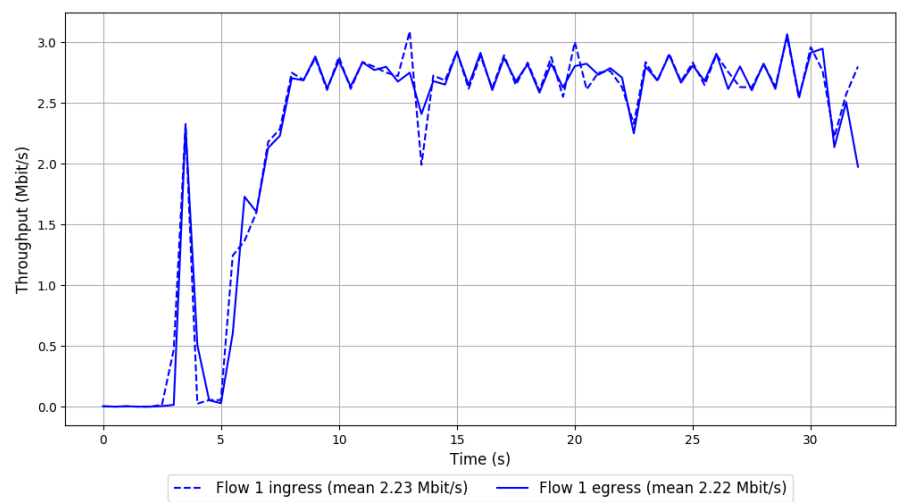
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.984 ms

Loss rate: 0.87%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-05 06:54:57

End at: 2017-12-05 06:55:27

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 87.437 ms

Loss rate: 0.77%

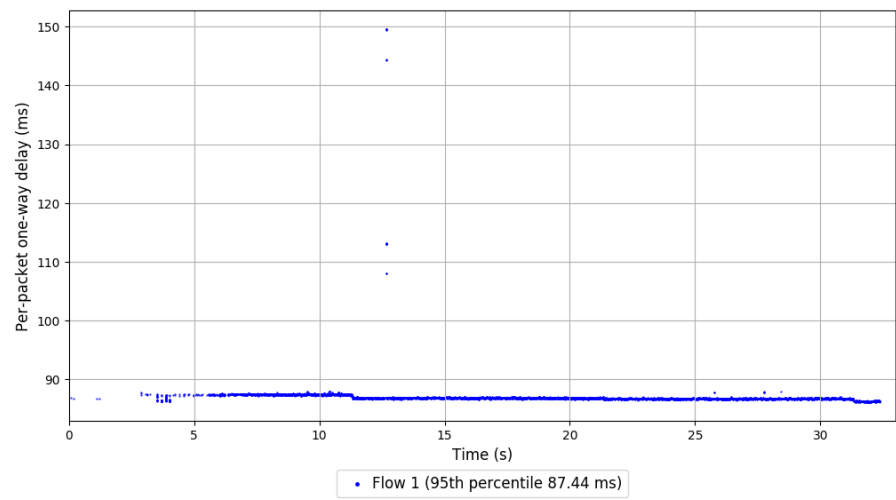
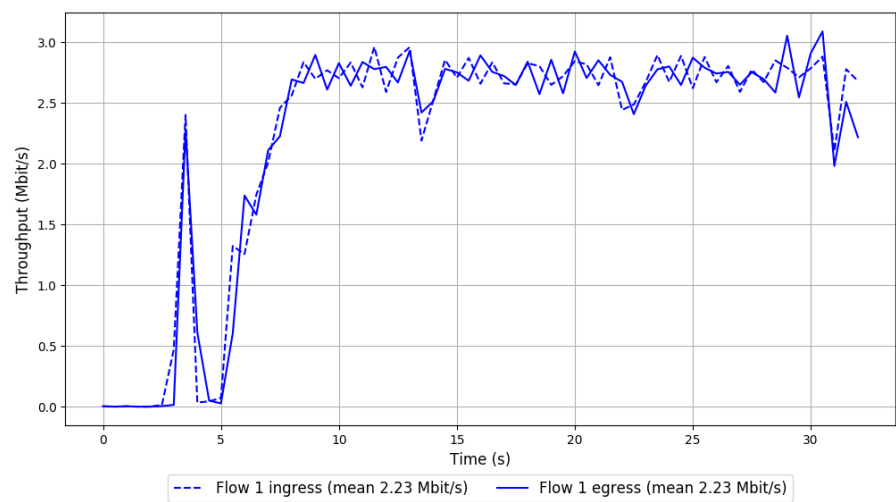
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 87.437 ms

Loss rate: 0.77%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-05 07:05:33

End at: 2017-12-05 07:06:03

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 87.474 ms

Loss rate: 0.77%

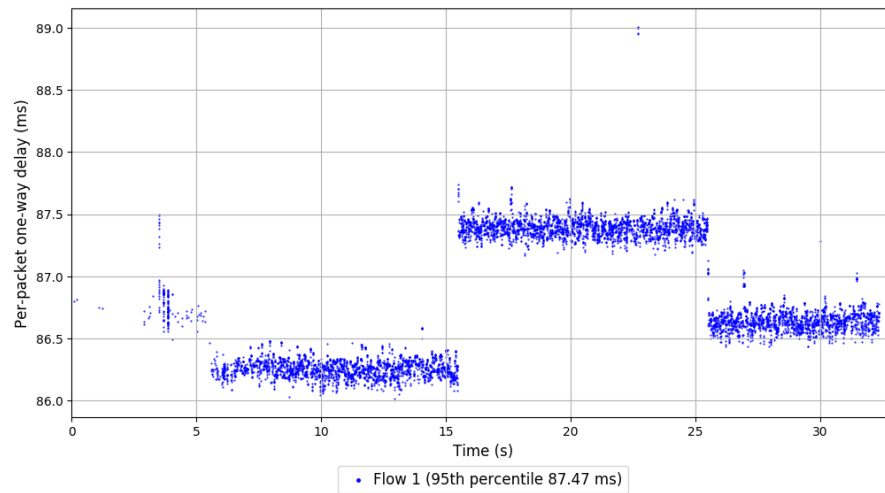
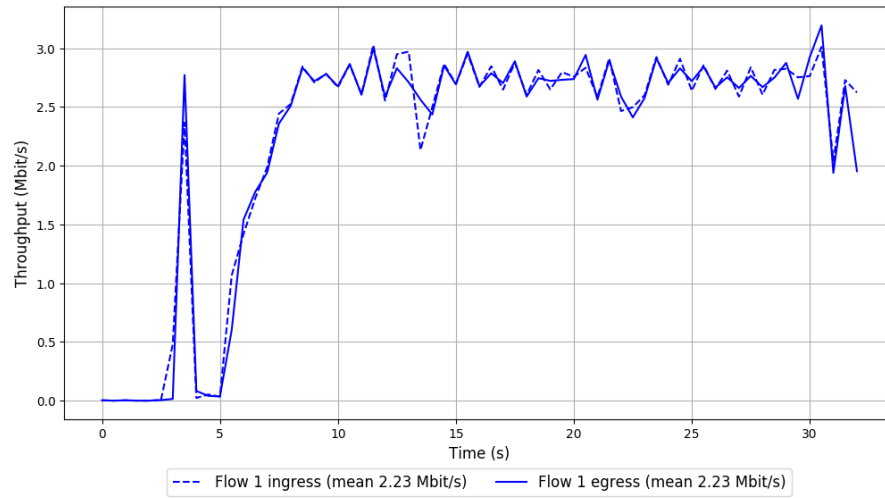
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 87.474 ms

Loss rate: 0.77%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-05 07:16:42

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

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 87.589 ms

Loss rate: 0.79%

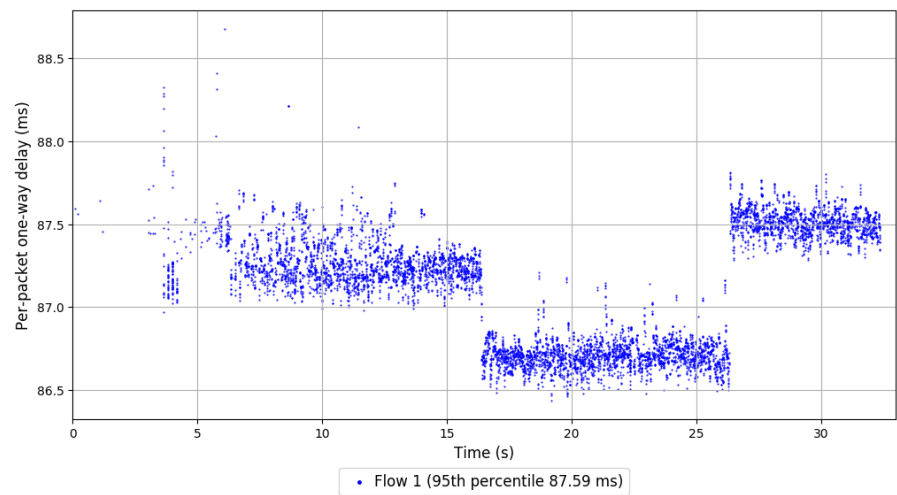
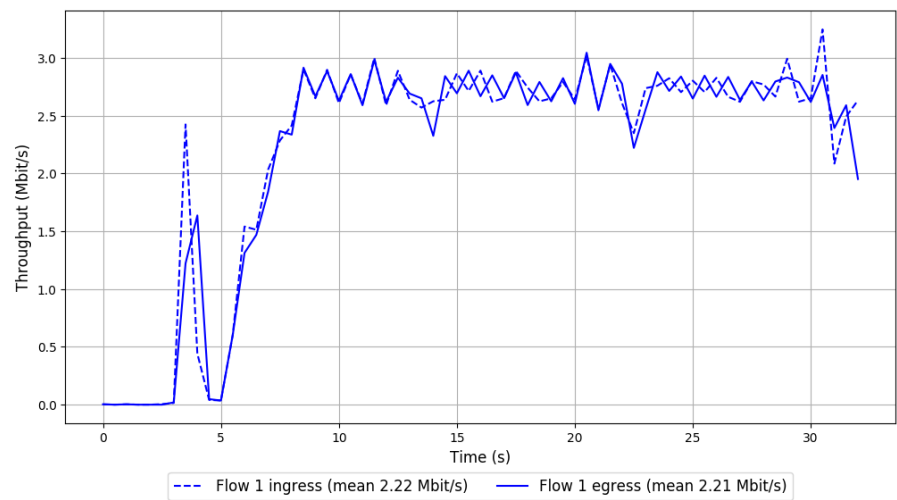
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 87.589 ms

Loss rate: 0.79%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-05 07:28:05

End at: 2017-12-05 07:28:35

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 87.428 ms

Loss rate: 0.94%

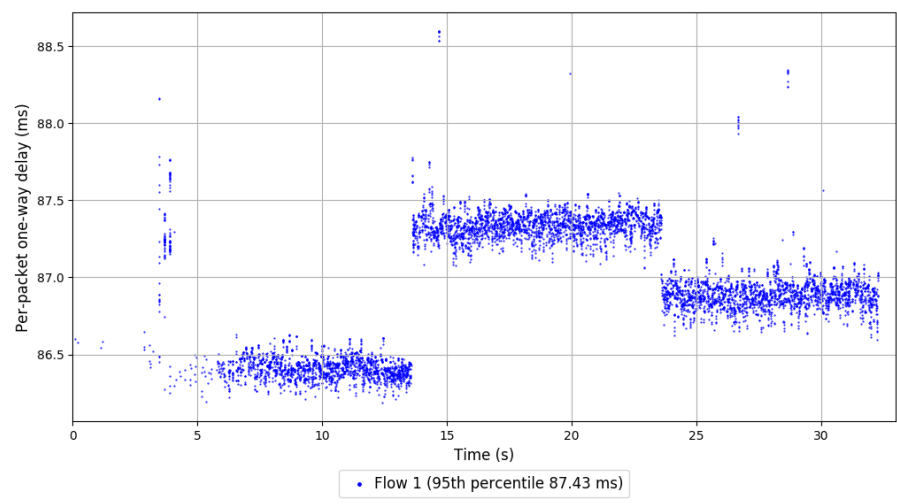
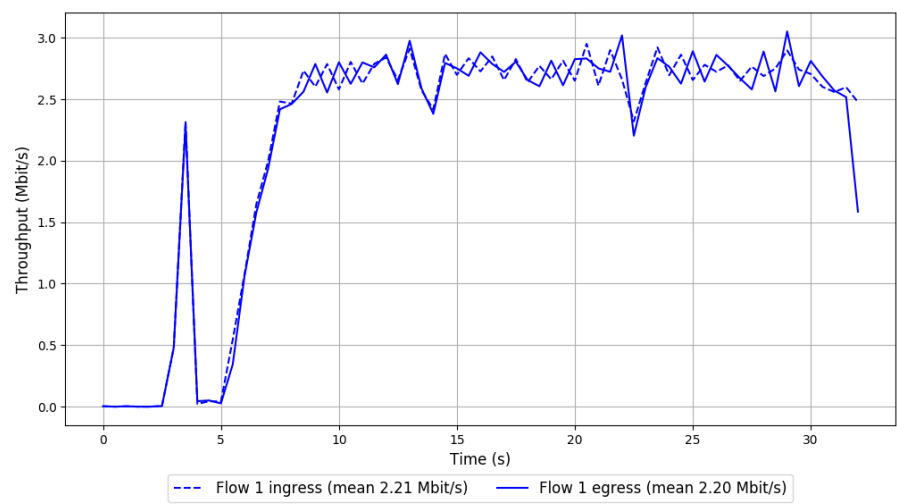
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 87.428 ms

Loss rate: 0.94%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-05 07:39:19

End at: 2017-12-05 07:39:49

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 87.099 ms

Loss rate: 0.78%

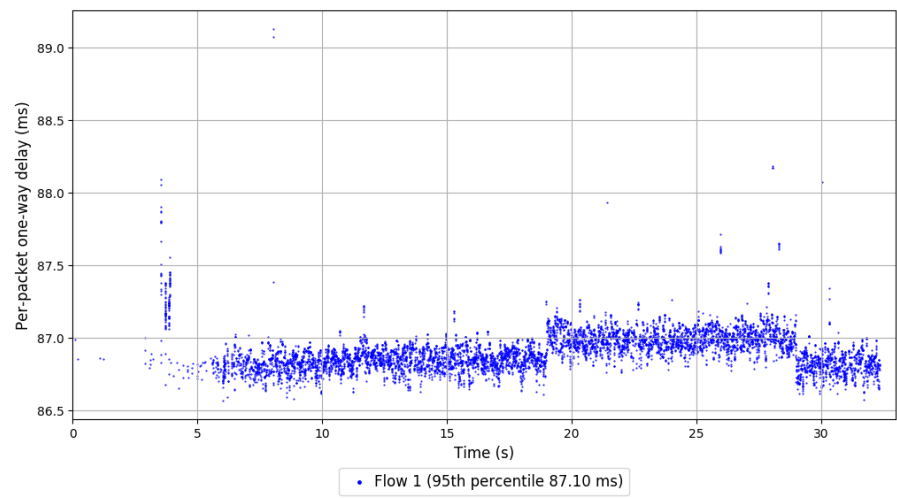
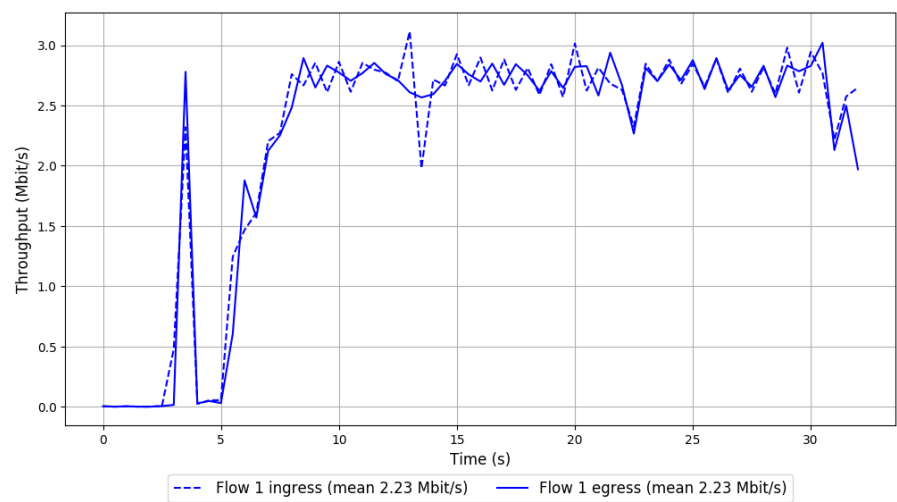
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 87.099 ms

Loss rate: 0.78%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-05 07:50:17

End at: 2017-12-05 07:50:47

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 87.386 ms

Loss rate: 1.92%

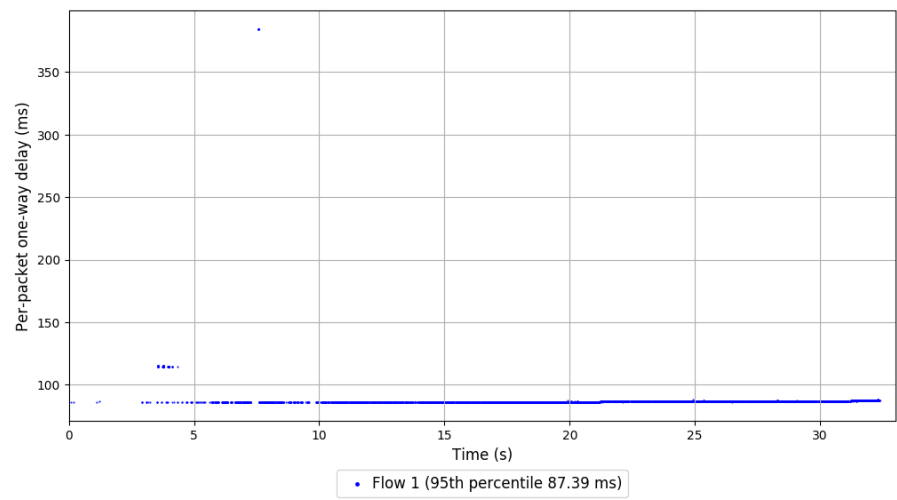
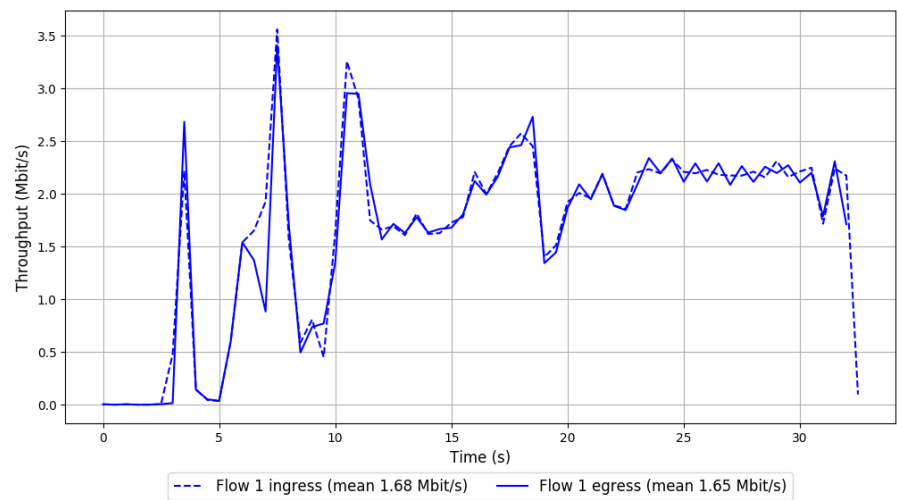
-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 87.386 ms

Loss rate: 1.92%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-05 08:01:09

End at: 2017-12-05 08:01:39

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 114.022 ms

Loss rate: 0.79%

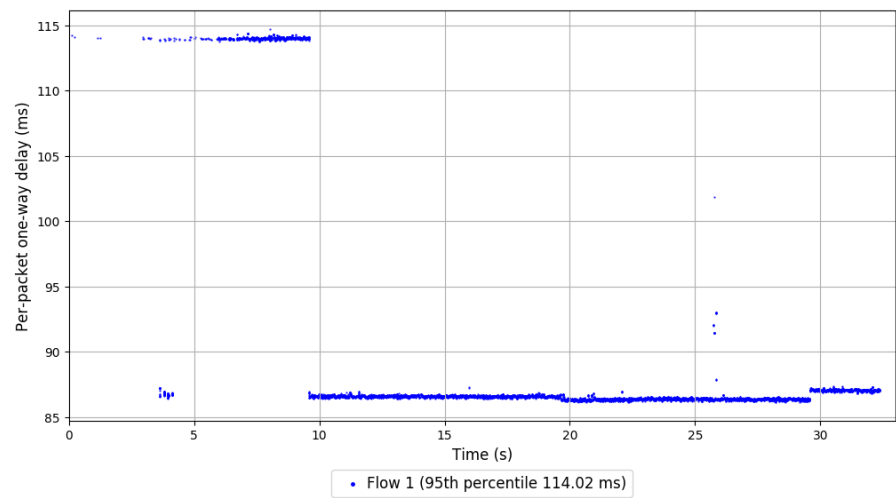
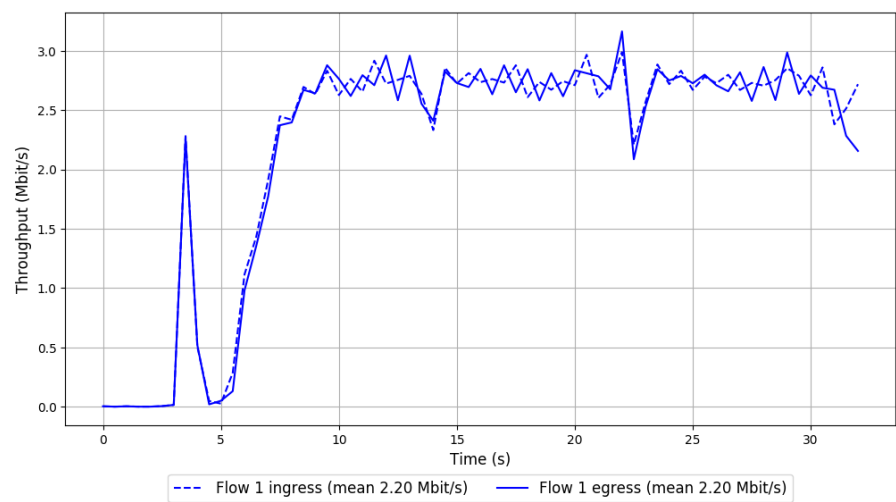
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 114.022 ms

Loss rate: 0.79%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-05 06:19:04

End at: 2017-12-05 06:19:34

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 87.357 ms

Loss rate: 0.36%

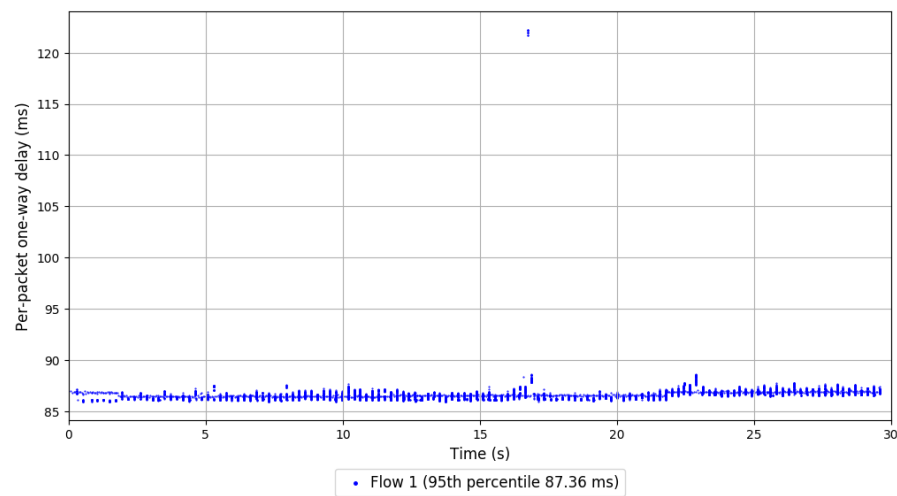
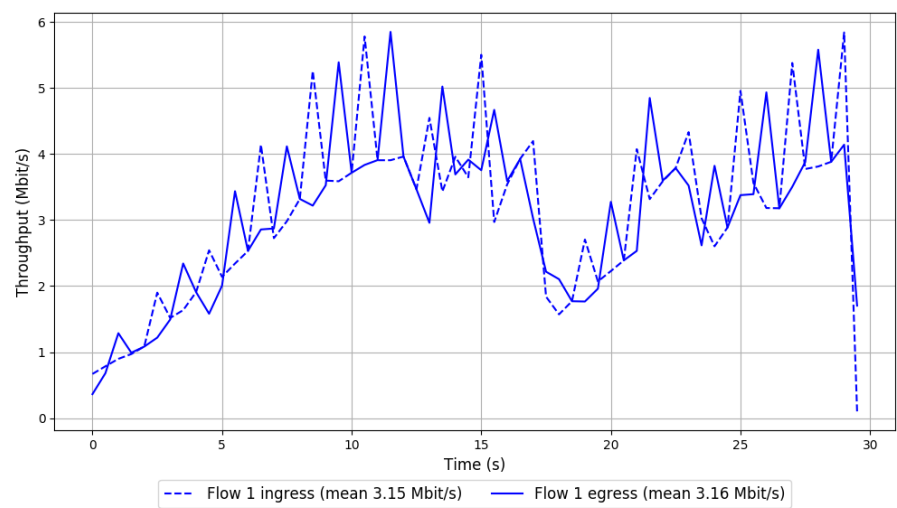
-- Flow 1:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 87.357 ms

Loss rate: 0.36%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-05 06:30:13

End at: 2017-12-05 06:30:43

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 87.711 ms

Loss rate: 2.86%

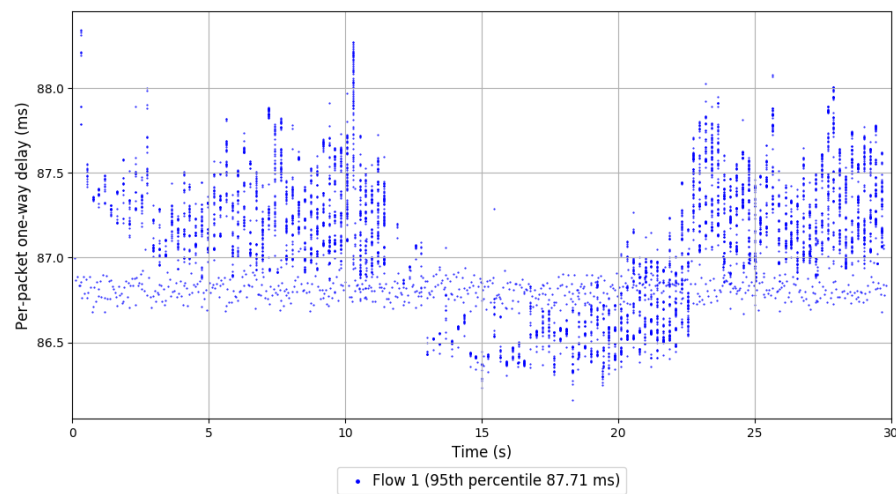
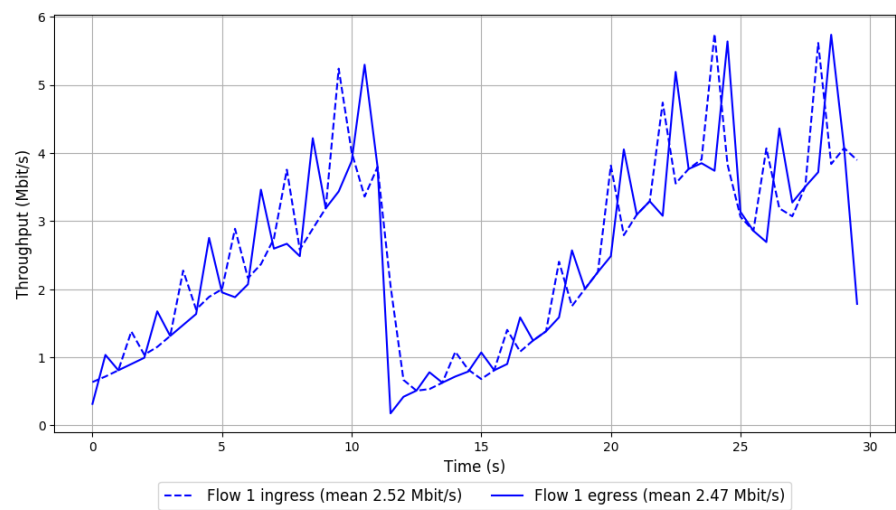
-- Flow 1:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 87.711 ms

Loss rate: 2.86%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 06:41:26

End at: 2017-12-05 06:41:56

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 114.551 ms

Loss rate: 0.96%

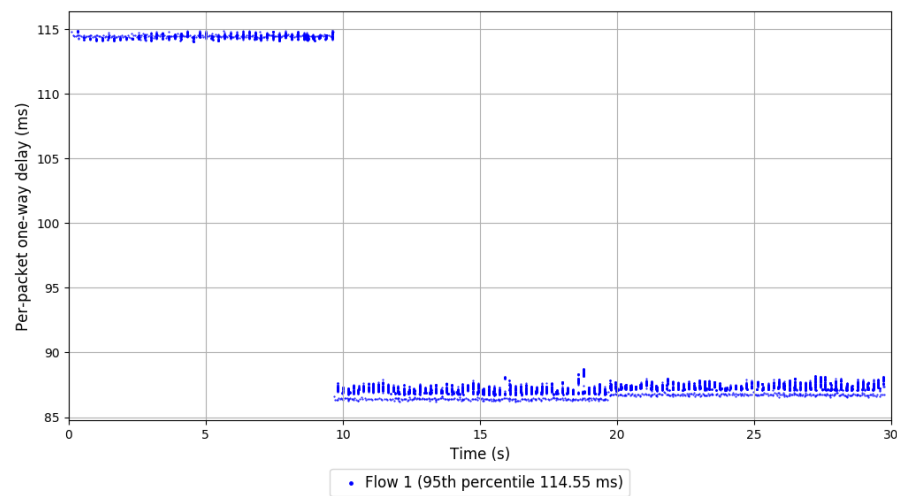
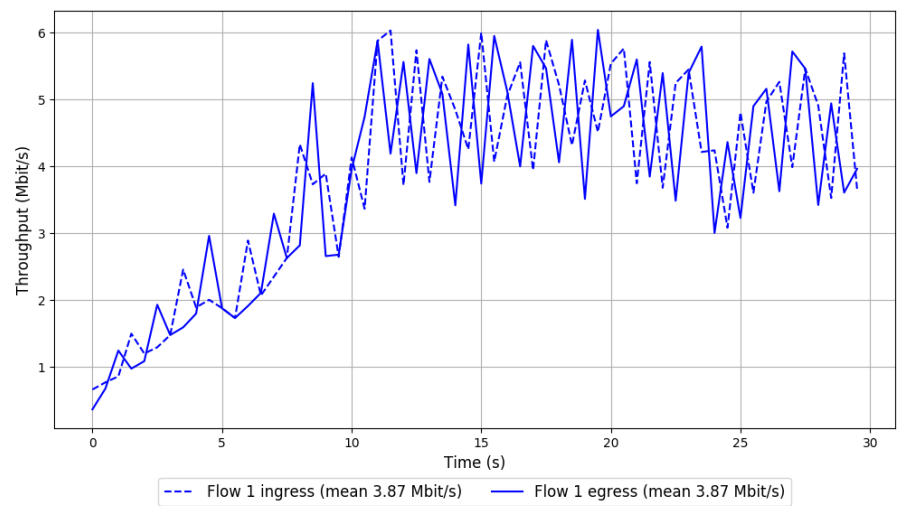
-- Flow 1:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 114.551 ms

