

Pantheon Report

Generated at 2018-01-08 23:43:10 (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.

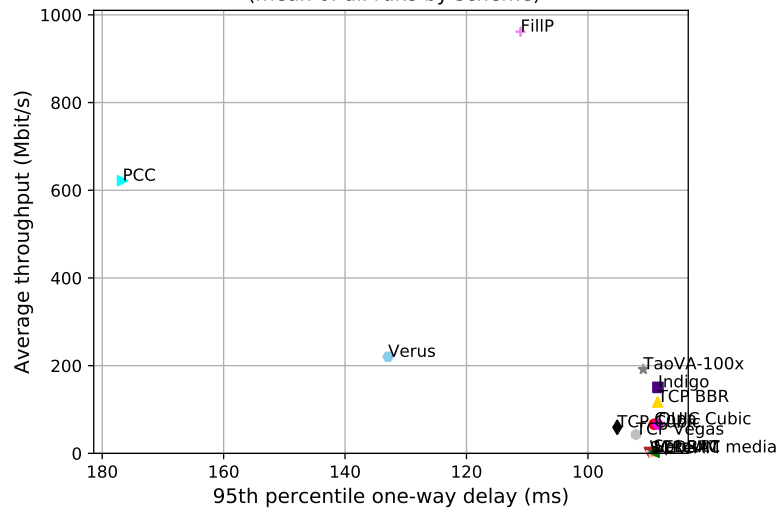
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

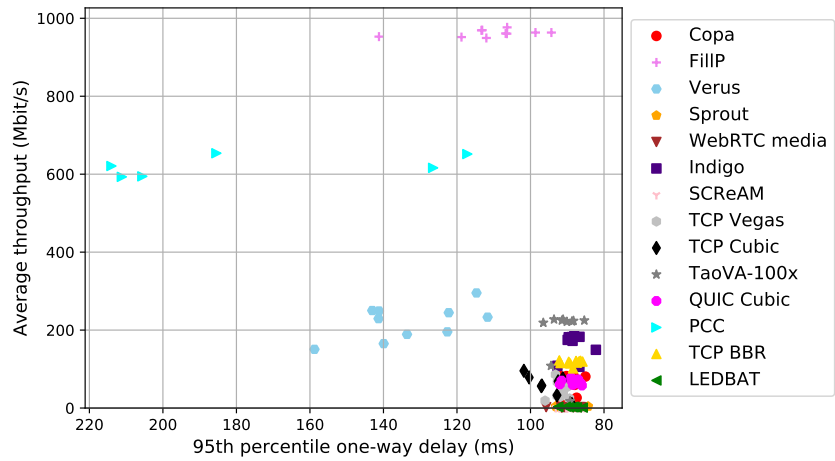
Git summary:

```
branch: master @ 56d1792c316a5efca3f2d21342905405fedffb48
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ 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	117.09	88.52	0.69
TCP Cubic	8	59.43	95.17	1.31
LEDBAT	10	2.36	89.11	0.94
PCC	6	621.70	176.65	2.05
QUIC Cubic	9	66.26	88.49	0.82
SCReAM	10	0.22	89.79	0.55
WebRTC media	10	2.11	89.88	0.77
Sprout	10	3.62	89.22	1.12
TaoVA-100x	10	191.66	90.88	0.67
TCP Vegas	9	42.70	92.09	0.67
Verus	10	220.21	132.91	0.91
Copa	10	66.36	89.07	0.52
FillP	10	961.80	111.10	0.79
Indigo	10	150.47	88.47	0.54

Run 1: Statistics of TCP BBR

Start at: 2018-01-08 18:58:37

End at: 2018-01-08 18:59:07

Below is generated by plot.py at 2018-01-08 22:58:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.27 Mbit/s

95th percentile per-packet one-way delay: 86.390 ms

Loss rate: 0.68%

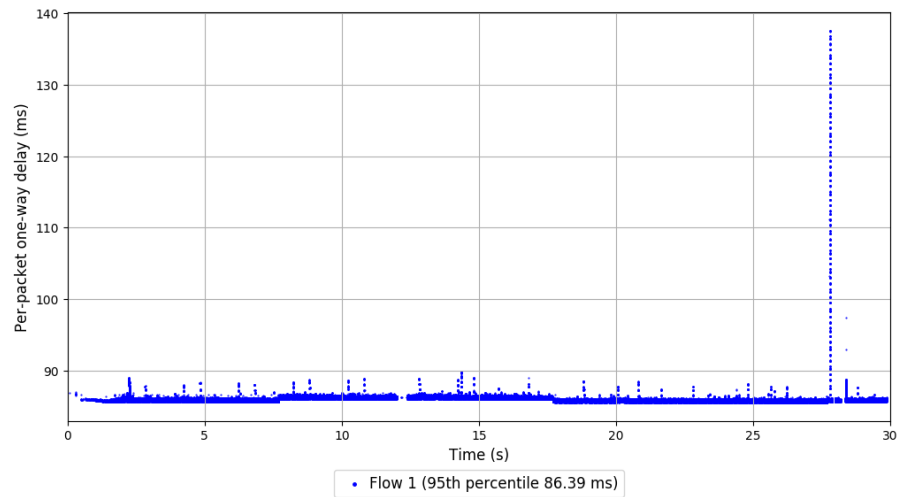
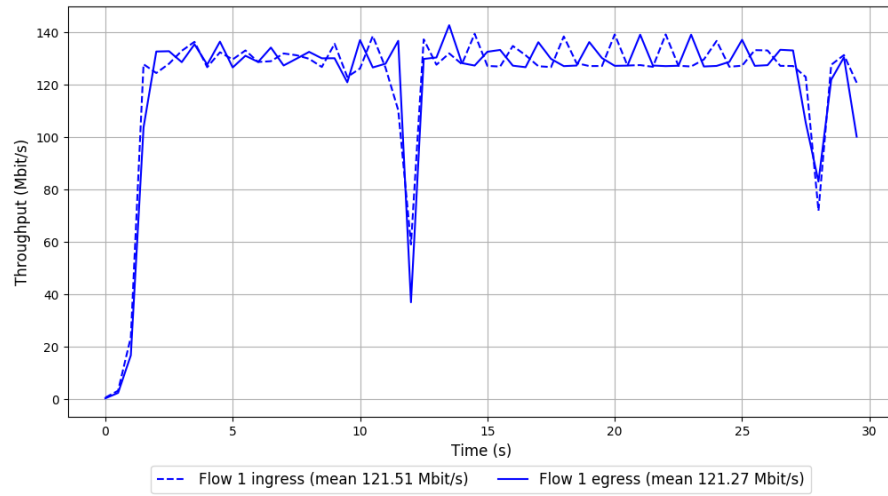
-- Flow 1:

Average throughput: 121.27 Mbit/s

95th percentile per-packet one-way delay: 86.390 ms

Loss rate: 0.68%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-08 19:10:45

End at: 2018-01-08 19:11:15

Below is generated by plot.py at 2018-01-08 22:58:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.45 Mbit/s

95th percentile per-packet one-way delay: 91.855 ms

Loss rate: 0.65%

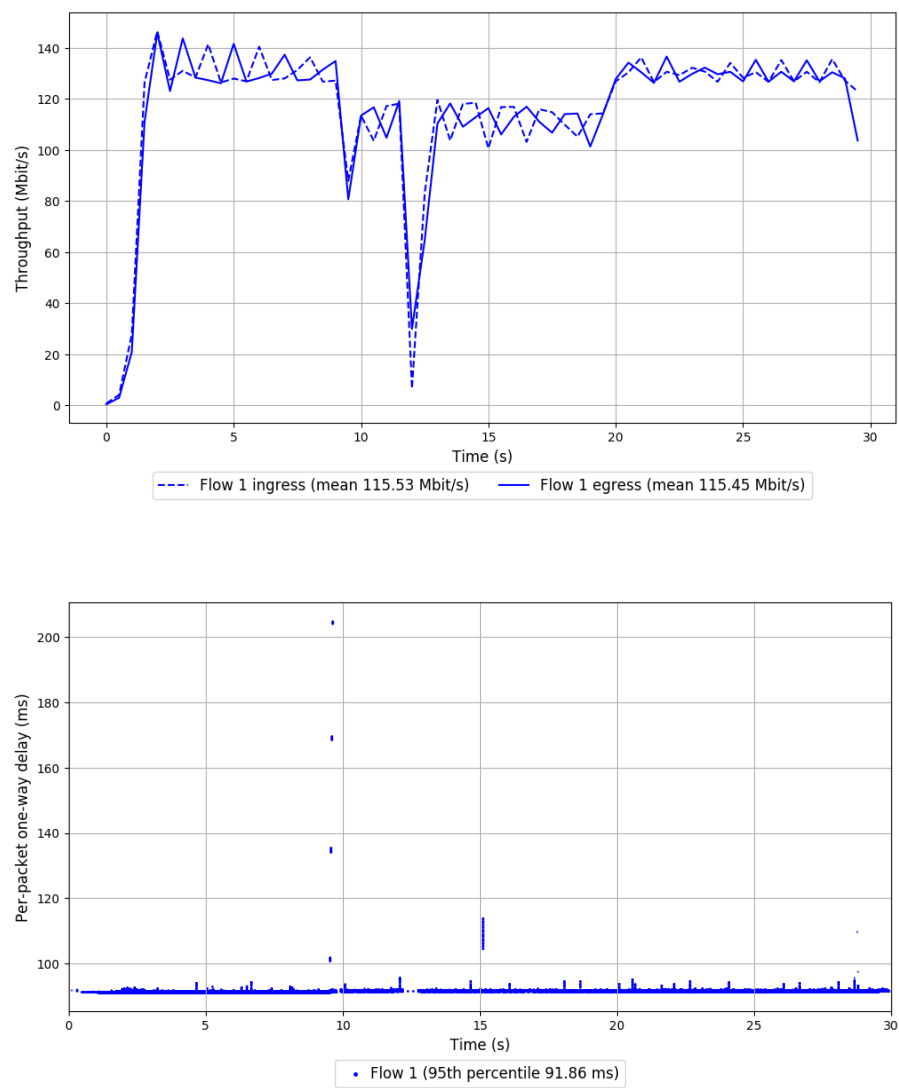
-- Flow 1:

Average throughput: 115.45 Mbit/s

95th percentile per-packet one-way delay: 91.855 ms

Loss rate: 0.65%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-08 19:22:58

End at: 2018-01-08 19:23:28

Below is generated by plot.py at 2018-01-08 22:58:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.21 Mbit/s

95th percentile per-packet one-way delay: 86.750 ms

Loss rate: 0.62%

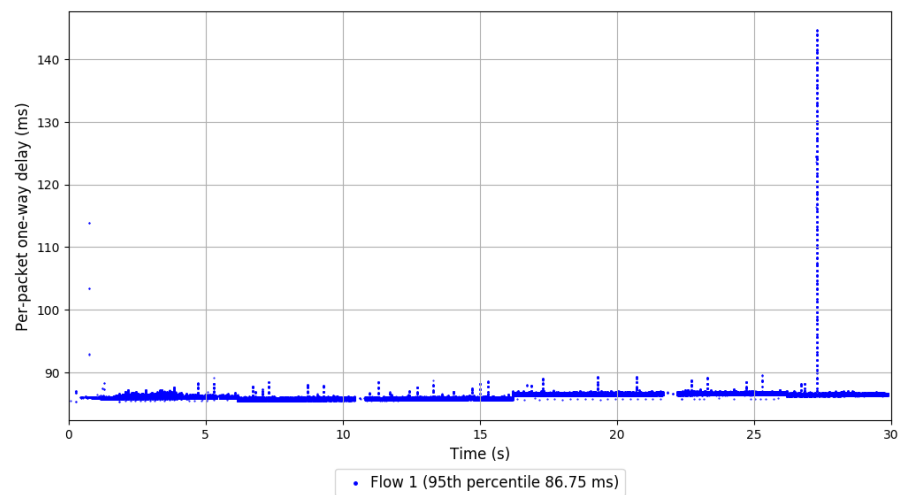
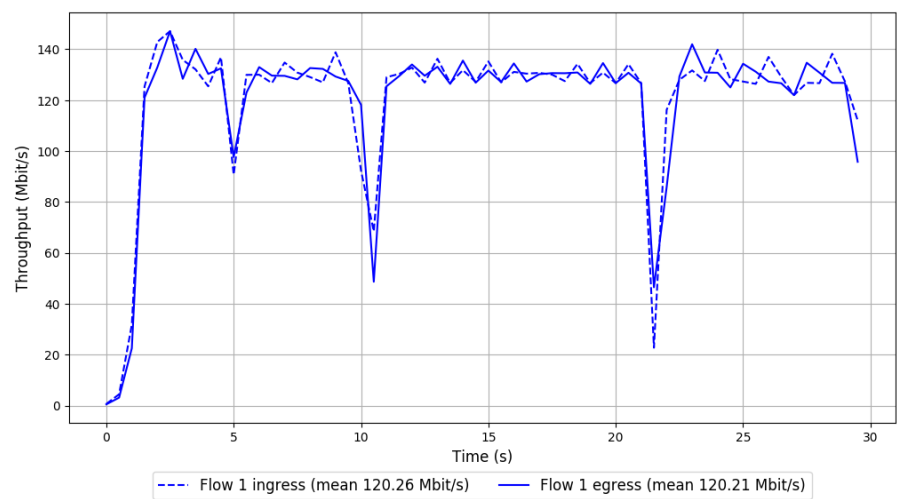
-- Flow 1:

Average throughput: 120.21 Mbit/s

95th percentile per-packet one-way delay: 86.750 ms

Loss rate: 0.62%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-08 19:34:50

End at: 2018-01-08 19:35:20

Below is generated by plot.py at 2018-01-08 22:58:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.59 Mbit/s

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

Loss rate: 0.57%

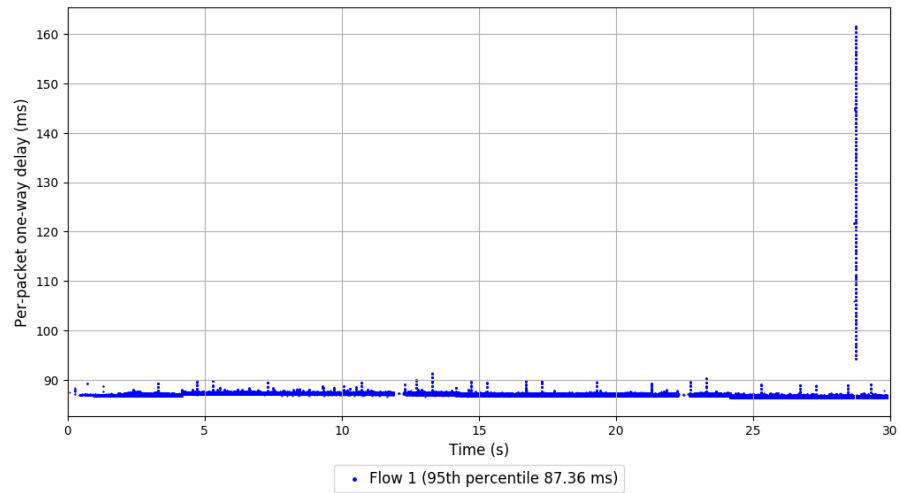
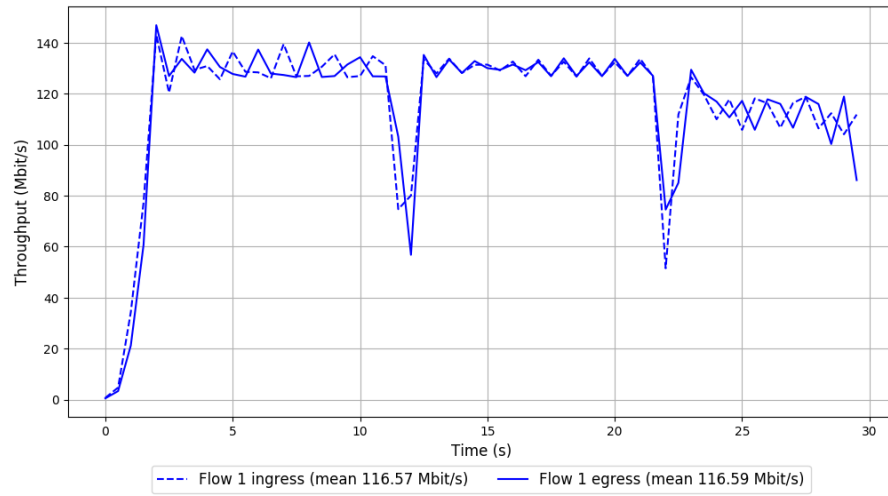
-- Flow 1:

Average throughput: 116.59 Mbit/s

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

Loss rate: 0.57%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-08 19:47:15

End at: 2018-01-08 19:47:45

Below is generated by plot.py at 2018-01-08 22:58:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.31 Mbit/s

95th percentile per-packet one-way delay: 85.842 ms

Loss rate: 0.77%

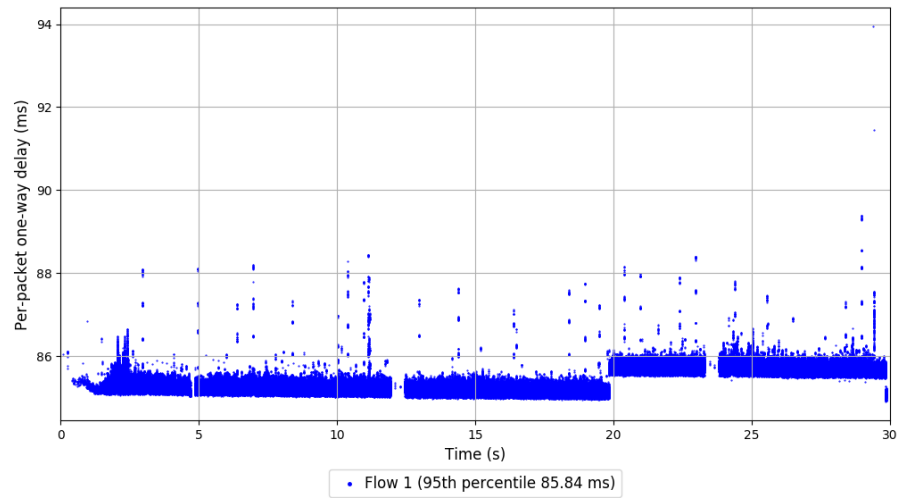
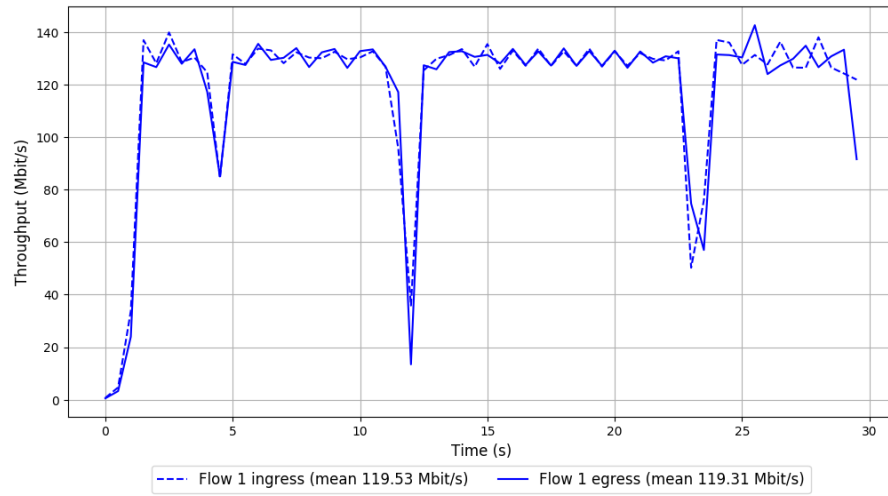
-- Flow 1:

Average throughput: 119.31 Mbit/s

95th percentile per-packet one-way delay: 85.842 ms

Loss rate: 0.77%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-08 19:59:11

End at: 2018-01-08 19:59:41

Below is generated by plot.py at 2018-01-08 22:58:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.87 Mbit/s

95th percentile per-packet one-way delay: 87.609 ms

Loss rate: 0.62%

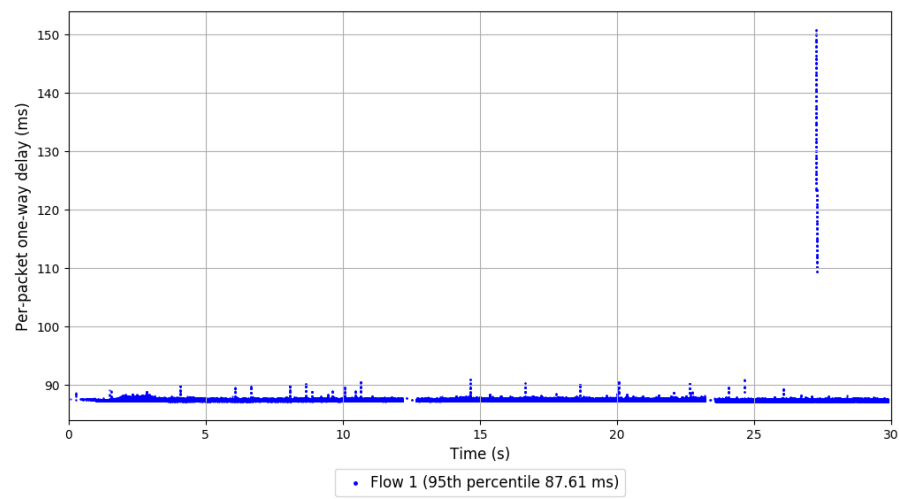
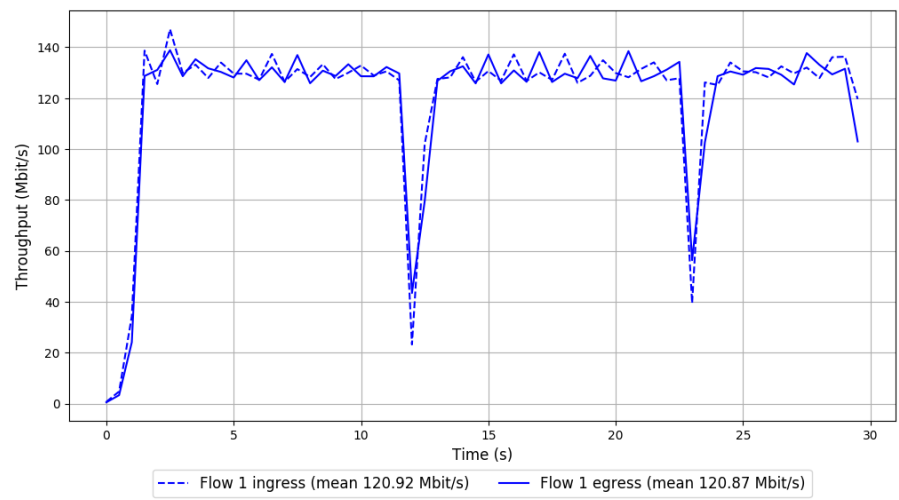
-- Flow 1:

Average throughput: 120.87 Mbit/s

95th percentile per-packet one-way delay: 87.609 ms

Loss rate: 0.62%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-08 20:11:04

End at: 2018-01-08 20:11:34

Below is generated by plot.py at 2018-01-08 22:58:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.68 Mbit/s

95th percentile per-packet one-way delay: 89.603 ms

Loss rate: 0.69%

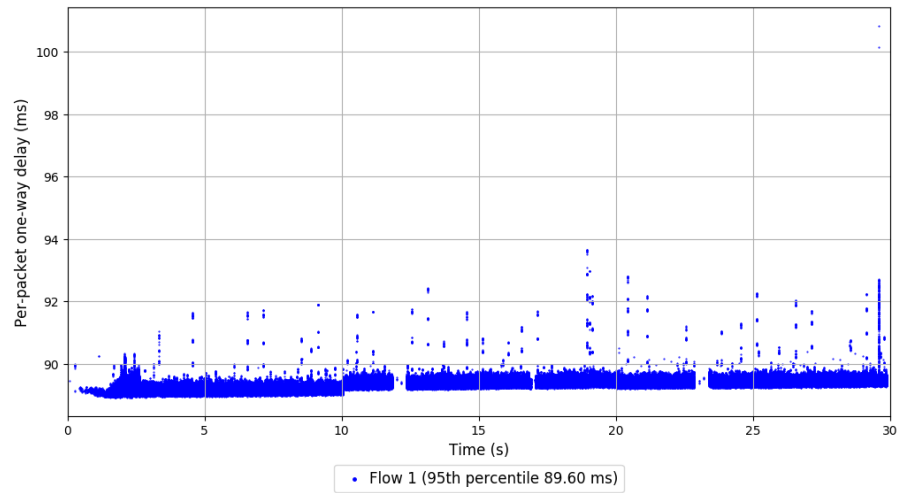
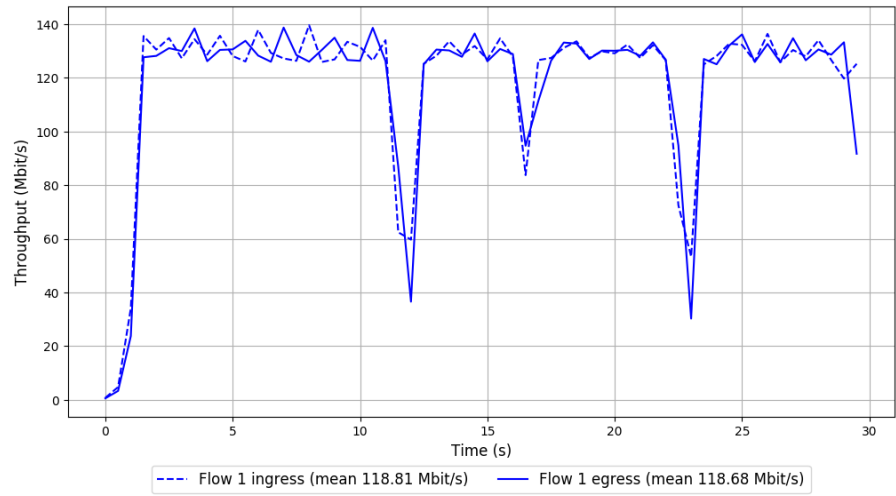
-- Flow 1:

Average throughput: 118.68 Mbit/s

95th percentile per-packet one-way delay: 89.603 ms

Loss rate: 0.69%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-08 20:22:55

End at: 2018-01-08 20:23:25

Below is generated by plot.py at 2018-01-08 22:58:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.41 Mbit/s

95th percentile per-packet one-way delay: 92.151 ms

Loss rate: 0.63%

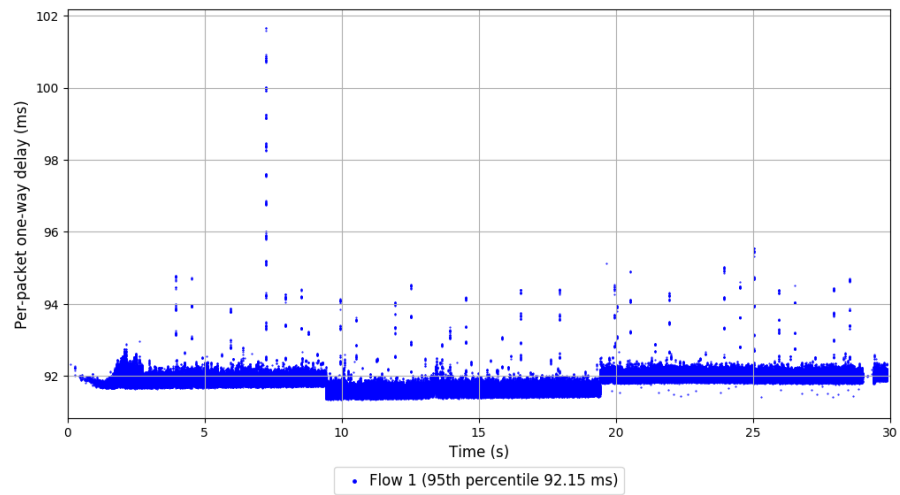
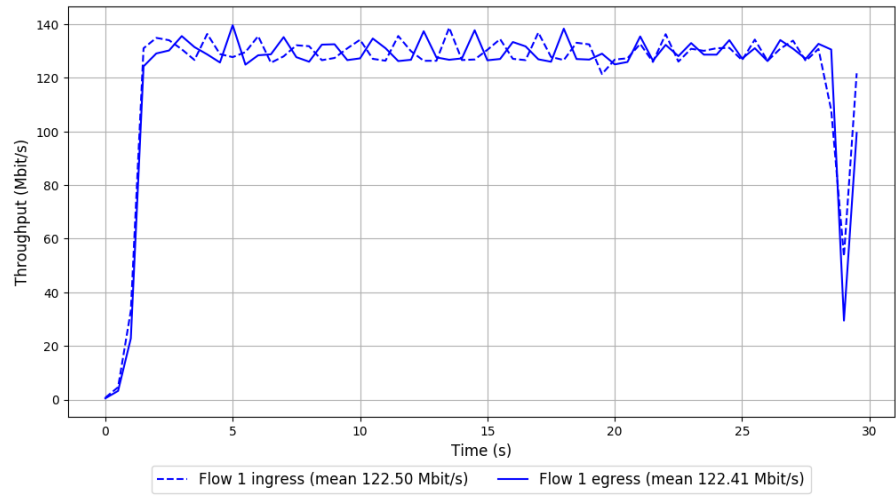
-- Flow 1:

Average throughput: 122.41 Mbit/s

95th percentile per-packet one-way delay: 92.151 ms

Loss rate: 0.63%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-08 20:35:07

End at: 2018-01-08 20:35:37

Below is generated by plot.py at 2018-01-08 23:00:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.73 Mbit/s

95th percentile per-packet one-way delay: 88.417 ms

Loss rate: 0.79%

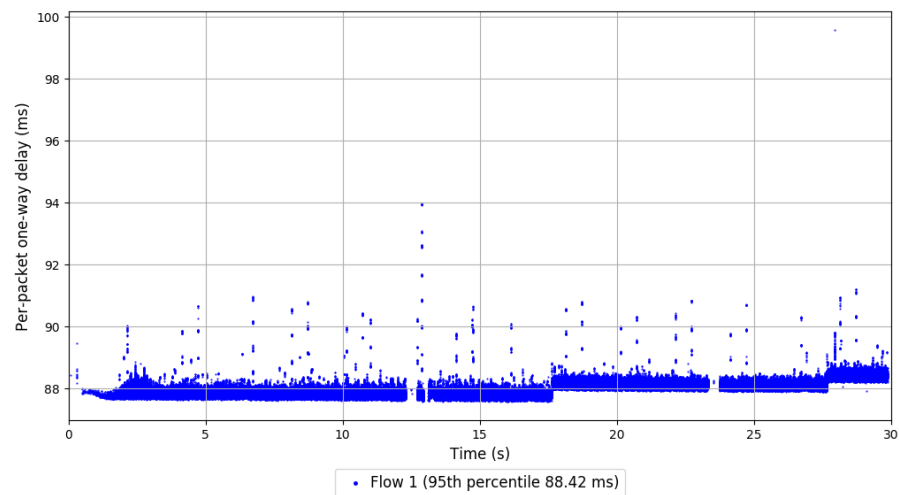
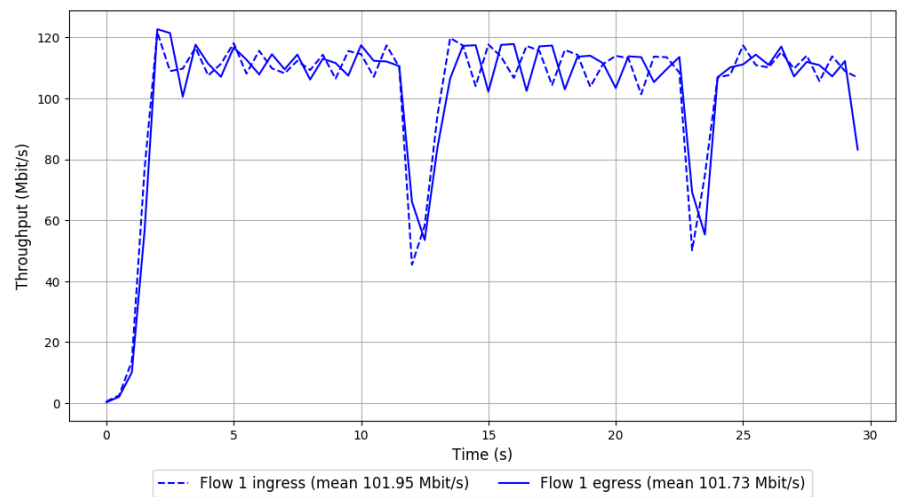
-- Flow 1:

Average throughput: 101.73 Mbit/s

95th percentile per-packet one-way delay: 88.417 ms

Loss rate: 0.79%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-08 20:47:26

End at: 2018-01-08 20:47:56

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 114.35 Mbit/s

95th percentile per-packet one-way delay: 89.206 ms

Loss rate: 0.83%

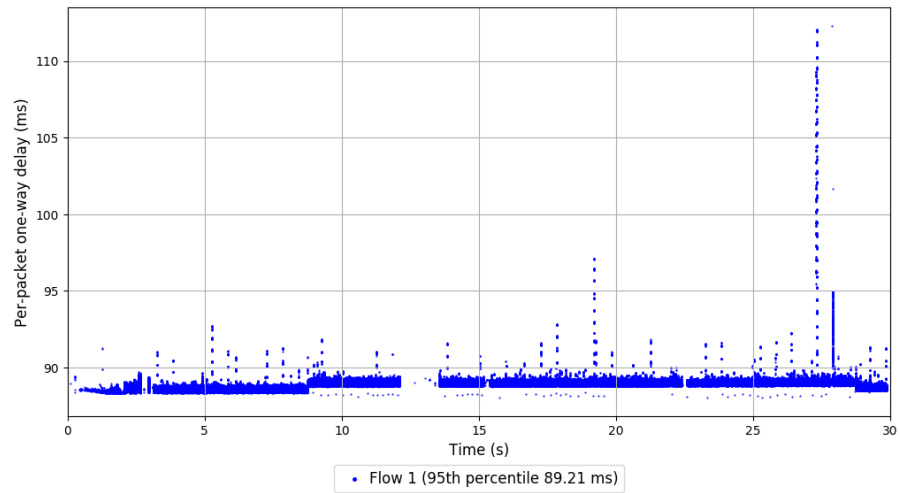
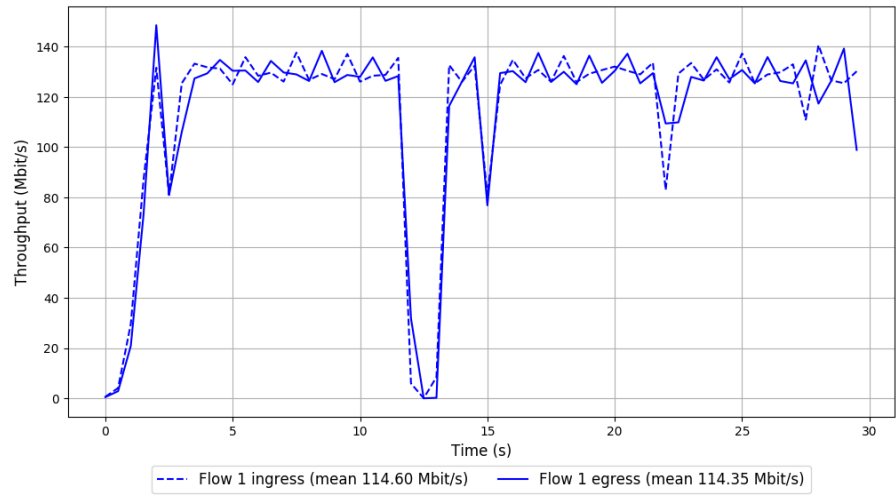
-- Flow 1:

Average throughput: 114.35 Mbit/s

95th percentile per-packet one-way delay: 89.206 ms

Loss rate: 0.83%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-08 18:52:11

End at: 2018-01-08 18:52:41

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.53 Mbit/s

95th percentile per-packet one-way delay: 101.799 ms

Loss rate: 0.84%

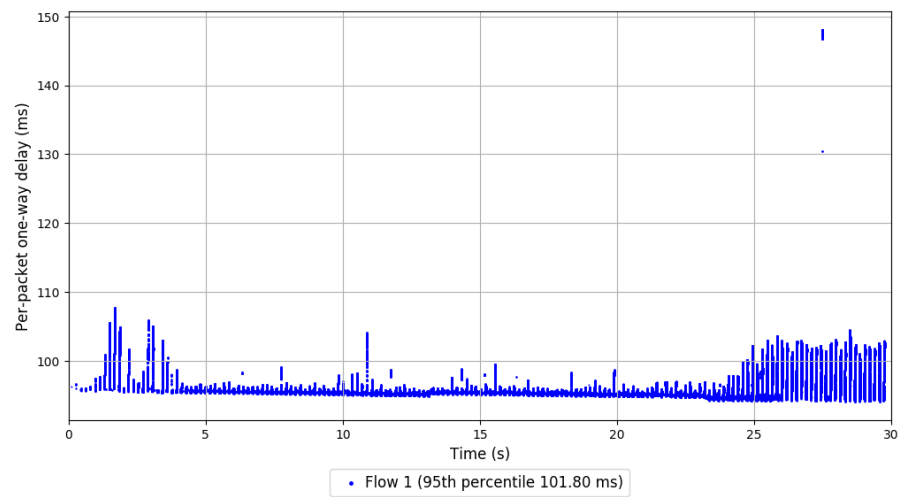
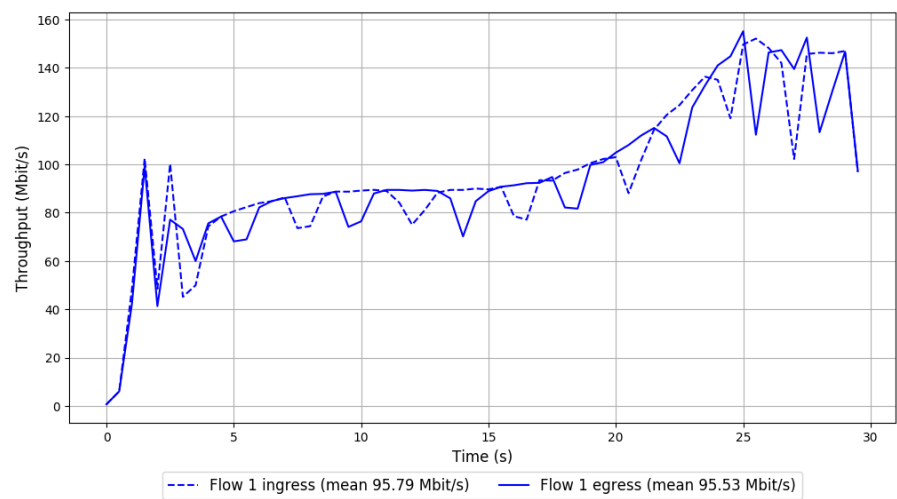
-- Flow 1:

Average throughput: 95.53 Mbit/s

95th percentile per-packet one-way delay: 101.799 ms

Loss rate: 0.84%

Run 1: Report of TCP Cubic — Data Link

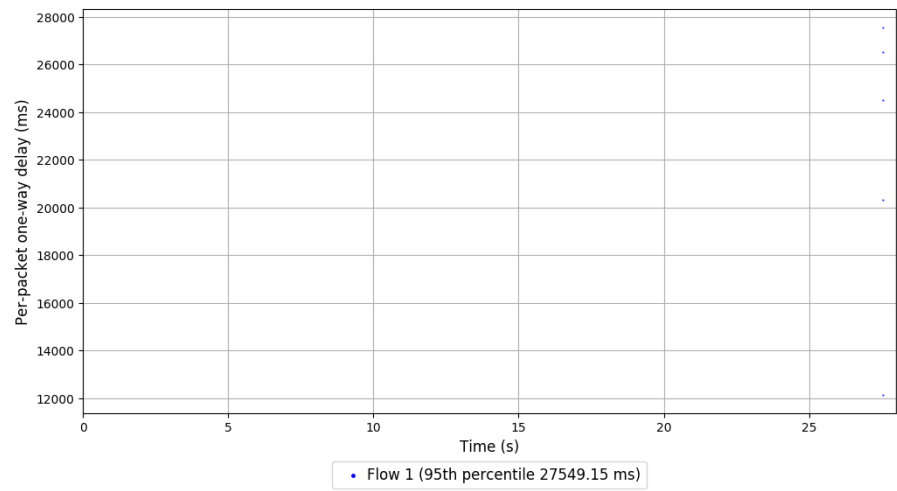
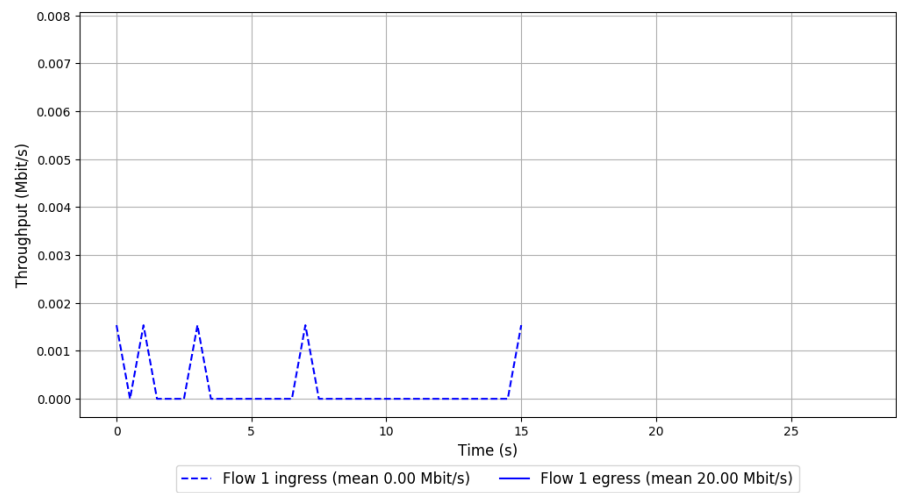


Run 2: Statistics of TCP Cubic

Start at: 2018-01-08 19:04:03

End at: 2018-01-08 19:04:33

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-08 19:16:10

End at: 2018-01-08 19:16:40

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.17 Mbit/s

95th percentile per-packet one-way delay: 97.061 ms

Loss rate: 0.91%

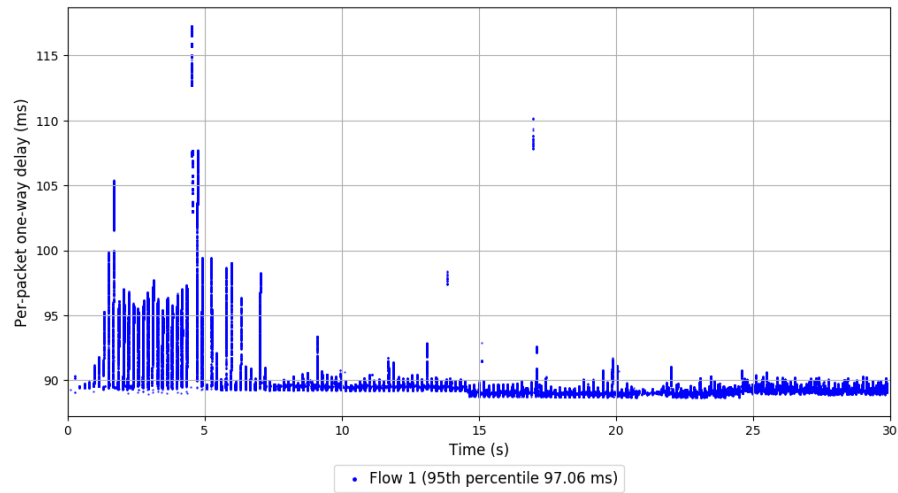
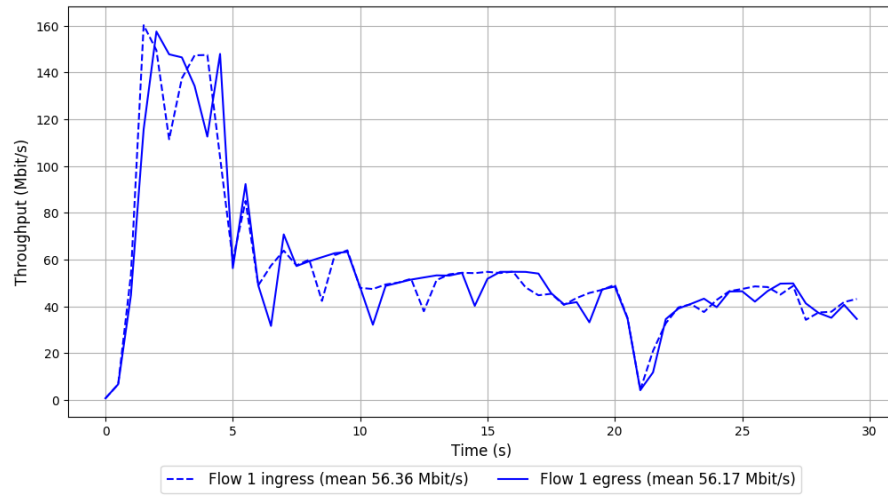
-- Flow 1:

Average throughput: 56.17 Mbit/s

95th percentile per-packet one-way delay: 97.061 ms

Loss rate: 0.91%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-08 19:28:22

End at: 2018-01-08 19:28:52

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.48 Mbit/s

95th percentile per-packet one-way delay: 100.352 ms

Loss rate: 1.07%

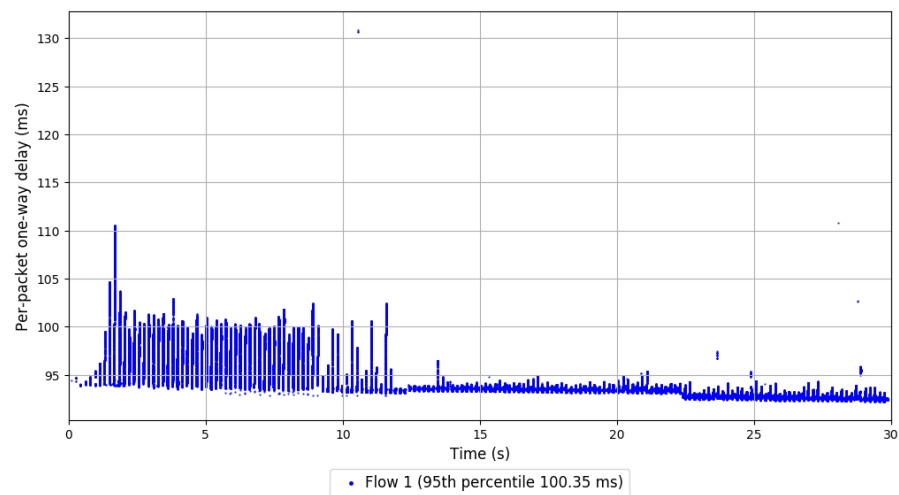
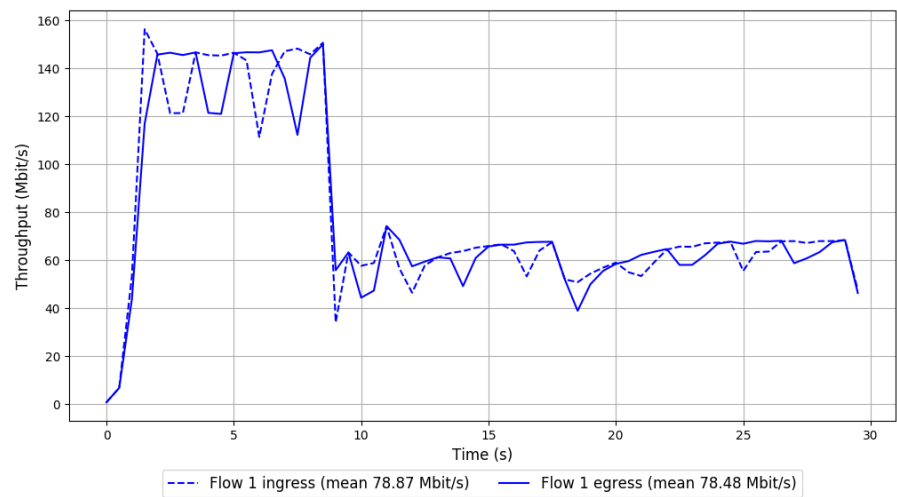
-- Flow 1:

Average throughput: 78.48 Mbit/s

95th percentile per-packet one-way delay: 100.352 ms

Loss rate: 1.07%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-08 19:40:22

End at: 2018-01-08 19:40:52

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.48 Mbit/s

95th percentile per-packet one-way delay: 92.488 ms

Loss rate: 0.84%

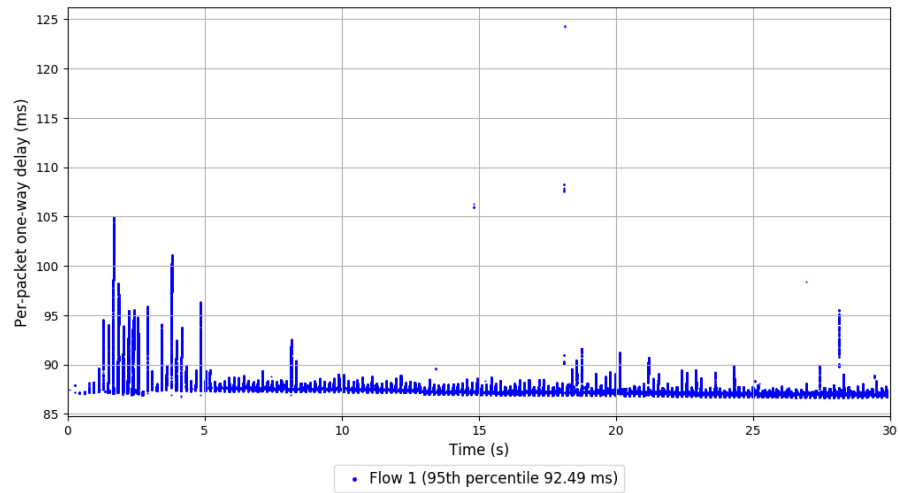
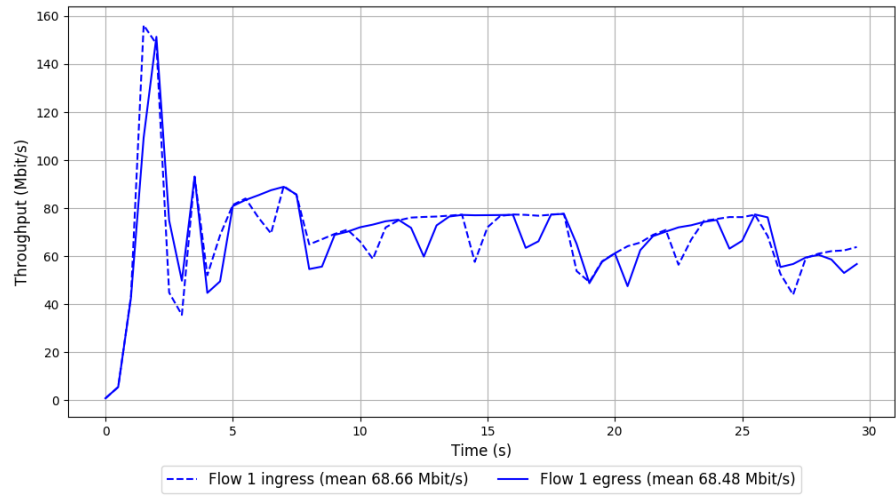
-- Flow 1:

Average throughput: 68.48 Mbit/s

95th percentile per-packet one-way delay: 92.488 ms

Loss rate: 0.84%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-08 19:52:45

End at: 2018-01-08 19:53:15

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.93 Mbit/s

95th percentile per-packet one-way delay: 91.217 ms

Loss rate: 1.44%

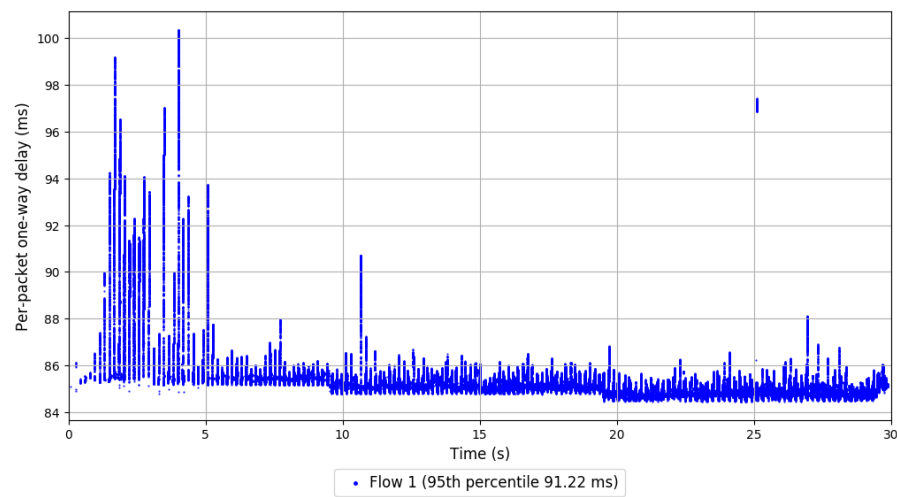
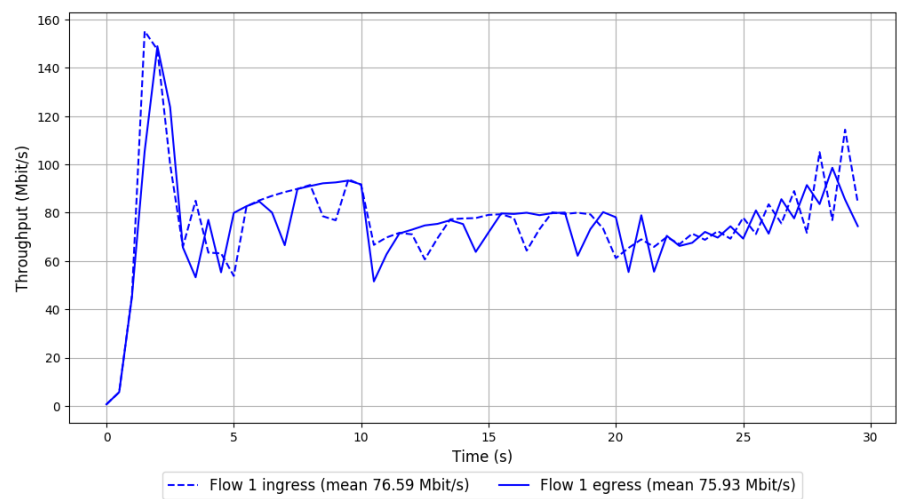
-- Flow 1:

Average throughput: 75.93 Mbit/s

95th percentile per-packet one-way delay: 91.217 ms

Loss rate: 1.44%

Run 6: Report of TCP Cubic — Data Link

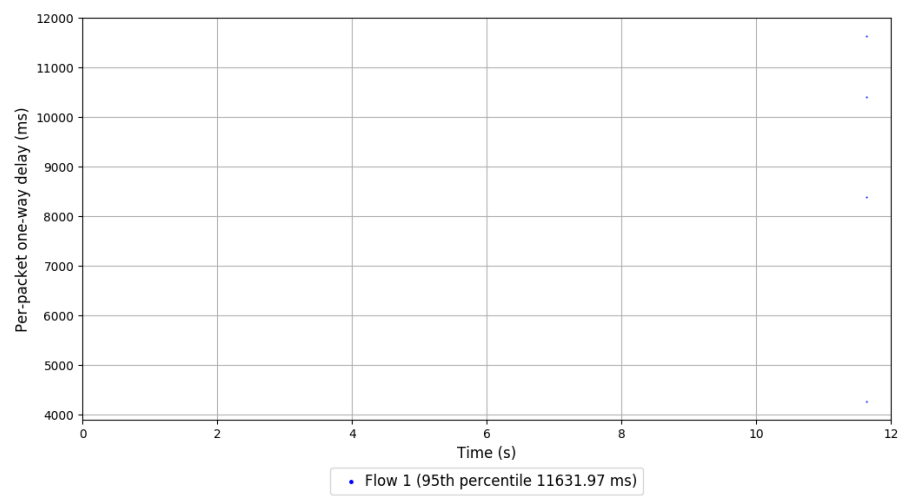
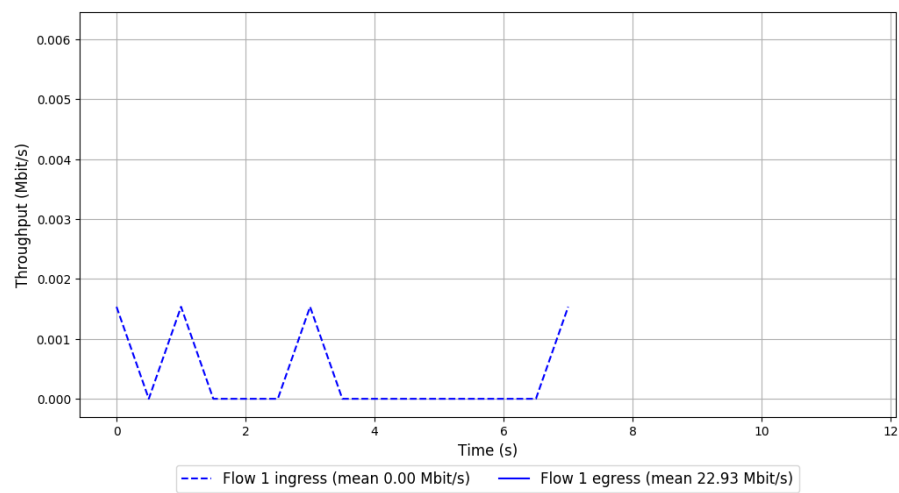


Run 7: Statistics of TCP Cubic

Start at: 2018-01-08 20:04:15

End at: 2018-01-08 20:04:45

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-08 20:16:36

End at: 2018-01-08 20:17:06

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.78 Mbit/s

95th percentile per-packet one-way delay: 96.901 ms

Loss rate: 2.14%

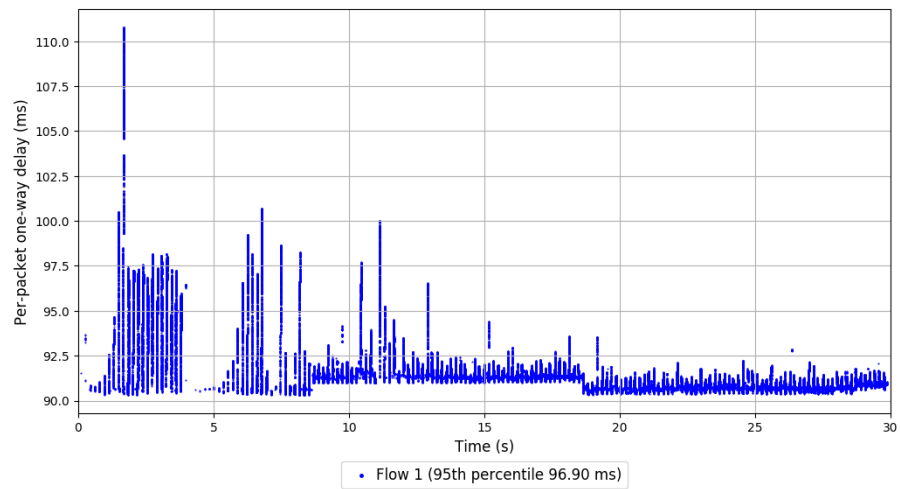
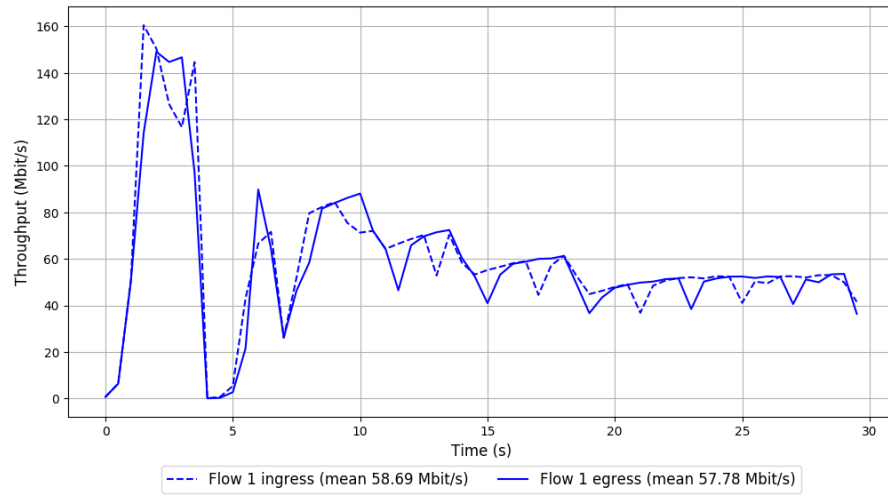
-- Flow 1:

Average throughput: 57.78 Mbit/s

95th percentile per-packet one-way delay: 96.901 ms

Loss rate: 2.14%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-08 20:28:17

End at: 2018-01-08 20:28:47

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.82 Mbit/s

95th percentile per-packet one-way delay: 92.797 ms

Loss rate: 1.41%

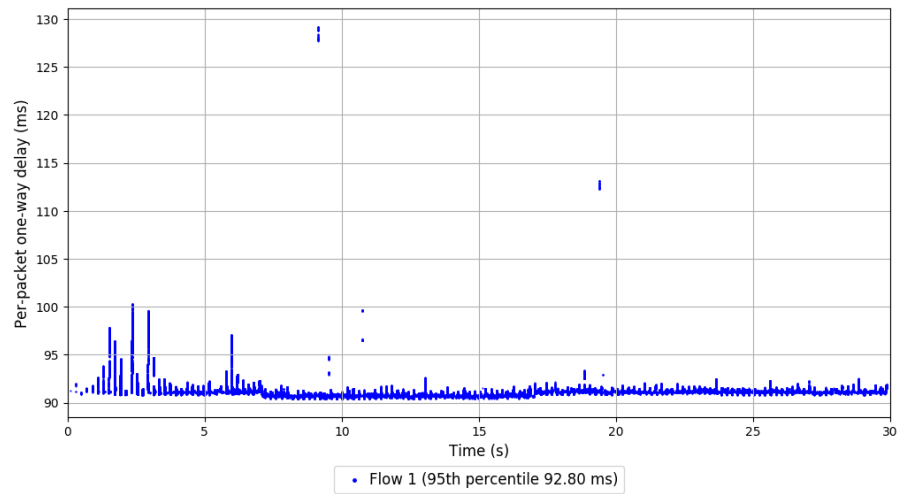
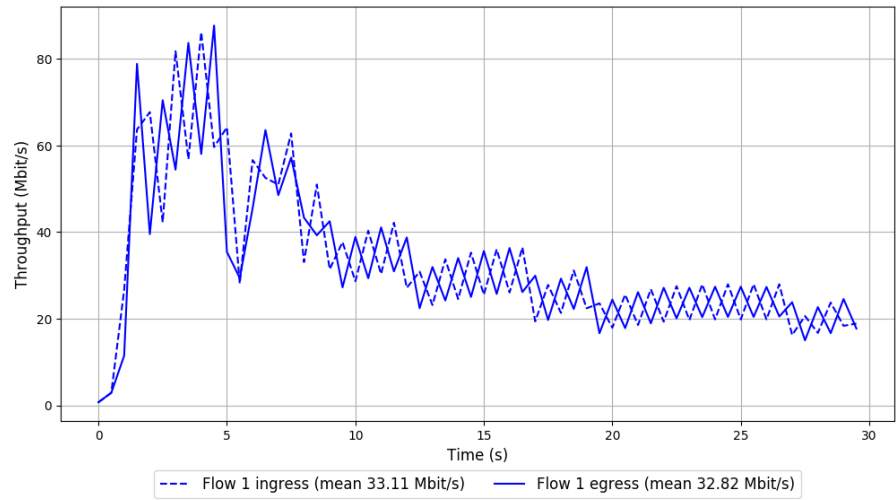
-- Flow 1:

Average throughput: 32.82 Mbit/s

95th percentile per-packet one-way delay: 92.797 ms

Loss rate: 1.41%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-08 20:40:37

End at: 2018-01-08 20:41:07

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.25 Mbit/s

95th percentile per-packet one-way delay: 88.737 ms

Loss rate: 1.83%

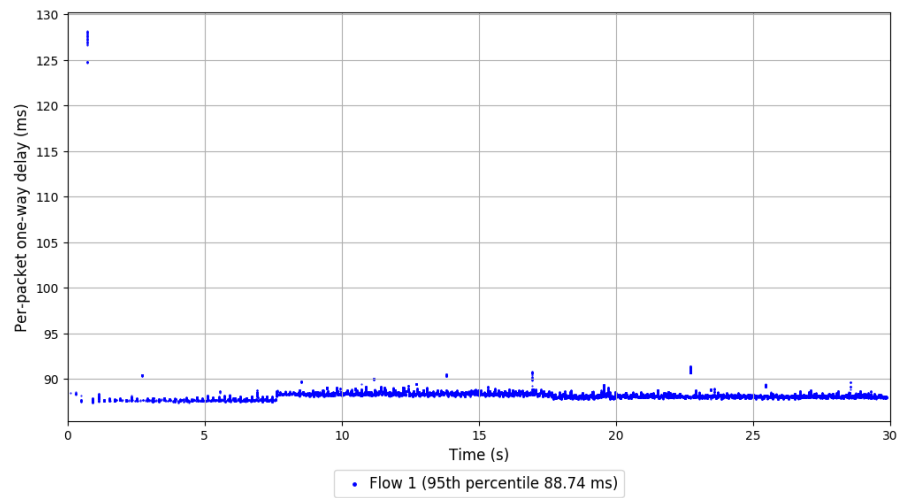
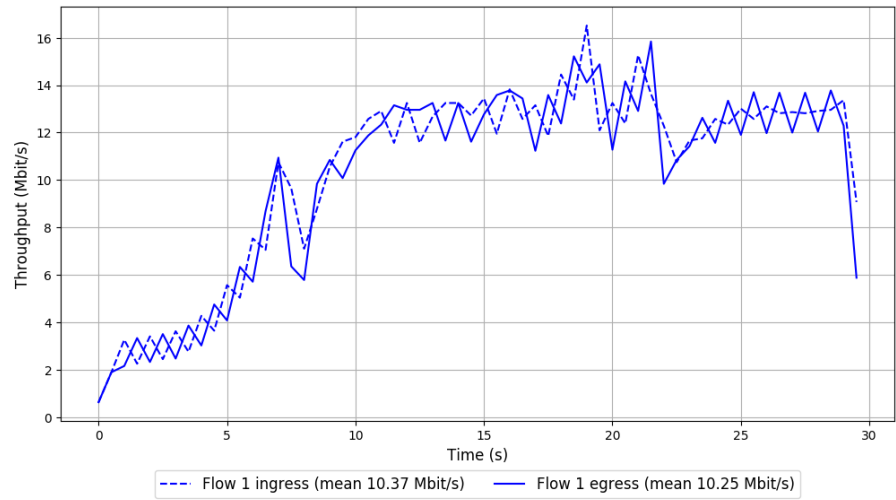
-- Flow 1:

Average throughput: 10.25 Mbit/s

95th percentile per-packet one-way delay: 88.737 ms

Loss rate: 1.83%

Run 10: Report of TCP Cubic — Data Link

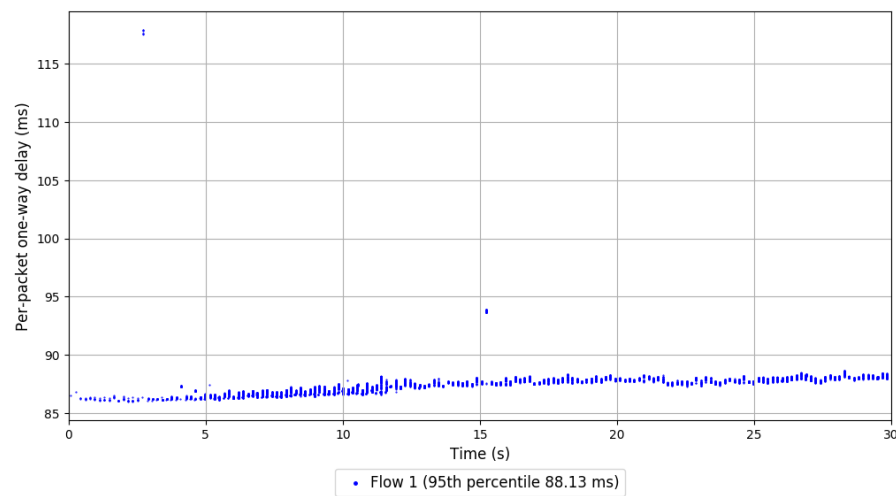
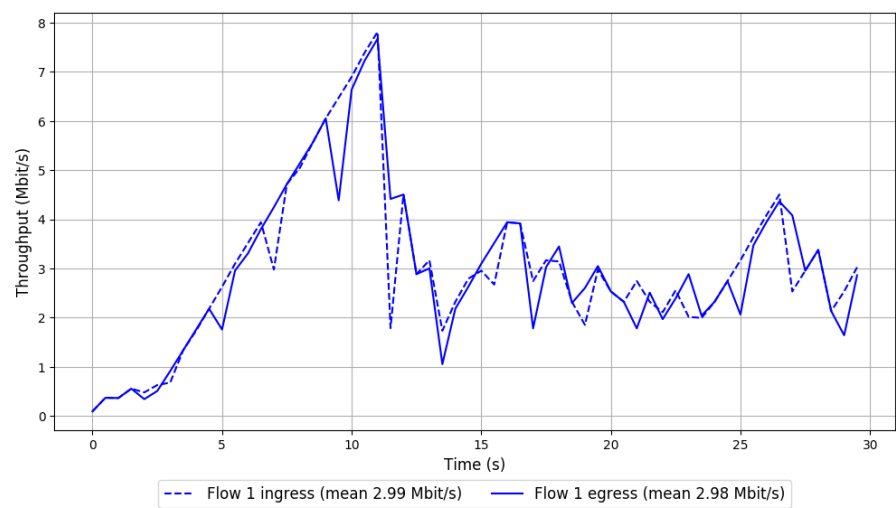


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-08 18:59:23
End at: 2018-01-08 18:59:53

# Below is generated by plot.py at 2018-01-08 23:00:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 88.134 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 88.134 ms
Loss rate: 0.79%
```

