

Pantheon Report

Generated at 2017-11-21 01:49:39 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

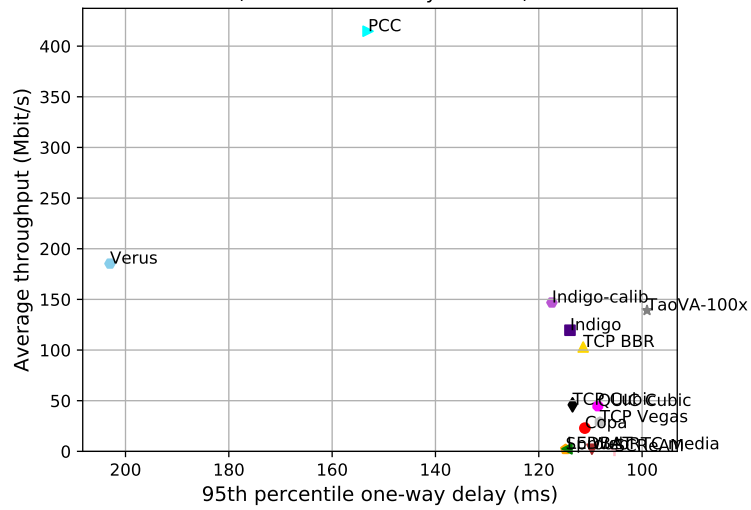
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

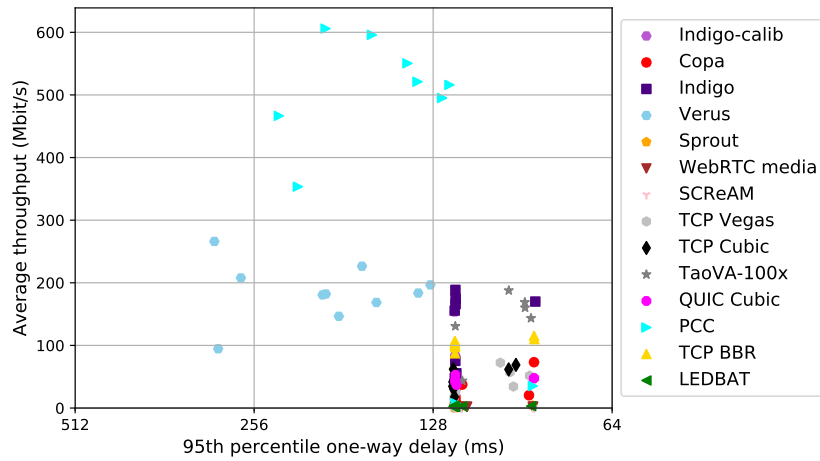
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	103.01	111.41	0.72
TCP Cubic	10	45.94	113.47	1.10
LEDBAT	10	2.47	114.55	0.83
PCC	10	414.73	153.05	3.57
QUIC Cubic	7	44.84	108.58	0.90
SCReAM	8	0.20	105.35	0.49
WebRTC media	10	2.08	109.71	0.75
Sprout	10	2.03	114.81	0.86
TaoVA-100x	6	139.13	99.05	0.80
TCP Vegas	10	28.83	108.18	0.62
Verus	10	185.33	203.01	4.85
Copa	10	22.94	111.08	0.70
Indigo	9	119.56	113.96	0.40
Indigo-calib	10	146.91	117.46	0.56

Run 1: Statistics of TCP BBR

Start at: 2017-11-20 21:42:09

End at: 2017-11-20 21:42:39

Below is generated by plot.py at 2017-11-21 01:19:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.54 Mbit/s

95th percentile per-packet one-way delay: 117.697 ms

Loss rate: 0.61%

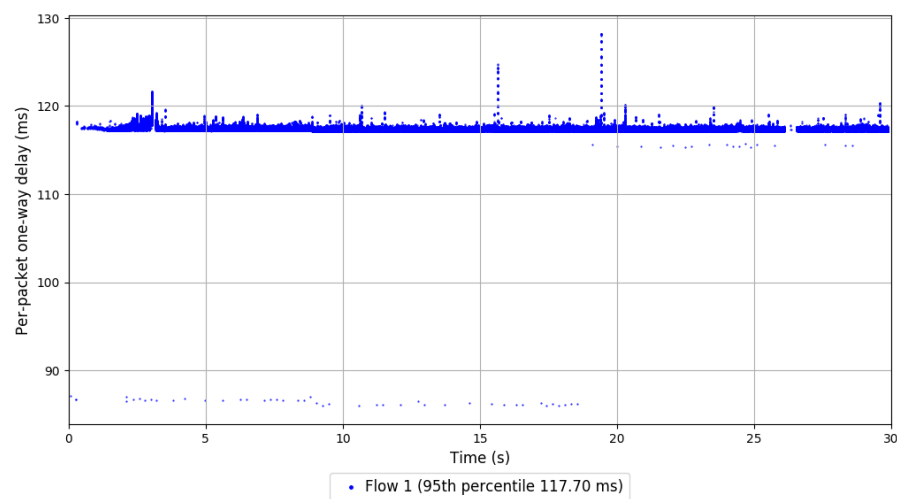
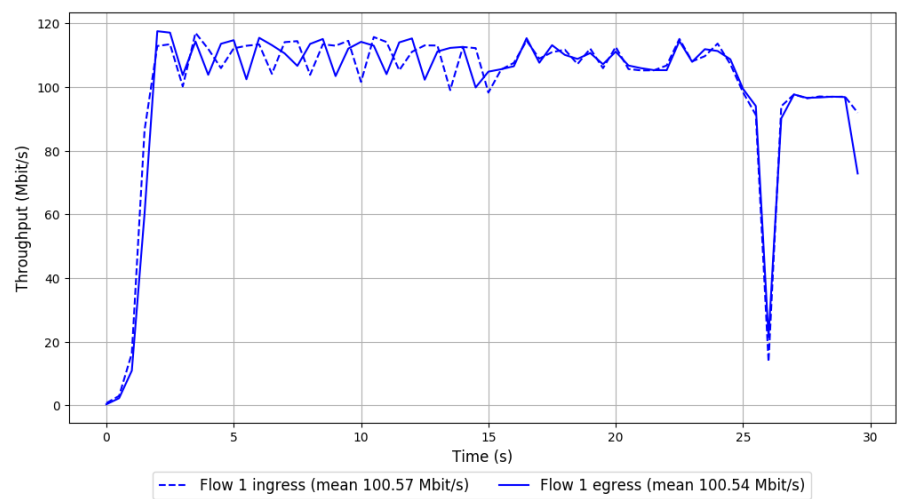
-- Flow 1:

Average throughput: 100.54 Mbit/s

95th percentile per-packet one-way delay: 117.697 ms

Loss rate: 0.61%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-20 21:52:29

End at: 2017-11-20 21:52:59

Below is generated by plot.py at 2017-11-21 01:19:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.38 Mbit/s

95th percentile per-packet one-way delay: 117.571 ms

Loss rate: 0.65%

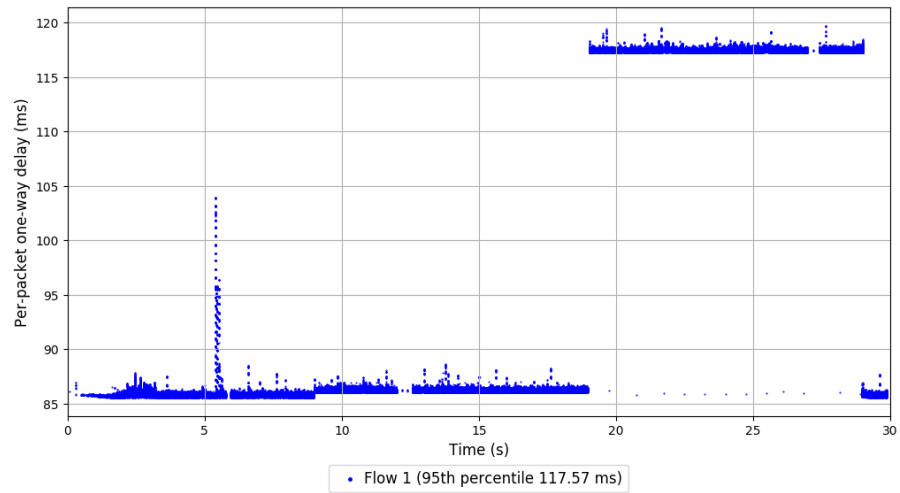
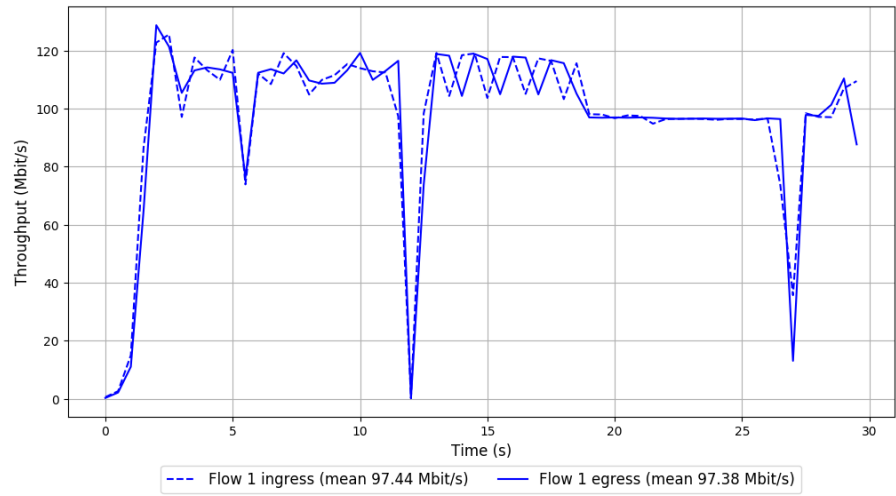
-- Flow 1:

Average throughput: 97.38 Mbit/s

95th percentile per-packet one-way delay: 117.571 ms

Loss rate: 0.65%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-20 22:03:08

End at: 2017-11-20 22:03:38

Below is generated by plot.py at 2017-11-21 01:19:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.09 Mbit/s

95th percentile per-packet one-way delay: 117.652 ms

Loss rate: 0.78%

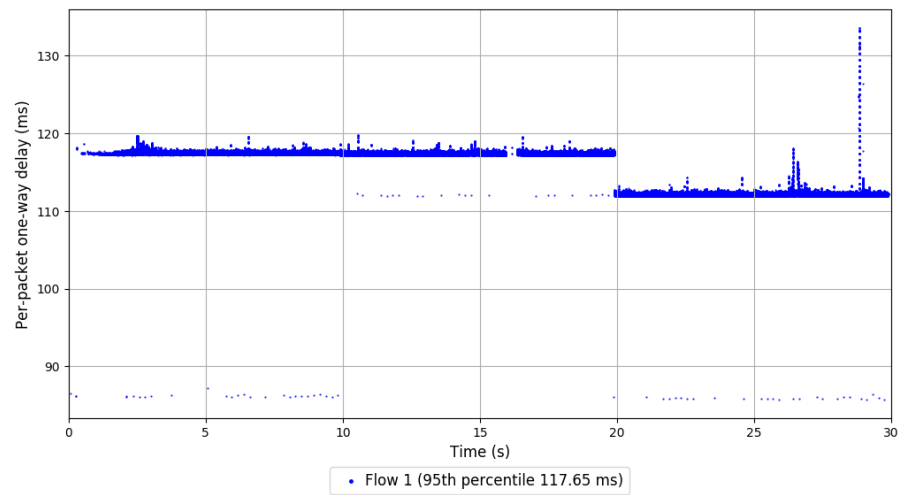
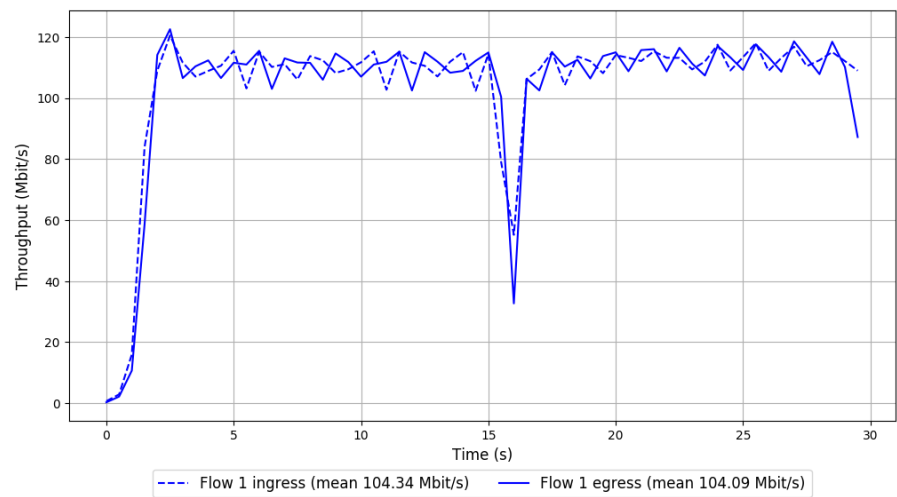
-- Flow 1:

Average throughput: 104.09 Mbit/s

95th percentile per-packet one-way delay: 117.652 ms

Loss rate: 0.78%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-20 22:14:01

End at: 2017-11-20 22:14:31

Below is generated by plot.py at 2017-11-21 01:19:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.04 Mbit/s

95th percentile per-packet one-way delay: 86.482 ms

Loss rate: 0.80%

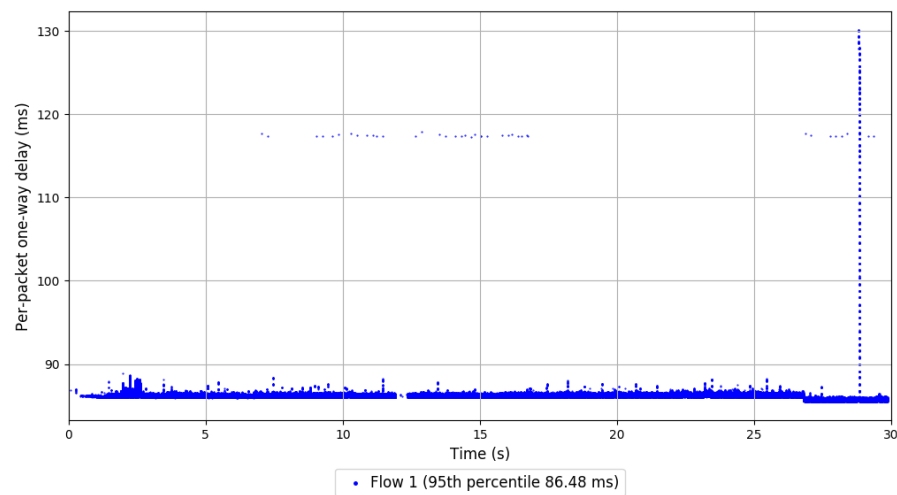
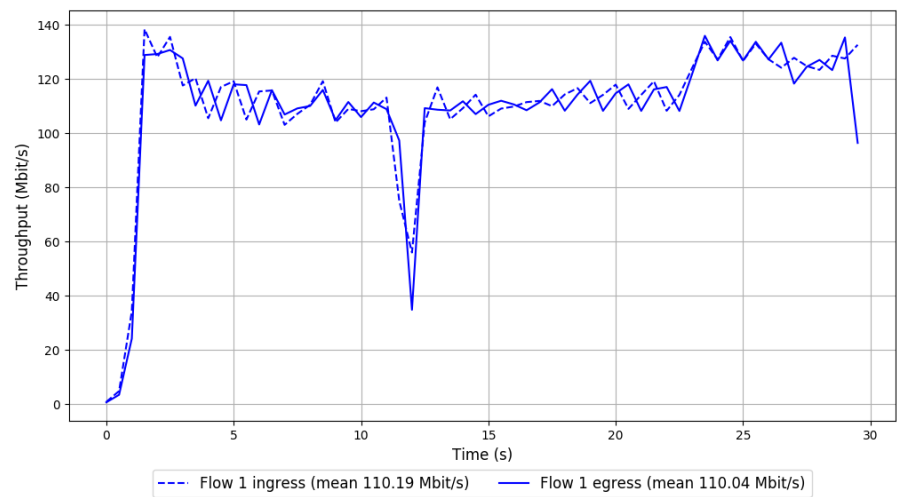
-- Flow 1:

Average throughput: 110.04 Mbit/s

95th percentile per-packet one-way delay: 86.482 ms

Loss rate: 0.80%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-20 22:24:33

End at: 2017-11-20 22:25:03

Below is generated by plot.py at 2017-11-21 01:19:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.64 Mbit/s

95th percentile per-packet one-way delay: 117.520 ms

Loss rate: 0.90%

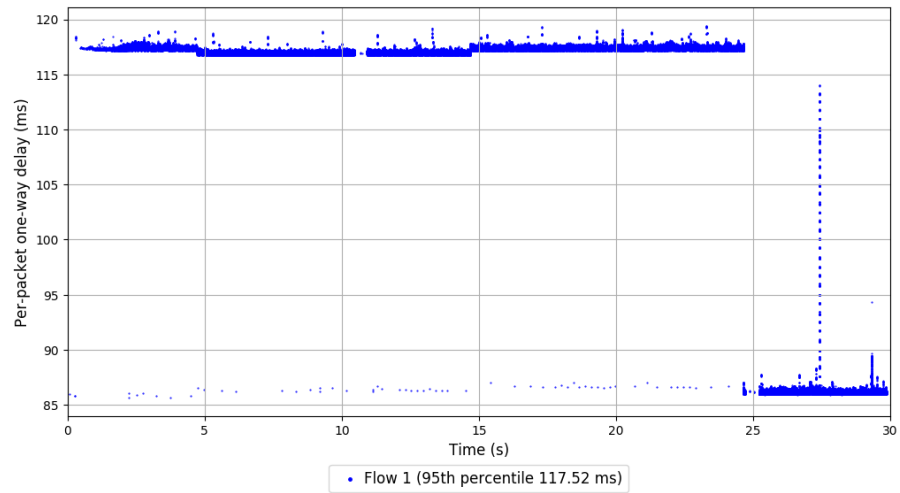
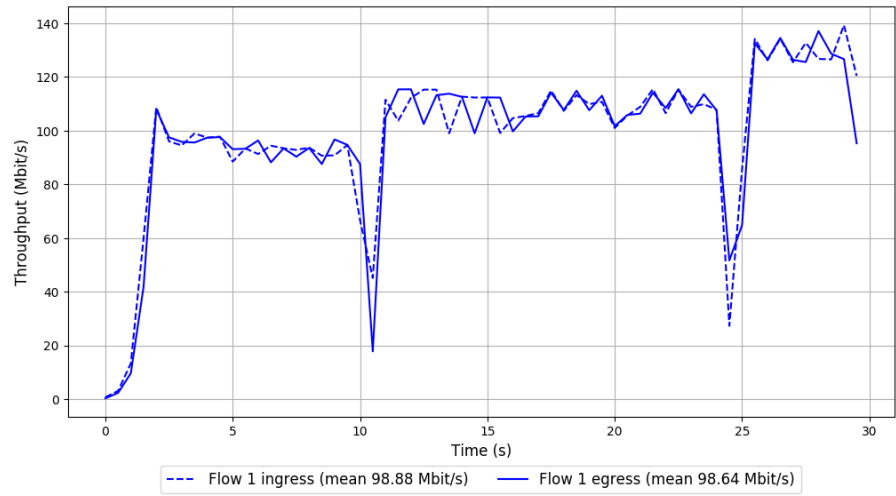
-- Flow 1:

Average throughput: 98.64 Mbit/s

95th percentile per-packet one-way delay: 117.520 ms

Loss rate: 0.90%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-20 22:35:01

End at: 2017-11-20 22:35:31

Below is generated by plot.py at 2017-11-21 01:19:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.39 Mbit/s

95th percentile per-packet one-way delay: 117.622 ms

Loss rate: 0.93%

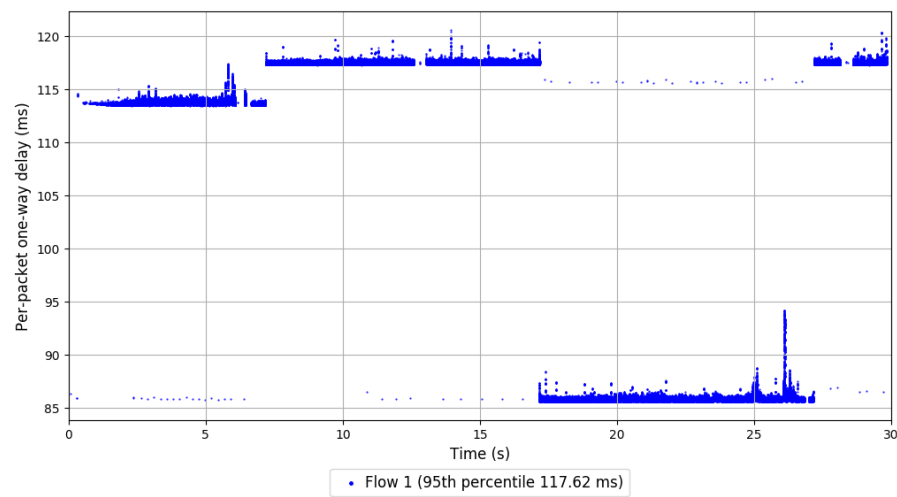
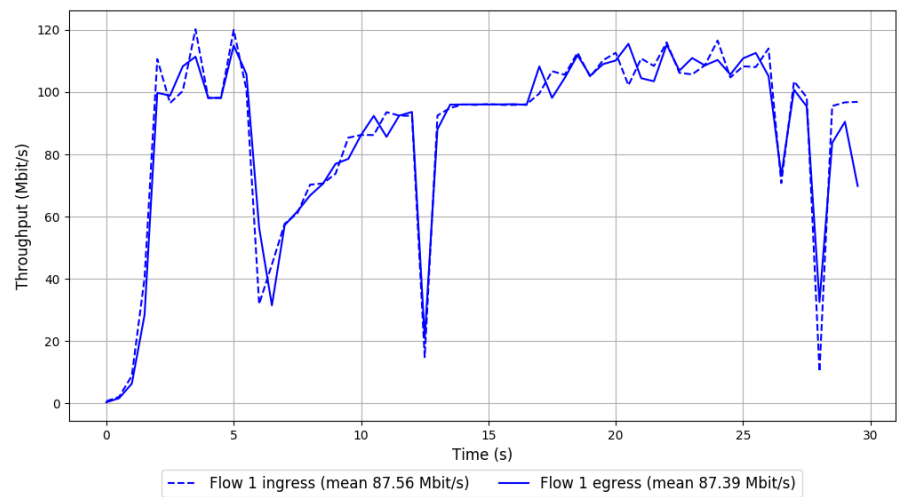
-- Flow 1:

Average throughput: 87.39 Mbit/s

95th percentile per-packet one-way delay: 117.622 ms

Loss rate: 0.93%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-20 22:45:26

End at: 2017-11-20 22:45:56

Below is generated by plot.py at 2017-11-21 01:19:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 106.48 Mbit/s

95th percentile per-packet one-way delay: 117.719 ms

Loss rate: 0.70%

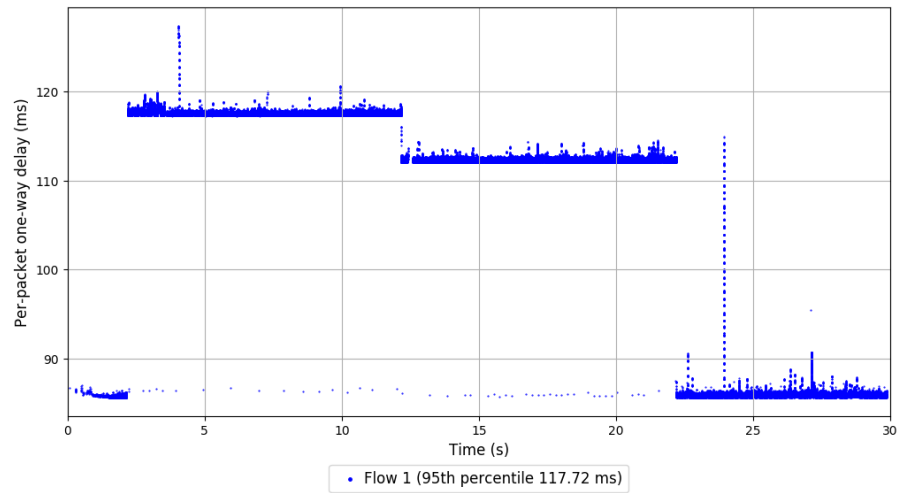
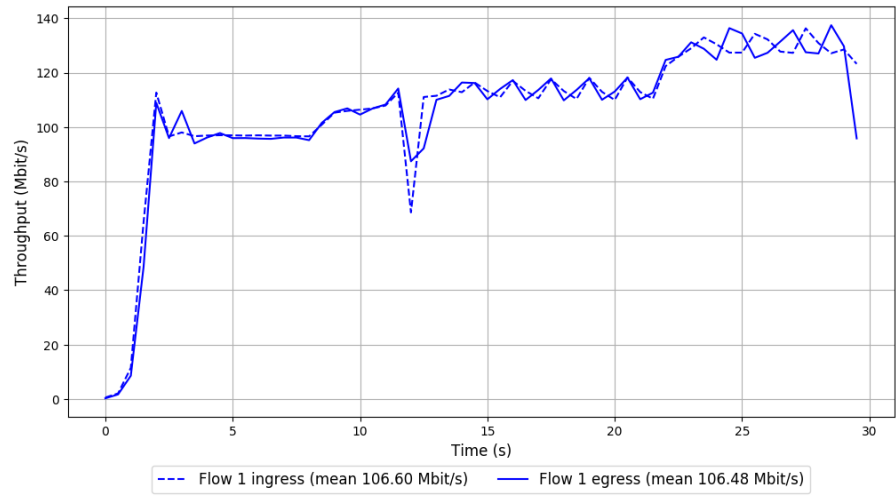
-- Flow 1:

Average throughput: 106.48 Mbit/s

95th percentile per-packet one-way delay: 117.719 ms

Loss rate: 0.70%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-20 22:55:56

End at: 2017-11-20 22:56:26

Below is generated by plot.py at 2017-11-21 01:19:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.31 Mbit/s

95th percentile per-packet one-way delay: 86.593 ms

Loss rate: 0.37%

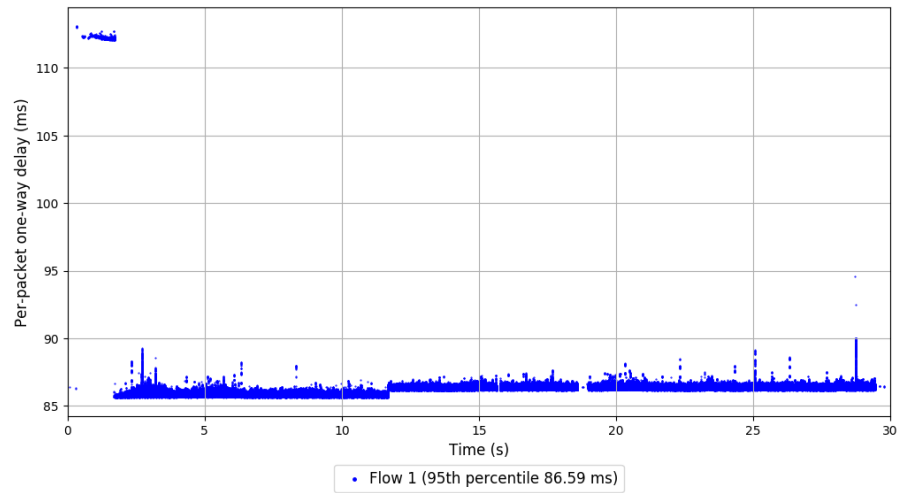
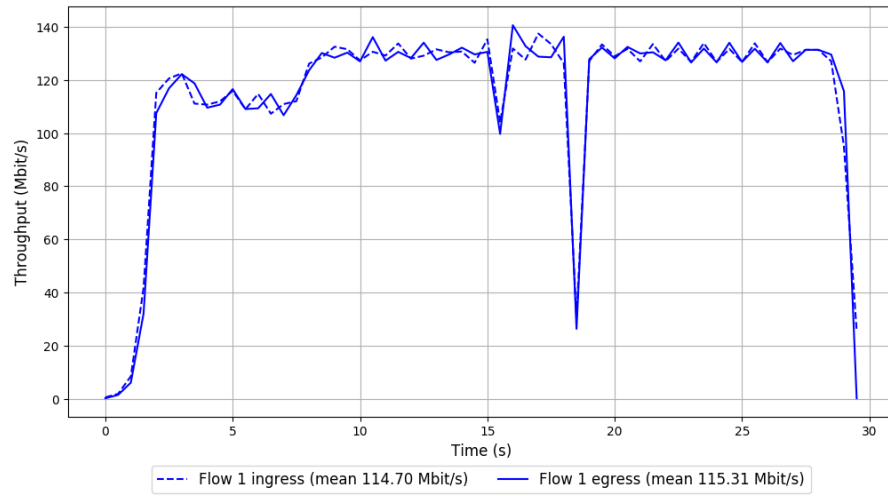
-- Flow 1:

Average throughput: 115.31 Mbit/s

95th percentile per-packet one-way delay: 86.593 ms

Loss rate: 0.37%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-20 23:06:53

End at: 2017-11-20 23:07:23

Below is generated by plot.py at 2017-11-21 01:21:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.43 Mbit/s

95th percentile per-packet one-way delay: 117.630 ms

Loss rate: 0.72%

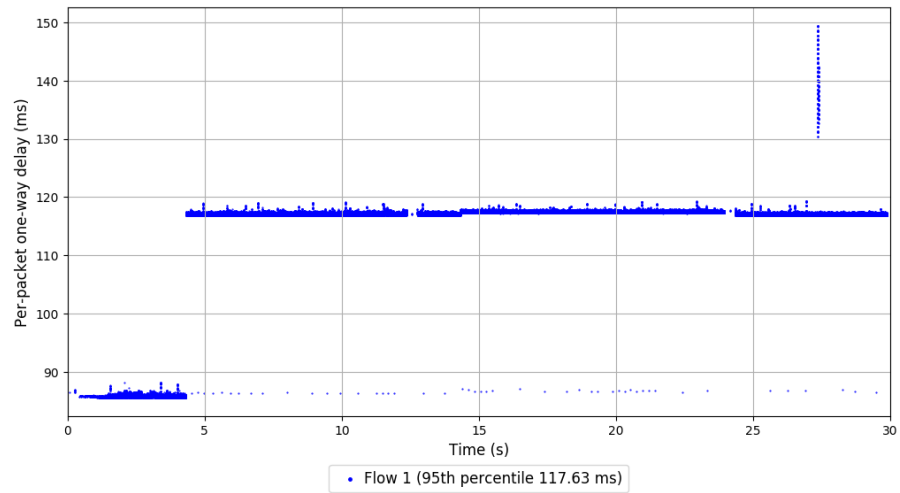
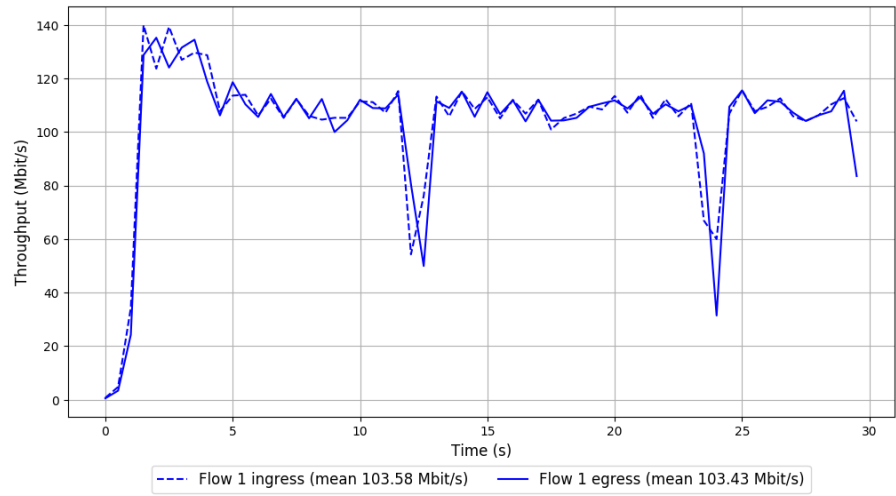
-- Flow 1:

Average throughput: 103.43 Mbit/s

95th percentile per-packet one-way delay: 117.630 ms

Loss rate: 0.72%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-20 23:17:20

End at: 2017-11-20 23:17:50

Below is generated by plot.py at 2017-11-21 01:21:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 106.84 Mbit/s

95th percentile per-packet one-way delay: 117.596 ms

Loss rate: 0.70%

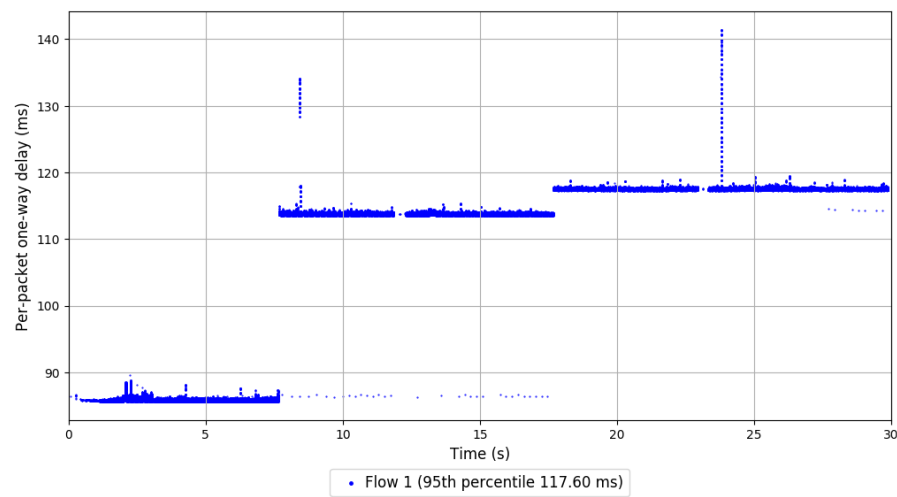
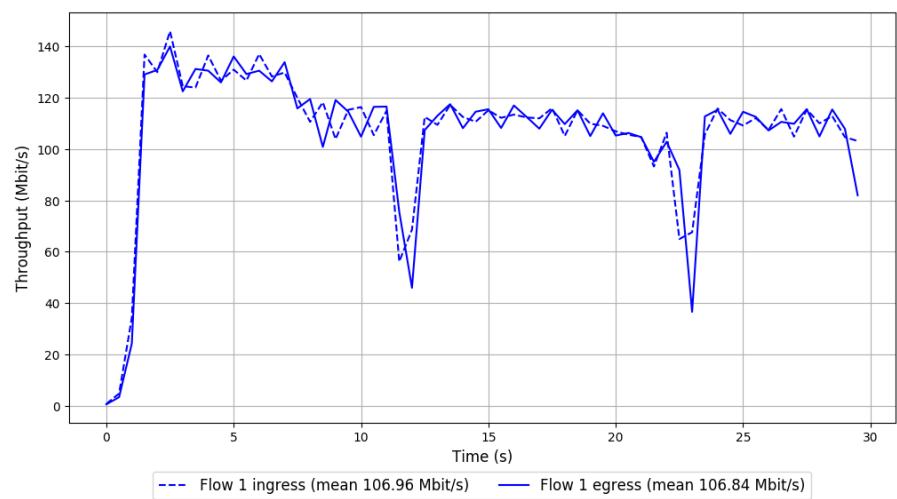
-- Flow 1:

Average throughput: 106.84 Mbit/s

95th percentile per-packet one-way delay: 117.596 ms

Loss rate: 0.70%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-20 21:40:45

End at: 2017-11-20 21:41:15

Below is generated by plot.py at 2017-11-21 01:21:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.91 Mbit/s

95th percentile per-packet one-way delay: 92.882 ms

Loss rate: 0.38%

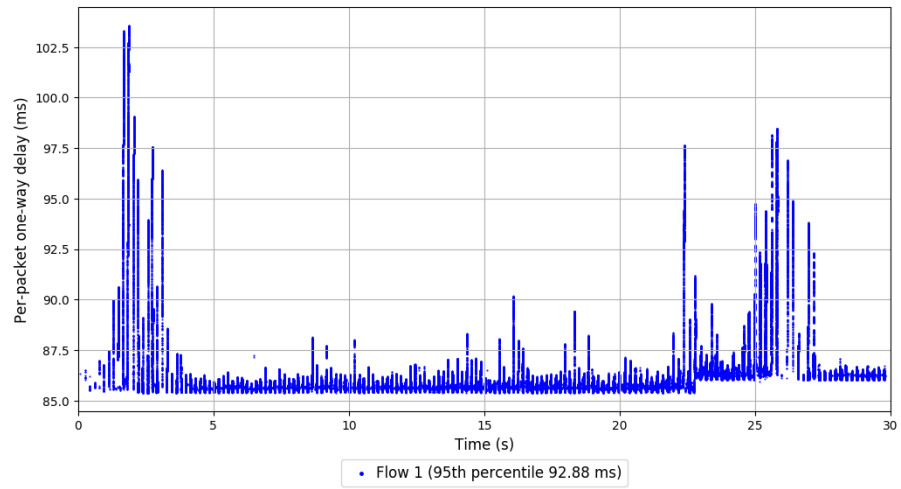
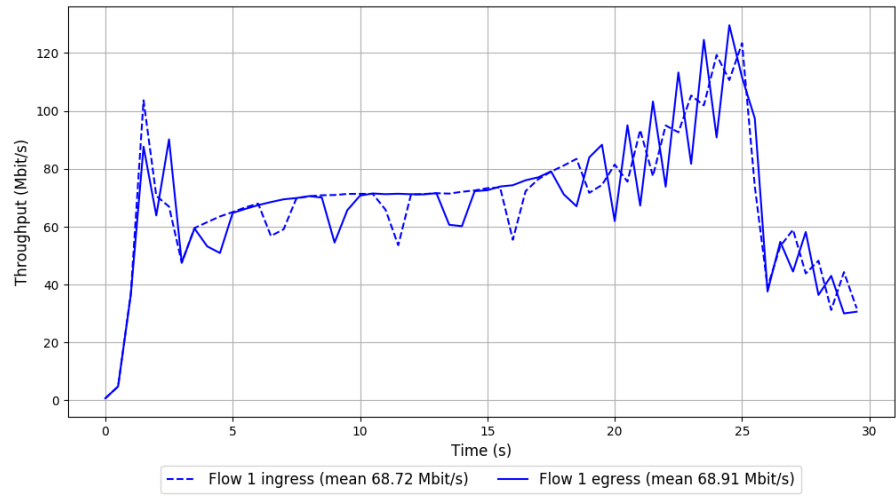
-- Flow 1:

Average throughput: 68.91 Mbit/s

95th percentile per-packet one-way delay: 92.882 ms

Loss rate: 0.38%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-20 21:51:07

End at: 2017-11-20 21:51:37

Below is generated by plot.py at 2017-11-21 01:21:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.92 Mbit/s

95th percentile per-packet one-way delay: 118.276 ms

Loss rate: 1.56%

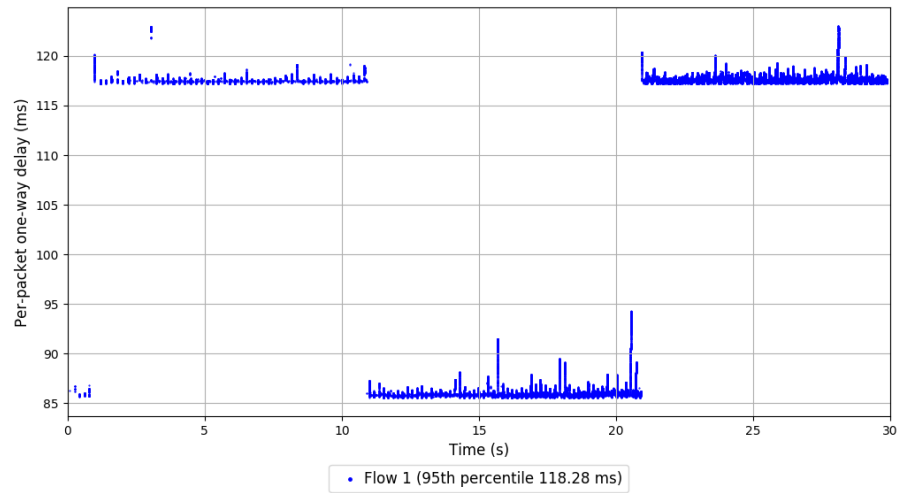
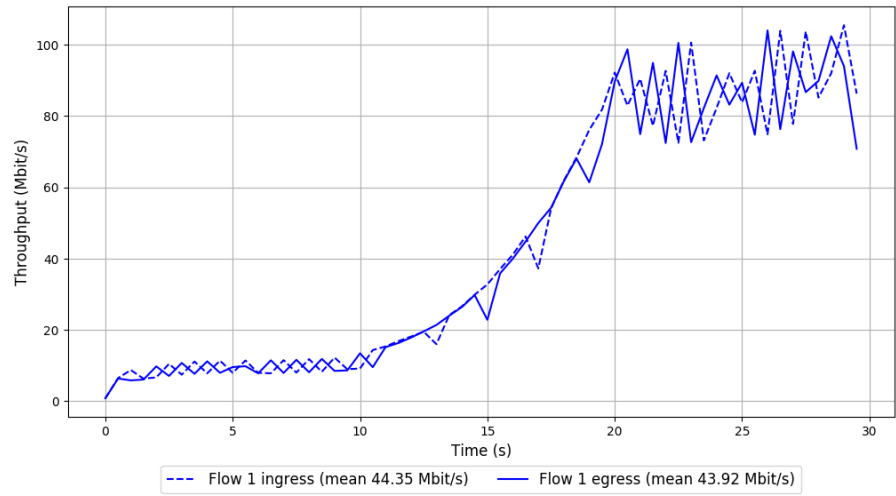
-- Flow 1:

Average throughput: 43.92 Mbit/s

95th percentile per-packet one-way delay: 118.276 ms

Loss rate: 1.56%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-20 22:01:47

End at: 2017-11-20 22:02:17

Below is generated by plot.py at 2017-11-21 01:21:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.85 Mbit/s

95th percentile per-packet one-way delay: 117.801 ms

Loss rate: 1.62%

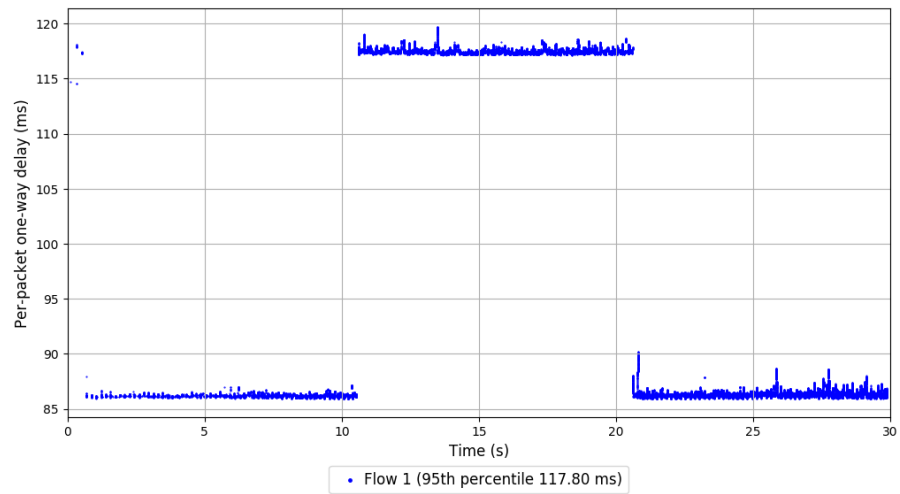
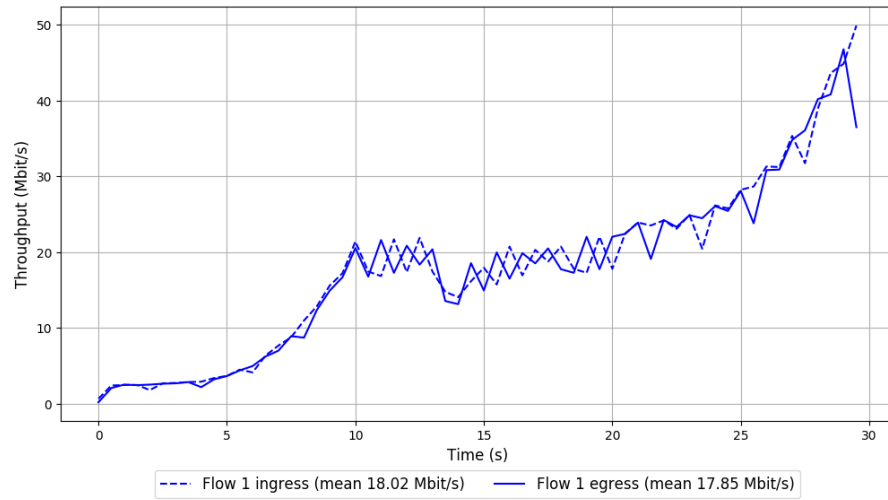
-- Flow 1:

Average throughput: 17.85 Mbit/s

95th percentile per-packet one-way delay: 117.801 ms

Loss rate: 1.62%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-20 22:12:37

End at: 2017-11-20 22:13:07

Below is generated by plot.py at 2017-11-21 01:21:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.32 Mbit/s

95th percentile per-packet one-way delay: 118.312 ms

Loss rate: 0.99%

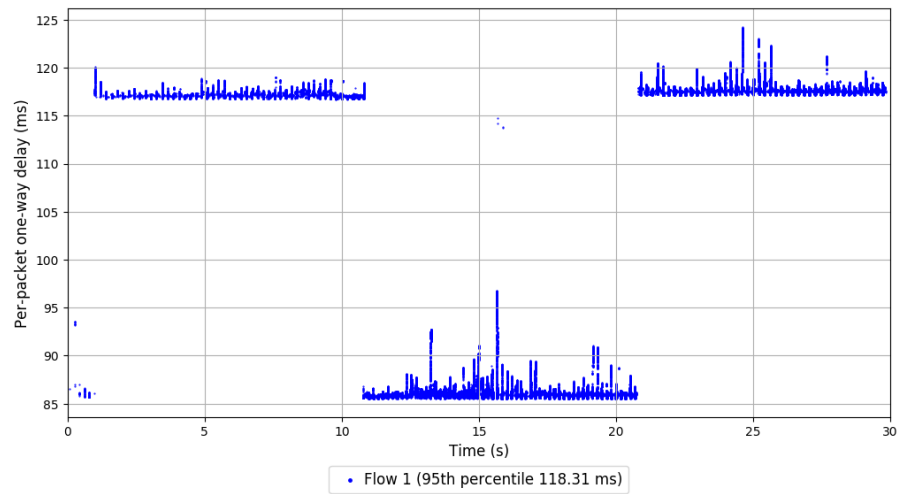
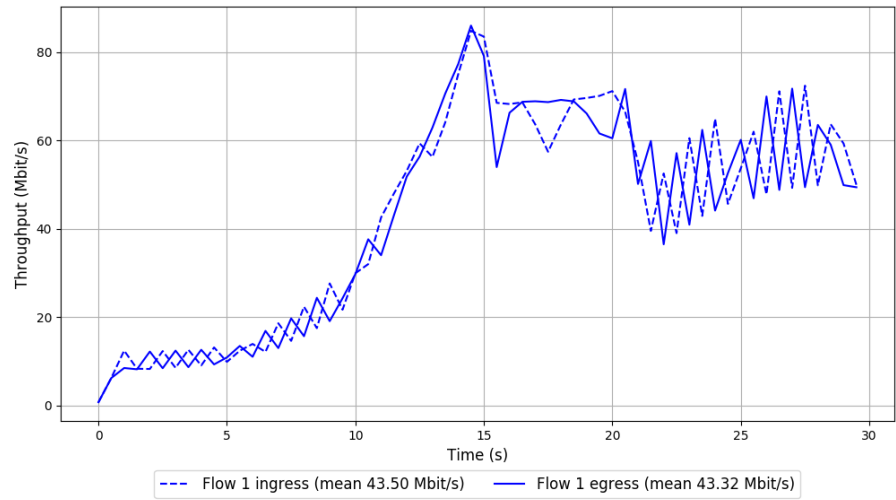
-- Flow 1:

Average throughput: 43.32 Mbit/s

95th percentile per-packet one-way delay: 118.312 ms

Loss rate: 0.99%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-20 22:23:08

End at: 2017-11-20 22:23:38

Below is generated by plot.py at 2017-11-21 01:21:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.67 Mbit/s

95th percentile per-packet one-way delay: 95.535 ms

Loss rate: 0.58%

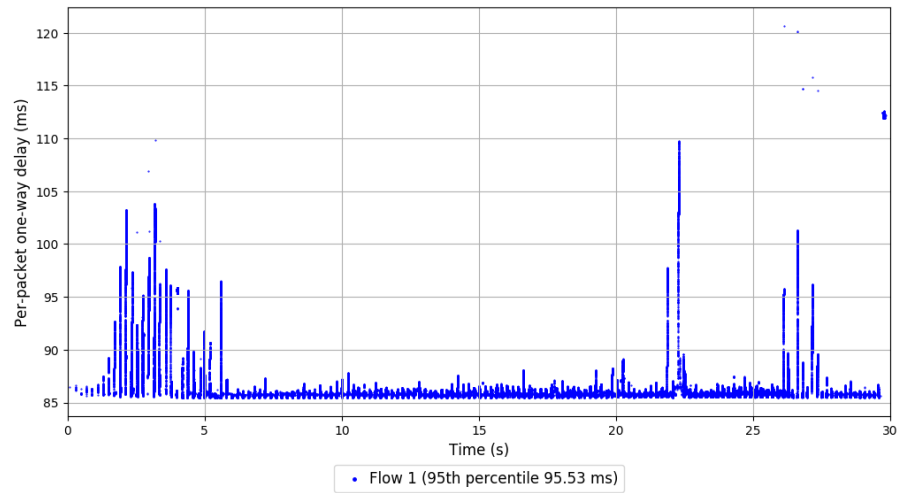
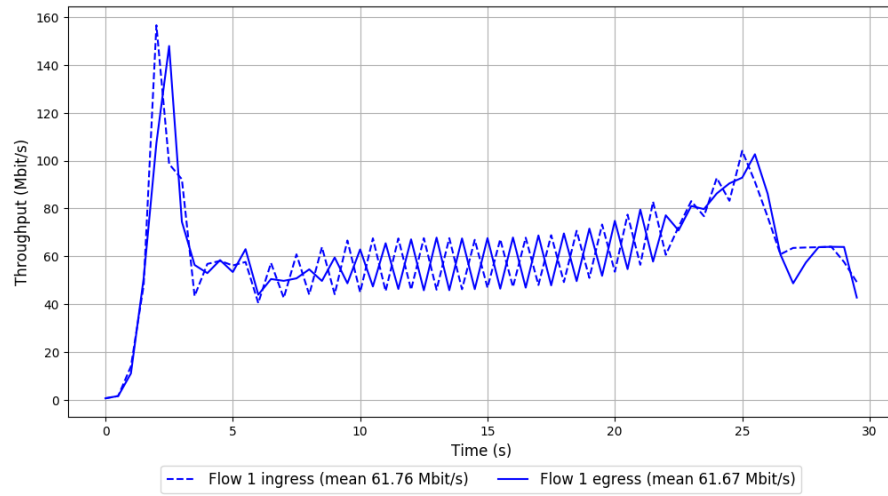
-- Flow 1:

Average throughput: 61.67 Mbit/s

95th percentile per-packet one-way delay: 95.535 ms

Loss rate: 0.58%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-20 22:33:38

End at: 2017-11-20 22:34:08

Below is generated by plot.py at 2017-11-21 01:21:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.82 Mbit/s

95th percentile per-packet one-way delay: 117.844 ms

Loss rate: 1.20%

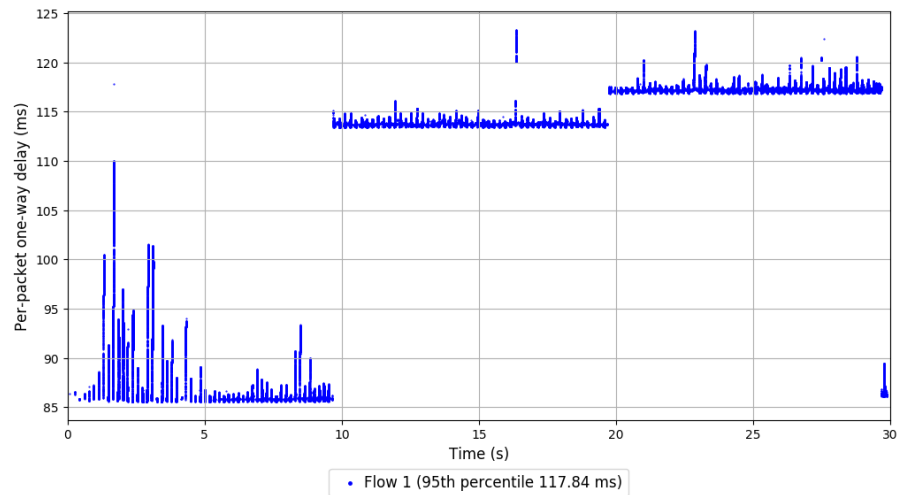
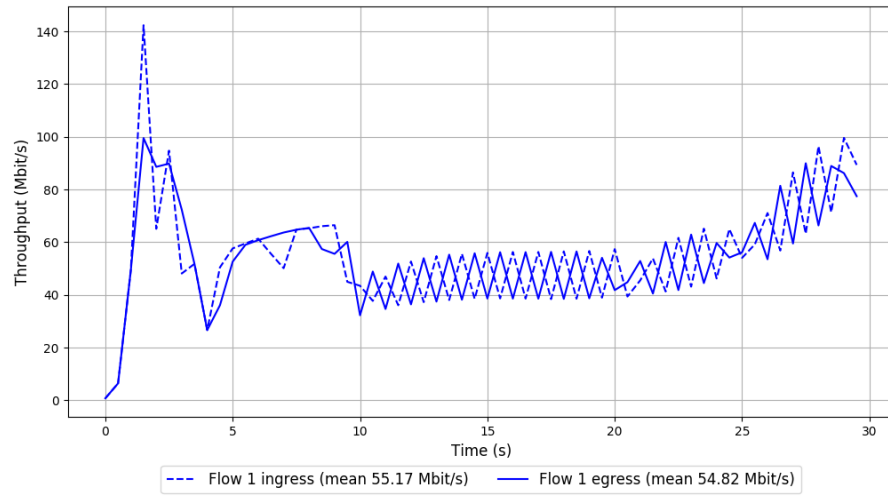
-- Flow 1:

Average throughput: 54.82 Mbit/s

95th percentile per-packet one-way delay: 117.844 ms

Loss rate: 1.20%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-20 22:44:04

End at: 2017-11-20 22:44:34

Below is generated by plot.py at 2017-11-21 01:21:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.64 Mbit/s