Loss rate: 0.96%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-05 06:52:30

End at: 2017-12-05 06:53:00

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.274 ms

Loss rate: 2.02%

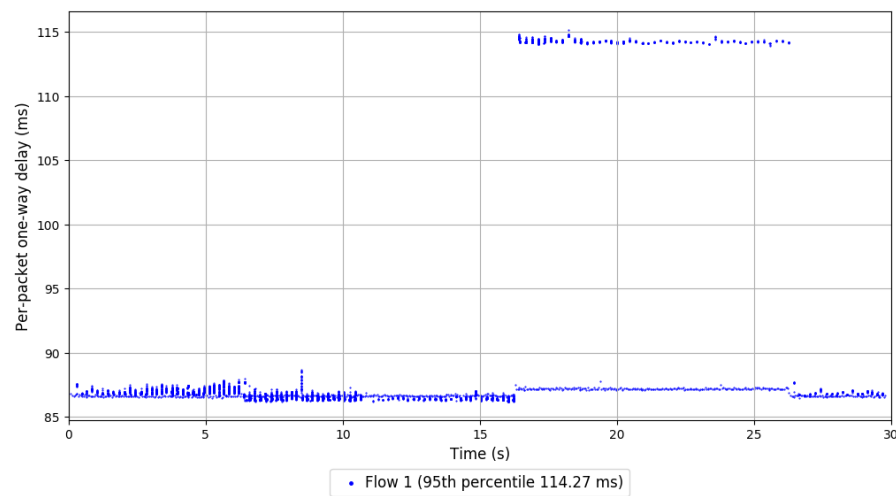
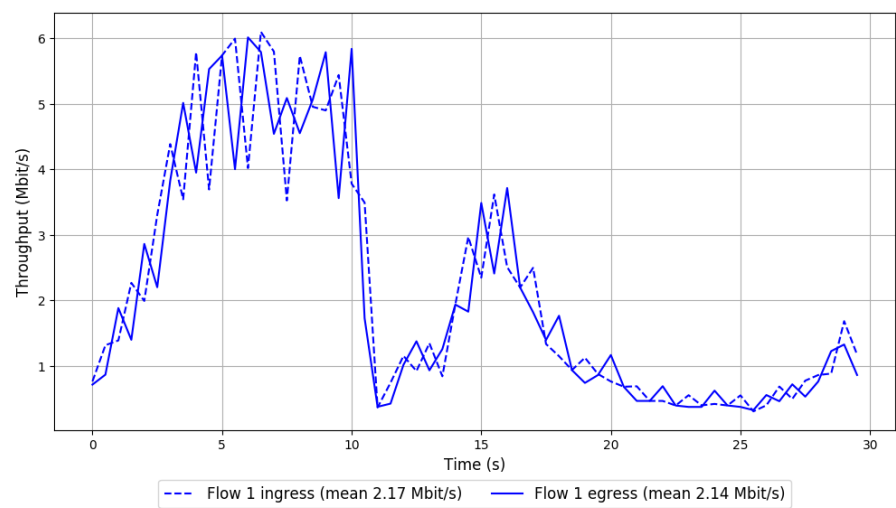
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 114.274 ms

Loss rate: 2.02%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-05 07:03:26

End at: 2017-12-05 07:03:56

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 87.859 ms

Loss rate: 1.17%

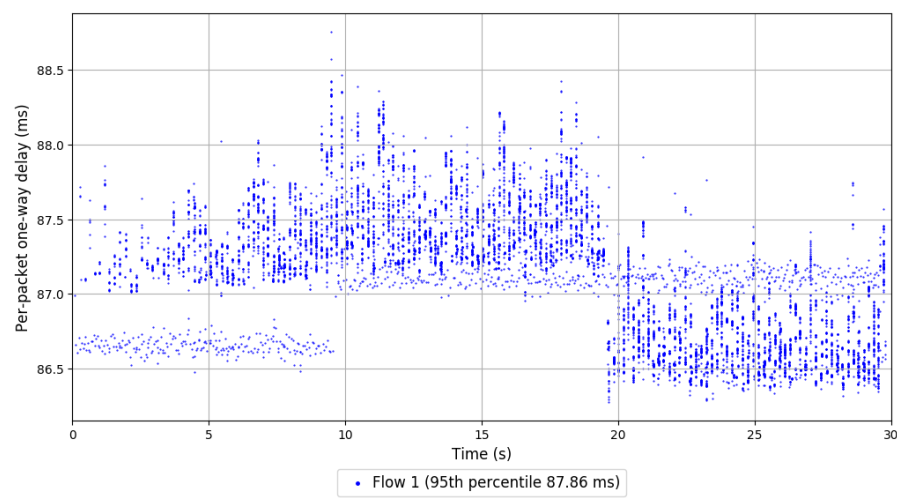
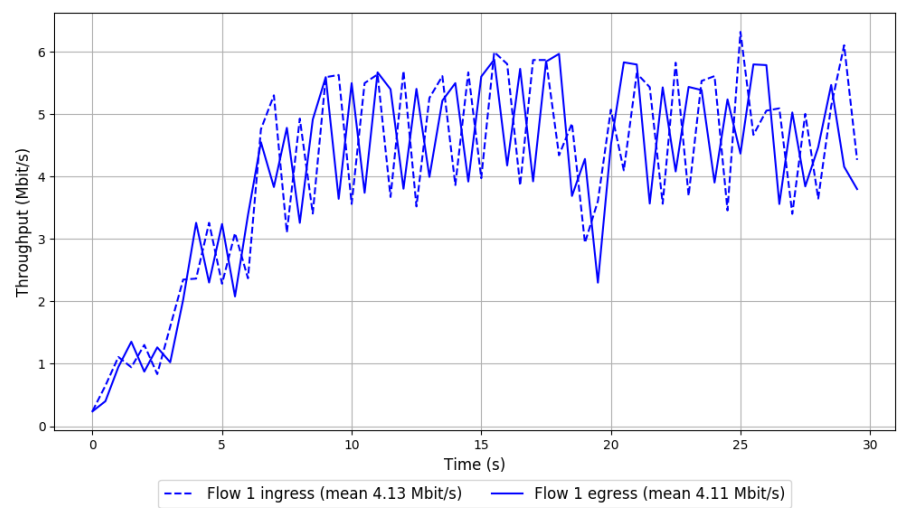
-- Flow 1:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 87.859 ms

Loss rate: 1.17%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-05 07:14:16

End at: 2017-12-05 07:14:46

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 87.807 ms

Loss rate: 1.27%

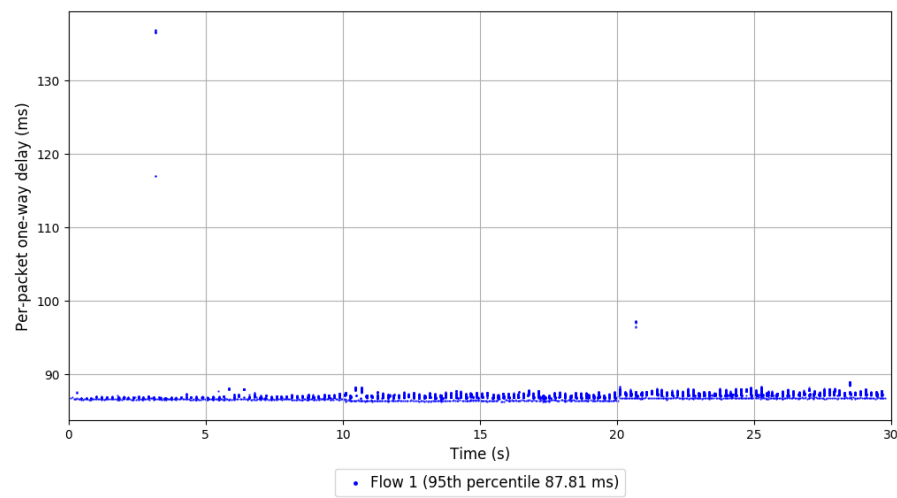
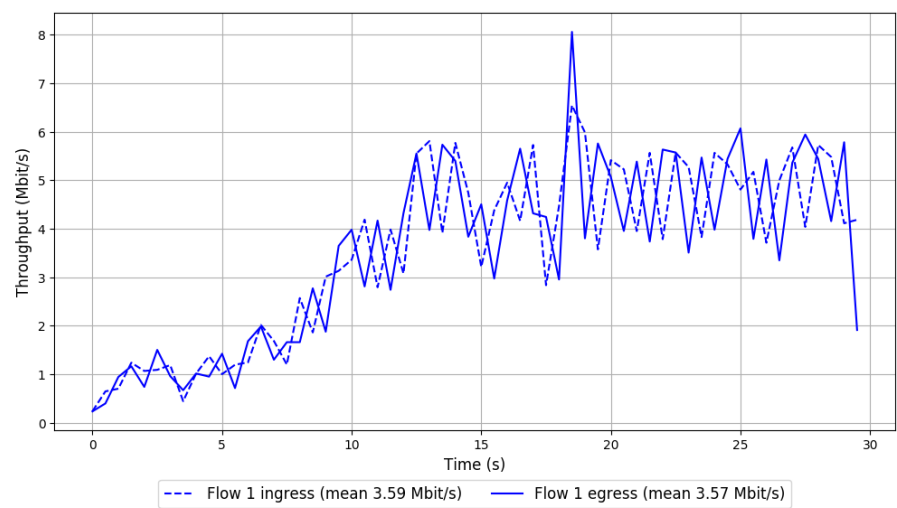
-- Flow 1:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 87.807 ms

Loss rate: 1.27%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-05 07:25:35

End at: 2017-12-05 07:26:05

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 87.907 ms

Loss rate: 1.55%

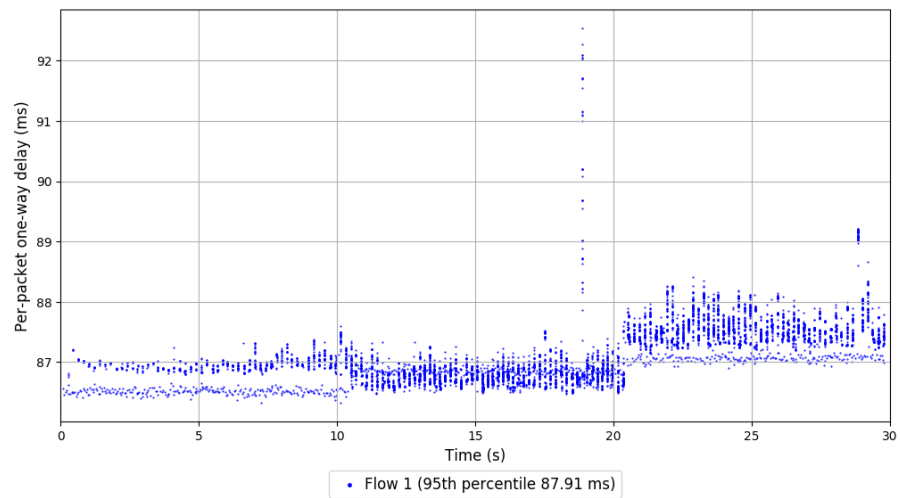
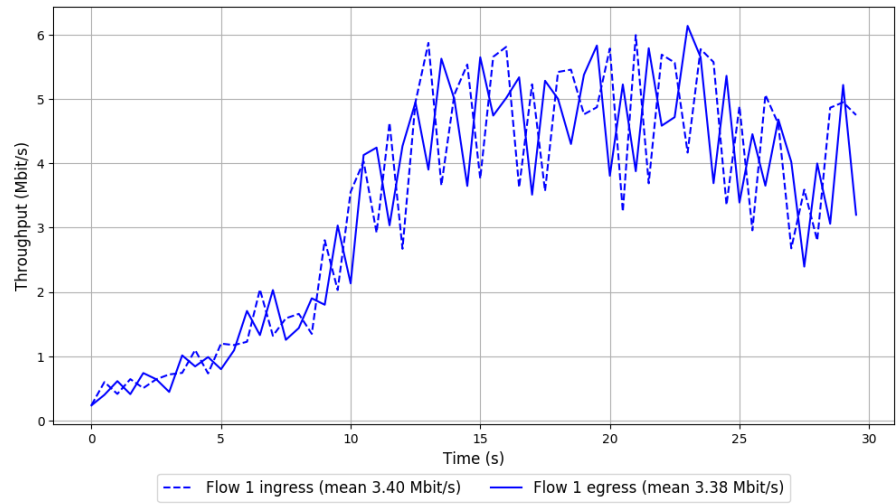
-- Flow 1:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 87.907 ms

Loss rate: 1.55%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-05 07:36:50

End at: 2017-12-05 07:37:20

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 87.967 ms

Loss rate: 1.57%

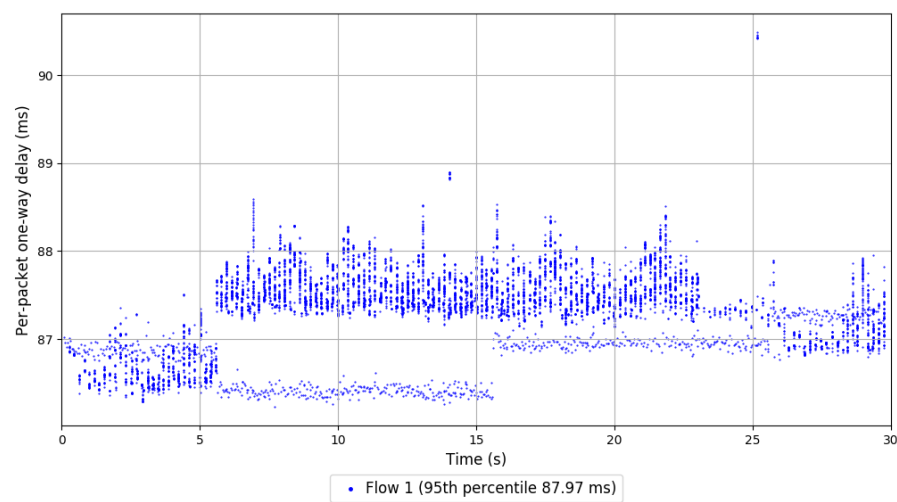
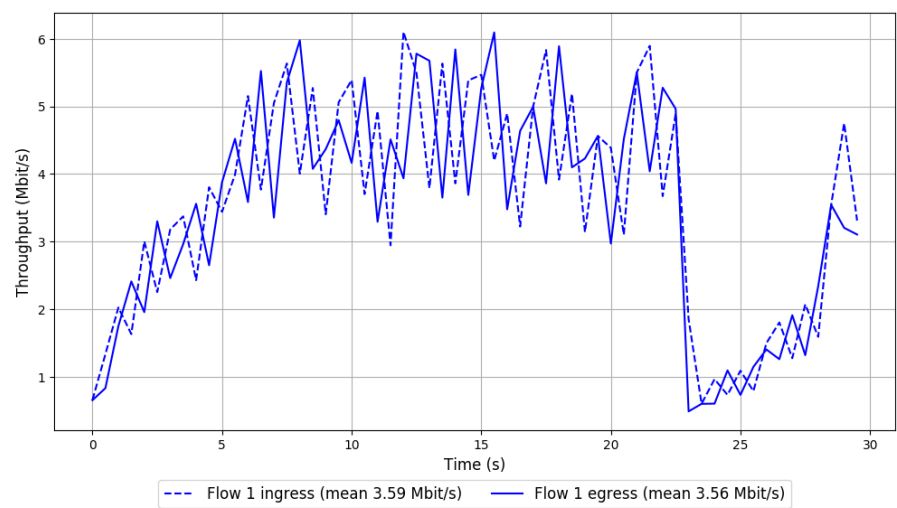
-- Flow 1:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 87.967 ms

Loss rate: 1.57%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-05 07:47:49

End at: 2017-12-05 07:48:19

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 87.875 ms

Loss rate: 1.76%

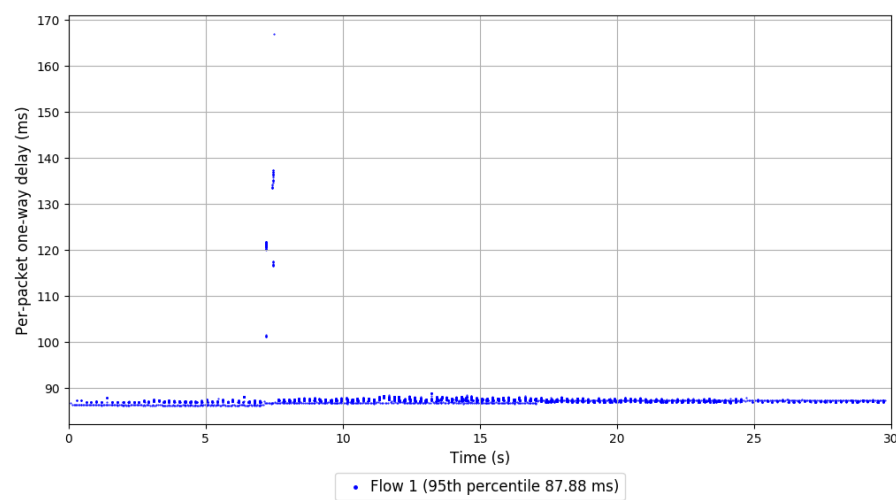
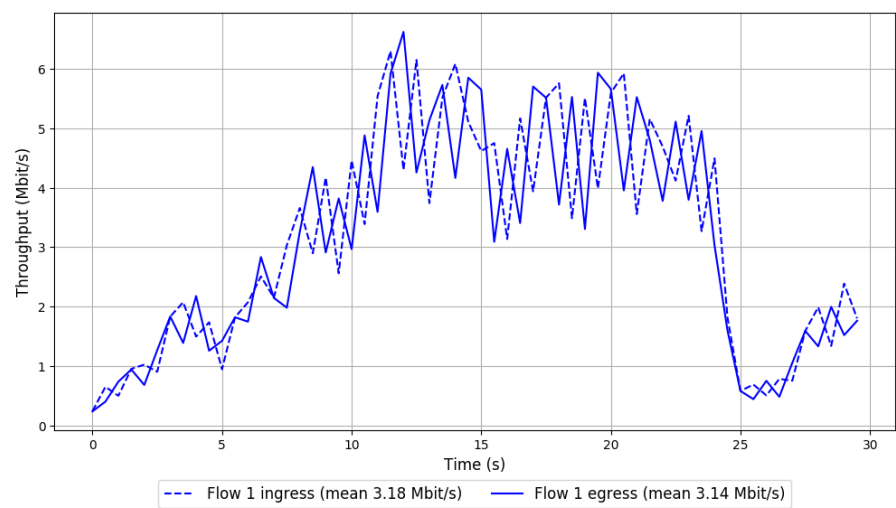
-- Flow 1:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 87.875 ms

Loss rate: 1.76%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-05 07:59:06

End at: 2017-12-05 07:59:36

Below is generated by plot.py at 2017-12-05 10:18:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 114.326 ms

Loss rate: 1.90%

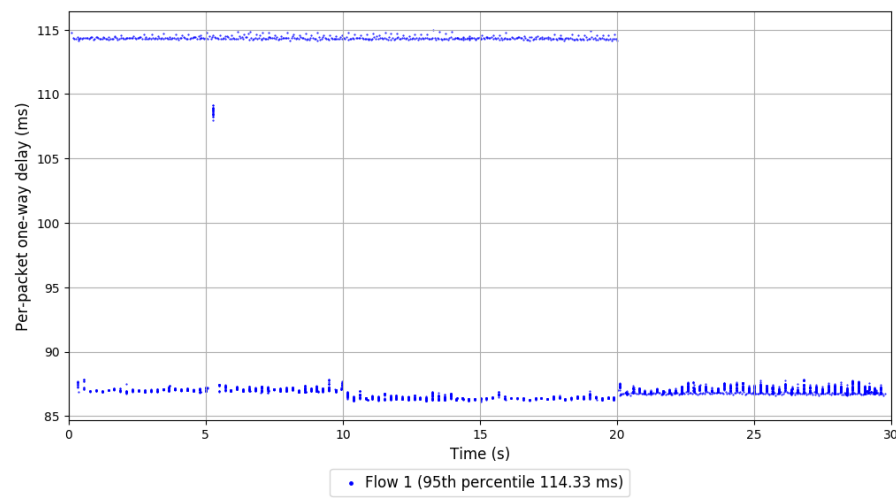
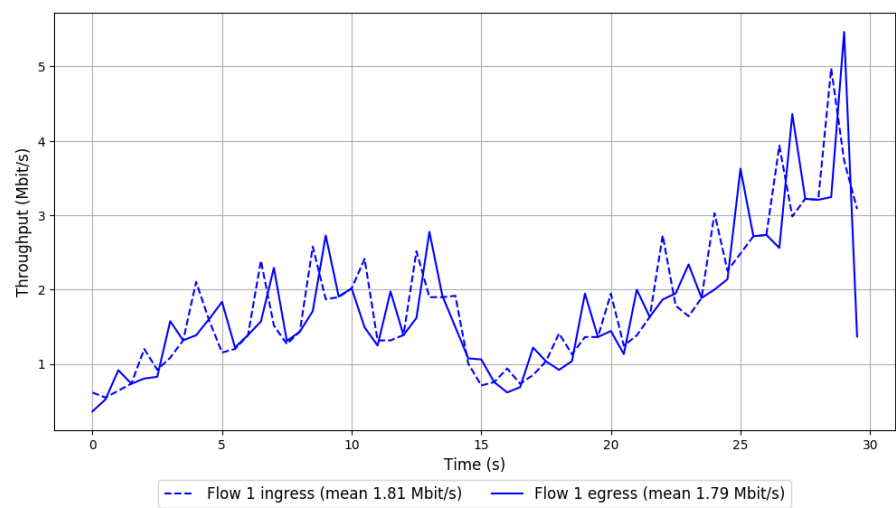
-- Flow 1:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 114.326 ms

Loss rate: 1.90%

Run 10: Report of Sprout — Data Link

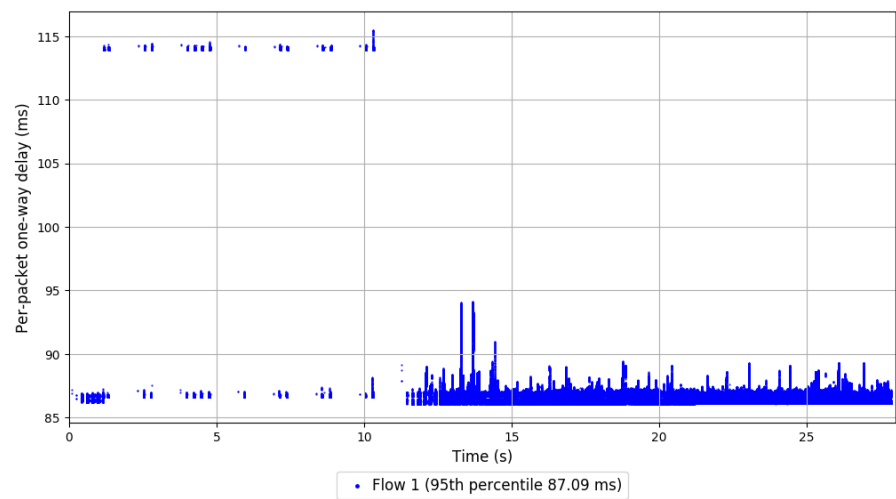
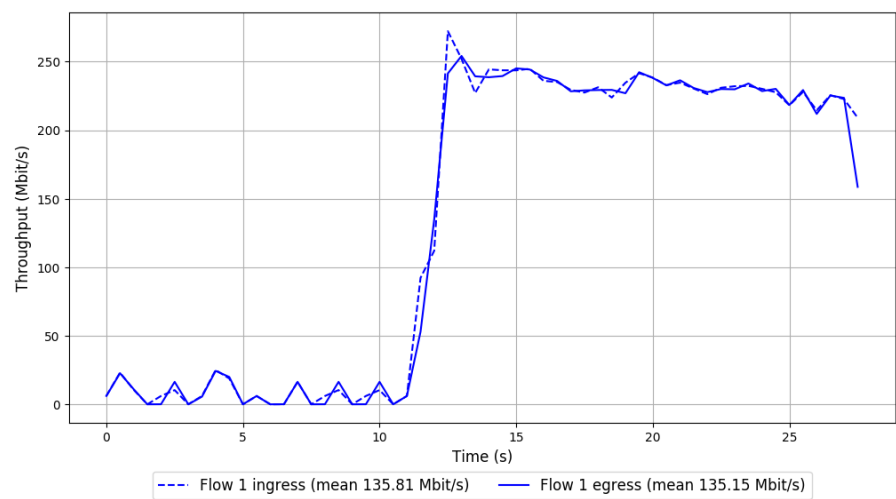


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 06:28:33
End at: 2017-12-05 06:29:03

# Below is generated by plot.py at 2017-12-05 10:21:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 135.15 Mbit/s
95th percentile per-packet one-way delay: 87.092 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 135.15 Mbit/s
95th percentile per-packet one-way delay: 87.092 ms
Loss rate: 1.18%
```

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

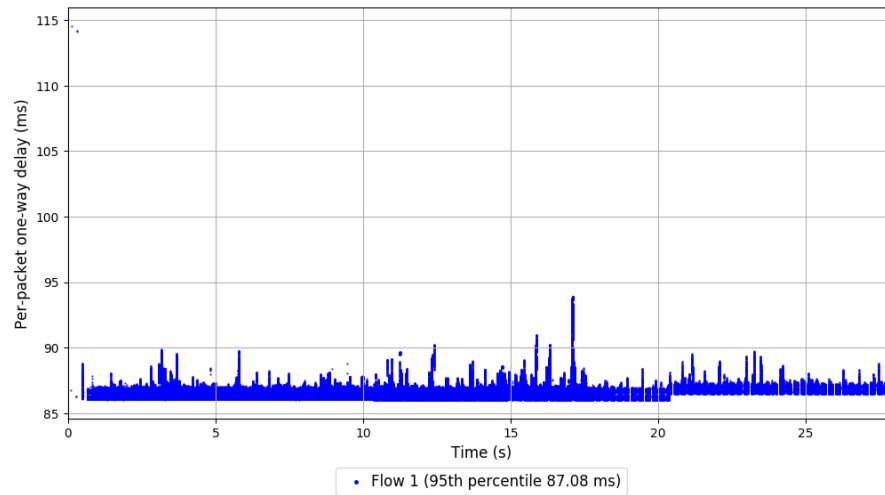
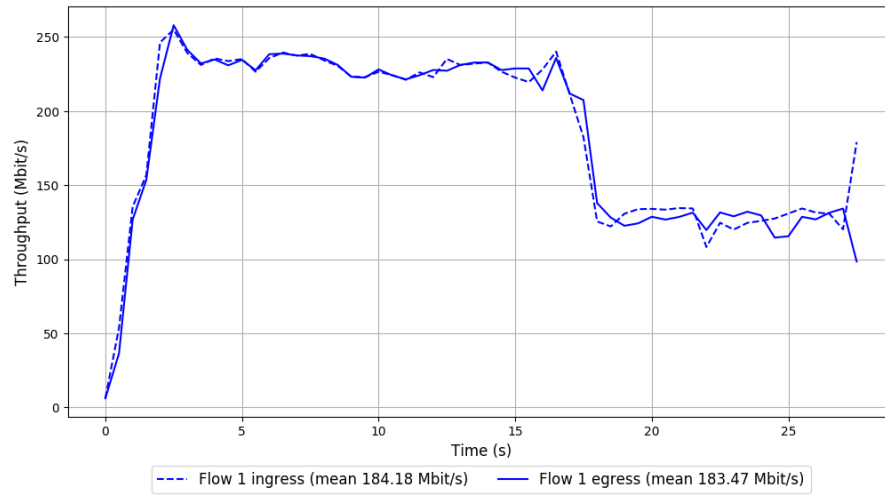


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 06:39:43
End at: 2017-12-05 06:40:14

# Below is generated by plot.py at 2017-12-05 10:23:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.47 Mbit/s
95th percentile per-packet one-way delay: 87.080 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 183.47 Mbit/s
95th percentile per-packet one-way delay: 87.080 ms
Loss rate: 1.10%
```

