

Pantheon Report

Generated at 2018-02-13 02:52:24 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

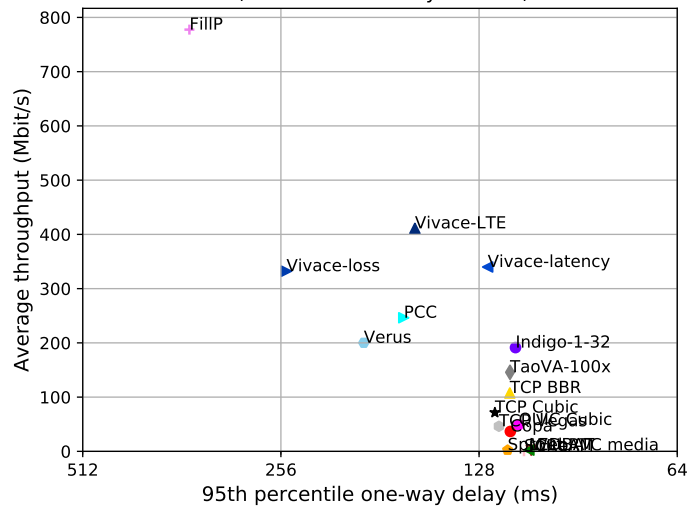
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

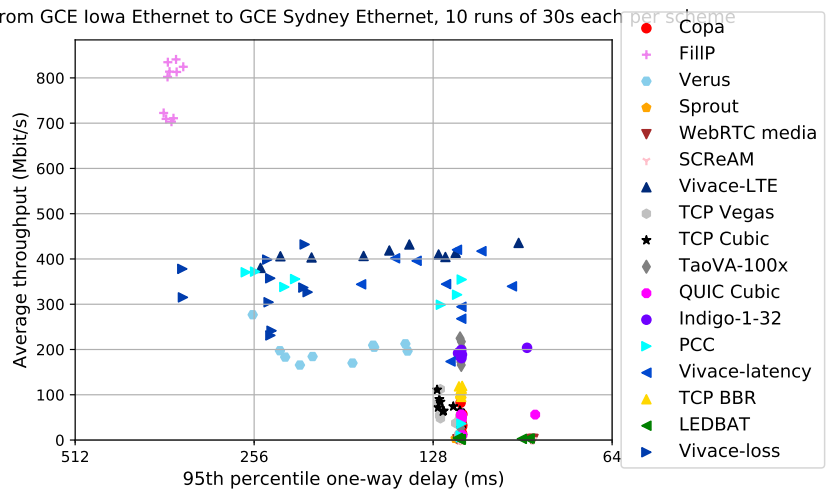
Git summary:

```
branch: master @ 2efdad57c2c56a9458b0d01ff33345e11732665
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
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/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	107.62	114.96	0.23
TCP Cubic	10	71.46	121.11	0.41
LEDBAT	10	2.32	107.56	0.48
PCC	10	246.29	166.56	0.39
QUIC Cubic	9	48.76	111.45	0.03
SCReAM	10	0.21	109.40	0.02
WebRTC media	10	1.95	106.66	0.00
Sprout	10	2.44	115.84	0.58
TaoVA-100x	7	145.76	114.88	0.02
TCP Vegas	10	46.20	119.43	0.41
Verus	10	200.12	191.57	0.85
Copa	10	36.70	114.73	0.03
FillP	10	777.51	352.56	9.02
Indigo-1-32	10	191.28	112.69	0.20
Vivace-latency	10	339.88	124.22	0.21
Vivace-loss	10	332.18	251.10	5.53
Vivace-LTE	10	411.11	160.21	0.38

Run 1: Statistics of TCP BBR

Start at: 2018-02-12 22:01:38

End at: 2018-02-12 22:02:08

Below is generated by plot.py at 2018-02-13 01:52:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.66 Mbit/s

95th percentile per-packet one-way delay: 115.810 ms

Loss rate: 0.19%

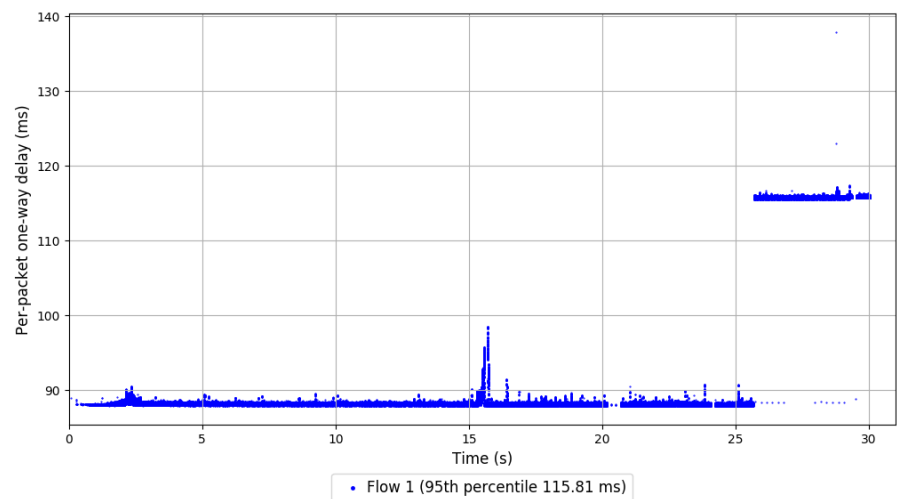
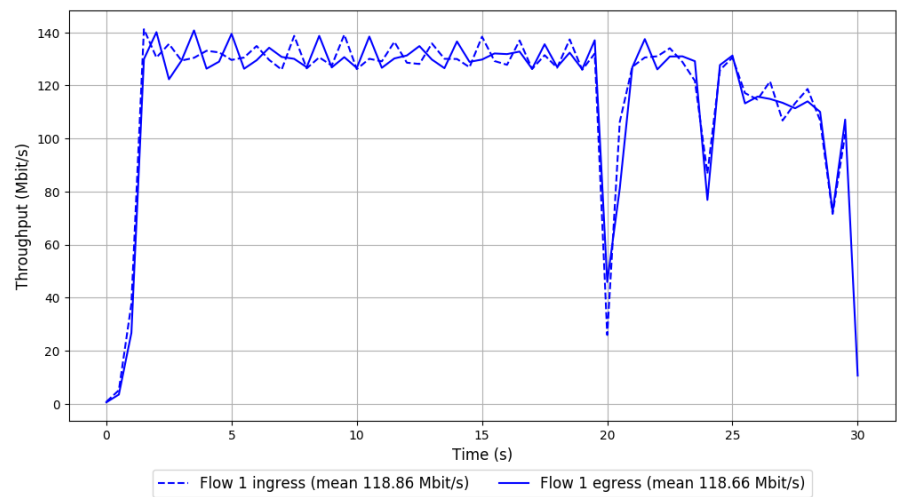
-- Flow 1:

Average throughput: 118.66 Mbit/s

95th percentile per-packet one-way delay: 115.810 ms

Loss rate: 0.19%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-12 22:16:21

End at: 2018-02-12 22:16:51

Below is generated by plot.py at 2018-02-13 01:52:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.60 Mbit/s

95th percentile per-packet one-way delay: 115.280 ms

Loss rate: 0.26%

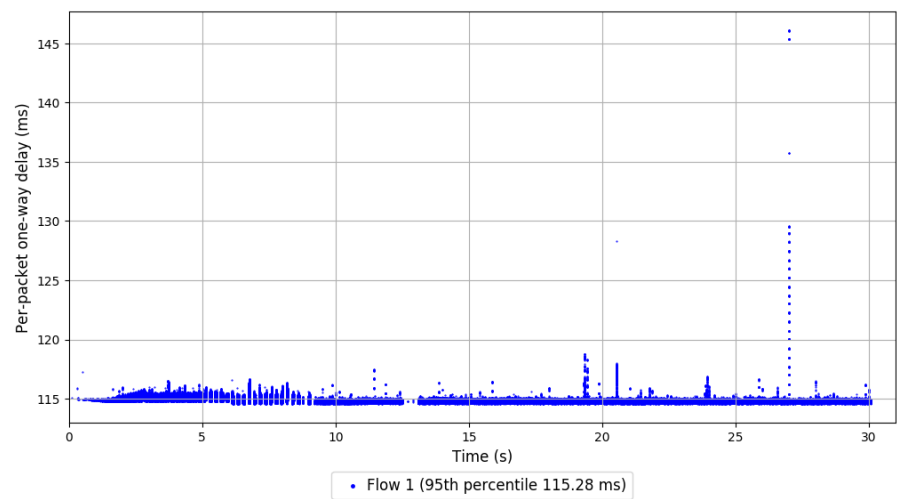
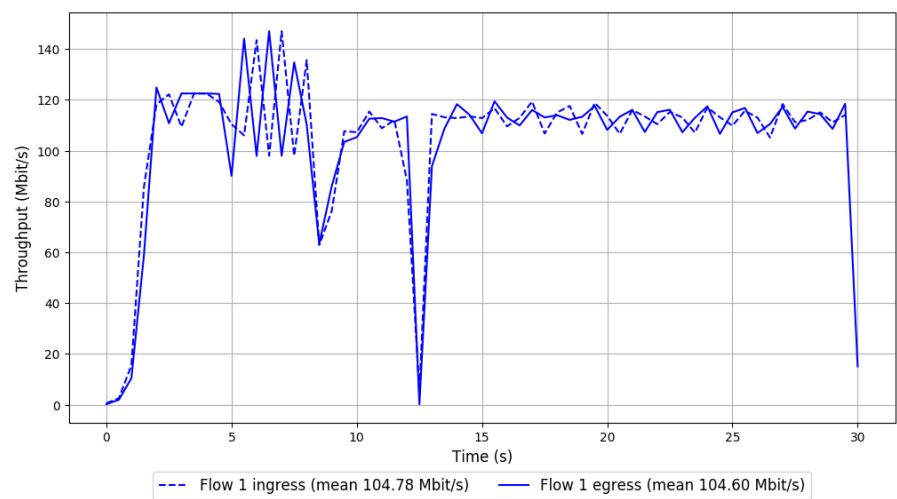
-- Flow 1:

Average throughput: 104.60 Mbit/s

95th percentile per-packet one-way delay: 115.280 ms

Loss rate: 0.26%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-12 22:31:36

End at: 2018-02-12 22:32:06

Below is generated by plot.py at 2018-02-13 01:52:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.80 Mbit/s

95th percentile per-packet one-way delay: 115.143 ms

Loss rate: 0.40%

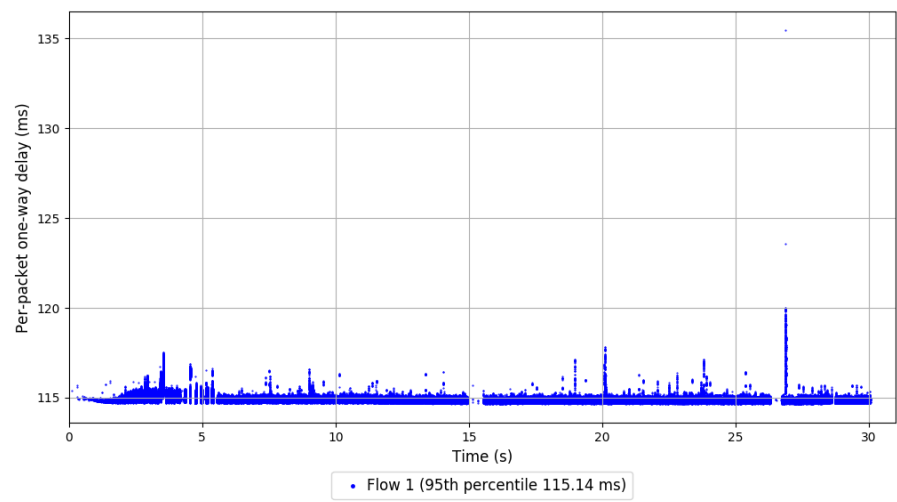
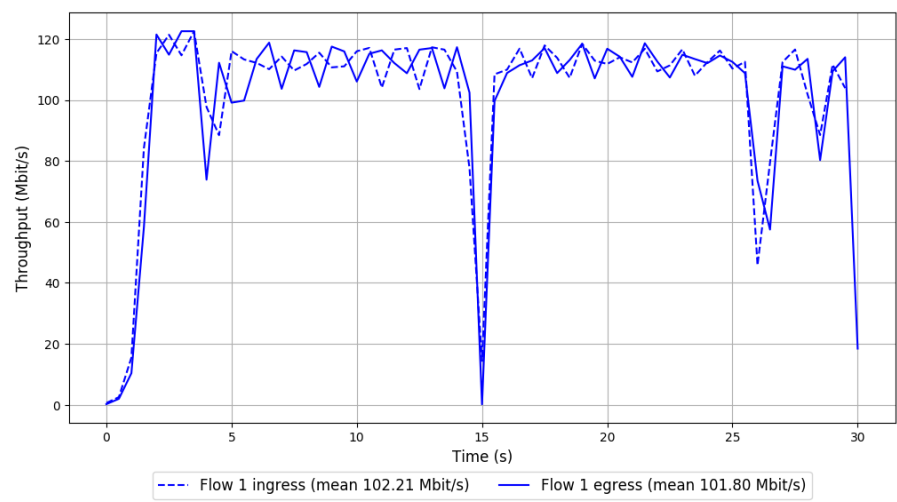
-- Flow 1:

Average throughput: 101.80 Mbit/s

95th percentile per-packet one-way delay: 115.143 ms

Loss rate: 0.40%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-12 22:46:39

End at: 2018-02-12 22:47:09

Below is generated by plot.py at 2018-02-13 01:52:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.46 Mbit/s

95th percentile per-packet one-way delay: 114.722 ms

Loss rate: 0.27%

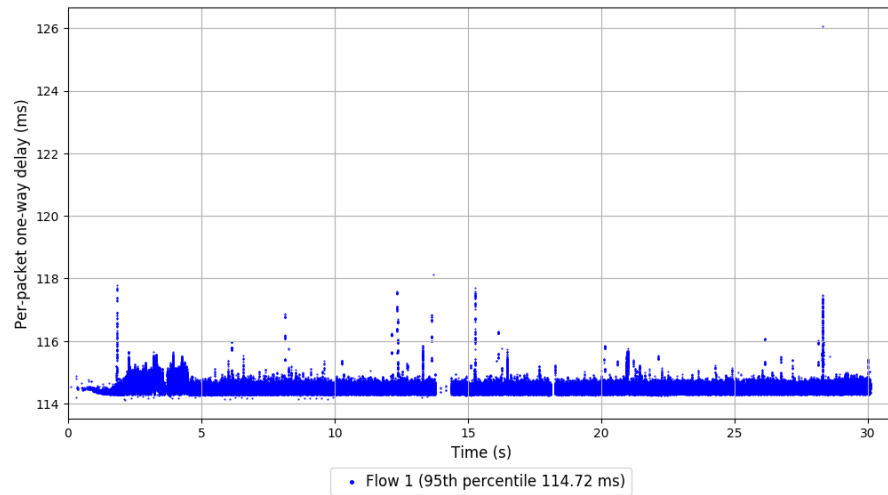
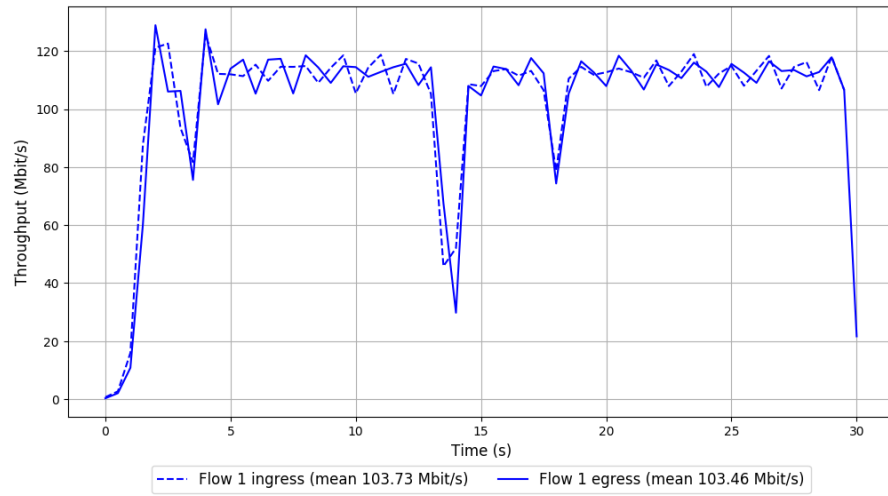
-- Flow 1:

Average throughput: 103.46 Mbit/s

95th percentile per-packet one-way delay: 114.722 ms

Loss rate: 0.27%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-12 23:01:50

End at: 2018-02-12 23:02:20

Below is generated by plot.py at 2018-02-13 01:52:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.31 Mbit/s

95th percentile per-packet one-way delay: 114.784 ms

Loss rate: 0.56%

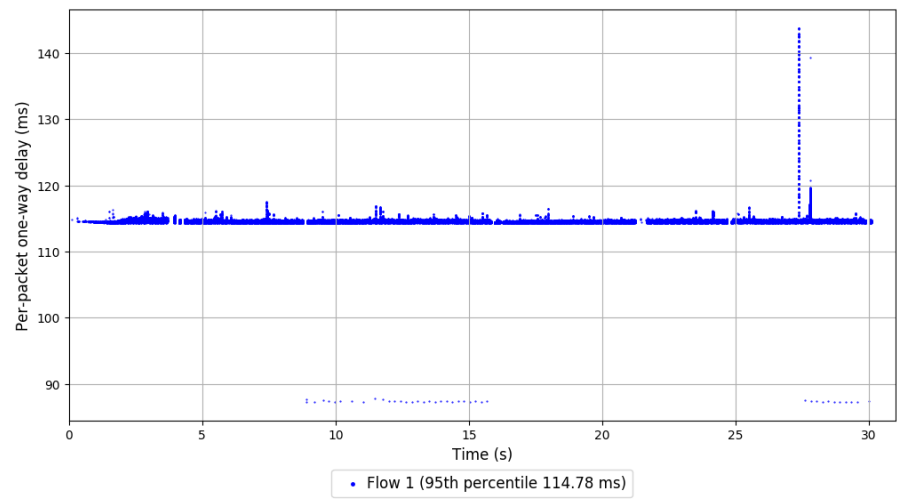
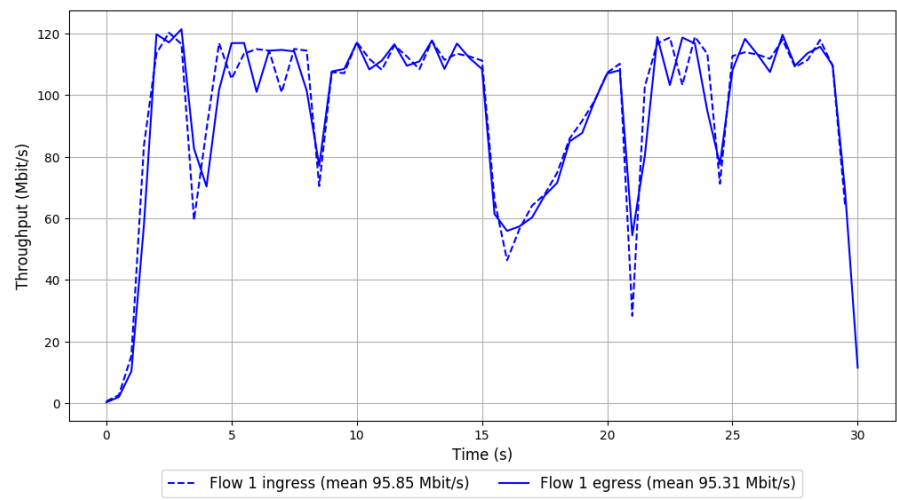
-- Flow 1:

Average throughput: 95.31 Mbit/s

95th percentile per-packet one-way delay: 114.784 ms

Loss rate: 0.56%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-12 23:16:52

End at: 2018-02-12 23:17:22

Below is generated by plot.py at 2018-02-13 01:52:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.74 Mbit/s

95th percentile per-packet one-way delay: 114.950 ms

Loss rate: 0.02%

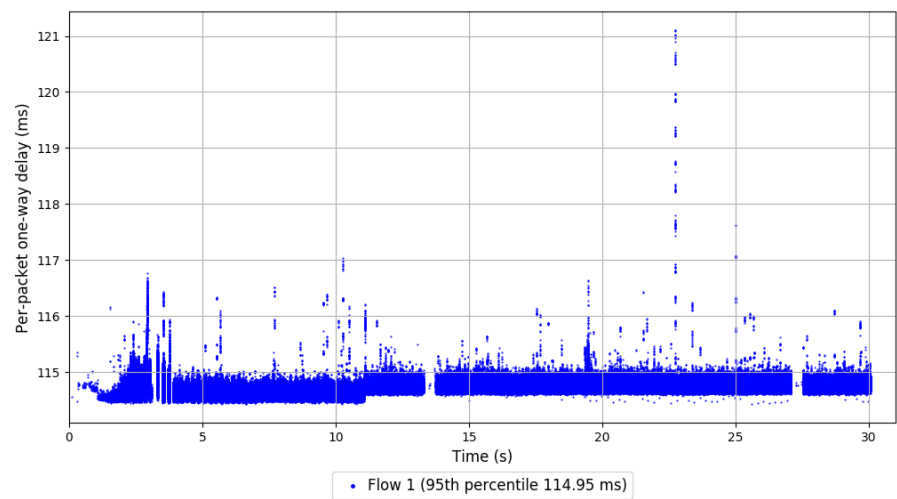
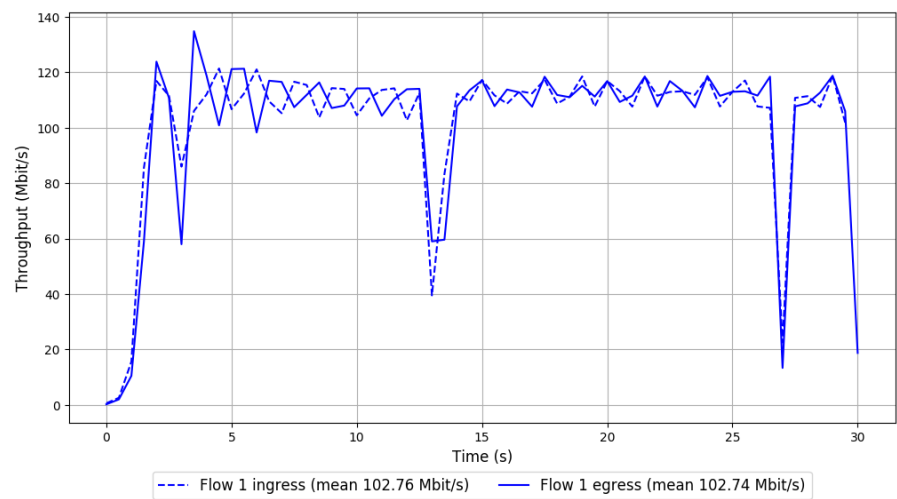
-- Flow 1:

Average throughput: 102.74 Mbit/s

95th percentile per-packet one-way delay: 114.950 ms

Loss rate: 0.02%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-12 23:31:50

End at: 2018-02-12 23:32:20

Below is generated by plot.py at 2018-02-13 01:52:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 112.12 Mbit/s

95th percentile per-packet one-way delay: 115.005 ms

Loss rate: 0.34%

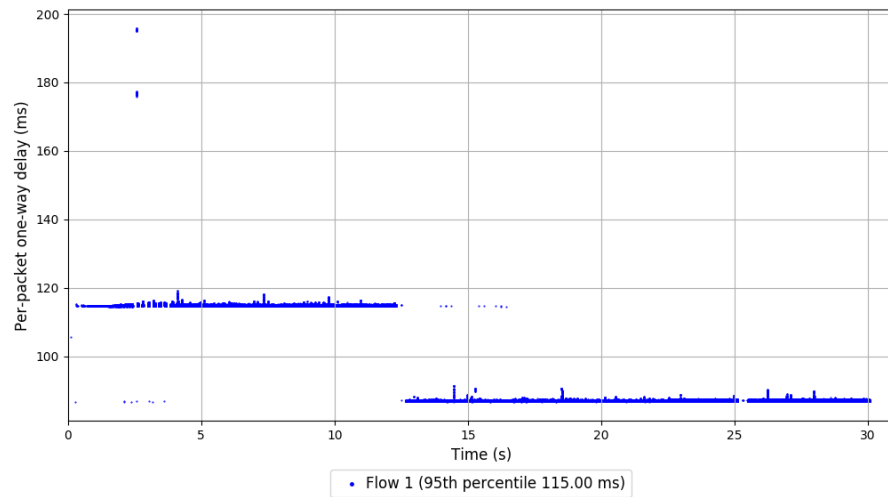
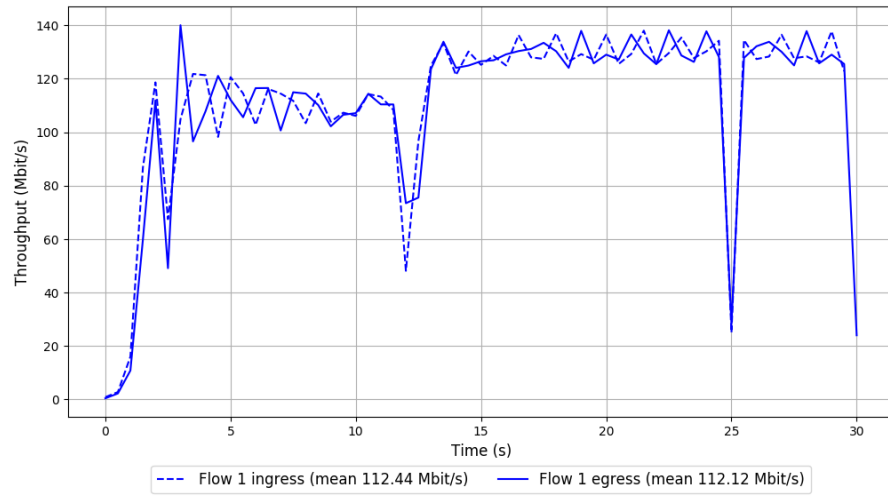
-- Flow 1:

Average throughput: 112.12 Mbit/s

95th percentile per-packet one-way delay: 115.005 ms

Loss rate: 0.34%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-12 23:46:45

End at: 2018-02-12 23:47:15

Below is generated by plot.py at 2018-02-13 01:52:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.44 Mbit/s

95th percentile per-packet one-way delay: 114.953 ms

Loss rate: 0.05%

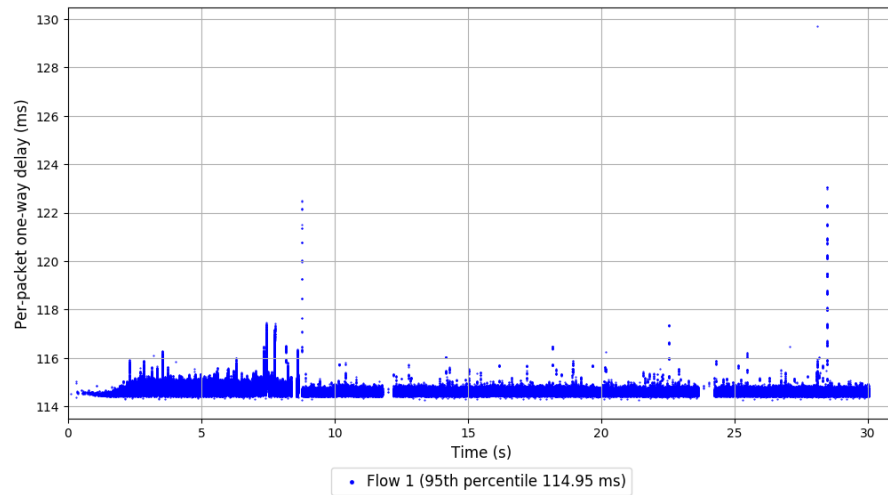
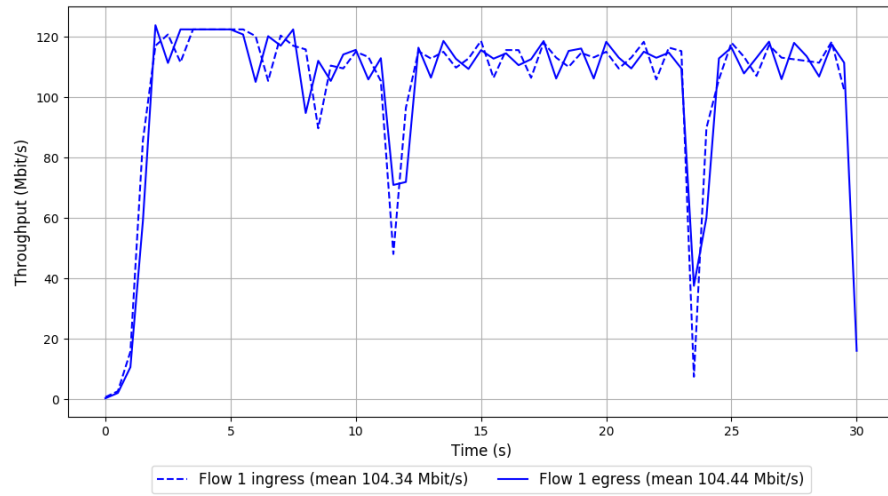
-- Flow 1:

Average throughput: 104.44 Mbit/s

95th percentile per-packet one-way delay: 114.953 ms

Loss rate: 0.05%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-13 00:01:52

End at: 2018-02-13 00:02:22

Below is generated by plot.py at 2018-02-13 01:54:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.48 Mbit/s

95th percentile per-packet one-way delay: 114.574 ms

Loss rate: 0.17%

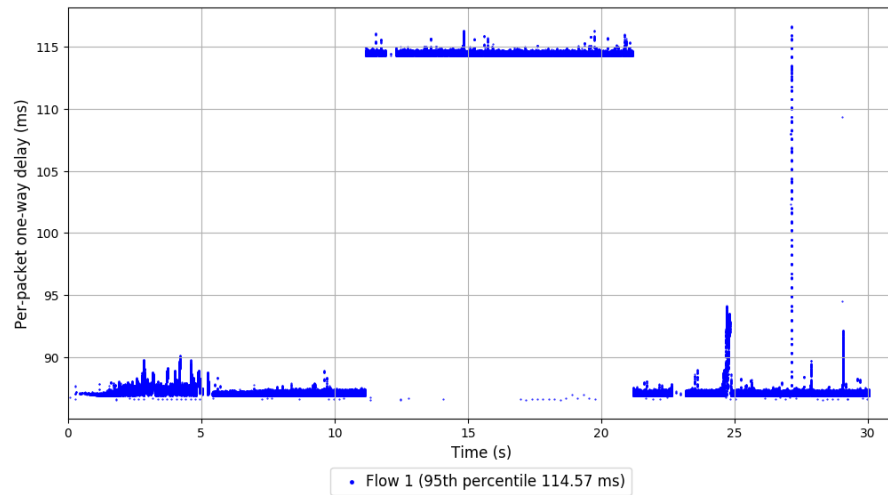
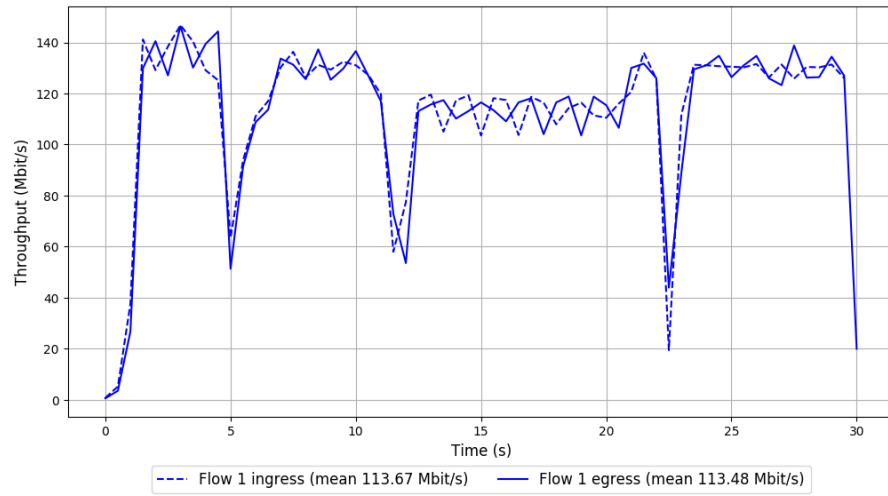
-- Flow 1:

Average throughput: 113.48 Mbit/s

95th percentile per-packet one-way delay: 114.574 ms

Loss rate: 0.17%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-13 00:16:15

End at: 2018-02-13 00:16:45

Below is generated by plot.py at 2018-02-13 01:54:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.62 Mbit/s

95th percentile per-packet one-way delay: 114.387 ms

Loss rate: 0.00%

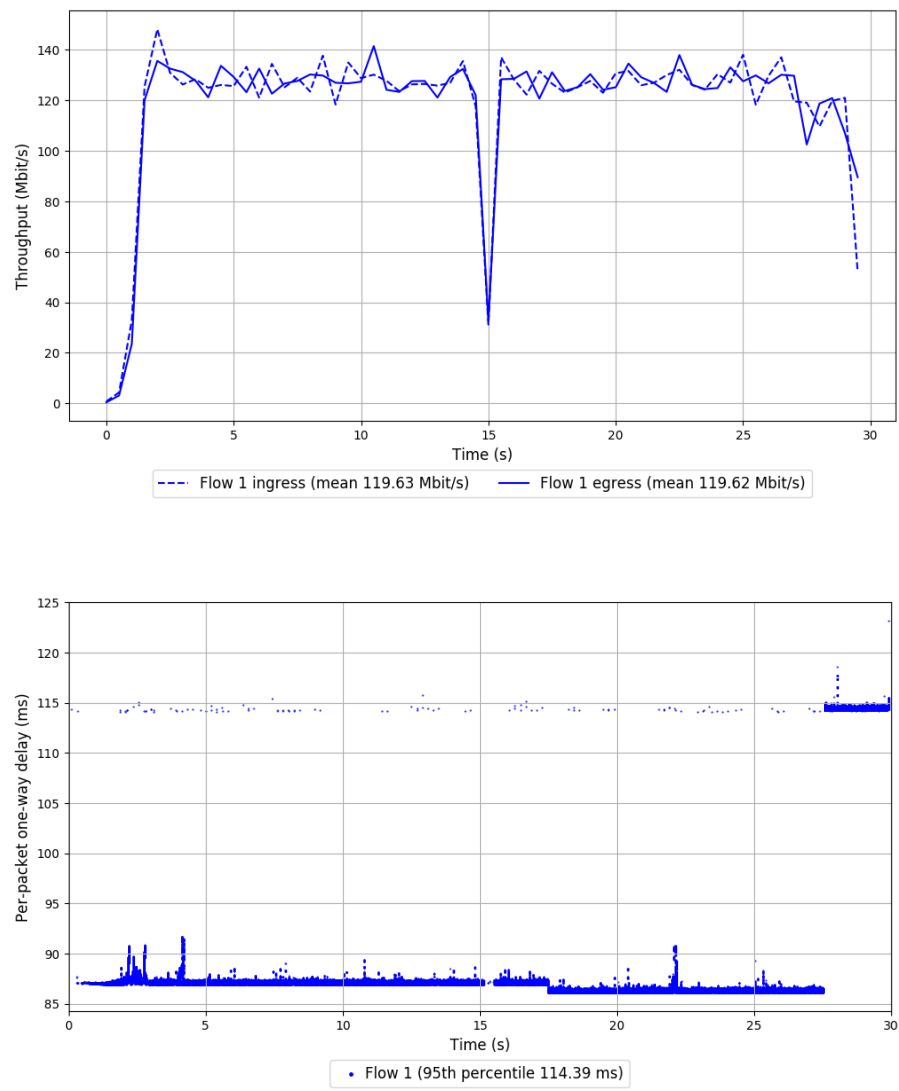
-- Flow 1:

Average throughput: 119.62 Mbit/s

95th percentile per-packet one-way delay: 114.387 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-12 22:06:13

End at: 2018-02-12 22:06:43

Below is generated by plot.py at 2018-02-13 01:54:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.09 Mbit/s

95th percentile per-packet one-way delay: 126.053 ms

Loss rate: 0.00%

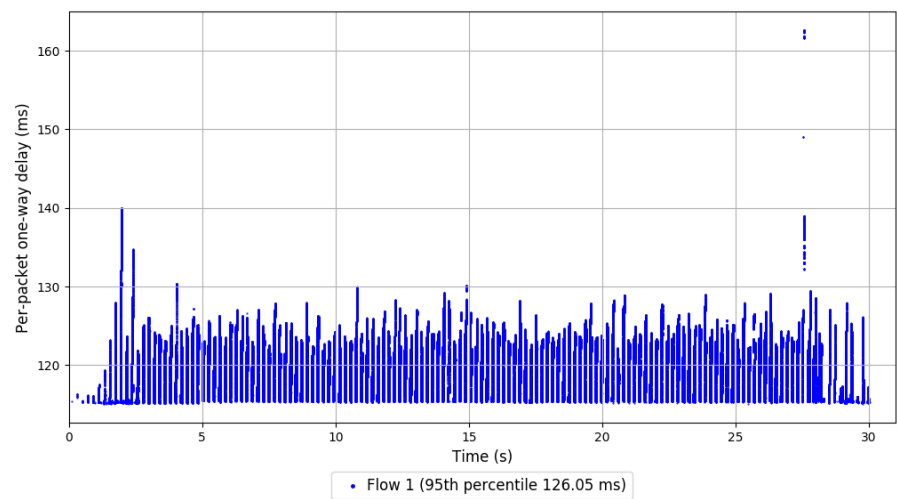
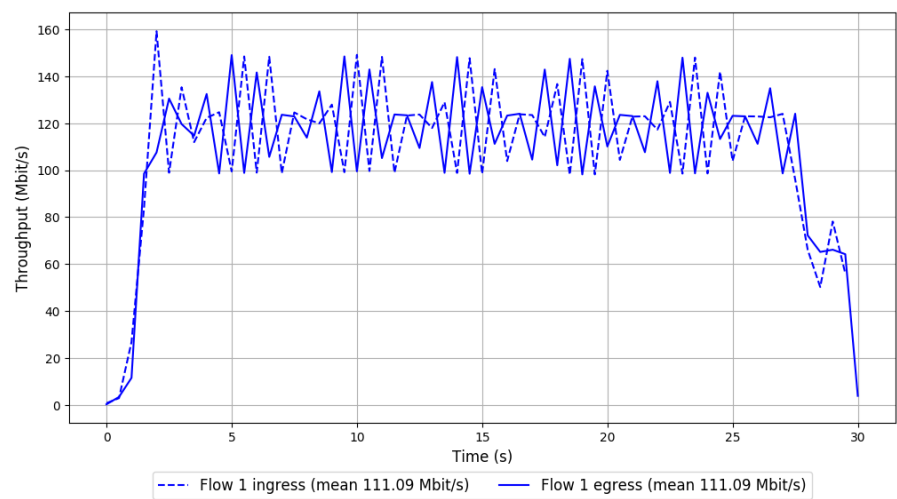
-- Flow 1:

Average throughput: 111.09 Mbit/s

95th percentile per-packet one-way delay: 126.053 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-12 22:21:05

End at: 2018-02-12 22:21:36

Below is generated by plot.py at 2018-02-13 01:54:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.26 Mbit/s

95th percentile per-packet one-way delay: 118.373 ms

Loss rate: 0.00%

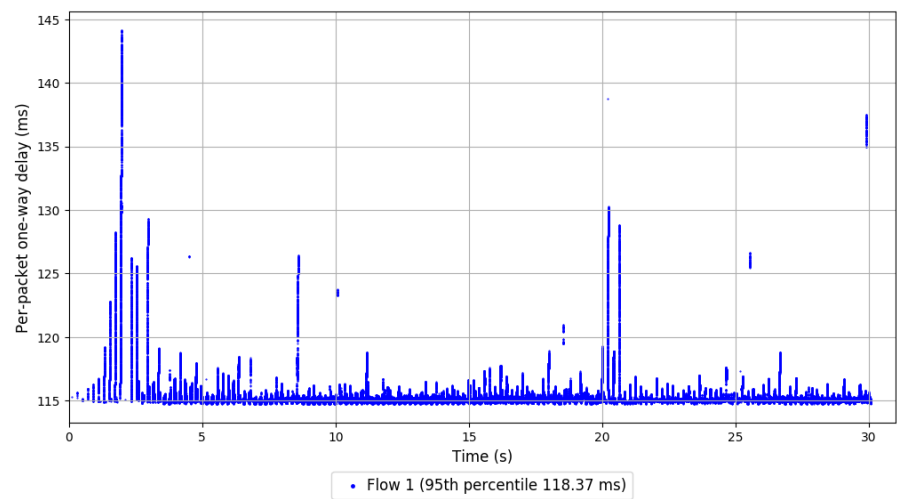
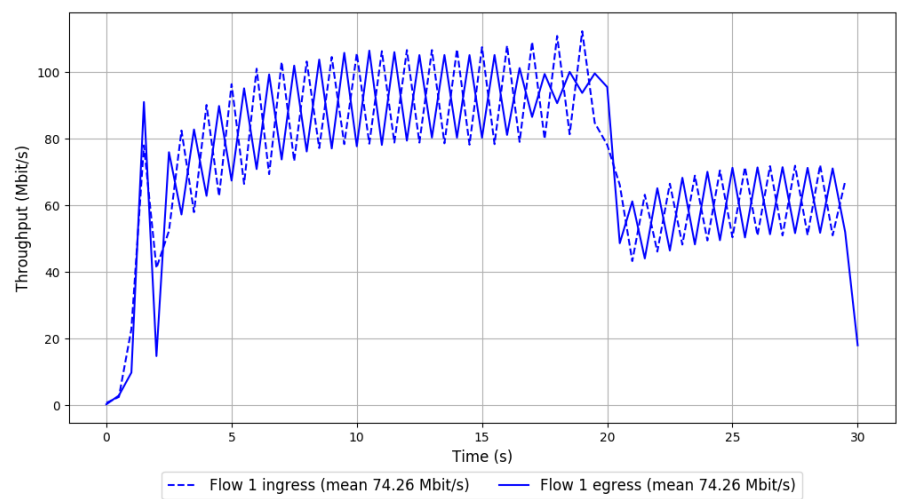
-- Flow 1:

Average throughput: 74.26 Mbit/s

95th percentile per-packet one-way delay: 118.373 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-12 22:36:20

End at: 2018-02-12 22:36:50

Below is generated by plot.py at 2018-02-13 01:54:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.28 Mbit/s

95th percentile per-packet one-way delay: 124.455 ms

Loss rate: 0.01%

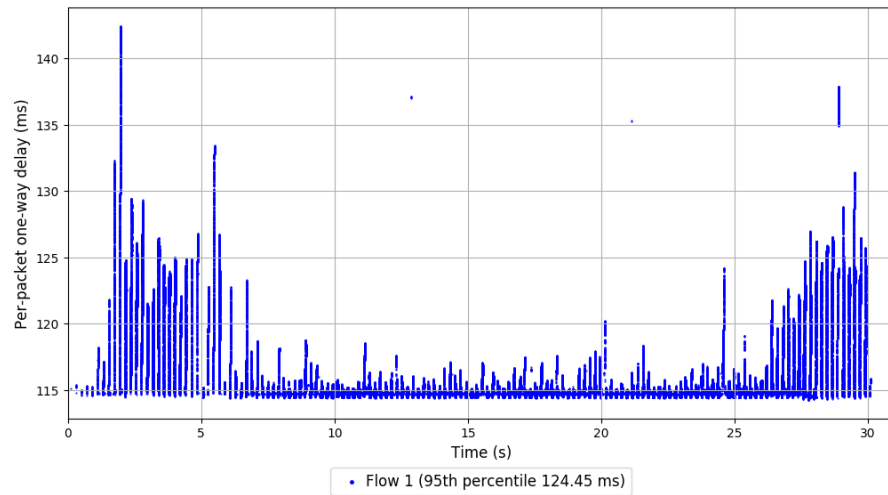
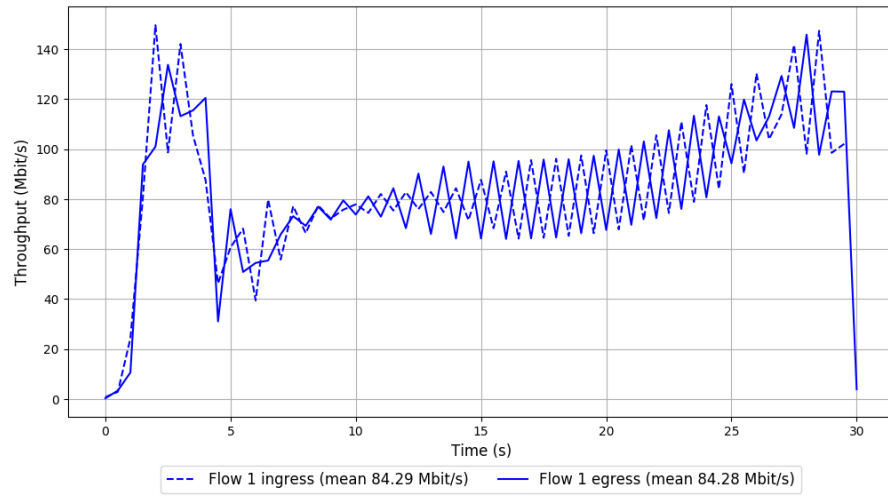
-- Flow 1:

Average throughput: 84.28 Mbit/s

95th percentile per-packet one-way delay: 124.455 ms

Loss rate: 0.01%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-12 22:51:22

End at: 2018-02-12 22:51:52

Below is generated by plot.py at 2018-02-13 01:54:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.30 Mbit/s

95th percentile per-packet one-way delay: 124.967 ms

Loss rate: 0.21%

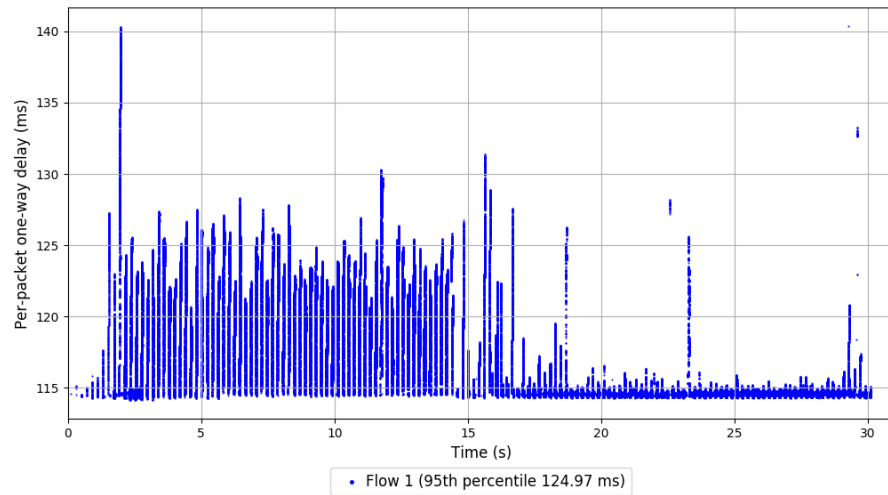
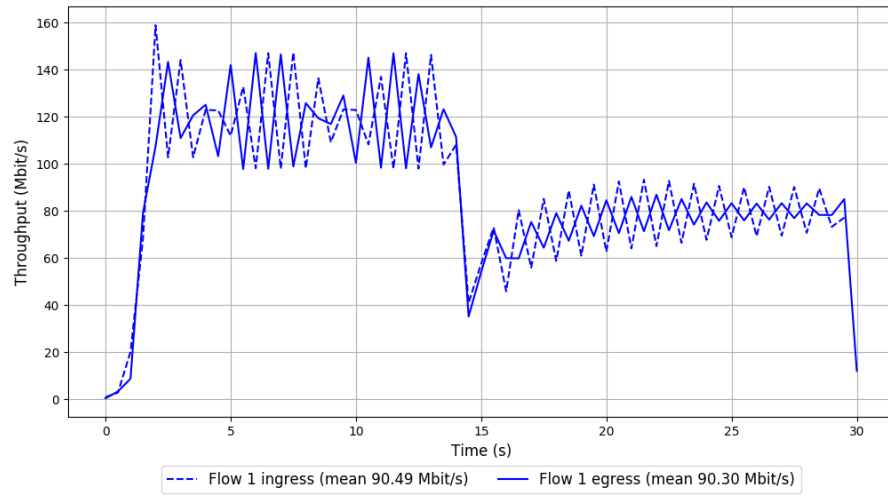
-- Flow 1:

Average throughput: 90.30 Mbit/s

95th percentile per-packet one-way delay: 124.967 ms

Loss rate: 0.21%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-12 23:06:33

End at: 2018-02-12 23:07:03

Below is generated by plot.py at 2018-02-13 01:54:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.64 Mbit/s

95th percentile per-packet one-way delay: 122.868 ms

Loss rate: 1.22%

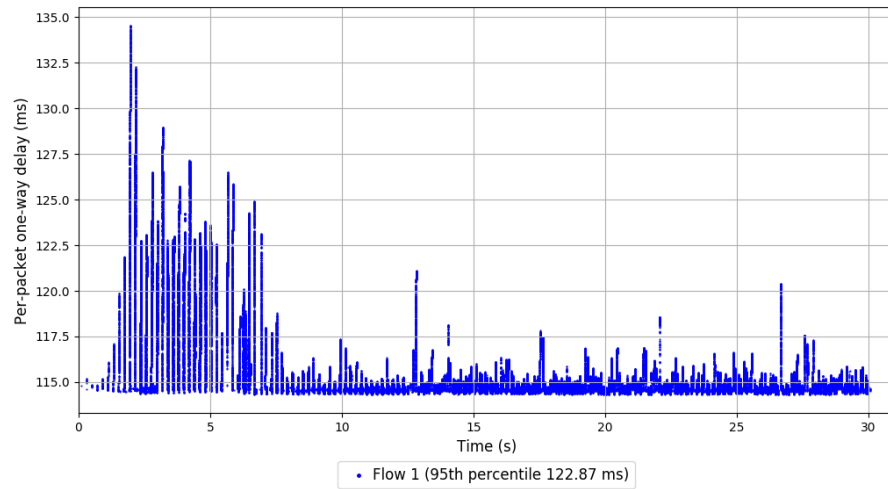
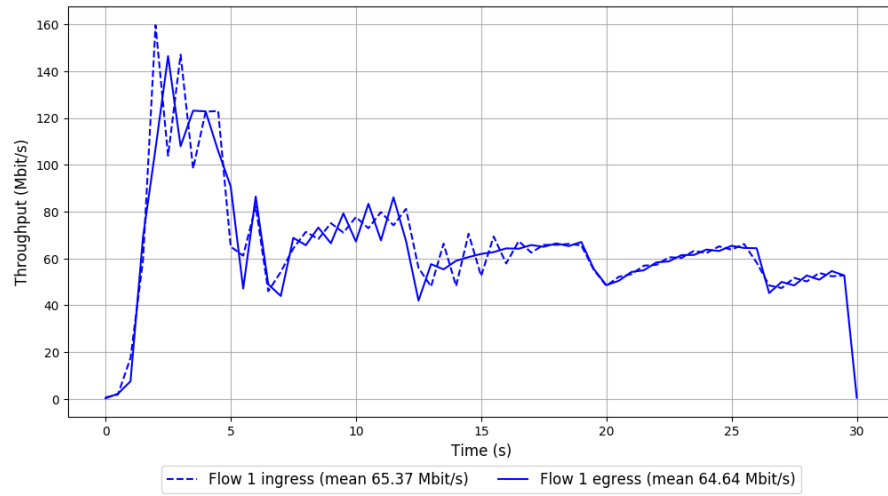
-- Flow 1:

Average throughput: 64.64 Mbit/s

95th percentile per-packet one-way delay: 122.868 ms

Loss rate: 1.22%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-12 23:21:32

End at: 2018-02-12 23:22:02

Below is generated by plot.py at 2018-02-13 01:54:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.04 Mbit/s

95th percentile per-packet one-way delay: 123.265 ms

Loss rate: 0.87%

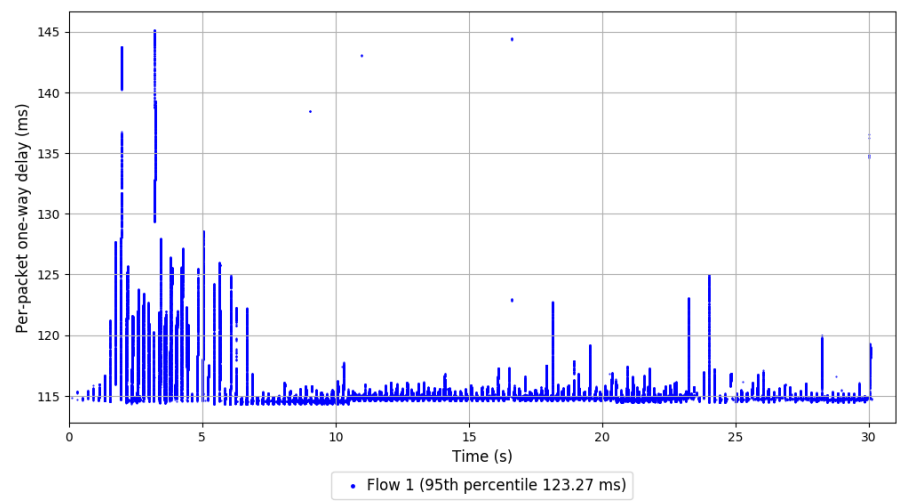
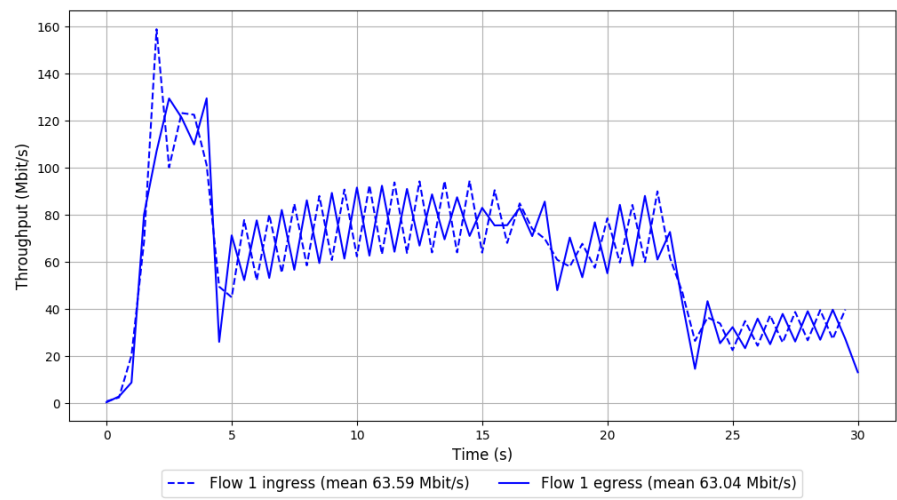
-- Flow 1:

Average throughput: 63.04 Mbit/s

95th percentile per-packet one-way delay: 123.265 ms

Loss rate: 0.87%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-12 23:36:23

End at: 2018-02-12 23:36:53

Below is generated by plot.py at 2018-02-13 01:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.92 Mbit/s

95th percentile per-packet one-way delay: 125.547 ms

Loss rate: 0.02%

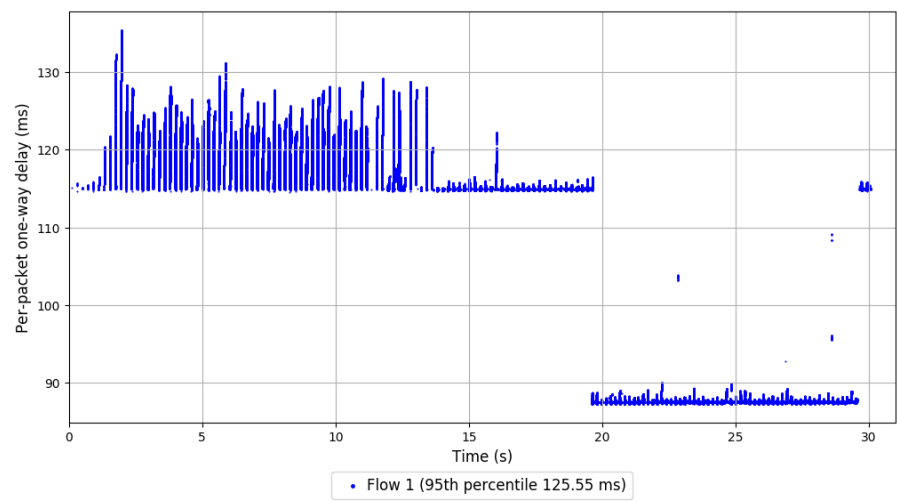
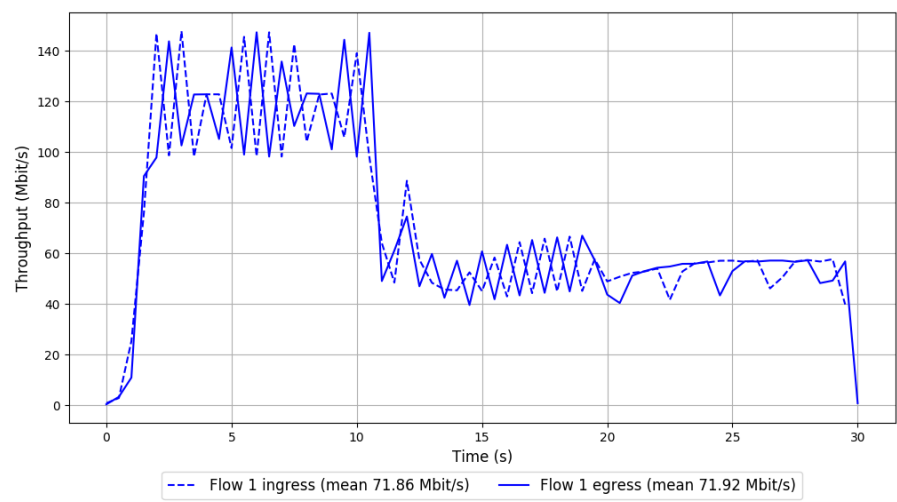
-- Flow 1:

Average throughput: 71.92 Mbit/s

95th percentile per-packet one-way delay: 125.547 ms

Loss rate: 0.02%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-12 23:51:23

End at: 2018-02-12 23:51:53

Below is generated by plot.py at 2018-02-13 01:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.02 Mbit/s

95th percentile per-packet one-way delay: 115.294 ms

Loss rate: 0.54%

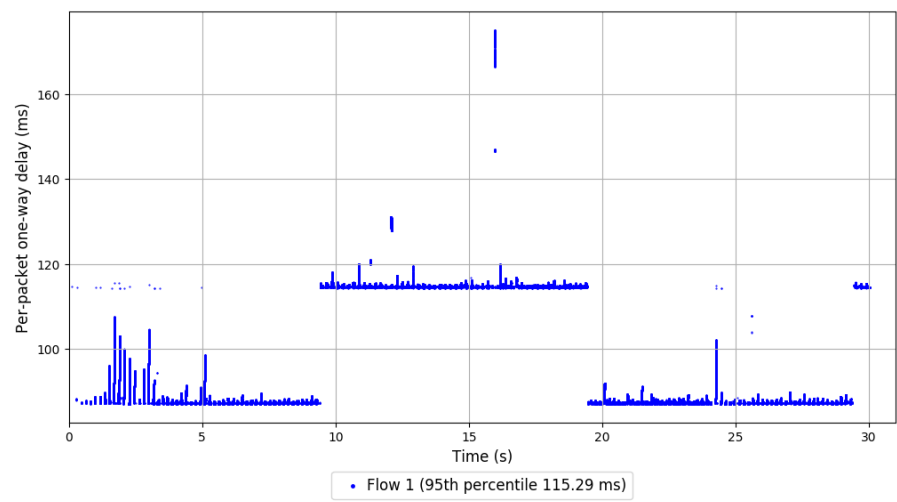
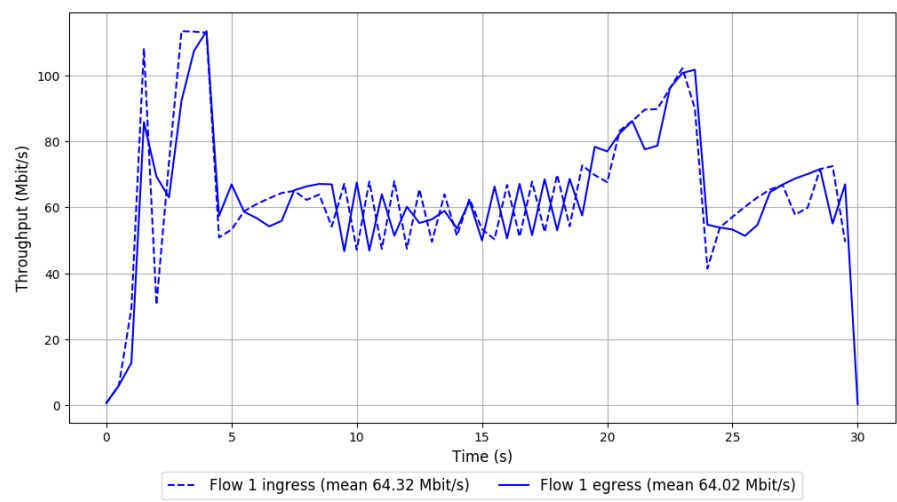
-- Flow 1:

Average throughput: 64.02 Mbit/s

95th percentile per-packet one-way delay: 115.294 ms

Loss rate: 0.54%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-13 00:06:25

End at: 2018-02-13 00:06:55

Below is generated by plot.py at 2018-02-13 01:54:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.95 Mbit/s

95th percentile per-packet one-way delay: 114.855 ms

Loss rate: 1.27%

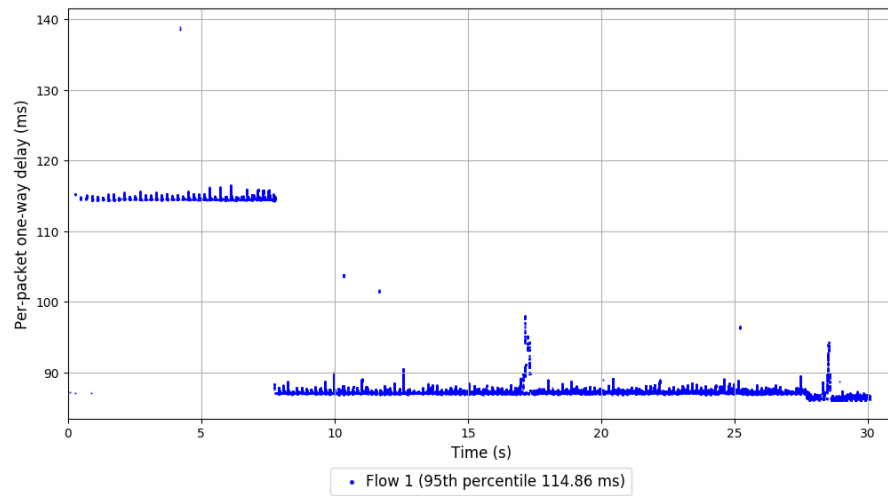
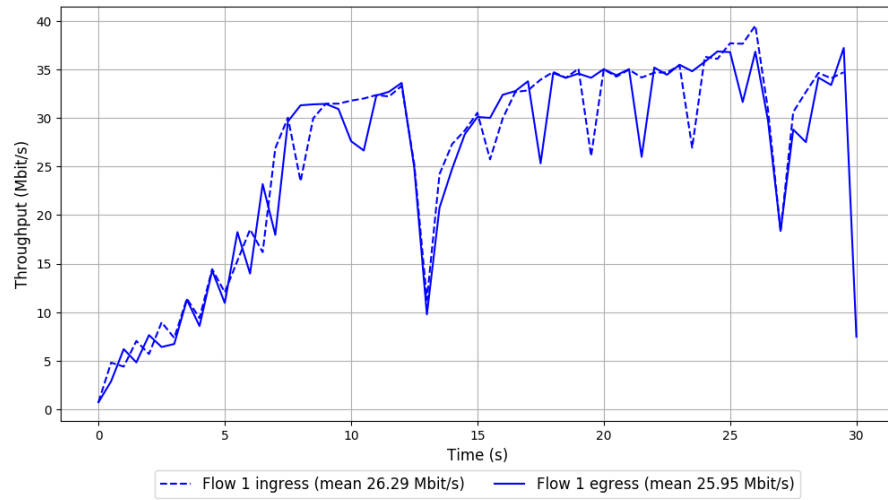
-- Flow 1:

Average throughput: 25.95 Mbit/s

95th percentile per-packet one-way delay: 114.855 ms

Loss rate: 1.27%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-13 00:20:54

End at: 2018-02-13 00:21:24

Below is generated by plot.py at 2018-02-13 01:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.07 Mbit/s

95th percentile per-packet one-way delay: 115.449 ms

Loss rate: 0.00%

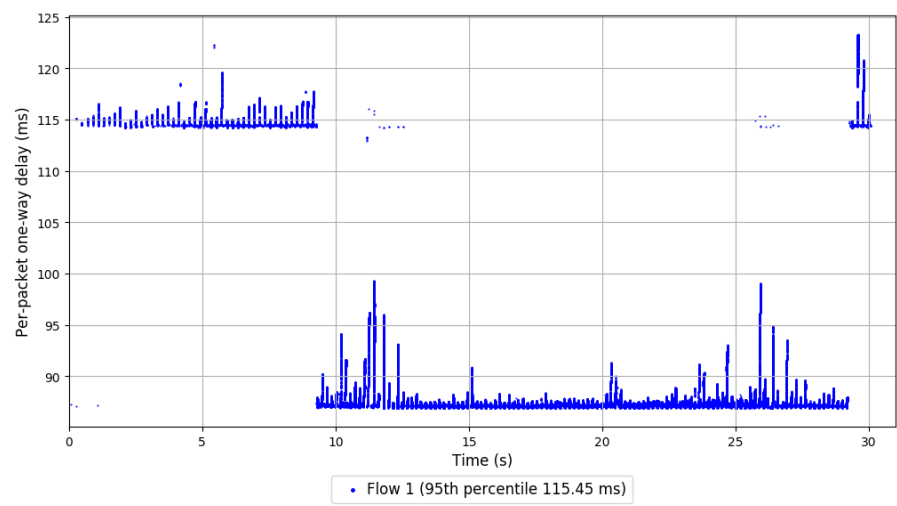
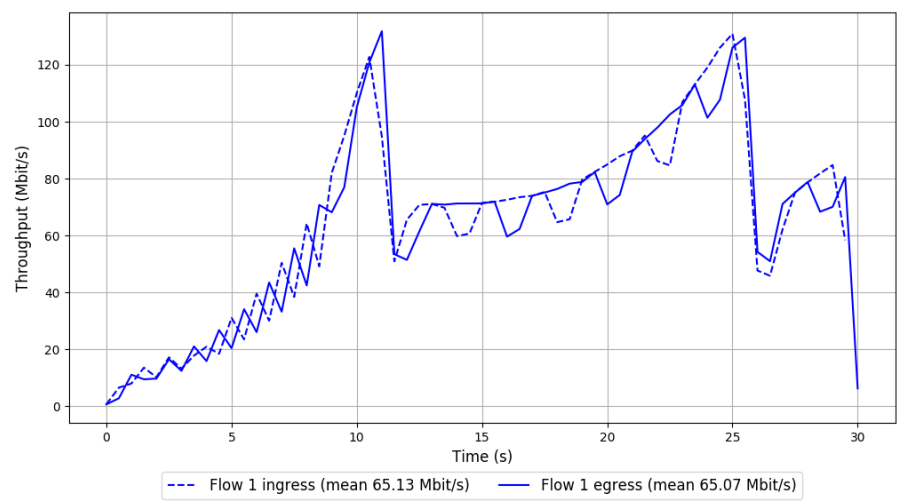
-- Flow 1:

Average throughput: 65.07 Mbit/s

95th percentile per-packet one-way delay: 115.449 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

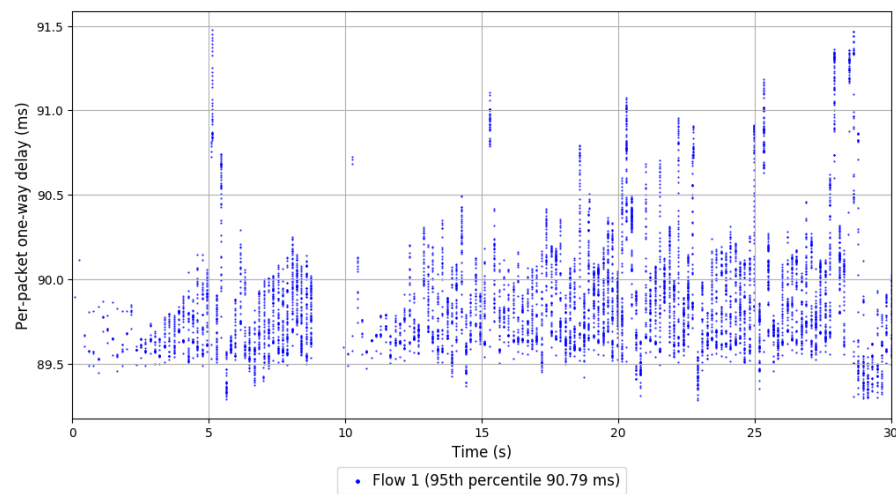
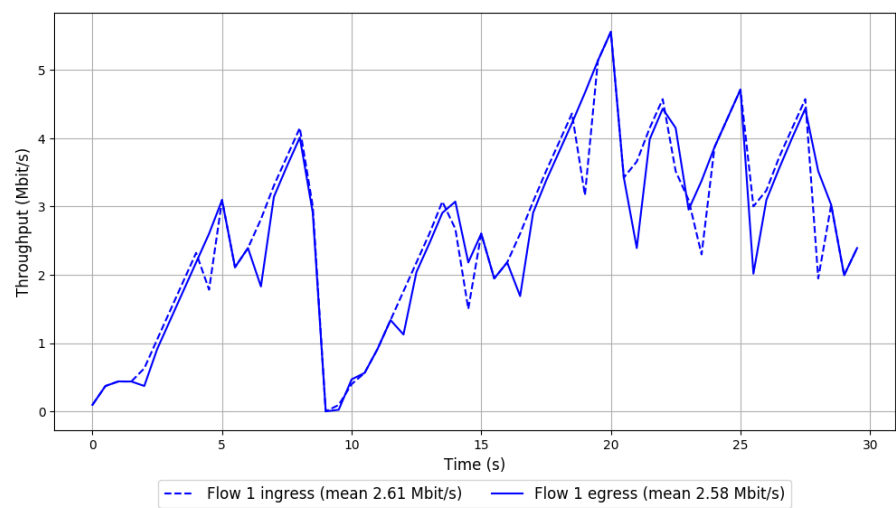


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-12 21:53:23
End at: 2018-02-12 21:53:53

# Below is generated by plot.py at 2018-02-13 01:54:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 90.791 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 90.791 ms
Loss rate: 0.98%
```