95th percentile per-packet one-way delay: 118.711 ms

Loss rate: 2.28%

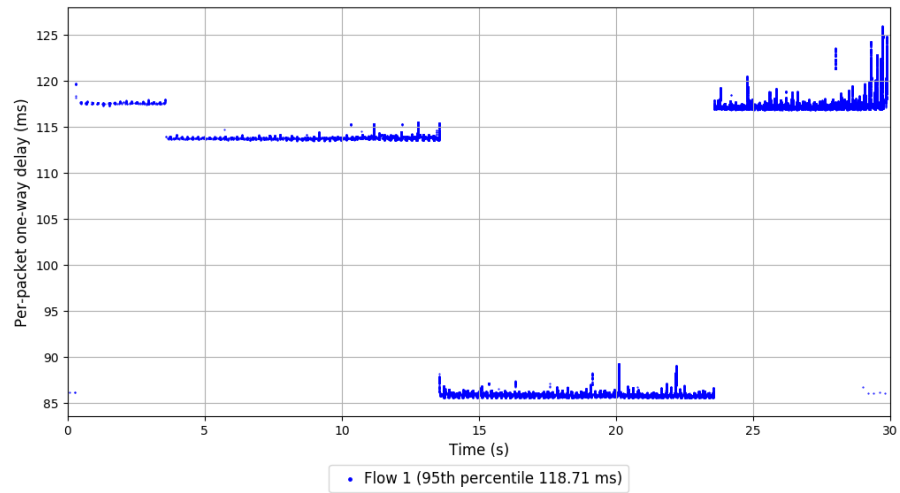
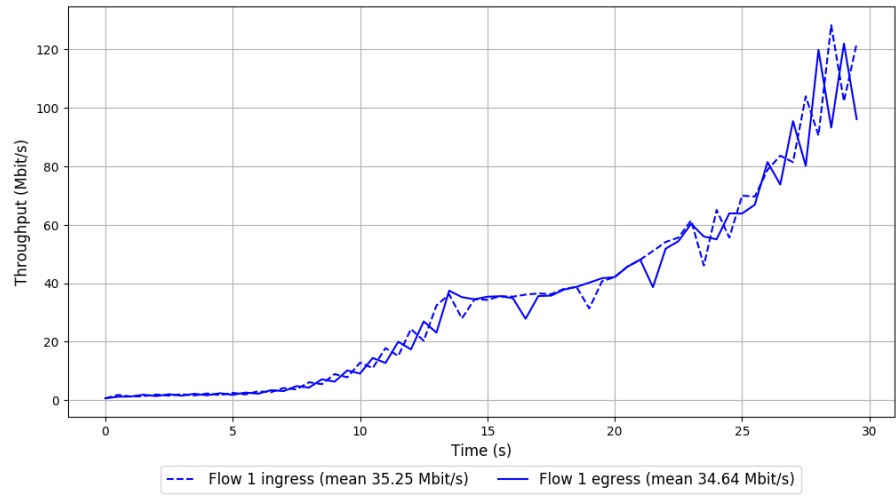
-- Flow 1:

Average throughput: 34.64 Mbit/s

95th percentile per-packet one-way delay: 118.711 ms

Loss rate: 2.28%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-20 22:54:35

End at: 2017-11-20 22:55:05

Below is generated by plot.py at 2017-11-21 01:21:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.61 Mbit/s

95th percentile per-packet one-way delay: 118.287 ms

Loss rate: 0.68%

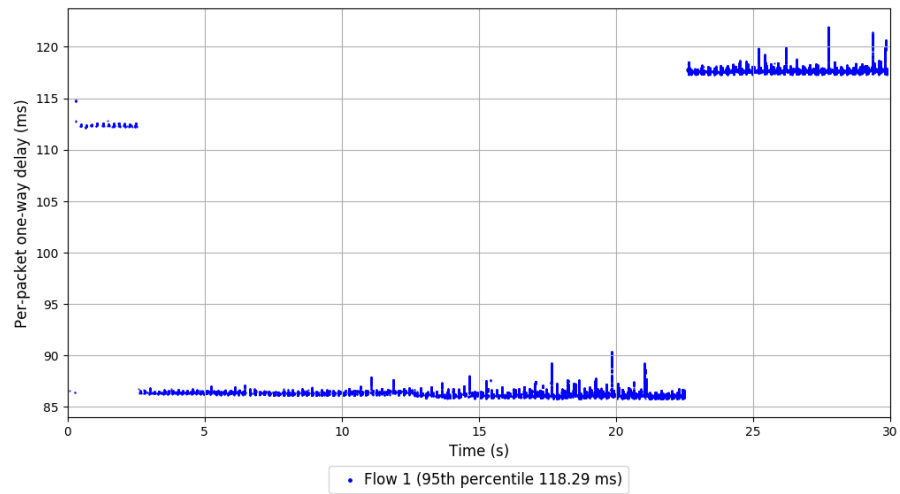
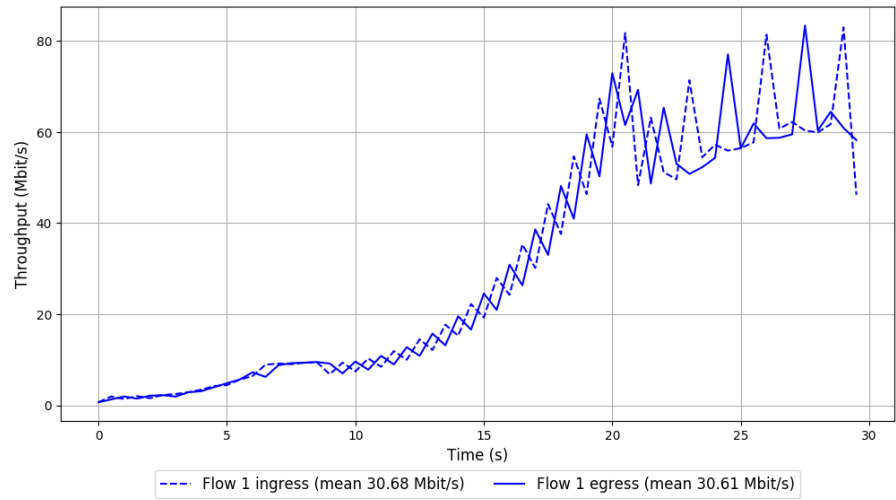
-- Flow 1:

Average throughput: 30.61 Mbit/s

95th percentile per-packet one-way delay: 118.287 ms

Loss rate: 0.68%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-20 23:05:32

End at: 2017-11-20 23:06:02

Below is generated by plot.py at 2017-11-21 01:21:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.65 Mbit/s

95th percentile per-packet one-way delay: 118.652 ms

Loss rate: 0.86%

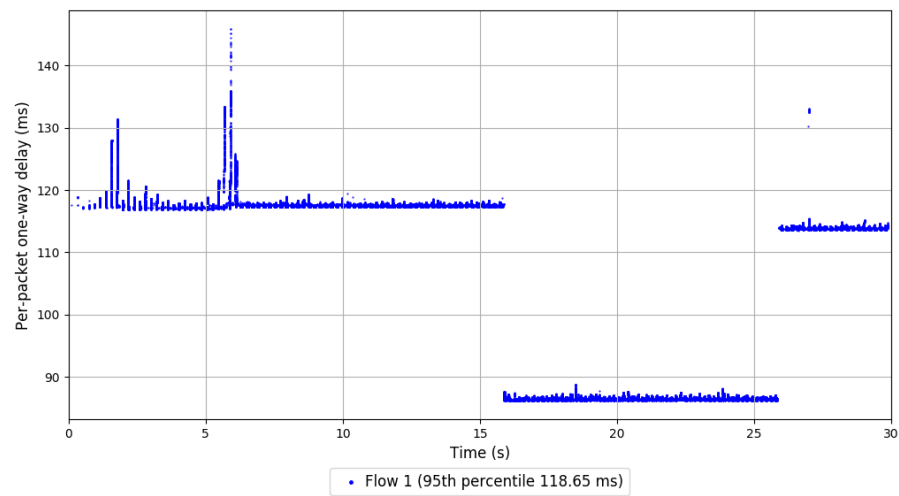
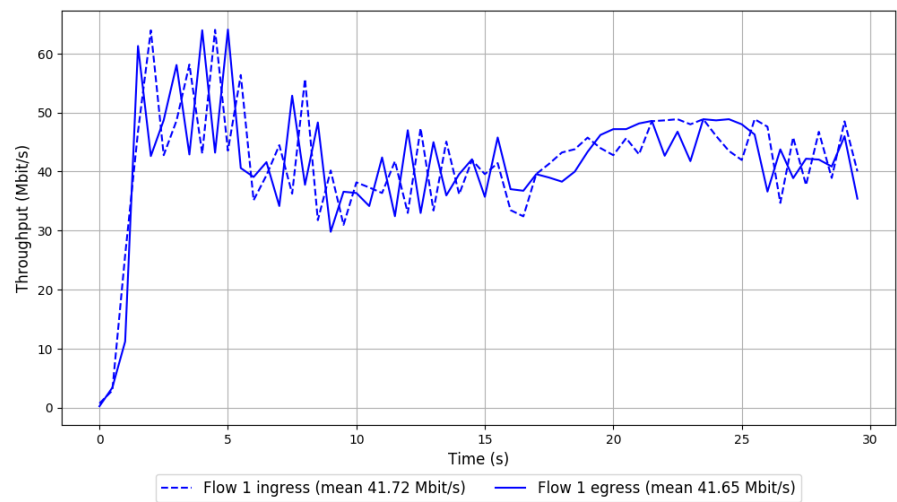
-- Flow 1:

Average throughput: 41.65 Mbit/s

95th percentile per-packet one-way delay: 118.652 ms

Loss rate: 0.86%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-20 23:15:56

End at: 2017-11-20 23:16:26

Below is generated by plot.py at 2017-11-21 01:21:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.01 Mbit/s

95th percentile per-packet one-way delay: 118.395 ms

Loss rate: 0.82%

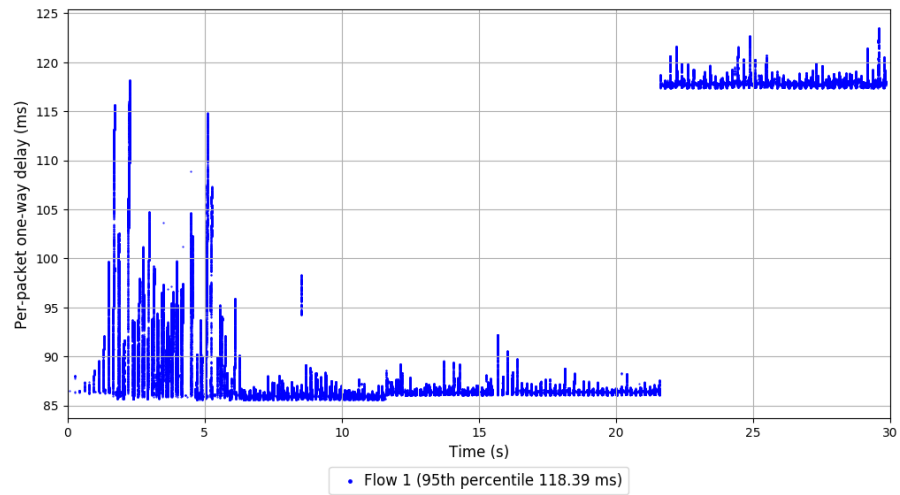
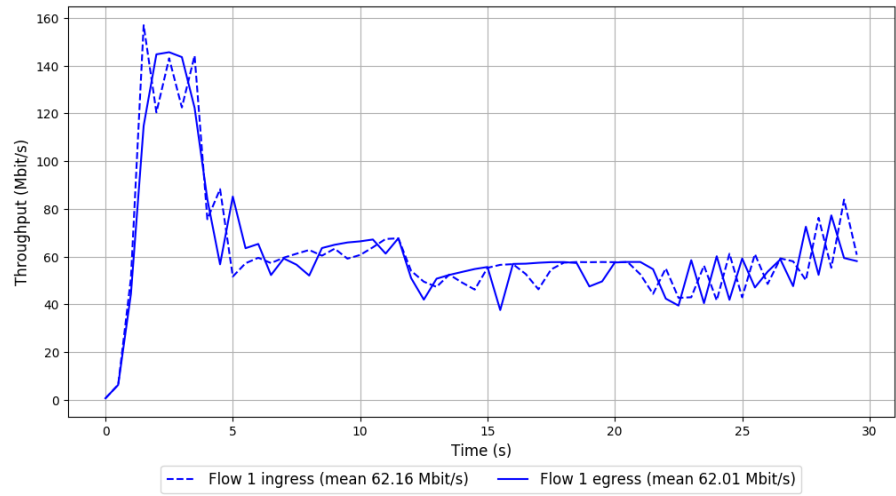
-- Flow 1:

Average throughput: 62.01 Mbit/s

95th percentile per-packet one-way delay: 118.395 ms

Loss rate: 0.82%

Run 10: Report of TCP Cubic — Data Link

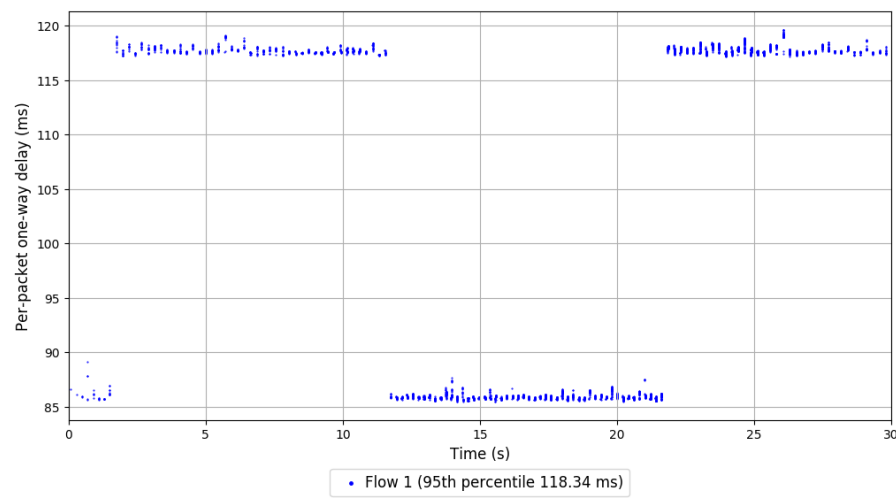
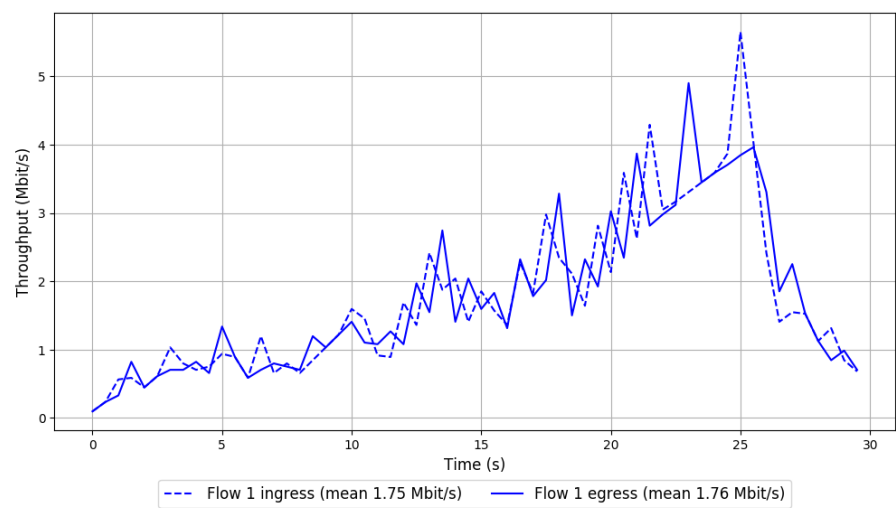


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-20 21:48:16
End at: 2017-11-20 21:48:46

# Below is generated by plot.py at 2017-11-21 01:21:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 118.340 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 118.340 ms
Loss rate: 0.29%
```

Run 1: Report of LEDBAT — Data Link

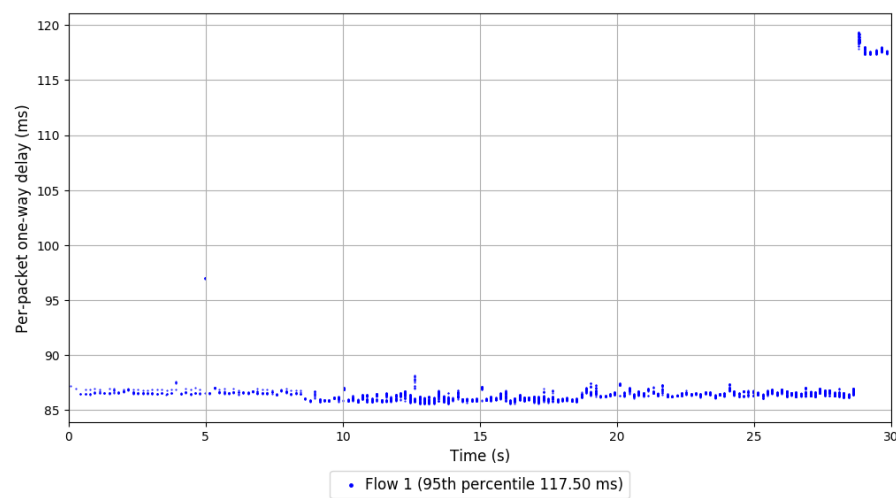
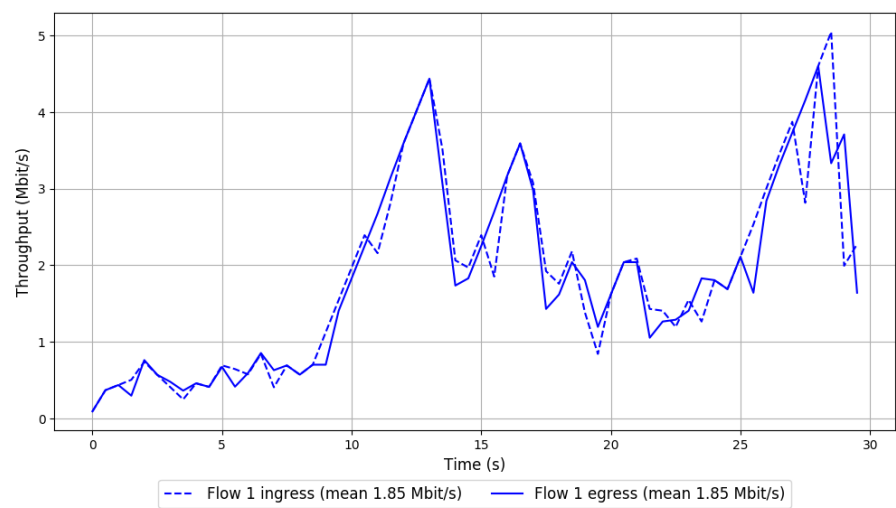


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-20 21:58:49
End at: 2017-11-20 21:59:19

# Below is generated by plot.py at 2017-11-21 01:21:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 117.505 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 117.505 ms
Loss rate: 0.89%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-20 22:09:38

End at: 2017-11-20 22:10:08

Below is generated by plot.py at 2017-11-21 01:21:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 117.778 ms

Loss rate: 0.95%

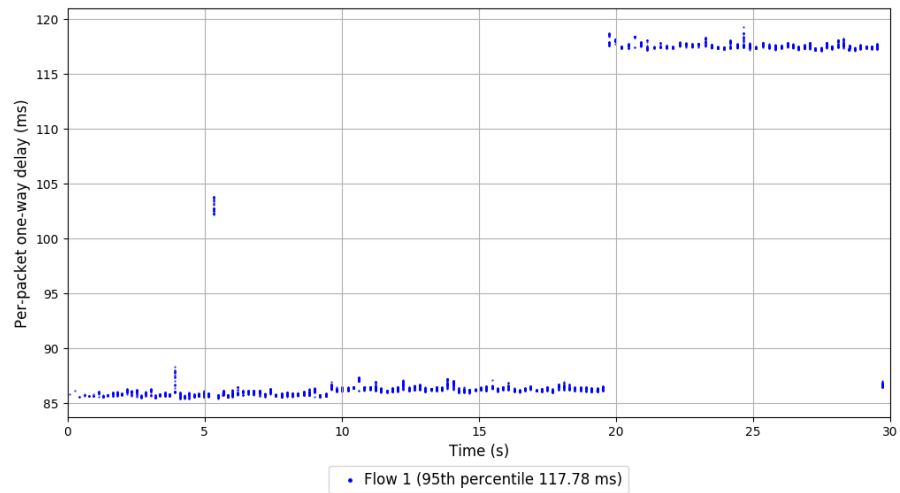
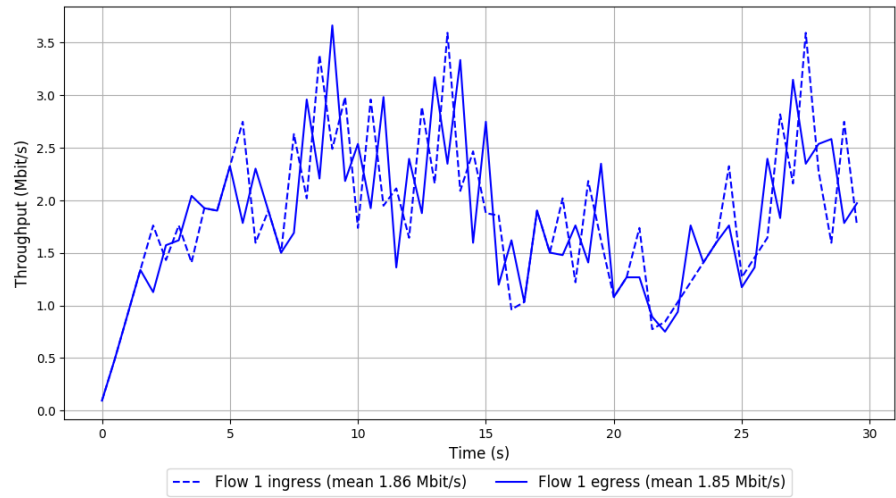
-- Flow 1:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 117.778 ms

Loss rate: 0.95%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-20 22:20:09

End at: 2017-11-20 22:20:39

Below is generated by plot.py at 2017-11-21 01:21:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 118.159 ms

Loss rate: 0.68%

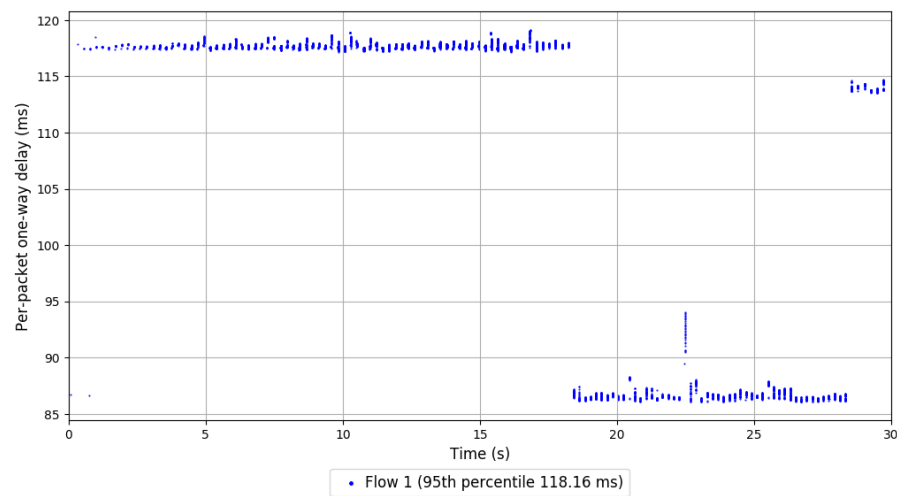
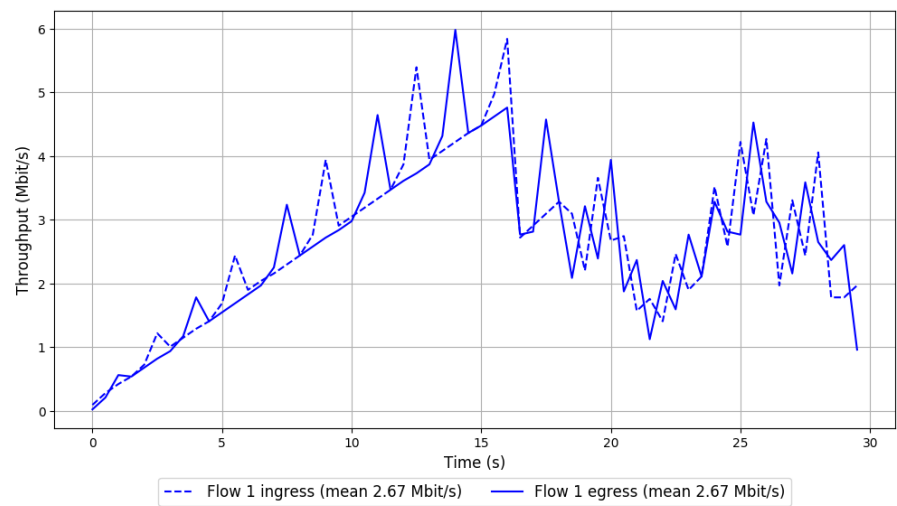
-- Flow 1:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 118.159 ms

Loss rate: 0.68%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-20 22:30:55

End at: 2017-11-20 22:31:25

Below is generated by plot.py at 2017-11-21 01:21:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 118.051 ms

Loss rate: 0.83%

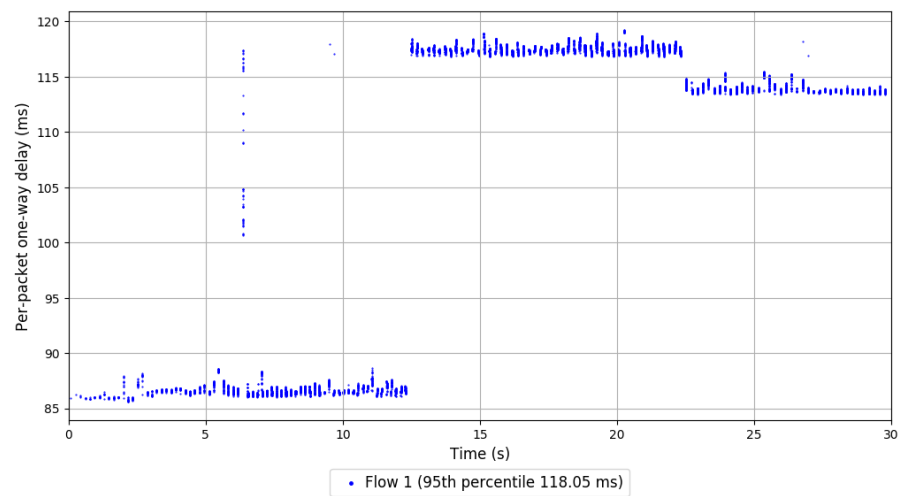
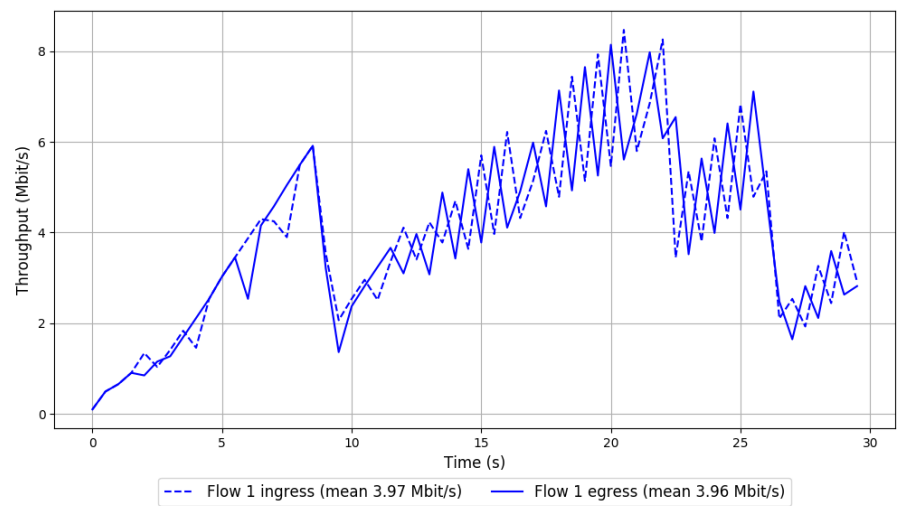
-- Flow 1:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 118.051 ms

Loss rate: 0.83%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-20 22:41:13

End at: 2017-11-20 22:41:43

Below is generated by plot.py at 2017-11-21 01:21:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 117.893 ms

Loss rate: 0.95%

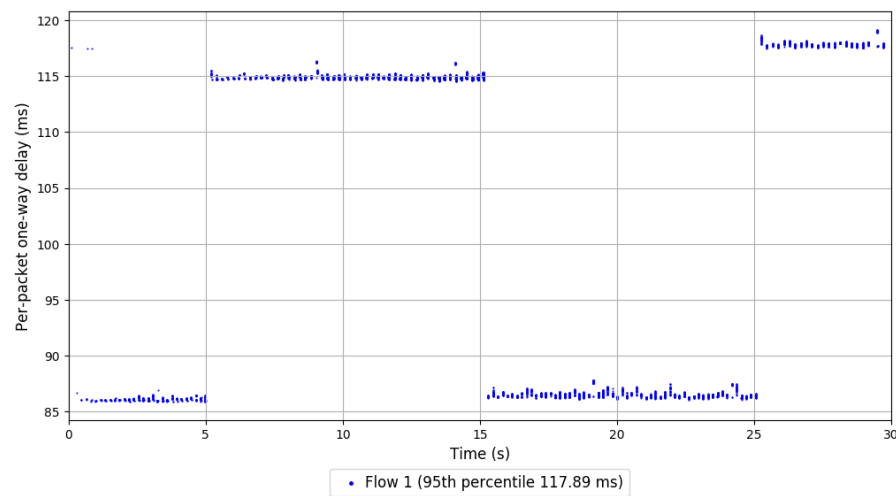
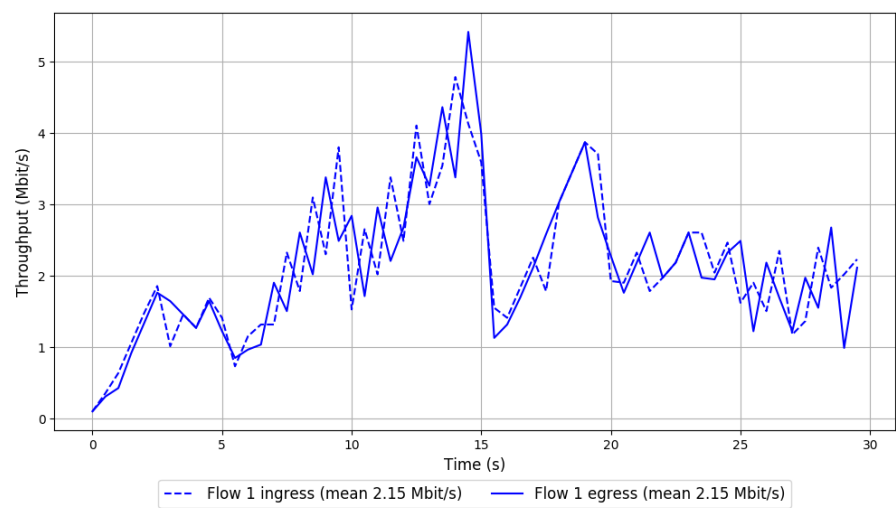
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 117.893 ms

Loss rate: 0.95%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-20 22:51:42

End at: 2017-11-20 22:52:12

Below is generated by plot.py at 2017-11-21 01:21:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.69 Mbit/s

95th percentile per-packet one-way delay: 114.365 ms

Loss rate: 1.93%

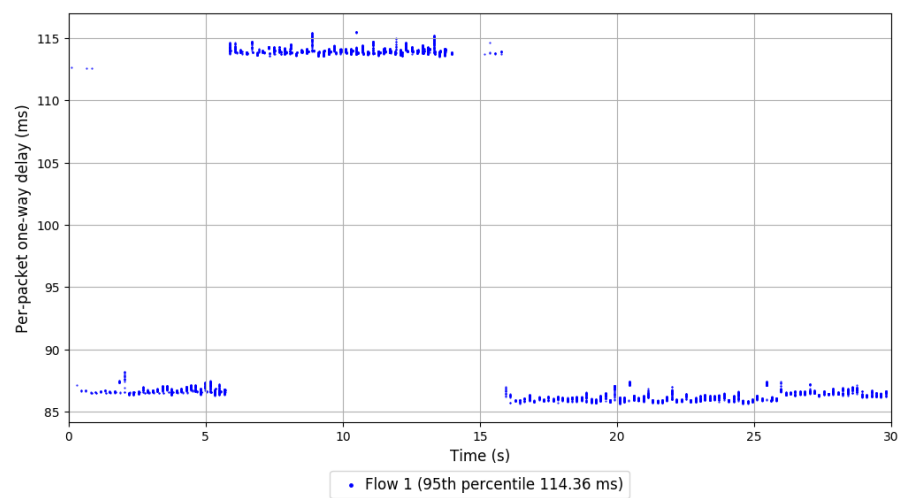
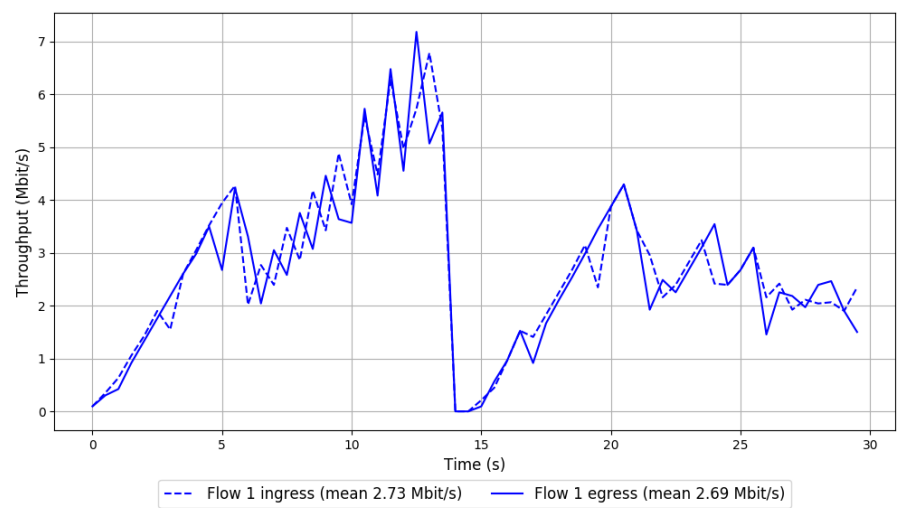
-- Flow 1:

Average throughput: 2.69 Mbit/s

95th percentile per-packet one-way delay: 114.365 ms

Loss rate: 1.93%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-20 23:02:41

End at: 2017-11-20 23:03:11

Below is generated by plot.py at 2017-11-21 01:21:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 117.919 ms

Loss rate: 0.42%

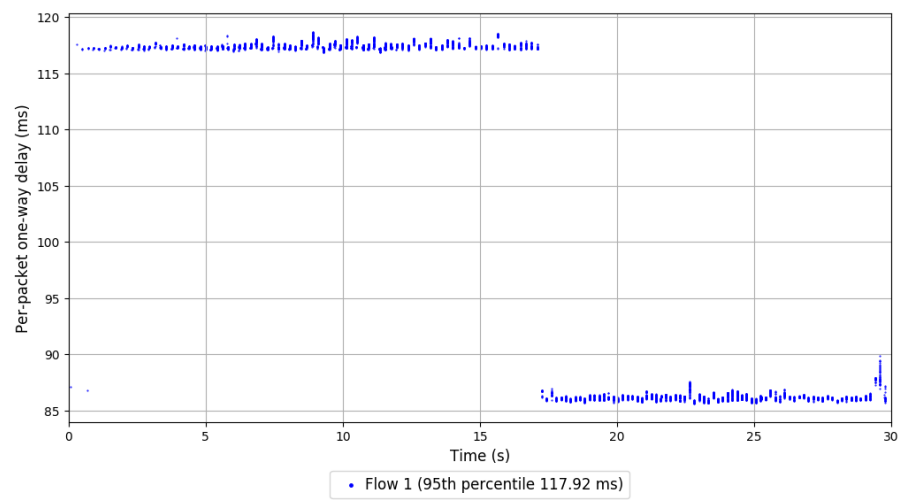
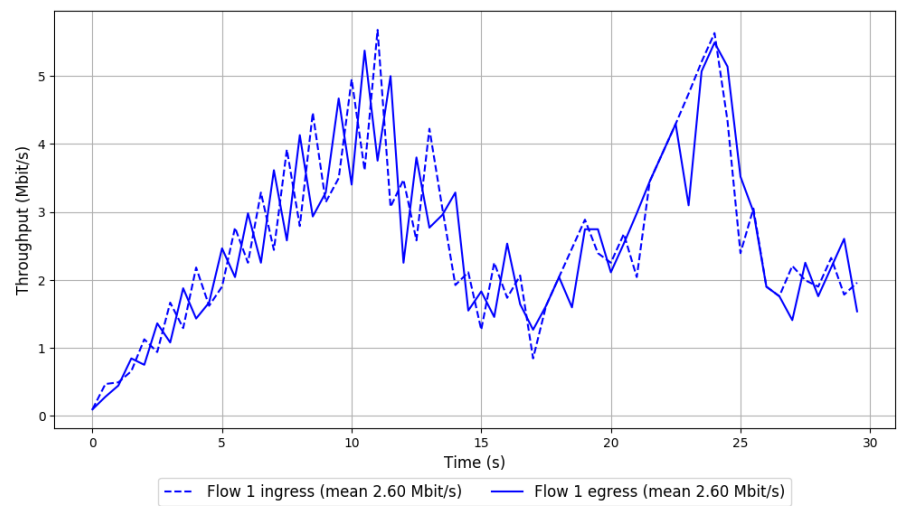
-- Flow 1:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 117.919 ms

Loss rate: 0.42%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-20 23:13:05

End at: 2017-11-20 23:13:35

Below is generated by plot.py at 2017-11-21 01:21:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.98 Mbit/s

95th percentile per-packet one-way delay: 87.569 ms

Loss rate: 0.50%

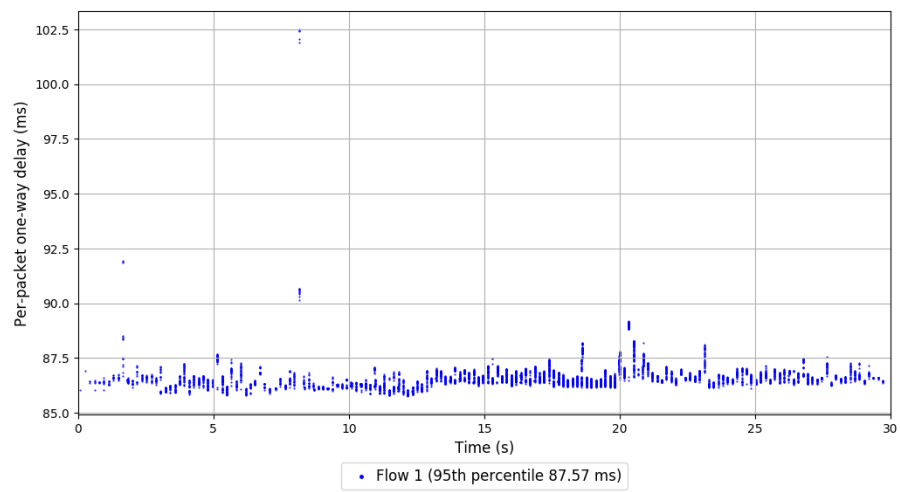
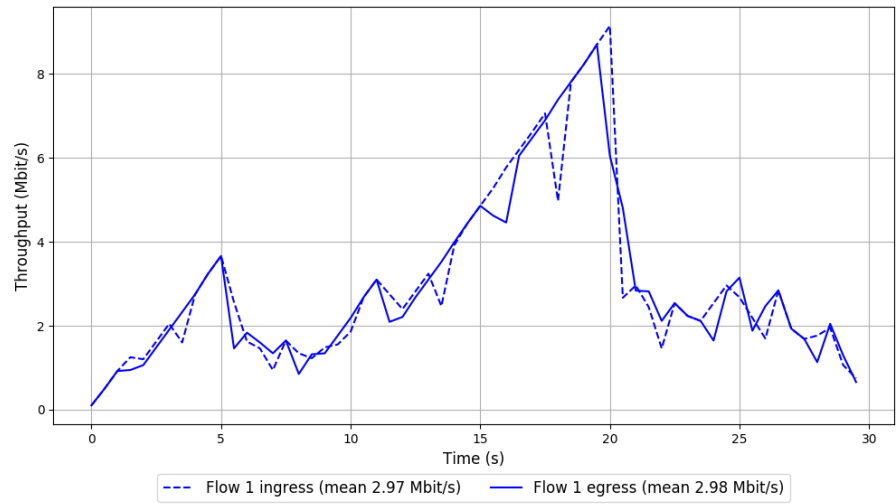
-- Flow 1:

Average throughput: 2.98 Mbit/s

95th percentile per-packet one-way delay: 87.569 ms

Loss rate: 0.50%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-20 23:23:32

End at: 2017-11-20 23:24:02

Below is generated by plot.py at 2017-11-21 01:21:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 117.937 ms

Loss rate: 0.89%

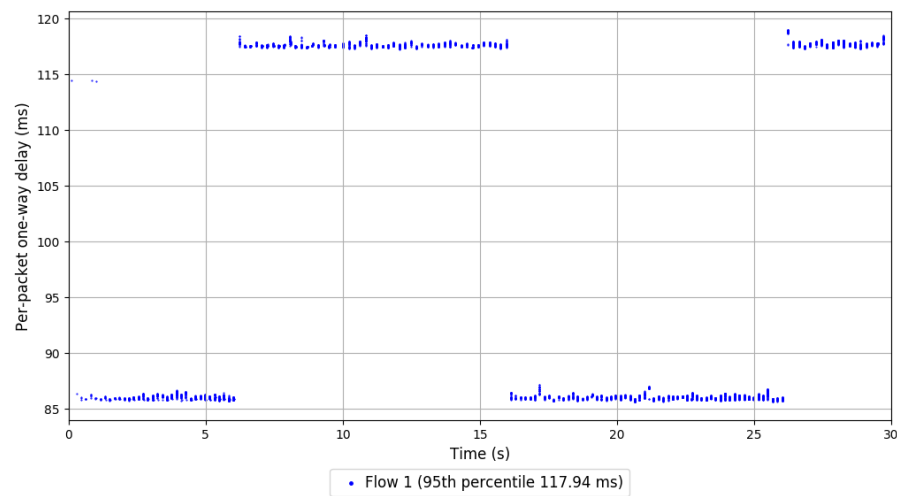
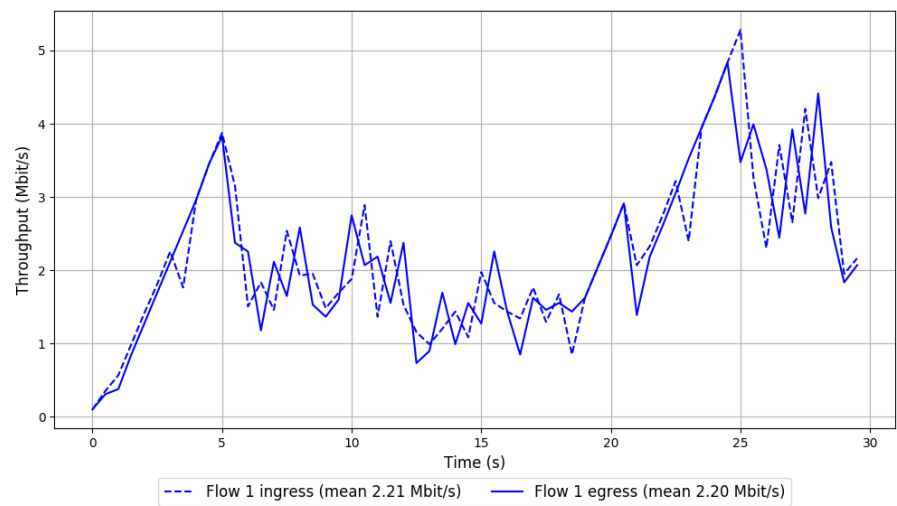
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 117.937 ms

Loss rate: 0.89%

Run 10: Report of LEDBAT — Data Link

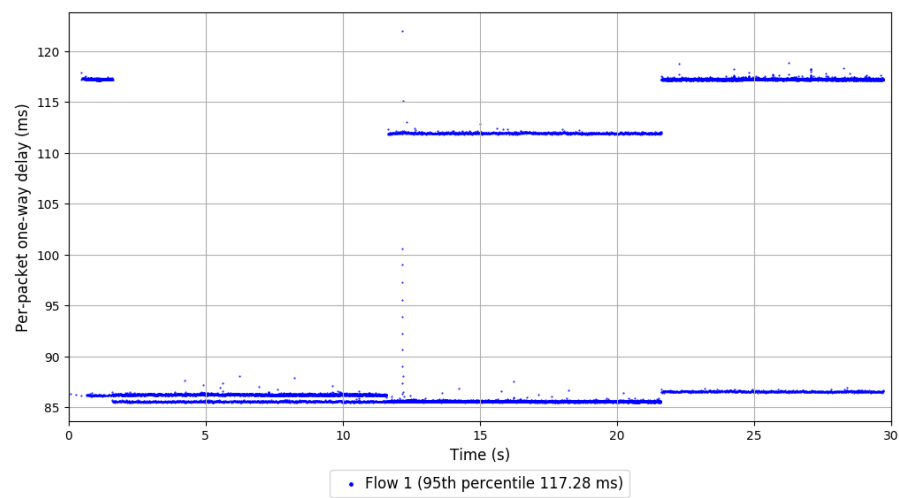
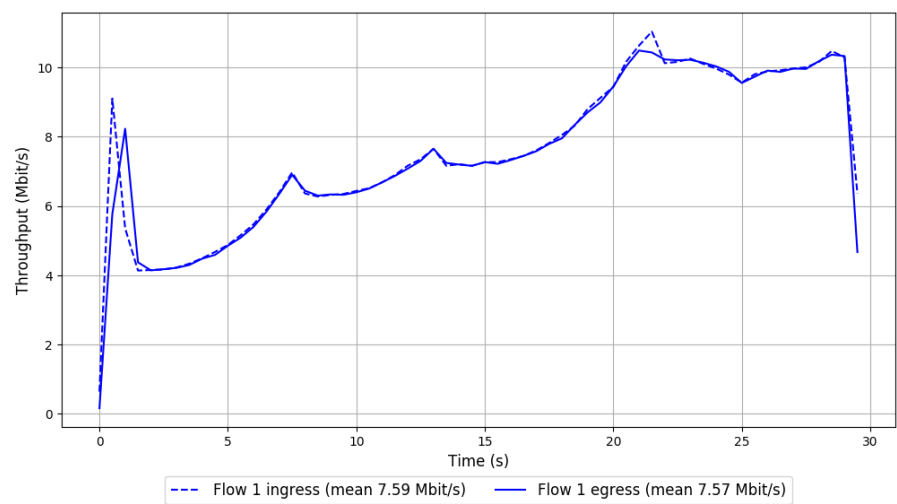


```
Run 1: Statistics of PCC

Start at: 2017-11-20 21:47:36
End at: 2017-11-20 21:48:06

# Below is generated by plot.py at 2017-11-21 01:21:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 117.279 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 117.279 ms
Loss rate: 0.91%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-20 21:57:51

End at: 2017-11-20 21:58:21

Below is generated by plot.py at 2017-11-21 01:30:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 466.58 Mbit/s

95th percentile per-packet one-way delay: 232.627 ms

Loss rate: 4.76%

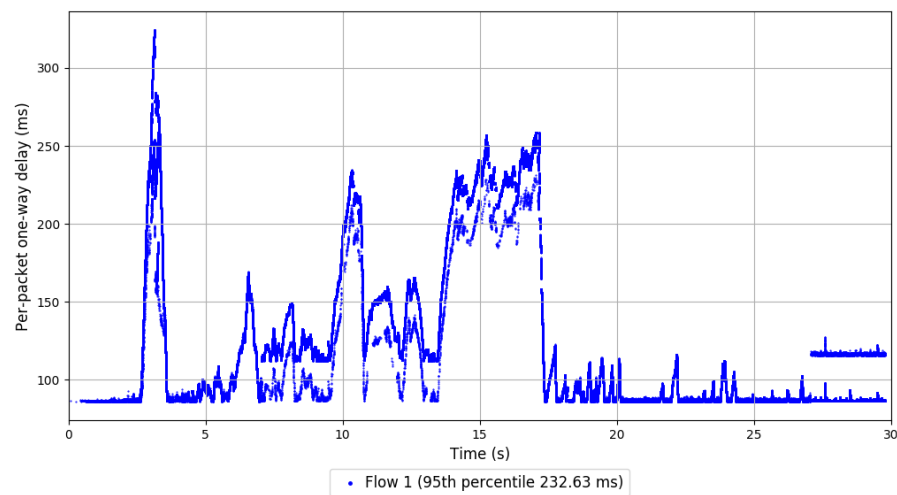
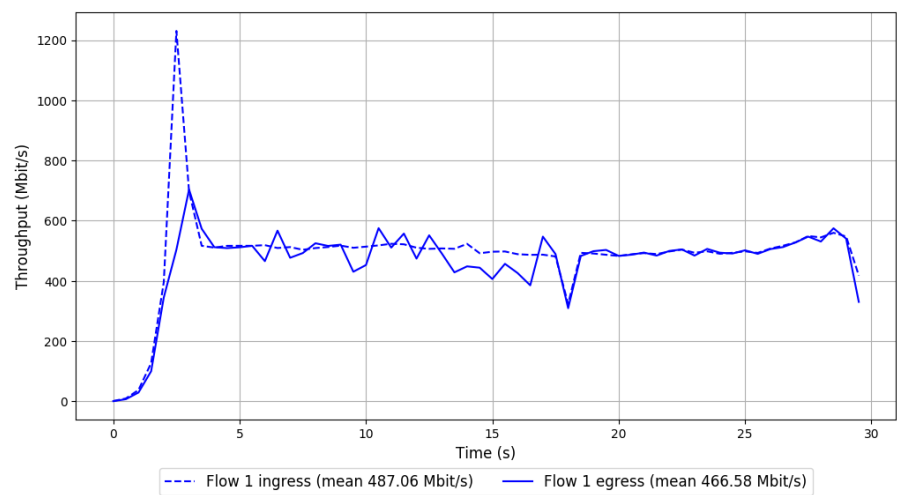
-- Flow 1:

Average throughput: 466.58 Mbit/s

95th percentile per-packet one-way delay: 232.627 ms

Loss rate: 4.76%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-20 22:08:33

End at: 2017-11-20 22:09:03

Below is generated by plot.py at 2017-11-21 01:33:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 595.89 Mbit/s

95th percentile per-packet one-way delay: 162.234 ms

Loss rate: 3.13%

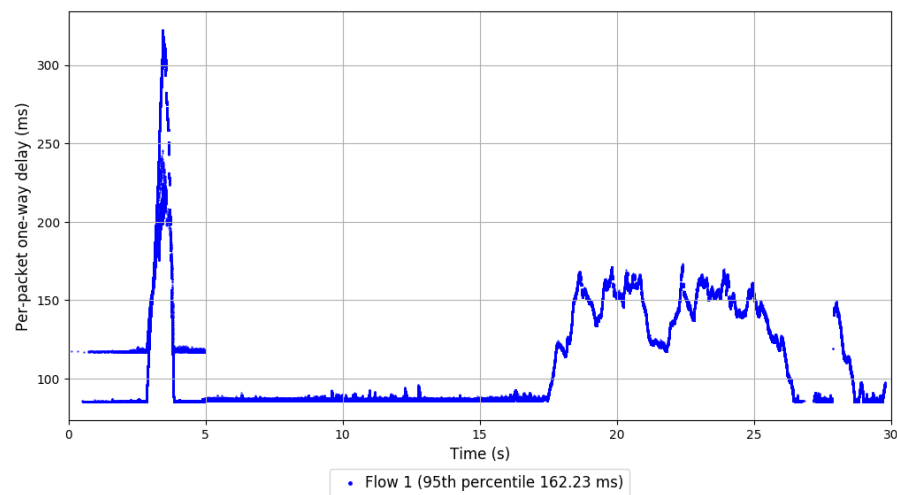
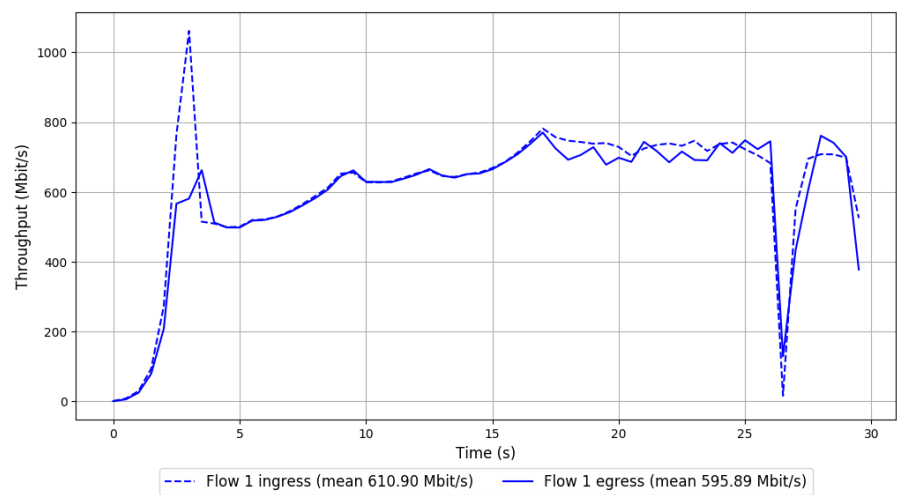
-- Flow 1:

Average throughput: 595.89 Mbit/s

95th percentile per-packet one-way delay: 162.234 ms

Loss rate: 3.13%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-20 22:19:27

End at: 2017-11-20 22:19:57

Below is generated by plot.py at 2017-11-21 01:33:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.10 Mbit/s

95th percentile per-packet one-way delay: 86.980 ms

Loss rate: 7.23%

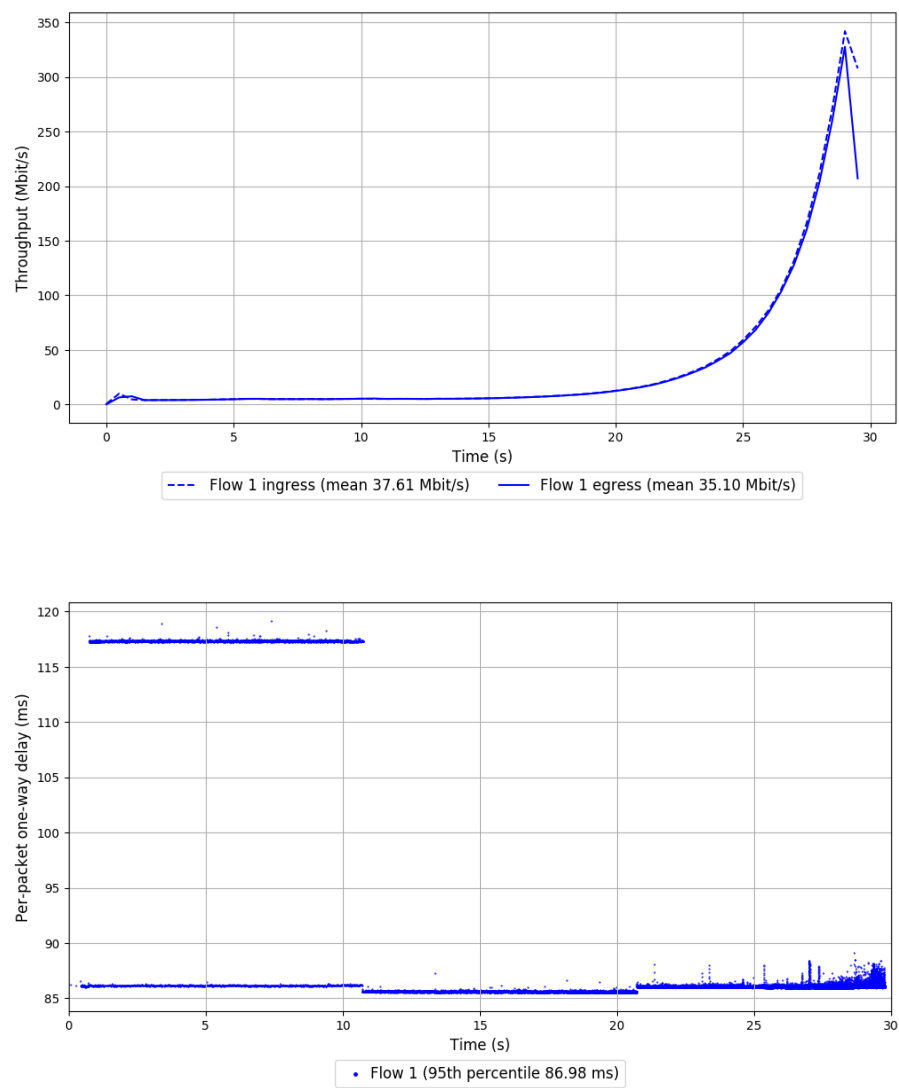
-- Flow 1:

Average throughput: 35.10 Mbit/s

95th percentile per-packet one-way delay: 86.980 ms

Loss rate: 7.23%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-20 22:29:53

End at: 2017-11-20 22:30:23

Below is generated by plot.py at 2017-11-21 01:33:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 521.12 Mbit/s

95th percentile per-packet one-way delay: 135.982 ms

Loss rate: 2.86%

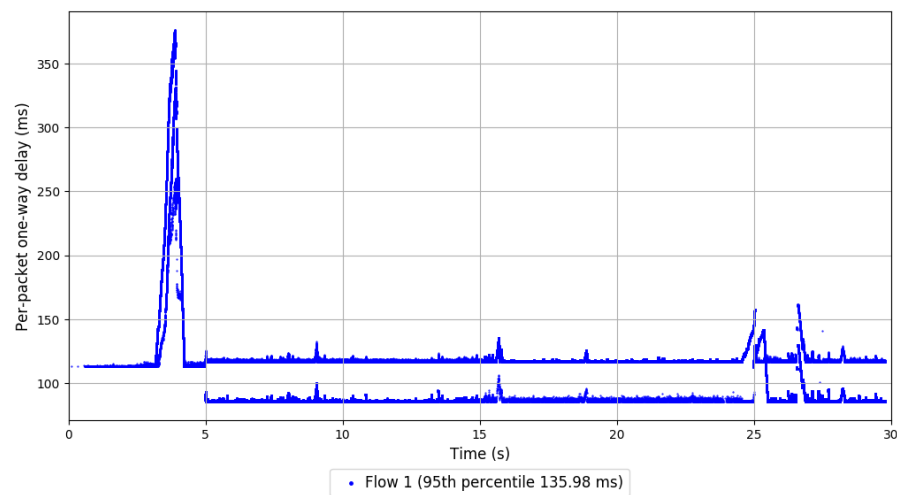
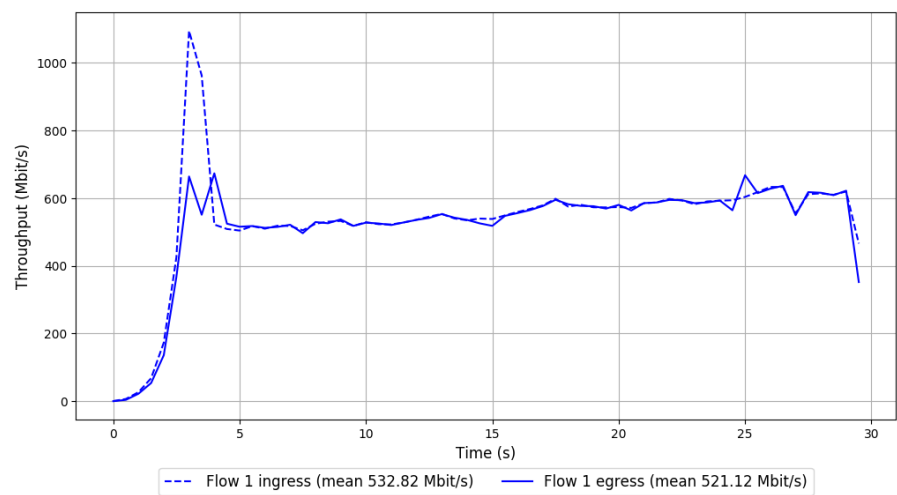
-- Flow 1:

Average throughput: 521.12 Mbit/s

95th percentile per-packet one-way delay: 135.982 ms

Loss rate: 2.86%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-20 22:40:10

End at: 2017-11-20 22:40:40

Below is generated by plot.py at 2017-11-21 01:33:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 550.44 Mbit/s

95th percentile per-packet one-way delay: 141.367 ms

Loss rate: 2.65%

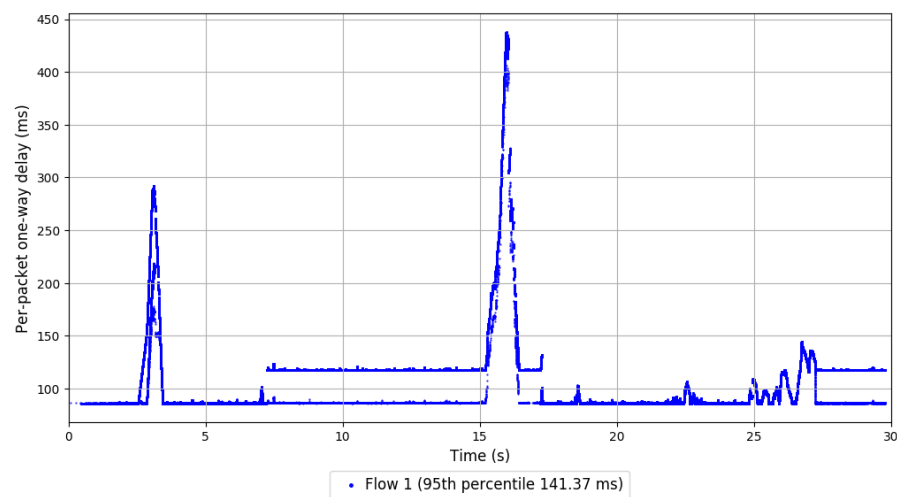
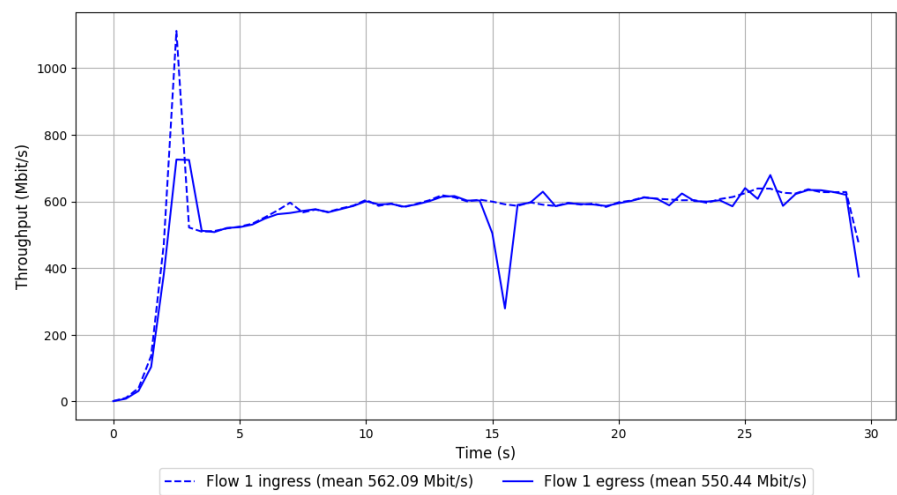
-- Flow 1:

Average throughput: 550.44 Mbit/s

95th percentile per-packet one-way delay: 141.367 ms

Loss rate: 2.65%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-20 22:50:38

End at: 2017-11-20 22:51:08

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 605.96 Mbit/s

95th percentile per-packet one-way delay: 194.114 ms

Loss rate: 4.72%

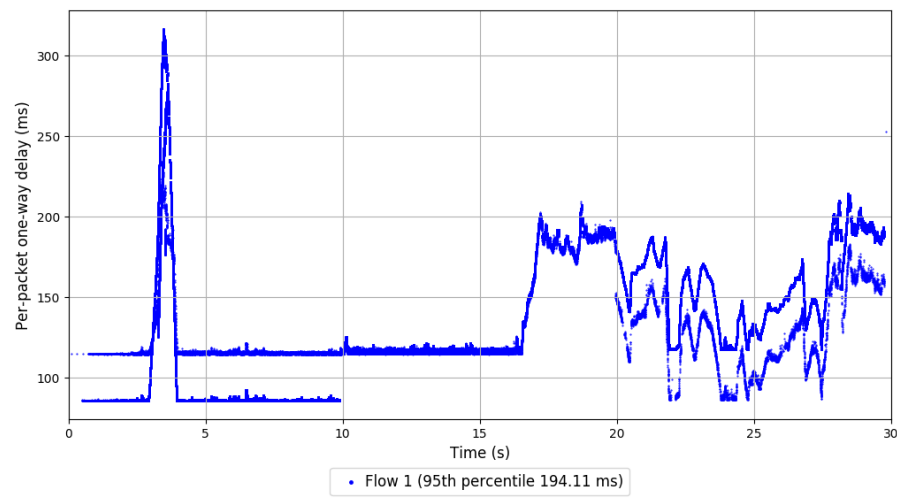
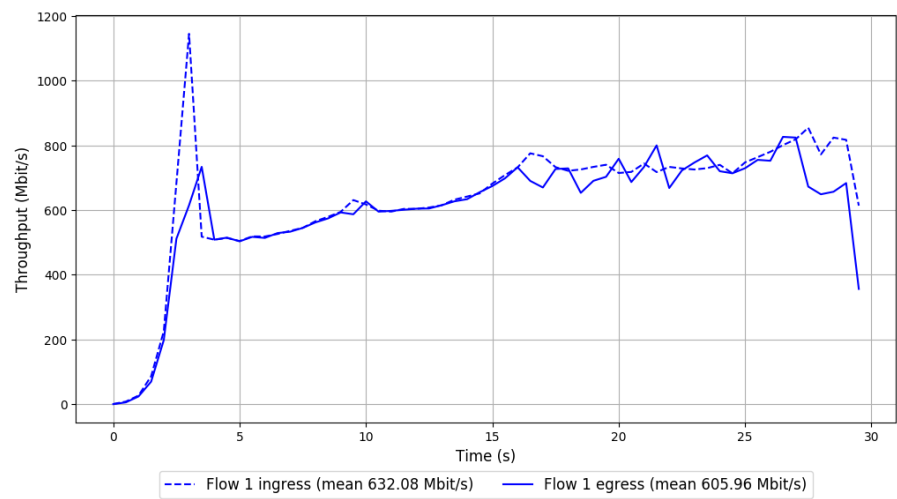
-- Flow 1:

Average throughput: 605.96 Mbit/s

95th percentile per-packet one-way delay: 194.114 ms

Loss rate: 4.72%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-20 23:01:40

End at: 2017-11-20 23:02:10

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 495.11 Mbit/s

95th percentile per-packet one-way delay: 123.629 ms

Loss rate: 1.50%

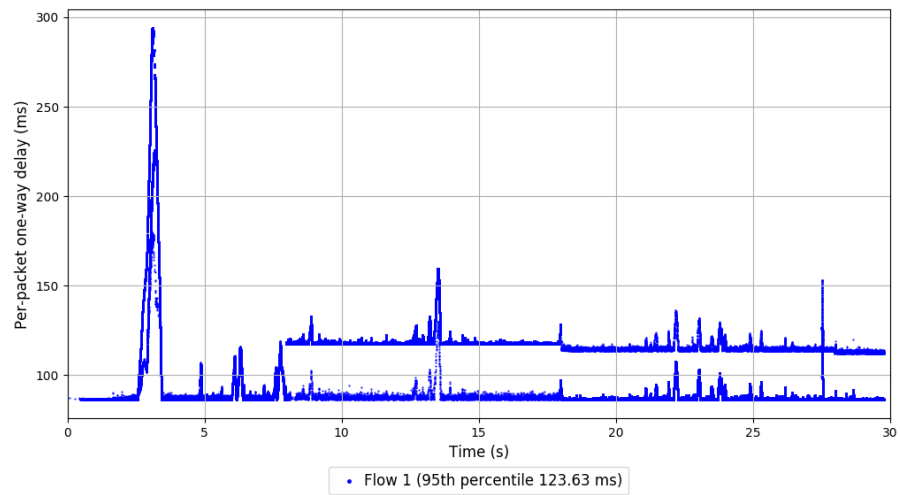
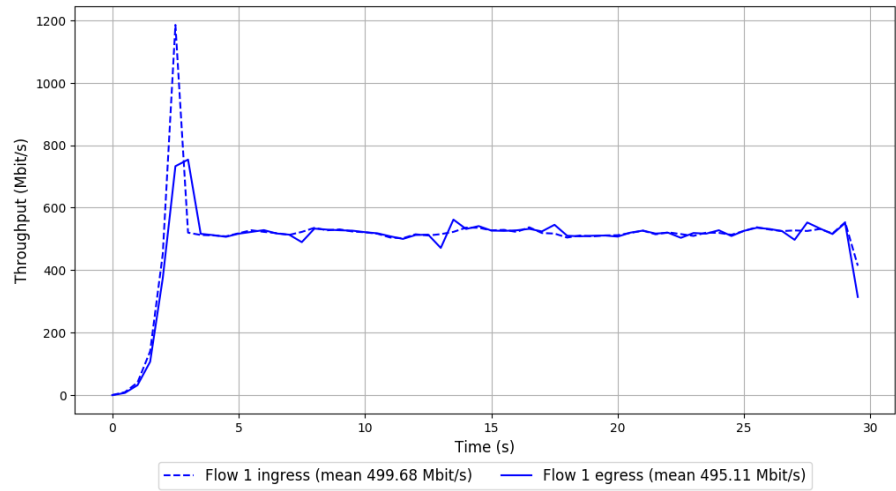
-- Flow 1:

Average throughput: 495.11 Mbit/s

95th percentile per-packet one-way delay: 123.629 ms

Loss rate: 1.50%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-20 23:12:07

End at: 2017-11-20 23:12:37

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 353.53 Mbit/s

95th percentile per-packet one-way delay: 216.088 ms

Loss rate: 6.27%

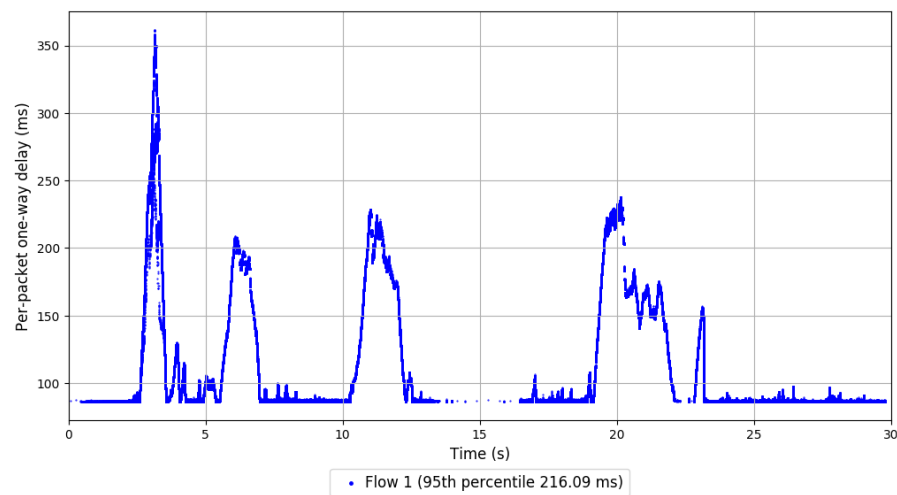
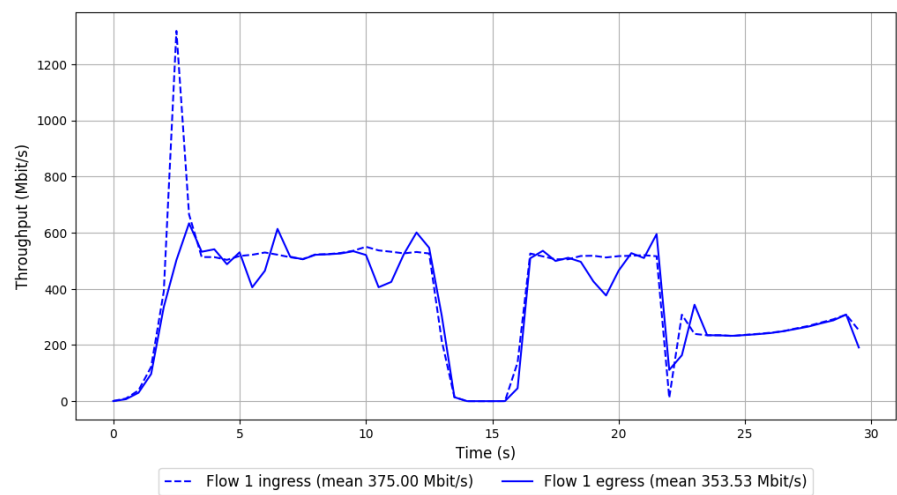
-- Flow 1:

Average throughput: 353.53 Mbit/s

95th percentile per-packet one-way delay: 216.088 ms

Loss rate: 6.27%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-20 23:22:32

End at: 2017-11-20 23:23:02

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 515.99 Mbit/s

95th percentile per-packet one-way delay: 120.155 ms

Loss rate: 1.63%

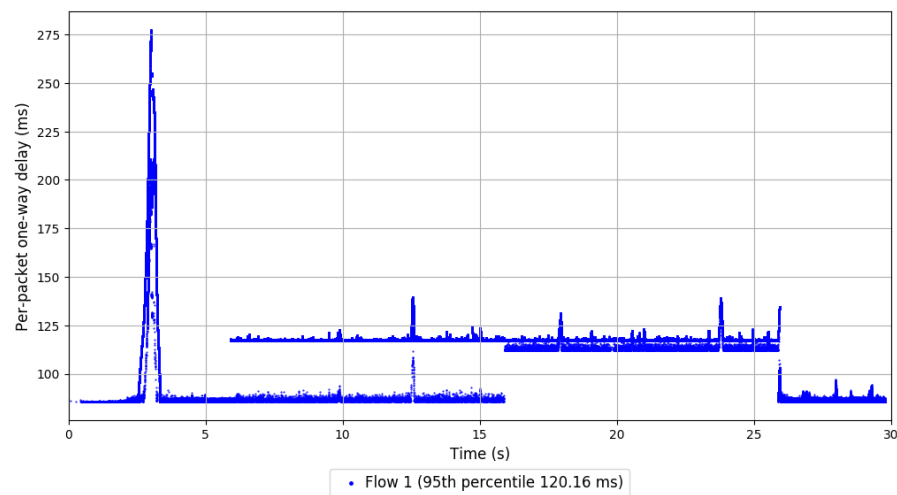
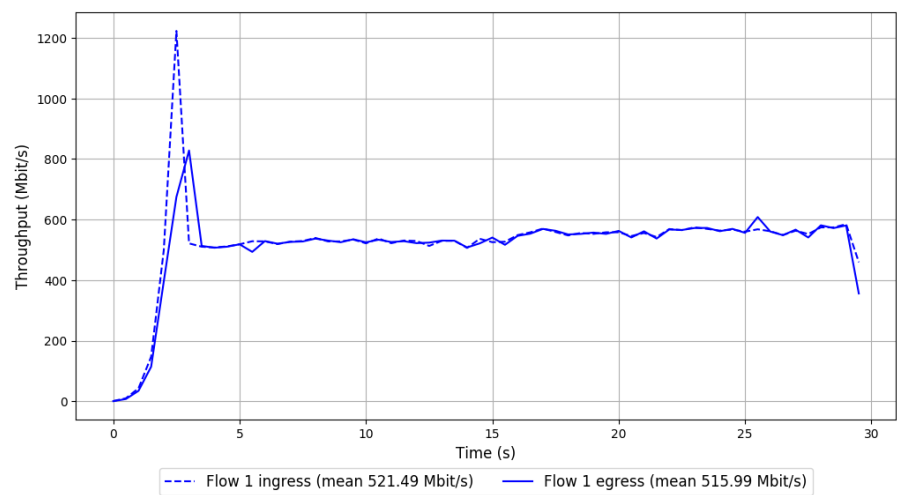
-- Flow 1:

Average throughput: 515.99 Mbit/s

95th percentile per-packet one-way delay: 120.155 ms

Loss rate: 1.63%

Run 10: Report of PCC — Data Link

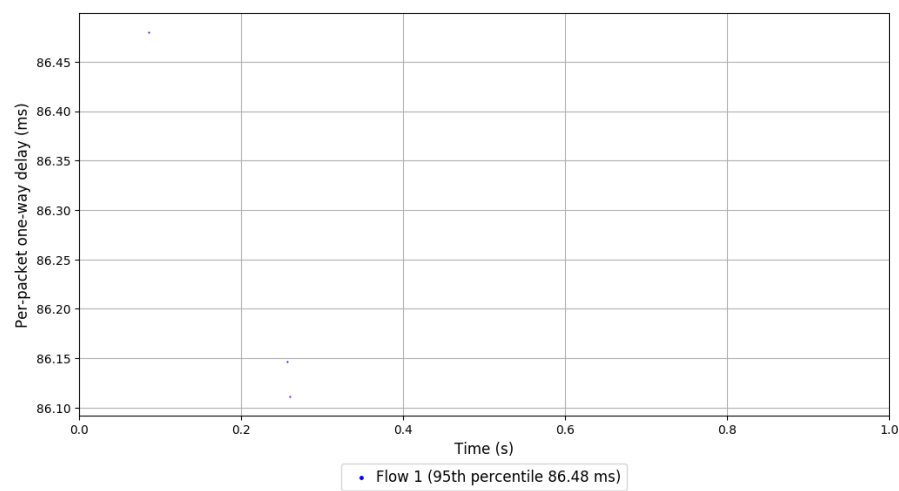
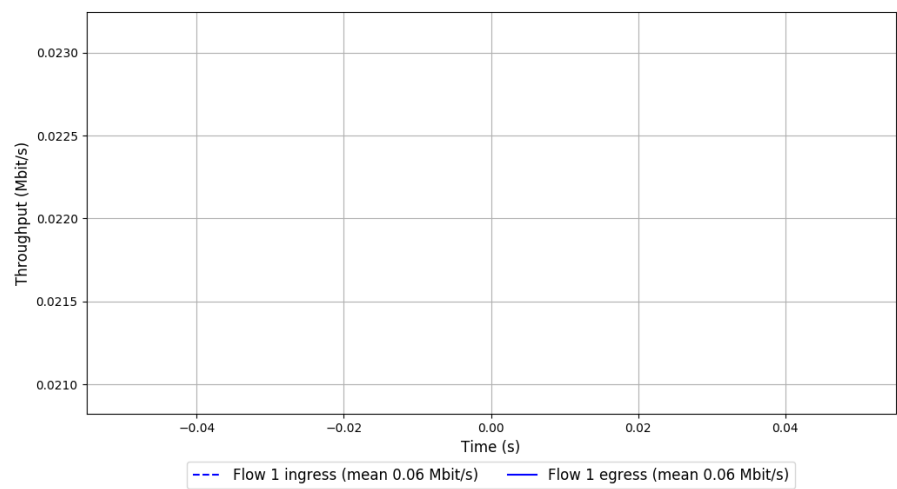


Run 1: Statistics of QUIC Cubic

Start at: 2017-11-20 21:44:30

End at: 2017-11-20 21:45:00

Run 1: Report of QUIC Cubic — Data Link

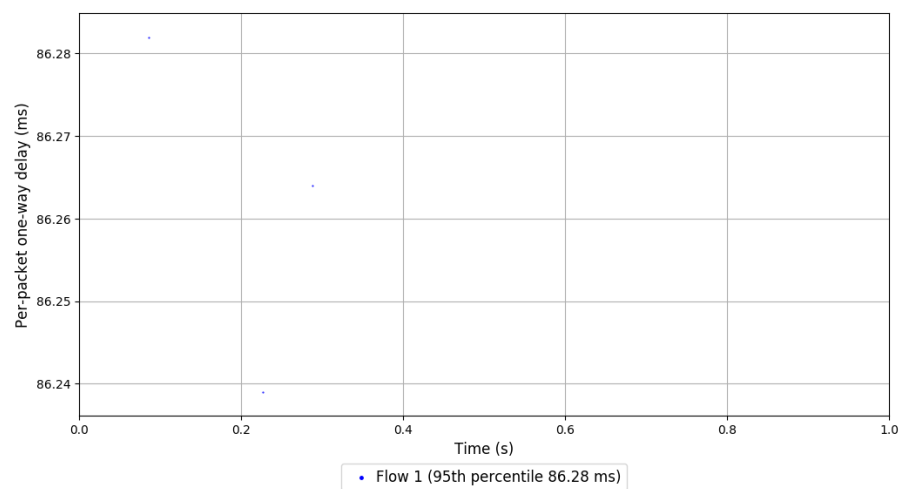
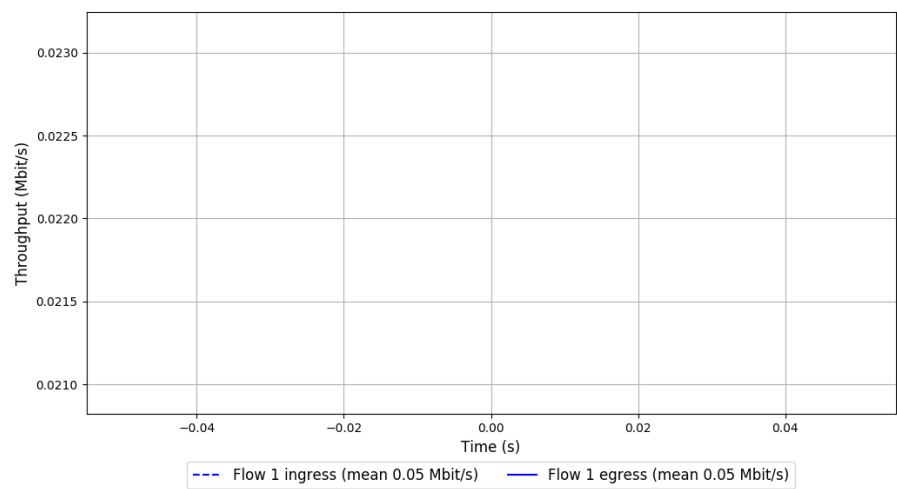


Run 2: Statistics of QUIC Cubic

Start at: 2017-11-20 21:54:55

End at: 2017-11-20 21:55:25

Run 2: Report of QUIC Cubic — Data Link

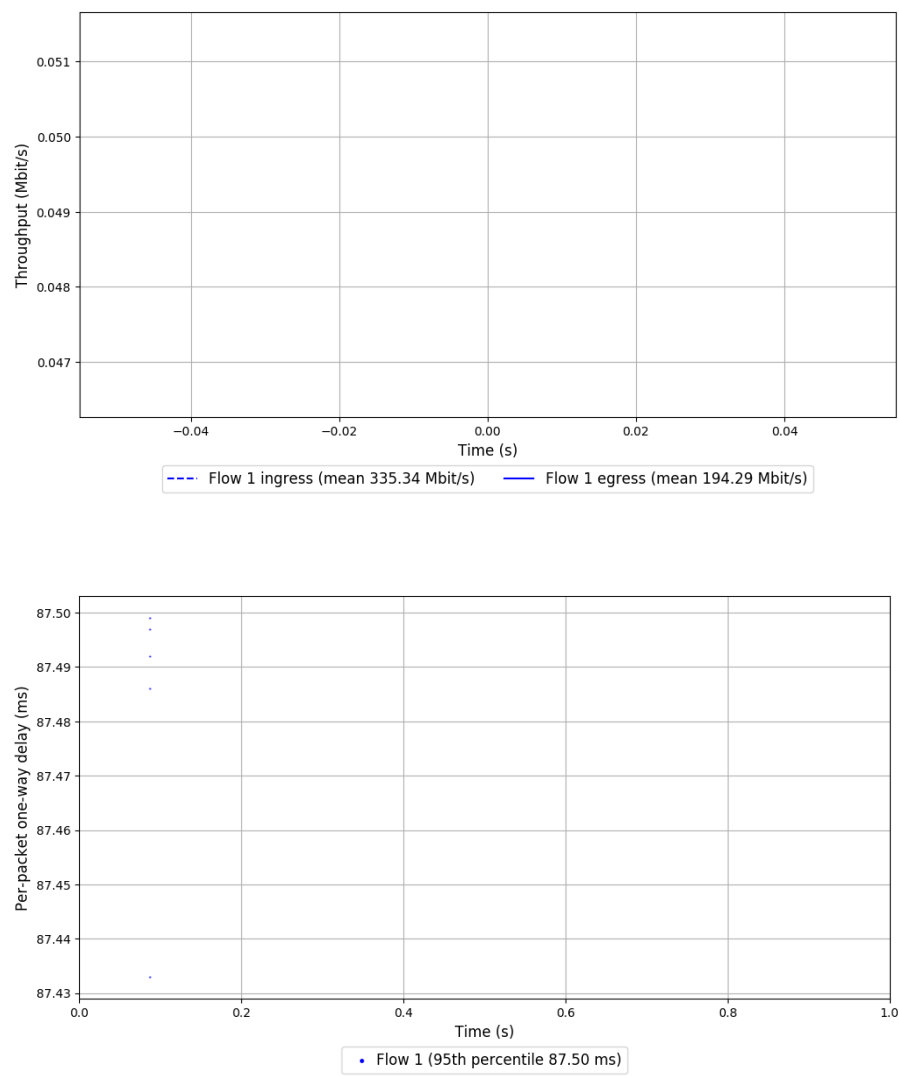


Run 3: Statistics of QUIC Cubic

Start at: 2017-11-20 22:05:29

End at: 2017-11-20 22:05:59

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-20 22:16:23

End at: 2017-11-20 22:16:53

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.86 Mbit/s

95th percentile per-packet one-way delay: 116.936 ms

Loss rate: 1.17%

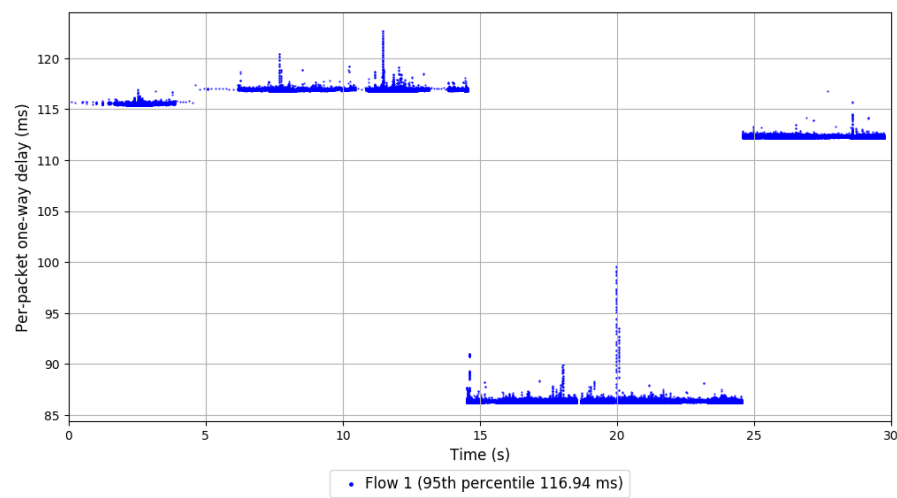
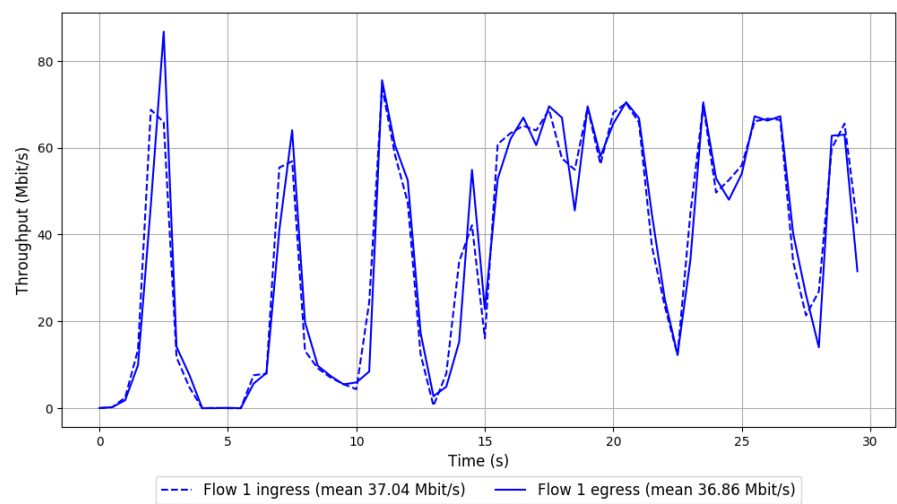
-- Flow 1:

Average throughput: 36.86 Mbit/s

95th percentile per-packet one-way delay: 116.936 ms

Loss rate: 1.17%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-20 22:26:43

End at: 2017-11-20 22:27:13

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.11 Mbit/s

95th percentile per-packet one-way delay: 117.398 ms

Loss rate: 0.99%

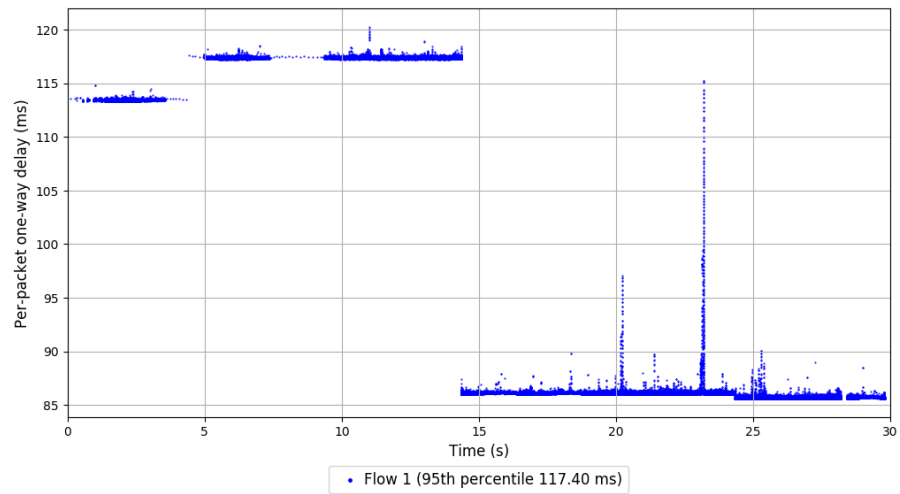
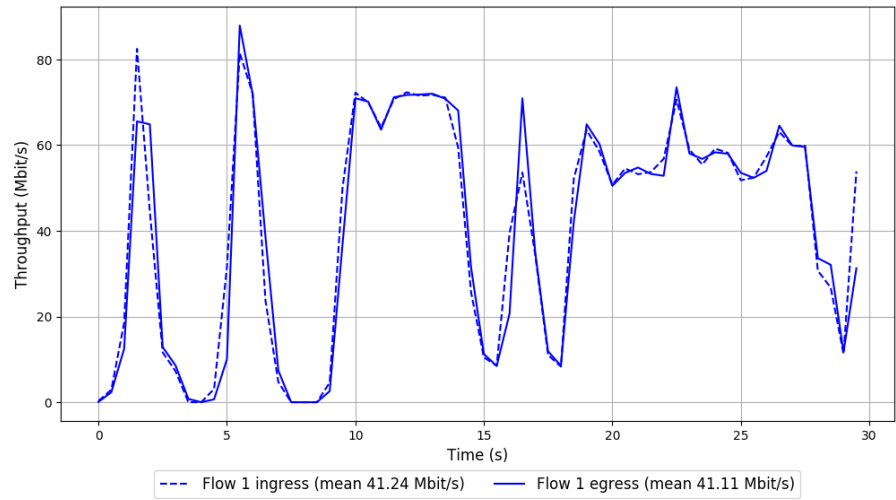
-- Flow 1:

Average throughput: 41.11 Mbit/s

95th percentile per-packet one-way delay: 117.398 ms

Loss rate: 0.99%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-20 22:37:17

End at: 2017-11-20 22:37:47

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.87 Mbit/s

95th percentile per-packet one-way delay: 117.501 ms

Loss rate: 1.11%

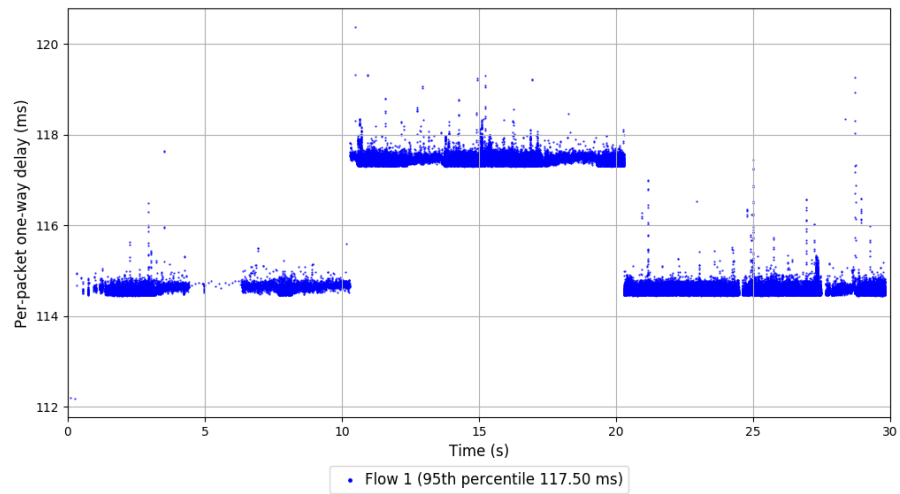
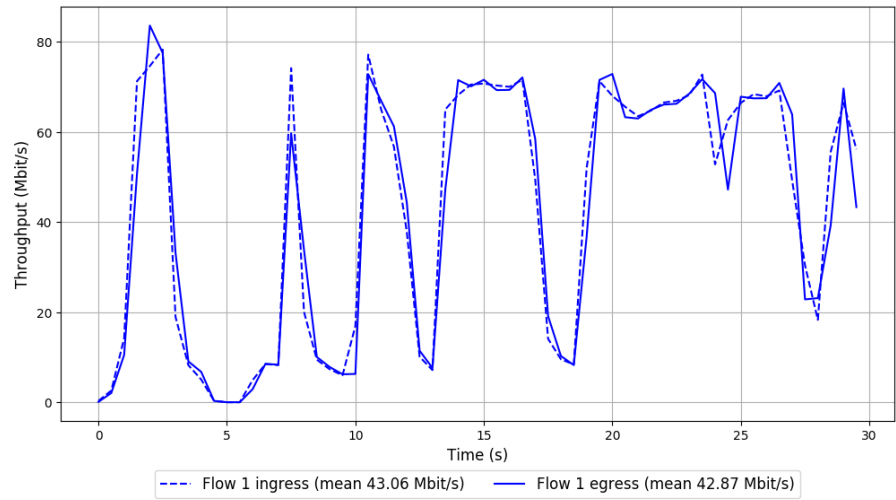
-- Flow 1:

Average throughput: 42.87 Mbit/s

95th percentile per-packet one-way delay: 117.501 ms

Loss rate: 1.11%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-20 22:47:38

End at: 2017-11-20 22:48:08

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.89 Mbit/s

95th percentile per-packet one-way delay: 86.541 ms

Loss rate: 0.14%

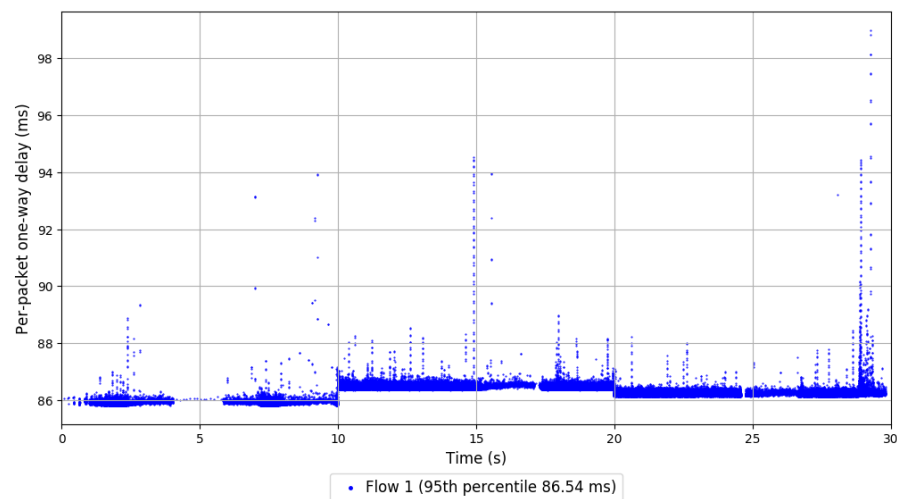
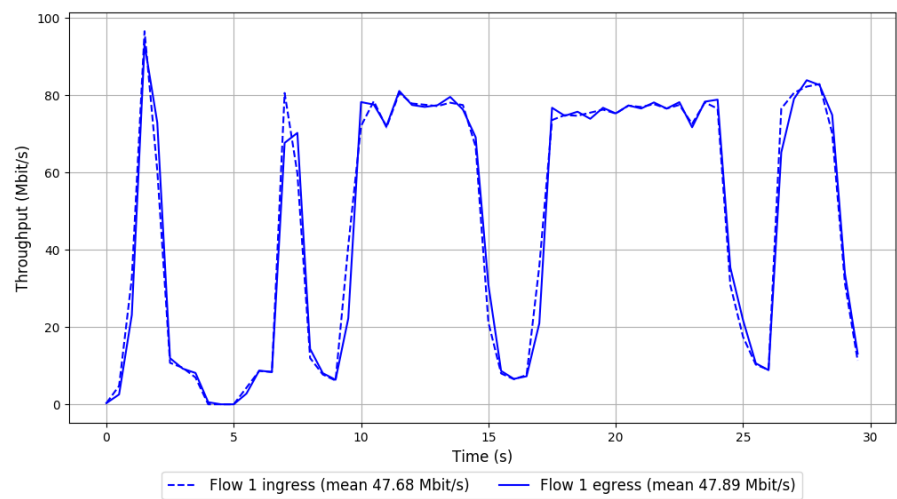
-- Flow 1:

Average throughput: 47.89 Mbit/s

95th percentile per-packet one-way delay: 86.541 ms

Loss rate: 0.14%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-20 22:58:23

End at: 2017-11-20 22:58:53

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.05 Mbit/s

95th percentile per-packet one-way delay: 117.533 ms

Loss rate: 0.87%

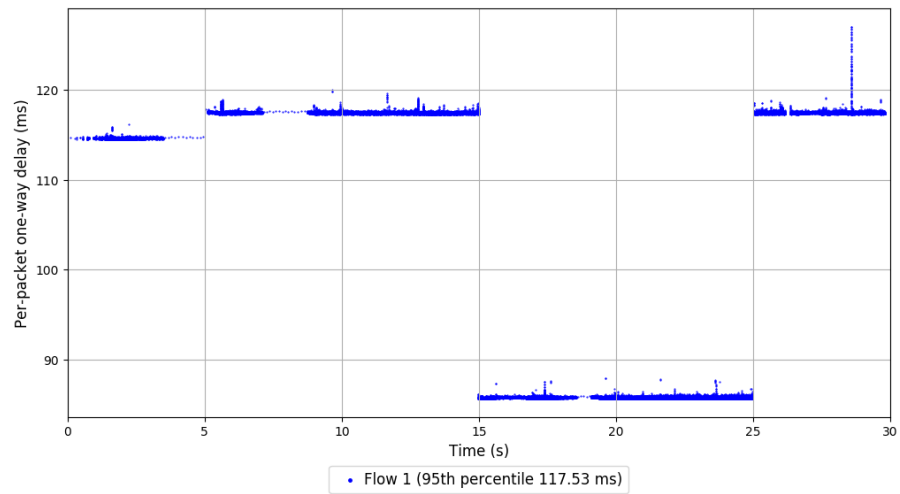
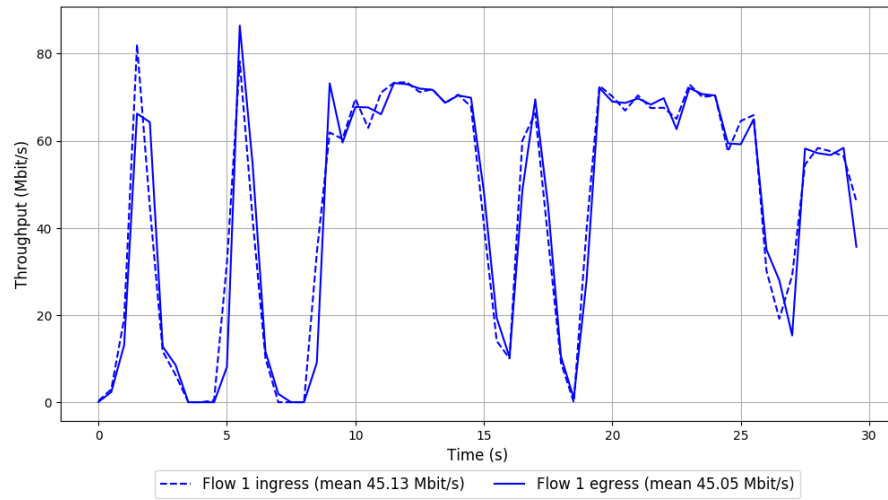
-- Flow 1:

Average throughput: 45.05 Mbit/s

95th percentile per-packet one-way delay: 117.533 ms

Loss rate: 0.87%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-20 23:09:11

End at: 2017-11-20 23:09:41

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.00 Mbit/s

95th percentile per-packet one-way delay: 117.427 ms

Loss rate: 1.02%

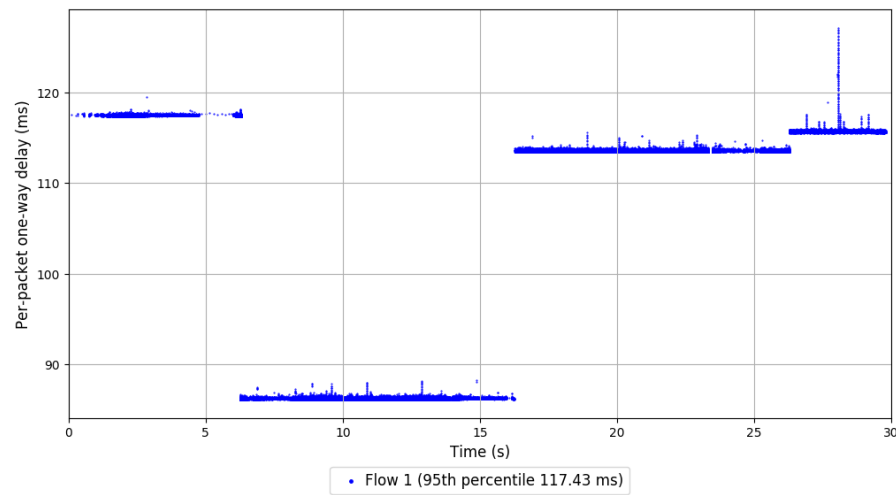
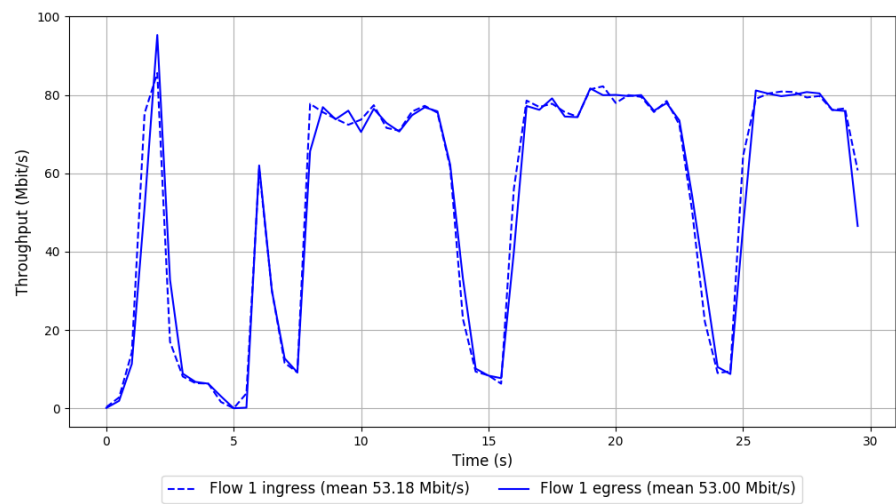
-- Flow 1:

Average throughput: 53.00 Mbit/s

95th percentile per-packet one-way delay: 117.427 ms

Loss rate: 1.02%

Run 9: Report of QUIC Cubic — Data Link

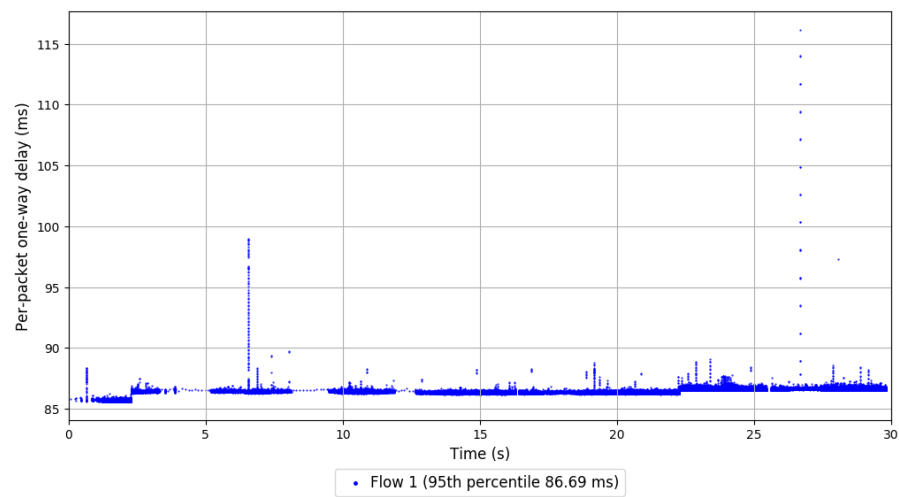
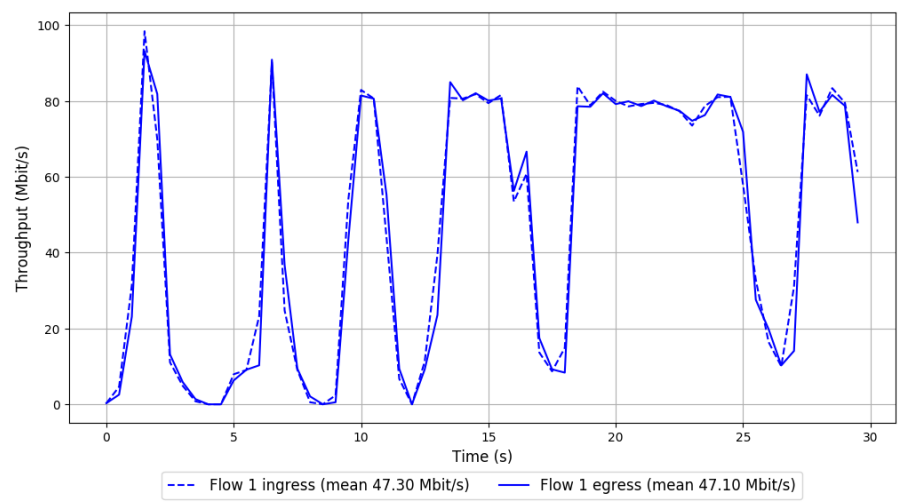


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-11-20 23:19:25
End at: 2017-11-20 23:19:55

# Below is generated by plot.py at 2017-11-21 01:33:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.10 Mbit/s
95th percentile per-packet one-way delay: 86.690 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 47.10 Mbit/s
95th percentile per-packet one-way delay: 86.690 ms
Loss rate: 0.99%
```

Run 10: Report of QUIC Cubic — Data Link

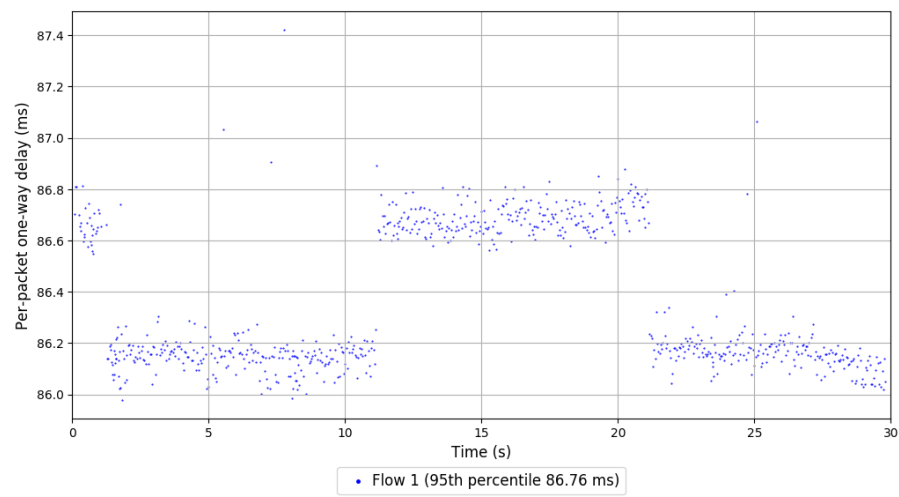
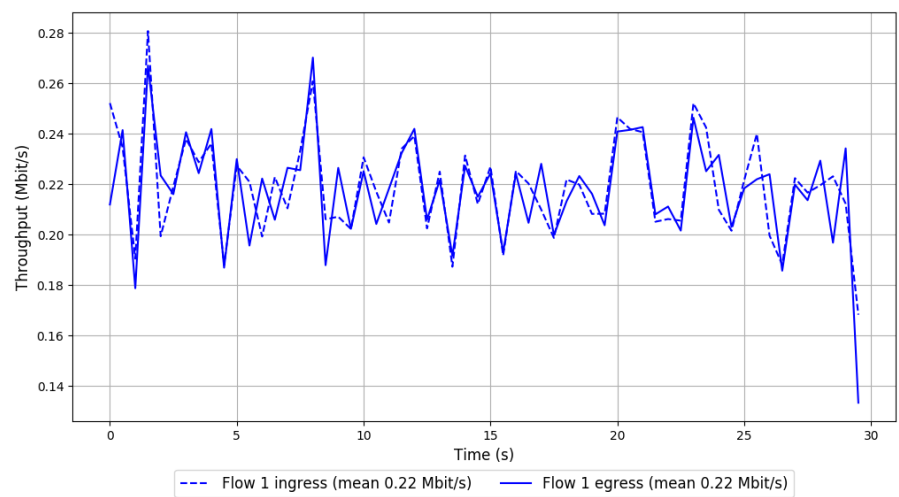