Run 1: Report of LEDBAT — Data Link

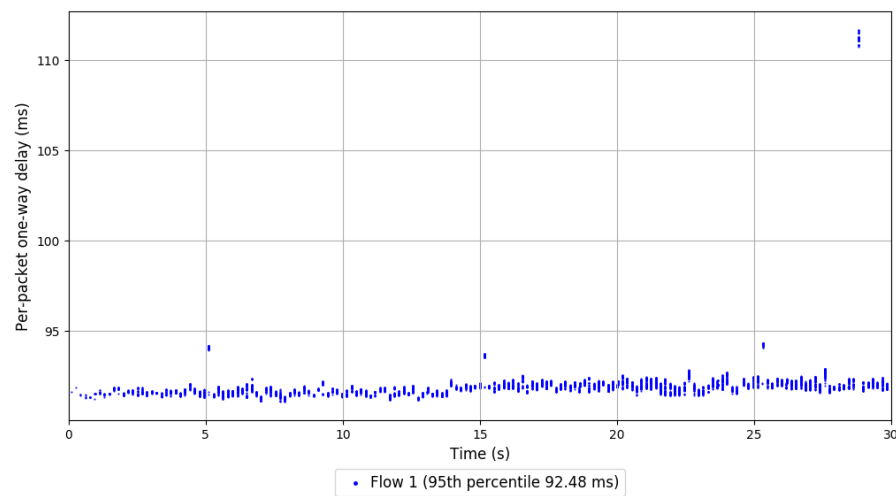
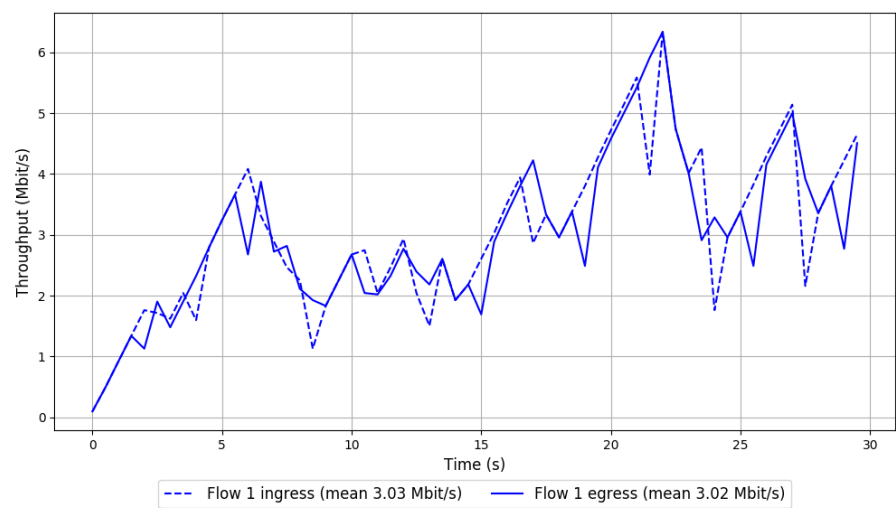


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-08 19:11:31
End at: 2018-01-08 19:12:01

# Below is generated by plot.py at 2018-01-08 23:00:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 92.482 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 92.482 ms
Loss rate: 0.88%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-08 19:23:44

End at: 2018-01-08 19:24:14

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 87.361 ms

Loss rate: 0.92%

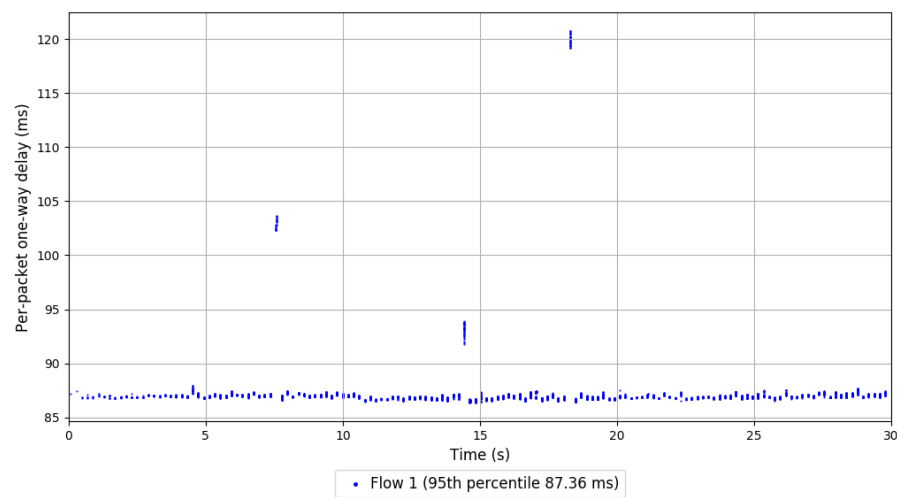
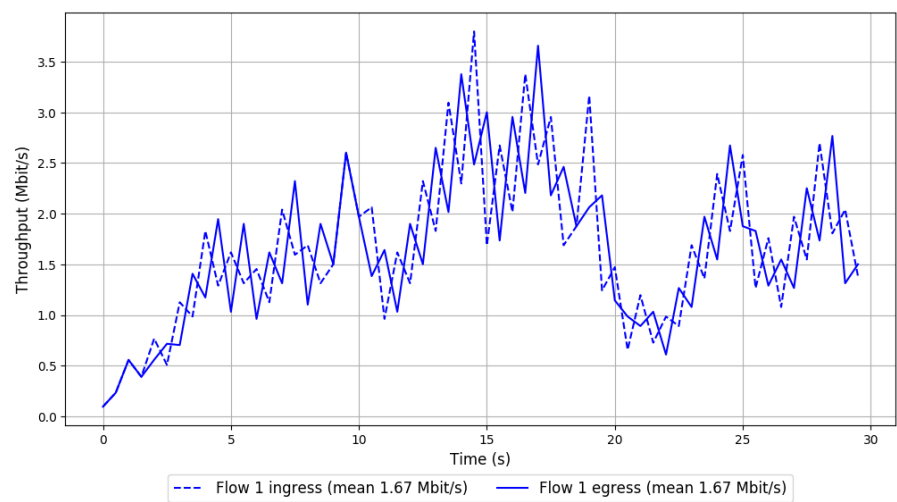
-- Flow 1:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 87.361 ms

Loss rate: 0.92%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-08 19:35:36

End at: 2018-01-08 19:36:06

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 88.517 ms

Loss rate: 0.87%

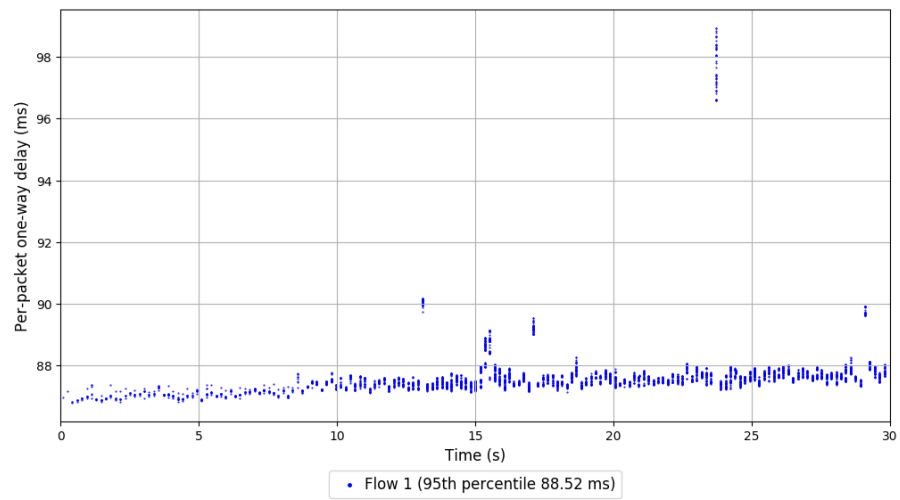
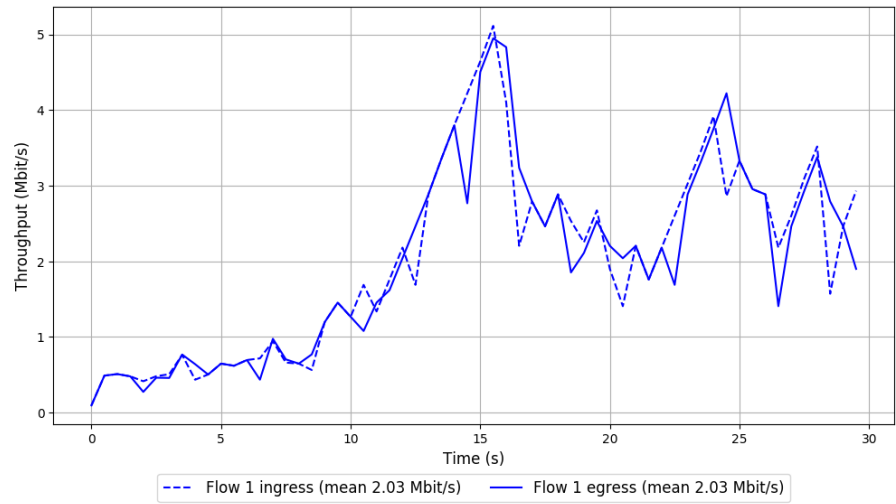
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 88.517 ms

Loss rate: 0.87%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-08 19:48:01

End at: 2018-01-08 19:48:31

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 85.782 ms

Loss rate: 1.75%

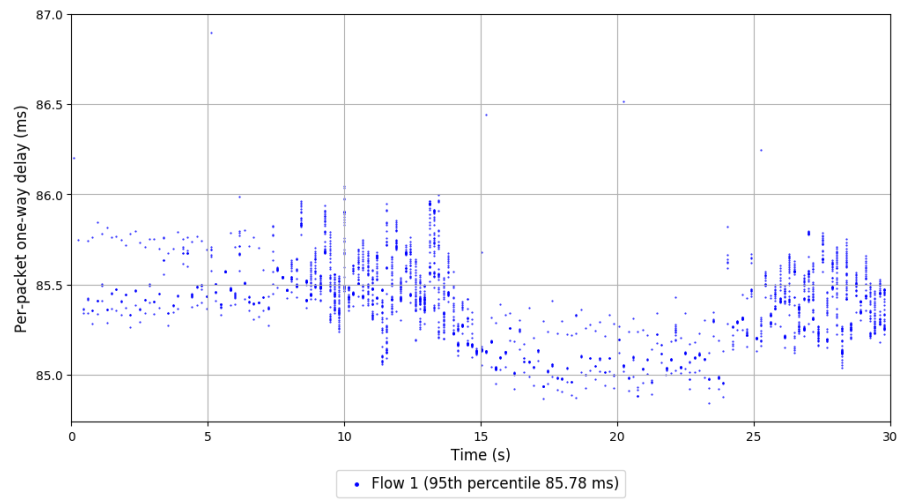
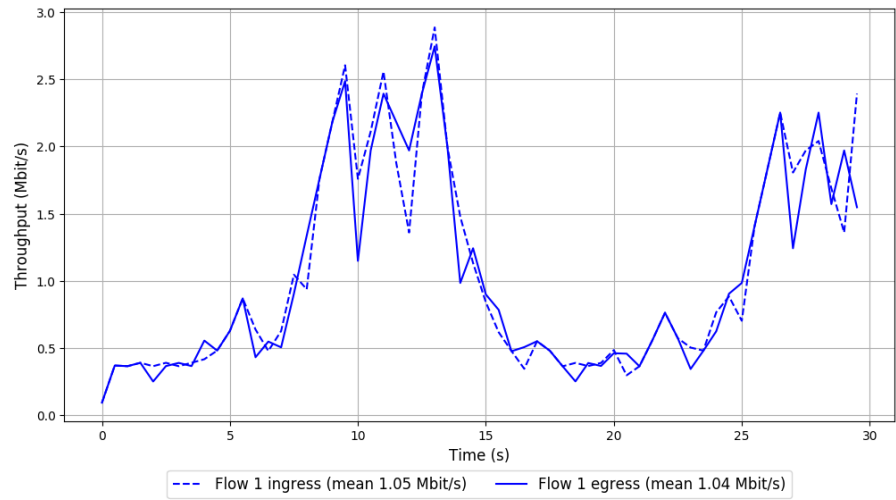
-- Flow 1:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 85.782 ms

Loss rate: 1.75%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-08 19:59:57

End at: 2018-01-08 20:00:27

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 88.089 ms

Loss rate: 0.62%

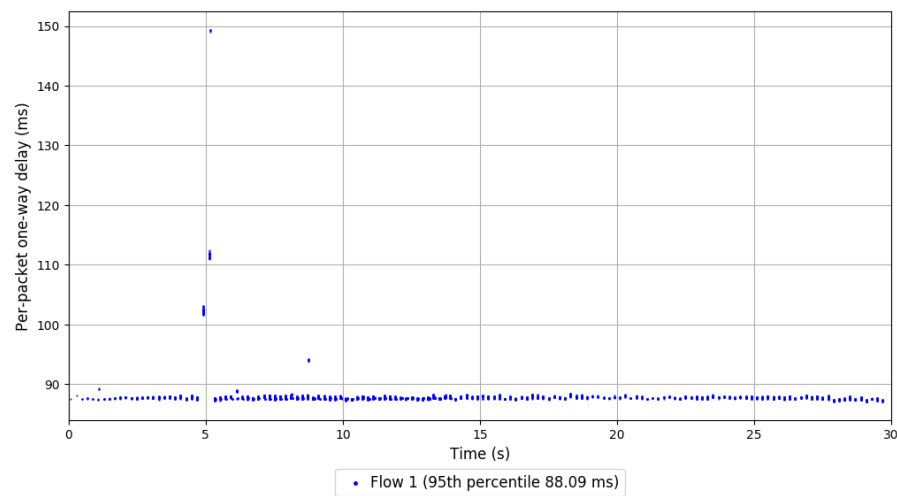
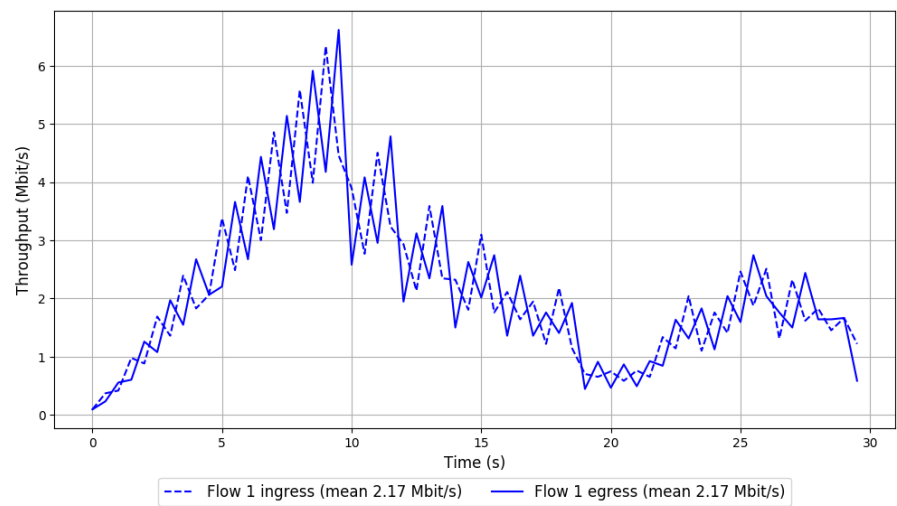
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 88.089 ms

Loss rate: 0.62%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-08 20:11:50

End at: 2018-01-08 20:12:20

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 90.358 ms

Loss rate: 0.75%

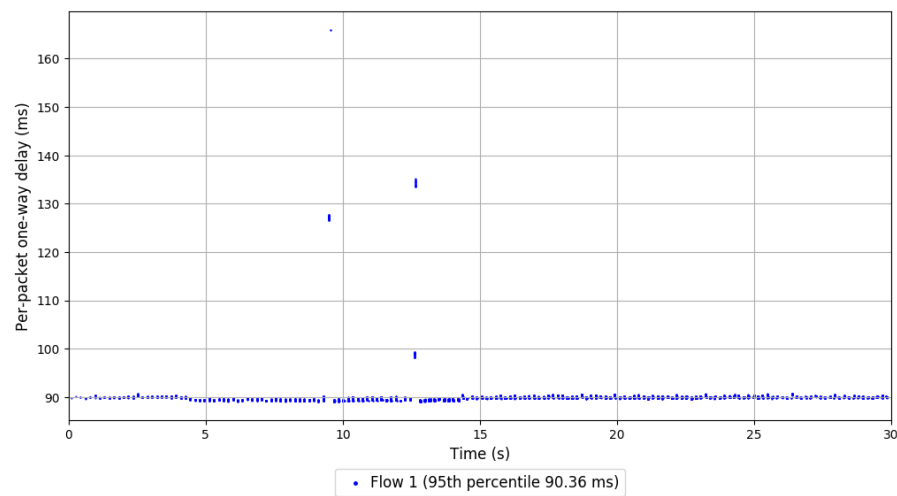
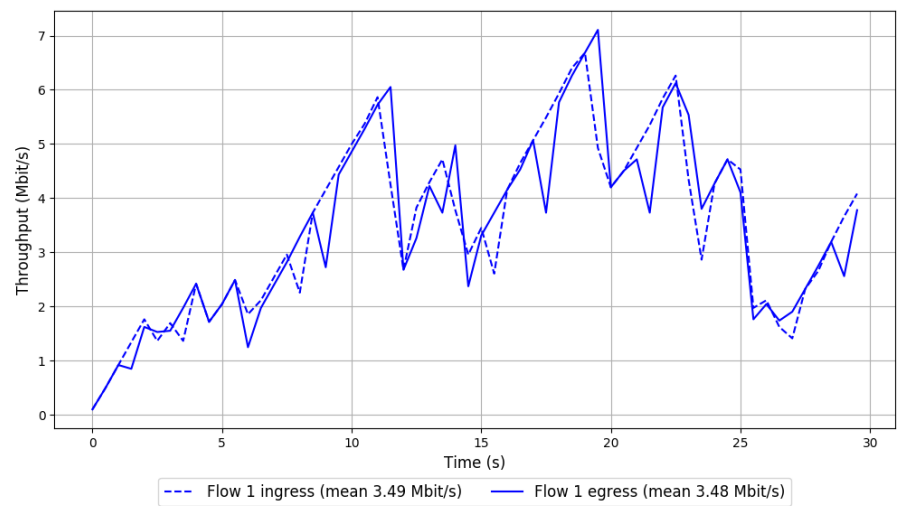
-- Flow 1:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 90.358 ms

Loss rate: 0.75%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-08 20:23:41

End at: 2018-01-08 20:24:11

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 92.474 ms

Loss rate: 1.35%

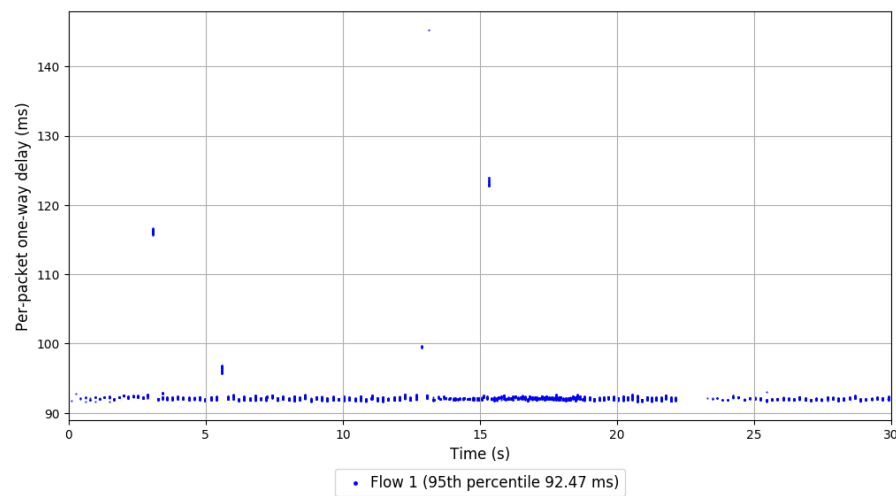
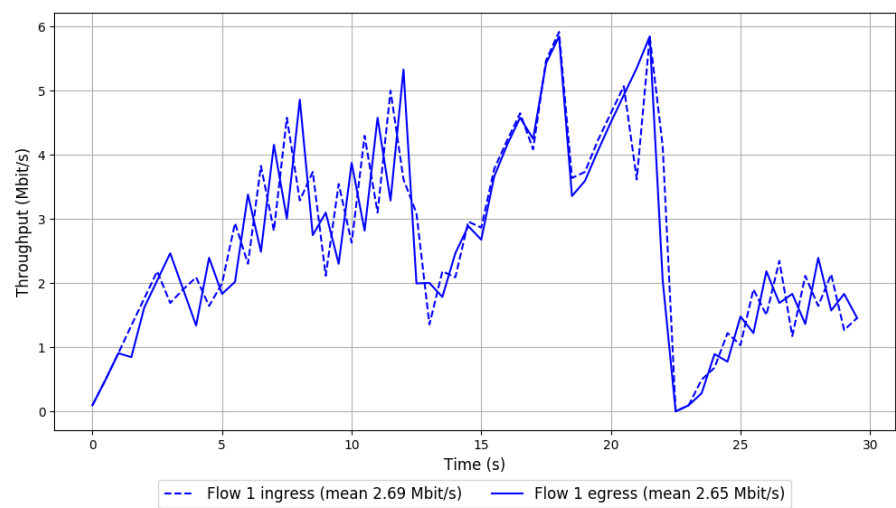
-- Flow 1:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 92.474 ms

Loss rate: 1.35%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-08 20:35:52

End at: 2018-01-08 20:36:22

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 88.360 ms

Loss rate: 0.59%

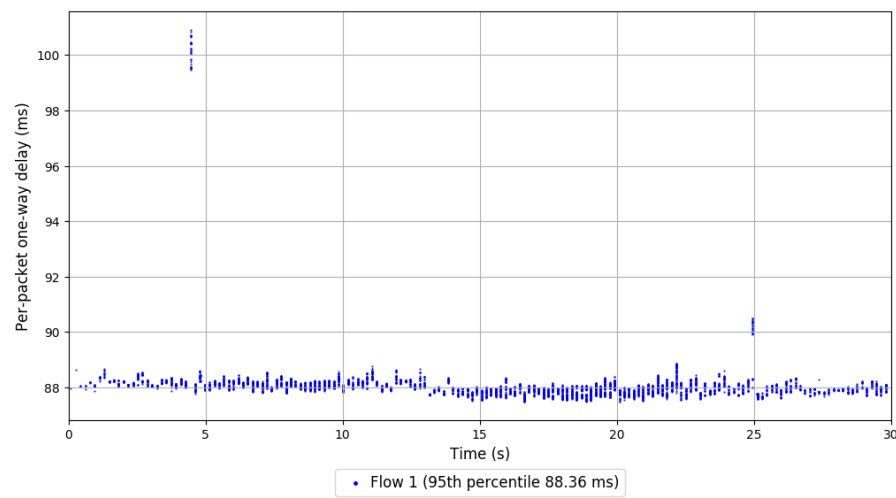
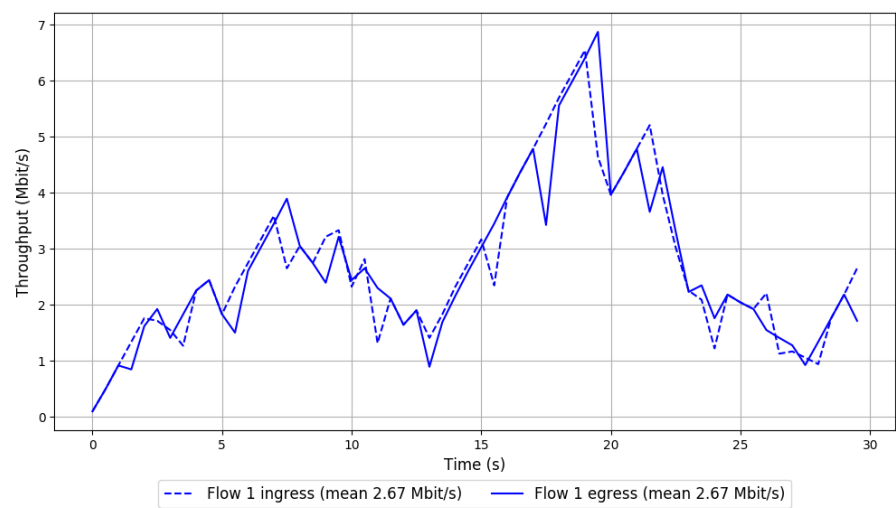
-- Flow 1:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 88.360 ms

Loss rate: 0.59%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-08 20:48:12

End at: 2018-01-08 20:48:42

Below is generated by plot.py at 2018-01-08 23:00:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 89.554 ms

Loss rate: 0.85%

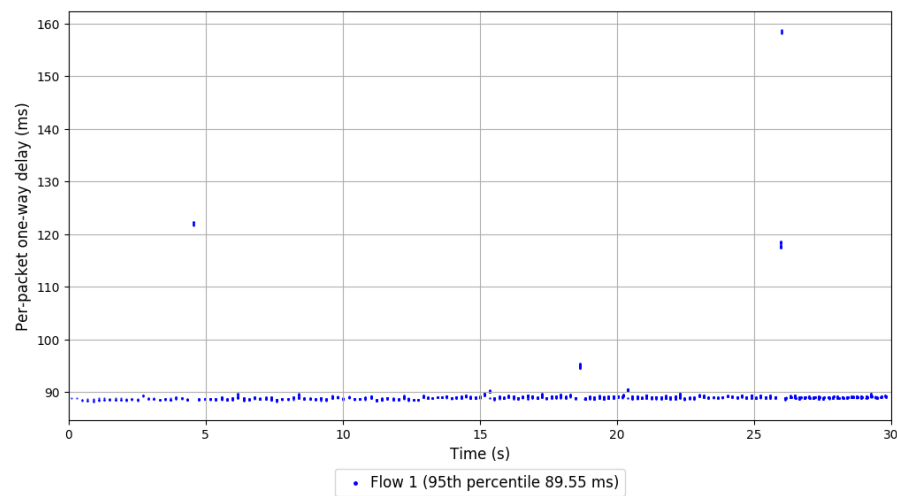
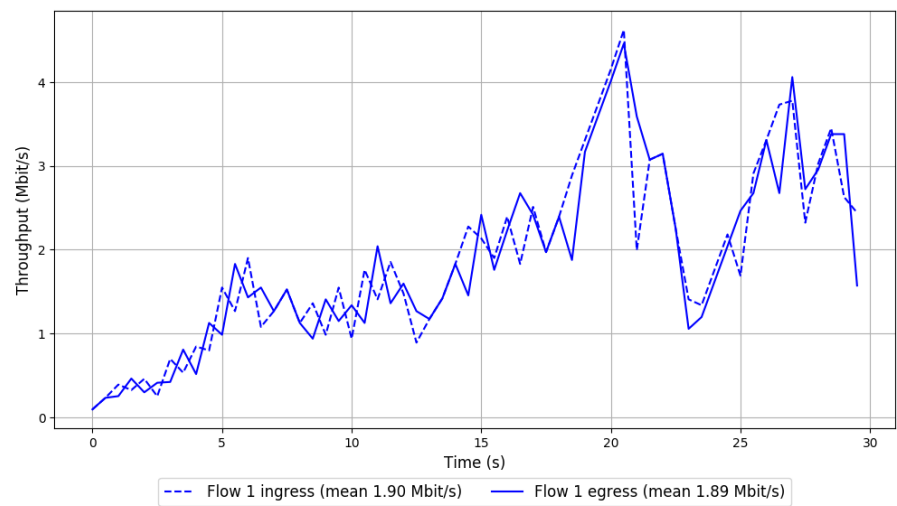
-- Flow 1:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 89.554 ms

Loss rate: 0.85%

Run 10: Report of LEDBAT — Data Link

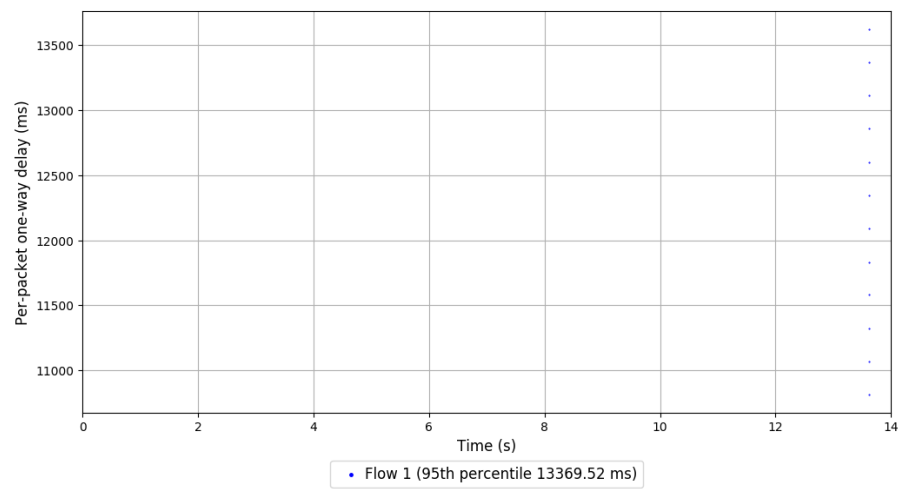
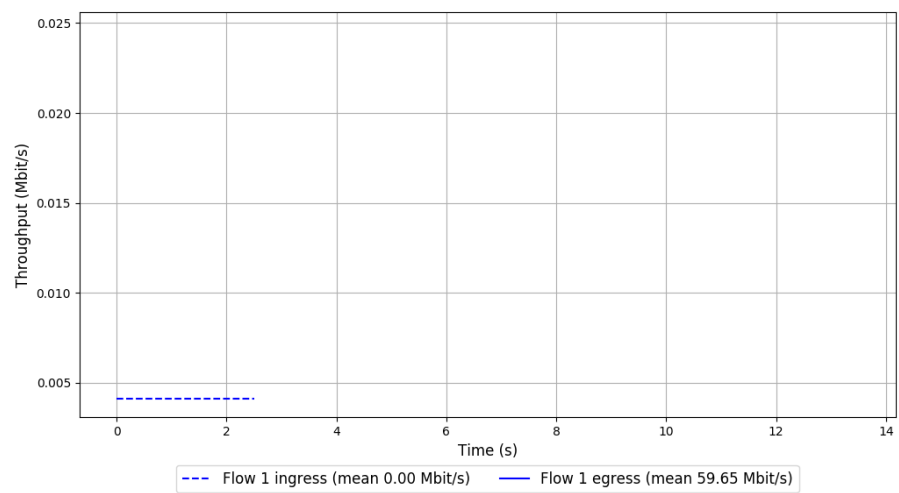


Run 1: Statistics of PCC

Start at: 2018-01-08 18:57:19

End at: 2018-01-08 18:57:49

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-08 19:08:58

End at: 2018-01-08 19:09:28

Below is generated by plot.py at 2018-01-08 23:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 620.99 Mbit/s

95th percentile per-packet one-way delay: 214.001 ms

Loss rate: 2.83%

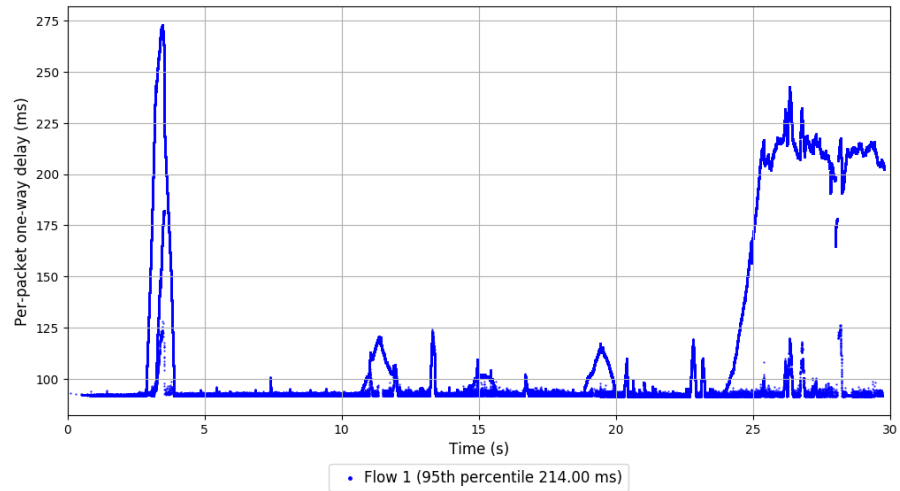
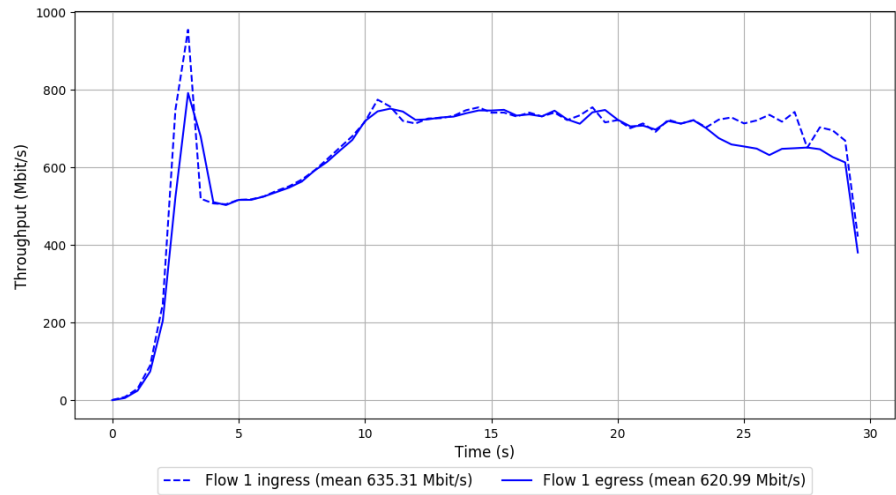
-- Flow 1:

Average throughput: 620.99 Mbit/s

95th percentile per-packet one-way delay: 214.001 ms

Loss rate: 2.83%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-08 19:21:12

End at: 2018-01-08 19:21:42

Below is generated by plot.py at 2018-01-08 23:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 594.42 Mbit/s

95th percentile per-packet one-way delay: 205.595 ms

Loss rate: 2.31%

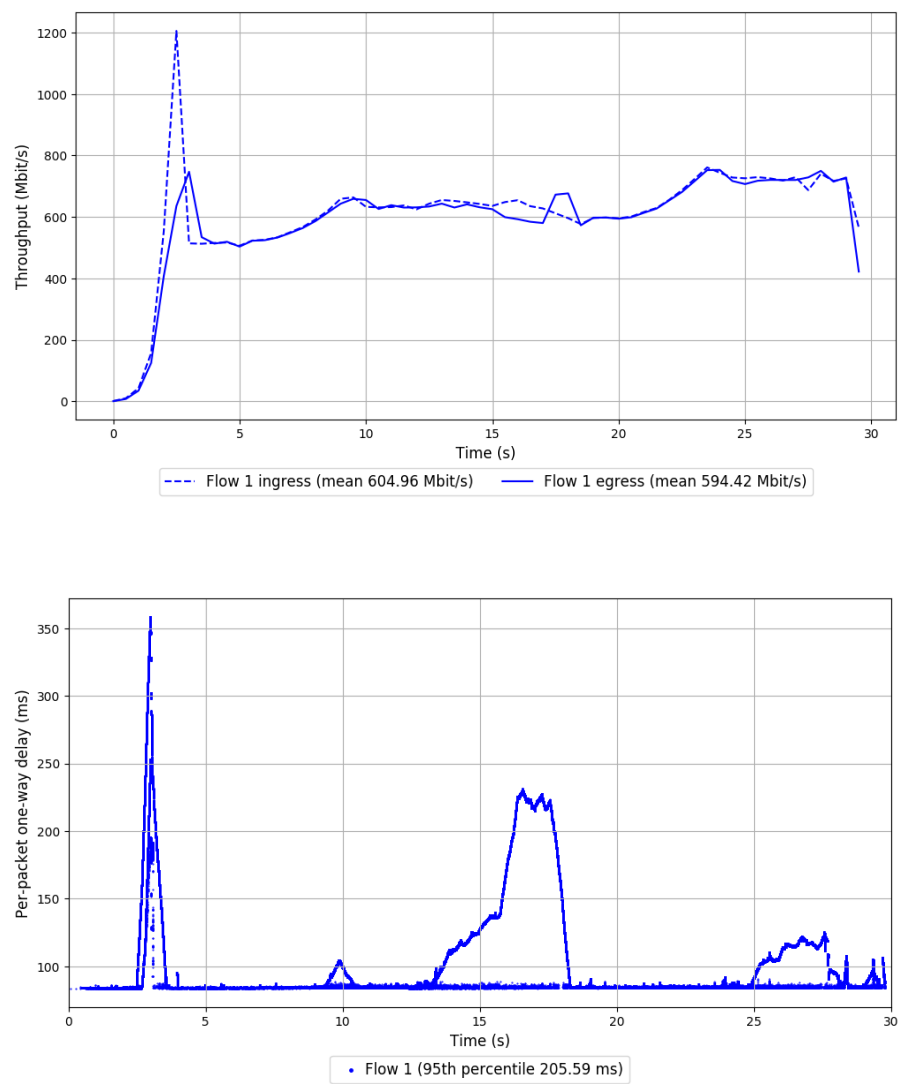
-- Flow 1:

Average throughput: 594.42 Mbit/s

95th percentile per-packet one-way delay: 205.595 ms

Loss rate: 2.31%

Run 3: Report of PCC — Data Link

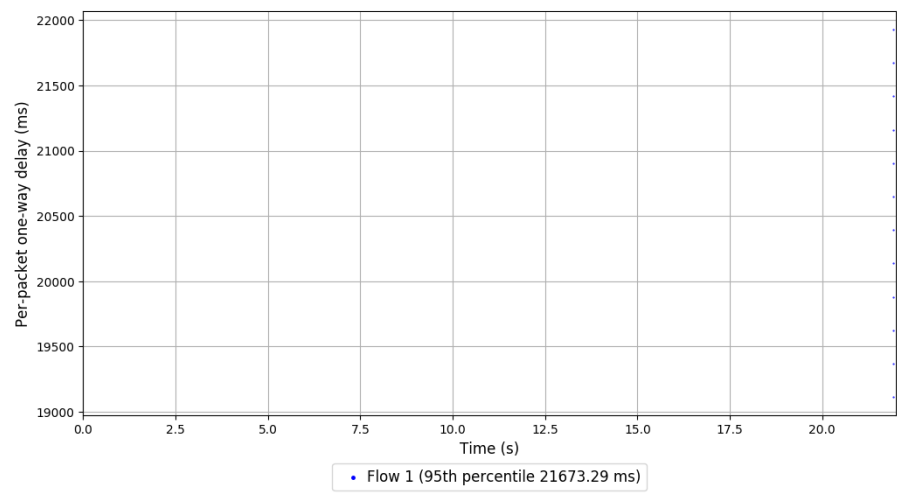
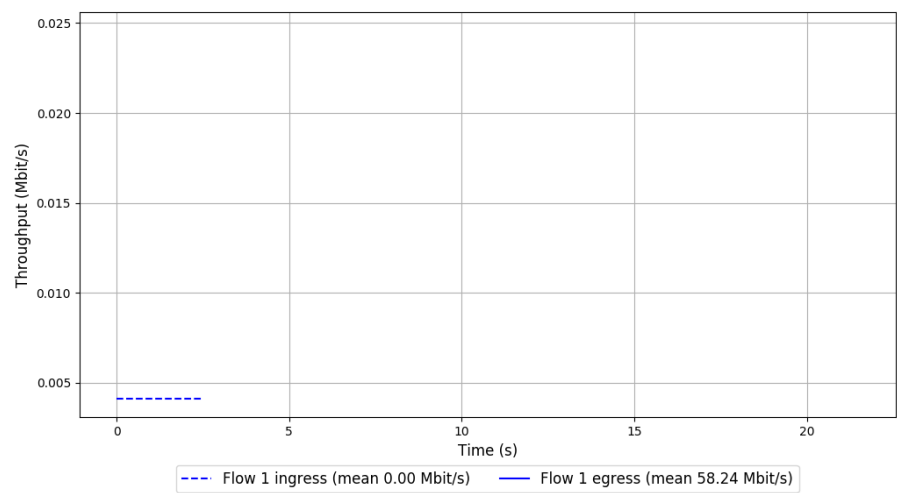


