

## Pantheon Report

Generated at 2017-12-11 16:34:40 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

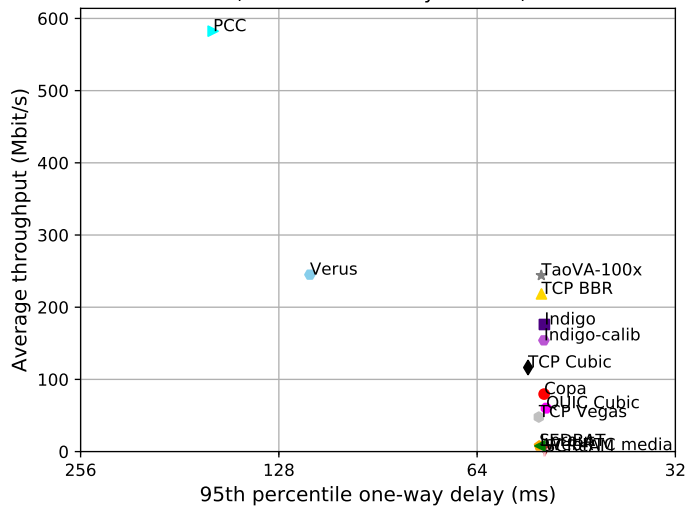
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

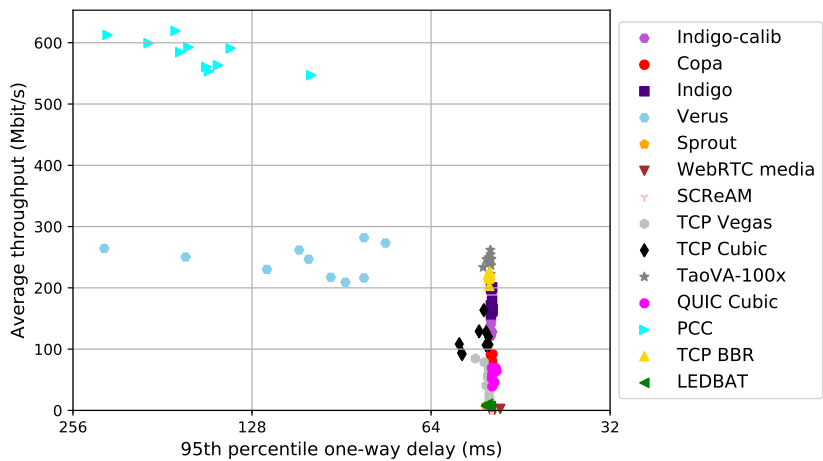
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabbb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	218.42	51.11	0.36
TCP Cubic	9	116.48	53.57	0.36
LEDBAT	10	7.84	51.40	0.56
PCC	10	582.39	161.07	2.16
QUIC Cubic	10	60.17	50.28	0.45
SCReAM	10	0.22	50.57	0.33
WebRTC media	10	2.05	50.50	0.47
Sprout	10	7.92	51.50	0.56
TaoVA-100x	10	244.09	51.14	0.36
TCP Vegas	10	47.82	51.59	0.53
Verus	10	245.10	114.84	0.56
Copa	10	79.67	50.64	0.35
Indigo	10	176.06	50.59	0.35
Indigo-calib	10	154.11	50.68	0.33

Run 1: Statistics of TCP BBR

Start at: 2017-12-11 12:19:45

End at: 2017-12-11 12:20:16

# Below is generated by plot.py at 2017-12-11 15:46:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 215.18 Mbit/s

95th percentile per-packet one-way delay: 51.132 ms

Loss rate: 0.37%

-- Flow 1:

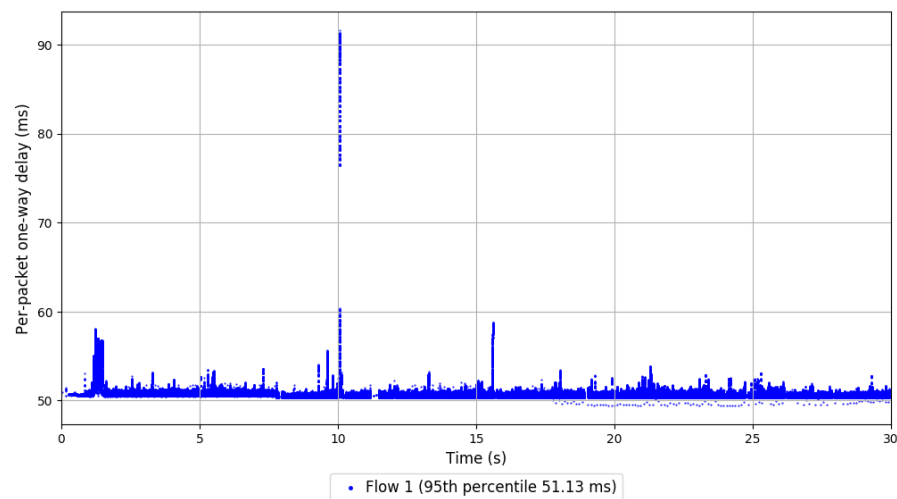
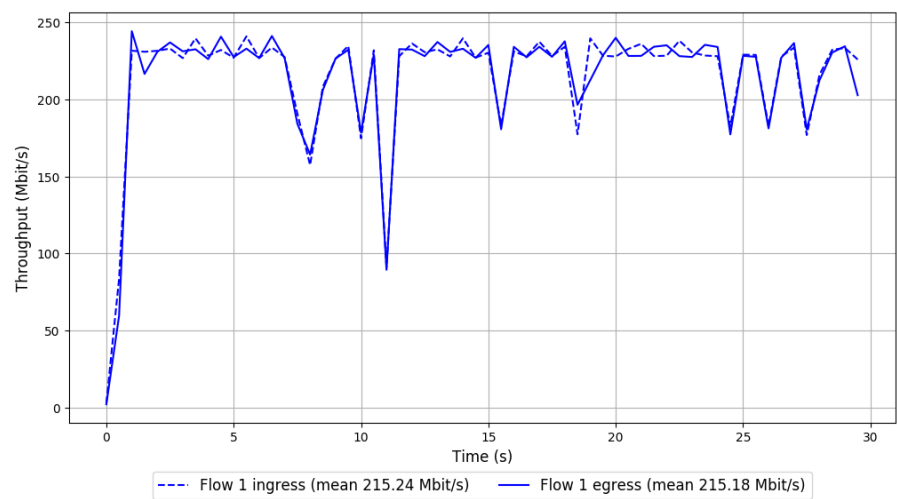
Average throughput: 215.18 Mbit/s

95th percentile per-packet one-way delay: 51.132 ms

Loss rate: 0.37%



Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-11 12:30:25

End at: 2017-12-11 12:30:55

# Below is generated by plot.py at 2017-12-11 15:47:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 221.52 Mbit/s

95th percentile per-packet one-way delay: 50.939 ms

Loss rate: 0.35%

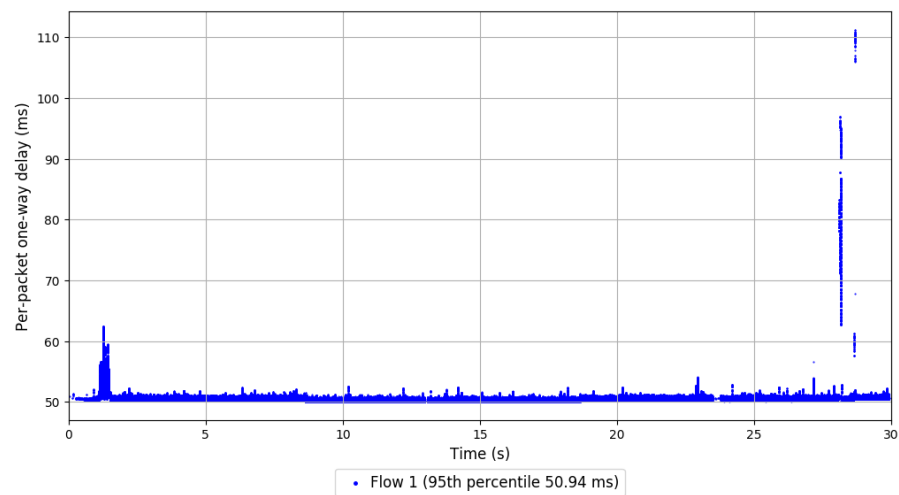
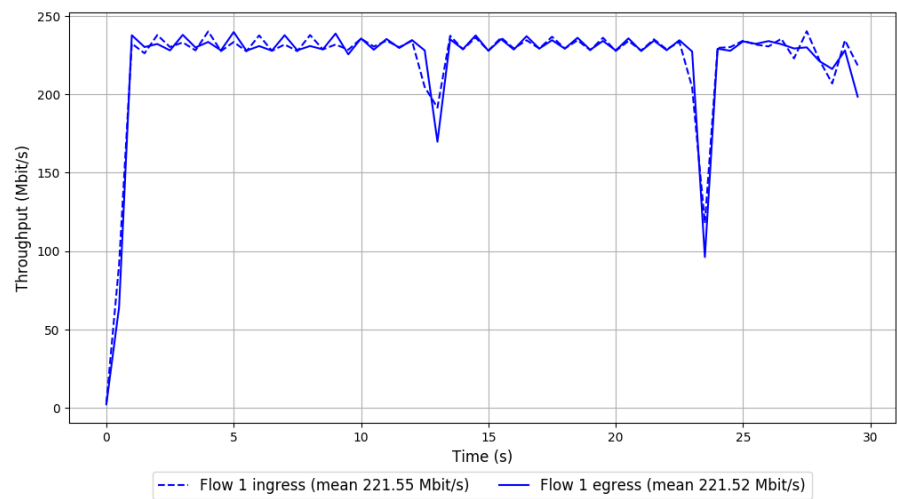
-- Flow 1:

Average throughput: 221.52 Mbit/s

95th percentile per-packet one-way delay: 50.939 ms

Loss rate: 0.35%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-11 12:40:56

End at: 2017-12-11 12:41:26

# Below is generated by plot.py at 2017-12-11 15:47:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 221.26 Mbit/s

95th percentile per-packet one-way delay: 51.286 ms

Loss rate: 0.37%

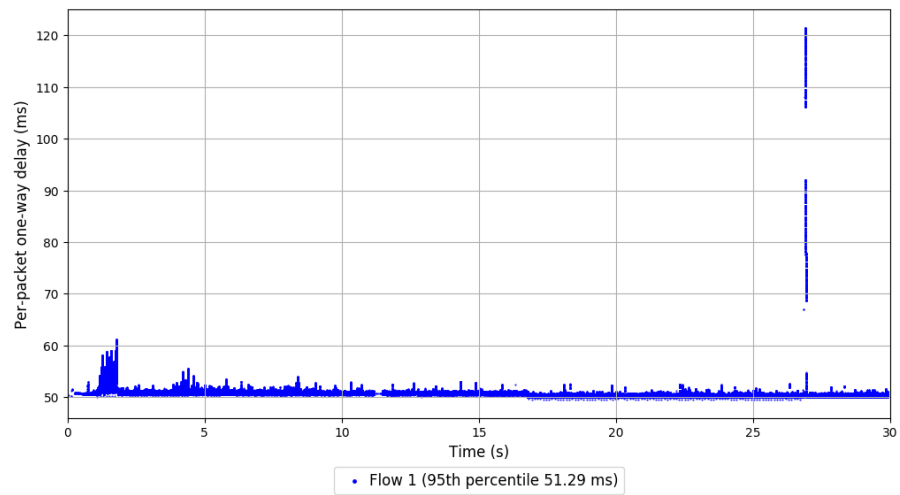
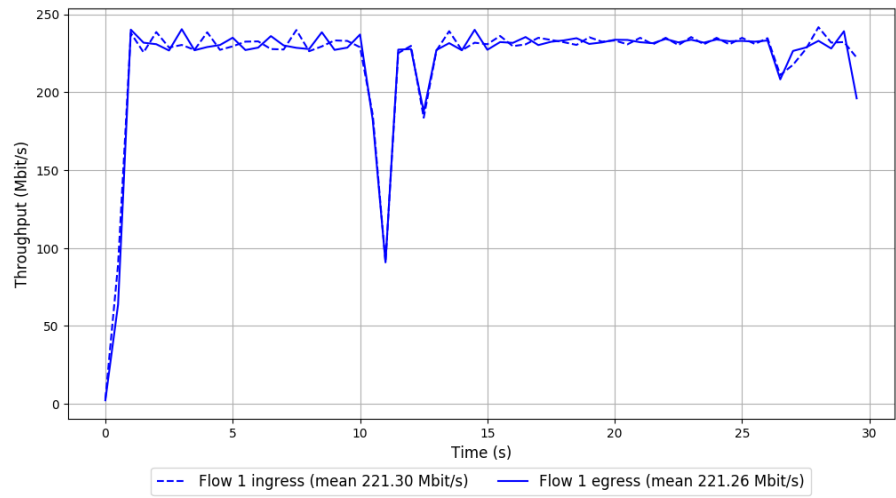
-- Flow 1:

Average throughput: 221.26 Mbit/s

95th percentile per-packet one-way delay: 51.286 ms

Loss rate: 0.37%

### Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-11 12:51:30

End at: 2017-12-11 12:52:00

# Below is generated by plot.py at 2017-12-11 15:47:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 219.78 Mbit/s

95th percentile per-packet one-way delay: 51.071 ms

Loss rate: 0.35%

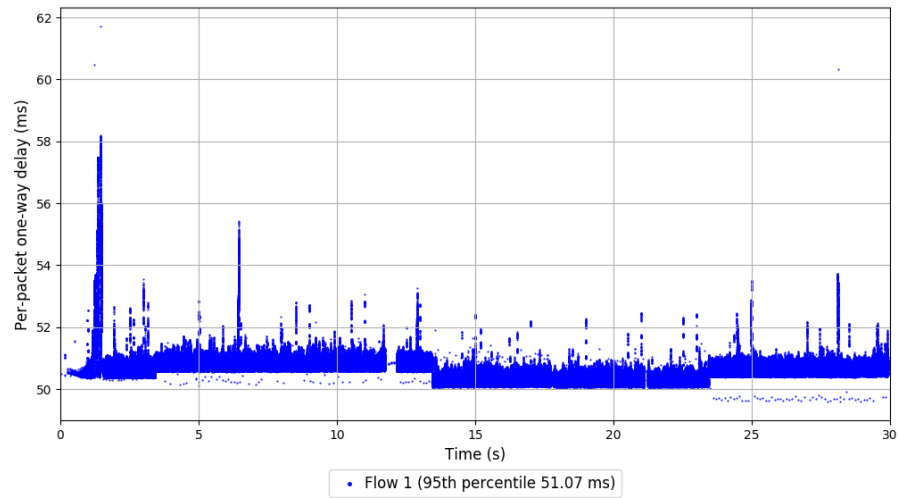
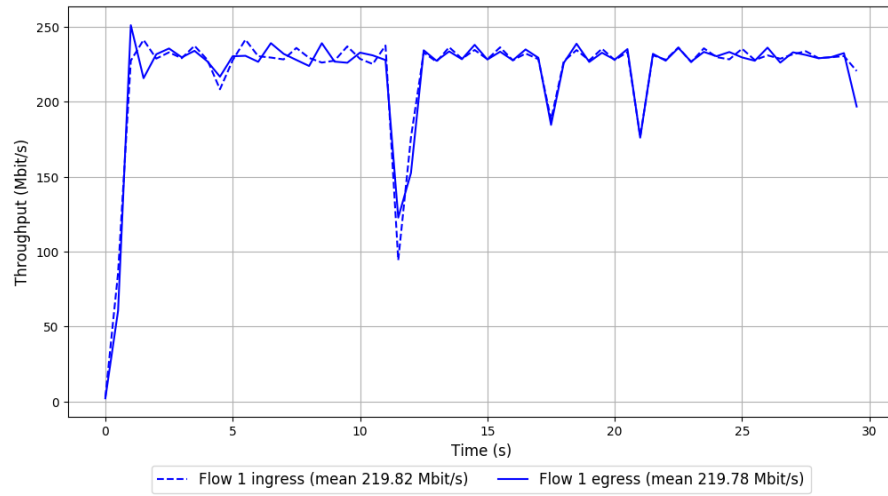
-- Flow 1:

Average throughput: 219.78 Mbit/s

95th percentile per-packet one-way delay: 51.071 ms

Loss rate: 0.35%

#### Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-11 13:02:01

End at: 2017-12-11 13:02:31

# Below is generated by plot.py at 2017-12-11 15:47:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 219.43 Mbit/s

95th percentile per-packet one-way delay: 51.108 ms

Loss rate: 0.36%

-- Flow 1:

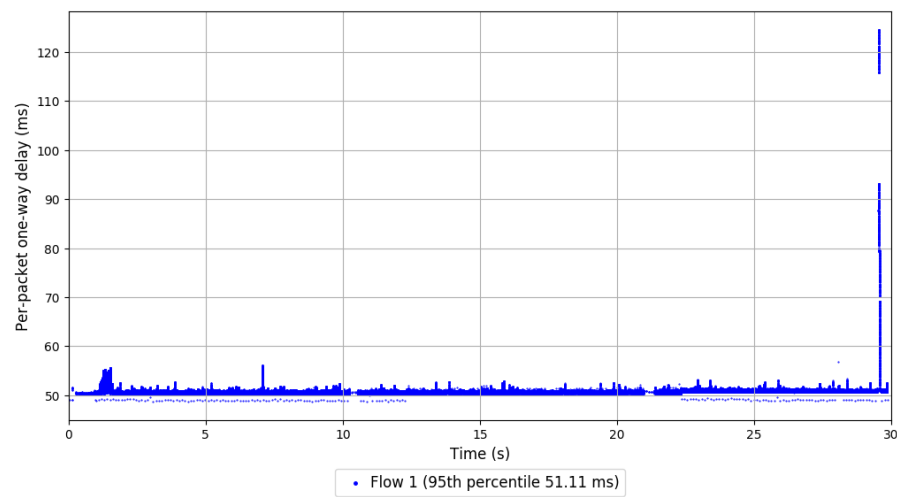
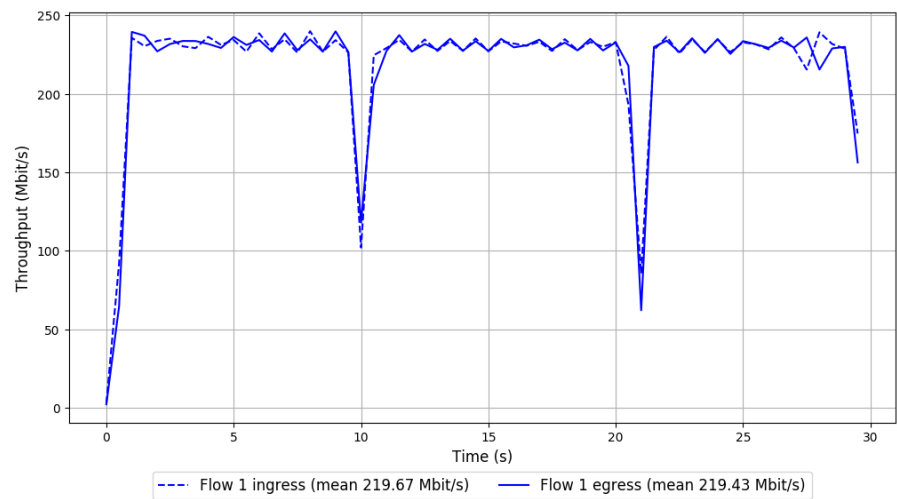
Average throughput: 219.43 Mbit/s

95th percentile per-packet one-way delay: 51.108 ms

Loss rate: 0.36%



Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-11 13:12:25

End at: 2017-12-11 13:12:55

# Below is generated by plot.py at 2017-12-11 15:47:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 203.37 Mbit/s

95th percentile per-packet one-way delay: 51.077 ms

Loss rate: 0.40%

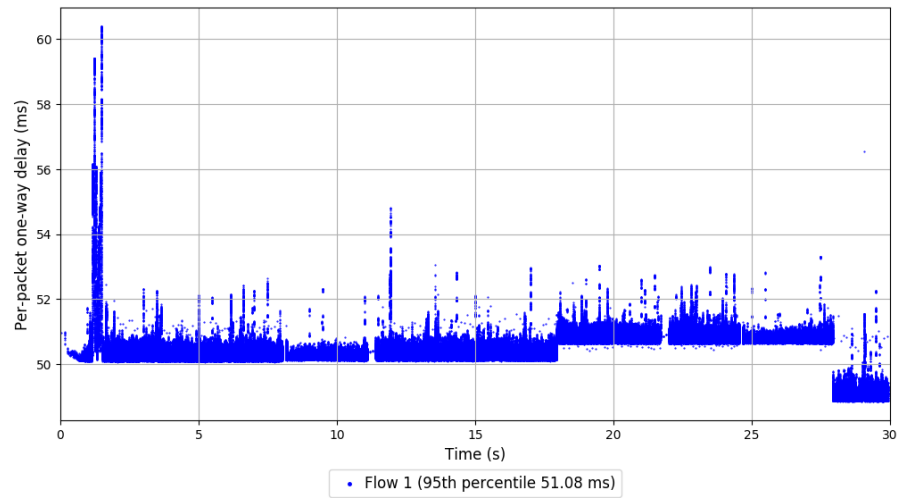
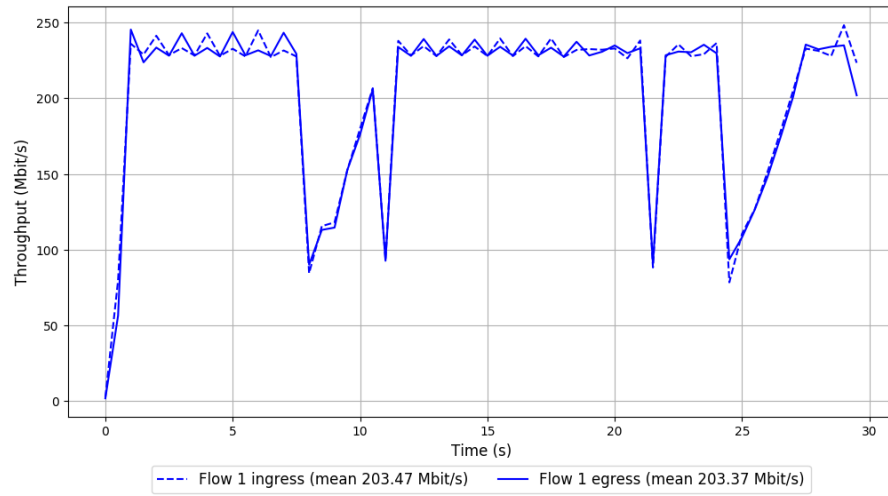
-- Flow 1:

Average throughput: 203.37 Mbit/s

95th percentile per-packet one-way delay: 51.077 ms

Loss rate: 0.40%

## Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-11 13:22:55

End at: 2017-12-11 13:23:25

# Below is generated by plot.py at 2017-12-11 15:47:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 226.63 Mbit/s

95th percentile per-packet one-way delay: 50.988 ms

Loss rate: 0.34%

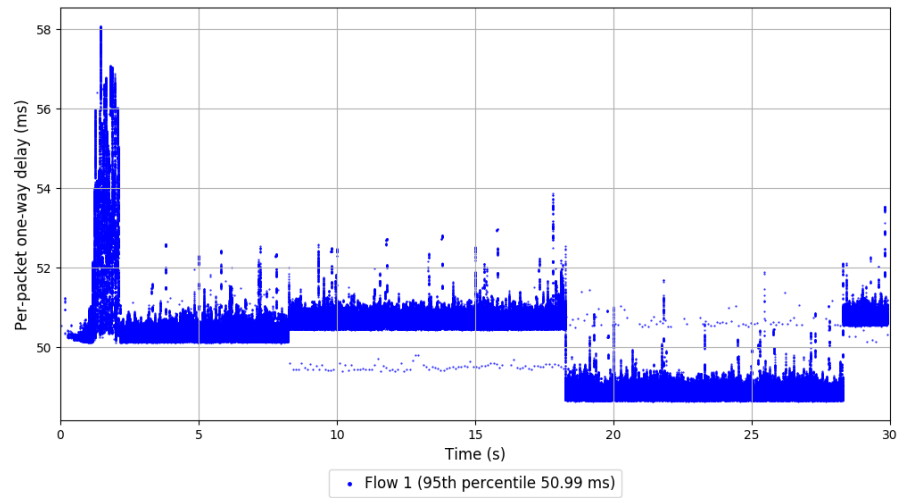
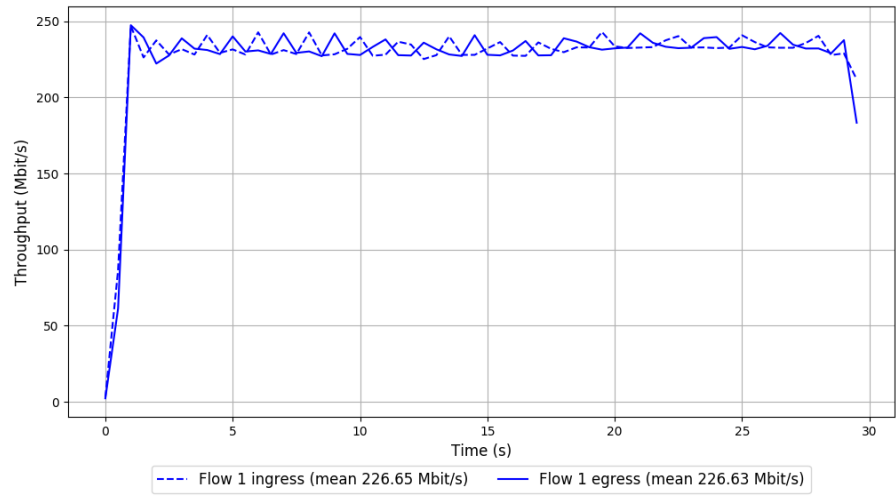
-- Flow 1:

Average throughput: 226.63 Mbit/s

95th percentile per-packet one-way delay: 50.988 ms

Loss rate: 0.34%

### Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-11 13:33:24

End at: 2017-12-11 13:33:54

# Below is generated by plot.py at 2017-12-11 15:47:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 218.77 Mbit/s

95th percentile per-packet one-way delay: 51.151 ms

Loss rate: 0.36%

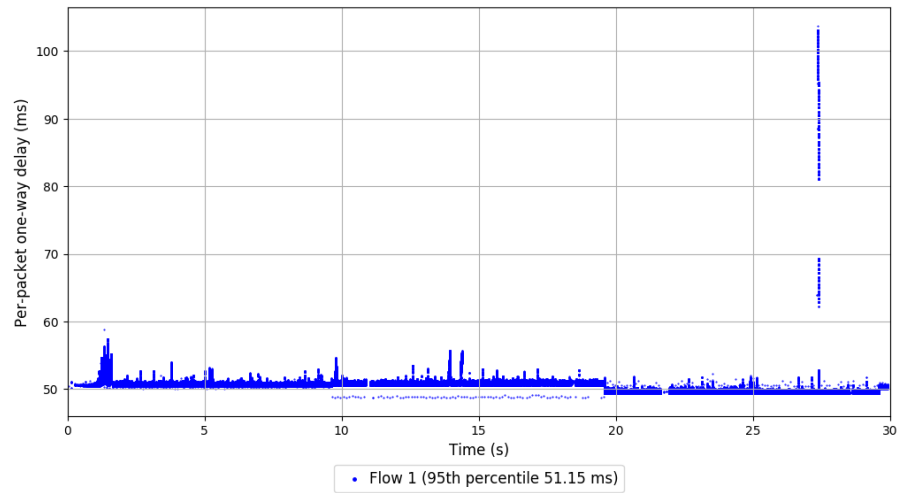
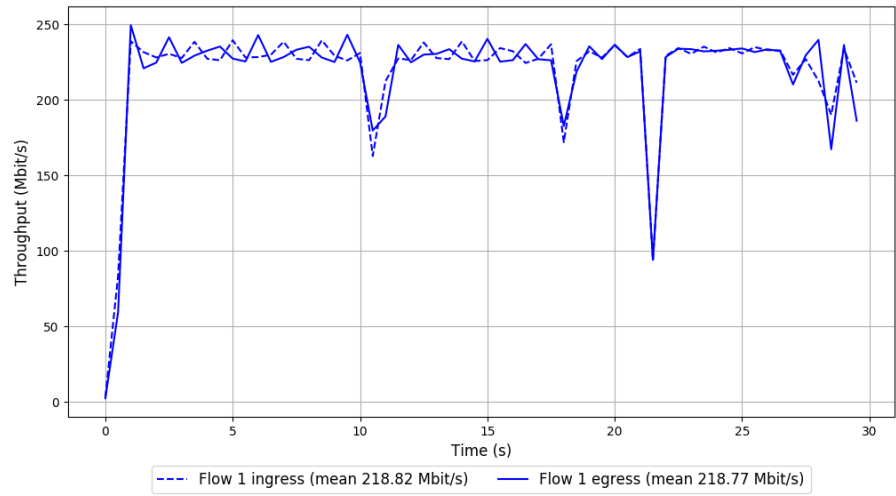
-- Flow 1:

Average throughput: 218.77 Mbit/s

95th percentile per-packet one-way delay: 51.151 ms

Loss rate: 0.36%

### Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-11 13:43:53

End at: 2017-12-11 13:44:23

# Below is generated by plot.py at 2017-12-11 15:51:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 216.81 Mbit/s

95th percentile per-packet one-way delay: 51.078 ms

Loss rate: 0.36%

-- Flow 1:

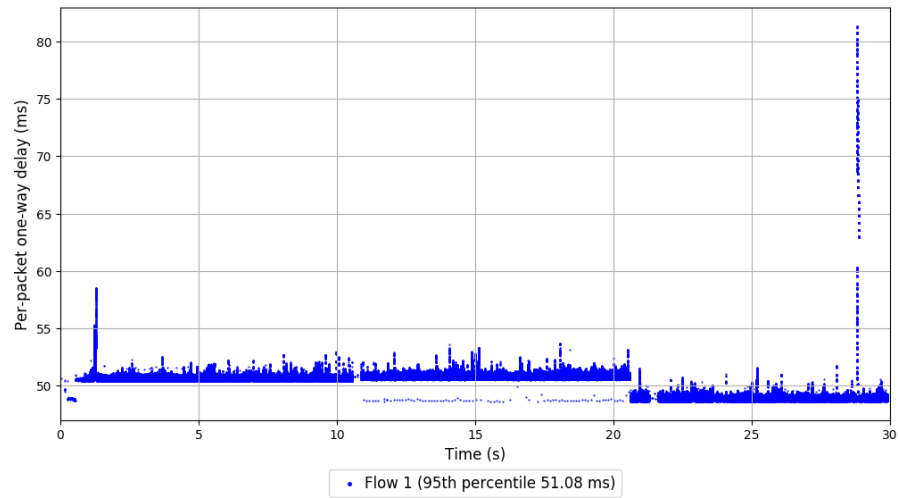
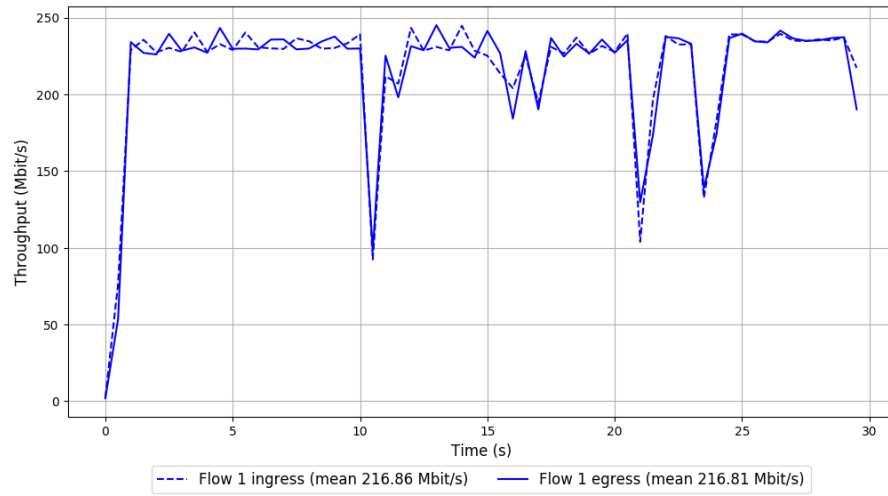
Average throughput: 216.81 Mbit/s

95th percentile per-packet one-way delay: 51.078 ms

Loss rate: 0.36%



### Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-11 13:54:19

End at: 2017-12-11 13:54:49

# Below is generated by plot.py at 2017-12-11 15:51:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 221.40 Mbit/s

95th percentile per-packet one-way delay: 51.265 ms

Loss rate: 0.35%

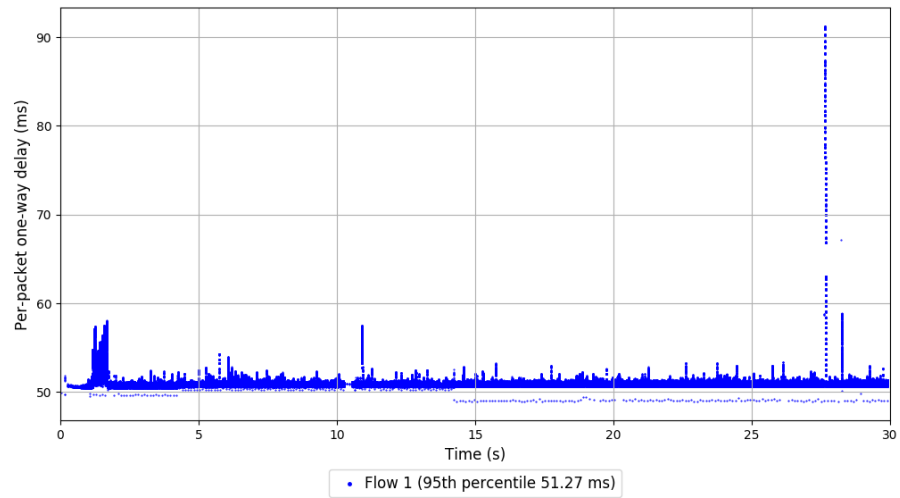
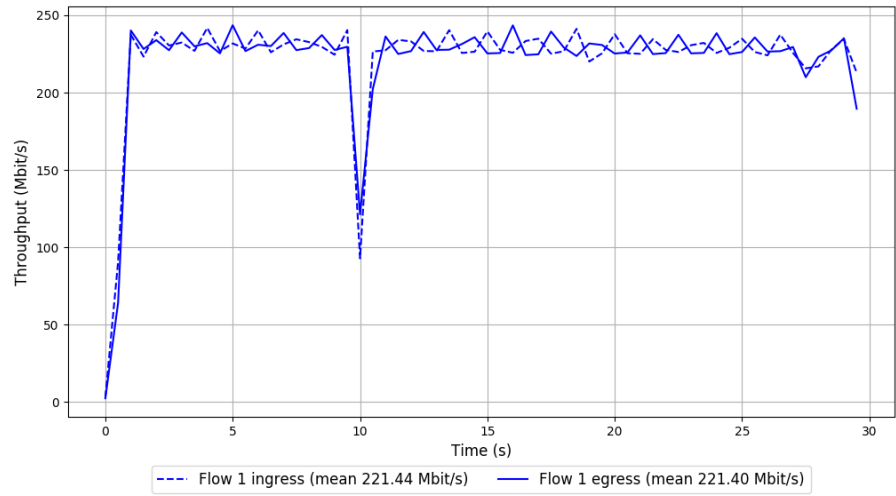
-- Flow 1:

Average throughput: 221.40 Mbit/s

95th percentile per-packet one-way delay: 51.265 ms

Loss rate: 0.35%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-11 12:09:55

End at: 2017-12-11 12:10:25

# Below is generated by plot.py at 2017-12-11 15:51:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 129.06 Mbit/s

95th percentile per-packet one-way delay: 53.131 ms

Loss rate: 0.33%

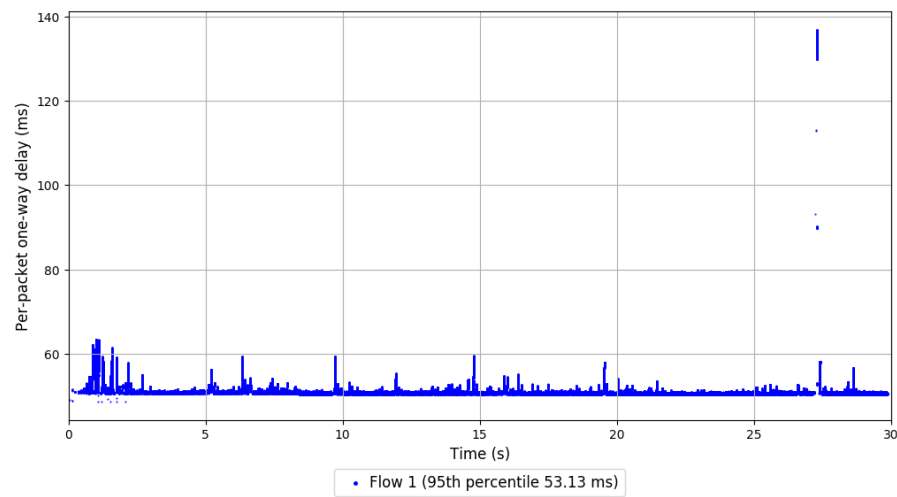
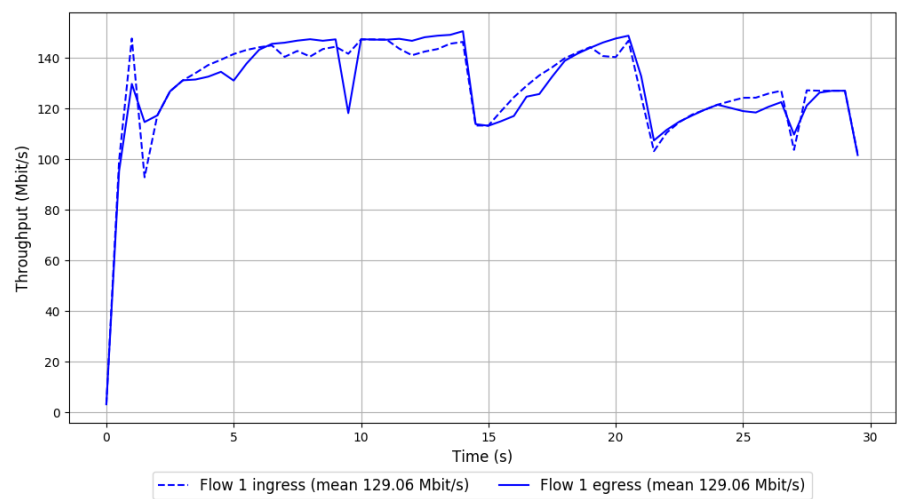
-- Flow 1:

Average throughput: 129.06 Mbit/s

95th percentile per-packet one-way delay: 53.131 ms

Loss rate: 0.33%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-11 12:20:34

End at: 2017-12-11 12:21:04

# Below is generated by plot.py at 2017-12-11 15:51:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.99 Mbit/s

95th percentile per-packet one-way delay: 56.734 ms

Loss rate: 0.48%

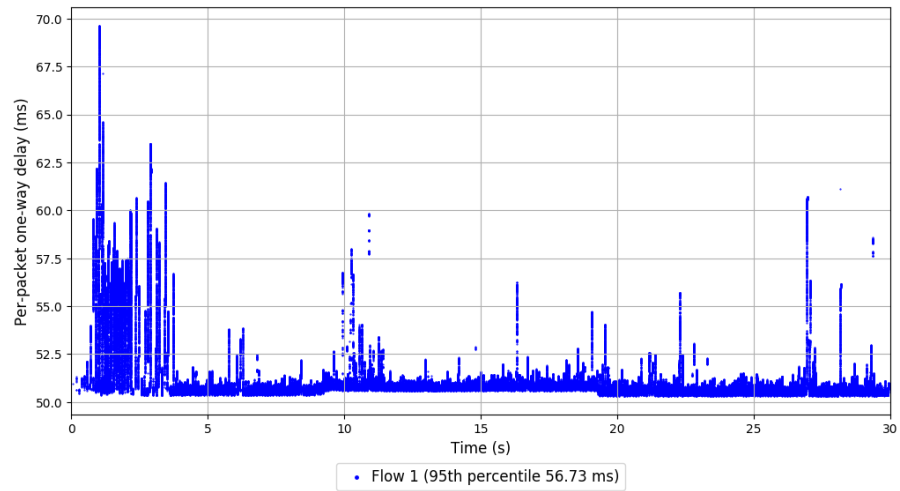
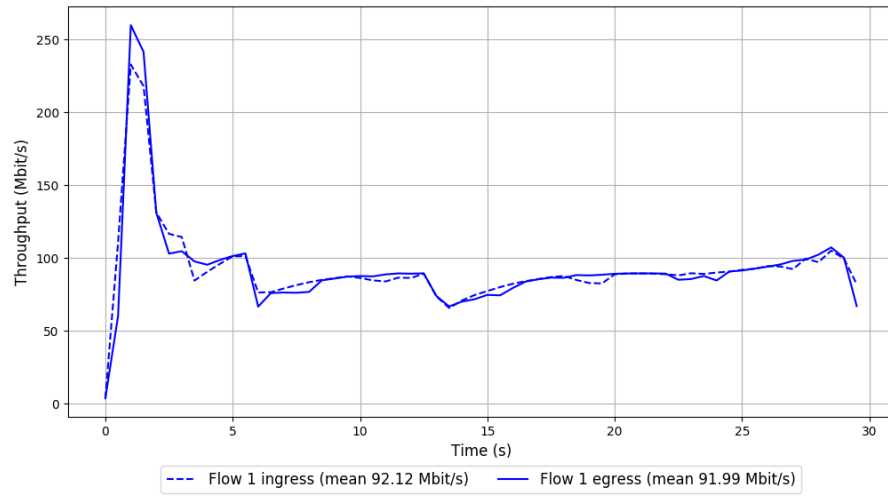
-- Flow 1:

Average throughput: 91.99 Mbit/s

95th percentile per-packet one-way delay: 56.734 ms

Loss rate: 0.48%

## Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-11 12:31:13

End at: 2017-12-11 12:31:43

# Below is generated by plot.py at 2017-12-11 15:51:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.82 Mbit/s

95th percentile per-packet one-way delay: 56.867 ms

Loss rate: 0.60%

-- Flow 1:

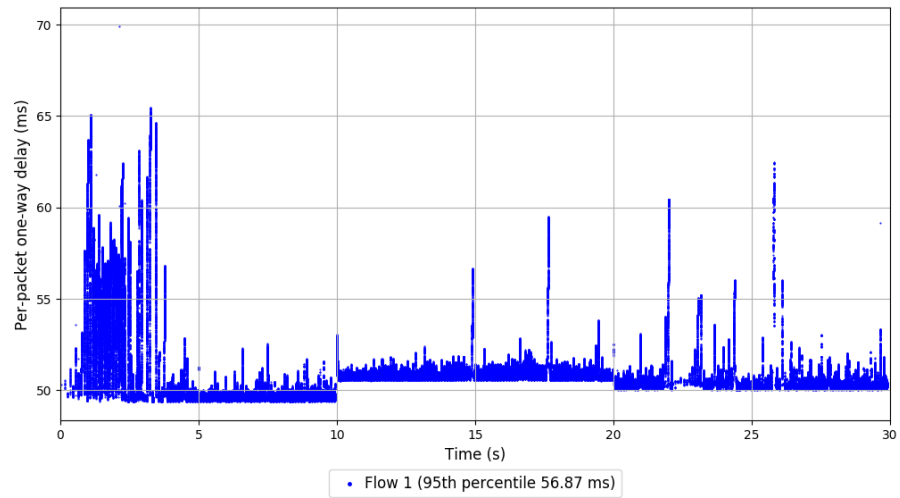
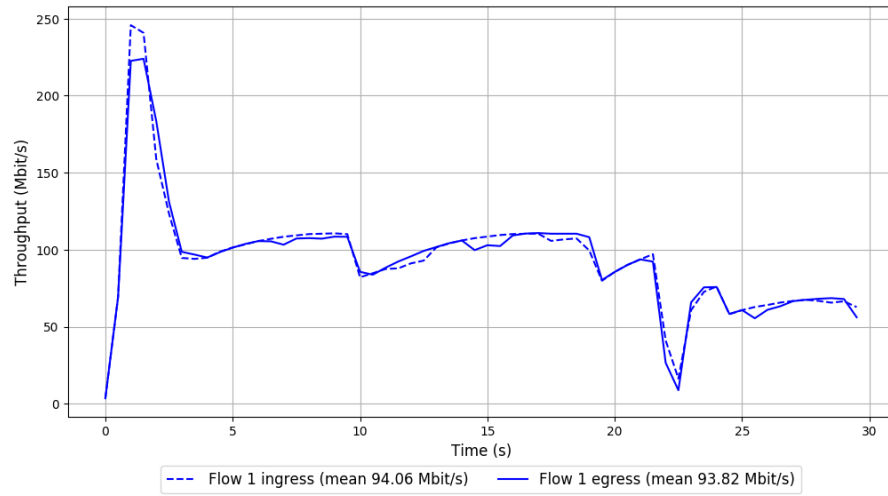
Average throughput: 93.82 Mbit/s

95th percentile per-packet one-way delay: 56.867 ms

Loss rate: 0.60%



### Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-11 12:41:45

End at: 2017-12-11 12:42:15

# Below is generated by plot.py at 2017-12-11 15:51:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 163.58 Mbit/s

95th percentile per-packet one-way delay: 52.168 ms

Loss rate: 0.17%

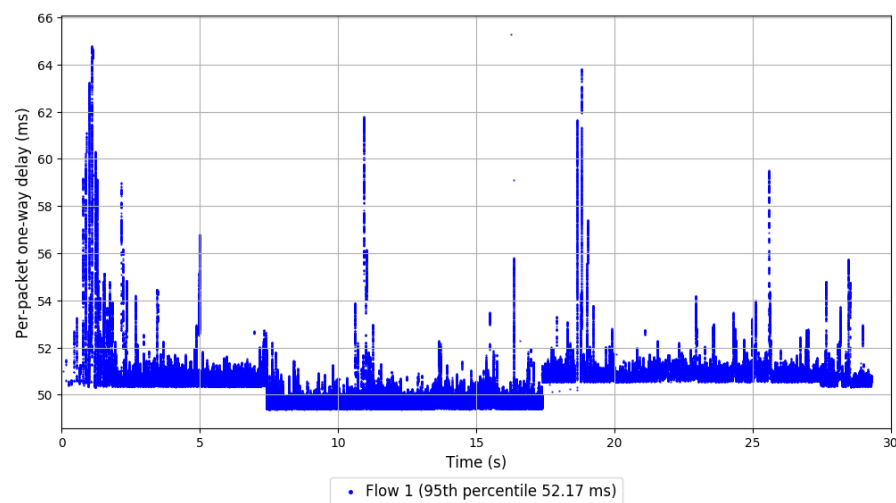
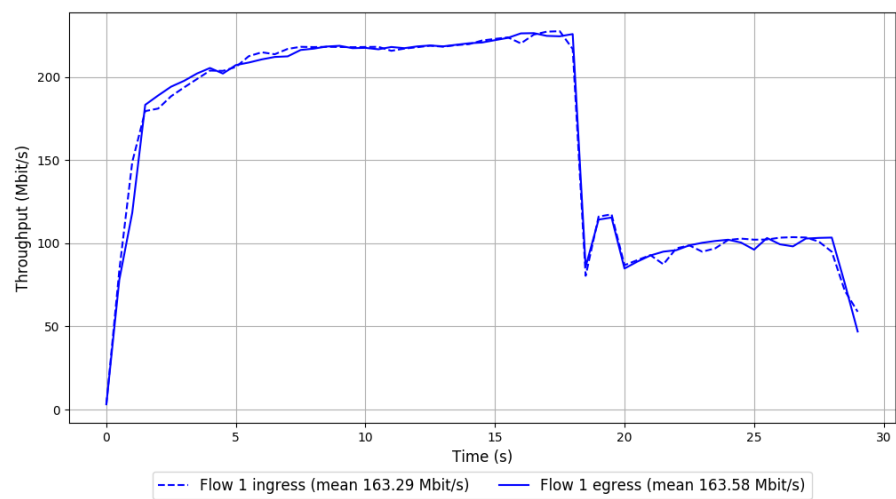
-- Flow 1:

Average throughput: 163.58 Mbit/s

95th percentile per-packet one-way delay: 52.168 ms

Loss rate: 0.17%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-11 12:52:19

End at: 2017-12-11 12:52:49

# Below is generated by plot.py at 2017-12-11 15:51:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 108.15 Mbit/s

95th percentile per-packet one-way delay: 57.372 ms

Loss rate: 0.24%

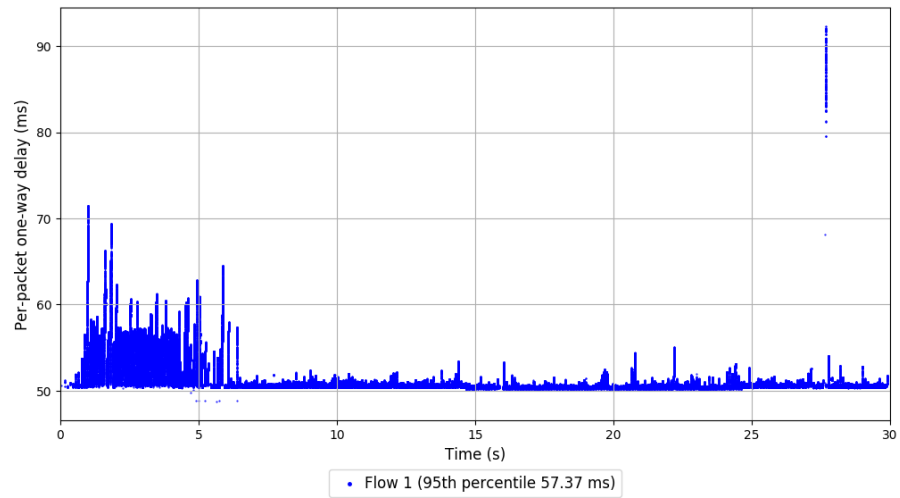
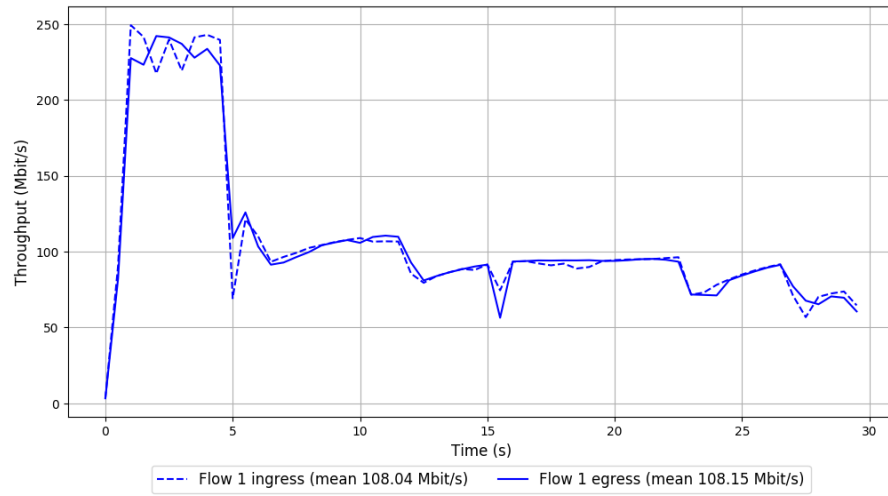
-- Flow 1:

Average throughput: 108.15 Mbit/s

95th percentile per-packet one-way delay: 57.372 ms

Loss rate: 0.24%

### Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-11 13:02:50

End at: 2017-12-11 13:03:20

# Below is generated by plot.py at 2017-12-11 15:51:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 107.34 Mbit/s

95th percentile per-packet one-way delay: 51.148 ms

Loss rate: 0.39%

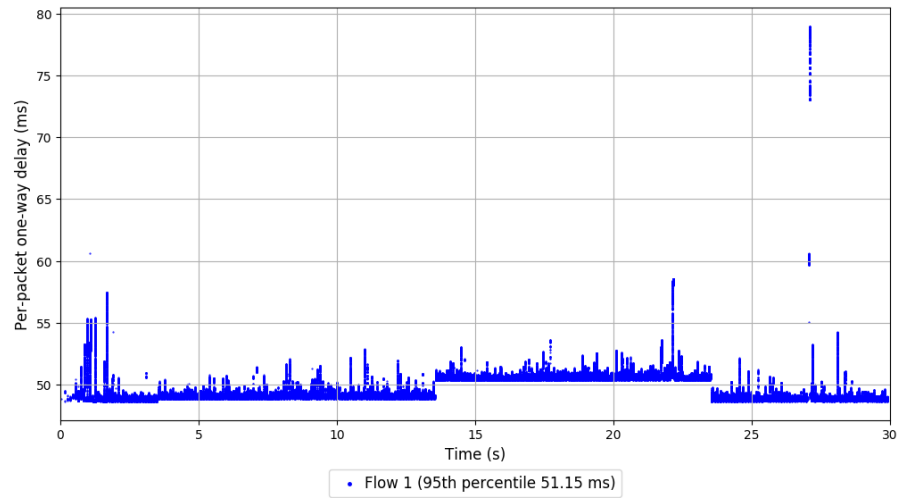
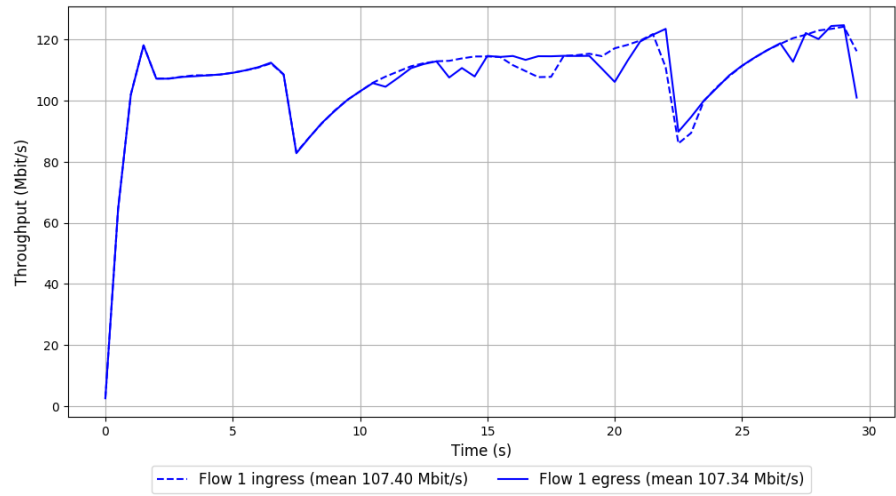
-- Flow 1:

Average throughput: 107.34 Mbit/s

95th percentile per-packet one-way delay: 51.148 ms

Loss rate: 0.39%

## Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-11 13:13:13

End at: 2017-12-11 13:13:43

# Below is generated by plot.py at 2017-12-11 15:51:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 106.69 Mbit/s

95th percentile per-packet one-way delay: 51.714 ms

Loss rate: 0.43%

-- Flow 1:

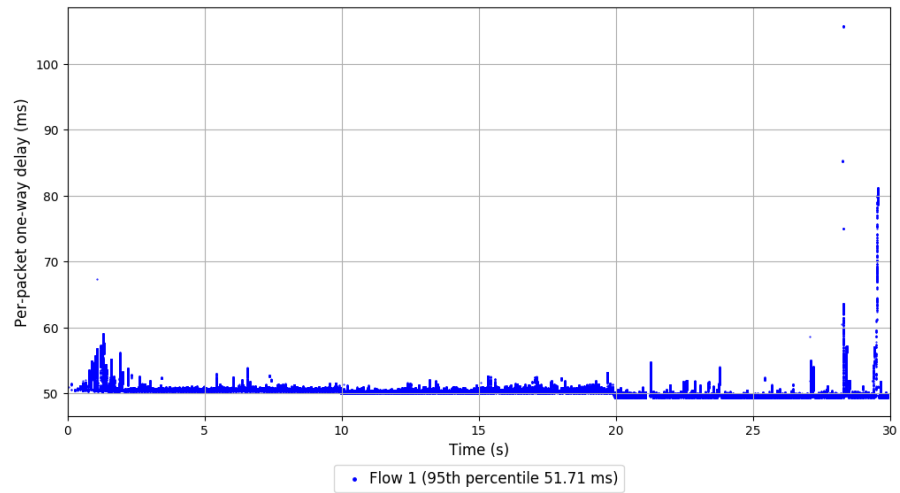
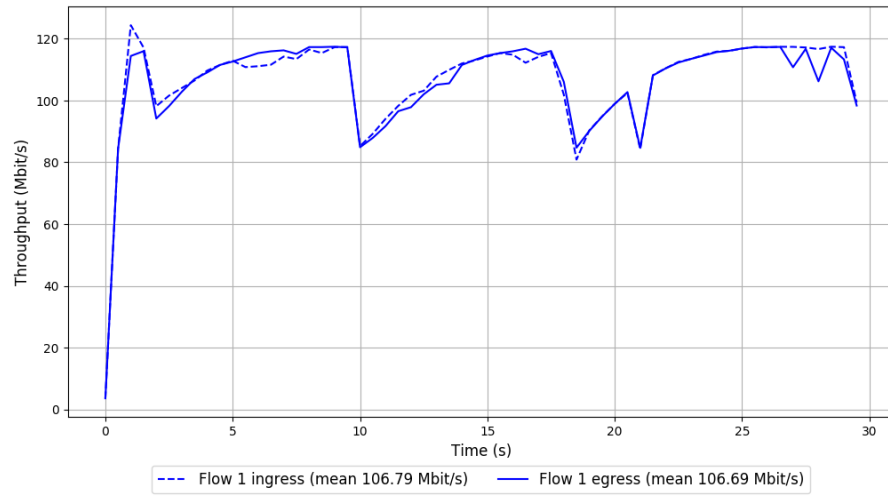
Average throughput: 106.69 Mbit/s

95th percentile per-packet one-way delay: 51.714 ms

Loss rate: 0.43%



### Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-11 13:23:44

End at: 2017-12-11 13:24:14

# Below is generated by plot.py at 2017-12-11 15:51:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 120.00 Mbit/s

95th percentile per-packet one-way delay: 51.236 ms

Loss rate: 0.32%

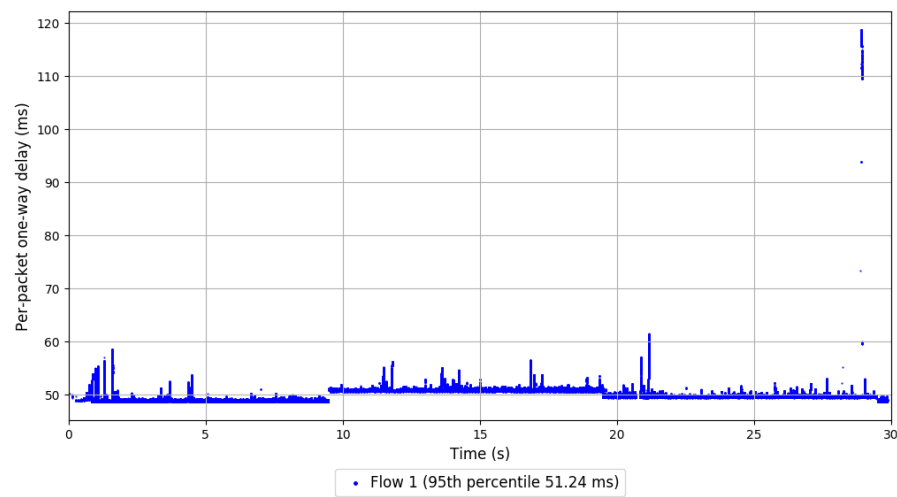
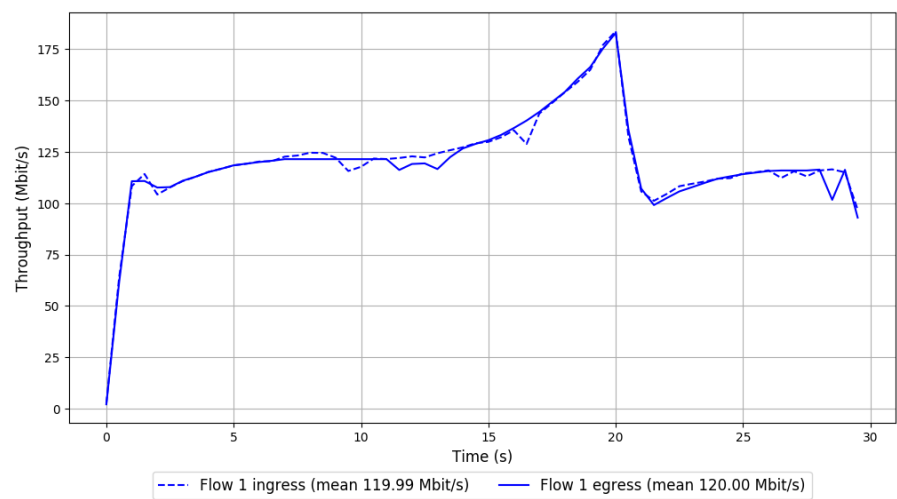
-- Flow 1:

Average throughput: 120.00 Mbit/s

95th percentile per-packet one-way delay: 51.236 ms

Loss rate: 0.32%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-11 13:34:13

End at: 2017-12-11 13:34:43

# Below is generated by plot.py at 2017-12-11 15:51:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 127.70 Mbit/s

95th percentile per-packet one-way delay: 51.717 ms

Loss rate: 0.27%

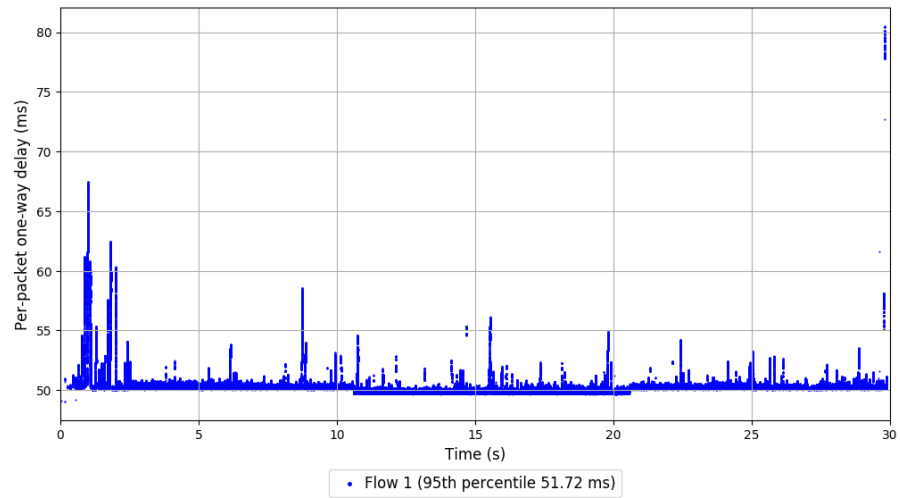
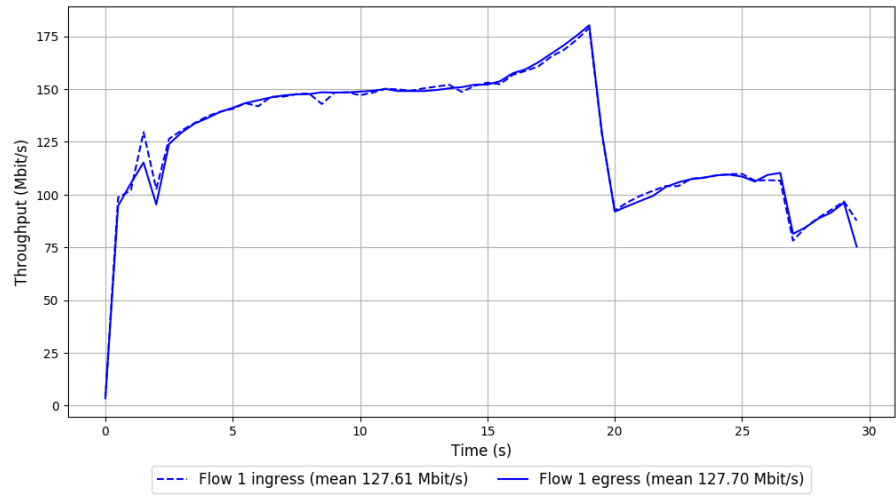
-- Flow 1:

Average throughput: 127.70 Mbit/s

95th percentile per-packet one-way delay: 51.717 ms

Loss rate: 0.27%

### Run 9: Report of TCP Cubic — Data Link

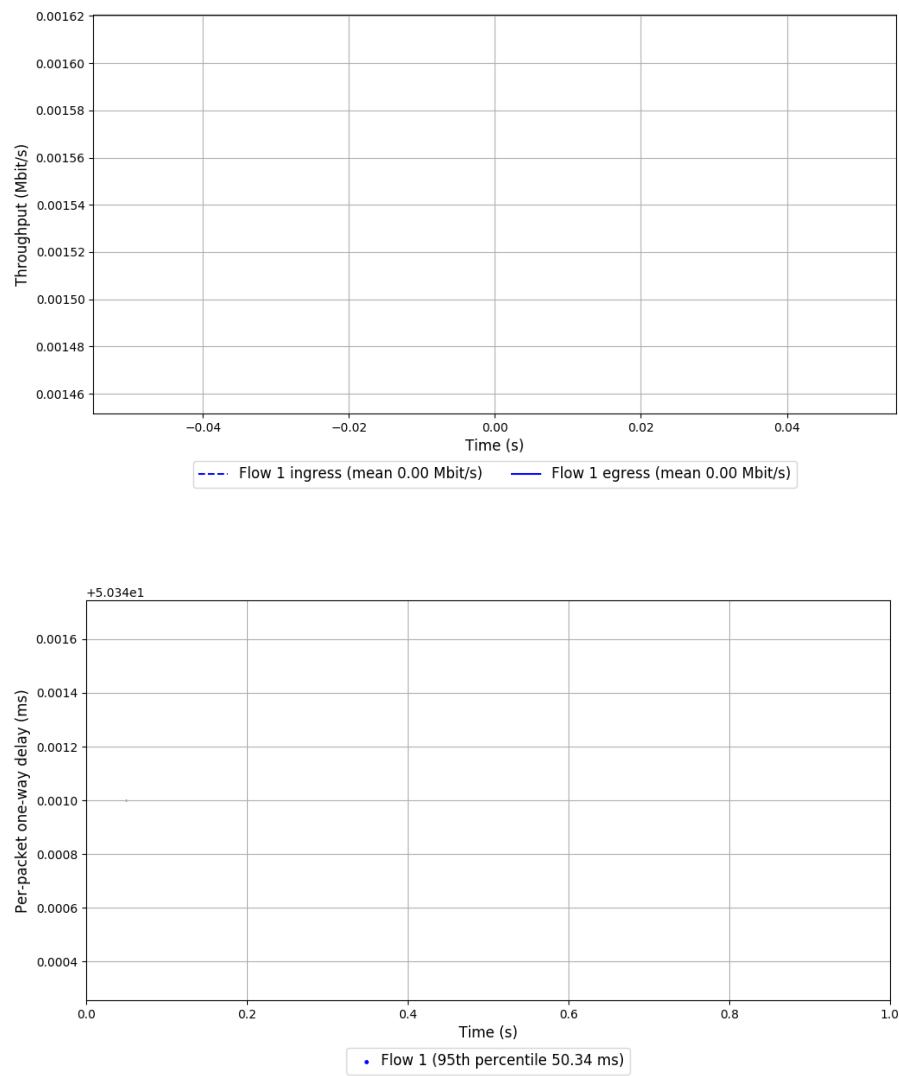


Run 10: Statistics of TCP Cubic

Start at: 2017-12-11 13:44:41

End at: 2017-12-11 13:45:12

Run 10: Report of TCP Cubic — Data Link



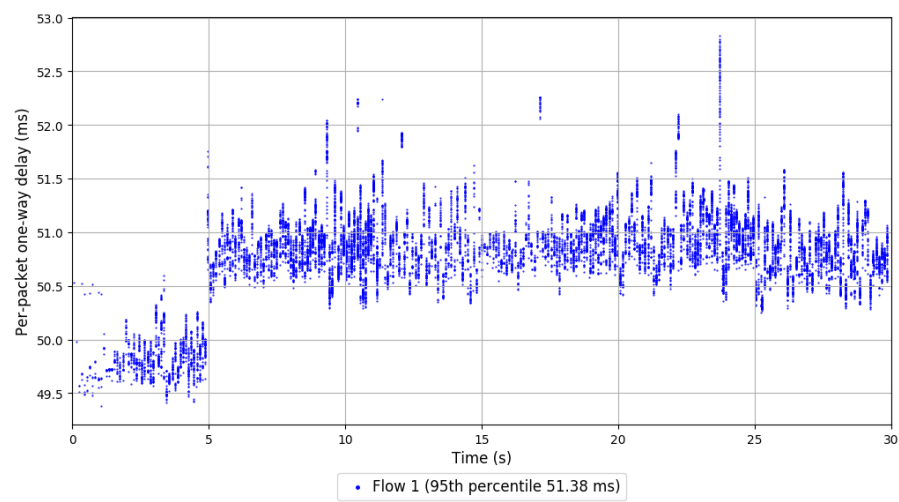
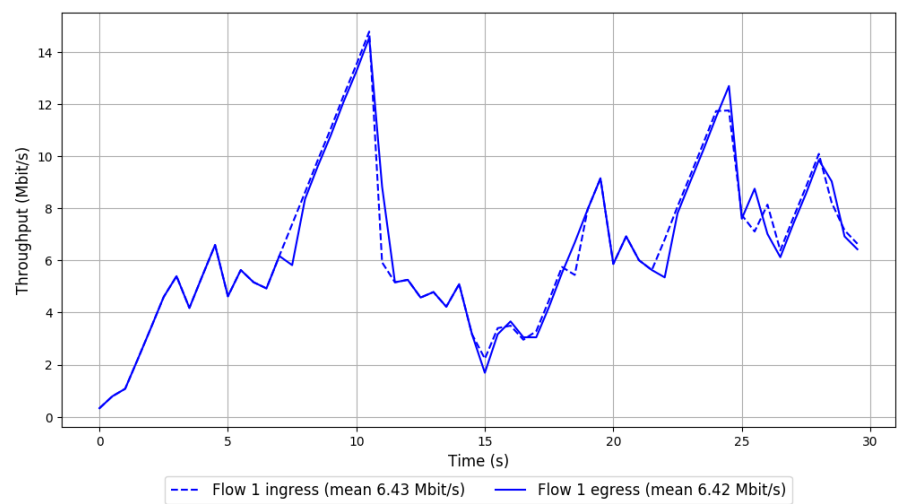
```
Run 1: Statistics of LEDBAT

Start at: 2017-12-11 12:10:38
End at: 2017-12-11 12:11:08

# Below is generated by plot.py at 2017-12-11 15:51:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 51.382 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 51.382 ms
Loss rate: 0.49%
```



Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-11 12:21:16

End at: 2017-12-11 12:21:46

# Below is generated by plot.py at 2017-12-11 15:51:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 9.44 Mbit/s

95th percentile per-packet one-way delay: 51.602 ms

Loss rate: 0.29%

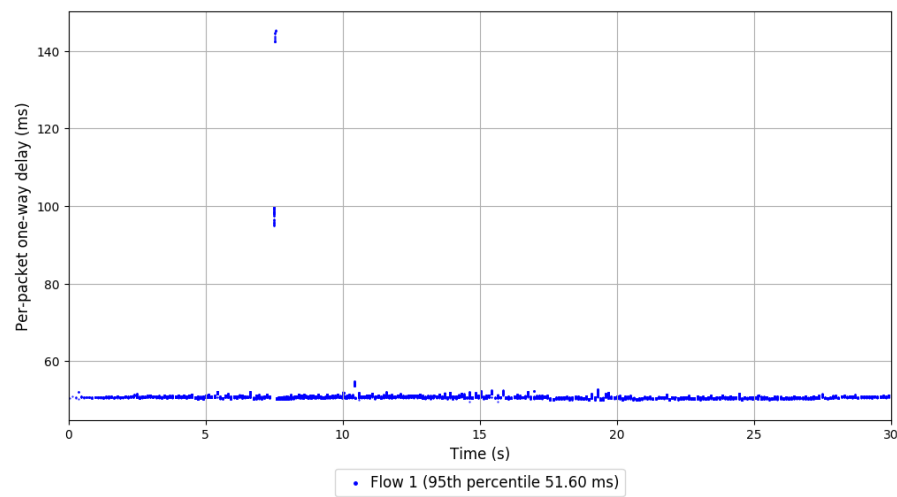
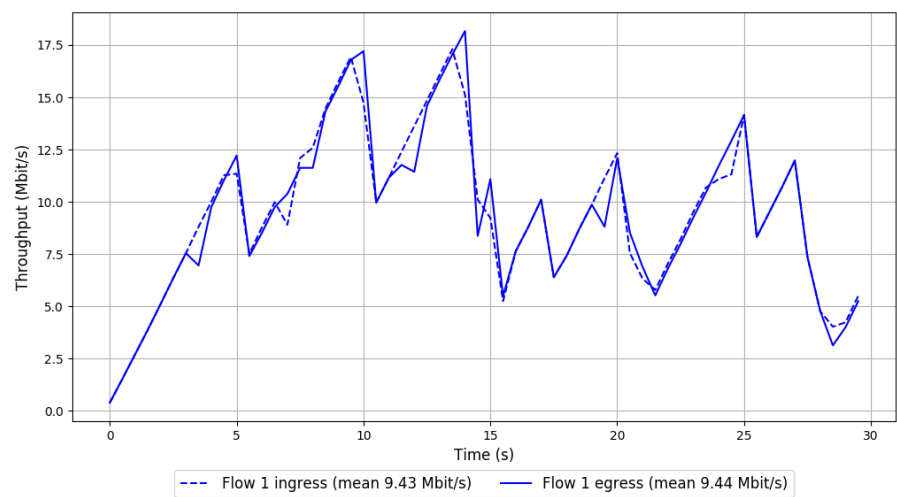
-- Flow 1:

Average throughput: 9.44 Mbit/s

95th percentile per-packet one-way delay: 51.602 ms

Loss rate: 0.29%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-11 12:31:55

End at: 2017-12-11 12:32:25

# Below is generated by plot.py at 2017-12-11 15:51:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 8.17 Mbit/s

95th percentile per-packet one-way delay: 51.562 ms

Loss rate: 0.51%

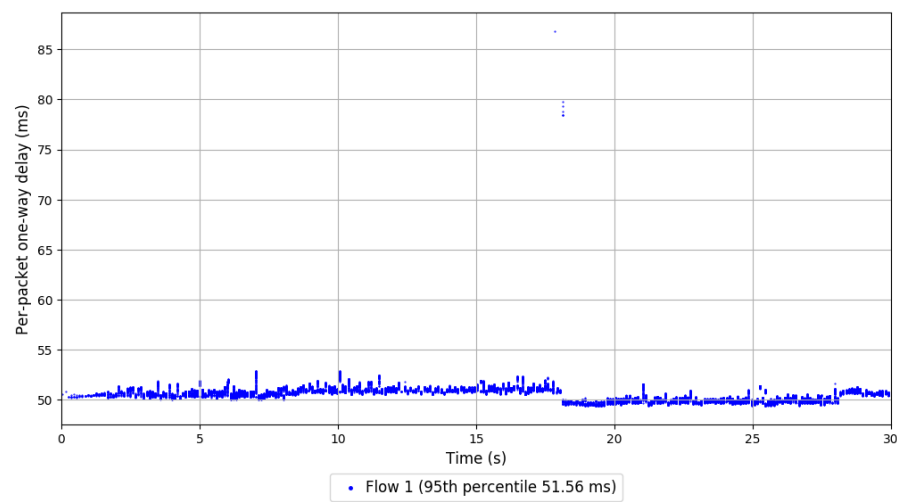
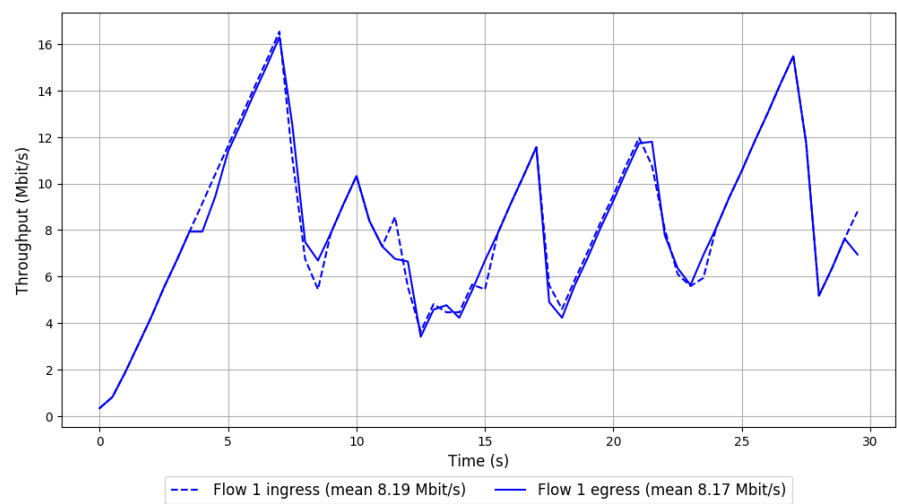
-- Flow 1:

Average throughput: 8.17 Mbit/s

95th percentile per-packet one-way delay: 51.562 ms

Loss rate: 0.51%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-11 12:42:30

End at: 2017-12-11 12:43:01

# Below is generated by plot.py at 2017-12-11 15:51:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.25 Mbit/s

95th percentile per-packet one-way delay: 51.732 ms

Loss rate: 0.52%

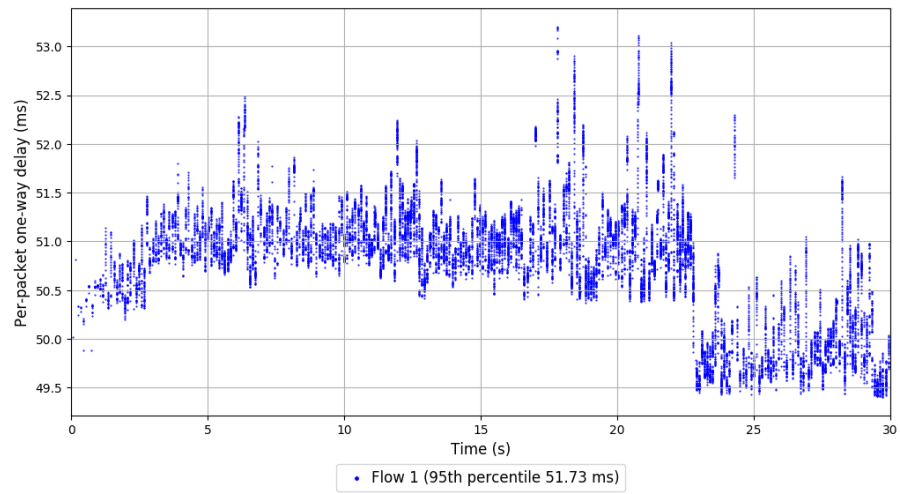
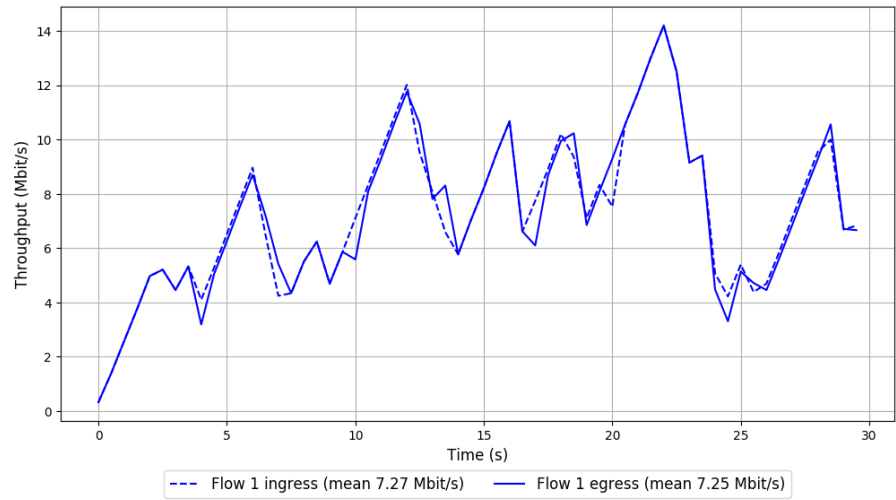
-- Flow 1:

Average throughput: 7.25 Mbit/s

95th percentile per-packet one-way delay: 51.732 ms

Loss rate: 0.52%

#### Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-11 12:53:01

End at: 2017-12-11 12:53:31

# Below is generated by plot.py at 2017-12-11 15:51:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 51.374 ms

Loss rate: 0.65%

-- Flow 1:

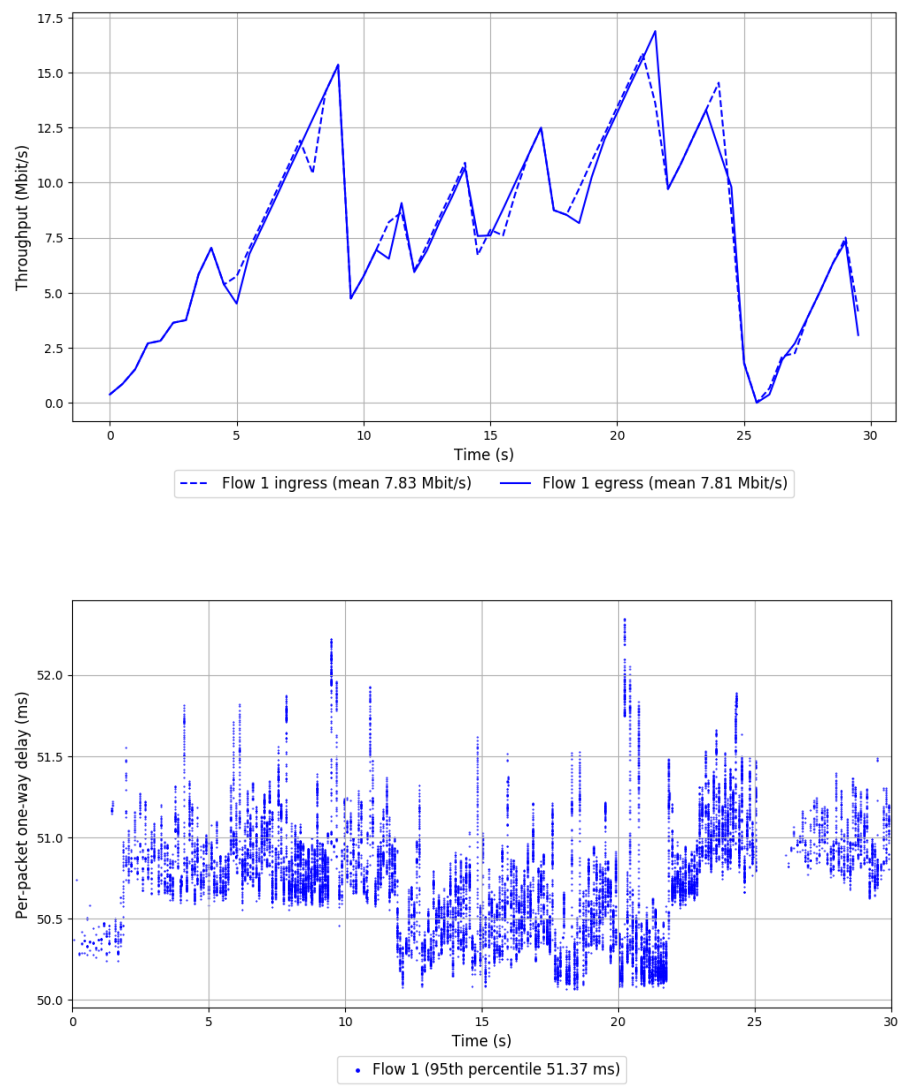
Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 51.374 ms

Loss rate: 0.65%



Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-11 13:03:32

End at: 2017-12-11 13:04:02

# Below is generated by plot.py at 2017-12-11 15:51:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.41 Mbit/s

95th percentile per-packet one-way delay: 51.518 ms

Loss rate: 0.95%

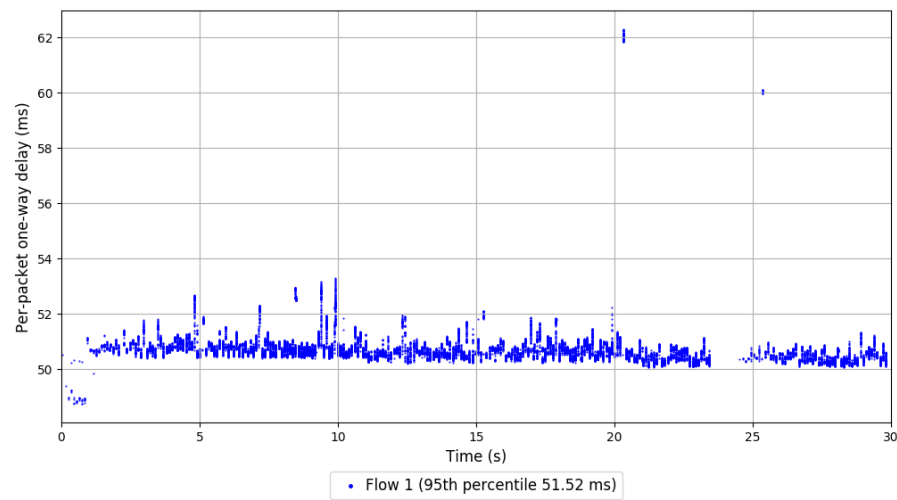
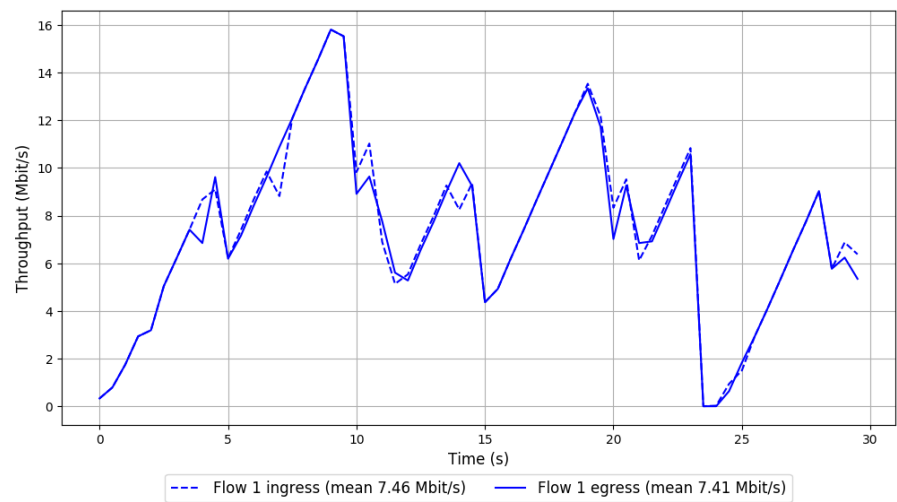
-- Flow 1:

Average throughput: 7.41 Mbit/s

95th percentile per-packet one-way delay: 51.518 ms

Loss rate: 0.95%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-11 13:13:56

End at: 2017-12-11 13:14:26

# Below is generated by plot.py at 2017-12-11 15:51:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 10.71 Mbit/s

95th percentile per-packet one-way delay: 51.317 ms

Loss rate: 0.39%

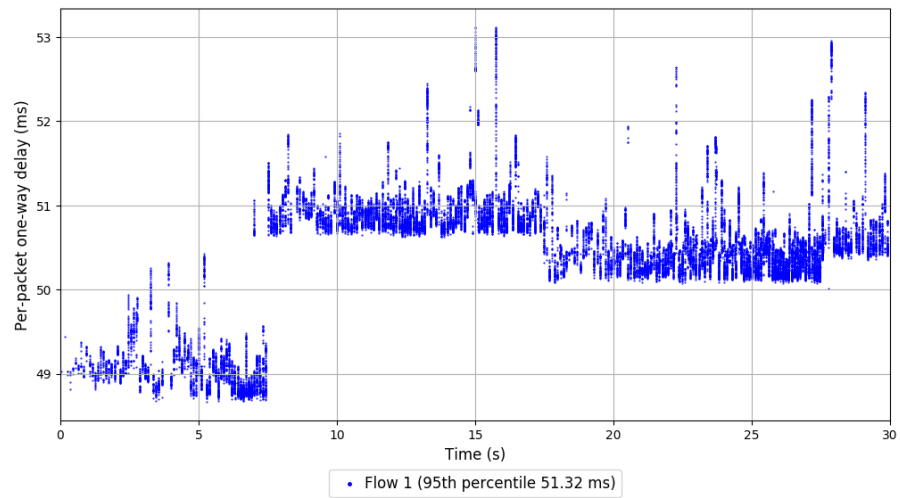
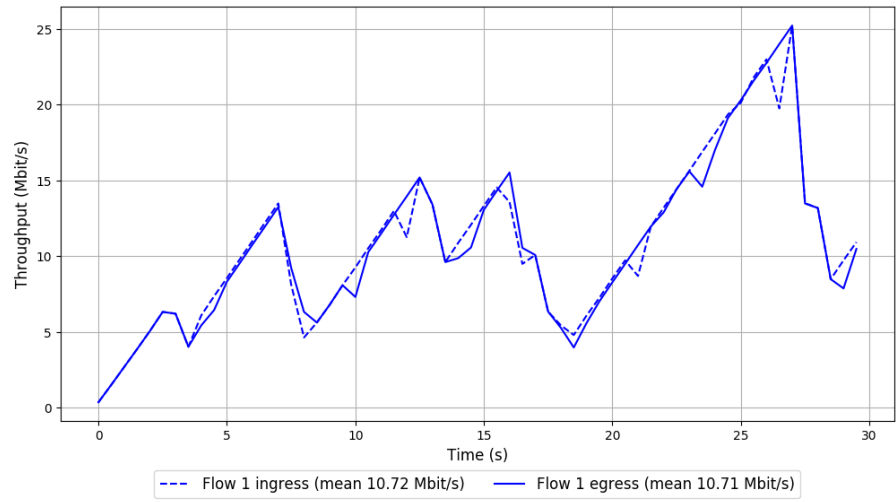
-- Flow 1:

Average throughput: 10.71 Mbit/s

95th percentile per-packet one-way delay: 51.317 ms

Loss rate: 0.39%

### Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-11 13:24:27

End at: 2017-12-11 13:24:57

# Below is generated by plot.py at 2017-12-11 15:51:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.19 Mbit/s

95th percentile per-packet one-way delay: 51.320 ms

Loss rate: 1.00%

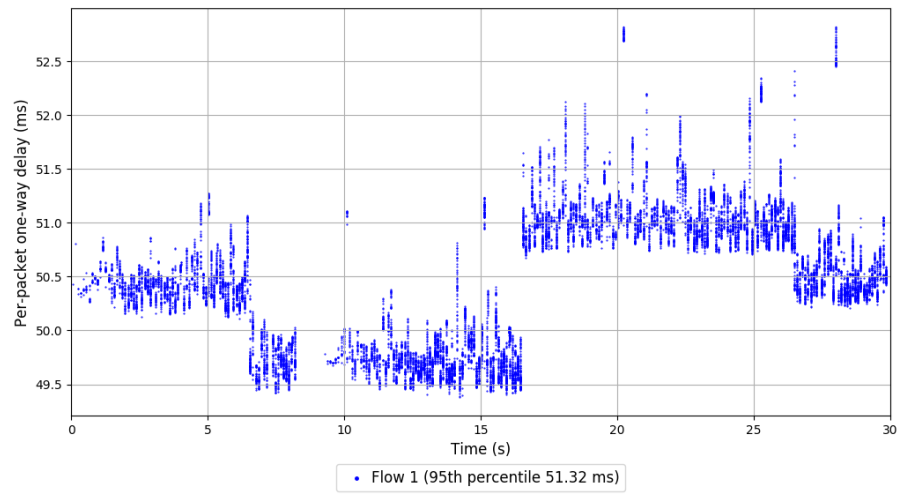
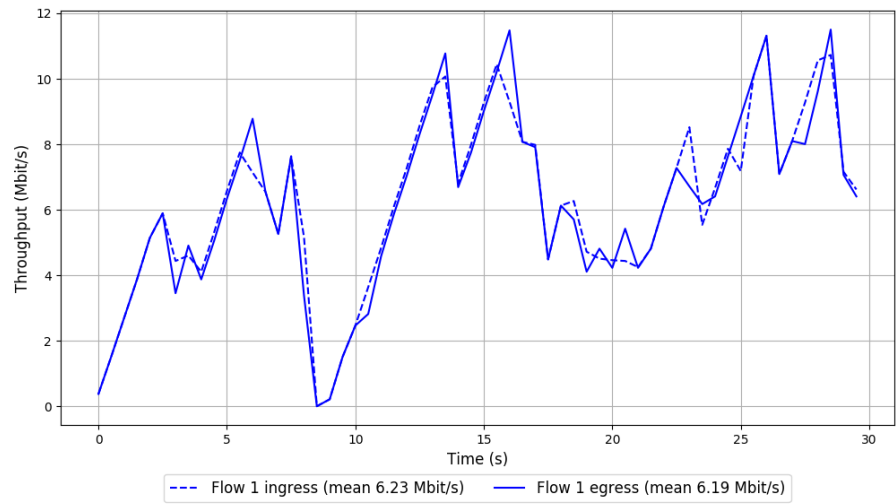
-- Flow 1:

Average throughput: 6.19 Mbit/s

95th percentile per-packet one-way delay: 51.320 ms

Loss rate: 1.00%

# Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-11 13:34:56

End at: 2017-12-11 13:35:26

# Below is generated by plot.py at 2017-12-11 15:51:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 50.778 ms

Loss rate: 0.51%

-- Flow 1:

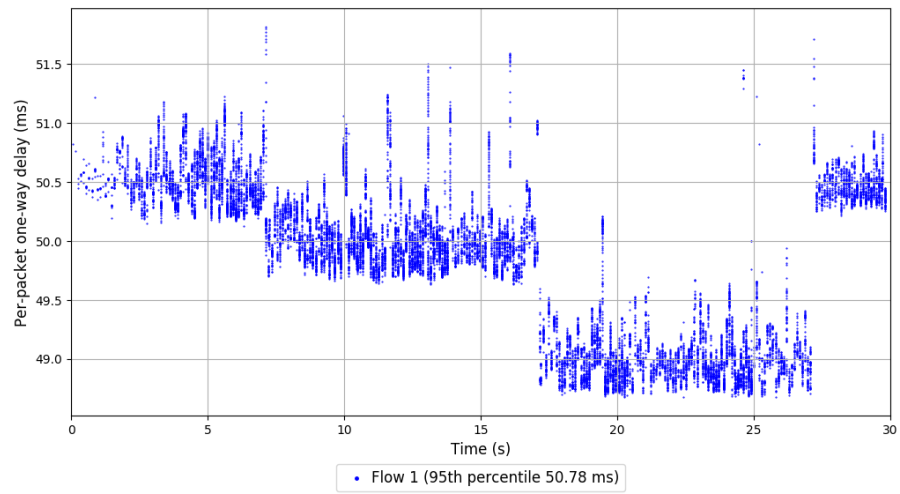
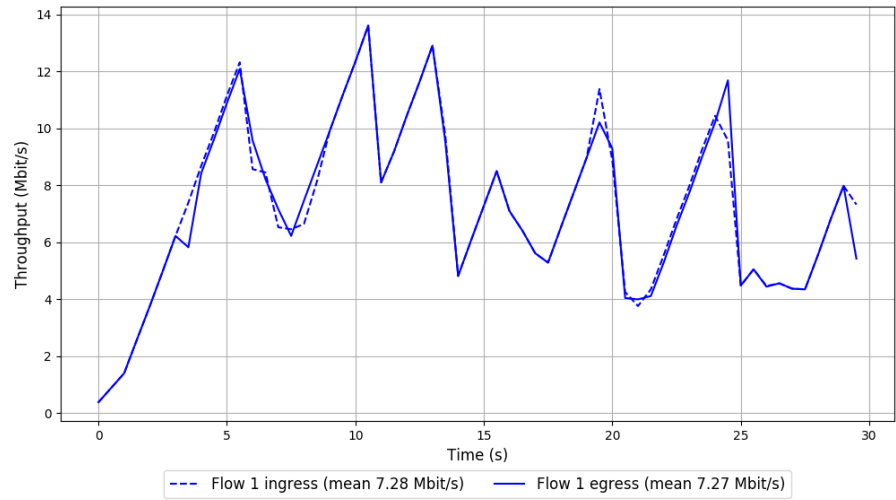
Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 50.778 ms

Loss rate: 0.51%



### Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-11 13:45:18

End at: 2017-12-11 13:45:48

# Below is generated by plot.py at 2017-12-11 15:51:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 51.376 ms

Loss rate: 0.27%

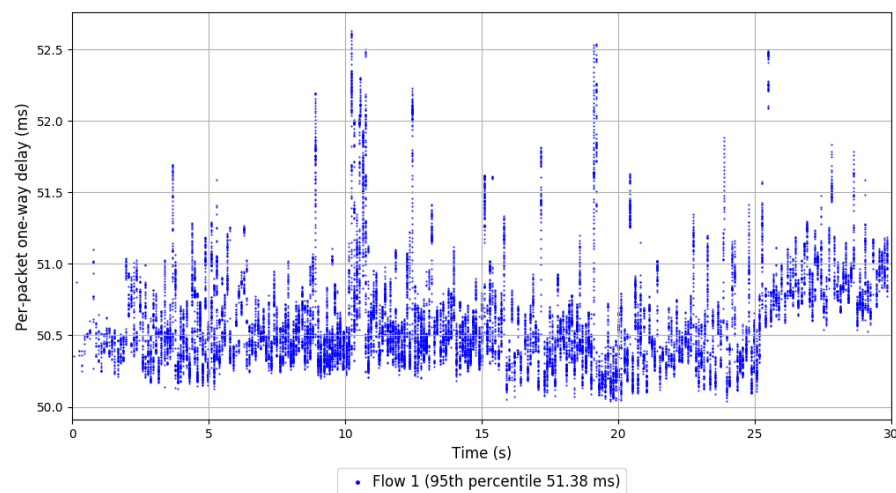
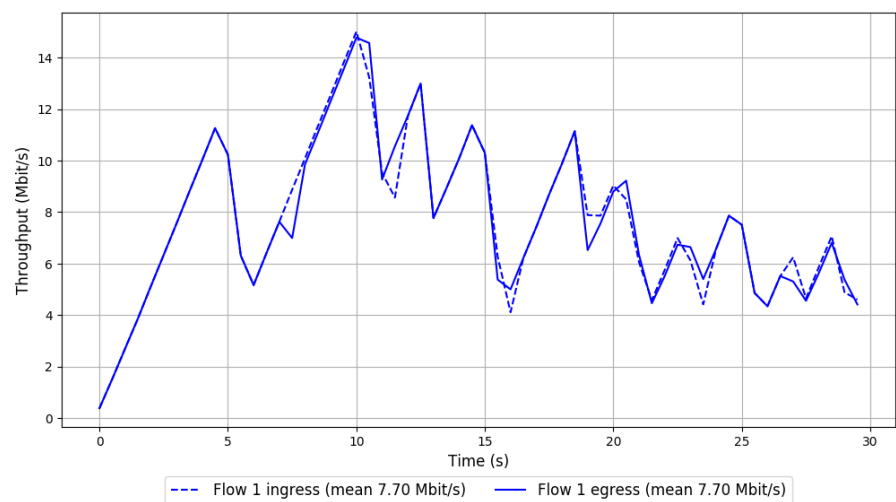
-- Flow 1:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 51.376 ms