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

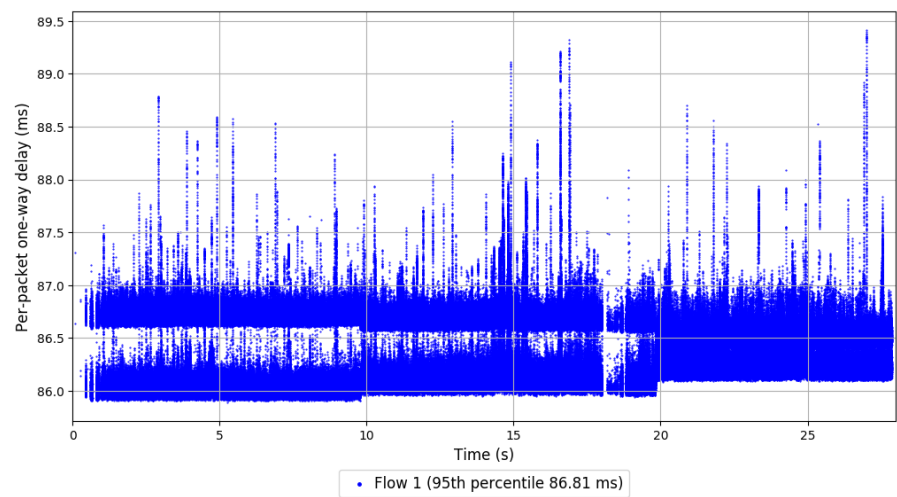
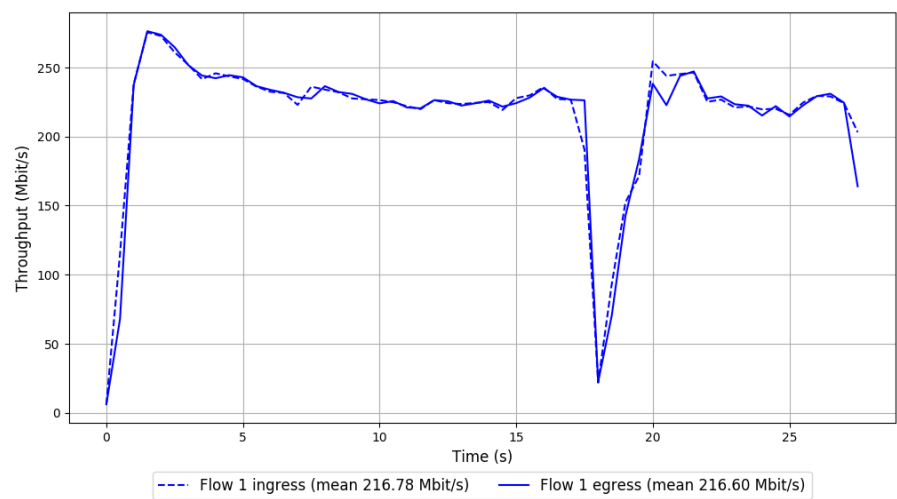


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 06:50:44
End at: 2017-12-05 06:51:14

# Below is generated by plot.py at 2017-12-05 10:24:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.60 Mbit/s
95th percentile per-packet one-way delay: 86.809 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 216.60 Mbit/s
95th percentile per-packet one-way delay: 86.809 ms
Loss rate: 0.80%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-05 07:01:46

End at: 2017-12-05 07:02:17

Below is generated by plot.py at 2017-12-05 10:24:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 162.72 Mbit/s

95th percentile per-packet one-way delay: 87.338 ms

Loss rate: 1.07%

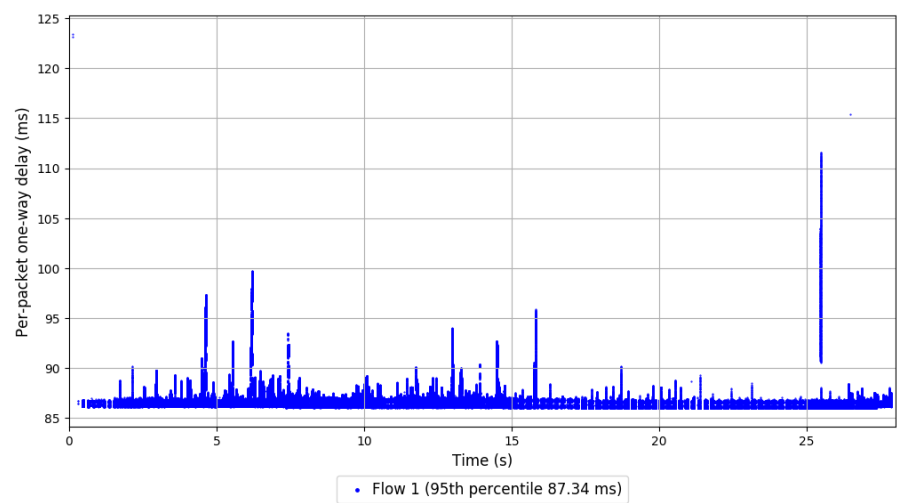
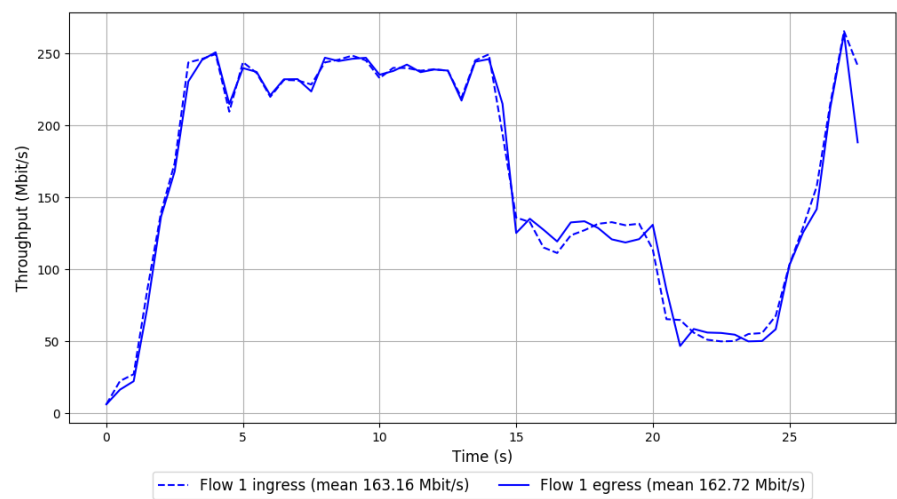
-- Flow 1:

Average throughput: 162.72 Mbit/s

95th percentile per-packet one-way delay: 87.338 ms

Loss rate: 1.07%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-05 07:12:30

End at: 2017-12-05 07:13:00

Below is generated by plot.py at 2017-12-05 10:24:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.40 Mbit/s

95th percentile per-packet one-way delay: 87.388 ms

Loss rate: 0.72%

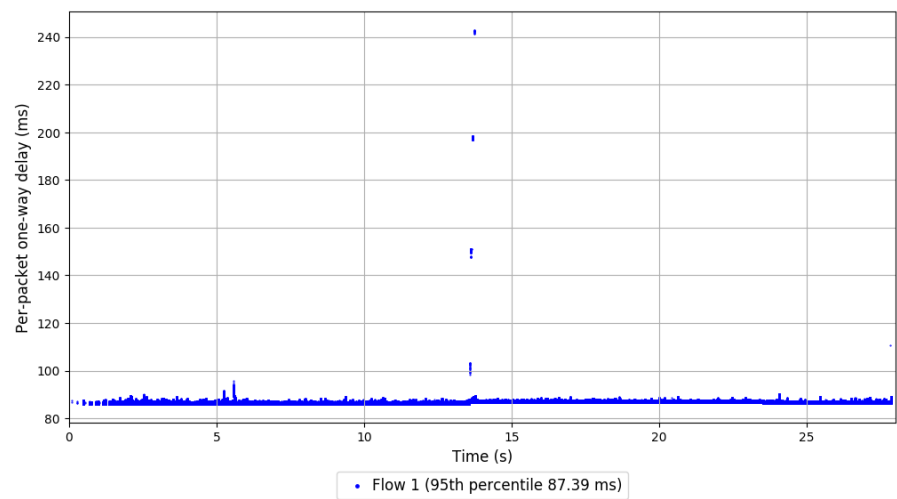
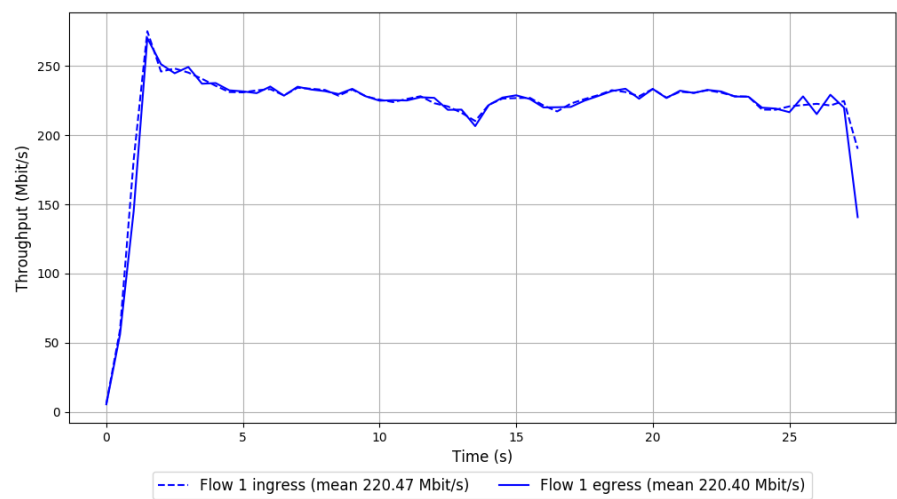
-- Flow 1:

Average throughput: 220.40 Mbit/s

95th percentile per-packet one-way delay: 87.388 ms

Loss rate: 0.72%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-05 07:23:49

End at: 2017-12-05 07:24:19

Below is generated by plot.py at 2017-12-05 10:24:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.12 Mbit/s

95th percentile per-packet one-way delay: 87.375 ms

Loss rate: 0.78%

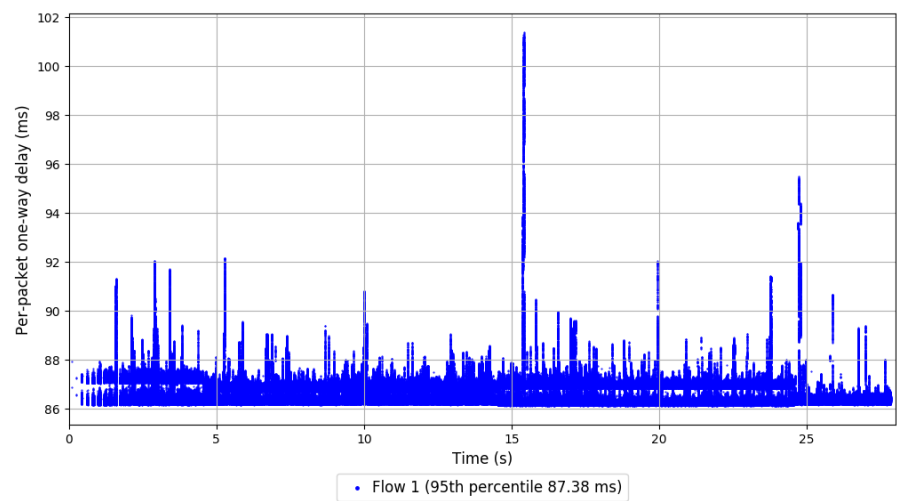
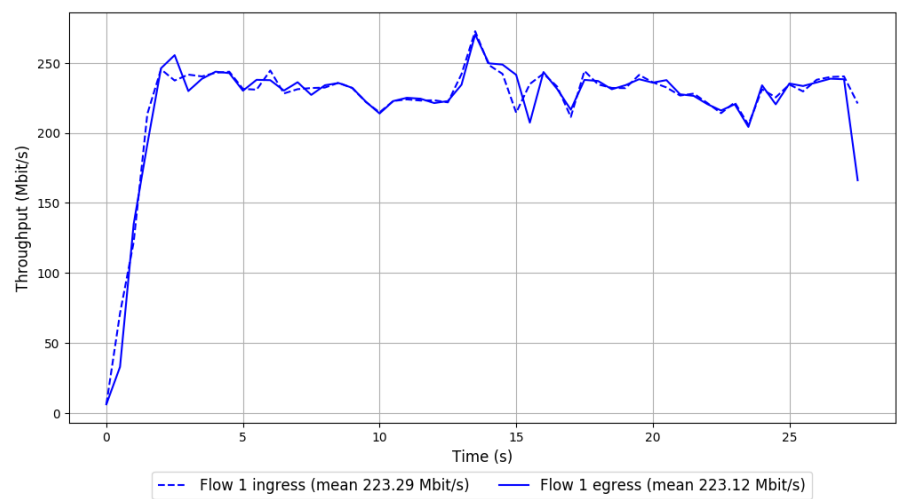
-- Flow 1:

Average throughput: 223.12 Mbit/s

95th percentile per-packet one-way delay: 87.375 ms

Loss rate: 0.78%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-05 07:35:03

End at: 2017-12-05 07:35:33

Below is generated by plot.py at 2017-12-05 10:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.06 Mbit/s

95th percentile per-packet one-way delay: 86.957 ms

Loss rate: 0.63%

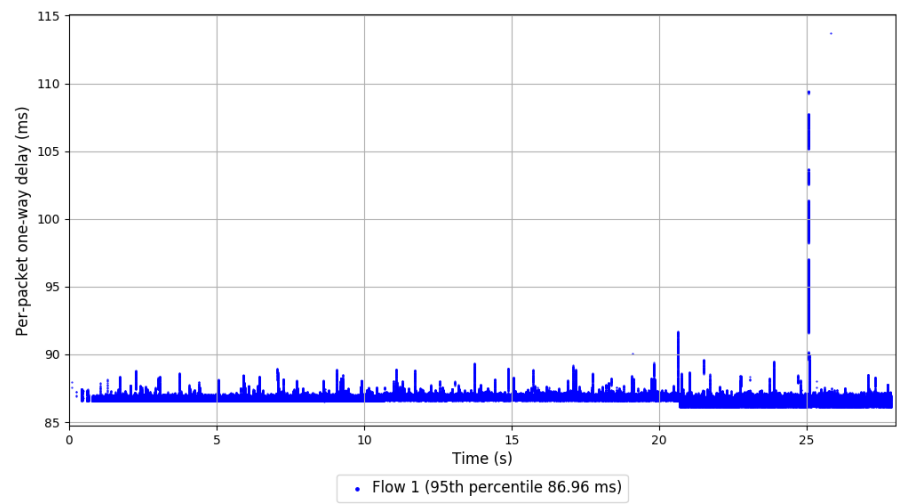
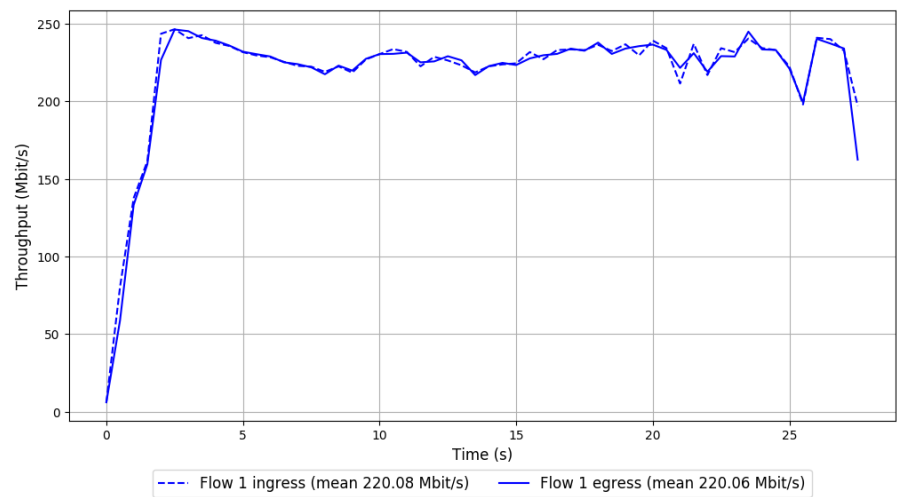
-- Flow 1:

Average throughput: 220.06 Mbit/s

95th percentile per-packet one-way delay: 86.957 ms

Loss rate: 0.63%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-05 07:46:03

End at: 2017-12-05 07:46:33

Below is generated by plot.py at 2017-12-05 10:25:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.74 Mbit/s

95th percentile per-packet one-way delay: 87.104 ms

Loss rate: 0.79%

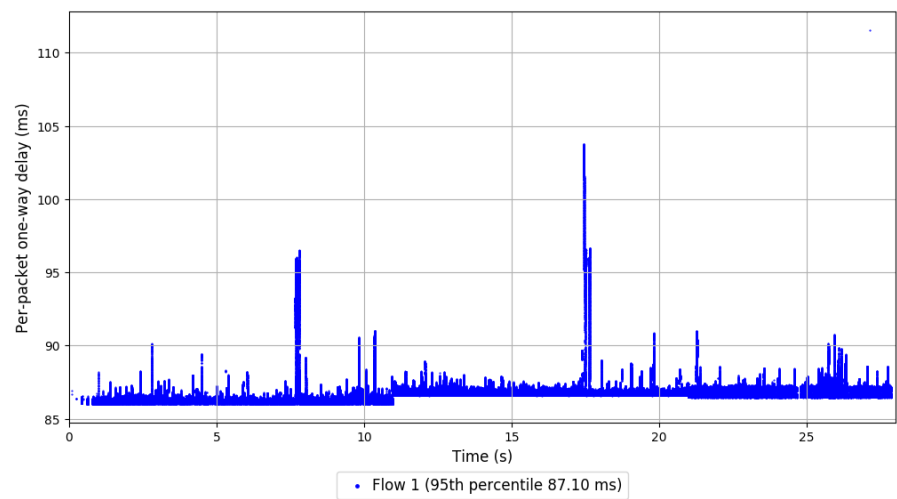
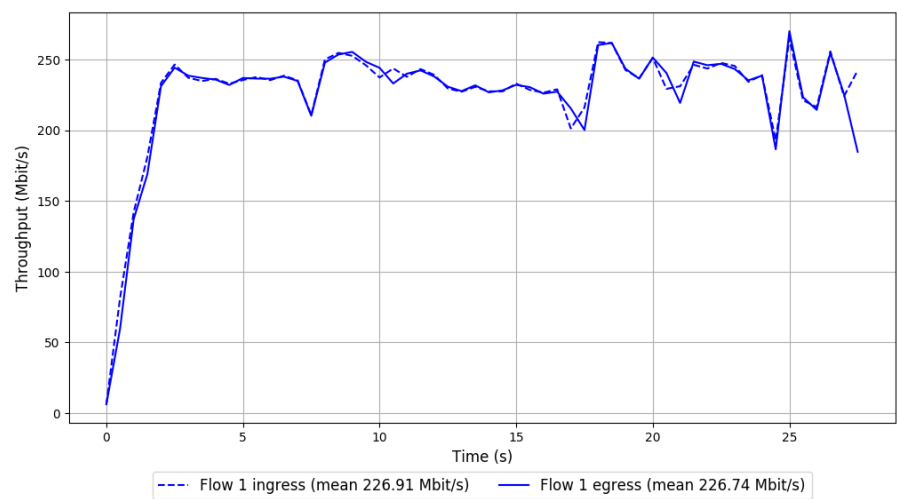
-- Flow 1:

Average throughput: 226.74 Mbit/s

95th percentile per-packet one-way delay: 87.104 ms

Loss rate: 0.79%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-05 07:57:19

End at: 2017-12-05 07:57:49

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.58 Mbit/s

95th percentile per-packet one-way delay: 87.279 ms

Loss rate: 0.75%

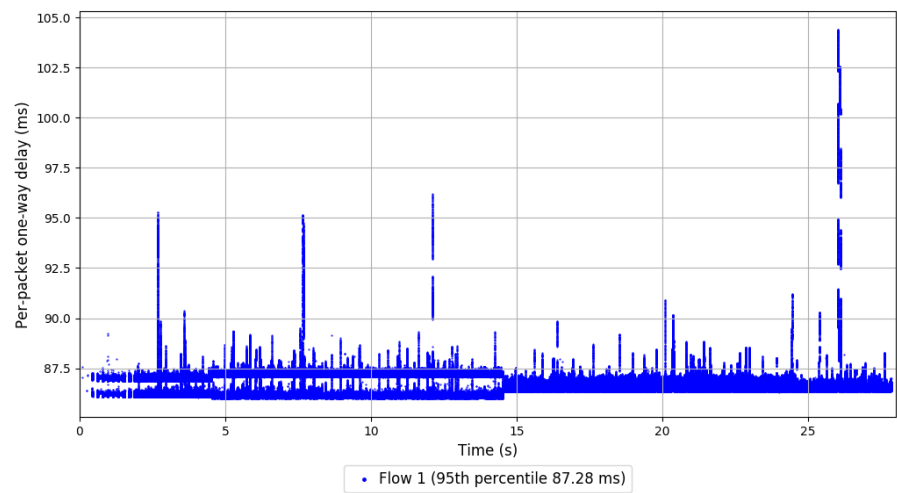
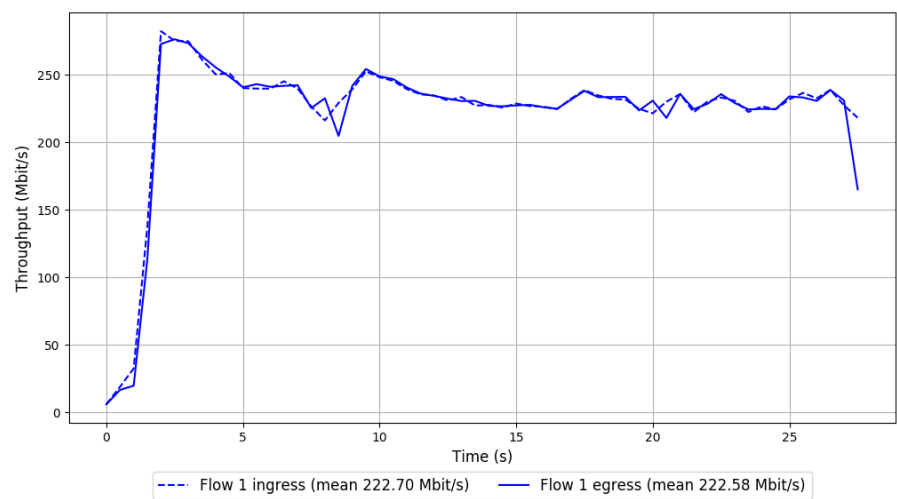
-- Flow 1:

Average throughput: 222.58 Mbit/s

95th percentile per-packet one-way delay: 87.279 ms

Loss rate: 0.75%

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

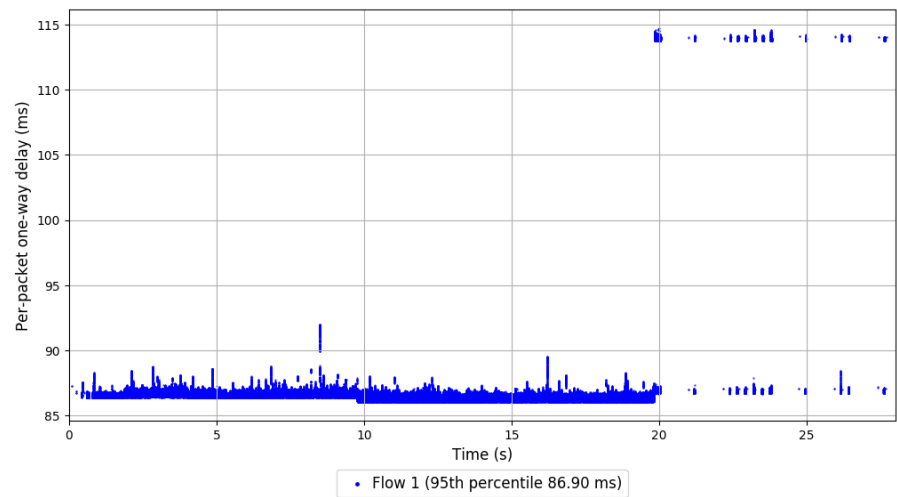
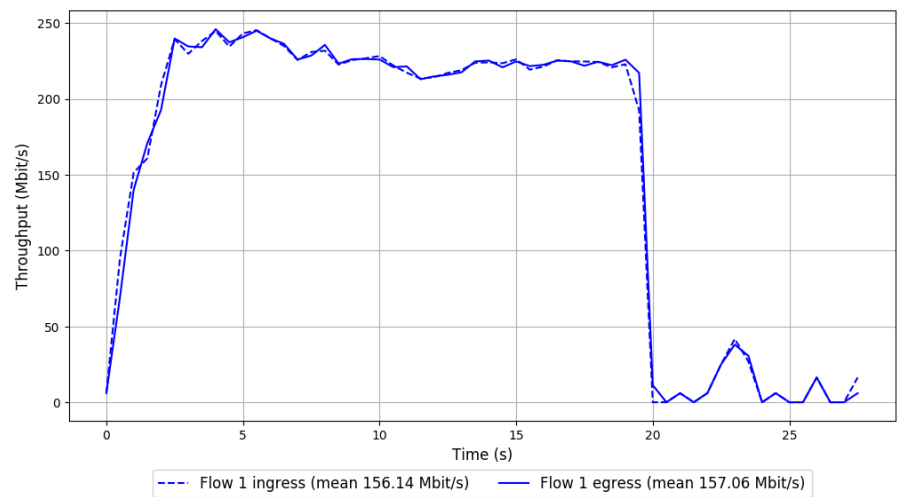


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-05 08:08:04
End at: 2017-12-05 08:08:34

# Below is generated by plot.py at 2017-12-05 10:28:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 157.06 Mbit/s
95th percentile per-packet one-way delay: 86.897 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 157.06 Mbit/s
95th percentile per-packet one-way delay: 86.897 ms
Loss rate: 0.12%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 06:22:13

End at: 2017-12-05 06:22:43

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.29 Mbit/s

95th percentile per-packet one-way delay: 87.814 ms

Loss rate: 0.77%

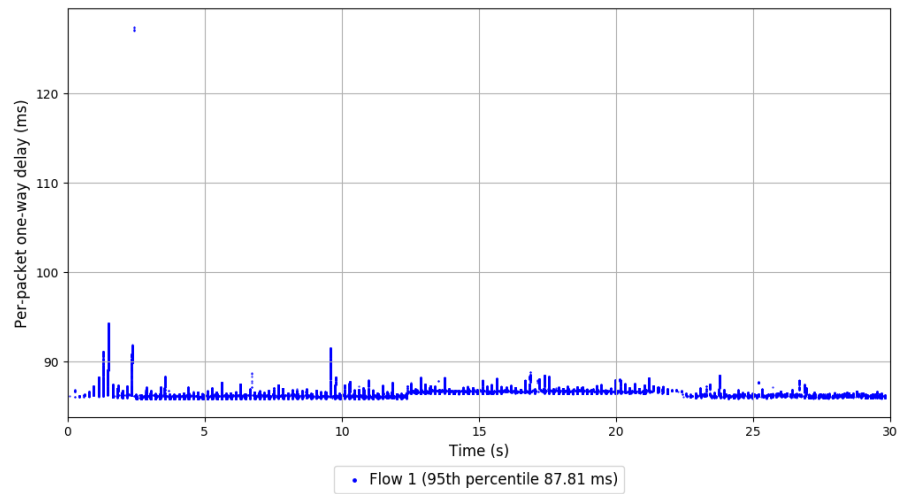
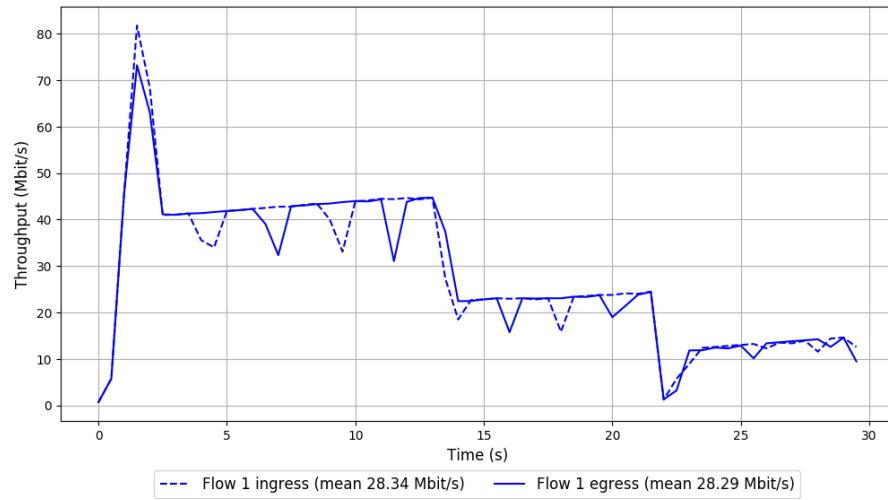
-- Flow 1:

Average throughput: 28.29 Mbit/s

95th percentile per-packet one-way delay: 87.814 ms

Loss rate: 0.77%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 06:33:20

End at: 2017-12-05 06:33:50

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.57 Mbit/s

95th percentile per-packet one-way delay: 97.338 ms

Loss rate: 0.32%

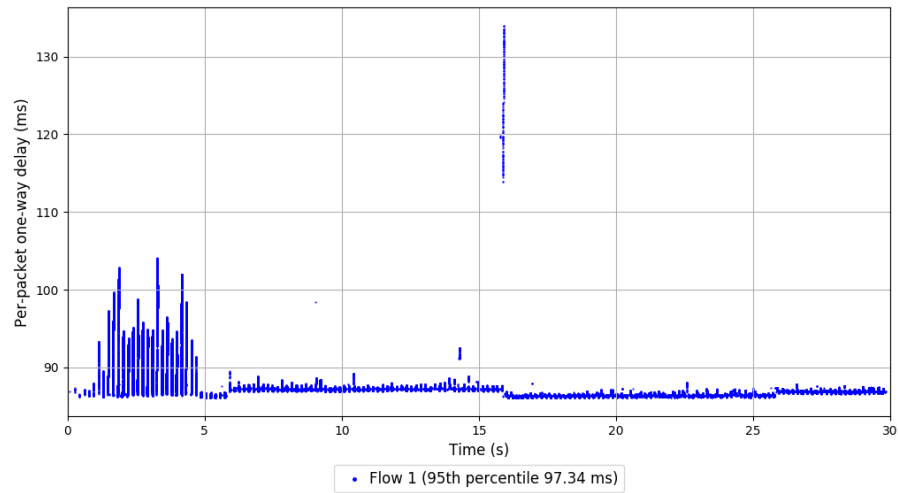
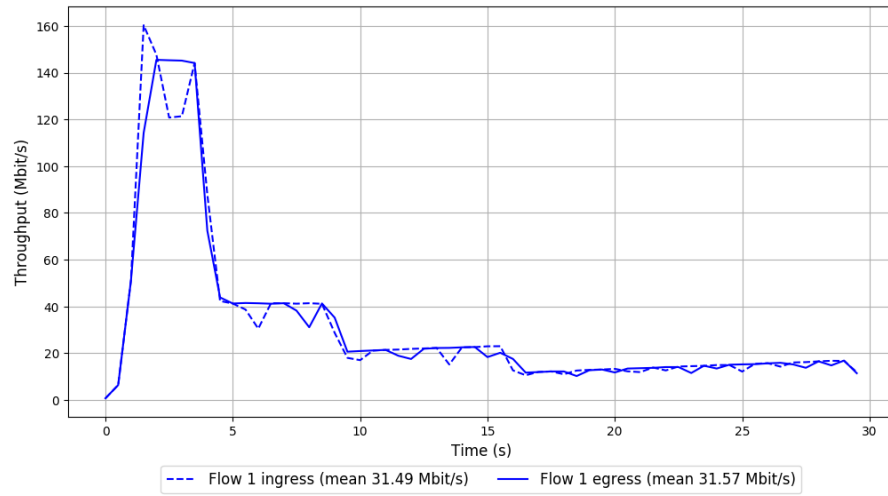
-- Flow 1:

Average throughput: 31.57 Mbit/s

95th percentile per-packet one-way delay: 97.338 ms

Loss rate: 0.32%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 06:44:31

End at: 2017-12-05 06:45:01

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.09 Mbit/s

95th percentile per-packet one-way delay: 114.543 ms

Loss rate: 0.75%

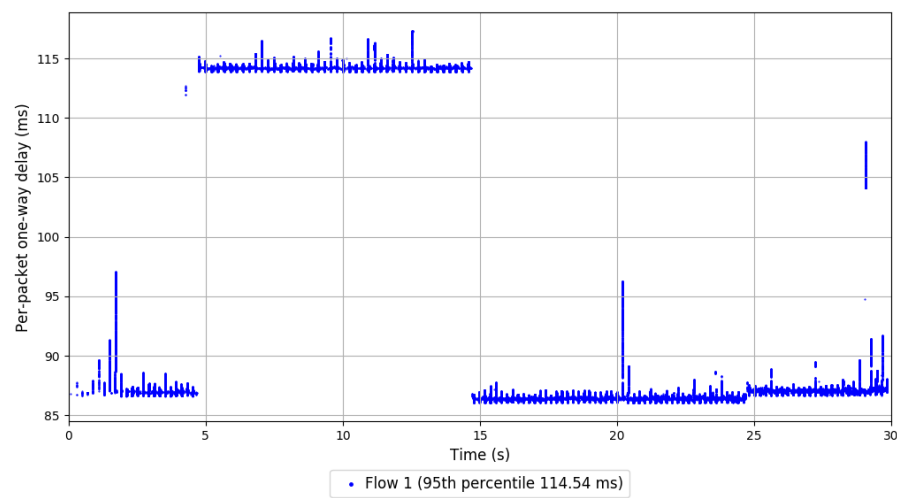
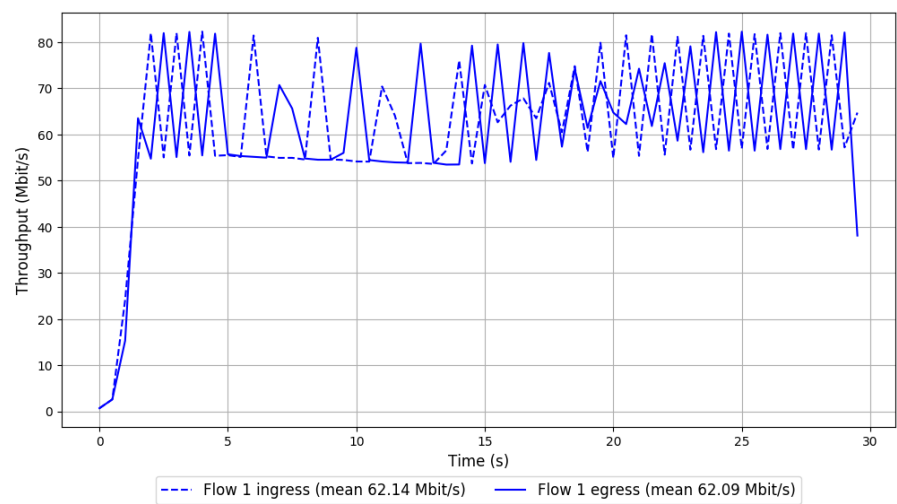
-- Flow 1:

Average throughput: 62.09 Mbit/s

95th percentile per-packet one-way delay: 114.543 ms

Loss rate: 0.75%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-05 06:55:37

End at: 2017-12-05 06:56:07

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.51 Mbit/s

95th percentile per-packet one-way delay: 91.045 ms

Loss rate: 0.43%

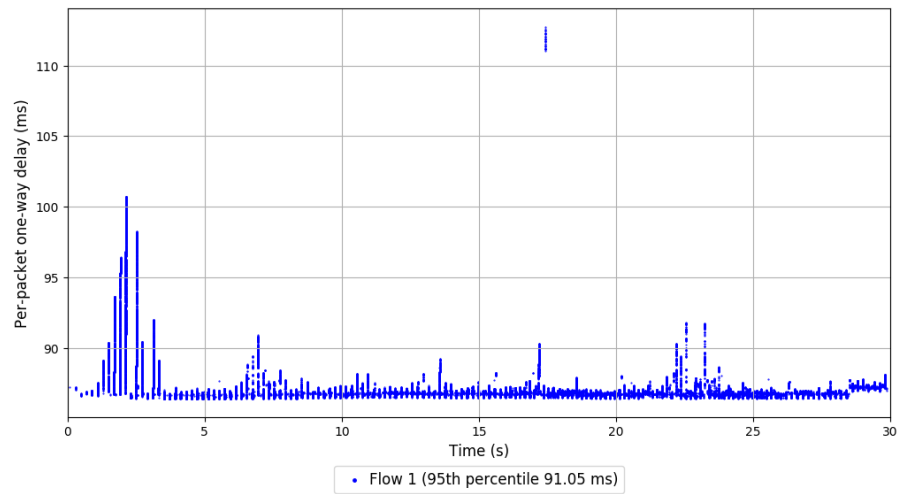
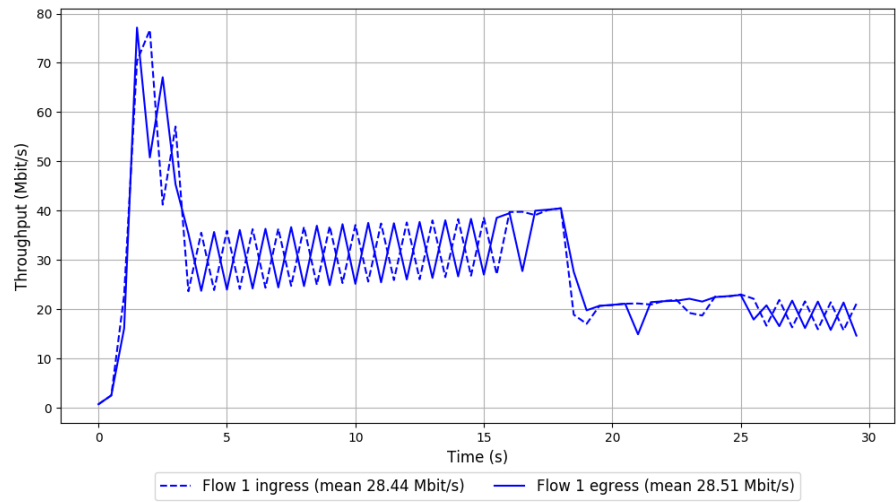
-- Flow 1:

Average throughput: 28.51 Mbit/s

95th percentile per-packet one-way delay: 91.045 ms

Loss rate: 0.43%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-05 07:06:13

End at: 2017-12-05 07:06:43

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.64 Mbit/s

95th percentile per-packet one-way delay: 87.673 ms

Loss rate: 0.34%

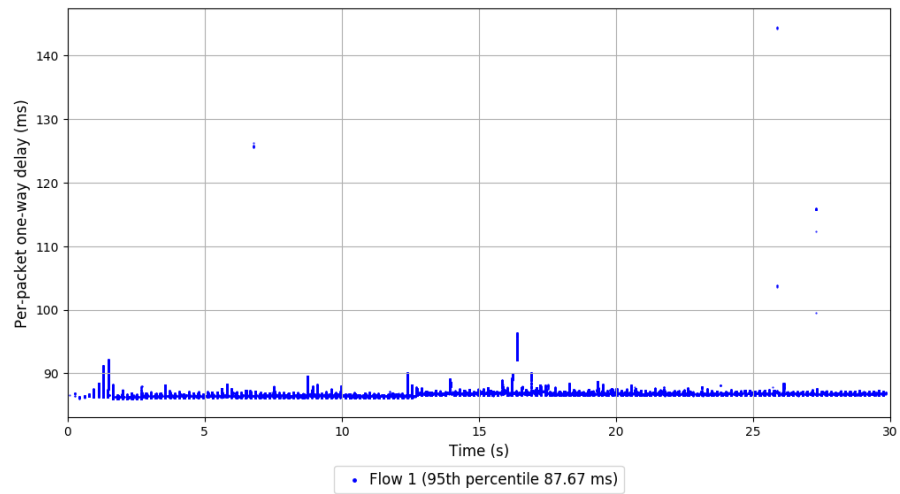
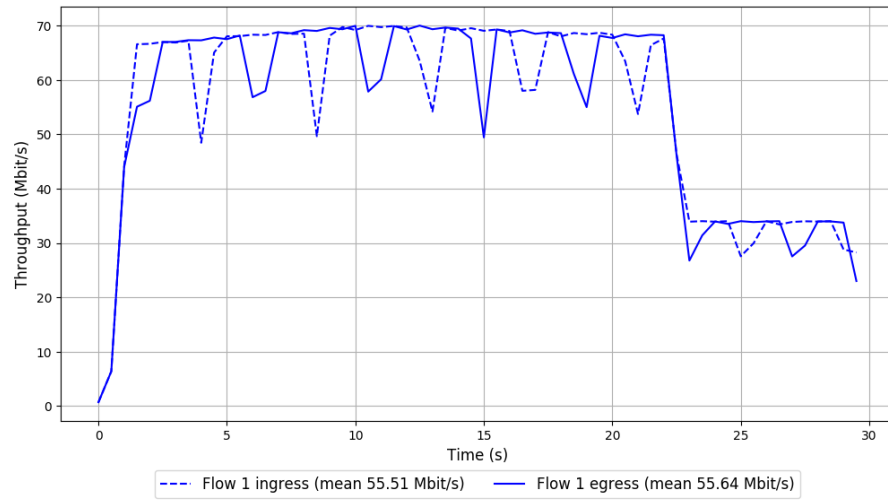
-- Flow 1:

Average throughput: 55.64 Mbit/s

95th percentile per-packet one-way delay: 87.673 ms

Loss rate: 0.34%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-05 07:17:22

End at: 2017-12-05 07:17:52

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.94 Mbit/s

95th percentile per-packet one-way delay: 88.235 ms

Loss rate: 0.16%

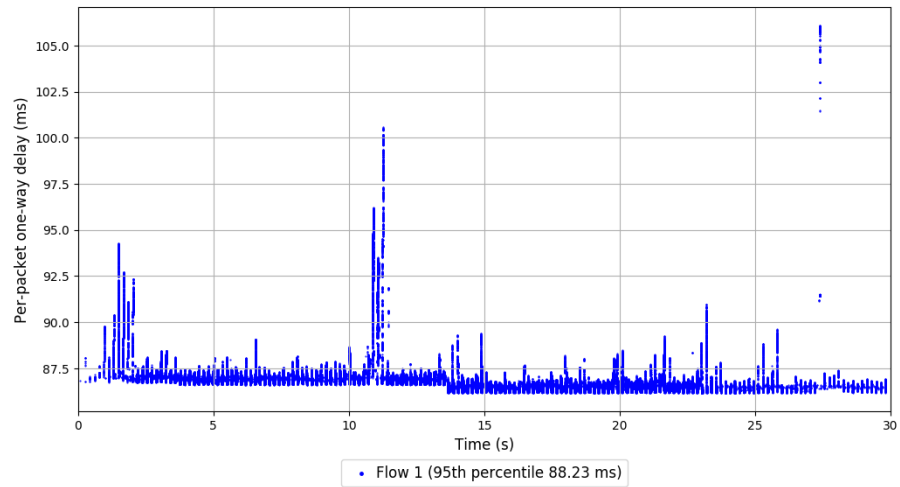
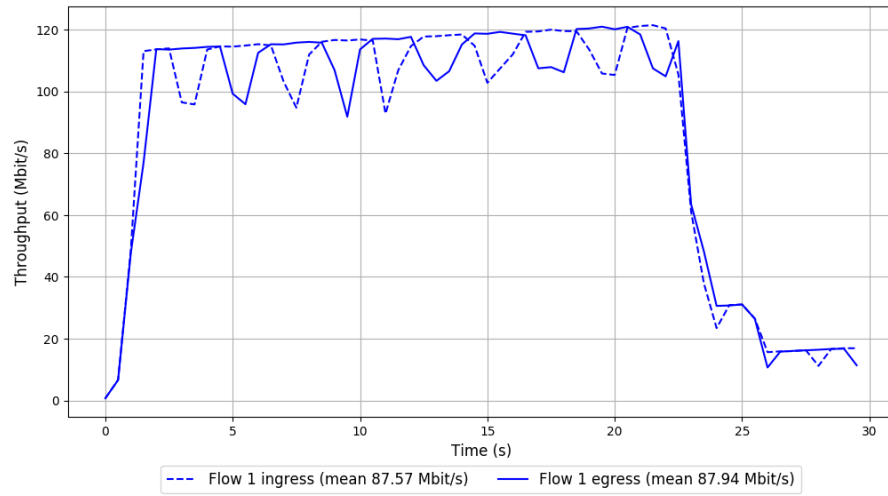
-- Flow 1:

Average throughput: 87.94 Mbit/s

95th percentile per-packet one-way delay: 88.235 ms

Loss rate: 0.16%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-05 07:28:45

End at: 2017-12-05 07:29:15

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.40 Mbit/s

95th percentile per-packet one-way delay: 87.808 ms

Loss rate: 0.88%

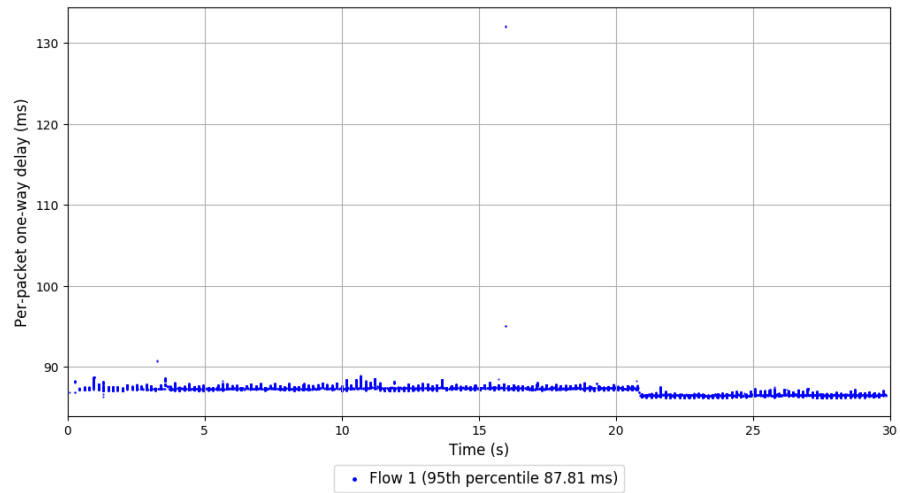
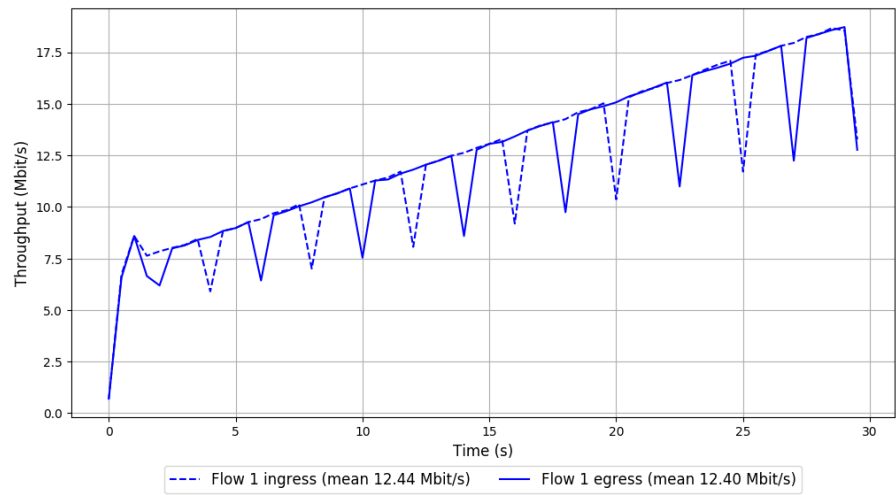
-- Flow 1:

Average throughput: 12.40 Mbit/s

95th percentile per-packet one-way delay: 87.808 ms

Loss rate: 0.88%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-05 07:40:00

End at: 2017-12-05 07:40:30

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.82 Mbit/s

95th percentile per-packet one-way delay: 87.565 ms

Loss rate: 0.66%

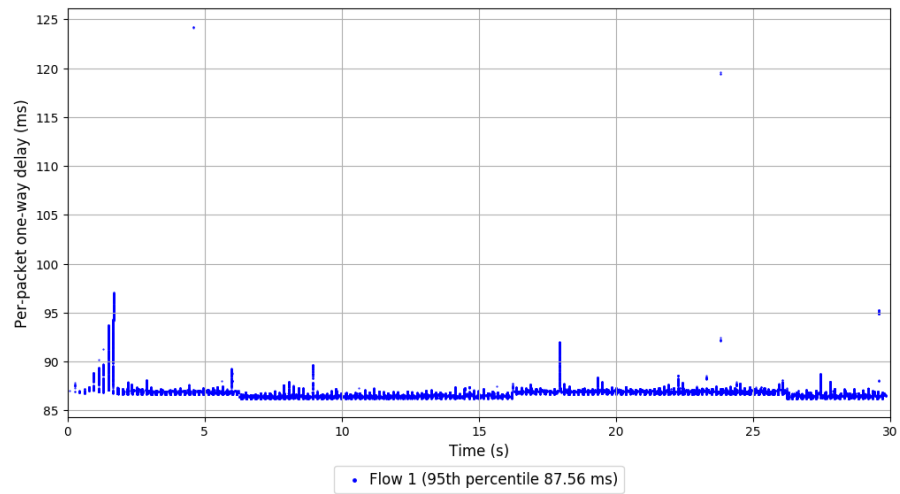
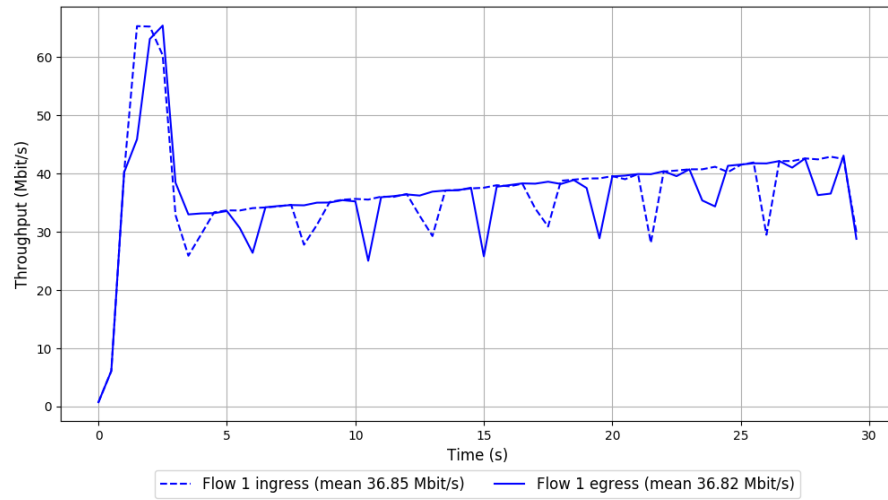
-- Flow 1:

Average throughput: 36.82 Mbit/s

95th percentile per-packet one-way delay: 87.565 ms

Loss rate: 0.66%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-05 07:50:57

End at: 2017-12-05 07:51:27

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.93 Mbit/s

95th percentile per-packet one-way delay: 88.014 ms

Loss rate: 0.30%

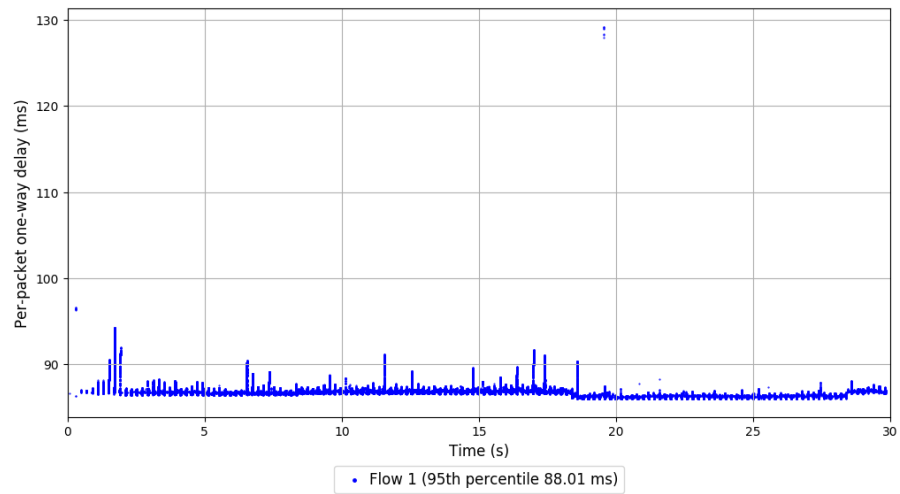
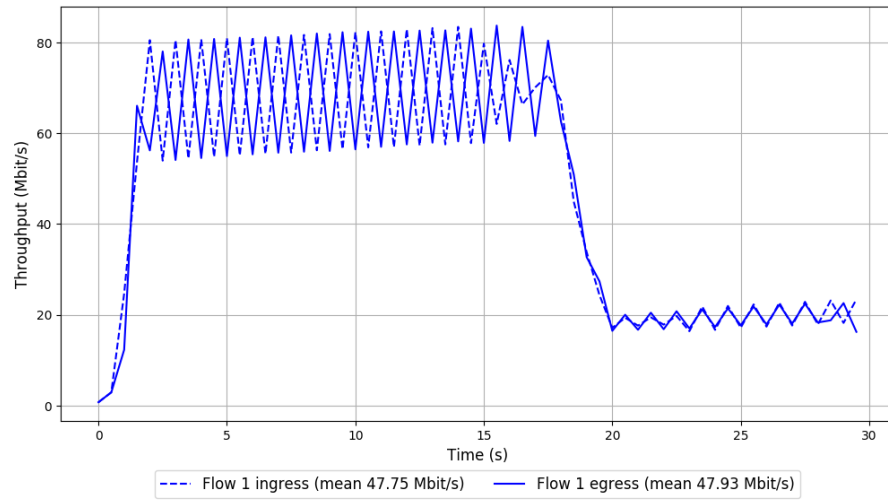
-- Flow 1:

Average throughput: 47.93 Mbit/s

95th percentile per-packet one-way delay: 88.014 ms

Loss rate: 0.30%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-05 08:01:49

End at: 2017-12-05 08:02:19

Below is generated by plot.py at 2017-12-05 10:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.16 Mbit/s

95th percentile per-packet one-way delay: 114.239 ms

Loss rate: 1.30%

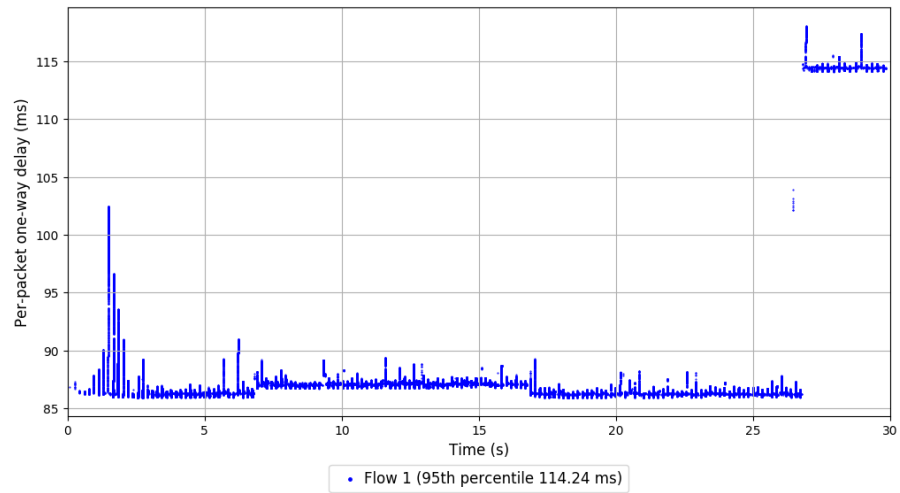
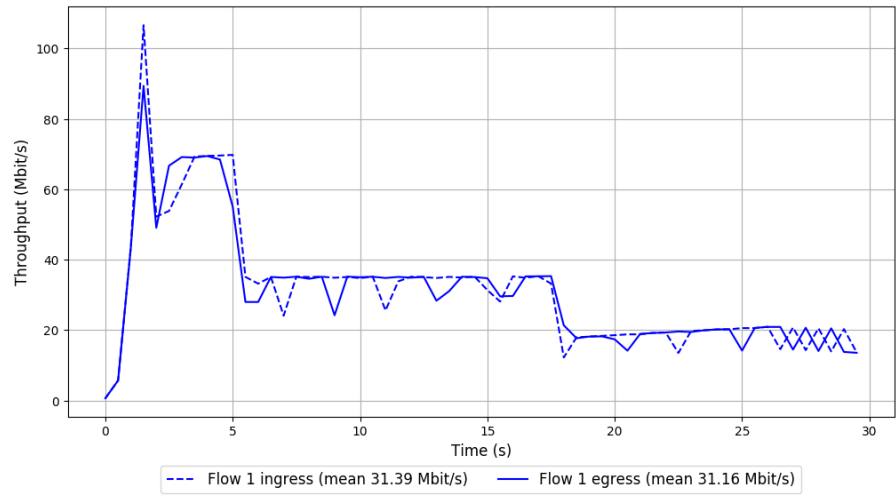
-- Flow 1:

Average throughput: 31.16 Mbit/s

95th percentile per-packet one-way delay: 114.239 ms

Loss rate: 1.30%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-05 06:25:55

End at: 2017-12-05 06:26:25

Below is generated by plot.py at 2017-12-05 10:29:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.15 Mbit/s

95th percentile per-packet one-way delay: 222.494 ms

Loss rate: 2.15%

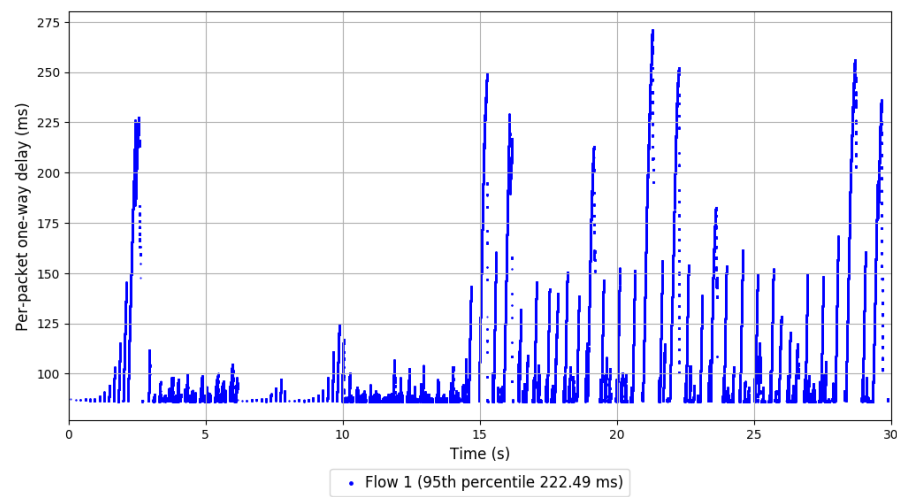
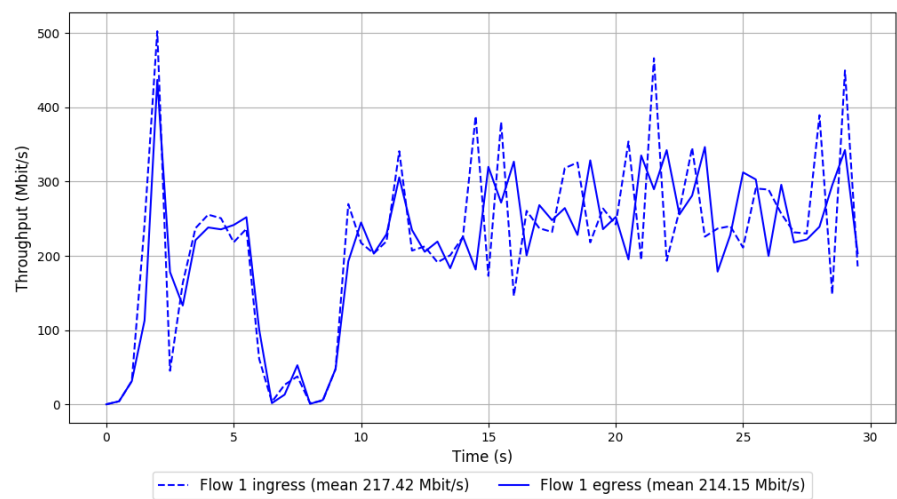
-- Flow 1:

Average throughput: 214.15 Mbit/s

95th percentile per-packet one-way delay: 222.494 ms

Loss rate: 2.15%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-05 06:37:04

End at: 2017-12-05 06:37:34

Below is generated by plot.py at 2017-12-05 10:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 267.87 Mbit/s

