

Pantheon Report

Generated at 2018-01-09 00:27:51 (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.

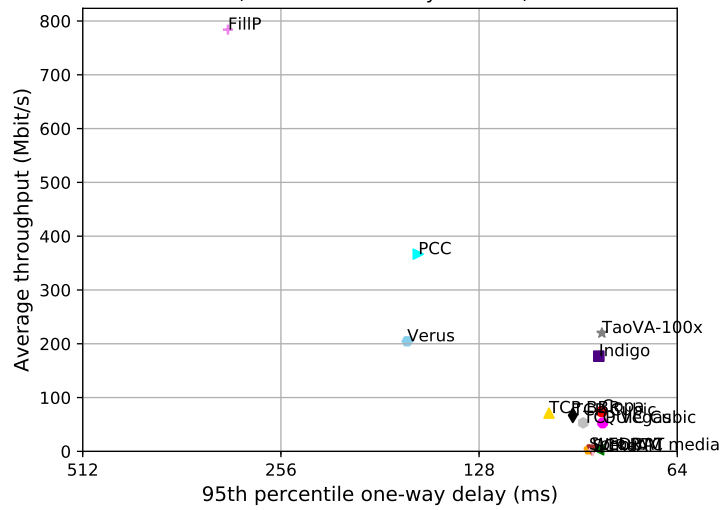
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

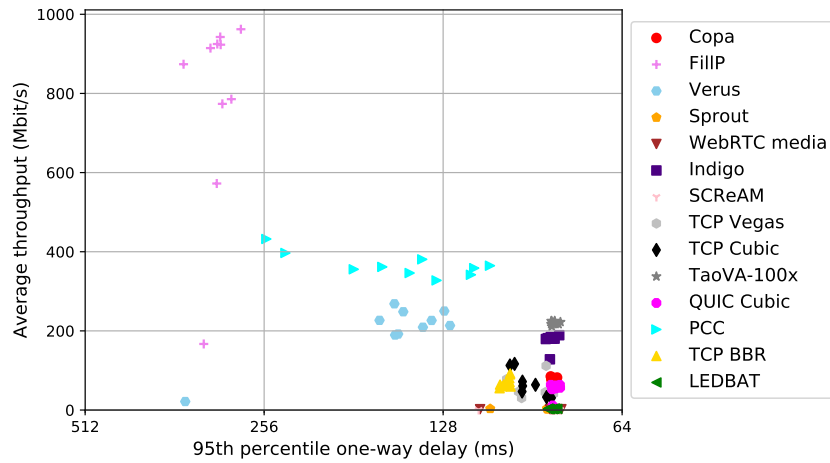
Git summary:

```
branch: master @ 56d1792c316a5efca3f2d21342905405fedffb48
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE 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	71.14	100.23	1.18
TCP Cubic	8	66.97	92.22	0.91
LEDBAT	10	2.86	84.25	1.30
PCC	10	366.61	158.33	1.12
QUIC Cubic	9	52.83	83.09	0.00
SCReAM	10	0.22	86.02	0.00
WebRTC media	10	2.15	86.14	0.00
Sprout	10	3.18	87.15	1.40
TaoVA-100x	10	220.01	83.30	0.07
TCP Vegas	9	53.01	88.92	0.61
Verus	10	204.60	164.60	2.68
Copa	9	73.97	83.32	0.00
FillP	10	783.97	308.09	3.62
Indigo	10	176.94	84.20	0.26

Run 1: Statistics of TCP BBR

Start at: 2018-01-08 20:55:38

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

Below is generated by plot.py at 2018-01-08 23:44:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.76 Mbit/s

95th percentile per-packet one-way delay: 98.950 ms

Loss rate: 1.29%

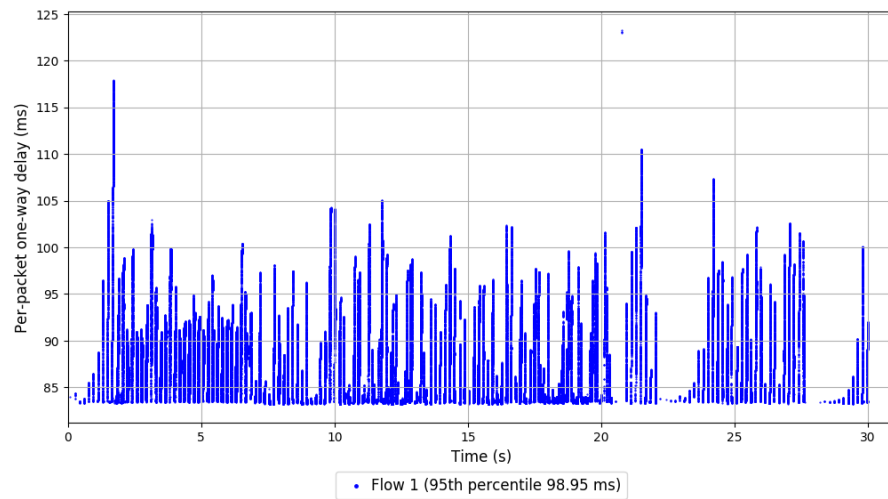
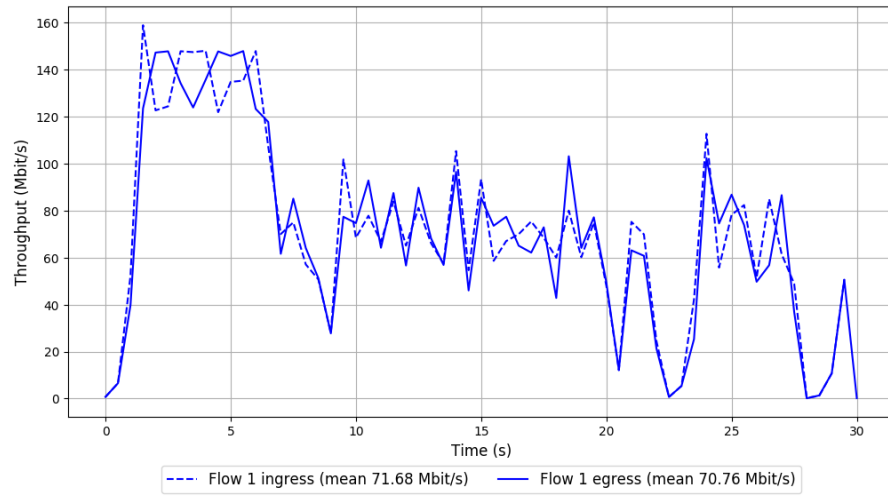
-- Flow 1:

Average throughput: 70.76 Mbit/s

95th percentile per-packet one-way delay: 98.950 ms

Loss rate: 1.29%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-08 21:07:46

End at: 2018-01-08 21:08:16

Below is generated by plot.py at 2018-01-08 23:44:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.45 Mbit/s

95th percentile per-packet one-way delay: 98.575 ms

Loss rate: 3.26%

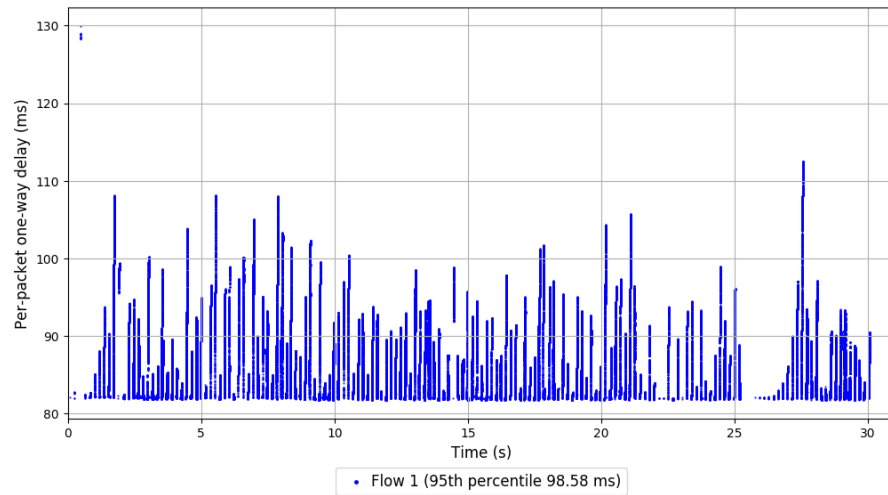
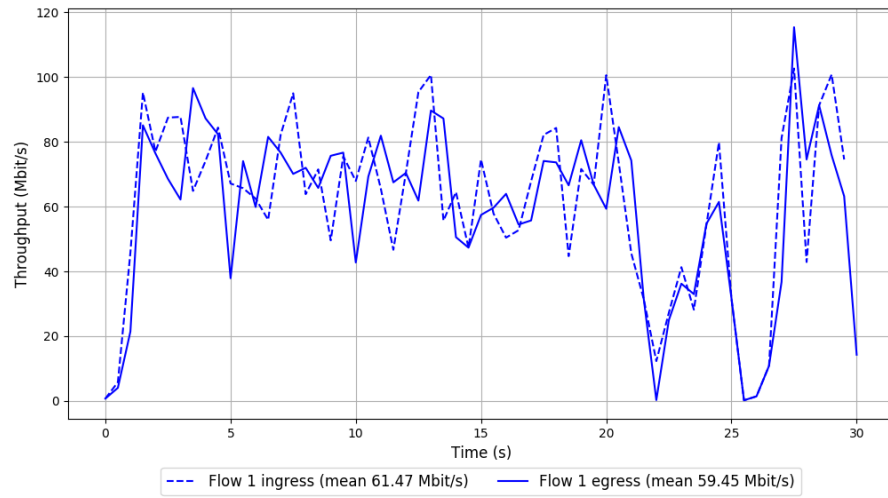
-- Flow 1:

Average throughput: 59.45 Mbit/s

95th percentile per-packet one-way delay: 98.575 ms

Loss rate: 3.26%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-08 21:19:52

End at: 2018-01-08 21:20:22

Below is generated by plot.py at 2018-01-08 23:44:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.18 Mbit/s

95th percentile per-packet one-way delay: 102.859 ms

Loss rate: 2.16%

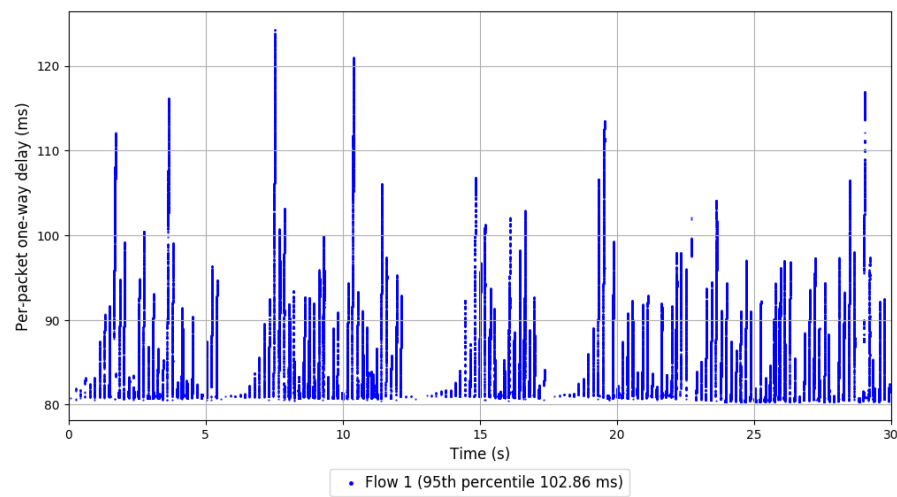
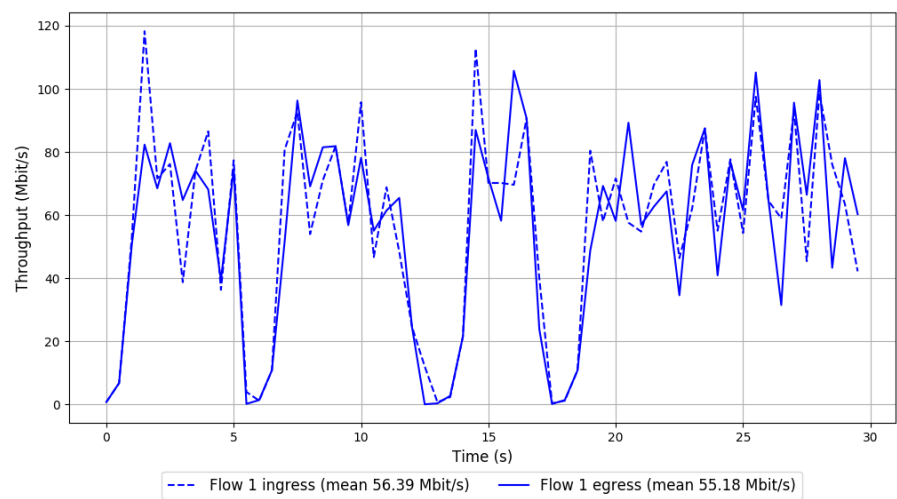
-- Flow 1:

Average throughput: 55.18 Mbit/s

95th percentile per-packet one-way delay: 102.859 ms

Loss rate: 2.16%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-08 21:31:57

End at: 2018-01-08 21:32:27

Below is generated by plot.py at 2018-01-08 23:44:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.48 Mbit/s

95th percentile per-packet one-way delay: 99.619 ms

Loss rate: 0.67%

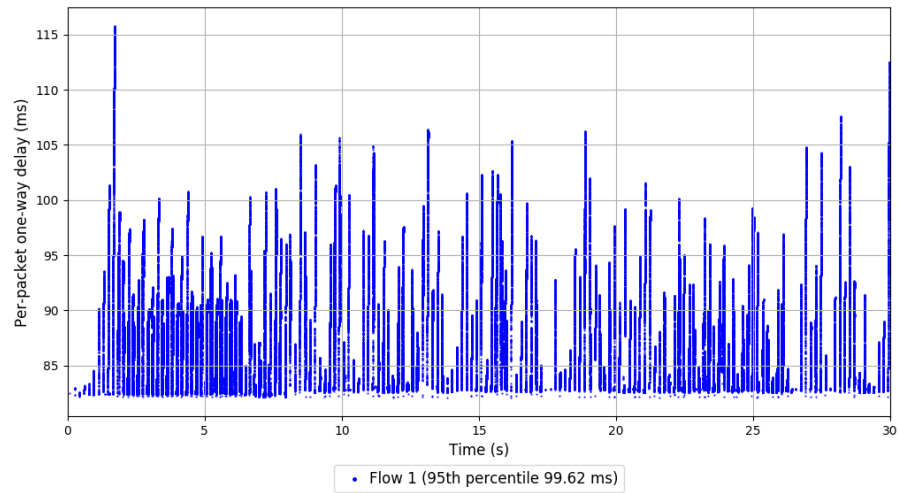
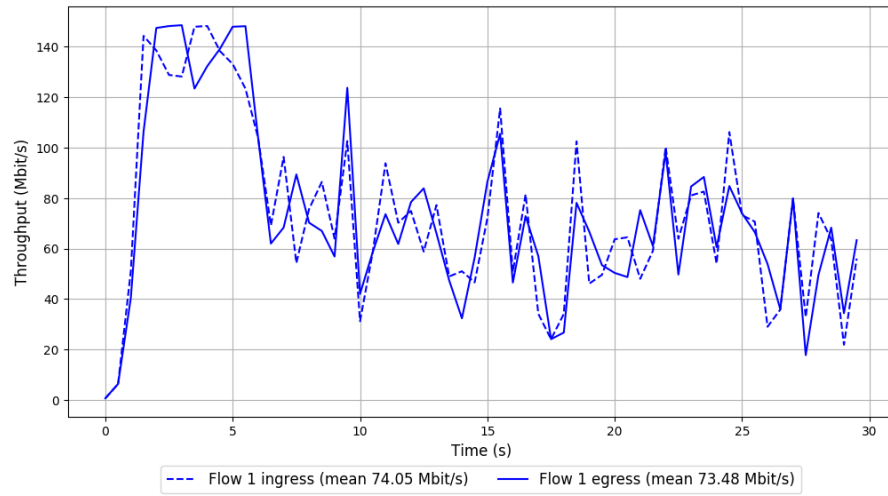
-- Flow 1:

Average throughput: 73.48 Mbit/s

95th percentile per-packet one-way delay: 99.619 ms

Loss rate: 0.67%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-08 21:43:33

End at: 2018-01-08 21:44:03

Below is generated by plot.py at 2018-01-08 23:44:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.07 Mbit/s

95th percentile per-packet one-way delay: 101.162 ms

Loss rate: 2.10%

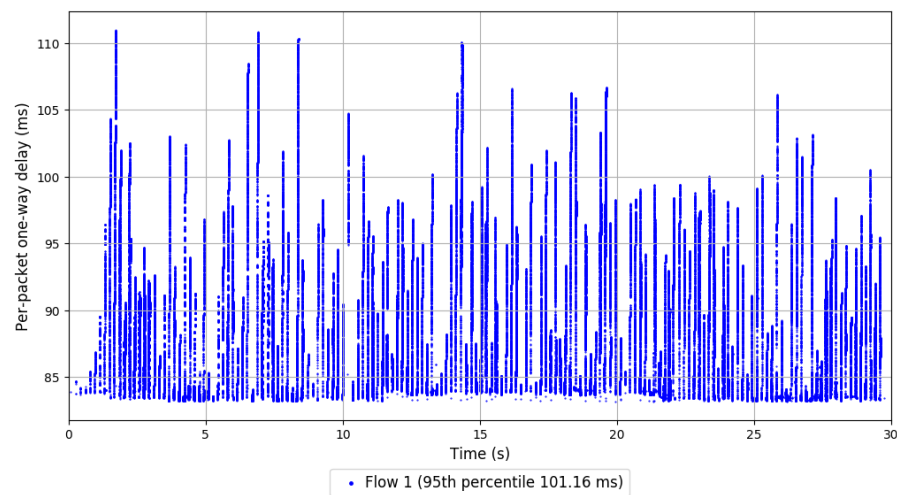
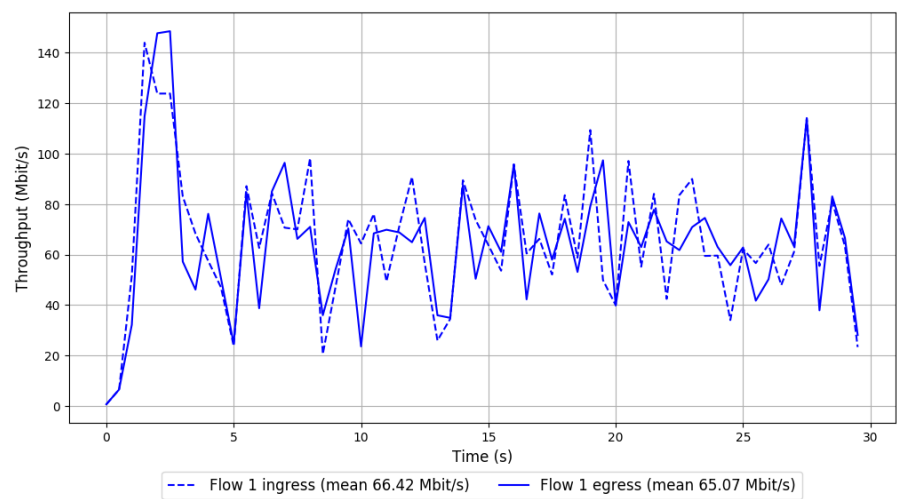
-- Flow 1:

Average throughput: 65.07 Mbit/s

95th percentile per-packet one-way delay: 101.162 ms

Loss rate: 2.10%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-08 21:55:34

End at: 2018-01-08 21:56:04

Below is generated by plot.py at 2018-01-08 23:44:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.51 Mbit/s

95th percentile per-packet one-way delay: 99.052 ms

Loss rate: 0.52%

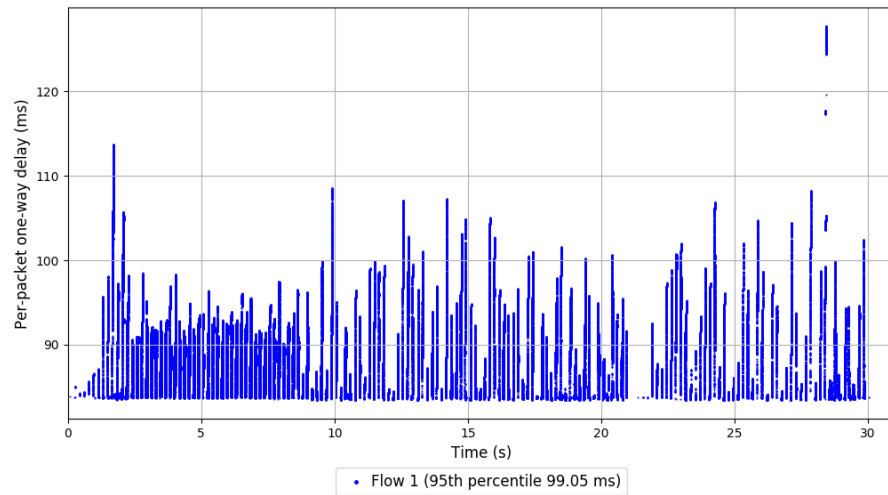
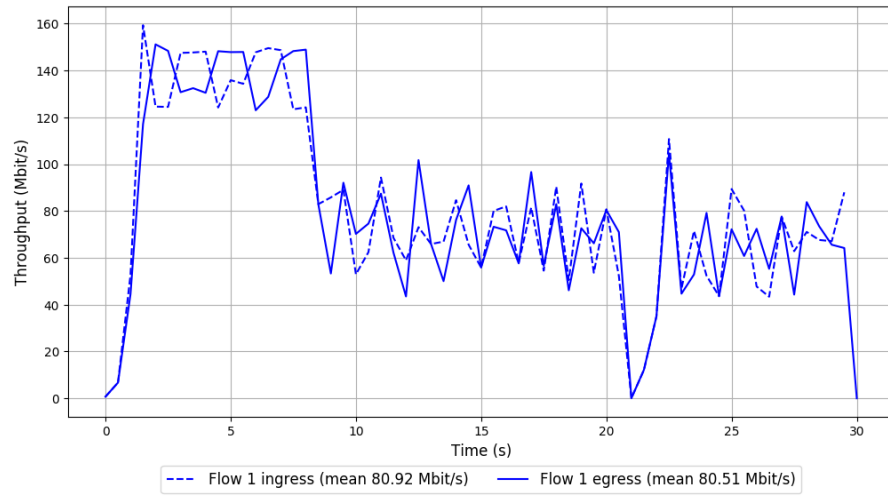
-- Flow 1:

Average throughput: 80.51 Mbit/s

95th percentile per-packet one-way delay: 99.052 ms

Loss rate: 0.52%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-08 22:07:25

End at: 2018-01-08 22:07:55

Below is generated by plot.py at 2018-01-08 23:44:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 102.692 ms

Loss rate: 0.75%

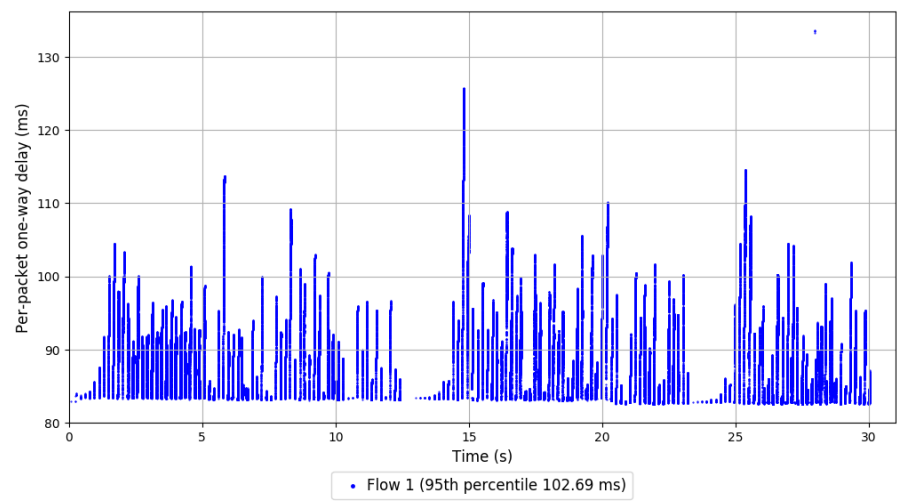
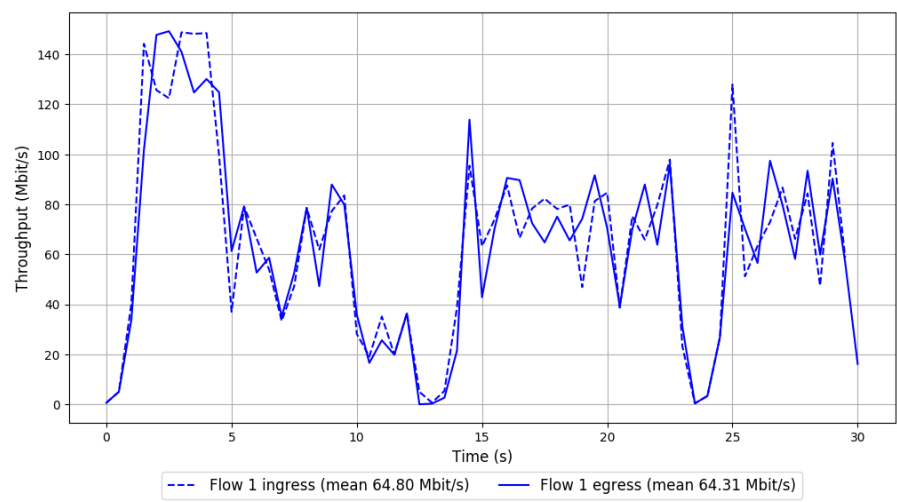
-- Flow 1:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 102.692 ms

Loss rate: 0.75%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-08 22:19:37

End at: 2018-01-08 22:20:07

Below is generated by plot.py at 2018-01-08 23:45:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.37 Mbit/s

95th percentile per-packet one-way delay: 98.743 ms

Loss rate: 0.00%

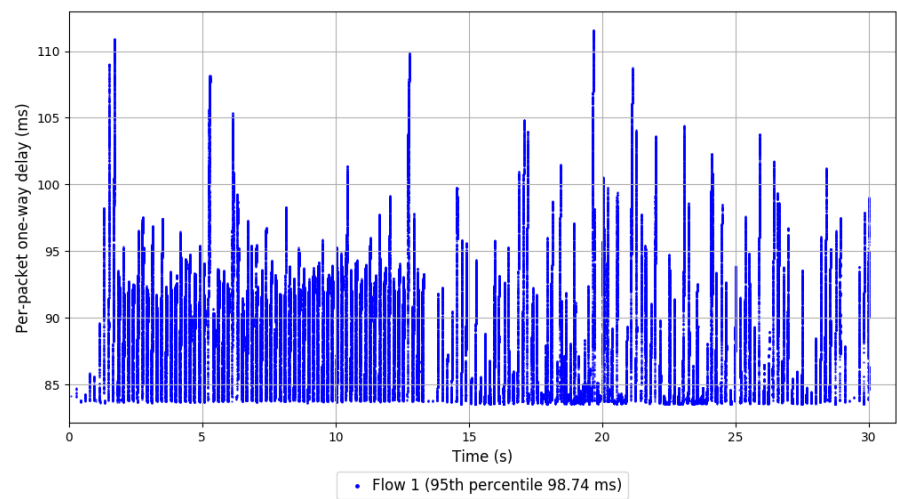
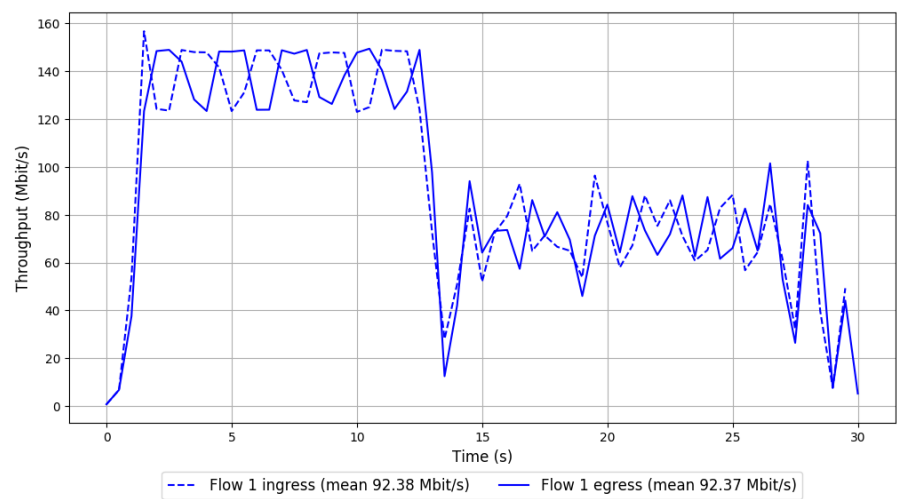
-- Flow 1:

Average throughput: 92.37 Mbit/s

95th percentile per-packet one-way delay: 98.743 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-08 22:31:51

End at: 2018-01-08 22:32:21

Below is generated by plot.py at 2018-01-08 23:45:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.17 Mbit/s

95th percentile per-packet one-way delay: 101.830 ms

Loss rate: 0.38%

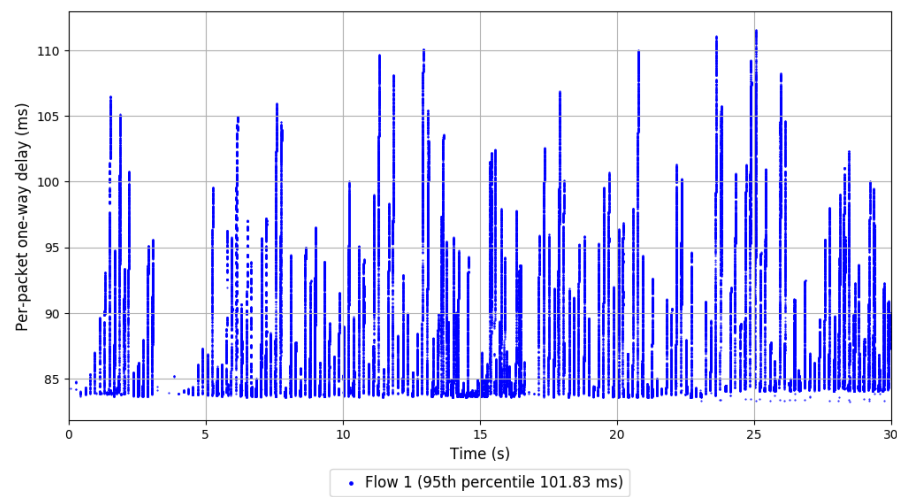
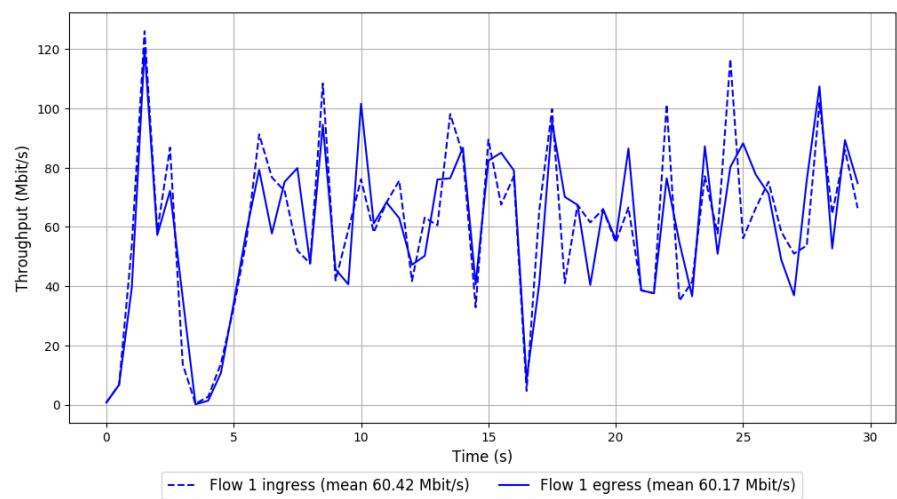
-- Flow 1:

Average throughput: 60.17 Mbit/s

95th percentile per-packet one-way delay: 101.830 ms

Loss rate: 0.38%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-08 22:43:48

End at: 2018-01-08 22:44:18

Below is generated by plot.py at 2018-01-08 23:46:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.07 Mbit/s

95th percentile per-packet one-way delay: 98.809 ms

Loss rate: 0.64%

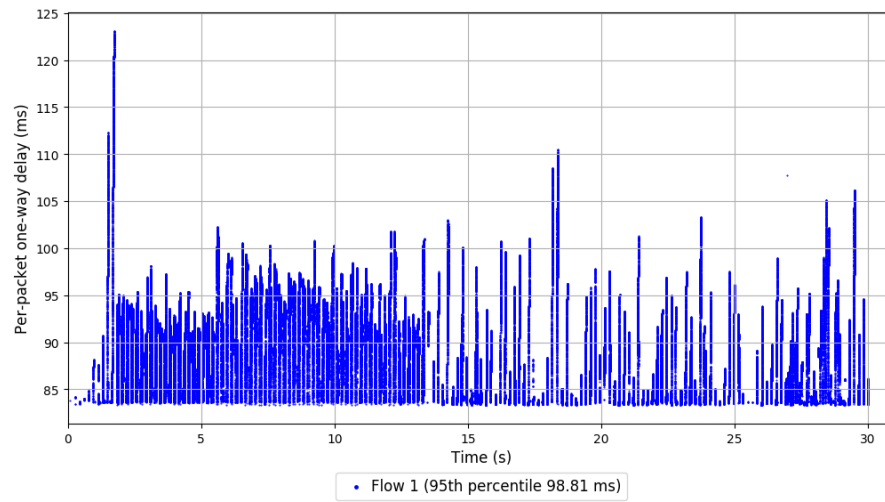
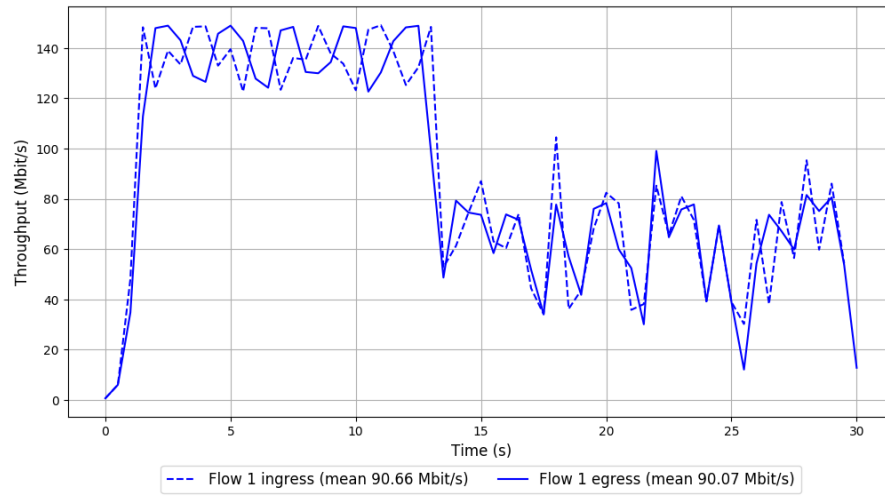
-- Flow 1:

Average throughput: 90.07 Mbit/s

95th percentile per-packet one-way delay: 98.809 ms

Loss rate: 0.64%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

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

End at: 2018-01-08 20:51:31

Below is generated by plot.py at 2018-01-08 23:46:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.84 Mbit/s

95th percentile per-packet one-way delay: 94.141 ms

Loss rate: 1.09%

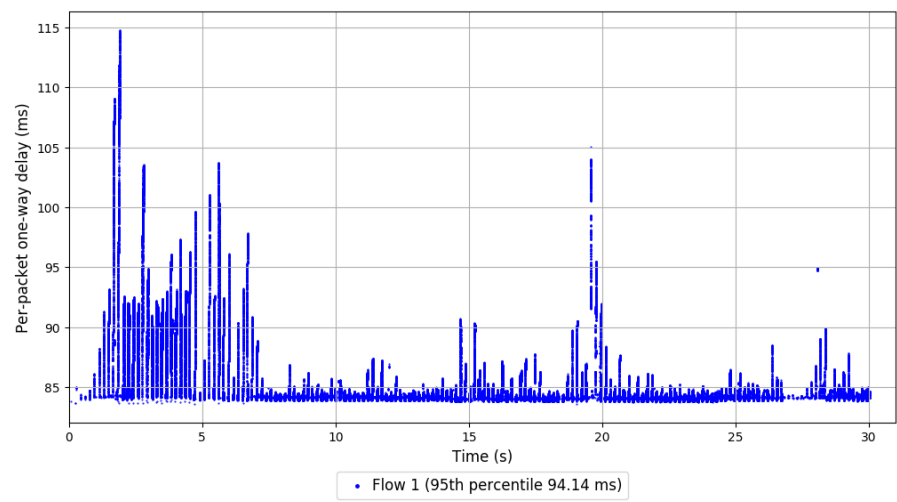
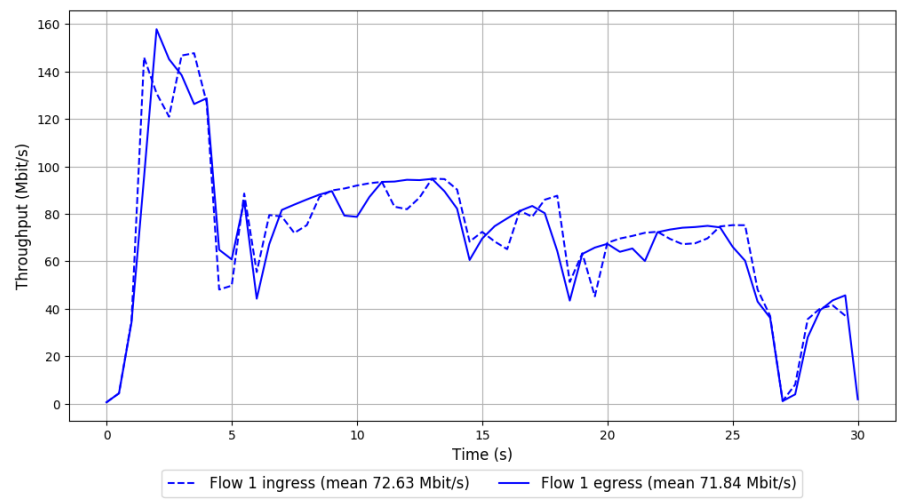
-- Flow 1:

Average throughput: 71.84 Mbit/s

95th percentile per-packet one-way delay: 94.141 ms

Loss rate: 1.09%

Run 1: Report of TCP Cubic — Data Link

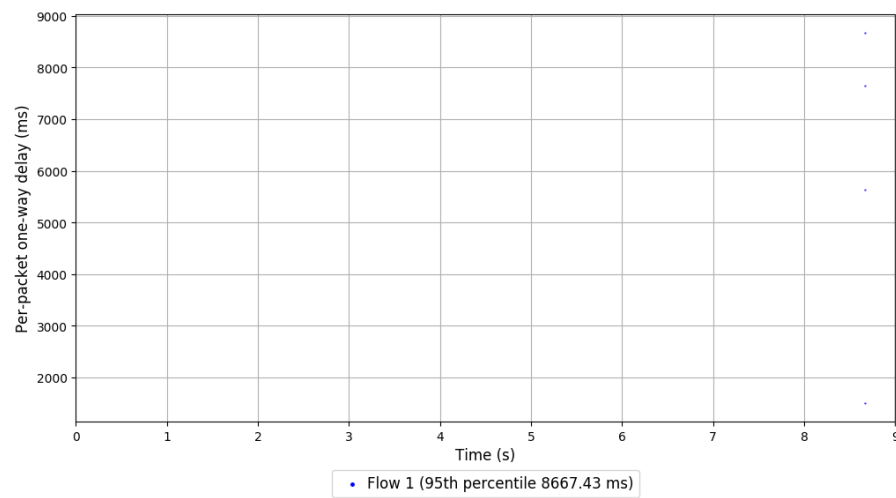
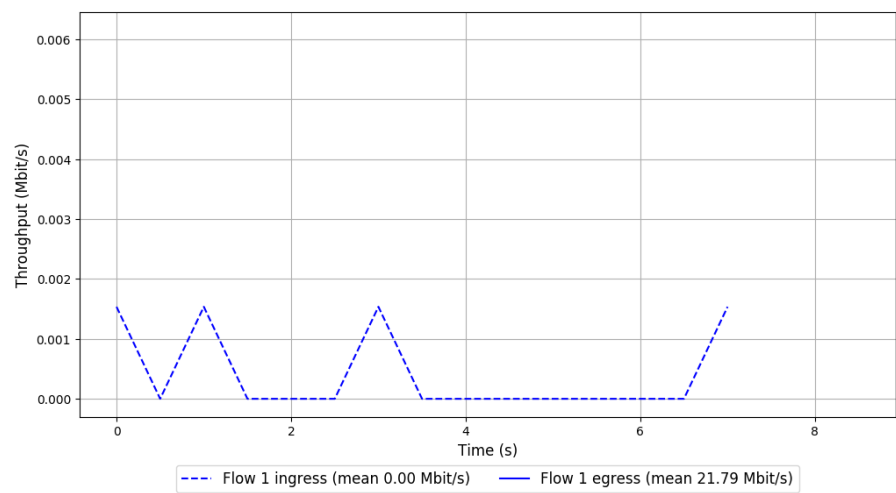


Run 2: Statistics of TCP Cubic

Start at: 2018-01-08 21:03:06

End at: 2018-01-08 21:03:36

Run 2: Report of TCP Cubic — Data Link

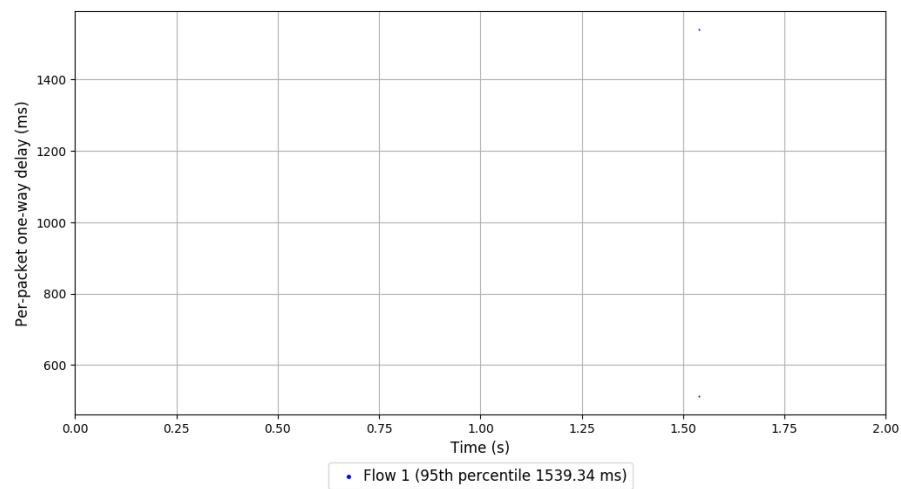
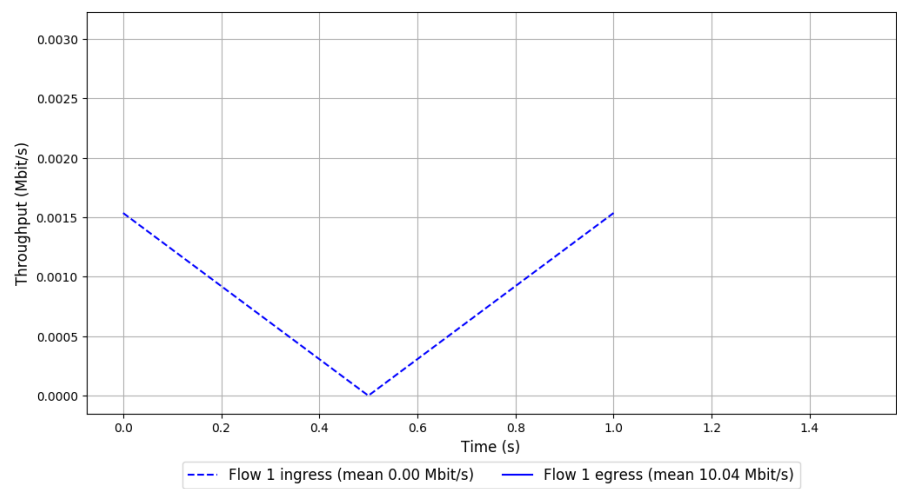


Run 3: Statistics of TCP Cubic

Start at: 2018-01-08 21:15:14

End at: 2018-01-08 21:15:44

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-08 21:27:19

End at: 2018-01-08 21:27:49

Below is generated by plot.py at 2018-01-08 23:46:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.62 Mbit/s

95th percentile per-packet one-way delay: 84.145 ms

Loss rate: 0.42%

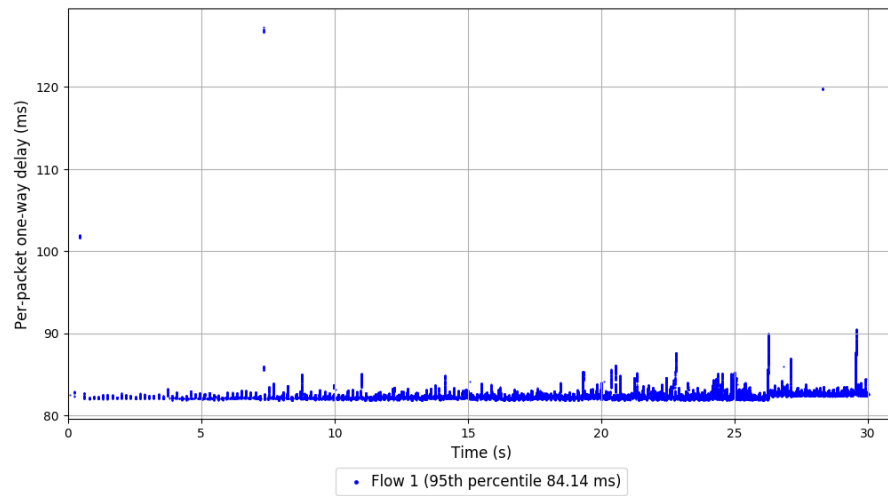
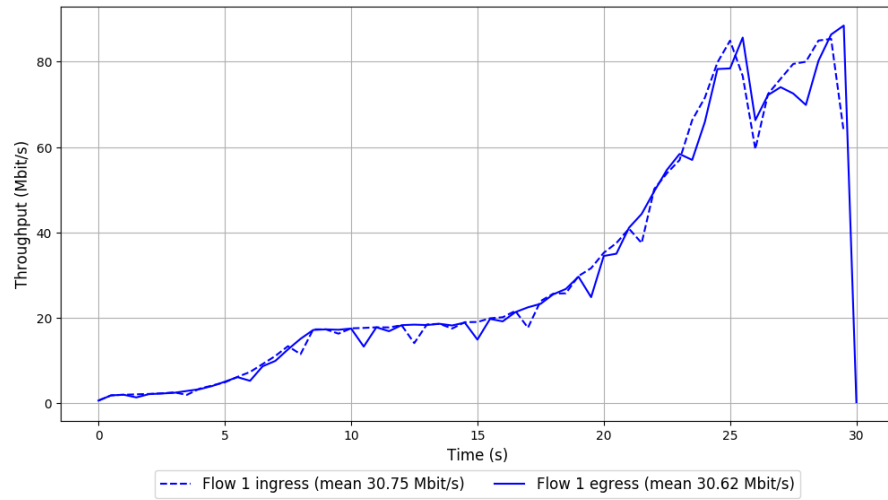
-- Flow 1:

Average throughput: 30.62 Mbit/s

95th percentile per-packet one-way delay: 84.145 ms

Loss rate: 0.42%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-08 21:38:53

End at: 2018-01-08 21:39:24

Below is generated by plot.py at 2018-01-08 23:46:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.68 Mbit/s

95th percentile per-packet one-way delay: 85.753 ms

Loss rate: 0.84%

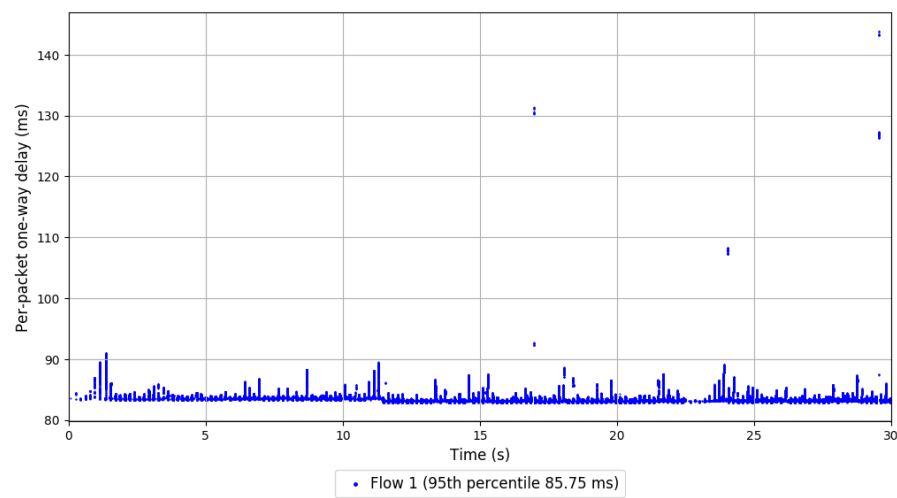
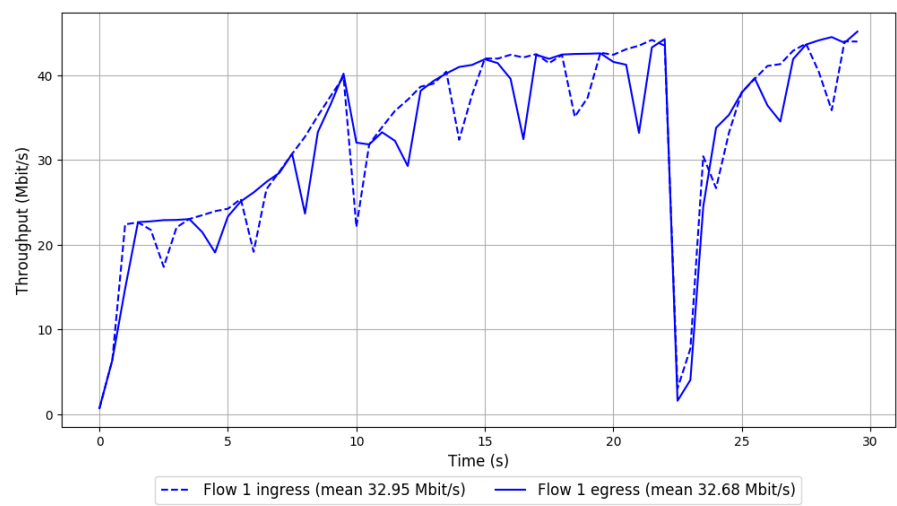
-- Flow 1:

Average throughput: 32.68 Mbit/s

95th percentile per-packet one-way delay: 85.753 ms

Loss rate: 0.84%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-08 21:51:03

End at: 2018-01-08 21:51:33

Below is generated by plot.py at 2018-01-08 23:46:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 112.64 Mbit/s

95th percentile per-packet one-way delay: 98.822 ms

Loss rate: 0.43%

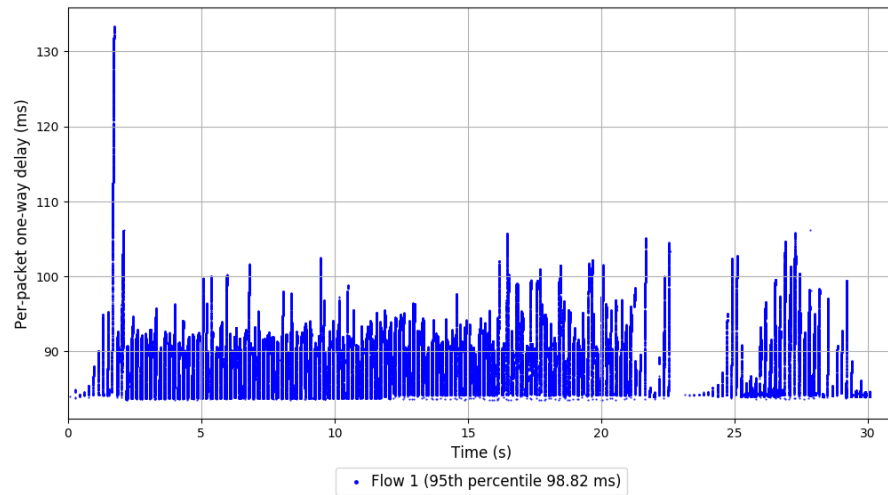
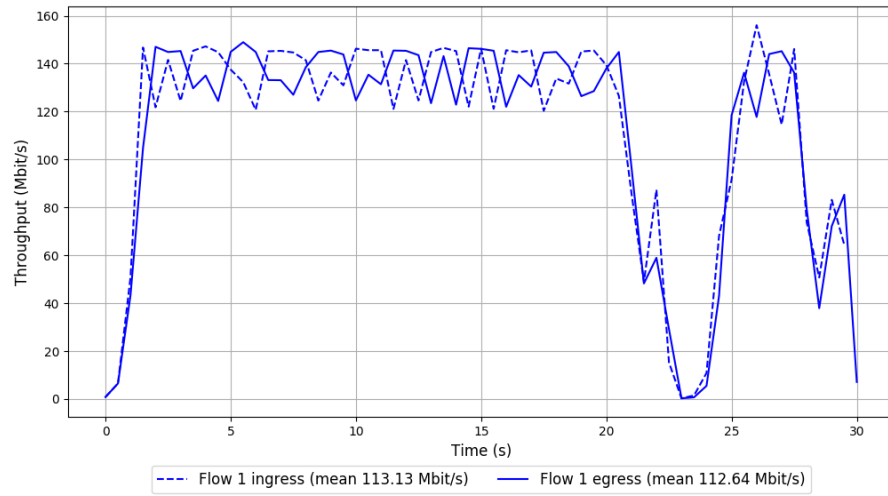
-- Flow 1:

Average throughput: 112.64 Mbit/s

95th percentile per-packet one-way delay: 98.822 ms

Loss rate: 0.43%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-08 22:02:43

End at: 2018-01-08 22:03:13

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.64 Mbit/s

95th percentile per-packet one-way delay: 97.062 ms

Loss rate: 0.35%

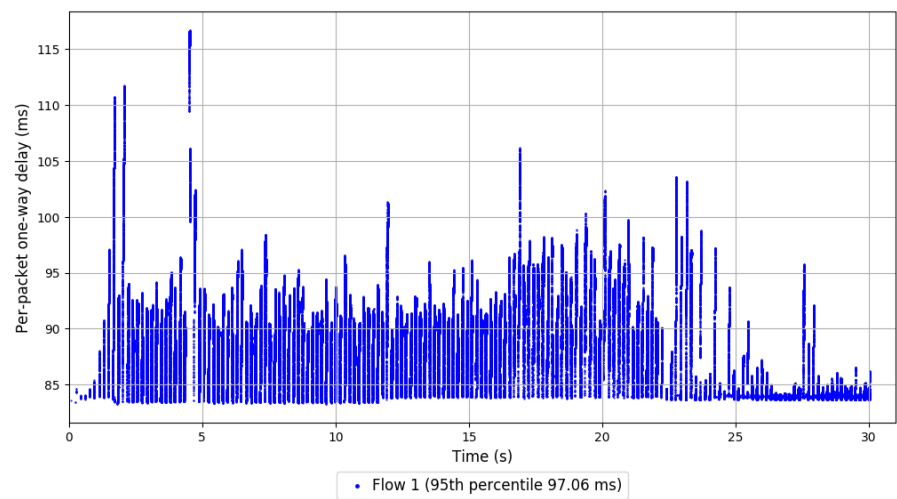
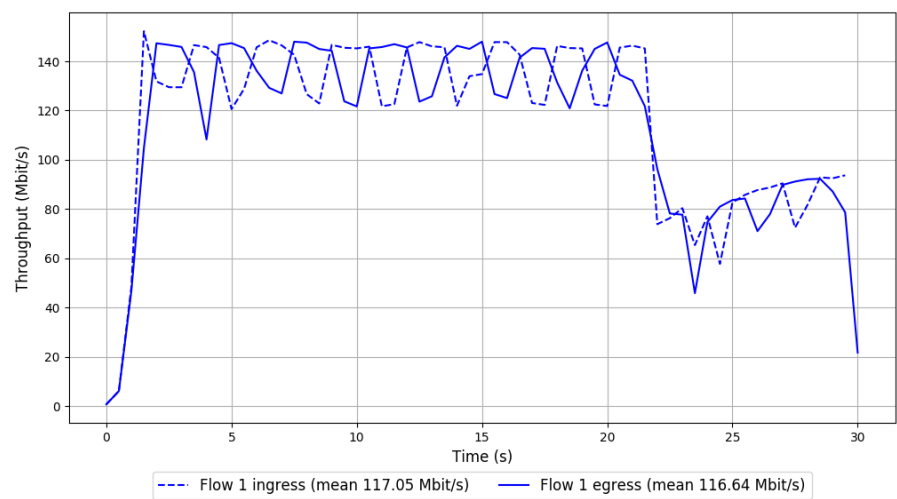
-- Flow 1:

Average throughput: 116.64 Mbit/s

95th percentile per-packet one-way delay: 97.062 ms

Loss rate: 0.35%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-08 22:14:57

End at: 2018-01-08 22:15:27

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.85 Mbit/s

95th percentile per-packet one-way delay: 94.064 ms

Loss rate: 0.94%

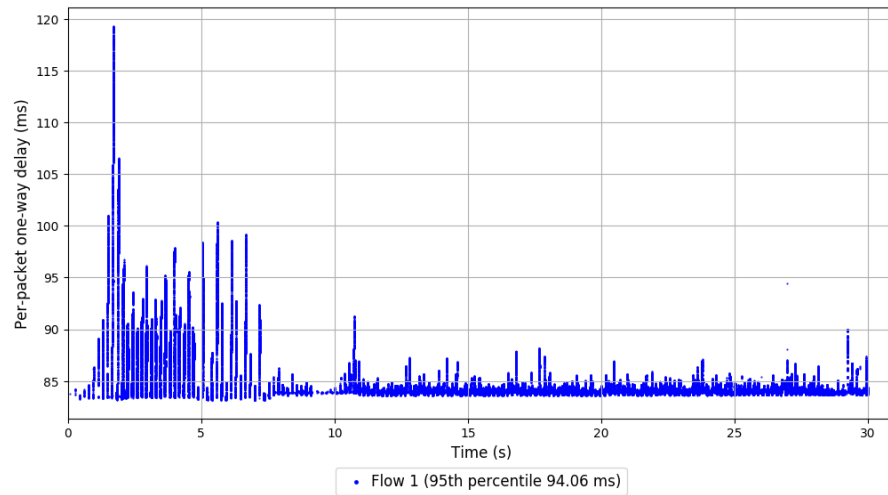
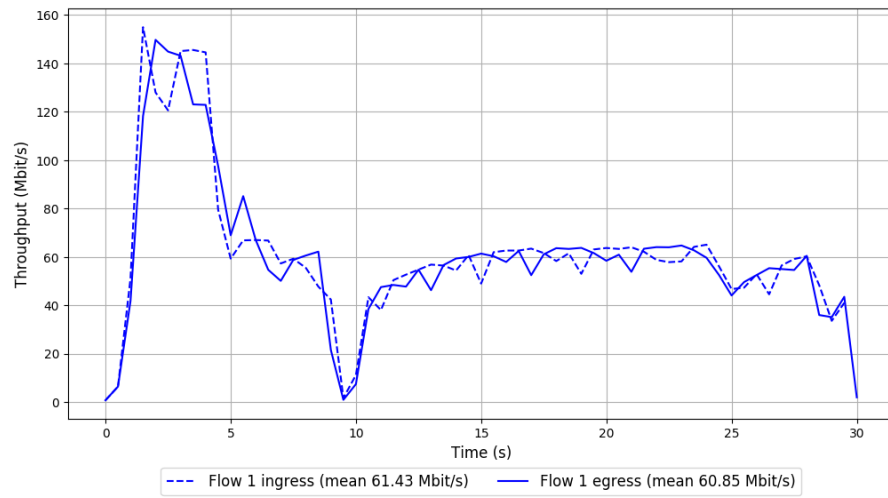
-- Flow 1:

Average throughput: 60.85 Mbit/s

95th percentile per-packet one-way delay: 94.064 ms

Loss rate: 0.94%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-08 22:27:11

End at: 2018-01-08 22:27:41

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.76 Mbit/s

95th percentile per-packet one-way delay: 89.509 ms

Loss rate: 1.28%

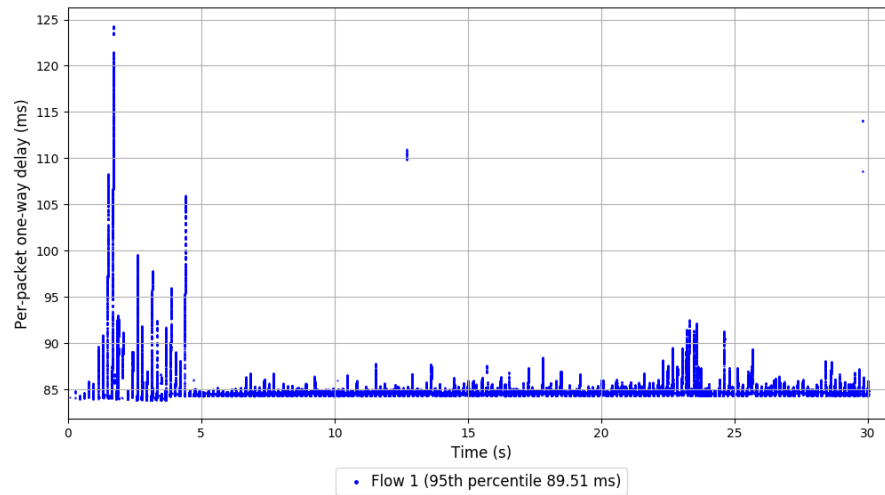
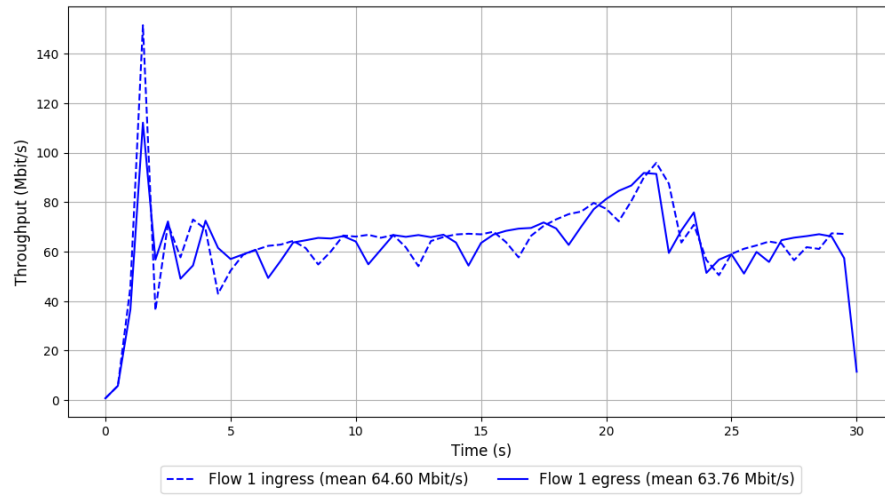
-- Flow 1:

Average throughput: 63.76 Mbit/s

95th percentile per-packet one-way delay: 89.509 ms

Loss rate: 1.28%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-08 22:39:10

End at: 2018-01-08 22:39:40

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.74 Mbit/s

95th percentile per-packet one-way delay: 94.265 ms

Loss rate: 1.91%

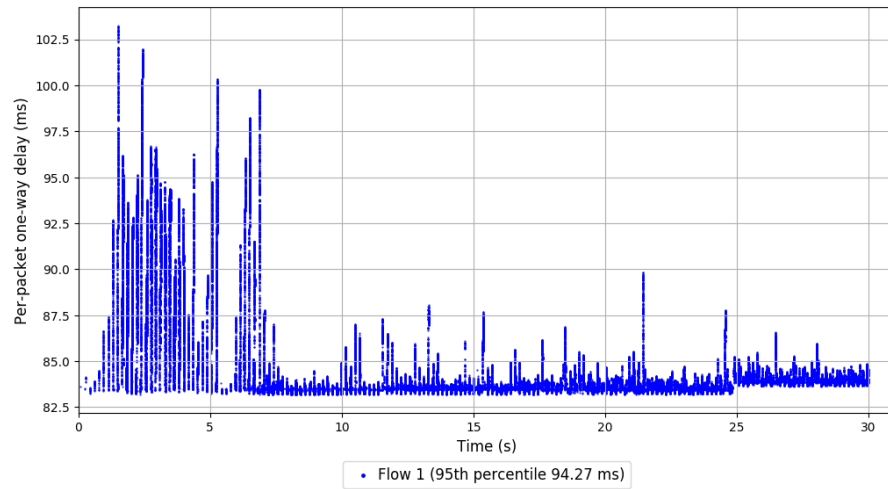
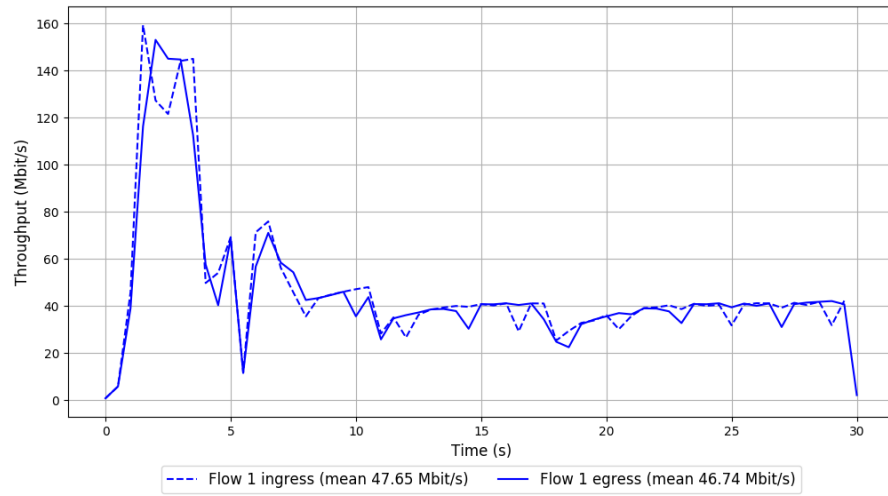
-- Flow 1:

Average throughput: 46.74 Mbit/s

95th percentile per-packet one-way delay: 94.265 ms

Loss rate: 1.91%

Run 10: Report of TCP Cubic — Data Link

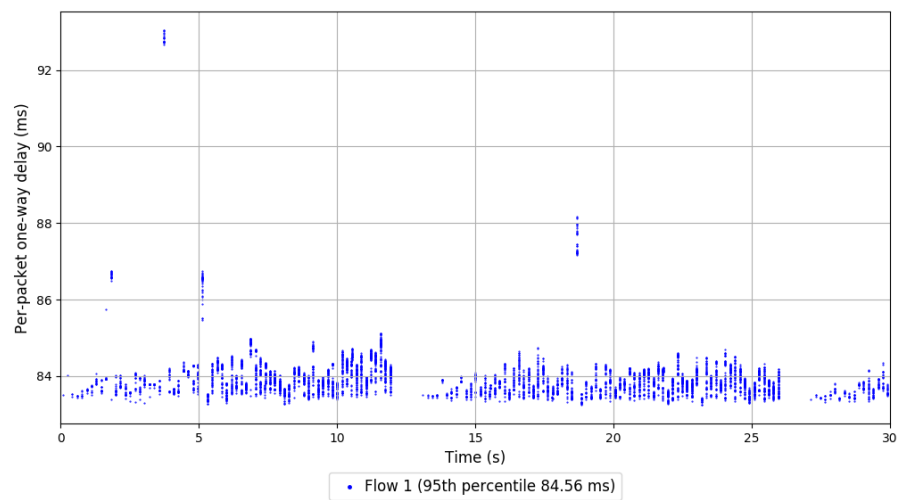
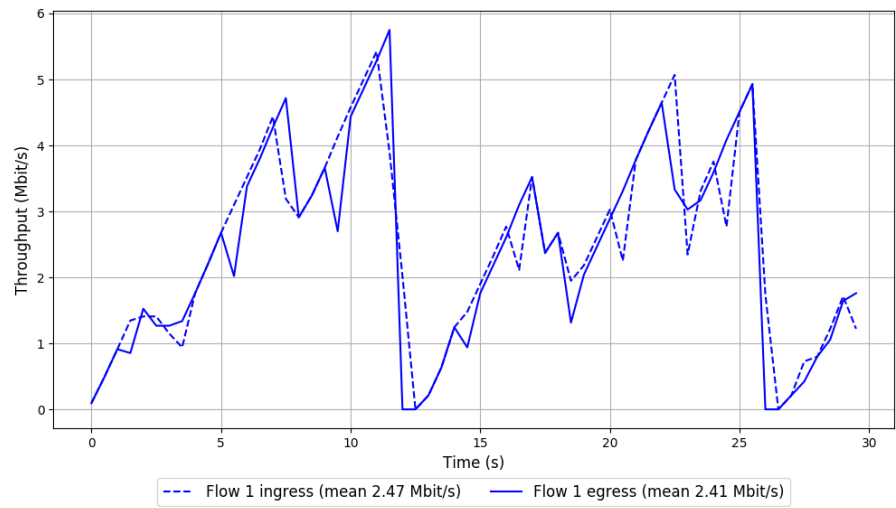


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-08 20:56:23
End at: 2018-01-08 20:56:53

# Below is generated by plot.py at 2018-01-08 23:46:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 84.561 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 84.561 ms
Loss rate: 2.58%
```