Run 4: Statistics of PCC

Start at: 2018-01-08 19:33:27

End at: 2018-01-08 19:33:57

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-08 19:45:27

End at: 2018-01-08 19:45:57

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 651.66 Mbit/s

95th percentile per-packet one-way delay: 117.175 ms

Loss rate: 1.17%

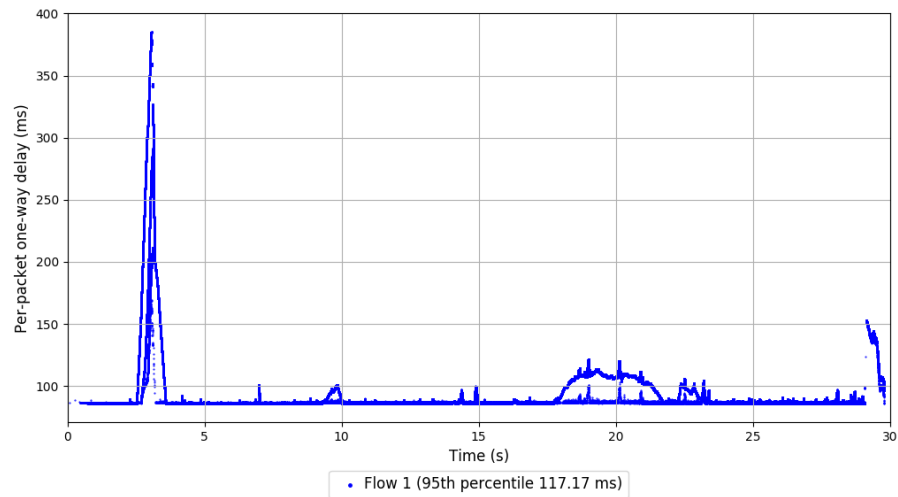
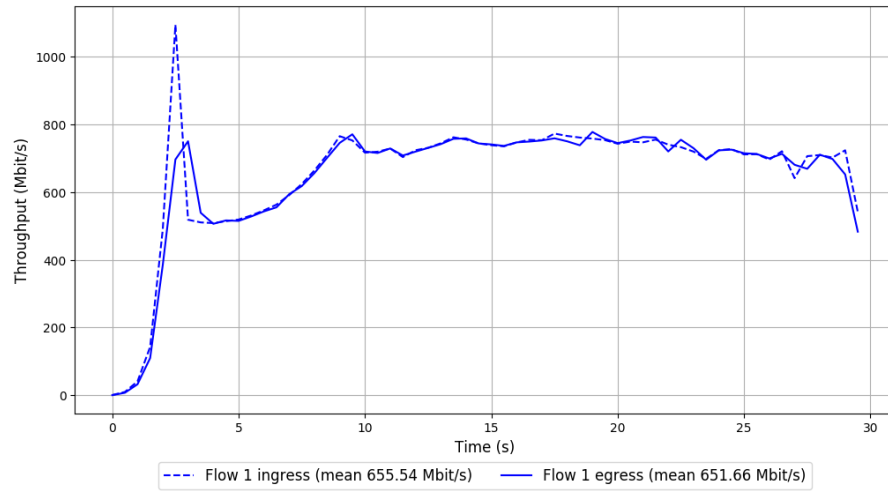
-- Flow 1:

Average throughput: 651.66 Mbit/s

95th percentile per-packet one-way delay: 117.175 ms

Loss rate: 1.17%

Run 5: Report of PCC — Data Link

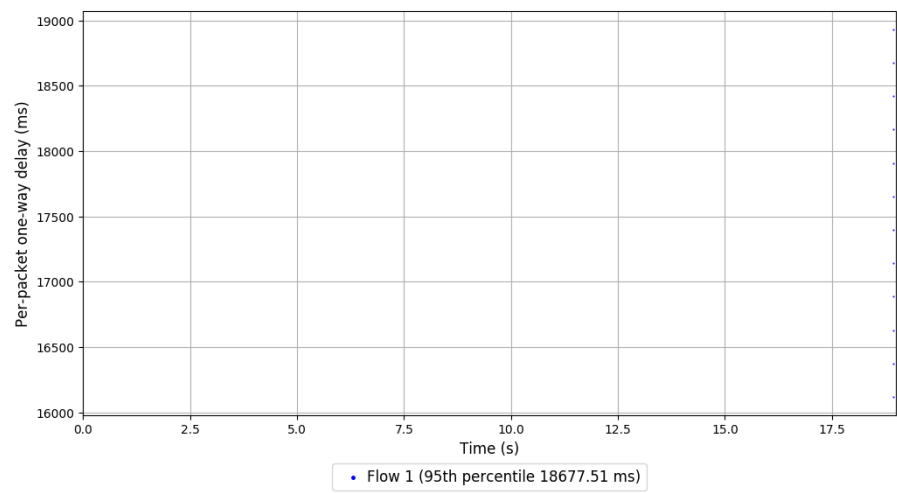
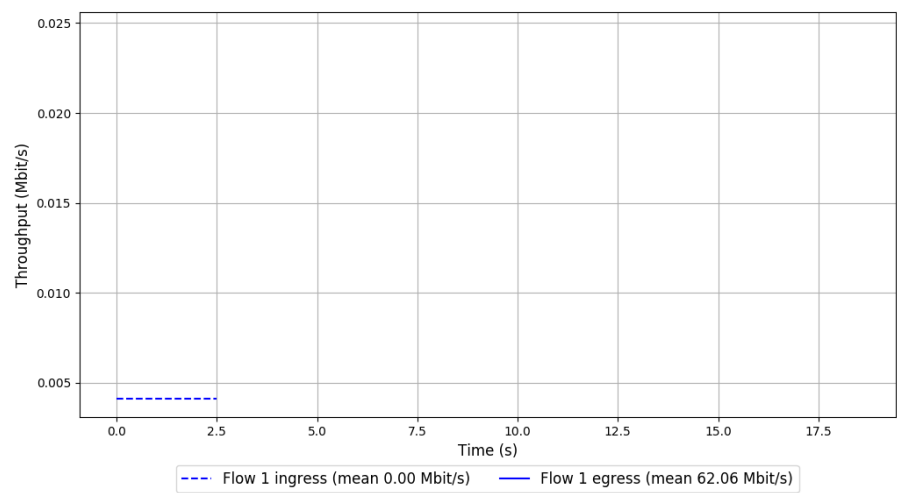


Run 6: Statistics of PCC

Start at: 2018-01-08 19:57:49

End at: 2018-01-08 19:58:19

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-08 20:09:15

End at: 2018-01-08 20:09:45

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 653.74 Mbit/s

95th percentile per-packet one-way delay: 185.449 ms

Loss rate: 1.52%

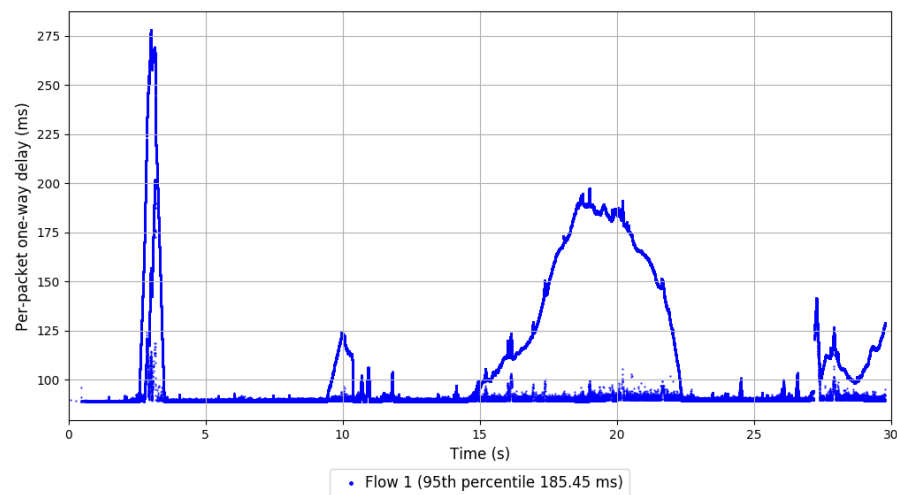
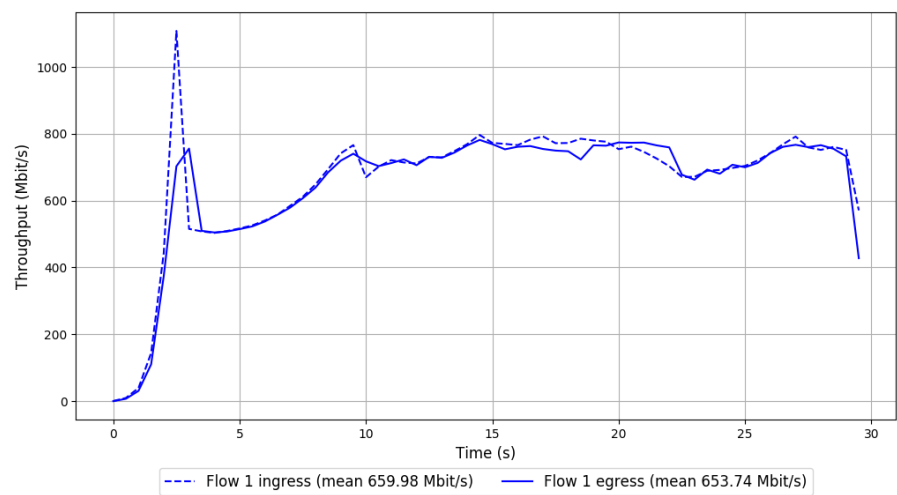
-- Flow 1:

Average throughput: 653.74 Mbit/s

95th percentile per-packet one-way delay: 185.449 ms

Loss rate: 1.52%

Run 7: Report of PCC — Data Link

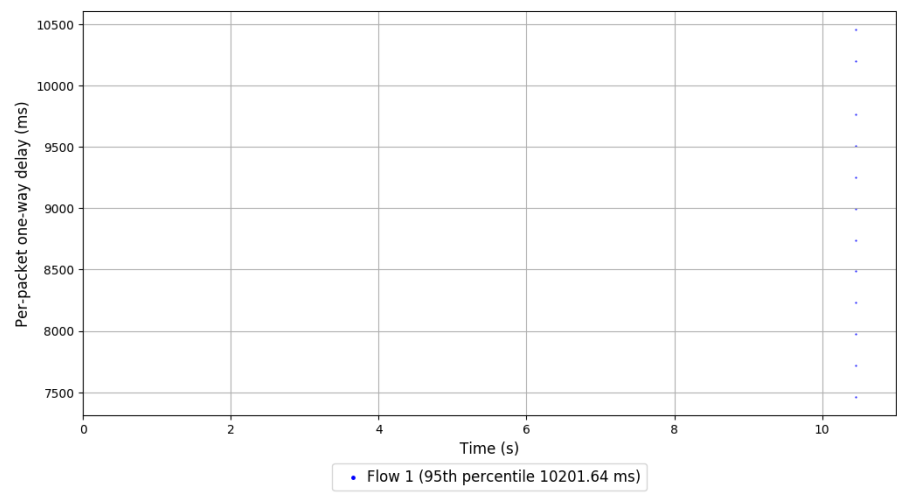
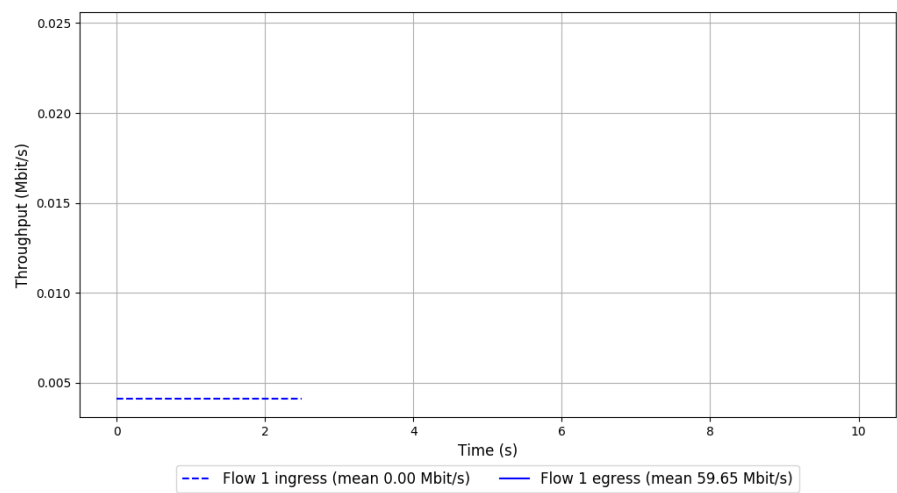


Run 8: Statistics of PCC

Start at: 2018-01-08 20:21:32

End at: 2018-01-08 20:22:02

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-08 20:33:20

End at: 2018-01-08 20:33:50

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 593.14 Mbit/s

95th percentile per-packet one-way delay: 211.171 ms

Loss rate: 3.30%

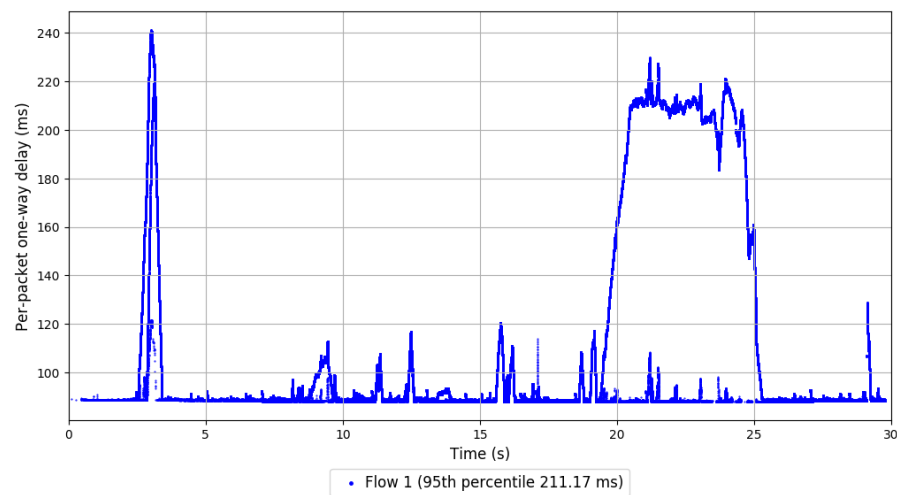
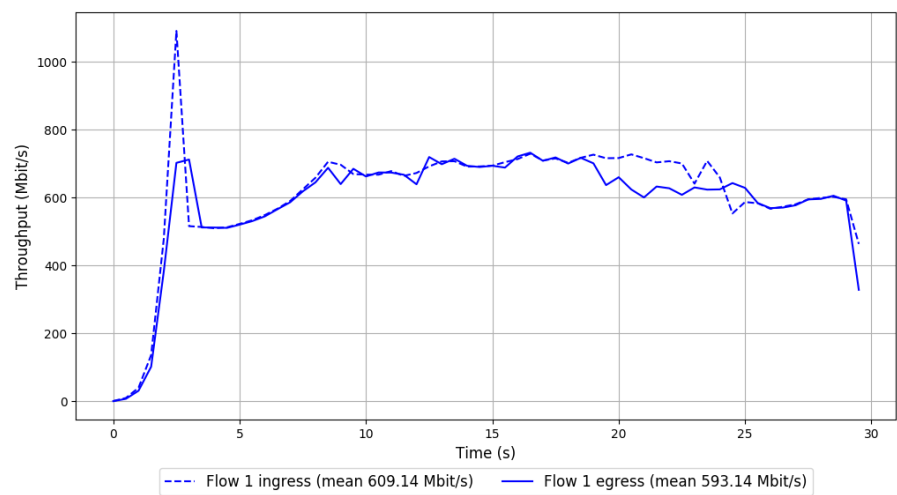
-- Flow 1:

Average throughput: 593.14 Mbit/s

95th percentile per-packet one-way delay: 211.171 ms

Loss rate: 3.30%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-08 20:45:38

End at: 2018-01-08 20:46:08

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 616.28 Mbit/s

95th percentile per-packet one-way delay: 126.487 ms

Loss rate: 1.17%

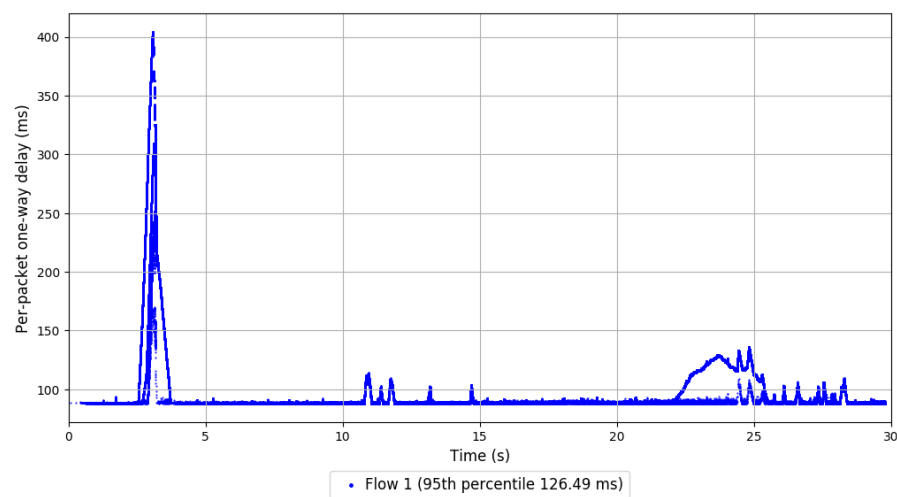
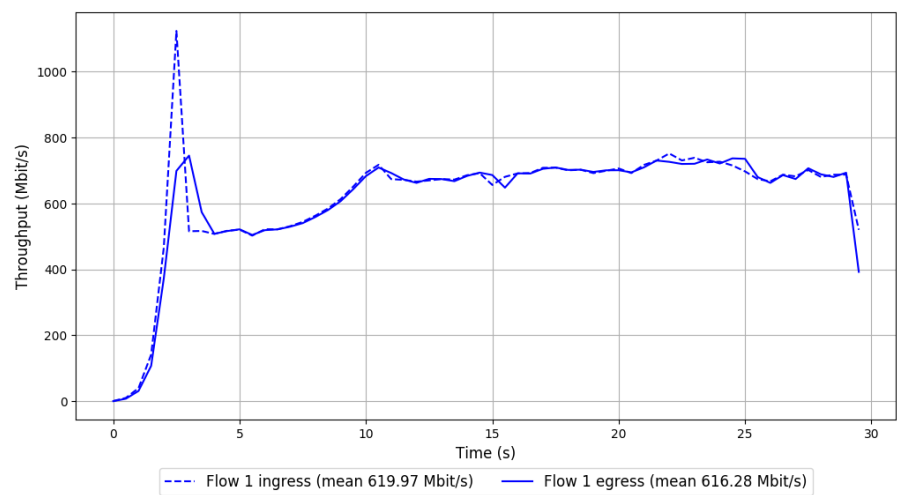
-- Flow 1:

Average throughput: 616.28 Mbit/s

95th percentile per-packet one-way delay: 126.487 ms

Loss rate: 1.17%

Run 10: Report of PCC — Data Link

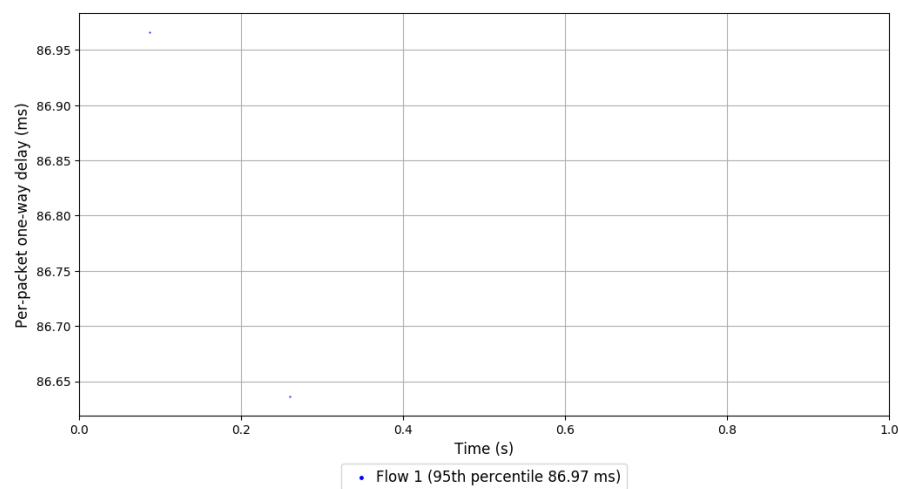
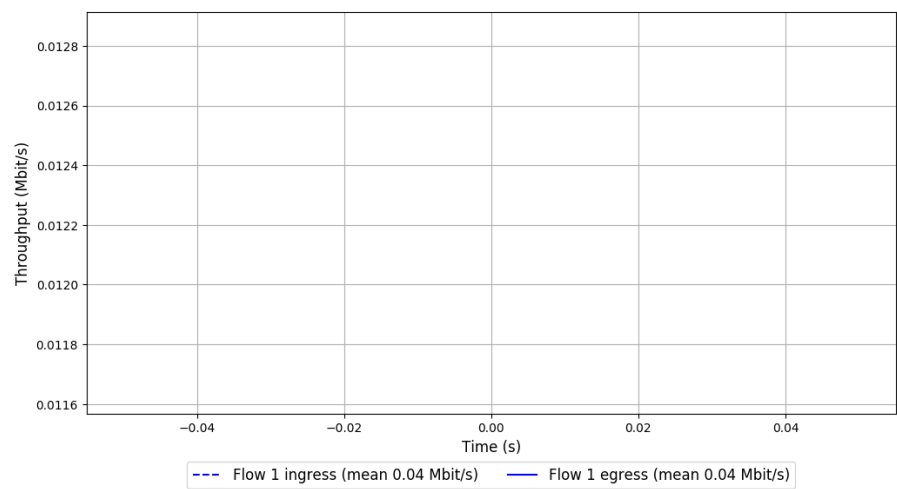


Run 1: Statistics of QUIC Cubic

Start at: 2018-01-08 18:57:57

End at: 2018-01-08 18:58:28

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-08 19:10:02

End at: 2018-01-08 19:10:32

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.81 Mbit/s

95th percentile per-packet one-way delay: 92.018 ms

Loss rate: 0.92%

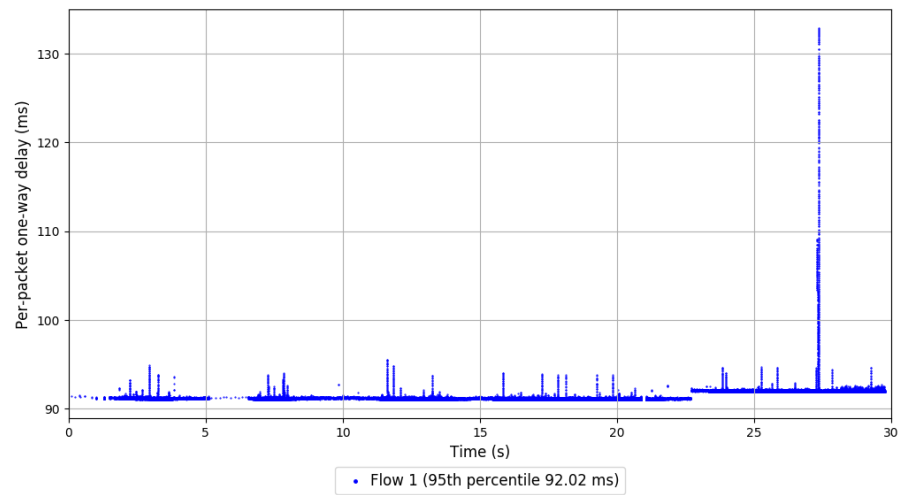
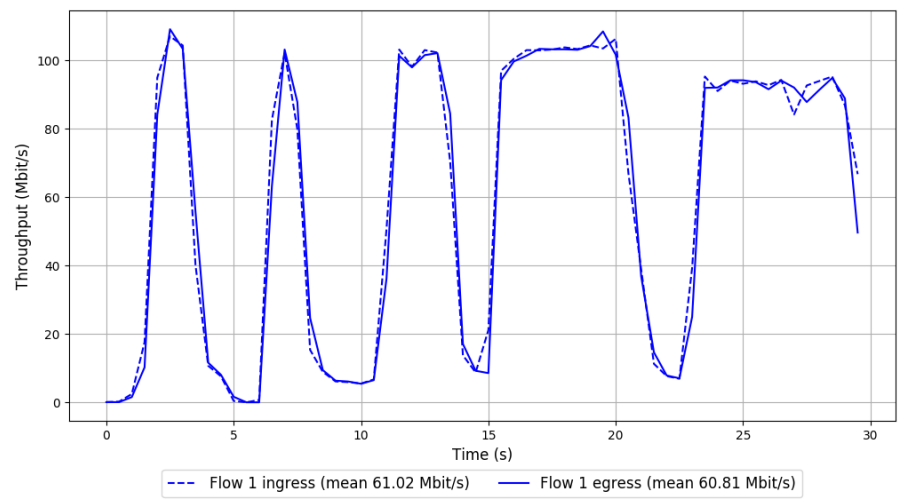
-- Flow 1:

Average throughput: 60.81 Mbit/s

95th percentile per-packet one-way delay: 92.018 ms

Loss rate: 0.92%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-08 19:22:15

End at: 2018-01-08 19:22:45

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.75 Mbit/s

95th percentile per-packet one-way delay: 86.013 ms

Loss rate: 0.92%

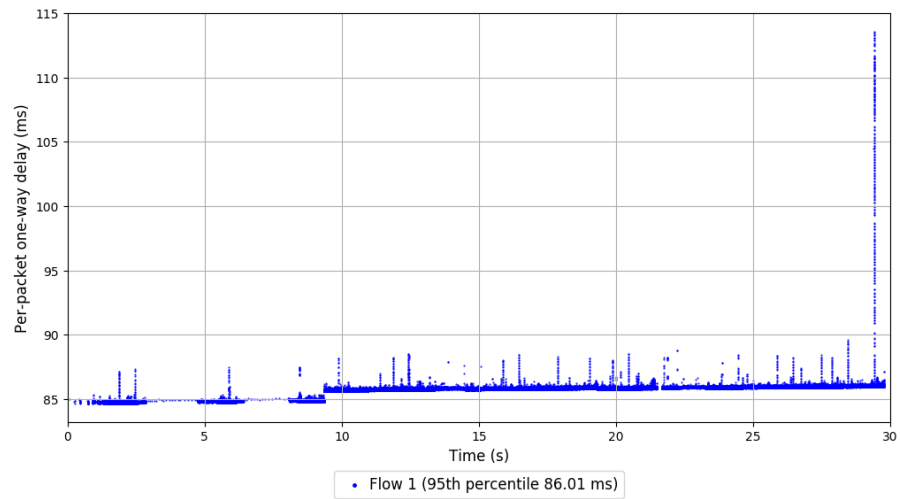
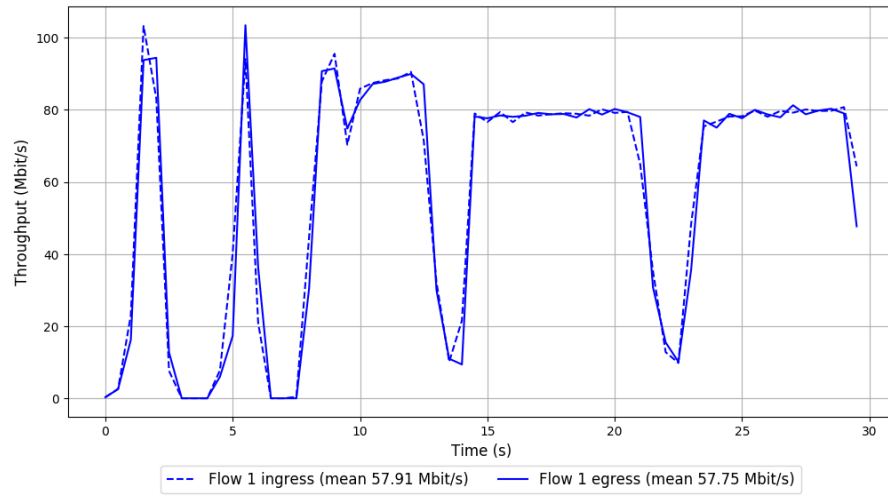
-- Flow 1:

Average throughput: 57.75 Mbit/s

95th percentile per-packet one-way delay: 86.013 ms

Loss rate: 0.92%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-08 19:34:06

End at: 2018-01-08 19:34:36

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.47 Mbit/s

95th percentile per-packet one-way delay: 87.041 ms

Loss rate: 0.76%

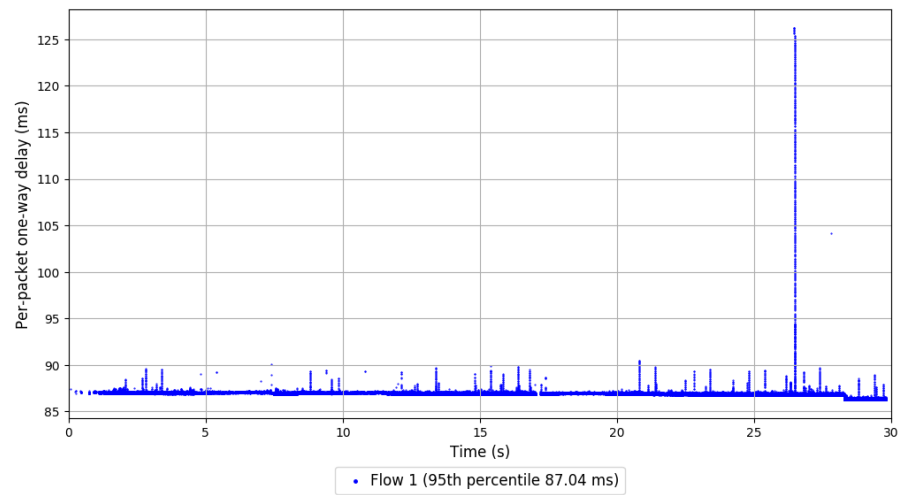
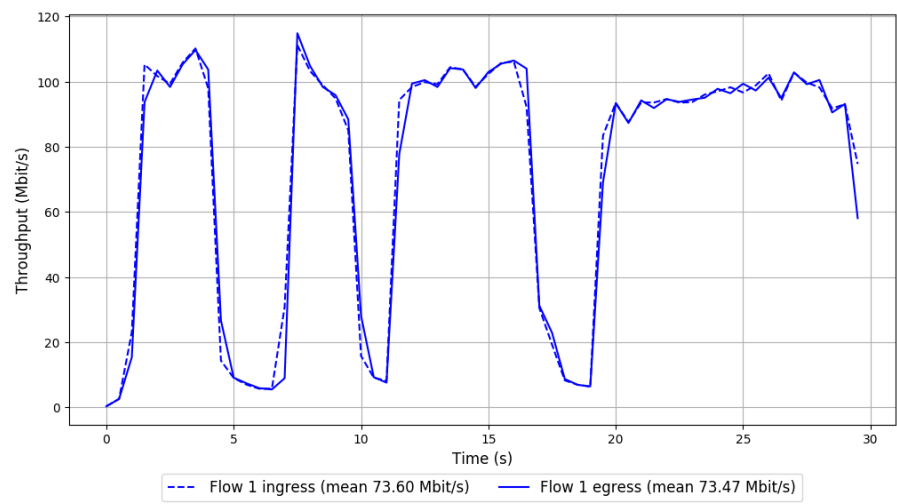
-- Flow 1:

Average throughput: 73.47 Mbit/s

95th percentile per-packet one-way delay: 87.041 ms

Loss rate: 0.76%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-08 19:46:31

End at: 2018-01-08 19:47:01

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.26 Mbit/s

95th percentile per-packet one-way delay: 86.264 ms

Loss rate: 0.88%

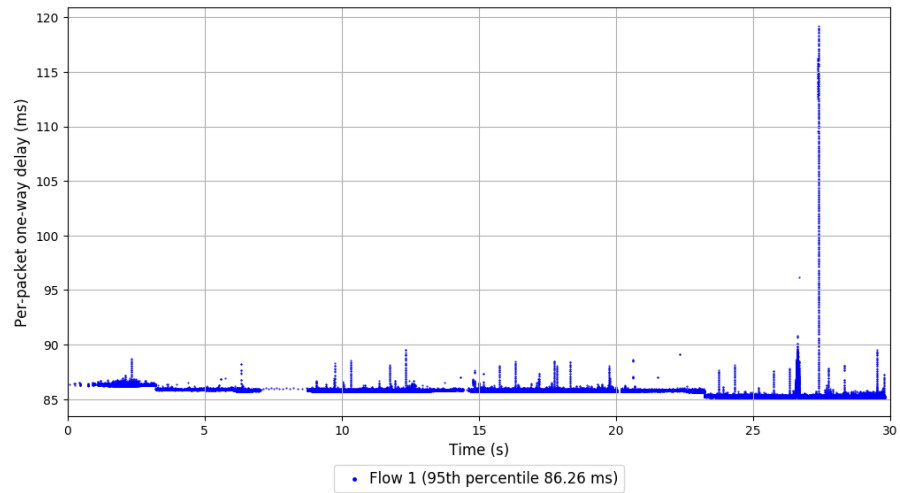
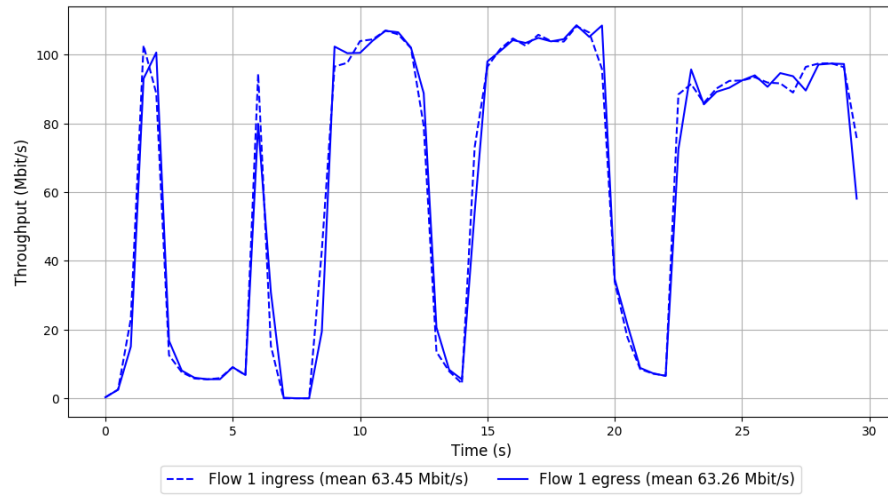
-- Flow 1:

Average throughput: 63.26 Mbit/s

95th percentile per-packet one-way delay: 86.264 ms

Loss rate: 0.88%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-08 19:58:27

End at: 2018-01-08 19:58:57

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.20 Mbit/s

95th percentile per-packet one-way delay: 87.255 ms

Loss rate: 0.87%

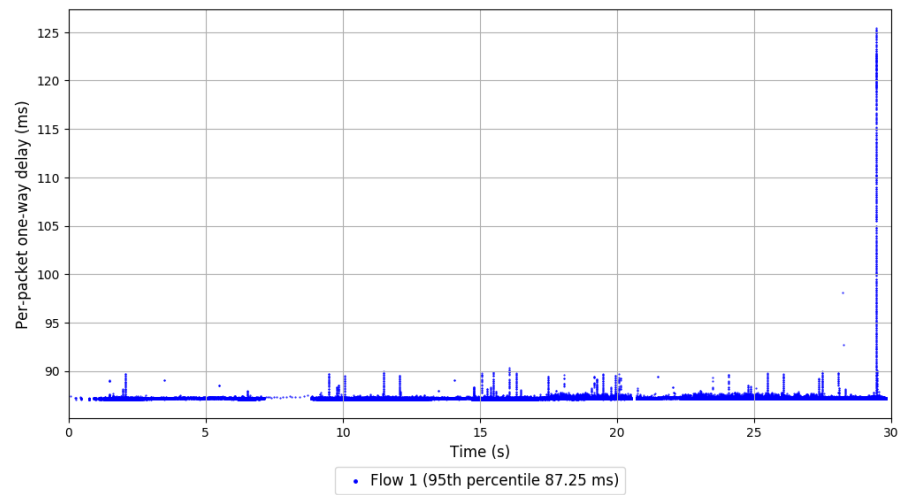
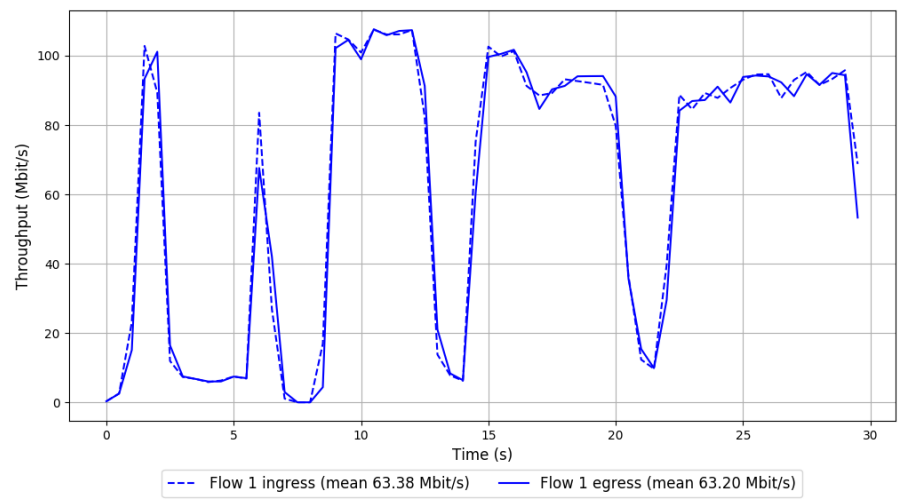
-- Flow 1:

Average throughput: 63.20 Mbit/s

95th percentile per-packet one-way delay: 87.255 ms

Loss rate: 0.87%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-08 20:10:20

End at: 2018-01-08 20:10:50

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.64 Mbit/s

95th percentile per-packet one-way delay: 88.947 ms

Loss rate: 0.34%

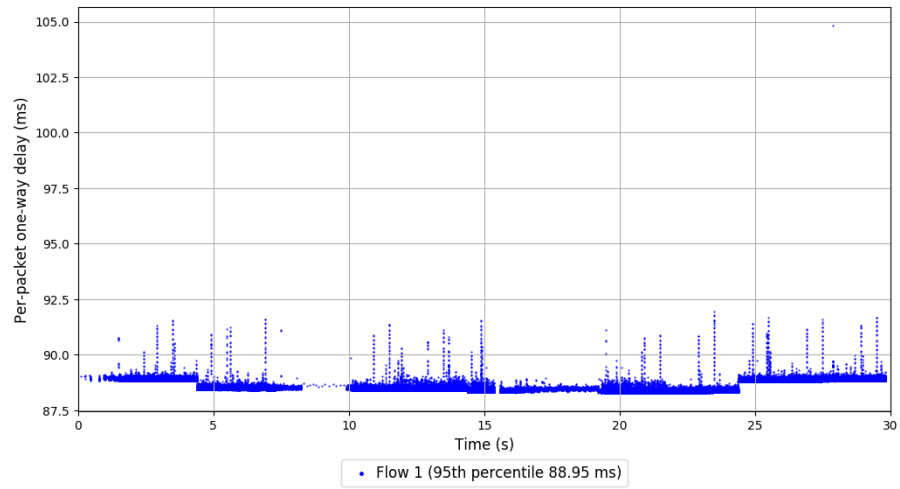
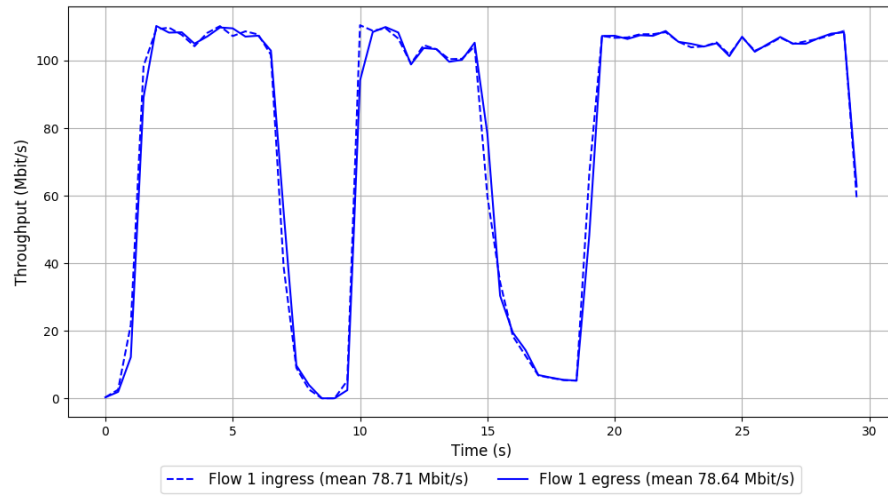
-- Flow 1:

Average throughput: 78.64 Mbit/s

95th percentile per-packet one-way delay: 88.947 ms

Loss rate: 0.34%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-08 20:22:11

End at: 2018-01-08 20:22:41

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.39 Mbit/s

95th percentile per-packet one-way delay: 91.561 ms

Loss rate: 0.88%

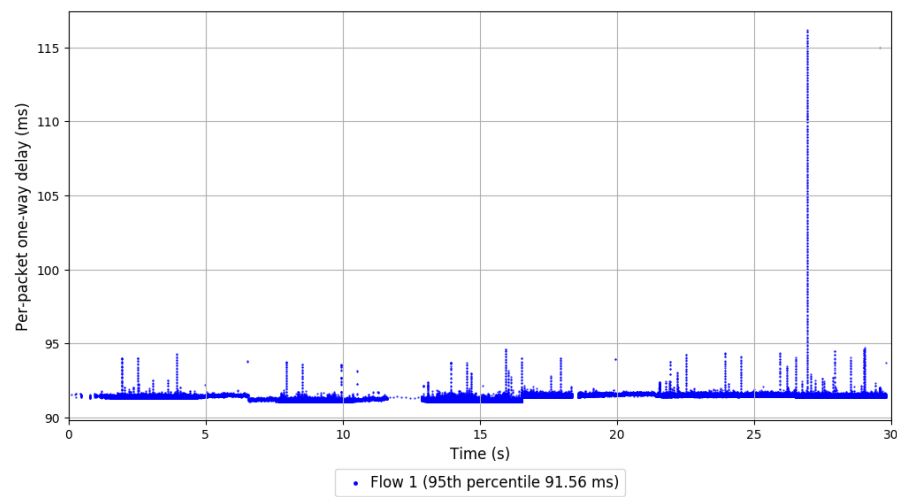
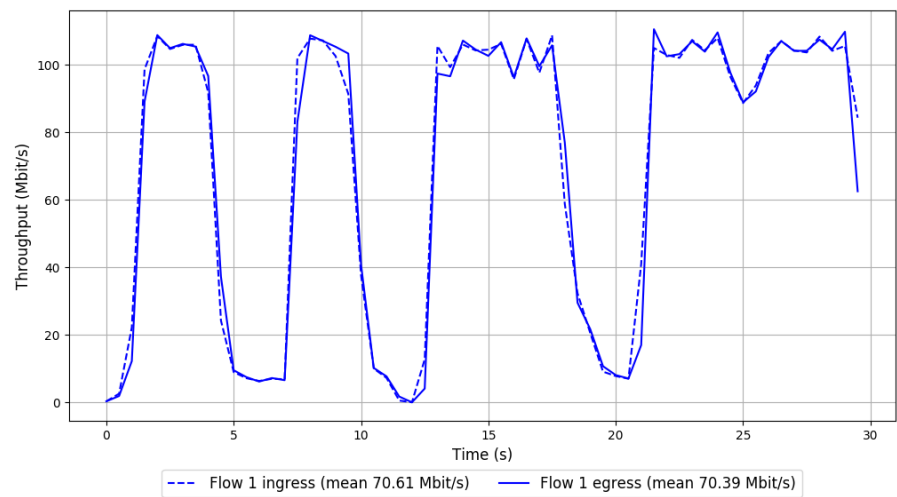
-- Flow 1:

Average throughput: 70.39 Mbit/s

95th percentile per-packet one-way delay: 91.561 ms

Loss rate: 0.88%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-08 20:34:23

End at: 2018-01-08 20:34:53

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.47 Mbit/s

95th percentile per-packet one-way delay: 88.511 ms

Loss rate: 0.96%

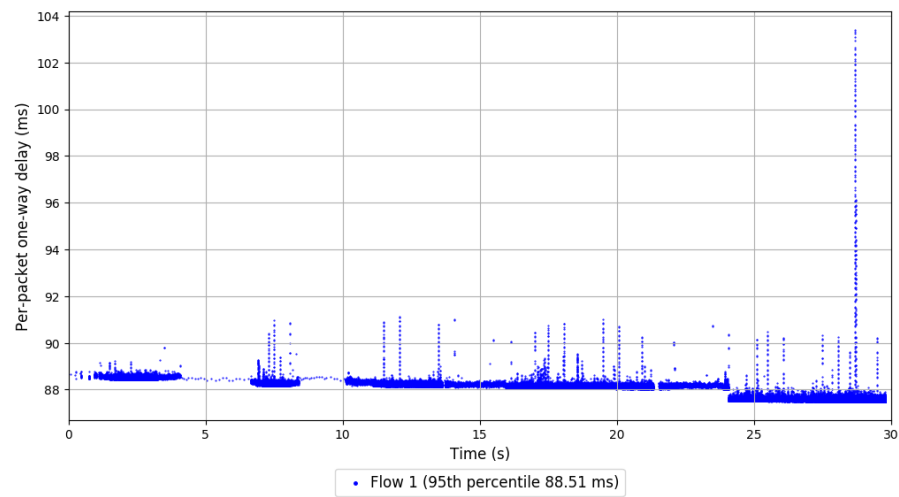
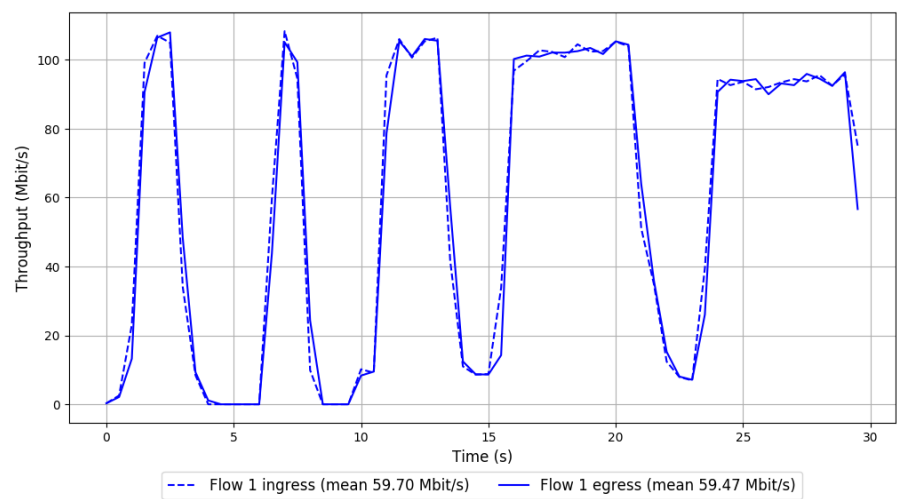
-- Flow 1:

Average throughput: 59.47 Mbit/s

95th percentile per-packet one-way delay: 88.511 ms

Loss rate: 0.96%

Run 9: Report of QUIC Cubic — Data Link

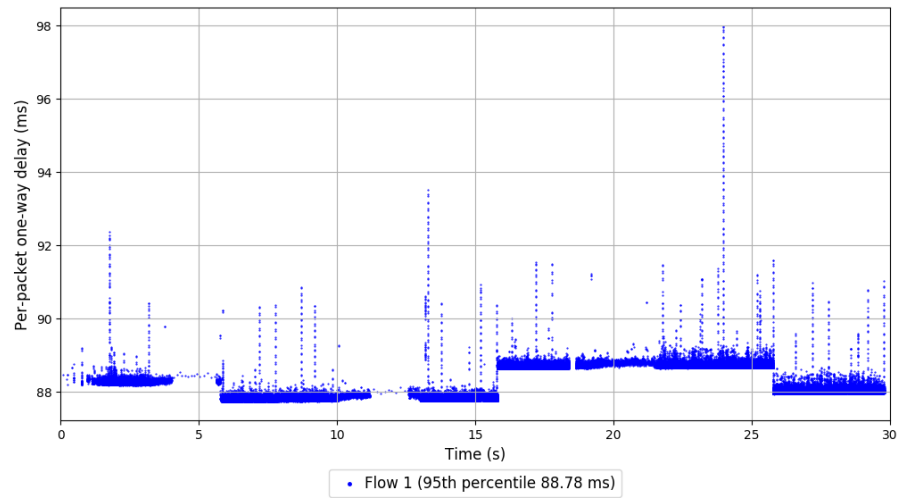
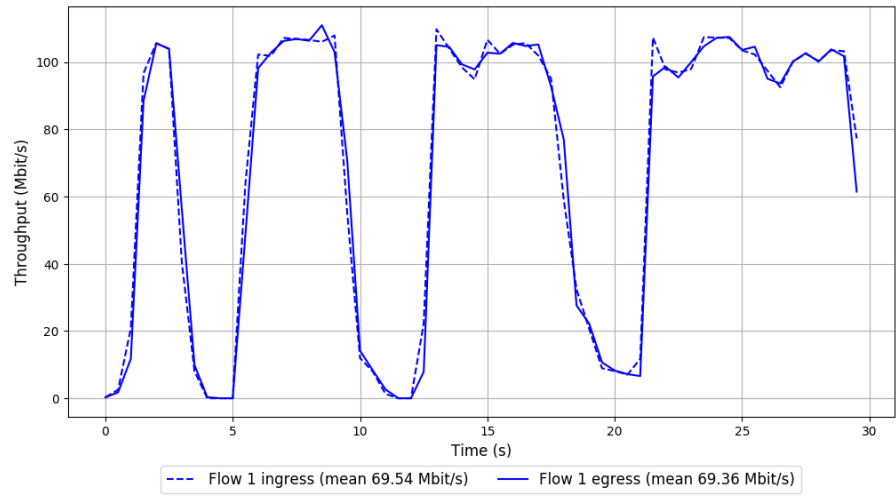


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-08 20:46:42
End at: 2018-01-08 20:47:12

# Below is generated by plot.py at 2018-01-08 23:09:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.36 Mbit/s
95th percentile per-packet one-way delay: 88.785 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 69.36 Mbit/s
95th percentile per-packet one-way delay: 88.785 ms
Loss rate: 0.84%
```

Run 10: Report of QUIC Cubic — Data Link

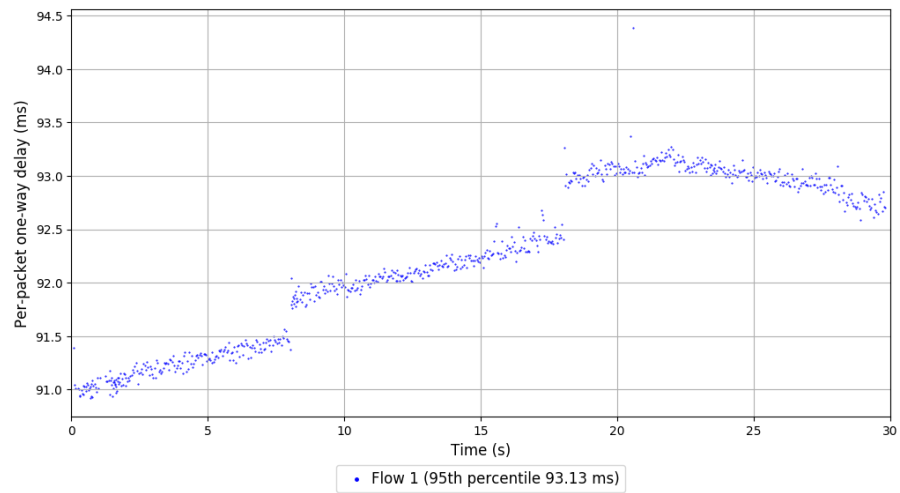
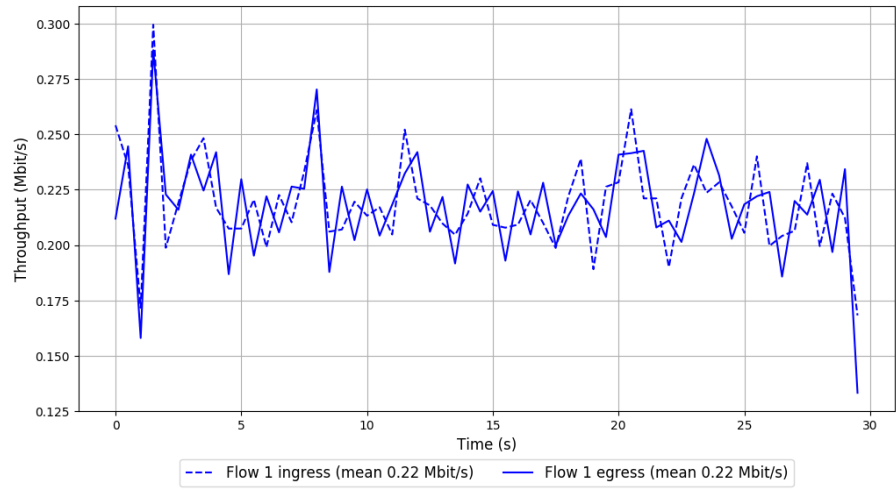


```
Run 1: Statistics of SCReAM

Start at: 2018-01-08 19:00:49
End at: 2018-01-08 19:01:19

# Below is generated by plot.py at 2018-01-08 23:09:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 93.130 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 93.130 ms
Loss rate: 0.52%
```

Run 1: Report of SReAM — Data Link

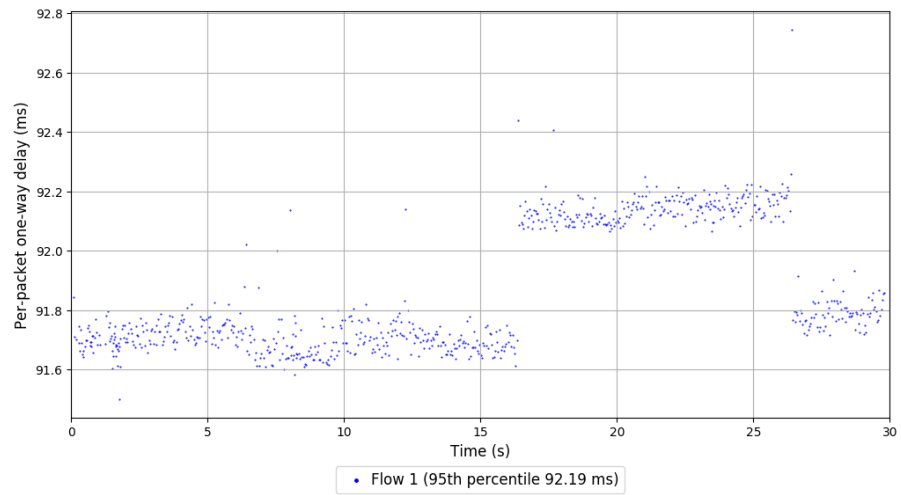
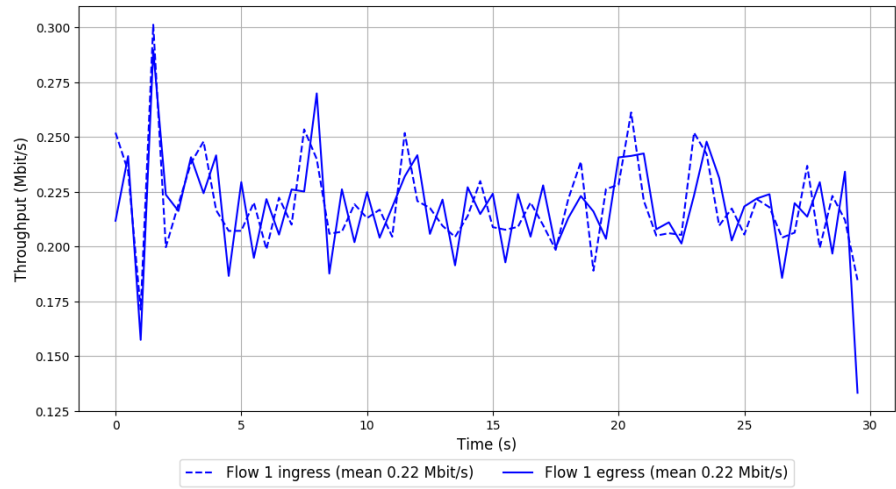