```
Run 1: Statistics of SCReAM

Start at: 2017-11-20 21:46:07
End at: 2017-11-20 21:46:37

# Below is generated by plot.py at 2017-11-21 01:33:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.762 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.762 ms
Loss rate: 0.52%
```

Run 1: Report of SReAM — Data Link

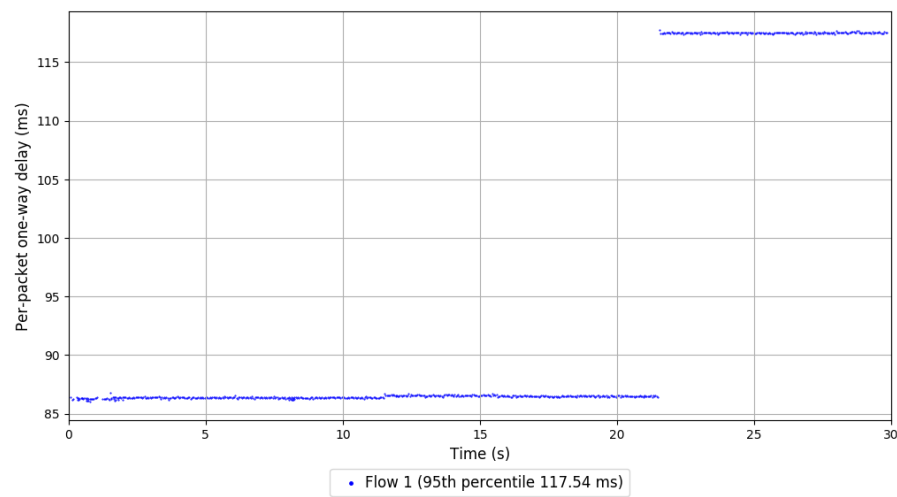
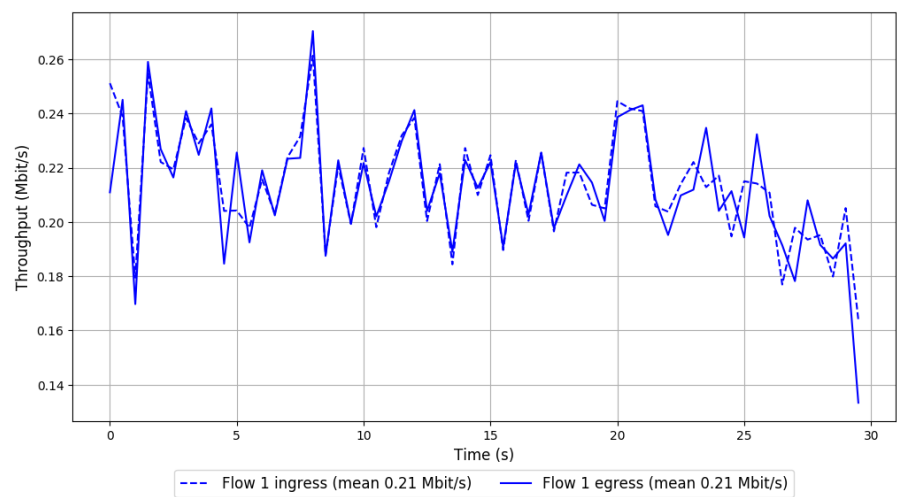


```
Run 2: Statistics of SCReAM

Start at: 2017-11-20 21:56:26
End at: 2017-11-20 21:56:56

# Below is generated by plot.py at 2017-11-21 01:33:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 117.543 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 117.543 ms
Loss rate: 0.58%
```

Run 2: Report of SReAM — Data Link

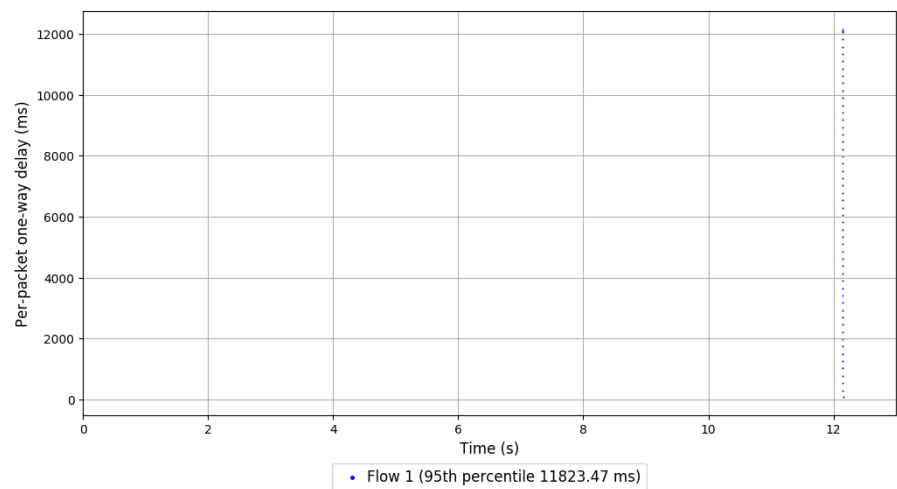
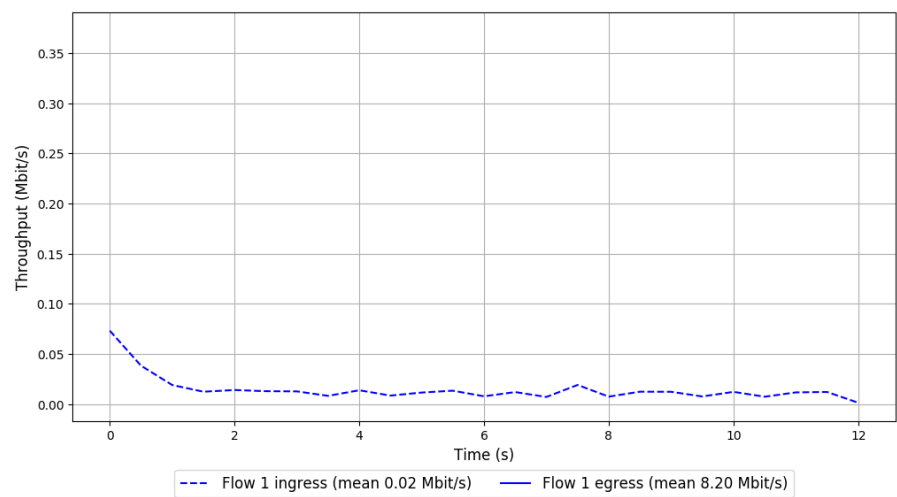


Run 3: Statistics of SReAM

Start at: 2017-11-20 22:07:04

End at: 2017-11-20 22:07:34

Run 3: Report of SReAM — Data Link

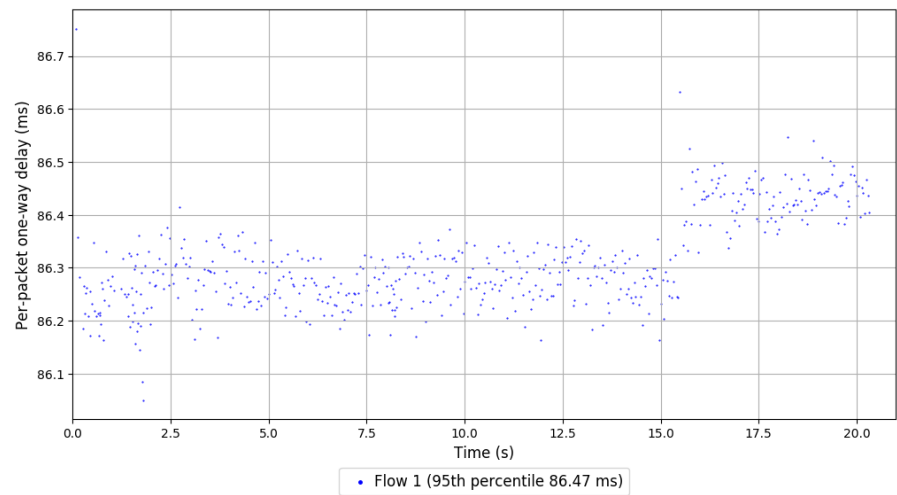
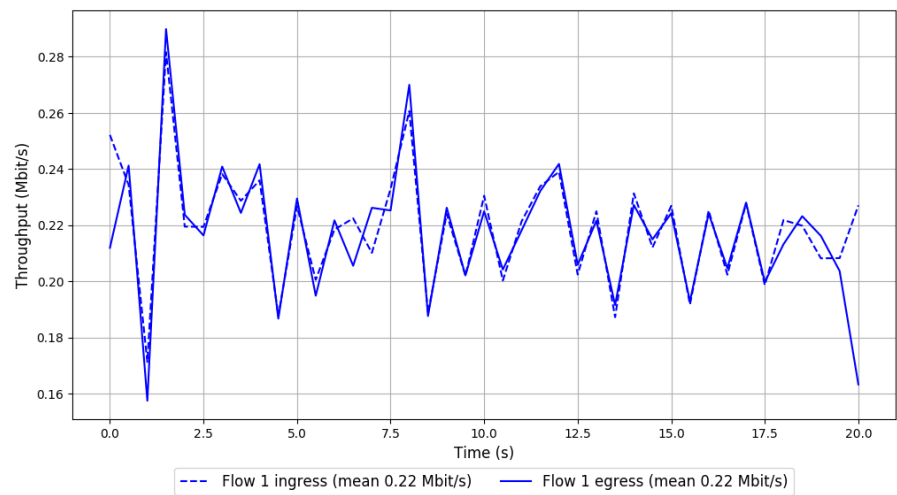


Run 4: Statistics of SReAM

Start at: 2017-11-20 22:18:03

End at: 2017-11-20 22:18:33

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-20 22:28:21

End at: 2017-11-20 22:28:51

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 117.514 ms

Loss rate: 0.29%

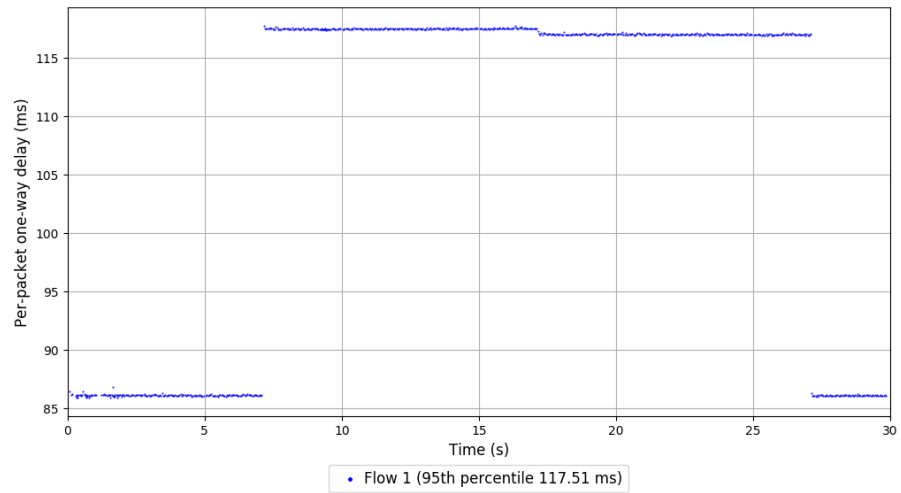
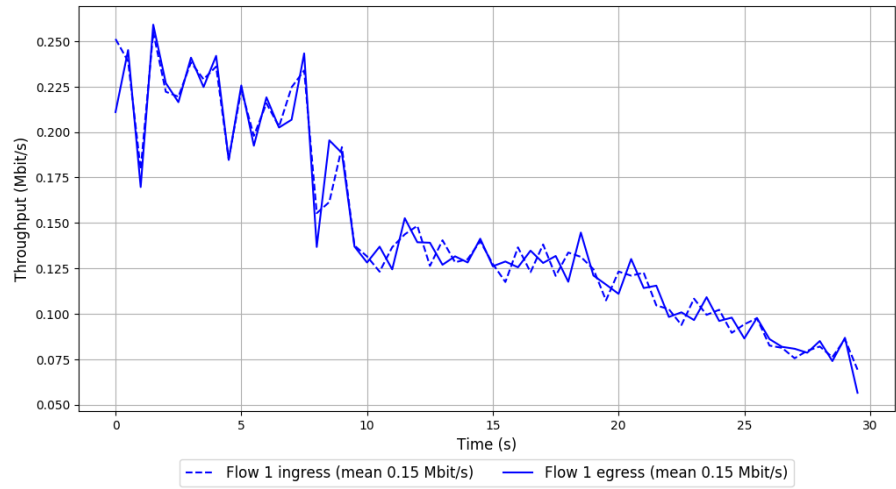
-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 117.514 ms

Loss rate: 0.29%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-20 22:38:46

End at: 2017-11-20 22:39:16

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 117.633 ms

Loss rate: 0.49%

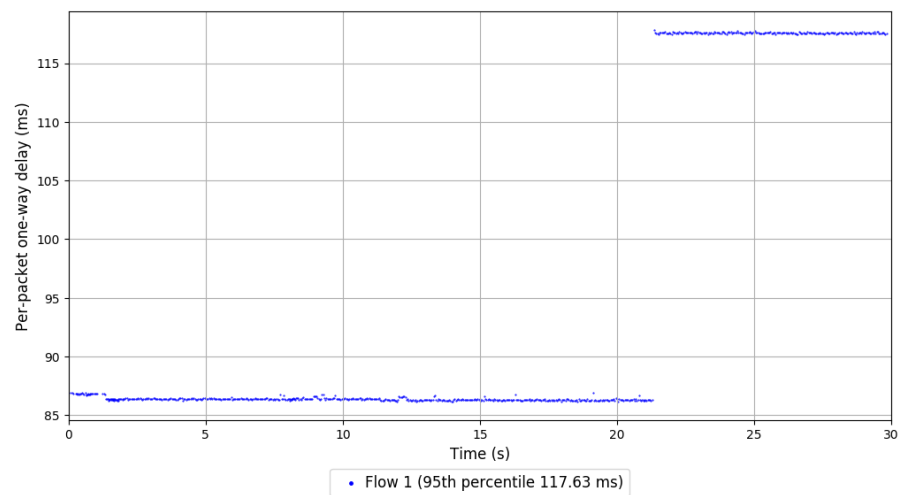
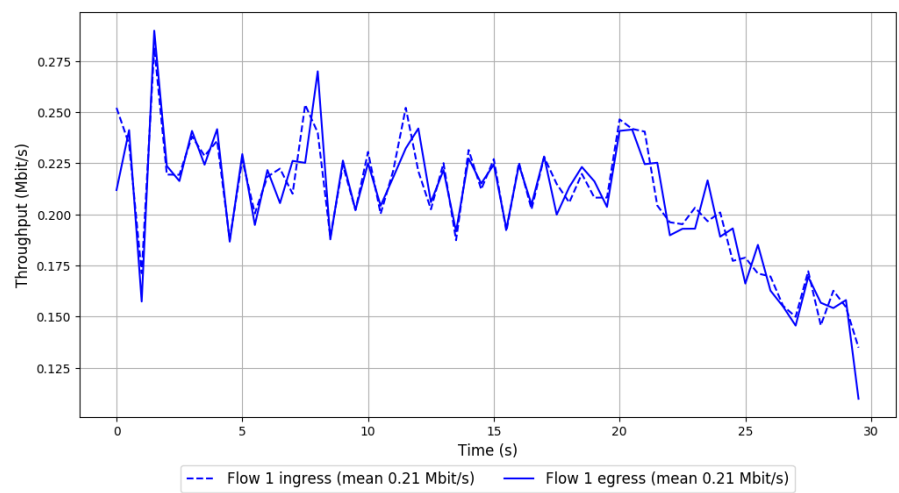
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 117.633 ms

Loss rate: 0.49%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-20 22:49:15

End at: 2017-11-20 22:49:45

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.950 ms

Loss rate: 0.61%

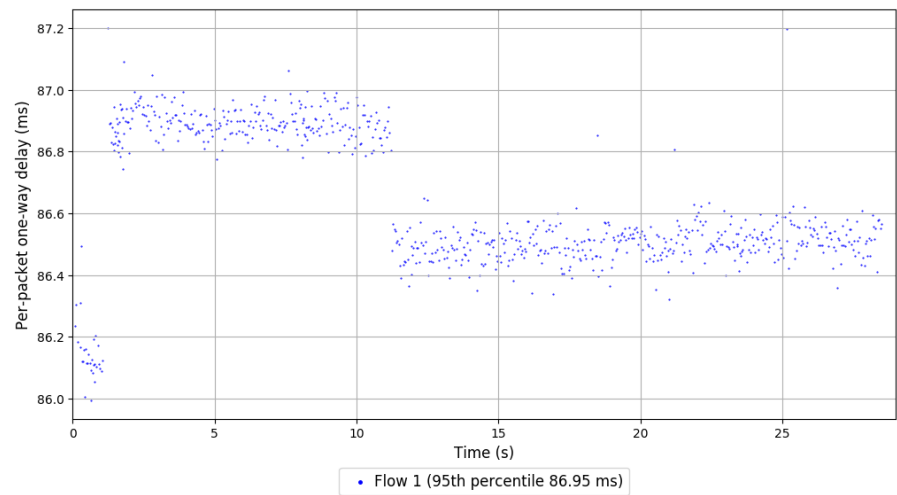
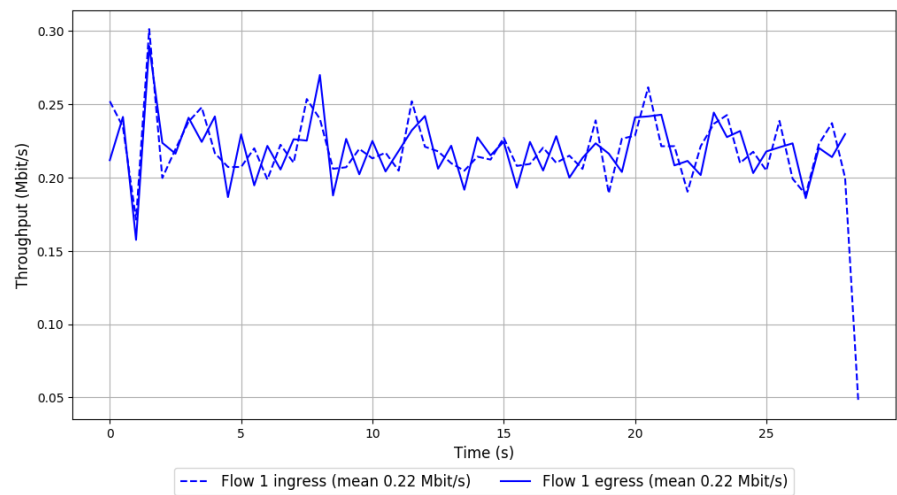
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.950 ms

Loss rate: 0.61%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-20 23:00:06

End at: 2017-11-20 23:00:36

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 114.755 ms

Loss rate: 0.46%

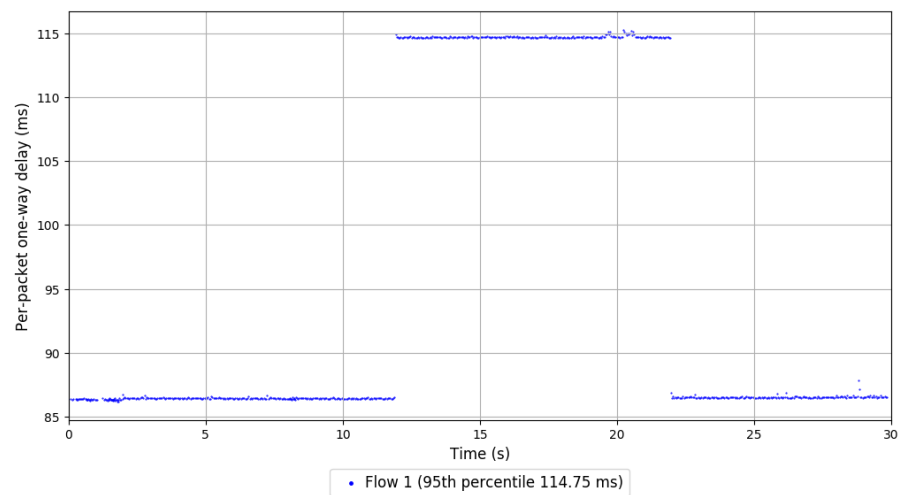
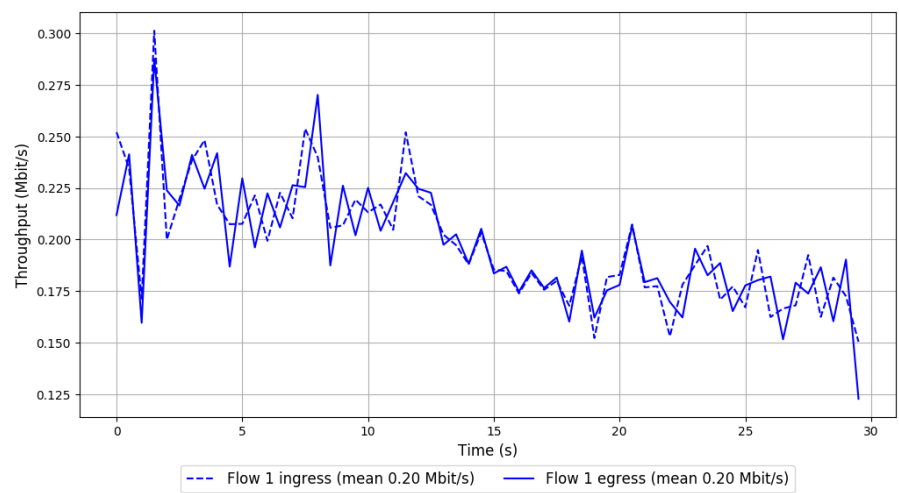
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 114.755 ms

Loss rate: 0.46%

Run 8: Report of SCRaM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-20 23:10:45

End at: 2017-11-20 23:11:15

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 114.911 ms

Loss rate: 0.50%

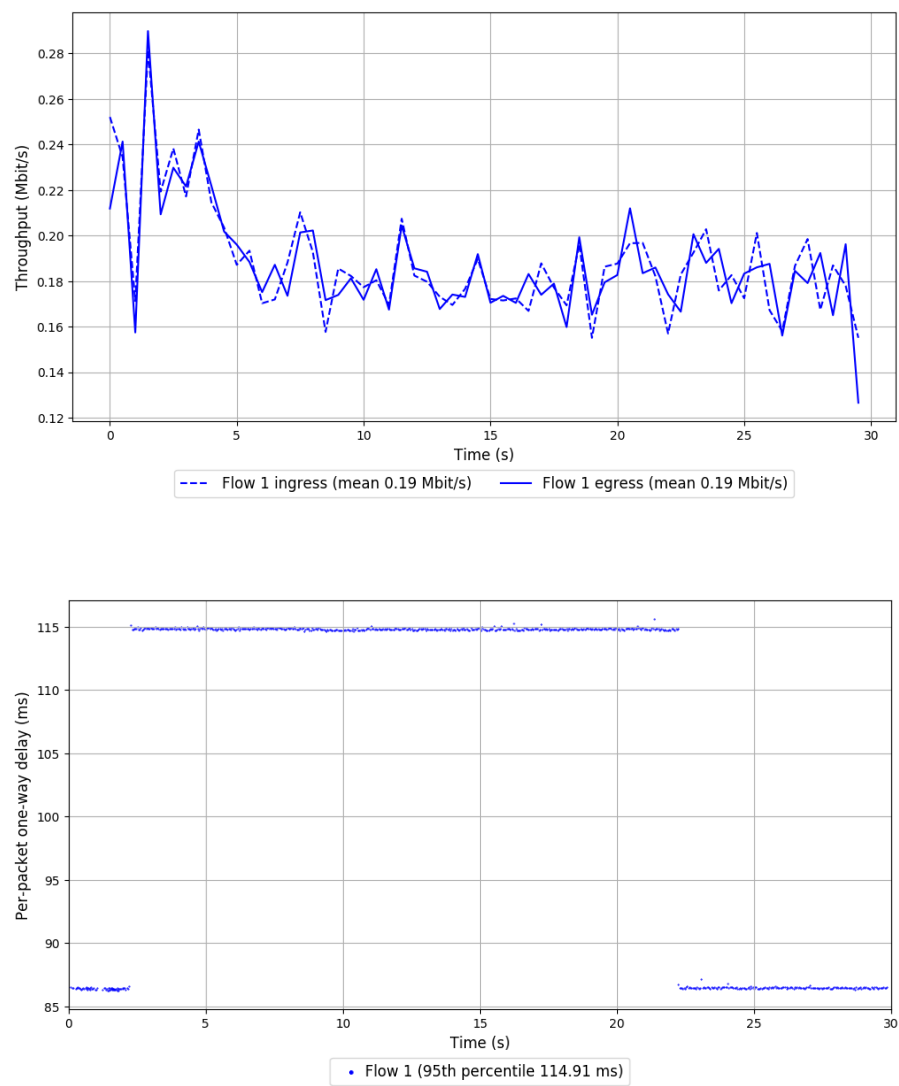
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 114.911 ms

Loss rate: 0.50%

Run 9: Report of SReAM — Data Link

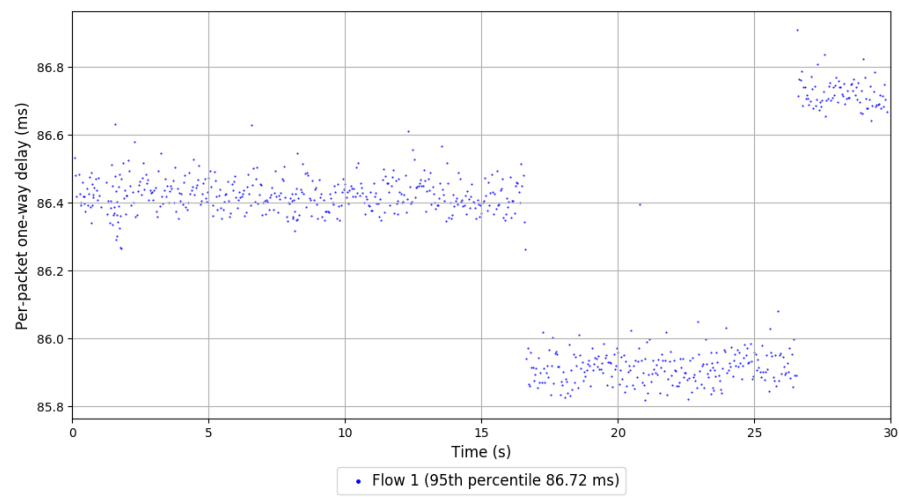
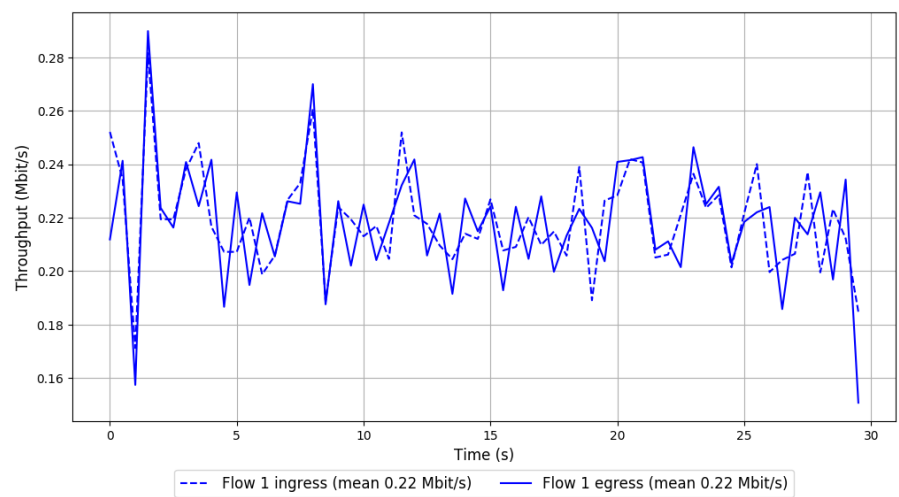


