

Pantheon Report

Generated at 2018-01-02 03:16:58 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

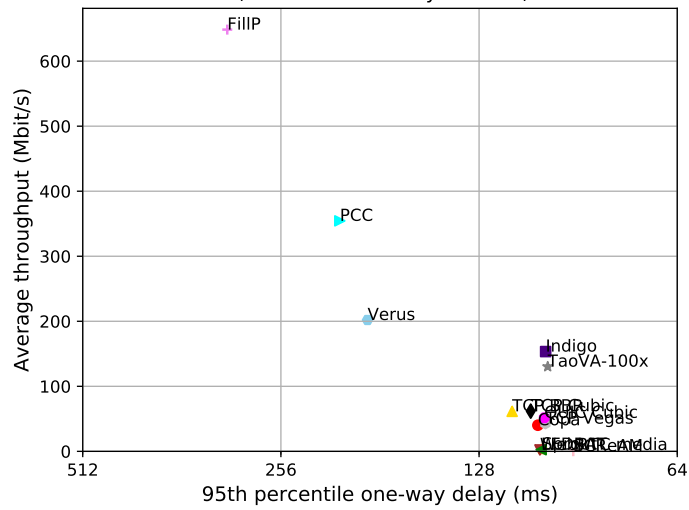
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

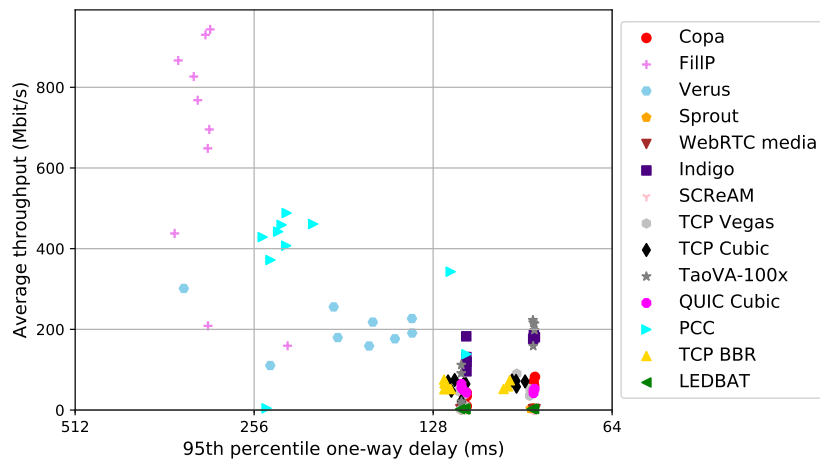
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Iowa Ethernet to GCE 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 per scheme



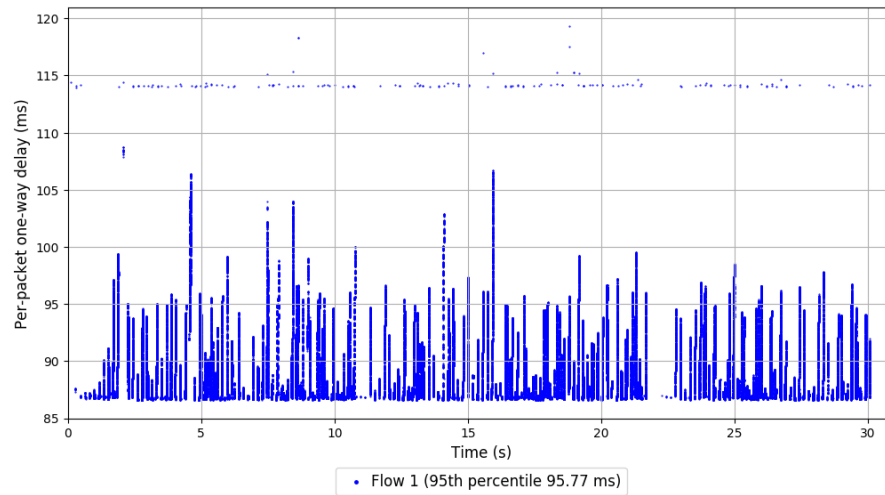
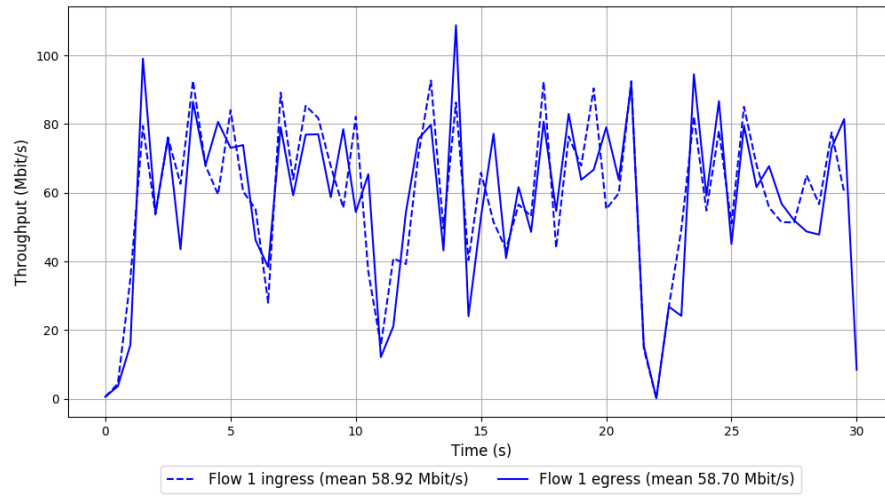
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	61.53	114.02	0.99
TCP Cubic	10	61.82	106.85	0.67
LEDBAT	10	2.50	103.04	0.68
PCC	10	354.42	208.30	1.30
QUIC Cubic	9	51.54	101.89	0.04
SCReAM	10	0.22	92.07	0.00
WebRTC media	10	2.14	103.46	0.02
Sprout	7	3.01	102.74	1.21
TaoVA-100x	10	130.24	100.69	0.07
TCP Vegas	10	42.60	101.50	0.35
Verus	9	201.98	189.10	3.41
Copa	9	40.17	104.21	0.04
FillP	10	648.47	308.83	2.98
Indigo	7	153.42	101.41	0.05

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-01 23:46:39
End at: 2018-01-01 23:47:09

# Below is generated by plot.py at 2018-01-02 02:37:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.70 Mbit/s
95th percentile per-packet one-way delay: 95.772 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 58.70 Mbit/s
95th percentile per-packet one-way delay: 95.772 ms
Loss rate: 0.38%
```

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-01 23:58:10

End at: 2018-01-01 23:58:40

Below is generated by plot.py at 2018-01-02 02:37:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 120.758 ms

Loss rate: 1.98%

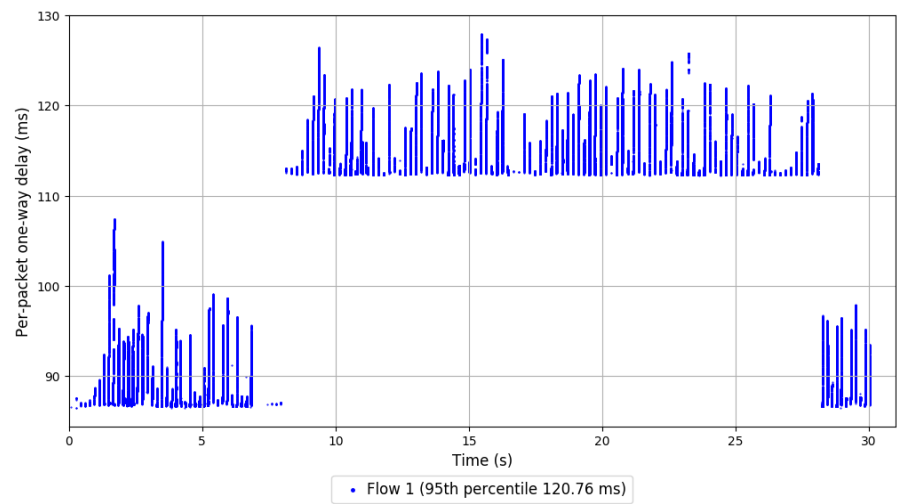
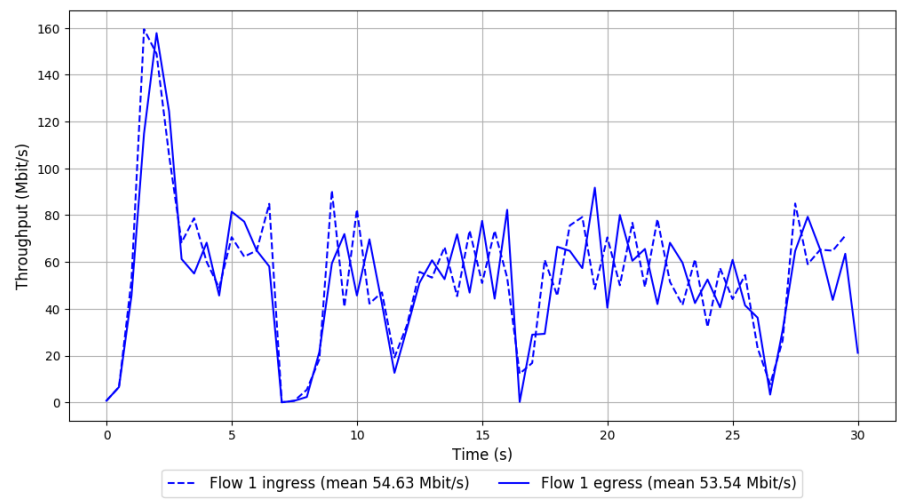
-- Flow 1:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 120.758 ms

Loss rate: 1.98%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-02 00:09:30

End at: 2018-01-02 00:10:00

Below is generated by plot.py at 2018-01-02 02:37:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.87 Mbit/s

95th percentile per-packet one-way delay: 122.443 ms

Loss rate: 1.69%

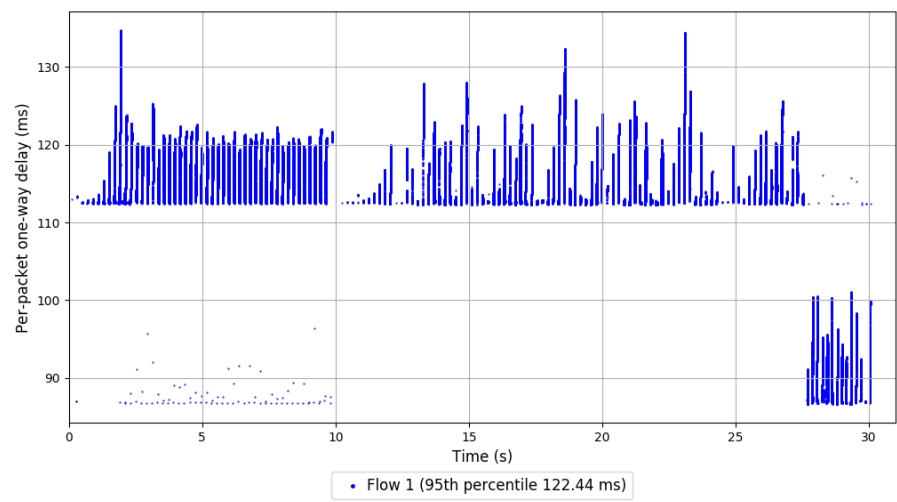
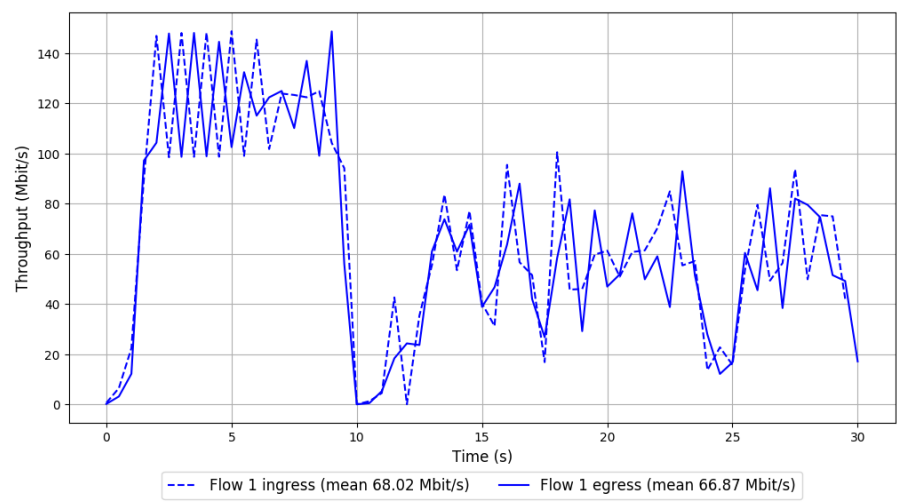
-- Flow 1:

Average throughput: 66.87 Mbit/s

95th percentile per-packet one-way delay: 122.443 ms

Loss rate: 1.69%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-02 00:21:23

End at: 2018-01-02 00:21:53

Below is generated by plot.py at 2018-01-02 02:37:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.42 Mbit/s

95th percentile per-packet one-way delay: 121.918 ms

Loss rate: 0.95%

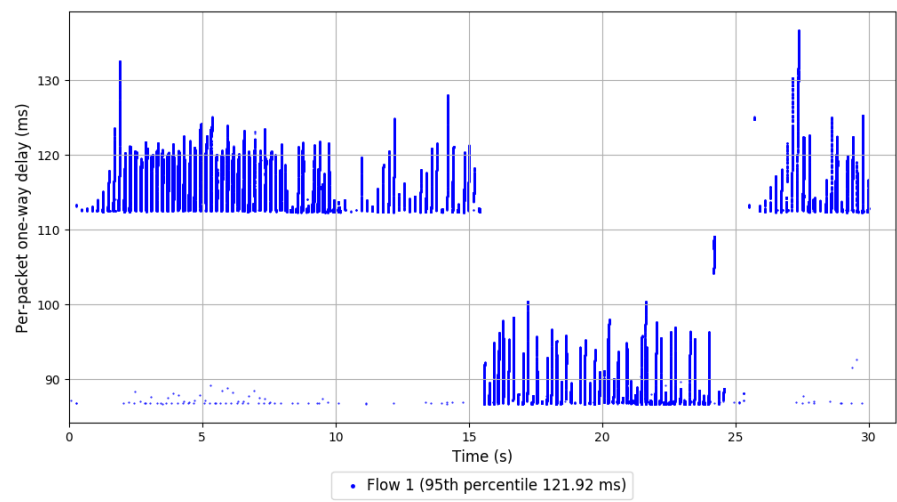
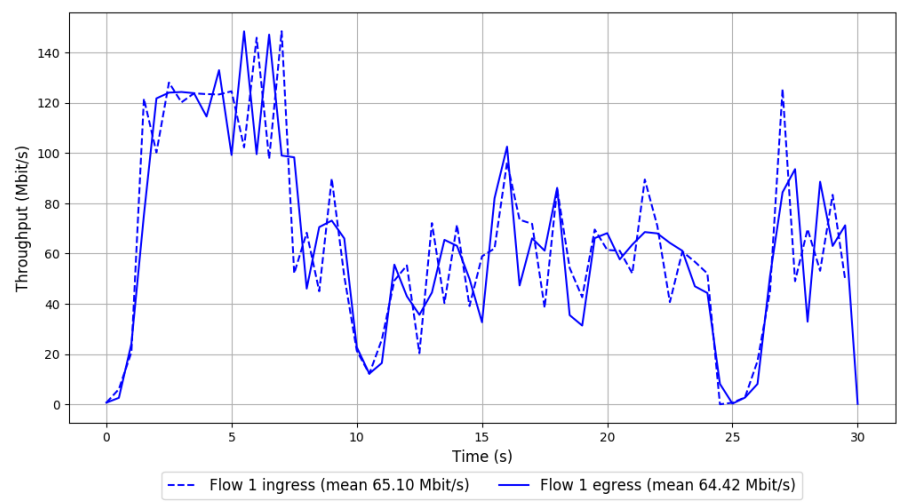
-- Flow 1:

Average throughput: 64.42 Mbit/s

95th percentile per-packet one-way delay: 121.918 ms

Loss rate: 0.95%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-02 00:33:19

End at: 2018-01-02 00:33:49

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.18 Mbit/s

95th percentile per-packet one-way delay: 121.869 ms

Loss rate: 1.20%

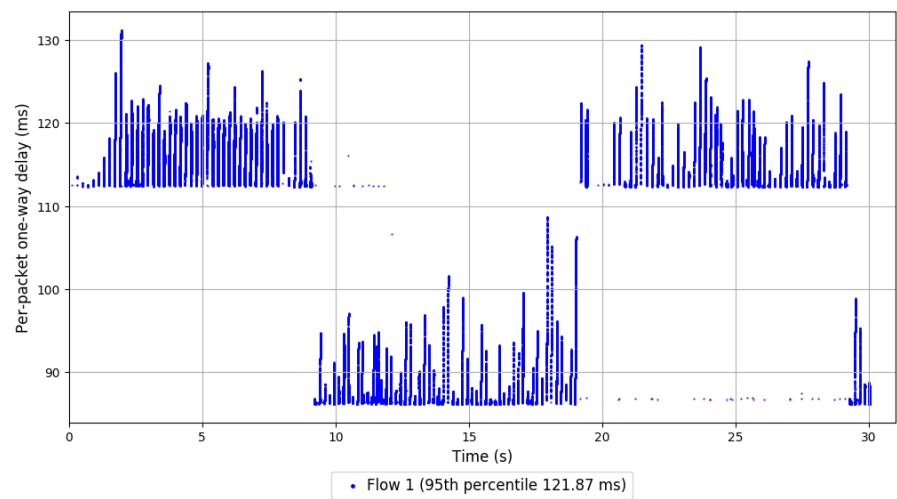
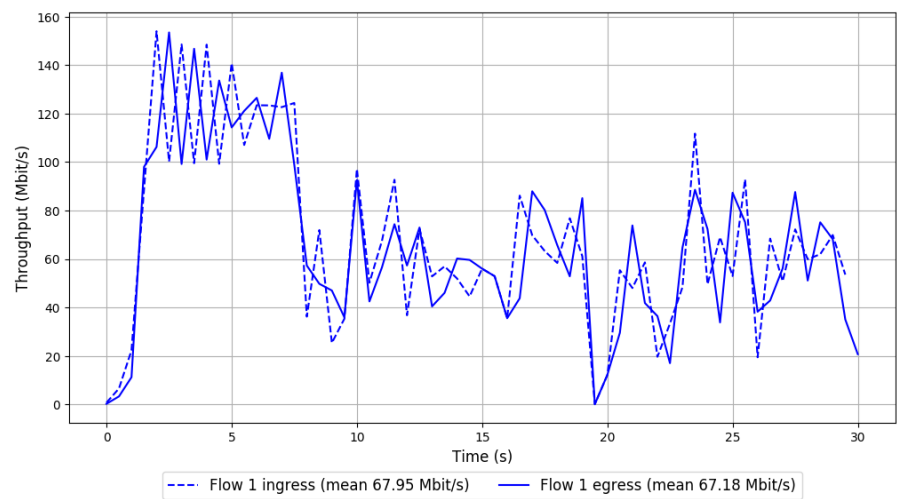
-- Flow 1:

Average throughput: 67.18 Mbit/s

95th percentile per-packet one-way delay: 121.869 ms

Loss rate: 1.20%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-02 00:45:14

End at: 2018-01-02 00:45:44

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.93 Mbit/s

95th percentile per-packet one-way delay: 119.561 ms

Loss rate: 0.02%

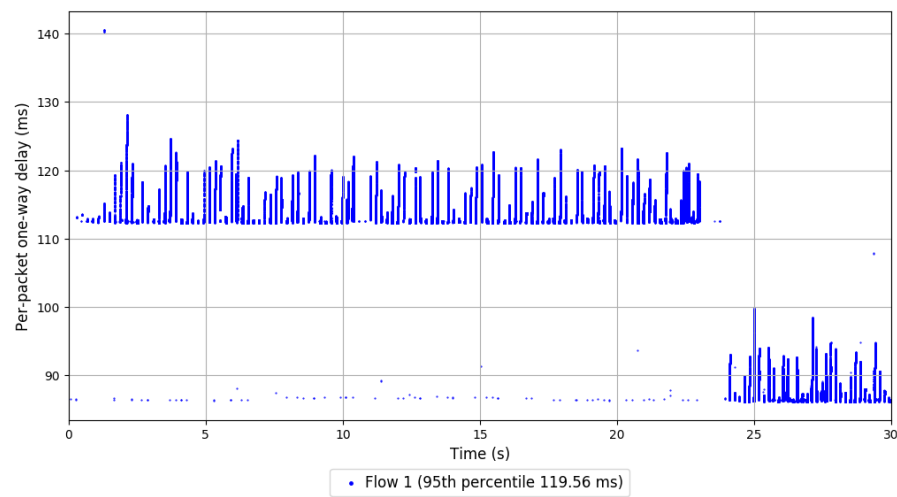
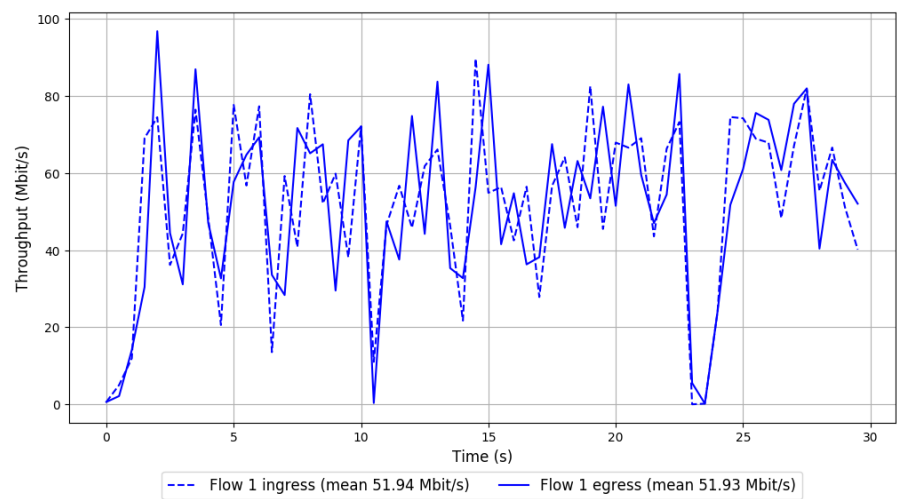
-- Flow 1:

Average throughput: 51.93 Mbit/s

95th percentile per-packet one-way delay: 119.561 ms

Loss rate: 0.02%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-02 00:57:24

End at: 2018-01-02 00:57:54

Below is generated by plot.py at 2018-01-02 02:37:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.79 Mbit/s

95th percentile per-packet one-way delay: 95.122 ms

Loss rate: 0.89%

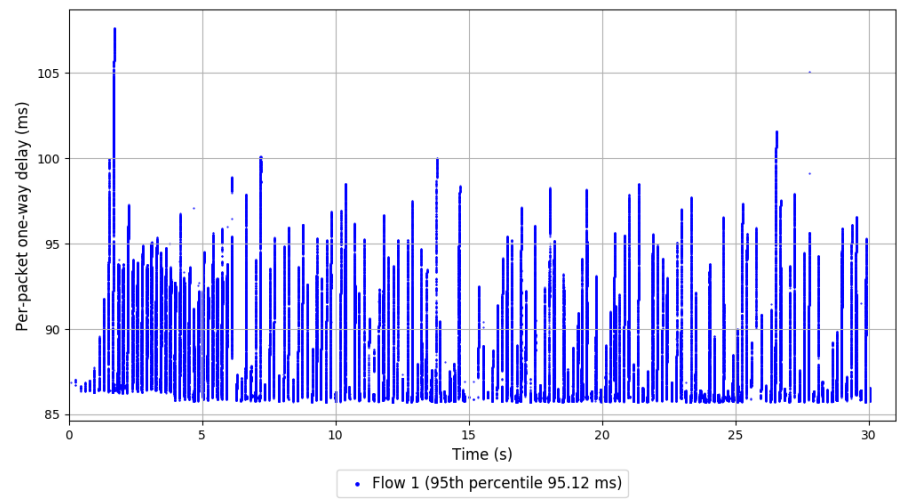
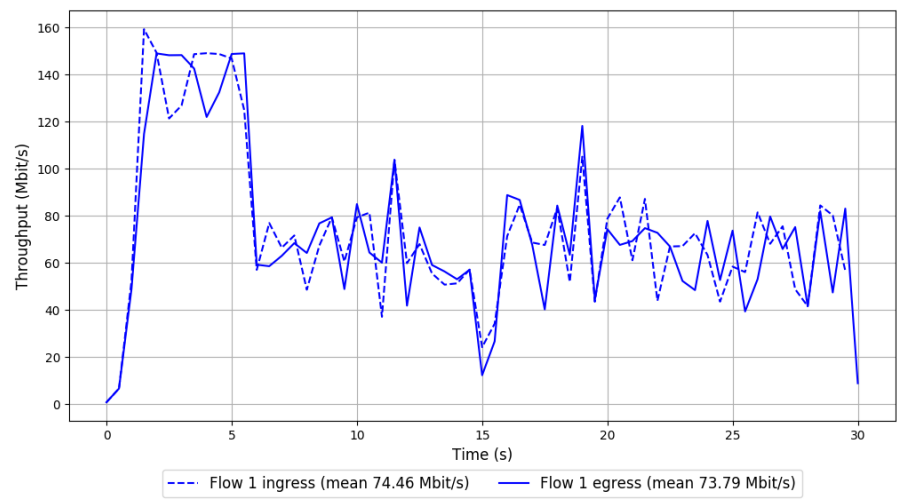
-- Flow 1:

Average throughput: 73.79 Mbit/s

95th percentile per-packet one-way delay: 95.122 ms

Loss rate: 0.89%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-02 01:09:40

End at: 2018-01-02 01:10:10

Below is generated by plot.py at 2018-01-02 02:37:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.22 Mbit/s

95th percentile per-packet one-way delay: 97.443 ms

Loss rate: 1.08%

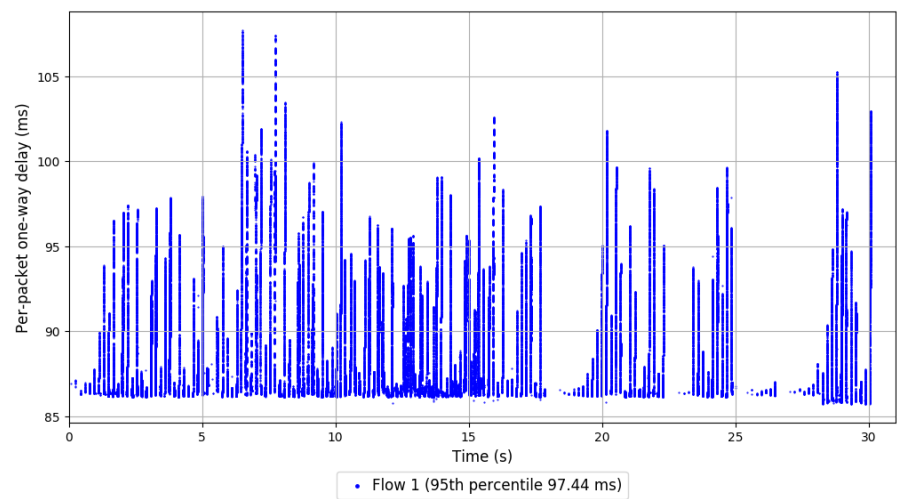
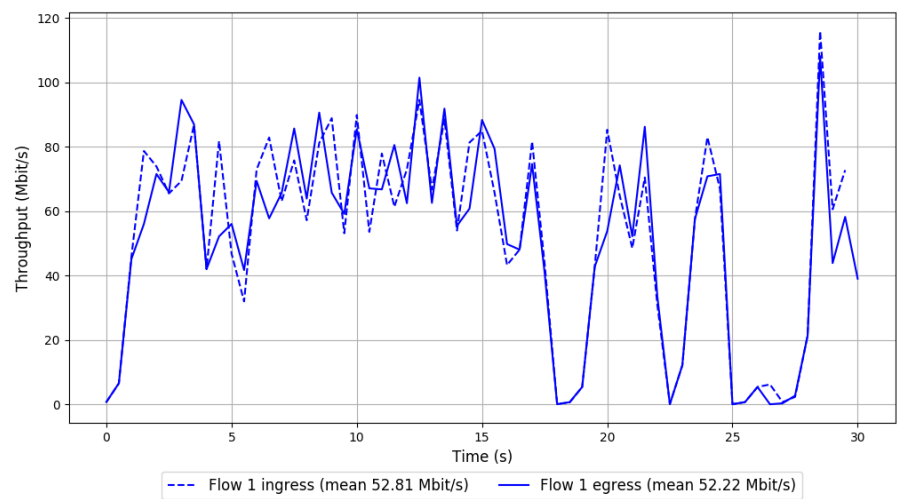
-- Flow 1:

Average throughput: 52.22 Mbit/s

95th percentile per-packet one-way delay: 97.443 ms

Loss rate: 1.08%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-02 01:21:14

End at: 2018-01-02 01:21:44

Below is generated by plot.py at 2018-01-02 02:38:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.23 Mbit/s

95th percentile per-packet one-way delay: 122.688 ms

Loss rate: 1.01%

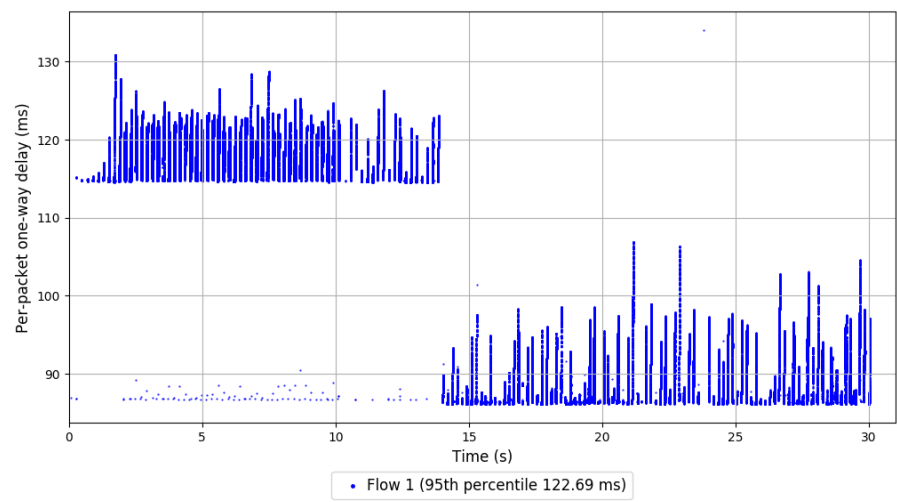
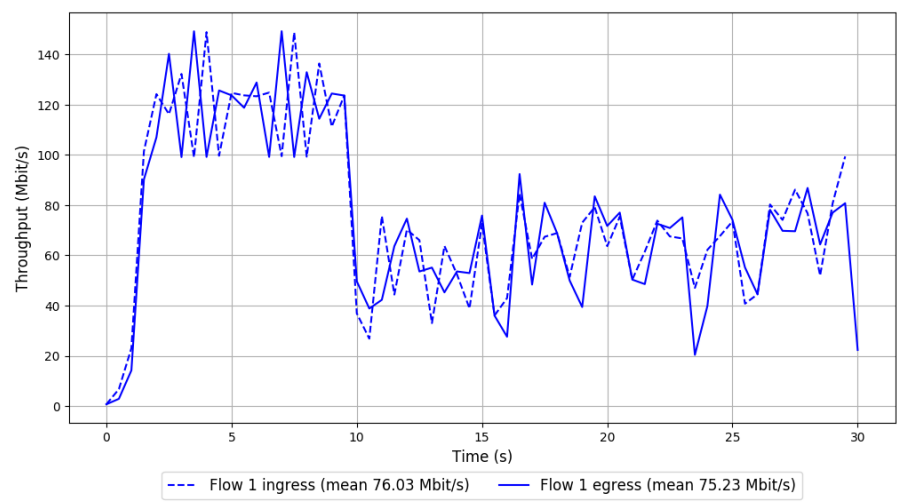
-- Flow 1:

Average throughput: 75.23 Mbit/s

95th percentile per-packet one-way delay: 122.688 ms

Loss rate: 1.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-02 01:33:10

End at: 2018-01-02 01:33:40

Below is generated by plot.py at 2018-01-02 02:38:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.46 Mbit/s

95th percentile per-packet one-way delay: 122.585 ms

Loss rate: 0.72%

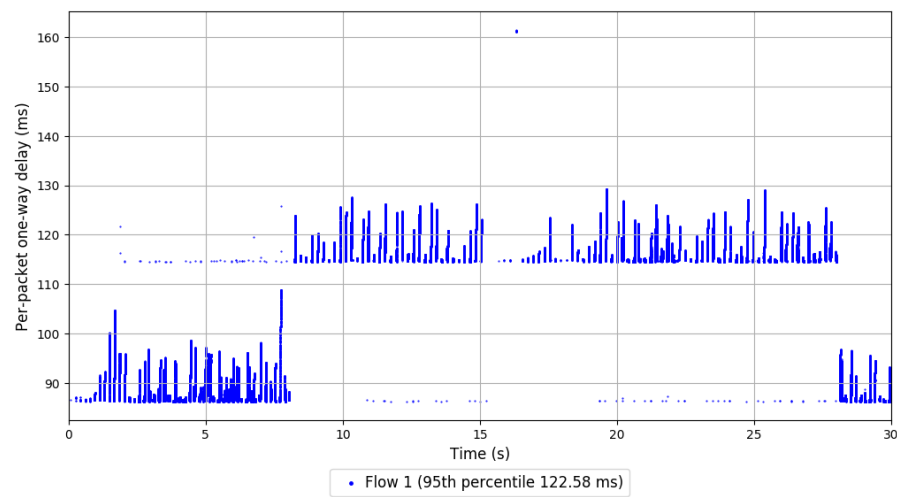
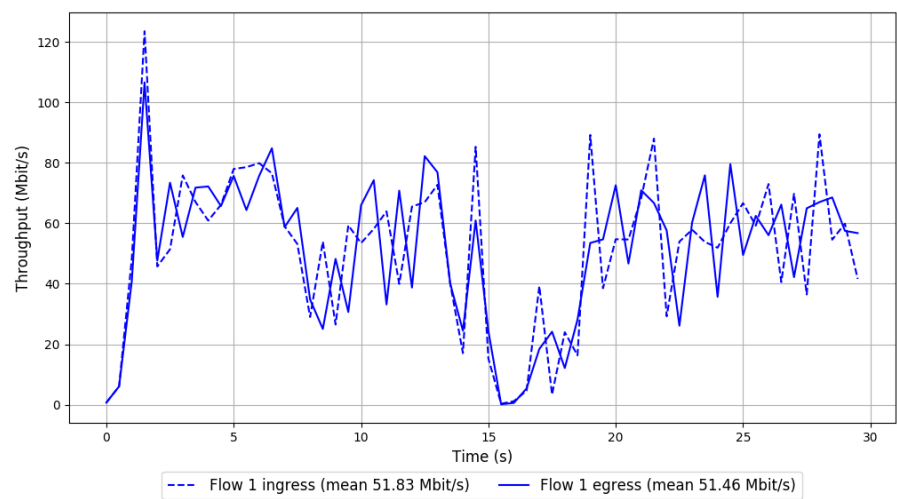
-- Flow 1:

Average throughput: 51.46 Mbit/s

95th percentile per-packet one-way delay: 122.585 ms

Loss rate: 0.72%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-01 23:47:24

End at: 2018-01-01 23:47:54

Below is generated by plot.py at 2018-01-02 02:38:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.13 Mbit/s

95th percentile per-packet one-way delay: 92.837 ms

Loss rate: 0.53%

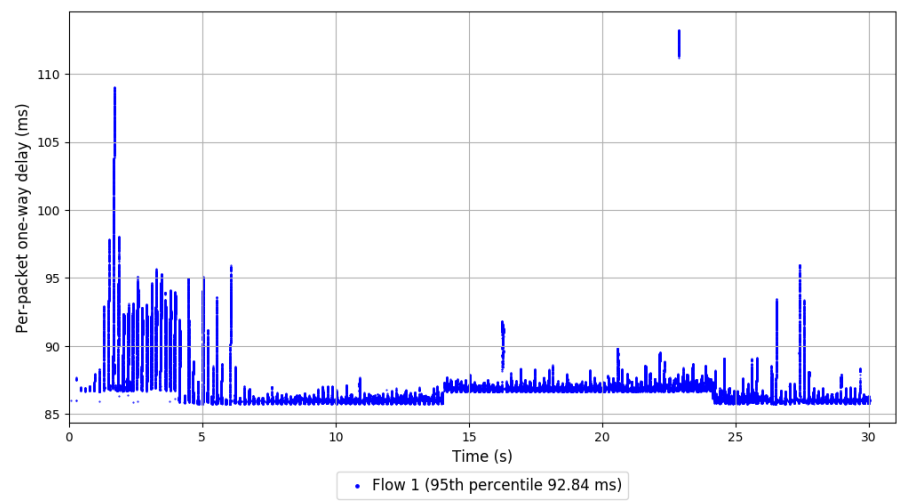
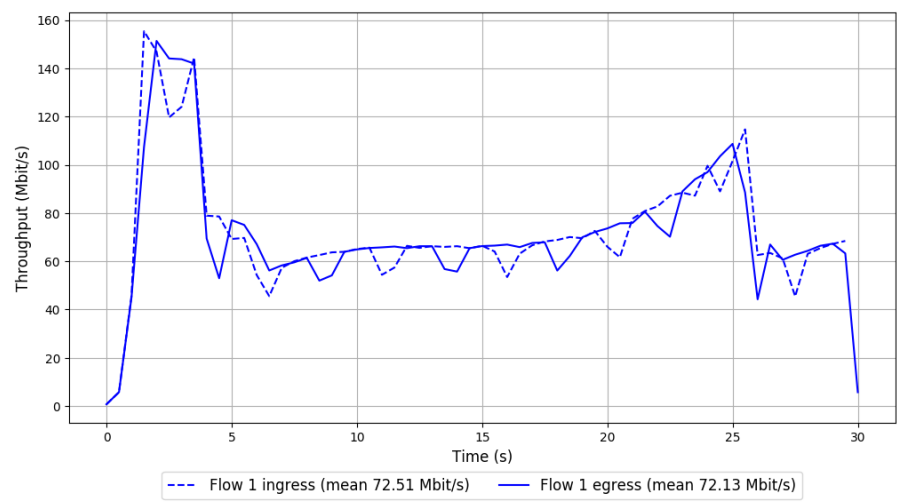
-- Flow 1:

Average throughput: 72.13 Mbit/s

95th percentile per-packet one-way delay: 92.837 ms

Loss rate: 0.53%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-01 23:58:53

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

Below is generated by plot.py at 2018-01-02 02:38:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.86 Mbit/s

95th percentile per-packet one-way delay: 113.716 ms

Loss rate: 0.74%

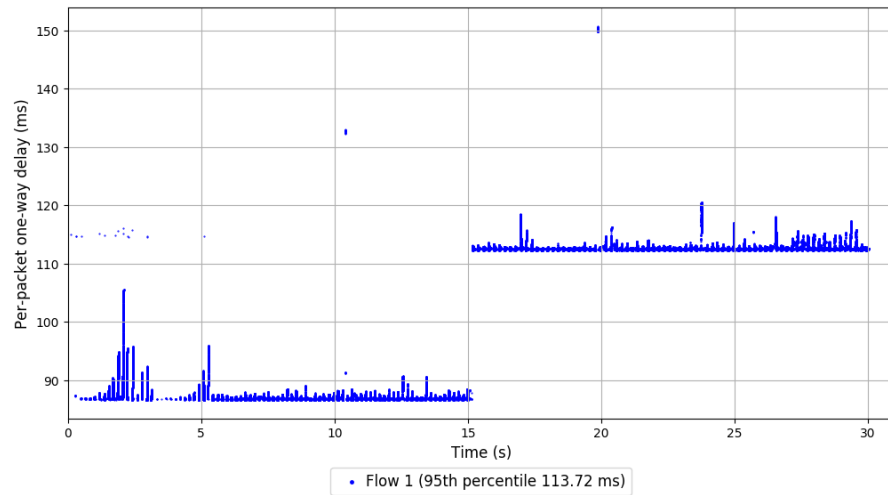
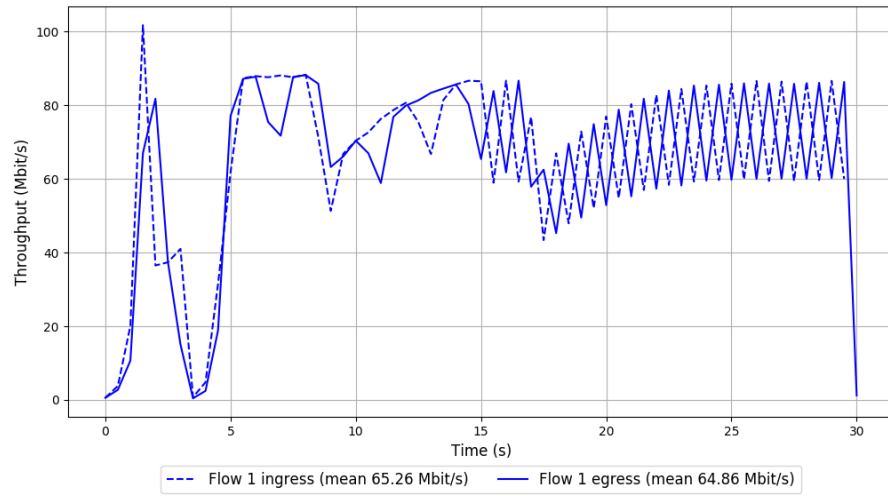
-- Flow 1:

Average throughput: 64.86 Mbit/s

95th percentile per-packet one-way delay: 113.716 ms

Loss rate: 0.74%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-02 00:10:14

End at: 2018-01-02 00:10:44

Below is generated by plot.py at 2018-01-02 02:38:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.71 Mbit/s

95th percentile per-packet one-way delay: 119.270 ms

Loss rate: 0.89%

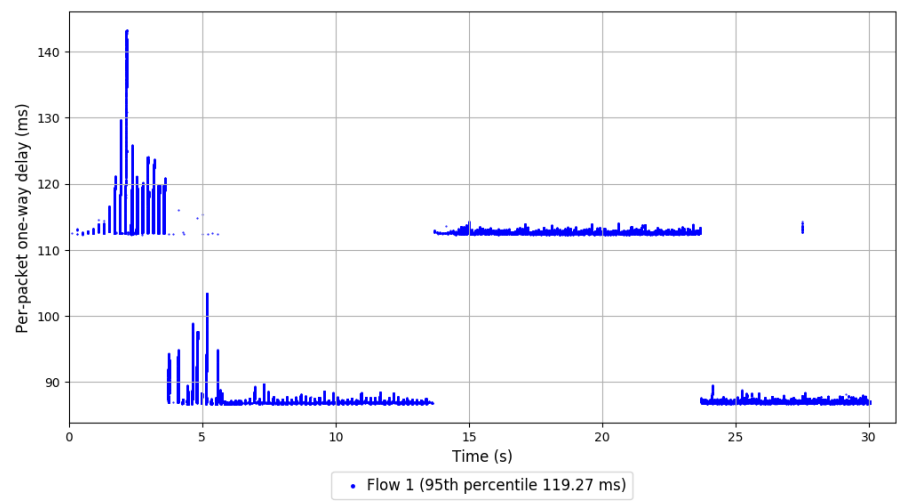
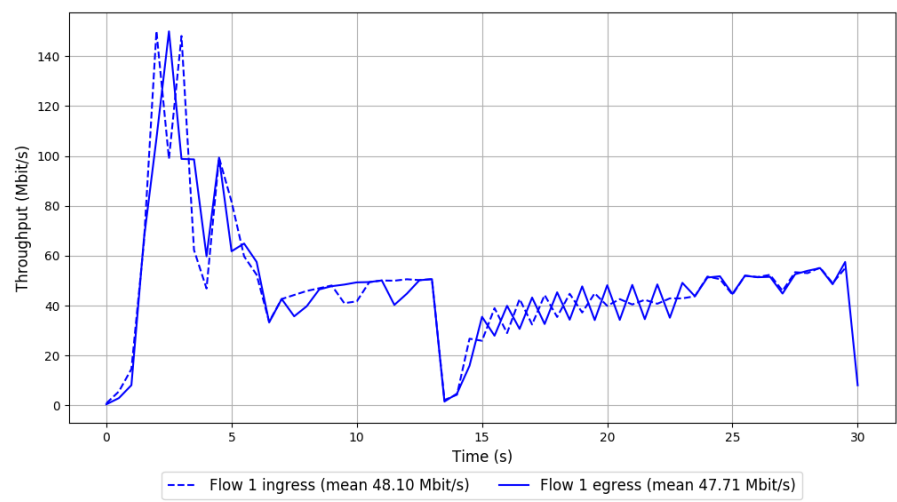
-- Flow 1:

Average throughput: 47.71 Mbit/s

95th percentile per-packet one-way delay: 119.270 ms

Loss rate: 0.89%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-02 00:22:06

End at: 2018-01-02 00:22:36

Below is generated by plot.py at 2018-01-02 02:38:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.40 Mbit/s

95th percentile per-packet one-way delay: 117.757 ms

Loss rate: 1.04%

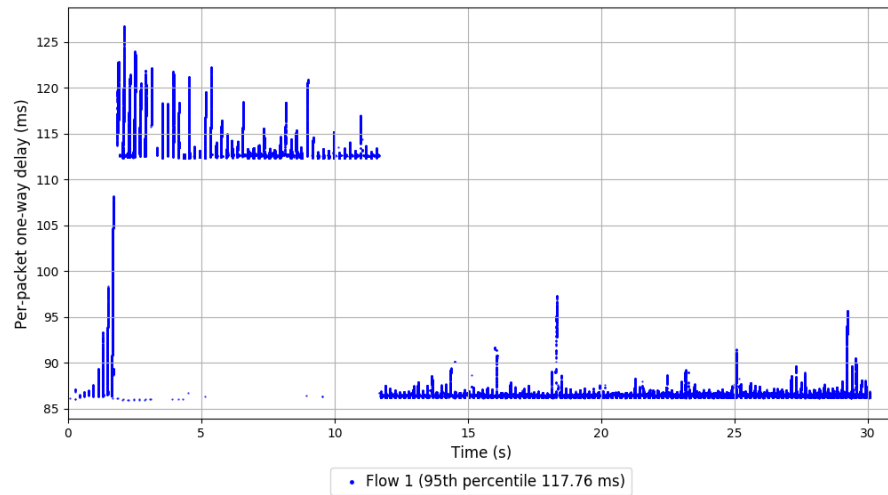
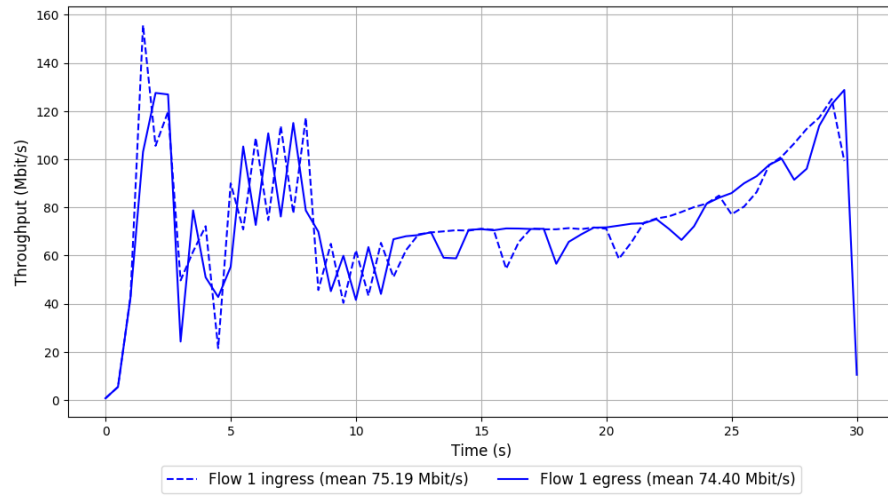
-- Flow 1:

Average throughput: 74.40 Mbit/s

95th percentile per-packet one-way delay: 117.757 ms

Loss rate: 1.04%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-02 00:34:04

End at: 2018-01-02 00:34:34

Below is generated by plot.py at 2018-01-02 02:38:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.99 Mbit/s

95th percentile per-packet one-way delay: 89.644 ms

Loss rate: 0.00%

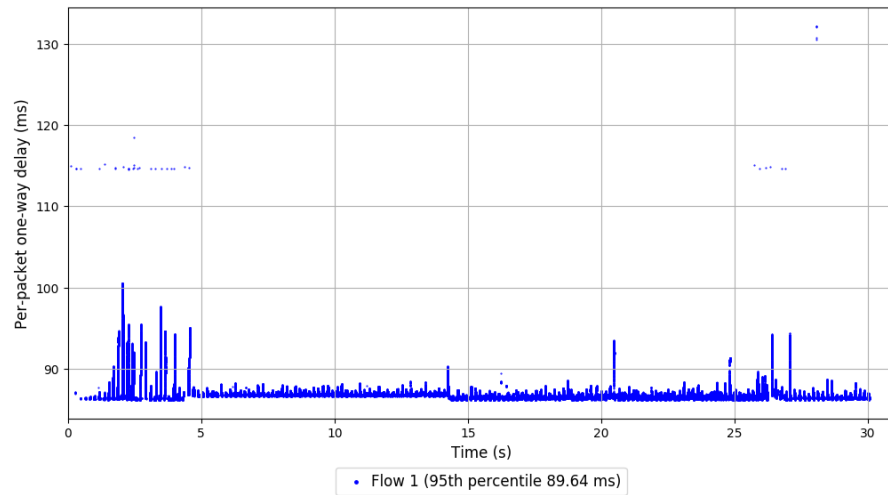
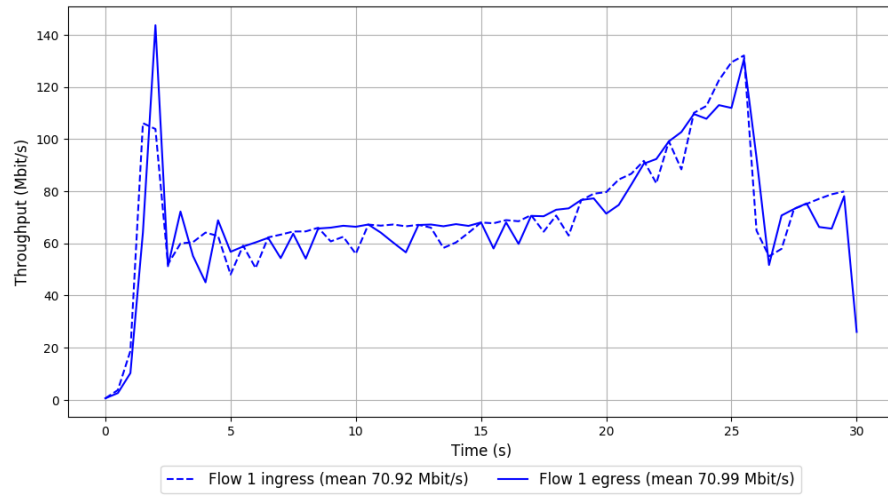
-- Flow 1:

Average throughput: 70.99 Mbit/s

95th percentile per-packet one-way delay: 89.644 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-02 00:45:58

End at: 2018-01-02 00:46:28

Below is generated by plot.py at 2018-01-02 02:38:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.58 Mbit/s

95th percentile per-packet one-way delay: 112.708 ms

Loss rate: 0.01%

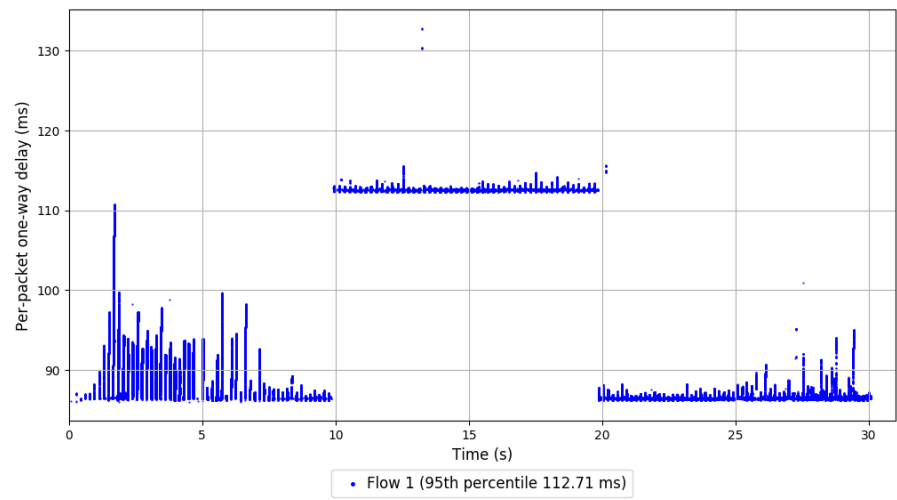
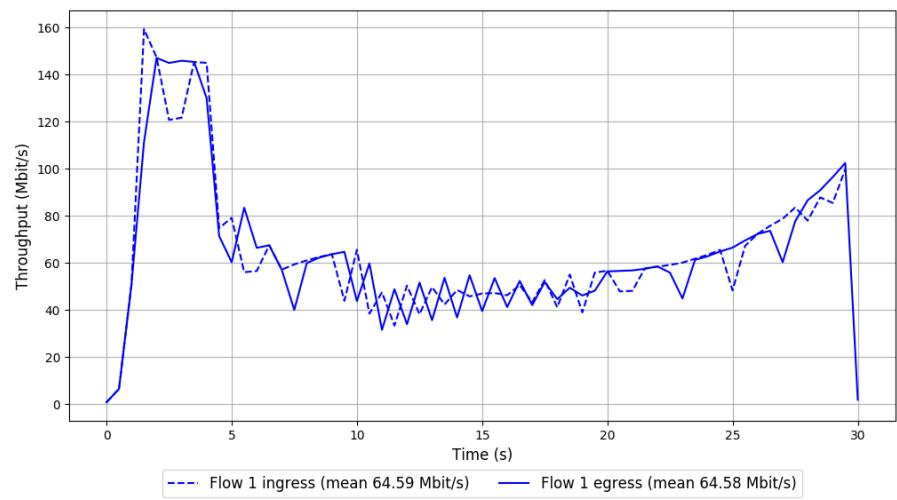
-- Flow 1:

Average throughput: 64.58 Mbit/s

95th percentile per-packet one-way delay: 112.708 ms

Loss rate: 0.01%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-02 00:58:09

End at: 2018-01-02 00:58:39

Below is generated by plot.py at 2018-01-02 02:39:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.82 Mbit/s

95th percentile per-packet one-way delay: 92.676 ms

Loss rate: 1.22%

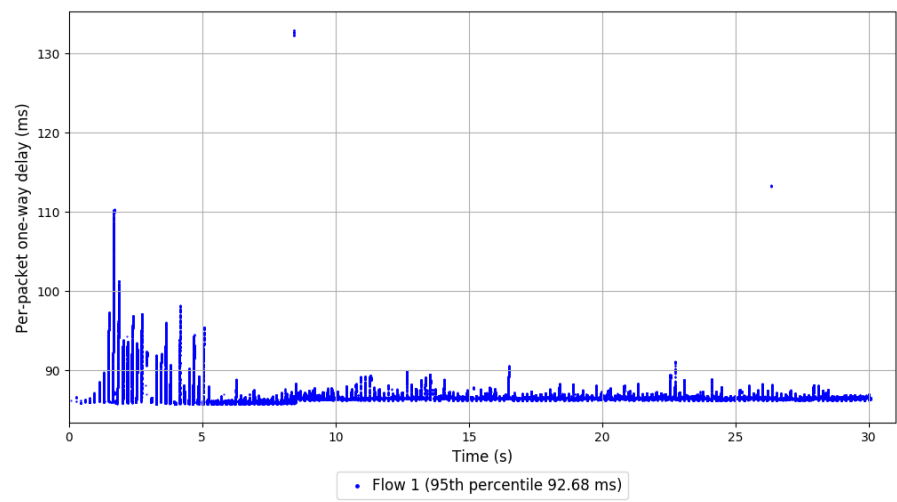
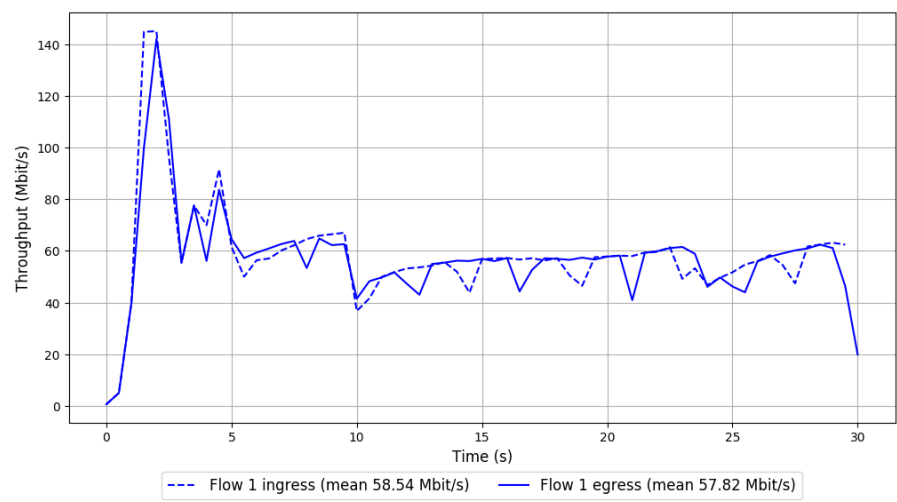
-- Flow 1:

Average throughput: 57.82 Mbit/s

95th percentile per-packet one-way delay: 92.676 ms

Loss rate: 1.22%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-02 01:10:24

End at: 2018-01-02 01:10:54

Below is generated by plot.py at 2018-01-02 02:39:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.12 Mbit/s

95th percentile per-packet one-way delay: 94.320 ms

Loss rate: 0.89%

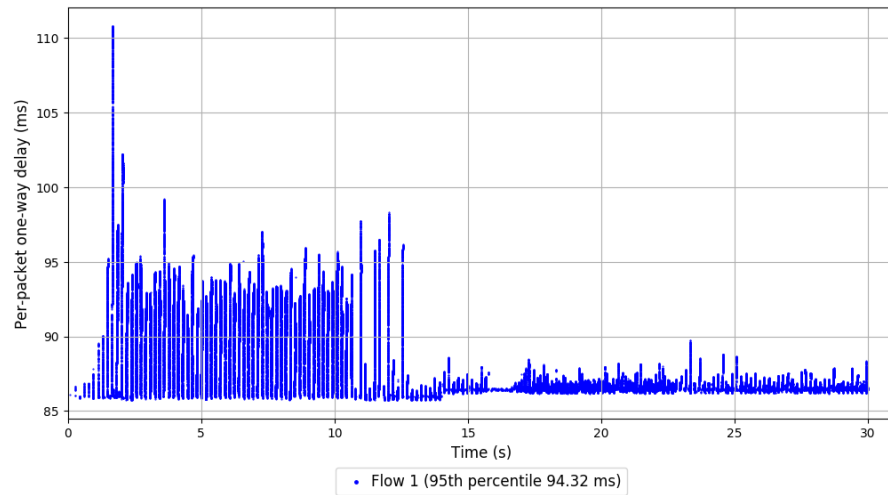
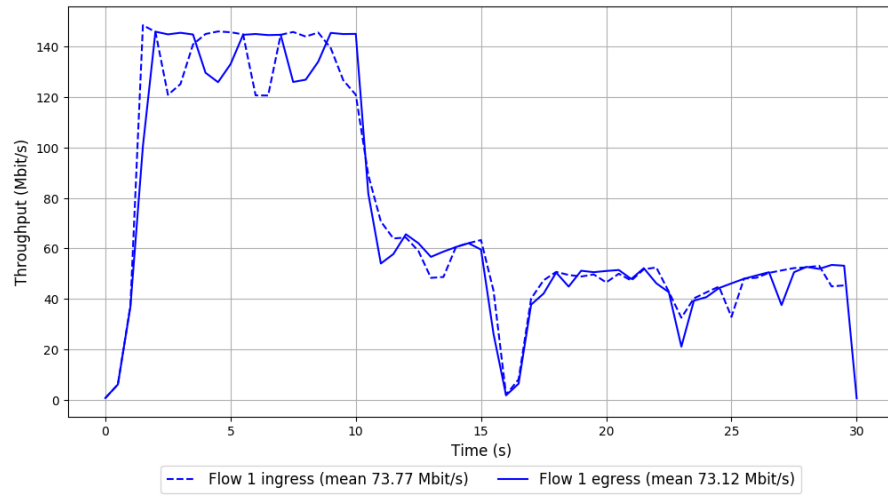
-- Flow 1:

Average throughput: 73.12 Mbit/s

95th percentile per-packet one-way delay: 94.320 ms

Loss rate: 0.89%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-02 01:21:59

End at: 2018-01-02 01:22:30

Below is generated by plot.py at 2018-01-02 02:39:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.62 Mbit/s

95th percentile per-packet one-way delay: 114.764 ms

Loss rate: 0.88%

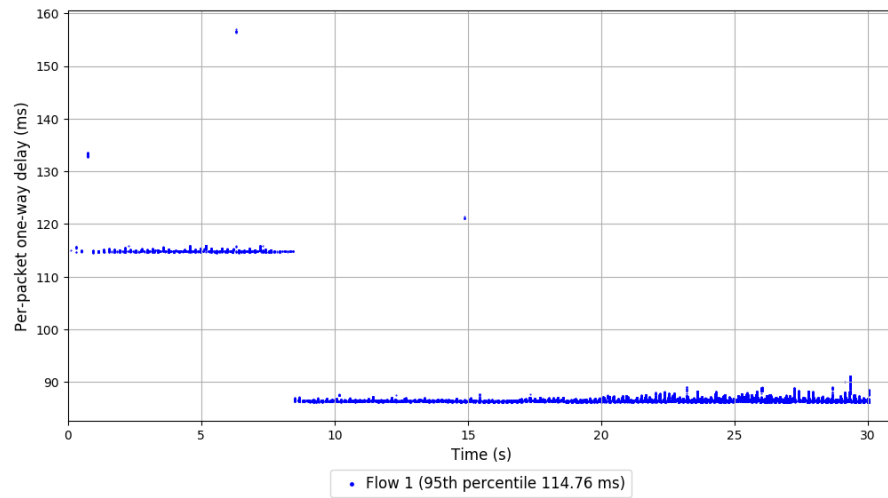
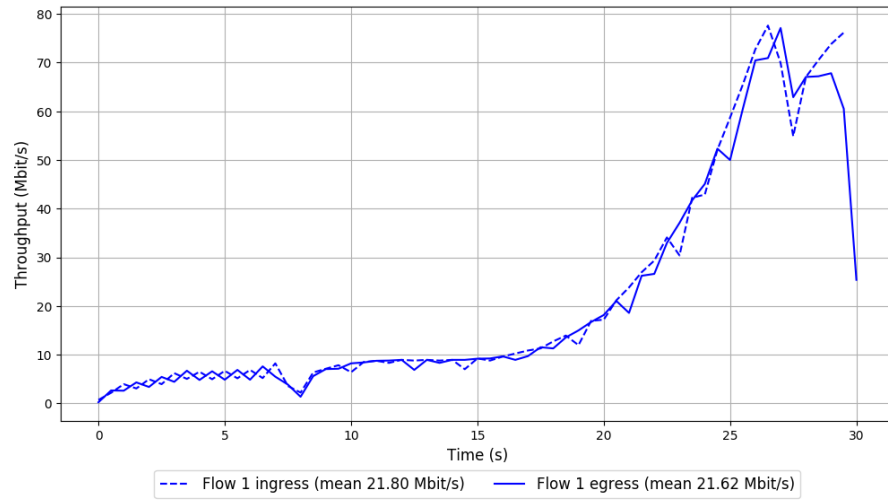
-- Flow 1:

Average throughput: 21.62 Mbit/s

95th percentile per-packet one-way delay: 114.764 ms

Loss rate: 0.88%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-02 01:33:54

End at: 2018-01-02 01:34:24

Below is generated by plot.py at 2018-01-02 02:39:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.00 Mbit/s

95th percentile per-packet one-way delay: 120.796 ms

Loss rate: 0.54%

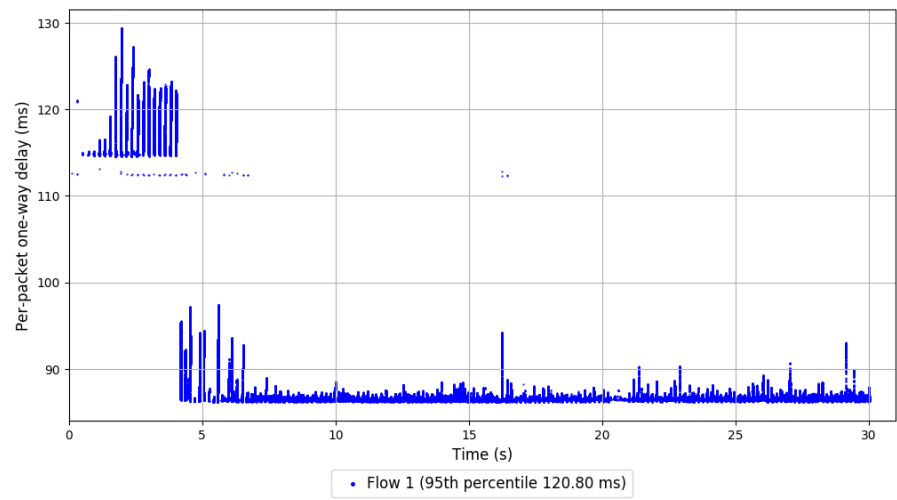
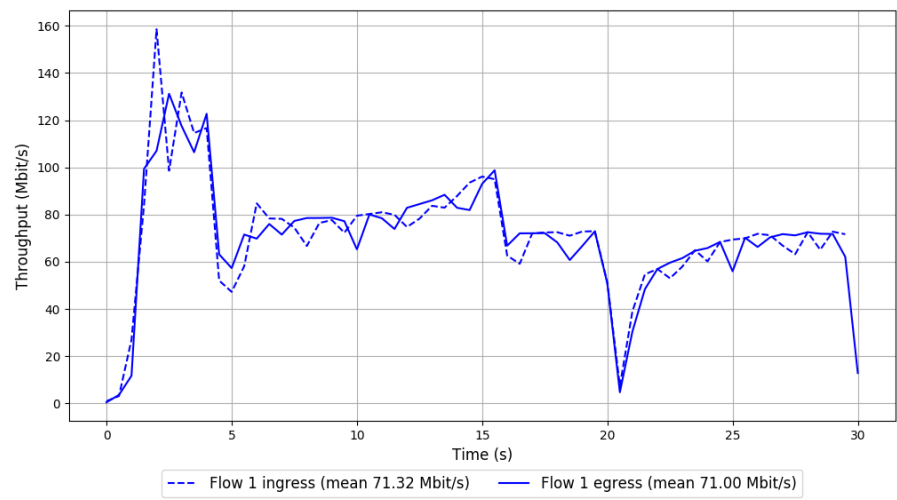
-- Flow 1:

Average throughput: 71.00 Mbit/s

95th percentile per-packet one-way delay: 120.796 ms

Loss rate: 0.54%

Run 10: Report of TCP Cubic — Data Link

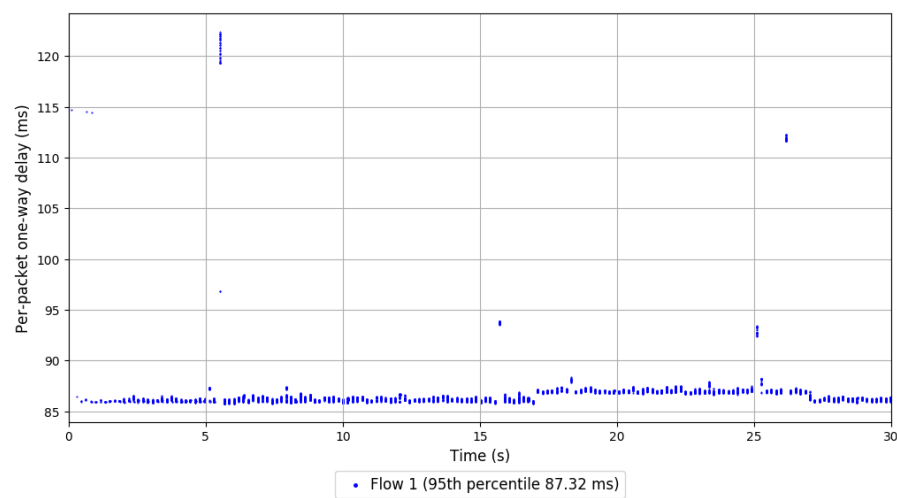
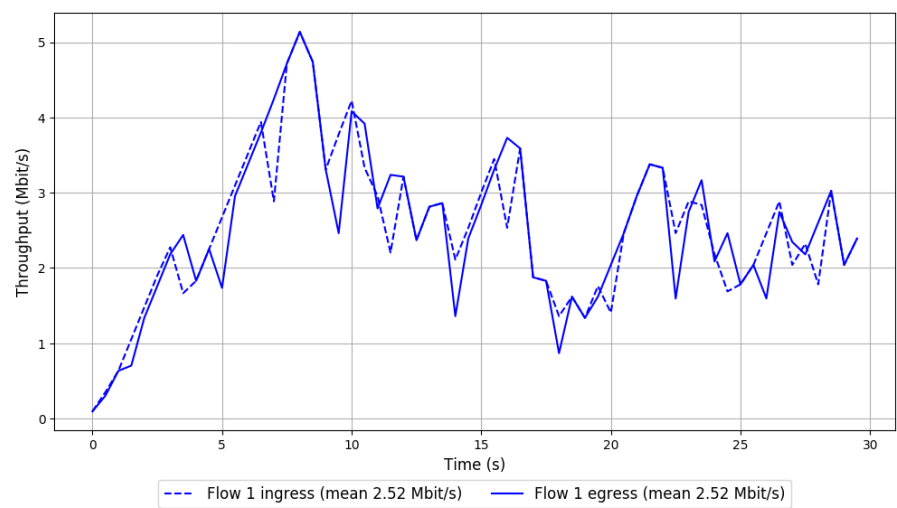


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-01 23:42:31
End at: 2018-01-01 23:43:01

# Below is generated by plot.py at 2018-01-02 02:39:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 87.319 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 87.319 ms
Loss rate: 0.02%
```