Loss rate: 0.27%

Run 10: Report of LEDBAT — Data Link

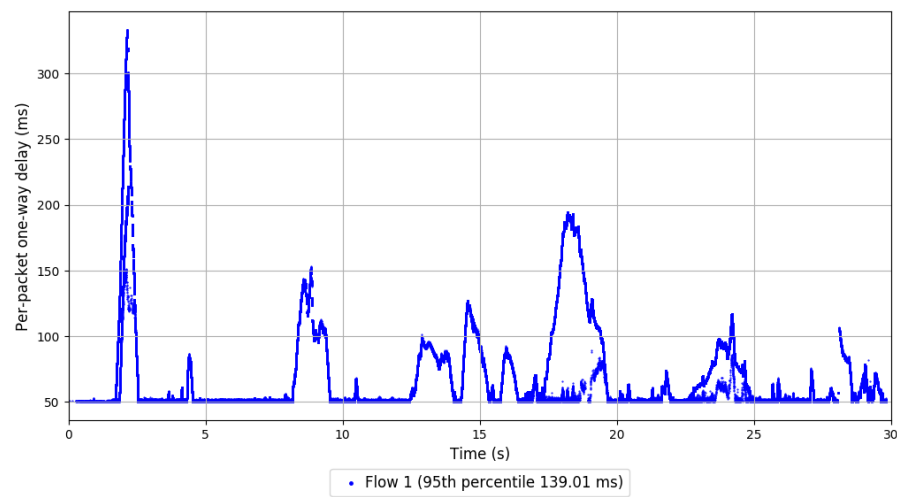
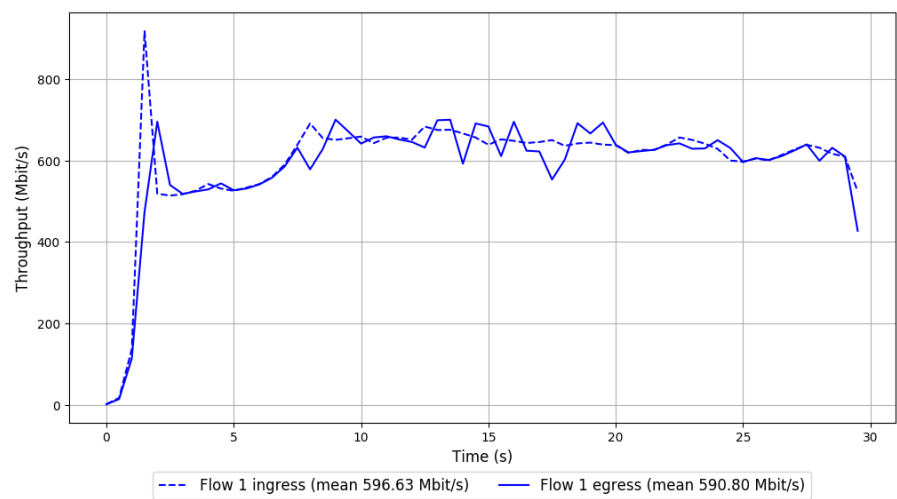


```
Run 1: Statistics of PCC

Start at: 2017-12-11 12:16:32
End at: 2017-12-11 12:17:02

# Below is generated by plot.py at 2017-12-11 16:01:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 590.80 Mbit/s
95th percentile per-packet one-way delay: 139.009 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 590.80 Mbit/s
95th percentile per-packet one-way delay: 139.009 ms
Loss rate: 1.45%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-11 12:27:11

End at: 2017-12-11 12:27:41

# Below is generated by plot.py at 2017-12-11 16:02:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 619.37 Mbit/s

95th percentile per-packet one-way delay: 172.108 ms

Loss rate: 2.19%

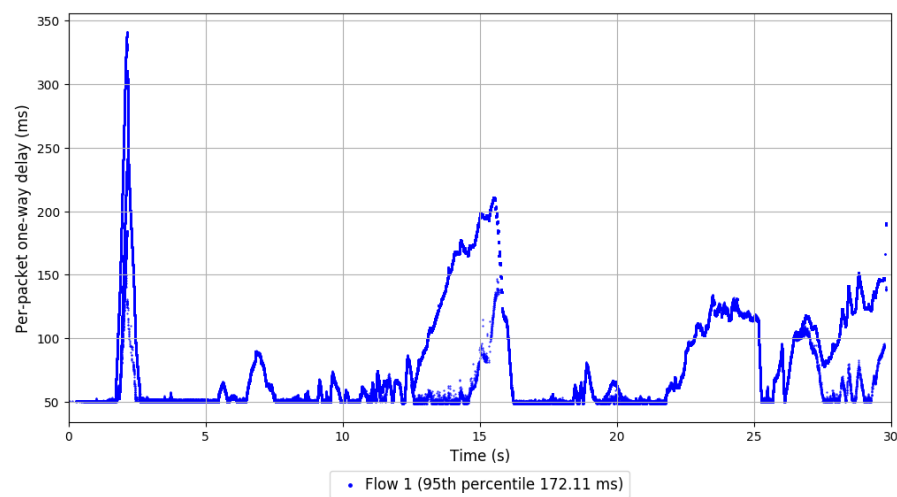
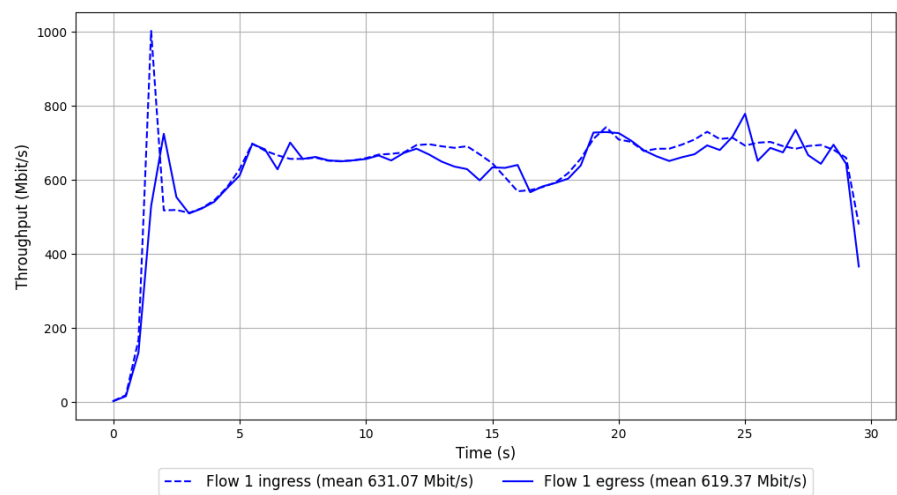
-- Flow 1:

Average throughput: 619.37 Mbit/s

95th percentile per-packet one-way delay: 172.108 ms

Loss rate: 2.19%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-11 12:37:48

End at: 2017-12-11 12:38:18

# Below is generated by plot.py at 2017-12-11 16:02:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 546.84 Mbit/s

95th percentile per-packet one-way delay: 101.746 ms

Loss rate: 0.99%

-- Flow 1:

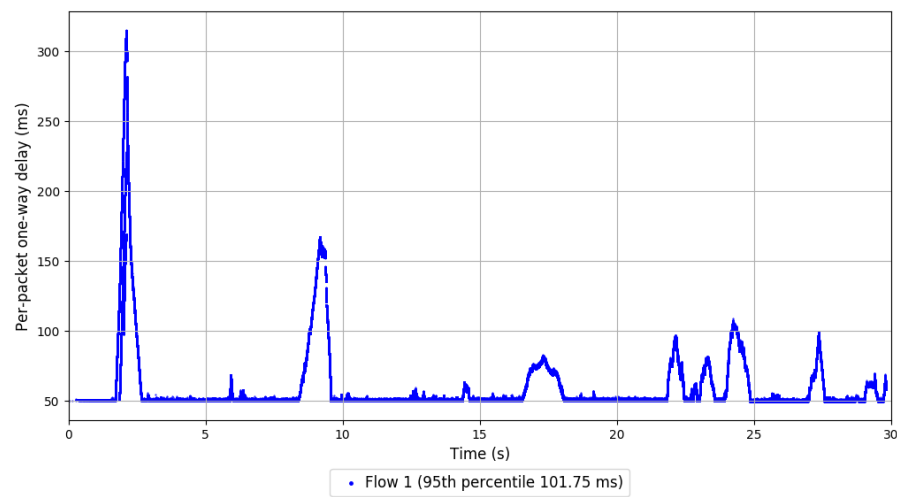
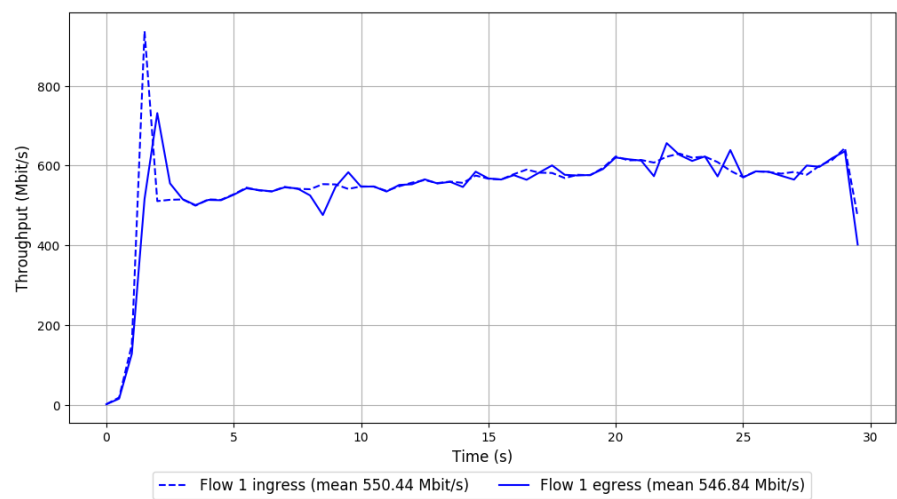
Average throughput: 546.84 Mbit/s

95th percentile per-packet one-way delay: 101.746 ms

Loss rate: 0.99%



Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-11 12:48:20

End at: 2017-12-11 12:48:50

# Below is generated by plot.py at 2017-12-11 16:02:03

# Datalink statistics

-- Total of 1 flow:

Average throughput: 584.67 Mbit/s

95th percentile per-packet one-way delay: 169.010 ms

Loss rate: 1.65%

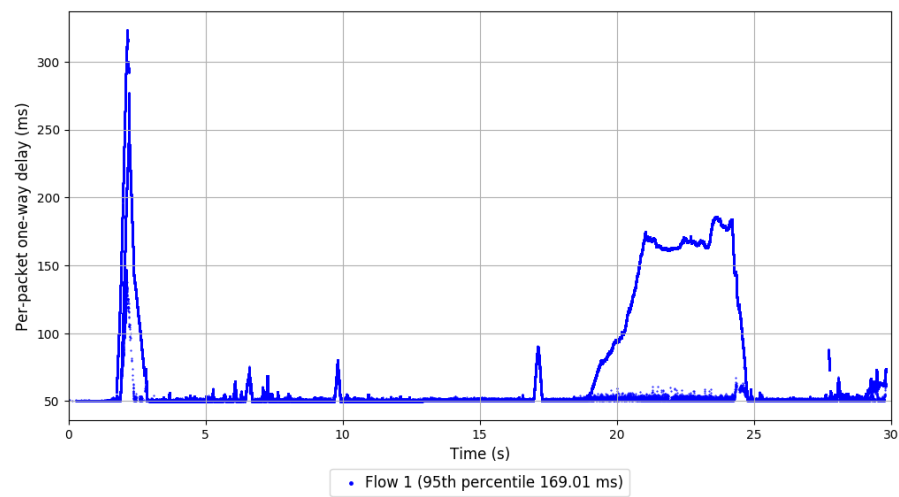
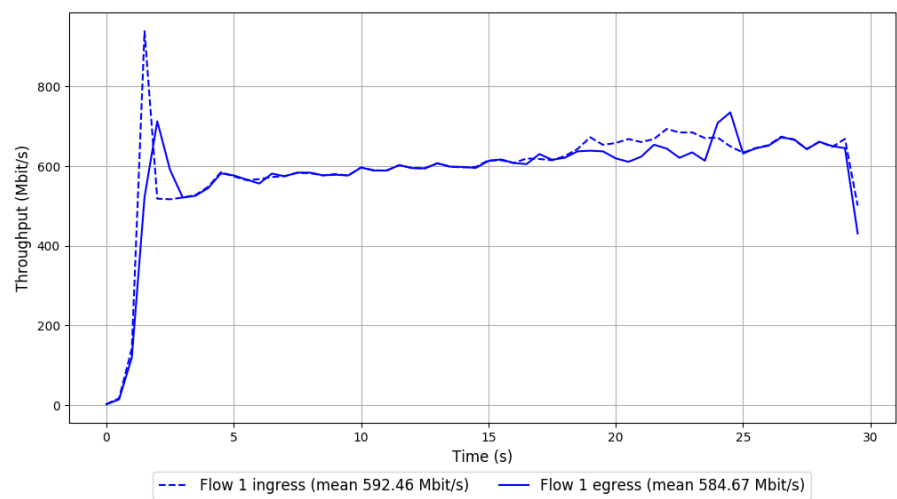
-- Flow 1:

Average throughput: 584.67 Mbit/s

95th percentile per-packet one-way delay: 169.010 ms

Loss rate: 1.65%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-11 12:58:49

End at: 2017-12-11 12:59:19

# Below is generated by plot.py at 2017-12-11 16:02:03

# Datalink statistics

-- Total of 1 flow:

Average throughput: 563.31 Mbit/s

95th percentile per-packet one-way delay: 146.038 ms

Loss rate: 0.73%

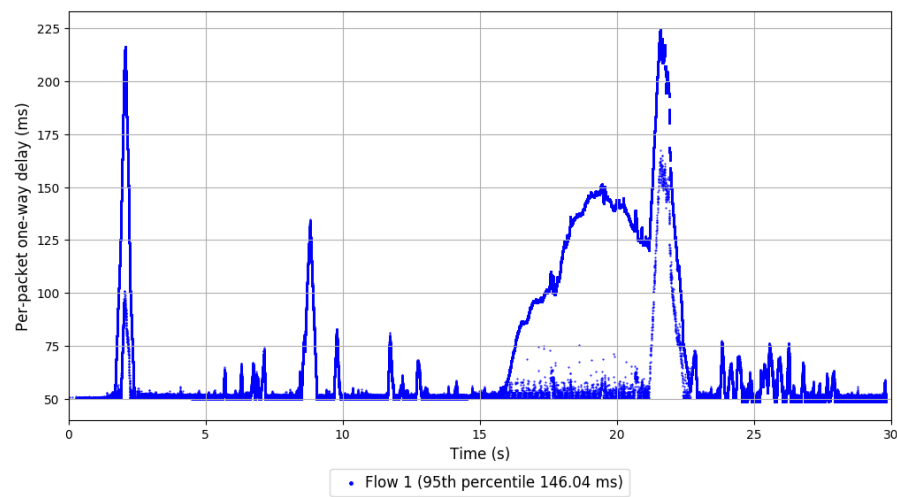
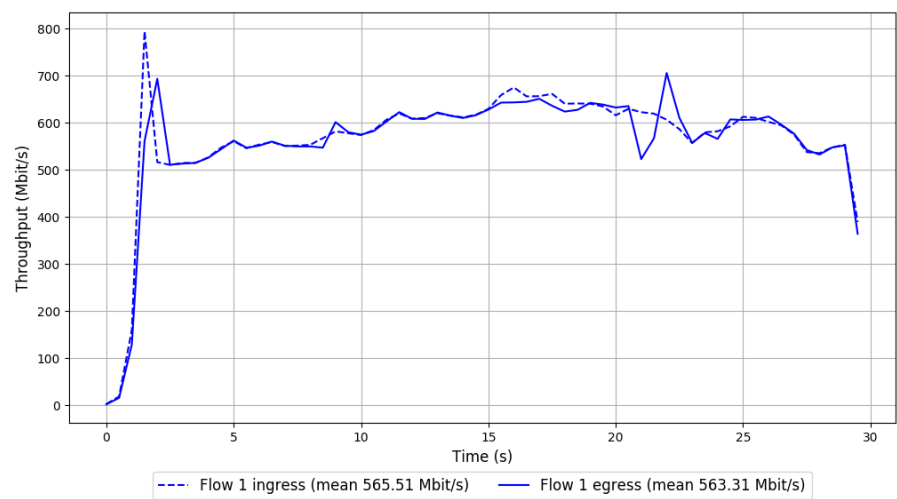
-- Flow 1:

Average throughput: 563.31 Mbit/s

95th percentile per-packet one-way delay: 146.038 ms

Loss rate: 0.73%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-11 13:09:21

End at: 2017-12-11 13:09:51

# Below is generated by plot.py at 2017-12-11 16:02:03

# Datalink statistics

-- Total of 1 flow:

Average throughput: 553.55 Mbit/s

95th percentile per-packet one-way delay: 151.184 ms

Loss rate: 3.80%

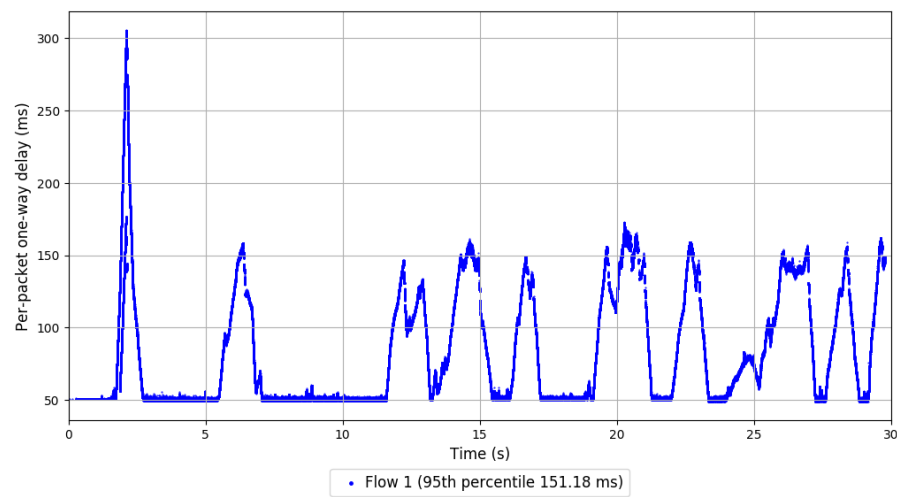
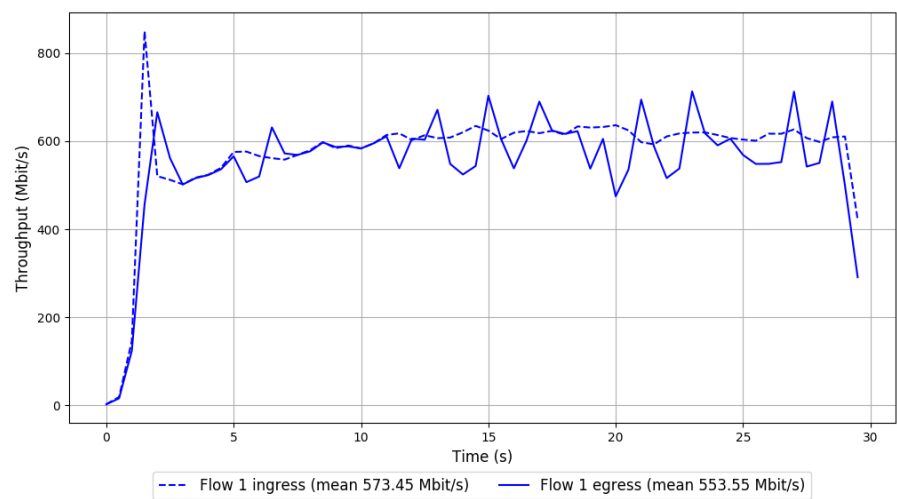
-- Flow 1:

Average throughput: 553.55 Mbit/s

95th percentile per-packet one-way delay: 151.184 ms

Loss rate: 3.80%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-11 13:19:45

End at: 2017-12-11 13:20:15

# Below is generated by plot.py at 2017-12-11 16:02:56

# Datalink statistics

-- Total of 1 flow:

Average throughput: 612.65 Mbit/s

95th percentile per-packet one-way delay: 223.921 ms

Loss rate: 4.93%

-- Flow 1:

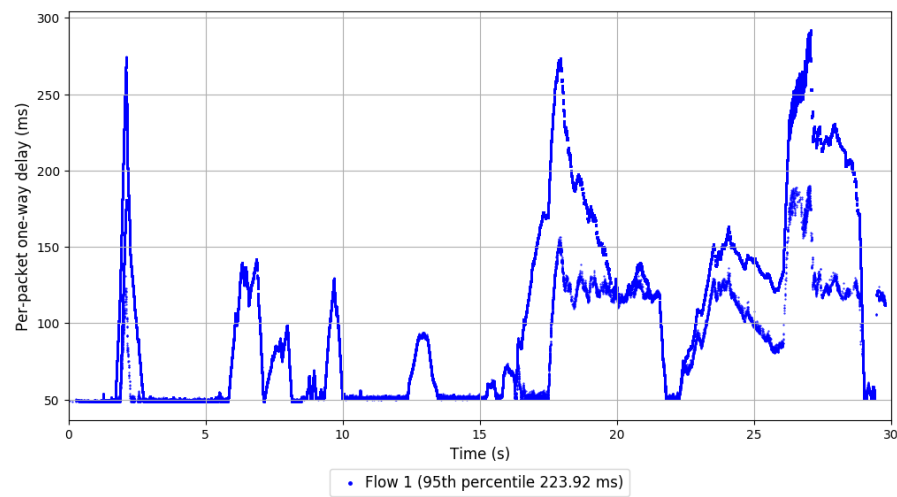
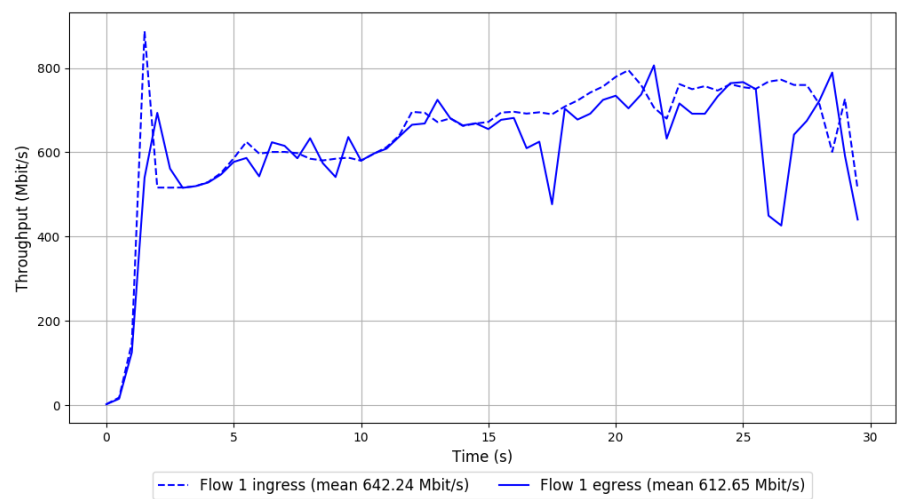
Average throughput: 612.65 Mbit/s

95th percentile per-packet one-way delay: 223.921 ms

Loss rate: 4.93%



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-11 13:30:15

End at: 2017-12-11 13:30:45

# Below is generated by plot.py at 2017-12-11 16:03:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 599.32 Mbit/s

95th percentile per-packet one-way delay: 191.037 ms

Loss rate: 3.35%

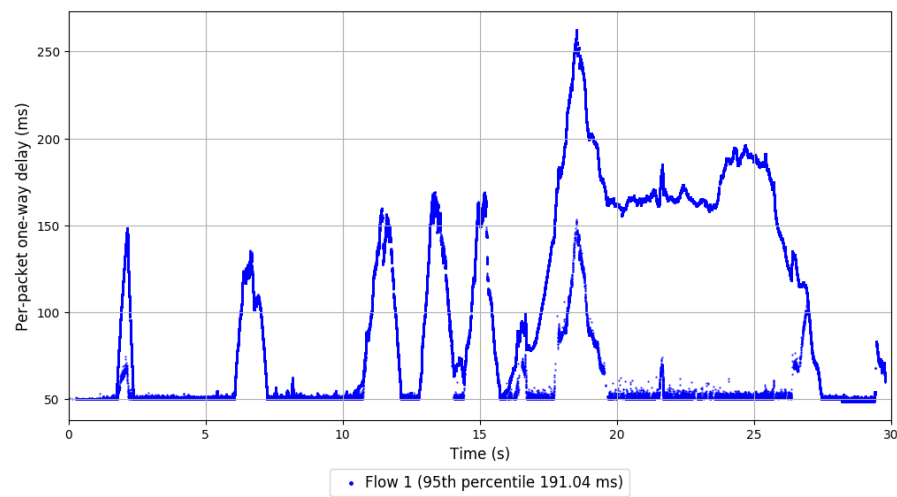
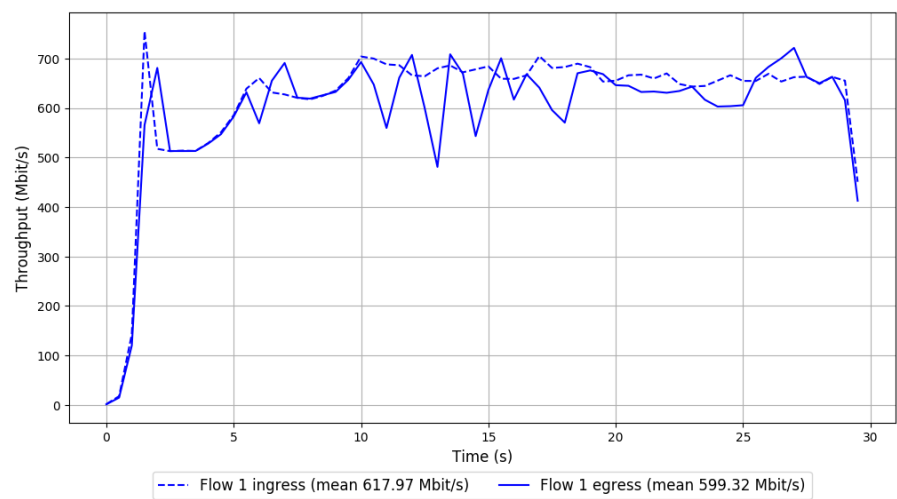
-- Flow 1:

Average throughput: 599.32 Mbit/s

95th percentile per-packet one-way delay: 191.037 ms

Loss rate: 3.35%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-11 13:40:42

End at: 2017-12-11 13:41:12

# Below is generated by plot.py at 2017-12-11 16:12:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 560.65 Mbit/s

95th percentile per-packet one-way delay: 152.872 ms

Loss rate: 1.45%

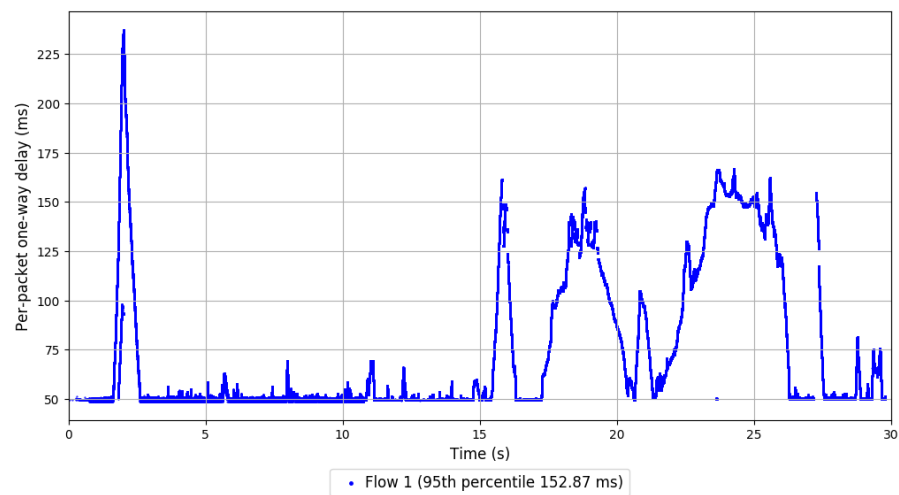
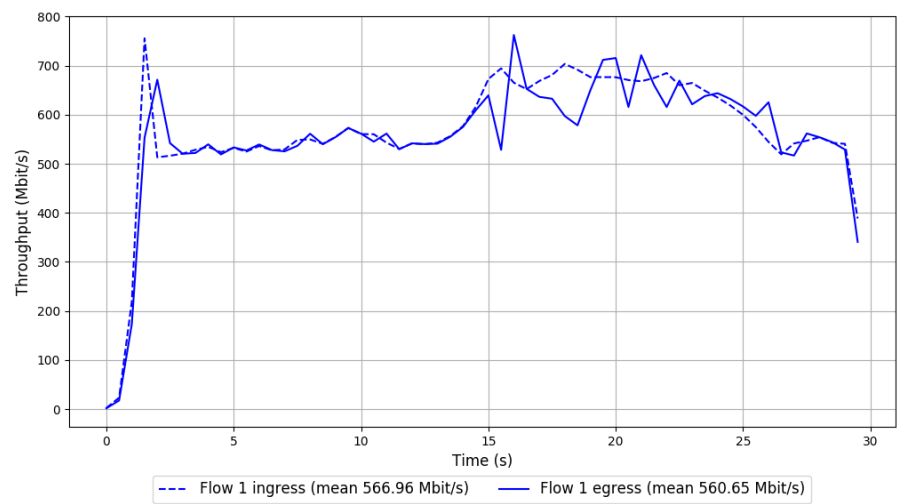
-- Flow 1:

Average throughput: 560.65 Mbit/s

95th percentile per-packet one-way delay: 152.872 ms

Loss rate: 1.45%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-11 13:51:08

End at: 2017-12-11 13:51:38

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 592.73 Mbit/s

95th percentile per-packet one-way delay: 163.768 ms

Loss rate: 1.11%

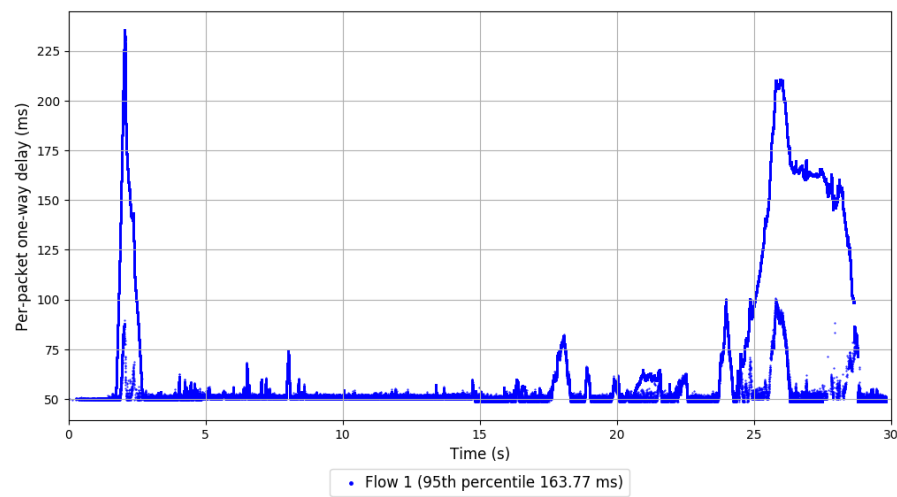
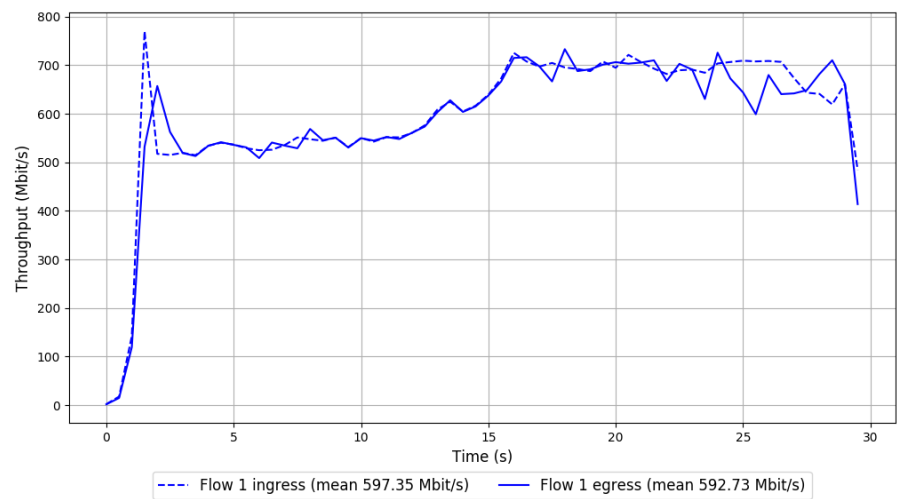
-- Flow 1:

Average throughput: 592.73 Mbit/s

95th percentile per-packet one-way delay: 163.768 ms

Loss rate: 1.11%

Run 10: Report of PCC — Data Link



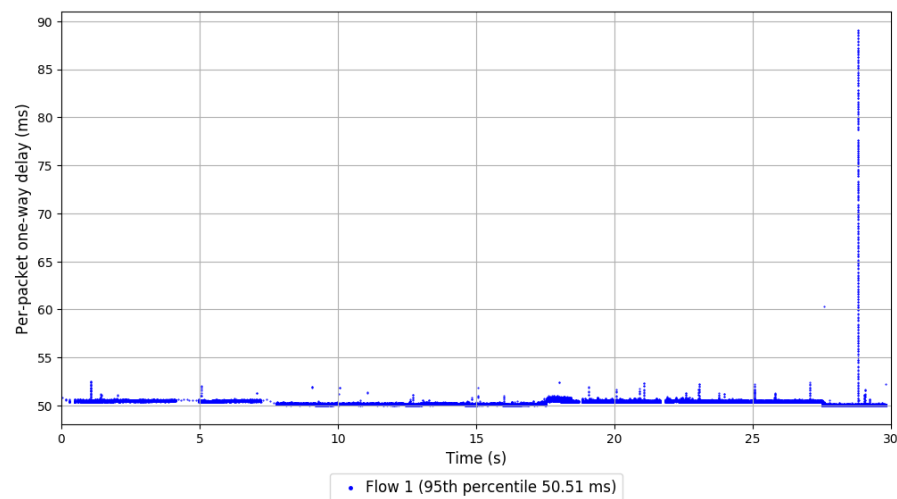
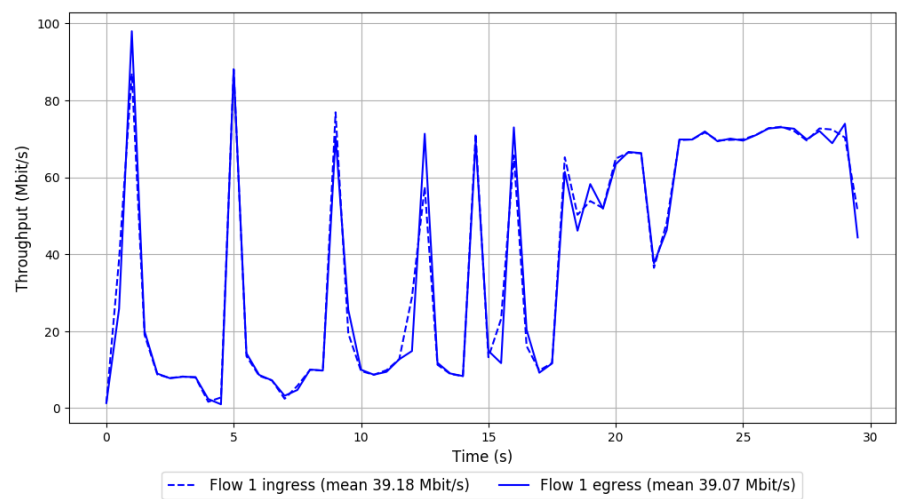
```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-11 12:11:16
End at: 2017-12-11 12:11:46

# Below is generated by plot.py at 2017-12-11 16:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.07 Mbit/s
95th percentile per-packet one-way delay: 50.509 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 39.07 Mbit/s
95th percentile per-packet one-way delay: 50.509 ms
Loss rate: 0.60%
```



Run 1: Report of QUIC Cubic — Data Link

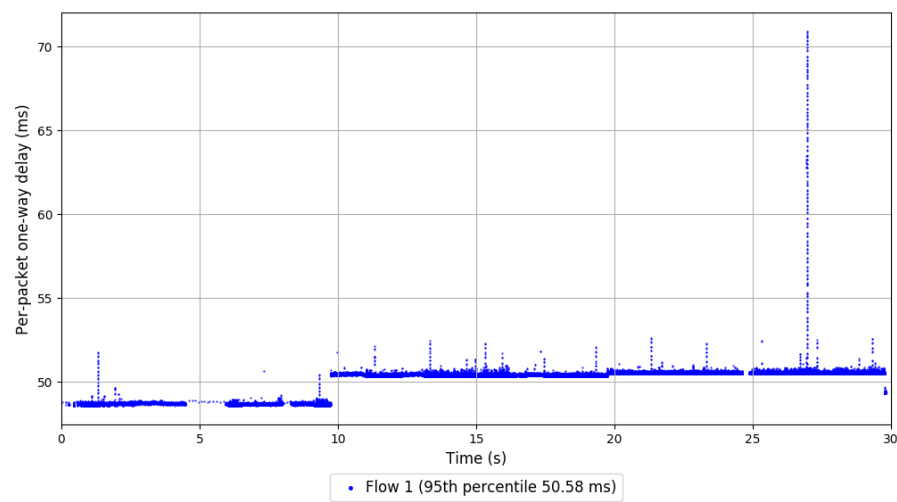
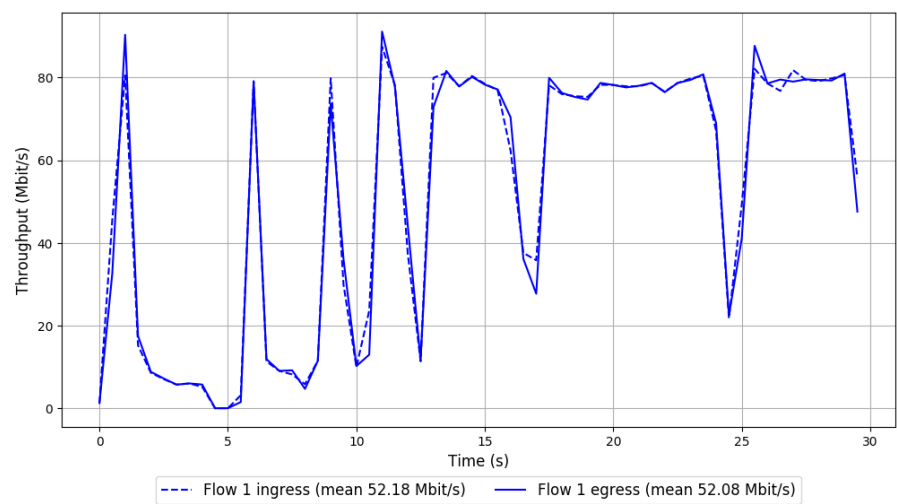


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-11 12:21:53
End at: 2017-12-11 12:22:23

# Below is generated by plot.py at 2017-12-11 16:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.08 Mbit/s
95th percentile per-packet one-way delay: 50.576 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 52.08 Mbit/s
95th percentile per-packet one-way delay: 50.576 ms
Loss rate: 0.52%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-11 12:32:33

End at: 2017-12-11 12:33:03

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 45.83 Mbit/s

95th percentile per-packet one-way delay: 50.070 ms

Loss rate: 0.59%

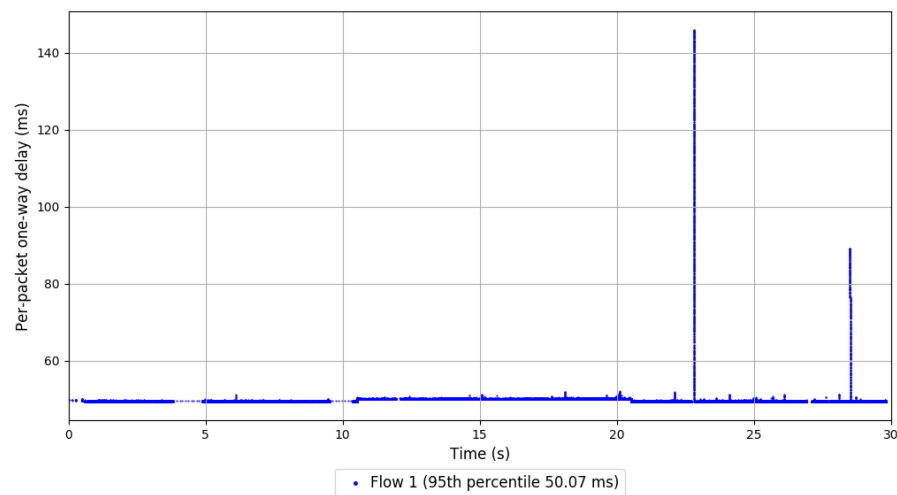
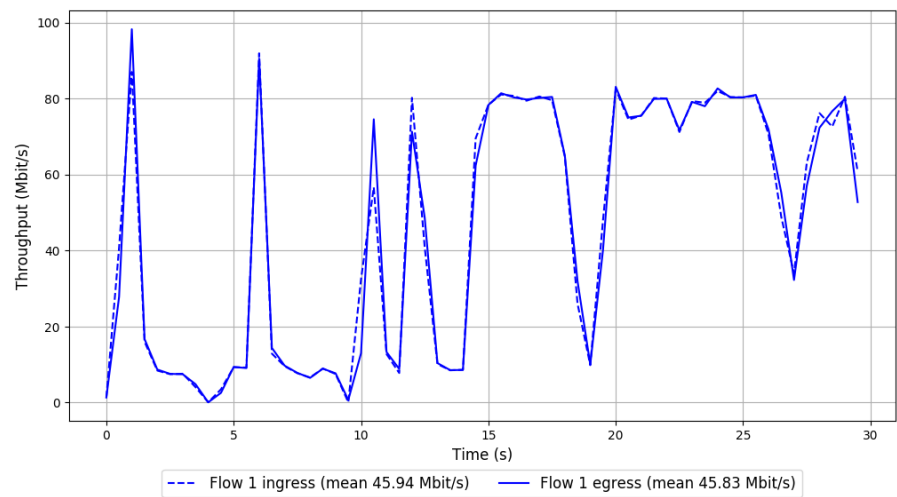
-- Flow 1:

Average throughput: 45.83 Mbit/s

95th percentile per-packet one-way delay: 50.070 ms

Loss rate: 0.59%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-11 12:43:08

End at: 2017-12-11 12:43:38

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 67.85 Mbit/s

95th percentile per-packet one-way delay: 50.459 ms

Loss rate: 0.42%

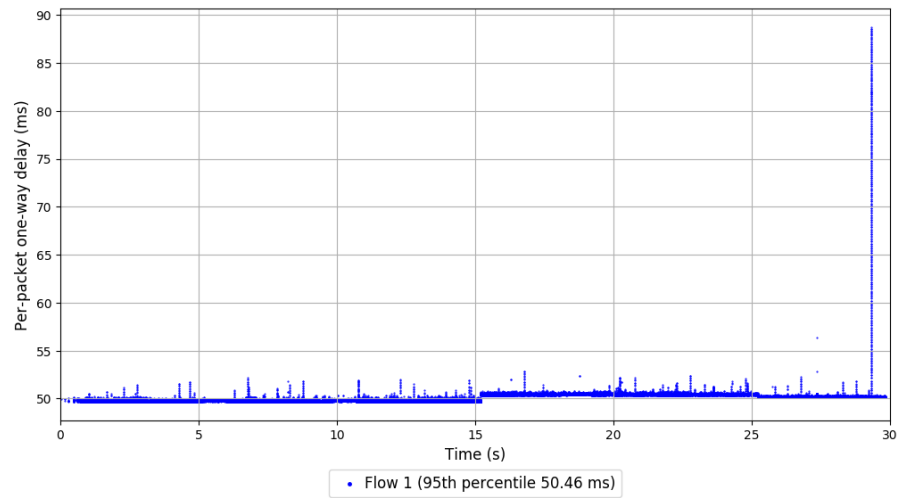
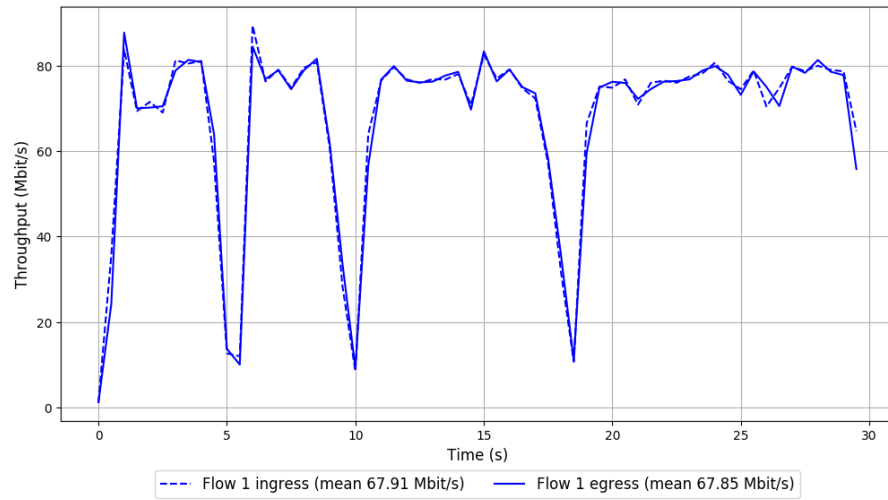
-- Flow 1:

Average throughput: 67.85 Mbit/s

95th percentile per-packet one-way delay: 50.459 ms

Loss rate: 0.42%

#### Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-11 12:53:39

End at: 2017-12-11 12:54:09

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 69.78 Mbit/s

95th percentile per-packet one-way delay: 50.557 ms

Loss rate: 0.34%

-- Flow 1:

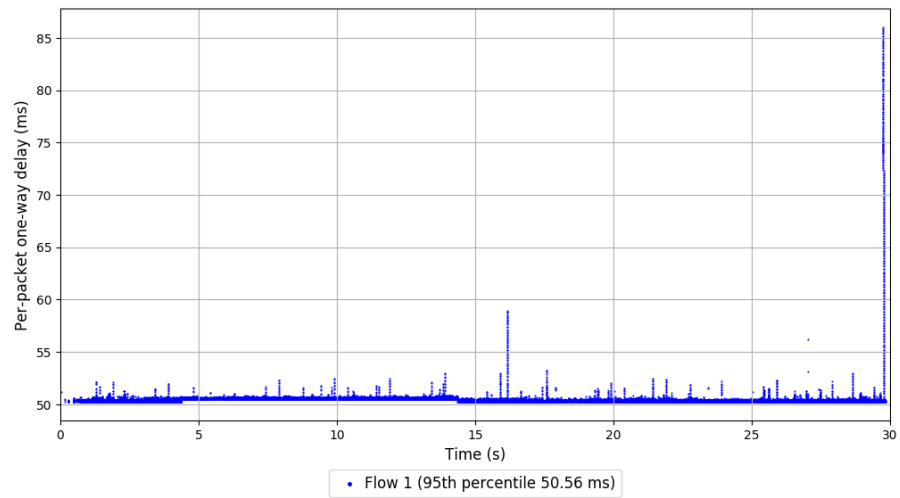
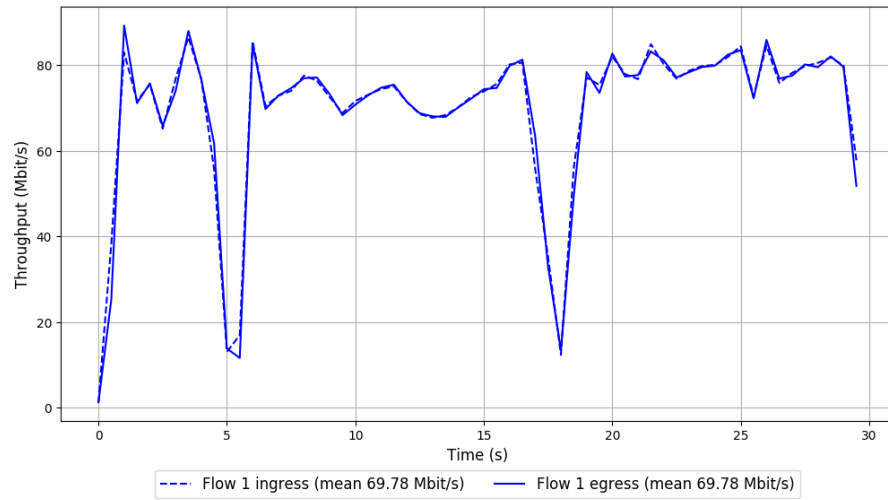
Average throughput: 69.78 Mbit/s

95th percentile per-packet one-way delay: 50.557 ms

Loss rate: 0.34%



### Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-11 13:04:10

End at: 2017-12-11 13:04:40

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 67.44 Mbit/s

95th percentile per-packet one-way delay: 50.262 ms

Loss rate: 0.42%

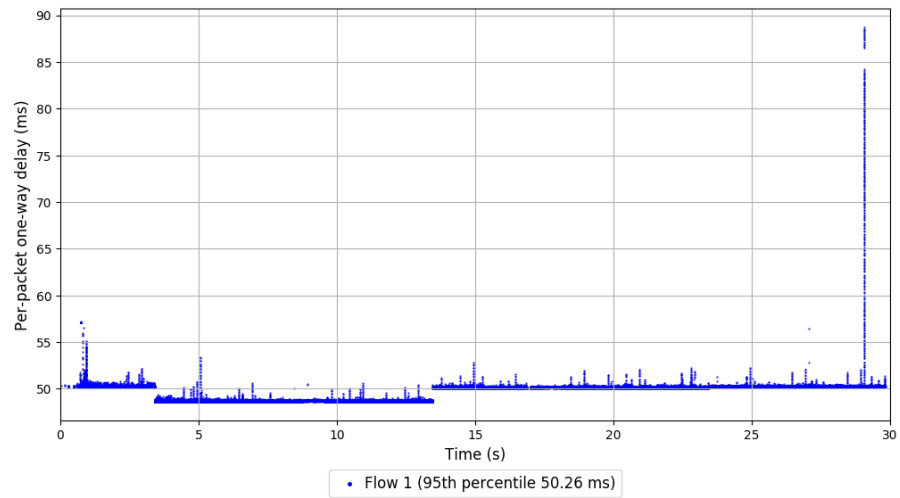
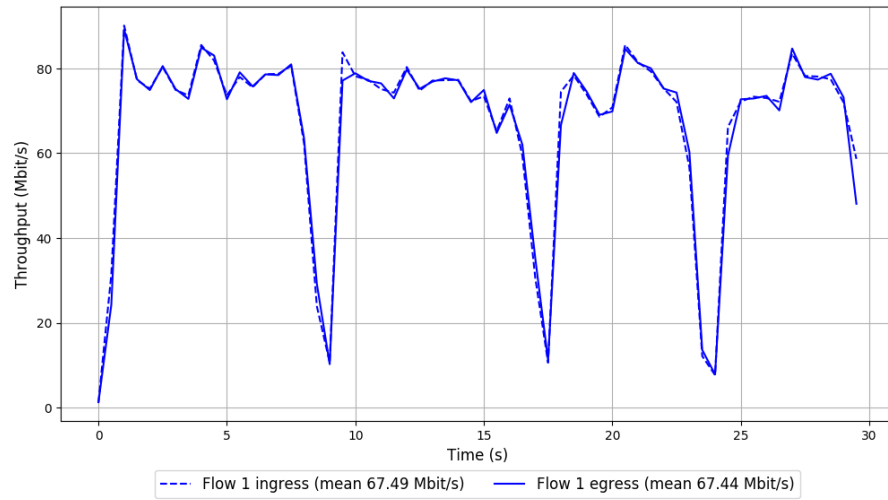
-- Flow 1:

Average throughput: 67.44 Mbit/s

95th percentile per-packet one-way delay: 50.262 ms

Loss rate: 0.42%

## Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-11 13:14:33

End at: 2017-12-11 13:15:03

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 68.95 Mbit/s

95th percentile per-packet one-way delay: 49.794 ms

Loss rate: 0.37%

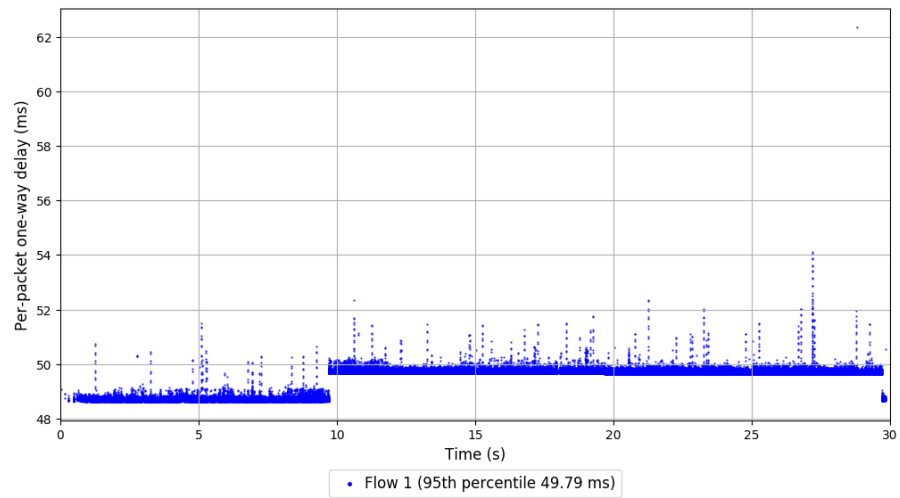
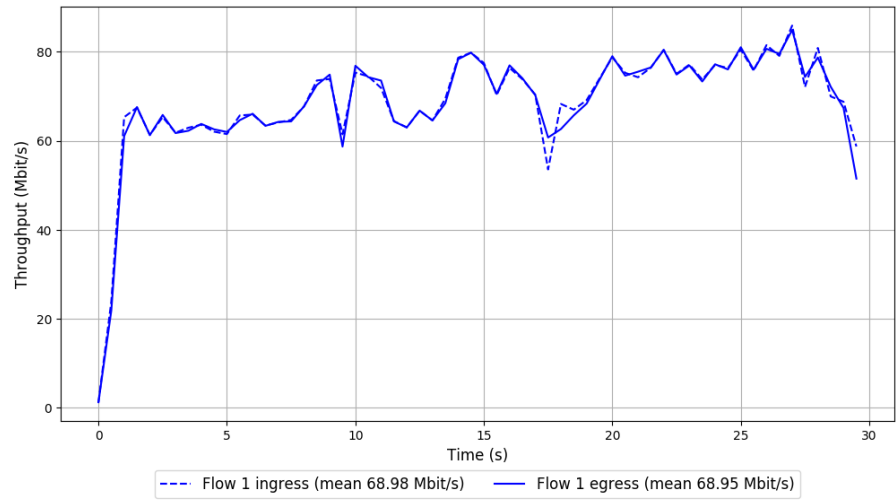
-- Flow 1:

Average throughput: 68.95 Mbit/s

95th percentile per-packet one-way delay: 49.794 ms

Loss rate: 0.37%

### Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-11 13:25:04

End at: 2017-12-11 13:25:34

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 64.41 Mbit/s

95th percentile per-packet one-way delay: 49.646 ms

Loss rate: 0.33%

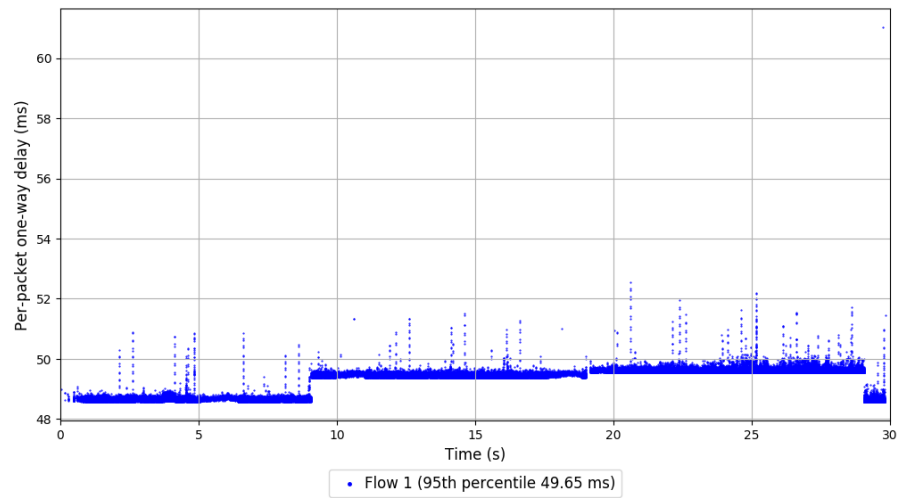
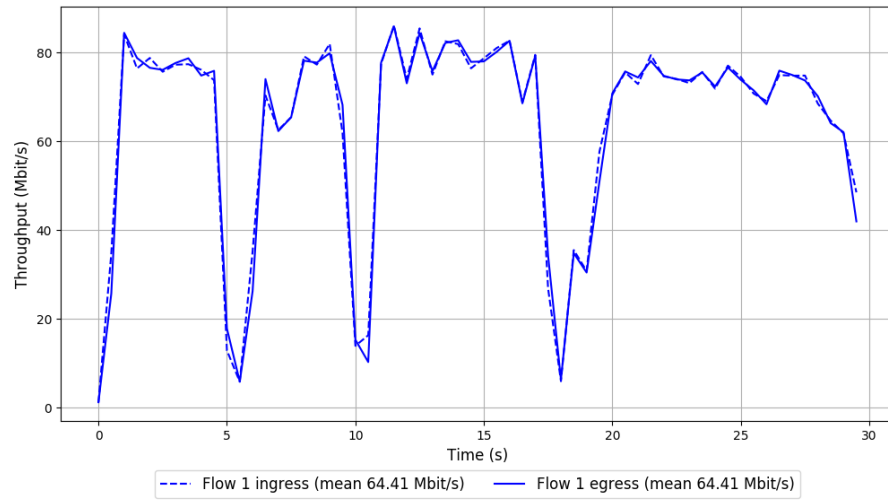
-- Flow 1:

Average throughput: 64.41 Mbit/s

95th percentile per-packet one-way delay: 49.646 ms

Loss rate: 0.33%

## Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-11 13:35:34

End at: 2017-12-11 13:36:04

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 58.53 Mbit/s

95th percentile per-packet one-way delay: 50.530 ms

Loss rate: 0.42%

-- Flow 1:

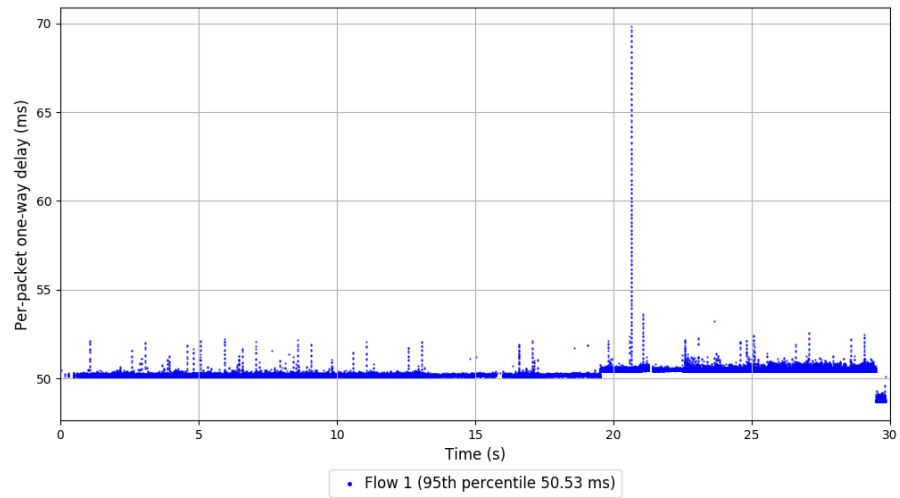
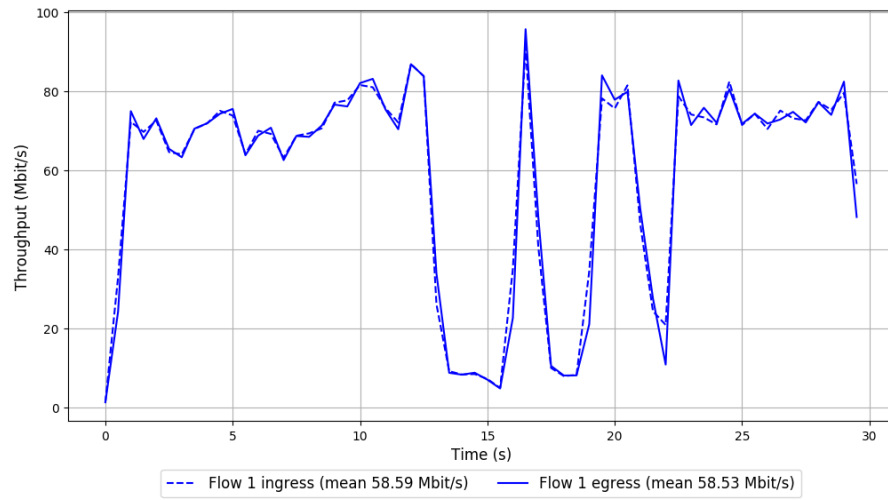
Average throughput: 58.53 Mbit/s

95th percentile per-packet one-way delay: 50.530 ms

Loss rate: 0.42%



### Run 9: Report of QUIC Cubic — Data Link

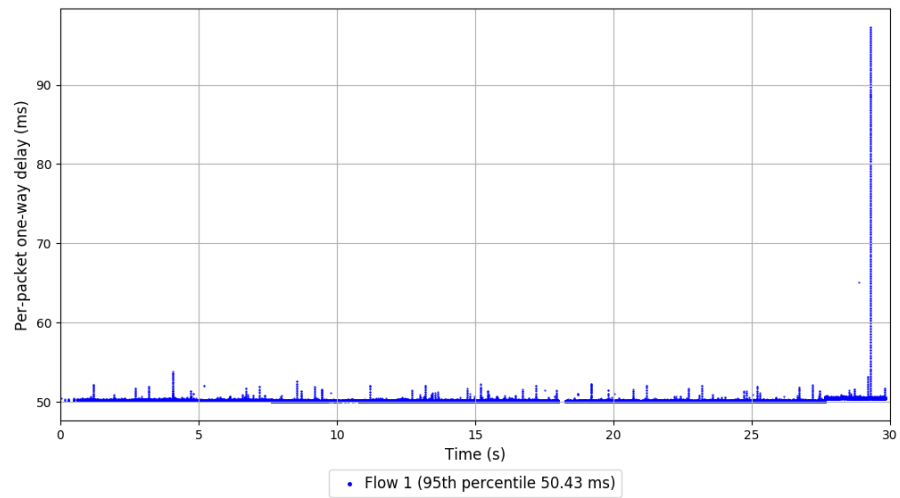
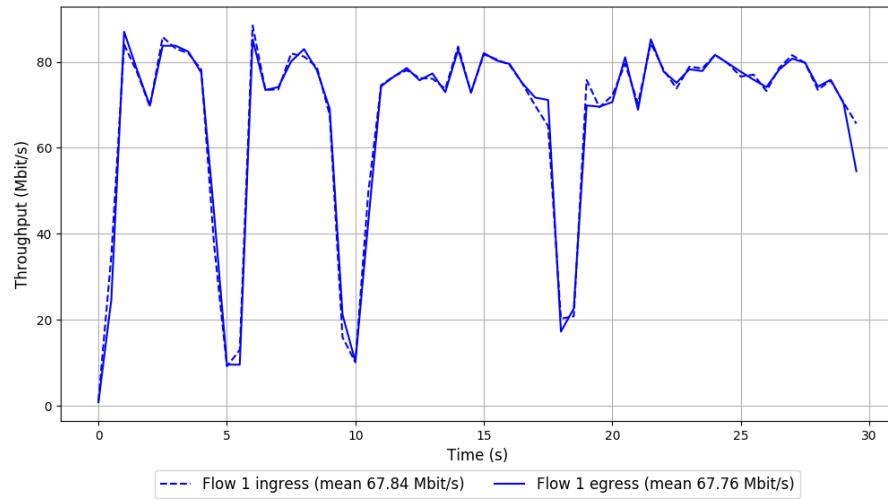


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-11 13:45:55
End at: 2017-12-11 13:46:26

# Below is generated by plot.py at 2017-12-11 16:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.76 Mbit/s
95th percentile per-packet one-way delay: 50.429 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 67.76 Mbit/s
95th percentile per-packet one-way delay: 50.429 ms
Loss rate: 0.45%
```

# Run 10: Report of QUIC Cubic — Data Link

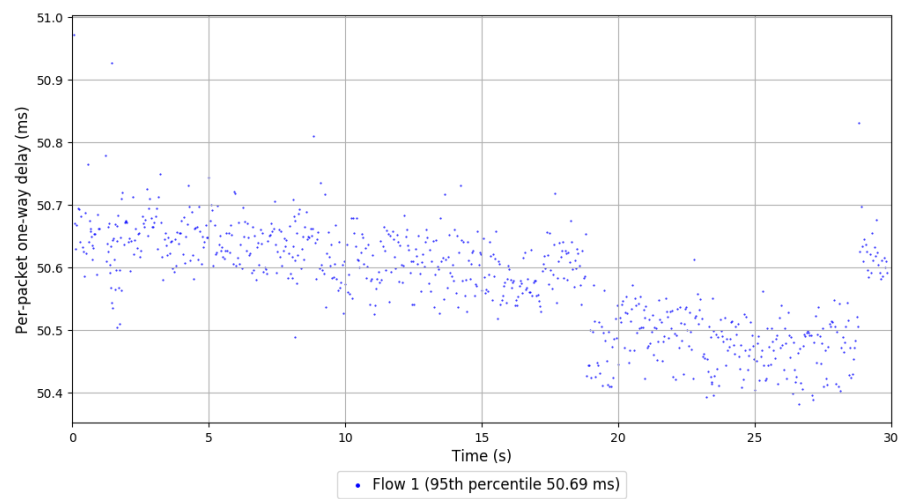
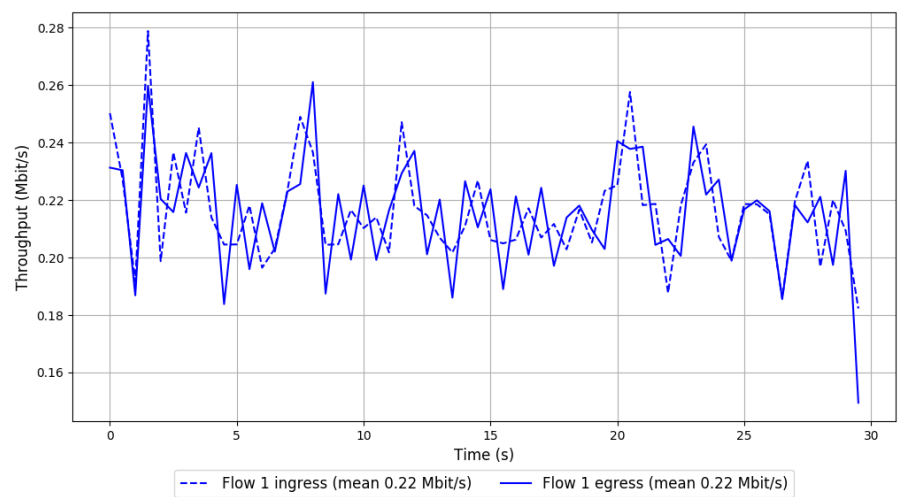


```
Run 1: Statistics of SCReAM

Start at: 2017-12-11 12:12:44
End at: 2017-12-11 12:13:14

# Below is generated by plot.py at 2017-12-11 16:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.687 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.687 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

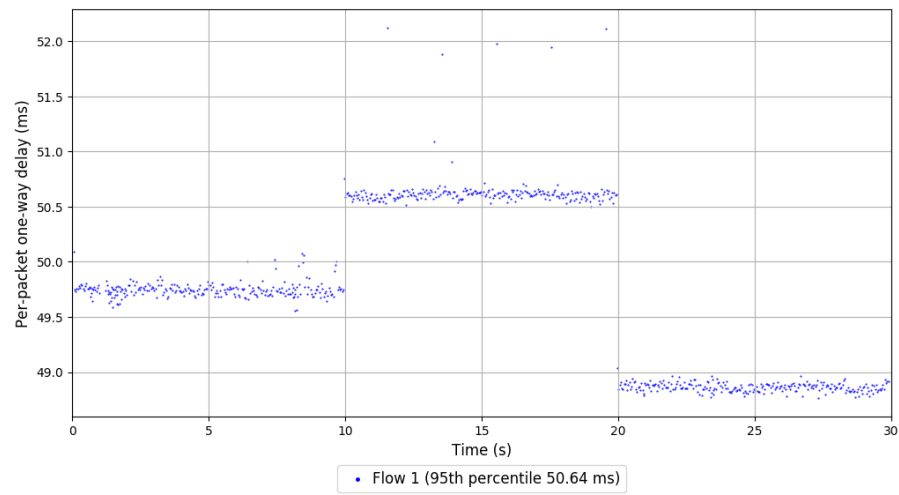
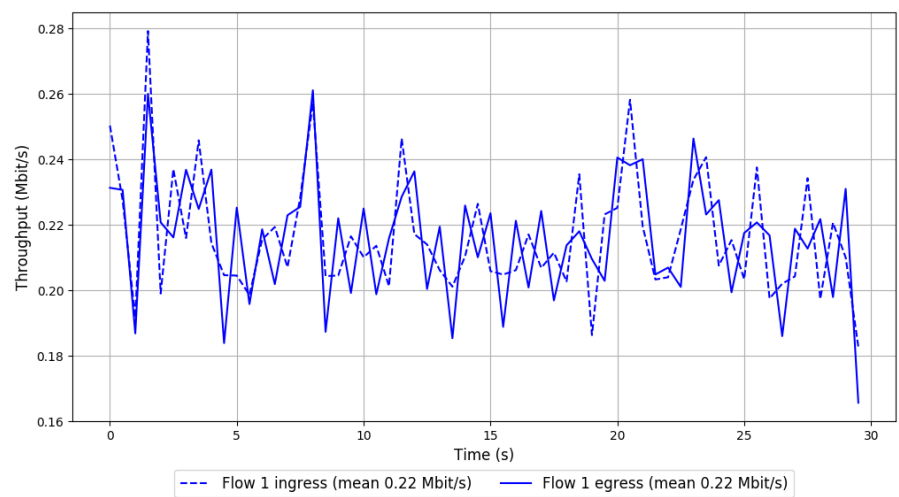