```
Run 2: Statistics of SCReAM

Start at: 2018-01-08 19:12:51
End at: 2018-01-08 19:13:21

# Below is generated by plot.py at 2018-01-08 23:09:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.185 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.185 ms
Loss rate: 0.64%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-08 19:25:10

End at: 2018-01-08 19:25:40

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.067 ms

Loss rate: 0.51%

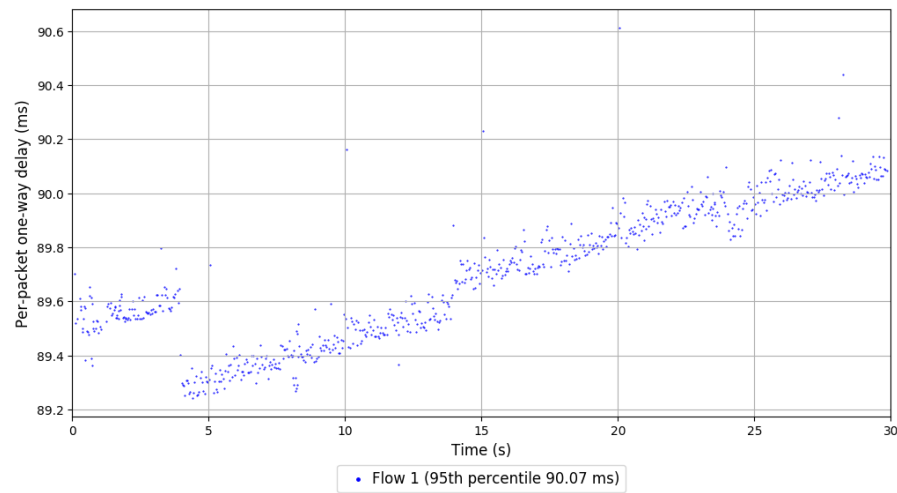
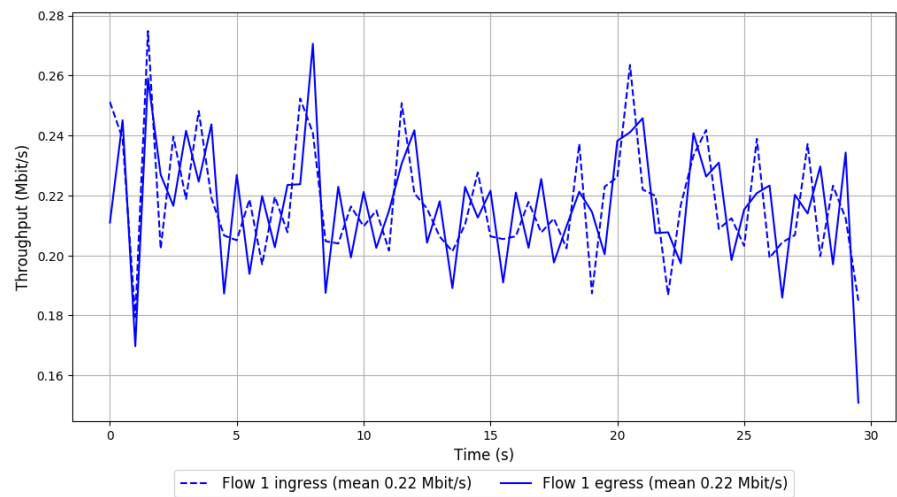
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.067 ms

Loss rate: 0.51%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-01-08 19:37:00

End at: 2018-01-08 19:37:30

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 89.968 ms

Loss rate: 0.51%

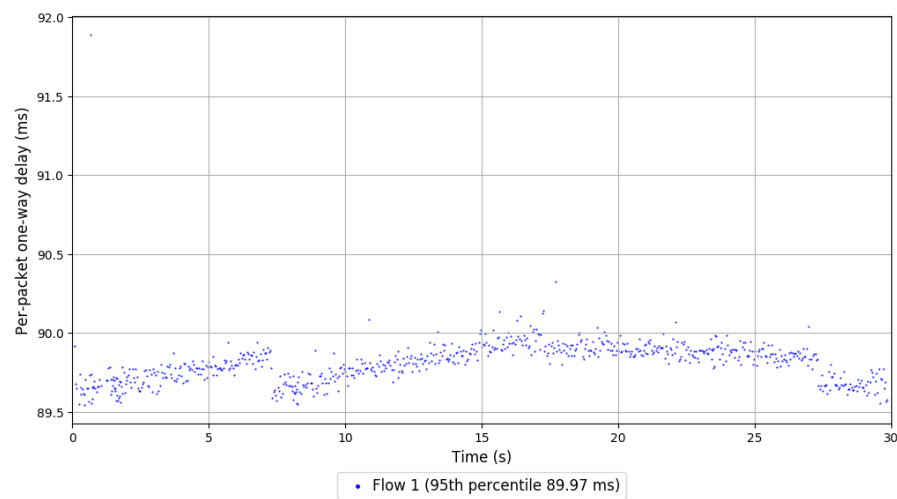
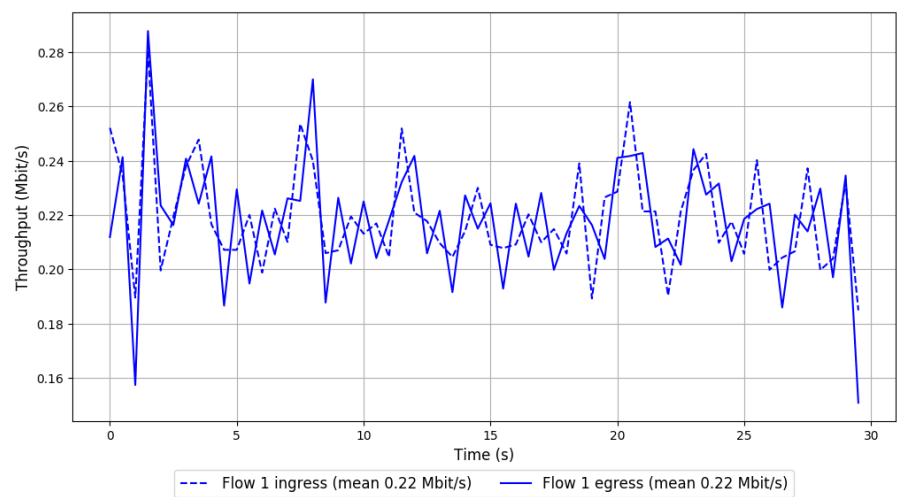
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 89.968 ms

Loss rate: 0.51%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-08 19:49:27

End at: 2018-01-08 19:49:57

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.339 ms

Loss rate: 0.51%

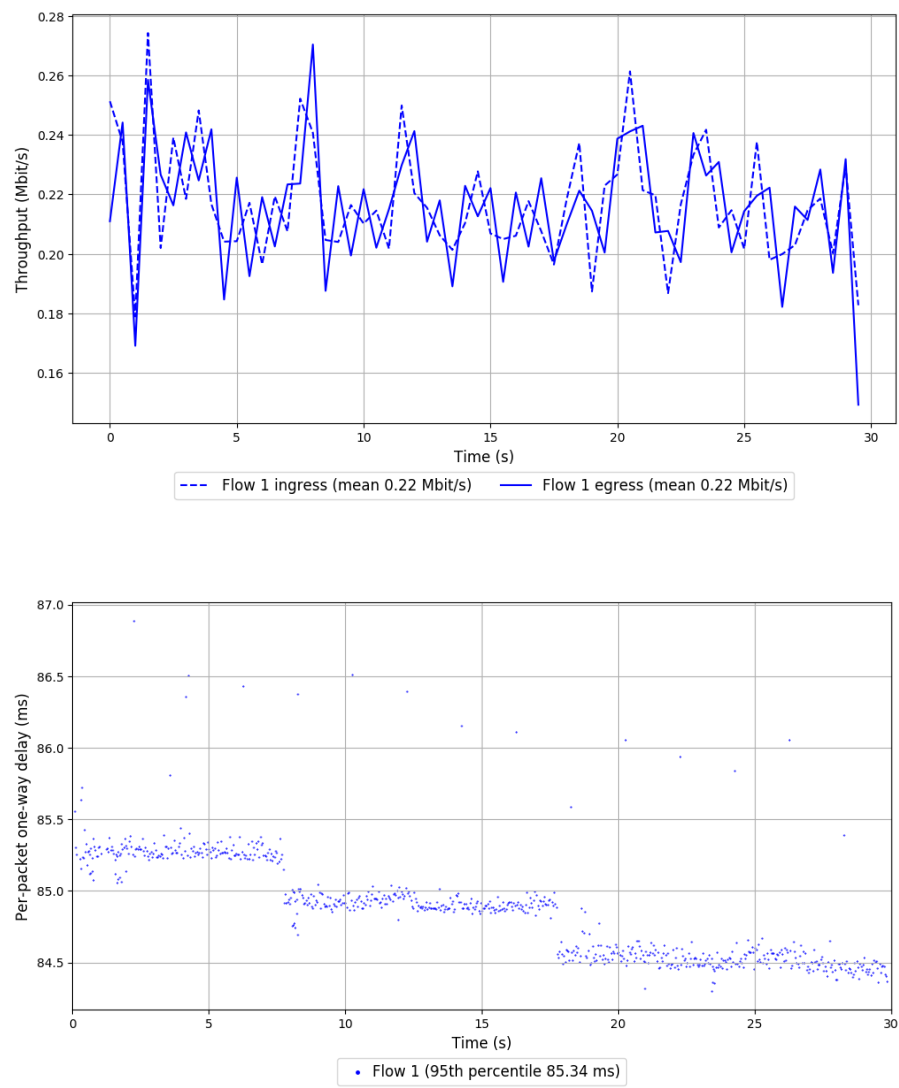
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.339 ms

Loss rate: 0.51%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-08 20:01:18

End at: 2018-01-08 20:01:48

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.612 ms

Loss rate: 0.64%

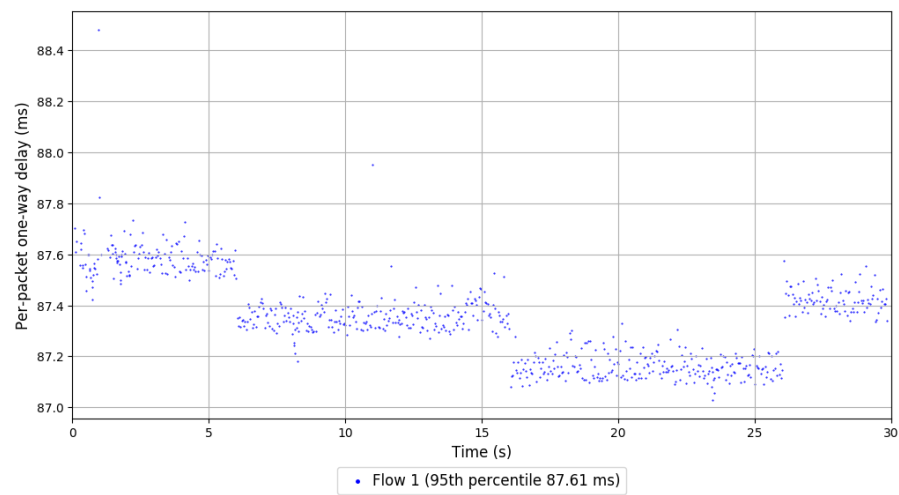
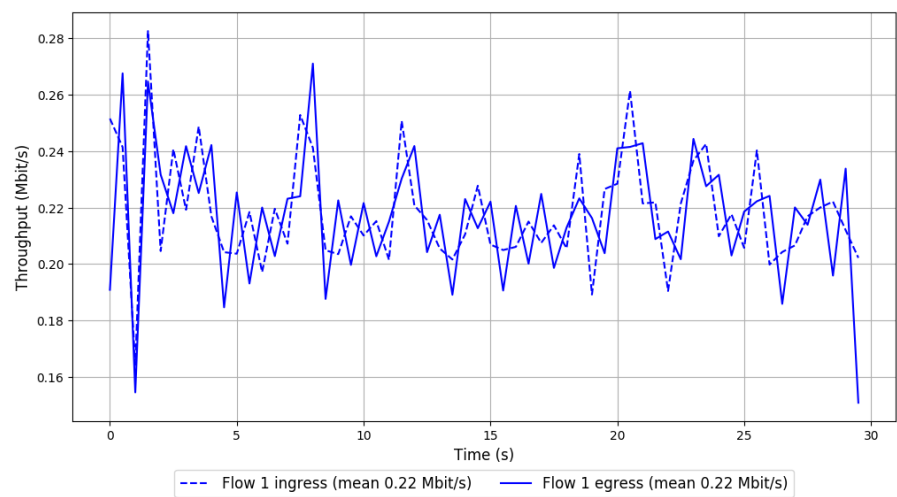
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.612 ms

Loss rate: 0.64%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-08 20:13:16

End at: 2018-01-08 20:13:46

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.275 ms

Loss rate: 0.51%

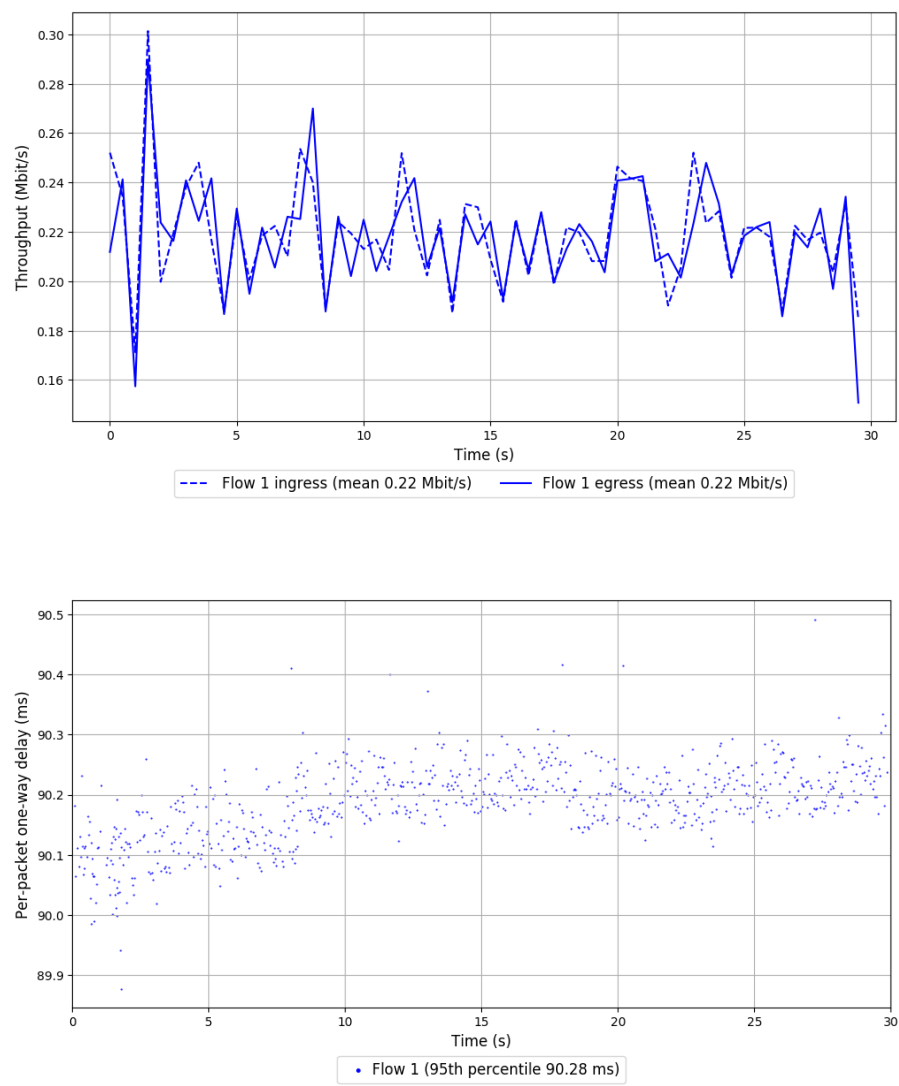
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.275 ms

Loss rate: 0.51%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-08 20:25:08

End at: 2018-01-08 20:25:38

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 91.990 ms

Loss rate: 0.51%

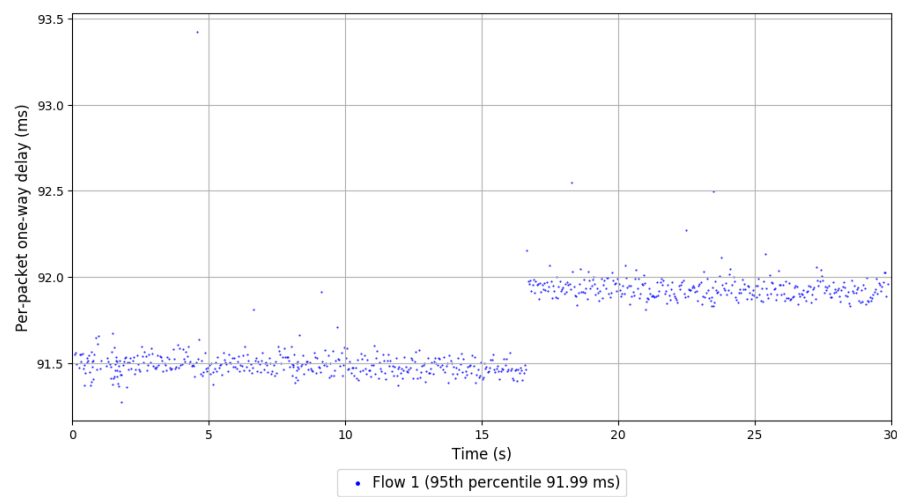
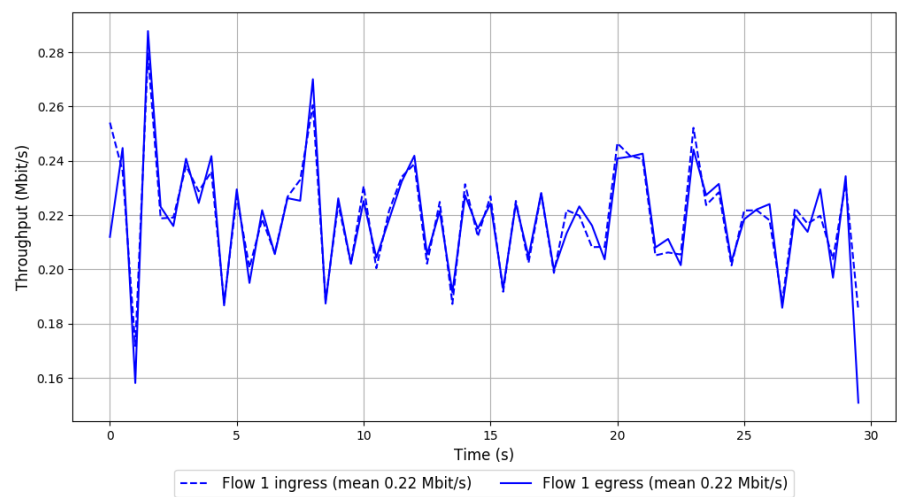
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 91.990 ms

Loss rate: 0.51%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-08 20:37:19

End at: 2018-01-08 20:37:49

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.794 ms

Loss rate: 0.51%

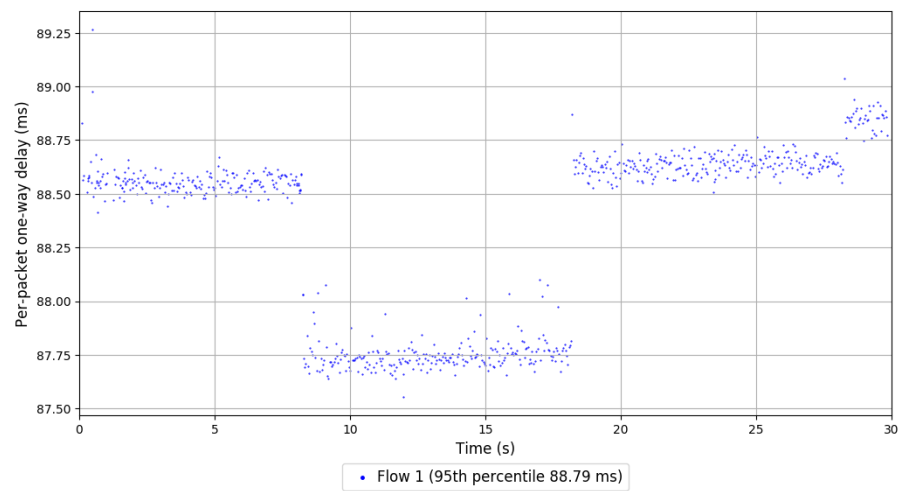
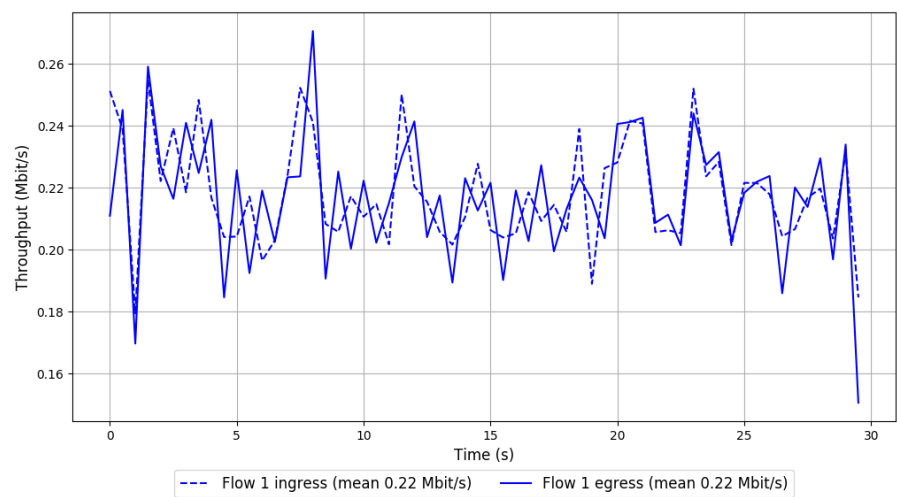
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.794 ms

Loss rate: 0.51%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-01-08 20:49:38

End at: 2018-01-08 20:50:08

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.548 ms

Loss rate: 0.63%

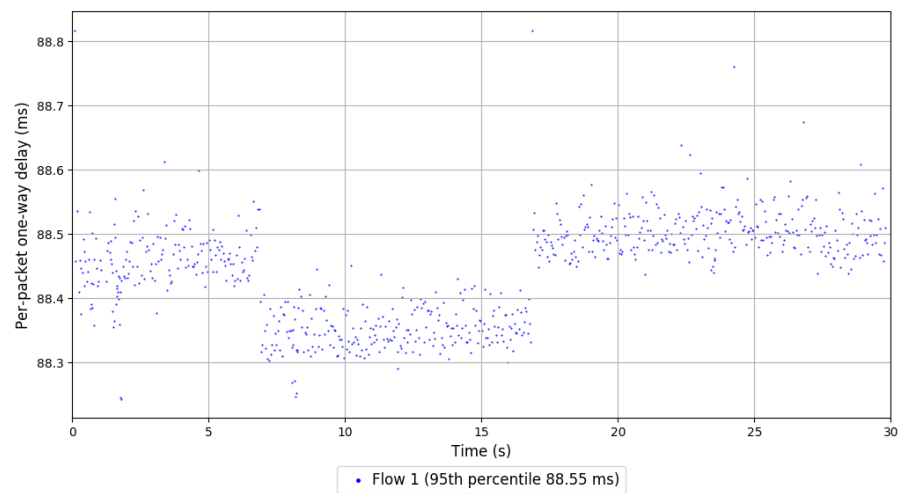
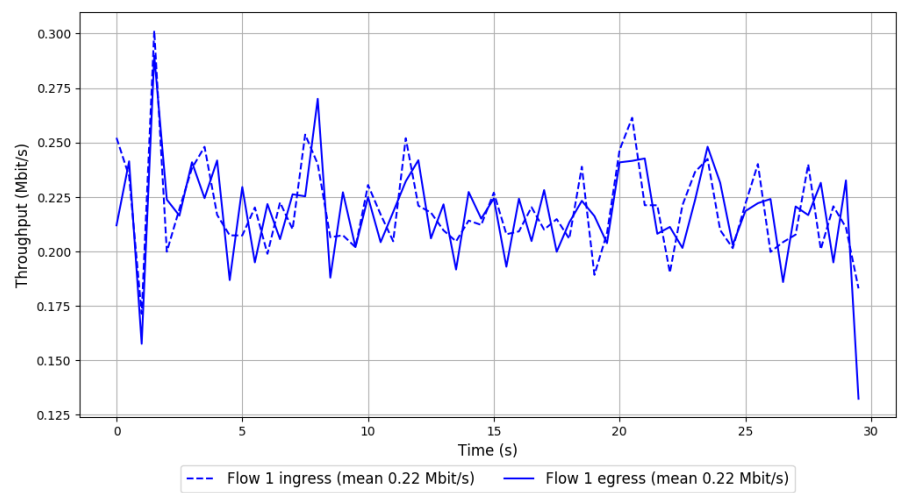
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.548 ms

Loss rate: 0.63%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-01-08 18:53:49

End at: 2018-01-08 18:54:19

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 91.485 ms

Loss rate: 1.47%

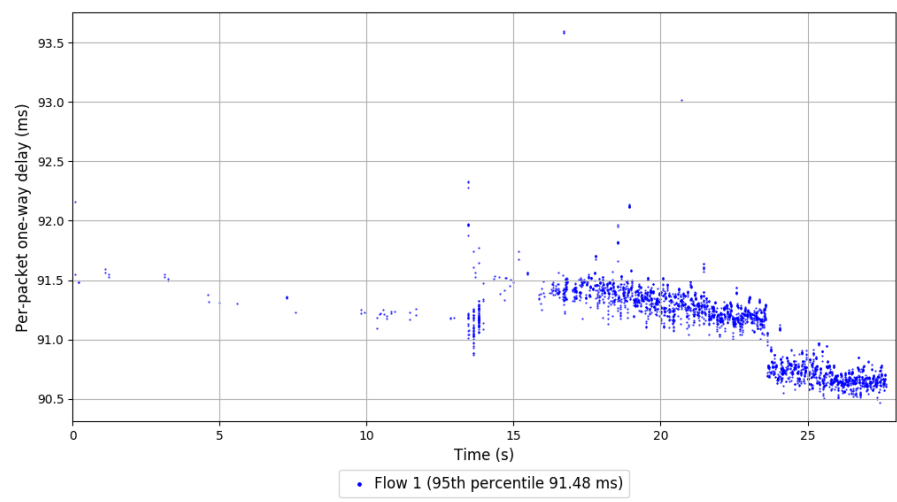
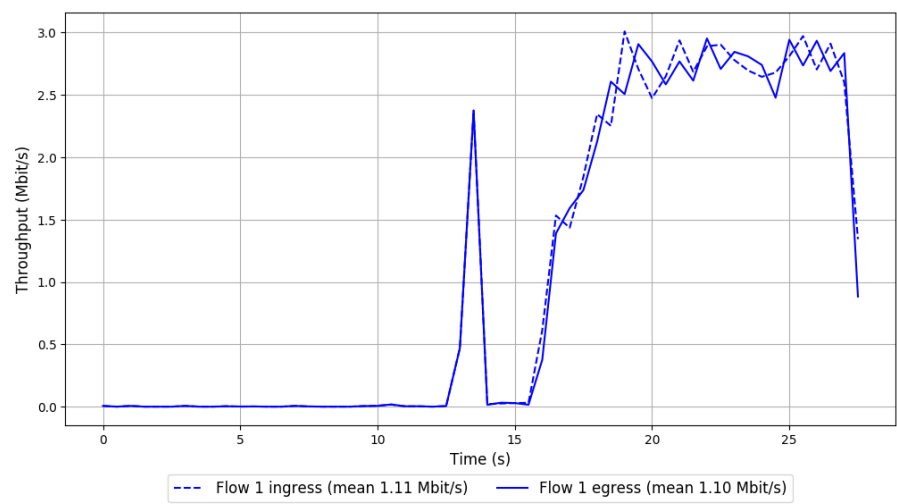
-- Flow 1:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 91.485 ms

Loss rate: 1.47%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-08 19:05:33

End at: 2018-01-08 19:06:03

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 95.733 ms

Loss rate: 0.62%

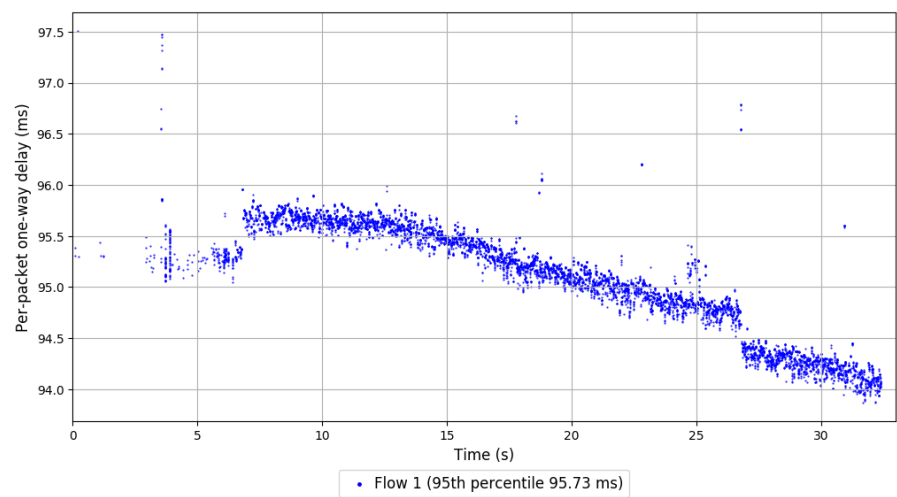
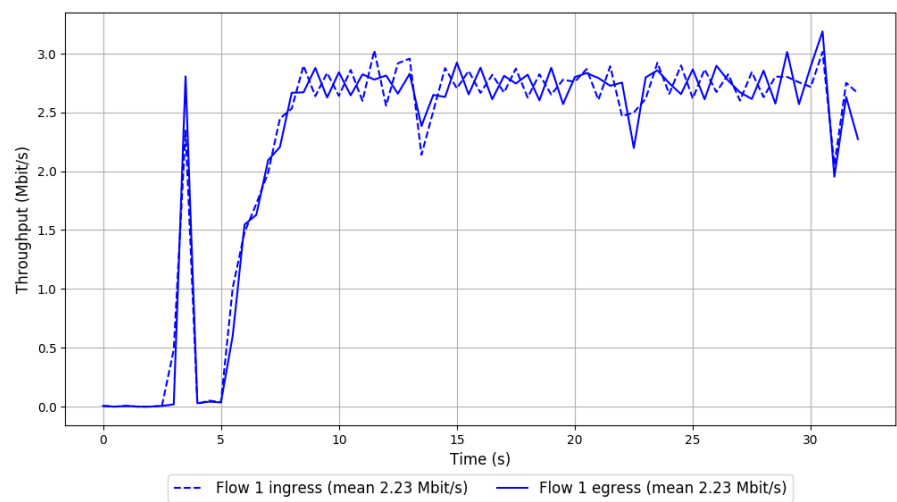
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 95.733 ms

Loss rate: 0.62%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-08 19:17:45

End at: 2018-01-08 19:18:15

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.391 ms

Loss rate: 0.78%

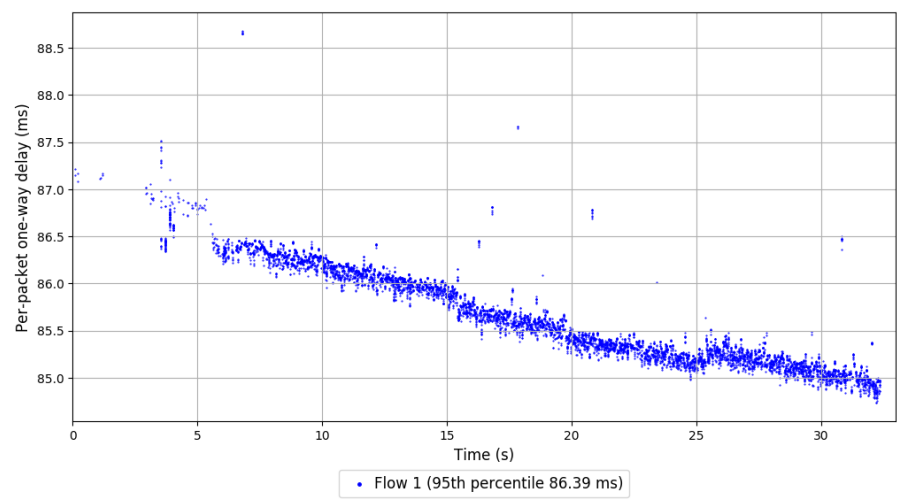
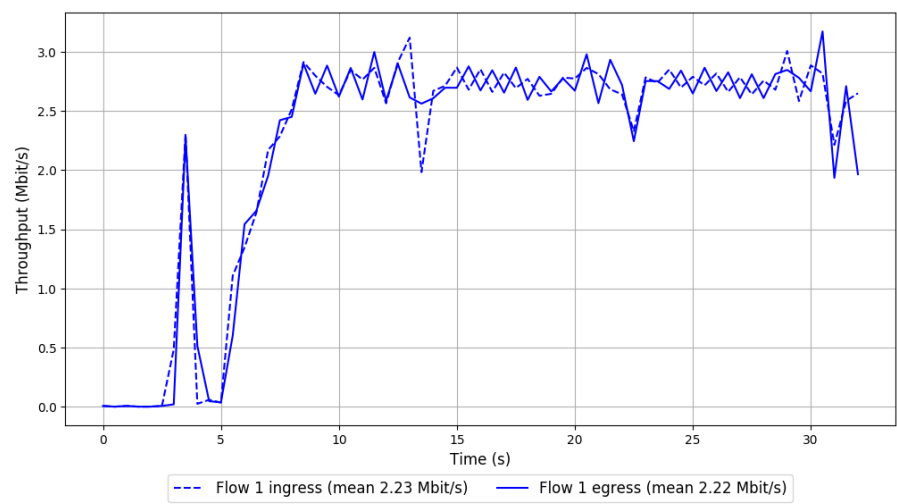
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.391 ms

Loss rate: 0.78%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-08 19:29:58

End at: 2018-01-08 19:30:28

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 91.148 ms

Loss rate: 0.77%

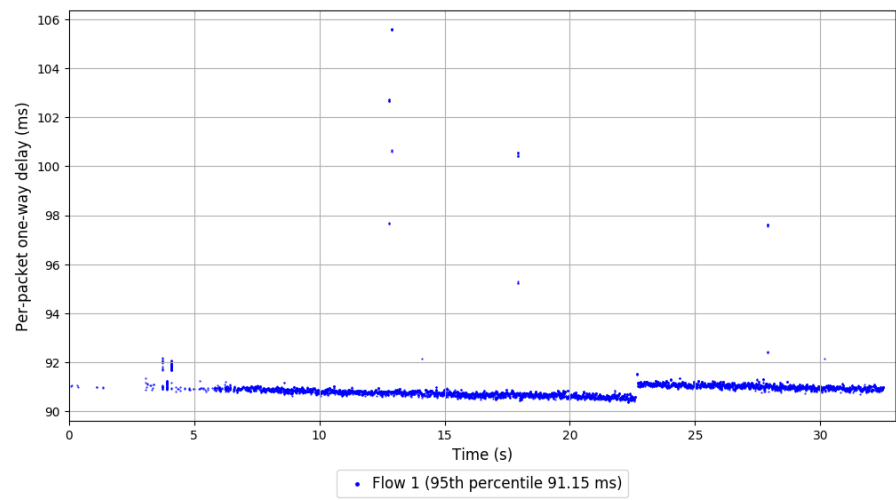
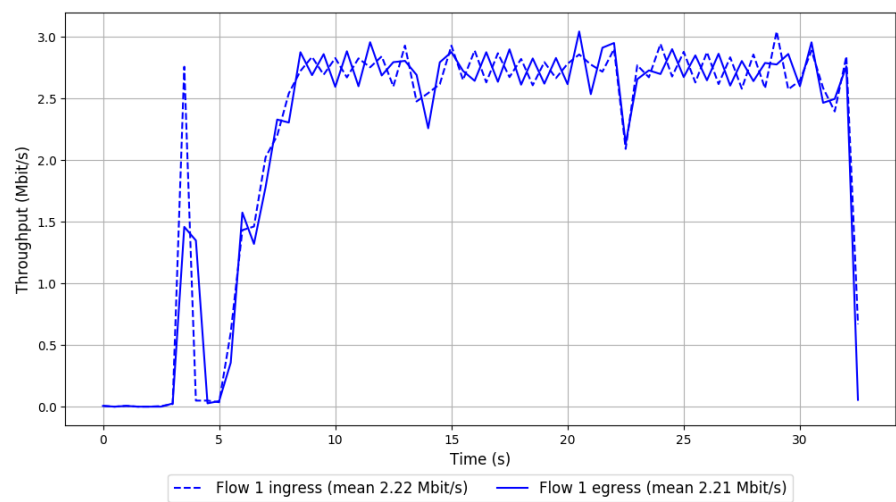
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 91.148 ms

Loss rate: 0.77%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-08 19:41:56

End at: 2018-01-08 19:42:26

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.590 ms

Loss rate: 0.77%

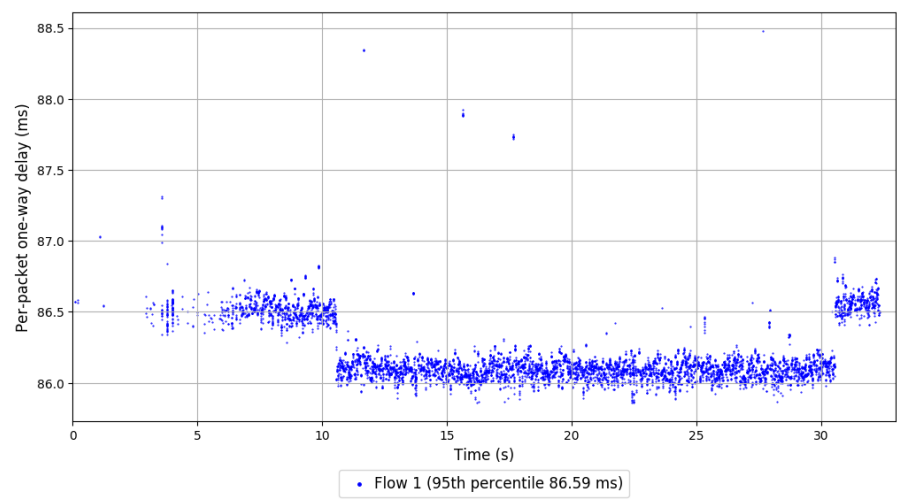
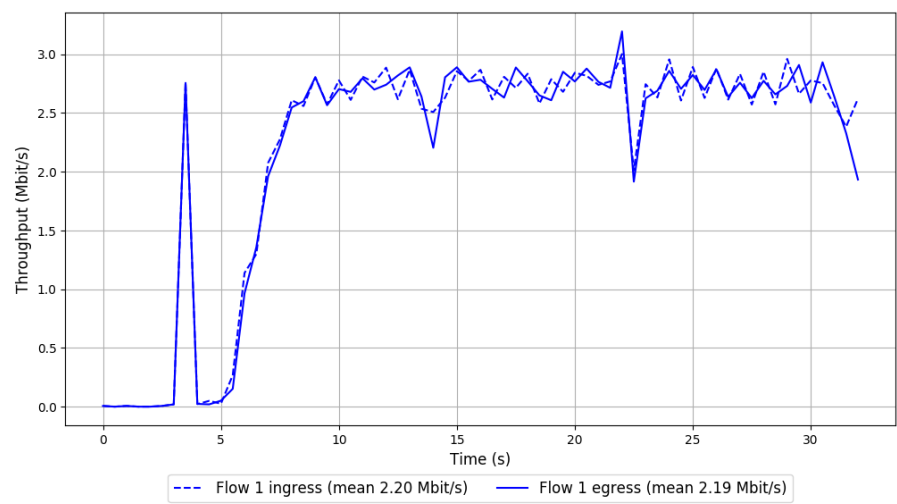
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.590 ms

Loss rate: 0.77%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-08 19:54:22

End at: 2018-01-08 19:54:52

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.155 ms

Loss rate: 0.61%

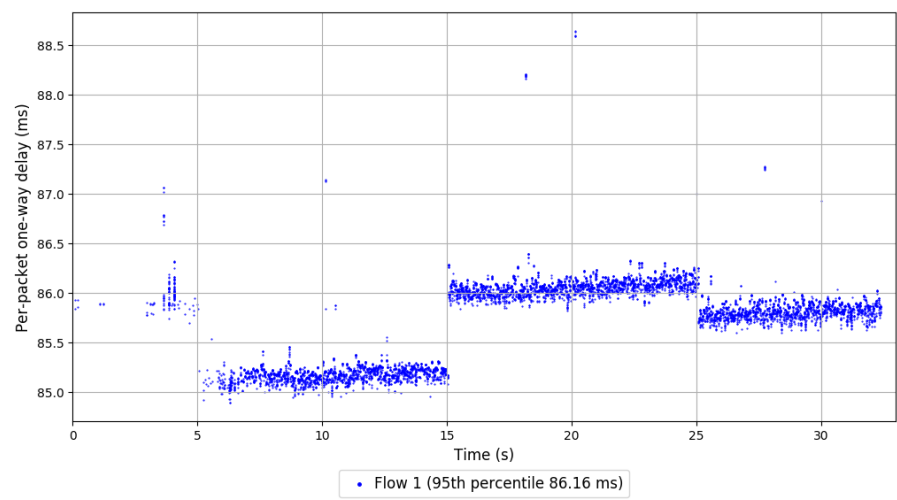
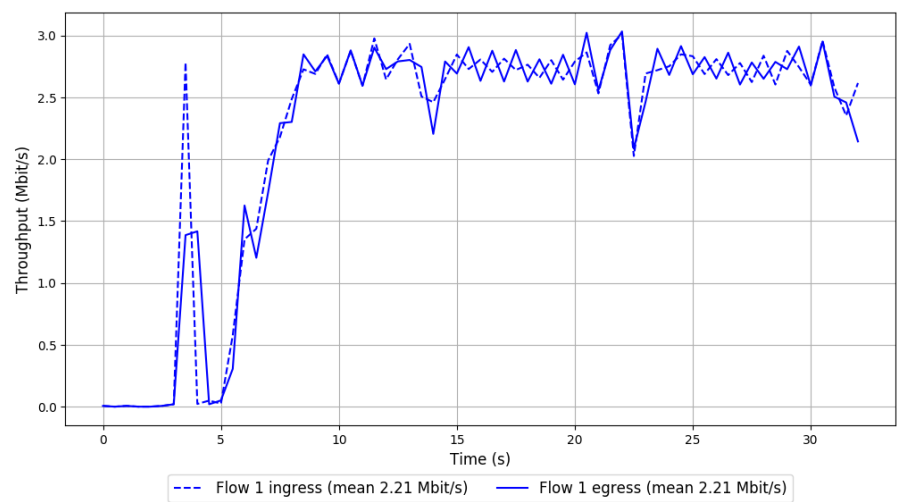
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.155 ms

Loss rate: 0.61%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-08 20:05:46

End at: 2018-01-08 20:06:16

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 90.601 ms

Loss rate: 0.78%

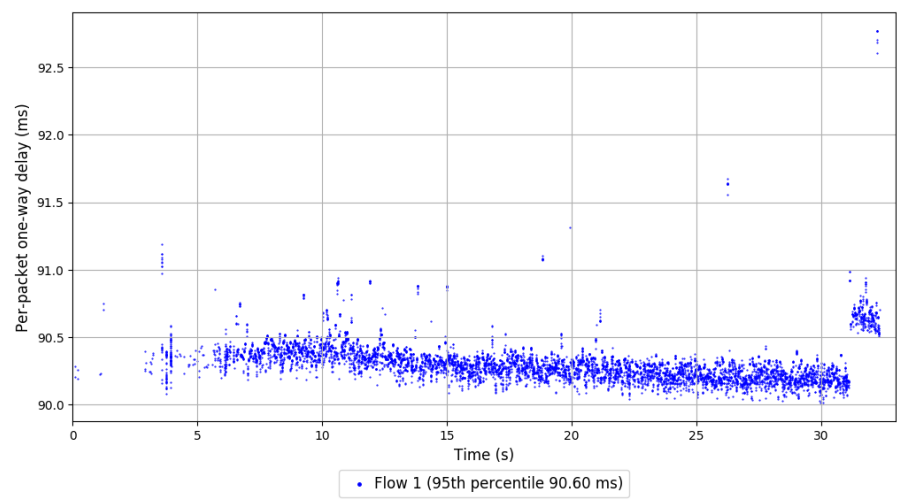
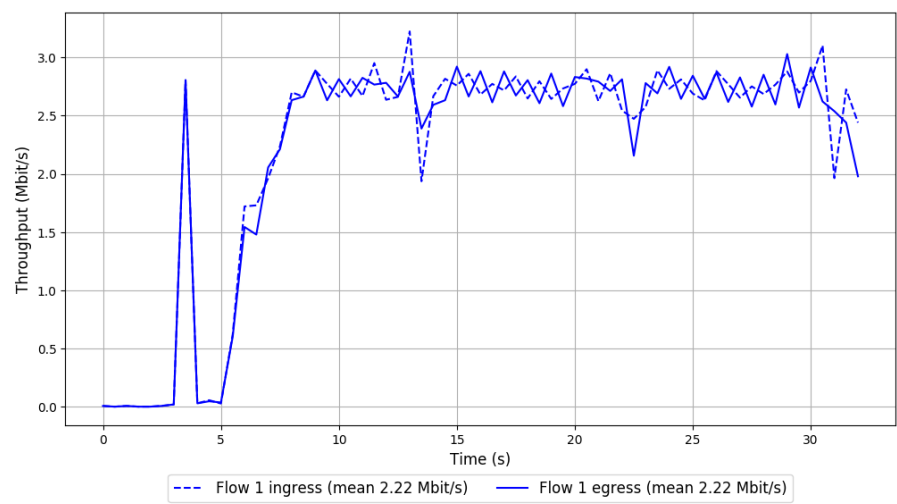
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 90.601 ms

Loss rate: 0.78%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-08 20:18:11

End at: 2018-01-08 20:18:41

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 91.613 ms

Loss rate: 0.62%

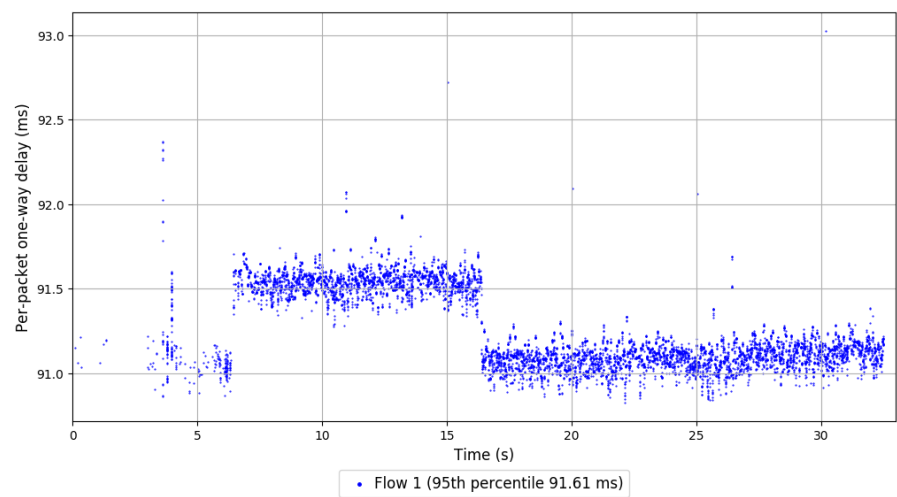
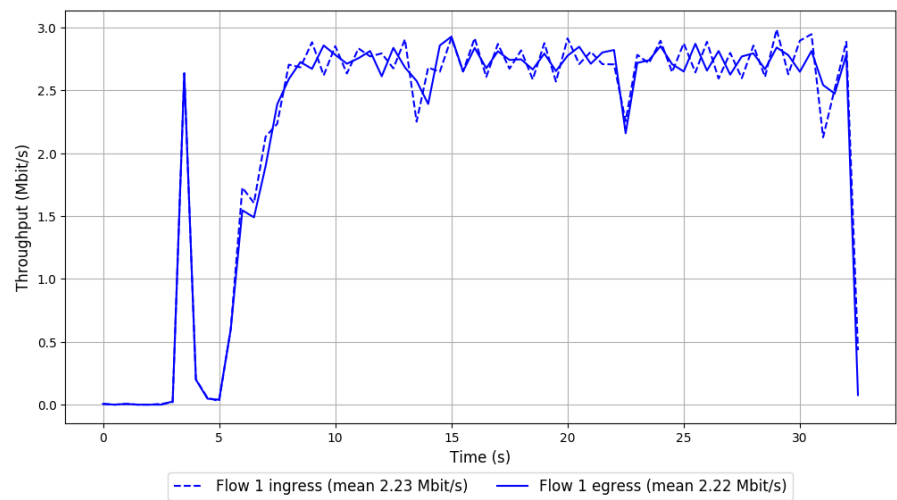
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 91.613 ms

Loss rate: 0.62%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-08 20:29:51

End at: 2018-01-08 20:30:21

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 90.855 ms

Loss rate: 0.66%

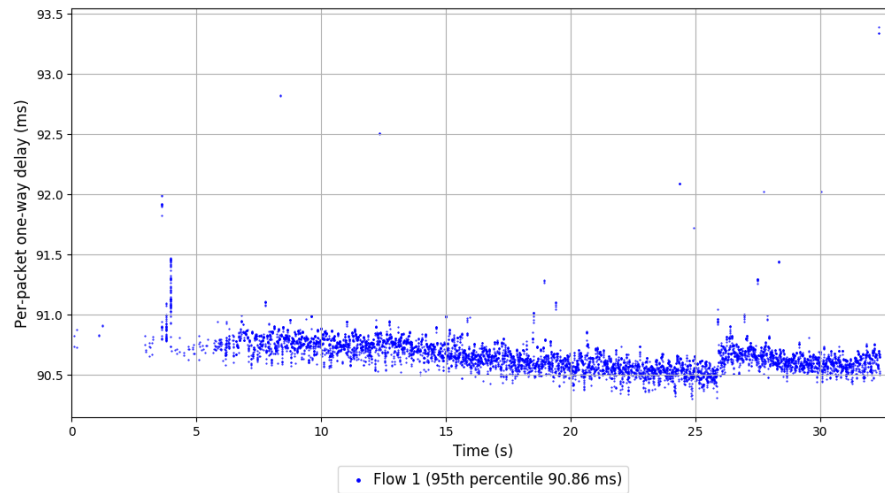
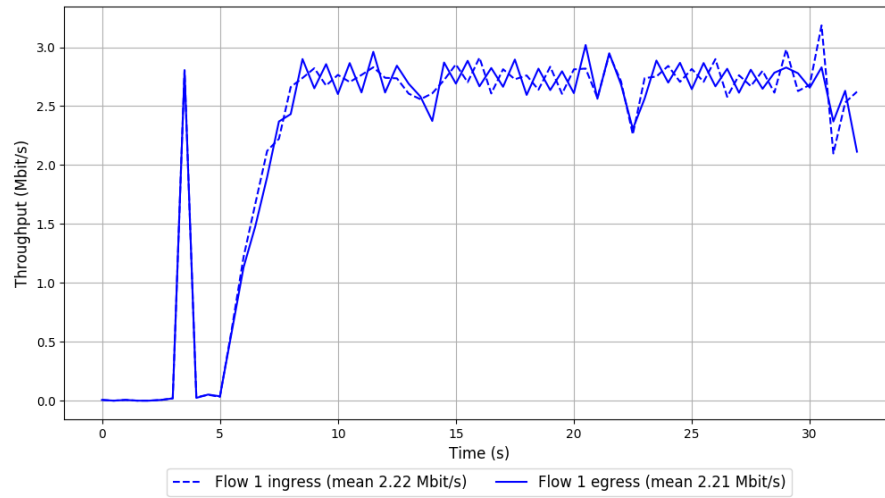
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 90.855 ms

Loss rate: 0.66%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-08 20:42:08

End at: 2018-01-08 20:42:38

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 88.216 ms

Loss rate: 0.62%

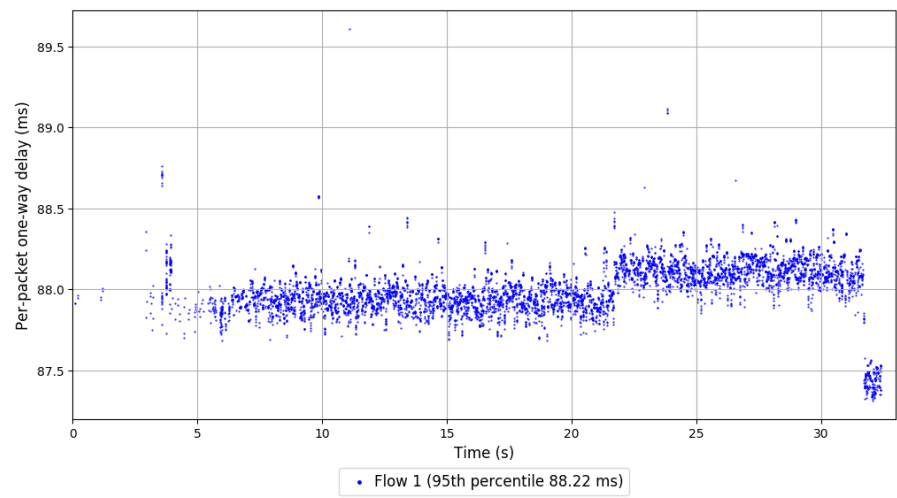
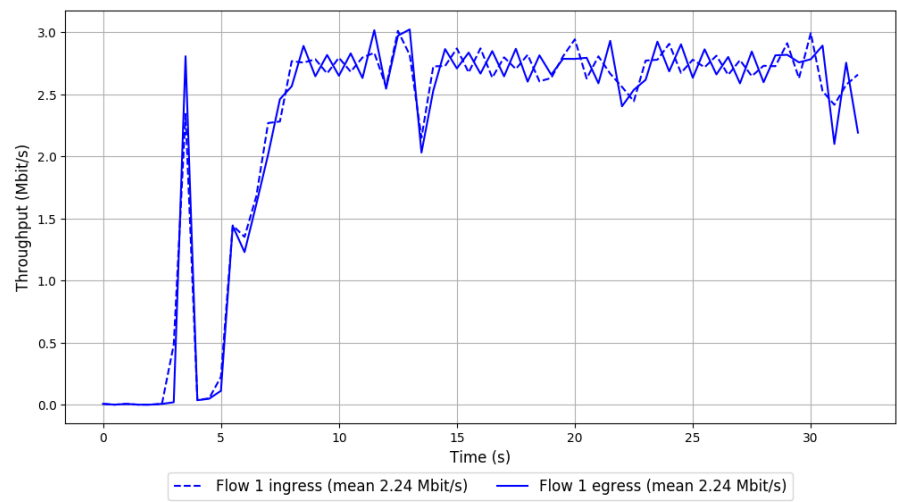
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 88.216 ms

Loss rate: 0.62%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-08 18:56:39