Run 1: Report of LEDBAT — Data Link

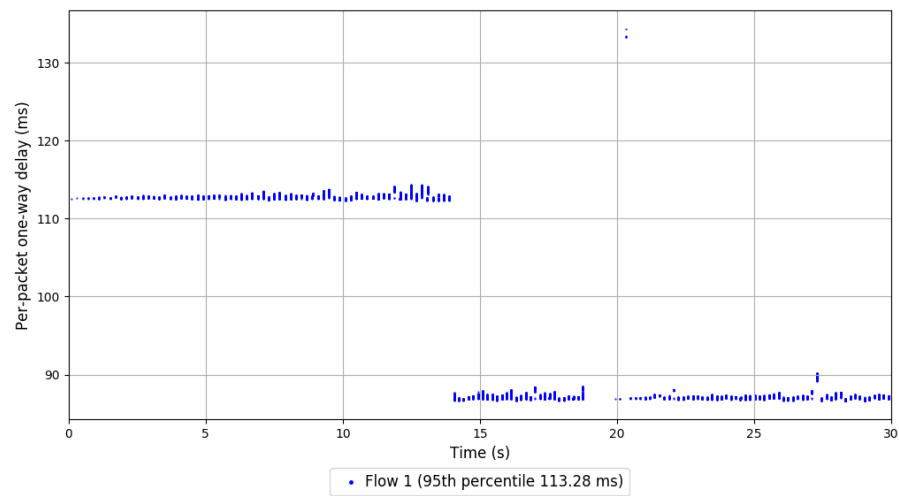
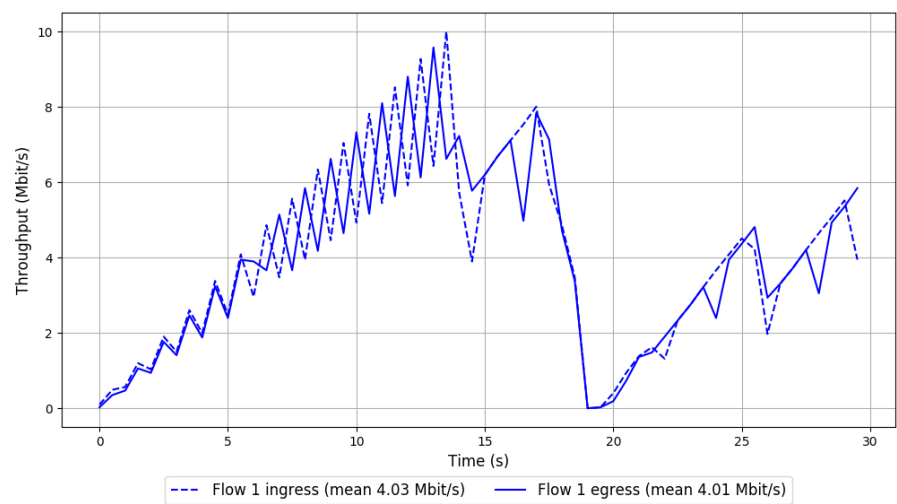


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-01 23:54:24
End at: 2018-01-01 23:54:54

# Below is generated by plot.py at 2018-01-02 02:39:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 113.285 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 113.285 ms
Loss rate: 0.73%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-02 00:06:01

End at: 2018-01-02 00:06:31

Below is generated by plot.py at 2018-01-02 02:39:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 113.363 ms

Loss rate: 0.15%

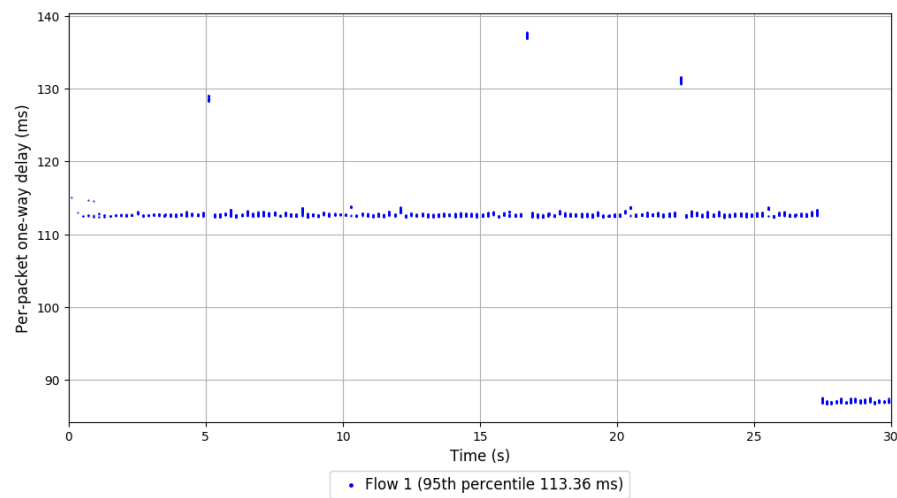
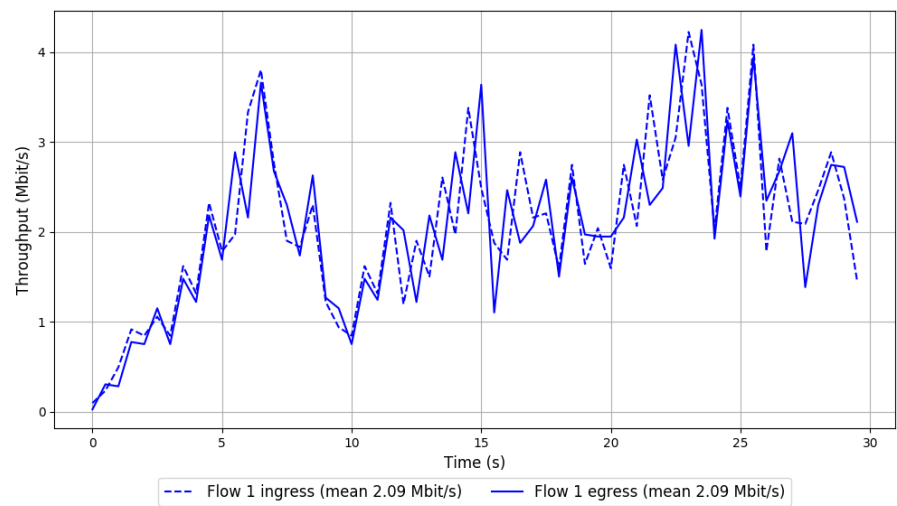
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 113.363 ms

Loss rate: 0.15%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-02 00:17:37

End at: 2018-01-02 00:18:07

Below is generated by plot.py at 2018-01-02 02:39:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 113.318 ms

Loss rate: 1.08%

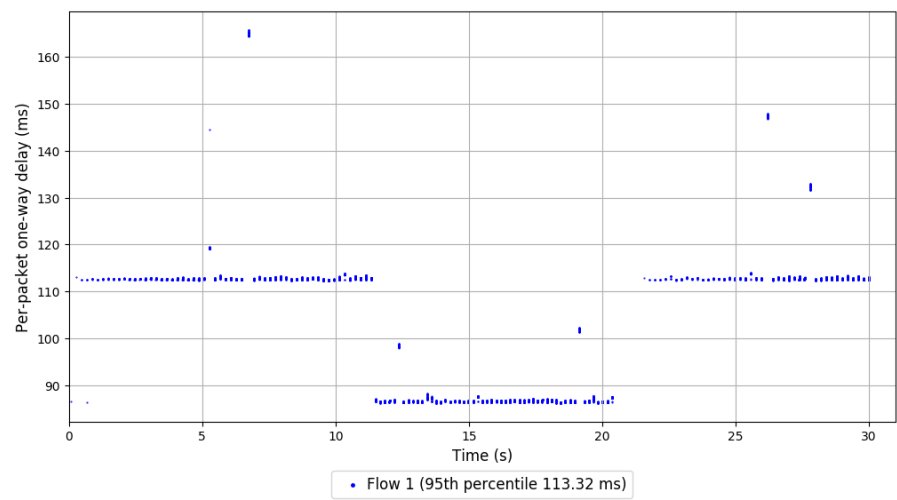
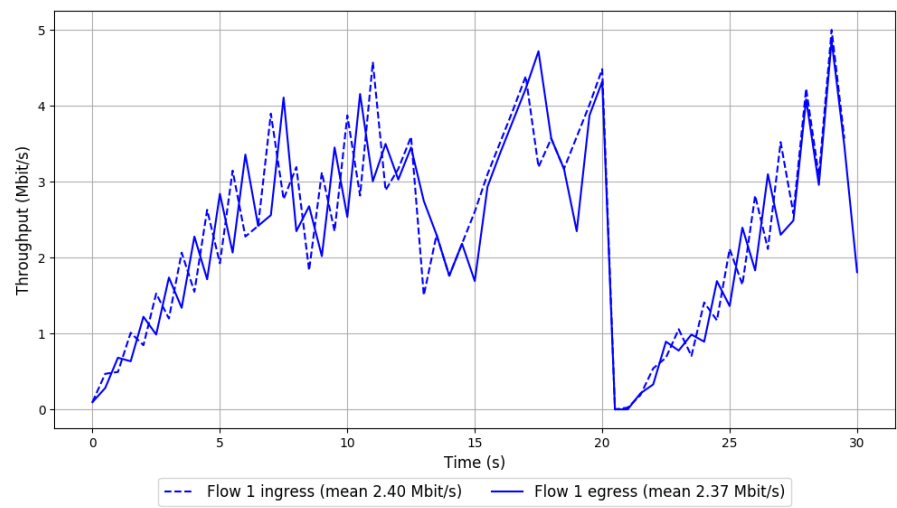
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 113.318 ms

Loss rate: 1.08%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-02 00:29:07

End at: 2018-01-02 00:29:37

Below is generated by plot.py at 2018-01-02 02:39:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 112.903 ms

Loss rate: 1.38%

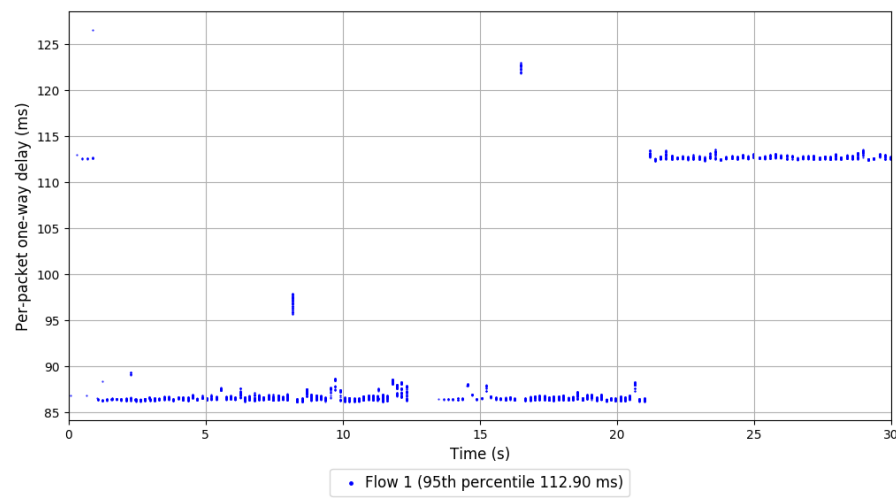
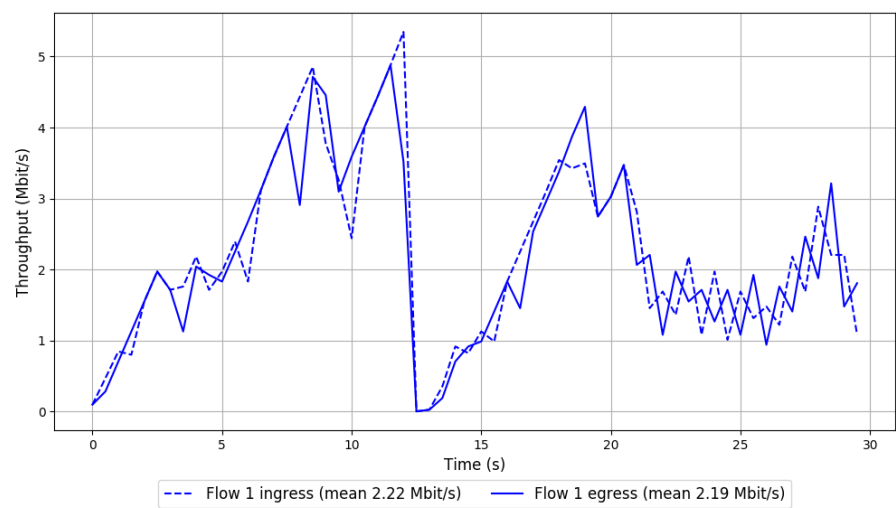
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 112.903 ms

Loss rate: 1.38%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-02 00:41:24

End at: 2018-01-02 00:41:54

Below is generated by plot.py at 2018-01-02 02:39:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.616 ms

Loss rate: 0.00%

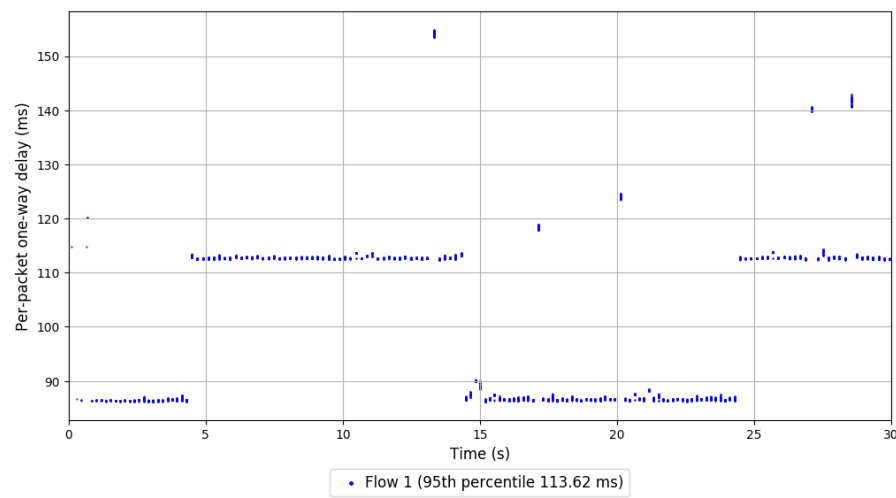
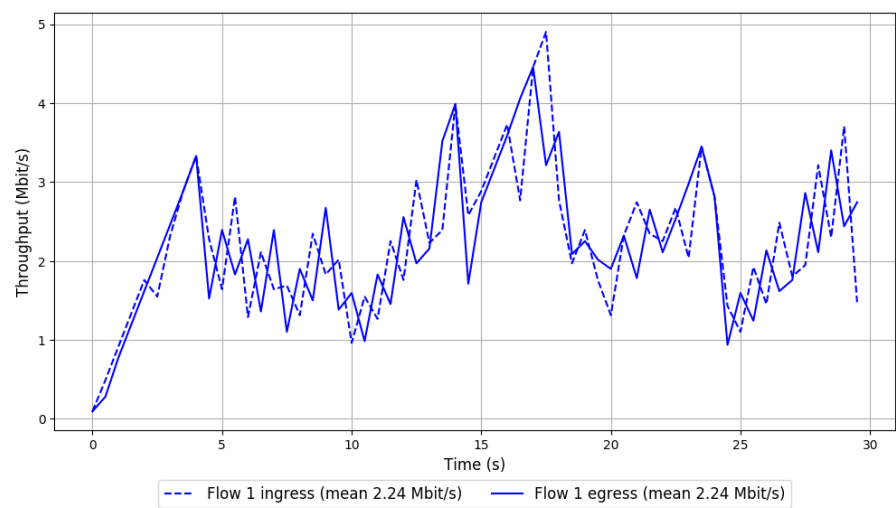
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.616 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-02 00:53:18

End at: 2018-01-02 00:53:48

Below is generated by plot.py at 2018-01-02 02:39:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.62 Mbit/s

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

Loss rate: 1.05%

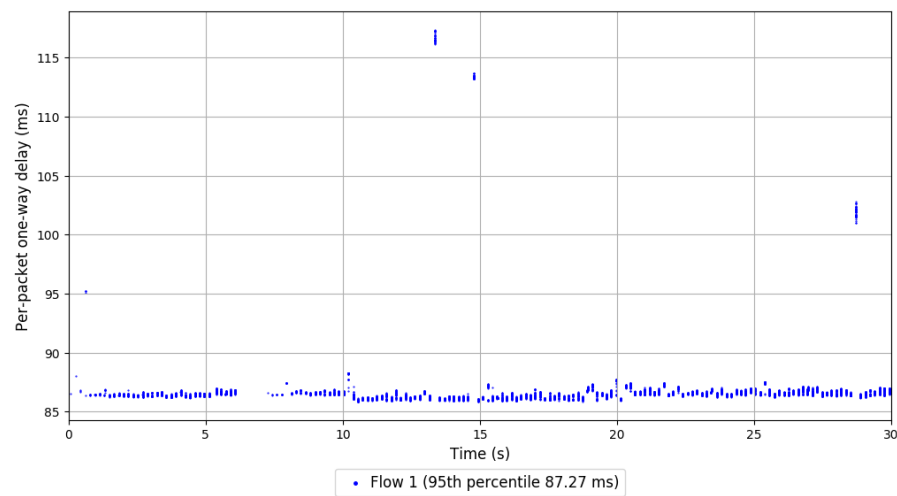
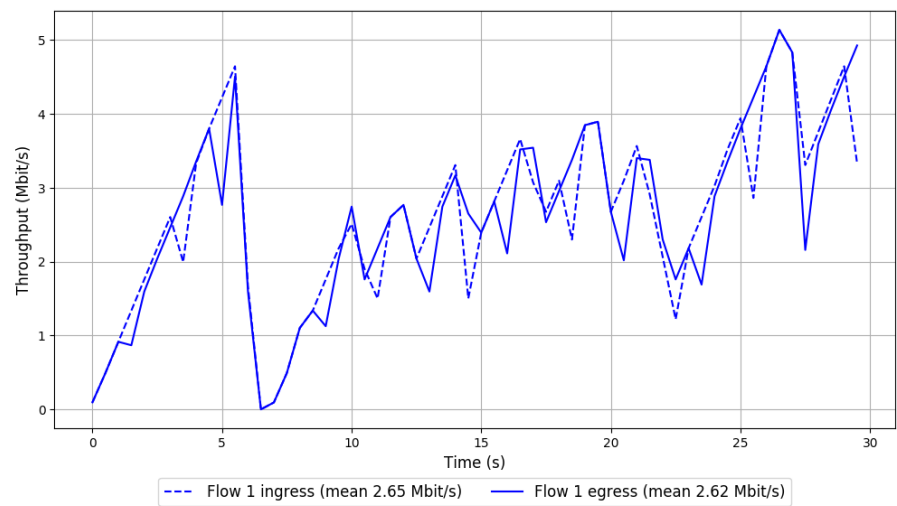
-- Flow 1:

Average throughput: 2.62 Mbit/s

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

Loss rate: 1.05%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-02 01:05:30

End at: 2018-01-02 01:06:00

Below is generated by plot.py at 2018-01-02 02:39:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 87.378 ms

Loss rate: 0.07%

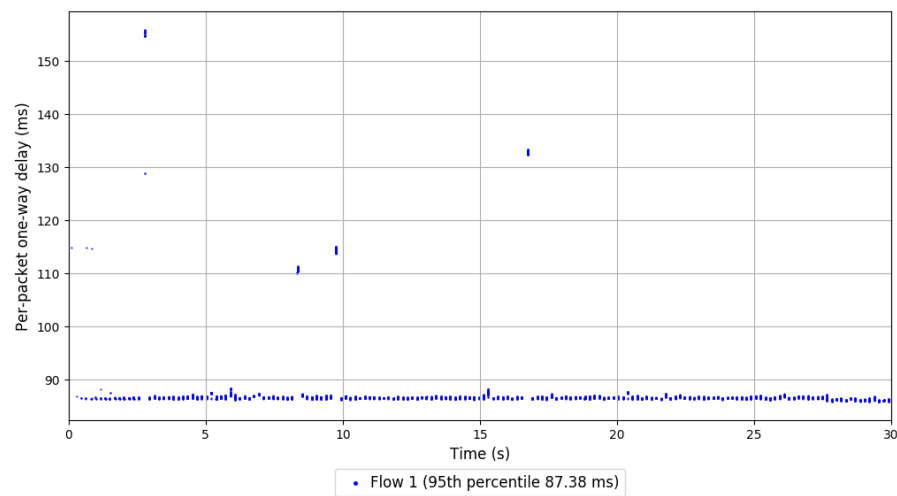
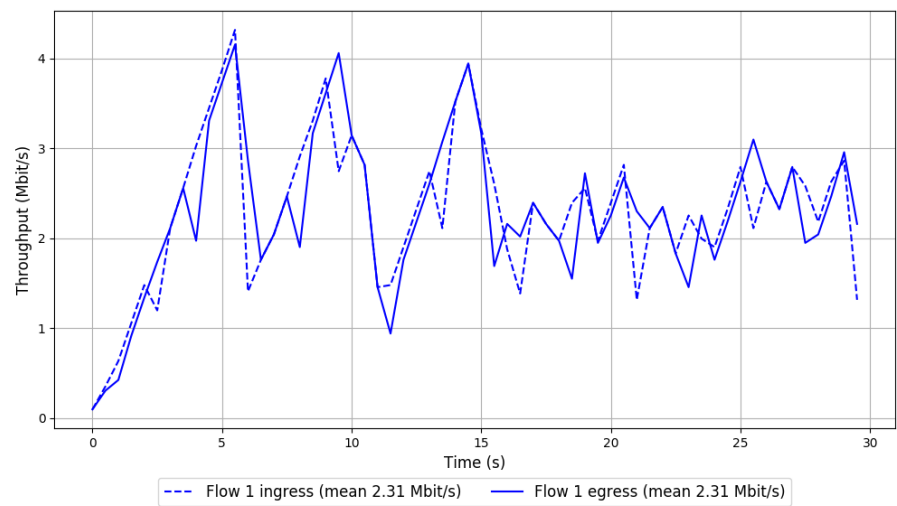
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 87.378 ms

Loss rate: 0.07%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-02 01:17:16

End at: 2018-01-02 01:17:46

Below is generated by plot.py at 2018-01-02 02:39:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 86.599 ms

Loss rate: 1.09%

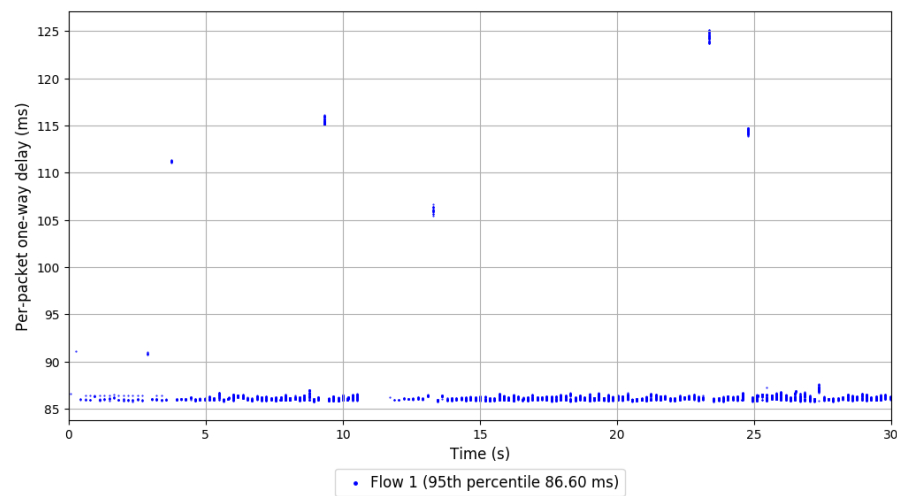
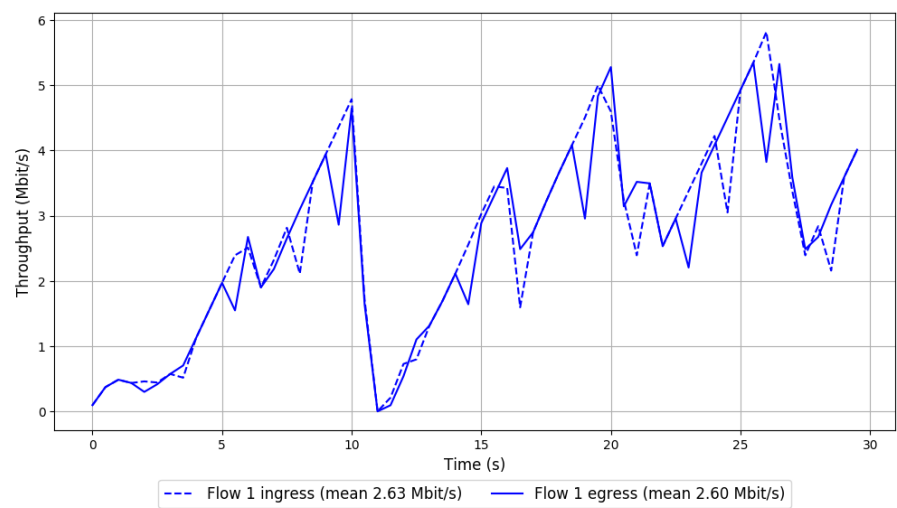
-- Flow 1:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 86.599 ms

Loss rate: 1.09%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-02 01:29:12

End at: 2018-01-02 01:29:42

Below is generated by plot.py at 2018-01-02 02:39:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 115.366 ms

Loss rate: 1.25%

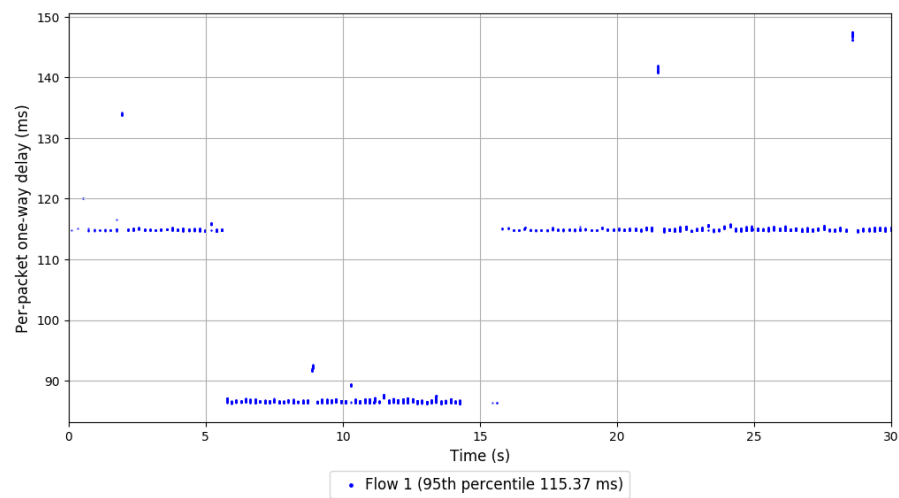
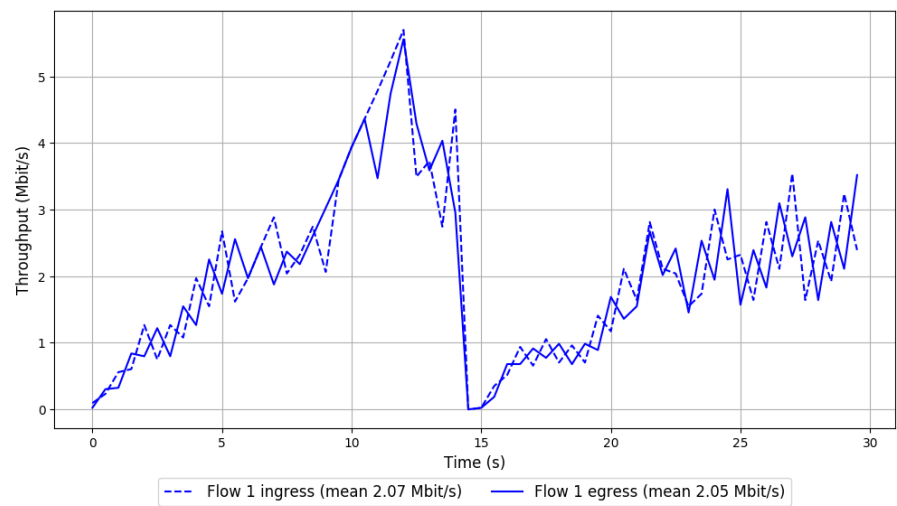
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 115.366 ms