Run 1: Report of LEDBAT — Data Link

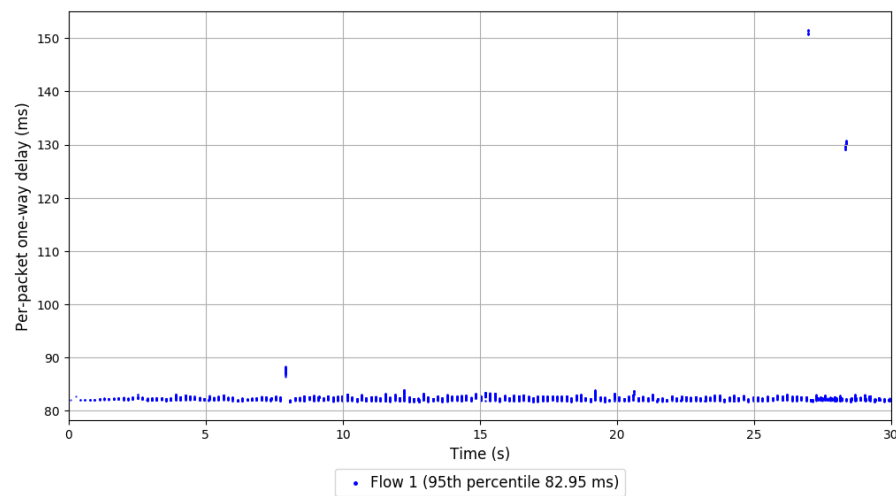
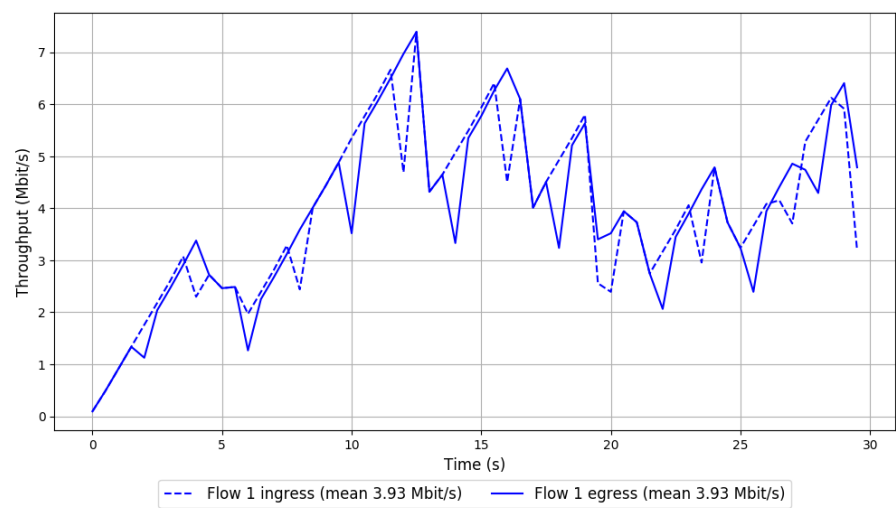


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-08 21:08:29
End at: 2018-01-08 21:08:59

# Below is generated by plot.py at 2018-01-08 23:46:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 82.955 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 82.955 ms
Loss rate: 0.01%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-08 21:20:36

End at: 2018-01-08 21:21:06

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.78 Mbit/s

95th percentile per-packet one-way delay: 82.252 ms

Loss rate: 2.19%

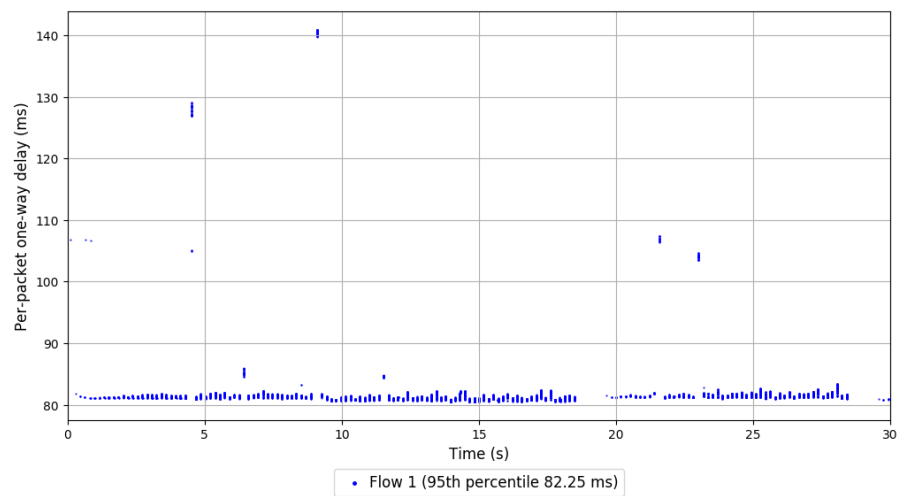
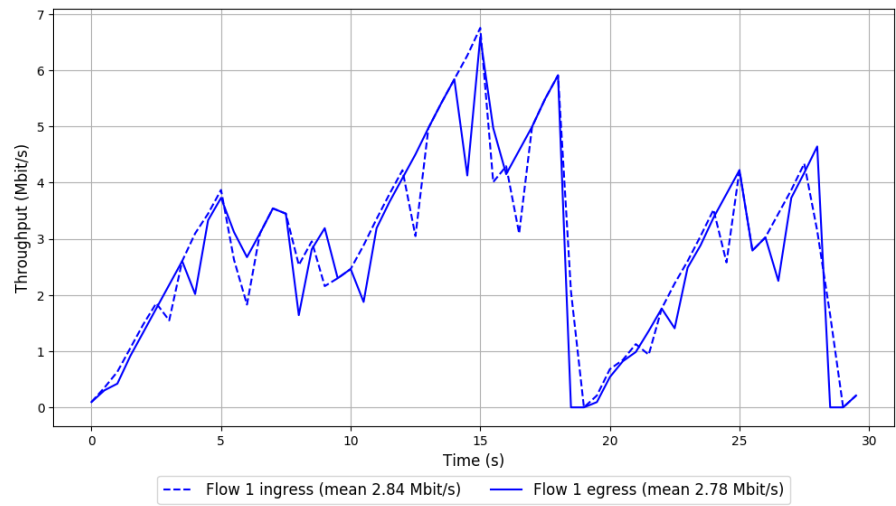
-- Flow 1:

Average throughput: 2.78 Mbit/s

95th percentile per-packet one-way delay: 82.252 ms

Loss rate: 2.19%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-08 21:32:41

End at: 2018-01-08 21:33:11

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 83.307 ms

Loss rate: 0.01%

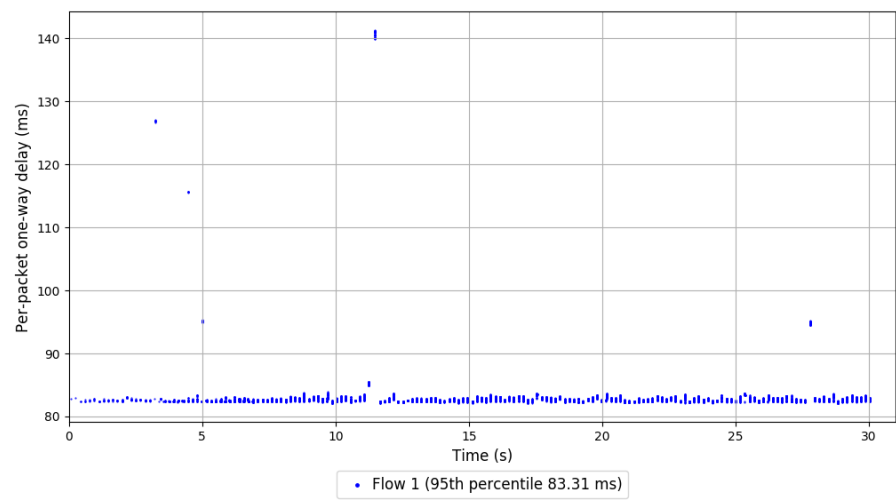
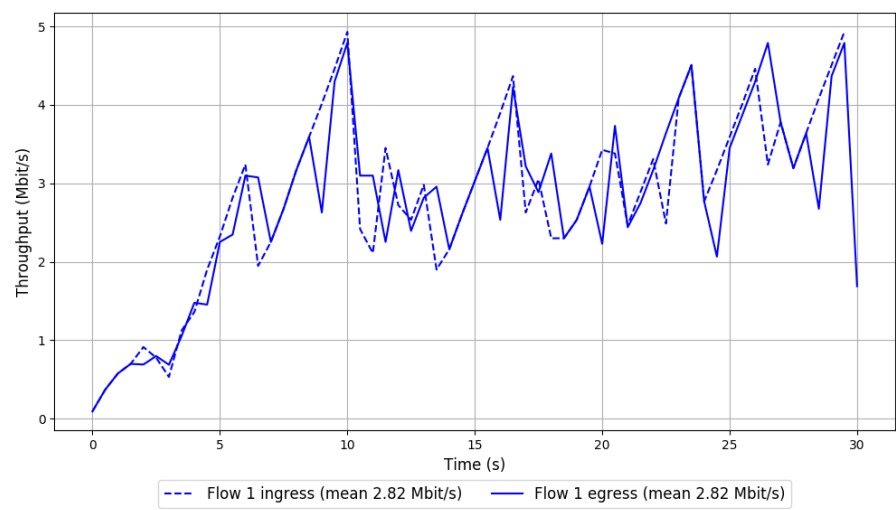
-- Flow 1:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 83.307 ms

Loss rate: 0.01%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-08 21:44:17

End at: 2018-01-08 21:44:47

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 84.885 ms

Loss rate: 2.73%

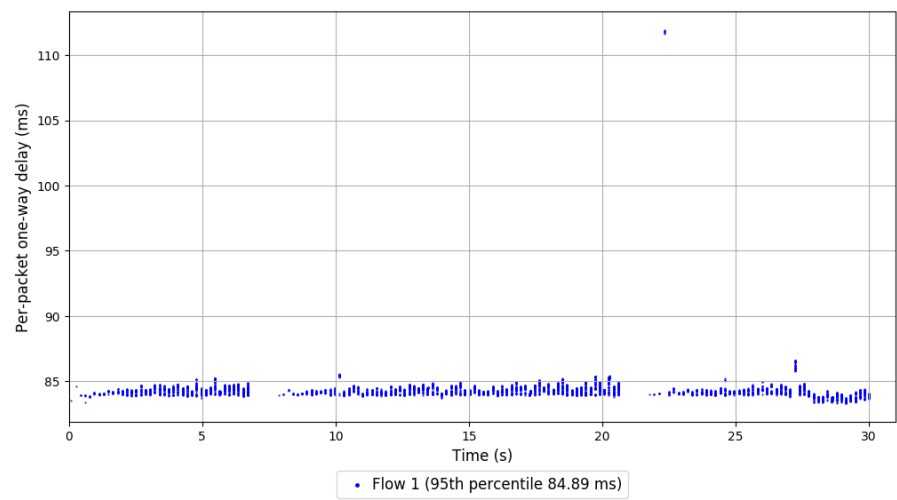
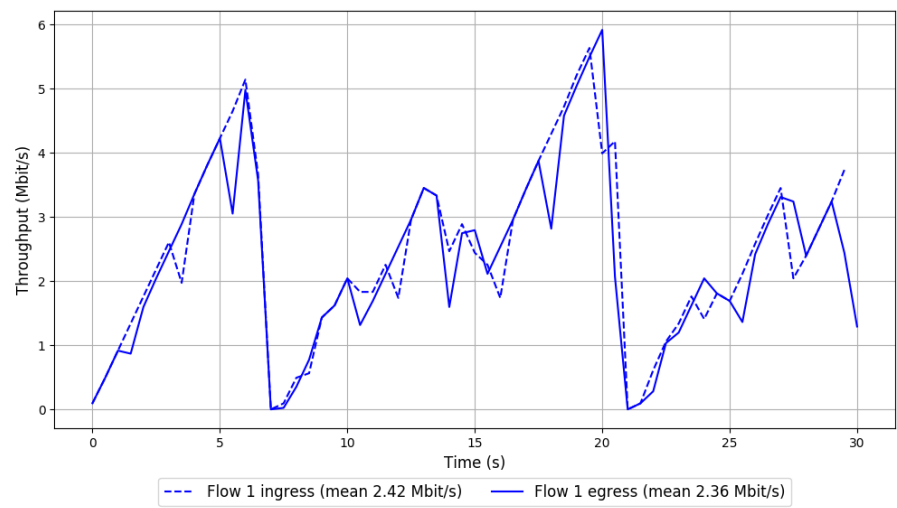
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 84.885 ms

Loss rate: 2.73%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-08 21:56:20

End at: 2018-01-08 21:56:50

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 85.061 ms

Loss rate: 0.96%

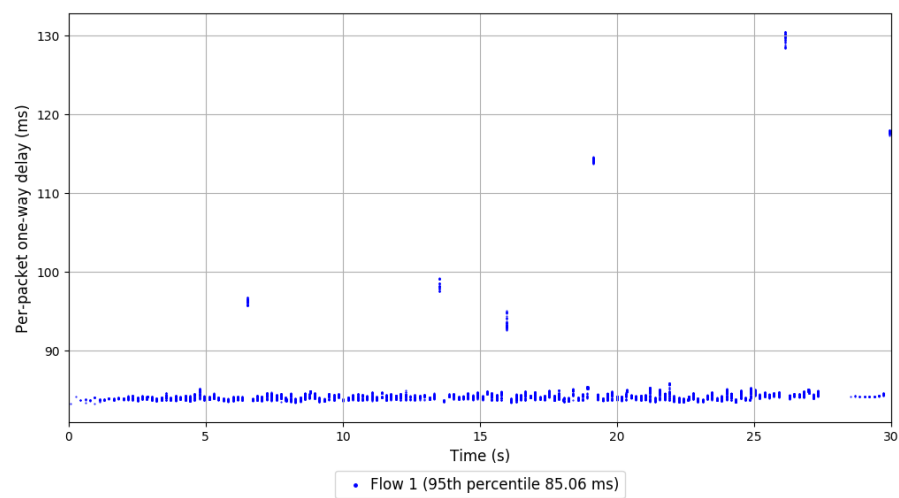
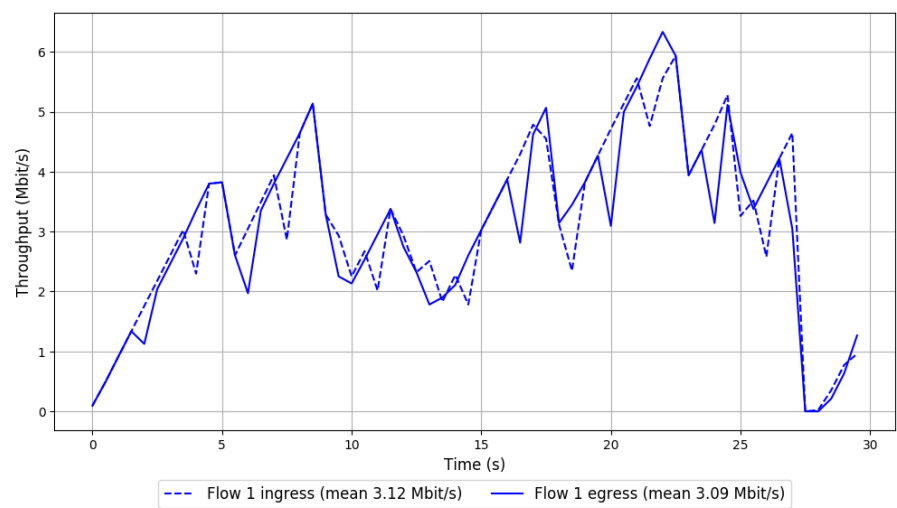
-- Flow 1:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 85.061 ms

Loss rate: 0.96%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

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

End at: 2018-01-08 22:08:38

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 83.797 ms

Loss rate: 0.00%

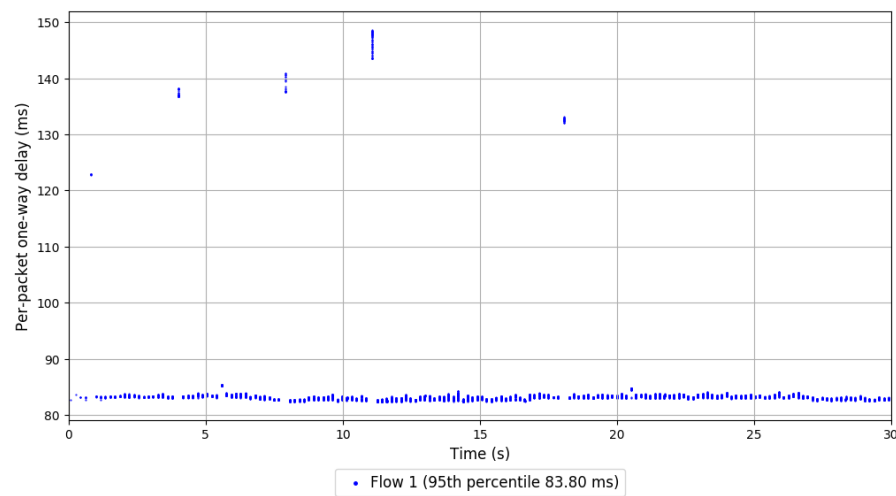
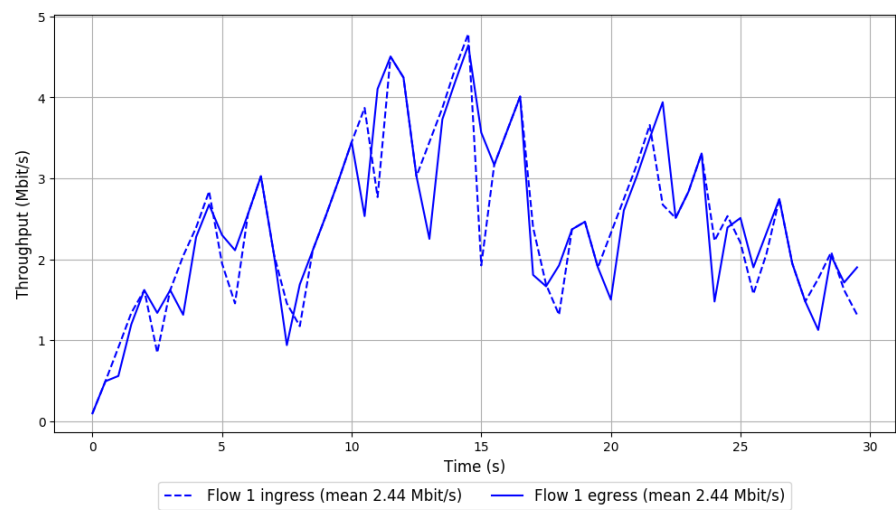
-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 83.797 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

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

End at: 2018-01-08 22:20:52

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 85.310 ms

Loss rate: 2.44%

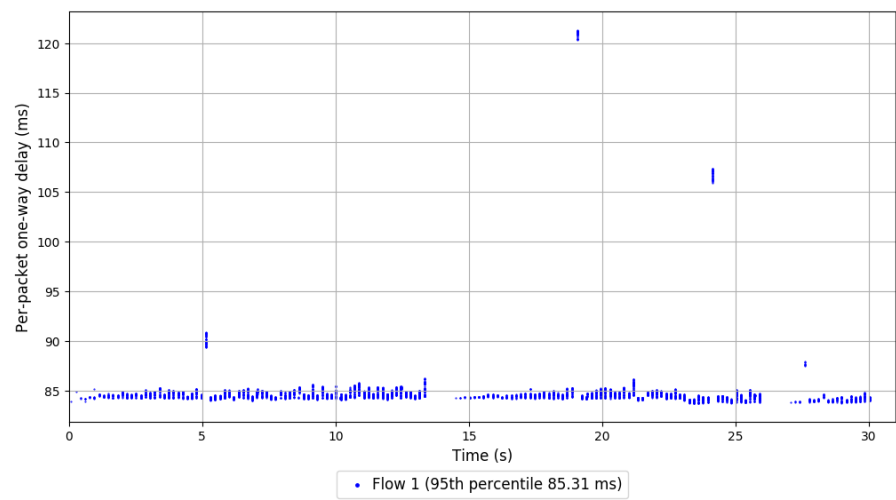
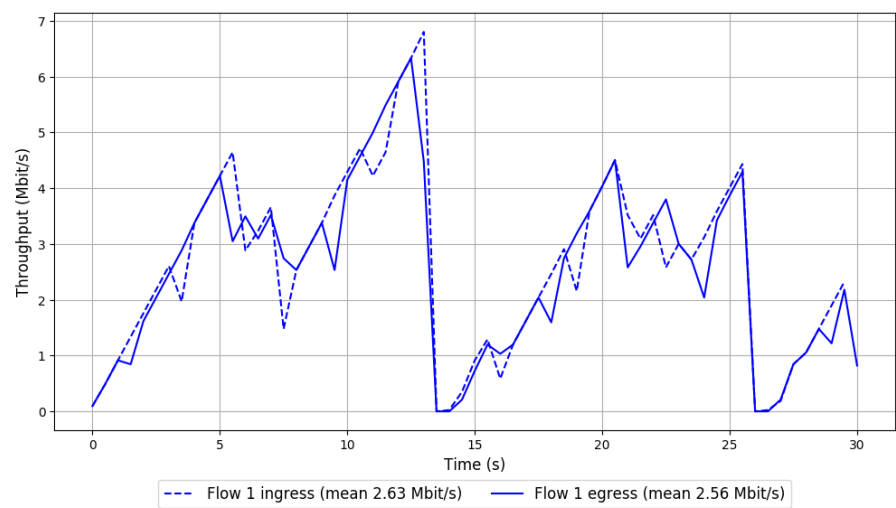
-- Flow 1:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 85.310 ms

Loss rate: 2.44%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-08 22:32:35

End at: 2018-01-08 22:33:05

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 85.222 ms

Loss rate: 1.17%

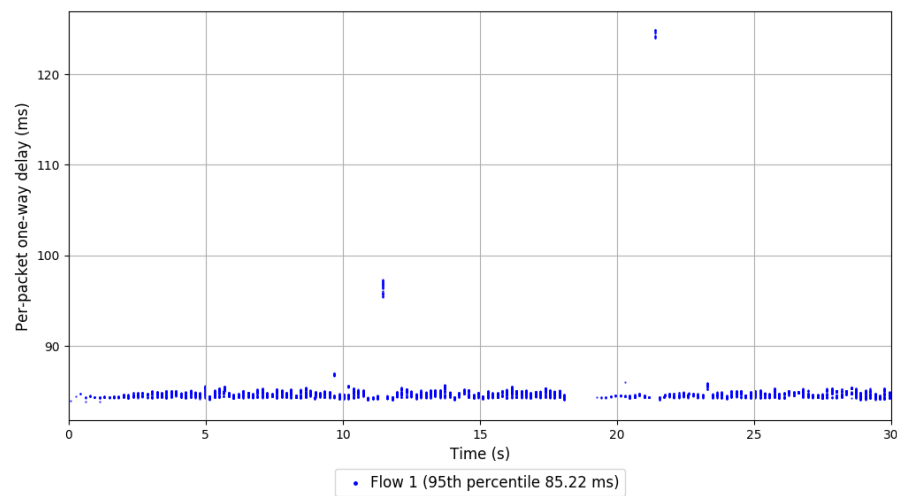
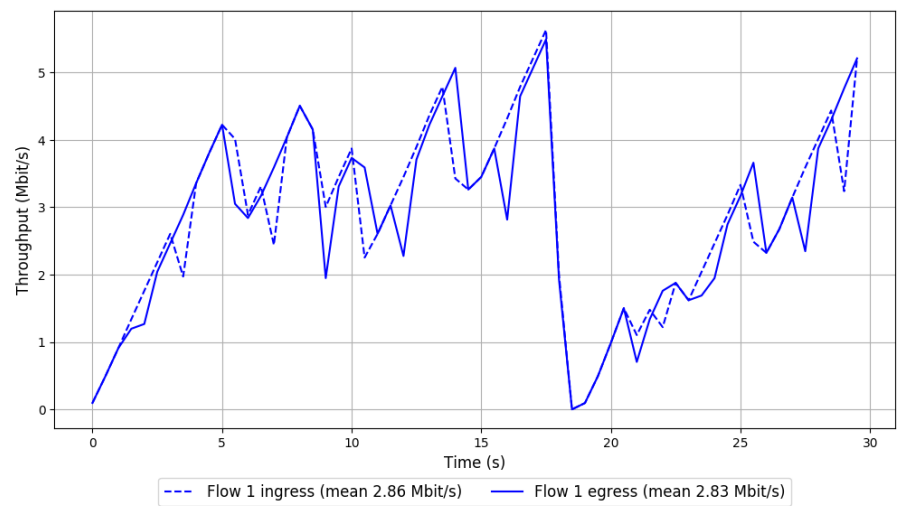
-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 85.222 ms

Loss rate: 1.17%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-08 22:44:32

End at: 2018-01-08 22:45:02

Below is generated by plot.py at 2018-01-08 23:46:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.35 Mbit/s

95th percentile per-packet one-way delay: 85.165 ms

Loss rate: 0.87%

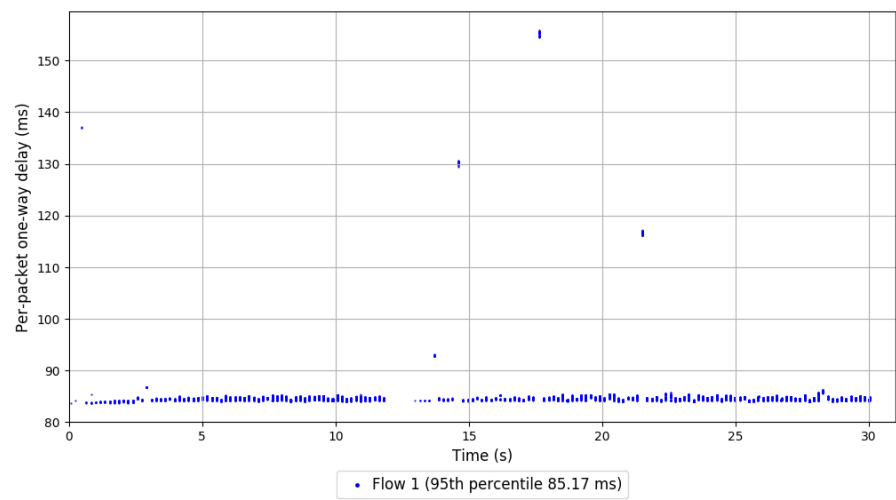
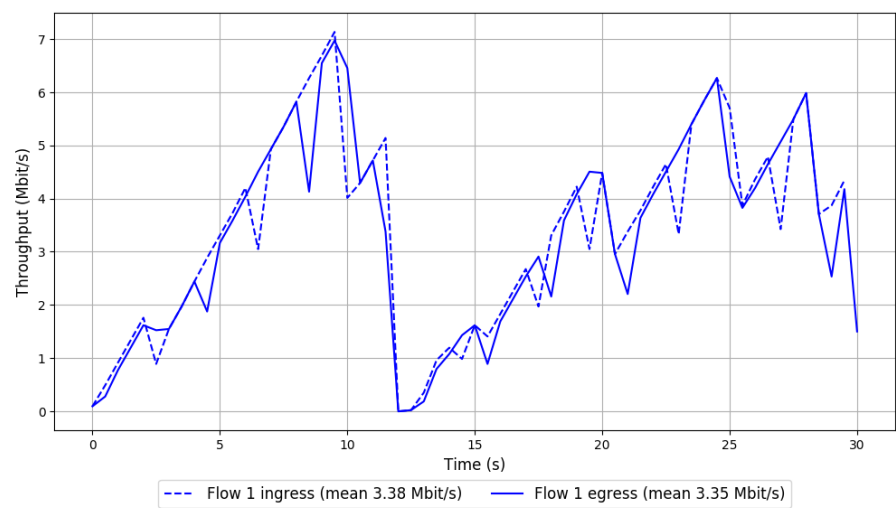
-- Flow 1:

Average throughput: 3.35 Mbit/s

95th percentile per-packet one-way delay: 85.165 ms

Loss rate: 0.87%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2018-01-08 20:53:52

End at: 2018-01-08 20:54:22

Below is generated by plot.py at 2018-01-08 23:51:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 358.59 Mbit/s

95th percentile per-packet one-way delay: 113.472 ms

Loss rate: 0.24%

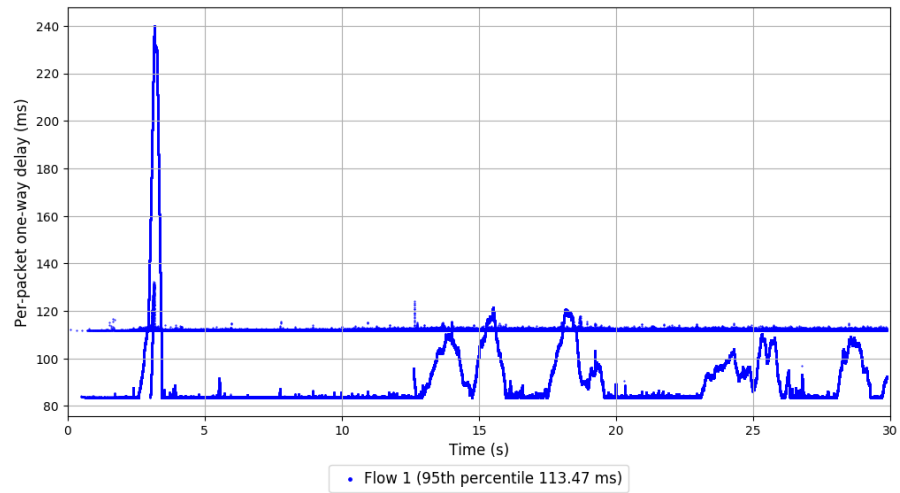
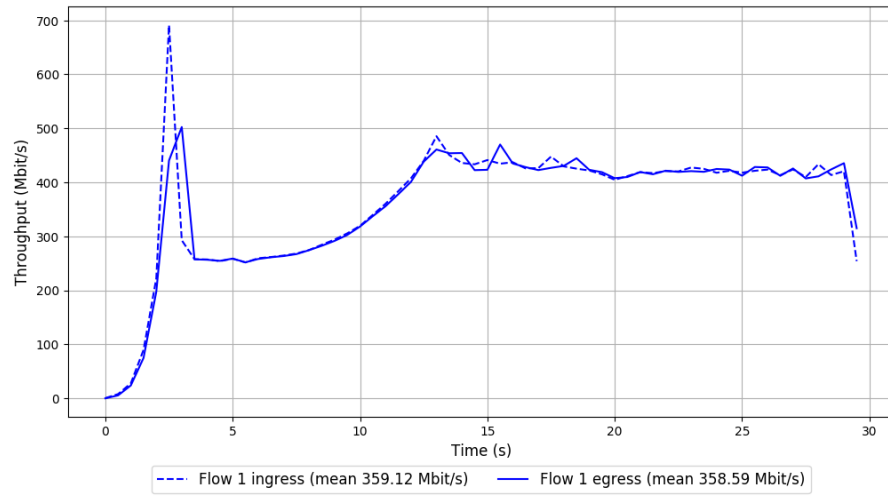
-- Flow 1:

Average throughput: 358.59 Mbit/s

95th percentile per-packet one-way delay: 113.472 ms

Loss rate: 0.24%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-08 21:05:57

End at: 2018-01-08 21:06:27

Below is generated by plot.py at 2018-01-08 23:52:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 432.21 Mbit/s

95th percentile per-packet one-way delay: 253.801 ms

Loss rate: 6.78%

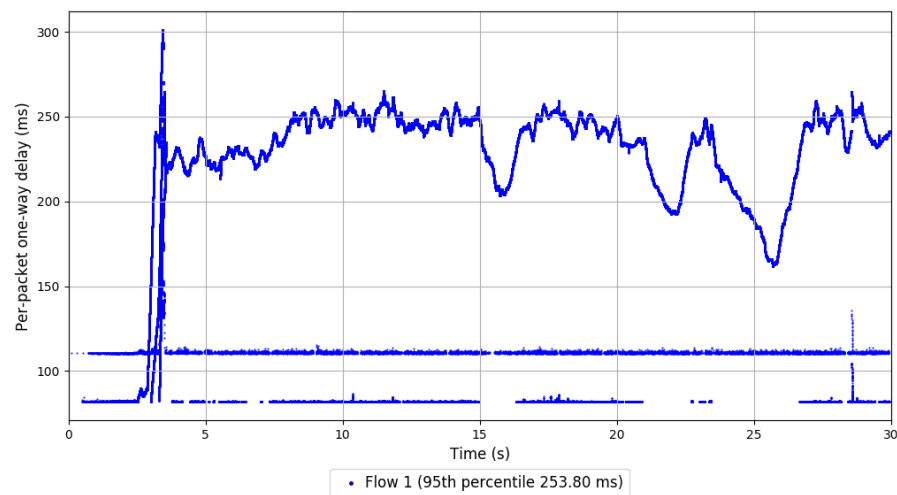
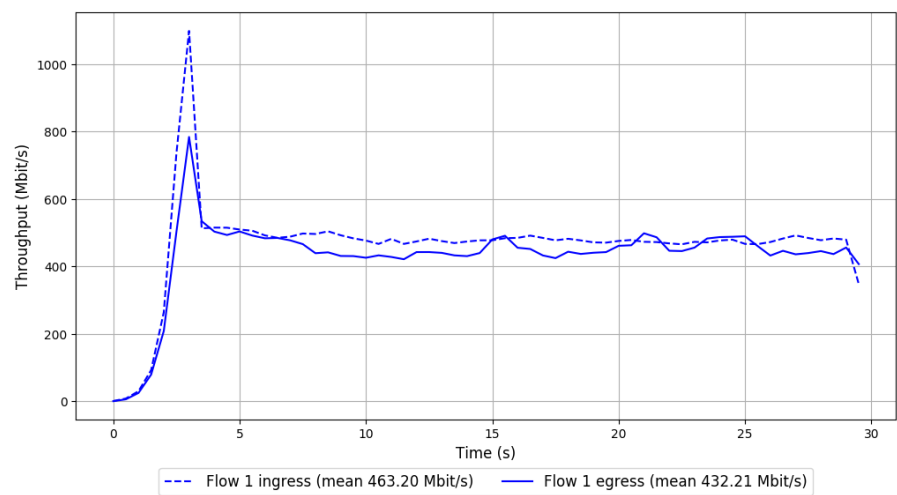
-- Flow 1:

Average throughput: 432.21 Mbit/s

95th percentile per-packet one-way delay: 253.801 ms

Loss rate: 6.78%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-08 21:18:05

End at: 2018-01-08 21:18:35

Below is generated by plot.py at 2018-01-08 23:52:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 361.70 Mbit/s

95th percentile per-packet one-way delay: 161.991 ms

Loss rate: 0.30%

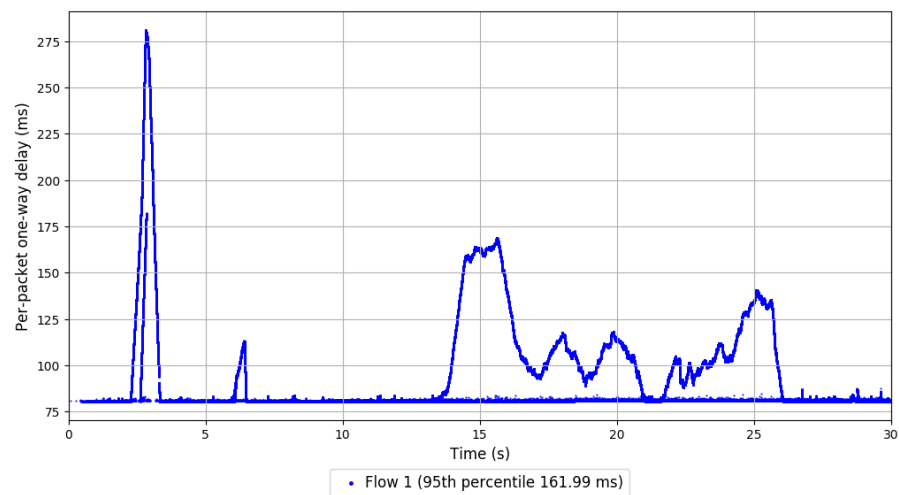
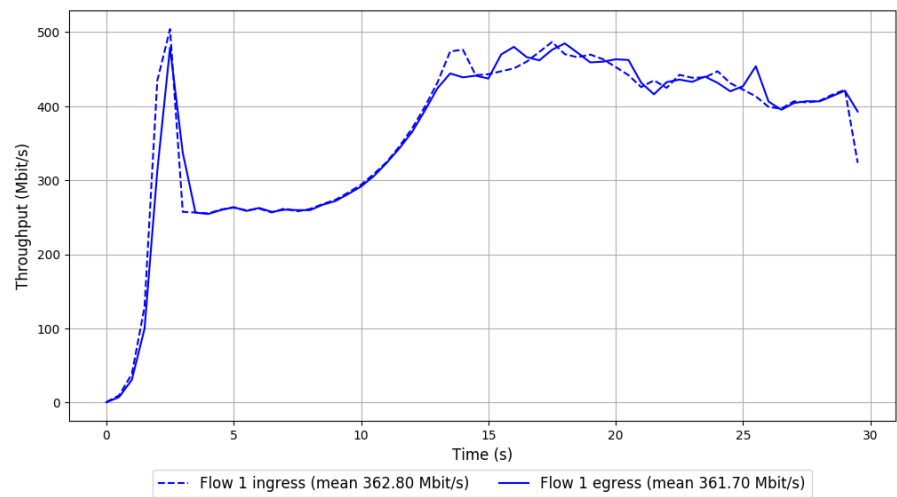
-- Flow 1:

Average throughput: 361.70 Mbit/s

95th percentile per-packet one-way delay: 161.991 ms

Loss rate: 0.30%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-08 21:30:11

End at: 2018-01-08 21:30:41

Below is generated by plot.py at 2018-01-08 23:52:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 355.66 Mbit/s

95th percentile per-packet one-way delay: 180.911 ms

Loss rate: 0.27%

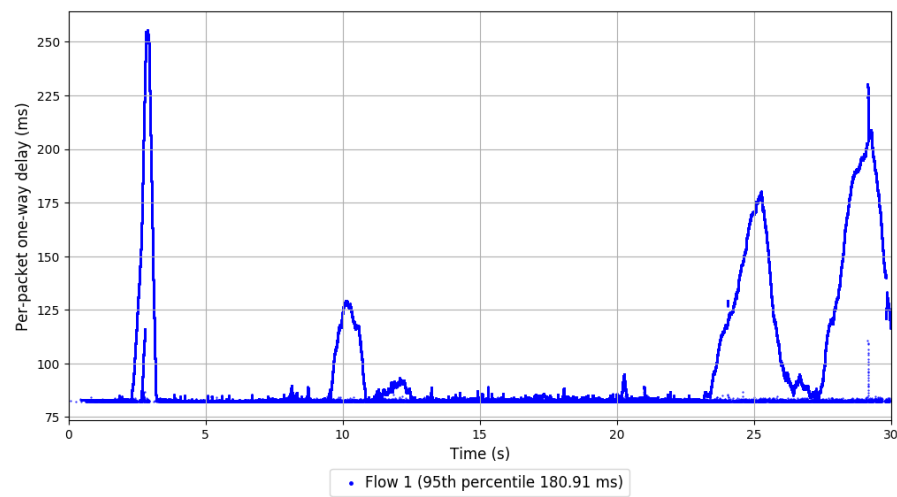
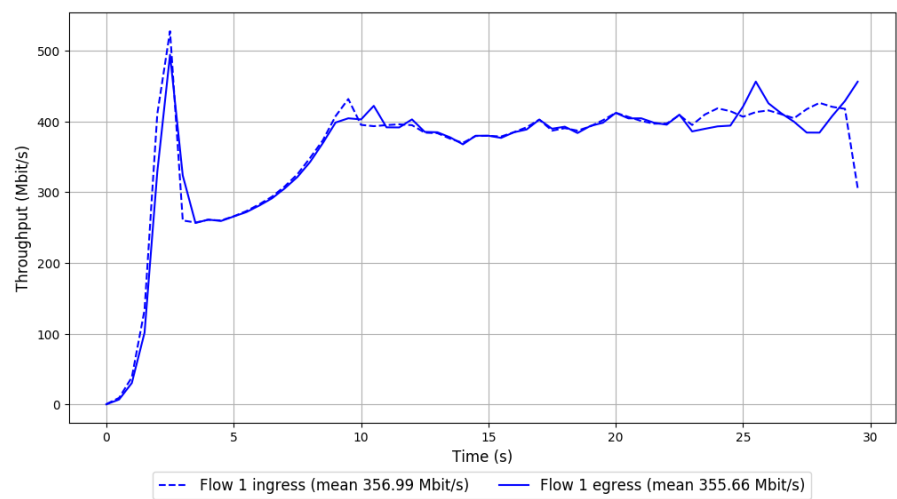
-- Flow 1:

Average throughput: 355.66 Mbit/s

95th percentile per-packet one-way delay: 180.911 ms

Loss rate: 0.27%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-08 21:41:47

End at: 2018-01-08 21:42:17

Below is generated by plot.py at 2018-01-08 23:52:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 380.76 Mbit/s

95th percentile per-packet one-way delay: 138.774 ms

Loss rate: 0.31%

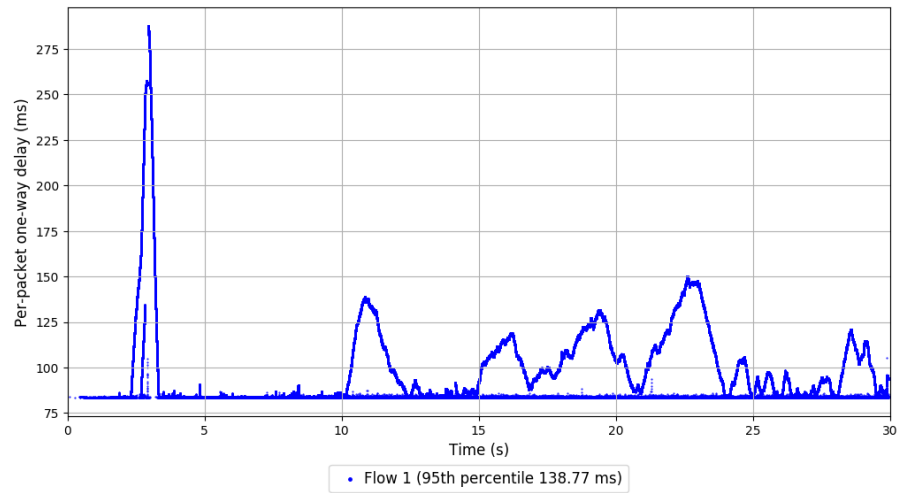
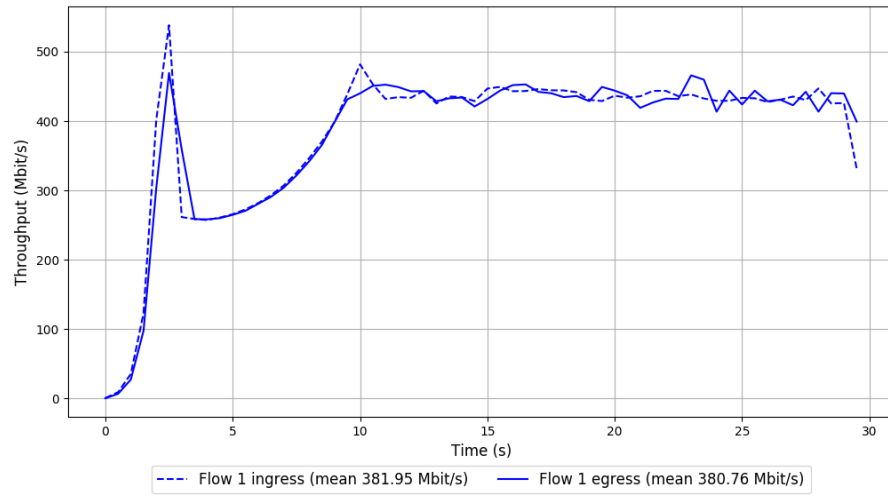
-- Flow 1:

Average throughput: 380.76 Mbit/s

95th percentile per-packet one-way delay: 138.774 ms

Loss rate: 0.31%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-08 21:54:00

End at: 2018-01-08 21:54:30

Below is generated by plot.py at 2018-01-08 23:52:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 396.89 Mbit/s

95th percentile per-packet one-way delay: 235.709 ms

Loss rate: 2.24%

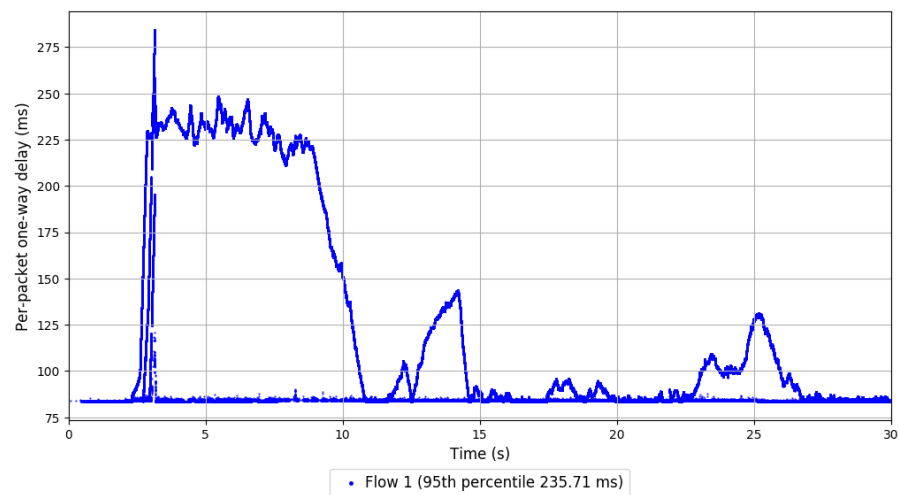
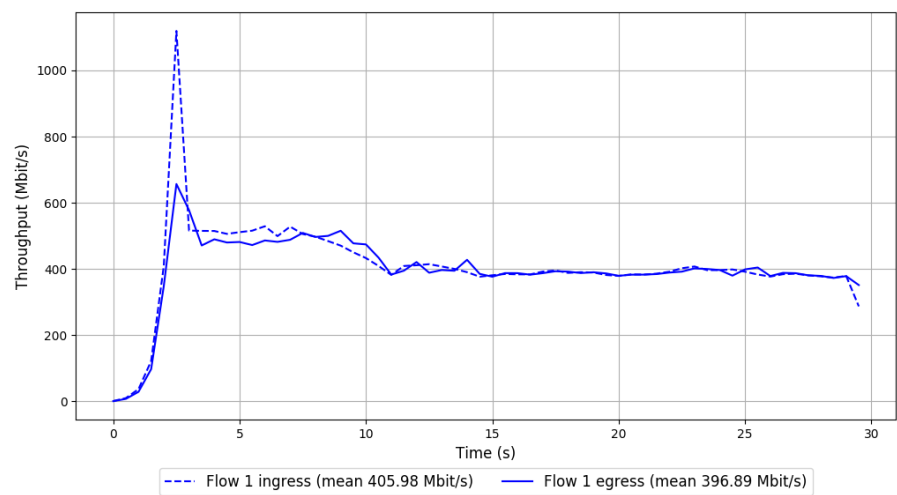
-- Flow 1:

Average throughput: 396.89 Mbit/s

95th percentile per-packet one-way delay: 235.709 ms

Loss rate: 2.24%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-08 22:05:40

End at: 2018-01-08 22:06:10

Below is generated by plot.py at 2018-01-08 23:52:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 327.54 Mbit/s

95th percentile per-packet one-way delay: 131.280 ms

Loss rate: 0.20%

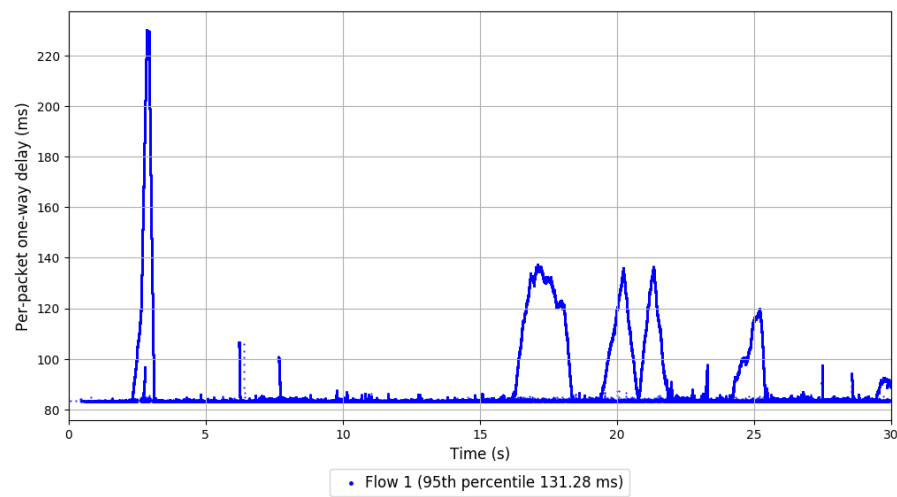
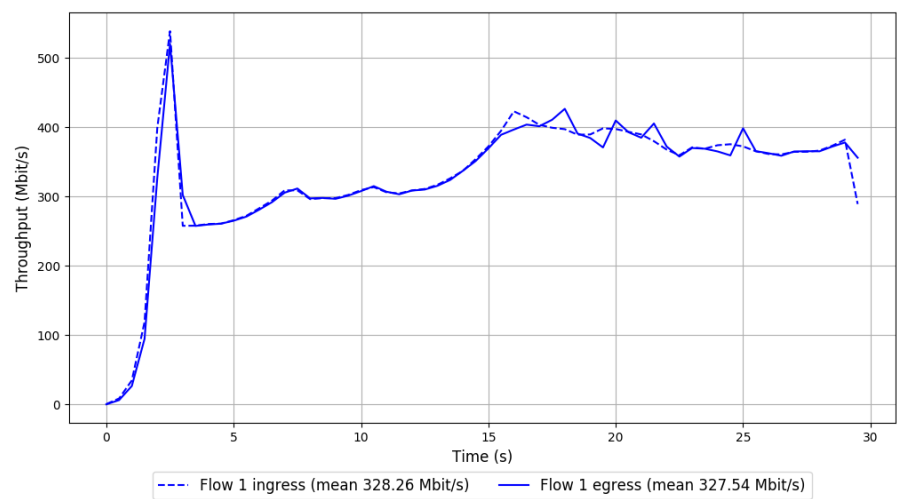
-- Flow 1:

Average throughput: 327.54 Mbit/s

95th percentile per-packet one-way delay: 131.280 ms

Loss rate: 0.20%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-08 22:17:51

End at: 2018-01-08 22:18:21

Below is generated by plot.py at 2018-01-08 23:52:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 346.23 Mbit/s

95th percentile per-packet one-way delay: 145.703 ms

Loss rate: 0.33%

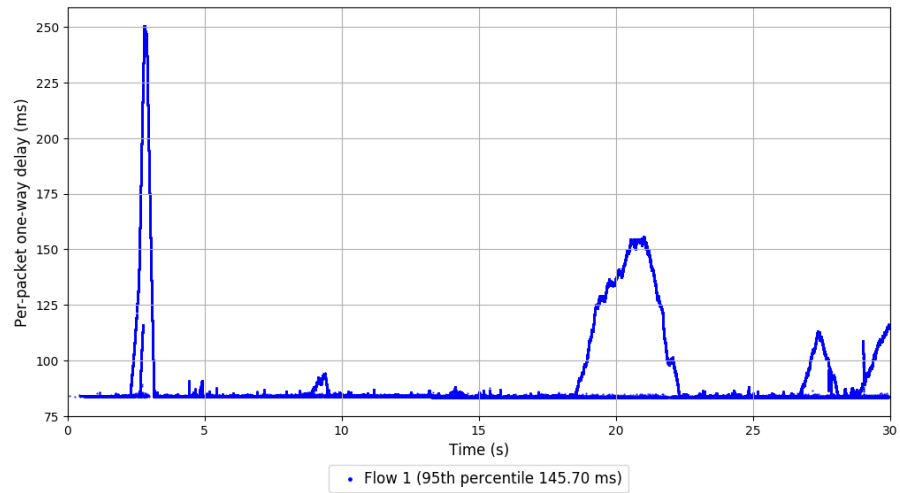
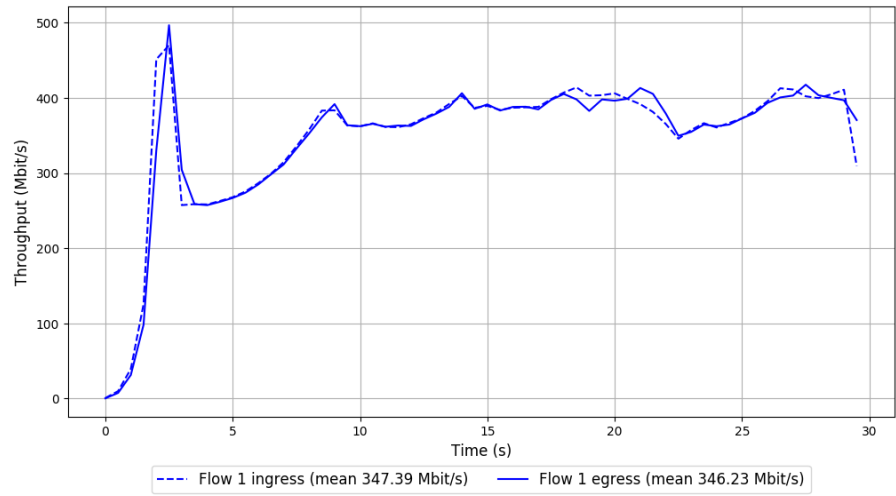
-- Flow 1:

Average throughput: 346.23 Mbit/s

95th percentile per-packet one-way delay: 145.703 ms

Loss rate: 0.33%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-08 22:30:05

End at: 2018-01-08 22:30:35

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 364.72 Mbit/s

95th percentile per-packet one-way delay: 106.762 ms

Loss rate: 0.29%

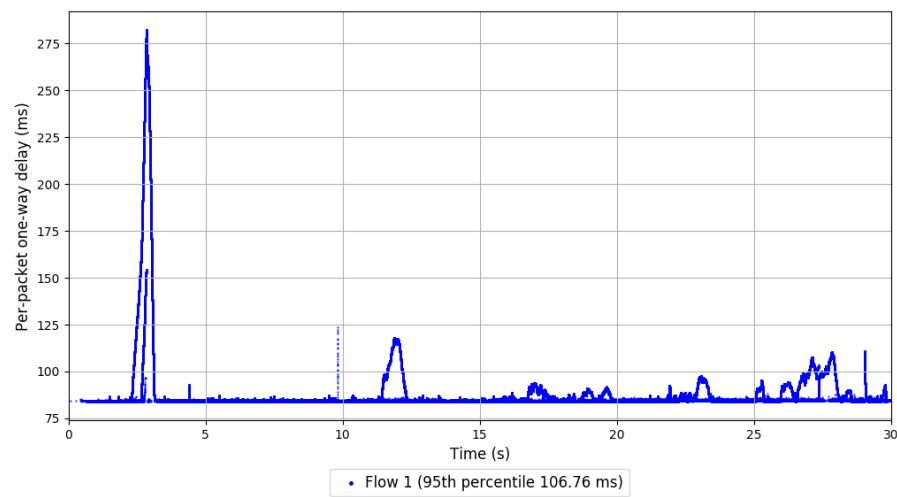
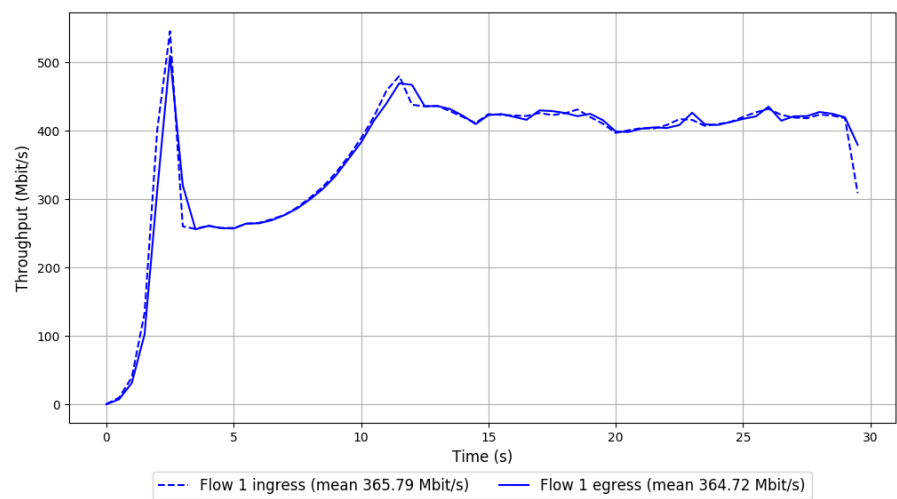
-- Flow 1:

Average throughput: 364.72 Mbit/s

95th percentile per-packet one-way delay: 106.762 ms

Loss rate: 0.29%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-08 22:42:03

End at: 2018-01-08 22:42:33

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 341.78 Mbit/s

95th percentile per-packet one-way delay: 114.934 ms

Loss rate: 0.27%

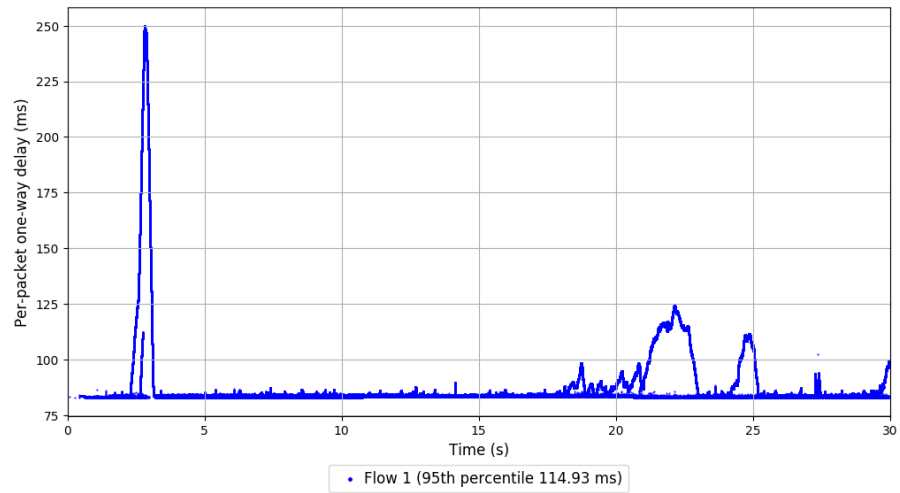
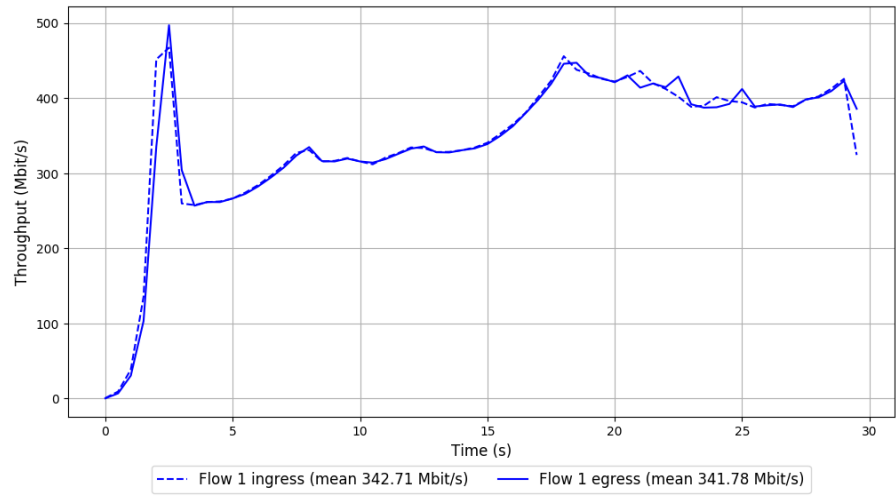
-- Flow 1:

Average throughput: 341.78 Mbit/s

95th percentile per-packet one-way delay: 114.934 ms

Loss rate: 0.27%

Run 10: Report of PCC — Data Link

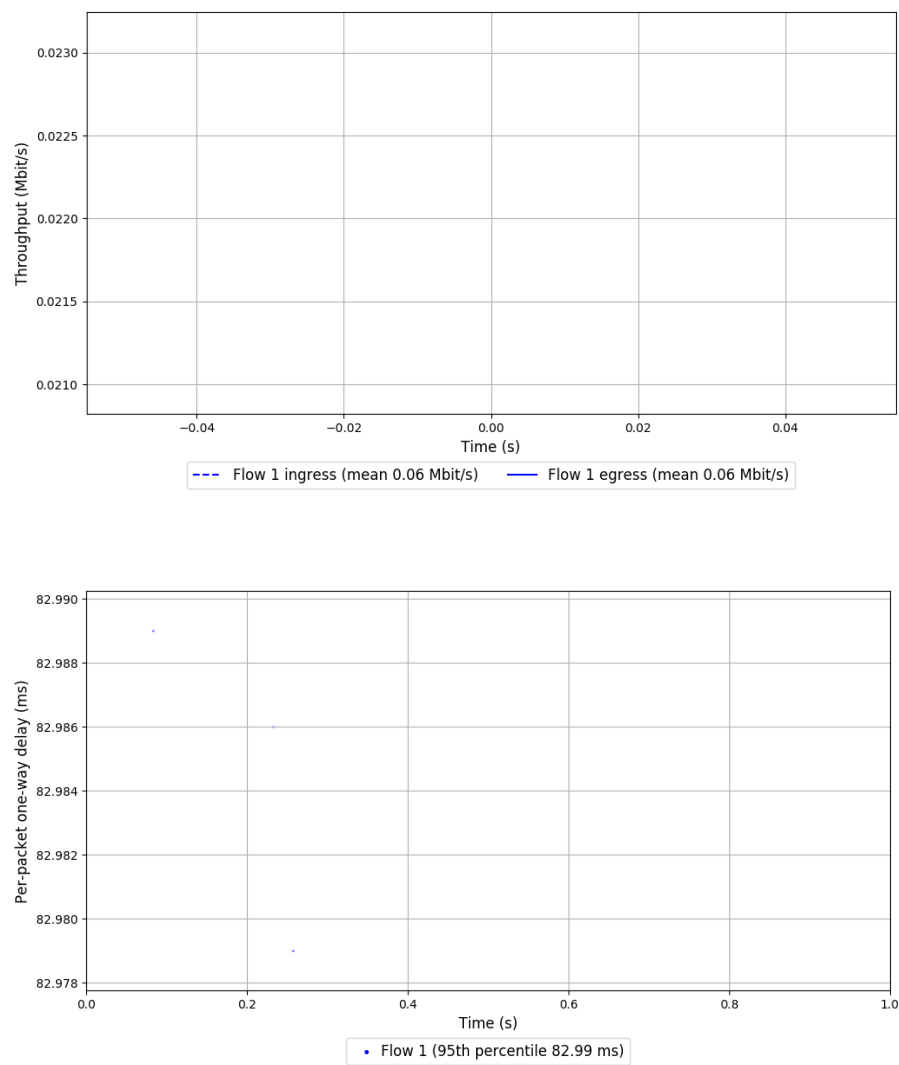


Run 1: Statistics of QUIC Cubic

Start at: 2018-01-08 20:59:25

End at: 2018-01-08 20:59:55

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-08 21:11:29

End at: 2018-01-08 21:11:59

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.16 Mbit/s

95th percentile per-packet one-way delay: 81.367 ms

Loss rate: 0.00%

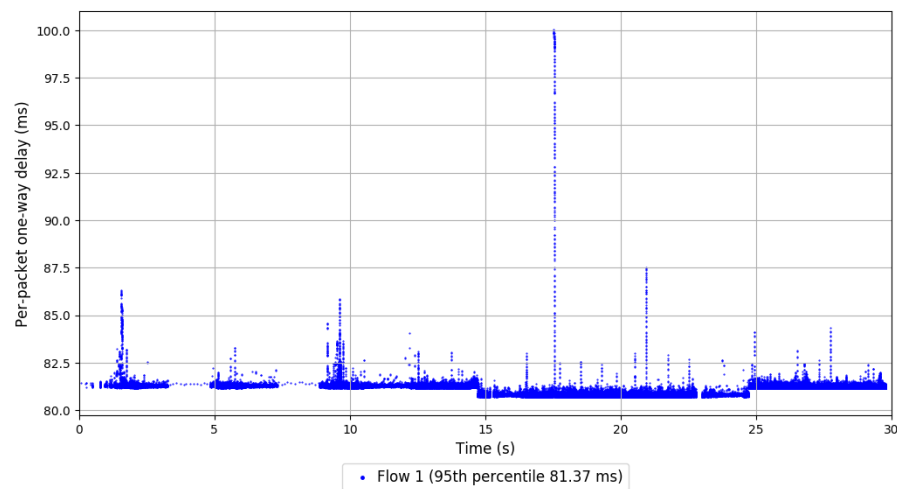
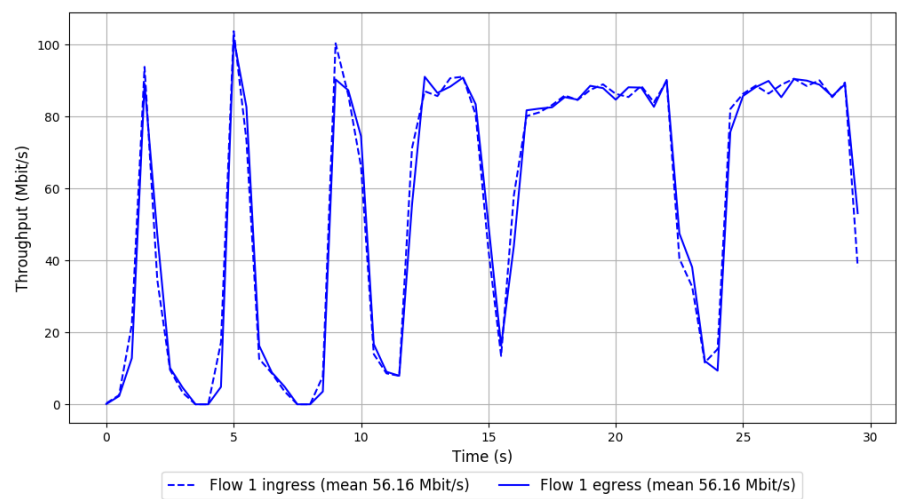
-- Flow 1:

Average throughput: 56.16 Mbit/s

95th percentile per-packet one-way delay: 81.367 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-08 21:23:35

End at: 2018-01-08 21:24:05

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.65 Mbit/s

95th percentile per-packet one-way delay: 81.423 ms

Loss rate: 0.00%

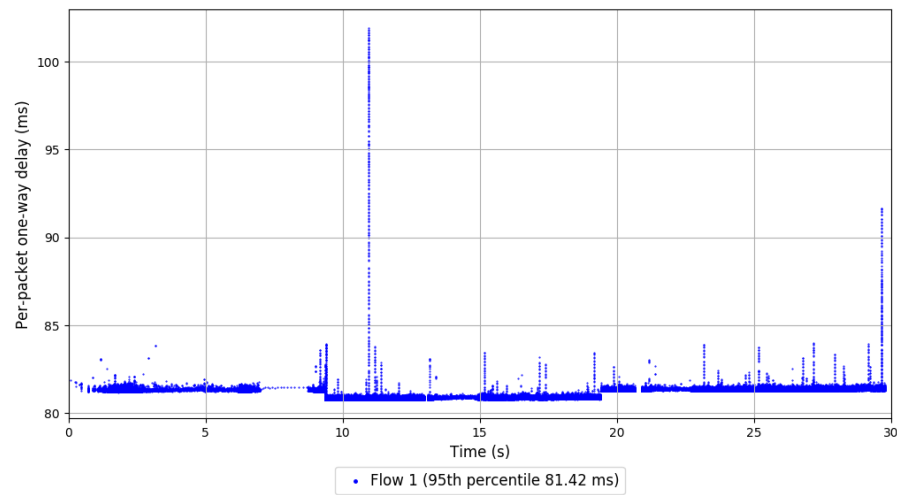
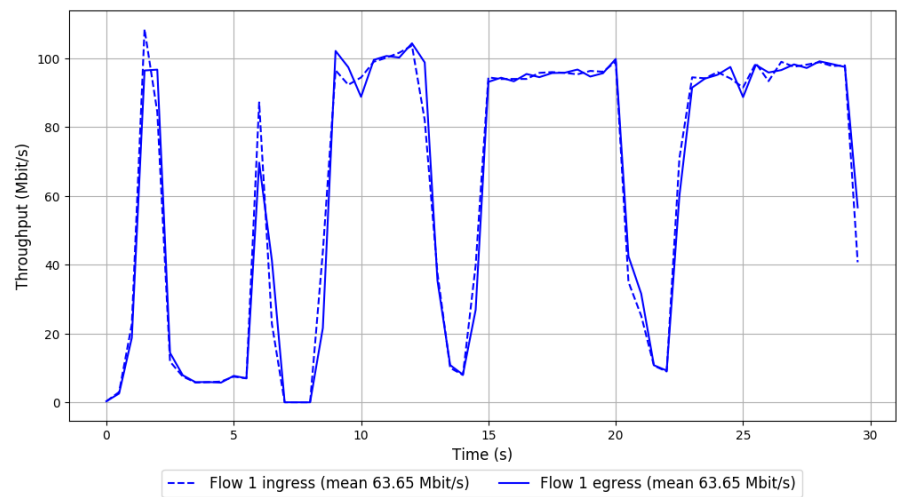
-- Flow 1:

Average throughput: 63.65 Mbit/s

95th percentile per-packet one-way delay: 81.423 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-08 21:35:41

End at: 2018-01-08 21:36:11

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.21 Mbit/s

95th percentile per-packet one-way delay: 82.745 ms

Loss rate: 0.00%

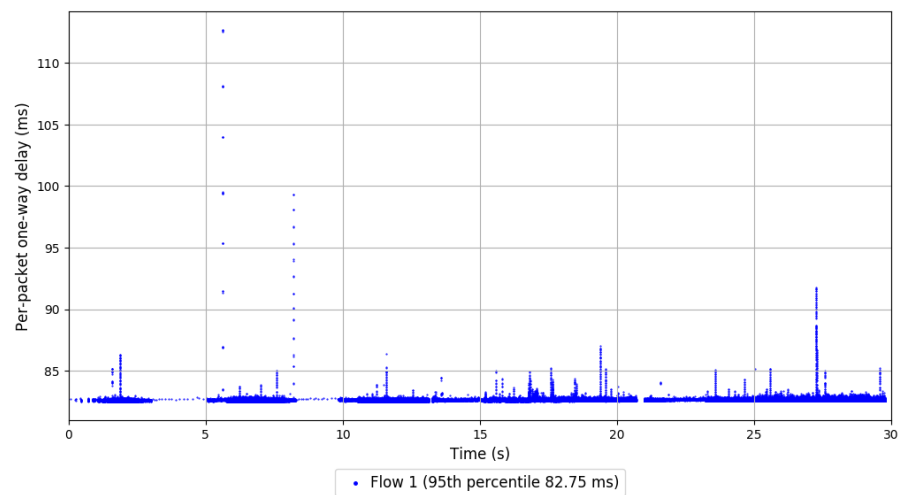
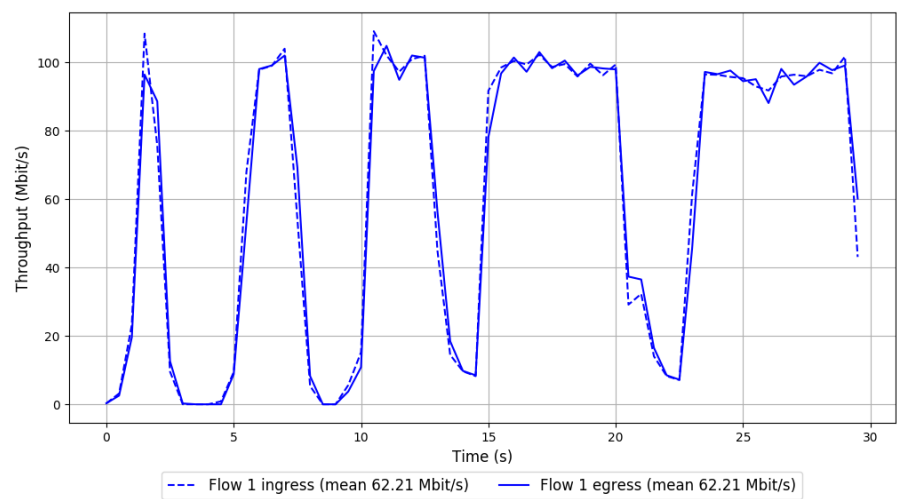
-- Flow 1:

Average throughput: 62.21 Mbit/s

95th percentile per-packet one-way delay: 82.745 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-08 21:47:17

End at: 2018-01-08 21:47:47

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.09 Mbit/s

95th percentile per-packet one-way delay: 83.487 ms

Loss rate: 0.00%

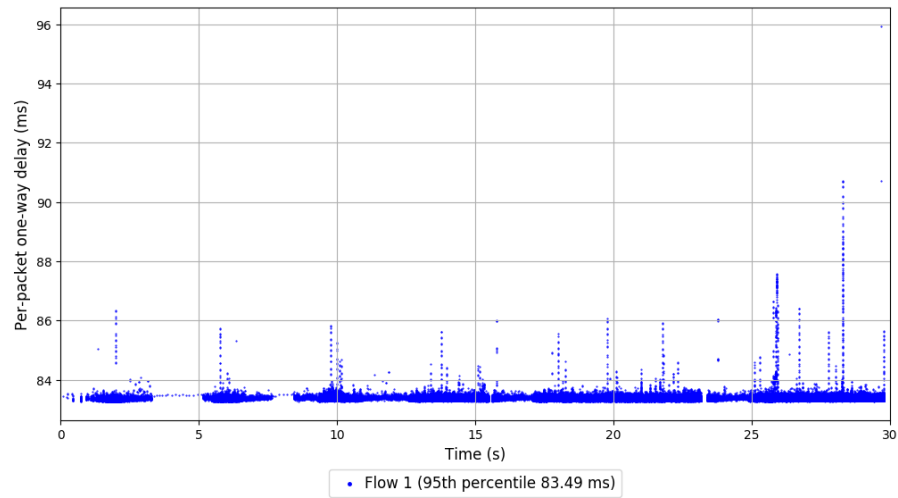
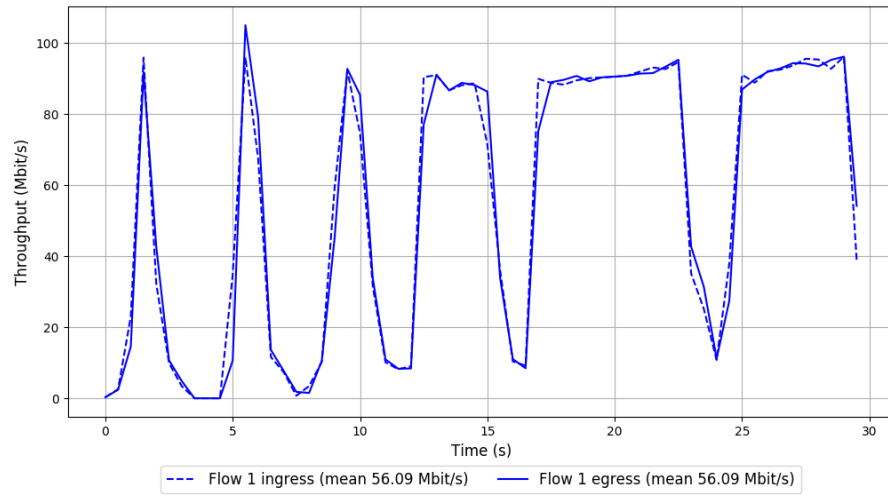
-- Flow 1:

Average throughput: 56.09 Mbit/s

95th percentile per-packet one-way delay: 83.487 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-08 21:59:19

End at: 2018-01-08 21:59:49

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.21 Mbit/s

95th percentile per-packet one-way delay: 83.891 ms

Loss rate: 0.00%

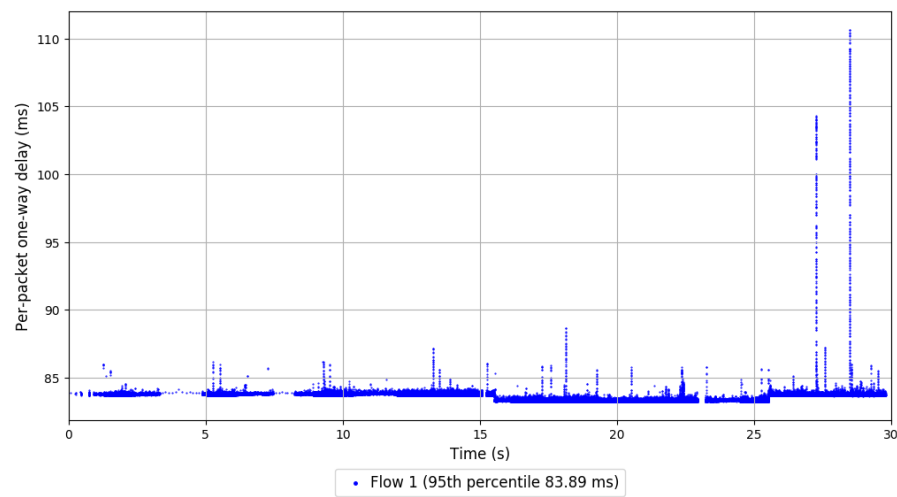
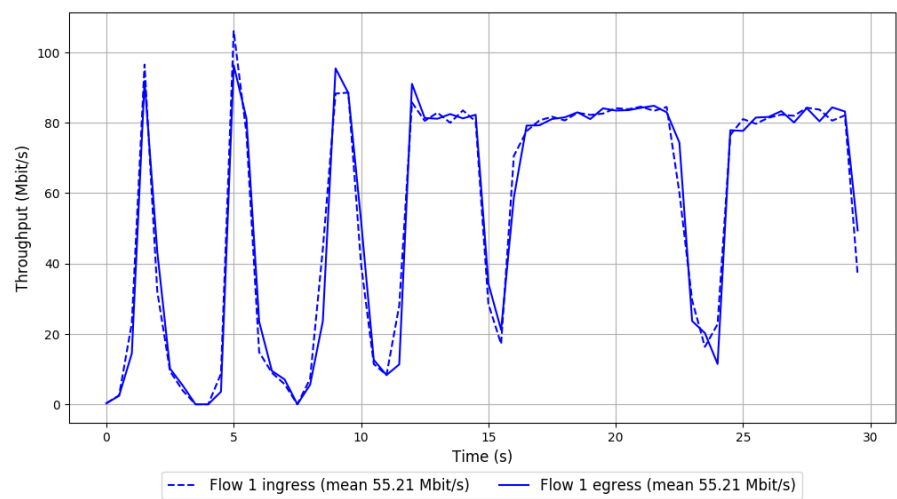
-- Flow 1:

Average throughput: 55.21 Mbit/s

95th percentile per-packet one-way delay: 83.891 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-08 22:11:07

End at: 2018-01-08 22:11:37

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.46 Mbit/s

95th percentile per-packet one-way delay: 82.874 ms

Loss rate: 0.00%

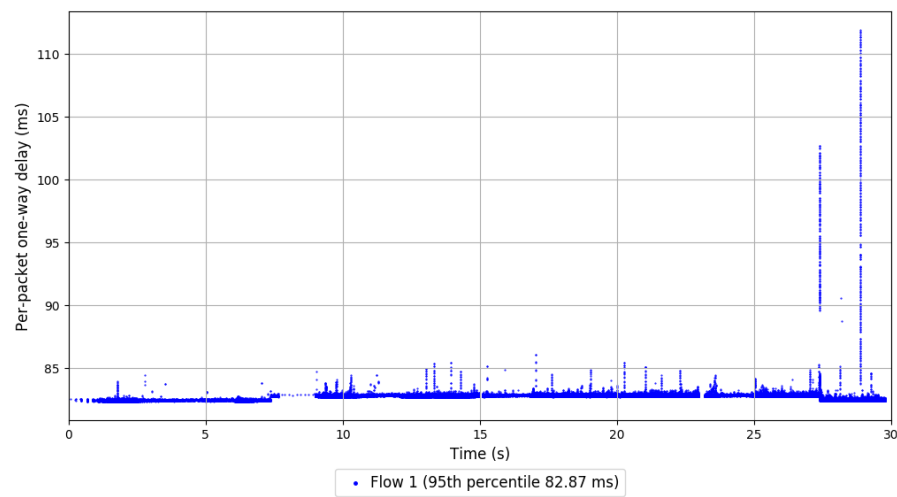
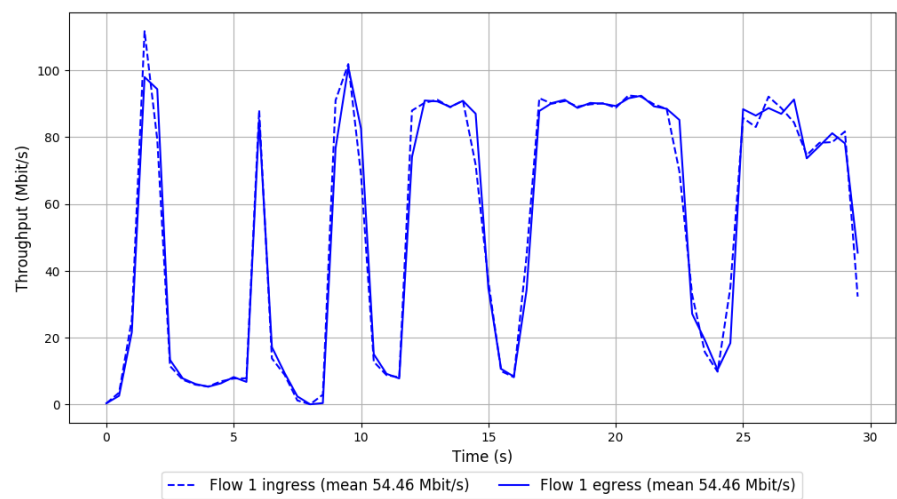
-- Flow 1:

Average throughput: 54.46 Mbit/s

95th percentile per-packet one-way delay: 82.874 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-08 22:23:21

End at: 2018-01-08 22:23:52

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.73 Mbit/s

95th percentile per-packet one-way delay: 84.355 ms

Loss rate: 0.00%

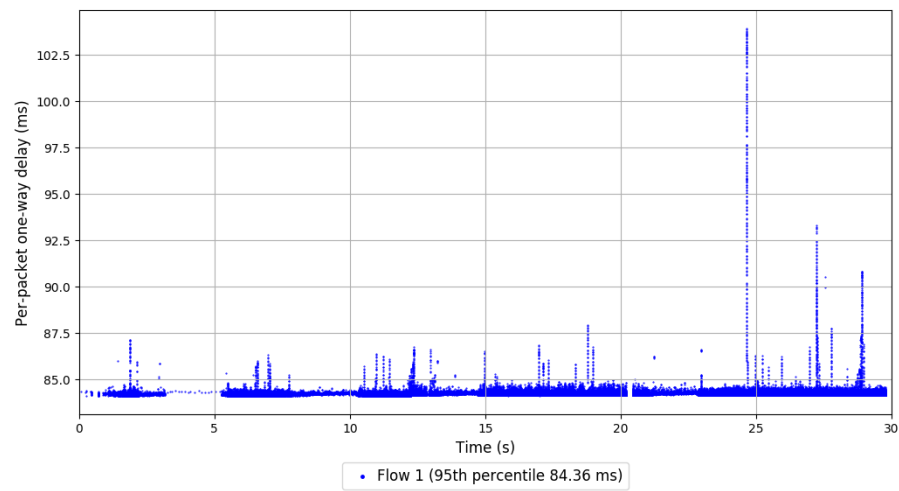
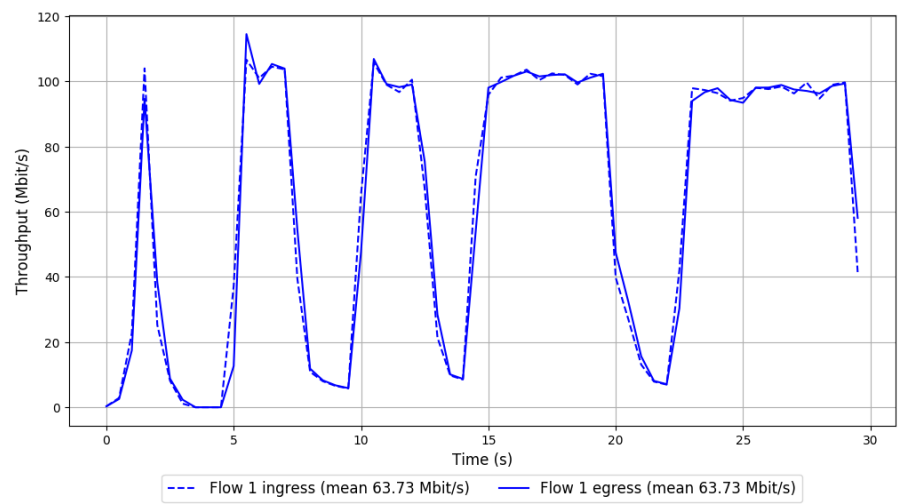
-- Flow 1:

Average throughput: 63.73 Mbit/s

95th percentile per-packet one-way delay: 84.355 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-08 22:35:38

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

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.39 Mbit/s

95th percentile per-packet one-way delay: 83.913 ms

Loss rate: 0.00%

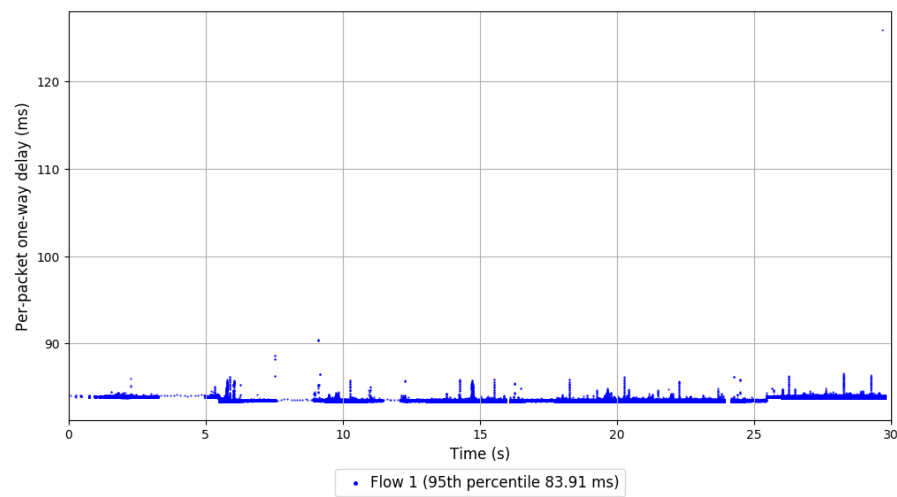
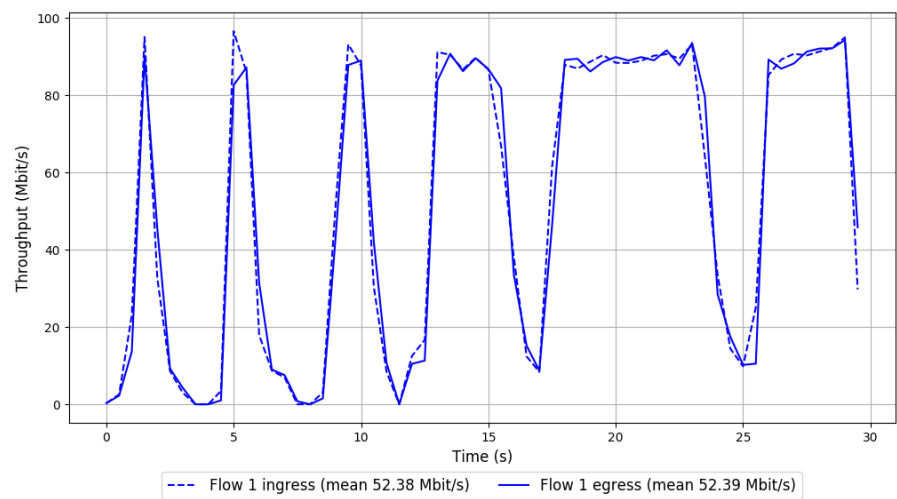
-- Flow 1:

Average throughput: 52.39 Mbit/s

95th percentile per-packet one-way delay: 83.913 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

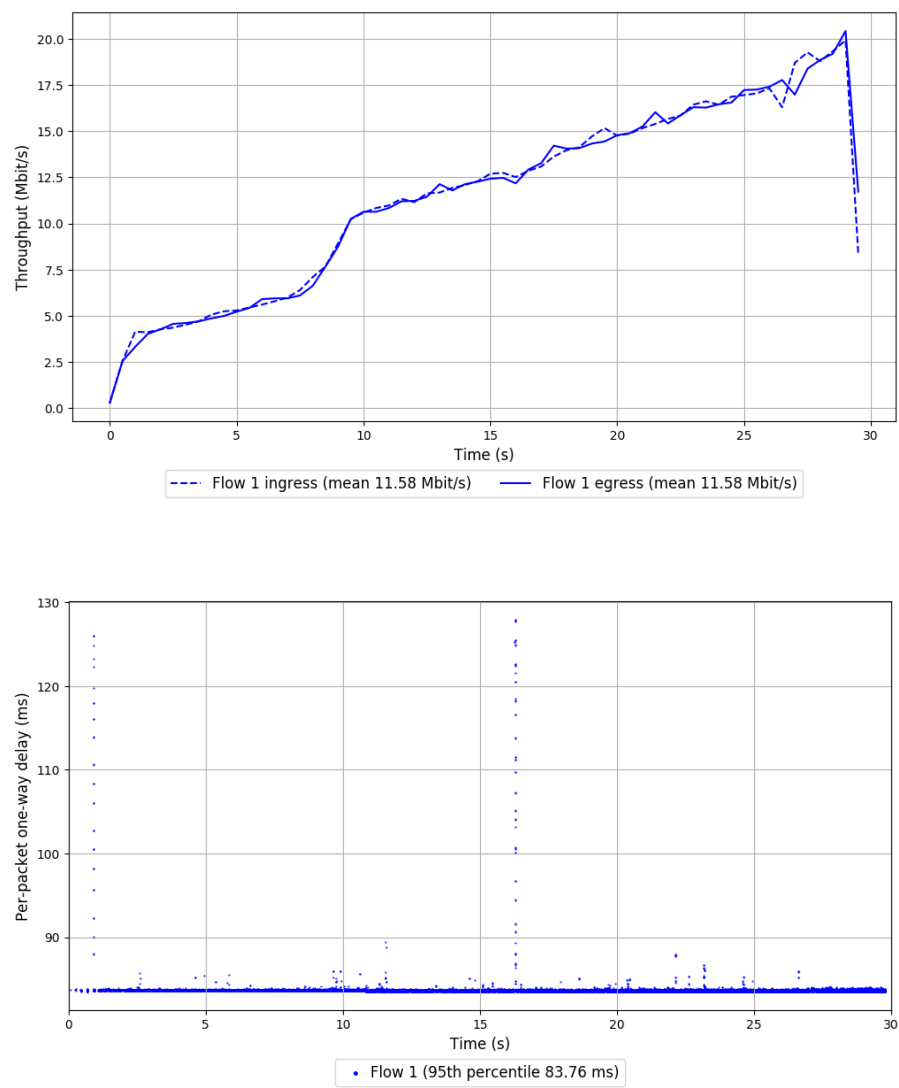


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-08 22:47:34
End at: 2018-01-08 22:48:04

# Below is generated by plot.py at 2018-01-08 23:57:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.58 Mbit/s
95th percentile per-packet one-way delay: 83.756 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.58 Mbit/s
95th percentile per-packet one-way delay: 83.756 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

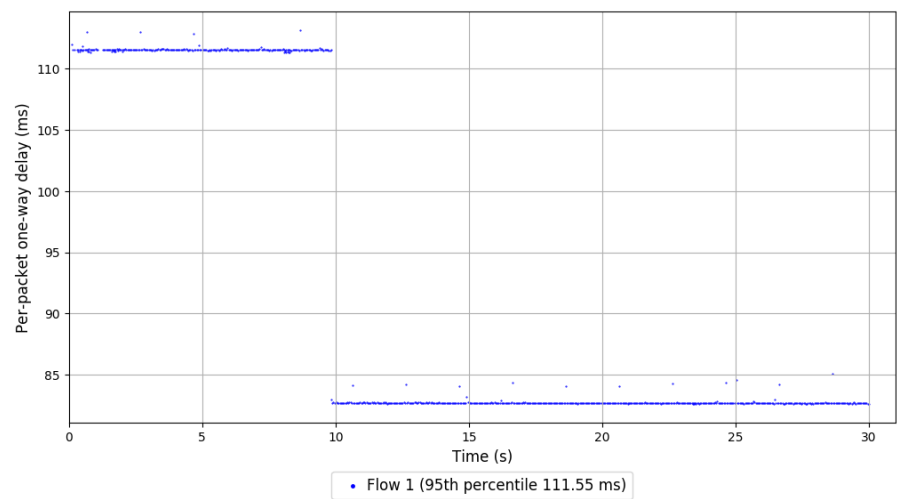
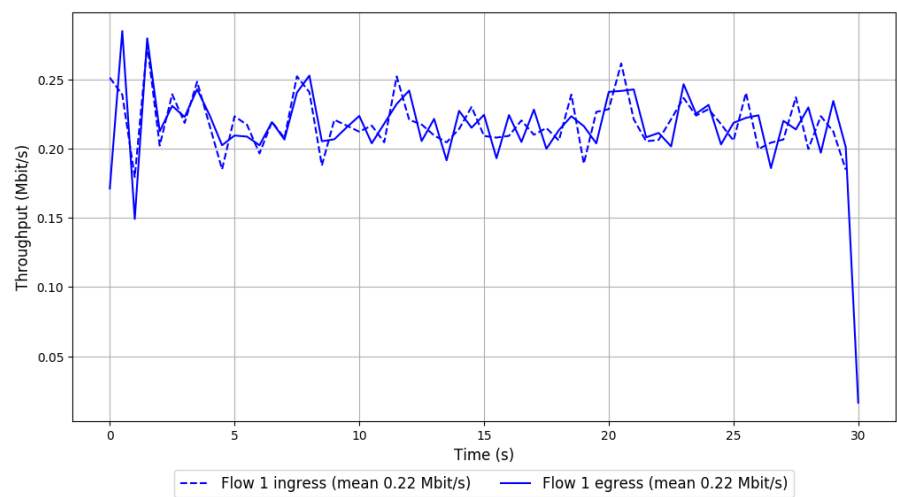


```
Run 1: Statistics of SCReAM

Start at: 2018-01-08 20:58:45
End at: 2018-01-08 20:59:15

# Below is generated by plot.py at 2018-01-08 23:57:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.548 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.548 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

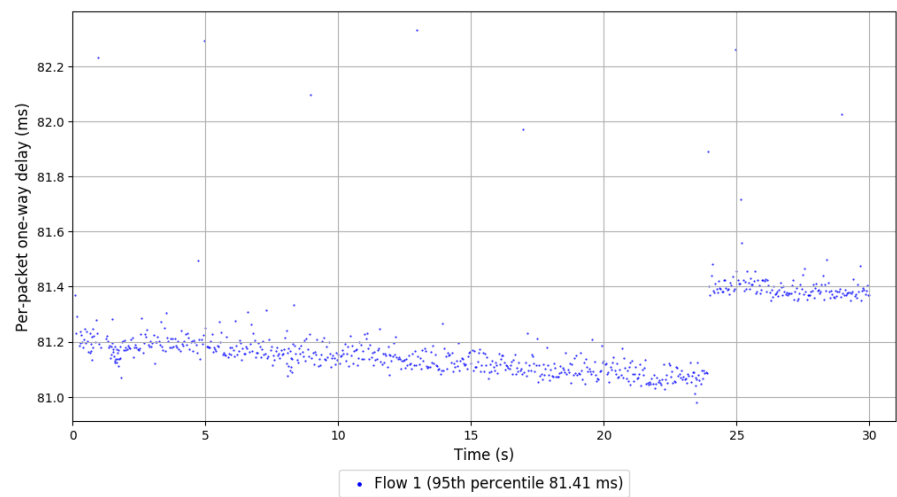
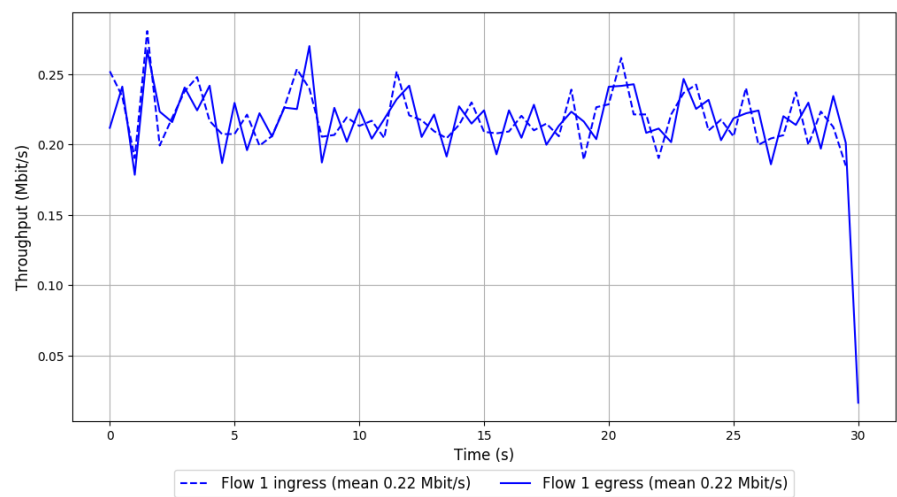


