

Pantheon Report

Generated at 2017-12-11 16:19:42 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

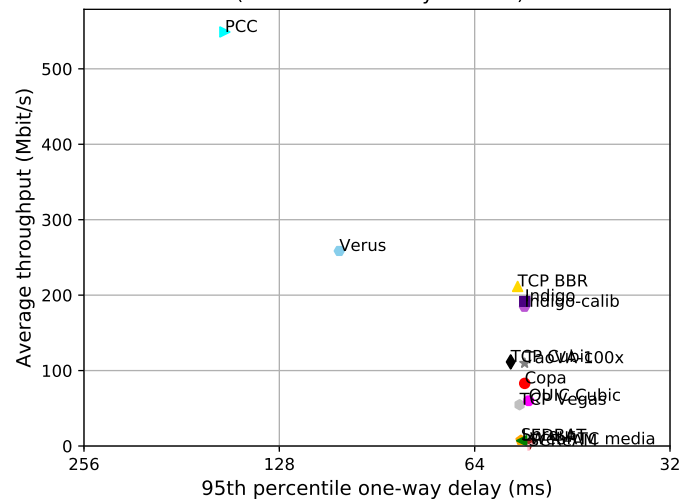
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

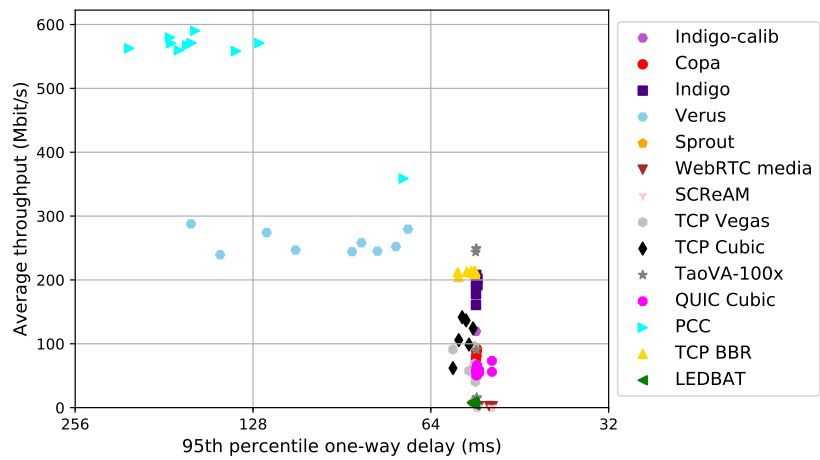
Git summary:

```
branch: 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 @ 03455460fd1a8ffbdad86fab936fdca204b80db
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 Tokyo Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from GCE Tokyo Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	211.55	54.95	0.40
TCP Cubic	6	111.48	56.33	0.33
LEDBAT	10	7.02	54.17	0.54
PCC	10	548.88	155.26	1.48
QUIC Cubic	10	59.98	52.84	0.51
SCReAM	10	0.21	52.85	0.33
WebRTC media	10	2.31	52.66	0.42
Sprout	10	7.71	54.33	0.42
TaoVA-100x	9	109.81	53.61	0.42
TCP Vegas	10	54.69	54.57	0.33
Verus	9	258.58	103.47	1.21
Copa	10	83.03	53.59	0.33
Indigo	10	191.90	53.58	0.40
Indigo-calib	10	184.56	53.63	0.39

Run 1: Statistics of TCP BBR

Start at: 2017-12-11 12:19:39

End at: 2017-12-11 12:20:09