```
Run 10: Statistics of SReAM

Start at: 2017-11-20 23:21:01
End at: 2017-11-20 23:21:31

# Below is generated by plot.py at 2017-11-21 01:33:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.717 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.717 ms
Loss rate: 0.51%
```

Run 10: Report of SReAM — Data Link

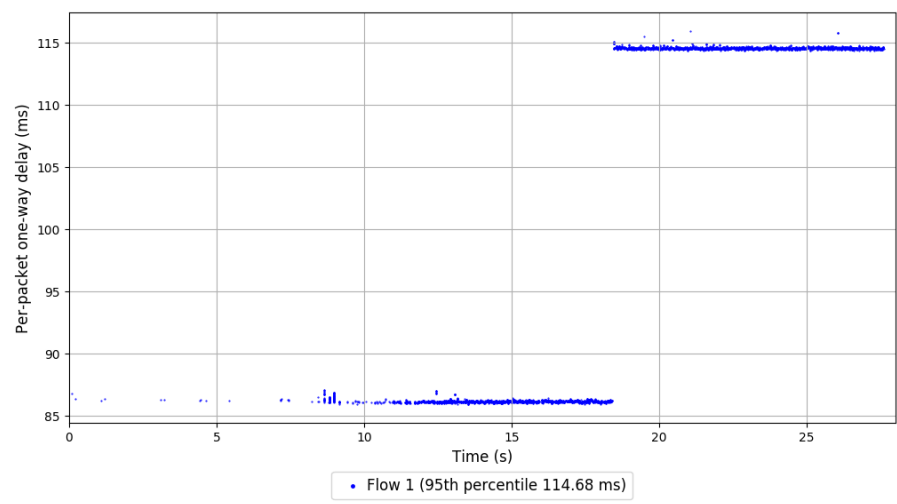
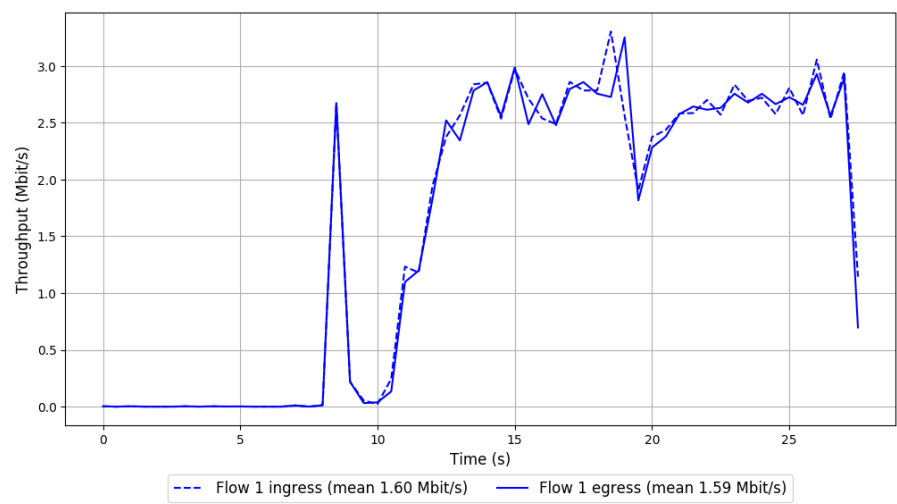


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-20 21:50:27
End at: 2017-11-20 21:50:57

# Below is generated by plot.py at 2017-11-21 01:33:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 114.683 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 114.683 ms
Loss rate: 1.29%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-20 22:01:07

End at: 2017-11-20 22:01:37

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 115.877 ms

Loss rate: 0.51%

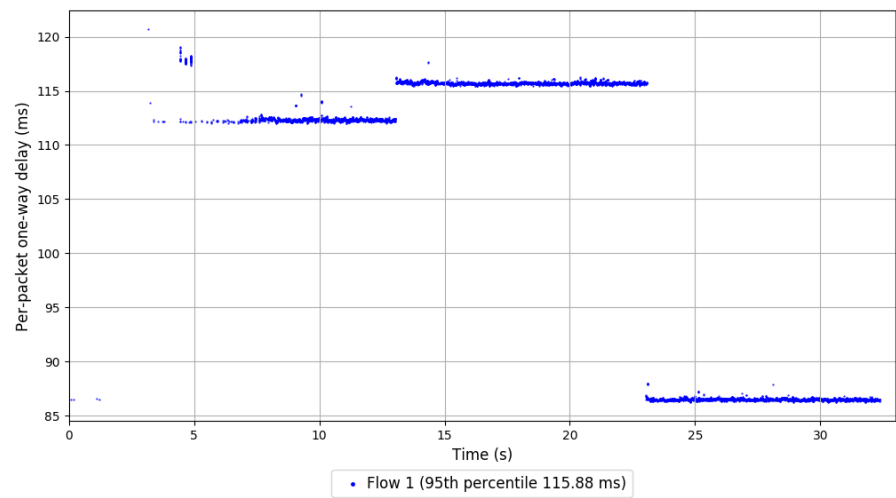
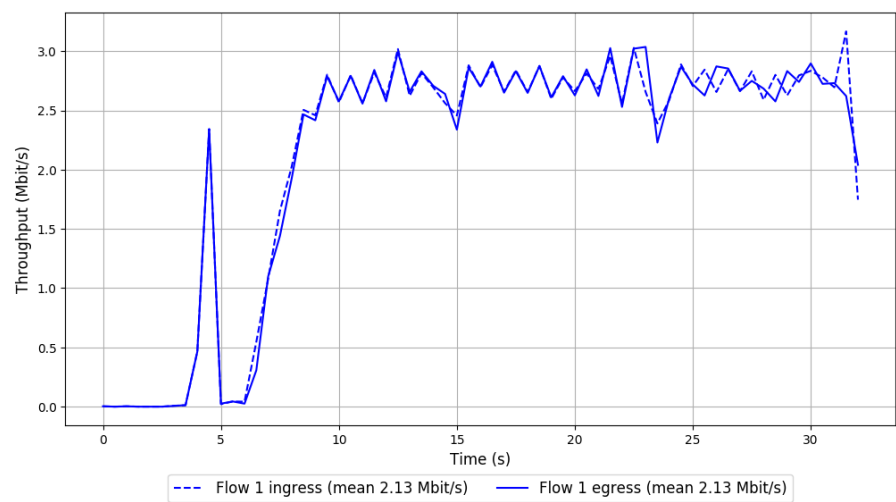
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 115.877 ms

Loss rate: 0.51%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-20 22:11:56

End at: 2017-11-20 22:12:26

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 117.077 ms

Loss rate: 0.94%

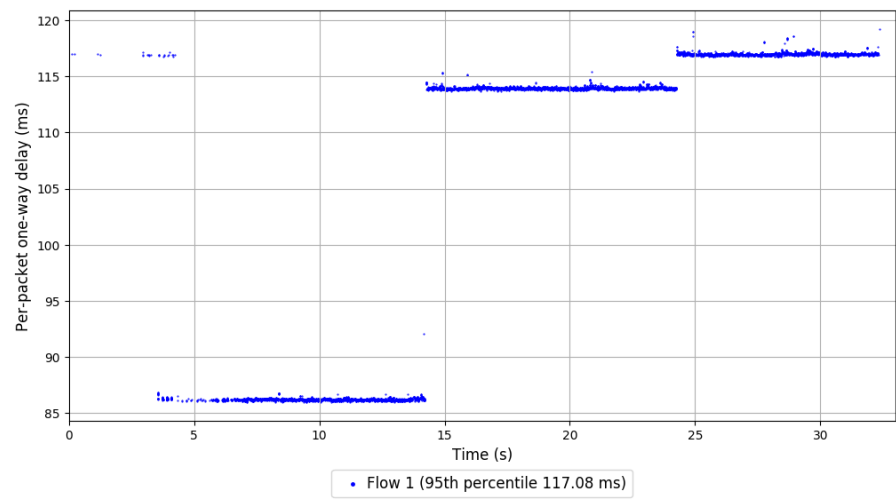
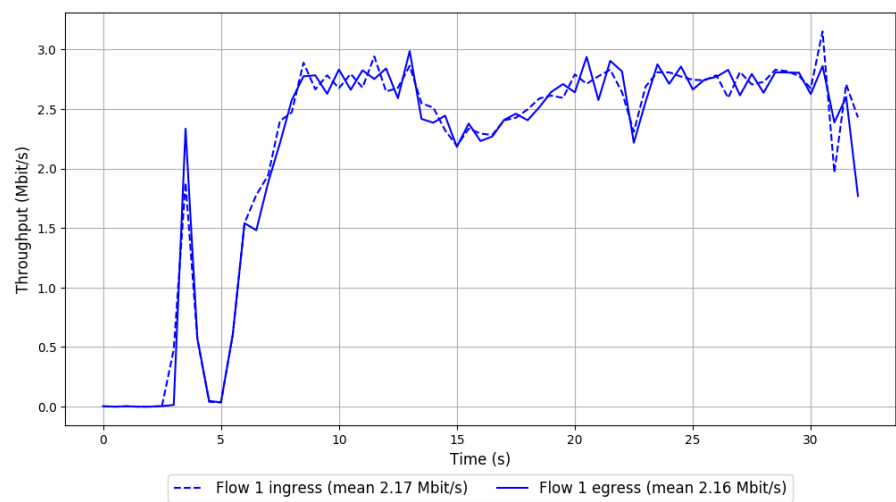
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 117.077 ms

Loss rate: 0.94%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-20 22:22:27

End at: 2017-11-20 22:22:57

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 112.188 ms

Loss rate: 0.80%

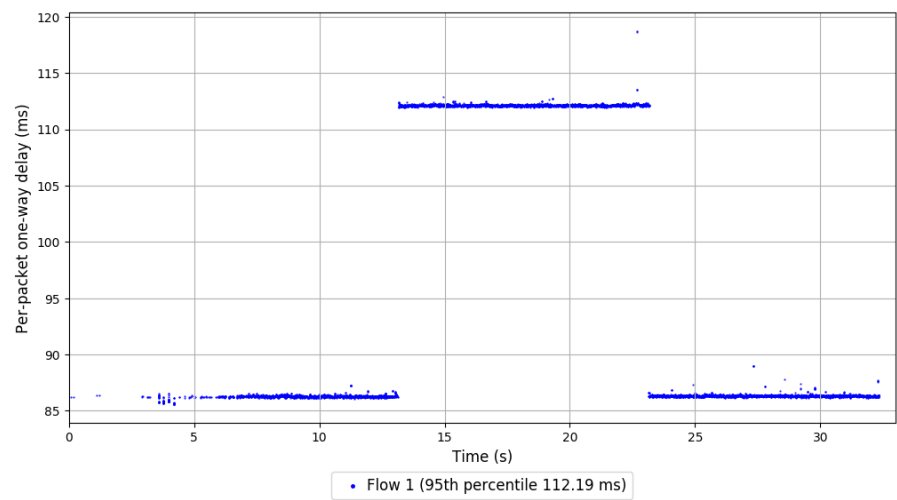
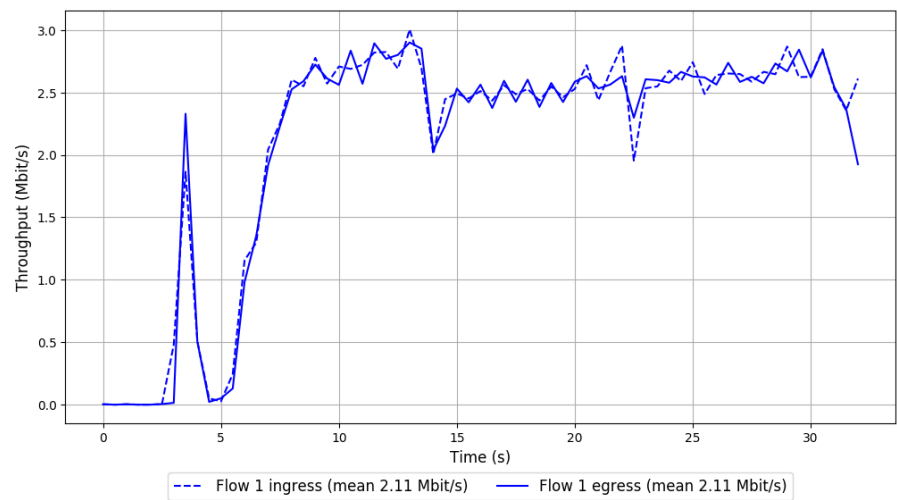
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 112.188 ms

Loss rate: 0.80%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-20 22:32:58

End at: 2017-11-20 22:33:28

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 117.669 ms

Loss rate: 0.62%

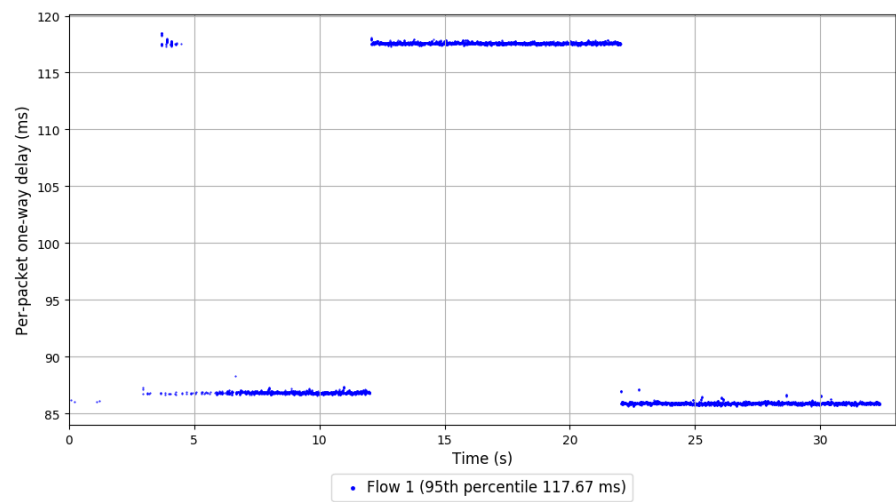
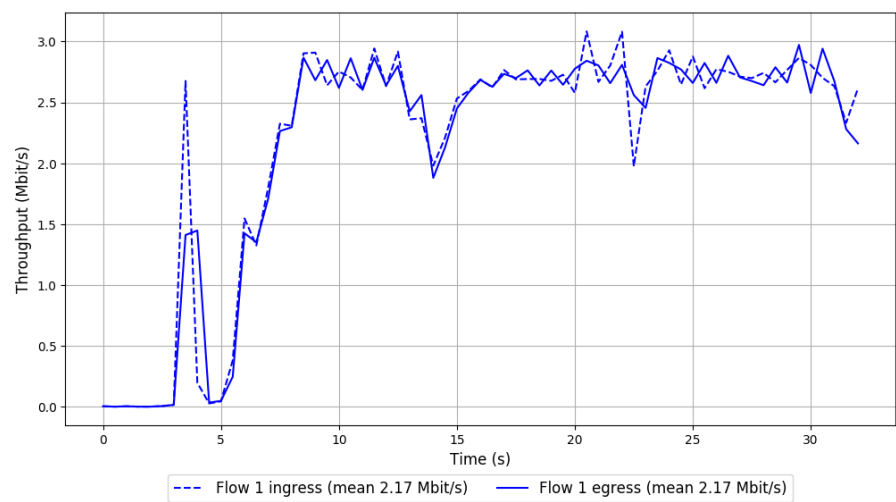
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 117.669 ms

Loss rate: 0.62%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-20 22:43:24

End at: 2017-11-20 22:43:54

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 112.377 ms

Loss rate: 0.66%

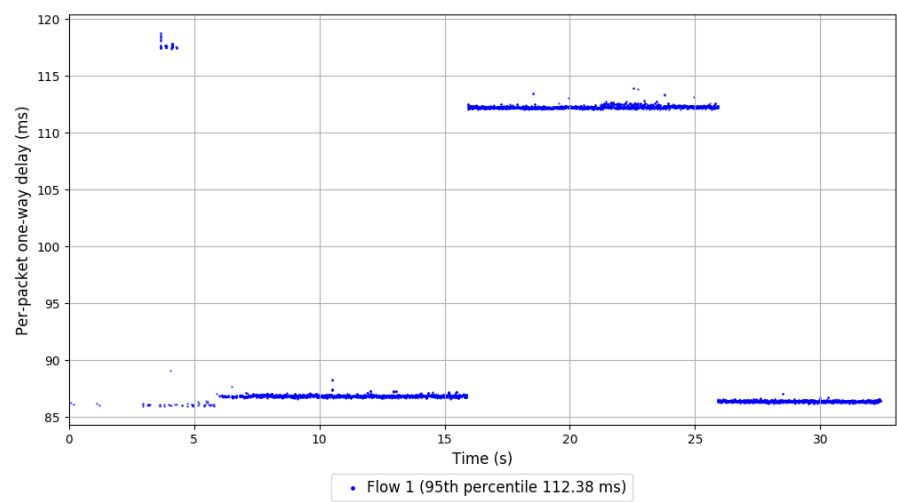
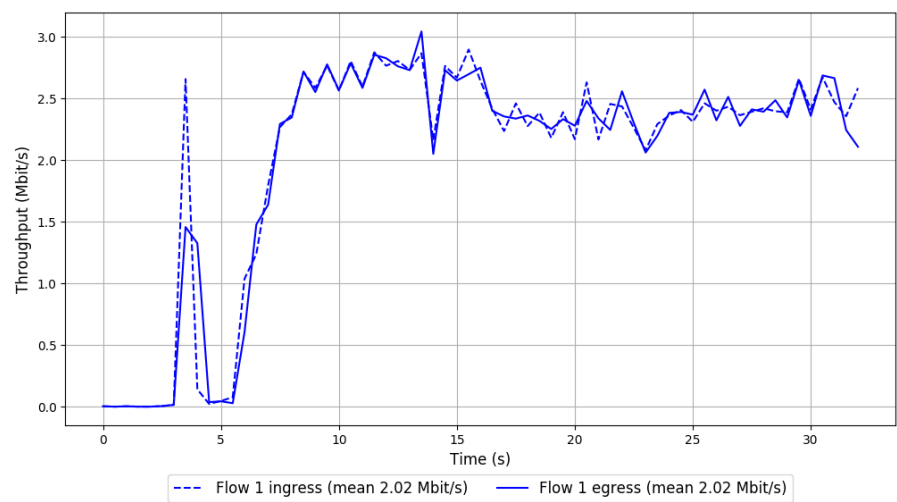
-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 112.377 ms

Loss rate: 0.66%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-20 22:53:55

End at: 2017-11-20 22:54:25

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.881 ms

Loss rate: 0.75%

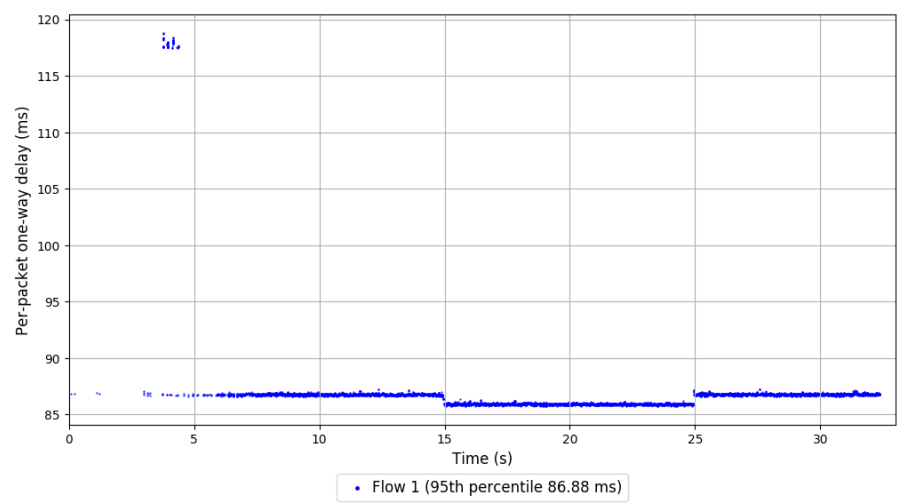
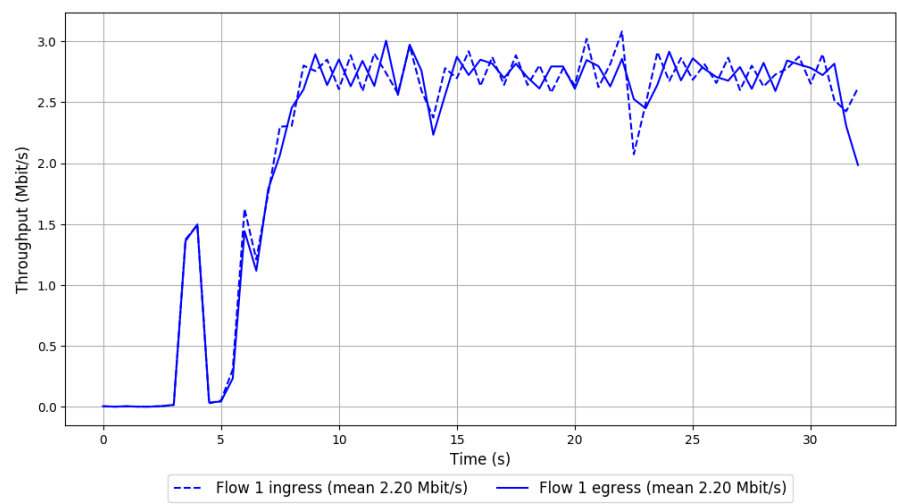
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.881 ms

Loss rate: 0.75%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-20 23:04:52

End at: 2017-11-20 23:05:22

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 115.717 ms

Loss rate: 0.68%

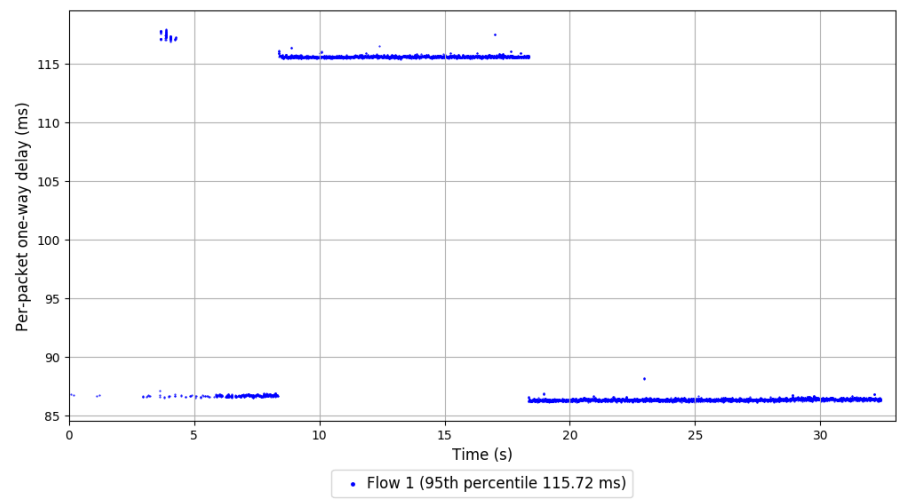
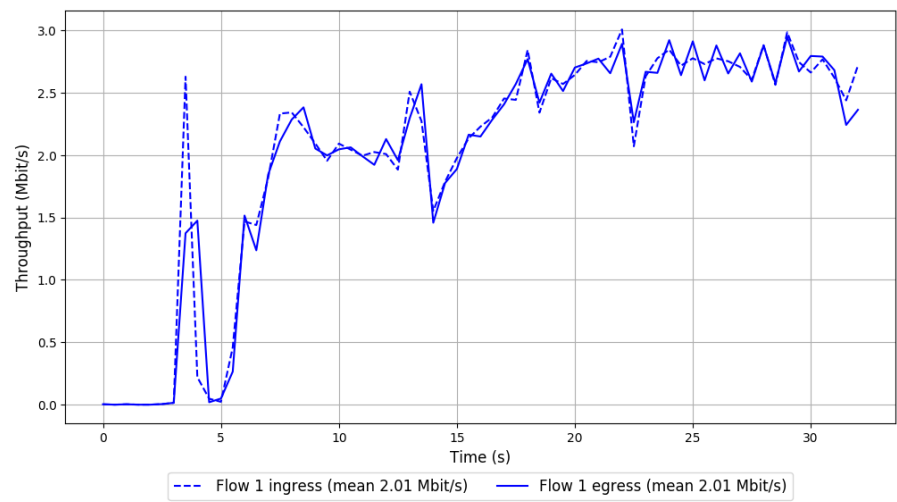
-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 115.717 ms

Loss rate: 0.68%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-20 23:15:16

End at: 2017-11-20 23:15:46

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 117.587 ms

Loss rate: 0.62%

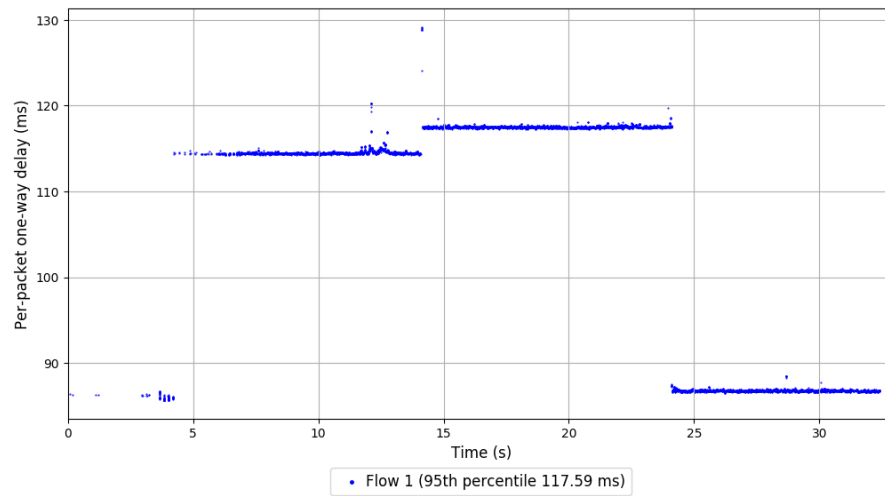
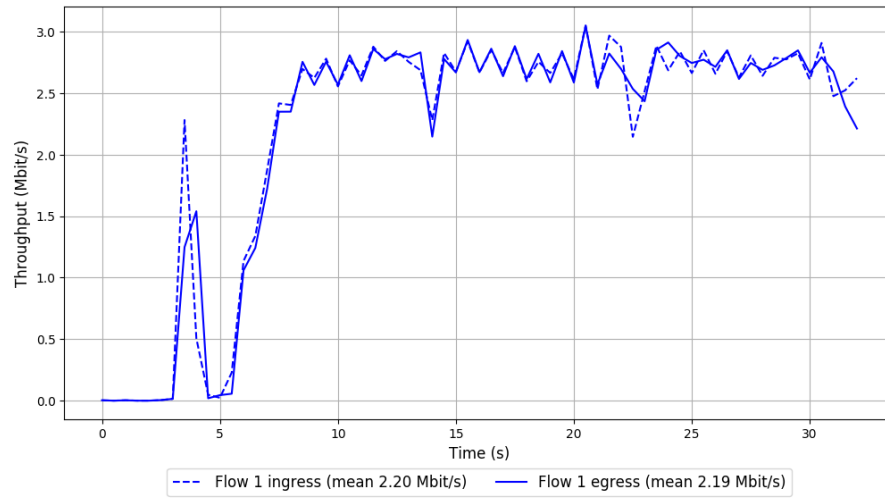
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 117.587 ms

Loss rate: 0.62%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-20 23:25:38

End at: 2017-11-20 23:26:08

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.045 ms

Loss rate: 0.61%

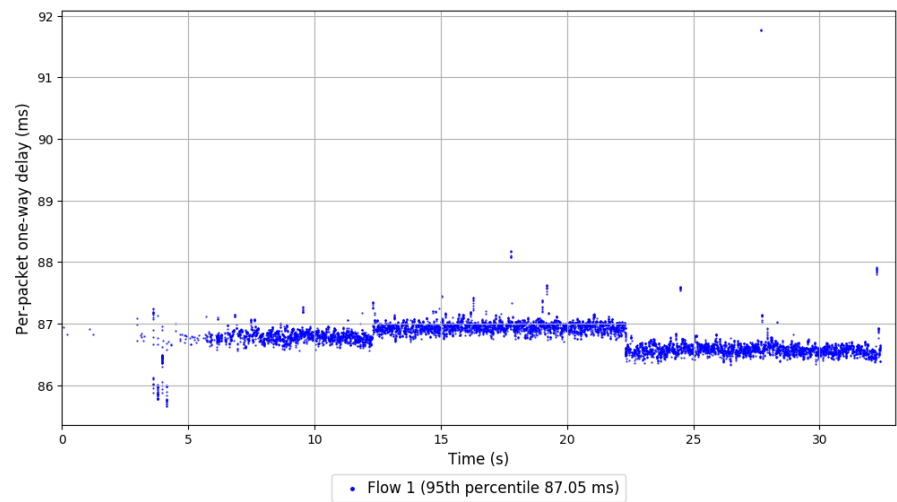
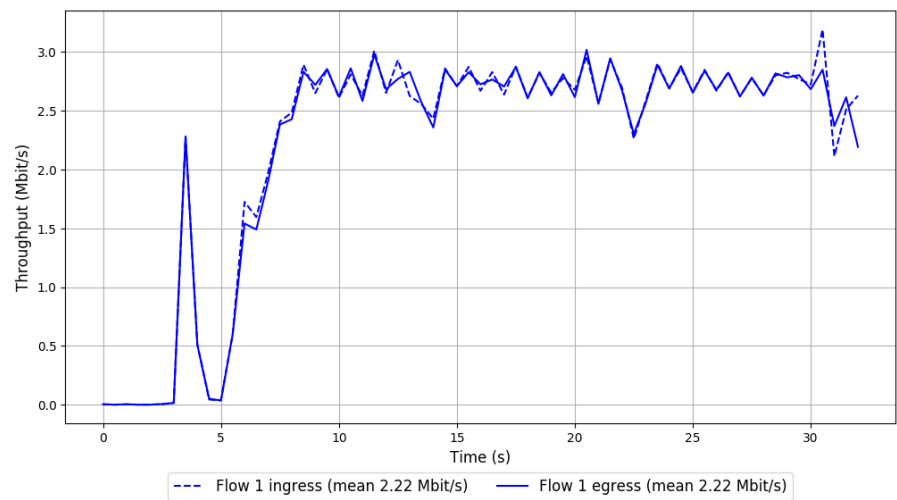
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.045 ms

Loss rate: 0.61%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-11-20 21:41:29

End at: 2017-11-20 21:41:59

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 118.123 ms

Loss rate: 0.21%

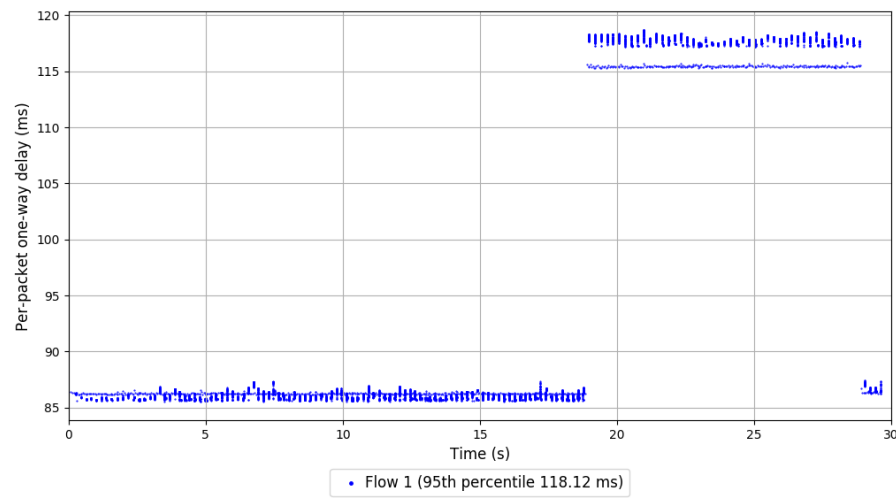
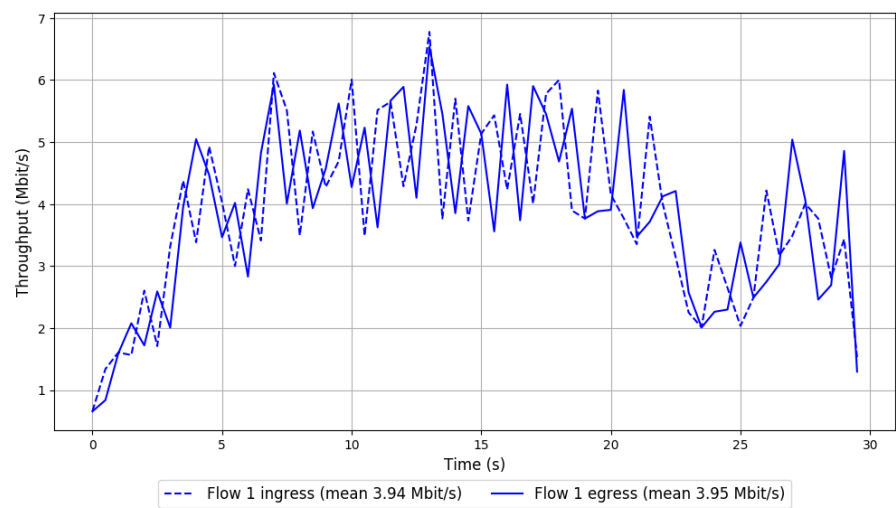
-- Flow 1:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 118.123 ms

Loss rate: 0.21%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-20 21:51:49

End at: 2017-11-20 21:52:19

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 118.107 ms

Loss rate: 0.82%

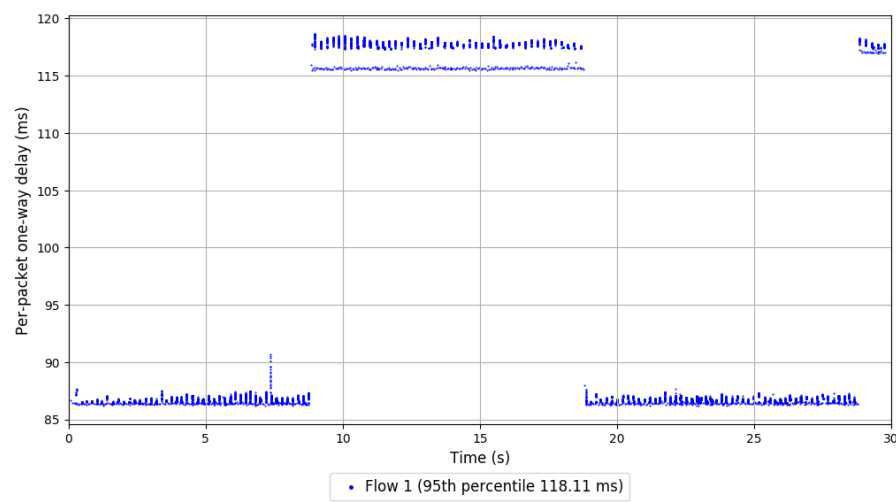
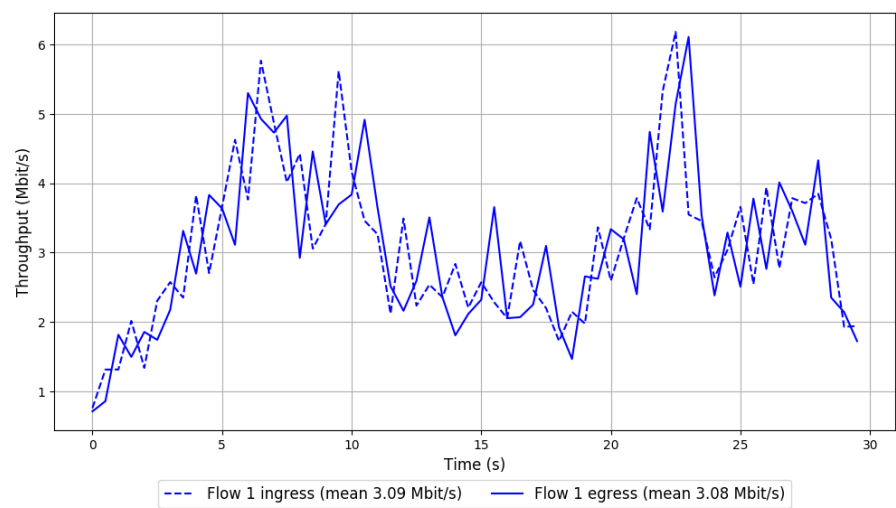
-- Flow 1:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 118.107 ms

Loss rate: 0.82%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-20 22:02:28

End at: 2017-11-20 22:02:58

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 87.100 ms

Loss rate: 0.80%

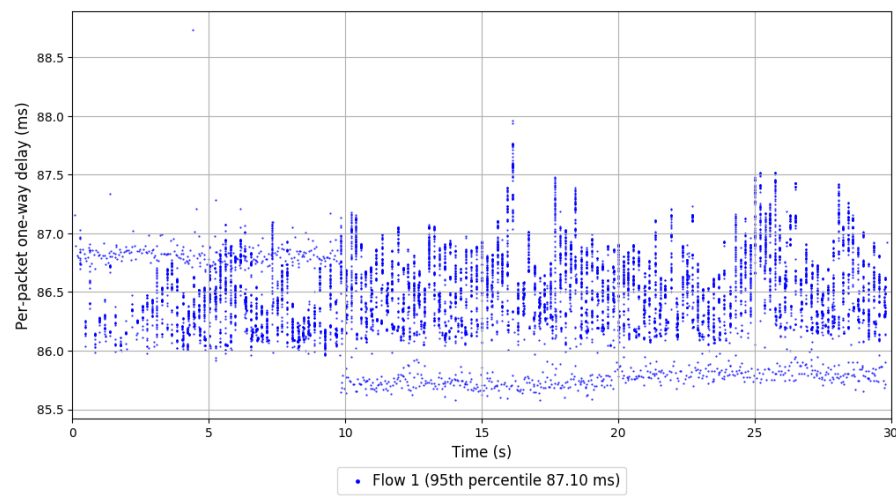
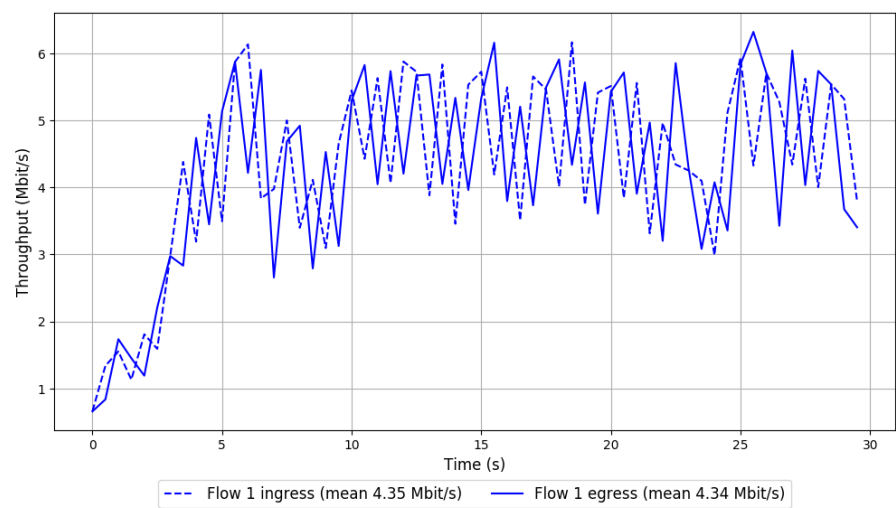
-- Flow 1:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 87.100 ms

Loss rate: 0.80%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-20 22:13:20

End at: 2017-11-20 22:13:50

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 118.061 ms

Loss rate: 0.39%

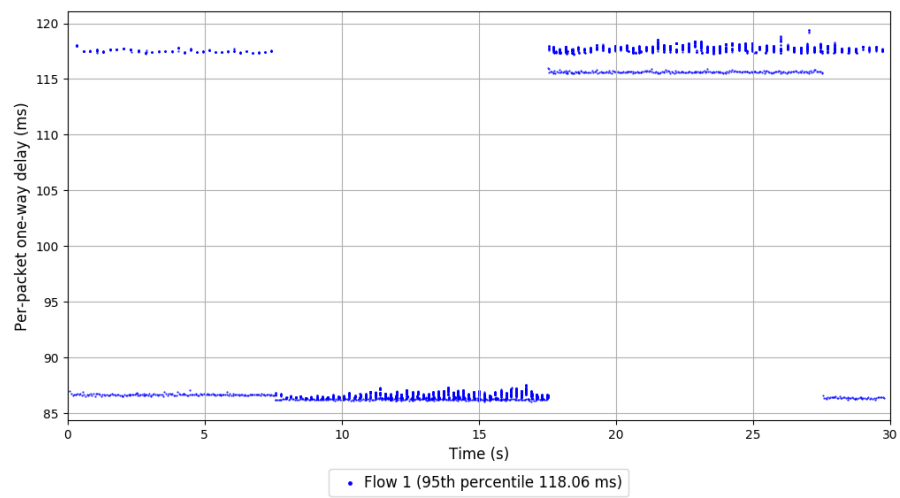
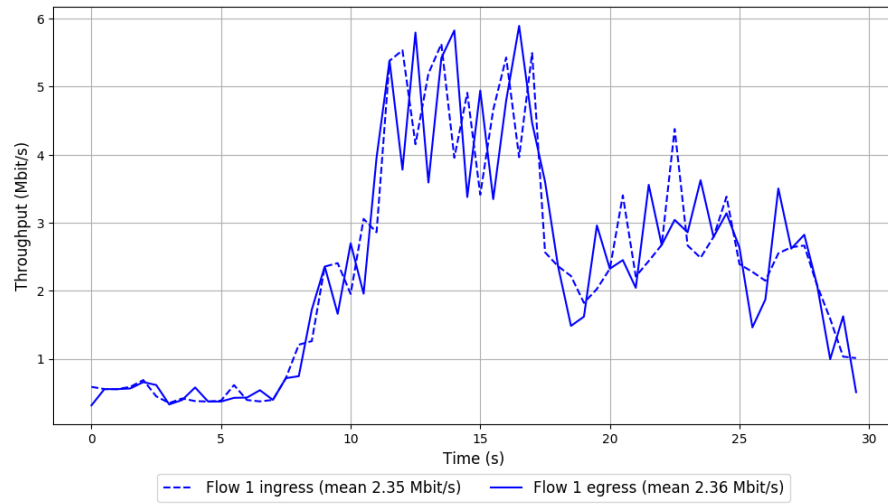
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 118.061 ms

Loss rate: 0.39%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-20 22:23:52

End at: 2017-11-20 22:24:22

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 118.056 ms

Loss rate: 1.51%

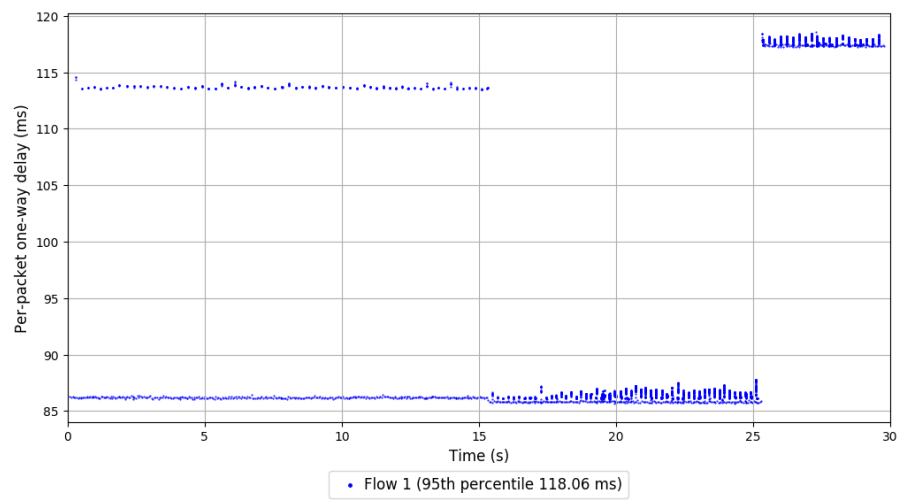
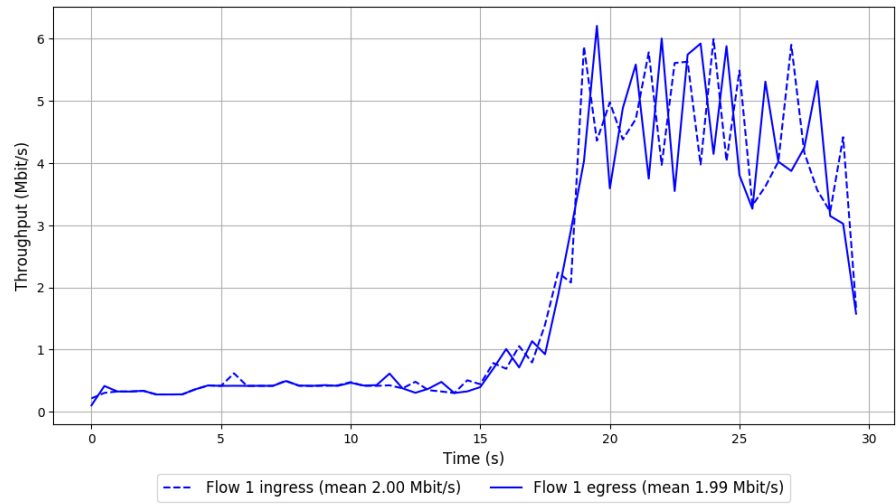
-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 118.056 ms

Loss rate: 1.51%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-20 22:34:21

End at: 2017-11-20 22:34:51

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 117.823 ms

Loss rate: 0.34%

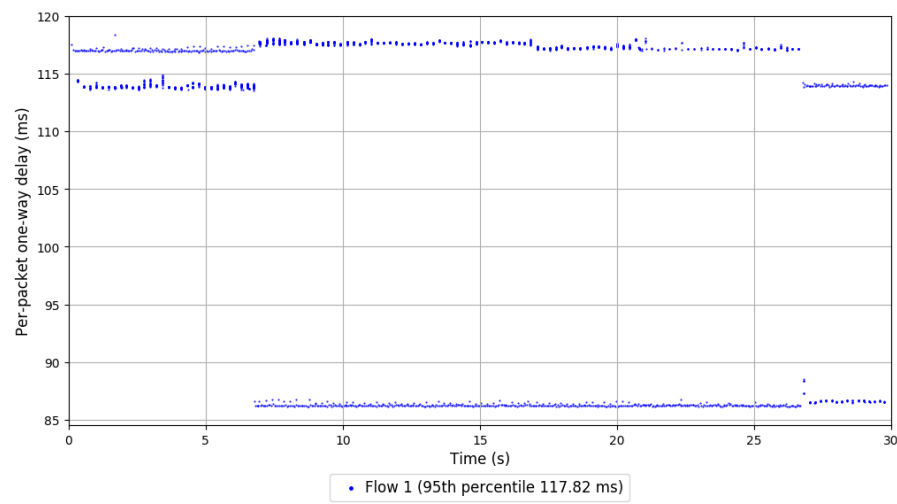
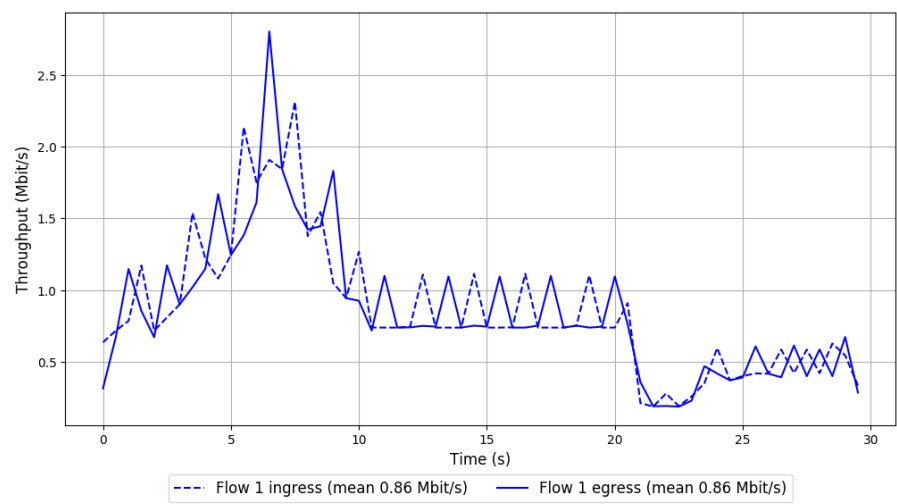
-- Flow 1:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 117.823 ms

Loss rate: 0.34%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-20 22:44:46

End at: 2017-11-20 22:45:16

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 117.667 ms

Loss rate: 1.74%

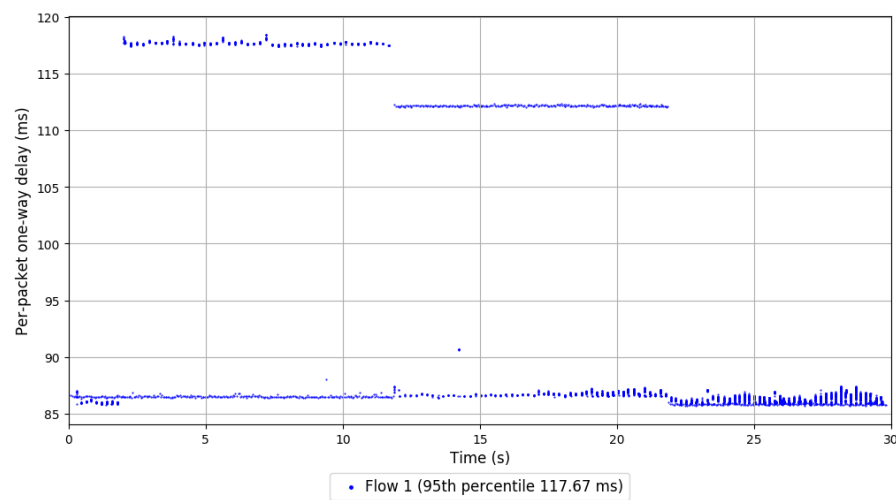
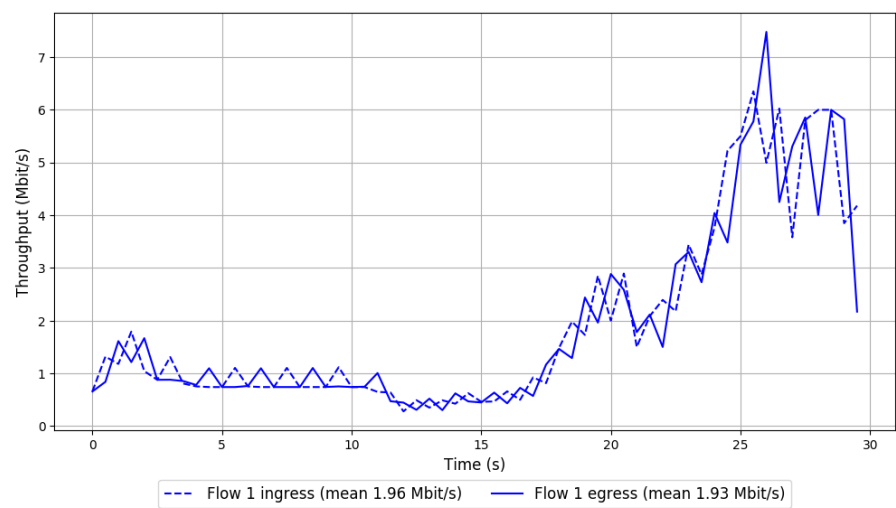
-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 117.667 ms

Loss rate: 1.74%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-20 22:55:17

End at: 2017-11-20 22:55:47

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 117.664 ms

Loss rate: 0.88%

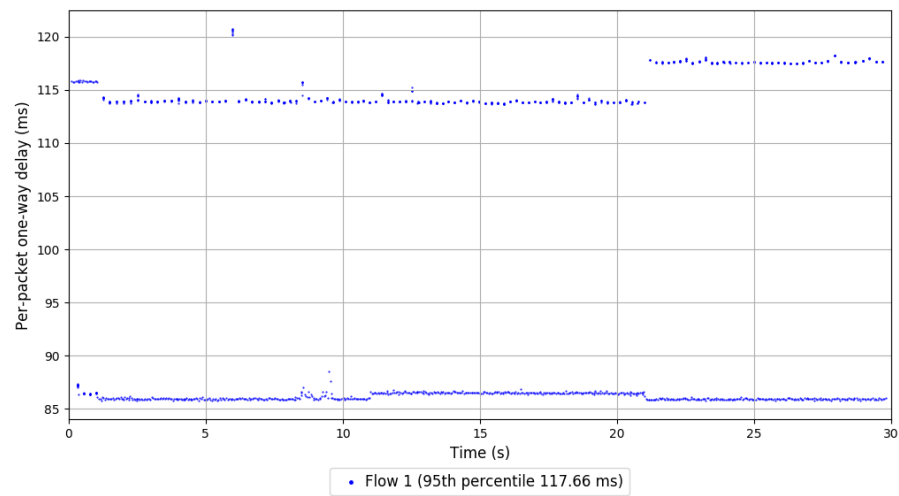
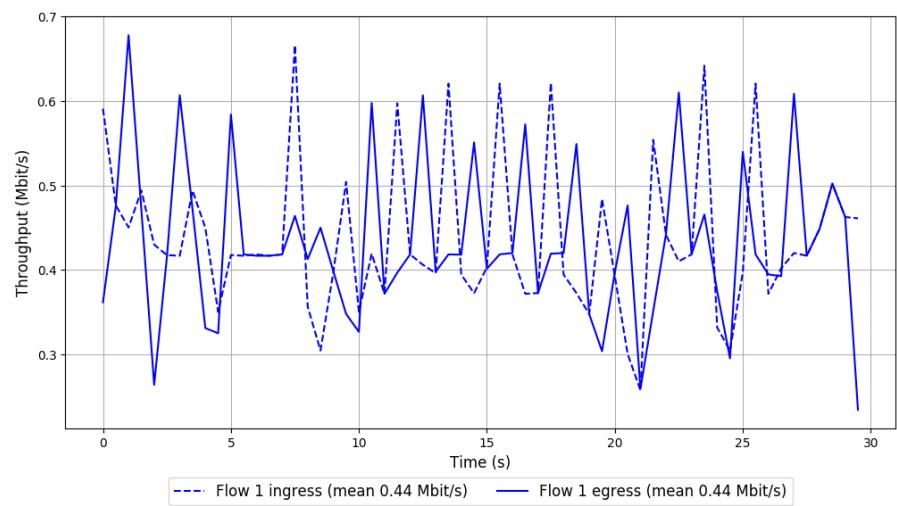
-- Flow 1:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 117.664 ms

Loss rate: 0.88%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-20 23:06:14

End at: 2017-11-20 23:06:44

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.717 ms

Loss rate: 0.09%

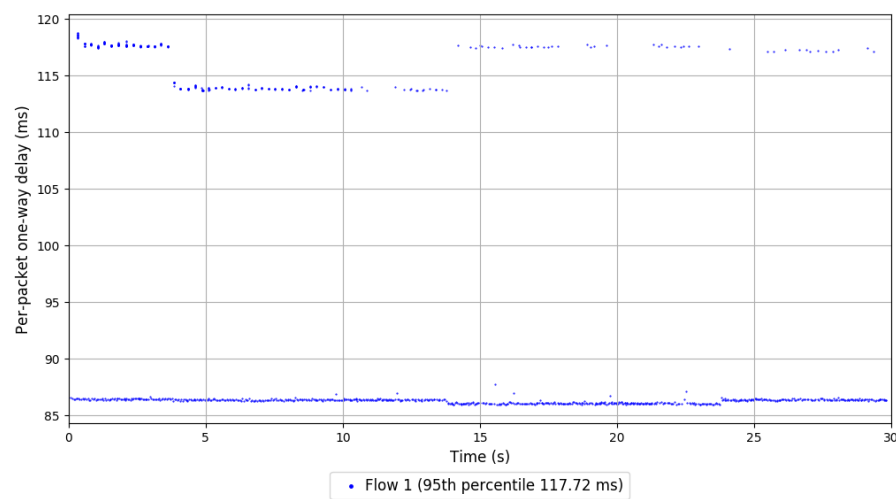
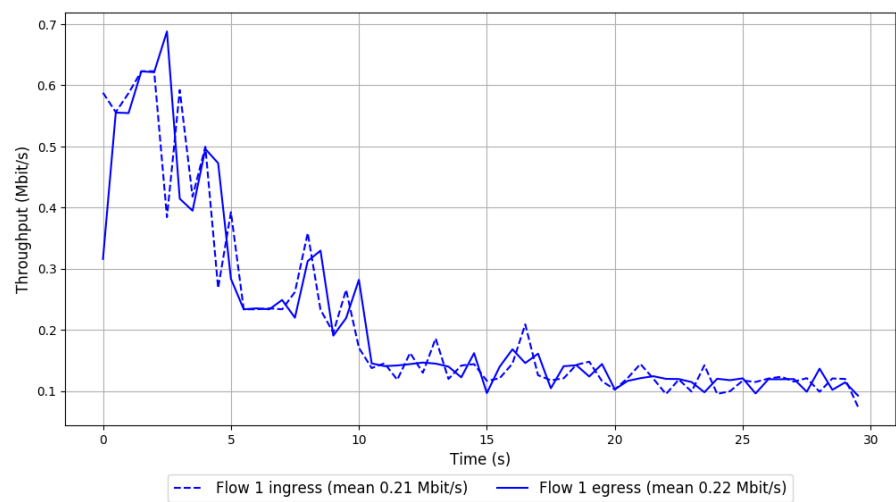
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.717 ms

Loss rate: 0.09%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-20 23:16:41

End at: 2017-11-20 23:17:11

Below is generated by plot.py at 2017-11-21 01:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 117.795 ms

Loss rate: 1.85%

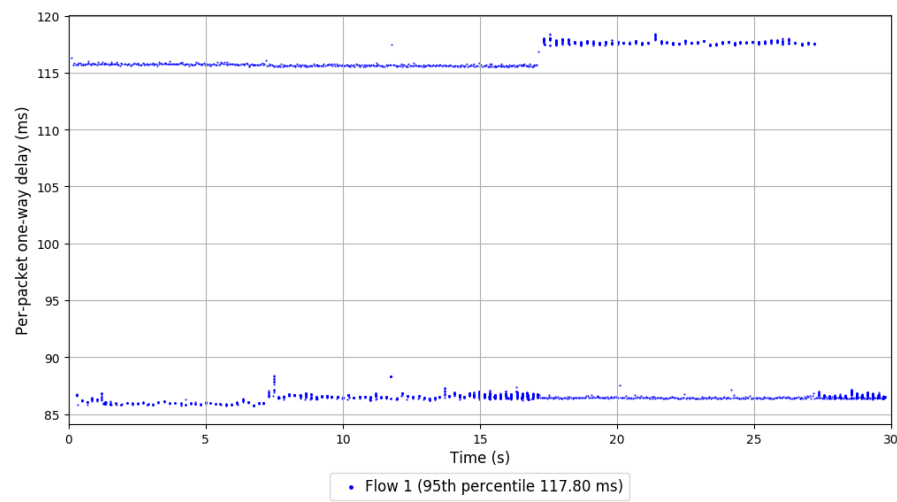
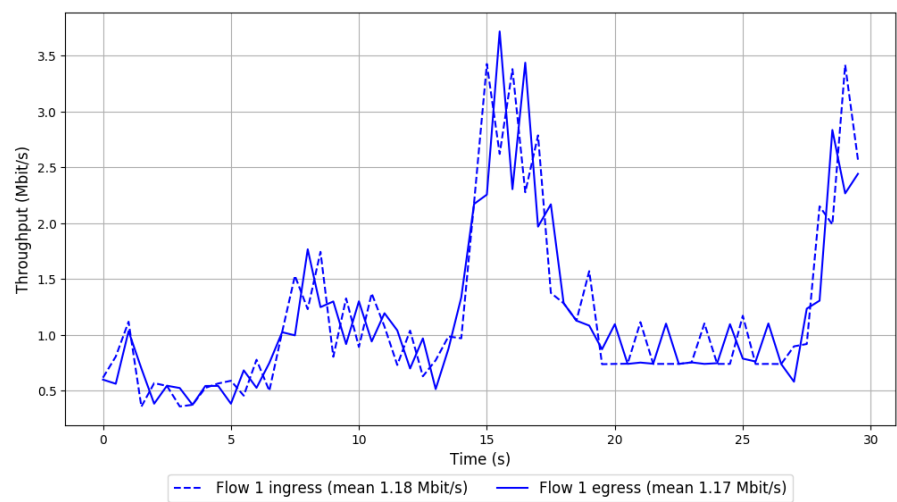
-- Flow 1:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 117.795 ms

Loss rate: 1.85%

Run 10: Report of Sprout — Data Link

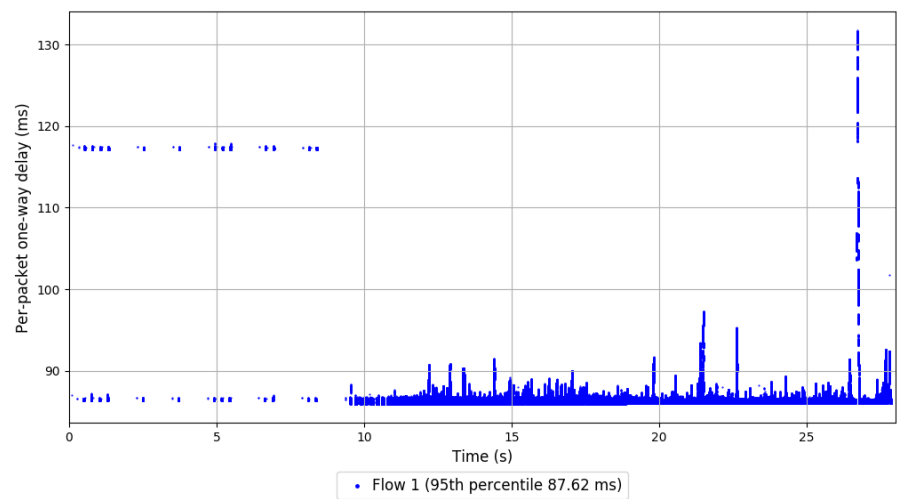
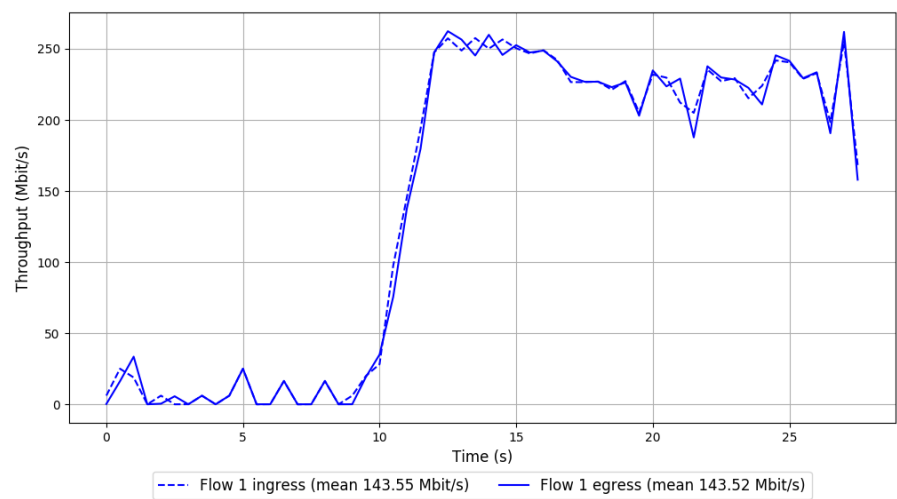


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-20 21:43:37
End at: 2017-11-20 21:44:07

# Below is generated by plot.py at 2017-11-21 01:37:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 143.52 Mbit/s
95th percentile per-packet one-way delay: 87.619 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 143.52 Mbit/s
95th percentile per-packet one-way delay: 87.619 ms
Loss rate: 0.64%
```

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

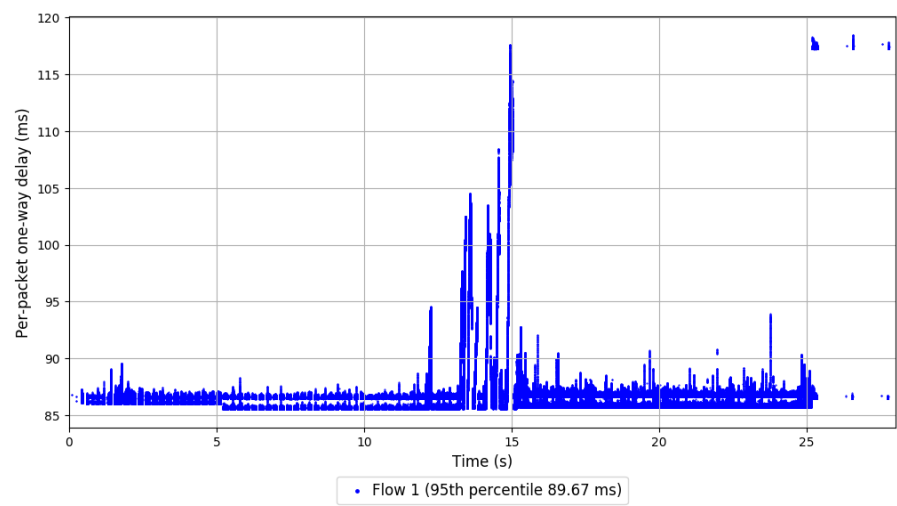
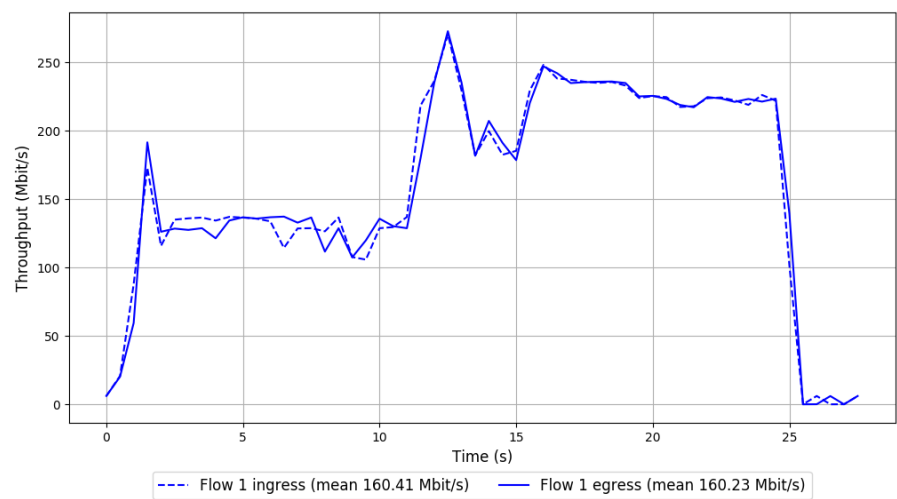


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-20 21:54:01
End at: 2017-11-20 21:54:31

# Below is generated by plot.py at 2017-11-21 01:37:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 160.23 Mbit/s
95th percentile per-packet one-way delay: 89.669 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 160.23 Mbit/s
95th percentile per-packet one-way delay: 89.669 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-20 22:04:34

End at: 2017-11-20 22:05:04

Below is generated by plot.py at 2017-11-21 01:38:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.98 Mbit/s

95th percentile per-packet one-way delay: 89.736 ms

Loss rate: 0.07%

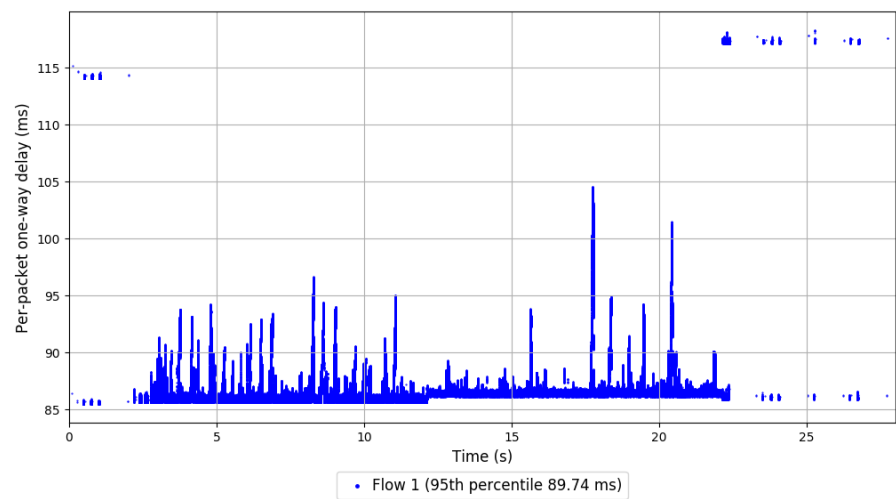
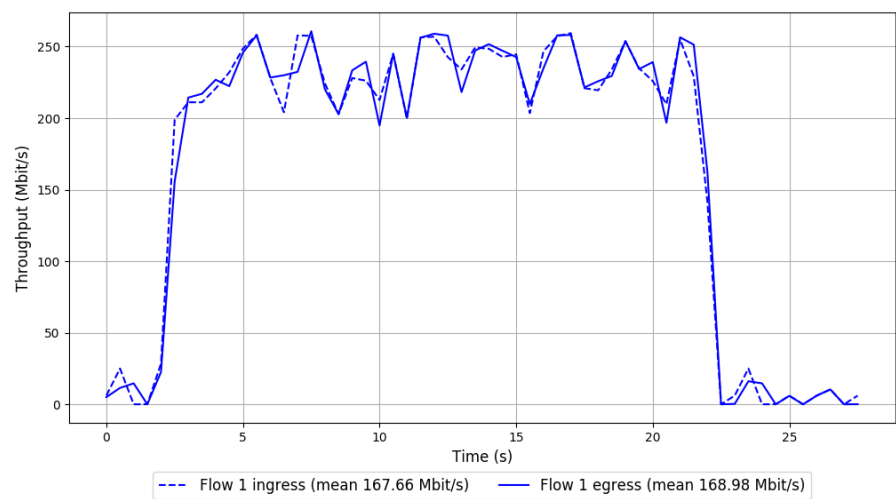
-- Flow 1:

Average throughput: 168.98 Mbit/s

95th percentile per-packet one-way delay: 89.736 ms

Loss rate: 0.07%

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

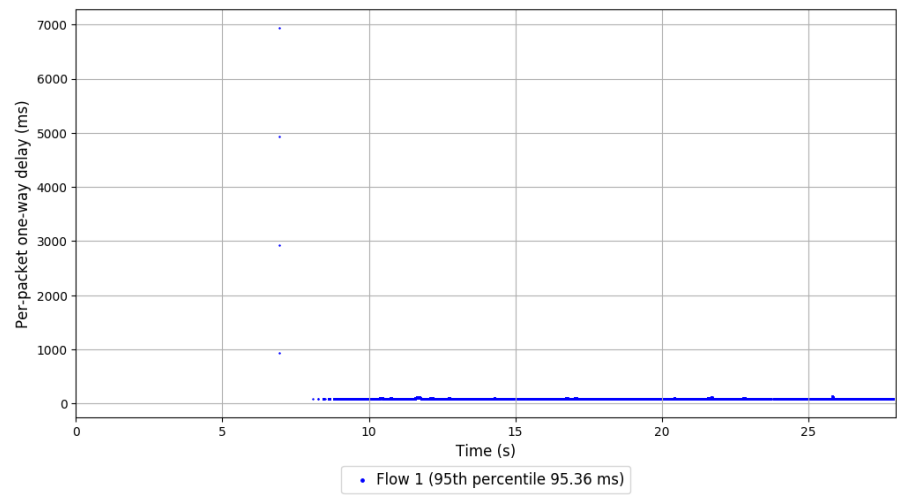
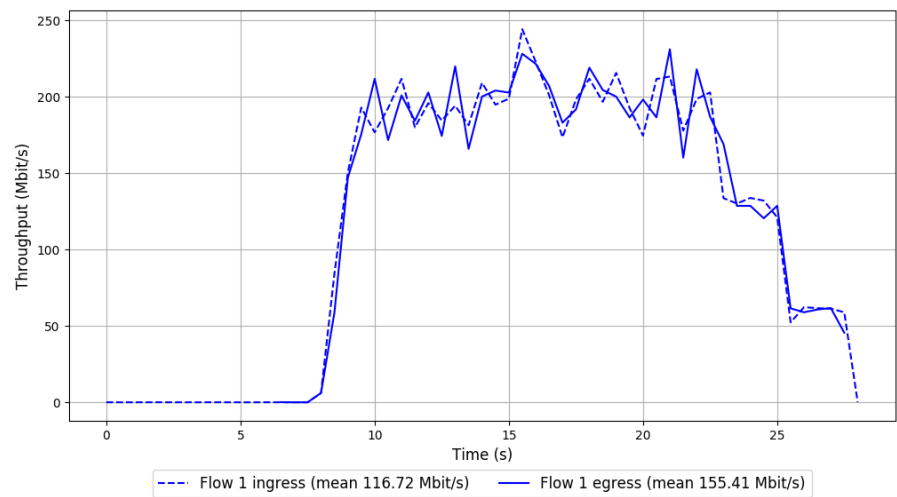


Run 4: Statistics of TaoVA-100x

Start at: 2017-11-20 22:15:29

End at: 2017-11-20 22:15:59

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

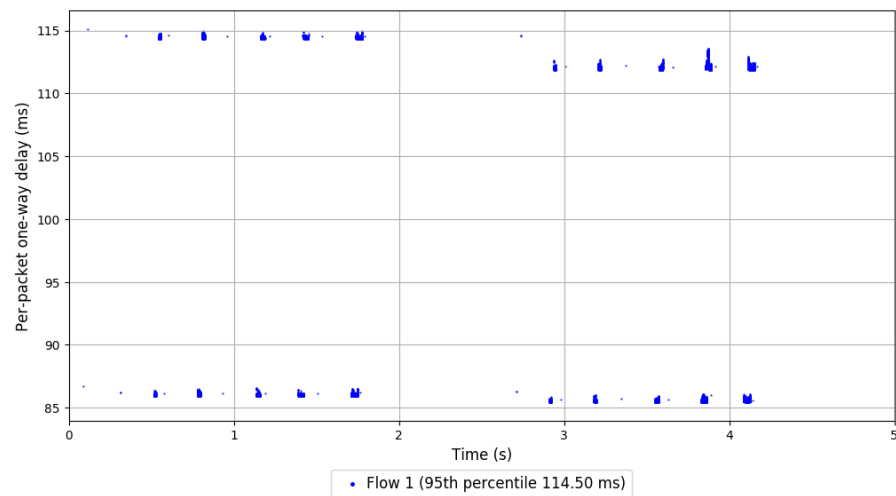
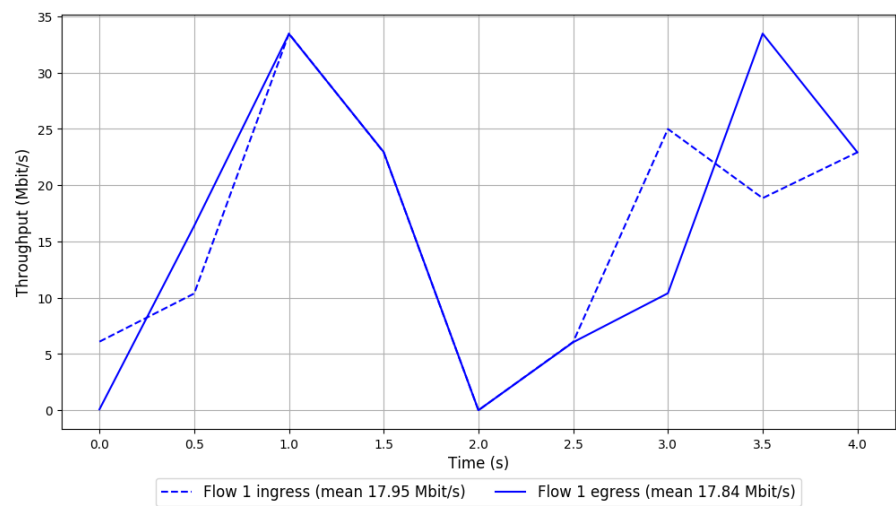


Run 5: Statistics of TaoVA-100x

Start at: 2017-11-20 22:26:03

End at: 2017-11-20 22:26:33

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

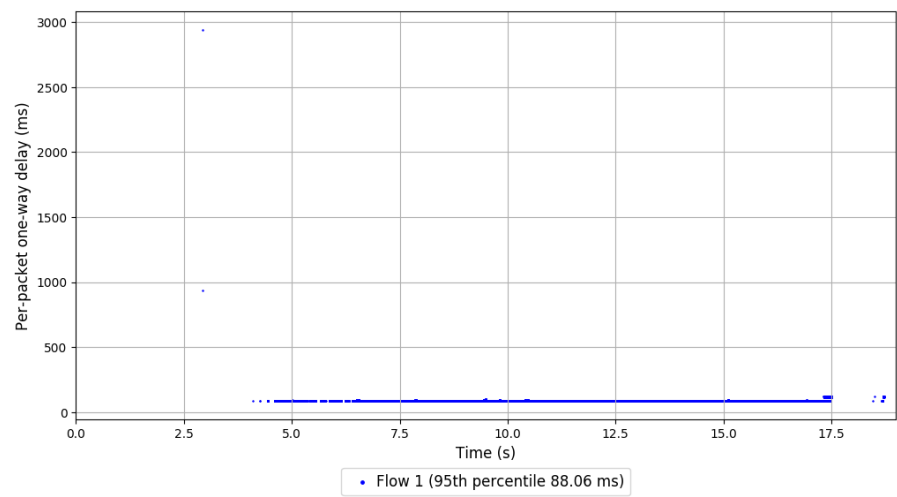
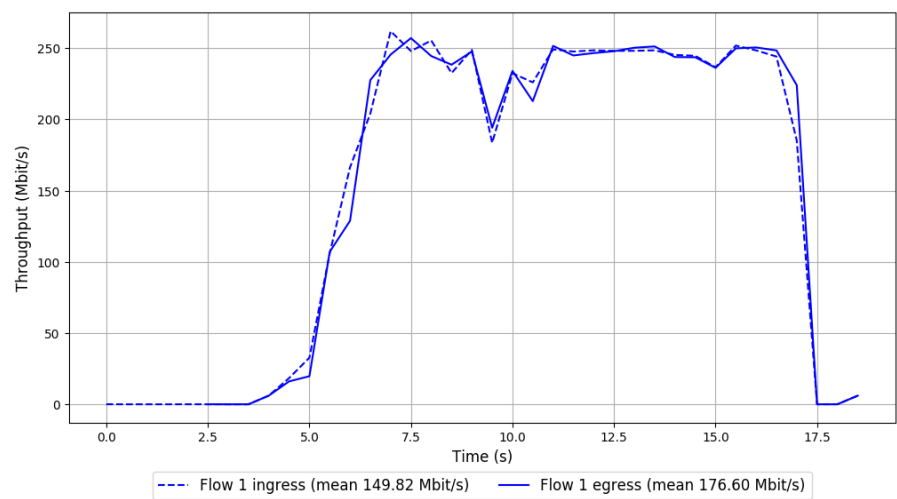


Run 6: Statistics of TaoVA-100x

Start at: 2017-11-20 22:36:28

End at: 2017-11-20 22:36:58

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-20 22:46:53

End at: 2017-11-20 22:47:23

Below is generated by plot.py at 2017-11-21 01:38:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.60 Mbit/s

95th percentile per-packet one-way delay: 114.324 ms

Loss rate: 3.46%

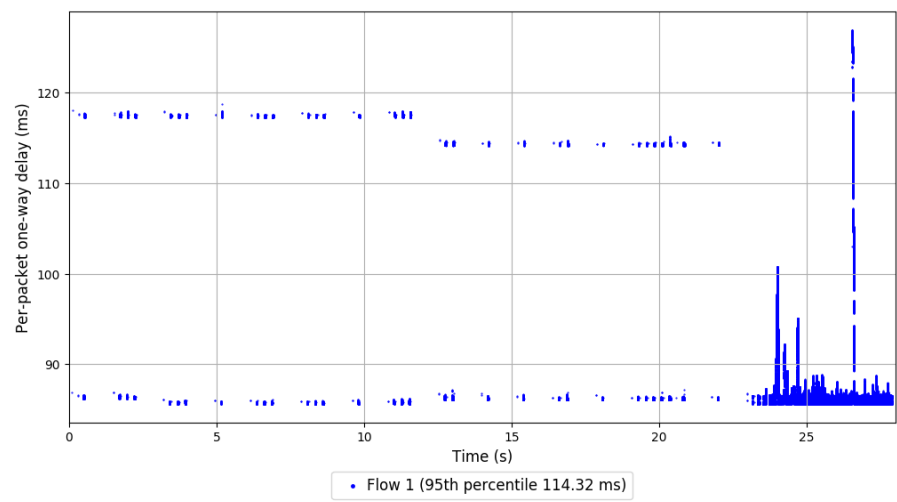
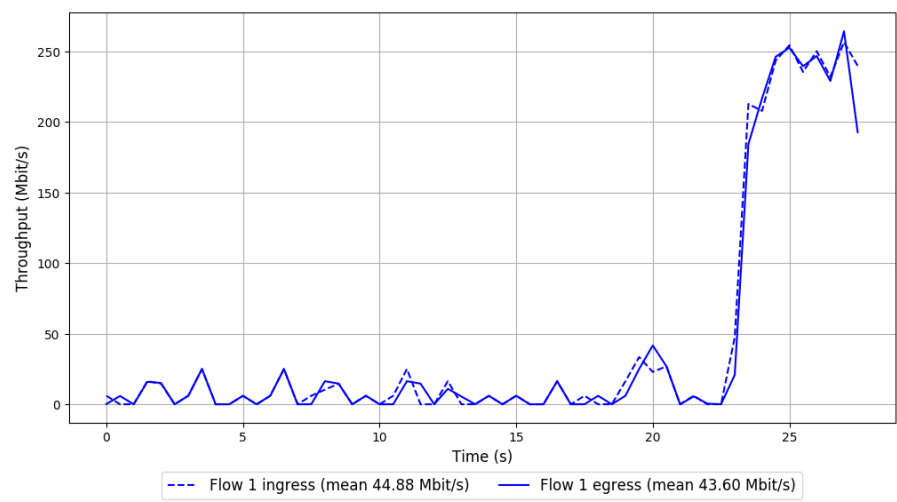
-- Flow 1:

Average throughput: 43.60 Mbit/s

95th percentile per-packet one-way delay: 114.324 ms

Loss rate: 3.46%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-20 22:57:24