End at: 2018-01-08 18:57:09

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 88.337 ms

Loss rate: 0.07%

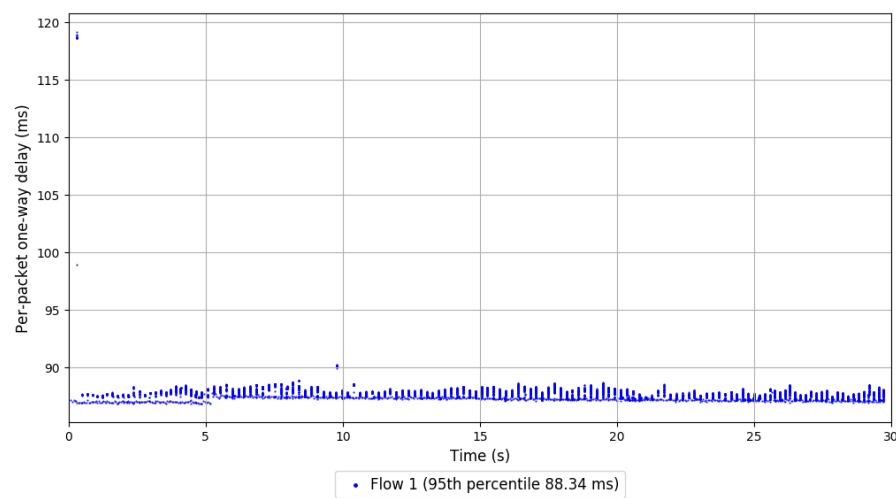
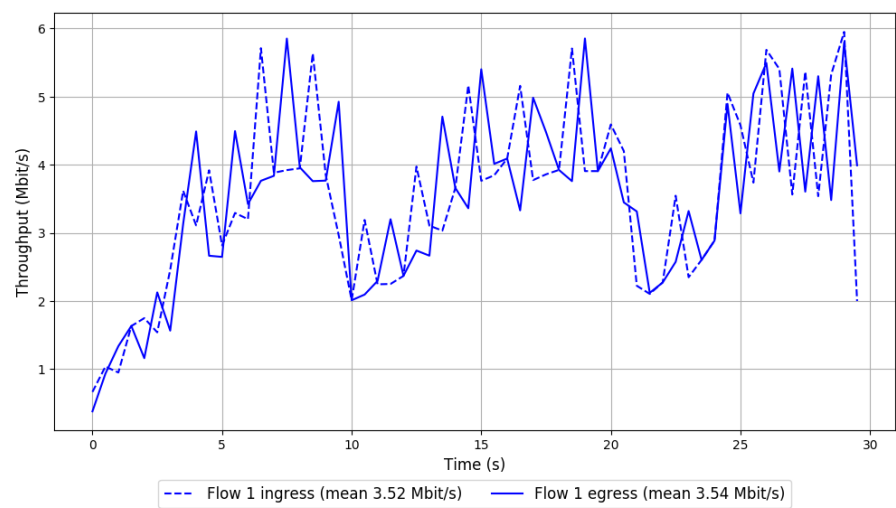
-- Flow 1:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 88.337 ms

Loss rate: 0.07%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-08 19:08:18

End at: 2018-01-08 19:08:48

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 93.119 ms

Loss rate: 0.70%

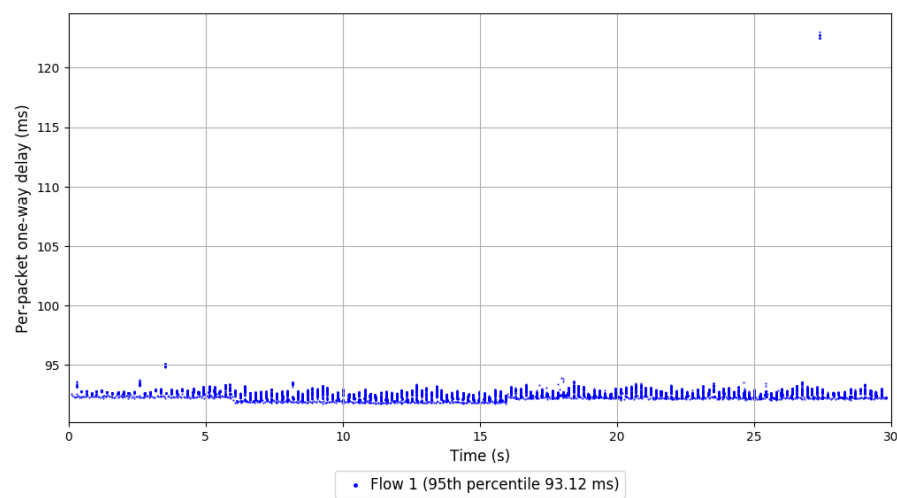
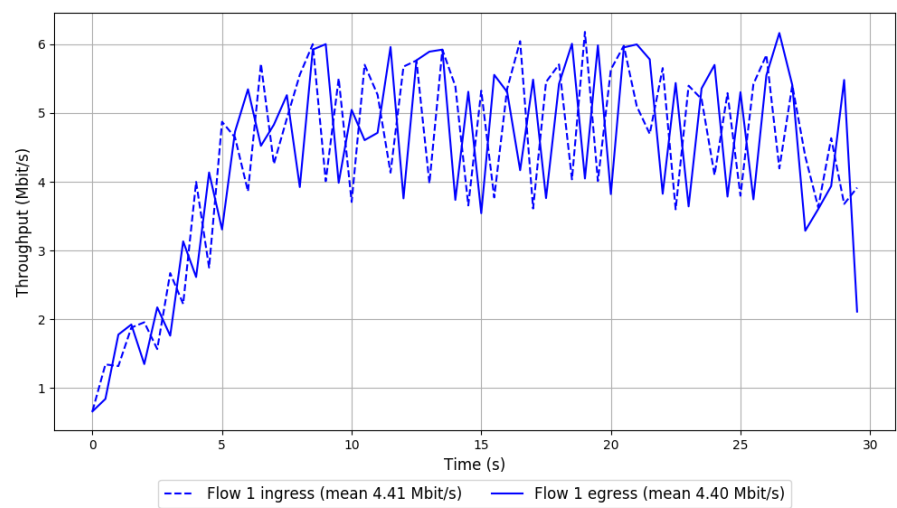
-- Flow 1:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 93.119 ms

Loss rate: 0.70%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-08 19:20:32

End at: 2018-01-08 19:21:02

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.31 Mbit/s

95th percentile per-packet one-way delay: 84.325 ms

Loss rate: 0.65%

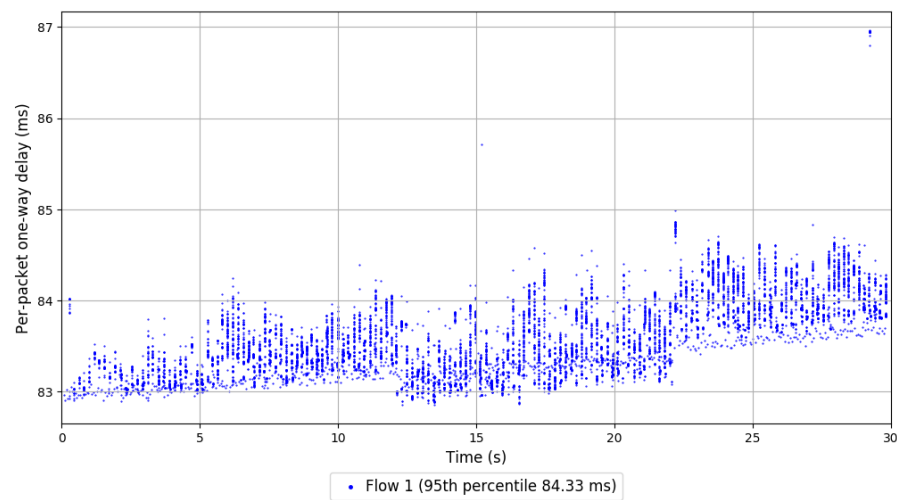
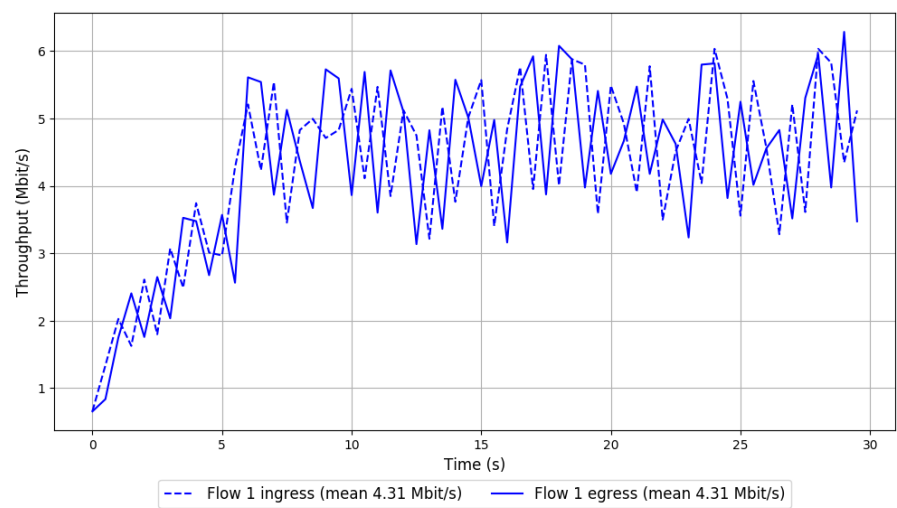
-- Flow 1:

Average throughput: 4.31 Mbit/s

95th percentile per-packet one-way delay: 84.325 ms

Loss rate: 0.65%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-08 19:32:48

End at: 2018-01-08 19:33:18

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 88.806 ms

Loss rate: 1.23%

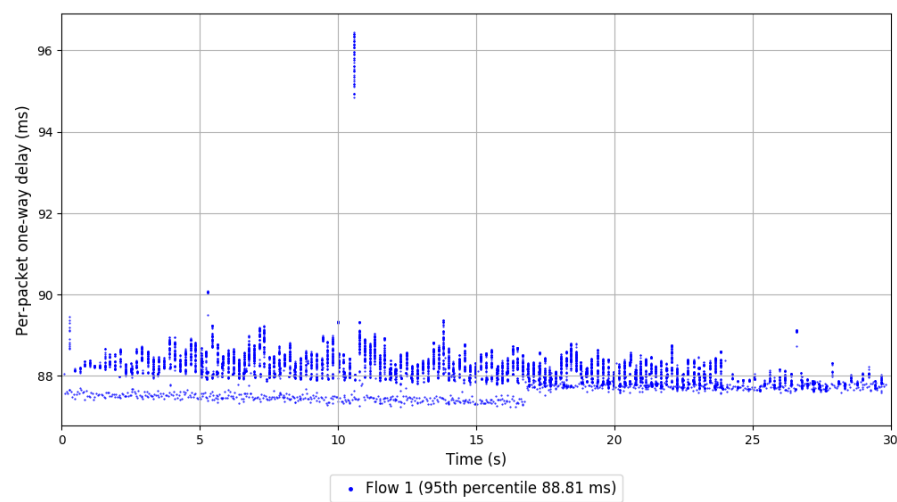
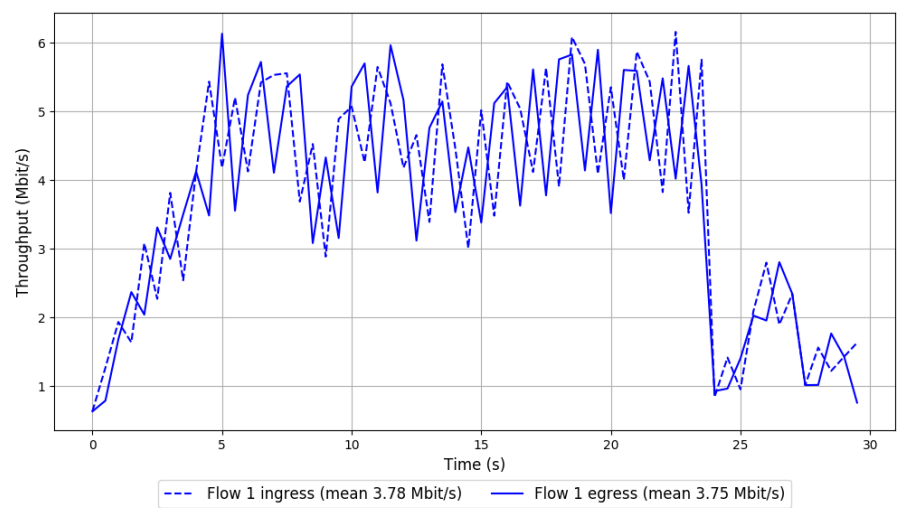
-- Flow 1:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 88.806 ms

Loss rate: 1.23%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-08 19:44:47

End at: 2018-01-08 19:45:17

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 87.373 ms

Loss rate: 2.96%

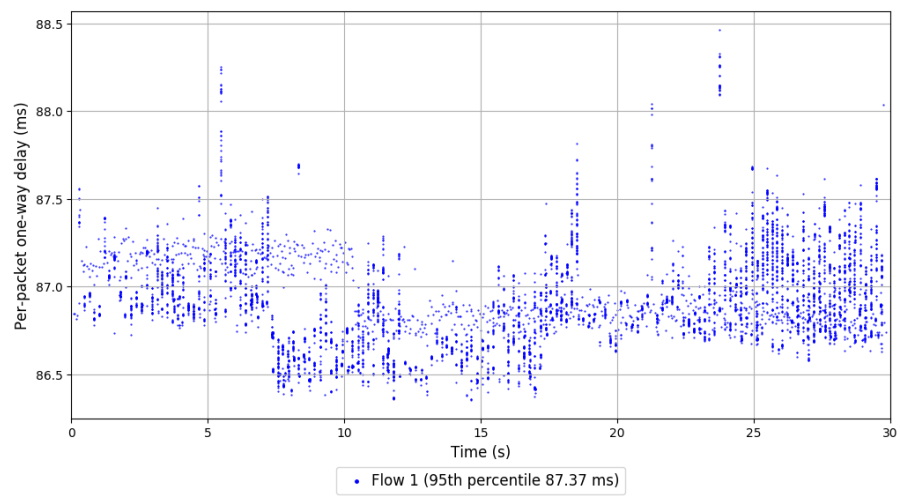
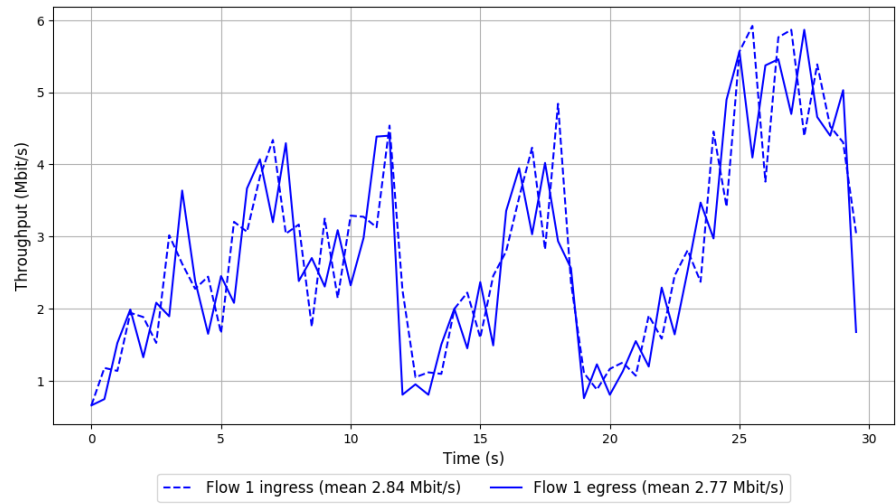
-- Flow 1:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 87.373 ms

Loss rate: 2.96%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-08 19:57:09

End at: 2018-01-08 19:57:39

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 87.933 ms

Loss rate: 0.91%

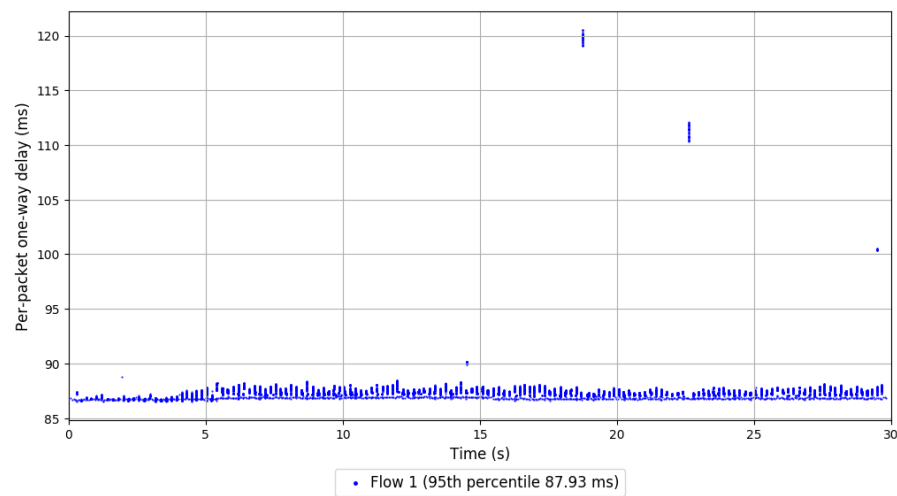
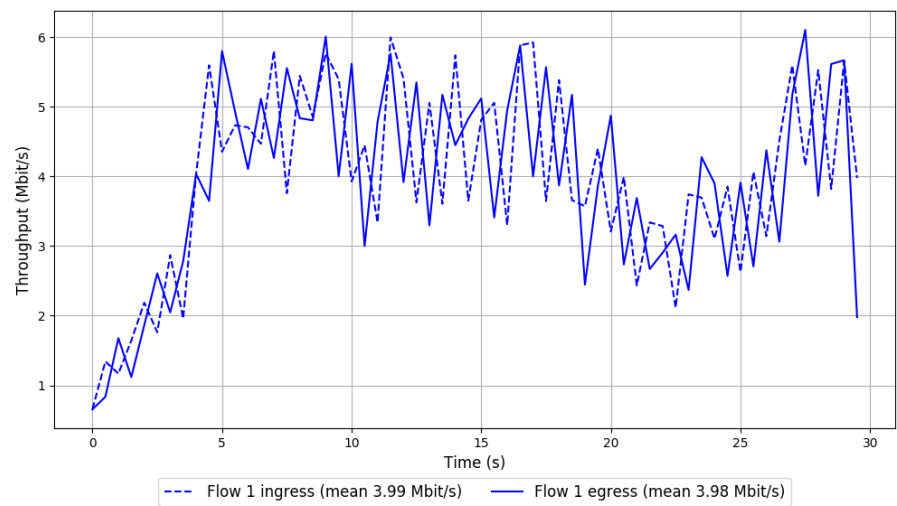
-- Flow 1:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 87.933 ms

Loss rate: 0.91%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-08 20:08:36

End at: 2018-01-08 20:09:06

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 90.659 ms

Loss rate: 0.80%

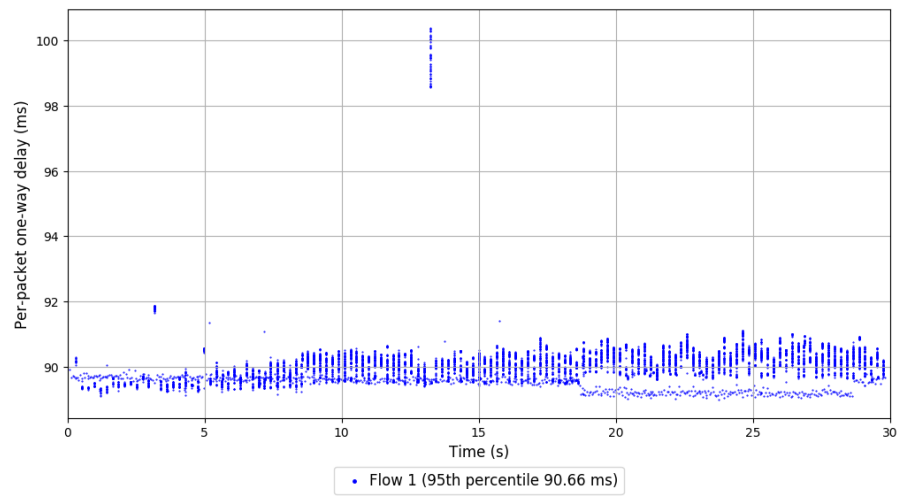
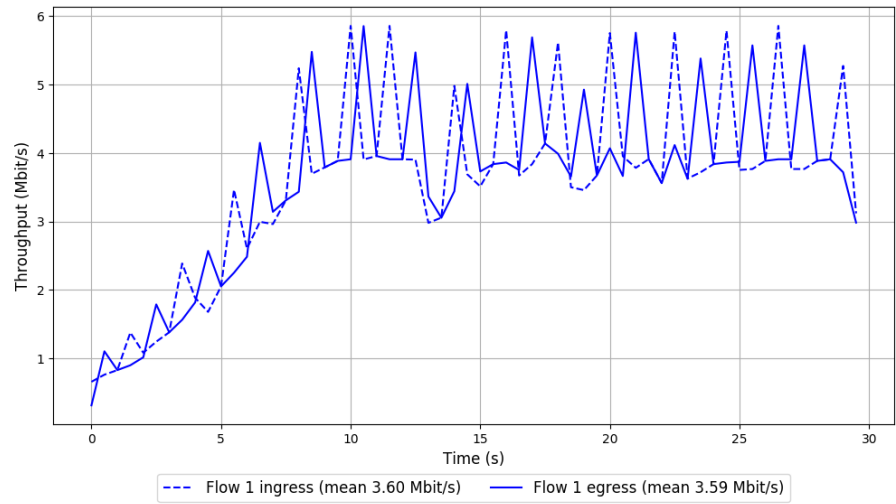
-- Flow 1:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 90.659 ms

Loss rate: 0.80%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-08 20:20:53

End at: 2018-01-08 20:21:23

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 92.812 ms

Loss rate: 2.33%

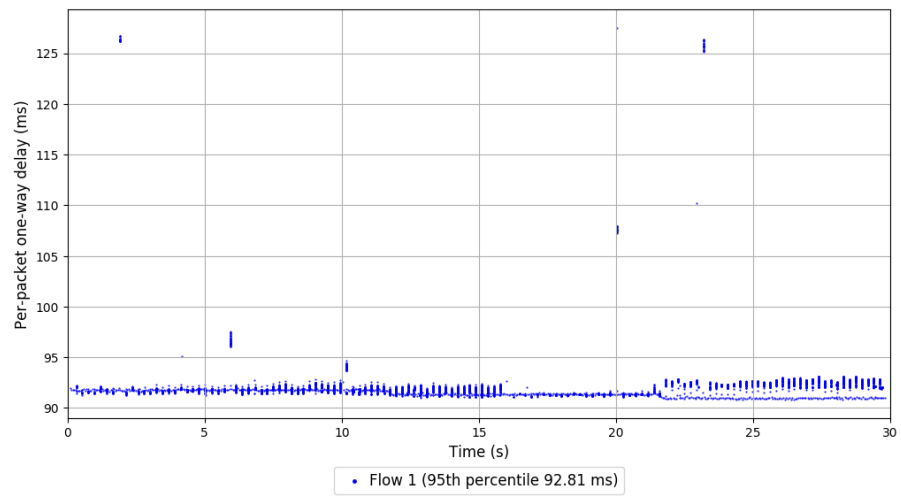
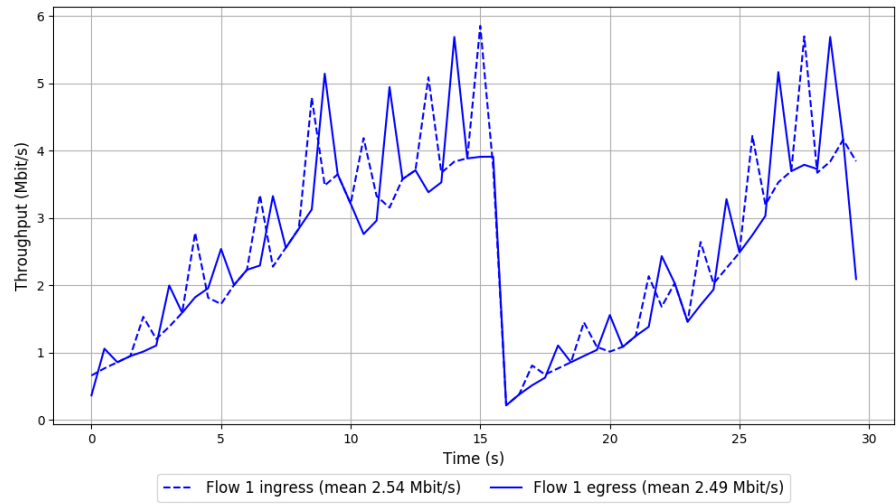
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 92.812 ms

Loss rate: 2.33%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-08 20:32:41

End at: 2018-01-08 20:33:11

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 89.790 ms

Loss rate: 1.04%

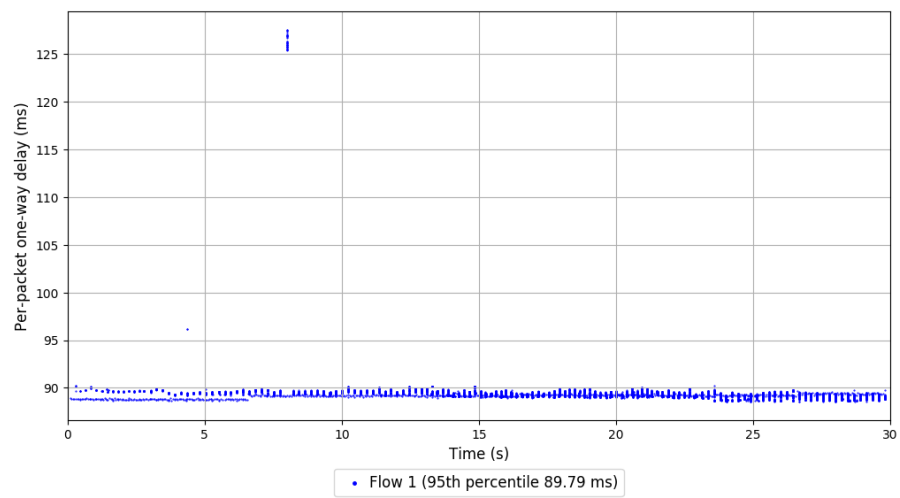
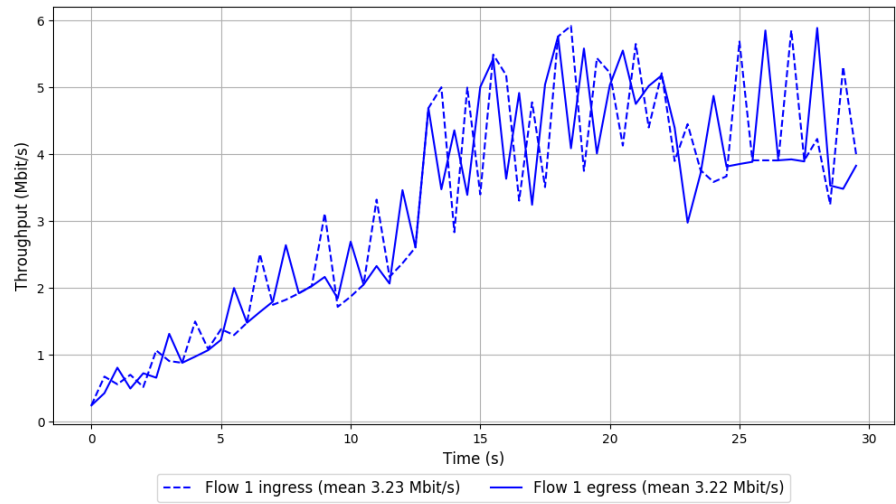
-- Flow 1:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 89.790 ms

Loss rate: 1.04%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-08 20:44:59

End at: 2018-01-08 20:45:29

Below is generated by plot.py at 2018-01-08 23:09:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 89.050 ms

Loss rate: 0.52%

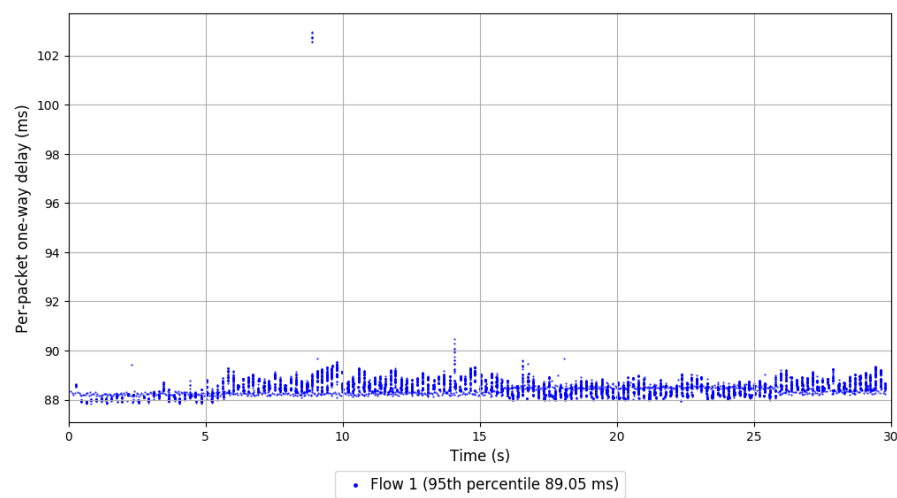
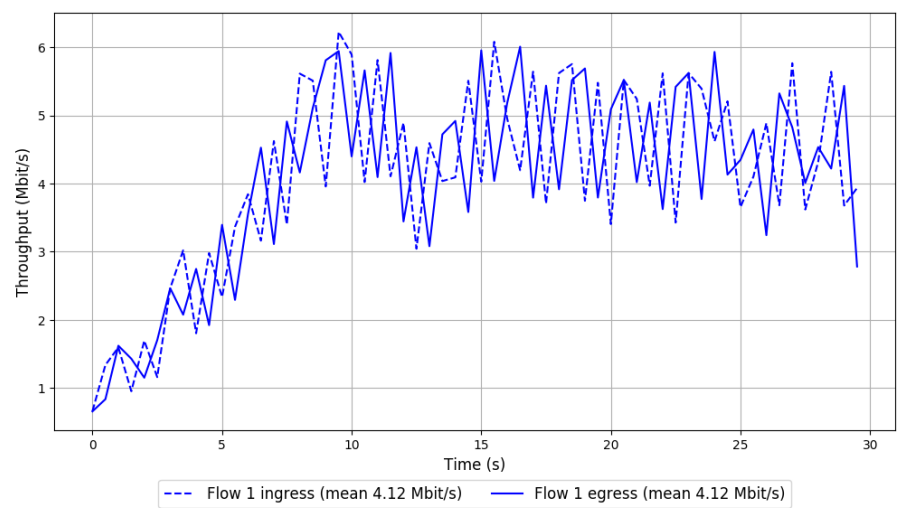
-- Flow 1:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 89.050 ms

Loss rate: 0.52%

Run 10: Report of Sprout — Data Link

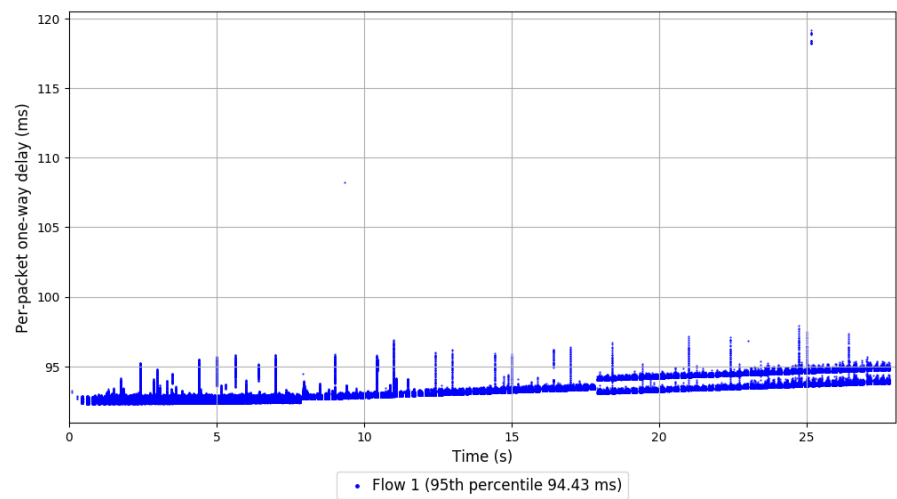
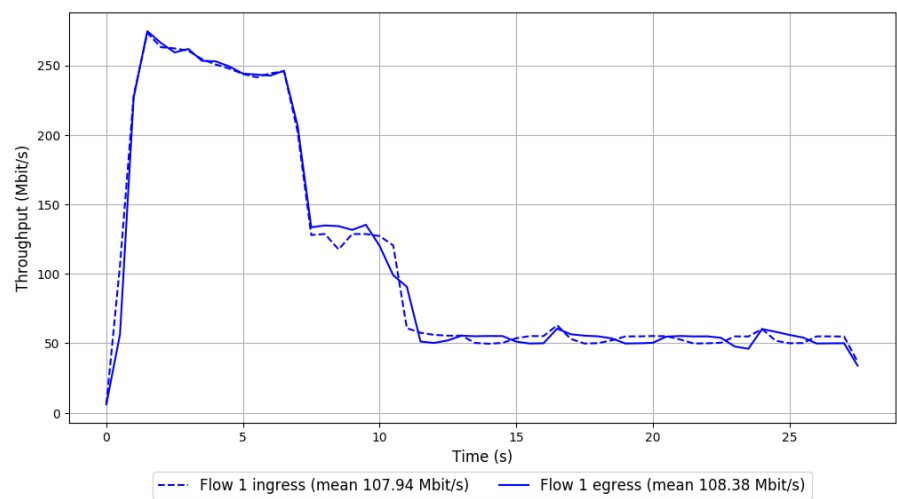


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-08 18:51:14
End at: 2018-01-08 18:51:44

# Below is generated by plot.py at 2018-01-08 23:09:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 108.38 Mbit/s
95th percentile per-packet one-way delay: 94.429 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 108.38 Mbit/s
95th percentile per-packet one-way delay: 94.429 ms
Loss rate: 0.30%
```

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

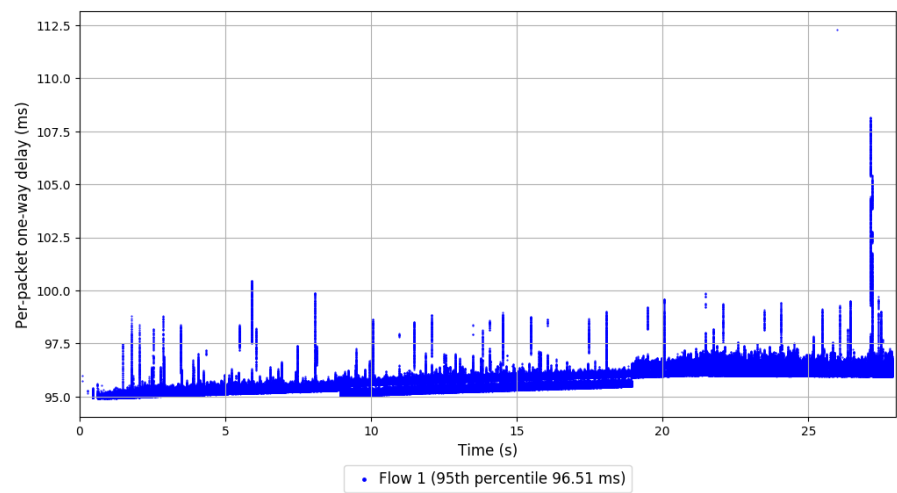
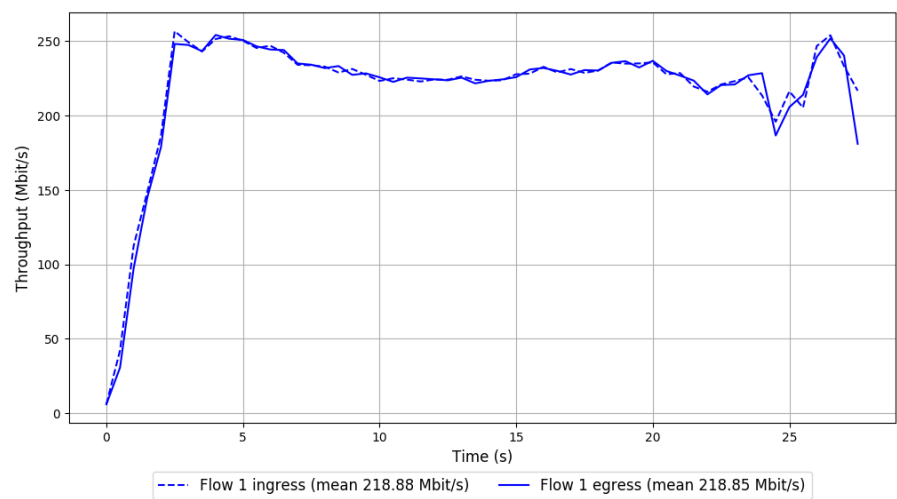


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-08 19:03:03
End at: 2018-01-08 19:03:34

# Below is generated by plot.py at 2018-01-08 23:12:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.85 Mbit/s
95th percentile per-packet one-way delay: 96.512 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 218.85 Mbit/s
95th percentile per-packet one-way delay: 96.512 ms
Loss rate: 0.64%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-01-08 19:15:11

End at: 2018-01-08 19:15:41

Below is generated by plot.py at 2018-01-08 23:14:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.44 Mbit/s

95th percentile per-packet one-way delay: 90.108 ms

Loss rate: 0.71%

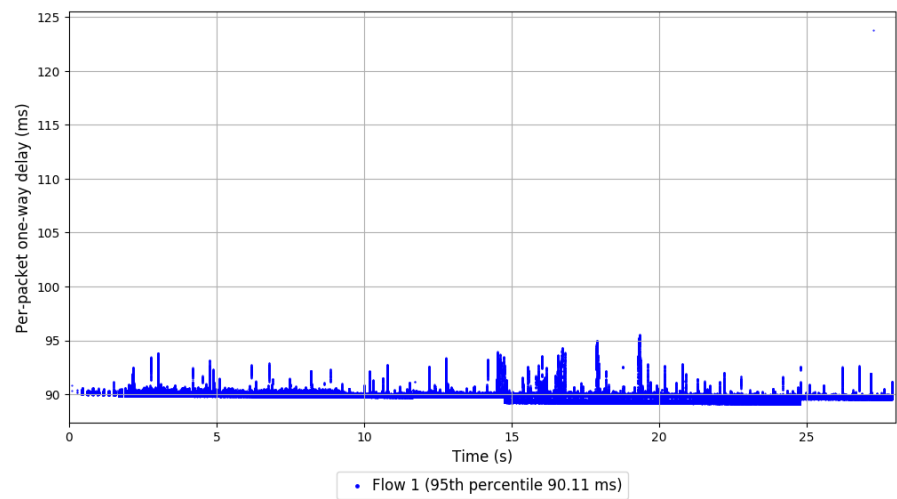
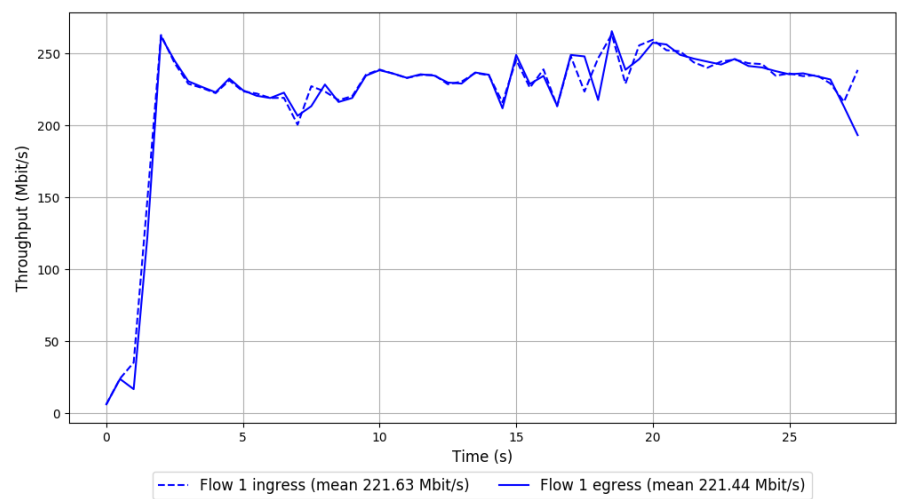
-- Flow 1:

Average throughput: 221.44 Mbit/s

95th percentile per-packet one-way delay: 90.108 ms

Loss rate: 0.71%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-08 19:27:22

End at: 2018-01-08 19:27:52

Below is generated by plot.py at 2018-01-08 23:15:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 227.40 Mbit/s

95th percentile per-packet one-way delay: 93.597 ms

Loss rate: 0.63%

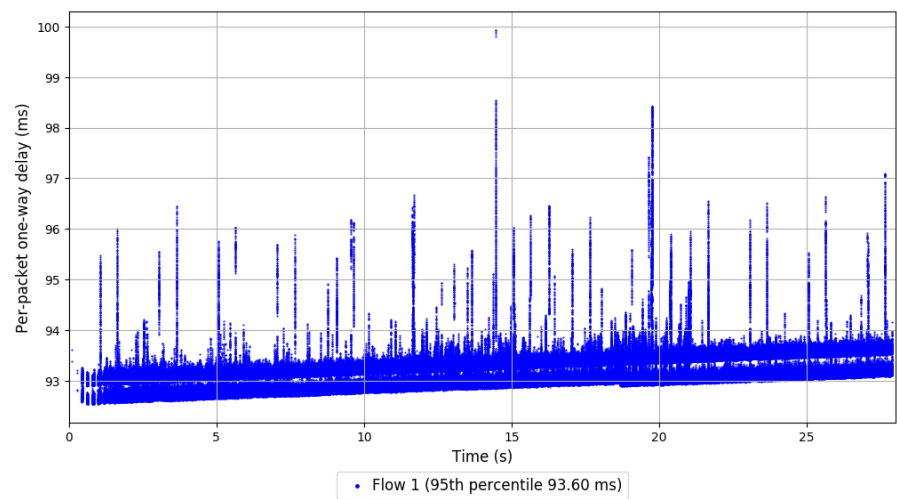
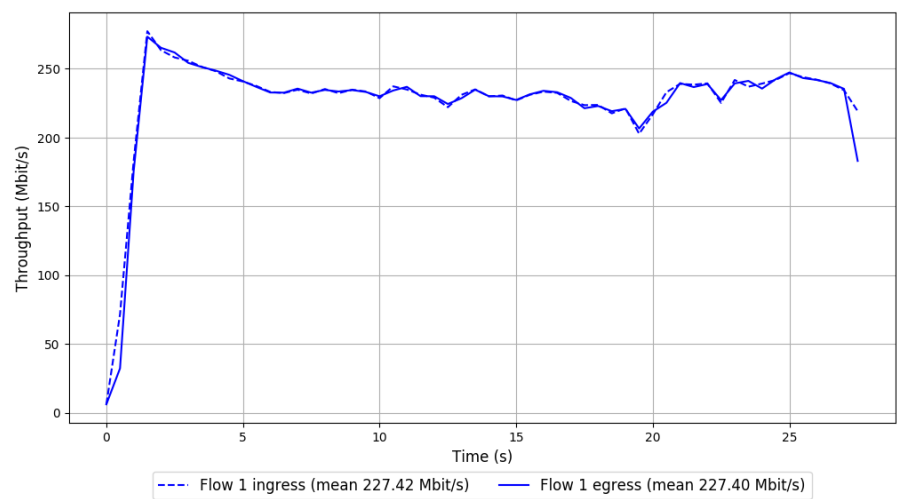
-- Flow 1:

Average throughput: 227.40 Mbit/s

95th percentile per-packet one-way delay: 93.597 ms

Loss rate: 0.63%

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

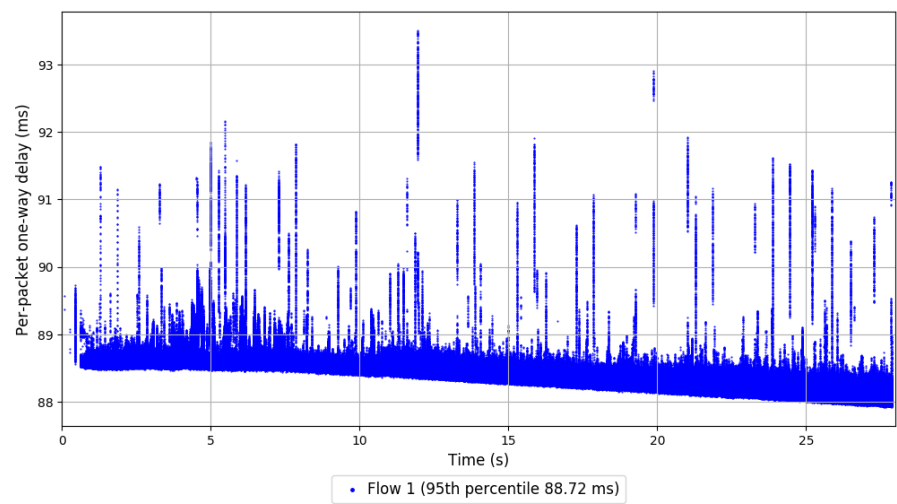
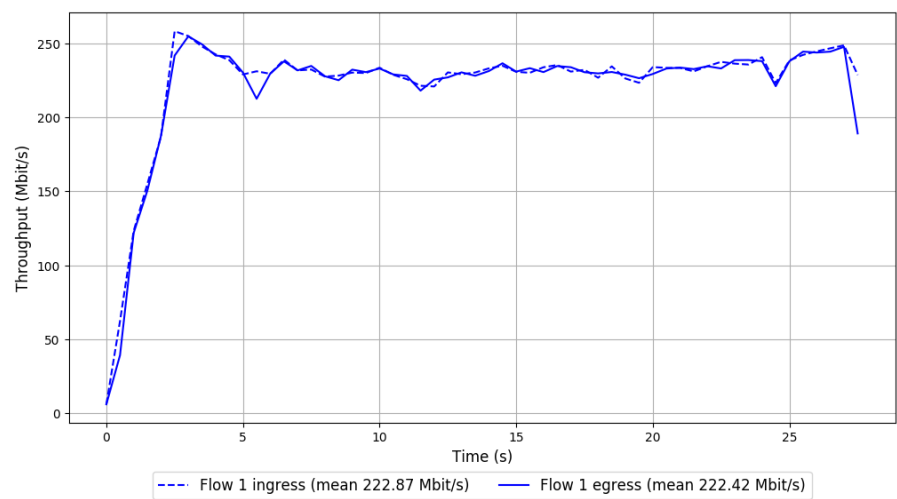