```
Run 2: Statistics of SCReAM

Start at: 2018-01-08 21:10:50
End at: 2018-01-08 21:11:20

# Below is generated by plot.py at 2018-01-08 23:57:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.414 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.414 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-08 21:22:56

End at: 2018-01-08 21:23:26

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.395 ms

Loss rate: 0.00%

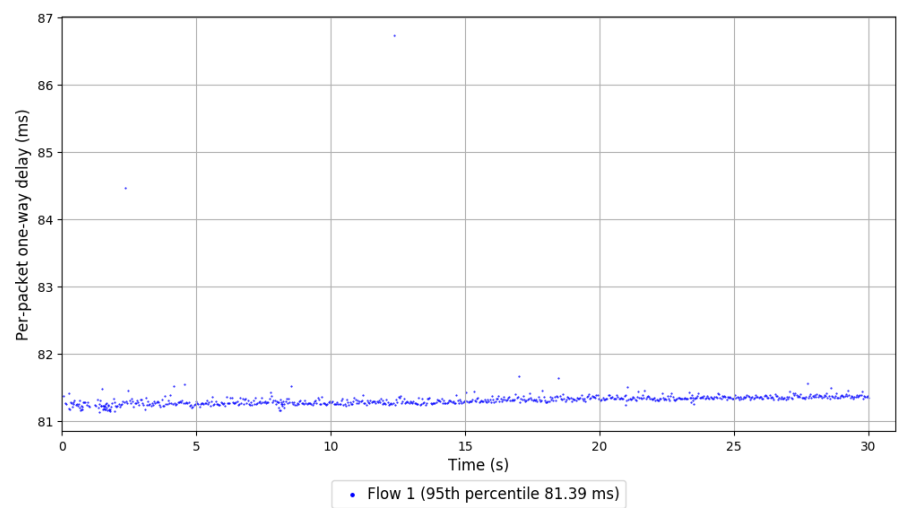
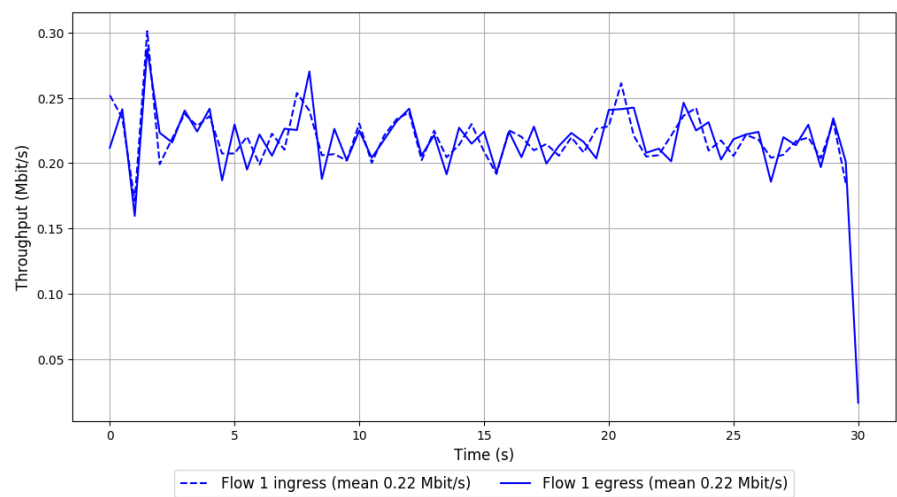
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.395 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-01-08 21:35:02

End at: 2018-01-08 21:35:32

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 82.995 ms

Loss rate: 0.00%

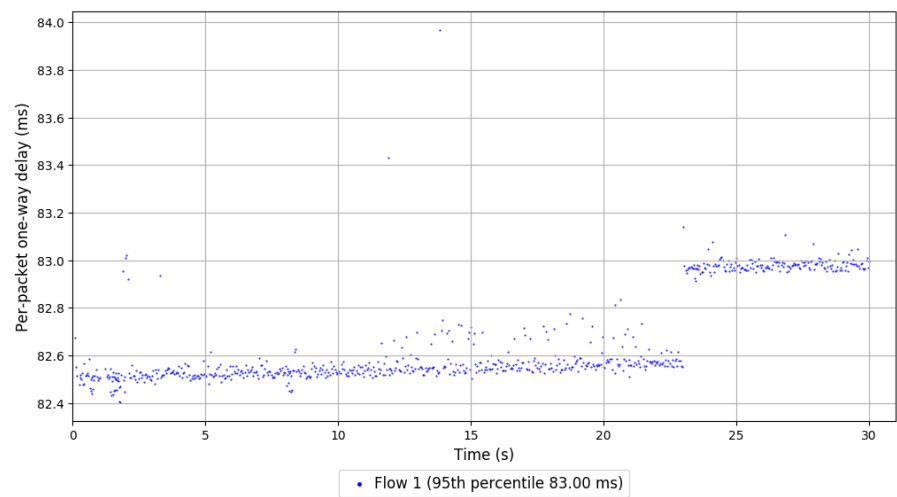
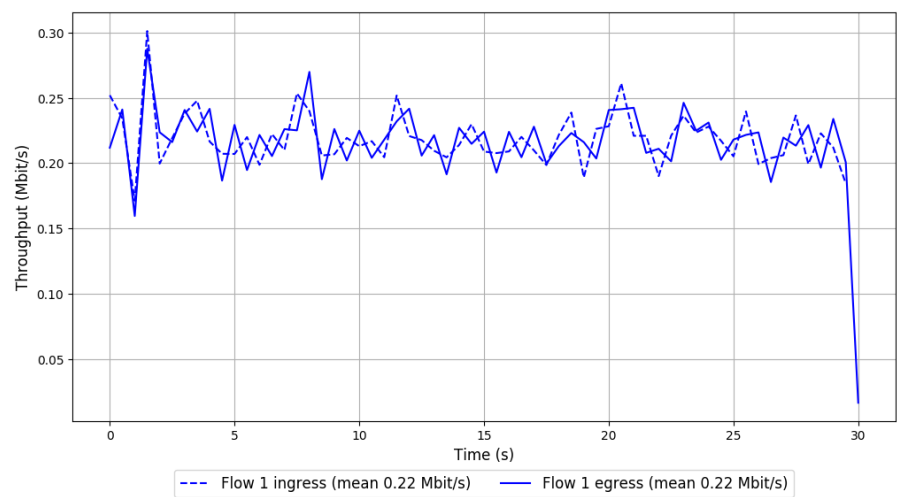
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 82.995 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-08 21:46:38

End at: 2018-01-08 21:47:08

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.058 ms

Loss rate: 0.00%

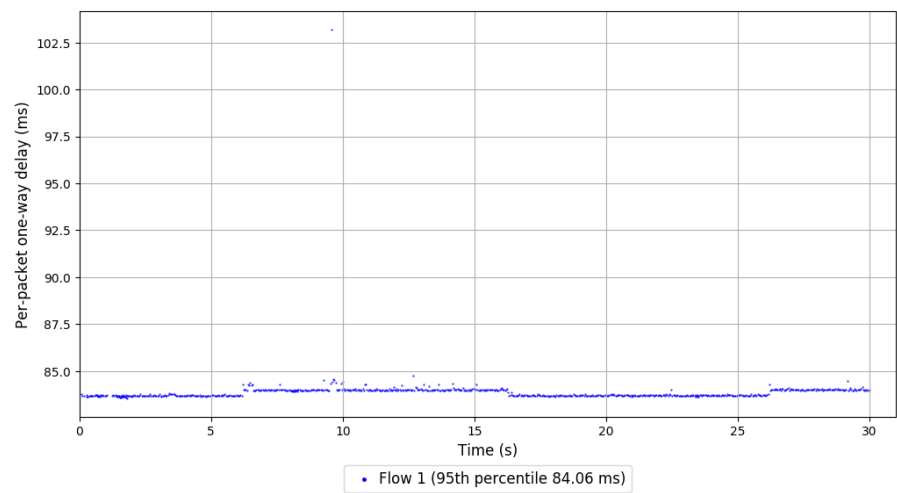
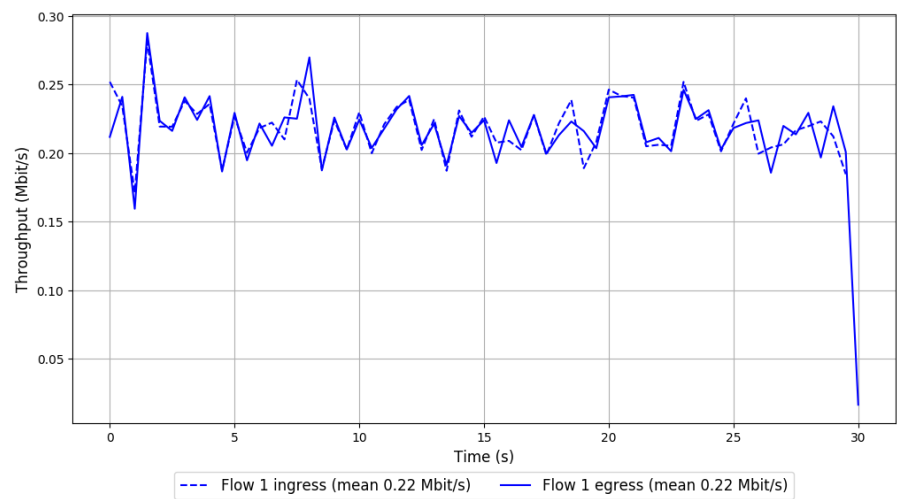
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.058 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-08 21:58:40

End at: 2018-01-08 21:59:10

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.937 ms

Loss rate: 0.00%

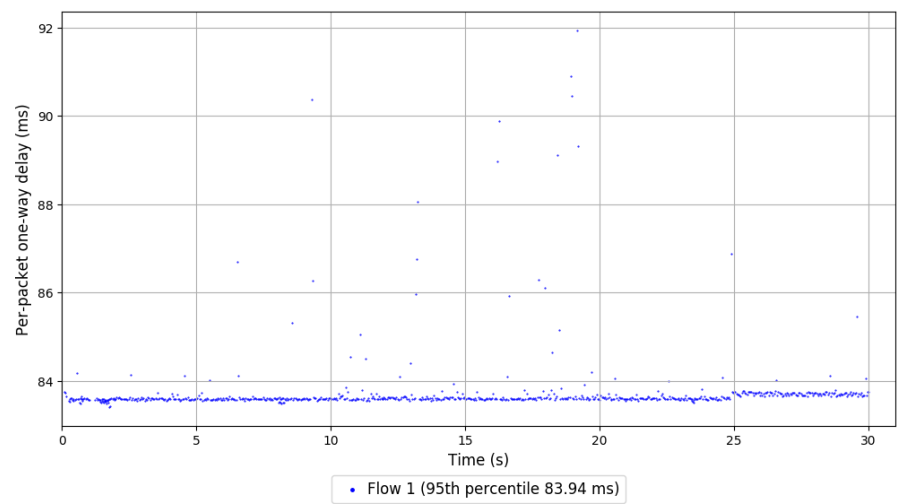
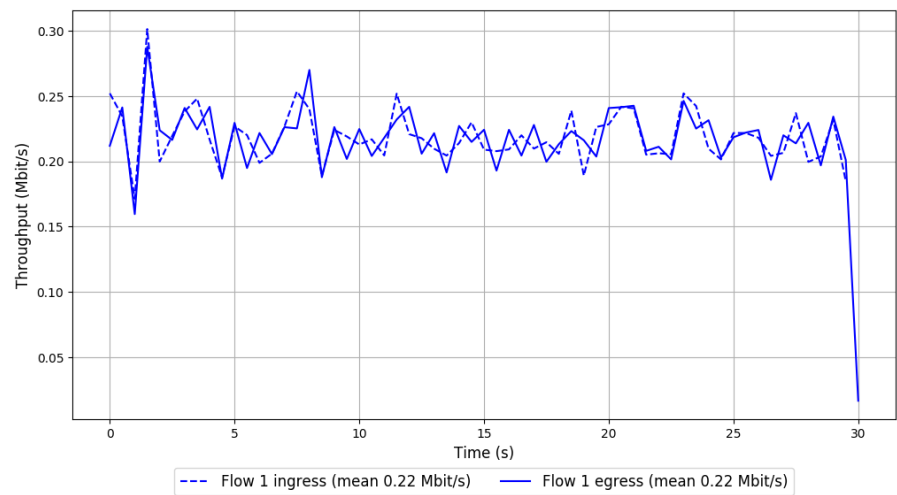
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.937 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-08 22:10:28

End at: 2018-01-08 22:10:58

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.284 ms

Loss rate: 0.00%

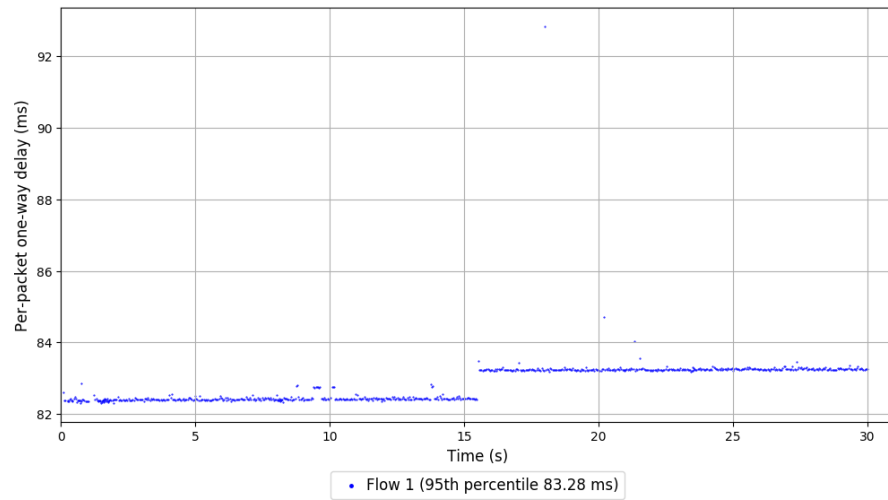
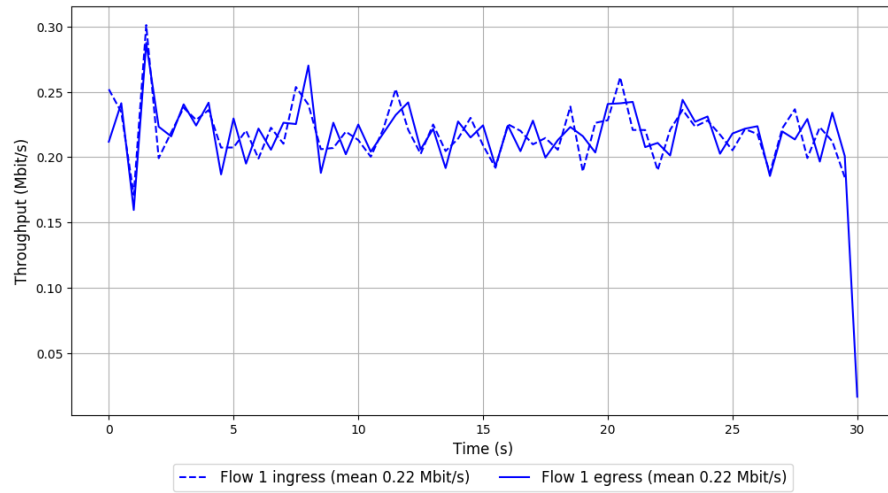
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.284 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-08 22:22:42

End at: 2018-01-08 22:23:13

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.989 ms

Loss rate: 0.00%

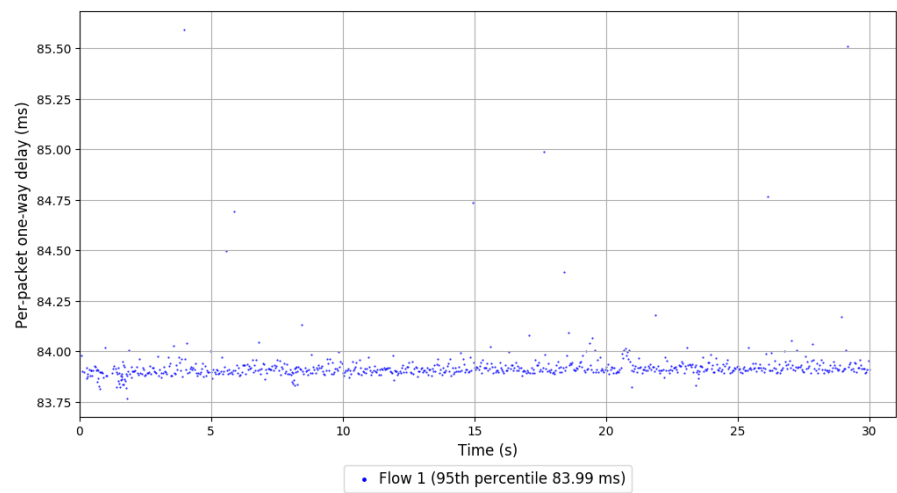
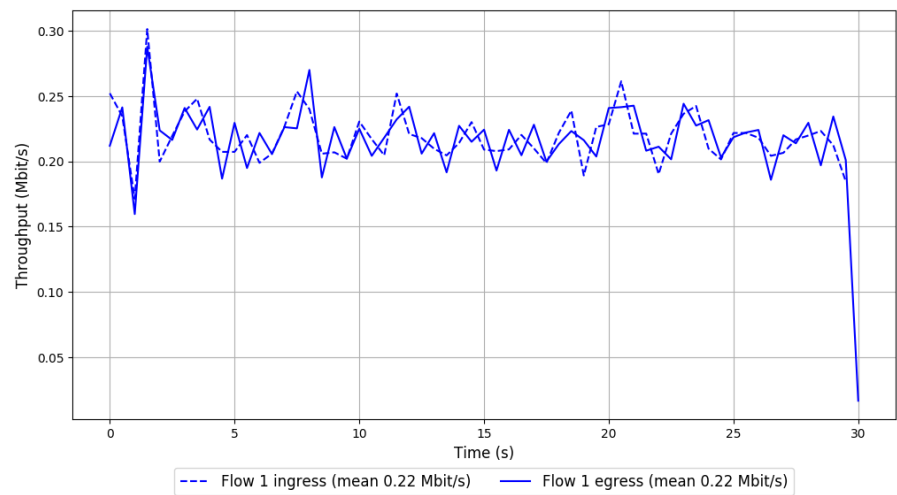
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.989 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-08 22:34:59

End at: 2018-01-08 22:35:29

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.736 ms

Loss rate: 0.00%

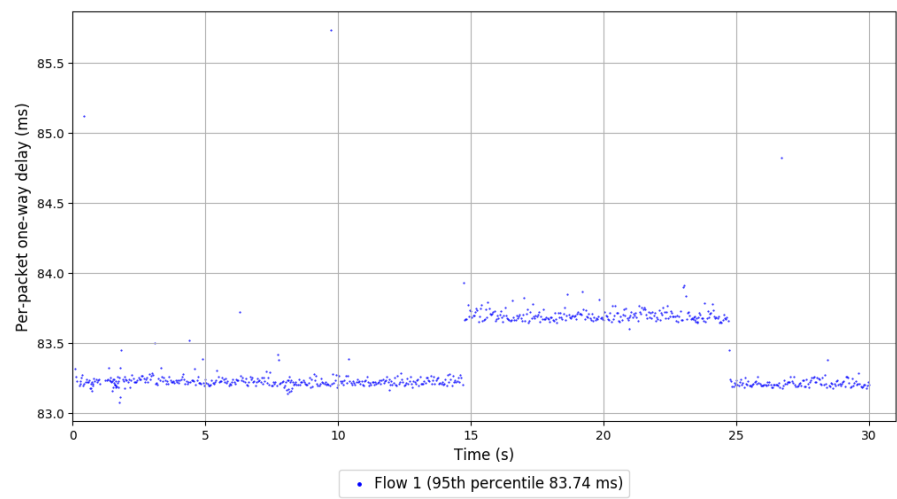
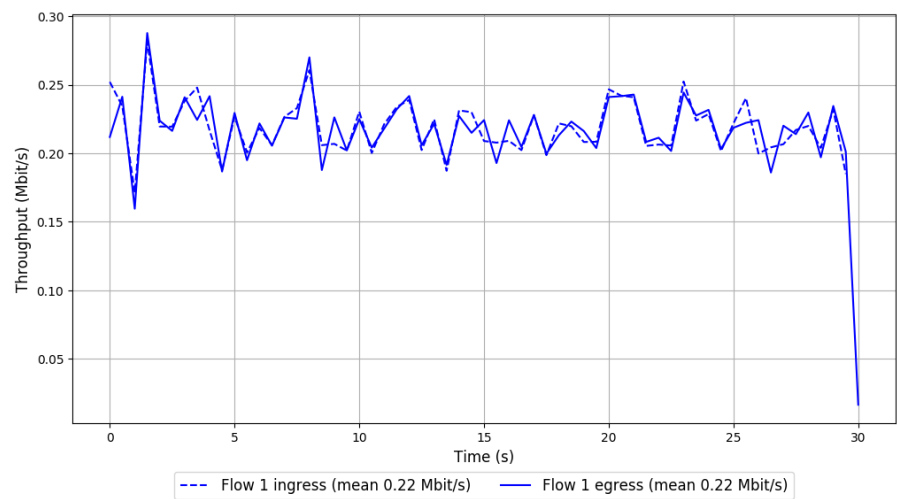
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.736 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

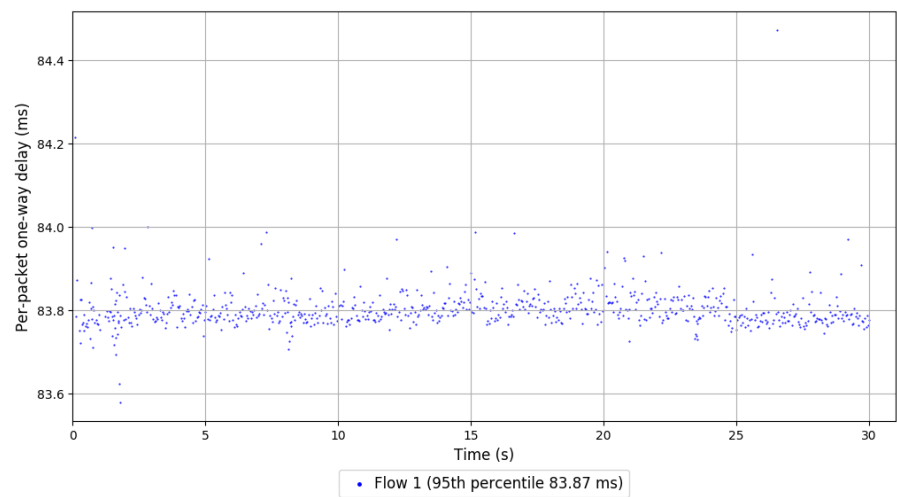
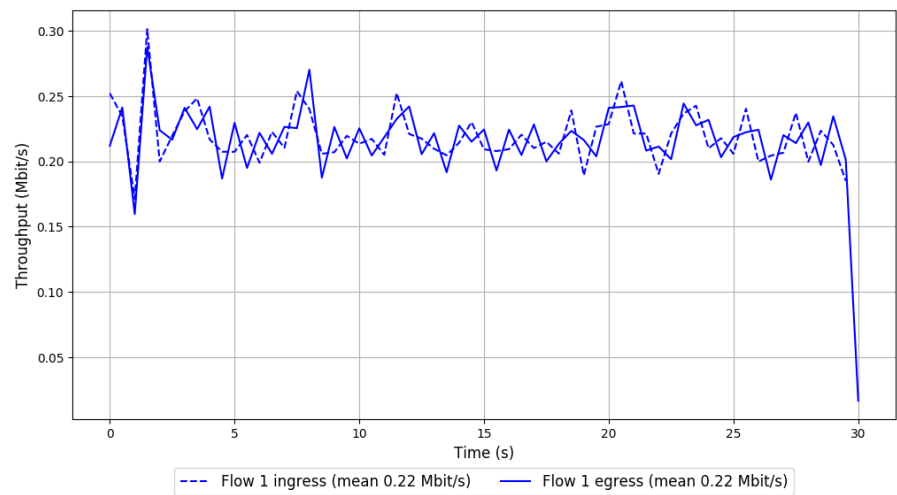


```
Run 10: Statistics of SReAM

Start at: 2018-01-08 22:46:55
End at: 2018-01-08 22:47:25

# Below is generated by plot.py at 2018-01-08 23:57:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.870 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.870 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

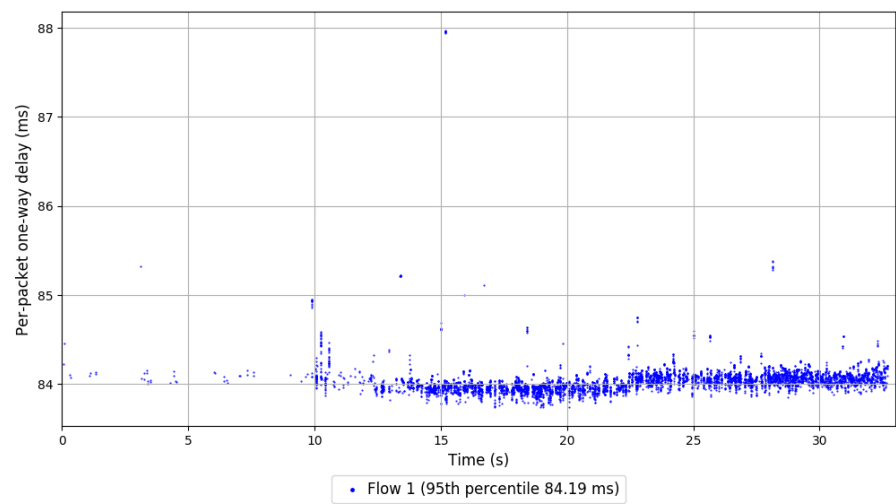
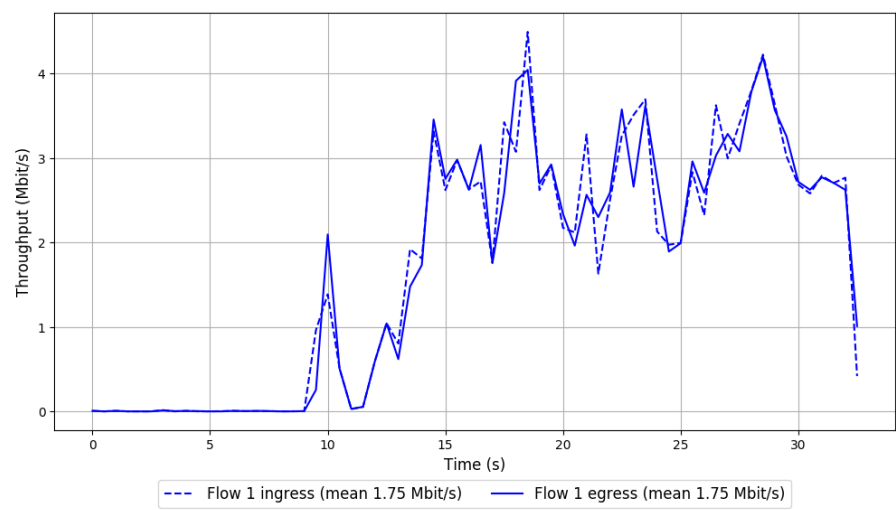


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-08 20:51:44
End at: 2018-01-08 20:52:14

# Below is generated by plot.py at 2018-01-08 23:57:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 84.187 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 84.187 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-08 21:03:45

End at: 2018-01-08 21:04:15

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 110.926 ms

Loss rate: 0.00%

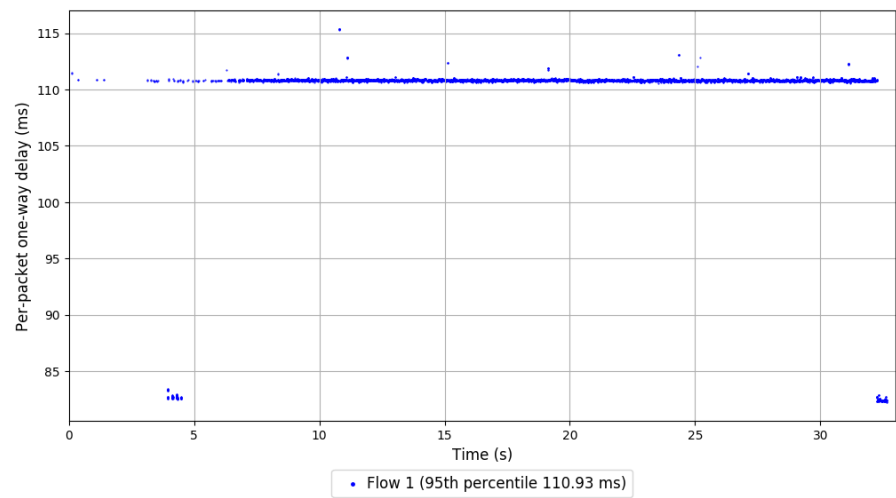
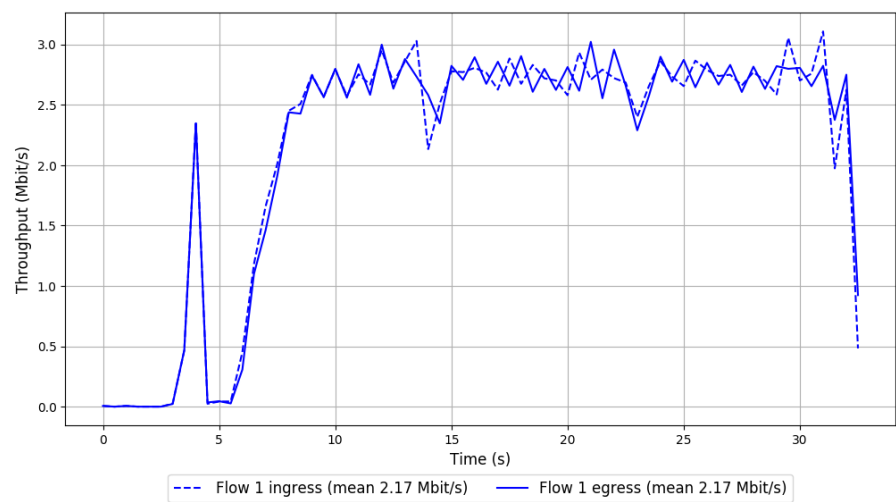
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 110.926 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-08 21:15:53

End at: 2018-01-08 21:16:23

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 80.965 ms

Loss rate: 0.00%

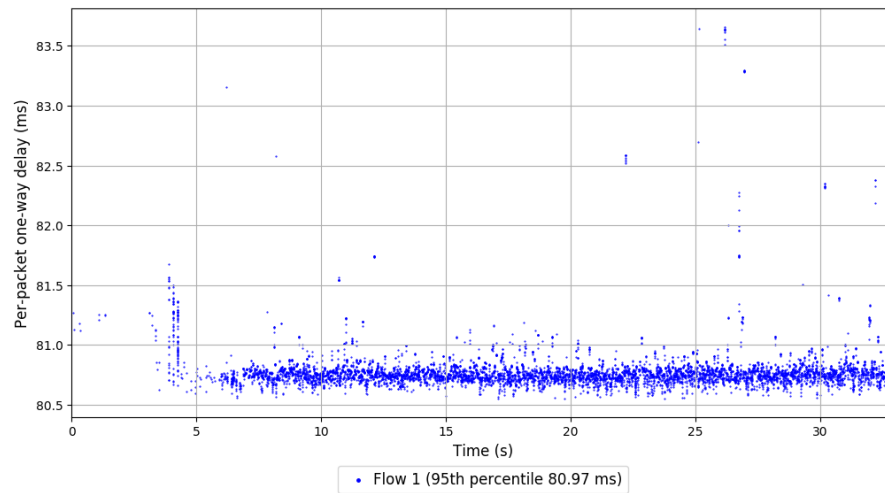
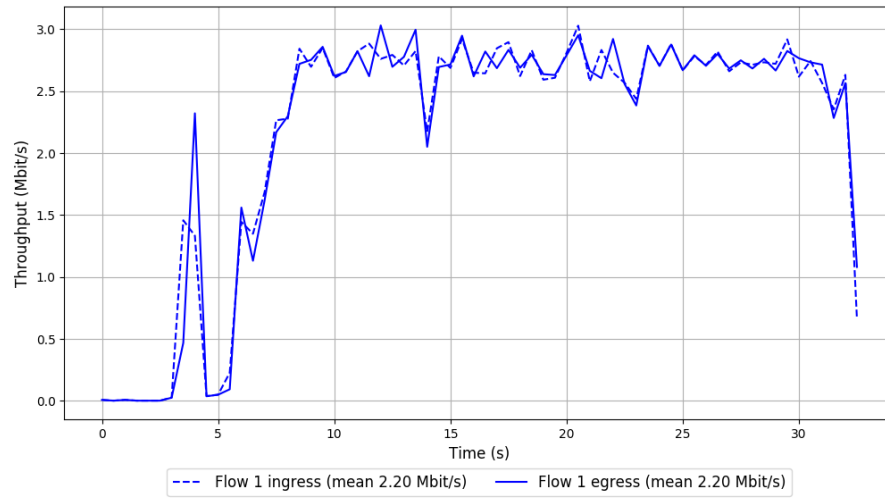
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 80.965 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-08 21:28:00

End at: 2018-01-08 21:28:30

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 82.196 ms

Loss rate: 0.00%

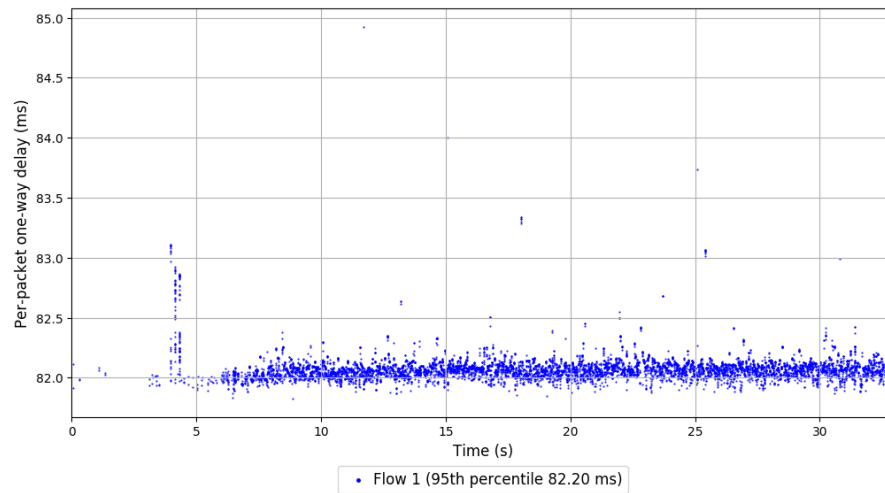
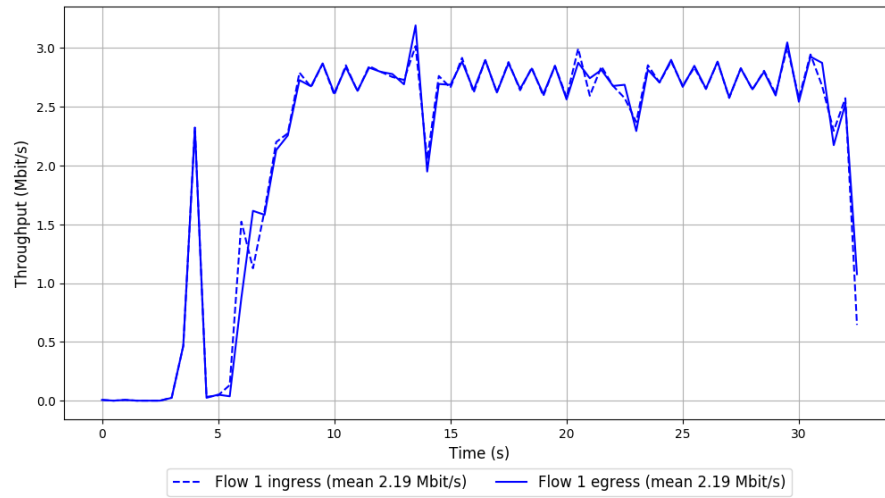
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 82.196 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-08 21:39:35

End at: 2018-01-08 21:40:05

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 83.221 ms

Loss rate: 0.00%

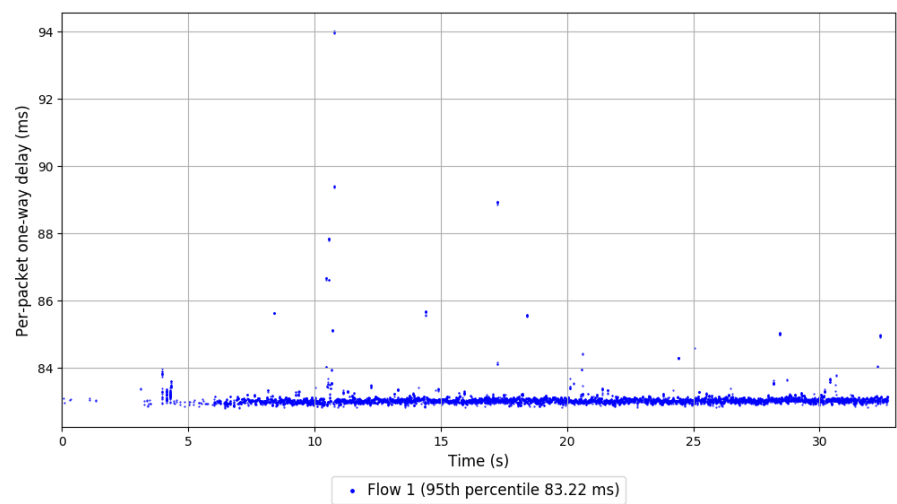
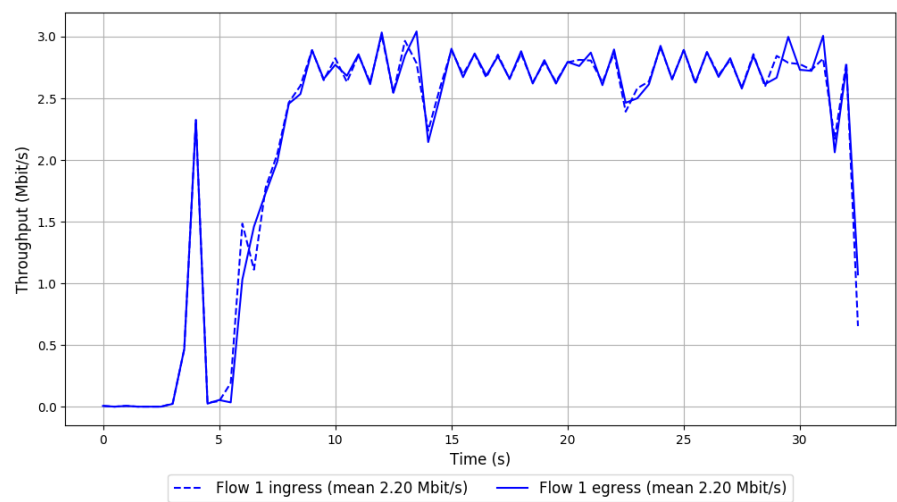
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 83.221 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-08 21:51:49

End at: 2018-01-08 21:52:19

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 84.167 ms

Loss rate: 0.00%

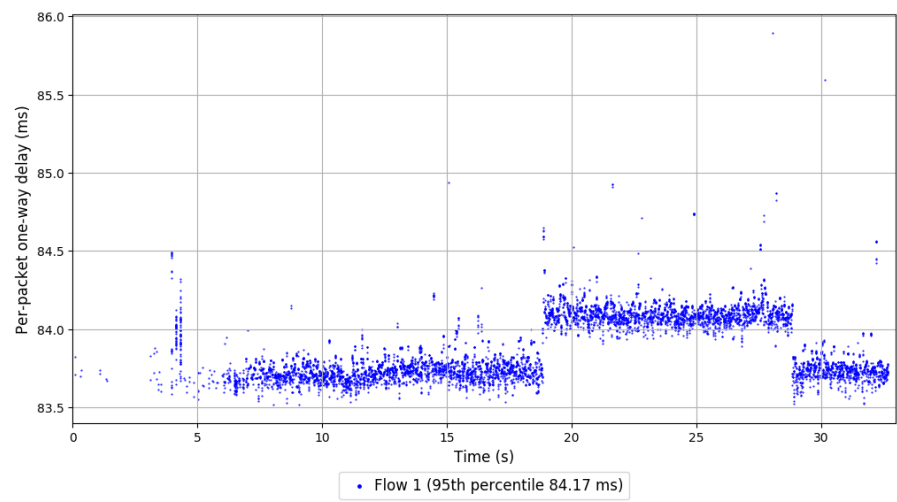
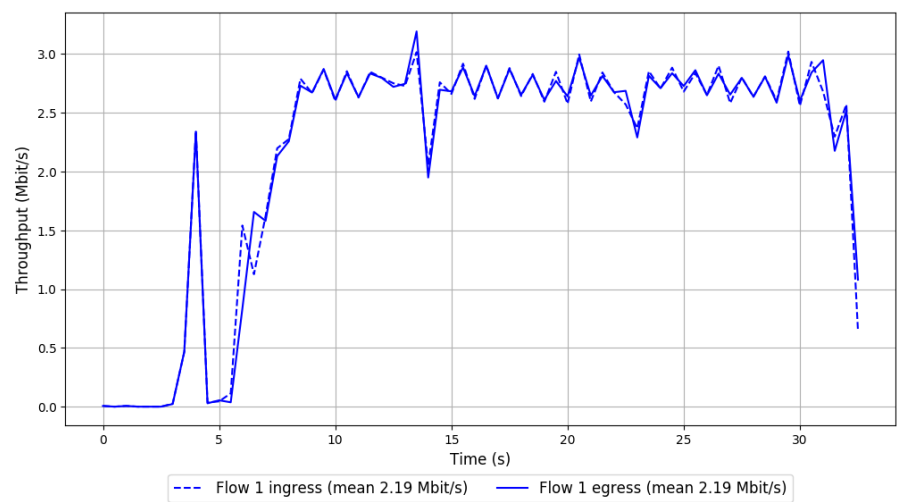
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 84.167 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-08 22:03:29

End at: 2018-01-08 22:03:59

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 83.956 ms

Loss rate: 0.00%

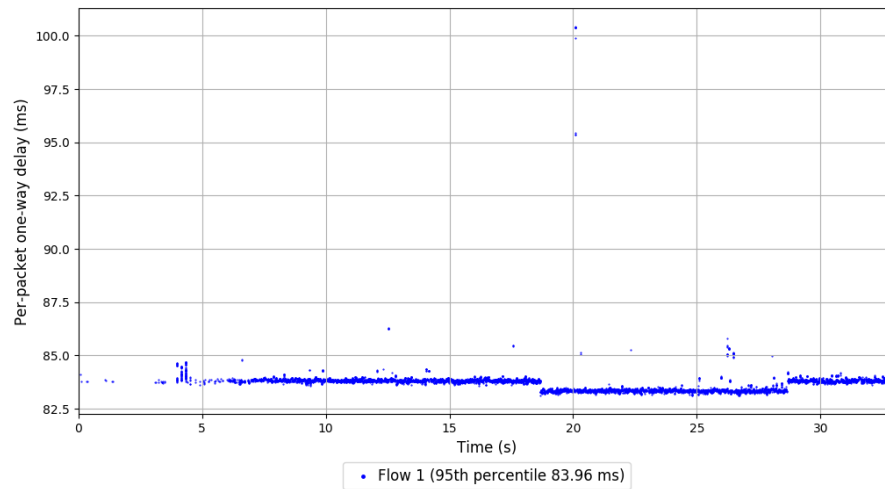
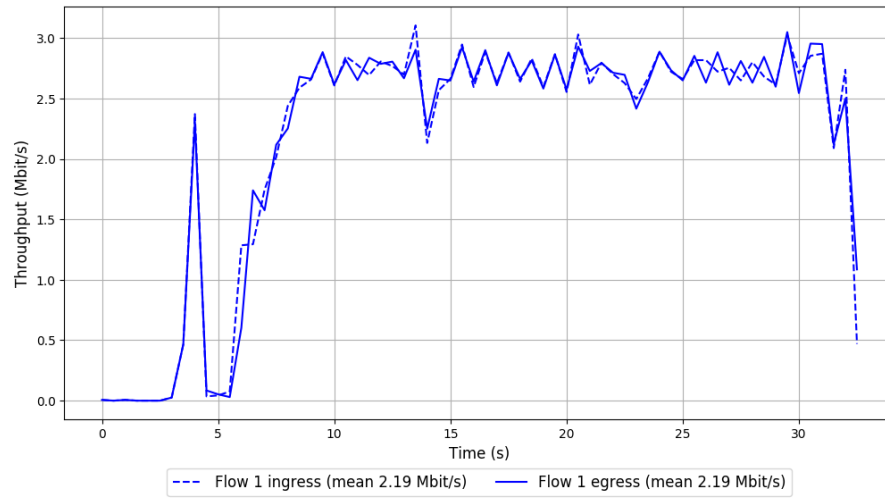
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 83.956 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-08 22:15:40

End at: 2018-01-08 22:16:10

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 83.706 ms

Loss rate: 0.00%

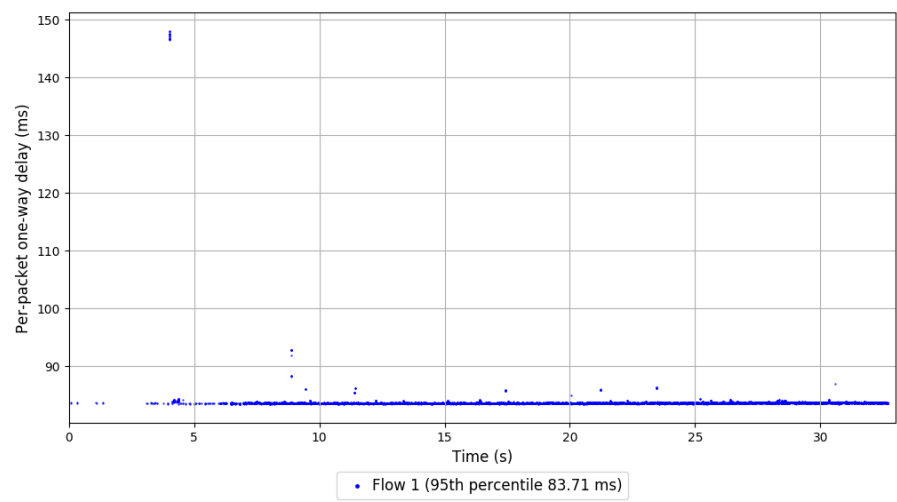
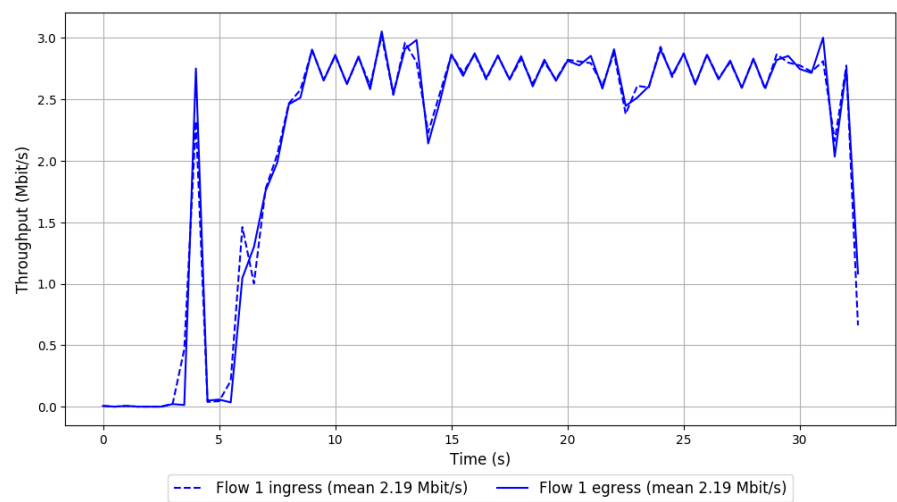
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 83.706 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-08 22:27:54

End at: 2018-01-08 22:28:24

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 84.613 ms

Loss rate: 0.00%

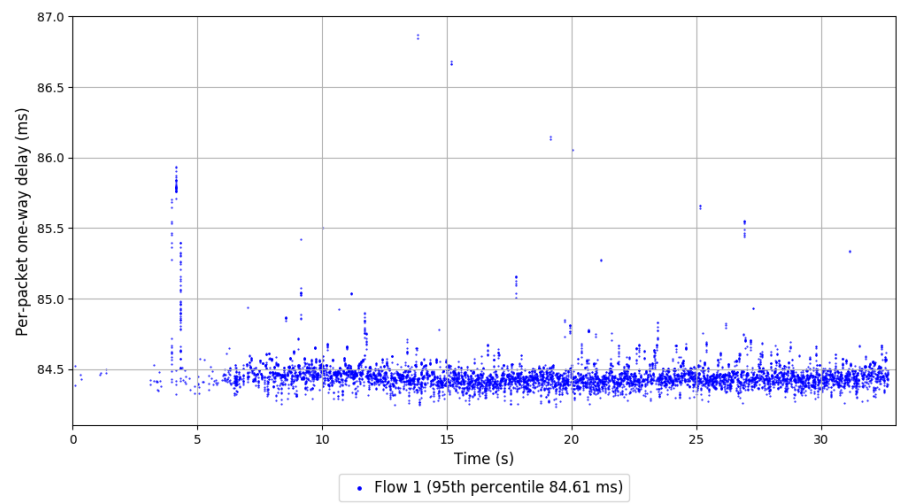
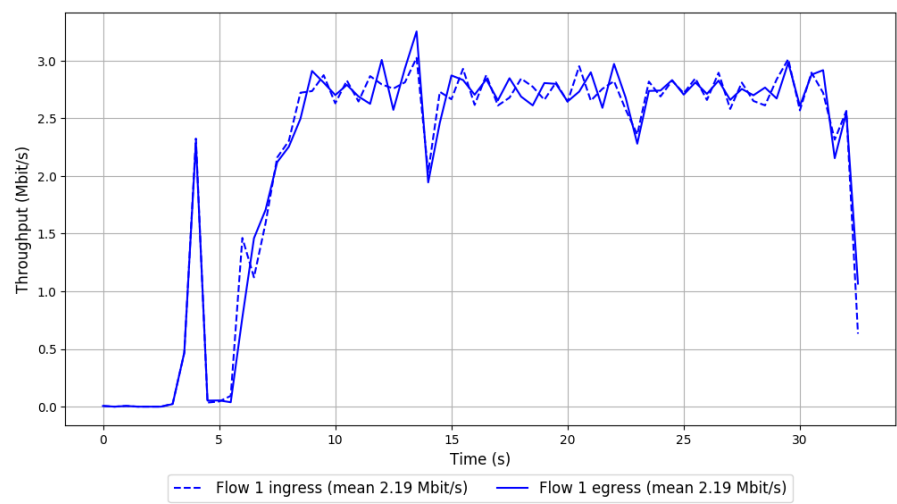
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 84.613 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

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

End at: 2018-01-08 22:40:22

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 83.448 ms

Loss rate: 0.00%

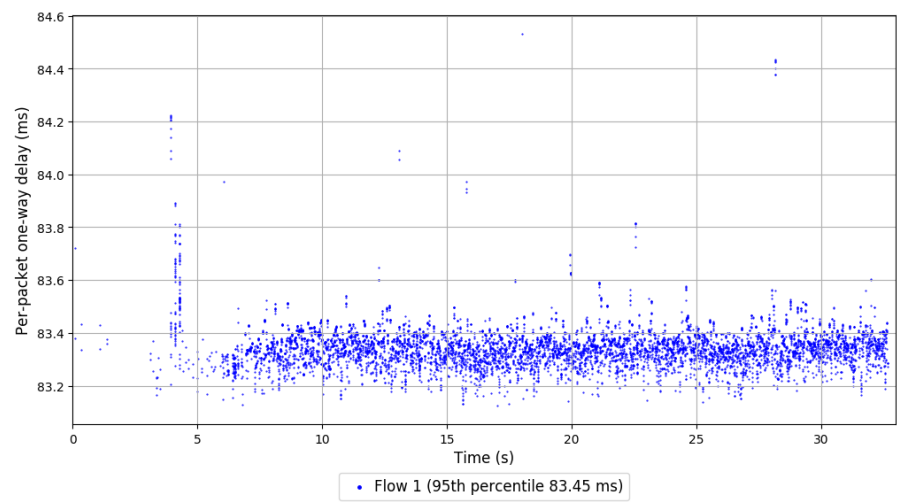
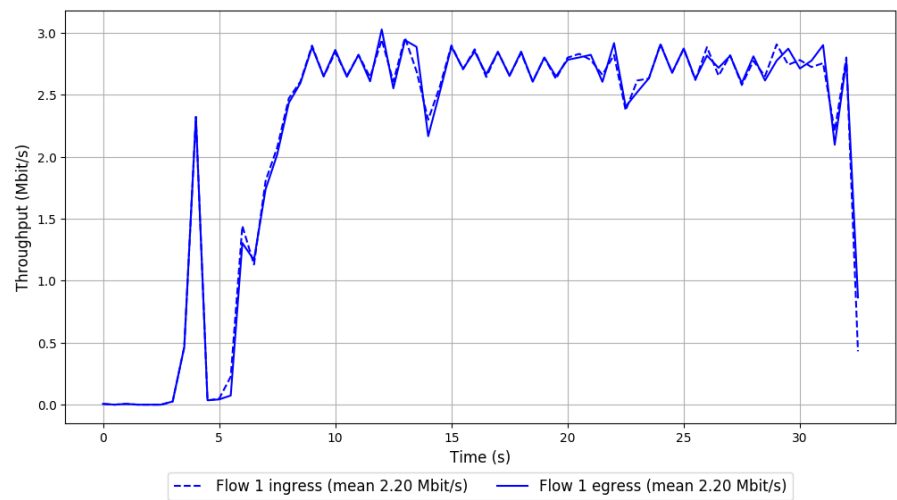
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 83.448 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

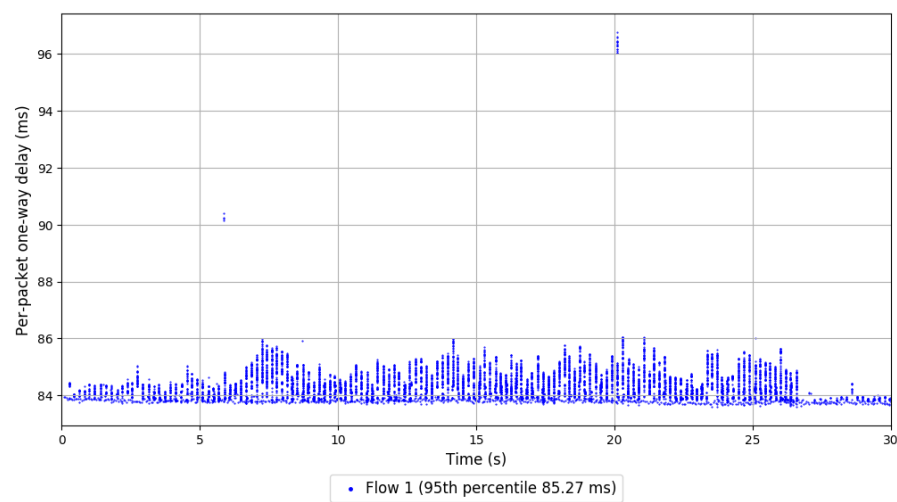
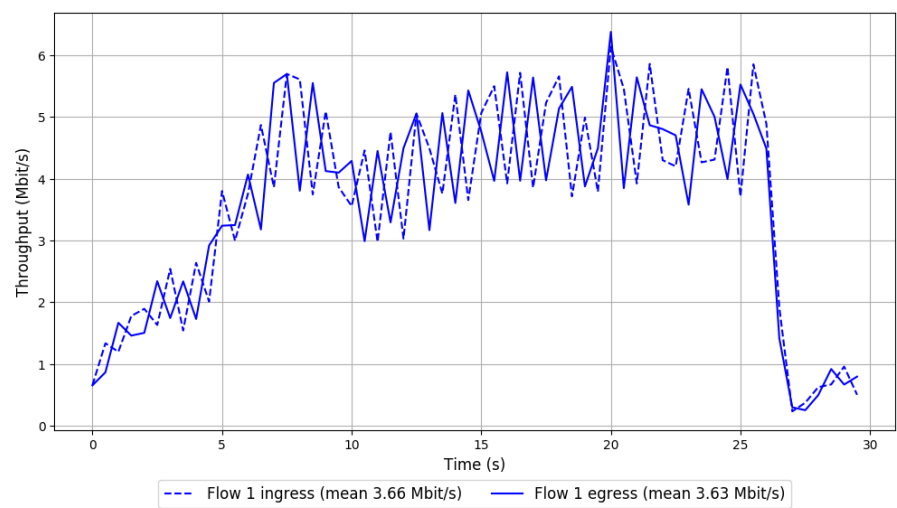