Loss rate: 1.25%

Run 10: Report of LEDBAT — Data Link

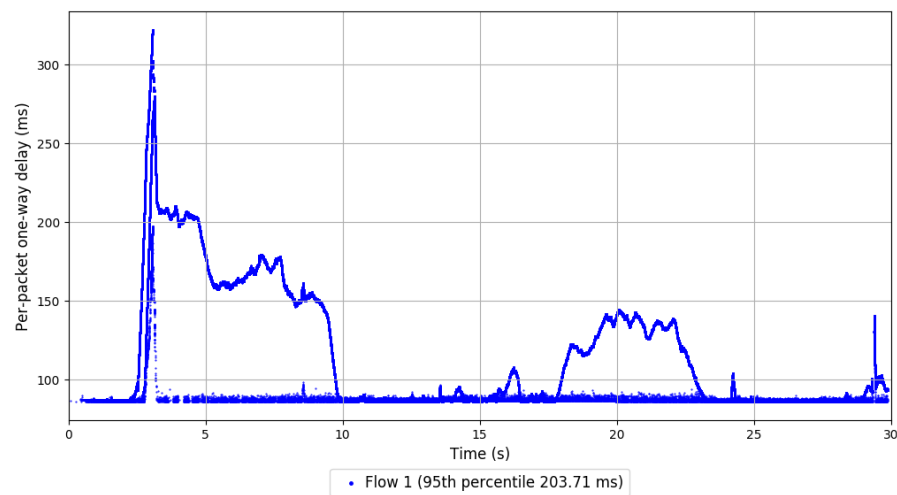
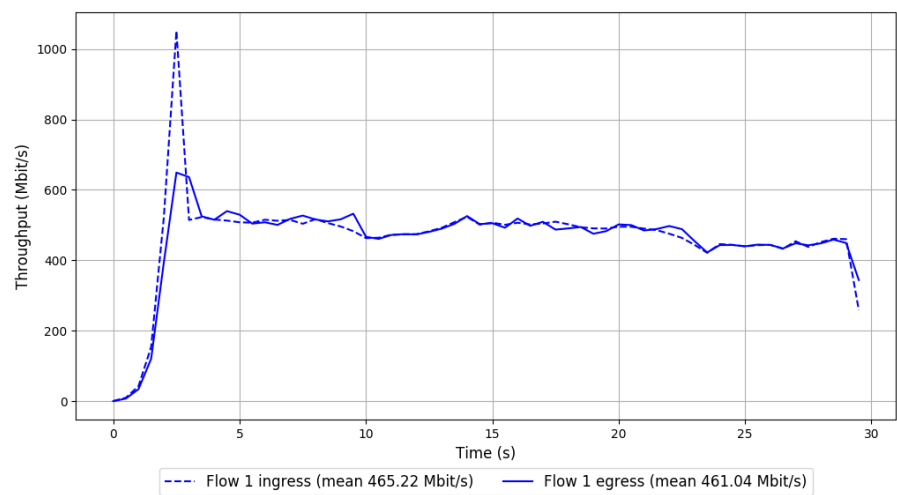


```
Run 1: Statistics of PCC

Start at: 2018-01-01 23:43:10
End at: 2018-01-01 23:43:40

# Below is generated by plot.py at 2018-01-02 02:46:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 461.04 Mbit/s
95th percentile per-packet one-way delay: 203.711 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 461.04 Mbit/s
95th percentile per-packet one-way delay: 203.711 ms
Loss rate: 0.90%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-01 23:55:04

End at: 2018-01-01 23:55:34

Below is generated by plot.py at 2018-01-02 02:46:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 442.25 Mbit/s

95th percentile per-packet one-way delay: 233.266 ms

Loss rate: 2.70%

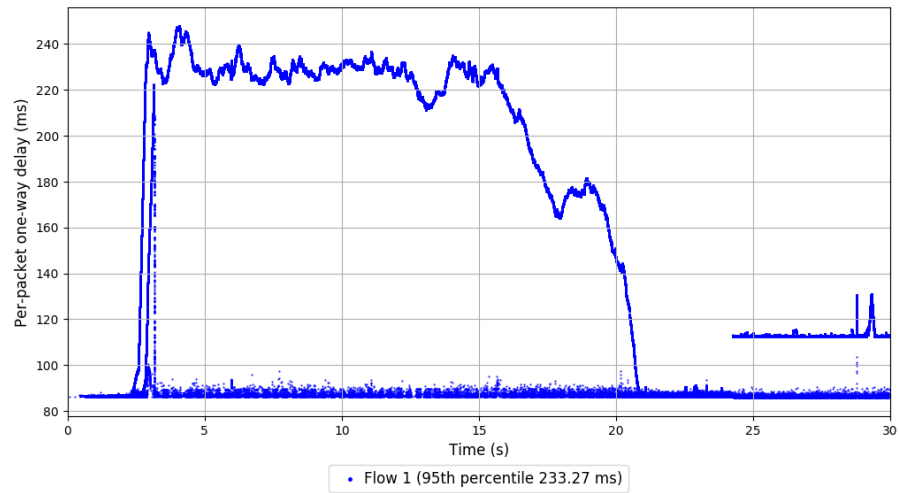
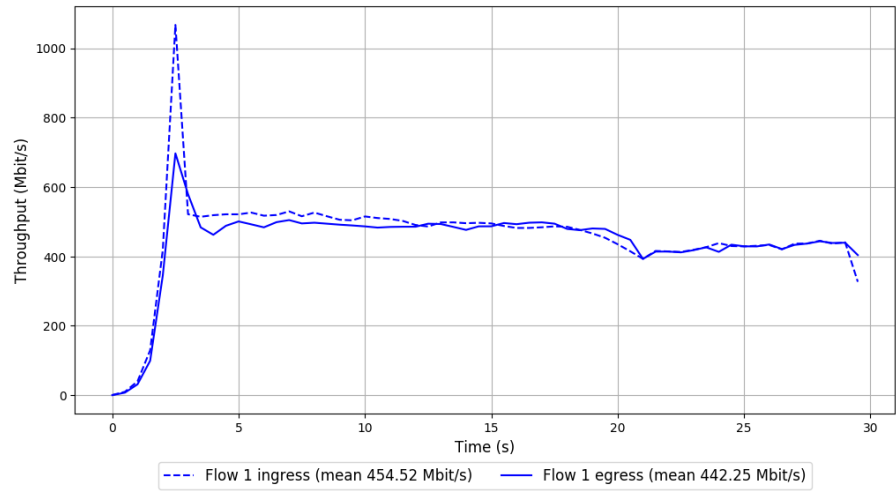
-- Flow 1:

Average throughput: 442.25 Mbit/s

95th percentile per-packet one-way delay: 233.266 ms

Loss rate: 2.70%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-02 00:06:41

End at: 2018-01-02 00:07:11

Below is generated by plot.py at 2018-01-02 02:46:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 243.974 ms

Loss rate: 0.39%

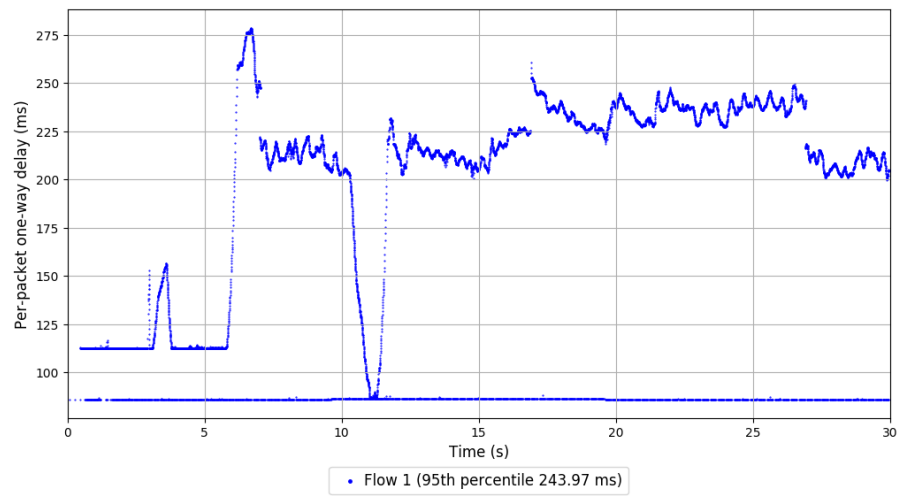
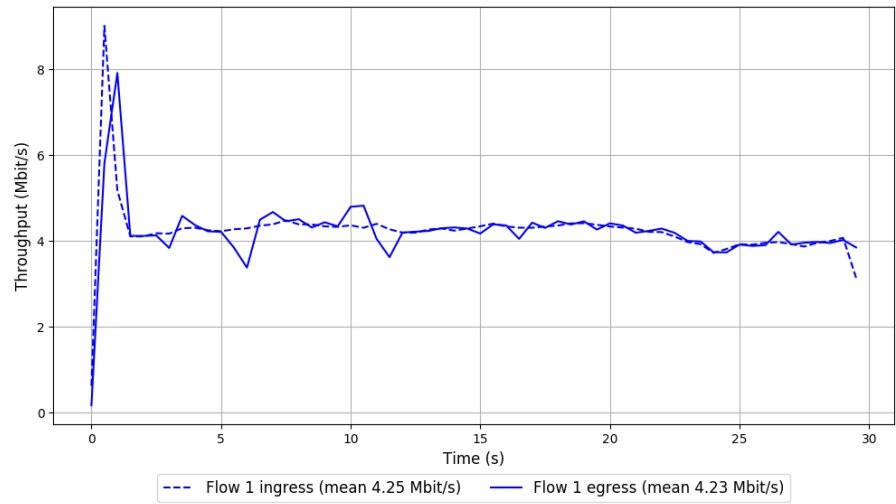
-- Flow 1:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 243.974 ms

Loss rate: 0.39%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-02 00:18:16

End at: 2018-01-02 00:18:46

Below is generated by plot.py at 2018-01-02 02:46:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 138.38 Mbit/s

95th percentile per-packet one-way delay: 112.521 ms

Loss rate: 0.16%

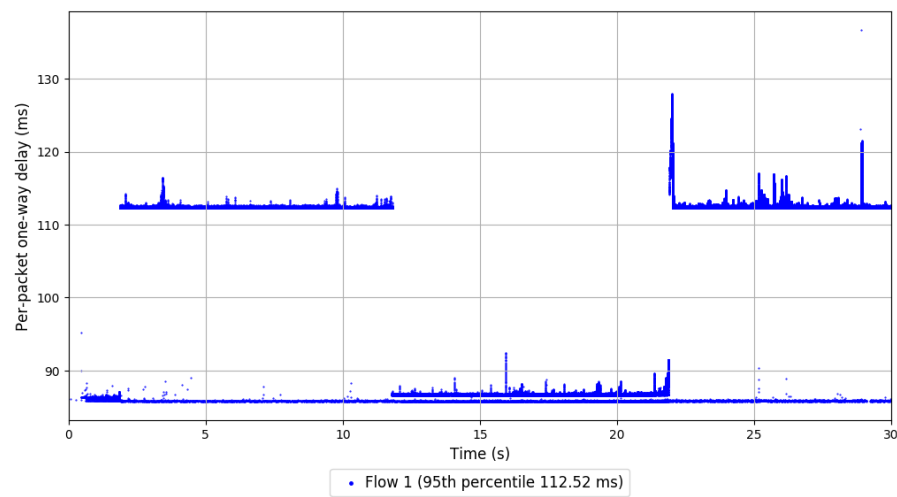
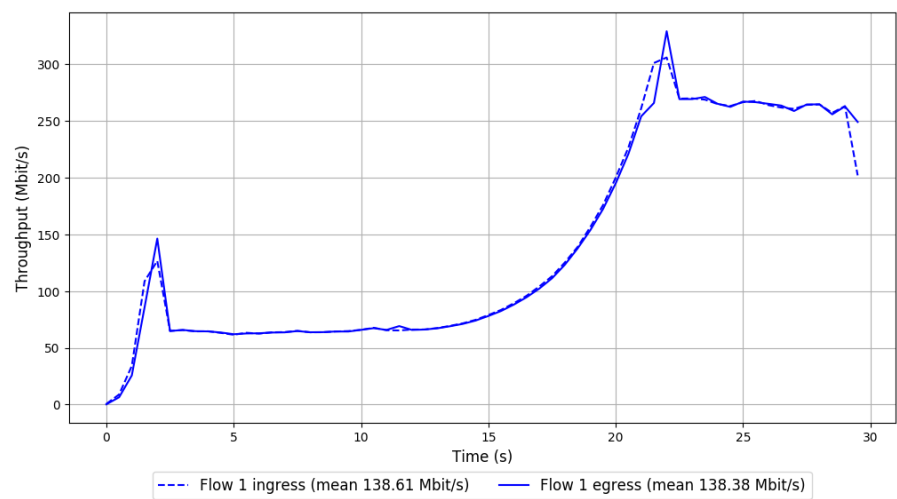
-- Flow 1:

Average throughput: 138.38 Mbit/s

95th percentile per-packet one-way delay: 112.521 ms

Loss rate: 0.16%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-02 00:29:47

End at: 2018-01-02 00:30:17

Below is generated by plot.py at 2018-01-02 02:46:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 371.89 Mbit/s

95th percentile per-packet one-way delay: 240.319 ms

Loss rate: 0.39%

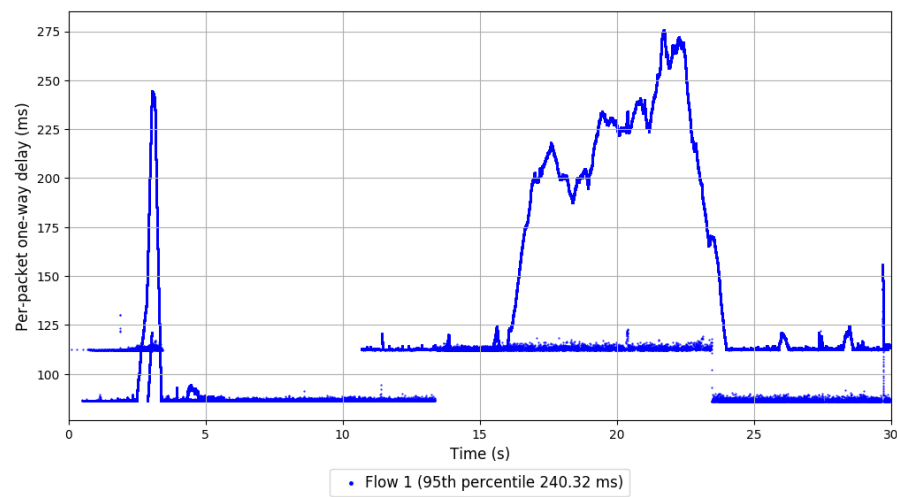
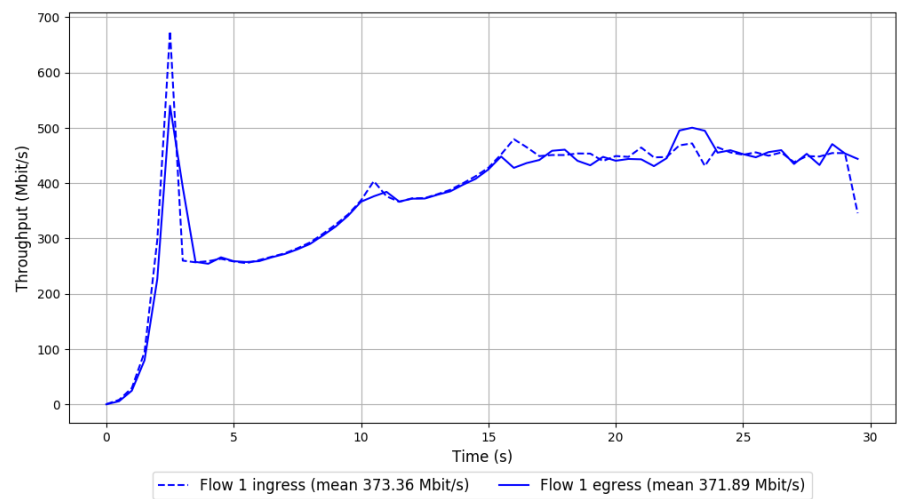
-- Flow 1:

Average throughput: 371.89 Mbit/s

95th percentile per-packet one-way delay: 240.319 ms

Loss rate: 0.39%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-02 00:42:04

End at: 2018-01-02 00:42:34

Below is generated by plot.py at 2018-01-02 02:46:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 342.96 Mbit/s

95th percentile per-packet one-way delay: 119.583 ms

Loss rate: 0.15%

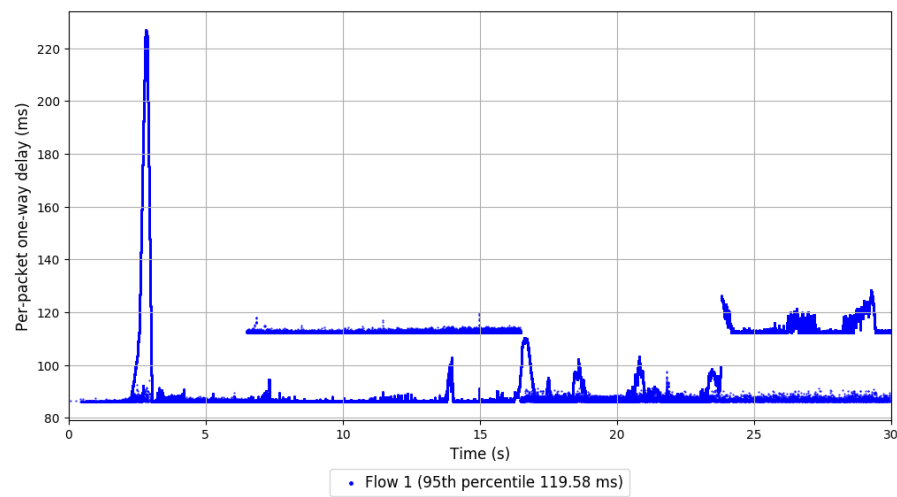
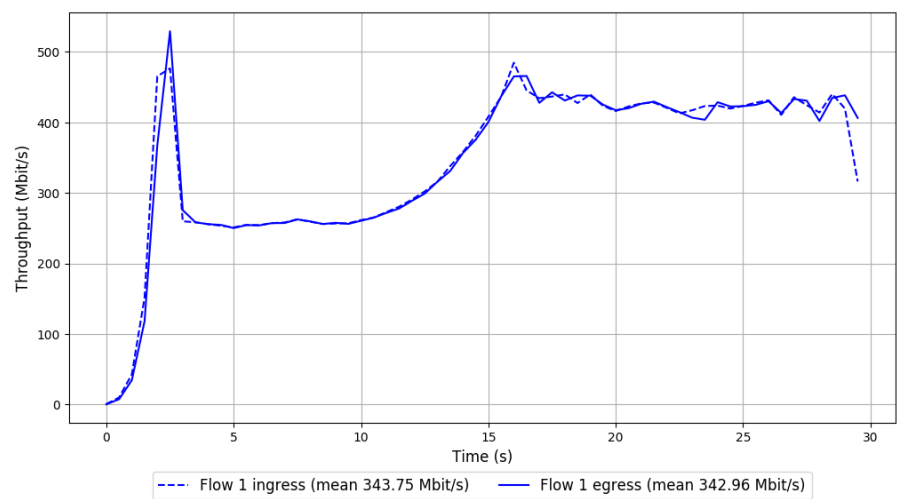
-- Flow 1:

Average throughput: 342.96 Mbit/s

95th percentile per-packet one-way delay: 119.583 ms

Loss rate: 0.15%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-02 00:53:58

End at: 2018-01-02 00:54:28

Below is generated by plot.py at 2018-01-02 02:47:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 488.40 Mbit/s

95th percentile per-packet one-way delay: 225.708 ms

Loss rate: 2.10%

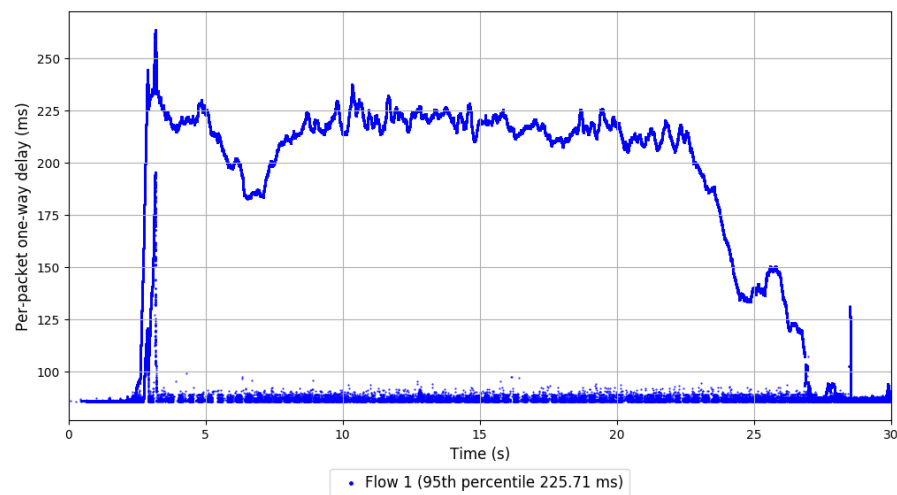
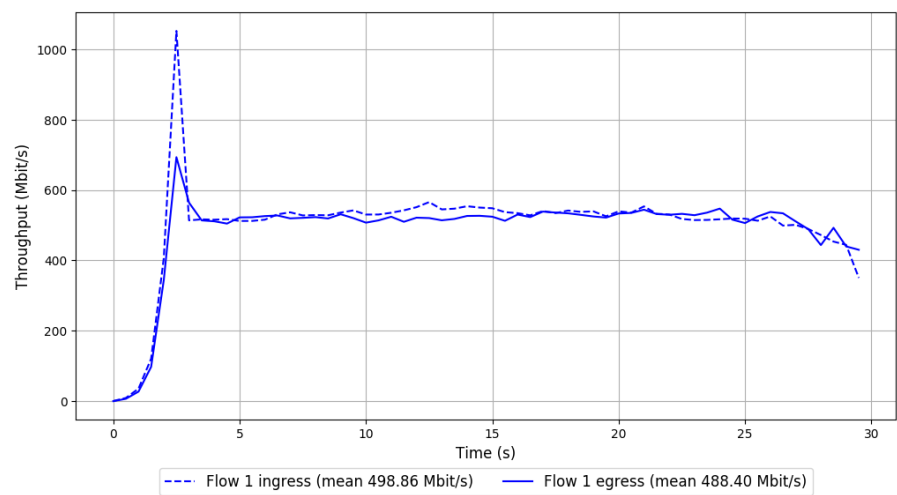
-- Flow 1:

Average throughput: 488.40 Mbit/s

95th percentile per-packet one-way delay: 225.708 ms

Loss rate: 2.10%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-02 01:06:11

End at: 2018-01-02 01:06:41

Below is generated by plot.py at 2018-01-02 02:47:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 458.95 Mbit/s

95th percentile per-packet one-way delay: 230.150 ms

Loss rate: 3.42%

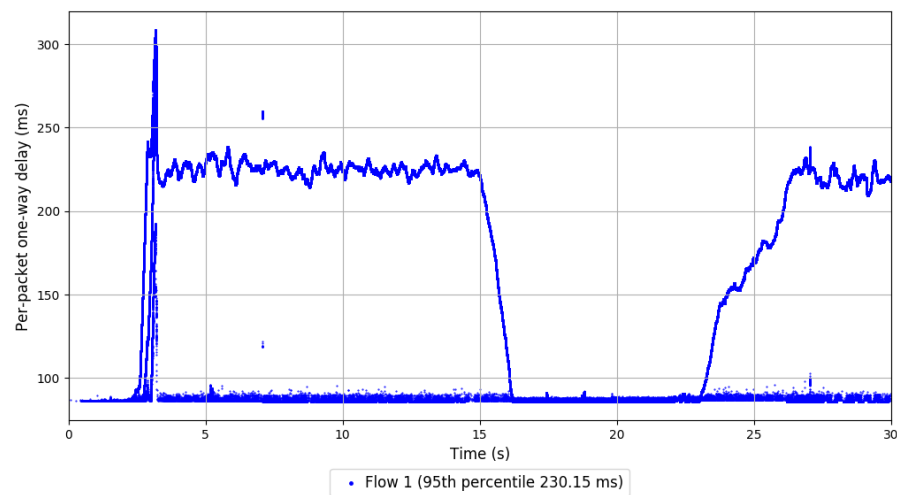
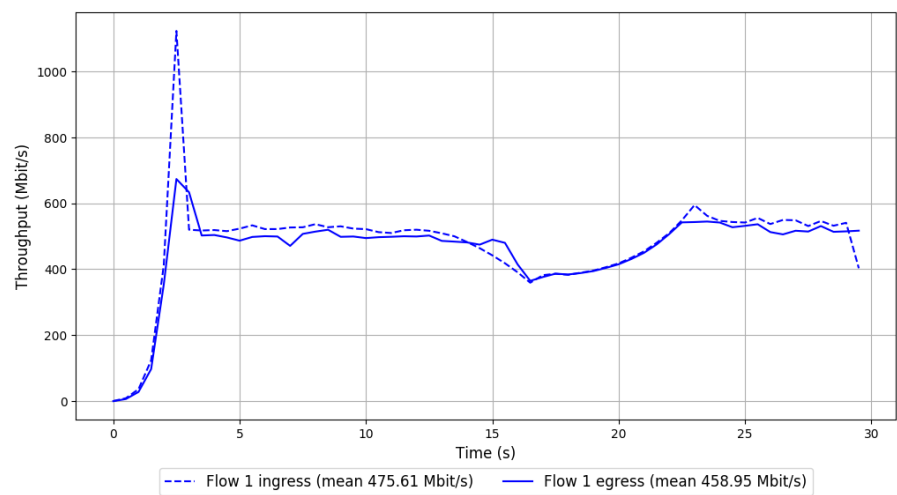
-- Flow 1:

Average throughput: 458.95 Mbit/s

95th percentile per-packet one-way delay: 230.150 ms

Loss rate: 3.42%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-02 01:17:57

End at: 2018-01-02 01:18:27

Below is generated by plot.py at 2018-01-02 02:47:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 407.35 Mbit/s

95th percentile per-packet one-way delay: 226.126 ms

Loss rate: 0.87%

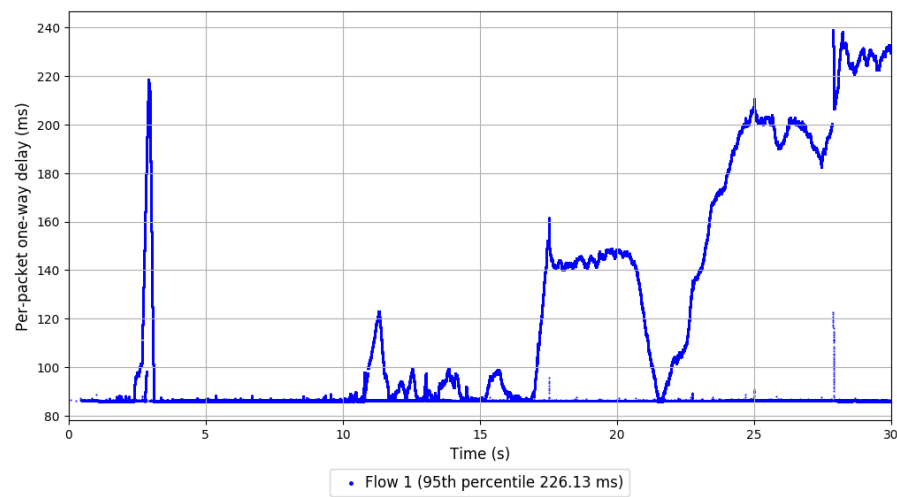
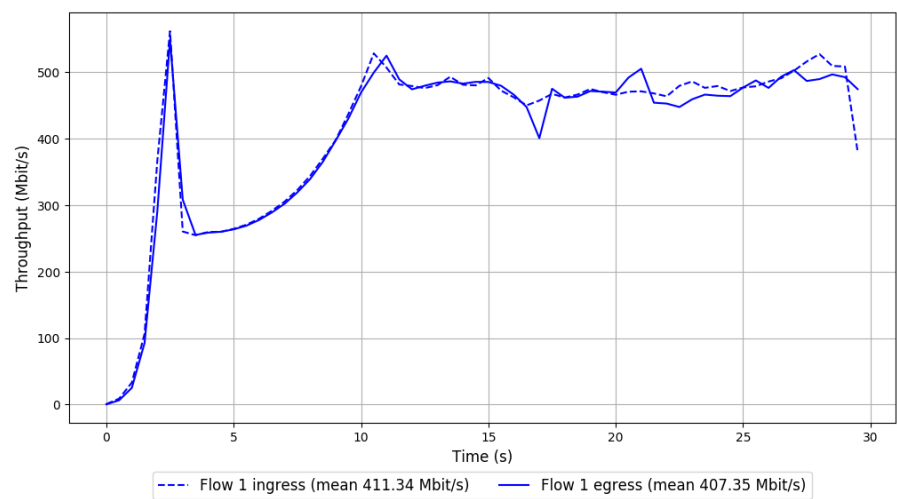
-- Flow 1:

Average throughput: 407.35 Mbit/s

95th percentile per-packet one-way delay: 226.126 ms

Loss rate: 0.87%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-02 01:29:53

End at: 2018-01-02 01:30:23

Below is generated by plot.py at 2018-01-02 02:49:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 428.71 Mbit/s

95th percentile per-packet one-way delay: 247.649 ms

Loss rate: 1.88%

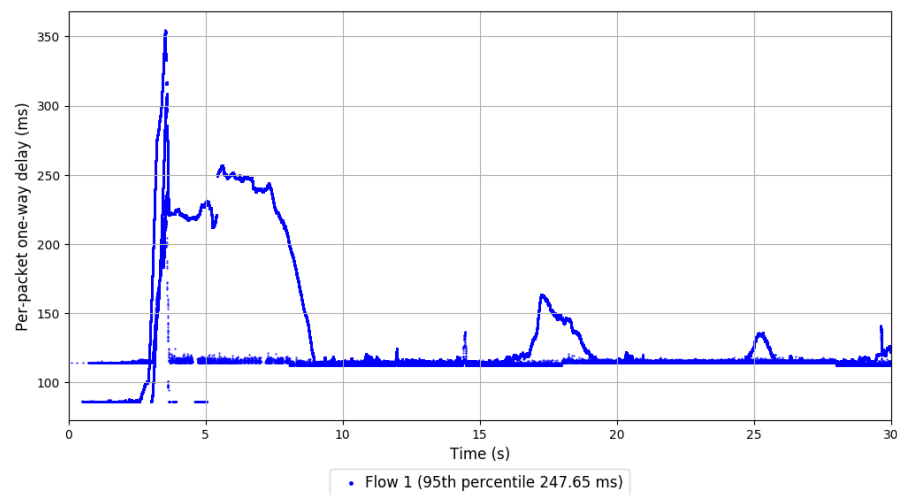
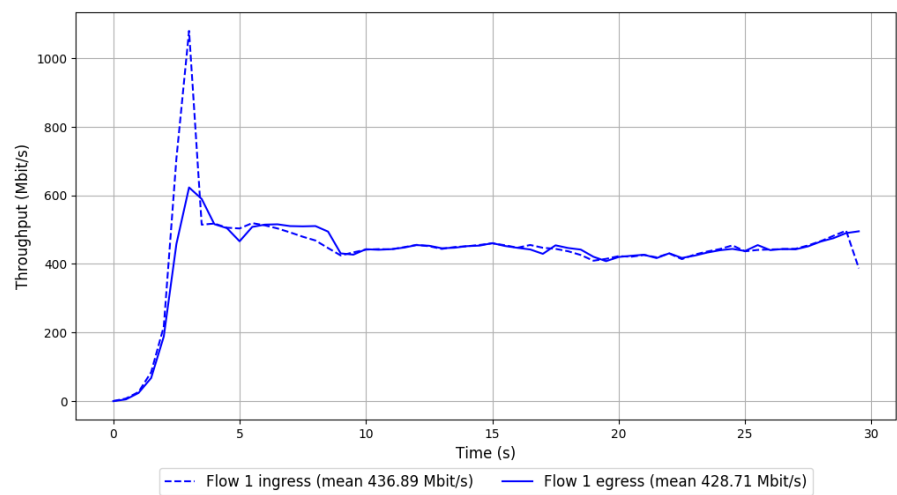
-- Flow 1:

Average throughput: 428.71 Mbit/s

95th percentile per-packet one-way delay: 247.649 ms

Loss rate: 1.88%

Run 10: Report of PCC — Data Link

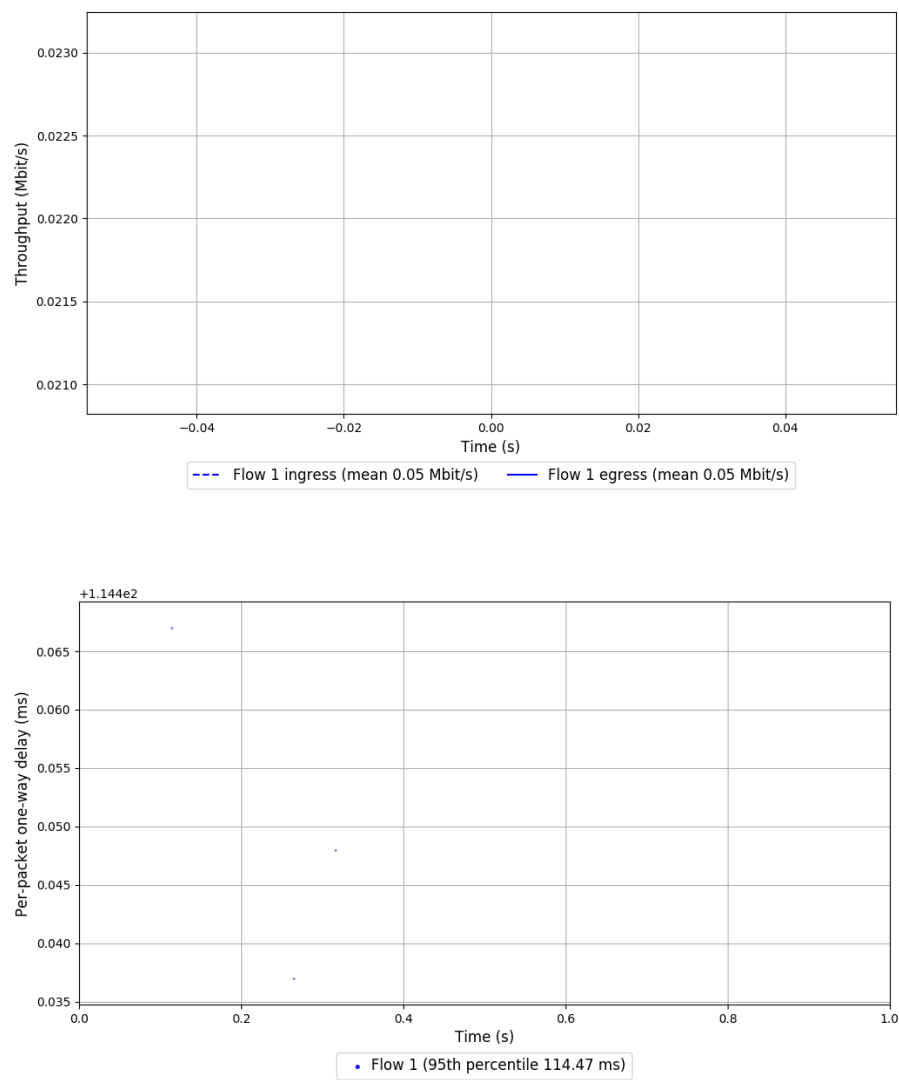


Run 1: Statistics of QUIC Cubic

Start at: 2018-01-01 23:36:30

End at: 2018-01-01 23:37:00

Run 1: Report of QUIC Cubic — Data Link

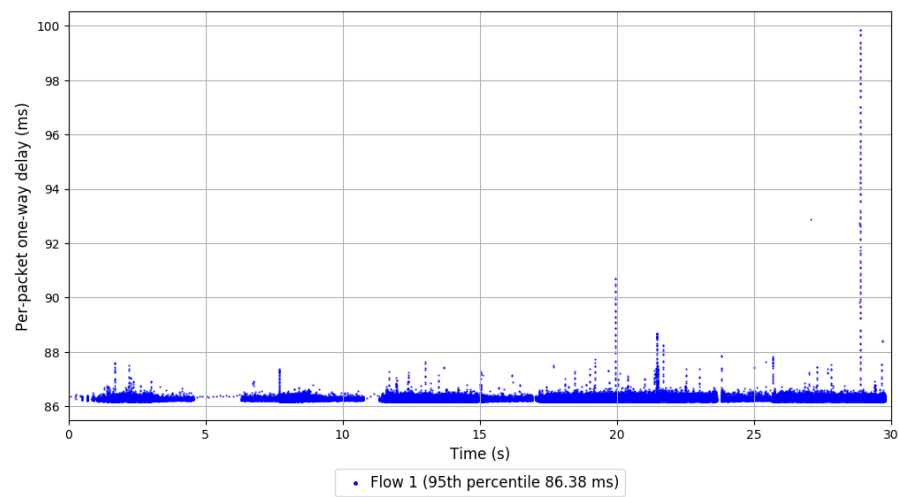
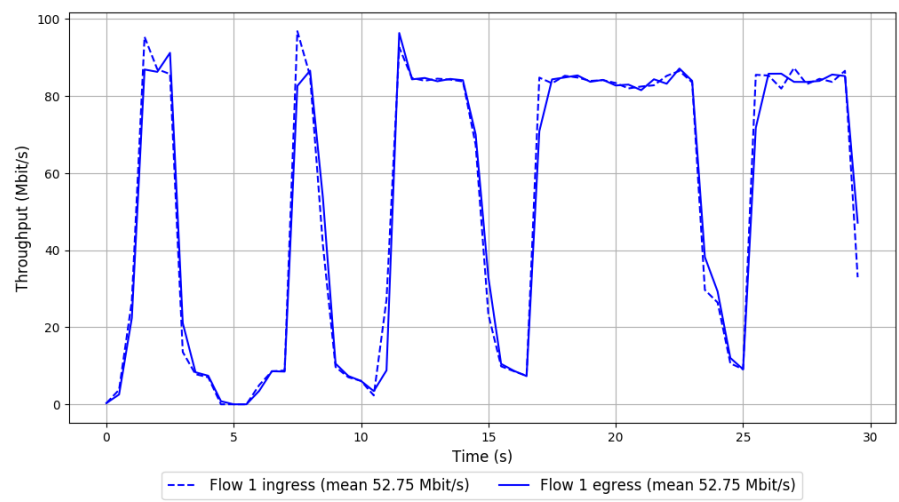


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-01 23:48:08
End at: 2018-01-01 23:48:38

# Below is generated by plot.py at 2018-01-02 02:49:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.75 Mbit/s
95th percentile per-packet one-way delay: 86.381 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.75 Mbit/s
95th percentile per-packet one-way delay: 86.381 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-01 23:59:36

End at: 2018-01-02 00:00:06

Below is generated by plot.py at 2018-01-02 02:49:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.59 Mbit/s

95th percentile per-packet one-way delay: 114.085 ms

Loss rate: 0.05%

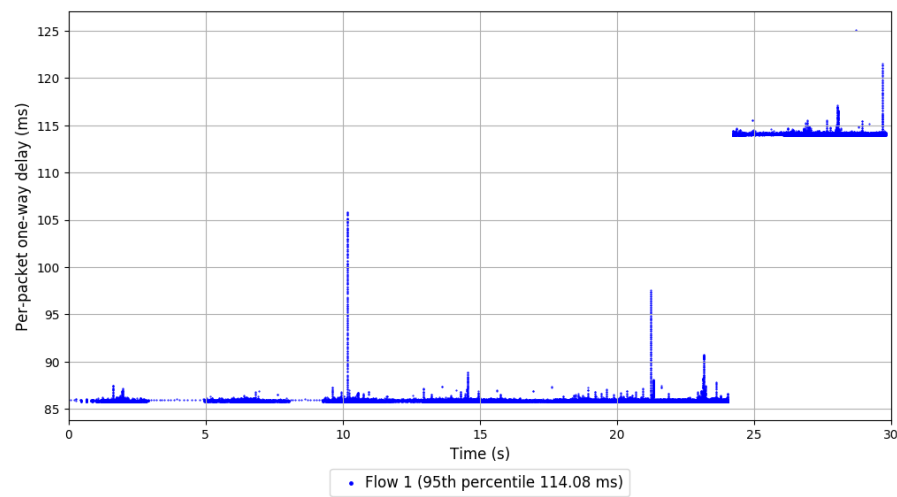
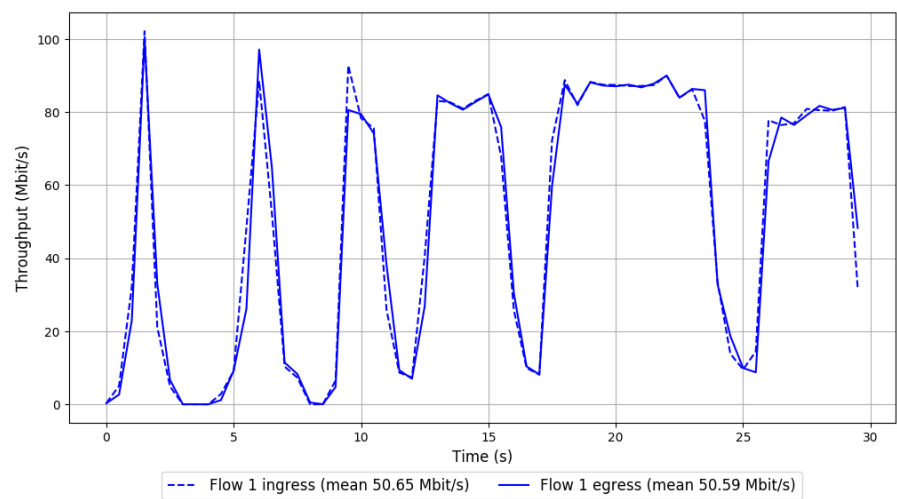
-- Flow 1:

Average throughput: 50.59 Mbit/s

95th percentile per-packet one-way delay: 114.085 ms

Loss rate: 0.05%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-02 00:10:57

End at: 2018-01-02 00:11:27

Below is generated by plot.py at 2018-01-02 02:49:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.88 Mbit/s

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

Loss rate: 0.12%

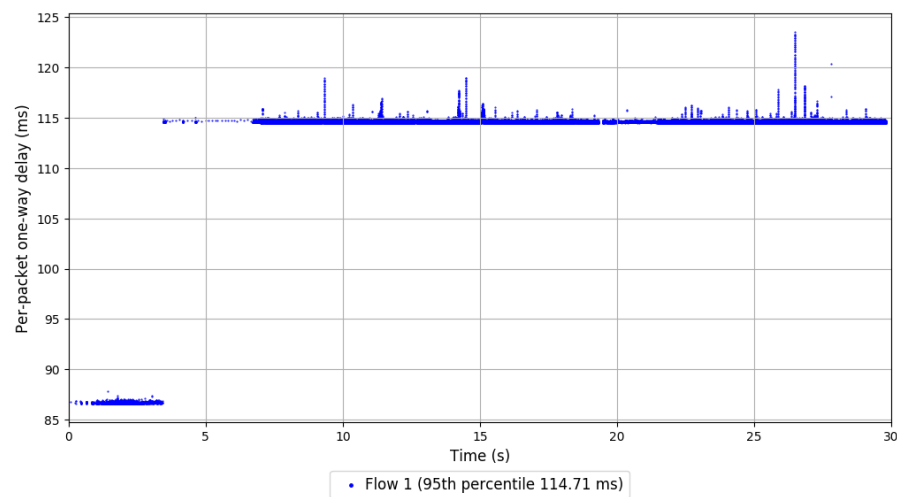
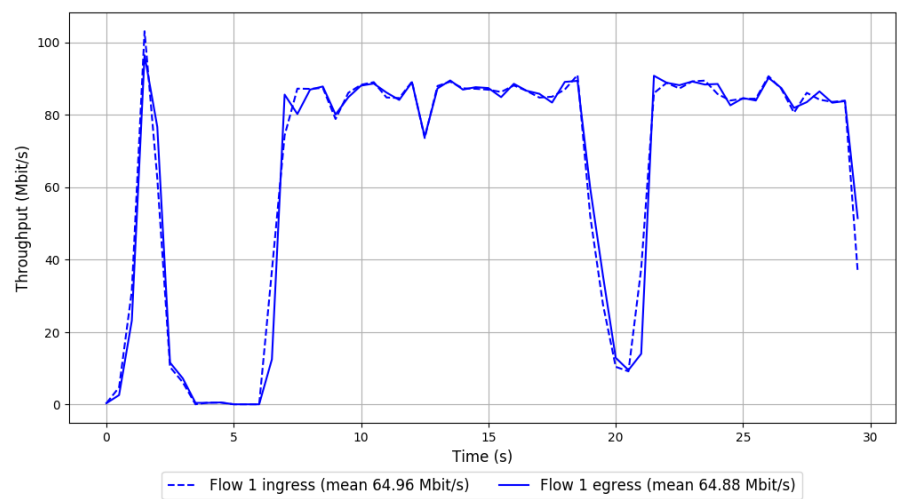
-- Flow 1:

Average throughput: 64.88 Mbit/s

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

Loss rate: 0.12%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-02 00:22:51

End at: 2018-01-02 00:23:21

Below is generated by plot.py at 2018-01-02 02:49:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.13 Mbit/s

95th percentile per-packet one-way delay: 112.448 ms

Loss rate: 0.15%

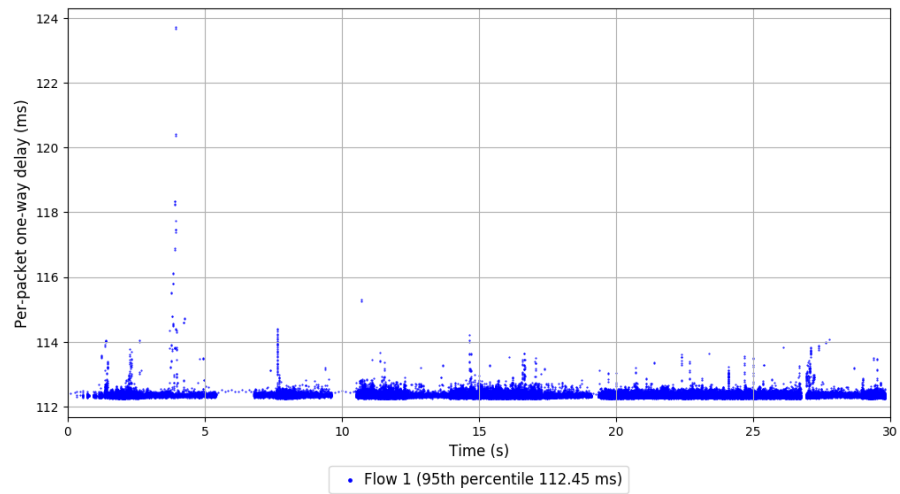
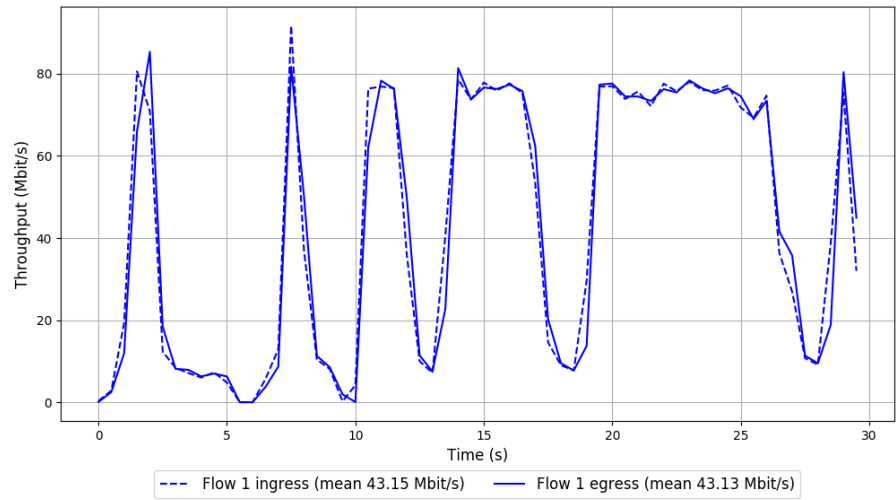
-- Flow 1:

Average throughput: 43.13 Mbit/s

95th percentile per-packet one-way delay: 112.448 ms

Loss rate: 0.15%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-02 00:34:49

End at: 2018-01-02 00:35:19

Below is generated by plot.py at 2018-01-02 02:49:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.44 Mbit/s

95th percentile per-packet one-way delay: 114.646 ms

Loss rate: 0.00%

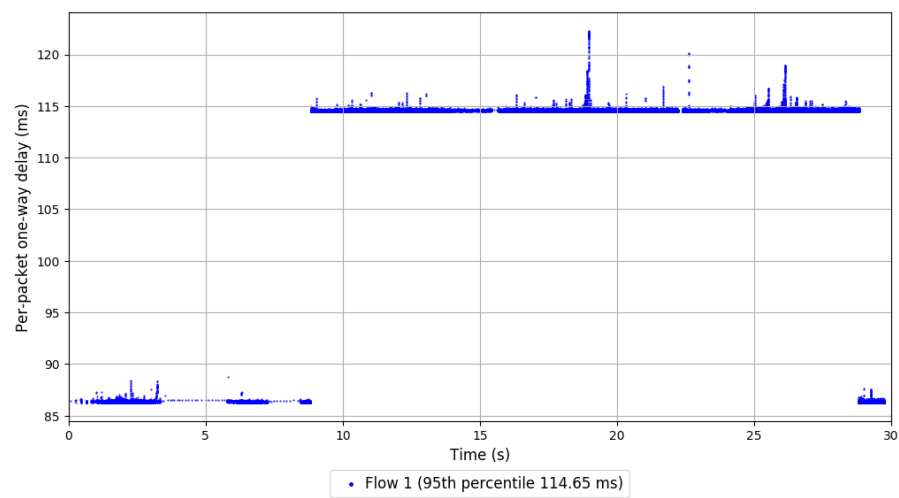
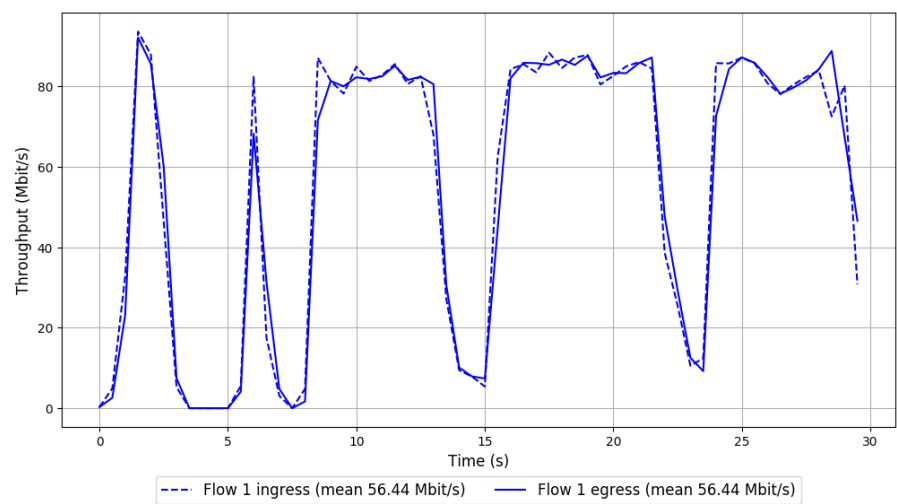
-- Flow 1:

Average throughput: 56.44 Mbit/s

95th percentile per-packet one-way delay: 114.646 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-02 00:46:43

End at: 2018-01-02 00:47:13

Below is generated by plot.py at 2018-01-02 02:49:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.01 Mbit/s

95th percentile per-packet one-way delay: 114.578 ms

Loss rate: 0.03%

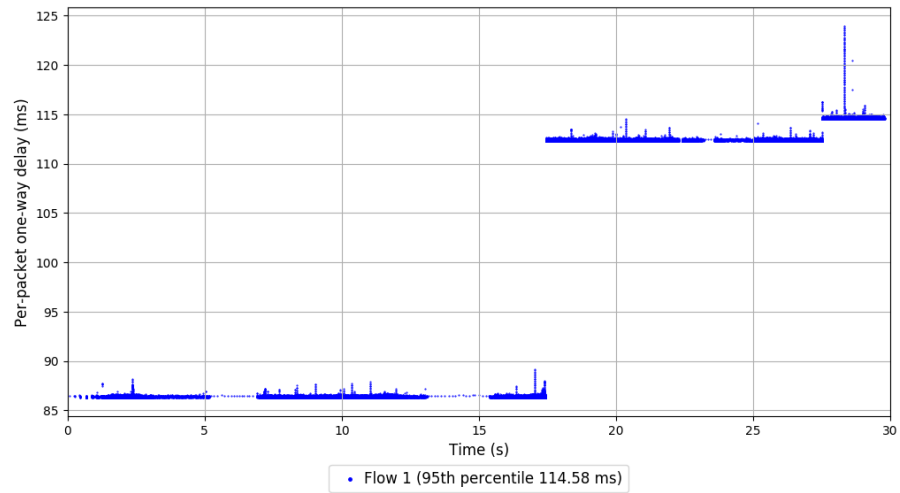
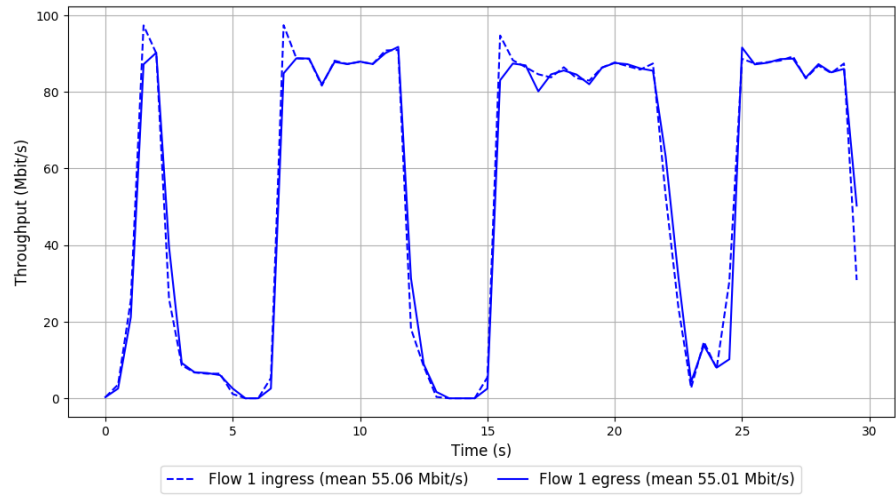
-- Flow 1:

Average throughput: 55.01 Mbit/s

95th percentile per-packet one-way delay: 114.578 ms

Loss rate: 0.03%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-02 00:58:54

End at: 2018-01-02 00:59:24

Below is generated by plot.py at 2018-01-02 02:49:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.42 Mbit/s

95th percentile per-packet one-way delay: 86.762 ms

Loss rate: 0.00%

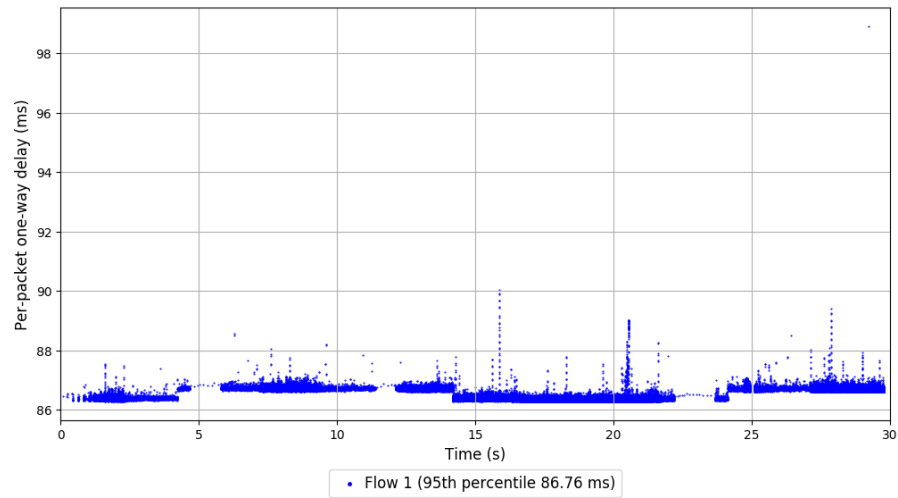
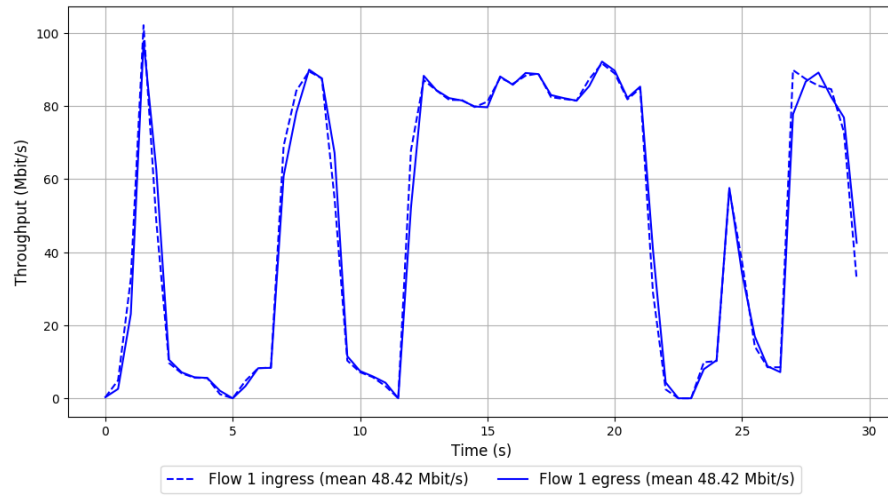
-- Flow 1:

Average throughput: 48.42 Mbit/s

95th percentile per-packet one-way delay: 86.762 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-02 01:11:09

End at: 2018-01-02 01:11:39

Below is generated by plot.py at 2018-01-02 02:49:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.80 Mbit/s

95th percentile per-packet one-way delay: 86.753 ms

Loss rate: 0.00%

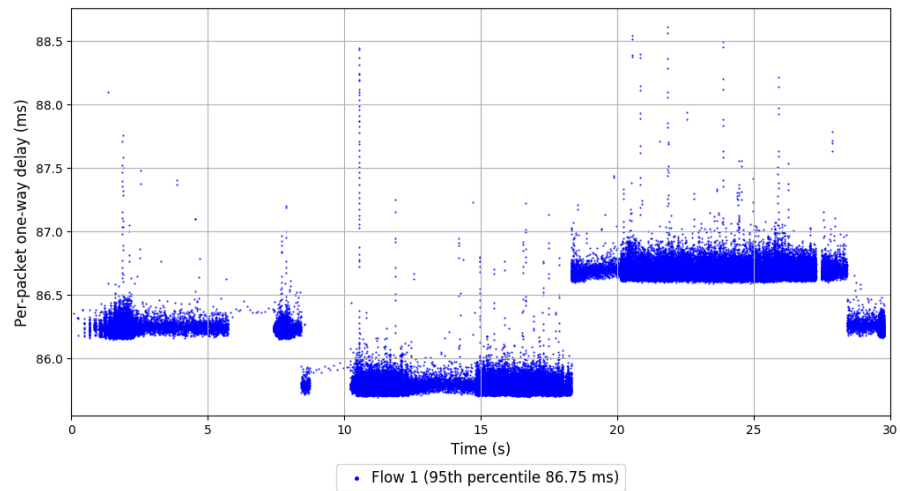
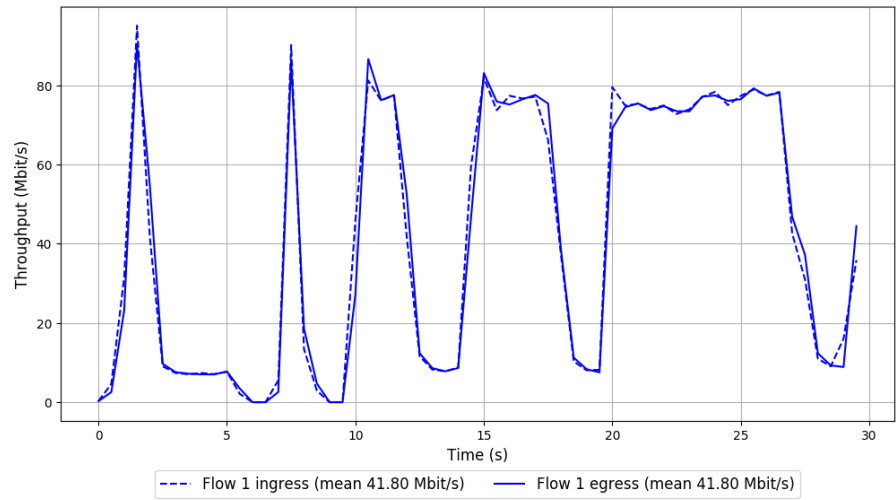
-- Flow 1:

Average throughput: 41.80 Mbit/s

95th percentile per-packet one-way delay: 86.753 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

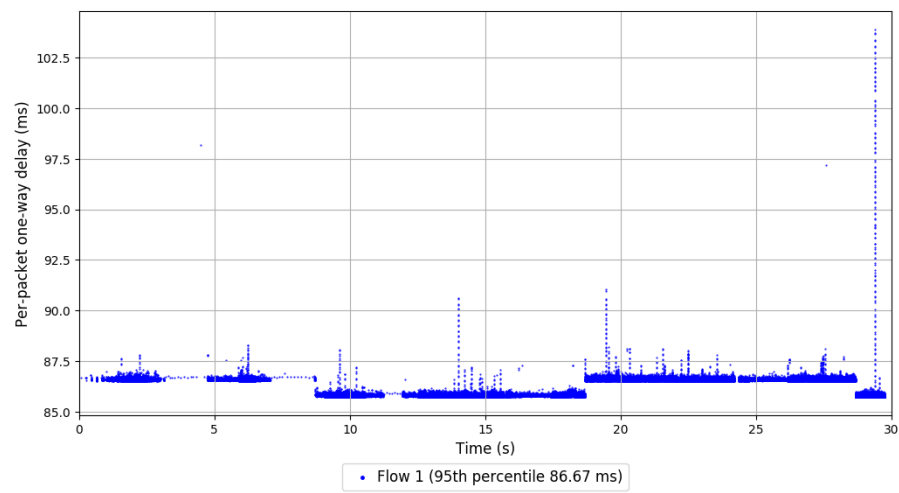
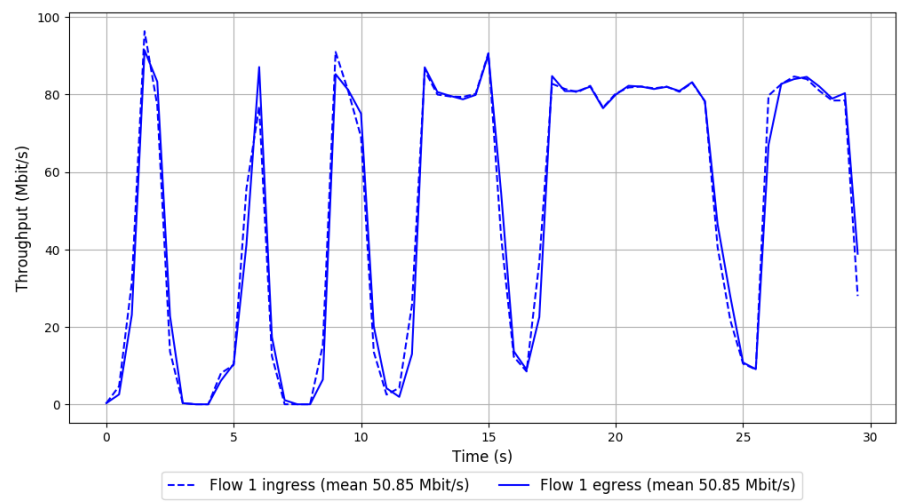


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-02 01:22:42
End at: 2018-01-02 01:23:12

# Below is generated by plot.py at 2018-01-02 02:49:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.85 Mbit/s
95th percentile per-packet one-way delay: 86.665 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.85 Mbit/s
95th percentile per-packet one-way delay: 86.665 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

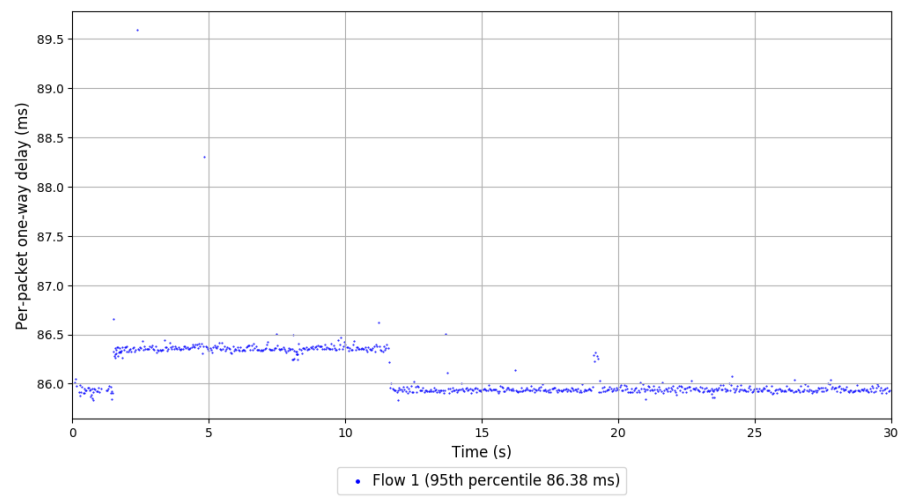
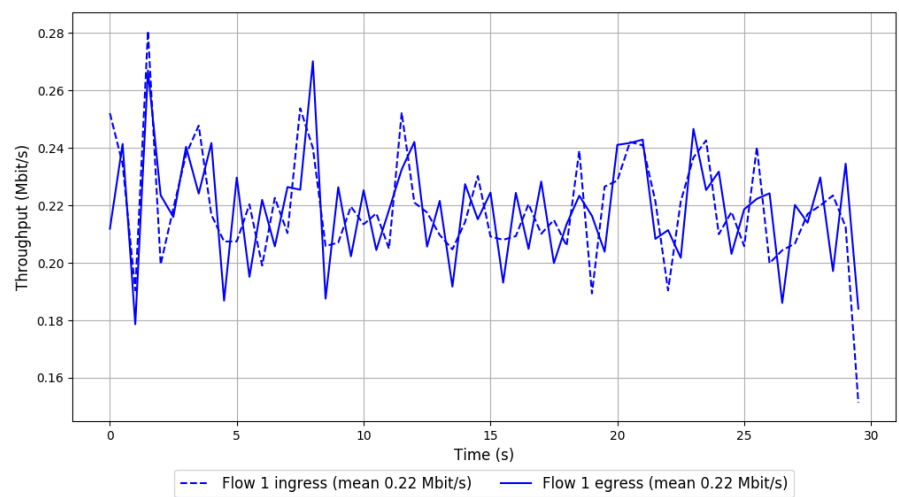