```
Run 5: Statistics of TaoVA-100x

Start at: 2018-01-08 19:39:22
End at: 2018-01-08 19:39:52

# Below is generated by plot.py at 2018-01-08 23:15:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.42 Mbit/s
95th percentile per-packet one-way delay: 88.718 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 222.42 Mbit/s
95th percentile per-packet one-way delay: 88.718 ms
Loss rate: 0.83%
```

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-08 19:51:46

End at: 2018-01-08 19:52:16

Below is generated by plot.py at 2018-01-08 23:15:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 224.68 Mbit/s

95th percentile per-packet one-way delay: 85.353 ms

Loss rate: 0.61%

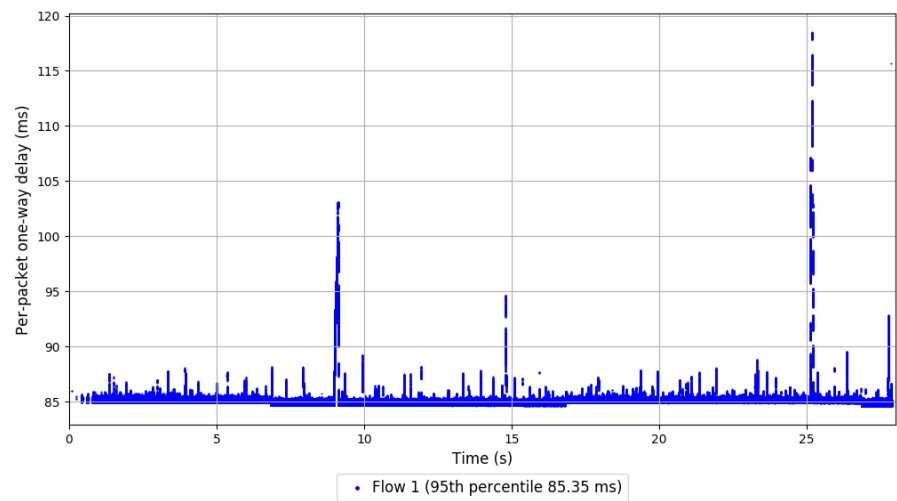
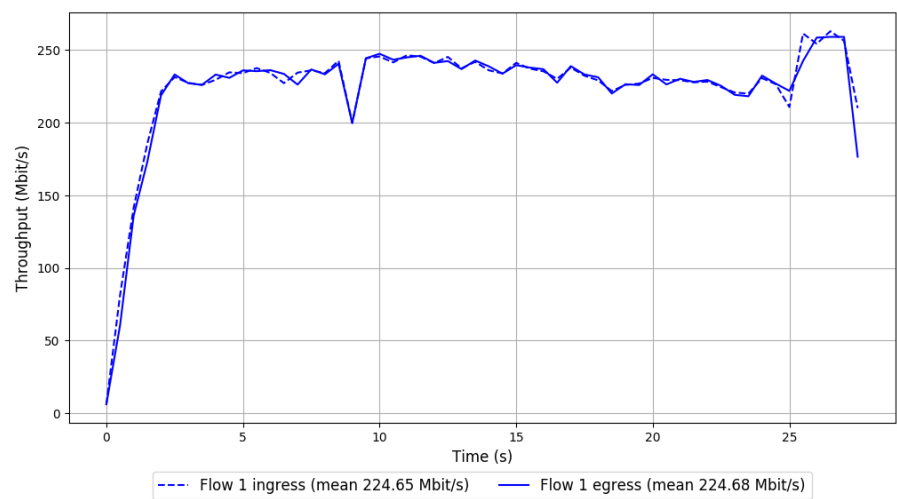
-- Flow 1:

Average throughput: 224.68 Mbit/s

95th percentile per-packet one-way delay: 85.353 ms

Loss rate: 0.61%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-08 20:03:33

End at: 2018-01-08 20:04:03

Below is generated by plot.py at 2018-01-08 23:15:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.75 Mbit/s

95th percentile per-packet one-way delay: 89.231 ms

Loss rate: 0.65%

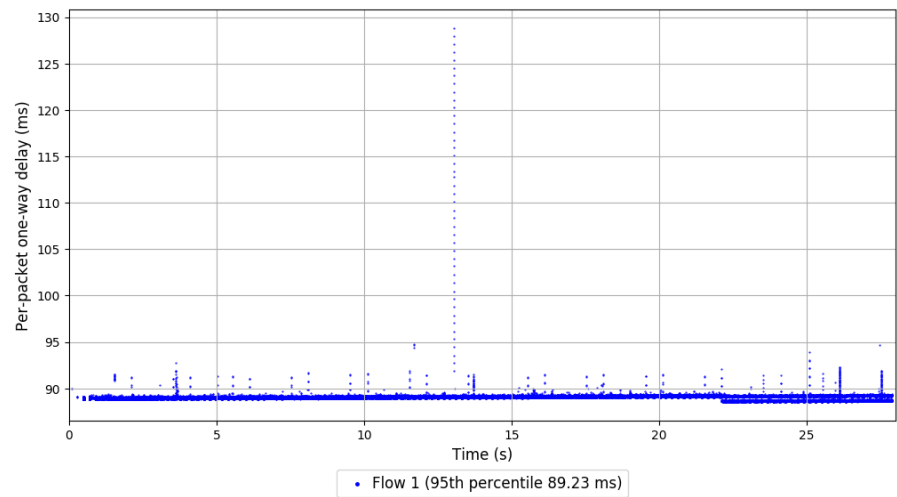
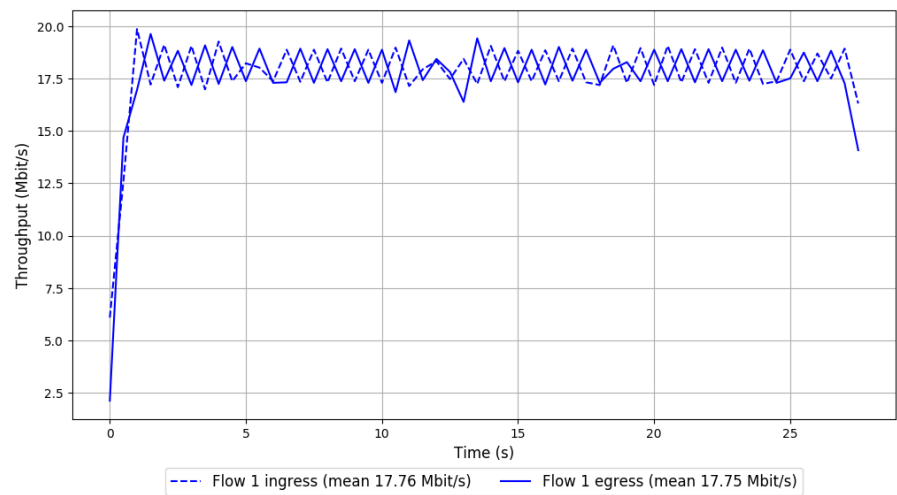
-- Flow 1:

Average throughput: 17.75 Mbit/s

95th percentile per-packet one-way delay: 89.231 ms

Loss rate: 0.65%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-08 20:15:36

End at: 2018-01-08 20:16:06

Below is generated by plot.py at 2018-01-08 23:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 227.23 Mbit/s

95th percentile per-packet one-way delay: 91.128 ms

Loss rate: 0.81%

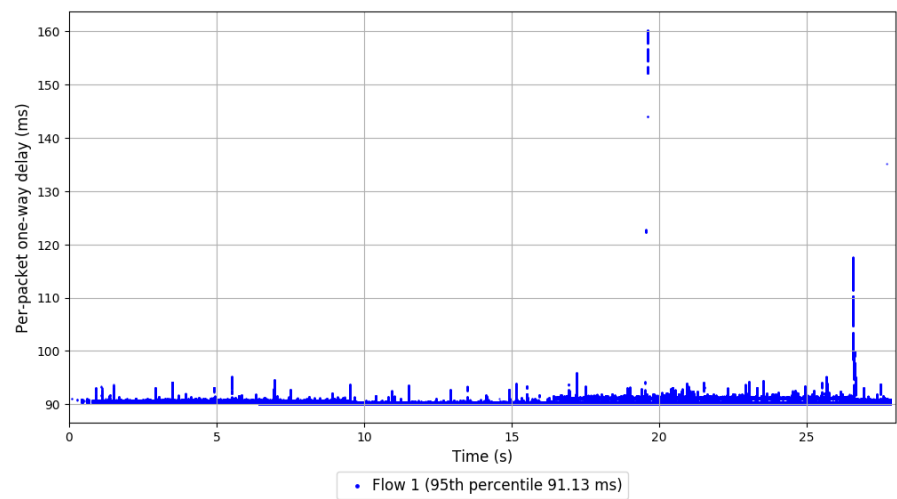
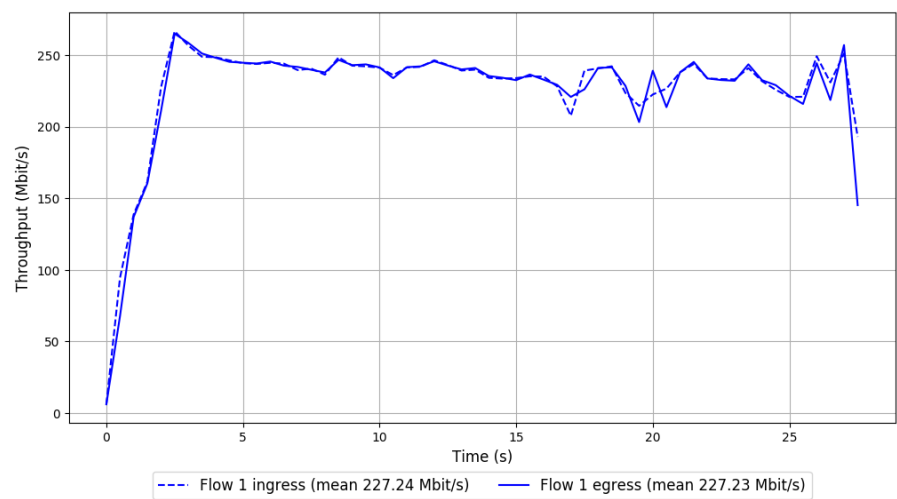
-- Flow 1:

Average throughput: 227.23 Mbit/s

95th percentile per-packet one-way delay: 91.128 ms

Loss rate: 0.81%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-08 20:27:18

End at: 2018-01-08 20:27:48

Below is generated by plot.py at 2018-01-08 23:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 224.67 Mbit/s

95th percentile per-packet one-way delay: 91.458 ms

Loss rate: 0.86%

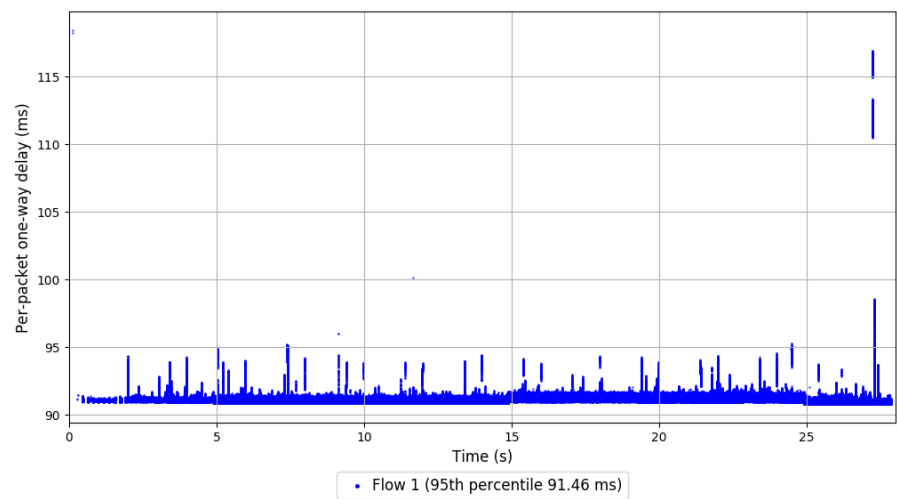
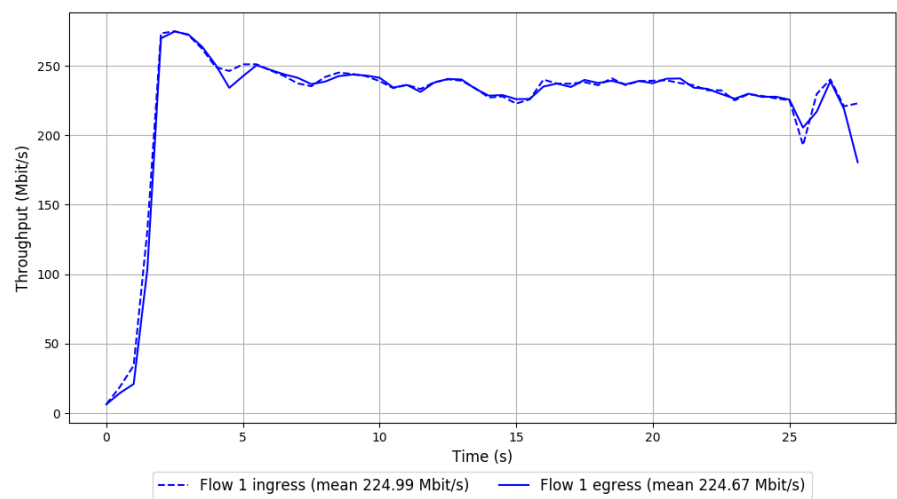
-- Flow 1:

Average throughput: 224.67 Mbit/s

95th percentile per-packet one-way delay: 91.458 ms

Loss rate: 0.86%

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

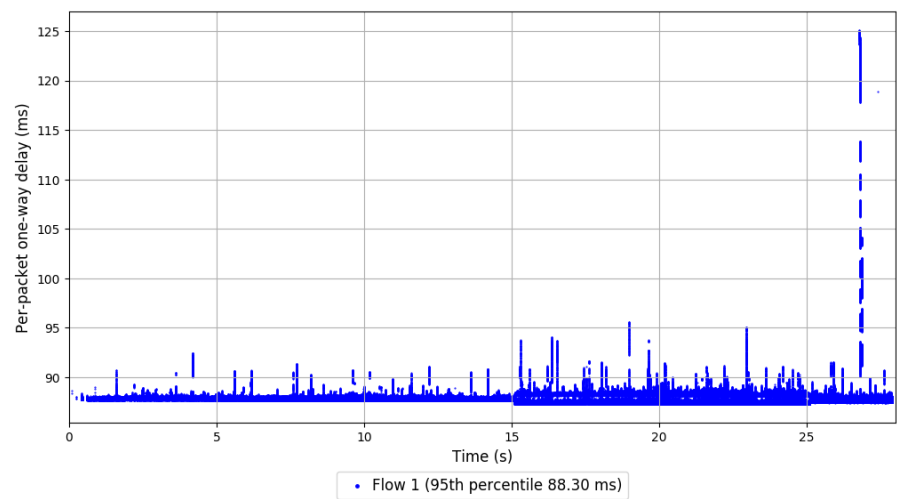
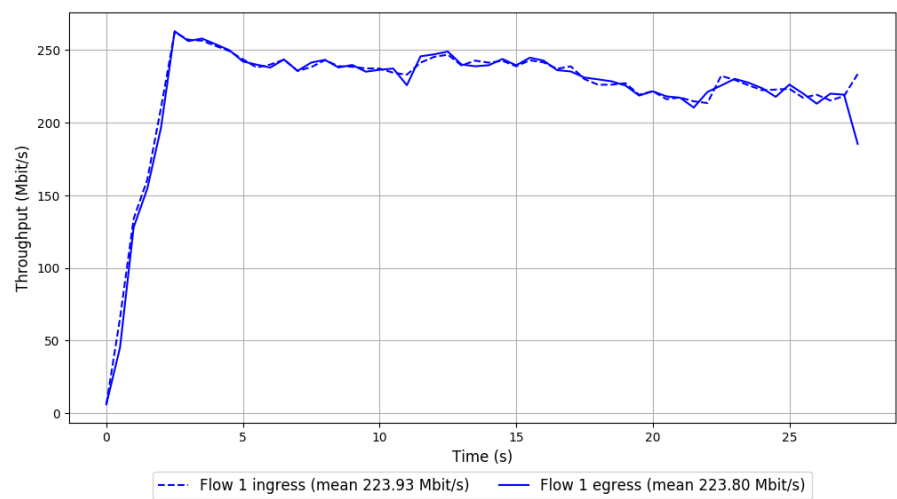


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-08 20:39:37
End at: 2018-01-08 20:40:07

# Below is generated by plot.py at 2018-01-08 23:15:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.80 Mbit/s
95th percentile per-packet one-way delay: 88.302 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 223.80 Mbit/s
95th percentile per-packet one-way delay: 88.302 ms
Loss rate: 0.68%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-08 19:01:28

End at: 2018-01-08 19:01:58

Below is generated by plot.py at 2018-01-08 23:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.07 Mbit/s

95th percentile per-packet one-way delay: 92.739 ms

Loss rate: 0.39%

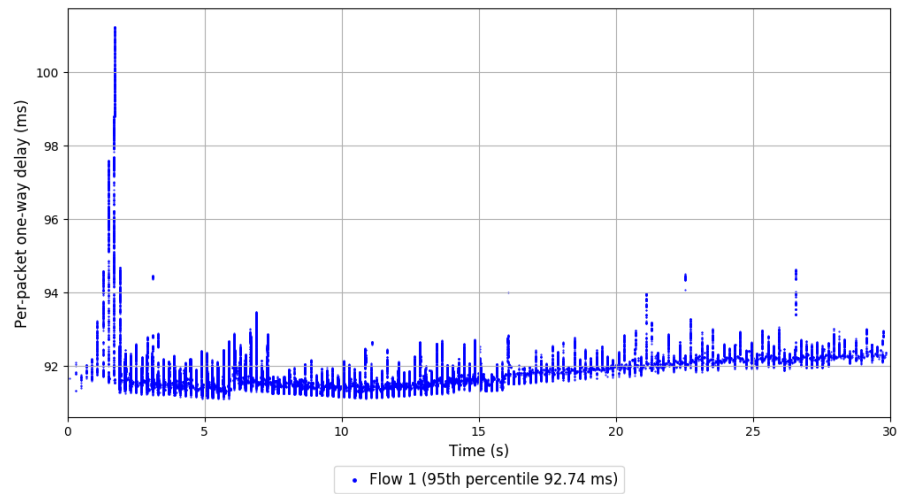
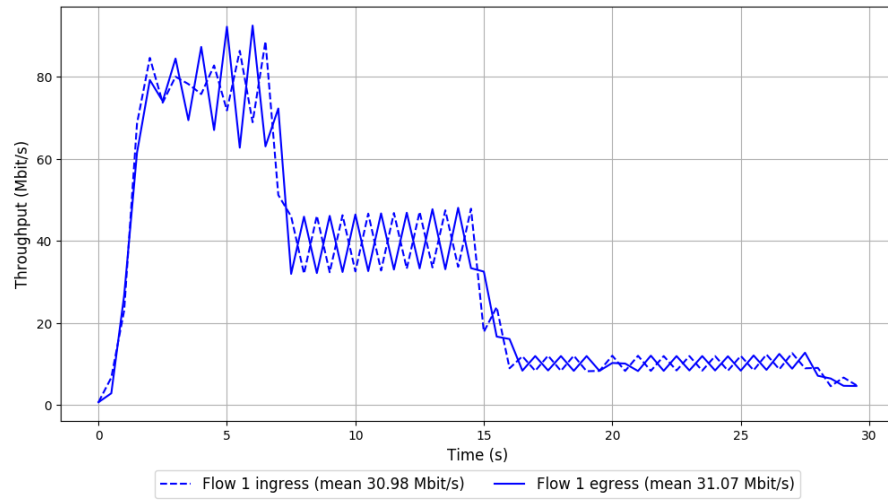
-- Flow 1:

Average throughput: 31.07 Mbit/s

95th percentile per-packet one-way delay: 92.739 ms

Loss rate: 0.39%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-08 19:13:30

End at: 2018-01-08 19:14:00

Below is generated by plot.py at 2018-01-08 23:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.78 Mbit/s

95th percentile per-packet one-way delay: 93.215 ms

Loss rate: 0.62%

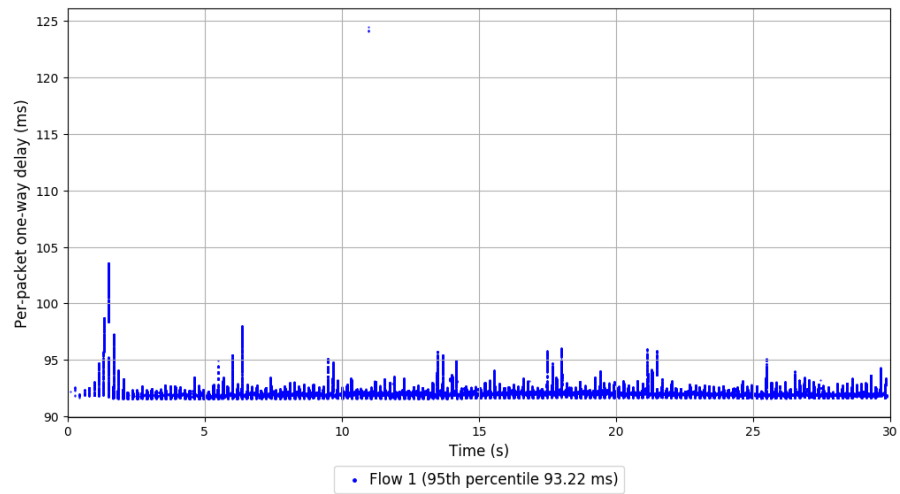
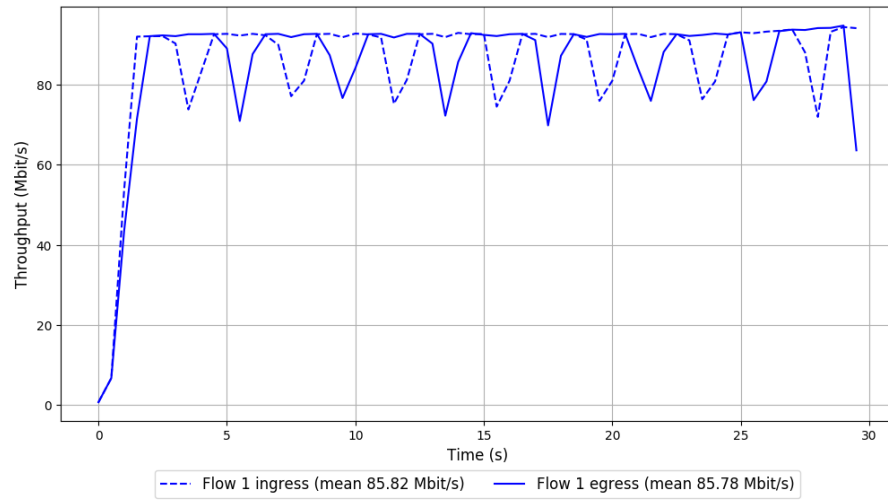
-- Flow 1:

Average throughput: 85.78 Mbit/s

95th percentile per-packet one-way delay: 93.215 ms

Loss rate: 0.62%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-08 19:25:49

End at: 2018-01-08 19:26:19

Below is generated by plot.py at 2018-01-08 23:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.58 Mbit/s

95th percentile per-packet one-way delay: 91.925 ms

Loss rate: 1.38%

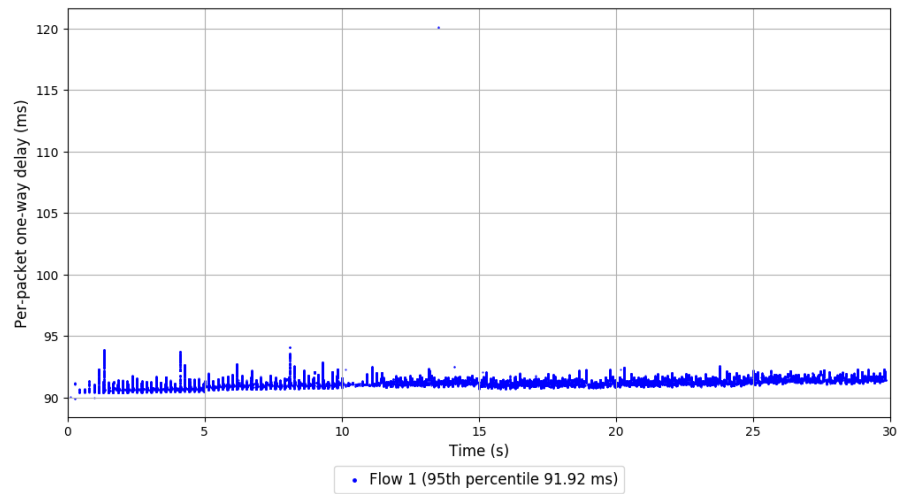
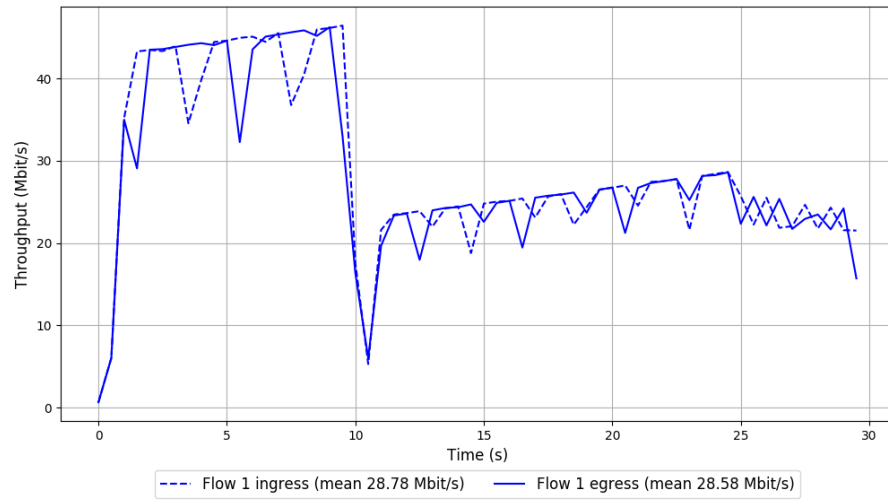
-- Flow 1:

Average throughput: 28.58 Mbit/s

95th percentile per-packet one-way delay: 91.925 ms

Loss rate: 1.38%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-08 19:37:39

End at: 2018-01-08 19:38:09

Below is generated by plot.py at 2018-01-08 23:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.16 Mbit/s

95th percentile per-packet one-way delay: 91.066 ms

Loss rate: 0.67%

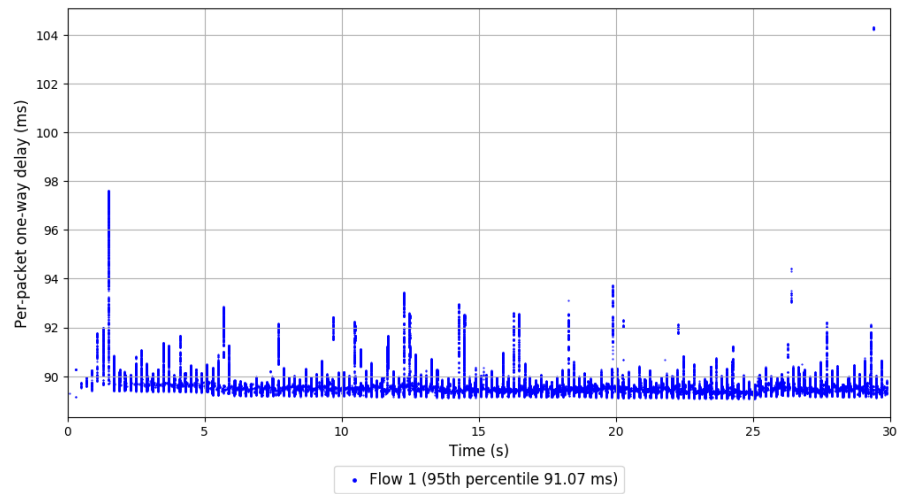
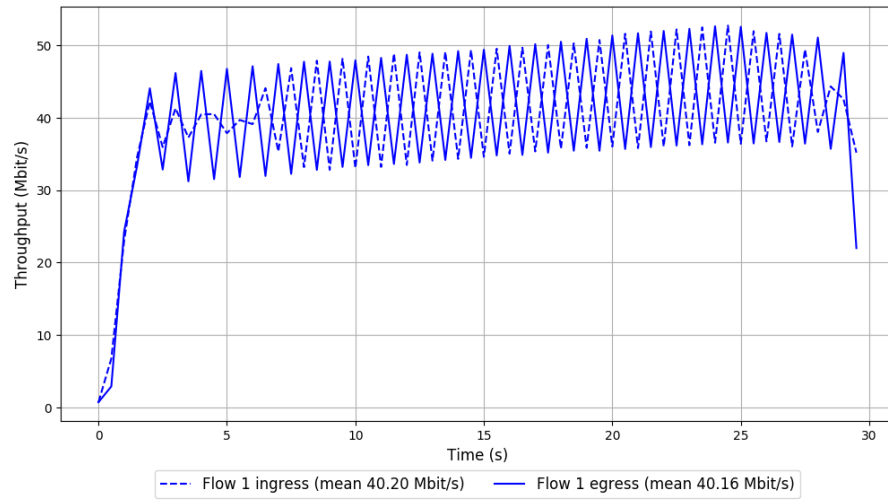
-- Flow 1:

Average throughput: 40.16 Mbit/s

95th percentile per-packet one-way delay: 91.066 ms

Loss rate: 0.67%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-08 19:50:06

End at: 2018-01-08 19:50:36

Below is generated by plot.py at 2018-01-08 23:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.72 Mbit/s

95th percentile per-packet one-way delay: 92.688 ms

Loss rate: 0.16%

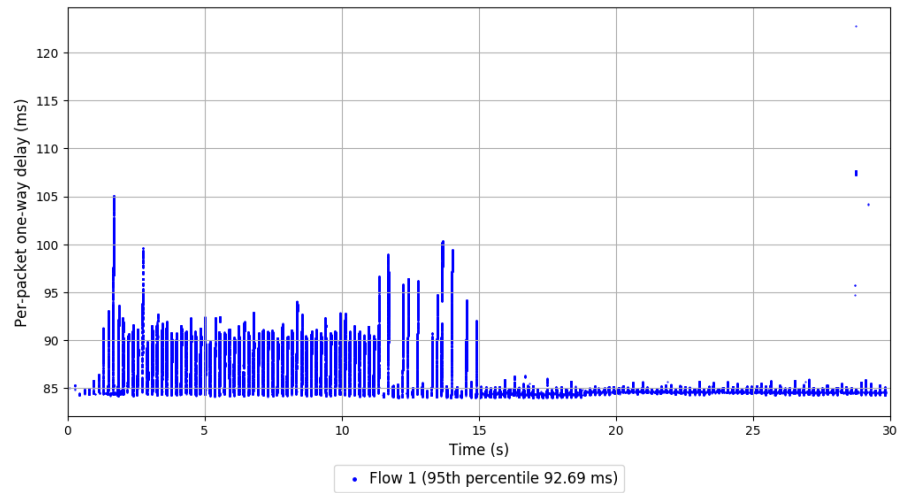
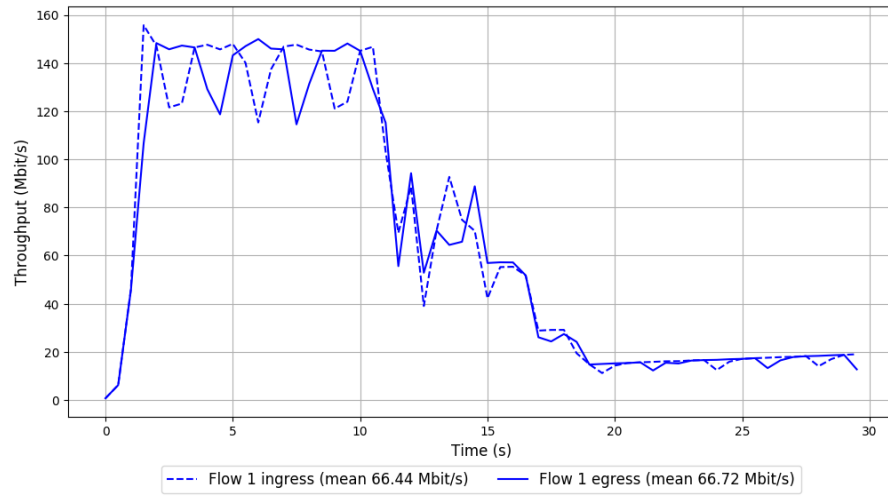
-- Flow 1:

Average throughput: 66.72 Mbit/s

95th percentile per-packet one-way delay: 92.688 ms

Loss rate: 0.16%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-08 20:01:58

End at: 2018-01-08 20:02:28

Below is generated by plot.py at 2018-01-08 23:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.47 Mbit/s

95th percentile per-packet one-way delay: 89.384 ms

Loss rate: 0.72%

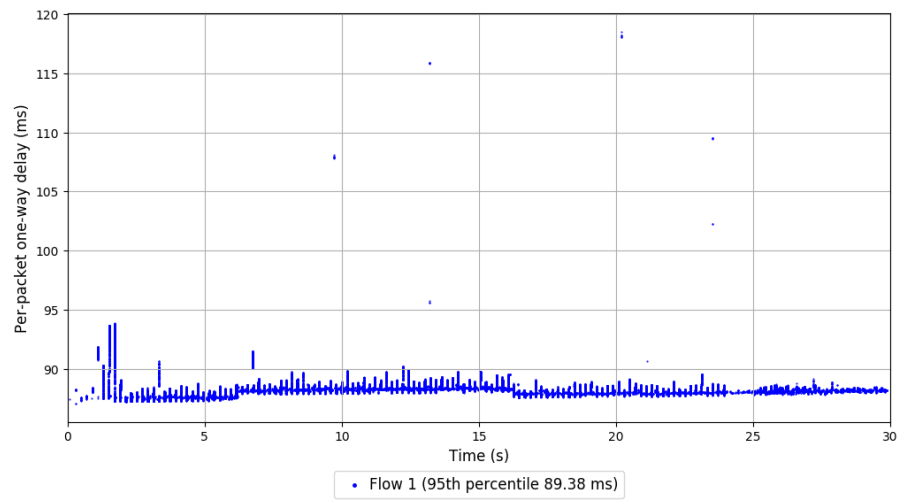
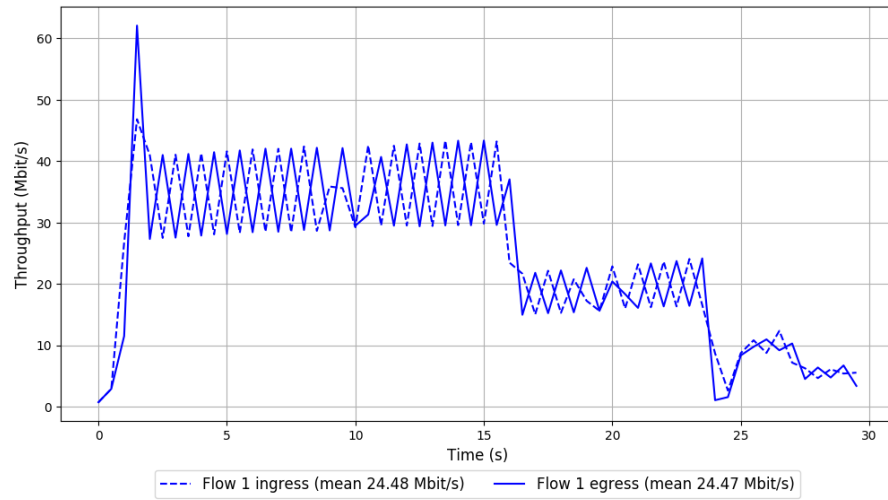
-- Flow 1:

Average throughput: 24.47 Mbit/s

95th percentile per-packet one-way delay: 89.384 ms

Loss rate: 0.72%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-08 20:13:55

End at: 2018-01-08 20:14:25

Below is generated by plot.py at 2018-01-08 23:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.55 Mbit/s

95th percentile per-packet one-way delay: 91.569 ms

Loss rate: 1.29%

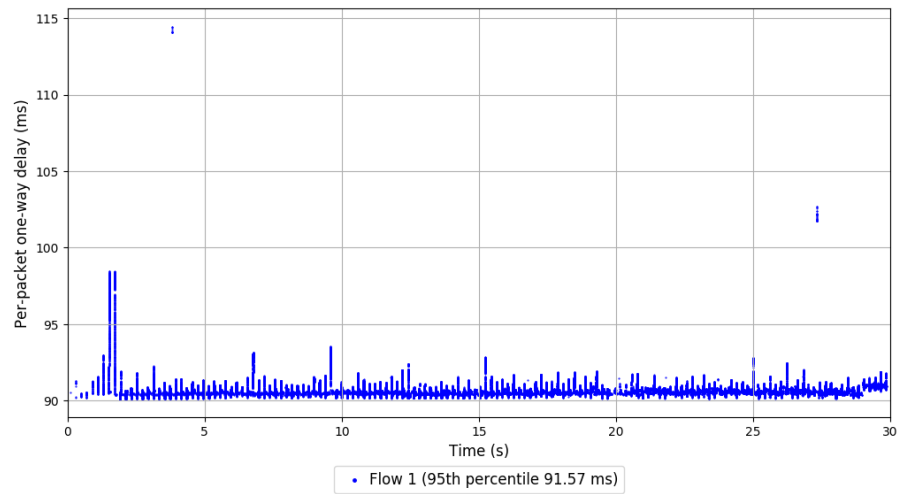
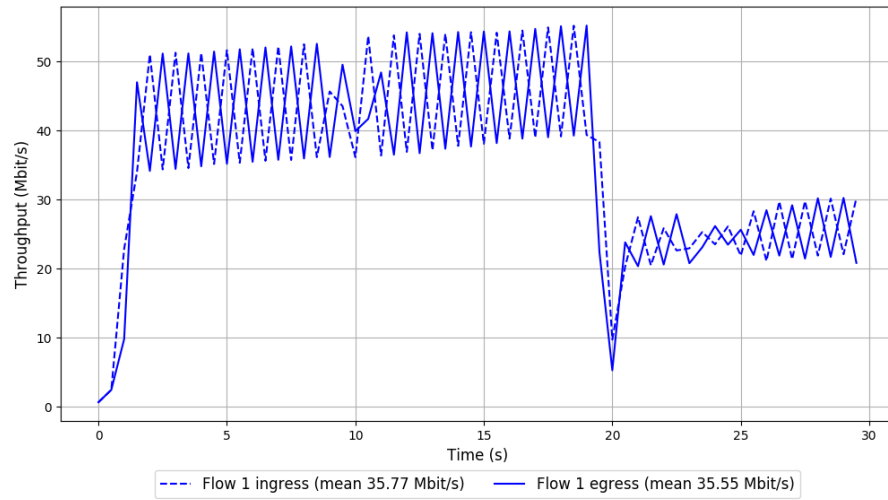
-- Flow 1:

Average throughput: 35.55 Mbit/s

95th percentile per-packet one-way delay: 91.569 ms

Loss rate: 1.29%

Run 7: Report of TCP Vegas — Data Link

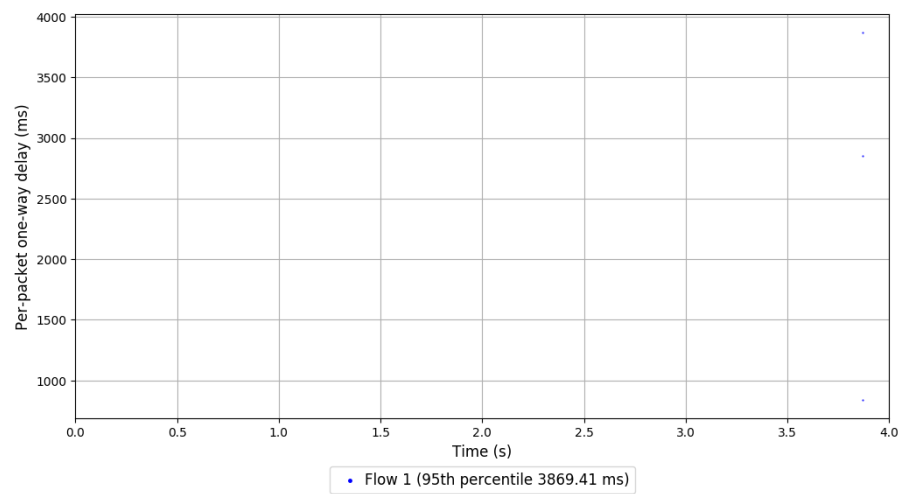
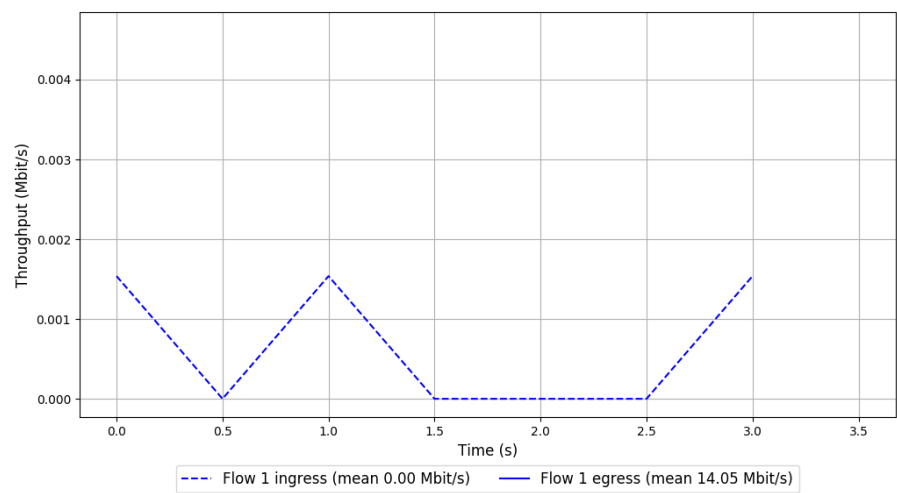


Run 8: Statistics of TCP Vegas

Start at: 2018-01-08 20:25:47

End at: 2018-01-08 20:26:17

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-08 20:37:58

End at: 2018-01-08 20:38:28

Below is generated by plot.py at 2018-01-08 23:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.97 Mbit/s

95th percentile per-packet one-way delay: 96.035 ms

Loss rate: 0.34%

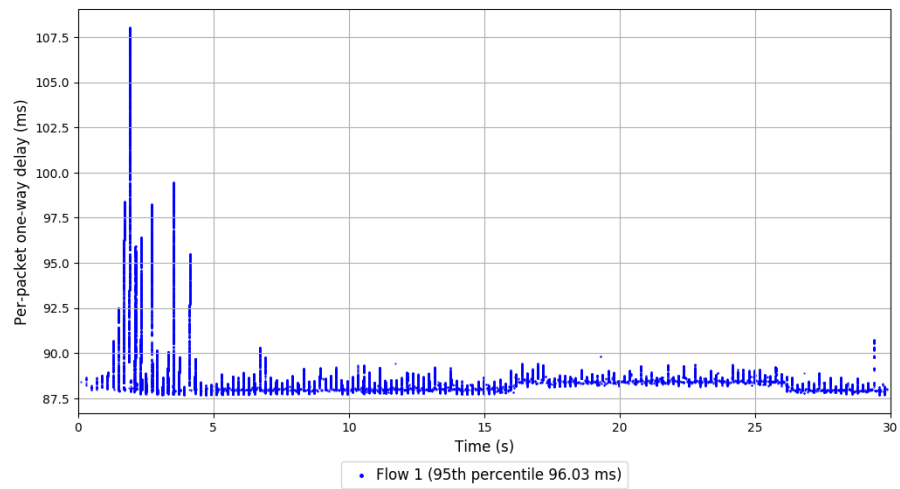
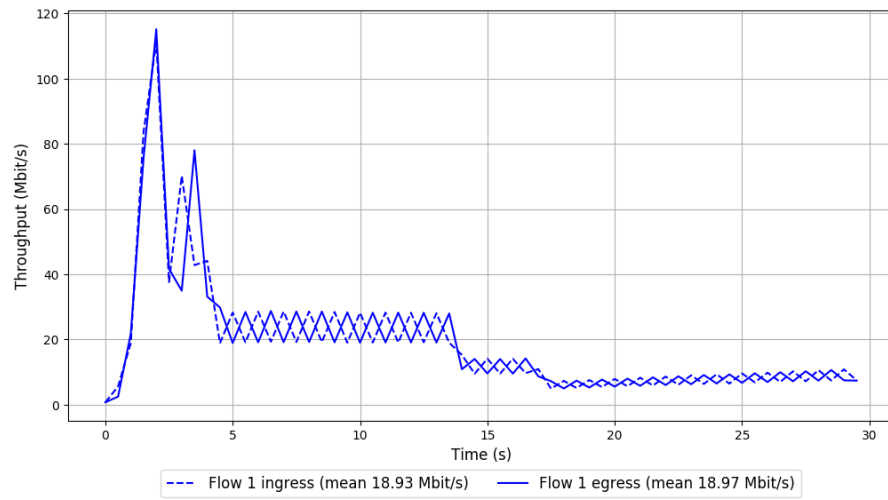
-- Flow 1:

Average throughput: 18.97 Mbit/s

95th percentile per-packet one-way delay: 96.035 ms

Loss rate: 0.34%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-08 20:50:17

End at: 2018-01-08 20:50:47

Below is generated by plot.py at 2018-01-08 23:16:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.01 Mbit/s

95th percentile per-packet one-way delay: 90.184 ms

Loss rate: 0.45%

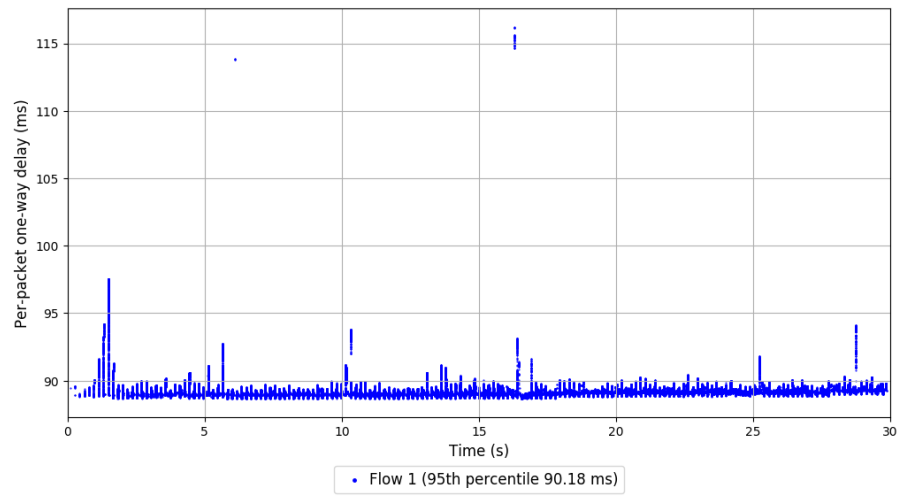
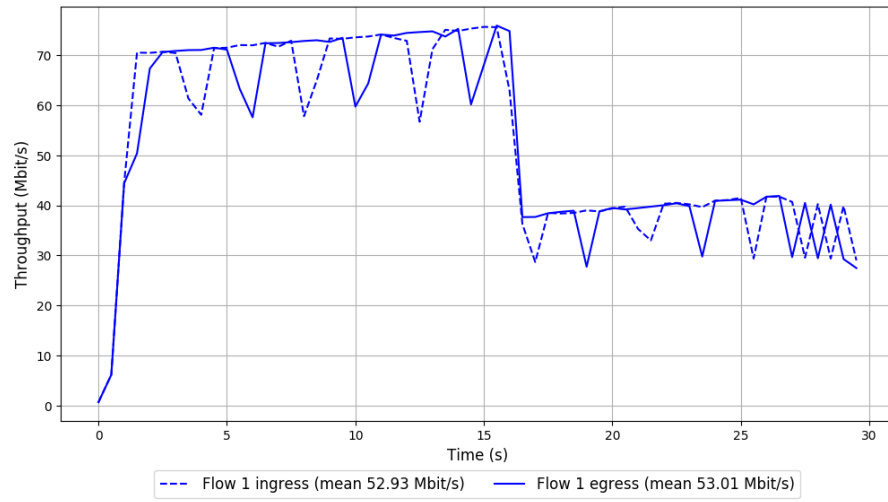
-- Flow 1:

Average throughput: 53.01 Mbit/s

95th percentile per-packet one-way delay: 90.184 ms

Loss rate: 0.45%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-08 18:50:17

End at: 2018-01-08 18:50:47

Below is generated by plot.py at 2018-01-08 23:19:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 249.04 Mbit/s

95th percentile per-packet one-way delay: 141.225 ms

Loss rate: 1.16%

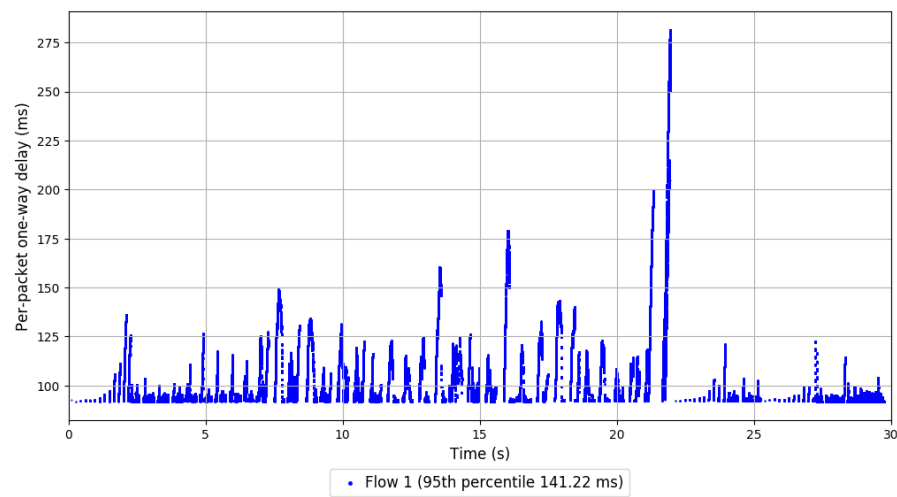
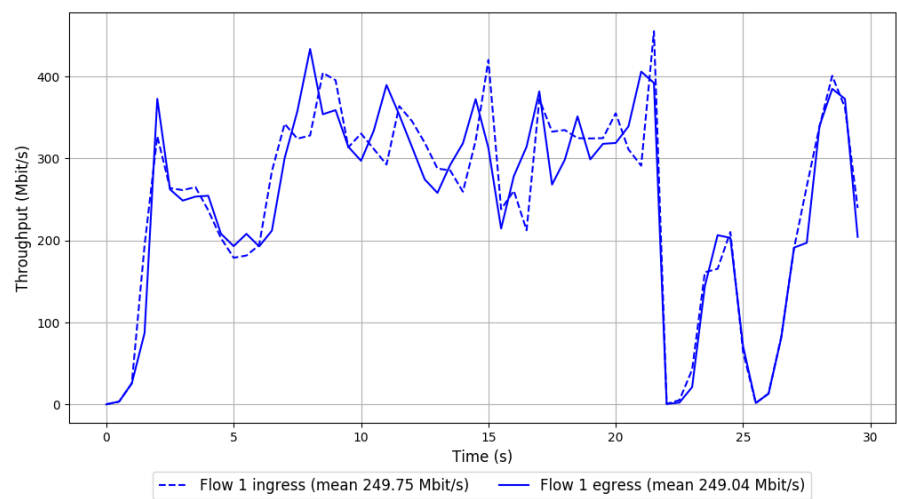
-- Flow 1:

Average throughput: 249.04 Mbit/s

95th percentile per-packet one-way delay: 141.225 ms

Loss rate: 1.16%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-08 19:02:10

End at: 2018-01-08 19:02:40

Below is generated by plot.py at 2018-01-08 23:19:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.48 Mbit/s

95th percentile per-packet one-way delay: 122.627 ms

Loss rate: 0.09%

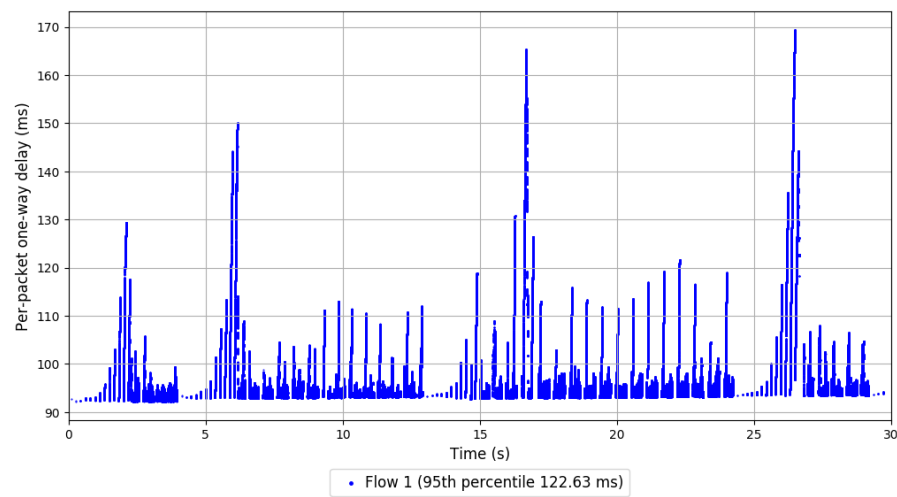
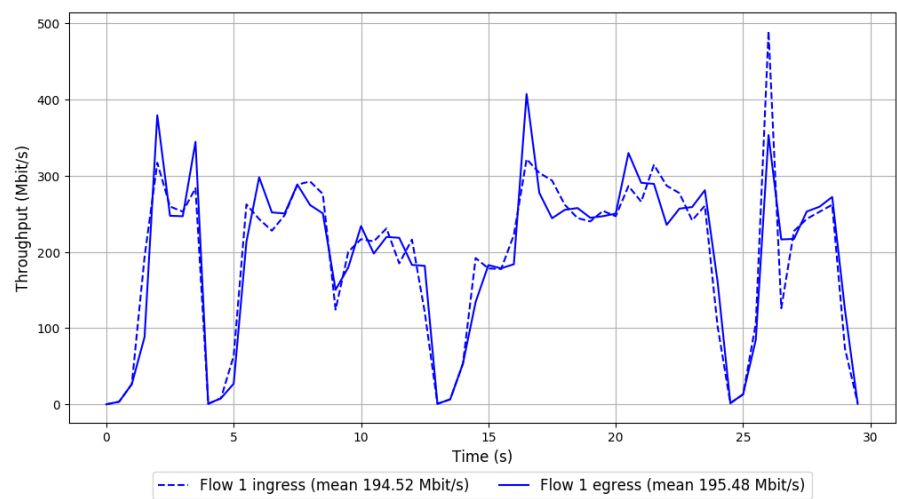
-- Flow 1:

Average throughput: 195.48 Mbit/s

95th percentile per-packet one-way delay: 122.627 ms

Loss rate: 0.09%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-08 19:14:15

End at: 2018-01-08 19:14:45

Below is generated by plot.py at 2018-01-08 23:19:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 233.16 Mbit/s

95th percentile per-packet one-way delay: 111.668 ms

Loss rate: 1.47%

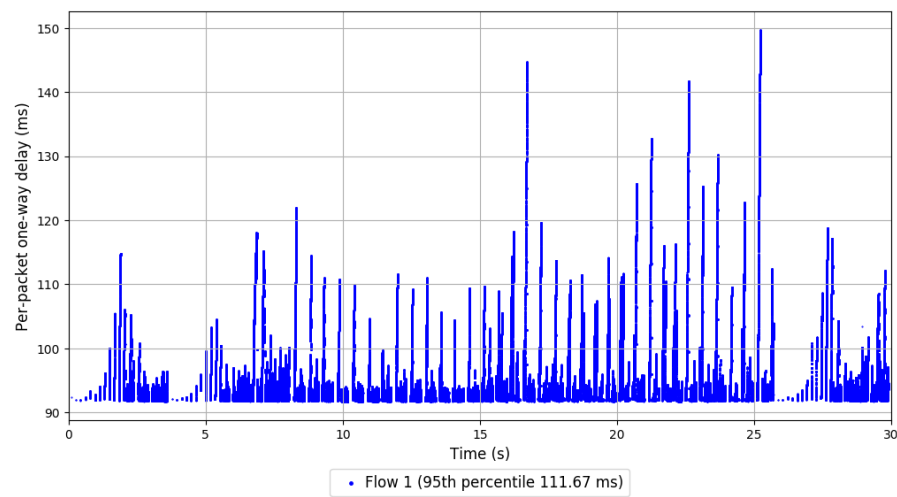
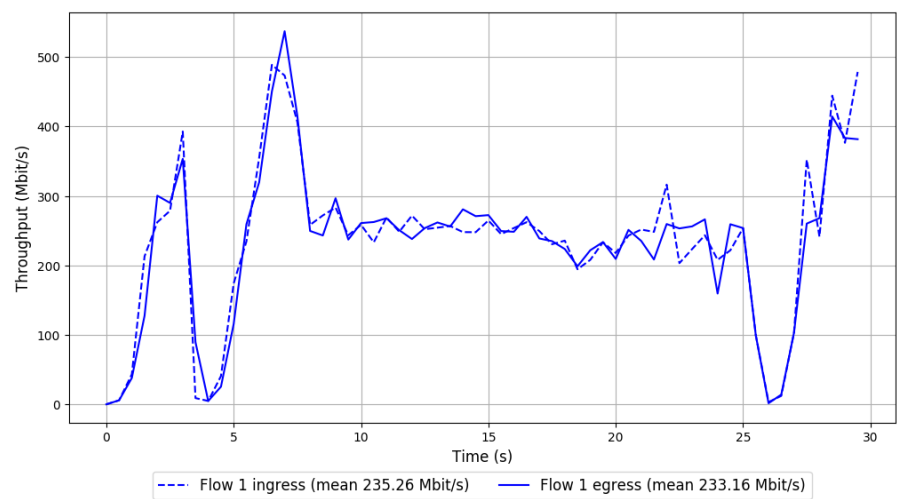
-- Flow 1:

Average throughput: 233.16 Mbit/s

95th percentile per-packet one-way delay: 111.668 ms

Loss rate: 1.47%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-08 19:26:32

End at: 2018-01-08 19:27:02

Below is generated by plot.py at 2018-01-08 23:19:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.66 Mbit/s

95th percentile per-packet one-way delay: 158.770 ms

Loss rate: 0.74%

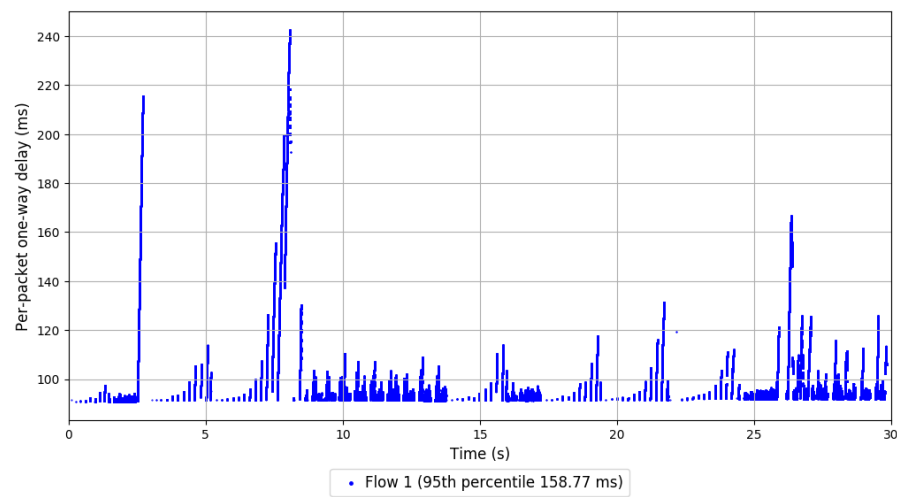
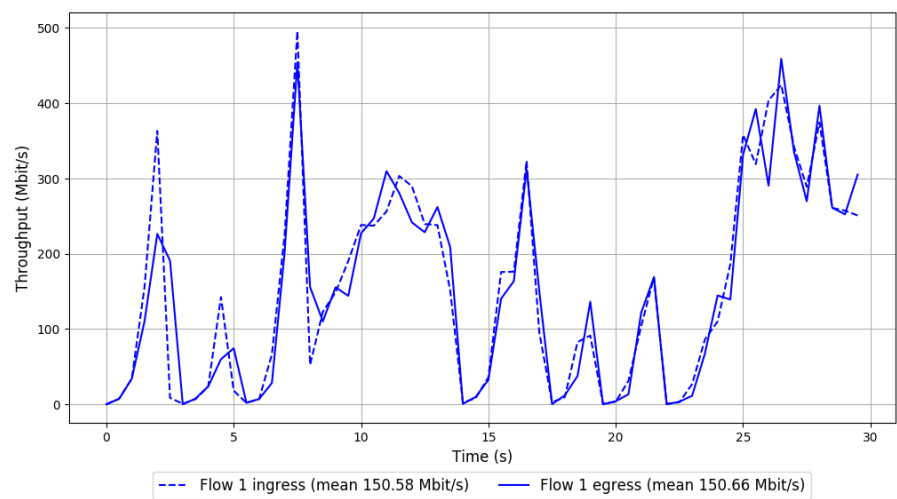
-- Flow 1:

Average throughput: 150.66 Mbit/s

95th percentile per-packet one-way delay: 158.770 ms

Loss rate: 0.74%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-08 19:38:22

End at: 2018-01-08 19:38:52

Below is generated by plot.py at 2018-01-08 23:20:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 295.29 Mbit/s

95th percentile per-packet one-way delay: 114.685 ms

Loss rate: 0.97%

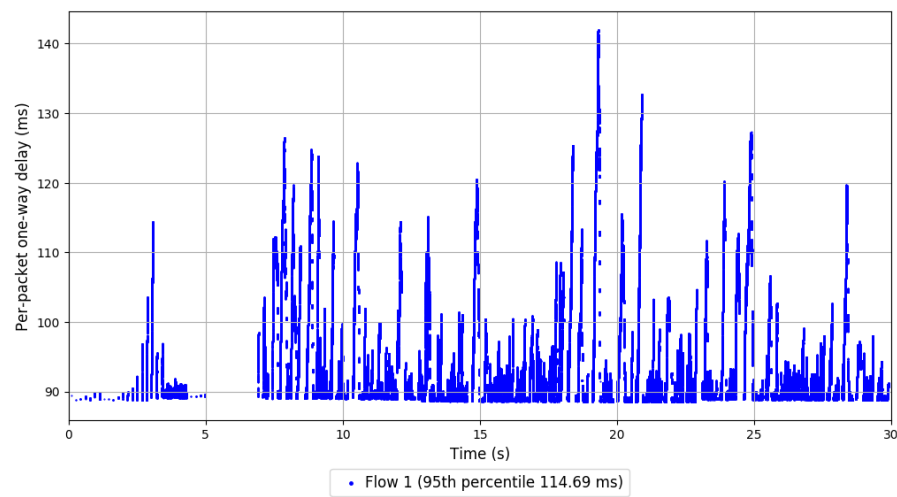
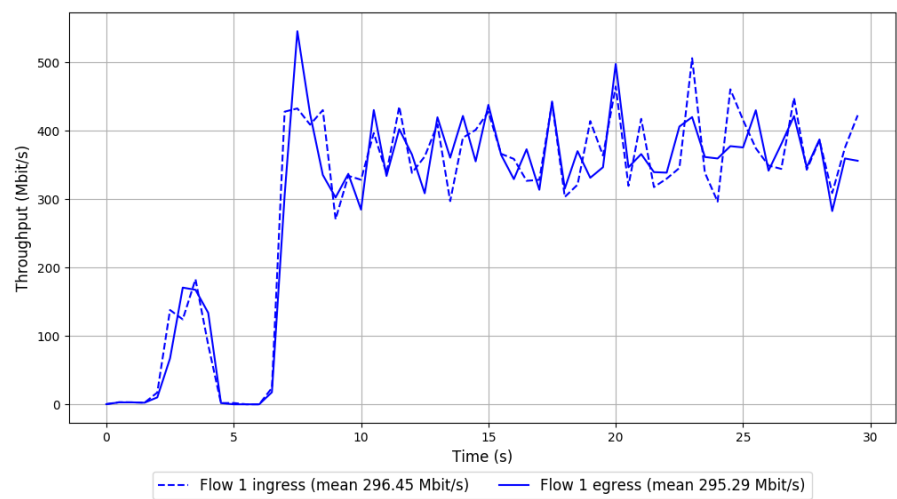
-- Flow 1:

Average throughput: 295.29 Mbit/s

95th percentile per-packet one-way delay: 114.685 ms

Loss rate: 0.97%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-08 19:50:50

End at: 2018-01-08 19:51:20

Below is generated by plot.py at 2018-01-08 23:20:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 229.38 Mbit/s

95th percentile per-packet one-way delay: 141.341 ms

Loss rate: 1.25%

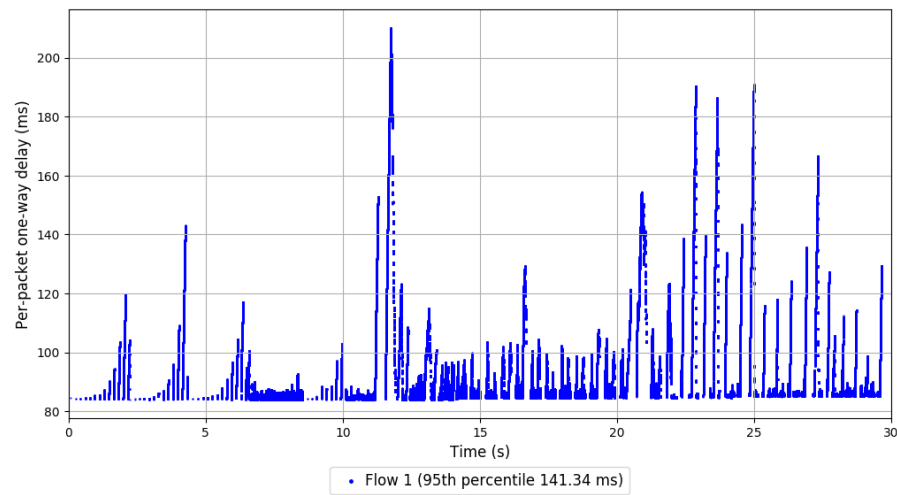
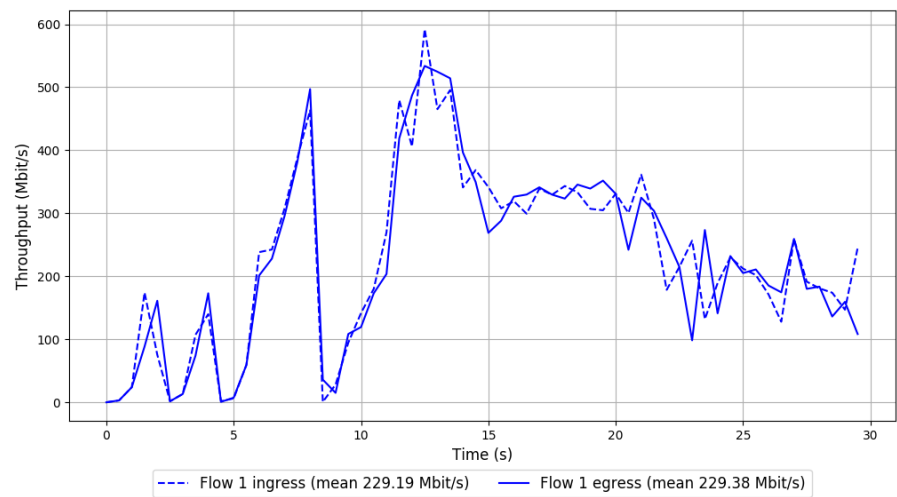
-- Flow 1:

Average throughput: 229.38 Mbit/s

95th percentile per-packet one-way delay: 141.341 ms

Loss rate: 1.25%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-08 20:02:40

End at: 2018-01-08 20:03:10

Below is generated by plot.py at 2018-01-08 23:20:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.03 Mbit/s

95th percentile per-packet one-way delay: 133.589 ms

Loss rate: 1.39%

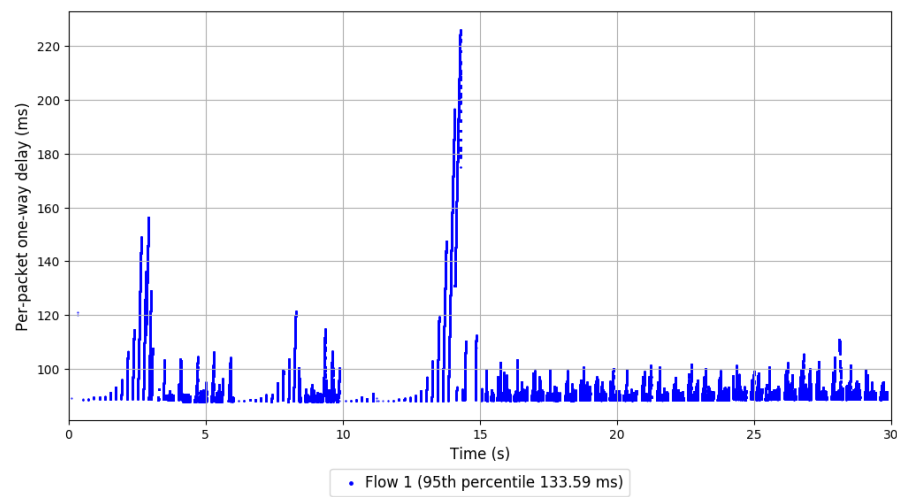
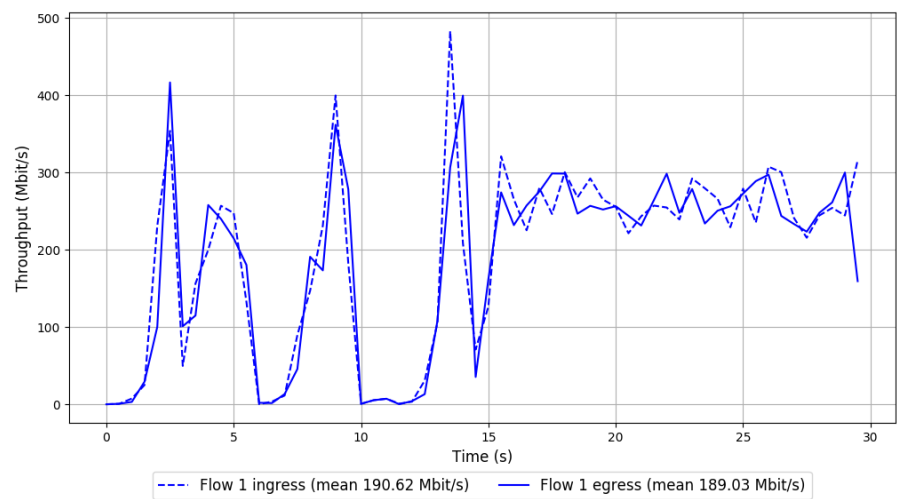
-- Flow 1:

Average throughput: 189.03 Mbit/s

95th percentile per-packet one-way delay: 133.589 ms

Loss rate: 1.39%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-08 20:14:38

End at: 2018-01-08 20:15:08

Below is generated by plot.py at 2018-01-08 23:20:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 244.61 Mbit/s

95th percentile per-packet one-way delay: 122.241 ms

Loss rate: 0.35%

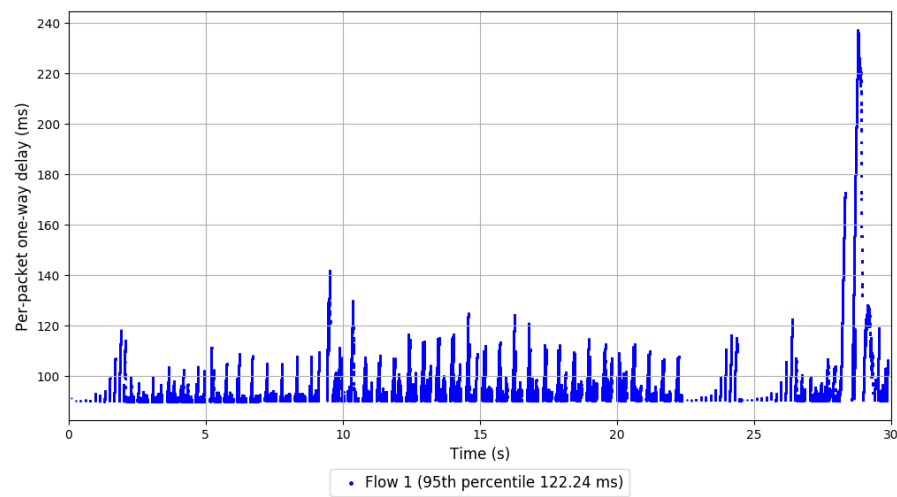
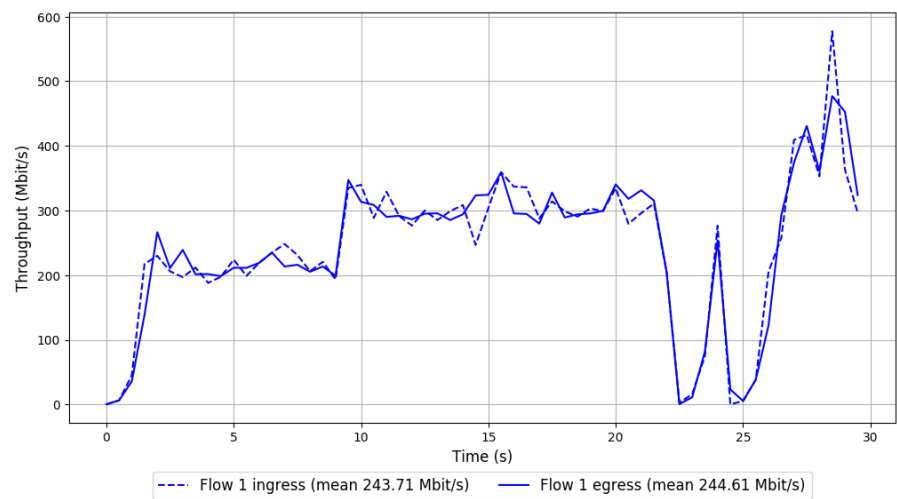
-- Flow 1:

Average throughput: 244.61 Mbit/s

95th percentile per-packet one-way delay: 122.241 ms

Loss rate: 0.35%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-08 20:26:26

End at: 2018-01-08 20:26:56

Below is generated by plot.py at 2018-01-08 23:20:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 165.23 Mbit/s

95th percentile per-packet one-way delay: 139.936 ms

Loss rate: 0.78%

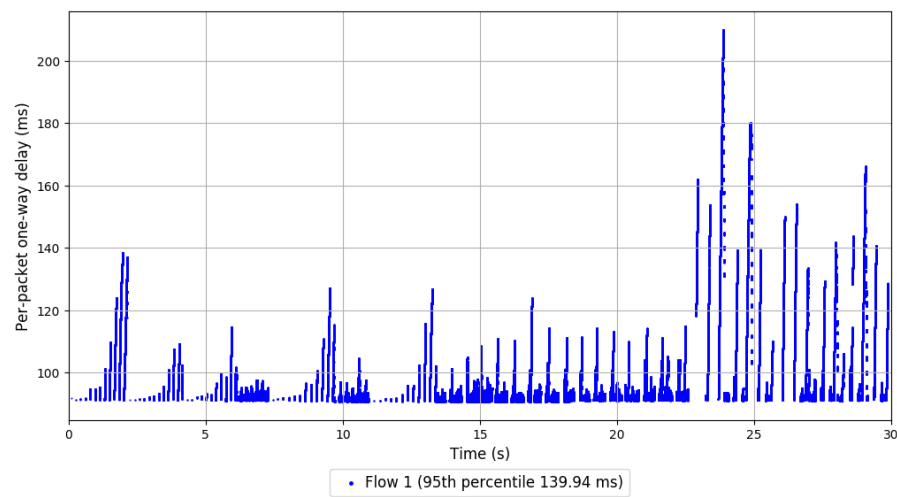
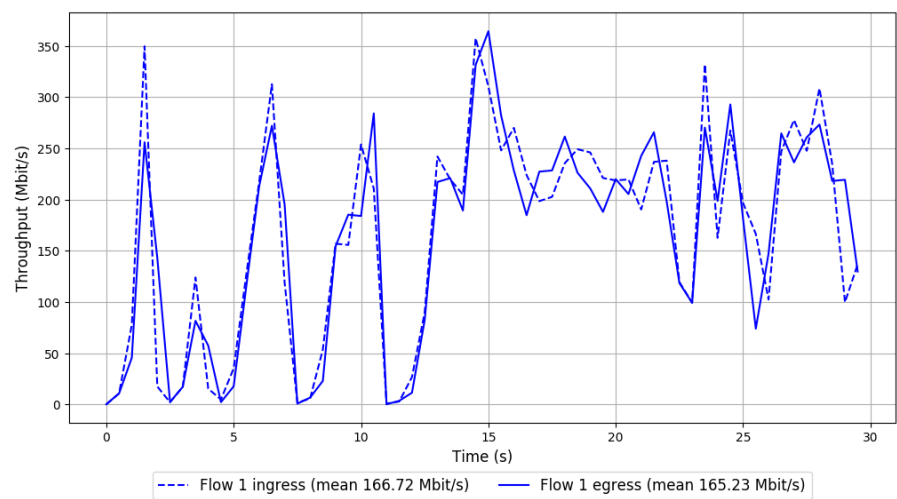
-- Flow 1:

Average throughput: 165.23 Mbit/s

95th percentile per-packet one-way delay: 139.936 ms

Loss rate: 0.78%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-08 20:38:40

End at: 2018-01-08 20:39:10

Below is generated by plot.py at 2018-01-08 23:22:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 250.18 Mbit/s

95th percentile per-packet one-way delay: 143.056 ms

Loss rate: 0.86%

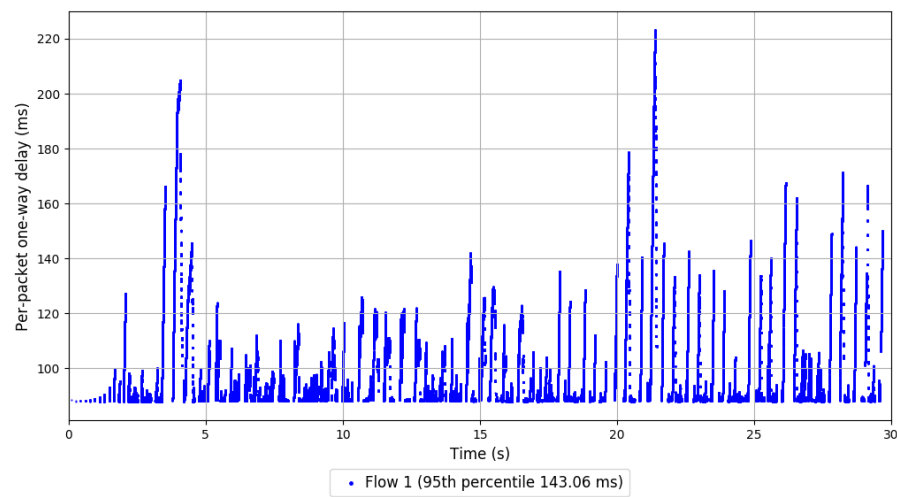
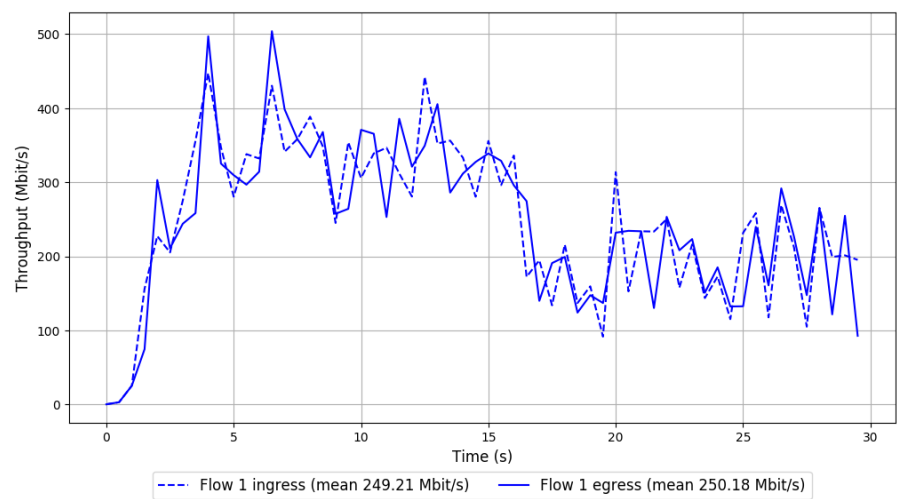
-- Flow 1:

Average throughput: 250.18 Mbit/s

95th percentile per-packet one-way delay: 143.056 ms

Loss rate: 0.86%

Run 10: Report of Verus — Data Link

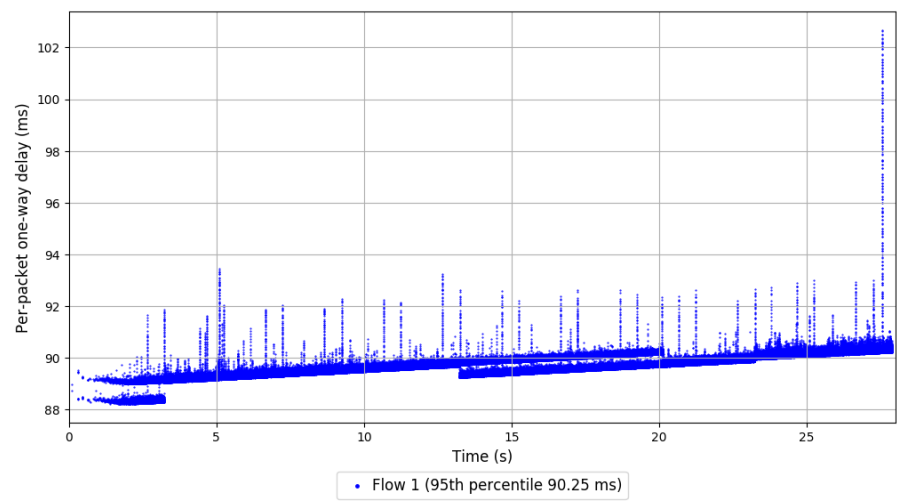
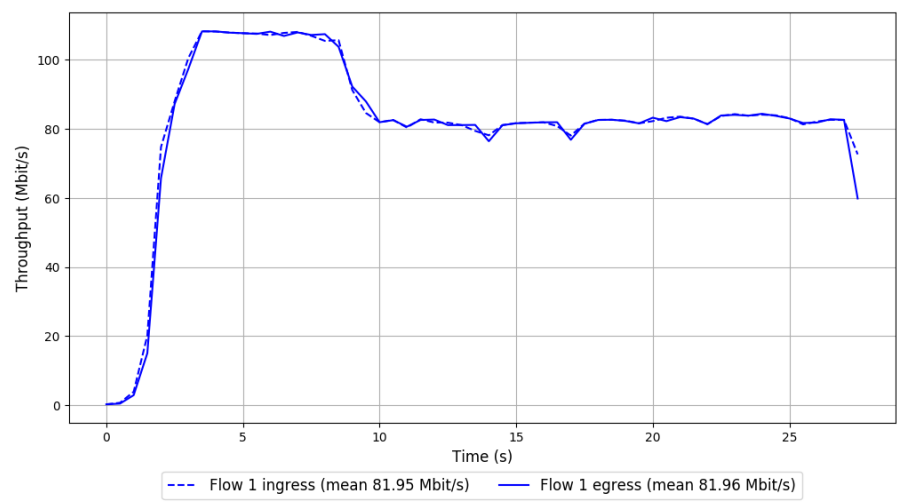