```
Run 1: Statistics of Sprout

Start at: 2018-01-08 20:53:12
End at: 2018-01-08 20:53:42

# Below is generated by plot.py at 2018-01-08 23:57:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: 85.274 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: 85.274 ms
Loss rate: 0.77%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-08 21:05:18

End at: 2018-01-08 21:05:48

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 83.715 ms

Loss rate: 0.91%

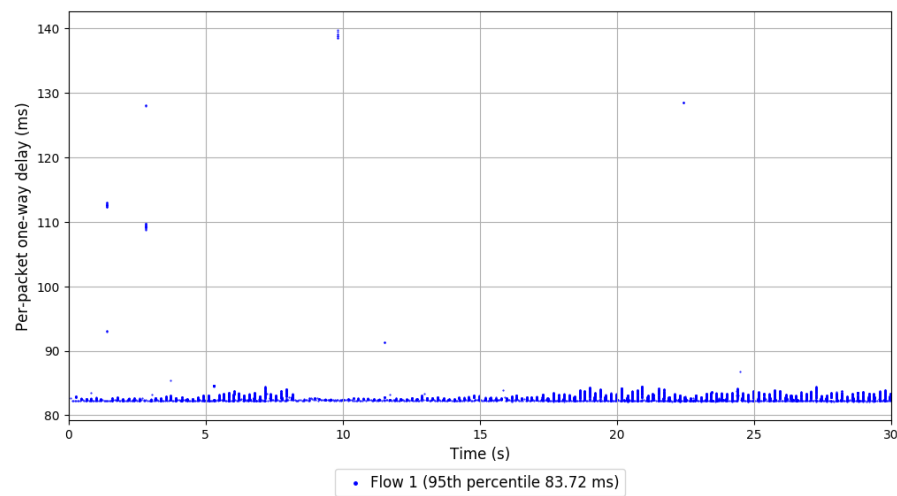
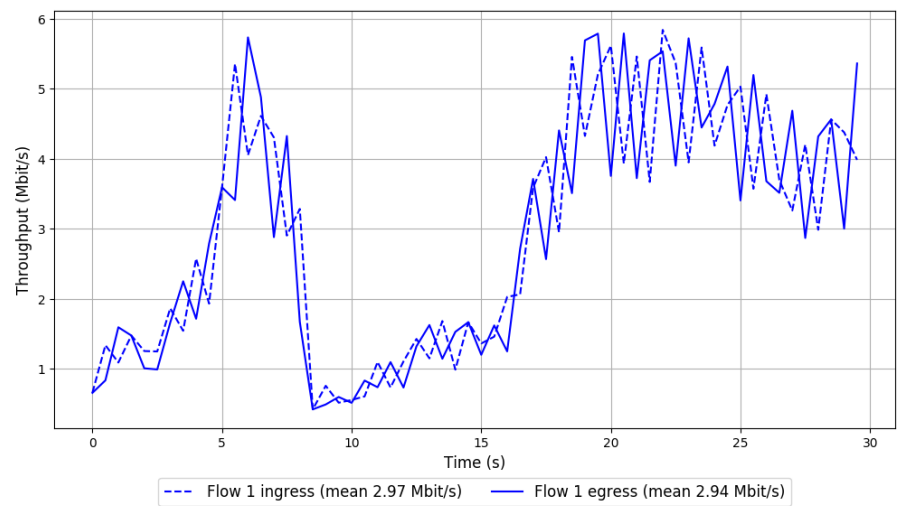
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 83.715 ms

Loss rate: 0.91%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-08 21:17:26

End at: 2018-01-08 21:17:56

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 106.660 ms

Loss rate: 0.00%

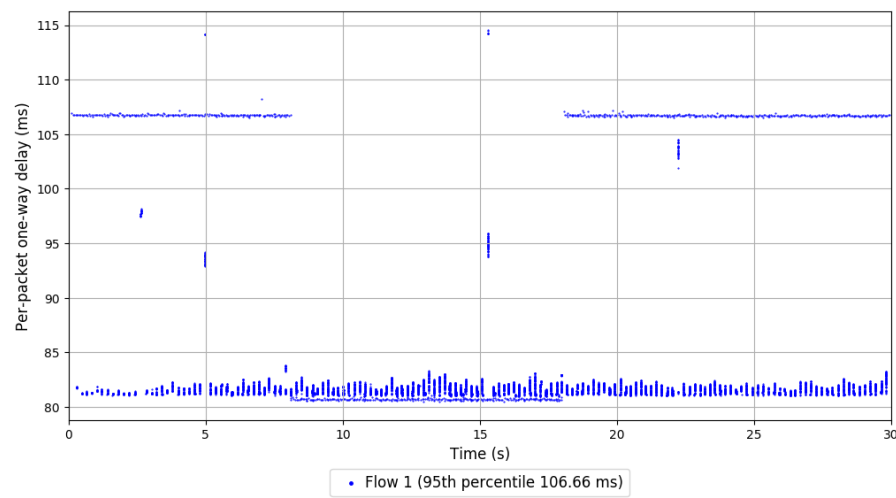
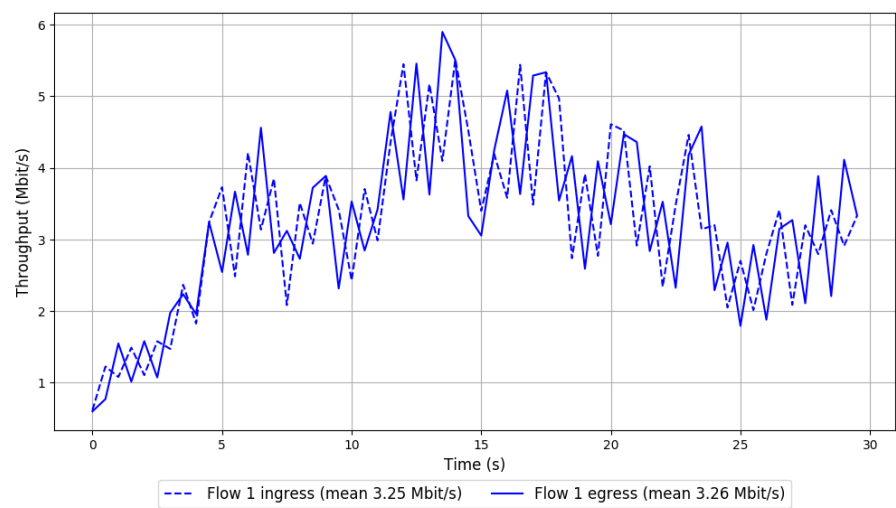
-- Flow 1:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 106.660 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-08 21:29:31

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

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 83.851 ms

Loss rate: 3.50%

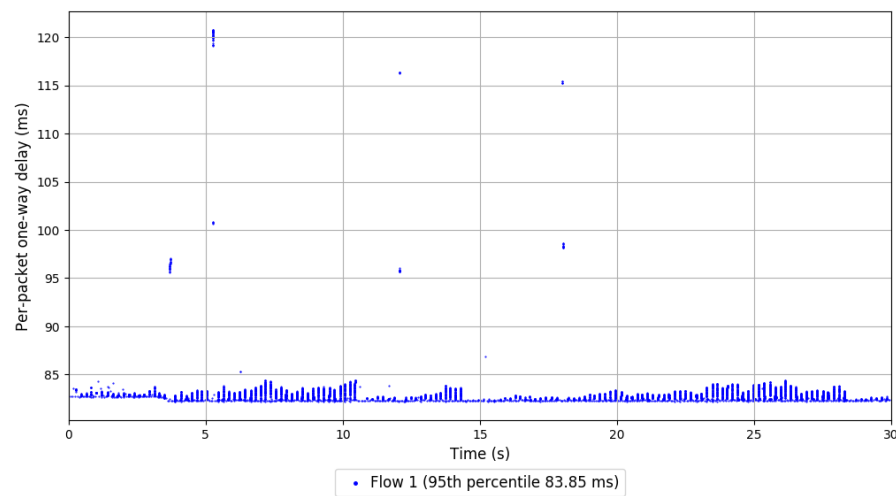
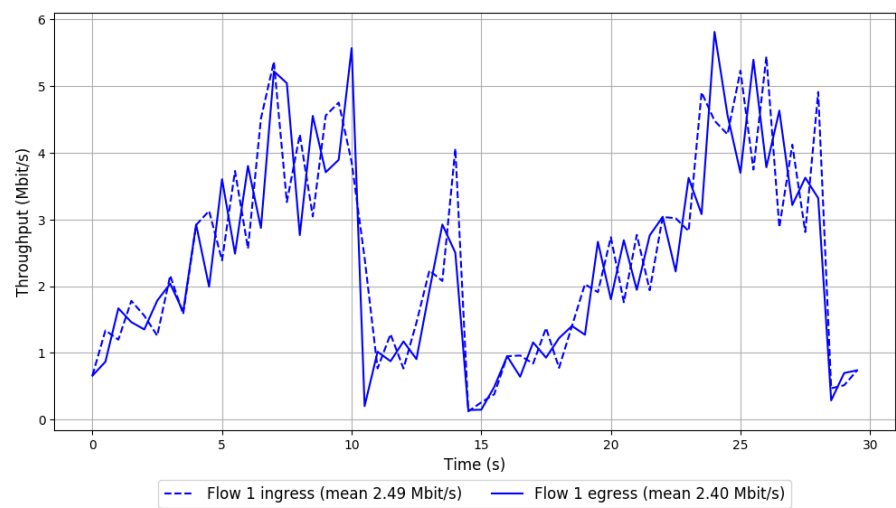
-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 83.851 ms

Loss rate: 3.50%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-08 21:41:07

End at: 2018-01-08 21:41:37

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 85.011 ms

Loss rate: 0.00%

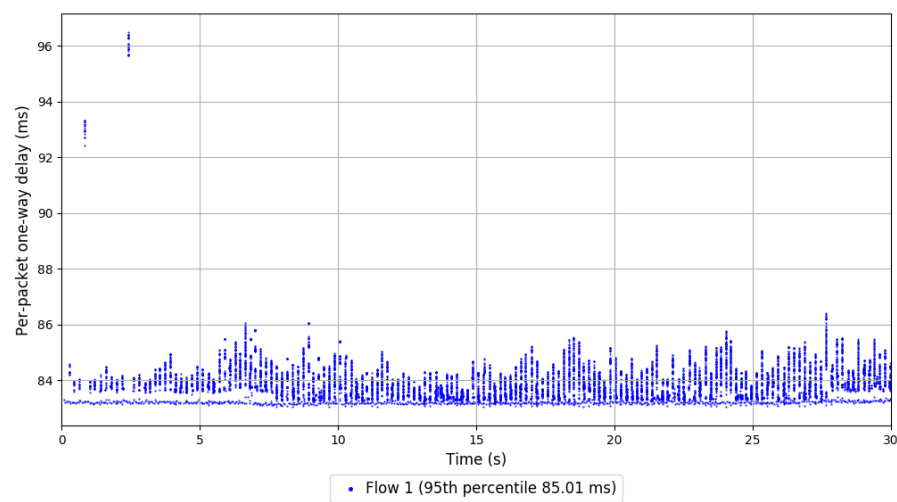
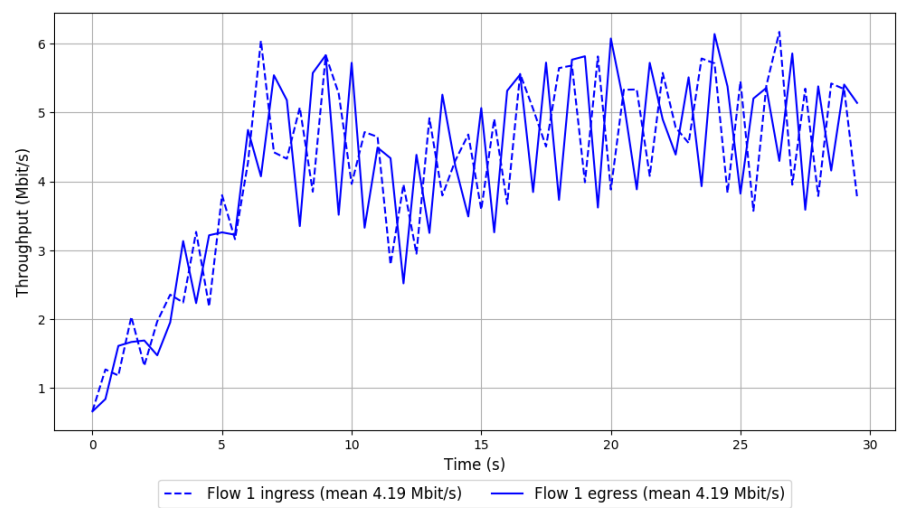
-- Flow 1:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 85.011 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-08 21:53:20

End at: 2018-01-08 21:53:50

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 85.581 ms

Loss rate: 0.80%

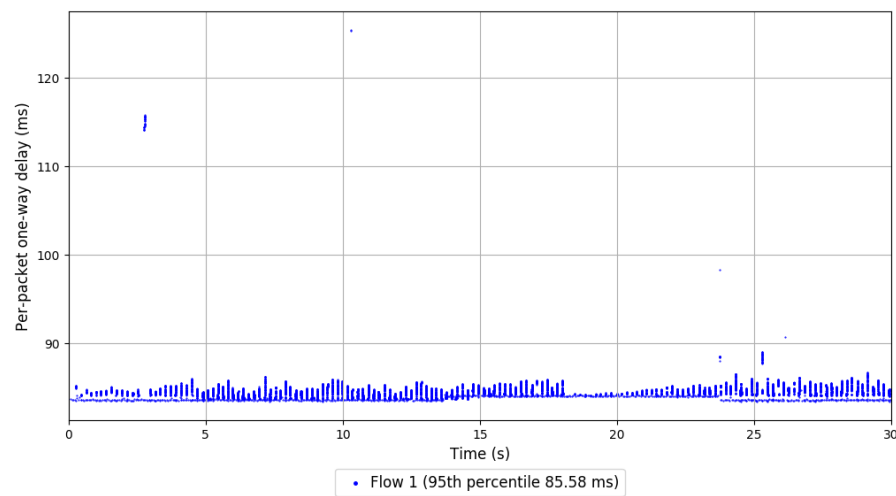
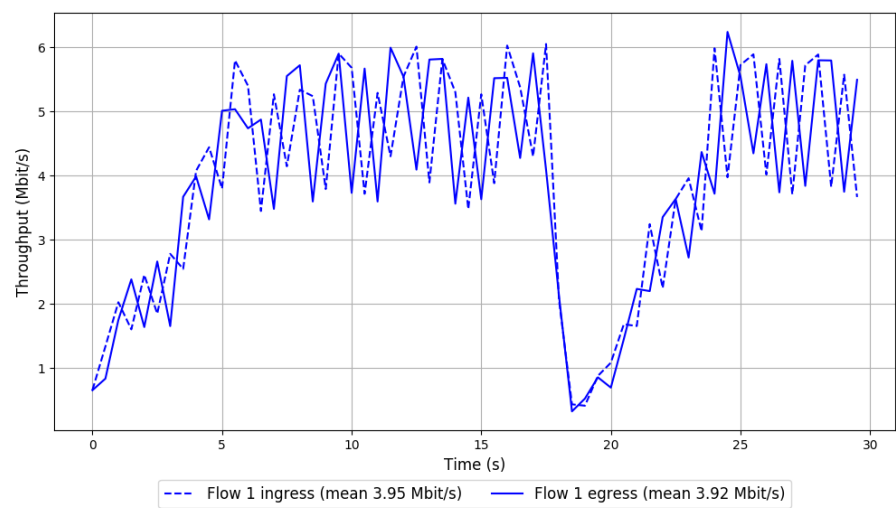
-- Flow 1:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 85.581 ms

Loss rate: 0.80%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-08 22:05:00

End at: 2018-01-08 22:05:30

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 85.131 ms

Loss rate: 1.04%

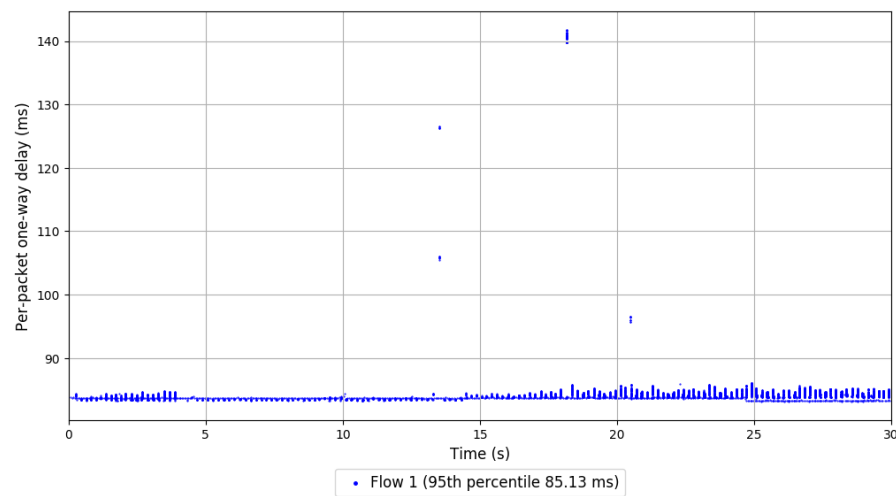
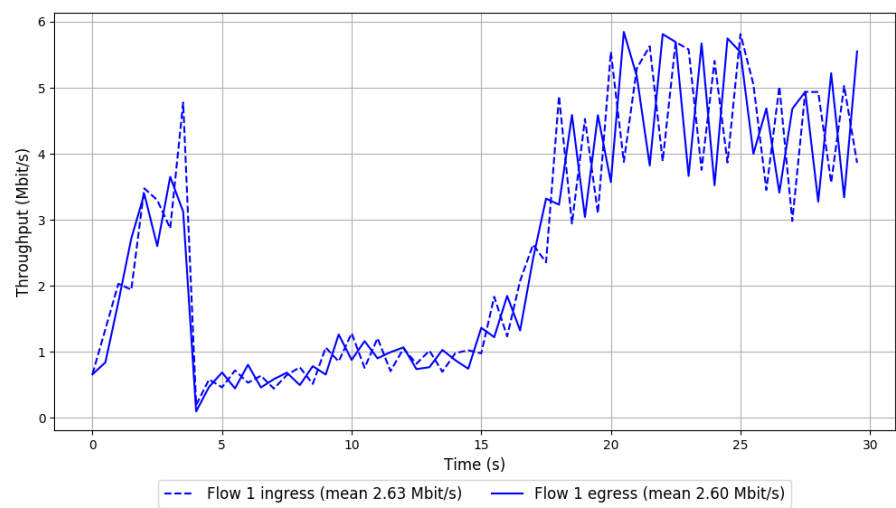
-- Flow 1:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 85.131 ms

Loss rate: 1.04%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-08 22:17:12

End at: 2018-01-08 22:17:42

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 85.295 ms

Loss rate: 1.65%

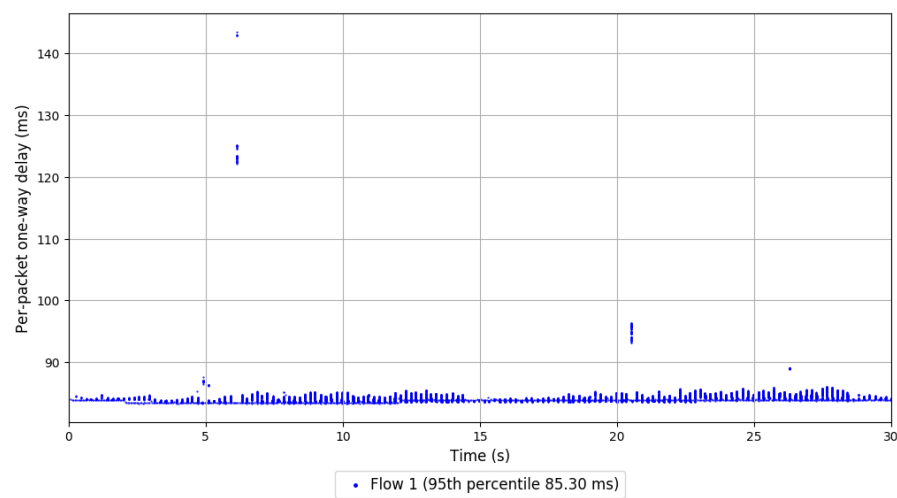
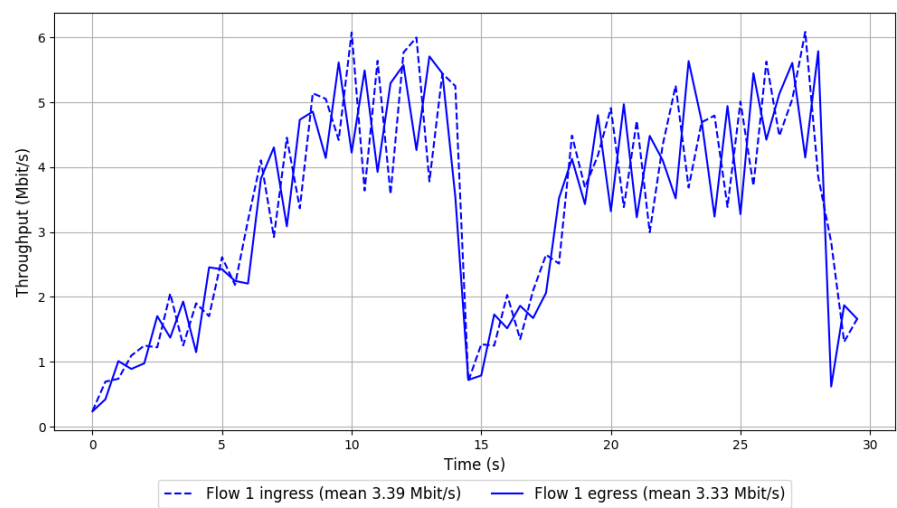
-- Flow 1:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 85.295 ms

Loss rate: 1.65%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-08 22:29:26

End at: 2018-01-08 22:29:56

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 85.481 ms

Loss rate: 3.58%

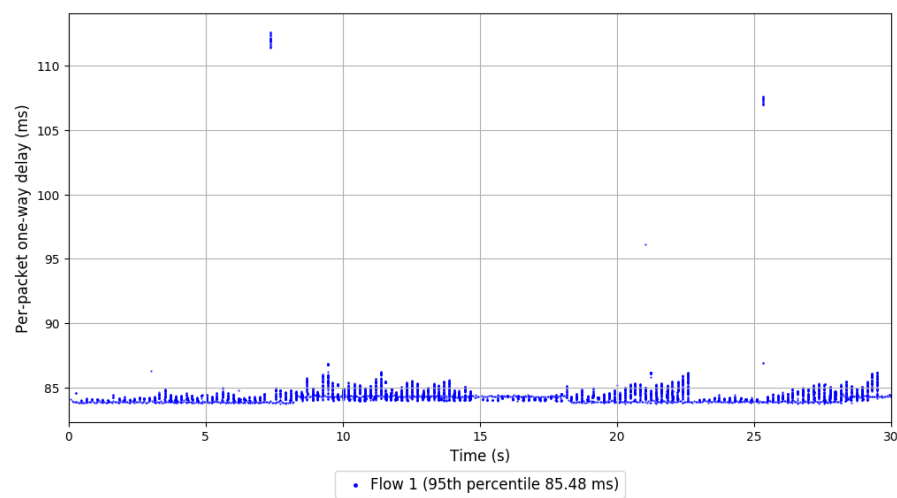
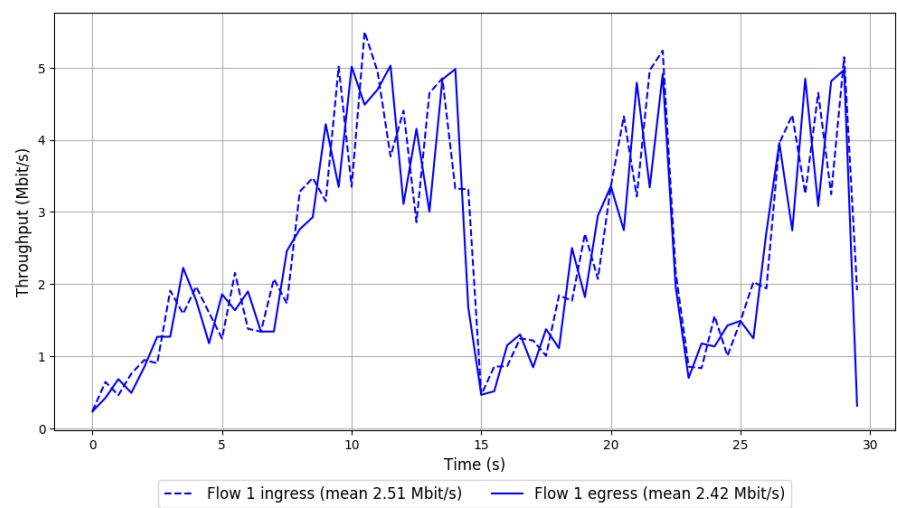
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 85.481 ms

Loss rate: 3.58%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-08 22:41:24

End at: 2018-01-08 22:41:54

Below is generated by plot.py at 2018-01-08 23:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 85.474 ms

Loss rate: 1.70%

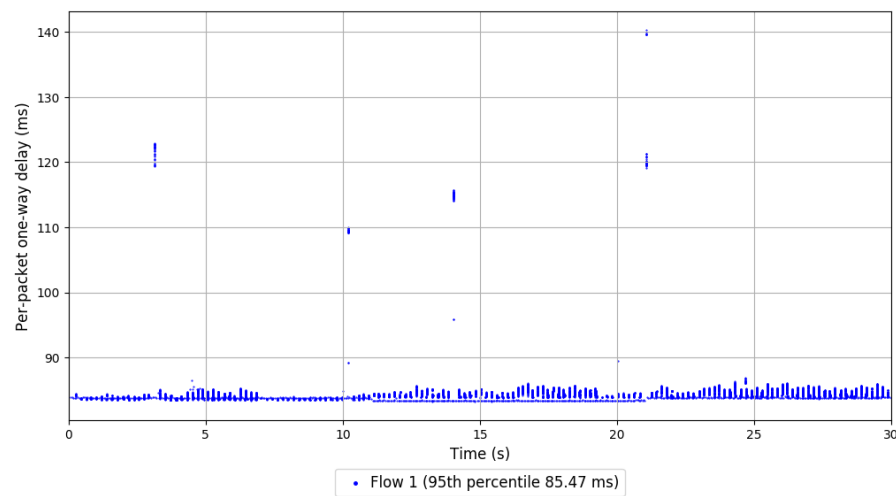
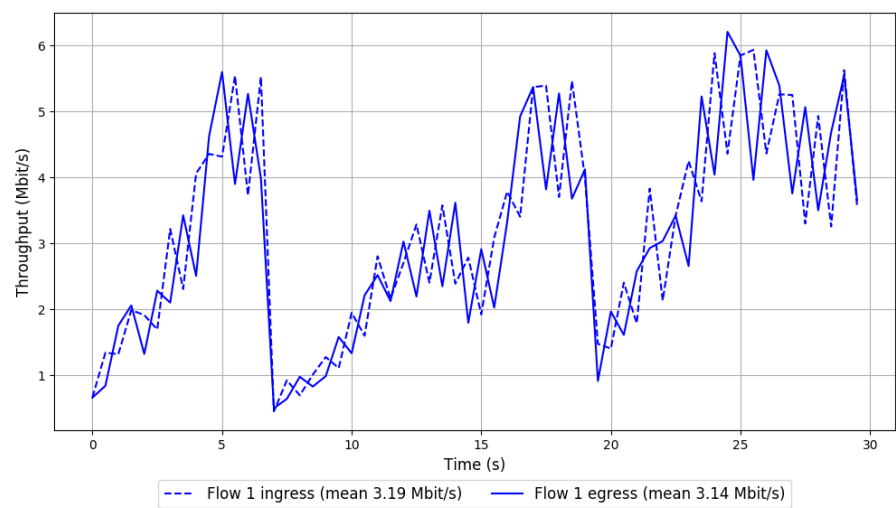
-- Flow 1:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 85.474 ms

Loss rate: 1.70%

Run 10: Report of Sprout — Data Link

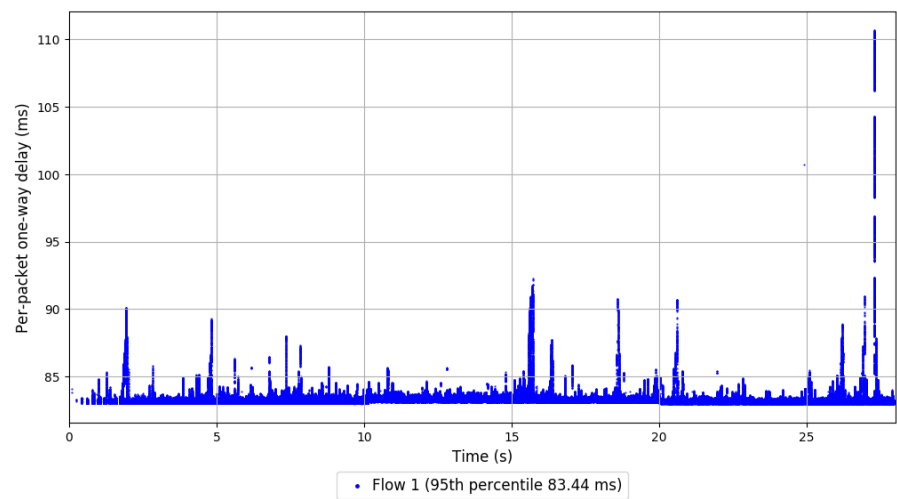
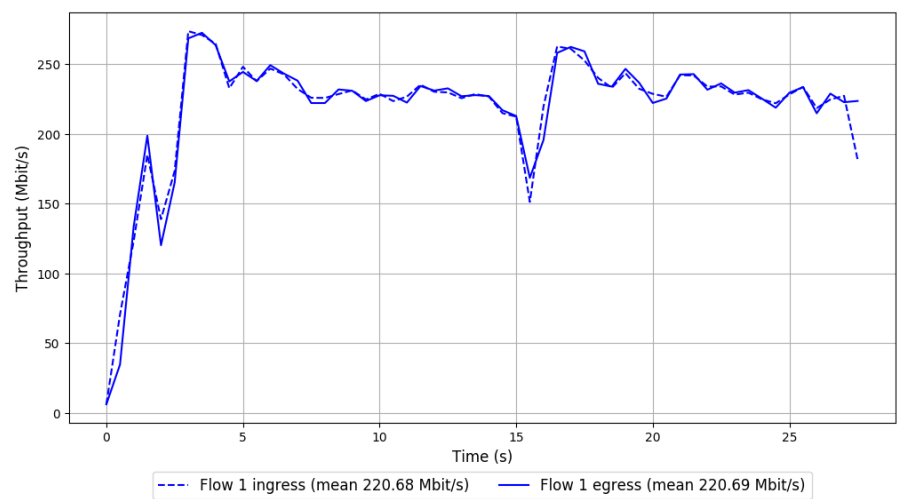


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-08 20:57:03
End at: 2018-01-08 20:57:33

# Below is generated by plot.py at 2018-01-08 23:59:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.69 Mbit/s
95th percentile per-packet one-way delay: 83.436 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 220.69 Mbit/s
95th percentile per-packet one-way delay: 83.436 ms
Loss rate: 0.00%
```


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

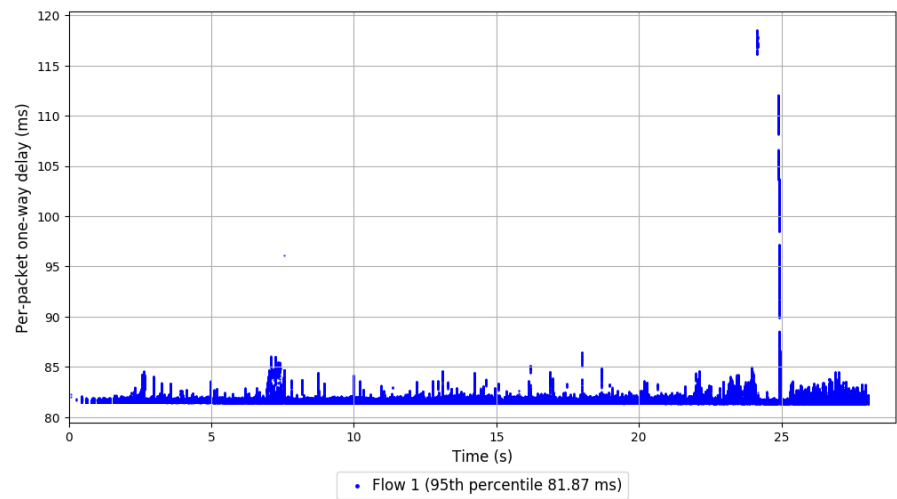
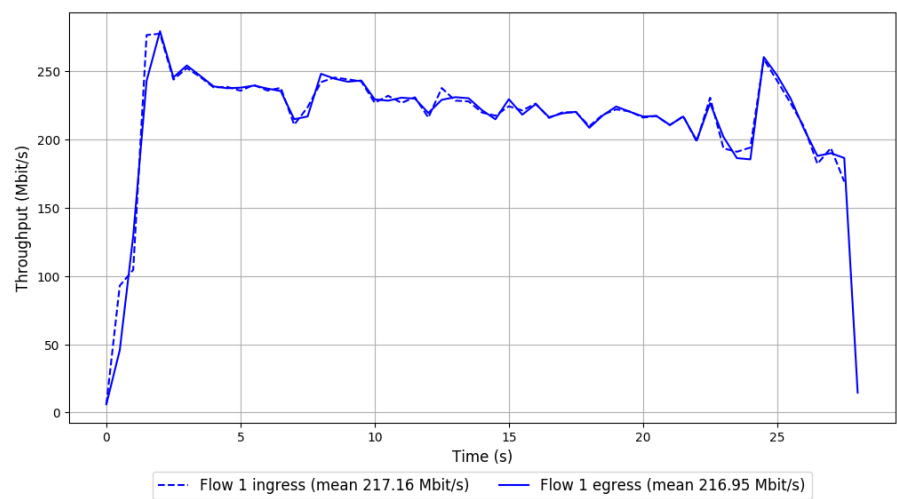


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-08 21:09:09
End at: 2018-01-08 21:09:39

# Below is generated by plot.py at 2018-01-08 23:59:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.95 Mbit/s
95th percentile per-packet one-way delay: 81.874 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 216.95 Mbit/s
95th percentile per-packet one-way delay: 81.874 ms
Loss rate: 0.10%
```

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

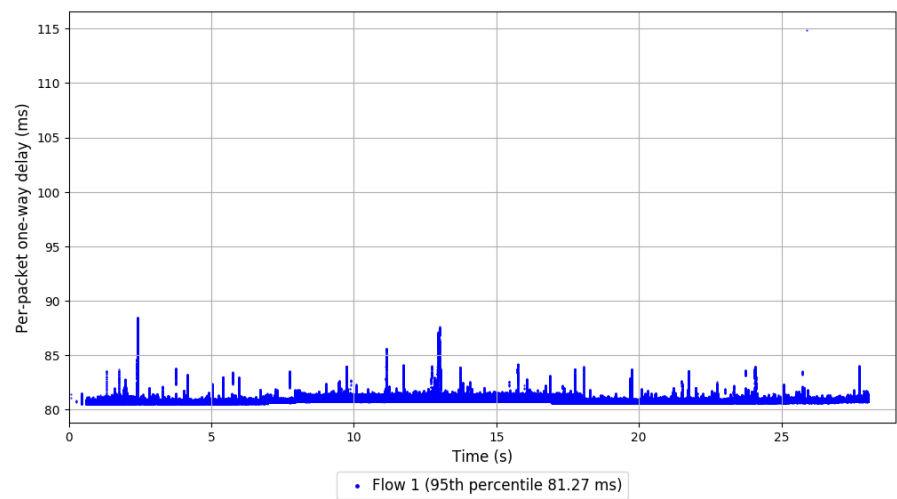
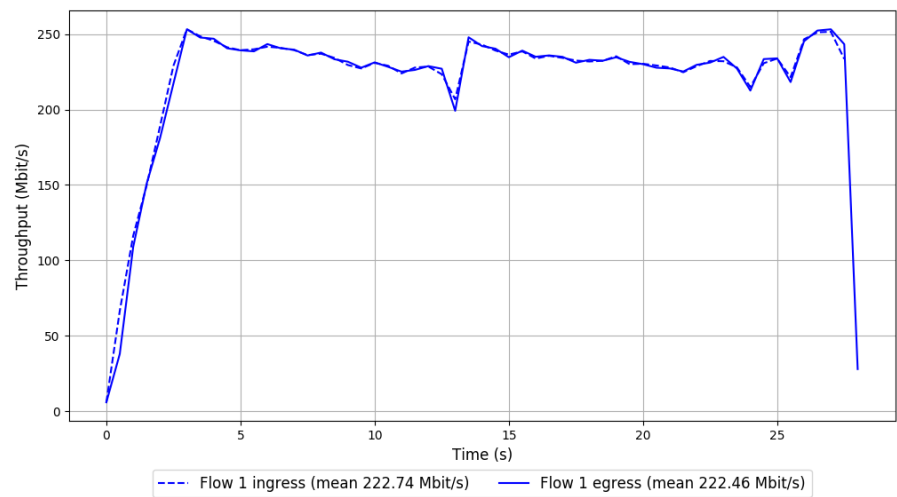


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-08 21:21:15
End at: 2018-01-08 21:21:45

# Below is generated by plot.py at 2018-01-08 23:59:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.46 Mbit/s
95th percentile per-packet one-way delay: 81.267 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 222.46 Mbit/s
95th percentile per-packet one-way delay: 81.267 ms
Loss rate: 0.12%
```

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

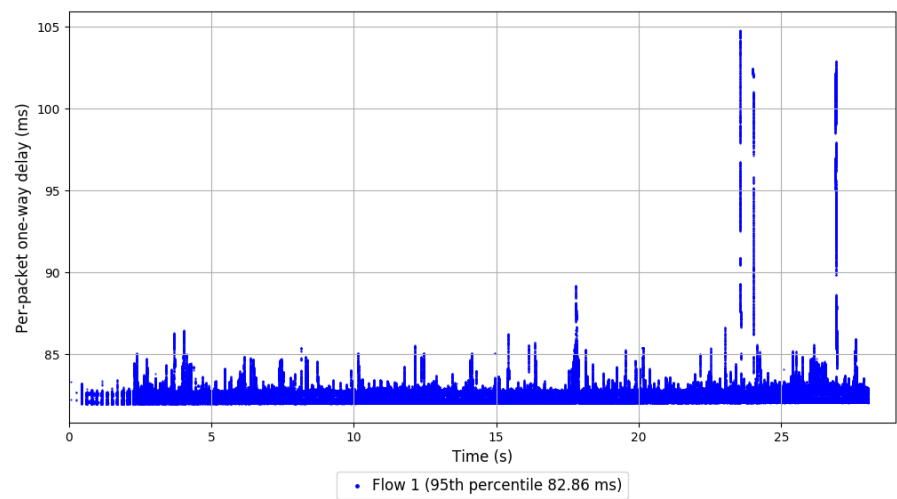
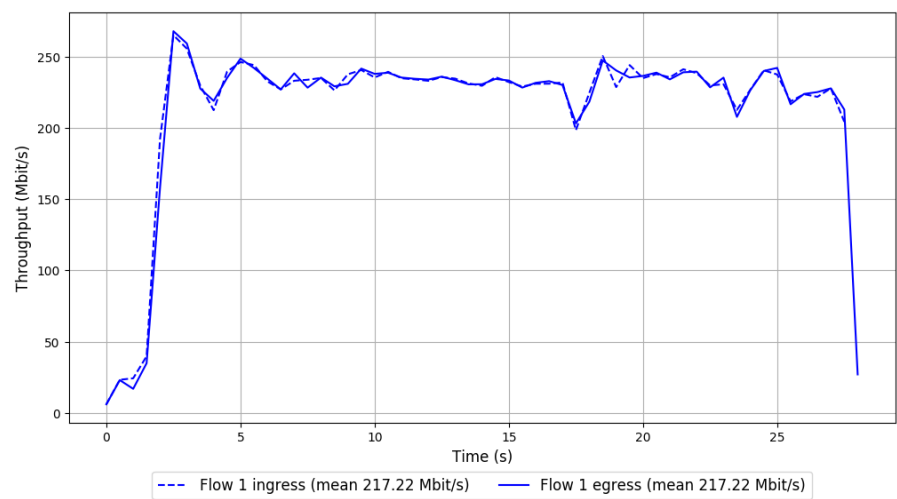


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-08 21:33:21
End at: 2018-01-08 21:33:51

# Below is generated by plot.py at 2018-01-08 23:59:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.22 Mbit/s
95th percentile per-packet one-way delay: 82.865 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.22 Mbit/s
95th percentile per-packet one-way delay: 82.865 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-08 21:44:57

End at: 2018-01-08 21:45:27

Below is generated by plot.py at 2018-01-08 23:59:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.15 Mbit/s

95th percentile per-packet one-way delay: 83.909 ms

Loss rate: 0.05%

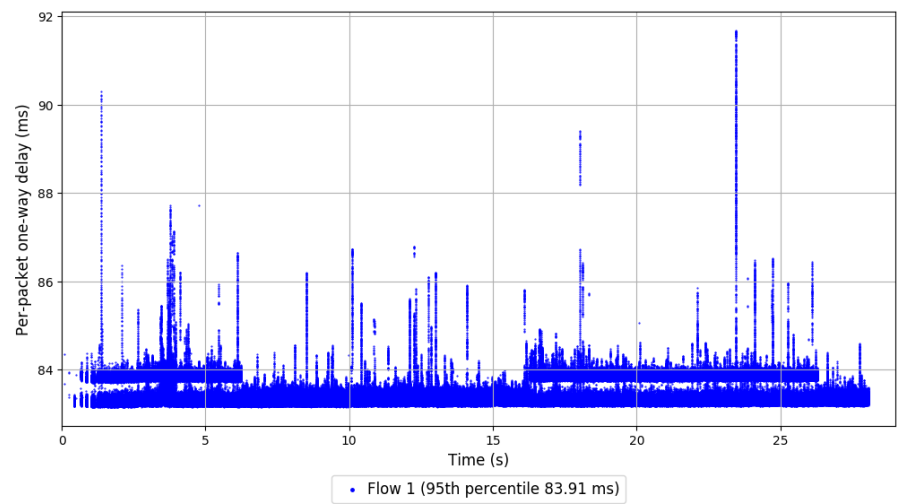
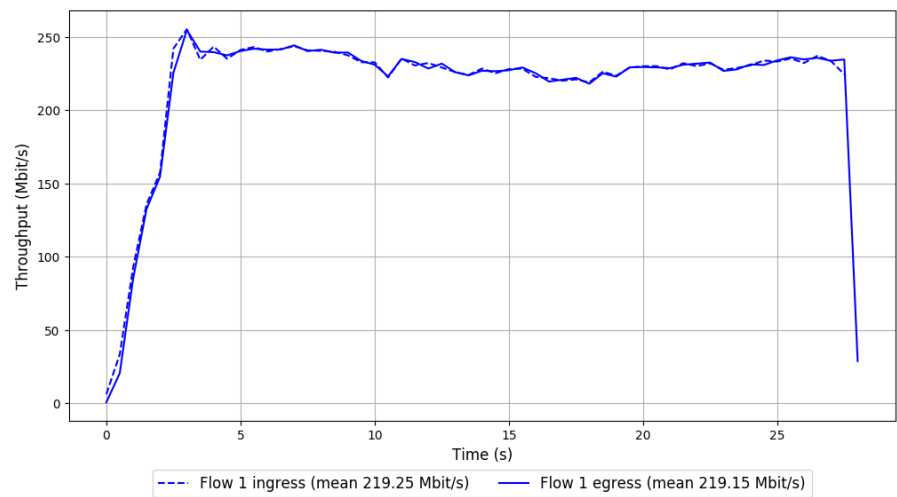
-- Flow 1:

Average throughput: 219.15 Mbit/s

95th percentile per-packet one-way delay: 83.909 ms

Loss rate: 0.05%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-08 21:56:59

End at: 2018-01-08 21:57:29

Below is generated by plot.py at 2018-01-08 23:59:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.16 Mbit/s

95th percentile per-packet one-way delay: 84.033 ms

Loss rate: 0.02%

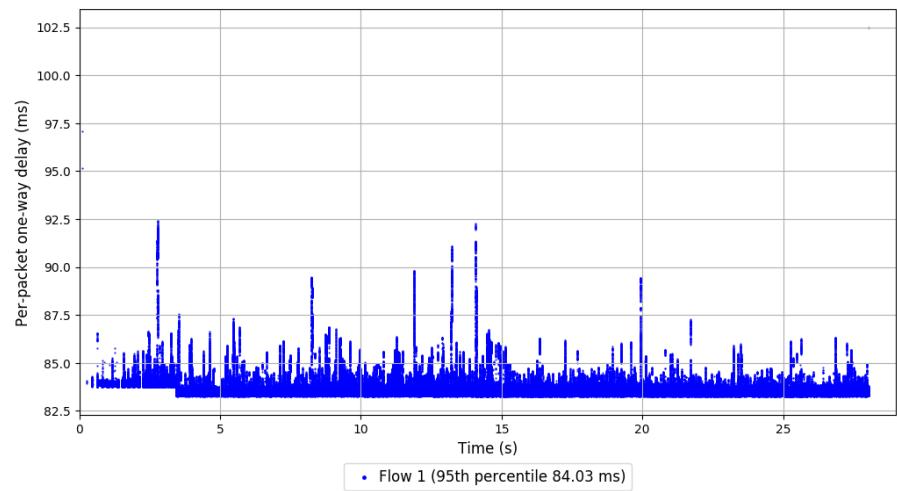
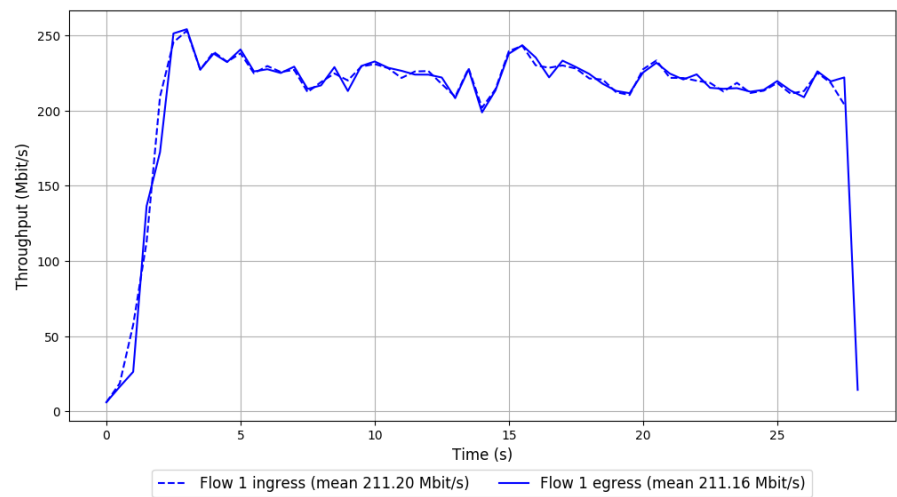
-- Flow 1:

Average throughput: 211.16 Mbit/s

95th percentile per-packet one-way delay: 84.033 ms

Loss rate: 0.02%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-08 22:08:48

End at: 2018-01-08 22:09:18

Below is generated by plot.py at 2018-01-09 00:03:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 225.29 Mbit/s

95th percentile per-packet one-way delay: 83.099 ms

Loss rate: 0.22%

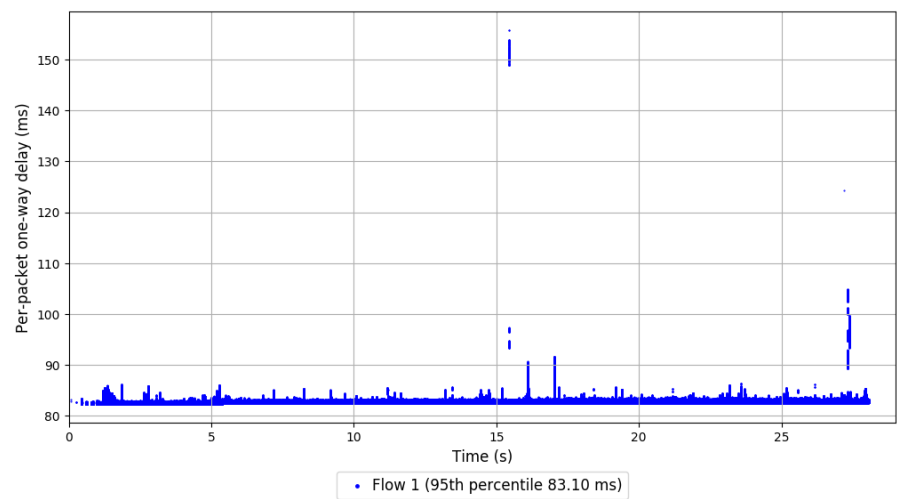
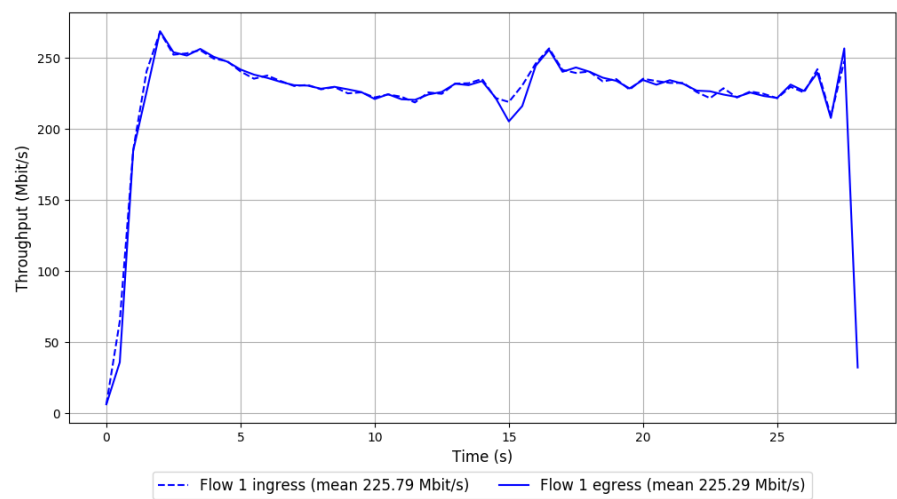
-- Flow 1:

Average throughput: 225.29 Mbit/s

95th percentile per-packet one-way delay: 83.099 ms

Loss rate: 0.22%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-08 22:21:01

End at: 2018-01-08 22:21:31

Below is generated by plot.py at 2018-01-09 00:03:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.23 Mbit/s

95th percentile per-packet one-way delay: 84.248 ms

Loss rate: 0.20%

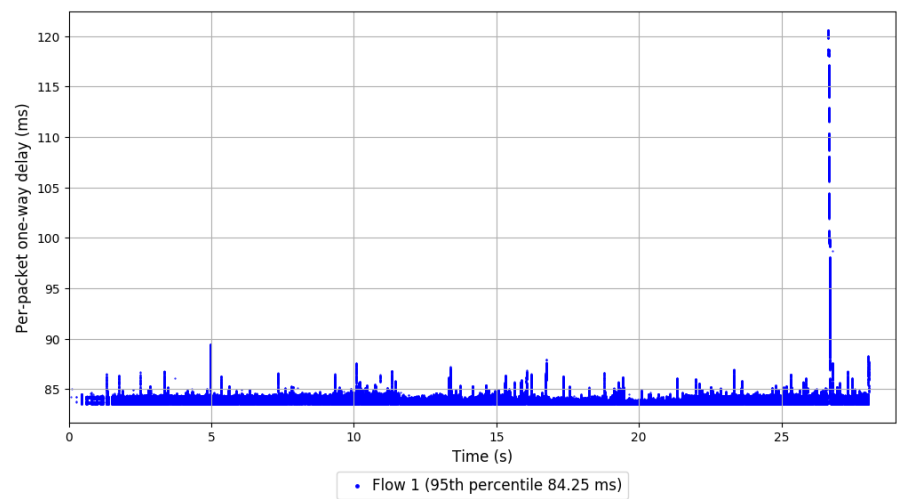
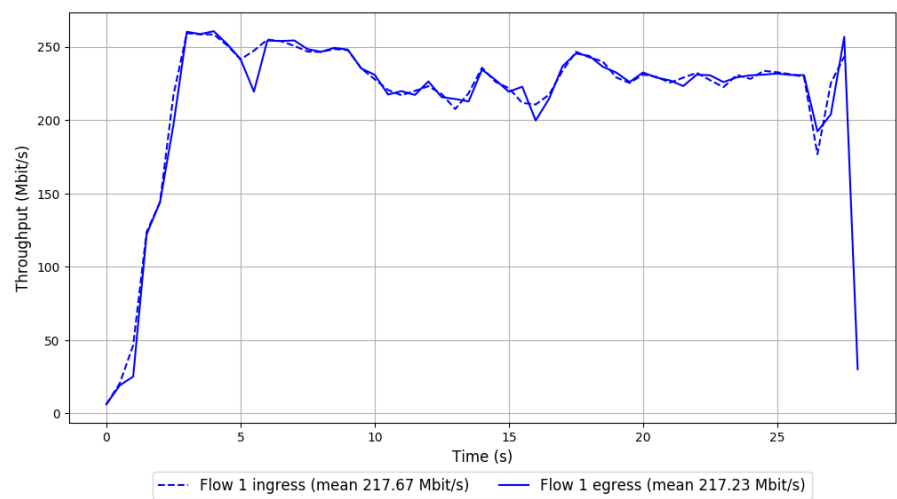
-- Flow 1:

Average throughput: 217.23 Mbit/s

95th percentile per-packet one-way delay: 84.248 ms

Loss rate: 0.20%

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

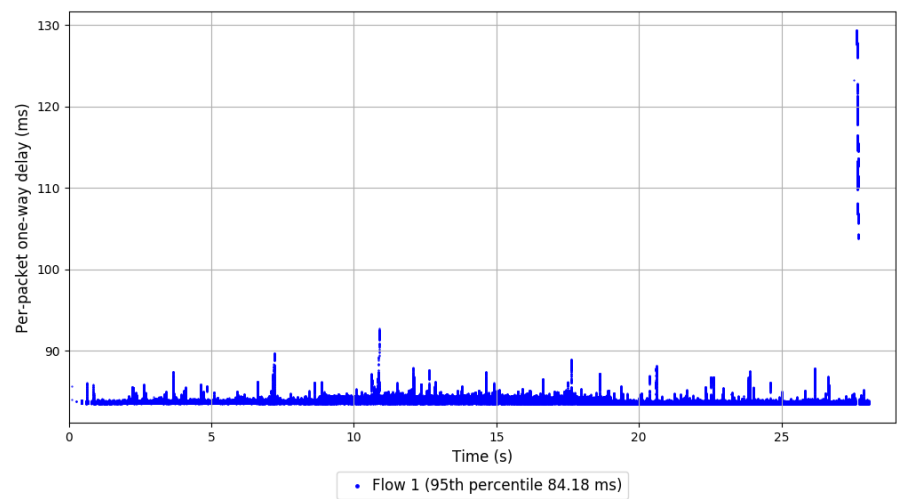
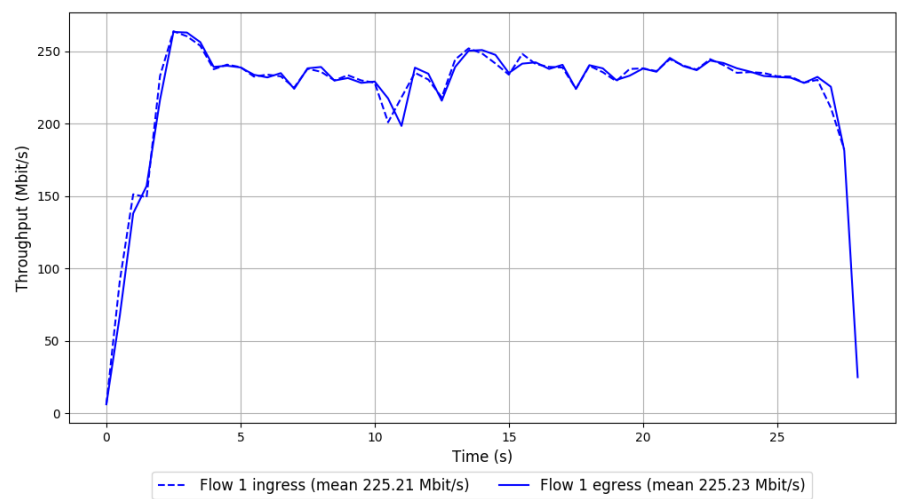


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-08 22:33:14
End at: 2018-01-08 22:33:44

# Below is generated by plot.py at 2018-01-09 00:05:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.23 Mbit/s
95th percentile per-packet one-way delay: 84.184 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.23 Mbit/s
95th percentile per-packet one-way delay: 84.184 ms
Loss rate: 0.00%
```