```
Run 1: Statistics of SCReAM

Start at: 2018-01-01 23:37:09
End at: 2018-01-01 23:37:39

# Below is generated by plot.py at 2018-01-02 02:49:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.384 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.384 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

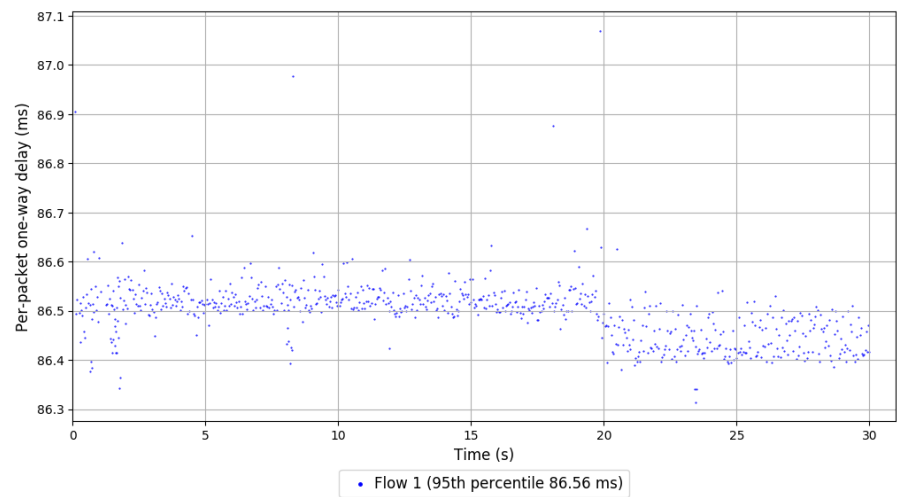
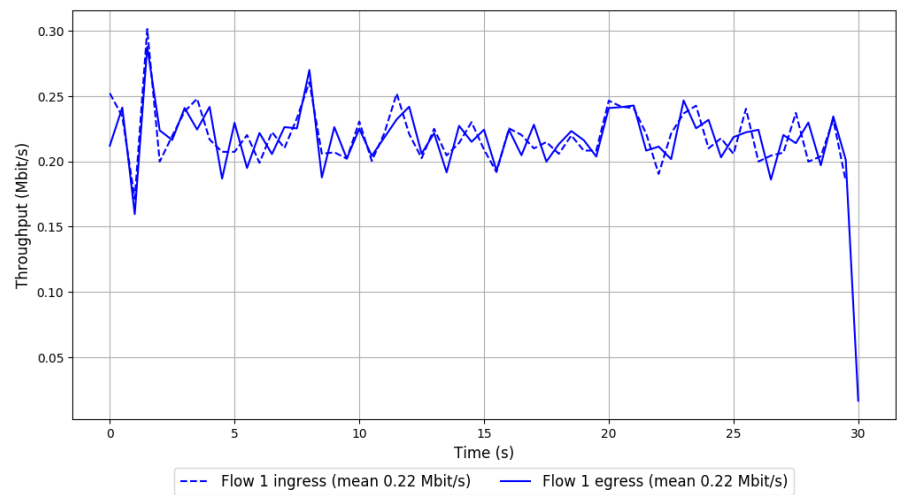


```
Run 2: Statistics of SCReAM

Start at: 2018-01-01 23:48:51
End at: 2018-01-01 23:49:21

# Below is generated by plot.py at 2018-01-02 02:49:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.565 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.565 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-02 00:00:19

End at: 2018-01-02 00:00:49

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.251 ms

Loss rate: 0.00%

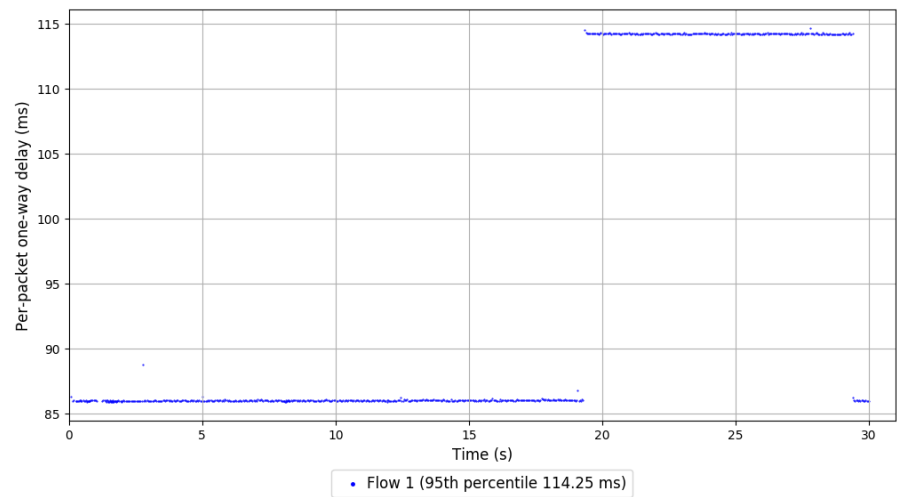
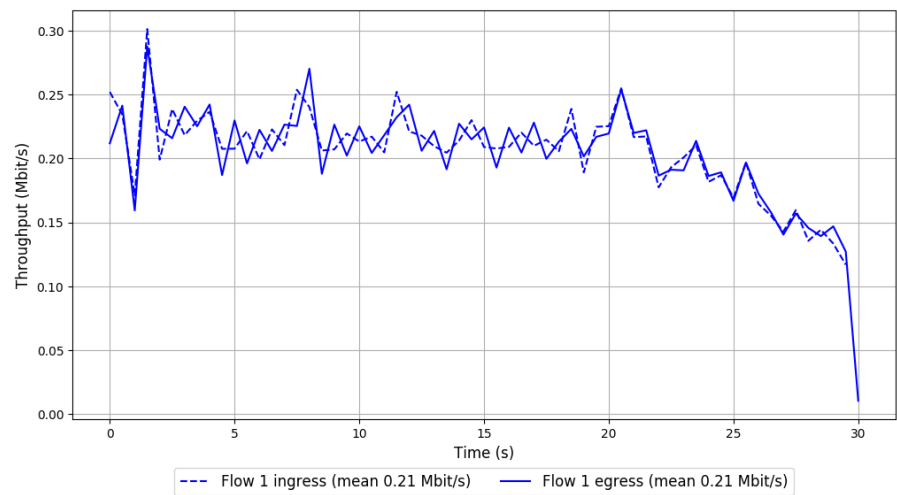
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.251 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-01-02 00:11:40

End at: 2018-01-02 00:12:10

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.904 ms

Loss rate: 0.00%

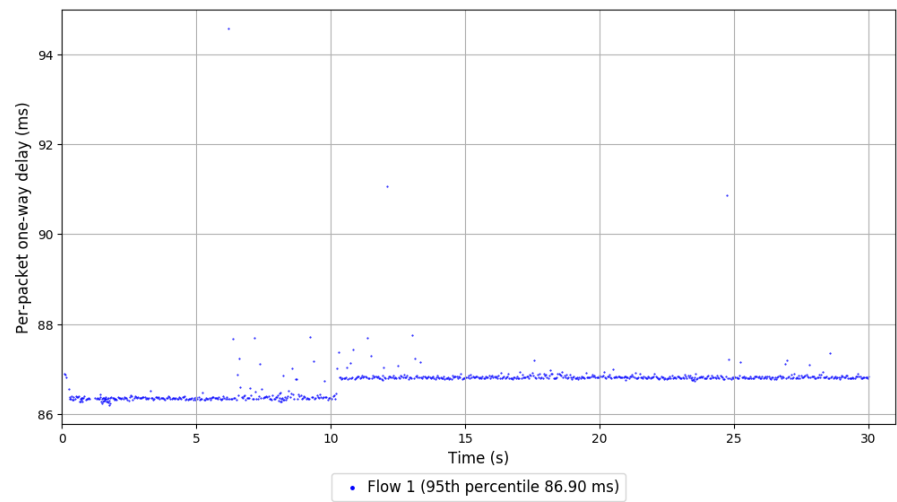
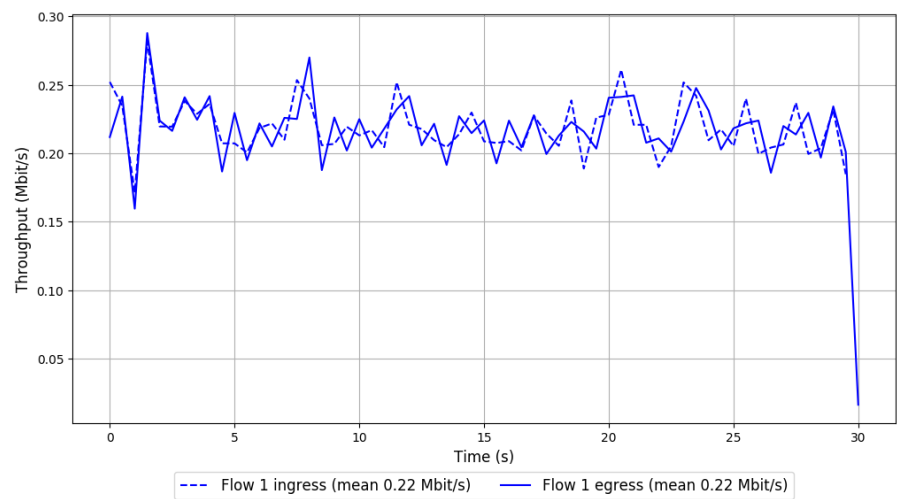
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.904 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-02 00:23:33

End at: 2018-01-02 00:24:03

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.448 ms

Loss rate: 0.00%

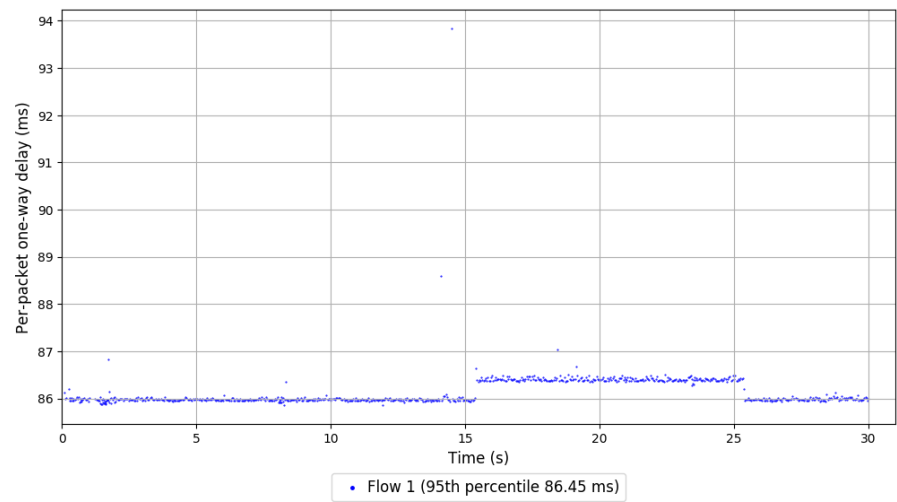
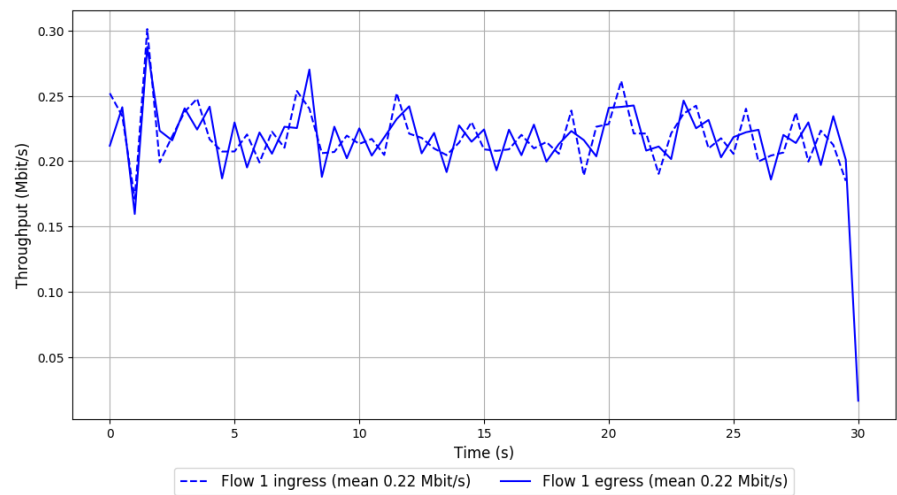
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.448 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-02 00:35:33

End at: 2018-01-02 00:36:03

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.525 ms

Loss rate: 0.00%

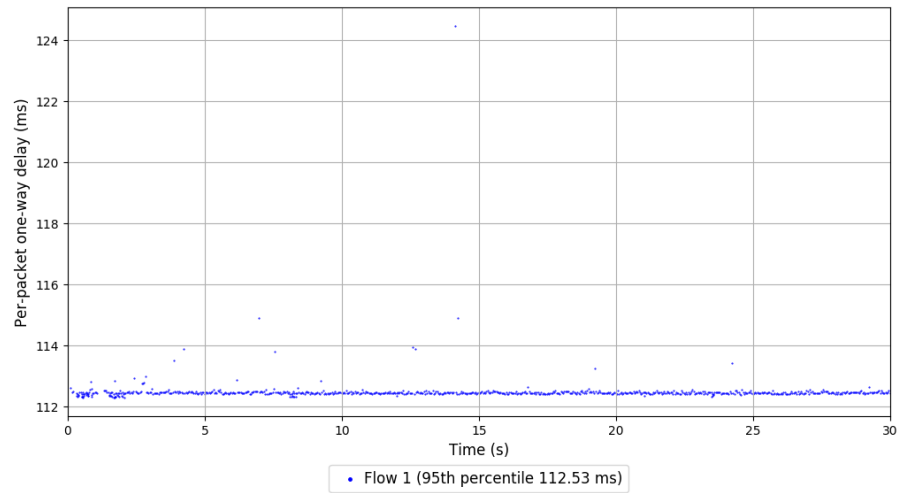
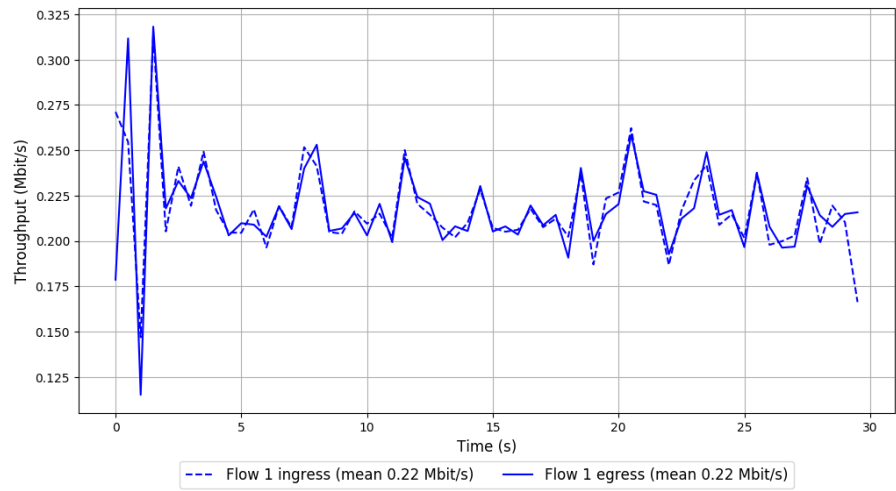
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.525 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-02 00:47:27

End at: 2018-01-02 00:47:57

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.030 ms

Loss rate: 0.00%

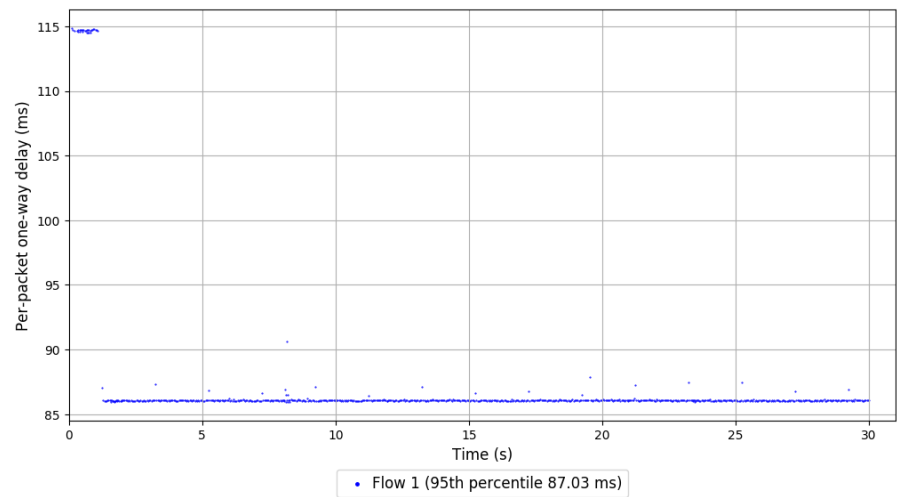
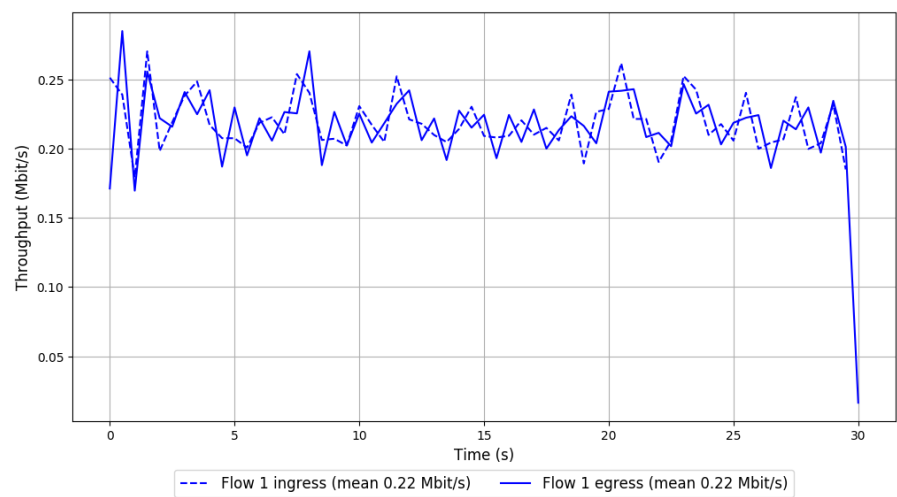
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.030 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-02 00:59:37

End at: 2018-01-02 01:00:07

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.890 ms

Loss rate: 0.00%

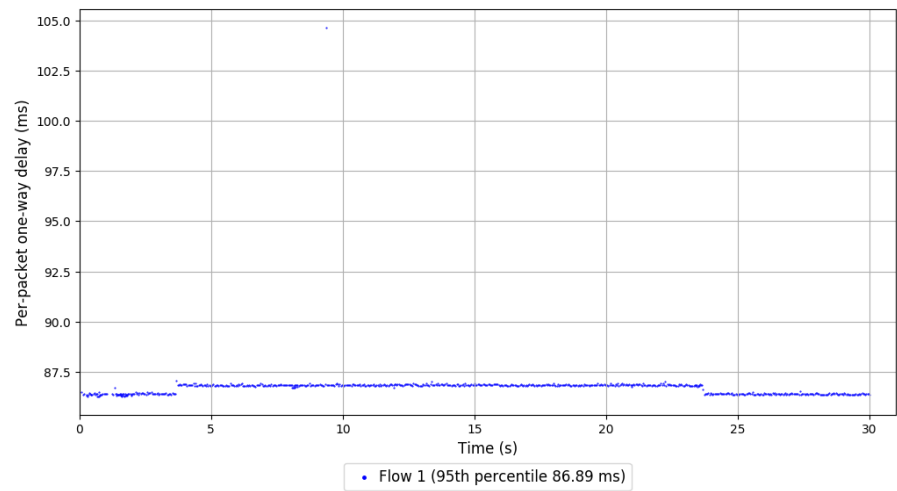
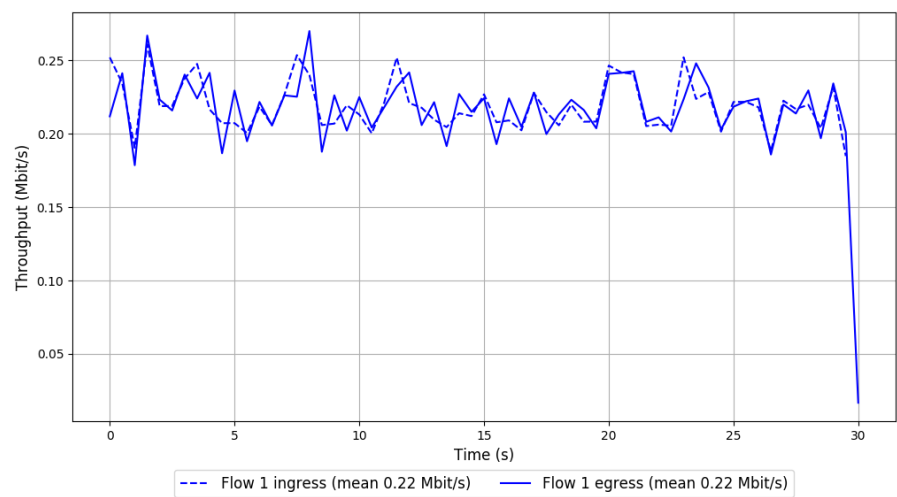
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.890 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-02 01:11:52

End at: 2018-01-02 01:12:22

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.840 ms

Loss rate: 0.00%

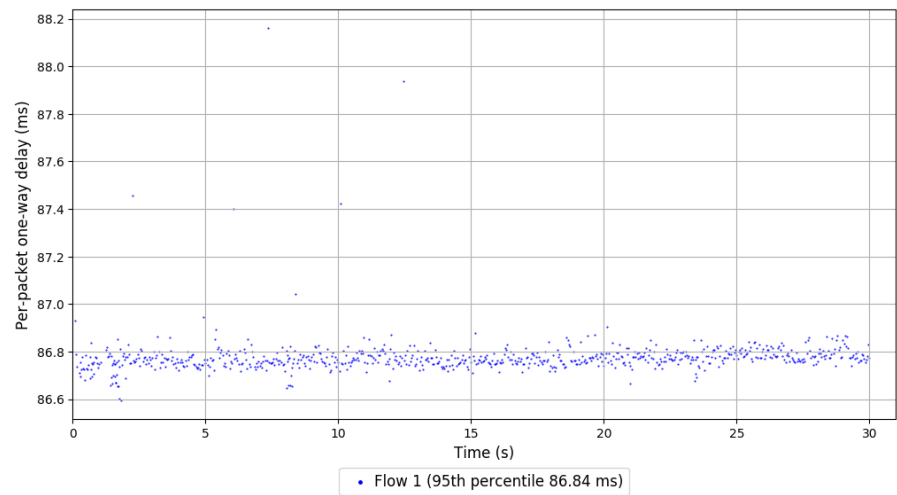
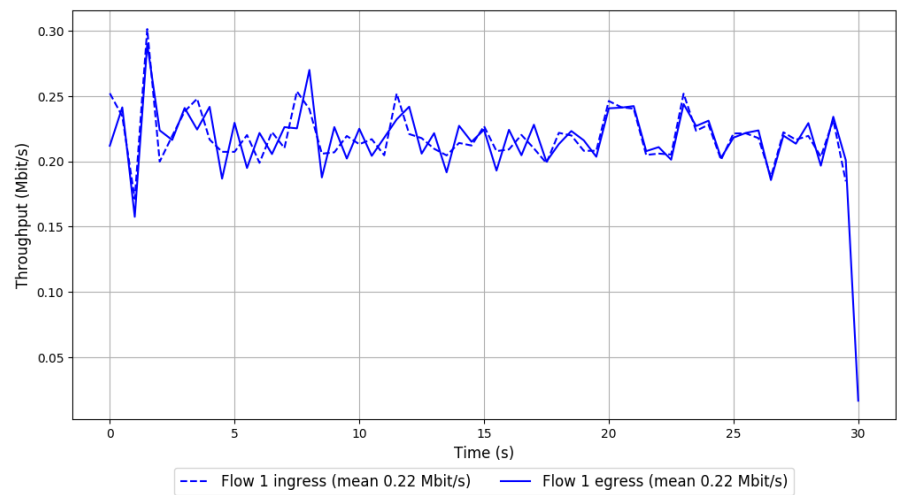
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.840 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

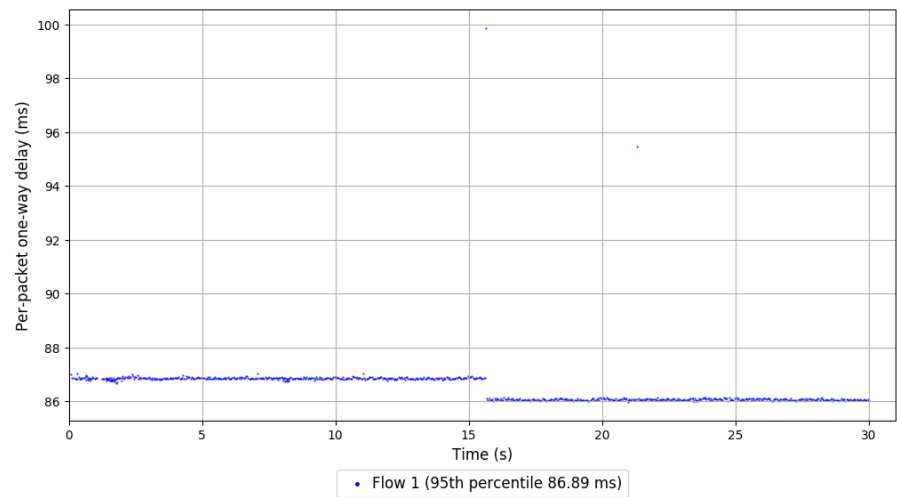
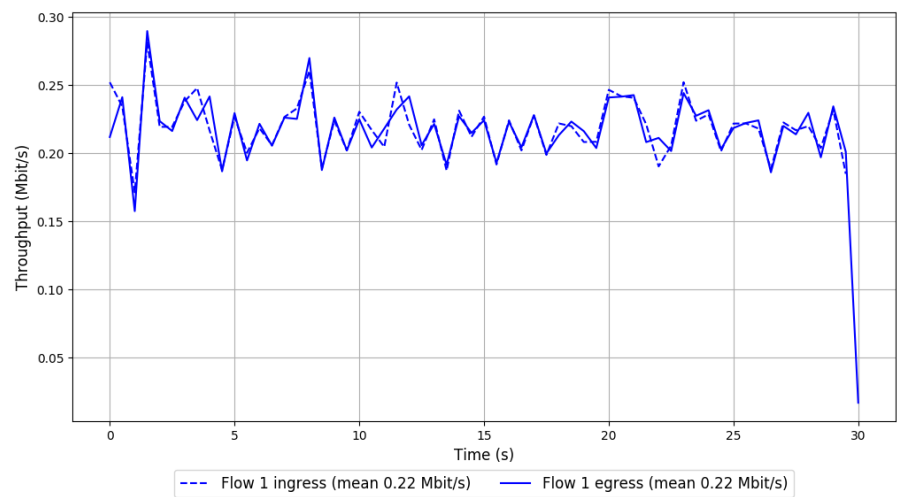


```
Run 10: Statistics of SReAM

Start at: 2018-01-02 01:23:25
End at: 2018-01-02 01:23:55

# Below is generated by plot.py at 2018-01-02 02:49:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.894 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.894 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

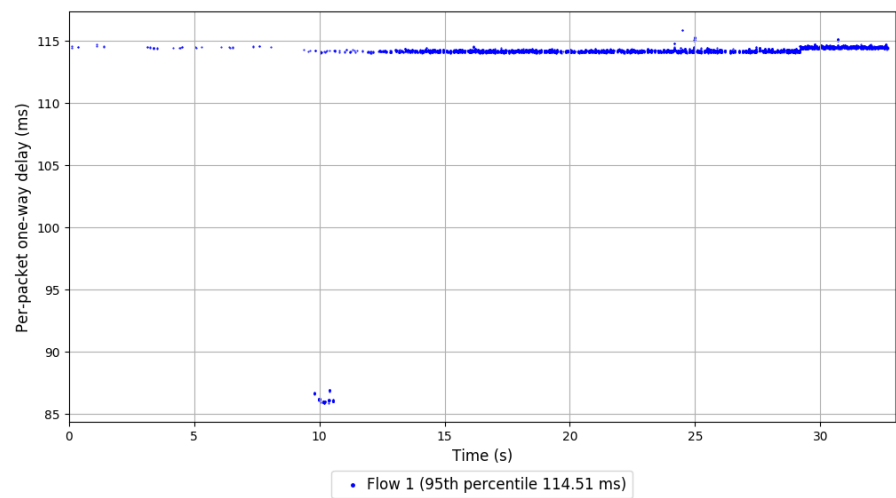
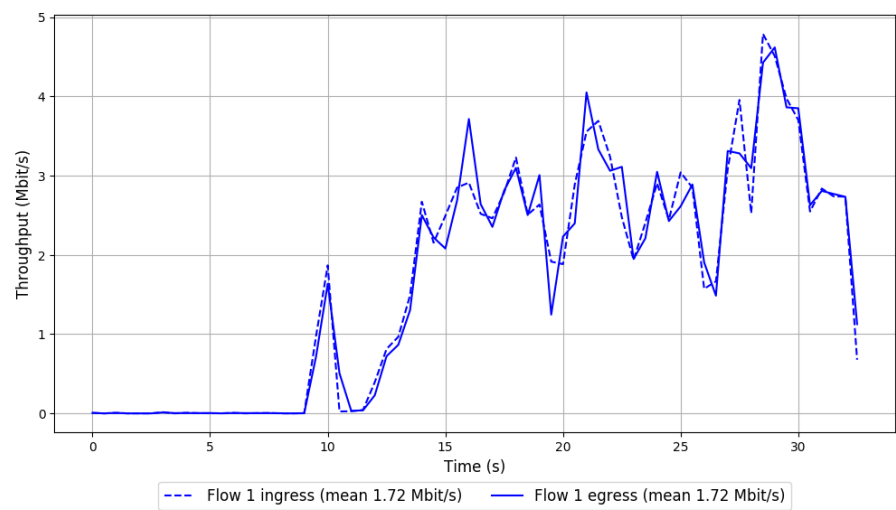


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-01 23:41:04
End at: 2018-01-01 23:41:34

# Below is generated by plot.py at 2018-01-02 02:49:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 114.510 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 114.510 ms
Loss rate: 0.20%
```

Run 1: Report of WebRTC media — Data Link

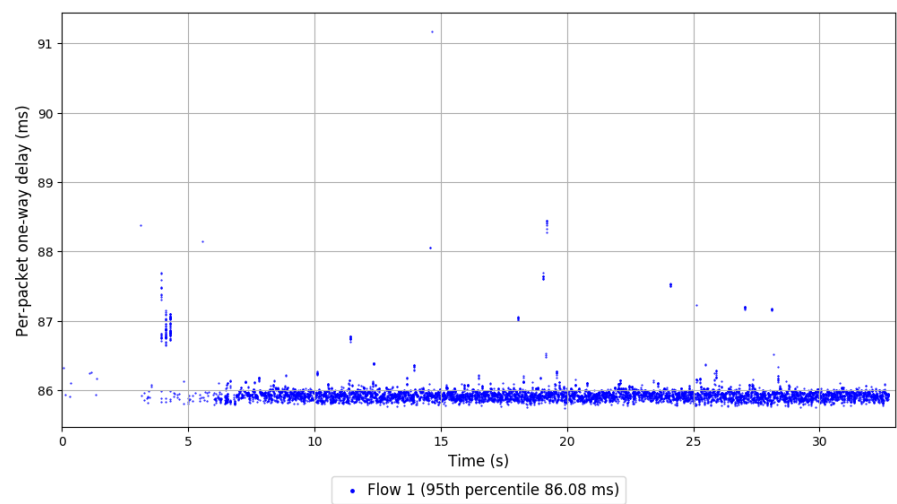
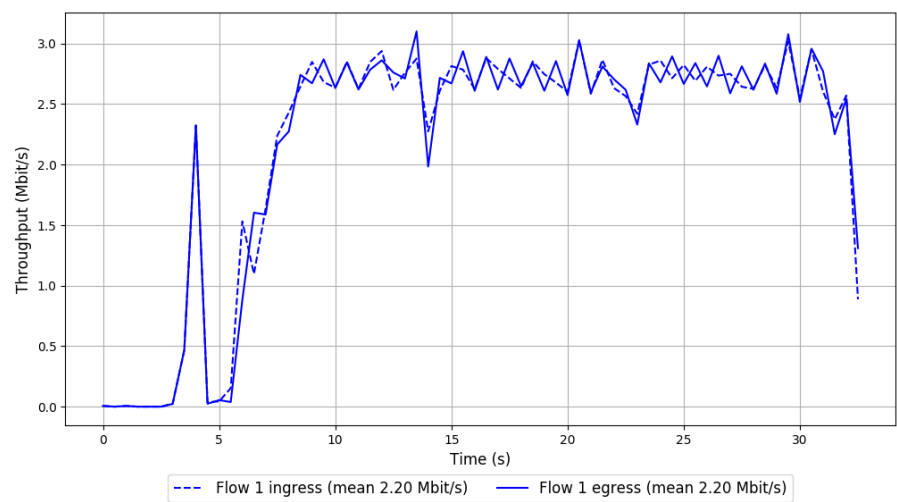


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-01 23:52:41
End at: 2018-01-01 23:53:11

# Below is generated by plot.py at 2018-01-02 02:49:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 86.079 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 86.079 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-02 00:04:01

End at: 2018-01-02 00:04:31

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.598 ms

Loss rate: 0.00%

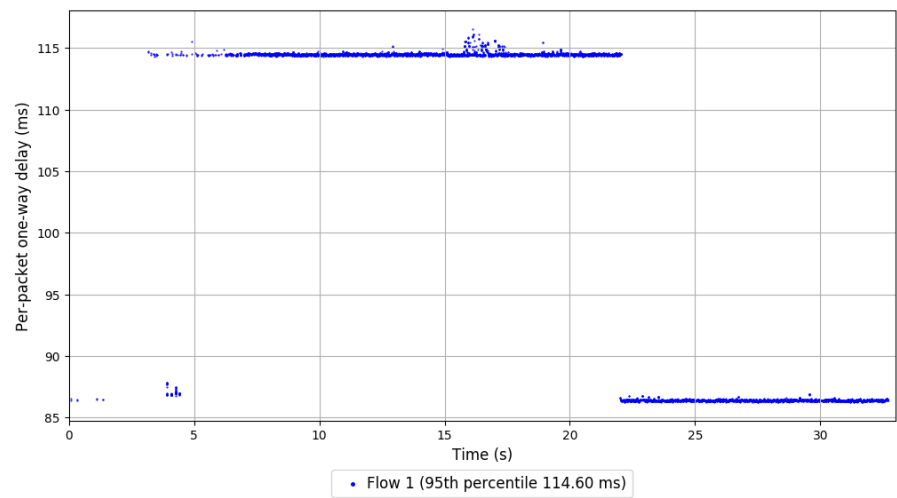
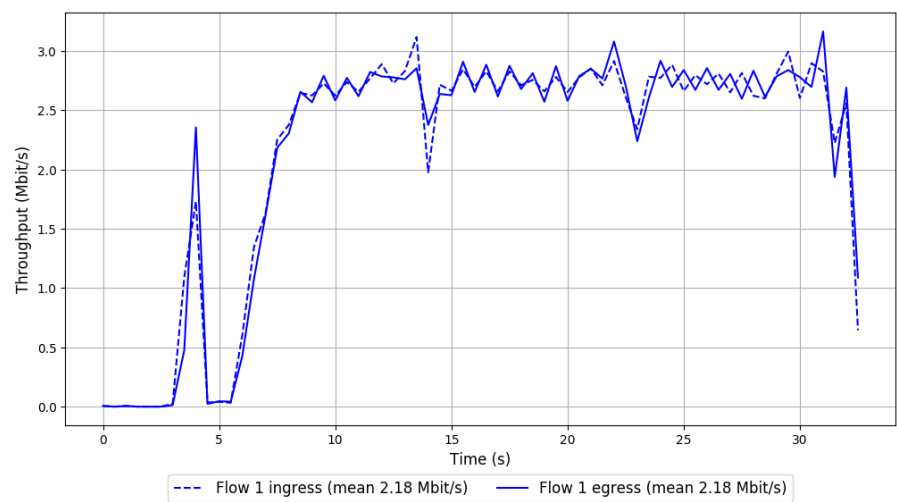
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.598 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-02 00:15:39

End at: 2018-01-02 00:16:09

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.538 ms

Loss rate: 0.00%

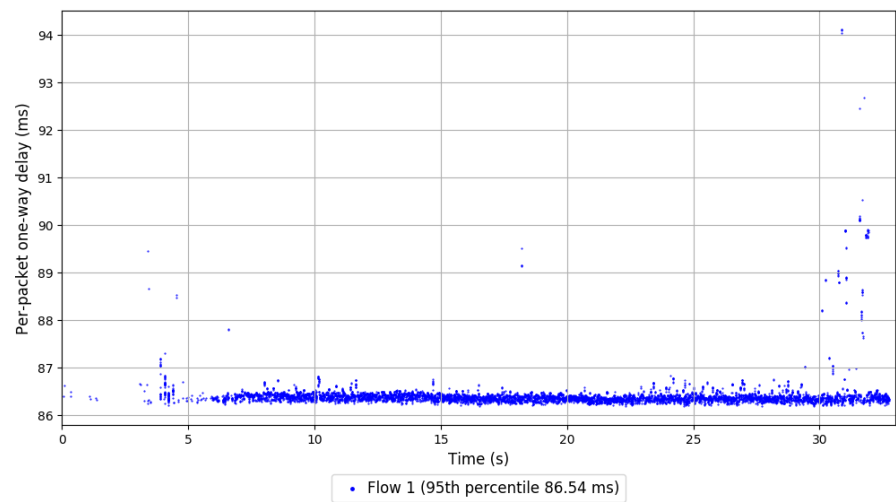
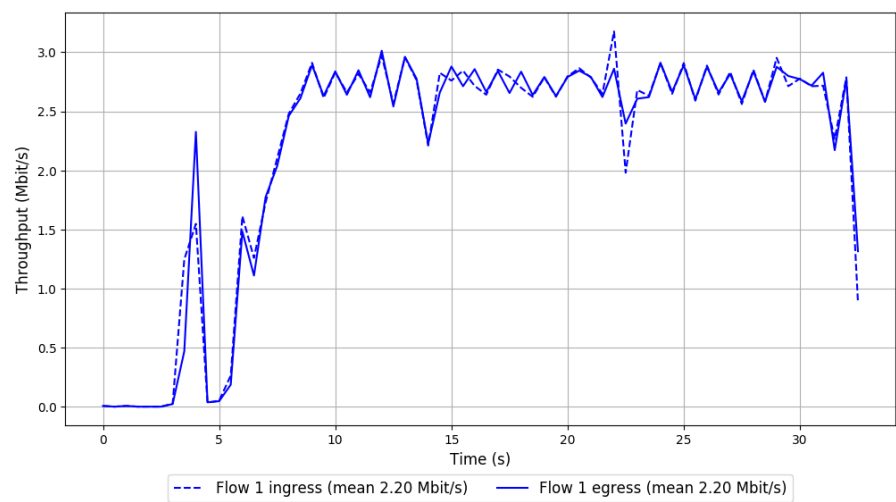
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.538 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-02 00:27:16

End at: 2018-01-02 00:27:46

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

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

Loss rate: 0.00%

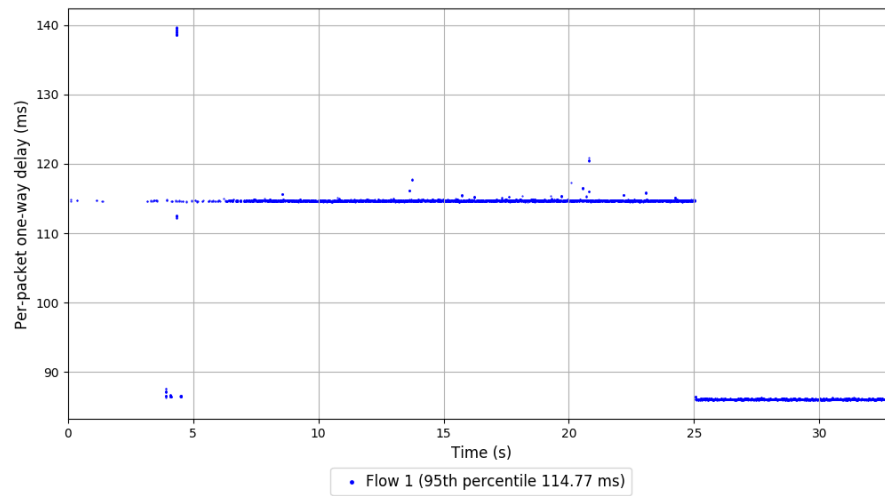
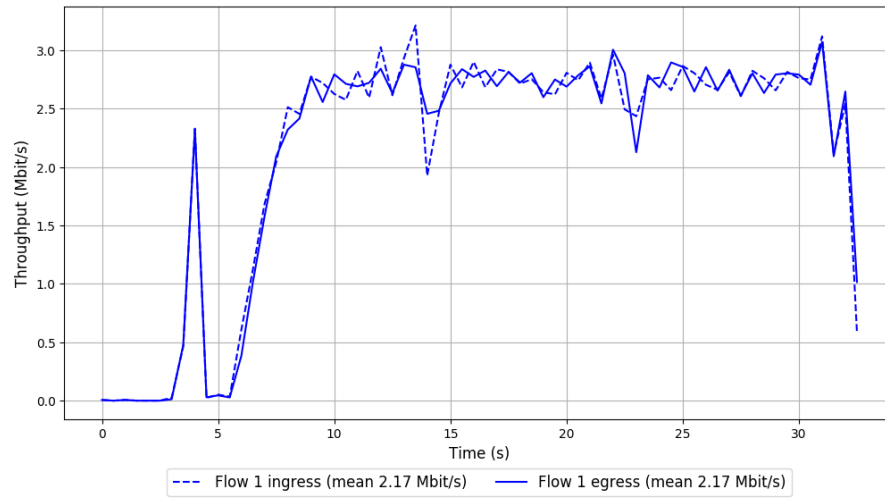
-- Flow 1:

Average throughput: 2.17 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-02 00:39:22

End at: 2018-01-02 00:39:52

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 114.768 ms

Loss rate: 0.00%

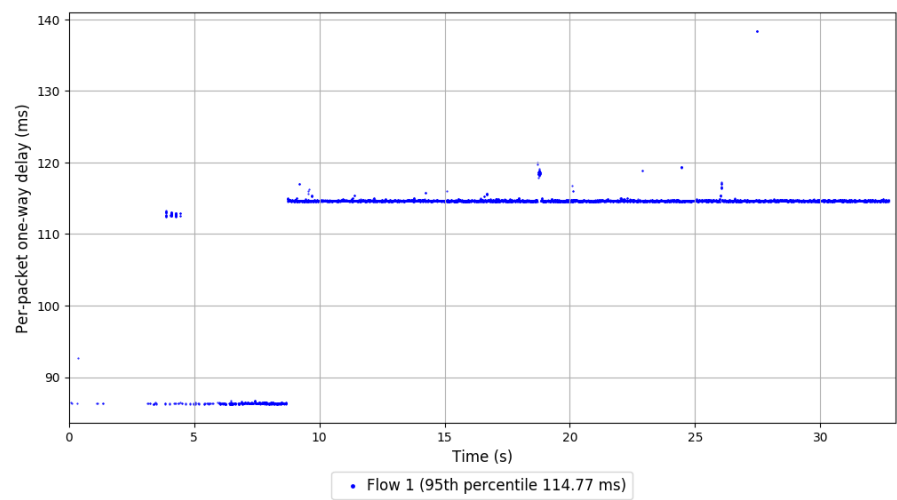
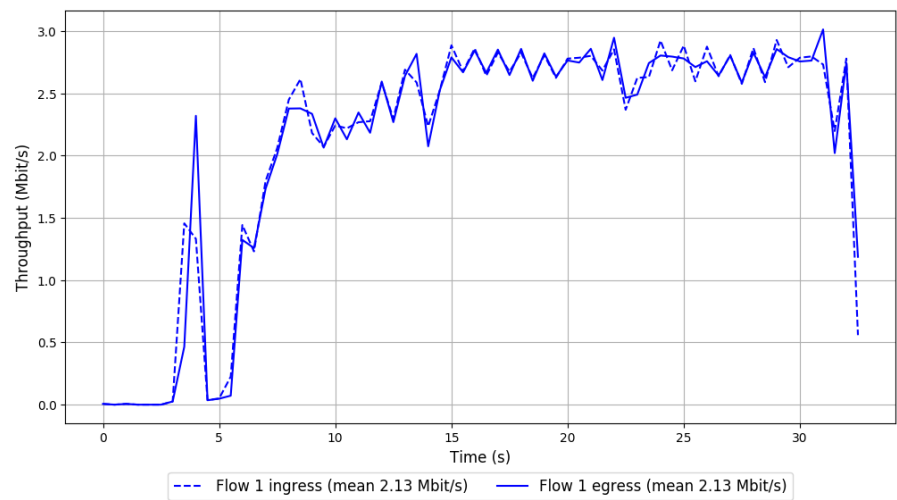
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 114.768 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-02 00:51:25

End at: 2018-01-02 00:51:55

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.924 ms

Loss rate: 0.00%

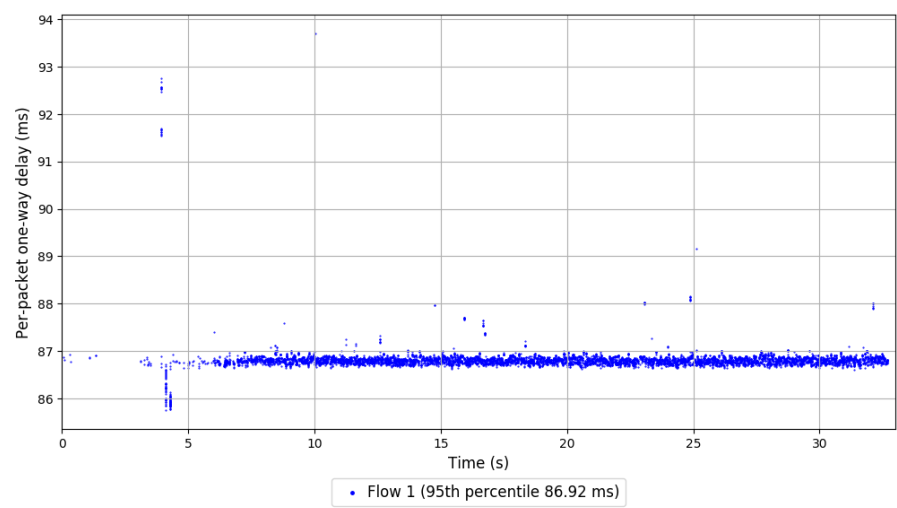
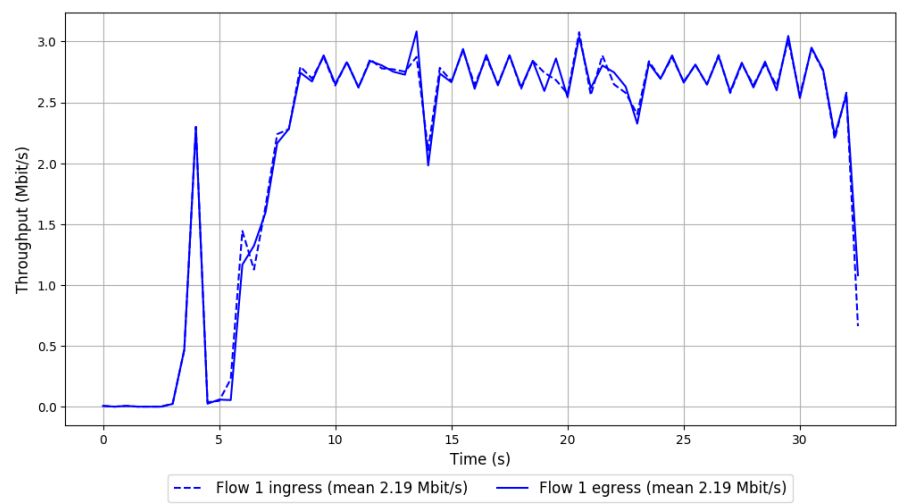
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.924 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-02 01:03:32

End at: 2018-01-02 01:04:02

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.818 ms

Loss rate: 0.00%

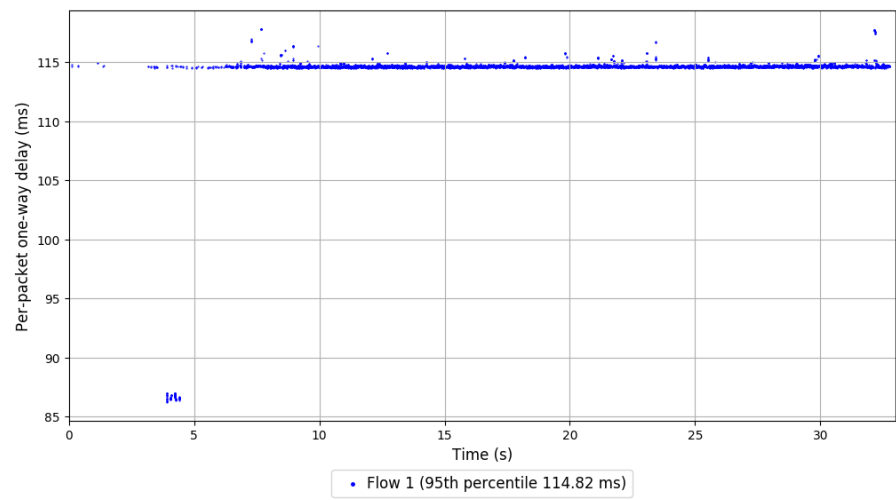
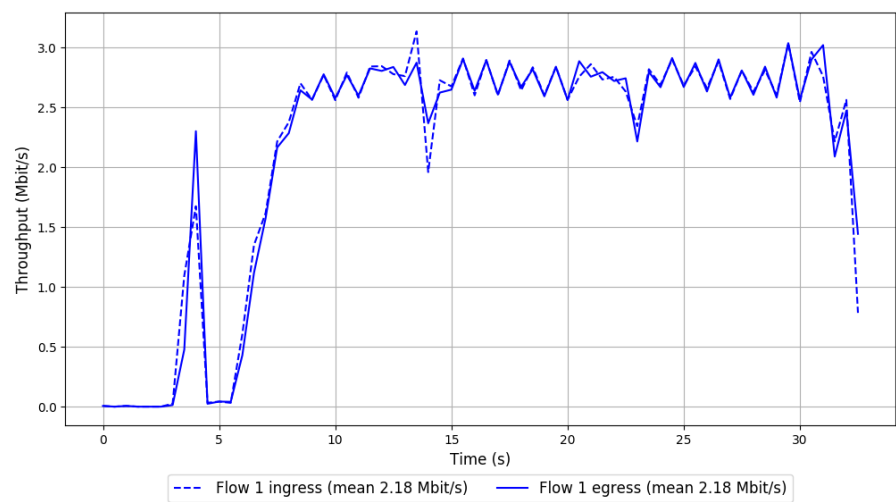
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.818 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-02 01:15:45

End at: 2018-01-02 01:16:15

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 115.212 ms

Loss rate: 0.00%

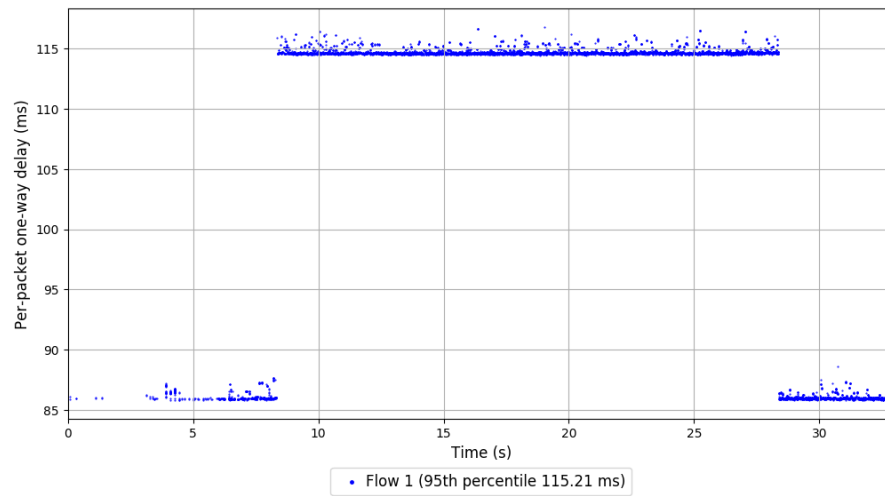
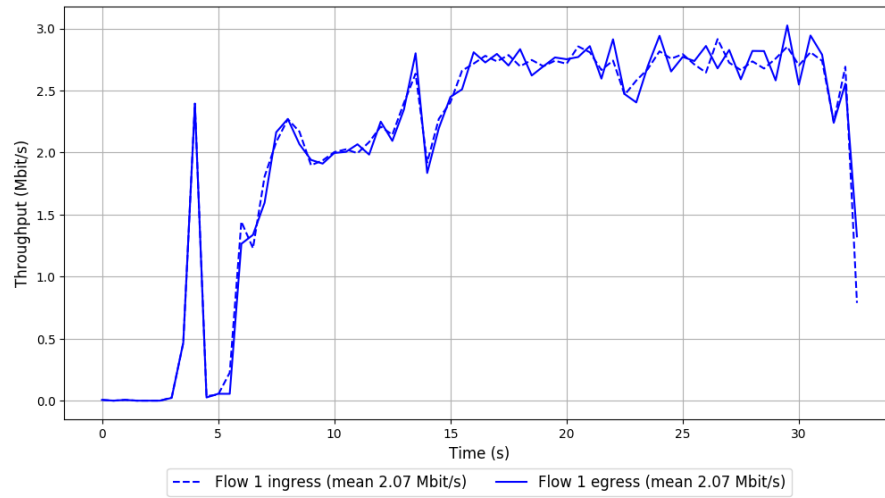
-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 115.212 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-02 01:27:15

End at: 2018-01-02 01:27:45

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 86.389 ms

Loss rate: 0.00%

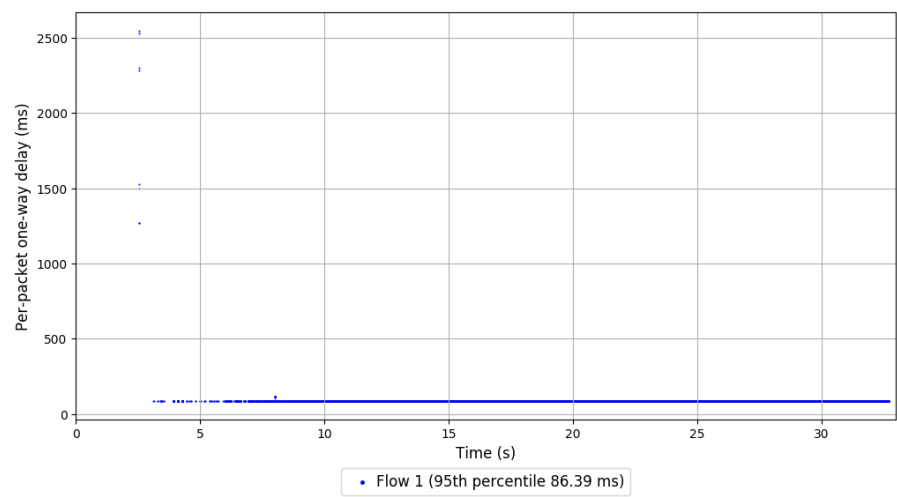
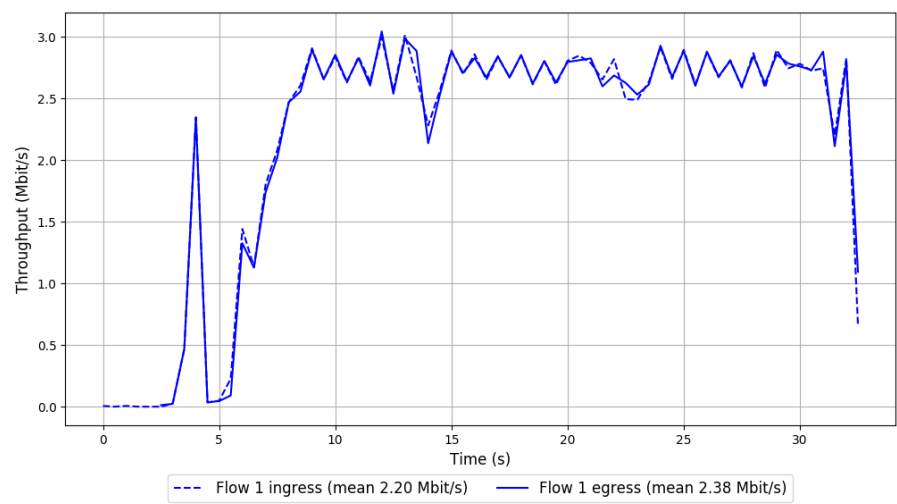
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 86.389 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

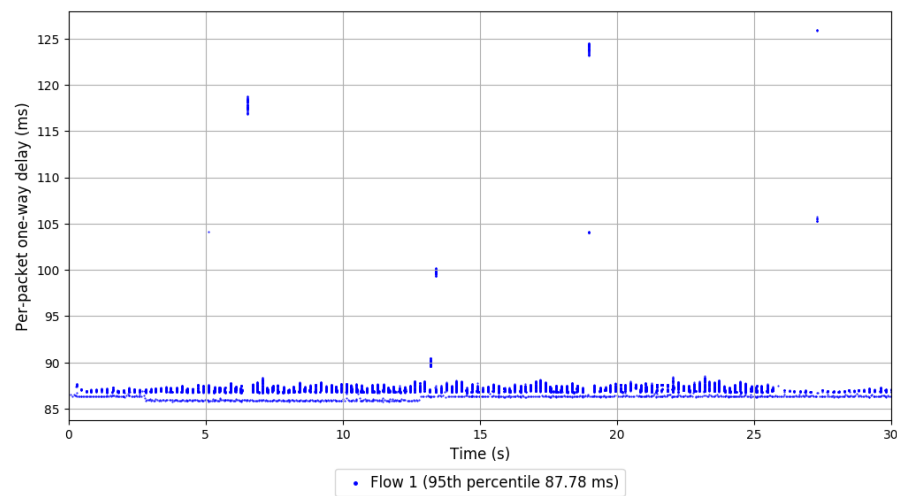
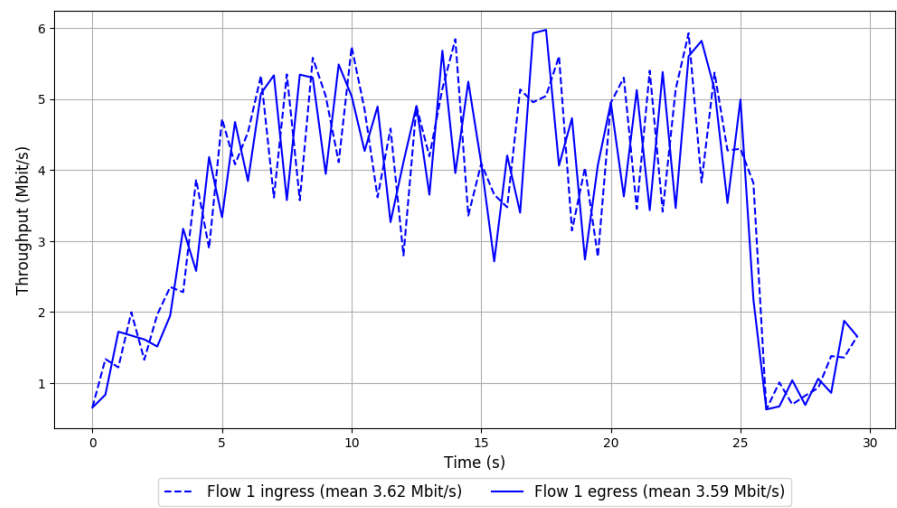