Below is generated by plot.py at 2017-12-11 15:43:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.81 Mbit/s

95th percentile per-packet one-way delay: 54.559 ms

Loss rate: 0.64%

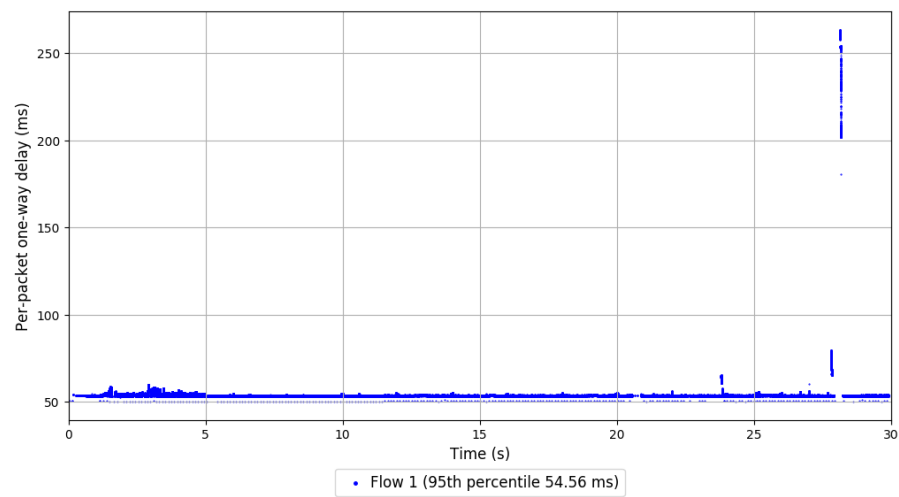
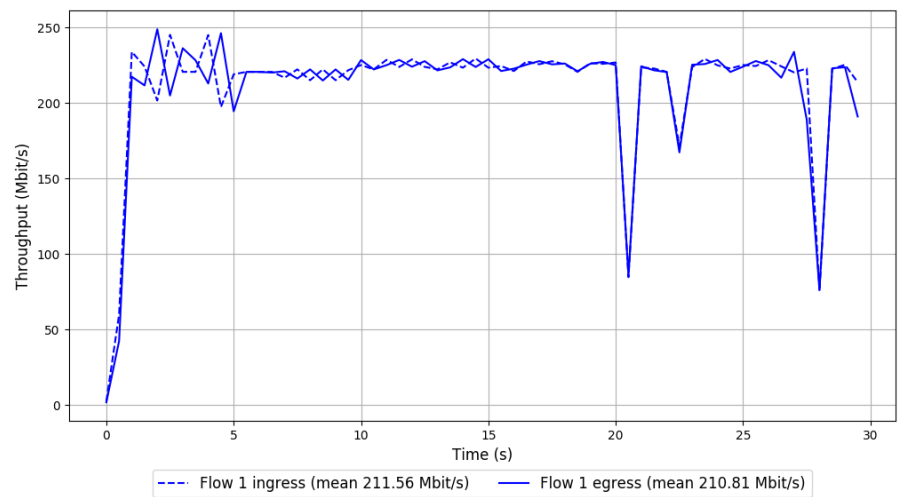
-- Flow 1:

Average throughput: 210.81 Mbit/s

95th percentile per-packet one-way delay: 54.559 ms

Loss rate: 0.64%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-11 12:29:52

End at: 2017-12-11 12:30:22

Below is generated by plot.py at 2017-12-11 15:43:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.65 Mbit/s

95th percentile per-packet one-way delay: 53.883 ms

Loss rate: 0.40%

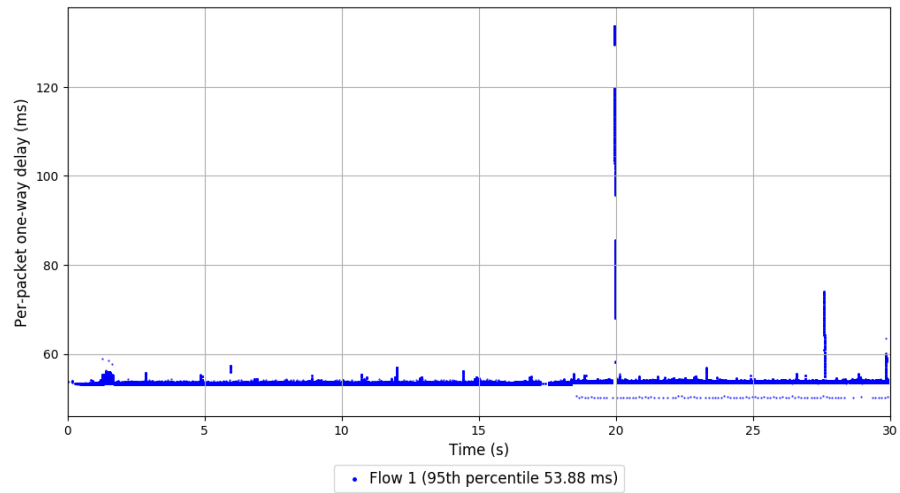
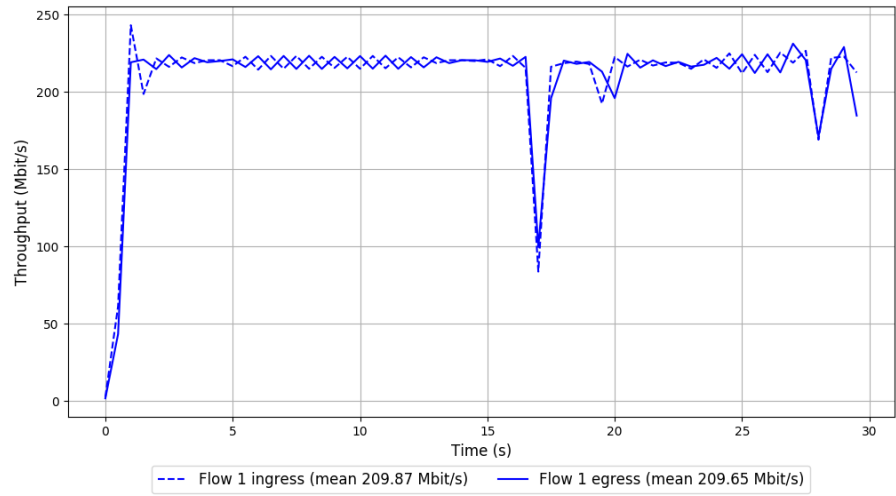
-- Flow 1:

Average throughput: 209.65 Mbit/s

95th percentile per-packet one-way delay: 53.883 ms

Loss rate: 0.40%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-11 12:40:05

End at: 2017-12-11 12:40:35

Below is generated by plot.py at 2017-12-11 15:43:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 204.59 Mbit/s

95th percentile per-packet one-way delay: 57.445 ms