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

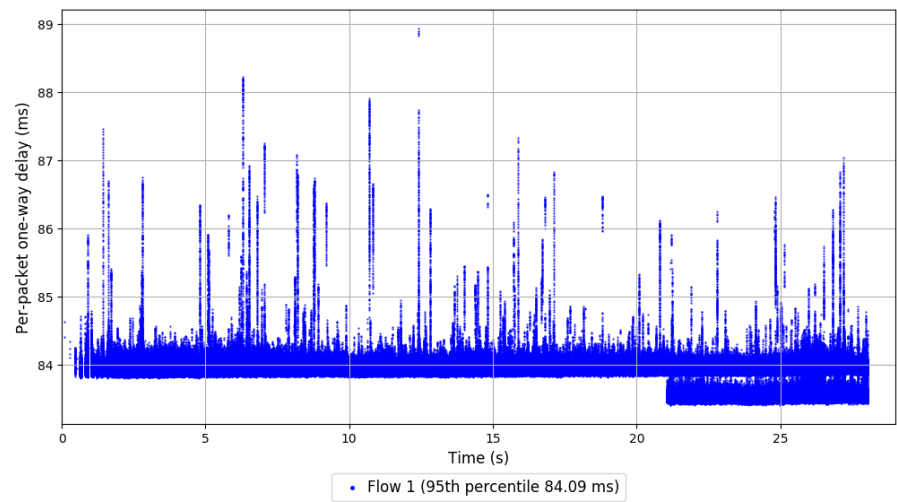
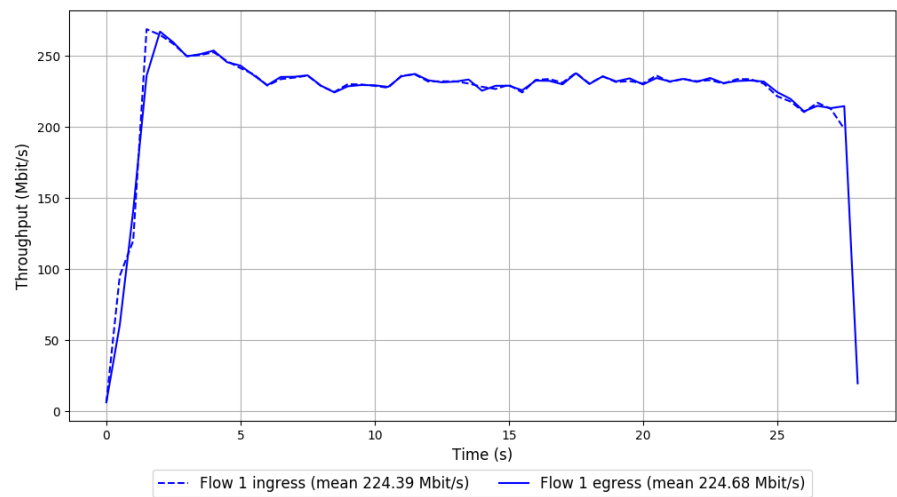


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-08 22:45:12
End at: 2018-01-08 22:45:42

# Below is generated by plot.py at 2018-01-09 00:05:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.68 Mbit/s
95th percentile per-packet one-way delay: 84.091 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 224.68 Mbit/s
95th percentile per-packet one-way delay: 84.091 ms
Loss rate: 0.00%
```

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

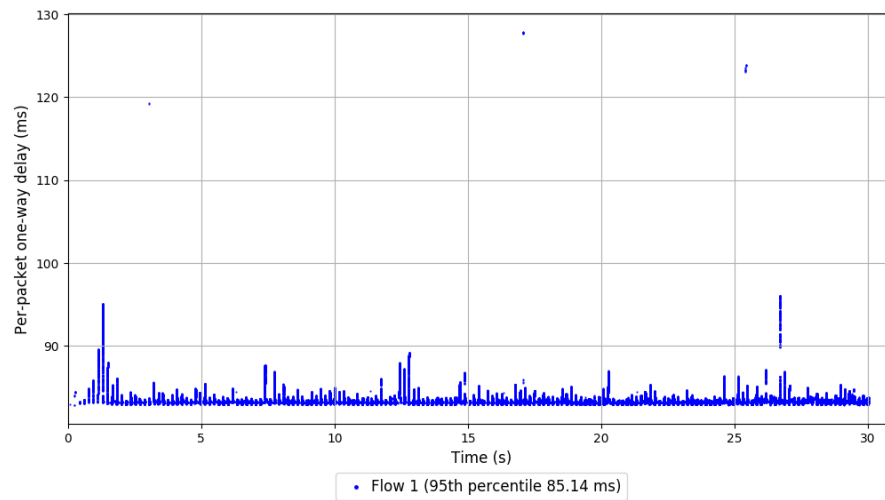
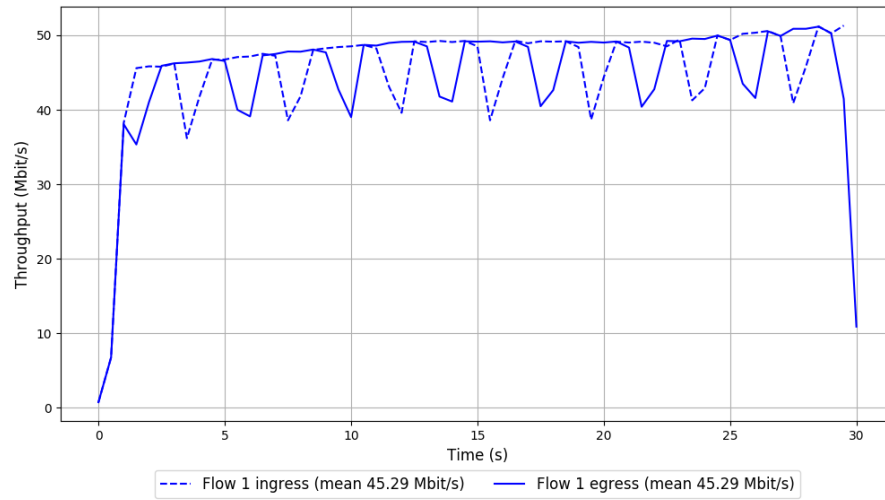


```
Run 1: Statistics of TCP Vegas

Start at: 2018-01-08 20:58:02
End at: 2018-01-08 20:58:32

# Below is generated by plot.py at 2018-01-09 00:05:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.29 Mbit/s
95th percentile per-packet one-way delay: 85.145 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.29 Mbit/s
95th percentile per-packet one-way delay: 85.145 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-08 21:10:08

End at: 2018-01-08 21:10:38

Below is generated by plot.py at 2018-01-09 00:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.27 Mbit/s

95th percentile per-packet one-way delay: 83.682 ms

Loss rate: 0.22%

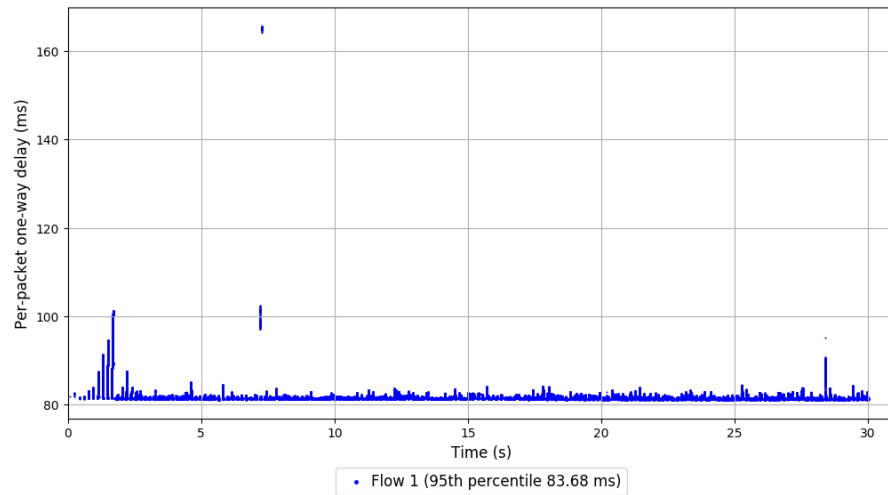
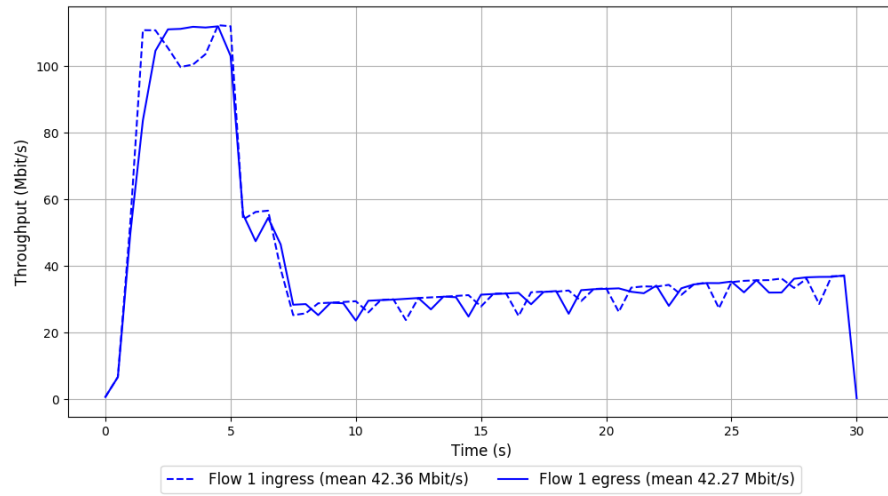
-- Flow 1:

Average throughput: 42.27 Mbit/s

95th percentile per-packet one-way delay: 83.682 ms

Loss rate: 0.22%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-08 21:22:14

End at: 2018-01-08 21:22:44

Below is generated by plot.py at 2018-01-09 00:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.13 Mbit/s

95th percentile per-packet one-way delay: 83.486 ms

Loss rate: 1.02%

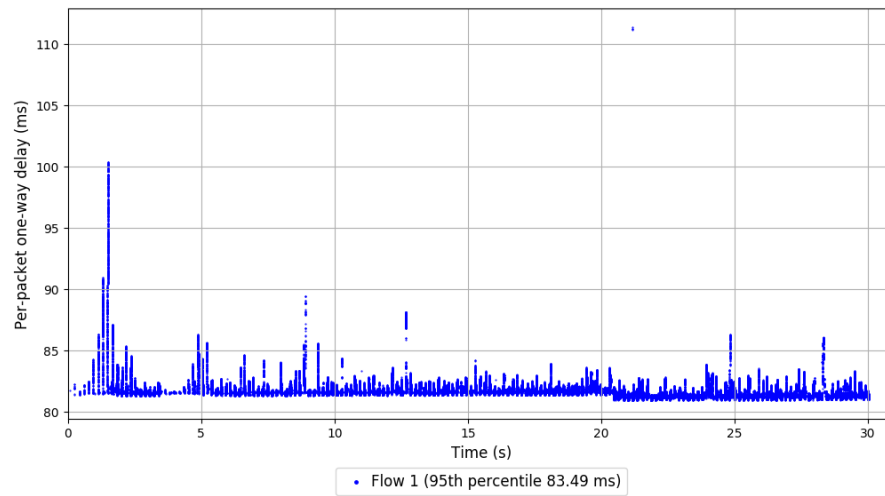
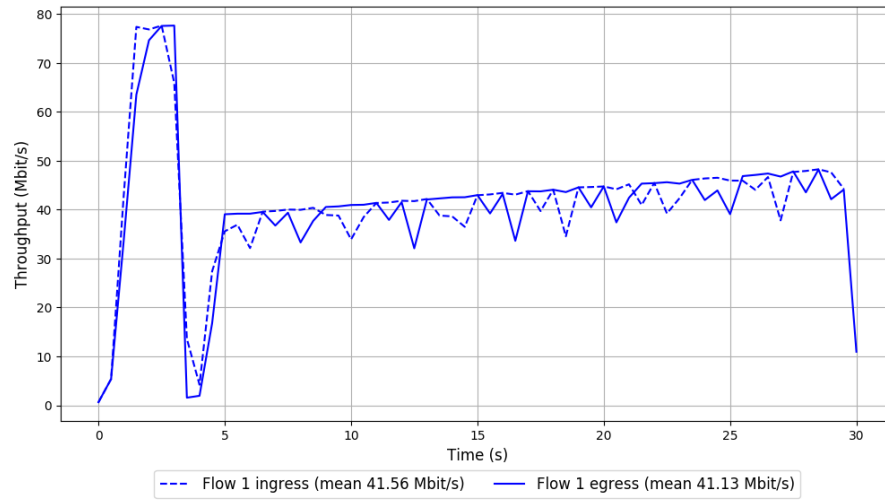
-- Flow 1:

Average throughput: 41.13 Mbit/s

95th percentile per-packet one-way delay: 83.486 ms

Loss rate: 1.02%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-08 21:34:20

End at: 2018-01-08 21:34:50

Below is generated by plot.py at 2018-01-09 00:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.32 Mbit/s

95th percentile per-packet one-way delay: 95.581 ms

Loss rate: 1.40%

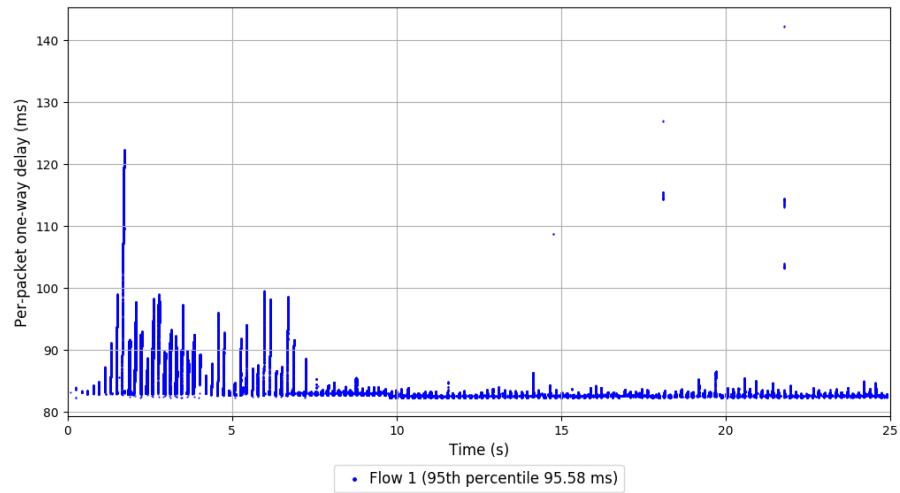
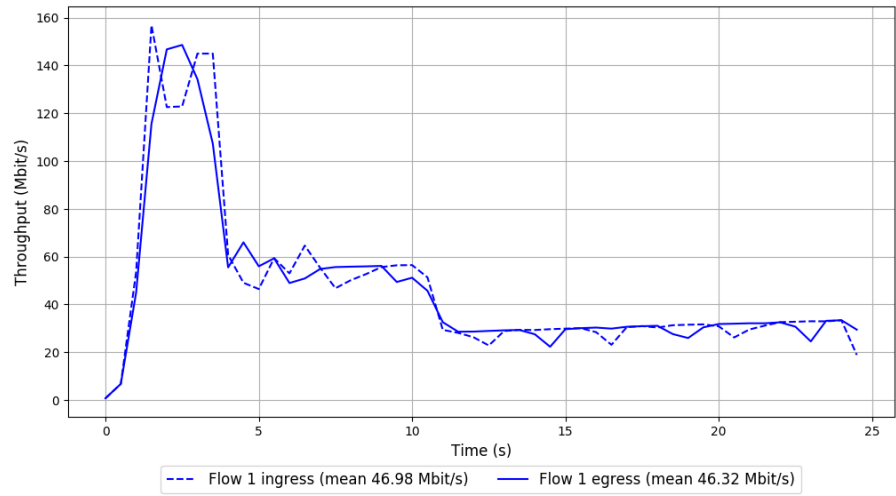
-- Flow 1:

Average throughput: 46.32 Mbit/s

95th percentile per-packet one-way delay: 95.581 ms

Loss rate: 1.40%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-08 21:45:56

End at: 2018-01-08 21:46:26

Below is generated by plot.py at 2018-01-09 00:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.39 Mbit/s

95th percentile per-packet one-way delay: 85.710 ms

Loss rate: 0.86%

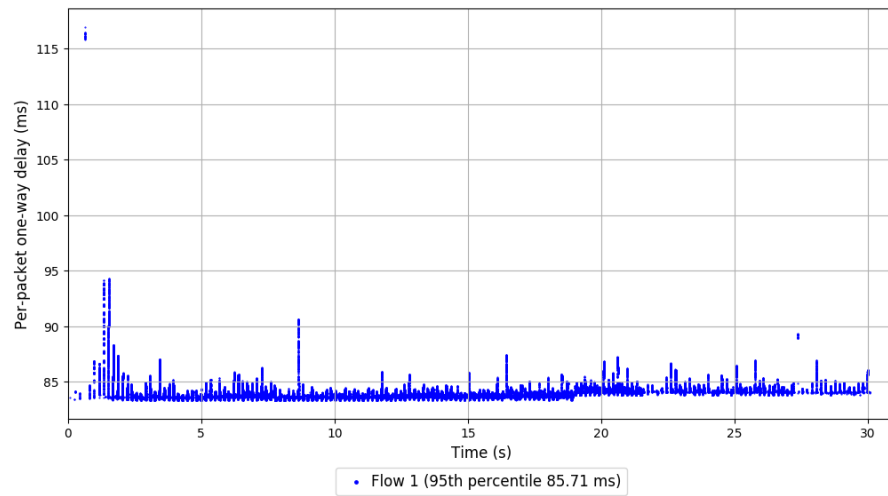
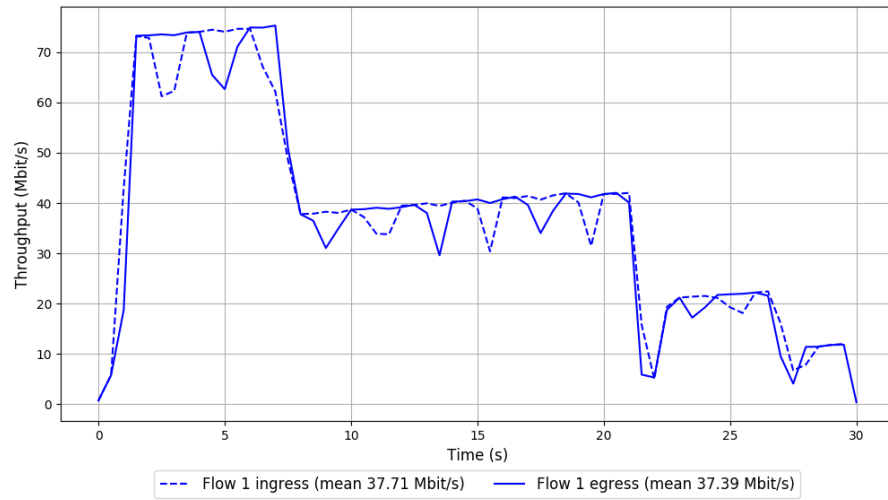
-- Flow 1:

Average throughput: 37.39 Mbit/s

95th percentile per-packet one-way delay: 85.710 ms

Loss rate: 0.86%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-08 21:57:58

End at: 2018-01-08 21:58:28

Below is generated by plot.py at 2018-01-09 00:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.76 Mbit/s

95th percentile per-packet one-way delay: 86.180 ms

Loss rate: 0.00%

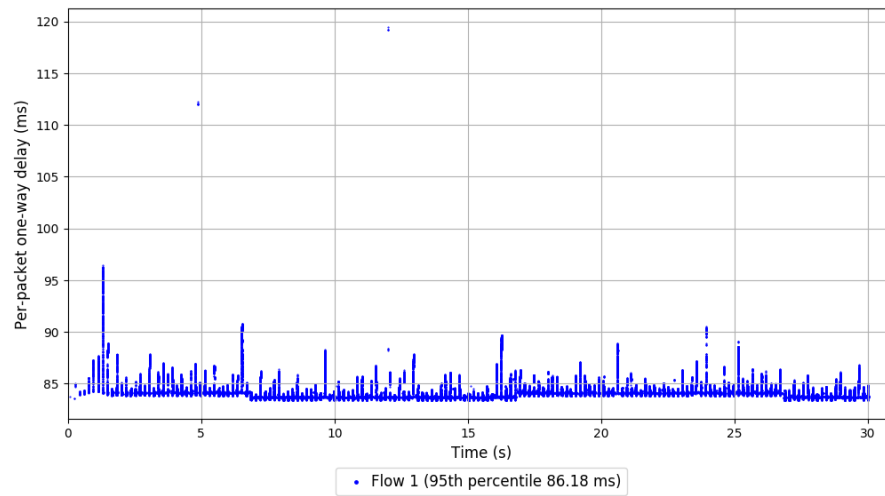
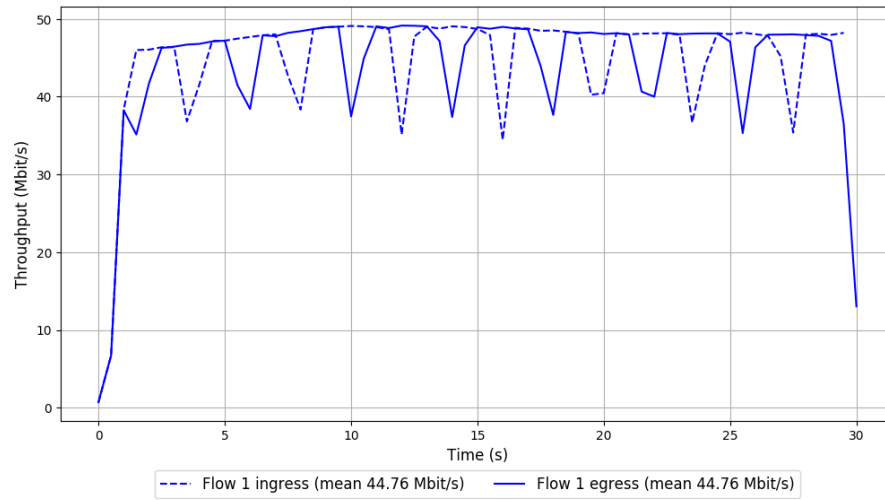
-- Flow 1:

Average throughput: 44.76 Mbit/s

95th percentile per-packet one-way delay: 86.180 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-08 22:09:47

End at: 2018-01-08 22:10:17

Below is generated by plot.py at 2018-01-09 00:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.34 Mbit/s

95th percentile per-packet one-way delay: 94.464 ms

Loss rate: 1.97%

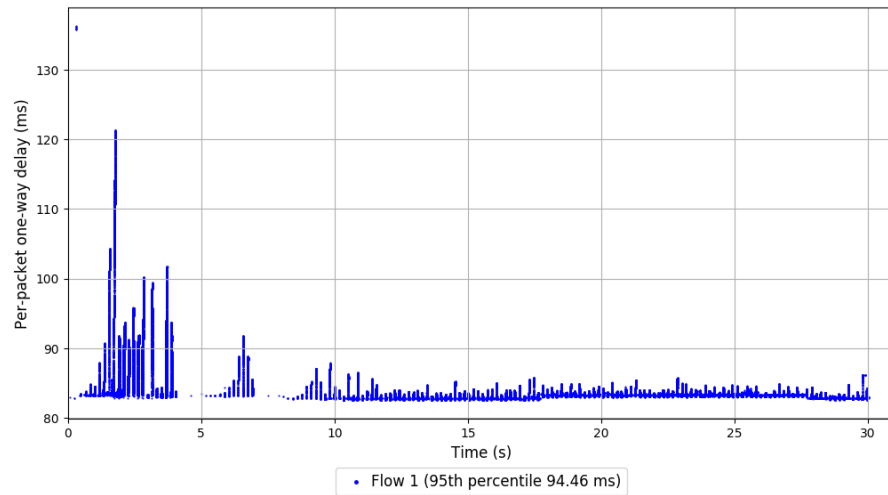
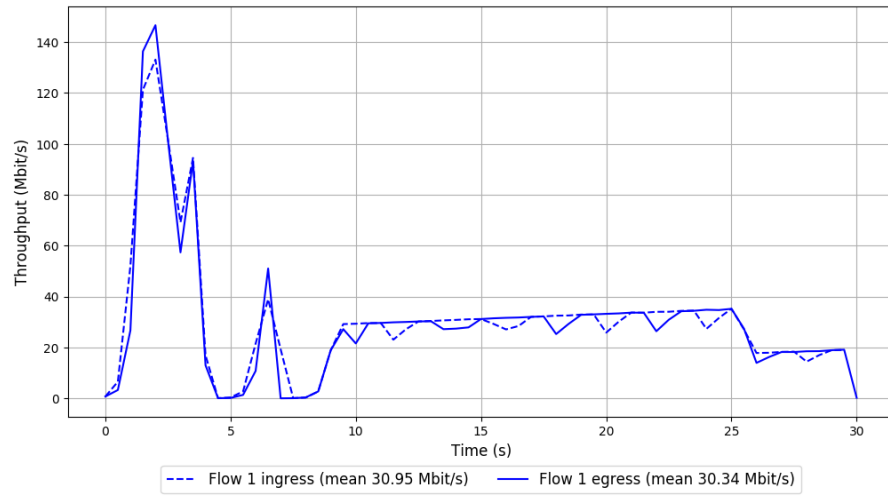
-- Flow 1:

Average throughput: 30.34 Mbit/s

95th percentile per-packet one-way delay: 94.464 ms

Loss rate: 1.97%

Run 7: Report of TCP Vegas — Data Link

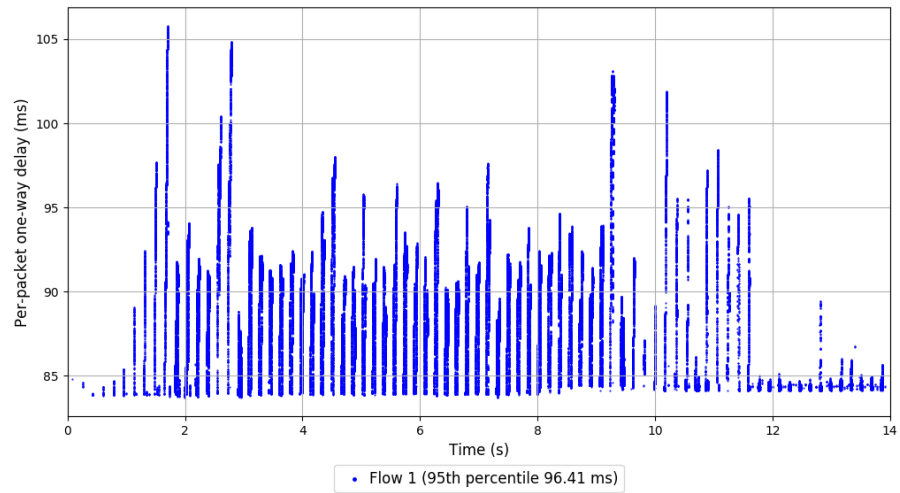
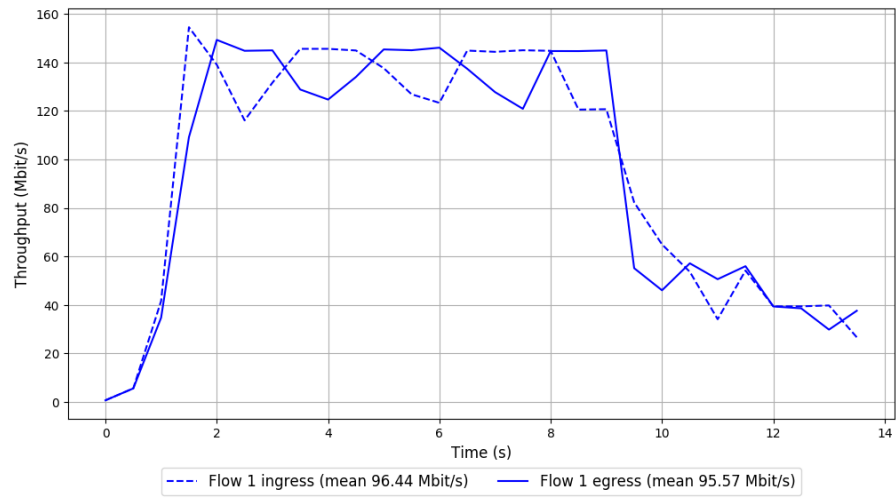


Run 8: Statistics of TCP Vegas

Start at: 2018-01-08 22:22:00

End at: 2018-01-08 22:22:30

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-08 22:34:14

End at: 2018-01-08 22:34:44

Below is generated by plot.py at 2018-01-09 00:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.69 Mbit/s

95th percentile per-packet one-way delay: 85.903 ms

Loss rate: 0.00%

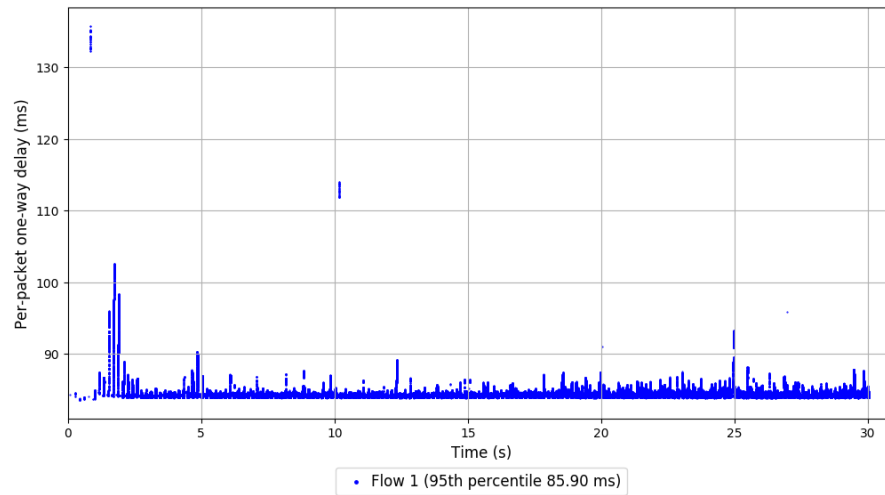
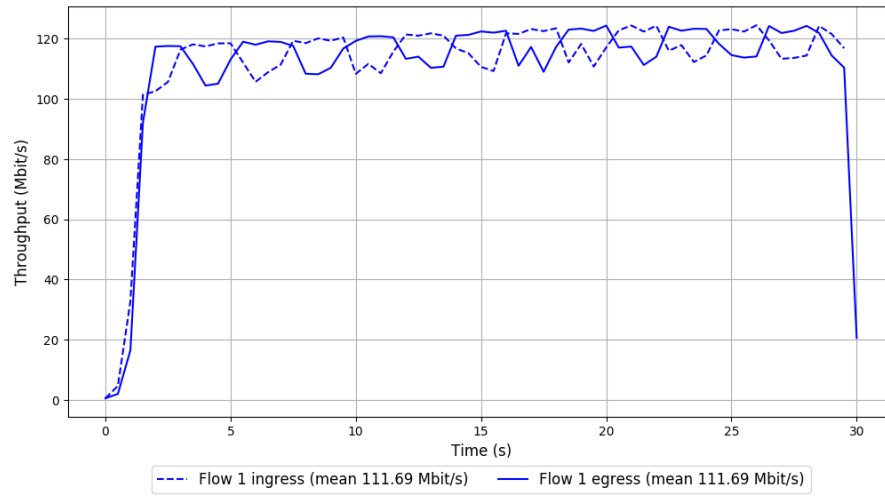
-- Flow 1:

Average throughput: 111.69 Mbit/s

95th percentile per-packet one-way delay: 85.903 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-08 22:46:11

End at: 2018-01-08 22:46:41

Below is generated by plot.py at 2018-01-09 00:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.86 Mbit/s

95th percentile per-packet one-way delay: 100.089 ms

Loss rate: 0.00%

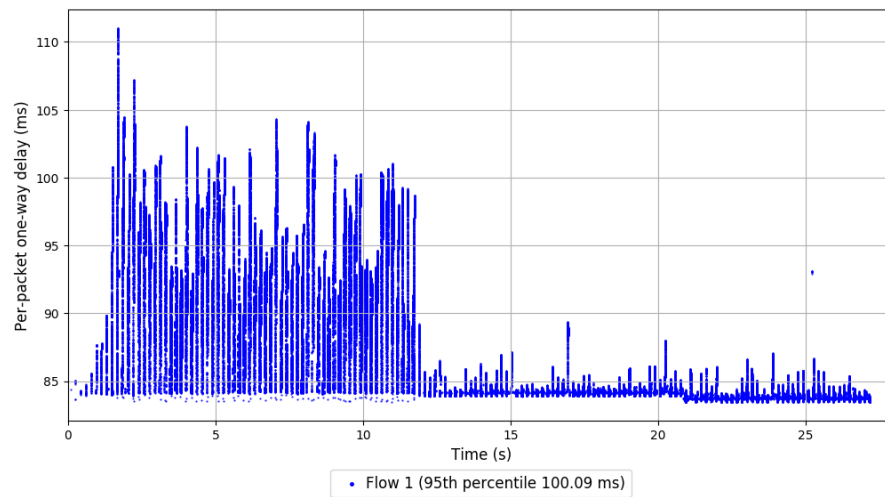
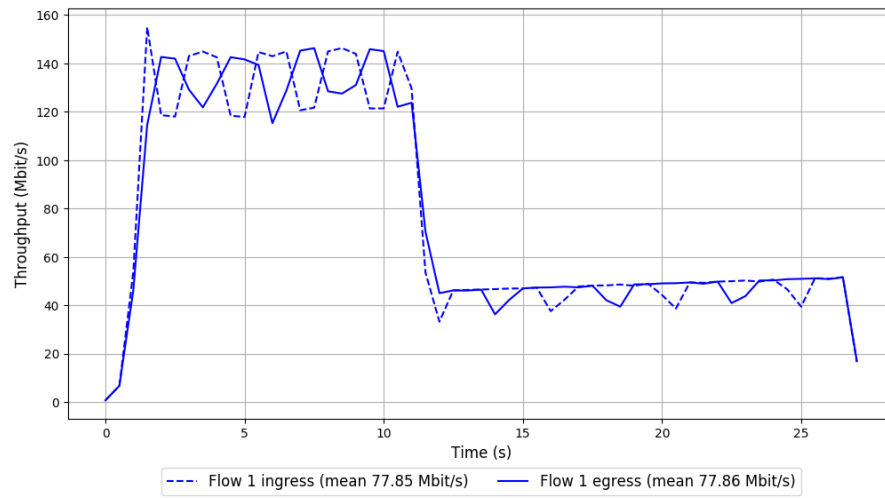
-- Flow 1:

Average throughput: 77.86 Mbit/s

95th percentile per-packet one-way delay: 100.089 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