Run 1: Report of LEDBAT — Data Link

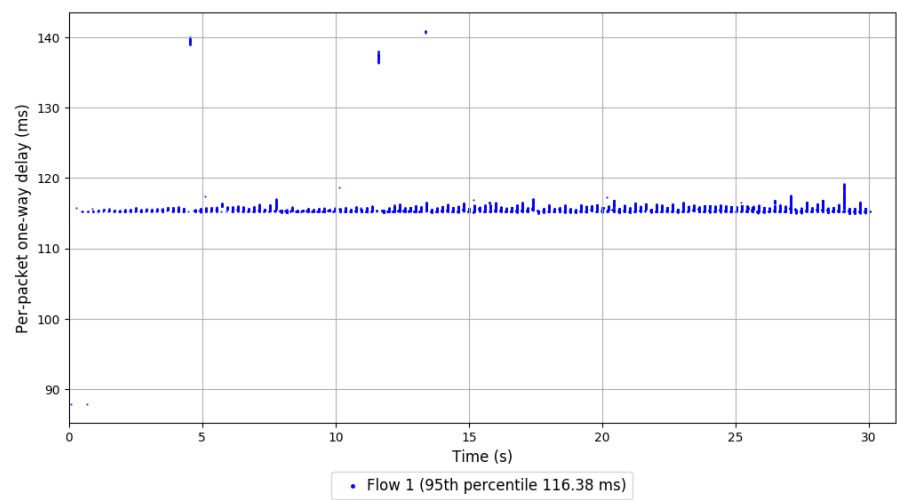
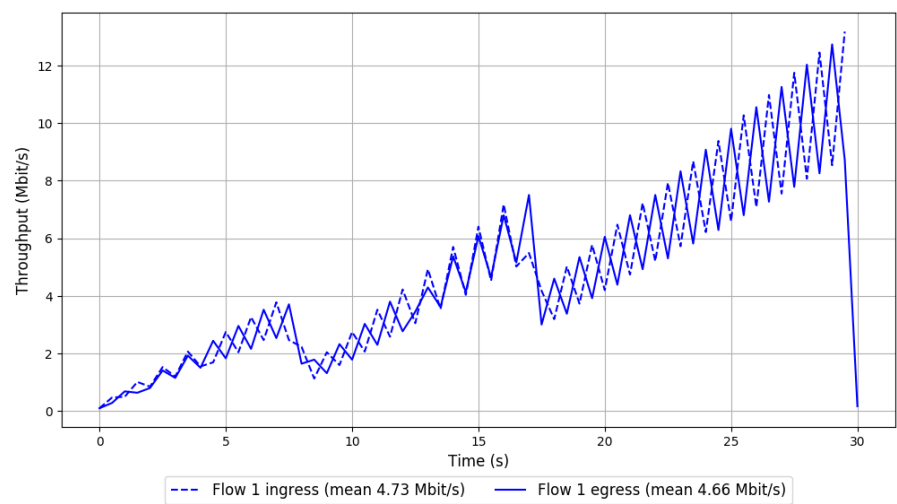


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-12 22:08:07
End at: 2018-02-12 22:08:37

# Below is generated by plot.py at 2018-02-13 01:54:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 116.383 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 116.383 ms
Loss rate: 1.51%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-12 22:22:53

End at: 2018-02-12 22:23:23

Below is generated by plot.py at 2018-02-13 01:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 115.535 ms

Loss rate: 0.00%

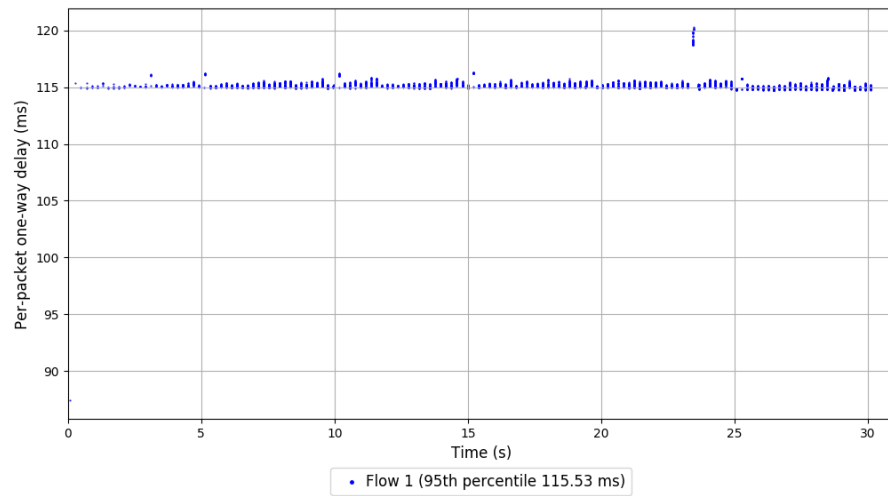
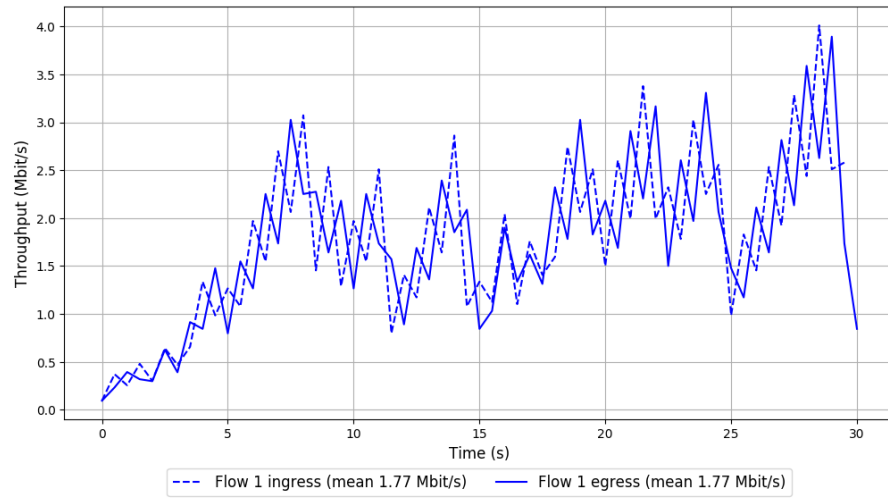
-- Flow 1:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 115.535 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-12 22:38:08

End at: 2018-02-12 22:38:38

Below is generated by plot.py at 2018-02-13 01:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 115.293 ms

Loss rate: 0.02%

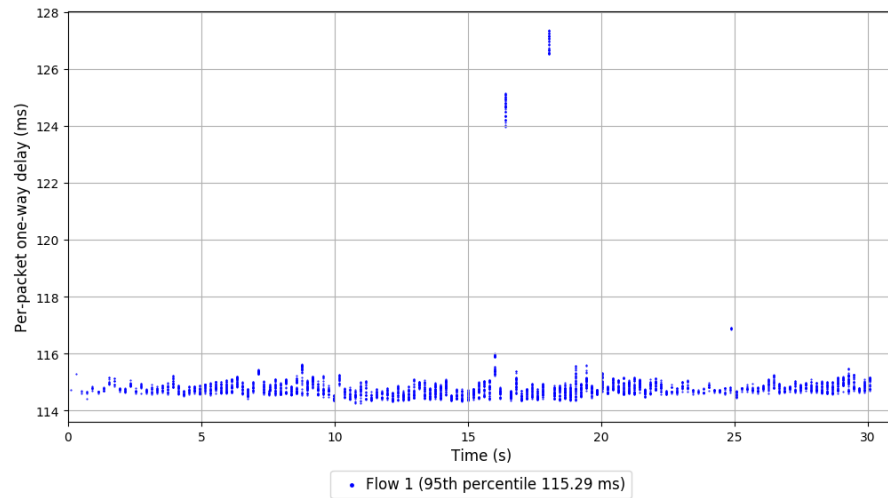
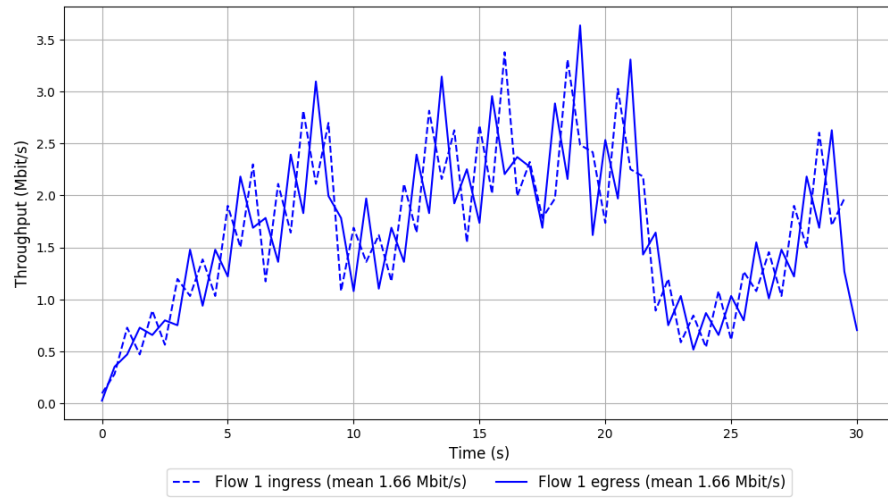
-- Flow 1:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 115.293 ms

Loss rate: 0.02%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-12 22:53:13

End at: 2018-02-12 22:53:43

Below is generated by plot.py at 2018-02-13 01:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.72 Mbit/s

95th percentile per-packet one-way delay: 115.037 ms

Loss rate: 0.00%

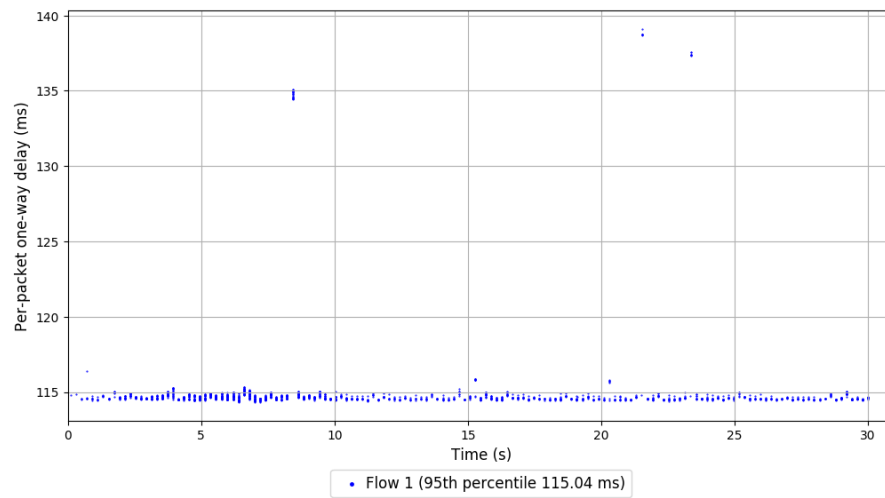
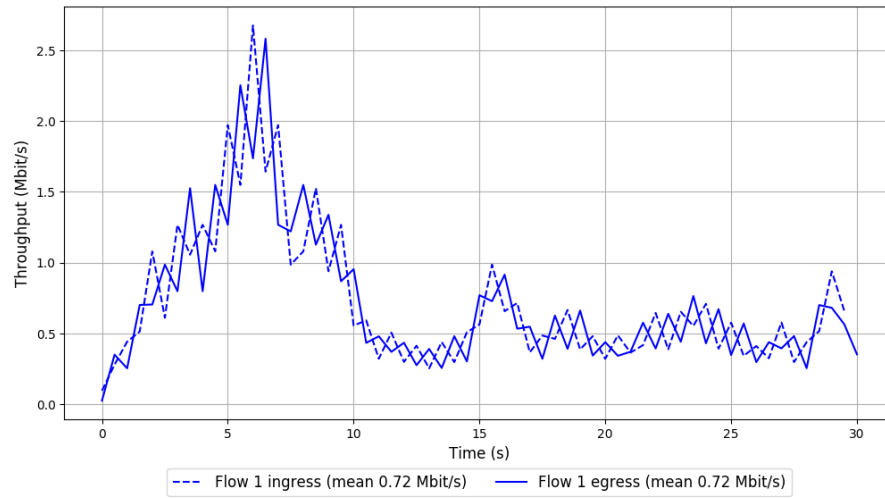
-- Flow 1:

Average throughput: 0.72 Mbit/s

95th percentile per-packet one-way delay: 115.037 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-12 23:08:15

End at: 2018-02-12 23:08:45

Below is generated by plot.py at 2018-02-13 01:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 115.608 ms

Loss rate: 0.80%

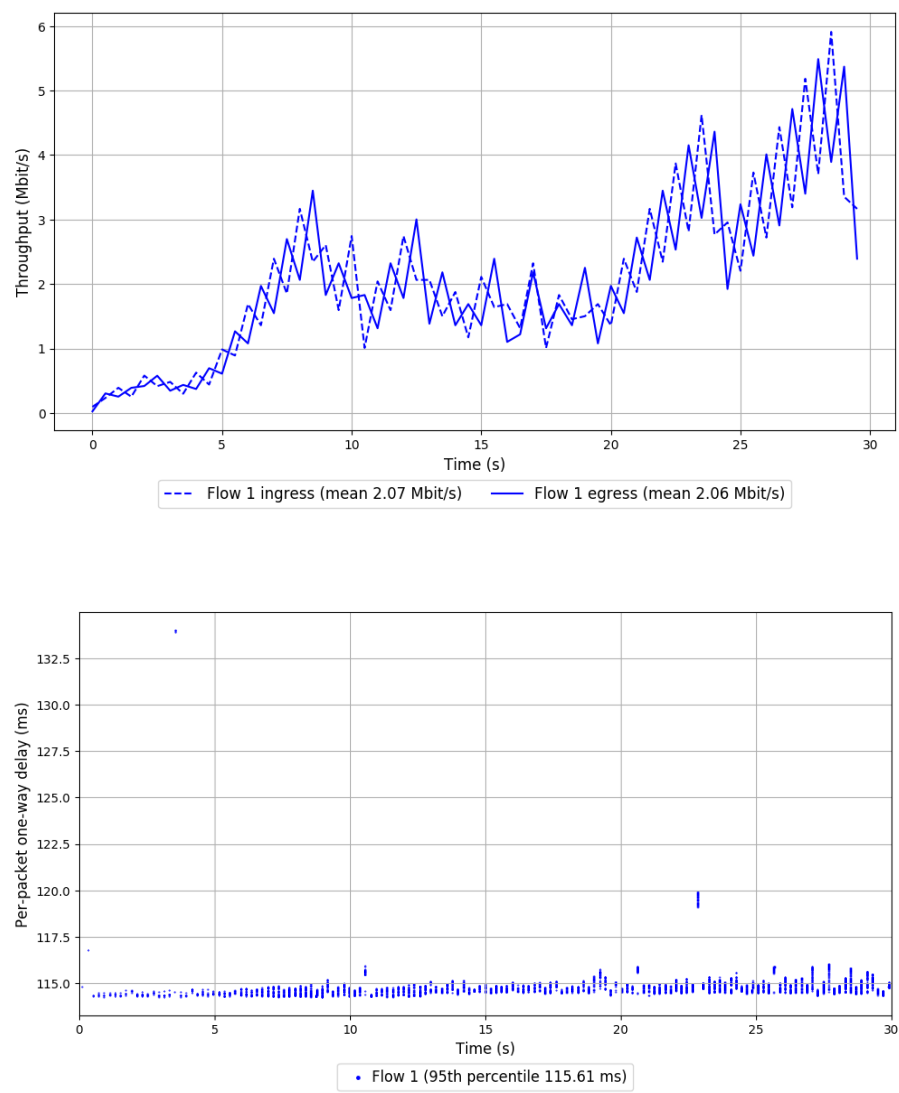
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 115.608 ms

Loss rate: 0.80%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-12 23:23:20

End at: 2018-02-12 23:23:50

Below is generated by plot.py at 2018-02-13 01:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 115.309 ms

Loss rate: 0.31%

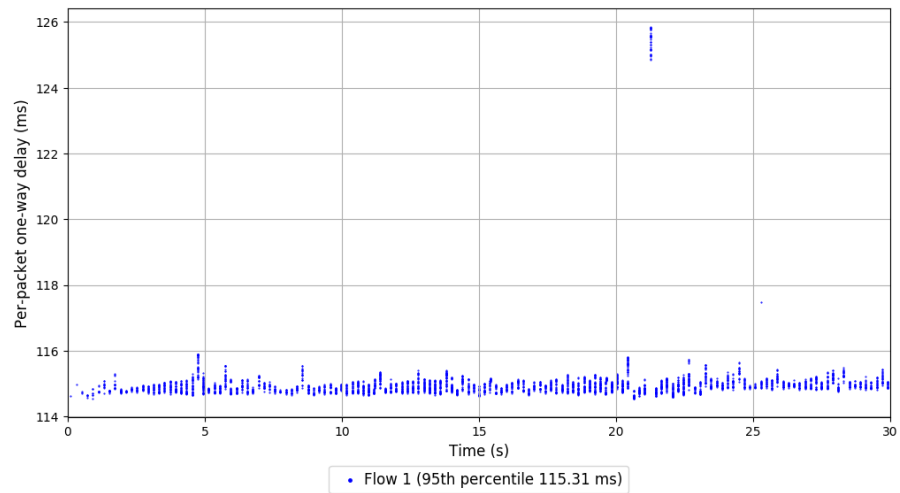
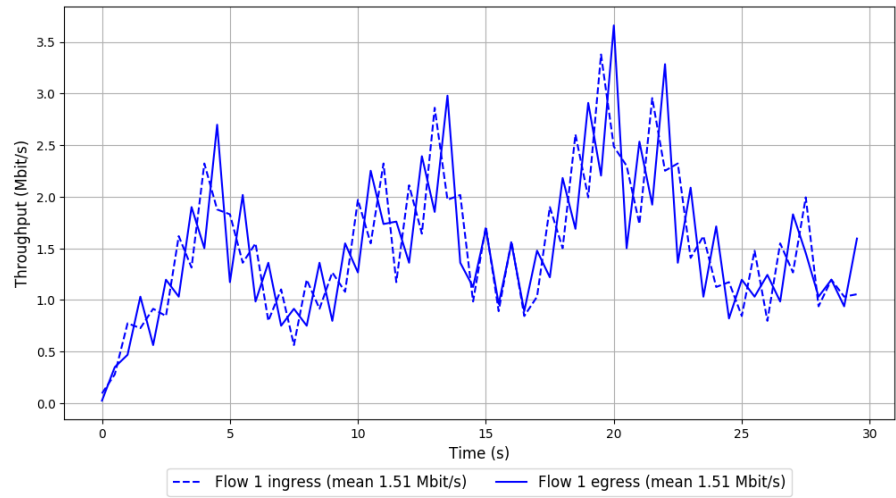
-- Flow 1:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 115.309 ms

Loss rate: 0.31%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-12 23:38:13

End at: 2018-02-12 23:38:43

Below is generated by plot.py at 2018-02-13 01:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.32 Mbit/s

95th percentile per-packet one-way delay: 88.093 ms

Loss rate: 0.00%

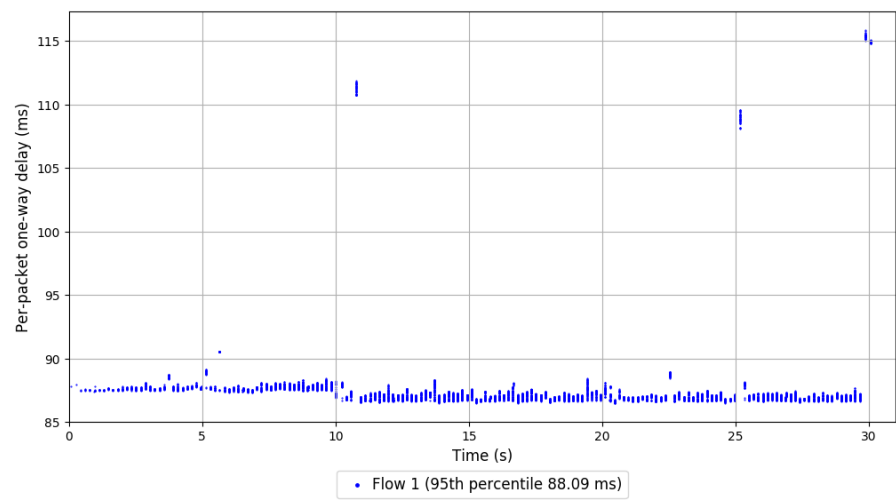
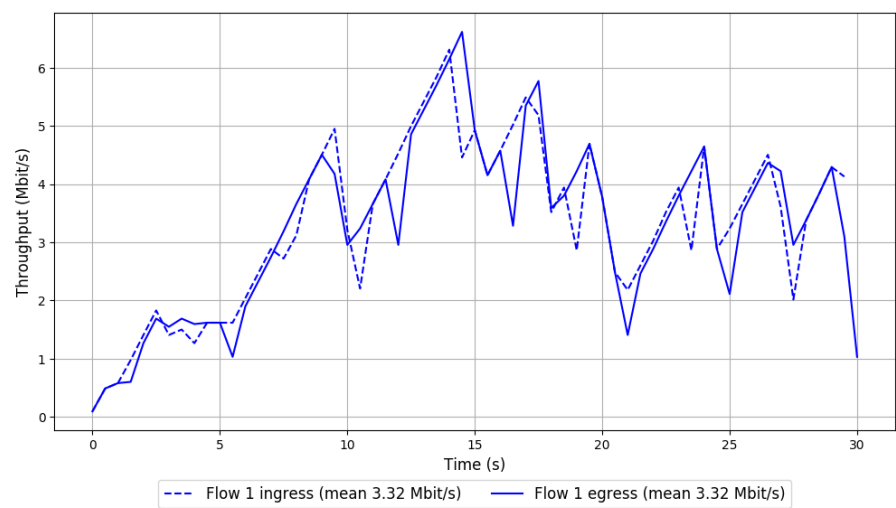
-- Flow 1:

Average throughput: 3.32 Mbit/s

95th percentile per-packet one-way delay: 88.093 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-12 23:53:10

End at: 2018-02-12 23:53:40

Below is generated by plot.py at 2018-02-13 01:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 88.526 ms

Loss rate: 1.23%

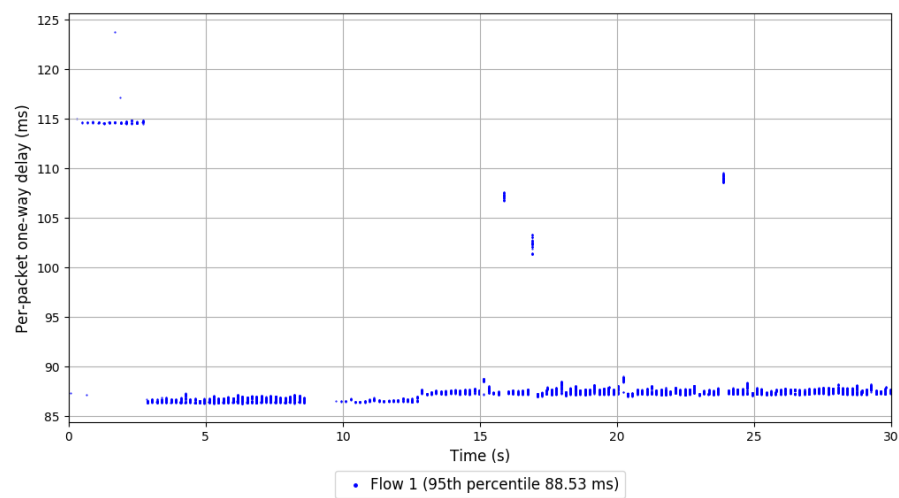
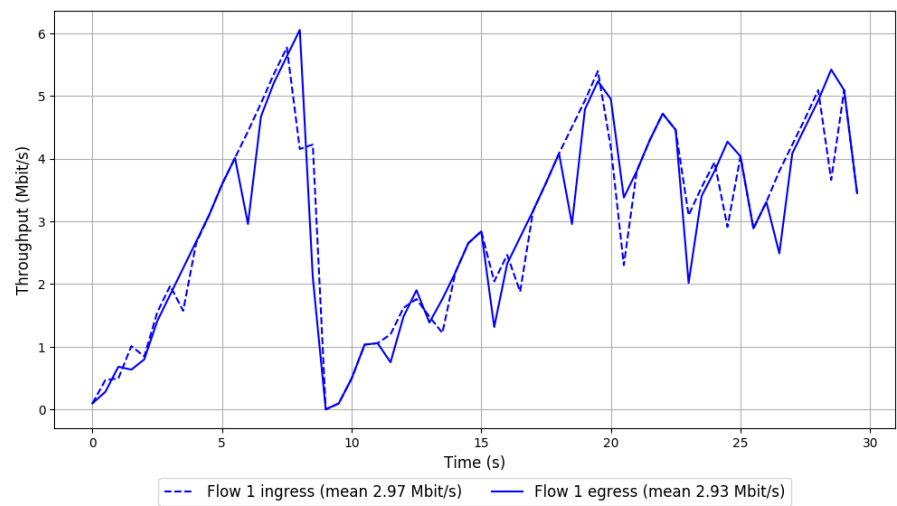
-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 88.526 ms

Loss rate: 1.23%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-13 00:08:07

End at: 2018-02-13 00:08:37

Below is generated by plot.py at 2018-02-13 01:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 114.977 ms

Loss rate: 0.00%

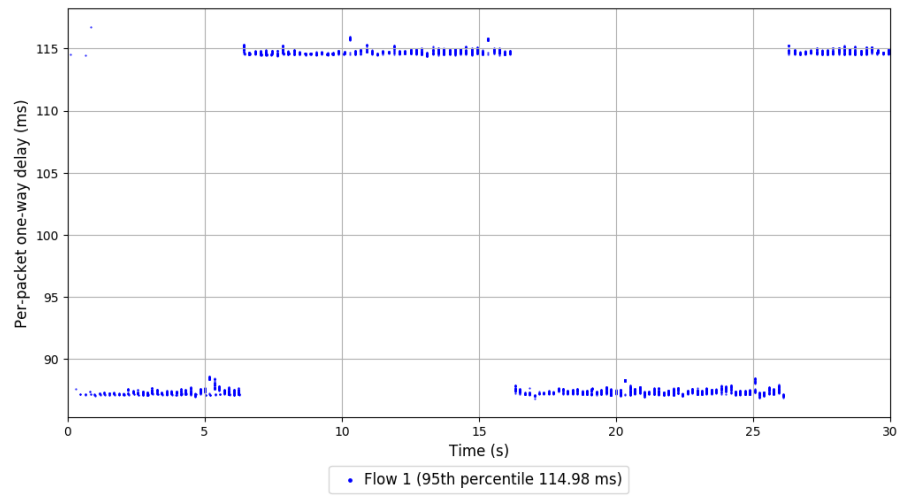
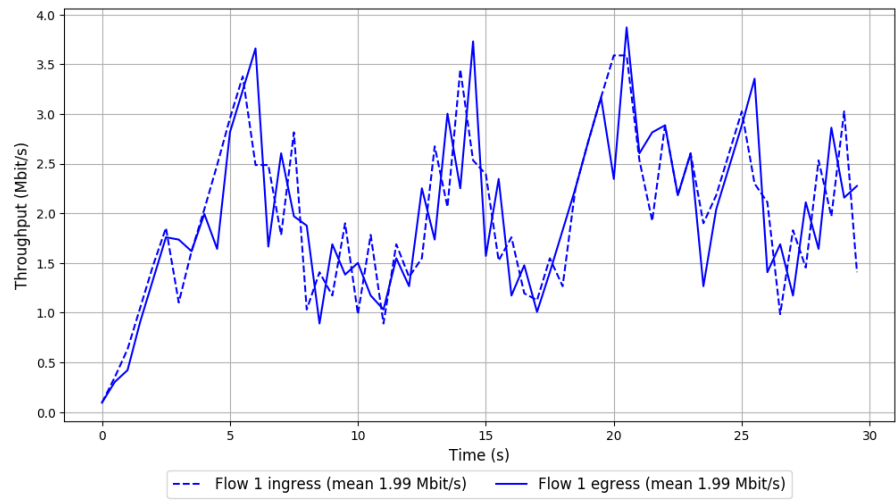
-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 114.977 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

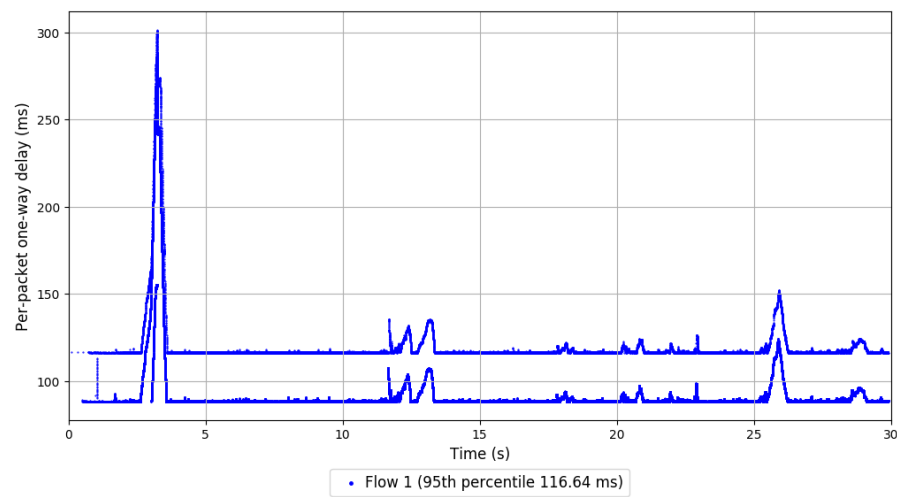
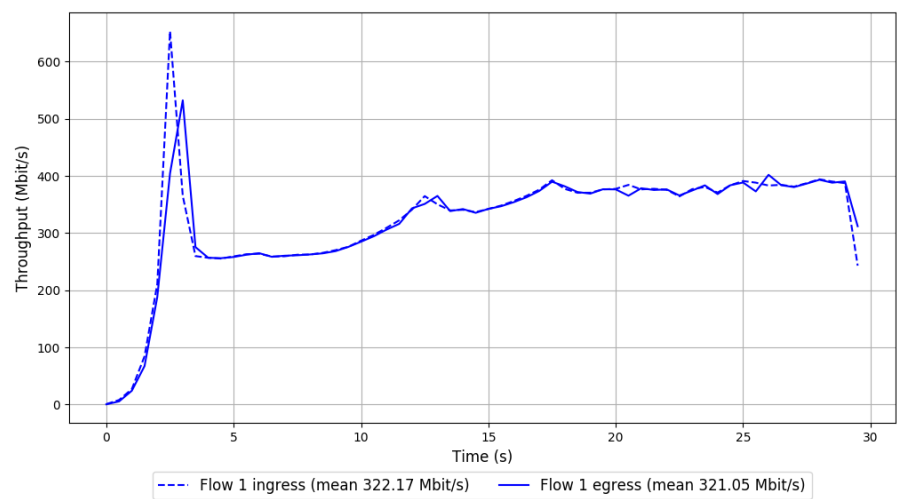


```
Run 1: Statistics of PCC

Start at: 2018-02-12 21:59:55
End at: 2018-02-12 22:00:25

# Below is generated by plot.py at 2018-02-13 01:59:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 321.05 Mbit/s
95th percentile per-packet one-way delay: 116.642 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 321.05 Mbit/s
95th percentile per-packet one-way delay: 116.642 ms
Loss rate: 0.44%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-12 22:14:50

End at: 2018-02-12 22:15:20

Below is generated by plot.py at 2018-02-13 01:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 114.921 ms

Loss rate: 0.13%

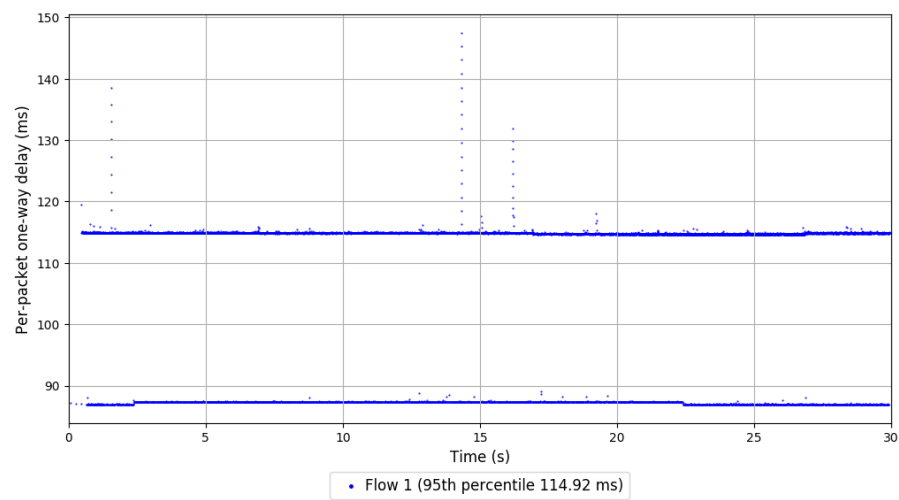
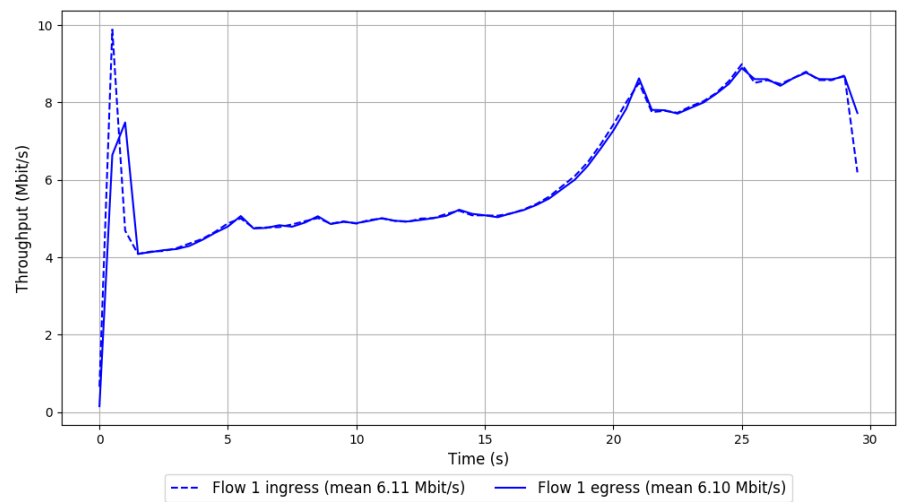
-- Flow 1:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 114.921 ms

Loss rate: 0.13%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-12 22:30:02

End at: 2018-02-12 22:30:32

Below is generated by plot.py at 2018-02-13 01:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.73 Mbit/s

95th percentile per-packet one-way delay: 114.972 ms

Loss rate: 0.00%

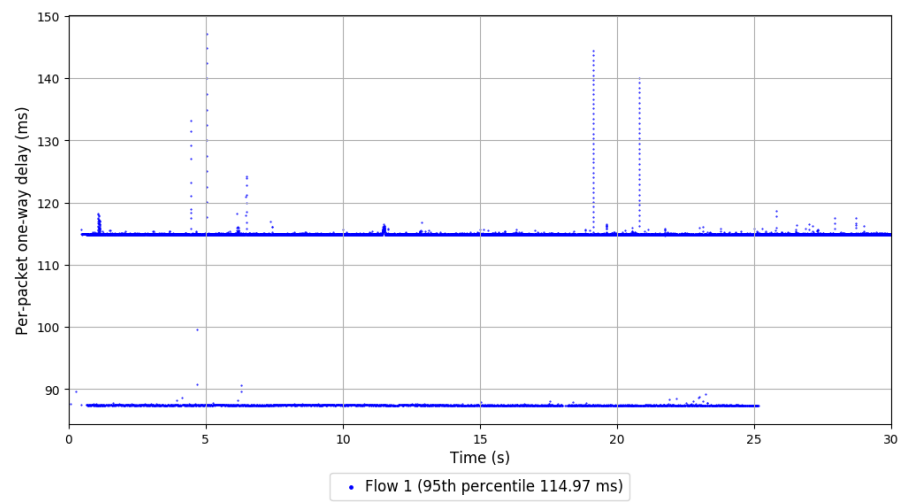
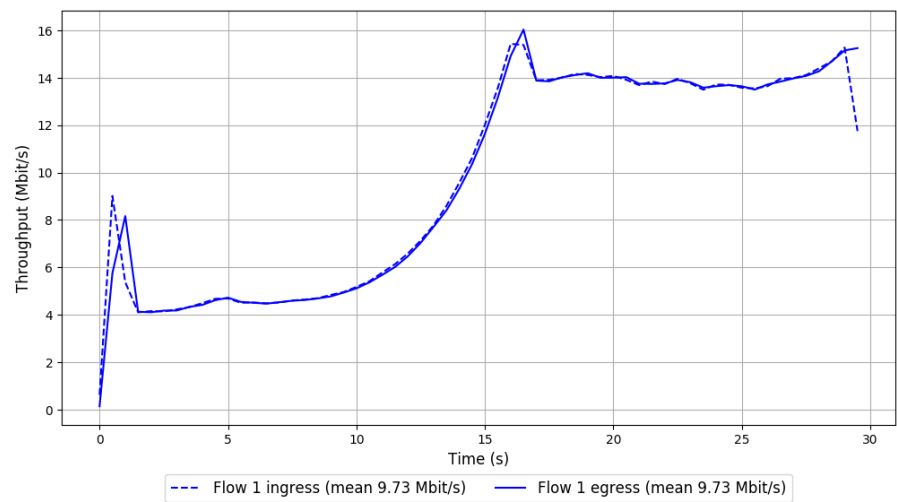
-- Flow 1:

Average throughput: 9.73 Mbit/s

95th percentile per-packet one-way delay: 114.972 ms

Loss rate: 0.00%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-12 22:44:54

End at: 2018-02-12 22:45:24

Below is generated by plot.py at 2018-02-13 01:59:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 338.14 Mbit/s

95th percentile per-packet one-way delay: 227.721 ms

Loss rate: 0.64%

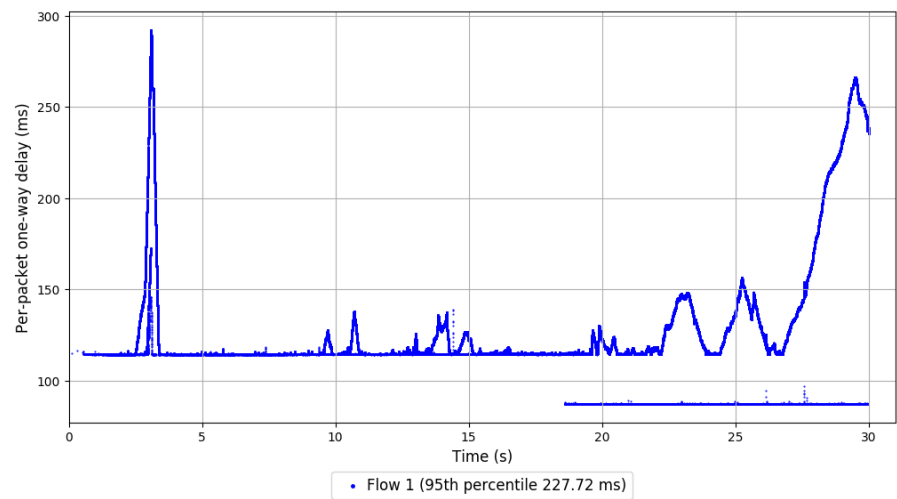
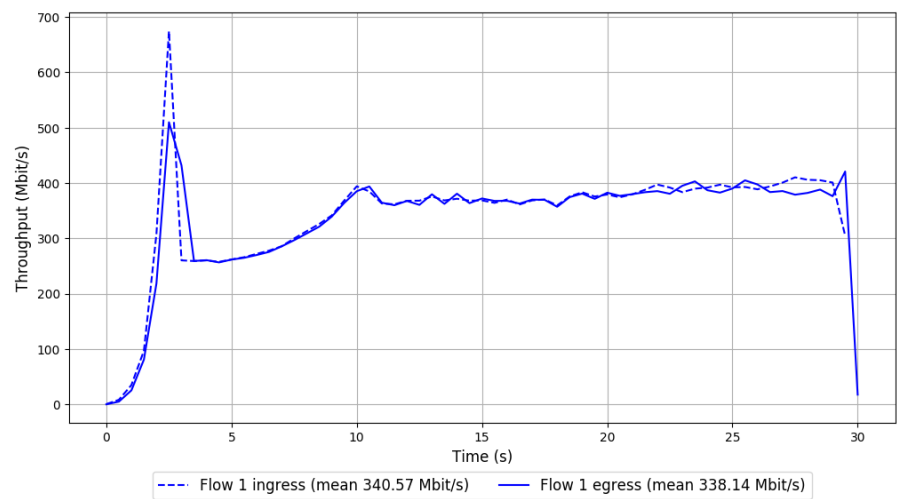
-- Flow 1:

Average throughput: 338.14 Mbit/s

95th percentile per-packet one-way delay: 227.721 ms

Loss rate: 0.64%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-12 23:00:05

End at: 2018-02-12 23:00:35

Below is generated by plot.py at 2018-02-13 01:59:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 298.85 Mbit/s

95th percentile per-packet one-way delay: 124.208 ms

Loss rate: 0.47%

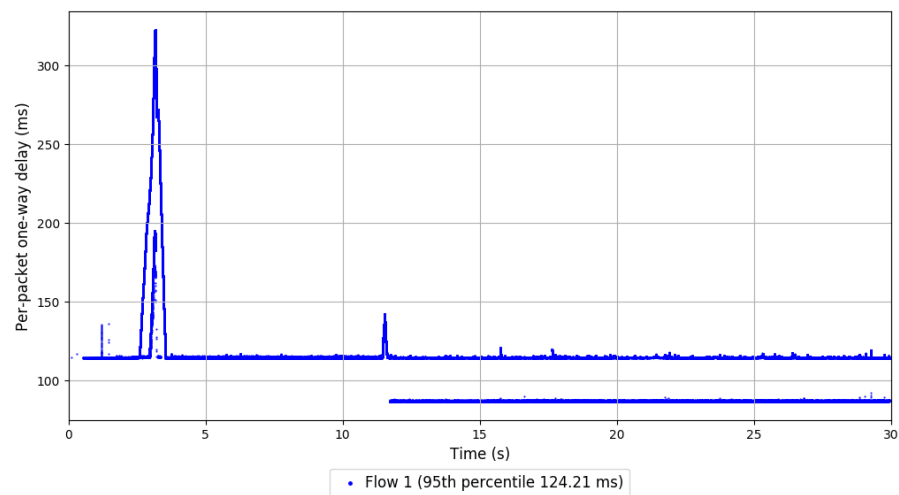
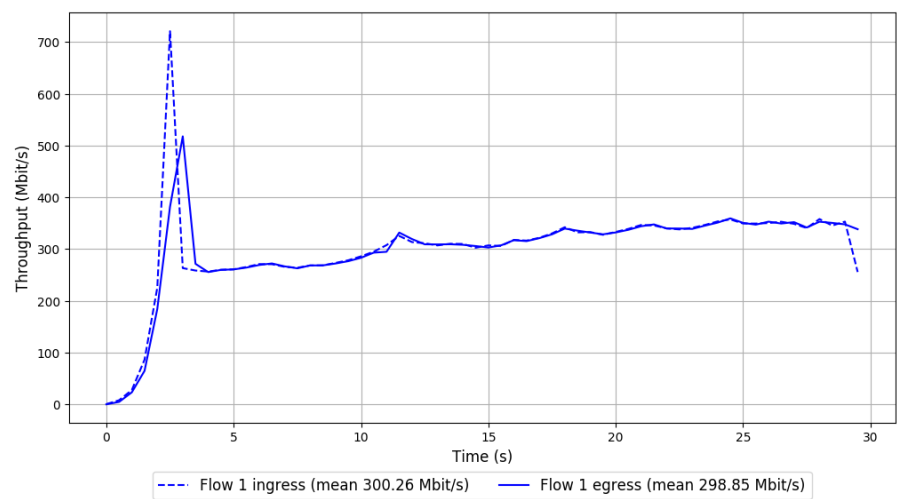
-- Flow 1:

Average throughput: 298.85 Mbit/s

95th percentile per-packet one-way delay: 124.208 ms

Loss rate: 0.47%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-12 23:15:16

End at: 2018-02-12 23:15:46

Below is generated by plot.py at 2018-02-13 01:59:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.26 Mbit/s

95th percentile per-packet one-way delay: 114.709 ms

Loss rate: 0.09%

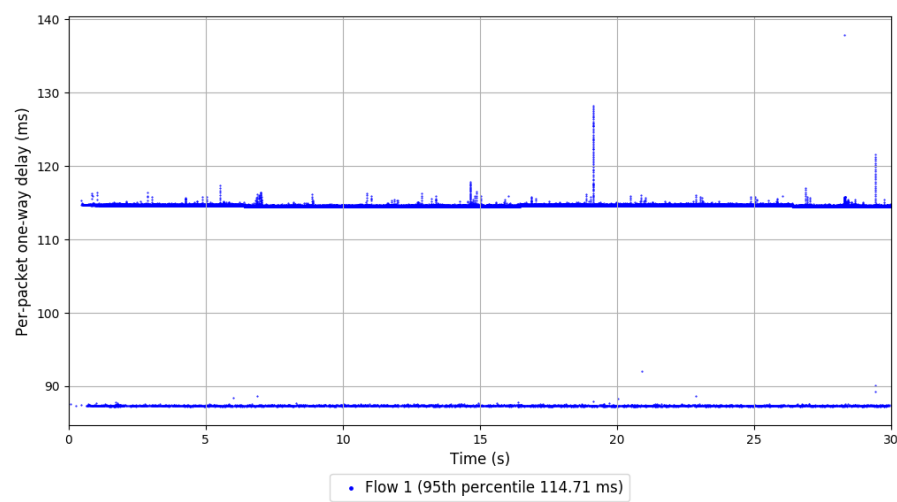
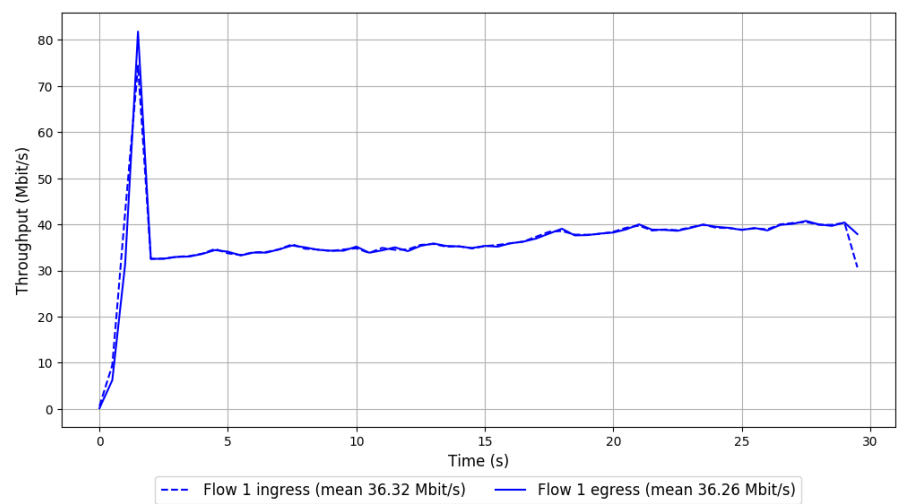
-- Flow 1:

Average throughput: 36.26 Mbit/s

95th percentile per-packet one-way delay: 114.709 ms

Loss rate: 0.09%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-12 23:30:04

End at: 2018-02-12 23:30:34

Below is generated by plot.py at 2018-02-13 02:00:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 372.00 Mbit/s

95th percentile per-packet one-way delay: 255.032 ms

Loss rate: 0.66%

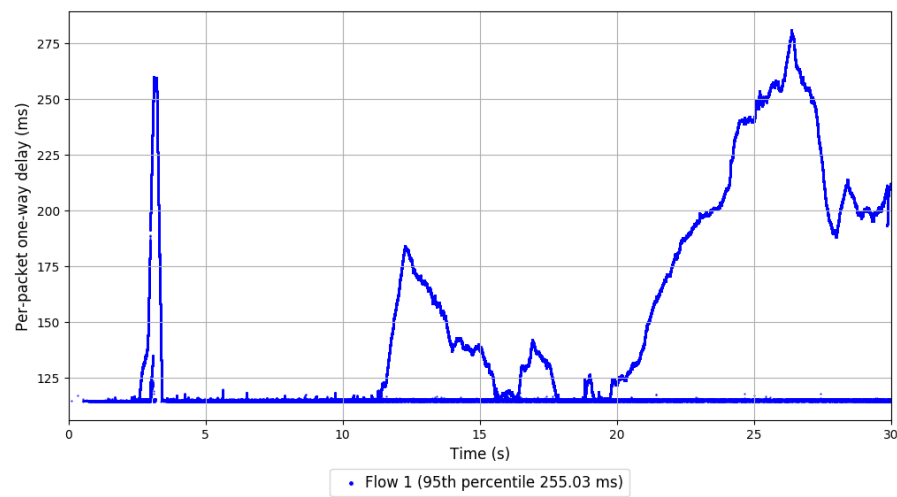
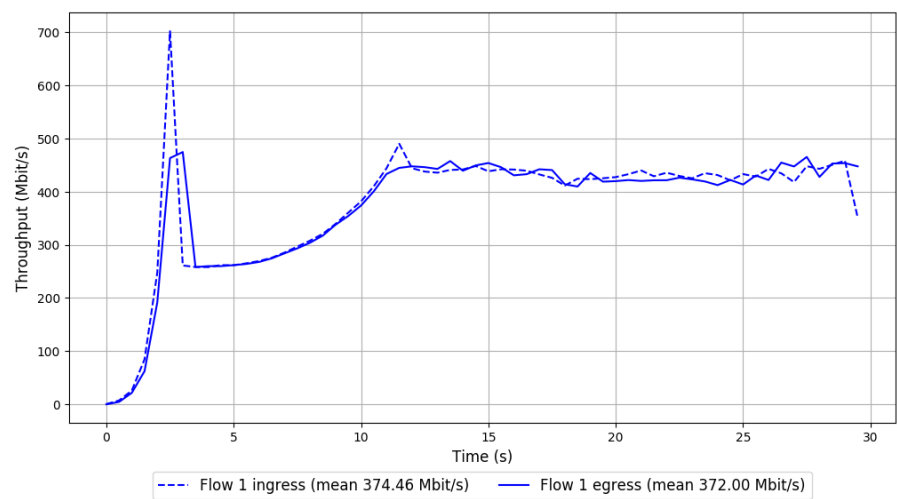
-- Flow 1:

Average throughput: 372.00 Mbit/s

95th percentile per-packet one-way delay: 255.032 ms

Loss rate: 0.66%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-12 23:45:02

End at: 2018-02-12 23:45:32

Below is generated by plot.py at 2018-02-13 02:00:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 355.62 Mbit/s

95th percentile per-packet one-way delay: 218.425 ms

Loss rate: 0.31%

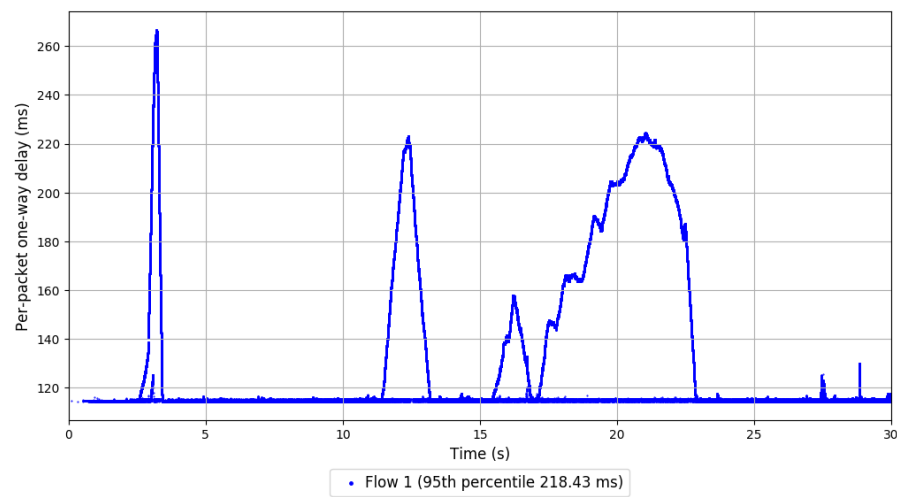
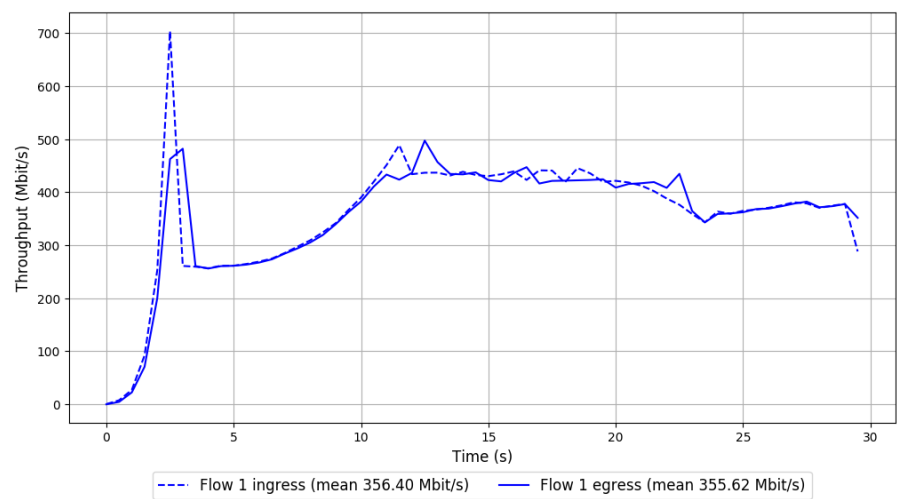
-- Flow 1:

Average throughput: 355.62 Mbit/s

95th percentile per-packet one-way delay: 218.425 ms

Loss rate: 0.31%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-13 00:00:08

End at: 2018-02-13 00:00:38

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 370.60 Mbit/s

95th percentile per-packet one-way delay: 264.421 ms

Loss rate: 0.93%

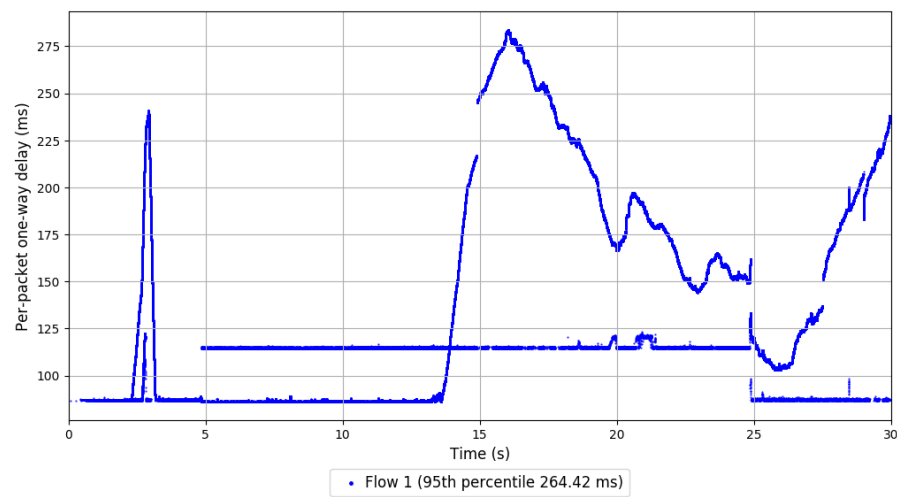
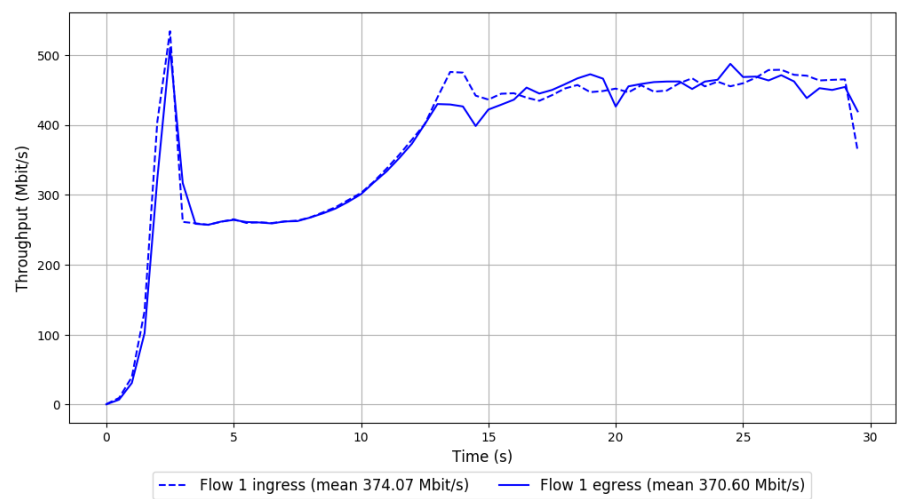
-- Flow 1:

Average throughput: 370.60 Mbit/s

95th percentile per-packet one-way delay: 264.421 ms

Loss rate: 0.93%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-13 00:14:31

End at: 2018-02-13 00:15:01

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 354.53 Mbit/s

95th percentile per-packet one-way delay: 114.568 ms

Loss rate: 0.26%

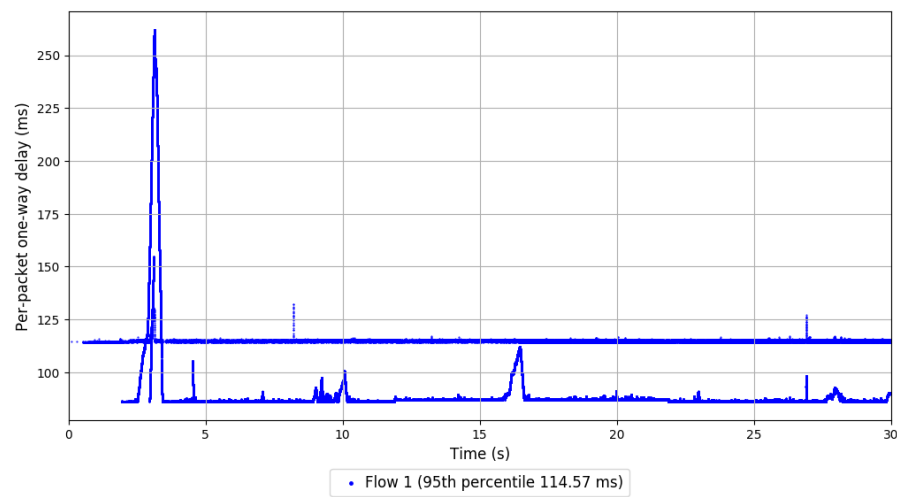
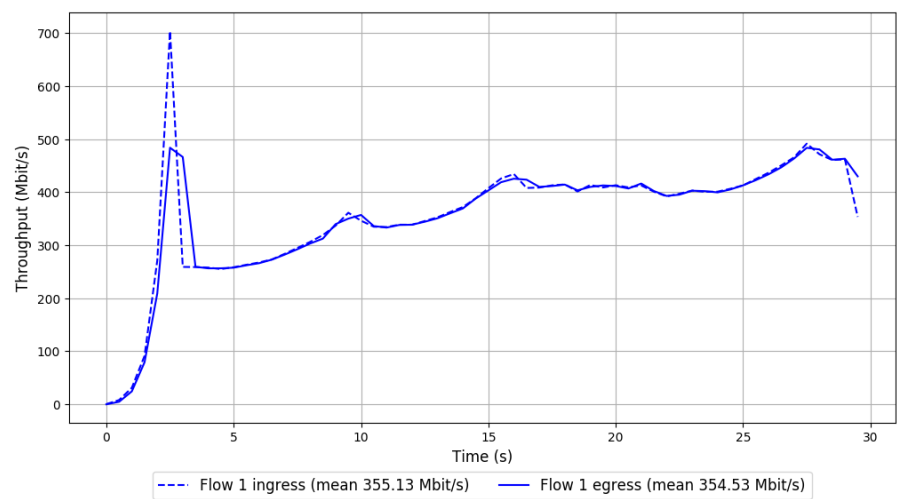
-- Flow 1:

Average throughput: 354.53 Mbit/s

95th percentile per-packet one-way delay: 114.568 ms

Loss rate: 0.26%

Run 10: Report of PCC — Data Link

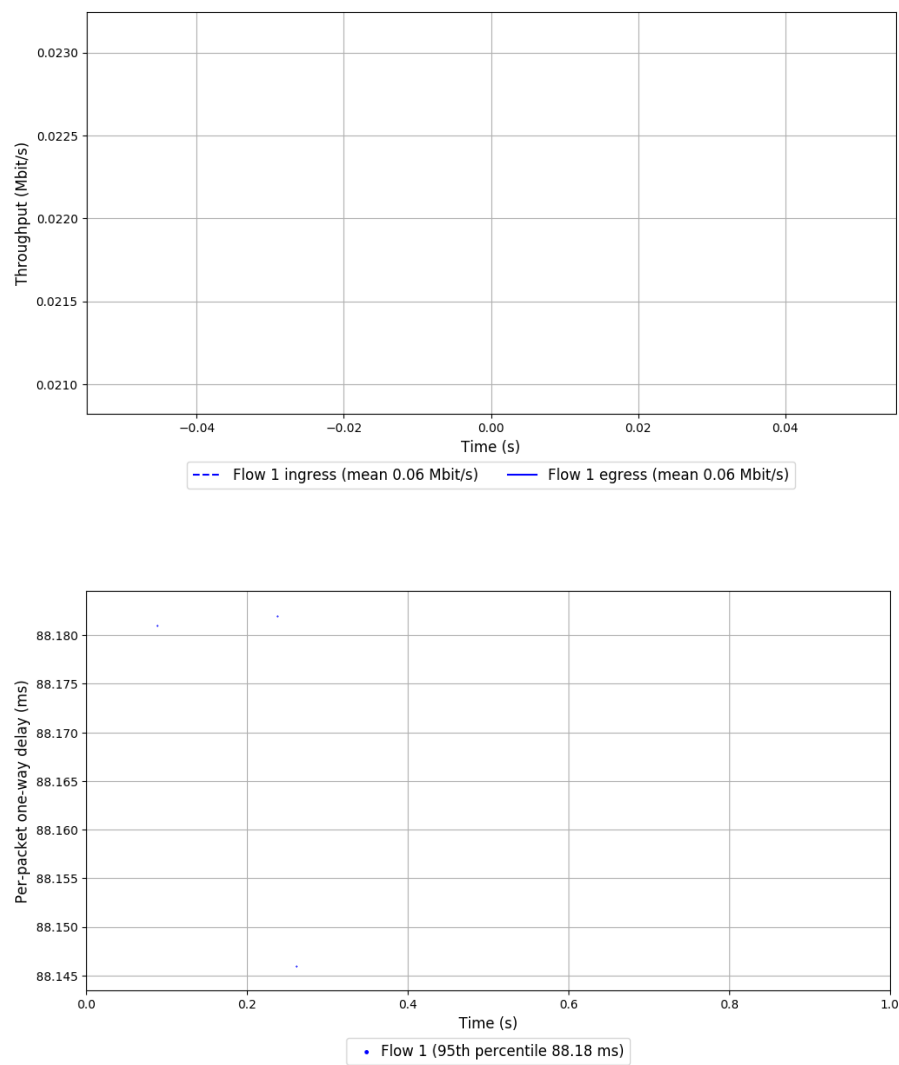


Run 1: Statistics of QUIC Cubic

Start at: 2018-02-12 22:03:08

End at: 2018-02-12 22:03:38

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-12 22:17:47

End at: 2018-02-12 22:18:17

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.00 Mbit/s

95th percentile per-packet one-way delay: 114.940 ms

Loss rate: 0.00%

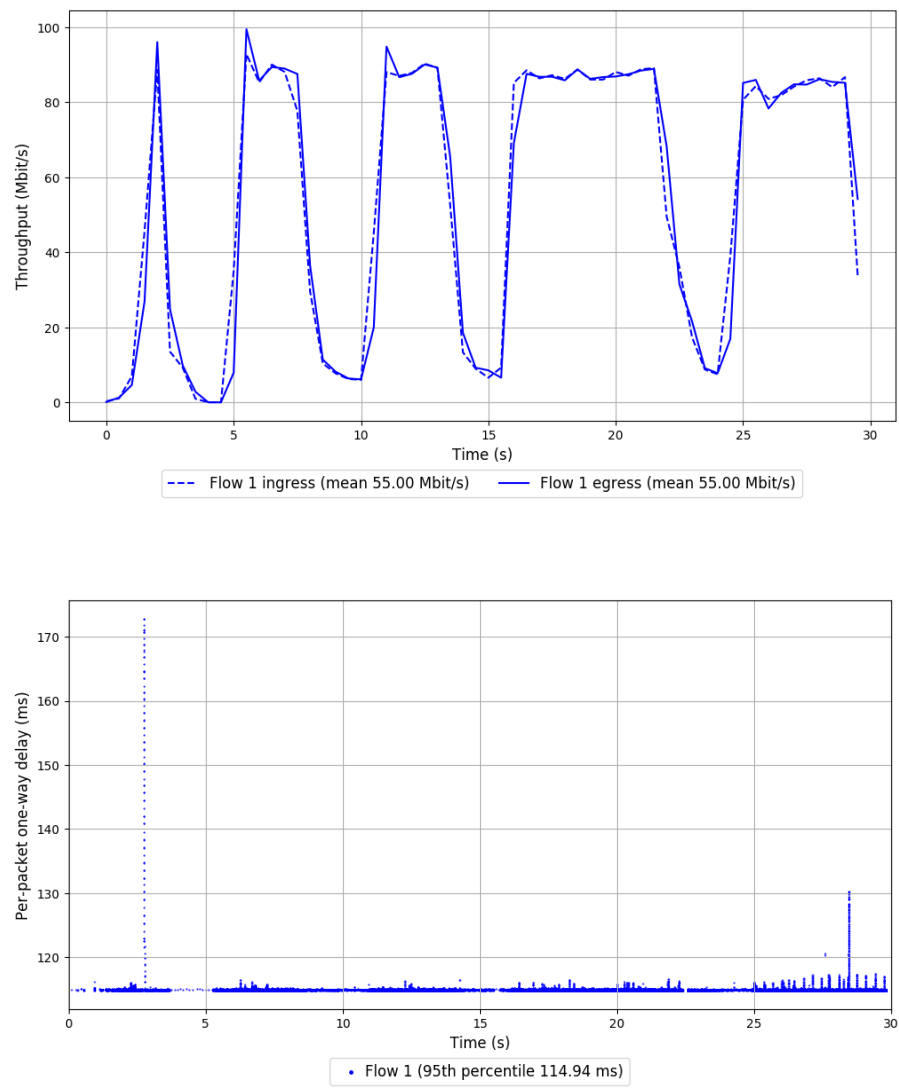
-- Flow 1:

Average throughput: 55.00 Mbit/s

95th percentile per-packet one-way delay: 114.940 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-12 22:33:03

End at: 2018-02-12 22:33:33

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.23 Mbit/s

95th percentile per-packet one-way delay: 114.722 ms

Loss rate: 0.00%

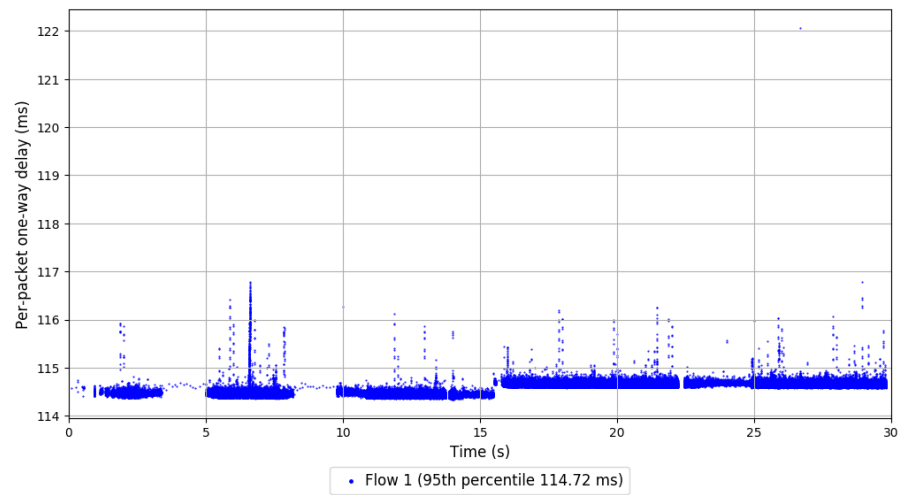
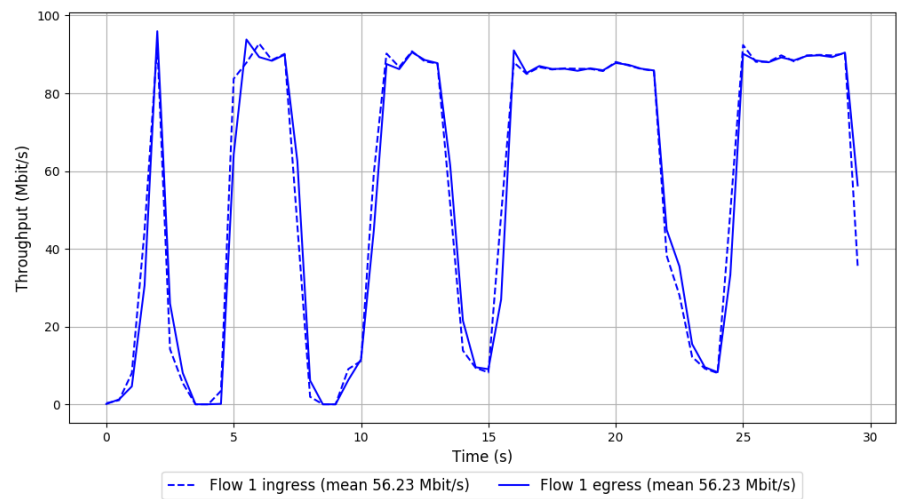
-- Flow 1:

Average throughput: 56.23 Mbit/s

95th percentile per-packet one-way delay: 114.722 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-12 22:48:07

End at: 2018-02-12 22:48:37

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.26 Mbit/s

95th percentile per-packet one-way delay: 114.528 ms

Loss rate: 0.00%

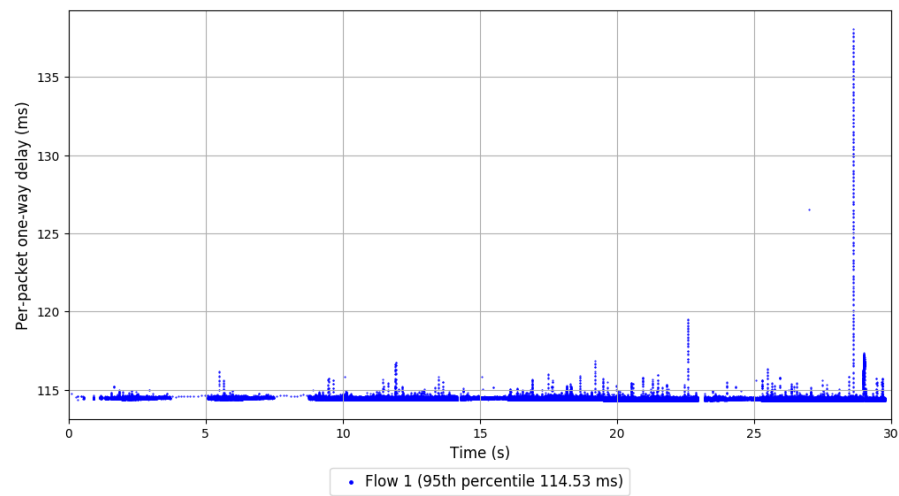
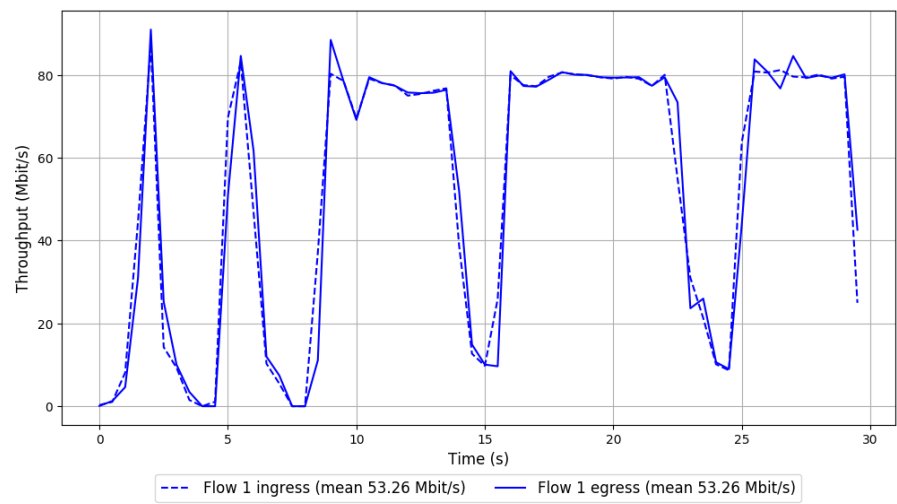
-- Flow 1:

Average throughput: 53.26 Mbit/s

95th percentile per-packet one-way delay: 114.528 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-12 23:03:21

End at: 2018-02-12 23:03:51

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.06 Mbit/s

95th percentile per-packet one-way delay: 114.577 ms

Loss rate: 0.00%

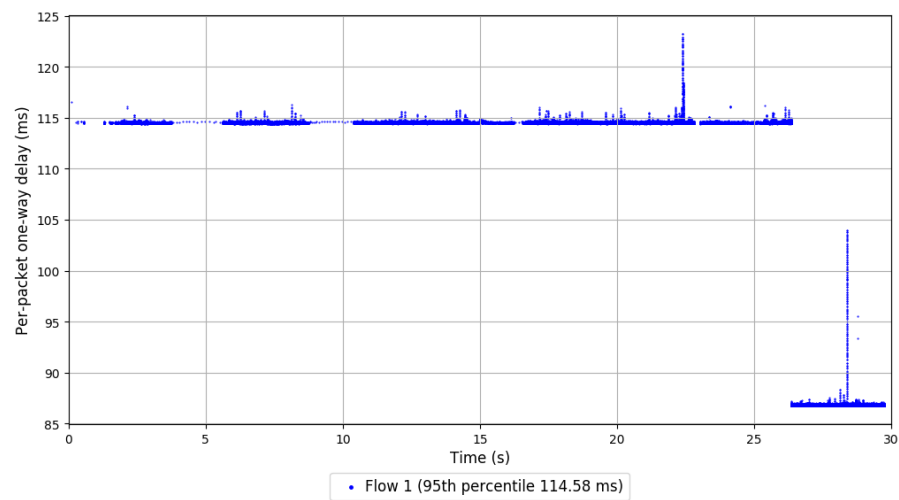
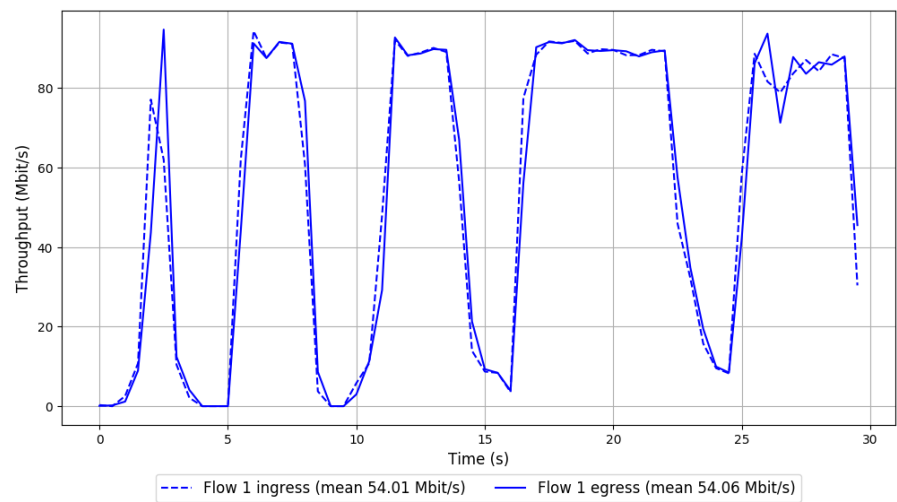
-- Flow 1:

Average throughput: 54.06 Mbit/s

95th percentile per-packet one-way delay: 114.577 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-12 23:18:17

End at: 2018-02-12 23:18:47

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.34 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 0.00%

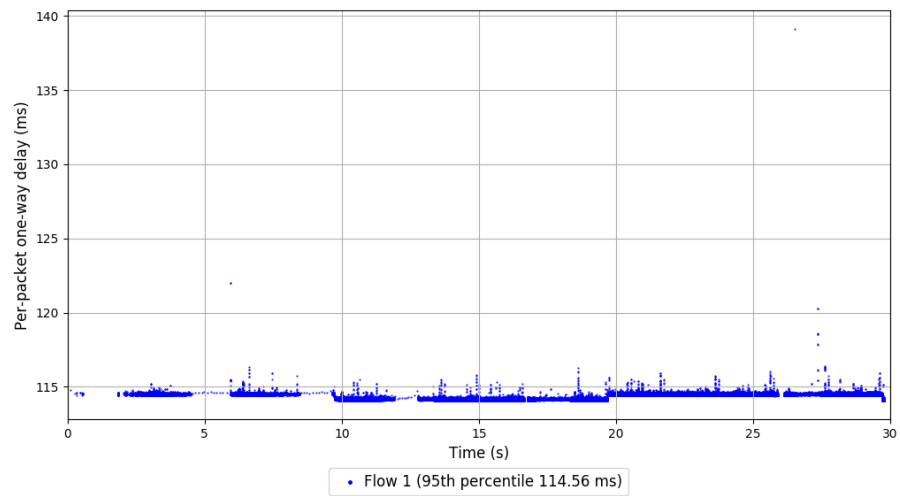
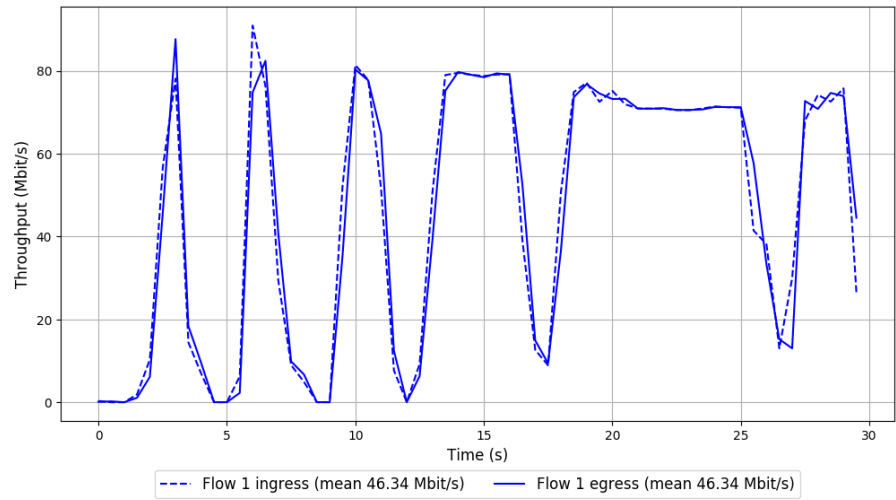
-- Flow 1:

Average throughput: 46.34 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-12 23:33:17

End at: 2018-02-12 23:33:47

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.39 Mbit/s

95th percentile per-packet one-way delay: 114.787 ms

Loss rate: 0.15%

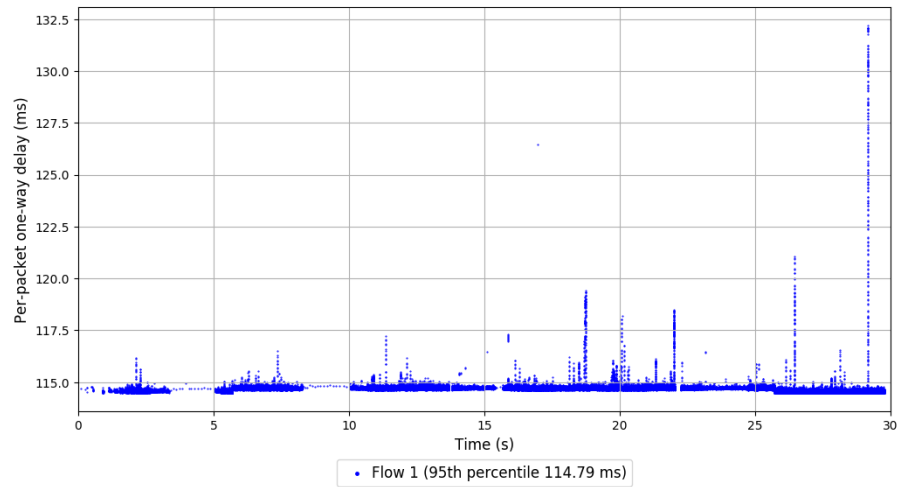
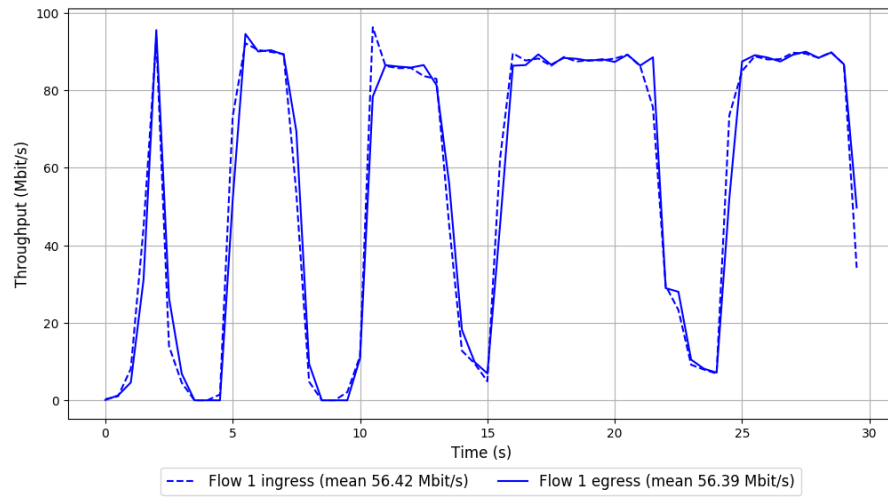
-- Flow 1:

Average throughput: 56.39 Mbit/s

95th percentile per-packet one-way delay: 114.787 ms

Loss rate: 0.15%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-12 23:48:12

End at: 2018-02-12 23:48:42

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.45 Mbit/s

95th percentile per-packet one-way delay: 114.497 ms

Loss rate: 0.14%

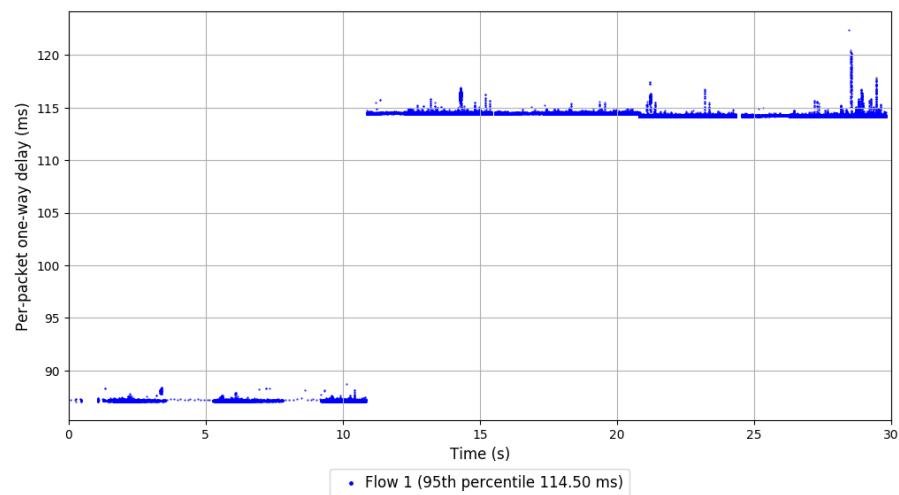
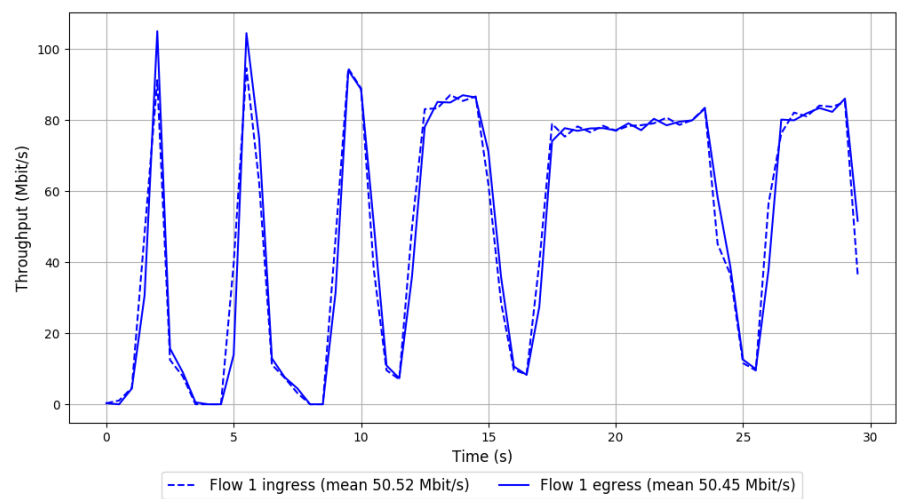
-- Flow 1:

Average throughput: 50.45 Mbit/s

95th percentile per-packet one-way delay: 114.497 ms

Loss rate: 0.14%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-13 00:03:17

End at: 2018-02-13 00:03:47

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.95 Mbit/s

95th percentile per-packet one-way delay: 114.268 ms

Loss rate: 0.00%

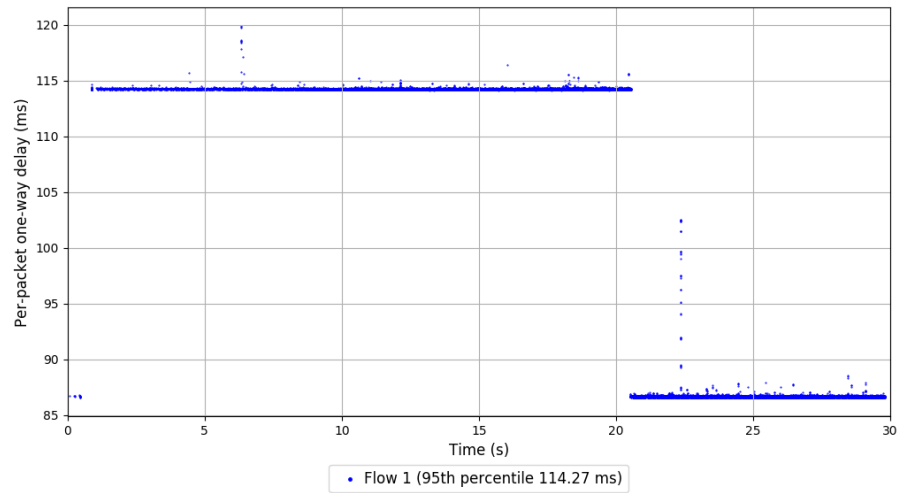
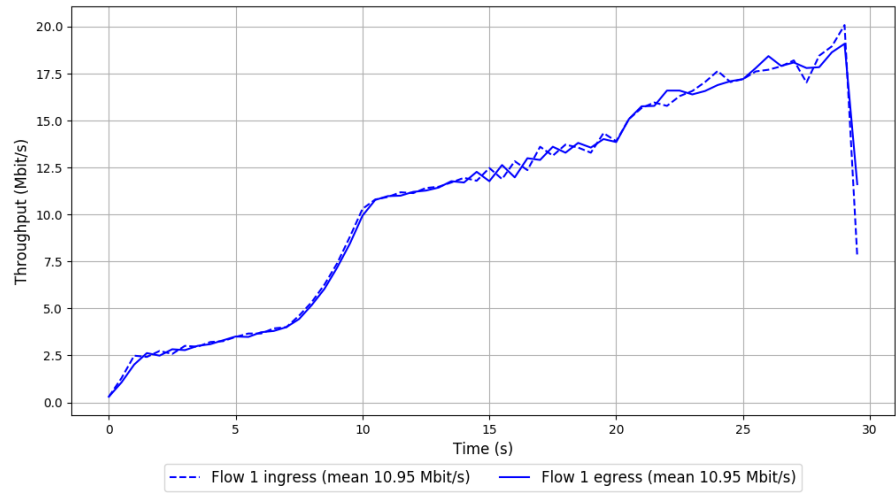
-- Flow 1:

Average throughput: 10.95 Mbit/s

95th percentile per-packet one-way delay: 114.268 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

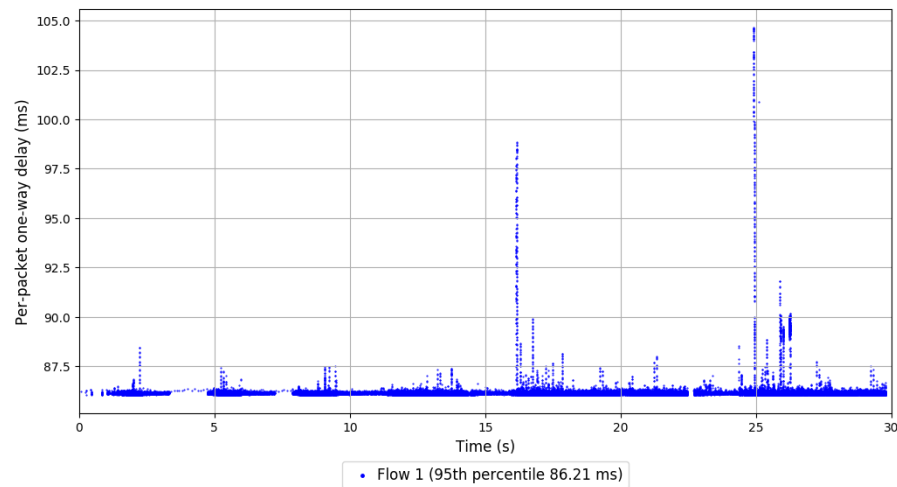
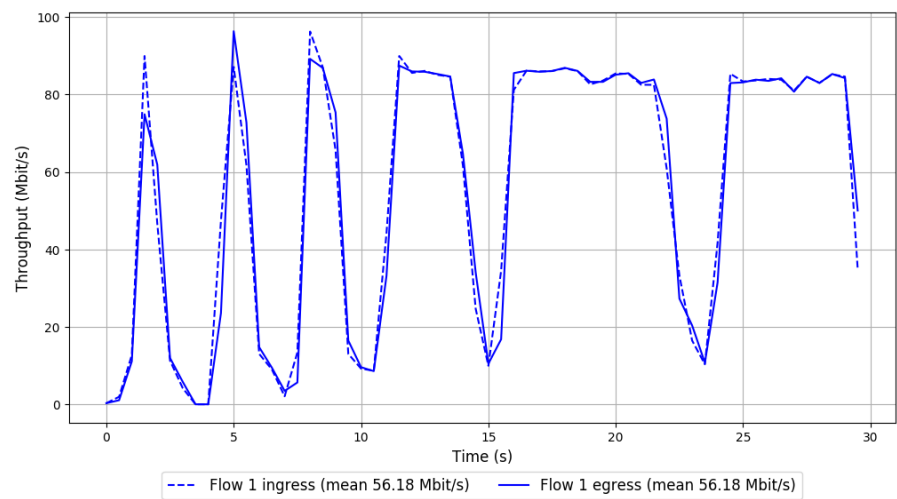


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-13 00:17:42
End at: 2018-02-13 00:18:12

# Below is generated by plot.py at 2018-02-13 02:00:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.18 Mbit/s
95th percentile per-packet one-way delay: 86.210 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.18 Mbit/s
95th percentile per-packet one-way delay: 86.210 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

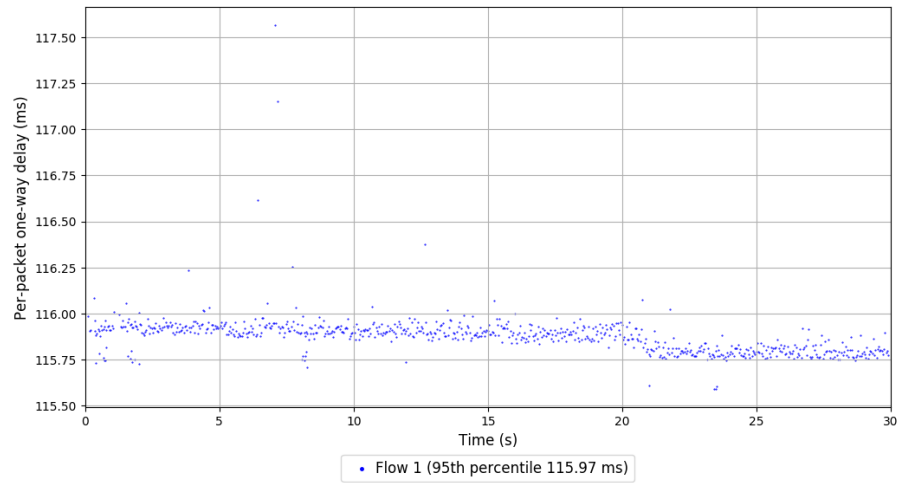
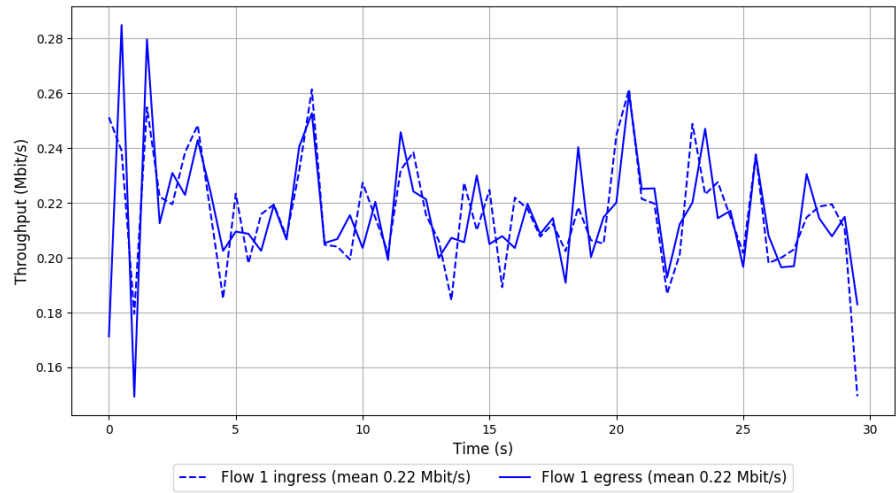