Loss rate: 0.38%

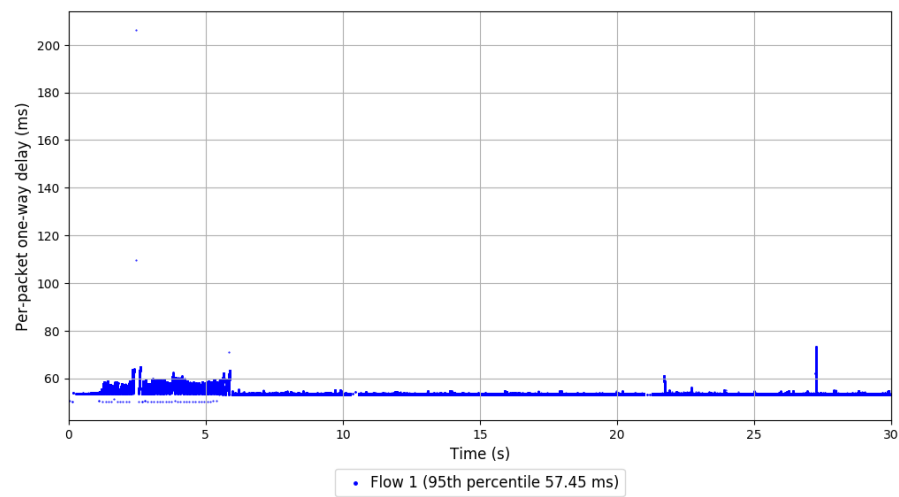
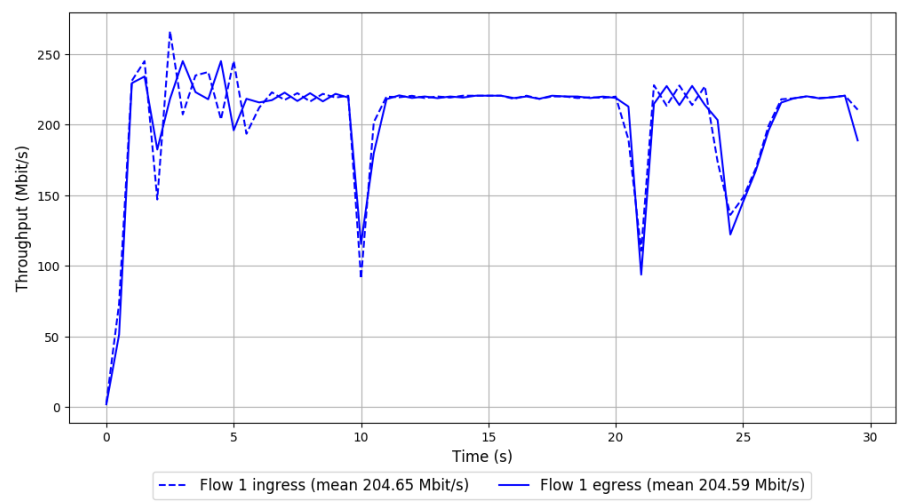
-- Flow 1:

Average throughput: 204.59 Mbit/s

95th percentile per-packet one-way delay: 57.445 ms

Loss rate: 0.38%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

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 15:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.87 Mbit/s

95th percentile per-packet one-way delay: 57.630 ms

Loss rate: 0.36%

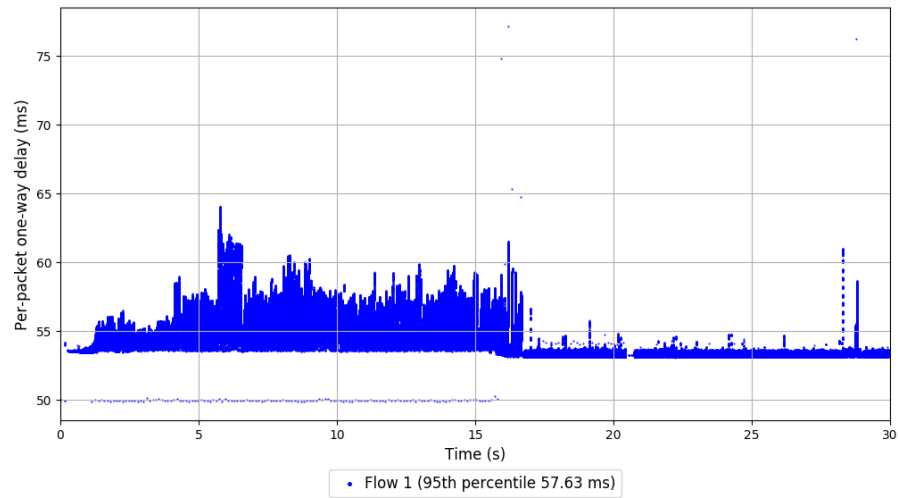
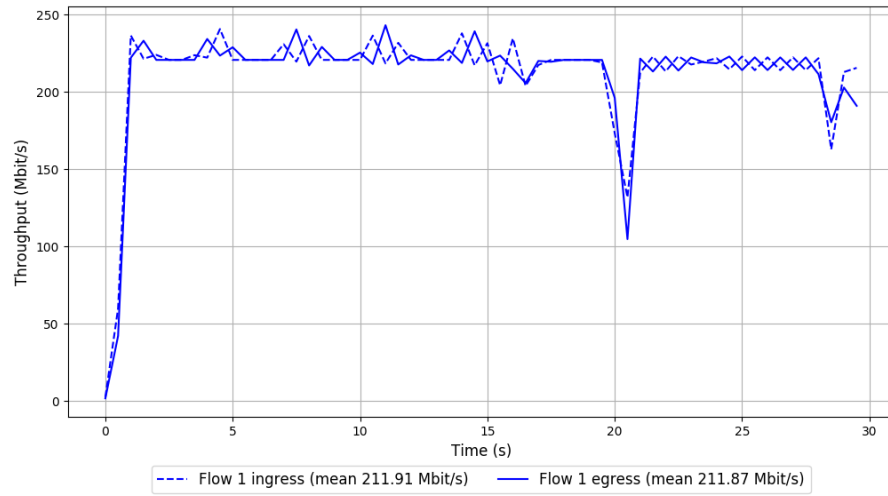
-- Flow 1:

Average throughput: 211.87 Mbit/s

95th percentile per-packet one-way delay: 57.630 ms

Loss rate: 0.36%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-11 13:00:51

End at: 2017-12-11 13:01:21

Below is generated by plot.py at 2017-12-11 15:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.35 Mbit/s

95th percentile per-packet one-way delay: 53.890 ms

Loss rate: 0.35%

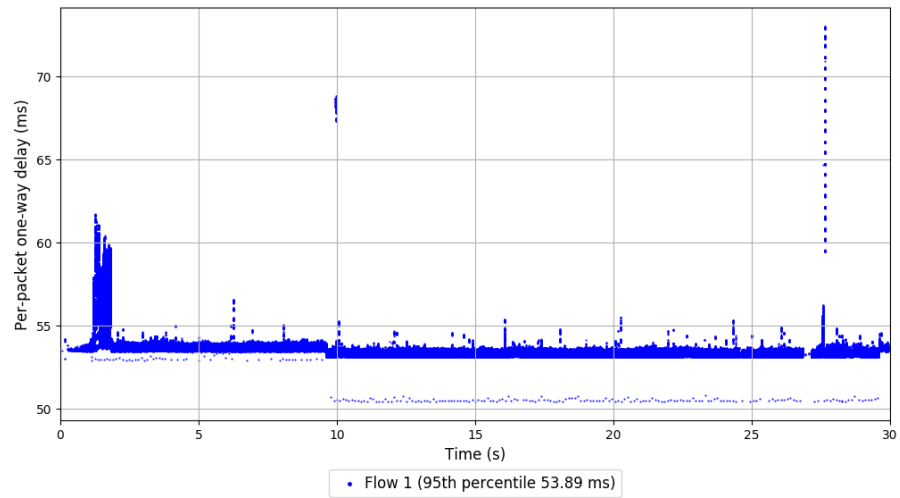
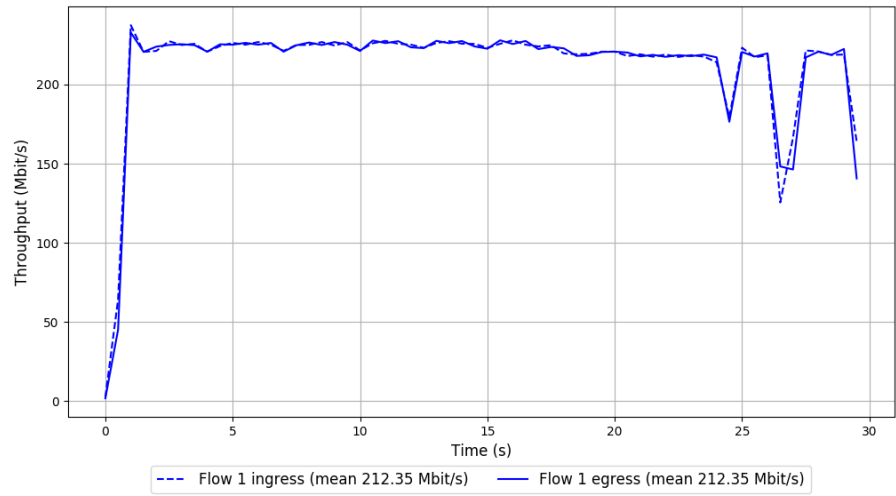
-- Flow 1:

Average throughput: 212.35 Mbit/s