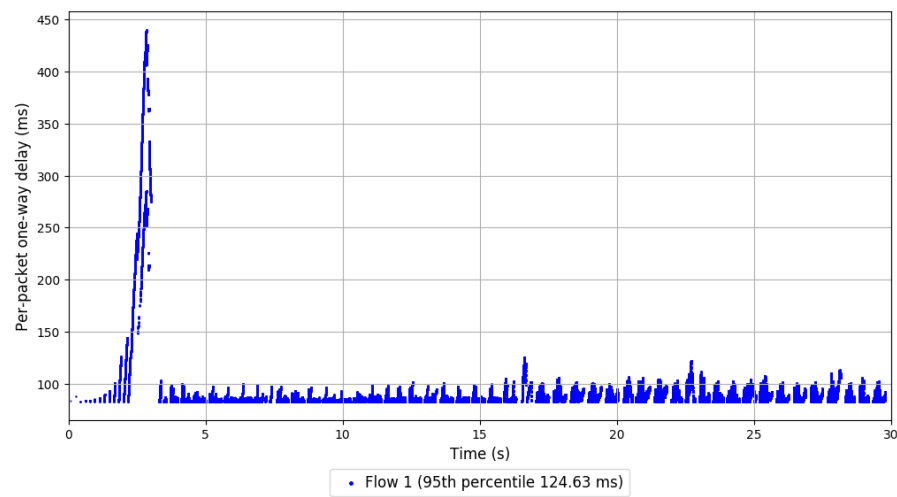
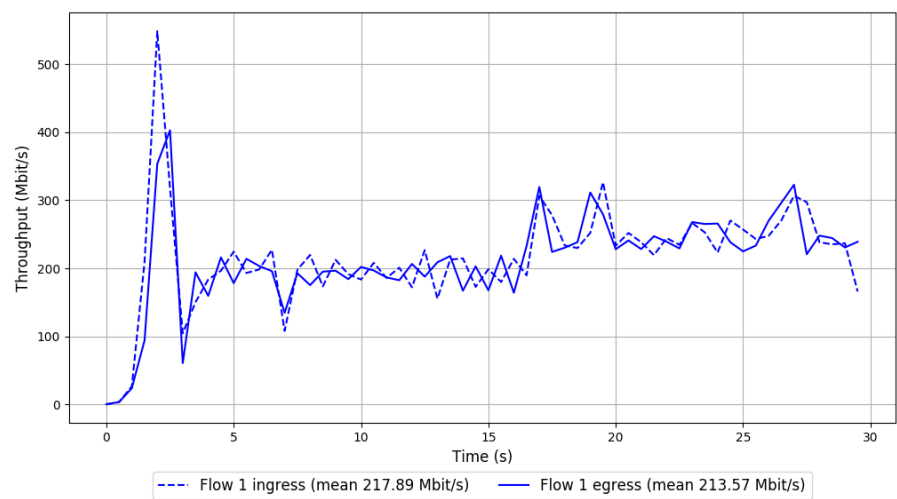


```
Run 1: Statistics of Verus

Start at: 2018-01-08 21:00:04
End at: 2018-01-08 21:00:34

# Below is generated by plot.py at 2018-01-09 00:05:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.57 Mbit/s
95th percentile per-packet one-way delay: 124.626 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 213.57 Mbit/s
95th percentile per-packet one-way delay: 124.626 ms
Loss rate: 1.98%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

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

End at: 2018-01-08 21:12:42

Below is generated by plot.py at 2018-01-09 00:05:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.26 Mbit/s

95th percentile per-packet one-way delay: 138.420 ms

Loss rate: 2.10%

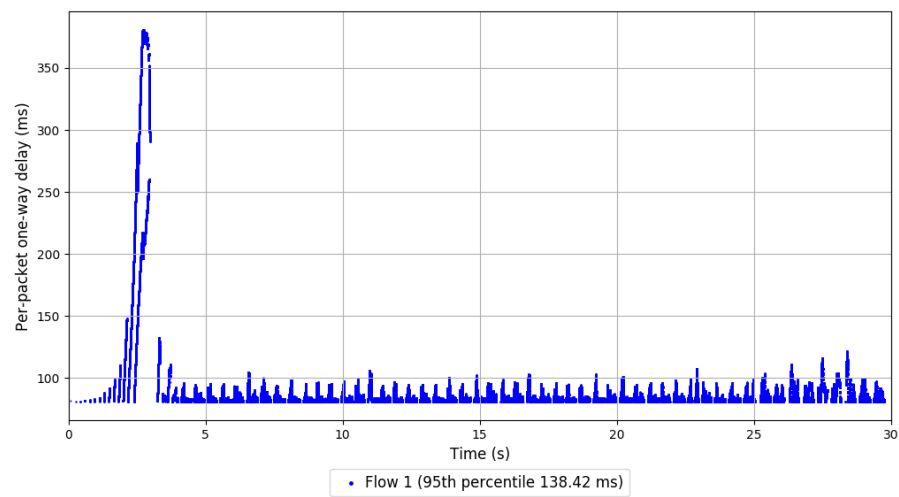
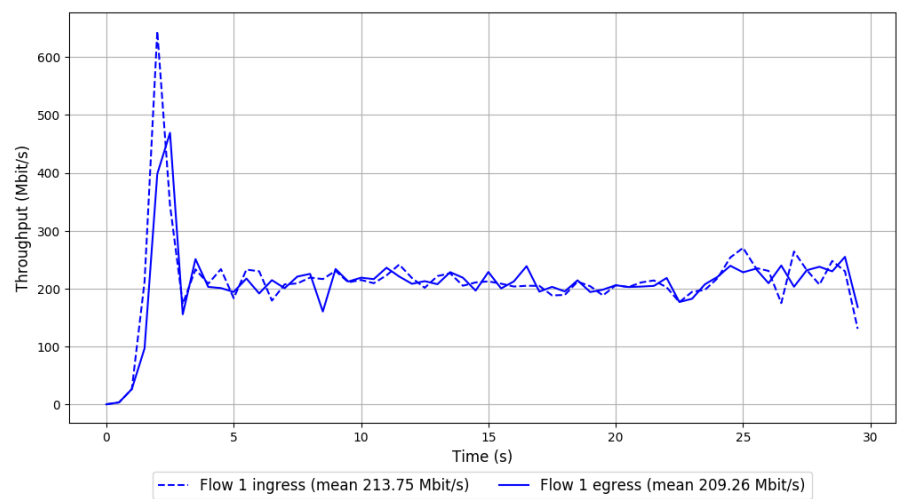
-- Flow 1:

Average throughput: 209.26 Mbit/s

95th percentile per-packet one-way delay: 138.420 ms

Loss rate: 2.10%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-08 21:24:18

End at: 2018-01-08 21:24:49

Below is generated by plot.py at 2018-01-09 00:05:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 248.33 Mbit/s

95th percentile per-packet one-way delay: 149.352 ms

Loss rate: 1.21%

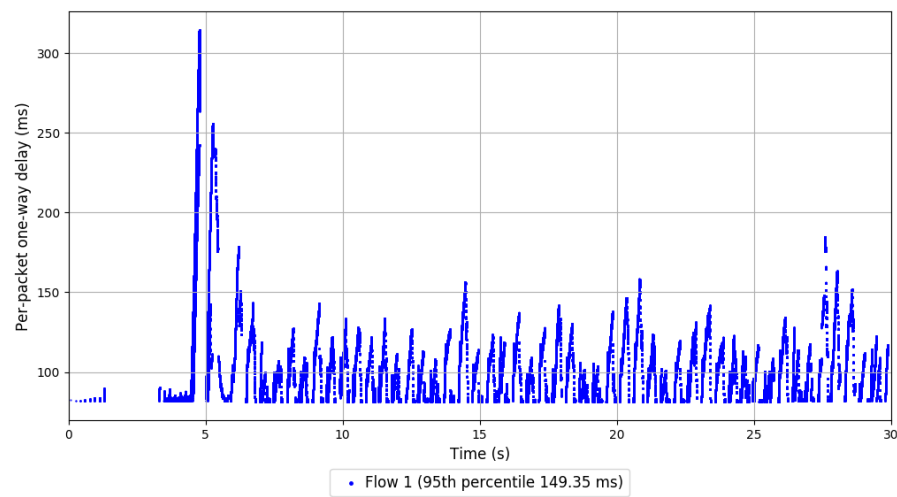
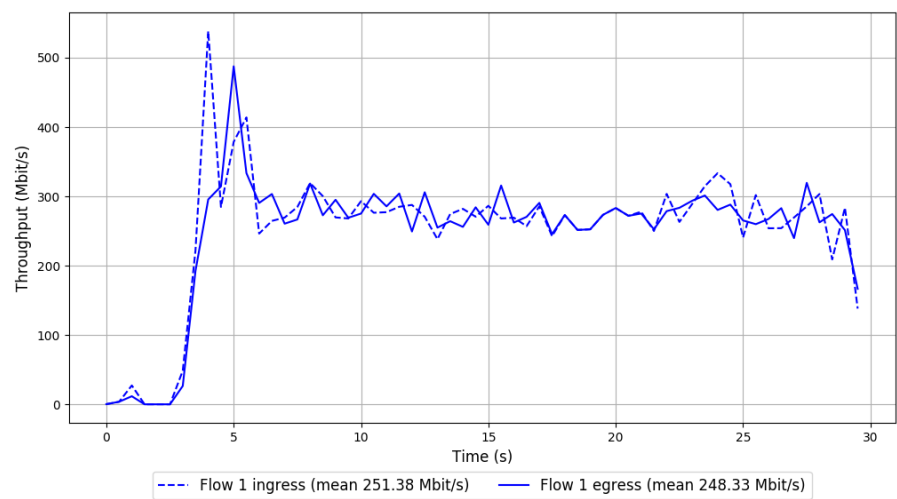
-- Flow 1:

Average throughput: 248.33 Mbit/s

95th percentile per-packet one-way delay: 149.352 ms

Loss rate: 1.21%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-08 21:36:24

End at: 2018-01-08 21:36:54

Below is generated by plot.py at 2018-01-09 00:05:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.55 Mbit/s

95th percentile per-packet one-way delay: 154.184 ms

Loss rate: 1.81%

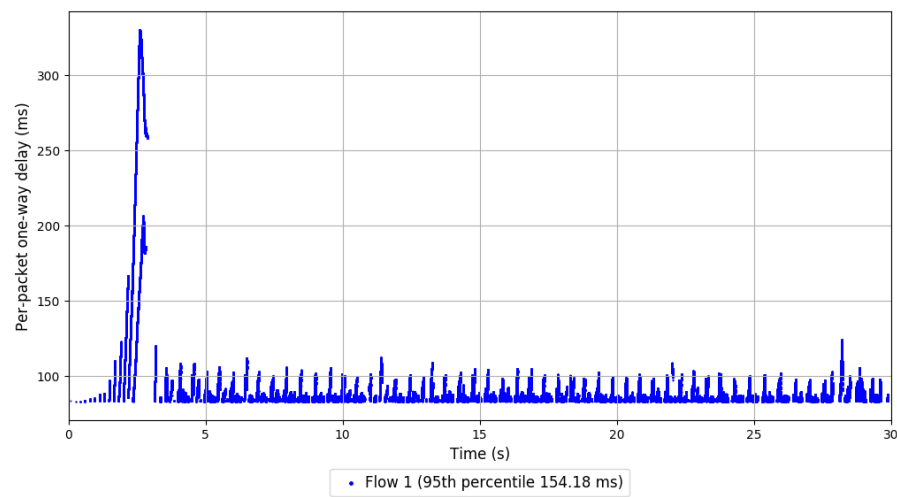
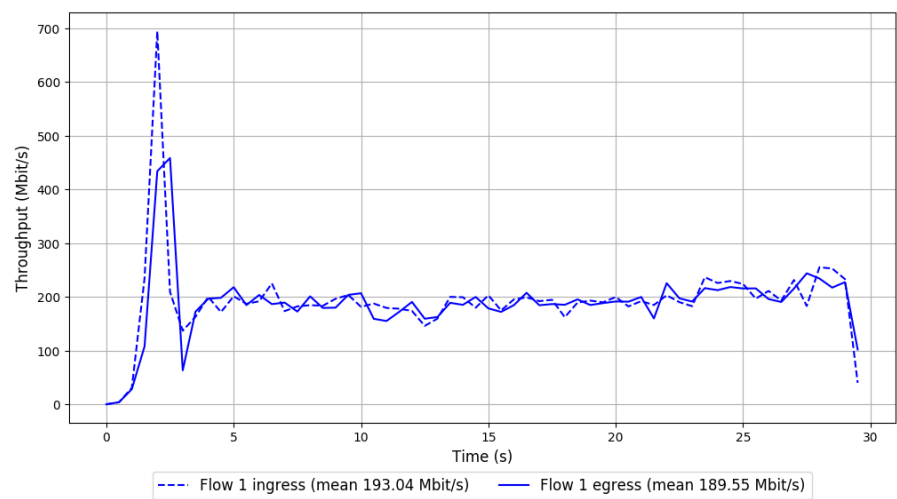
-- Flow 1:

Average throughput: 189.55 Mbit/s

95th percentile per-packet one-way delay: 154.184 ms

Loss rate: 1.81%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-08 21:48:00

End at: 2018-01-08 21:48:30

Below is generated by plot.py at 2018-01-09 00:07:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 268.41 Mbit/s

95th percentile per-packet one-way delay: 154.575 ms

Loss rate: 0.50%

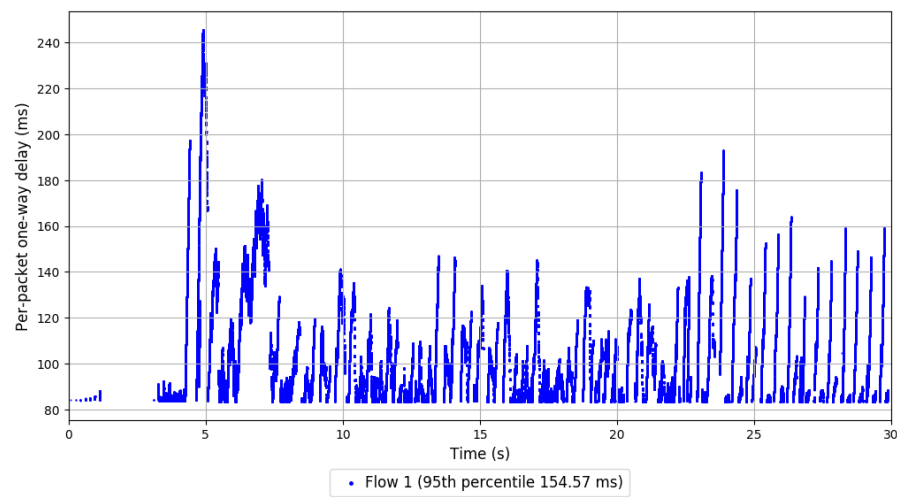
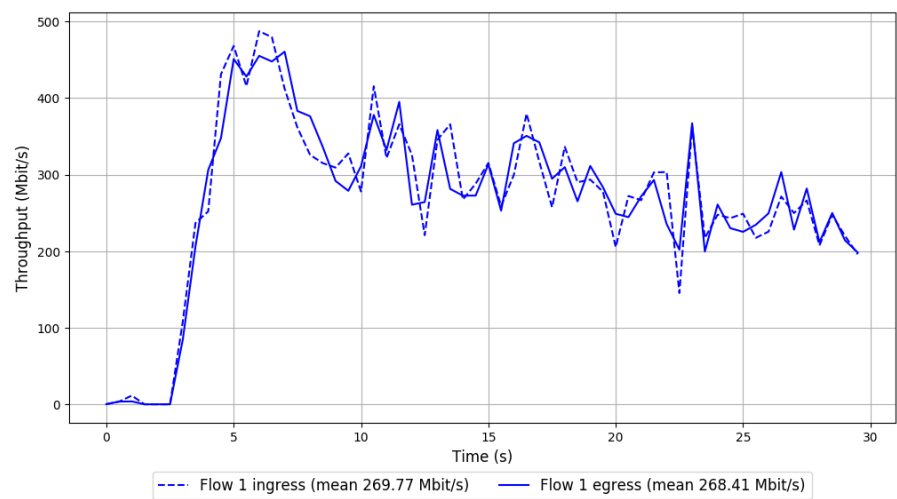
-- Flow 1:

Average throughput: 268.41 Mbit/s

95th percentile per-packet one-way delay: 154.575 ms

Loss rate: 0.50%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-08 22:00:02

End at: 2018-01-08 22:00:32

Below is generated by plot.py at 2018-01-09 00:07:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.53 Mbit/s

95th percentile per-packet one-way delay: 347.475 ms

Loss rate: 11.63%

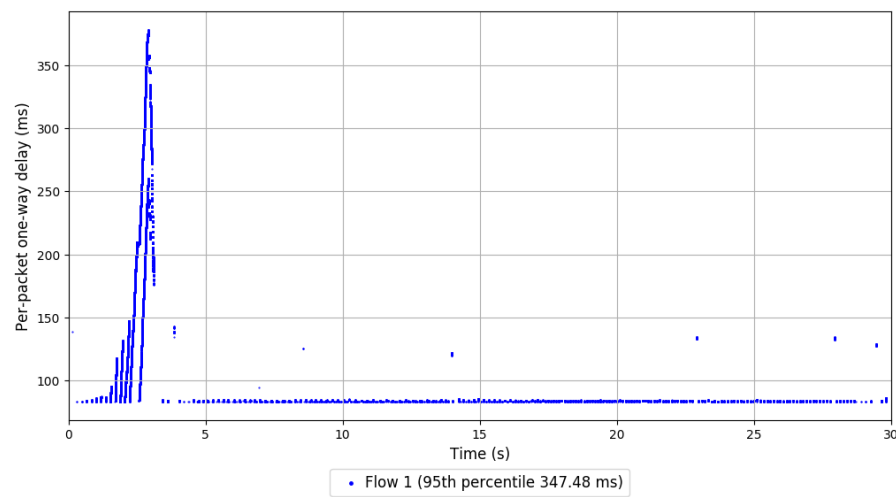
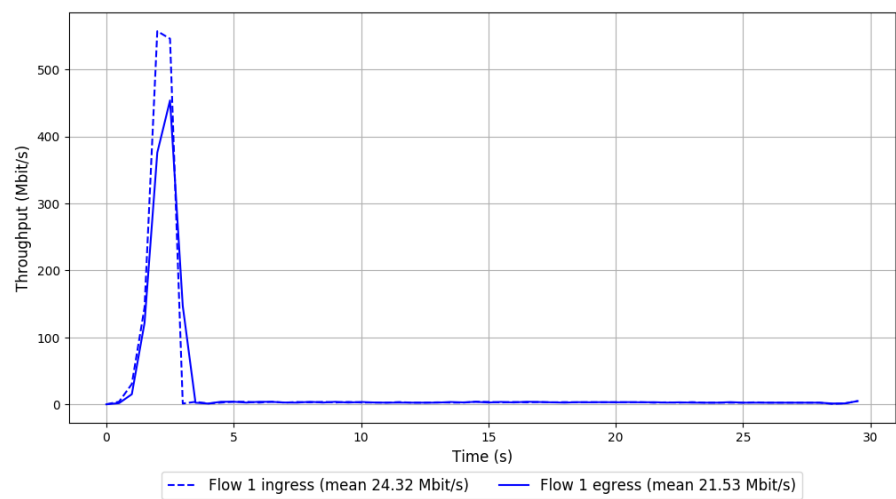
-- Flow 1:

Average throughput: 21.53 Mbit/s

95th percentile per-packet one-way delay: 347.475 ms

Loss rate: 11.63%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-08 22:11:50

End at: 2018-01-08 22:12:20

Below is generated by plot.py at 2018-01-09 00:07:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 250.17 Mbit/s

95th percentile per-packet one-way delay: 127.420 ms

Loss rate: 2.03%

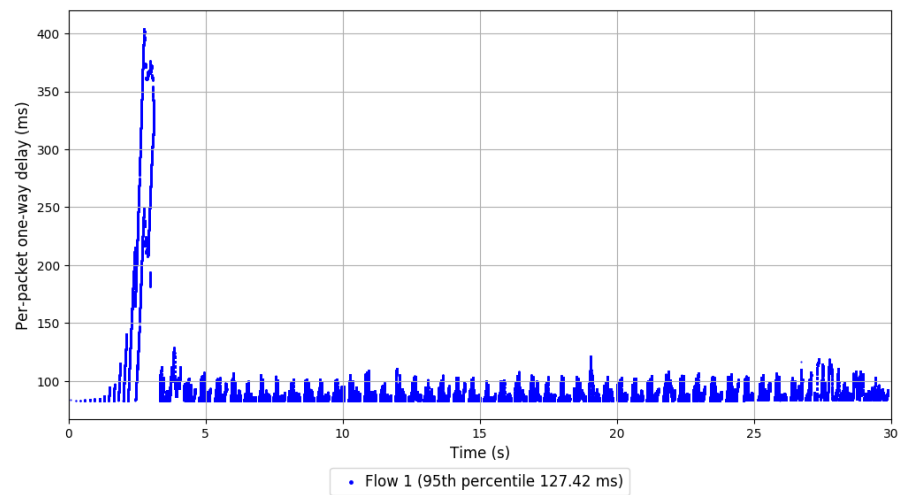
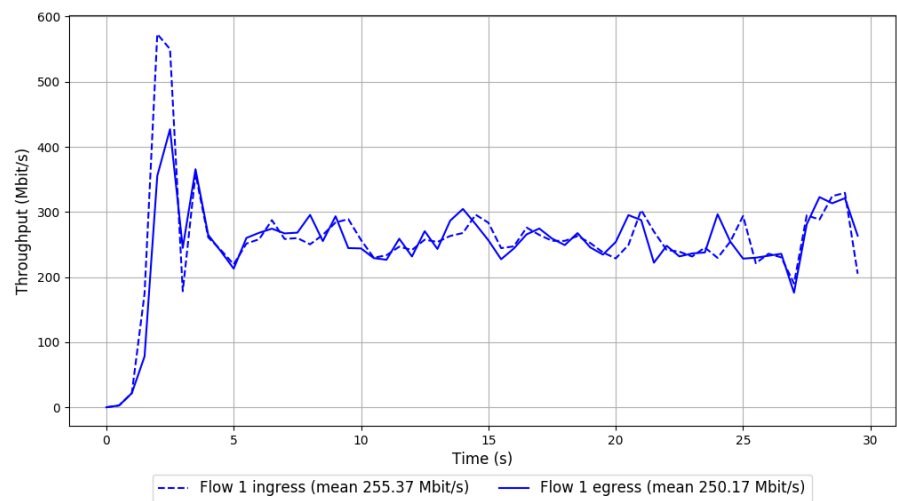
-- Flow 1:

Average throughput: 250.17 Mbit/s

95th percentile per-packet one-way delay: 127.420 ms

Loss rate: 2.03%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-08 22:24:05

End at: 2018-01-08 22:24:35

Below is generated by plot.py at 2018-01-09 00:07:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.40 Mbit/s

95th percentile per-packet one-way delay: 133.833 ms

Loss rate: 1.07%

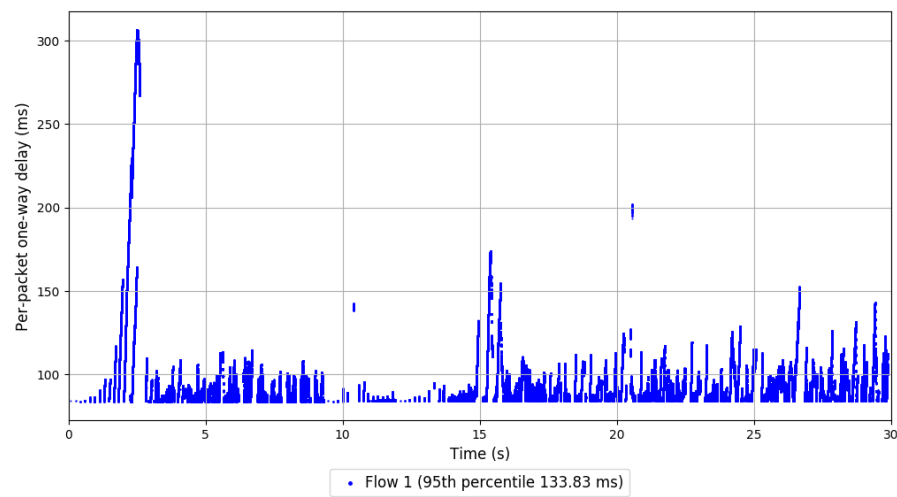
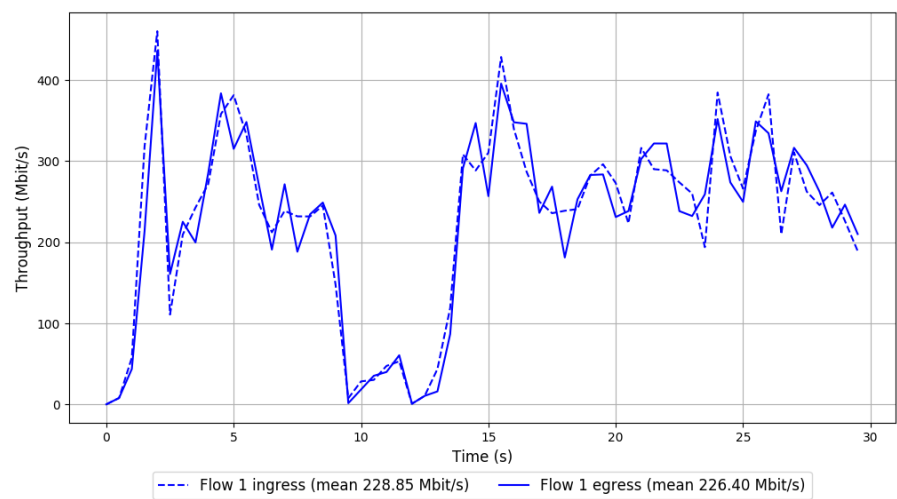
-- Flow 1:

Average throughput: 226.40 Mbit/s

95th percentile per-packet one-way delay: 133.833 ms

Loss rate: 1.07%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-08 22:36:21

End at: 2018-01-08 22:36:51

Below is generated by plot.py at 2018-01-09 00:07:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.10 Mbit/s

95th percentile per-packet one-way delay: 152.369 ms

Loss rate: 1.51%

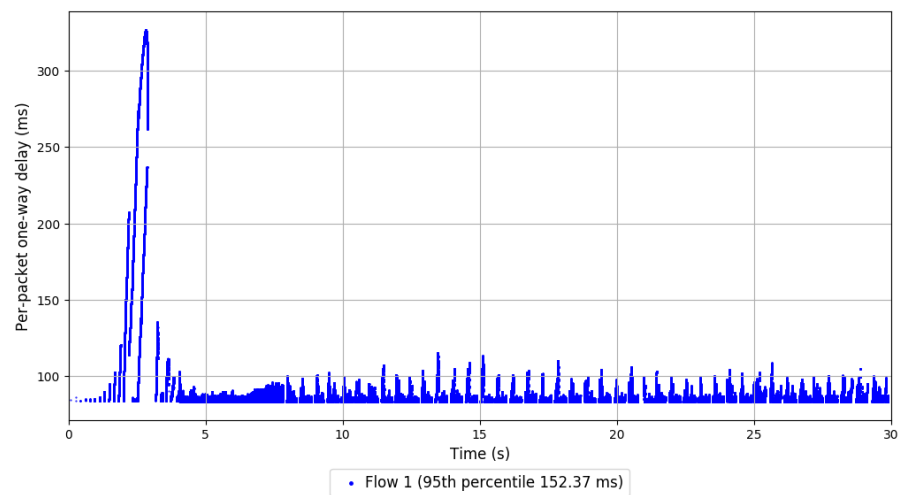
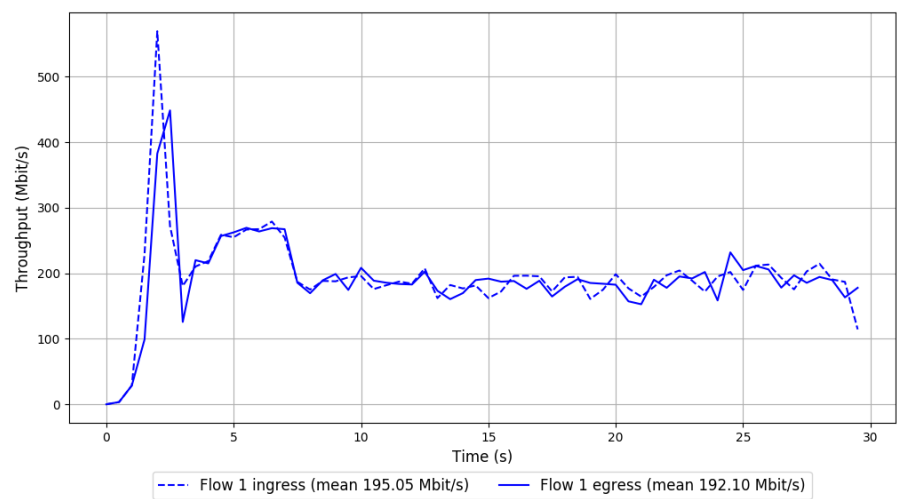
-- Flow 1:

Average throughput: 192.10 Mbit/s

95th percentile per-packet one-way delay: 152.369 ms

Loss rate: 1.51%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-08 22:48:14

End at: 2018-01-08 22:48:44

Below is generated by plot.py at 2018-01-09 00:08:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.66 Mbit/s

95th percentile per-packet one-way delay: 163.753 ms

Loss rate: 2.98%

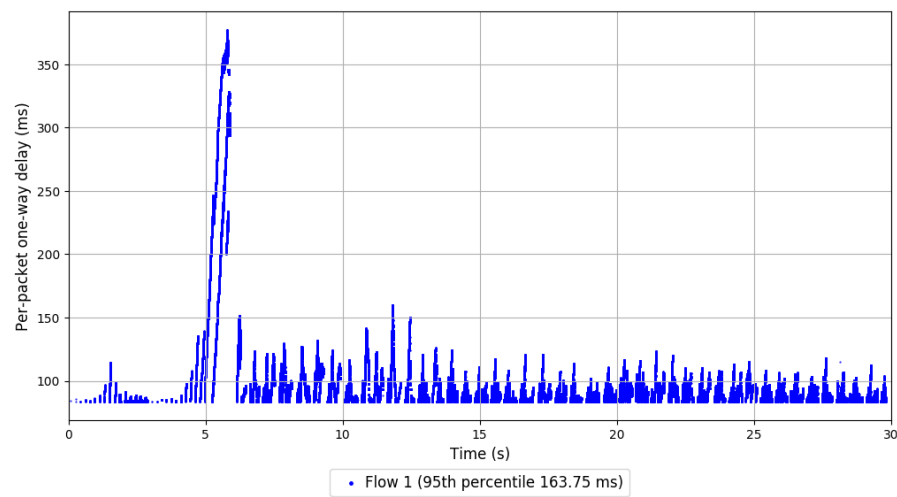
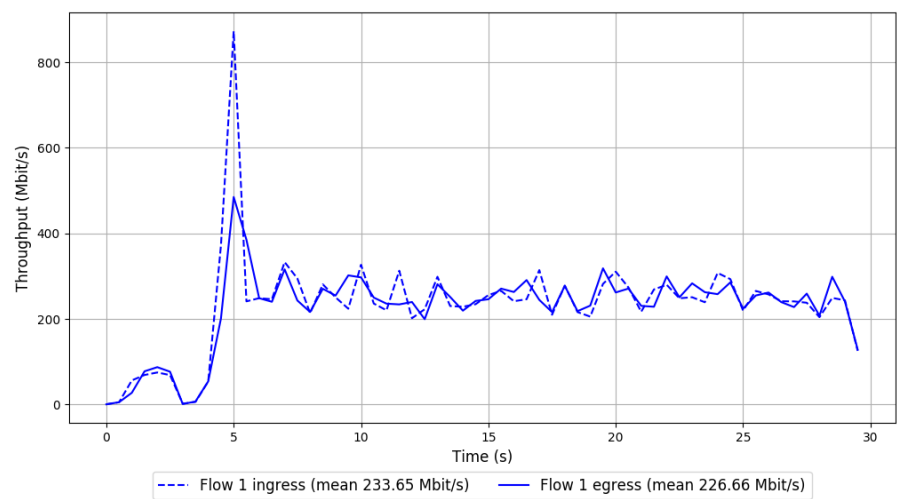
-- Flow 1:

Average throughput: 226.66 Mbit/s

95th percentile per-packet one-way delay: 163.753 ms

Loss rate: 2.98%

Run 10: Report of Verus — Data Link

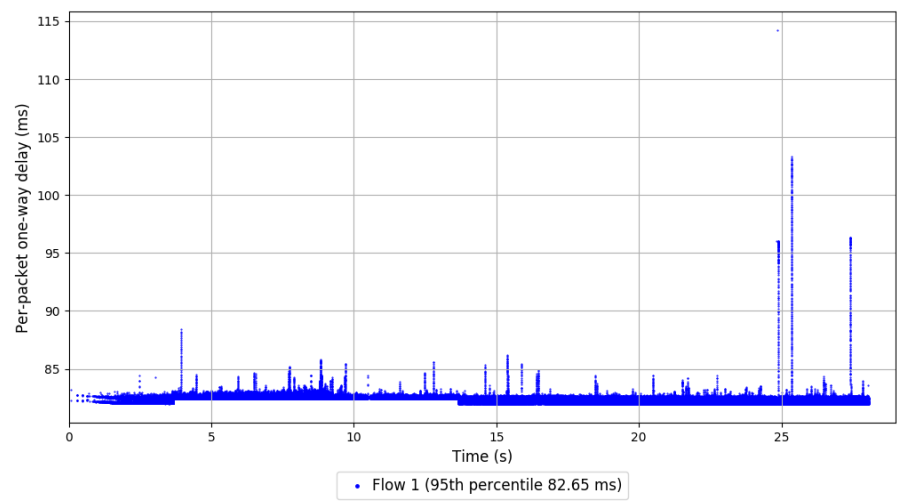
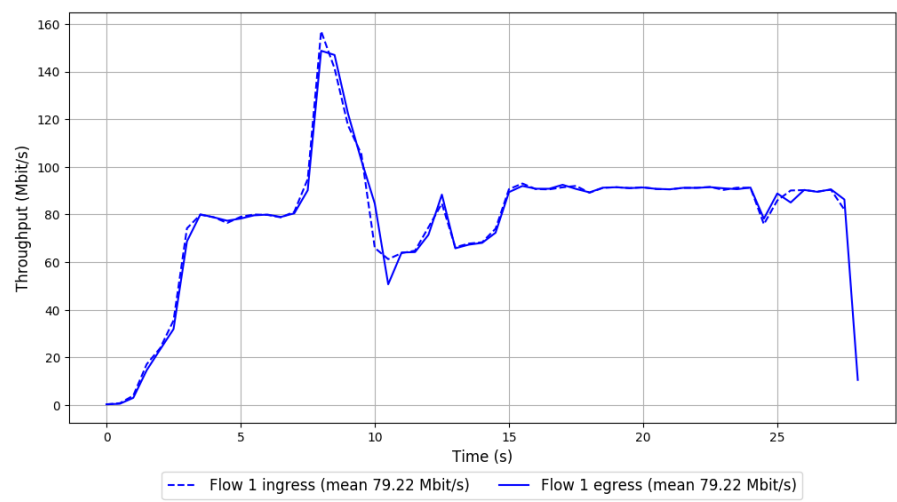


```
Run 1: Statistics of Copa

Start at: 2018-01-08 21:02:19
End at: 2018-01-08 21:02:49

# Below is generated by plot.py at 2018-01-09 00:08:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.22 Mbit/s
95th percentile per-packet one-way delay: 82.648 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 79.22 Mbit/s
95th percentile per-packet one-way delay: 82.648 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-08 21:14:29

End at: 2018-01-08 21:14:59

Below is generated by plot.py at 2018-01-09 00:08:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.26 Mbit/s

95th percentile per-packet one-way delay: 81.862 ms

Loss rate: 0.00%

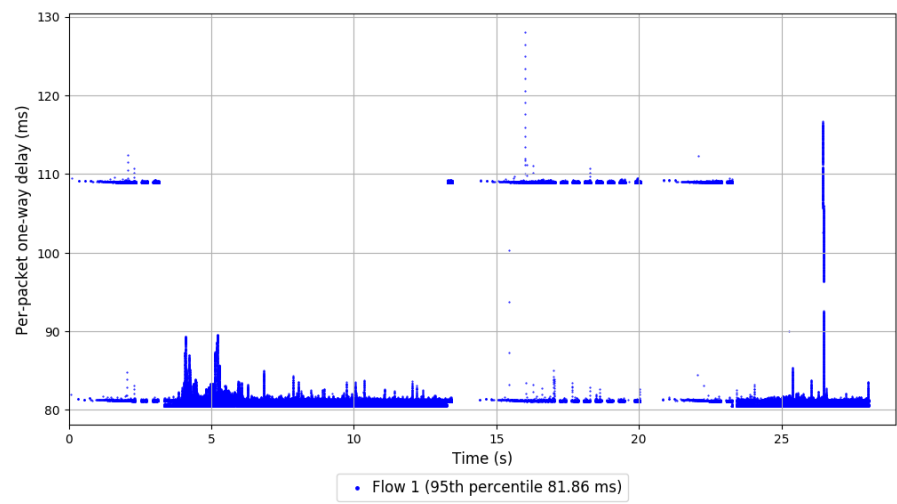
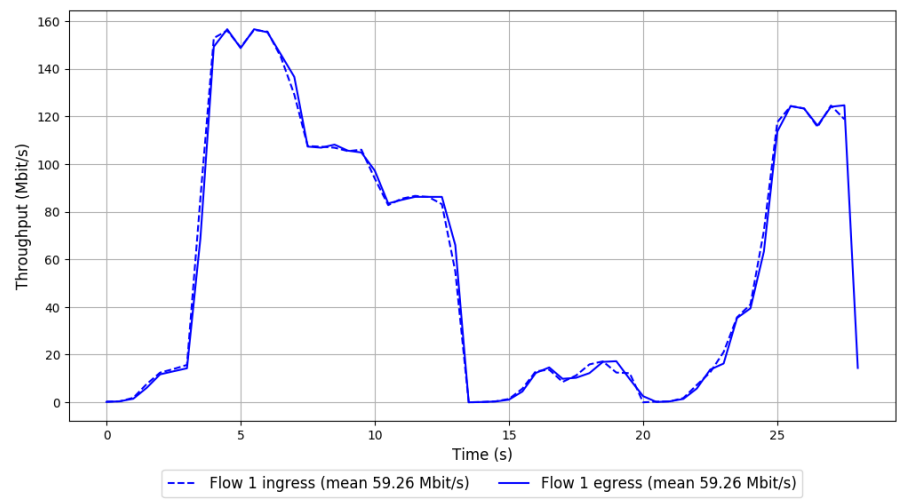
-- Flow 1:

Average throughput: 59.26 Mbit/s

95th percentile per-packet one-way delay: 81.862 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-08 21:26:31

End at: 2018-01-08 21:27:01

Below is generated by plot.py at 2018-01-09 00:08:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.21 Mbit/s

95th percentile per-packet one-way delay: 82.323 ms

Loss rate: 0.00%

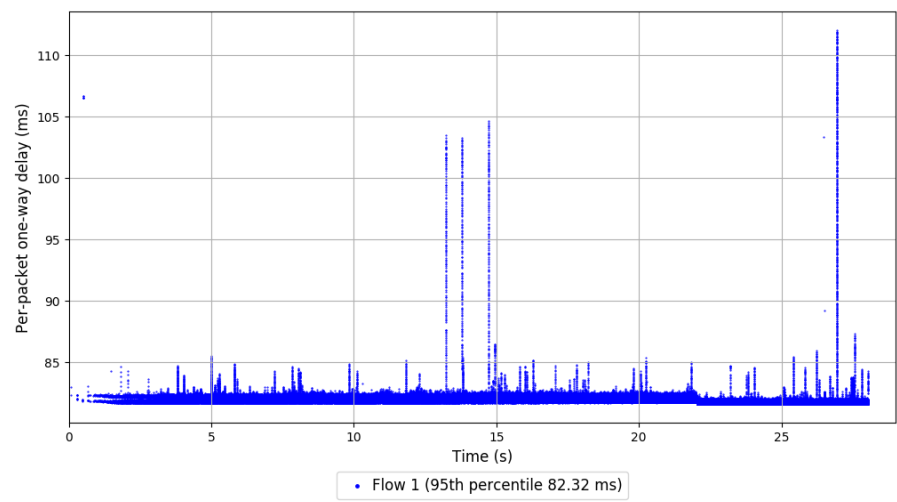
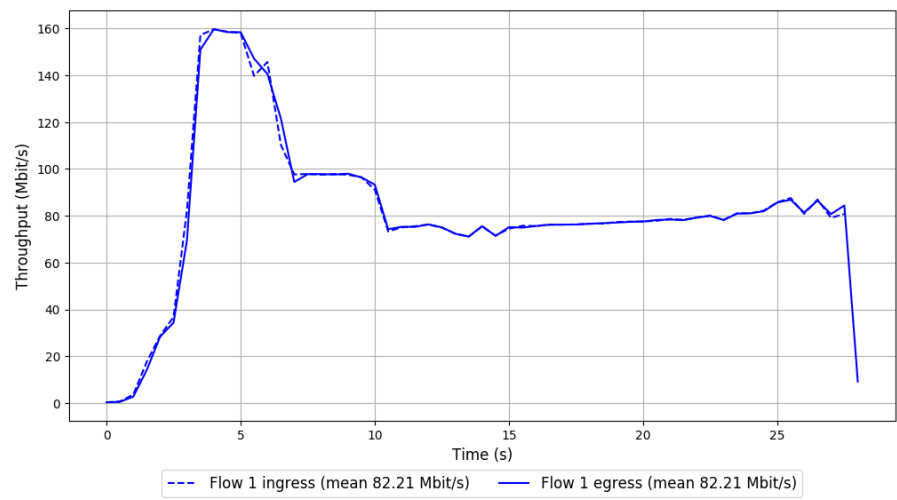
-- Flow 1:

Average throughput: 82.21 Mbit/s

95th percentile per-packet one-way delay: 82.323 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-08 21:38:06

End at: 2018-01-08 21:38:36

Below is generated by plot.py at 2018-01-09 00:08:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.06 Mbit/s

95th percentile per-packet one-way delay: 83.305 ms

Loss rate: 0.00%

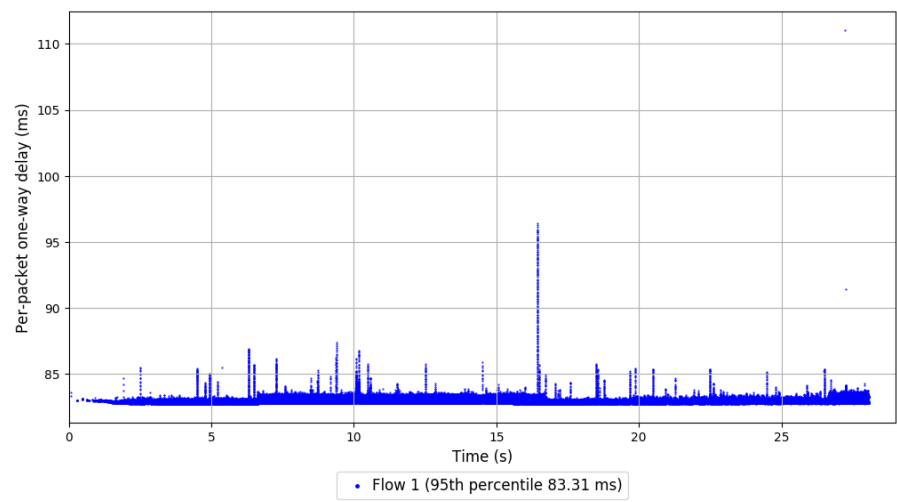
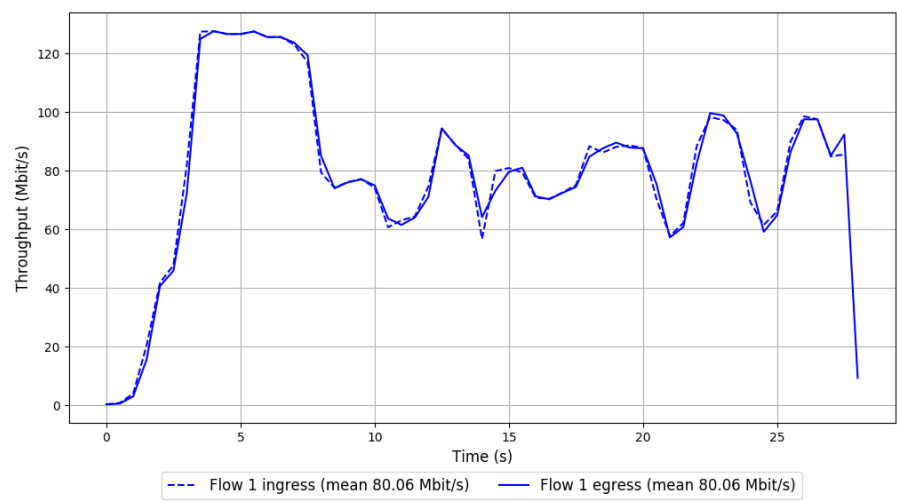
-- Flow 1:

Average throughput: 80.06 Mbit/s

95th percentile per-packet one-way delay: 83.305 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-08 21:50:18

End at: 2018-01-08 21:50:48

Below is generated by plot.py at 2018-01-09 00:08:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.87 Mbit/s

95th percentile per-packet one-way delay: 84.076 ms

Loss rate: 0.00%

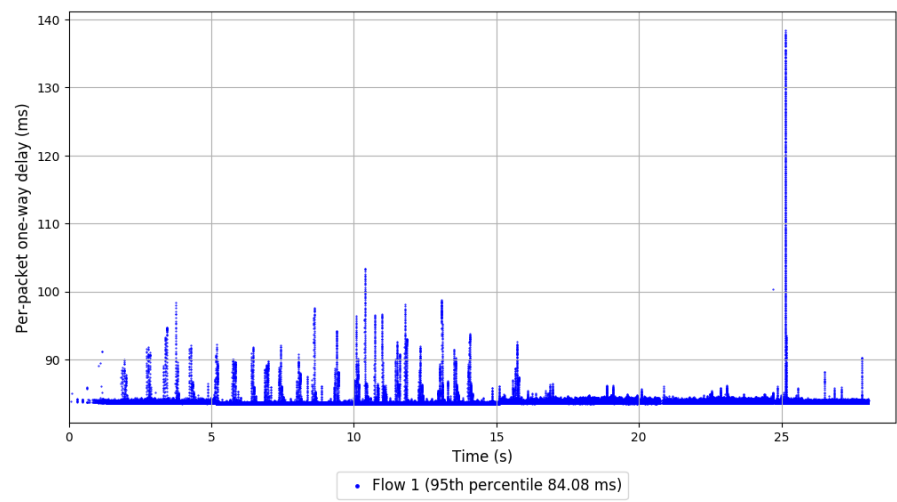
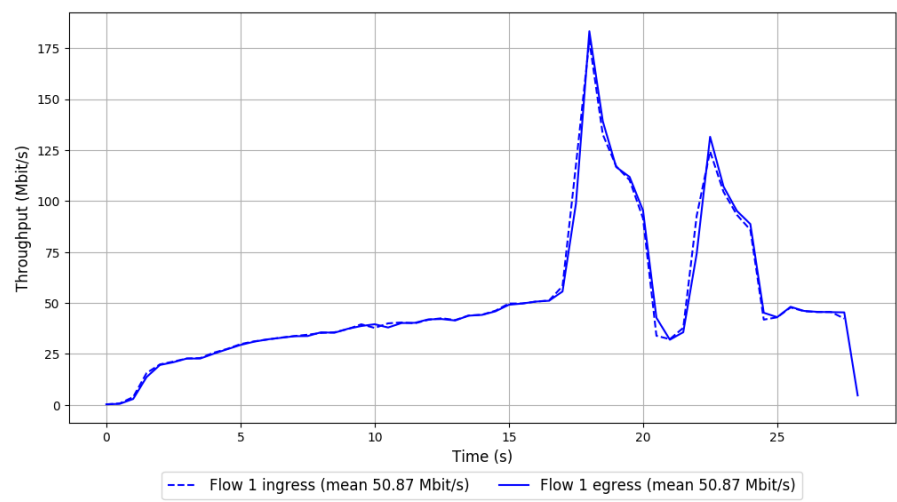
-- Flow 1:

Average throughput: 50.87 Mbit/s

95th percentile per-packet one-way delay: 84.076 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link

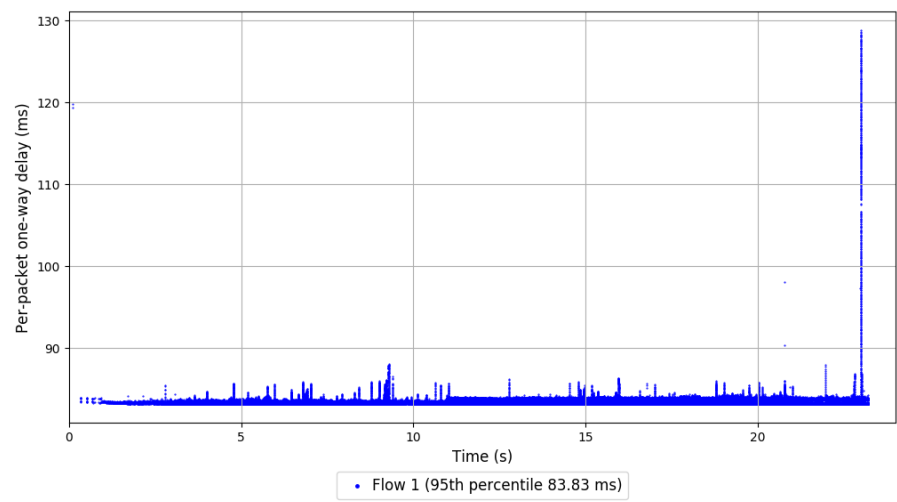
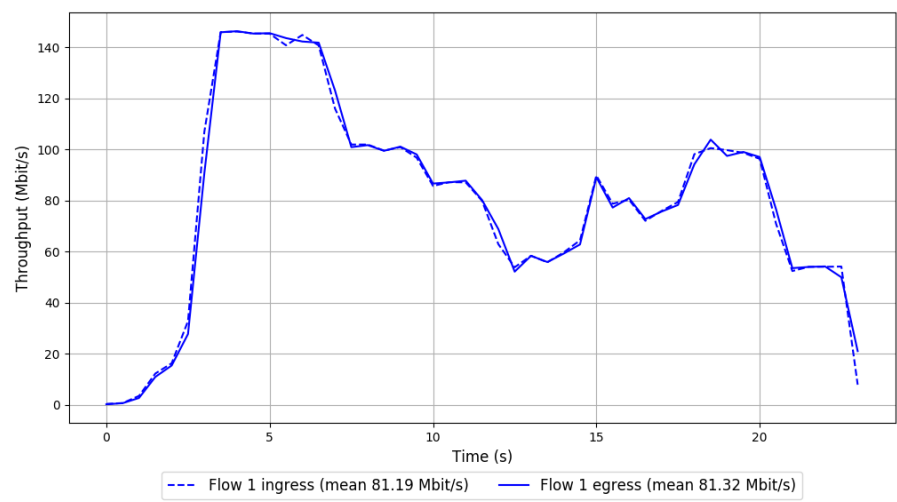


Run 6: Statistics of Copa

Start at: 2018-01-08 22:01:57

End at: 2018-01-08 22:02:27

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-08 22:14:11

End at: 2018-01-08 22:14:41

Below is generated by plot.py at 2018-01-09 00:09:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.99 Mbit/s

95th percentile per-packet one-way delay: 83.674 ms

Loss rate: 0.00%

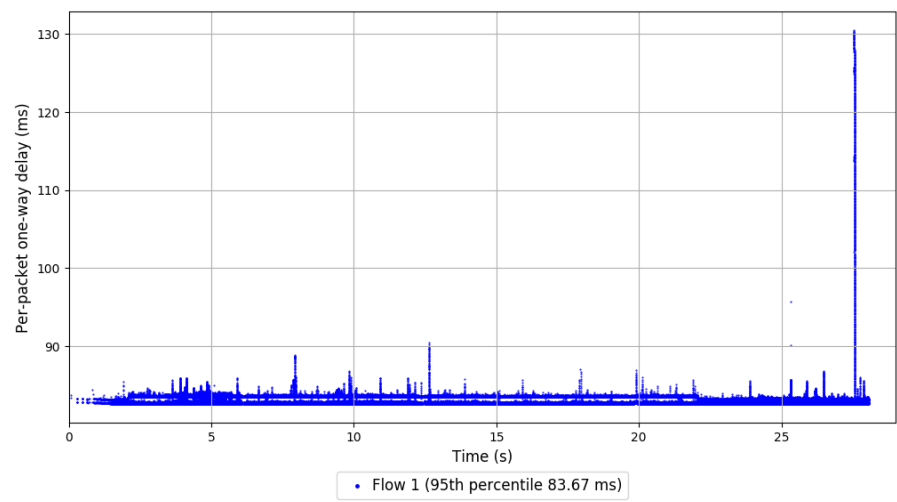
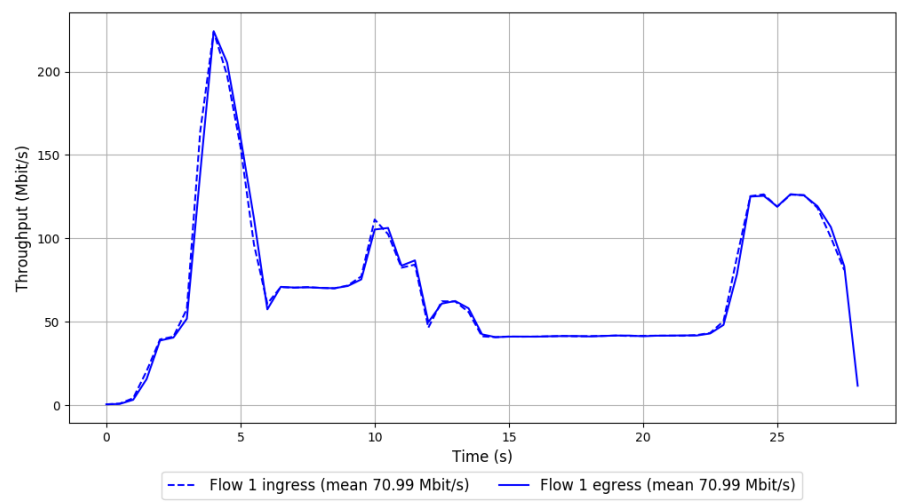
-- Flow 1:

Average throughput: 70.99 Mbit/s

95th percentile per-packet one-way delay: 83.674 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-08 22:26:23

End at: 2018-01-08 22:26:53

Below is generated by plot.py at 2018-01-09 00:09:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.02 Mbit/s

95th percentile per-packet one-way delay: 84.380 ms

Loss rate: 0.00%

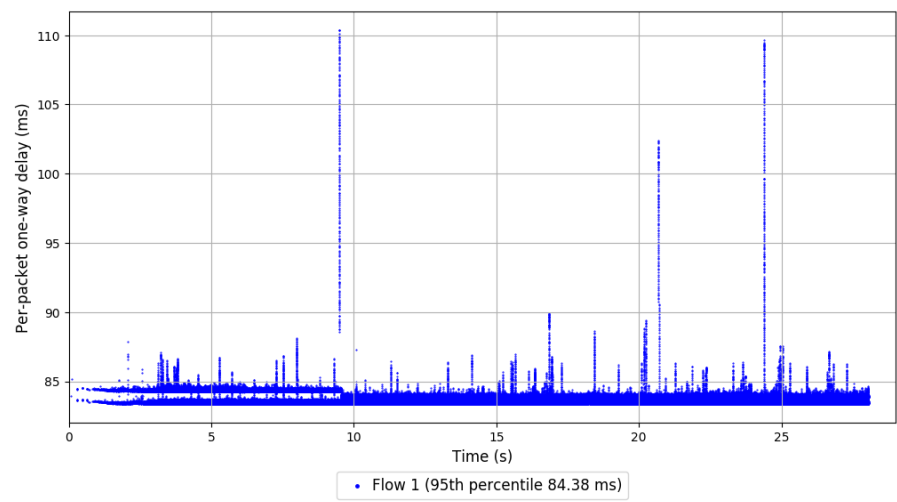
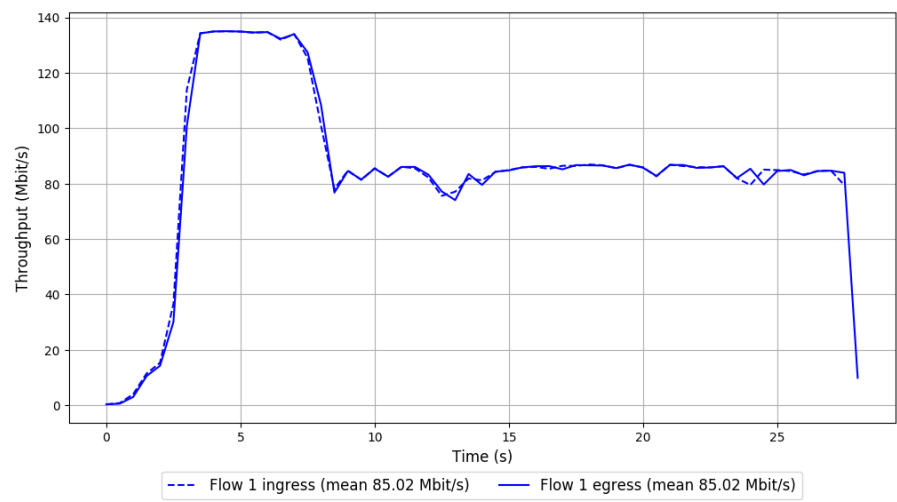
-- Flow 1:

Average throughput: 85.02 Mbit/s

95th percentile per-packet one-way delay: 84.380 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-08 22:38:23

End at: 2018-01-08 22:38:53

Below is generated by plot.py at 2018-01-09 00:09:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.17 Mbit/s

95th percentile per-packet one-way delay: 83.416 ms

Loss rate: 0.00%

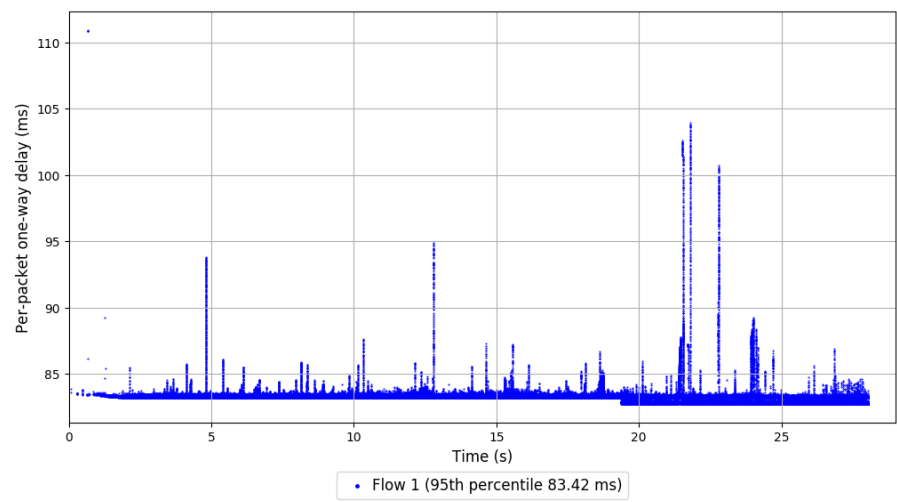
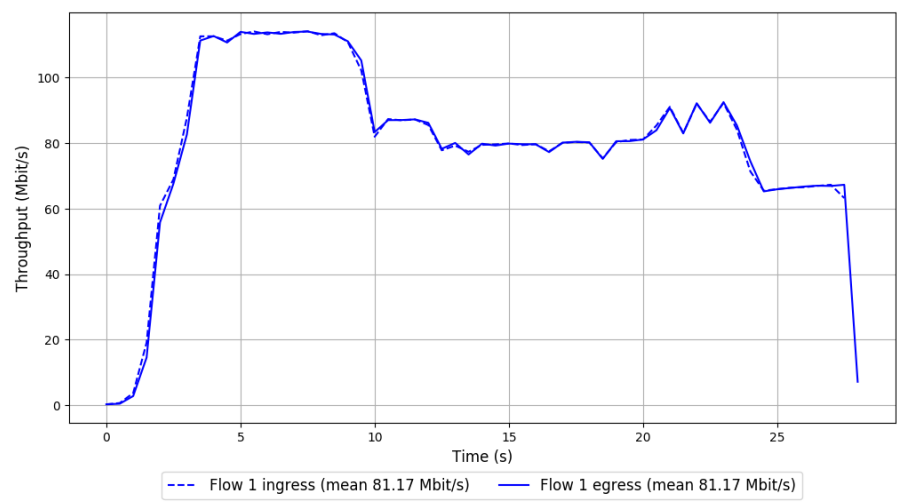
-- Flow 1:

Average throughput: 81.17 Mbit/s

95th percentile per-packet one-way delay: 83.416 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-08 22:50:32

End at: 2018-01-08 22:51:02

Below is generated by plot.py at 2018-01-09 00:09:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.94 Mbit/s

95th percentile per-packet one-way delay: 84.190 ms

Loss rate: 0.00%

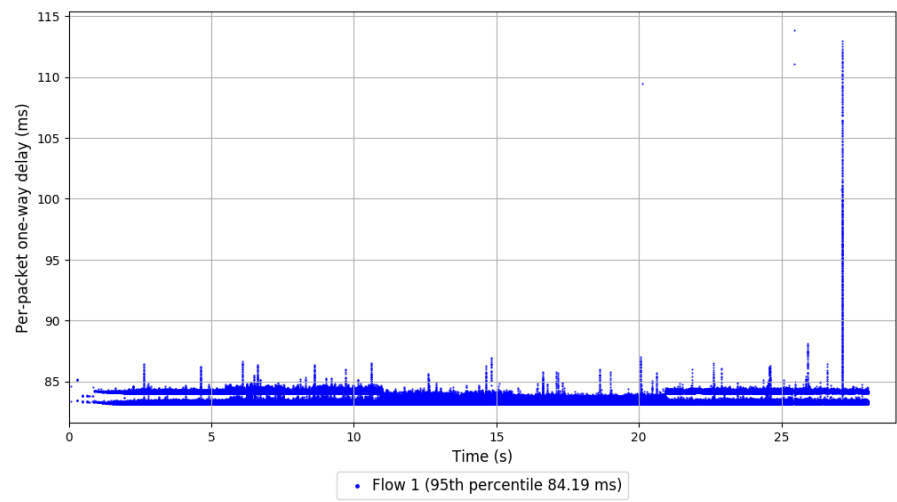
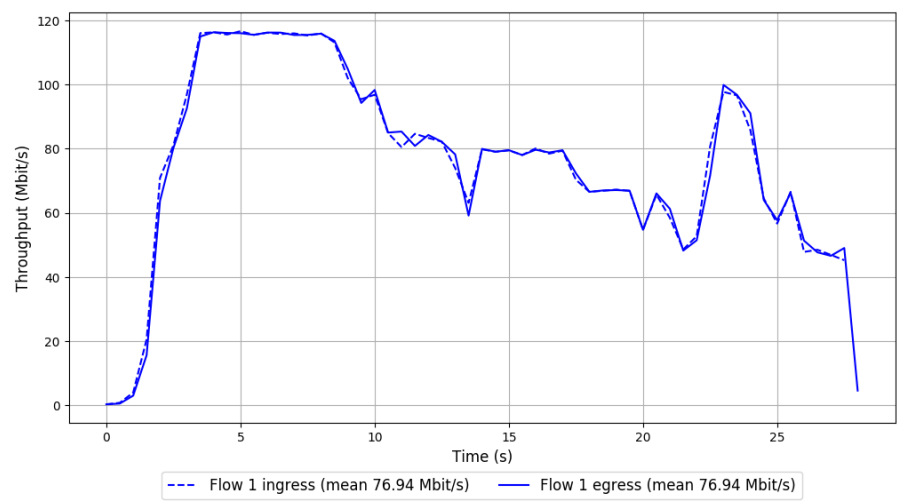
-- Flow 1:

Average throughput: 76.94 Mbit/s

95th percentile per-packet one-way delay: 84.190 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