End at: 2017-11-20 22:57:54

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.78 Mbit/s

95th percentile per-packet one-way delay: 95.495 ms

Loss rate: 0.64%

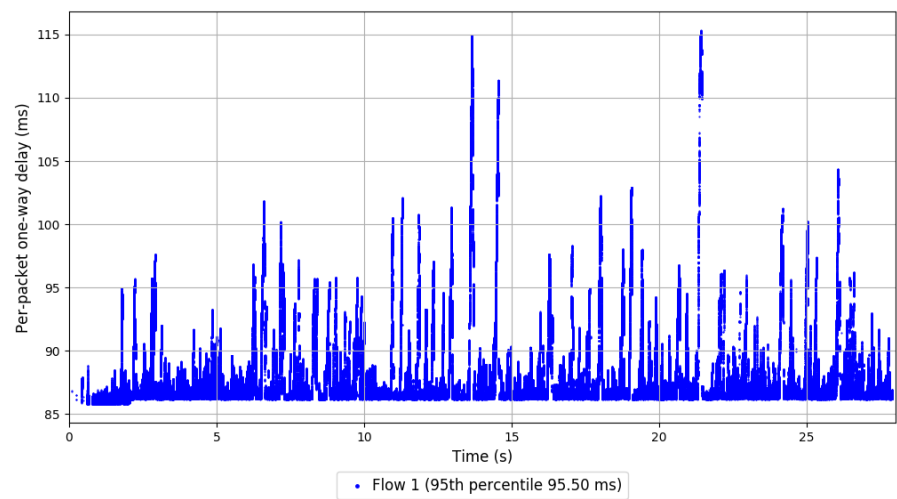
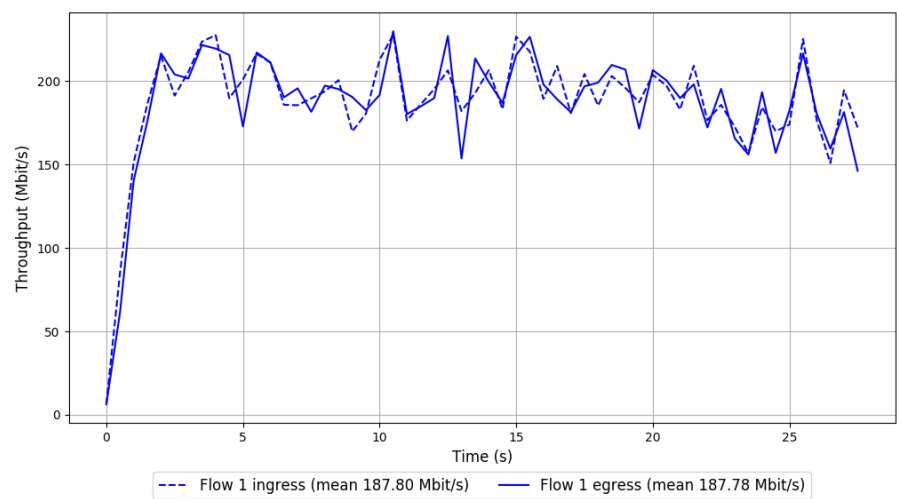
-- Flow 1:

Average throughput: 187.78 Mbit/s

95th percentile per-packet one-way delay: 95.495 ms

Loss rate: 0.64%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-20 23:08:20

End at: 2017-11-20 23:08:50

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.67 Mbit/s

95th percentile per-packet one-way delay: 117.454 ms

Loss rate: 0.00%

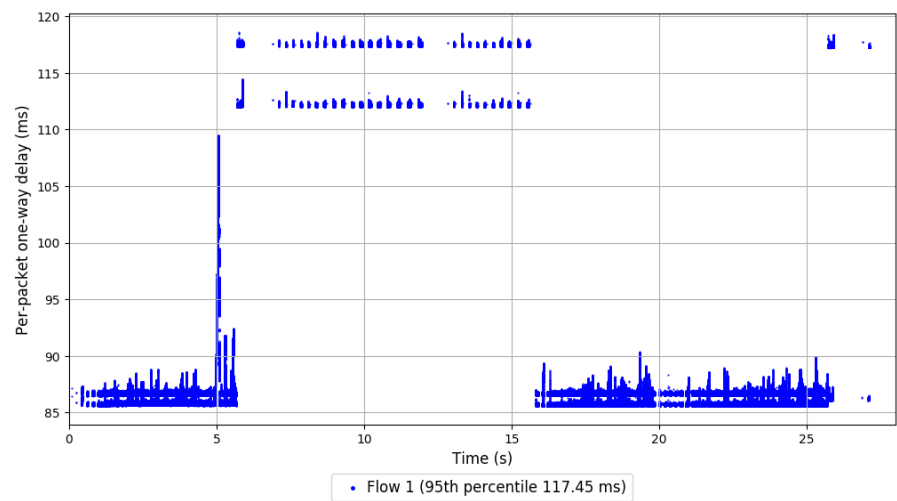
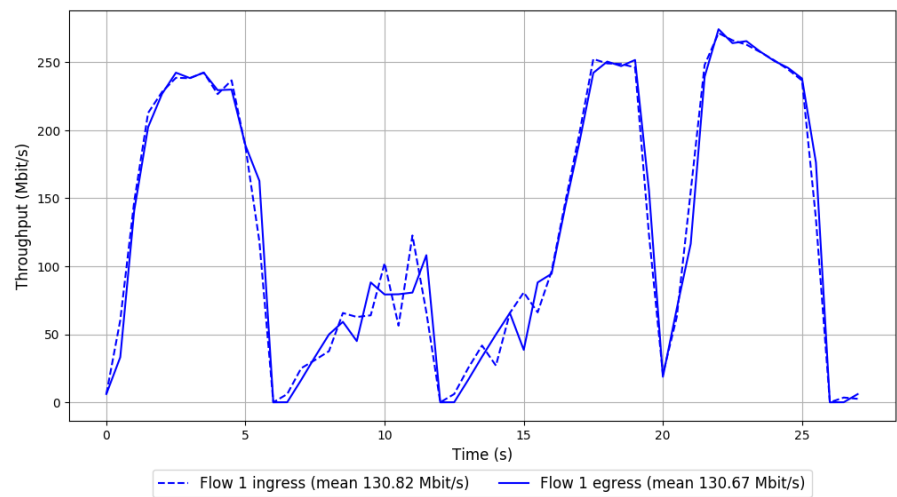
-- Flow 1:

Average throughput: 130.67 Mbit/s

95th percentile per-packet one-way delay: 117.454 ms

Loss rate: 0.00%

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

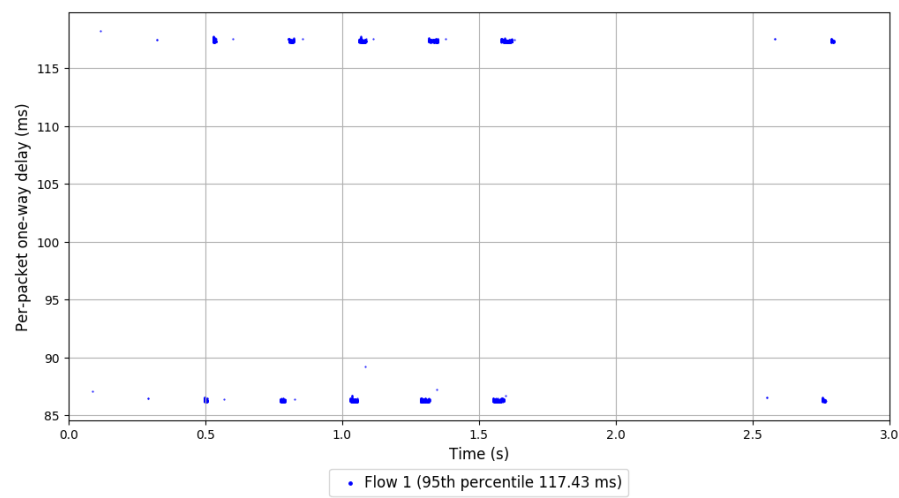
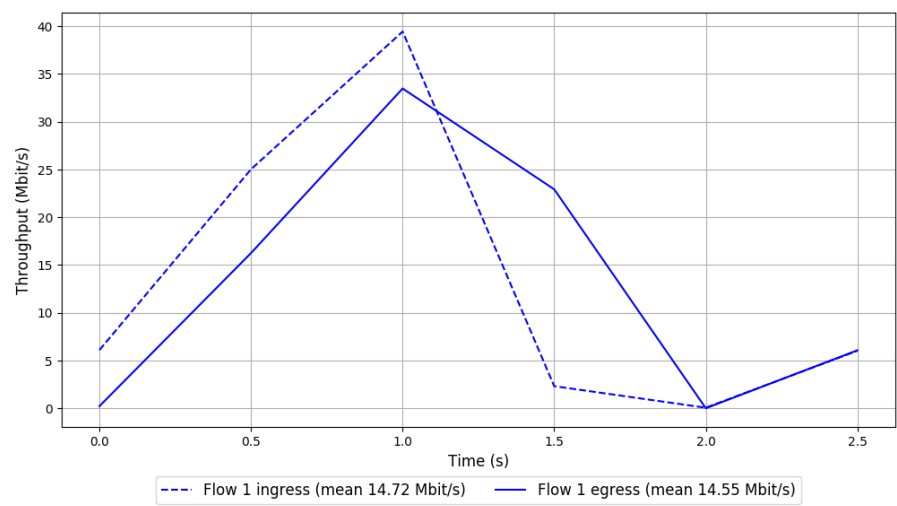


Run 10: Statistics of TaoVA-100x

Start at: 2017-11-20 23:18:46

End at: 2017-11-20 23:19:16

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-20 21:48:55

End at: 2017-11-20 21:49:25

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 117.677 ms

Loss rate: 1.69%

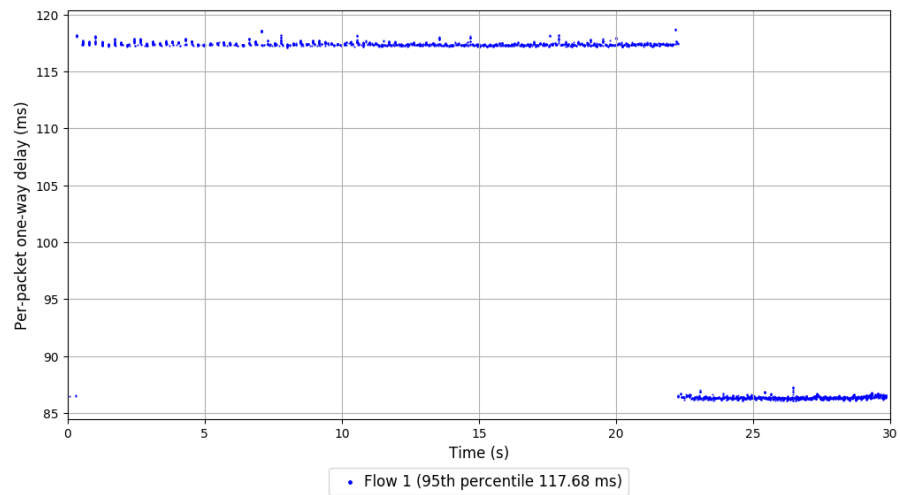
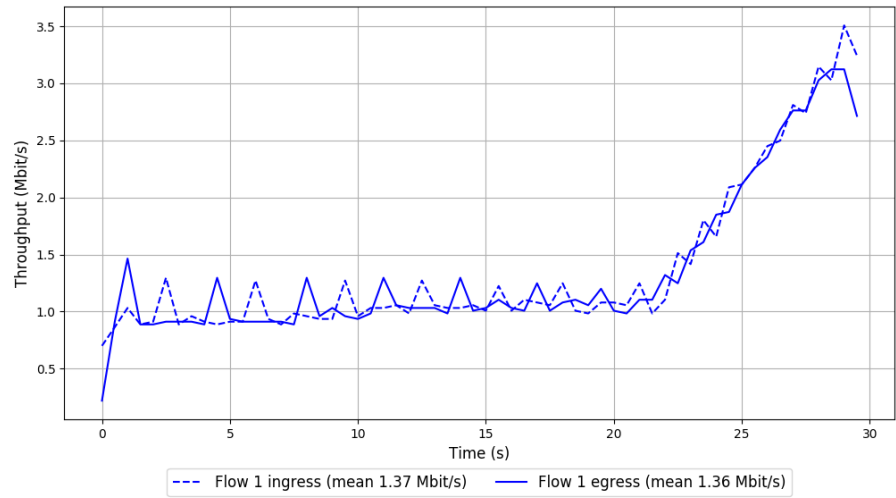
-- Flow 1:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 117.677 ms

Loss rate: 1.69%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-20 21:59:29

End at: 2017-11-20 21:59:59

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.63 Mbit/s

95th percentile per-packet one-way delay: 88.108 ms

Loss rate: 0.21%

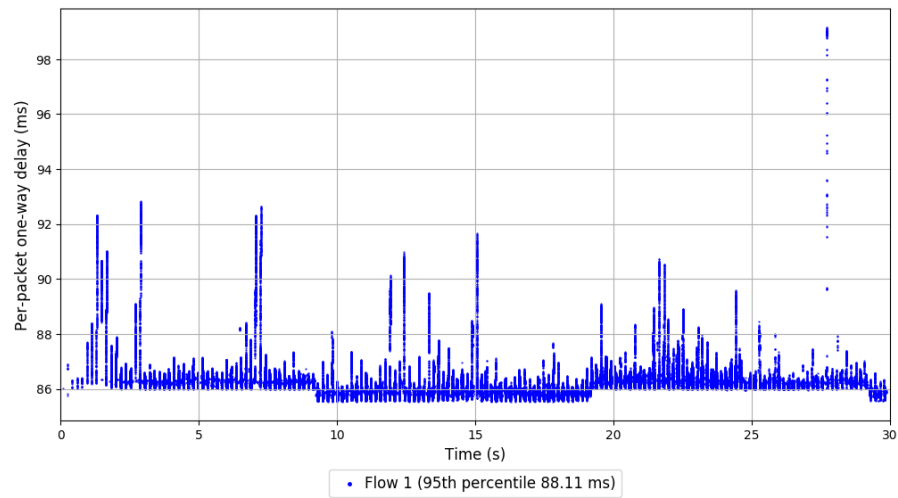
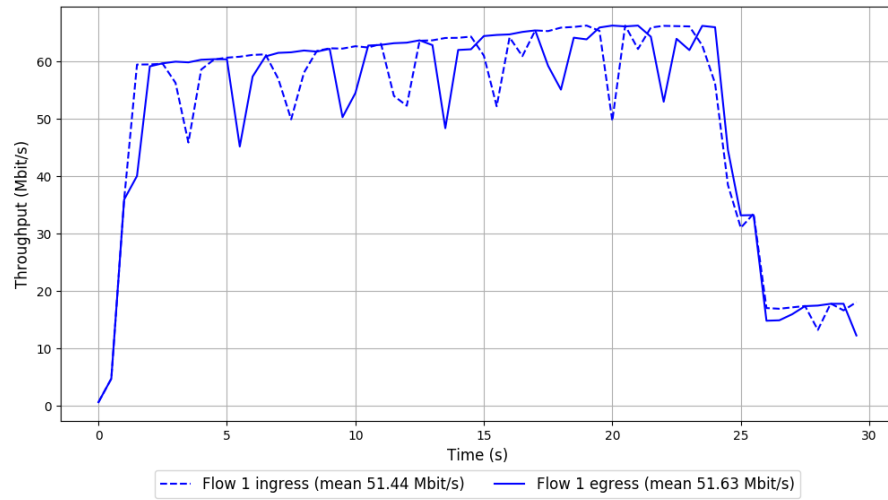
-- Flow 1:

Average throughput: 51.63 Mbit/s

95th percentile per-packet one-way delay: 88.108 ms

Loss rate: 0.21%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-20 22:10:18

End at: 2017-11-20 22:10:48

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.26 Mbit/s

95th percentile per-packet one-way delay: 95.054 ms

Loss rate: 0.32%

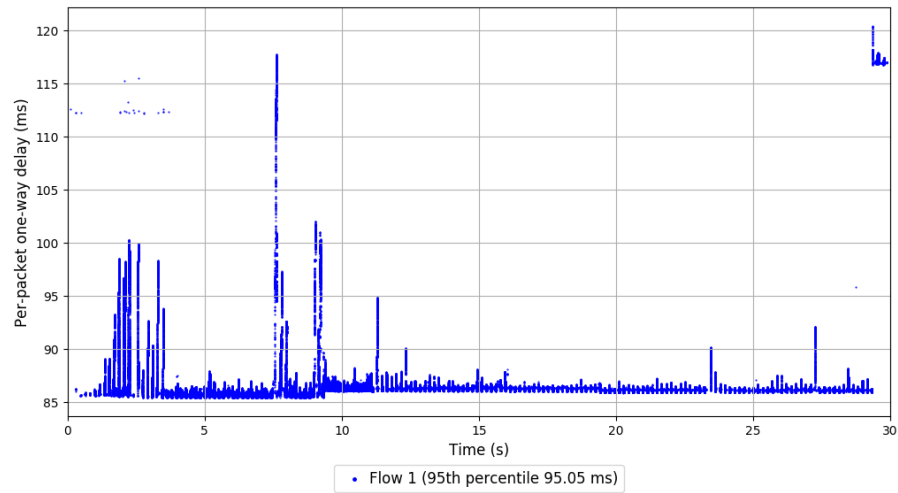
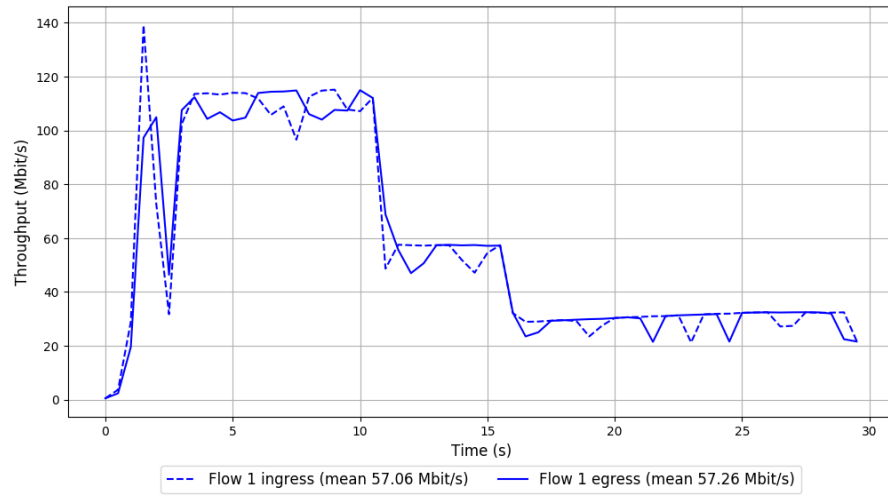
-- Flow 1:

Average throughput: 57.26 Mbit/s

95th percentile per-packet one-way delay: 95.054 ms

Loss rate: 0.32%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-20 22:20:50

End at: 2017-11-20 22:21:20

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.41 Mbit/s

95th percentile per-packet one-way delay: 98.661 ms

Loss rate: 0.36%

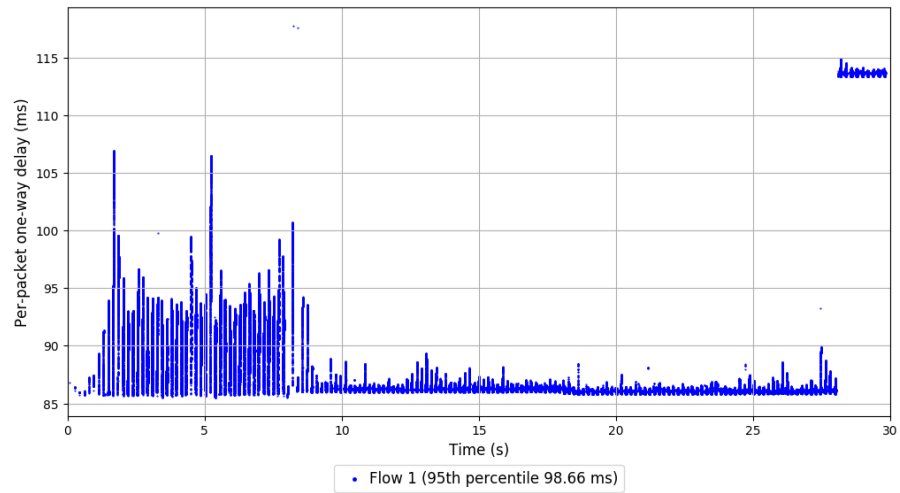
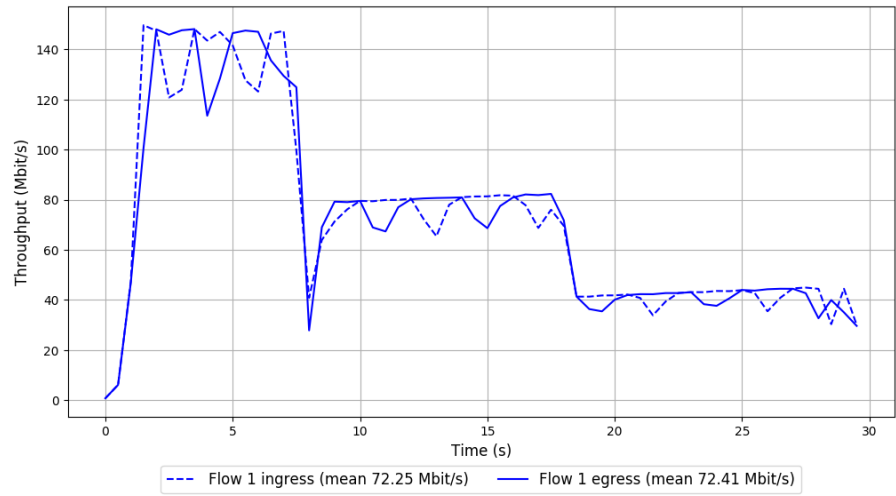
-- Flow 1:

Average throughput: 72.41 Mbit/s

95th percentile per-packet one-way delay: 98.661 ms

Loss rate: 0.36%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-20 22:31:35

End at: 2017-11-20 22:32:05

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 117.640 ms

Loss rate: 0.86%

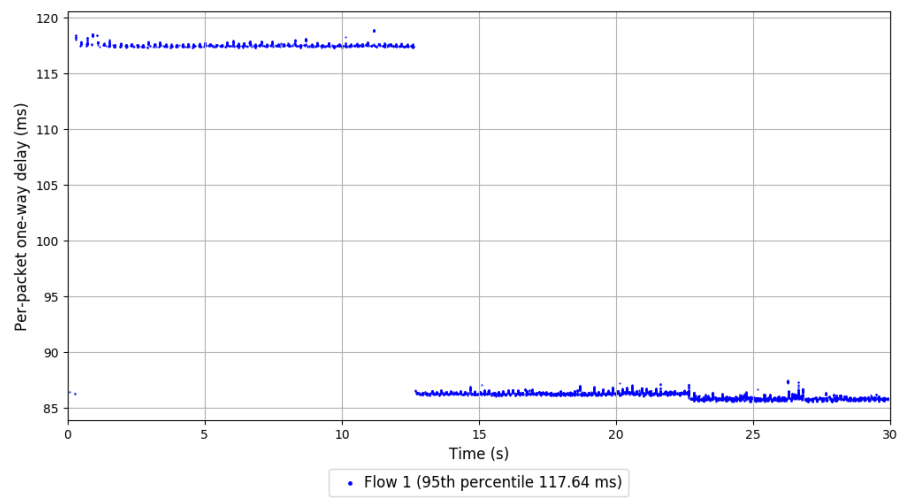
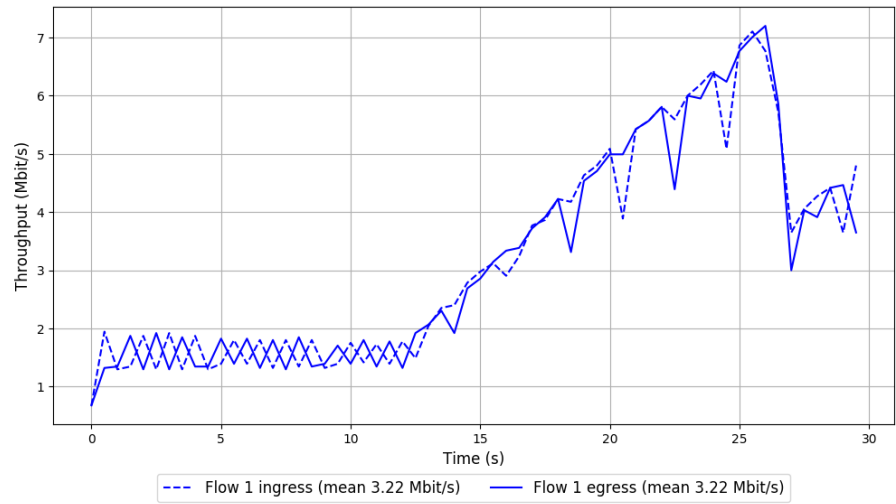
-- Flow 1:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 117.640 ms

Loss rate: 0.86%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-20 22:41:52

End at: 2017-11-20 22:42:22

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.32 Mbit/s

95th percentile per-packet one-way delay: 93.788 ms

Loss rate: 0.64%

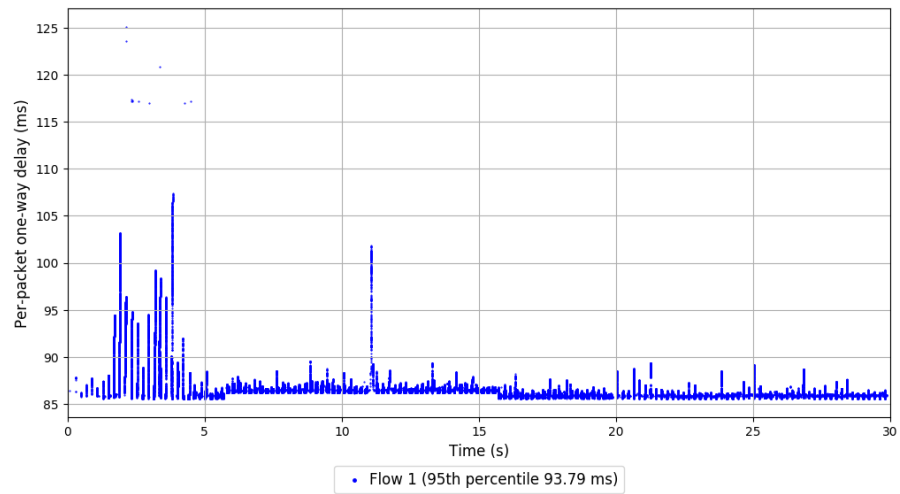
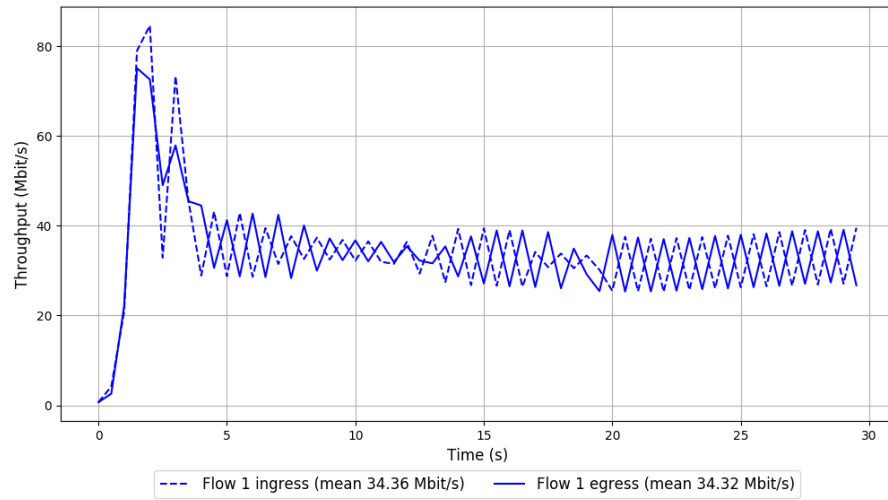
-- Flow 1:

Average throughput: 34.32 Mbit/s

95th percentile per-packet one-way delay: 93.788 ms

Loss rate: 0.64%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-20 22:52:21

End at: 2017-11-20 22:52:51

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.87 Mbit/s

95th percentile per-packet one-way delay: 117.333 ms

Loss rate: 0.28%

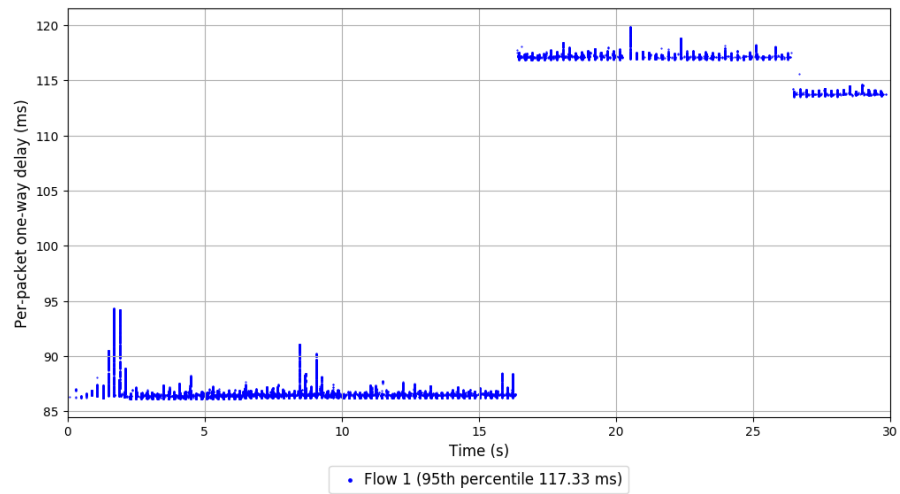
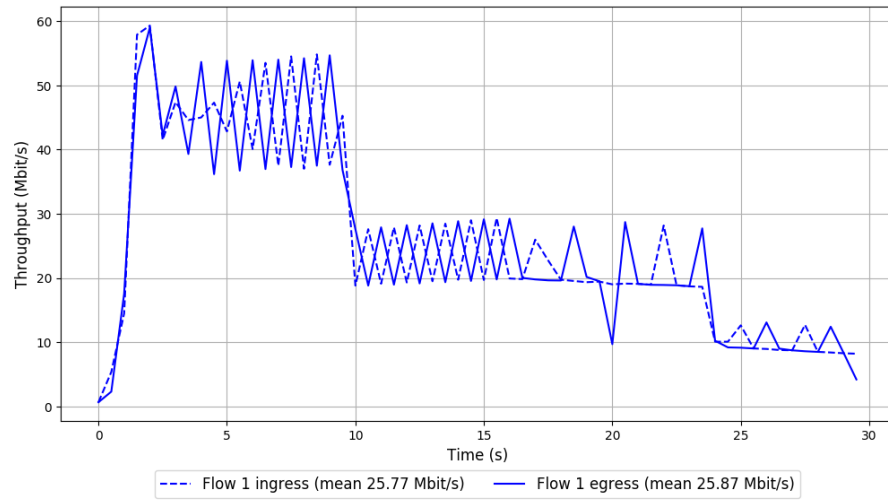
-- Flow 1:

Average throughput: 25.87 Mbit/s

95th percentile per-packet one-way delay: 117.333 ms

Loss rate: 0.28%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-20 23:03:20

End at: 2017-11-20 23:03:50

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.24 Mbit/s

95th percentile per-packet one-way delay: 117.725 ms

Loss rate: 0.32%

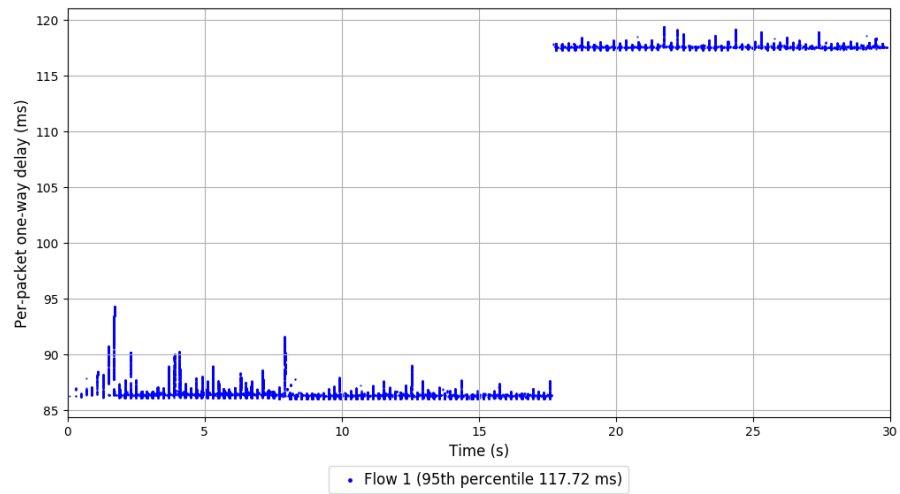
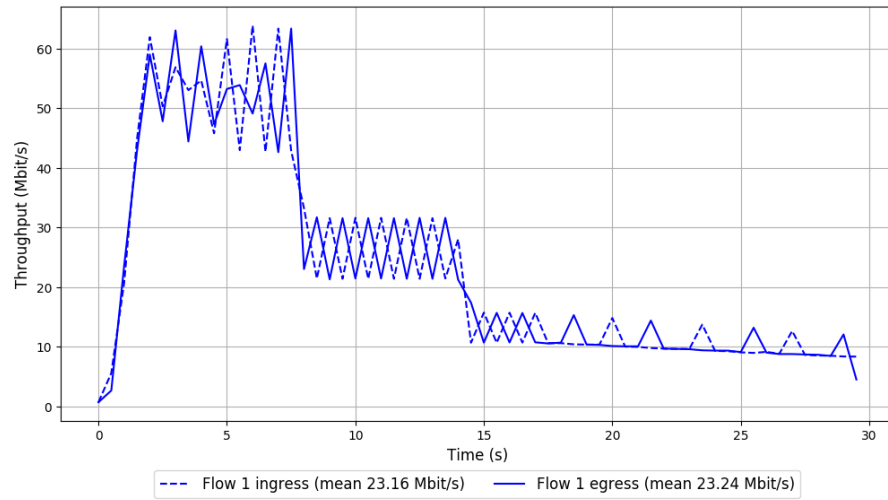
-- Flow 1:

Average throughput: 23.24 Mbit/s

95th percentile per-packet one-way delay: 117.725 ms

Loss rate: 0.32%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-20 23:13:44

End at: 2017-11-20 23:14:14

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 117.714 ms

Loss rate: 0.82%

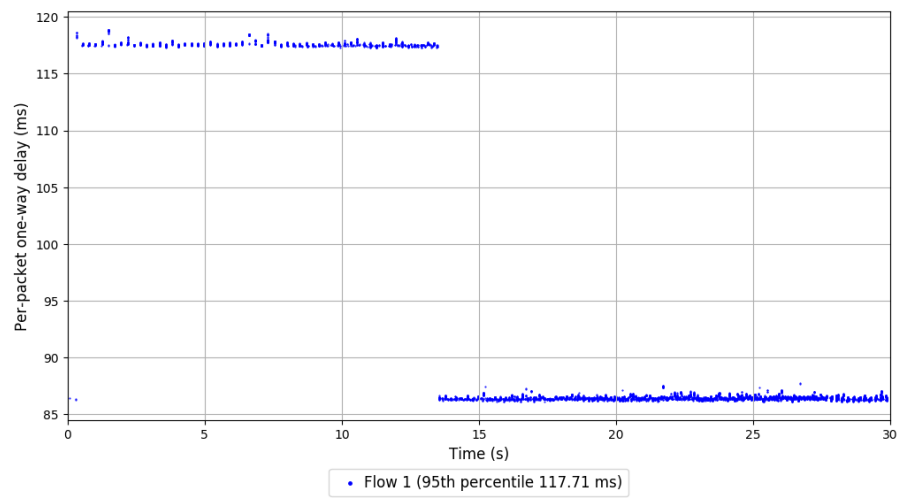
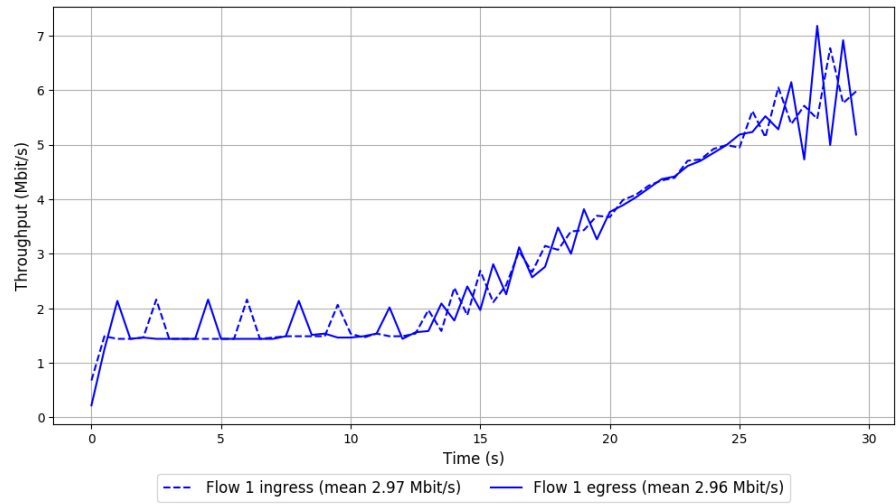
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 117.714 ms

Loss rate: 0.82%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-20 23:24:11

End at: 2017-11-20 23:24:41

Below is generated by plot.py at 2017-11-21 01:39:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.01 Mbit/s

95th percentile per-packet one-way delay: 118.087 ms

Loss rate: 0.66%

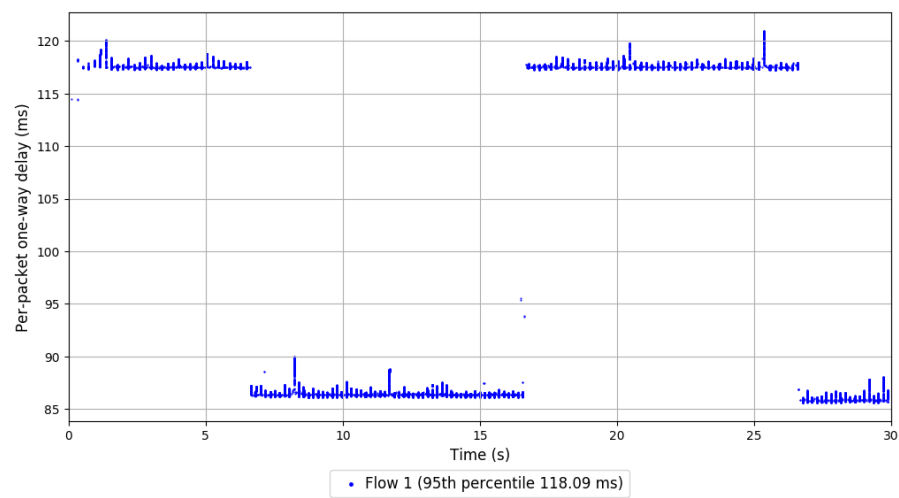
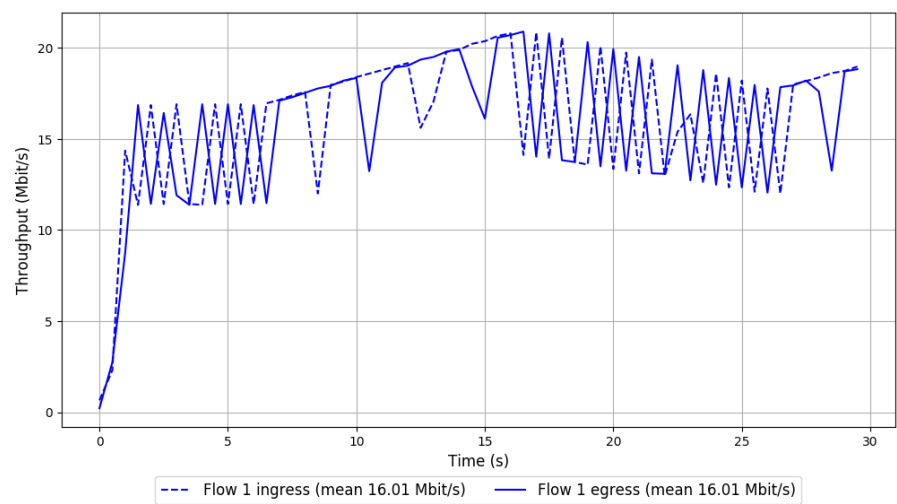
-- Flow 1:

Average throughput: 16.01 Mbit/s

95th percentile per-packet one-way delay: 118.087 ms

Loss rate: 0.66%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-20 21:45:09

End at: 2017-11-20 21:45:39

Below is generated by plot.py at 2017-11-21 01:40:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.64 Mbit/s

95th percentile per-packet one-way delay: 135.597 ms

Loss rate: 0.88%

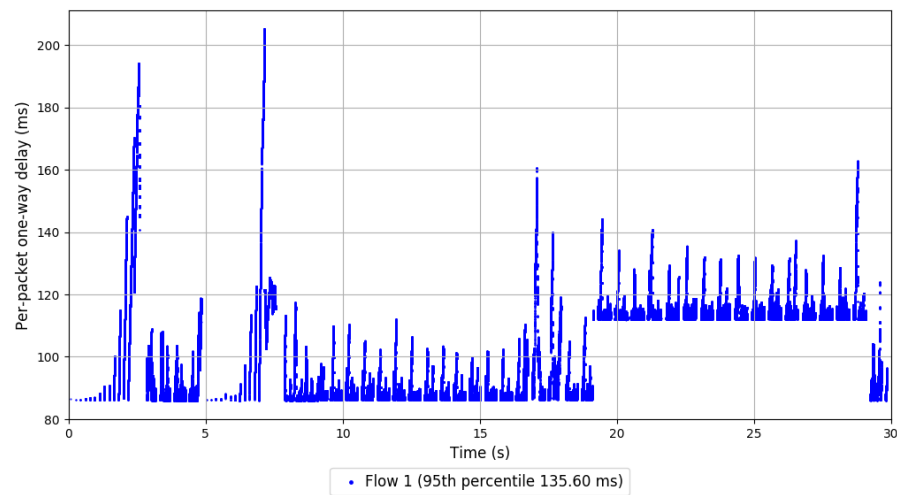
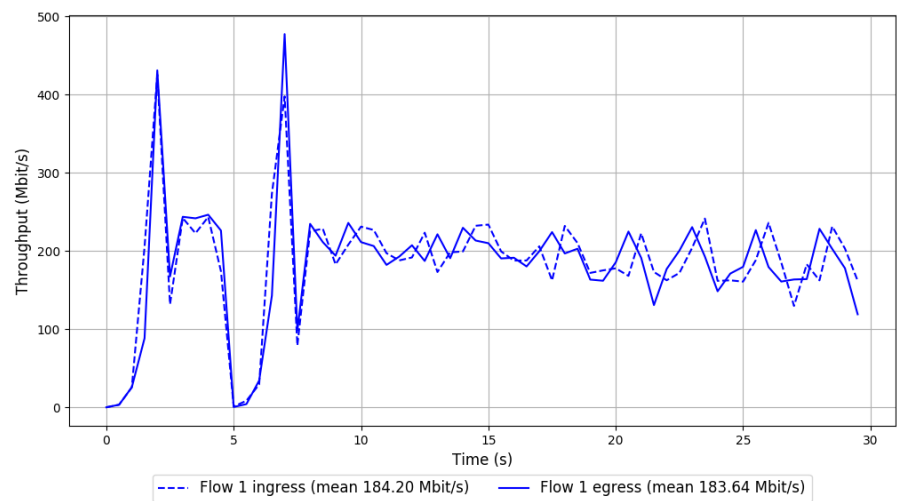
-- Flow 1:

Average throughput: 183.64 Mbit/s

95th percentile per-packet one-way delay: 135.597 ms

Loss rate: 0.88%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-20 21:55:34

End at: 2017-11-20 21:56:04

Below is generated by plot.py at 2017-11-21 01:40:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.60 Mbit/s

95th percentile per-packet one-way delay: 159.407 ms

Loss rate: 1.21%

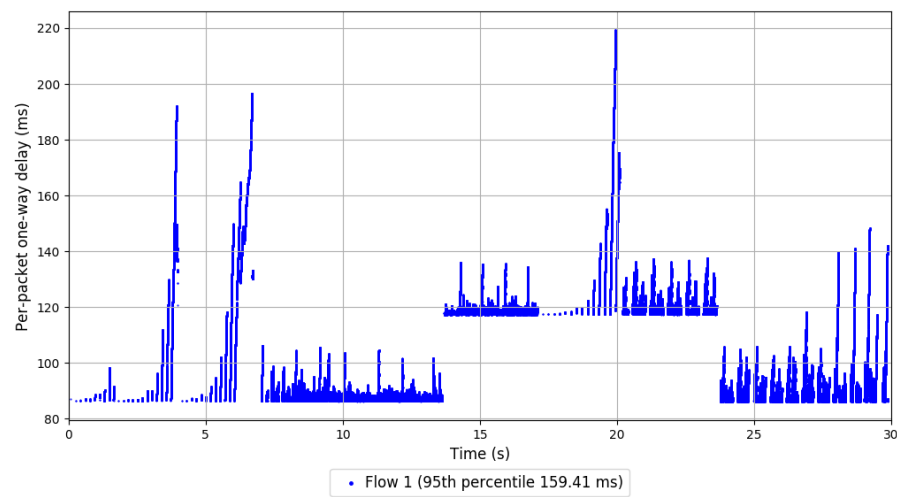
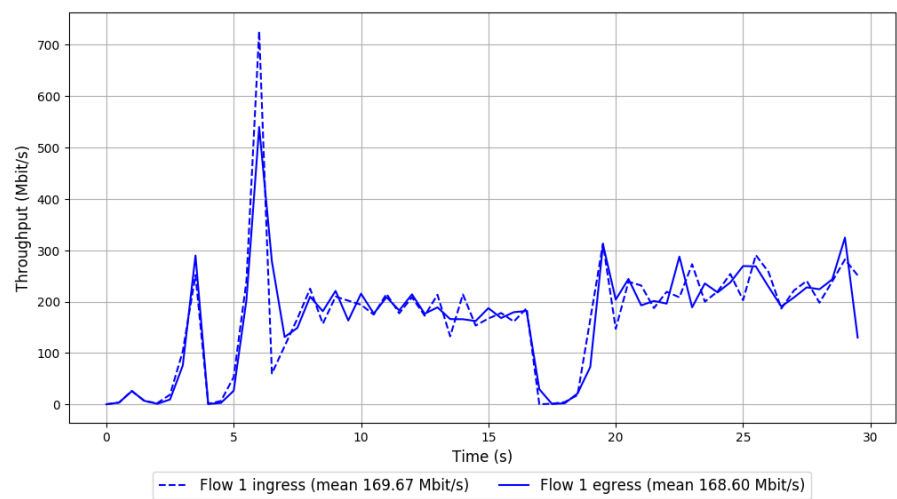
-- Flow 1:

Average throughput: 168.60 Mbit/s

95th percentile per-packet one-way delay: 159.407 ms

Loss rate: 1.21%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-20 22:06:08

End at: 2017-11-20 22:06:38

Below is generated by plot.py at 2017-11-21 01:41:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.47 Mbit/s

95th percentile per-packet one-way delay: 168.598 ms

Loss rate: 1.46%

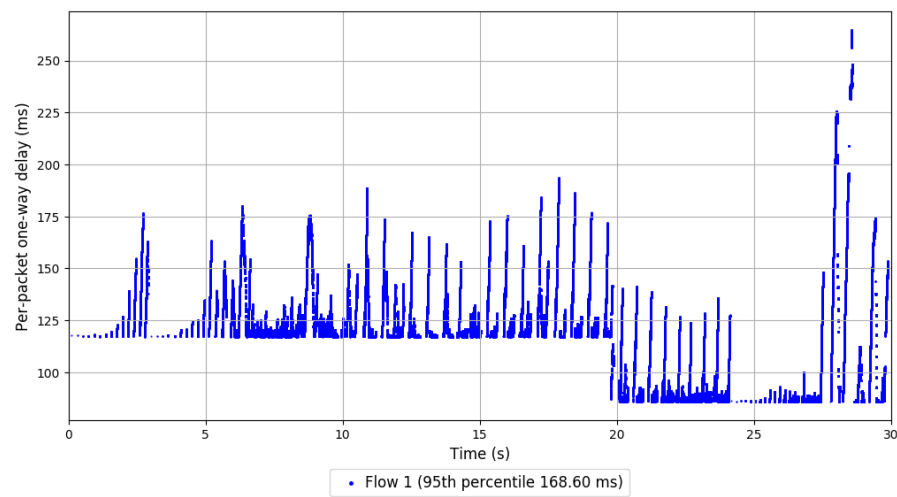
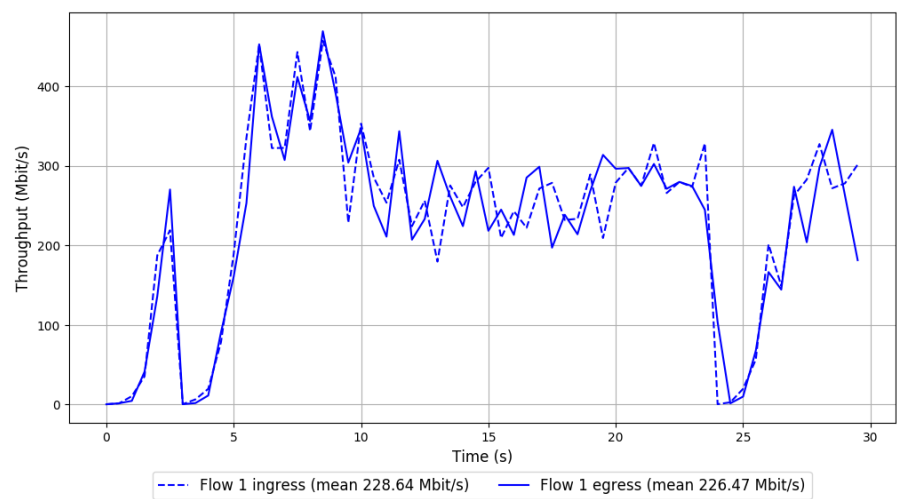
-- Flow 1:

Average throughput: 226.47 Mbit/s

95th percentile per-packet one-way delay: 168.598 ms

Loss rate: 1.46%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-20 22:17:06

End at: 2017-11-20 22:17:36

Below is generated by plot.py at 2017-11-21 01:41:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.80 Mbit/s

95th percentile per-packet one-way delay: 269.455 ms

Loss rate: 6.85%

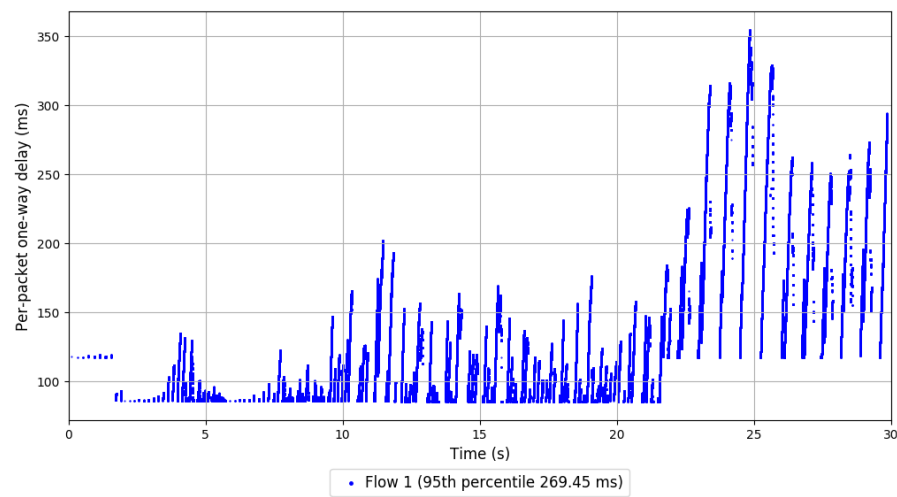
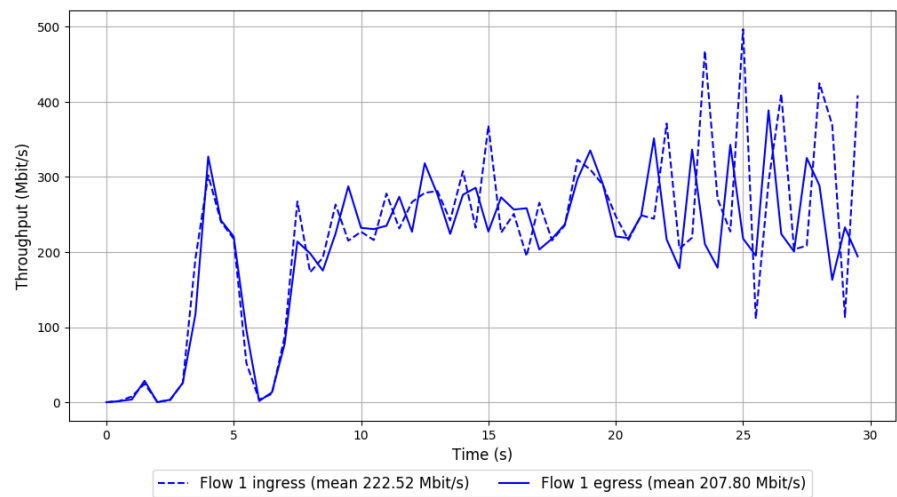
-- Flow 1:

Average throughput: 207.80 Mbit/s

95th percentile per-packet one-way delay: 269.455 ms

Loss rate: 6.85%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-20 22:27:27

End at: 2017-11-20 22:27:57

Below is generated by plot.py at 2017-11-21 01:41:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.14 Mbit/s

95th percentile per-packet one-way delay: 193.930 ms

Loss rate: 1.79%

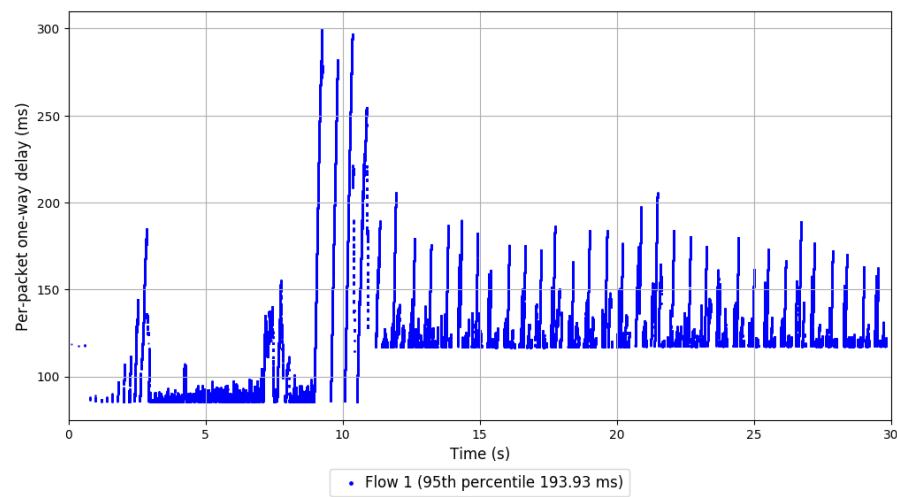
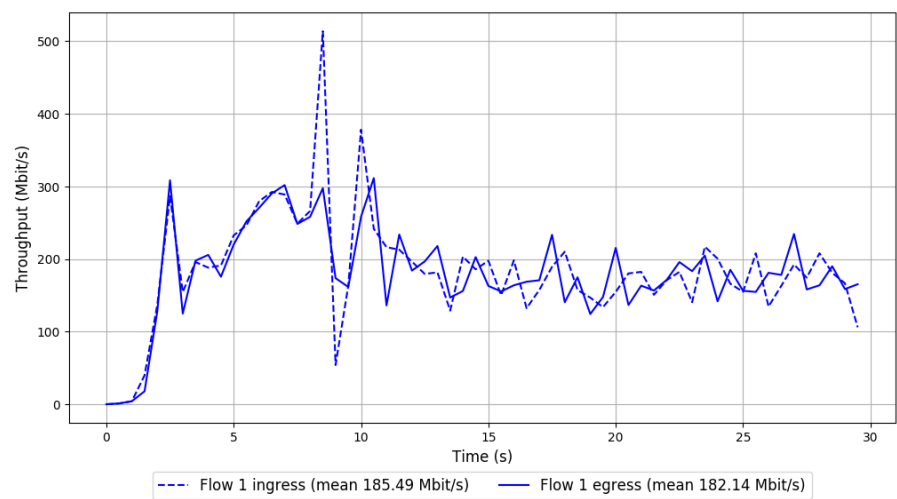
-- Flow 1:

Average throughput: 182.14 Mbit/s

95th percentile per-packet one-way delay: 193.930 ms

Loss rate: 1.79%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-20 22:38:00

End at: 2017-11-20 22:38:30

Below is generated by plot.py at 2017-11-21 01:41:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.69 Mbit/s

95th percentile per-packet one-way delay: 294.266 ms

Loss rate: 8.13%

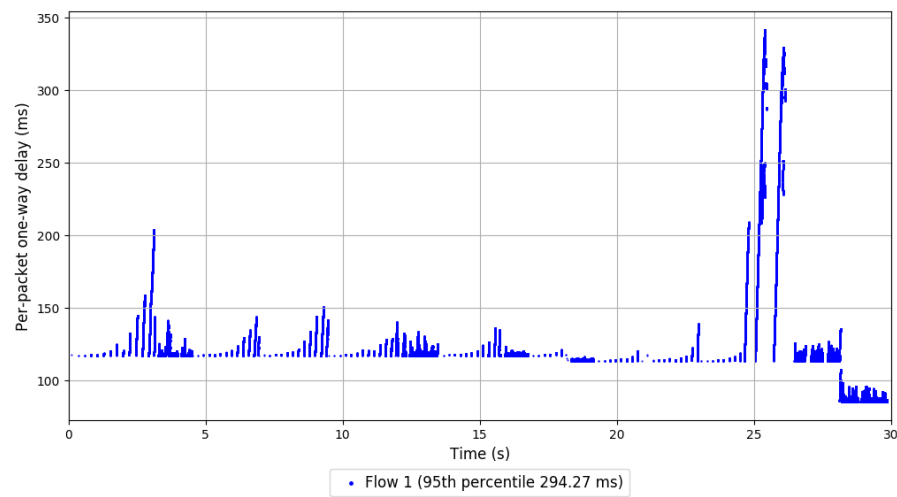
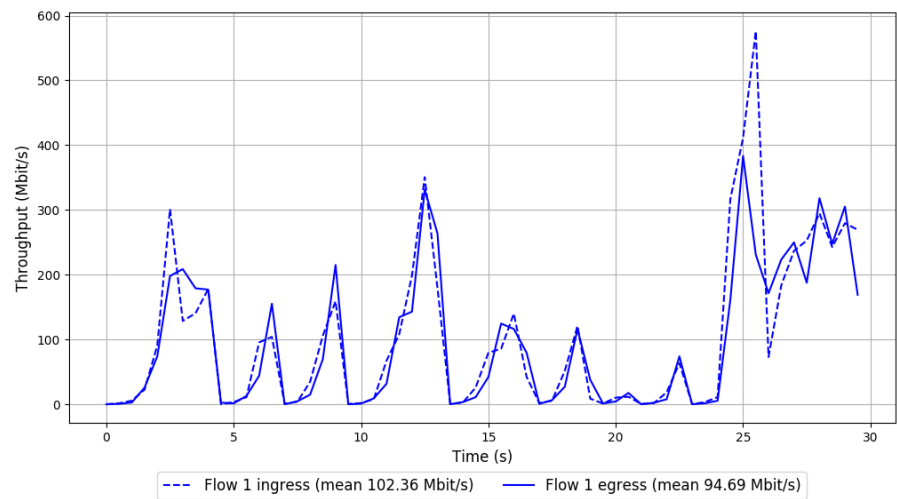
-- Flow 1:

Average throughput: 94.69 Mbit/s

95th percentile per-packet one-way delay: 294.266 ms

Loss rate: 8.13%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-20 22:48:20

End at: 2017-11-20 22:48:50

Below is generated by plot.py at 2017-11-21 01:41:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.69 Mbit/s

95th percentile per-packet one-way delay: 129.369 ms

Loss rate: 0.02%

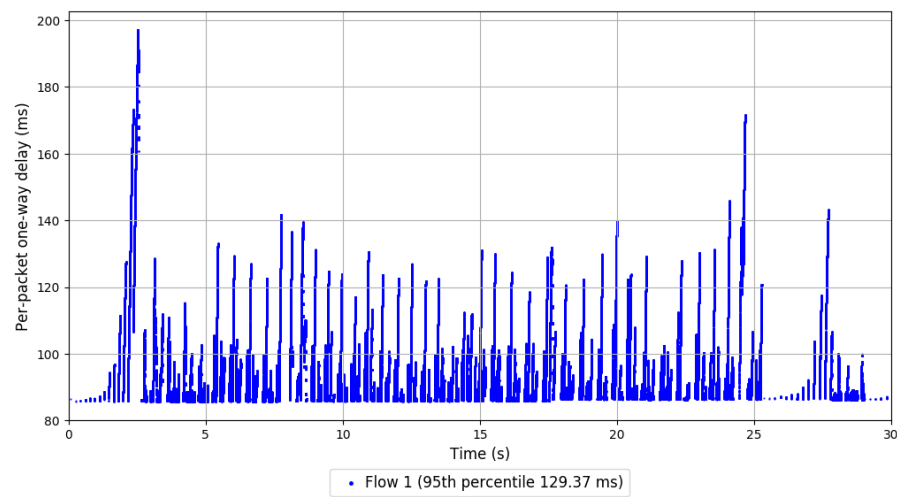
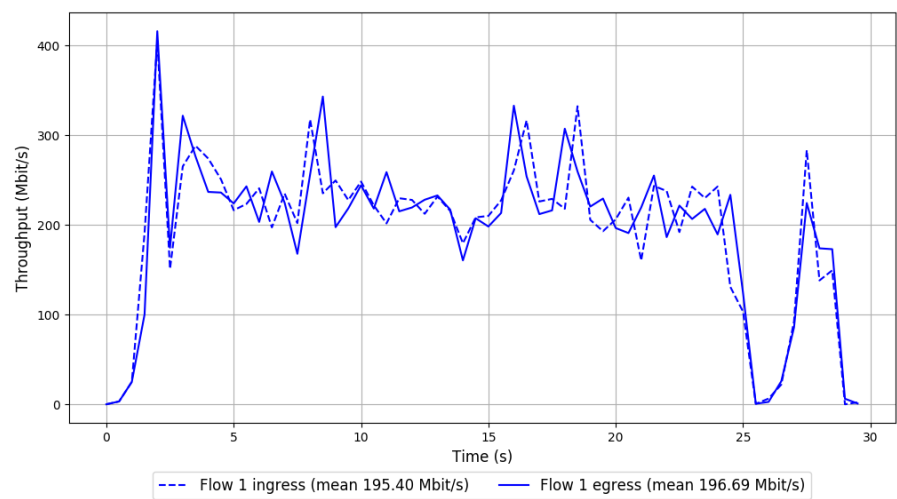
-- Flow 1:

Average throughput: 196.69 Mbit/s

95th percentile per-packet one-way delay: 129.369 ms

Loss rate: 0.02%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-20 22:59:05

End at: 2017-11-20 22:59:35

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 266.06 Mbit/s

95th percentile per-packet one-way delay: 298.610 ms

Loss rate: 25.16%

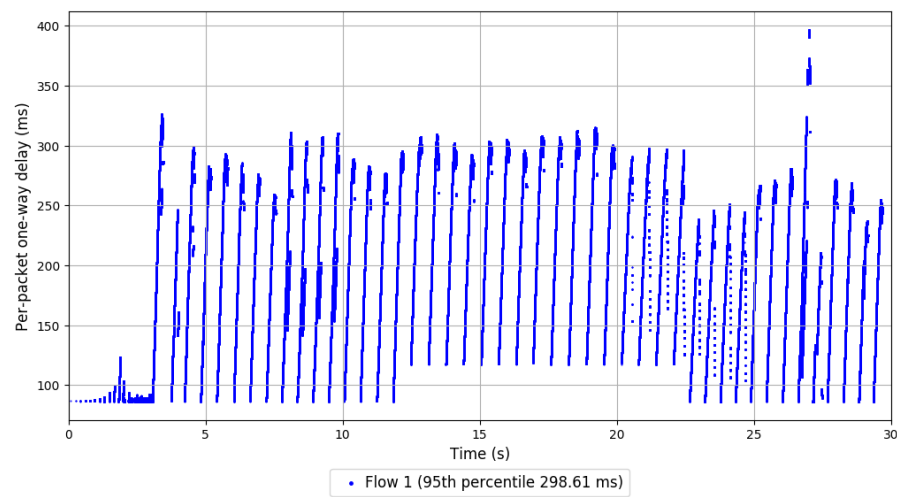
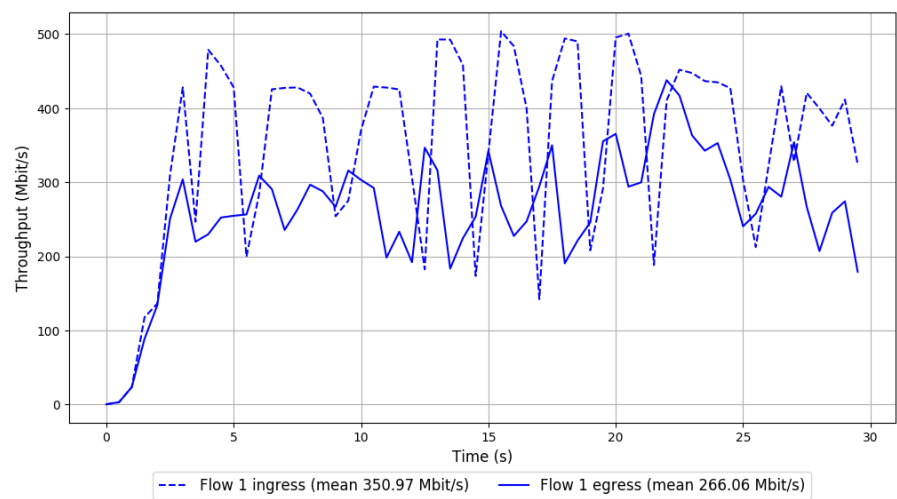
-- Flow 1:

Average throughput: 266.06 Mbit/s

95th percentile per-packet one-way delay: 298.610 ms

Loss rate: 25.16%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-20 23:09:54

End at: 2017-11-20 23:10:24

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 146.54 Mbit/s

95th percentile per-packet one-way delay: 184.431 ms

Loss rate: 0.79%

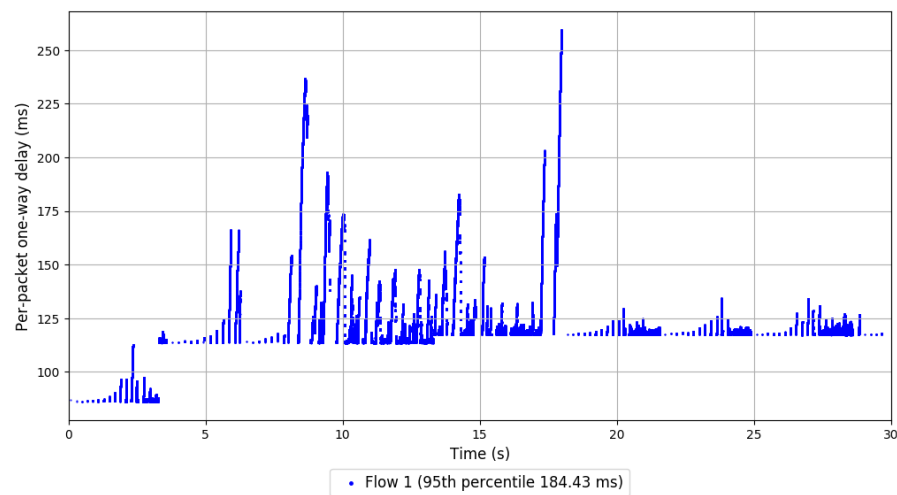
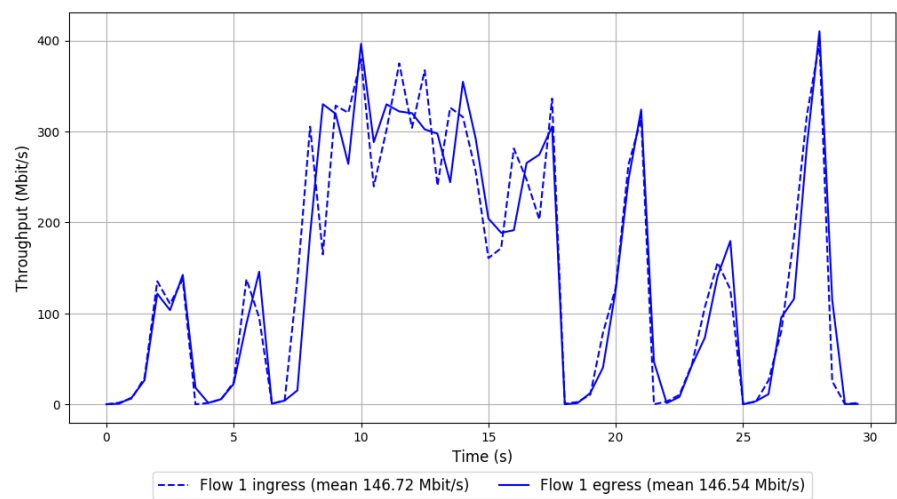
-- Flow 1:

Average throughput: 146.54 Mbit/s

95th percentile per-packet one-way delay: 184.431 ms

Loss rate: 0.79%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-20 23:20:08

End at: 2017-11-20 23:20:38

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.67 Mbit/s

95th percentile per-packet one-way delay: 196.405 ms

Loss rate: 2.18%

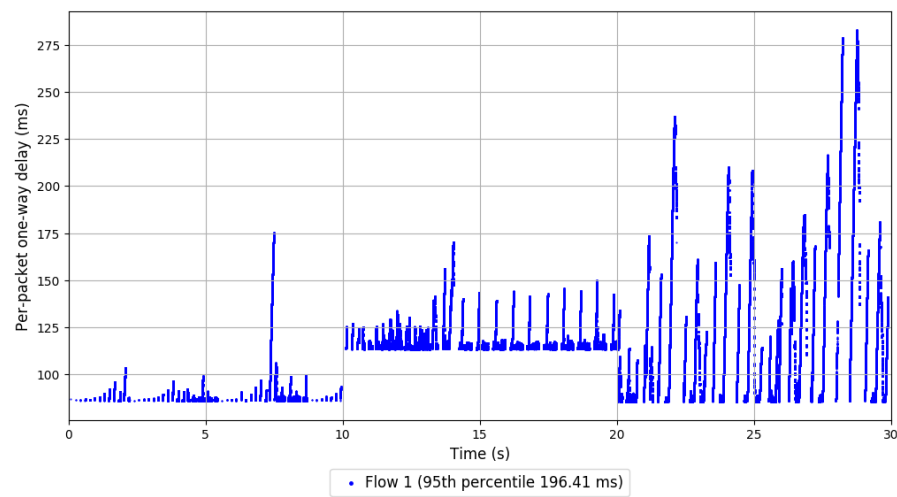
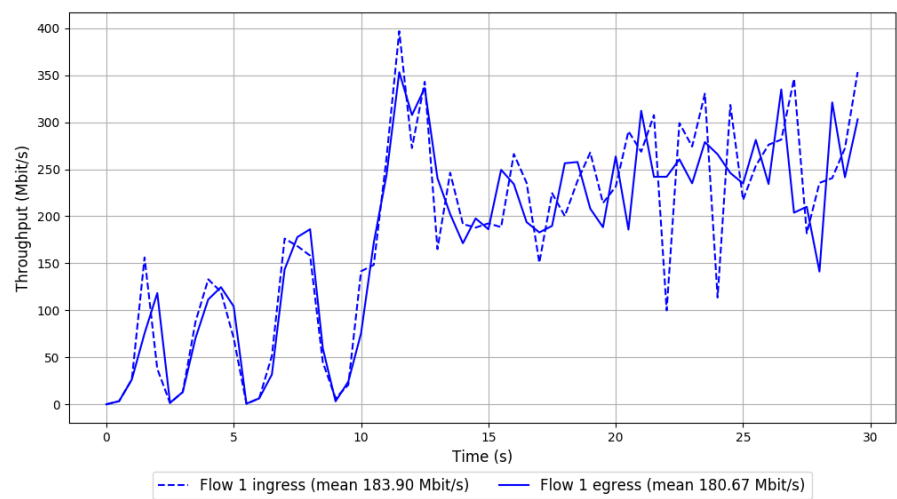
-- Flow 1:

Average throughput: 180.67 Mbit/s

95th percentile per-packet one-way delay: 196.405 ms

Loss rate: 2.18%

Run 10: Report of Verus — Data Link

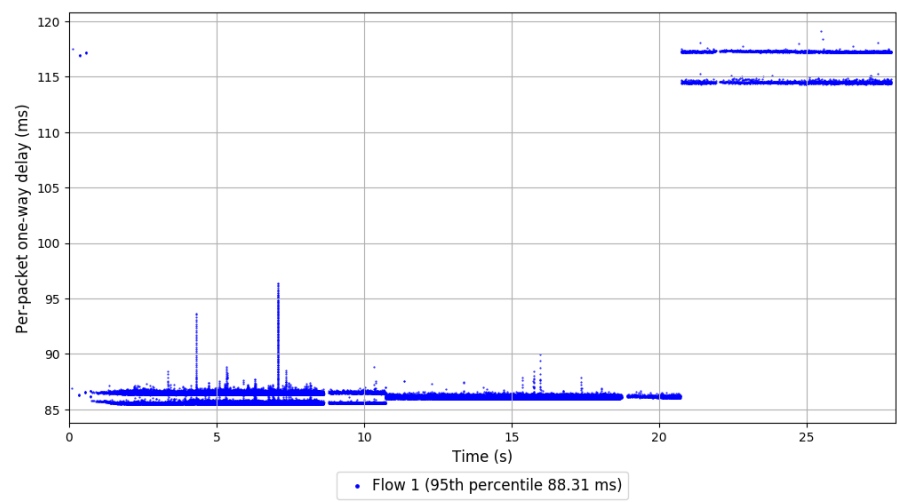
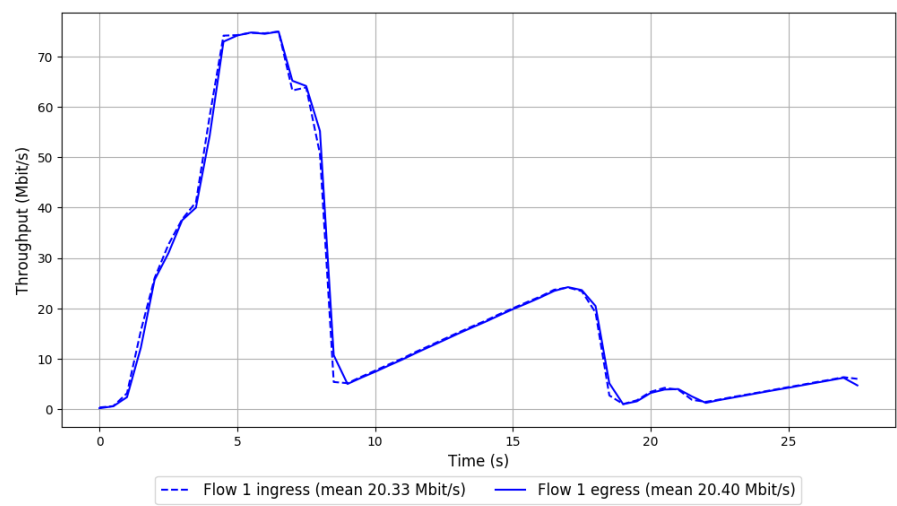


```
Run 1: Statistics of Copa

Start at: 2017-11-20 21:42:55
End at: 2017-11-20 21:43:25

# Below is generated by plot.py at 2017-11-21 01:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.40 Mbit/s
95th percentile per-packet one-way delay: 88.310 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 20.40 Mbit/s
95th percentile per-packet one-way delay: 88.310 ms
Loss rate: 0.25%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-20 21:53:14

End at: 2017-11-20 21:53:44

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.22 Mbit/s

95th percentile per-packet one-way delay: 86.611 ms

Loss rate: 0.72%

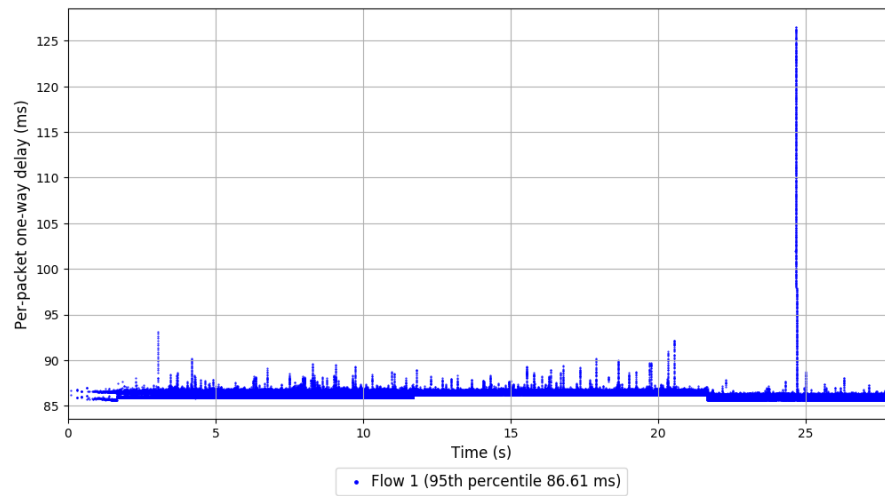
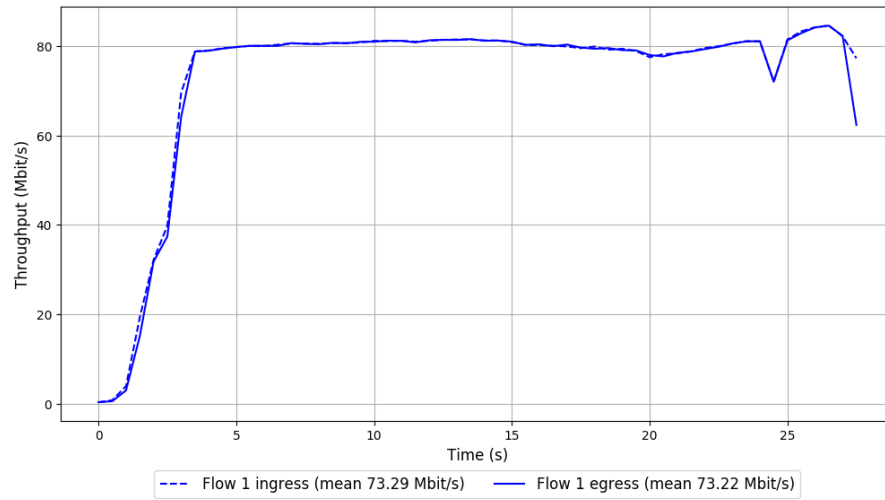
-- Flow 1:

Average throughput: 73.22 Mbit/s

95th percentile per-packet one-way delay: 86.611 ms

Loss rate: 0.72%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-20 22:03:53

End at: 2017-11-20 22:04:23

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 117.388 ms

Loss rate: 0.86%

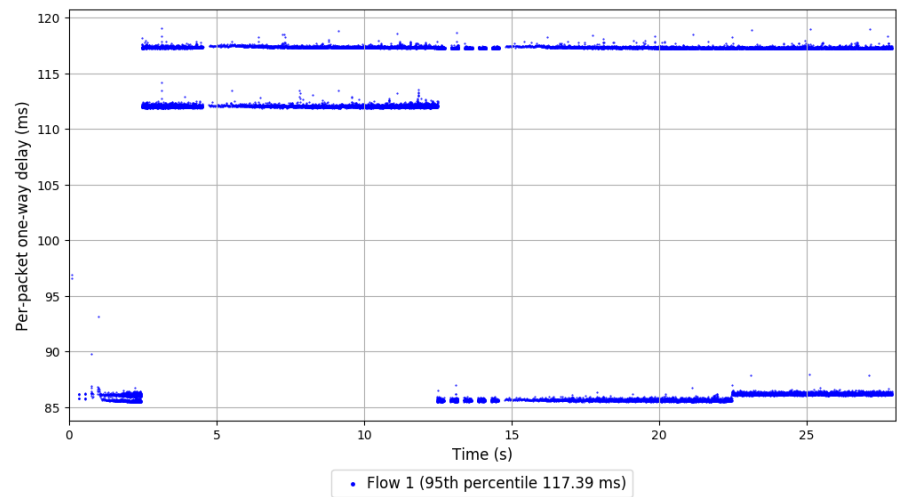
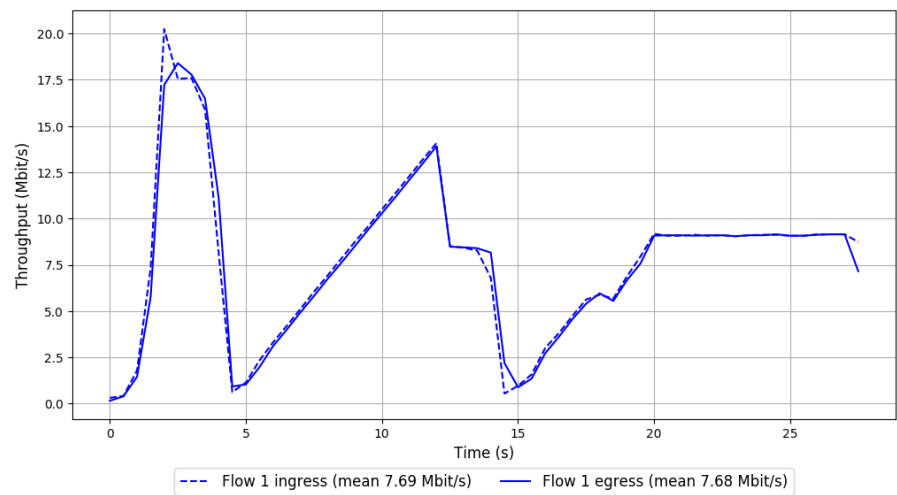
-- Flow 1:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 117.388 ms

Loss rate: 0.86%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-20 22:14:48

End at: 2017-11-20 22:15:18

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.11 Mbit/s

95th percentile per-packet one-way delay: 117.262 ms

Loss rate: 0.01%

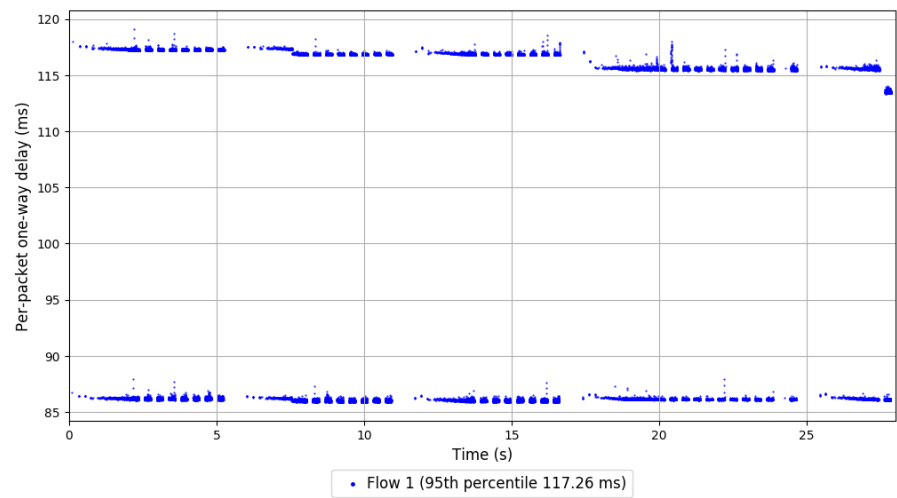
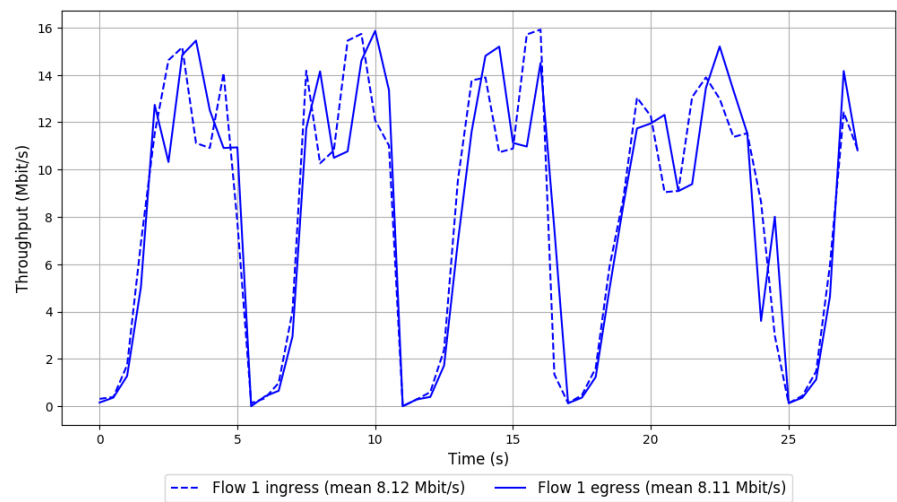
-- Flow 1:

Average throughput: 8.11 Mbit/s

95th percentile per-packet one-way delay: 117.262 ms

Loss rate: 0.01%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-20 22:25:19

End at: 2017-11-20 22:25:50

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.24 Mbit/s

95th percentile per-packet one-way delay: 117.314 ms

Loss rate: 0.17%

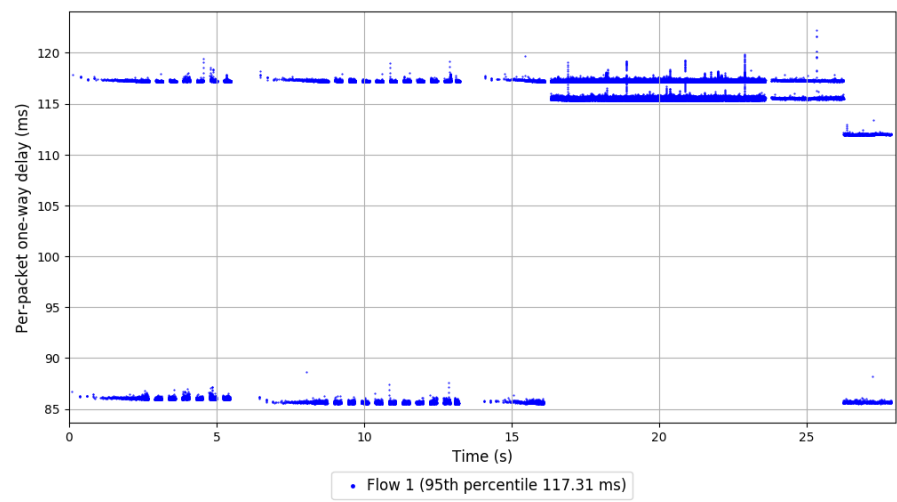
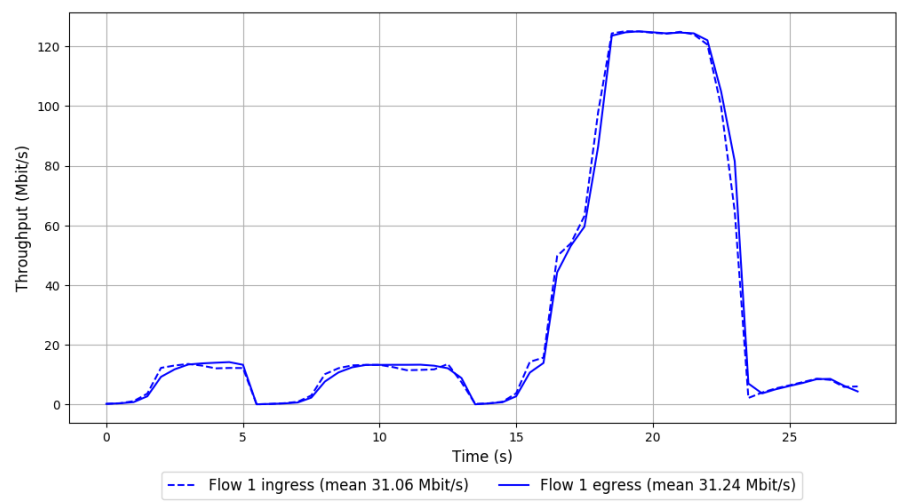
-- Flow 1:

Average throughput: 31.24 Mbit/s

95th percentile per-packet one-way delay: 117.314 ms

Loss rate: 0.17%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-20 22:35:45

End at: 2017-11-20 22:36:15

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.42 Mbit/s

95th percentile per-packet one-way delay: 114.343 ms

Loss rate: 0.15%

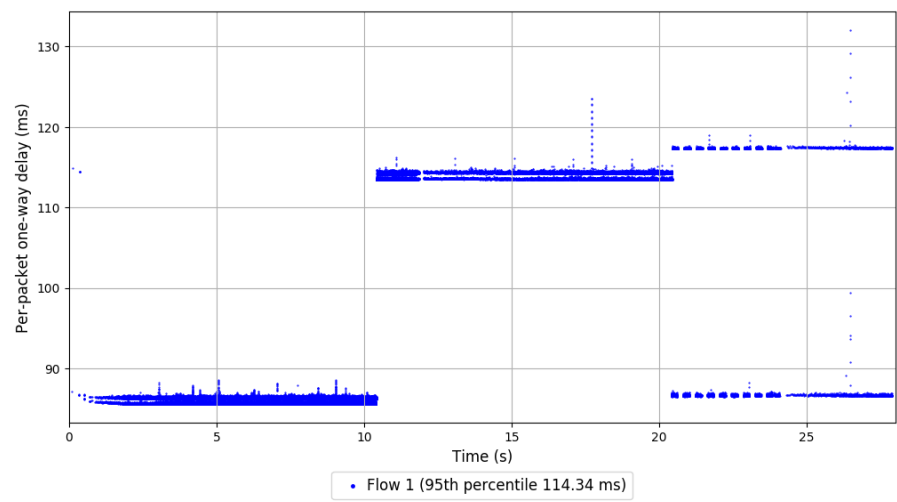
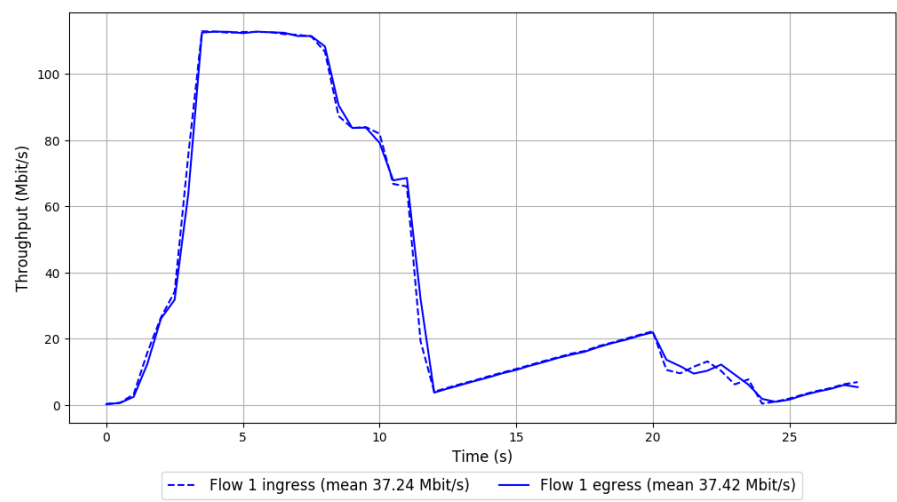
-- Flow 1:

Average throughput: 37.42 Mbit/s

95th percentile per-packet one-way delay: 114.343 ms

Loss rate: 0.15%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-20 22:46:13

End at: 2017-11-20 22:46:43

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.13 Mbit/s

95th percentile per-packet one-way delay: 117.431 ms

Loss rate: 0.81%

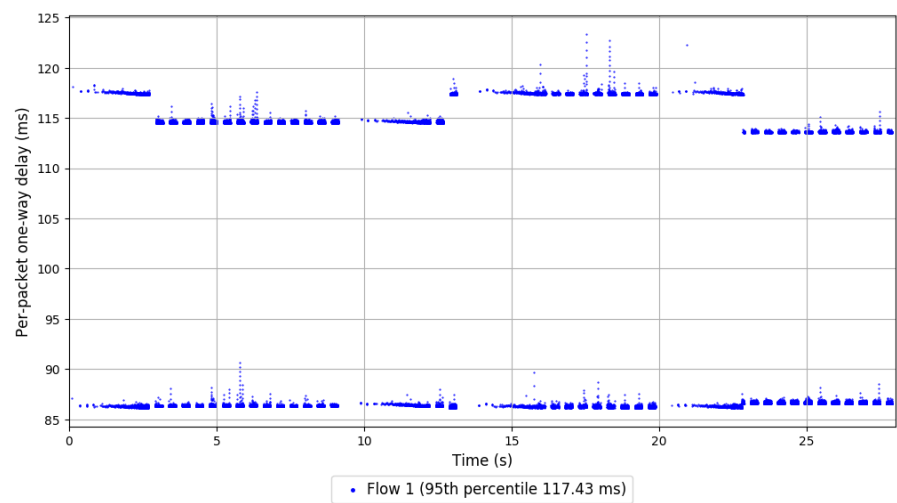
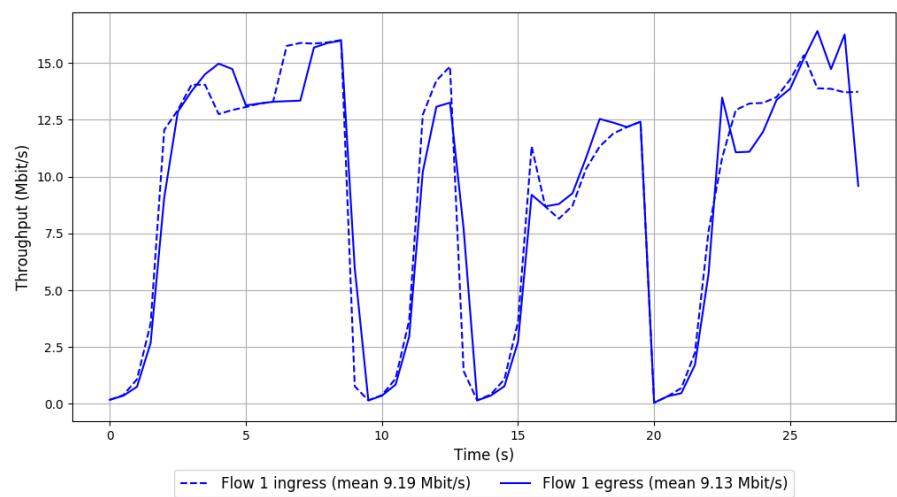
-- Flow 1:

Average throughput: 9.13 Mbit/s

95th percentile per-packet one-way delay: 117.431 ms

Loss rate: 0.81%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-20 22:56:42

End at: 2017-11-20 22:57:12

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.42 Mbit/s

95th percentile per-packet one-way delay: 117.411 ms

Loss rate: 3.69%

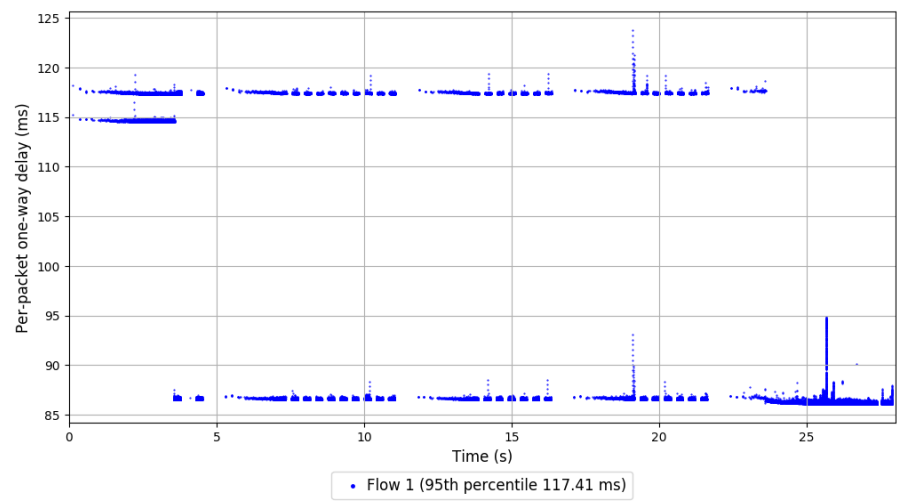
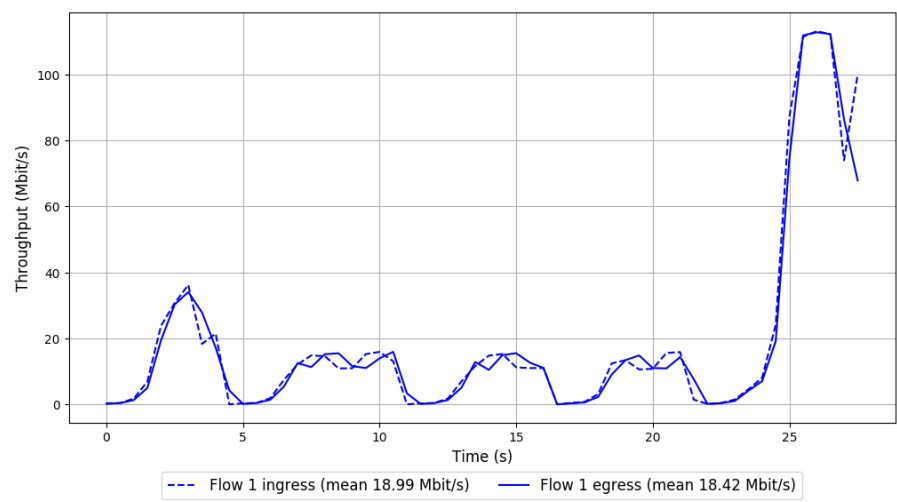
-- Flow 1:

Average throughput: 18.42 Mbit/s

95th percentile per-packet one-way delay: 117.411 ms

Loss rate: 3.69%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-20 23:07:39

End at: 2017-11-20 23:08:09

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.83 Mbit/s

95th percentile per-packet one-way delay: 117.401 ms

Loss rate: 0.05%

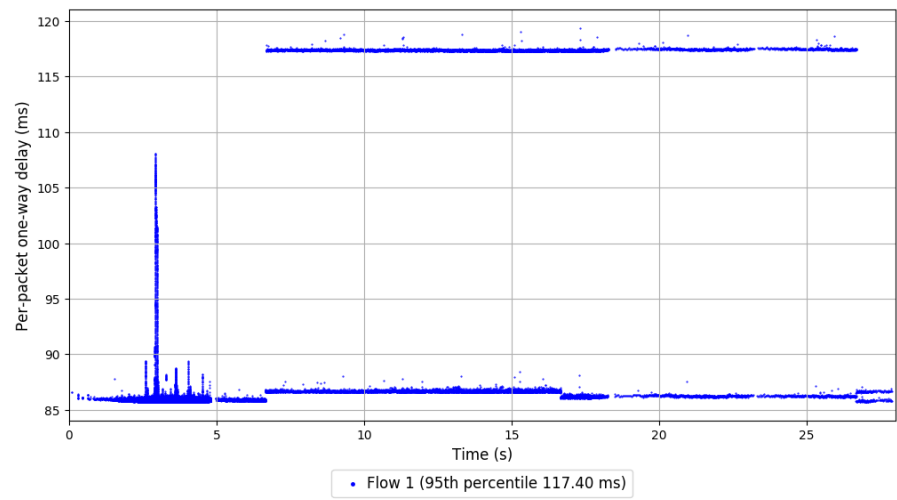
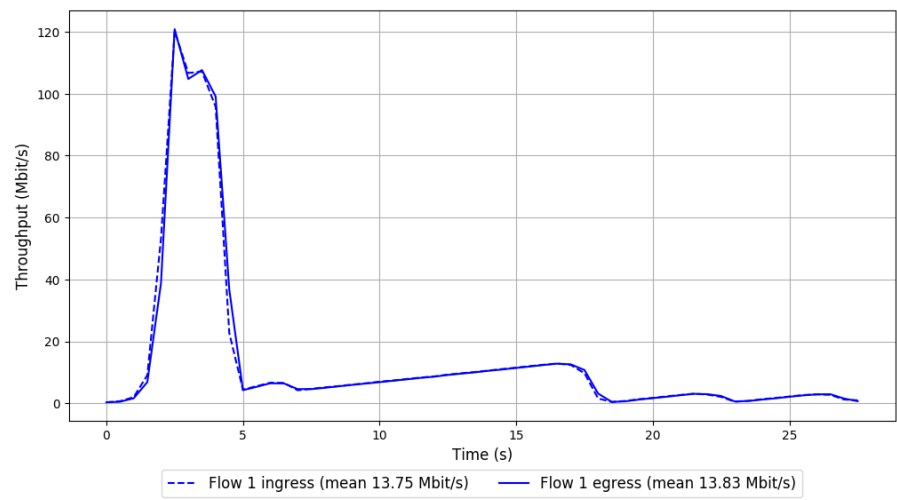
-- Flow 1:

Average throughput: 13.83 Mbit/s

95th percentile per-packet one-way delay: 117.401 ms

Loss rate: 0.05%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-20 23:18:06

End at: 2017-11-20 23:18:36

Below is generated by plot.py at 2017-11-21 01:45:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.92 Mbit/s

95th percentile per-packet one-way delay: 117.329 ms

Loss rate: 0.25%

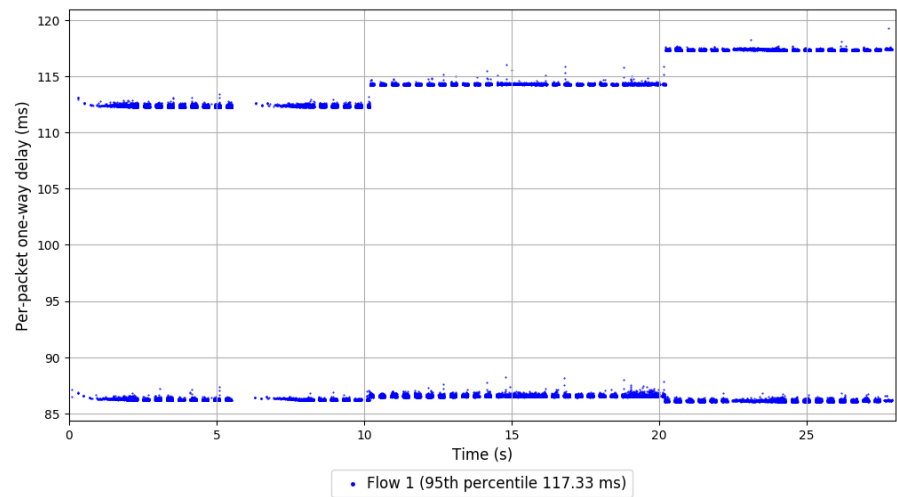
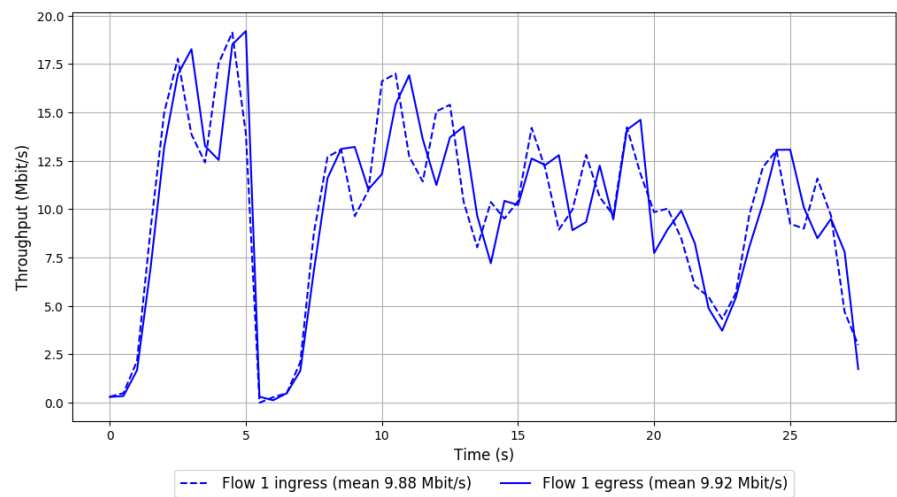
-- Flow 1:

Average throughput: 9.92 Mbit/s

95th percentile per-packet one-way delay: 117.329 ms

Loss rate: 0.25%

Run 10: Report of Copa — Data Link

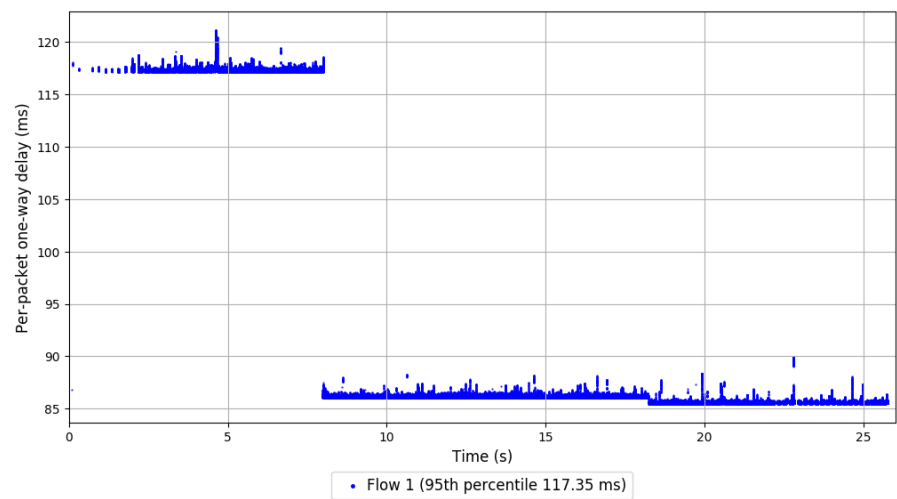
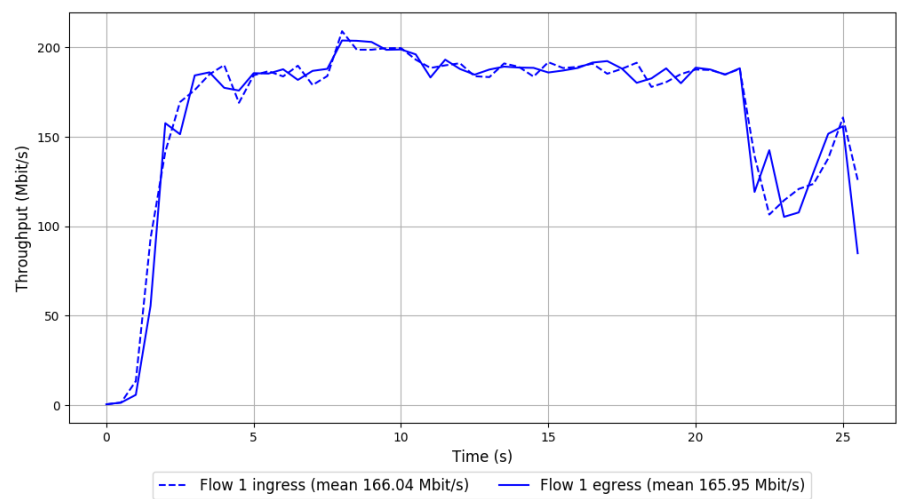