```
Run 1: Statistics of Sprout

Start at: 2018-01-01 23:44:08
End at: 2018-01-01 23:44:38

# Below is generated by plot.py at 2018-01-02 02:49:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 87.775 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 87.775 ms
Loss rate: 0.89%
```

Run 1: Report of Sprout — Data Link

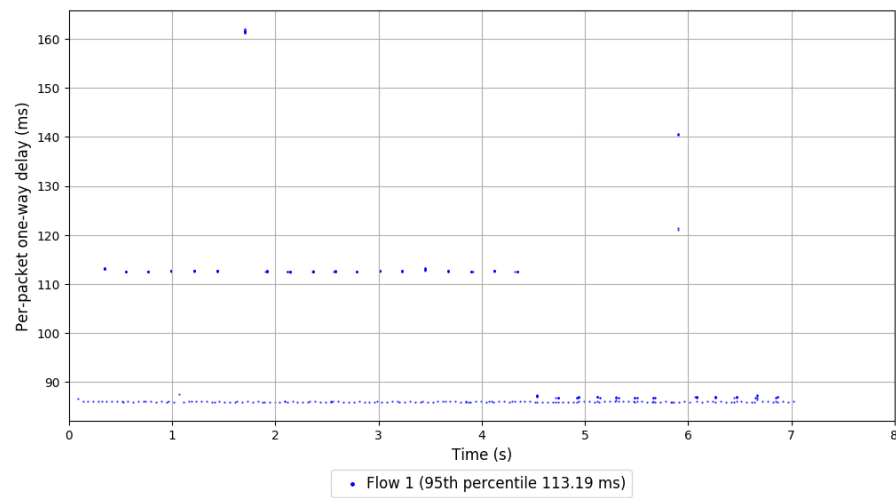
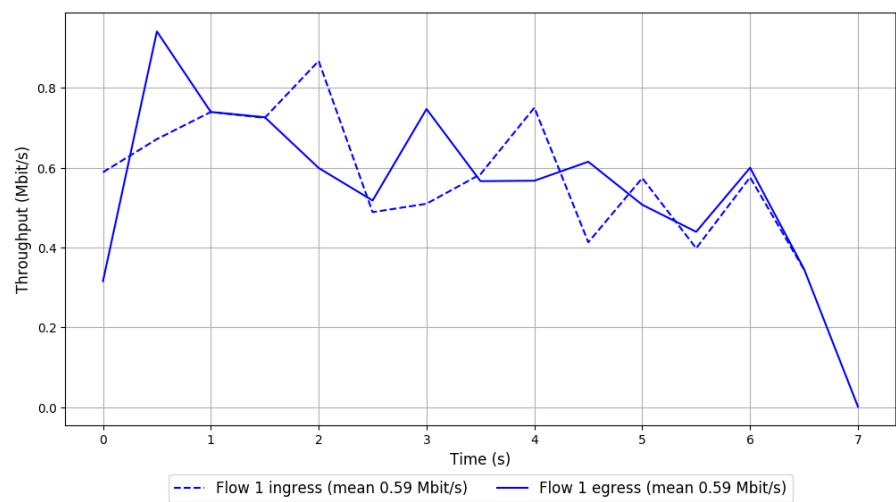


Run 2: Statistics of Sprout

Start at: 2018-01-01 23:56:00

End at: 2018-01-01 23:56:30

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-02 00:07:21

End at: 2018-01-02 00:07:51

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.645 ms

Loss rate: 1.22%

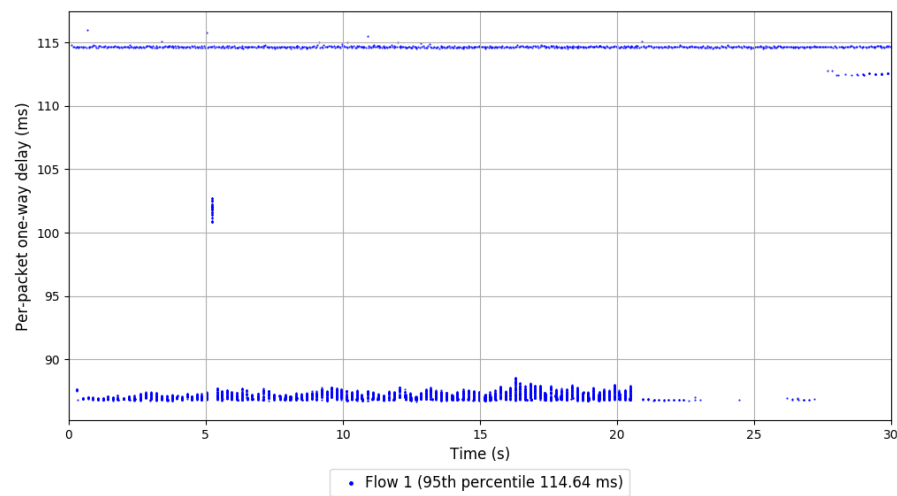
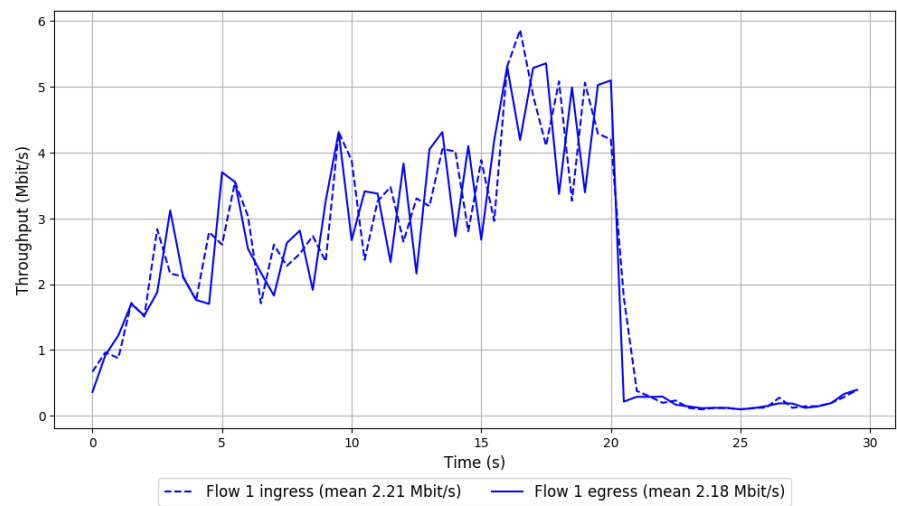
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.645 ms

Loss rate: 1.22%

Run 3: Report of Sprout — Data Link

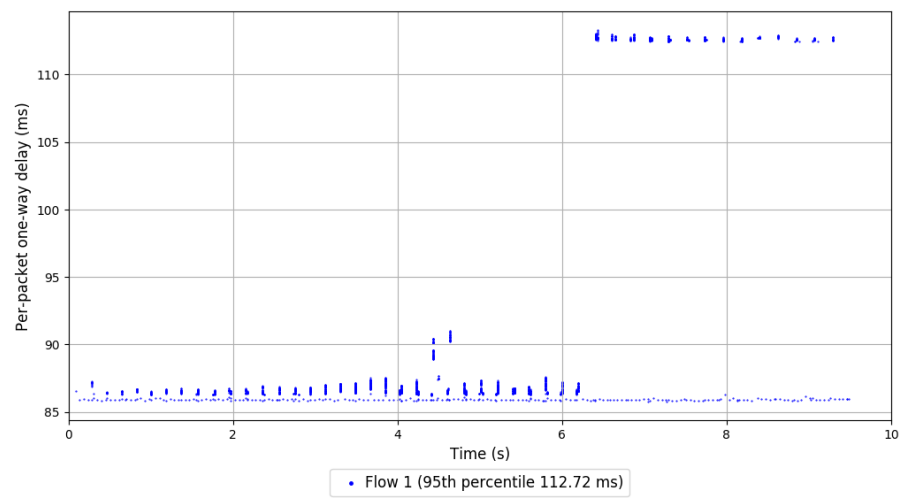
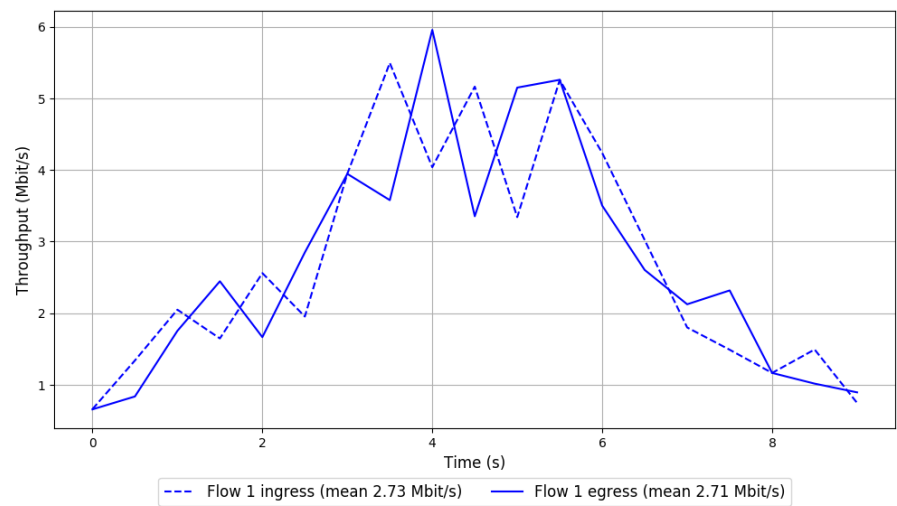


Run 4: Statistics of Sprout

Start at: 2018-01-02 00:19:01

End at: 2018-01-02 00:19:31

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-02 00:30:43

End at: 2018-01-02 00:31:13

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 113.036 ms

Loss rate: 1.95%

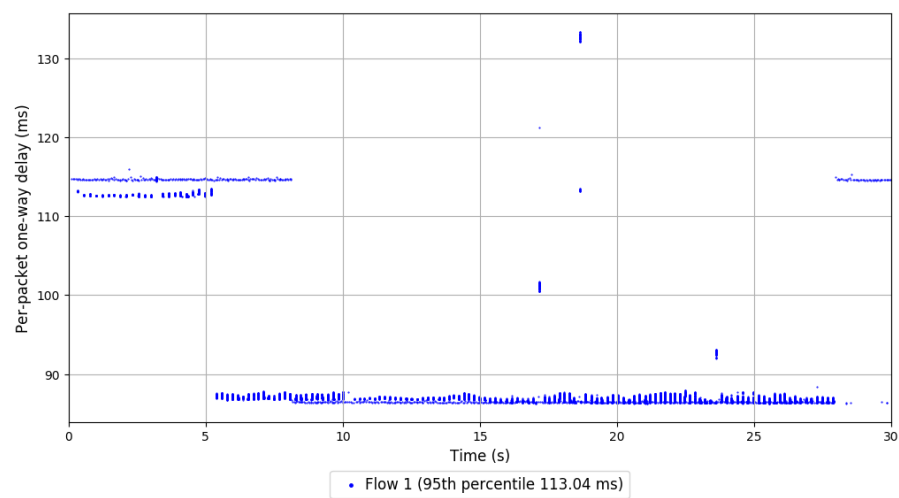
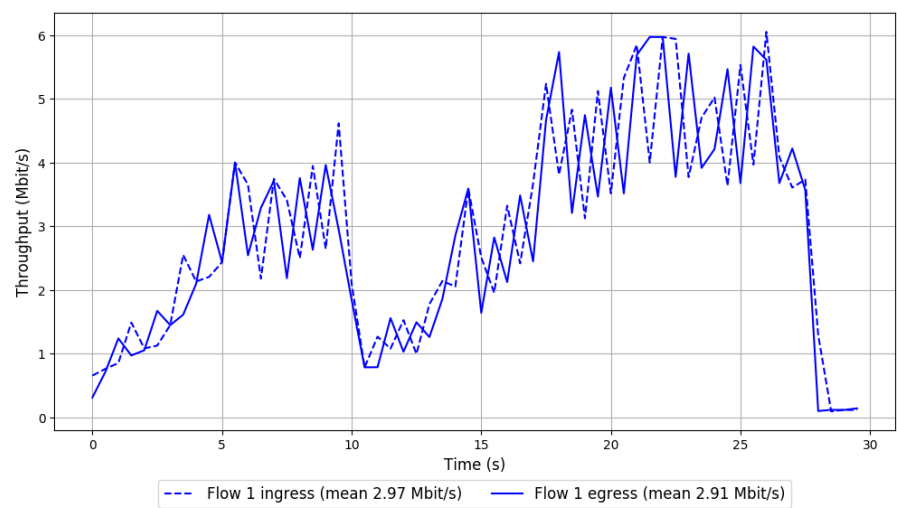
-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 113.036 ms

Loss rate: 1.95%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-02 00:42:58

End at: 2018-01-02 00:43:28

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

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

Loss rate: 1.23%

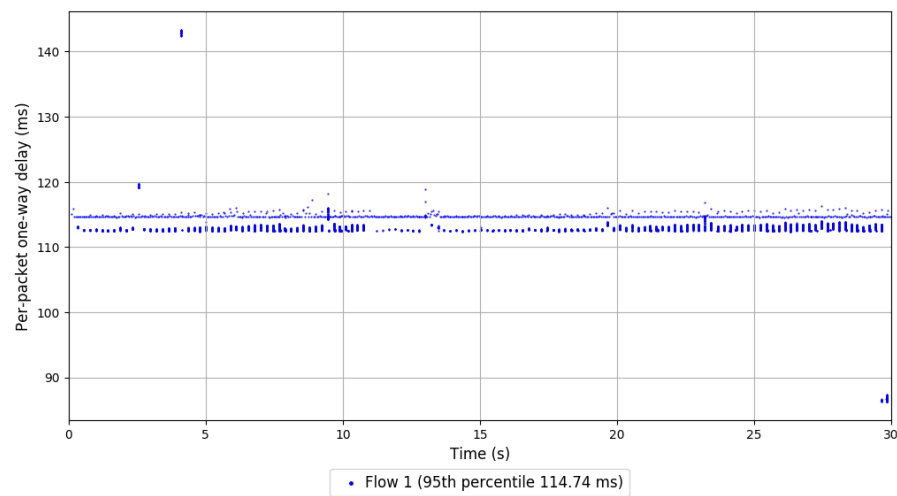
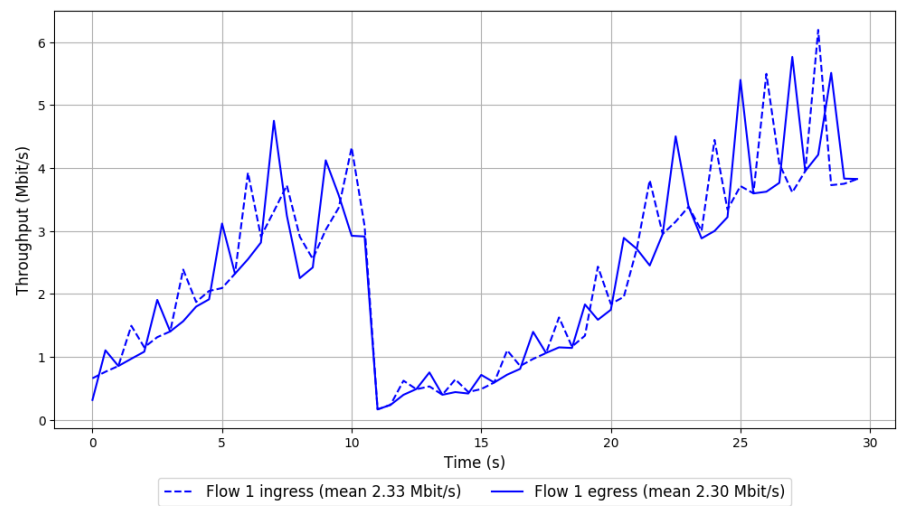
-- Flow 1:

Average throughput: 2.30 Mbit/s

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

Loss rate: 1.23%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-02 00:54:58

End at: 2018-01-02 00:55:28

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.81 Mbit/s

95th percentile per-packet one-way delay: 86.833 ms

Loss rate: 0.00%

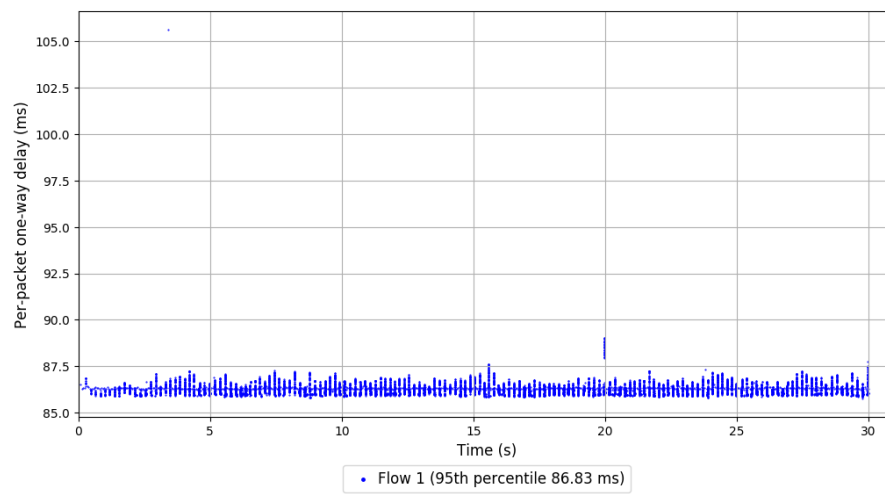
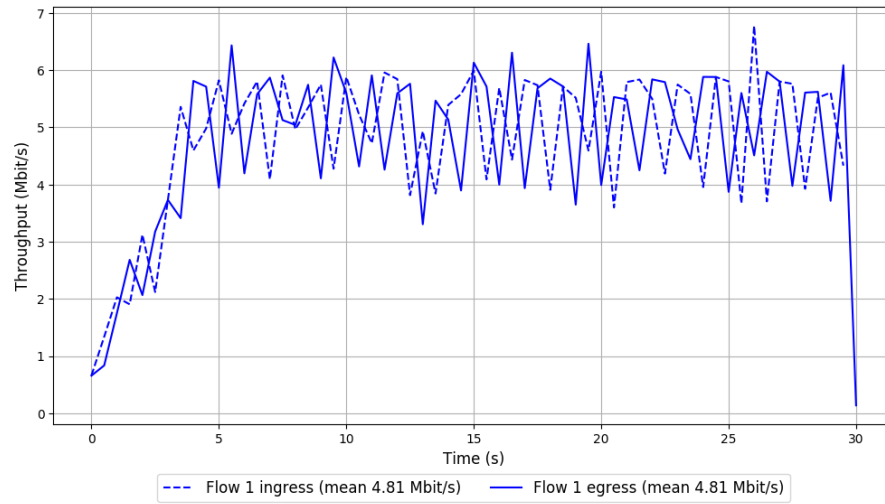
-- Flow 1:

Average throughput: 4.81 Mbit/s

95th percentile per-packet one-way delay: 86.833 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-02 01:07:10

End at: 2018-01-02 01:07:40

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 87.250 ms

Loss rate: 3.17%

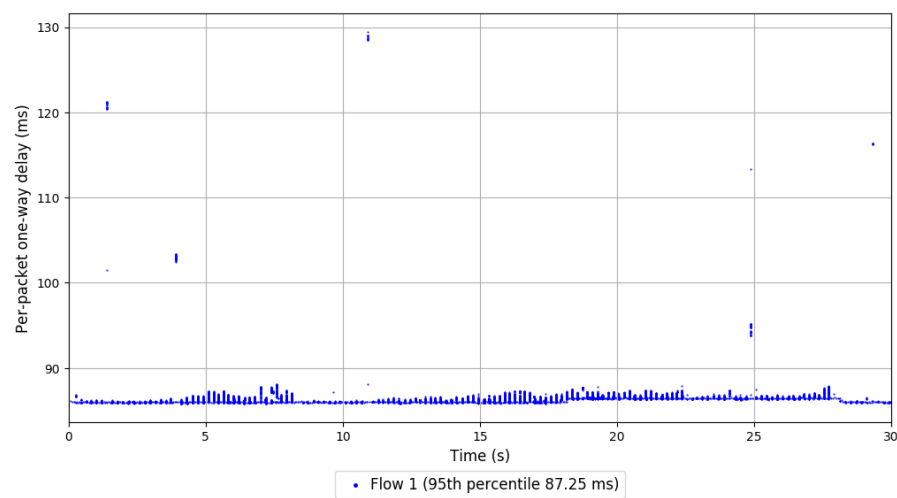
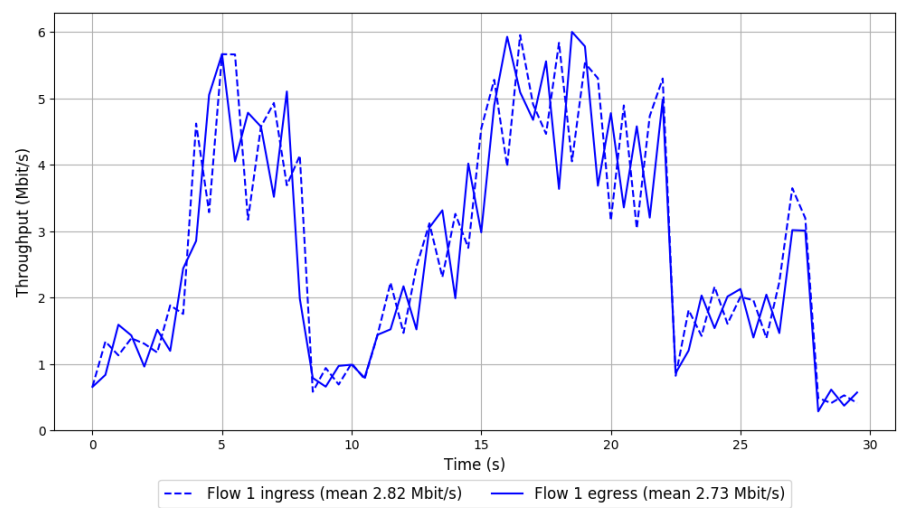
-- Flow 1:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 87.250 ms

Loss rate: 3.17%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-02 01:18:53

End at: 2018-01-02 01:19:23

Run 9: Report of Sprout — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of Sprout

Start at: 2018-01-02 01:30:50

End at: 2018-01-02 01:31:20

Below is generated by plot.py at 2018-01-02 02:49:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 114.878 ms

Loss rate: 0.00%

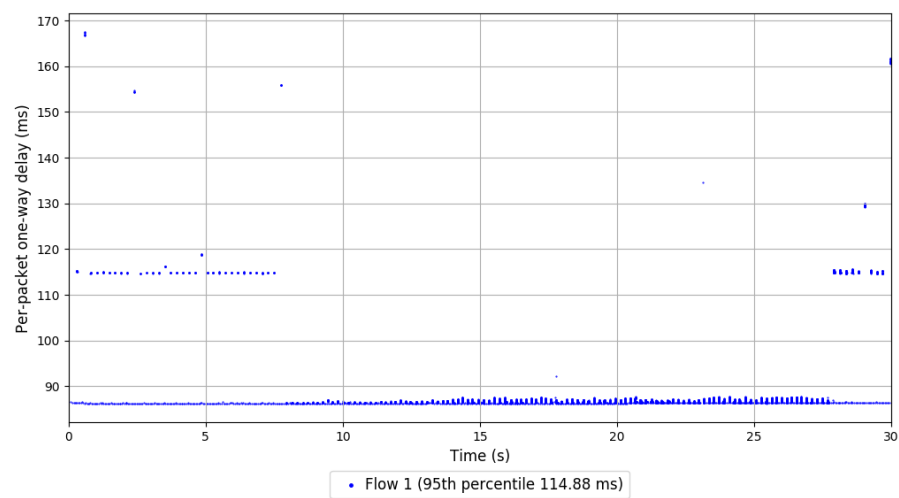
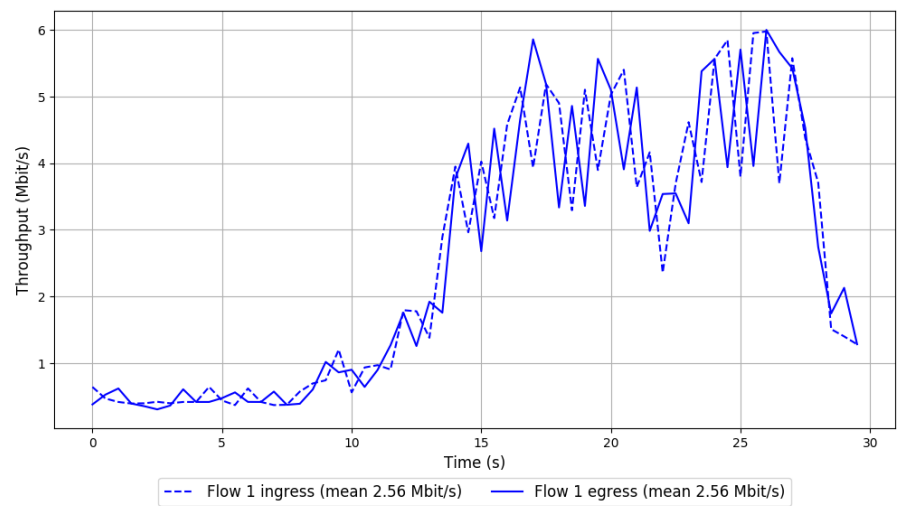
-- Flow 1:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 114.878 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

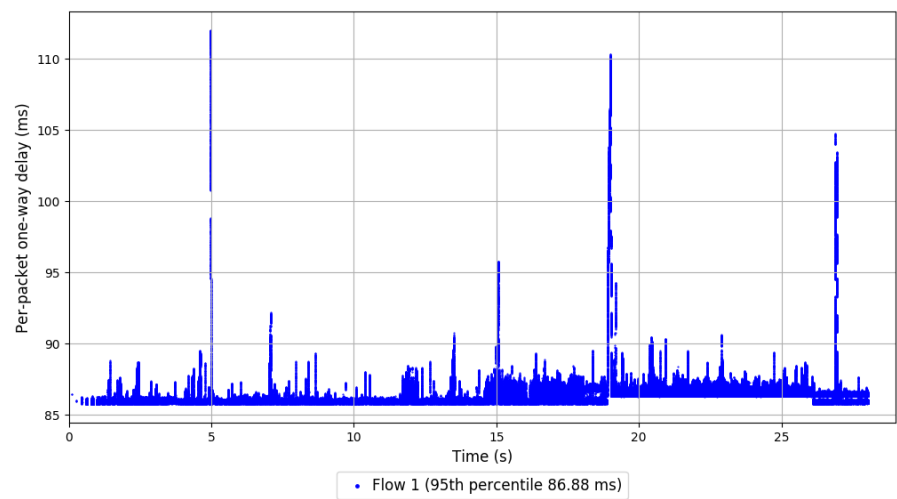
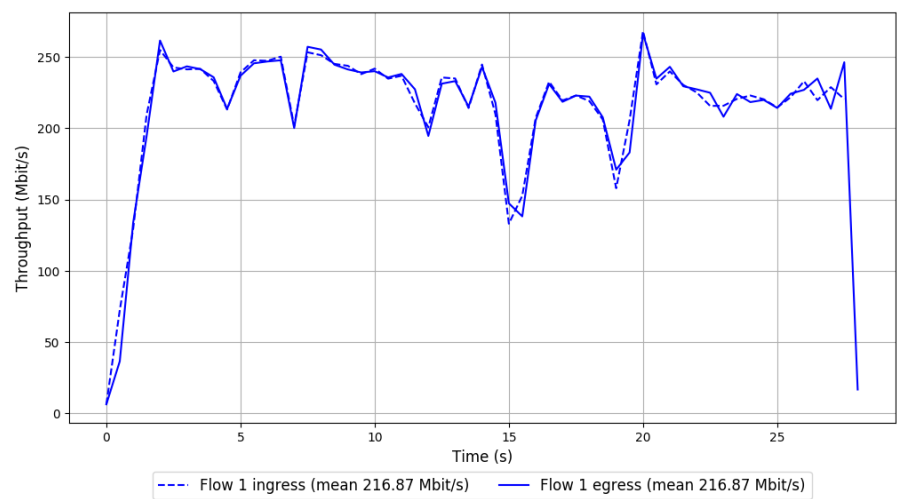


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-01 23:45:40
End at: 2018-01-01 23:46:10

# Below is generated by plot.py at 2018-01-02 02:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.87 Mbit/s
95th percentile per-packet one-way delay: 86.878 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 216.87 Mbit/s
95th percentile per-packet one-way delay: 86.878 ms
Loss rate: 0.00%
```

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

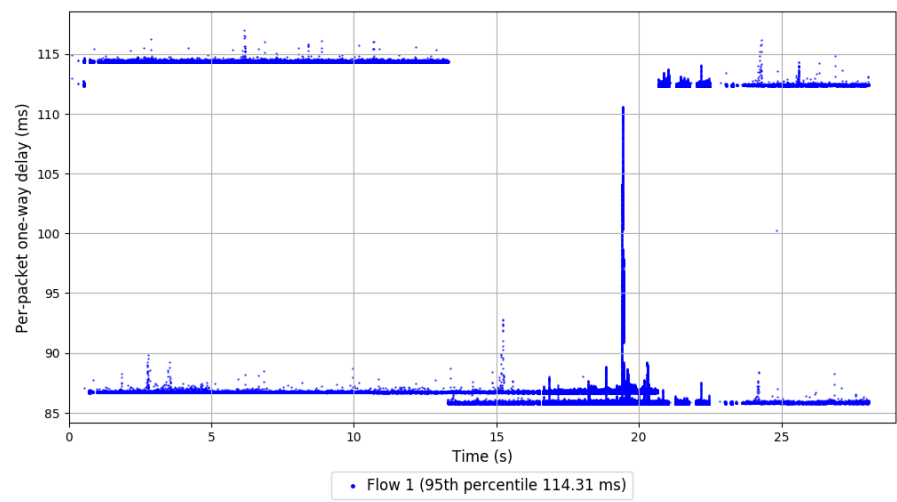
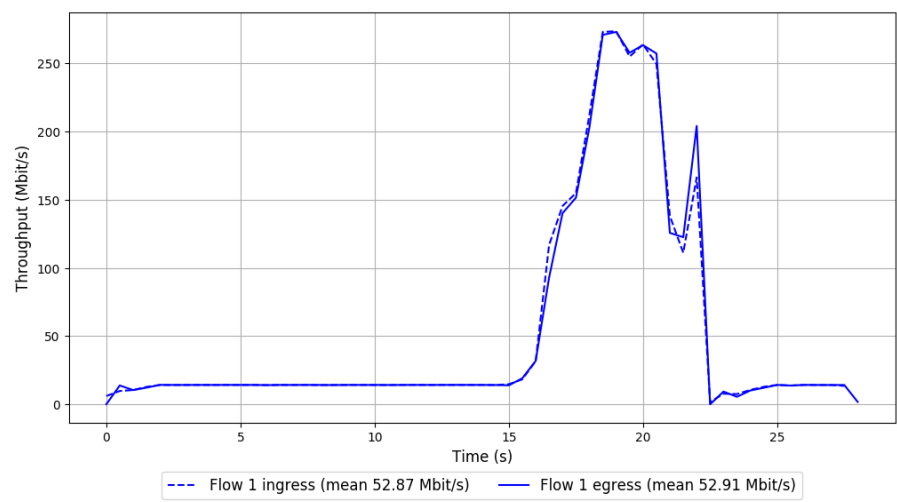


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-01 23:57:25
End at: 2018-01-01 23:57:55

# Below is generated by plot.py at 2018-01-02 02:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.91 Mbit/s
95th percentile per-packet one-way delay: 114.315 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 52.91 Mbit/s
95th percentile per-packet one-way delay: 114.315 ms
Loss rate: 0.02%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-01-02 00:08:49

End at: 2018-01-02 00:09:19

Below is generated by plot.py at 2018-01-02 02:54:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.84 Mbit/s

95th percentile per-packet one-way delay: 114.637 ms

Loss rate: 0.01%

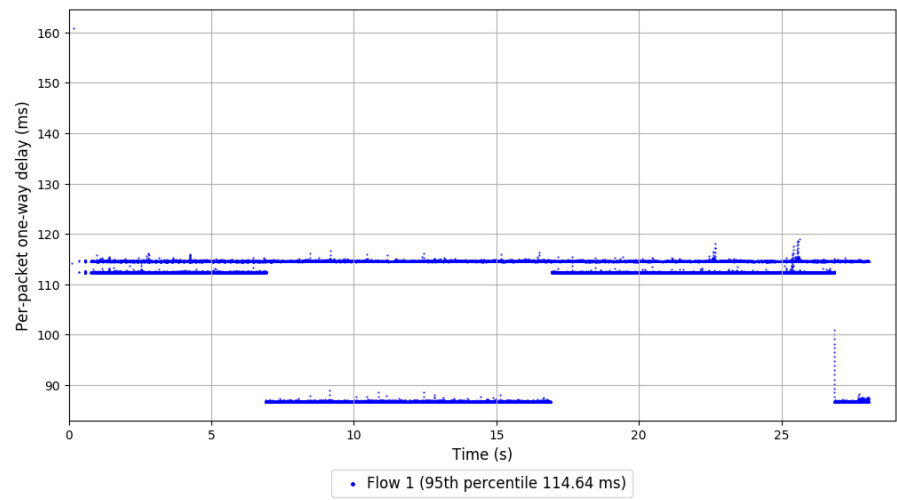
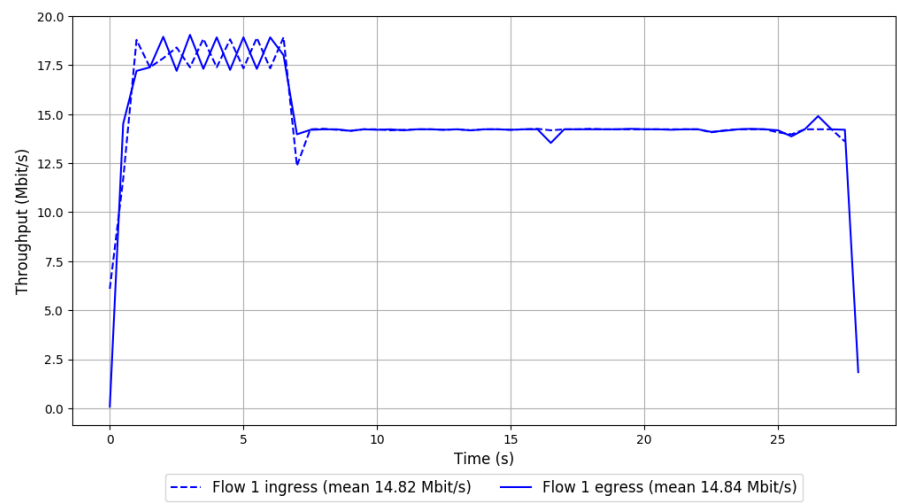
-- Flow 1:

Average throughput: 14.84 Mbit/s

95th percentile per-packet one-way delay: 114.637 ms

Loss rate: 0.01%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-02 00:20:28

End at: 2018-01-02 00:20:58

Below is generated by plot.py at 2018-01-02 02:54:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.58 Mbit/s

95th percentile per-packet one-way delay: 86.871 ms

Loss rate: 0.20%

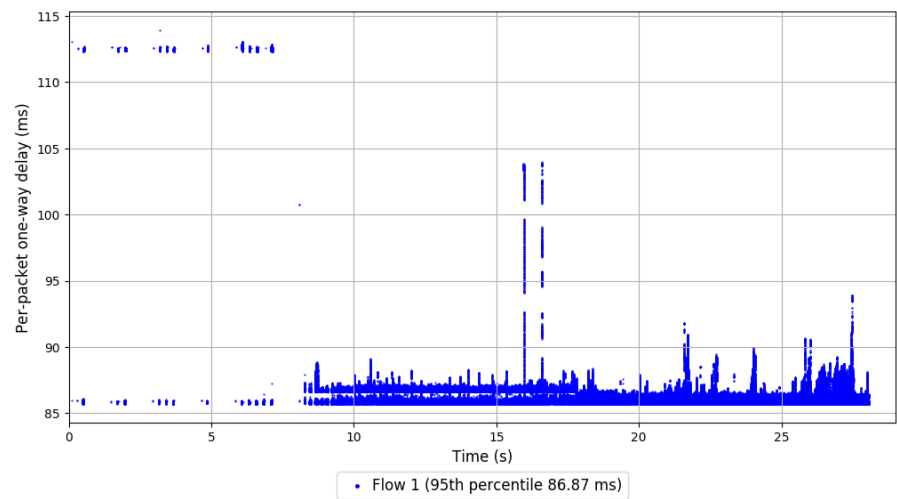
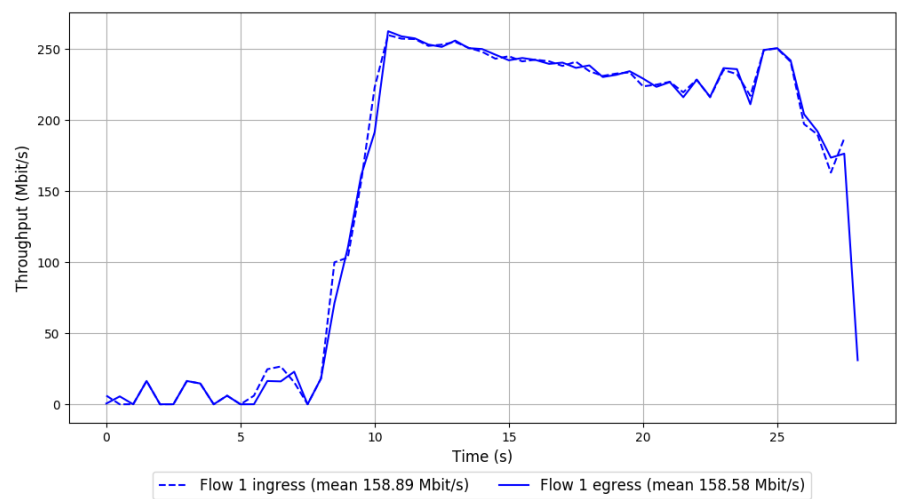
-- Flow 1:

Average throughput: 158.58 Mbit/s

95th percentile per-packet one-way delay: 86.871 ms

Loss rate: 0.20%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-02 00:32:17

End at: 2018-01-02 00:32:47

Below is generated by plot.py at 2018-01-02 02:54:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.89 Mbit/s

95th percentile per-packet one-way delay: 86.971 ms

Loss rate: 0.00%

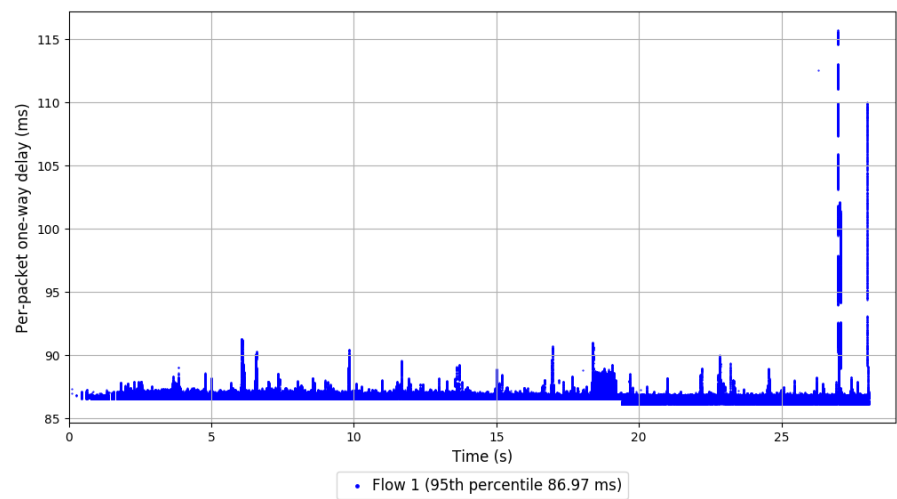
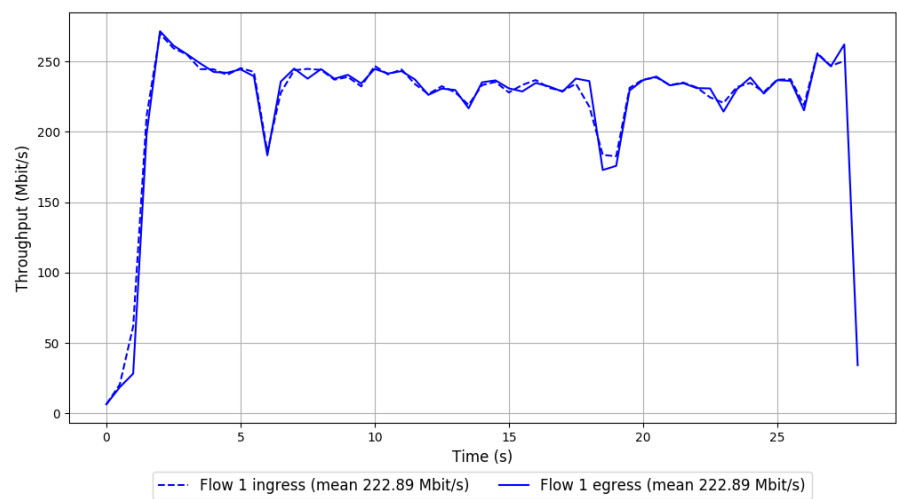
-- Flow 1:

Average throughput: 222.89 Mbit/s

95th percentile per-packet one-way delay: 86.971 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-02 00:44:31

End at: 2018-01-02 00:45:01

Below is generated by plot.py at 2018-01-02 02:54:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.01 Mbit/s

95th percentile per-packet one-way delay: 114.678 ms

Loss rate: 0.00%

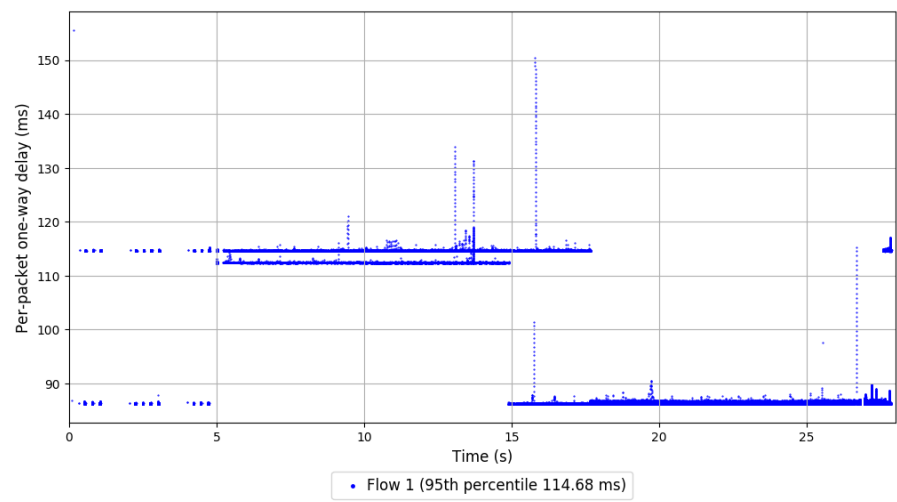
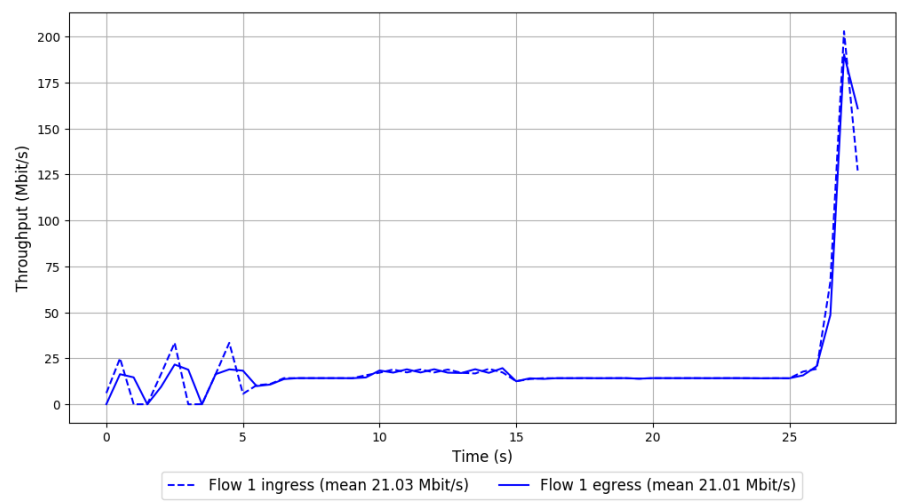
-- Flow 1:

Average throughput: 21.01 Mbit/s

95th percentile per-packet one-way delay: 114.678 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-02 00:56:25

End at: 2018-01-02 00:56:55

Below is generated by plot.py at 2018-01-02 02:54:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.28 Mbit/s

95th percentile per-packet one-way delay: 86.467 ms

Loss rate: 0.00%

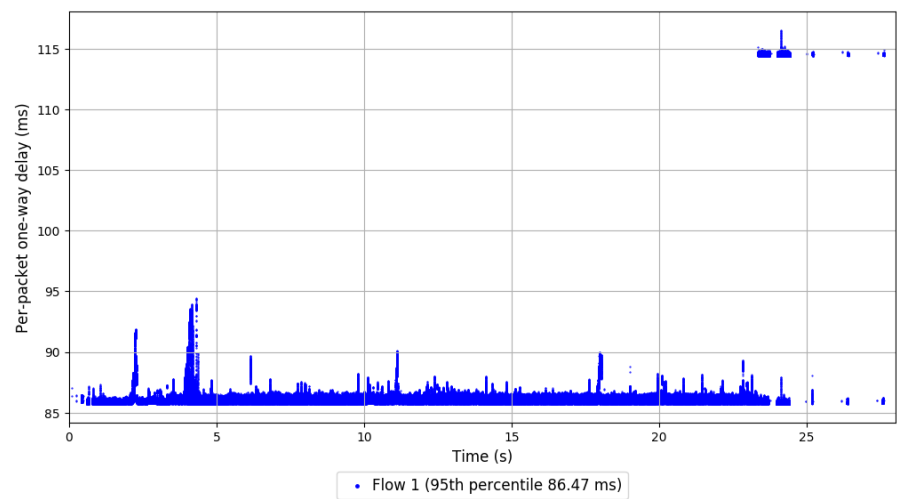
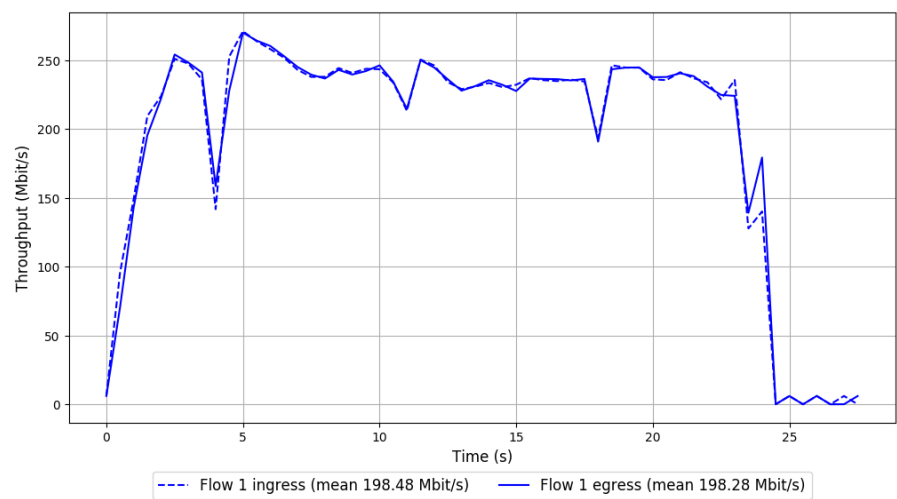
-- Flow 1:

Average throughput: 198.28 Mbit/s

95th percentile per-packet one-way delay: 86.467 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-02 01:08:39