95th percentile per-packet one-way delay: 145.417 ms

Loss rate: 1.42%

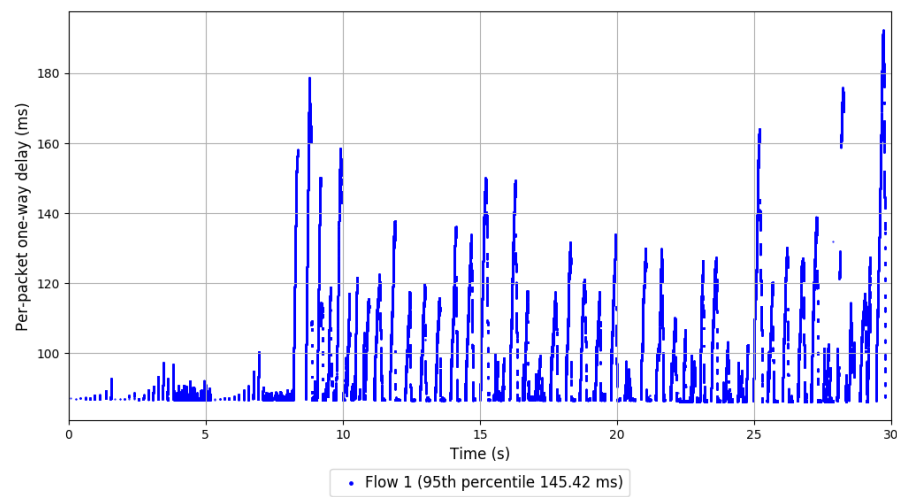
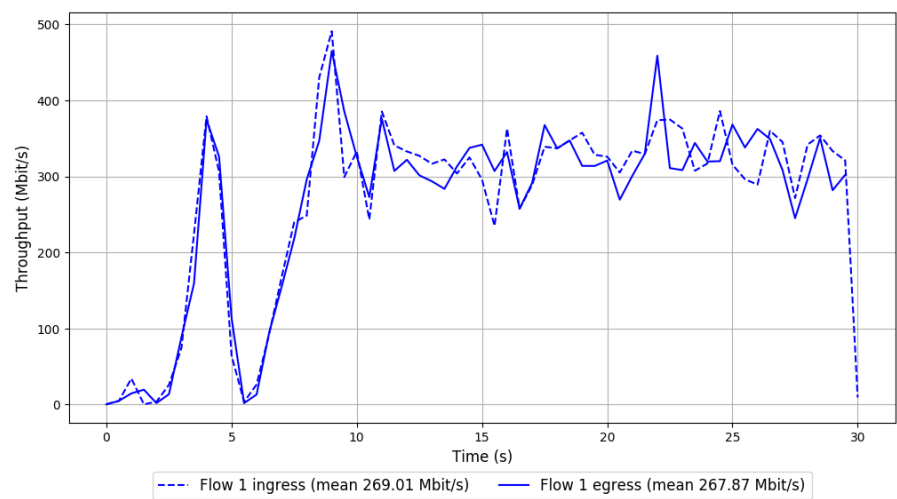
-- Flow 1:

Average throughput: 267.87 Mbit/s

95th percentile per-packet one-way delay: 145.417 ms

Loss rate: 1.42%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 06:48:03

End at: 2017-12-05 06:48:33

Below is generated by plot.py at 2017-12-05 10:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 264.63 Mbit/s

95th percentile per-packet one-way delay: 203.609 ms

Loss rate: 0.93%

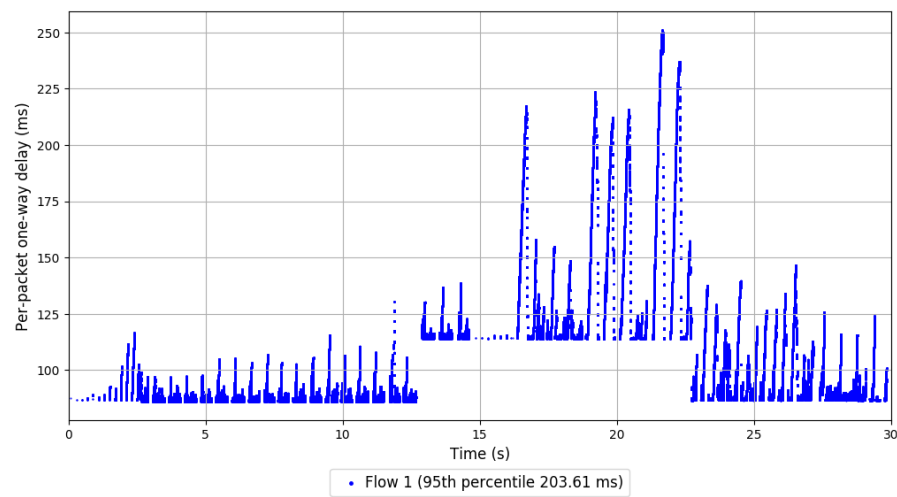
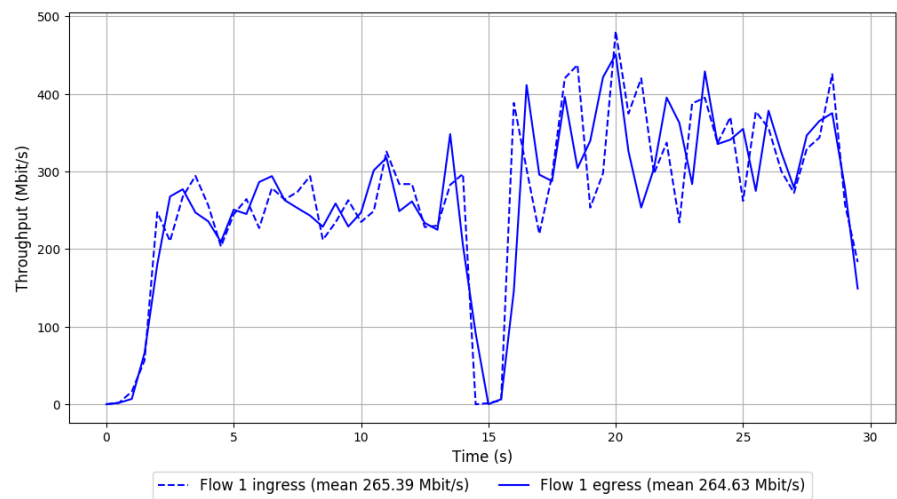
-- Flow 1:

Average throughput: 264.63 Mbit/s

95th percentile per-packet one-way delay: 203.609 ms

Loss rate: 0.93%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-05 06:59:13

End at: 2017-12-05 06:59:43

Below is generated by plot.py at 2017-12-05 10:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.41 Mbit/s

95th percentile per-packet one-way delay: 119.360 ms

Loss rate: 2.27%

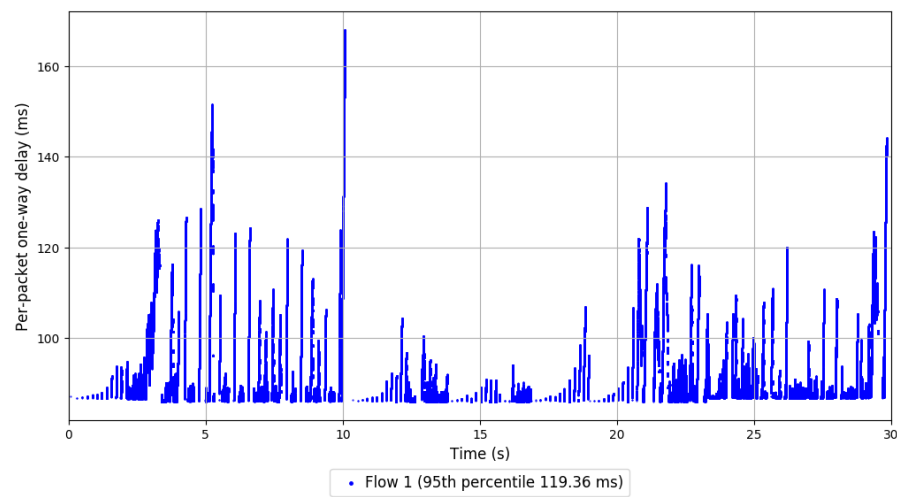
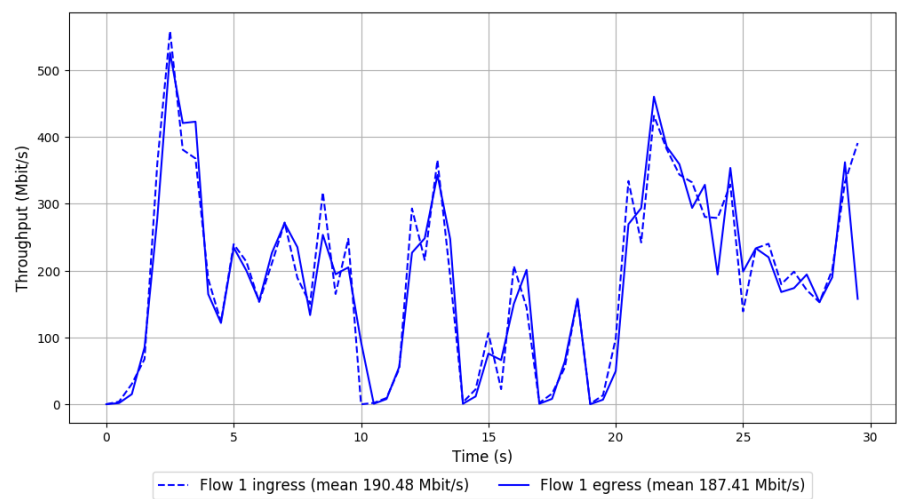
-- Flow 1:

Average throughput: 187.41 Mbit/s

95th percentile per-packet one-way delay: 119.360 ms

Loss rate: 2.27%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-05 07:09:54

End at: 2017-12-05 07:10:24

Below is generated by plot.py at 2017-12-05 10:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.37 Mbit/s

95th percentile per-packet one-way delay: 184.874 ms

Loss rate: 0.25%

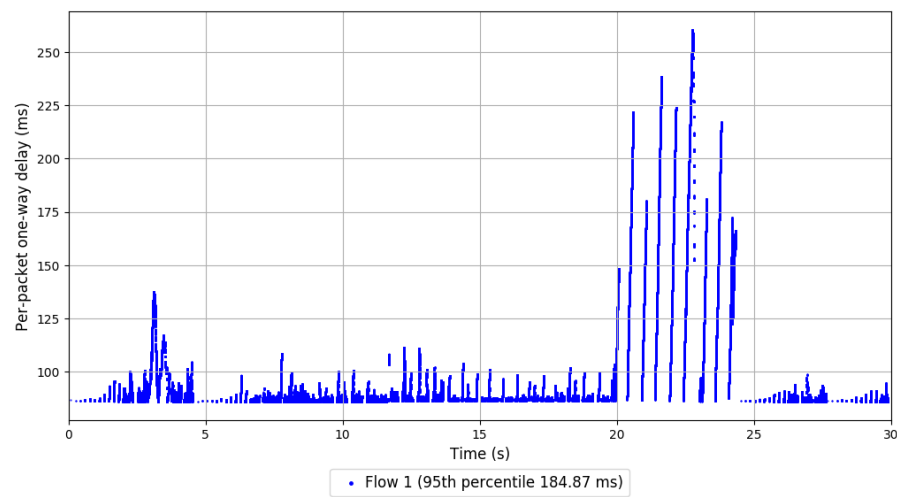
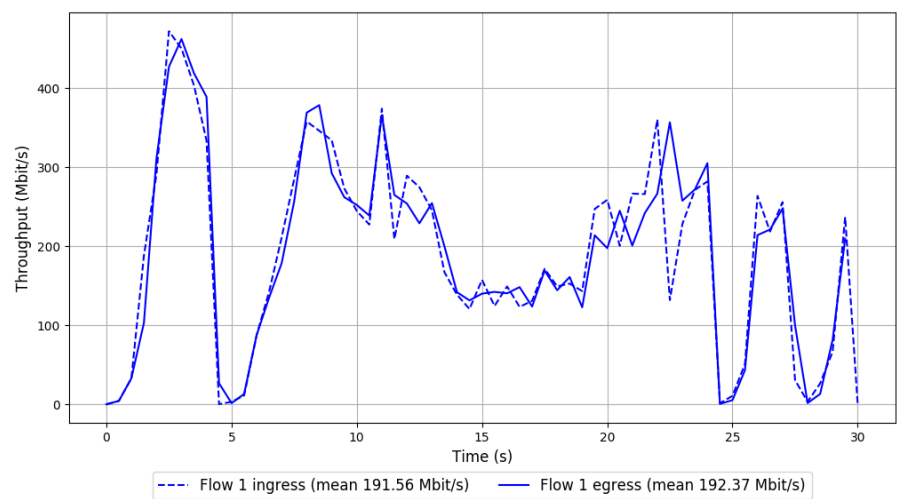
-- Flow 1:

Average throughput: 192.37 Mbit/s

95th percentile per-packet one-way delay: 184.874 ms

Loss rate: 0.25%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-05 07:21:09

End at: 2017-12-05 07:21:39

Below is generated by plot.py at 2017-12-05 10:29:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 239.99 Mbit/s

95th percentile per-packet one-way delay: 119.529 ms

Loss rate: 1.53%

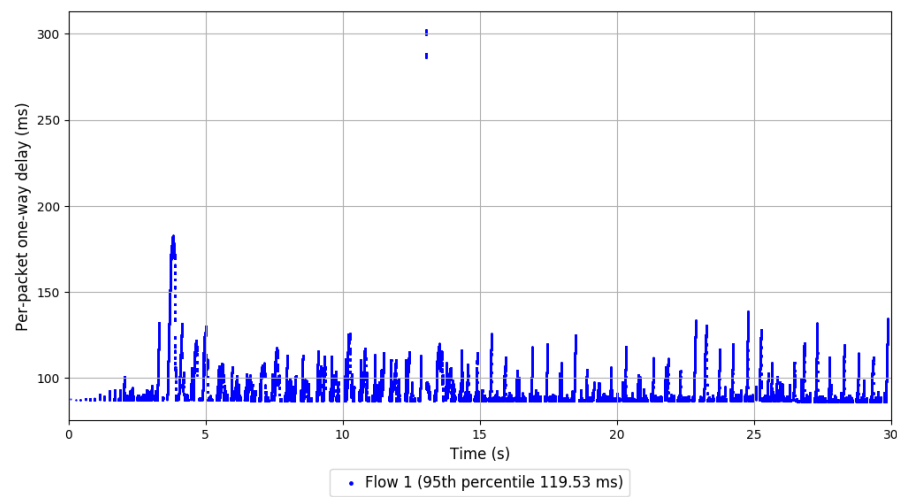
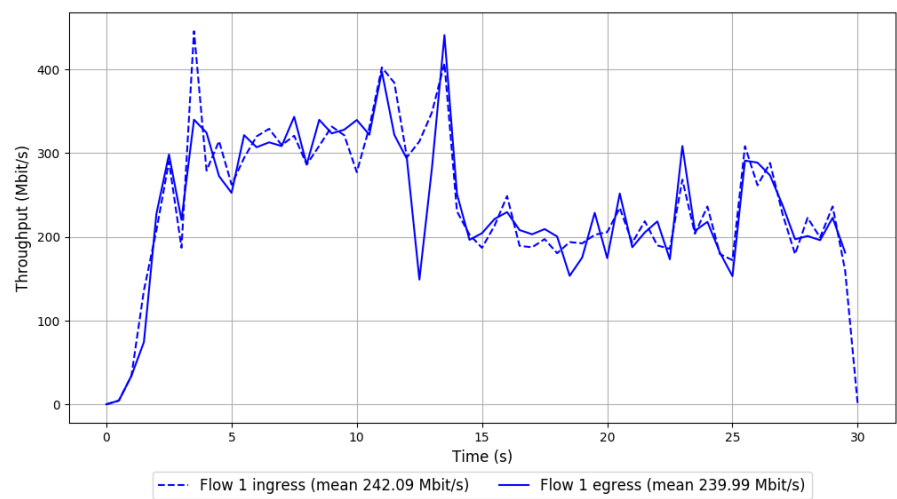
-- Flow 1:

Average throughput: 239.99 Mbit/s

95th percentile per-packet one-way delay: 119.529 ms

Loss rate: 1.53%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-05 07:32:28

End at: 2017-12-05 07:32:58

Below is generated by plot.py at 2017-12-05 10:30:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.48 Mbit/s

95th percentile per-packet one-way delay: 108.748 ms

Loss rate: 3.68%

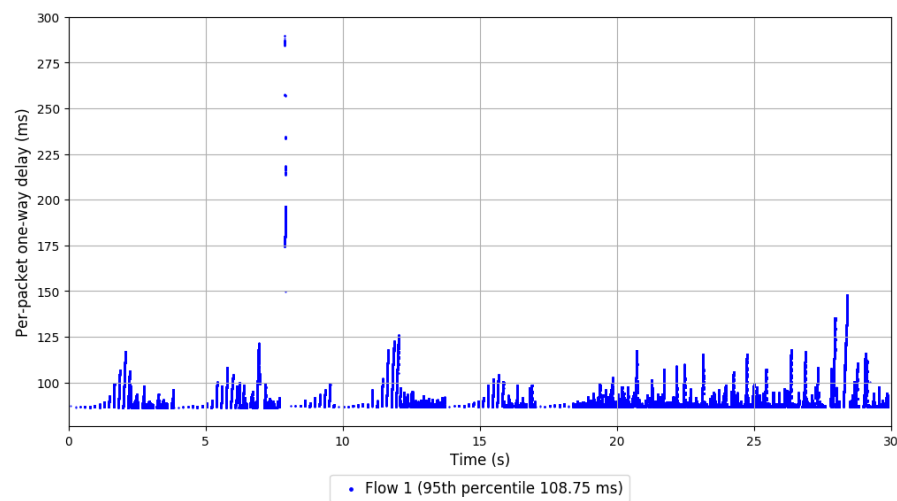
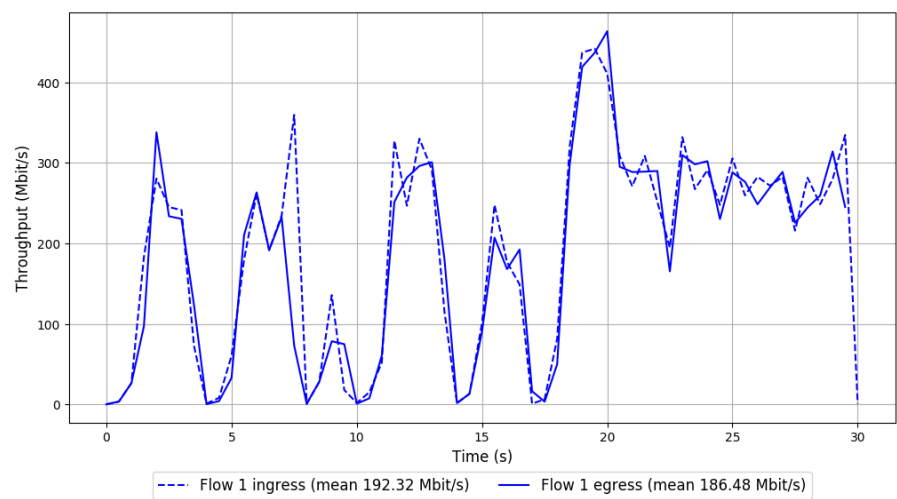
-- Flow 1:

Average throughput: 186.48 Mbit/s

95th percentile per-packet one-way delay: 108.748 ms

Loss rate: 3.68%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-05 07:43:34

End at: 2017-12-05 07:44:04

Below is generated by plot.py at 2017-12-05 10:32:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.98 Mbit/s

95th percentile per-packet one-way delay: 119.492 ms

Loss rate: 2.93%

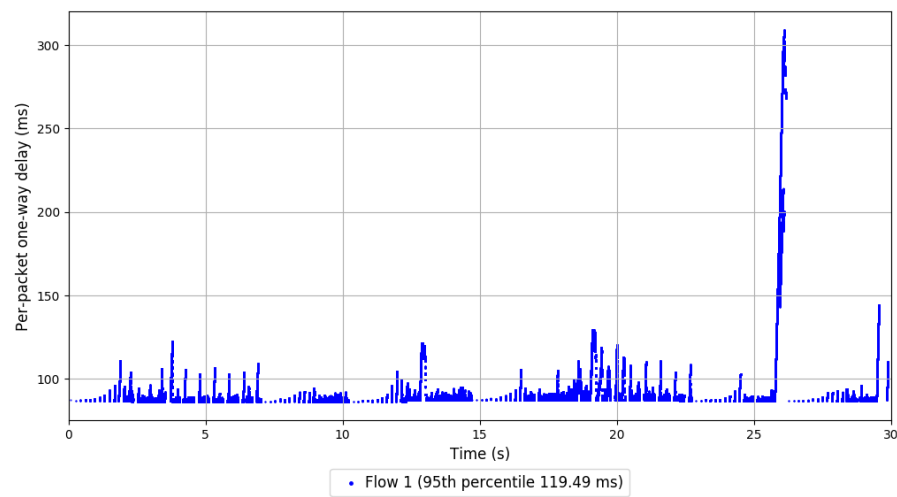
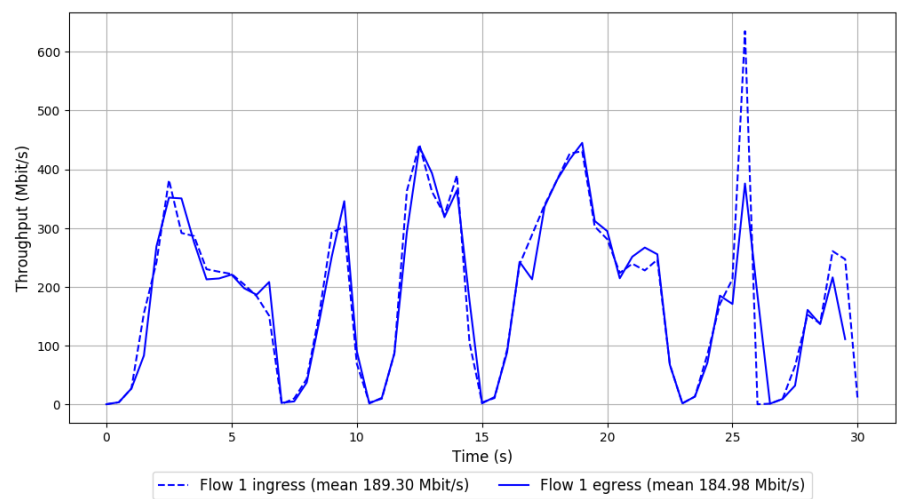
-- Flow 1:

Average throughput: 184.98 Mbit/s

95th percentile per-packet one-way delay: 119.492 ms

Loss rate: 2.93%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-05 07:54:43

End at: 2017-12-05 07:55:13

Below is generated by plot.py at 2017-12-05 10:32:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.87 Mbit/s

95th percentile per-packet one-way delay: 121.606 ms

Loss rate: 1.05%

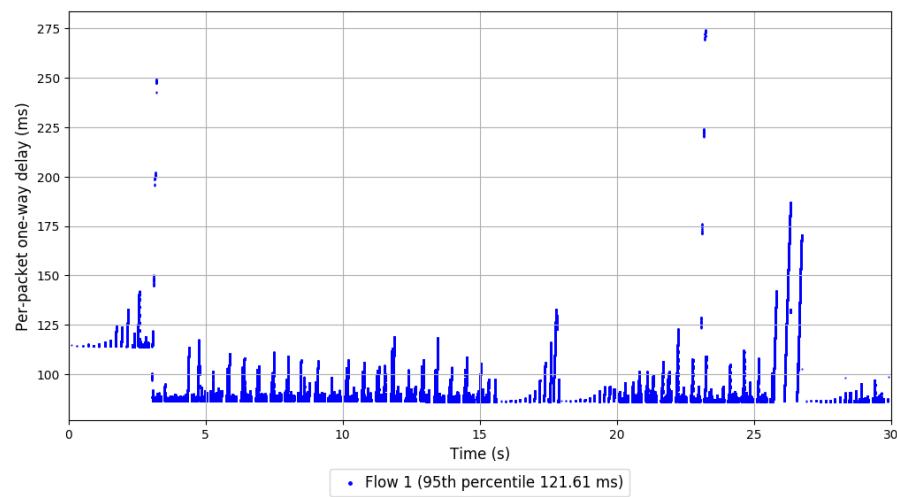
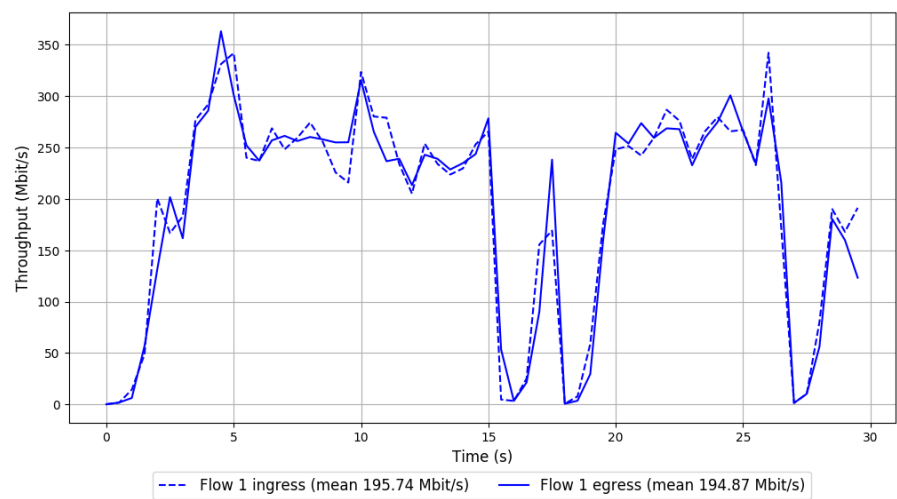
-- Flow 1:

Average throughput: 194.87 Mbit/s

95th percentile per-packet one-way delay: 121.606 ms

Loss rate: 1.05%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-05 08:05:26

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

Below is generated by plot.py at 2017-12-05 10:32:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 233.87 Mbit/s

95th percentile per-packet one-way delay: 136.603 ms

Loss rate: 1.33%

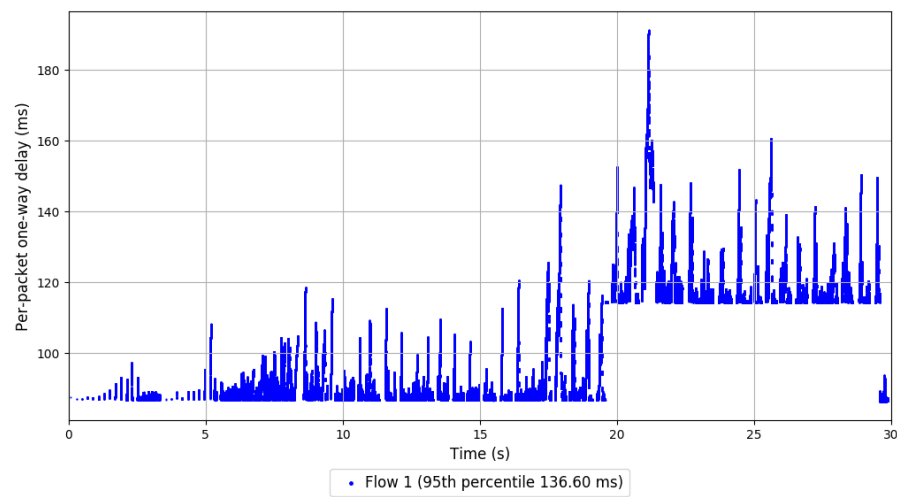
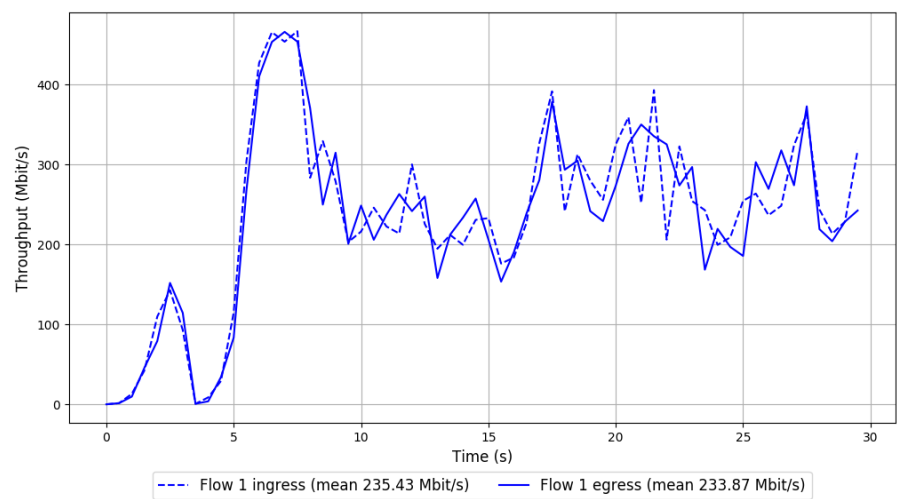
-- Flow 1:

Average throughput: 233.87 Mbit/s

95th percentile per-packet one-way delay: 136.603 ms

Loss rate: 1.33%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-05 06:24:16

End at: 2017-12-05 06:24:46

Below is generated by plot.py at 2017-12-05 10:32:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.78 Mbit/s

95th percentile per-packet one-way delay: 86.817 ms

Loss rate: 1.33%

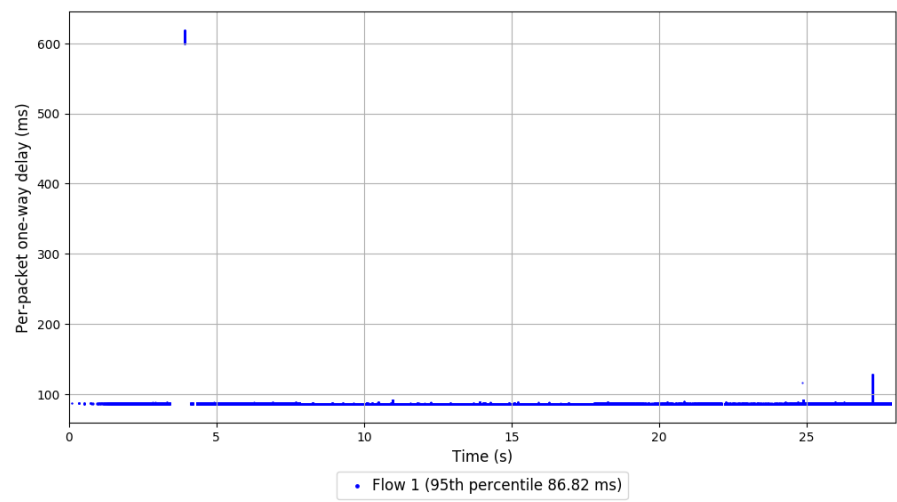
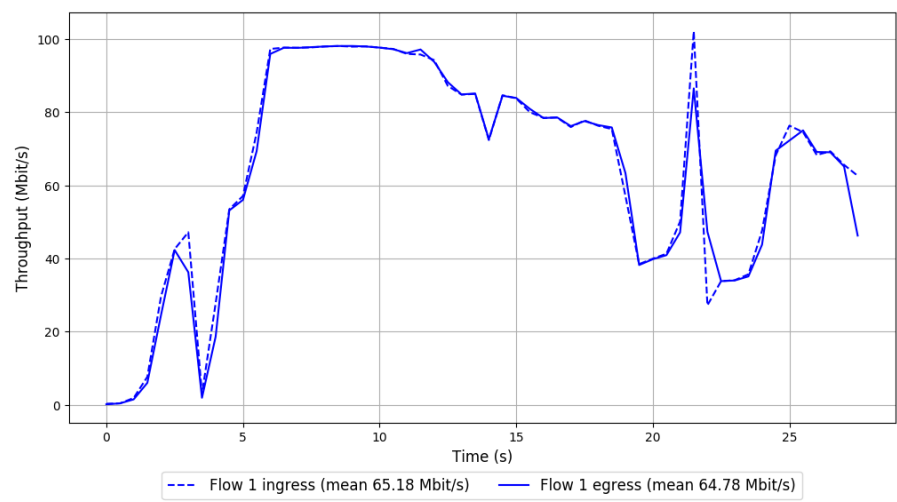
-- Flow 1:

Average throughput: 64.78 Mbit/s

95th percentile per-packet one-way delay: 86.817 ms

Loss rate: 1.33%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-05 06:35:23

End at: 2017-12-05 06:35:53

Below is generated by plot.py at 2017-12-05 10:32:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.47 Mbit/s

95th percentile per-packet one-way delay: 87.195 ms

Loss rate: 0.79%

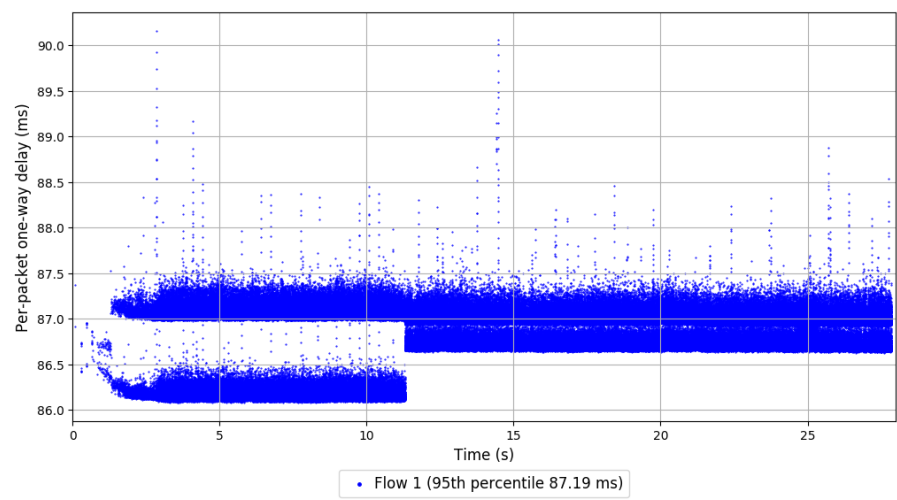
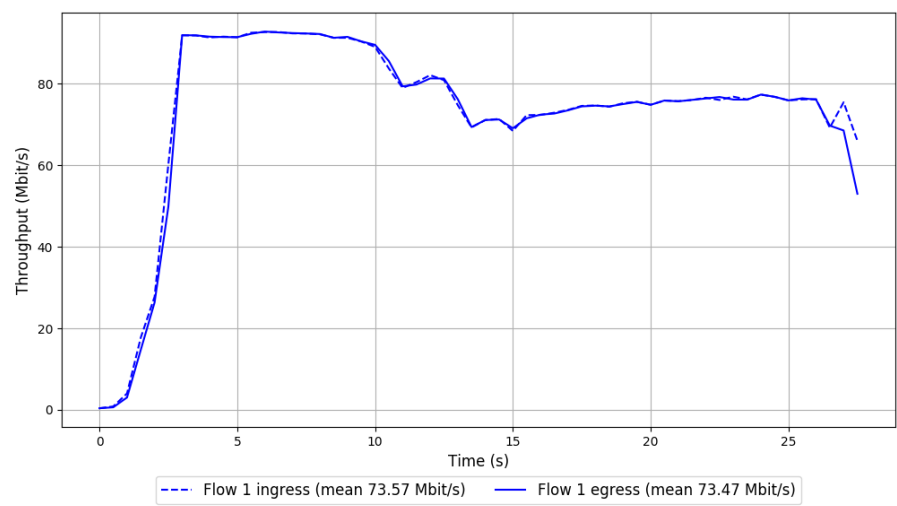
-- Flow 1:

Average throughput: 73.47 Mbit/s

95th percentile per-packet one-way delay: 87.195 ms

Loss rate: 0.79%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-05 06:46:35

End at: 2017-12-05 06:47:05

Below is generated by plot.py at 2017-12-05 10:32:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.77 Mbit/s

95th percentile per-packet one-way delay: 86.732 ms

Loss rate: 0.65%

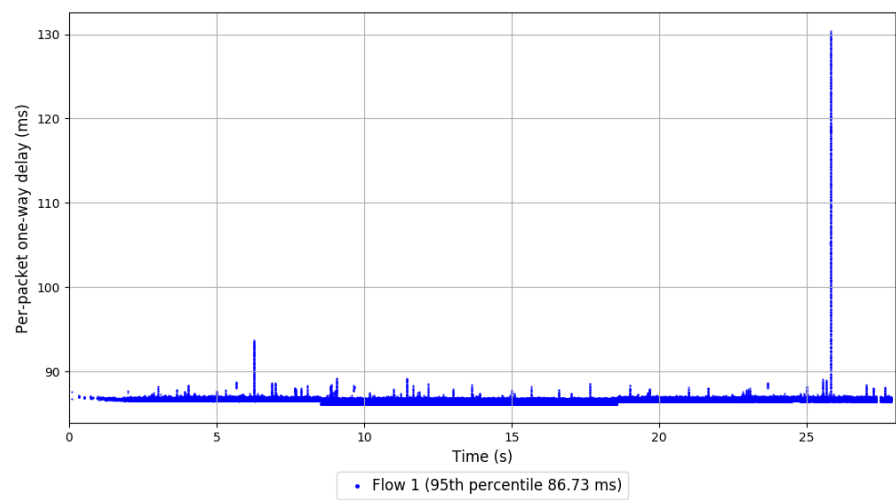
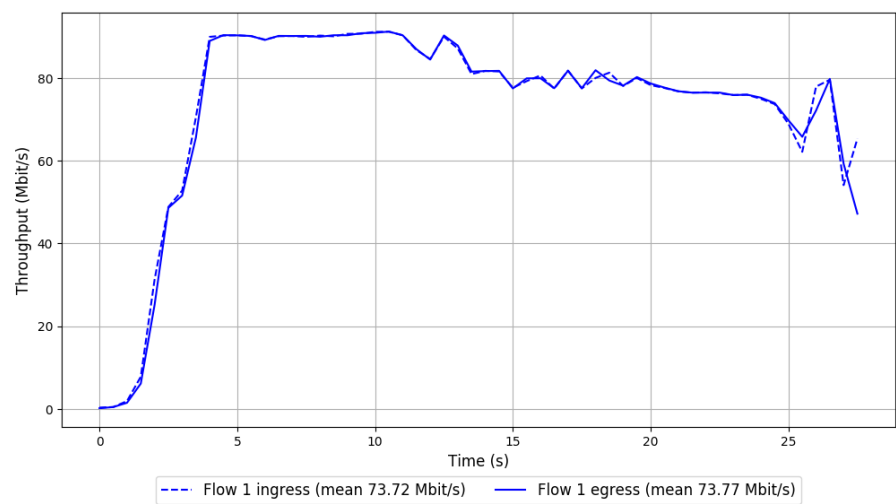
-- Flow 1:

Average throughput: 73.77 Mbit/s

95th percentile per-packet one-way delay: 86.732 ms

Loss rate: 0.65%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-05 06:57:40

End at: 2017-12-05 06:58:10

Below is generated by plot.py at 2017-12-05 10:32:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.51 Mbit/s

95th percentile per-packet one-way delay: 86.771 ms

Loss rate: 0.57%

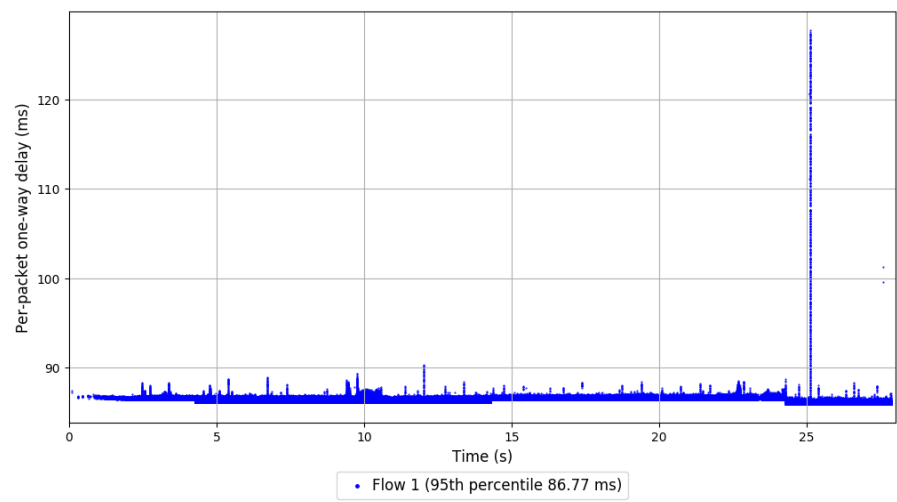
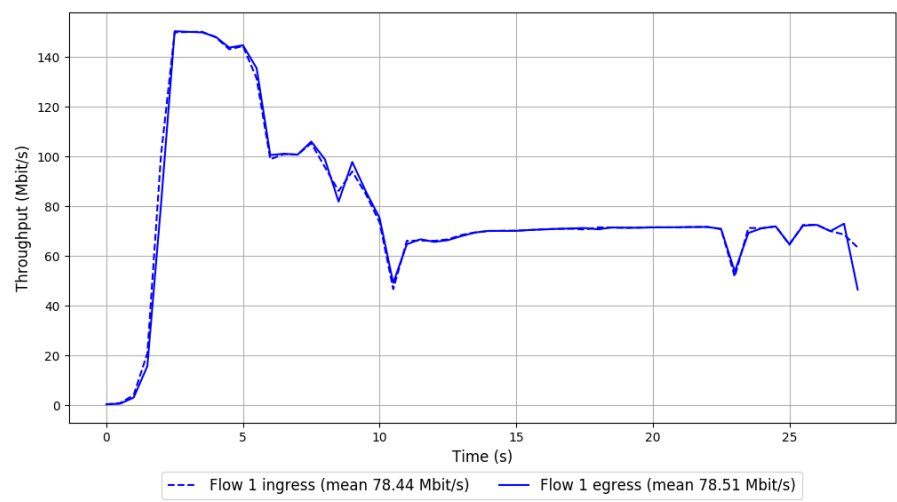
-- Flow 1:

Average throughput: 78.51 Mbit/s

95th percentile per-packet one-way delay: 86.771 ms

Loss rate: 0.57%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-05 07:08:16

End at: 2017-12-05 07:08:46

Below is generated by plot.py at 2017-12-05 10:33:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.91 Mbit/s

95th percentile per-packet one-way delay: 87.085 ms

Loss rate: 1.07%

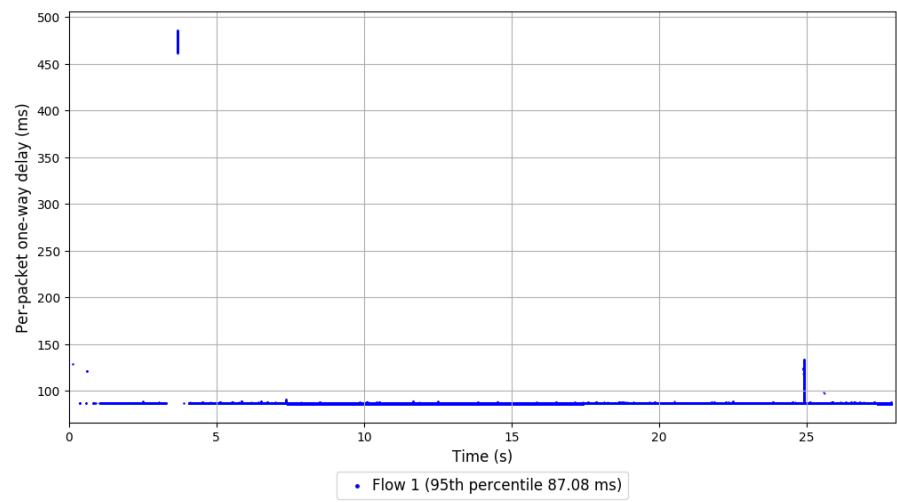
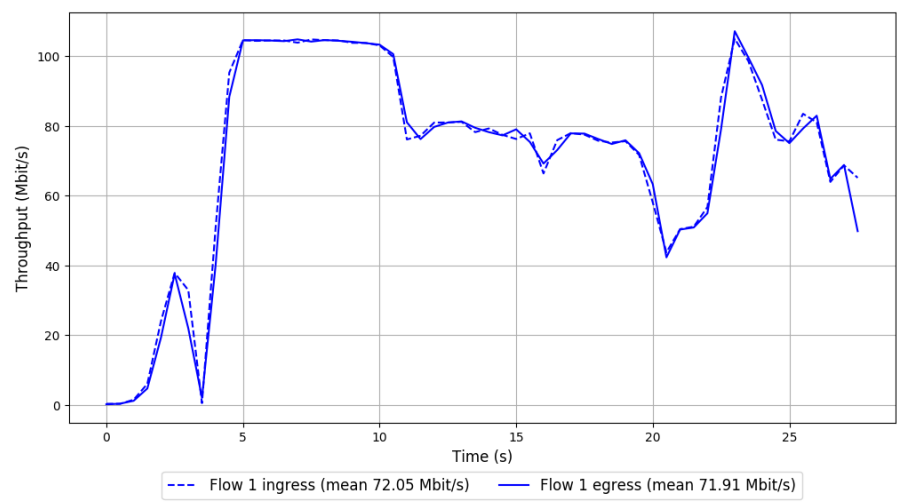
-- Flow 1:

Average throughput: 71.91 Mbit/s

95th percentile per-packet one-way delay: 87.085 ms

Loss rate: 1.07%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-05 07:19:28

End at: 2017-12-05 07:19:58

Below is generated by plot.py at 2017-12-05 10:33:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.86 Mbit/s

95th percentile per-packet one-way delay: 87.115 ms

Loss rate: 0.64%

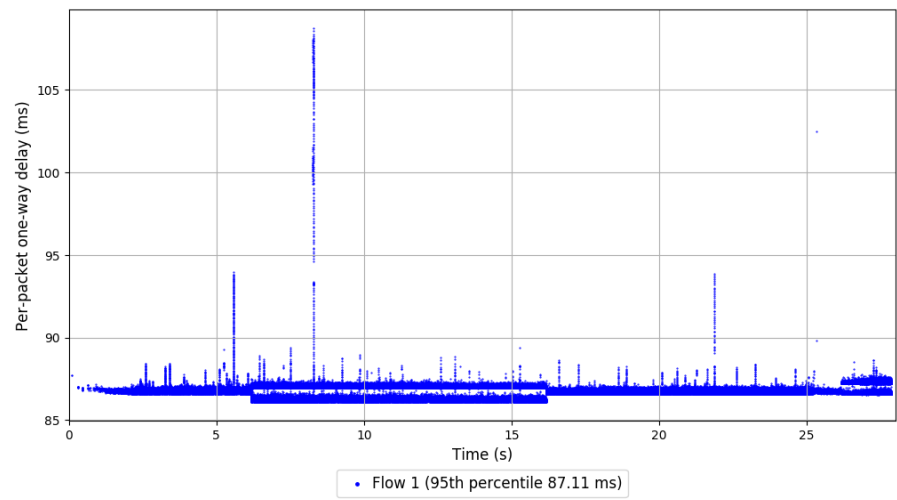
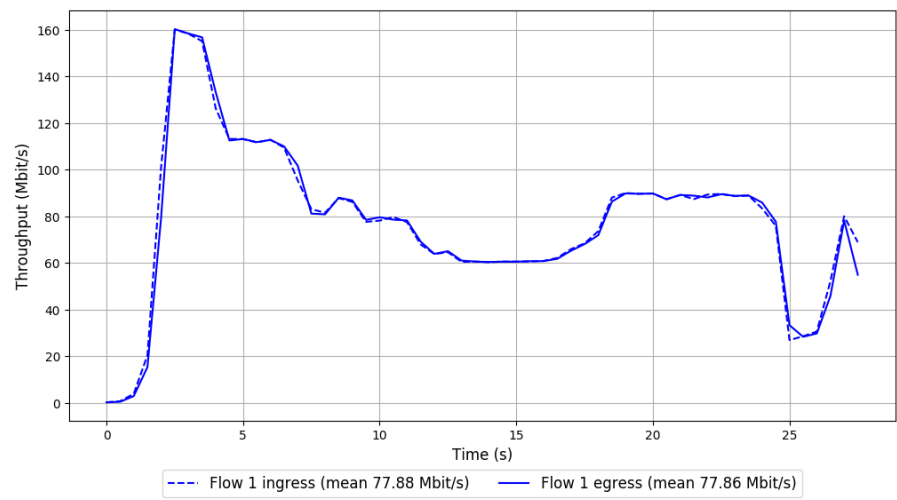
-- Flow 1:

Average throughput: 77.86 Mbit/s

95th percentile per-packet one-way delay: 87.115 ms

Loss rate: 0.64%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-05 07:30:46

End at: 2017-12-05 07:31:16

Below is generated by plot.py at 2017-12-05 10:34:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.70 Mbit/s

95th percentile per-packet one-way delay: 87.460 ms

Loss rate: 0.63%

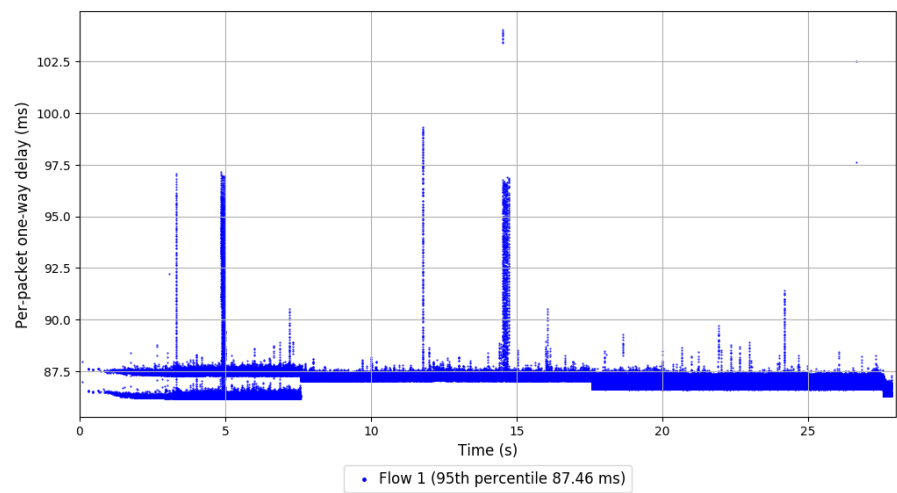
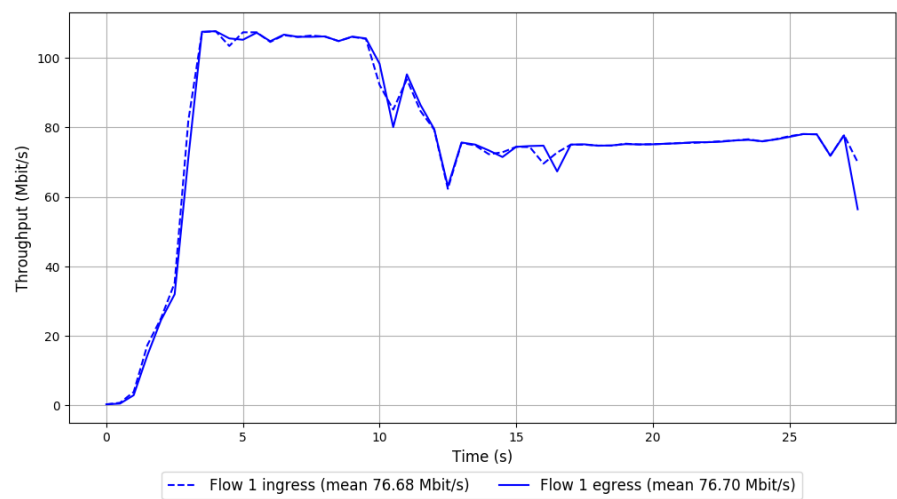
-- Flow 1:

Average throughput: 76.70 Mbit/s

95th percentile per-packet one-way delay: 87.460 ms

Loss rate: 0.63%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-05 07:42:03

End at: 2017-12-05 07:42:33

Below is generated by plot.py at 2017-12-05 10:34:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.63 Mbit/s

95th percentile per-packet one-way delay: 86.823 ms

Loss rate: 0.59%

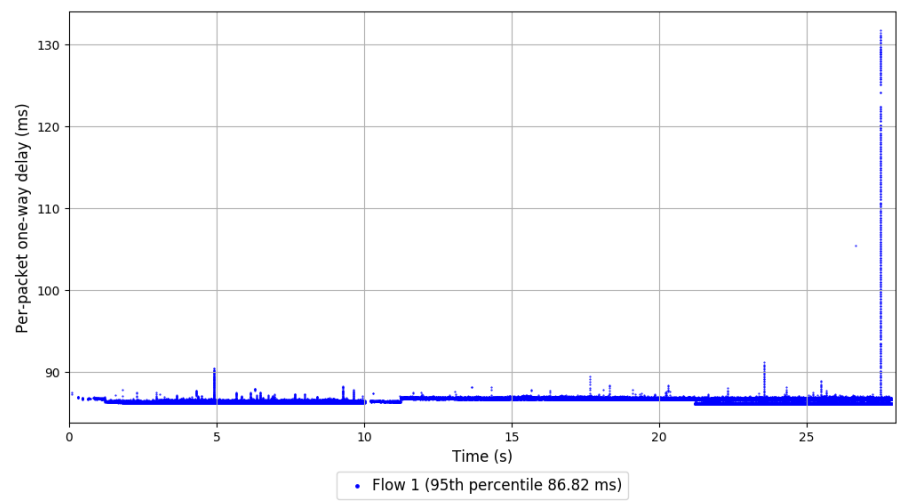
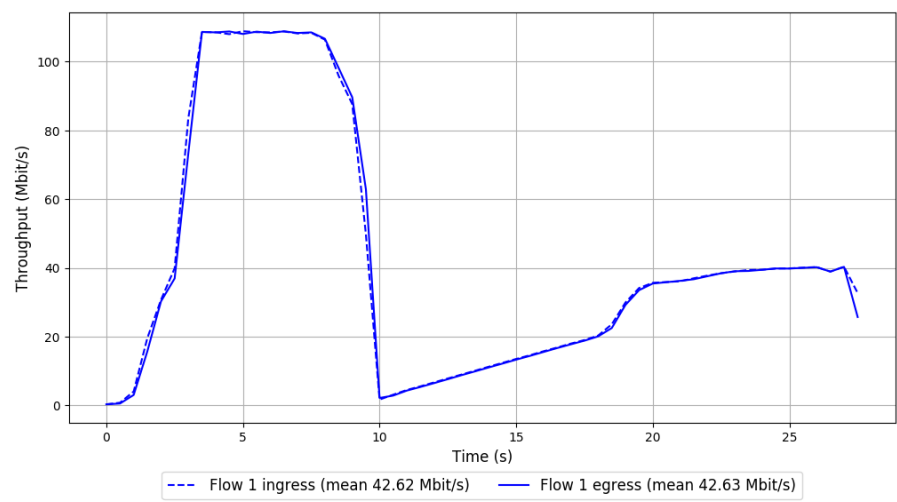
-- Flow 1:

Average throughput: 42.63 Mbit/s

95th percentile per-packet one-way delay: 86.823 ms

Loss rate: 0.59%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-05 07:53:01

End at: 2017-12-05 07:53:31

Below is generated by plot.py at 2017-12-05 10:34:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.89 Mbit/s

95th percentile per-packet one-way delay: 87.272 ms

Loss rate: 0.64%

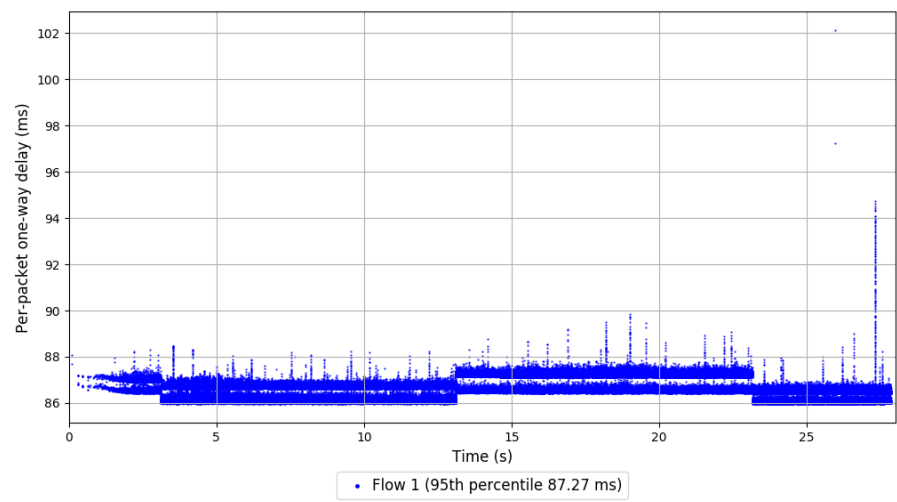
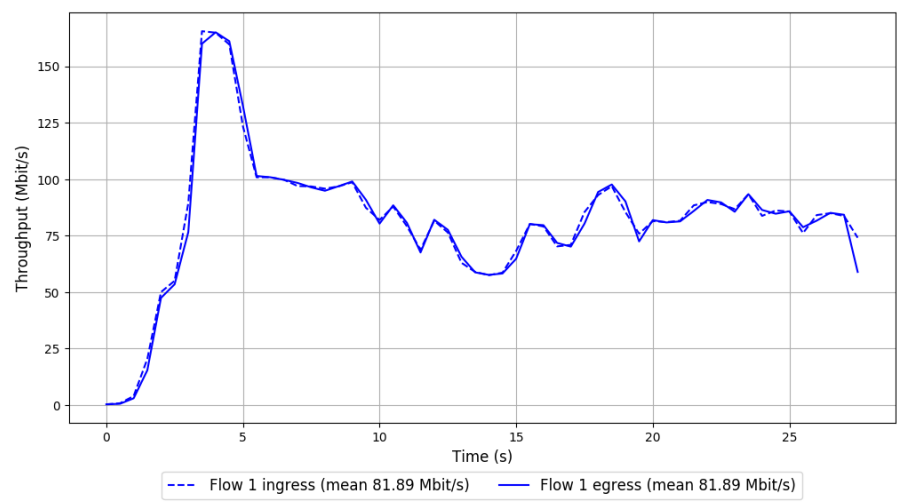
-- Flow 1:

Average throughput: 81.89 Mbit/s

95th percentile per-packet one-way delay: 87.272 ms

Loss rate: 0.64%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-05 08:03:52

End at: 2017-12-05 08:04:22

Below is generated by plot.py at 2017-12-05 10:34:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.12 Mbit/s

95th percentile per-packet one-way delay: 86.777 ms

Loss rate: 0.14%

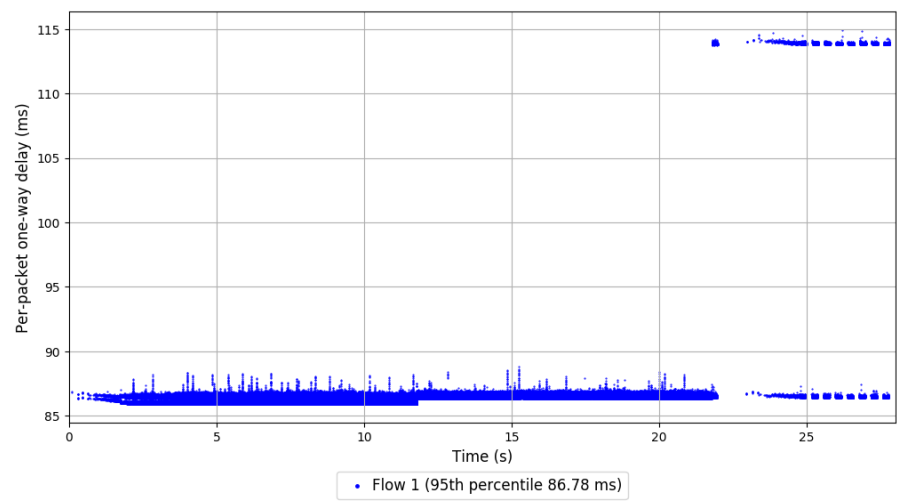
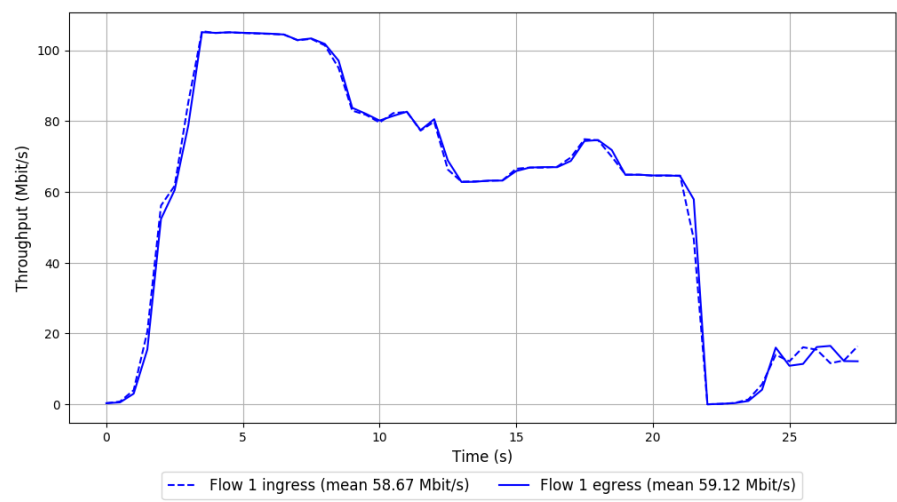
-- Flow 1:

Average throughput: 59.12 Mbit/s

95th percentile per-packet one-way delay: 86.777 ms

Loss rate: 0.14%

Run 10: Report of Copa — Data Link

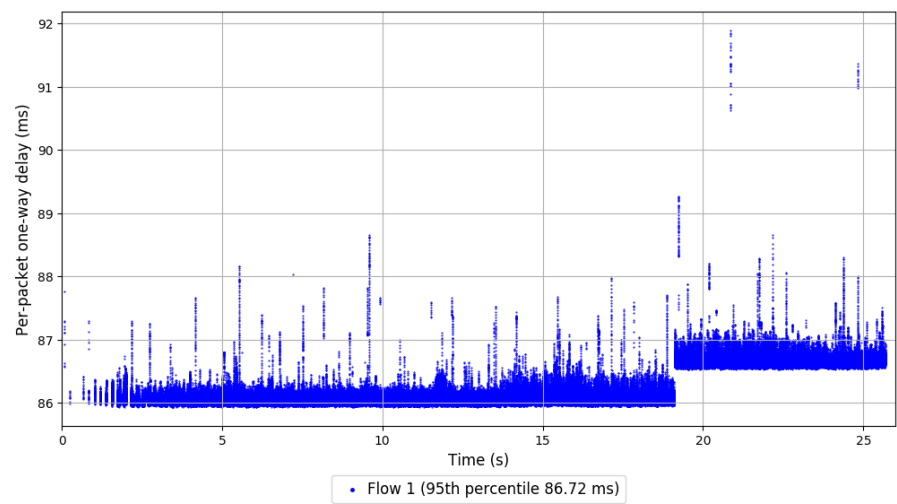
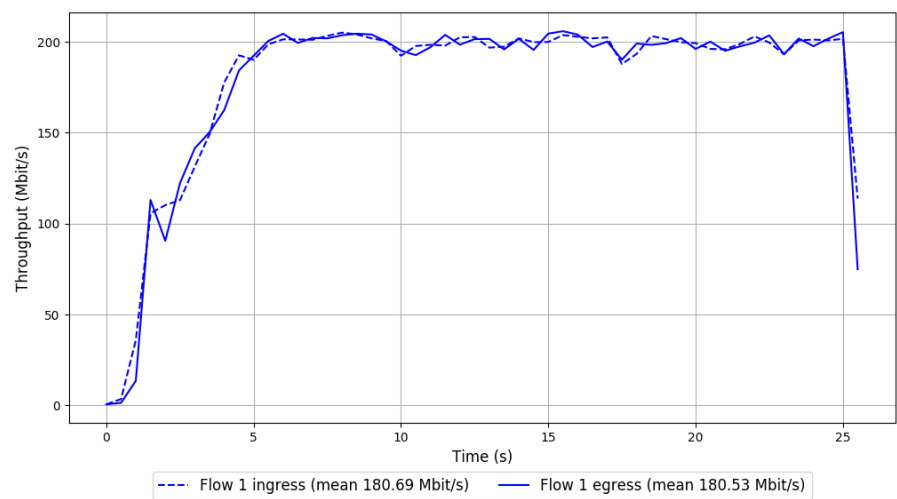


```
Run 1: Statistics of Indigo

Start at: 2017-12-05 06:25:03
End at: 2017-12-05 06:25:33

# Below is generated by plot.py at 2017-12-05 10:35:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.53 Mbit/s
95th percentile per-packet one-way delay: 86.725 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 180.53 Mbit/s
95th percentile per-packet one-way delay: 86.725 ms
Loss rate: 0.77%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

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

End at: 2017-12-05 06:36:40

Below is generated by plot.py at 2017-12-05 10:36:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.51 Mbit/s

95th percentile per-packet one-way delay: 86.830 ms

Loss rate: 0.63%

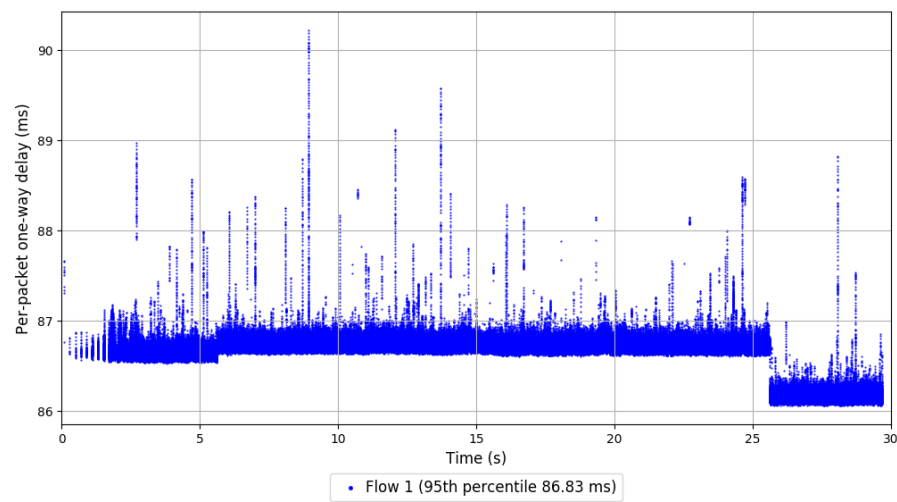
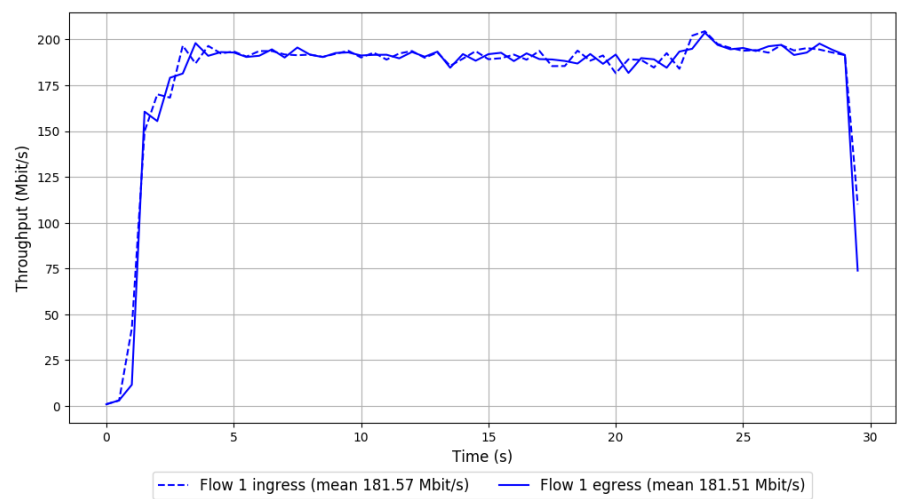
-- Flow 1:

Average throughput: 181.51 Mbit/s

95th percentile per-packet one-way delay: 86.830 ms

Loss rate: 0.63%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-05 06:47:23

End at: 2017-12-05 06:47:53

Below is generated by plot.py at 2017-12-05 10:36:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 114.191 ms

Loss rate: 0.67%

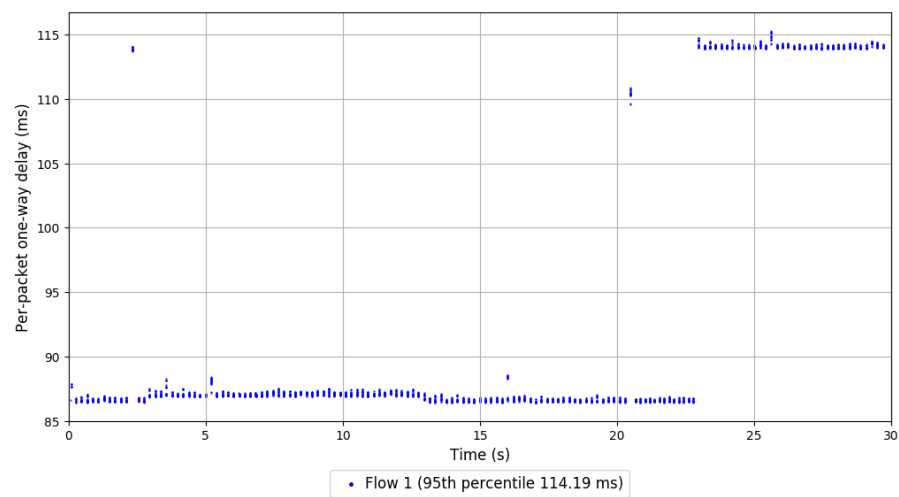
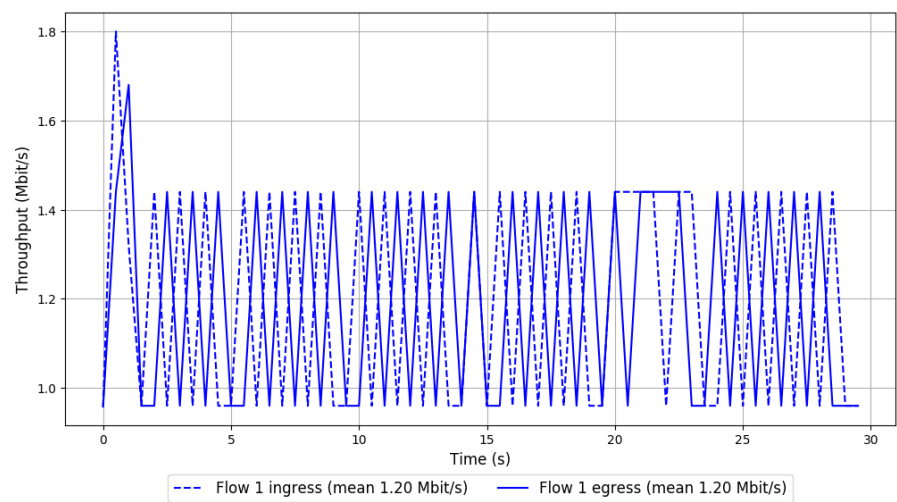
-- Flow 1:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 114.191 ms

Loss rate: 0.67%

Run 3: Report of Indigo — Data Link

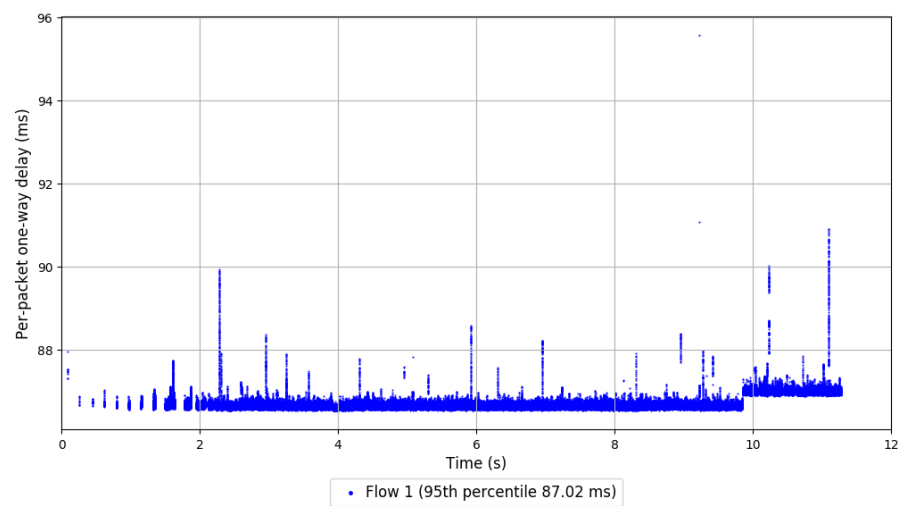
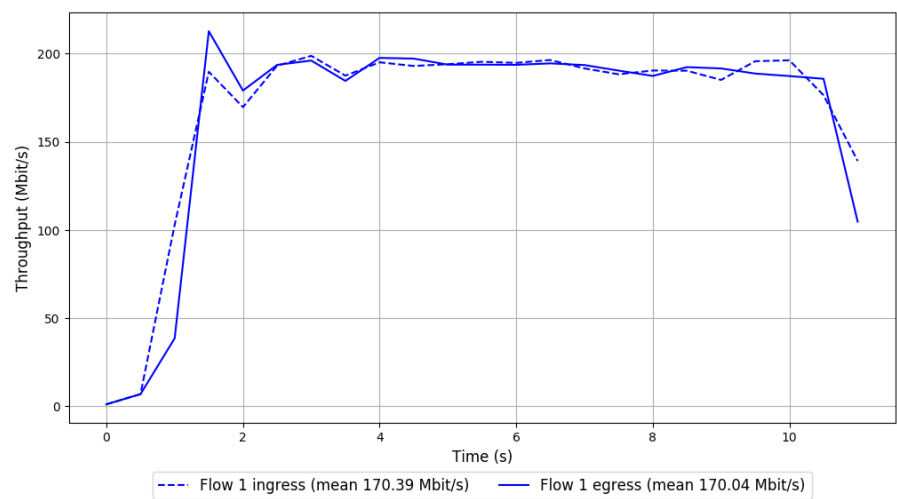


Run 4: Statistics of Indigo

Start at: 2017-12-05 06:58:27

End at: 2017-12-05 06:58:57

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-05 07:09:04

End at: 2017-12-05 07:09:34

Below is generated by plot.py at 2017-12-05 10:36:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 137.95 Mbit/s

95th percentile per-packet one-way delay: 87.055 ms

Loss rate: 0.35%

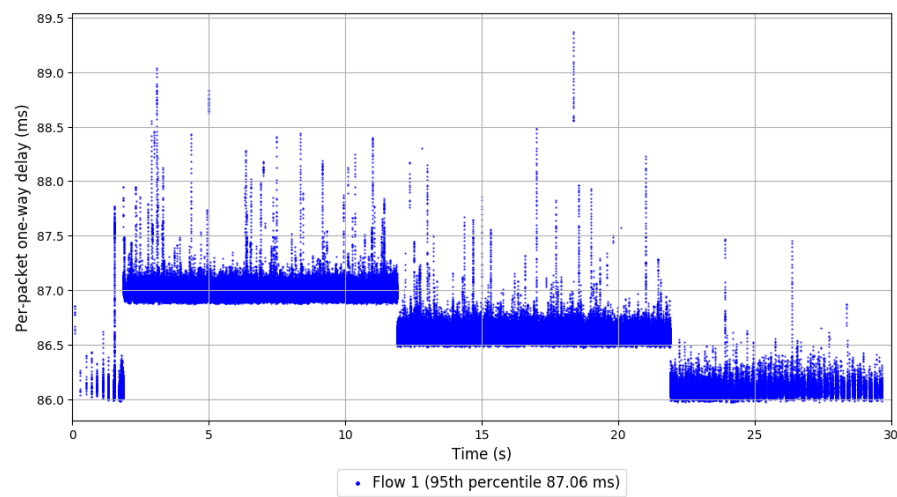
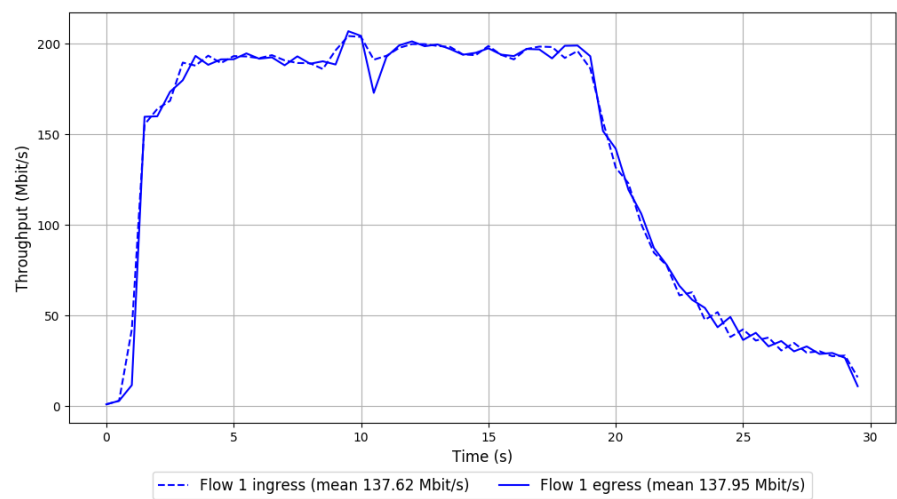
-- Flow 1:

Average throughput: 137.95 Mbit/s

95th percentile per-packet one-way delay: 87.055 ms

Loss rate: 0.35%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-05 07:20:16

End at: 2017-12-05 07:20:46

Below is generated by plot.py at 2017-12-05 10:36:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.99 Mbit/s

95th percentile per-packet one-way delay: 87.085 ms

Loss rate: 0.65%

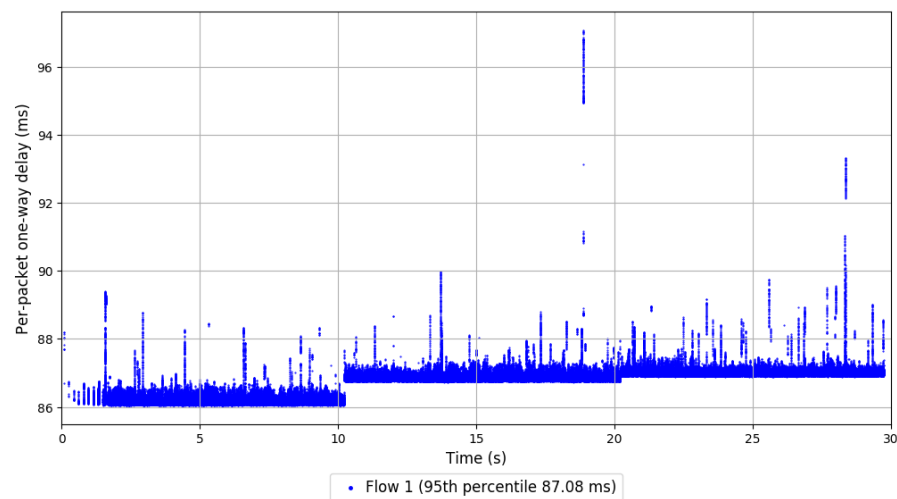
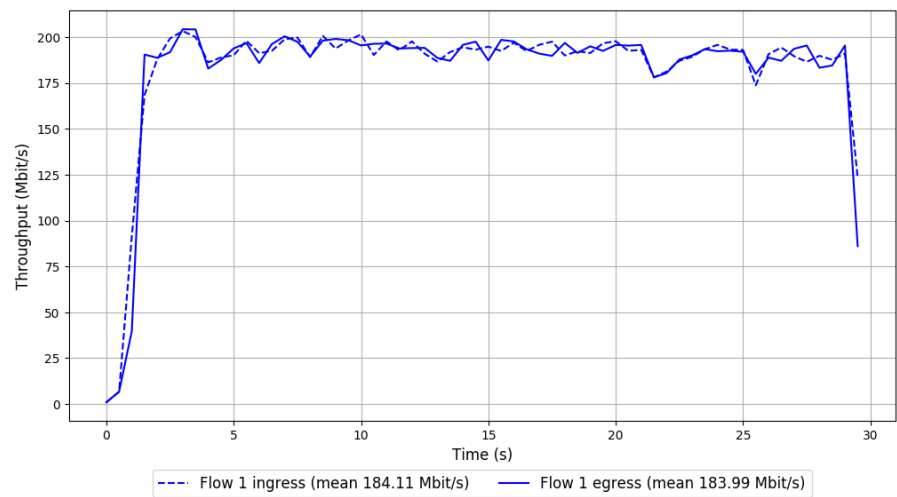
-- Flow 1:

Average throughput: 183.99 Mbit/s

95th percentile per-packet one-way delay: 87.085 ms

Loss rate: 0.65%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-05 07:31:35

End at: 2017-12-05 07:32:05

Below is generated by plot.py at 2017-12-05 10:37:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.59 Mbit/s

95th percentile per-packet one-way delay: 86.949 ms

Loss rate: 0.59%

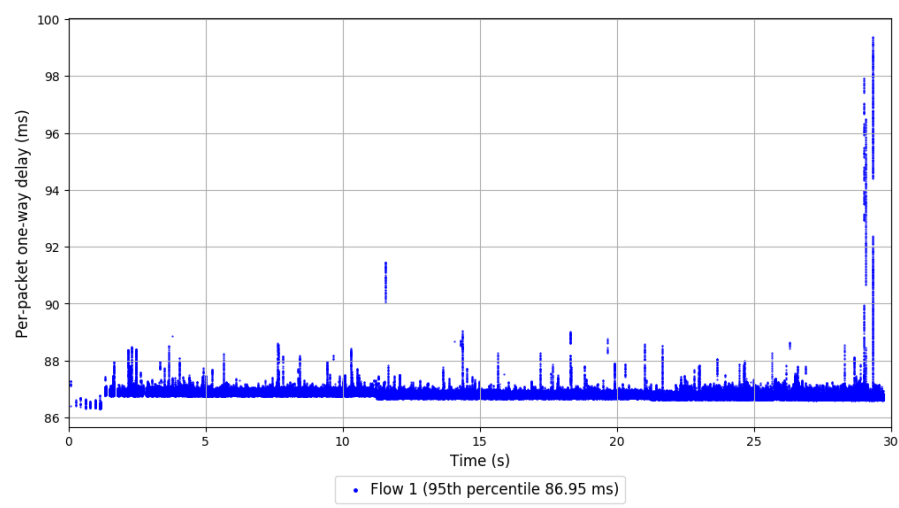
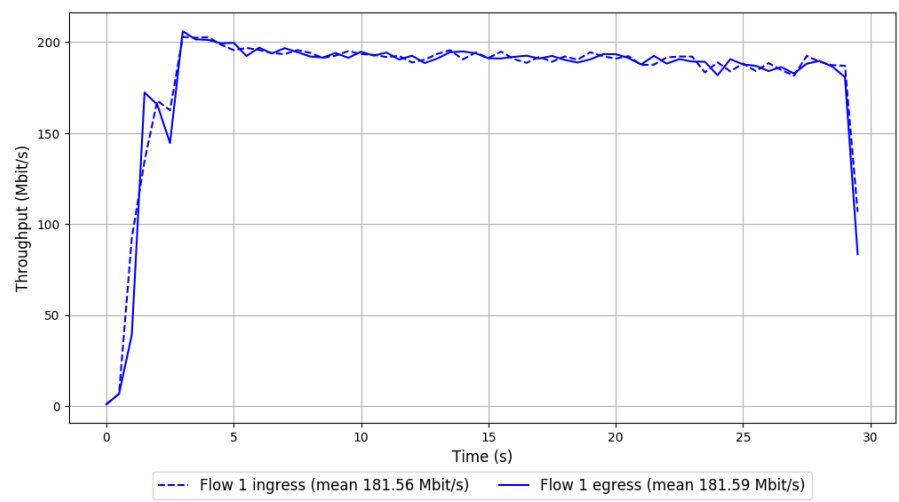
-- Flow 1:

Average throughput: 181.59 Mbit/s

95th percentile per-packet one-way delay: 86.949 ms

Loss rate: 0.59%

Run 7: Report of Indigo — Data Link

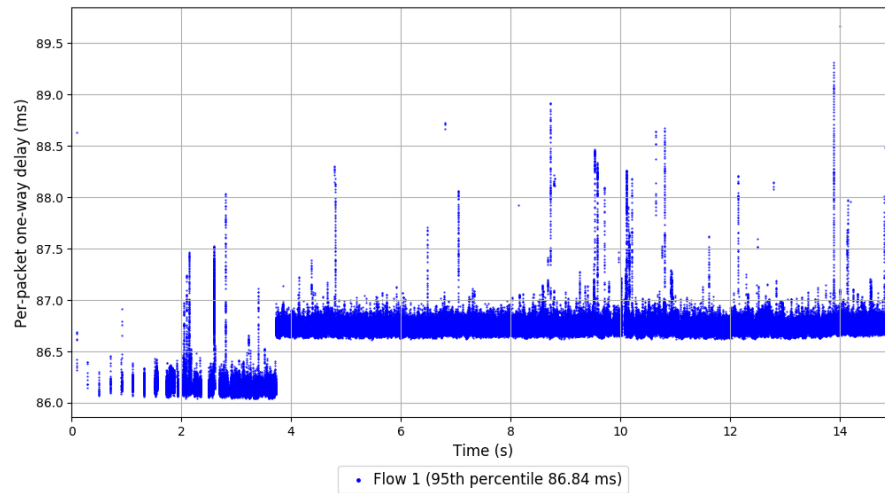
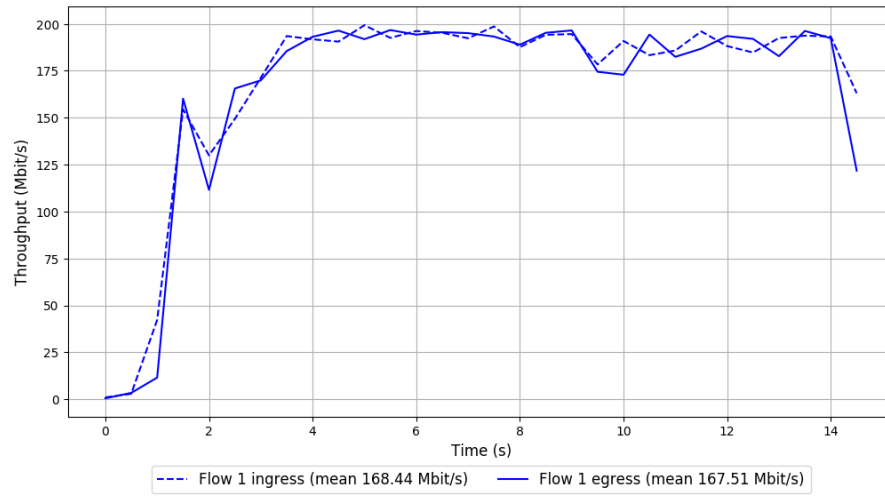


Run 8: Statistics of Indigo

Start at: 2017-12-05 07:42:47

End at: 2017-12-05 07:43:17

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-05 07:53:49

End at: 2017-12-05 07:54:19

Below is generated by plot.py at 2017-12-05 10:37:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.29 Mbit/s

95th percentile per-packet one-way delay: 86.293 ms

Loss rate: 0.66%

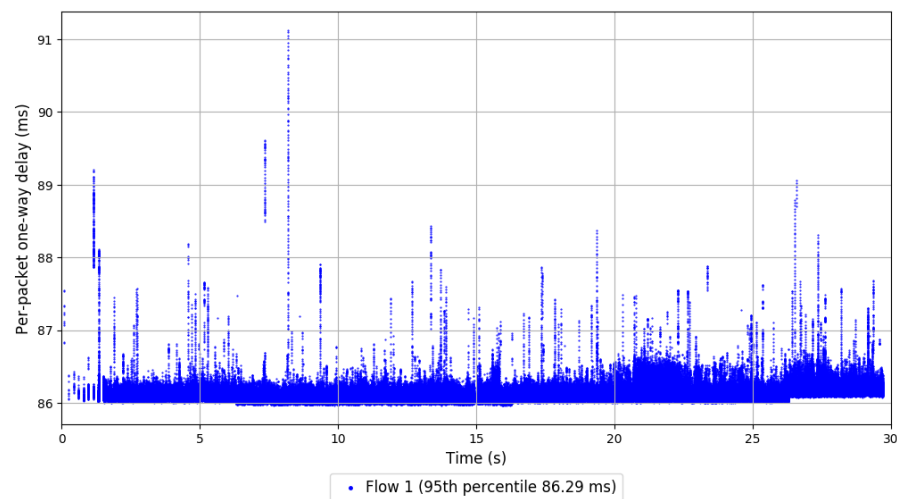
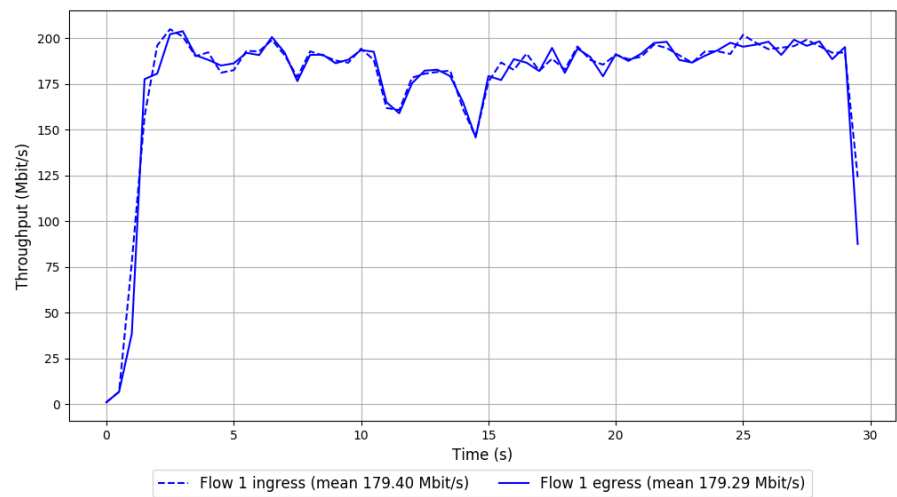
-- Flow 1:

Average throughput: 179.29 Mbit/s

95th percentile per-packet one-way delay: 86.293 ms

Loss rate: 0.66%

Run 9: Report of Indigo — Data Link

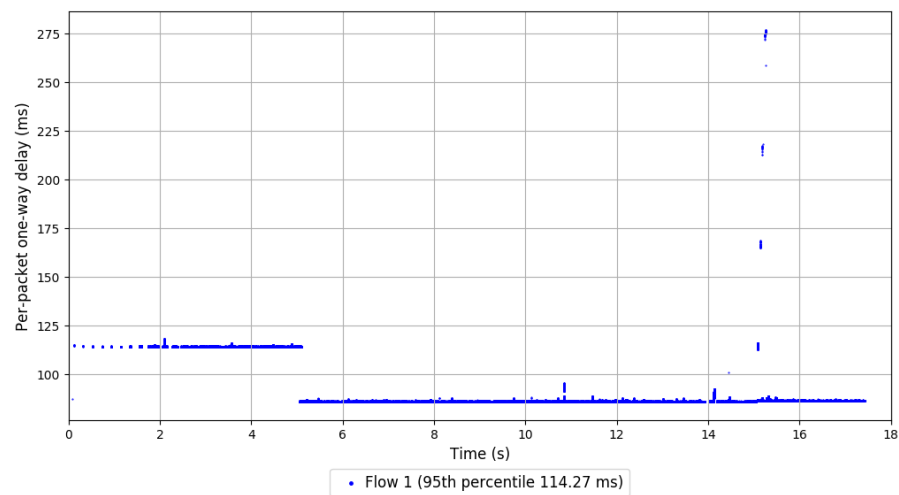
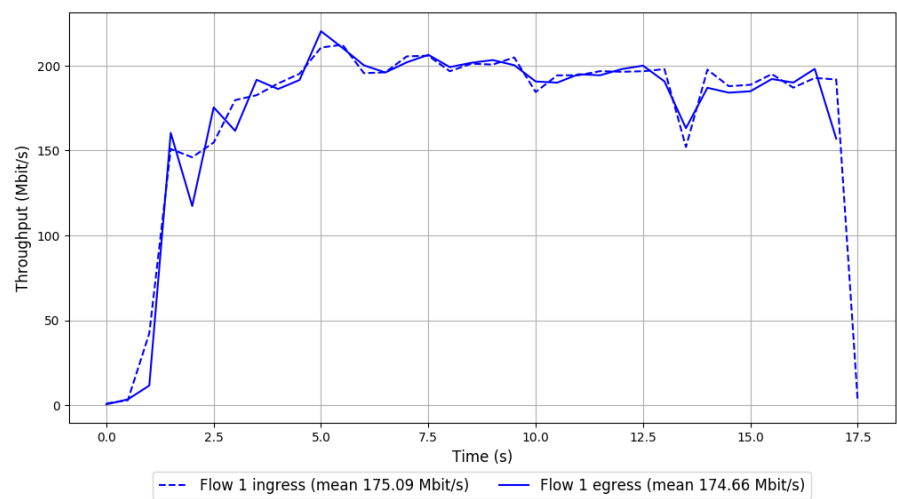


Run 10: Statistics of Indigo

Start at: 2017-12-05 08:04:38

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

Run 10: Report of Indigo — Data Link

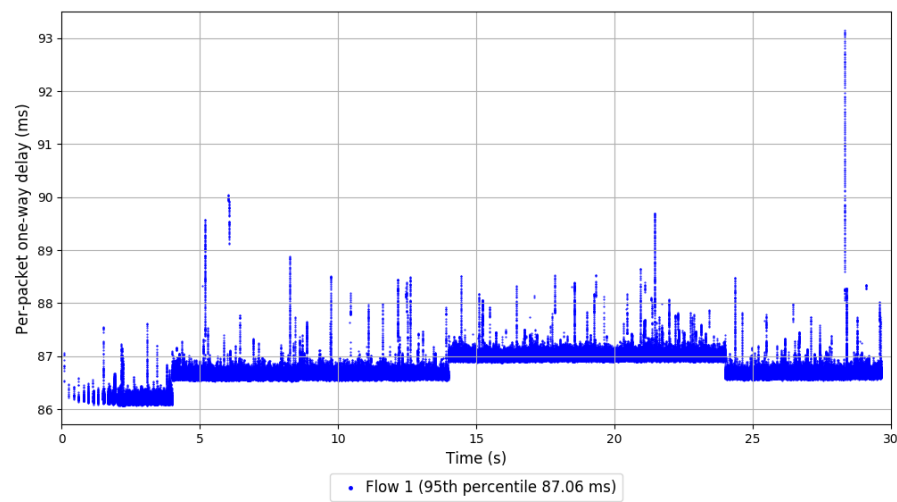
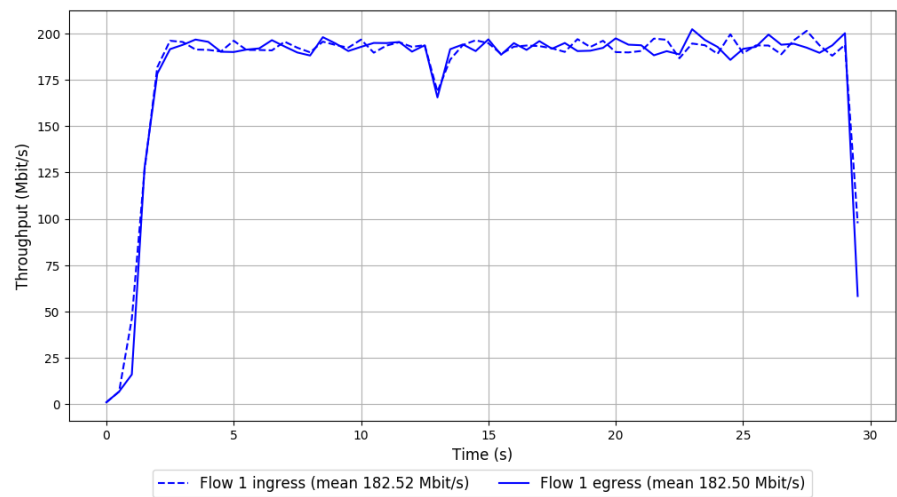


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 06:26:52
End at: 2017-12-05 06:27:22

# Below is generated by plot.py at 2017-12-05 10:38:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.50 Mbit/s
95th percentile per-packet one-way delay: 87.065 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 182.50 Mbit/s
95th percentile per-packet one-way delay: 87.065 ms
Loss rate: 0.63%
```