```
Run 1: Statistics of SCReAM

Start at: 2018-02-12 22:04:26
End at: 2018-02-12 22:04:56

# Below is generated by plot.py at 2018-02-13 02:00:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 115.971 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 115.971 ms
Loss rate: 0.12%
```

Run 1: Report of SReAM — Data Link

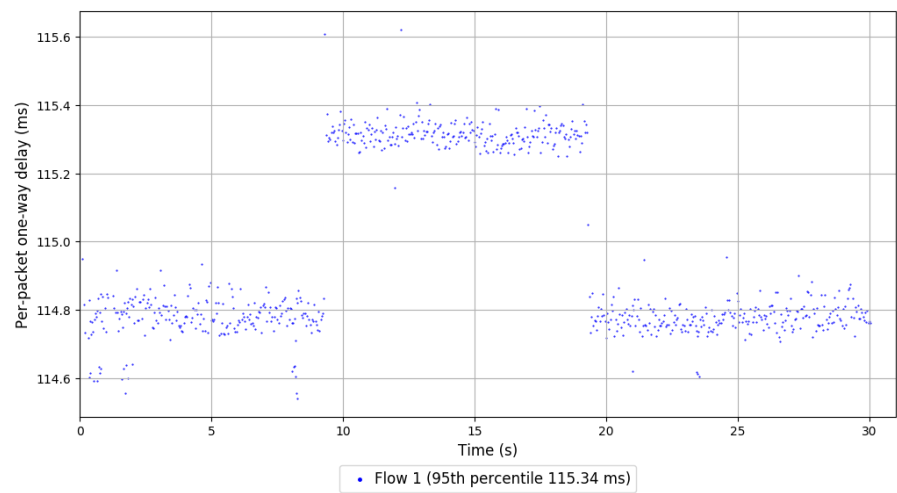
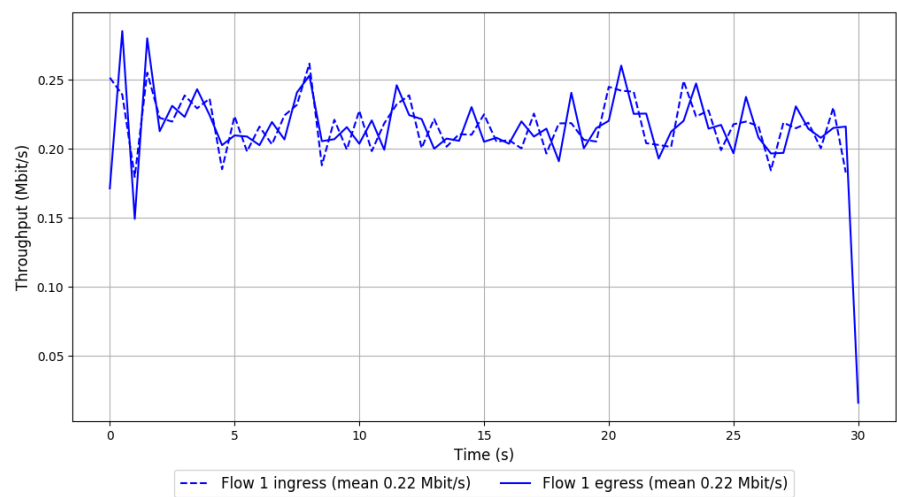


```
Run 2: Statistics of SCReAM

Start at: 2018-02-12 22:19:18
End at: 2018-02-12 22:19:48

# Below is generated by plot.py at 2018-02-13 02:00:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 115.345 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 115.345 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-12 22:34:32

End at: 2018-02-12 22:35:02

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.933 ms

Loss rate: 0.00%

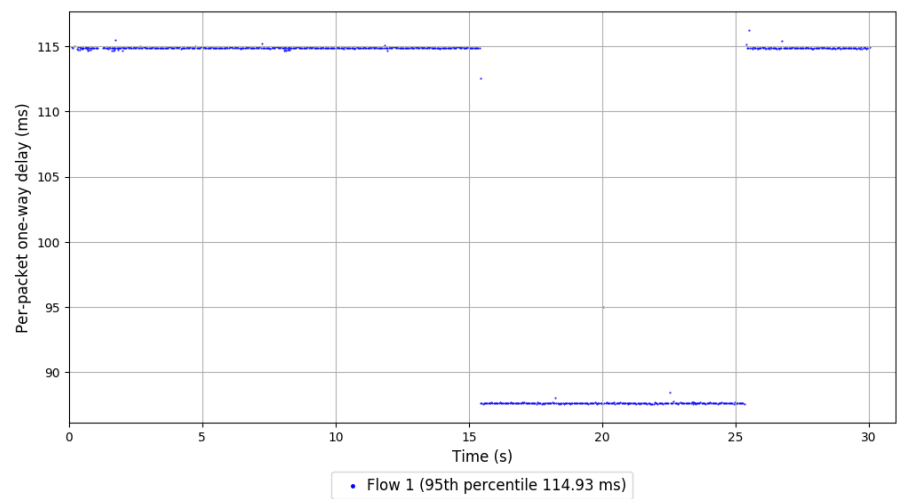
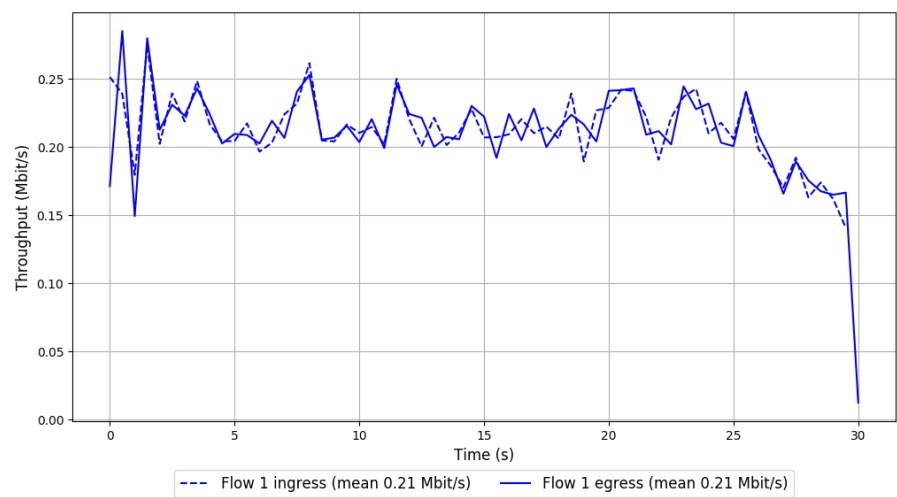
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.933 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-02-12 22:49:34

End at: 2018-02-12 22:50:04

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.631 ms

Loss rate: 0.00%

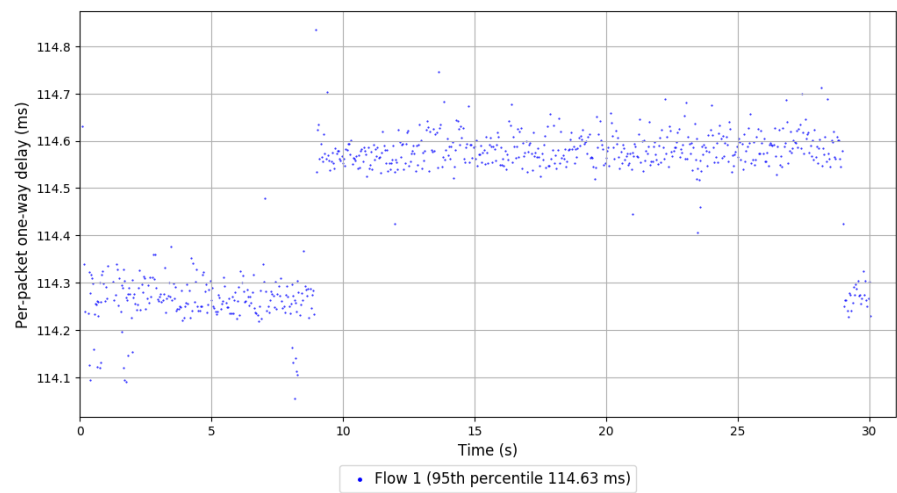
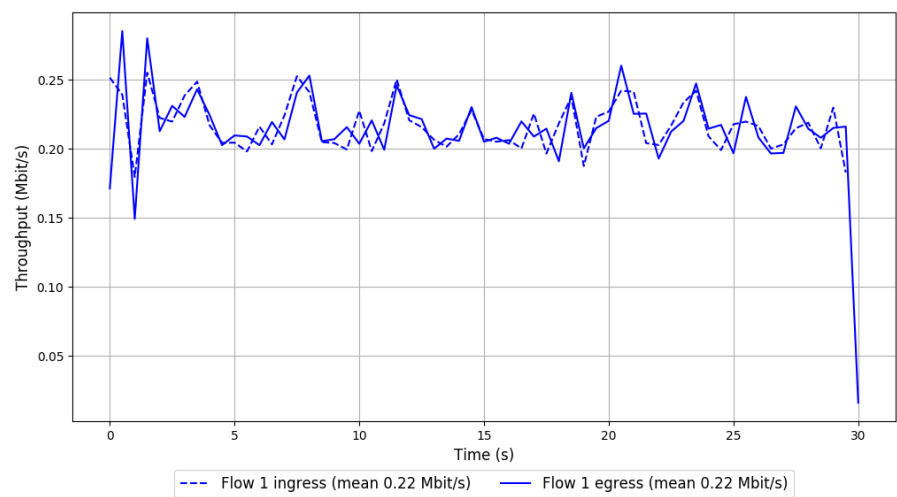
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.631 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-12 23:04:46

End at: 2018-02-12 23:05:16

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.909 ms

Loss rate: 0.00%

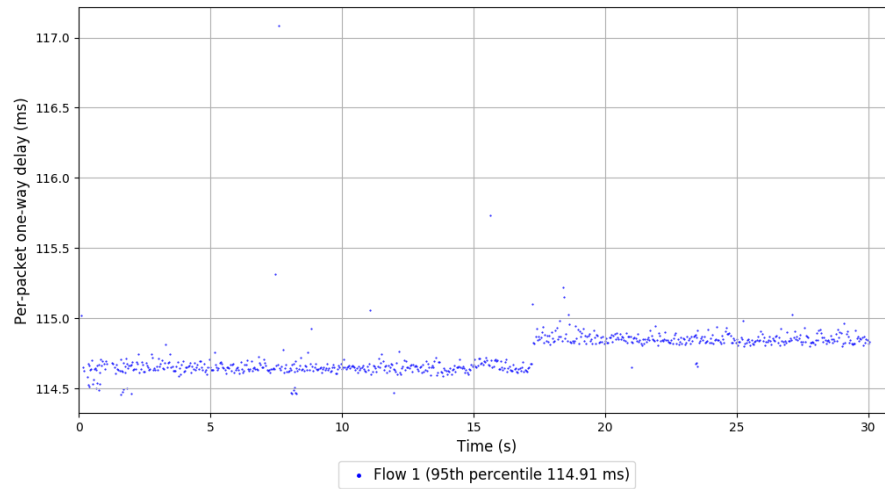
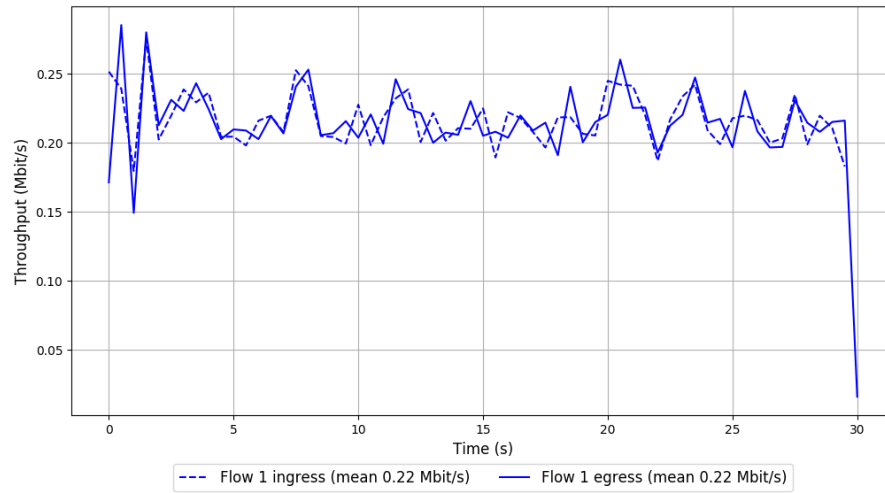
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.909 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-12 23:19:45

End at: 2018-02-12 23:20:15

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.739 ms

Loss rate: 0.00%

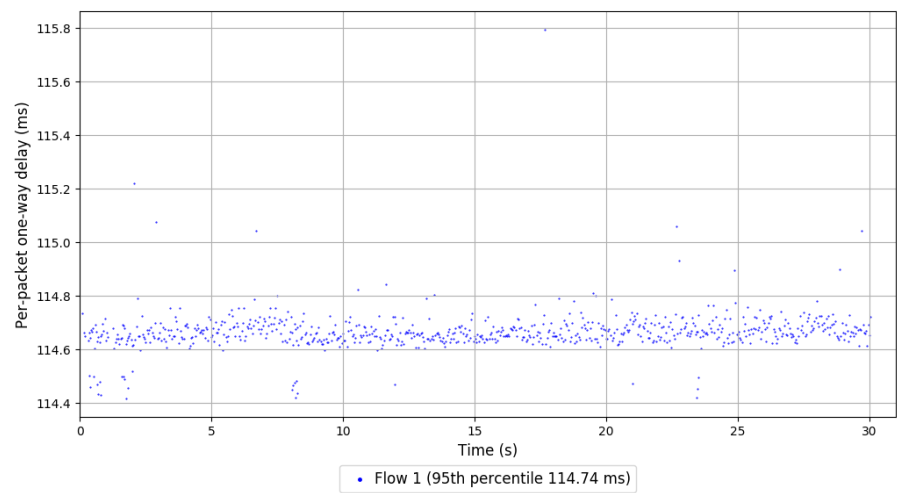
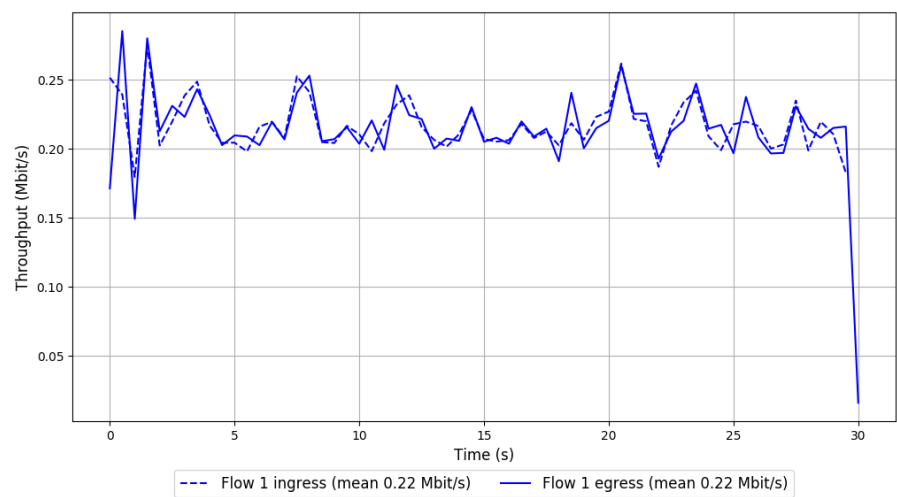
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.739 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-02-12 23:34:39

End at: 2018-02-12 23:35:10

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 114.765 ms

Loss rate: 0.11%

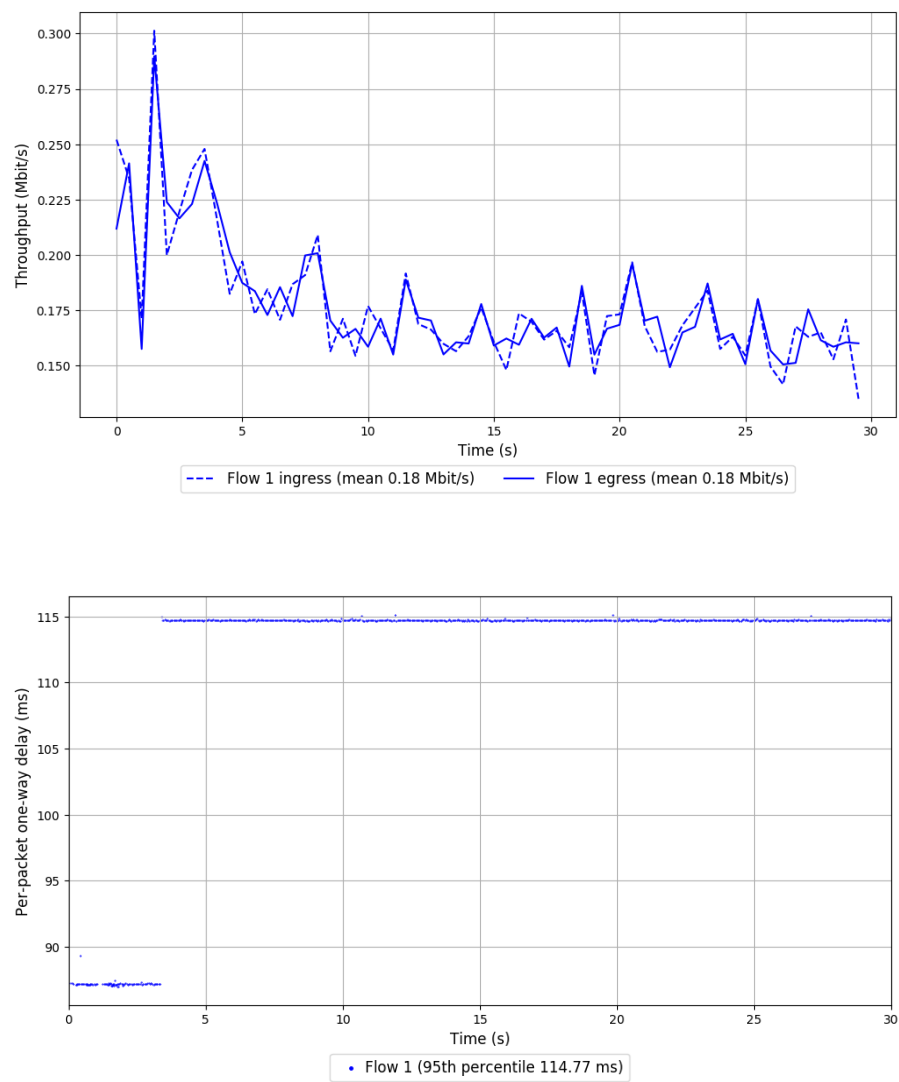
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 114.765 ms

Loss rate: 0.11%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-12 23:49:36

End at: 2018-02-12 23:50:06

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.321 ms

Loss rate: 0.00%

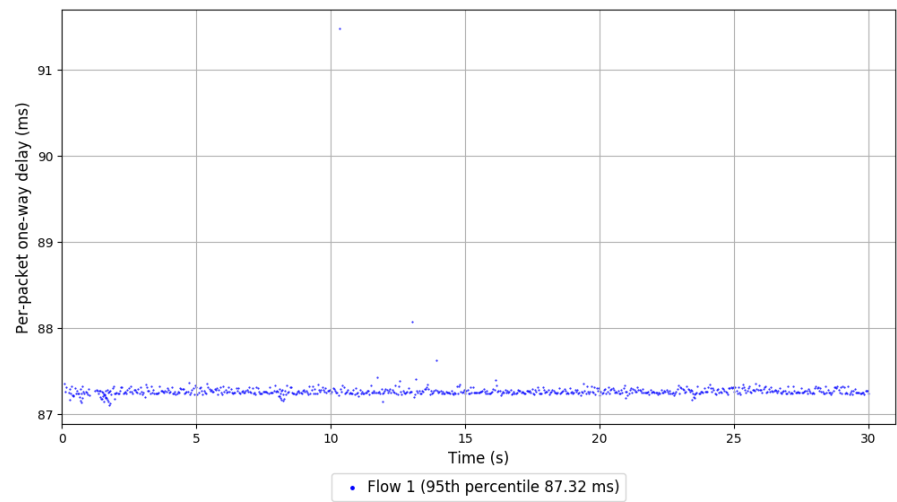
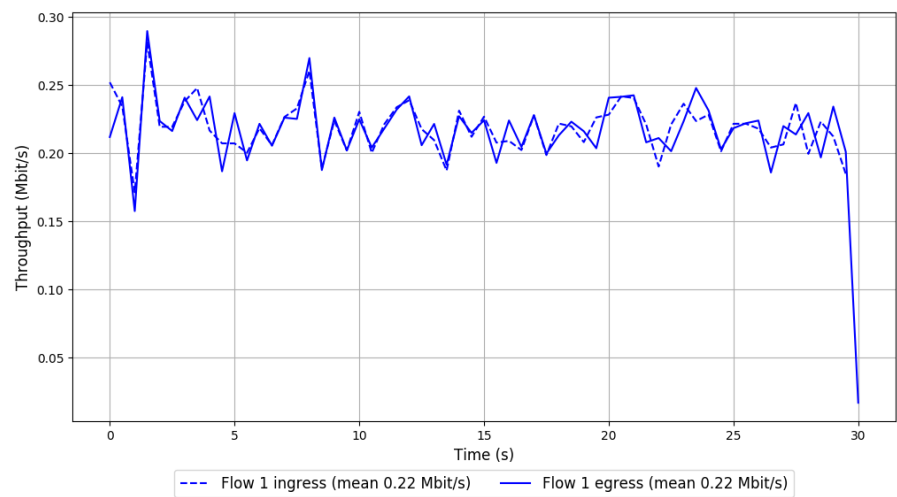
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.321 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-13 00:04:38

End at: 2018-02-13 00:05:08

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.886 ms

Loss rate: 0.00%

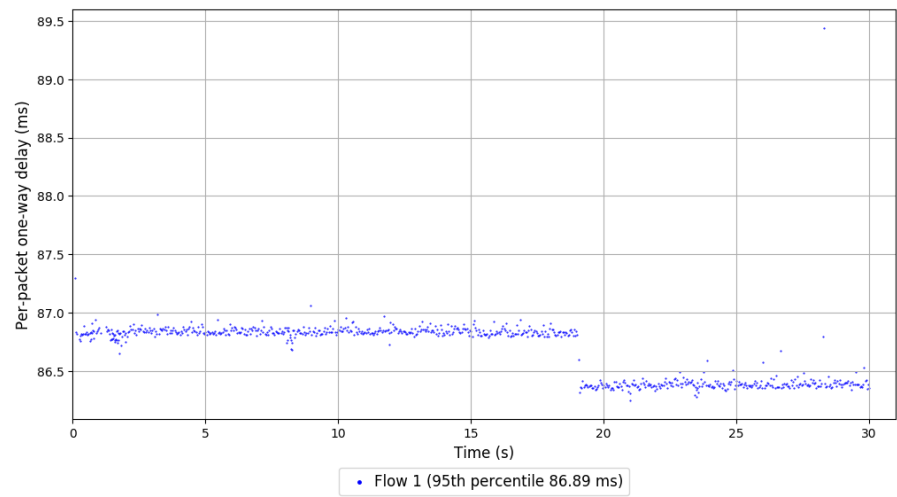
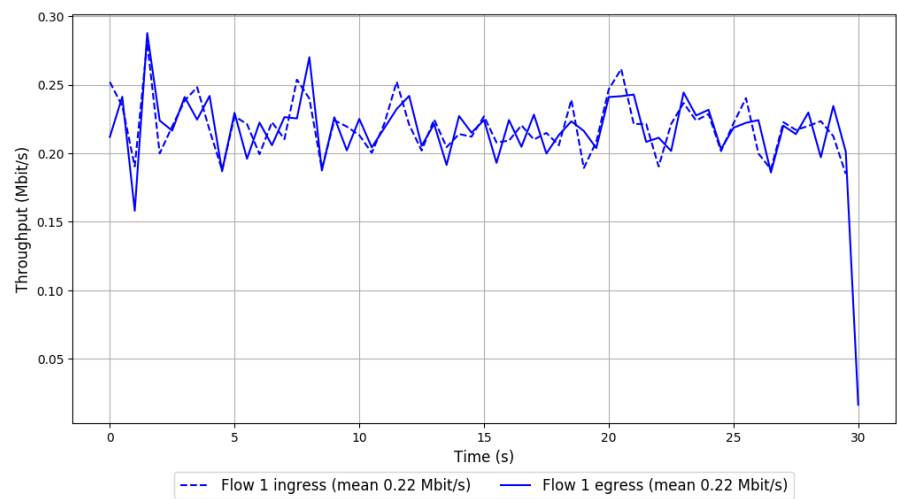
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.886 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

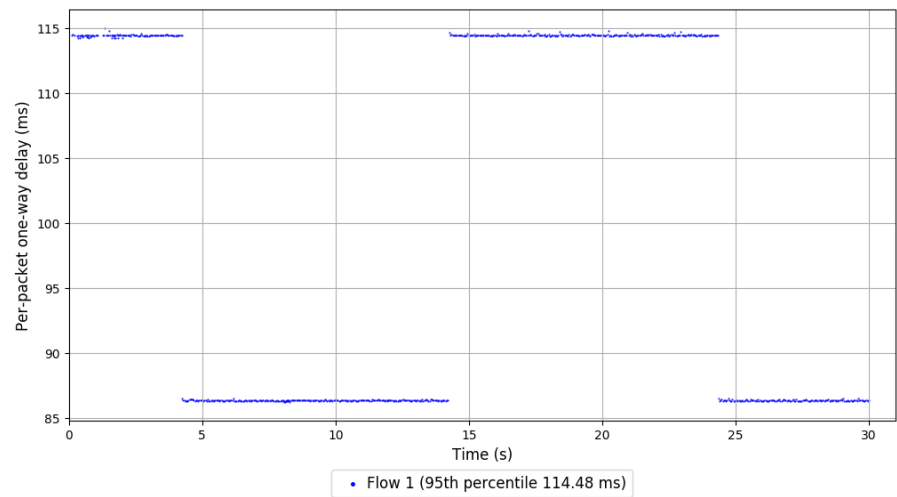
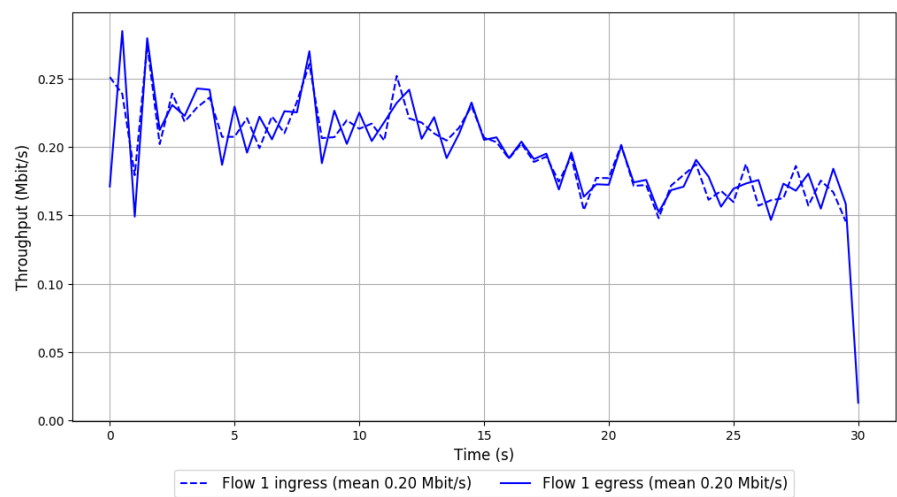


```
Run 10: Statistics of SReAM

Start at: 2018-02-13 00:19:09
End at: 2018-02-13 00:19:39

# Below is generated by plot.py at 2018-02-13 02:00:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 114.483 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 114.483 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

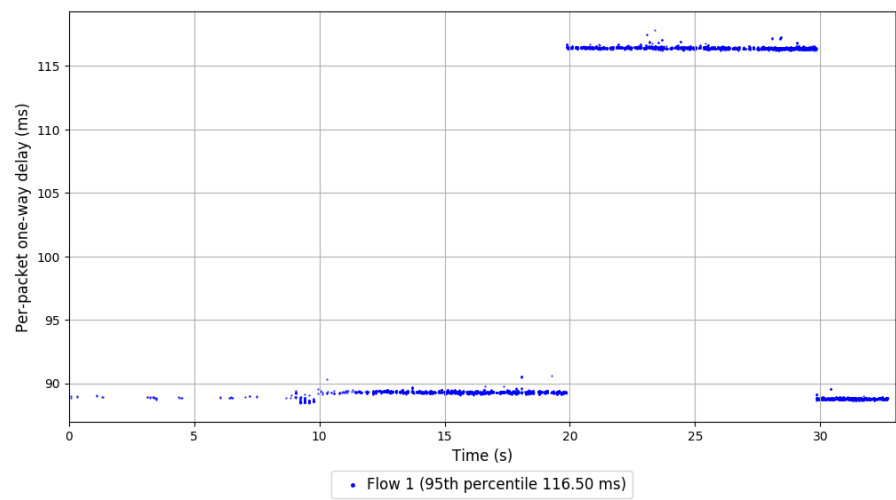
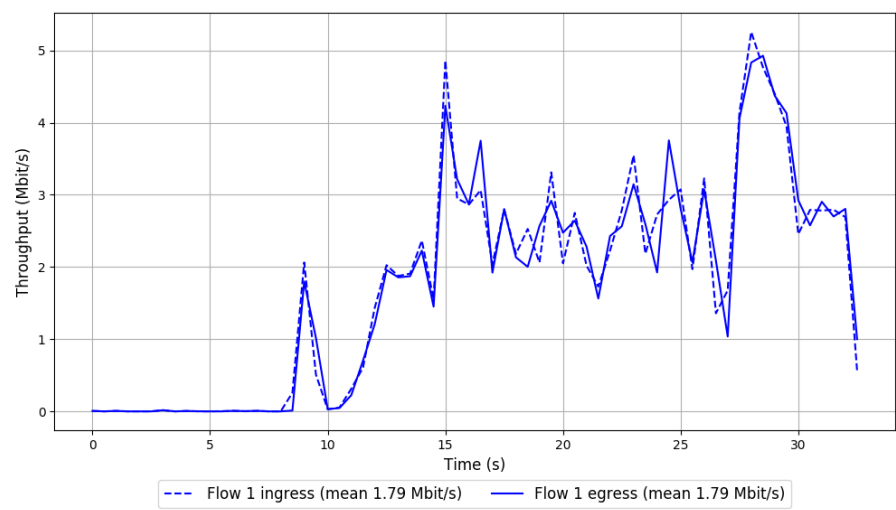


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-12 21:59:16
End at: 2018-02-12 21:59:46

# Below is generated by plot.py at 2018-02-13 02:00:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 116.499 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 116.499 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

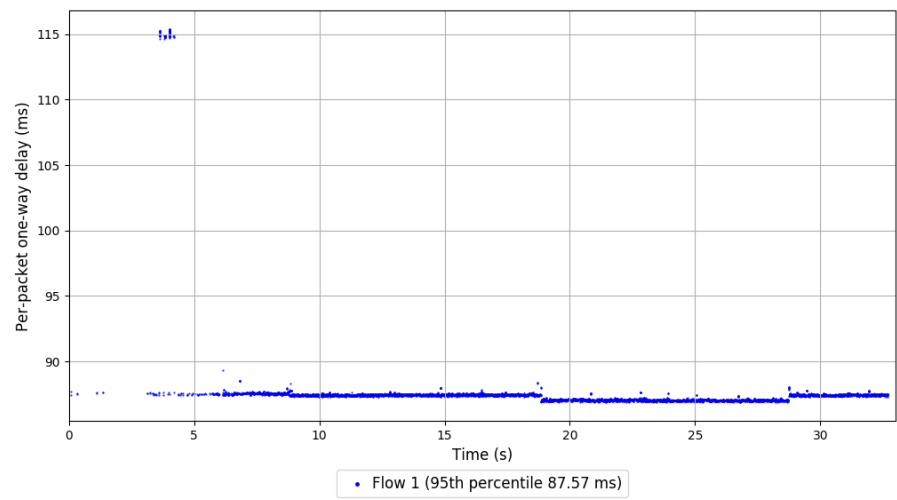
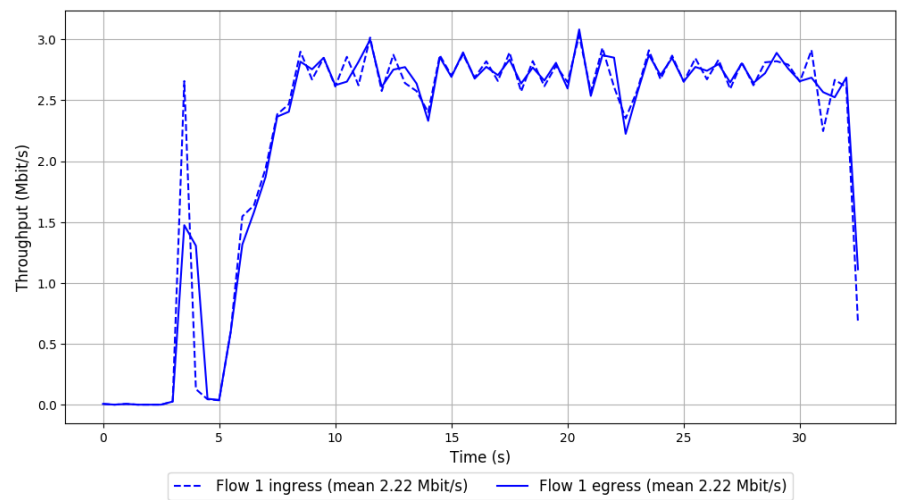


```
Run 2: Statistics of WebRTC media

Start at: 2018-02-12 22:14:11
End at: 2018-02-12 22:14:41

# Below is generated by plot.py at 2018-02-13 02:00:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 87.573 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 87.573 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-12 22:29:22

End at: 2018-02-12 22:29:52

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 115.342 ms

Loss rate: 0.00%

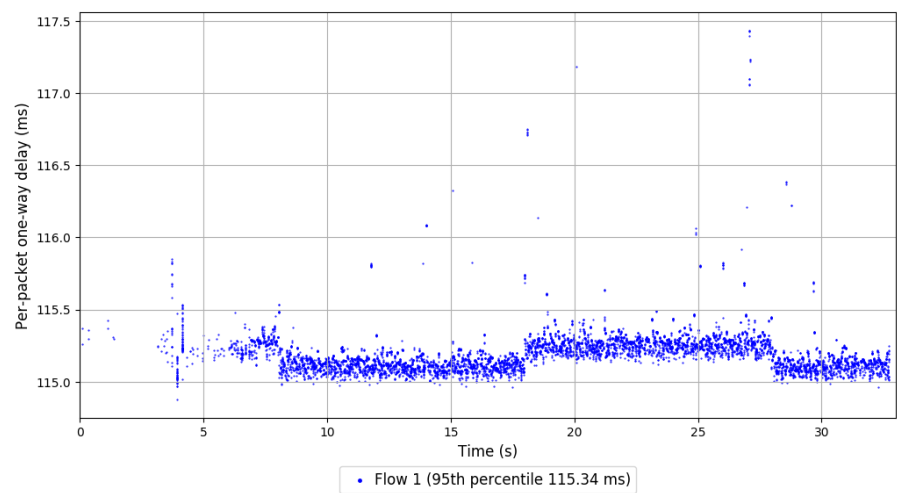
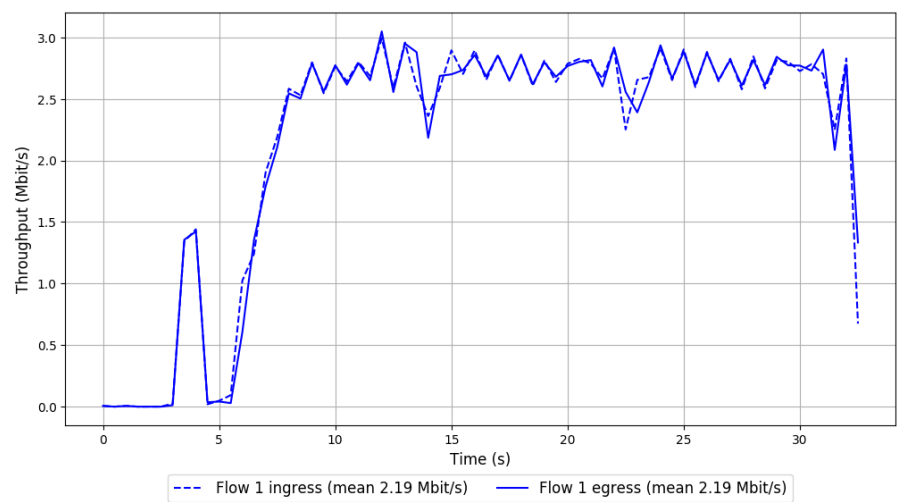
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 115.342 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-12 22:44:14