```
Run 2: Statistics of SCReAM

Start at: 2017-12-11 12:23:23
End at: 2017-12-11 12:23:53

# Below is generated by plot.py at 2017-12-11 16:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.644 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.644 ms
Loss rate: 0.26%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-11 12:34:02

End at: 2017-12-11 12:34:32

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.745 ms

Loss rate: 0.38%

-- Flow 1:

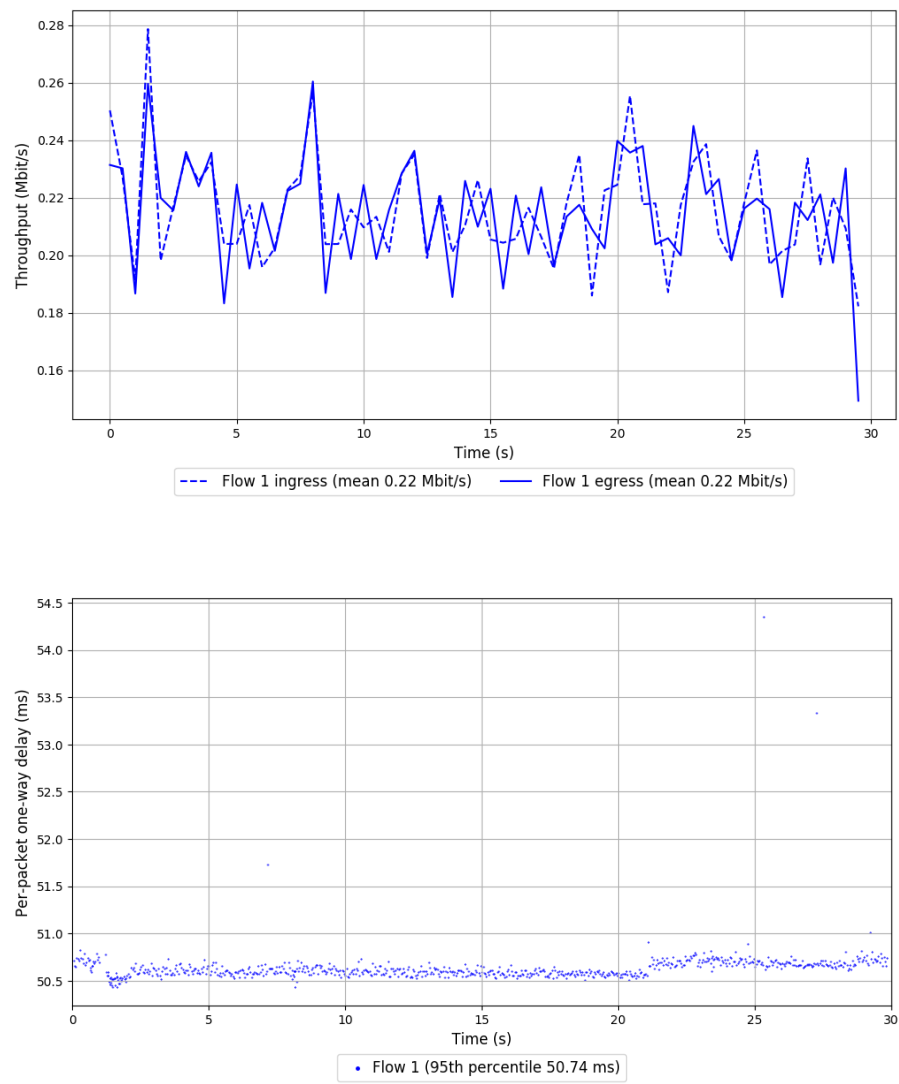
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.745 ms

Loss rate: 0.38%



Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-11 12:44:35

End at: 2017-12-11 12:45:06

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.584 ms

Loss rate: 0.38%

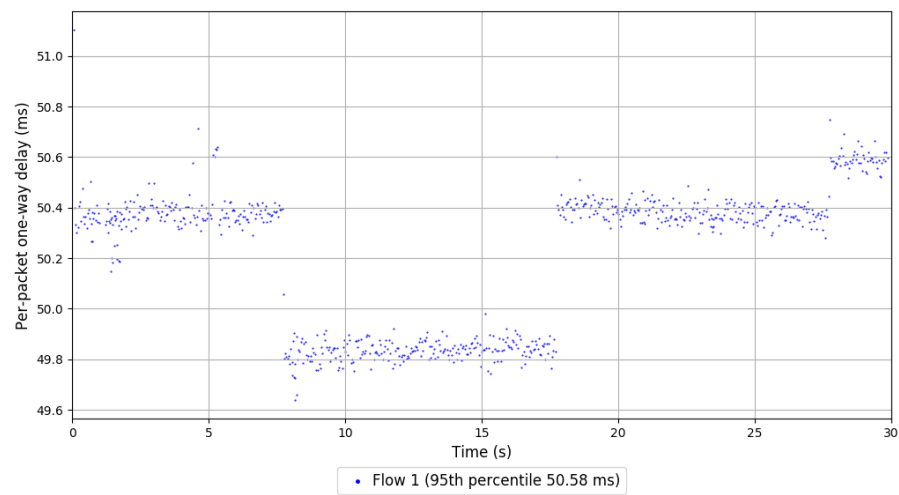
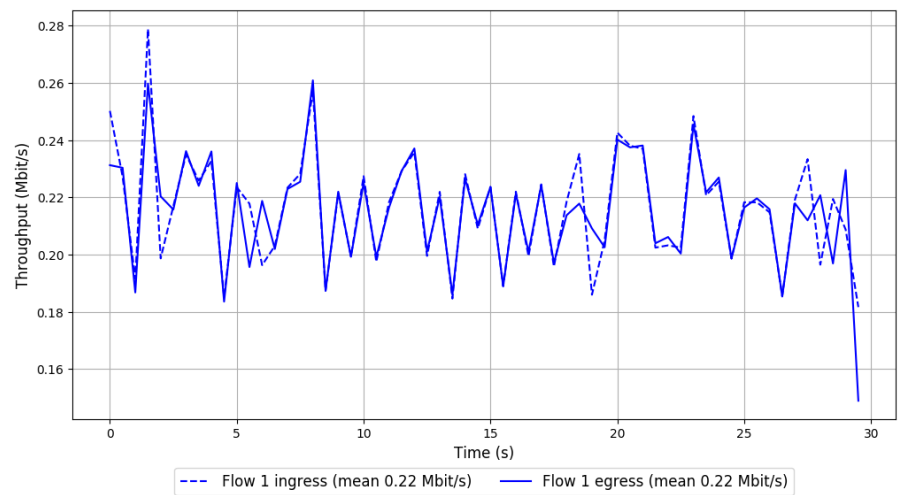
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.584 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-11 12:55:06

End at: 2017-12-11 12:55:36

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.601 ms

Loss rate: 0.38%

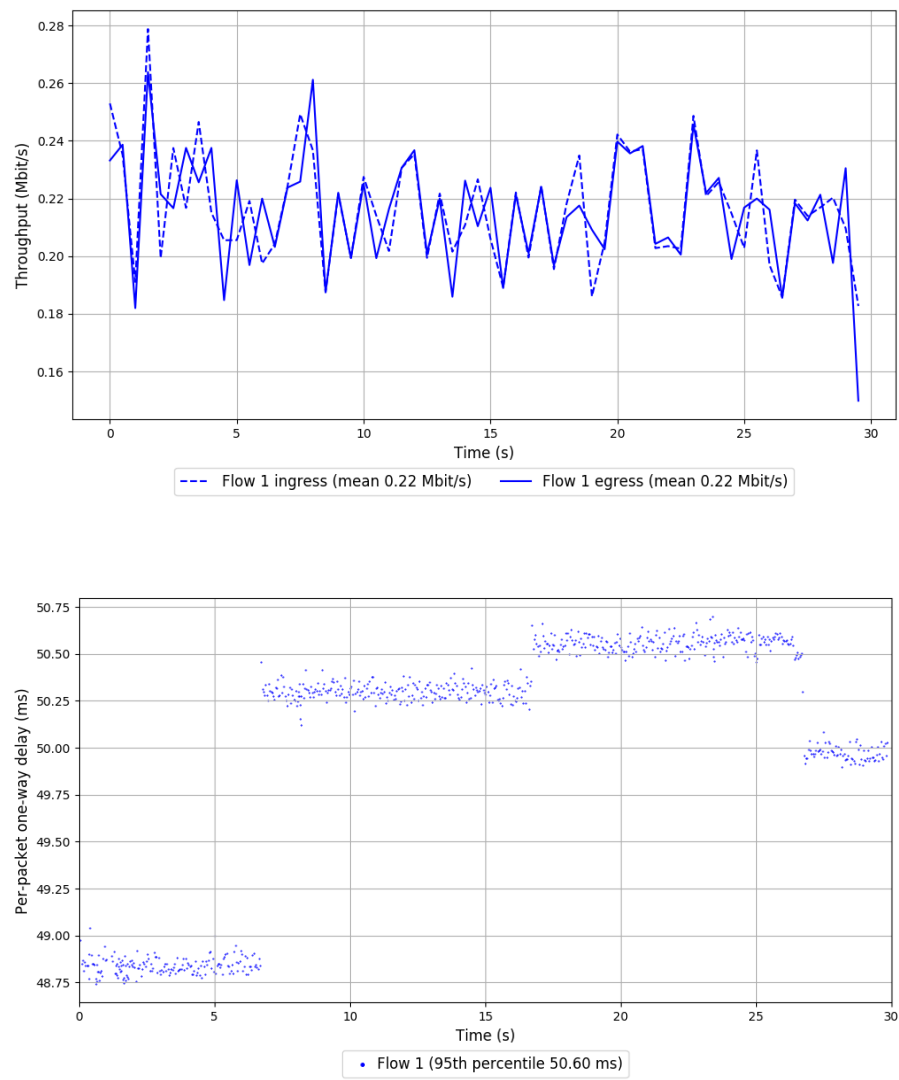
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.601 ms

Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-11 13:05:36

End at: 2017-12-11 13:06:06

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.379 ms

Loss rate: 0.27%

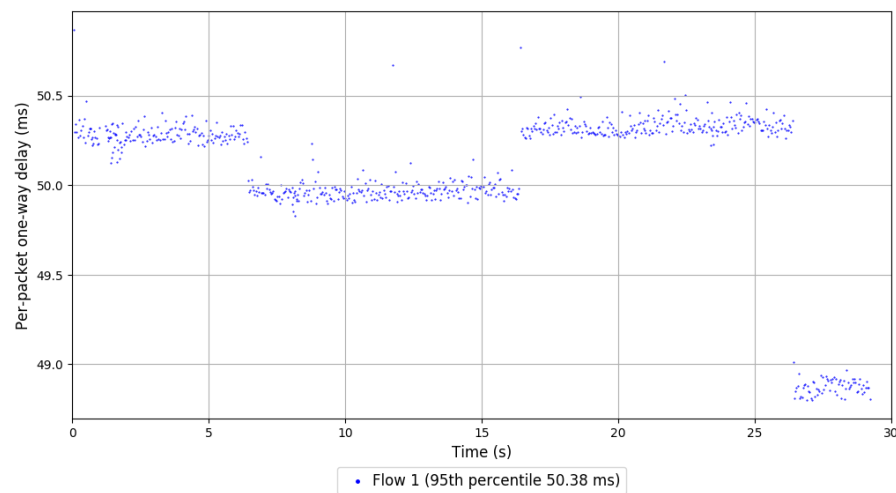
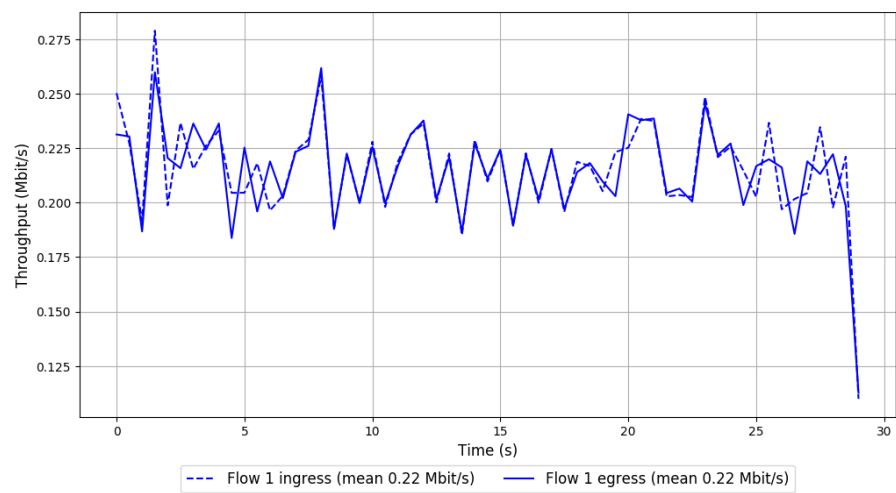
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.379 ms

Loss rate: 0.27%

Run 6: Report of SReAM — Data Link



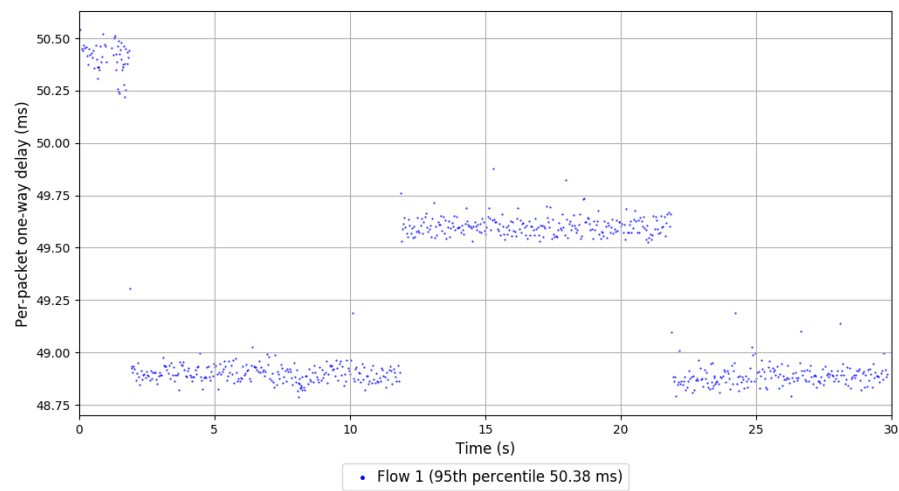
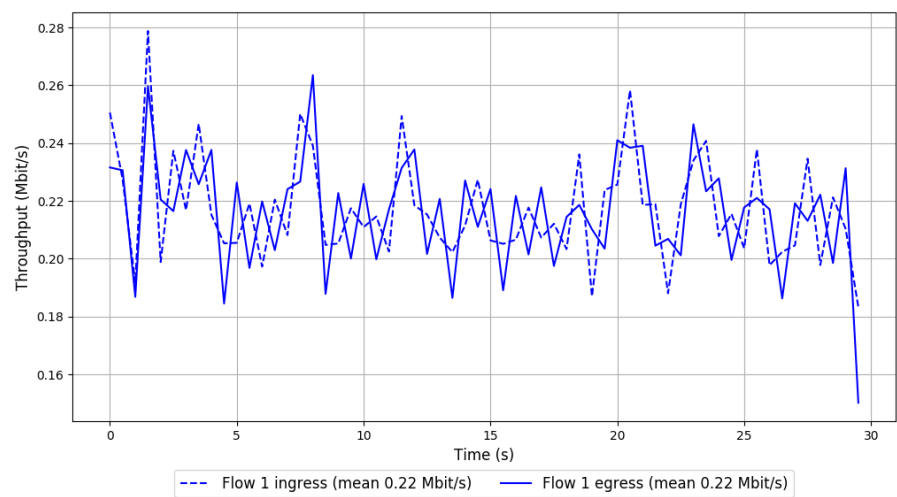
```
Run 7: Statistics of SCReAM

Start at: 2017-12-11 13:16:01
End at: 2017-12-11 13:16:31

# Below is generated by plot.py at 2017-12-11 16:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.384 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.384 ms
Loss rate: 0.38%
```



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-11 13:26:30

End at: 2017-12-11 13:27:00

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.678 ms

Loss rate: 0.39%

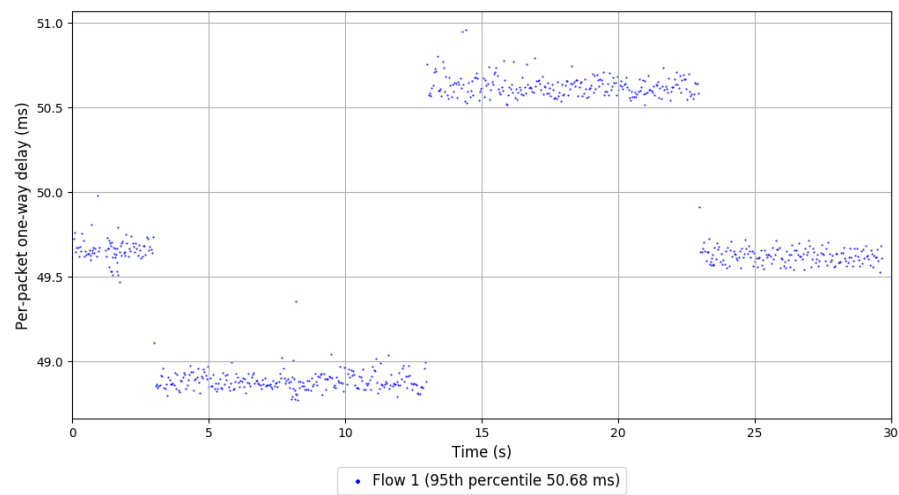
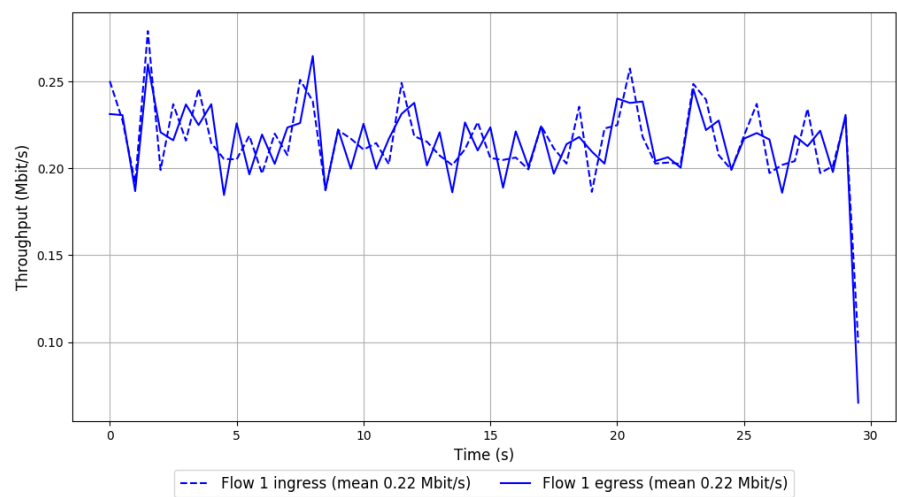
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.678 ms

Loss rate: 0.39%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-11 13:37:00

End at: 2017-12-11 13:37:30

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.441 ms

Loss rate: 0.25%

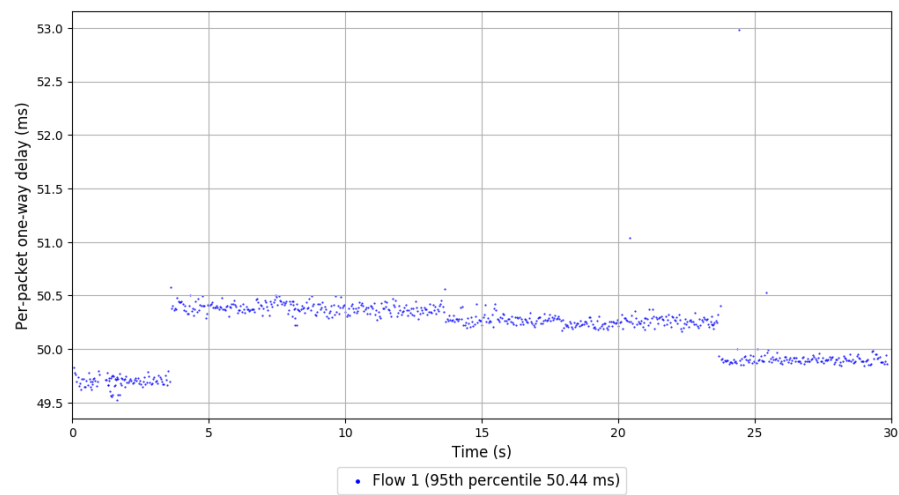
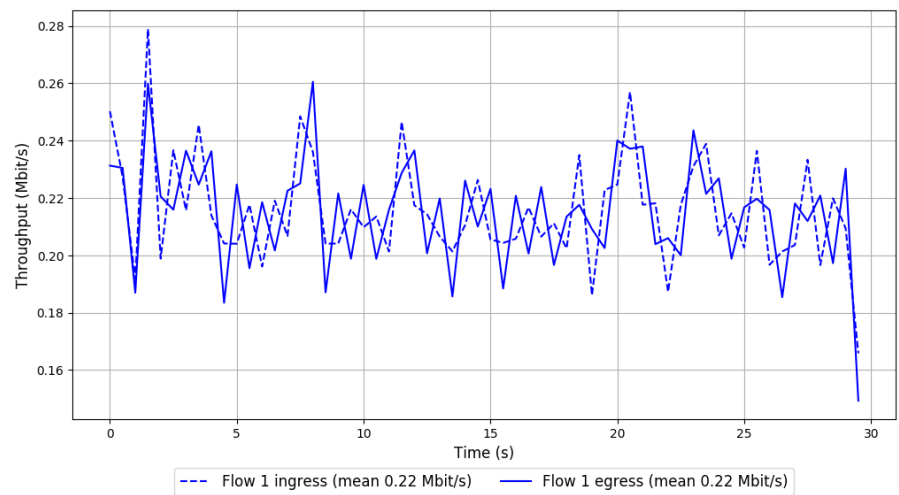
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.441 ms

Loss rate: 0.25%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-11 13:47:24

End at: 2017-12-11 13:47:54

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.25%

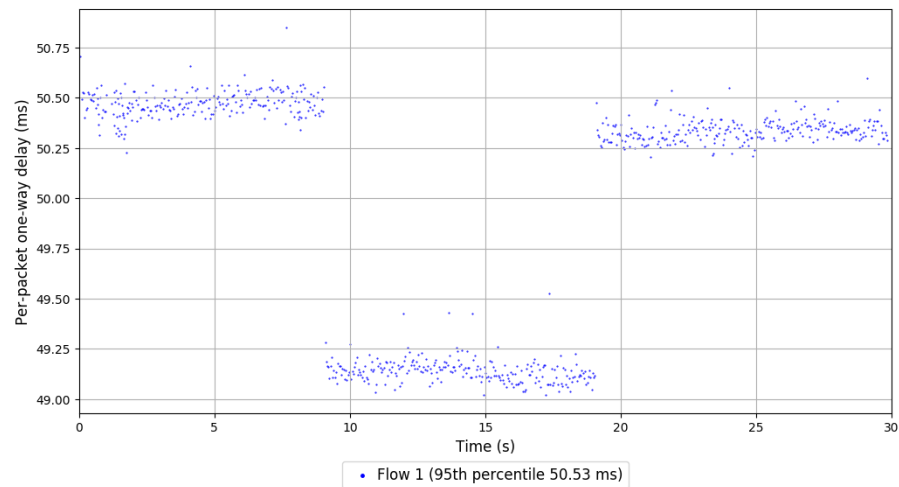
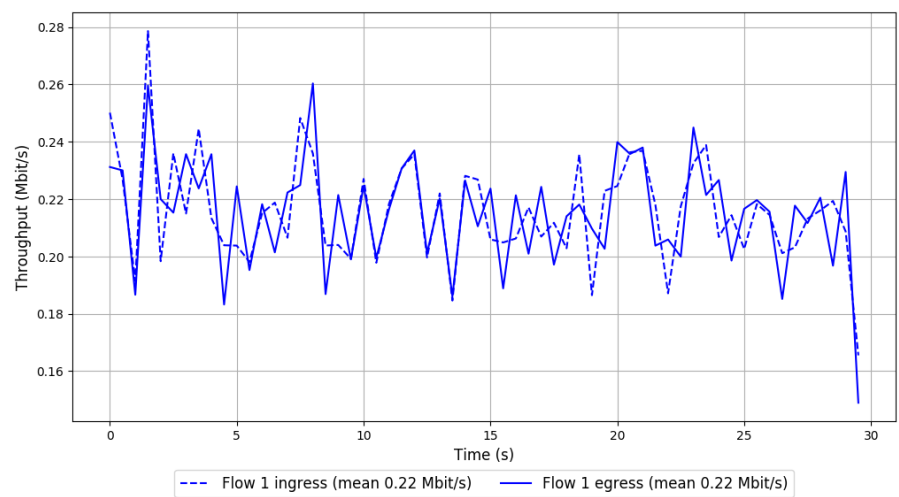
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.25%

Run 10: Report of SReAM — Data Link



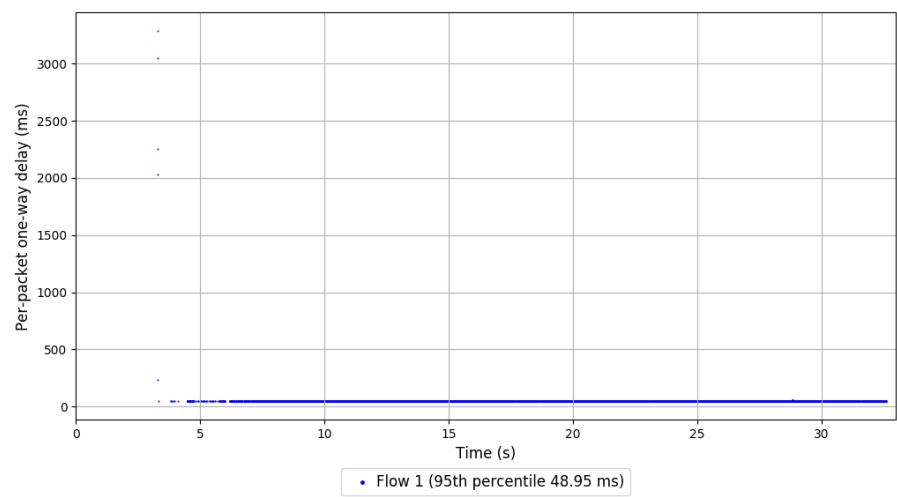
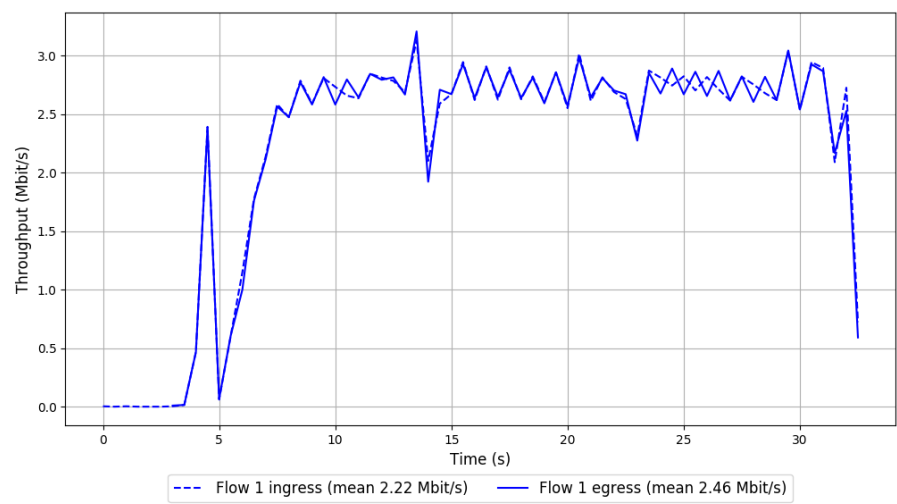
```
Run 1: Statistics of WebRTC media

Start at: 2017-12-11 12:15:10
End at: 2017-12-11 12:15:40

# Below is generated by plot.py at 2017-12-11 16:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 48.954 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 48.954 ms
Loss rate: 0.36%
```



Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-11 12:25:50

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

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.772 ms

Loss rate: 0.46%

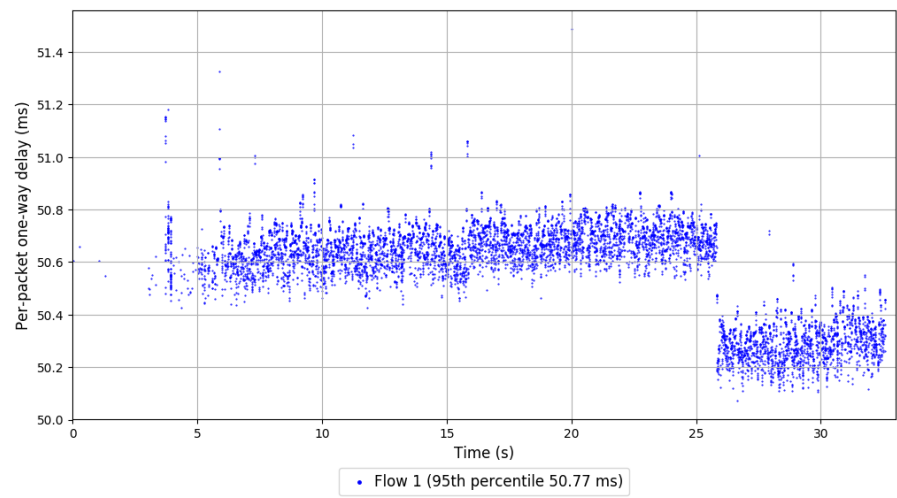
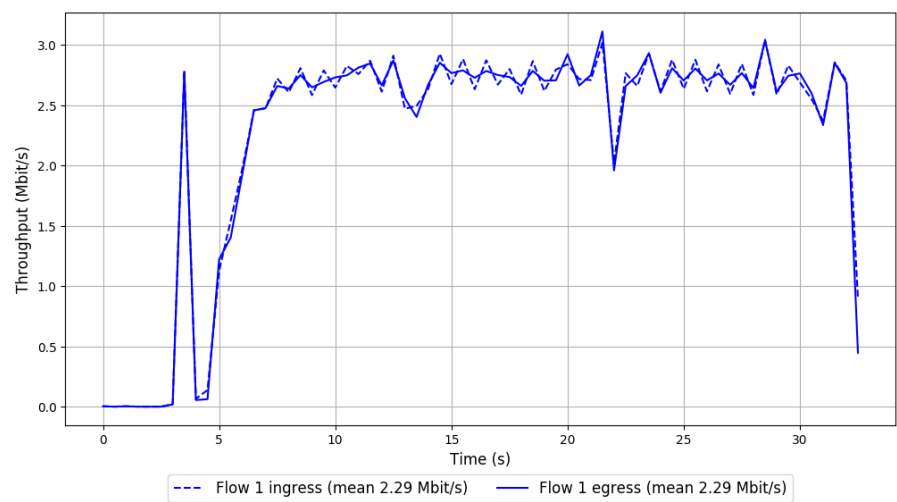
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.772 ms

Loss rate: 0.46%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-11 12:36:26

End at: 2017-12-11 12:36:56

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.800 ms

Loss rate: 0.33%

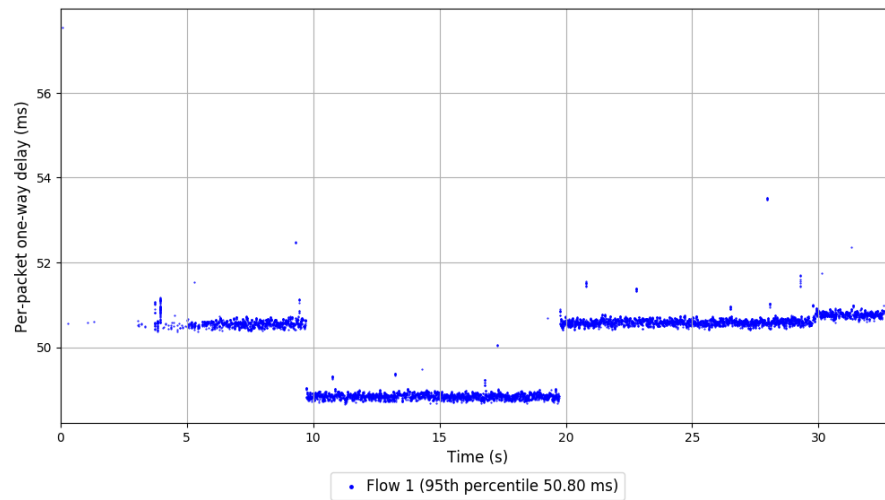
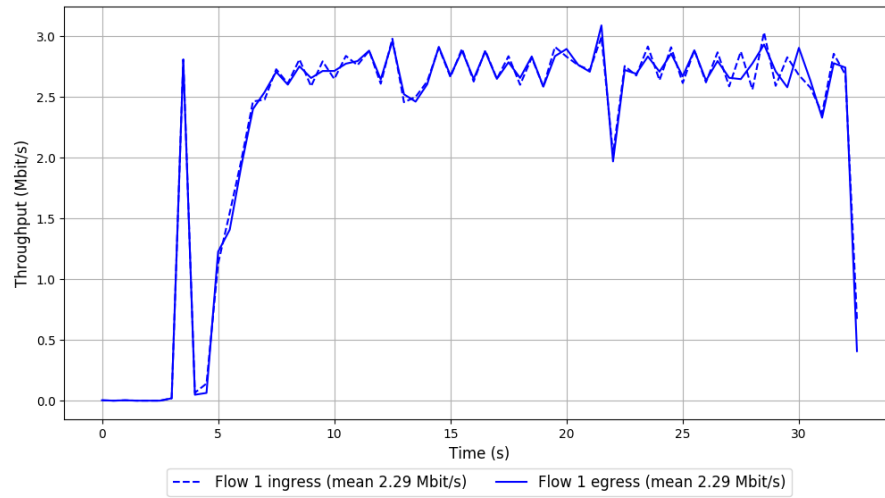
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.800 ms

Loss rate: 0.33%

### Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-11 12:47:00

End at: 2017-12-11 12:47:30

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 50.892 ms

Loss rate: 0.62%

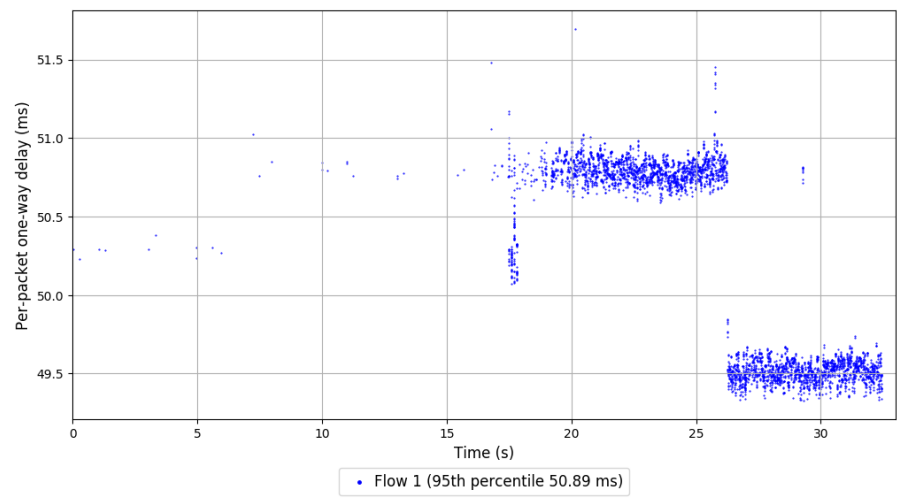
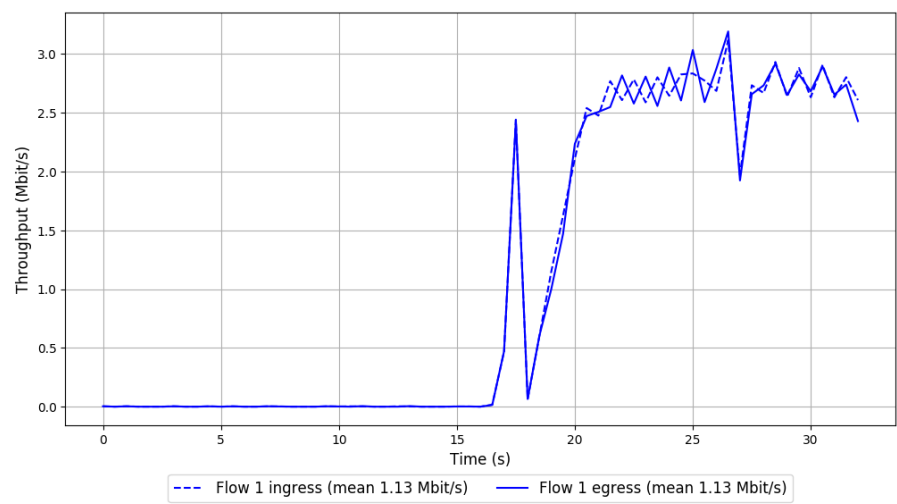
-- Flow 1:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 50.892 ms

Loss rate: 0.62%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-11 12:57:28

End at: 2017-12-11 12:57:58

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.913 ms

Loss rate: 0.30%

-- Flow 1:

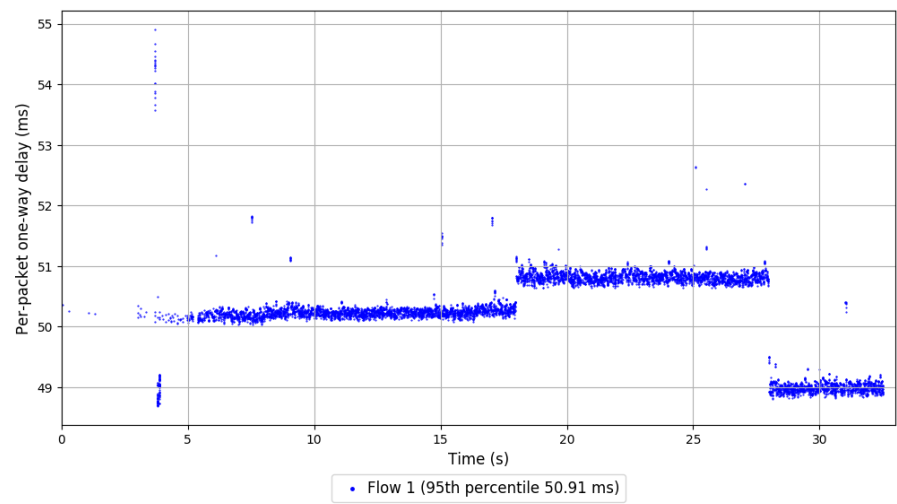
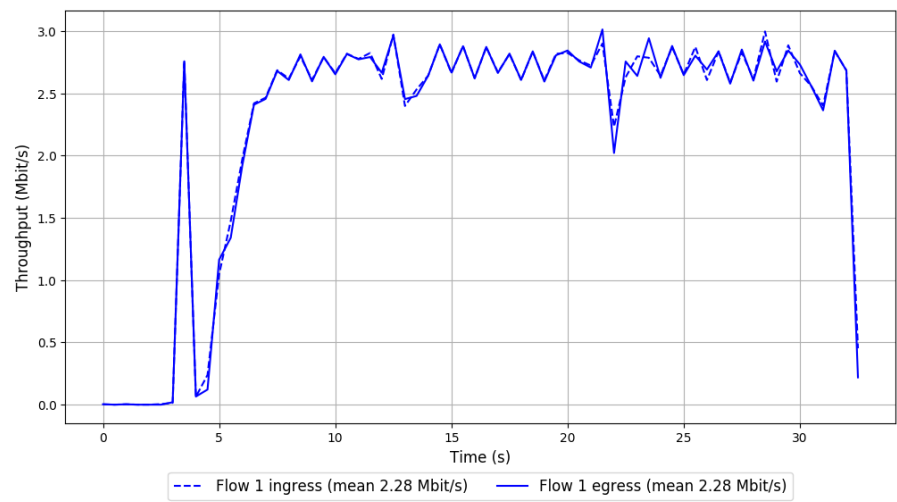
Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.913 ms

Loss rate: 0.30%



Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-11 13:08:00

End at: 2017-12-11 13:08:30

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.587 ms

Loss rate: 0.45%

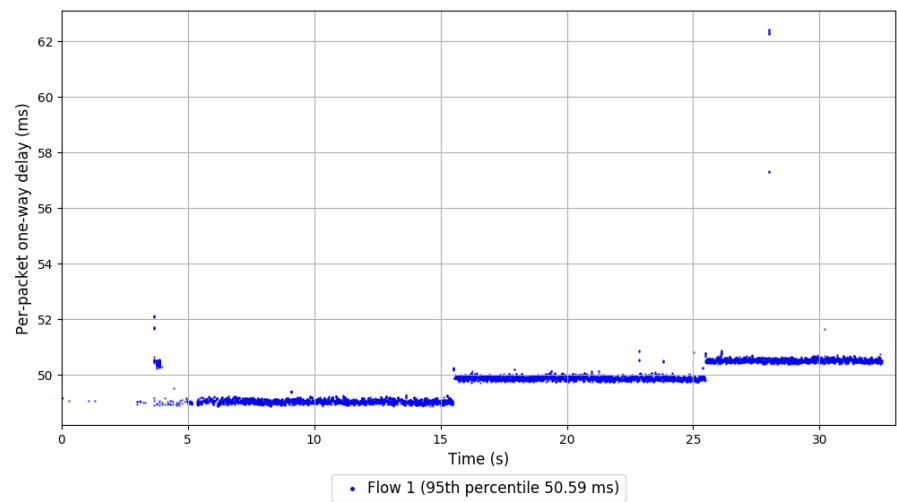
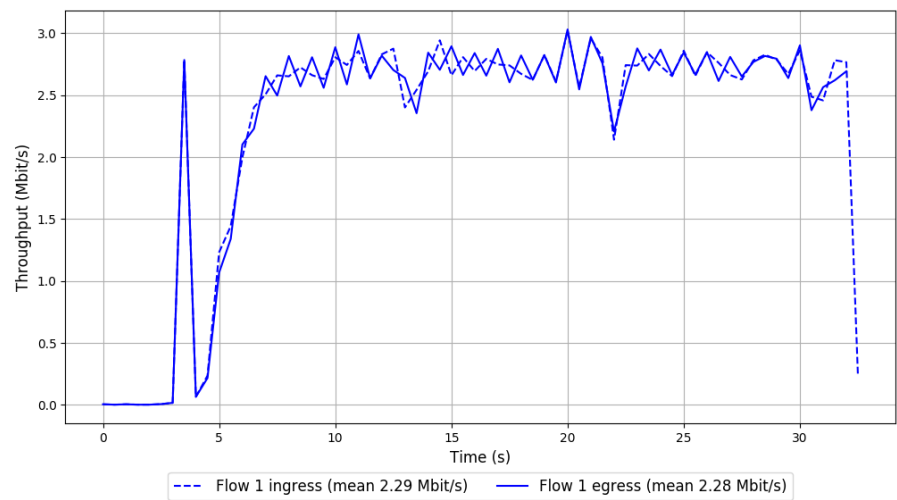
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.587 ms

Loss rate: 0.45%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-11 13:18:24

End at: 2017-12-11 13:18:54

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.669 ms

Loss rate: 0.46%

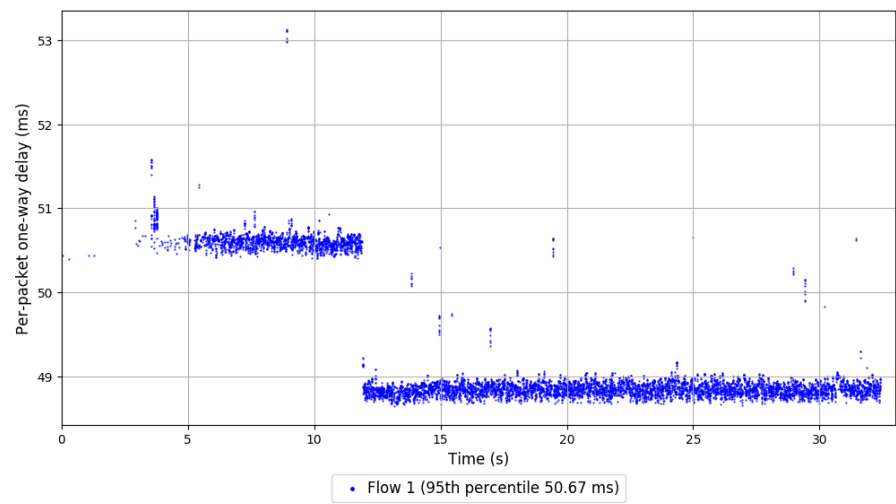
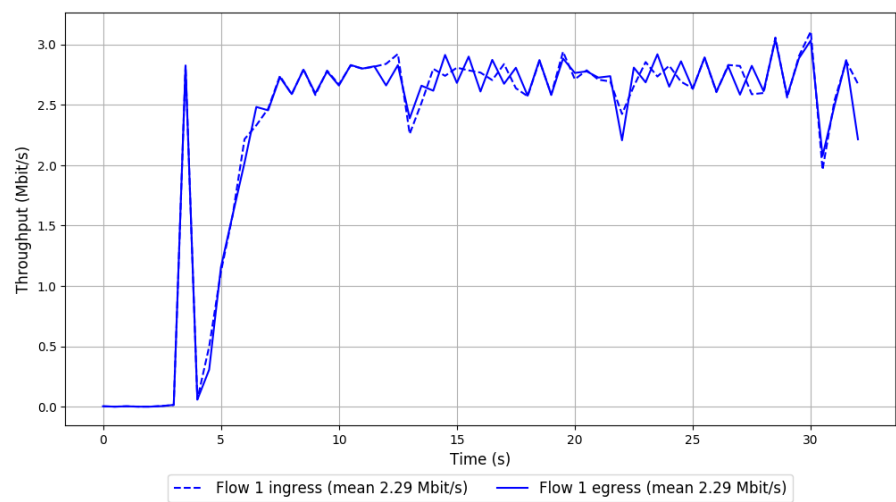
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.669 ms

Loss rate: 0.46%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-11 13:28:55

End at: 2017-12-11 13:29:25

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.46%

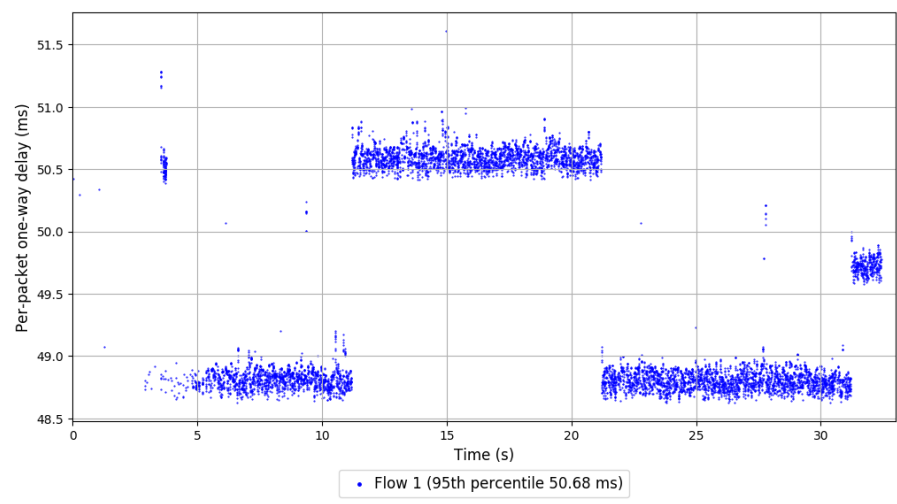
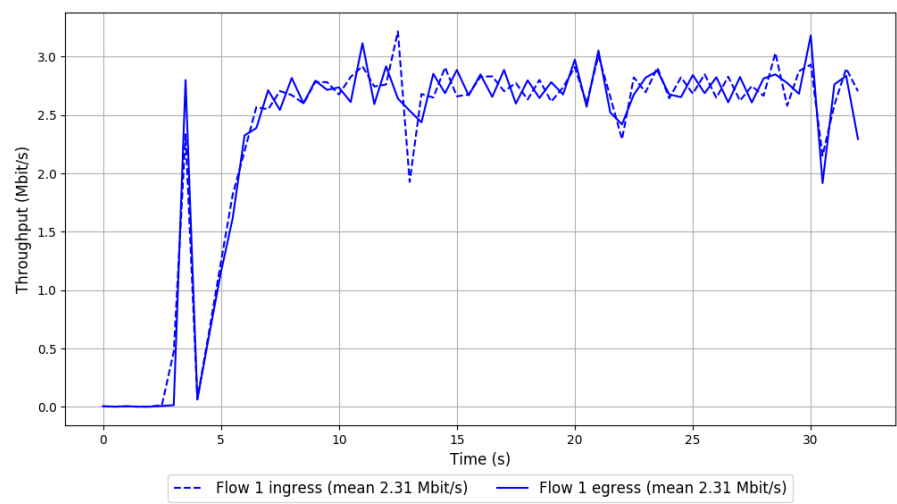
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.46%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-11 13:39:22

End at: 2017-12-11 13:39:52

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 50.092 ms

Loss rate: 0.80%

-- Flow 1:

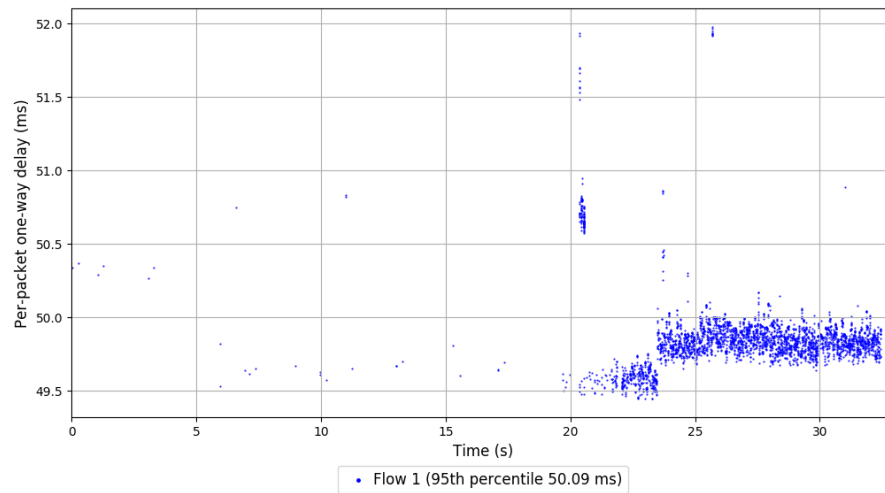
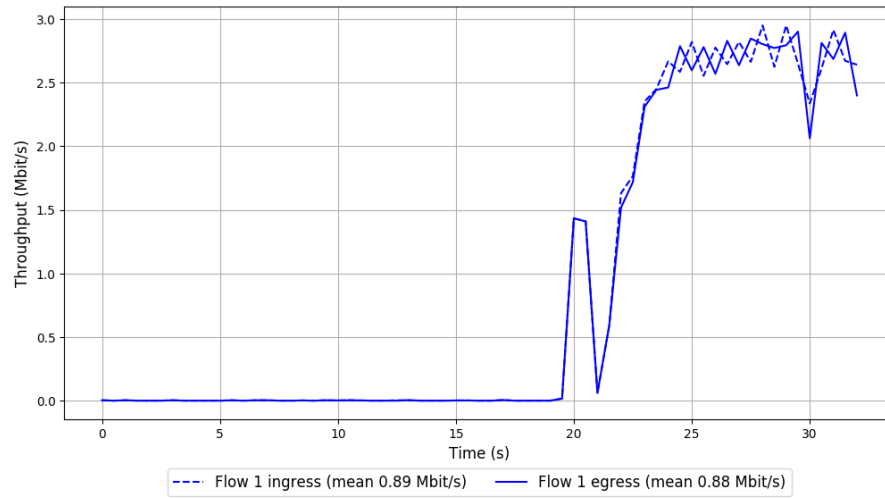
Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 50.092 ms

