

Pantheon Report

Generated at 2018-01-02 08:24:50 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

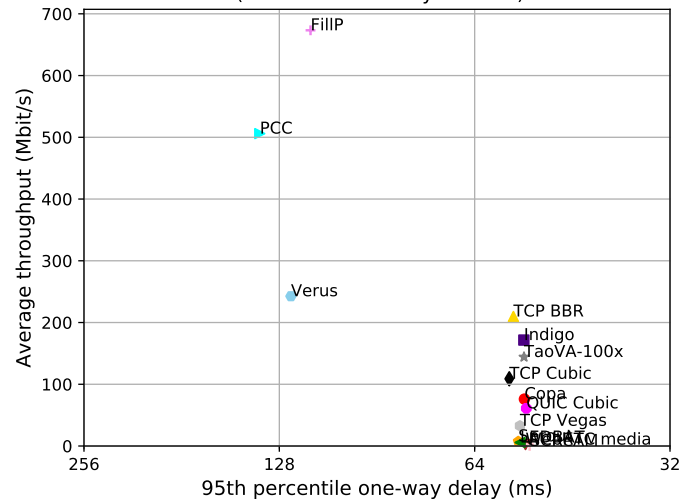
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

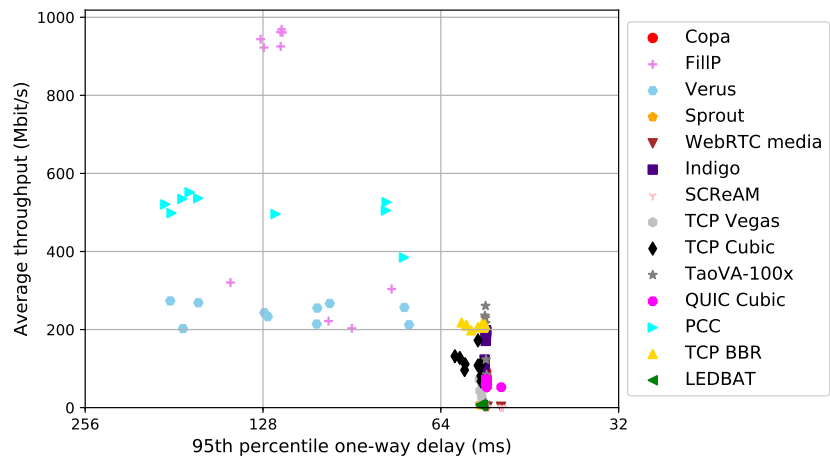
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-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 Tokyo Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from GCE Tokyo 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	209.75	55.78	0.41
TCP Cubic	10	108.87	56.61	0.68
LEDBAT	10	5.66	54.49	1.77
PCC	9	505.98	137.18	0.77
QUIC Cubic	10	61.00	53.29	0.46
SCReAM	10	0.20	52.65	0.36
WebRTC media	10	2.29	53.44	0.42
Sprout	10	7.55	54.83	1.10
TaoVA-100x	9	144.20	53.72	0.46
TCP Vegas	10	32.73	54.51	0.49
Verus	10	242.60	122.85	1.39
Copa	10	75.97	53.64	0.28
FillP	10	673.31	114.59	2.01
Indigo	9	171.59	53.75	0.38

Run 1: Statistics of TCP BBR

Start at: 2018-01-02 03:50:39

End at: 2018-01-02 03:51:09

Below is generated by plot.py at 2018-01-02 07:36:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.24 Mbit/s

95th percentile per-packet one-way delay: 59.020 ms

Loss rate: 0.37%

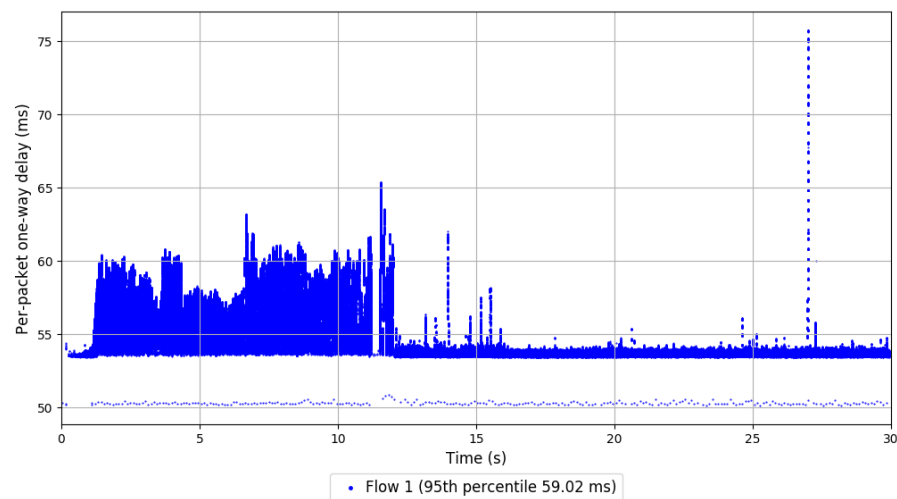
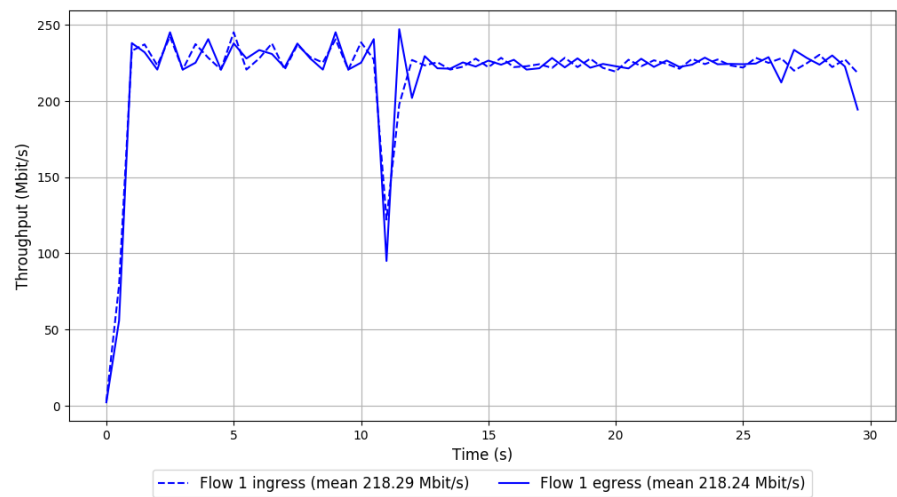
-- Flow 1:

Average throughput: 218.24 Mbit/s

95th percentile per-packet one-way delay: 59.020 ms

Loss rate: 0.37%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-02 04:02:18

End at: 2018-01-02 04:02:48

Below is generated by plot.py at 2018-01-02 07:36:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.31 Mbit/s

95th percentile per-packet one-way delay: 57.845 ms

Loss rate: 0.35%

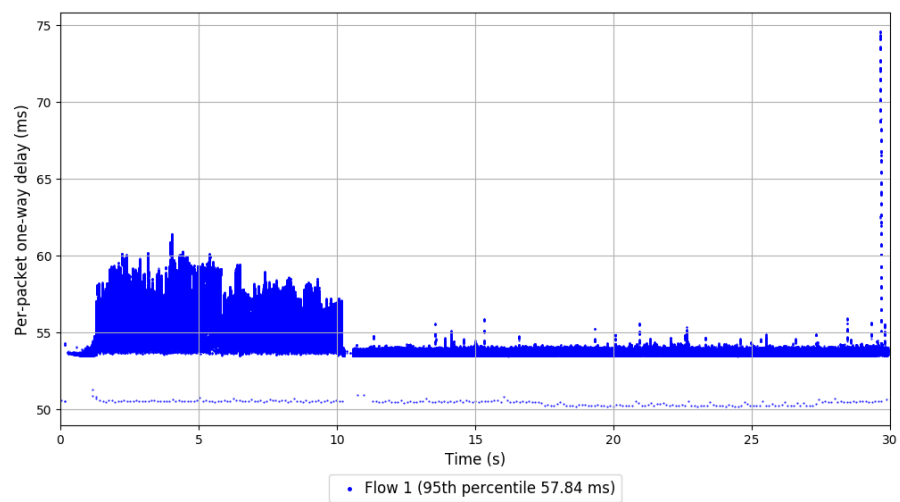
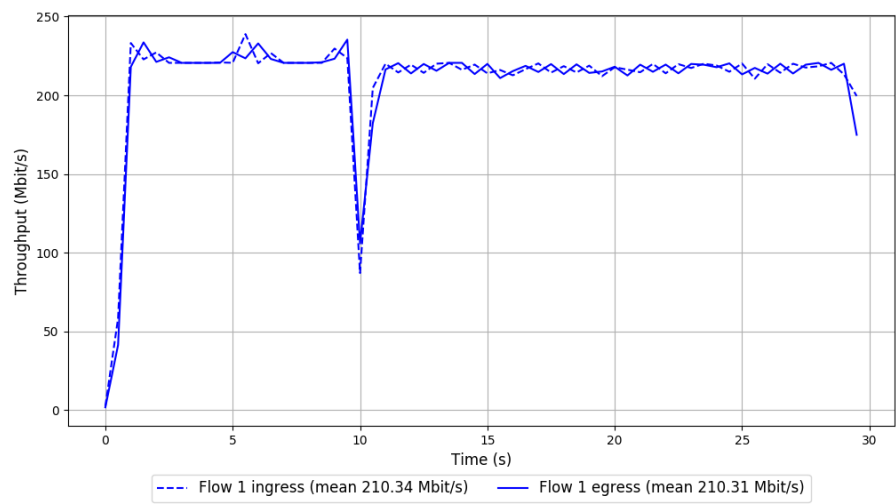
-- Flow 1:

Average throughput: 210.31 Mbit/s

95th percentile per-packet one-way delay: 57.845 ms

Loss rate: 0.35%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-02 04:13:54

End at: 2018-01-02 04:14:24

Below is generated by plot.py at 2018-01-02 07:36:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 206.35 Mbit/s

95th percentile per-packet one-way delay: 55.389 ms

Loss rate: 0.38%

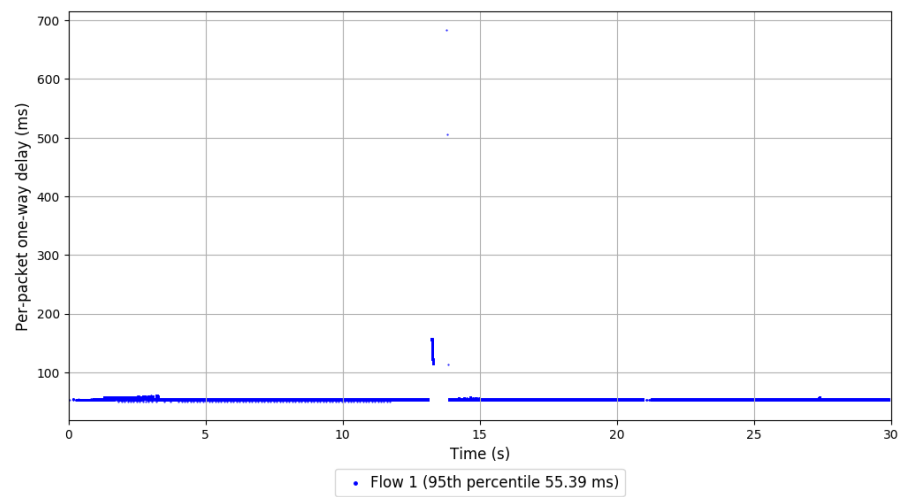
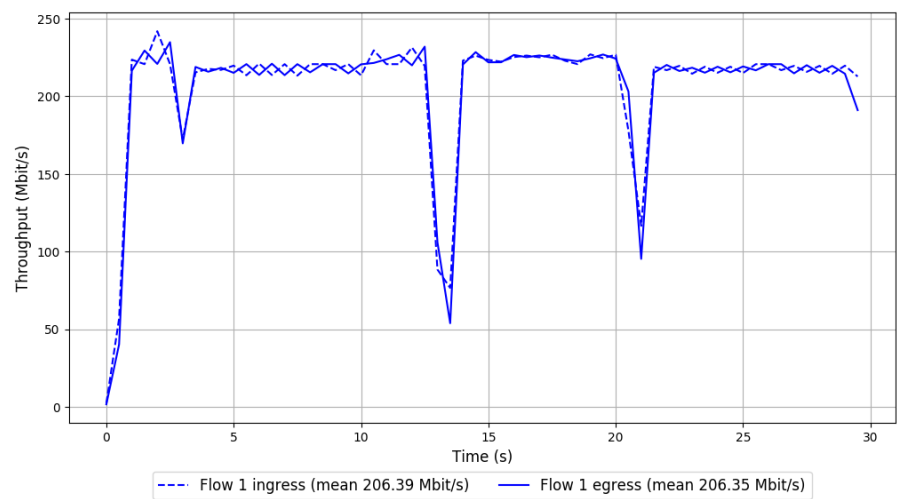
-- Flow 1:

Average throughput: 206.35 Mbit/s

95th percentile per-packet one-way delay: 55.389 ms

Loss rate: 0.38%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-02 04:25:37

End at: 2018-01-02 04:26:07

Below is generated by plot.py at 2018-01-02 07:36:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.27 Mbit/s

95th percentile per-packet one-way delay: 53.916 ms

Loss rate: 0.00%

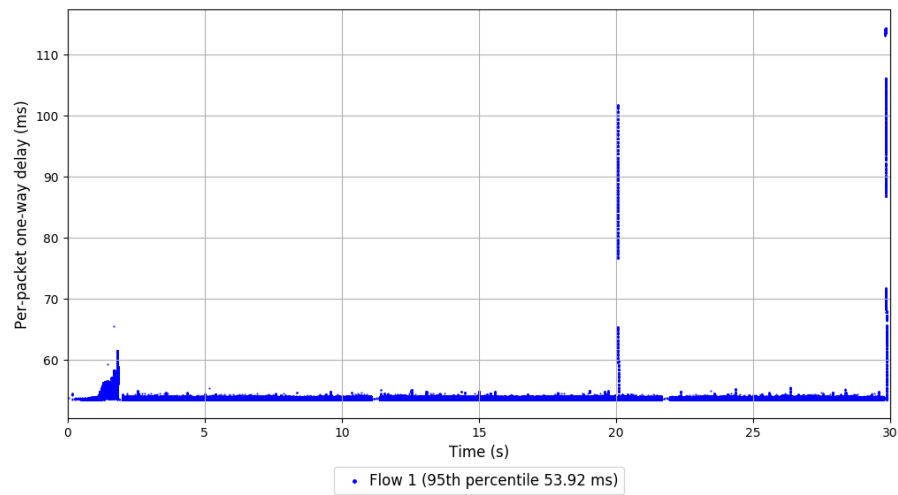
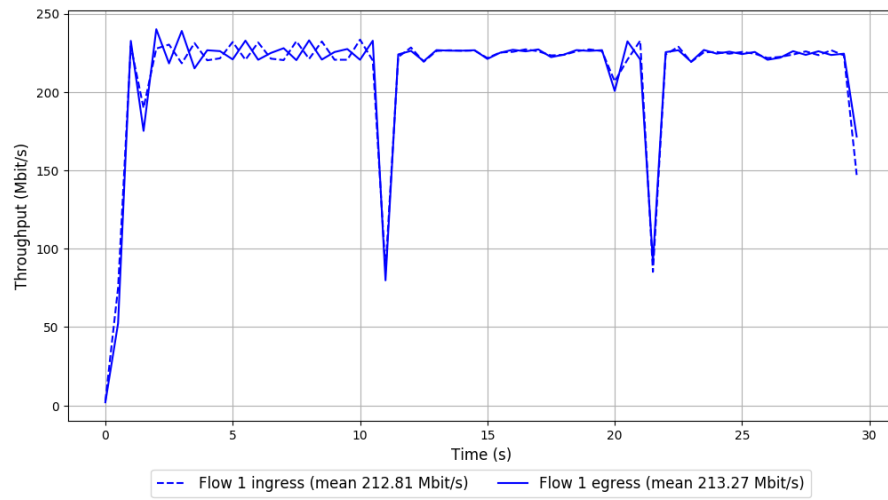
-- Flow 1:

Average throughput: 213.27 Mbit/s

95th percentile per-packet one-way delay: 53.916 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-02 04:37:04

End at: 2018-01-02 04:37:34

Below is generated by plot.py at 2018-01-02 07:36:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.34 Mbit/s

95th percentile per-packet one-way delay: 54.020 ms

Loss rate: 0.37%

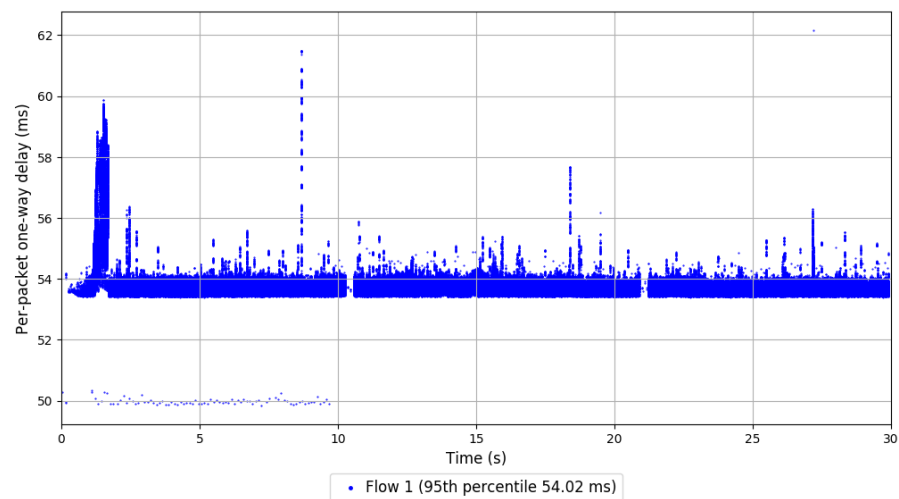
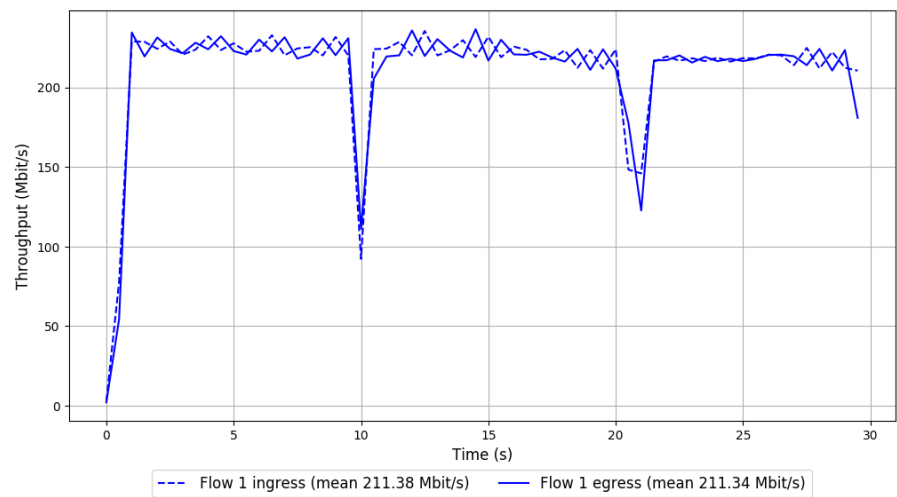
-- Flow 1:

Average throughput: 211.34 Mbit/s

95th percentile per-packet one-way delay: 54.020 ms

Loss rate: 0.37%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-02 04:48:01

End at: 2018-01-02 04:48:31

Below is generated by plot.py at 2018-01-02 07:36:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 204.89 Mbit/s

95th percentile per-packet one-way delay: 54.226 ms

Loss rate: 0.37%

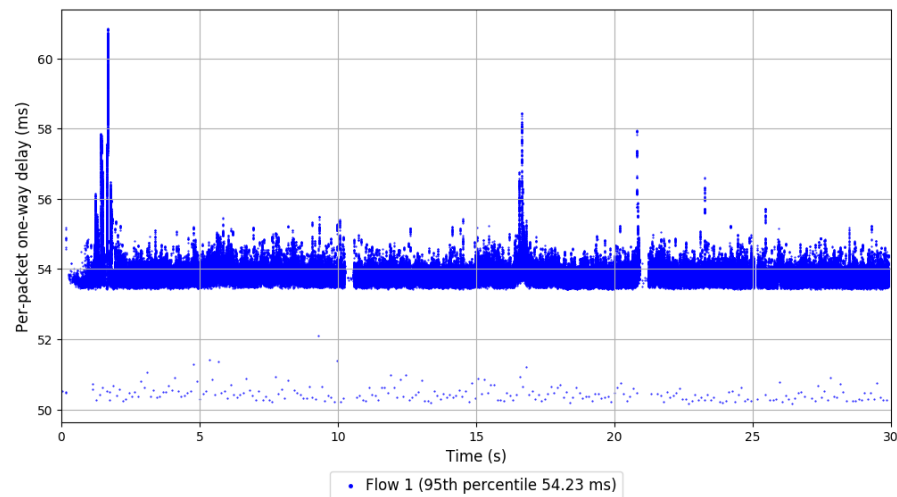
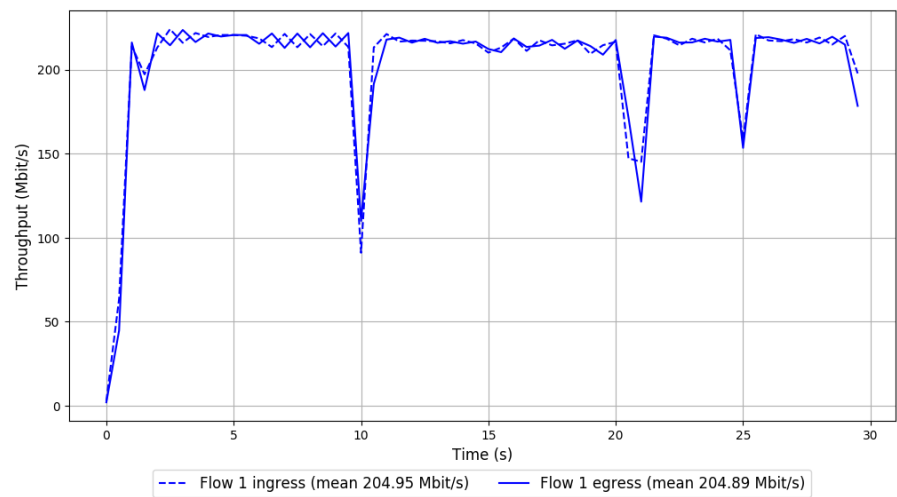
-- Flow 1:

Average throughput: 204.89 Mbit/s

95th percentile per-packet one-way delay: 54.226 ms

Loss rate: 0.37%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-02 04:58:52

End at: 2018-01-02 04:59:22

Below is generated by plot.py at 2018-01-02 07:36:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.59 Mbit/s

95th percentile per-packet one-way delay: 57.991 ms

Loss rate: 0.38%

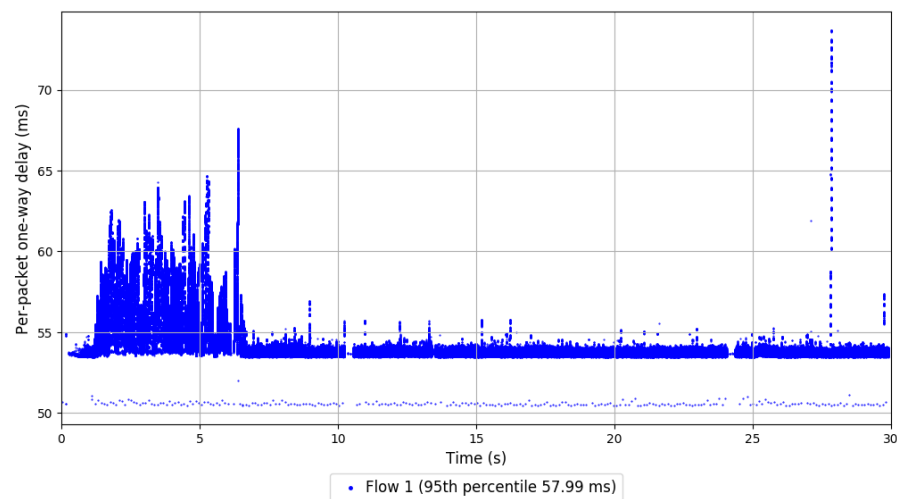
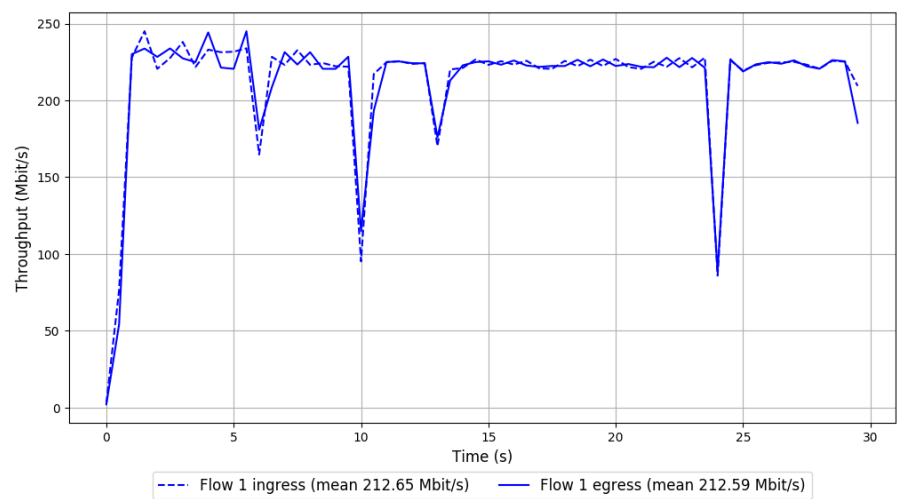
-- Flow 1:

Average throughput: 212.59 Mbit/s

95th percentile per-packet one-way delay: 57.991 ms

Loss rate: 0.38%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-02 05:10:15

End at: 2018-01-02 05:10:45

Below is generated by plot.py at 2018-01-02 07:36:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.03 Mbit/s

95th percentile per-packet one-way delay: 56.828 ms

Loss rate: 0.96%

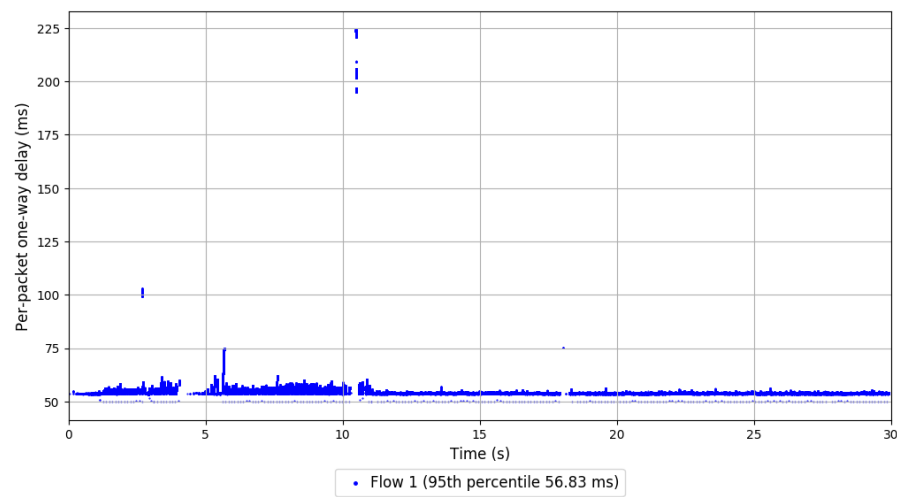
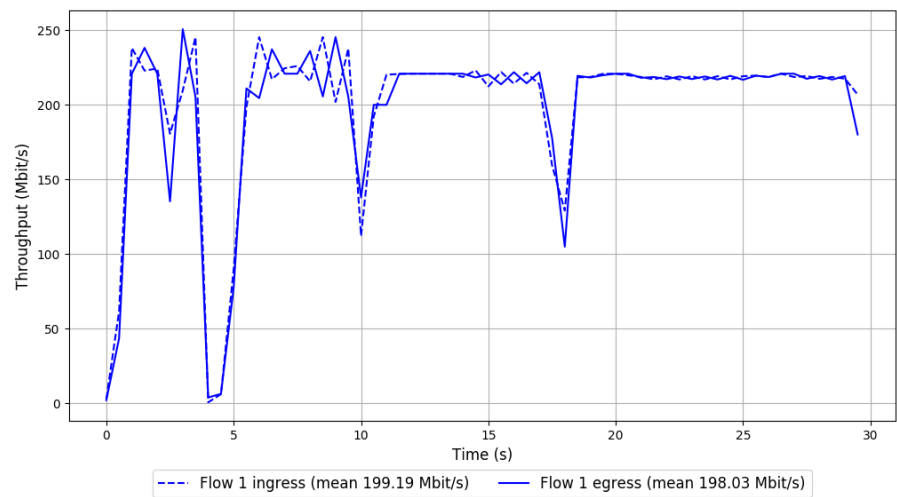
-- Flow 1:

Average throughput: 198.03 Mbit/s

95th percentile per-packet one-way delay: 56.828 ms

Loss rate: 0.96%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-02 05:21:29

End at: 2018-01-02 05:21:59

Below is generated by plot.py at 2018-01-02 07:40:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.33 Mbit/s

95th percentile per-packet one-way delay: 54.071 ms

Loss rate: 0.38%

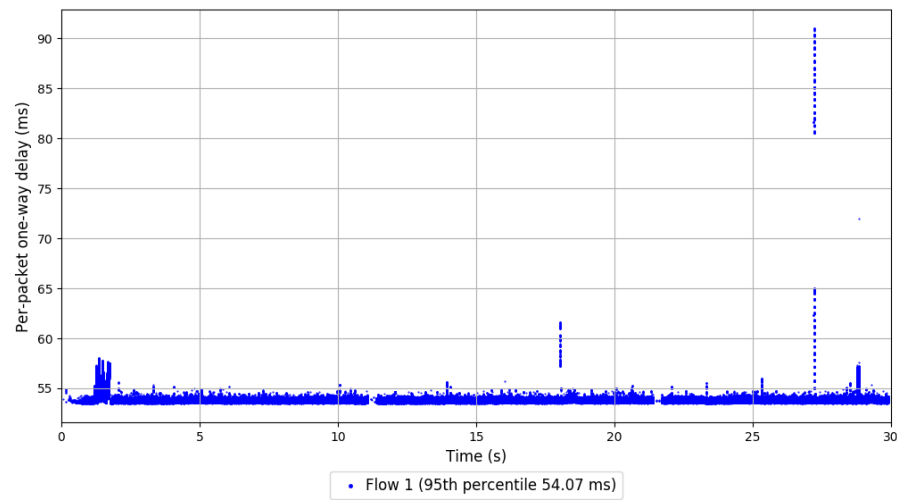
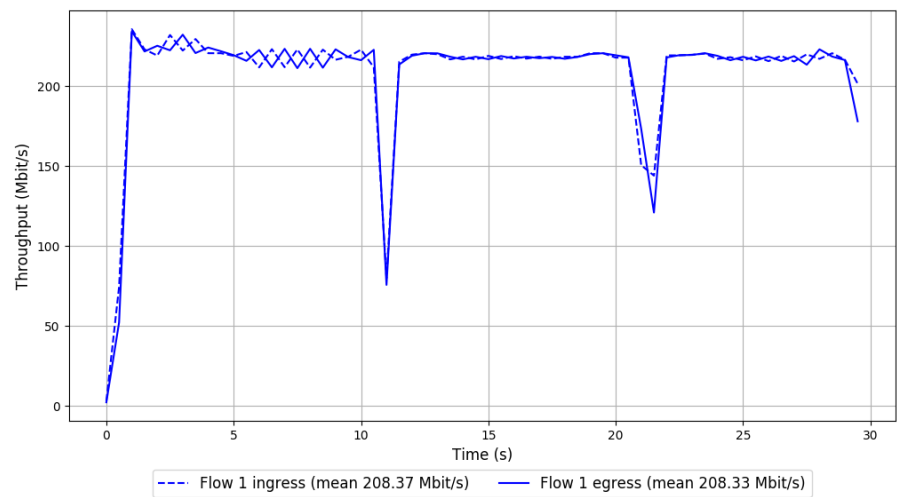
-- Flow 1:

Average throughput: 208.33 Mbit/s

95th percentile per-packet one-way delay: 54.071 ms

Loss rate: 0.38%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-02 05:32:19

End at: 2018-01-02 05:32:49

Below is generated by plot.py at 2018-01-02 07:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.12 Mbit/s

95th percentile per-packet one-way delay: 54.492 ms

Loss rate: 0.57%

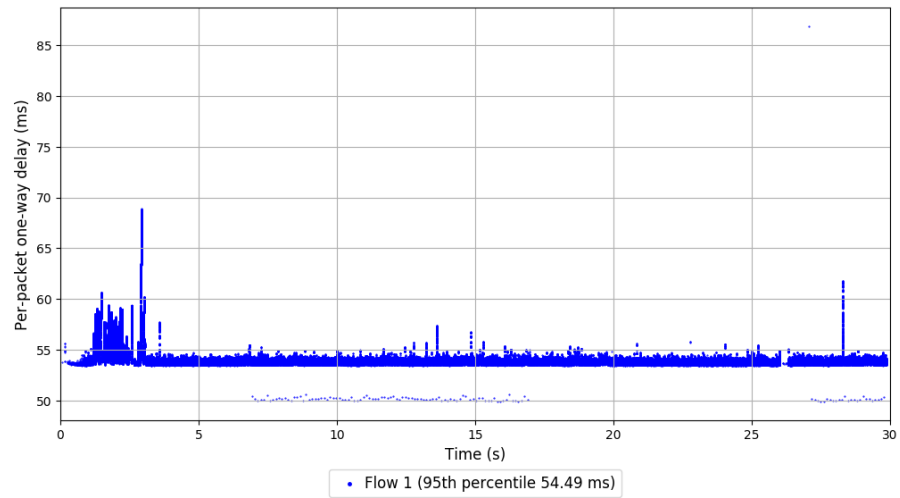
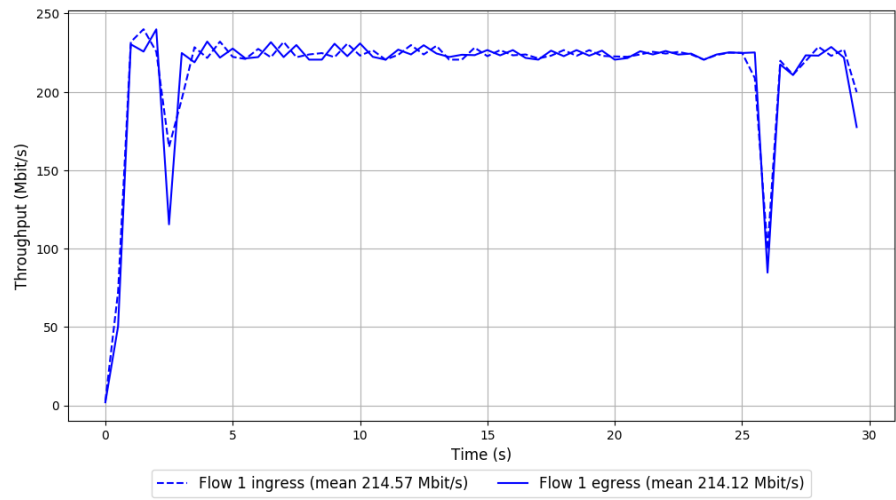
-- Flow 1:

Average throughput: 214.12 Mbit/s

95th percentile per-packet one-way delay: 54.492 ms

Loss rate: 0.57%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-02 03:41:18

End at: 2018-01-02 03:41:48

Below is generated by plot.py at 2018-01-02 07:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.36 Mbit/s

95th percentile per-packet one-way delay: 54.713 ms

Loss rate: 0.42%

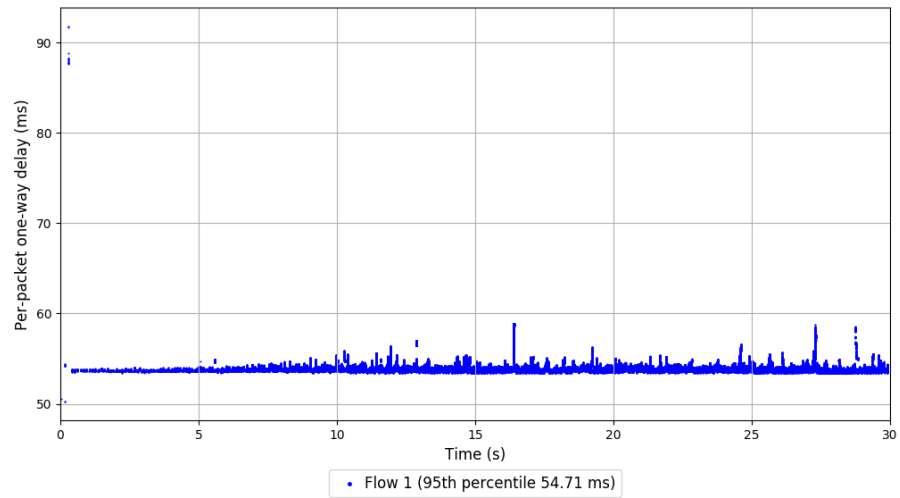
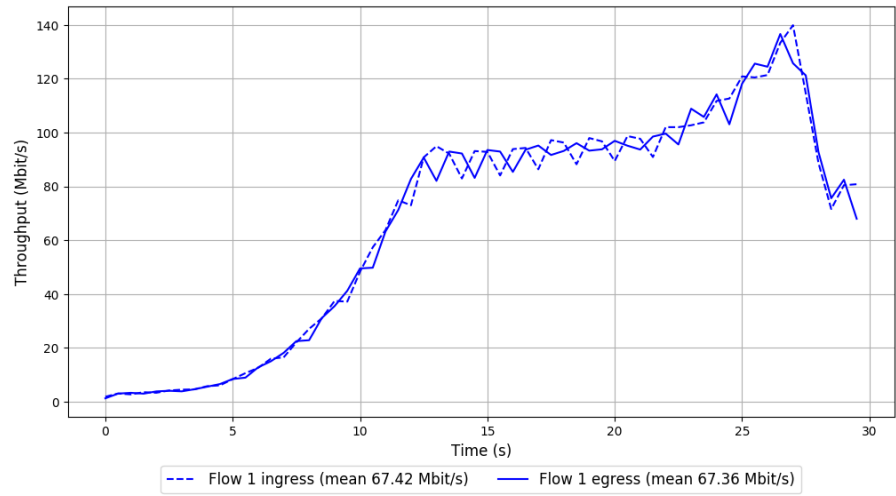
-- Flow 1:

Average throughput: 67.36 Mbit/s

95th percentile per-packet one-way delay: 54.713 ms

Loss rate: 0.42%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-02 03:52:49

End at: 2018-01-02 03:53:19

Below is generated by plot.py at 2018-01-02 07:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.80 Mbit/s

95th percentile per-packet one-way delay: 60.575 ms

Loss rate: 0.31%

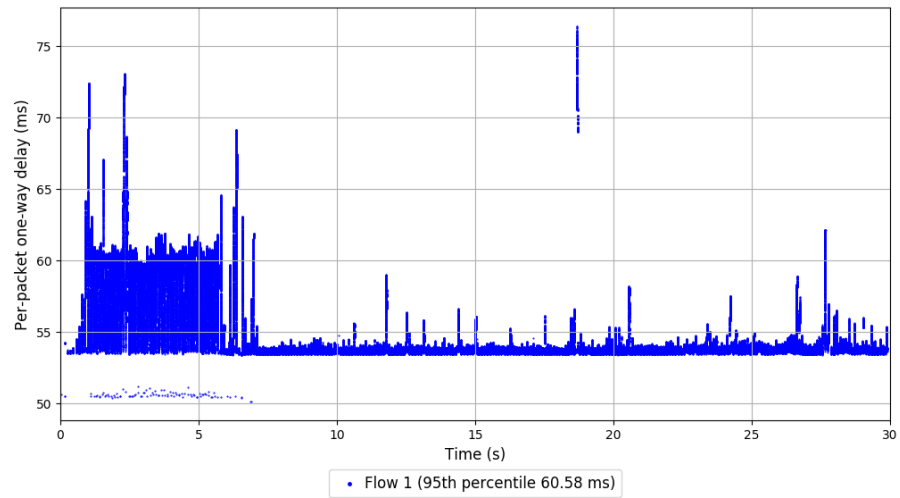
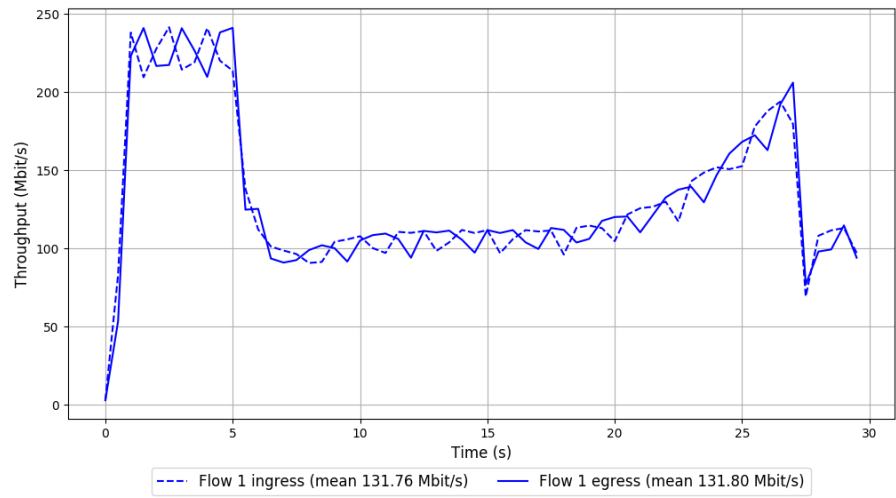
-- Flow 1:

Average throughput: 131.80 Mbit/s

95th percentile per-packet one-way delay: 60.575 ms

Loss rate: 0.31%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-02 04:04:29

End at: 2018-01-02 04:04:59

Below is generated by plot.py at 2018-01-02 07:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 127.39 Mbit/s

95th percentile per-packet one-way delay: 59.430 ms

Loss rate: 1.21%

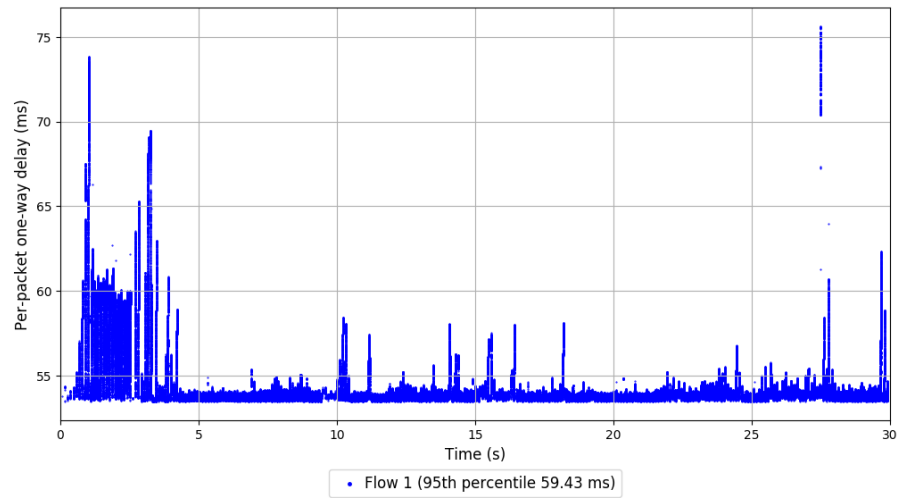
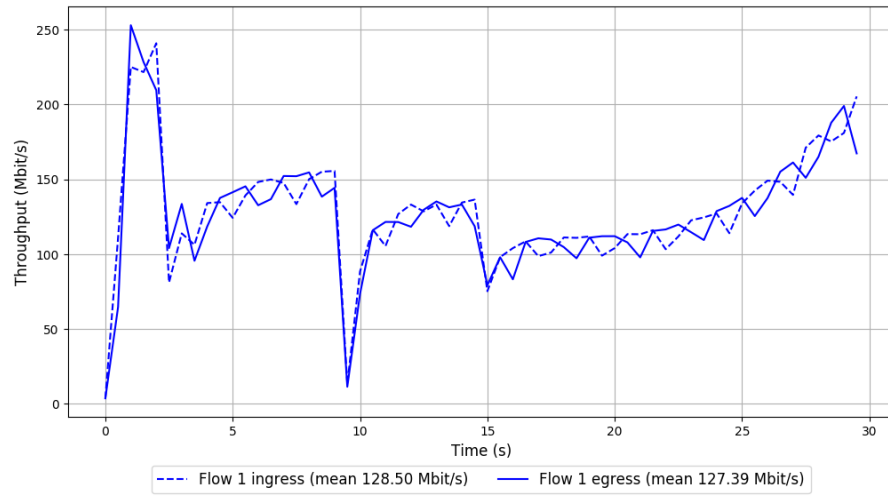
-- Flow 1:

Average throughput: 127.39 Mbit/s

95th percentile per-packet one-way delay: 59.430 ms

Loss rate: 1.21%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-02 04:16:00

End at: 2018-01-02 04:16:30

Below is generated by plot.py at 2018-01-02 07:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.39 Mbit/s

95th percentile per-packet one-way delay: 58.213 ms

Loss rate: 1.00%

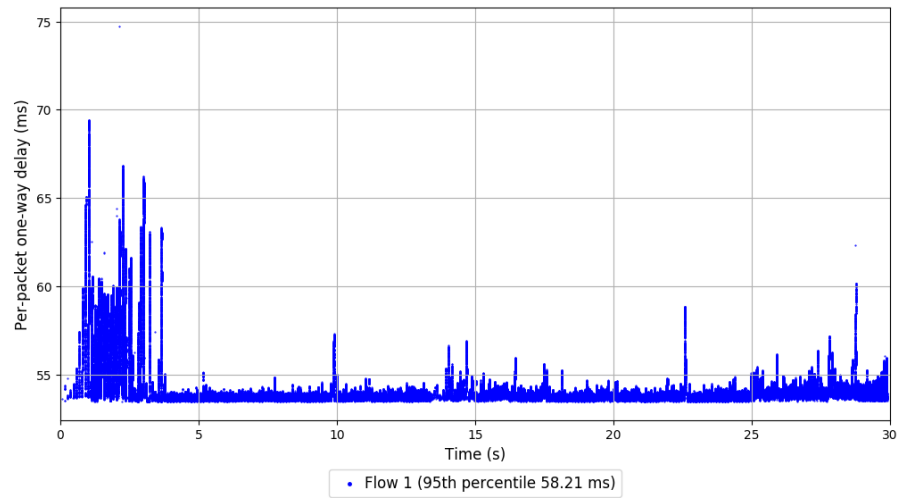
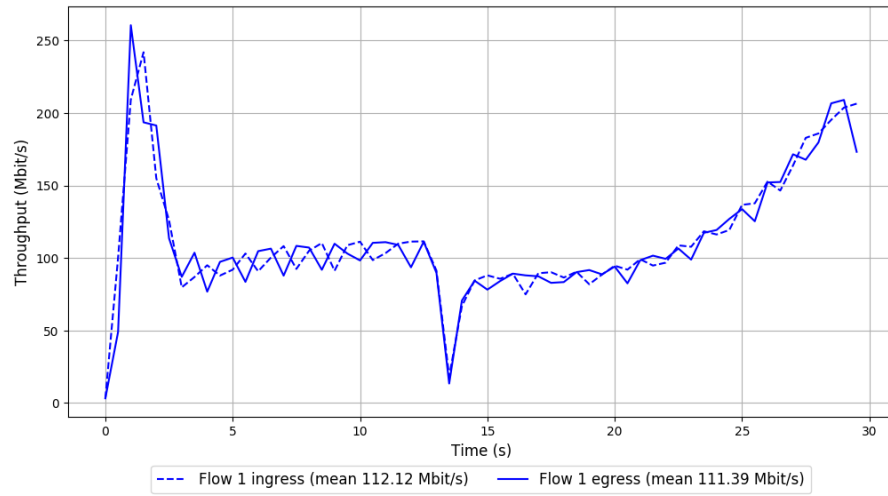
-- Flow 1:

Average throughput: 111.39 Mbit/s

95th percentile per-packet one-way delay: 58.213 ms

Loss rate: 1.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-02 04:27:44

End at: 2018-01-02 04:28:14

Below is generated by plot.py at 2018-01-02 07:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.16 Mbit/s

95th percentile per-packet one-way delay: 58.337 ms

Loss rate: 0.73%

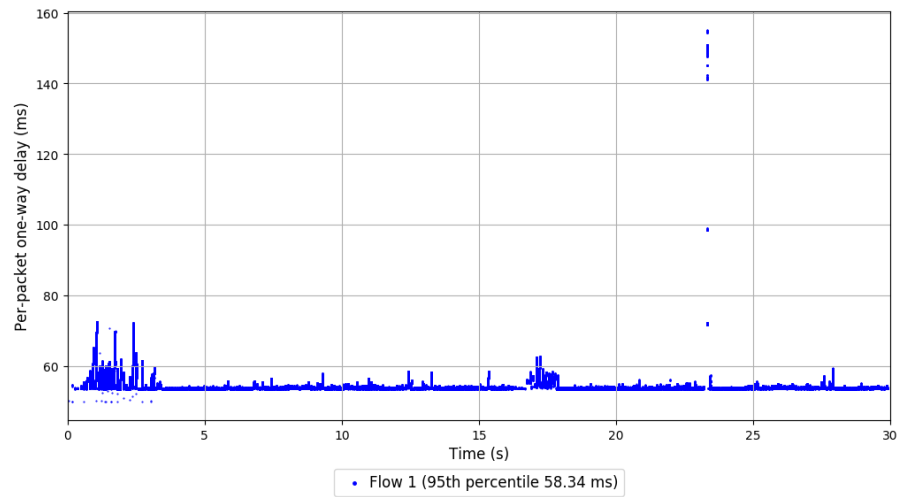
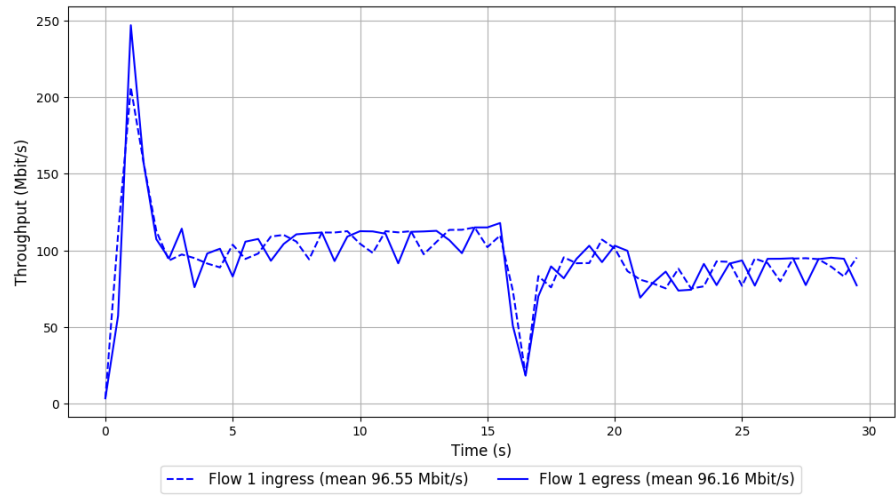
-- Flow 1:

Average throughput: 96.16 Mbit/s

95th percentile per-packet one-way delay: 58.337 ms

Loss rate: 0.73%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-02 04:39:13

End at: 2018-01-02 04:39:43

Below is generated by plot.py at 2018-01-02 07:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.64 Mbit/s

95th percentile per-packet one-way delay: 54.759 ms

Loss rate: 0.86%

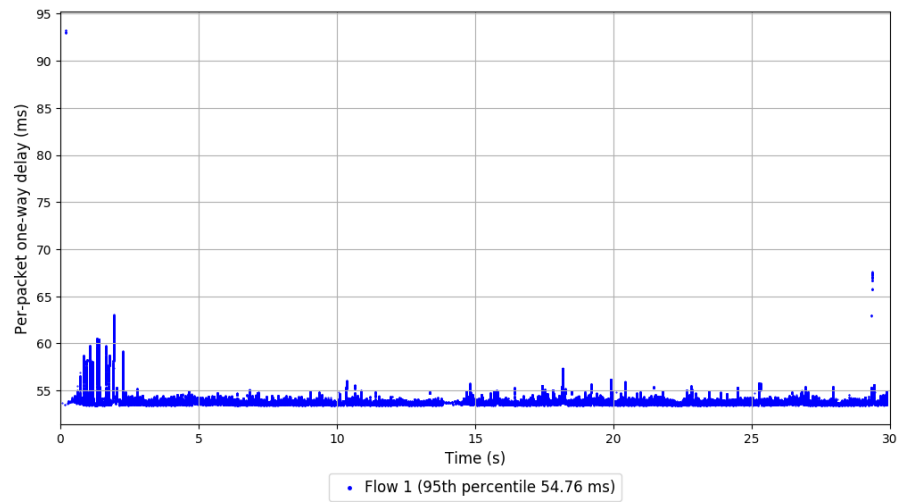
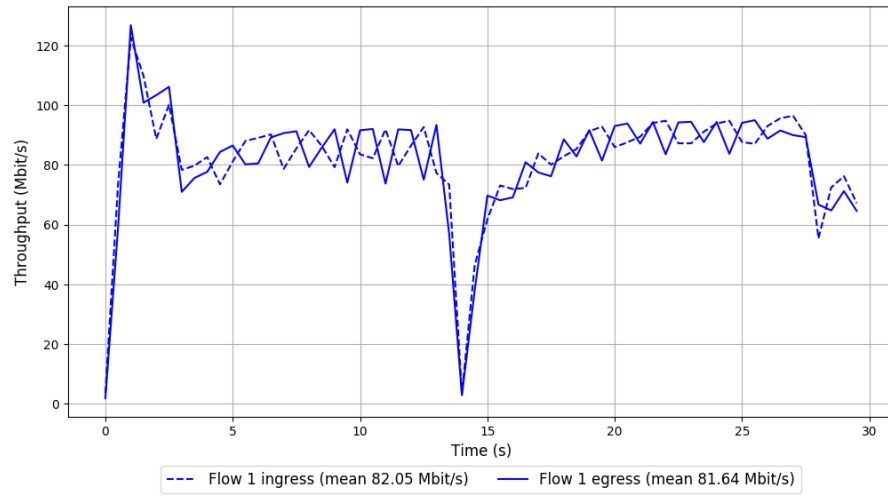
-- Flow 1:

Average throughput: 81.64 Mbit/s

95th percentile per-packet one-way delay: 54.759 ms

Loss rate: 0.86%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-02 04:50:10