End at: 2018-02-12 22:44:44

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.795 ms

Loss rate: 0.00%

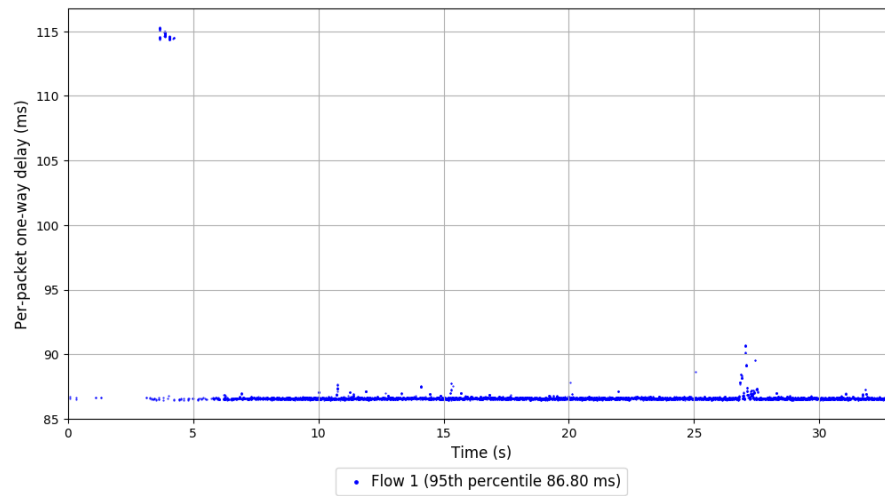
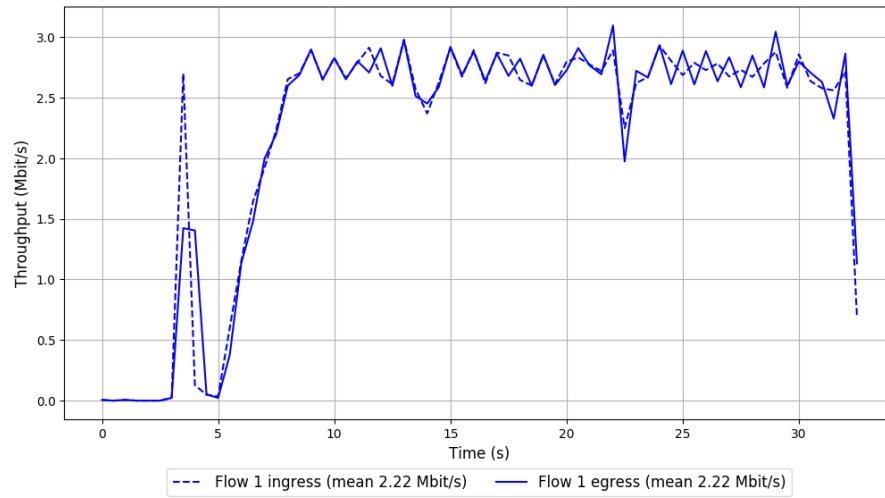
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.795 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-12 22:59:25

End at: 2018-02-12 22:59:55

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 114.669 ms

Loss rate: 0.00%

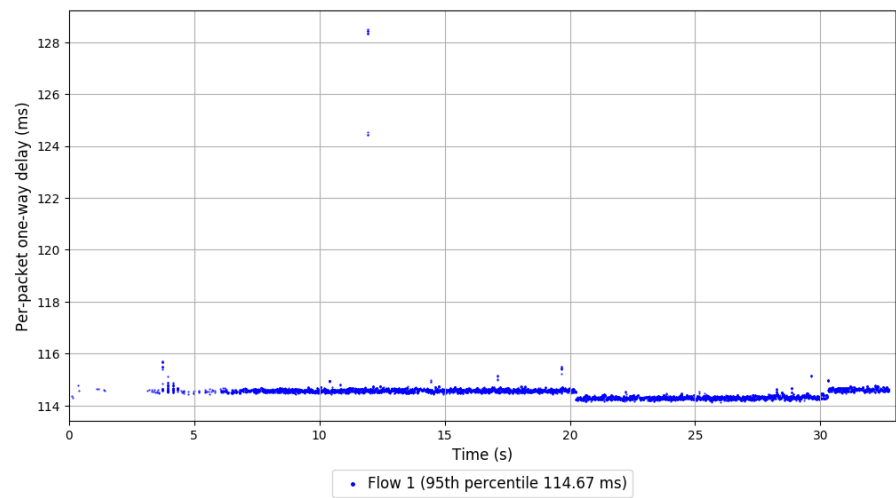
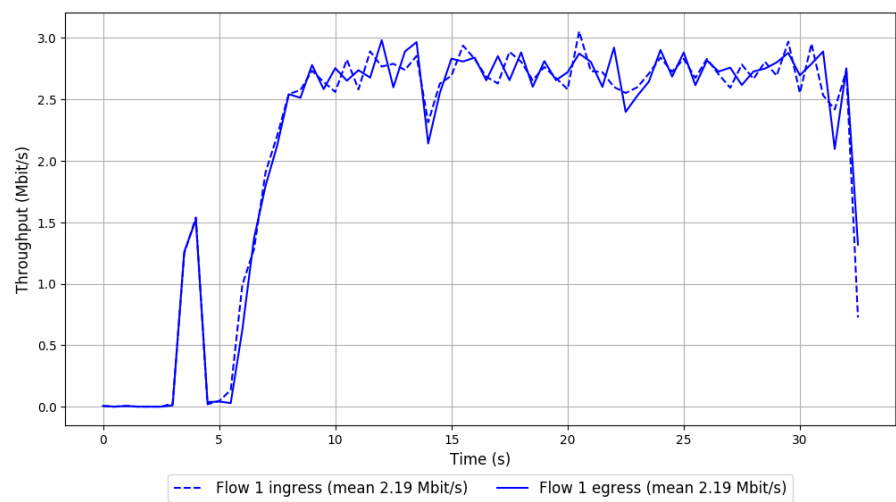
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 114.669 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-12 23:14:37

End at: 2018-02-12 23:15:07

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 115.134 ms

Loss rate: 0.00%

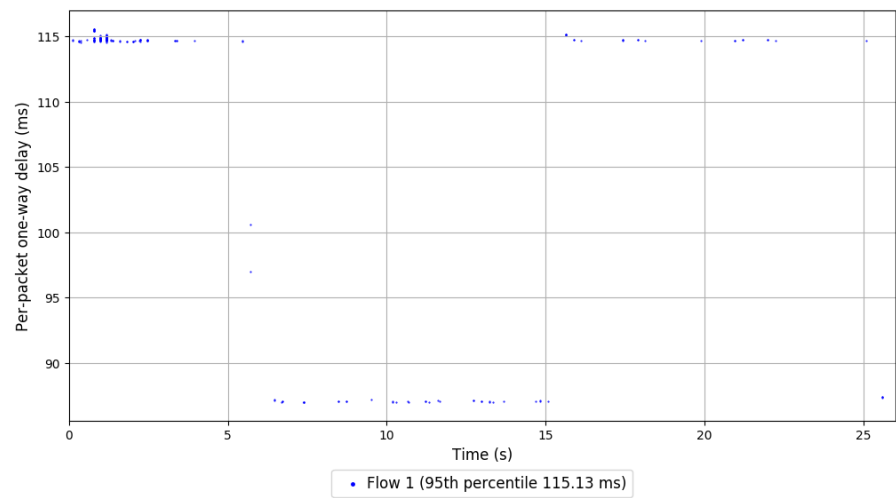
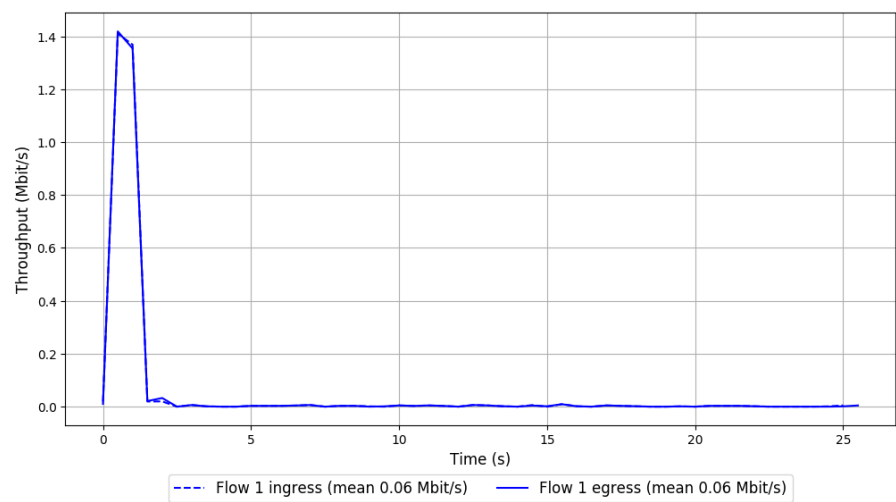
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 115.134 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-12 23:29:24

End at: 2018-02-12 23:29:54

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.747 ms

Loss rate: 0.00%

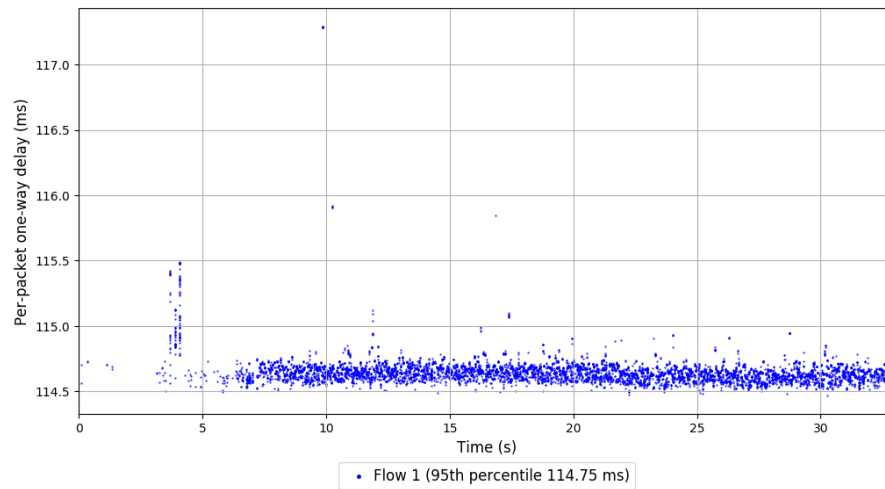
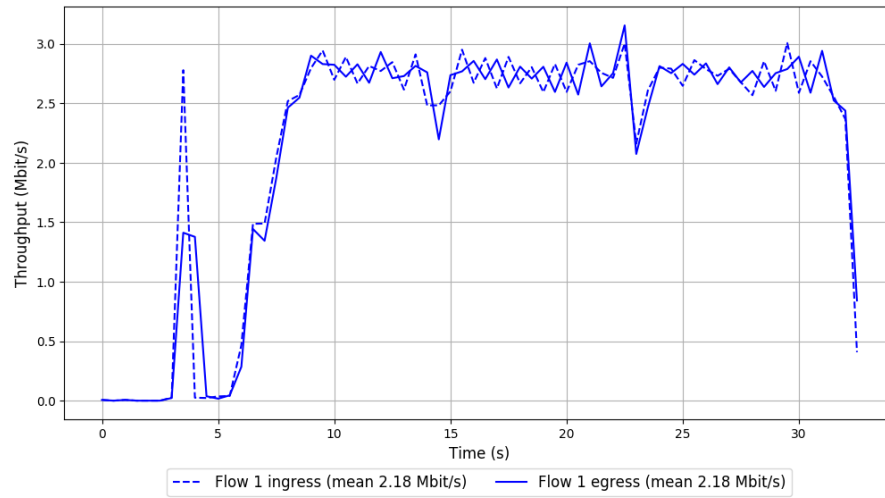
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.747 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-12 23:44:23

End at: 2018-02-12 23:44:53

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.955 ms

Loss rate: 0.00%

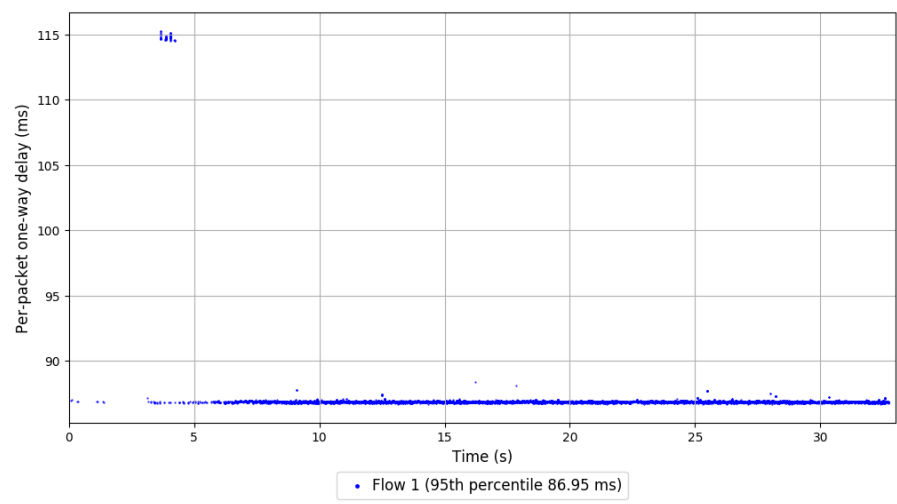
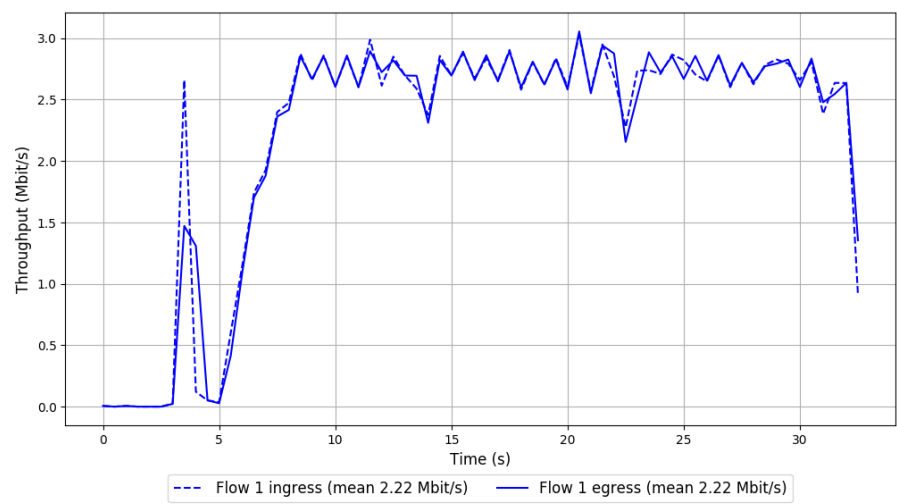
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.955 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-12 23:59:29

End at: 2018-02-12 23:59:59

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 114.323 ms

Loss rate: 0.00%

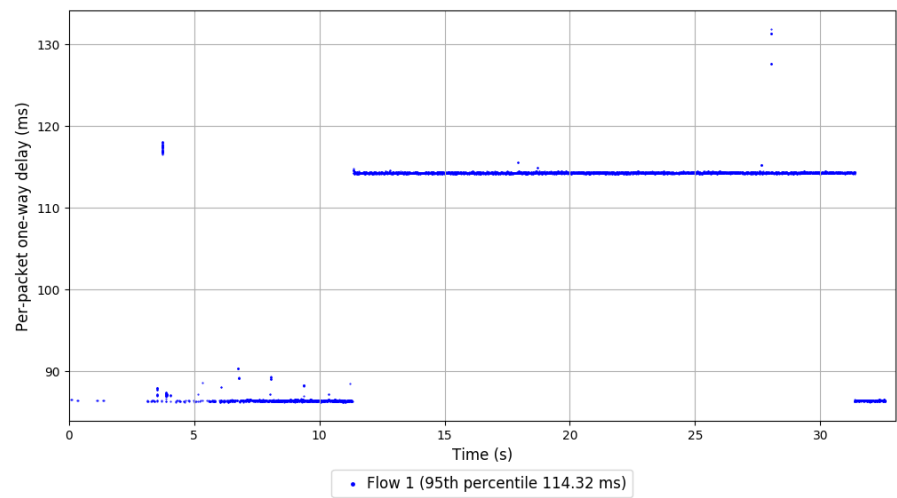
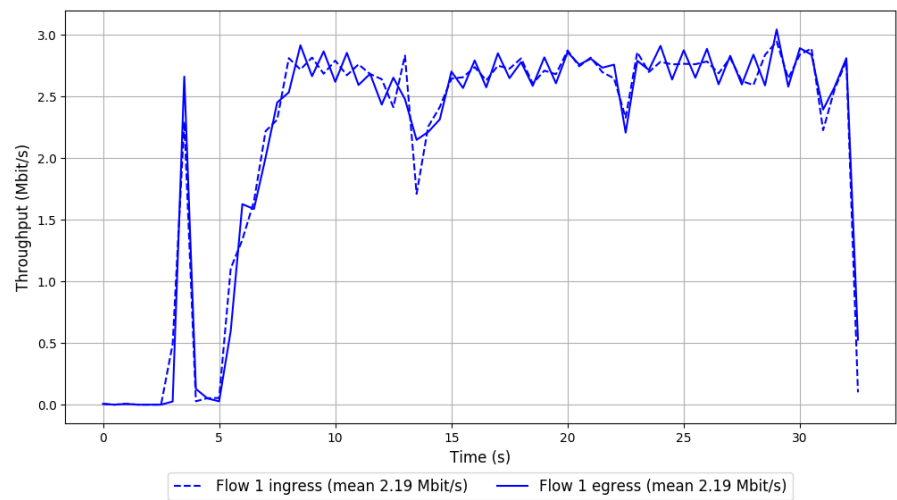
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 114.323 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-13 00:13:52

End at: 2018-02-13 00:14:22

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 114.516 ms

Loss rate: 0.00%

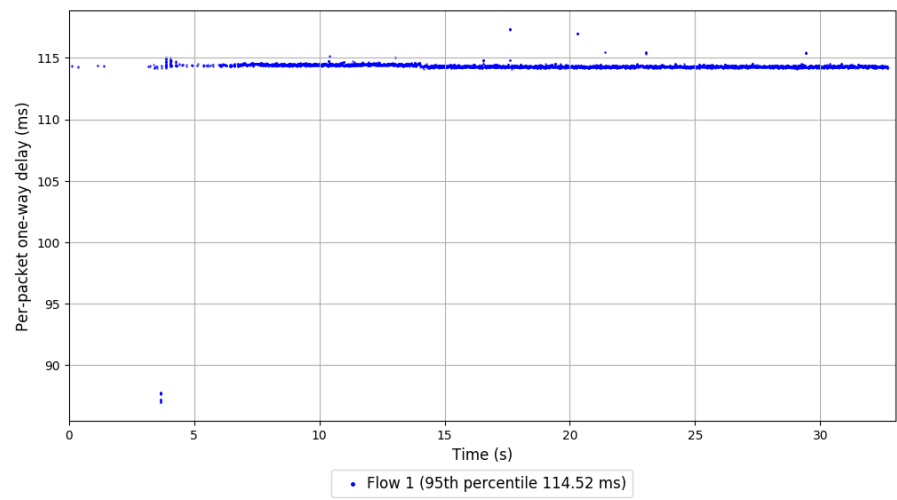
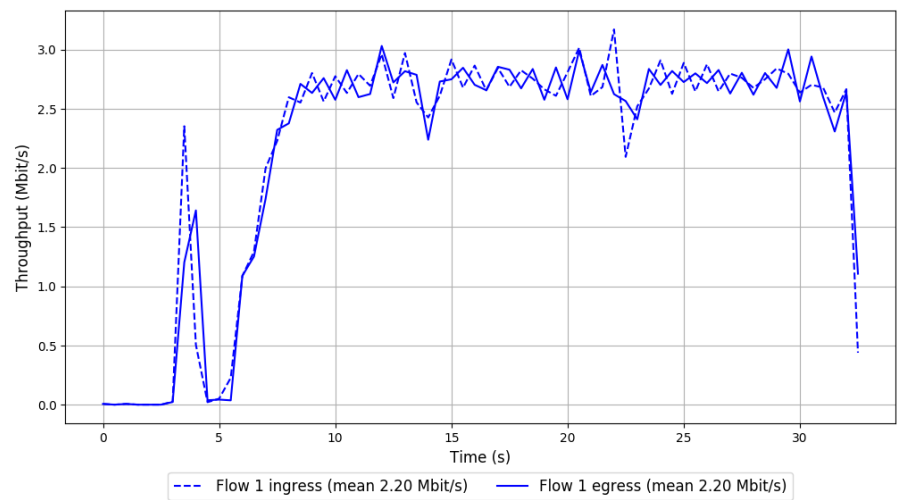
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 114.516 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