Loss rate: 0.80%



### Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-11 13:49:47

End at: 2017-12-11 13:50:17

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.603 ms

Loss rate: 0.45%

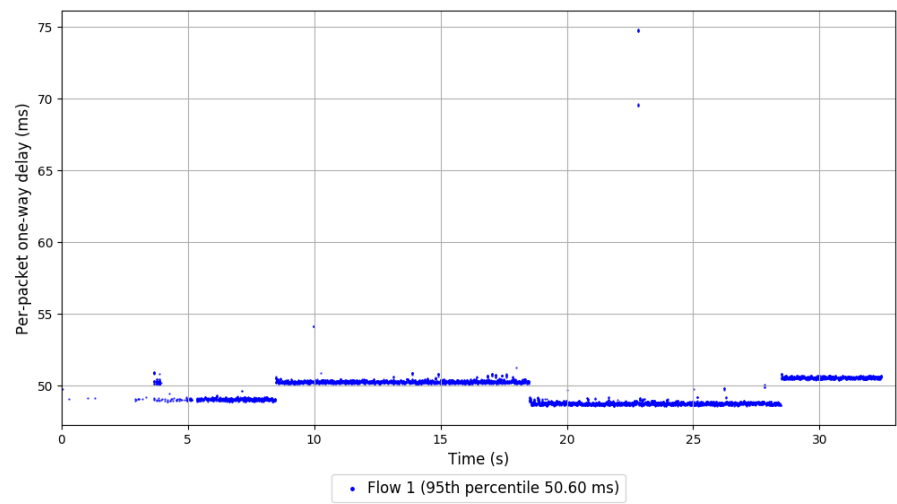
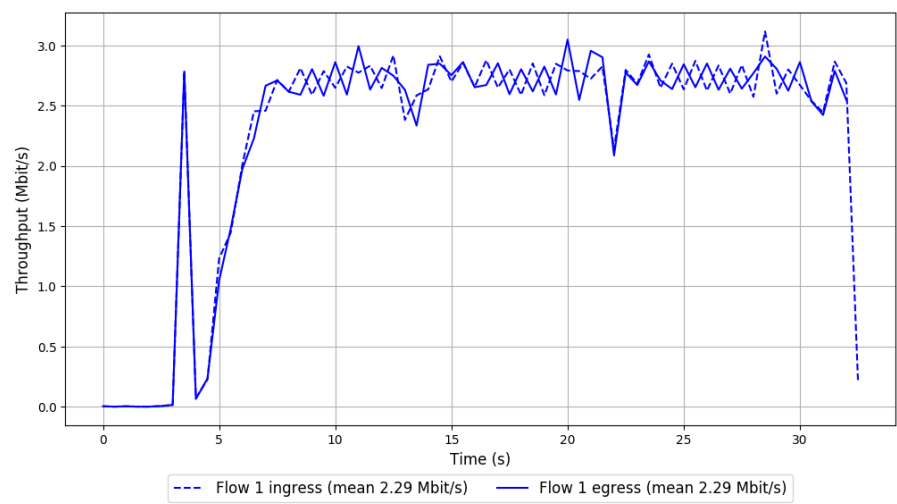
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.603 ms

Loss rate: 0.45%

Run 10: Report of WebRTC media — Data Link

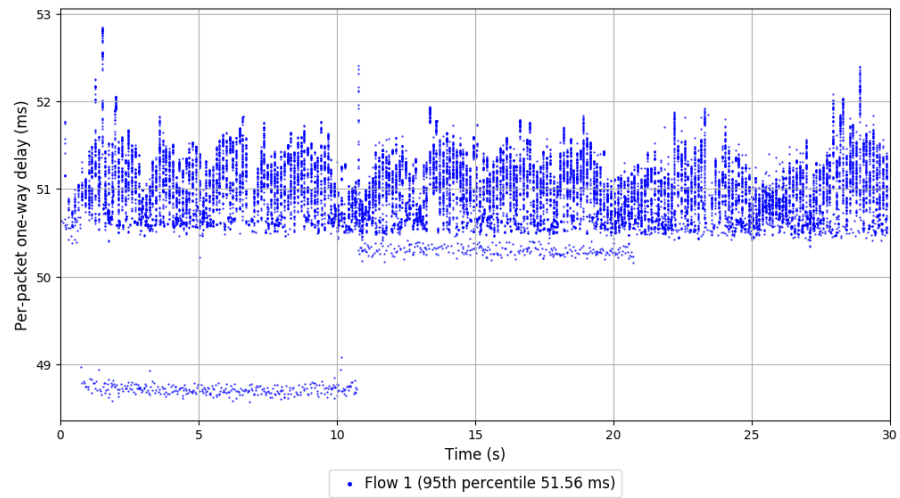
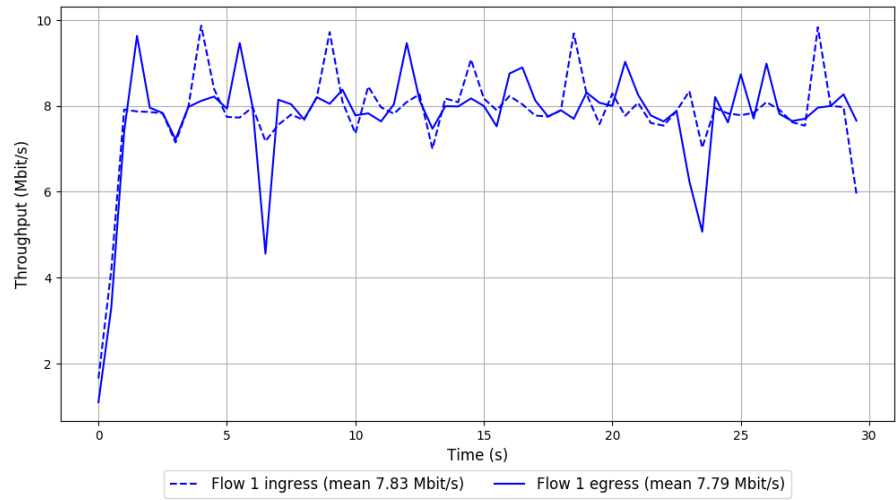


```
Run 1: Statistics of Sprout

Start at: 2017-12-11 12:17:32
End at: 2017-12-11 12:18:02

# Below is generated by plot.py at 2017-12-11 16:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.79 Mbit/s
95th percentile per-packet one-way delay: 51.557 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 7.79 Mbit/s
95th percentile per-packet one-way delay: 51.557 ms
Loss rate: 0.83%
```

# Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-11 12:28:12

End at: 2017-12-11 12:28:42

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 51.431 ms

Loss rate: 0.40%

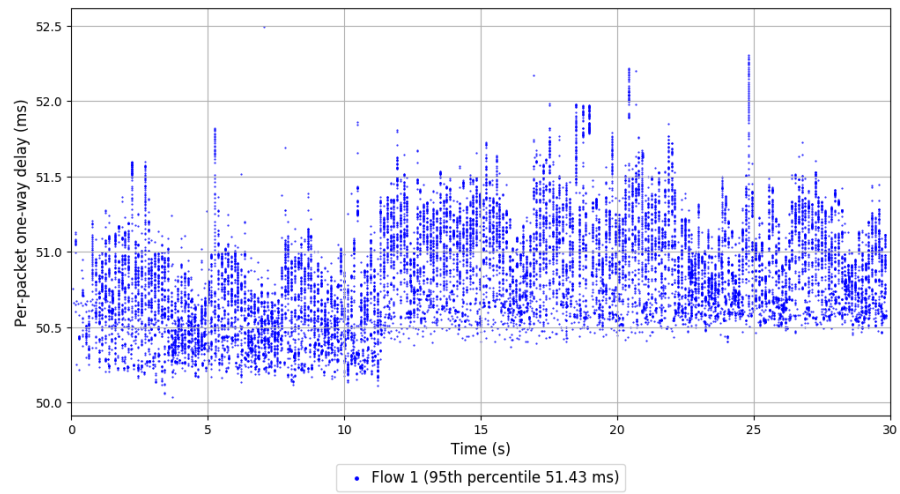
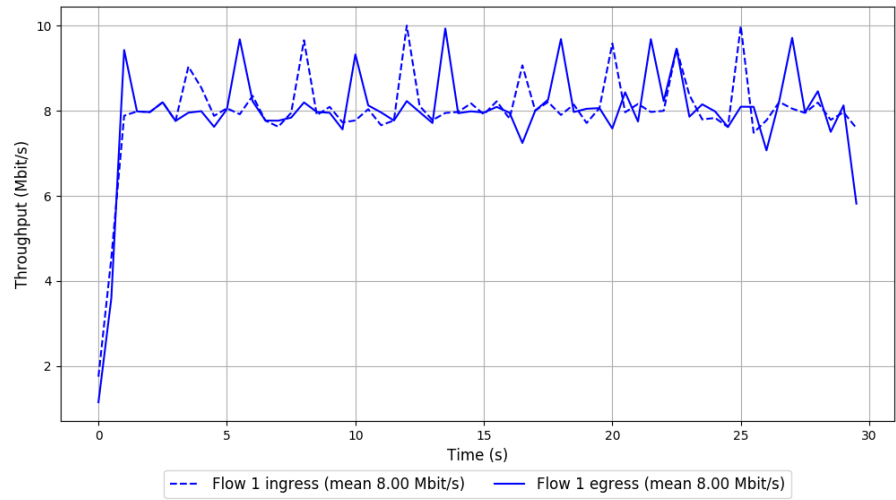
-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 51.431 ms

Loss rate: 0.40%

## Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-11 12:38:45

End at: 2017-12-11 12:39:15

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.743 ms

Loss rate: 0.44%

-- Flow 1:

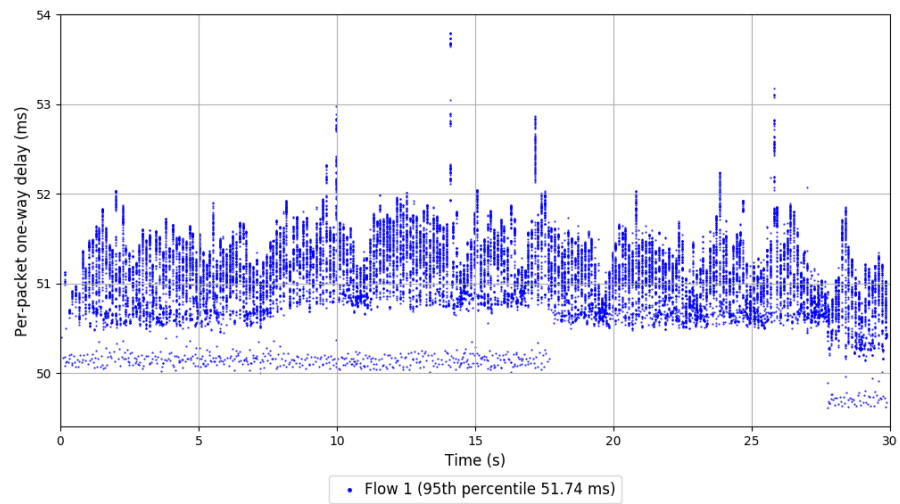
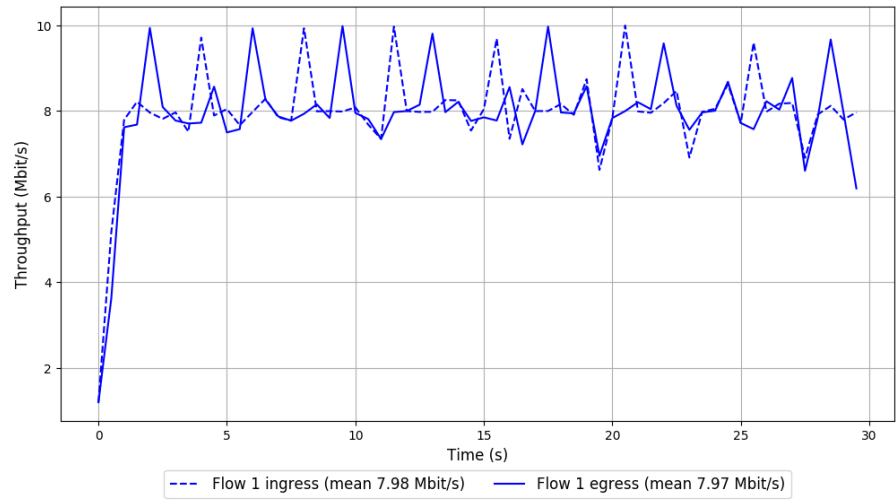
Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.743 ms

Loss rate: 0.44%



### Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-11 12:49:19

End at: 2017-12-11 12:49:49

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.404 ms

Loss rate: 0.41%

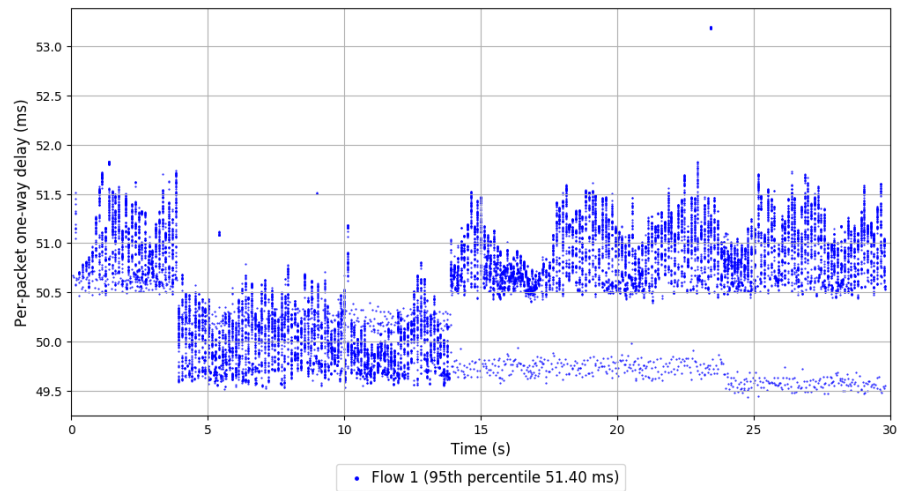
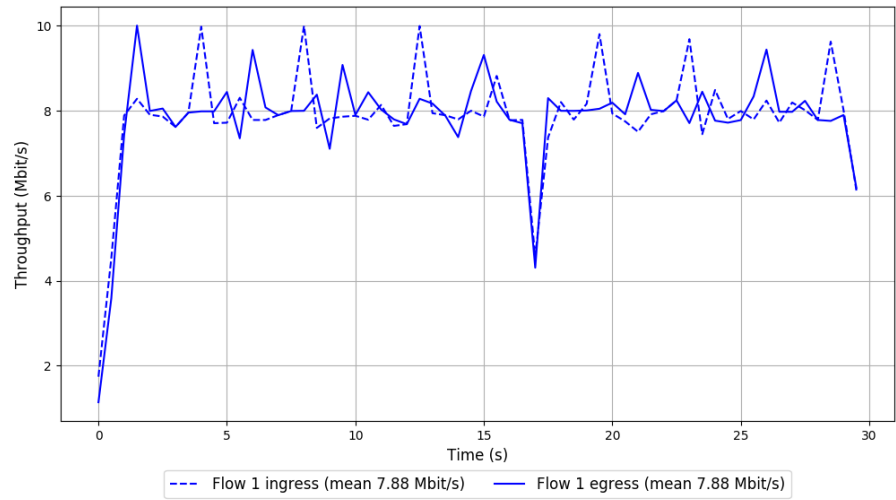
-- Flow 1:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.404 ms

Loss rate: 0.41%

#### Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-11 12:59:48

End at: 2017-12-11 13:00:18

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.358 ms

Loss rate: 0.52%

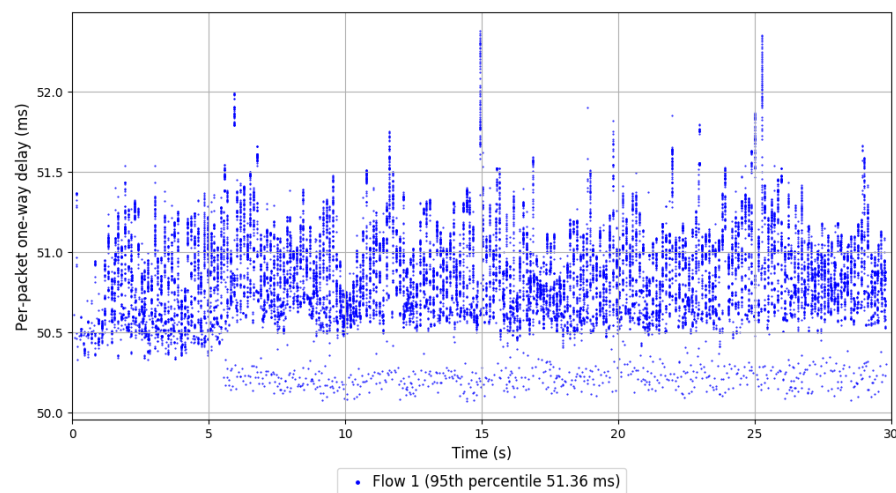
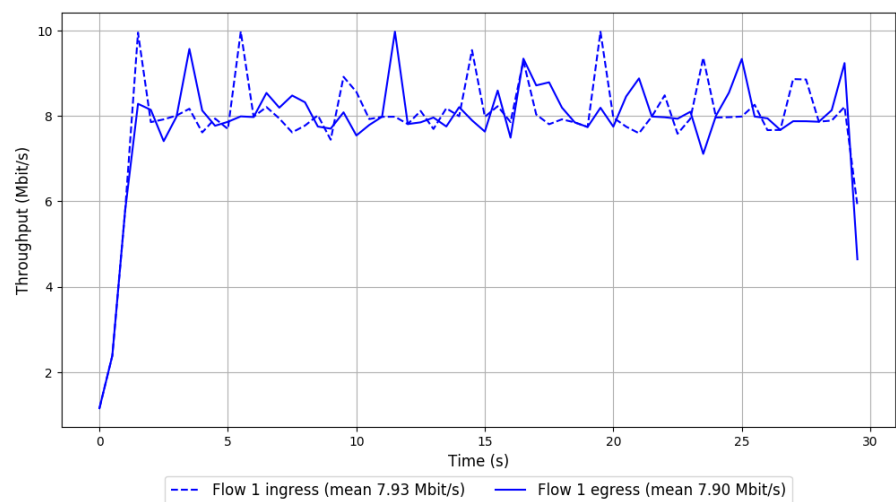
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.358 ms

Loss rate: 0.52%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-11 13:10:18

End at: 2017-12-11 13:10:49

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 51.557 ms

Loss rate: 0.36%

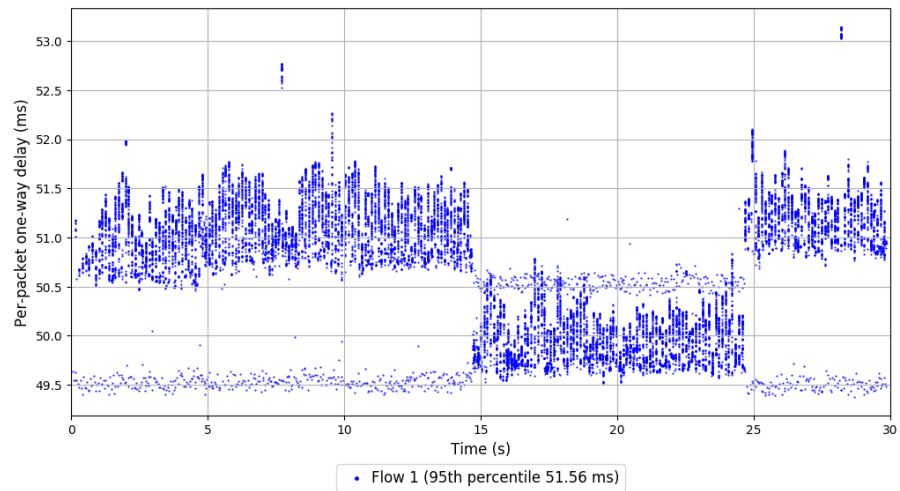
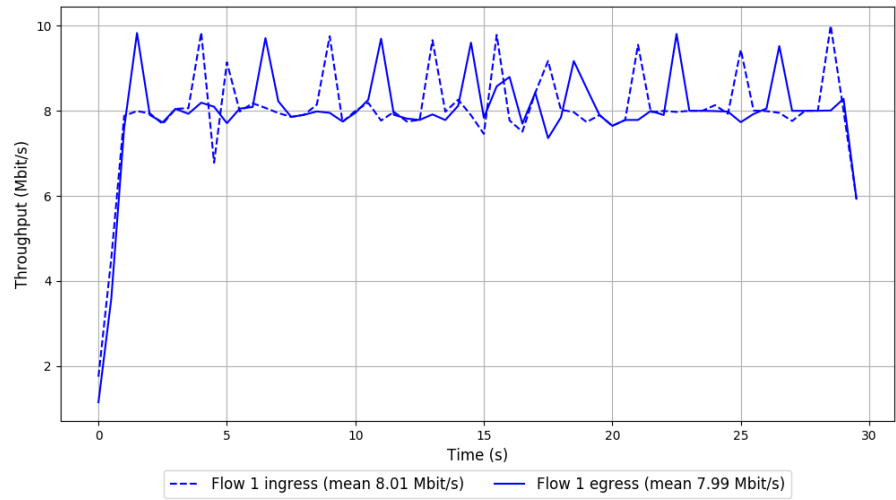
-- Flow 1:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 51.557 ms

Loss rate: 0.36%

## Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-11 13:20:45

End at: 2017-12-11 13:21:15

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 51.748 ms

Loss rate: 0.87%

-- Flow 1:

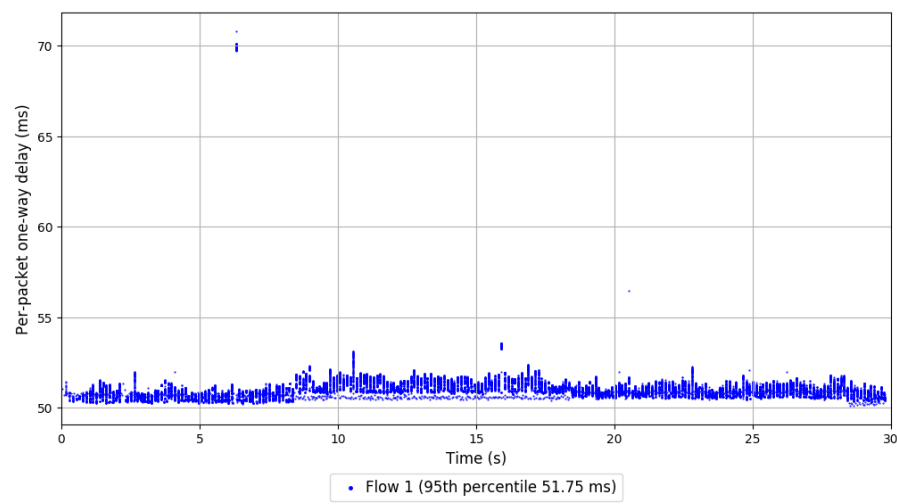
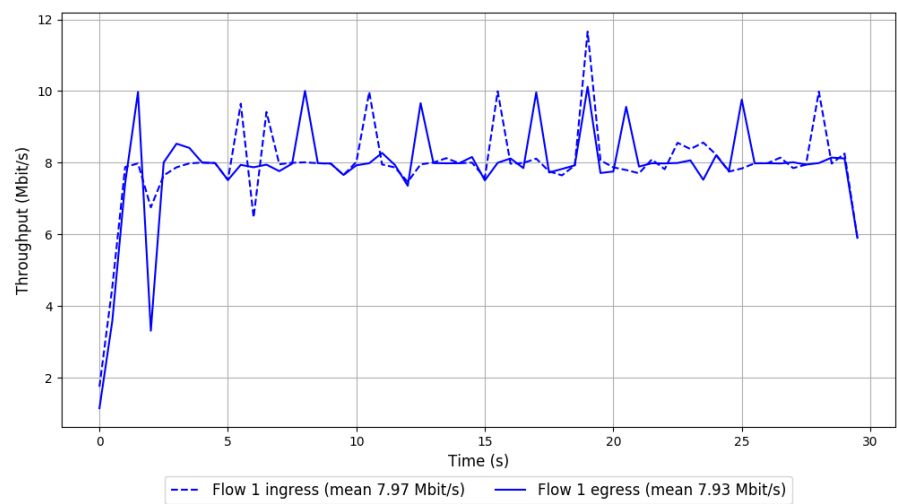
Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 51.748 ms

Loss rate: 0.87%



Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-11 13:31:14

End at: 2017-12-11 13:31:44

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 51.253 ms

Loss rate: 0.58%

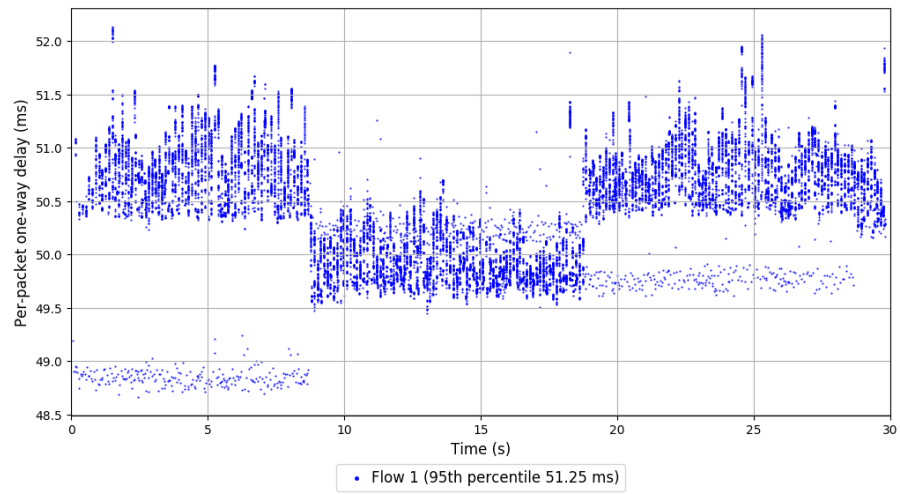
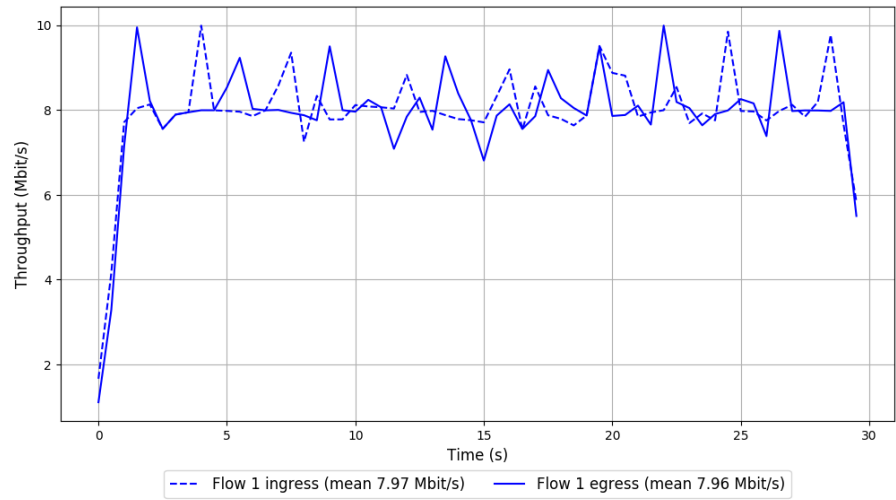
-- Flow 1:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 51.253 ms

Loss rate: 0.58%

## Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-11 13:41:42

End at: 2017-12-11 13:42:12

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 51.550 ms

Loss rate: 0.40%

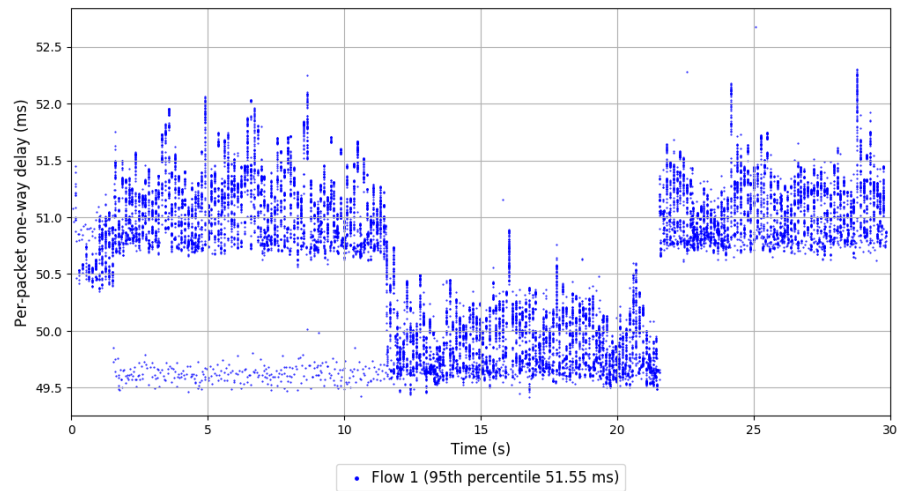
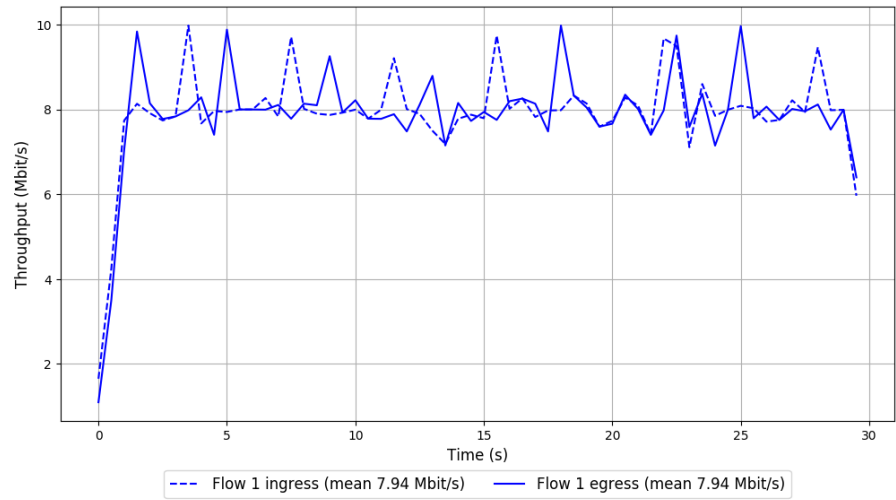
-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 51.550 ms

Loss rate: 0.40%

### Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-11 13:52:08

End at: 2017-12-11 13:52:38

# Below is generated by plot.py at 2017-12-11 16:13:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.409 ms

Loss rate: 0.80%

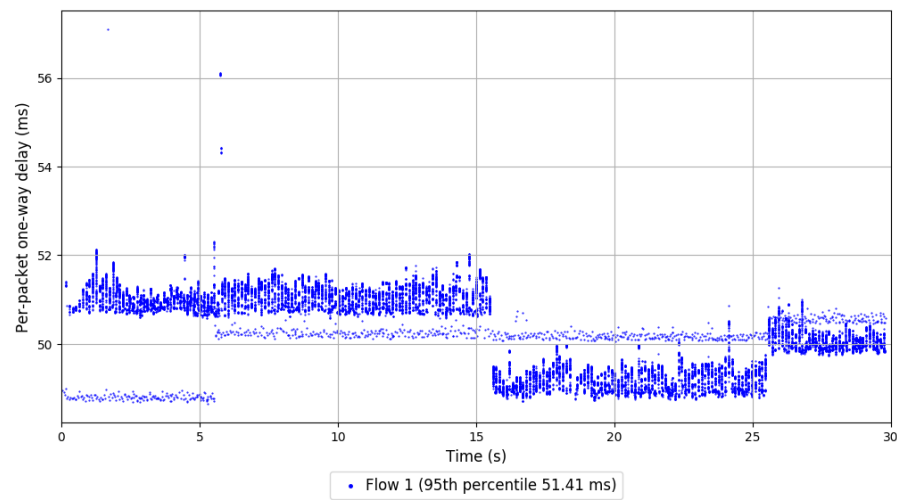
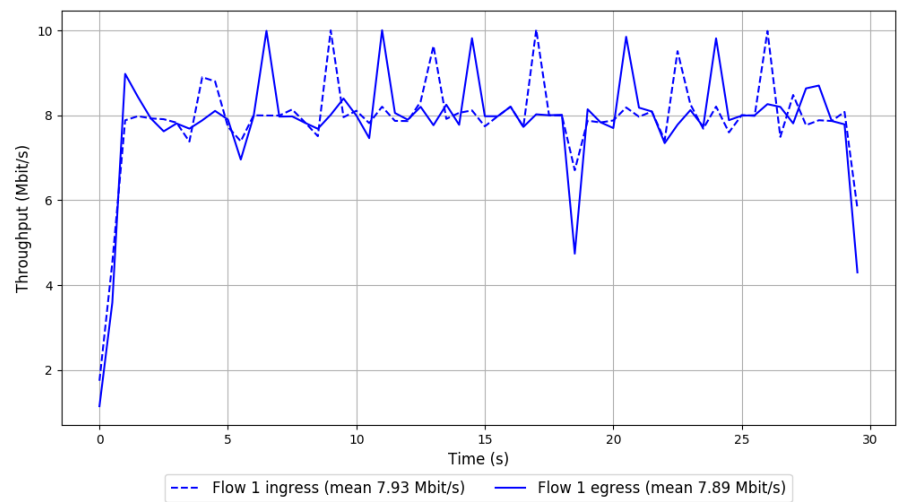
-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.409 ms

Loss rate: 0.80%

Run 10: Report of Sprout — Data Link



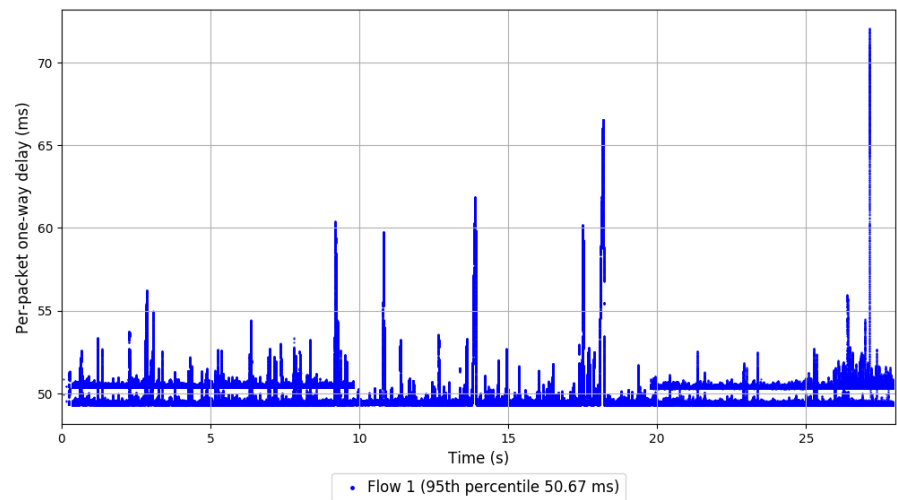
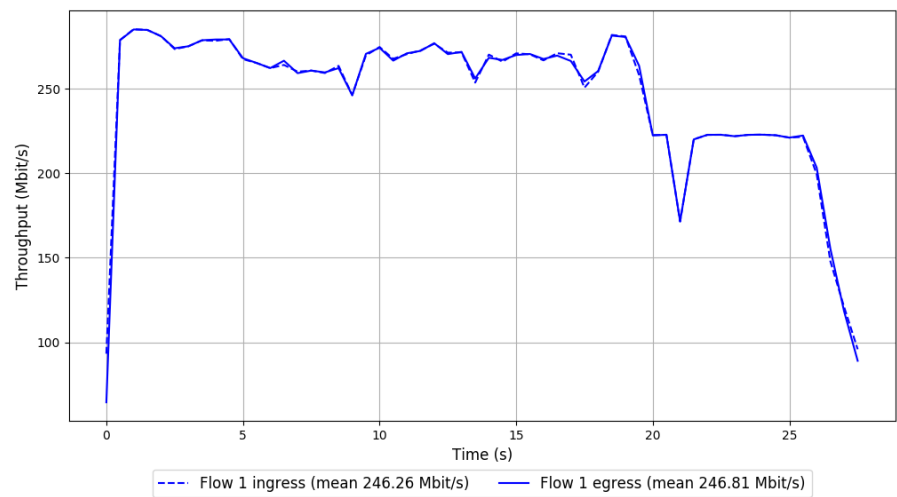
```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-11 12:14:11
End at: 2017-12-11 12:14:41

# Below is generated by plot.py at 2017-12-11 16:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 246.81 Mbit/s
95th percentile per-packet one-way delay: 50.671 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 246.81 Mbit/s
95th percentile per-packet one-way delay: 50.671 ms
Loss rate: 0.14%
```



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

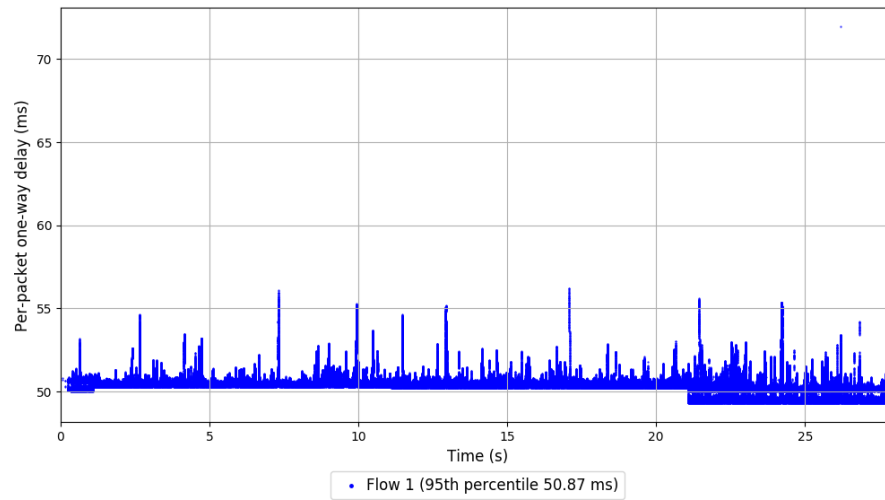
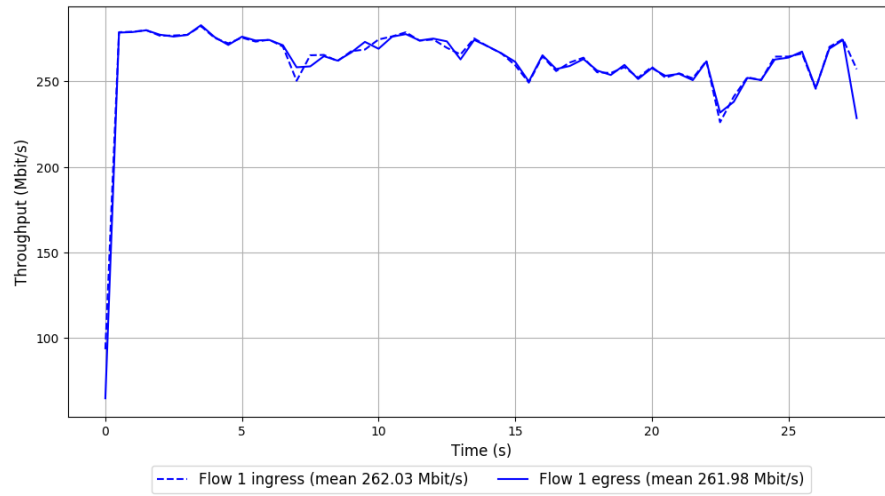


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-11 12:24:50
End at: 2017-12-11 12:25:20

# Below is generated by plot.py at 2017-12-11 16:13:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 261.98 Mbit/s
95th percentile per-packet one-way delay: 50.871 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 261.98 Mbit/s
95th percentile per-packet one-way delay: 50.871 ms
Loss rate: 0.38%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-11 12:35:29

End at: 2017-12-11 12:35:59

# Below is generated by plot.py at 2017-12-11 16:13:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 236.63 Mbit/s

95th percentile per-packet one-way delay: 50.728 ms

Loss rate: 0.26%

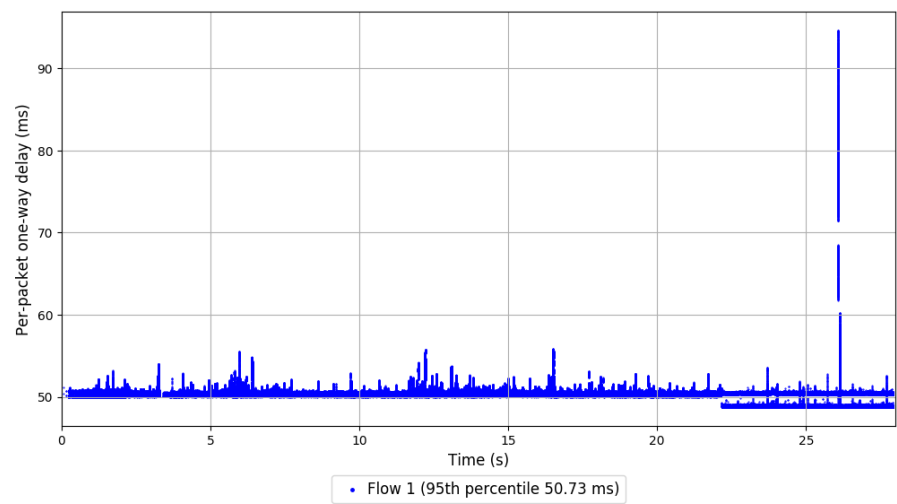
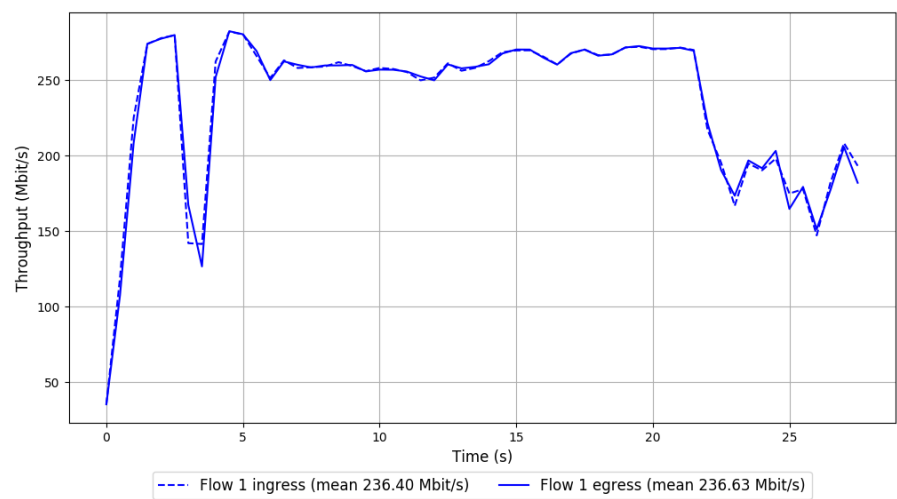
-- Flow 1:

Average throughput: 236.63 Mbit/s

95th percentile per-packet one-way delay: 50.728 ms

Loss rate: 0.26%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-11 12:46:01

End at: 2017-12-11 12:46:31

# Below is generated by plot.py at 2017-12-11 16:13:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 247.99 Mbit/s

95th percentile per-packet one-way delay: 50.994 ms

Loss rate: 0.37%

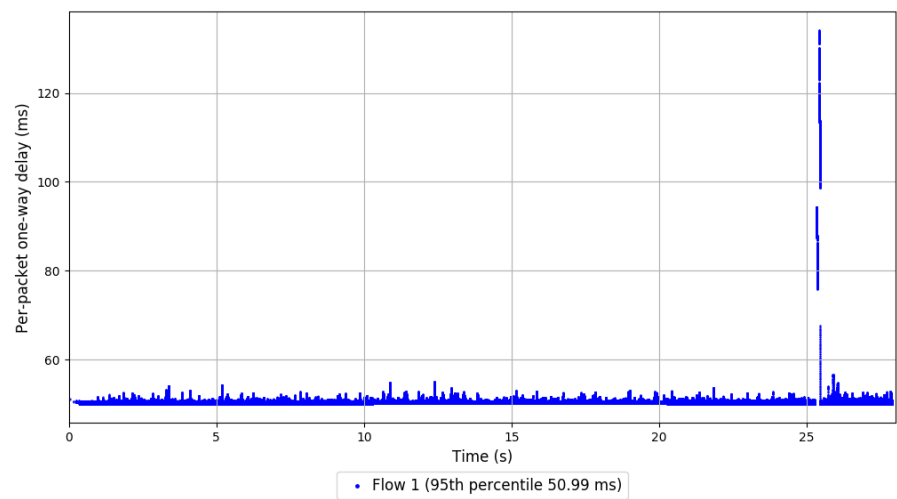
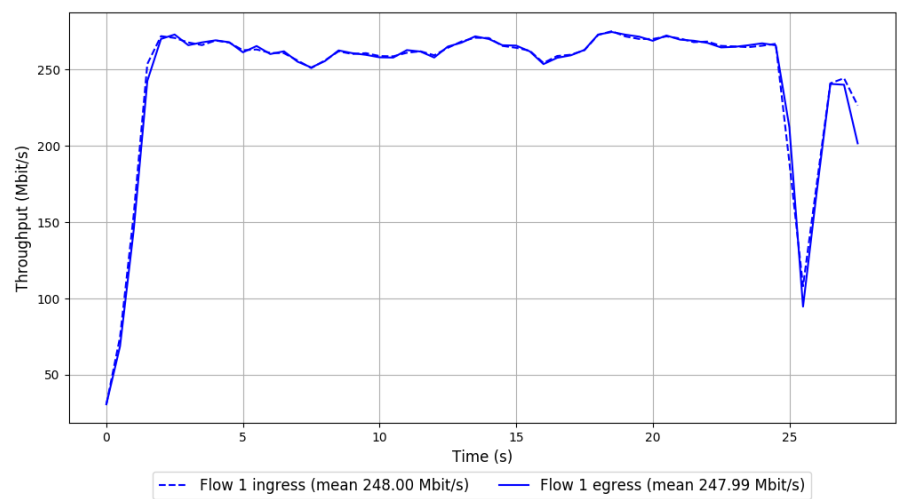
-- Flow 1:

Average throughput: 247.99 Mbit/s

95th percentile per-packet one-way delay: 50.994 ms

Loss rate: 0.37%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-11 12:56:32

End at: 2017-12-11 12:57:02

# Below is generated by plot.py at 2017-12-11 16:13:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 222.65 Mbit/s

95th percentile per-packet one-way delay: 50.833 ms

Loss rate: 0.46%

-- Flow 1:

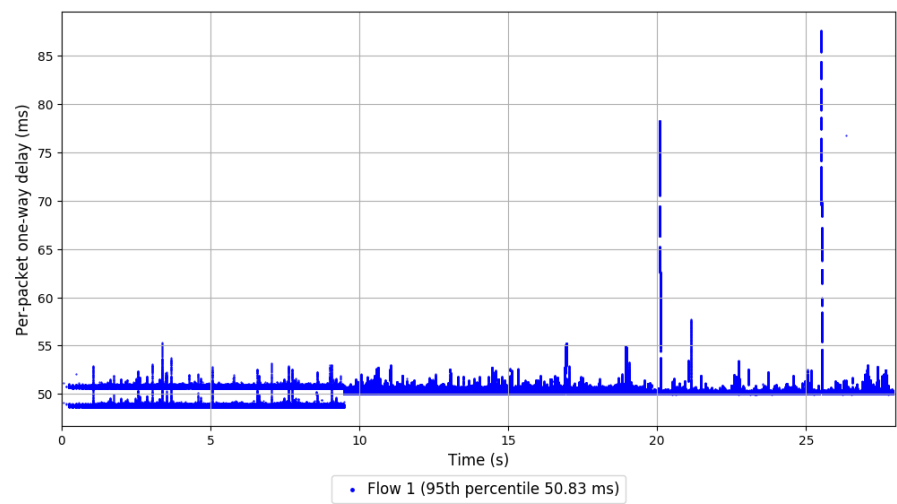
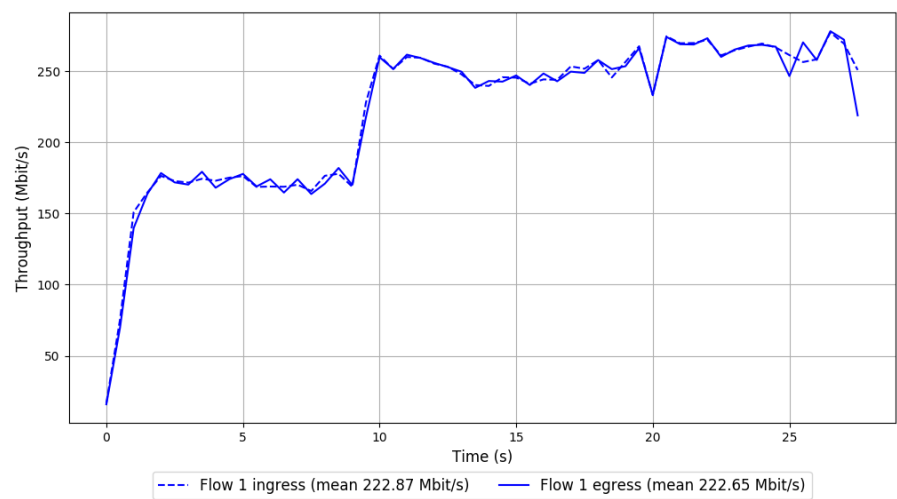
Average throughput: 222.65 Mbit/s

95th percentile per-packet one-way delay: 50.833 ms

Loss rate: 0.46%



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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-11 13:07:01

End at: 2017-12-11 13:07:31

# Below is generated by plot.py at 2017-12-11 16:13:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 249.43 Mbit/s

95th percentile per-packet one-way delay: 51.215 ms

Loss rate: 0.31%

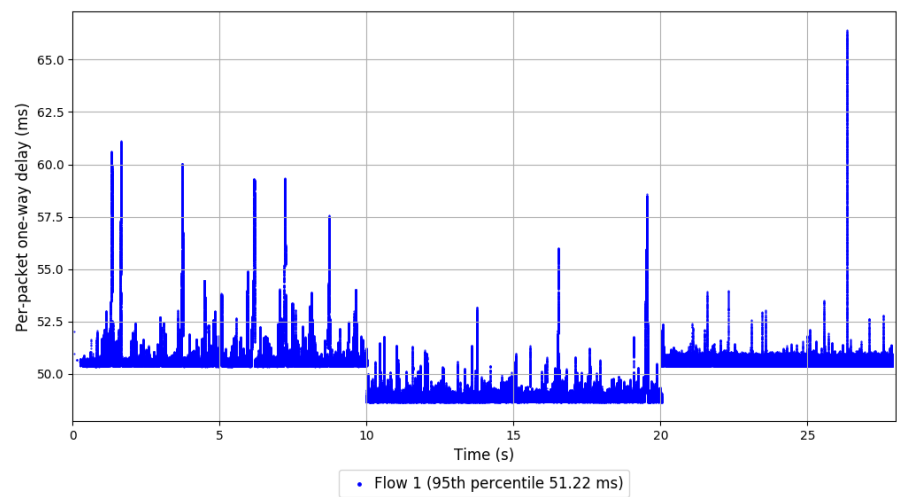
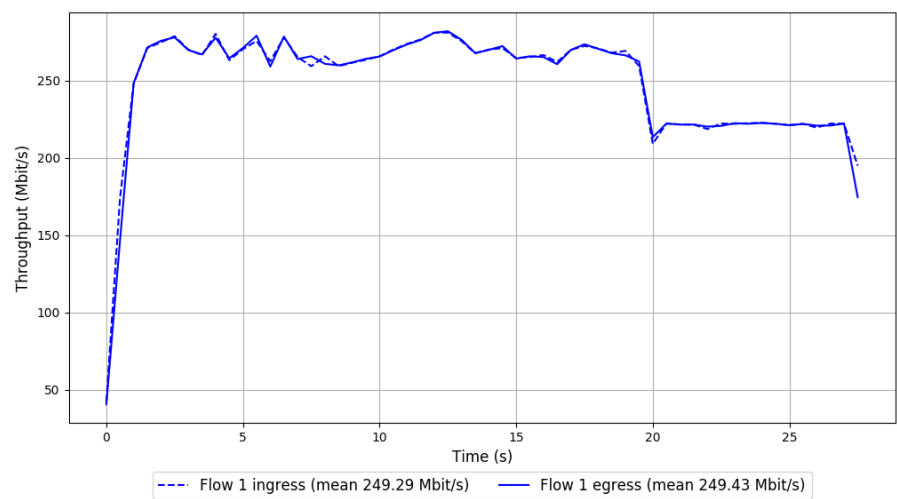
-- Flow 1:

Average throughput: 249.43 Mbit/s

95th percentile per-packet one-way delay: 51.215 ms

Loss rate: 0.31%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-11 13:17:26

End at: 2017-12-11 13:17:56

# Below is generated by plot.py at 2017-12-11 16:20:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 246.49 Mbit/s

95th percentile per-packet one-way delay: 51.598 ms

Loss rate: 0.41%

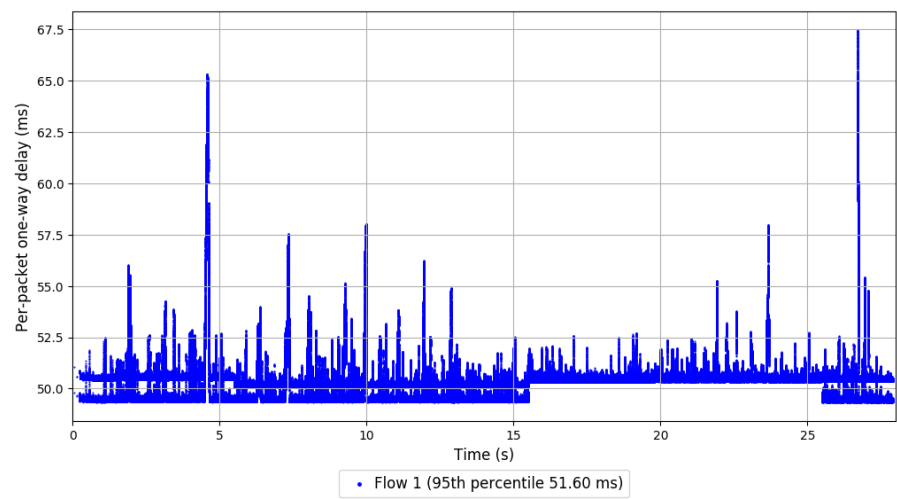
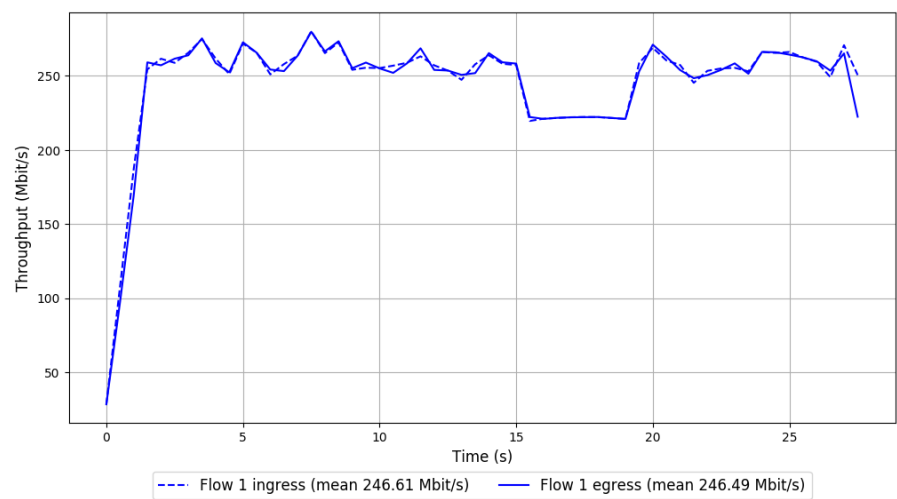
-- Flow 1:

Average throughput: 246.49 Mbit/s

95th percentile per-packet one-way delay: 51.598 ms

Loss rate: 0.41%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-11 13:27:55

End at: 2017-12-11 13:28:25

# Below is generated by plot.py at 2017-12-11 16:20:33

# Datalink statistics

-- Total of 1 flow:

Average throughput: 254.37 Mbit/s

95th percentile per-packet one-way delay: 50.832 ms

Loss rate: 0.38%

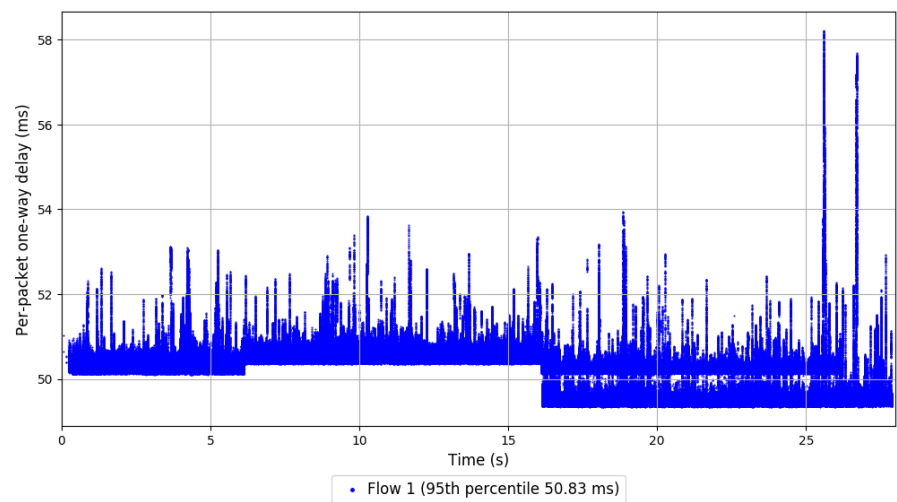
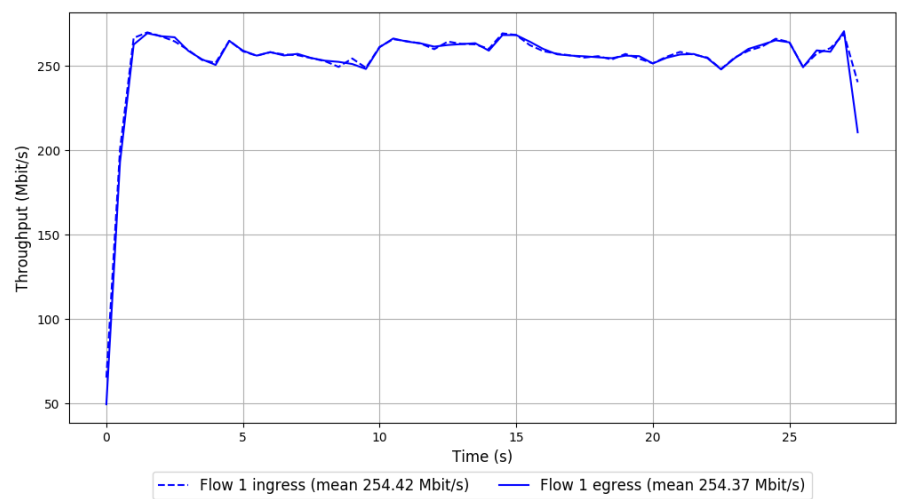
-- Flow 1:

Average throughput: 254.37 Mbit/s

95th percentile per-packet one-way delay: 50.832 ms

Loss rate: 0.38%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-11 13:38:25

End at: 2017-12-11 13:38:55

# Below is generated by plot.py at 2017-12-11 16:20:33

# Datalink statistics

-- Total of 1 flow:

Average throughput: 233.50 Mbit/s

95th percentile per-packet one-way delay: 52.306 ms

Loss rate: 0.34%

-- Flow 1:

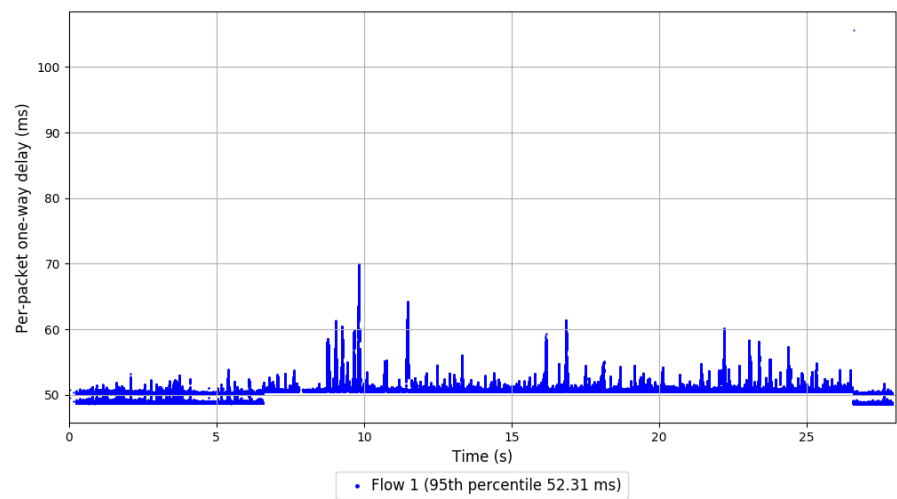
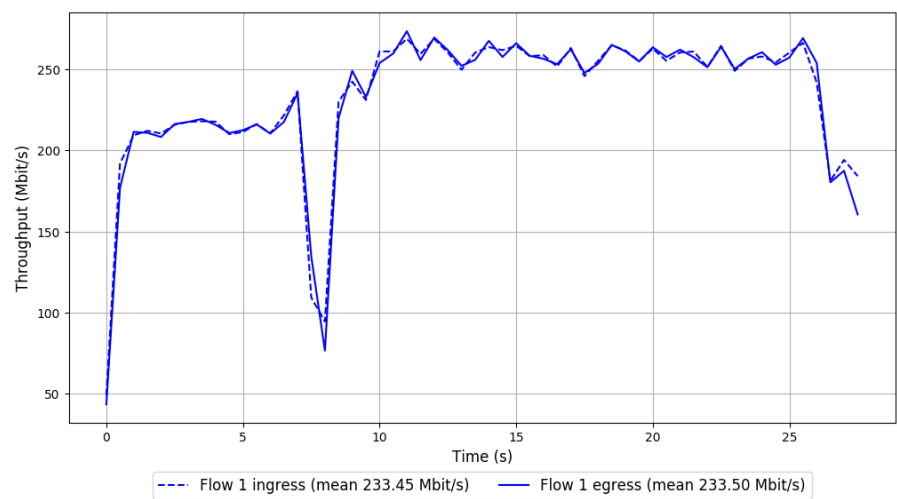
Average throughput: 233.50 Mbit/s

95th percentile per-packet one-way delay: 52.306 ms

Loss rate: 0.34%



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

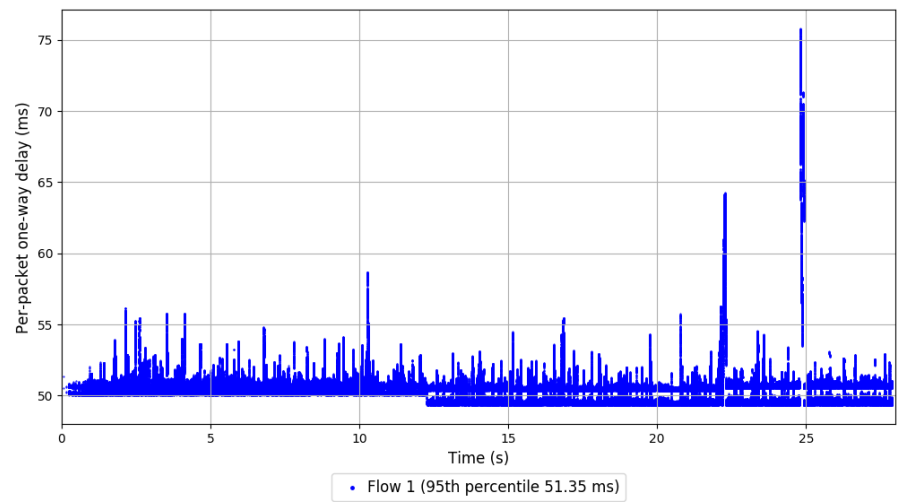
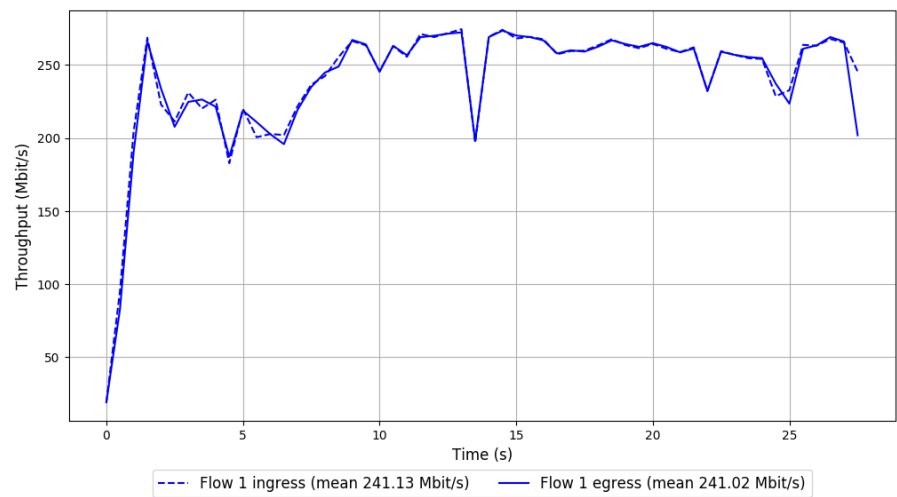


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-11 13:48:49
End at: 2017-12-11 13:49:19

# Below is generated by plot.py at 2017-12-11 16:20:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 241.02 Mbit/s
95th percentile per-packet one-way delay: 51.352 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 241.02 Mbit/s
95th percentile per-packet one-way delay: 51.352 ms
Loss rate: 0.52%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-11 12:18:10

End at: 2017-12-11 12:18:40

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 40.56 Mbit/s

95th percentile per-packet one-way delay: 51.699 ms

Loss rate: 0.85%

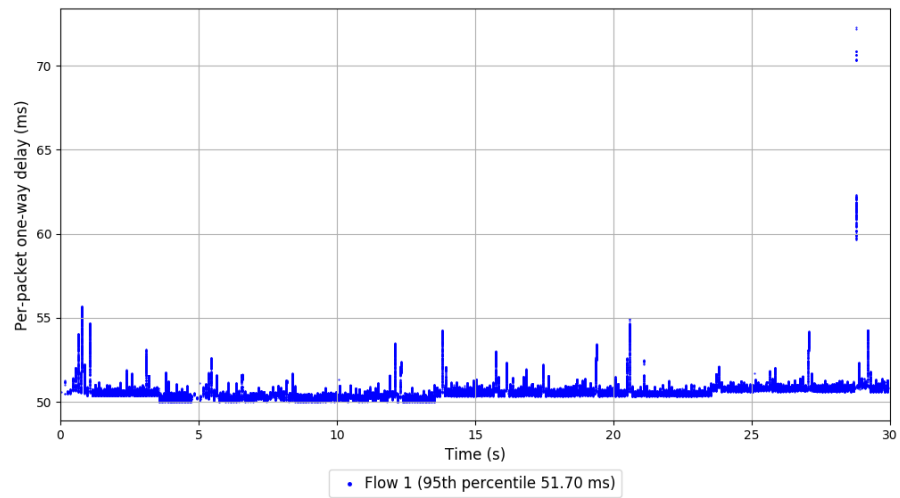
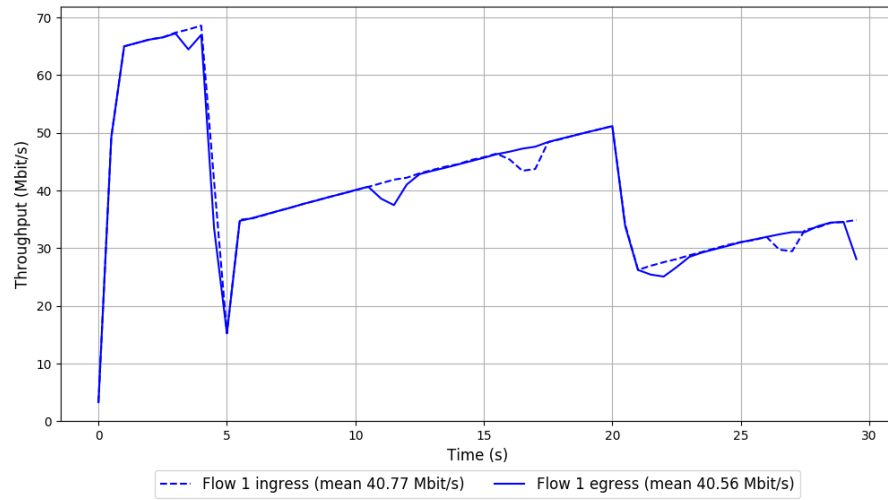
-- Flow 1:

Average throughput: 40.56 Mbit/s

95th percentile per-packet one-way delay: 51.699 ms

Loss rate: 0.85%

### Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-11 12:28:49

End at: 2017-12-11 12:29:19

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 78.63 Mbit/s

95th percentile per-packet one-way delay: 52.115 ms

Loss rate: 0.17%

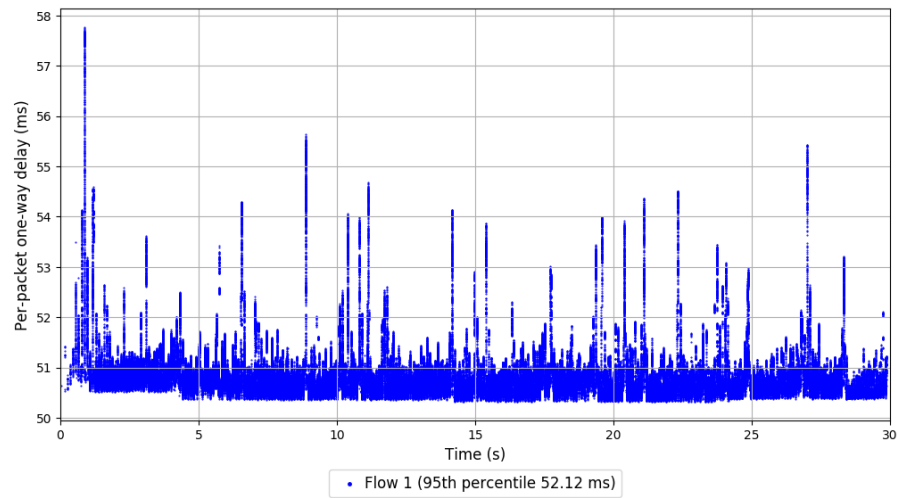
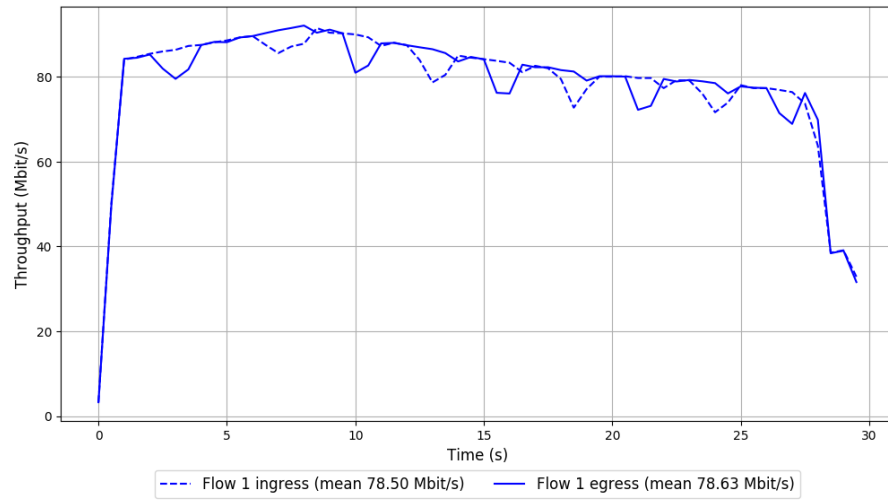
-- Flow 1:

Average throughput: 78.63 Mbit/s

95th percentile per-packet one-way delay: 52.115 ms

Loss rate: 0.17%

## Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-11 12:39:23

End at: 2017-12-11 12:39:53

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 84.74 Mbit/s

95th percentile per-packet one-way delay: 53.902 ms

Loss rate: 0.37%

-- Flow 1:

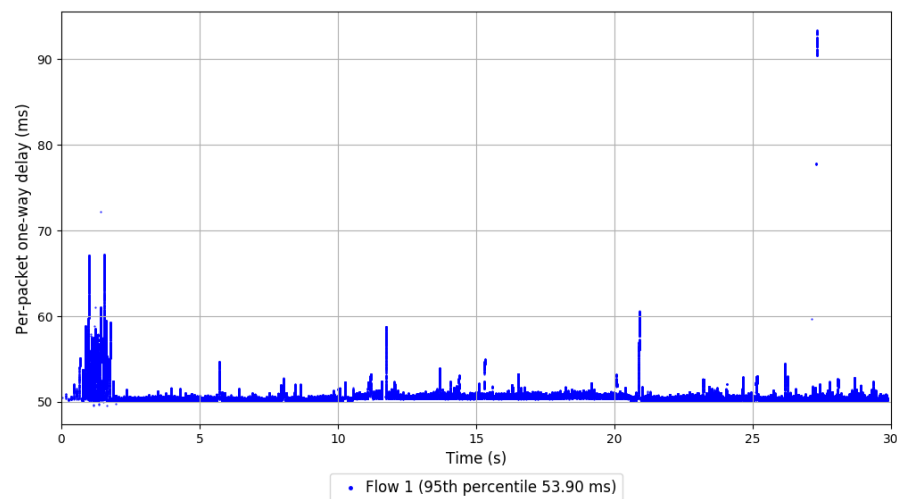
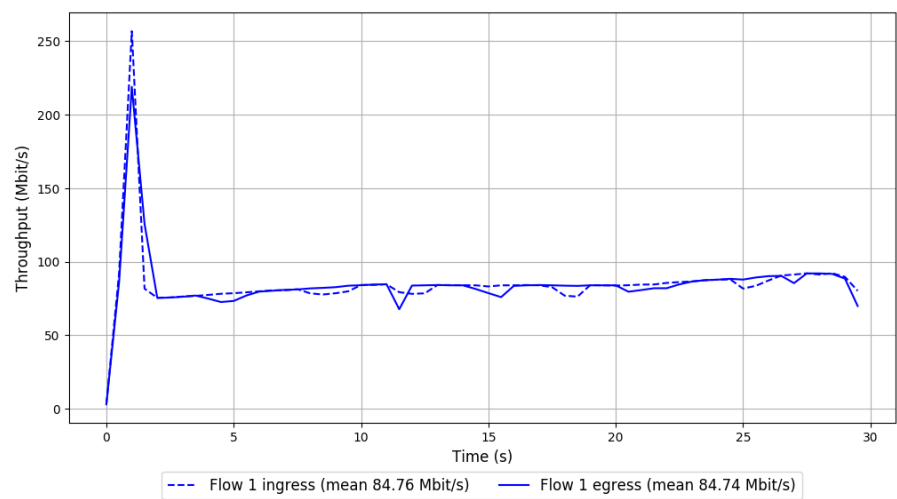
Average throughput: 84.74 Mbit/s

95th percentile per-packet one-way delay: 53.902 ms

Loss rate: 0.37%



Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-11 12:49:57

End at: 2017-12-11 12:50:27

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 25.72 Mbit/s

95th percentile per-packet one-way delay: 51.101 ms

Loss rate: 0.44%

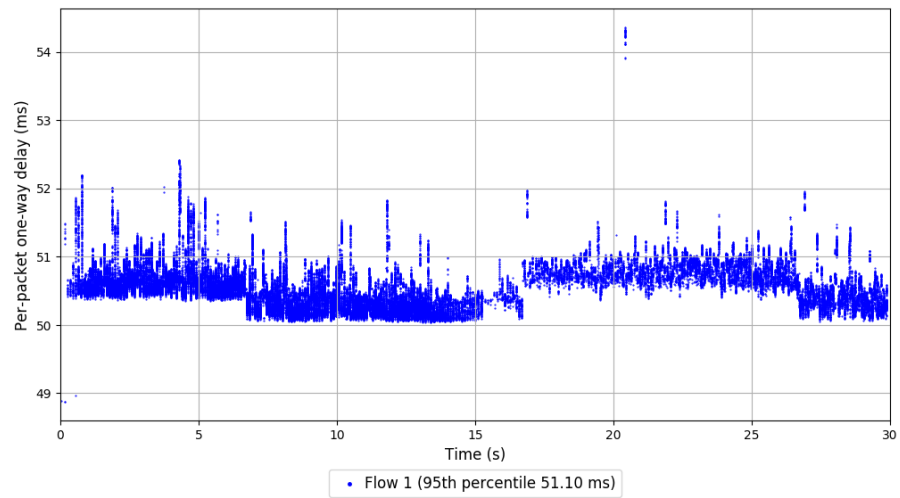
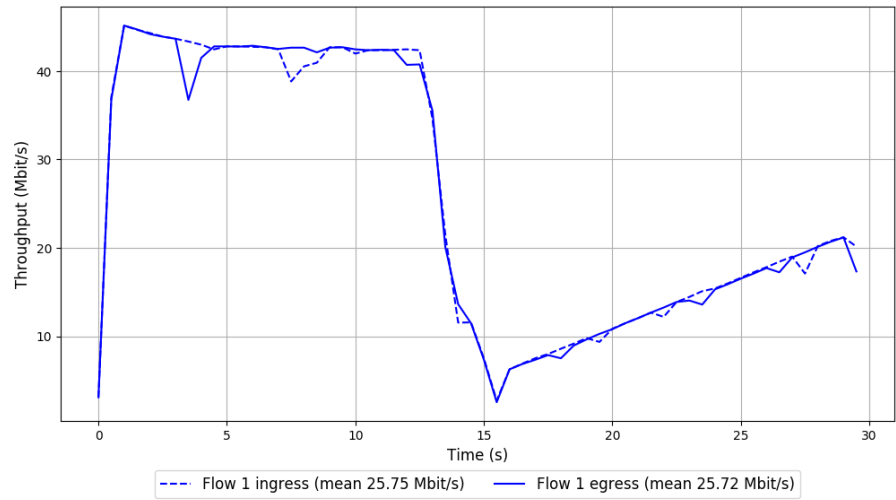
-- Flow 1:

Average throughput: 25.72 Mbit/s

95th percentile per-packet one-way delay: 51.101 ms

Loss rate: 0.44%

#### Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-11 13:00:25

End at: 2017-12-11 13:00:55

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 54.57 Mbit/s

95th percentile per-packet one-way delay: 51.409 ms

Loss rate: 0.25%

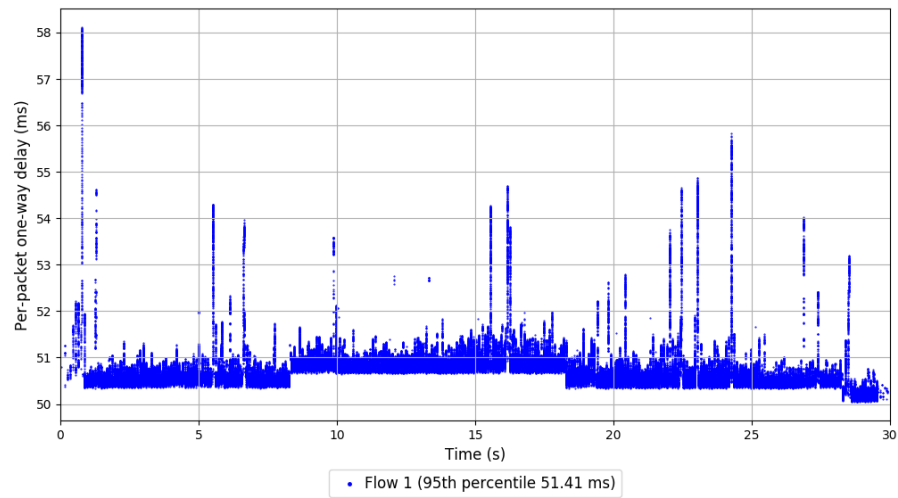
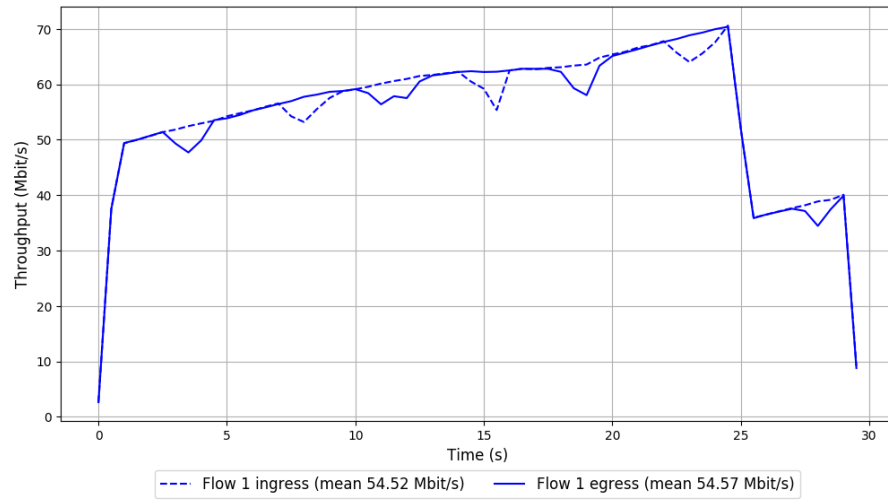
-- Flow 1:

Average throughput: 54.57 Mbit/s

95th percentile per-packet one-way delay: 51.409 ms

Loss rate: 0.25%

### Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-11 13:10:56

End at: 2017-12-11 13:11:26

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 17.88 Mbit/s

95th percentile per-packet one-way delay: 51.115 ms

Loss rate: 0.70%

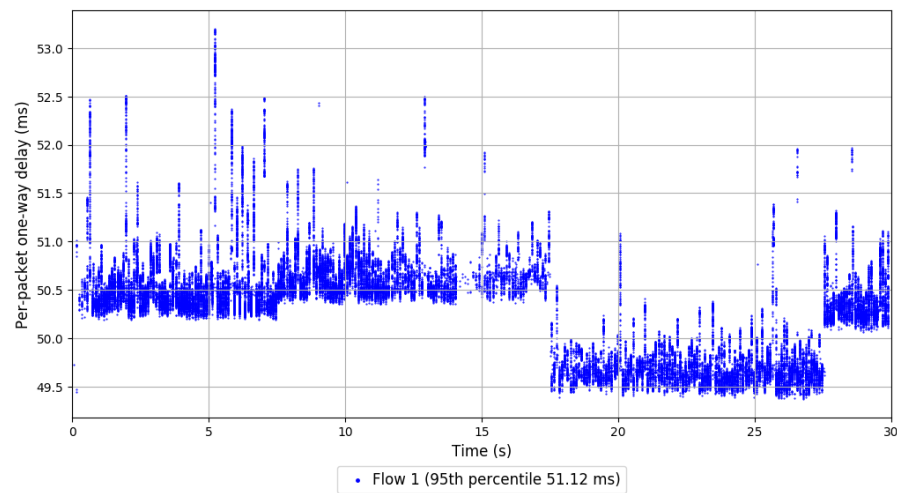
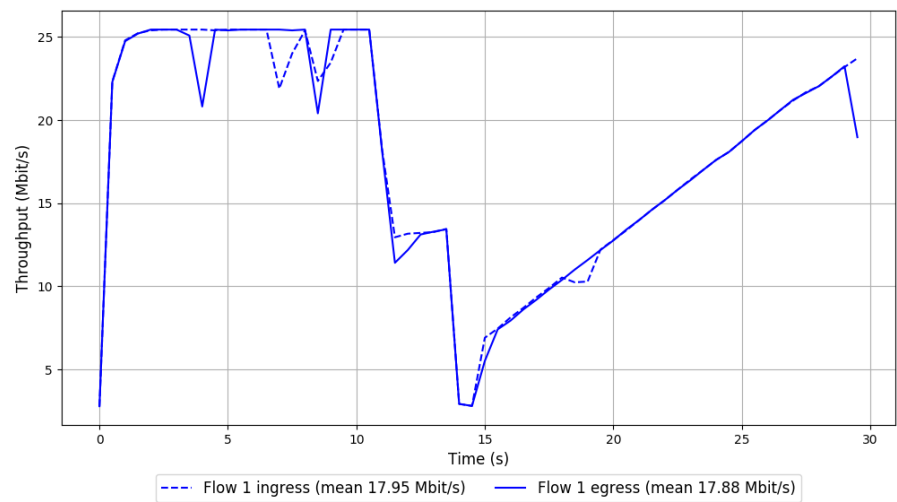
-- Flow 1:

Average throughput: 17.88 Mbit/s

95th percentile per-packet one-way delay: 51.115 ms

Loss rate: 0.70%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-11 13:21:22

End at: 2017-12-11 13:21:52

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 35.36 Mbit/s

95th percentile per-packet one-way delay: 50.980 ms

Loss rate: 0.49%

-- Flow 1:

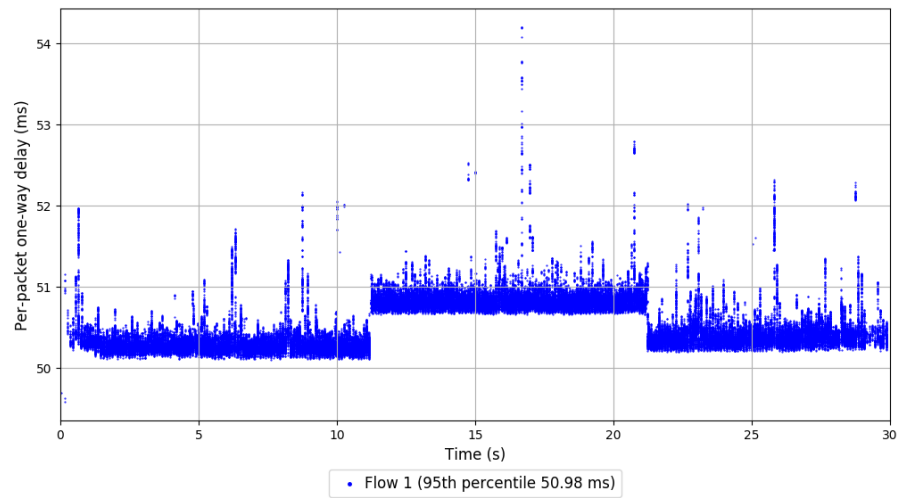
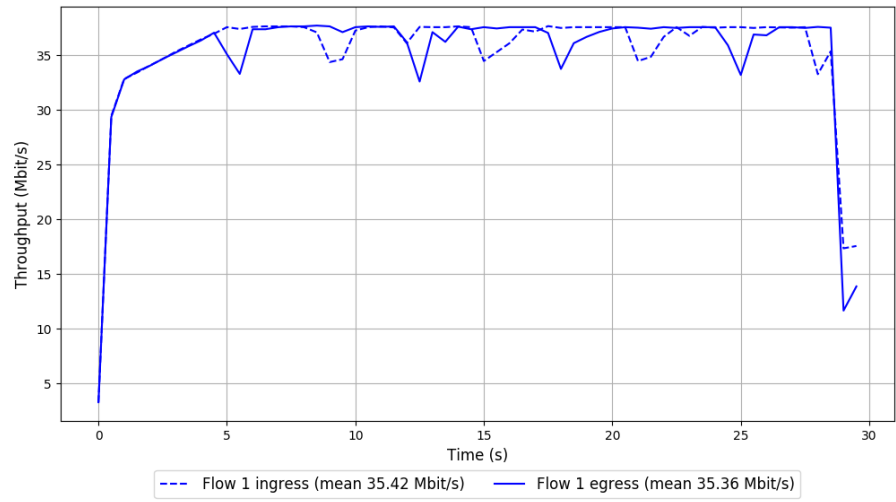
Average throughput: 35.36 Mbit/s

95th percentile per-packet one-way delay: 50.980 ms

Loss rate: 0.49%



### Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-11 13:31:52

End at: 2017-12-11 13:32:22

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 56.72 Mbit/s

95th percentile per-packet one-way delay: 51.390 ms

Loss rate: 0.42%

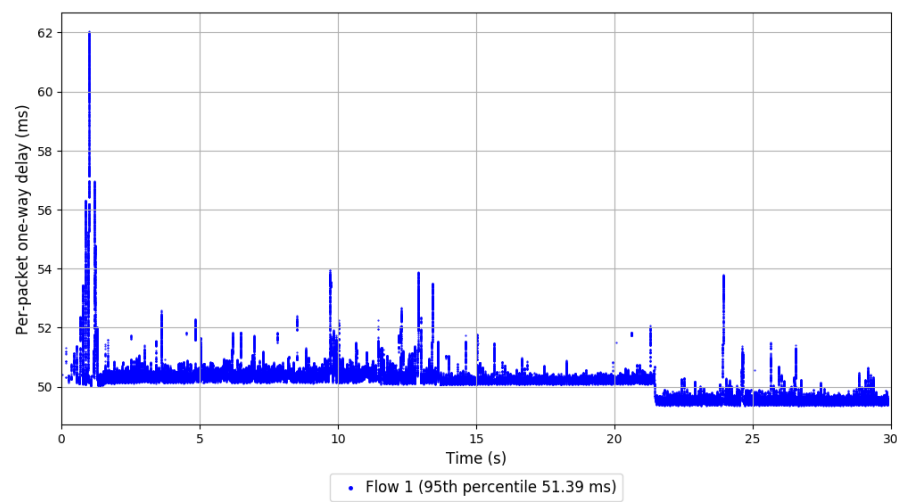
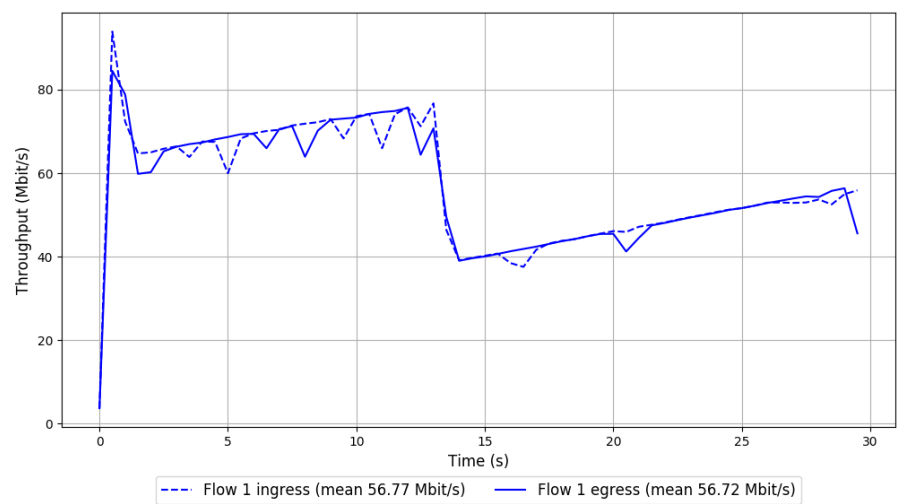
-- Flow 1:

Average throughput: 56.72 Mbit/s

95th percentile per-packet one-way delay: 51.390 ms

Loss rate: 0.42%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-11 13:42:19

End at: 2017-12-11 13:42:49

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 65.61 Mbit/s

95th percentile per-packet one-way delay: 51.217 ms

Loss rate: 0.31%

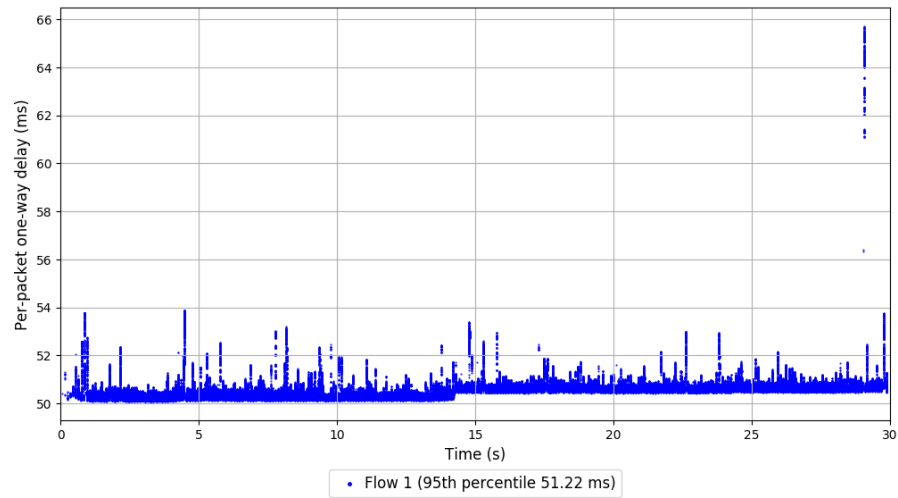
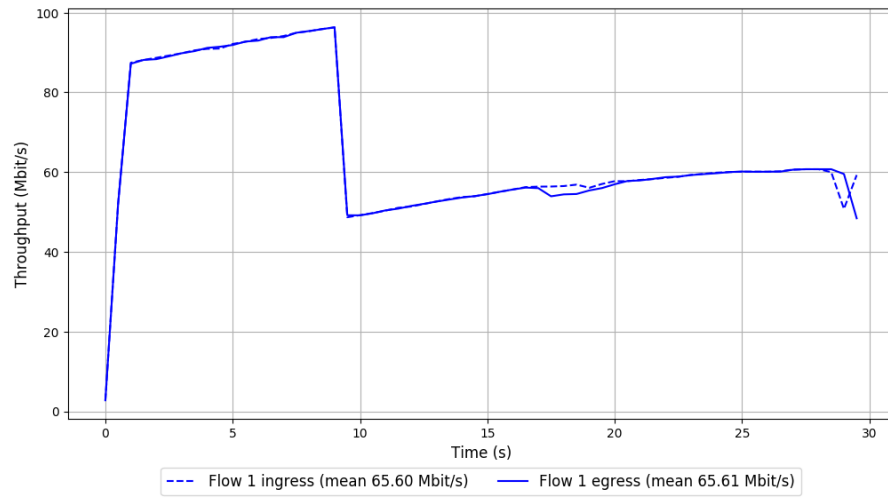
-- Flow 1:

Average throughput: 65.61 Mbit/s

95th percentile per-packet one-way delay: 51.217 ms

Loss rate: 0.31%

### Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-11 13:52:45

End at: 2017-12-11 13:53:15

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 18.39 Mbit/s

95th percentile per-packet one-way delay: 50.962 ms

Loss rate: 1.25%

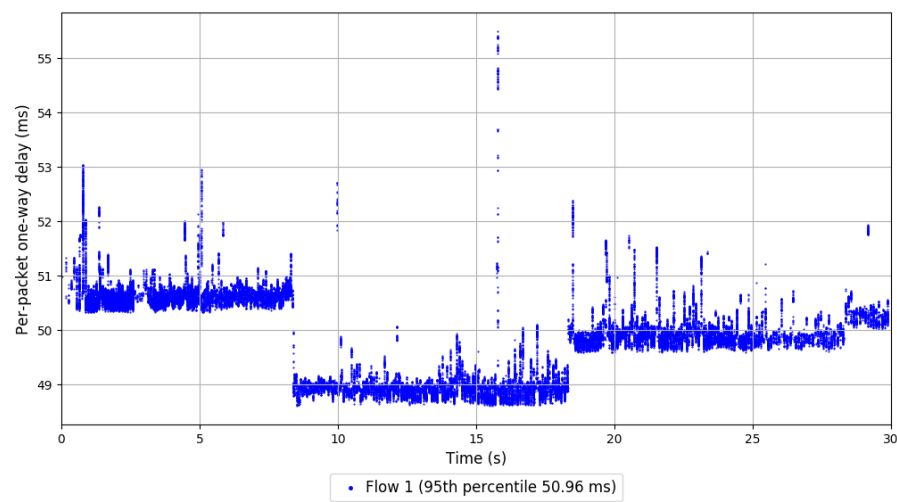
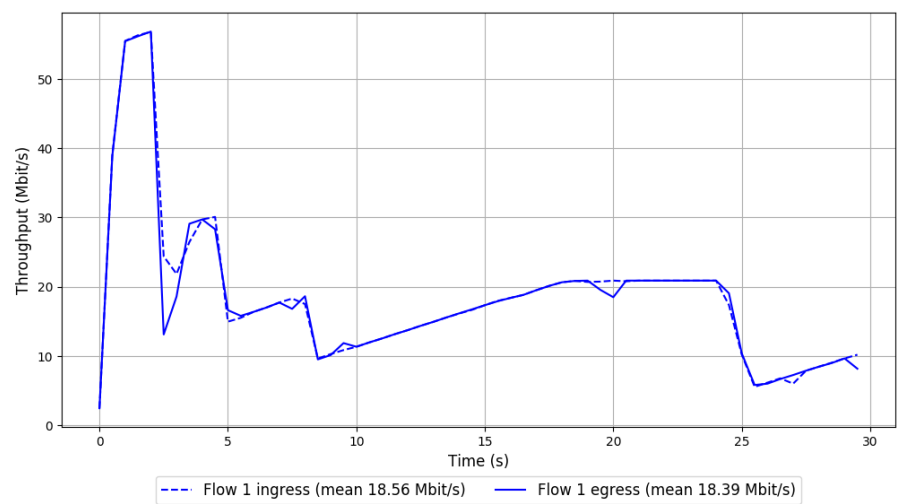
-- Flow 1:

Average throughput: 18.39 Mbit/s

95th percentile per-packet one-way delay: 50.962 ms

Loss rate: 1.25%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-11 12:18:49

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

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 281.96 Mbit/s

95th percentile per-packet one-way delay: 82.934 ms

Loss rate: 0.35%

-- Flow 1:

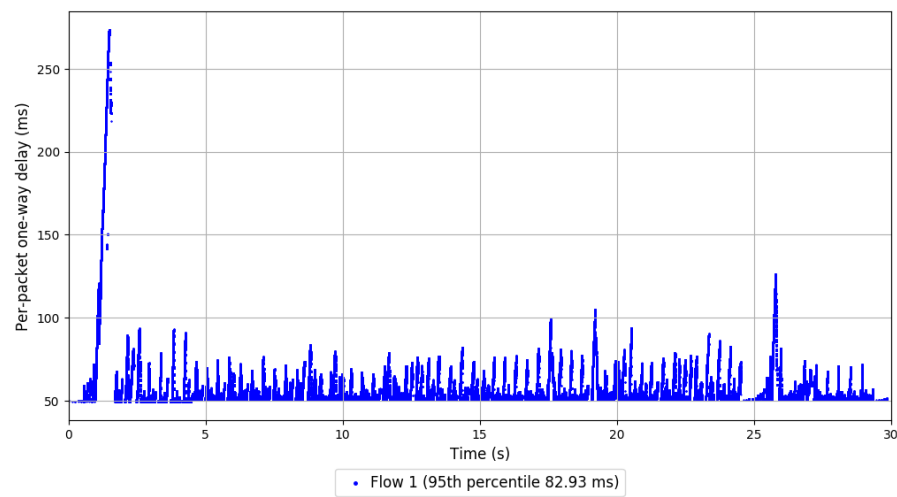
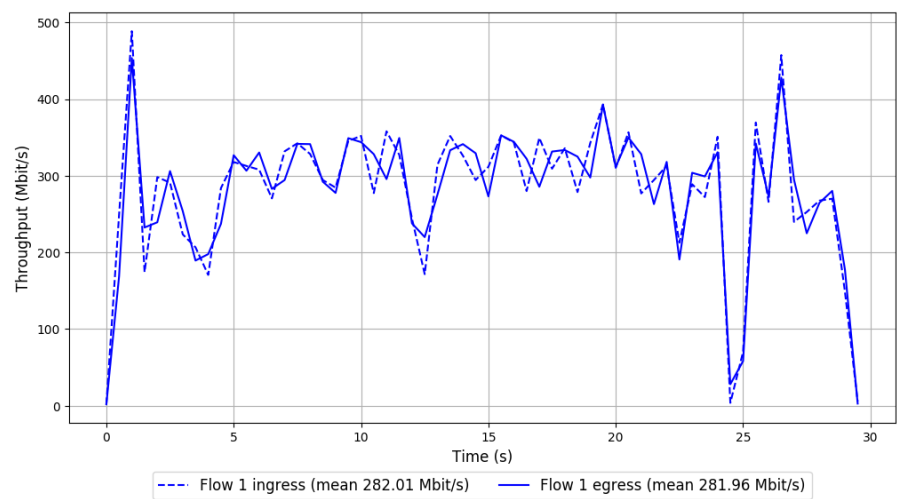
Average throughput: 281.96 Mbit/s

95th percentile per-packet one-way delay: 82.934 ms

Loss rate: 0.35%



Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-11 12:29:30

End at: 2017-12-11 12:30:00

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 246.71 Mbit/s

95th percentile per-packet one-way delay: 102.793 ms

Loss rate: 0.58%

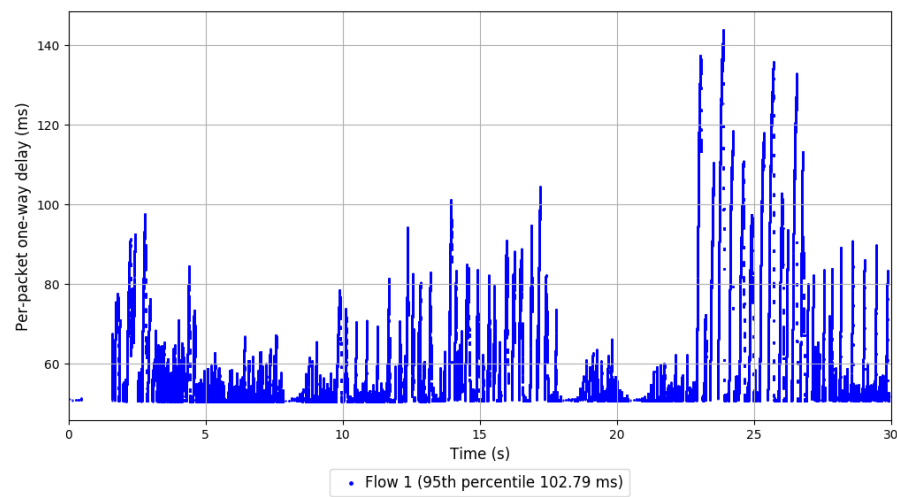
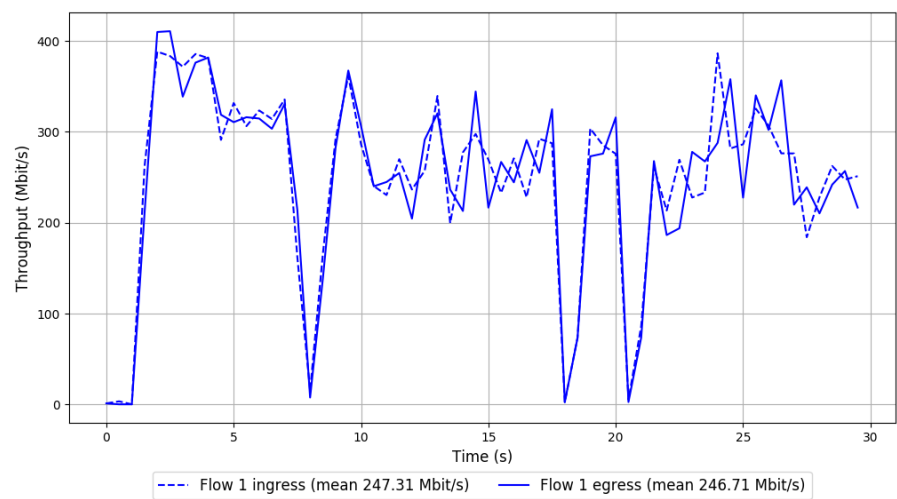
-- Flow 1:

Average throughput: 246.71 Mbit/s

95th percentile per-packet one-way delay: 102.793 ms

Loss rate: 0.58%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-11 12:40:04

End at: 2017-12-11 12:40:34

# Below is generated by plot.py at 2017-12-11 16:20:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 217.20 Mbit/s

95th percentile per-packet one-way delay: 94.363 ms

Loss rate: 0.43%

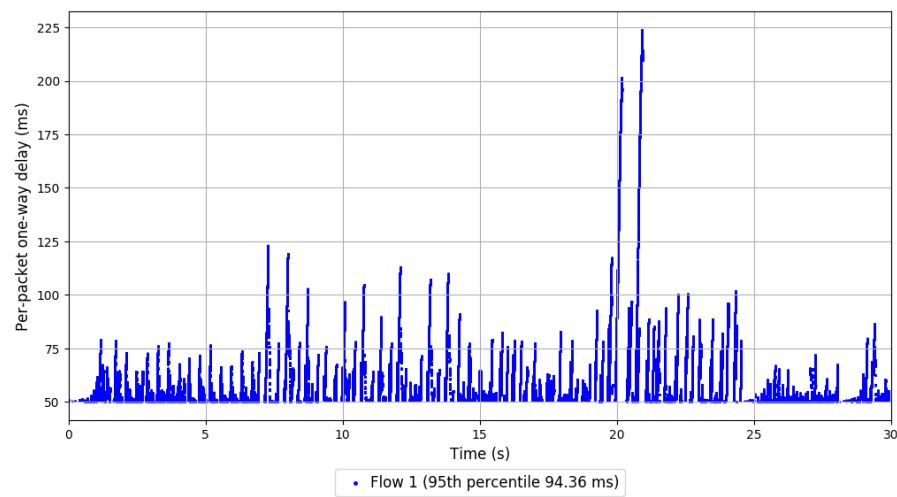
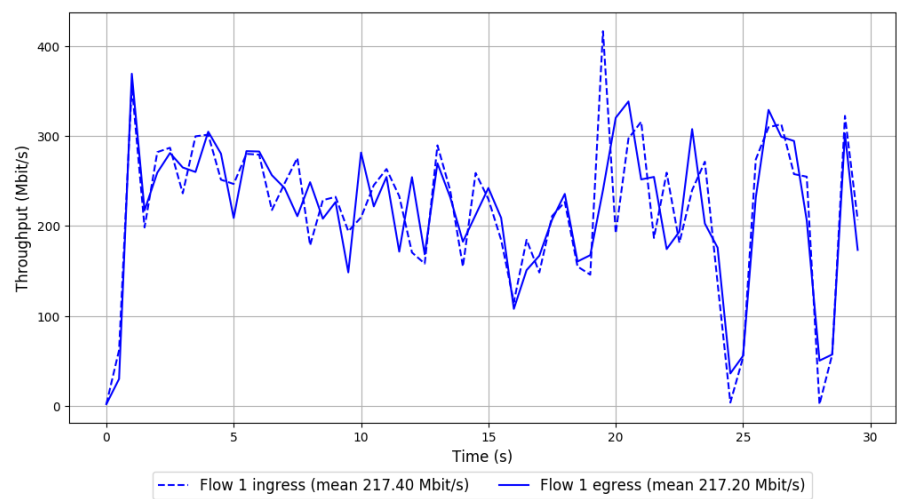
-- Flow 1:

Average throughput: 217.20 Mbit/s

95th percentile per-packet one-way delay: 94.363 ms

Loss rate: 0.43%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-11 12:50:35

End at: 2017-12-11 12:51:05

# Below is generated by plot.py at 2017-12-11 16:21:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 261.72 Mbit/s

95th percentile per-packet one-way delay: 106.644 ms

Loss rate: 0.22%

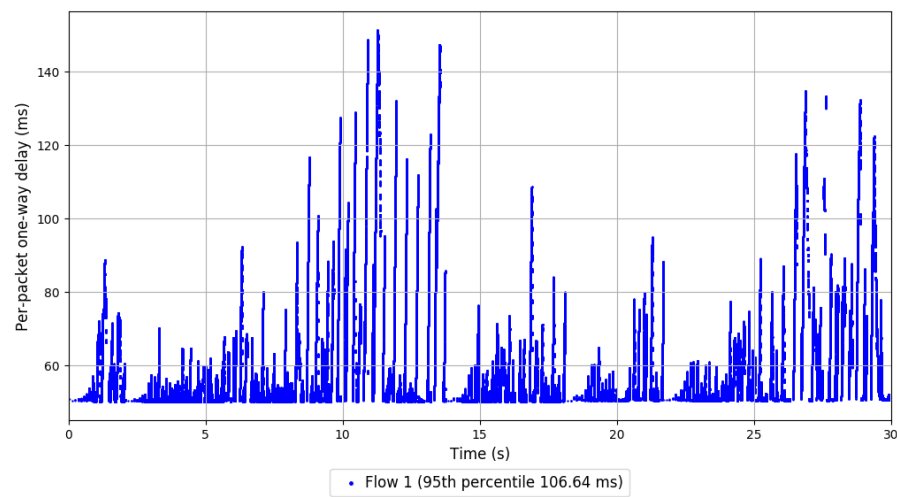
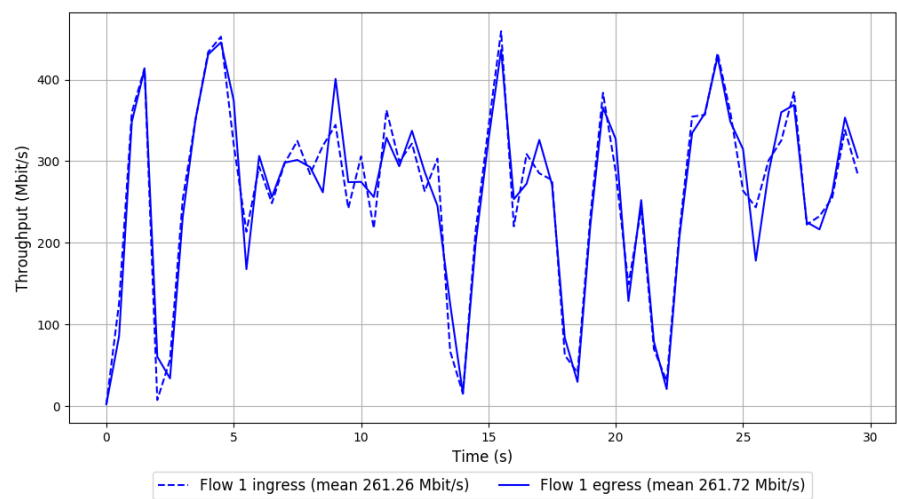
-- Flow 1:

Average throughput: 261.72 Mbit/s

95th percentile per-packet one-way delay: 106.644 ms

Loss rate: 0.22%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-11 13:01:05

End at: 2017-12-11 13:01:35

# Below is generated by plot.py at 2017-12-11 16:24:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 273.18 Mbit/s

95th percentile per-packet one-way delay: 76.343 ms

Loss rate: 0.38%

-- Flow 1:

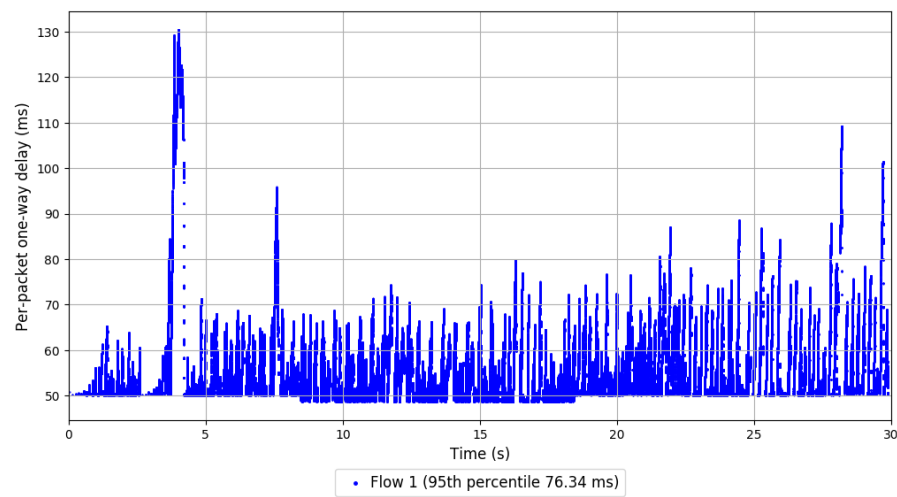
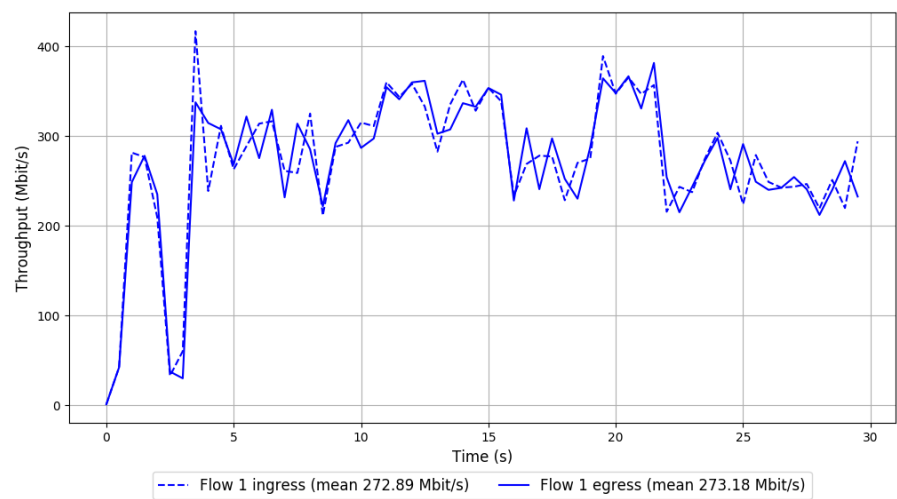
Average throughput: 273.18 Mbit/s