95th percentile per-packet one-way delay: 53.890 ms

Loss rate: 0.35%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

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

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

Below is generated by plot.py at 2017-12-11 15:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.19 Mbit/s

95th percentile per-packet one-way delay: 53.986 ms

Loss rate: 0.37%

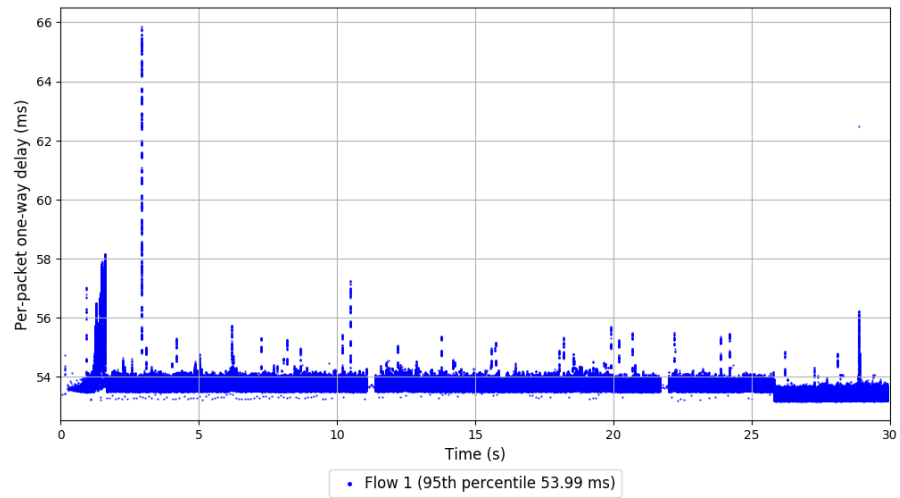
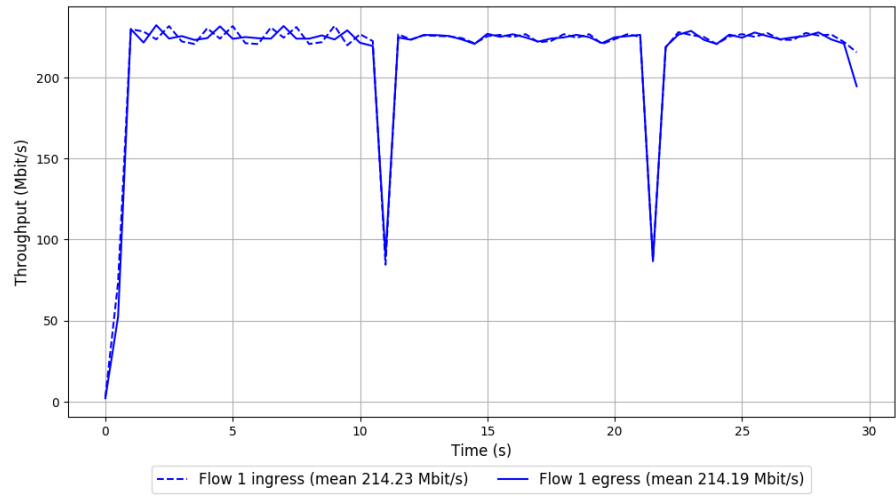
-- Flow 1:

Average throughput: 214.19 Mbit/s

95th percentile per-packet one-way delay: 53.986 ms

Loss rate: 0.37%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

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

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

Below is generated by plot.py at 2017-12-11 15:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.50 Mbit/s

95th percentile per-packet one-way delay: 53.938 ms

Loss rate: 0.39%

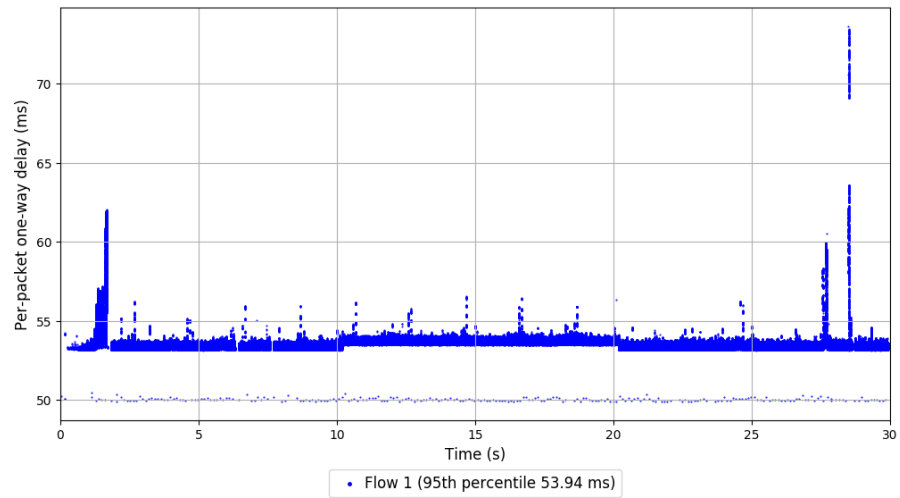
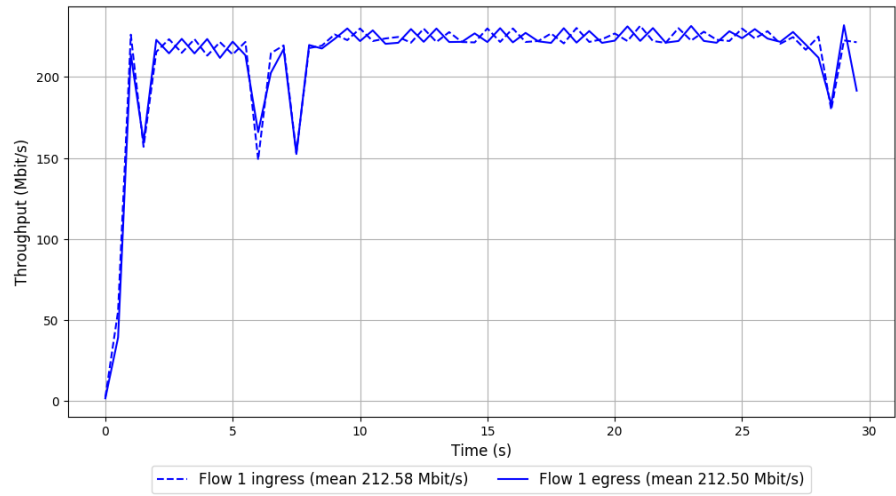
-- Flow 1:

Average throughput: 212.50 Mbit/s