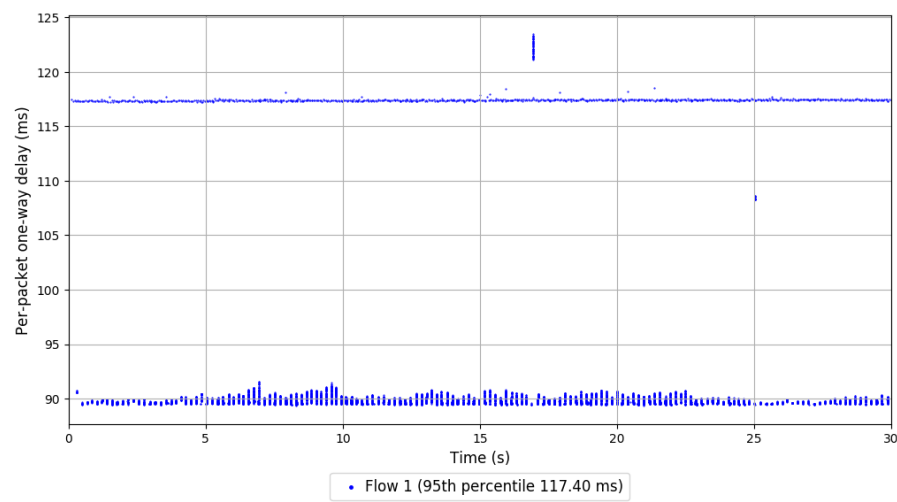
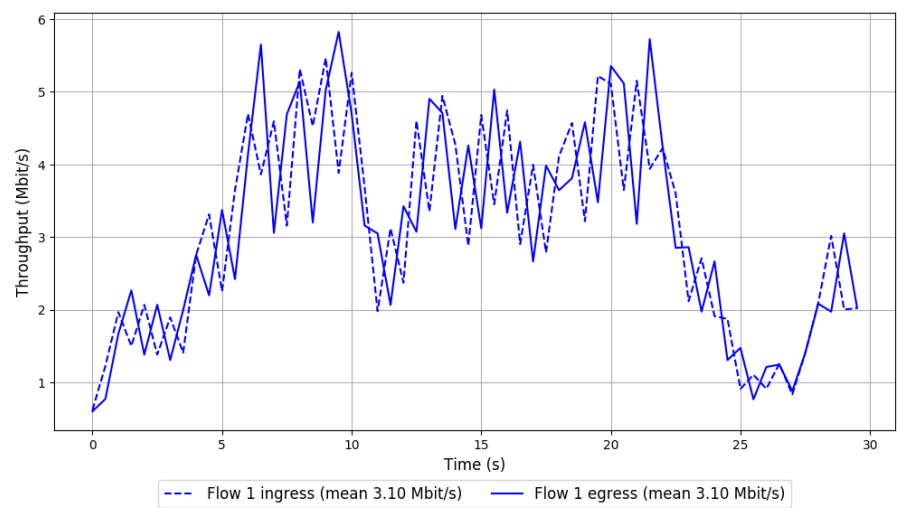


```
Run 1: Statistics of Sprout

Start at: 2018-02-12 21:54:02
End at: 2018-02-12 21:54:32

# Below is generated by plot.py at 2018-02-13 02:00:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 117.402 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 117.402 ms
Loss rate: 0.10%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-12 22:08:46

End at: 2018-02-12 22:09:16

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 116.141 ms

Loss rate: 1.66%

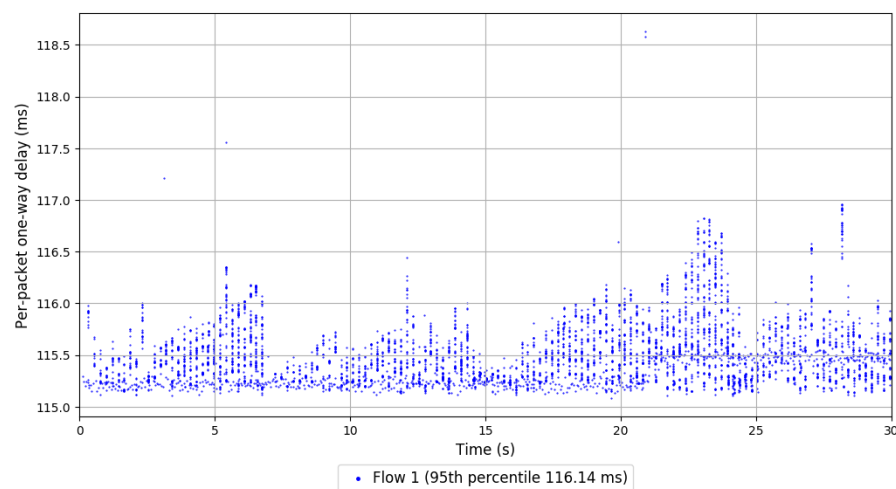
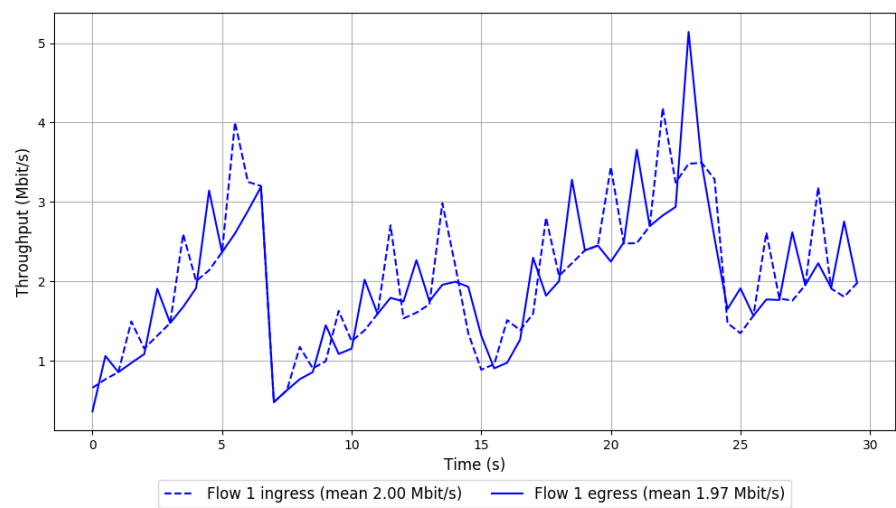
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 116.141 ms

Loss rate: 1.66%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-12 22:23:33

End at: 2018-02-12 22:24:03

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 116.280 ms

Loss rate: 0.02%

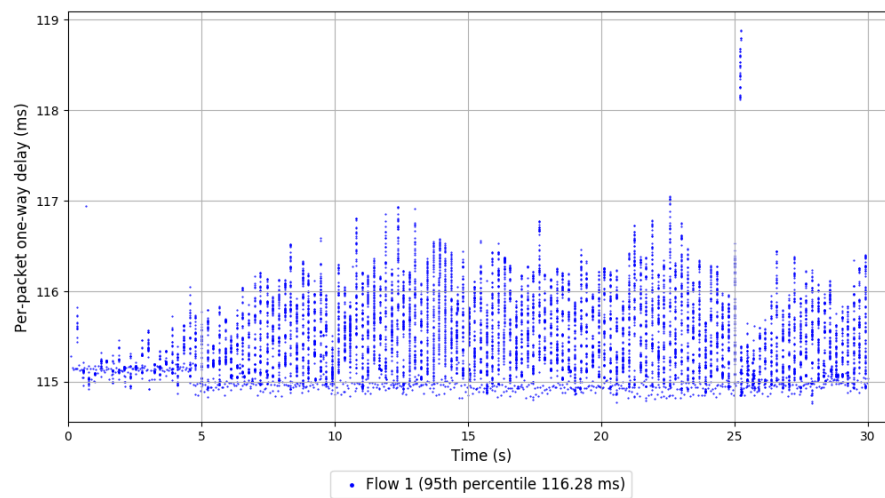
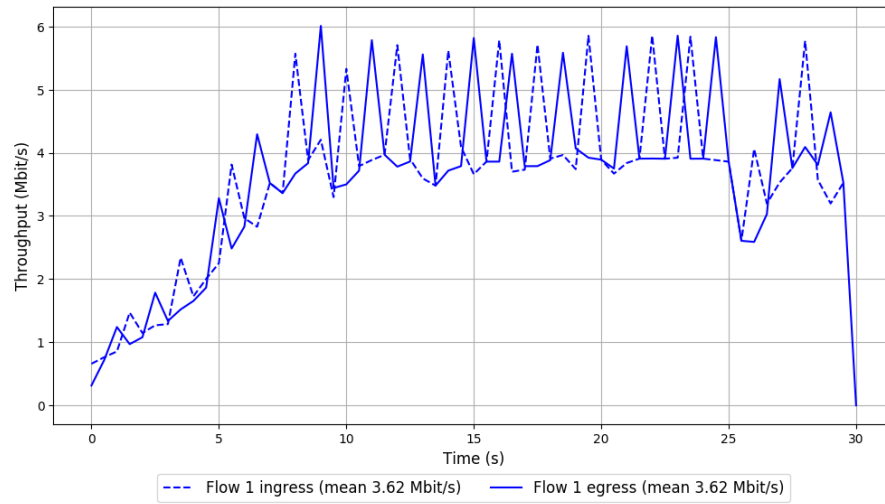
-- Flow 1:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 116.280 ms

Loss rate: 0.02%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-12 22:38:48

End at: 2018-02-12 22:39:18

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.35 Mbit/s

95th percentile per-packet one-way delay: 115.892 ms

Loss rate: 0.00%

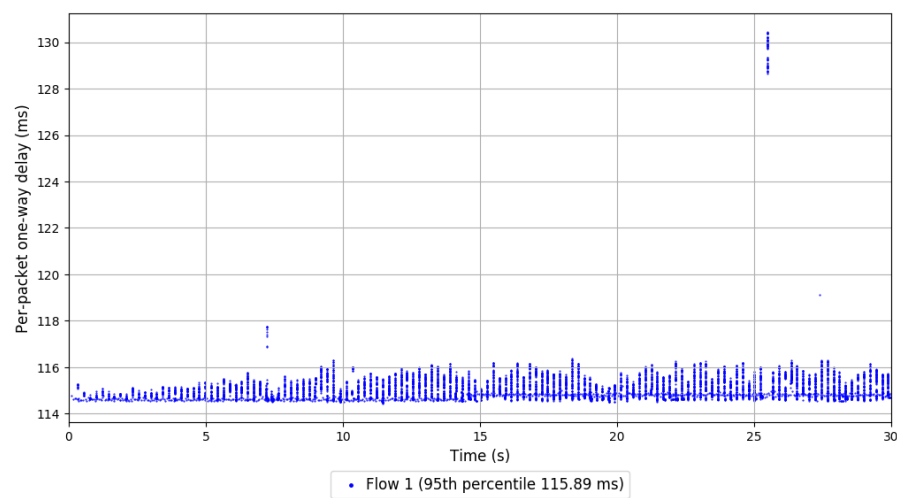
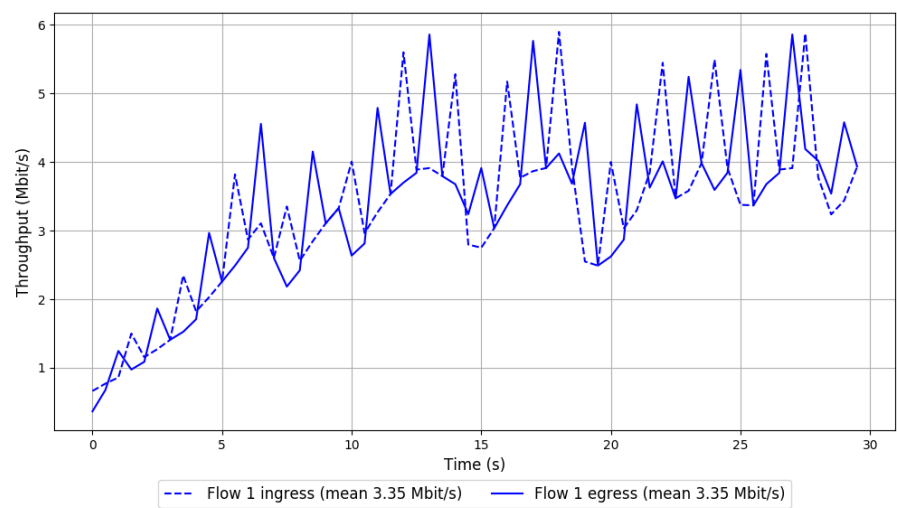
-- Flow 1:

Average throughput: 3.35 Mbit/s

95th percentile per-packet one-way delay: 115.892 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-12 22:53:53

End at: 2018-02-12 22:54:23

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 115.297 ms

Loss rate: 0.06%

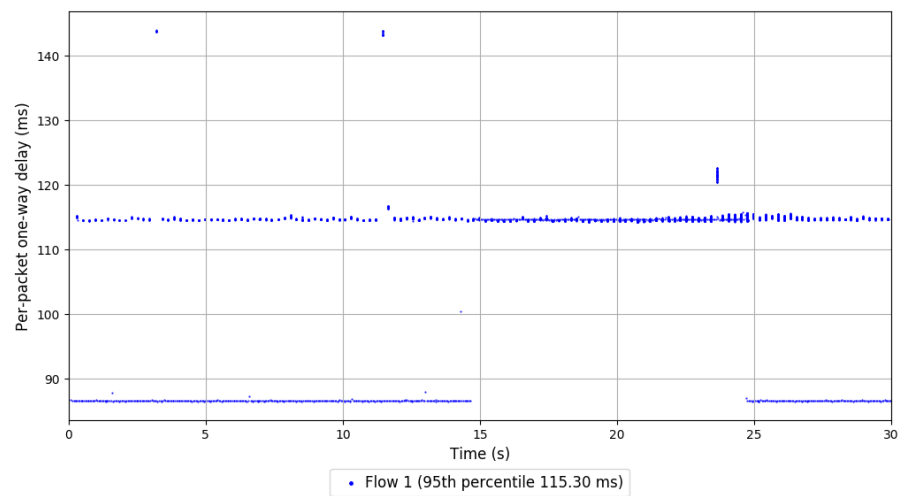
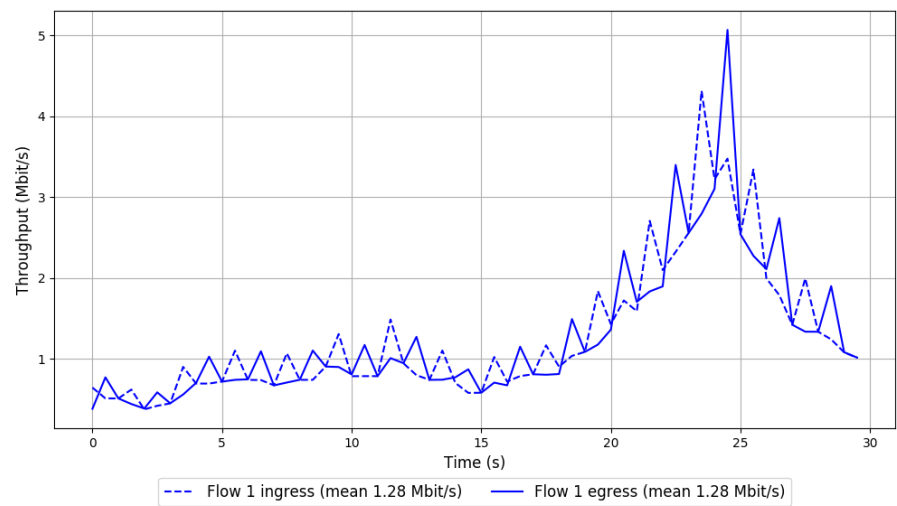
-- Flow 1:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 115.297 ms

Loss rate: 0.06%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-12 23:08:54

End at: 2018-02-12 23:09:24

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 115.658 ms

Loss rate: 0.05%

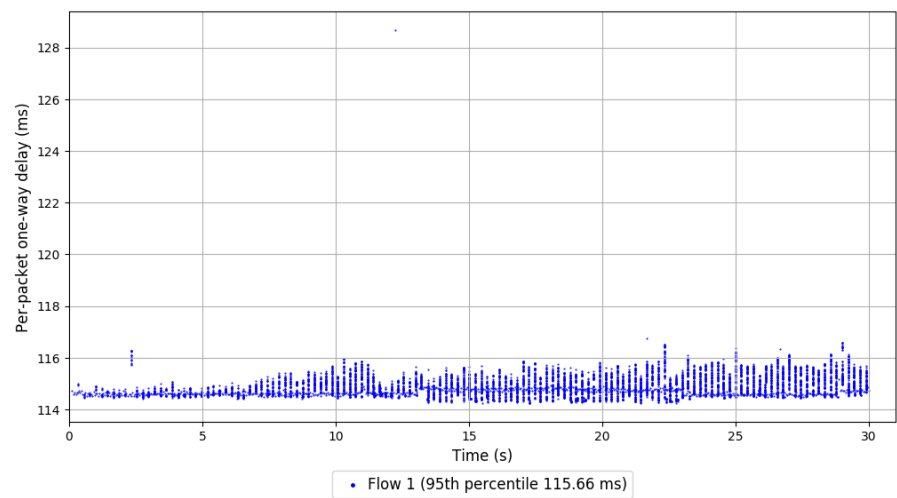
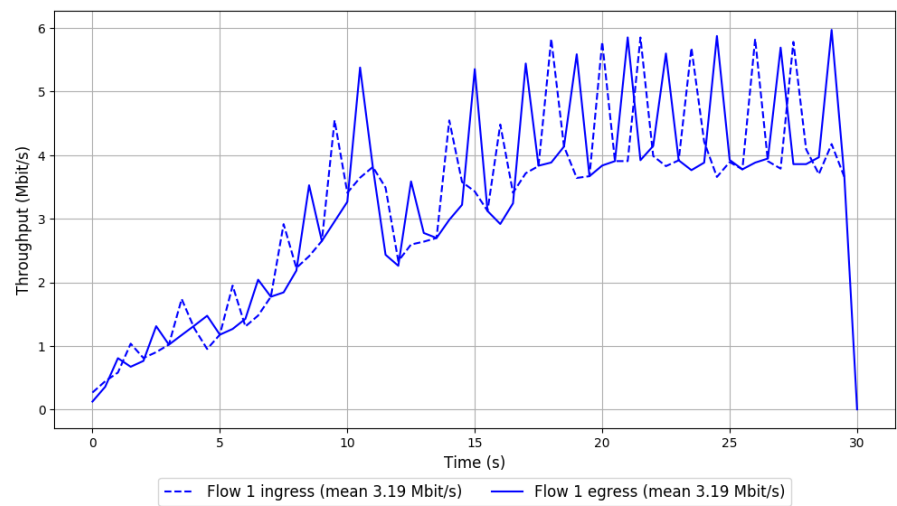
-- Flow 1:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 115.658 ms

Loss rate: 0.05%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-12 23:24:00

End at: 2018-02-12 23:24:30

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 116.088 ms

Loss rate: 0.12%

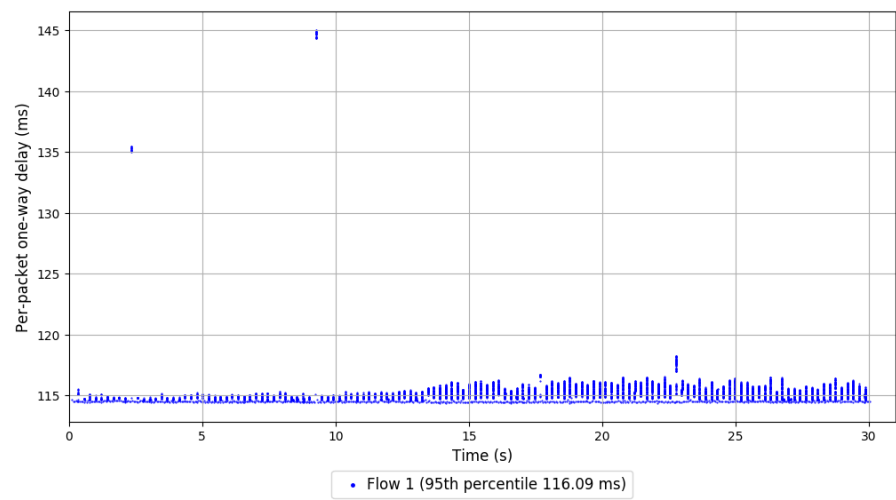
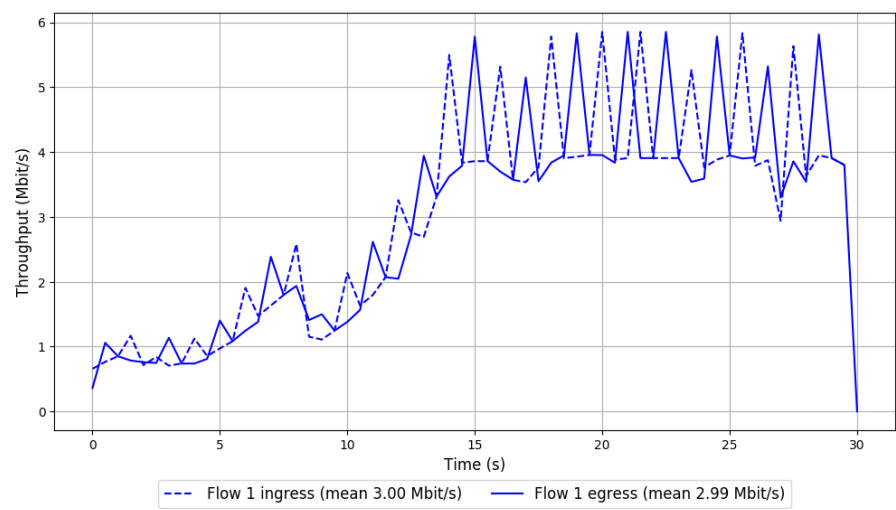
-- Flow 1:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 116.088 ms

Loss rate: 0.12%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-12 23:38:52

End at: 2018-02-12 23:39:22

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 115.688 ms

Loss rate: 1.89%

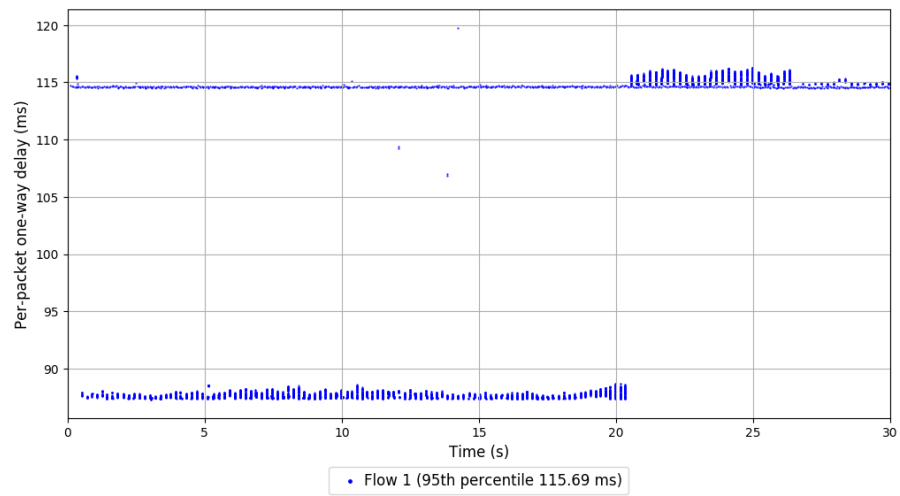
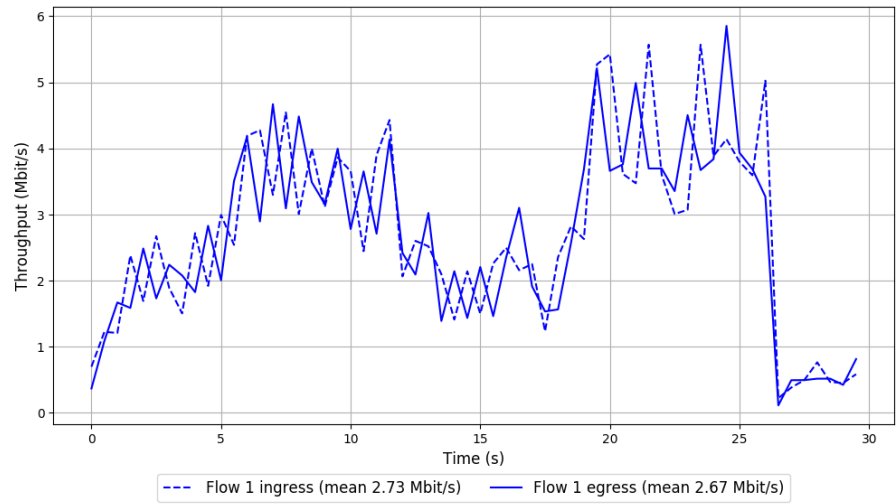
-- Flow 1:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 115.688 ms

Loss rate: 1.89%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-12 23:53:49

End at: 2018-02-12 23:54:19

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 115.181 ms

Loss rate: 1.87%

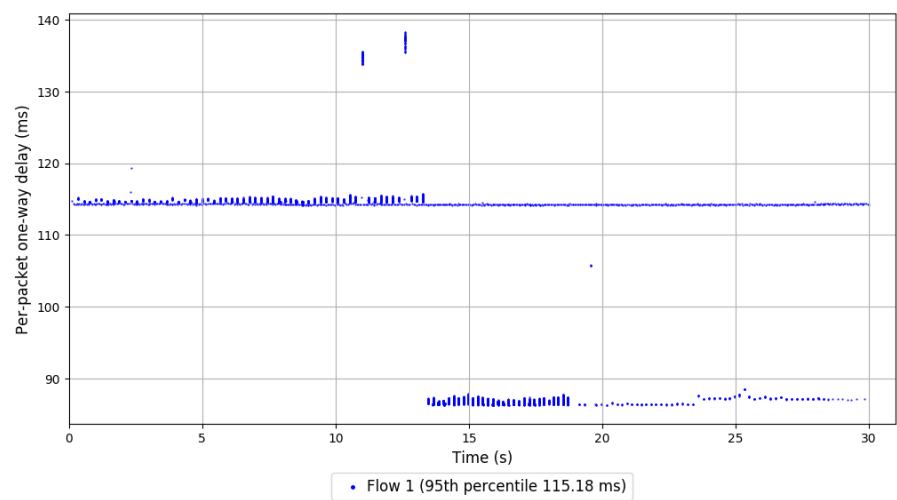
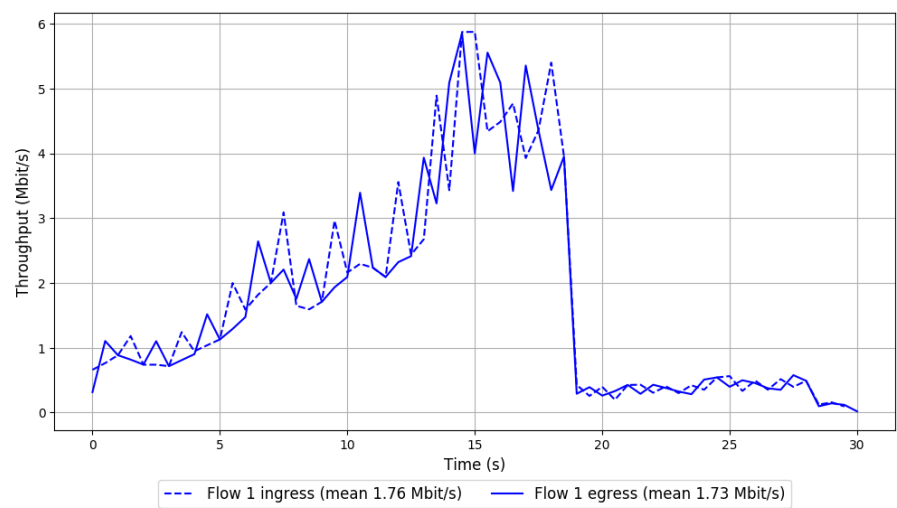
-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 115.181 ms

Loss rate: 1.87%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-13 00:08:46

End at: 2018-02-13 00:09:16

Below is generated by plot.py at 2018-02-13 02:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 114.795 ms

Loss rate: 0.05%

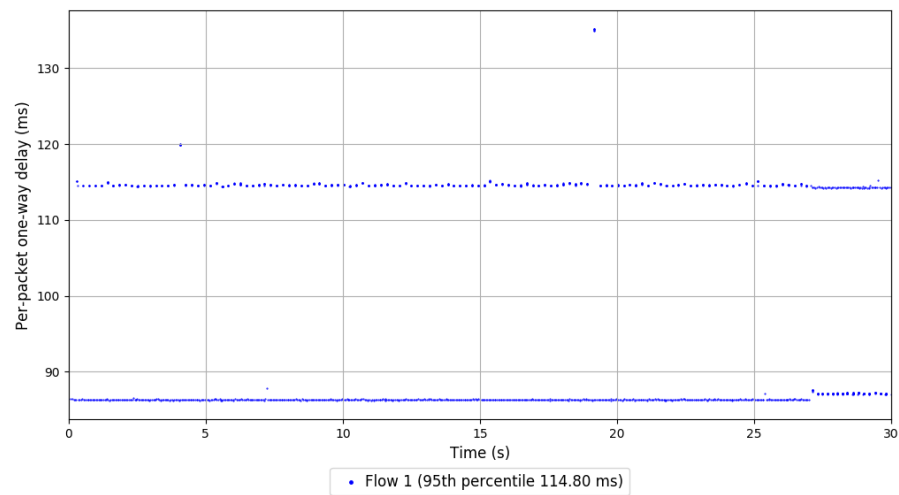
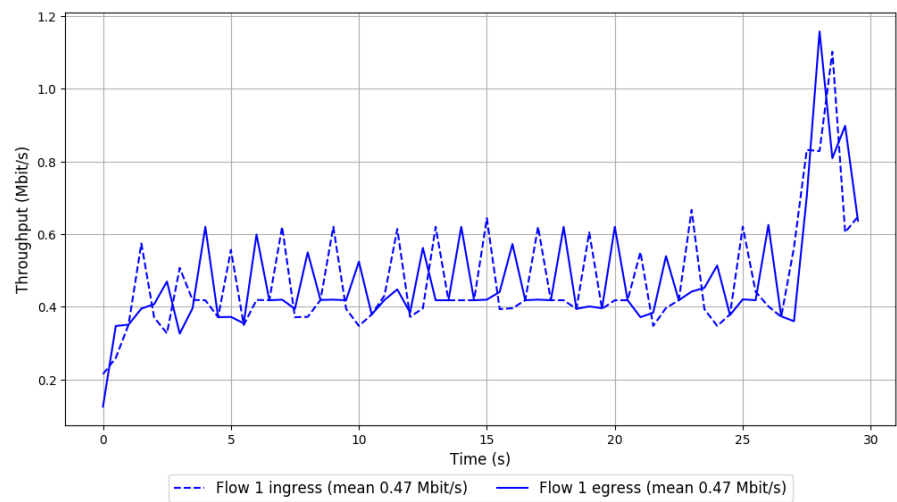
-- Flow 1:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 114.795 ms

Loss rate: 0.05%

Run 10: Report of Sprout — Data Link

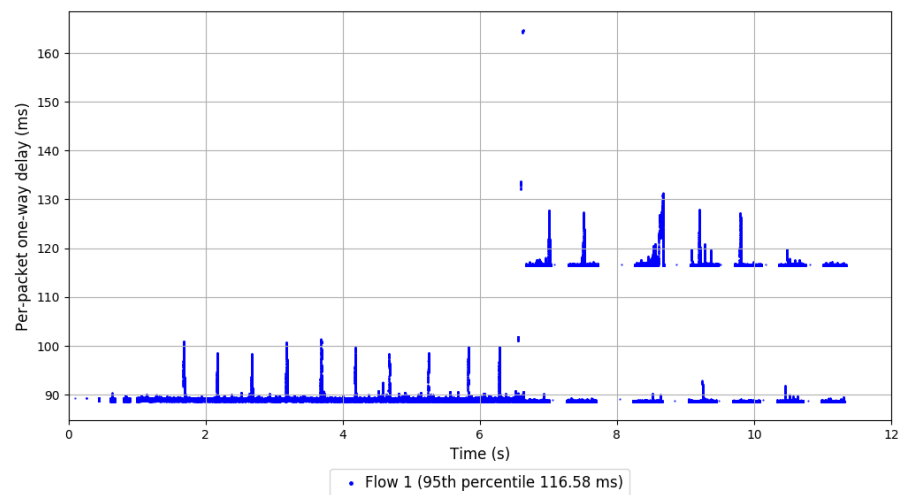
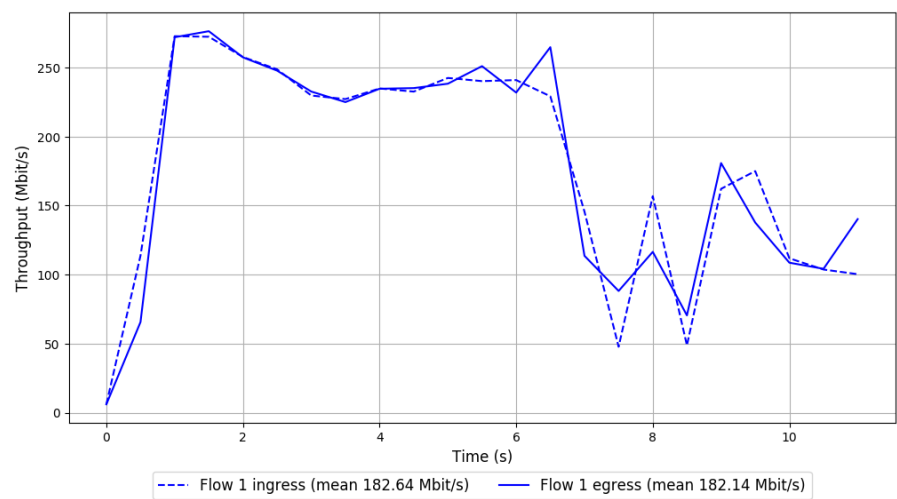


Run 1: Statistics of TaoVA-100x

Start at: 2018-02-12 21:58:31

End at: 2018-02-12 21:59:01

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

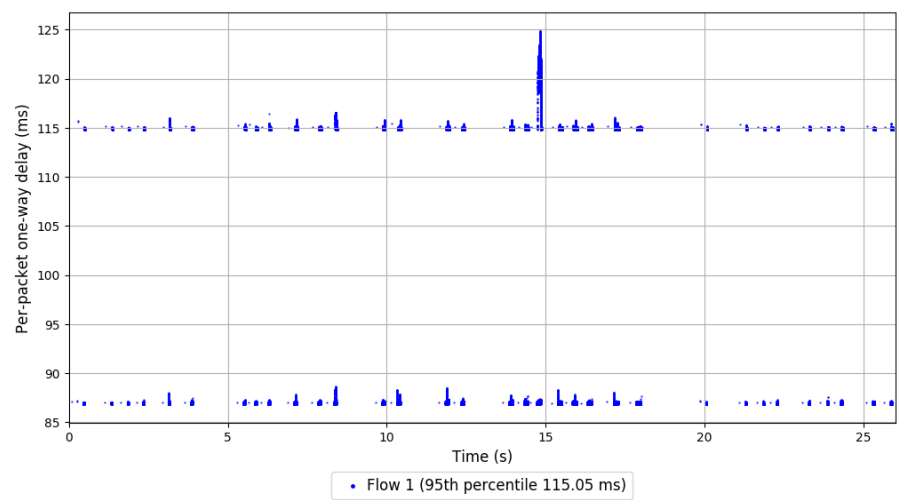
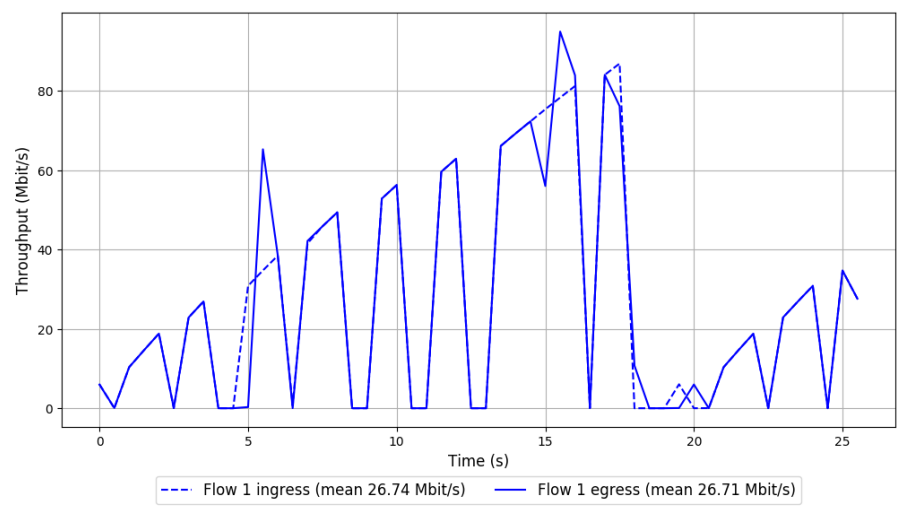


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-12 22:13:30
End at: 2018-02-12 22:14:00

# Below is generated by plot.py at 2018-02-13 02:02:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.71 Mbit/s
95th percentile per-packet one-way delay: 115.052 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.71 Mbit/s
95th percentile per-packet one-way delay: 115.052 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-02-12 22:28:21

End at: 2018-02-12 22:28:51

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 224.63 Mbit/s

95th percentile per-packet one-way delay: 115.329 ms

Loss rate: 0.00%

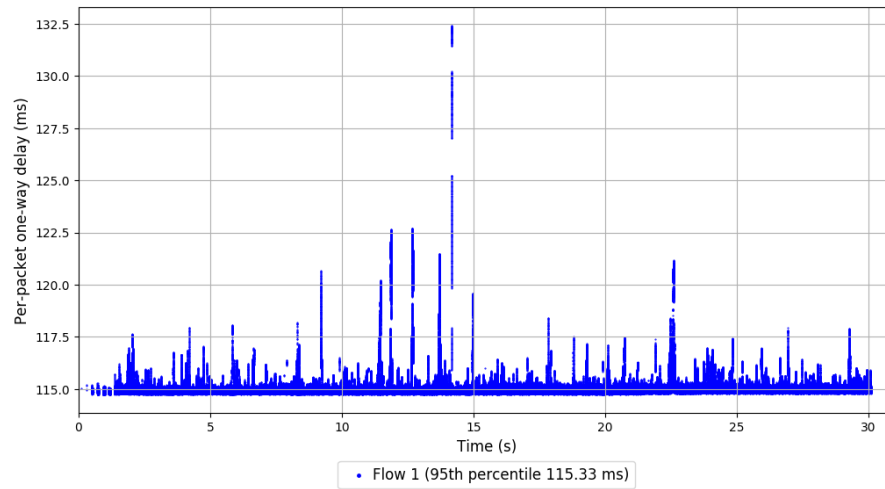
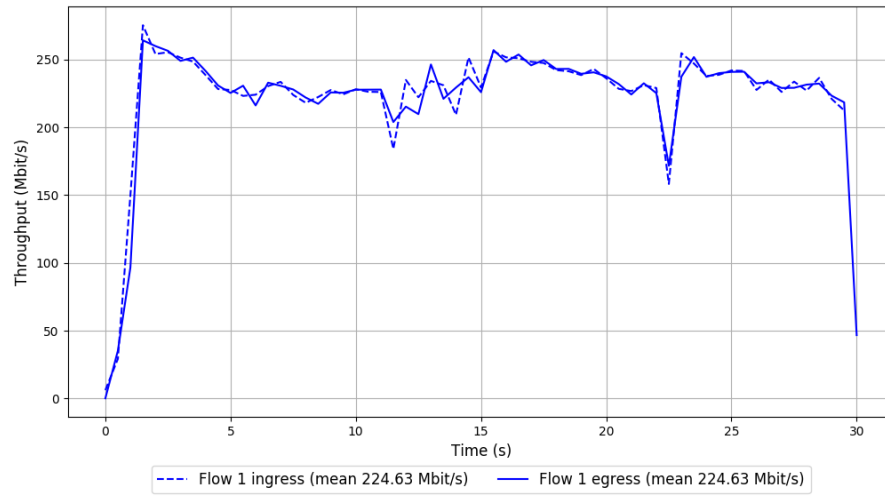
-- Flow 1:

Average throughput: 224.63 Mbit/s

95th percentile per-packet one-way delay: 115.329 ms

Loss rate: 0.00%

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

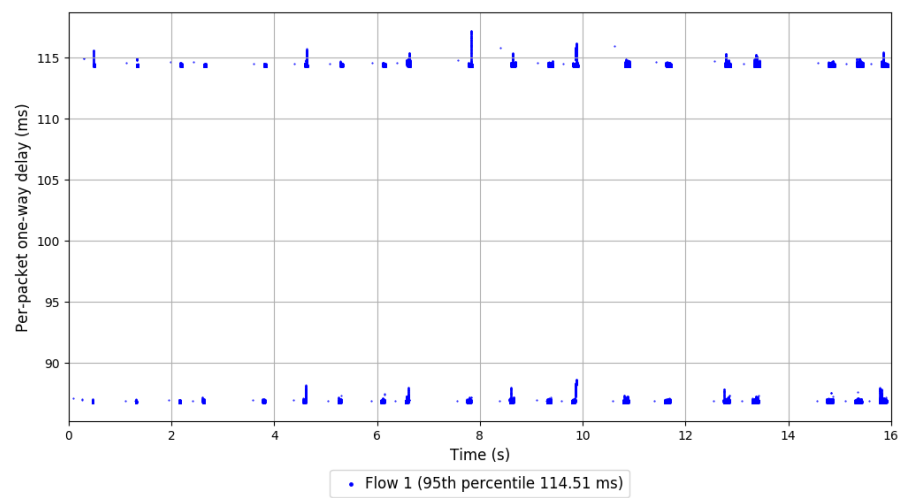
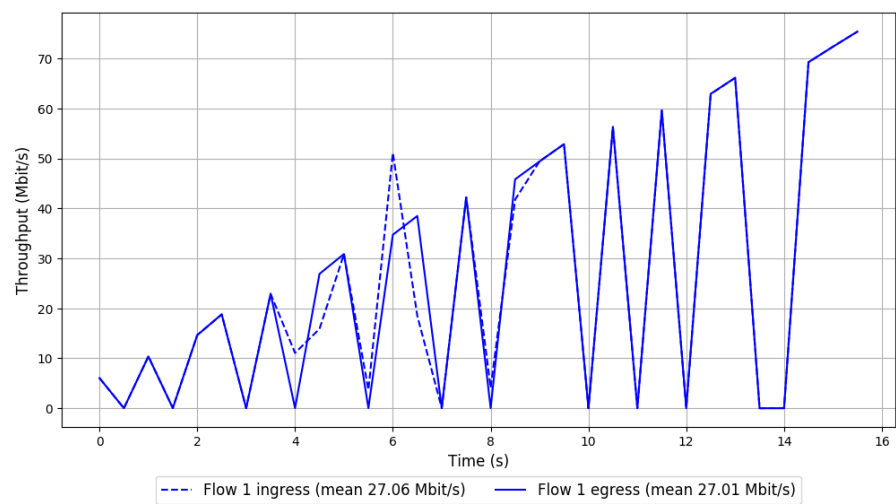


Run 4: Statistics of TaoVA-100x

Start at: 2018-02-12 22:43:33

End at: 2018-02-12 22:44:03

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-12 22:58:29

End at: 2018-02-12 22:58:59

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.52 Mbit/s

95th percentile per-packet one-way delay: 114.972 ms

Loss rate: 0.01%

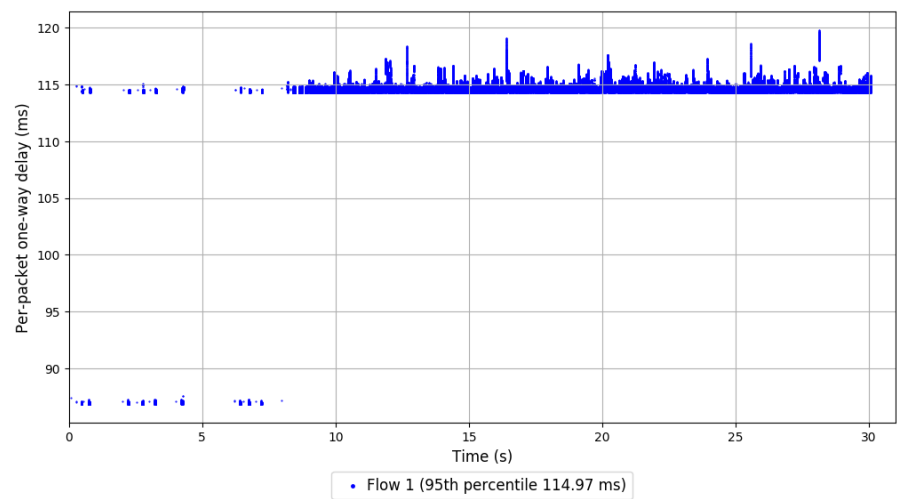
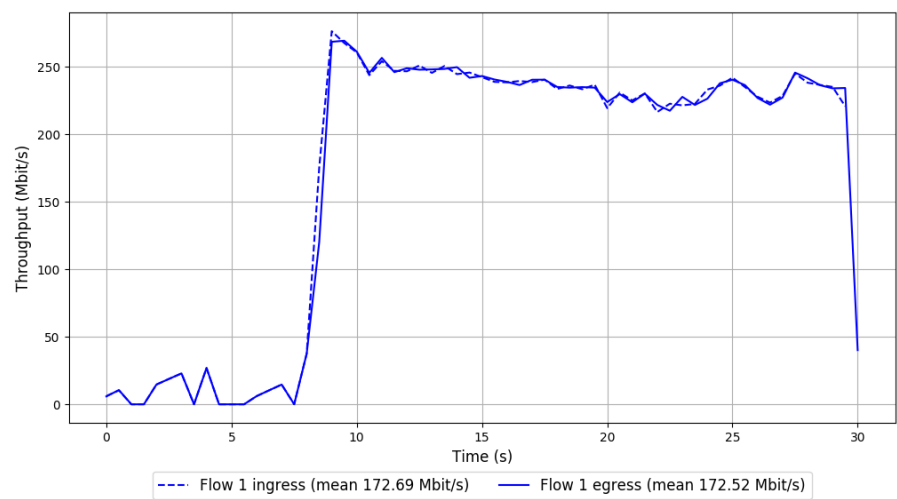
-- Flow 1:

Average throughput: 172.52 Mbit/s

95th percentile per-packet one-way delay: 114.972 ms

Loss rate: 0.01%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-12 23:13:37

End at: 2018-02-12 23:14:07

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.43 Mbit/s

95th percentile per-packet one-way delay: 114.741 ms

Loss rate: 0.10%

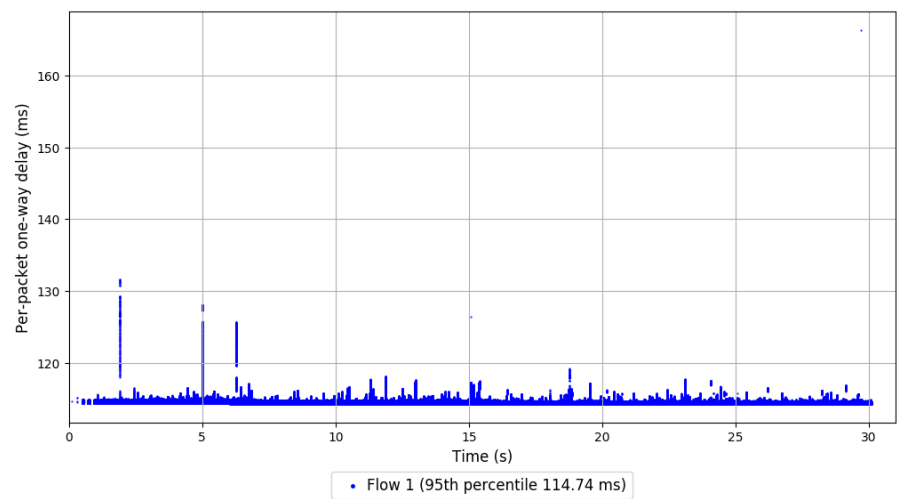
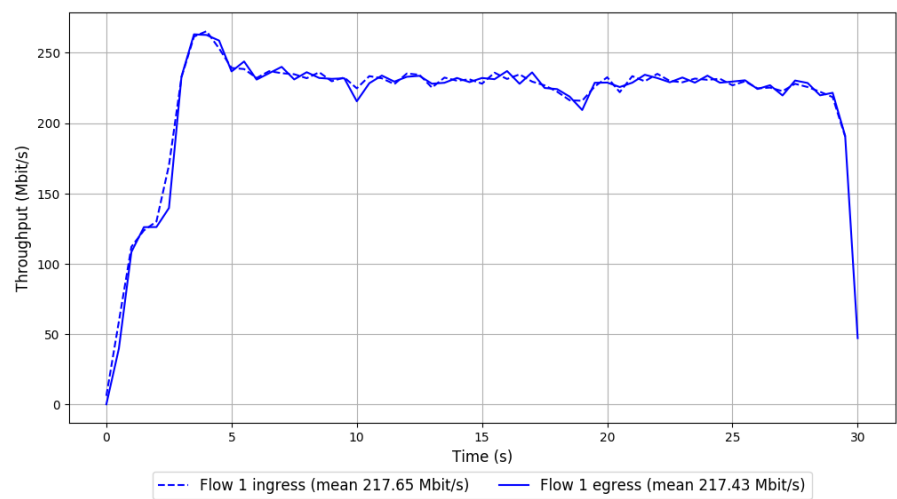
-- Flow 1:

Average throughput: 217.43 Mbit/s

95th percentile per-packet one-way delay: 114.741 ms

Loss rate: 0.10%

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

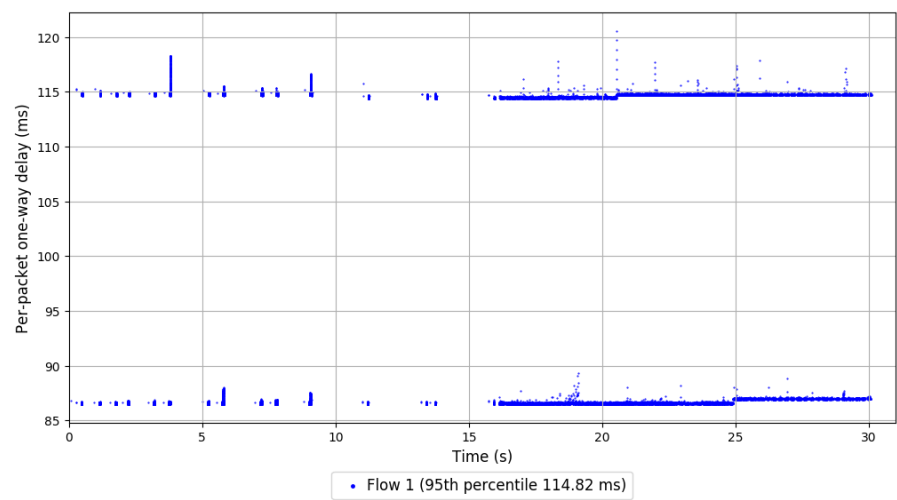
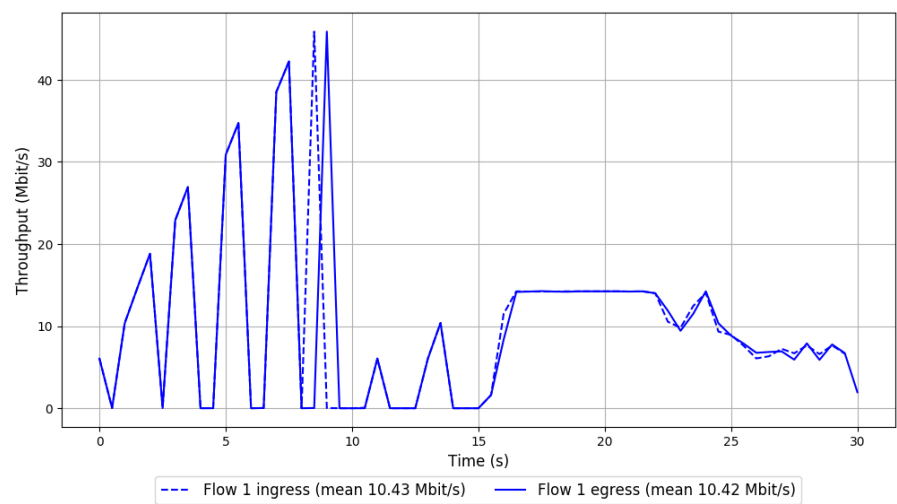


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-12 23:28:42
End at: 2018-02-12 23:29:12

# Below is generated by plot.py at 2018-02-13 02:06:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.42 Mbit/s
95th percentile per-packet one-way delay: 114.819 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.42 Mbit/s
95th percentile per-packet one-way delay: 114.819 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-12 23:43:31

End at: 2018-02-12 23:44:01

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 165.83 Mbit/s

95th percentile per-packet one-way delay: 114.789 ms

Loss rate: 0.00%

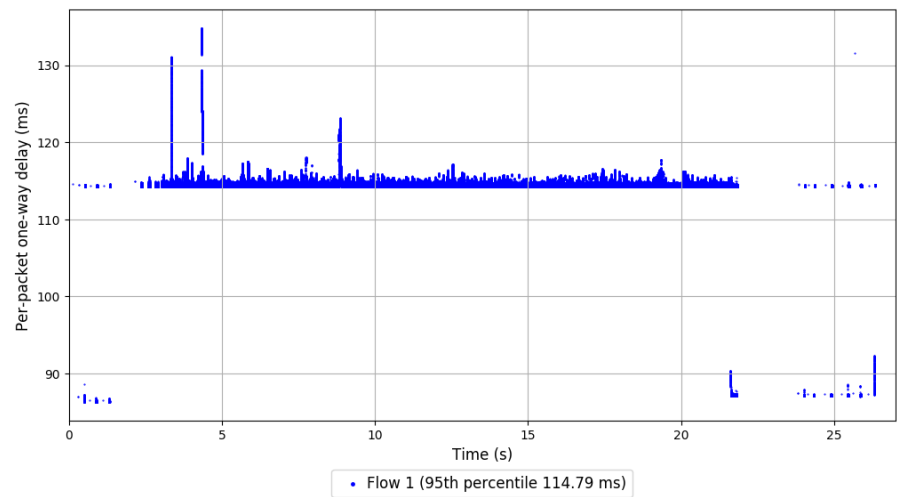
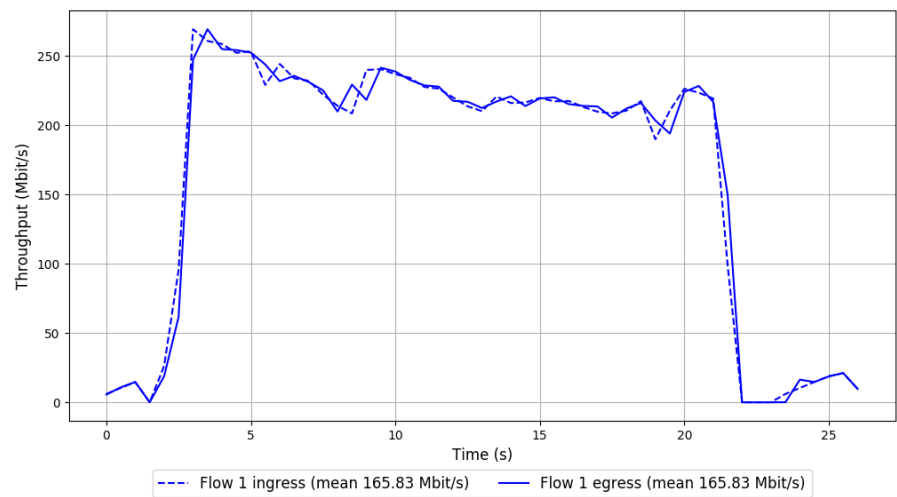
-- Flow 1:

Average throughput: 165.83 Mbit/s

95th percentile per-packet one-way delay: 114.789 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-12 23:58:31

End at: 2018-02-12 23:59:01

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.76 Mbit/s

95th percentile per-packet one-way delay: 114.466 ms

Loss rate: 0.00%

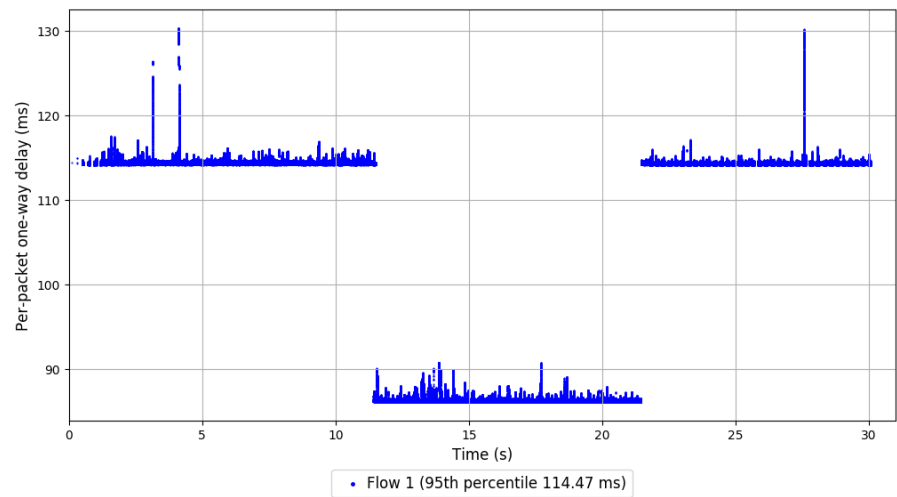
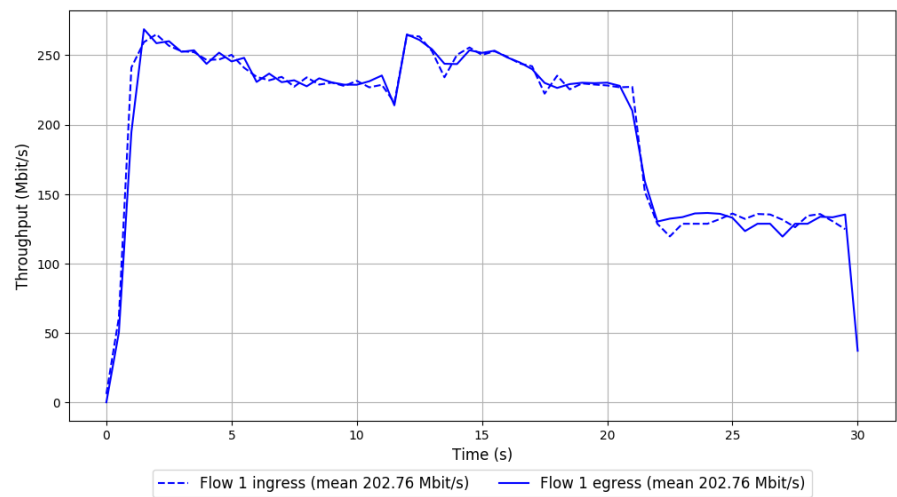
-- Flow 1:

Average throughput: 202.76 Mbit/s

95th percentile per-packet one-way delay: 114.466 ms

Loss rate: 0.00%

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

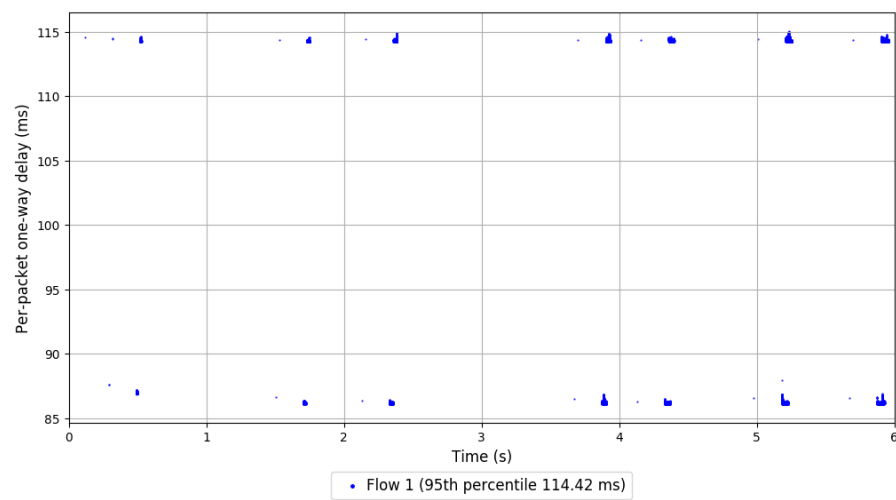
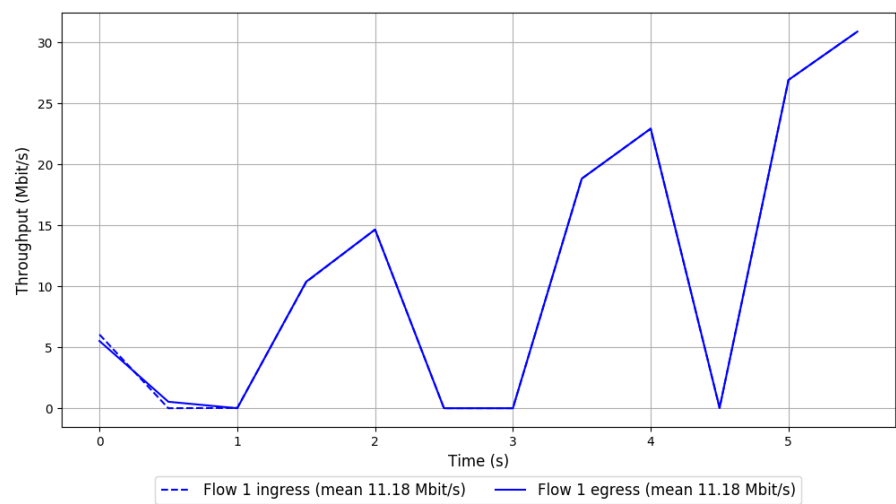


Run 10: Statistics of TaoVA-100x

Start at: 2018-02-13 00:13:12

End at: 2018-02-13 00:13:42

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-12 22:02:23

End at: 2018-02-12 22:02:53

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.59 Mbit/s

95th percentile per-packet one-way delay: 125.358 ms

Loss rate: 0.00%

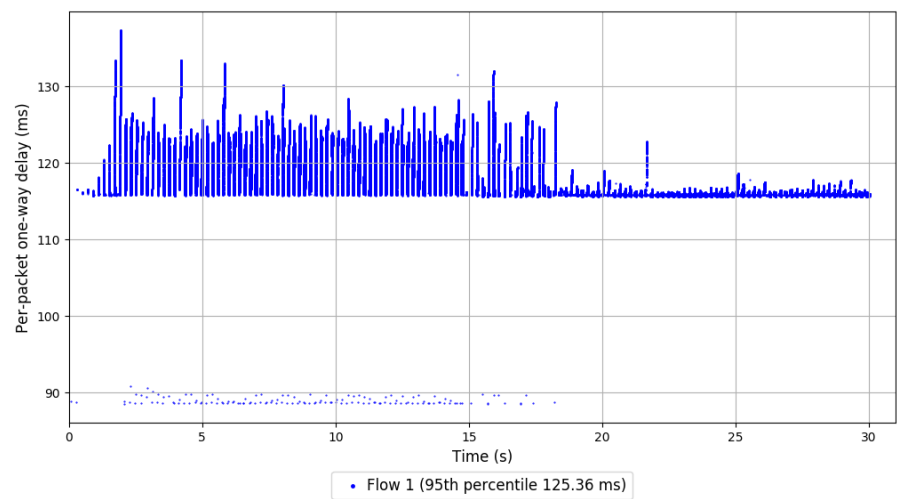
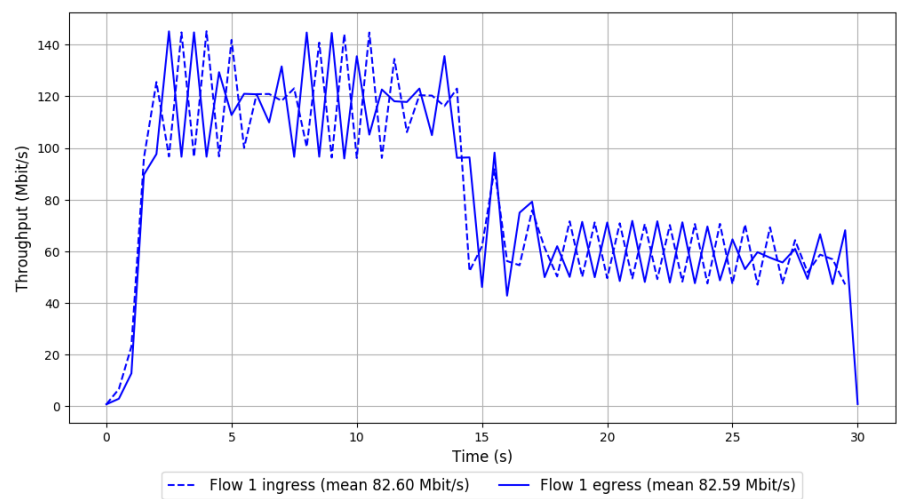
-- Flow 1:

Average throughput: 82.59 Mbit/s

95th percentile per-packet one-way delay: 125.358 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-12 22:17:06

End at: 2018-02-12 22:17:36

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.06 Mbit/s

95th percentile per-packet one-way delay: 115.858 ms

Loss rate: 0.49%

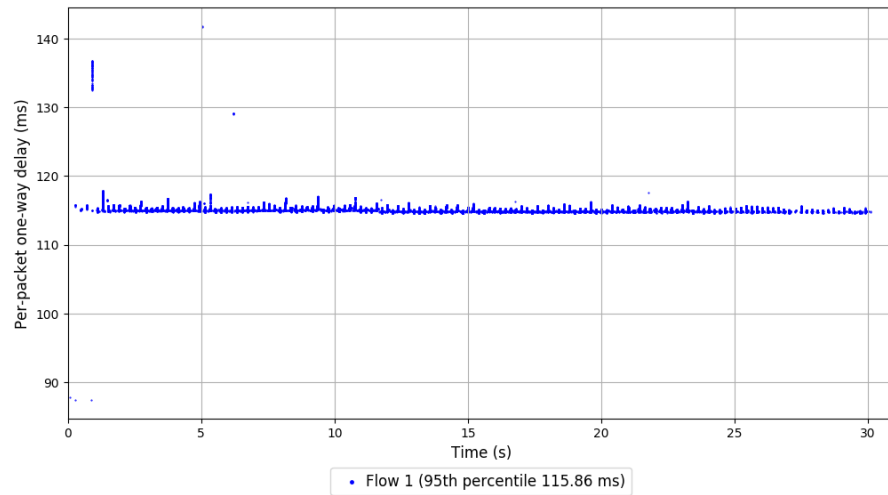
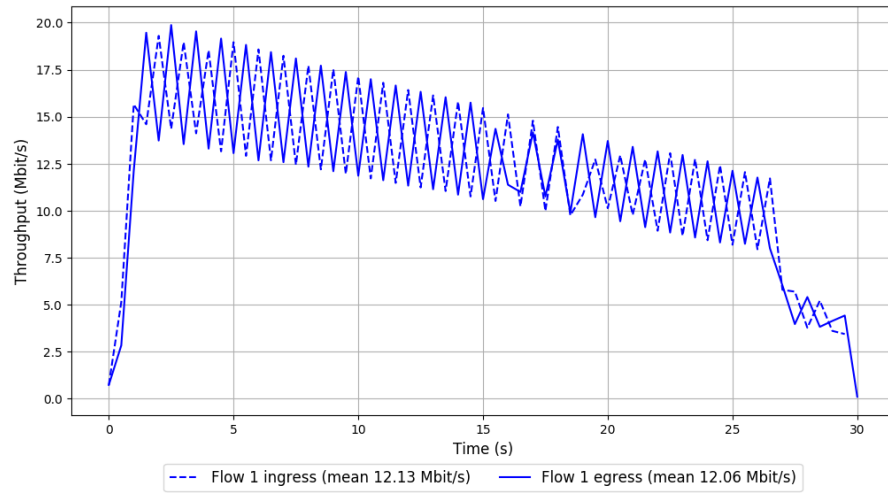
-- Flow 1:

Average throughput: 12.06 Mbit/s

95th percentile per-packet one-way delay: 115.858 ms

Loss rate: 0.49%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-12 22:32:21

End at: 2018-02-12 22:32:51

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.26 Mbit/s

95th percentile per-packet one-way delay: 124.831 ms

Loss rate: 0.44%

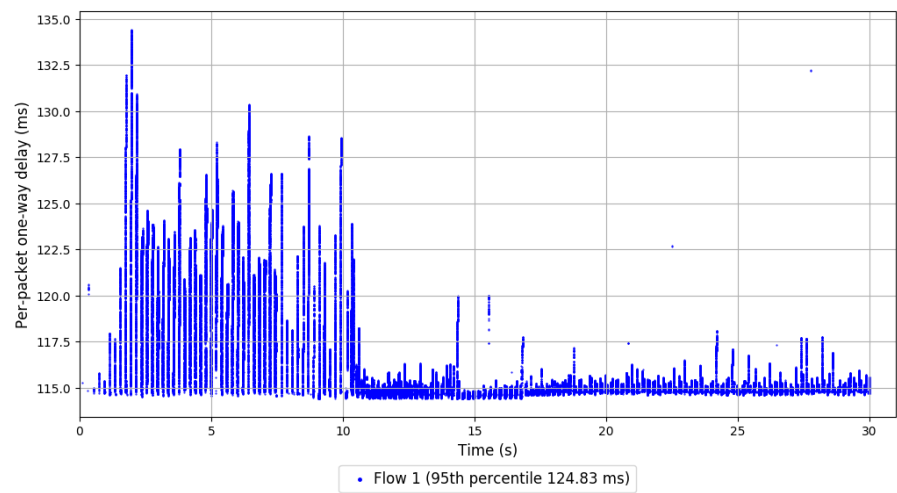
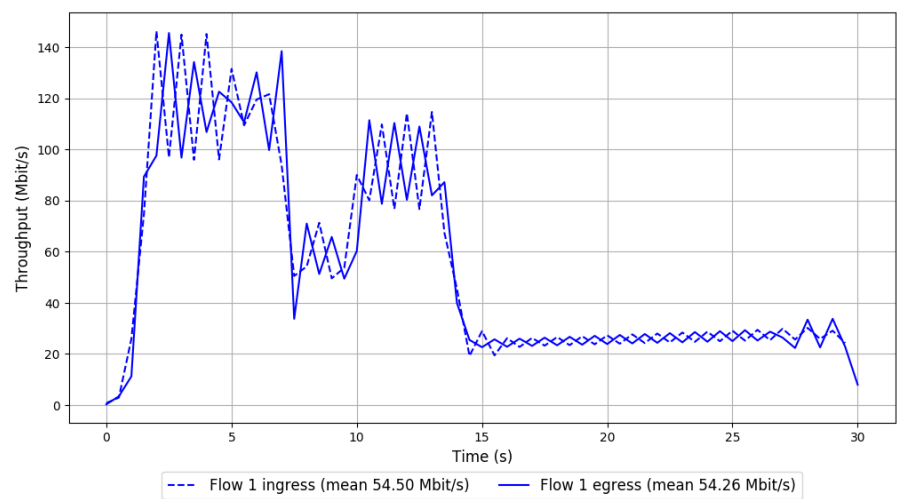
-- Flow 1:

Average throughput: 54.26 Mbit/s

95th percentile per-packet one-way delay: 124.831 ms

Loss rate: 0.44%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-12 22:47:25

End at: 2018-02-12 22:47:55

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.94 Mbit/s

95th percentile per-packet one-way delay: 124.426 ms

Loss rate: 0.81%

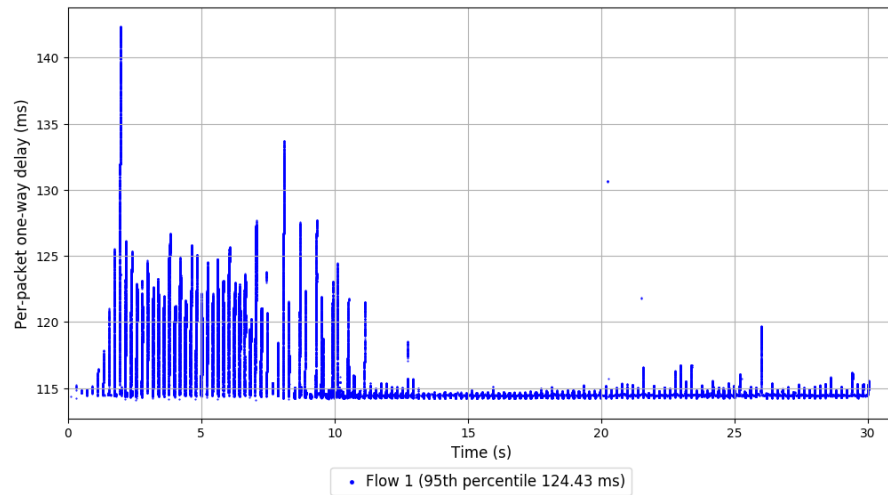
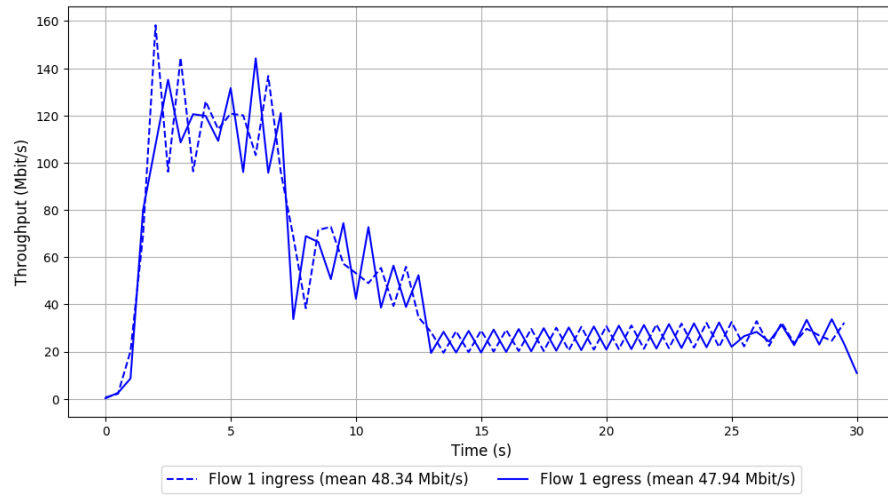
-- Flow 1:

Average throughput: 47.94 Mbit/s

95th percentile per-packet one-way delay: 124.426 ms

Loss rate: 0.81%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-12 23:02:35

End at: 2018-02-12 23:03:05

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 112.42 Mbit/s

95th percentile per-packet one-way delay: 124.487 ms

Loss rate: 0.10%

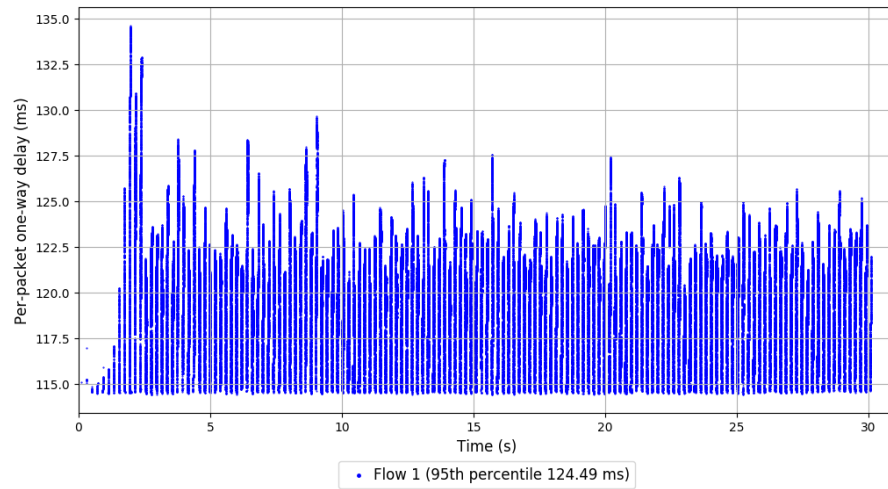
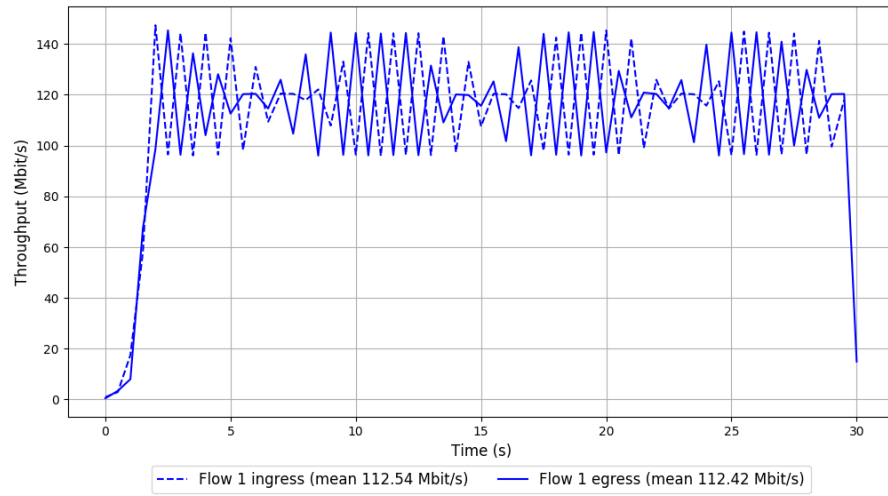
-- Flow 1:

Average throughput: 112.42 Mbit/s

95th percentile per-packet one-way delay: 124.487 ms

Loss rate: 0.10%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-12 23:17:37

End at: 2018-02-12 23:18:07

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 115.635 ms

Loss rate: 1.27%

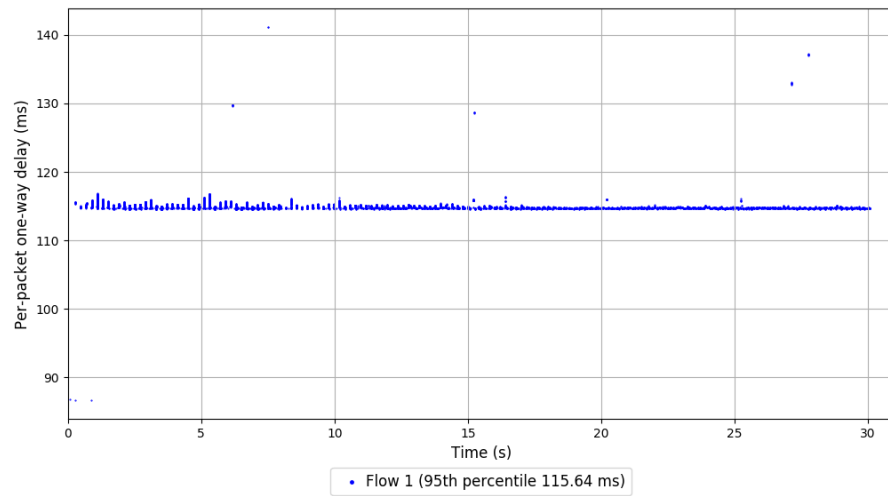
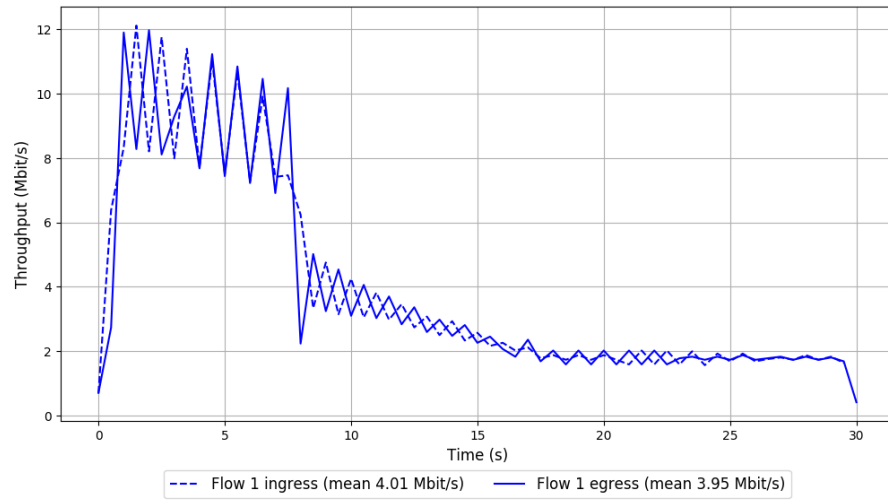
-- Flow 1:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 115.635 ms

Loss rate: 1.27%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-12 23:32:35

End at: 2018-02-12 23:33:05

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.88 Mbit/s

95th percentile per-packet one-way delay: 115.701 ms

Loss rate: 0.00%

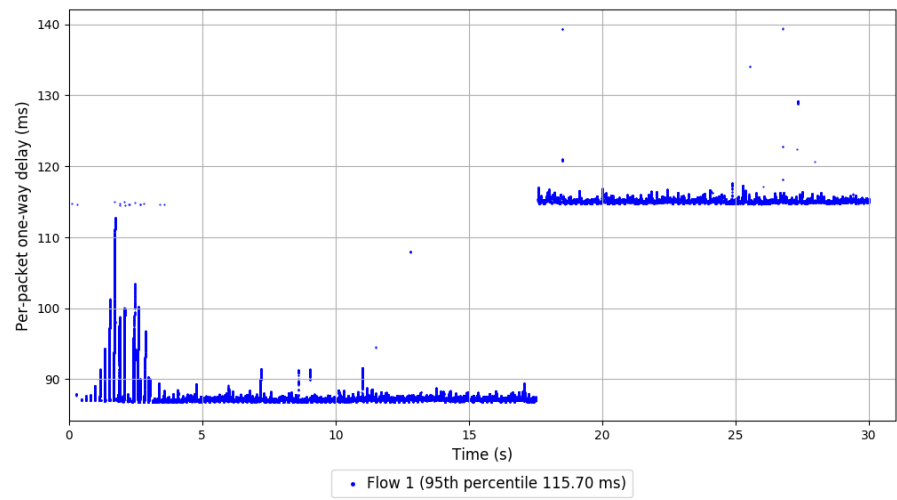
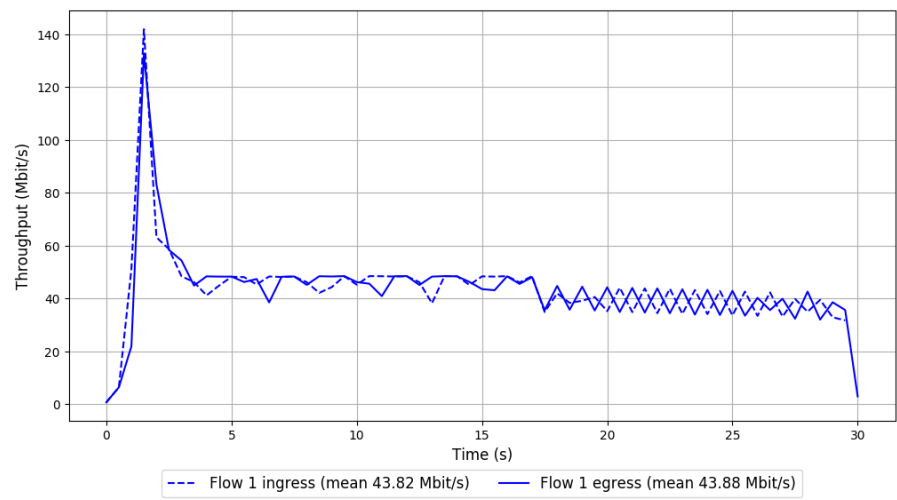
-- Flow 1:

Average throughput: 43.88 Mbit/s

95th percentile per-packet one-way delay: 115.701 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-12 23:47:30

End at: 2018-02-12 23:48:00

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.36 Mbit/s

95th percentile per-packet one-way delay: 115.386 ms

Loss rate: 0.24%

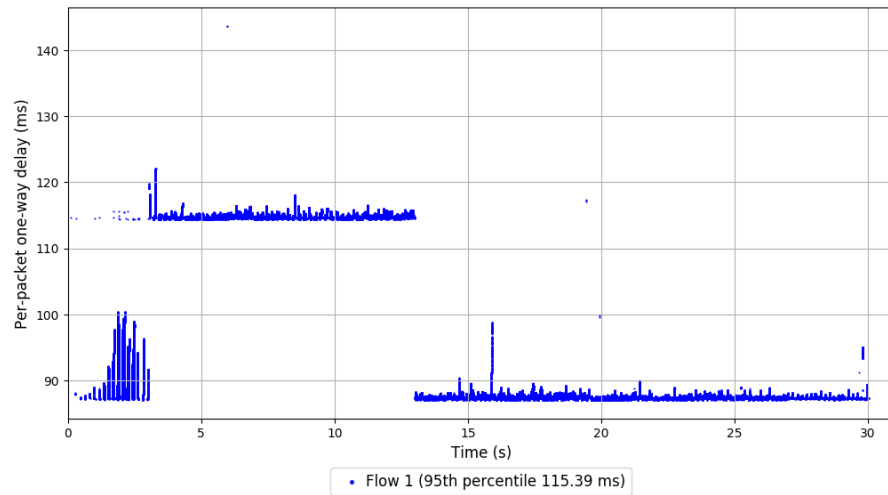
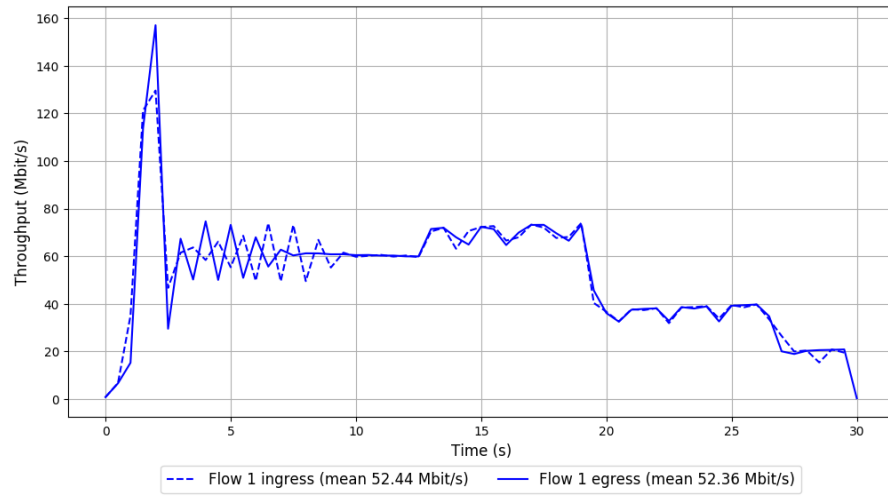
-- Flow 1:

Average throughput: 52.36 Mbit/s

95th percentile per-packet one-way delay: 115.386 ms

Loss rate: 0.24%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-13 00:02:36

End at: 2018-02-13 00:03:06

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.19 Mbit/s

95th percentile per-packet one-way delay: 115.314 ms

Loss rate: 0.74%

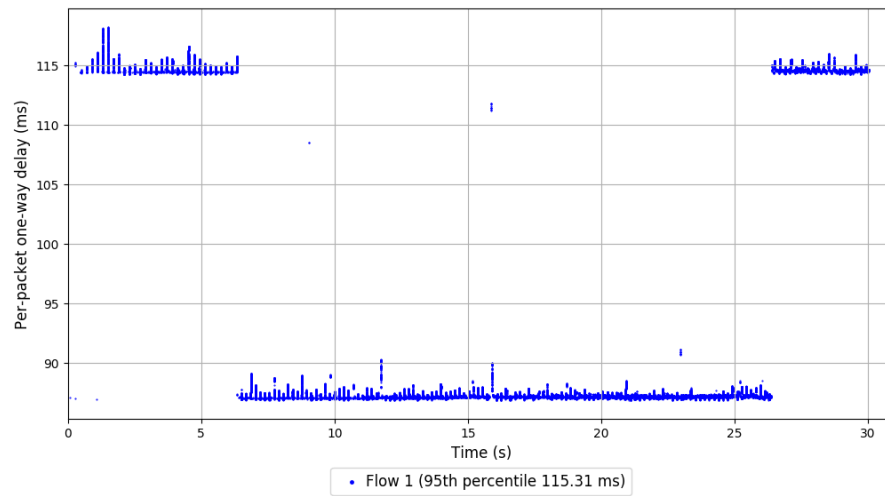
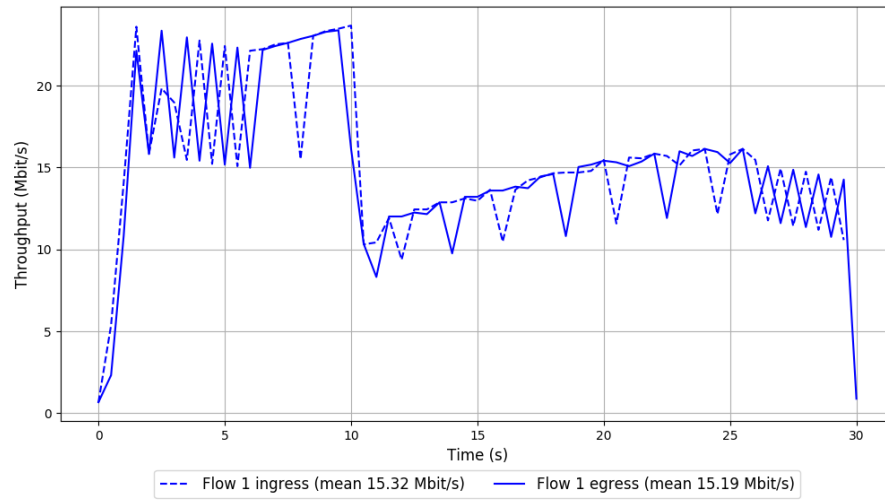
-- Flow 1:

Average throughput: 15.19 Mbit/s

95th percentile per-packet one-way delay: 115.314 ms

Loss rate: 0.74%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-13 00:17:00

End at: 2018-02-13 00:17:31

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.34 Mbit/s

95th percentile per-packet one-way delay: 117.298 ms

Loss rate: 0.01%

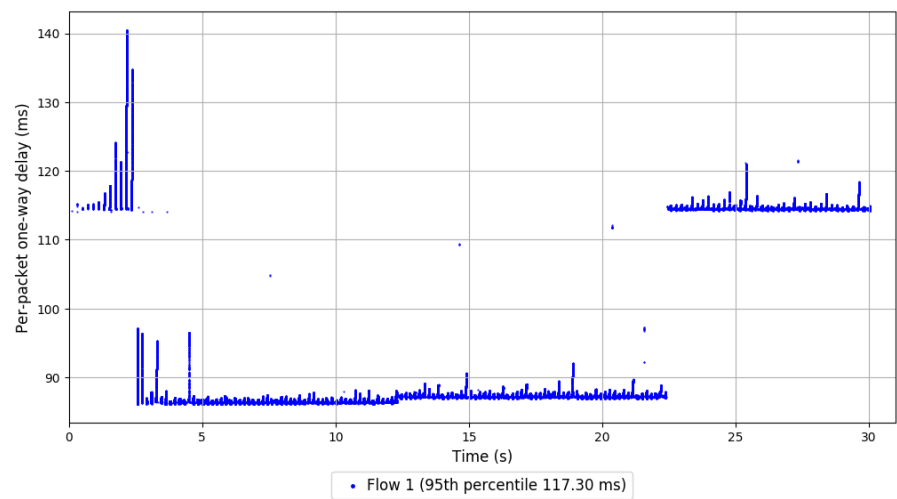
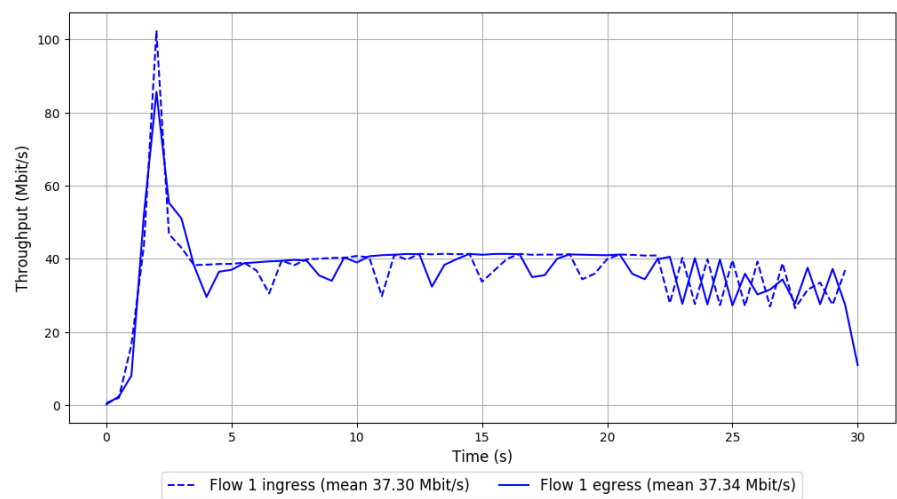
-- Flow 1:

Average throughput: 37.34 Mbit/s

95th percentile per-packet one-way delay: 117.298 ms

Loss rate: 0.01%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-02-12 21:56:52

End at: 2018-02-12 21:57:22

Below is generated by plot.py at 2018-02-13 02:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.05 Mbit/s

95th percentile per-packet one-way delay: 174.921 ms

Loss rate: 1.43%

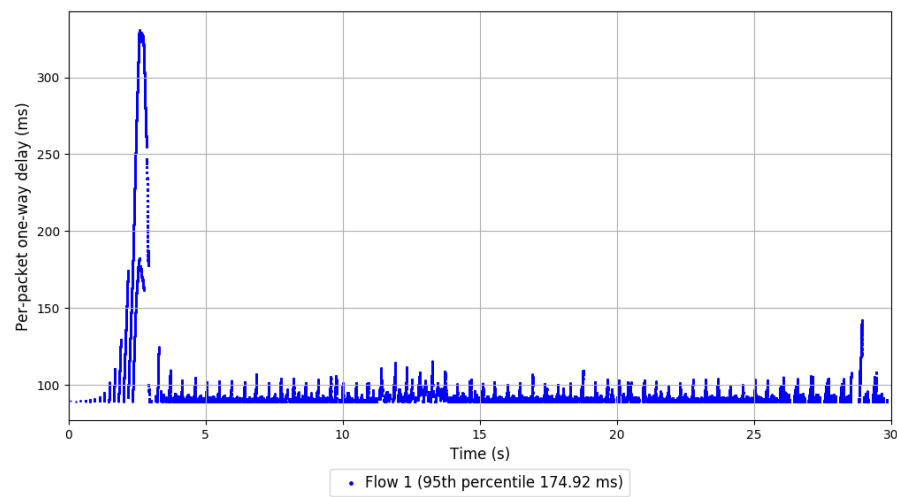
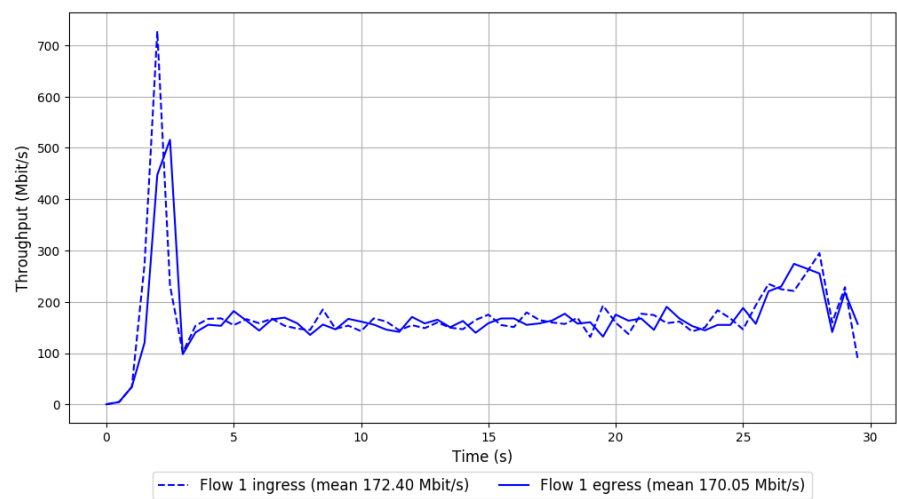
-- Flow 1:

Average throughput: 170.05 Mbit/s

95th percentile per-packet one-way delay: 174.921 ms

Loss rate: 1.43%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-12 22:11:43

End at: 2018-02-12 22:12:13

Below is generated by plot.py at 2018-02-13 02:08:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 276.83 Mbit/s

95th percentile per-packet one-way delay: 257.425 ms

Loss rate: 0.09%

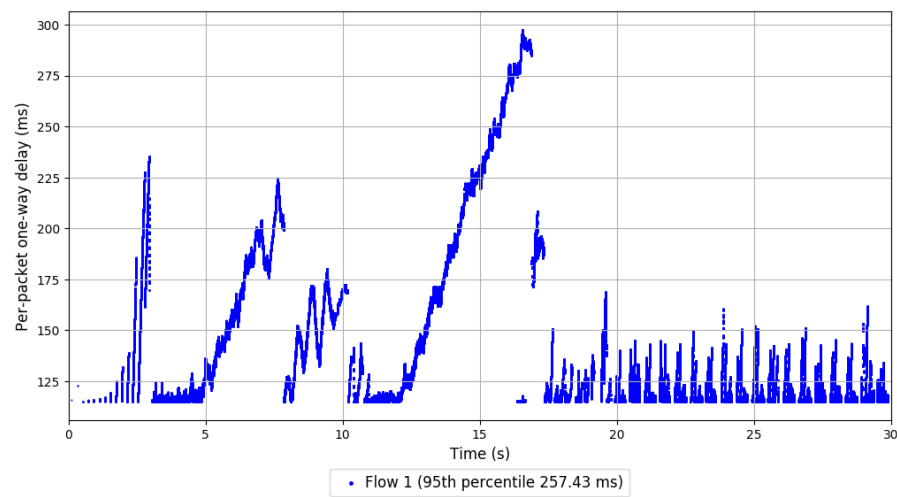
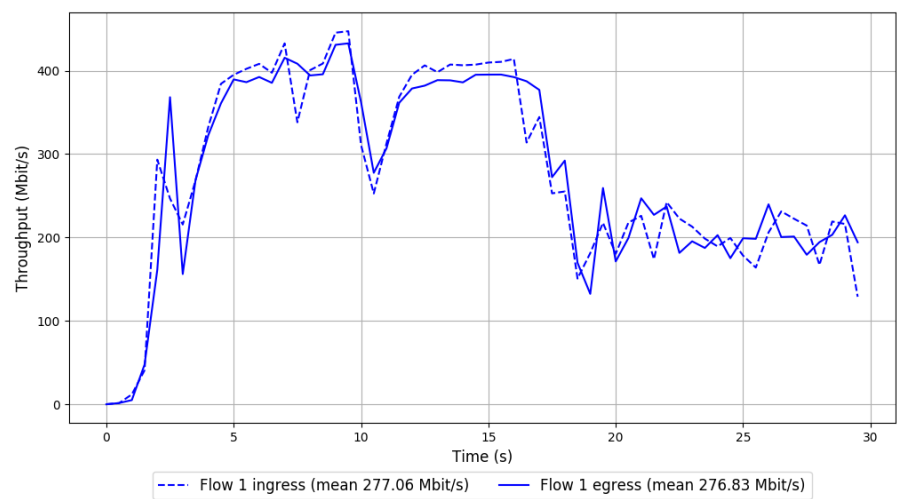
-- Flow 1:

Average throughput: 276.83 Mbit/s

95th percentile per-packet one-way delay: 257.425 ms

Loss rate: 0.09%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-12 22:26:37

End at: 2018-02-12 22:27:07

Below is generated by plot.py at 2018-02-13 02:08:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.48 Mbit/s

95th percentile per-packet one-way delay: 204.142 ms

Loss rate: 0.92%

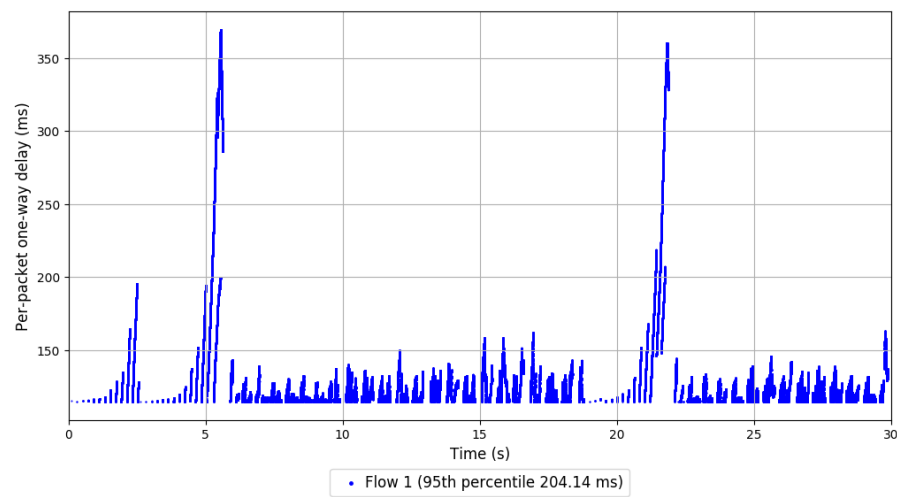
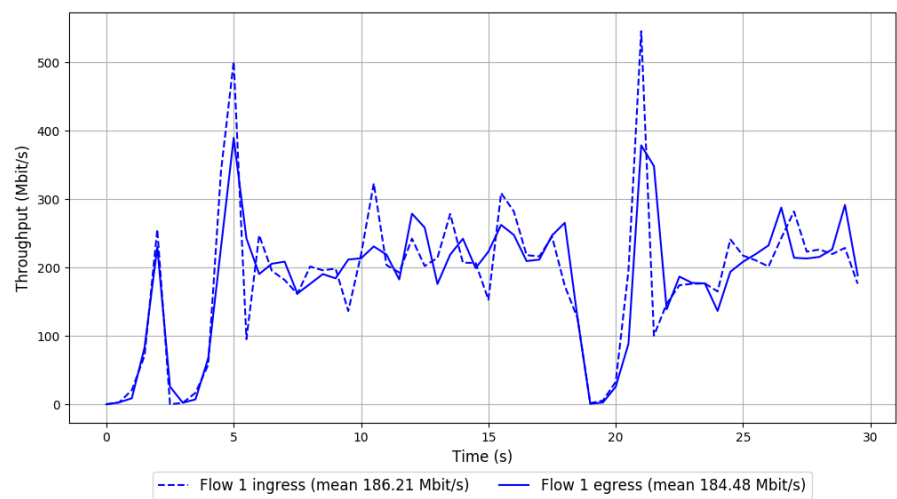
-- Flow 1:

Average throughput: 184.48 Mbit/s

95th percentile per-packet one-way delay: 204.142 ms

Loss rate: 0.92%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-12 22:41:47

End at: 2018-02-12 22:42:17

Below is generated by plot.py at 2018-02-13 02:08:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.53 Mbit/s

95th percentile per-packet one-way delay: 142.523 ms

Loss rate: 0.26%

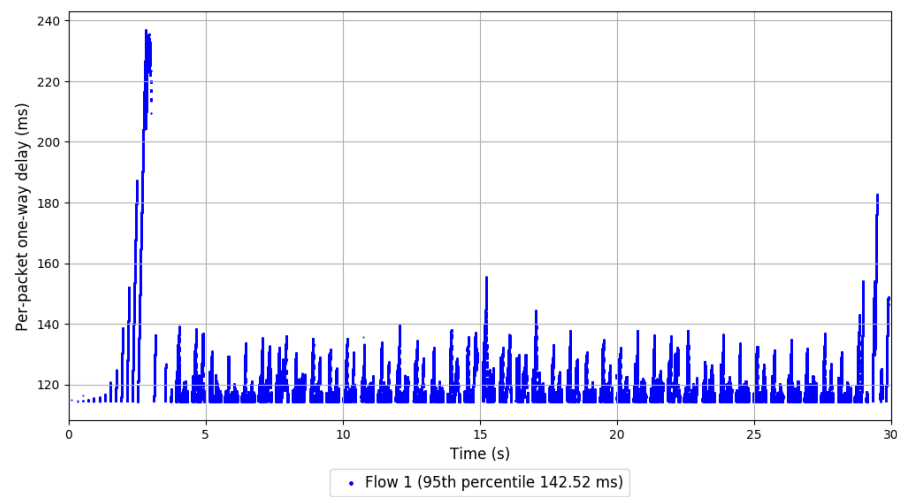
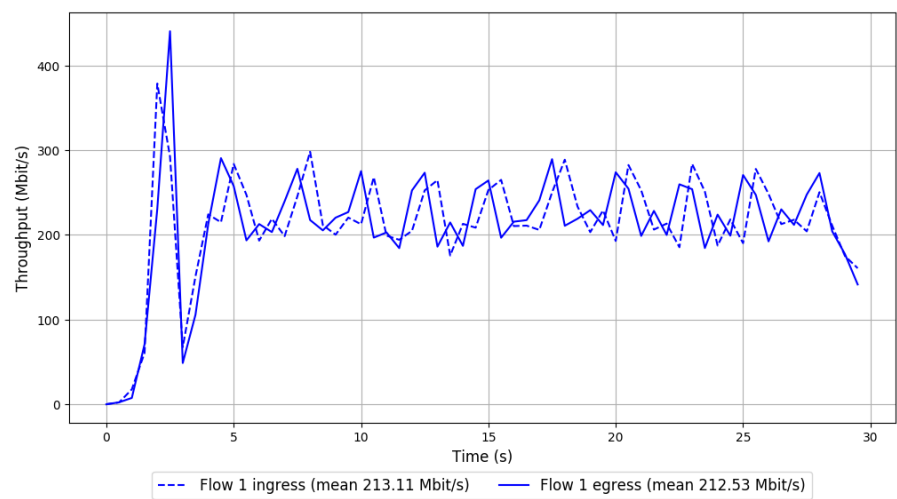
-- Flow 1:

Average throughput: 212.53 Mbit/s

95th percentile per-packet one-way delay: 142.523 ms

Loss rate: 0.26%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-12 22:56:44

End at: 2018-02-12 22:57:14

Below is generated by plot.py at 2018-02-13 02:08:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.46 Mbit/s

95th percentile per-packet one-way delay: 161.480 ms

Loss rate: 1.40%

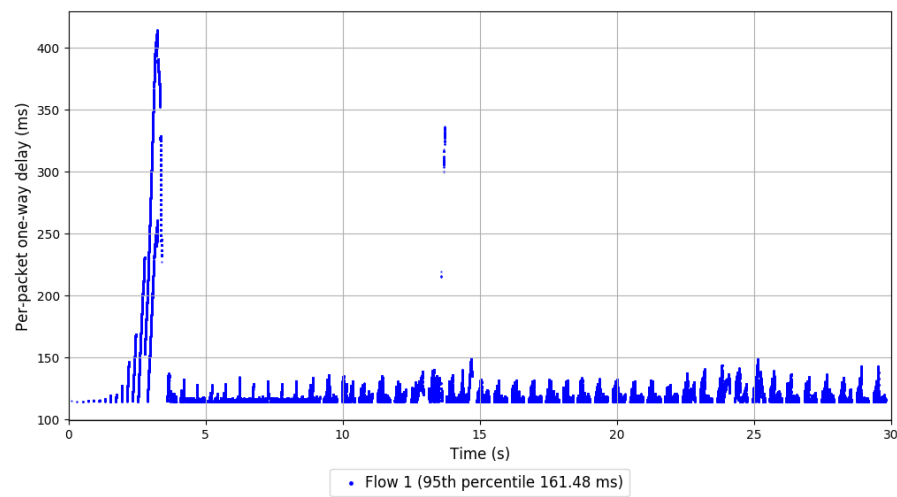
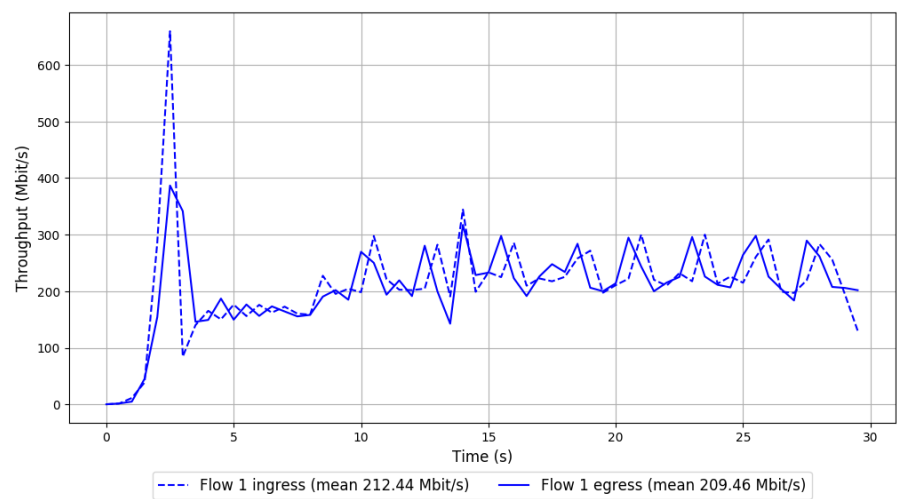
-- Flow 1:

Average throughput: 209.46 Mbit/s

95th percentile per-packet one-way delay: 161.480 ms

Loss rate: 1.40%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-12 23:11:52

End at: 2018-02-12 23:12:22

Below is generated by plot.py at 2018-02-13 02:09:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.24 Mbit/s

95th percentile per-packet one-way delay: 226.997 ms

Loss rate: 0.74%

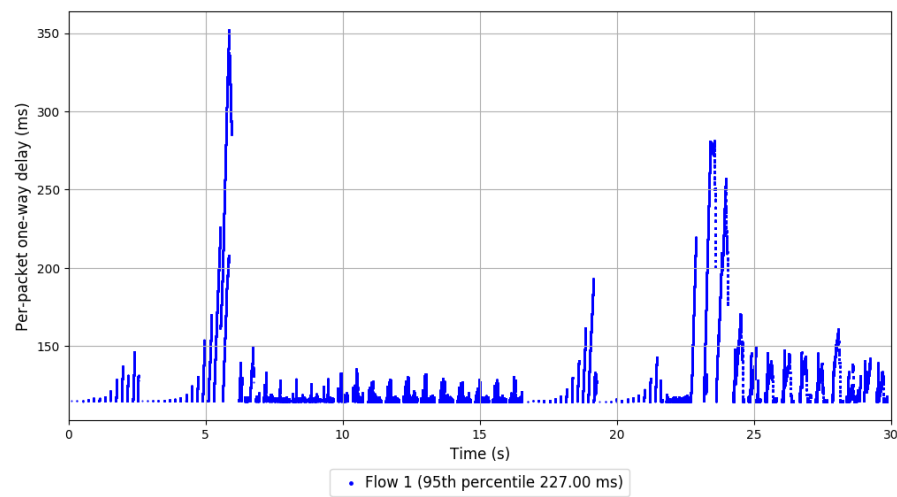
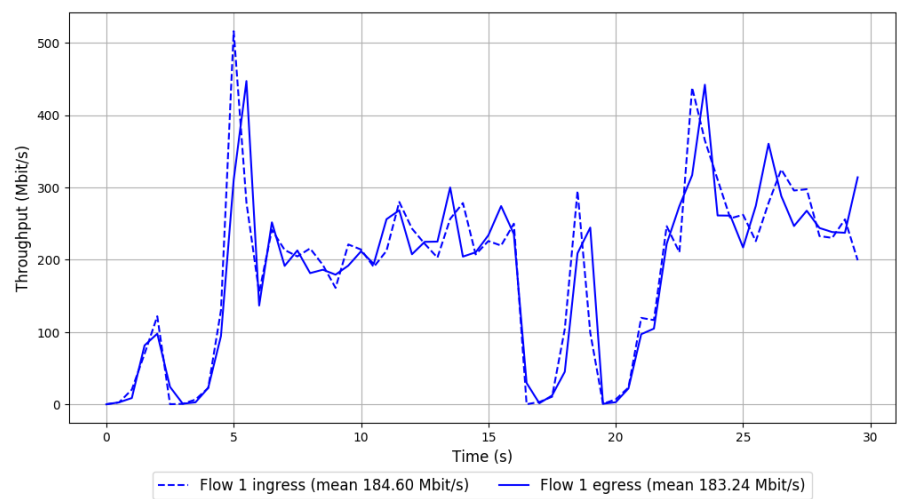
-- Flow 1:

Average throughput: 183.24 Mbit/s

95th percentile per-packet one-way delay: 226.997 ms

Loss rate: 0.74%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-12 23:26:59

End at: 2018-02-12 23:27:29

Below is generated by plot.py at 2018-02-13 02:09:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 165.66 Mbit/s

95th percentile per-packet one-way delay: 214.406 ms

Loss rate: 2.22%

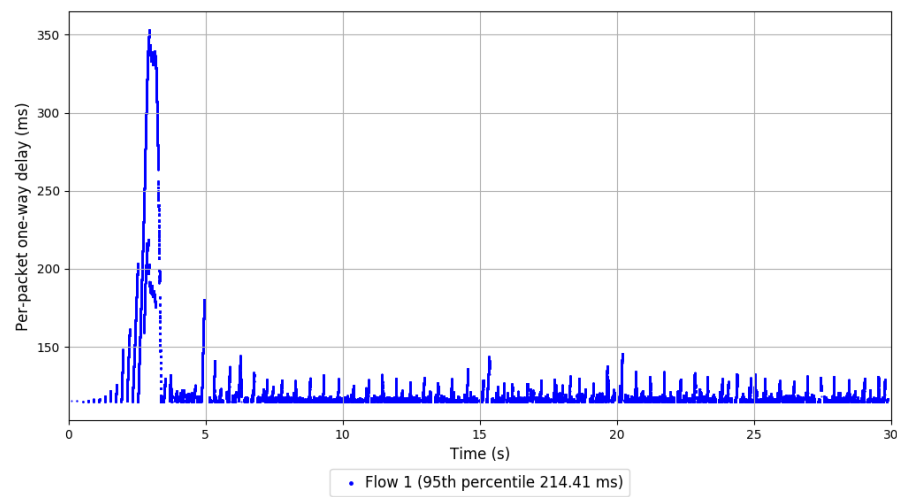
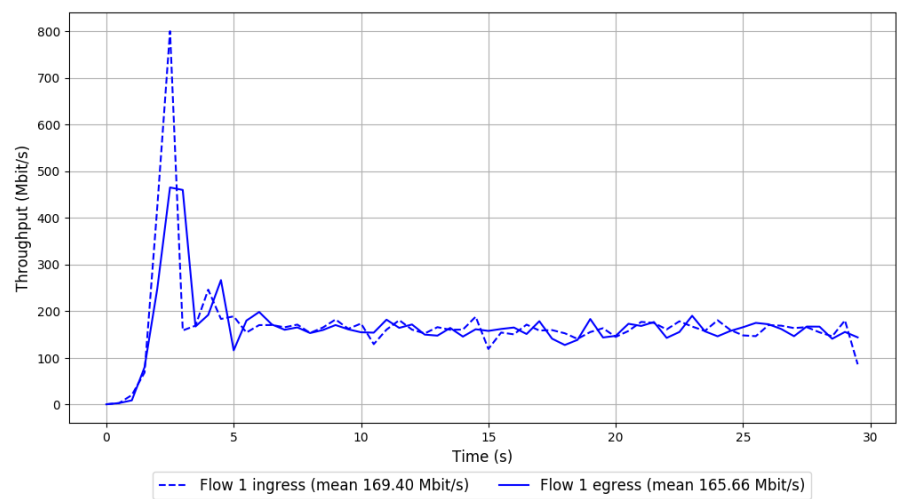
-- Flow 1:

Average throughput: 165.66 Mbit/s

95th percentile per-packet one-way delay: 214.406 ms

Loss rate: 2.22%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-12 23:41:48

End at: 2018-02-12 23:42:18

Below is generated by plot.py at 2018-02-13 02:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.25 Mbit/s

95th percentile per-packet one-way delay: 231.686 ms

Loss rate: 0.49%

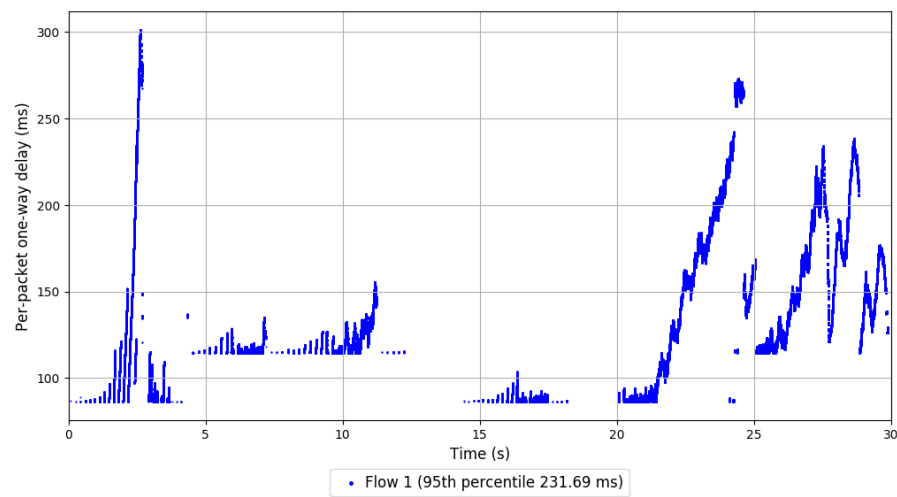
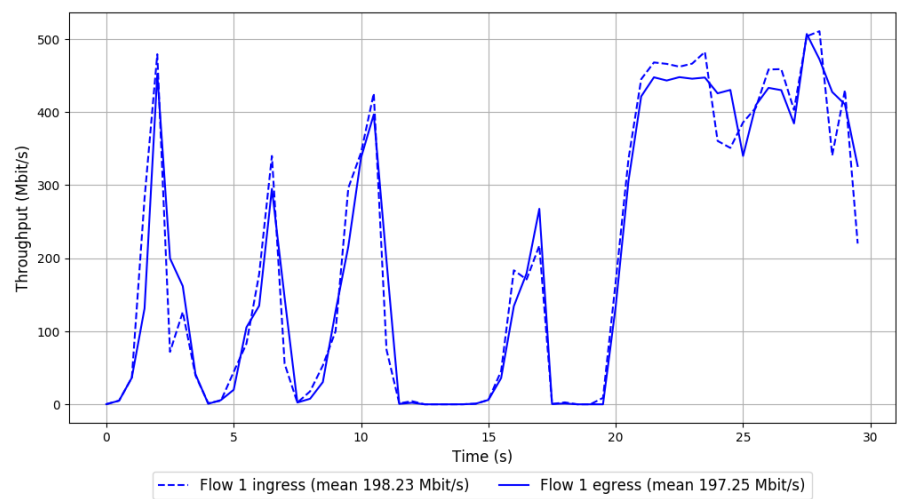
-- Flow 1:

Average throughput: 197.25 Mbit/s

95th percentile per-packet one-way delay: 231.686 ms

Loss rate: 0.49%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-12 23:56:47

End at: 2018-02-12 23:57:17

Below is generated by plot.py at 2018-02-13 02:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.08 Mbit/s

95th percentile per-packet one-way delay: 160.819 ms

Loss rate: 0.50%

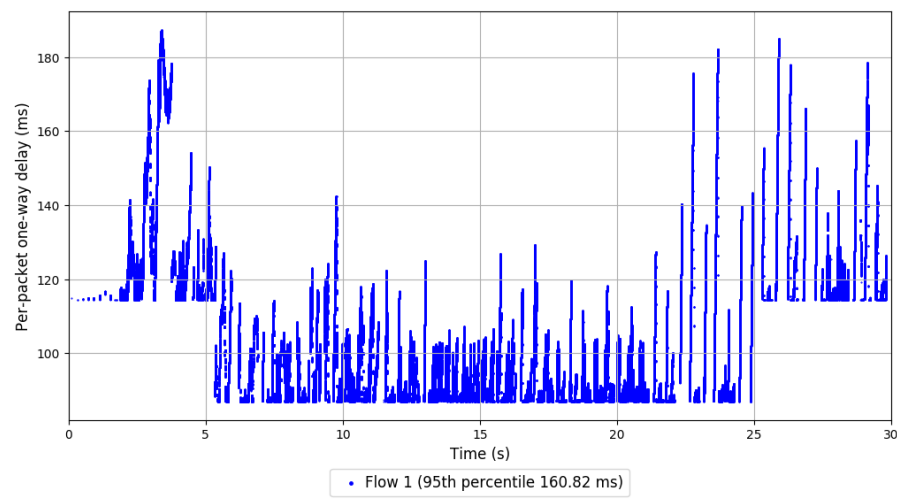
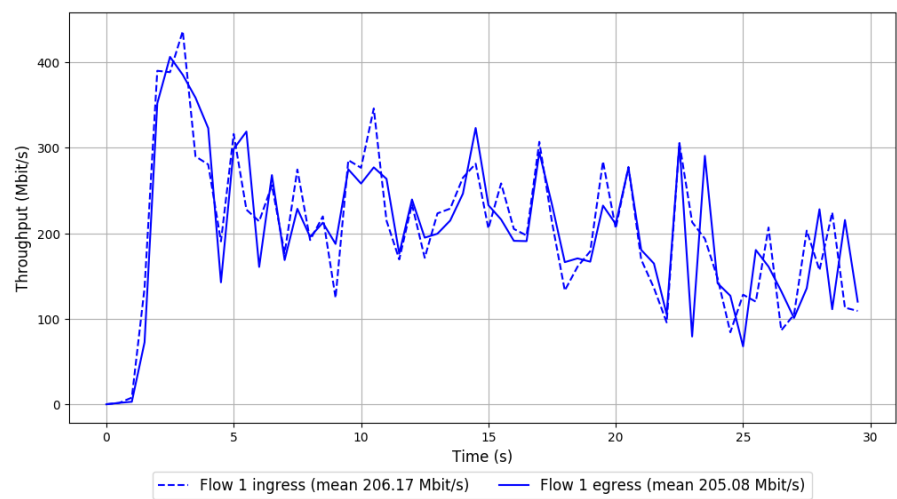
-- Flow 1:

Average throughput: 205.08 Mbit/s

95th percentile per-packet one-way delay: 160.819 ms

Loss rate: 0.50%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-13 00:11:29

End at: 2018-02-13 00:11:59

Below is generated by plot.py at 2018-02-13 02:10:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.59 Mbit/s

95th percentile per-packet one-way delay: 141.317 ms

Loss rate: 0.46%

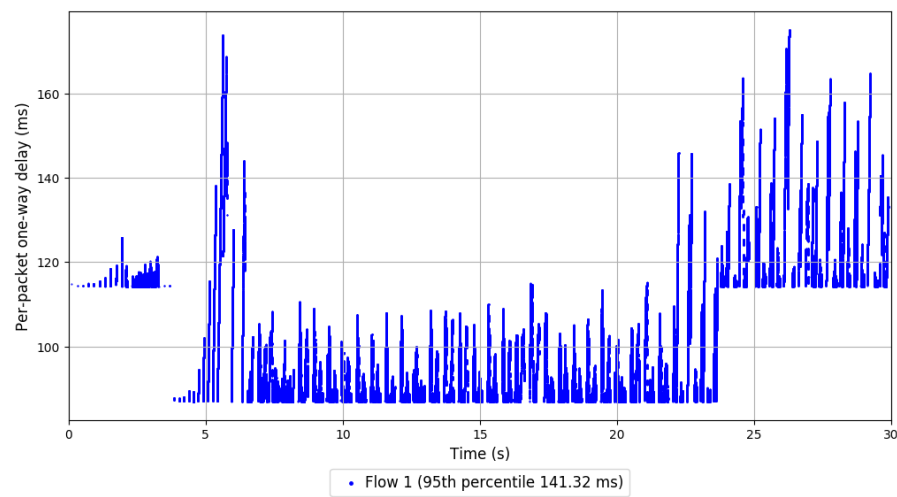
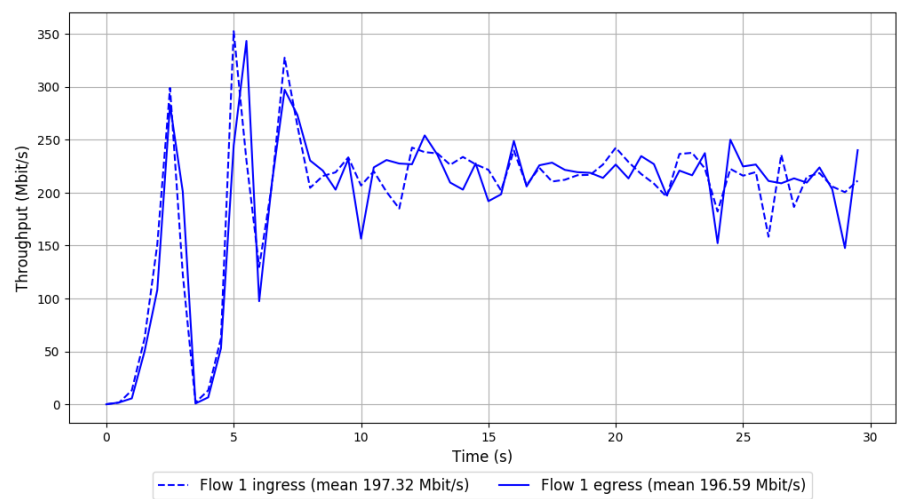
-- Flow 1:

Average throughput: 196.59 Mbit/s

95th percentile per-packet one-way delay: 141.317 ms

Loss rate: 0.46%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-12 22:03:46

End at: 2018-02-12 22:04:16

Below is generated by plot.py at 2018-02-13 02:10:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.07 Mbit/s

95th percentile per-packet one-way delay: 115.596 ms

Loss rate: 0.14%

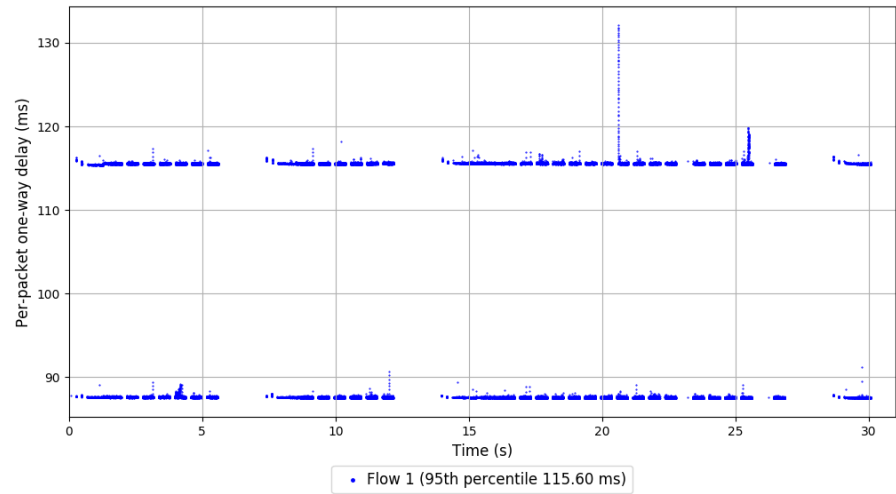
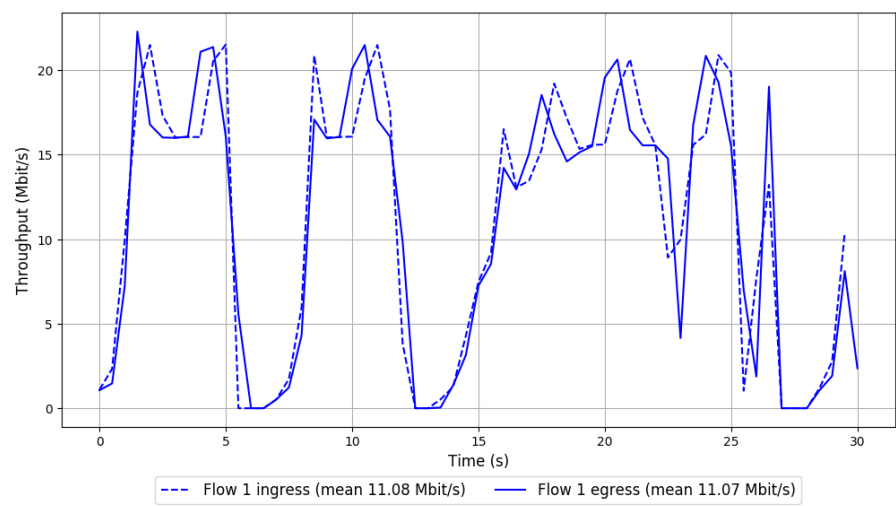
-- Flow 1:

Average throughput: 11.07 Mbit/s

95th percentile per-packet one-way delay: 115.596 ms

Loss rate: 0.14%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-12 22:18:30

End at: 2018-02-12 22:19:00

Below is generated by plot.py at 2018-02-13 02:11:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.35 Mbit/s

95th percentile per-packet one-way delay: 115.090 ms

Loss rate: 0.00%

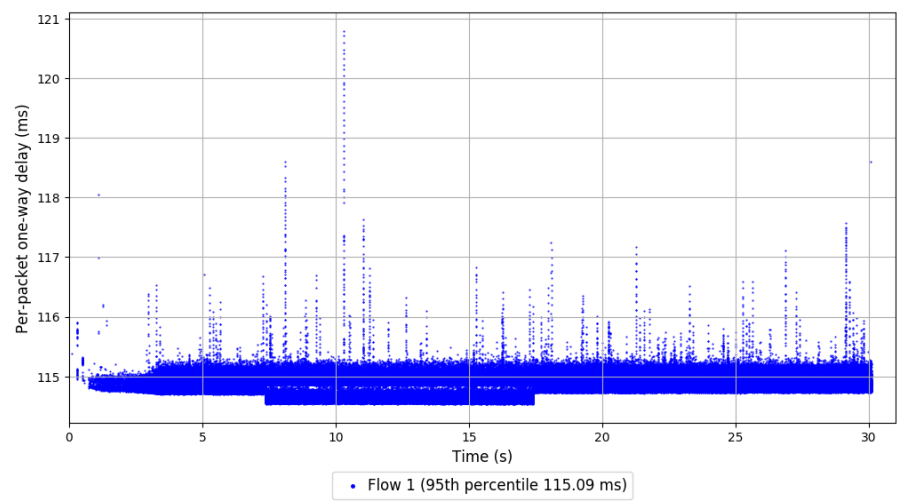
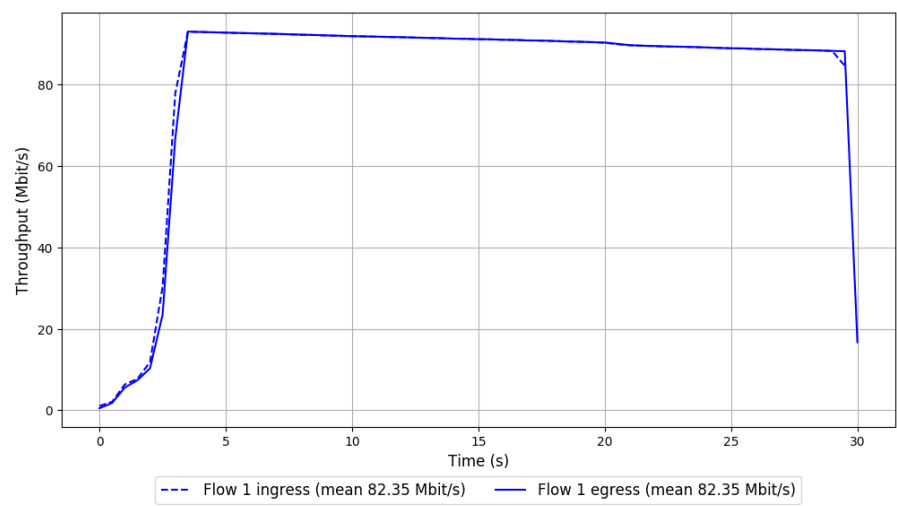
-- Flow 1:

Average throughput: 82.35 Mbit/s

95th percentile per-packet one-way delay: 115.090 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-12 22:33:46

End at: 2018-02-12 22:34:16

Below is generated by plot.py at 2018-02-13 02:11:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.71 Mbit/s

95th percentile per-packet one-way delay: 114.956 ms

Loss rate: 0.00%

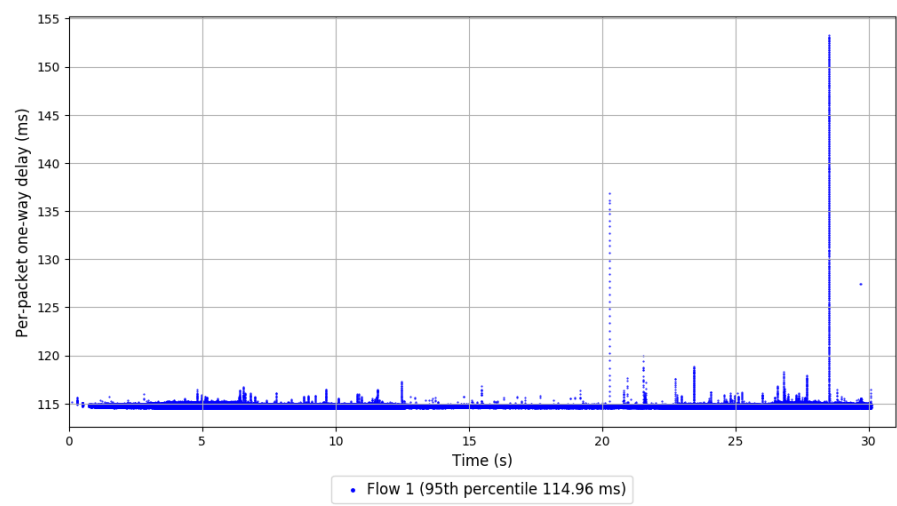
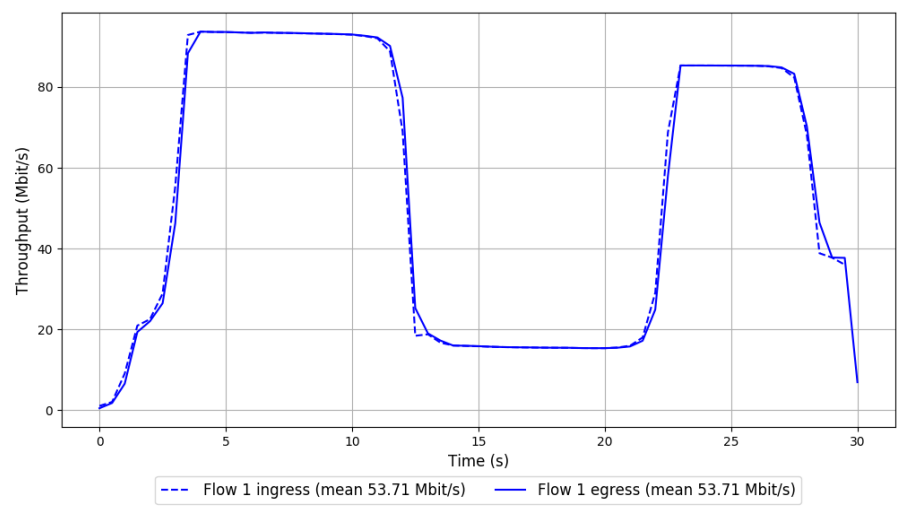
-- Flow 1:

Average throughput: 53.71 Mbit/s

95th percentile per-packet one-way delay: 114.956 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-12 22:48:50

End at: 2018-02-12 22:49:21

Below is generated by plot.py at 2018-02-13 02:11:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.76 Mbit/s

95th percentile per-packet one-way delay: 114.459 ms

Loss rate: 0.00%

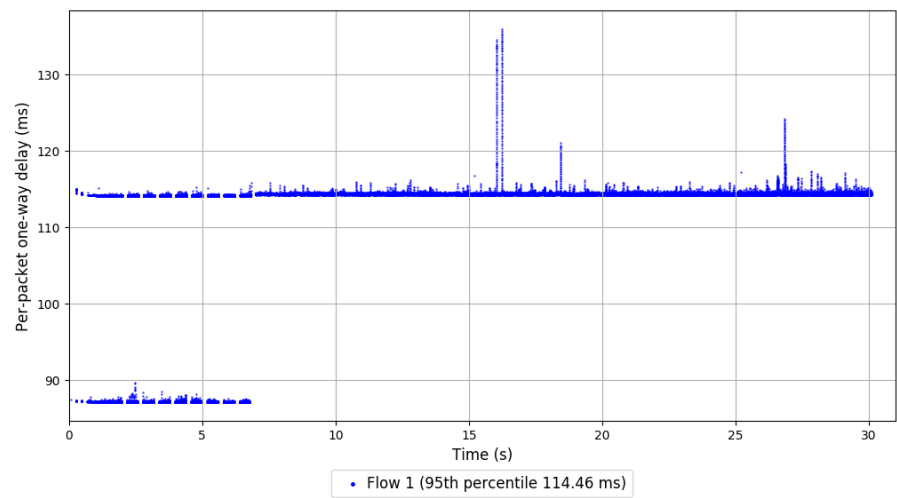
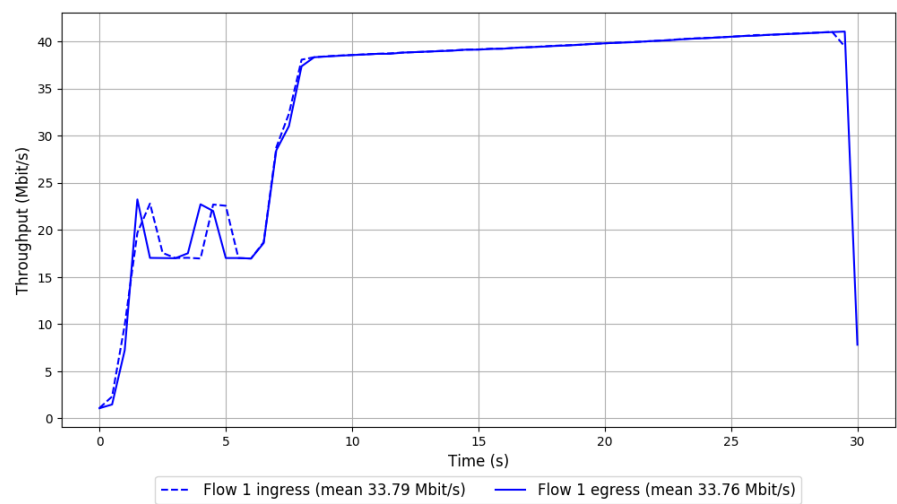
-- Flow 1:

Average throughput: 33.76 Mbit/s

95th percentile per-packet one-way delay: 114.459 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-12 23:04:04

End at: 2018-02-12 23:04:34

Below is generated by plot.py at 2018-02-13 02:11:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.82 Mbit/s

95th percentile per-packet one-way delay: 114.463 ms

Loss rate: 0.00%

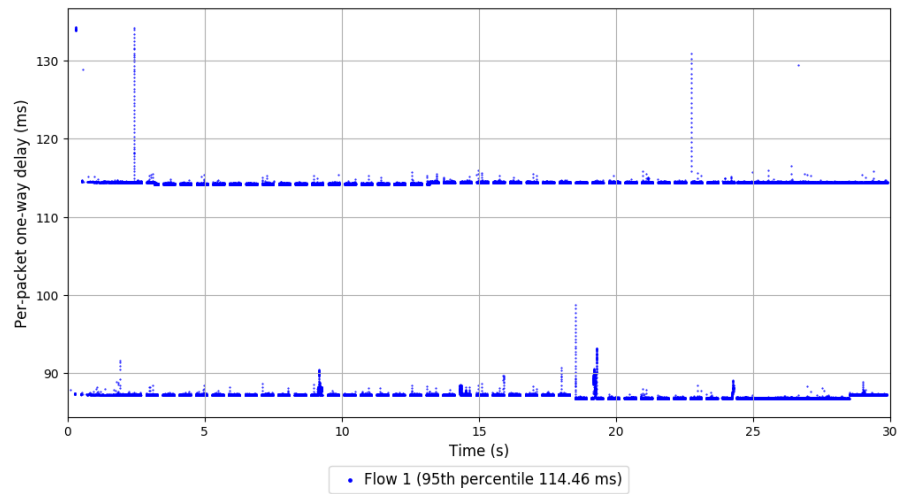
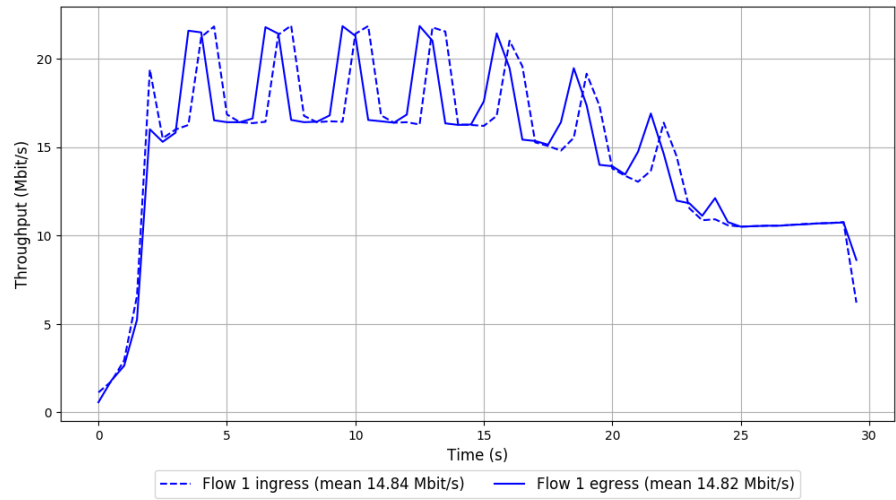
-- Flow 1:

Average throughput: 14.82 Mbit/s

95th percentile per-packet one-way delay: 114.463 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-12 23:19:00

End at: 2018-02-12 23:19:30

Below is generated by plot.py at 2018-02-13 02:11:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.02 Mbit/s

95th percentile per-packet one-way delay: 114.788 ms

Loss rate: 0.00%

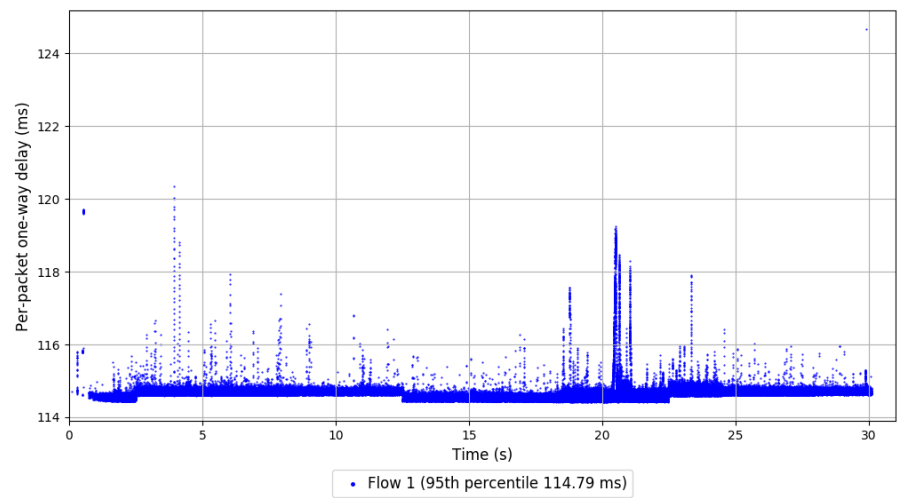
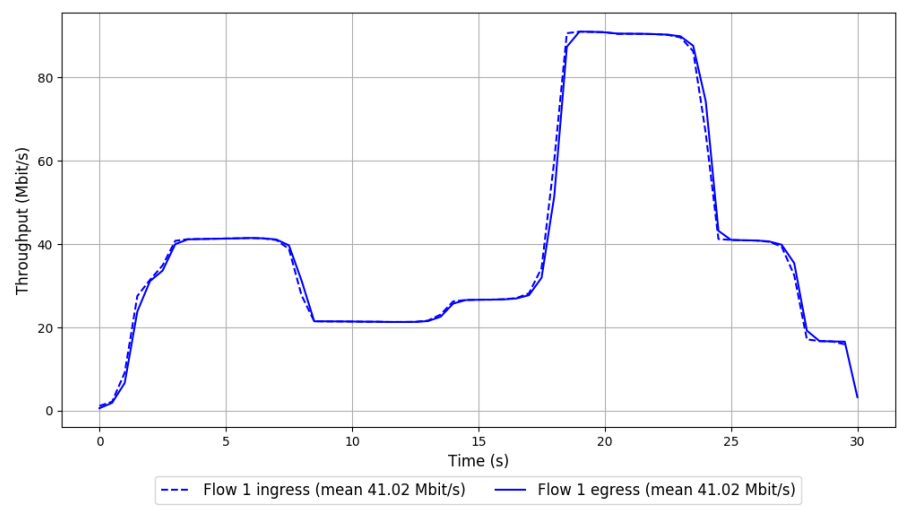
-- Flow 1:

Average throughput: 41.02 Mbit/s

95th percentile per-packet one-way delay: 114.788 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-12 23:33:59

End at: 2018-02-12 23:34:29

Below is generated by plot.py at 2018-02-13 02:11:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.48 Mbit/s

95th percentile per-packet one-way delay: 114.844 ms

Loss rate: 0.00%

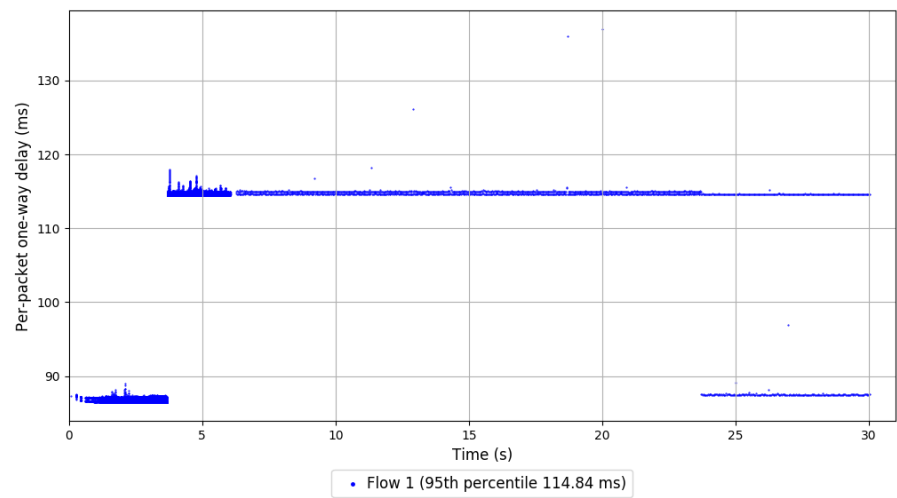
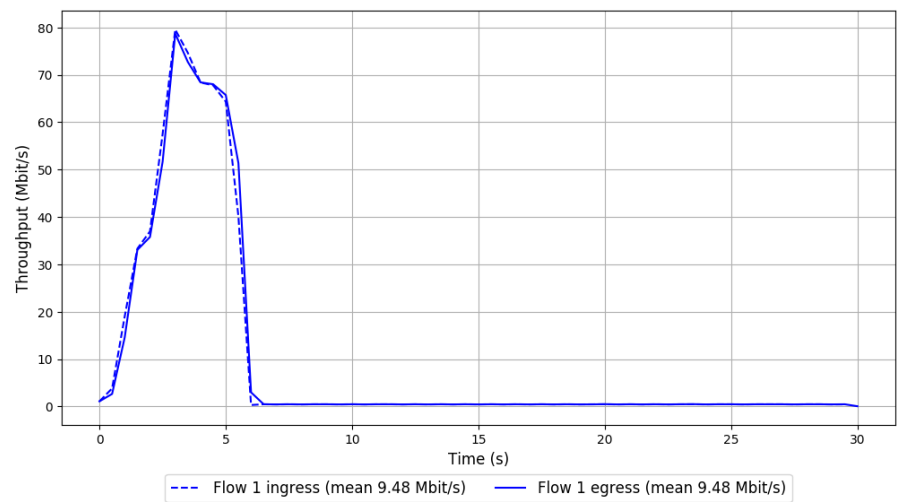
-- Flow 1:

Average throughput: 9.48 Mbit/s

95th percentile per-packet one-way delay: 114.844 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-12 23:48:54

End at: 2018-02-12 23:49:24

Below is generated by plot.py at 2018-02-13 02:11:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.58 Mbit/s

95th percentile per-packet one-way delay: 114.443 ms

Loss rate: 0.00%

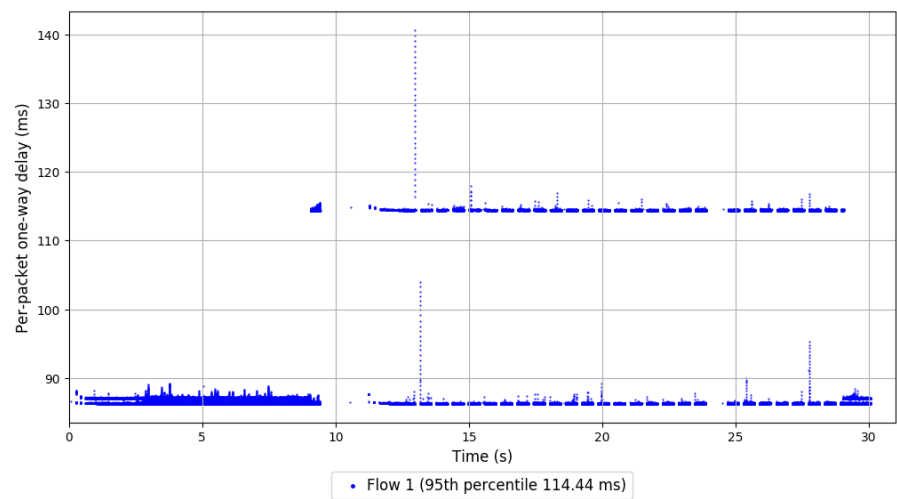
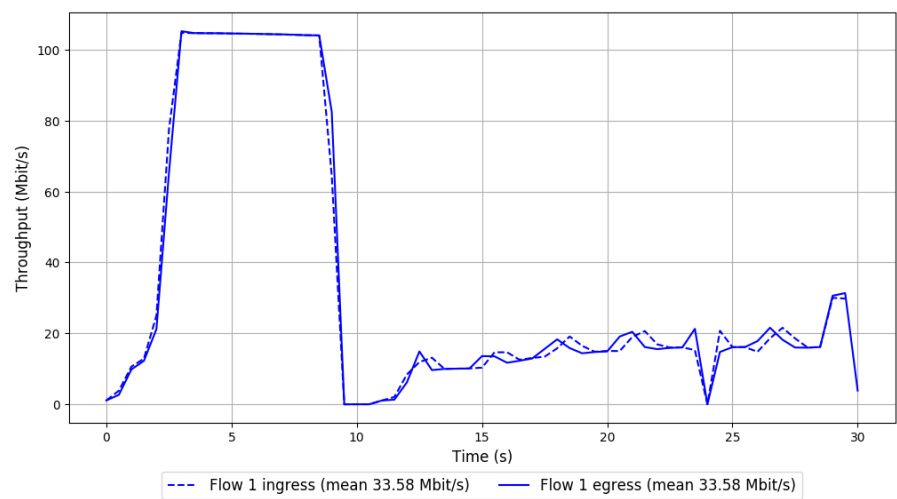
-- Flow 1:

Average throughput: 33.58 Mbit/s

95th percentile per-packet one-way delay: 114.443 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-13 00:03:56

End at: 2018-02-13 00:04:26

Below is generated by plot.py at 2018-02-13 02:11:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.97 Mbit/s

95th percentile per-packet one-way delay: 114.407 ms

Loss rate: 0.07%

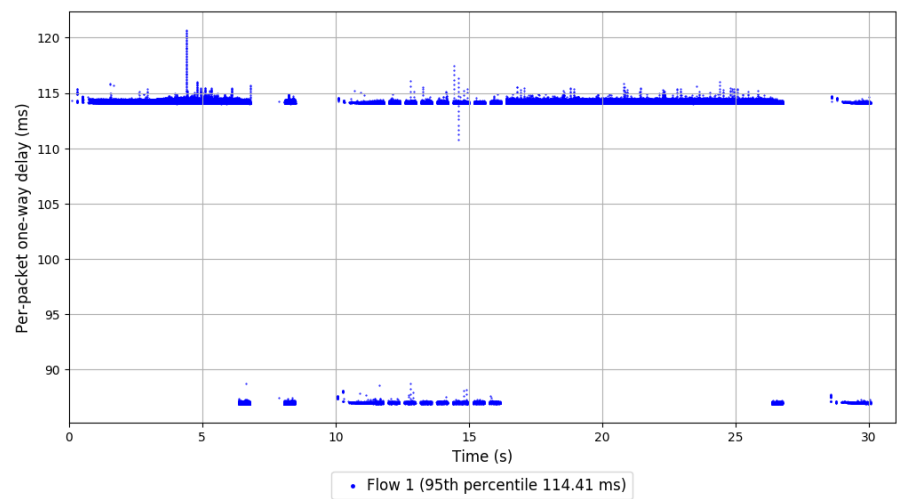
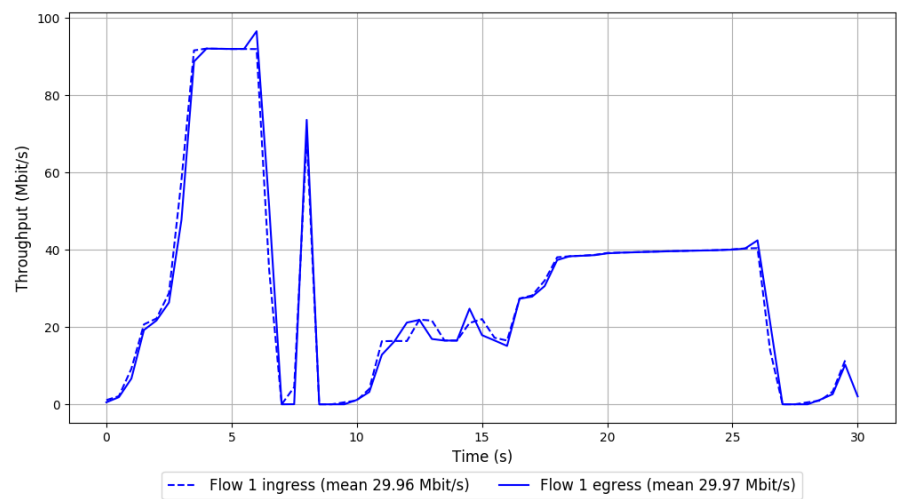
-- Flow 1:

Average throughput: 29.97 Mbit/s

95th percentile per-packet one-way delay: 114.407 ms

Loss rate: 0.07%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-13 00:18:24

End at: 2018-02-13 00:18:54

Below is generated by plot.py at 2018-02-13 02:11:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 114.303 ms

Loss rate: 0.05%

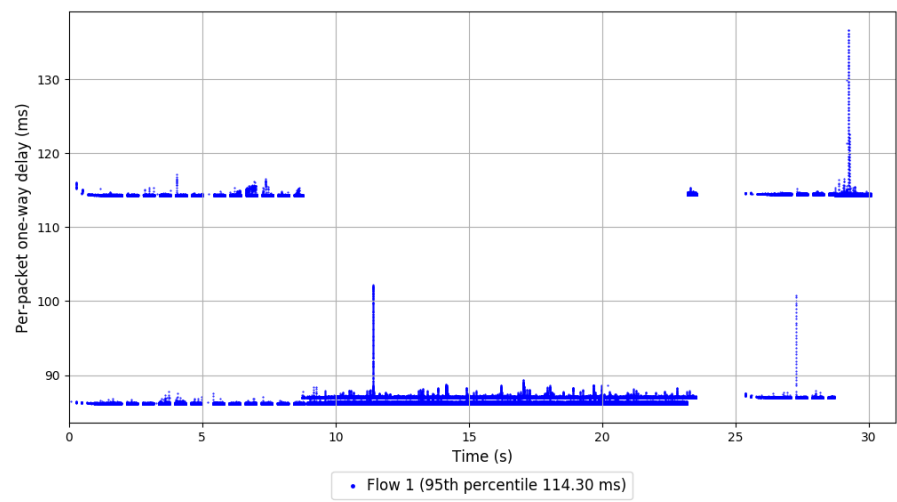
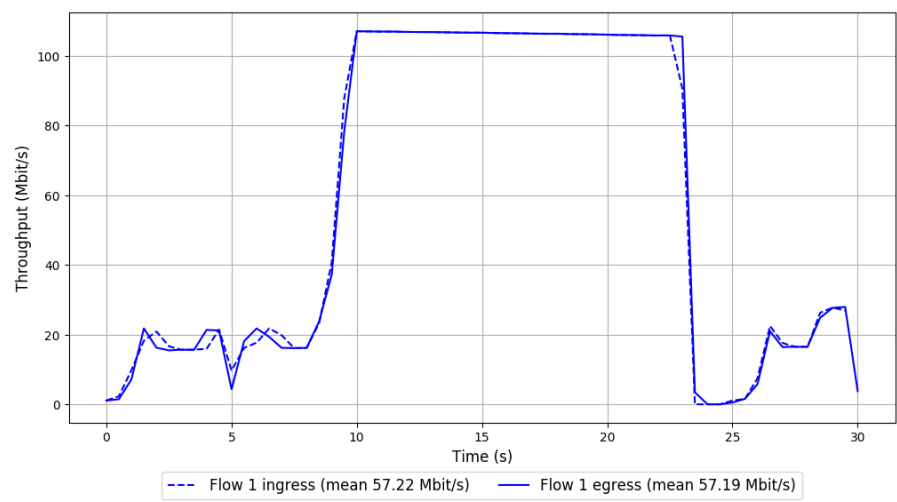
-- Flow 1:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 114.303 ms

Loss rate: 0.05%

Run 10: Report of Copa — Data Link

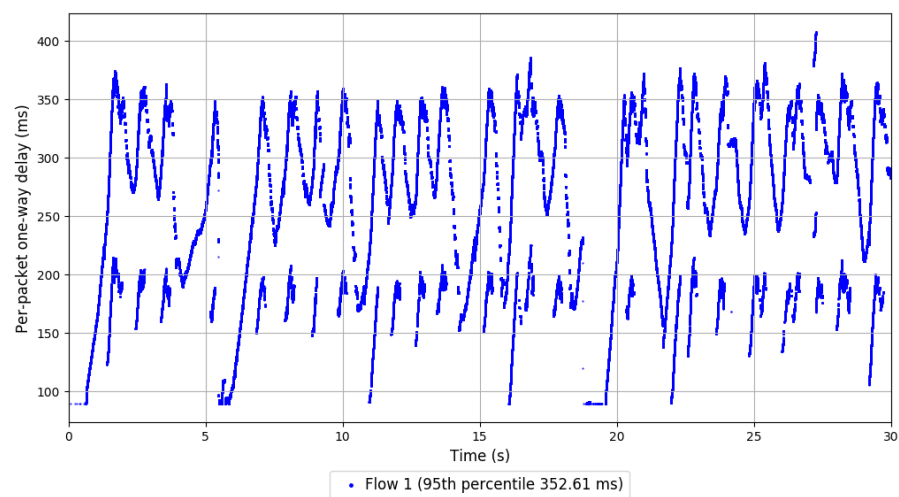
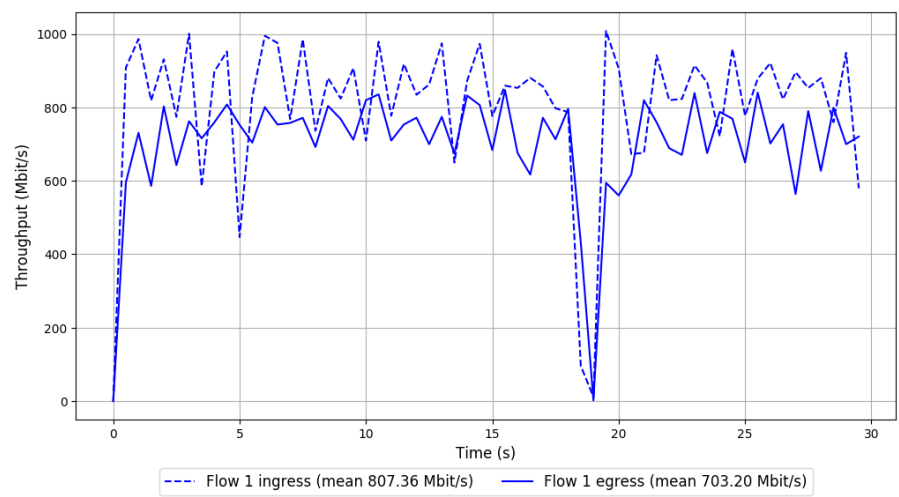