Run 1: Report of Indigo-calib — Data Link

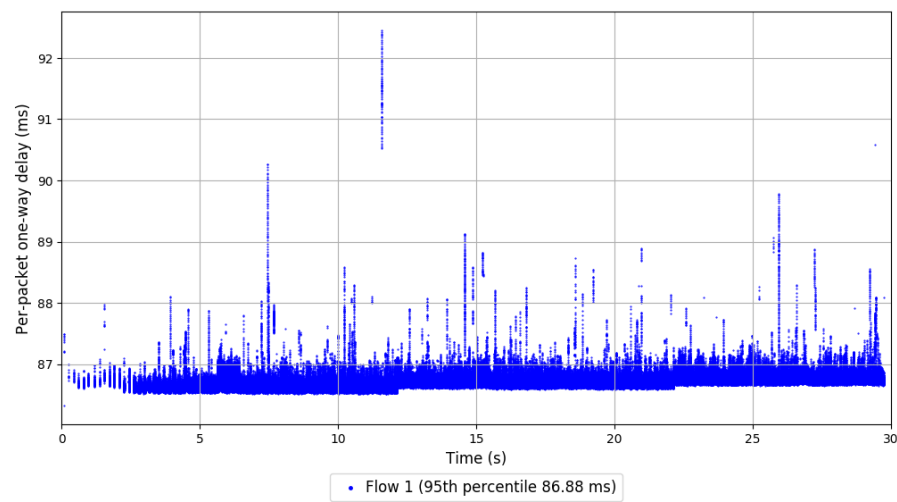
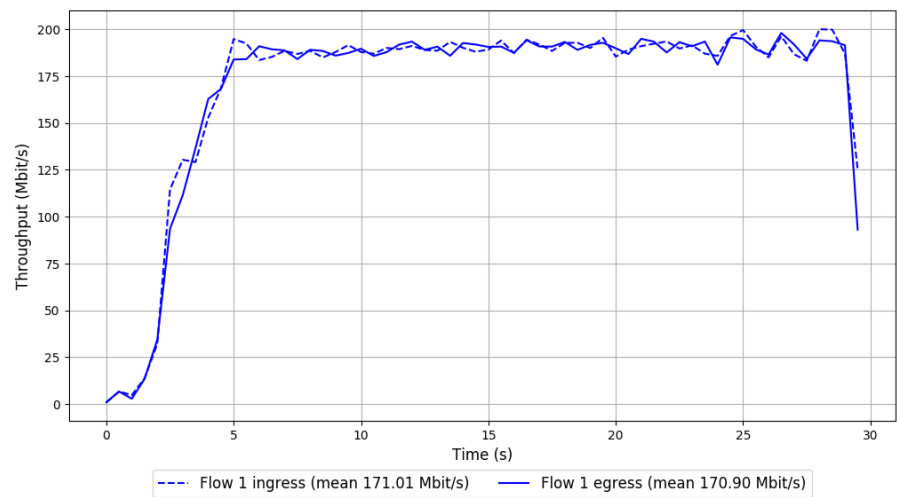


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 06:38:04
End at: 2017-12-05 06:38:34

# Below is generated by plot.py at 2017-12-05 10:38:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 170.90 Mbit/s
95th percentile per-packet one-way delay: 86.878 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 170.90 Mbit/s
95th percentile per-packet one-way delay: 86.878 ms
Loss rate: 0.66%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 06:49:03

End at: 2017-12-05 06:49:33

Below is generated by plot.py at 2017-12-05 10:38:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.68 Mbit/s

95th percentile per-packet one-way delay: 87.042 ms

Loss rate: 0.63%

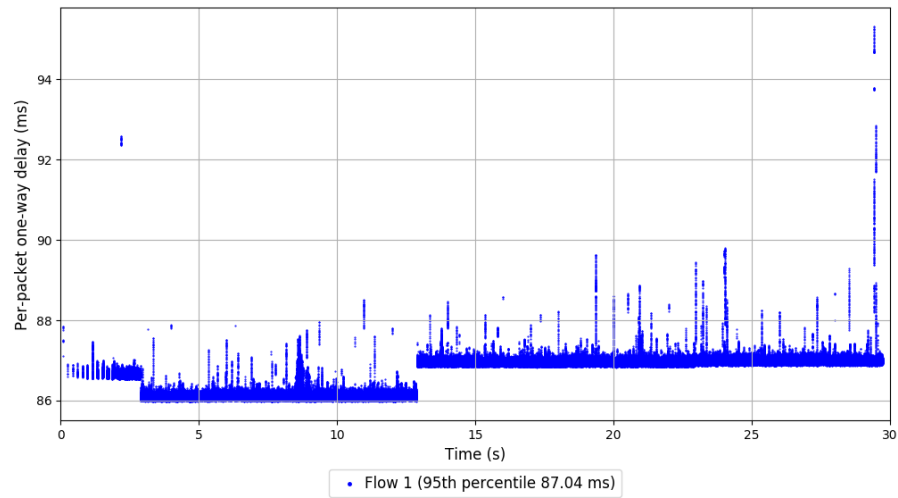
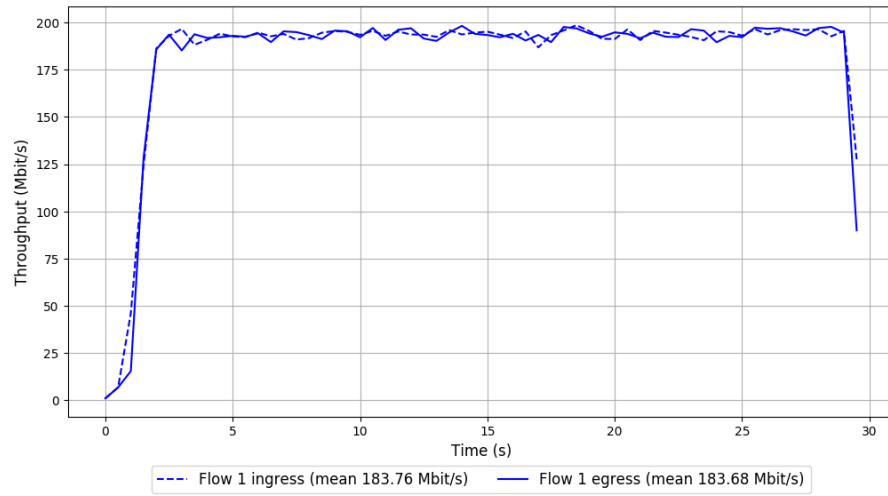
-- Flow 1:

Average throughput: 183.68 Mbit/s

95th percentile per-packet one-way delay: 87.042 ms

Loss rate: 0.63%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-05 07:00:07

End at: 2017-12-05 07:00:37

Below is generated by plot.py at 2017-12-05 10:38:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 162.86 Mbit/s

95th percentile per-packet one-way delay: 86.872 ms

Loss rate: 1.40%

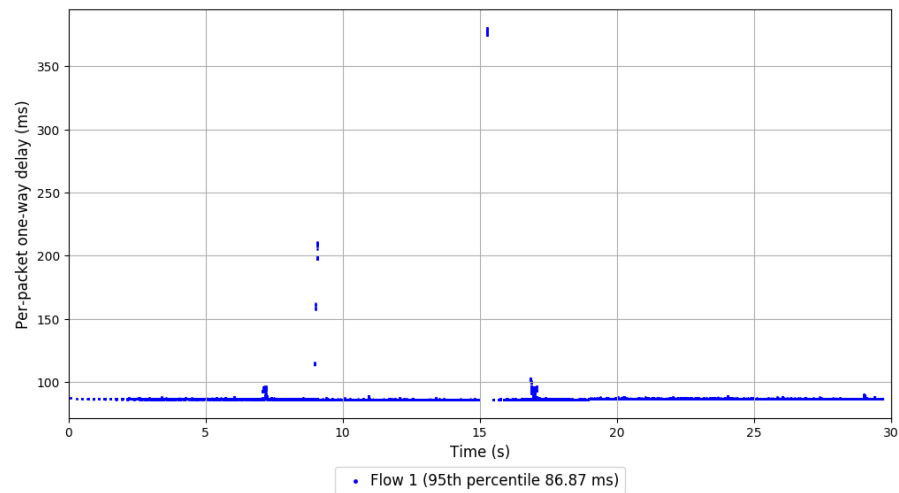
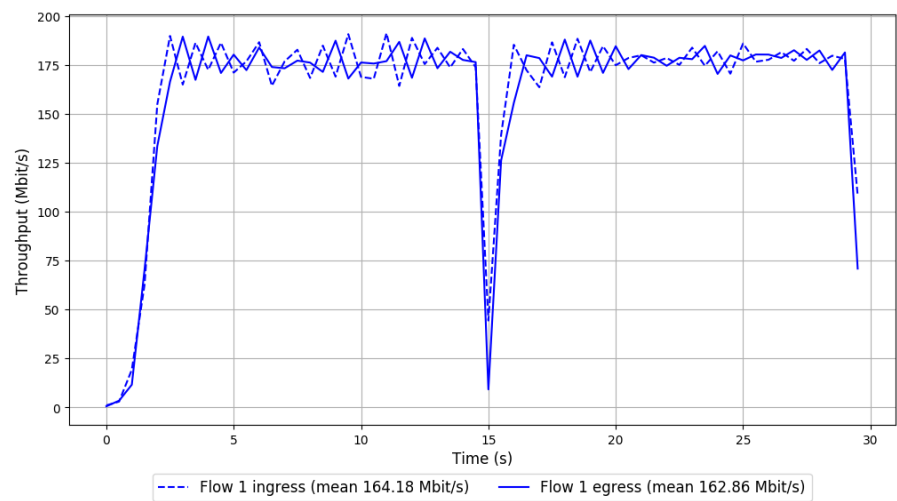
-- Flow 1:

Average throughput: 162.86 Mbit/s

95th percentile per-packet one-way delay: 86.872 ms

Loss rate: 1.40%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-05 07:10:49

End at: 2017-12-05 07:11:19

Below is generated by plot.py at 2017-12-05 10:39:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.68 Mbit/s

95th percentile per-packet one-way delay: 87.028 ms

Loss rate: 0.63%

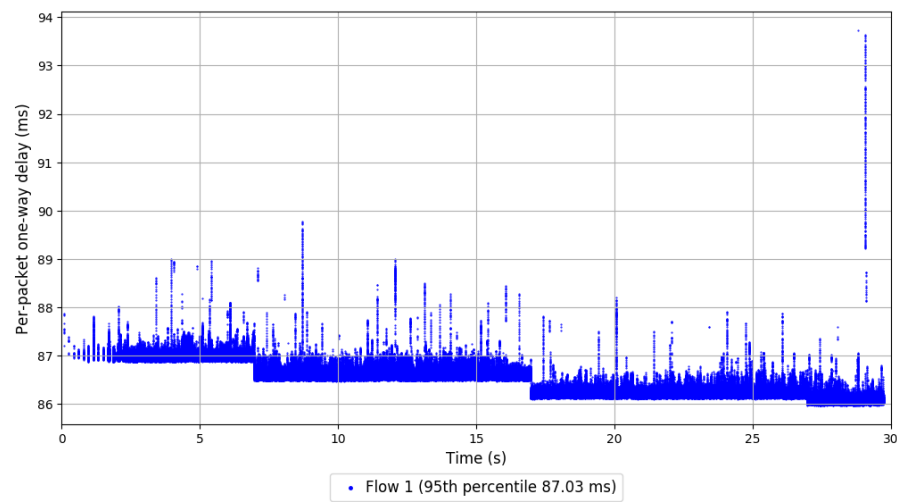
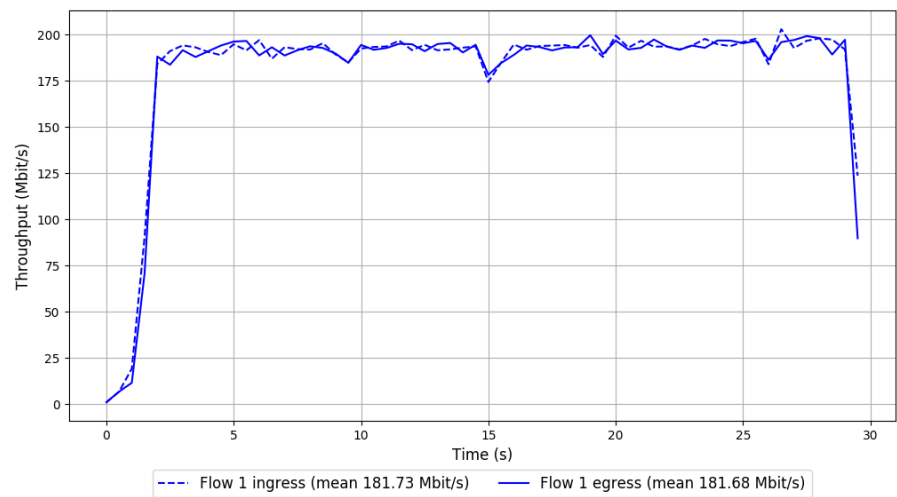
-- Flow 1:

Average throughput: 181.68 Mbit/s

95th percentile per-packet one-way delay: 87.028 ms

Loss rate: 0.63%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-05 07:22:08

End at: 2017-12-05 07:22:38

Below is generated by plot.py at 2017-12-05 10:39:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.29 Mbit/s

95th percentile per-packet one-way delay: 87.197 ms

Loss rate: 0.82%

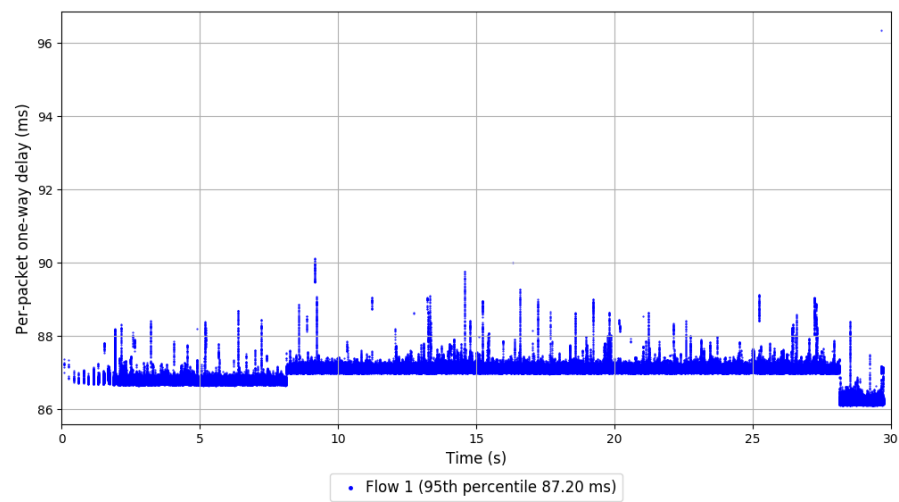
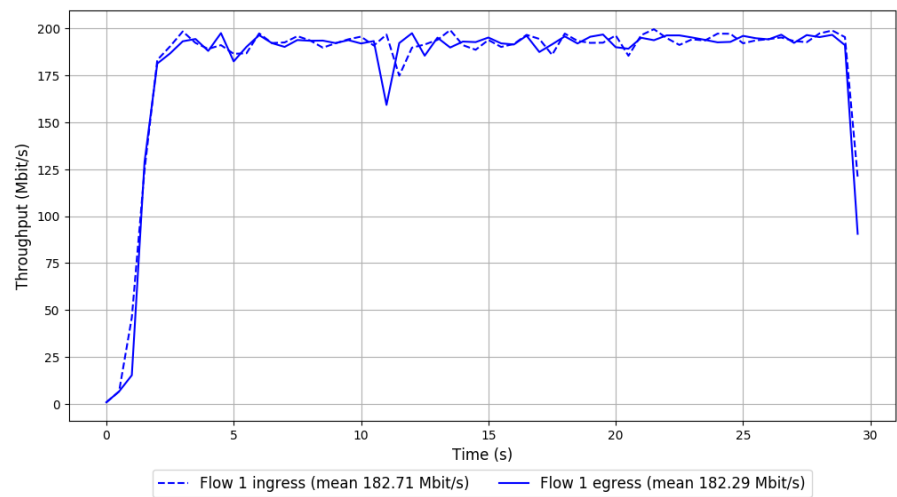
-- Flow 1:

Average throughput: 182.29 Mbit/s

95th percentile per-packet one-way delay: 87.197 ms

Loss rate: 0.82%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-05 07:33:23

End at: 2017-12-05 07:33:53

Below is generated by plot.py at 2017-12-05 10:39:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.91 Mbit/s

95th percentile per-packet one-way delay: 86.820 ms

Loss rate: 0.72%

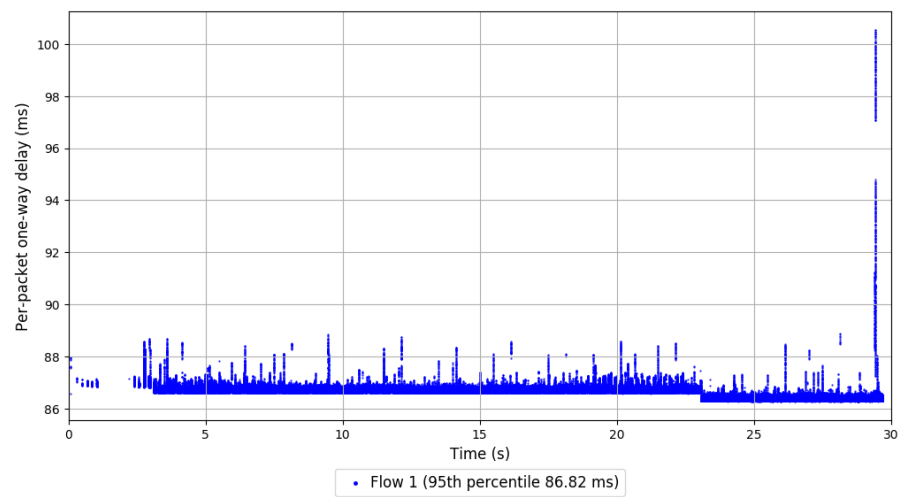
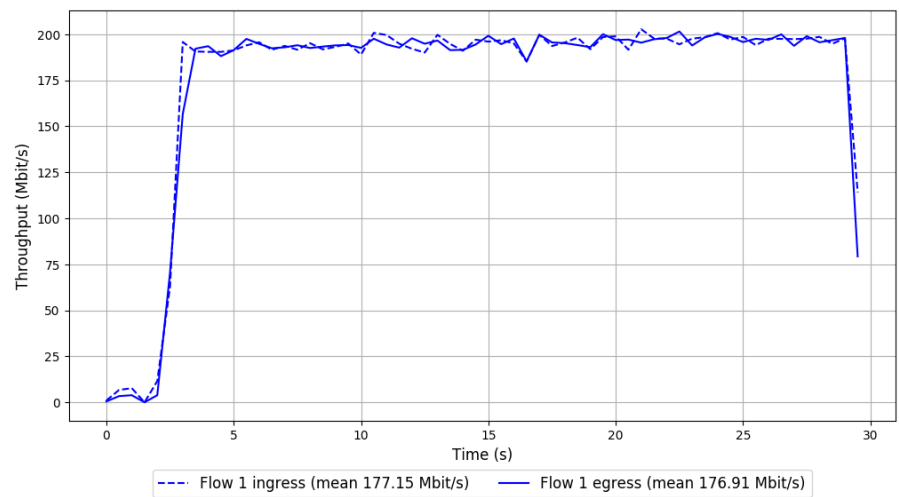
-- Flow 1:

Average throughput: 176.91 Mbit/s

95th percentile per-packet one-way delay: 86.820 ms

Loss rate: 0.72%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-05 07:44:28

End at: 2017-12-05 07:44:58

Below is generated by plot.py at 2017-12-05 10:39:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 128.64 Mbit/s

95th percentile per-packet one-way delay: 87.052 ms

Loss rate: 0.97%

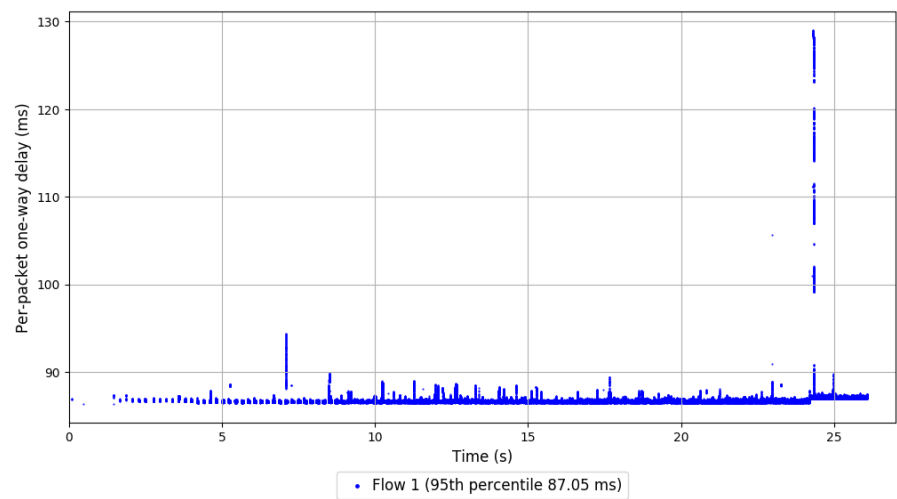
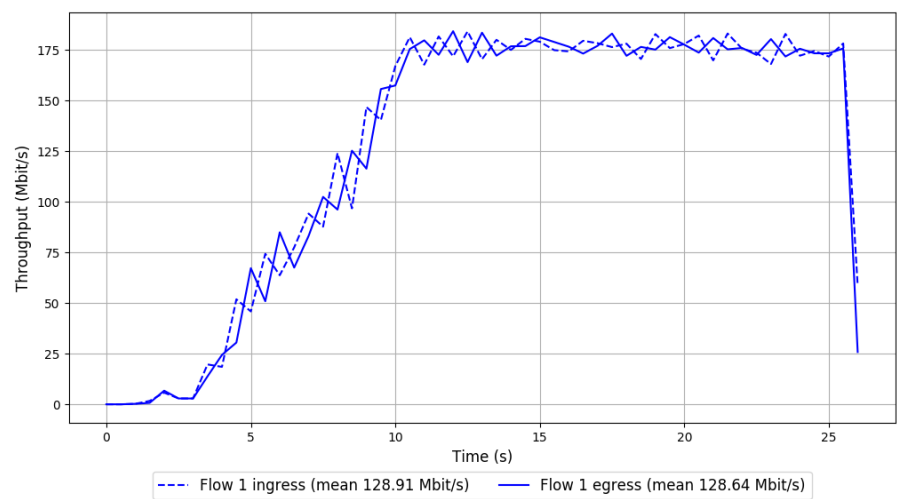
-- Flow 1:

Average throughput: 128.64 Mbit/s

95th percentile per-packet one-way delay: 87.052 ms

Loss rate: 0.97%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-05 07:55:37

End at: 2017-12-05 07:56:07

Below is generated by plot.py at 2017-12-05 10:39:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.68 Mbit/s

95th percentile per-packet one-way delay: 87.035 ms

Loss rate: 0.62%

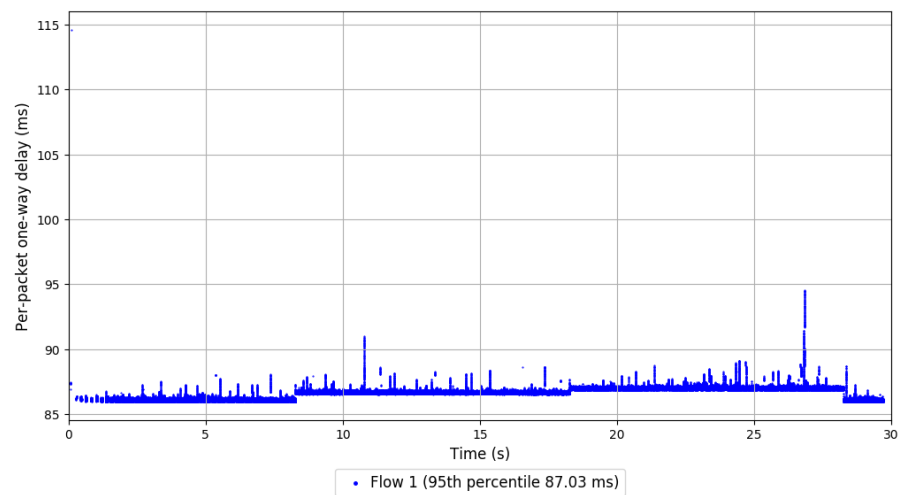
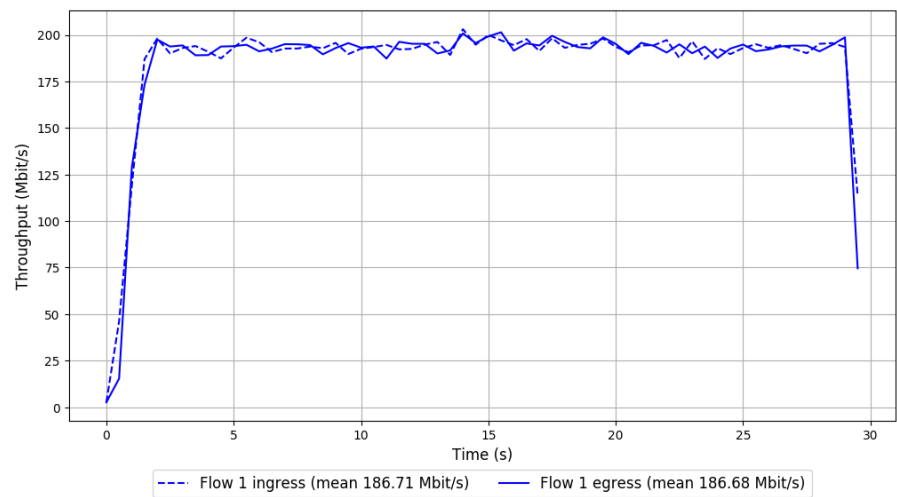
-- Flow 1:

Average throughput: 186.68 Mbit/s

95th percentile per-packet one-way delay: 87.035 ms

Loss rate: 0.62%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-05 08:06:24

End at: 2017-12-05 08:06:54

Below is generated by plot.py at 2017-12-05 10:39:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.54 Mbit/s

95th percentile per-packet one-way delay: 87.040 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 176.54 Mbit/s

95th percentile per-packet one-way delay: 87.040 ms

Loss rate: 0.62%

Run 10: Report of Indigo-calib — Data Link