95th percentile per-packet one-way delay: 76.343 ms

Loss rate: 0.38%



Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-11 13:11:34

End at: 2017-12-11 13:12:04

# Below is generated by plot.py at 2017-12-11 16:24:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 209.11 Mbit/s

95th percentile per-packet one-way delay: 89.156 ms

Loss rate: 0.07%

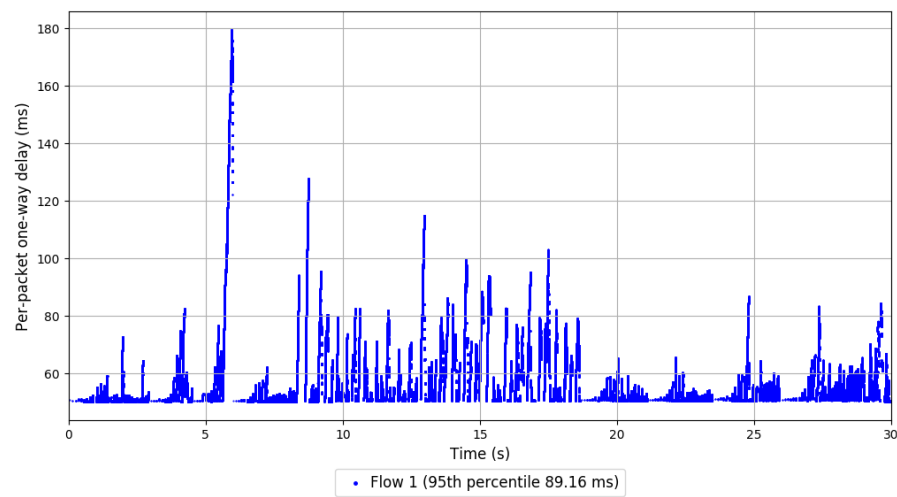
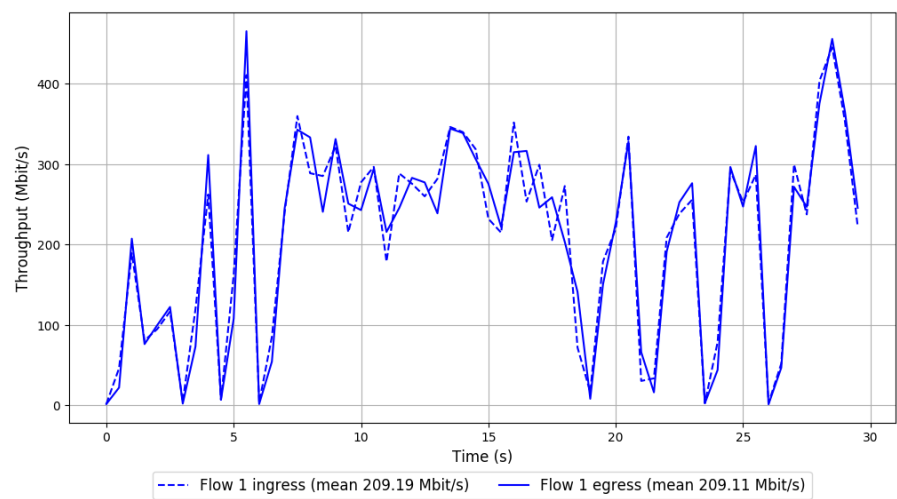
-- Flow 1:

Average throughput: 209.11 Mbit/s

95th percentile per-packet one-way delay: 89.156 ms

Loss rate: 0.07%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-11 13:22:01

End at: 2017-12-11 13:22:31

# Below is generated by plot.py at 2017-12-11 16:24:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 250.38 Mbit/s

95th percentile per-packet one-way delay: 165.555 ms

Loss rate: 1.60%

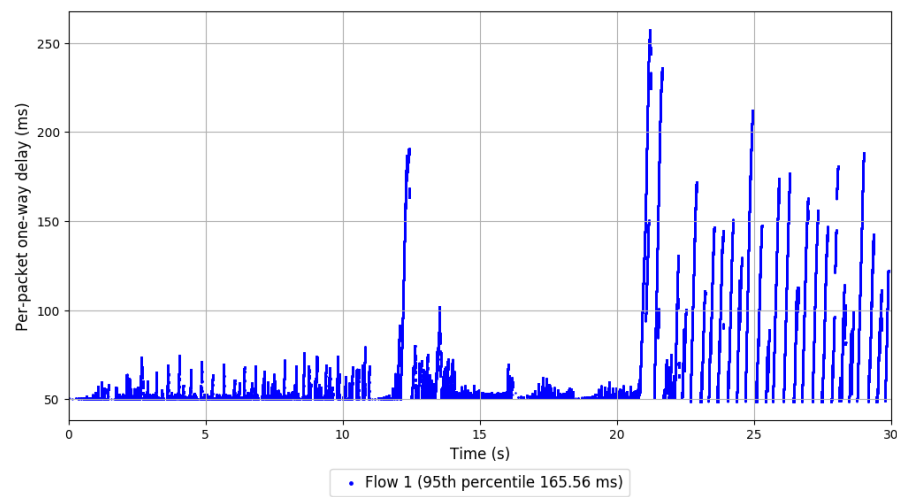
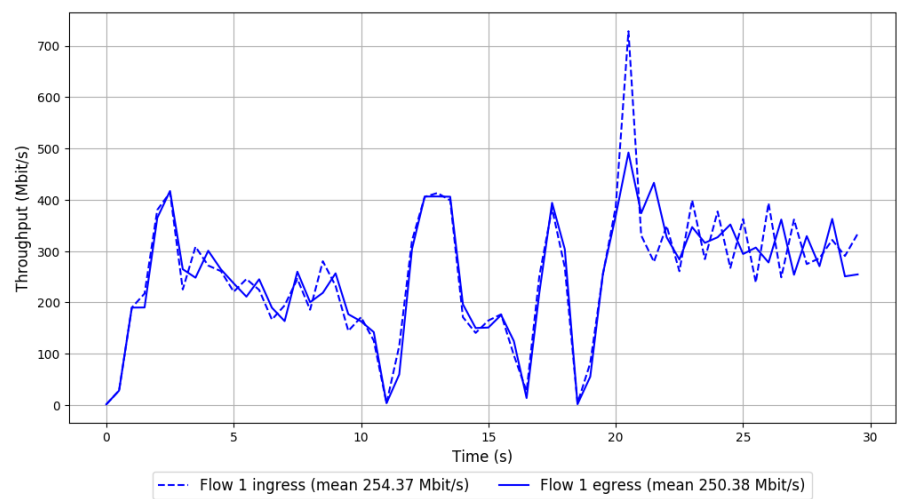
-- Flow 1:

Average throughput: 250.38 Mbit/s

95th percentile per-packet one-way delay: 165.555 ms

Loss rate: 1.60%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-11 13:32:32

End at: 2017-12-11 13:33:02

# Below is generated by plot.py at 2017-12-11 16:24:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 216.28 Mbit/s

95th percentile per-packet one-way delay: 82.981 ms

Loss rate: 0.21%

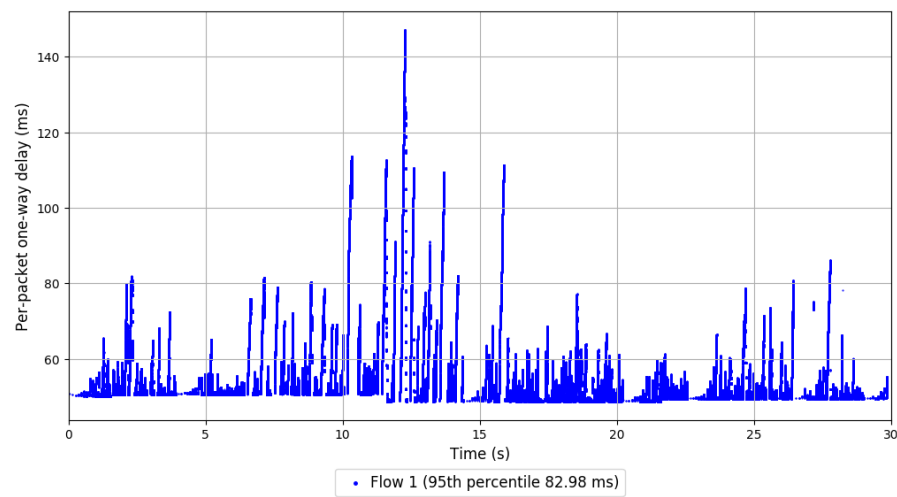
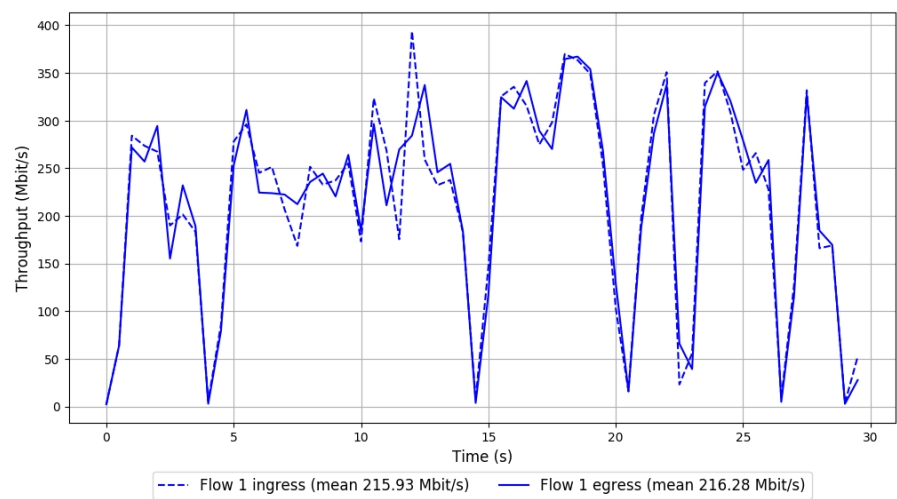
-- Flow 1:

Average throughput: 216.28 Mbit/s

95th percentile per-packet one-way delay: 82.981 ms

Loss rate: 0.21%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-11 13:42:59

End at: 2017-12-11 13:43:29

# Below is generated by plot.py at 2017-12-11 16:24:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 230.07 Mbit/s

95th percentile per-packet one-way delay: 120.834 ms

Loss rate: 0.03%

-- Flow 1:

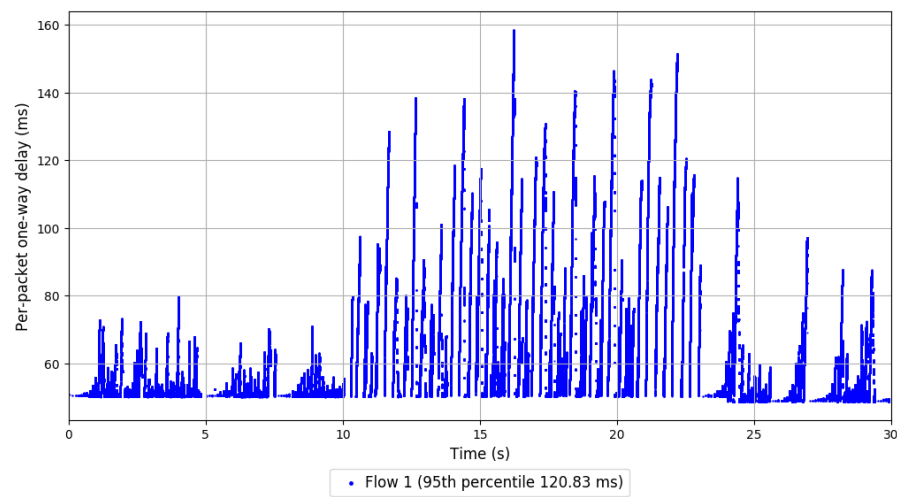
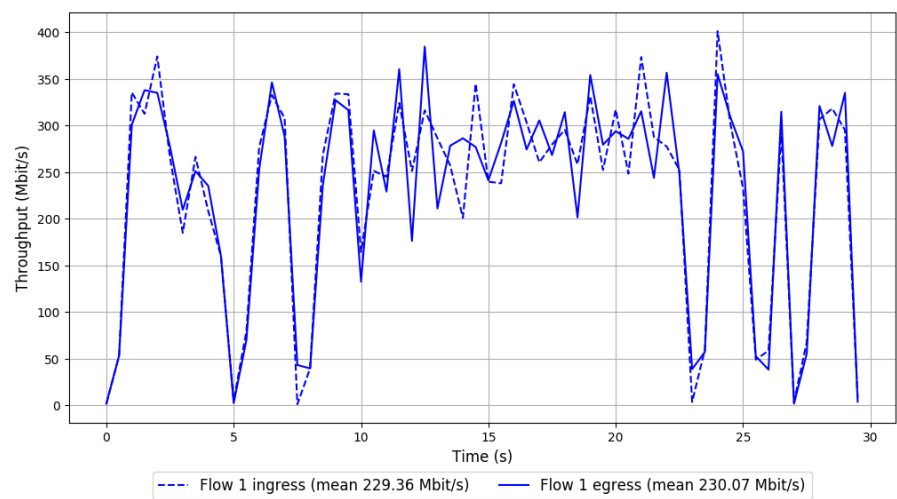
Average throughput: 230.07 Mbit/s

95th percentile per-packet one-way delay: 120.834 ms

Loss rate: 0.03%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-11 13:53:23

End at: 2017-12-11 13:53:53

# Below is generated by plot.py at 2017-12-11 16:25:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 264.38 Mbit/s

95th percentile per-packet one-way delay: 226.793 ms

Loss rate: 1.72%

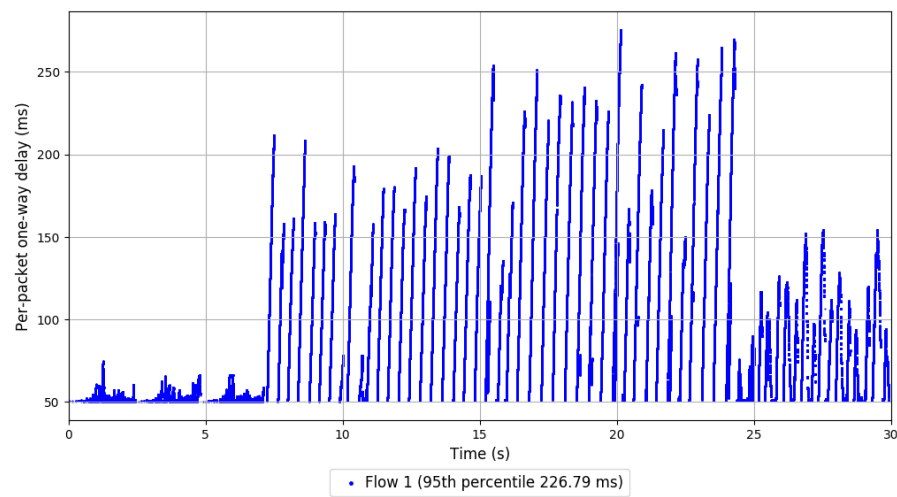
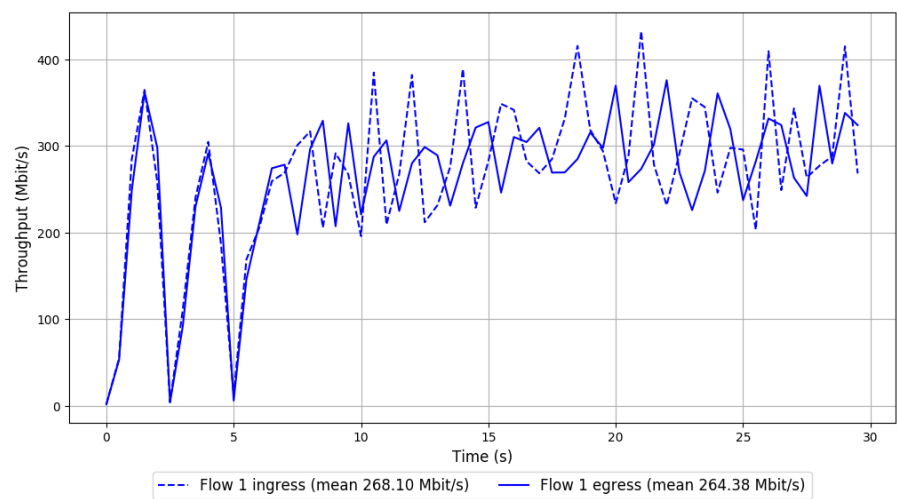
-- Flow 1:

Average throughput: 264.38 Mbit/s

95th percentile per-packet one-way delay: 226.793 ms

Loss rate: 1.72%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-11 12:15:47

End at: 2017-12-11 12:16:17

# Below is generated by plot.py at 2017-12-11 16:25:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.07 Mbit/s

95th percentile per-packet one-way delay: 50.773 ms

Loss rate: 0.36%

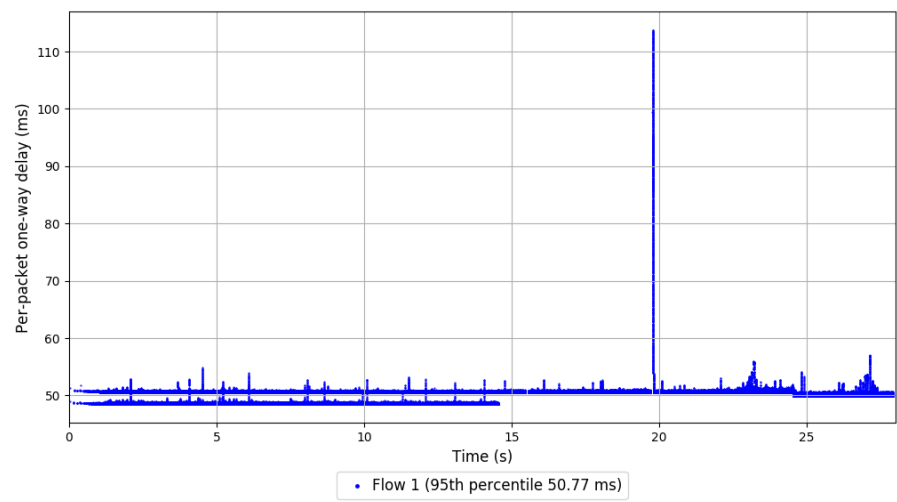
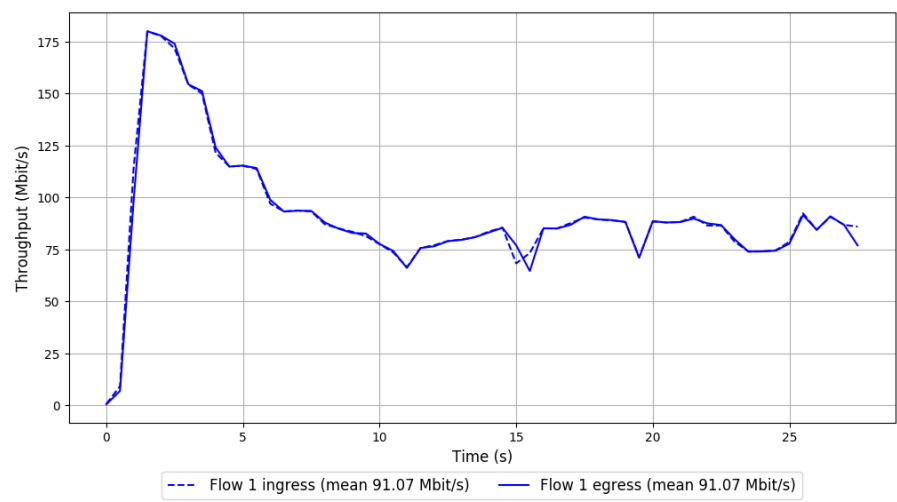
-- Flow 1:

Average throughput: 91.07 Mbit/s

95th percentile per-packet one-way delay: 50.773 ms

Loss rate: 0.36%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-11 12:26:27

End at: 2017-12-11 12:26:57

# Below is generated by plot.py at 2017-12-11 16:25:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.41 Mbit/s

95th percentile per-packet one-way delay: 50.606 ms

Loss rate: 0.41%

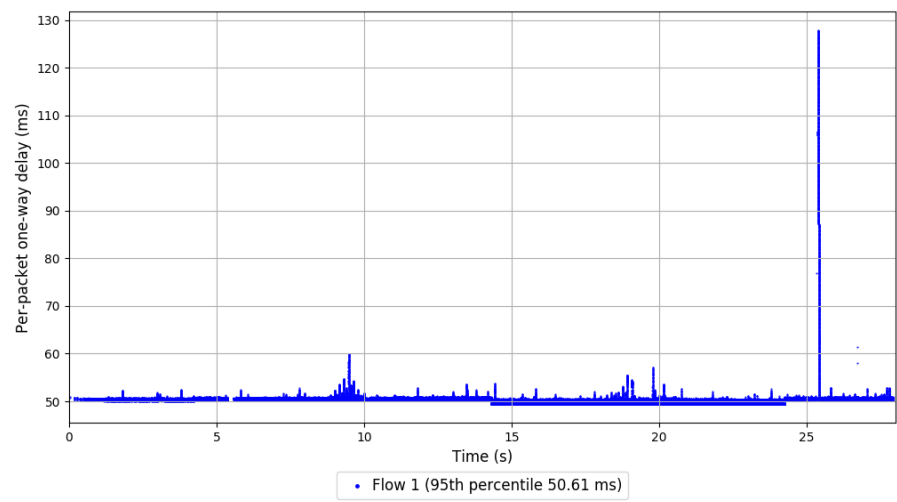
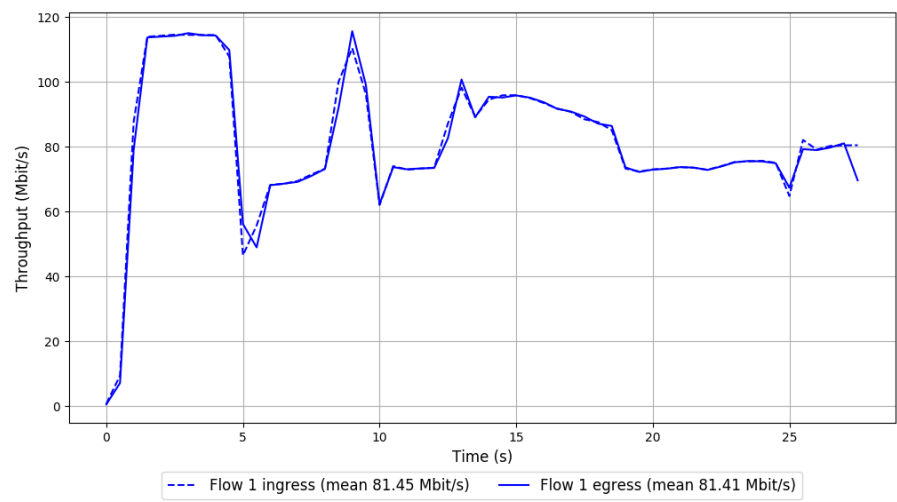
-- Flow 1:

Average throughput: 81.41 Mbit/s

95th percentile per-packet one-way delay: 50.606 ms

Loss rate: 0.41%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-11 12:37:03

End at: 2017-12-11 12:37:33

# Below is generated by plot.py at 2017-12-11 16:26:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.18 Mbit/s

95th percentile per-packet one-way delay: 50.471 ms

Loss rate: 0.34%

-- Flow 1:

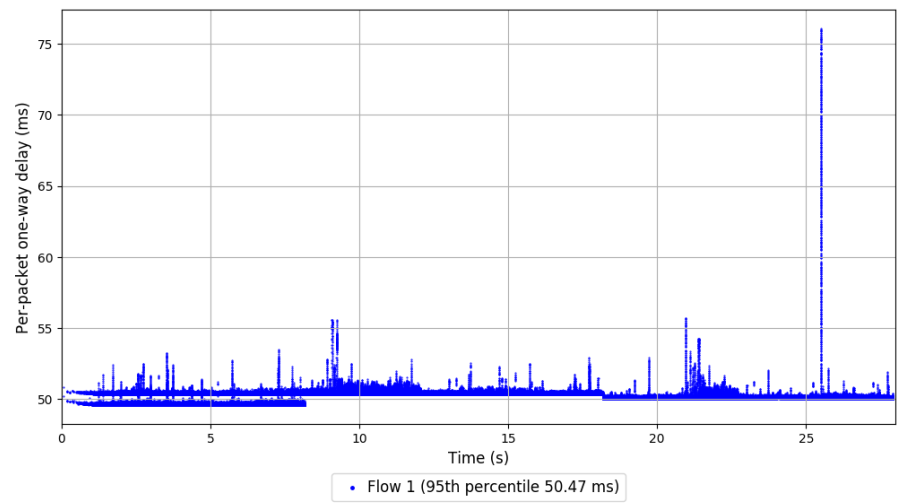
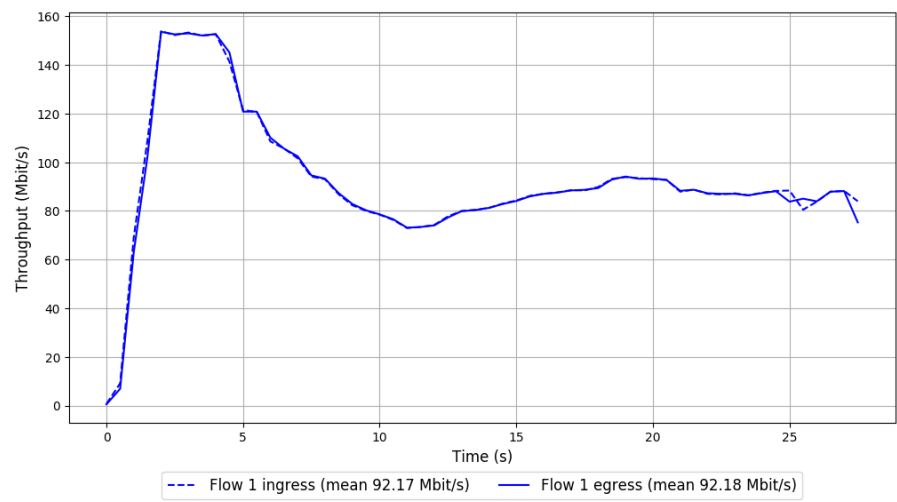
Average throughput: 92.18 Mbit/s

95th percentile per-packet one-way delay: 50.471 ms

Loss rate: 0.34%



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-11 12:47:36

End at: 2017-12-11 12:48:06

# Below is generated by plot.py at 2017-12-11 16:26:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 80.32 Mbit/s

95th percentile per-packet one-way delay: 50.557 ms

Loss rate: 0.36%

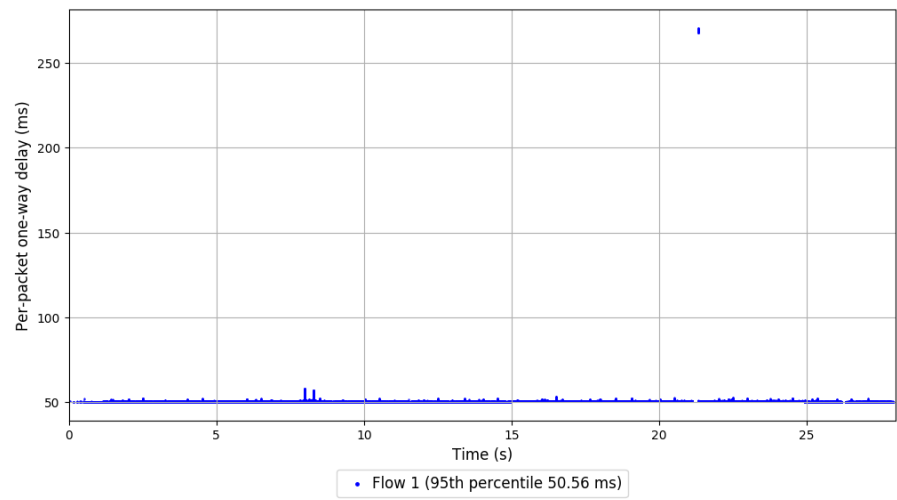
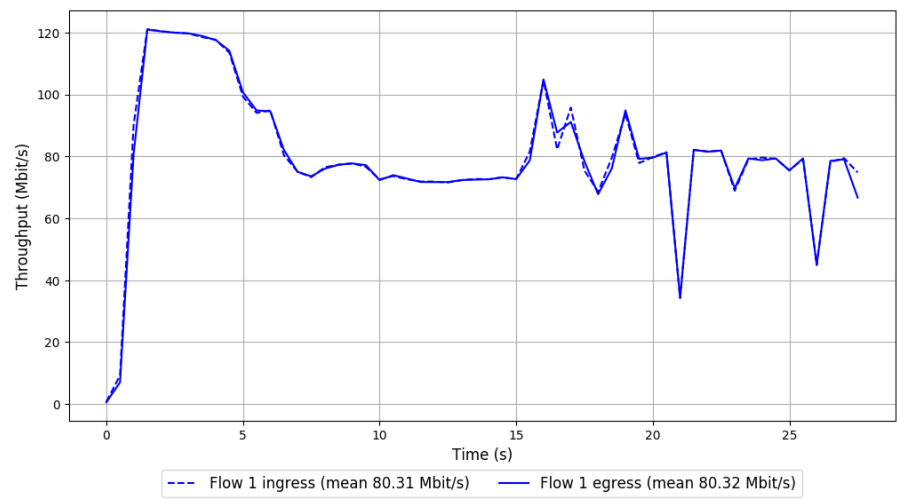
-- Flow 1:

Average throughput: 80.32 Mbit/s

95th percentile per-packet one-way delay: 50.557 ms

Loss rate: 0.36%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-11 12:58:05

End at: 2017-12-11 12:58:35

# Below is generated by plot.py at 2017-12-11 16:26:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 77.91 Mbit/s

95th percentile per-packet one-way delay: 50.784 ms

Loss rate: 0.26%

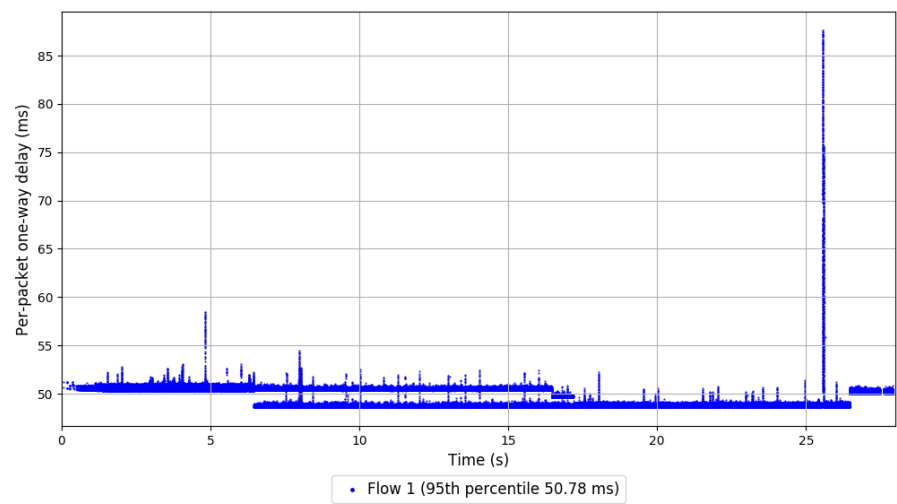
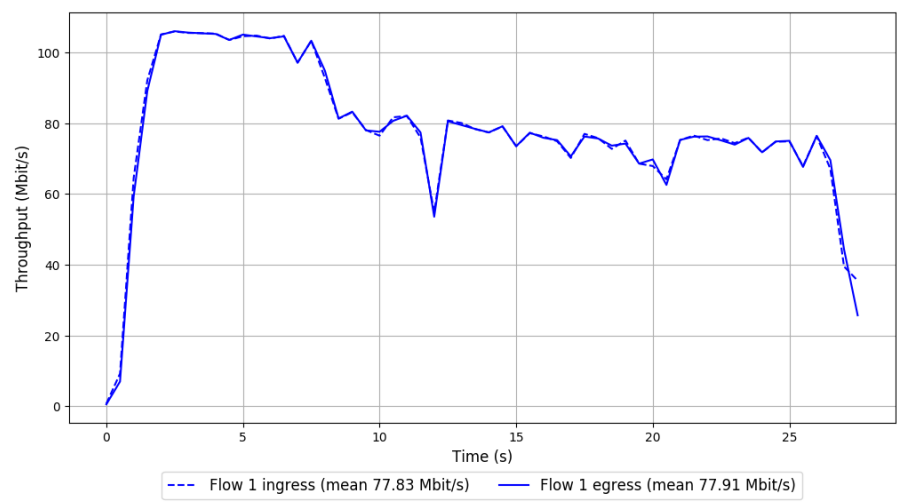
-- Flow 1:

Average throughput: 77.91 Mbit/s

95th percentile per-packet one-way delay: 50.784 ms

Loss rate: 0.26%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-11 13:08:37

End at: 2017-12-11 13:09:07

# Below is generated by plot.py at 2017-12-11 16:26:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 73.41 Mbit/s

95th percentile per-packet one-way delay: 50.509 ms

Loss rate: 0.43%

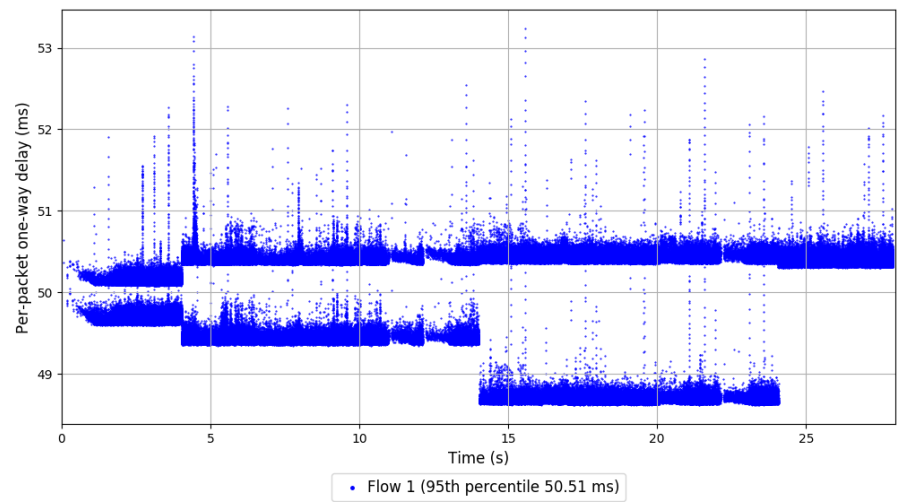
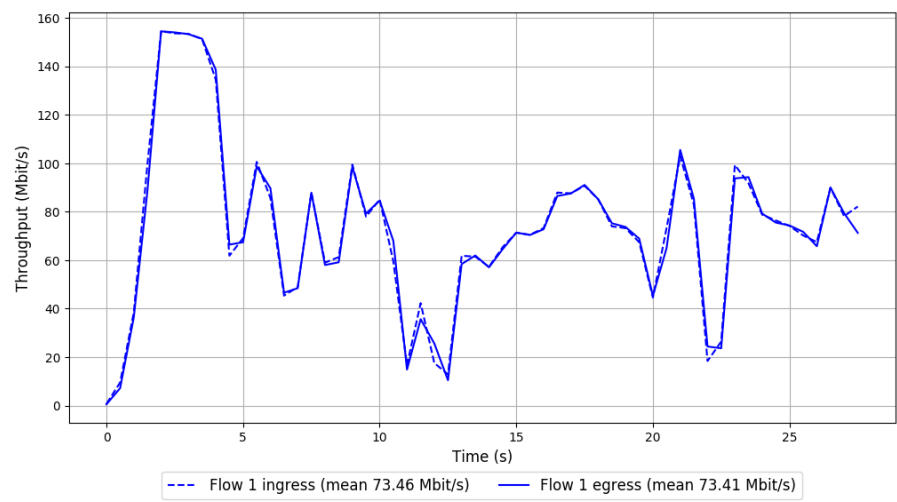
-- Flow 1:

Average throughput: 73.41 Mbit/s

95th percentile per-packet one-way delay: 50.509 ms

Loss rate: 0.43%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-11 13:19:01

End at: 2017-12-11 13:19:31

# Below is generated by plot.py at 2017-12-11 16:27:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 78.35 Mbit/s

95th percentile per-packet one-way delay: 50.766 ms

Loss rate: 0.45%

-- Flow 1:

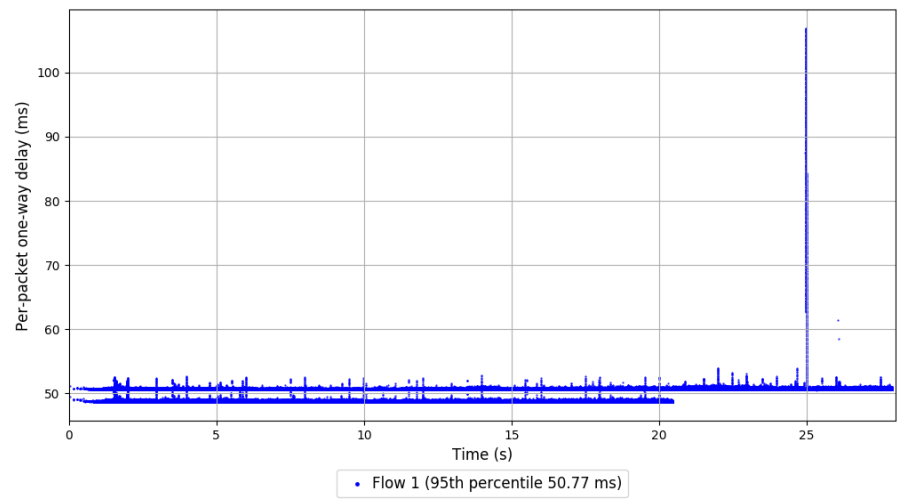
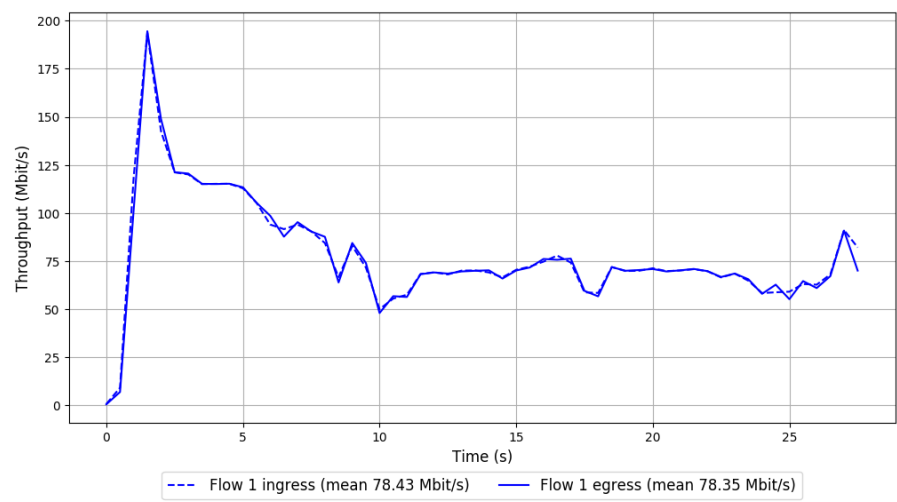
Average throughput: 78.35 Mbit/s

95th percentile per-packet one-way delay: 50.766 ms

Loss rate: 0.45%



Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-11 13:29:31

End at: 2017-12-11 13:30:01

# Below is generated by plot.py at 2017-12-11 16:27:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 74.19 Mbit/s

95th percentile per-packet one-way delay: 50.660 ms

Loss rate: 0.17%

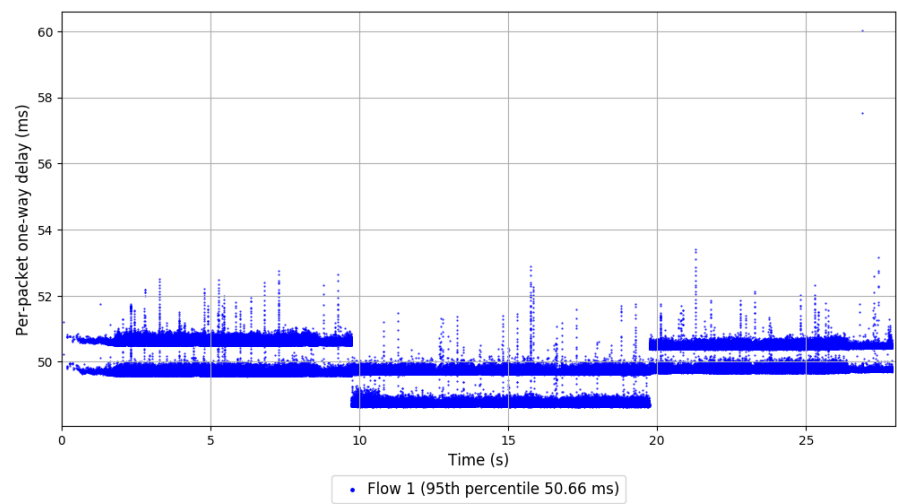
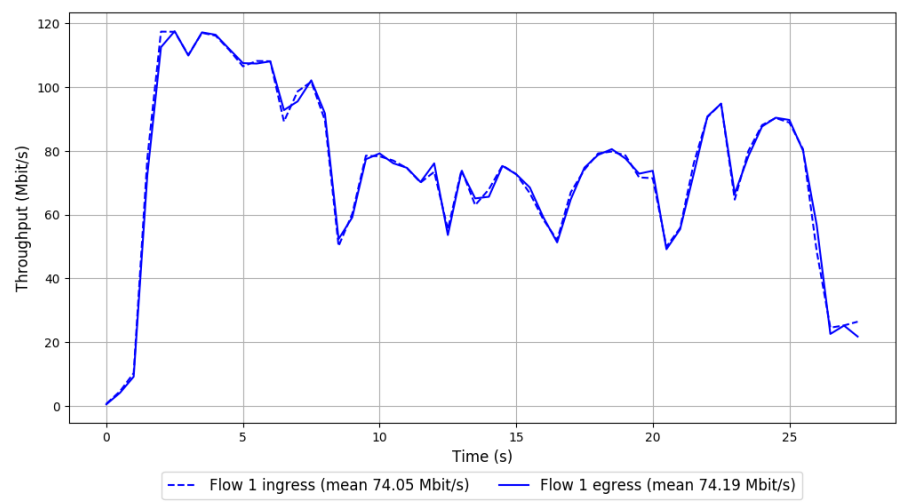
-- Flow 1:

Average throughput: 74.19 Mbit/s

95th percentile per-packet one-way delay: 50.660 ms

Loss rate: 0.17%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-11 13:39:59

End at: 2017-12-11 13:40:29

# Below is generated by plot.py at 2017-12-11 16:27:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 70.53 Mbit/s

95th percentile per-packet one-way delay: 50.541 ms

Loss rate: 0.37%

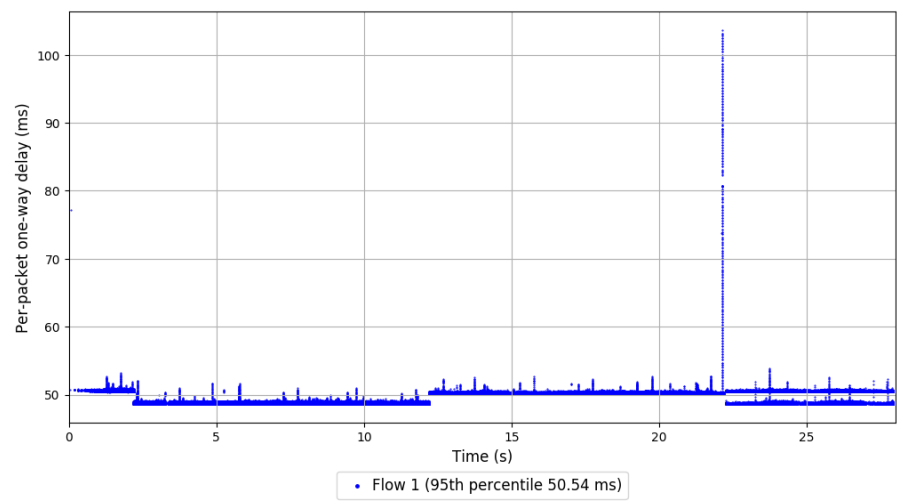
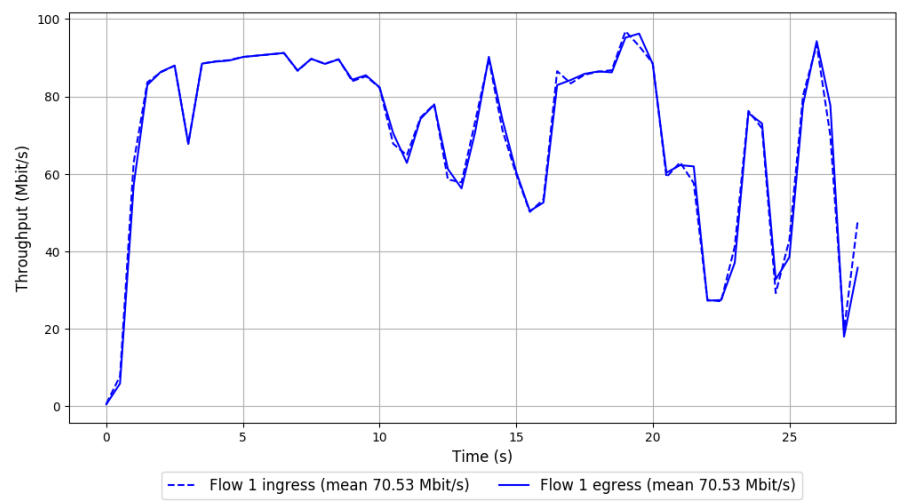
-- Flow 1:

Average throughput: 70.53 Mbit/s

95th percentile per-packet one-way delay: 50.541 ms

Loss rate: 0.37%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-11 13:50:24

End at: 2017-12-11 13:50:54

# Below is generated by plot.py at 2017-12-11 16:28:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 77.36 Mbit/s

95th percentile per-packet one-way delay: 50.702 ms

Loss rate: 0.36%

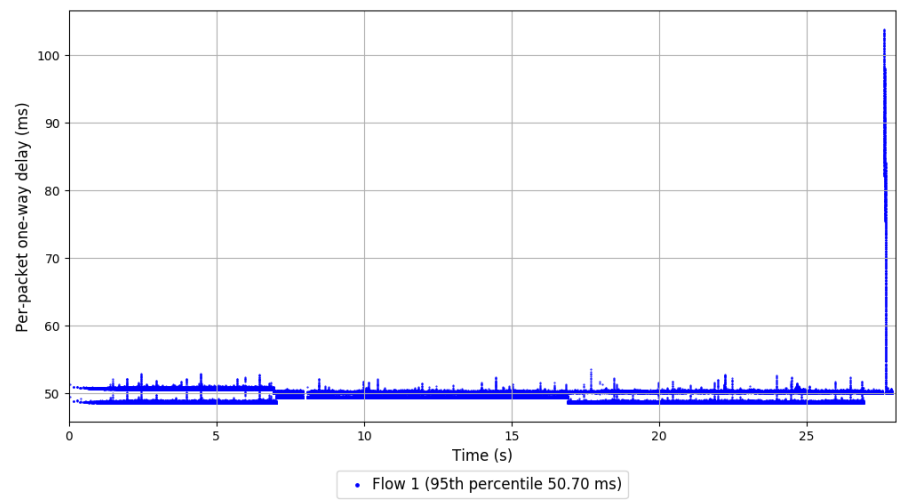
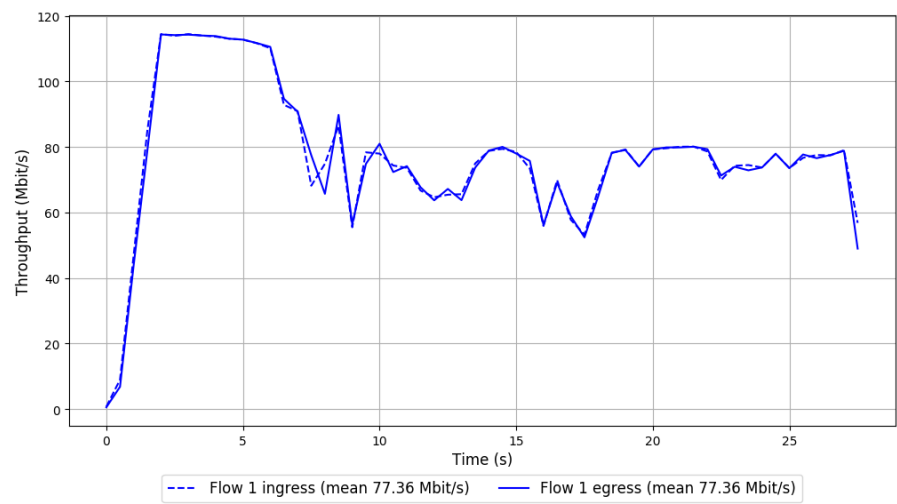
-- Flow 1:

Average throughput: 77.36 Mbit/s

95th percentile per-packet one-way delay: 50.702 ms

Loss rate: 0.36%

Run 10: Report of Copa — Data Link



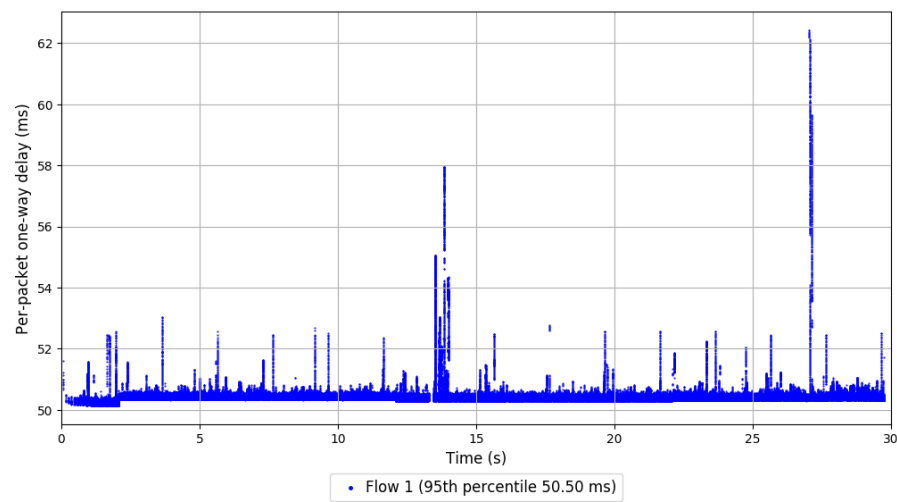
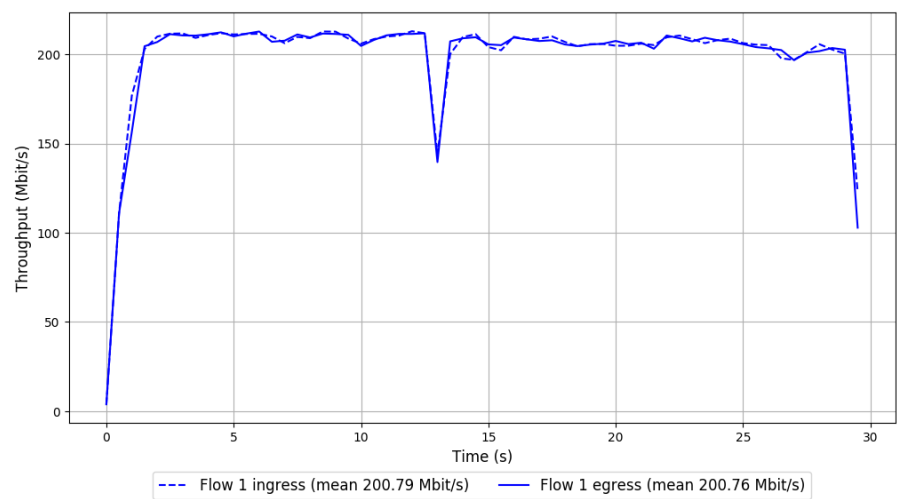
```
Run 1: Statistics of Indigo

Start at: 2017-12-11 12:13:21
End at: 2017-12-11 12:13:51

# Below is generated by plot.py at 2017-12-11 16:30:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.76 Mbit/s
95th percentile per-packet one-way delay: 50.504 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 200.76 Mbit/s
95th percentile per-packet one-way delay: 50.504 ms
Loss rate: 0.35%
```



Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-11 12:24:00

End at: 2017-12-11 12:24:30

# Below is generated by plot.py at 2017-12-11 16:30:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 198.59 Mbit/s

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

Loss rate: 0.34%

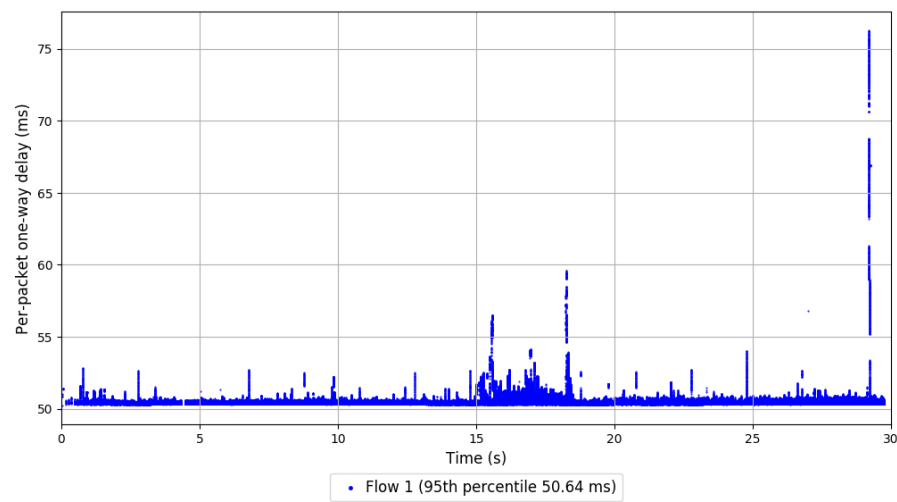
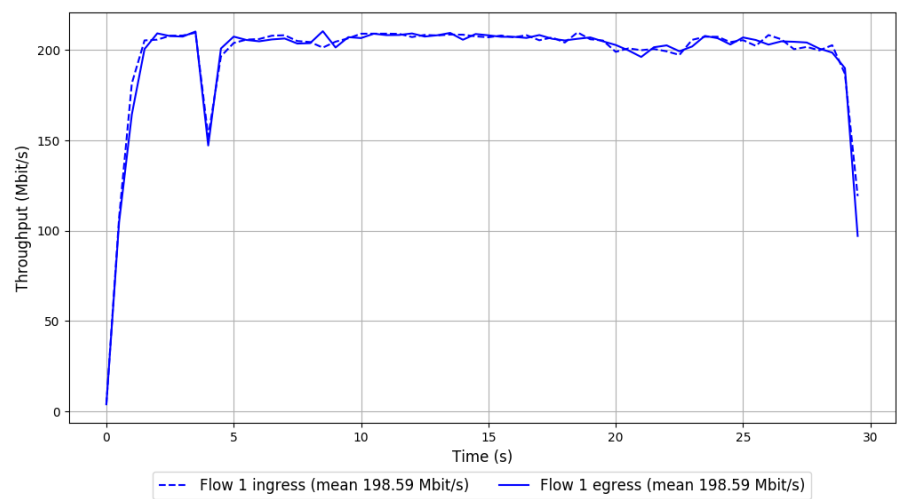
-- Flow 1:

Average throughput: 198.59 Mbit/s

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

Loss rate: 0.34%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-11 12:34:39

End at: 2017-12-11 12:35:09

# Below is generated by plot.py at 2017-12-11 16:30:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 199.91 Mbit/s

95th percentile per-packet one-way delay: 50.730 ms

Loss rate: 0.34%

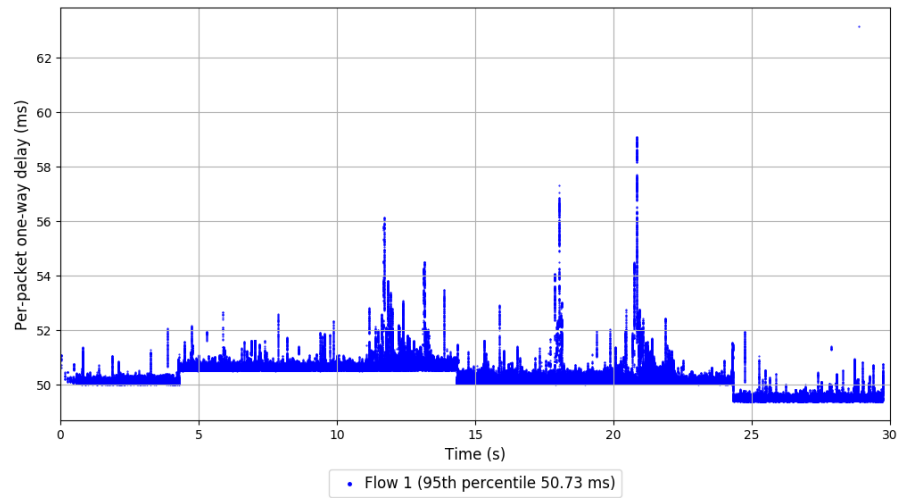
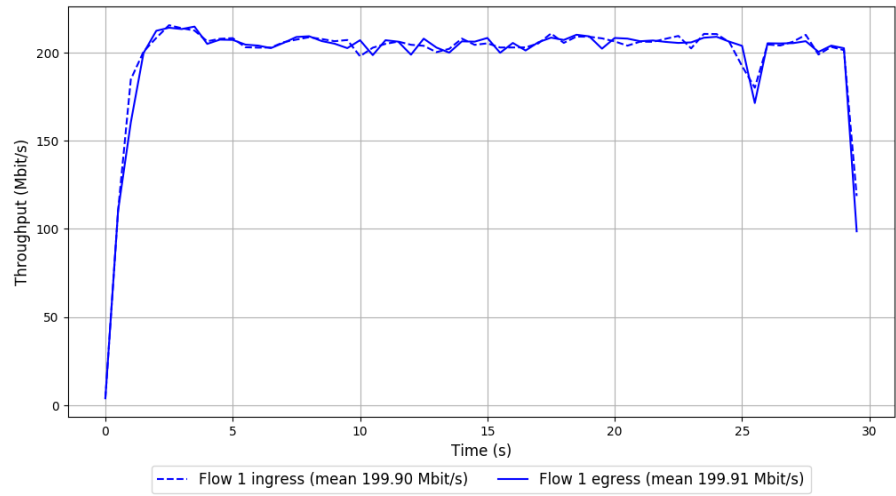
-- Flow 1:

Average throughput: 199.91 Mbit/s

95th percentile per-packet one-way delay: 50.730 ms

Loss rate: 0.34%

### Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-11 12:45:12

End at: 2017-12-11 12:45:42

# Below is generated by plot.py at 2017-12-11 16:30:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 178.06 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.34%

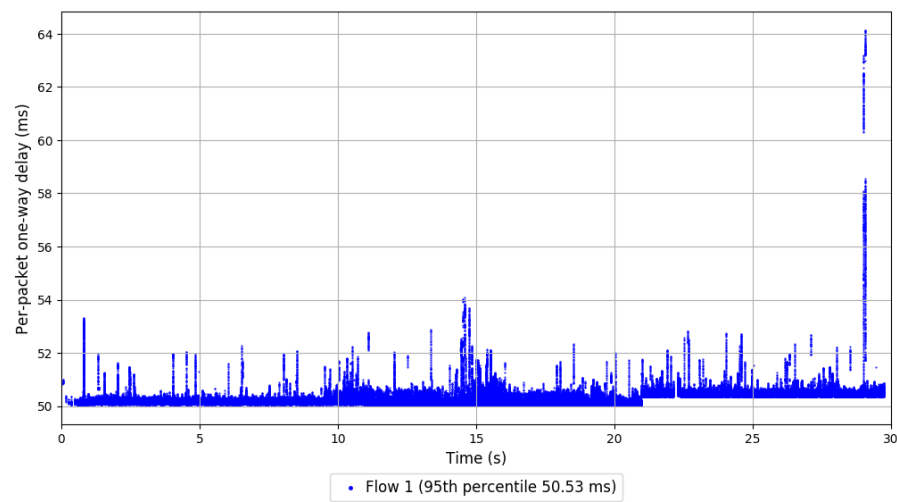
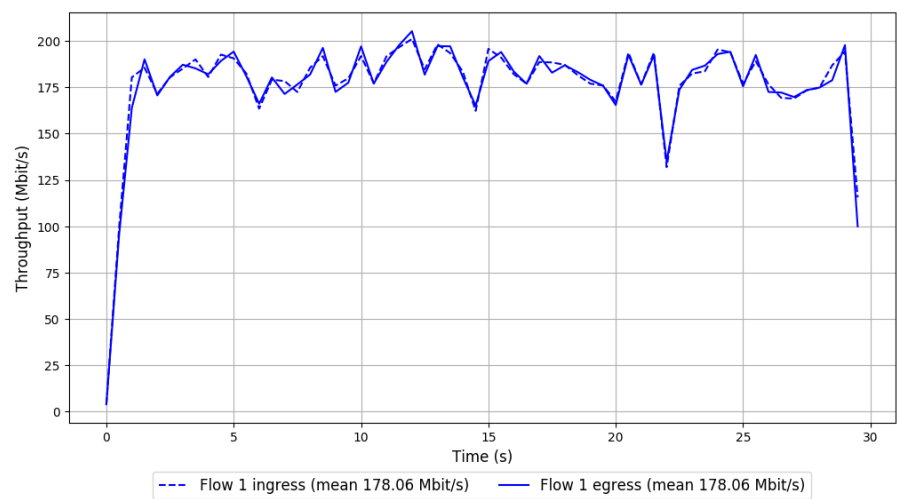
-- Flow 1:

Average throughput: 178.06 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.34%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-11 12:55:43

End at: 2017-12-11 12:56:13

# Below is generated by plot.py at 2017-12-11 16:30:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 171.49 Mbit/s

95th percentile per-packet one-way delay: 50.770 ms

Loss rate: 0.33%

-- Flow 1:

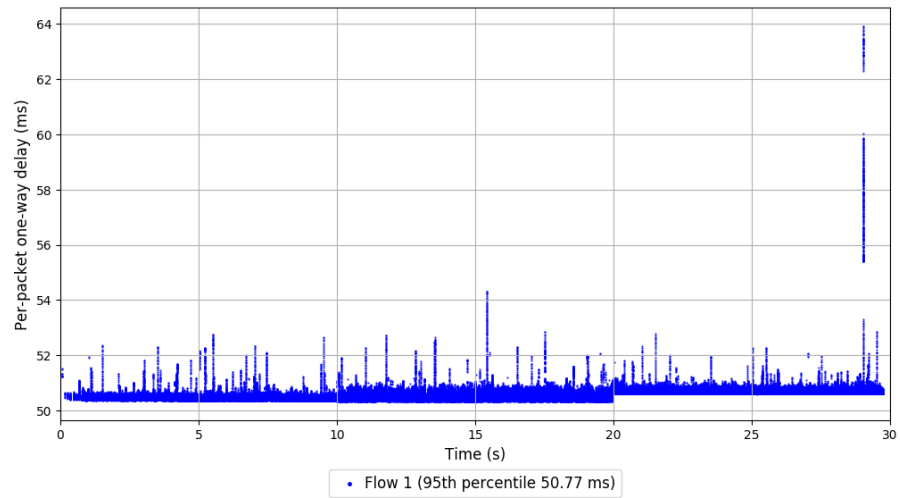
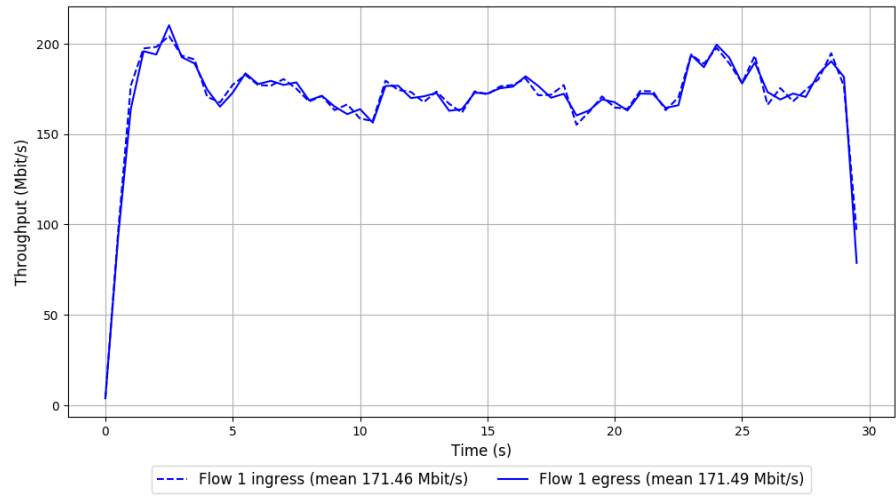
Average throughput: 171.49 Mbit/s

95th percentile per-packet one-way delay: 50.770 ms

Loss rate: 0.33%



### Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-11 13:06:13

End at: 2017-12-11 13:06:43

# Below is generated by plot.py at 2017-12-11 16:30:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 161.50 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.36%

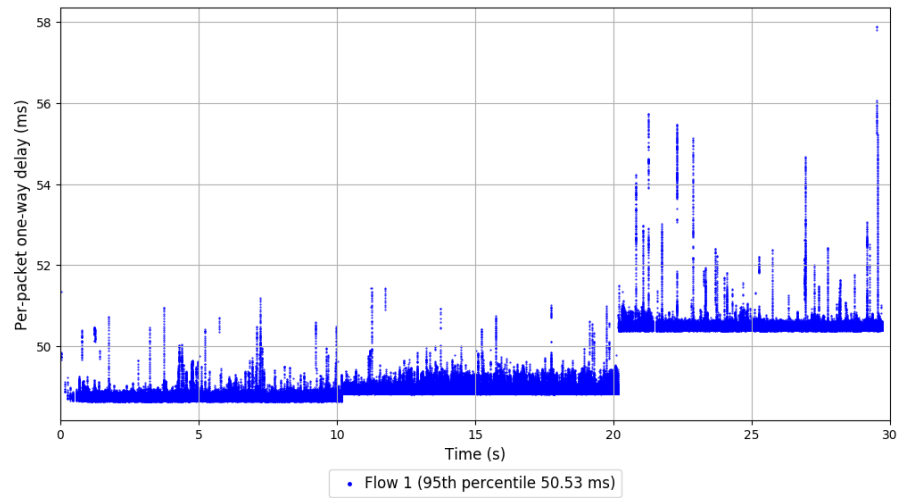
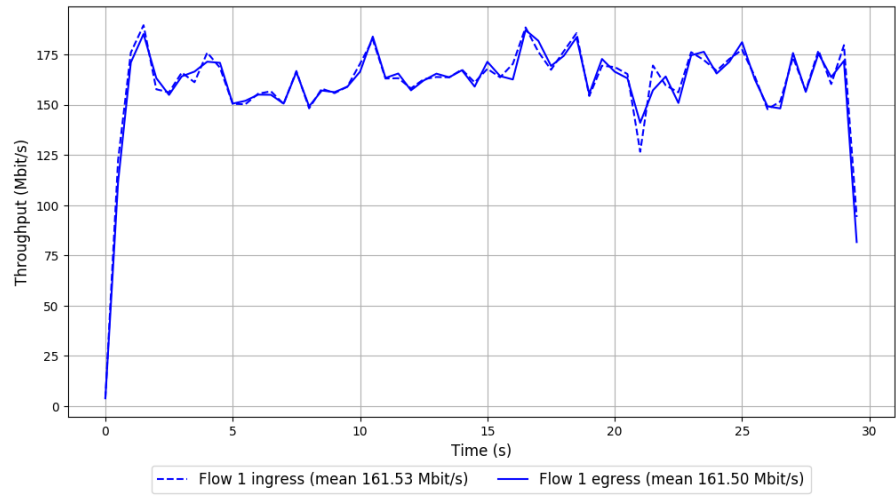
-- Flow 1:

Average throughput: 161.50 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.36%

## Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-11 13:16:38

End at: 2017-12-11 13:17:08

# Below is generated by plot.py at 2017-12-11 16:30:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 162.35 Mbit/s

95th percentile per-packet one-way delay: 50.464 ms

Loss rate: 0.35%

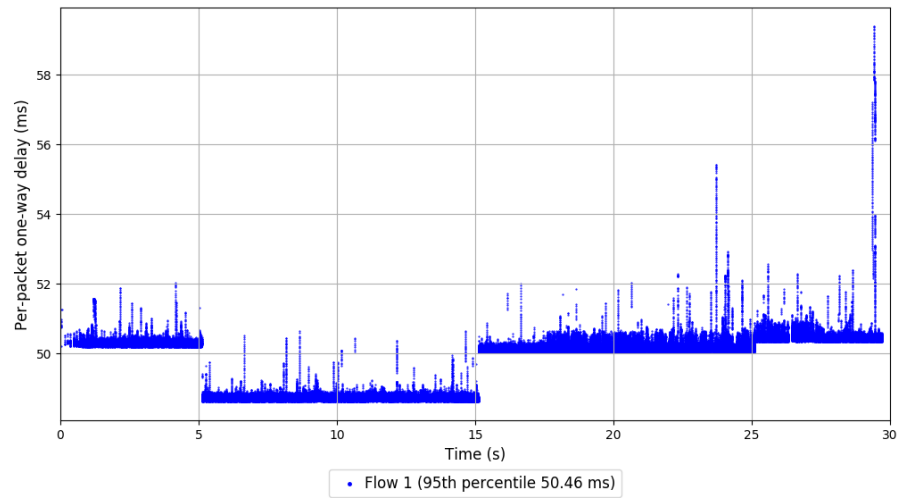
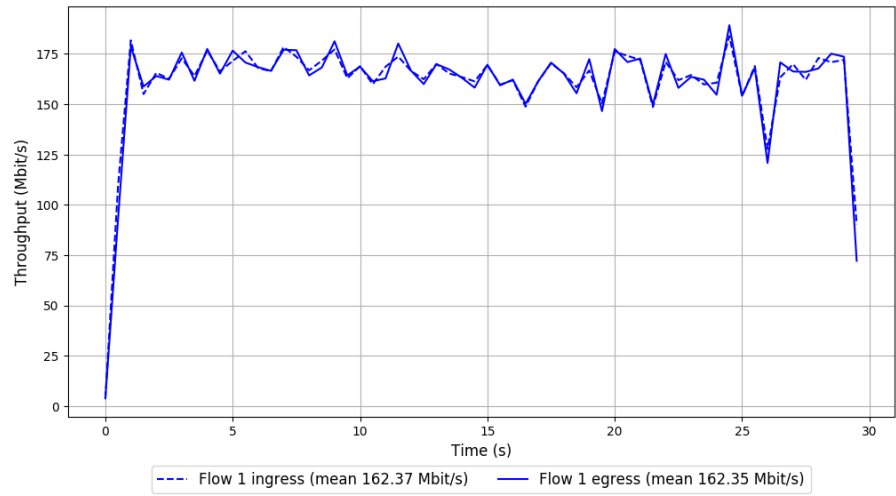
-- Flow 1:

Average throughput: 162.35 Mbit/s

95th percentile per-packet one-way delay: 50.464 ms

Loss rate: 0.35%

### Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-11 13:27:07

End at: 2017-12-11 13:27:37

# Below is generated by plot.py at 2017-12-11 16:31:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 165.40 Mbit/s

95th percentile per-packet one-way delay: 50.476 ms

Loss rate: 0.34%

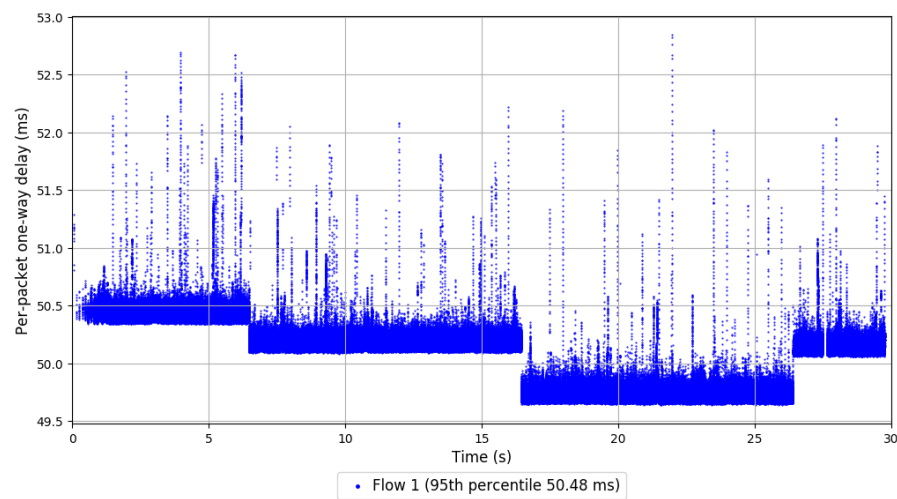
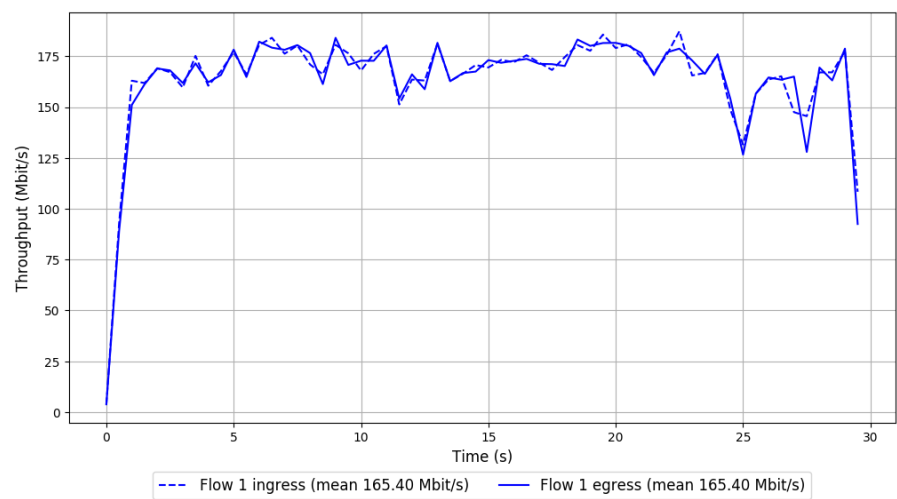
-- Flow 1:

Average throughput: 165.40 Mbit/s

95th percentile per-packet one-way delay: 50.476 ms

Loss rate: 0.34%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-11 13:37:36

End at: 2017-12-11 13:38:06

# Below is generated by plot.py at 2017-12-11 16:33:10

# Datalink statistics

-- Total of 1 flow:

Average throughput: 156.83 Mbit/s

95th percentile per-packet one-way delay: 50.749 ms

Loss rate: 0.33%

-- Flow 1:

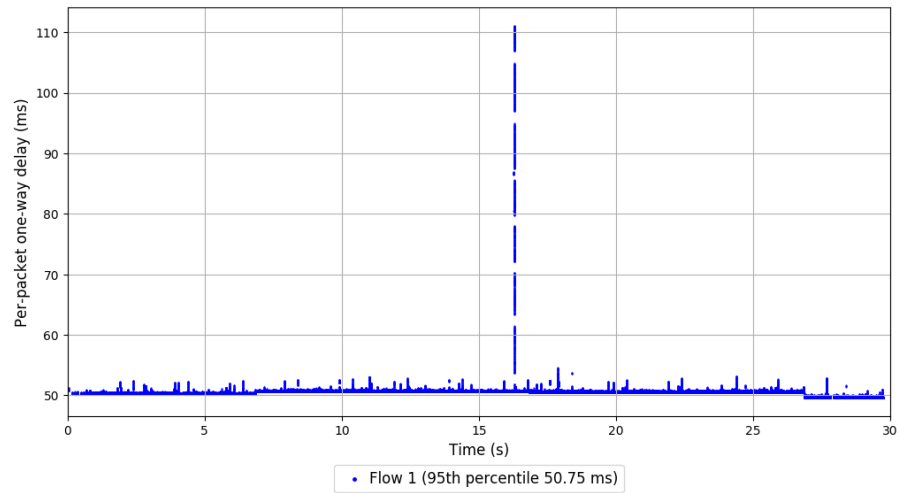
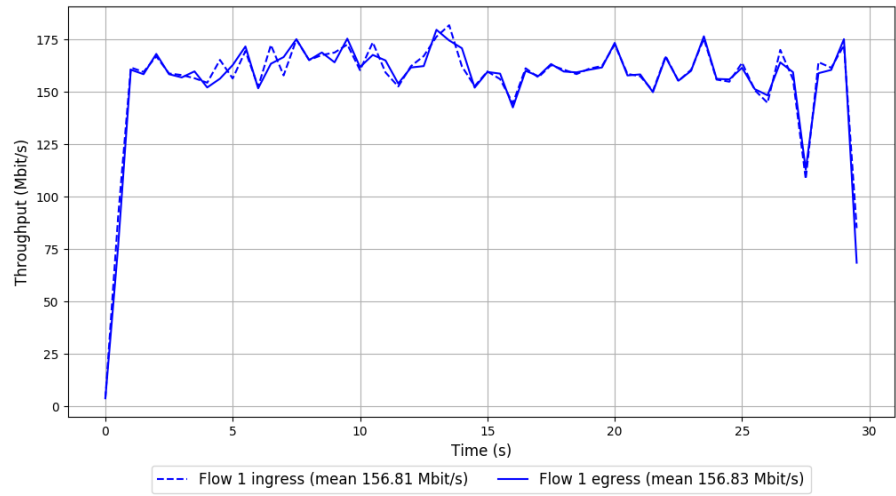
Average throughput: 156.83 Mbit/s

95th percentile per-packet one-way delay: 50.749 ms

Loss rate: 0.33%



### Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-11 13:48:01

End at: 2017-12-11 13:48:31

# Below is generated by plot.py at 2017-12-11 16:33:18

# Datalink statistics

-- Total of 1 flow:

Average throughput: 165.72 Mbit/s

95th percentile per-packet one-way delay: 50.487 ms

Loss rate: 0.39%

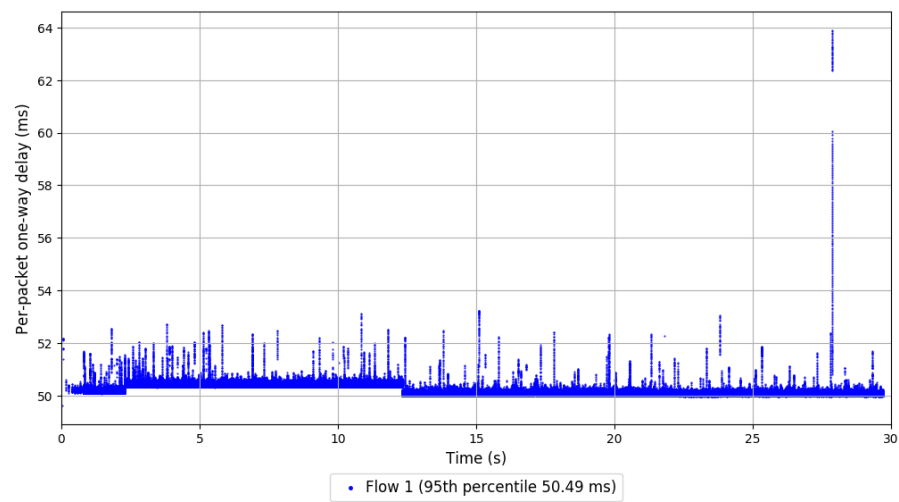
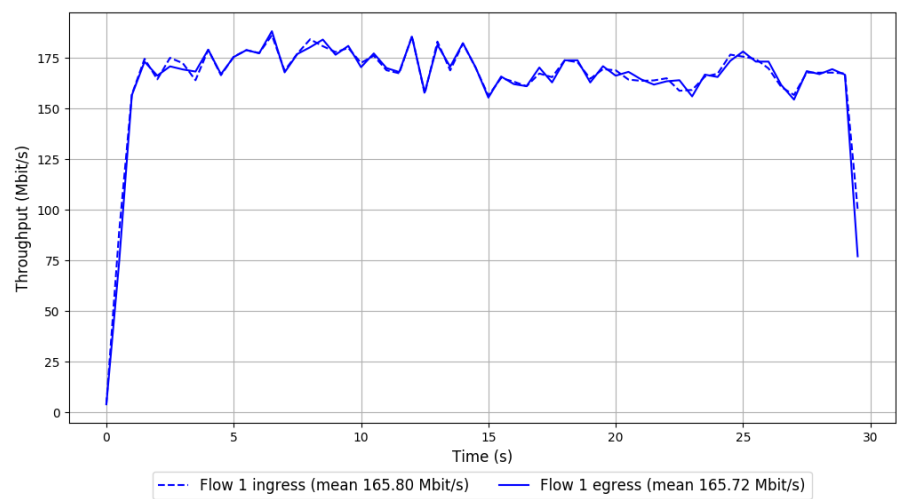
-- Flow 1:

Average throughput: 165.72 Mbit/s

95th percentile per-packet one-way delay: 50.487 ms

Loss rate: 0.39%

Run 10: Report of Indigo — Data Link

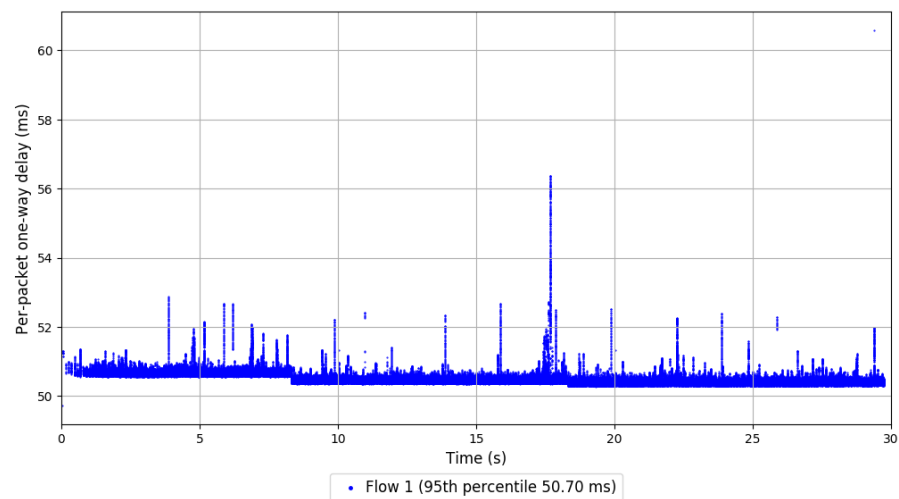
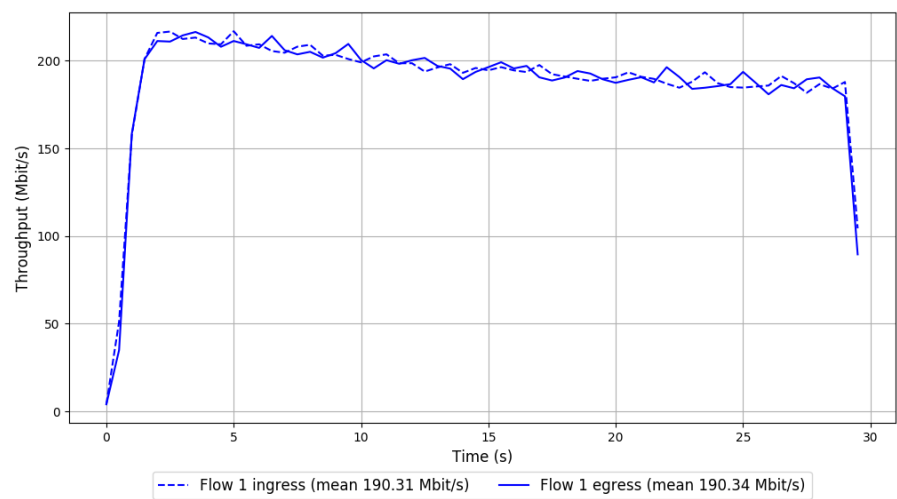


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-11 12:11:55
End at: 2017-12-11 12:12:25

# Below is generated by plot.py at 2017-12-11 16:33:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.34 Mbit/s
95th percentile per-packet one-way delay: 50.704 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 190.34 Mbit/s
95th percentile per-packet one-way delay: 50.704 ms
Loss rate: 0.32%
```

Run 1: Report of Indigo-calib — Data Link

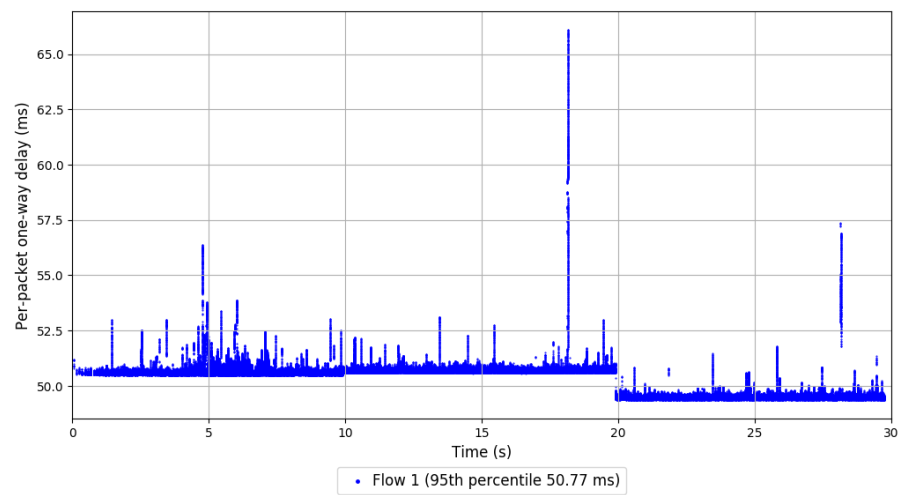
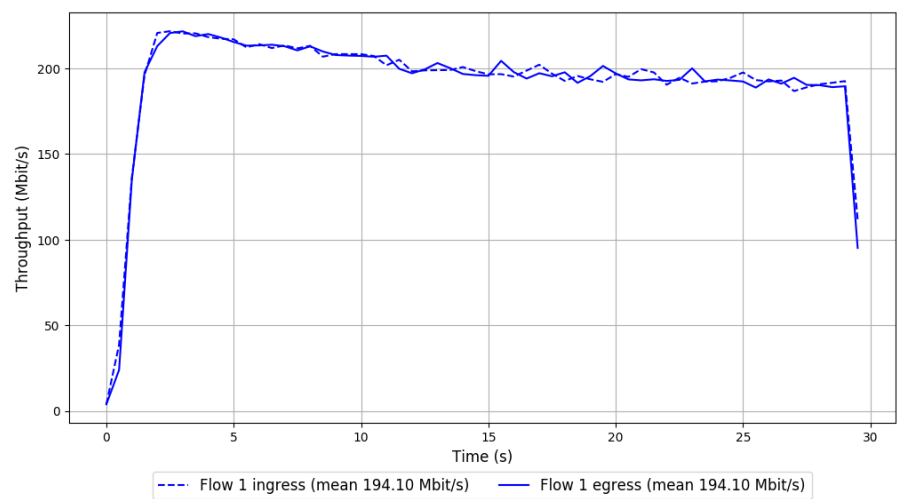


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-11 12:22:33
End at: 2017-12-11 12:23:03

# Below is generated by plot.py at 2017-12-11 16:33:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.10 Mbit/s
95th percentile per-packet one-way delay: 50.766 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 194.10 Mbit/s
95th percentile per-packet one-way delay: 50.766 ms
Loss rate: 0.34%
```

Run 2: Report of Indigo-calib — Data Link



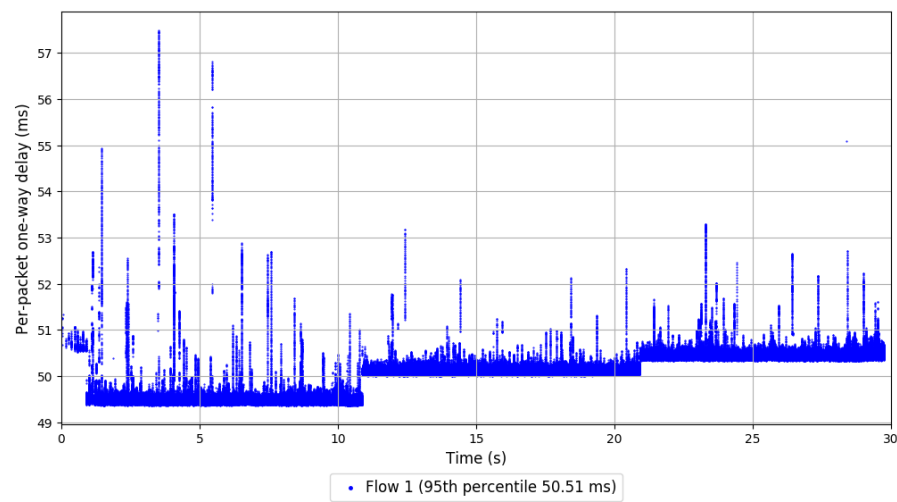
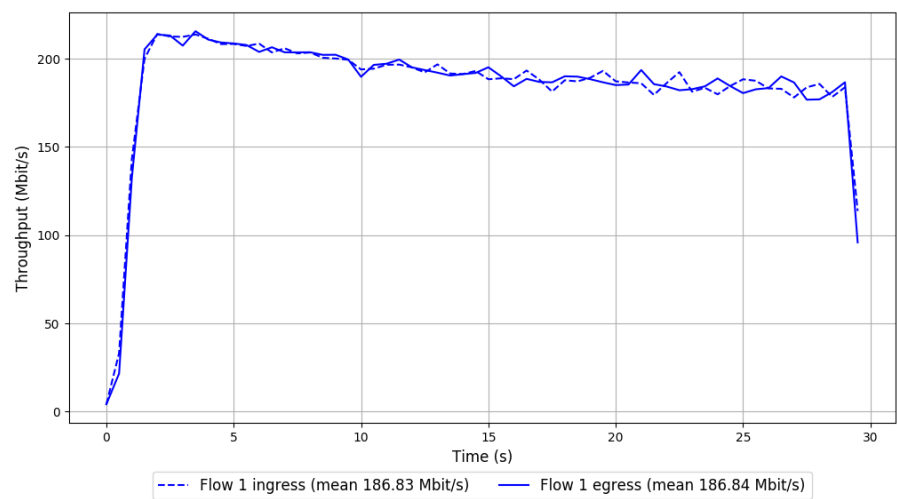
```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-11 12:33:12
End at: 2017-12-11 12:33:42

# Below is generated by plot.py at 2017-12-11 16:33:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.84 Mbit/s
95th percentile per-packet one-way delay: 50.508 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 186.84 Mbit/s
95th percentile per-packet one-way delay: 50.508 ms
Loss rate: 0.34%
```



Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-11 12:43:49

End at: 2017-12-11 12:44:19

# Below is generated by plot.py at 2017-12-11 16:33:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 140.41 Mbit/s

95th percentile per-packet one-way delay: 50.770 ms

Loss rate: 0.47%

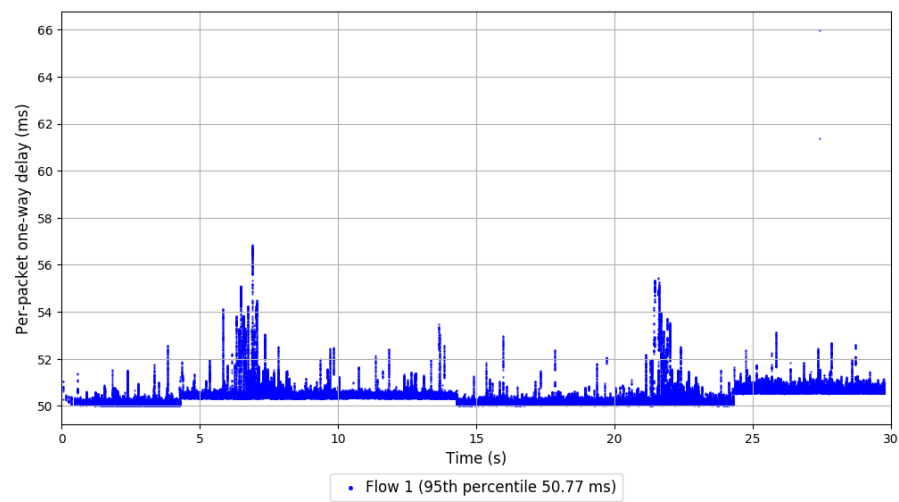
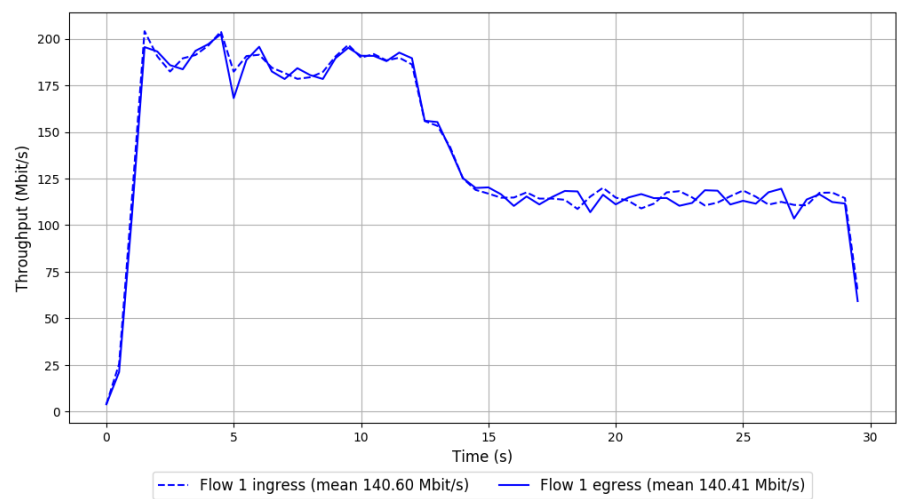
-- Flow 1:

Average throughput: 140.41 Mbit/s

95th percentile per-packet one-way delay: 50.770 ms

Loss rate: 0.47%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-11 12:54:20

End at: 2017-12-11 12:54:50

# Below is generated by plot.py at 2017-12-11 16:33:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 146.07 Mbit/s

95th percentile per-packet one-way delay: 50.692 ms

Loss rate: 0.26%

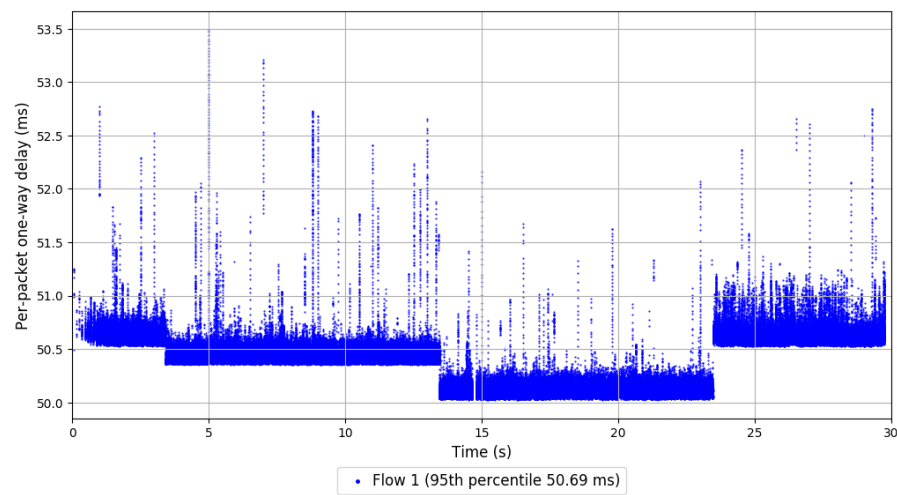
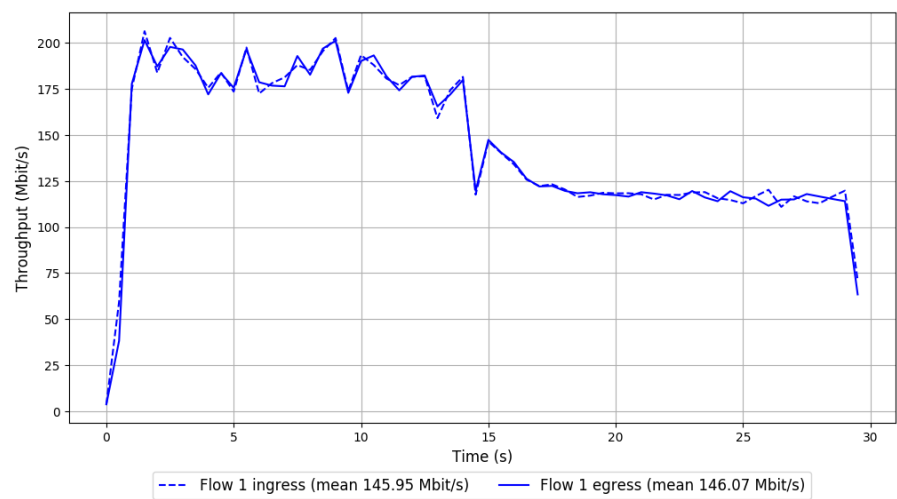
-- Flow 1:

Average throughput: 146.07 Mbit/s

95th percentile per-packet one-way delay: 50.692 ms

Loss rate: 0.26%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-11 13:04:51

End at: 2017-12-11 13:05:21

# Below is generated by plot.py at 2017-12-11 16:33:55

# Datalink statistics

-- Total of 1 flow:

Average throughput: 128.23 Mbit/s

95th percentile per-packet one-way delay: 50.497 ms

Loss rate: 0.44%

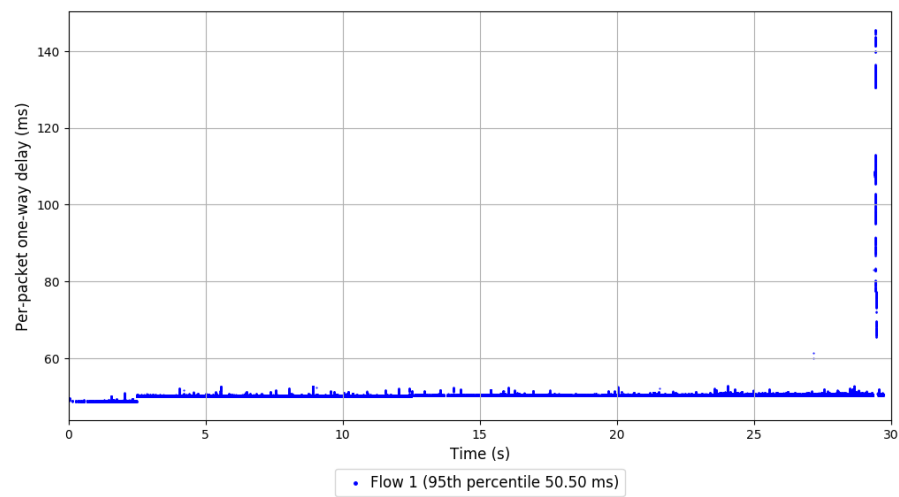
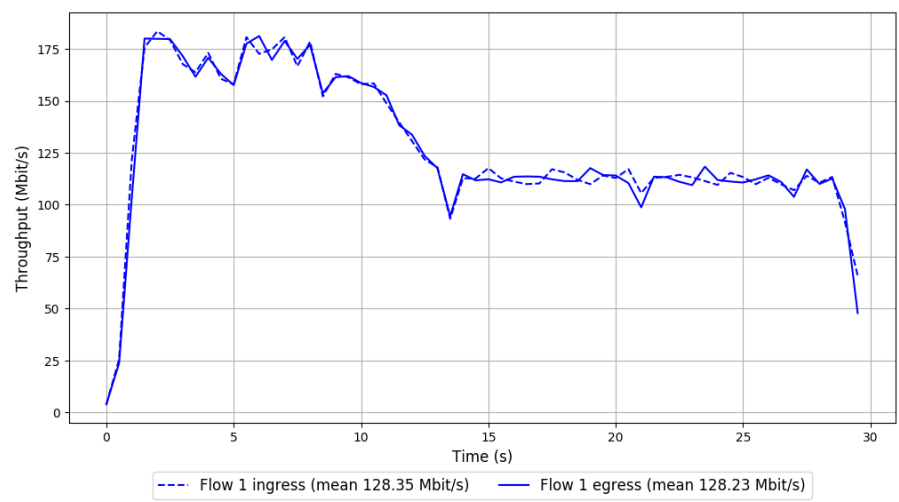
-- Flow 1:

Average throughput: 128.23 Mbit/s

95th percentile per-packet one-way delay: 50.497 ms

Loss rate: 0.44%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-11 13:15:14

End at: 2017-12-11 13:15:44

# Below is generated by plot.py at 2017-12-11 16:34:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 147.95 Mbit/s

95th percentile per-packet one-way delay: 50.755 ms

Loss rate: 0.26%

-- Flow 1:

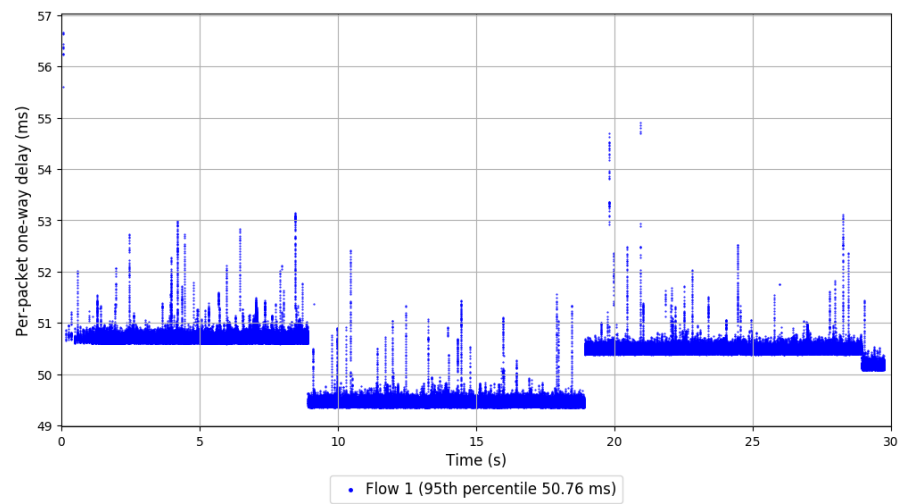
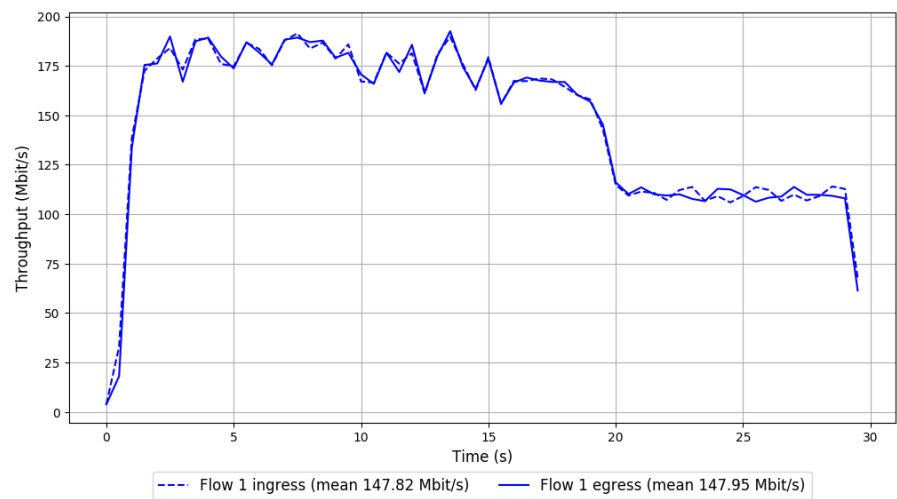
Average throughput: 147.95 Mbit/s

95th percentile per-packet one-way delay: 50.755 ms

Loss rate: 0.26%



Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-11 13:25:45

End at: 2017-12-11 13:26:15

# Below is generated by plot.py at 2017-12-11 16:34:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 127.20 Mbit/s

95th percentile per-packet one-way delay: 50.669 ms

Loss rate: 0.32%

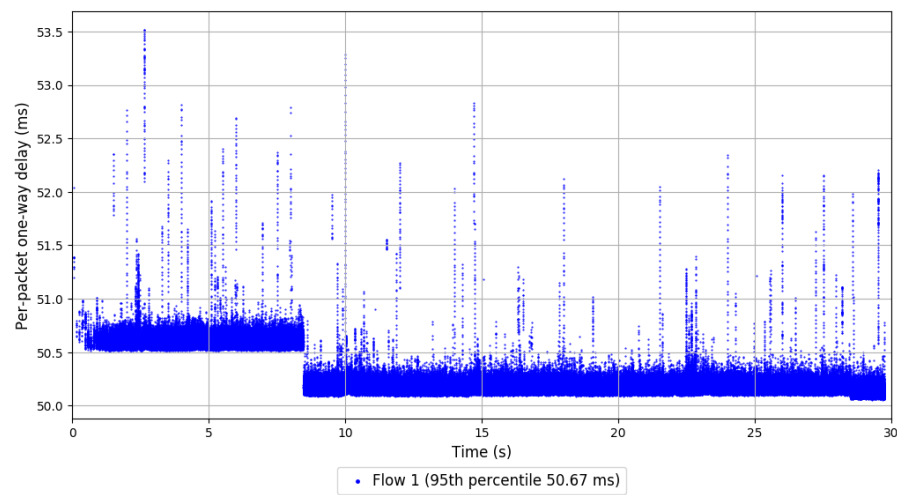
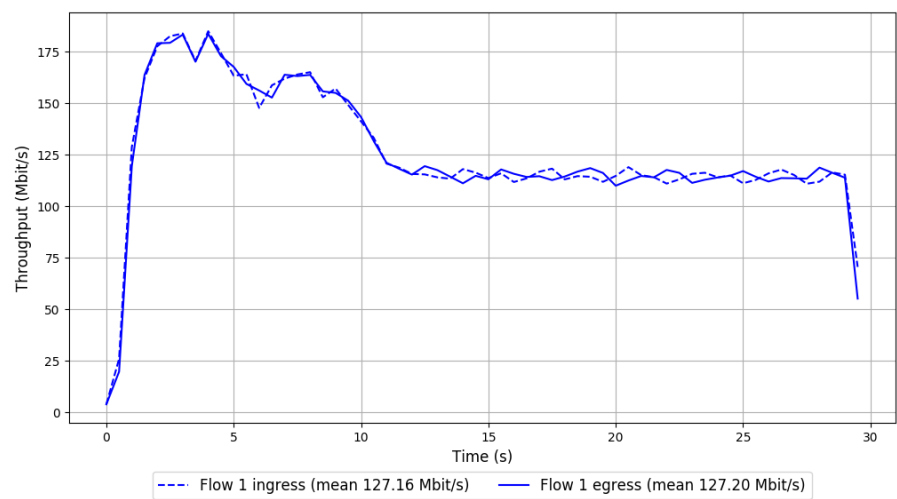
-- Flow 1:

Average throughput: 127.20 Mbit/s

95th percentile per-packet one-way delay: 50.669 ms

Loss rate: 0.32%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-11 13:36:14

End at: 2017-12-11 13:36:44

# Below is generated by plot.py at 2017-12-11 16:34:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 121.50 Mbit/s

95th percentile per-packet one-way delay: 50.730 ms

Loss rate: 0.32%

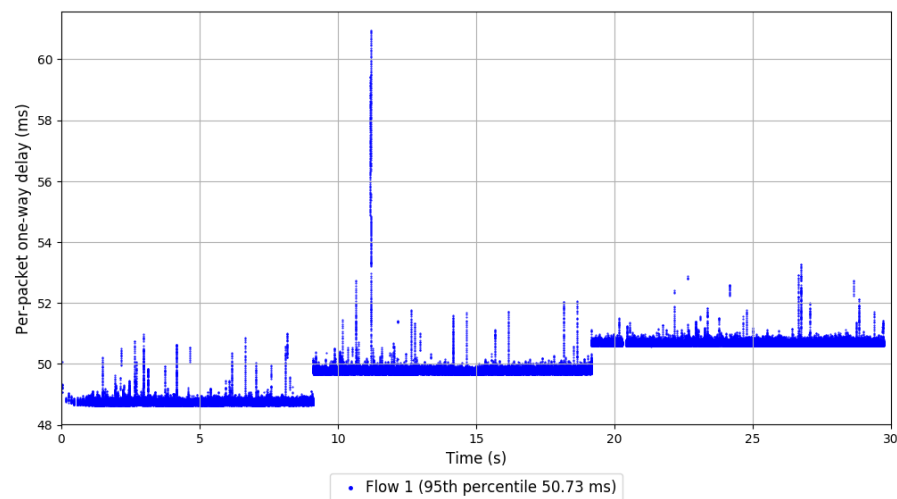
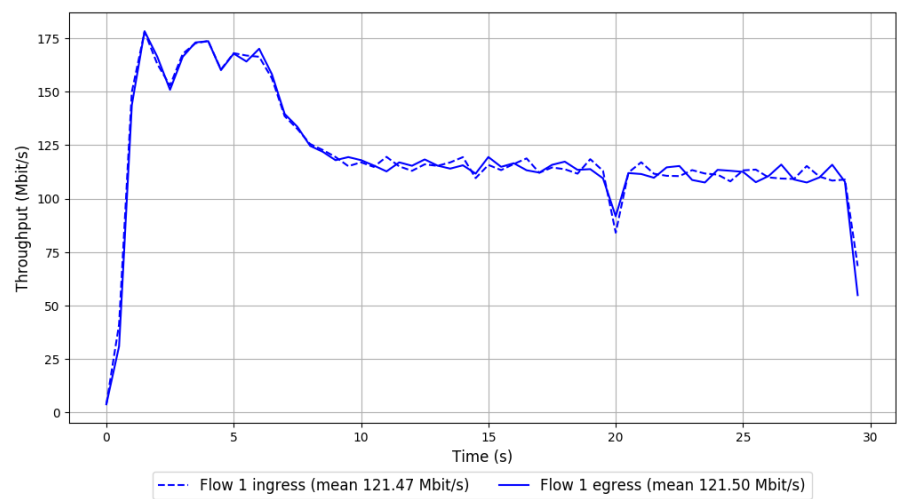
-- Flow 1:

Average throughput: 121.50 Mbit/s

95th percentile per-packet one-way delay: 50.730 ms

Loss rate: 0.32%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-11 13:46:36

End at: 2017-12-11 13:47:06

# Below is generated by plot.py at 2017-12-11 16:34:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 158.45 Mbit/s

95th percentile per-packet one-way delay: 50.690 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 158.45 Mbit/s

95th percentile per-packet one-way delay: 50.690 ms

Loss rate: 0.24%

Run 10: Report of Indigo-calib — Data Link