End at: 2018-01-02 01:09:09

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.10 Mbit/s

95th percentile per-packet one-way delay: 86.465 ms

Loss rate: 0.00%

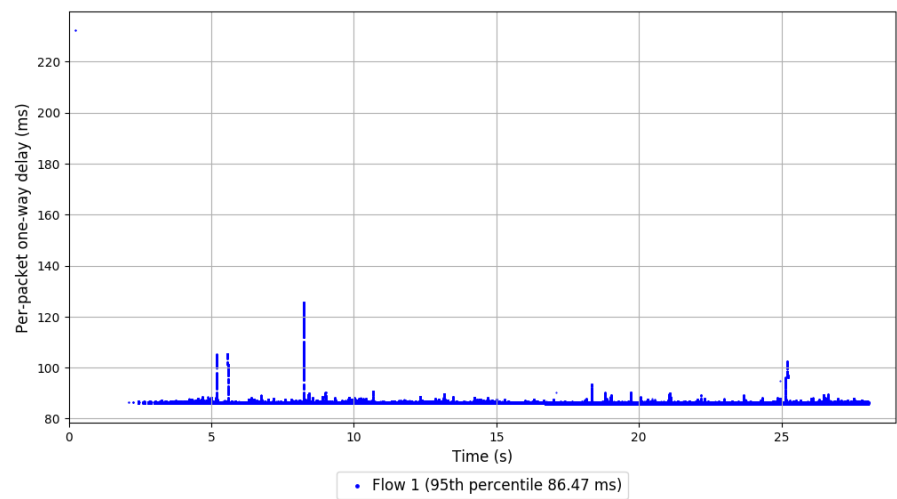
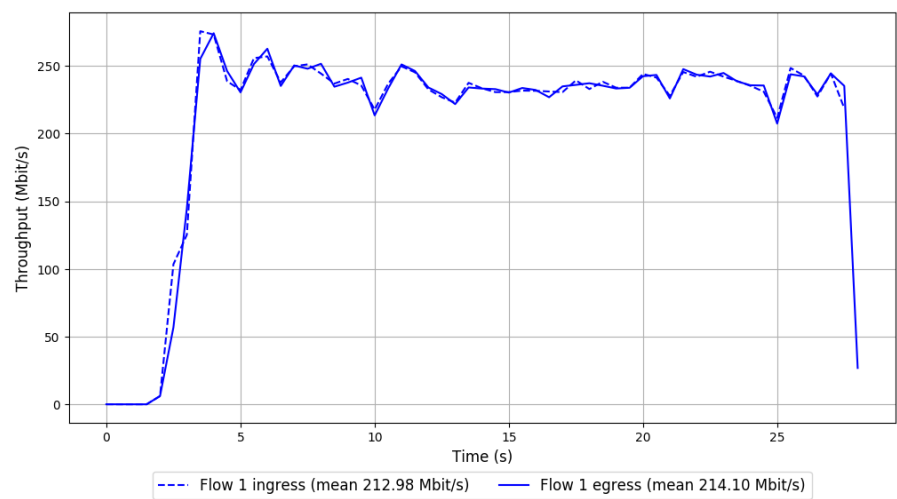
-- Flow 1:

Average throughput: 214.10 Mbit/s

95th percentile per-packet one-way delay: 86.465 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-02 01:20:25

End at: 2018-01-02 01:20:55

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.99 Mbit/s

95th percentile per-packet one-way delay: 114.820 ms

Loss rate: 0.44%

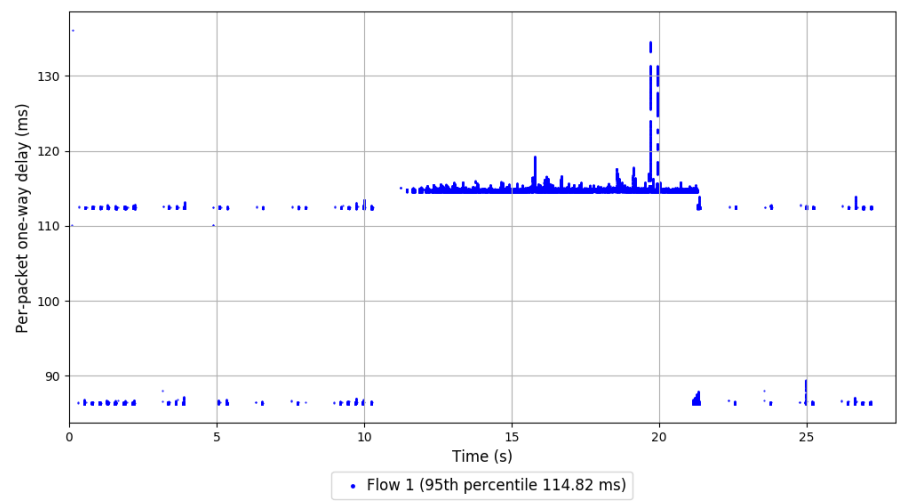
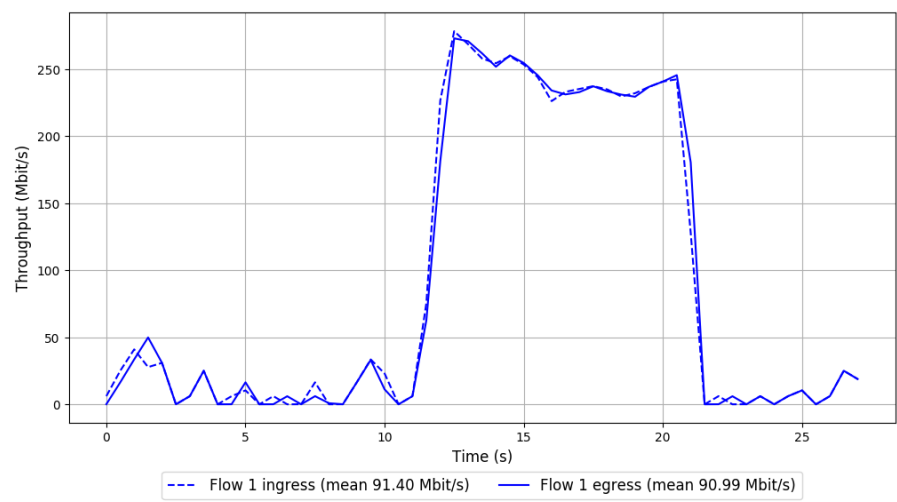
-- Flow 1:

Average throughput: 90.99 Mbit/s

95th percentile per-packet one-way delay: 114.820 ms

Loss rate: 0.44%

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

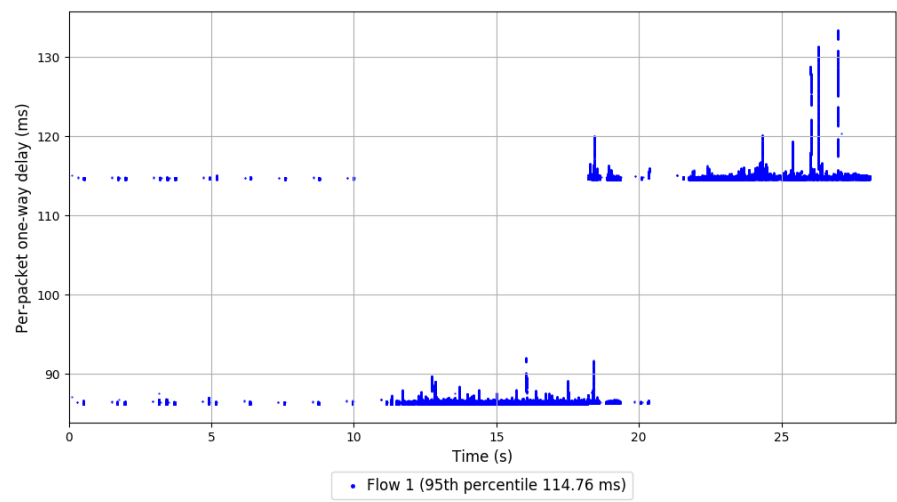
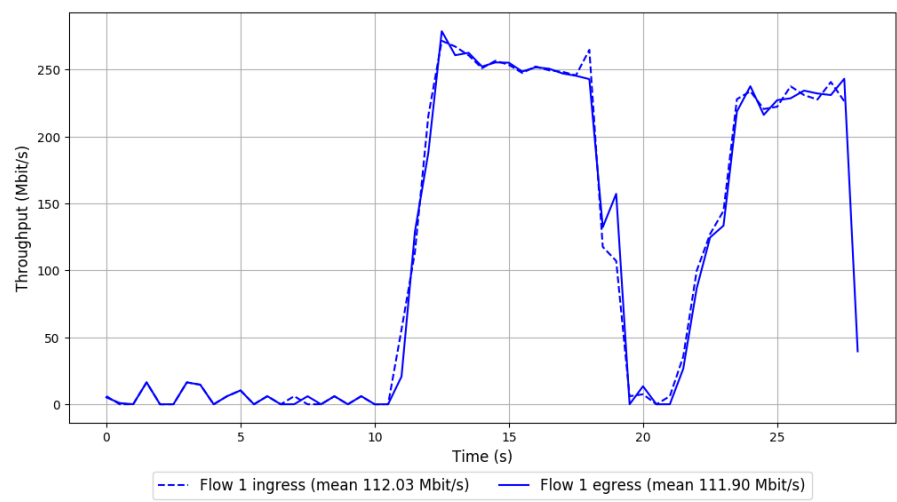


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-02 01:32:18
End at: 2018-01-02 01:32:48

# Below is generated by plot.py at 2018-01-02 02:54:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.90 Mbit/s
95th percentile per-packet one-way delay: 114.761 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 111.90 Mbit/s
95th percentile per-packet one-way delay: 114.761 ms
Loss rate: 0.02%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-01 23:40:22

End at: 2018-01-01 23:40:52

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.70 Mbit/s

95th percentile per-packet one-way delay: 87.938 ms

Loss rate: 0.00%

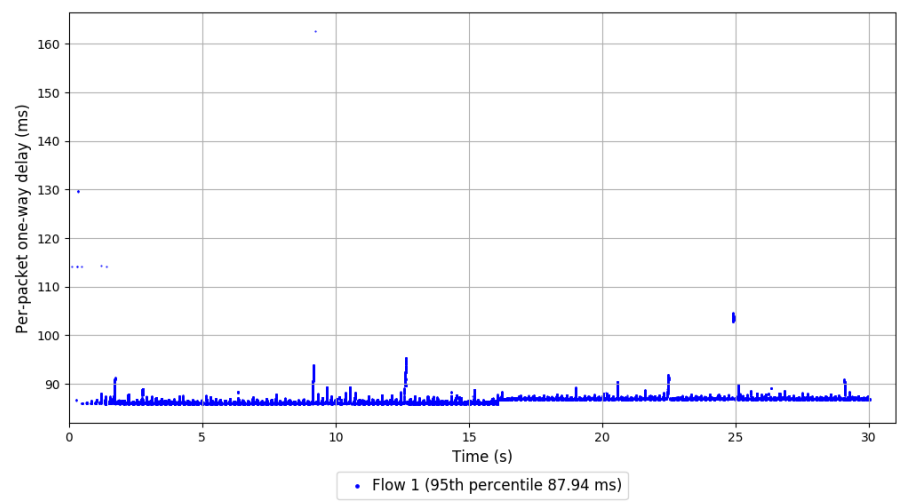
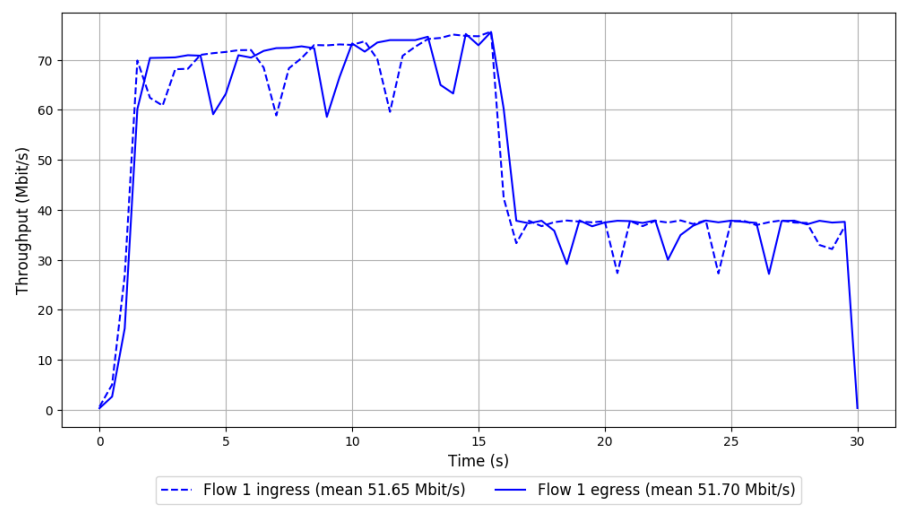
-- Flow 1:

Average throughput: 51.70 Mbit/s

95th percentile per-packet one-way delay: 87.938 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-01 23:52:01

End at: 2018-01-01 23:52:31

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.29 Mbit/s

95th percentile per-packet one-way delay: 112.839 ms

Loss rate: 0.85%

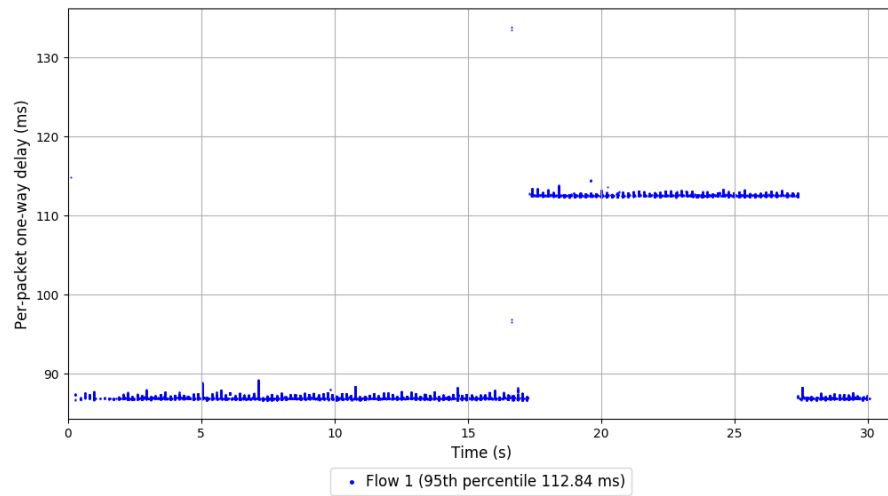
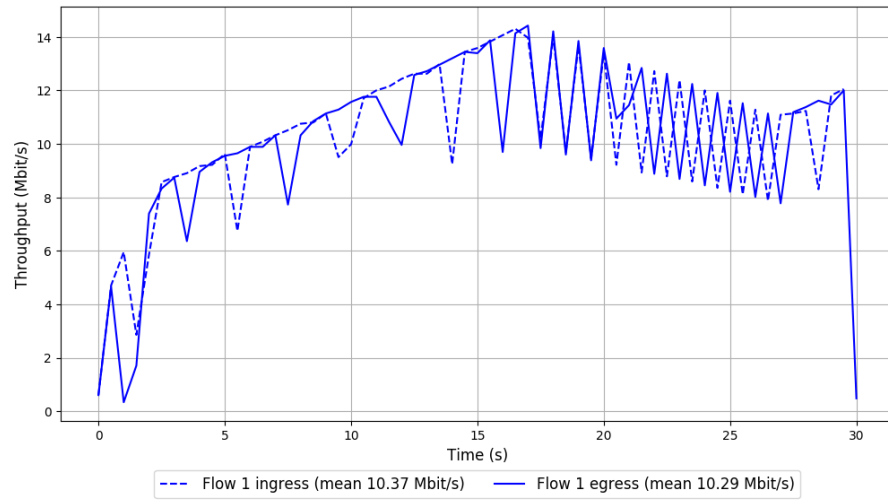
-- Flow 1:

Average throughput: 10.29 Mbit/s

95th percentile per-packet one-way delay: 112.839 ms

Loss rate: 0.85%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-02 00:03:20

End at: 2018-01-02 00:03:50

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.28 Mbit/s

95th percentile per-packet one-way delay: 113.394 ms

Loss rate: 0.00%

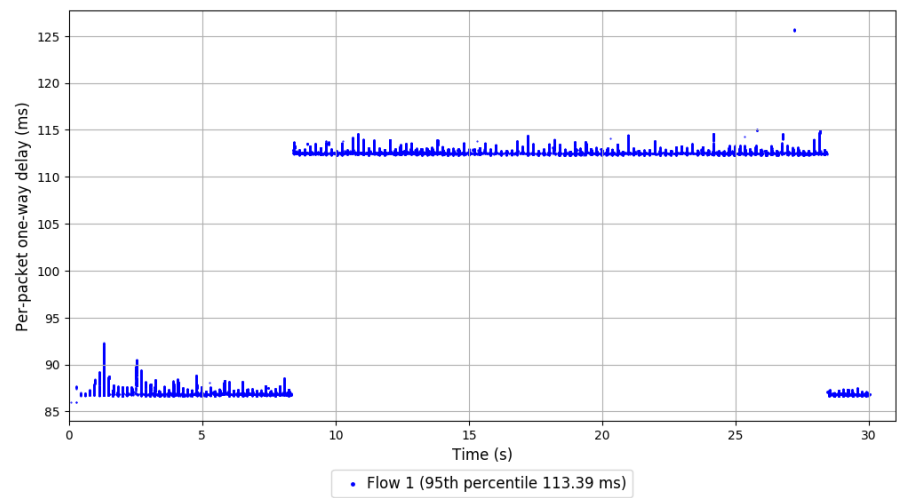
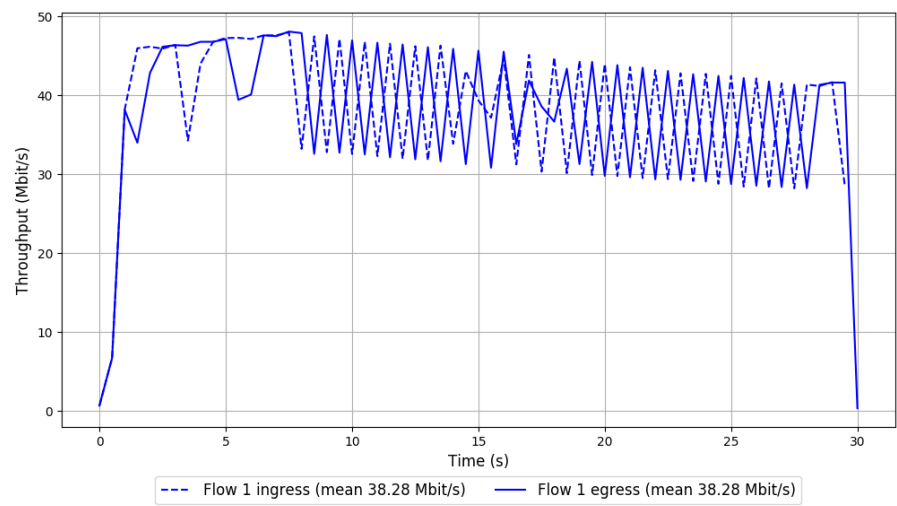
-- Flow 1:

Average throughput: 38.28 Mbit/s

95th percentile per-packet one-way delay: 113.394 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-02 00:14:56

End at: 2018-01-02 00:15:26

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.00 Mbit/s

95th percentile per-packet one-way delay: 114.291 ms

Loss rate: 0.28%

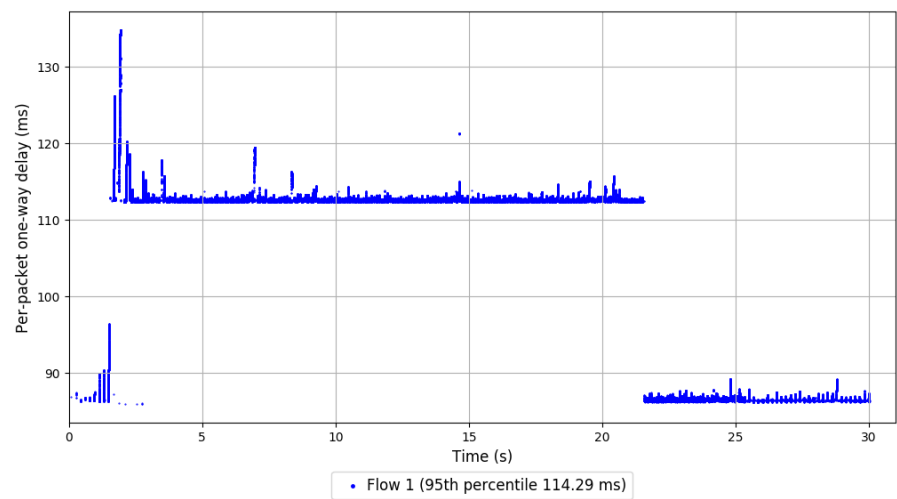
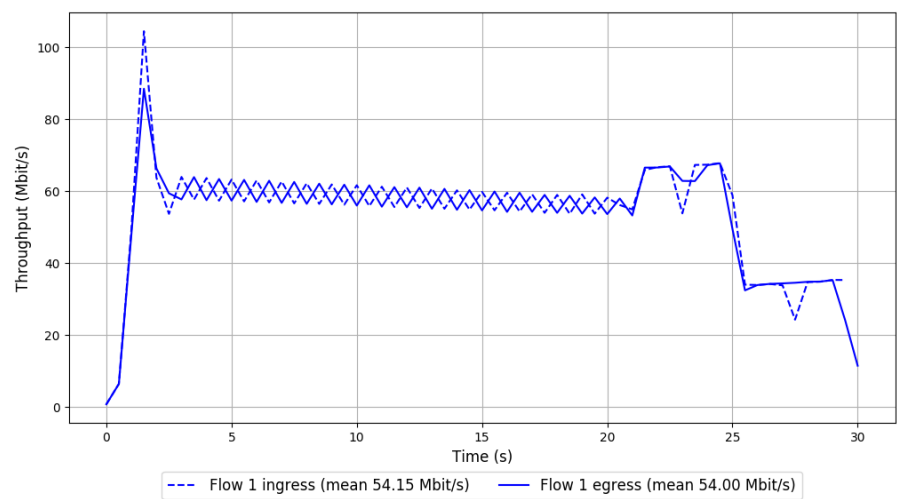
-- Flow 1:

Average throughput: 54.00 Mbit/s

95th percentile per-packet one-way delay: 114.291 ms

Loss rate: 0.28%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-02 00:26:33

End at: 2018-01-02 00:27:03

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.31 Mbit/s

95th percentile per-packet one-way delay: 88.057 ms

Loss rate: 1.04%

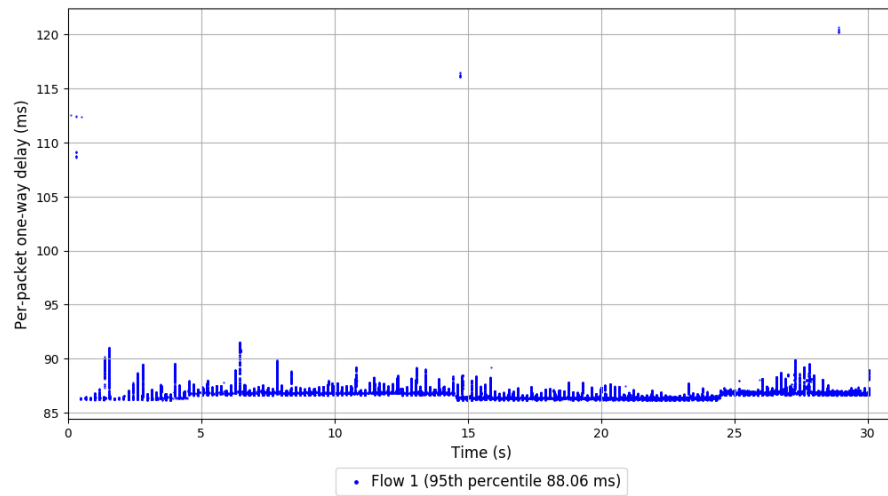
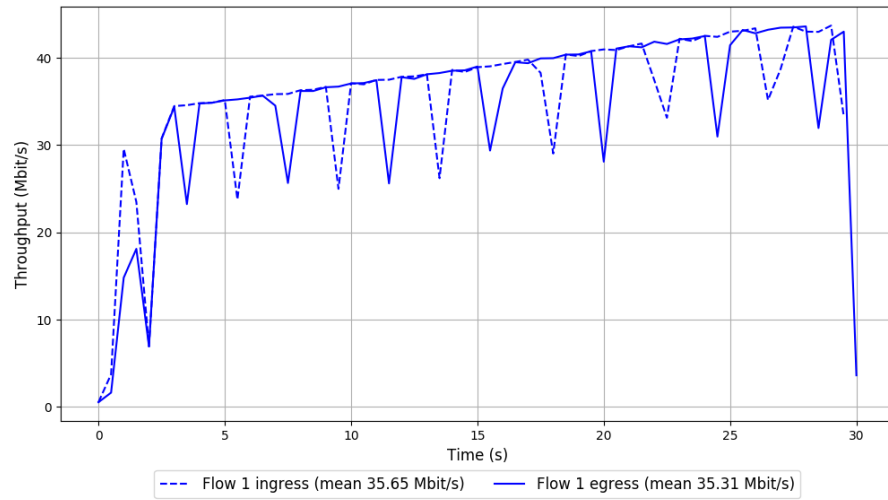
-- Flow 1:

Average throughput: 35.31 Mbit/s

95th percentile per-packet one-way delay: 88.057 ms

Loss rate: 1.04%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-02 00:38:39

End at: 2018-01-02 00:39:09

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.90 Mbit/s

95th percentile per-packet one-way delay: 116.101 ms

Loss rate: 0.53%

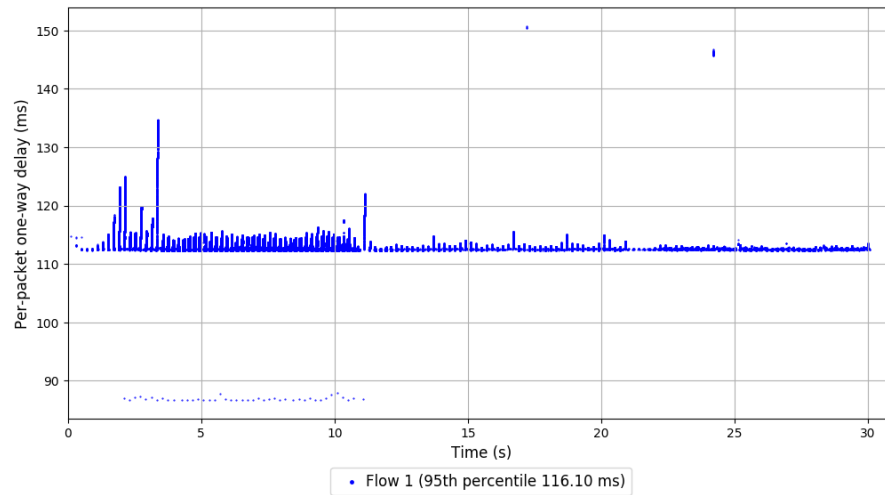
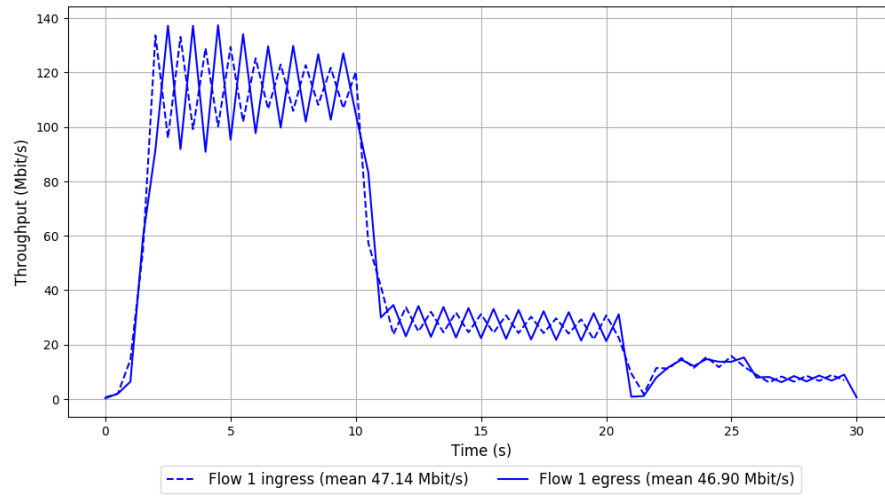
-- Flow 1:

Average throughput: 46.90 Mbit/s

95th percentile per-packet one-way delay: 116.101 ms

Loss rate: 0.53%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-02 00:50:39

End at: 2018-01-02 00:51:09

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.17 Mbit/s

95th percentile per-packet one-way delay: 92.582 ms

Loss rate: 0.78%

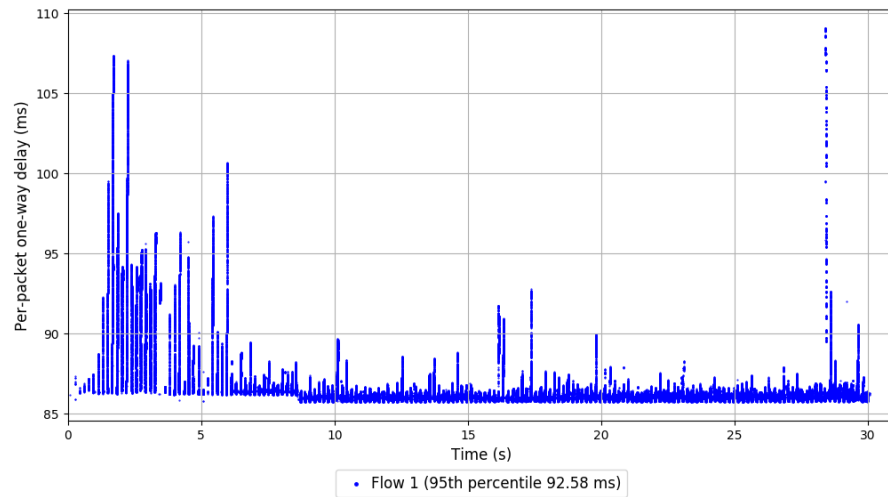
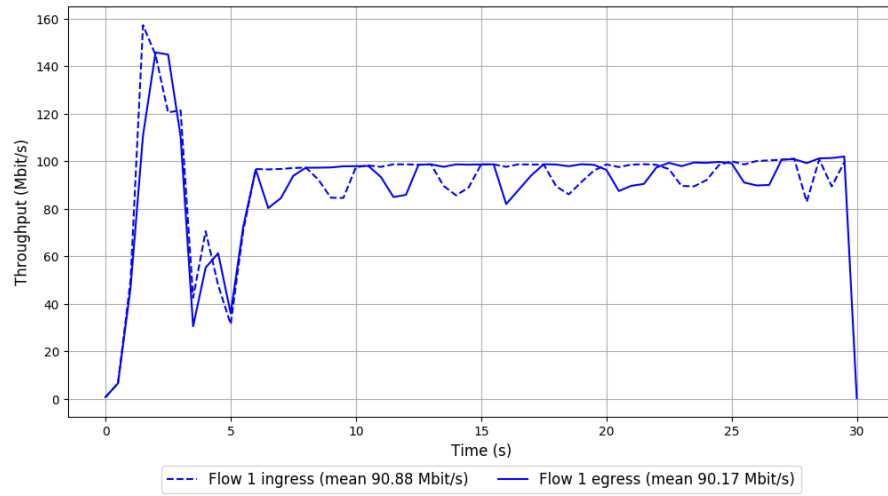
-- Flow 1:

Average throughput: 90.17 Mbit/s

95th percentile per-packet one-way delay: 92.582 ms

Loss rate: 0.78%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

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

End at: 2018-01-02 01:03:20

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.53 Mbit/s

95th percentile per-packet one-way delay: 87.153 ms

Loss rate: 0.00%

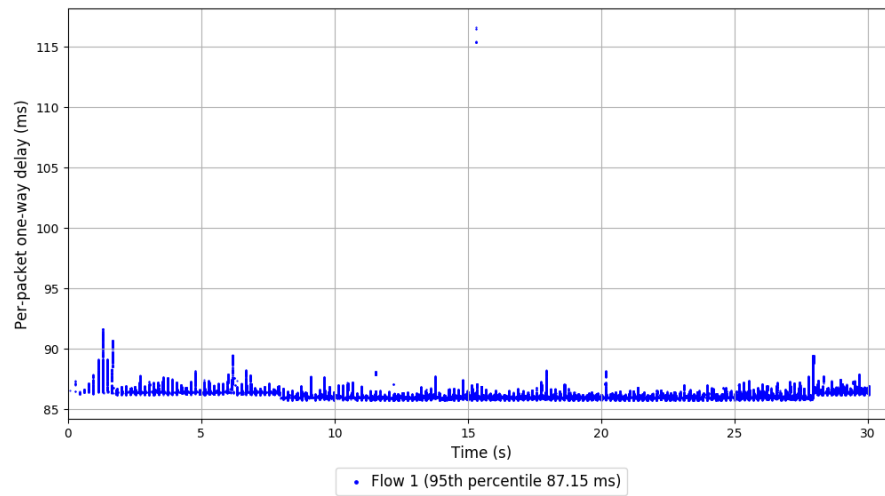
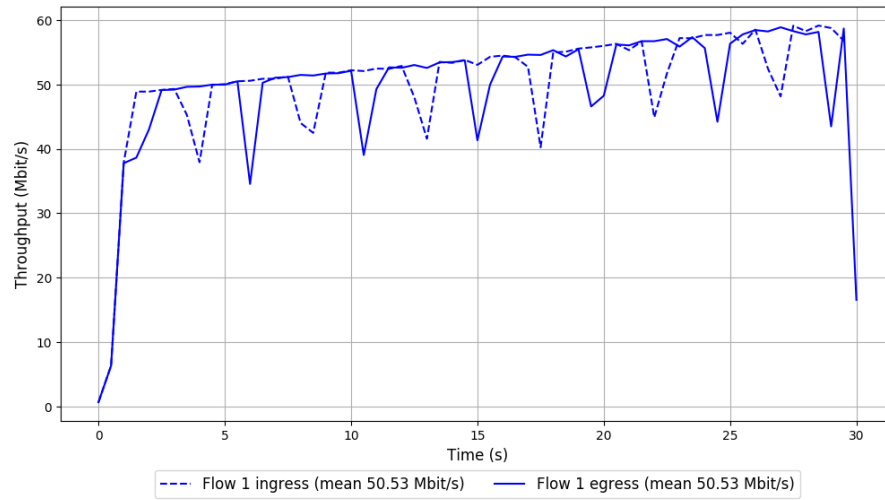
-- Flow 1:

Average throughput: 50.53 Mbit/s

95th percentile per-packet one-way delay: 87.153 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-02 01:15:02

End at: 2018-01-02 01:15:32

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.64 Mbit/s

95th percentile per-packet one-way delay: 87.668 ms

Loss rate: 0.00%

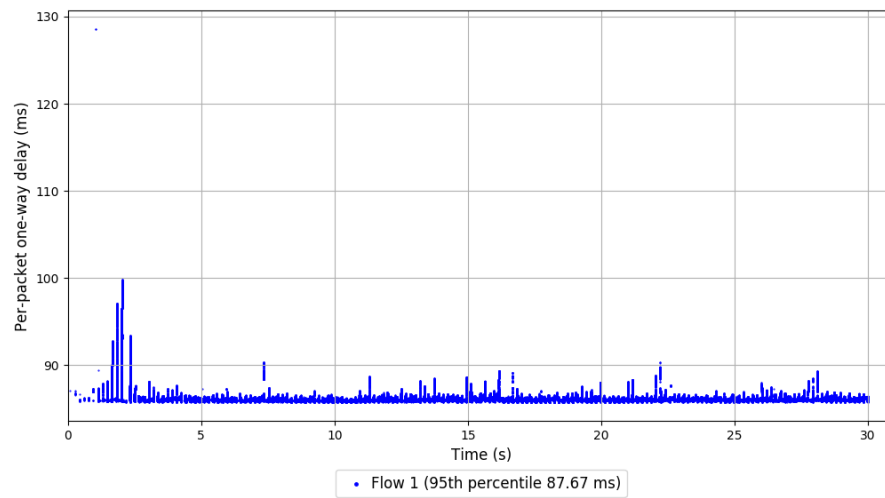
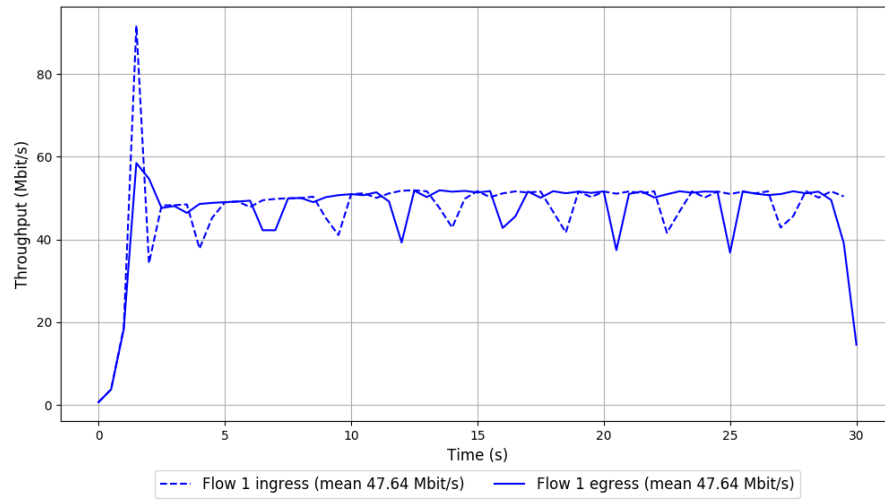
-- Flow 1:

Average throughput: 47.64 Mbit/s

95th percentile per-packet one-way delay: 87.668 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-02 01:26:34

End at: 2018-01-02 01:27:04

Below is generated by plot.py at 2018-01-02 02:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 115.016 ms

Loss rate: 0.00%

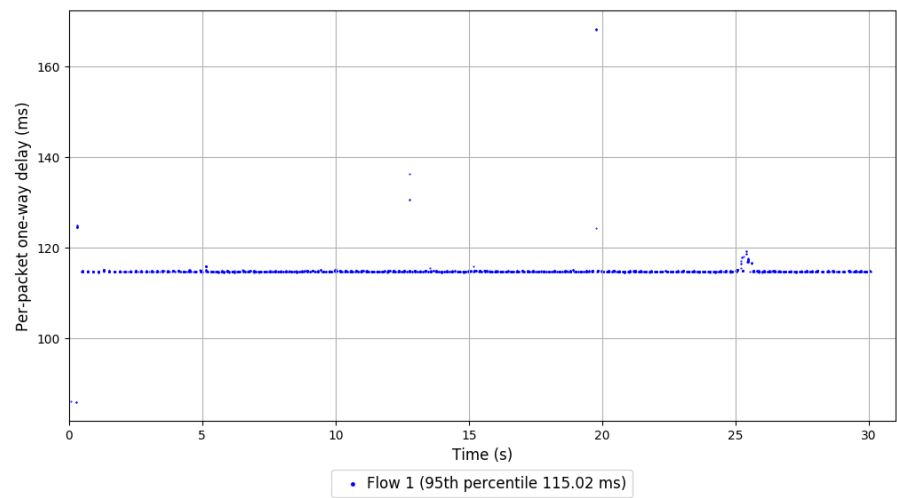
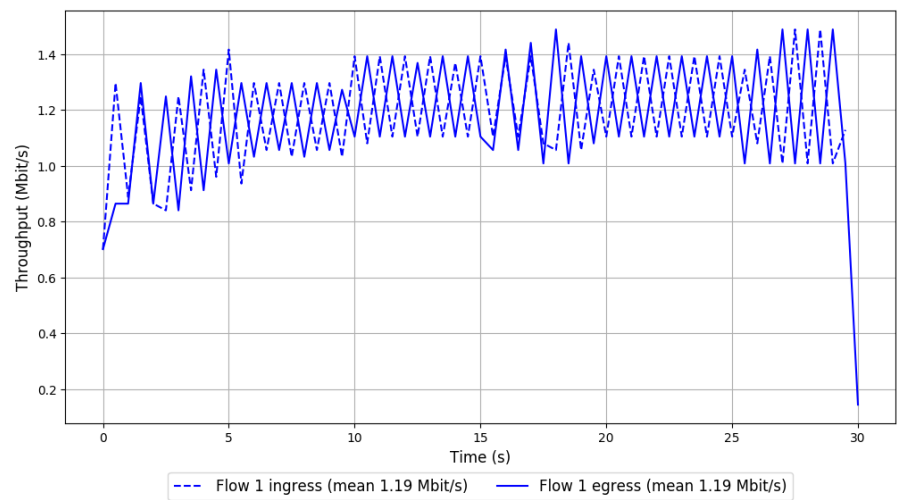
-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 115.016 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

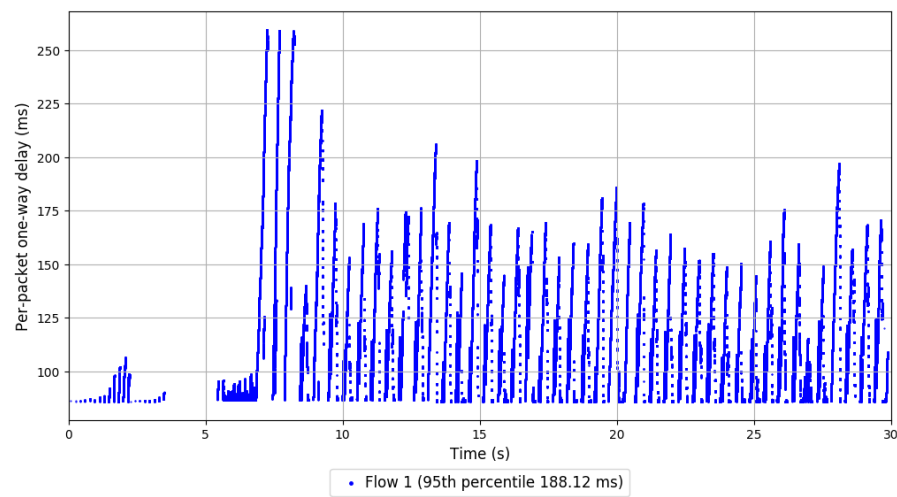
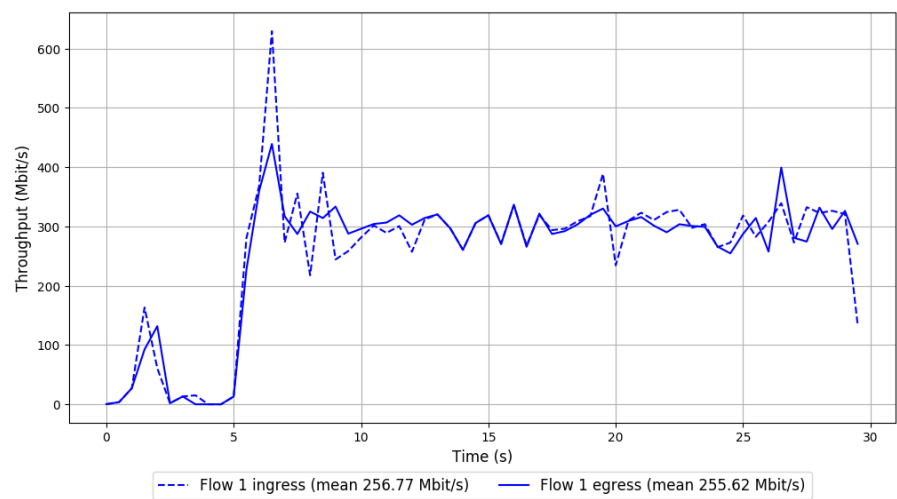


```
Run 1: Statistics of Verus

Start at: 2018-01-01 23:38:34
End at: 2018-01-01 23:39:04

# Below is generated by plot.py at 2018-01-02 02:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 255.62 Mbit/s
95th percentile per-packet one-way delay: 188.119 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 255.62 Mbit/s
95th percentile per-packet one-way delay: 188.119 ms
Loss rate: 0.40%
```

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-01 23:50:13

End at: 2018-01-01 23:50:43

Below is generated by plot.py at 2018-01-02 02:57:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.74 Mbit/s

95th percentile per-packet one-way delay: 138.945 ms

Loss rate: 1.73%

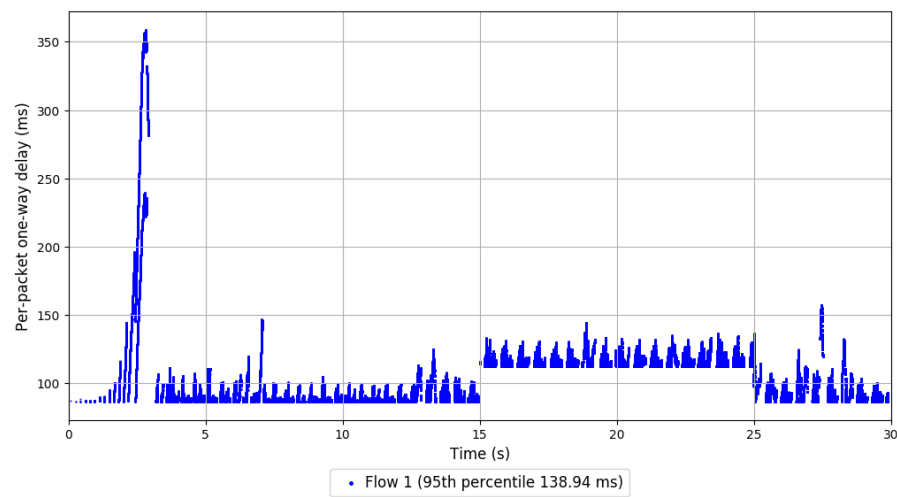
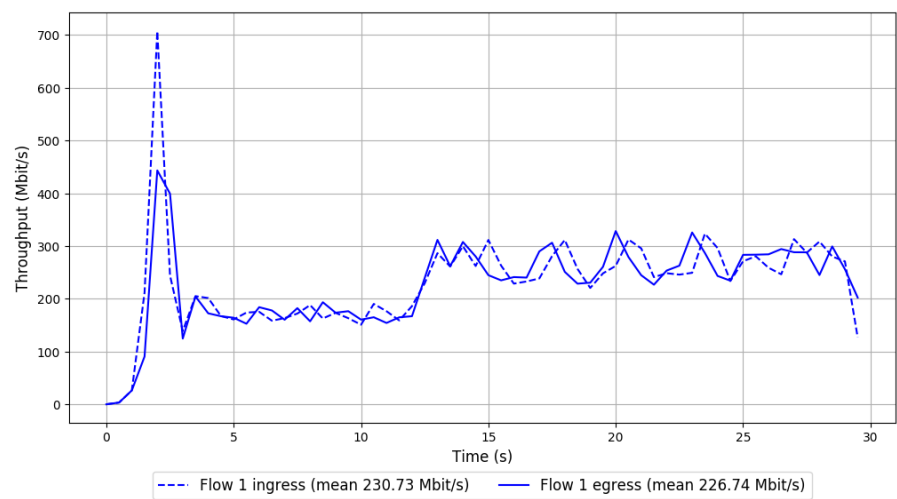
-- Flow 1:

Average throughput: 226.74 Mbit/s

95th percentile per-packet one-way delay: 138.945 ms

Loss rate: 1.73%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-02 00:01:42

End at: 2018-01-02 00:02:12

Below is generated by plot.py at 2018-01-02 02:57:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.57 Mbit/s

95th percentile per-packet one-way delay: 148.413 ms

Loss rate: 0.18%

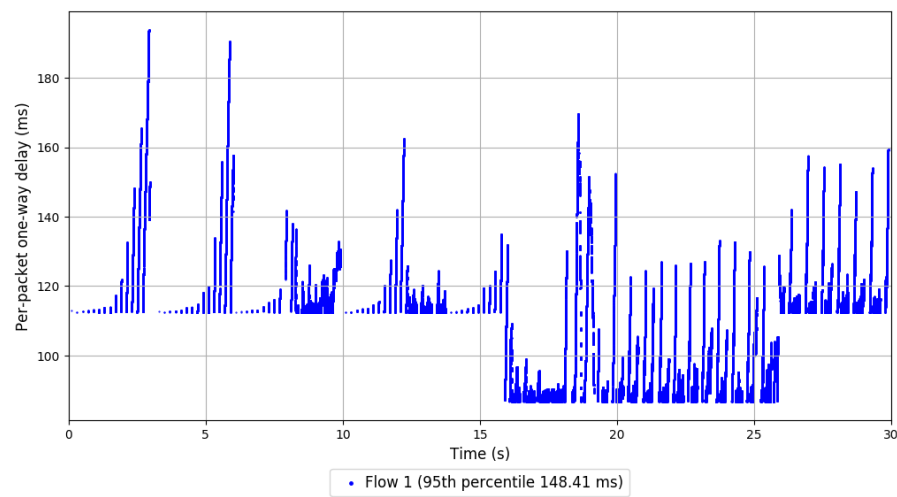
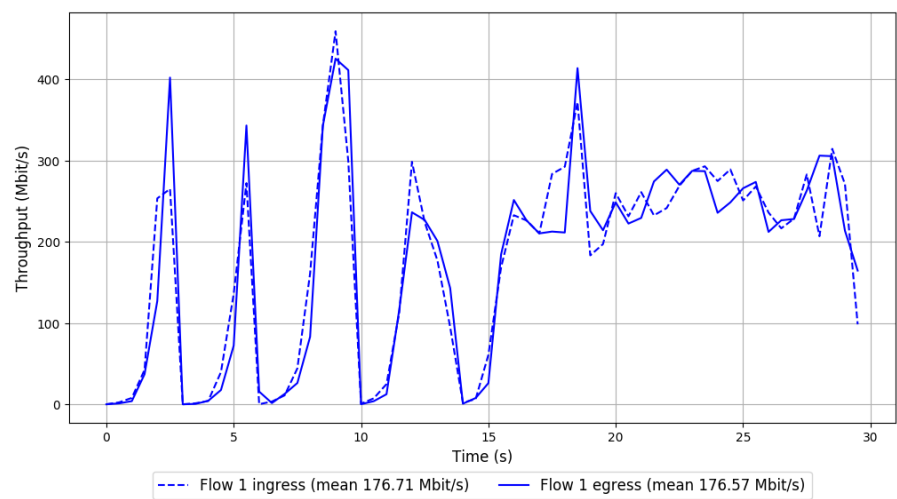
-- Flow 1:

Average throughput: 176.57 Mbit/s

95th percentile per-packet one-way delay: 148.413 ms

Loss rate: 0.18%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

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

End at: 2018-01-02 00:13:32

Below is generated by plot.py at 2018-01-02 02:59:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 301.43 Mbit/s

95th percentile per-packet one-way delay: 336.156 ms

Loss rate: 22.50%

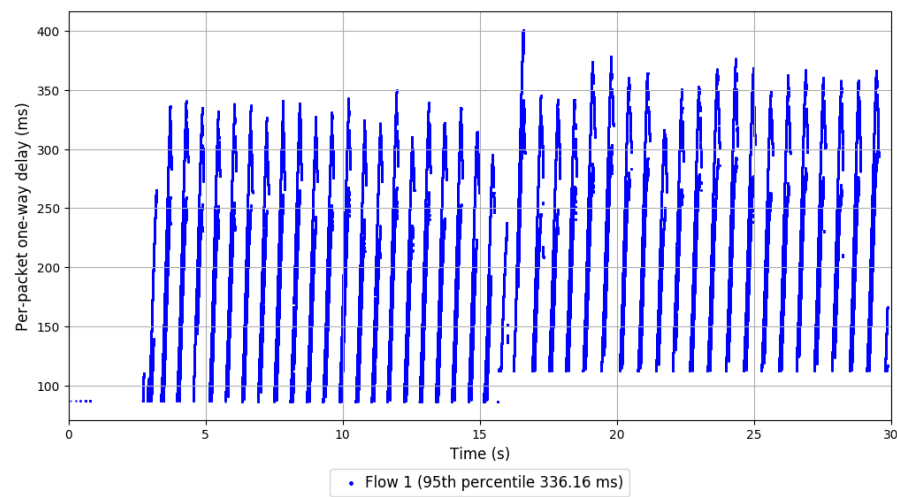
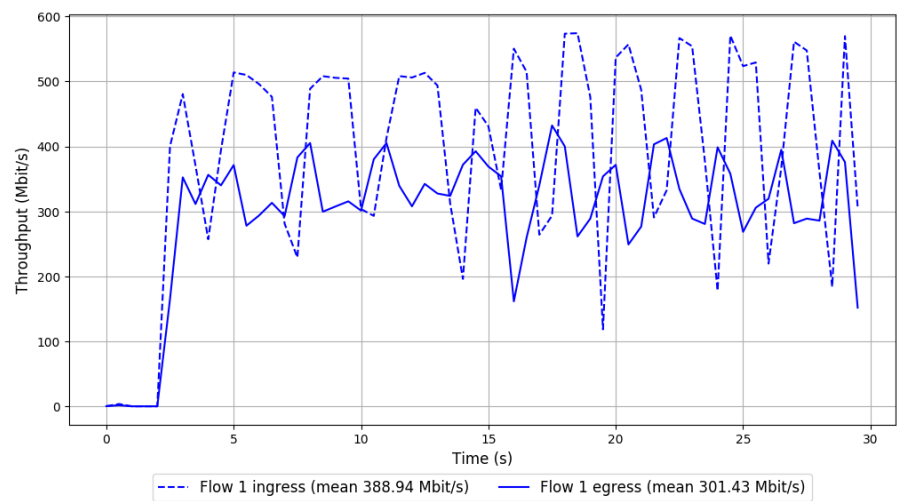
-- Flow 1:

Average throughput: 301.43 Mbit/s

95th percentile per-packet one-way delay: 336.156 ms

Loss rate: 22.50%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-02 00:24:52

End at: 2018-01-02 00:25:22

Below is generated by plot.py at 2018-01-02 02:59:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.34 Mbit/s

95th percentile per-packet one-way delay: 240.538 ms

Loss rate: 2.32%

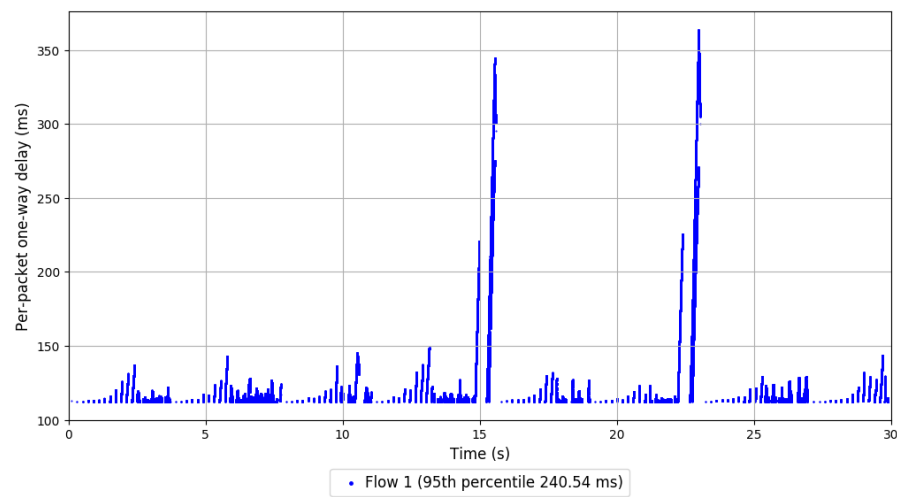
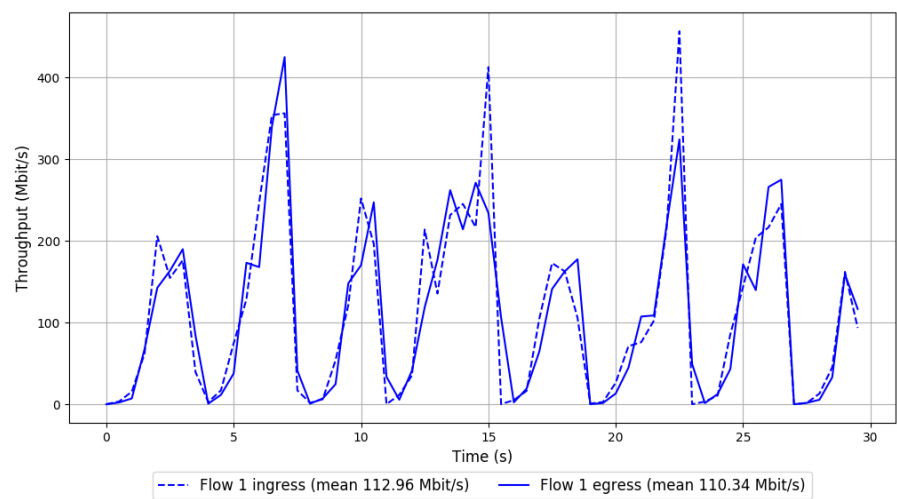
-- Flow 1:

Average throughput: 110.34 Mbit/s

95th percentile per-packet one-way delay: 240.538 ms

Loss rate: 2.32%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-02 00:36:54

End at: 2018-01-02 00:37:24

Below is generated by plot.py at 2018-01-02 02:59:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.71 Mbit/s

95th percentile per-packet one-way delay: 164.025 ms

Loss rate: 0.37%

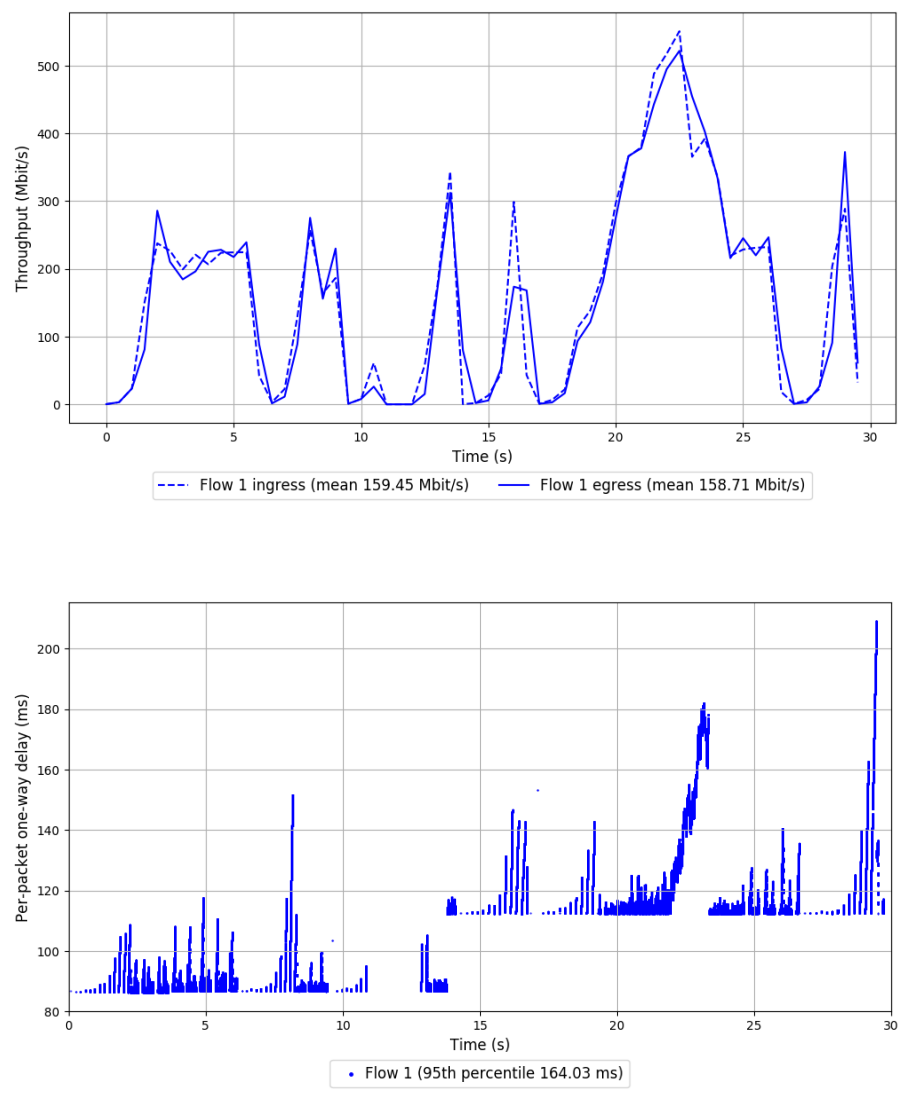
-- Flow 1:

Average throughput: 158.71 Mbit/s

95th percentile per-packet one-way delay: 164.025 ms

Loss rate: 0.37%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-02 00:48:53

End at: 2018-01-02 00:49:23

Below is generated by plot.py at 2018-01-02 02:59:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.62 Mbit/s

95th percentile per-packet one-way delay: 185.198 ms

Loss rate: 0.93%

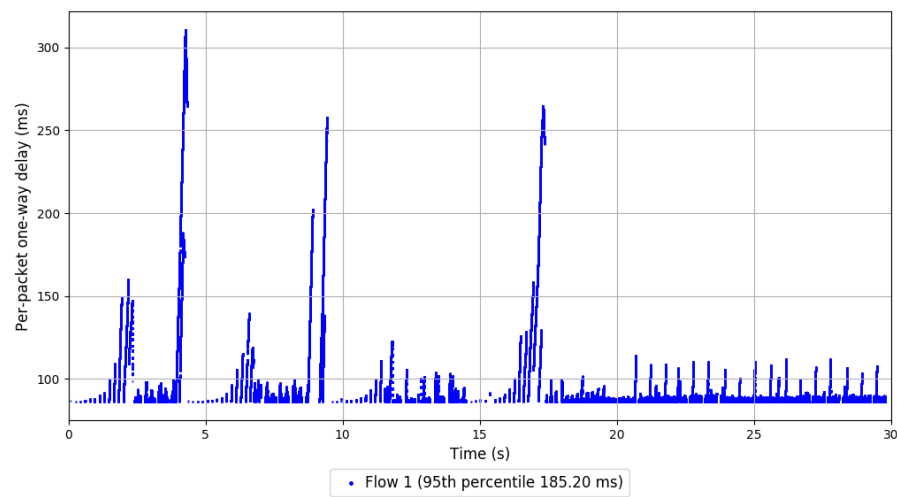
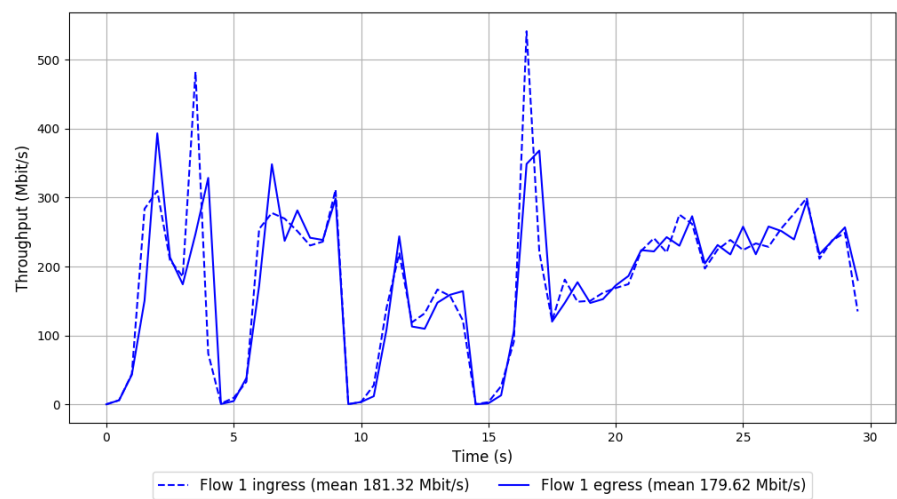
-- Flow 1:

Average throughput: 179.62 Mbit/s

95th percentile per-packet one-way delay: 185.198 ms

Loss rate: 0.93%

Run 7: Report of Verus — Data Link

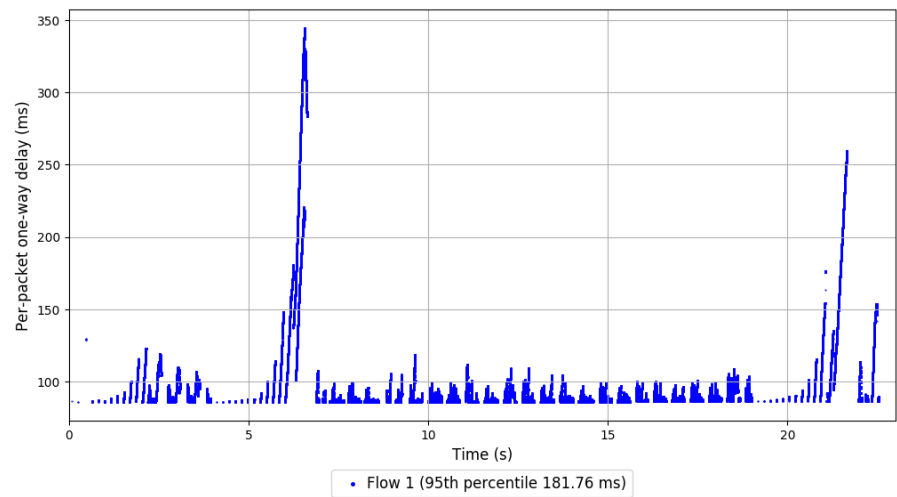
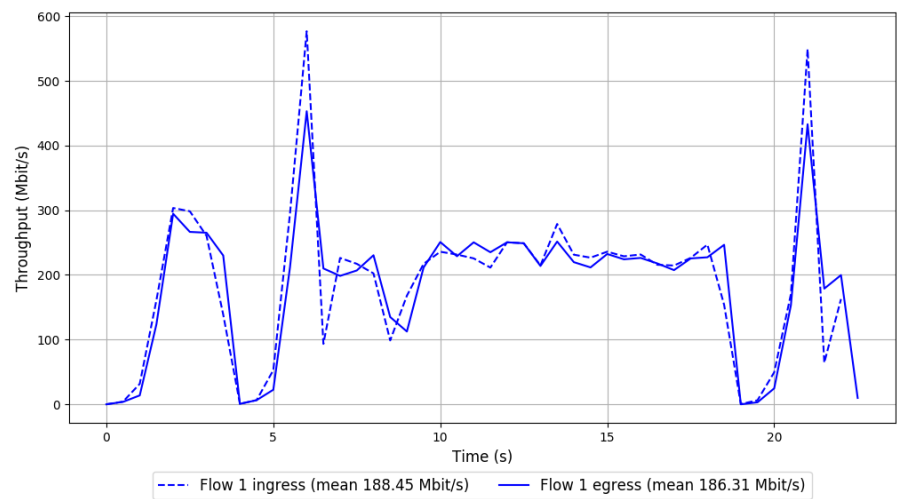


Run 8: Statistics of Verus

Start at: 2018-01-02 01:01:05

End at: 2018-01-02 01:01:35

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-02 01:13:14

End at: 2018-01-02 01:13:44

Below is generated by plot.py at 2018-01-02 02:59:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.81 Mbit/s

95th percentile per-packet one-way delay: 138.820 ms

Loss rate: 0.42%

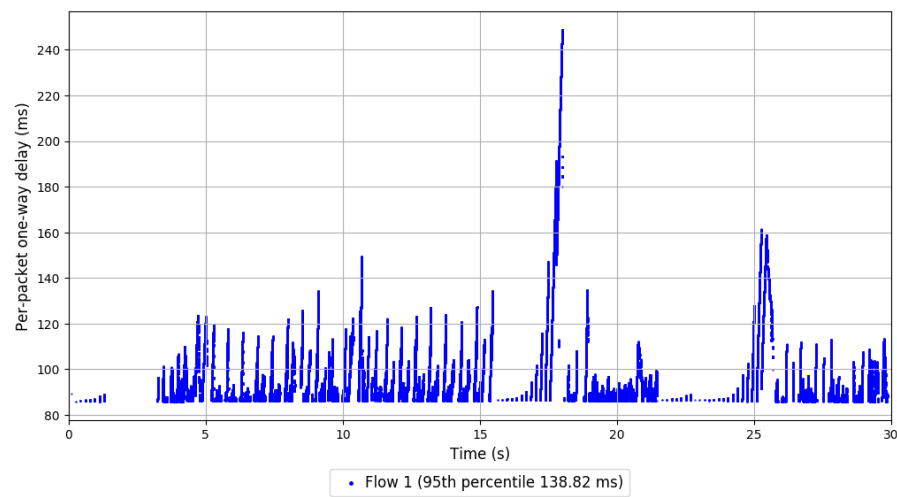
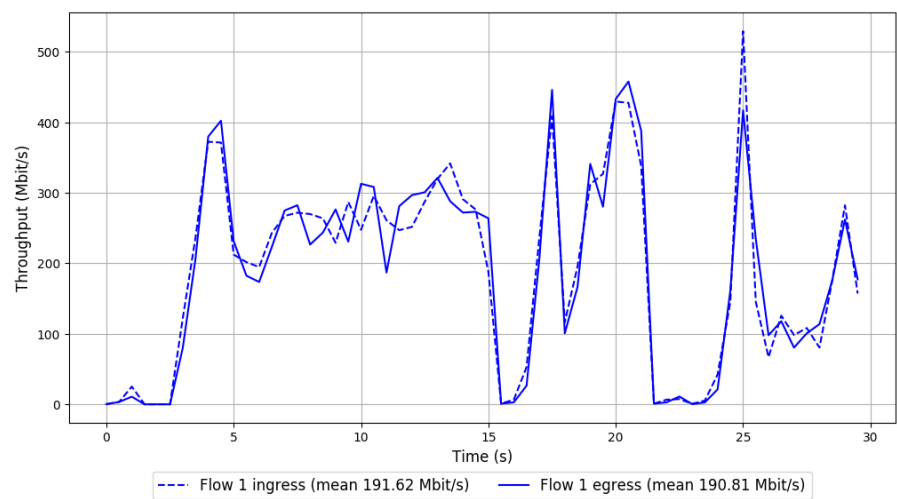
-- Flow 1:

Average throughput: 190.81 Mbit/s

95th percentile per-packet one-way delay: 138.820 ms

Loss rate: 0.42%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-02 01:24:46

End at: 2018-01-02 01:25:16

Below is generated by plot.py at 2018-01-02 03:00:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.98 Mbit/s

95th percentile per-packet one-way delay: 161.672 ms

Loss rate: 1.82%

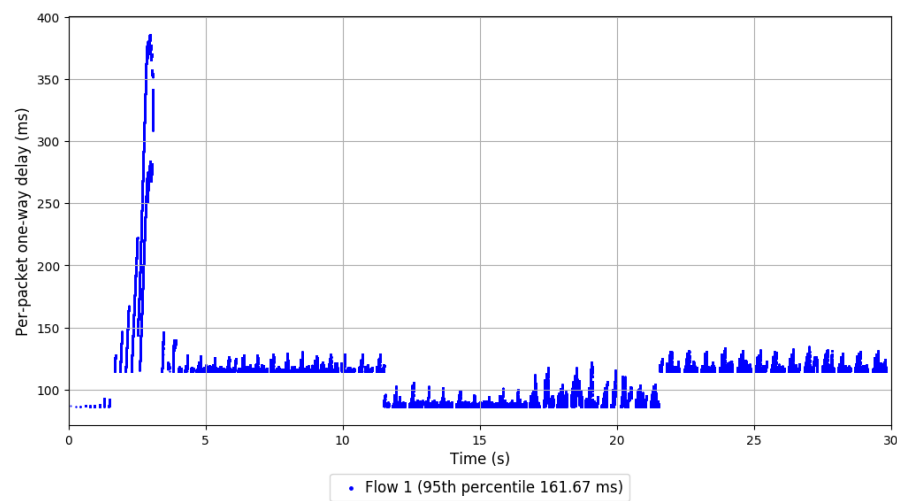
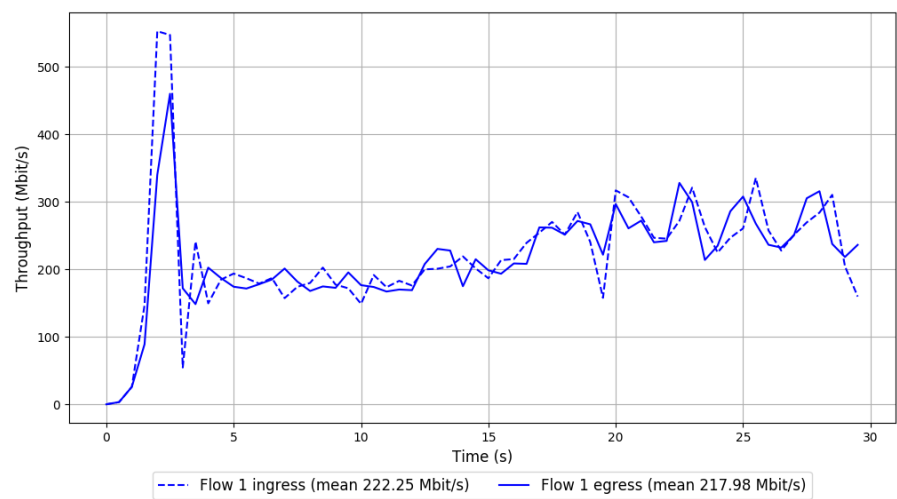
-- Flow 1:

Average throughput: 217.98 Mbit/s

95th percentile per-packet one-way delay: 161.672 ms

Loss rate: 1.82%

Run 10: Report of Verus — Data Link

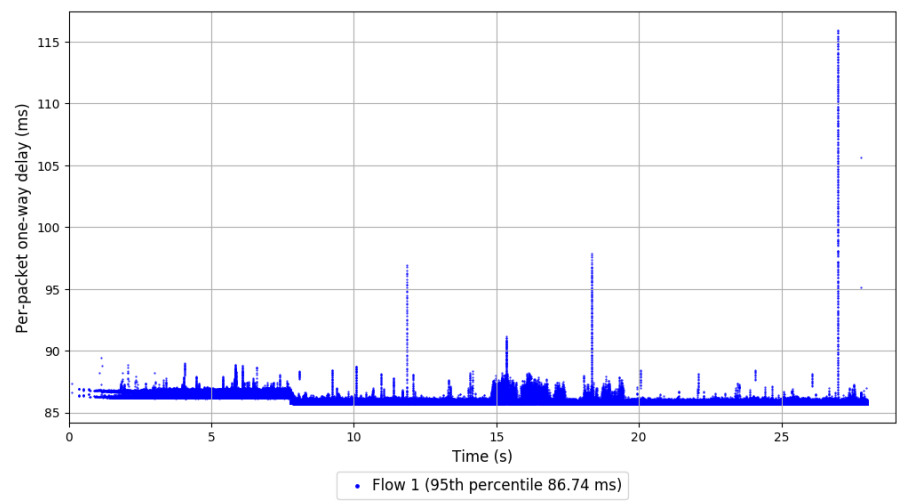
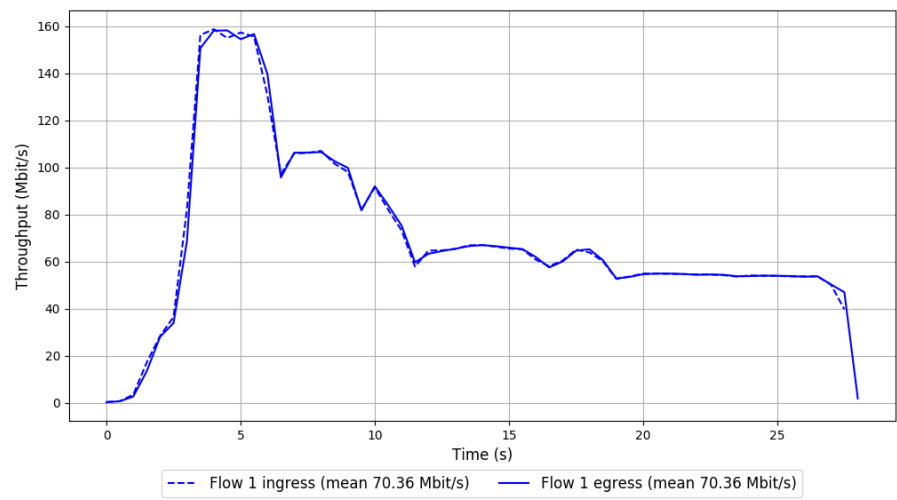


```
Run 1: Statistics of Copa

Start at: 2018-01-01 23:37:48
End at: 2018-01-01 23:38:18

# Below is generated by plot.py at 2018-01-02 03:00:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.36 Mbit/s
95th percentile per-packet one-way delay: 86.743 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.36 Mbit/s
95th percentile per-packet one-way delay: 86.743 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-01 23:49:30

End at: 2018-01-01 23:50:00

Below is generated by plot.py at 2018-01-02 03:00:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.67 Mbit/s

95th percentile per-packet one-way delay: 114.000 ms

Loss rate: 0.00%

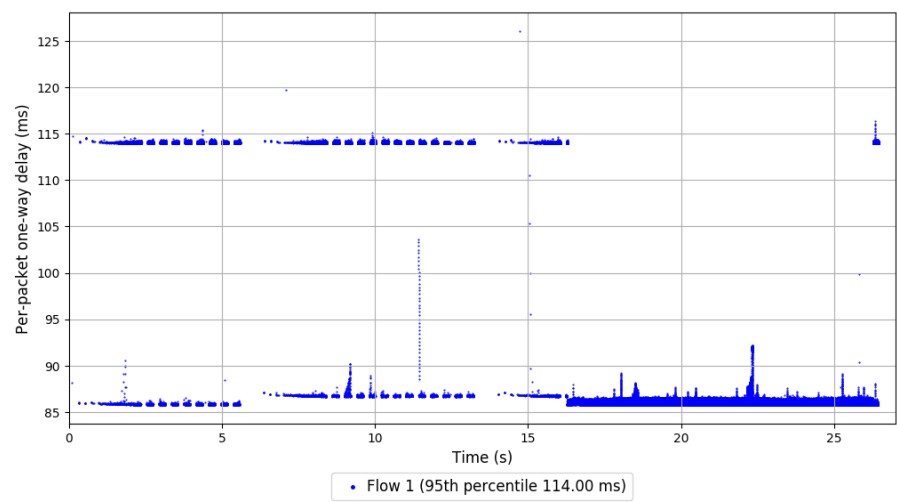
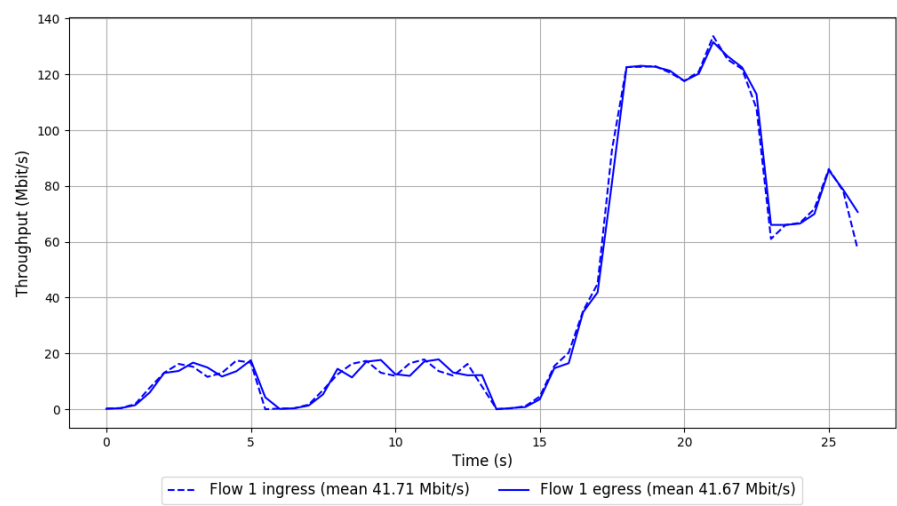
-- Flow 1:

Average throughput: 41.67 Mbit/s

95th percentile per-packet one-way delay: 114.000 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-02 00:00:58

End at: 2018-01-02 00:01:28

Below is generated by plot.py at 2018-01-02 03:00:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.58 Mbit/s

95th percentile per-packet one-way delay: 112.362 ms

Loss rate: 0.00%

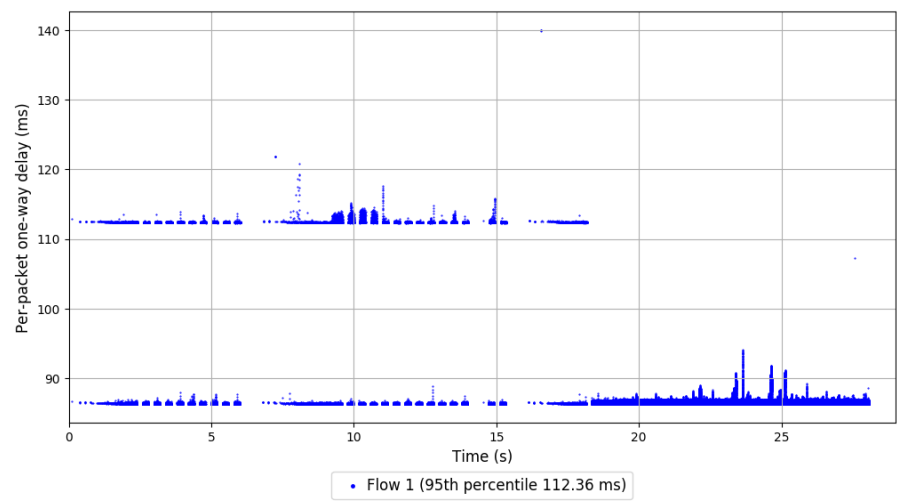
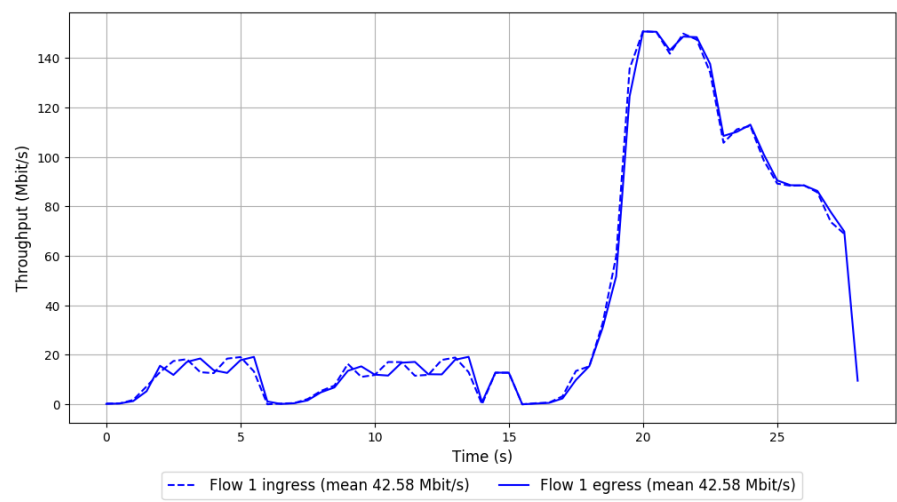
-- Flow 1:

Average throughput: 42.58 Mbit/s

95th percentile per-packet one-way delay: 112.362 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-02 00:12:19

End at: 2018-01-02 00:12:49

Below is generated by plot.py at 2018-01-02 03:00:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.32 Mbit/s

95th percentile per-packet one-way delay: 112.392 ms

Loss rate: 0.00%

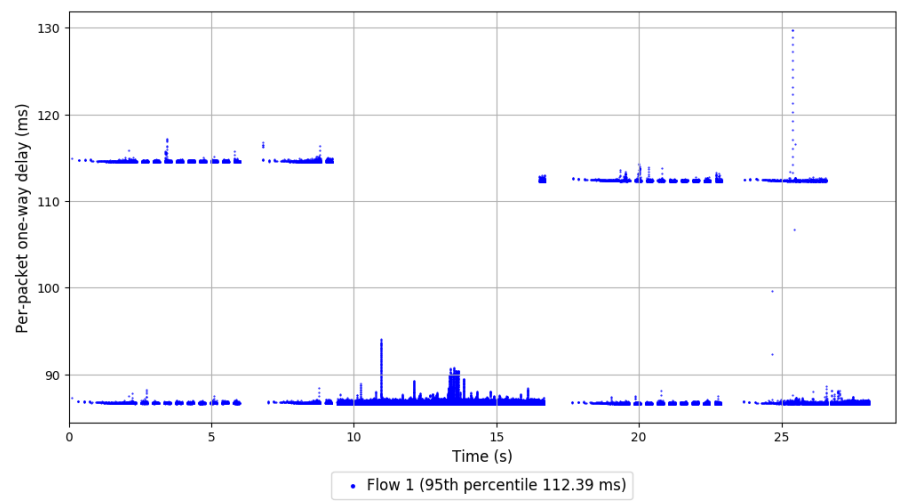
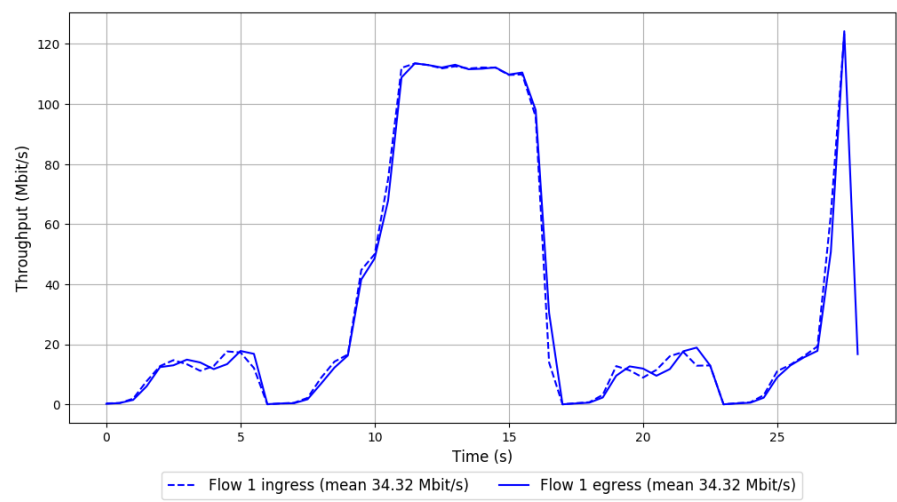
-- Flow 1:

Average throughput: 34.32 Mbit/s

95th percentile per-packet one-way delay: 112.392 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-02 00:24:12

End at: 2018-01-02 00:24:42

Below is generated by plot.py at 2018-01-02 03:00:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.80 Mbit/s

95th percentile per-packet one-way delay: 112.452 ms

Loss rate: 0.00%

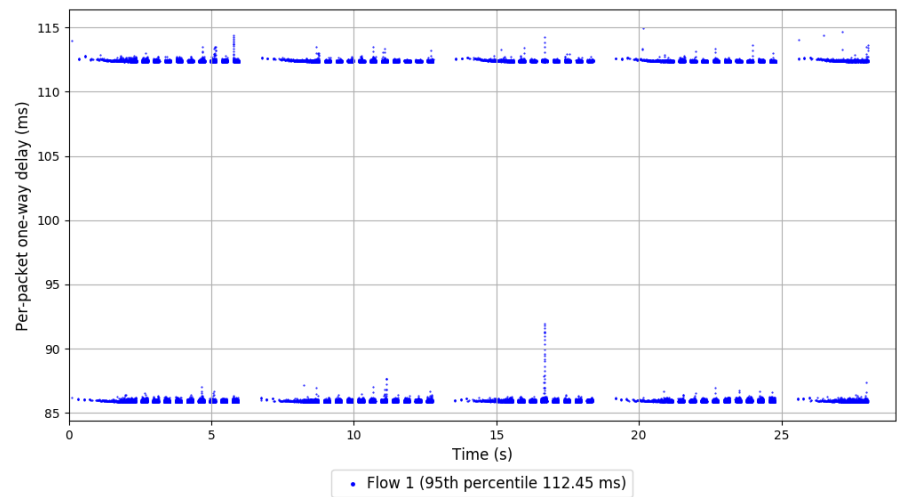
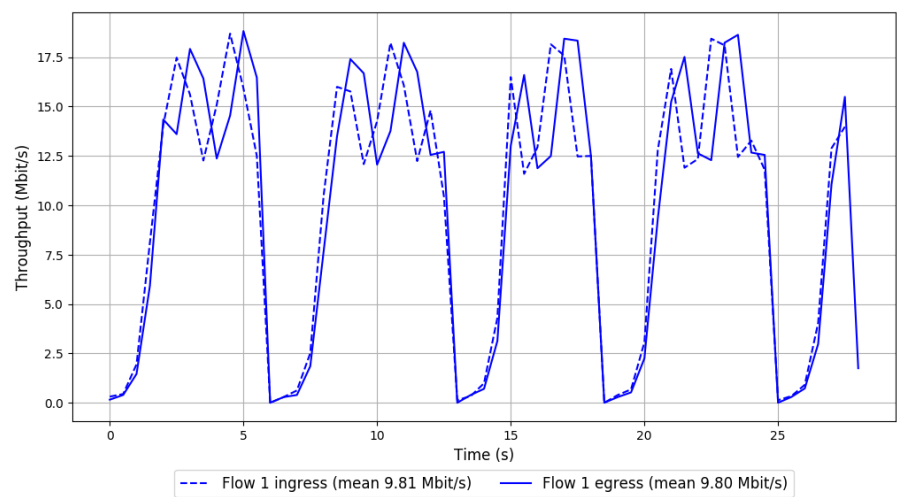
-- Flow 1:

Average throughput: 9.80 Mbit/s

95th percentile per-packet one-way delay: 112.452 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link

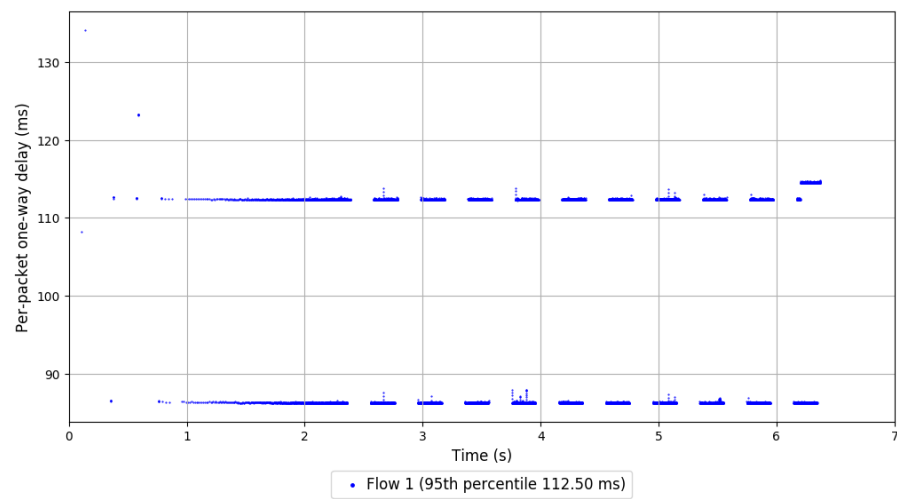
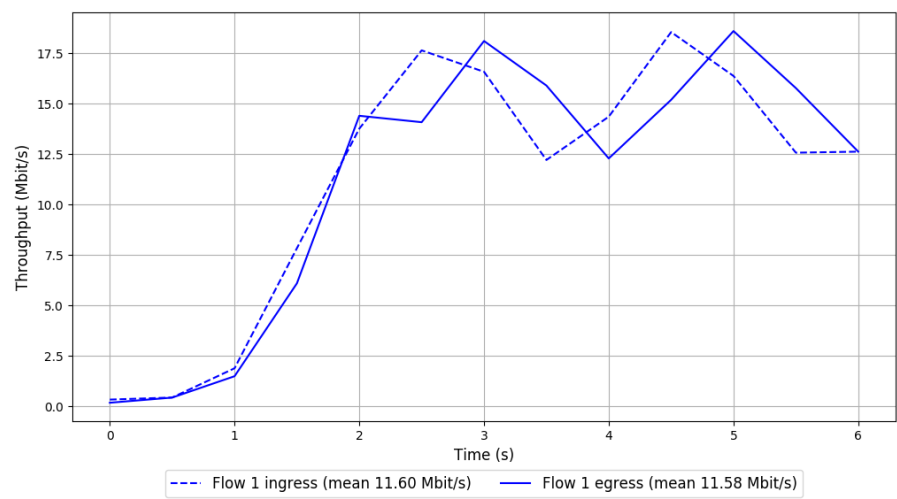


Run 6: Statistics of Copa

Start at: 2018-01-02 00:36:12

End at: 2018-01-02 00:36:42

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-02 00:48:07

End at: 2018-01-02 00:48:37

Below is generated by plot.py at 2018-01-02 03:00:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.91 Mbit/s

95th percentile per-packet one-way delay: 86.569 ms

Loss rate: 0.00%

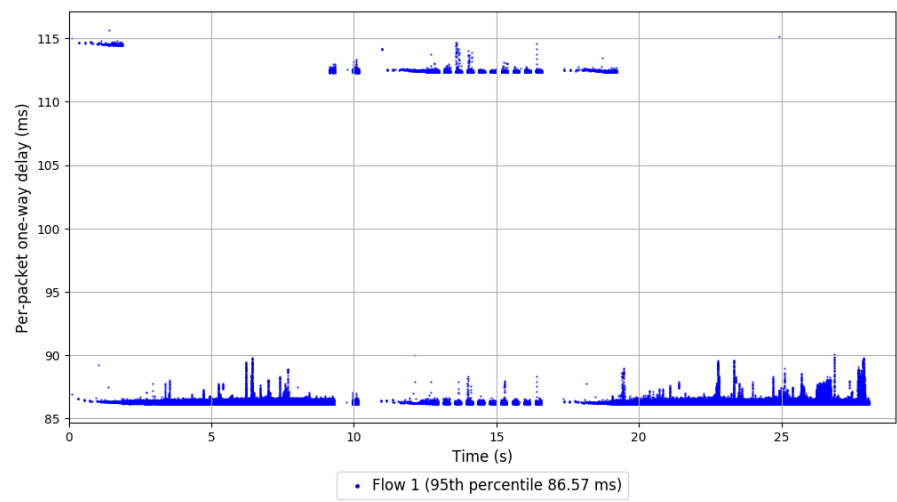
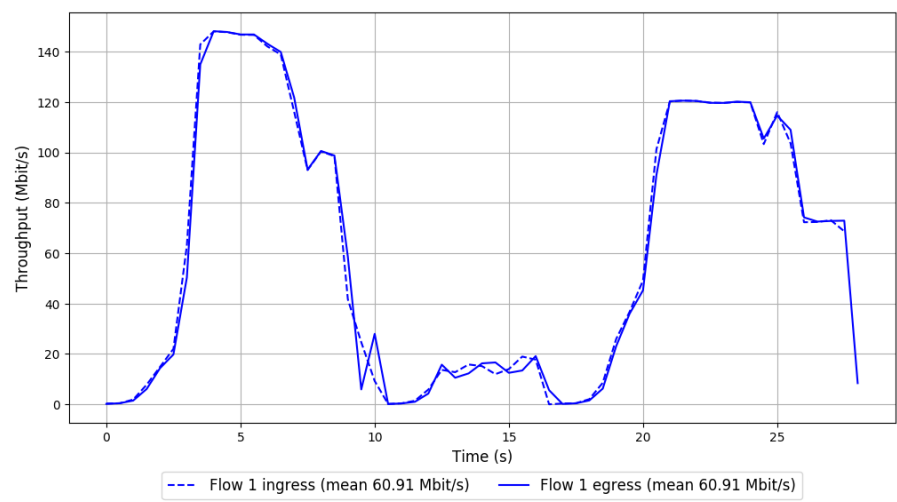
-- Flow 1:

Average throughput: 60.91 Mbit/s

95th percentile per-packet one-way delay: 86.569 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-02 01:00:17

End at: 2018-01-02 01:00:47

Below is generated by plot.py at 2018-01-02 03:00:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.23 Mbit/s

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

Loss rate: 0.00%

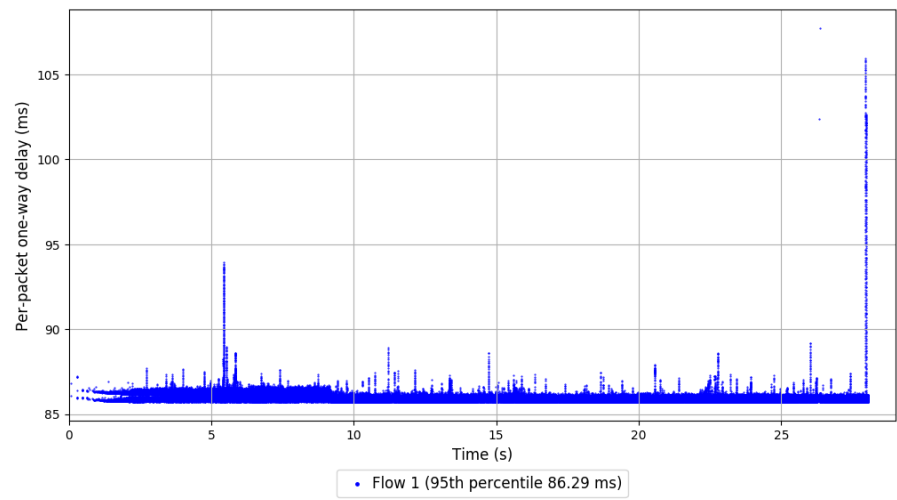
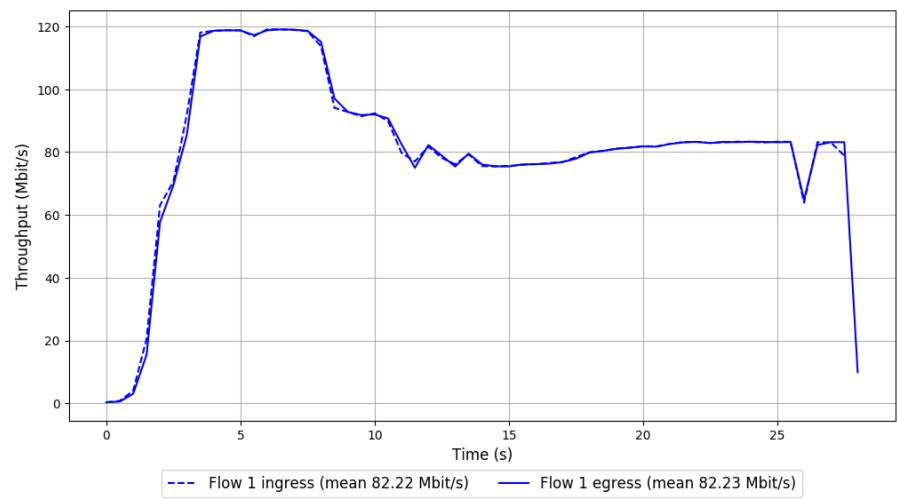
-- Flow 1:

Average throughput: 82.23 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-02 01:12:32

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

Below is generated by plot.py at 2018-01-02 03:00:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.41 Mbit/s

95th percentile per-packet one-way delay: 112.404 ms

Loss rate: 0.36%

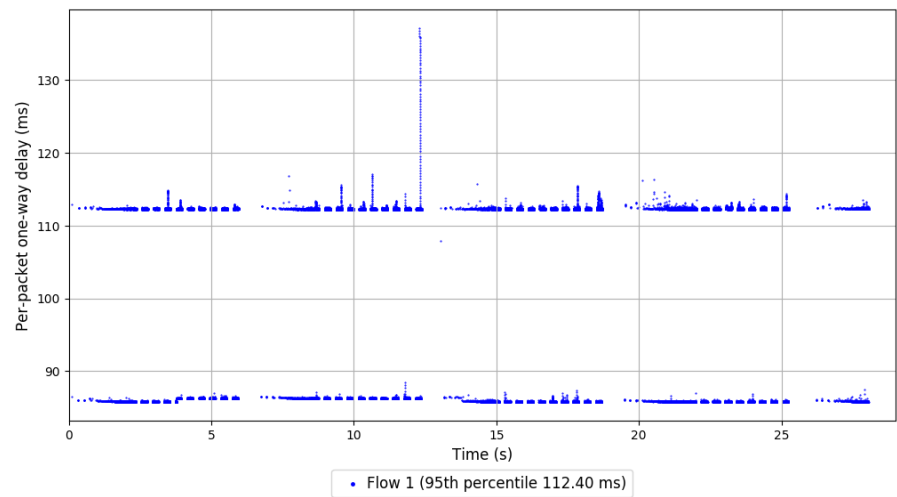
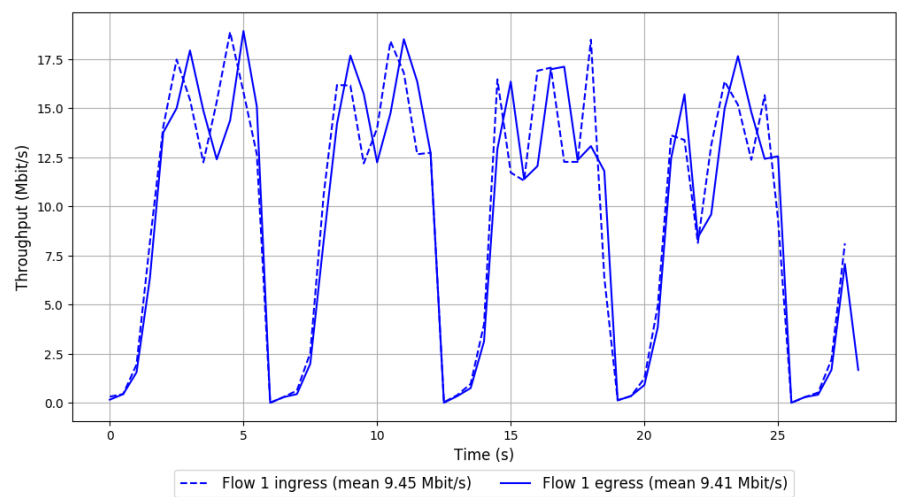
-- Flow 1:

Average throughput: 9.41 Mbit/s

95th percentile per-packet one-way delay: 112.404 ms

Loss rate: 0.36%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-02 01:24:05

End at: 2018-01-02 01:24:35

Below is generated by plot.py at 2018-01-02 03:00:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.28 Mbit/s

95th percentile per-packet one-way delay: 114.640 ms

Loss rate: 0.00%

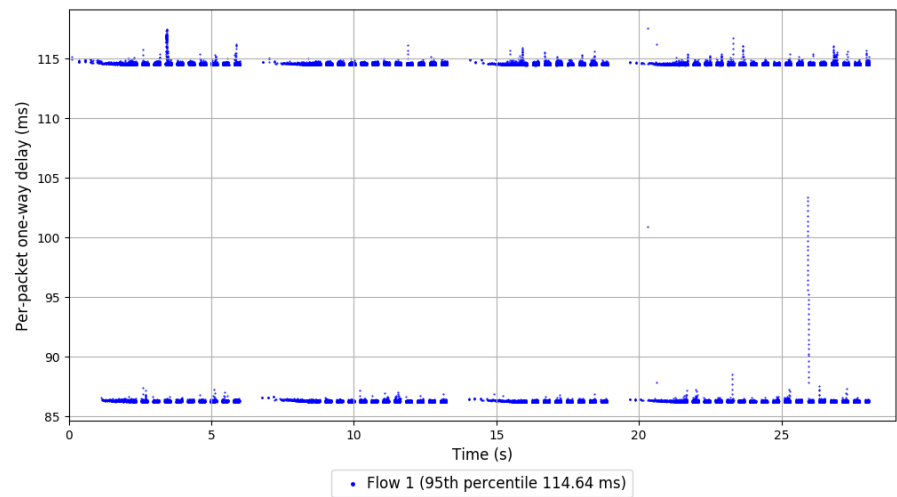
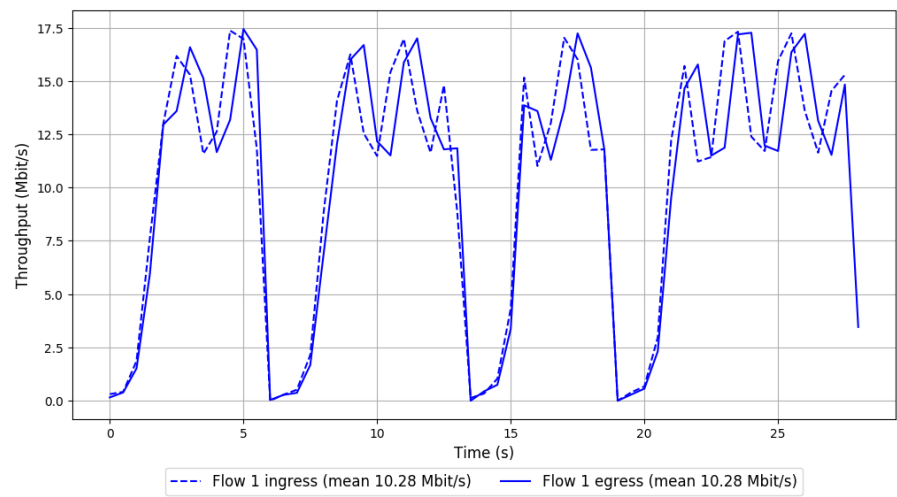
-- Flow 1:

Average throughput: 10.28 Mbit/s

95th percentile per-packet one-way delay: 114.640 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

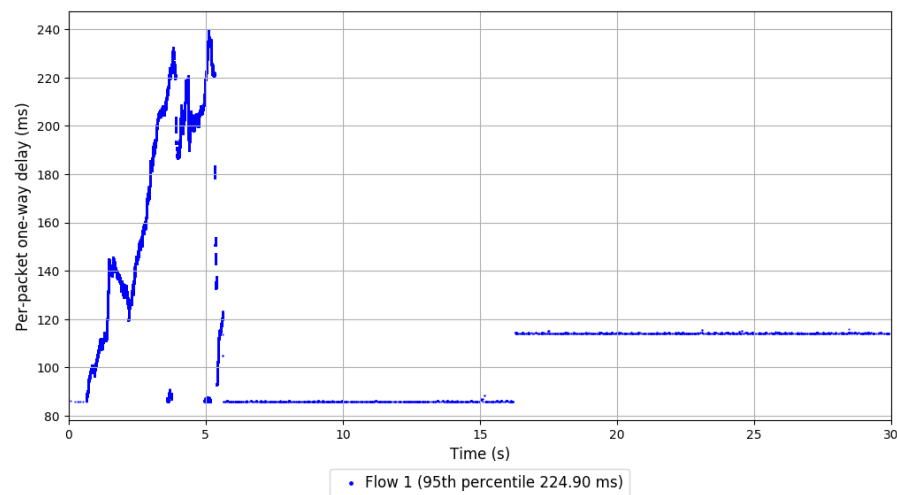
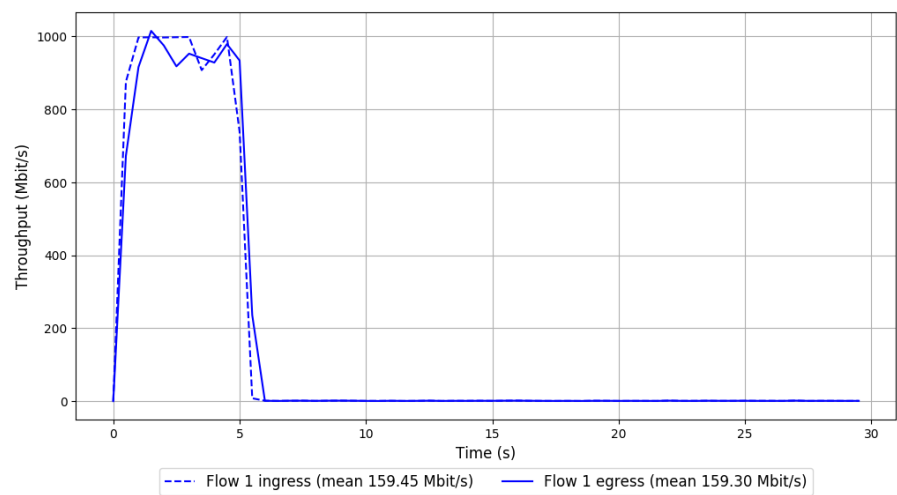


```
Run 1: Statistics of FillP

Start at: 2018-01-01 23:41:44
End at: 2018-01-01 23:42:14

# Below is generated by plot.py at 2018-01-02 03:01:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 159.30 Mbit/s
95th percentile per-packet one-way delay: 224.903 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.30 Mbit/s
95th percentile per-packet one-way delay: 224.903 ms
Loss rate: 0.00%
```

Run 1: Report of FillP — Data Link

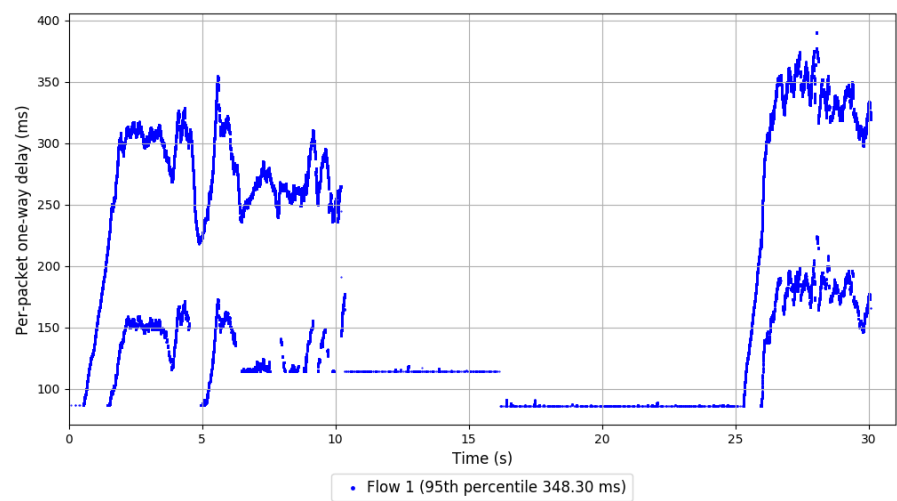
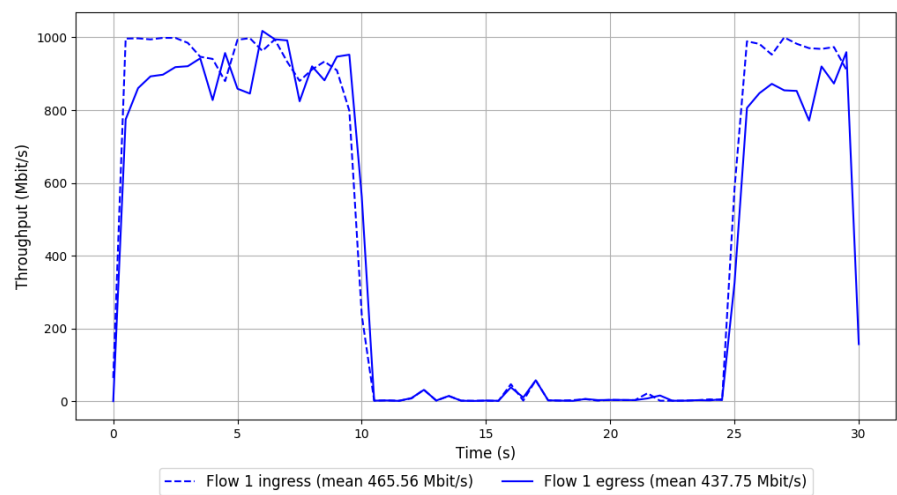