End at: 2018-01-02 04:50:40

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.40 Mbit/s

95th percentile per-packet one-way delay: 55.373 ms

Loss rate: 0.29%

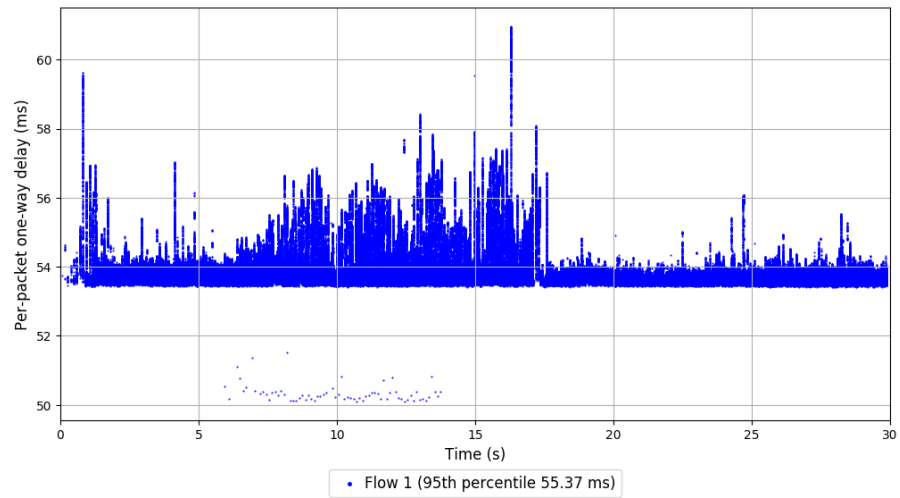
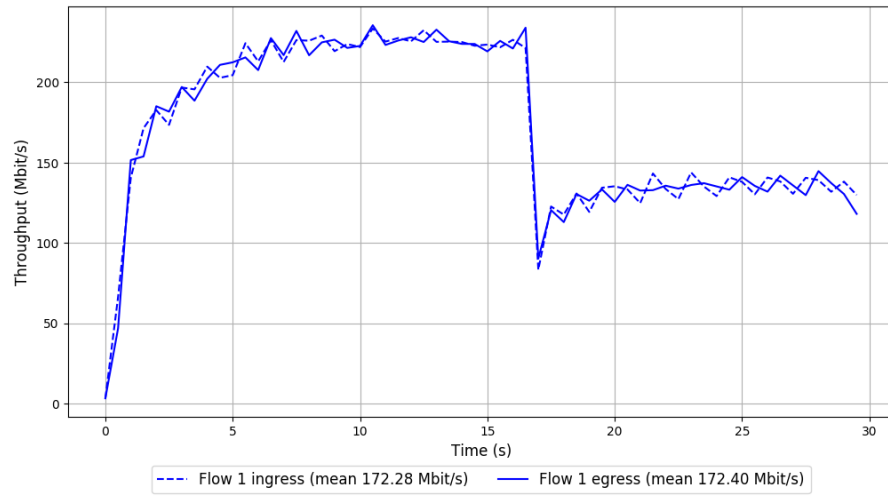
-- Flow 1:

Average throughput: 172.40 Mbit/s

95th percentile per-packet one-way delay: 55.373 ms

Loss rate: 0.29%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-02 05:01:00

End at: 2018-01-02 05:01:31

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.59 Mbit/s

95th percentile per-packet one-way delay: 54.658 ms

Loss rate: 1.20%

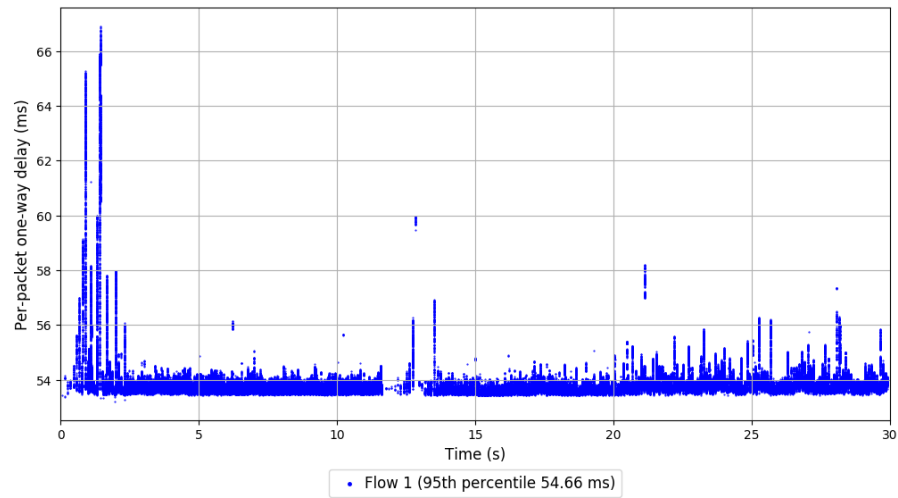
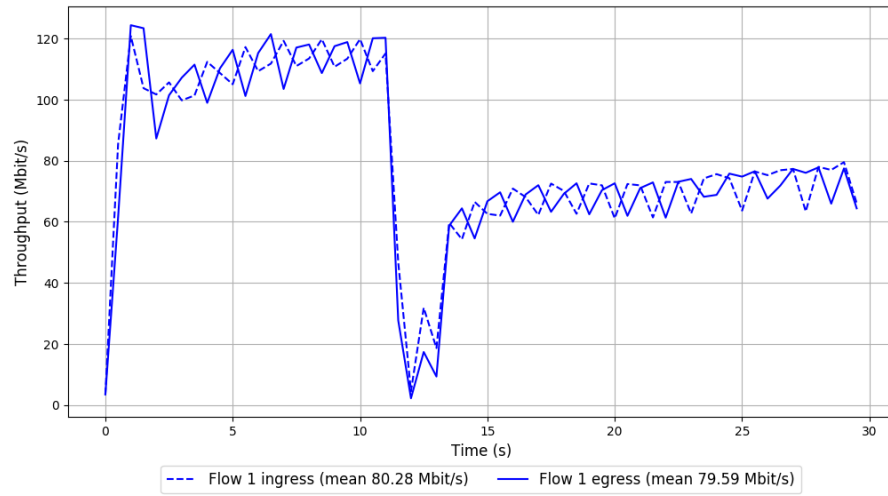
-- Flow 1:

Average throughput: 79.59 Mbit/s

95th percentile per-packet one-way delay: 54.658 ms

Loss rate: 1.20%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-02 05:12:24

End at: 2018-01-02 05:12:54

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.93 Mbit/s

95th percentile per-packet one-way delay: 55.382 ms

Loss rate: 0.37%

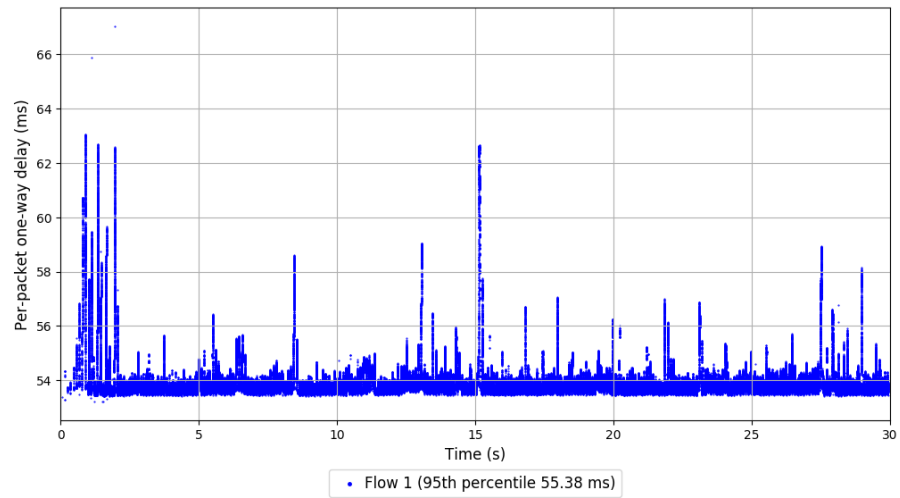
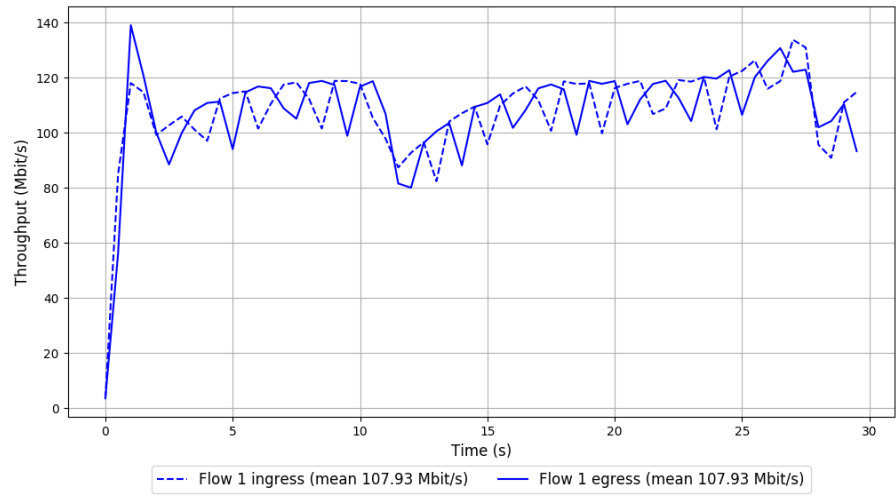
-- Flow 1:

Average throughput: 107.93 Mbit/s

95th percentile per-packet one-way delay: 55.382 ms

Loss rate: 0.37%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-02 05:23:38

End at: 2018-01-02 05:24:08

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.06 Mbit/s

95th percentile per-packet one-way delay: 54.628 ms

Loss rate: 0.38%

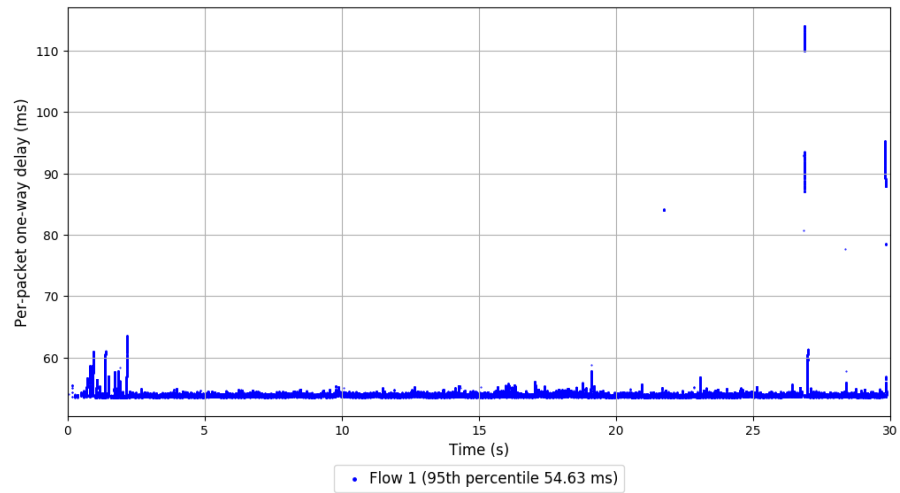
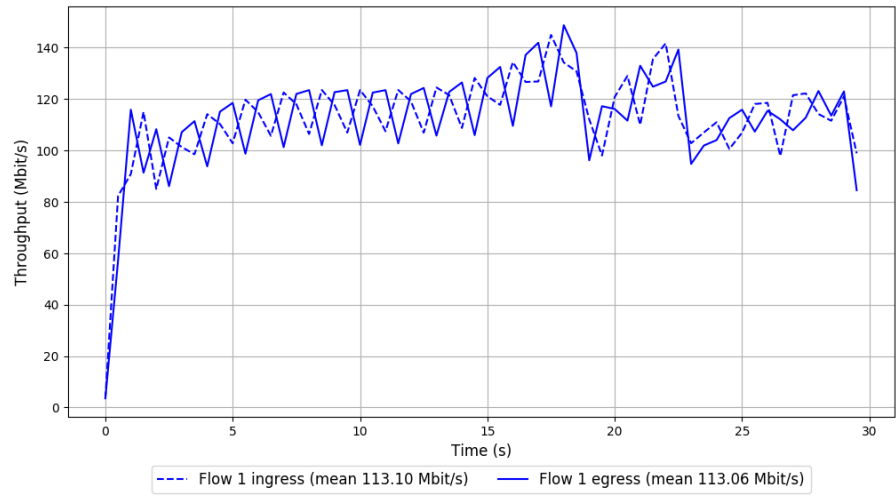
-- Flow 1:

Average throughput: 113.06 Mbit/s

95th percentile per-packet one-way delay: 54.628 ms

Loss rate: 0.38%

Run 10: Report of TCP Cubic — Data Link

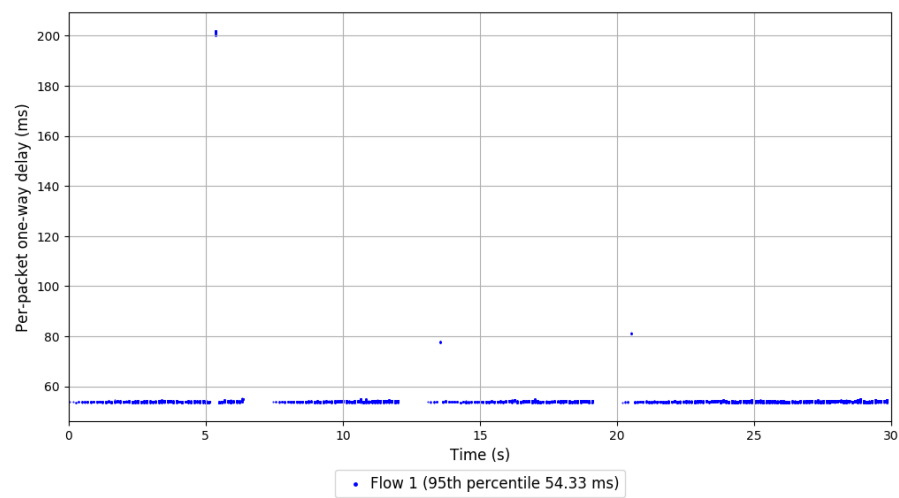
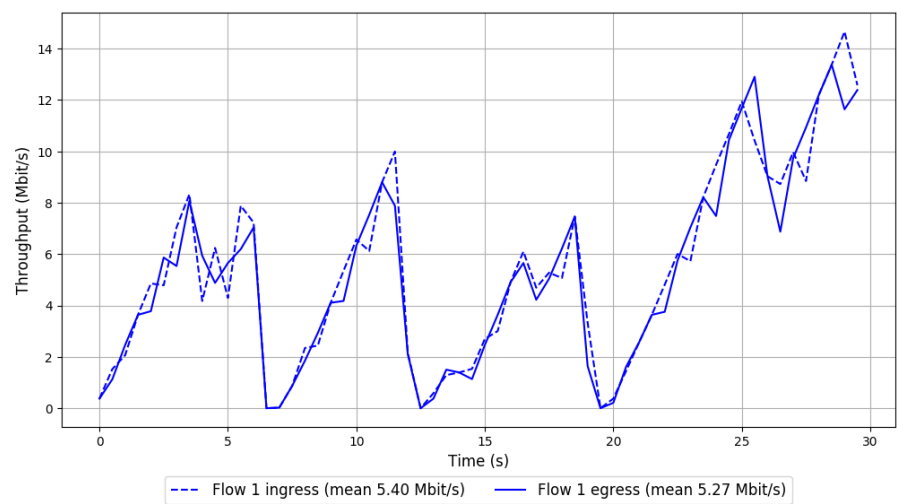


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-02 03:47:02
End at: 2018-01-02 03:47:32

# Below is generated by plot.py at 2018-01-02 07:40:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 54.333 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 54.333 ms
Loss rate: 2.77%
```

Run 1: Report of LEDBAT — Data Link

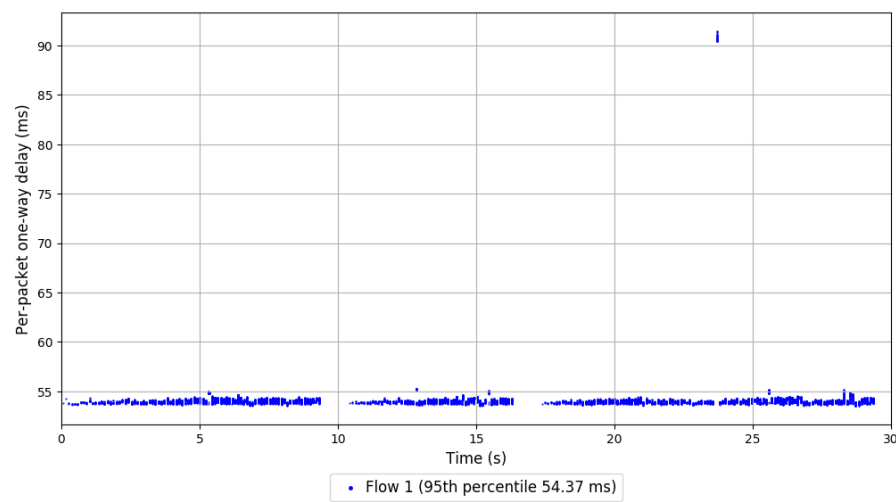
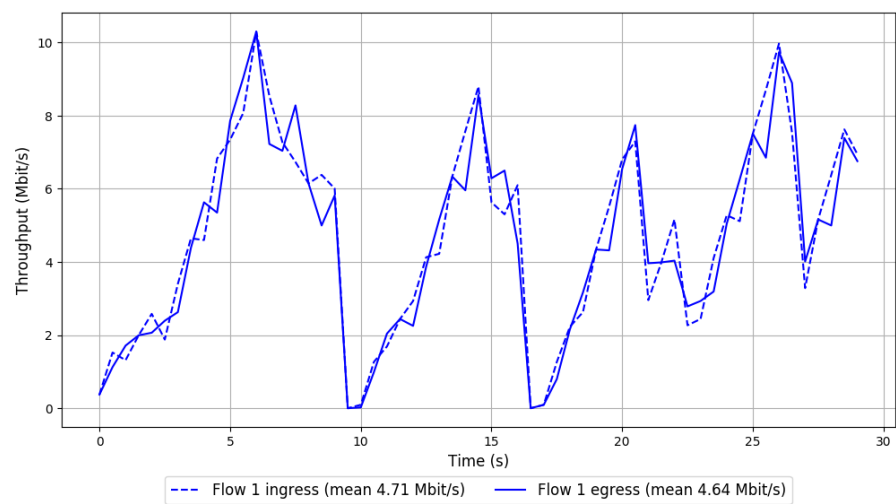


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-02 03:58:39
End at: 2018-01-02 03:59:09

# Below is generated by plot.py at 2018-01-02 07:40:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.64 Mbit/s
95th percentile per-packet one-way delay: 54.373 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 4.64 Mbit/s
95th percentile per-packet one-way delay: 54.373 ms
Loss rate: 1.84%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-02 04:10:16

End at: 2018-01-02 04:10:46

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.56 Mbit/s

95th percentile per-packet one-way delay: 54.489 ms

Loss rate: 0.93%

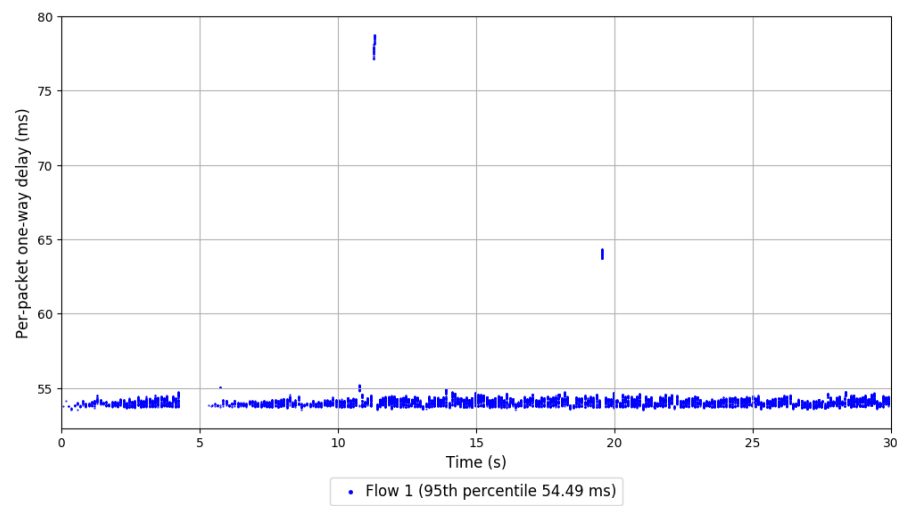
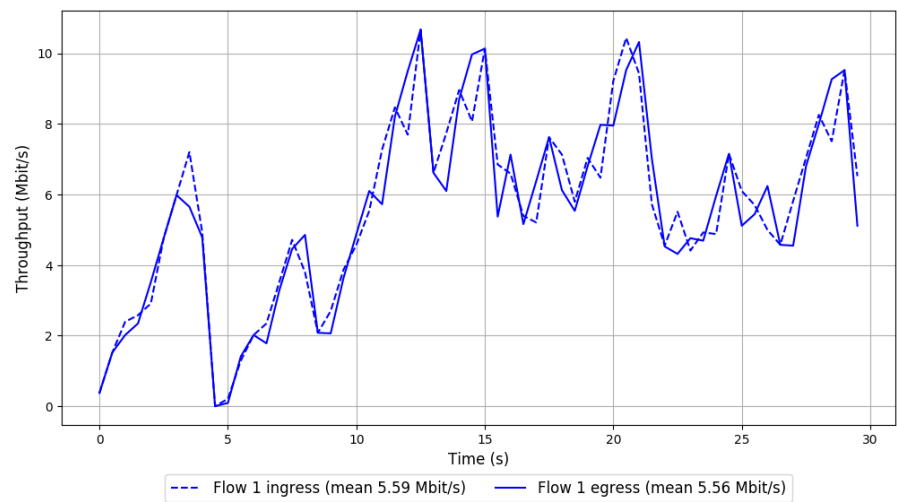
-- Flow 1:

Average throughput: 5.56 Mbit/s

95th percentile per-packet one-way delay: 54.489 ms

Loss rate: 0.93%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-02 04:21:59

End at: 2018-01-02 04:22:29

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.30 Mbit/s

95th percentile per-packet one-way delay: 54.341 ms

Loss rate: 2.40%

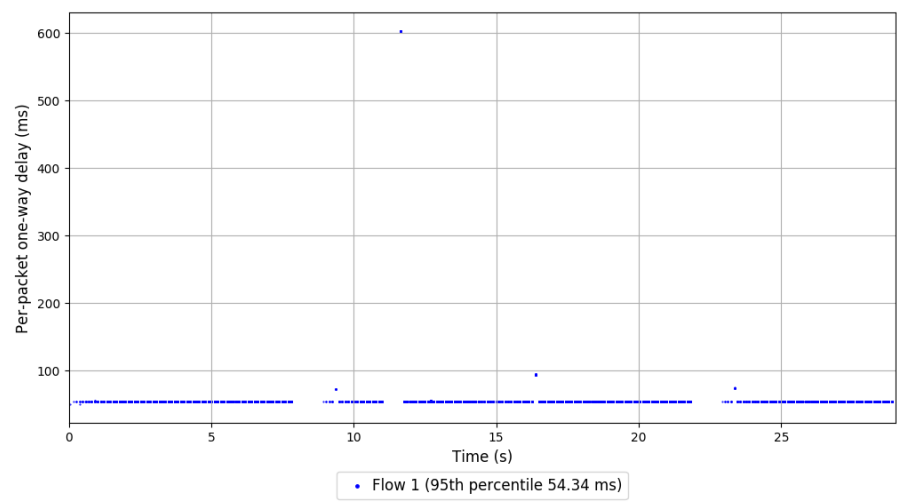
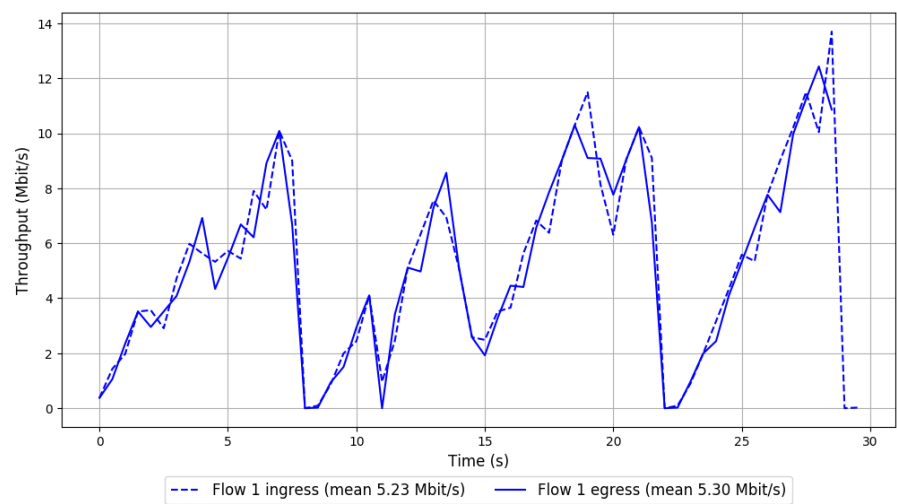
-- Flow 1:

Average throughput: 5.30 Mbit/s

95th percentile per-packet one-way delay: 54.341 ms

Loss rate: 2.40%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-02 04:33:30

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

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.81 Mbit/s

95th percentile per-packet one-way delay: 54.494 ms

Loss rate: 2.00%

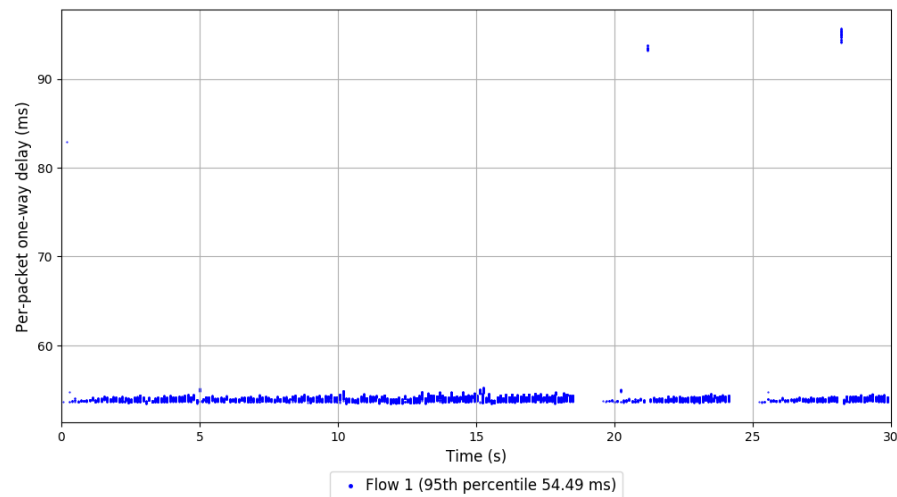
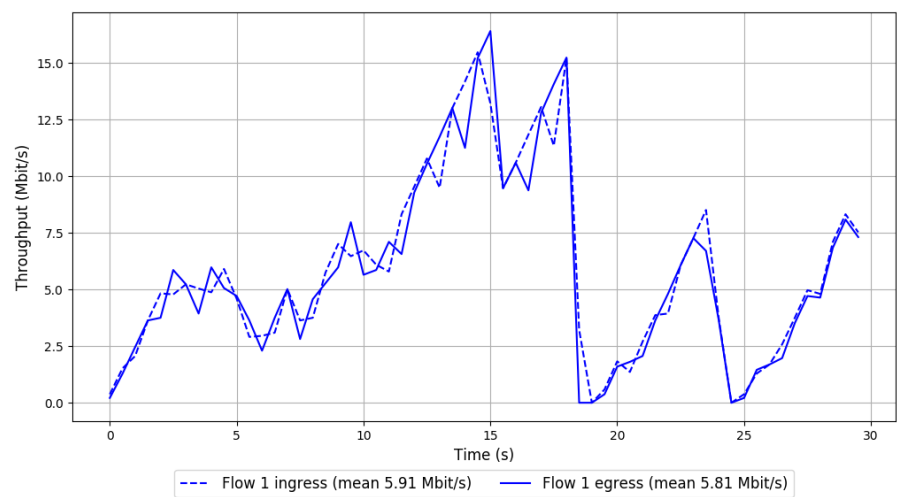
-- Flow 1:

Average throughput: 5.81 Mbit/s

95th percentile per-packet one-way delay: 54.494 ms

Loss rate: 2.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-02 04:45:00

End at: 2018-01-02 04:45:30

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 54.704 ms

Loss rate: 2.12%

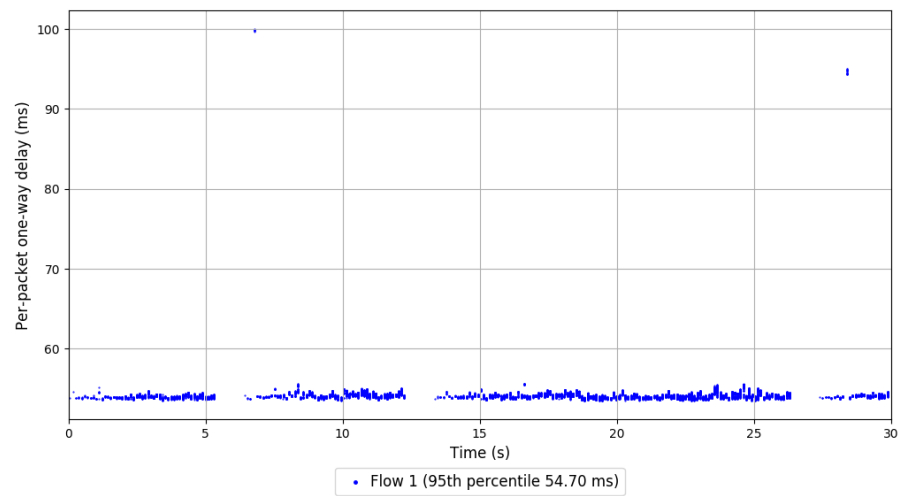
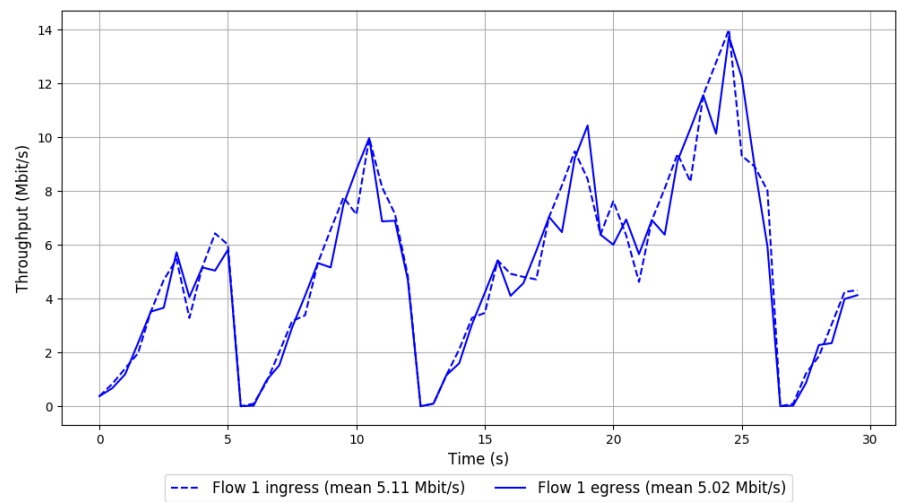
-- Flow 1:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 54.704 ms

Loss rate: 2.12%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-02 04:55:49

End at: 2018-01-02 04:56:19

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 54.535 ms

Loss rate: 1.54%

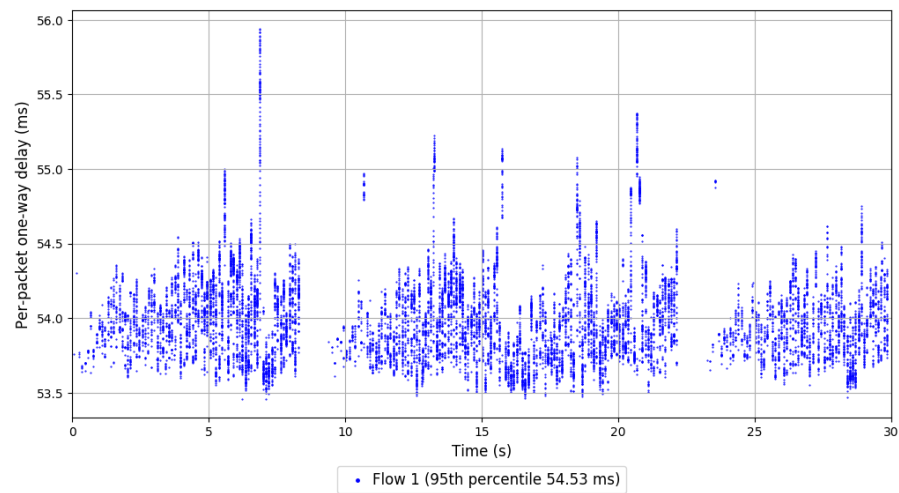
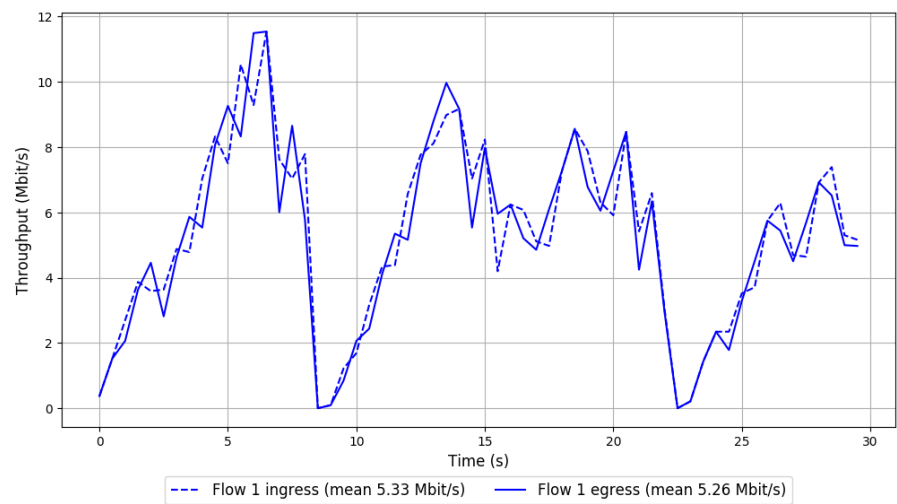
-- Flow 1:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 54.535 ms

Loss rate: 1.54%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-02 05:06:51

End at: 2018-01-02 05:07:21

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 54.469 ms

Loss rate: 1.91%

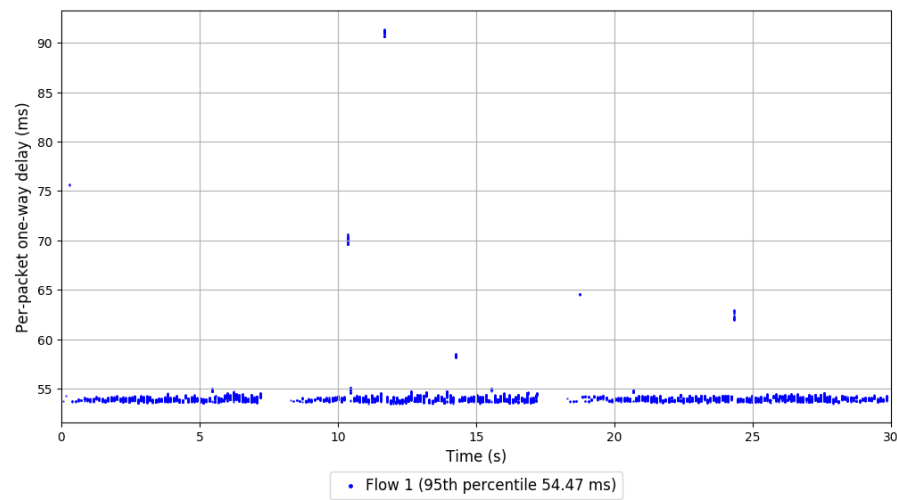
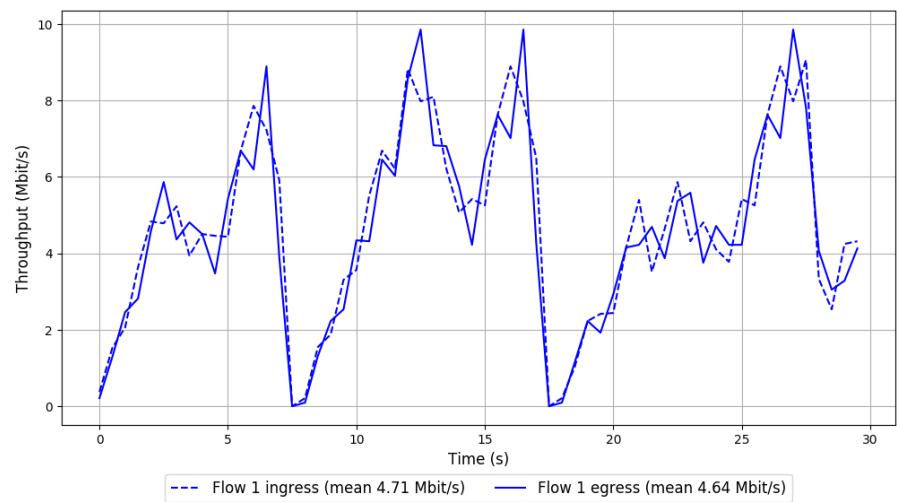
-- Flow 1:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 54.469 ms

Loss rate: 1.91%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-02 05:18:14

End at: 2018-01-02 05:18:44

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 54.347 ms

Loss rate: 1.24%

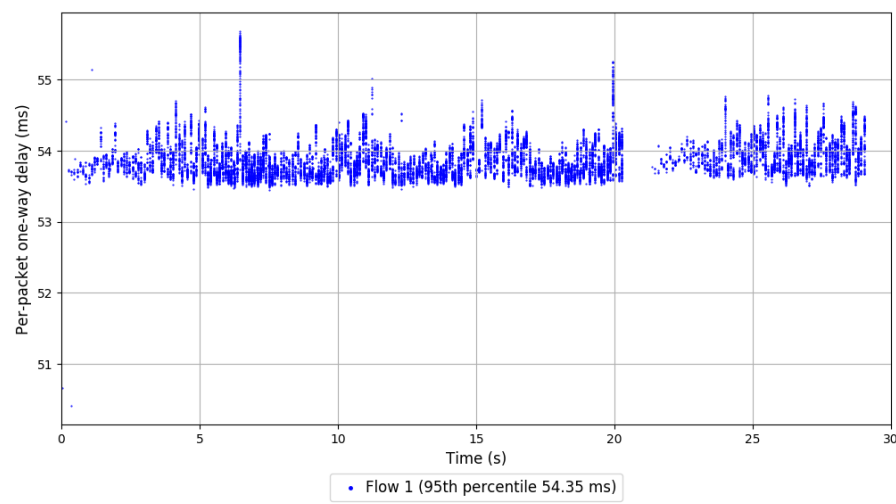
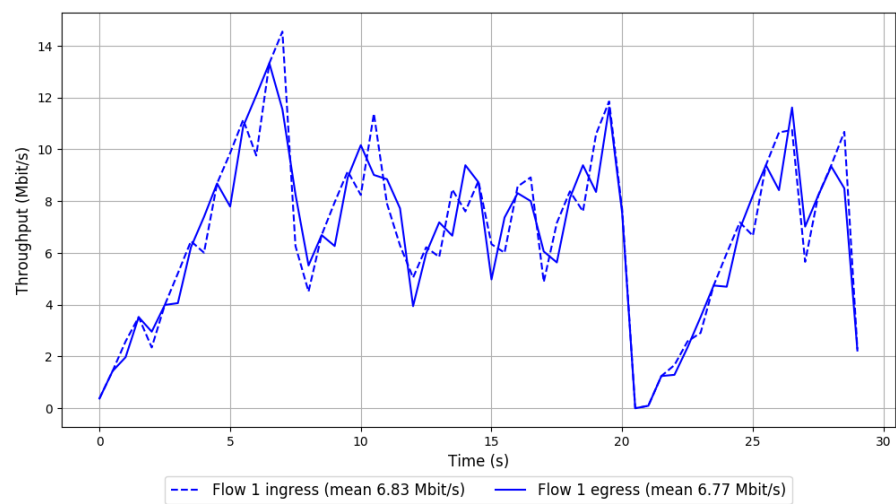
-- Flow 1:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 54.347 ms

Loss rate: 1.24%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-02 05:29:10

End at: 2018-01-02 05:29:40

Below is generated by plot.py at 2018-01-02 07:40:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.34 Mbit/s

95th percentile per-packet one-way delay: 54.791 ms

Loss rate: 1.00%

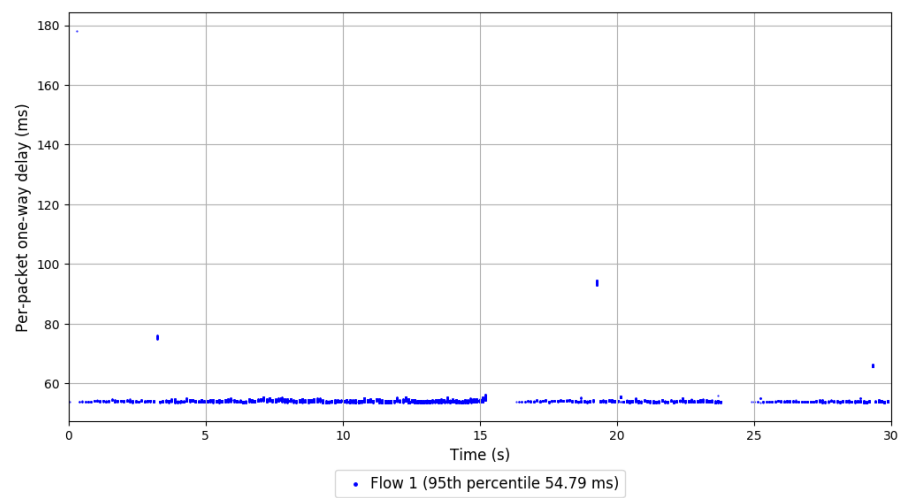
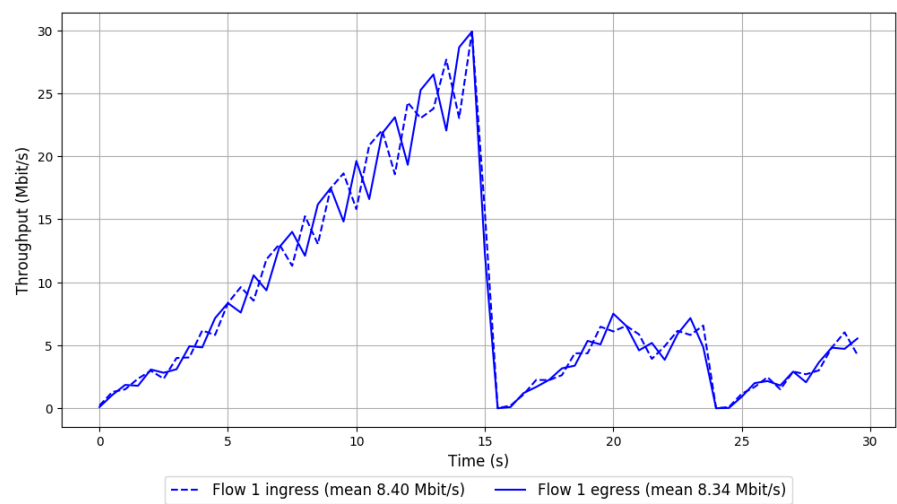
-- Flow 1:

Average throughput: 8.34 Mbit/s

95th percentile per-packet one-way delay: 54.791 ms

Loss rate: 1.00%

Run 10: Report of LEDBAT — Data Link

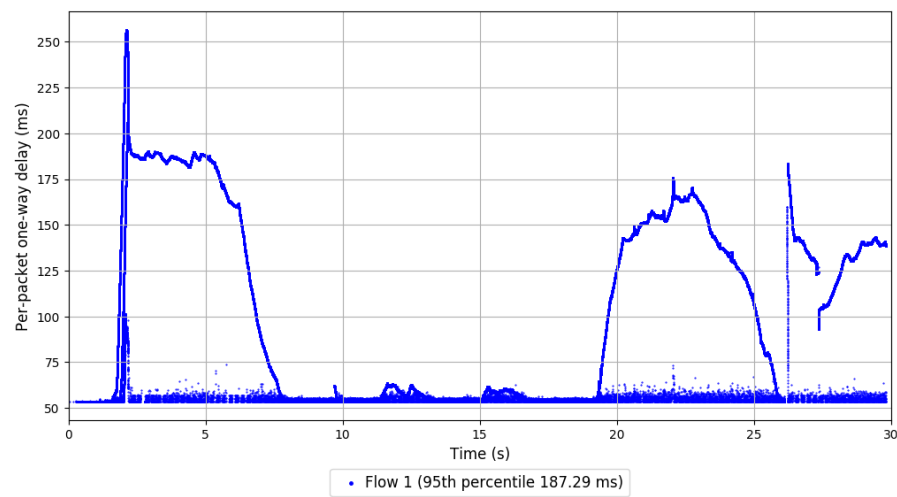
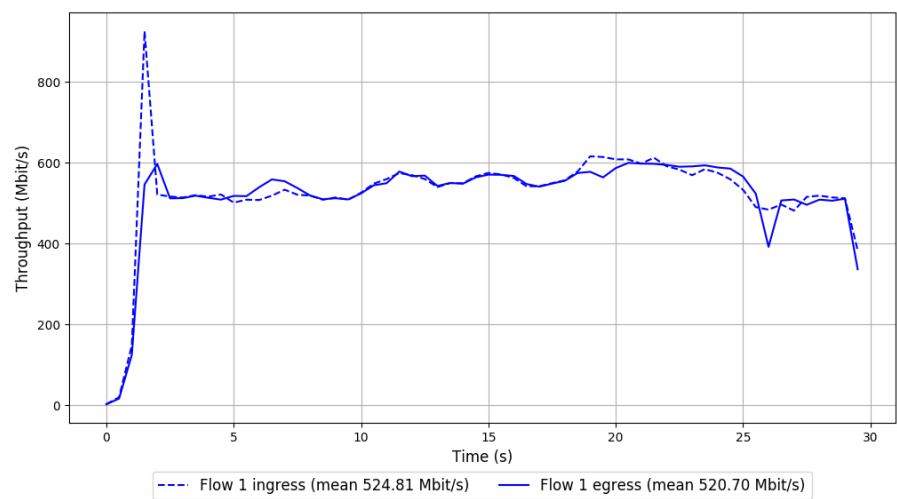


```
Run 1: Statistics of PCC

Start at: 2018-01-02 03:49:42
End at: 2018-01-02 03:50:12

# Below is generated by plot.py at 2018-01-02 07:48:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 520.70 Mbit/s
95th percentile per-packet one-way delay: 187.295 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 520.70 Mbit/s
95th percentile per-packet one-way delay: 187.295 ms
Loss rate: 1.13%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-02 04:01:21

End at: 2018-01-02 04:01:51

Below is generated by plot.py at 2018-01-02 07:48:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 534.84 Mbit/s

95th percentile per-packet one-way delay: 175.241 ms

Loss rate: 0.96%

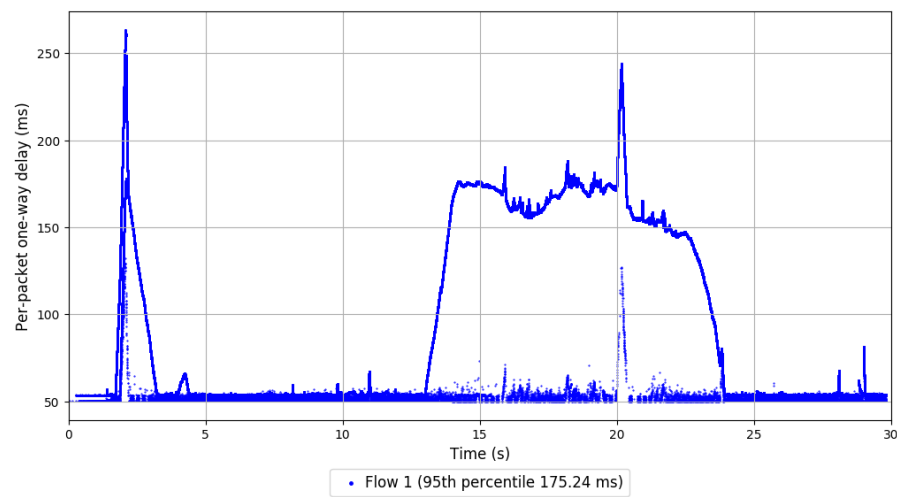
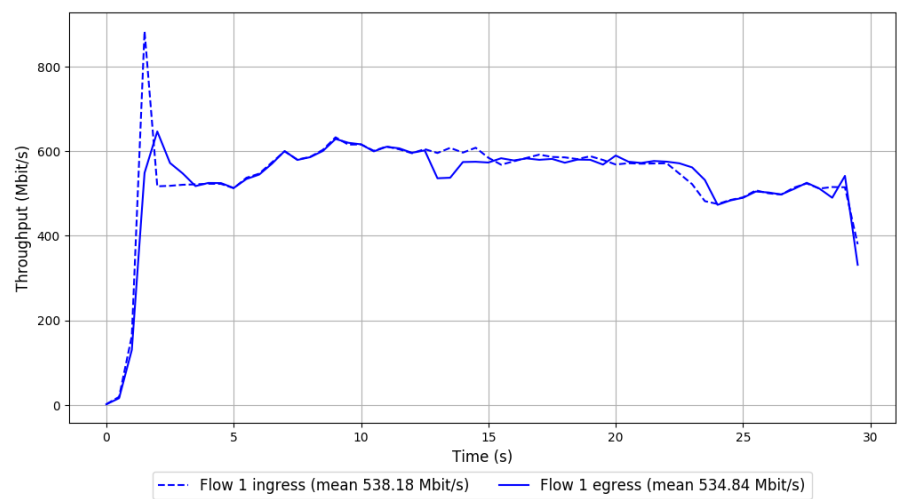
-- Flow 1:

Average throughput: 534.84 Mbit/s

95th percentile per-packet one-way delay: 175.241 ms

Loss rate: 0.96%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-02 04:12:57

End at: 2018-01-02 04:13:27

Below is generated by plot.py at 2018-01-02 07:48:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 526.27 Mbit/s

95th percentile per-packet one-way delay: 79.045 ms

Loss rate: 0.74%

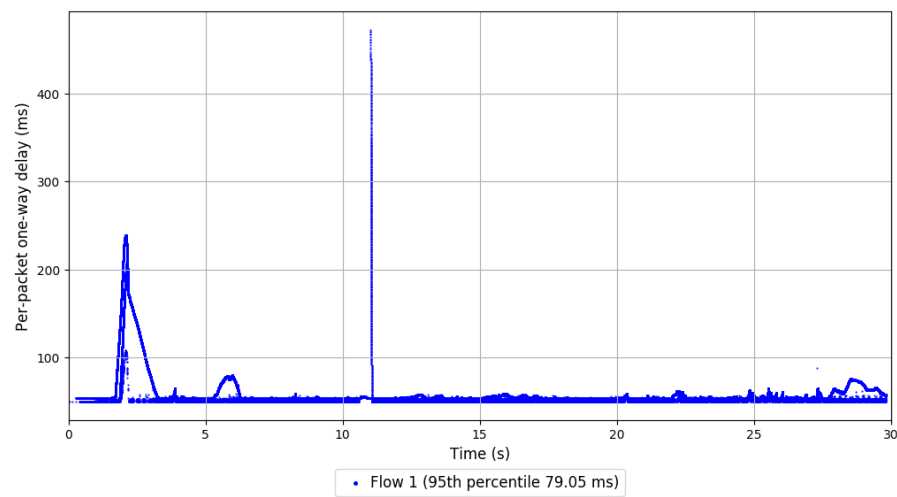
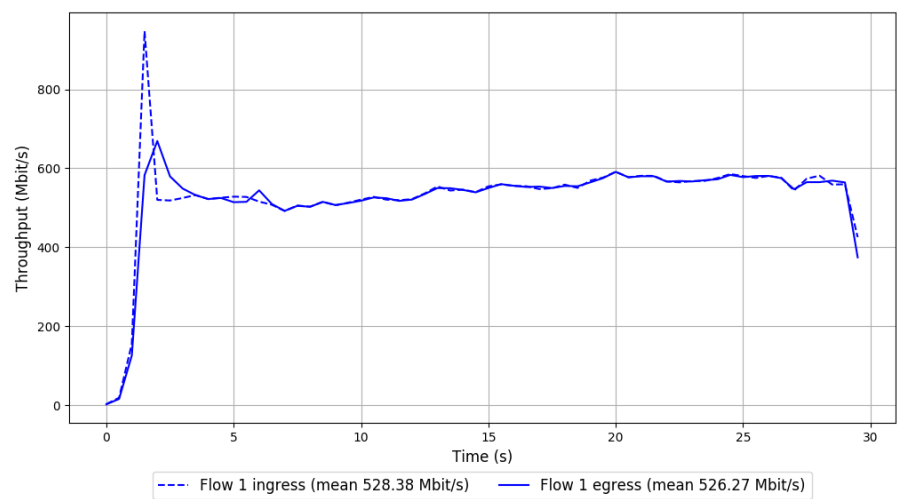
-- Flow 1:

Average throughput: 526.27 Mbit/s

95th percentile per-packet one-way delay: 79.045 ms

Loss rate: 0.74%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-02 04:24:40

End at: 2018-01-02 04:25:10

Below is generated by plot.py at 2018-01-02 07:49:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 536.35 Mbit/s

95th percentile per-packet one-way delay: 164.798 ms

Loss rate: 0.83%

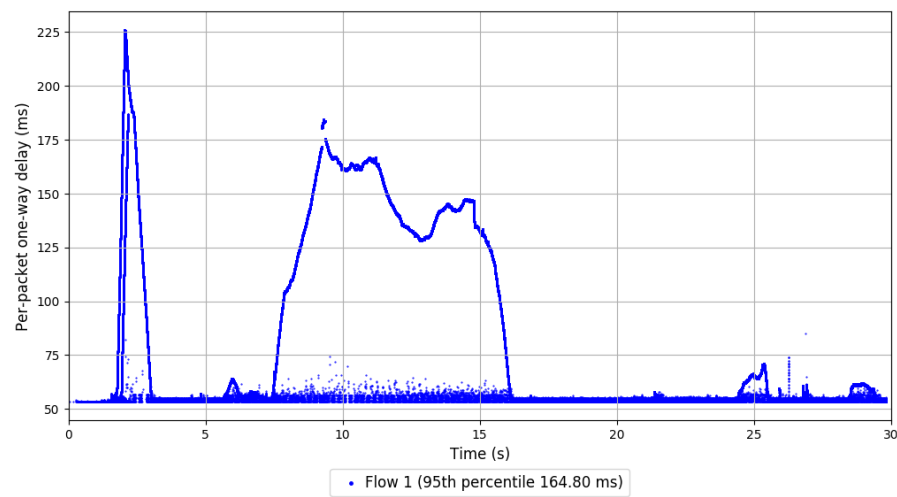
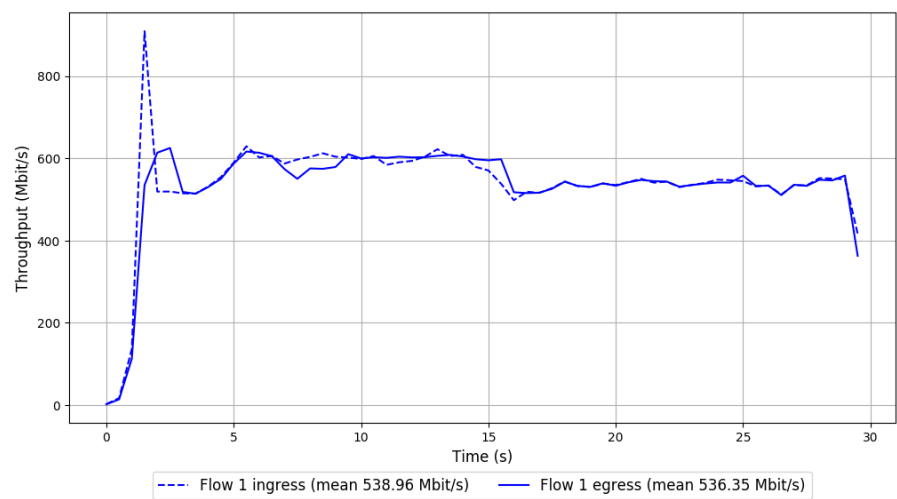
-- Flow 1:

Average throughput: 536.35 Mbit/s

95th percentile per-packet one-way delay: 164.798 ms

Loss rate: 0.83%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-02 04:36:09

End at: 2018-01-02 04:36:39

Below is generated by plot.py at 2018-01-02 07:49:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 495.93 Mbit/s

95th percentile per-packet one-way delay: 121.868 ms

Loss rate: 0.55%

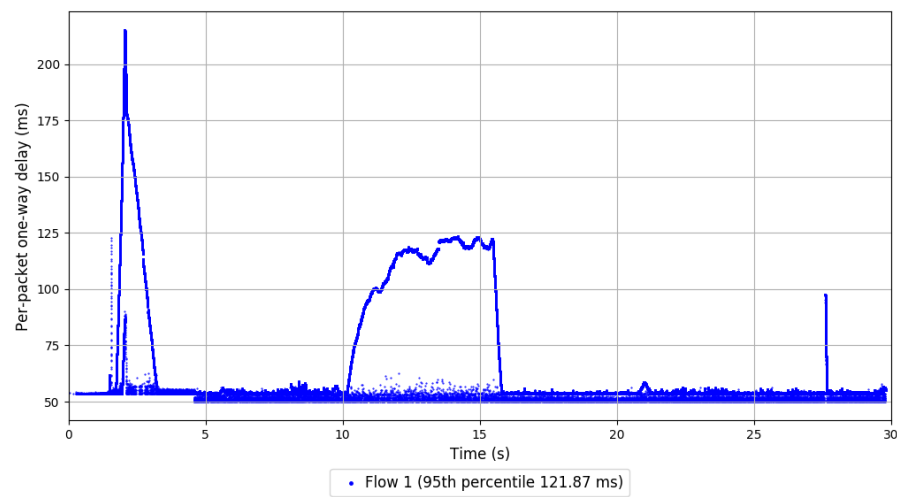
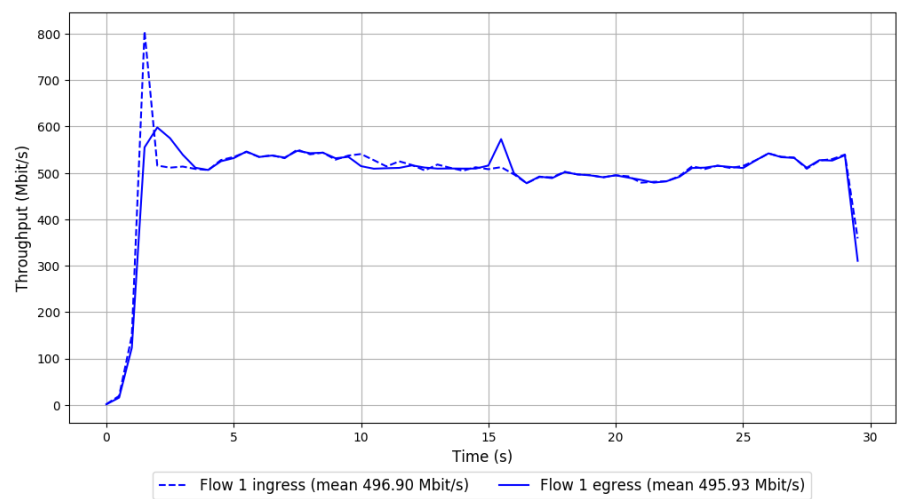
-- Flow 1:

Average throughput: 495.93 Mbit/s

95th percentile per-packet one-way delay: 121.868 ms

Loss rate: 0.55%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-02 04:47:10

End at: 2018-01-02 04:47:40

Below is generated by plot.py at 2018-01-02 07:49:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 384.73 Mbit/s

95th percentile per-packet one-way delay: 73.879 ms

Loss rate: 0.40%

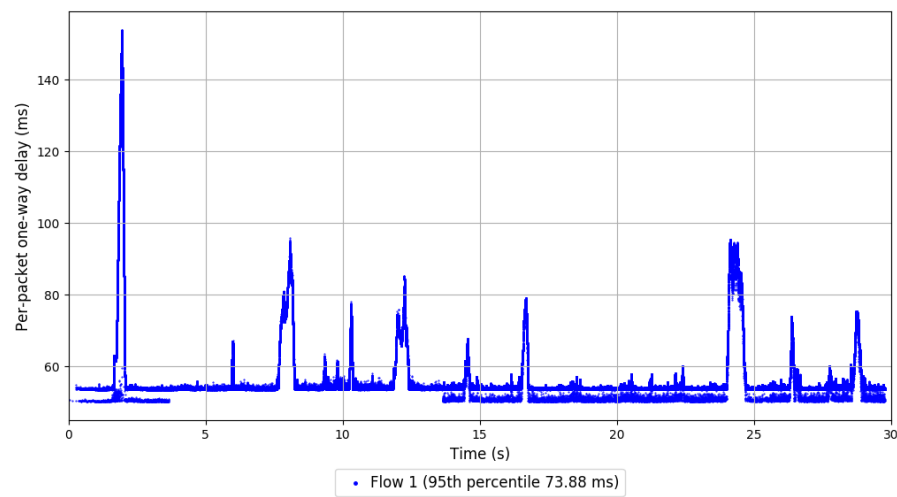
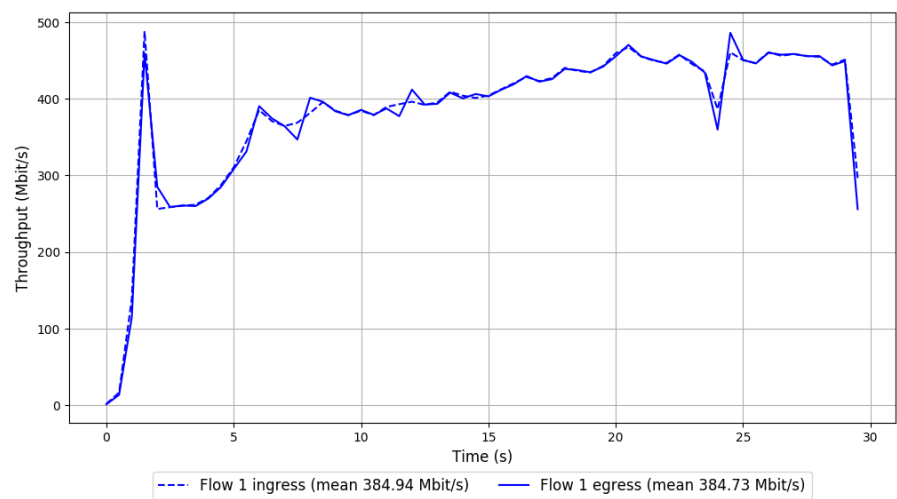
-- Flow 1:

Average throughput: 384.73 Mbit/s

95th percentile per-packet one-way delay: 73.879 ms

Loss rate: 0.40%

Run 6: Report of PCC — Data Link

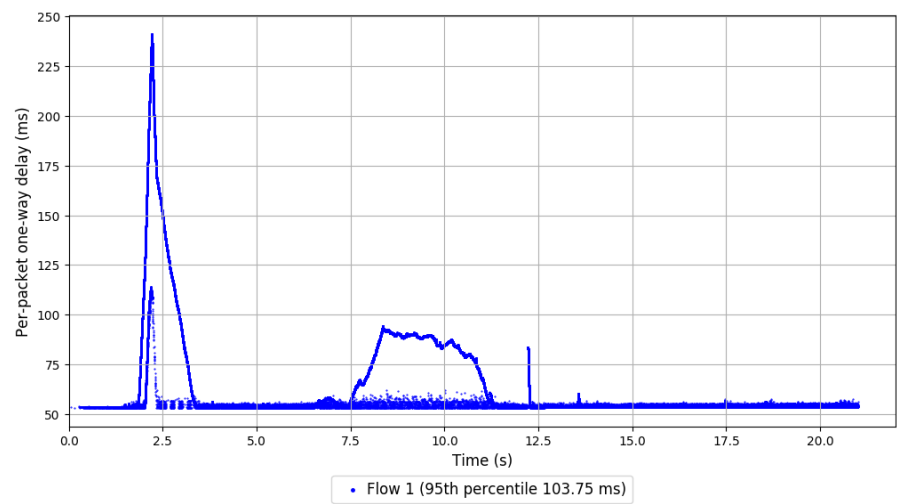
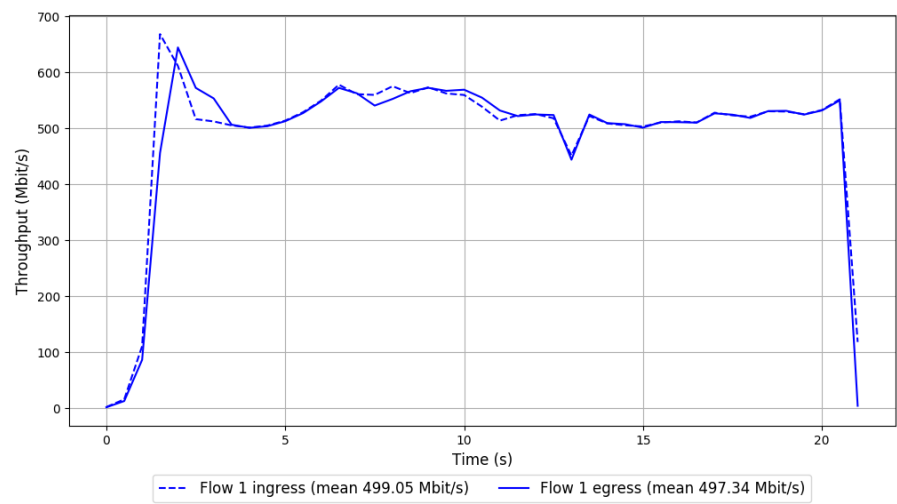


Run 7: Statistics of PCC

Start at: 2018-01-02 04:58:02

End at: 2018-01-02 04:58:32

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-02 05:09:20

End at: 2018-01-02 05:09:50

Below is generated by plot.py at 2018-01-02 07:49:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 505.00 Mbit/s

95th percentile per-packet one-way delay: 79.273 ms

Loss rate: 0.62%

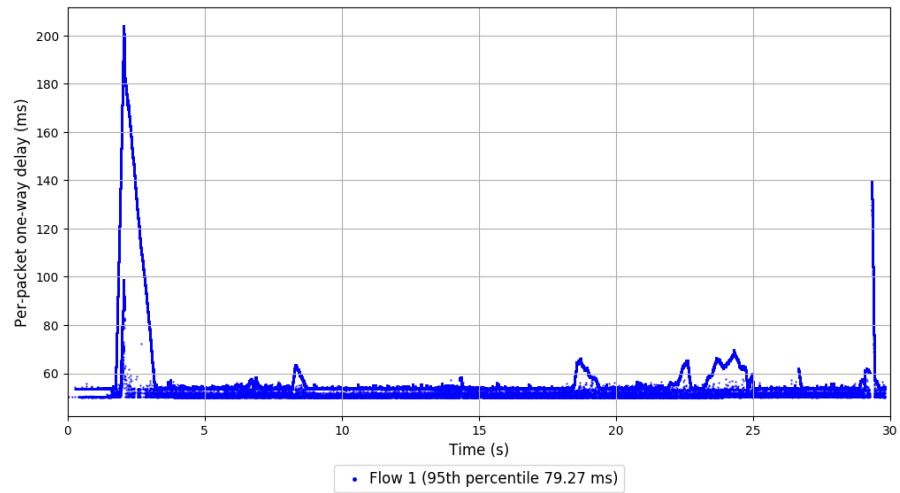
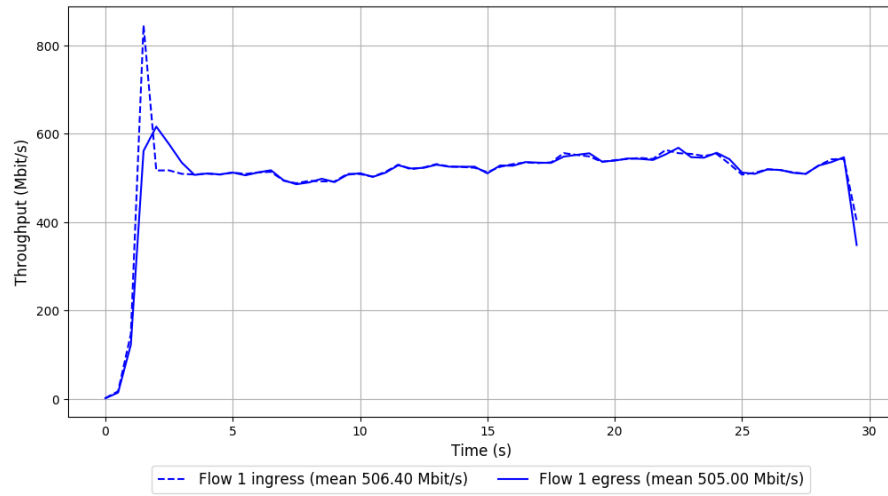
-- Flow 1:

Average throughput: 505.00 Mbit/s

95th percentile per-packet one-way delay: 79.273 ms

Loss rate: 0.62%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-02 05:20:32

End at: 2018-01-02 05:21:02

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 551.74 Mbit/s

95th percentile per-packet one-way delay: 170.397 ms

Loss rate: 1.12%

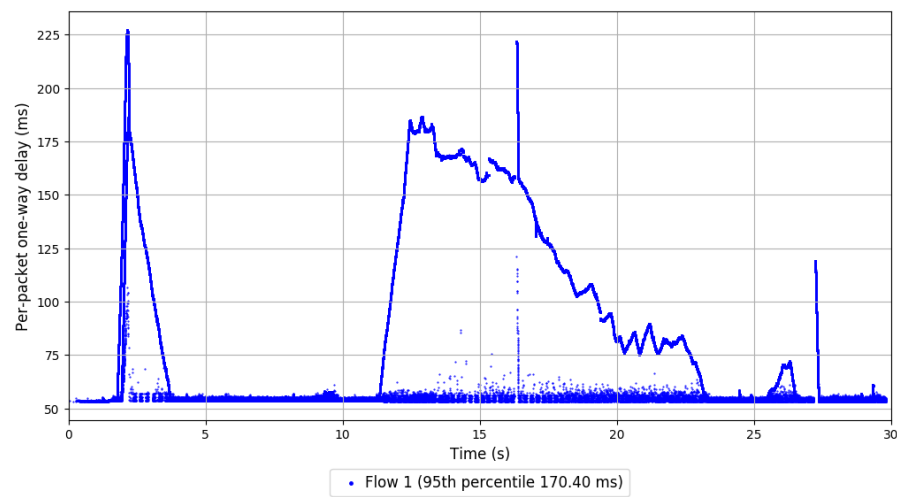
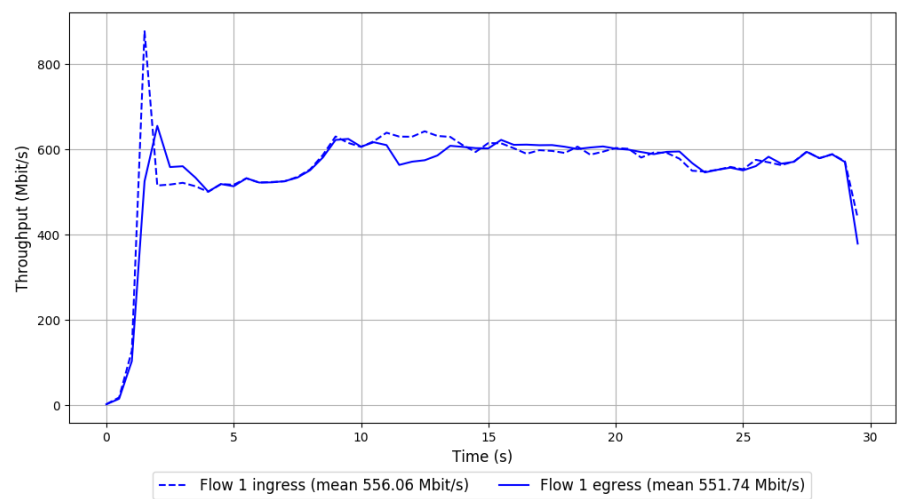
-- Flow 1:

Average throughput: 551.74 Mbit/s

95th percentile per-packet one-way delay: 170.397 ms

Loss rate: 1.12%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-02 05:31:23

End at: 2018-01-02 05:31:53

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 498.27 Mbit/s

95th percentile per-packet one-way delay: 182.796 ms

Loss rate: 0.60%

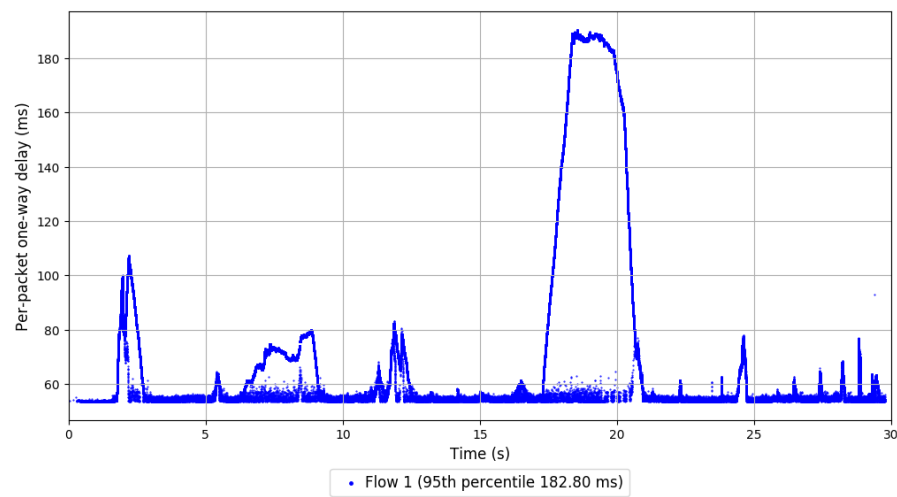
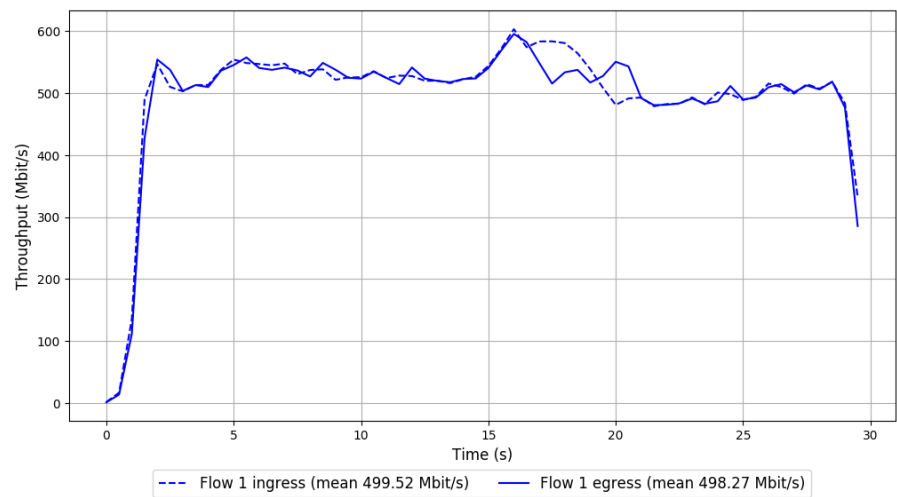
-- Flow 1:

Average throughput: 498.27 Mbit/s

95th percentile per-packet one-way delay: 182.796 ms

Loss rate: 0.60%

Run 10: Report of PCC — Data Link

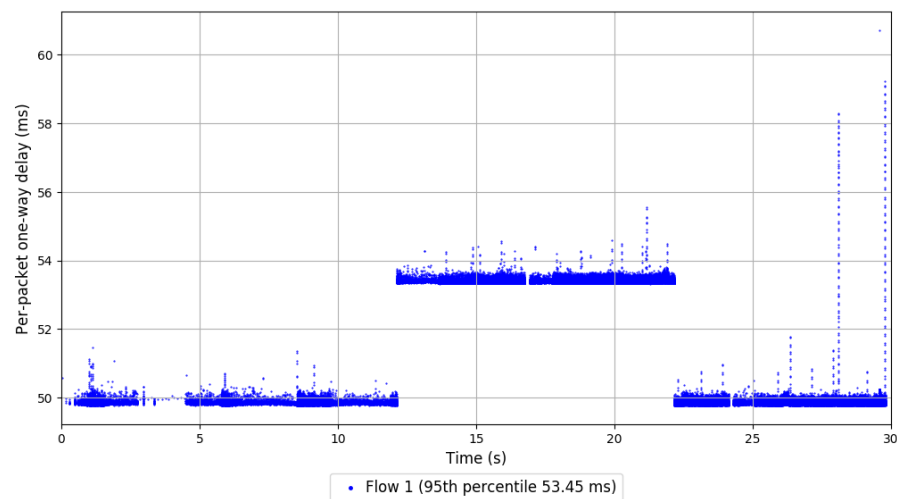
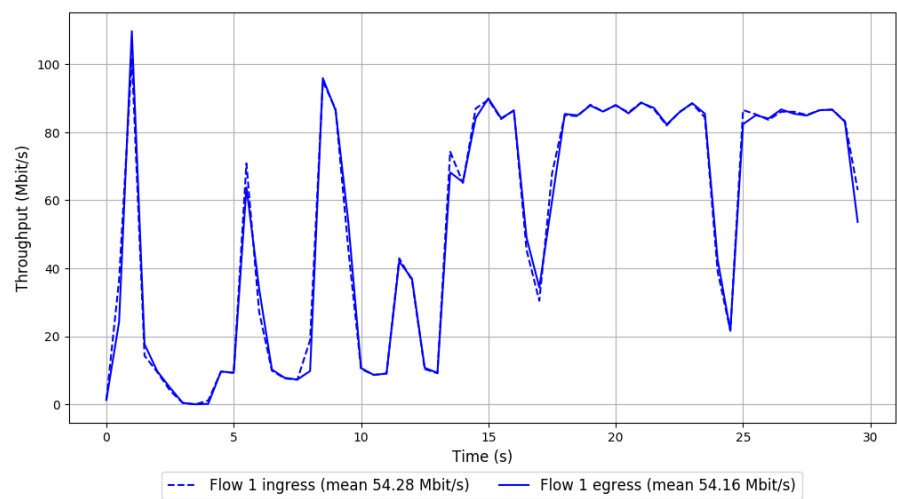


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-02 03:46:21
End at: 2018-01-02 03:46:51

# Below is generated by plot.py at 2018-01-02 07:56:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.16 Mbit/s
95th percentile per-packet one-way delay: 53.452 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 54.16 Mbit/s
95th percentile per-packet one-way delay: 53.452 ms
Loss rate: 0.56%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-02 03:57:58

End at: 2018-01-02 03:58:28

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.61 Mbit/s

95th percentile per-packet one-way delay: 53.476 ms

Loss rate: 0.54%

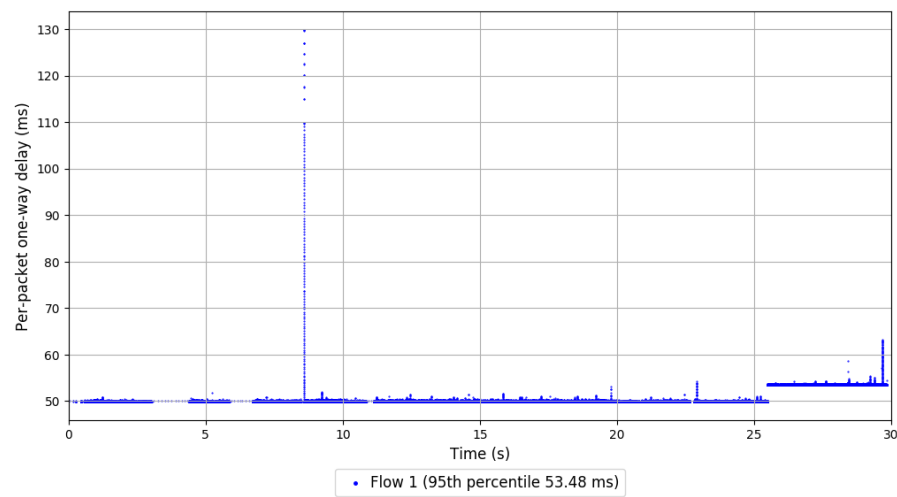
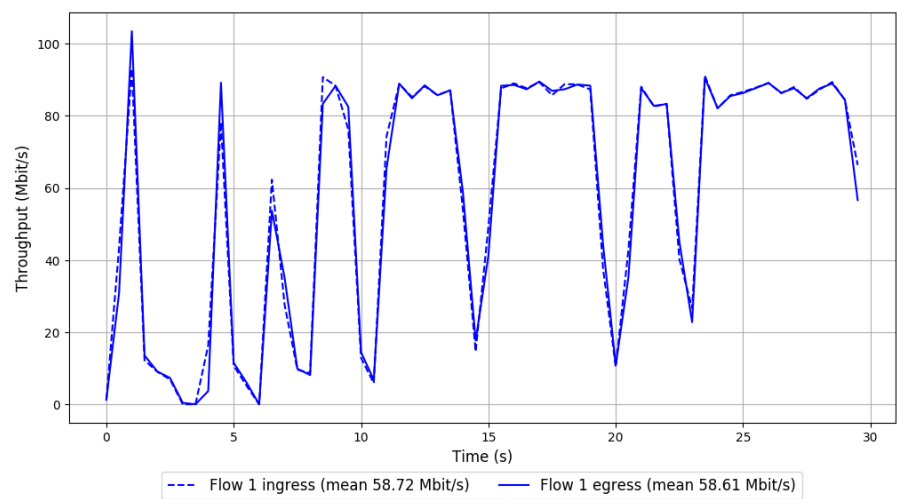
-- Flow 1:

Average throughput: 58.61 Mbit/s

95th percentile per-packet one-way delay: 53.476 ms

Loss rate: 0.54%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-02 04:09:36

End at: 2018-01-02 04:10:06

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.35 Mbit/s

95th percentile per-packet one-way delay: 50.577 ms

Loss rate: 0.55%

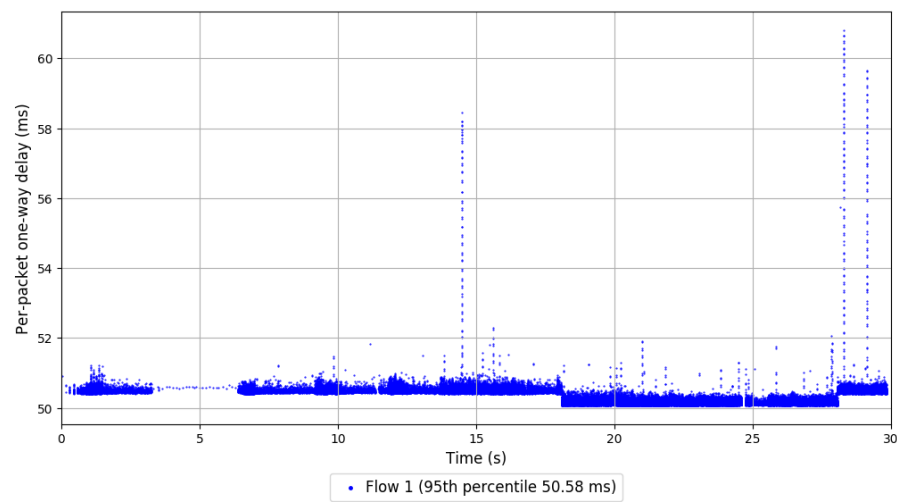
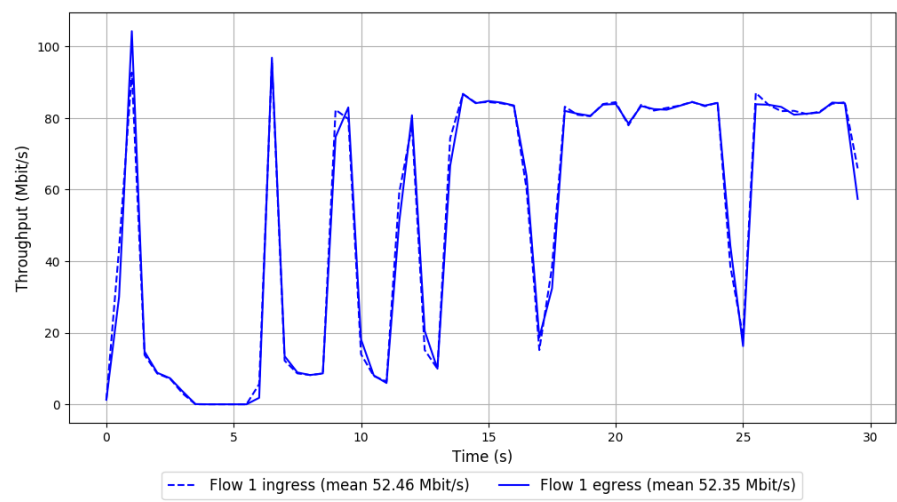
-- Flow 1:

Average throughput: 52.35 Mbit/s

95th percentile per-packet one-way delay: 50.577 ms

Loss rate: 0.55%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-02 04:21:19

End at: 2018-01-02 04:21:49

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.01 Mbit/s

95th percentile per-packet one-way delay: 53.590 ms

Loss rate: 0.50%

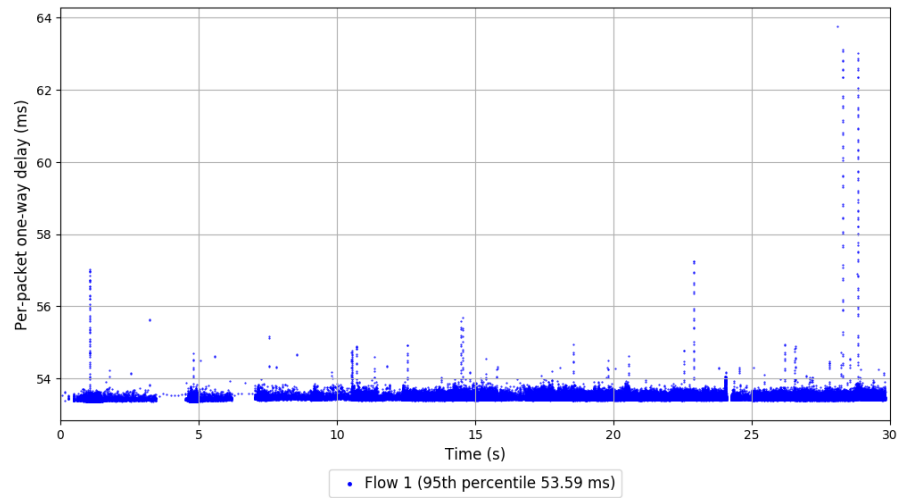
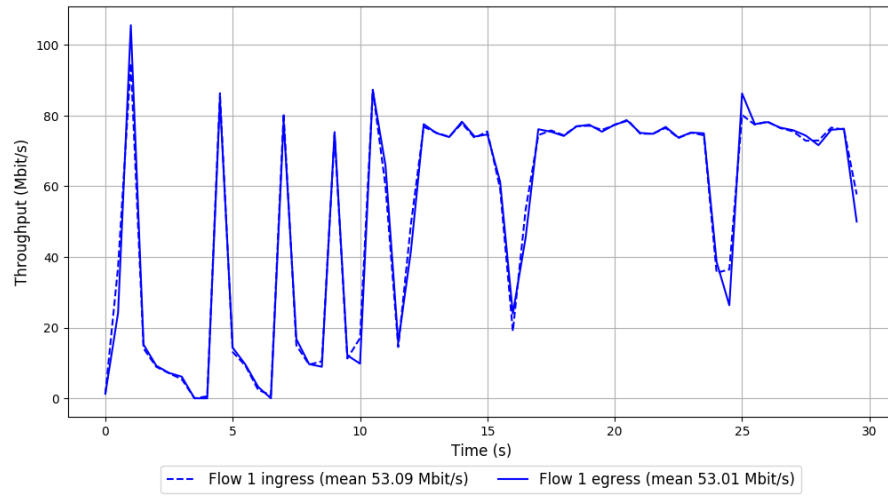
-- Flow 1:

Average throughput: 53.01 Mbit/s

95th percentile per-packet one-way delay: 53.590 ms

Loss rate: 0.50%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-02 04:32:49

End at: 2018-01-02 04:33:19

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.34 Mbit/s

95th percentile per-packet one-way delay: 53.448 ms

Loss rate: 0.49%

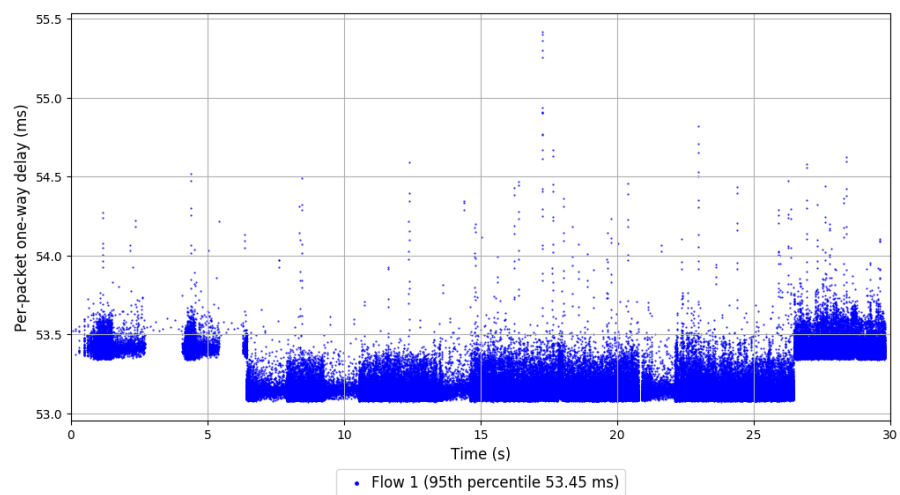
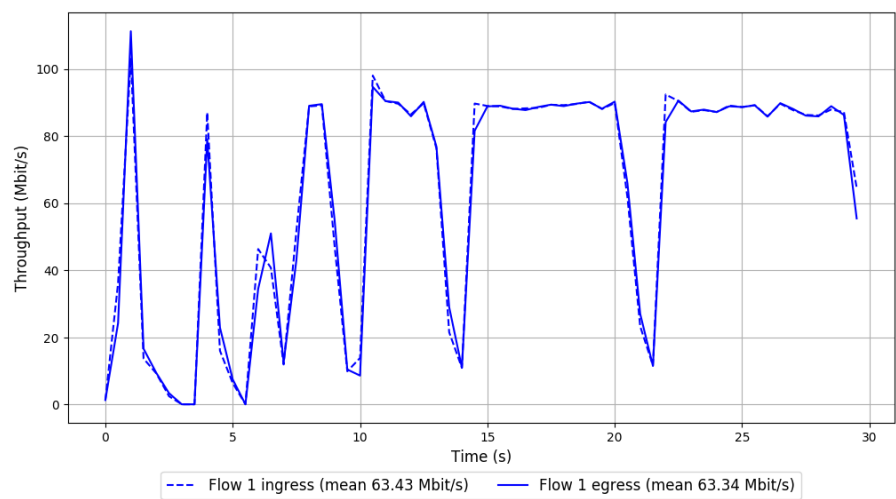
-- Flow 1:

Average throughput: 63.34 Mbit/s

95th percentile per-packet one-way delay: 53.448 ms

Loss rate: 0.49%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-02 04:44:20

End at: 2018-01-02 04:44:50

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.72 Mbit/s

95th percentile per-packet one-way delay: 53.632 ms

Loss rate: 0.43%

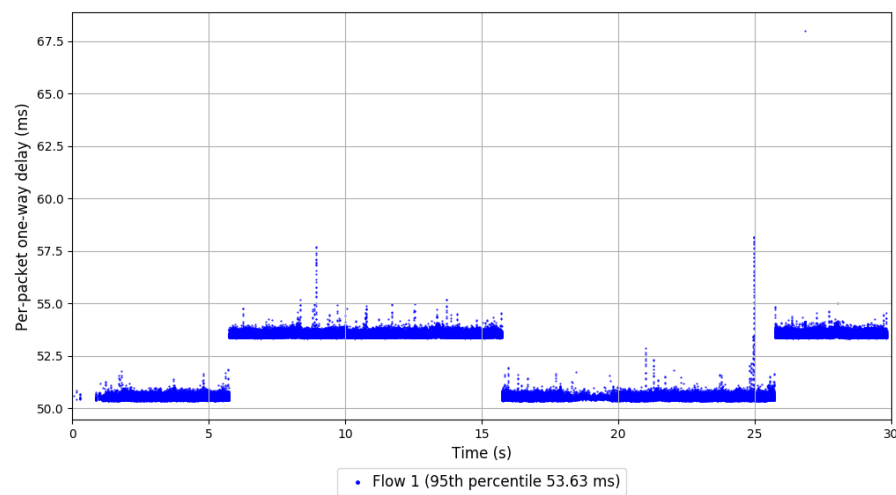
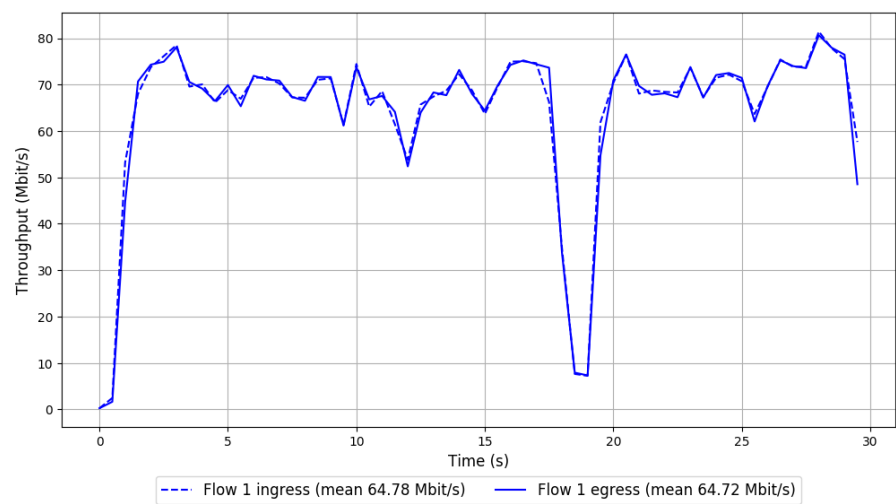
-- Flow 1:

Average throughput: 64.72 Mbit/s

95th percentile per-packet one-way delay: 53.632 ms

Loss rate: 0.43%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-02 04:55:08

End at: 2018-01-02 04:55:38

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.00 Mbit/s

95th percentile per-packet one-way delay: 53.682 ms

Loss rate: 0.39%

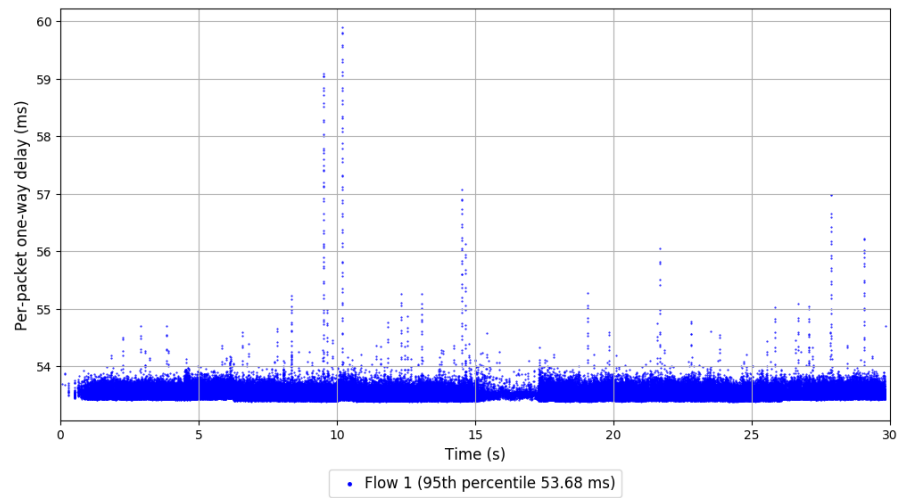
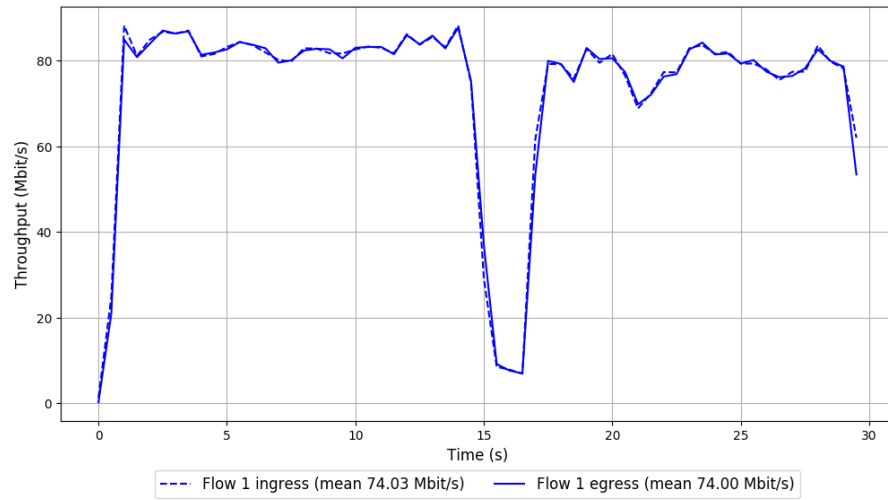
-- Flow 1:

Average throughput: 74.00 Mbit/s

95th percentile per-packet one-way delay: 53.682 ms

Loss rate: 0.39%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-02 05:06:11

End at: 2018-01-02 05:06:41

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.72 Mbit/s

95th percentile per-packet one-way delay: 53.592 ms

Loss rate: 0.42%

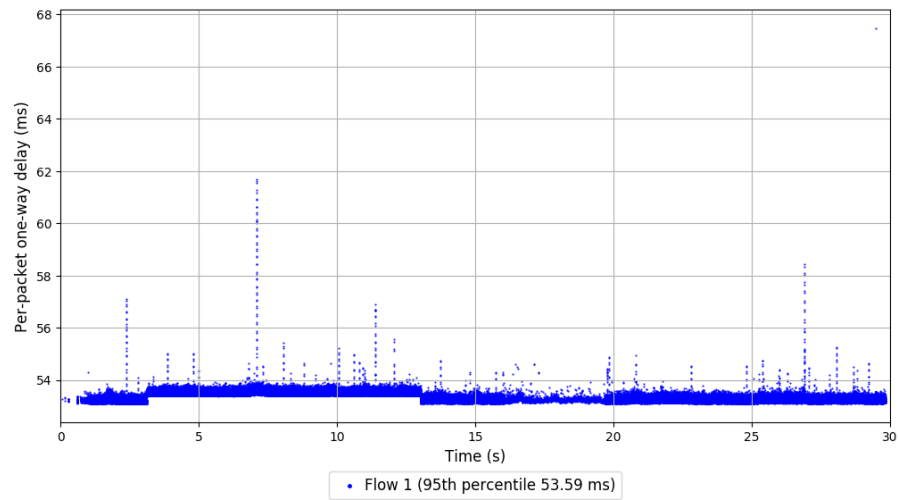
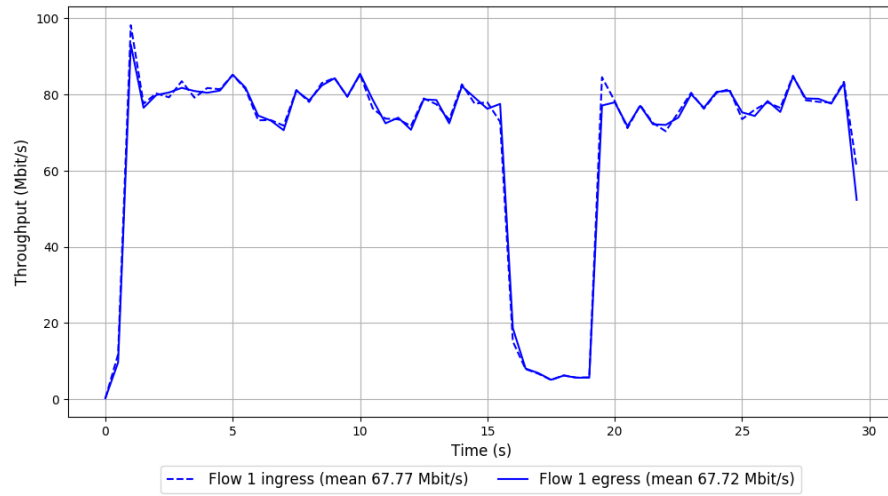
-- Flow 1:

Average throughput: 67.72 Mbit/s

95th percentile per-packet one-way delay: 53.592 ms

Loss rate: 0.42%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-02 05:17:34

End at: 2018-01-02 05:18:04

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.21 Mbit/s

95th percentile per-packet one-way delay: 53.670 ms

Loss rate: 0.38%

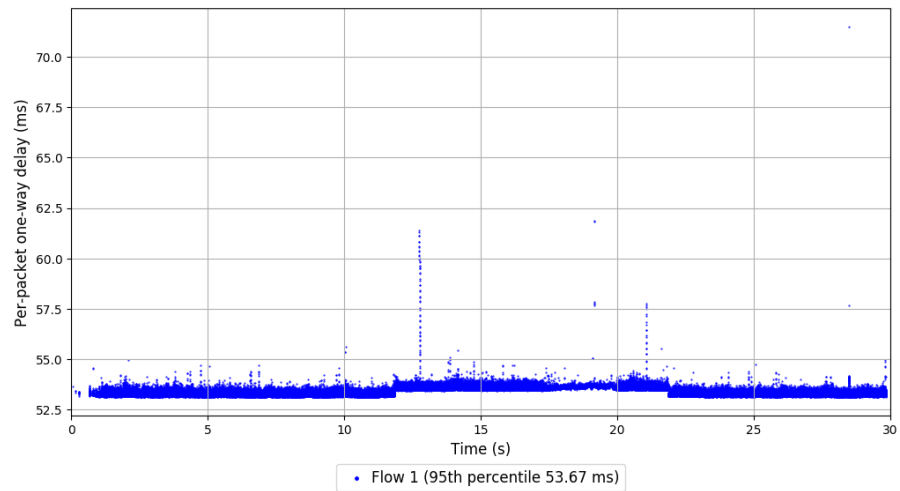
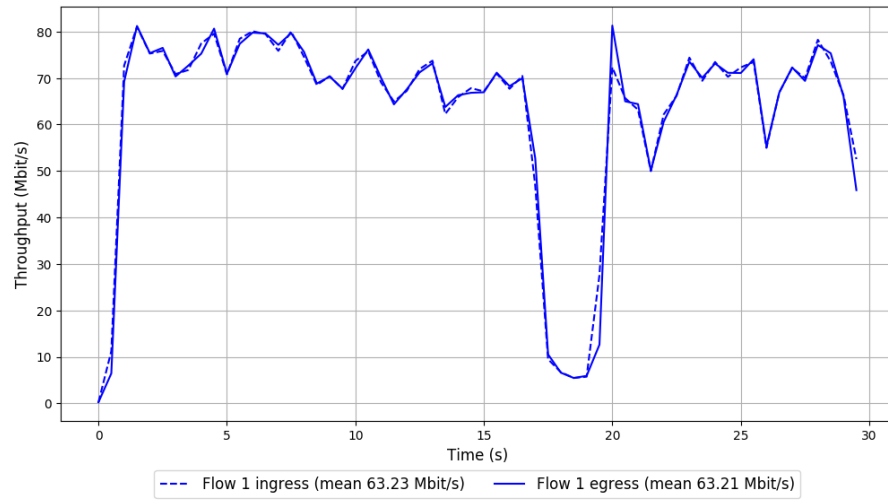
-- Flow 1:

Average throughput: 63.21 Mbit/s

95th percentile per-packet one-way delay: 53.670 ms

Loss rate: 0.38%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-02 05:28:30

End at: 2018-01-02 05:29:00

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.88 Mbit/s

95th percentile per-packet one-way delay: 53.755 ms

Loss rate: 0.38%

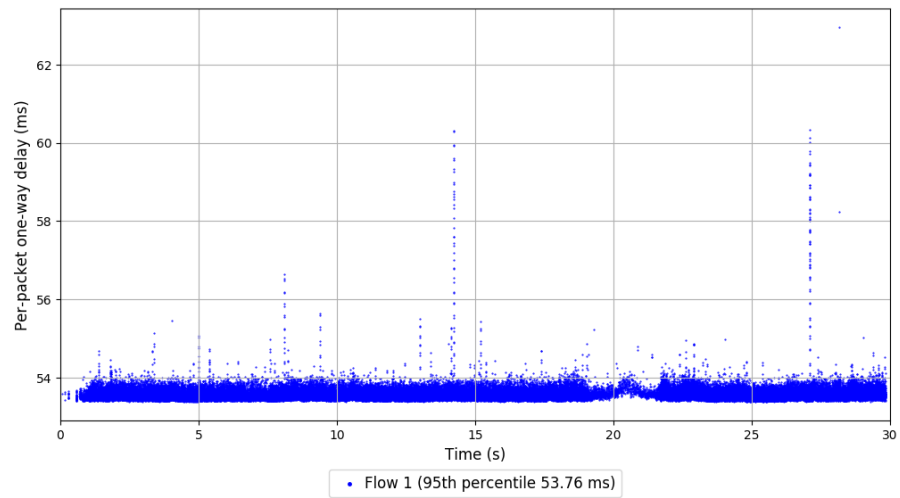
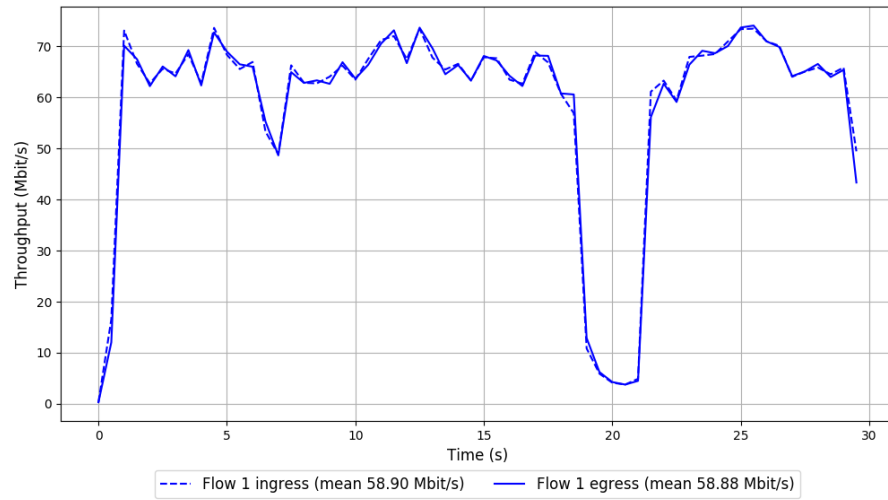
-- Flow 1:

Average throughput: 58.88 Mbit/s

95th percentile per-packet one-way delay: 53.755 ms

Loss rate: 0.38%

Run 10: Report of QUIC Cubic — Data Link

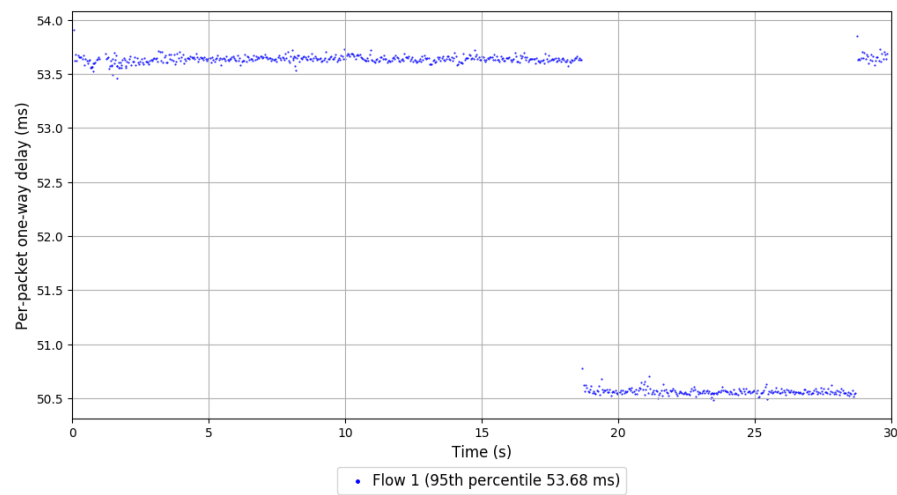
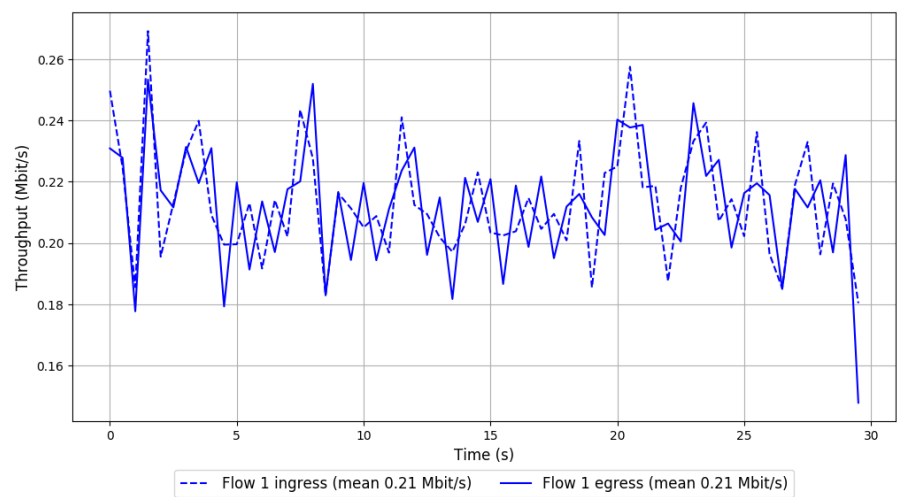


```
Run 1: Statistics of SCReAM

Start at: 2018-01-02 03:39:57
End at: 2018-01-02 03:40:27

# Below is generated by plot.py at 2018-01-02 07:56:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.682 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.682 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

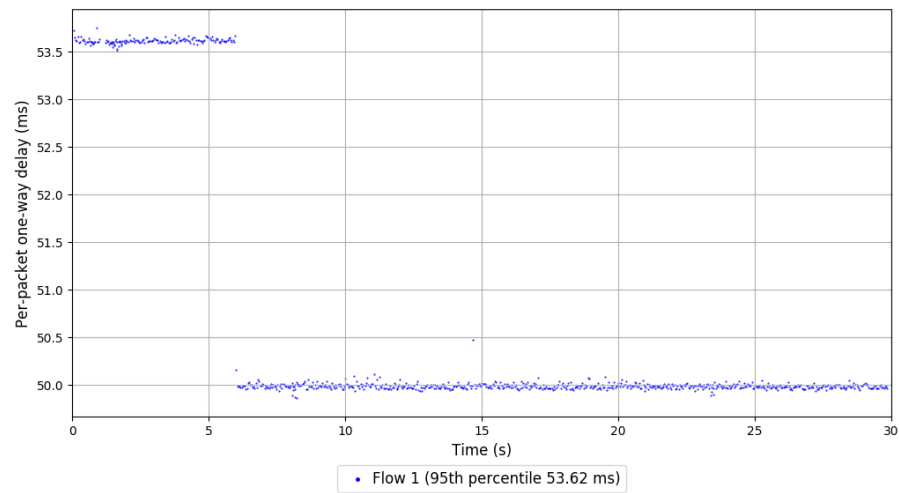
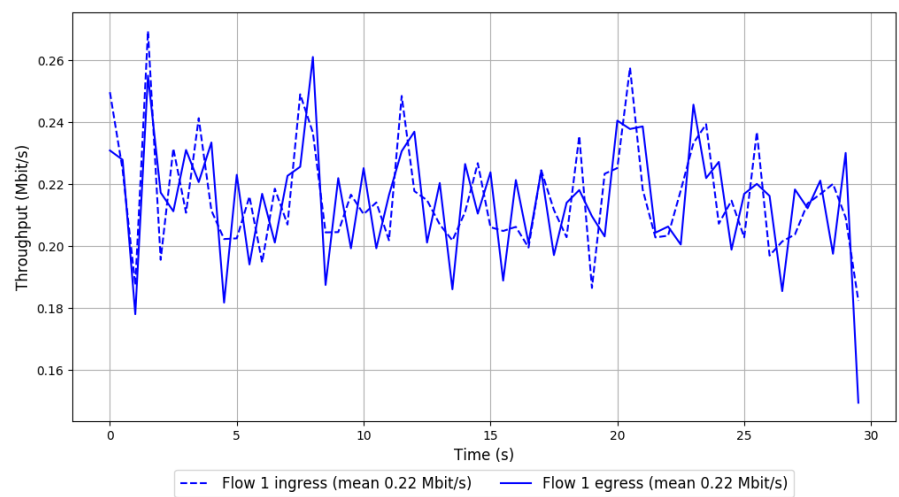


```
Run 2: Statistics of SCReAM

Start at: 2018-01-02 03:51:28
End at: 2018-01-02 03:51:58

# Below is generated by plot.py at 2018-01-02 07:56:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.625 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.625 ms
Loss rate: 0.38%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-02 04:03:06

End at: 2018-01-02 04:03:36

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.275 ms

Loss rate: 0.38%

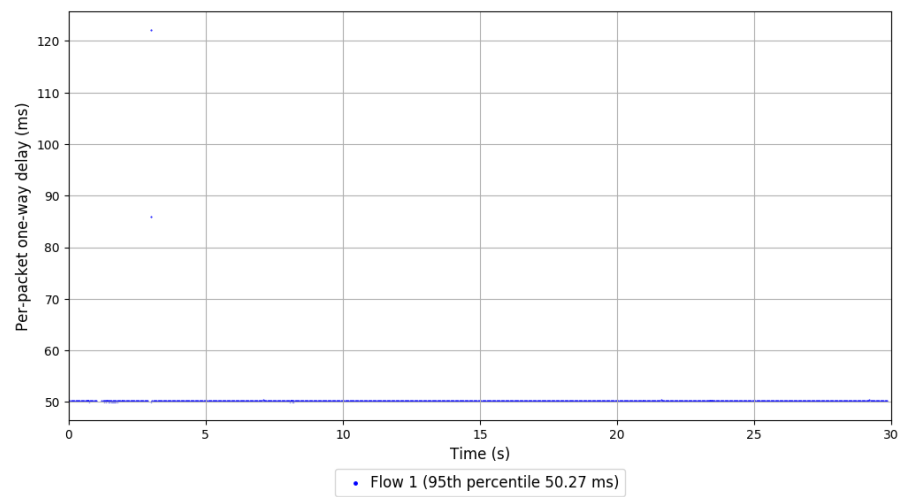
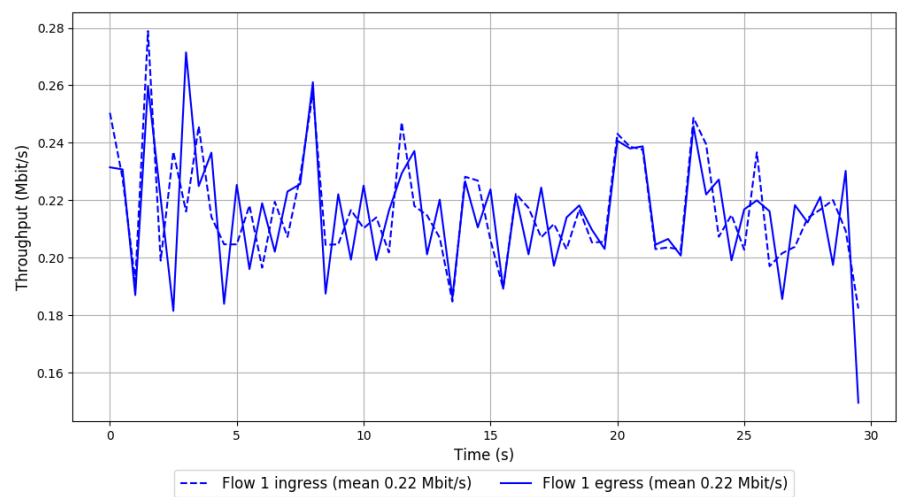
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.275 ms

Loss rate: 0.38%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-01-02 04:14:42

End at: 2018-01-02 04:15:12

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.692 ms

Loss rate: 0.38%

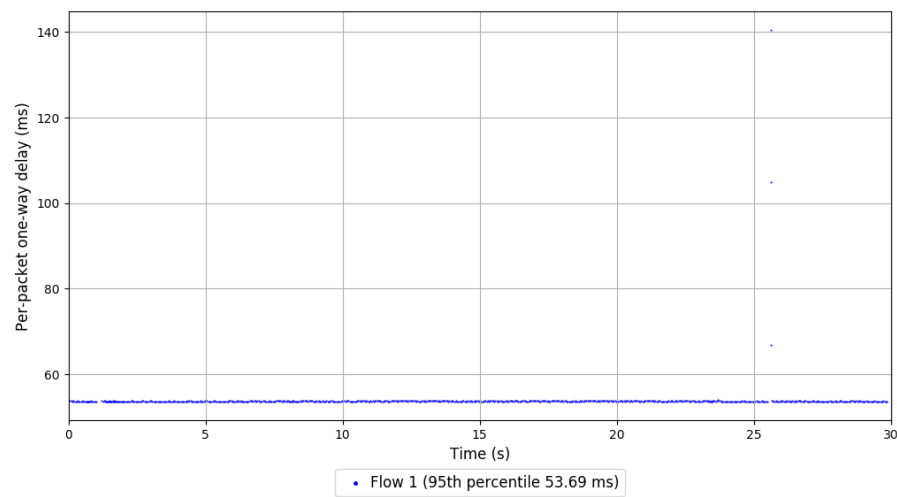
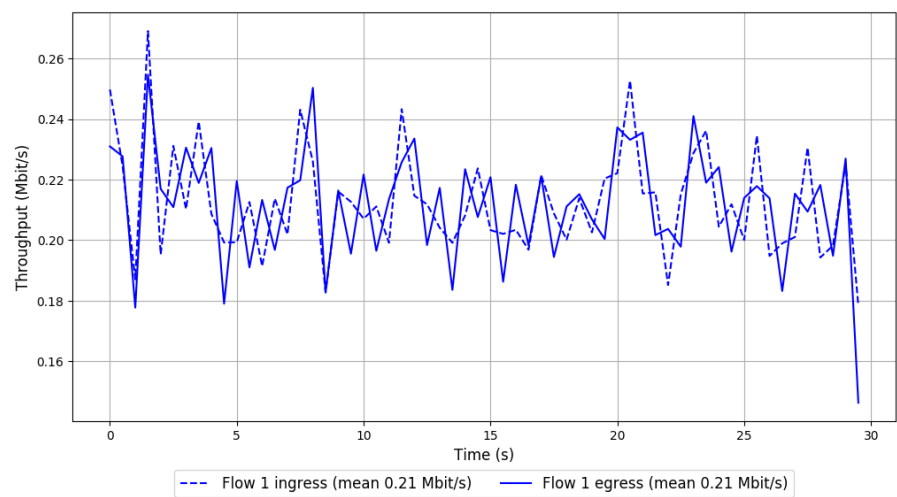
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.692 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-02 04:26:25

End at: 2018-01-02 04:26:55

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.584 ms

Loss rate: 0.38%

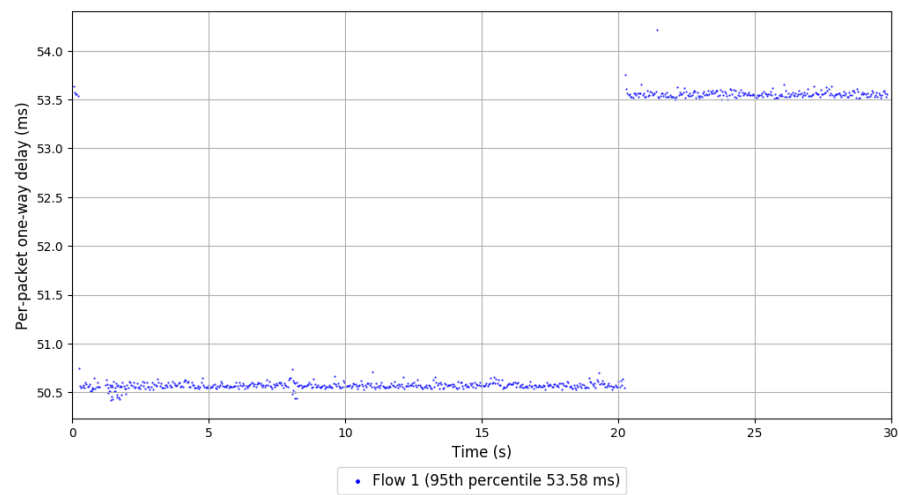
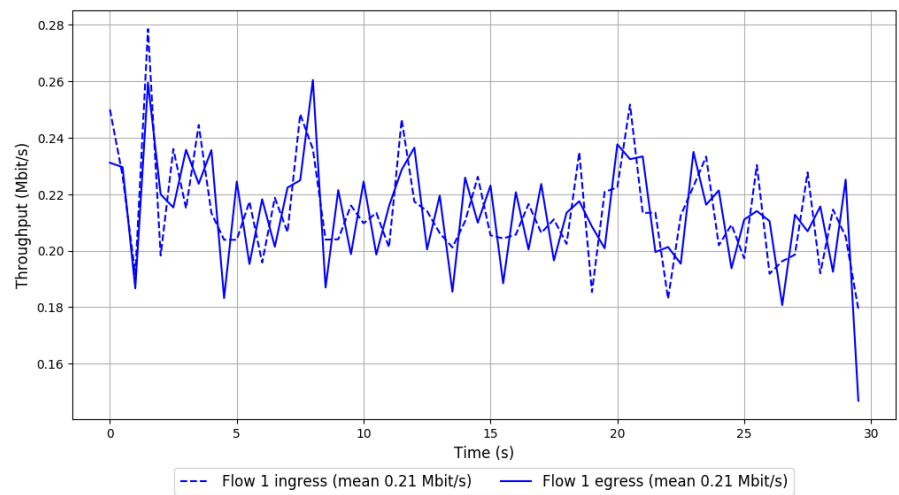
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.584 ms

Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-02 04:37:52

End at: 2018-01-02 04:38:22

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.639 ms

Loss rate: 0.38%

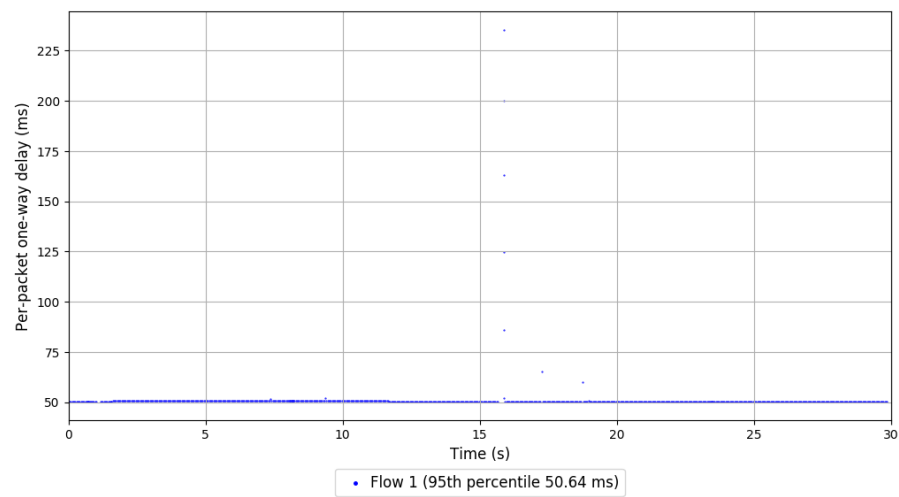
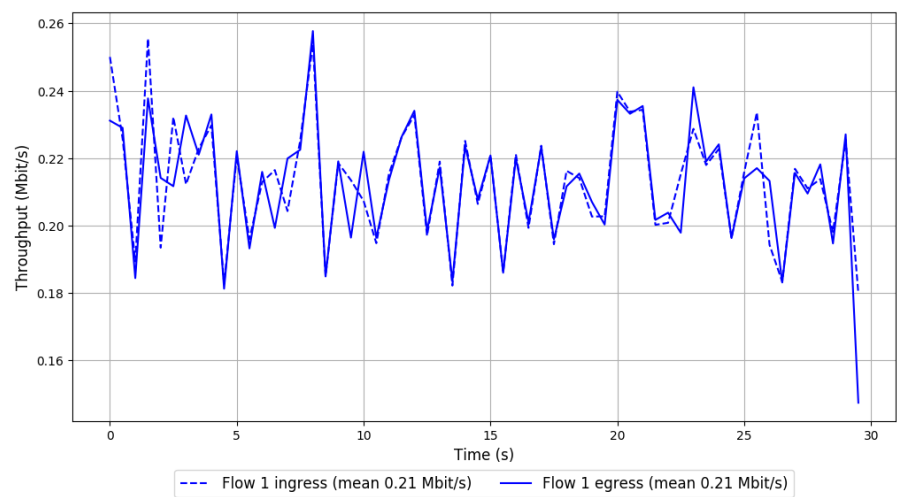
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.639 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-02 04:48:49

End at: 2018-01-02 04:49:19

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.619 ms

Loss rate: 0.38%

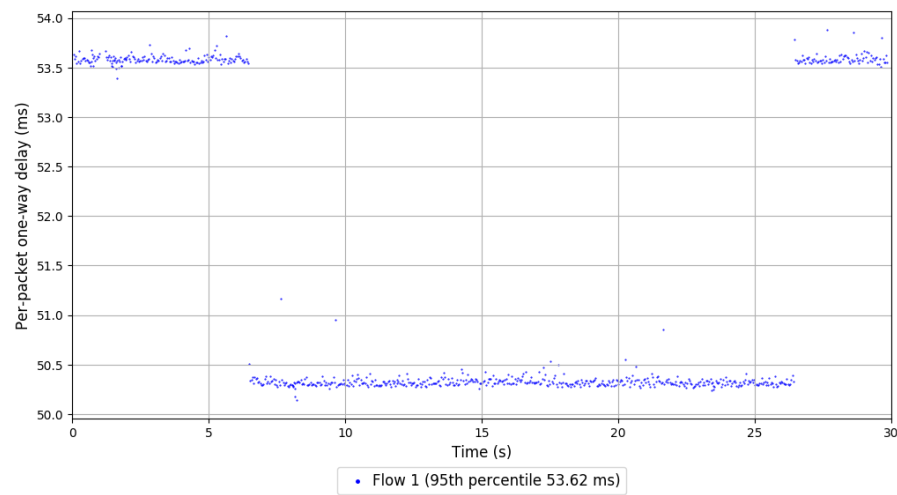
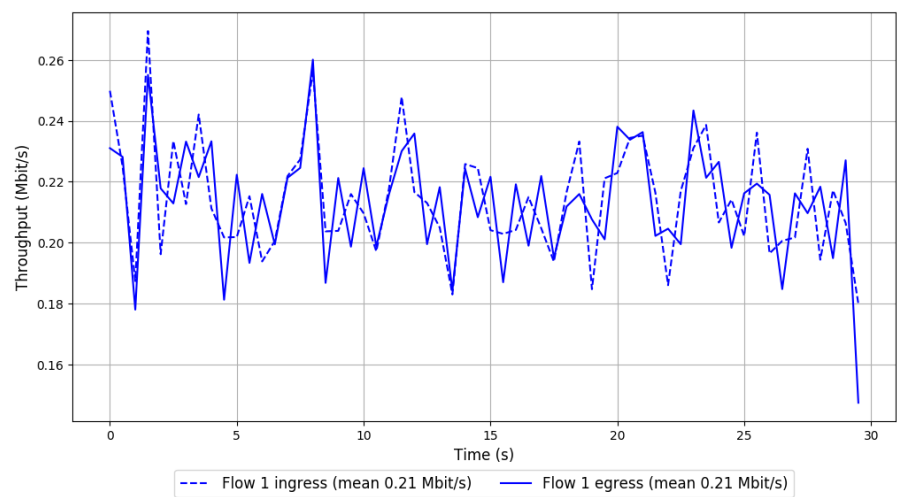
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.619 ms

Loss rate: 0.38%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-02 04:59:41

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

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.733 ms

Loss rate: 0.26%

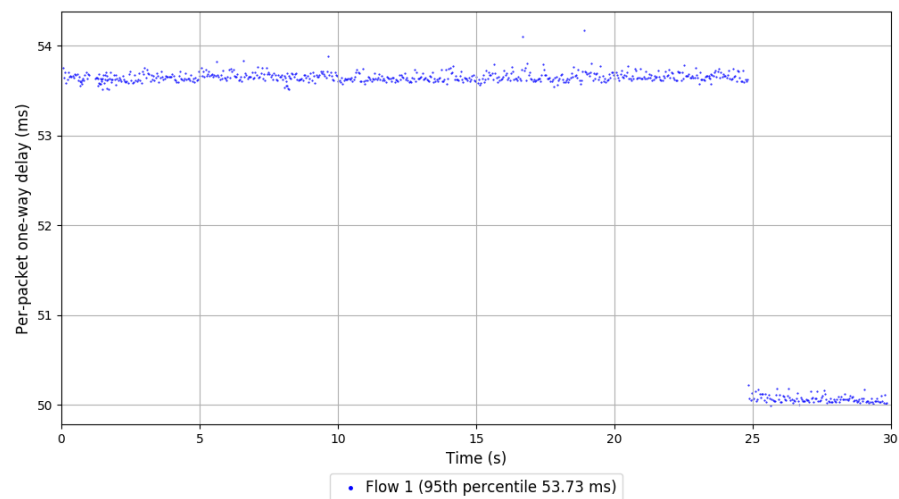
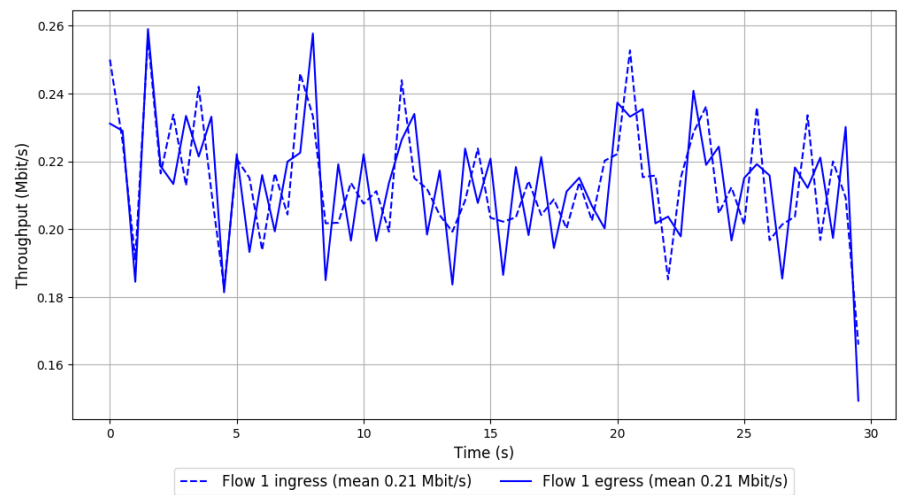
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.733 ms

Loss rate: 0.26%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-02 05:11:02

End at: 2018-01-02 05:11:33

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 53.424 ms

Loss rate: 0.26%

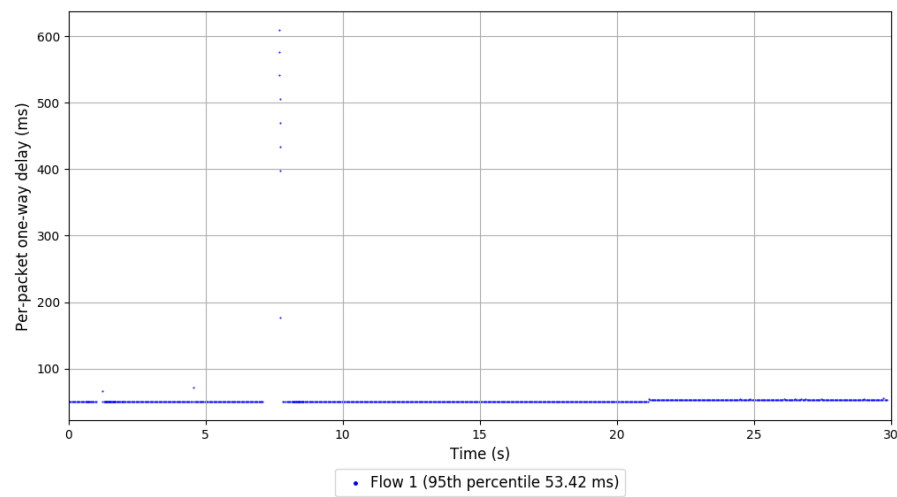
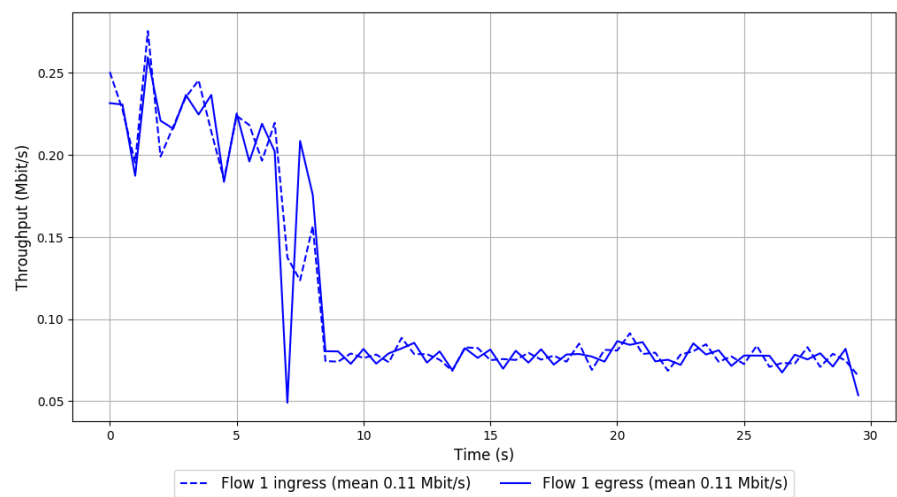
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 53.424 ms

Loss rate: 0.26%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-01-02 05:22:17

End at: 2018-01-02 05:22:47

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.258 ms

Loss rate: 0.38%

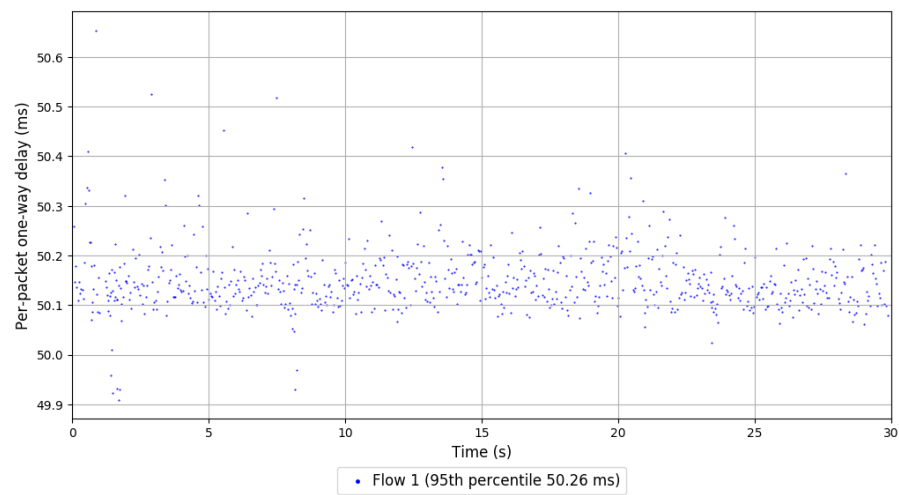
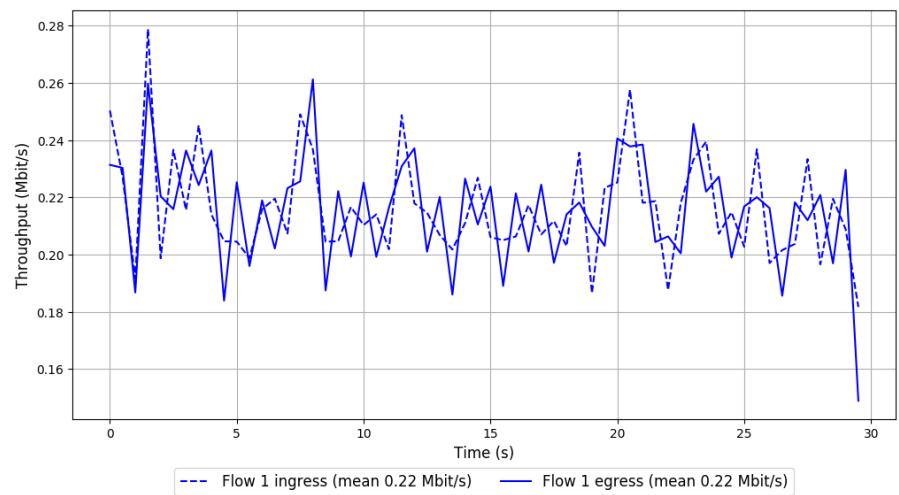
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.258 ms

Loss rate: 0.38%

Run 10: Report of SReAM — Data Link

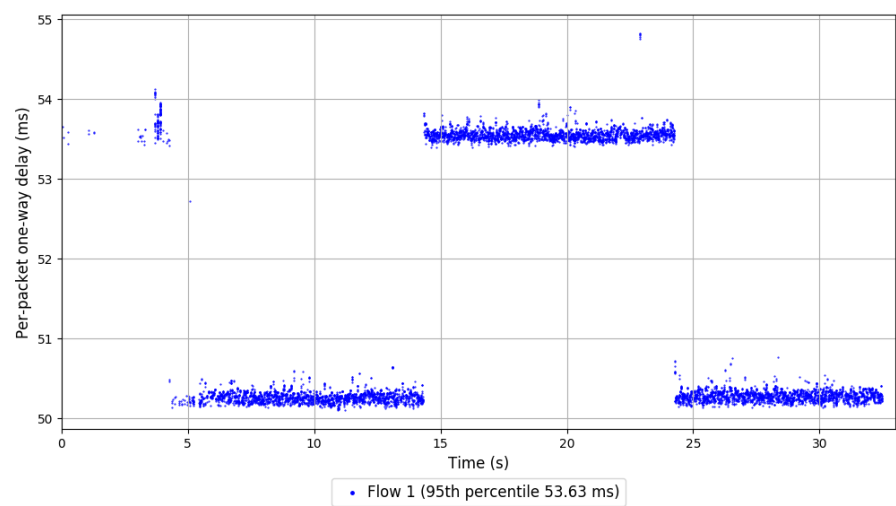
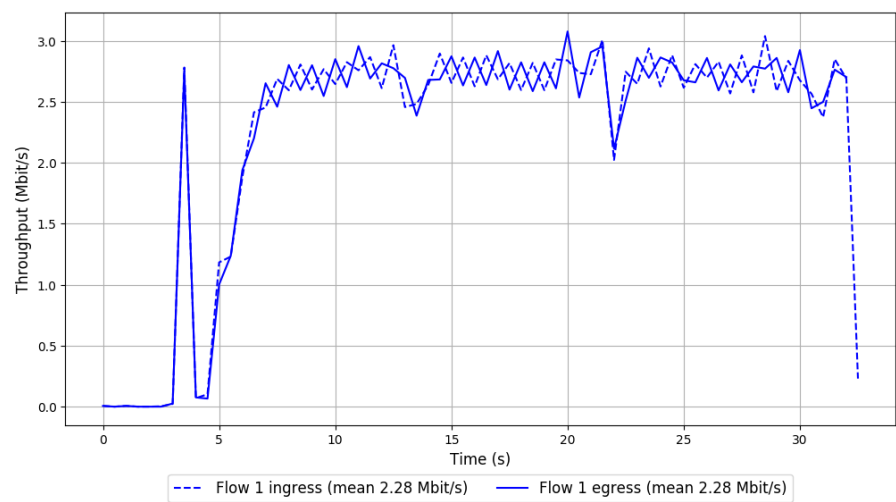


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-02 03:43:24
End at: 2018-01-02 03:43:54

# Below is generated by plot.py at 2018-01-02 07:56:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.628 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.628 ms
Loss rate: 0.35%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-02 03:54:55

End at: 2018-01-02 03:55:25

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.794 ms

Loss rate: 0.46%

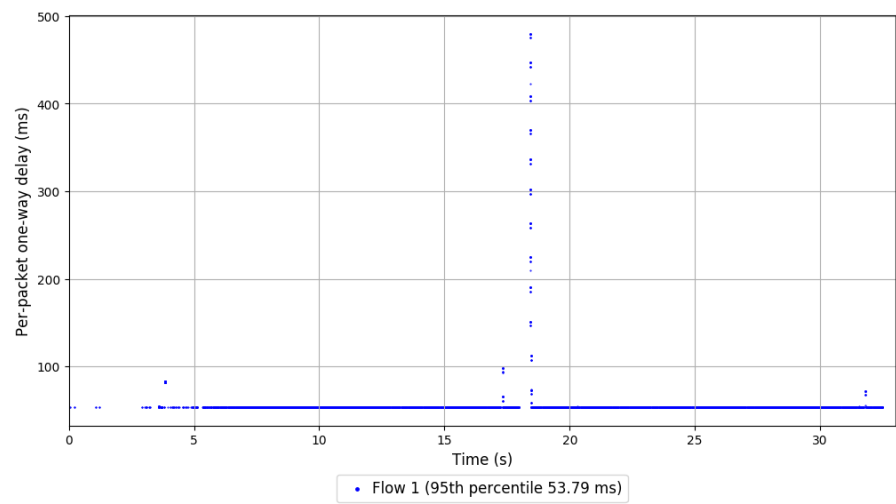
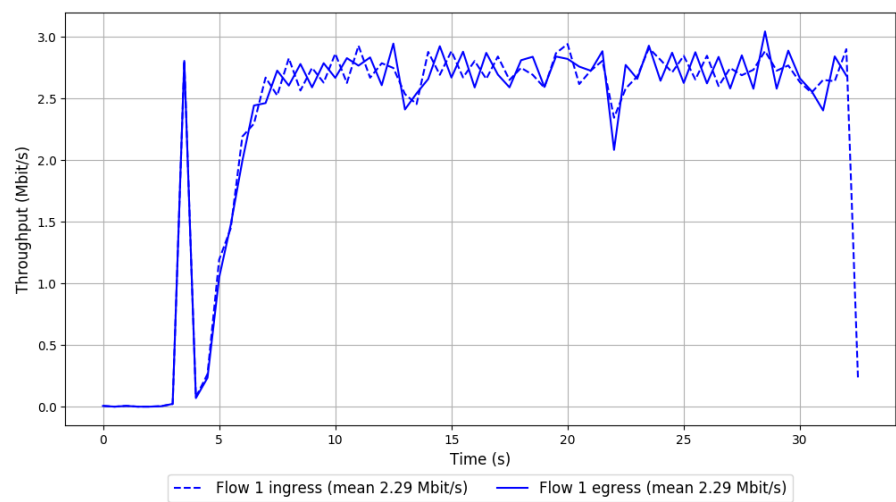
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.794 ms

Loss rate: 0.46%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-02 04:06:32

End at: 2018-01-02 04:07:02

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.689 ms

Loss rate: 0.31%

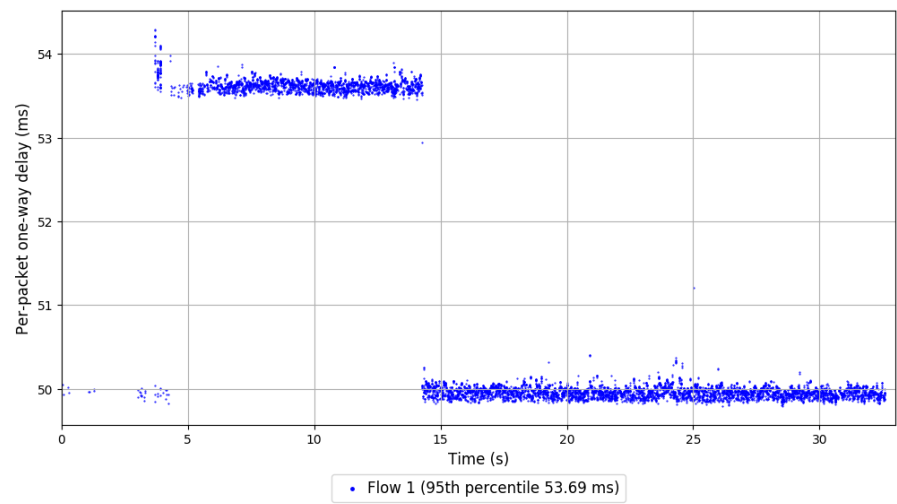
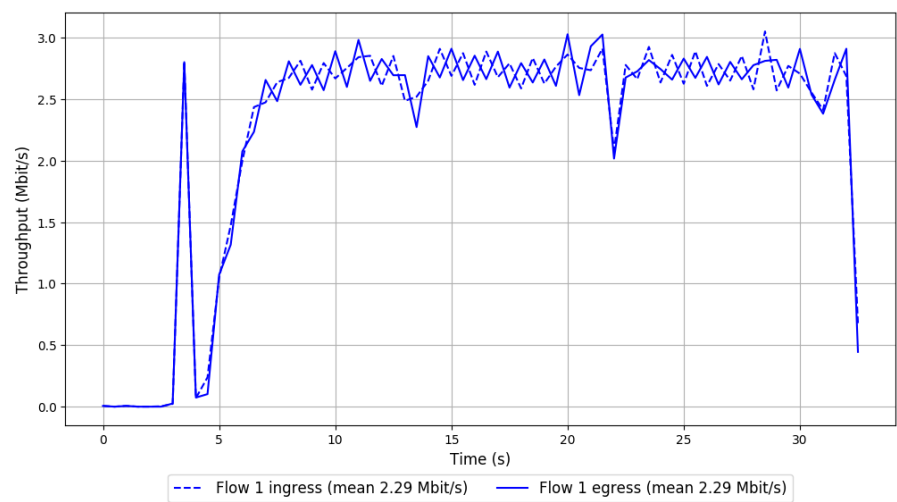
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.689 ms

Loss rate: 0.31%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-02 04:18:20

End at: 2018-01-02 04:18:50

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.615 ms

Loss rate: 0.32%

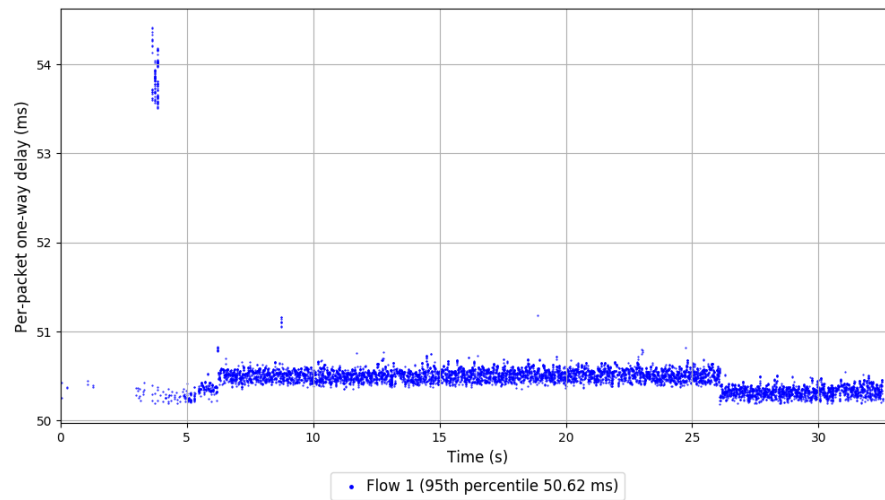
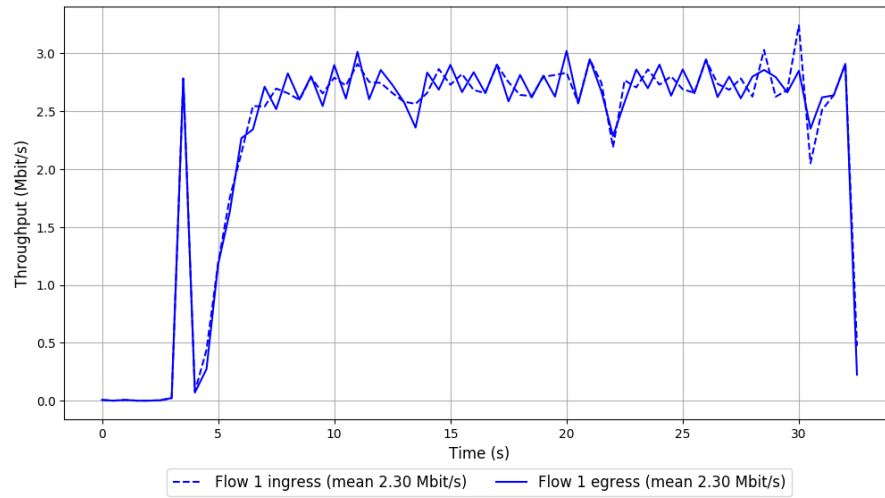
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.615 ms

Loss rate: 0.32%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-02 04:29:49

End at: 2018-01-02 04:30:19

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.338 ms

Loss rate: 0.46%

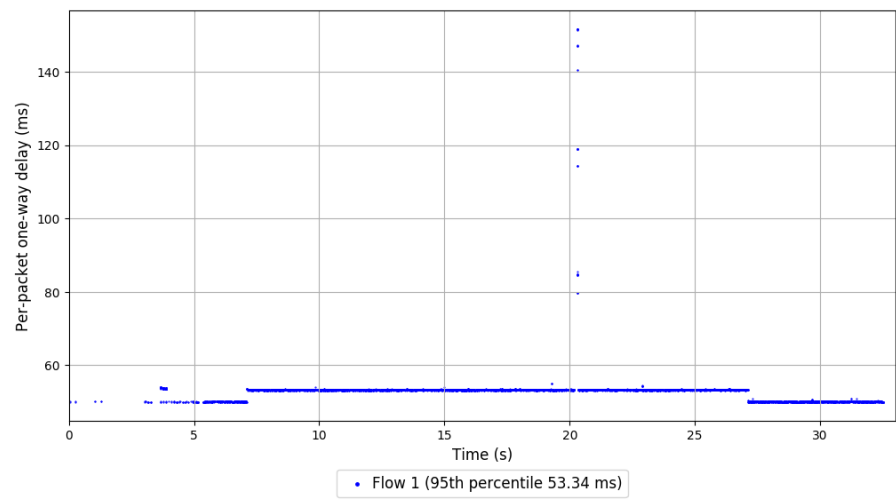
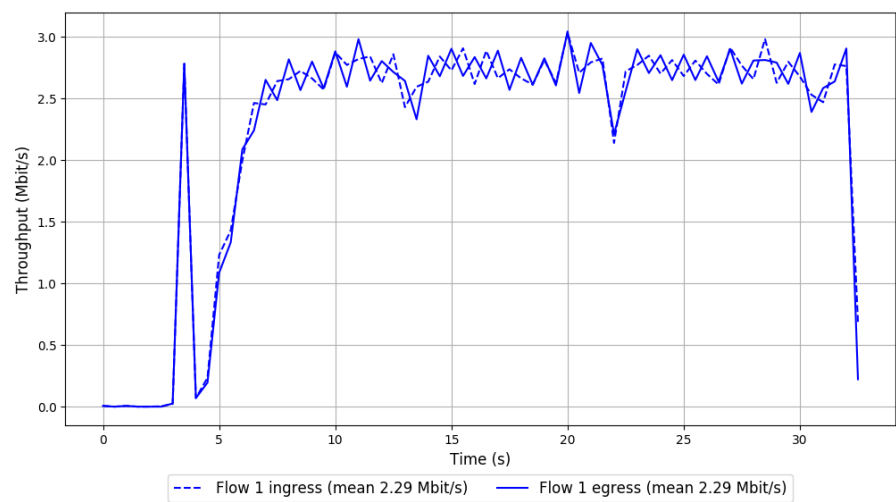
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.338 ms

Loss rate: 0.46%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-02 04:41:28

End at: 2018-01-02 04:41:58

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.929 ms

Loss rate: 0.49%

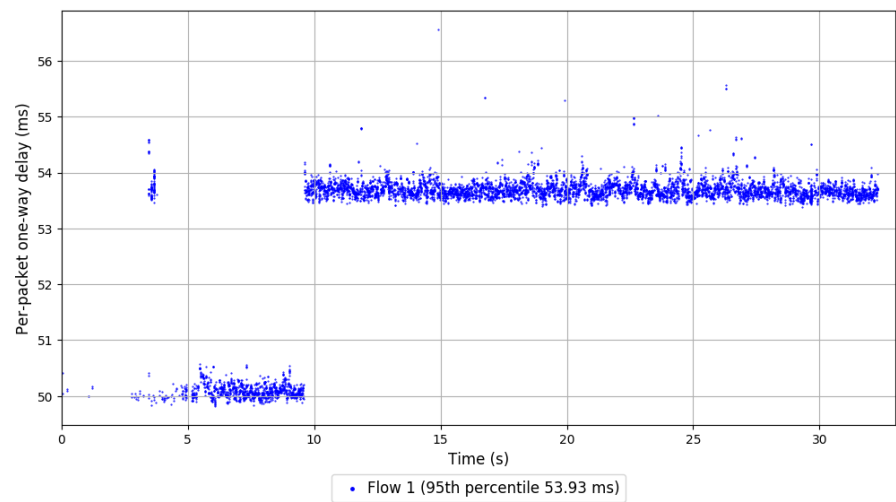
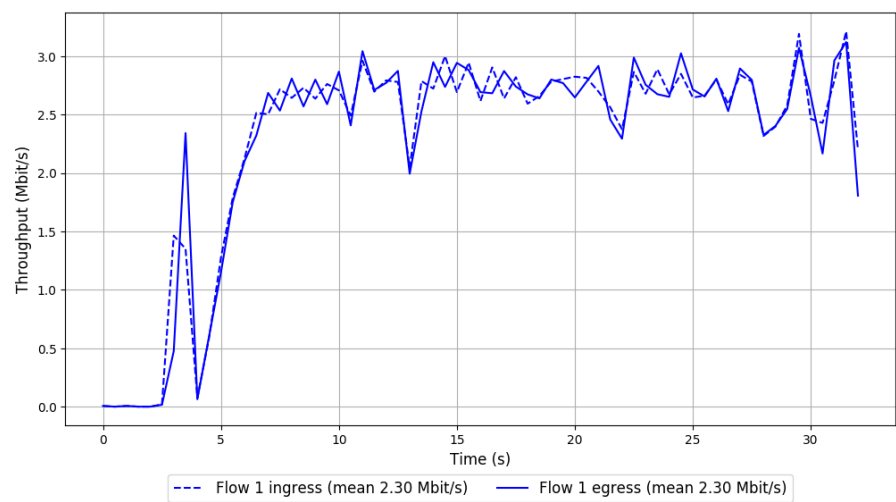
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.929 ms

Loss rate: 0.49%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-02 04:52:12

End at: 2018-01-02 04:52:42

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.892 ms

Loss rate: 0.48%

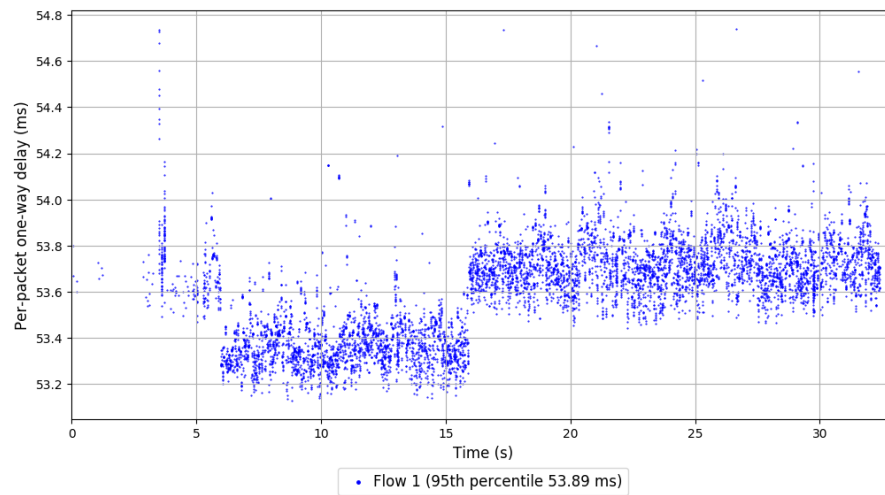
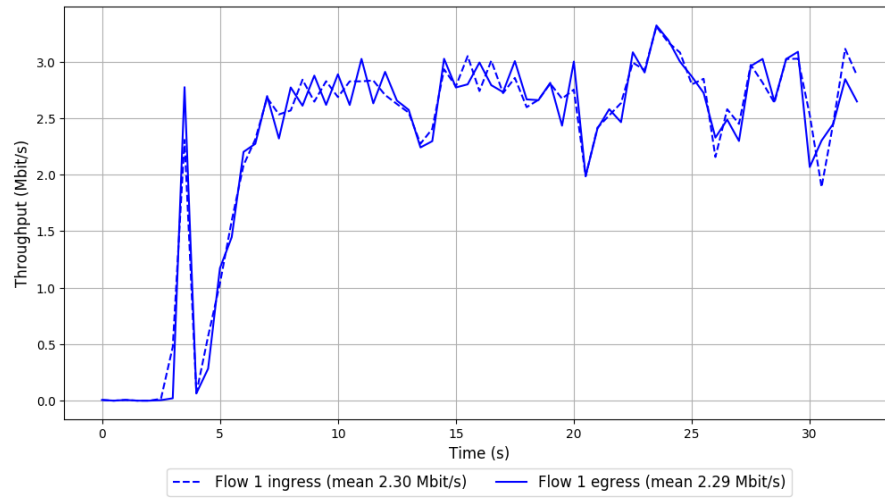
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.892 ms

Loss rate: 0.48%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-02 05:03:17

End at: 2018-01-02 05:03:47

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.884 ms

Loss rate: 0.46%

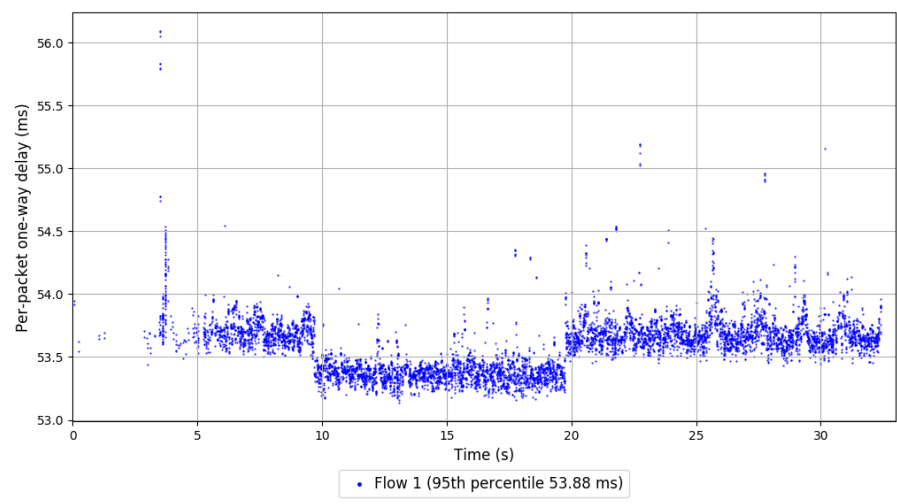
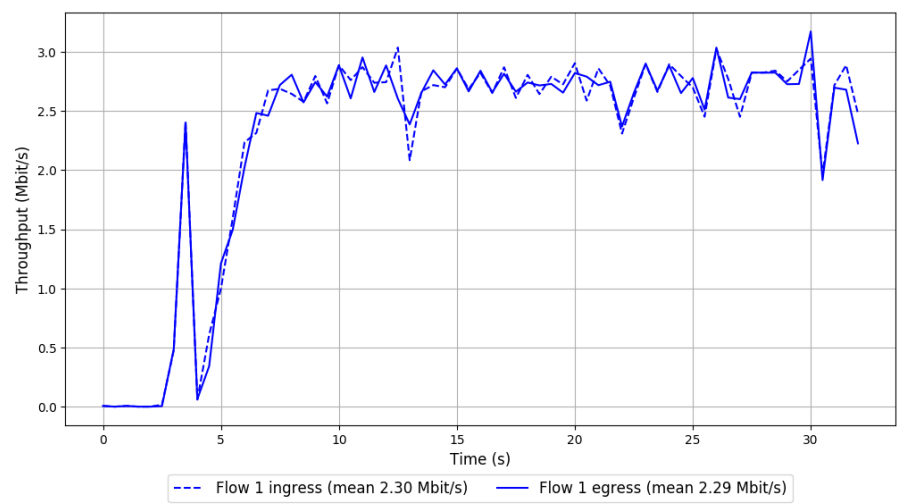
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.884 ms

Loss rate: 0.46%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-02 05:14:40

End at: 2018-01-02 05:15:10

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.768 ms

Loss rate: 0.46%

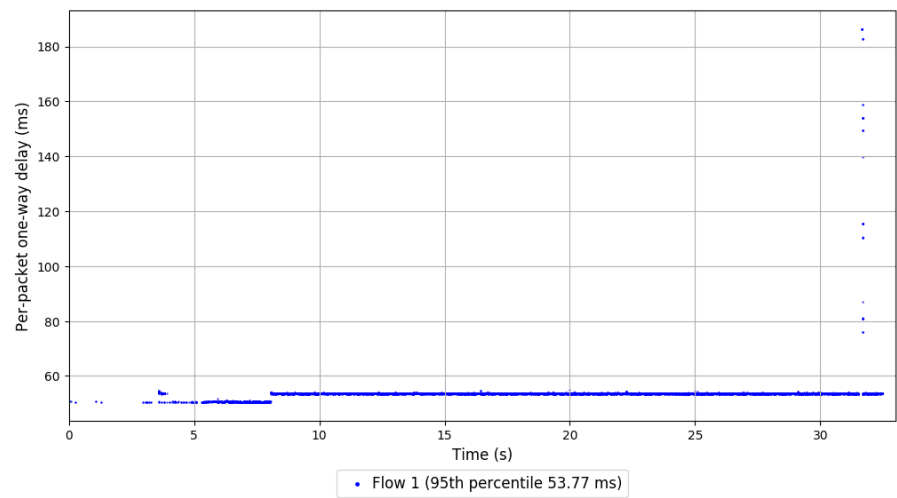
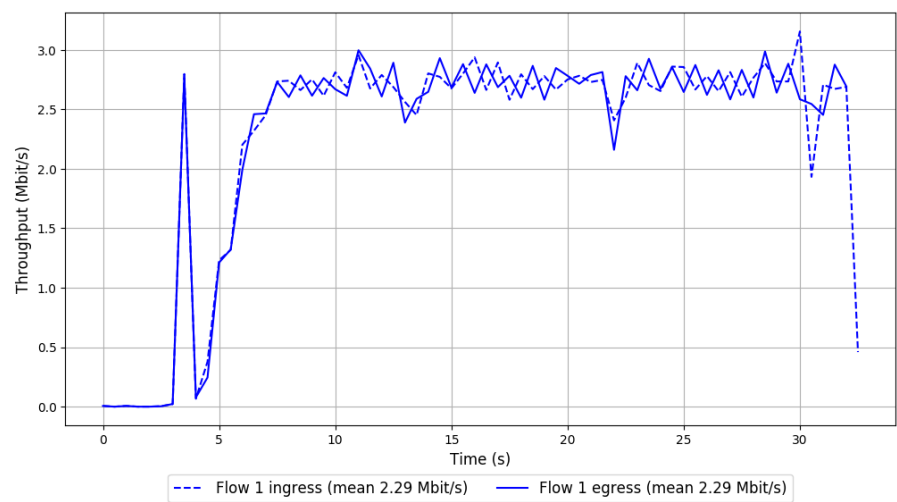
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.768 ms

Loss rate: 0.46%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-02 05:25:37