95th percentile per-packet one-way delay: 53.938 ms

Loss rate: 0.39%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-11 13:31:40

End at: 2017-12-11 13:32:10

Below is generated by plot.py at 2017-12-11 15:43:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.93 Mbit/s

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

Loss rate: 0.36%

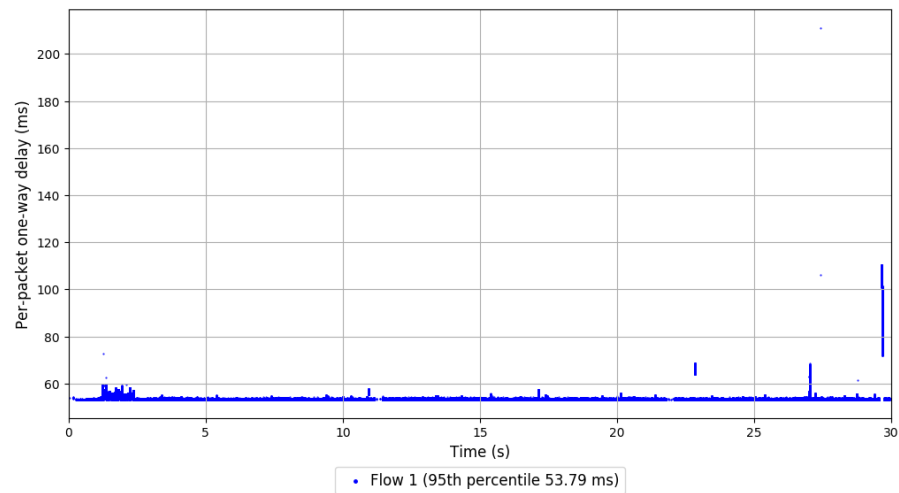
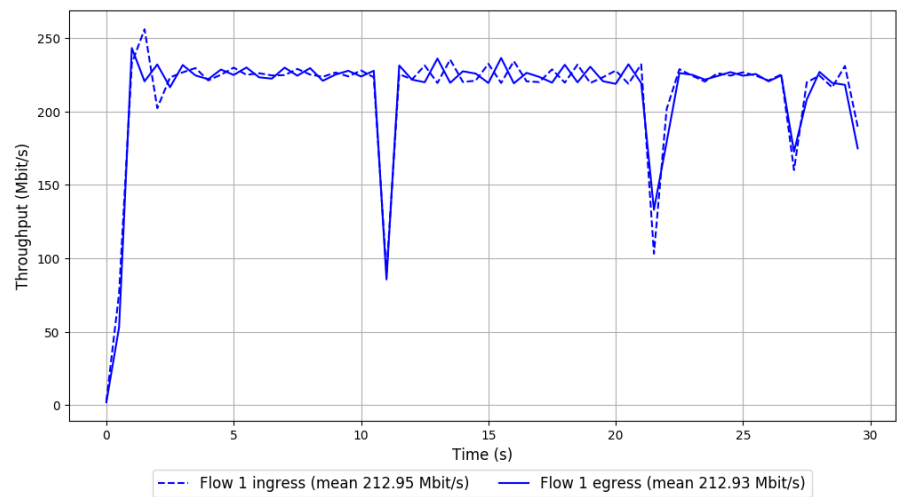
-- Flow 1:

Average throughput: 212.93 Mbit/s

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

Loss rate: 0.36%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-11 13:41:49

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

Below is generated by plot.py at 2017-12-11 15:46:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.63 Mbit/s

95th percentile per-packet one-way delay: 55.640 ms

Loss rate: 0.36%

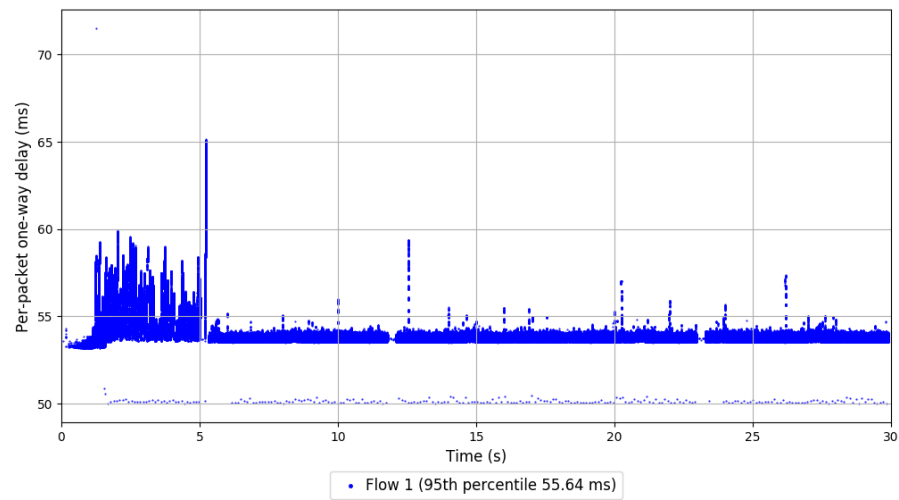
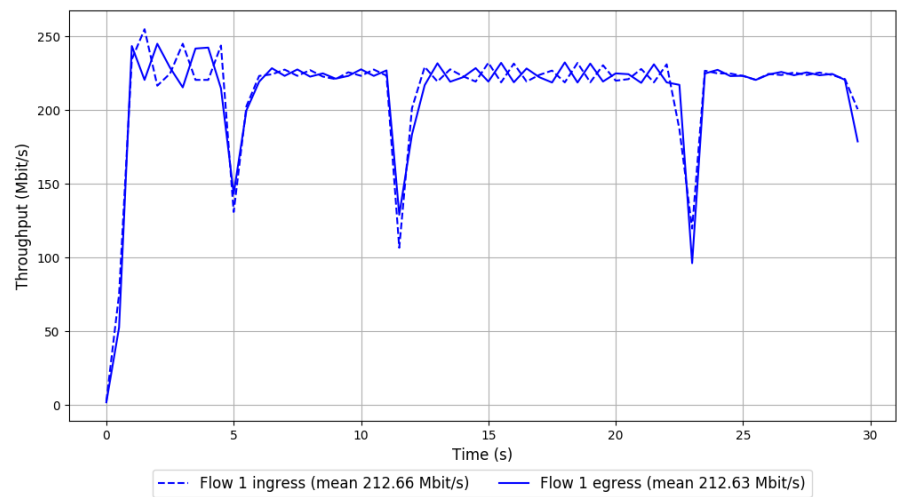
-- Flow 1:

Average throughput: 212.63 Mbit/s

95th percentile per-packet one-way delay: 55.640 ms