```
Run 1: Statistics of Copa

Start at: 2018-01-08 19:00:02
End at: 2018-01-08 19:00:32

# Below is generated by plot.py at 2018-01-08 23:22:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.96 Mbit/s
95th percentile per-packet one-way delay: 90.253 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 81.96 Mbit/s
95th percentile per-packet one-way delay: 90.253 ms
Loss rate: 0.60%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-08 19:12:10

End at: 2018-01-08 19:12:40

Below is generated by plot.py at 2018-01-08 23:22:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.17 Mbit/s

95th percentile per-packet one-way delay: 91.913 ms

Loss rate: 0.23%

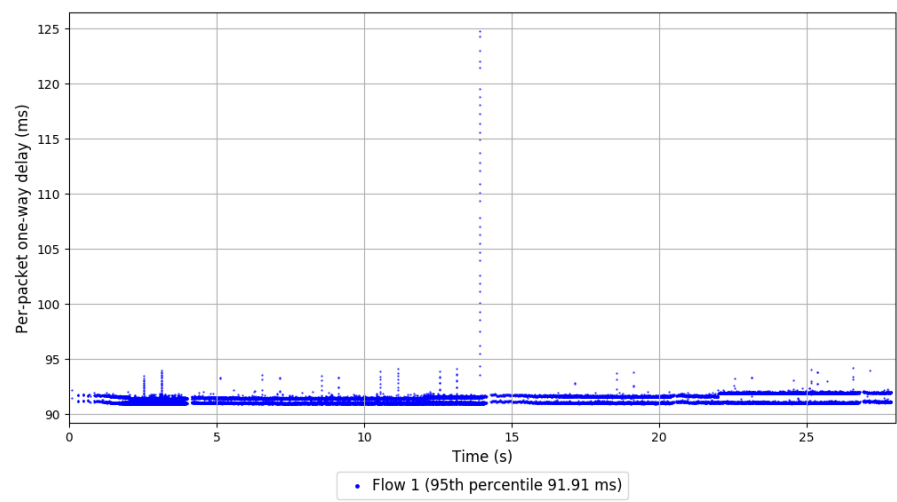
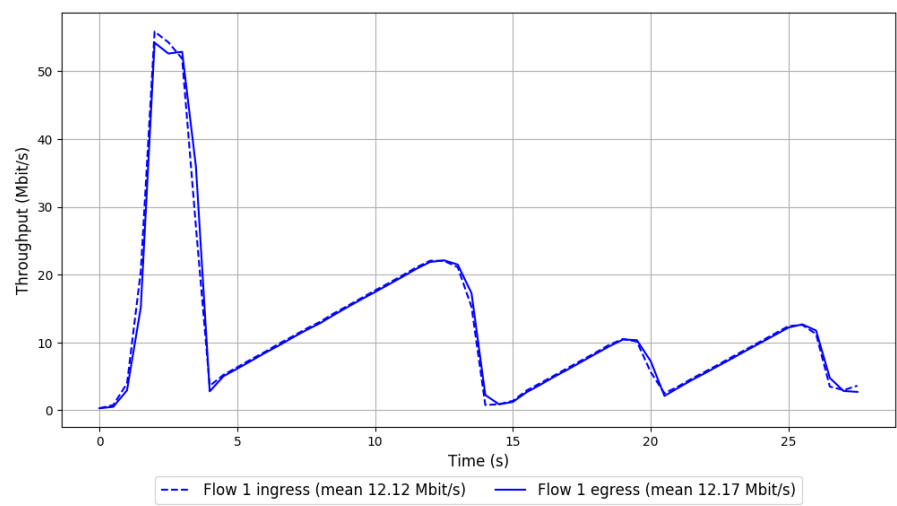
-- Flow 1:

Average throughput: 12.17 Mbit/s

95th percentile per-packet one-way delay: 91.913 ms

Loss rate: 0.23%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-08 19:24:24

End at: 2018-01-08 19:24:54

Below is generated by plot.py at 2018-01-08 23:22:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.61 Mbit/s

95th percentile per-packet one-way delay: 88.584 ms

Loss rate: 0.59%

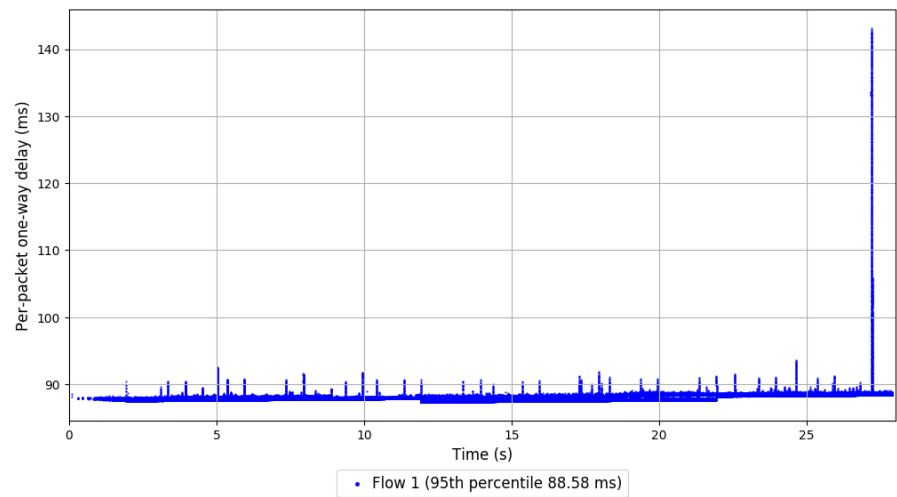
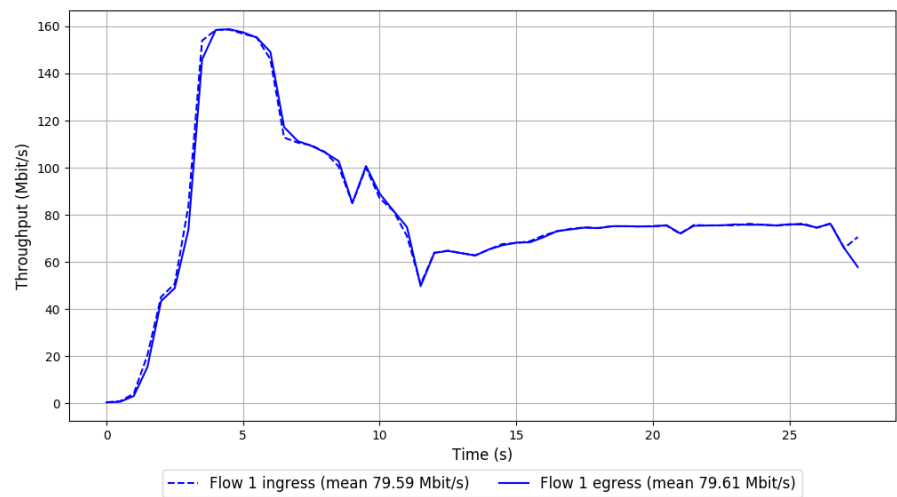
-- Flow 1:

Average throughput: 79.61 Mbit/s

95th percentile per-packet one-way delay: 88.584 ms

Loss rate: 0.59%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-08 19:36:15

End at: 2018-01-08 19:36:45

Below is generated by plot.py at 2018-01-08 23:22:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.46 Mbit/s

95th percentile per-packet one-way delay: 87.972 ms

Loss rate: 0.20%

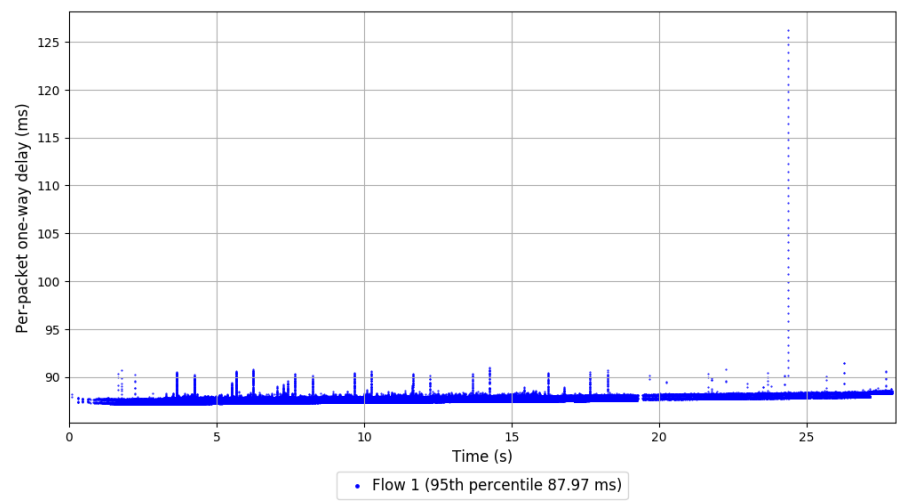
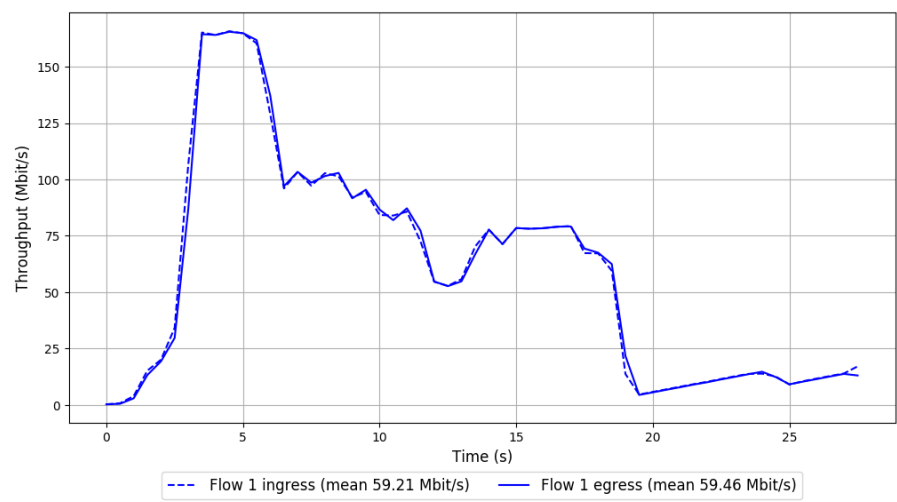
-- Flow 1:

Average throughput: 59.46 Mbit/s

95th percentile per-packet one-way delay: 87.972 ms

Loss rate: 0.20%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-08 19:48:40

End at: 2018-01-08 19:49:10

Below is generated by plot.py at 2018-01-08 23:22:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.68 Mbit/s

95th percentile per-packet one-way delay: 85.066 ms

Loss rate: 0.63%

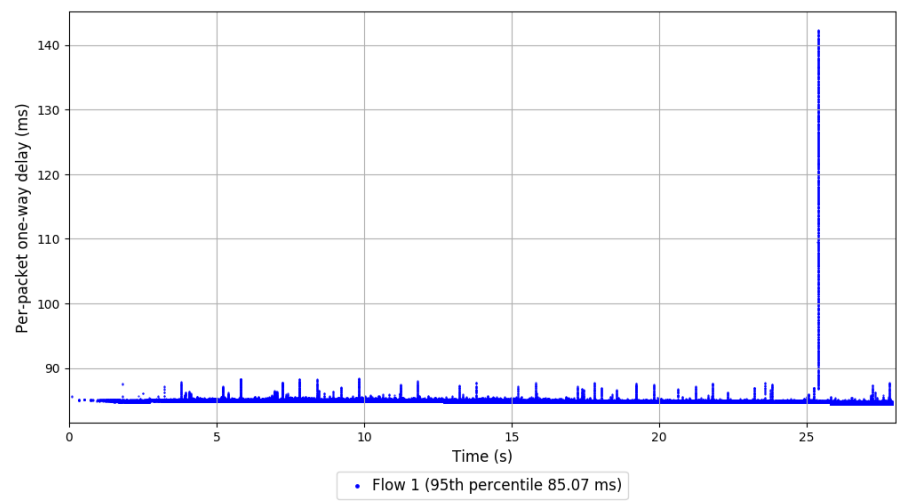
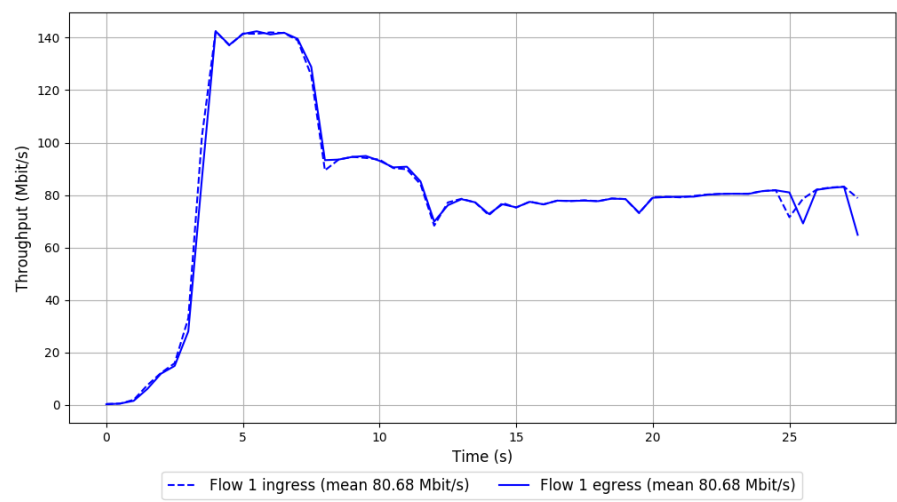
-- Flow 1:

Average throughput: 80.68 Mbit/s

95th percentile per-packet one-way delay: 85.066 ms

Loss rate: 0.63%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-08 20:00:36

End at: 2018-01-08 20:01:06

Below is generated by plot.py at 2018-01-08 23:22:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.46 Mbit/s

95th percentile per-packet one-way delay: 87.448 ms

Loss rate: 0.05%

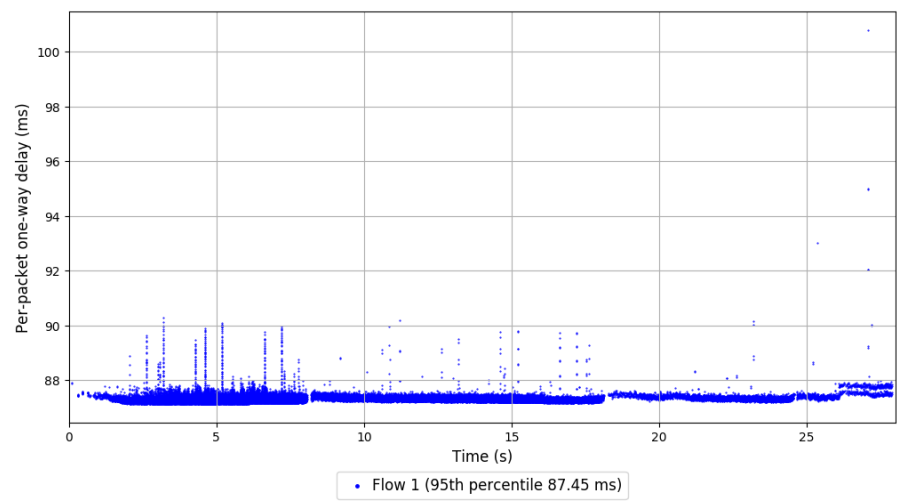
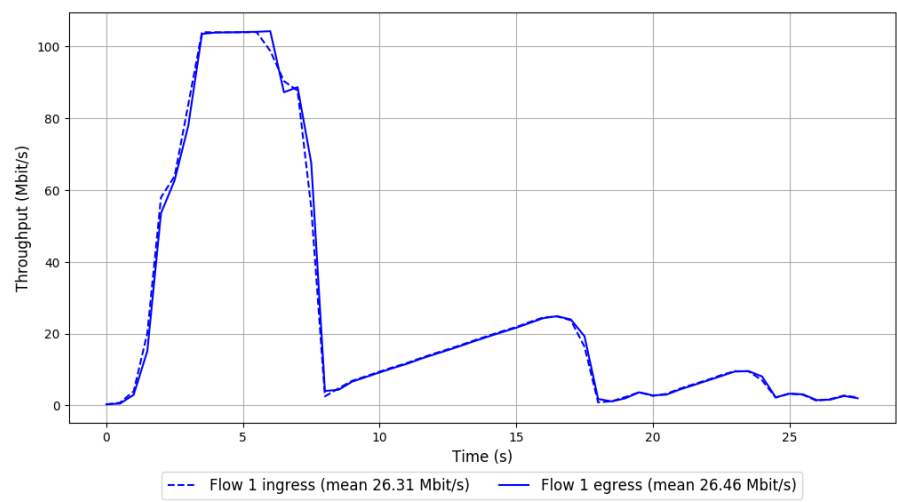
-- Flow 1:

Average throughput: 26.46 Mbit/s

95th percentile per-packet one-way delay: 87.448 ms

Loss rate: 0.05%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-08 20:12:30

End at: 2018-01-08 20:13:00

Below is generated by plot.py at 2018-01-08 23:22:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.55 Mbit/s

95th percentile per-packet one-way delay: 90.001 ms

Loss rate: 0.72%

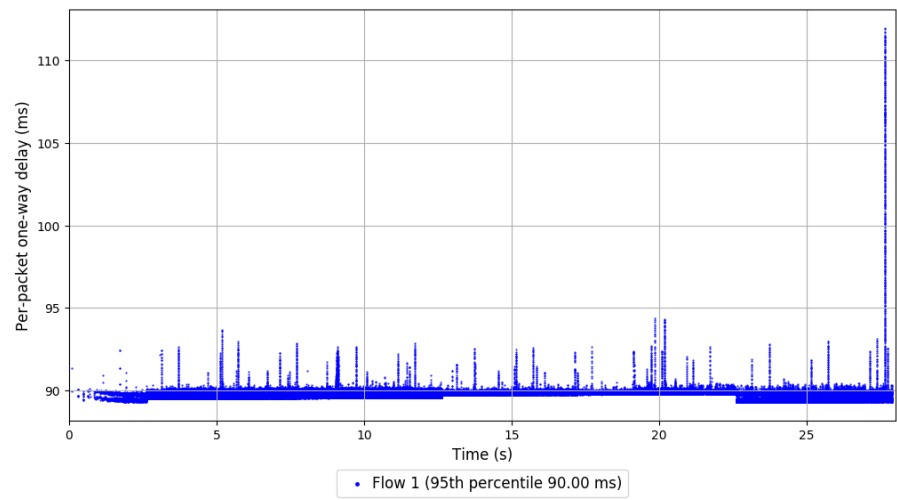
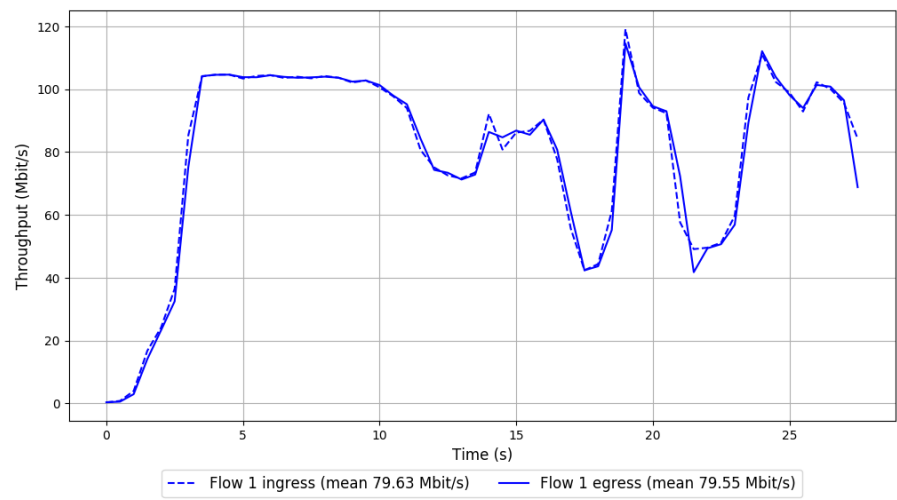
-- Flow 1:

Average throughput: 79.55 Mbit/s

95th percentile per-packet one-way delay: 90.001 ms

Loss rate: 0.72%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-08 20:24:21

End at: 2018-01-08 20:24:51

Below is generated by plot.py at 2018-01-08 23:22:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.65 Mbit/s

95th percentile per-packet one-way delay: 92.089 ms

Loss rate: 0.86%

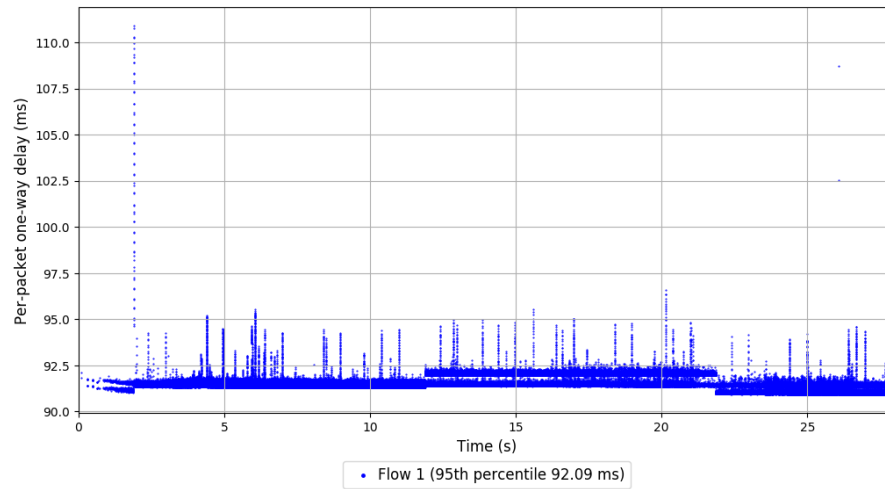
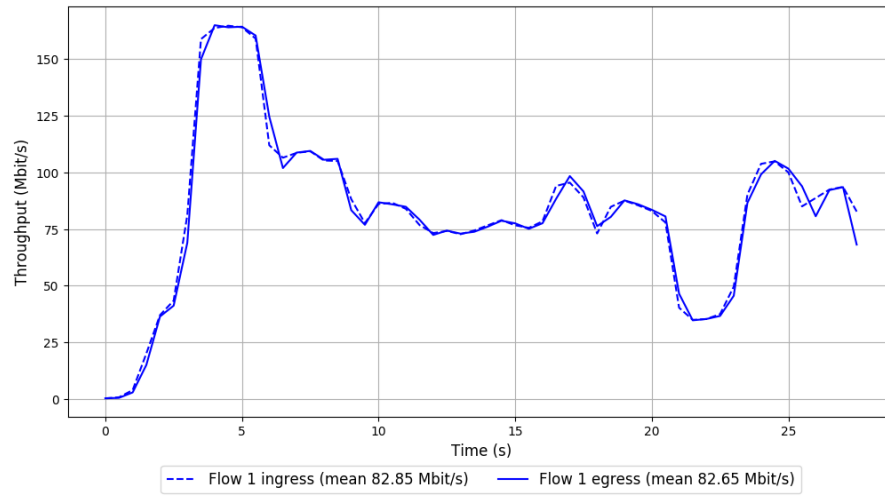
-- Flow 1:

Average throughput: 82.65 Mbit/s

95th percentile per-packet one-way delay: 92.089 ms

Loss rate: 0.86%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-08 20:36:32

End at: 2018-01-08 20:37:02

Below is generated by plot.py at 2018-01-08 23:22:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.20 Mbit/s

95th percentile per-packet one-way delay: 88.296 ms

Loss rate: 0.73%

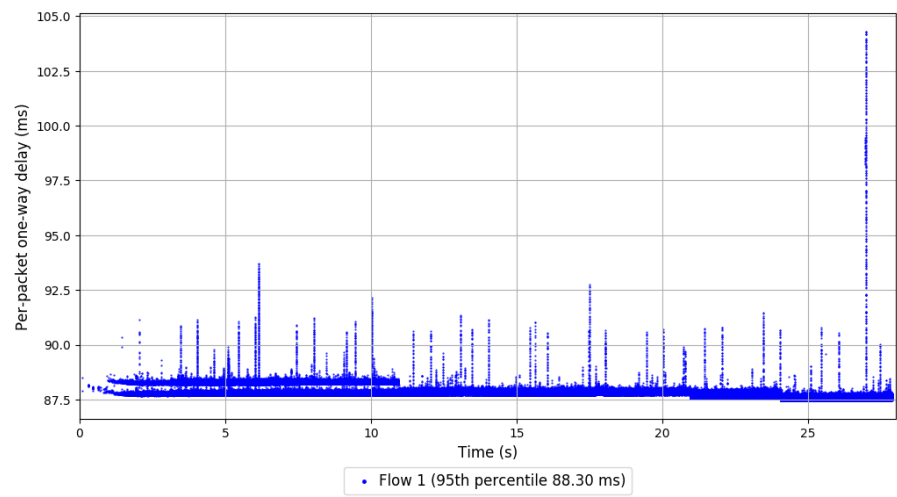
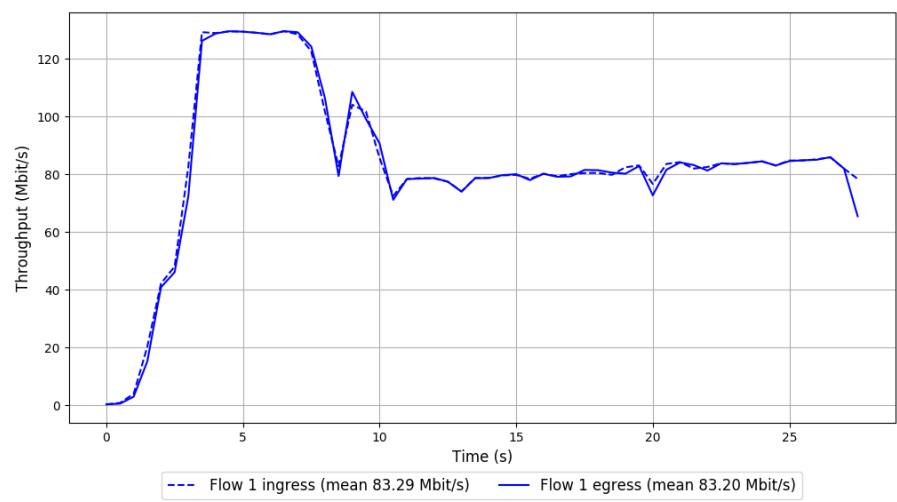
-- Flow 1:

Average throughput: 83.20 Mbit/s

95th percentile per-packet one-way delay: 88.296 ms

Loss rate: 0.73%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-08 20:48:51

End at: 2018-01-08 20:49:21

Below is generated by plot.py at 2018-01-08 23:22:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.90 Mbit/s

95th percentile per-packet one-way delay: 89.054 ms

Loss rate: 0.59%

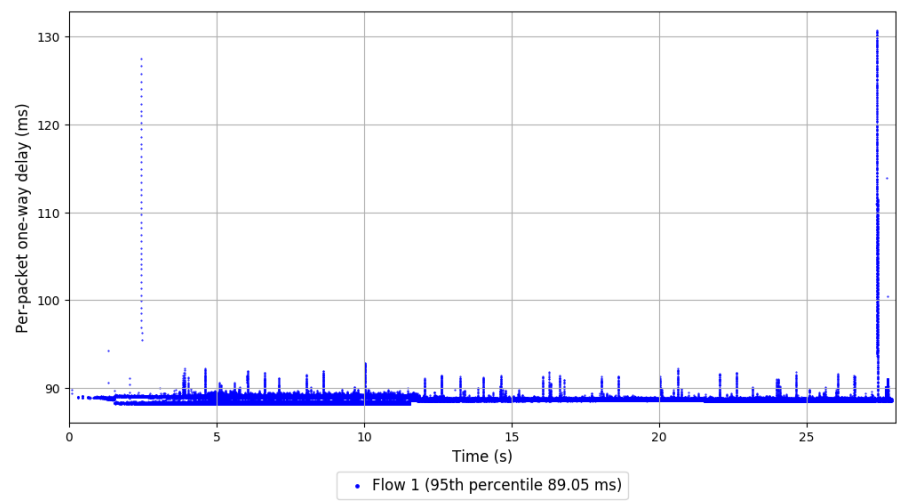
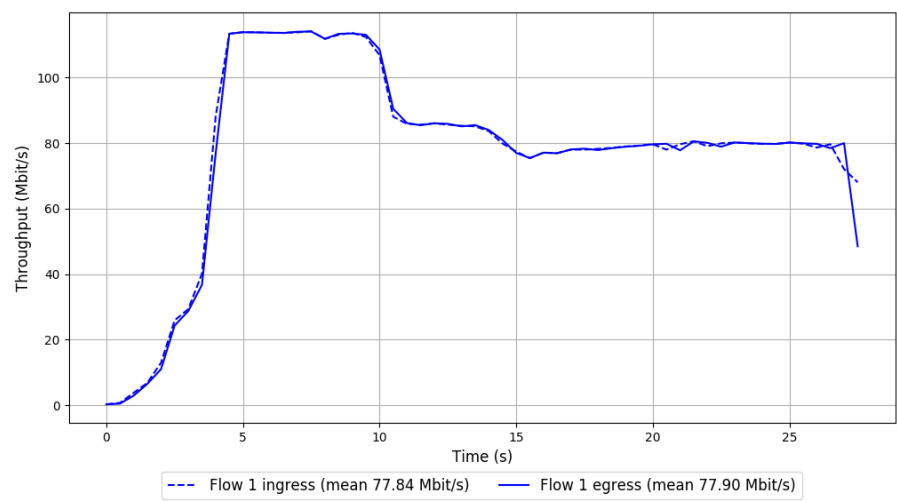
-- Flow 1:

Average throughput: 77.90 Mbit/s

95th percentile per-packet one-way delay: 89.054 ms

Loss rate: 0.59%

Run 10: Report of Copa — Data Link

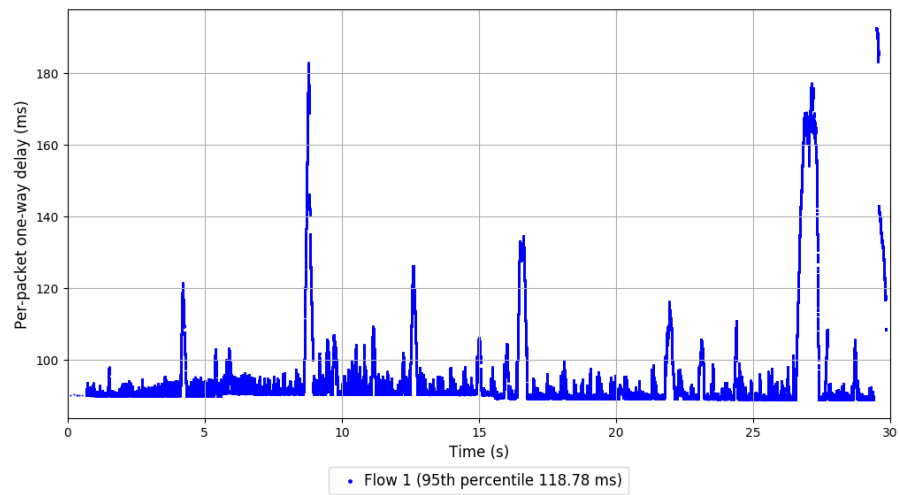
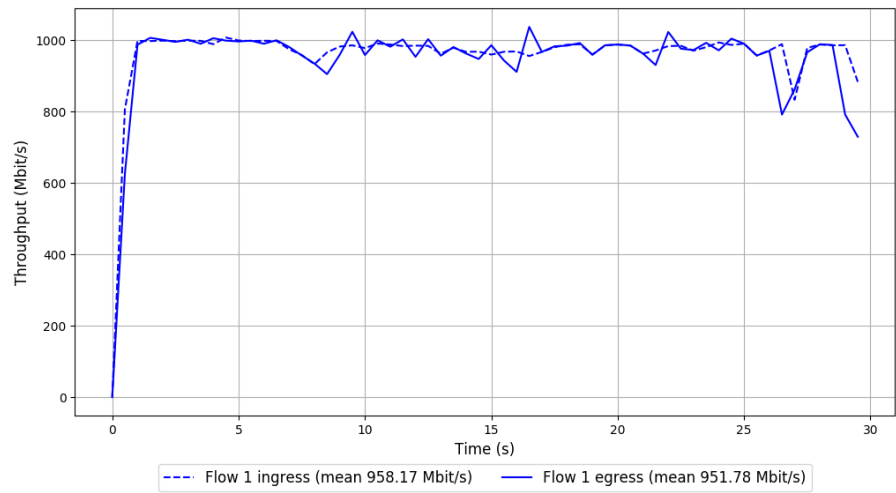


```
Run 1: Statistics of FillP

Start at: 2018-01-08 18:54:29
End at: 2018-01-08 18:54:59

# Below is generated by plot.py at 2018-01-08 23:36:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 951.78 Mbit/s
95th percentile per-packet one-way delay: 118.778 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 951.78 Mbit/s
95th percentile per-packet one-way delay: 118.778 ms
Loss rate: 1.33%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-08 19:06:13

End at: 2018-01-08 19:06:43

Below is generated by plot.py at 2018-01-08 23:37:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 976.70 Mbit/s

95th percentile per-packet one-way delay: 106.357 ms

Loss rate: 0.63%

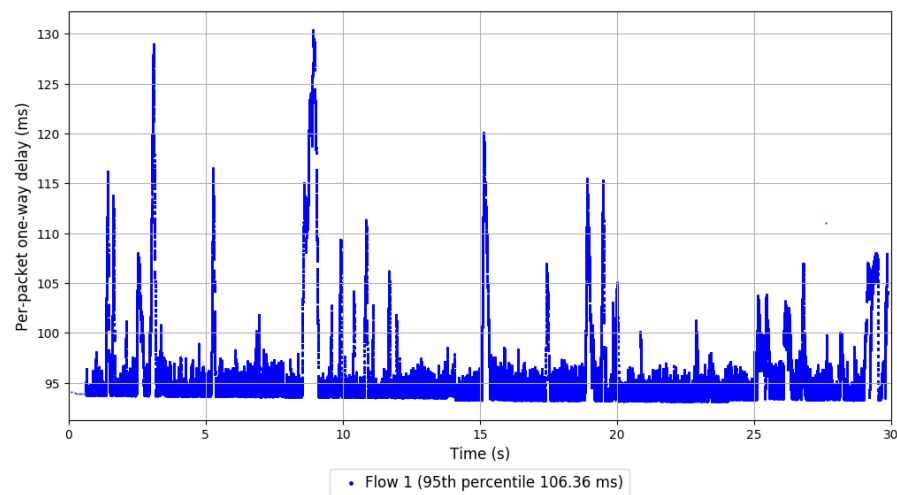
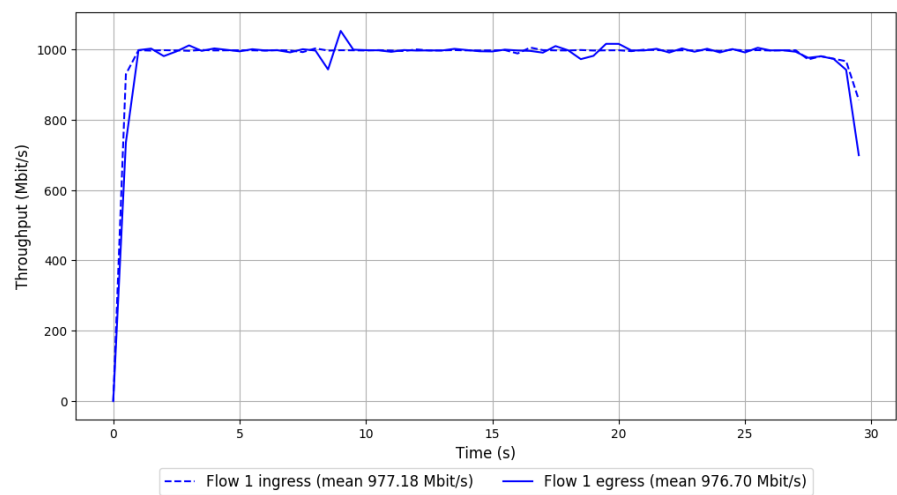
-- Flow 1:

Average throughput: 976.70 Mbit/s

95th percentile per-packet one-way delay: 106.357 ms

Loss rate: 0.63%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-08 19:18:25

End at: 2018-01-08 19:18:55

Below is generated by plot.py at 2018-01-08 23:37:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 961.13 Mbit/s

95th percentile per-packet one-way delay: 106.756 ms

Loss rate: 1.05%

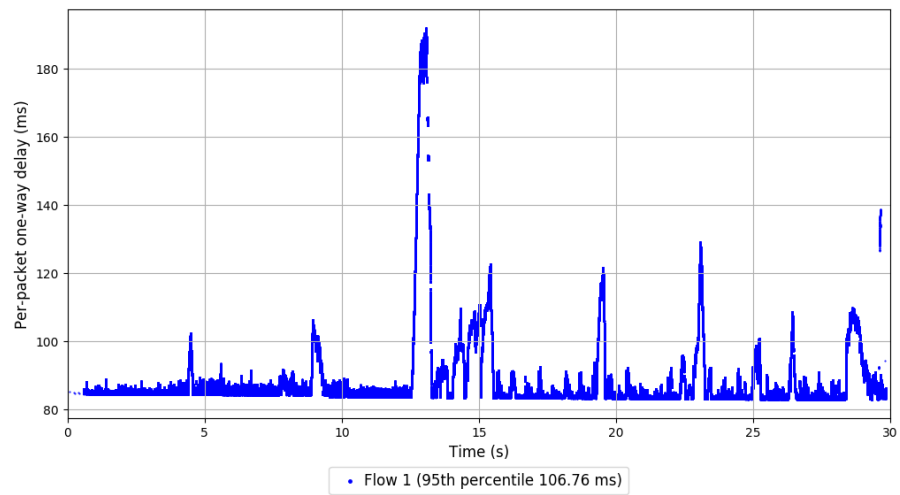
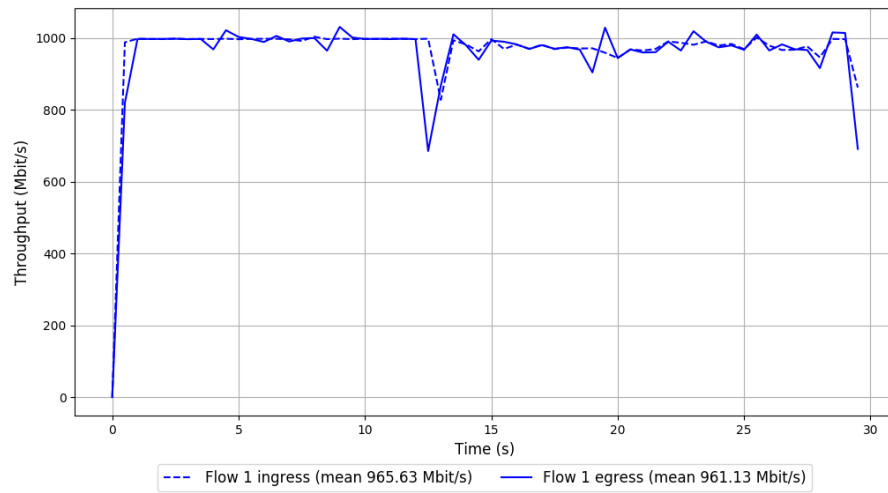
-- Flow 1:

Average throughput: 961.13 Mbit/s

95th percentile per-packet one-way delay: 106.756 ms

Loss rate: 1.05%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-08 19:30:38

End at: 2018-01-08 19:31:08

Below is generated by plot.py at 2018-01-08 23:37:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 969.55 Mbit/s

95th percentile per-packet one-way delay: 113.143 ms

Loss rate: 0.77%

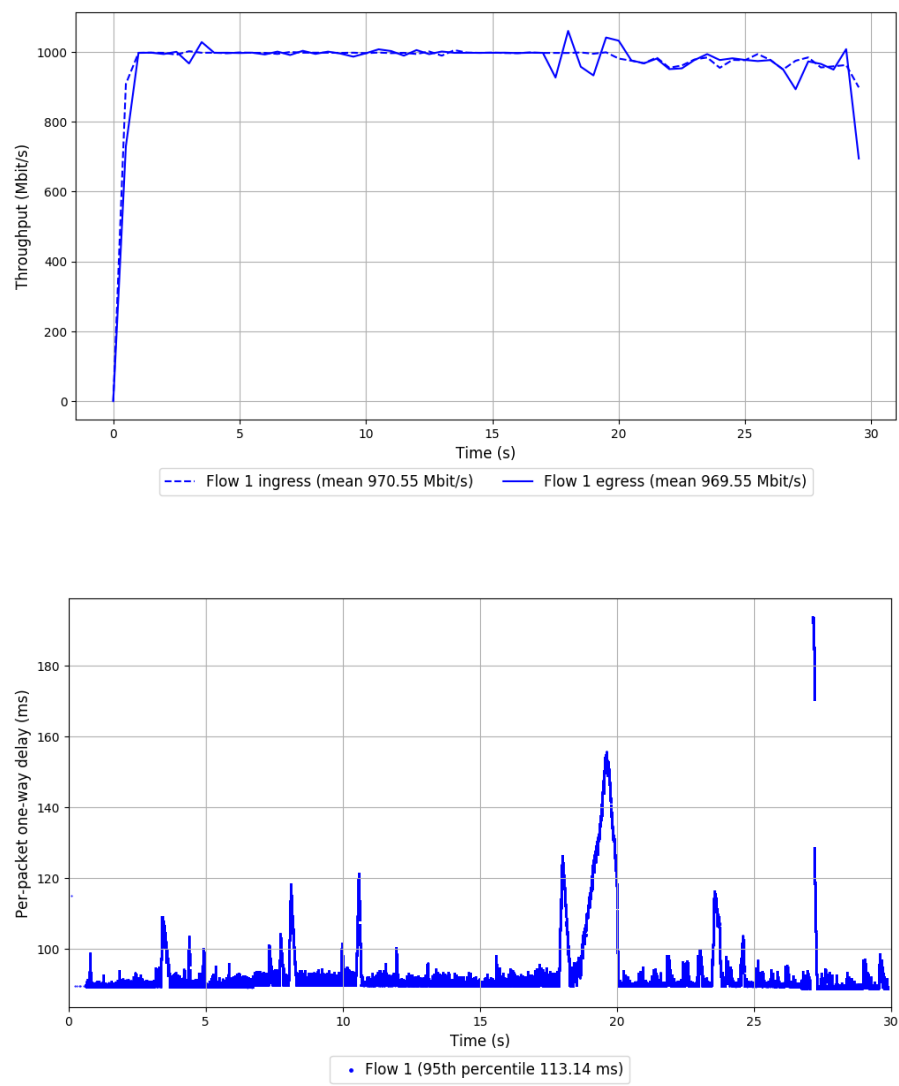
-- Flow 1:

Average throughput: 969.55 Mbit/s

95th percentile per-packet one-way delay: 113.143 ms

Loss rate: 0.77%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-08 19:42:37

End at: 2018-01-08 19:43:07

Below is generated by plot.py at 2018-01-08 23:37:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 969.13 Mbit/s

95th percentile per-packet one-way delay: 113.338 ms

Loss rate: 0.57%

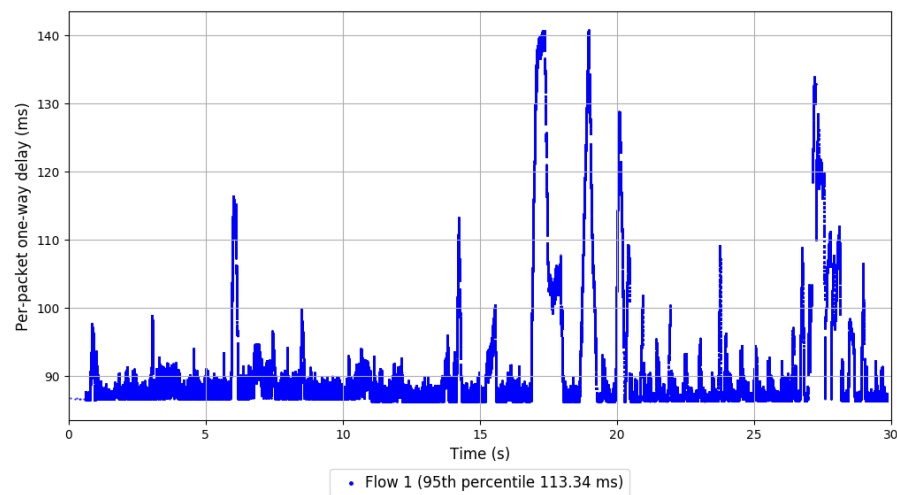
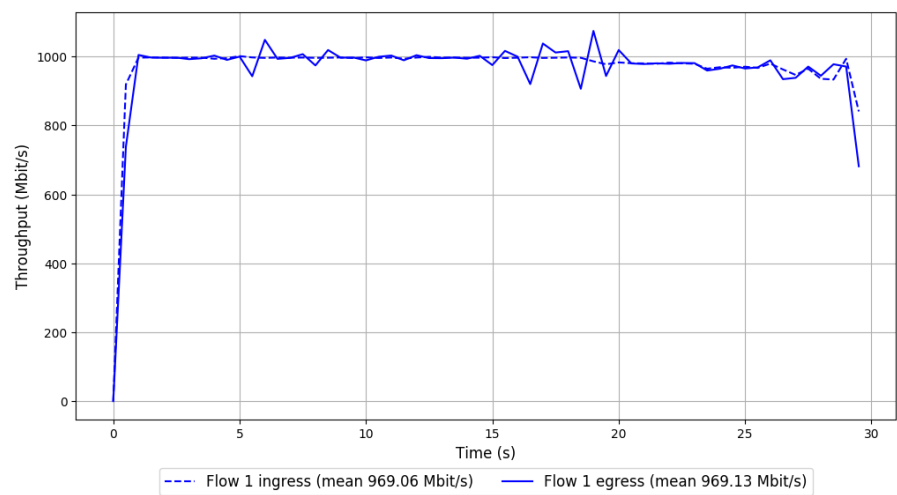
-- Flow 1:

Average throughput: 969.13 Mbit/s

95th percentile per-packet one-way delay: 113.338 ms

Loss rate: 0.57%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-08 19:55:02

End at: 2018-01-08 19:55:32

Below is generated by plot.py at 2018-01-08 23:38:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 963.39 Mbit/s

95th percentile per-packet one-way delay: 94.319 ms

Loss rate: 0.60%

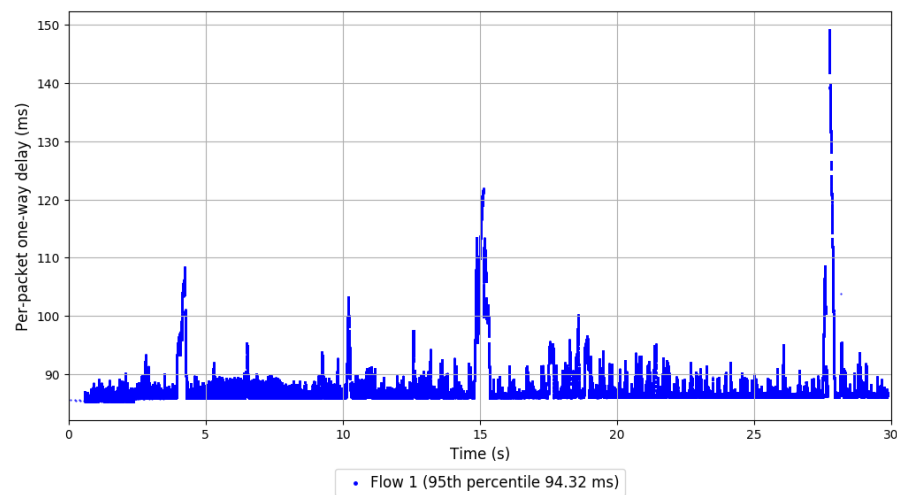
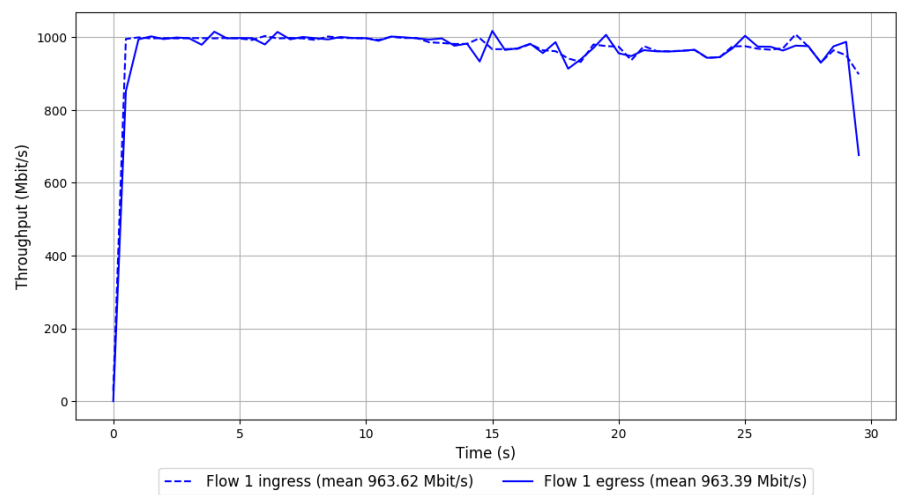
-- Flow 1:

Average throughput: 963.39 Mbit/s

95th percentile per-packet one-way delay: 94.319 ms

Loss rate: 0.60%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-08 20:06:26

End at: 2018-01-08 20:06:56

Below is generated by plot.py at 2018-01-08 23:38:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 960.49 Mbit/s

95th percentile per-packet one-way delay: 106.427 ms

Loss rate: 0.81%

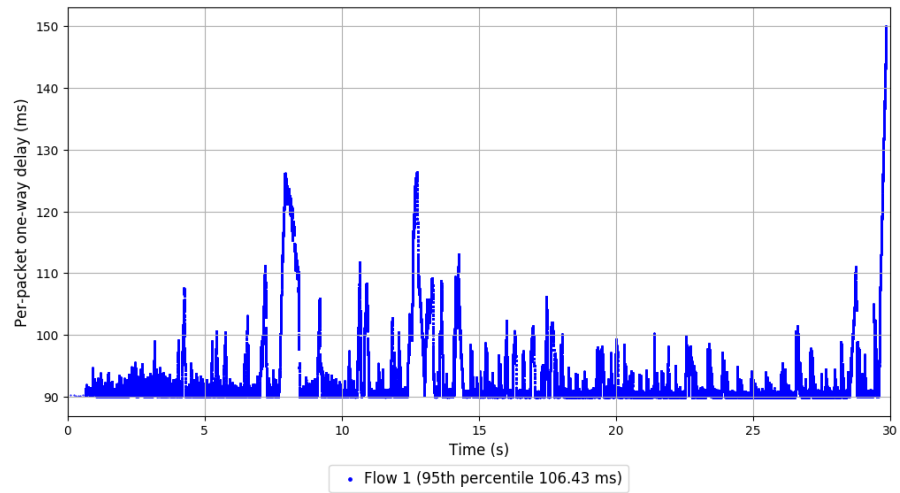
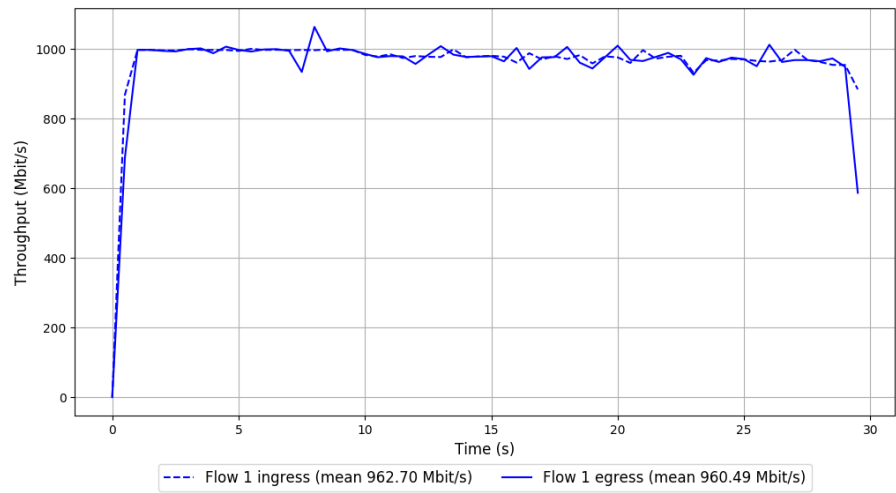
-- Flow 1:

Average throughput: 960.49 Mbit/s

95th percentile per-packet one-way delay: 106.427 ms

Loss rate: 0.81%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-08 20:18:51

End at: 2018-01-08 20:19:21

Below is generated by plot.py at 2018-01-08 23:38:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 952.93 Mbit/s

95th percentile per-packet one-way delay: 141.223 ms

Loss rate: 1.01%

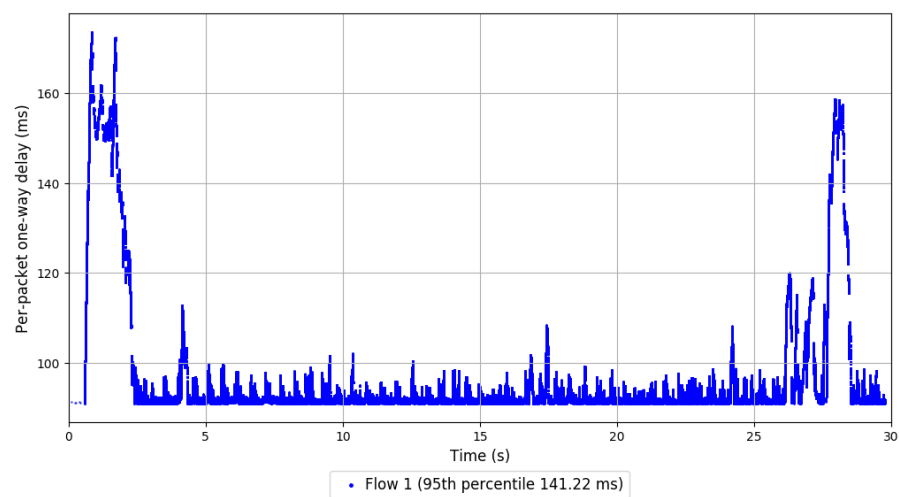
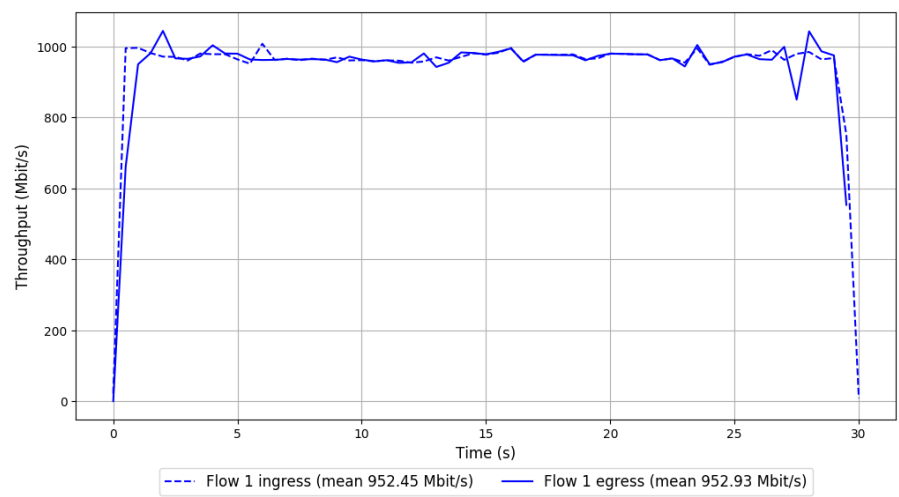
-- Flow 1:

Average throughput: 952.93 Mbit/s

95th percentile per-packet one-way delay: 141.223 ms

Loss rate: 1.01%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-08 20:30:31

End at: 2018-01-08 20:31:01

Below is generated by plot.py at 2018-01-08 23:43:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 949.47 Mbit/s

95th percentile per-packet one-way delay: 112.007 ms

Loss rate: 0.61%

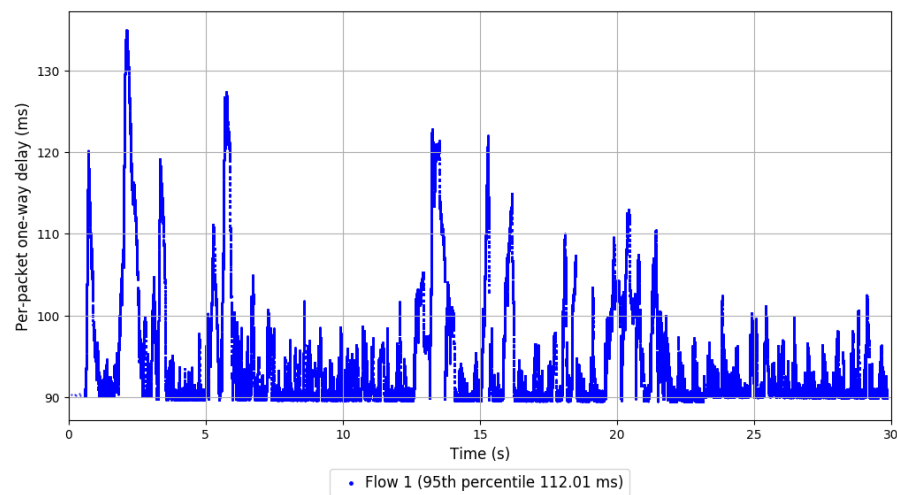
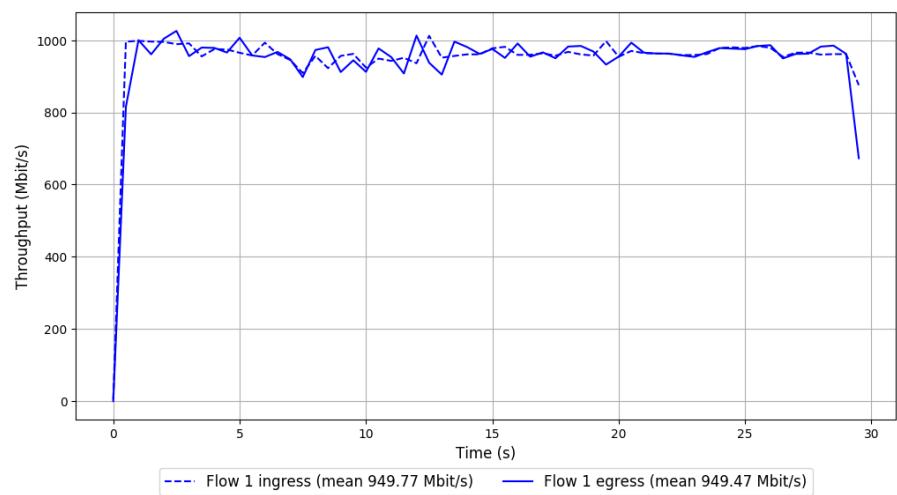
-- Flow 1:

Average throughput: 949.47 Mbit/s

95th percentile per-packet one-way delay: 112.007 ms

Loss rate: 0.61%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-08 20:42:49

End at: 2018-01-08 20:43:19

Below is generated by plot.py at 2018-01-08 23:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 963.41 Mbit/s

95th percentile per-packet one-way delay: 98.648 ms

Loss rate: 0.54%

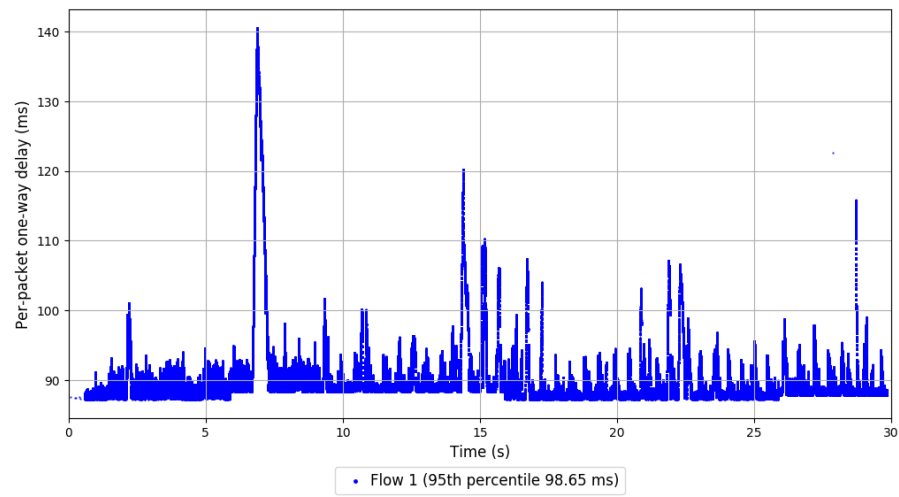
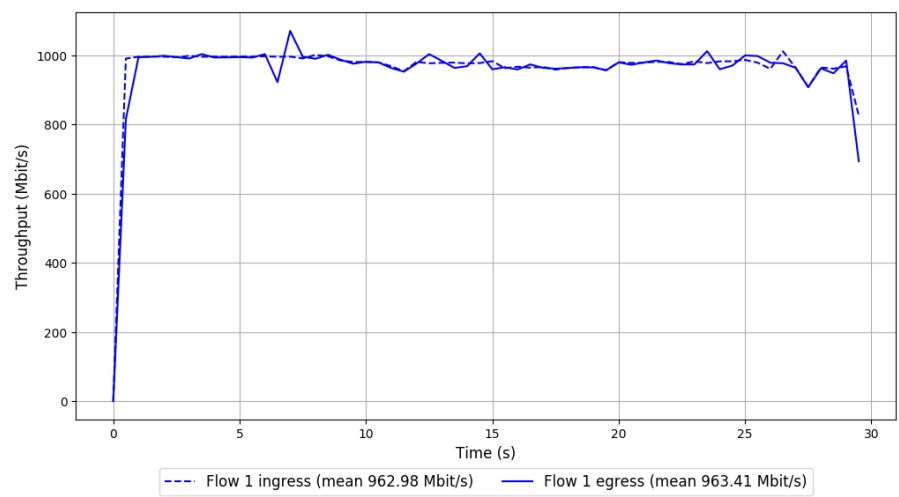
-- Flow 1:

Average throughput: 963.41 Mbit/s

95th percentile per-packet one-way delay: 98.648 ms

Loss rate: 0.54%

Run 10: Report of FillP — Data Link

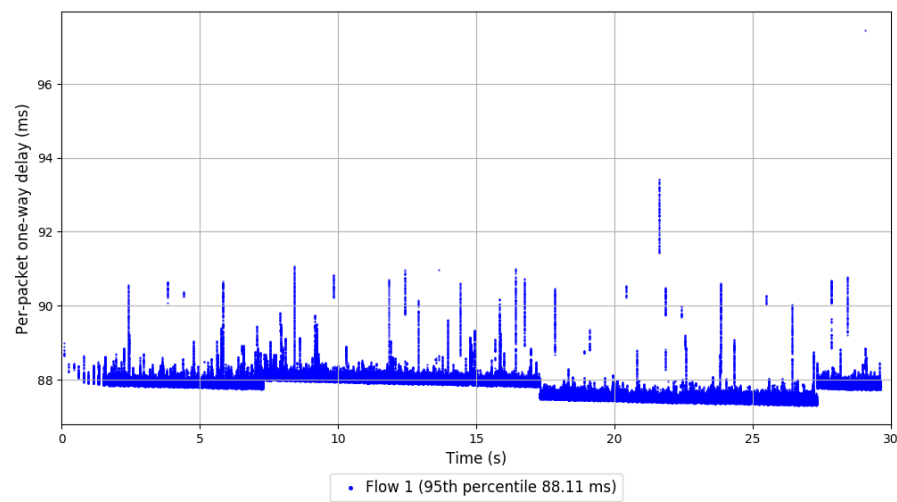
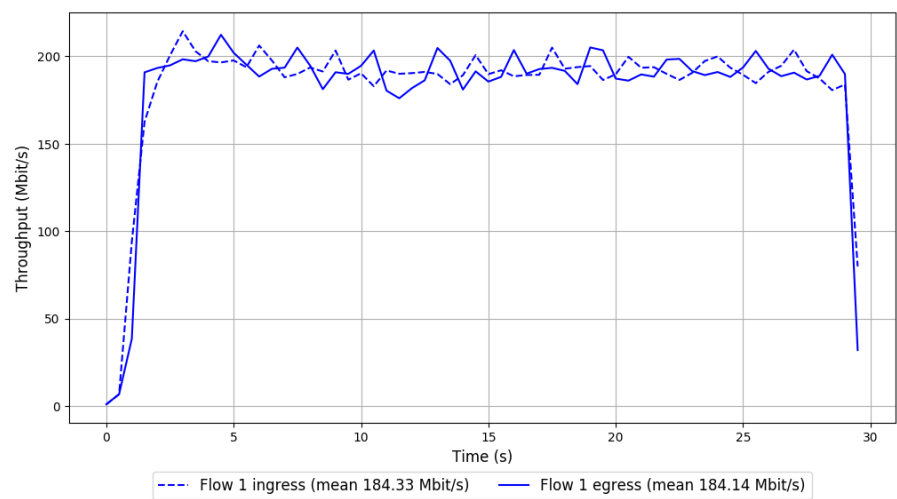


```
Run 1: Statistics of Indigo

Start at: 2018-01-08 18:55:47
End at: 2018-01-08 18:56:17

# Below is generated by plot.py at 2018-01-08 23:43:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.14 Mbit/s
95th percentile per-packet one-way delay: 88.115 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 184.14 Mbit/s
95th percentile per-packet one-way delay: 88.115 ms
Loss rate: 0.69%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-08 19:07:31

End at: 2018-01-08 19:08:01

Below is generated by plot.py at 2018-01-08 23:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.46 Mbit/s

95th percentile per-packet one-way delay: 92.680 ms

Loss rate: 0.33%

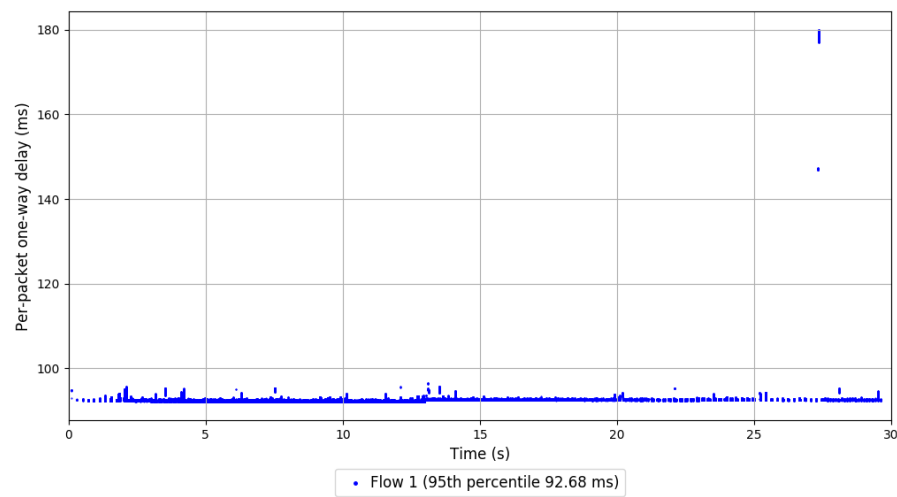
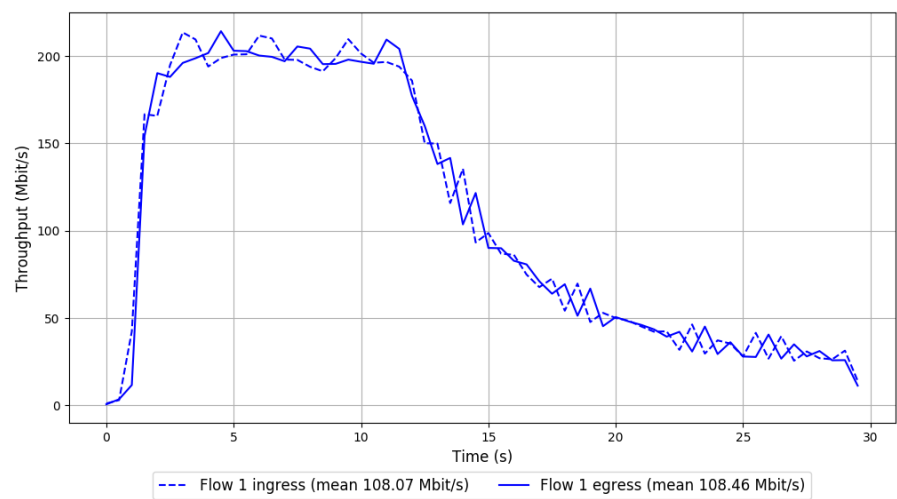
-- Flow 1:

Average throughput: 108.46 Mbit/s

95th percentile per-packet one-way delay: 92.680 ms

Loss rate: 0.33%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-08 19:19:43

End at: 2018-01-08 19:20:13

Below is generated by plot.py at 2018-01-08 23:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 149.42 Mbit/s

95th percentile per-packet one-way delay: 82.215 ms

Loss rate: 0.13%

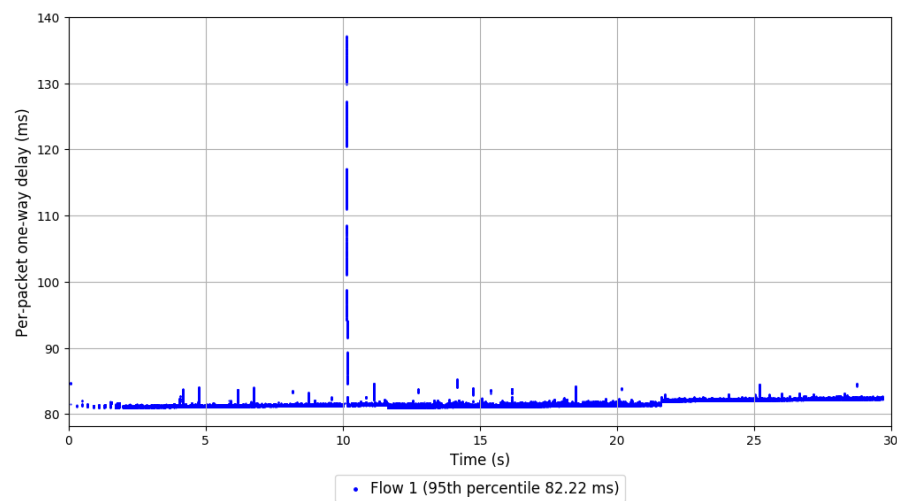
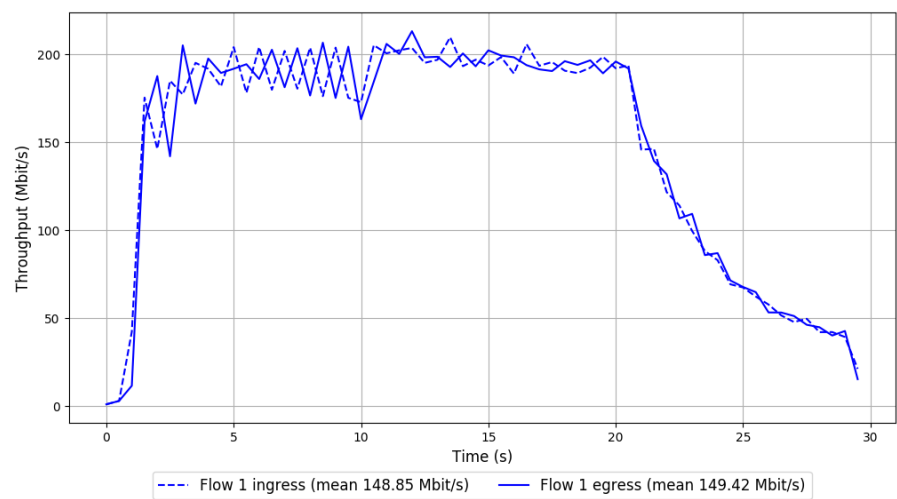
-- Flow 1:

Average throughput: 149.42 Mbit/s

95th percentile per-packet one-way delay: 82.215 ms

Loss rate: 0.13%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-08 19:31:56

End at: 2018-01-08 19:32:26

Below is generated by plot.py at 2018-01-08 23:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.00 Mbit/s

95th percentile per-packet one-way delay: 88.838 ms

Loss rate: 0.61%

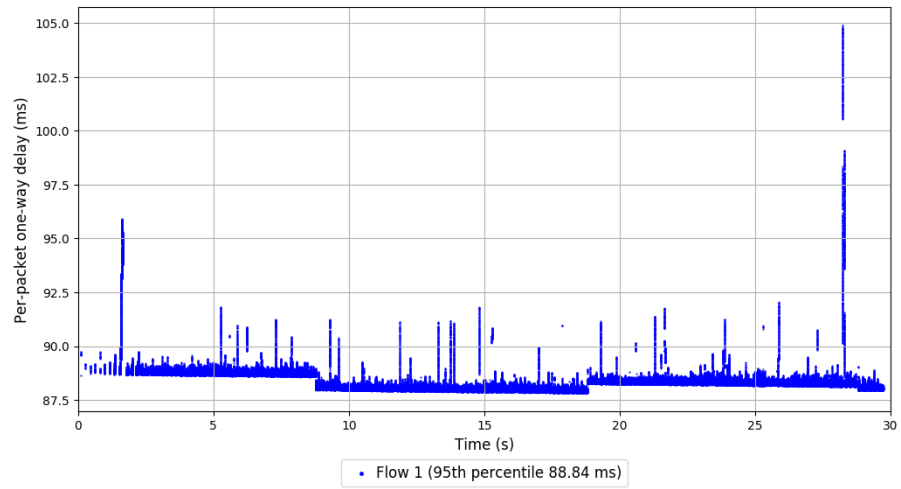
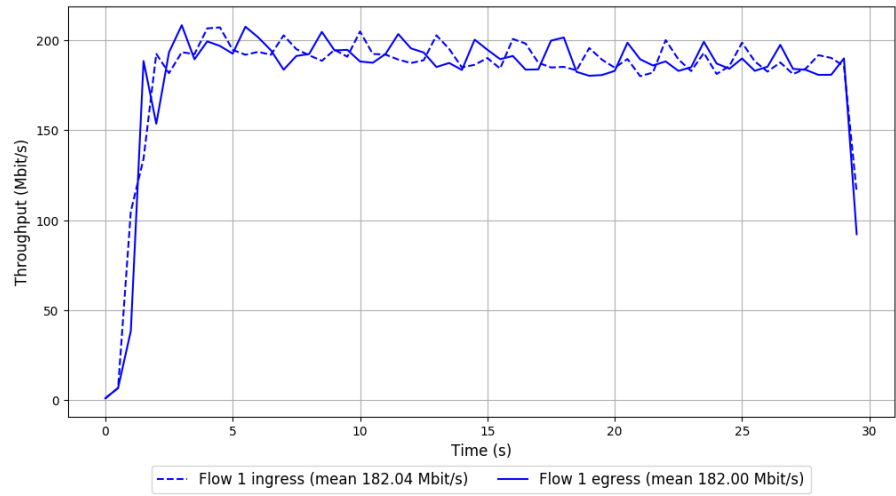
-- Flow 1:

Average throughput: 182.00 Mbit/s

95th percentile per-packet one-way delay: 88.838 ms

Loss rate: 0.61%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-08 19:43:55

End at: 2018-01-08 19:44:25

Below is generated by plot.py at 2018-01-08 23:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.74 Mbit/s

95th percentile per-packet one-way delay: 86.667 ms

Loss rate: 0.61%

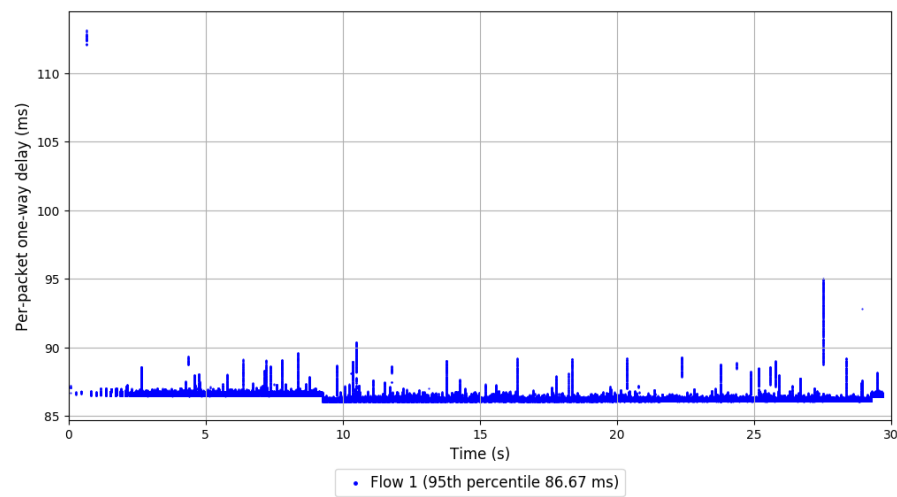
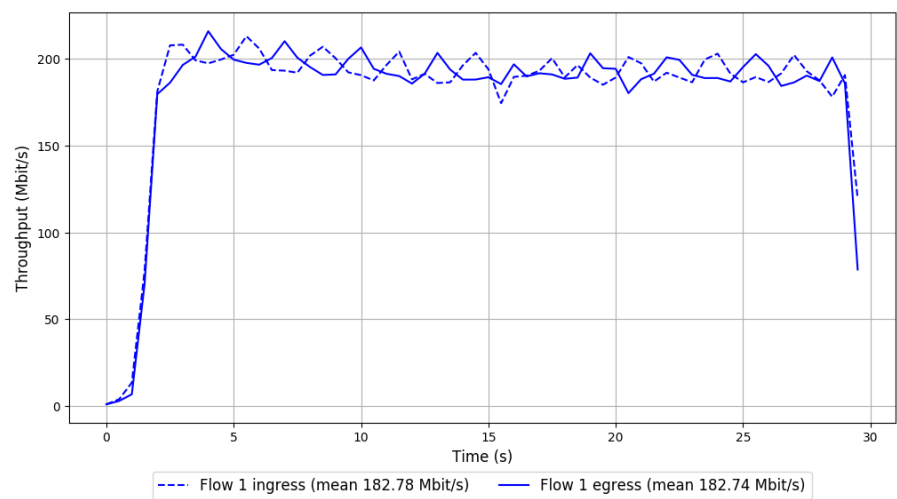
-- Flow 1:

Average throughput: 182.74 Mbit/s

95th percentile per-packet one-way delay: 86.667 ms

Loss rate: 0.61%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-08 19:56:22

End at: 2018-01-08 19:56:52

Below is generated by plot.py at 2018-01-08 23:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.70 Mbit/s

95th percentile per-packet one-way delay: 86.704 ms

Loss rate: 0.16%

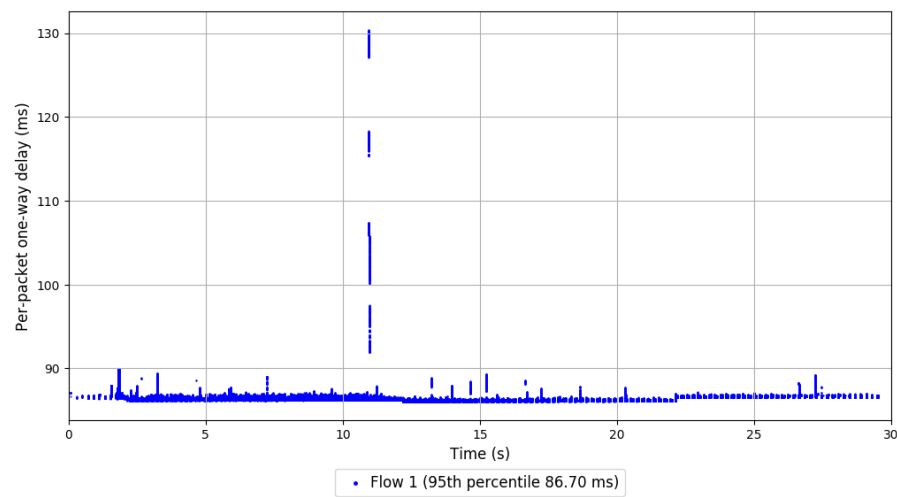
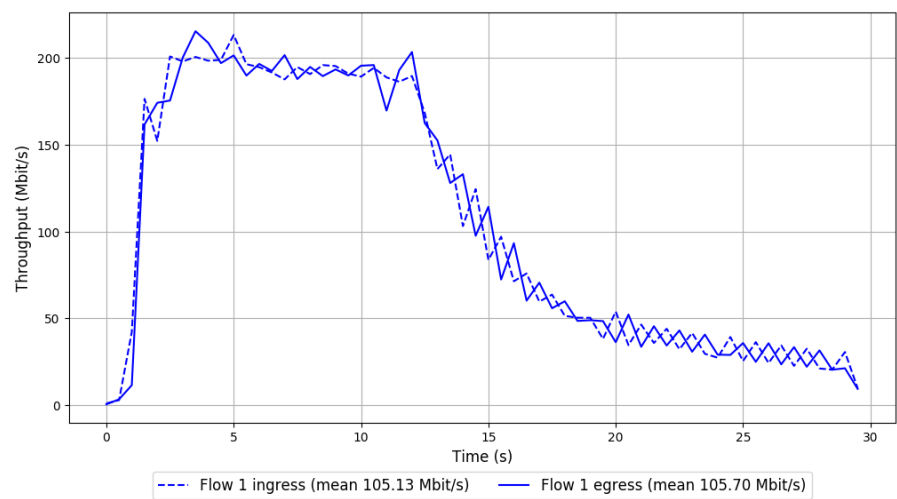
-- Flow 1:

Average throughput: 105.70 Mbit/s

95th percentile per-packet one-way delay: 86.704 ms

Loss rate: 0.16%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-08 20:07:44

End at: 2018-01-08 20:08:14

Below is generated by plot.py at 2018-01-08 23:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.89 Mbit/s

95th percentile per-packet one-way delay: 89.883 ms

Loss rate: 0.80%

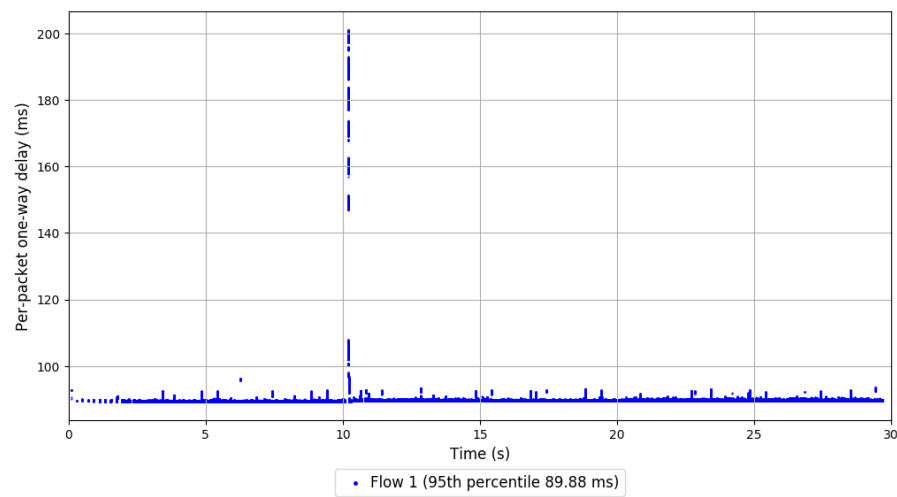
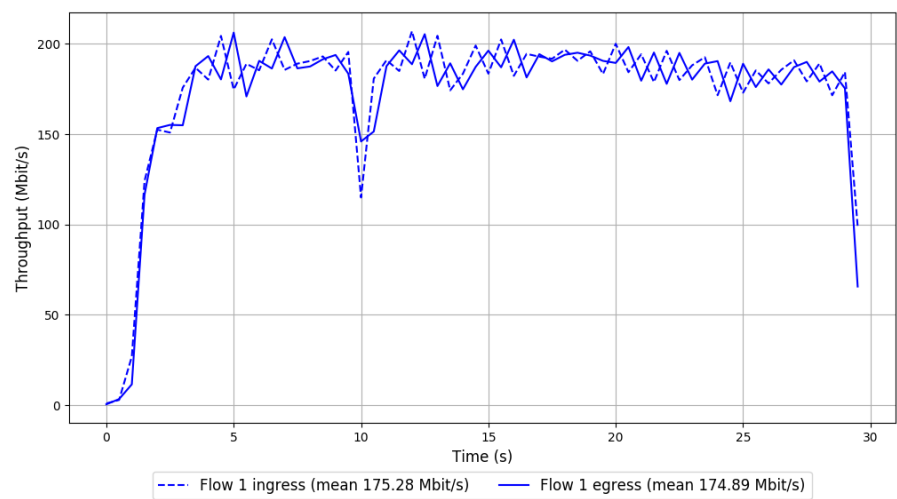
-- Flow 1:

Average throughput: 174.89 Mbit/s

95th percentile per-packet one-way delay: 89.883 ms

Loss rate: 0.80%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-08 20:20:09

End at: 2018-01-08 20:20:39

Below is generated by plot.py at 2018-01-08 23:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.27 Mbit/s

95th percentile per-packet one-way delay: 91.405 ms

Loss rate: 0.81%

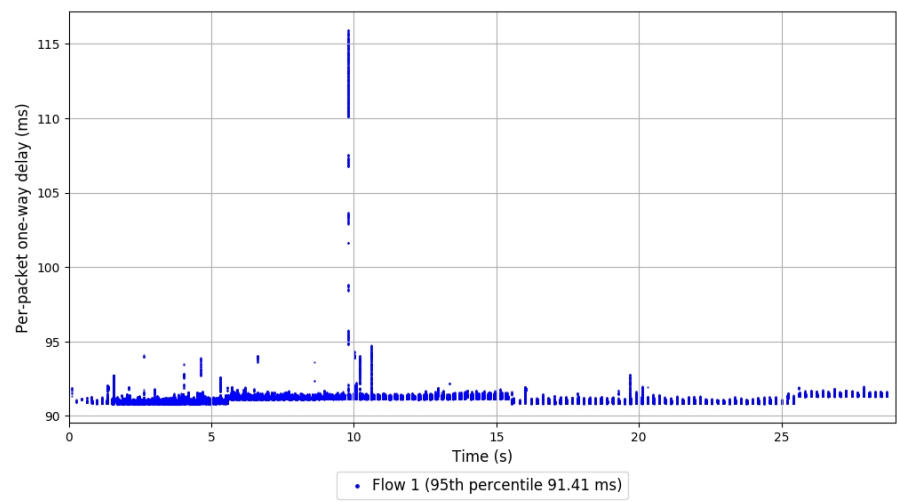
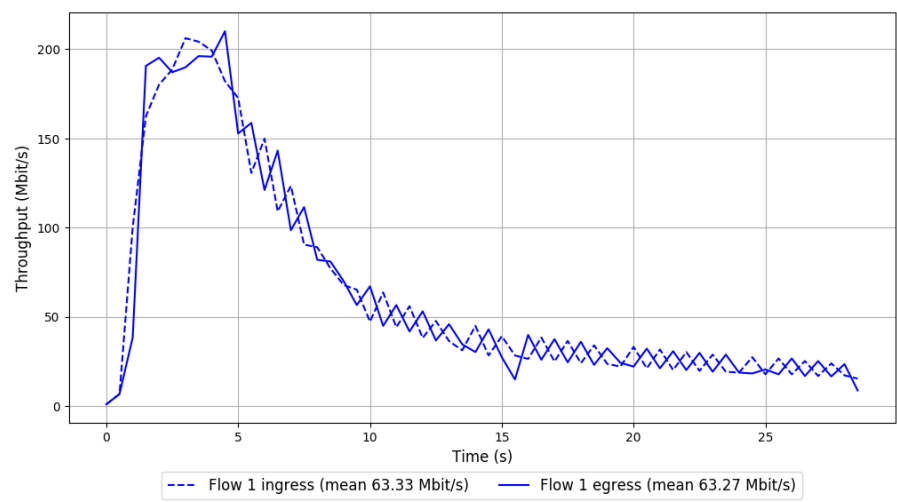
-- Flow 1:

Average throughput: 63.27 Mbit/s

95th percentile per-packet one-way delay: 91.405 ms

Loss rate: 0.81%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-08 20:31:49

End at: 2018-01-08 20:32:19

Below is generated by plot.py at 2018-01-08 23:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.67 Mbit/s

95th percentile per-packet one-way delay: 89.595 ms

Loss rate: 0.60%

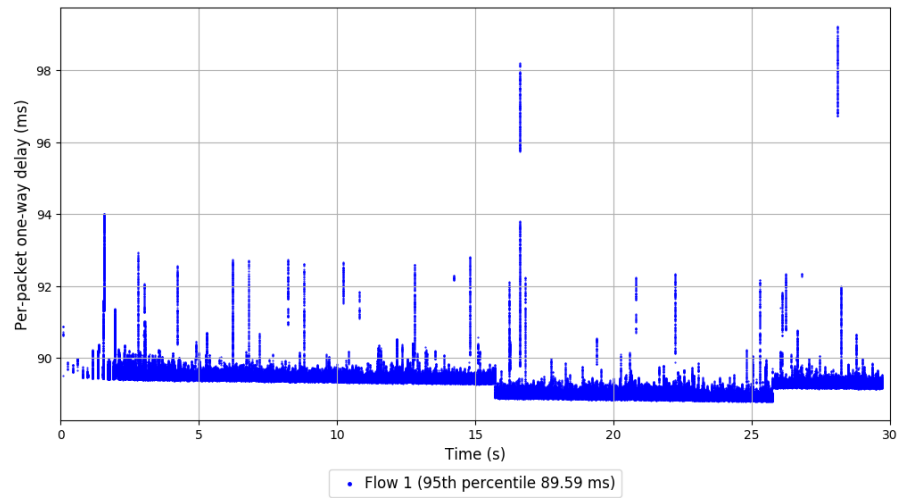
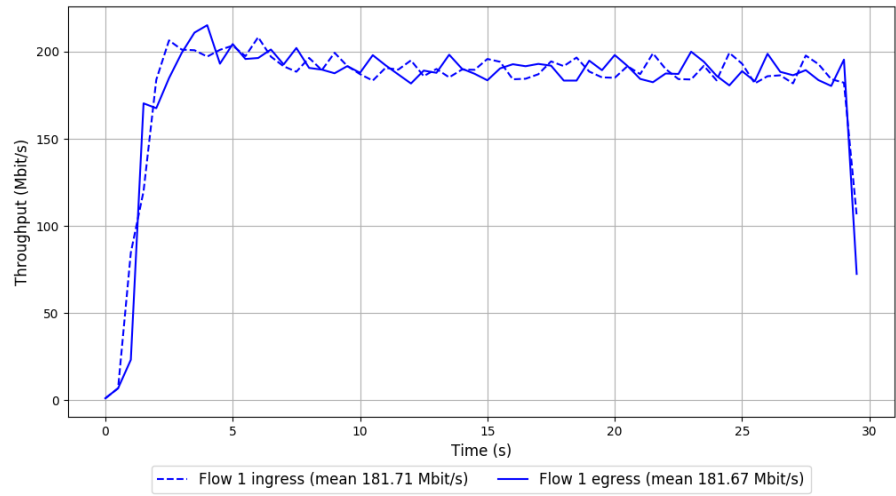
-- Flow 1:

Average throughput: 181.67 Mbit/s

95th percentile per-packet one-way delay: 89.595 ms

Loss rate: 0.60%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-08 20:44:07

End at: 2018-01-08 20:44:37

Below is generated by plot.py at 2018-01-08 23:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.44 Mbit/s

95th percentile per-packet one-way delay: 88.560 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 172.44 Mbit/s

95th percentile per-packet one-way delay: 88.560 ms

Loss rate: 0.69%

Run 10: Report of Indigo — Data Link