```
Run 1: Statistics of FillP

Start at: 2018-02-12 21:54:41
End at: 2018-02-12 21:55:11

# Below is generated by plot.py at 2018-02-13 02:22:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 703.20 Mbit/s
95th percentile per-packet one-way delay: 352.609 ms
Loss rate: 12.90%
-- Flow 1:
Average throughput: 703.20 Mbit/s
95th percentile per-packet one-way delay: 352.609 ms
Loss rate: 12.90%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-12 22:09:26

End at: 2018-02-12 22:09:56

Below is generated by plot.py at 2018-02-13 02:22:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 710.88 Mbit/s

95th percentile per-packet one-way delay: 349.867 ms

Loss rate: 10.09%

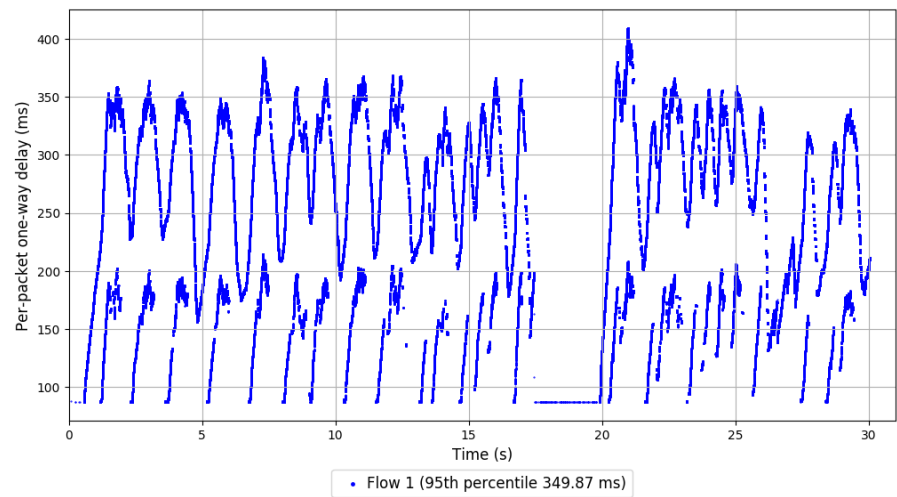
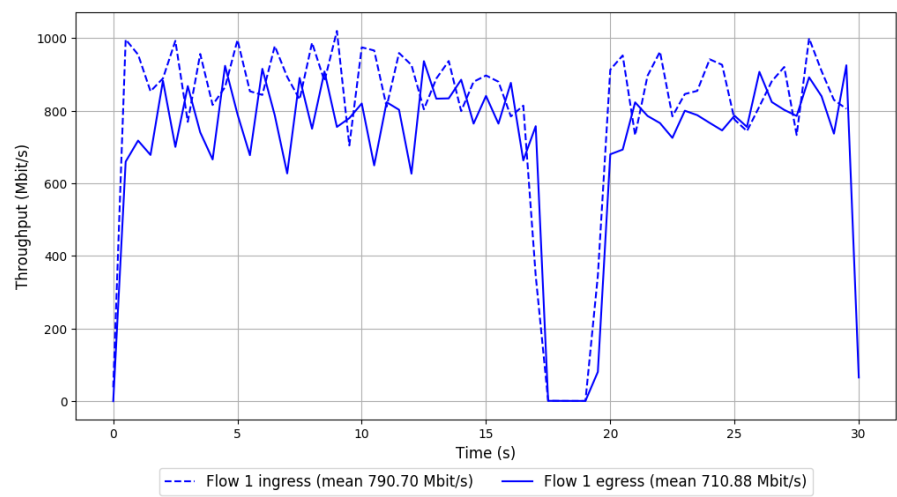
-- Flow 1:

Average throughput: 710.88 Mbit/s

95th percentile per-packet one-way delay: 349.867 ms

Loss rate: 10.09%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-12 22:24:13

End at: 2018-02-12 22:24:43

Below is generated by plot.py at 2018-02-13 02:23:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 813.81 Mbit/s

95th percentile per-packet one-way delay: 355.238 ms

Loss rate: 8.79%

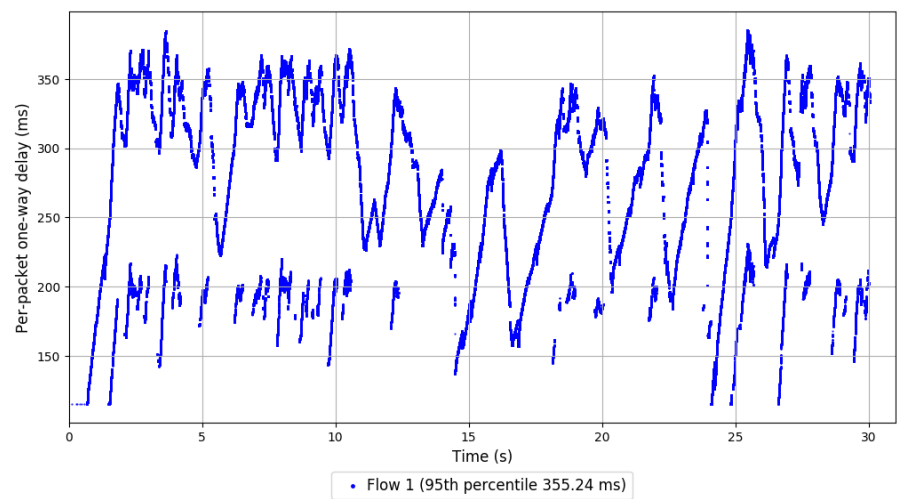
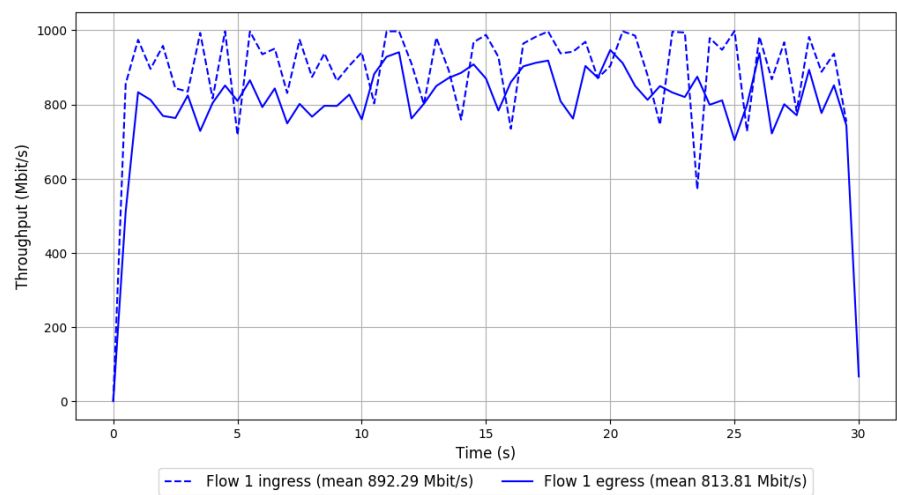
-- Flow 1:

Average throughput: 813.81 Mbit/s

95th percentile per-packet one-way delay: 355.238 ms

Loss rate: 8.79%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-12 22:39:29

End at: 2018-02-12 22:39:59

Below is generated by plot.py at 2018-02-13 02:24:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 834.65 Mbit/s

95th percentile per-packet one-way delay: 357.577 ms

Loss rate: 7.24%

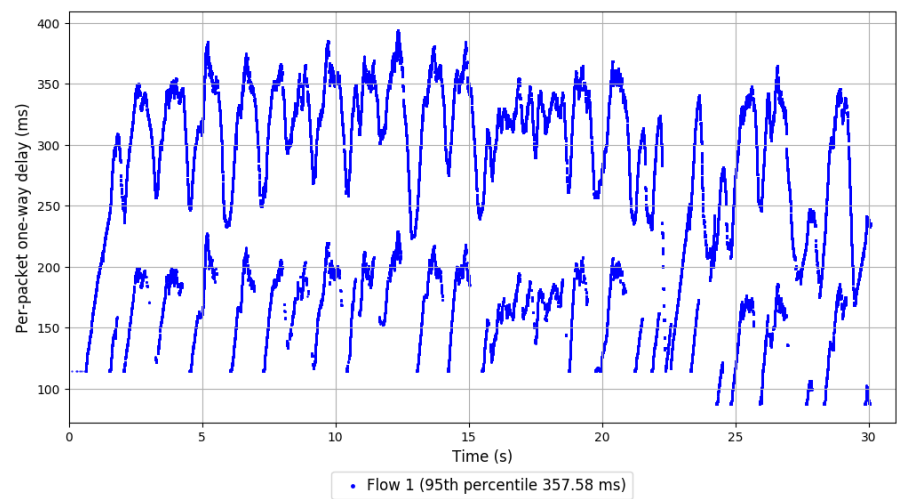
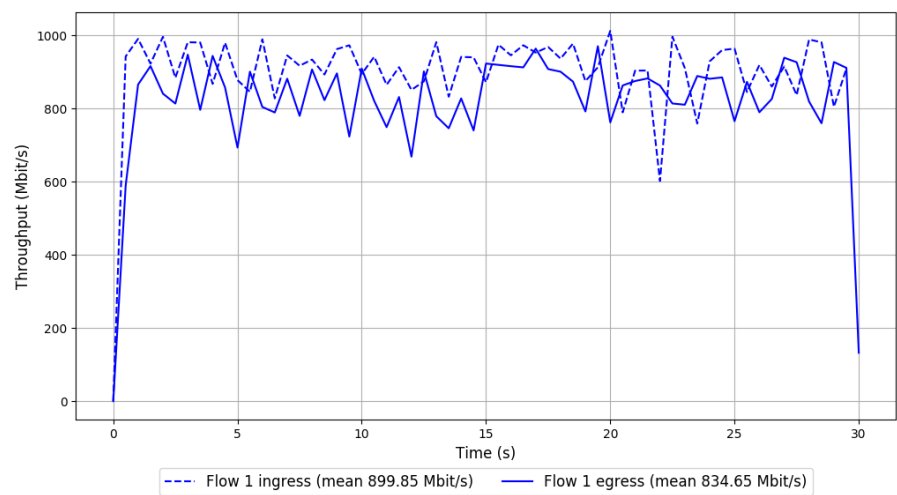
-- Flow 1:

Average throughput: 834.65 Mbit/s

95th percentile per-packet one-way delay: 357.577 ms

Loss rate: 7.24%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-12 22:54:32

End at: 2018-02-12 22:55:02

Below is generated by plot.py at 2018-02-13 02:24:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 802.16 Mbit/s

95th percentile per-packet one-way delay: 358.010 ms

Loss rate: 8.04%

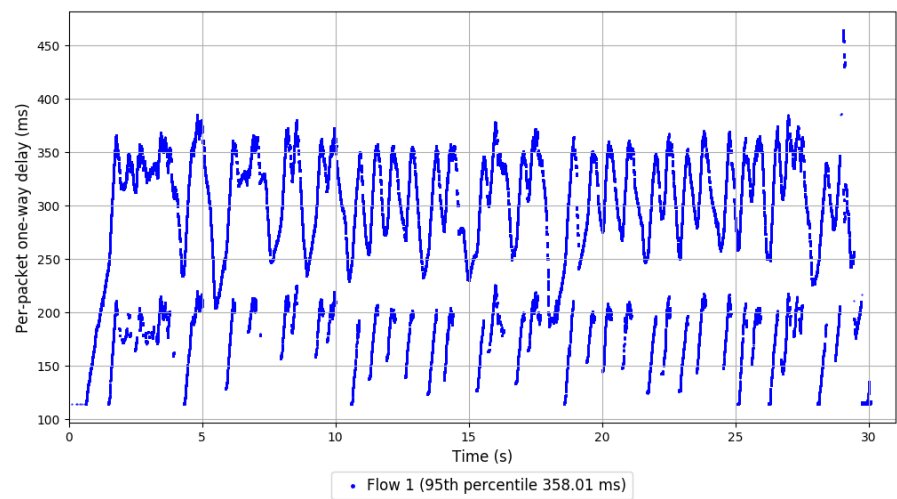
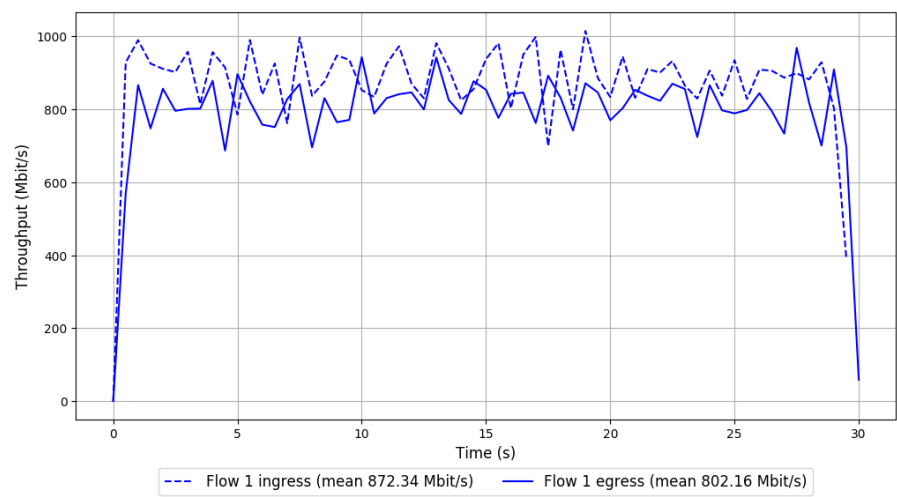
-- Flow 1:

Average throughput: 802.16 Mbit/s

95th percentile per-packet one-way delay: 358.010 ms

Loss rate: 8.04%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-12 23:09:34

End at: 2018-02-12 23:10:04

Below is generated by plot.py at 2018-02-13 02:24:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 709.36 Mbit/s

95th percentile per-packet one-way delay: 359.961 ms

Loss rate: 11.70%

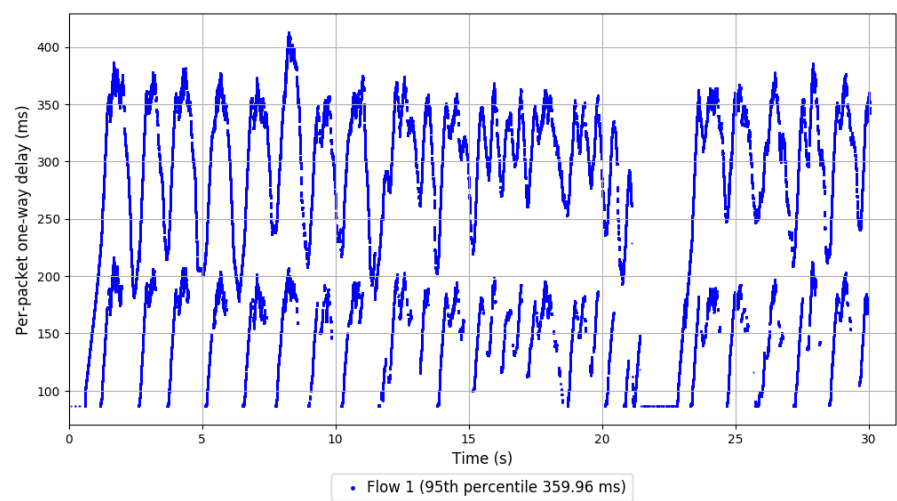
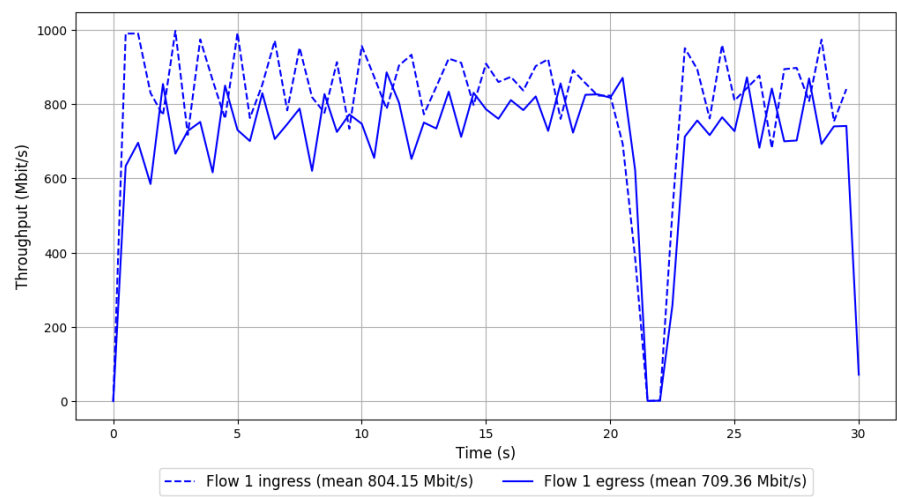
-- Flow 1:

Average throughput: 709.36 Mbit/s

95th percentile per-packet one-way delay: 359.961 ms

Loss rate: 11.70%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-12 23:24:40

End at: 2018-02-12 23:25:10

Below is generated by plot.py at 2018-02-13 02:24:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 840.83 Mbit/s

95th percentile per-packet one-way delay: 346.424 ms

Loss rate: 5.23%

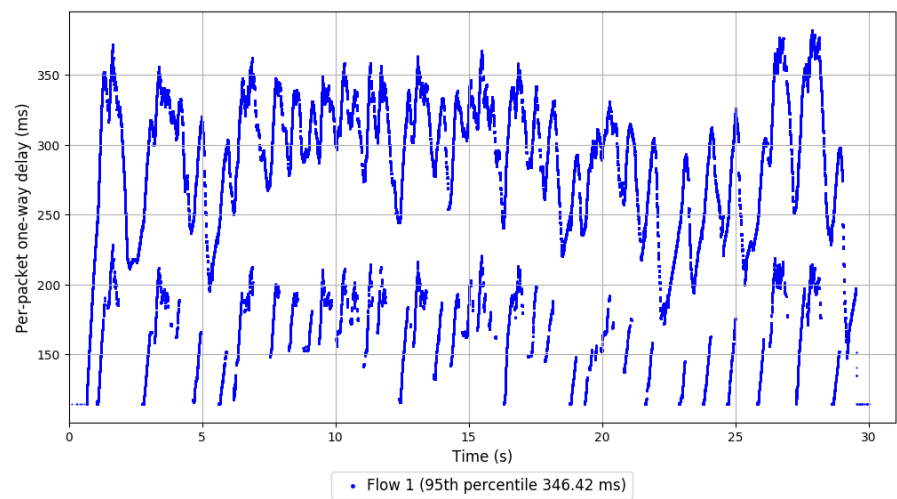
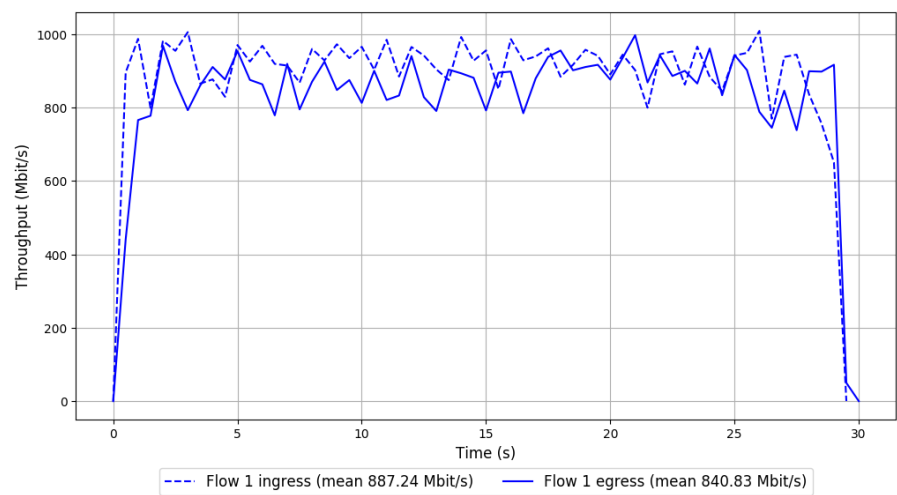
-- Flow 1:

Average throughput: 840.83 Mbit/s

95th percentile per-packet one-way delay: 346.424 ms

Loss rate: 5.23%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-12 23:39:31

End at: 2018-02-12 23:40:01

Below is generated by plot.py at 2018-02-13 02:24:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 722.55 Mbit/s