Loss rate: 0.36%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-11 13:52:01

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

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.98 Mbit/s

95th percentile per-packet one-way delay: 54.731 ms

Loss rate: 0.38%

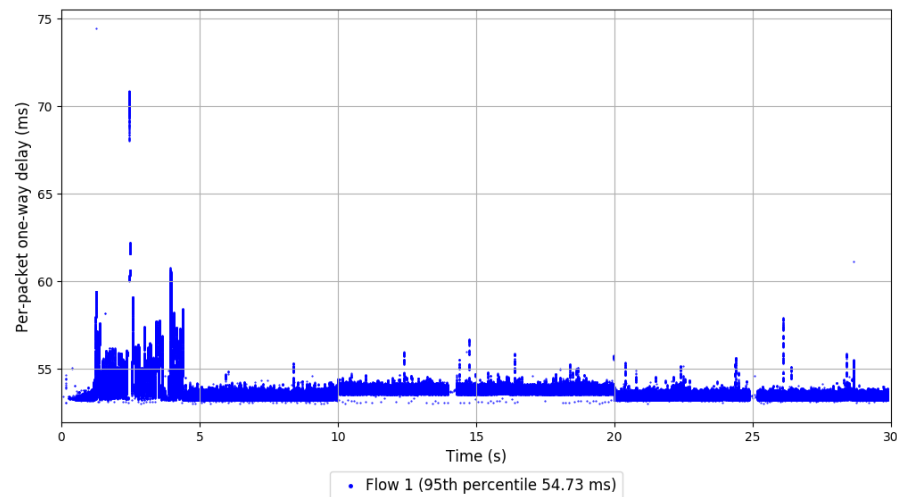
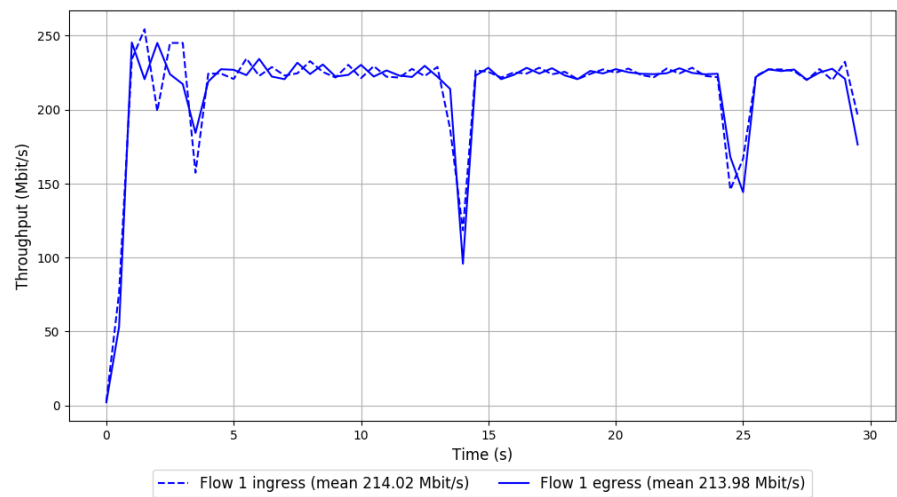
-- Flow 1:

Average throughput: 213.98 Mbit/s

95th percentile per-packet one-way delay: 54.731 ms

Loss rate: 0.38%

Run 10: Report of TCP BBR — Data Link

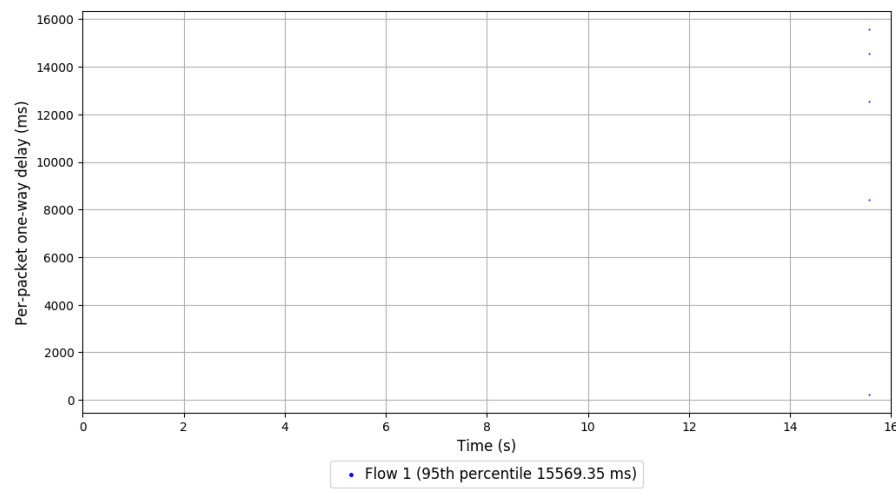
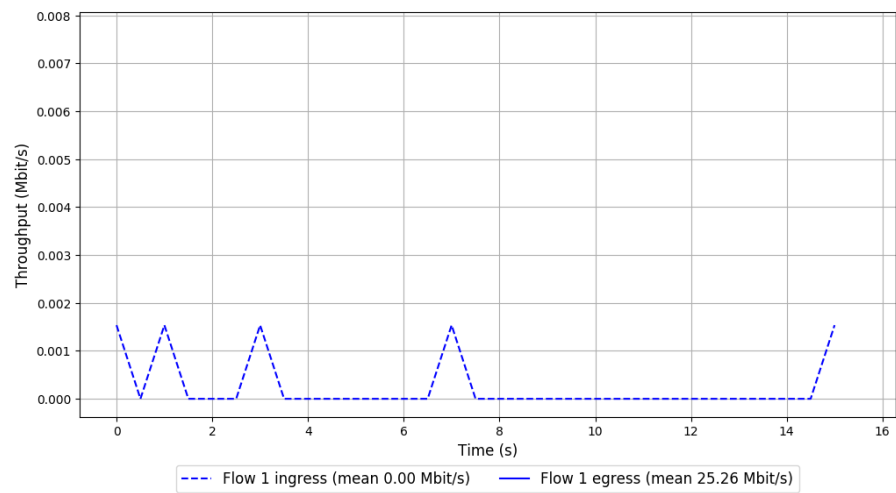


Run 1: Statistics of TCP Cubic

Start at: 2017-12-11 12:18:25

End at: 2017-12-11 12:18:55

Run 1: Report of TCP Cubic — Data Link

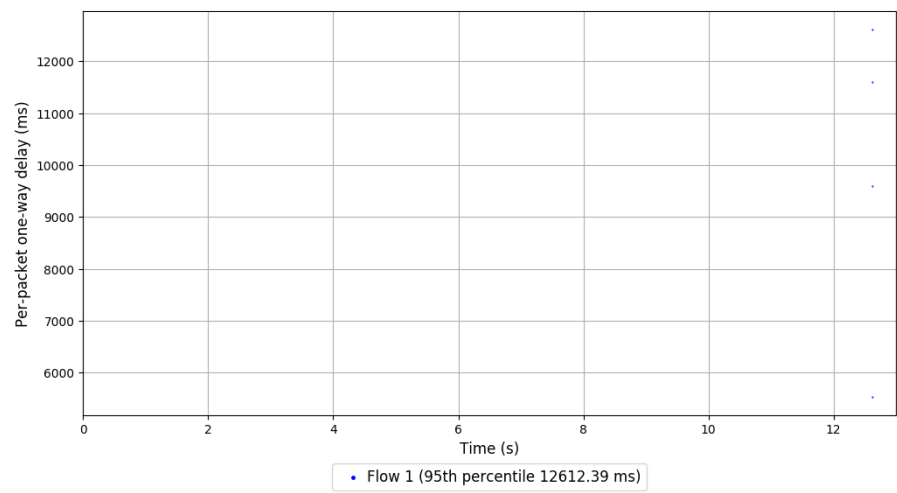
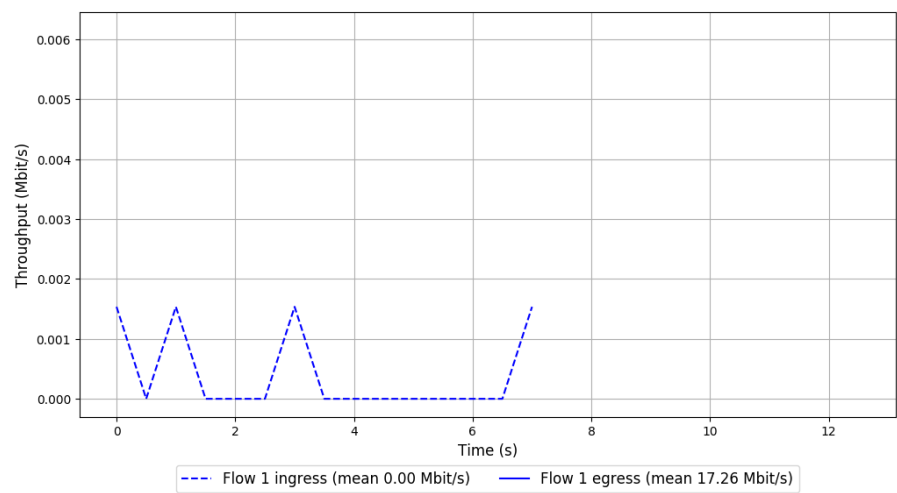


Run 2: Statistics of TCP Cubic

Start at: 2017-12-11 12:28:38

End at: 2017-12-11 12:29:08

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

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 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.79 Mbit/s