```
Run 2: Statistics of FillP

Start at: 2018-01-01 23:53:22
End at: 2018-01-01 23:53:52

# Below is generated by plot.py at 2018-01-02 03:06:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 437.75 Mbit/s
95th percentile per-packet one-way delay: 348.302 ms
Loss rate: 5.88%
-- Flow 1:
Average throughput: 437.75 Mbit/s
95th percentile per-packet one-way delay: 348.302 ms
Loss rate: 5.88%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-02 00:04:41

End at: 2018-01-02 00:05:11

Below is generated by plot.py at 2018-01-02 03:16:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 943.54 Mbit/s

95th percentile per-packet one-way delay: 303.533 ms

Loss rate: 1.16%

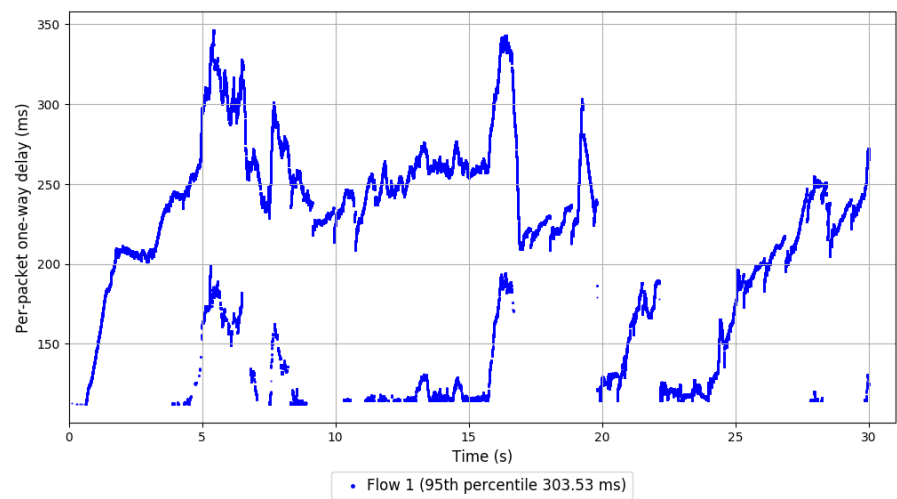
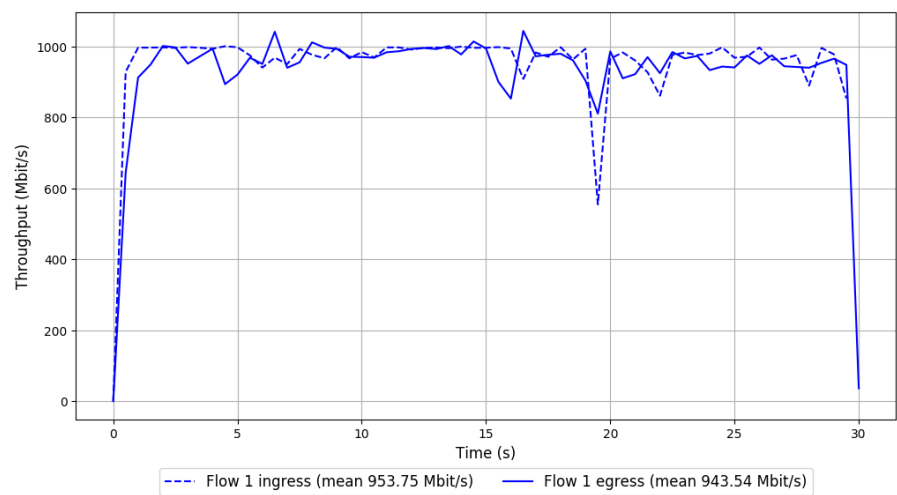
-- Flow 1:

Average throughput: 943.54 Mbit/s

95th percentile per-packet one-way delay: 303.533 ms

Loss rate: 1.16%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-02 00:16:19

End at: 2018-01-02 00:16:49

Below is generated by plot.py at 2018-01-02 03:16:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 866.58 Mbit/s

95th percentile per-packet one-way delay: 343.488 ms

Loss rate: 5.33%

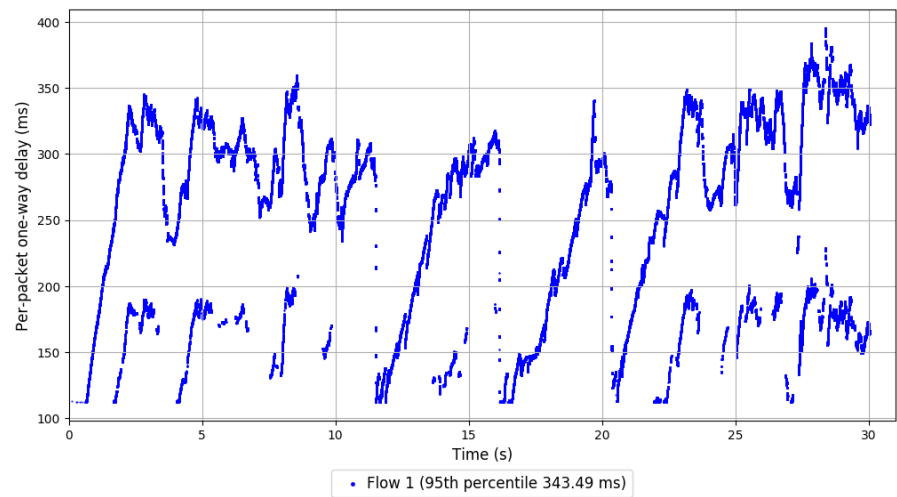
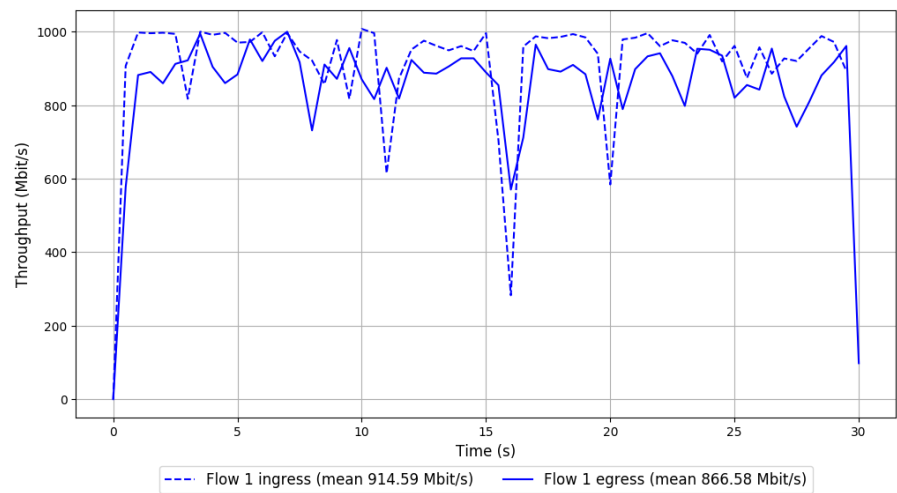
-- Flow 1:

Average throughput: 866.58 Mbit/s

95th percentile per-packet one-way delay: 343.488 ms

Loss rate: 5.33%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-02 00:27:57

End at: 2018-01-02 00:28:27

Below is generated by plot.py at 2018-01-02 03:16:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 648.60 Mbit/s

95th percentile per-packet one-way delay: 306.353 ms

Loss rate: 3.29%

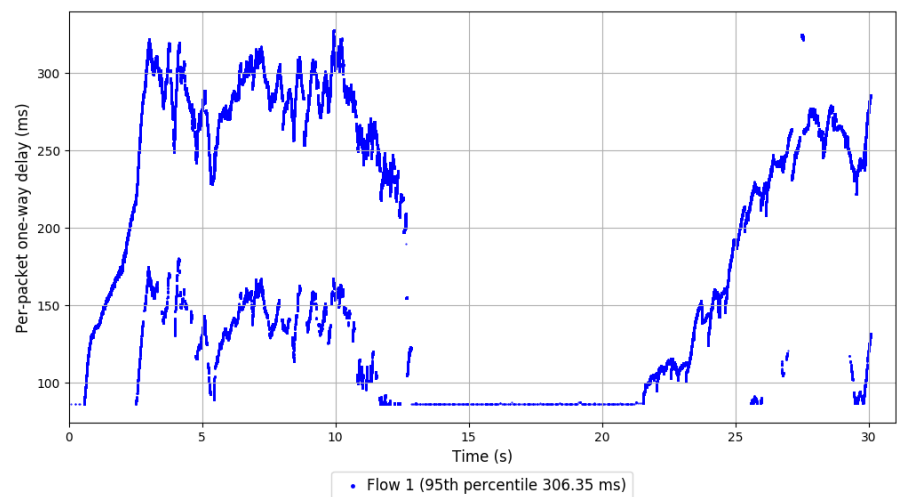
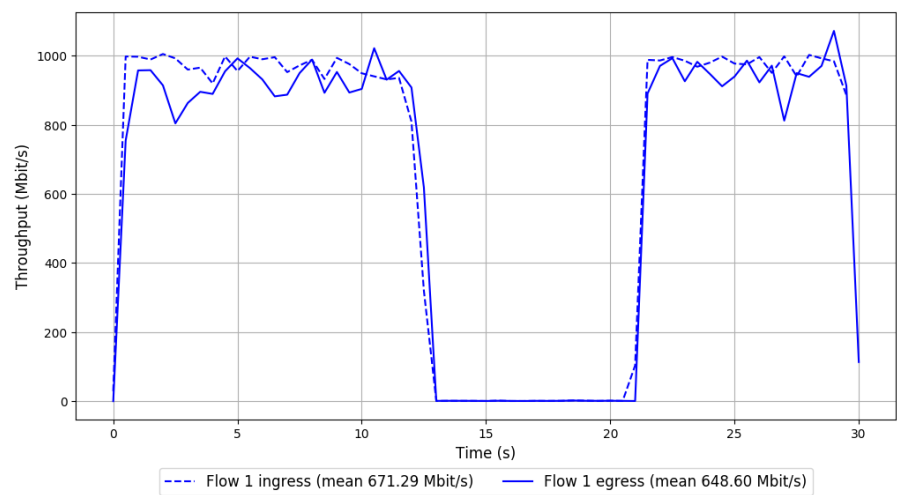
-- Flow 1:

Average throughput: 648.60 Mbit/s

95th percentile per-packet one-way delay: 306.353 ms

Loss rate: 3.29%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-02 00:40:03

End at: 2018-01-02 00:40:33

Below is generated by plot.py at 2018-01-02 03:16:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 930.16 Mbit/s

95th percentile per-packet one-way delay: 309.082 ms

Loss rate: 2.45%

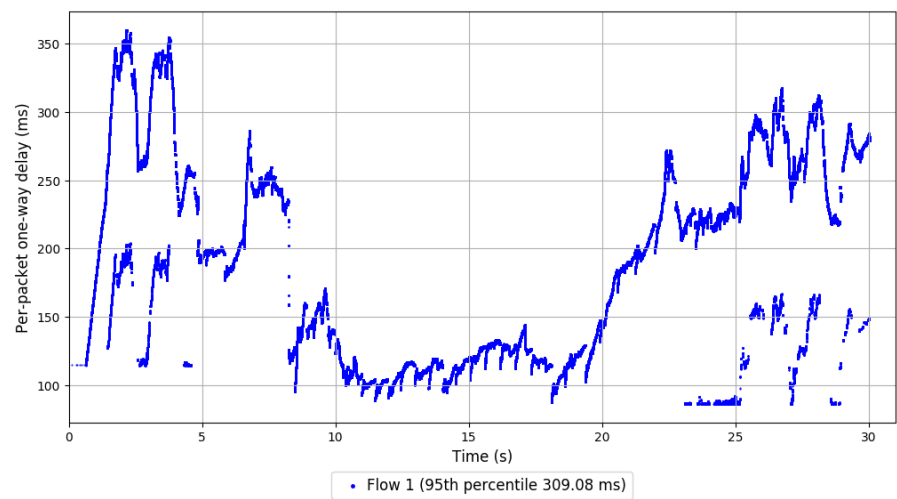
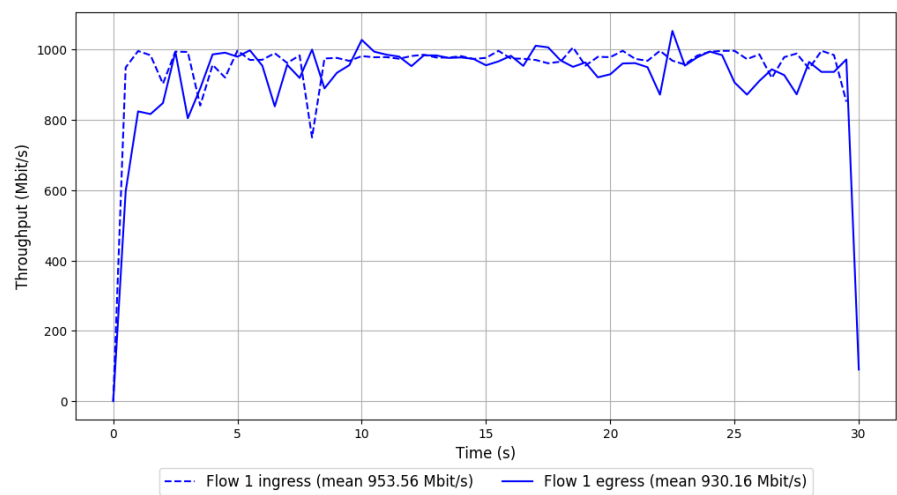
-- Flow 1:

Average throughput: 930.16 Mbit/s

95th percentile per-packet one-way delay: 309.082 ms

Loss rate: 2.45%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-02 00:52:06

End at: 2018-01-02 00:52:36

Below is generated by plot.py at 2018-01-02 03:16:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 695.49 Mbit/s

95th percentile per-packet one-way delay: 304.557 ms

Loss rate: 2.14%

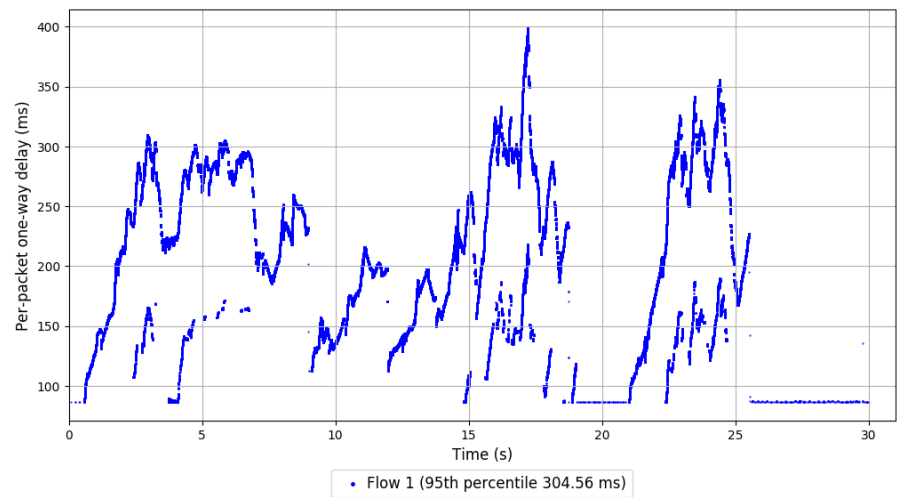
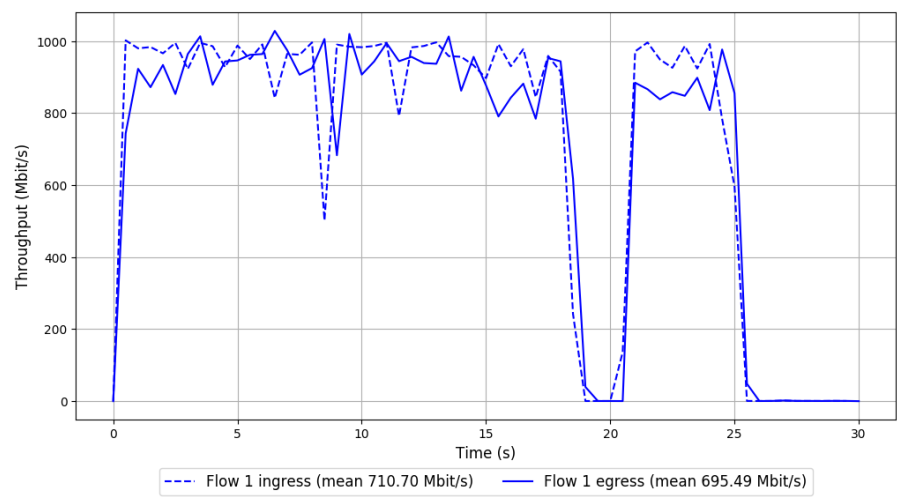
-- Flow 1:

Average throughput: 695.49 Mbit/s

95th percentile per-packet one-way delay: 304.557 ms

Loss rate: 2.14%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-02 01:04:14

End at: 2018-01-02 01:04:44

Below is generated by plot.py at 2018-01-02 03:16:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 768.04 Mbit/s

95th percentile per-packet one-way delay: 318.521 ms

Loss rate: 6.25%

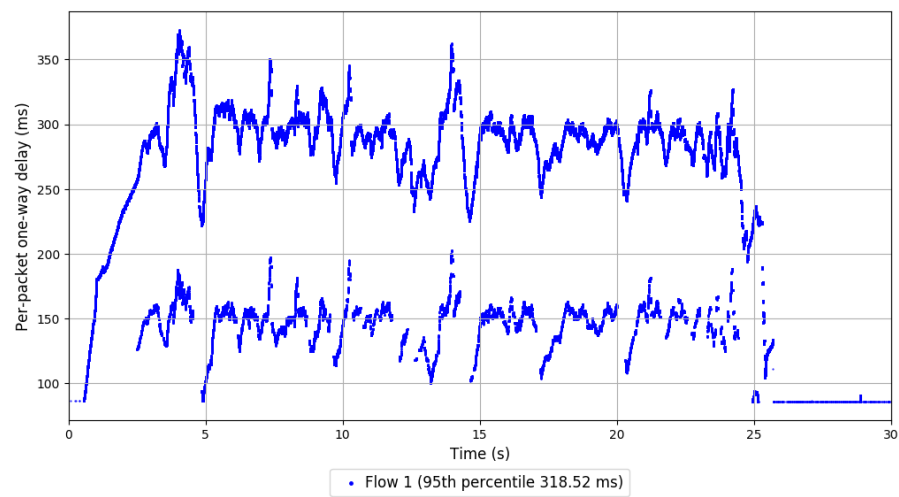
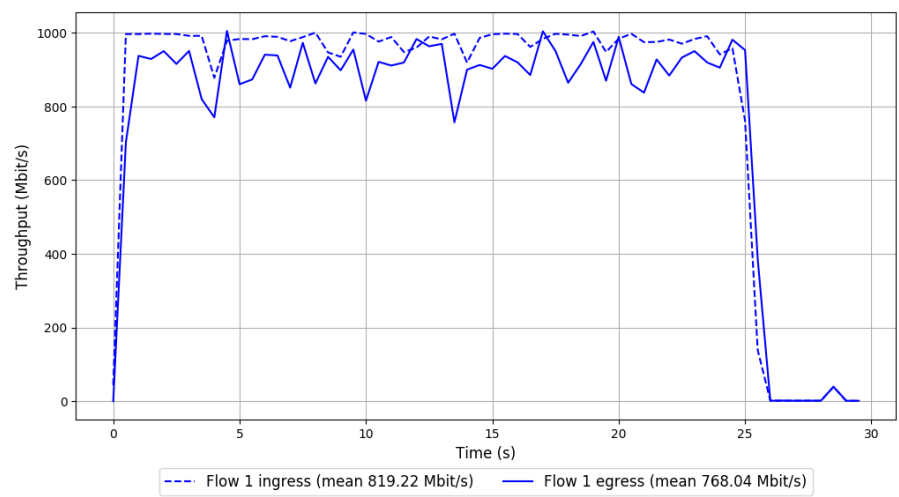
-- Flow 1:

Average throughput: 768.04 Mbit/s

95th percentile per-packet one-way delay: 318.521 ms

Loss rate: 6.25%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-02 01:16:26

End at: 2018-01-02 01:16:56

Below is generated by plot.py at 2018-01-02 03:16:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.68 Mbit/s

95th percentile per-packet one-way delay: 306.080 ms

Loss rate: 1.34%

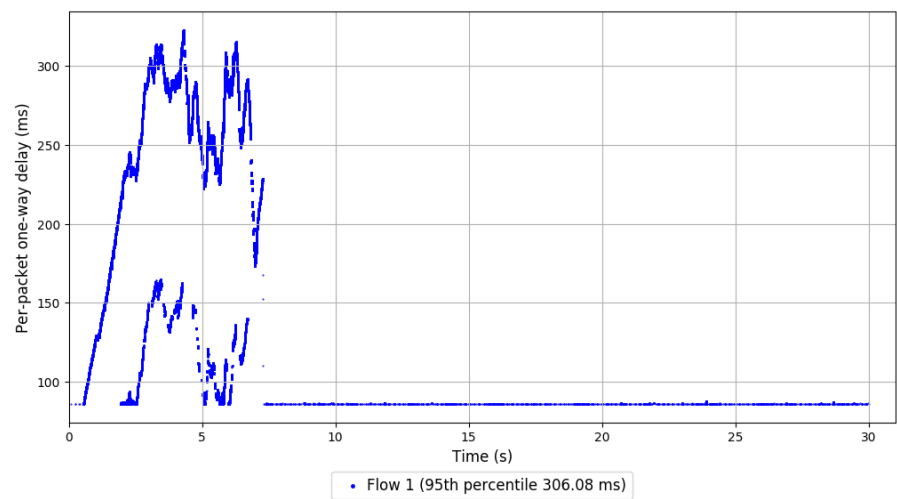
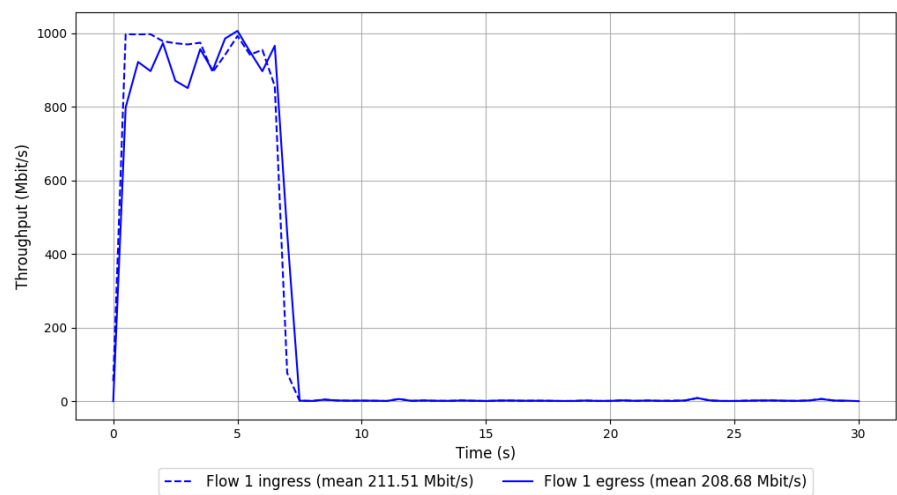
-- Flow 1:

Average throughput: 208.68 Mbit/s

95th percentile per-packet one-way delay: 306.080 ms

Loss rate: 1.34%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-02 01:27:57

End at: 2018-01-02 01:28:27

Below is generated by plot.py at 2018-01-02 03:16:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 826.57 Mbit/s

95th percentile per-packet one-way delay: 323.441 ms

Loss rate: 1.94%

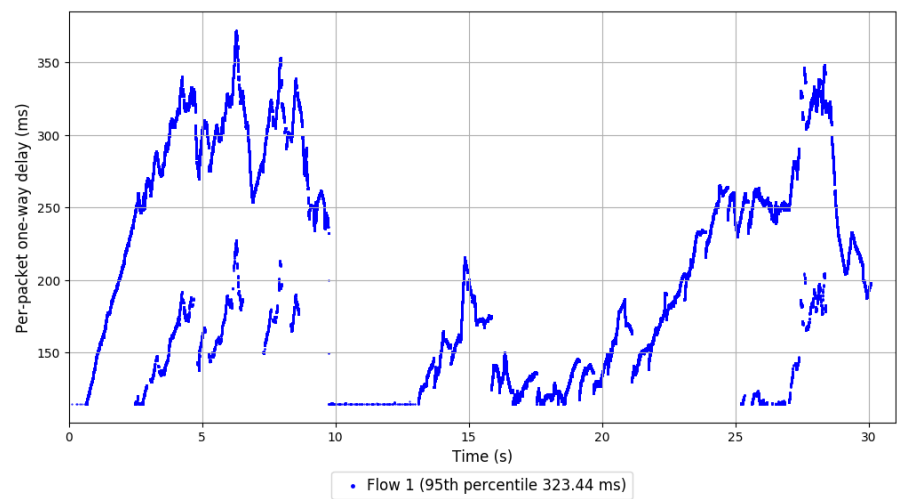
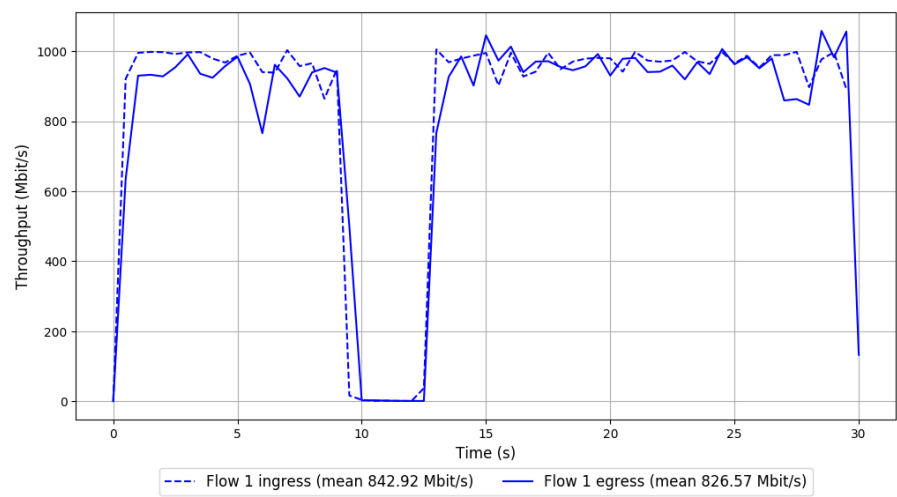
-- Flow 1:

Average throughput: 826.57 Mbit/s

95th percentile per-packet one-way delay: 323.441 ms

Loss rate: 1.94%

Run 10: Report of FillP — Data Link

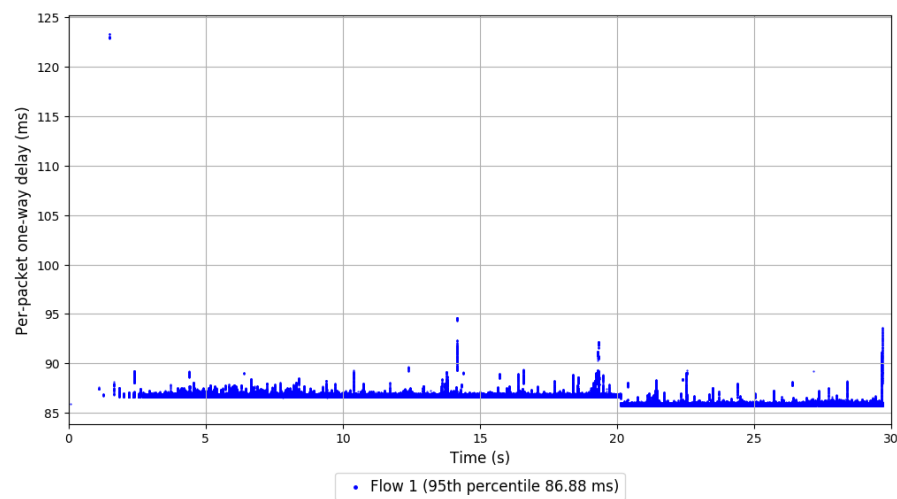
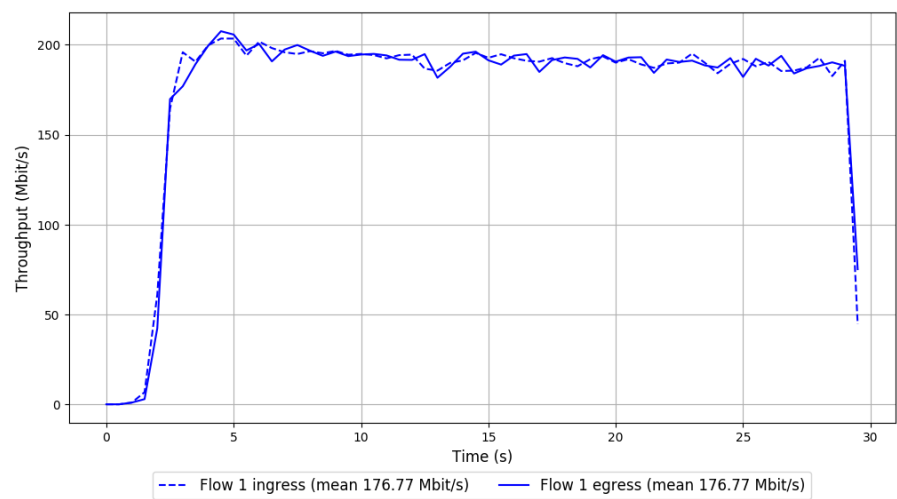


```
Run 1: Statistics of Indigo

Start at: 2018-01-01 23:44:47
End at: 2018-01-01 23:45:17

# Below is generated by plot.py at 2018-01-02 03:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 176.77 Mbit/s
95th percentile per-packet one-way delay: 86.881 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 176.77 Mbit/s
95th percentile per-packet one-way delay: 86.881 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

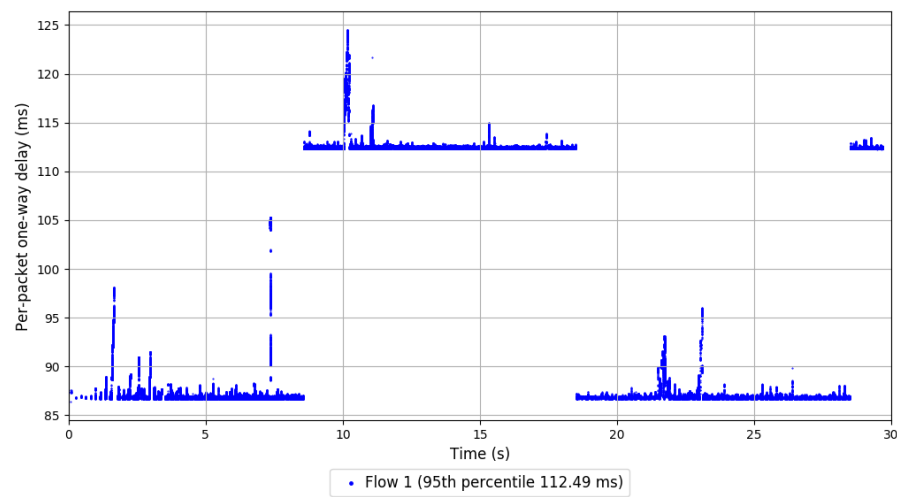
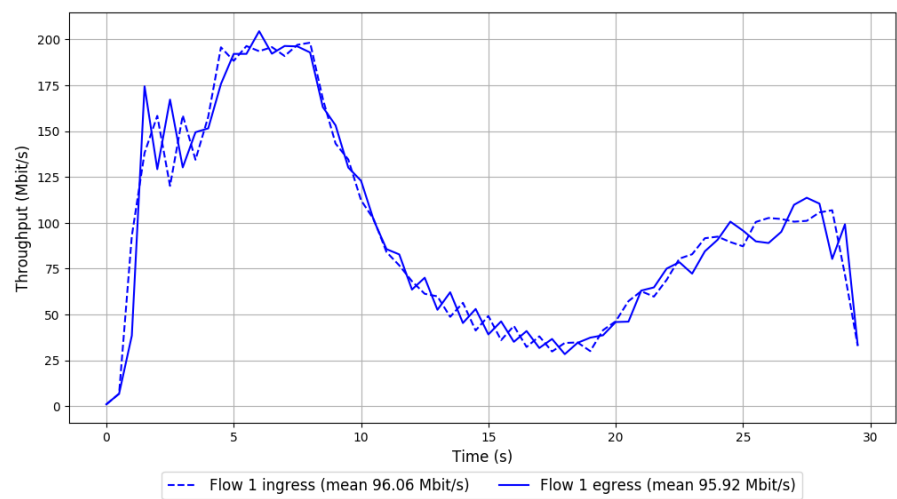


```
Run 2: Statistics of Indigo

Start at: 2018-01-01 23:56:39
End at: 2018-01-01 23:57:09

# Below is generated by plot.py at 2018-01-02 03:16:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 112.488 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 112.488 ms
Loss rate: 0.18%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-02 00:08:00

End at: 2018-01-02 00:08:30

Below is generated by plot.py at 2018-01-02 03:16:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.37 Mbit/s

95th percentile per-packet one-way delay: 112.531 ms

Loss rate: 0.04%

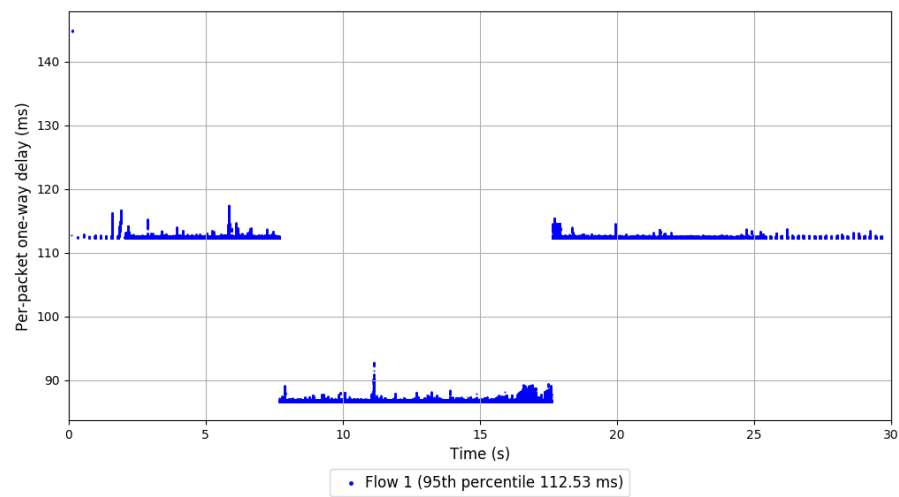
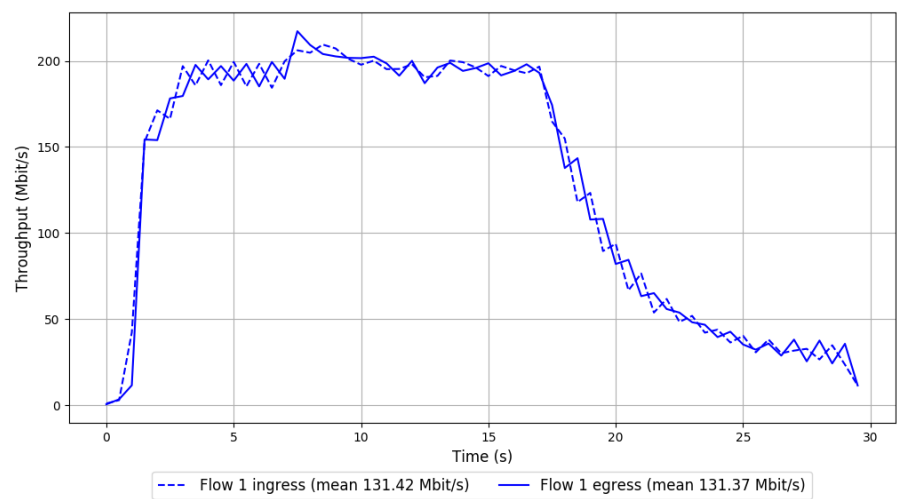
-- Flow 1:

Average throughput: 131.37 Mbit/s

95th percentile per-packet one-way delay: 112.531 ms

Loss rate: 0.04%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-02 00:19:40

End at: 2018-01-02 00:20:10

Below is generated by plot.py at 2018-01-02 03:16:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.21 Mbit/s

95th percentile per-packet one-way delay: 112.427 ms

Loss rate: 0.12%

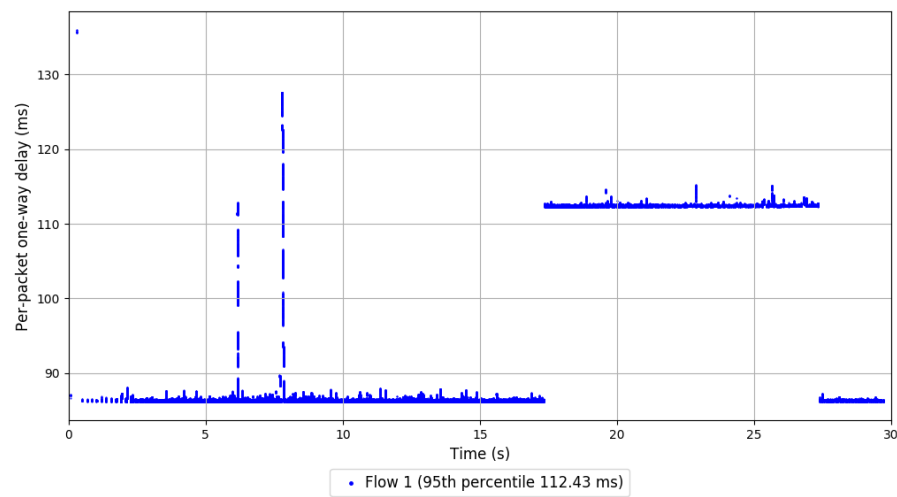
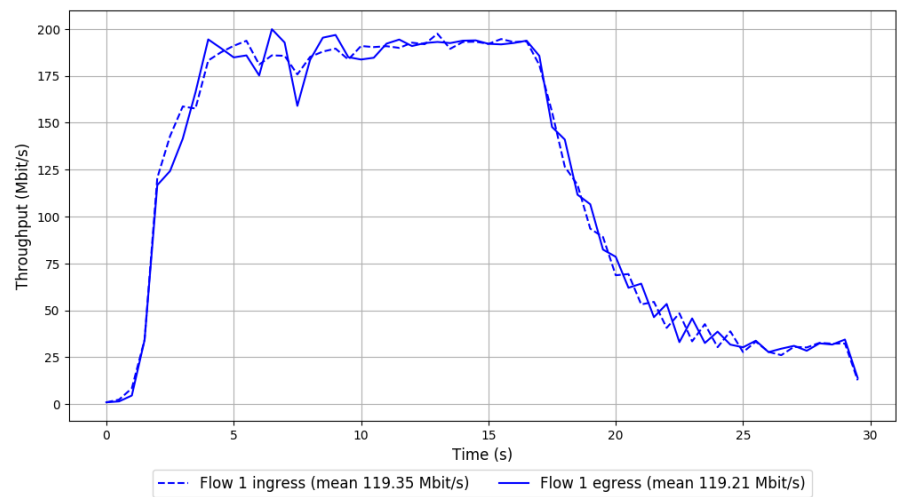
-- Flow 1:

Average throughput: 119.21 Mbit/s

95th percentile per-packet one-way delay: 112.427 ms

Loss rate: 0.12%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-02 00:31:23

End at: 2018-01-02 00:31:53

Below is generated by plot.py at 2018-01-02 03:16:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.72 Mbit/s

95th percentile per-packet one-way delay: 112.592 ms

Loss rate: 0.00%

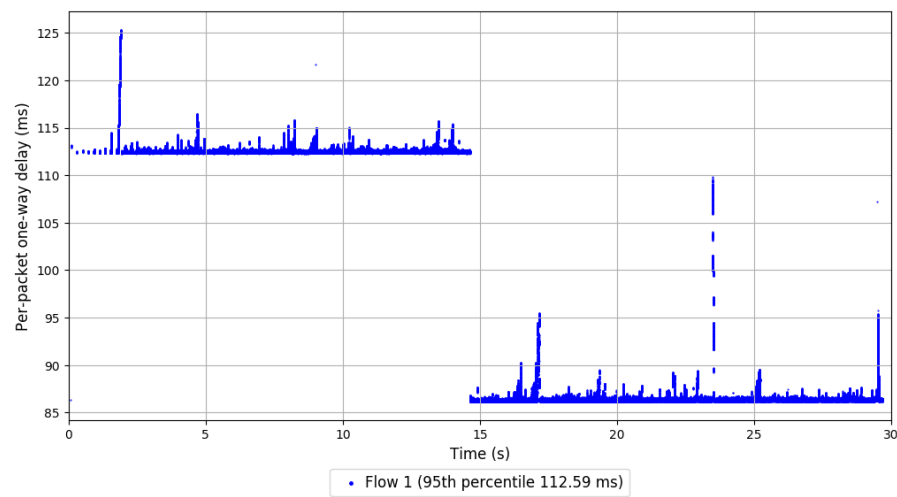
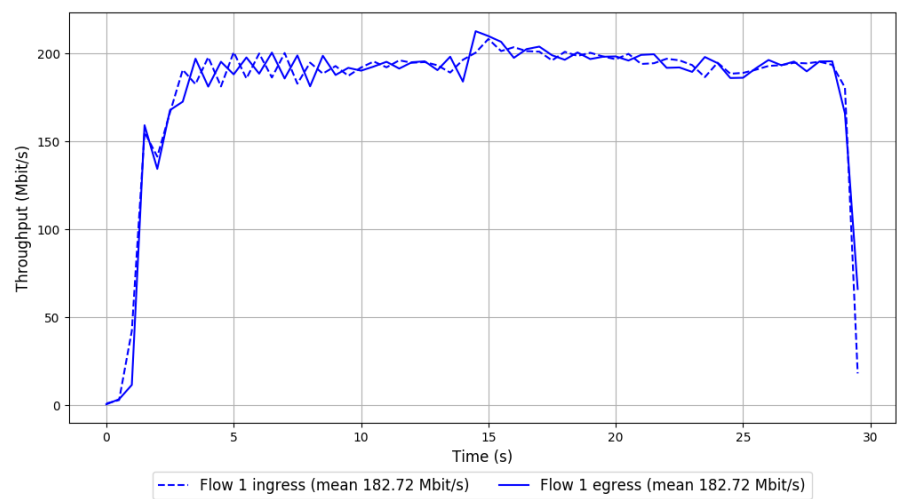
-- Flow 1:

Average throughput: 182.72 Mbit/s

95th percentile per-packet one-way delay: 112.592 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-02 00:43:38

End at: 2018-01-02 00:44:08

Below is generated by plot.py at 2018-01-02 03:16:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.37 Mbit/s

95th percentile per-packet one-way delay: 86.655 ms

Loss rate: 0.00%

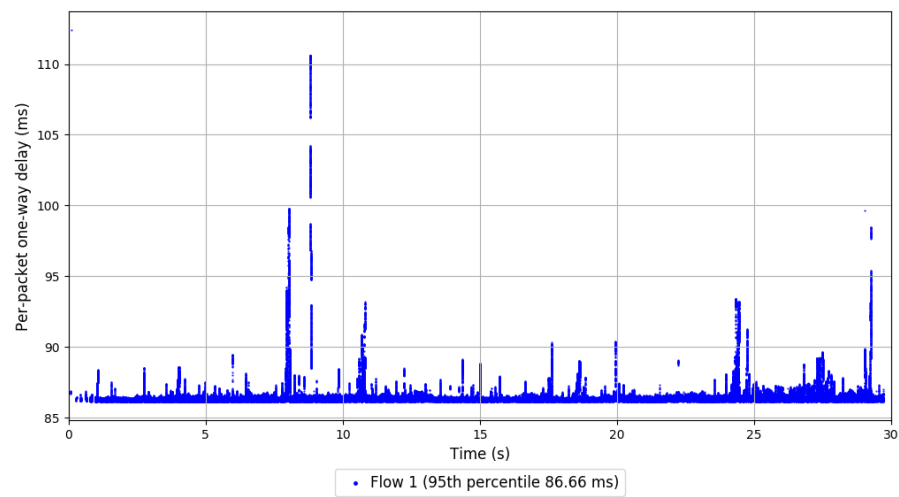
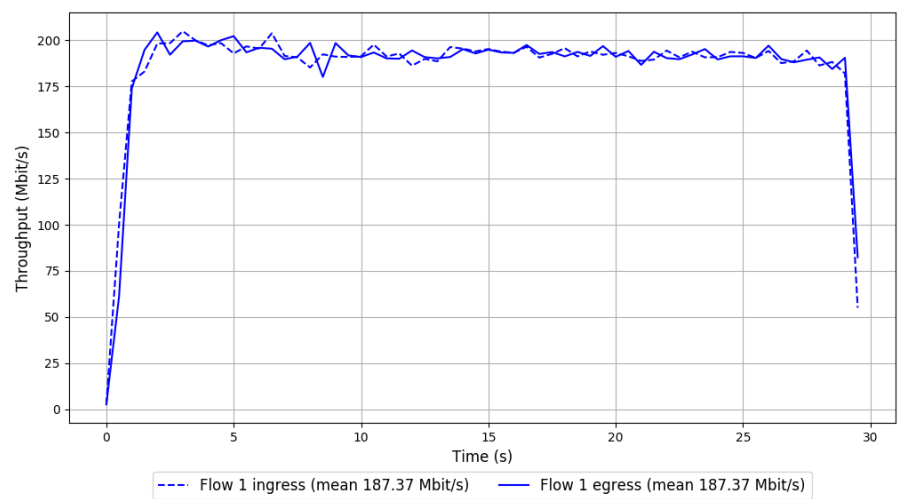
-- Flow 1:

Average throughput: 187.37 Mbit/s

95th percentile per-packet one-way delay: 86.655 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link

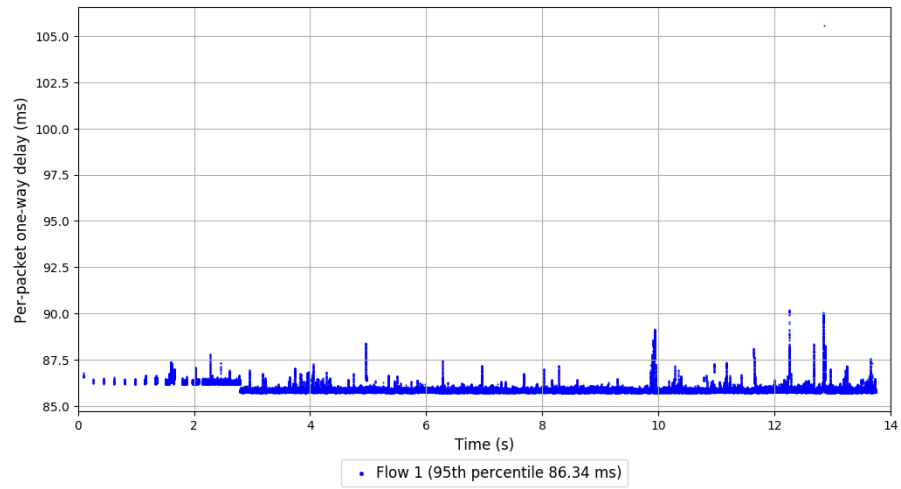
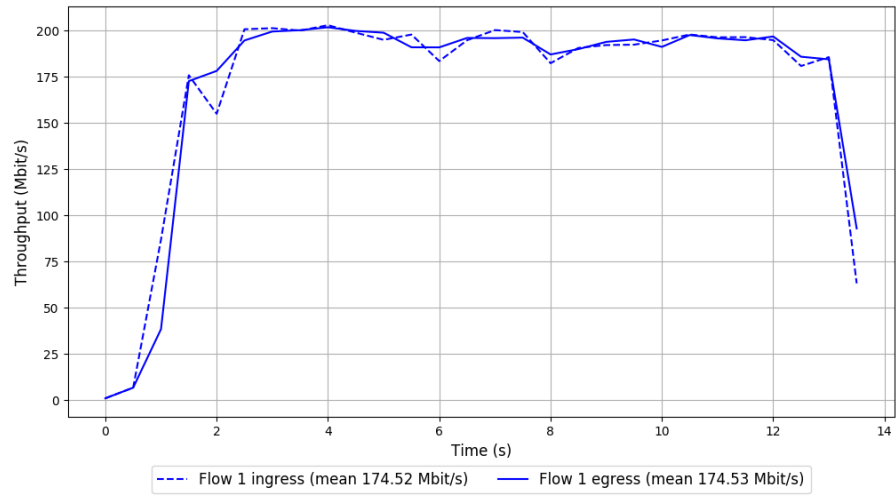


Run 7: Statistics of Indigo

Start at: 2018-01-02 00:55:39

End at: 2018-01-02 00:56:09

Run 7: Report of Indigo — Data Link

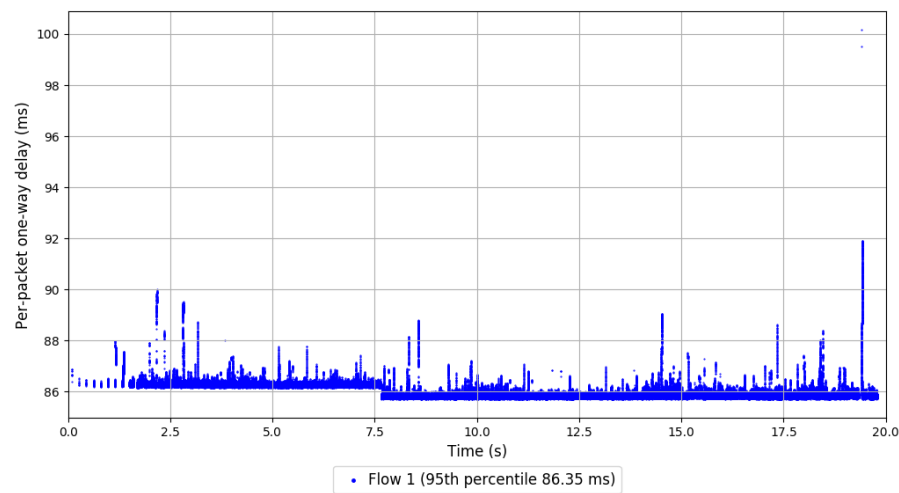
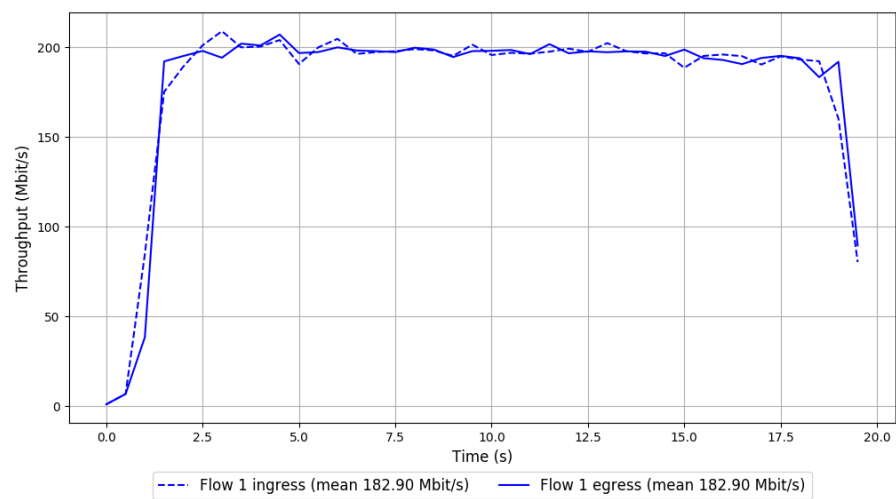


Run 8: Statistics of Indigo

Start at: 2018-01-02 01:07:50

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

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-02 01:19:32

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

Below is generated by plot.py at 2018-01-02 03:16:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.55 Mbit/s

95th percentile per-packet one-way delay: 86.309 ms

Loss rate: 0.02%

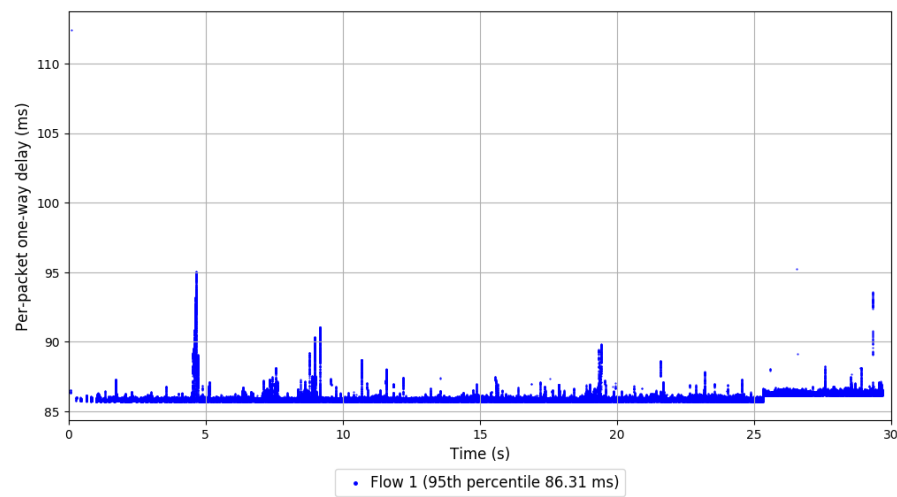
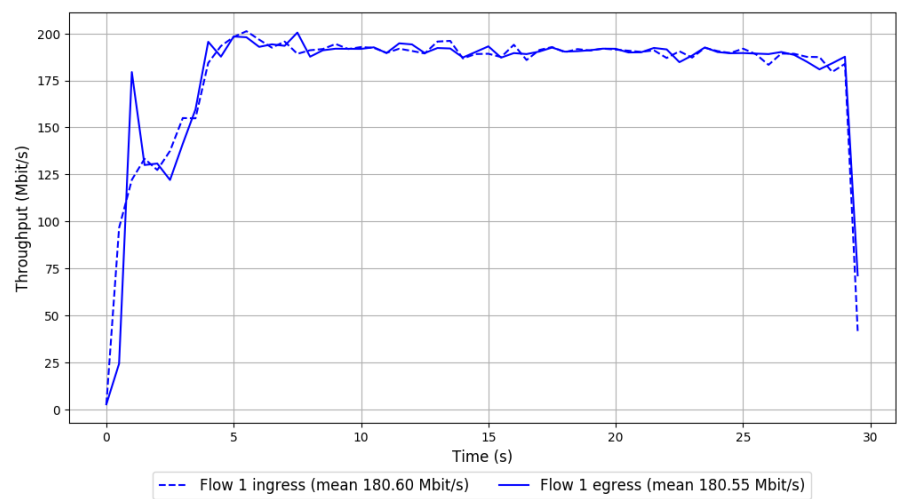
-- Flow 1:

Average throughput: 180.55 Mbit/s

95th percentile per-packet one-way delay: 86.309 ms

Loss rate: 0.02%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-02 01:31:30

End at: 2018-01-02 01:32:01

Run 10: Report of Indigo — Data Link