95th percentile per-packet one-way delay: 363.432 ms

Loss rate: 9.02%

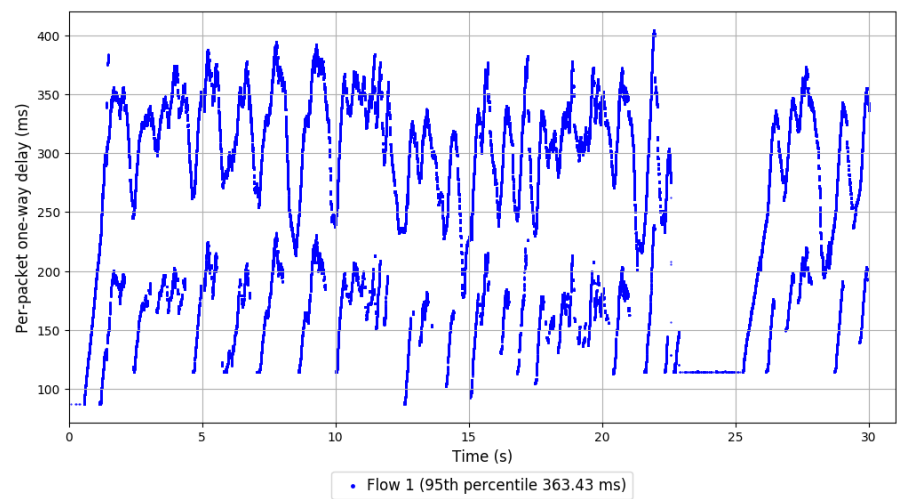
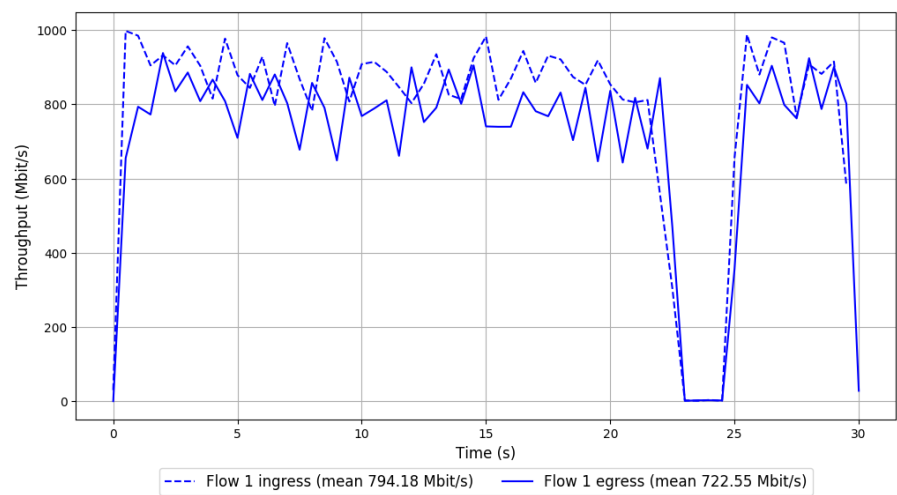
-- Flow 1:

Average throughput: 722.55 Mbit/s

95th percentile per-packet one-way delay: 363.432 ms

Loss rate: 9.02%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-12 23:54:29

End at: 2018-02-12 23:54:59

Below is generated by plot.py at 2018-02-13 02:35:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 813.13 Mbit/s

95th percentile per-packet one-way delay: 345.605 ms

Loss rate: 8.71%

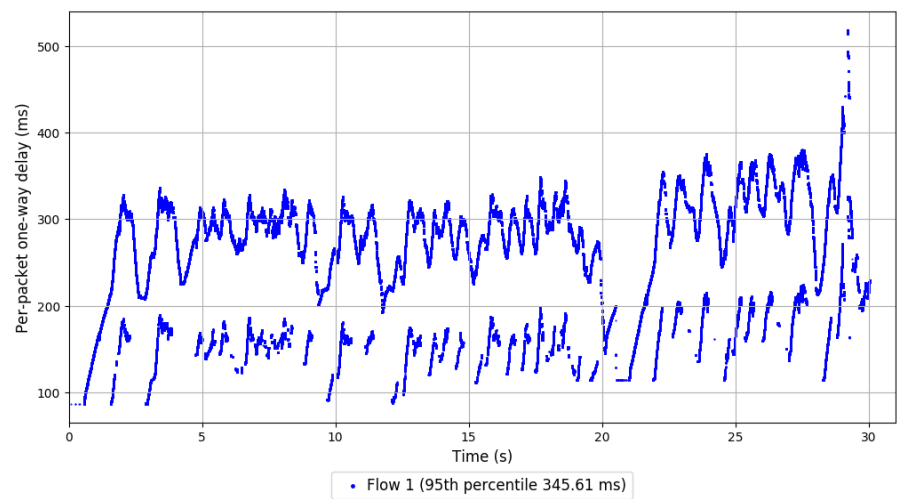
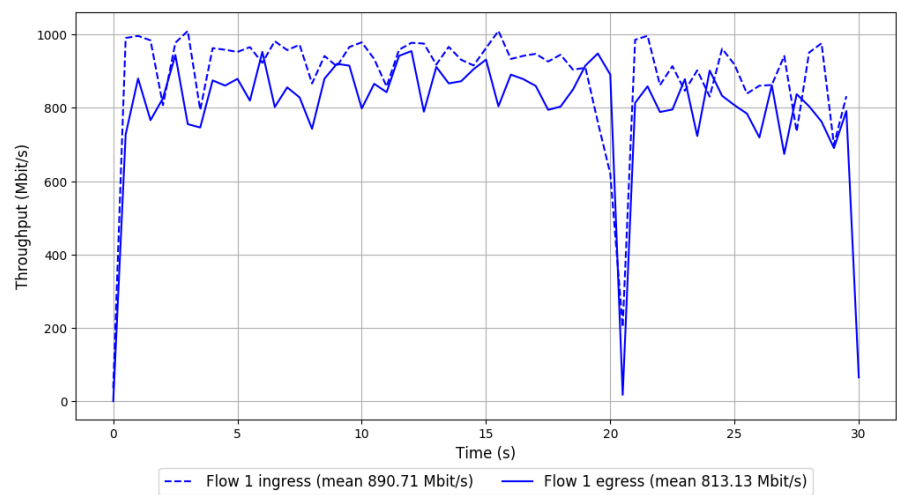
-- Flow 1:

Average throughput: 813.13 Mbit/s

95th percentile per-packet one-way delay: 345.605 ms

Loss rate: 8.71%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-13 00:09:25

End at: 2018-02-13 00:09:55

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 824.56 Mbit/s

95th percentile per-packet one-way delay: 336.844 ms

Loss rate: 8.45%

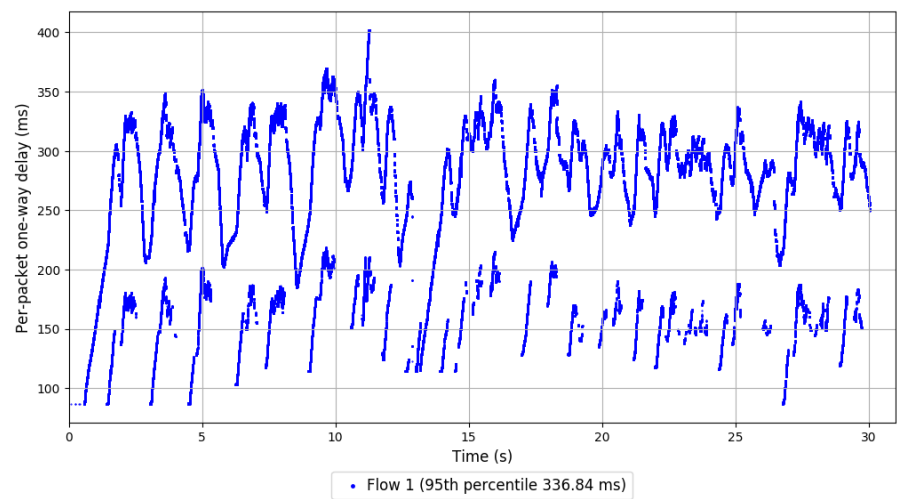
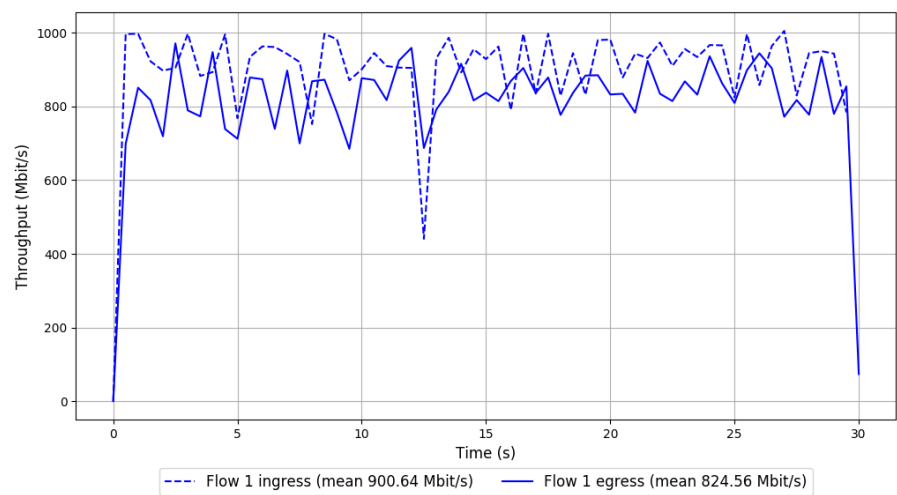
-- Flow 1:

Average throughput: 824.56 Mbit/s

95th percentile per-packet one-way delay: 336.844 ms

Loss rate: 8.45%

Run 10: Report of FillP — Data Link

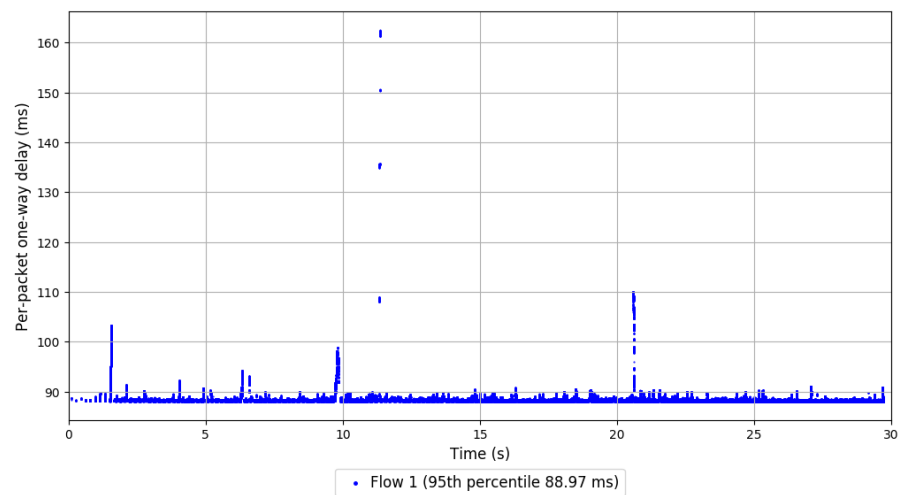
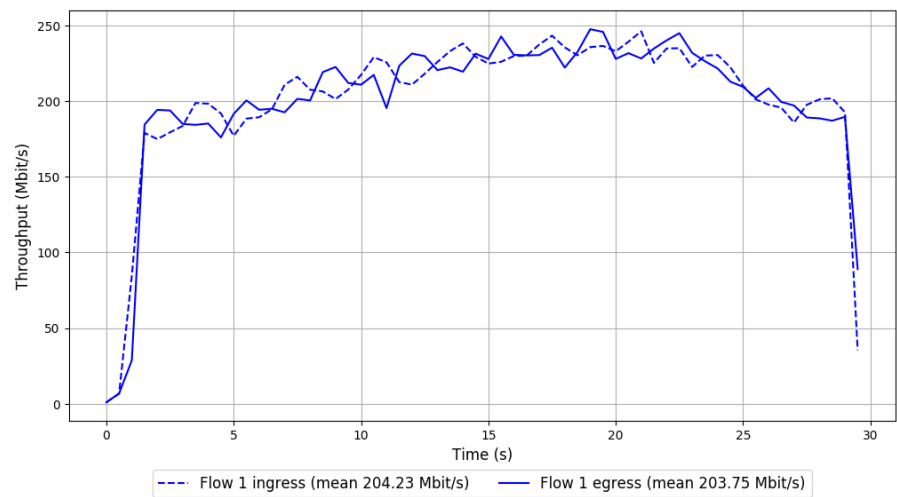


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-12 22:00:46
End at: 2018-02-12 22:01:16

# Below is generated by plot.py at 2018-02-13 02:36:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.75 Mbit/s
95th percentile per-packet one-way delay: 88.969 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 203.75 Mbit/s
95th percentile per-packet one-way delay: 88.969 ms
Loss rate: 0.24%
```

Run 1: Report of Indigo-1-32 — Data Link

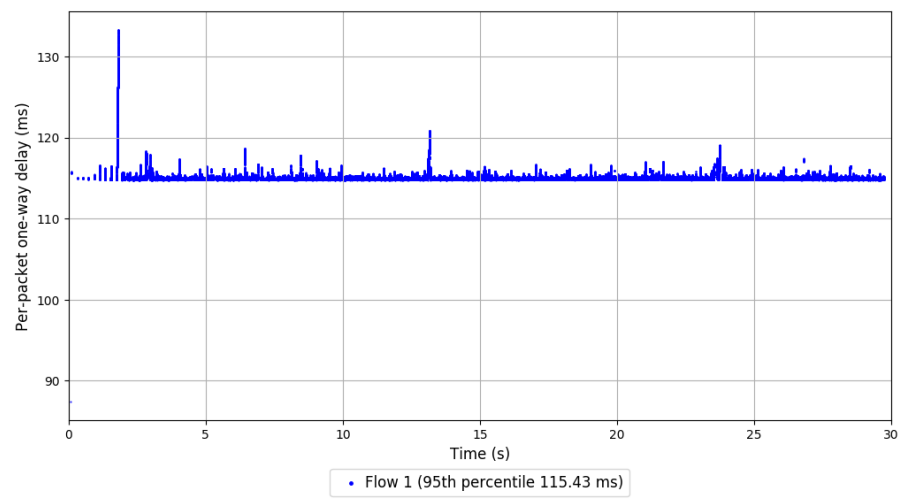
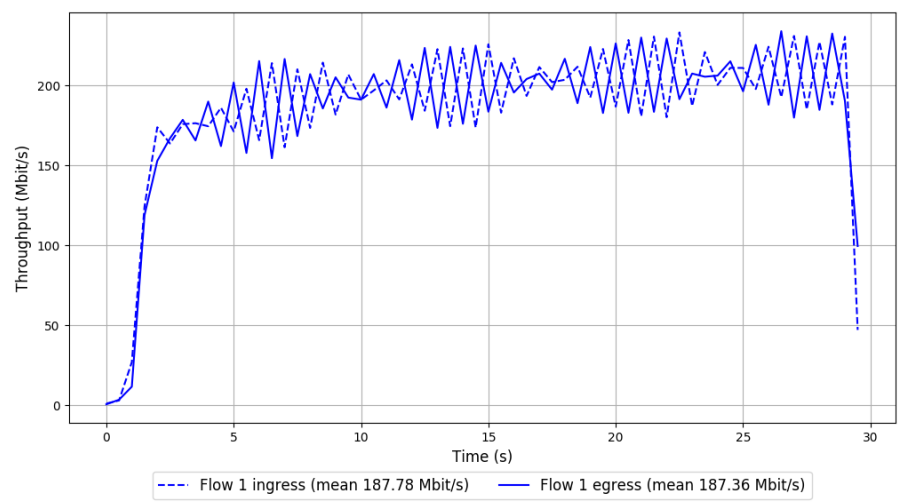


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-12 22:15:30
End at: 2018-02-12 22:16:00

# Below is generated by plot.py at 2018-02-13 02:36:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 187.36 Mbit/s
95th percentile per-packet one-way delay: 115.432 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 187.36 Mbit/s
95th percentile per-packet one-way delay: 115.432 ms
Loss rate: 0.22%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-12 22:30:43

End at: 2018-02-12 22:31:13

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.87 Mbit/s

95th percentile per-packet one-way delay: 116.222 ms

Loss rate: 0.28%

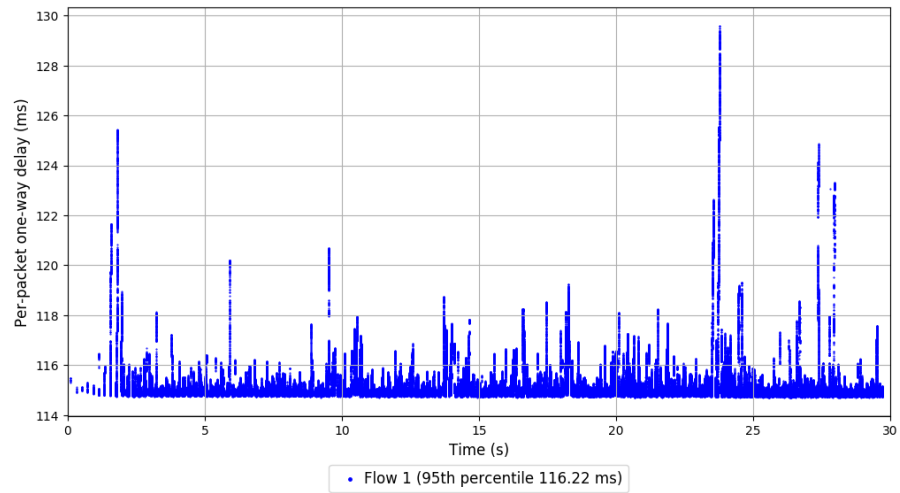
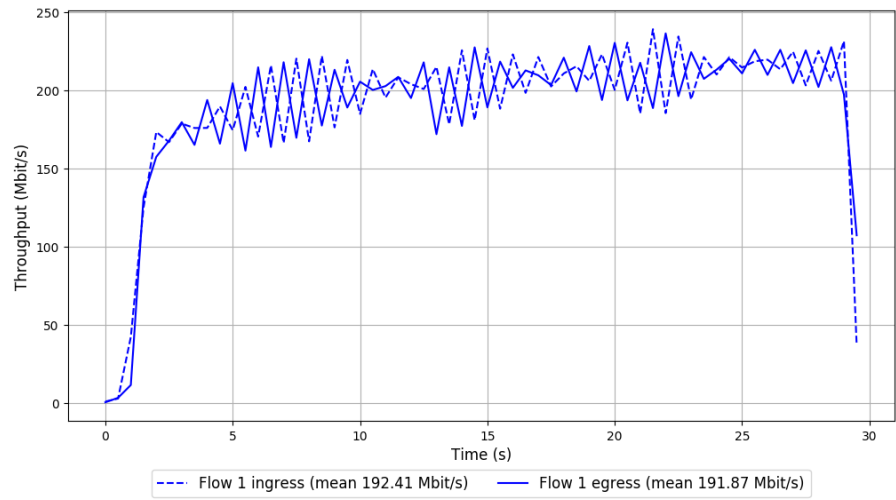
-- Flow 1:

Average throughput: 191.87 Mbit/s

95th percentile per-packet one-way delay: 116.222 ms

Loss rate: 0.28%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-12 22:45:47

End at: 2018-02-12 22:46:17

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.39 Mbit/s

95th percentile per-packet one-way delay: 115.451 ms

Loss rate: 0.22%

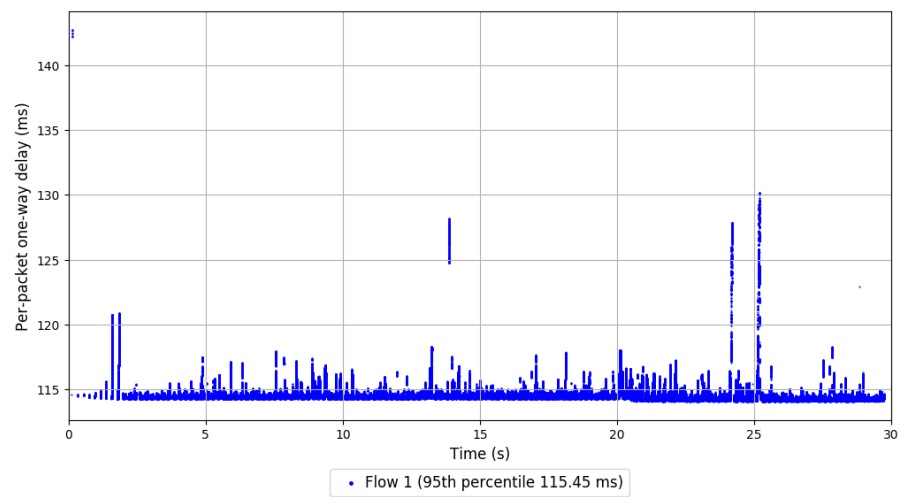
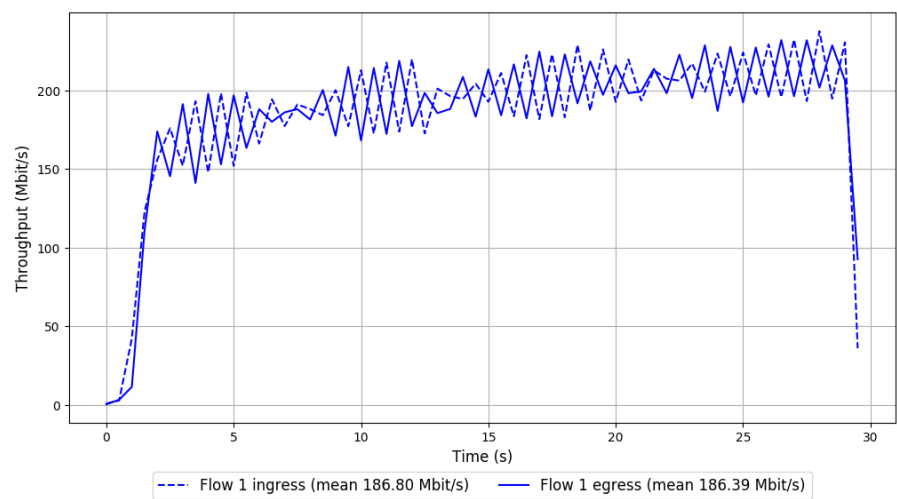
-- Flow 1:

Average throughput: 186.39 Mbit/s

95th percentile per-packet one-way delay: 115.451 ms

Loss rate: 0.22%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-12 23:00:57

End at: 2018-02-12 23:01:27

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.49 Mbit/s

95th percentile per-packet one-way delay: 115.207 ms

Loss rate: 0.01%

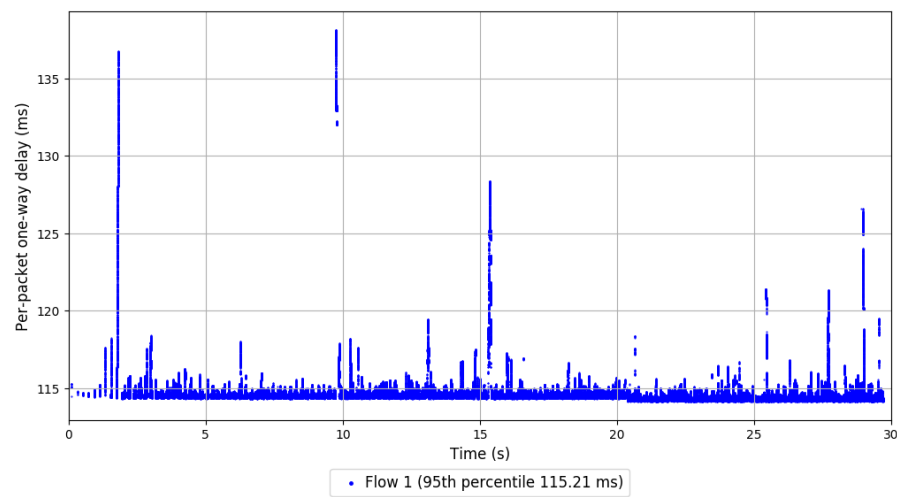
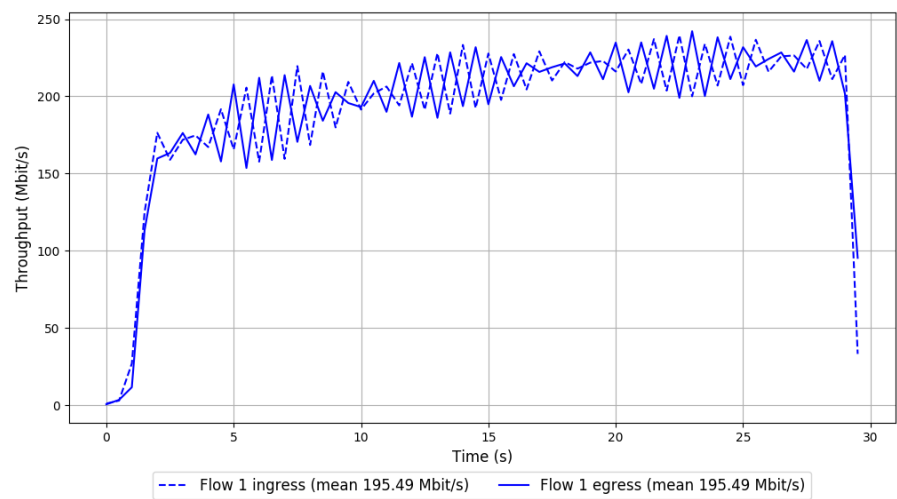
-- Flow 1:

Average throughput: 195.49 Mbit/s

95th percentile per-packet one-way delay: 115.207 ms

Loss rate: 0.01%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-12 23:15:58

End at: 2018-02-12 23:16:28

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.22 Mbit/s

95th percentile per-packet one-way delay: 115.860 ms

Loss rate: 0.19%

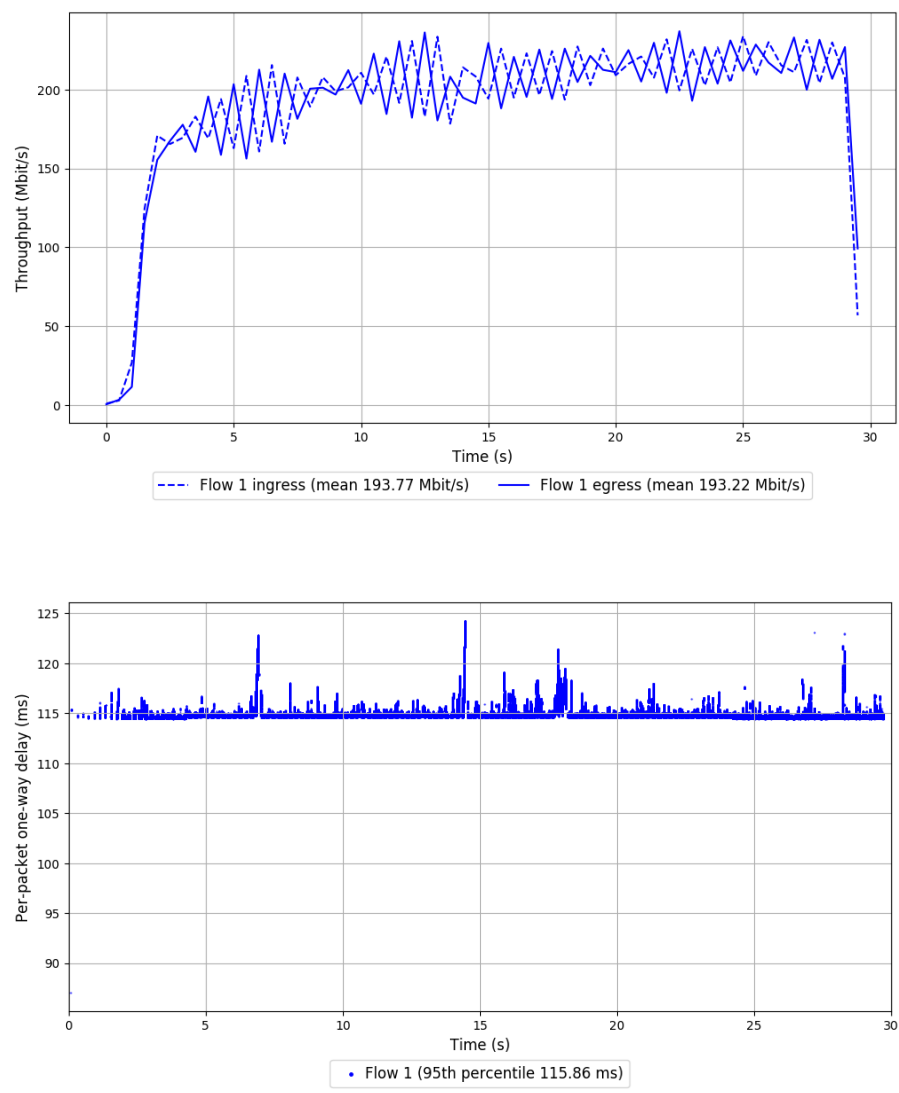
-- Flow 1:

Average throughput: 193.22 Mbit/s

95th percentile per-packet one-way delay: 115.860 ms

Loss rate: 0.19%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-12 23:30:58

End at: 2018-02-12 23:31:28

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.04 Mbit/s

95th percentile per-packet one-way delay: 115.739 ms

Loss rate: 0.11%

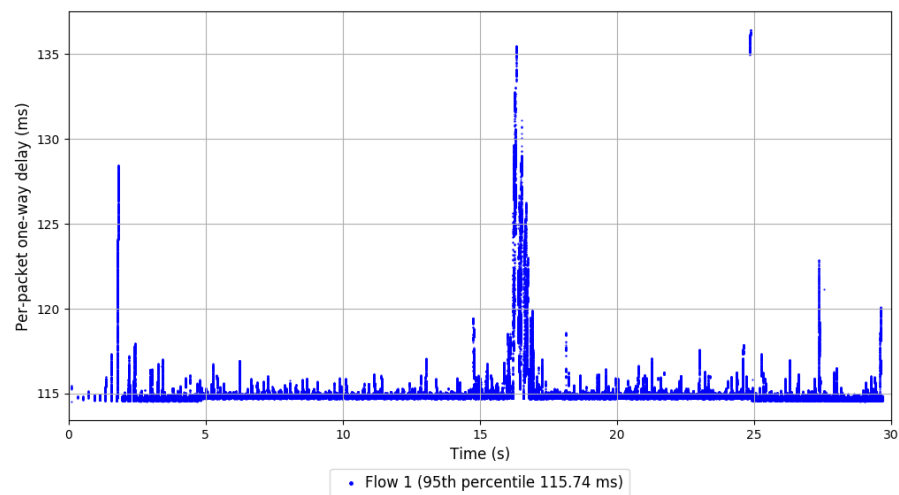
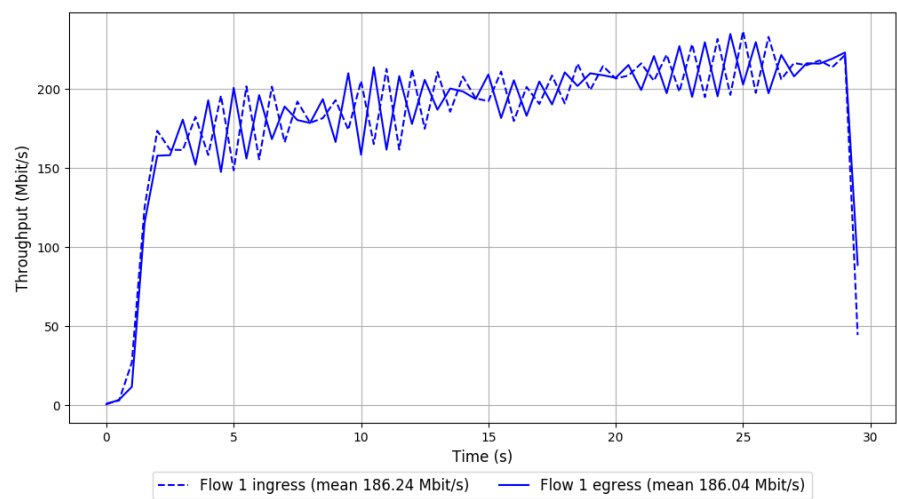
-- Flow 1:

Average throughput: 186.04 Mbit/s

95th percentile per-packet one-way delay: 115.739 ms

Loss rate: 0.11%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-12 23:45:54

End at: 2018-02-12 23:46:24

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.90 Mbit/s

95th percentile per-packet one-way delay: 114.708 ms

Loss rate: 0.00%

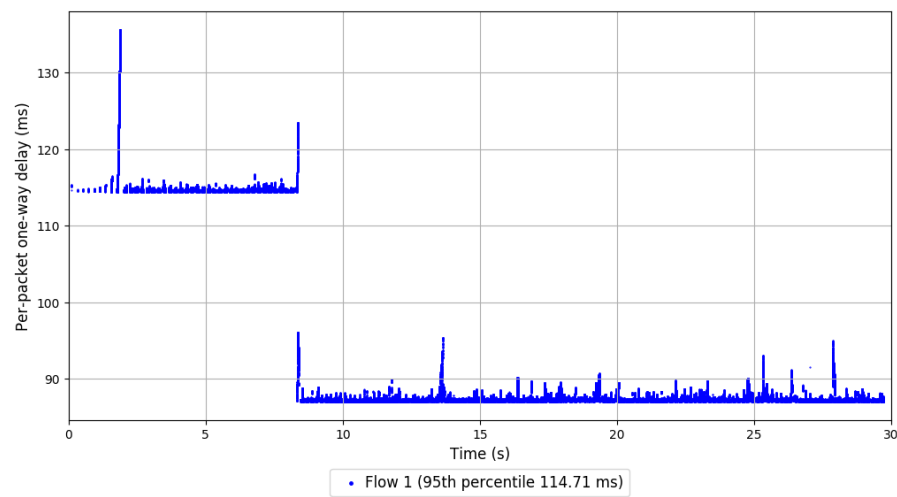
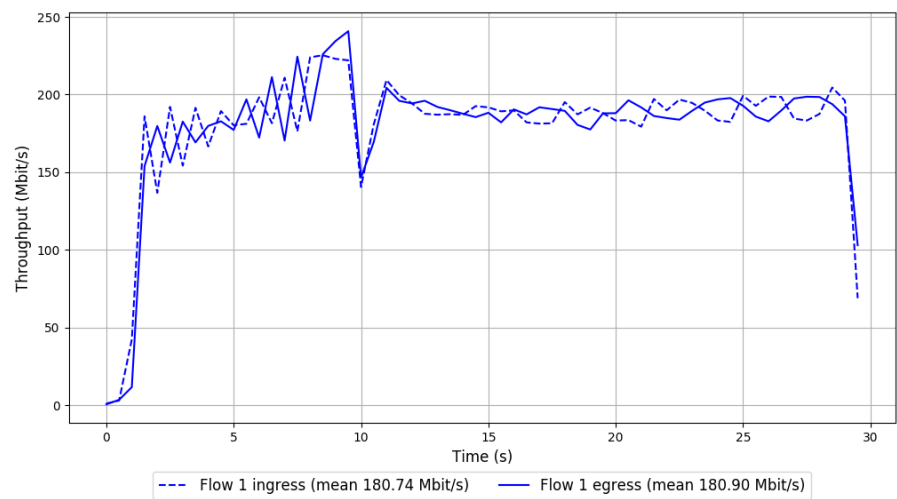
-- Flow 1:

Average throughput: 180.90 Mbit/s

95th percentile per-packet one-way delay: 114.708 ms

Loss rate: 0.00%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-13 00:01:00

End at: 2018-02-13 00:01:30

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.77 Mbit/s

95th percentile per-packet one-way delay: 114.481 ms

Loss rate: 0.47%

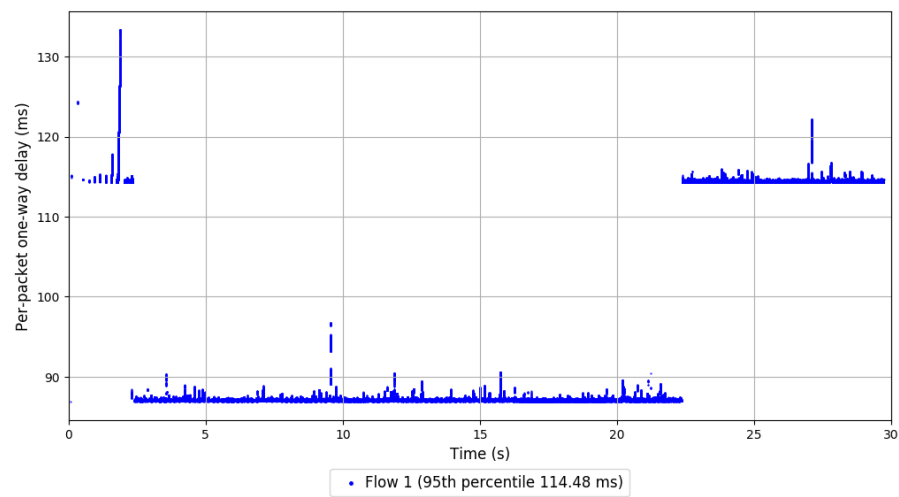
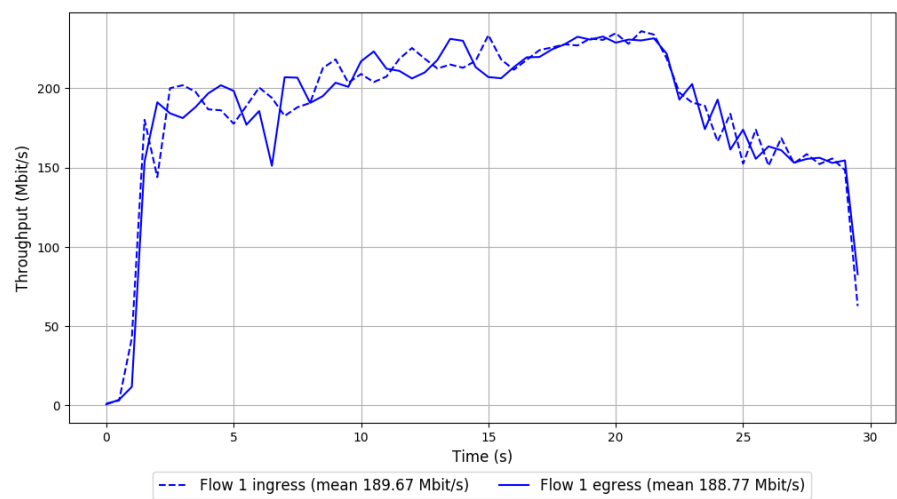
-- Flow 1:

Average throughput: 188.77 Mbit/s

95th percentile per-packet one-way delay: 114.481 ms

Loss rate: 0.47%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-13 00:15:23

End at: 2018-02-13 00:15:53

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.04 Mbit/s

95th percentile per-packet one-way delay: 114.787 ms

Loss rate: 0.28%

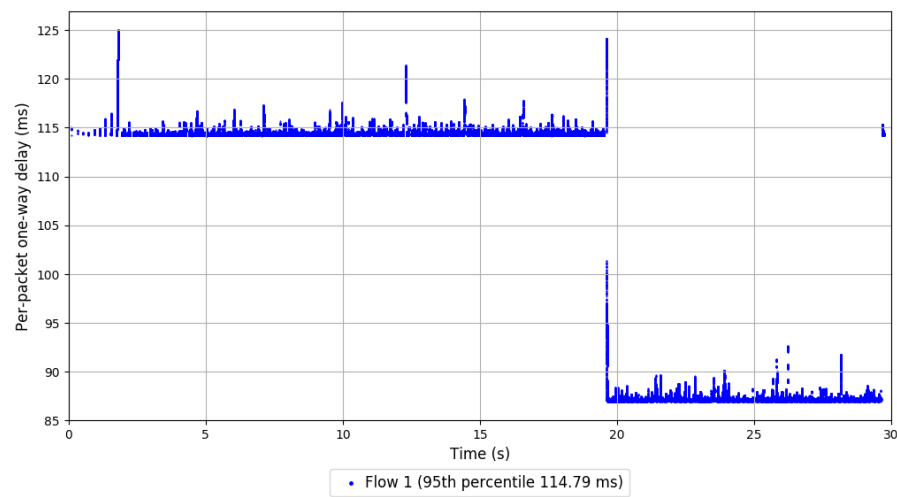
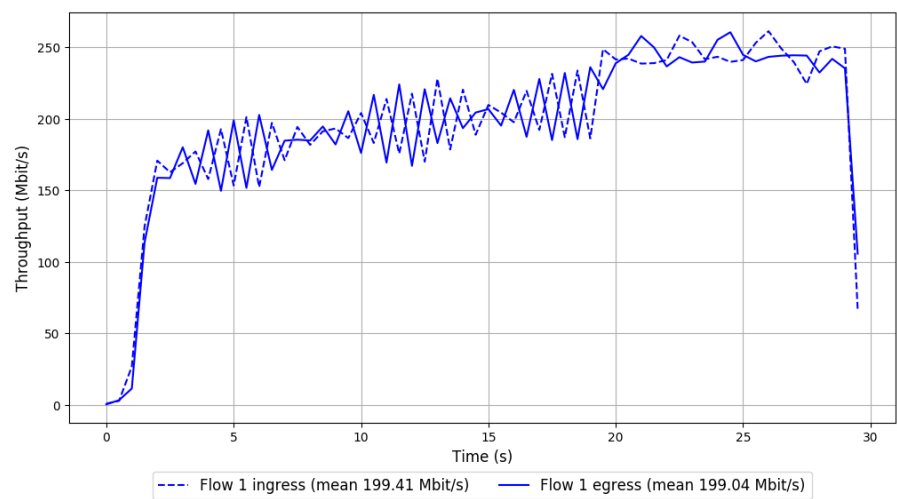
-- Flow 1:

Average throughput: 199.04 Mbit/s

95th percentile per-packet one-way delay: 114.787 ms

Loss rate: 0.28%

Run 10: Report of Indigo-1-32 — Data Link

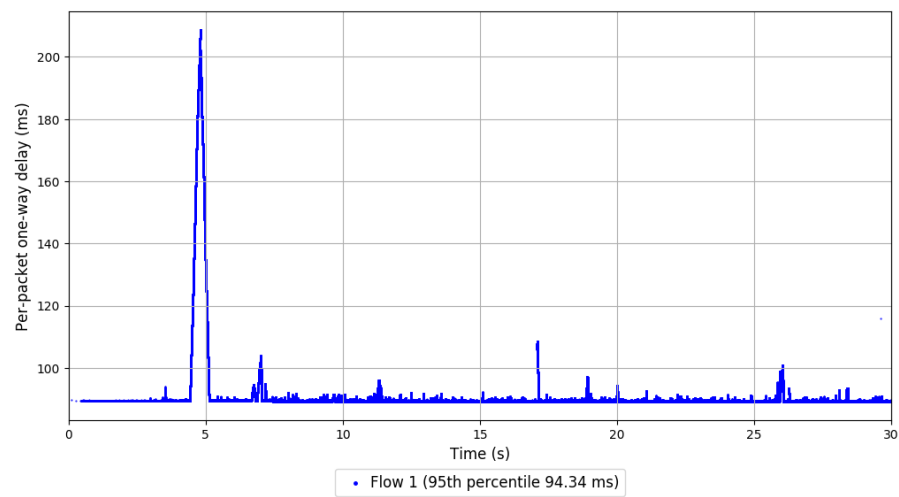
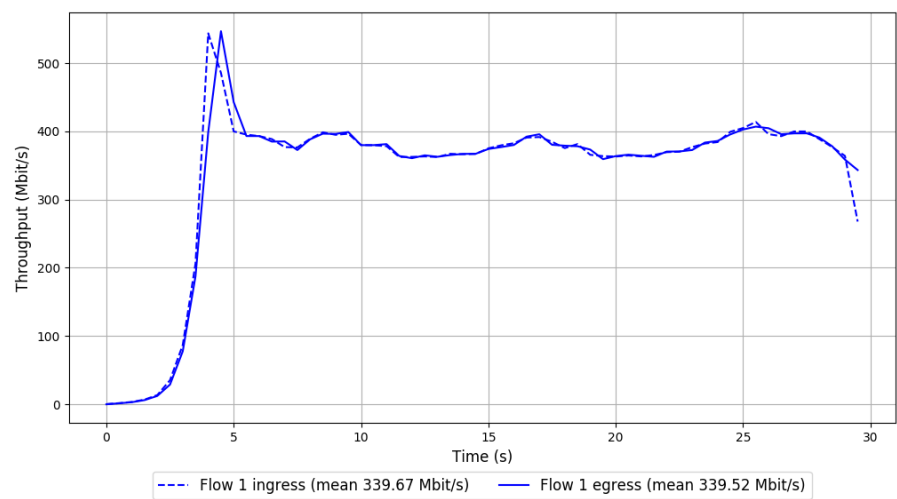


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-12 21:55:50
End at: 2018-02-12 21:56:20

# Below is generated by plot.py at 2018-02-13 02:36:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 339.52 Mbit/s
95th percentile per-packet one-way delay: 94.340 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 339.52 Mbit/s
95th percentile per-packet one-way delay: 94.340 ms
Loss rate: 0.05%
```

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-12 22:10:36

End at: 2018-02-12 22:11:06

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 417.24 Mbit/s

95th percentile per-packet one-way delay: 106.172 ms

Loss rate: 0.08%

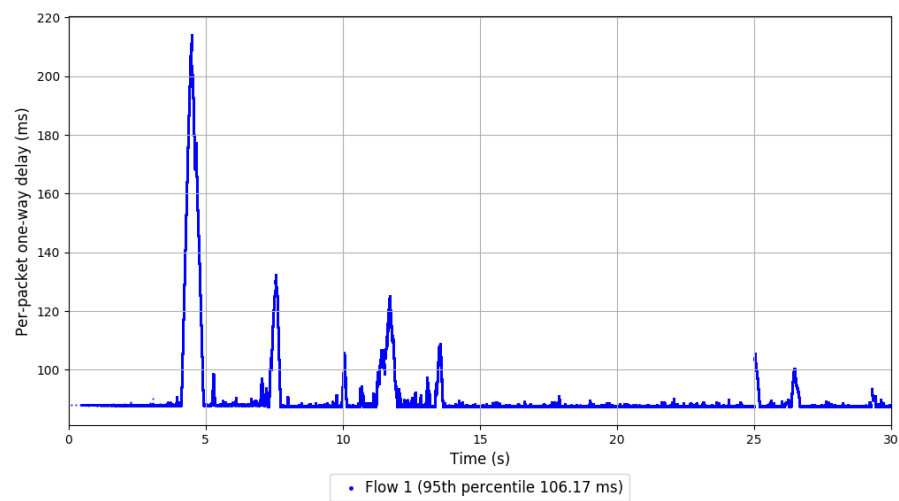
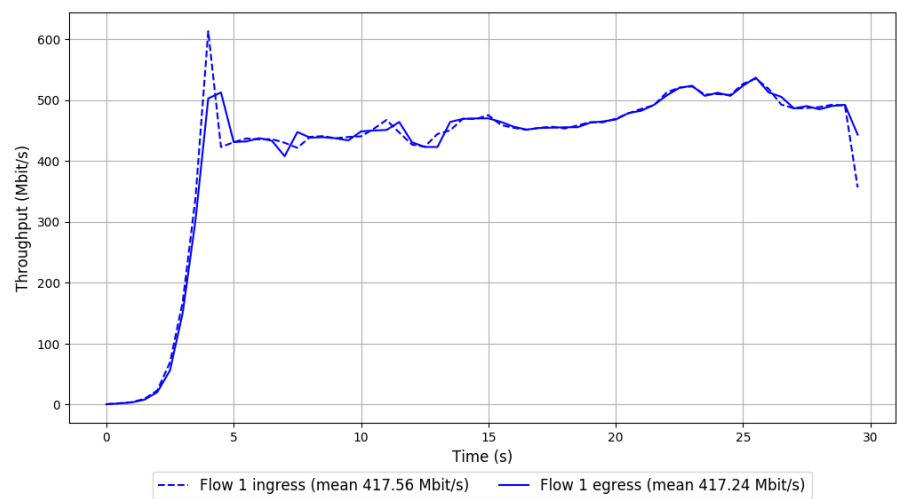
-- Flow 1:

Average throughput: 417.24 Mbit/s

95th percentile per-packet one-way delay: 106.172 ms

Loss rate: 0.08%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-12 22:25:27

End at: 2018-02-12 22:25:57

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 420.35 Mbit/s

95th percentile per-packet one-way delay: 116.722 ms

Loss rate: 0.00%

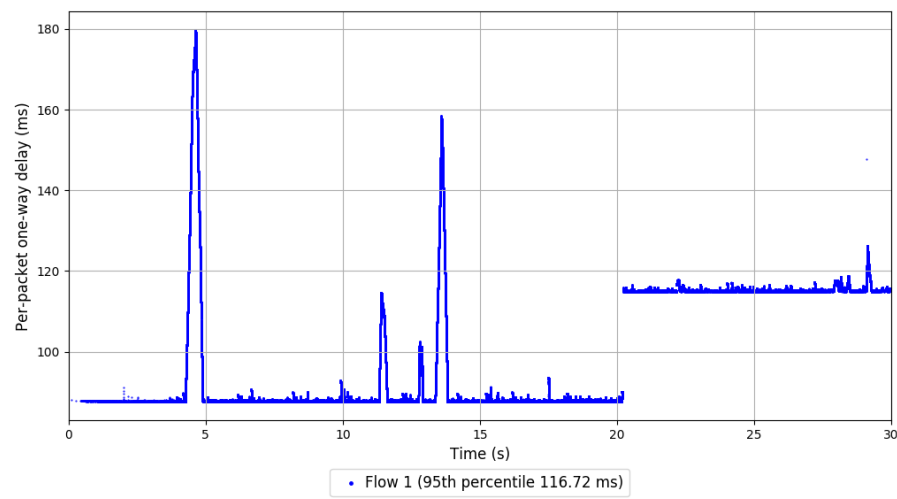
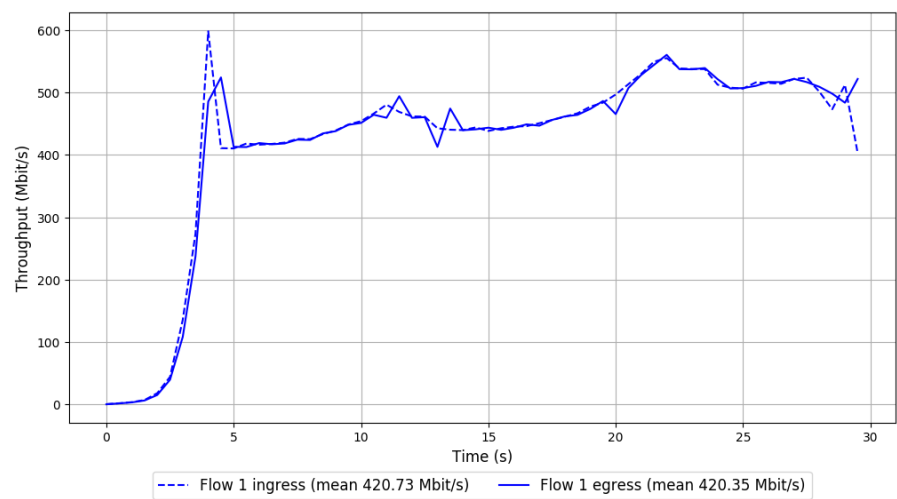
-- Flow 1:

Average throughput: 420.35 Mbit/s

95th percentile per-packet one-way delay: 116.722 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-12 22:40:46

End at: 2018-02-12 22:41:16

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 294.41 Mbit/s

95th percentile per-packet one-way delay: 114.740 ms

Loss rate: 0.04%

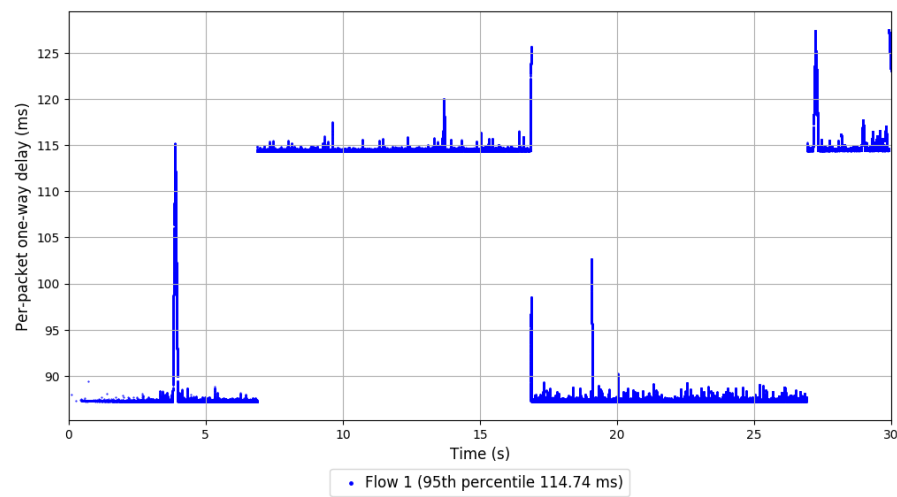
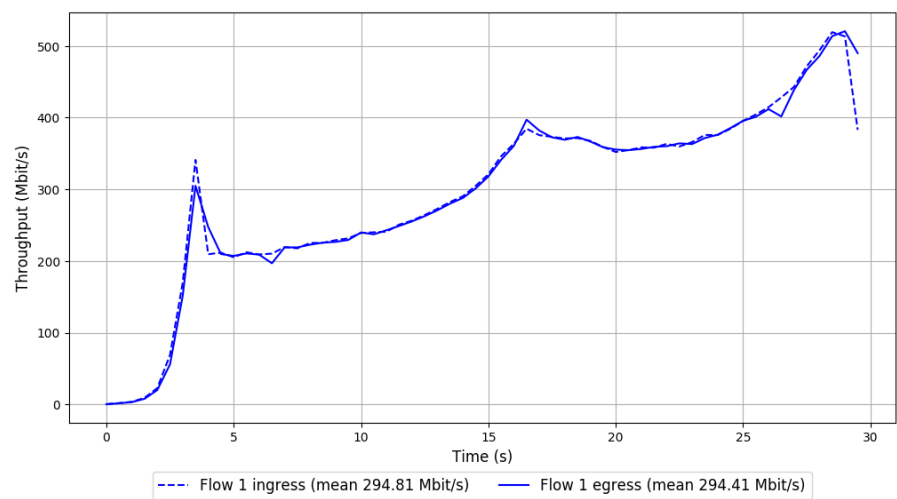
-- Flow 1:

Average throughput: 294.41 Mbit/s

95th percentile per-packet one-way delay: 114.740 ms

Loss rate: 0.04%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-12 22:55:46

End at: 2018-02-12 22:56:16

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 267.97 Mbit/s

95th percentile per-packet one-way delay: 114.804 ms

Loss rate: 0.00%

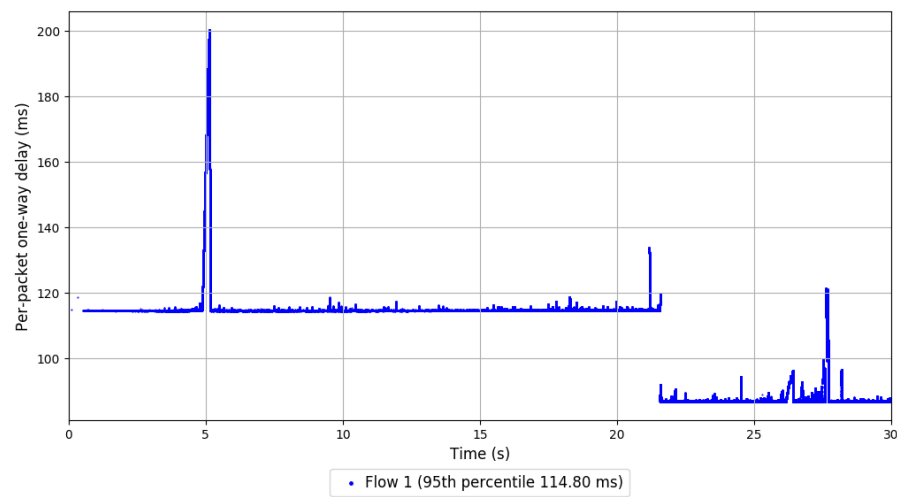
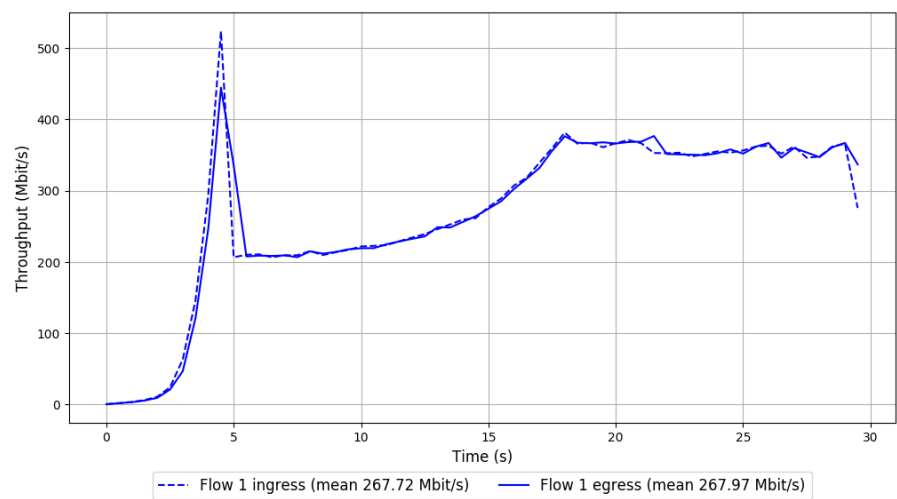
-- Flow 1:

Average throughput: 267.97 Mbit/s

95th percentile per-packet one-way delay: 114.804 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-12 23:10:48

End at: 2018-02-12 23:11:18

Below is generated by plot.py at 2018-02-13 02:36:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 343.98 Mbit/s

95th percentile per-packet one-way delay: 169.176 ms

Loss rate: 0.99%

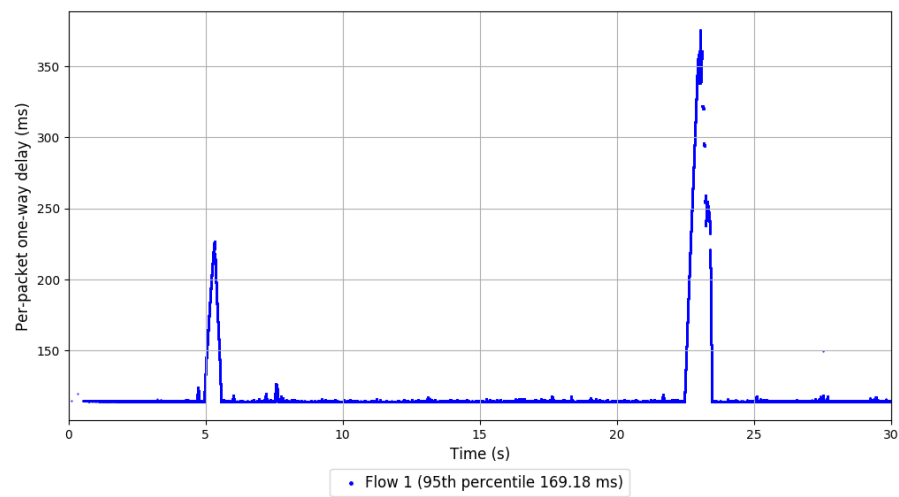
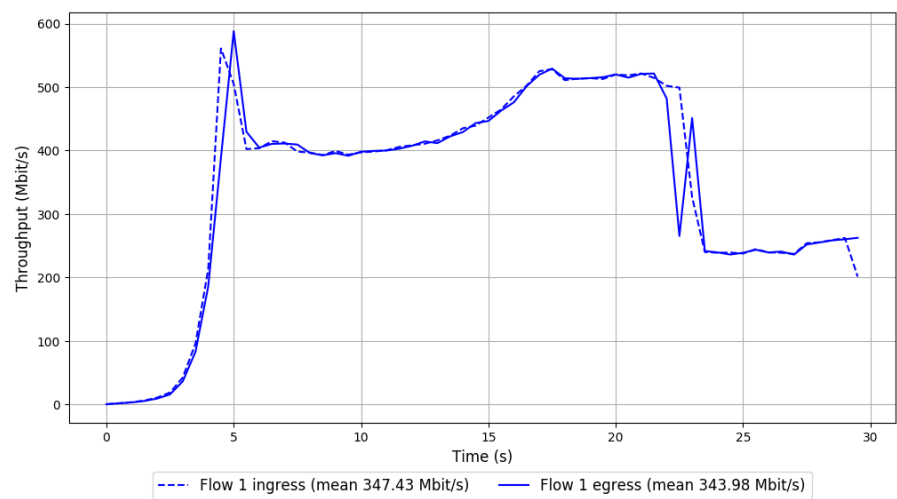
-- Flow 1:

Average throughput: 343.98 Mbit/s

95th percentile per-packet one-way delay: 169.176 ms

Loss rate: 0.99%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-12 23:25:55

End at: 2018-02-12 23:26:25

Below is generated by plot.py at 2018-02-13 02:38:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 344.45 Mbit/s

95th percentile per-packet one-way delay: 121.751 ms

Loss rate: 0.02%

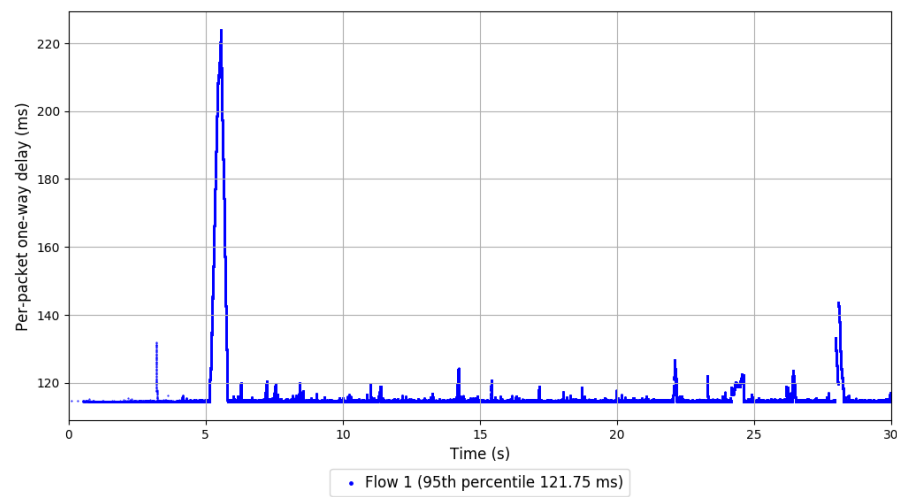
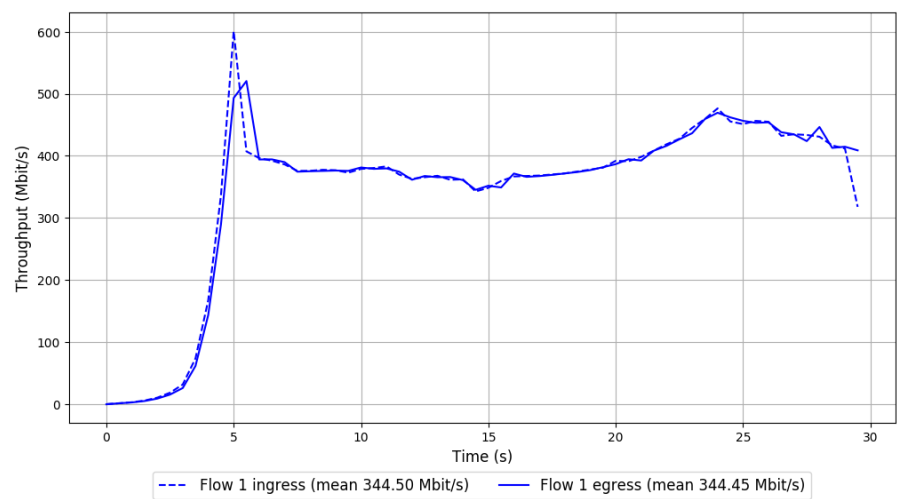
-- Flow 1:

Average throughput: 344.45 Mbit/s

95th percentile per-packet one-way delay: 121.751 ms

Loss rate: 0.02%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-12 23:40:42

End at: 2018-02-12 23:41:12

Below is generated by plot.py at 2018-02-13 02:40:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 401.46 Mbit/s

95th percentile per-packet one-way delay: 148.328 ms

Loss rate: 0.36%

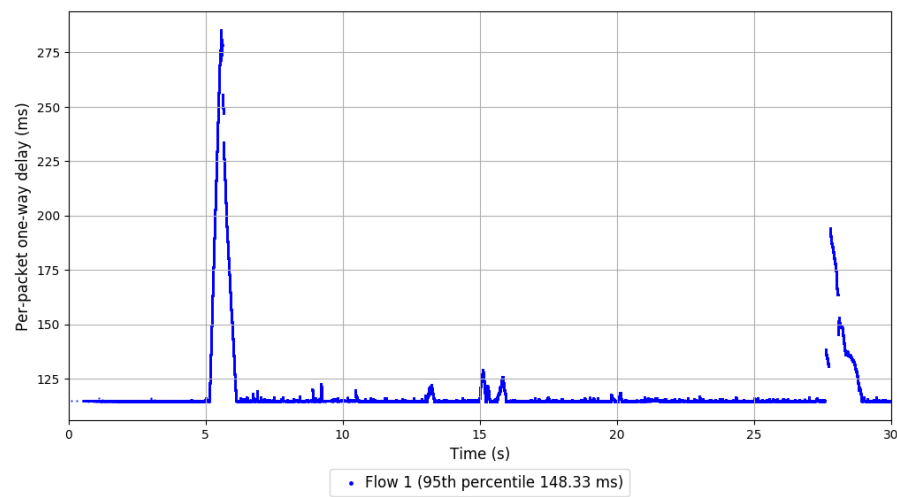
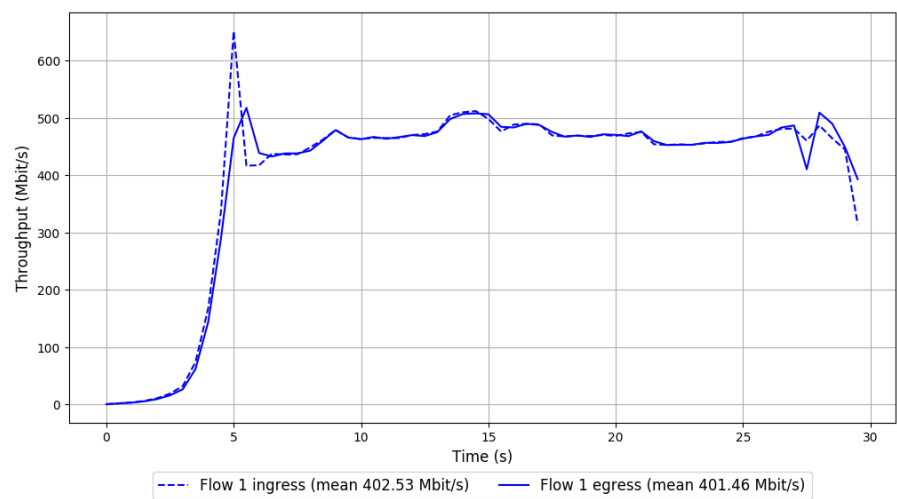
-- Flow 1:

Average throughput: 401.46 Mbit/s

95th percentile per-packet one-way delay: 148.328 ms

Loss rate: 0.36%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-12 23:55:42

End at: 2018-02-12 23:56:12

Below is generated by plot.py at 2018-02-13 02:40:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 395.97 Mbit/s