95th percentile per-packet one-way delay: 57.399 ms

Loss rate: 0.39%

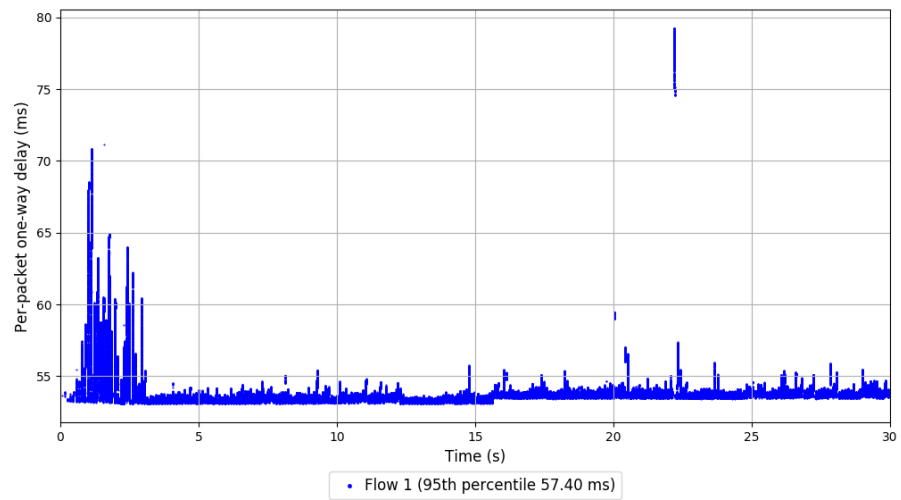
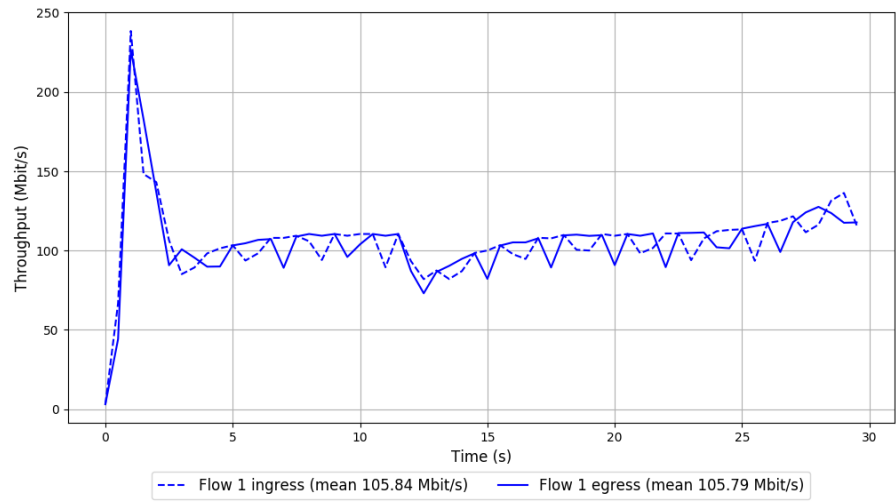
-- Flow 1:

Average throughput: 105.79 Mbit/s

95th percentile per-packet one-way delay: 57.399 ms

Loss rate: 0.39%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 141.69 Mbit/s

95th percentile per-packet one-way delay: 56.637 ms

Loss rate: 0.23%

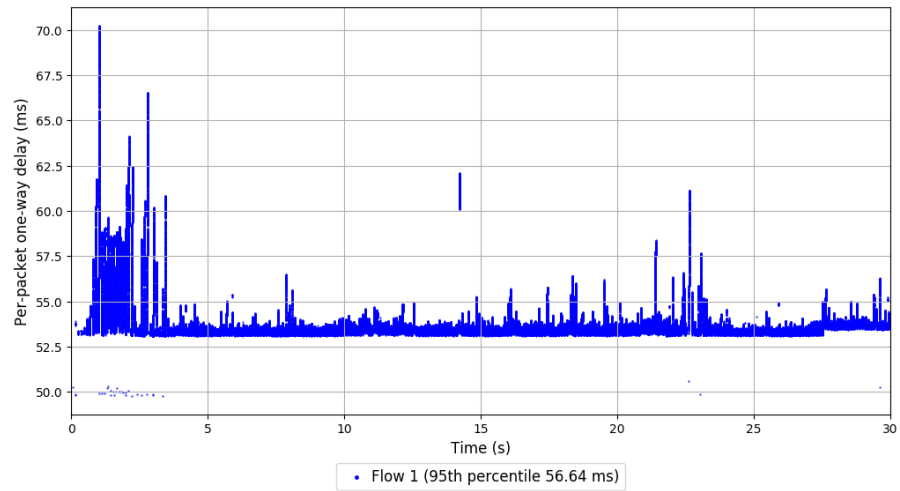
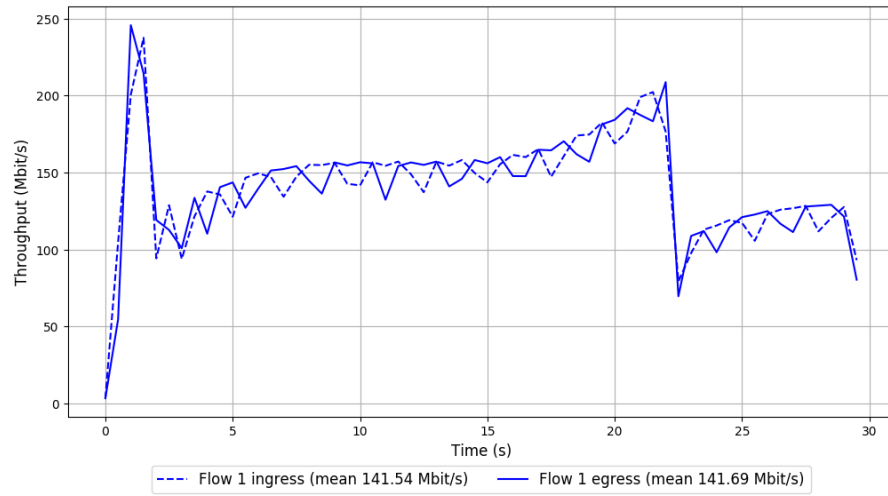
-- Flow 1:

Average throughput: 141.69 Mbit/s

95th percentile per-packet one-way delay: 56.637 ms

Loss rate: 0.23%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-11 12:59:31

End at: 2017-12-11 13:00:01

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.74 Mbit/s

95th percentile per-packet one-way delay: 55.165 ms

Loss rate: 0.33%

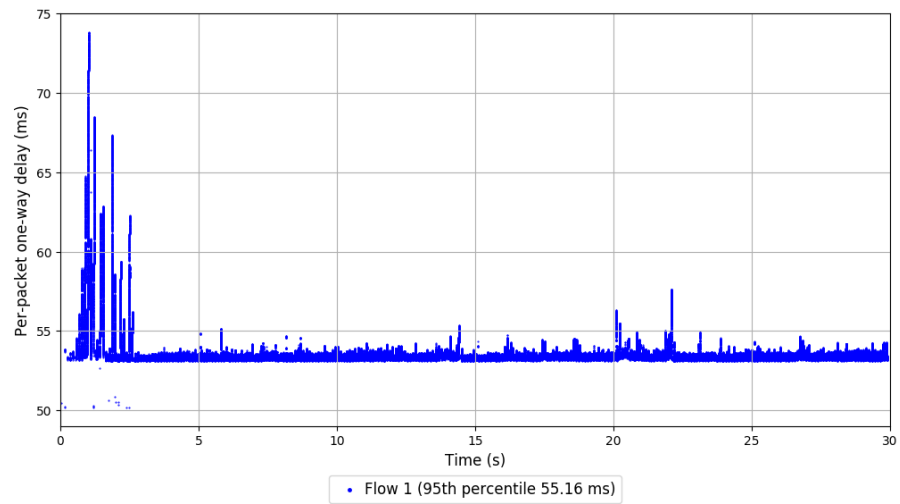
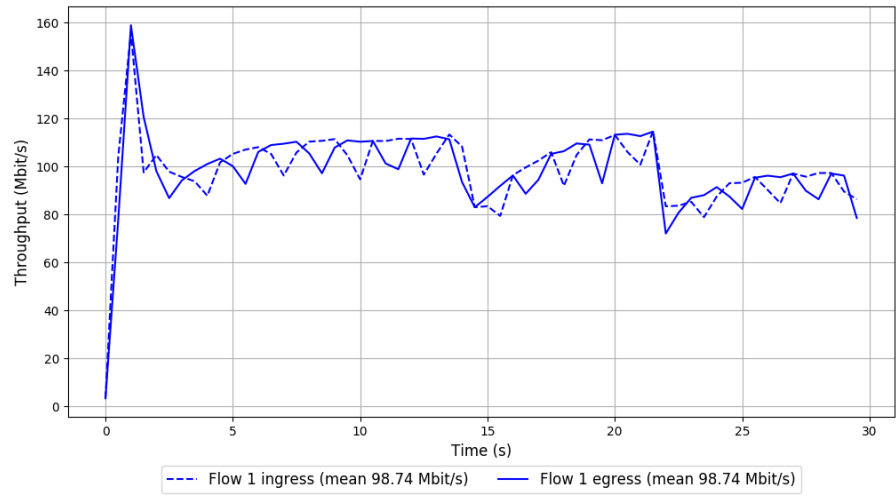
-- Flow 1:

Average throughput: 98.74 Mbit/s

95th percentile per-packet one-way delay: 55.165 ms

Loss rate: 0.33%

Run 5: Report of TCP Cubic — Data Link

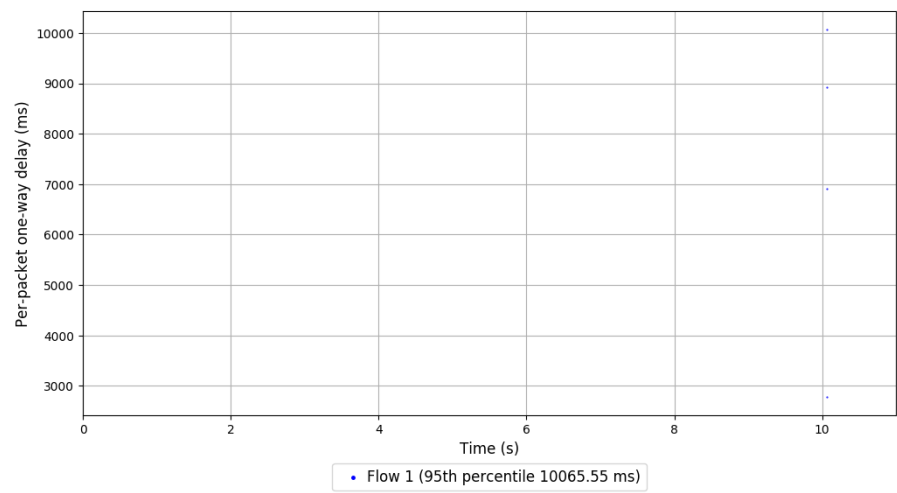