End at: 2018-01-02 05:26:07

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.832 ms

Loss rate: 0.46%

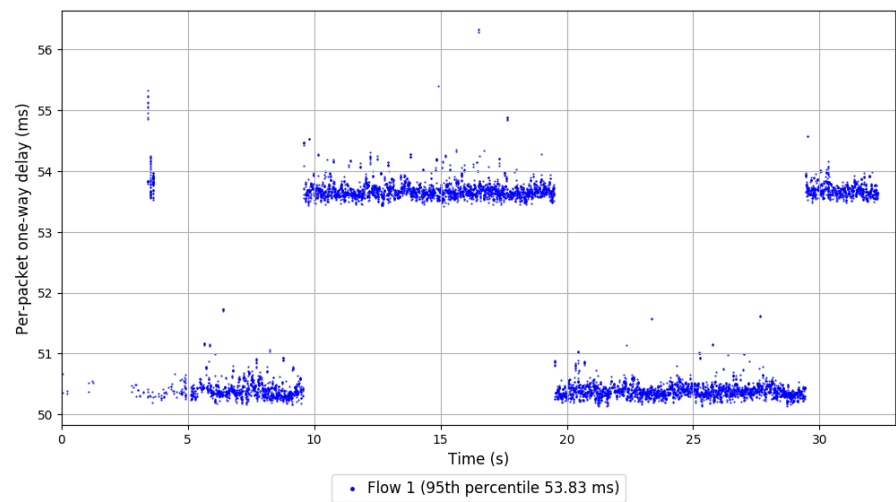
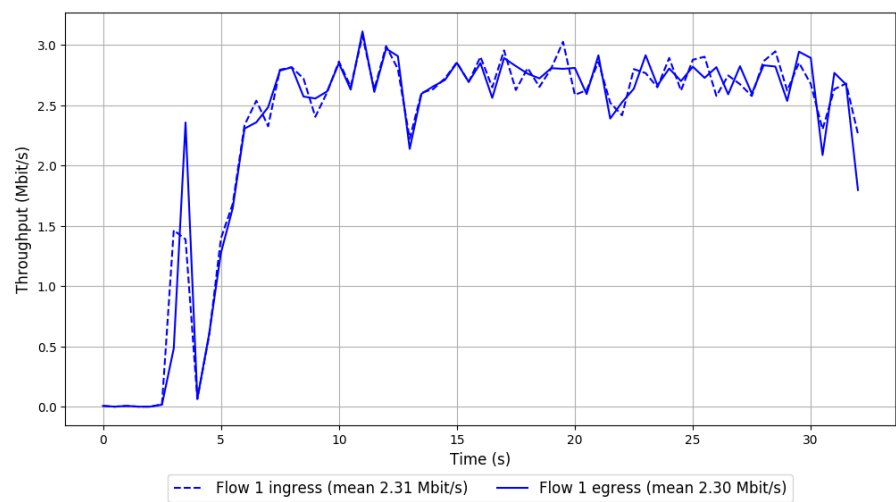
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.832 ms

Loss rate: 0.46%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-02 03:42:46

End at: 2018-01-02 03:43:16

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 54.763 ms

Loss rate: 0.83%

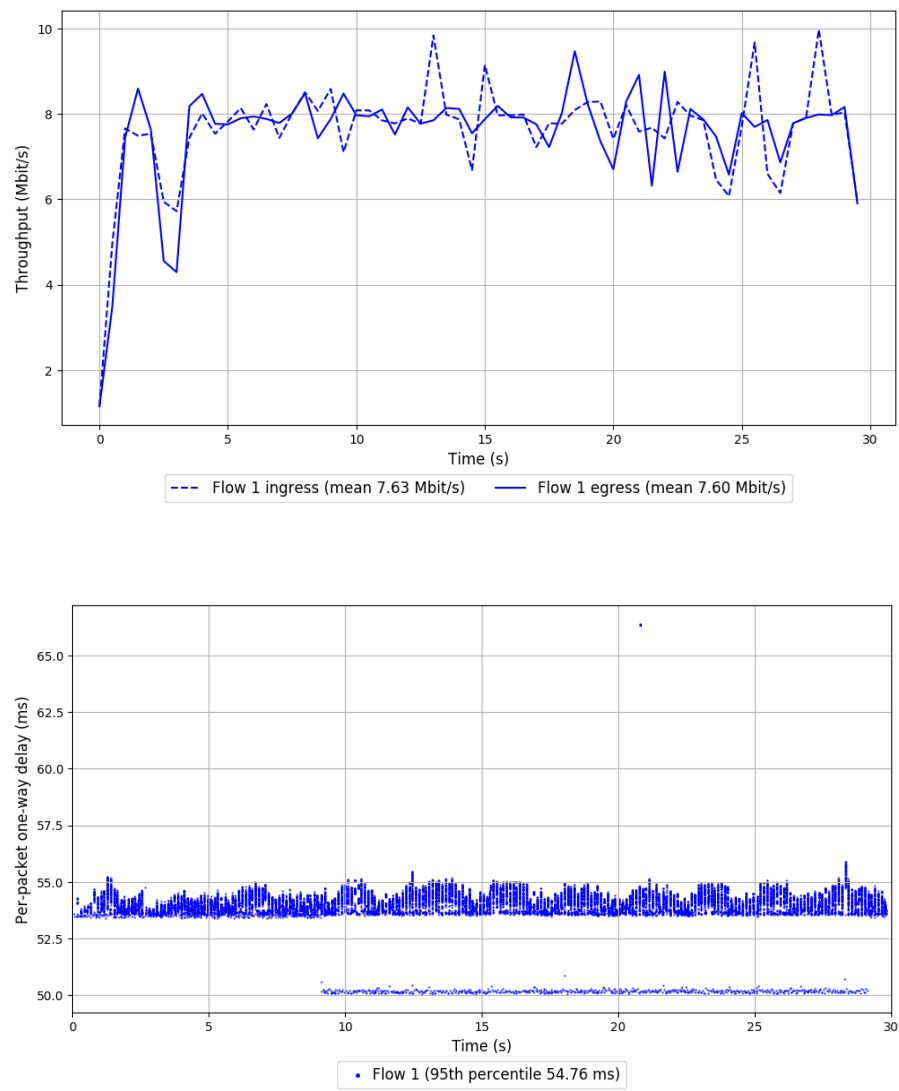
-- Flow 1:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 54.763 ms

Loss rate: 0.83%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-02 03:54:17

End at: 2018-01-02 03:54:47

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 54.816 ms

Loss rate: 0.37%

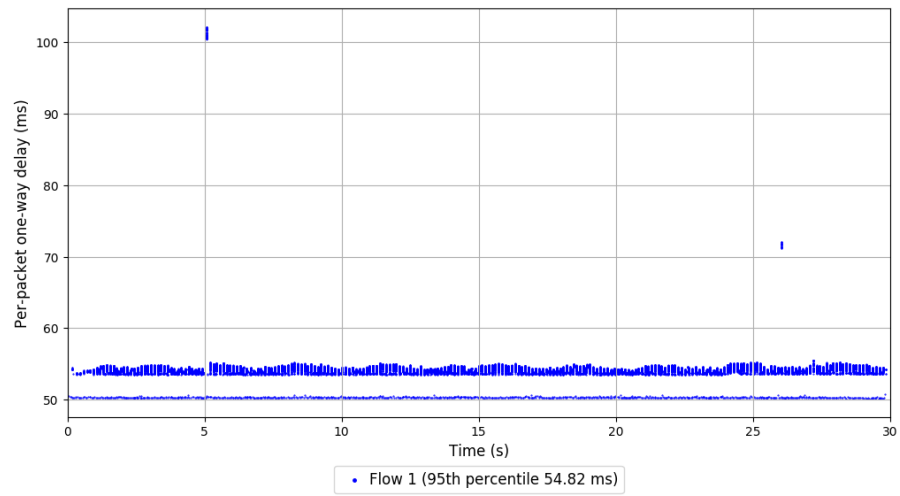
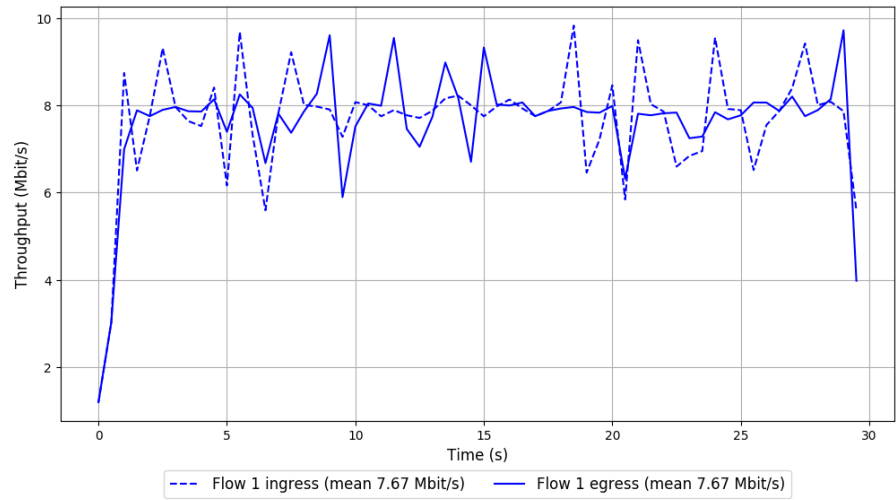
-- Flow 1:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 54.816 ms

Loss rate: 0.37%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-02 04:05:55

End at: 2018-01-02 04:06:25

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 54.744 ms

Loss rate: 1.62%

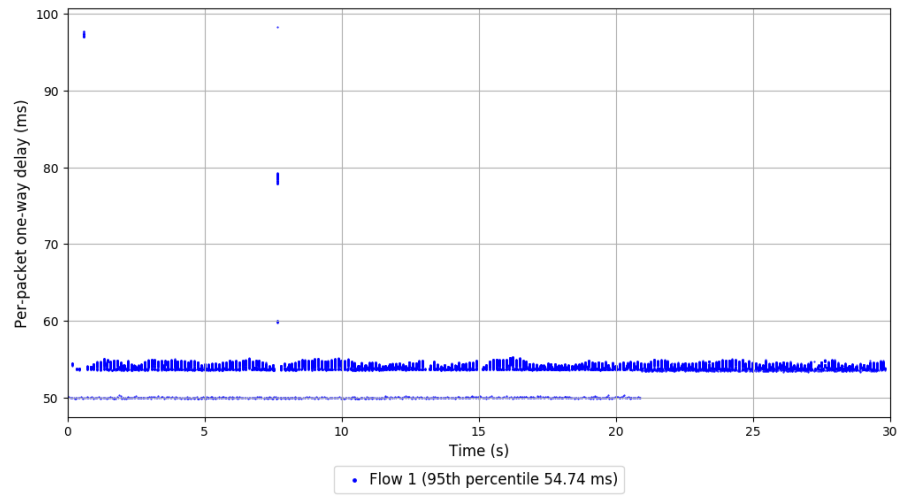
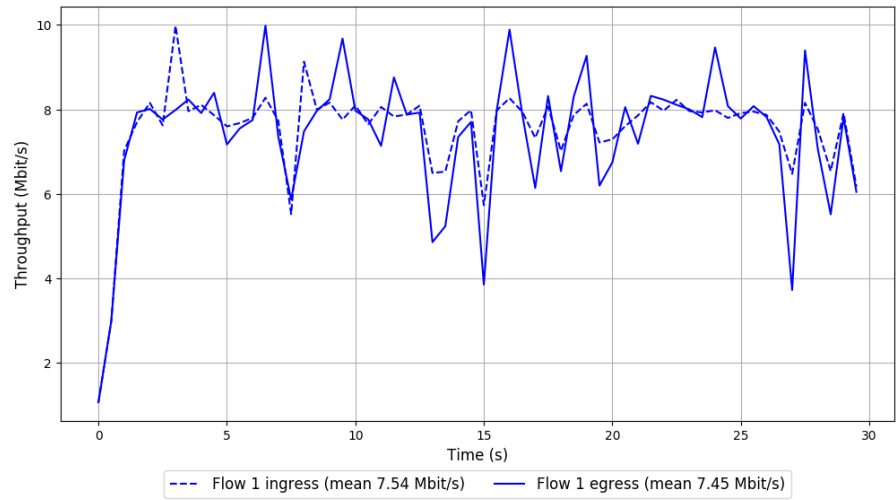
-- Flow 1:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 54.744 ms

Loss rate: 1.62%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-02 04:17:43

End at: 2018-01-02 04:18:13

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 54.769 ms

Loss rate: 1.33%

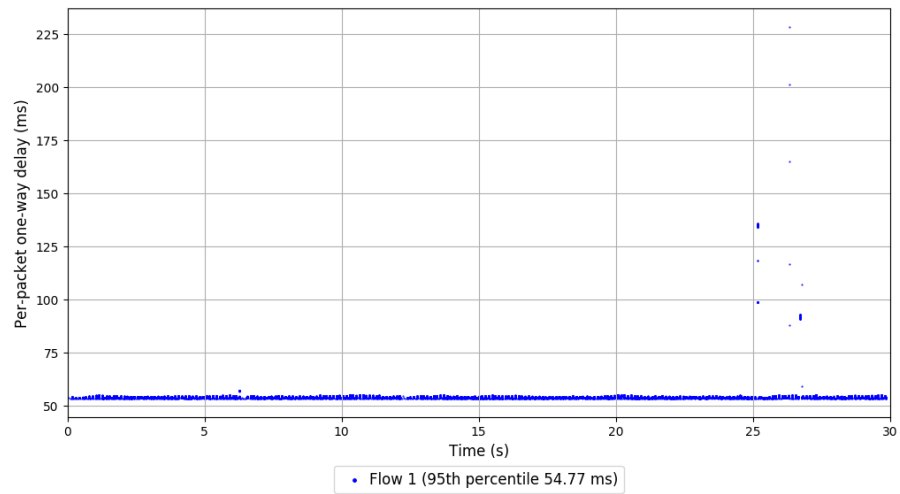
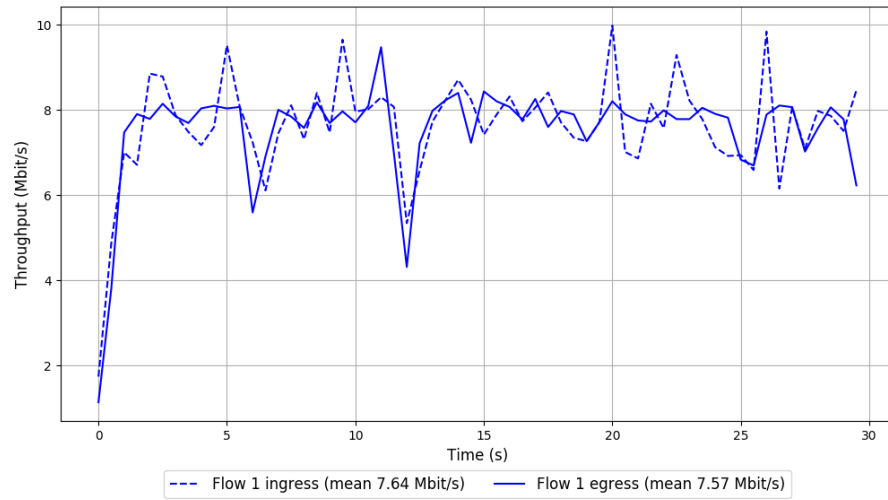
-- Flow 1:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 54.769 ms

Loss rate: 1.33%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-02 04:29:12

End at: 2018-01-02 04:29:42

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 54.744 ms

Loss rate: 0.74%

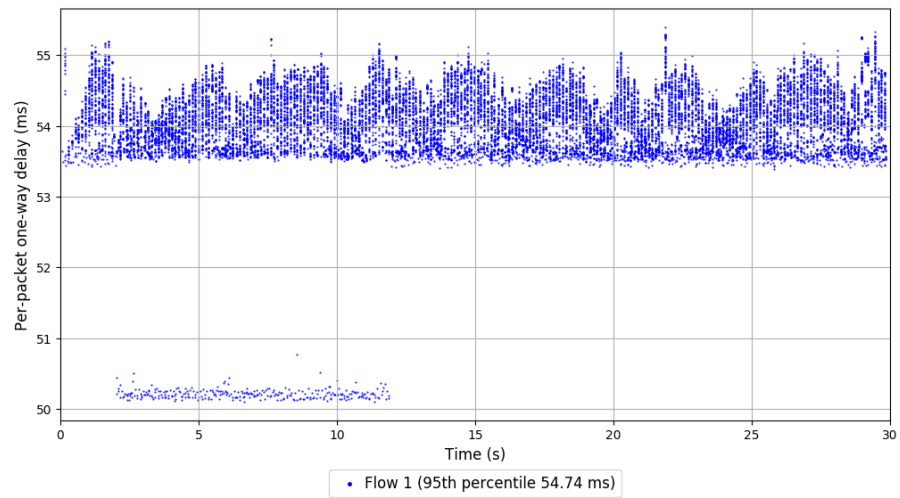
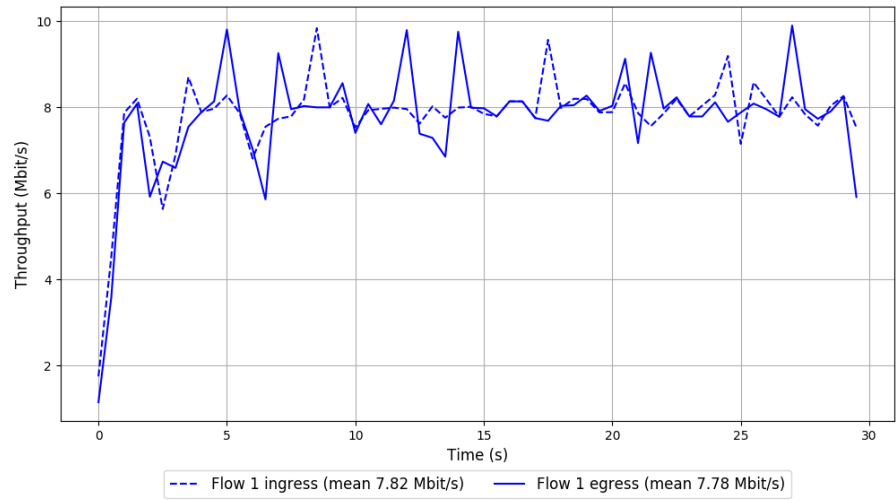
-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 54.744 ms

Loss rate: 0.74%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-02 04:40:51

End at: 2018-01-02 04:41:21

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 54.859 ms

Loss rate: 2.00%

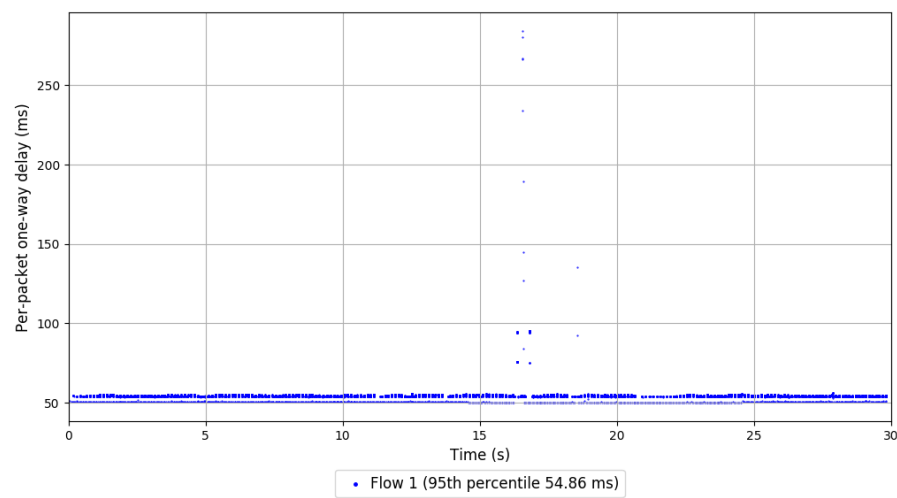
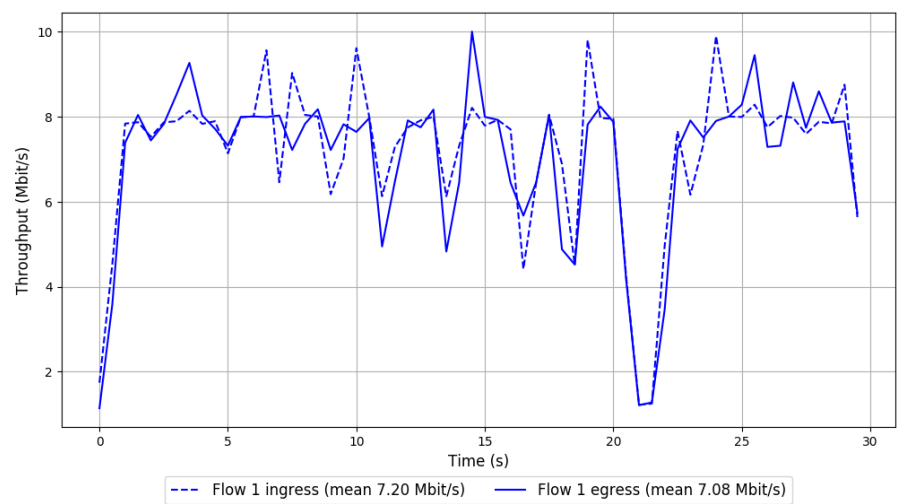
-- Flow 1:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 54.859 ms

Loss rate: 2.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-02 04:51:35

End at: 2018-01-02 04:52:05

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 54.755 ms

Loss rate: 0.38%

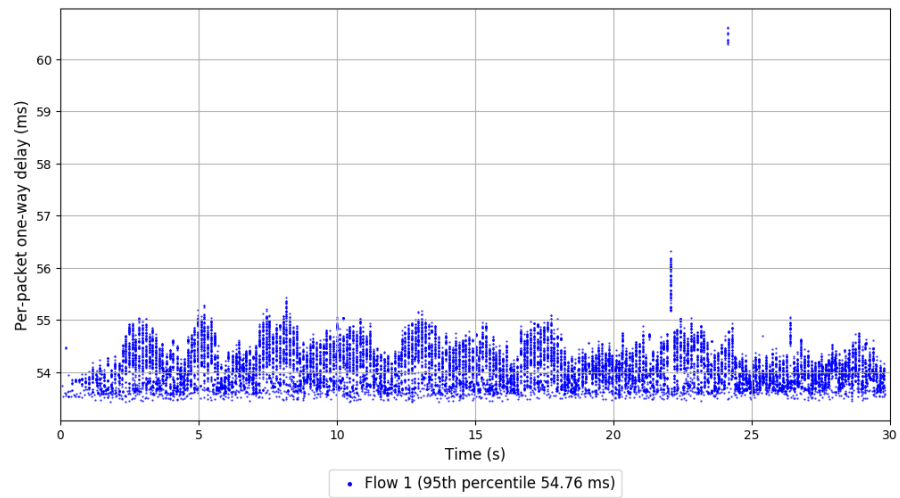
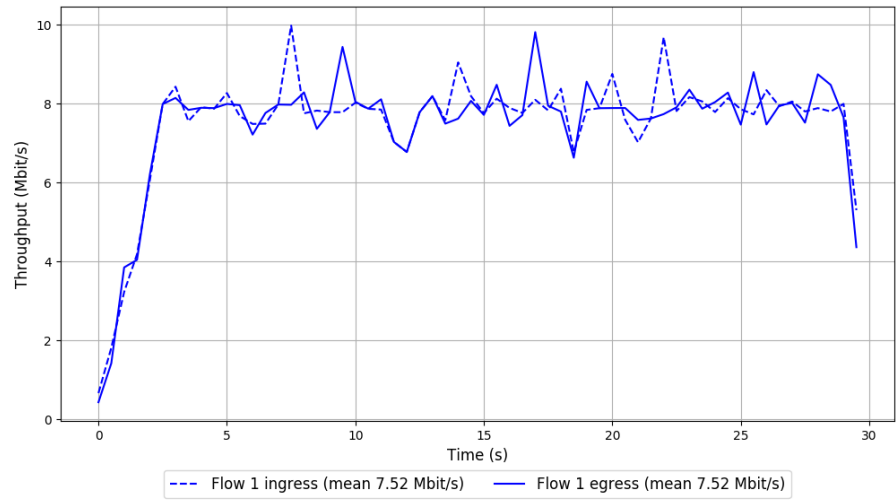
-- Flow 1:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 54.755 ms

Loss rate: 0.38%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-02 05:02:39

End at: 2018-01-02 05:03:09

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 54.939 ms

Loss rate: 1.72%

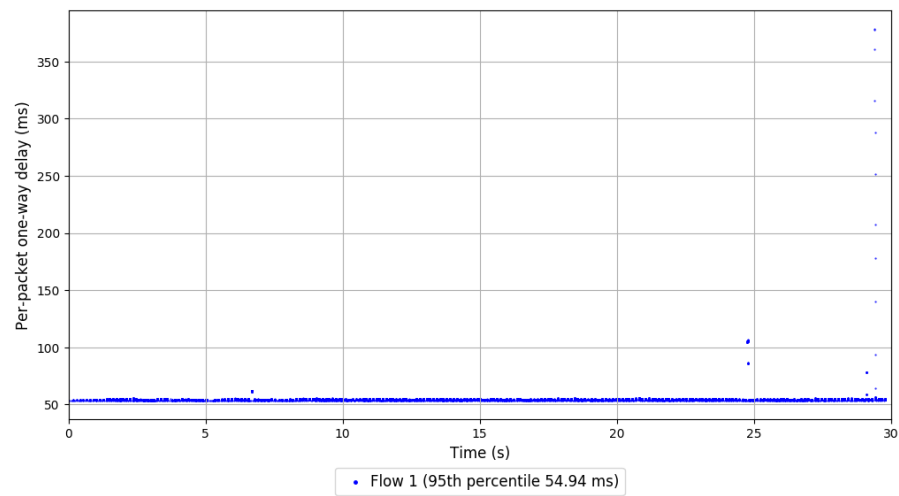
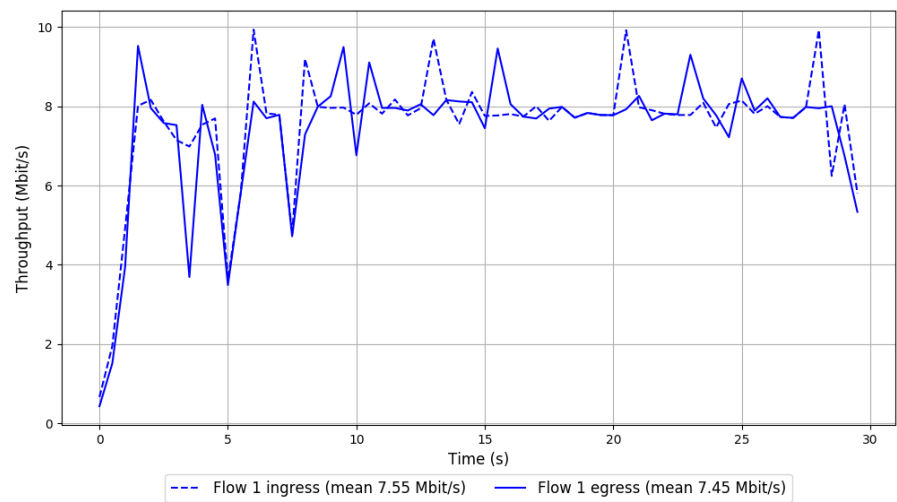
-- Flow 1:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 54.939 ms

Loss rate: 1.72%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-02 05:14:03

End at: 2018-01-02 05:14:33

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 54.971 ms

Loss rate: 0.42%

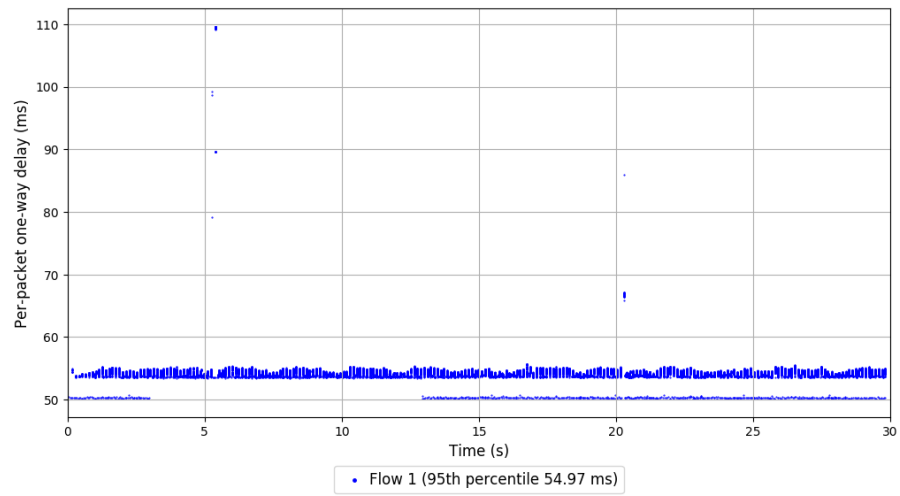
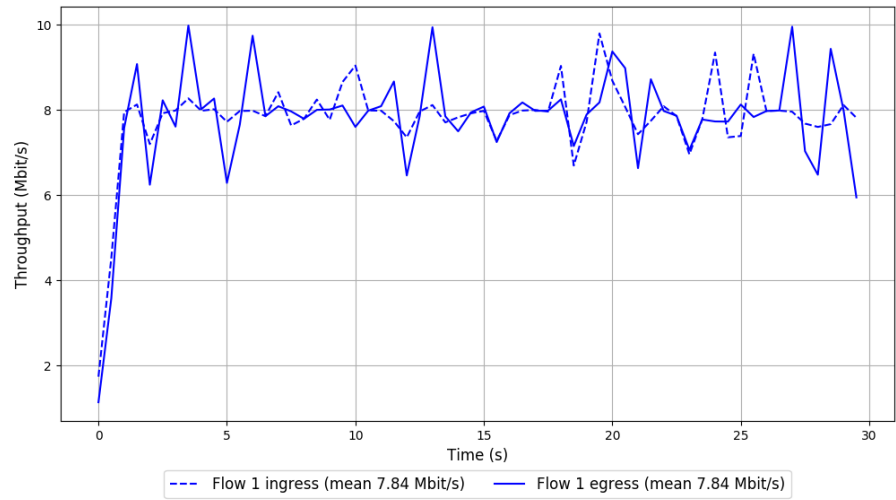
-- Flow 1:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 54.971 ms

Loss rate: 0.42%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-02 05:24:59

End at: 2018-01-02 05:25:29

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 54.935 ms

Loss rate: 1.64%

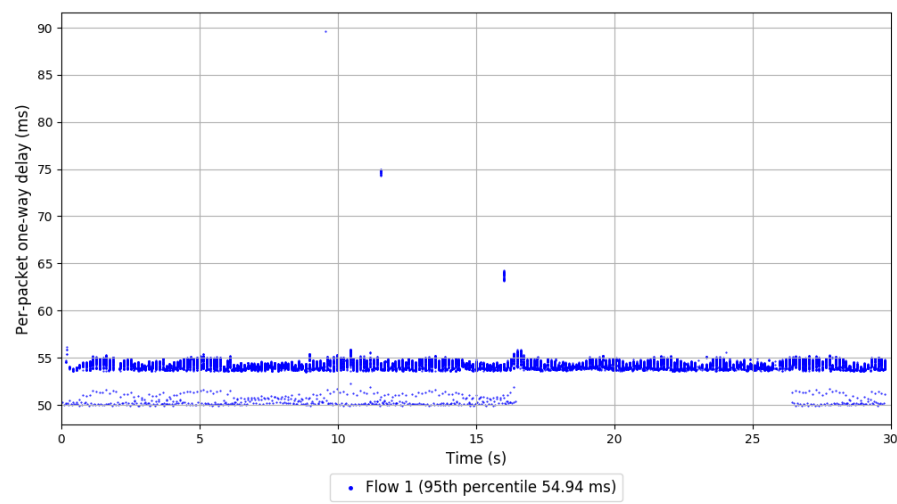
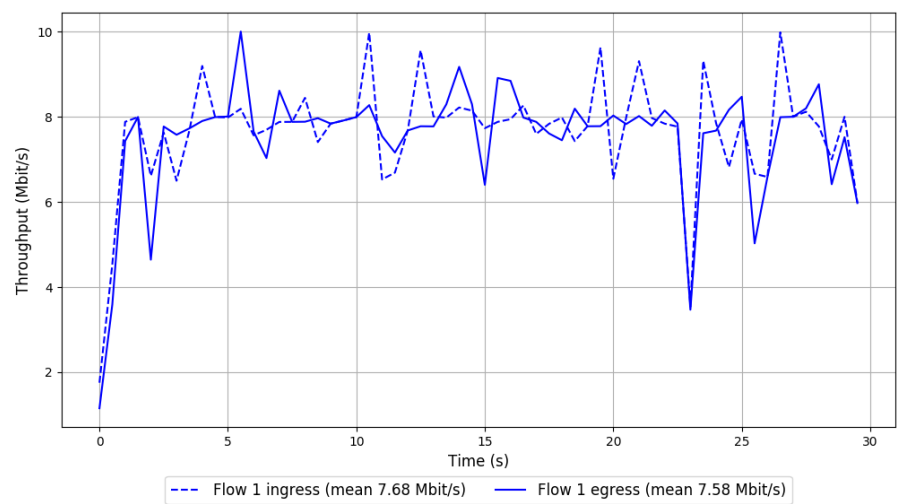
-- Flow 1:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 54.935 ms

Loss rate: 1.64%

Run 10: Report of Sprout — Data Link

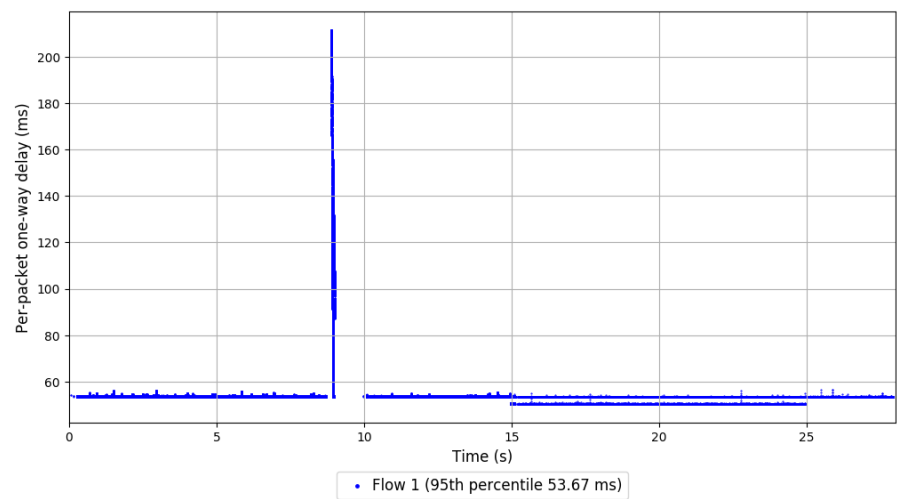
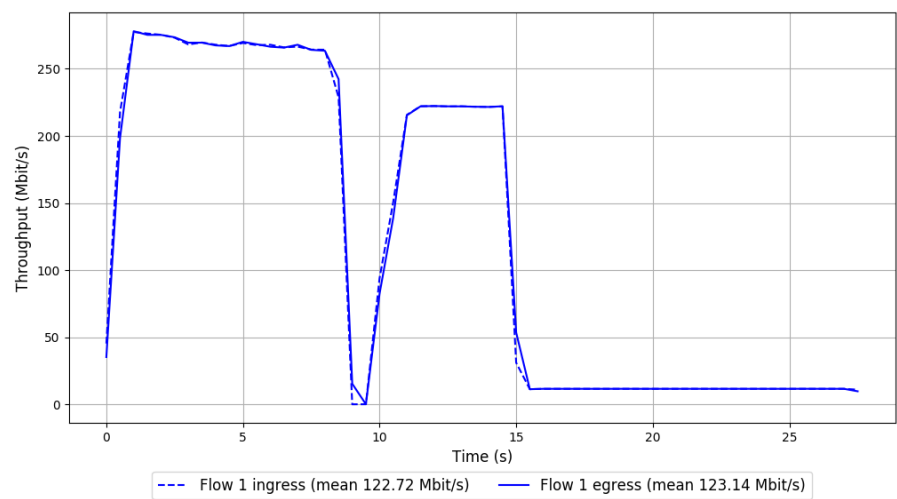


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-02 03:41:59
End at: 2018-01-02 03:42:29