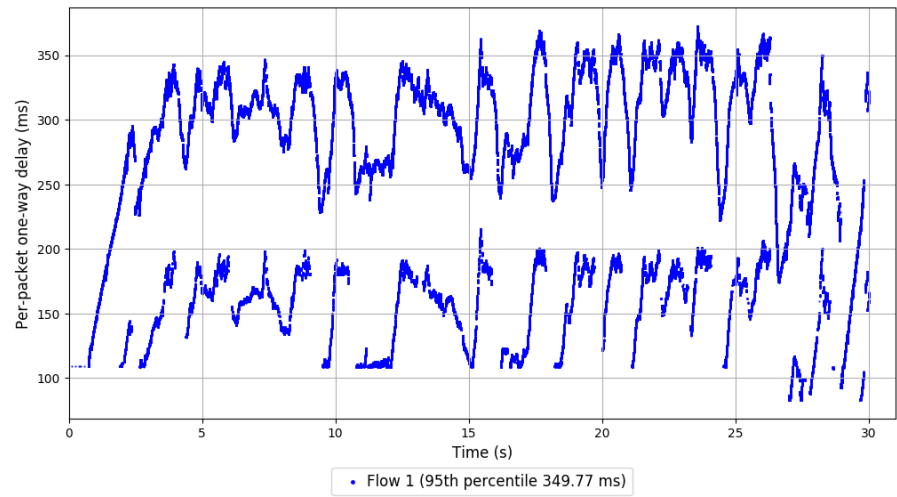
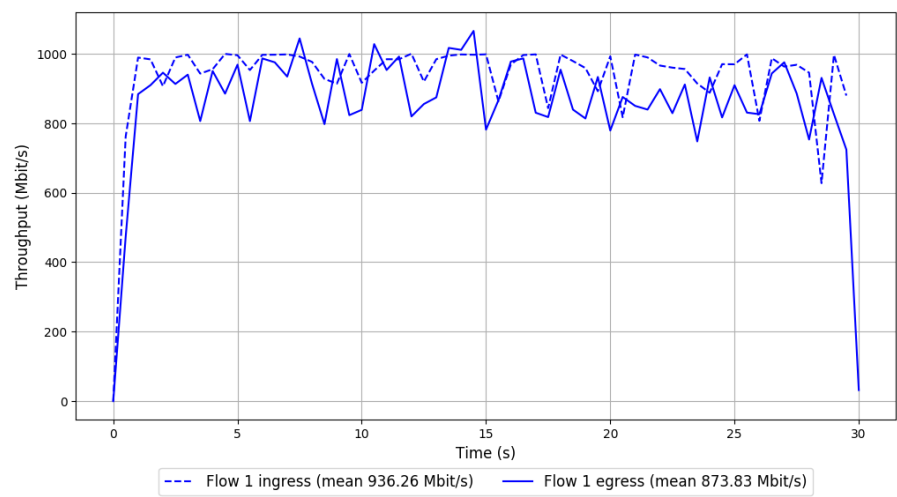


```
Run 1: Statistics of FillP

Start at: 2018-01-08 21:00:59
End at: 2018-01-08 21:01:29

# Below is generated by plot.py at 2018-01-09 00:23:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 873.83 Mbit/s
95th percentile per-packet one-way delay: 349.773 ms
Loss rate: 6.75%
-- Flow 1:
Average throughput: 873.83 Mbit/s
95th percentile per-packet one-way delay: 349.773 ms
Loss rate: 6.75%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-08 21:13:07

End at: 2018-01-08 21:13:37

Below is generated by plot.py at 2018-01-09 00:23:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 924.86 Mbit/s

95th percentile per-packet one-way delay: 306.902 ms

Loss rate: 3.83%

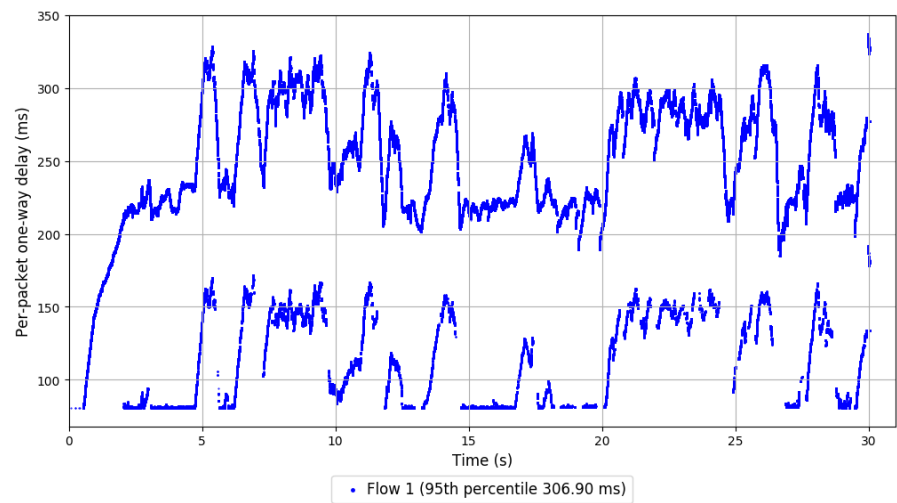
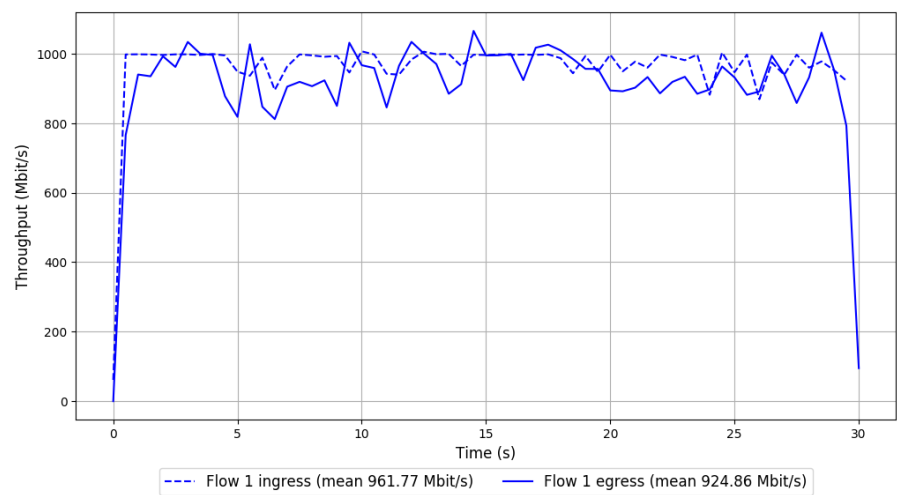
-- Flow 1:

Average throughput: 924.86 Mbit/s

95th percentile per-packet one-way delay: 306.902 ms

Loss rate: 3.83%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-08 21:25:16

End at: 2018-01-08 21:25:46

Below is generated by plot.py at 2018-01-09 00:23:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 785.54 Mbit/s

95th percentile per-packet one-way delay: 290.661 ms

Loss rate: 0.83%

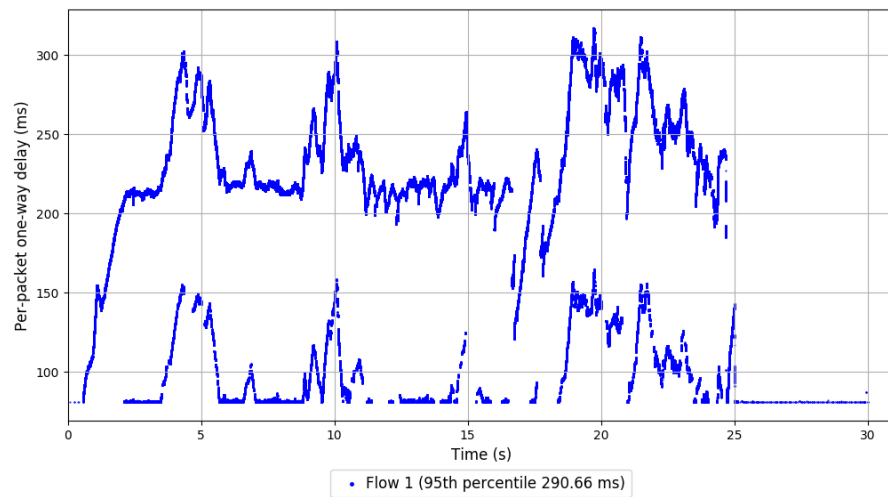
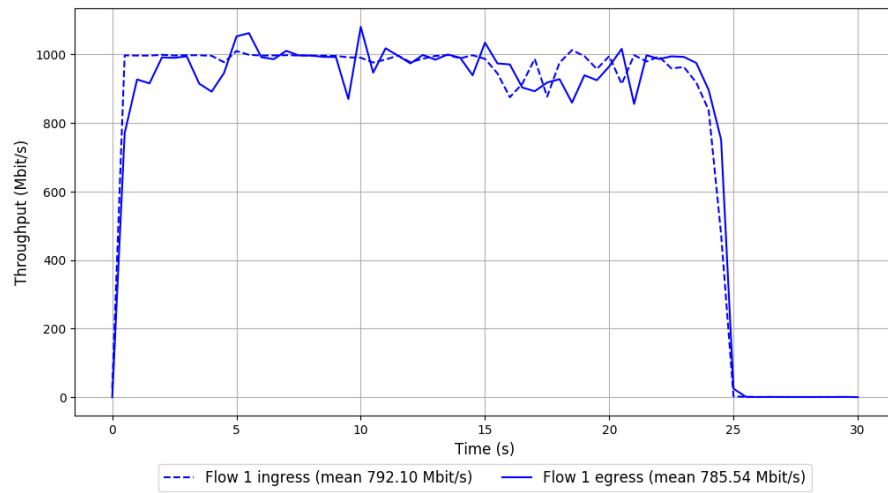
-- Flow 1:

Average throughput: 785.54 Mbit/s

95th percentile per-packet one-way delay: 290.661 ms

Loss rate: 0.83%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-08 21:37:18

End at: 2018-01-08 21:37:48

Below is generated by plot.py at 2018-01-09 00:23:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.97 Mbit/s

95th percentile per-packet one-way delay: 323.447 ms

Loss rate: 6.93%

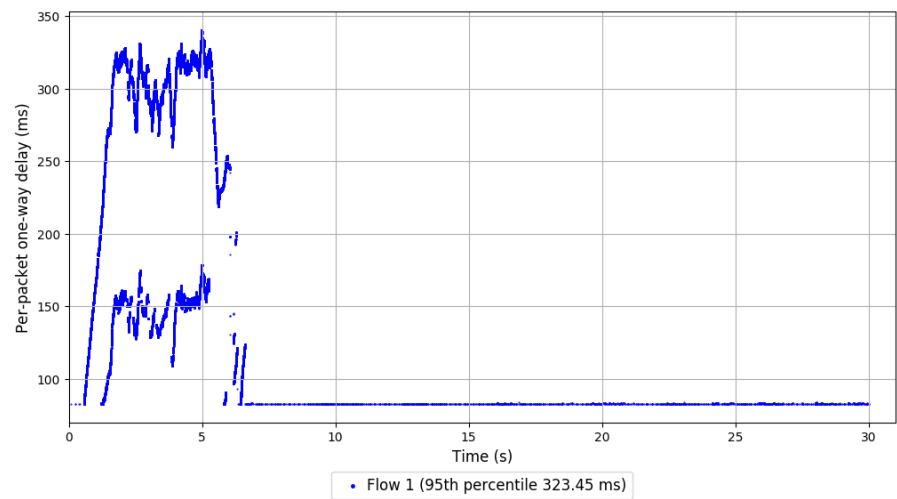
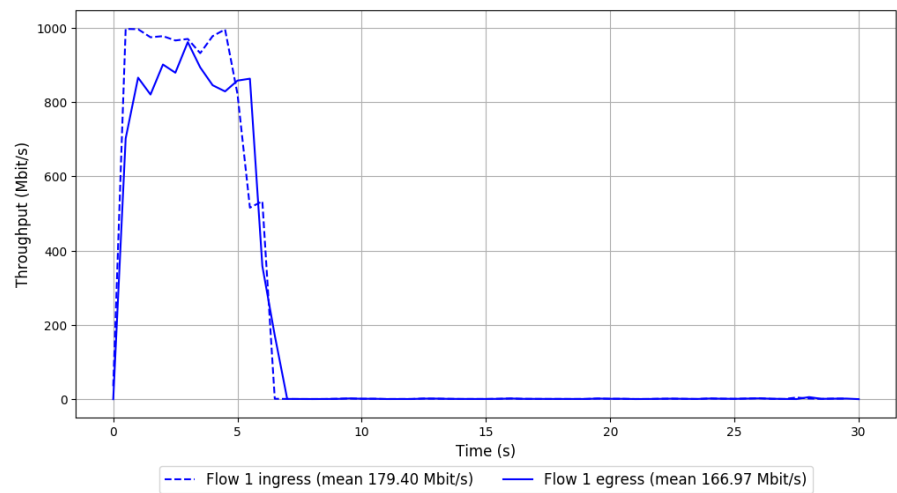
-- Flow 1:

Average throughput: 166.97 Mbit/s

95th percentile per-packet one-way delay: 323.447 ms

Loss rate: 6.93%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-08 21:48:59

End at: 2018-01-08 21:49:29

Below is generated by plot.py at 2018-01-09 00:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 962.21 Mbit/s

95th percentile per-packet one-way delay: 280.118 ms

Loss rate: 0.81%

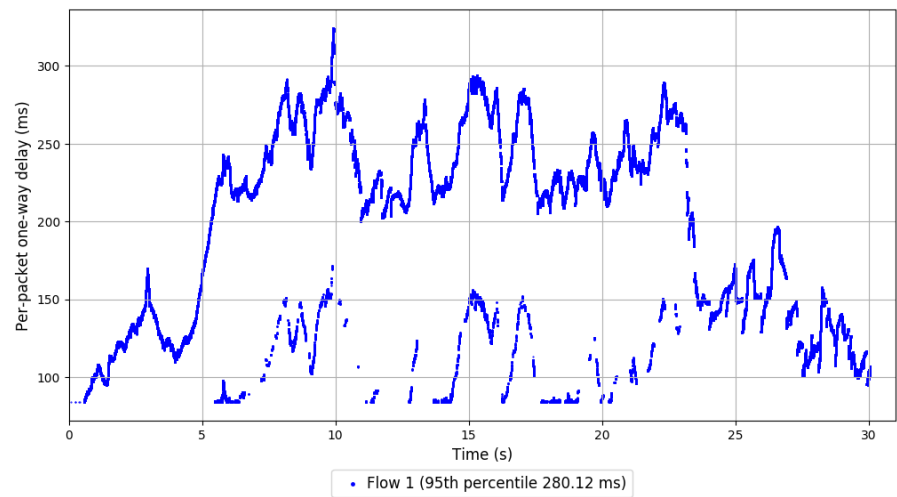
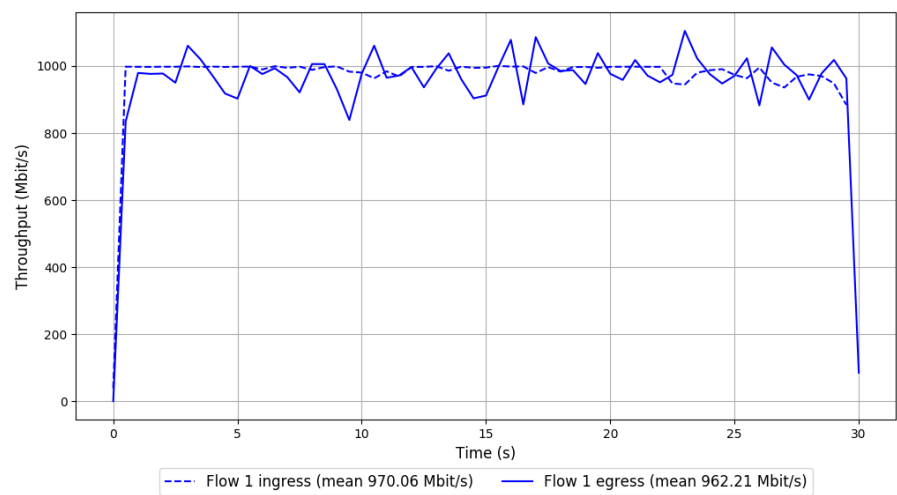
-- Flow 1:

Average throughput: 962.21 Mbit/s

95th percentile per-packet one-way delay: 280.118 ms

Loss rate: 0.81%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-08 22:00:44

End at: 2018-01-08 22:01:14

Below is generated by plot.py at 2018-01-09 00:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 773.62 Mbit/s

95th percentile per-packet one-way delay: 300.956 ms

Loss rate: 3.41%

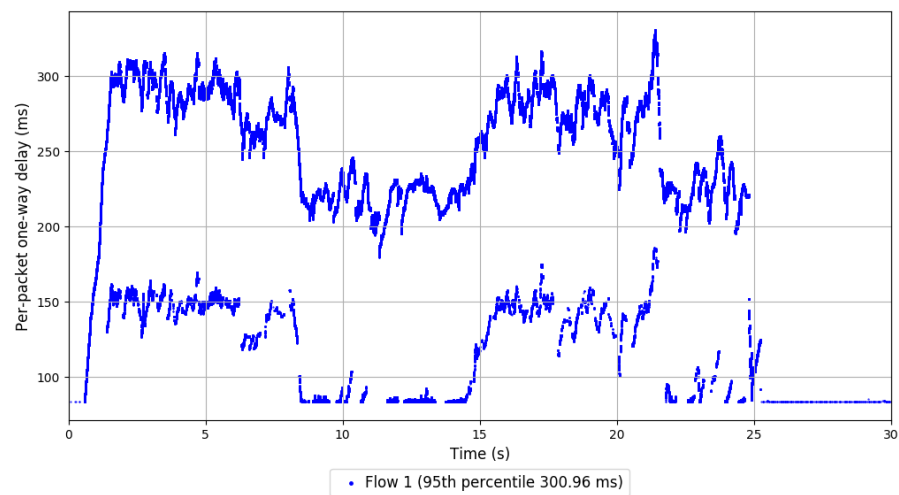
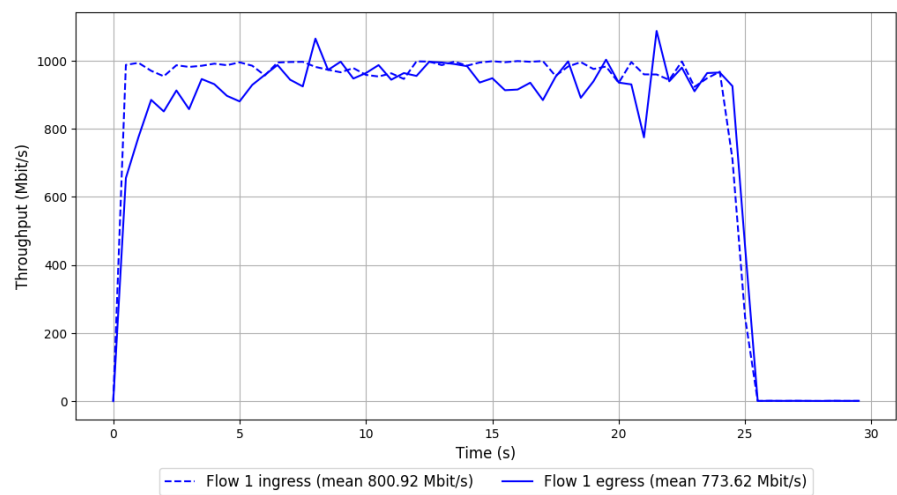
-- Flow 1:

Average throughput: 773.62 Mbit/s

95th percentile per-packet one-way delay: 300.956 ms

Loss rate: 3.41%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-08 22:12:49

End at: 2018-01-08 22:13:19

Below is generated by plot.py at 2018-01-09 00:25:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 942.62 Mbit/s

95th percentile per-packet one-way delay: 303.446 ms

Loss rate: 2.53%

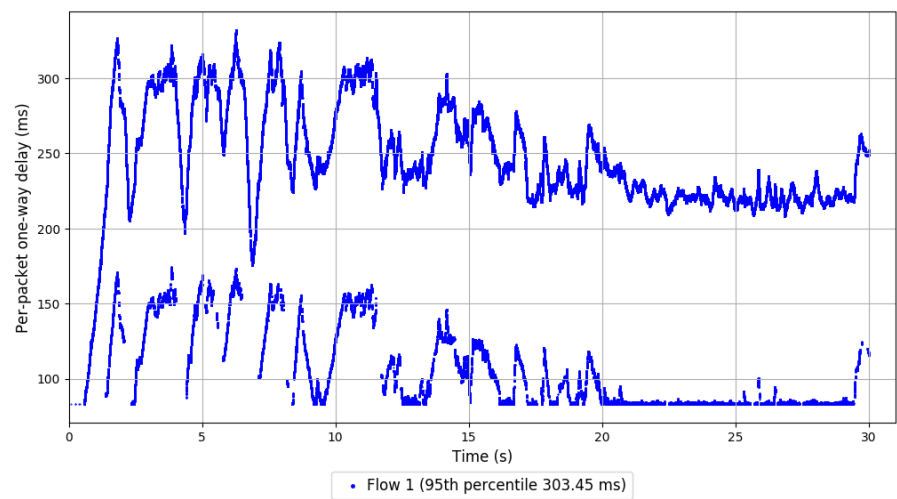
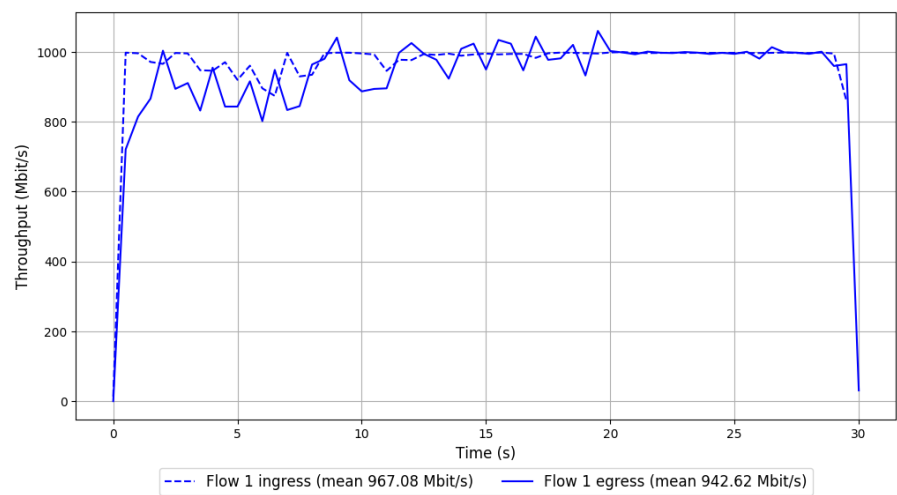
-- Flow 1:

Average throughput: 942.62 Mbit/s

95th percentile per-packet one-way delay: 303.446 ms

Loss rate: 2.53%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-08 22:25:01

End at: 2018-01-08 22:25:31

Below is generated by plot.py at 2018-01-09 00:25:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 923.12 Mbit/s

95th percentile per-packet one-way delay: 302.952 ms

Loss rate: 3.64%

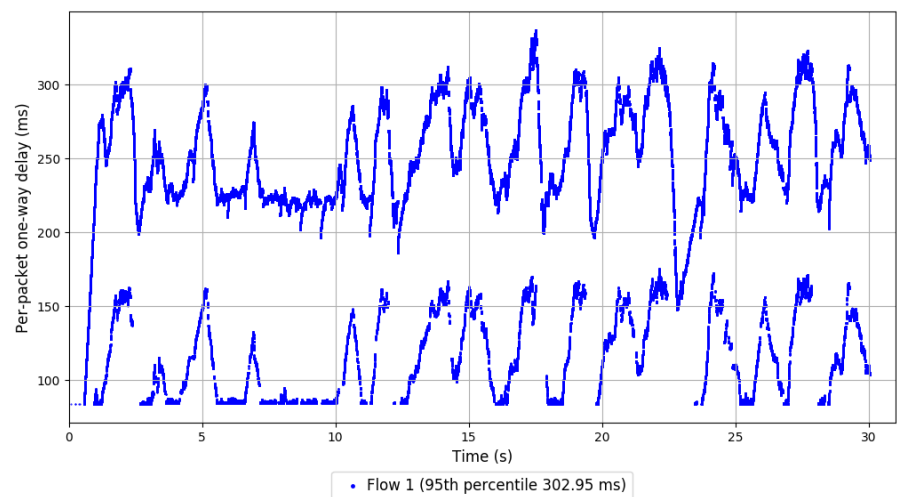
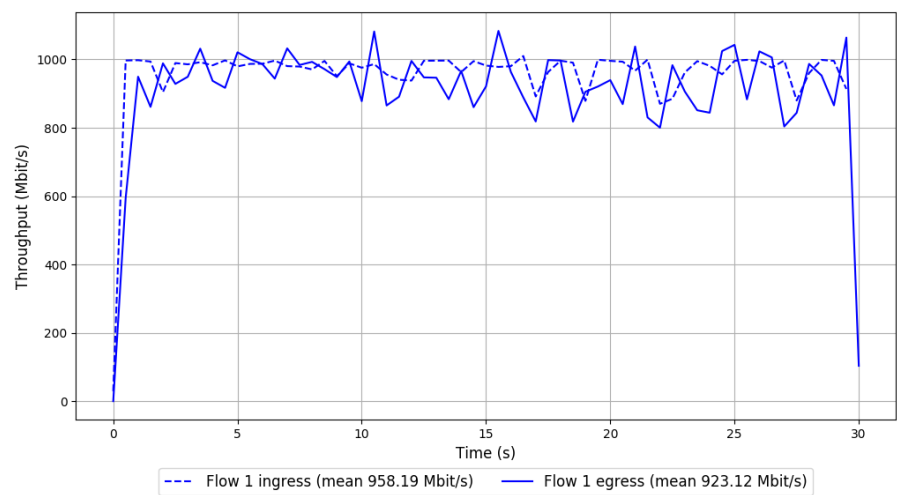
-- Flow 1:

Average throughput: 923.12 Mbit/s

95th percentile per-packet one-way delay: 302.952 ms

Loss rate: 3.64%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-08 22:37:17

End at: 2018-01-08 22:37:47

Below is generated by plot.py at 2018-01-09 00:25:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 572.41 Mbit/s

95th percentile per-packet one-way delay: 307.541 ms

Loss rate: 3.36%

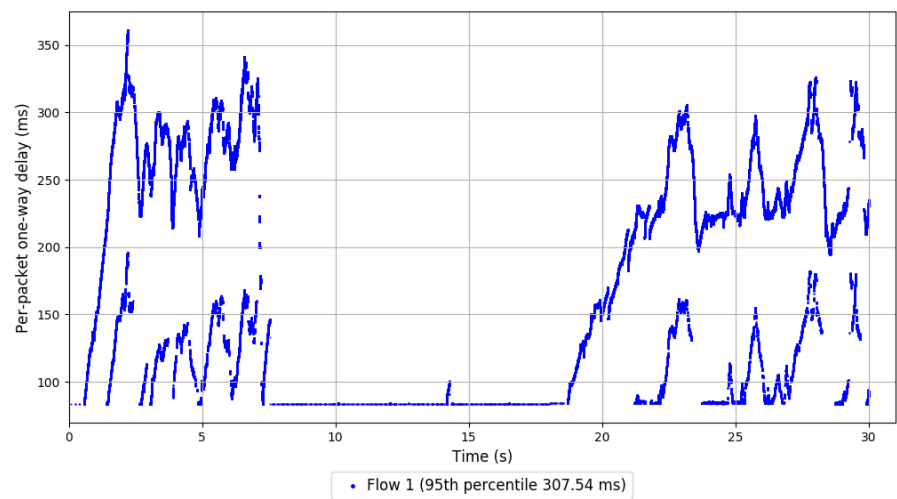
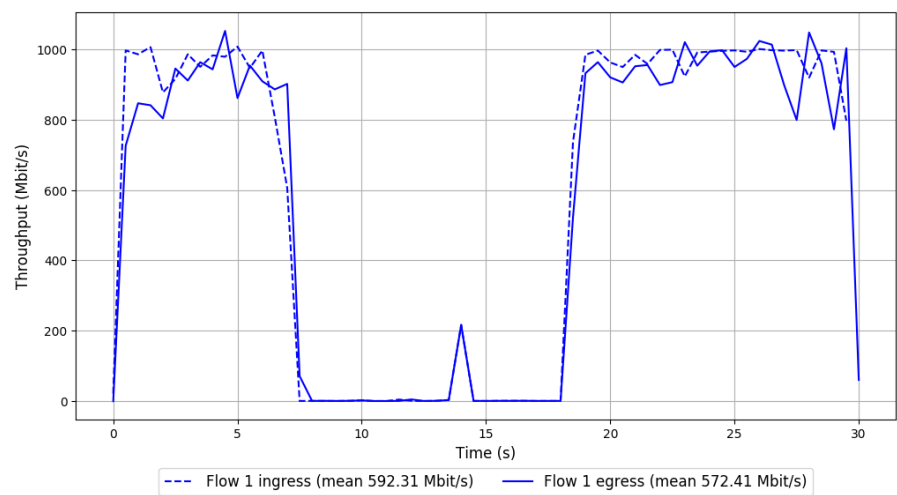
-- Flow 1:

Average throughput: 572.41 Mbit/s

95th percentile per-packet one-way delay: 307.541 ms

Loss rate: 3.36%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-08 22:49:10

End at: 2018-01-08 22:49:40

Below is generated by plot.py at 2018-01-09 00:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 914.57 Mbit/s

95th percentile per-packet one-way delay: 315.143 ms

Loss rate: 4.13%

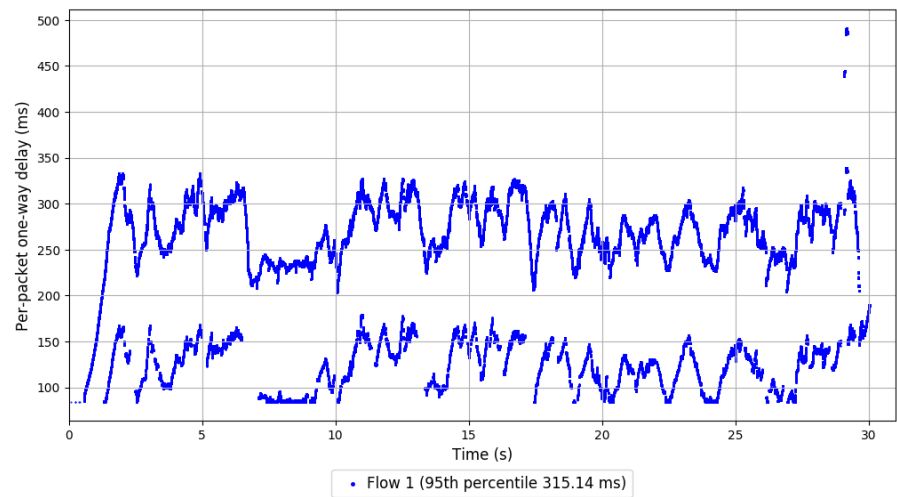
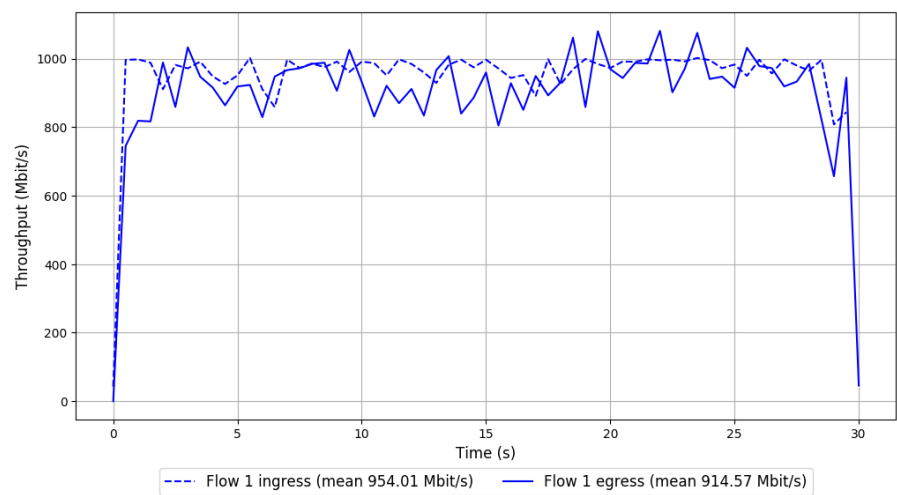
-- Flow 1:

Average throughput: 914.57 Mbit/s

95th percentile per-packet one-way delay: 315.143 ms

Loss rate: 4.13%

Run 10: Report of FillP — Data Link

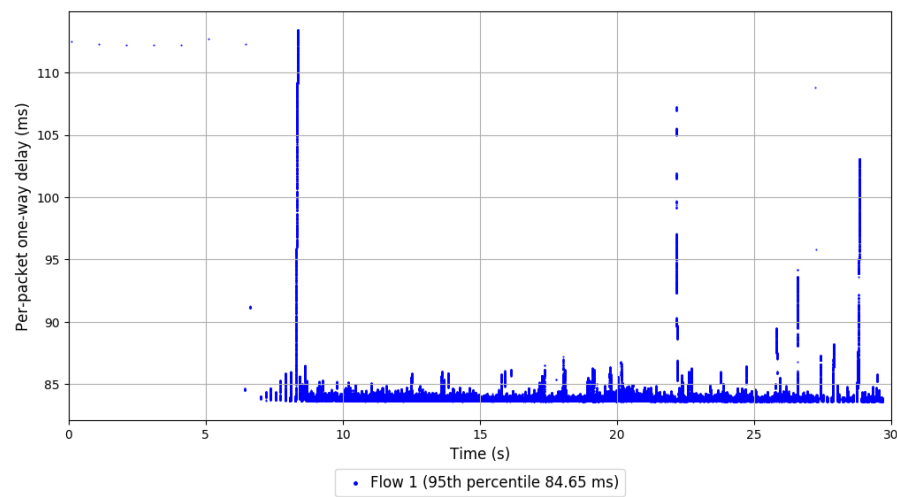
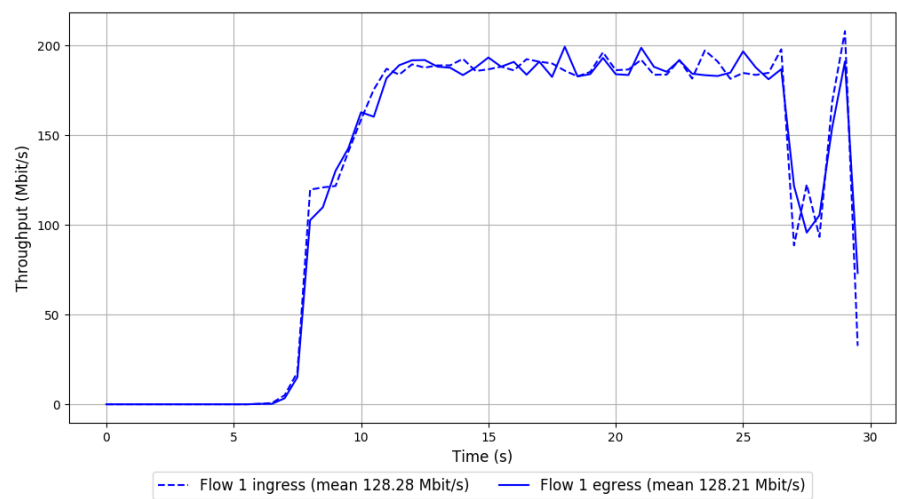


```
Run 1: Statistics of Indigo

Start at: 2018-01-08 20:52:24
End at: 2018-01-08 20:52:54

# Below is generated by plot.py at 2018-01-09 00:27:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 128.21 Mbit/s
95th percentile per-packet one-way delay: 84.652 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 128.21 Mbit/s
95th percentile per-packet one-way delay: 84.652 ms
Loss rate: 0.15%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-08 21:04:25

End at: 2018-01-08 21:04:55

Below is generated by plot.py at 2018-01-09 00:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.22 Mbit/s

95th percentile per-packet one-way delay: 83.944 ms

Loss rate: 0.52%

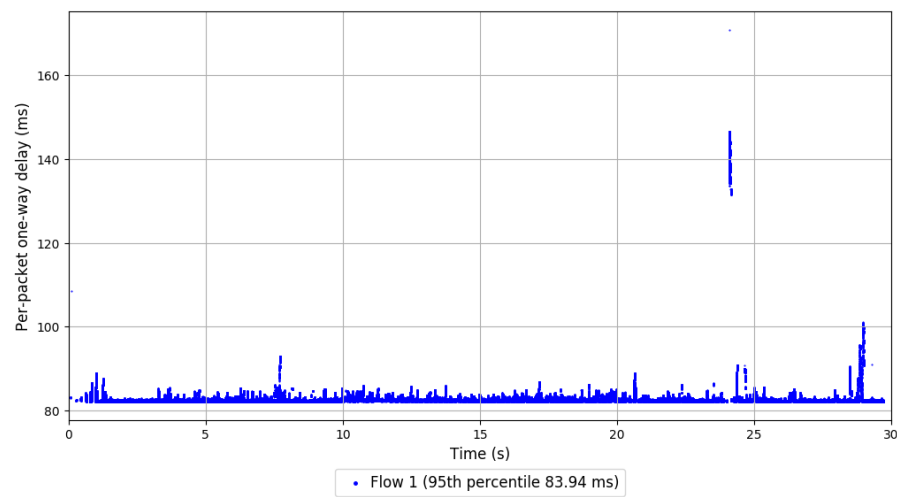
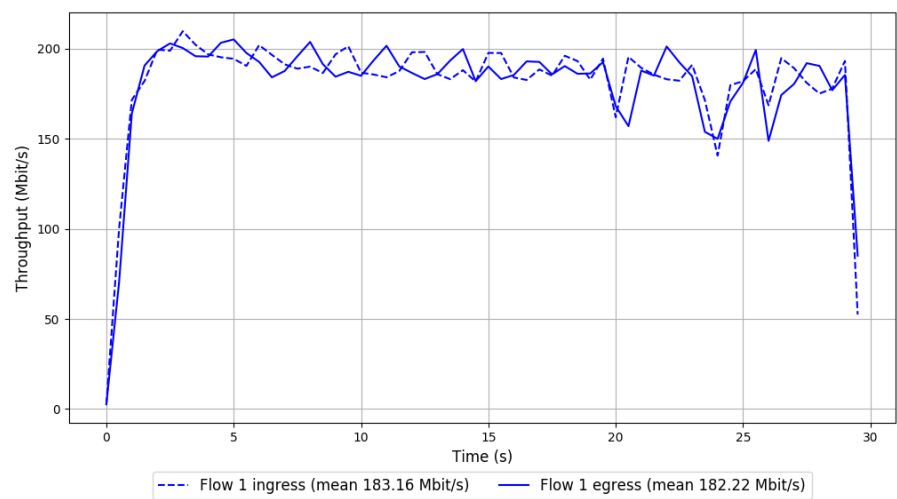
-- Flow 1:

Average throughput: 182.22 Mbit/s

95th percentile per-packet one-way delay: 83.944 ms

Loss rate: 0.52%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-08 21:16:33

End at: 2018-01-08 21:17:03

Below is generated by plot.py at 2018-01-09 00:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.11 Mbit/s

95th percentile per-packet one-way delay: 81.649 ms

Loss rate: 0.00%

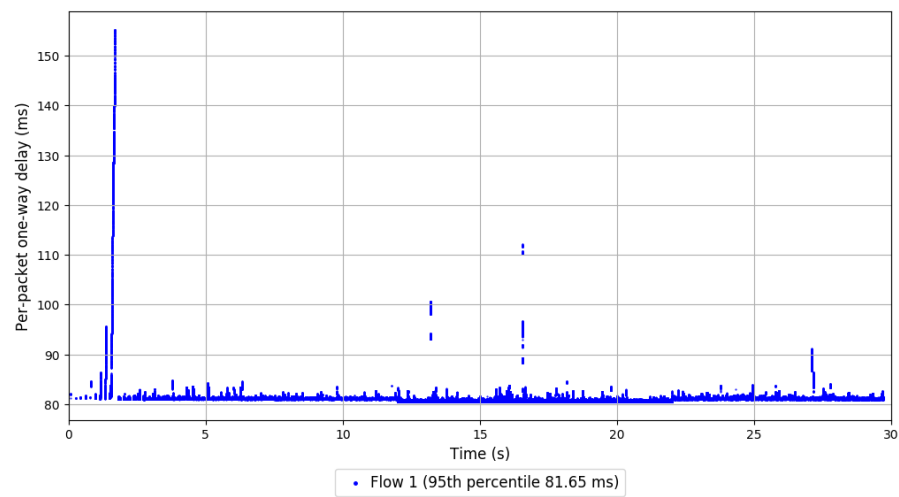
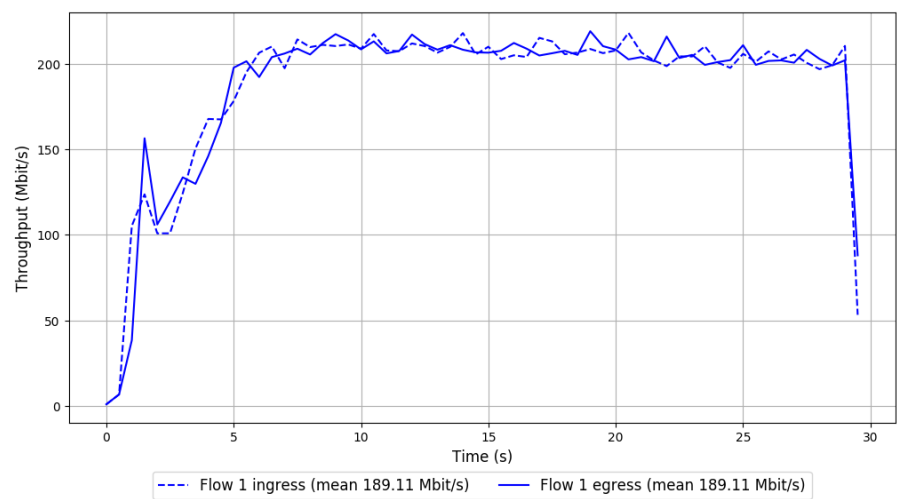
-- Flow 1:

Average throughput: 189.11 Mbit/s

95th percentile per-packet one-way delay: 81.649 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-08 21:28:39

End at: 2018-01-08 21:29:09

Below is generated by plot.py at 2018-01-09 00:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.39 Mbit/s

95th percentile per-packet one-way delay: 83.122 ms

Loss rate: 0.21%

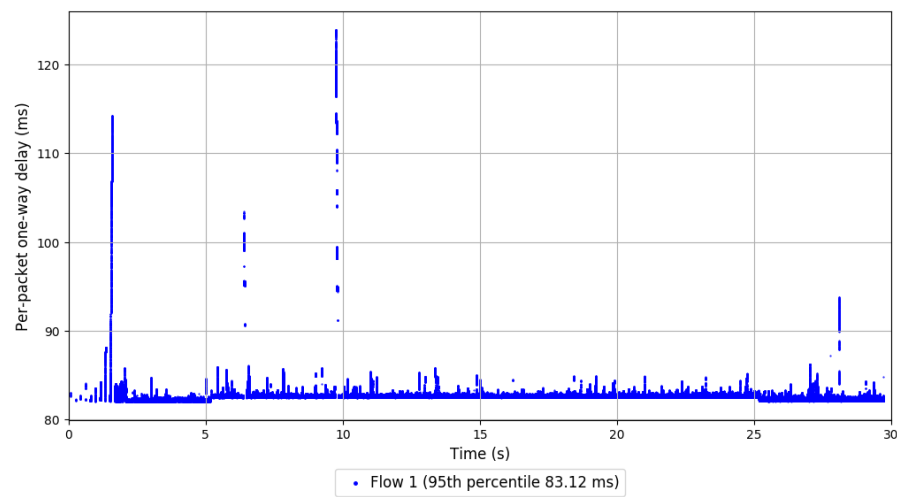
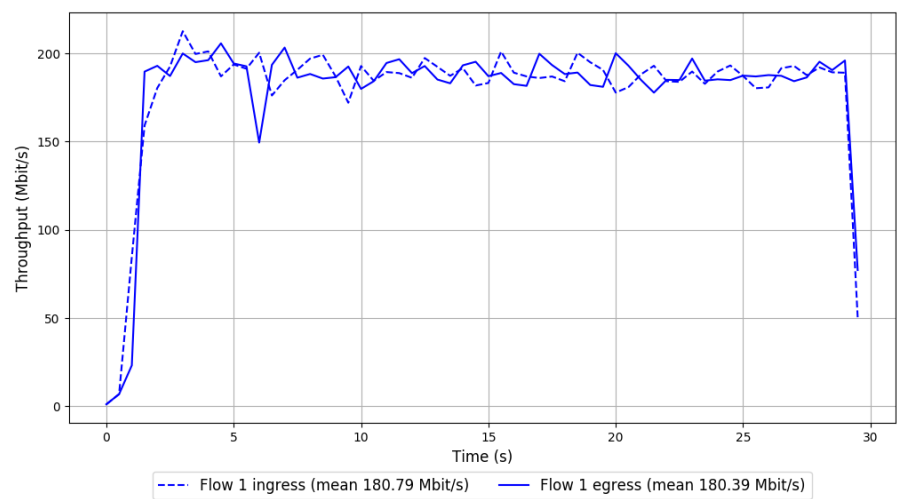
-- Flow 1:

Average throughput: 180.39 Mbit/s

95th percentile per-packet one-way delay: 83.122 ms

Loss rate: 0.21%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-08 21:40:15

End at: 2018-01-08 21:40:45

Below is generated by plot.py at 2018-01-09 00:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.59 Mbit/s

95th percentile per-packet one-way delay: 84.355 ms

Loss rate: 0.00%

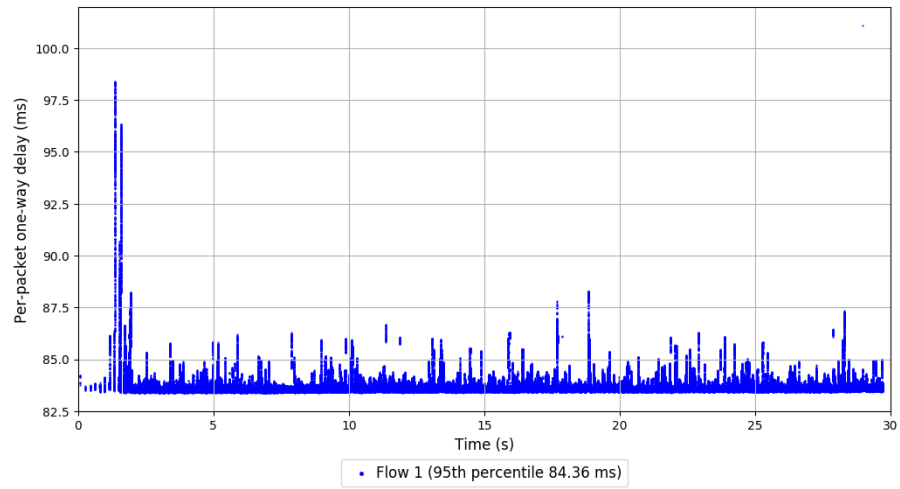
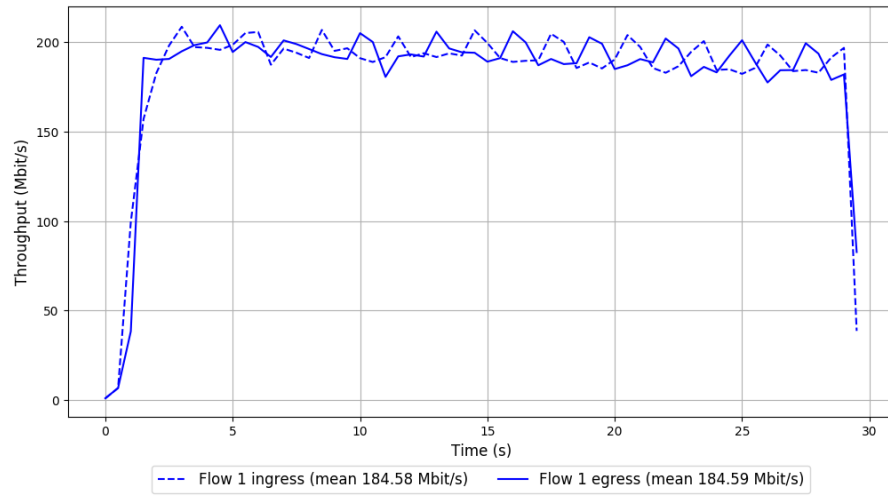
-- Flow 1:

Average throughput: 184.59 Mbit/s

95th percentile per-packet one-way delay: 84.355 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-08 21:52:28

End at: 2018-01-08 21:52:58

Below is generated by plot.py at 2018-01-09 00:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.72 Mbit/s

95th percentile per-packet one-way delay: 84.813 ms

Loss rate: 0.23%

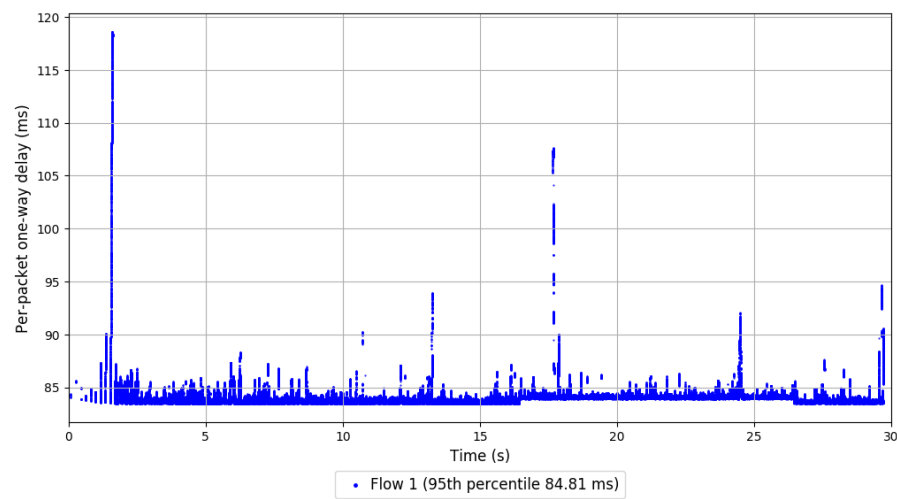
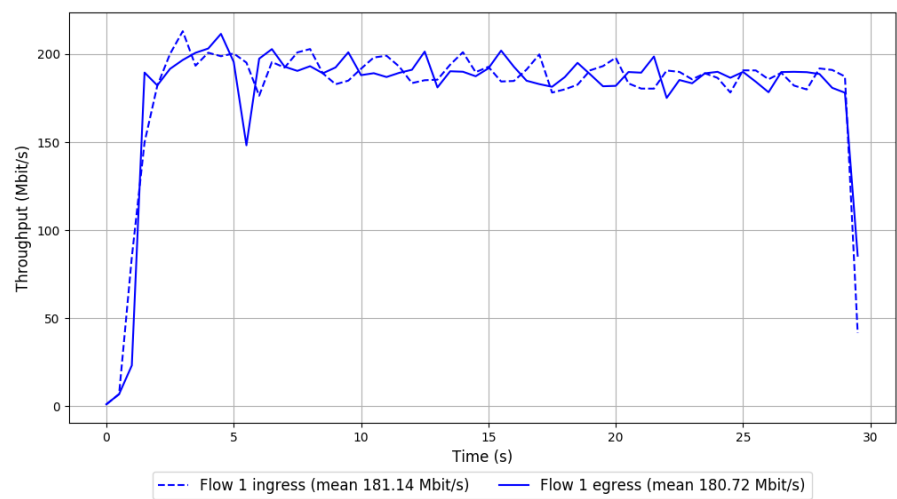
-- Flow 1:

Average throughput: 180.72 Mbit/s

95th percentile per-packet one-way delay: 84.813 ms

Loss rate: 0.23%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-08 22:04:08

End at: 2018-01-08 22:04:38

Below is generated by plot.py at 2018-01-09 00:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.64 Mbit/s

95th percentile per-packet one-way delay: 85.356 ms

Loss rate: 0.36%

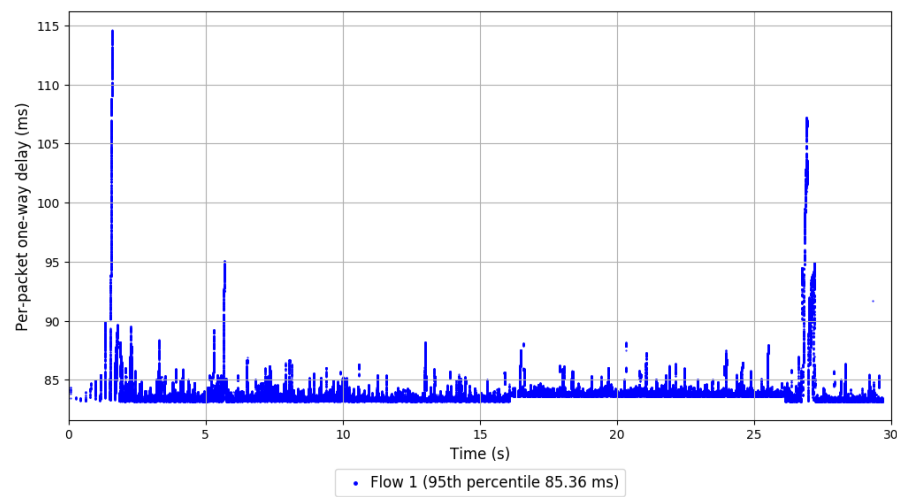
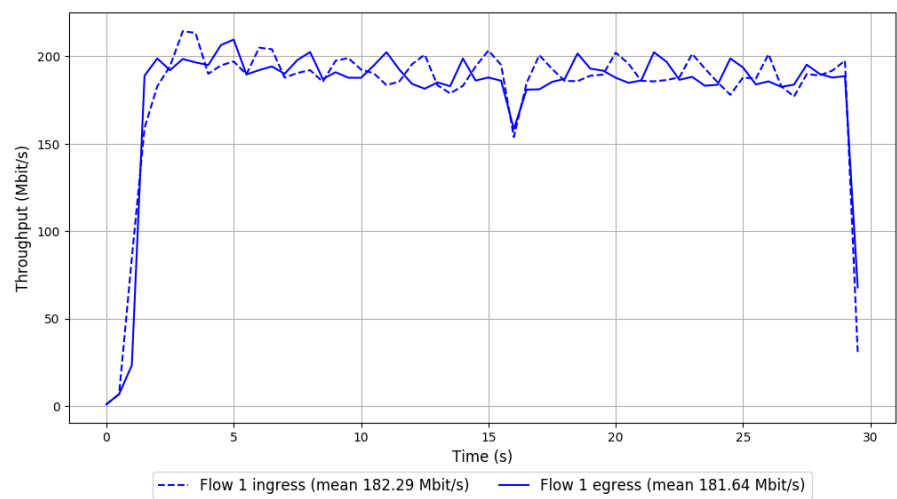
-- Flow 1:

Average throughput: 181.64 Mbit/s

95th percentile per-packet one-way delay: 85.356 ms

Loss rate: 0.36%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-08 22:16:20

End at: 2018-01-08 22:16:50

Below is generated by plot.py at 2018-01-09 00:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.84 Mbit/s

95th percentile per-packet one-way delay: 84.190 ms

Loss rate: 0.00%

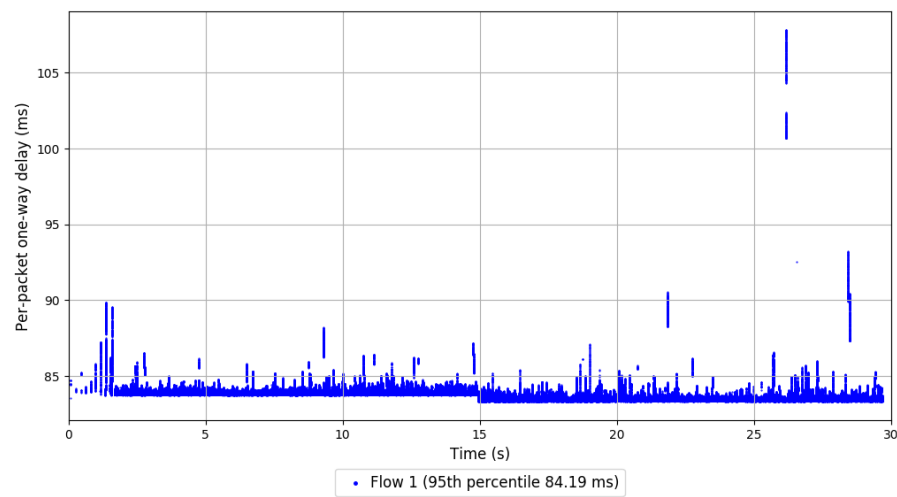
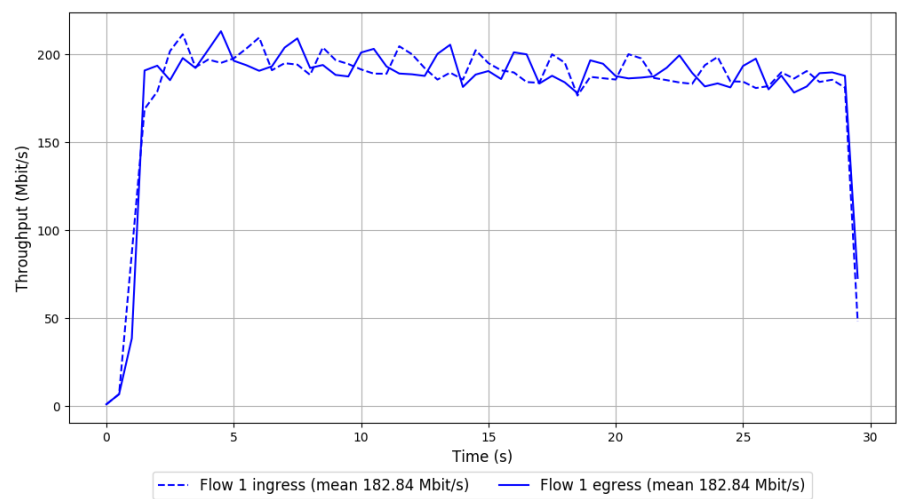
-- Flow 1:

Average throughput: 182.84 Mbit/s

95th percentile per-packet one-way delay: 84.190 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-08 22:28:34

End at: 2018-01-08 22:29:04

Below is generated by plot.py at 2018-01-09 00:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.41 Mbit/s

95th percentile per-packet one-way delay: 85.985 ms

Loss rate: 1.08%

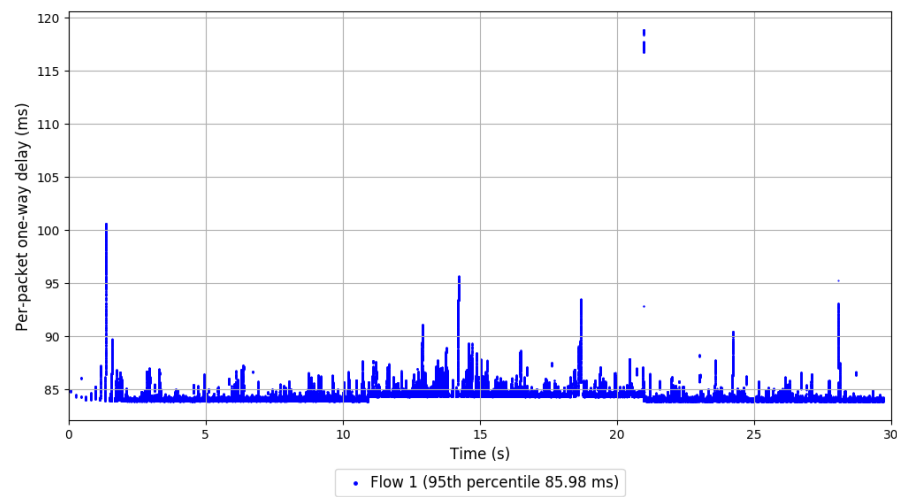
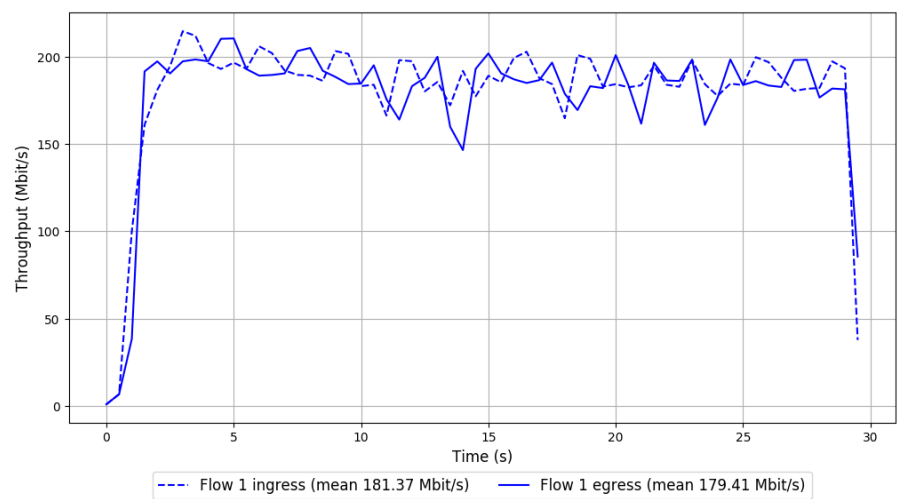
-- Flow 1:

Average throughput: 179.41 Mbit/s

95th percentile per-packet one-way delay: 85.985 ms

Loss rate: 1.08%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-08 22:40:32

End at: 2018-01-08 22:41:02

Below is generated by plot.py at 2018-01-09 00:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.24 Mbit/s

95th percentile per-packet one-way delay: 83.949 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 180.24 Mbit/s

95th percentile per-packet one-way delay: 83.949 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