```
Run 1: Statistics of Indigo

Start at: 2017-11-20 21:46:46
End at: 2017-11-20 21:47:16

# Below is generated by plot.py at 2017-11-21 01:45:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 165.95 Mbit/s
95th percentile per-packet one-way delay: 117.350 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 165.95 Mbit/s
95th percentile per-packet one-way delay: 117.350 ms
Loss rate: 0.73%
```

Run 1: Report of Indigo — Data Link

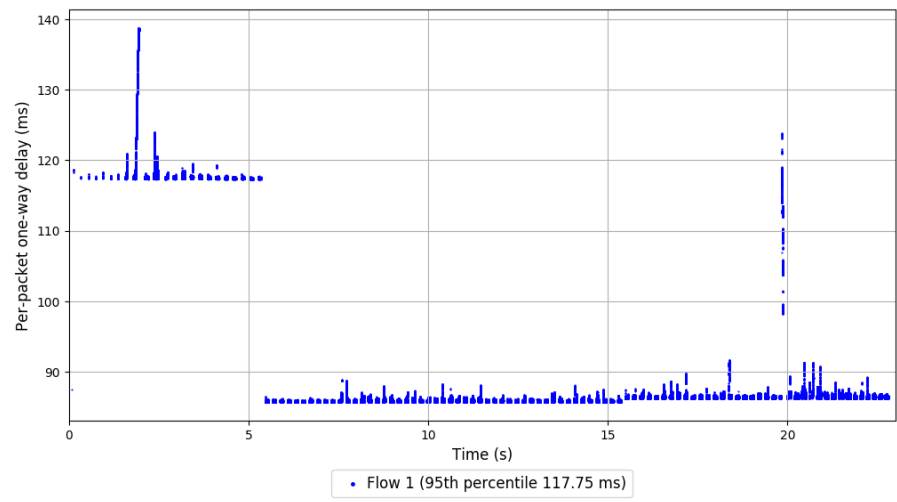
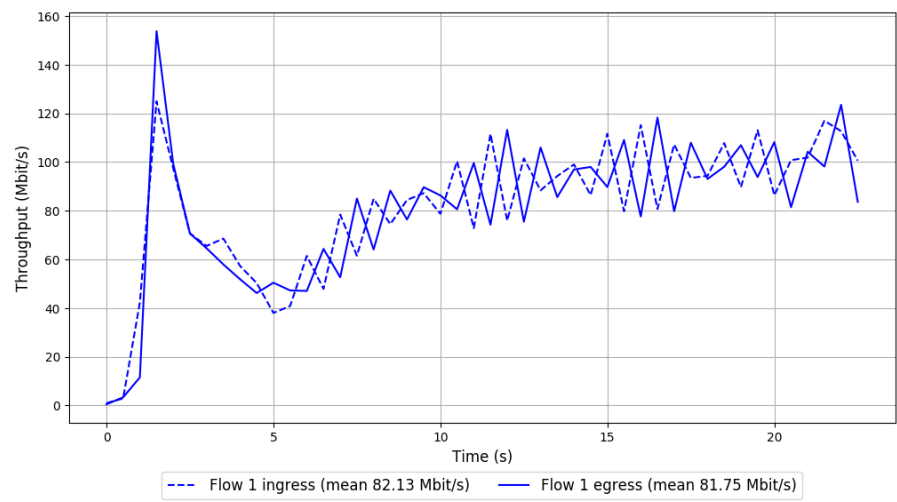


Run 2: Statistics of Indigo

Start at: 2017-11-20 21:57:05

End at: 2017-11-20 21:57:35

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-20 22:07:43

End at: 2017-11-20 22:08:13

Below is generated by plot.py at 2017-11-21 01:45:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.04 Mbit/s

95th percentile per-packet one-way delay: 86.165 ms

Loss rate: 0.88%

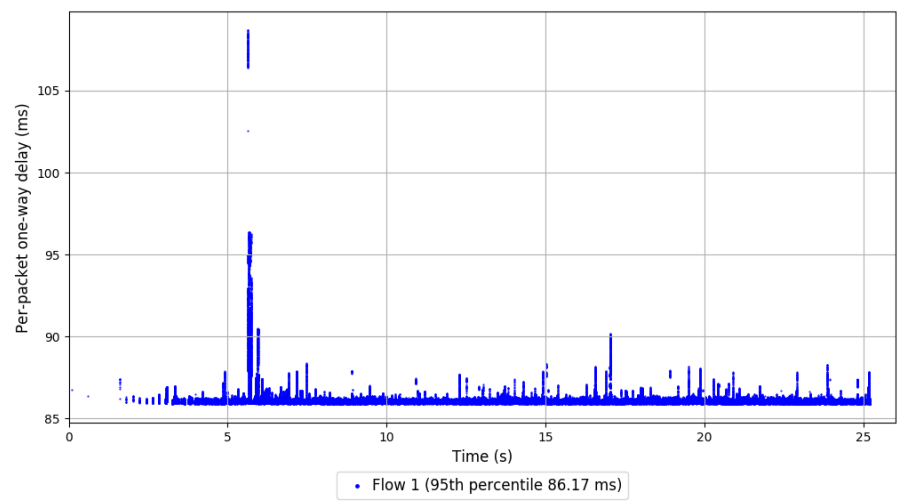
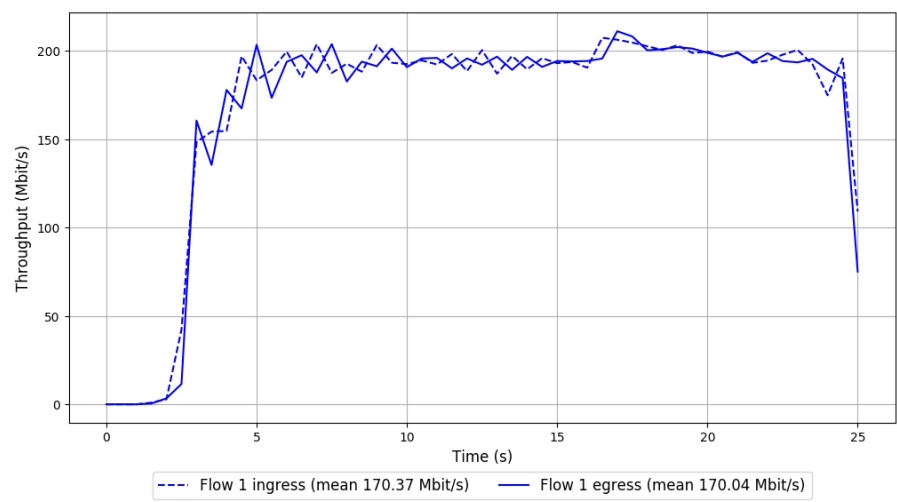
-- Flow 1:

Average throughput: 170.04 Mbit/s

95th percentile per-packet one-way delay: 86.165 ms

Loss rate: 0.88%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-20 22:18:42

End at: 2017-11-20 22:19:12

Below is generated by plot.py at 2017-11-21 01:45:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 116.982 ms

Loss rate: 0.18%

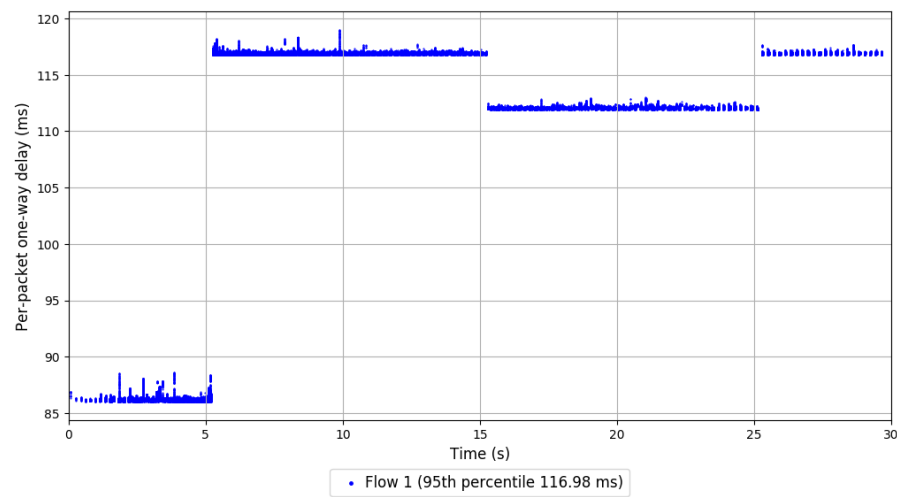
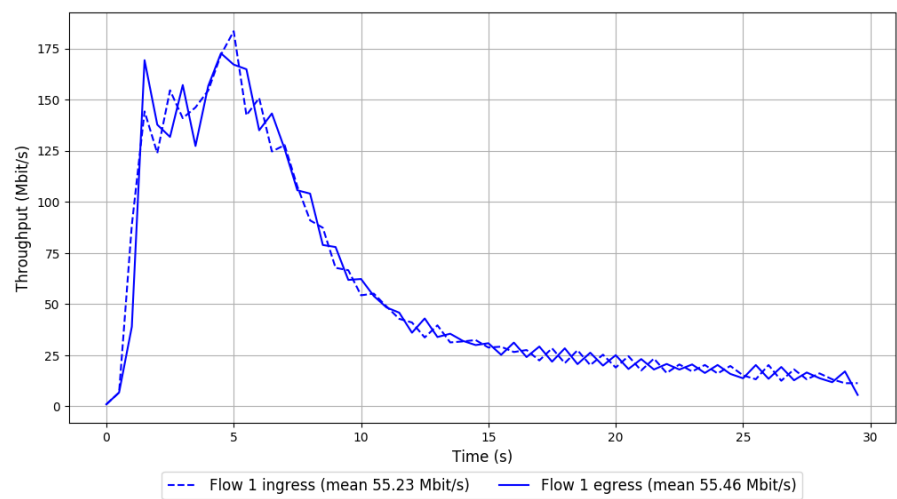
-- Flow 1:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 116.982 ms

Loss rate: 0.18%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-20 22:29:00

End at: 2017-11-20 22:29:30

Below is generated by plot.py at 2017-11-21 01:46:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.68 Mbit/s

95th percentile per-packet one-way delay: 117.418 ms

Loss rate: 0.44%

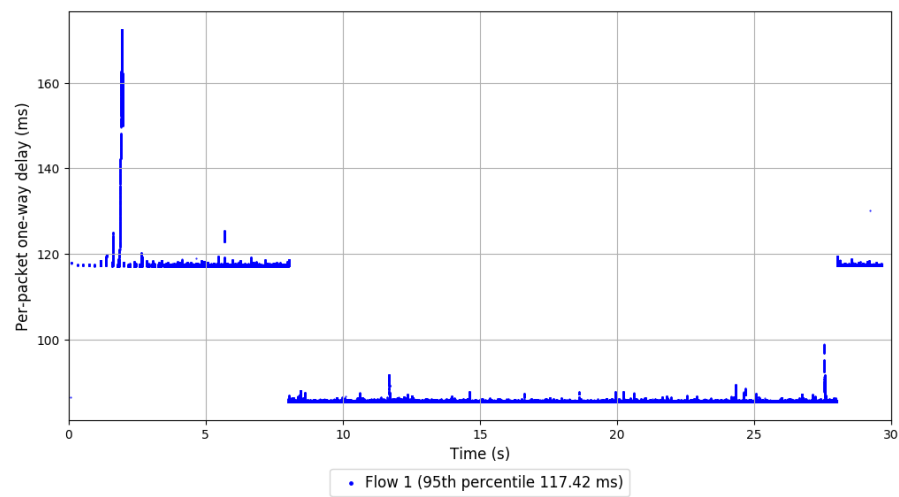
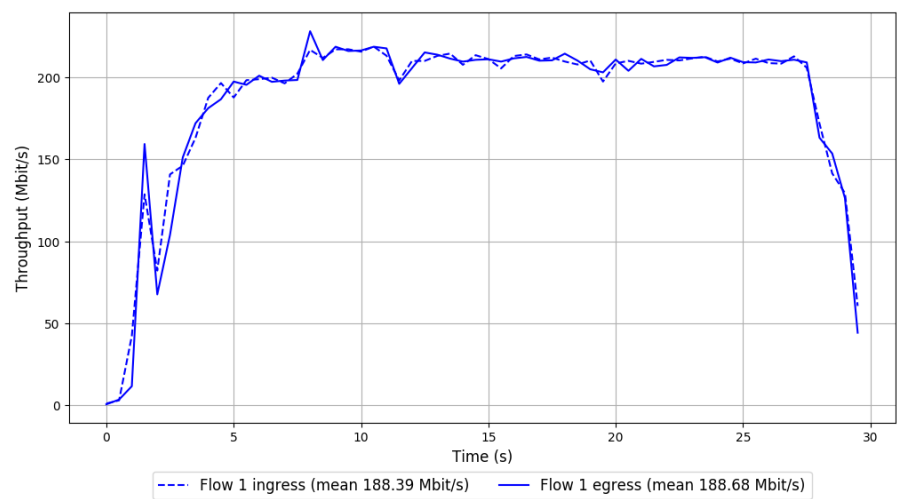
-- Flow 1:

Average throughput: 188.68 Mbit/s

95th percentile per-packet one-way delay: 117.418 ms

Loss rate: 0.44%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-20 22:39:25

End at: 2017-11-20 22:39:55

Below is generated by plot.py at 2017-11-21 01:46:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.31 Mbit/s

95th percentile per-packet one-way delay: 117.453 ms

Loss rate: 0.15%

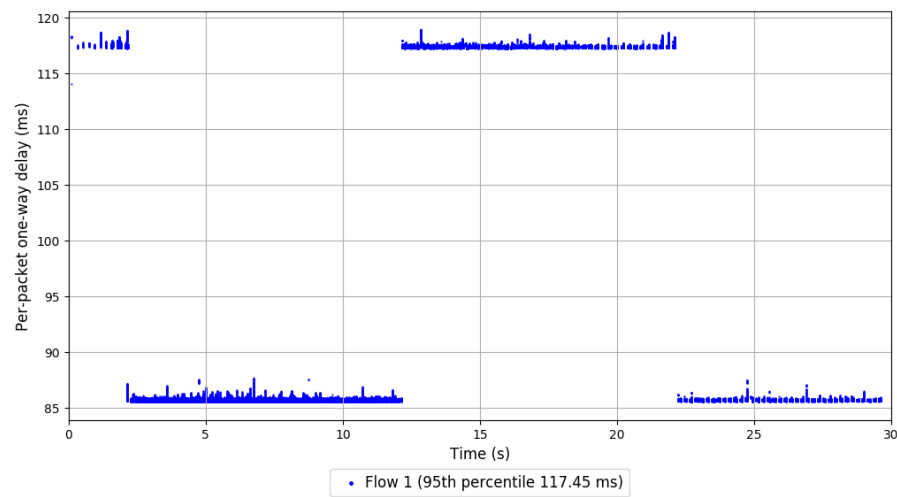
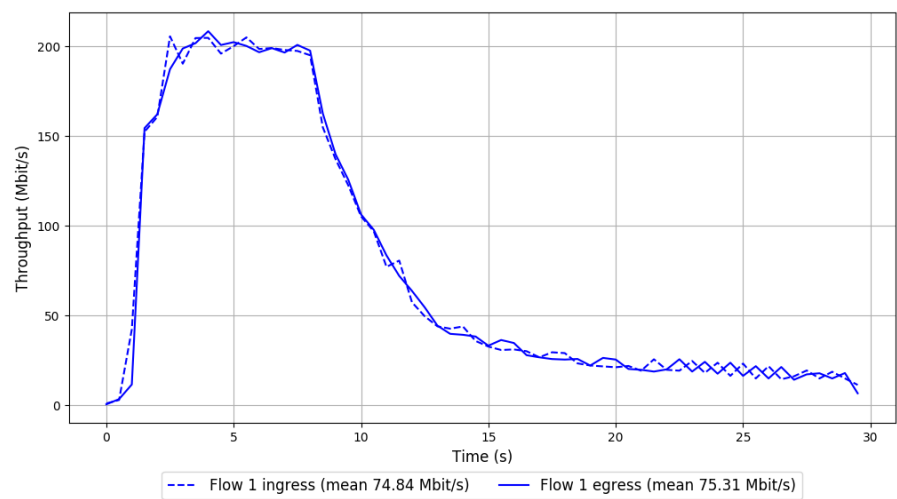
-- Flow 1:

Average throughput: 75.31 Mbit/s

95th percentile per-packet one-way delay: 117.453 ms

Loss rate: 0.15%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-20 22:49:54

End at: 2017-11-20 22:50:24

Below is generated by plot.py at 2017-11-21 01:46:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.78 Mbit/s

95th percentile per-packet one-way delay: 117.699 ms

Loss rate: 0.45%

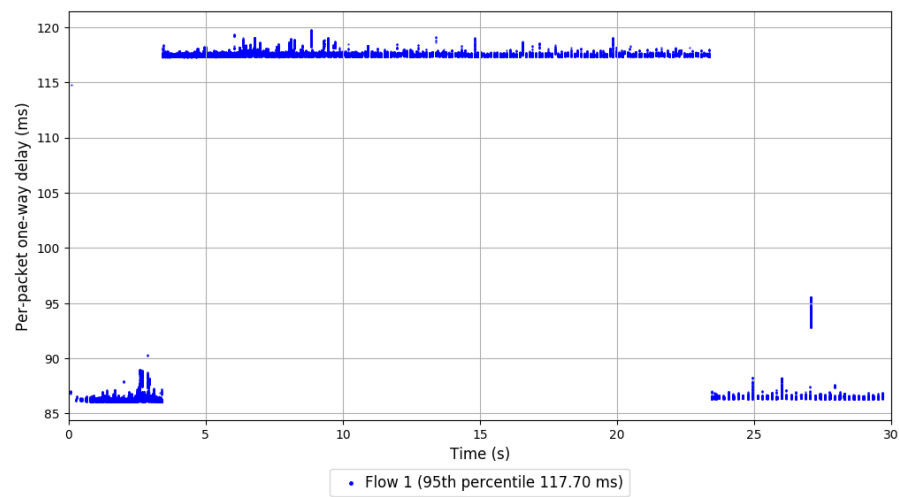
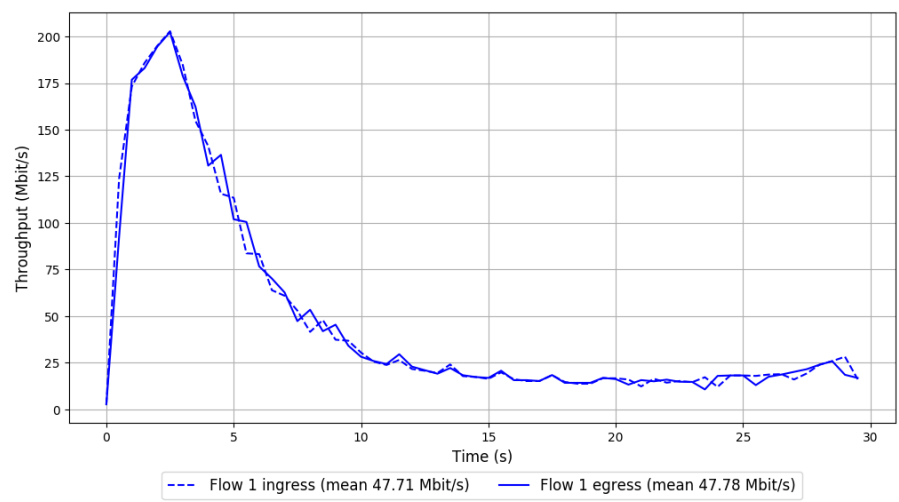
-- Flow 1:

Average throughput: 47.78 Mbit/s

95th percentile per-packet one-way delay: 117.699 ms

Loss rate: 0.45%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-20 23:00:45

End at: 2017-11-20 23:01:15

Below is generated by plot.py at 2017-11-21 01:47:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 155.66 Mbit/s

95th percentile per-packet one-way delay: 117.745 ms

Loss rate: 0.24%

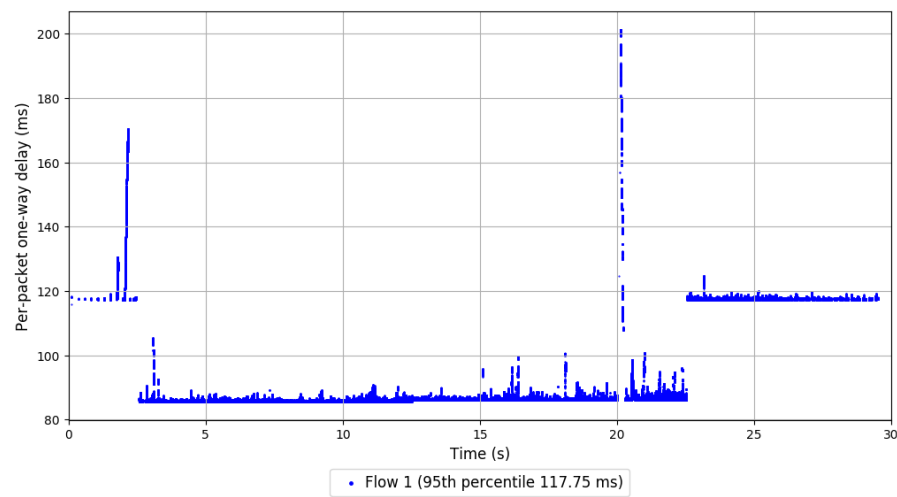
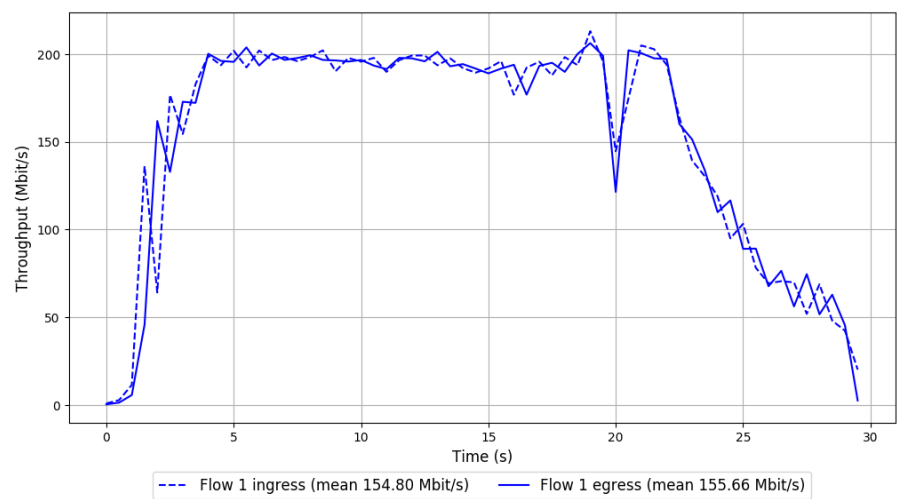
-- Flow 1:

Average throughput: 155.66 Mbit/s

95th percentile per-packet one-way delay: 117.745 ms

Loss rate: 0.24%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-20 23:11:24

End at: 2017-11-20 23:11:55

Below is generated by plot.py at 2017-11-21 01:47:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.50 Mbit/s

95th percentile per-packet one-way delay: 117.527 ms

Loss rate: 0.18%

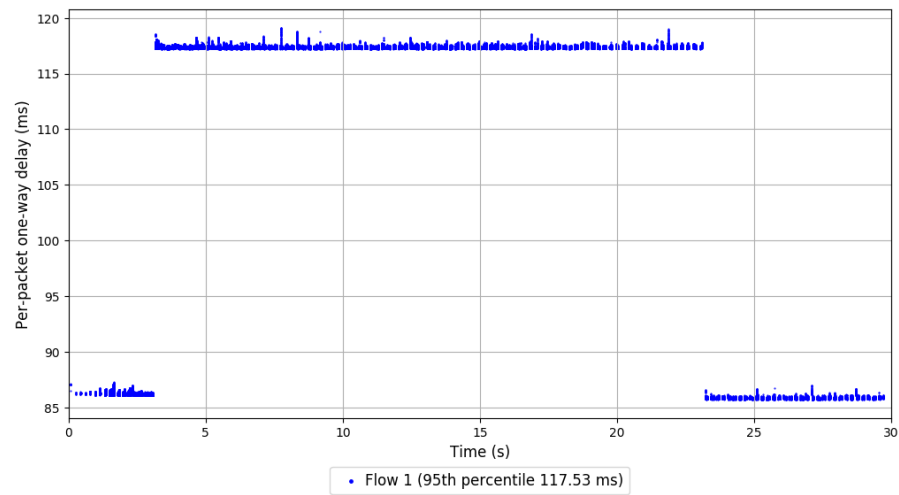
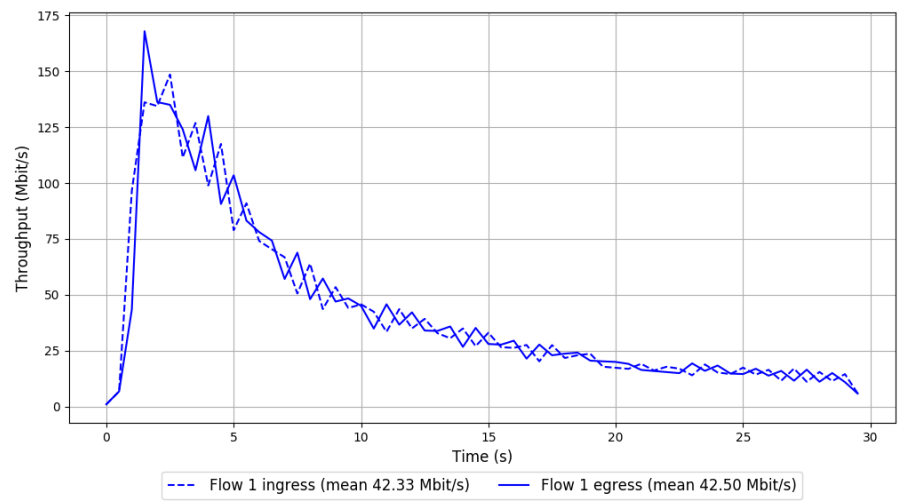
-- Flow 1:

Average throughput: 42.50 Mbit/s

95th percentile per-packet one-way delay: 117.527 ms

Loss rate: 0.18%

Run 9: Report of Indigo — Data Link

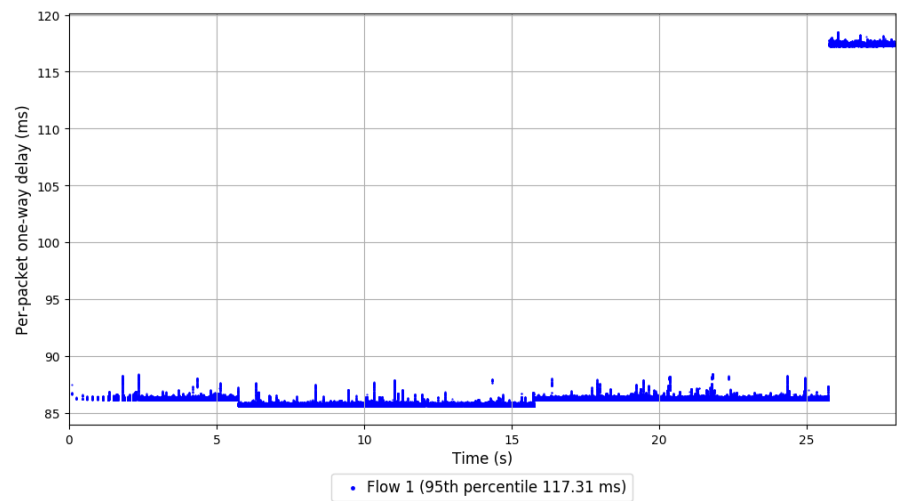
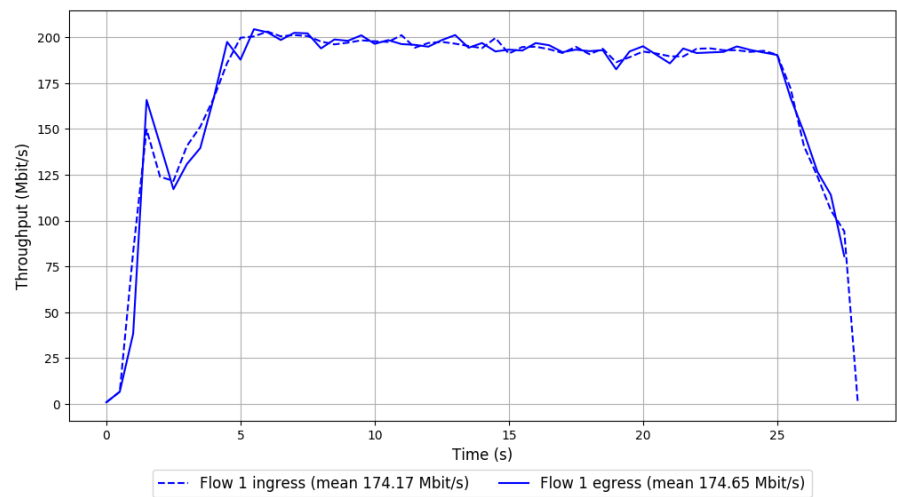


```
Run 10: Statistics of Indigo

Start at: 2017-11-20 23:21:40
End at: 2017-11-20 23:22:10

# Below is generated by plot.py at 2017-11-21 01:48:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 174.65 Mbit/s
95th percentile per-packet one-way delay: 117.308 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 174.65 Mbit/s
95th percentile per-packet one-way delay: 117.308 ms
Loss rate: 0.36%
```

Run 10: Report of Indigo — Data Link

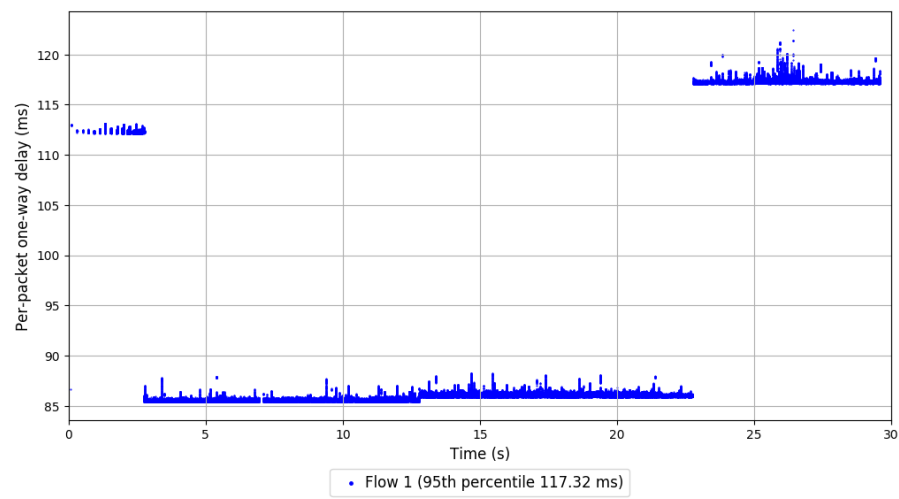
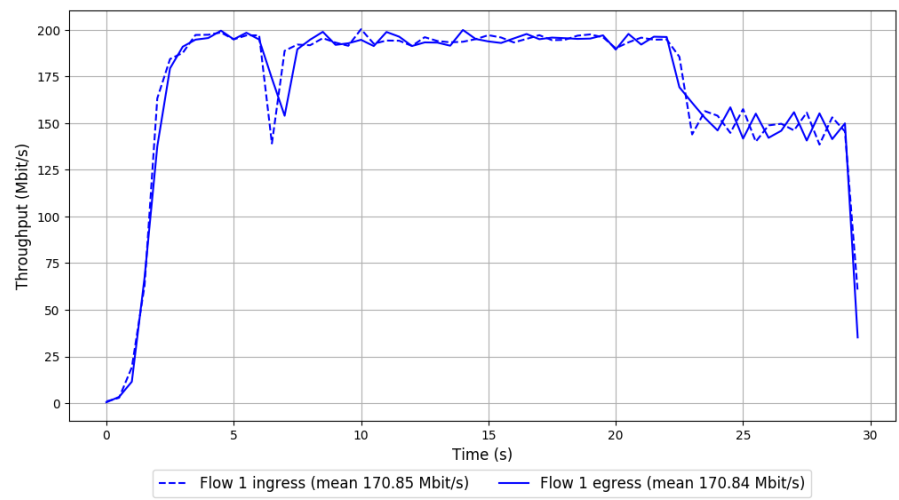


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-20 21:49:35
End at: 2017-11-20 21:50:05

# Below is generated by plot.py at 2017-11-21 01:48:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 170.84 Mbit/s
95th percentile per-packet one-way delay: 117.316 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 170.84 Mbit/s
95th percentile per-packet one-way delay: 117.316 ms
Loss rate: 0.59%
```

Run 1: Report of Indigo-calib — Data Link

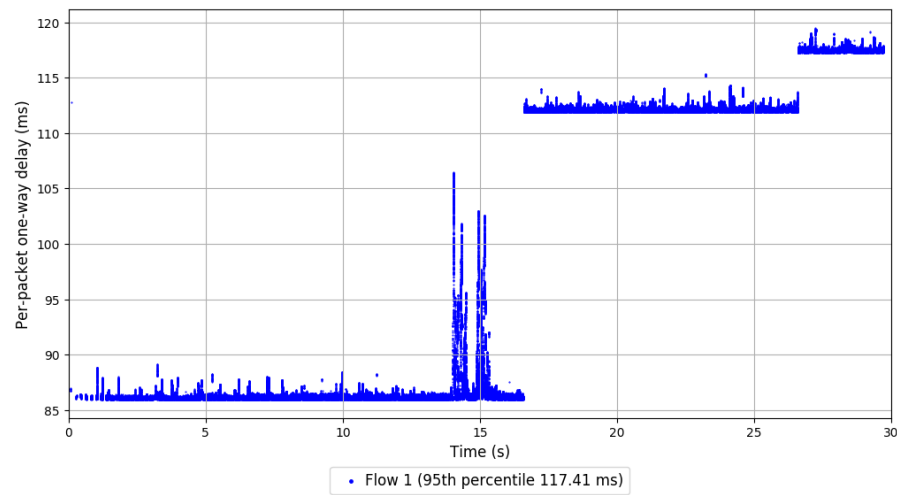
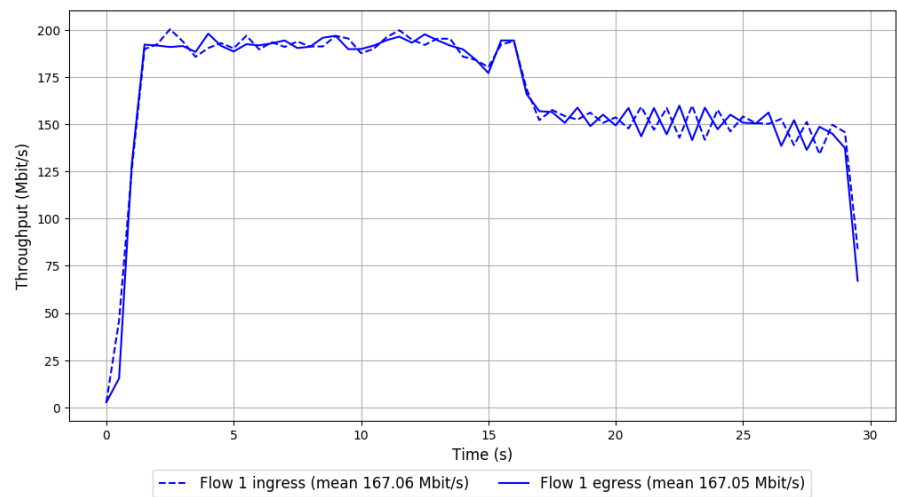


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-20 22:00:11
End at: 2017-11-20 22:00:41

# Below is generated by plot.py at 2017-11-21 01:48:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 167.05 Mbit/s
95th percentile per-packet one-way delay: 117.408 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 167.05 Mbit/s
95th percentile per-packet one-way delay: 117.408 ms
Loss rate: 0.59%
```

Run 2: Report of Indigo-calib — Data Link

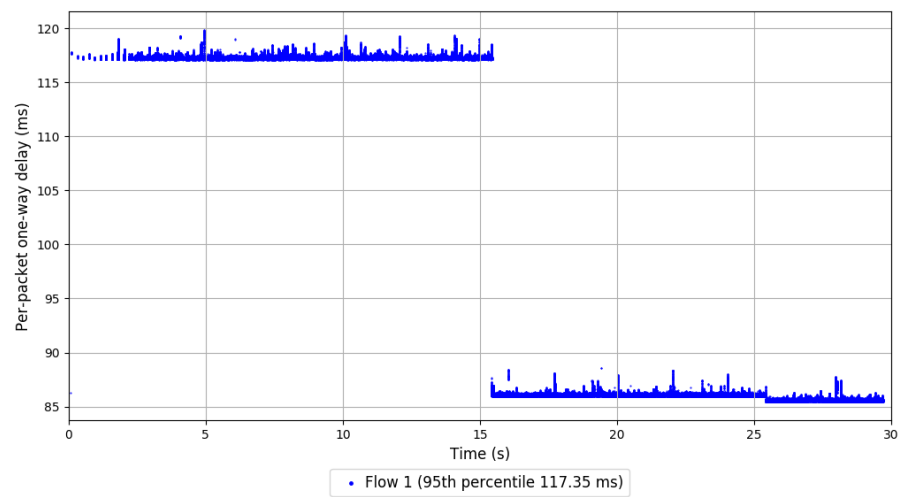
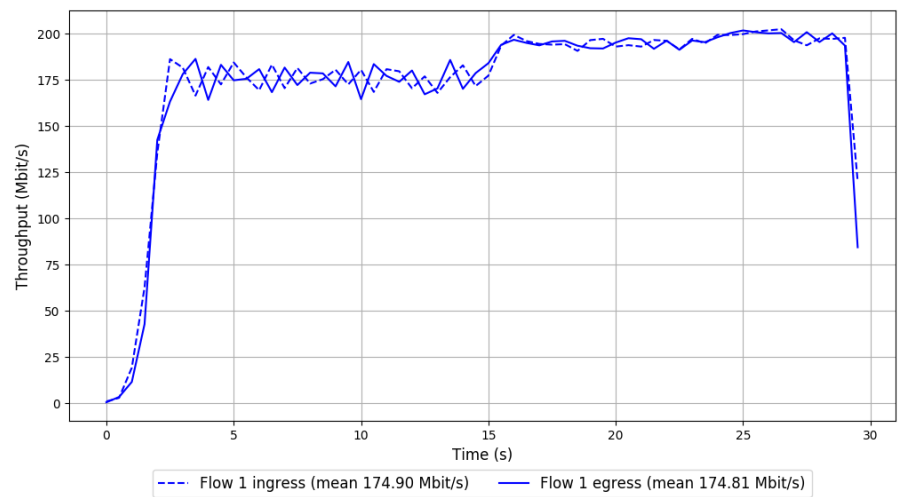


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-20 22:11:02
End at: 2017-11-20 22:11:32

# Below is generated by plot.py at 2017-11-21 01:48:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 174.81 Mbit/s
95th percentile per-packet one-way delay: 117.349 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 174.81 Mbit/s
95th percentile per-packet one-way delay: 117.349 ms
Loss rate: 0.66%
```

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-20 22:21:35

End at: 2017-11-20 22:22:05

Below is generated by plot.py at 2017-11-21 01:48:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 163.42 Mbit/s

95th percentile per-packet one-way delay: 117.364 ms

Loss rate: 0.74%

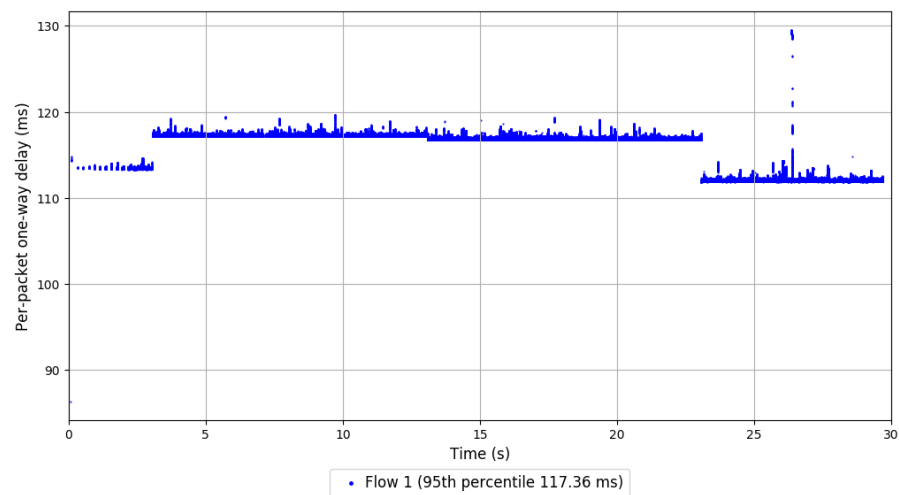
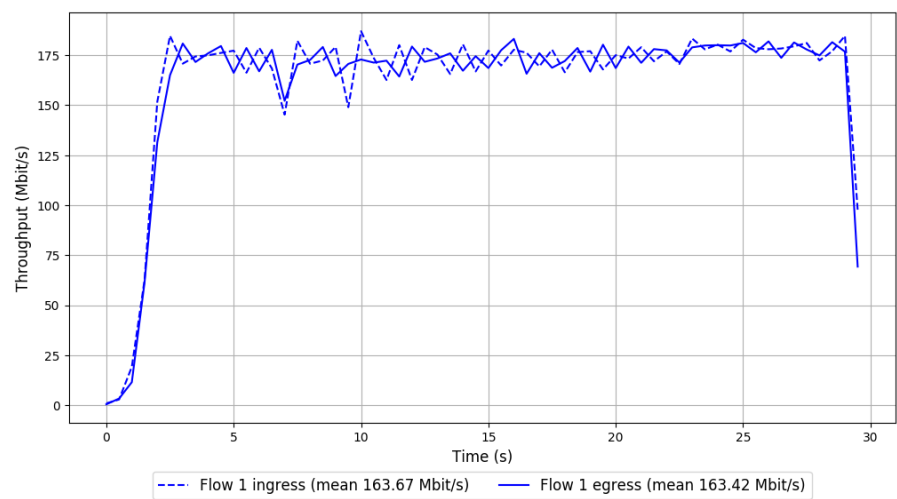
-- Flow 1:

Average throughput: 163.42 Mbit/s

95th percentile per-packet one-way delay: 117.364 ms

Loss rate: 0.74%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-20 22:32:15

End at: 2017-11-20 22:32:45

Below is generated by plot.py at 2017-11-21 01:48:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.99 Mbit/s

95th percentile per-packet one-way delay: 117.481 ms

Loss rate: 0.33%

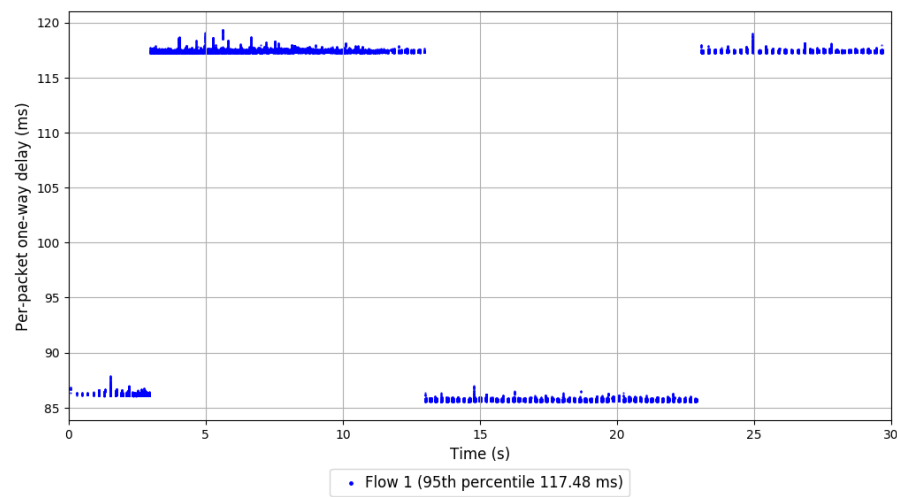
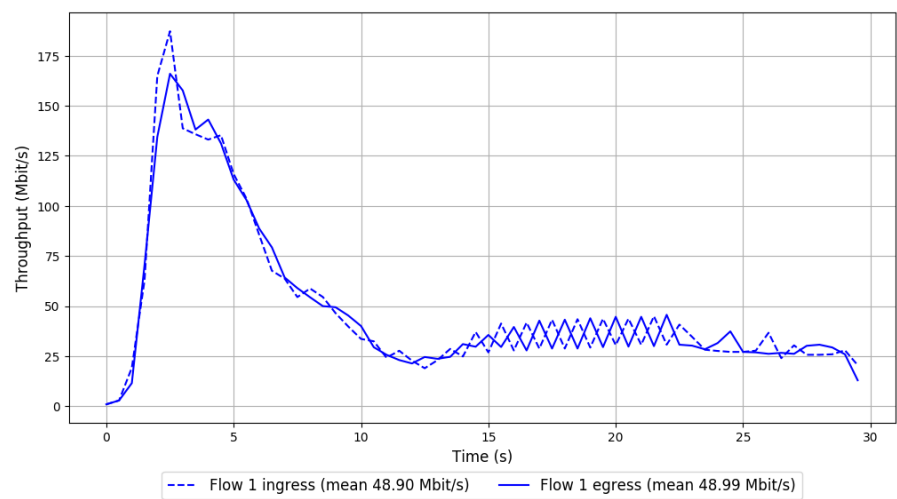
-- Flow 1:

Average throughput: 48.99 Mbit/s

95th percentile per-packet one-way delay: 117.481 ms

Loss rate: 0.33%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-20 22:42:34

End at: 2017-11-20 22:43:04

Below is generated by plot.py at 2017-11-21 01:49:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.47 Mbit/s

95th percentile per-packet one-way delay: 117.768 ms

Loss rate: 0.67%

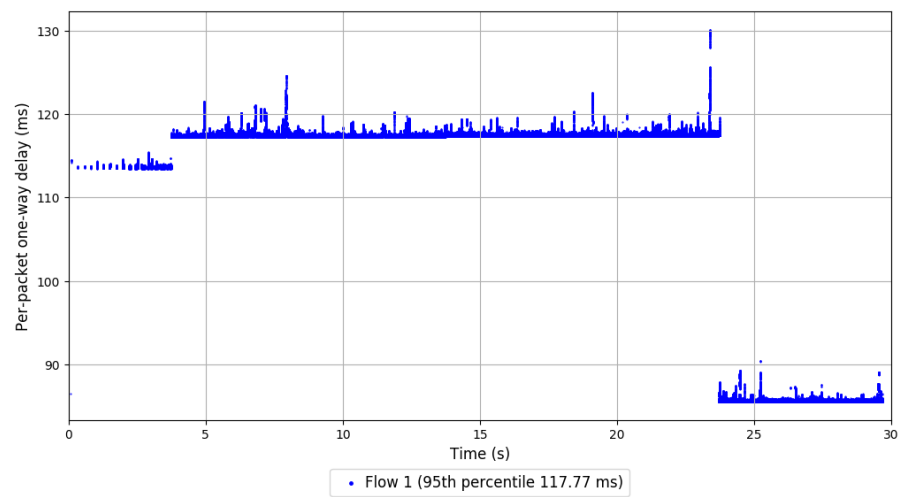
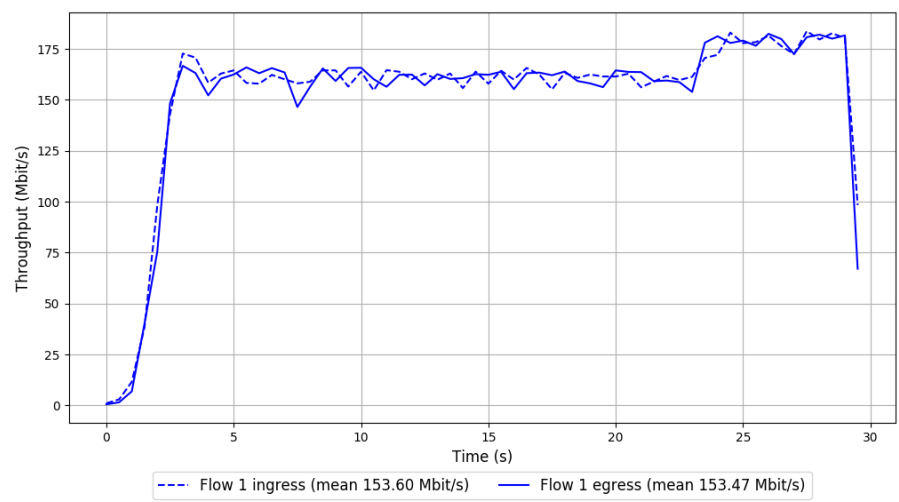
-- Flow 1:

Average throughput: 153.47 Mbit/s

95th percentile per-packet one-way delay: 117.768 ms

Loss rate: 0.67%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-20 22:53:03

End at: 2017-11-20 22:53:33

Below is generated by plot.py at 2017-11-21 01:49:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.96 Mbit/s

95th percentile per-packet one-way delay: 117.416 ms

Loss rate: 0.64%

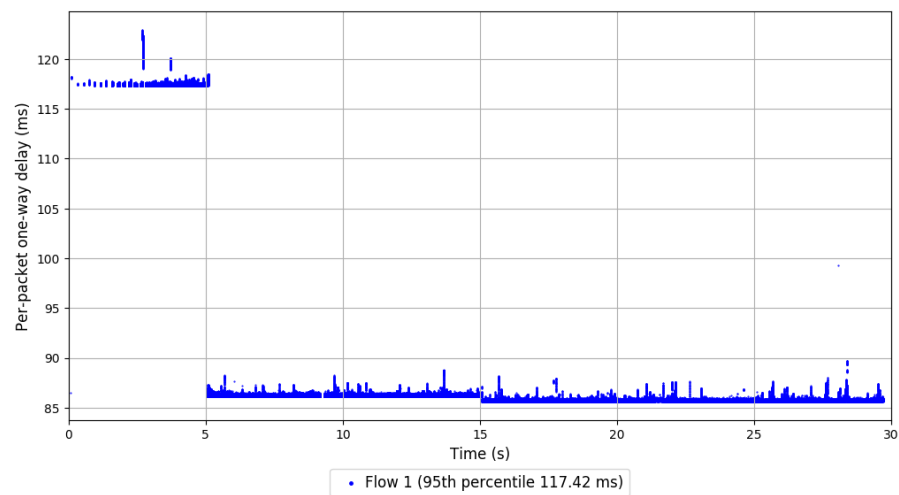
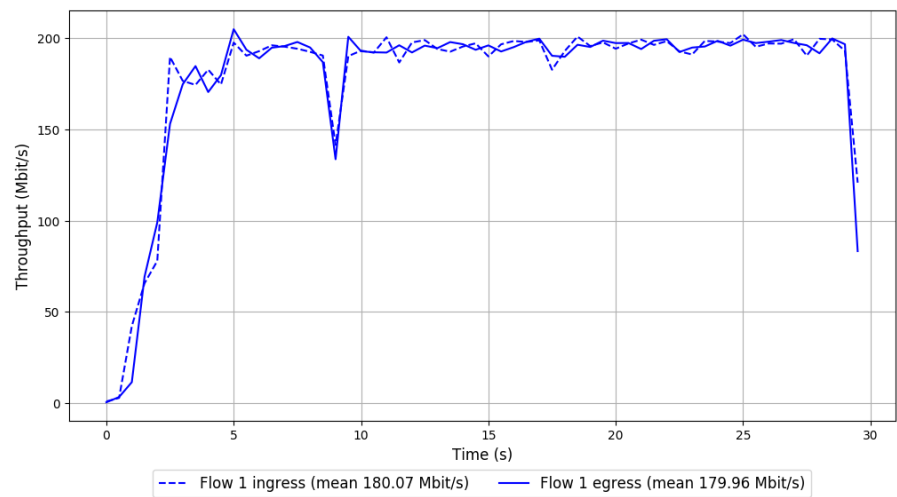
-- Flow 1:

Average throughput: 179.96 Mbit/s

95th percentile per-packet one-way delay: 117.416 ms

Loss rate: 0.64%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-20 23:04:01

End at: 2017-11-20 23:04:31

Below is generated by plot.py at 2017-11-21 01:49:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.67 Mbit/s

95th percentile per-packet one-way delay: 117.563 ms

Loss rate: 0.60%

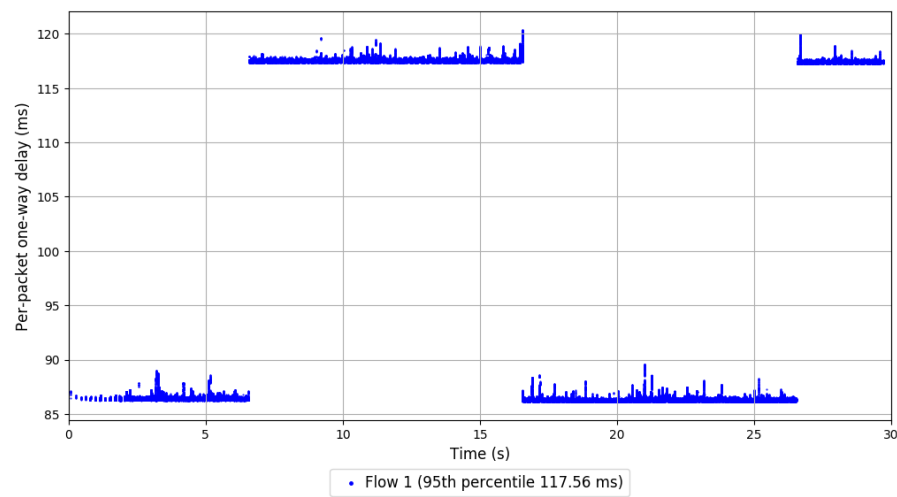
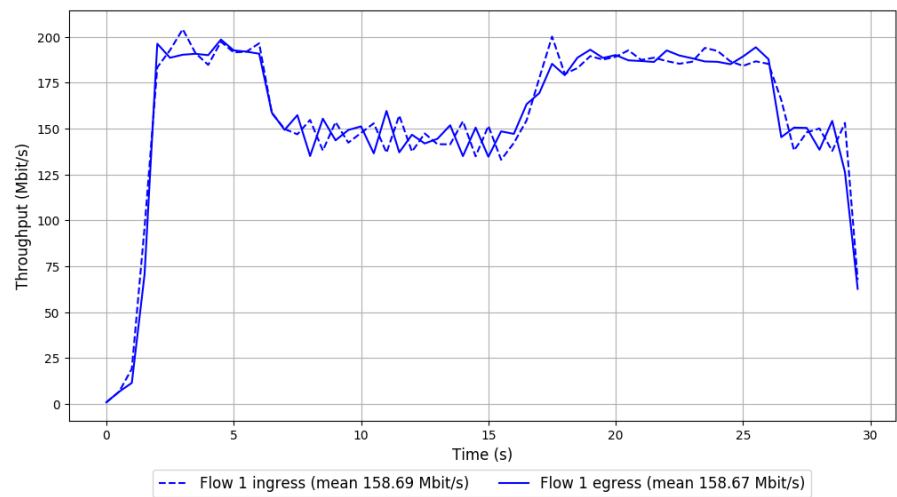
-- Flow 1:

Average throughput: 158.67 Mbit/s

95th percentile per-packet one-way delay: 117.563 ms

Loss rate: 0.60%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-20 23:14:24

End at: 2017-11-20 23:14:54

Below is generated by plot.py at 2017-11-21 01:49:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.86 Mbit/s

95th percentile per-packet one-way delay: 117.395 ms

Loss rate: 0.61%

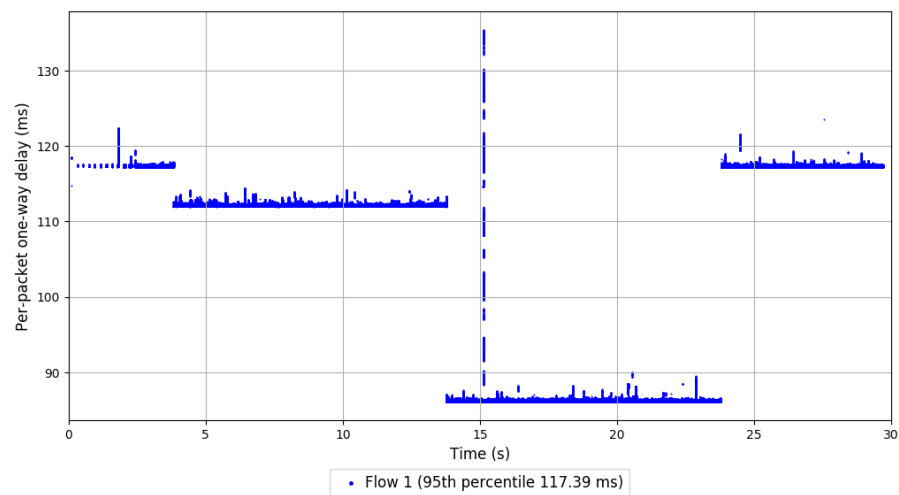
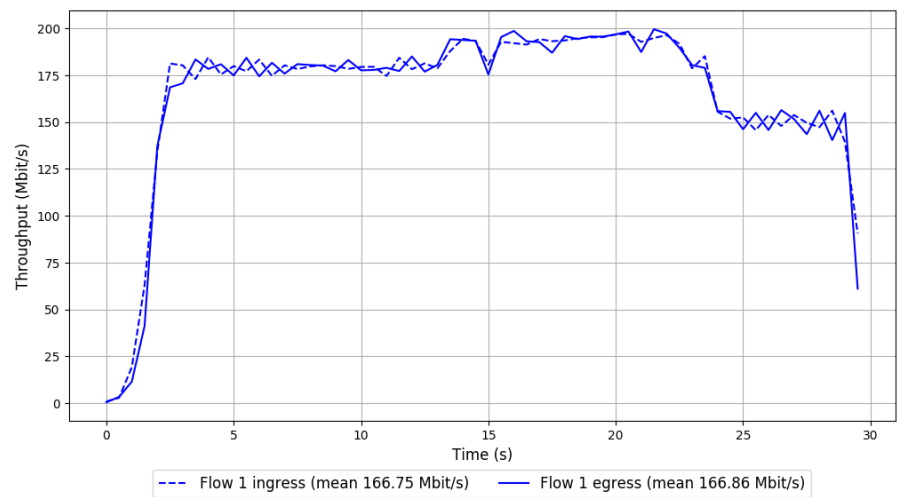
-- Flow 1:

Average throughput: 166.86 Mbit/s

95th percentile per-packet one-way delay: 117.395 ms

Loss rate: 0.61%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-20 23:24:52

End at: 2017-11-20 23:25:22

Below is generated by plot.py at 2017-11-21 01:49:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.03 Mbit/s

95th percentile per-packet one-way delay: 117.523 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 85.03 Mbit/s

95th percentile per-packet one-way delay: 117.523 ms

Loss rate: 0.13%

Run 10: Report of Indigo-calib — Data Link