# Below is generated by plot.py at 2018-01-02 07:56:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 123.14 Mbit/s
95th percentile per-packet one-way delay: 53.671 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 123.14 Mbit/s
95th percentile per-packet one-way delay: 53.671 ms
Loss rate: 0.04%
```

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

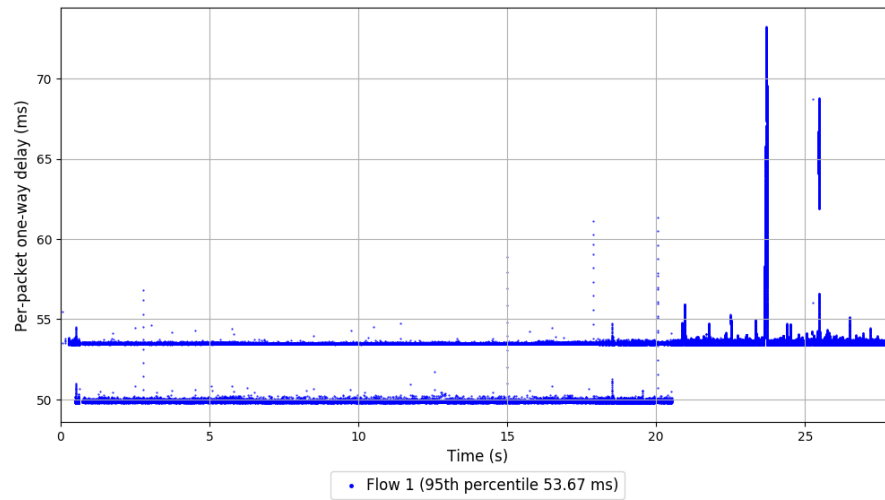
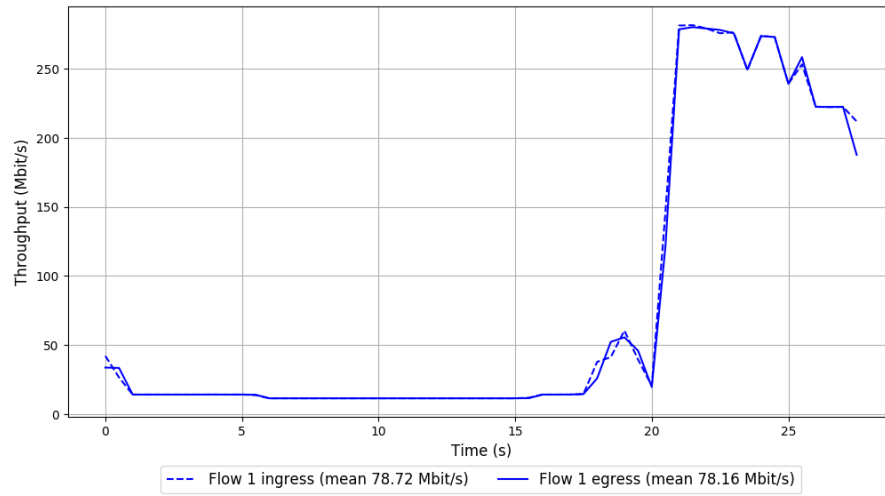


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-02 03:53:33
End at: 2018-01-02 03:54:03

# Below is generated by plot.py at 2018-01-02 07:56:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.16 Mbit/s
95th percentile per-packet one-way delay: 53.675 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 78.16 Mbit/s
95th percentile per-packet one-way delay: 53.675 ms
Loss rate: 1.09%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-01-02 04:05:13

End at: 2018-01-02 04:05:43

Below is generated by plot.py at 2018-01-02 07:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.86 Mbit/s

95th percentile per-packet one-way delay: 53.663 ms

Loss rate: 0.73%

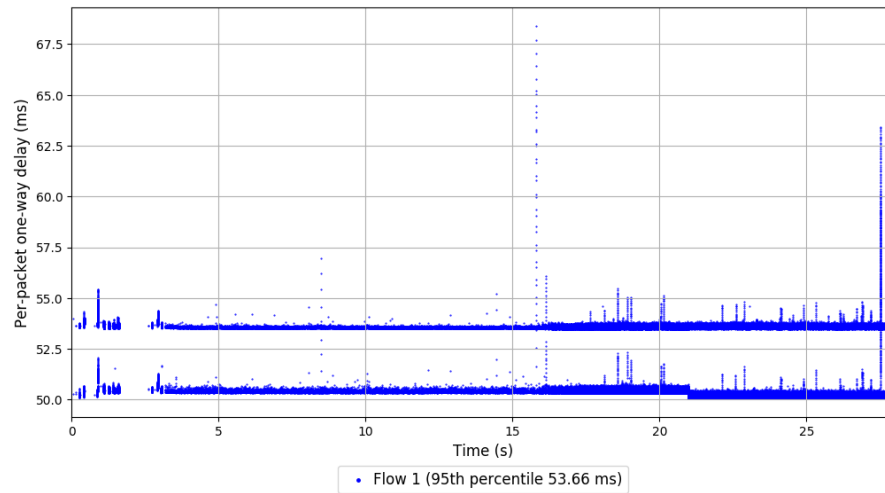
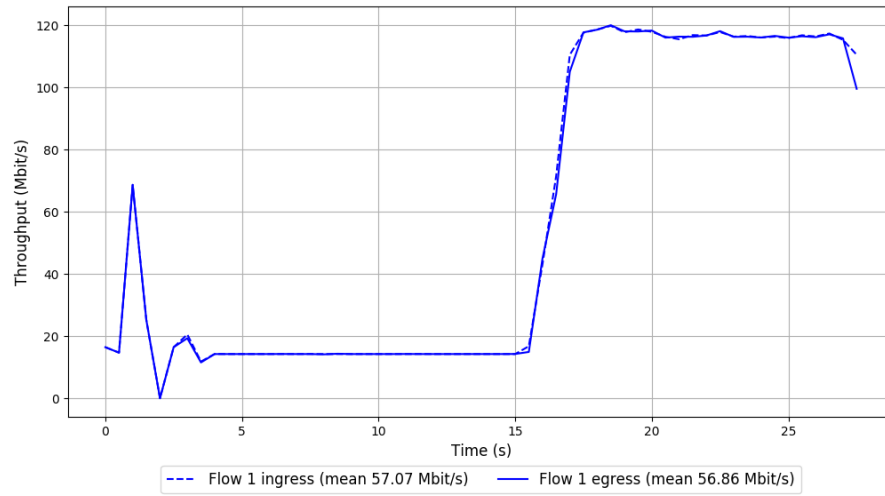
-- Flow 1:

Average throughput: 56.86 Mbit/s

95th percentile per-packet one-way delay: 53.663 ms

Loss rate: 0.73%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-02 04:16:43

End at: 2018-01-02 04:17:13

Below is generated by plot.py at 2018-01-02 07:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.70 Mbit/s

95th percentile per-packet one-way delay: 53.764 ms

Loss rate: 0.38%

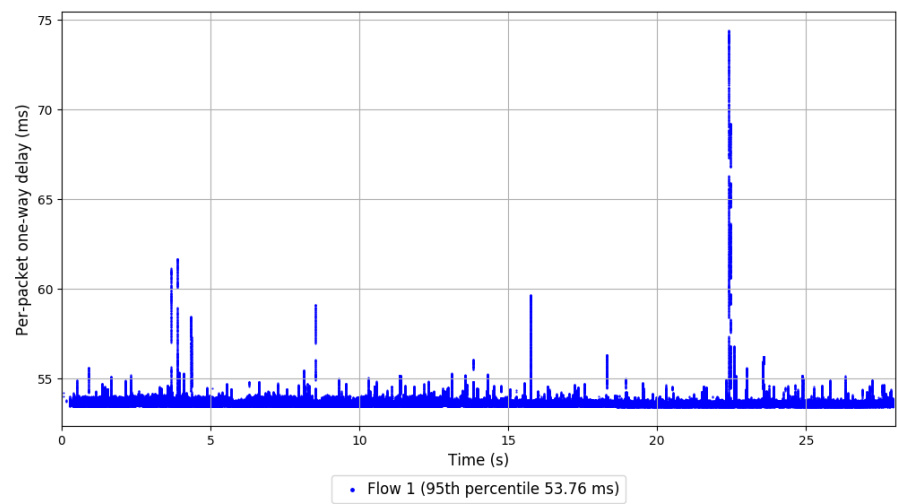
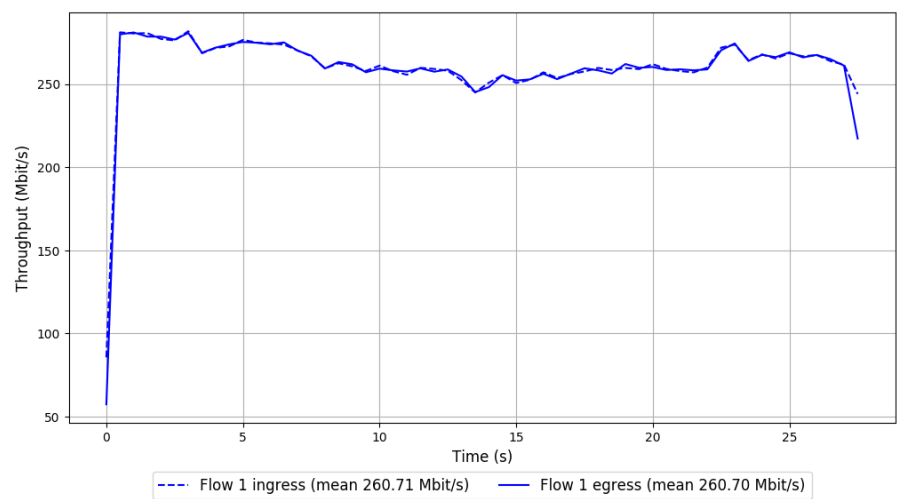
-- Flow 1:

Average throughput: 260.70 Mbit/s

95th percentile per-packet one-way delay: 53.764 ms

Loss rate: 0.38%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-02 04:28:26

End at: 2018-01-02 04:28:57

Below is generated by plot.py at 2018-01-02 07:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.66 Mbit/s

95th percentile per-packet one-way delay: 53.543 ms

Loss rate: 0.39%

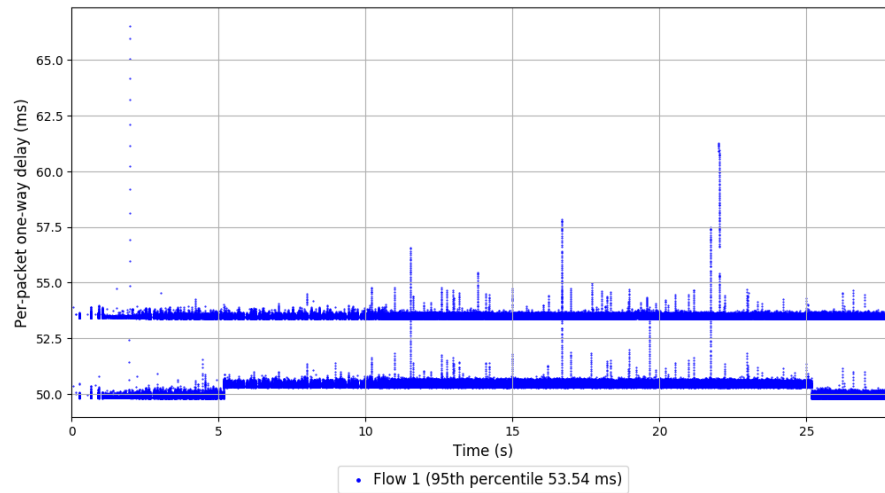
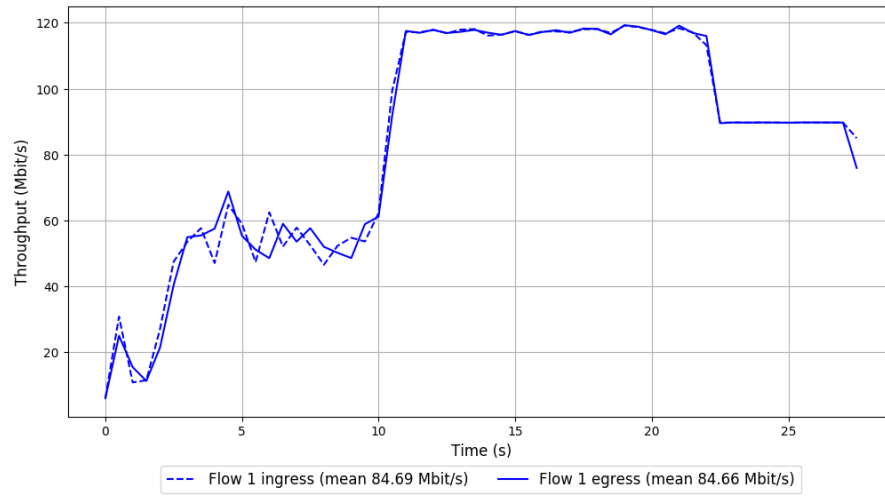
-- Flow 1:

Average throughput: 84.66 Mbit/s

95th percentile per-packet one-way delay: 53.543 ms

Loss rate: 0.39%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-02 04:39:54

End at: 2018-01-02 04:40:24

Below is generated by plot.py at 2018-01-02 07:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.04 Mbit/s

95th percentile per-packet one-way delay: 53.818 ms

Loss rate: 0.42%

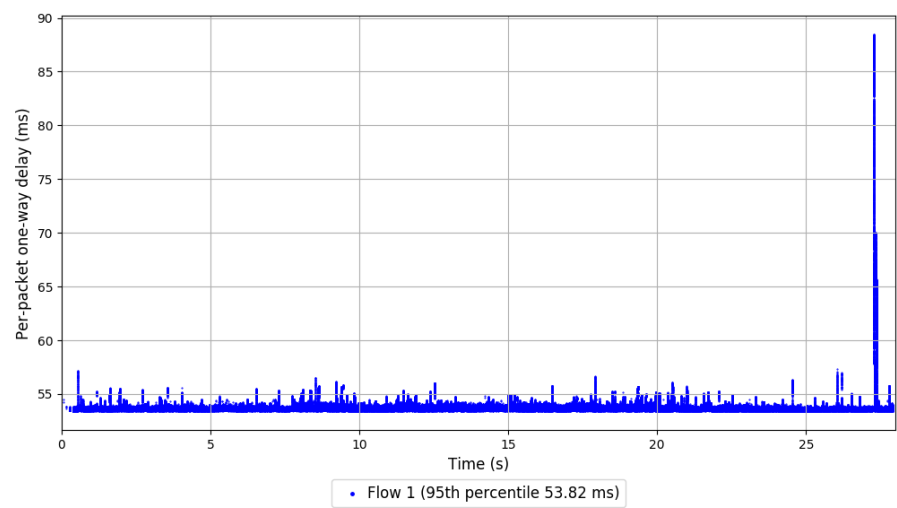
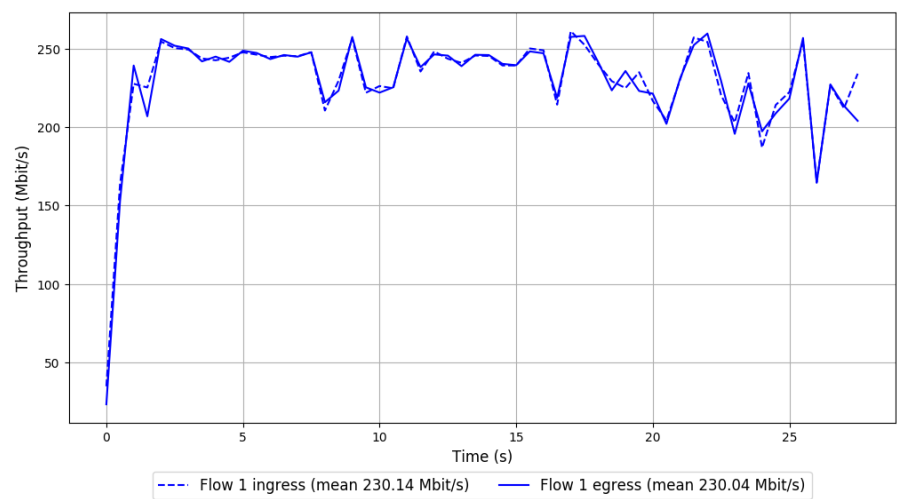
-- Flow 1:

Average throughput: 230.04 Mbit/s

95th percentile per-packet one-way delay: 53.818 ms

Loss rate: 0.42%

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

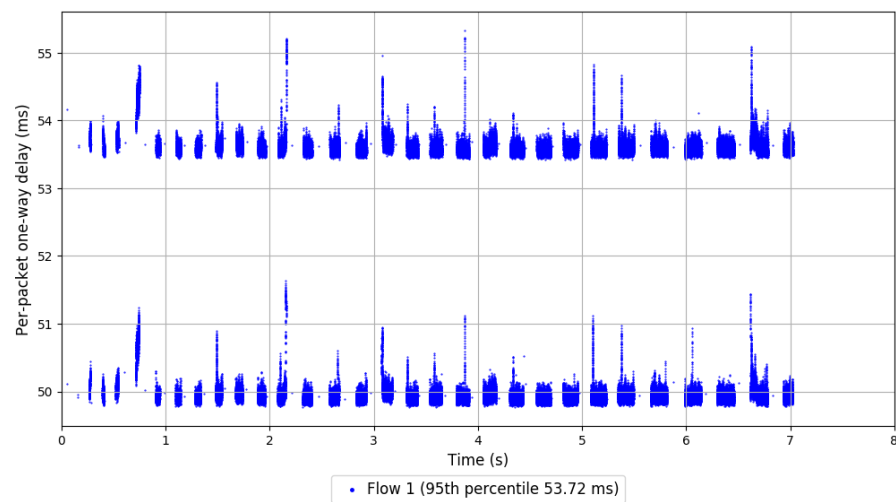
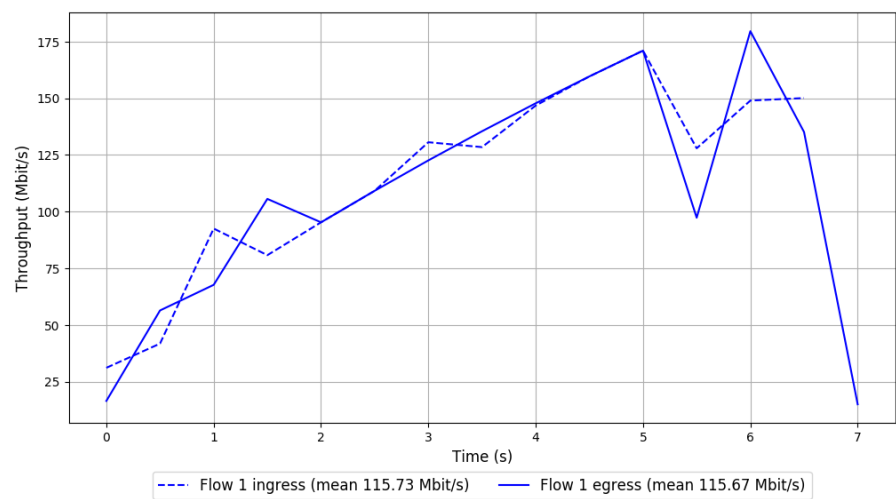


Run 7: Statistics of TaoVA-100x

Start at: 2018-01-02 04:50:56

End at: 2018-01-02 04:51:26

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-02 05:01:42

End at: 2018-01-02 05:02:12

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 235.52 Mbit/s

95th percentile per-packet one-way delay: 53.885 ms

Loss rate: 0.37%

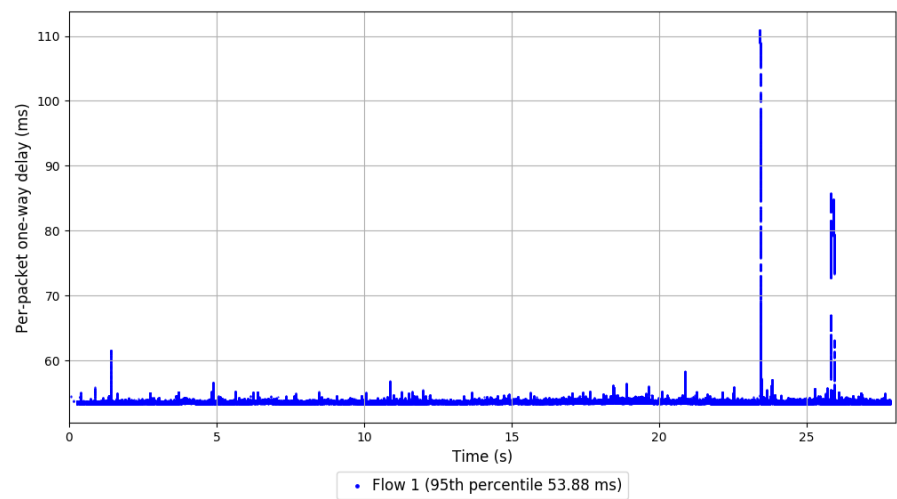
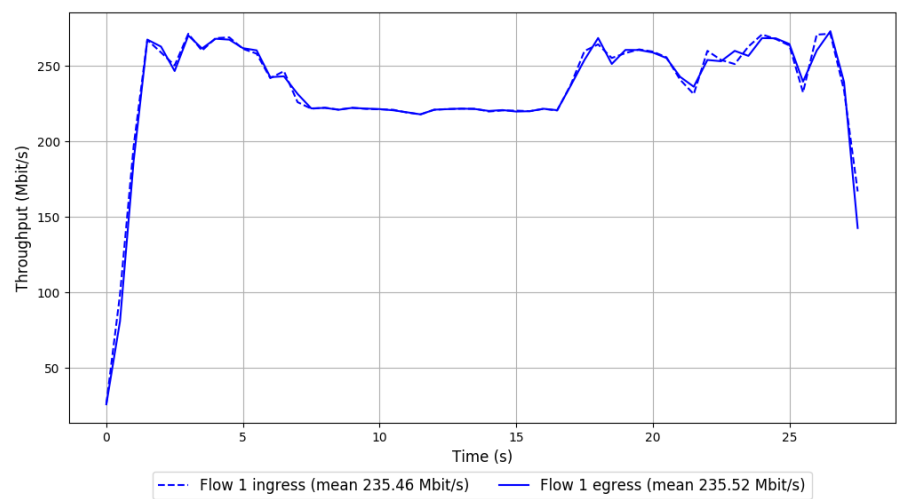
-- Flow 1:

Average throughput: 235.52 Mbit/s

95th percentile per-packet one-way delay: 53.885 ms

Loss rate: 0.37%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-02 05:13:07

End at: 2018-01-02 05:13:37

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.34 Mbit/s

95th percentile per-packet one-way delay: 53.749 ms

Loss rate: 0.38%

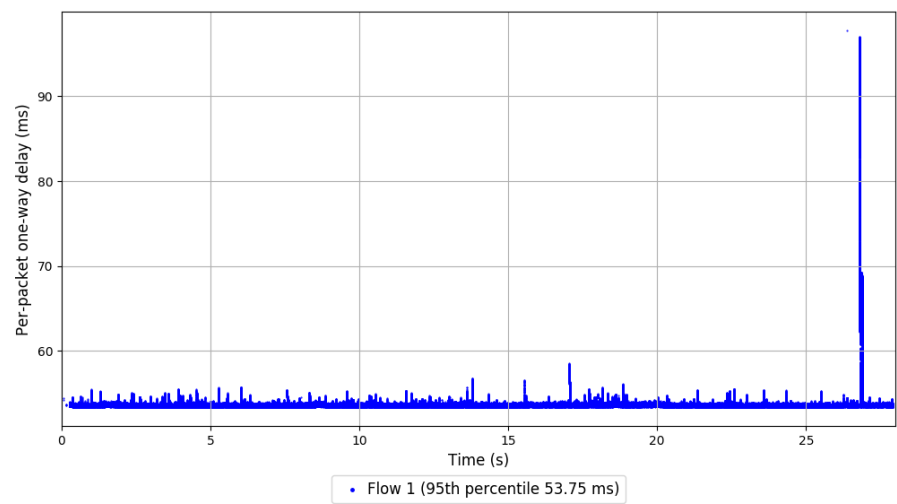
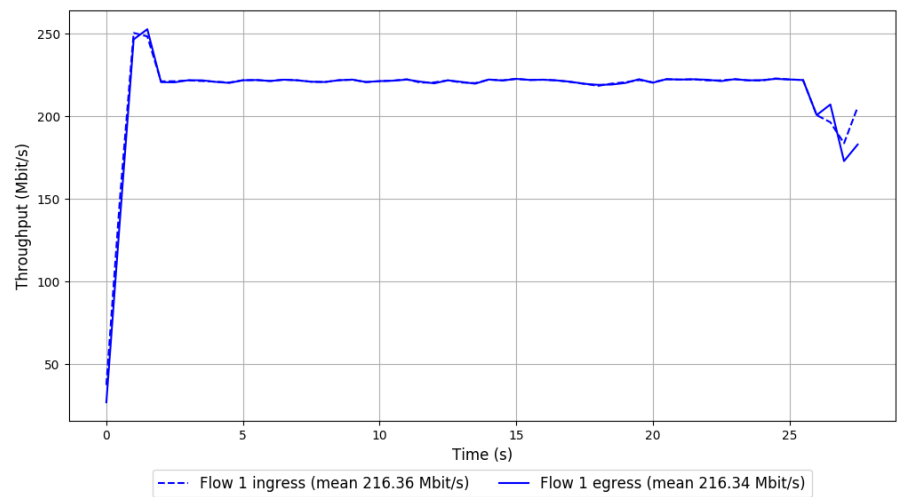
-- Flow 1:

Average throughput: 216.34 Mbit/s

95th percentile per-packet one-way delay: 53.749 ms

Loss rate: 0.38%

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

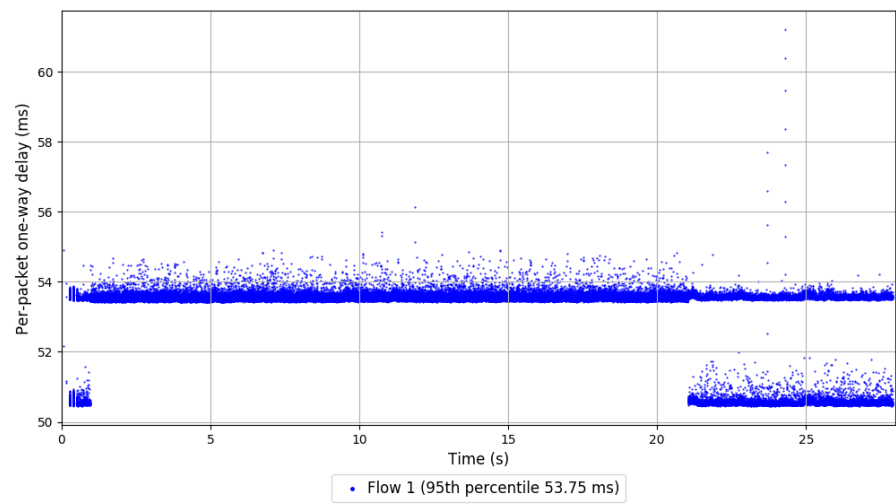
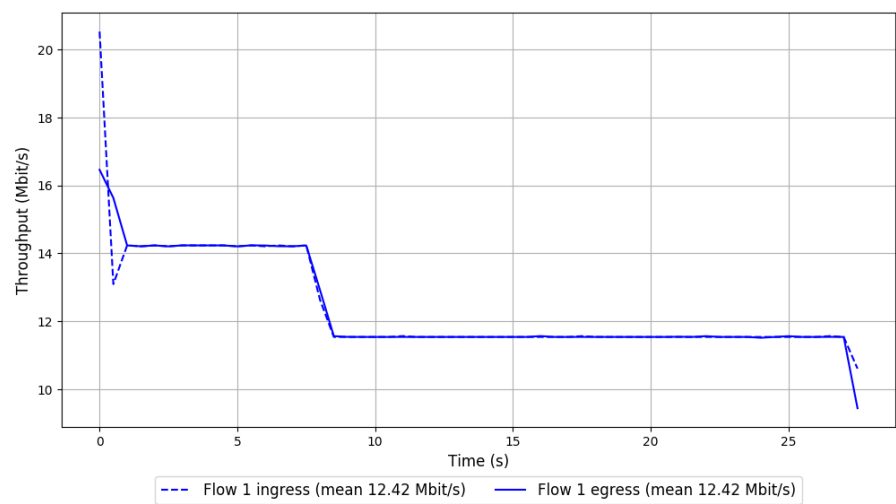


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-02 05:24:21
End at: 2018-01-02 05:24:51

# Below is generated by plot.py at 2018-01-02 08:00:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.42 Mbit/s
95th percentile per-packet one-way delay: 53.746 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 12.42 Mbit/s
95th percentile per-packet one-way delay: 53.746 ms
Loss rate: 0.35%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-02 03:45:42

End at: 2018-01-02 03:46:12

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.57 Mbit/s

95th percentile per-packet one-way delay: 54.296 ms

Loss rate: 0.81%

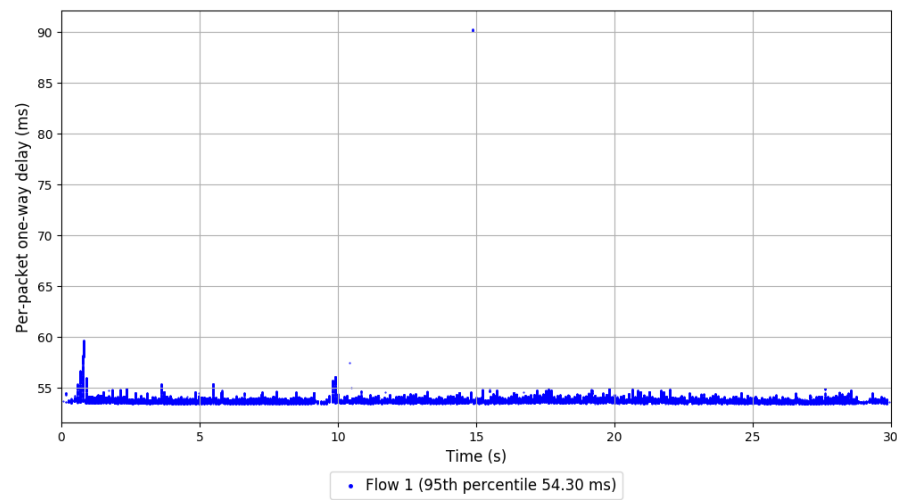
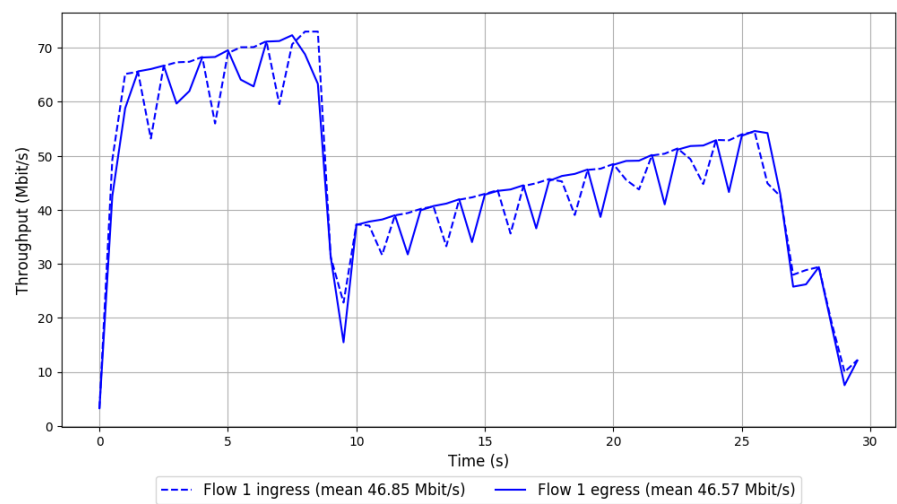
-- Flow 1:

Average throughput: 46.57 Mbit/s

95th percentile per-packet one-way delay: 54.296 ms

Loss rate: 0.81%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-02 03:57:18

End at: 2018-01-02 03:57:48

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.78 Mbit/s

95th percentile per-packet one-way delay: 54.535 ms

Loss rate: 0.18%

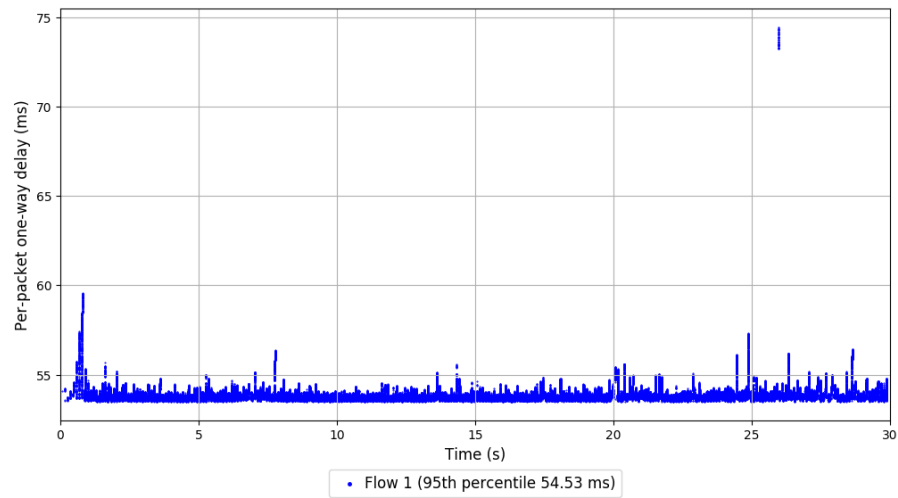
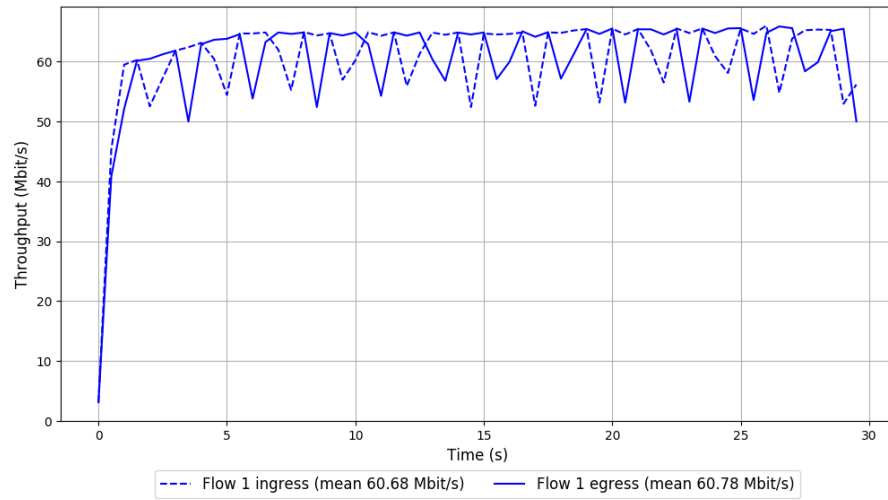
-- Flow 1:

Average throughput: 60.78 Mbit/s

95th percentile per-packet one-way delay: 54.535 ms

Loss rate: 0.18%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-02 04:08:55

End at: 2018-01-02 04:09:25

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.26 Mbit/s

95th percentile per-packet one-way delay: 55.077 ms

Loss rate: 0.43%

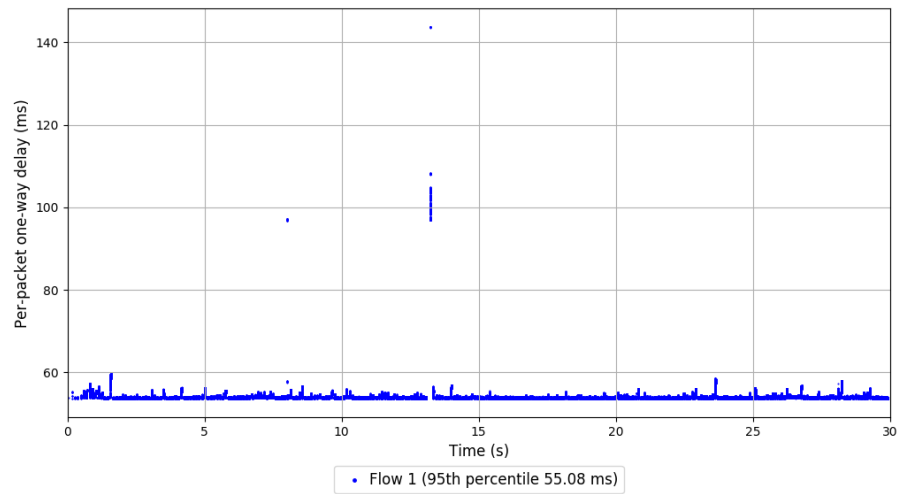
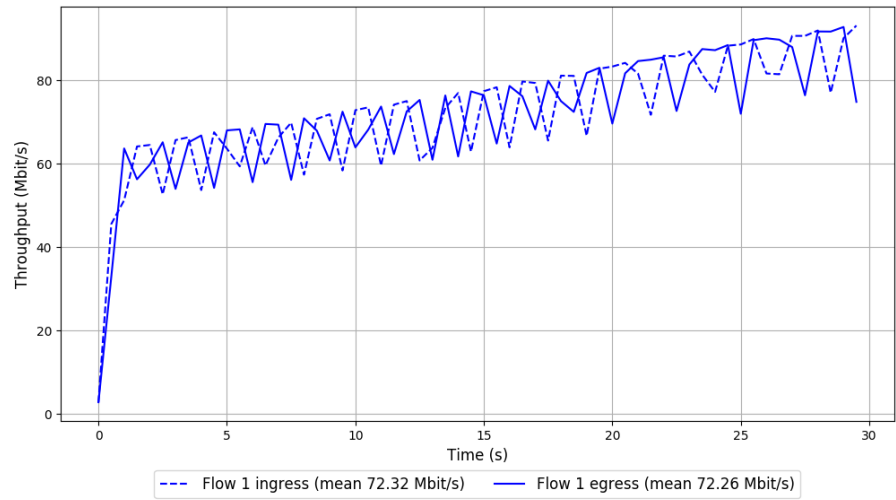
-- Flow 1:

Average throughput: 72.26 Mbit/s

95th percentile per-packet one-way delay: 55.077 ms

Loss rate: 0.43%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-02 04:20:40

End at: 2018-01-02 04:21:10

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.64 Mbit/s

95th percentile per-packet one-way delay: 54.538 ms

Loss rate: 0.62%

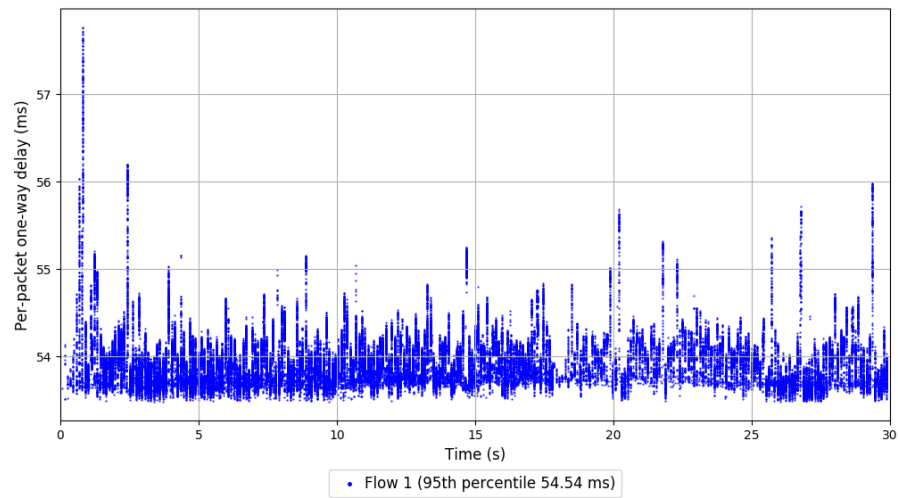
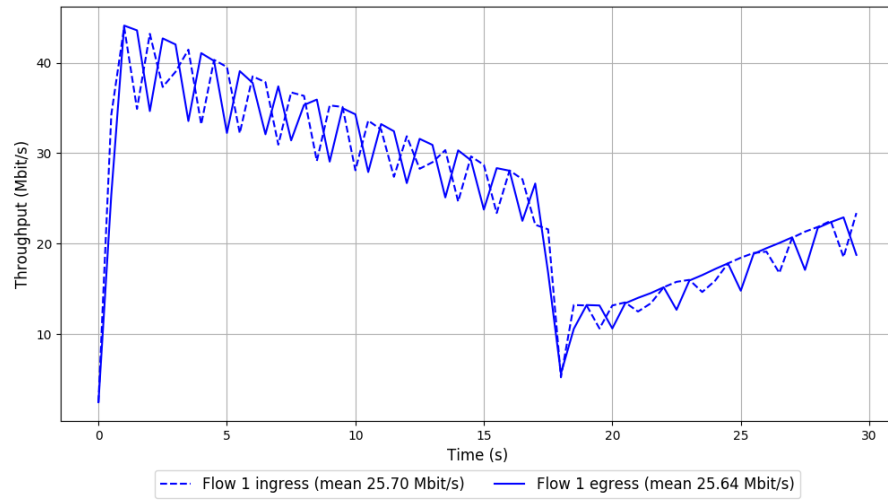
-- Flow 1:

Average throughput: 25.64 Mbit/s

95th percentile per-packet one-way delay: 54.538 ms

Loss rate: 0.62%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-02 04:32:11

End at: 2018-01-02 04:32:41

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.79 Mbit/s

95th percentile per-packet one-way delay: 54.120 ms

Loss rate: 0.37%

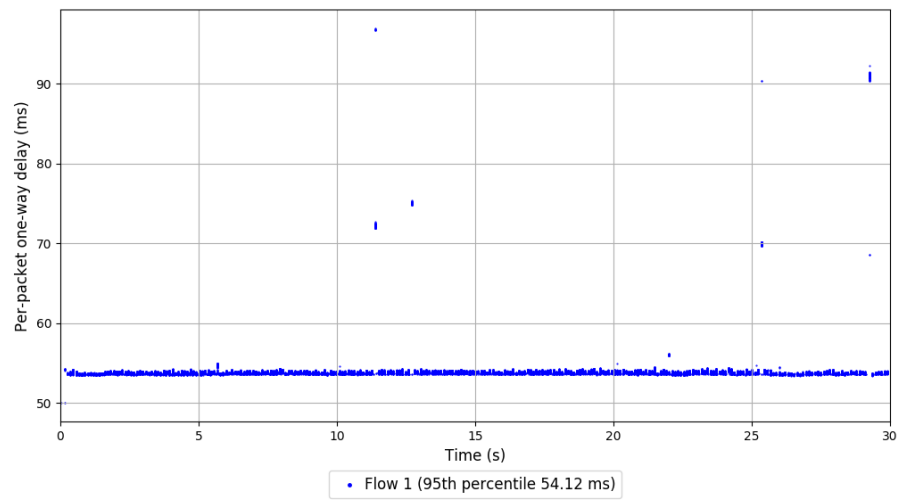
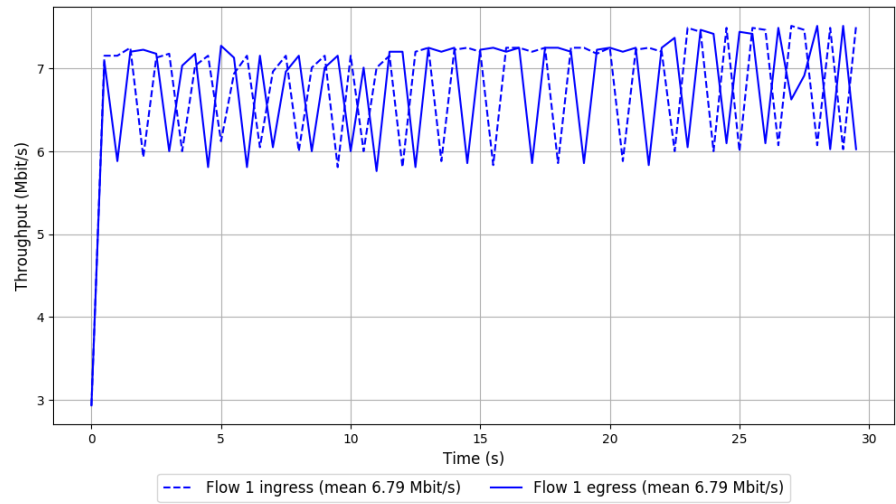
-- Flow 1:

Average throughput: 6.79 Mbit/s

95th percentile per-packet one-way delay: 54.120 ms

Loss rate: 0.37%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-02 04:43:41

End at: 2018-01-02 04:44:11

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.99 Mbit/s

95th percentile per-packet one-way delay: 54.389 ms

Loss rate: 0.36%

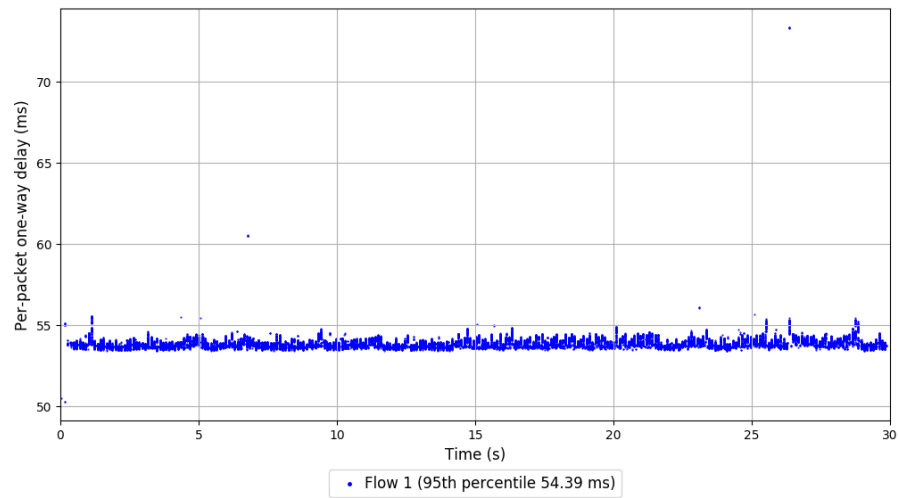
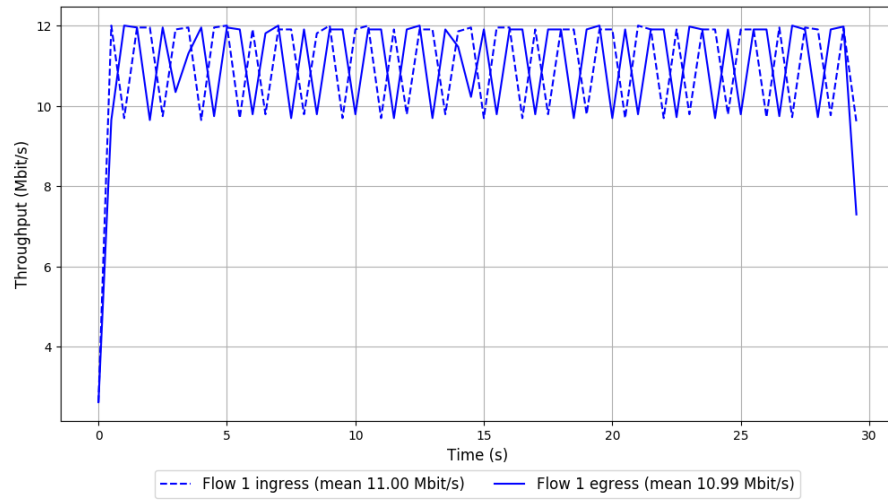
-- Flow 1:

Average throughput: 10.99 Mbit/s

95th percentile per-packet one-way delay: 54.389 ms

Loss rate: 0.36%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-02 04:54:28

End at: 2018-01-02 04:54:58

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.28 Mbit/s

95th percentile per-packet one-way delay: 54.629 ms

Loss rate: 0.35%

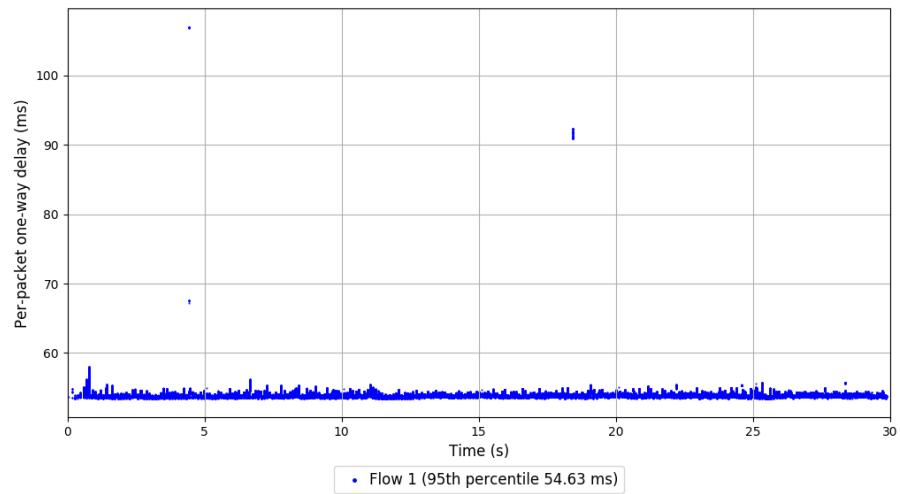
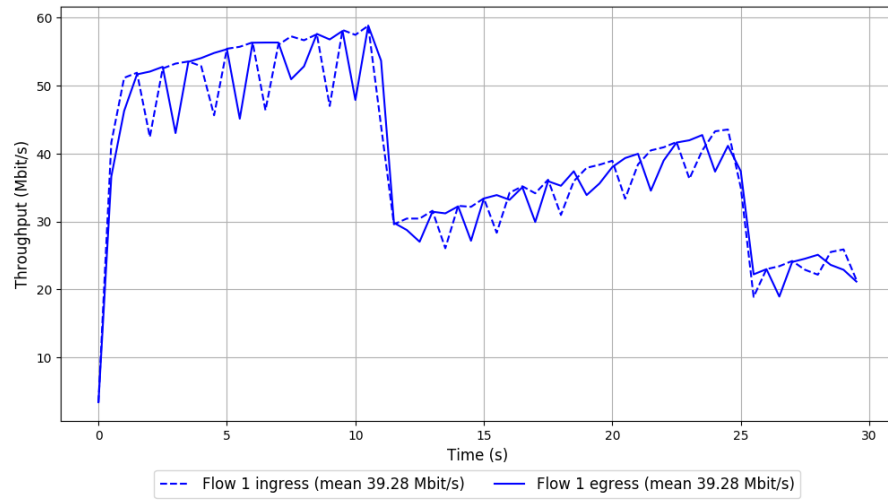
-- Flow 1:

Average throughput: 39.28 Mbit/s

95th percentile per-packet one-way delay: 54.629 ms

Loss rate: 0.35%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-02 05:05:31

End at: 2018-01-02 05:06:01

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.08 Mbit/s

95th percentile per-packet one-way delay: 54.927 ms

Loss rate: 0.19%

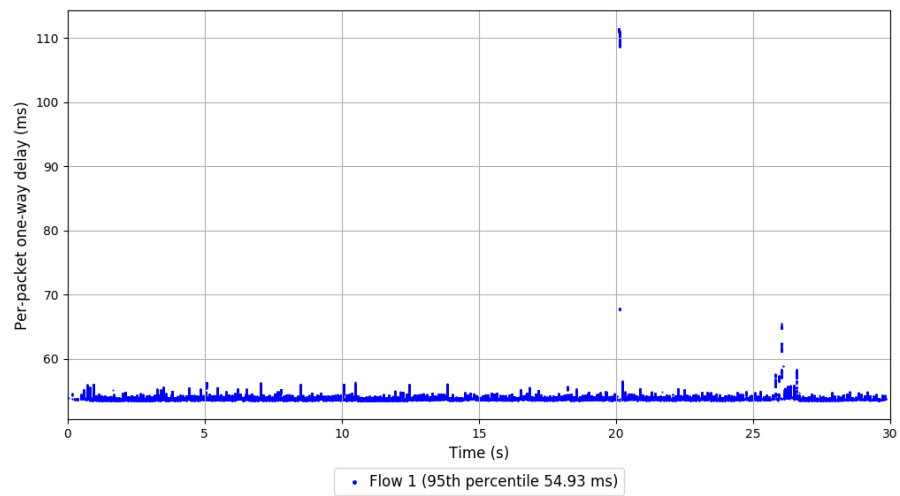
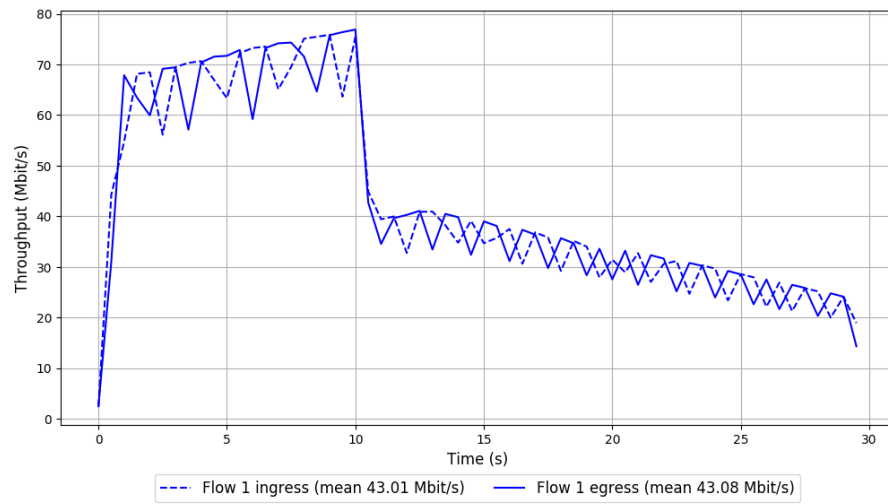
-- Flow 1:

Average throughput: 43.08 Mbit/s

95th percentile per-packet one-way delay: 54.927 ms

Loss rate: 0.19%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-02 05:16:56

End at: 2018-01-02 05:17:26

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 54.249 ms

Loss rate: 0.92%

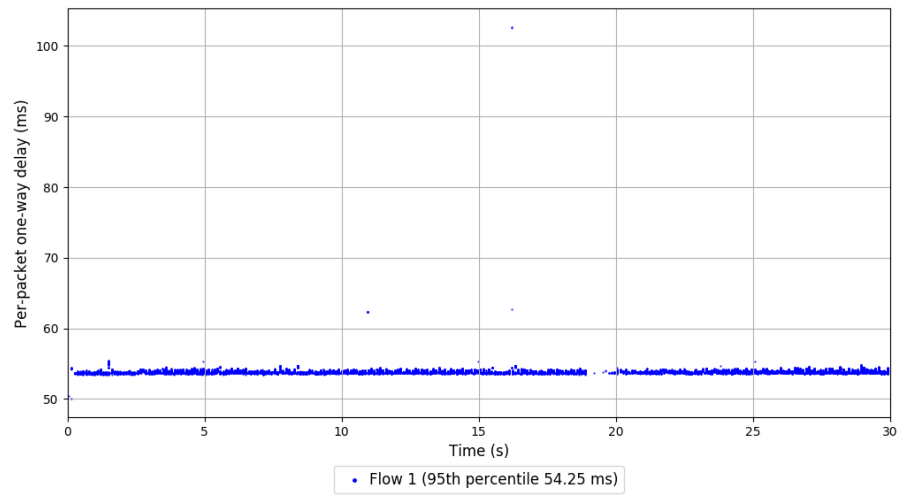
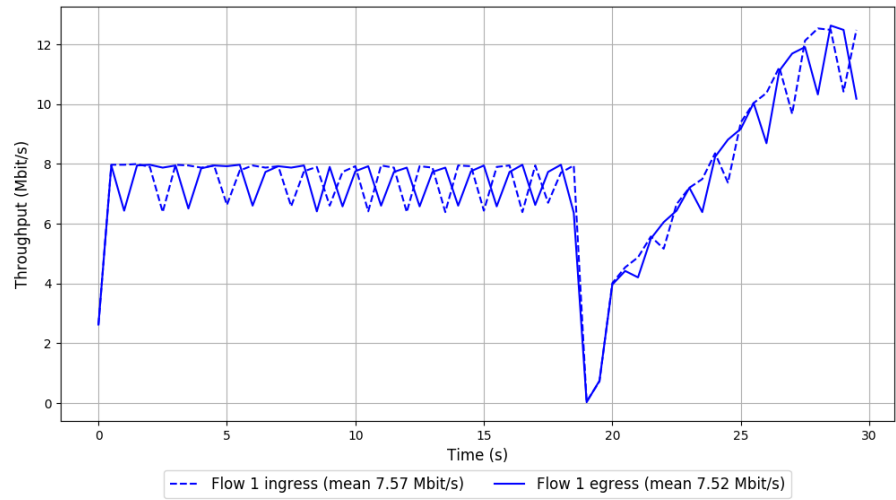
-- Flow 1:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 54.249 ms

Loss rate: 0.92%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-02 05:27:52

End at: 2018-01-02 05:28:22

Below is generated by plot.py at 2018-01-02 08:00:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.38 Mbit/s

95th percentile per-packet one-way delay: 54.329 ms

Loss rate: 0.69%

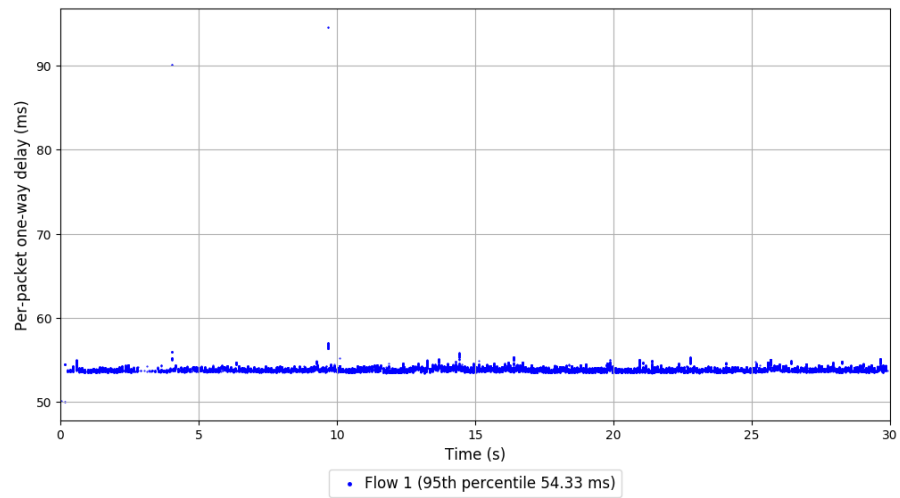
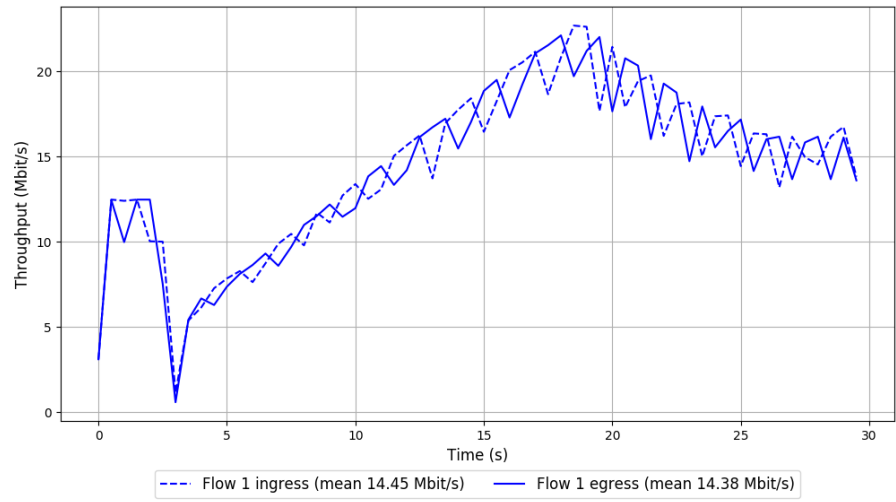
-- Flow 1:

Average throughput: 14.38 Mbit/s

95th percentile per-packet one-way delay: 54.329 ms

Loss rate: 0.69%

Run 10: Report of TCP Vegas — Data Link

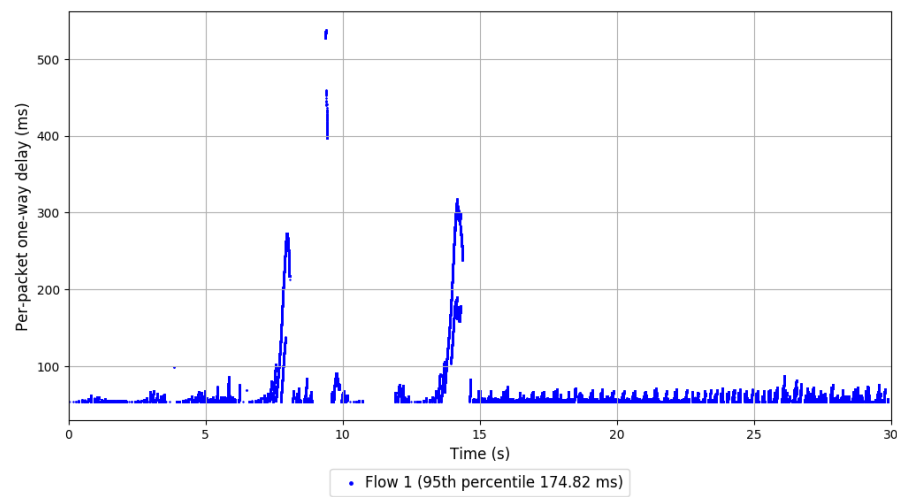
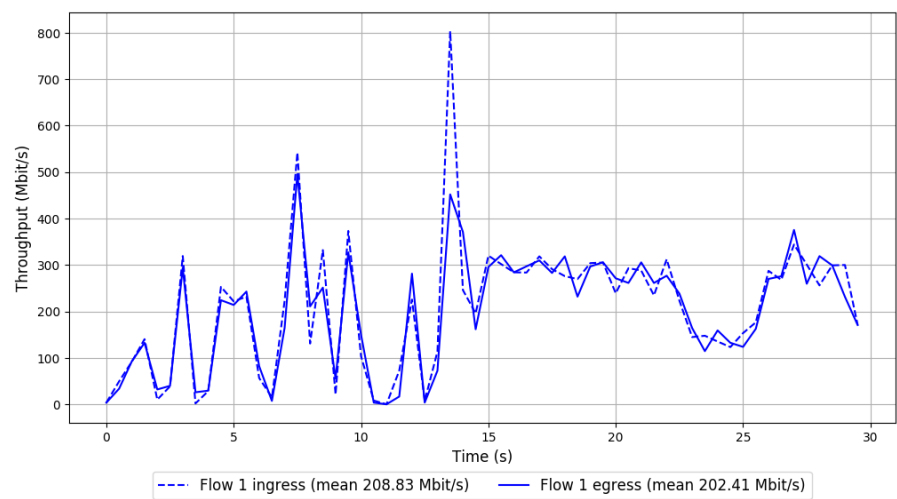