95th percentile per-packet one-way delay: 136.481 ms

Loss rate: 0.39%

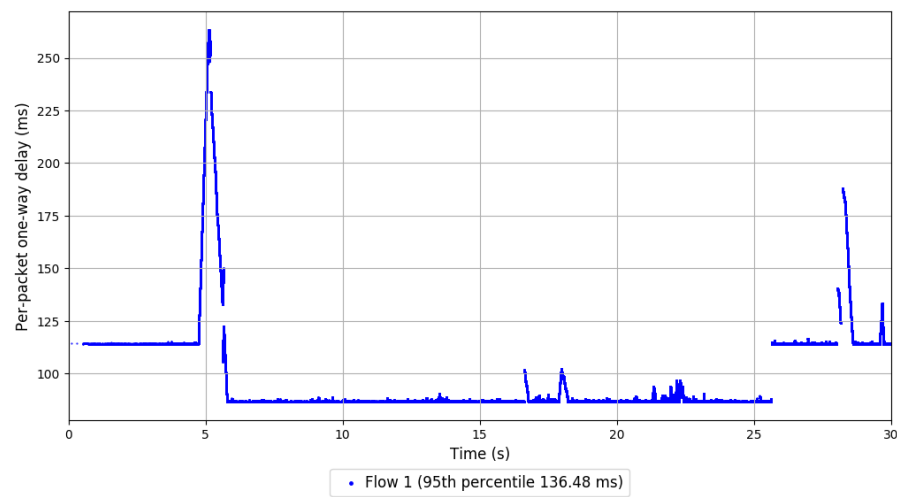
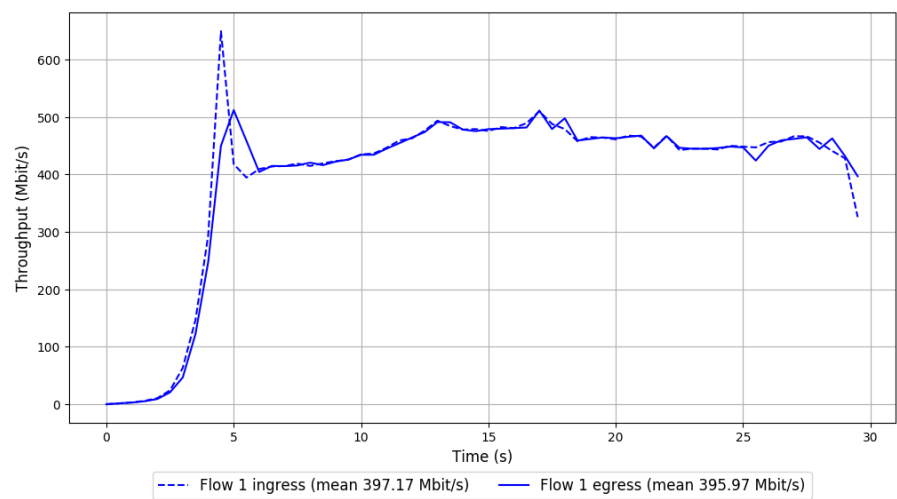
-- Flow 1:

Average throughput: 395.97 Mbit/s

95th percentile per-packet one-way delay: 136.481 ms

Loss rate: 0.39%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-13 00:10:38

End at: 2018-02-13 00:11:08

Below is generated by plot.py at 2018-02-13 02:40:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.49 Mbit/s

95th percentile per-packet one-way delay: 119.680 ms

Loss rate: 0.14%

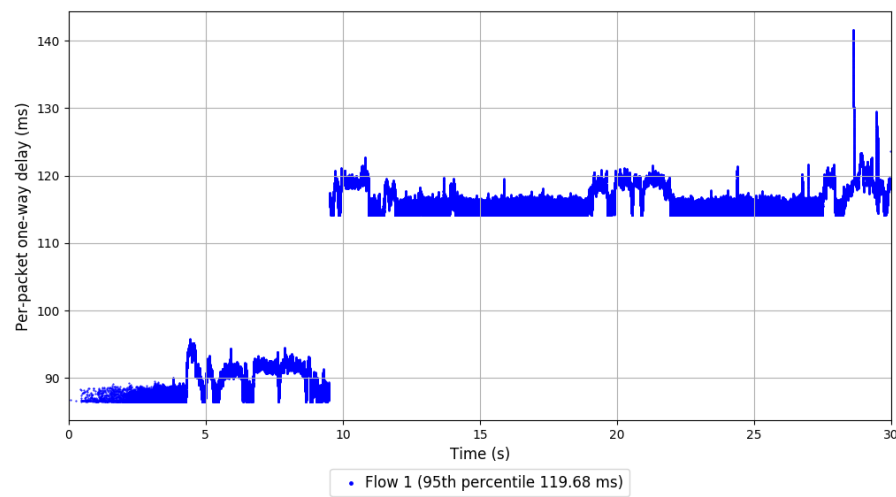
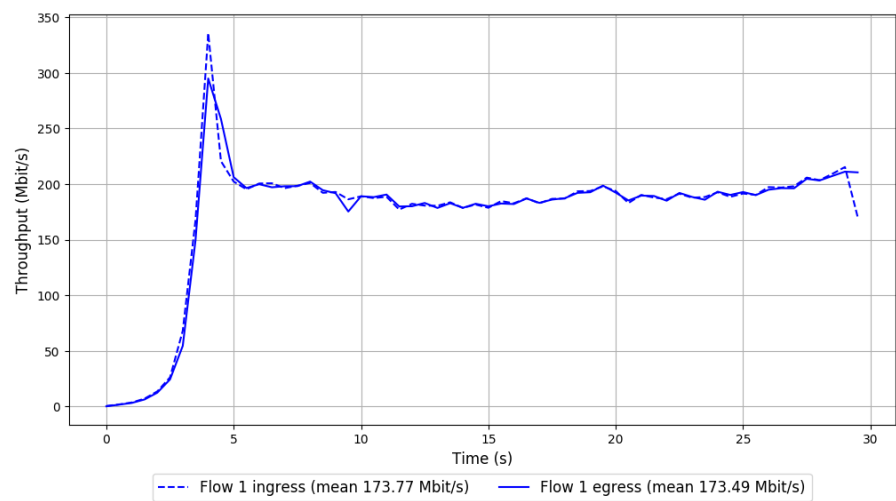
-- Flow 1:

Average throughput: 173.49 Mbit/s

95th percentile per-packet one-way delay: 119.680 ms

Loss rate: 0.14%

Run 10: Report of Vivace-latency — Data Link

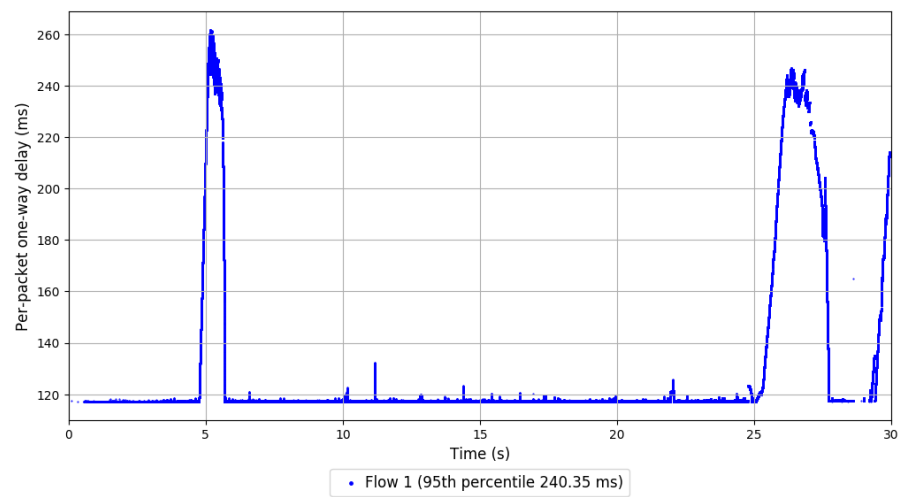
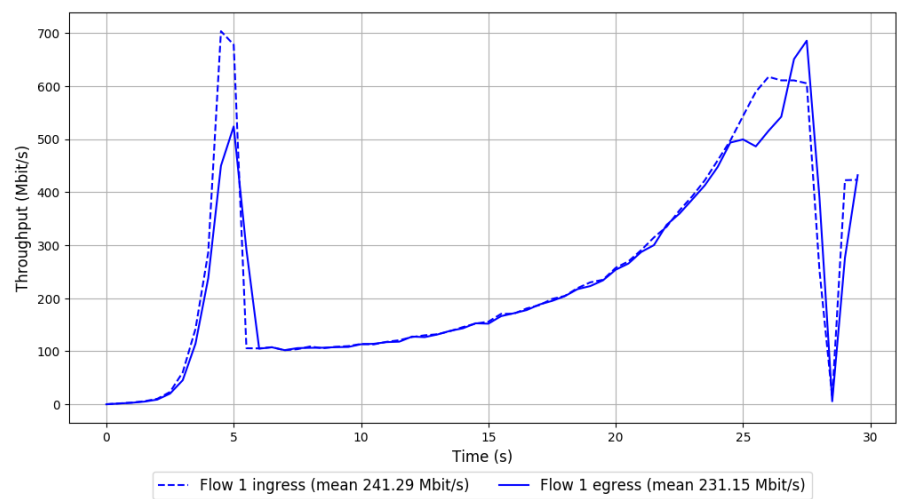


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-12 21:52:27
End at: 2018-02-12 21:52:57

# Below is generated by plot.py at 2018-02-13 02:40:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 231.15 Mbit/s
95th percentile per-packet one-way delay: 240.350 ms
Loss rate: 4.29%
-- Flow 1:
Average throughput: 231.15 Mbit/s
95th percentile per-packet one-way delay: 240.350 ms
Loss rate: 4.29%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-12 22:06:58

End at: 2018-02-12 22:07:28

Below is generated by plot.py at 2018-02-13 02:42:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 432.09 Mbit/s

95th percentile per-packet one-way delay: 210.493 ms

Loss rate: 1.82%

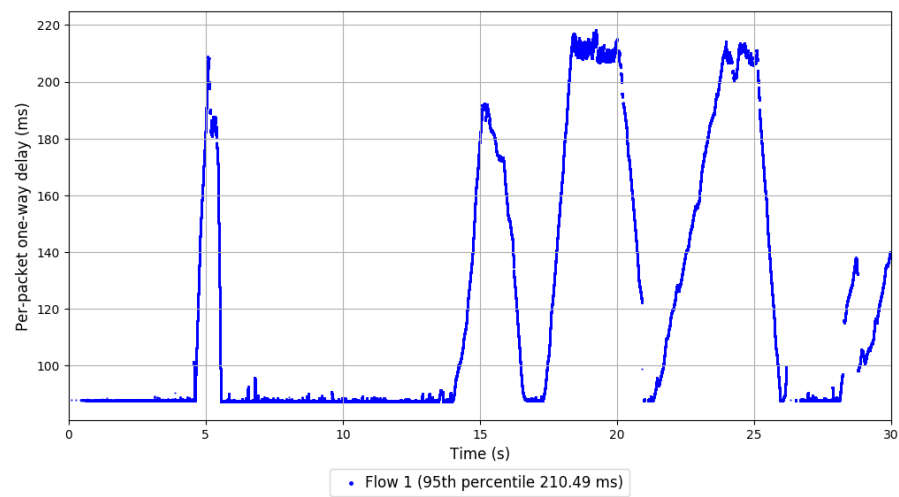
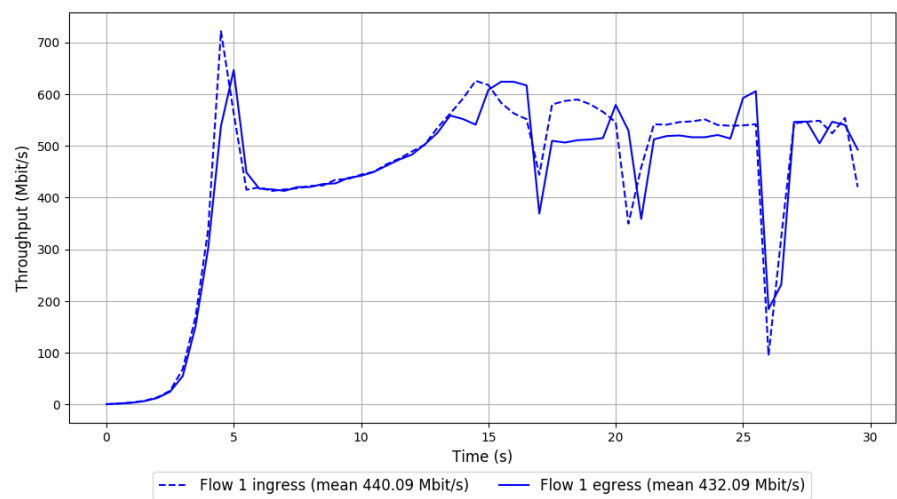
-- Flow 1:

Average throughput: 432.09 Mbit/s

95th percentile per-packet one-way delay: 210.493 ms

Loss rate: 1.82%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-12 22:21:50

End at: 2018-02-12 22:22:20

Below is generated by plot.py at 2018-02-13 02:42:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 315.15 Mbit/s

95th percentile per-packet one-way delay: 337.255 ms

Loss rate: 15.32%

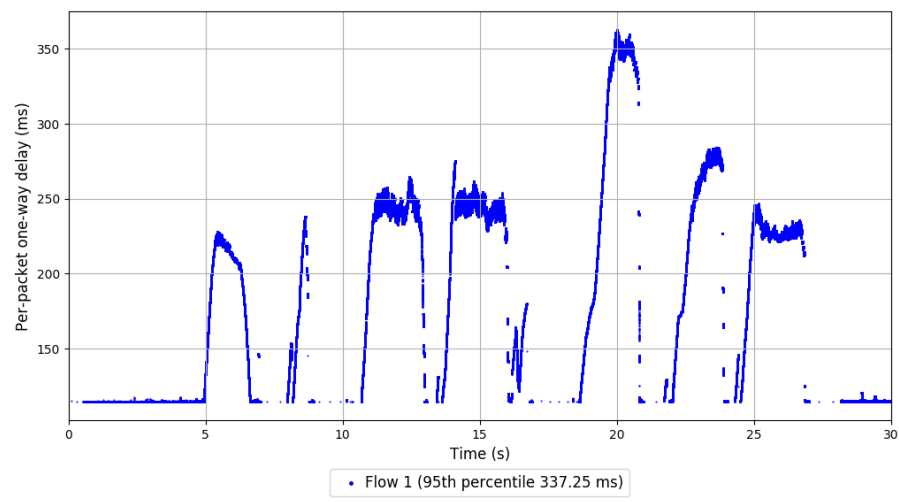
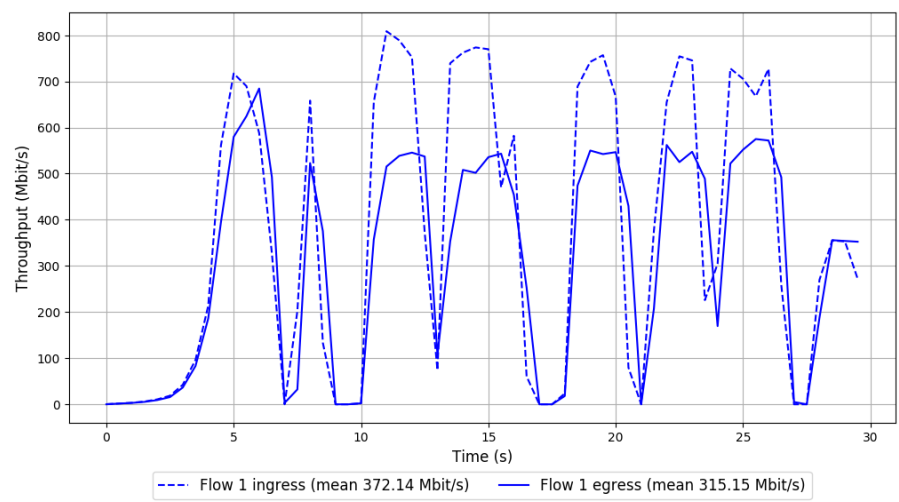
-- Flow 1:

Average throughput: 315.15 Mbit/s

95th percentile per-packet one-way delay: 337.255 ms

Loss rate: 15.32%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-12 22:37:05

End at: 2018-02-12 22:37:35

Below is generated by plot.py at 2018-02-13 02:42:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 336.73 Mbit/s

95th percentile per-packet one-way delay: 211.535 ms

Loss rate: 3.14%

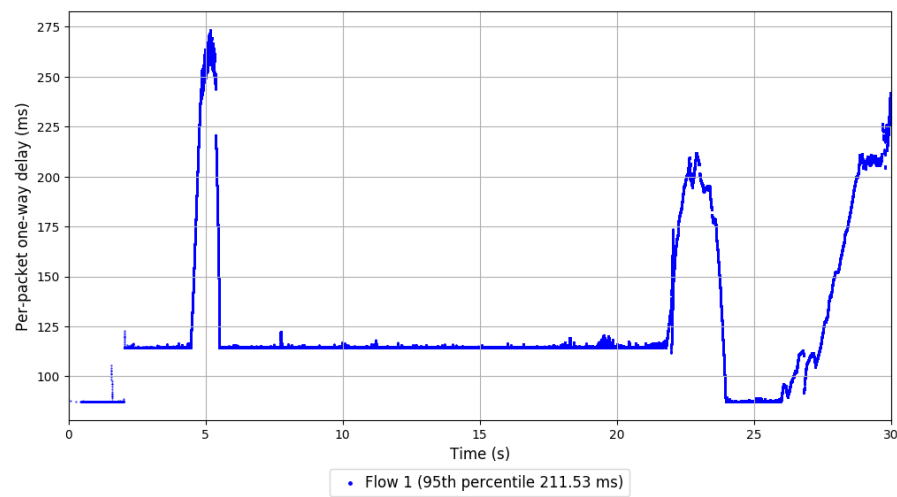
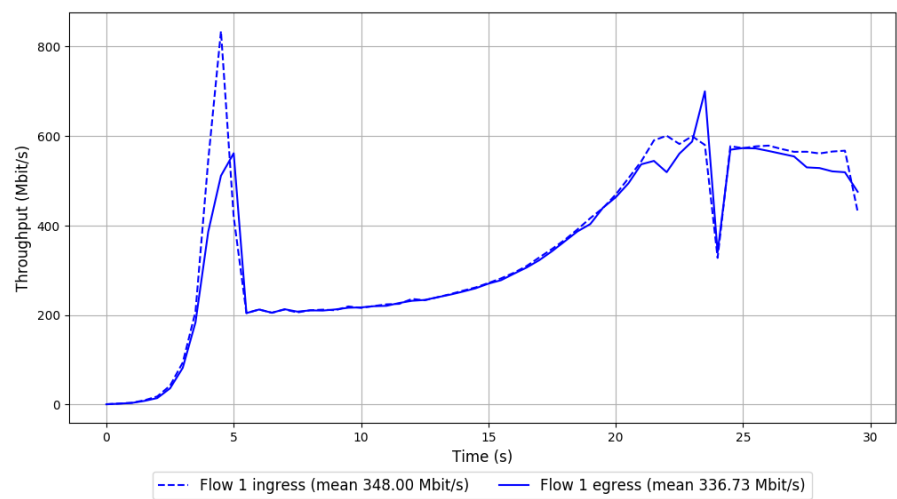
-- Flow 1:

Average throughput: 336.73 Mbit/s

95th percentile per-packet one-way delay: 211.535 ms

Loss rate: 3.14%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-12 22:52:07

End at: 2018-02-12 22:52:37

Below is generated by plot.py at 2018-02-13 02:43:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 378.12 Mbit/s

95th percentile per-packet one-way delay: 338.083 ms

Loss rate: 6.58%

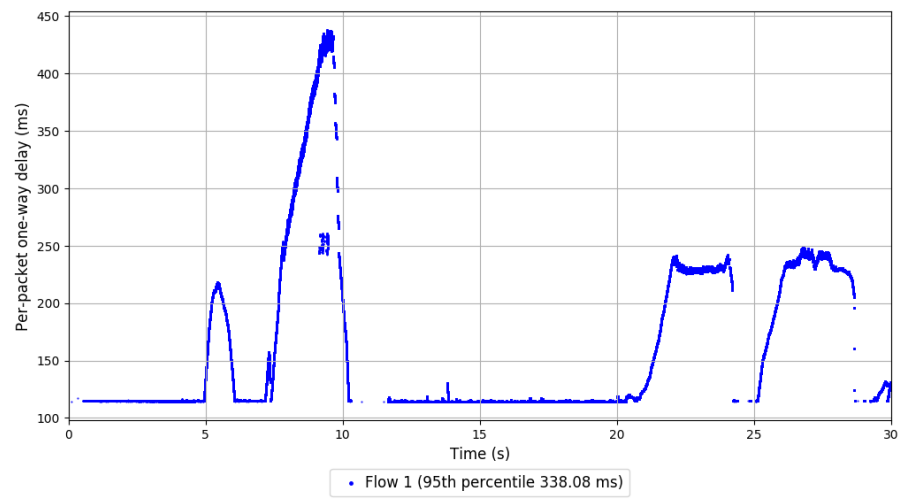
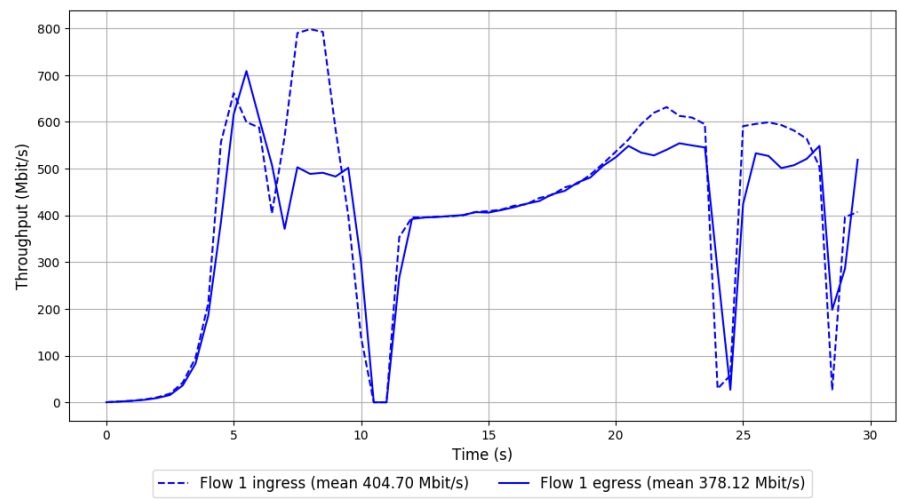
-- Flow 1:

Average throughput: 378.12 Mbit/s

95th percentile per-packet one-way delay: 338.083 ms

Loss rate: 6.58%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-12 23:07:17

End at: 2018-02-12 23:07:47

Below is generated by plot.py at 2018-02-13 02:43:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 241.48 Mbit/s

95th percentile per-packet one-way delay: 239.289 ms

Loss rate: 5.14%

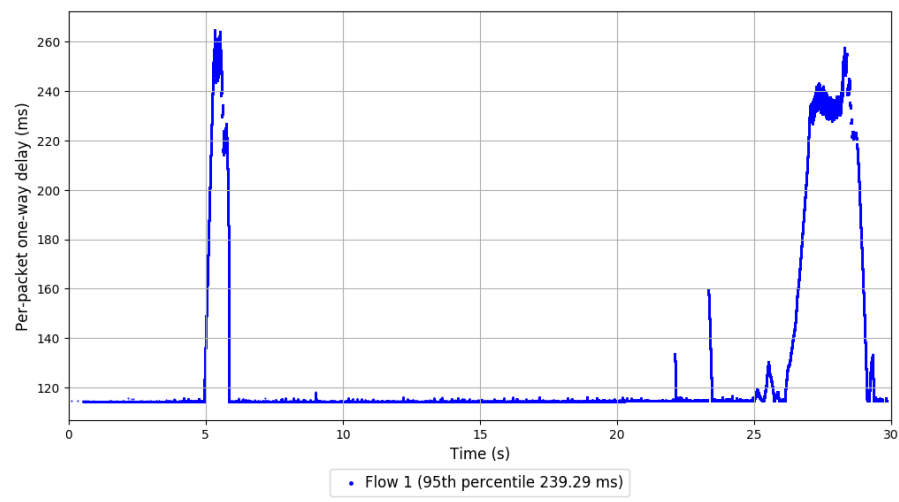
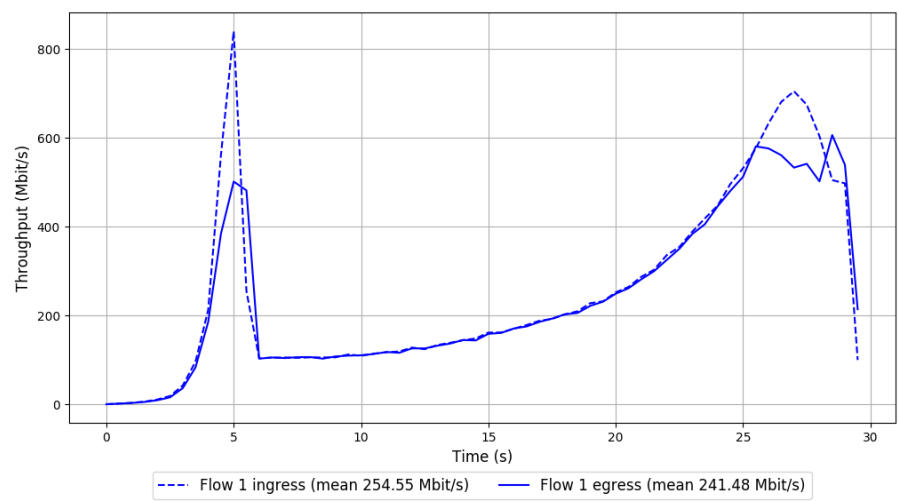
-- Flow 1:

Average throughput: 241.48 Mbit/s

95th percentile per-packet one-way delay: 239.289 ms

Loss rate: 5.14%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-12 23:22:16

End at: 2018-02-12 23:22:46

Below is generated by plot.py at 2018-02-13 02:43:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 326.73 Mbit/s

95th percentile per-packet one-way delay: 208.080 ms

Loss rate: 3.75%

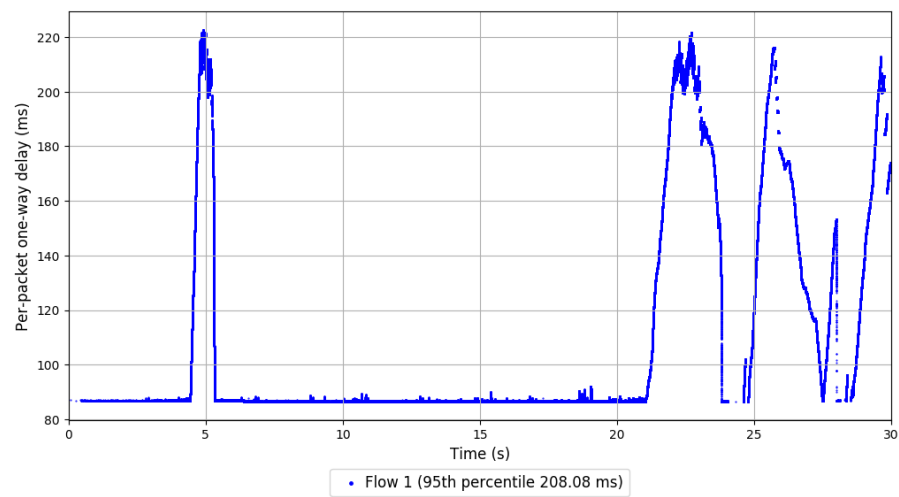
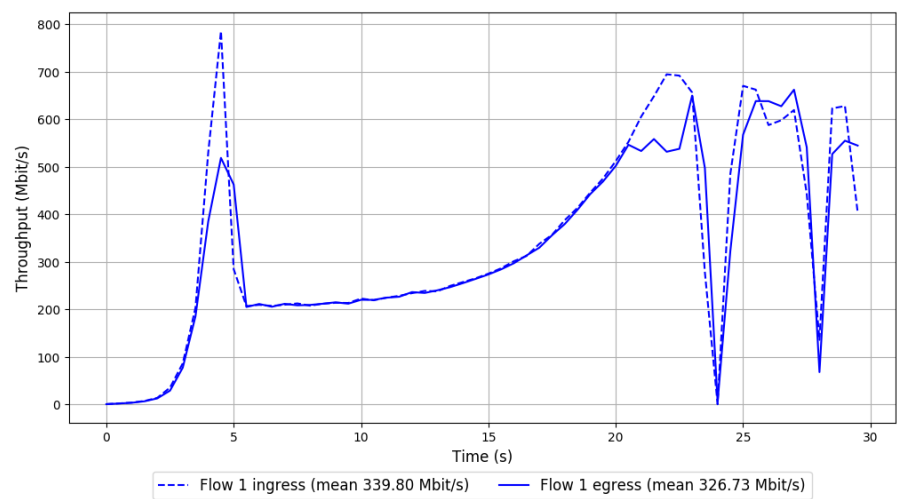
-- Flow 1:

Average throughput: 326.73 Mbit/s

95th percentile per-packet one-way delay: 208.080 ms

Loss rate: 3.75%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-12 23:37:07

End at: 2018-02-12 23:37:37

Below is generated by plot.py at 2018-02-13 02:46:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 398.58 Mbit/s

95th percentile per-packet one-way delay: 243.336 ms

Loss rate: 6.41%

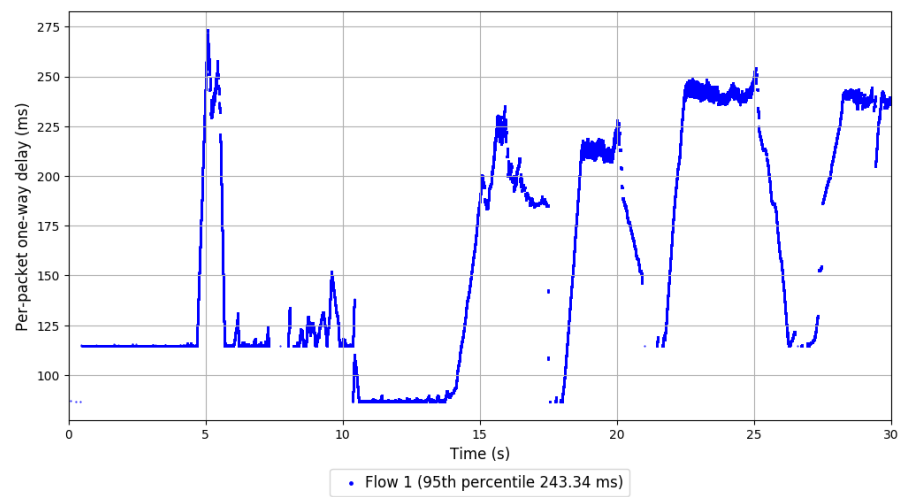
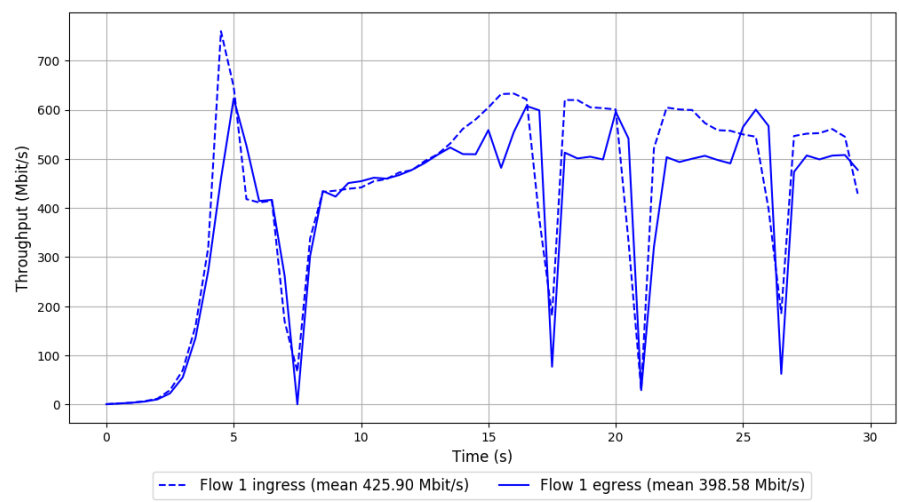
-- Flow 1:

Average throughput: 398.58 Mbit/s

95th percentile per-packet one-way delay: 243.336 ms

Loss rate: 6.41%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-12 23:52:06

End at: 2018-02-12 23:52:36

Below is generated by plot.py at 2018-02-13 02:46:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 357.35 Mbit/s

95th percentile per-packet one-way delay: 240.522 ms

Loss rate: 5.38%

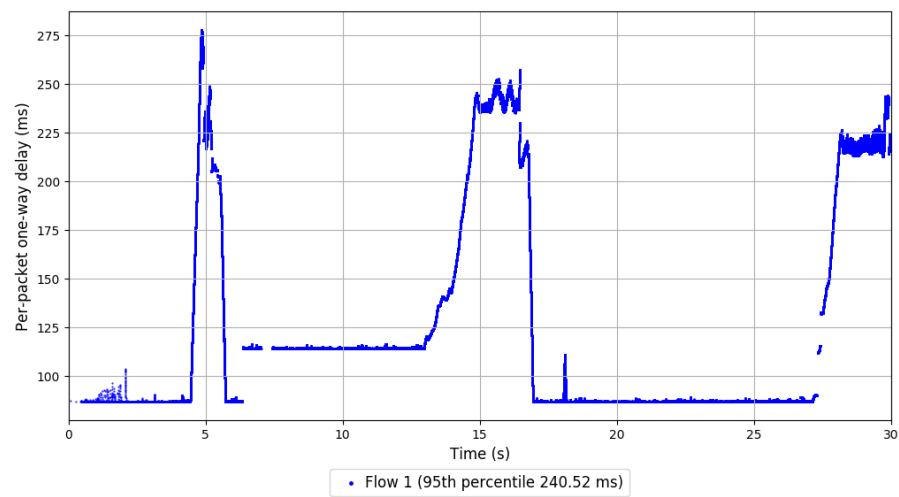
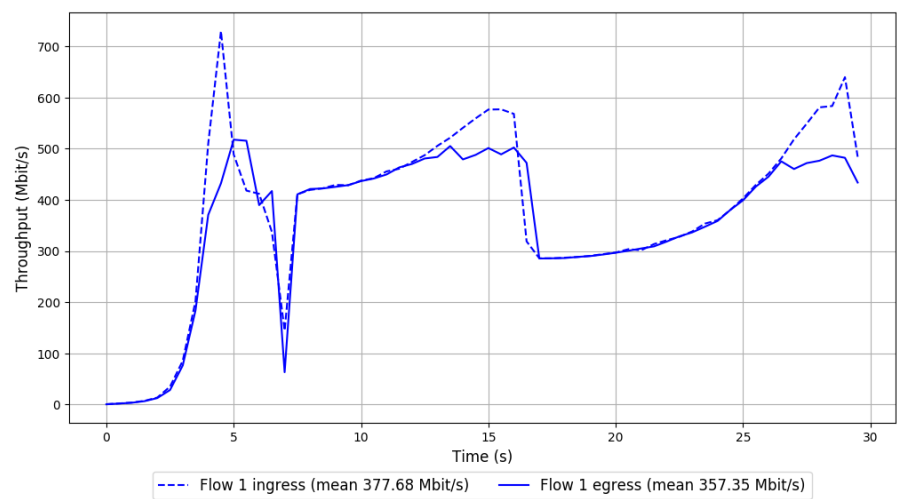
-- Flow 1:

Average throughput: 357.35 Mbit/s

95th percentile per-packet one-way delay: 240.522 ms

Loss rate: 5.38%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-13 00:07:06

End at: 2018-02-13 00:07:36

Below is generated by plot.py at 2018-02-13 02:46:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 304.38 Mbit/s

95th percentile per-packet one-way delay: 242.023 ms

Loss rate: 3.46%

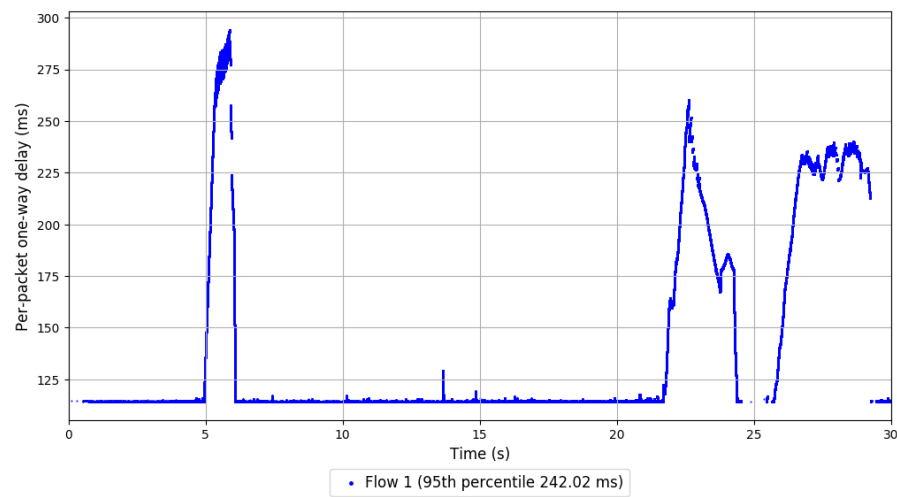
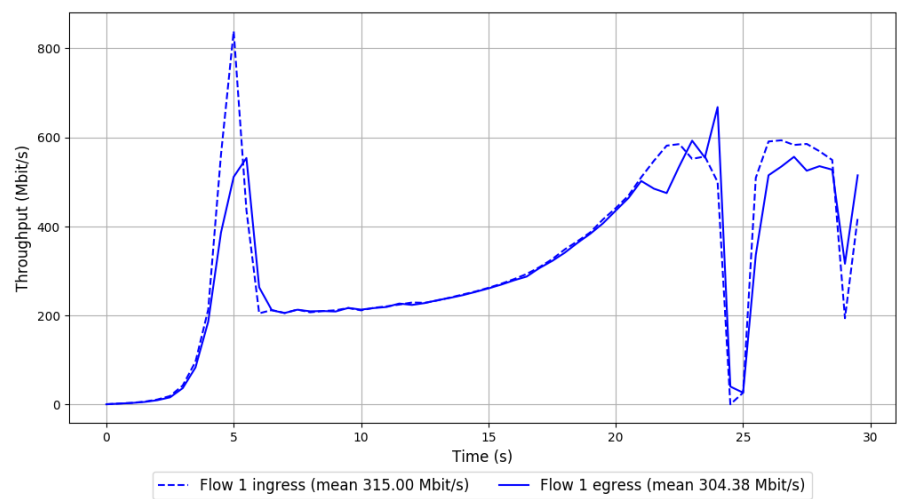
-- Flow 1:

Average throughput: 304.38 Mbit/s

95th percentile per-packet one-way delay: 242.023 ms

Loss rate: 3.46%

Run 10: Report of Vivace-loss — Data Link

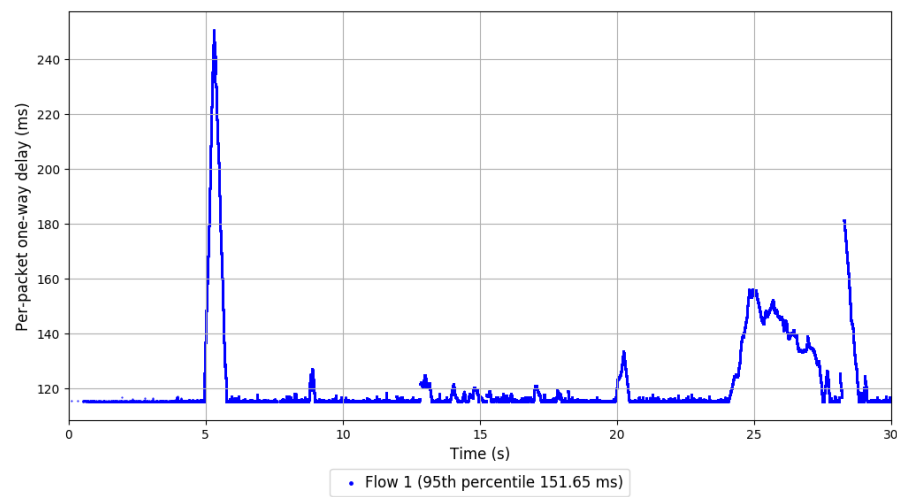
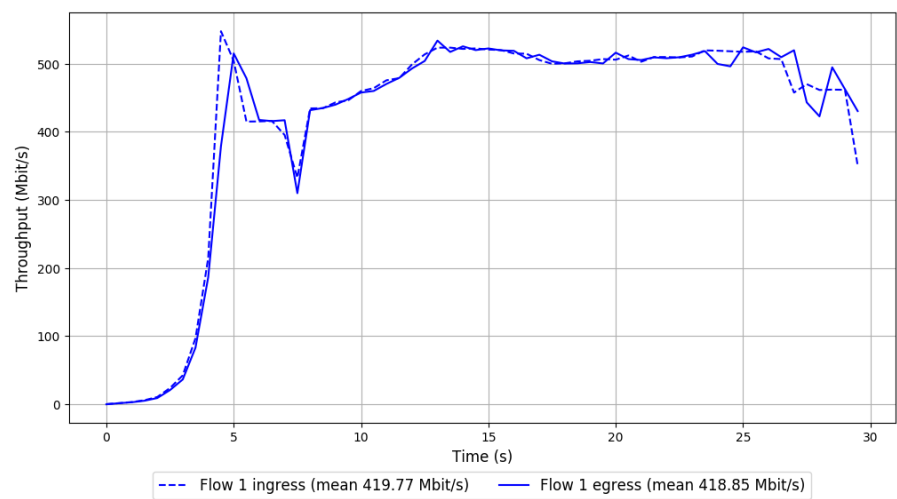


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-12 22:05:05
End at: 2018-02-12 22:05:35

# Below is generated by plot.py at 2018-02-13 02:48:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 418.85 Mbit/s
95th percentile per-packet one-way delay: 151.648 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 418.85 Mbit/s
95th percentile per-packet one-way delay: 151.648 ms
Loss rate: 0.31%
```

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-12 22:19:58

End at: 2018-02-12 22:20:28

Below is generated by plot.py at 2018-02-13 02:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 413.69 Mbit/s

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

Loss rate: 0.00%

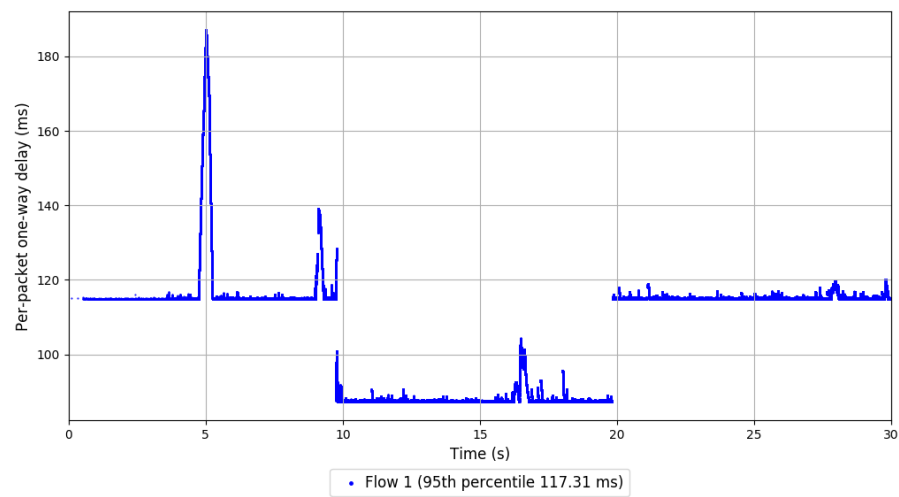
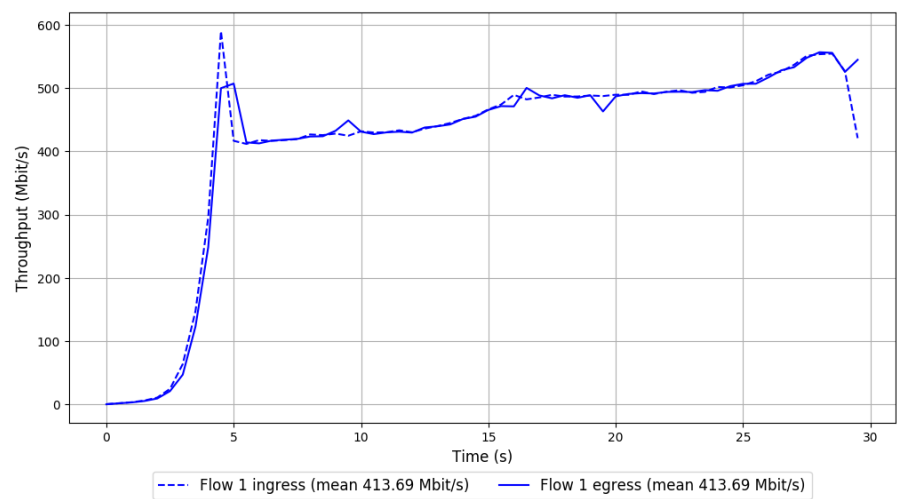
-- Flow 1:

Average throughput: 413.69 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-12 22:35:12

End at: 2018-02-12 22:35:42

Below is generated by plot.py at 2018-02-13 02:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 410.03 Mbit/s

95th percentile per-packet one-way delay: 125.325 ms

Loss rate: 0.10%

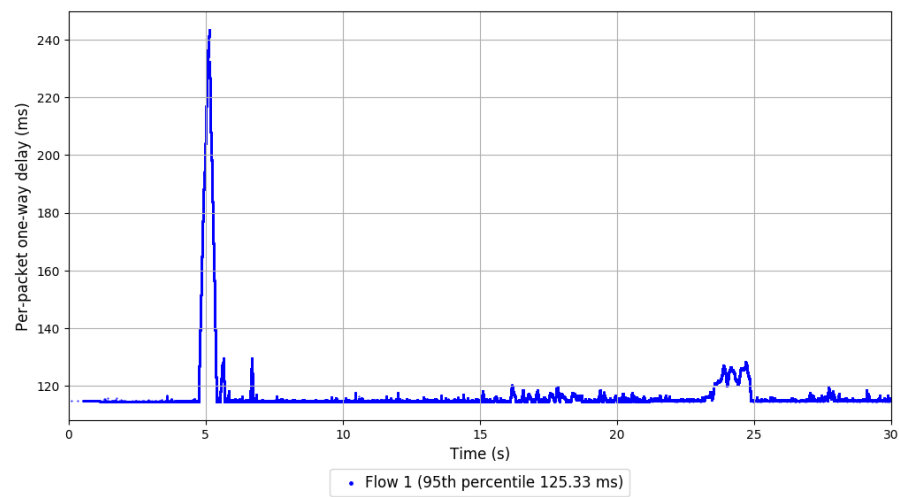
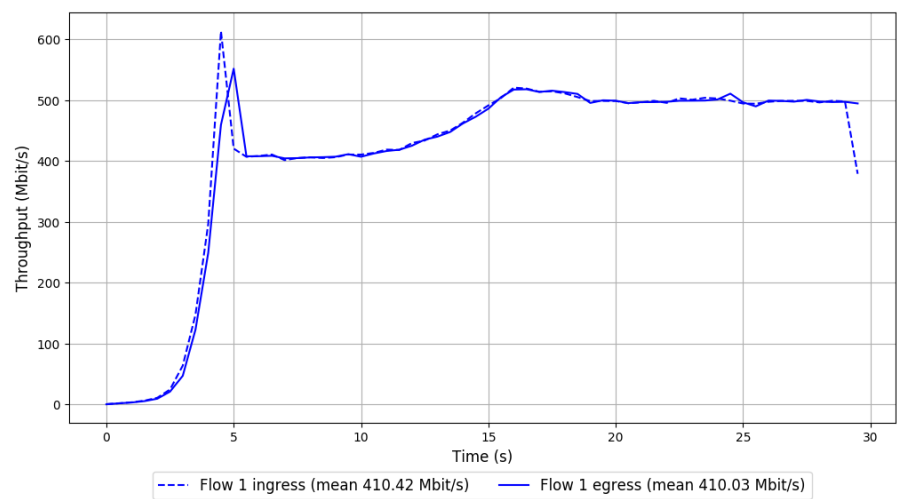
-- Flow 1:

Average throughput: 410.03 Mbit/s

95th percentile per-packet one-way delay: 125.325 ms

Loss rate: 0.10%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-12 22:50:14

End at: 2018-02-12 22:50:44

Below is generated by plot.py at 2018-02-13 02:50:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 404.42 Mbit/s

95th percentile per-packet one-way delay: 122.054 ms

Loss rate: 0.13%

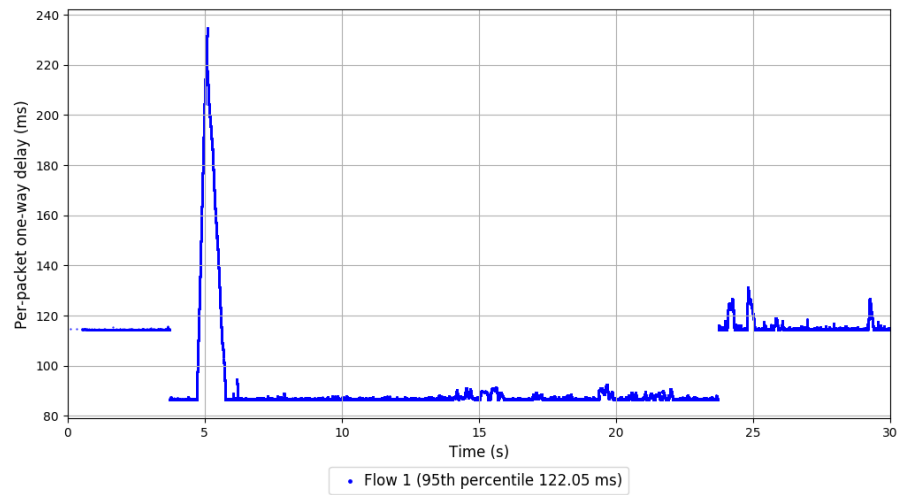
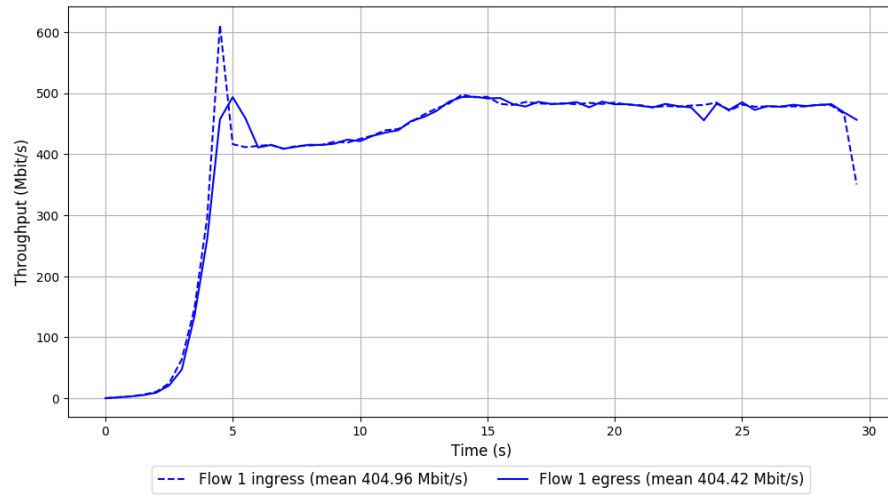
-- Flow 1:

Average throughput: 404.42 Mbit/s

95th percentile per-packet one-way delay: 122.054 ms

Loss rate: 0.13%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-12 23:05:25

End at: 2018-02-12 23:05:55

Below is generated by plot.py at 2018-02-13 02:50:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 406.06 Mbit/s

95th percentile per-packet one-way delay: 231.239 ms

Loss rate: 0.71%

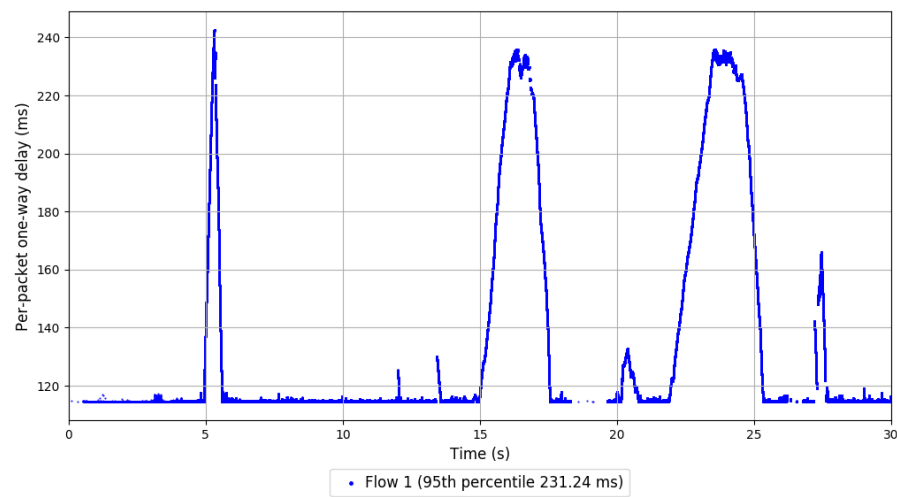
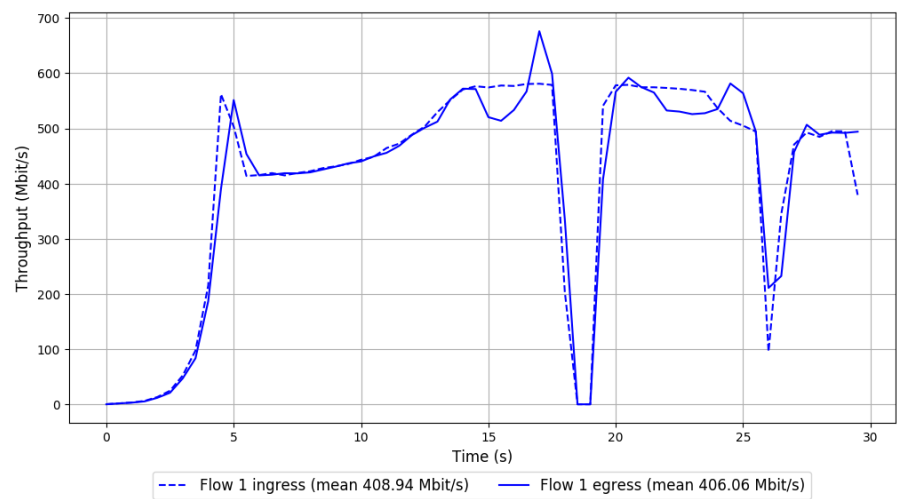
-- Flow 1:

Average throughput: 406.06 Mbit/s

95th percentile per-packet one-way delay: 231.239 ms

Loss rate: 0.71%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-12 23:20:24

End at: 2018-02-12 23:20:54

Below is generated by plot.py at 2018-02-13 02:51:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 406.69 Mbit/s

95th percentile per-packet one-way delay: 167.570 ms

Loss rate: 0.48%

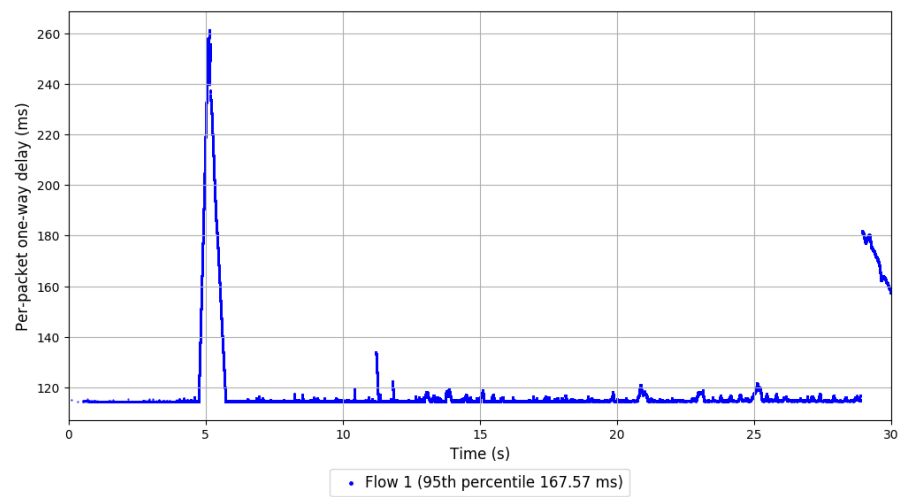
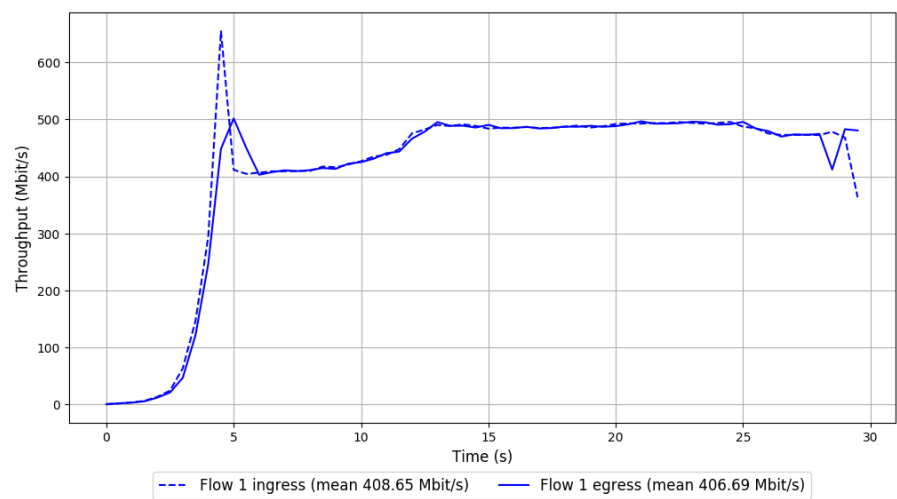
-- Flow 1:

Average throughput: 406.69 Mbit/s

95th percentile per-packet one-way delay: 167.570 ms

Loss rate: 0.48%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-12 23:35:18

End at: 2018-02-12 23:35:48

Below is generated by plot.py at 2018-02-13 02:51:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 380.34 Mbit/s

95th percentile per-packet one-way delay: 249.752 ms

Loss rate: 0.79%

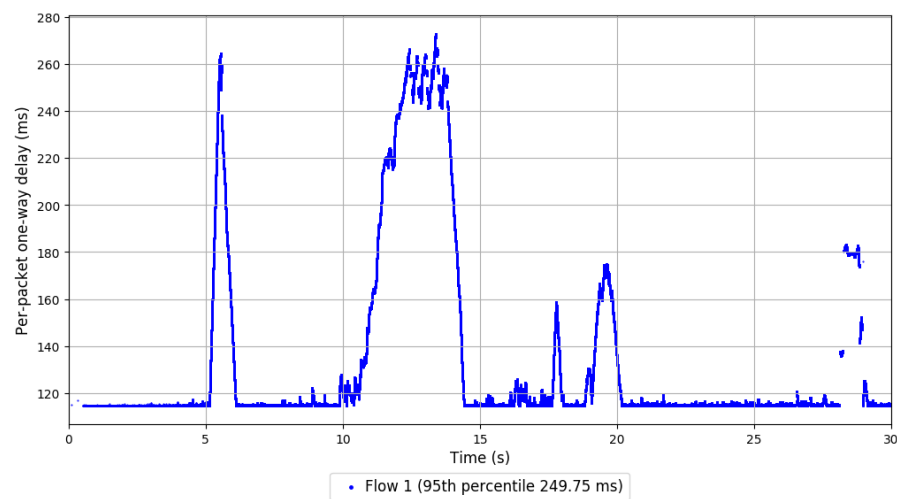
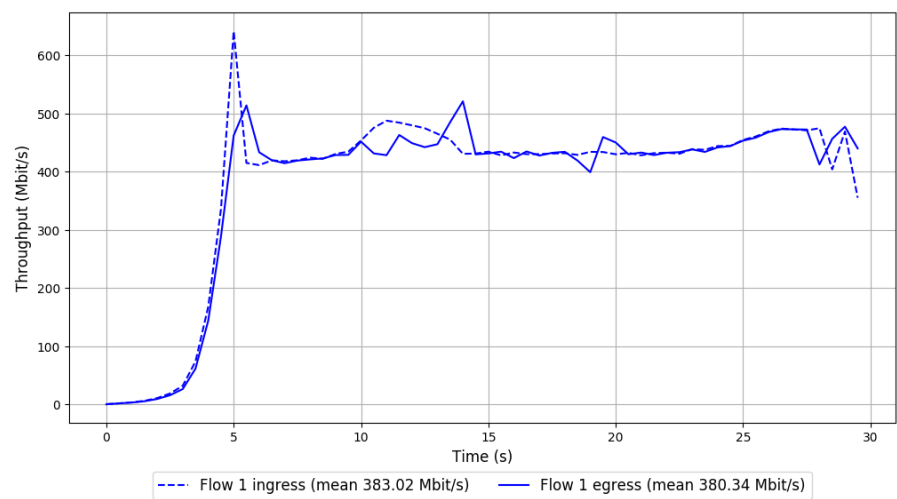
-- Flow 1:

Average throughput: 380.34 Mbit/s

95th percentile per-packet one-way delay: 249.752 ms

Loss rate: 0.79%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-12 23:50:15

End at: 2018-02-12 23:50:45

Below is generated by plot.py at 2018-02-13 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 435.55 Mbit/s

95th percentile per-packet one-way delay: 91.926 ms

Loss rate: 0.02%

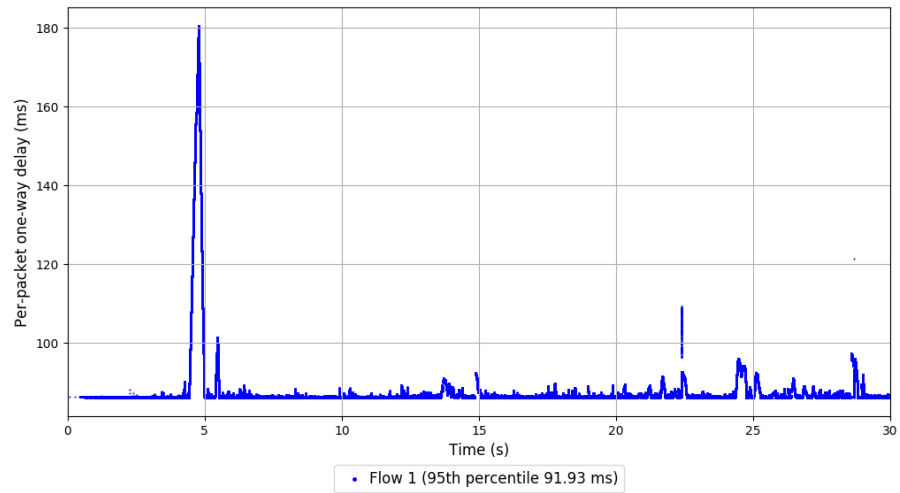
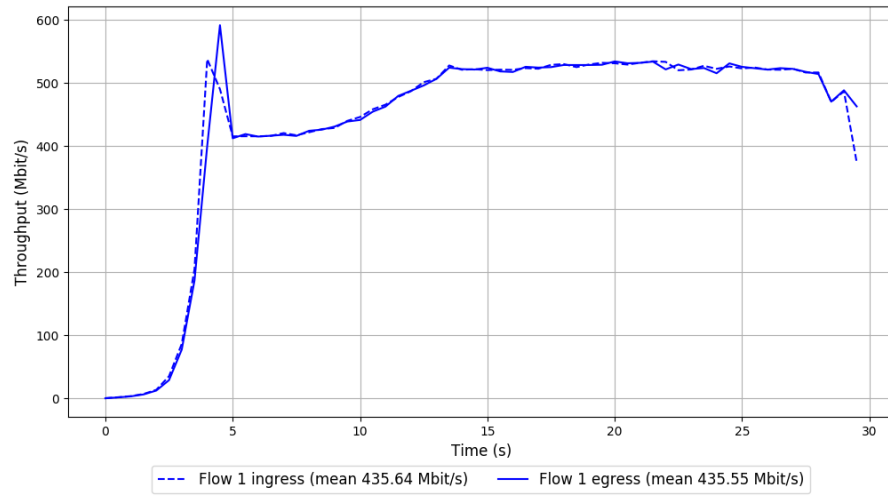
-- Flow 1:

Average throughput: 435.55 Mbit/s

95th percentile per-packet one-way delay: 91.926 ms

Loss rate: 0.02%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-13 00:05:17

End at: 2018-02-13 00:05:47

Below is generated by plot.py at 2018-02-13 02:52:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 432.07 Mbit/s

95th percentile per-packet one-way delay: 140.341 ms

Loss rate: 0.38%

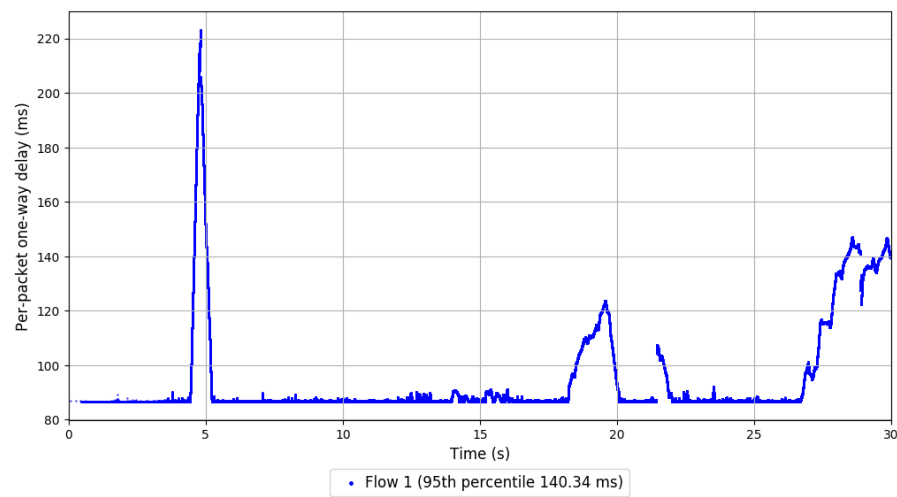
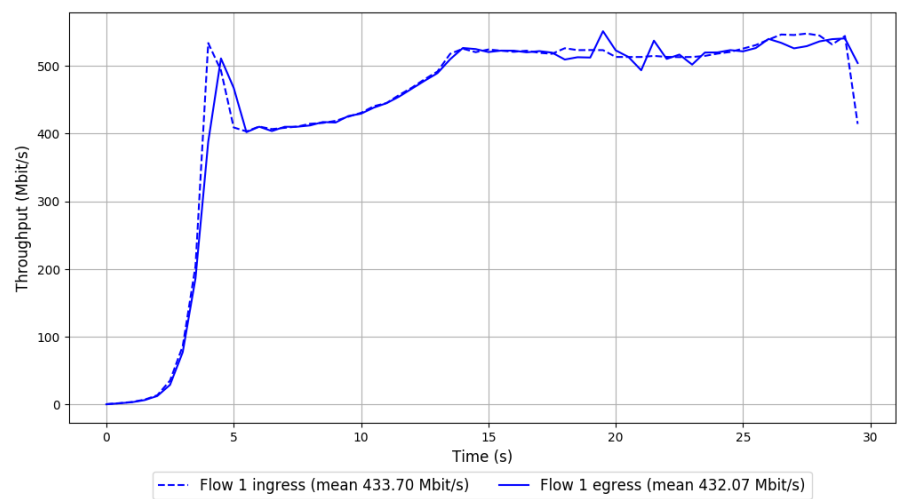
-- Flow 1:

Average throughput: 432.07 Mbit/s

95th percentile per-packet one-way delay: 140.341 ms

Loss rate: 0.38%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-13 00:19:47
End at: 2018-02-13 00:20:17

# Below is generated by plot.py at 2018-02-13 02:52:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 403.40 Mbit/s
95th percentile per-packet one-way delay: 204.965 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 403.40 Mbit/s
95th percentile per-packet one-way delay: 204.965 ms
Loss rate: 0.89%
```

Run 10: Report of Vivace-LTE — Data Link