```
Run 1: Statistics of Verus

Start at: 2018-01-02 03:44:01
End at: 2018-01-02 03:44:31

# Below is generated by plot.py at 2018-01-02 08:00:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.41 Mbit/s
95th percentile per-packet one-way delay: 174.820 ms
Loss rate: 3.39%
-- Flow 1:
Average throughput: 202.41 Mbit/s
95th percentile per-packet one-way delay: 174.820 ms
Loss rate: 3.39%
```

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-02 03:55:32

End at: 2018-01-02 03:56:02

Below is generated by plot.py at 2018-01-02 08:01:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 273.47 Mbit/s

95th percentile per-packet one-way delay: 183.744 ms

Loss rate: 0.70%

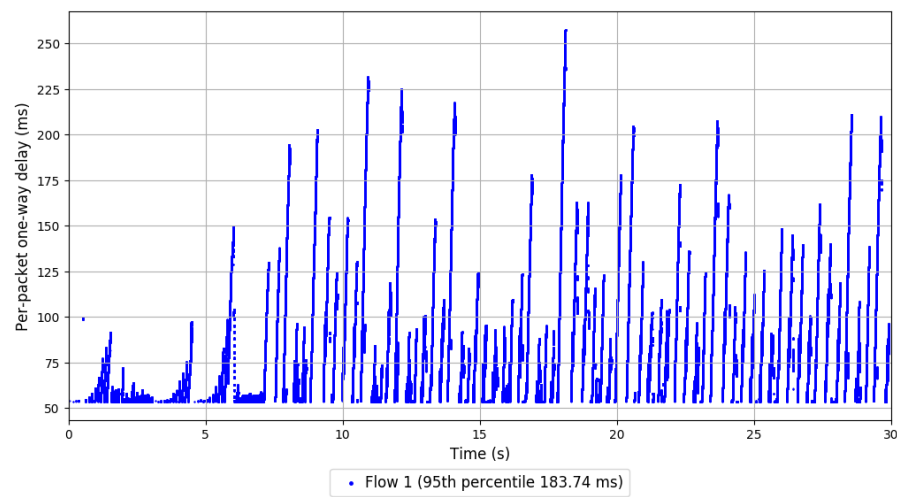
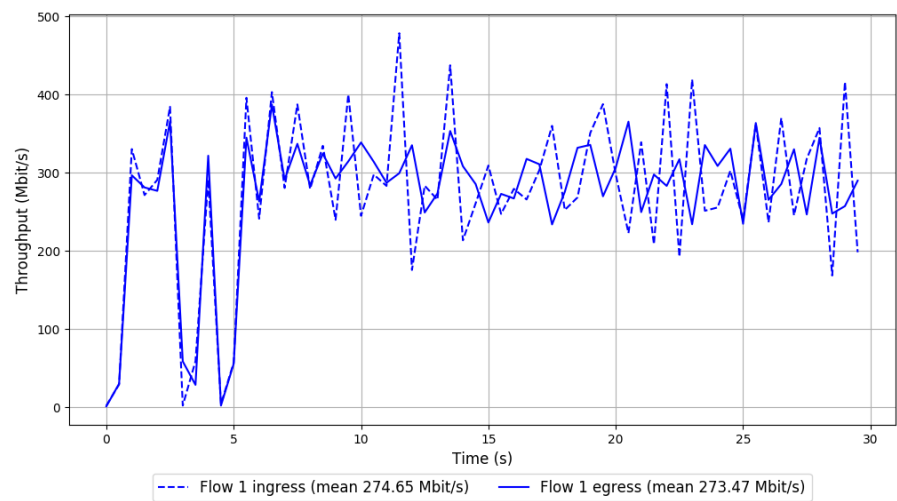
-- Flow 1:

Average throughput: 273.47 Mbit/s

95th percentile per-packet one-way delay: 183.744 ms

Loss rate: 0.70%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-02 04:07:09

End at: 2018-01-02 04:07:39

Below is generated by plot.py at 2018-01-02 08:01:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 268.67 Mbit/s

95th percentile per-packet one-way delay: 164.675 ms

Loss rate: 3.55%

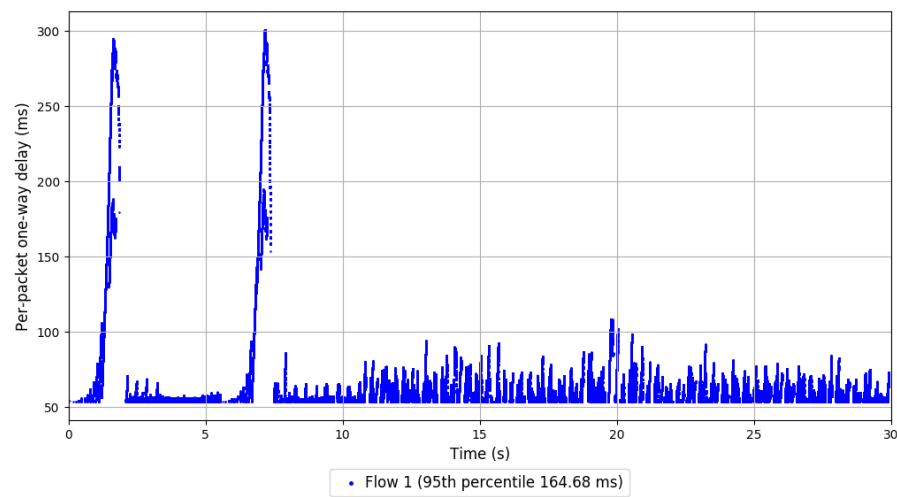
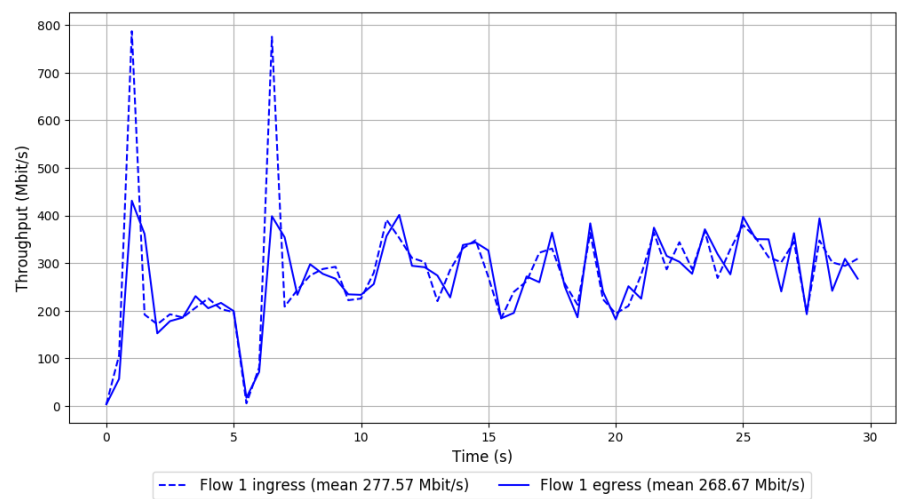
-- Flow 1:

Average throughput: 268.67 Mbit/s

95th percentile per-packet one-way delay: 164.675 ms

Loss rate: 3.55%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-02 04:18:57

End at: 2018-01-02 04:19:27

Below is generated by plot.py at 2018-01-02 08:01:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 233.21 Mbit/s

95th percentile per-packet one-way delay: 125.637 ms

Loss rate: 1.95%

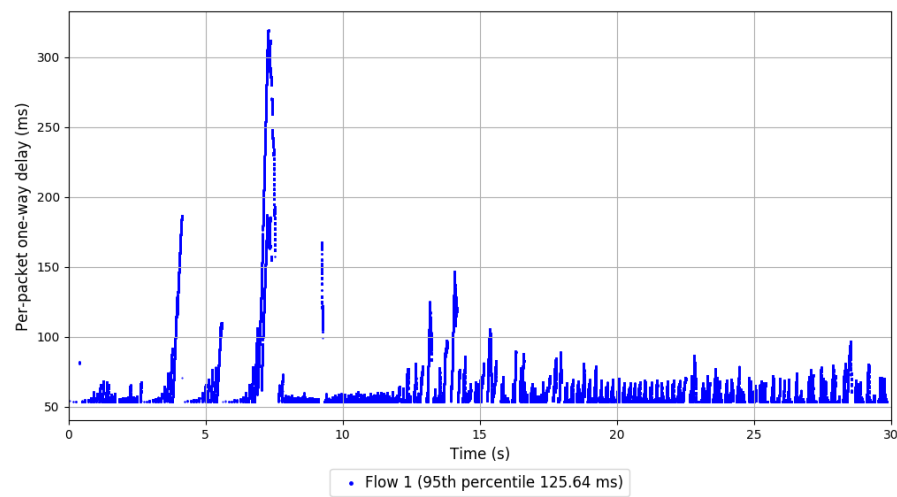
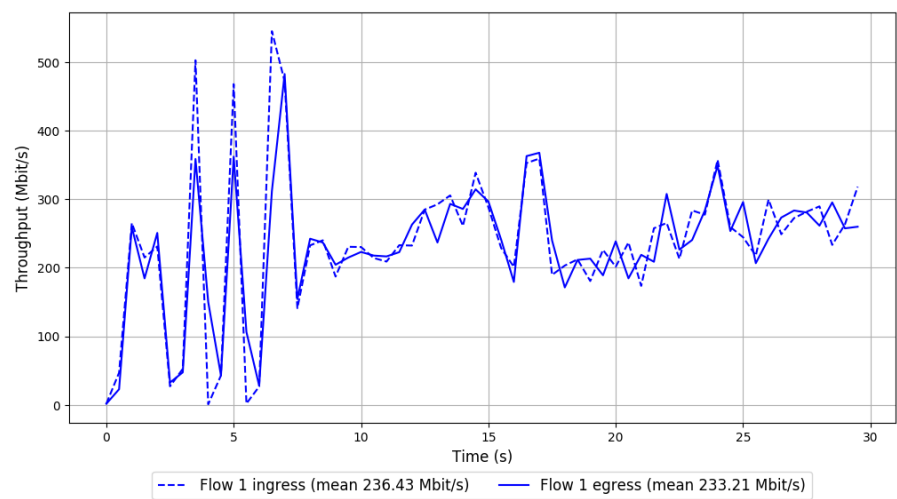
-- Flow 1:

Average throughput: 233.21 Mbit/s

95th percentile per-packet one-way delay: 125.637 ms

Loss rate: 1.95%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-02 04:30:26

End at: 2018-01-02 04:30:56

Below is generated by plot.py at 2018-01-02 08:02:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 266.93 Mbit/s

95th percentile per-packet one-way delay: 98.667 ms

Loss rate: 0.76%

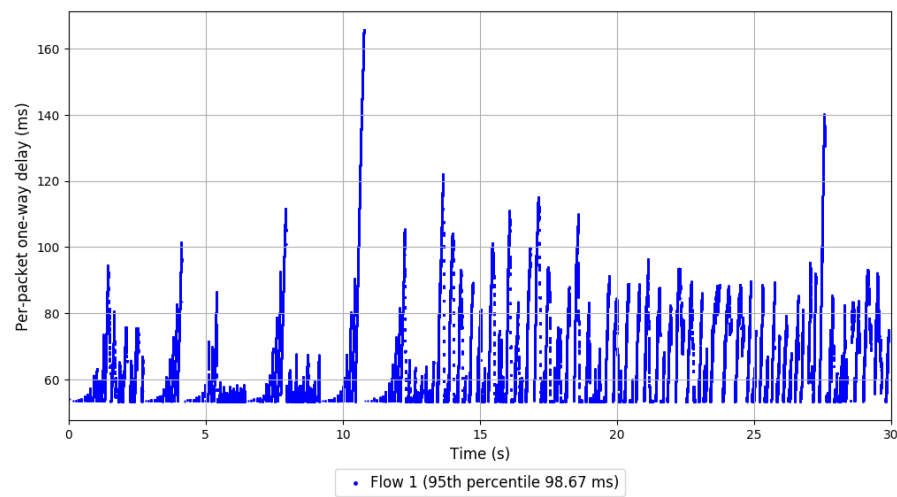
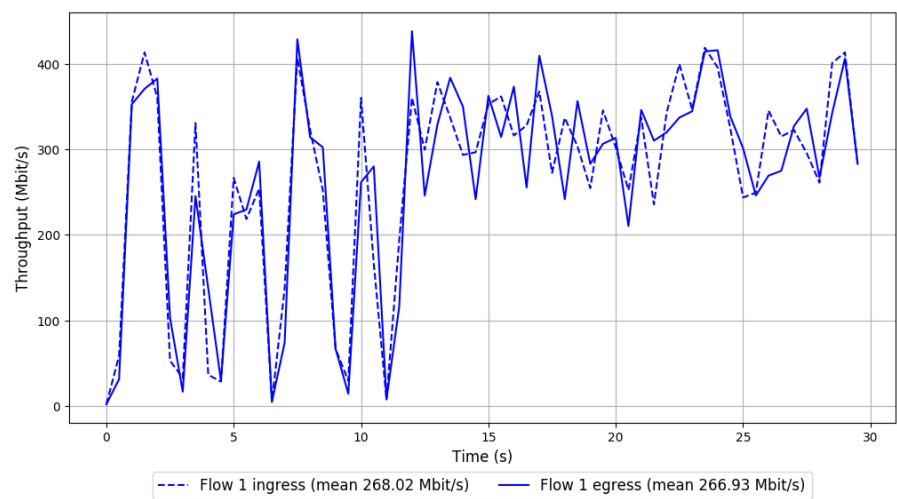
-- Flow 1:

Average throughput: 266.93 Mbit/s

95th percentile per-packet one-way delay: 98.667 ms

Loss rate: 0.76%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-02 04:42:06

End at: 2018-01-02 04:42:36

Below is generated by plot.py at 2018-01-02 08:02:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.31 Mbit/s

95th percentile per-packet one-way delay: 72.434 ms

Loss rate: 1.04%

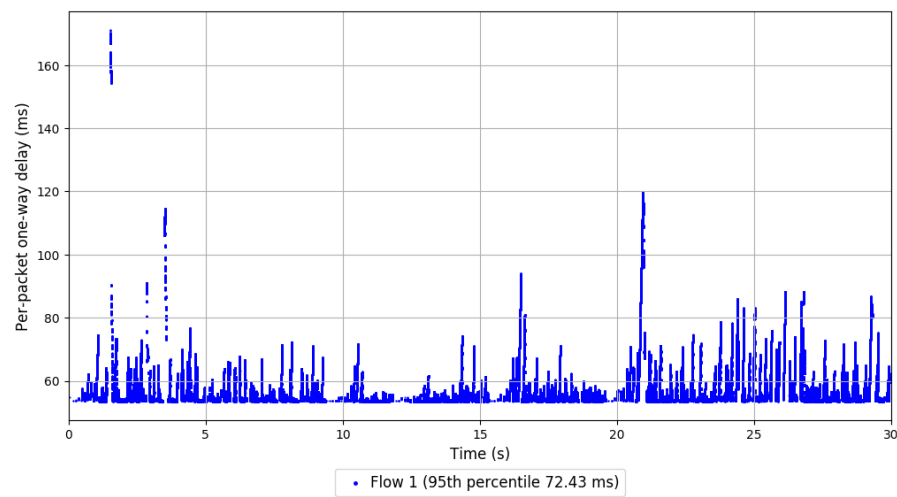
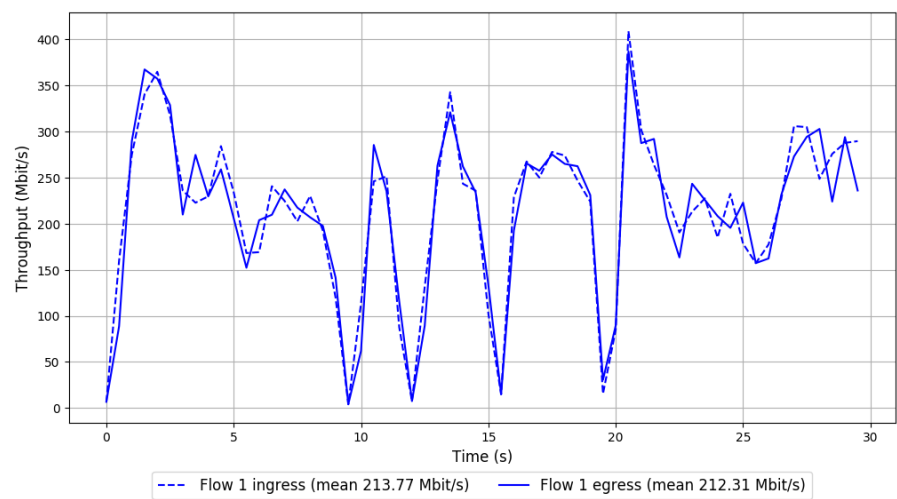
-- Flow 1:

Average throughput: 212.31 Mbit/s

95th percentile per-packet one-way delay: 72.434 ms

Loss rate: 1.04%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-02 04:52:49

End at: 2018-01-02 04:53:19

Below is generated by plot.py at 2018-01-02 08:04:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 256.62 Mbit/s

95th percentile per-packet one-way delay: 73.761 ms

Loss rate: 0.25%

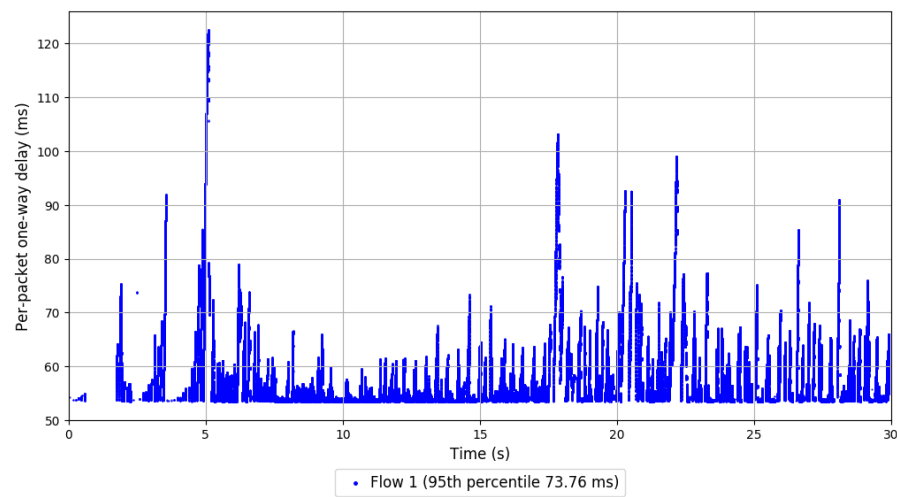
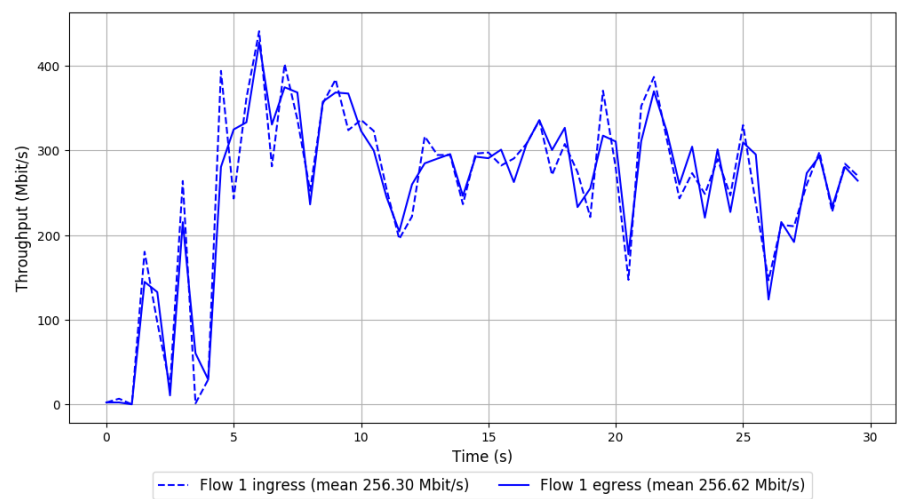
-- Flow 1:

Average throughput: 256.62 Mbit/s

95th percentile per-packet one-way delay: 73.761 ms

Loss rate: 0.25%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-02 05:03:54

End at: 2018-01-02 05:04:24

Below is generated by plot.py at 2018-01-02 08:04:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.03 Mbit/s

95th percentile per-packet one-way delay: 103.809 ms

Loss rate: 0.40%

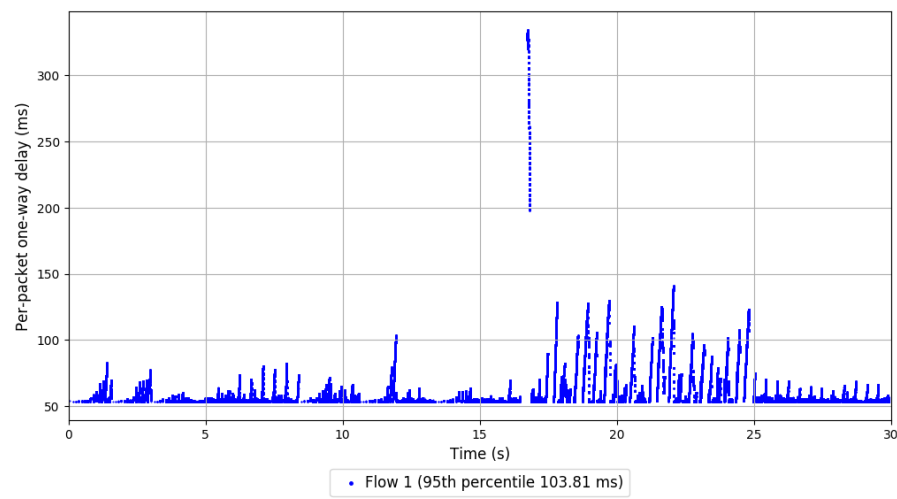
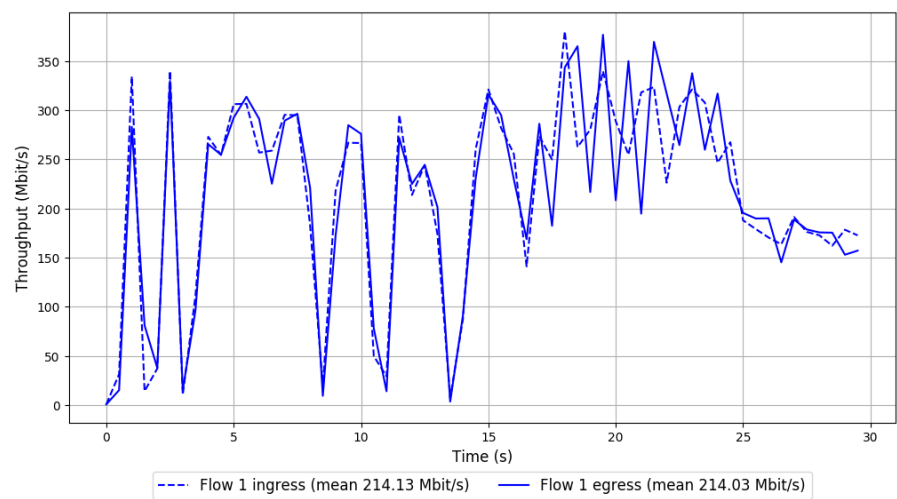
-- Flow 1:

Average throughput: 214.03 Mbit/s

95th percentile per-packet one-way delay: 103.809 ms

Loss rate: 0.40%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-02 05:15:17

End at: 2018-01-02 05:15:47

Below is generated by plot.py at 2018-01-02 08:04:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 255.10 Mbit/s

95th percentile per-packet one-way delay: 103.579 ms

Loss rate: 0.77%

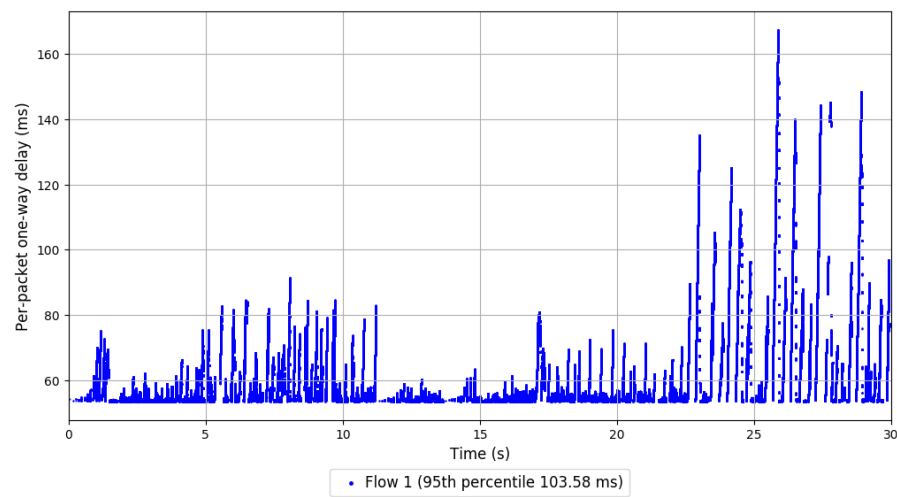
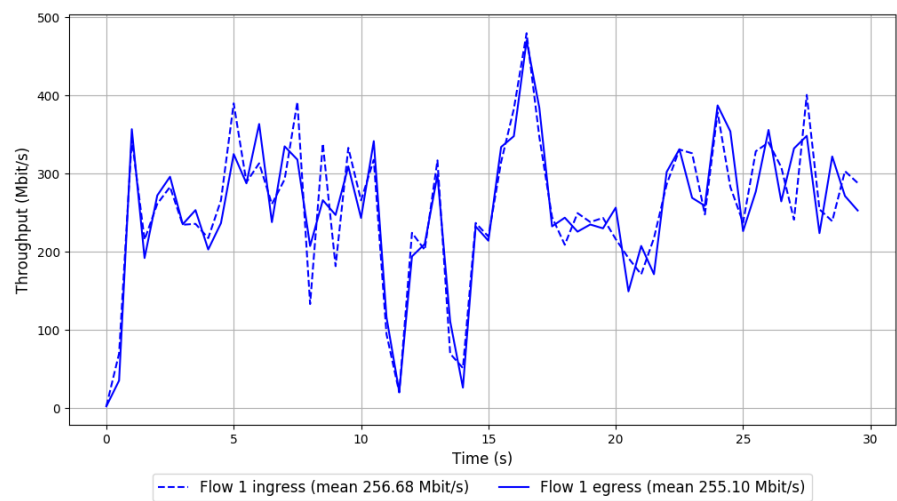
-- Flow 1:

Average throughput: 255.10 Mbit/s

95th percentile per-packet one-way delay: 103.579 ms

Loss rate: 0.77%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-02 05:26:14

End at: 2018-01-02 05:26:44

Below is generated by plot.py at 2018-01-02 08:05:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 243.22 Mbit/s

95th percentile per-packet one-way delay: 127.351 ms

Loss rate: 1.08%

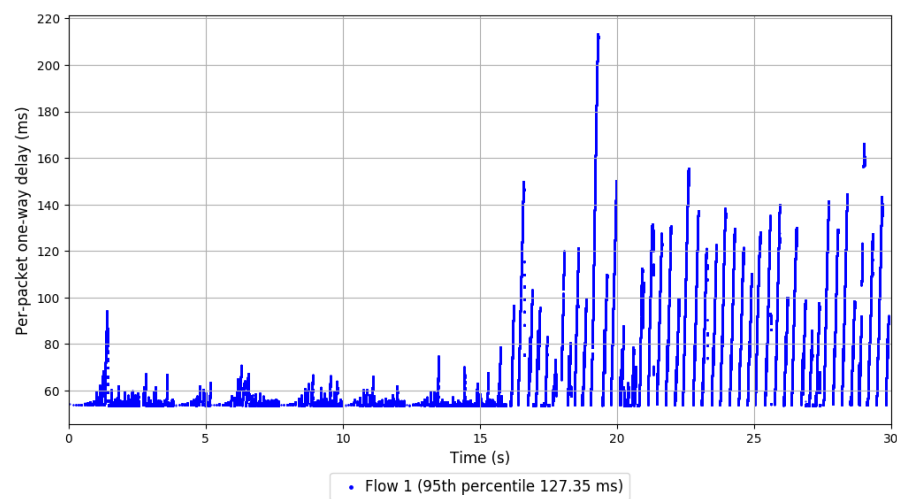
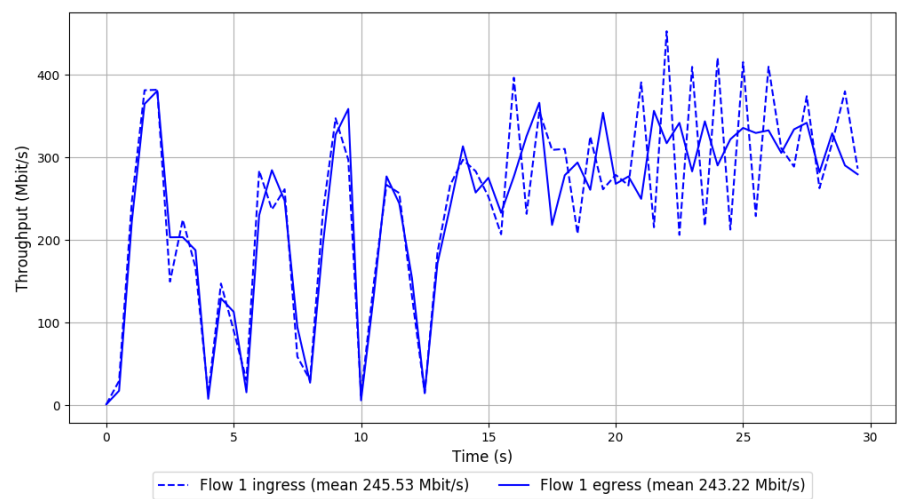
-- Flow 1:

Average throughput: 243.22 Mbit/s

95th percentile per-packet one-way delay: 127.351 ms

Loss rate: 1.08%

Run 10: Report of Verus — Data Link

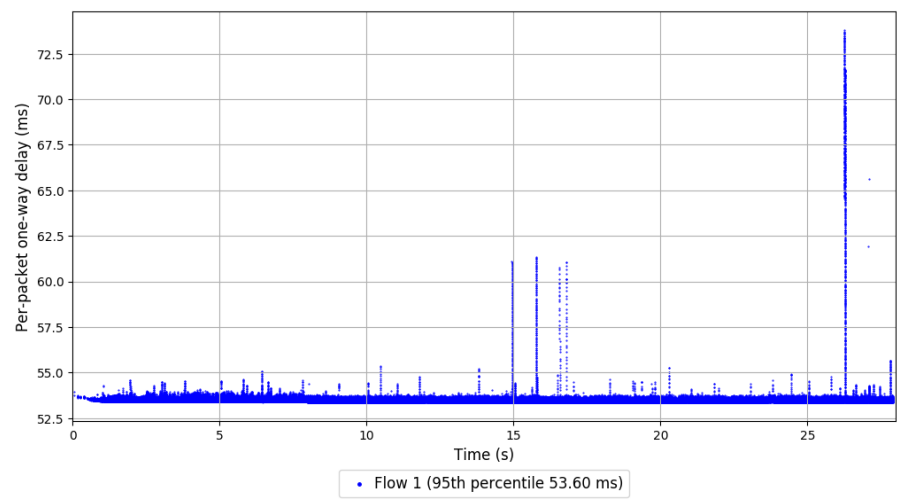
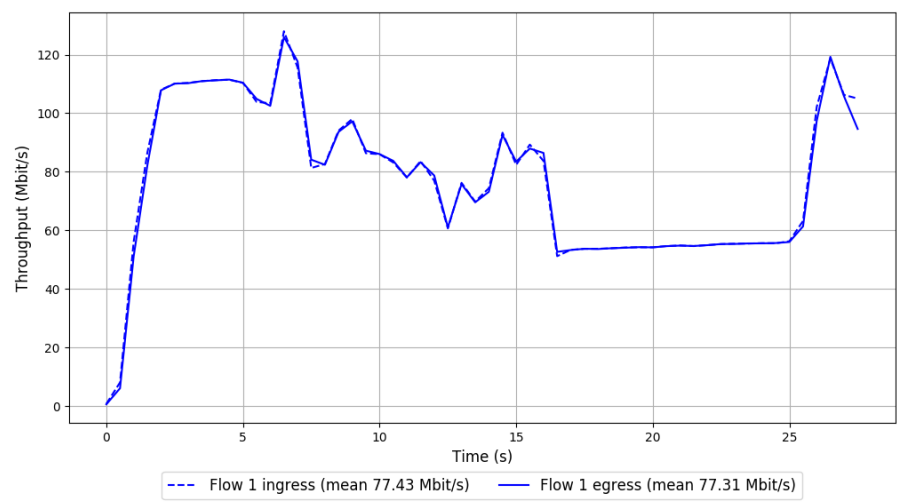


```
Run 1: Statistics of Copa

Start at: 2018-01-02 03:40:34
End at: 2018-01-02 03:41:04

# Below is generated by plot.py at 2018-01-02 08:05:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.31 Mbit/s
95th percentile per-packet one-way delay: 53.600 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 77.31 Mbit/s
95th percentile per-packet one-way delay: 53.600 ms
Loss rate: 0.53%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-02 03:52:05

End at: 2018-01-02 03:52:35

Below is generated by plot.py at 2018-01-02 08:05:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.26 Mbit/s

95th percentile per-packet one-way delay: 53.600 ms

Loss rate: 0.44%

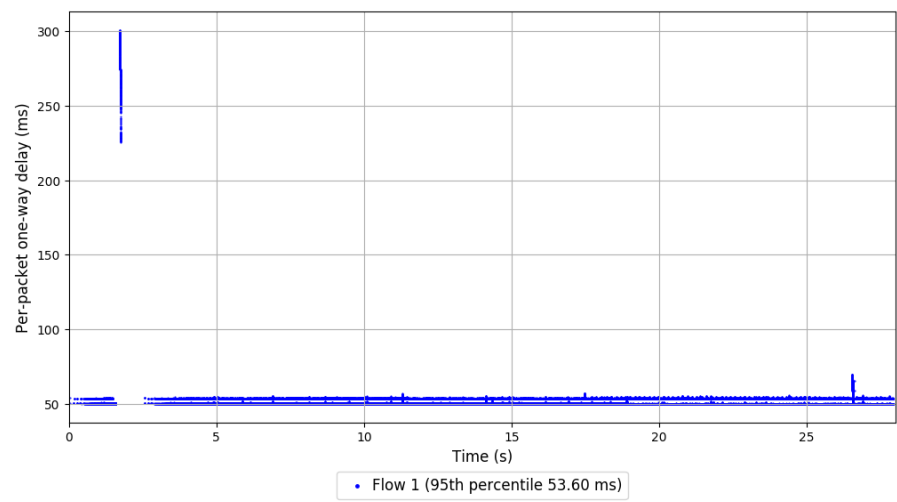
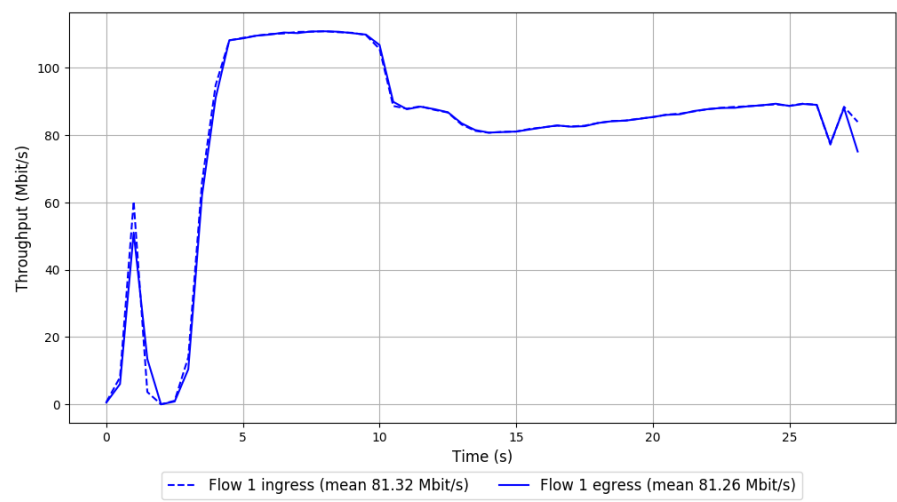
-- Flow 1:

Average throughput: 81.26 Mbit/s

95th percentile per-packet one-way delay: 53.600 ms

Loss rate: 0.44%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-02 04:03:43

End at: 2018-01-02 04:04:13

Below is generated by plot.py at 2018-01-02 08:05:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.43 Mbit/s

95th percentile per-packet one-way delay: 53.647 ms

Loss rate: 0.36%

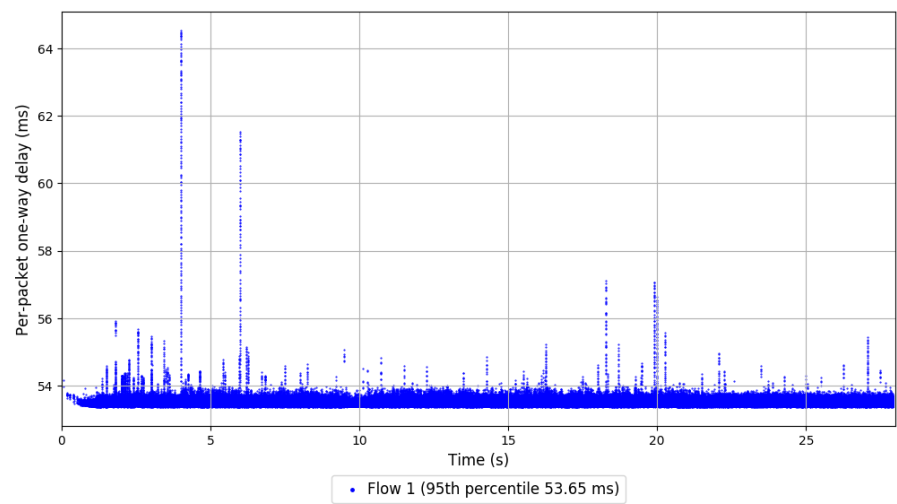
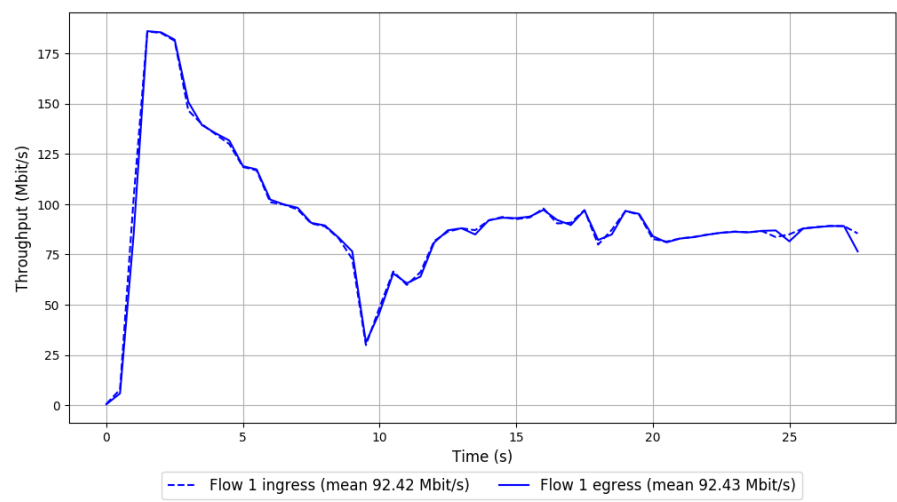
-- Flow 1:

Average throughput: 92.43 Mbit/s

95th percentile per-packet one-way delay: 53.647 ms

Loss rate: 0.36%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-02 04:15:19

End at: 2018-01-02 04:15:49

Below is generated by plot.py at 2018-01-02 08:05:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.83 Mbit/s

95th percentile per-packet one-way delay: 53.665 ms

Loss rate: 0.05%

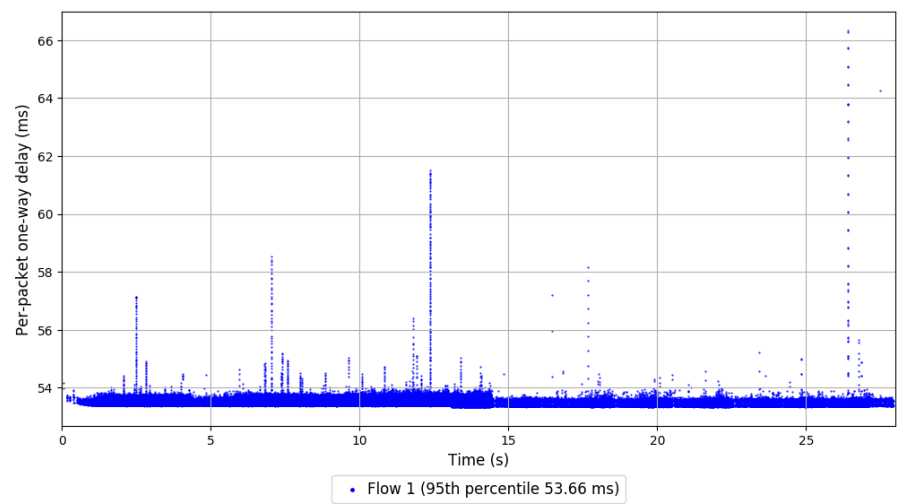
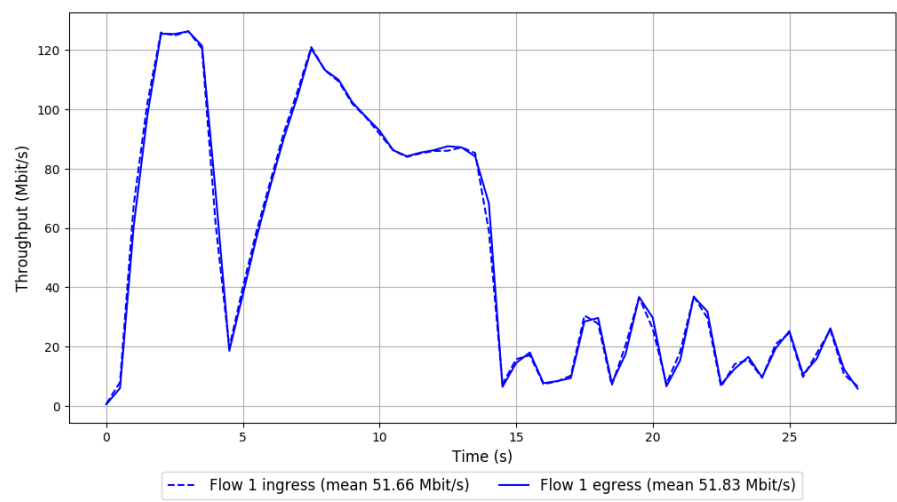
-- Flow 1:

Average throughput: 51.83 Mbit/s

95th percentile per-packet one-way delay: 53.665 ms

Loss rate: 0.05%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

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

End at: 2018-01-02 04:27:32

Below is generated by plot.py at 2018-01-02 08:05:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.18 Mbit/s

95th percentile per-packet one-way delay: 53.553 ms

Loss rate: 0.43%

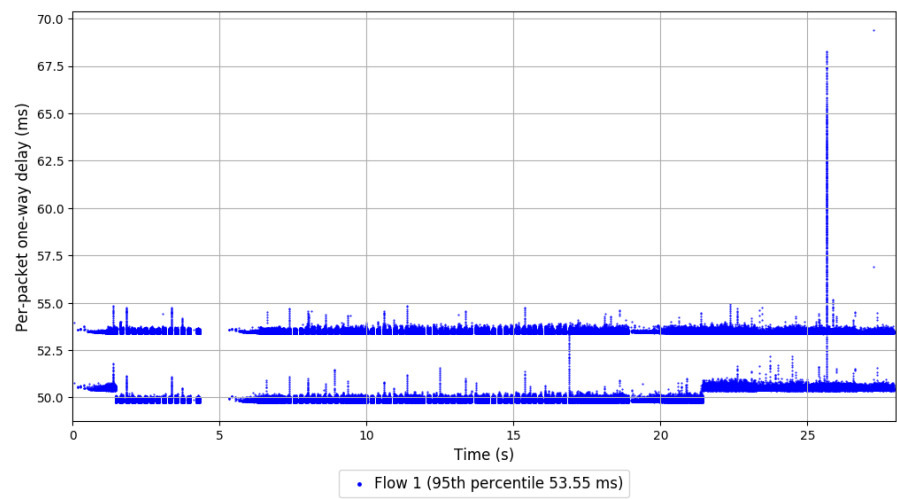
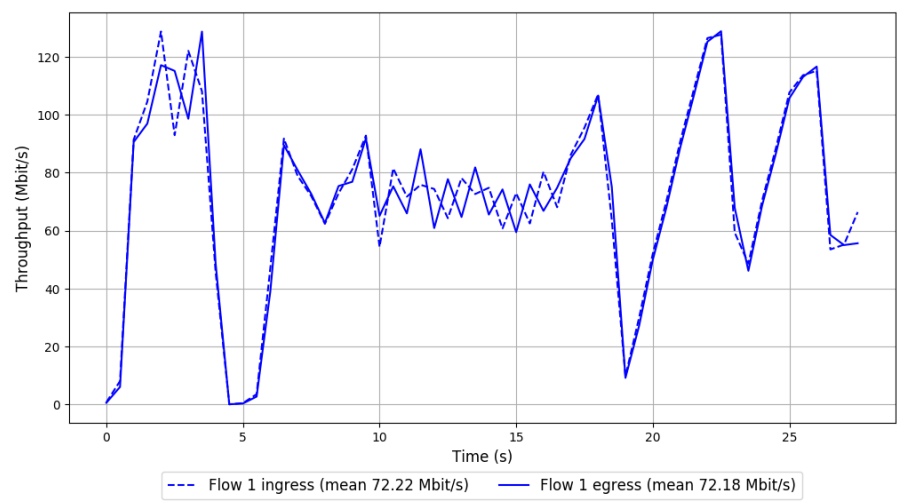
-- Flow 1:

Average throughput: 72.18 Mbit/s

95th percentile per-packet one-way delay: 53.553 ms

Loss rate: 0.43%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-02 04:38:29

End at: 2018-01-02 04:38:59

Below is generated by plot.py at 2018-01-02 08:06:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.26 Mbit/s

95th percentile per-packet one-way delay: 53.630 ms

Loss rate: 0.34%

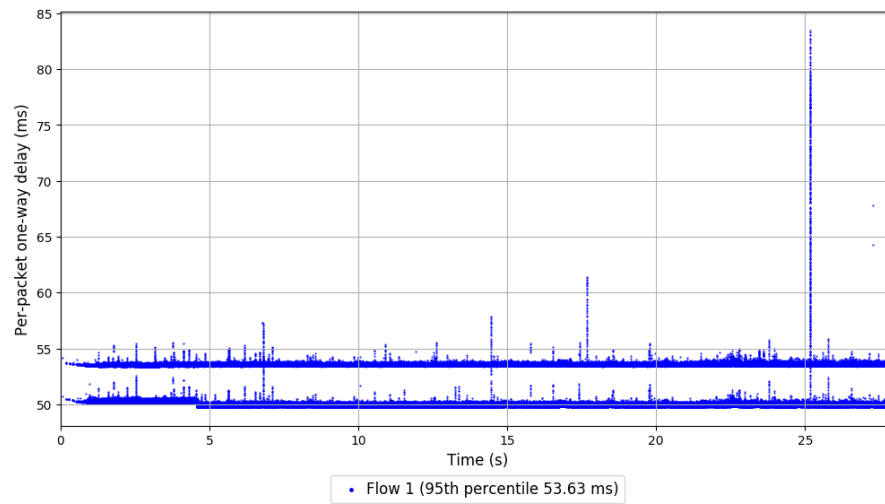
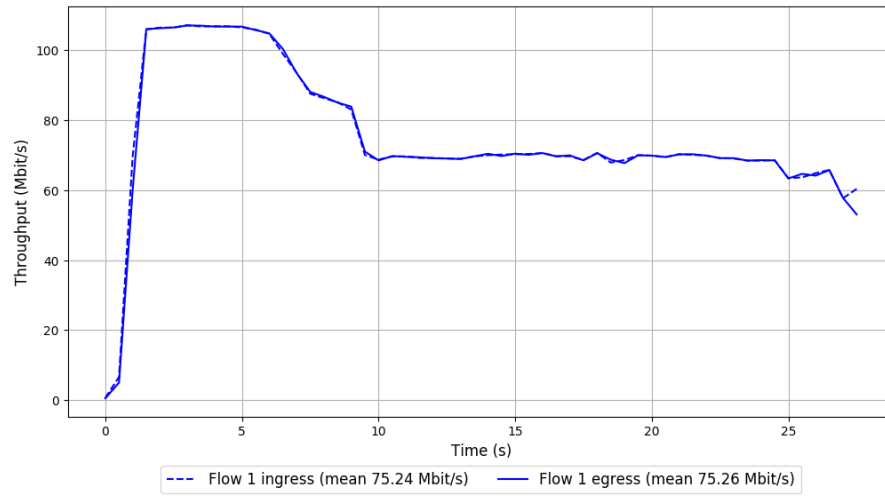
-- Flow 1:

Average throughput: 75.26 Mbit/s

95th percentile per-packet one-way delay: 53.630 ms

Loss rate: 0.34%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-02 04:49:26

End at: 2018-01-02 04:49:56

Below is generated by plot.py at 2018-01-02 08:06:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.02 Mbit/s

95th percentile per-packet one-way delay: 53.698 ms

Loss rate: 0.23%

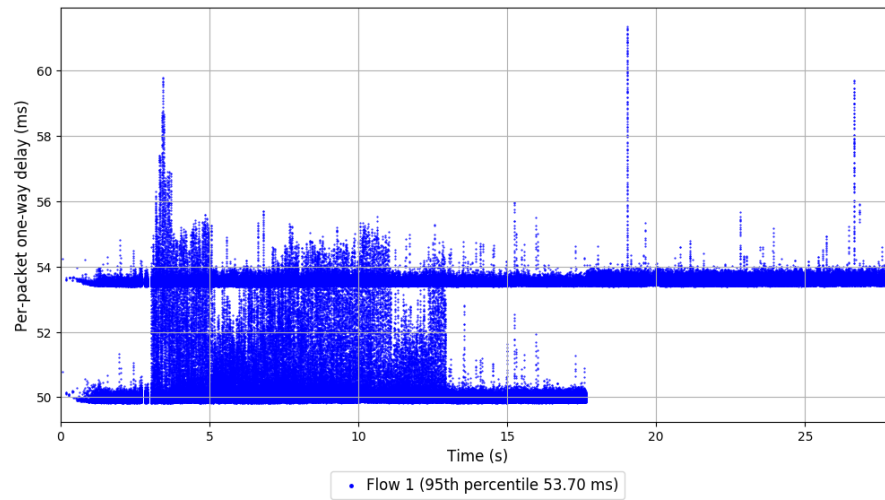
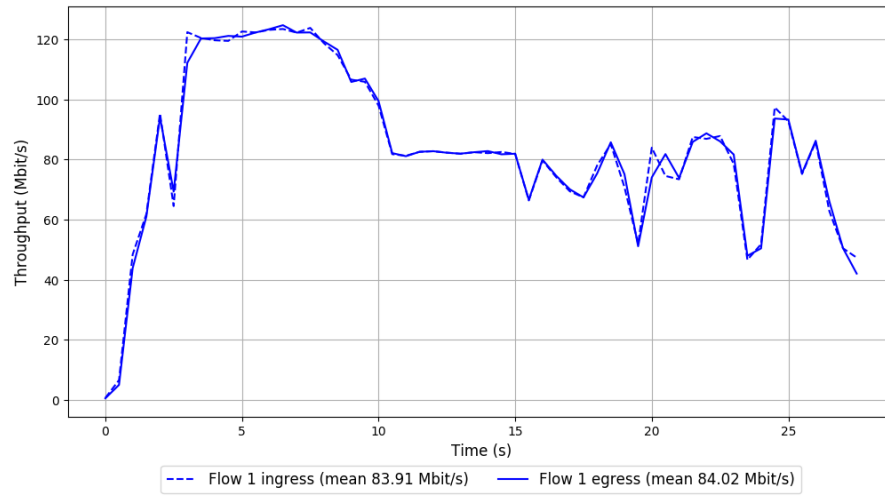
-- Flow 1:

Average throughput: 84.02 Mbit/s

95th percentile per-packet one-way delay: 53.698 ms

Loss rate: 0.23%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-02 05:00:18

End at: 2018-01-02 05:00:48

Below is generated by plot.py at 2018-01-02 08:06:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.91 Mbit/s

95th percentile per-packet one-way delay: 53.659 ms

Loss rate: 0.05%

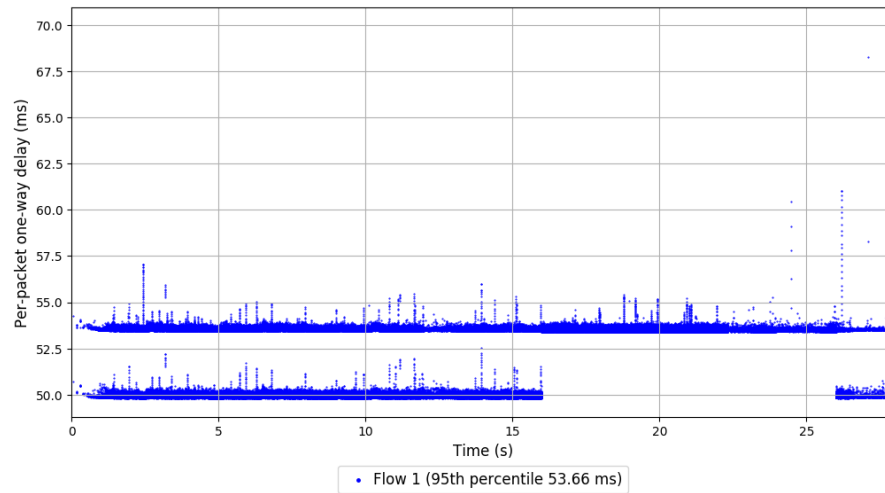
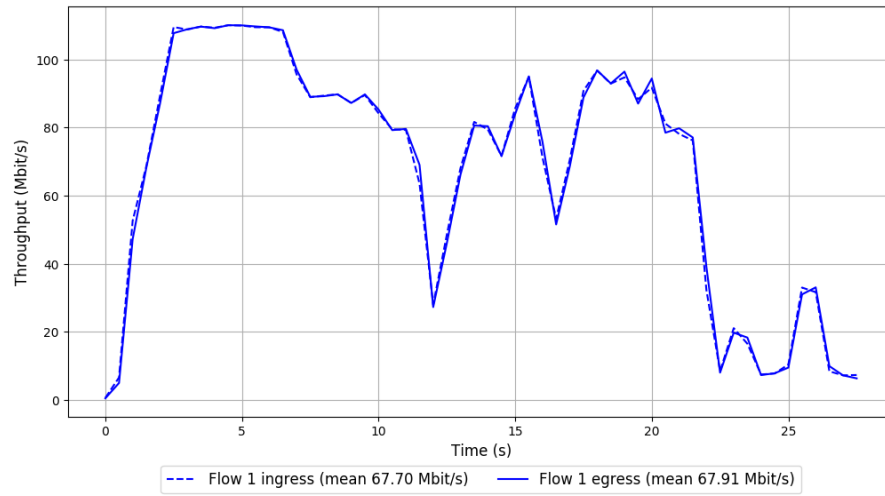
-- Flow 1:

Average throughput: 67.91 Mbit/s

95th percentile per-packet one-way delay: 53.659 ms

Loss rate: 0.05%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-02 05:11:39

End at: 2018-01-02 05:12:09

Below is generated by plot.py at 2018-01-02 08:06:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.41 Mbit/s

95th percentile per-packet one-way delay: 53.679 ms

Loss rate: 0.00%

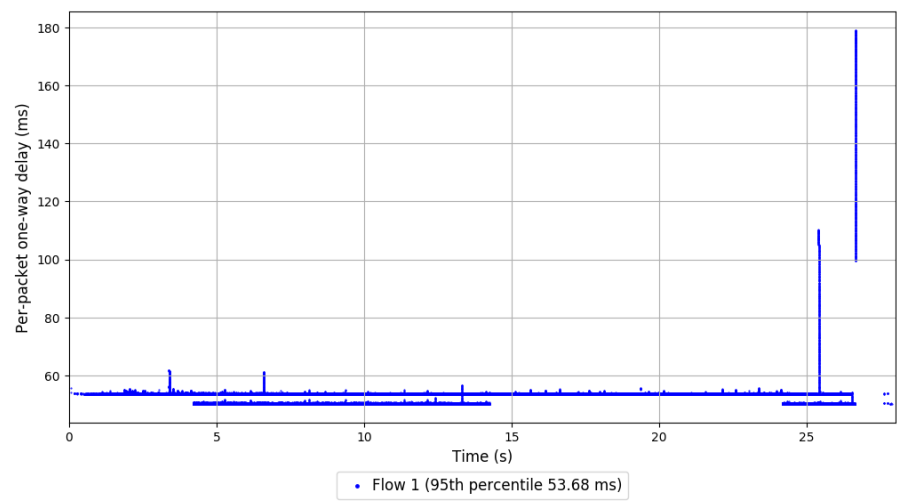
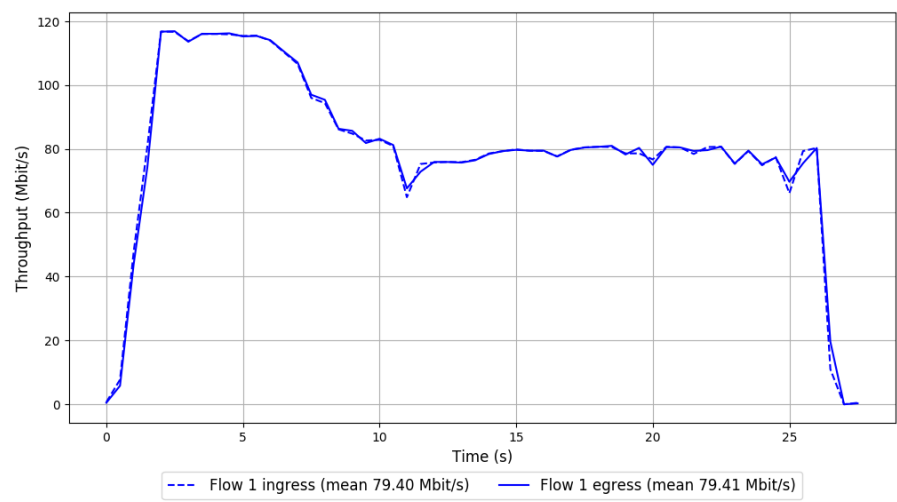
-- Flow 1:

Average throughput: 79.41 Mbit/s

95th percentile per-packet one-way delay: 53.679 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-02 05:22:54

End at: 2018-01-02 05:23:24

Below is generated by plot.py at 2018-01-02 08:06:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.08 Mbit/s

95th percentile per-packet one-way delay: 53.696 ms

Loss rate: 0.35%

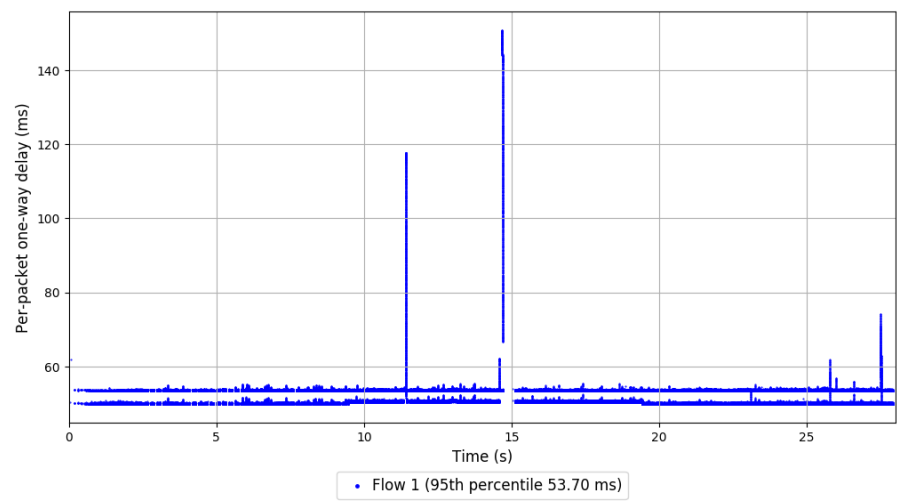
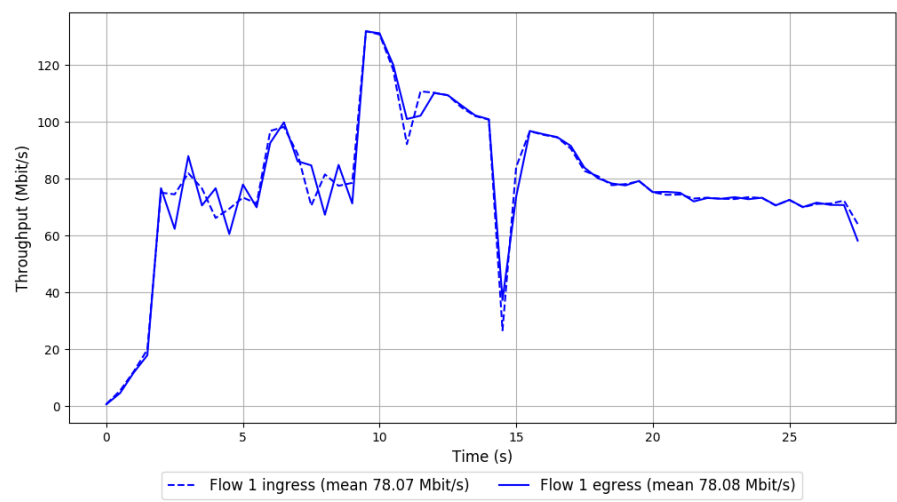
-- Flow 1:

Average throughput: 78.08 Mbit/s

95th percentile per-packet one-way delay: 53.696 ms

Loss rate: 0.35%

Run 10: Report of Copa — Data Link

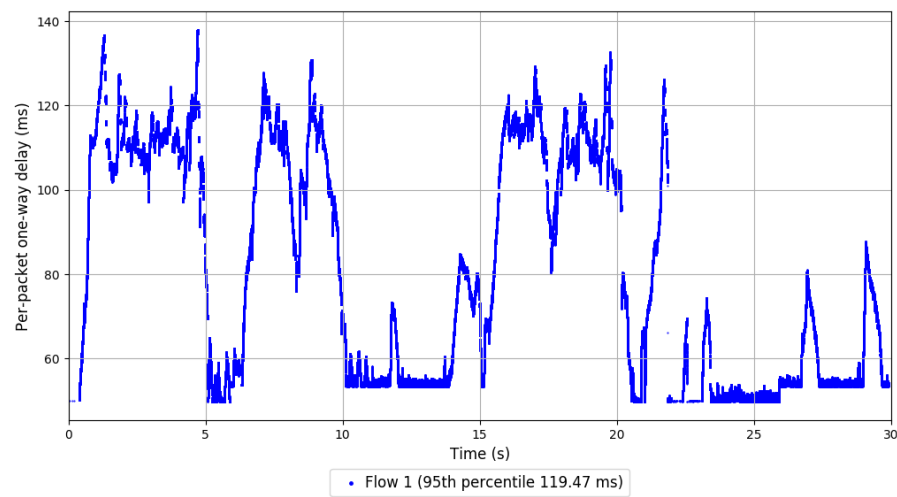
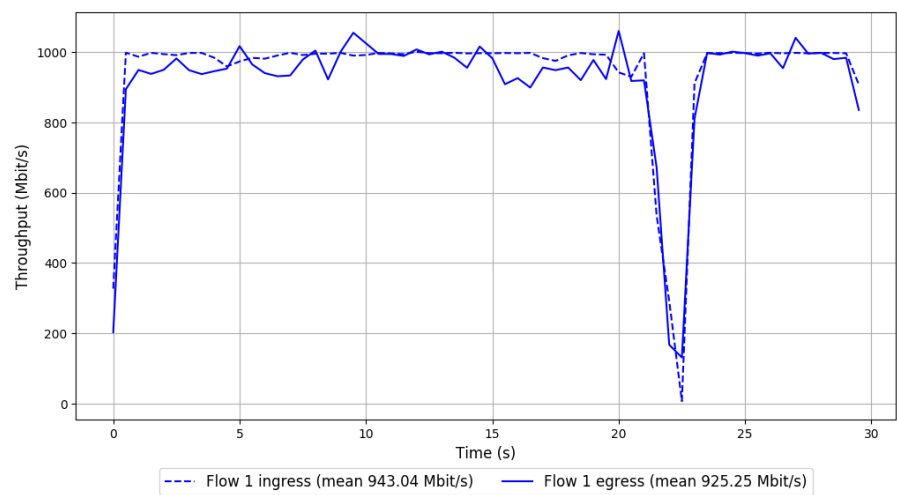


```
Run 1: Statistics of FillP

Start at: 2018-01-02 03:47:40
End at: 2018-01-02 03:48:10

# Below is generated by plot.py at 2018-01-02 08:22:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 925.25 Mbit/s
95th percentile per-packet one-way delay: 119.475 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 925.25 Mbit/s
95th percentile per-packet one-way delay: 119.475 ms
Loss rate: 2.22%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-02 03:59:16

End at: 2018-01-02 03:59:47

Below is generated by plot.py at 2018-01-02 08:23:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 943.93 Mbit/s

95th percentile per-packet one-way delay: 129.196 ms

Loss rate: 3.60%

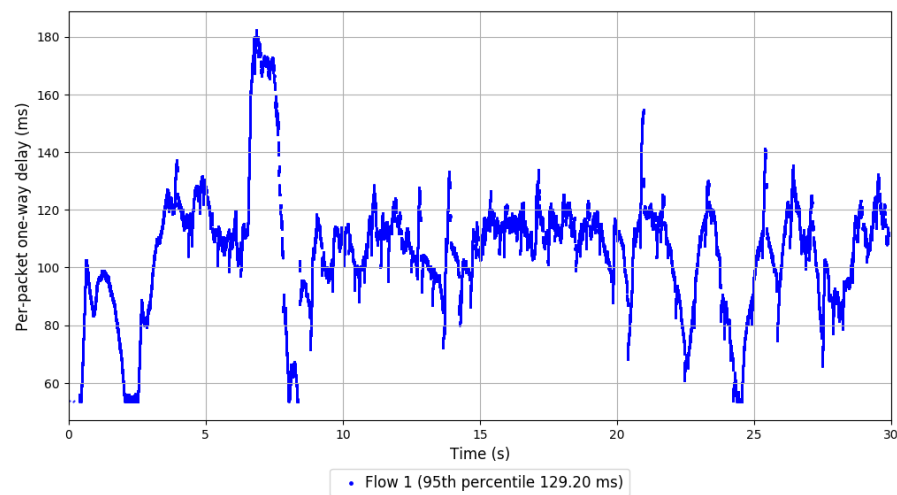
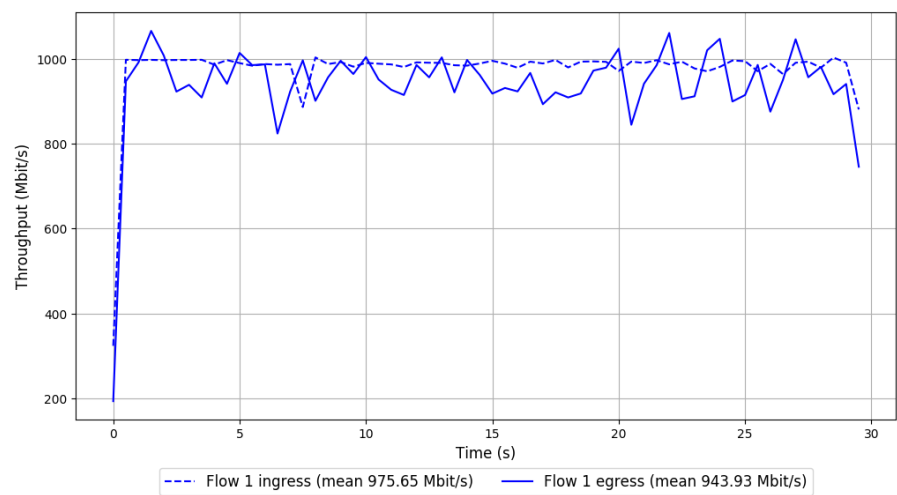
-- Flow 1:

Average throughput: 943.93 Mbit/s

95th percentile per-packet one-way delay: 129.196 ms

Loss rate: 3.60%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-02 04:10:53

End at: 2018-01-02 04:11:23

Below is generated by plot.py at 2018-01-02 08:23:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 922.41 Mbit/s

95th percentile per-packet one-way delay: 127.507 ms

Loss rate: 5.60%

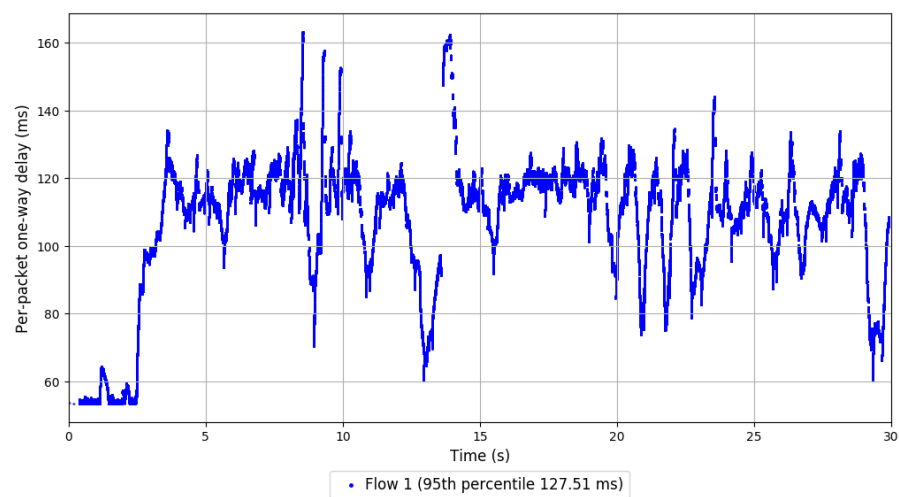
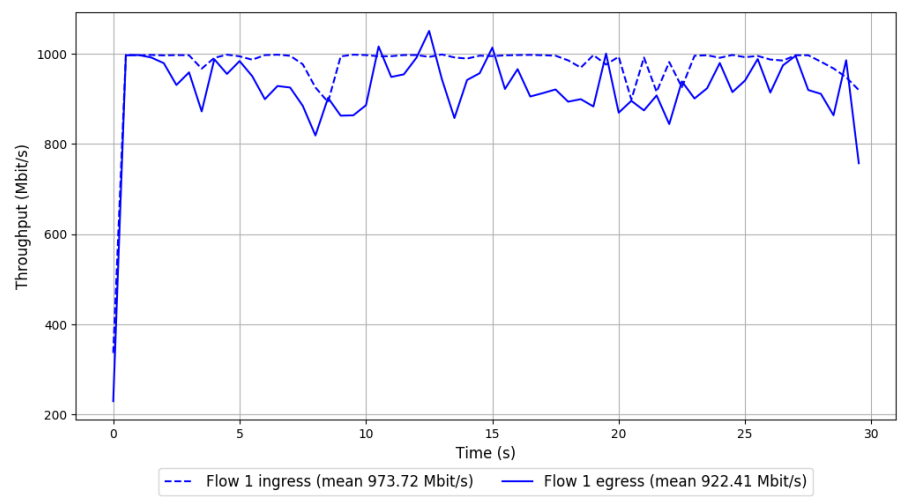
-- Flow 1:

Average throughput: 922.41 Mbit/s

95th percentile per-packet one-way delay: 127.507 ms

Loss rate: 5.60%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-02 04:22:37

End at: 2018-01-02 04:23:07

Below is generated by plot.py at 2018-01-02 08:23:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 969.04 Mbit/s

95th percentile per-packet one-way delay: 119.055 ms

Loss rate: 1.69%

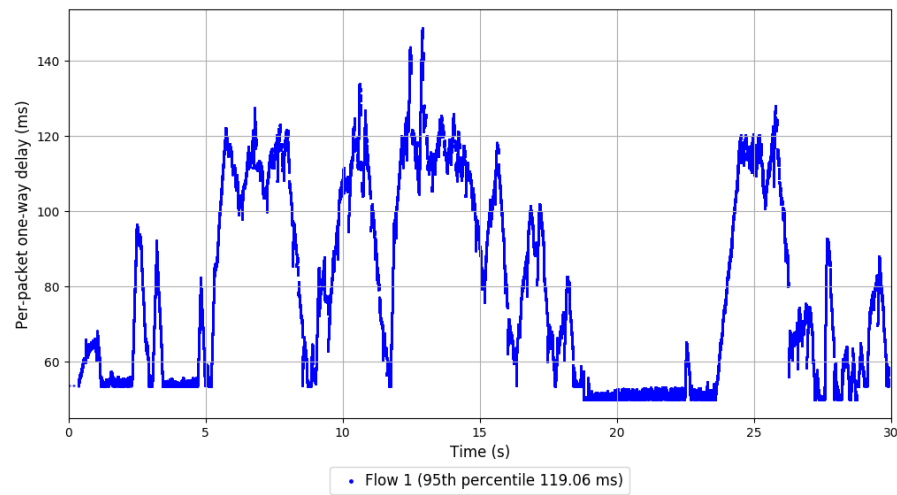
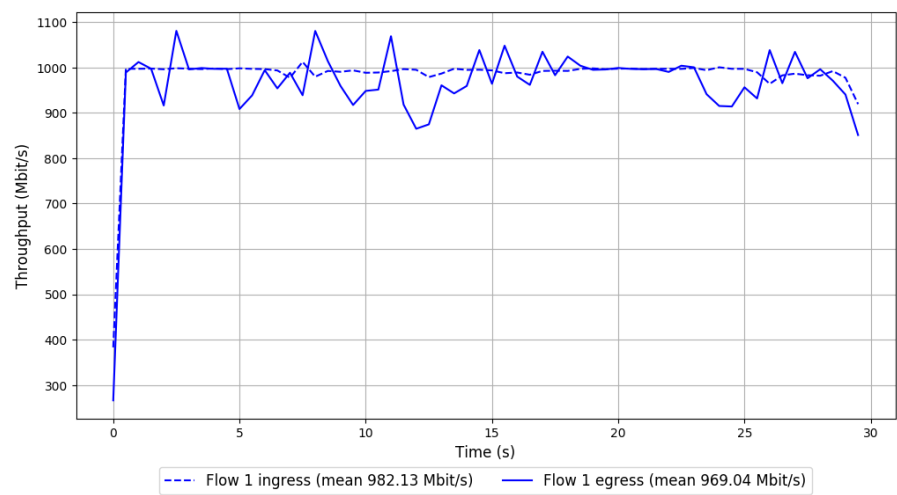
-- Flow 1:

Average throughput: 969.04 Mbit/s

95th percentile per-packet one-way delay: 119.055 ms

Loss rate: 1.69%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-02 04:34:07

End at: 2018-01-02 04:34:37

Below is generated by plot.py at 2018-01-02 08:23:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 961.28 Mbit/s

95th percentile per-packet one-way delay: 118.627 ms

Loss rate: 1.71%

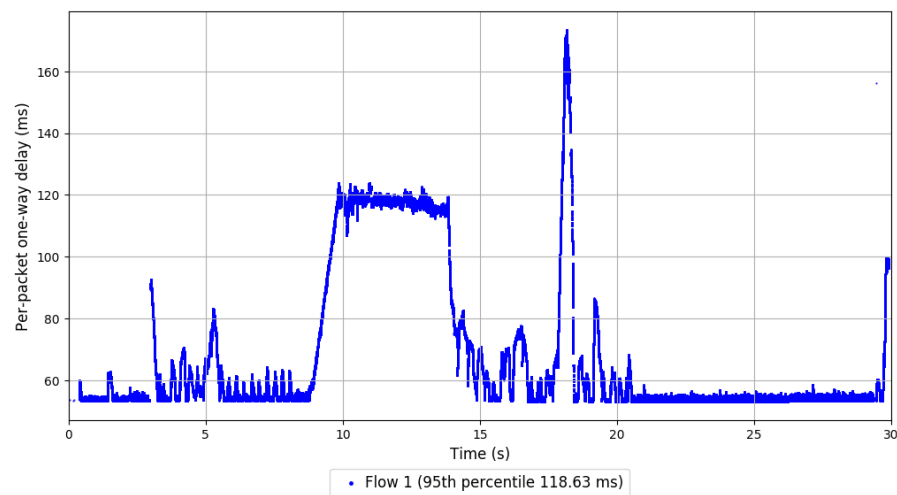
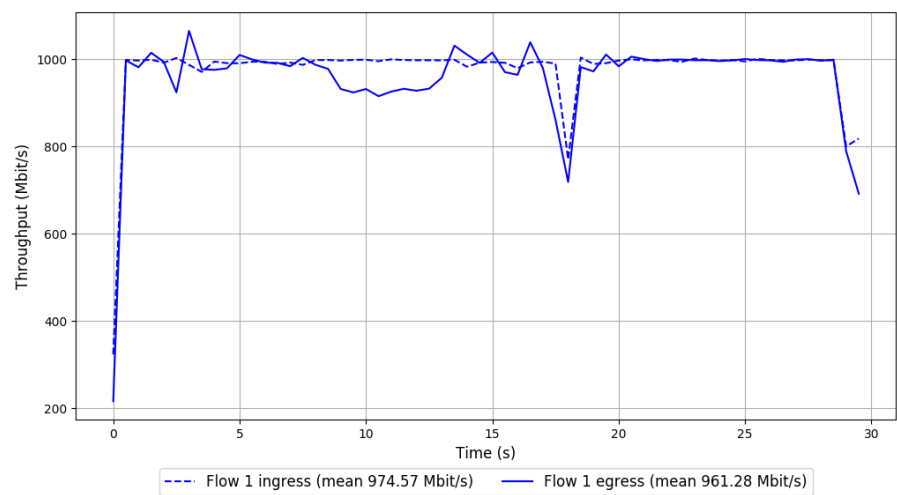
-- Flow 1:

Average throughput: 961.28 Mbit/s

95th percentile per-packet one-way delay: 118.627 ms

Loss rate: 1.71%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-02 04:45:38

End at: 2018-01-02 04:46:08

Below is generated by plot.py at 2018-01-02 08:23:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 203.14 Mbit/s

95th percentile per-packet one-way delay: 90.528 ms

Loss rate: 0.84%

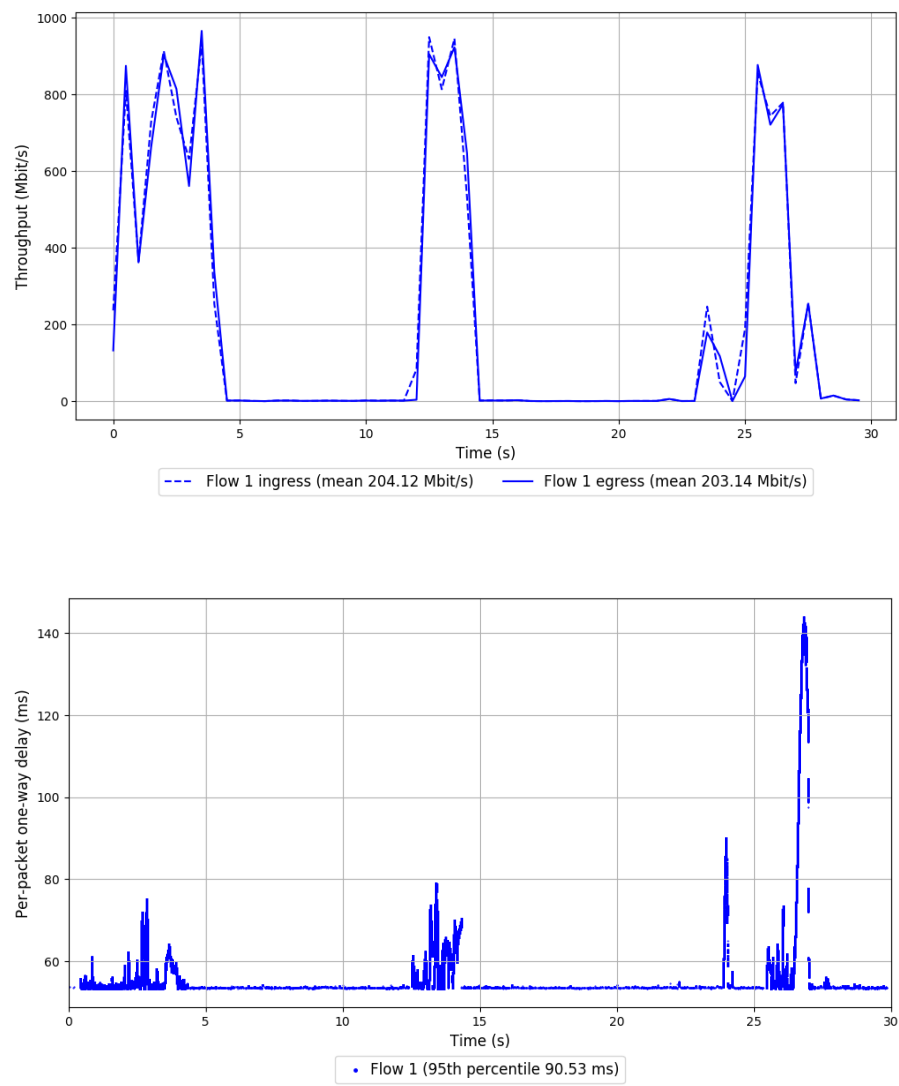
-- Flow 1:

Average throughput: 203.14 Mbit/s

95th percentile per-packet one-way delay: 90.528 ms

Loss rate: 0.84%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-02 04:56:27

End at: 2018-01-02 04:56:57

Below is generated by plot.py at 2018-01-02 08:23:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.80 Mbit/s

95th percentile per-packet one-way delay: 99.139 ms

Loss rate: 1.52%

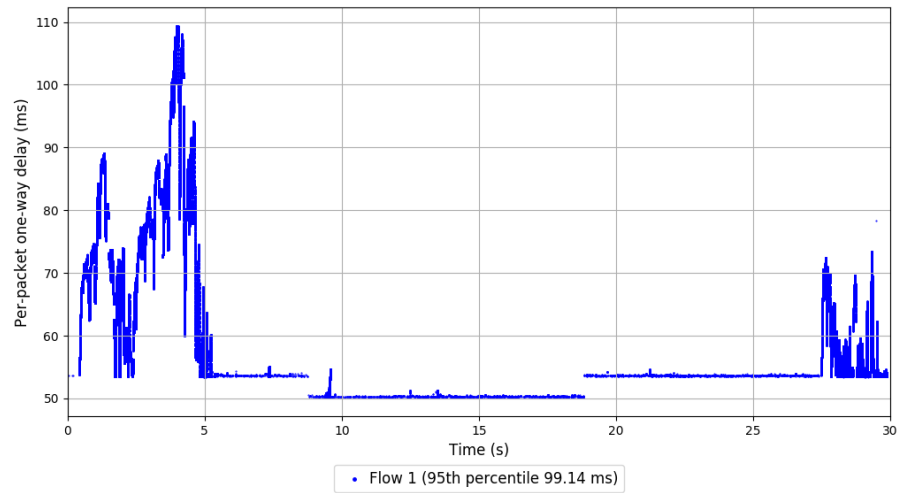
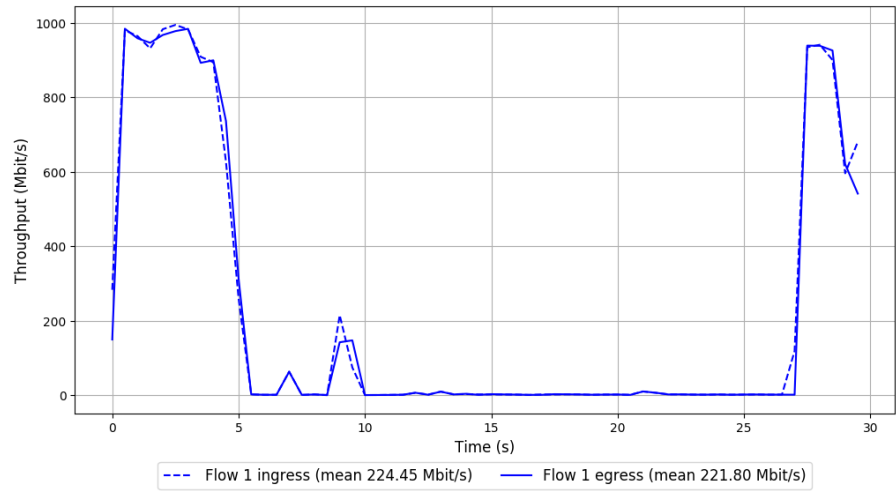
-- Flow 1:

Average throughput: 221.80 Mbit/s

95th percentile per-packet one-way delay: 99.139 ms

Loss rate: 1.52%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-02 05:07:29

End at: 2018-01-02 05:07:59

Below is generated by plot.py at 2018-01-02 08:24:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 961.95 Mbit/s

95th percentile per-packet one-way delay: 119.516 ms

Loss rate: 1.96%

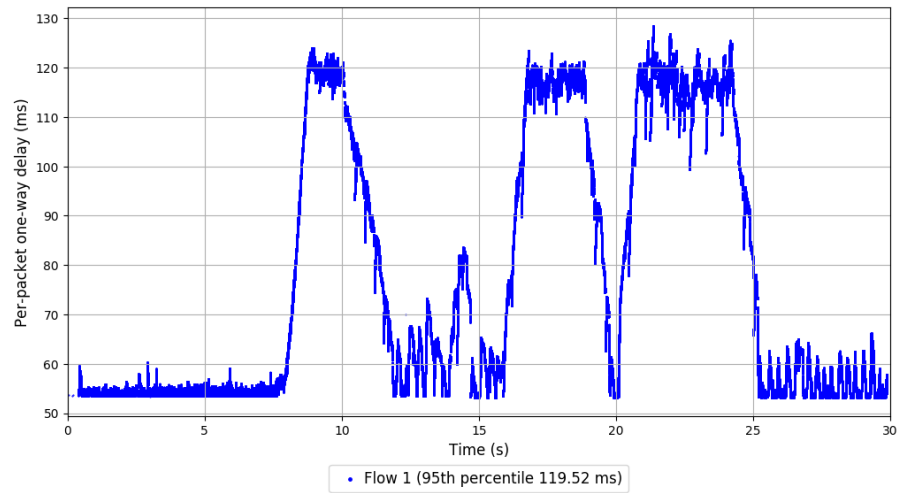
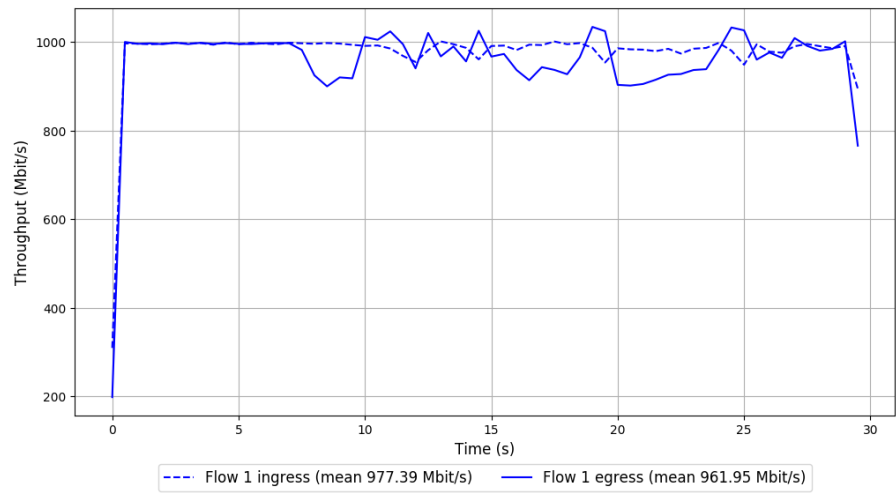
-- Flow 1:

Average throughput: 961.95 Mbit/s

95th percentile per-packet one-way delay: 119.516 ms

Loss rate: 1.96%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-02 05:18:52

End at: 2018-01-02 05:19:23

Below is generated by plot.py at 2018-01-02 08:24:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 320.43 Mbit/s

95th percentile per-packet one-way delay: 145.308 ms

Loss rate: 0.26%

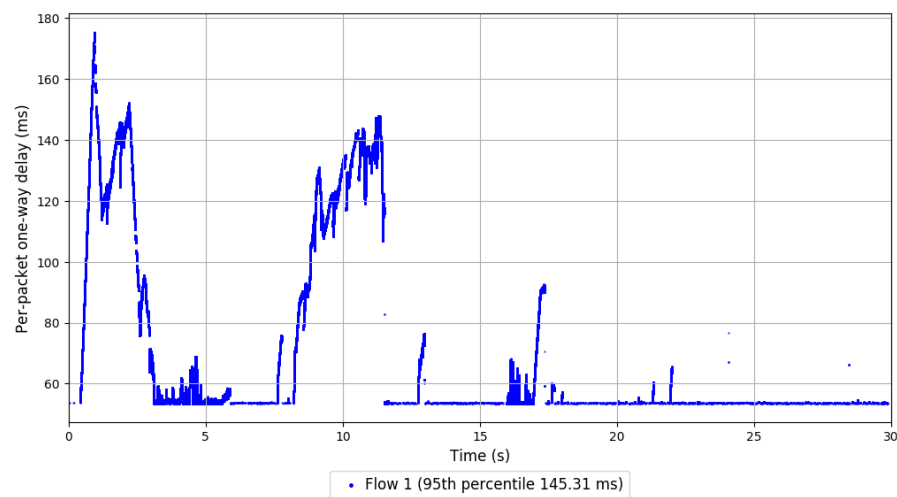
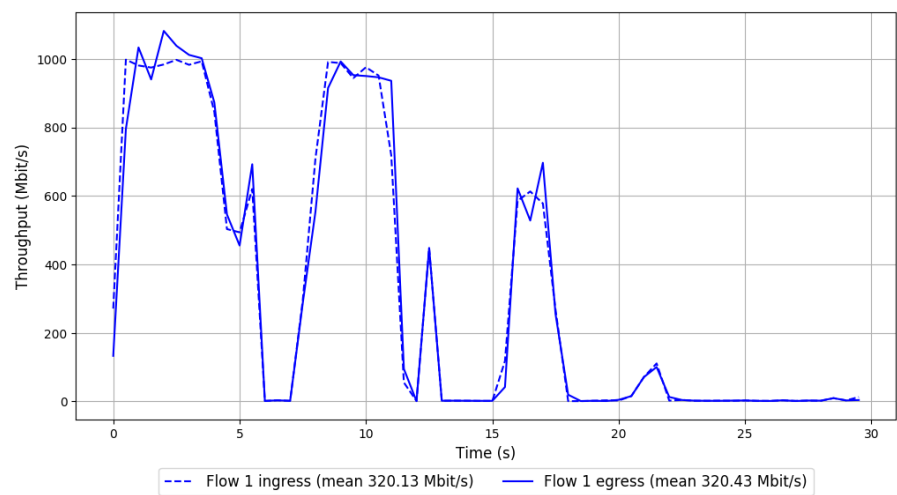
-- Flow 1:

Average throughput: 320.43 Mbit/s

95th percentile per-packet one-way delay: 145.308 ms

Loss rate: 0.26%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-02 05:29:49

End at: 2018-01-02 05:30:19

Below is generated by plot.py at 2018-01-02 08:24:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 303.91 Mbit/s

95th percentile per-packet one-way delay: 77.530 ms

Loss rate: 0.68%

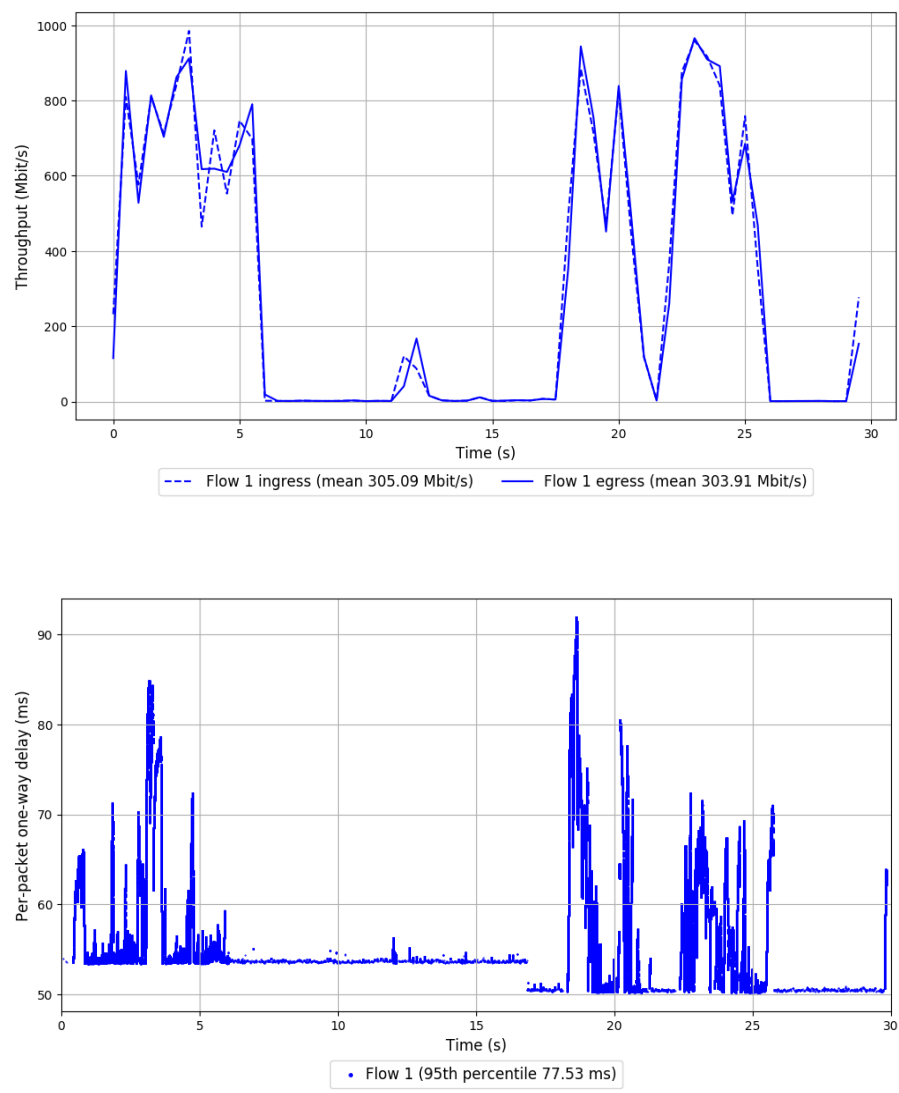
-- Flow 1:

Average throughput: 303.91 Mbit/s

95th percentile per-packet one-way delay: 77.530 ms

Loss rate: 0.68%

Run 10: Report of FillP — Data Link

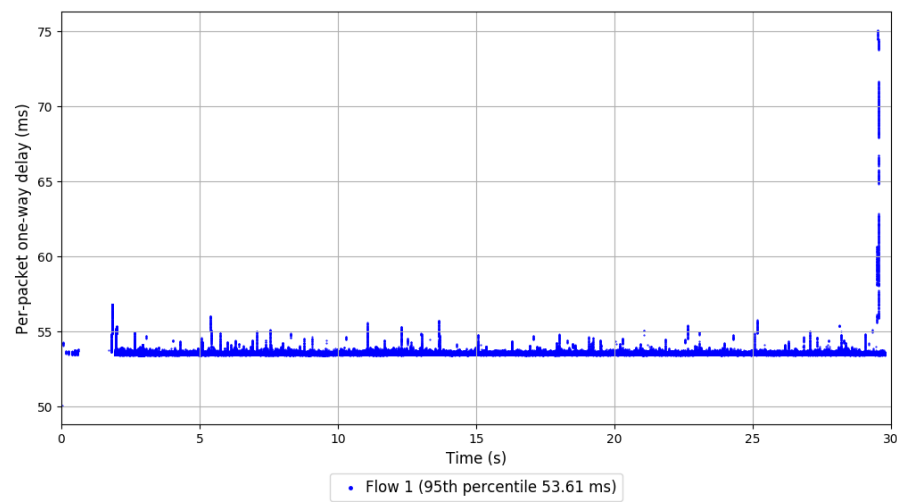
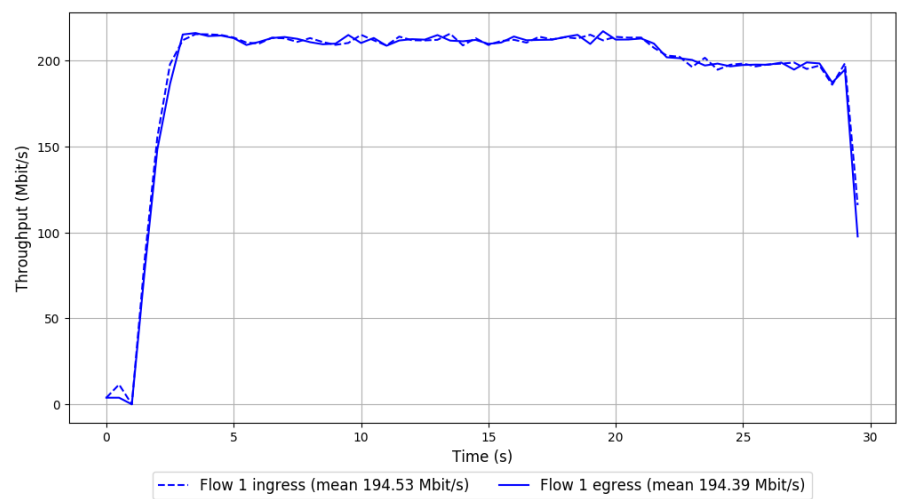


```
Run 1: Statistics of Indigo

Start at: 2018-01-02 03:48:52
End at: 2018-01-02 03:49:22

# Below is generated by plot.py at 2018-01-02 08:24:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.39 Mbit/s
95th percentile per-packet one-way delay: 53.608 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 194.39 Mbit/s
95th percentile per-packet one-way delay: 53.608 ms
Loss rate: 0.41%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

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

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

Below is generated by plot.py at 2018-01-02 08:24:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.71 Mbit/s

95th percentile per-packet one-way delay: 53.691 ms

Loss rate: 0.36%

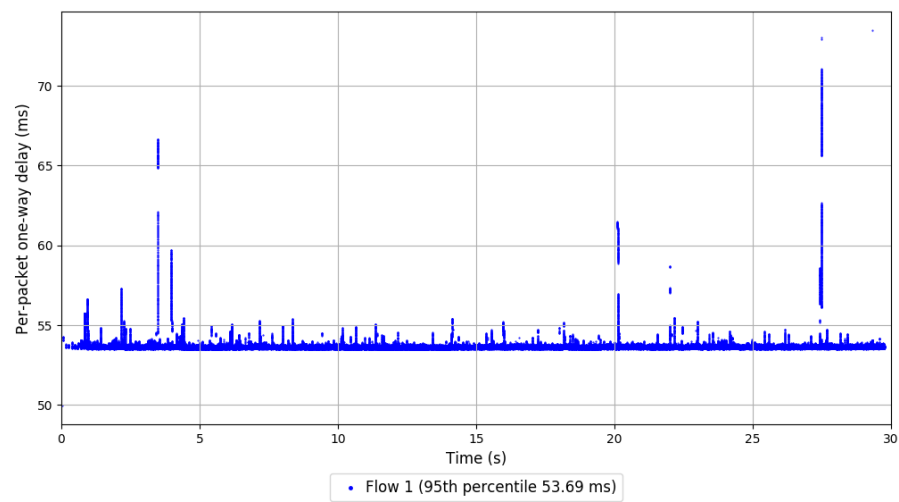
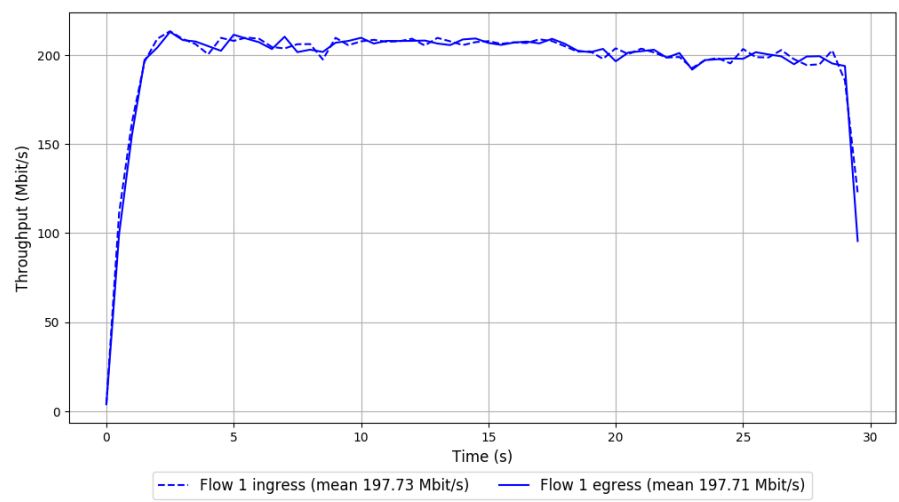
-- Flow 1:

Average throughput: 197.71 Mbit/s

95th percentile per-packet one-way delay: 53.691 ms

Loss rate: 0.36%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-02 04:12:06

End at: 2018-01-02 04:12:36

Below is generated by plot.py at 2018-01-02 08:24:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.21 Mbit/s

95th percentile per-packet one-way delay: 53.713 ms

Loss rate: 0.49%

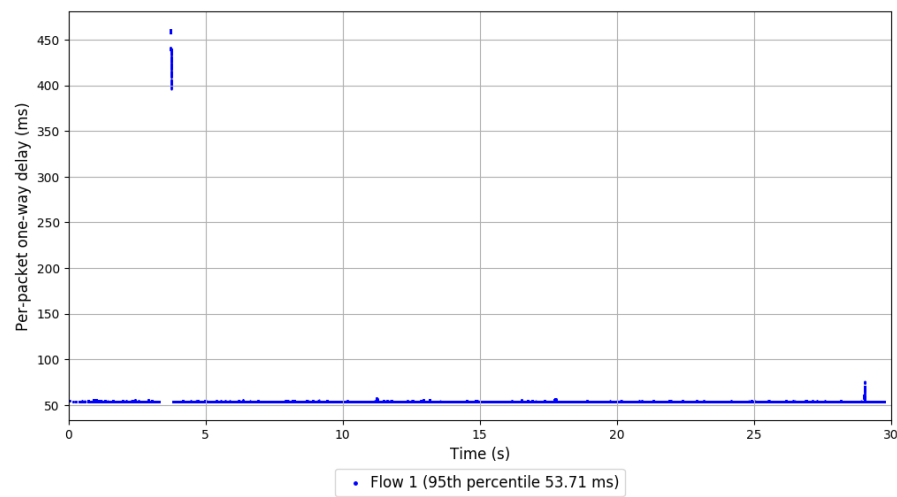
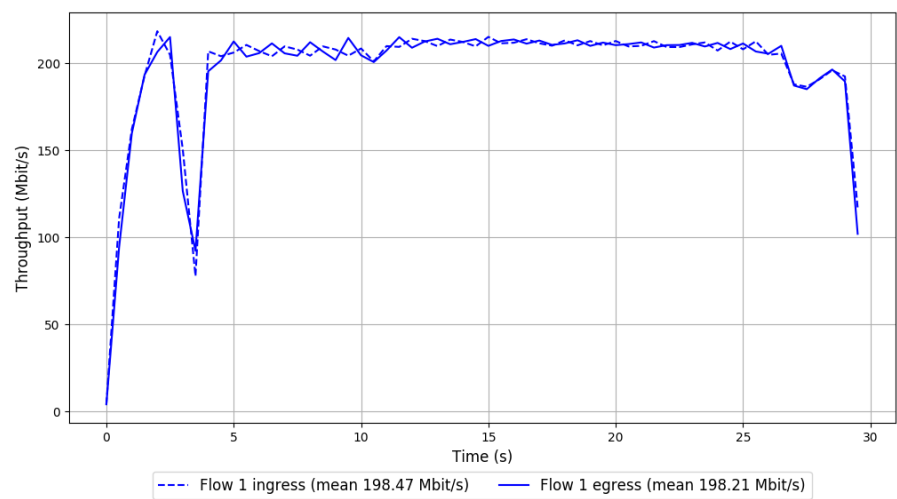
-- Flow 1:

Average throughput: 198.21 Mbit/s

95th percentile per-packet one-way delay: 53.713 ms

Loss rate: 0.49%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-02 04:23:50

End at: 2018-01-02 04:24:20

Below is generated by plot.py at 2018-01-02 08:24:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.39 Mbit/s

95th percentile per-packet one-way delay: 53.679 ms

Loss rate: 0.35%

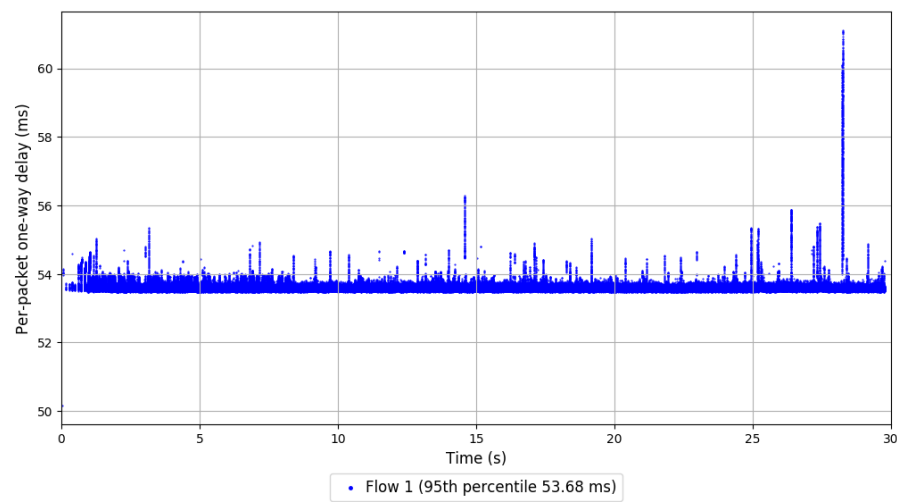
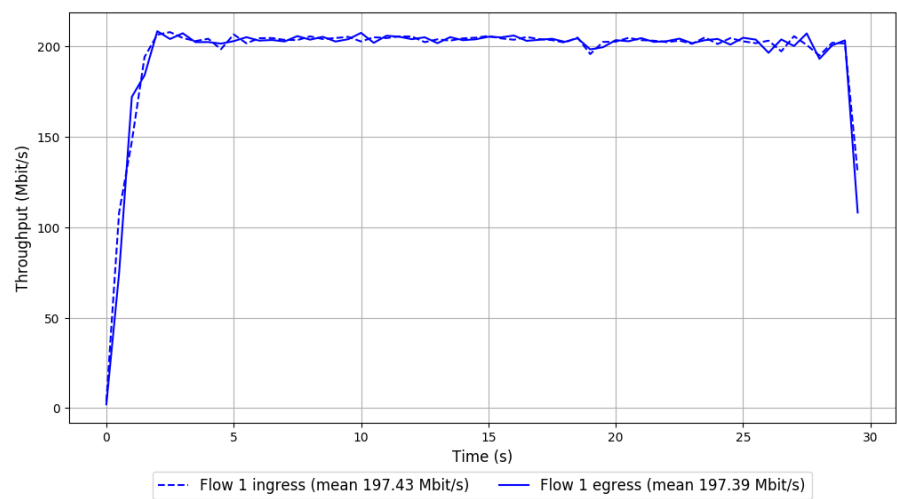
-- Flow 1:

Average throughput: 197.39 Mbit/s

95th percentile per-packet one-way delay: 53.679 ms

Loss rate: 0.35%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-02 04:35:21

End at: 2018-01-02 04:35:51

Below is generated by plot.py at 2018-01-02 08:24:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.09 Mbit/s

95th percentile per-packet one-way delay: 53.715 ms

Loss rate: 0.31%

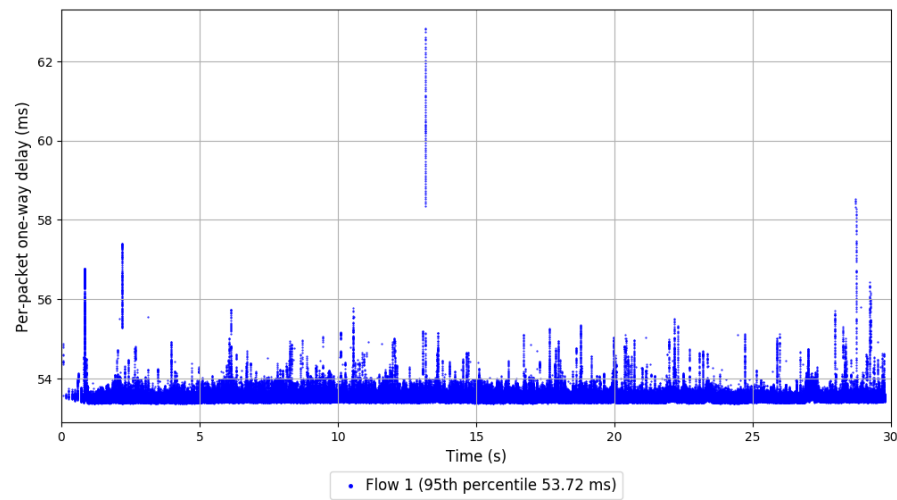
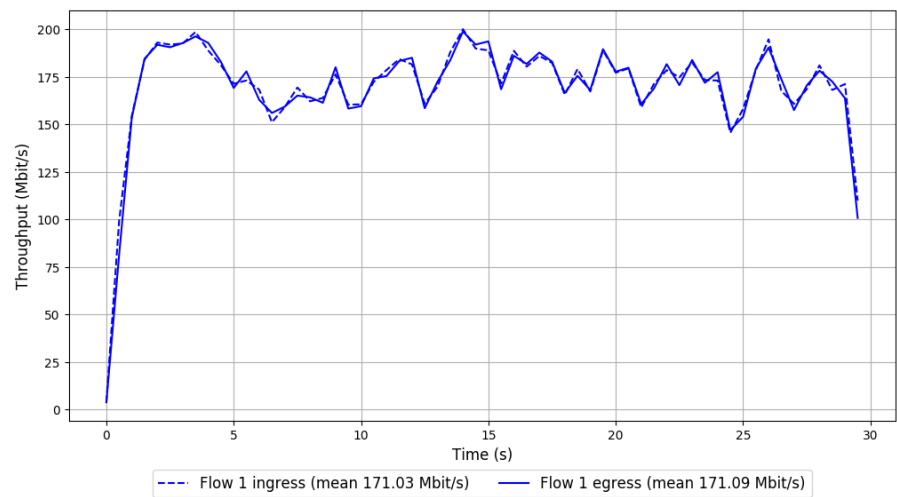
-- Flow 1:

Average throughput: 171.09 Mbit/s

95th percentile per-packet one-way delay: 53.715 ms

Loss rate: 0.31%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-02 04:46:25

End at: 2018-01-02 04:46:55

Below is generated by plot.py at 2018-01-02 08:24:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 123.19 Mbit/s

95th percentile per-packet one-way delay: 53.960 ms

Loss rate: 0.31%

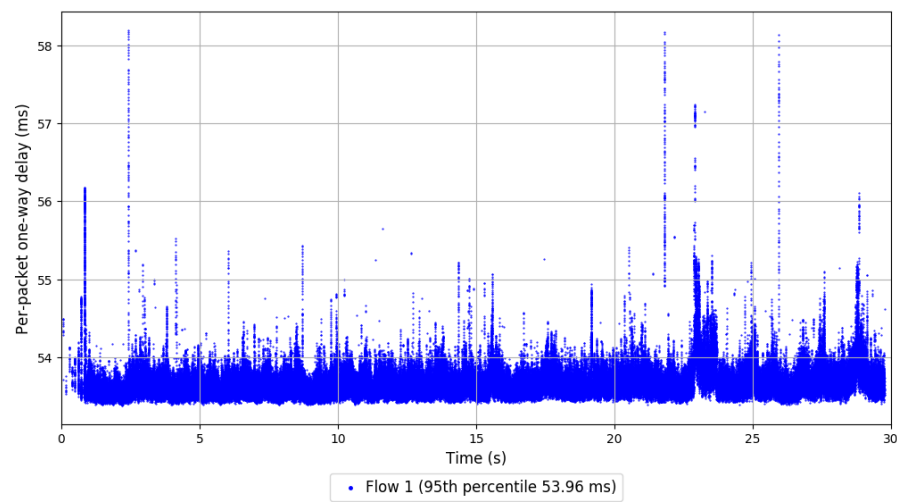
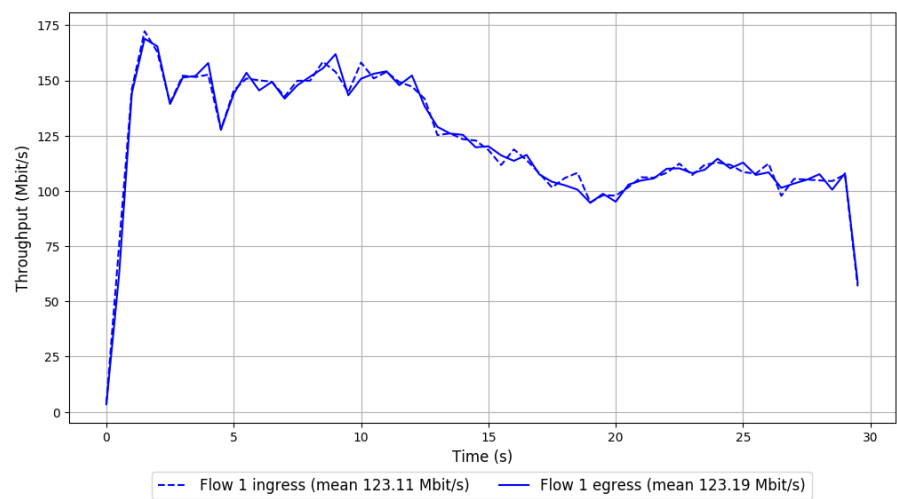
-- Flow 1:

Average throughput: 123.19 Mbit/s

95th percentile per-packet one-way delay: 53.960 ms

Loss rate: 0.31%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-02 04:57:13

End at: 2018-01-02 04:57:43

Below is generated by plot.py at 2018-01-02 08:24:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.18 Mbit/s

95th percentile per-packet one-way delay: 53.692 ms

Loss rate: 0.37%

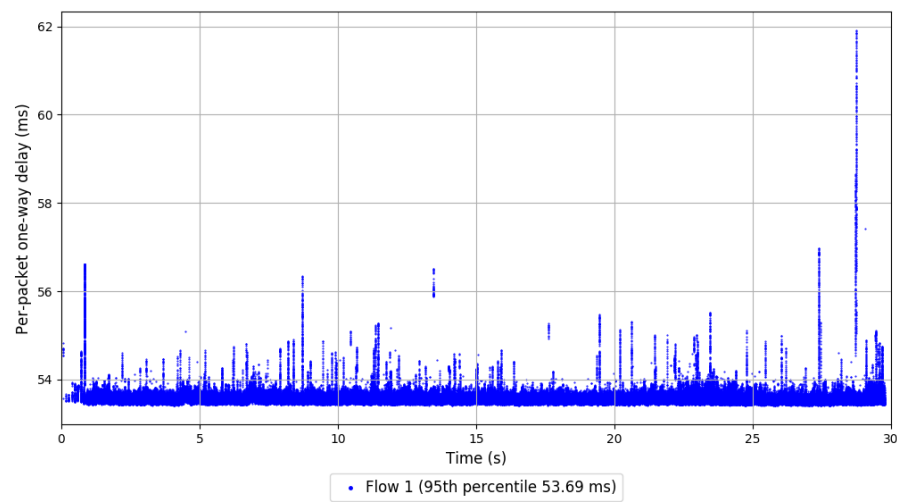
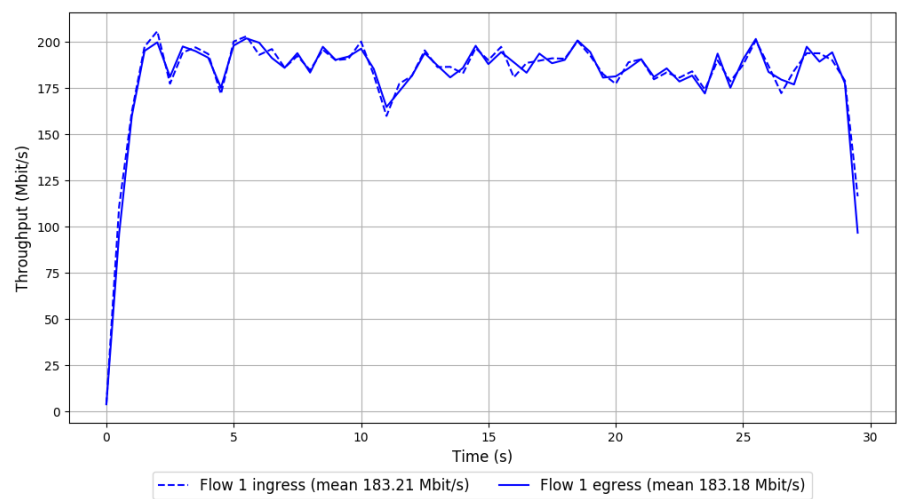
-- Flow 1:

Average throughput: 183.18 Mbit/s

95th percentile per-packet one-way delay: 53.692 ms

Loss rate: 0.37%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-02 05:08:43

End at: 2018-01-02 05:09:13

Run 8: Report of Indigo — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of Indigo

Start at: 2018-01-02 05:19:43

End at: 2018-01-02 05:20:13

Below is generated by plot.py at 2018-01-02 08:24:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.76 Mbit/s

95th percentile per-packet one-way delay: 53.766 ms

Loss rate: 0.41%

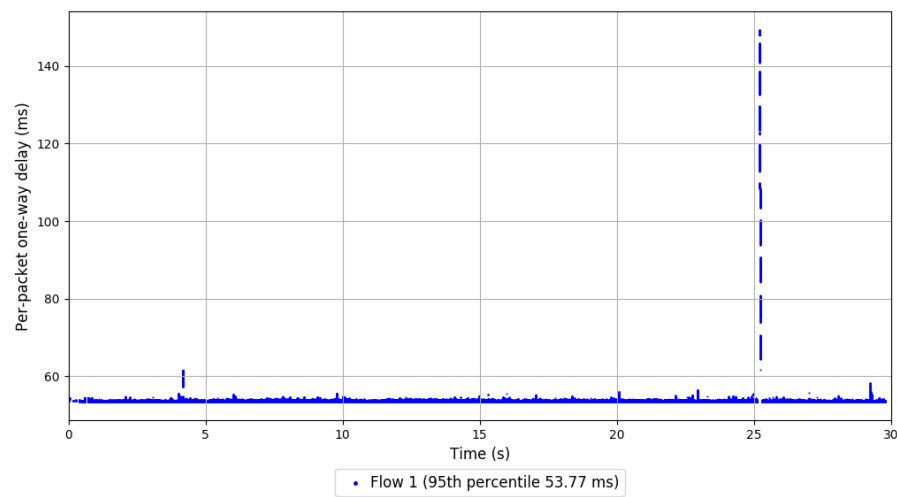
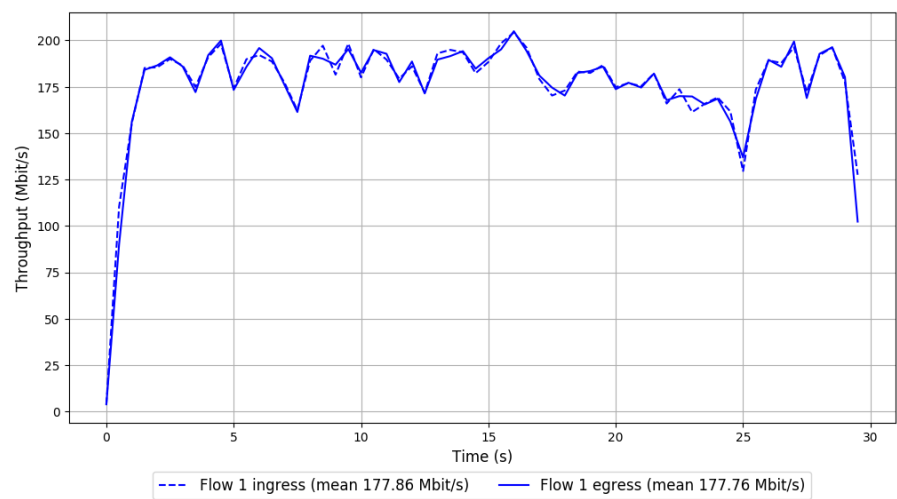
-- Flow 1:

Average throughput: 177.76 Mbit/s

95th percentile per-packet one-way delay: 53.766 ms

Loss rate: 0.41%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-02 05:30:39

End at: 2018-01-02 05:31:09

Below is generated by plot.py at 2018-01-02 08:24:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.42 Mbit/s

95th percentile per-packet one-way delay: 53.933 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 101.42 Mbit/s

95th percentile per-packet one-way delay: 53.933 ms

Loss rate: 0.37%

Run 10: Report of Indigo — Data Link