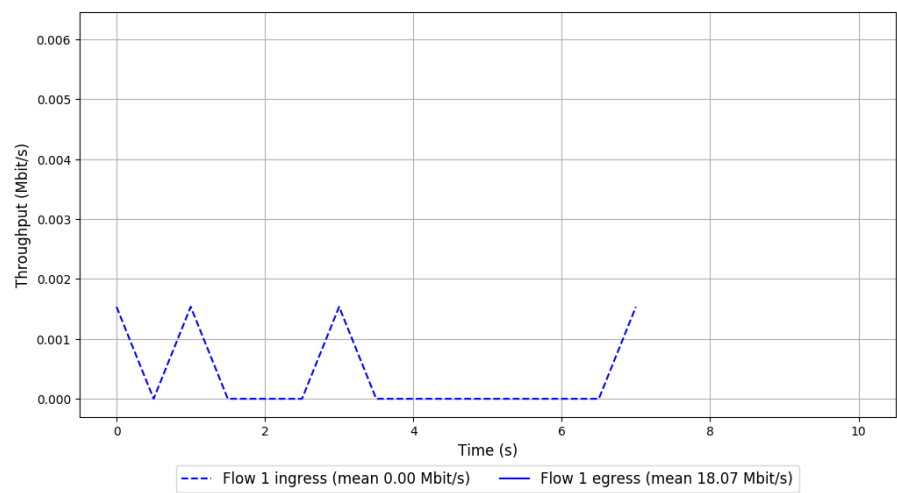


Run 6: Statistics of TCP Cubic

Start at: 2017-12-11 13:09:50

End at: 2017-12-11 13:10:21

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

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

End at: 2017-12-11 13:20:33

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.90 Mbit/s

95th percentile per-packet one-way delay: 58.706 ms

Loss rate: 0.42%

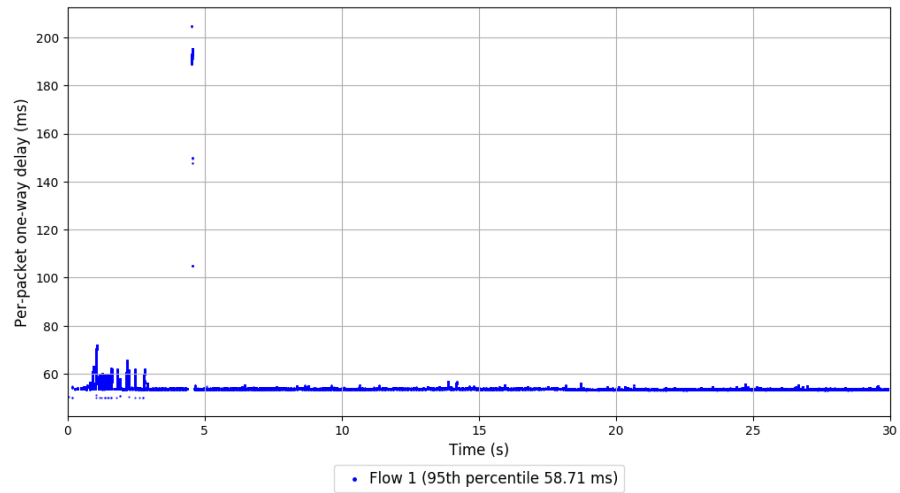
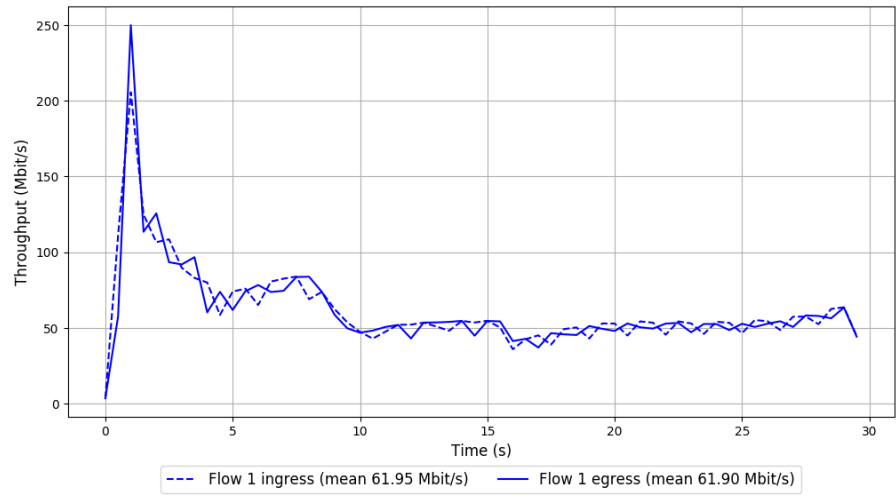
-- Flow 1:

Average throughput: 61.90 Mbit/s

95th percentile per-packet one-way delay: 58.706 ms

Loss rate: 0.42%

Run 7: Report of TCP Cubic — Data Link

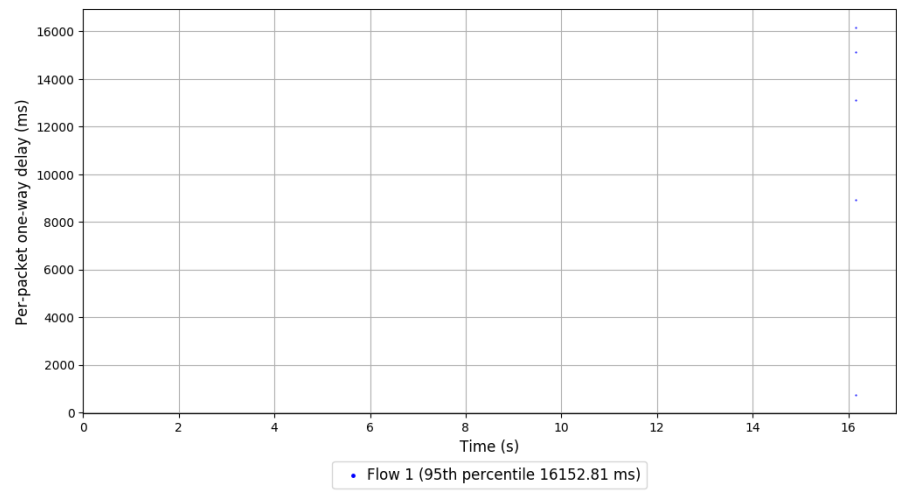
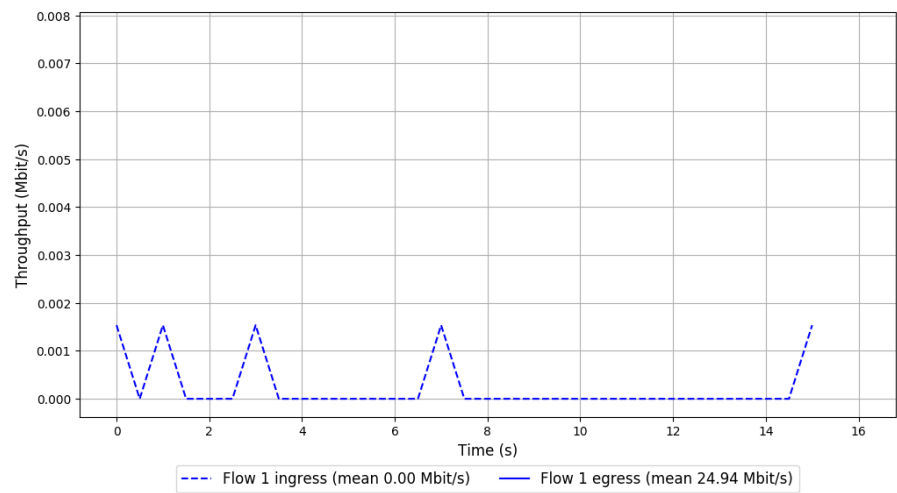


Run 8: Statistics of TCP Cubic

Start at: 2017-12-11 13:30:25

End at: 2017-12-11 13:30:56

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-11 13:40:28

End at: 2017-12-11 13:40:58

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 124.16 Mbit/s

95th percentile per-packet one-way delay: 54.274 ms

Loss rate: 0.30%

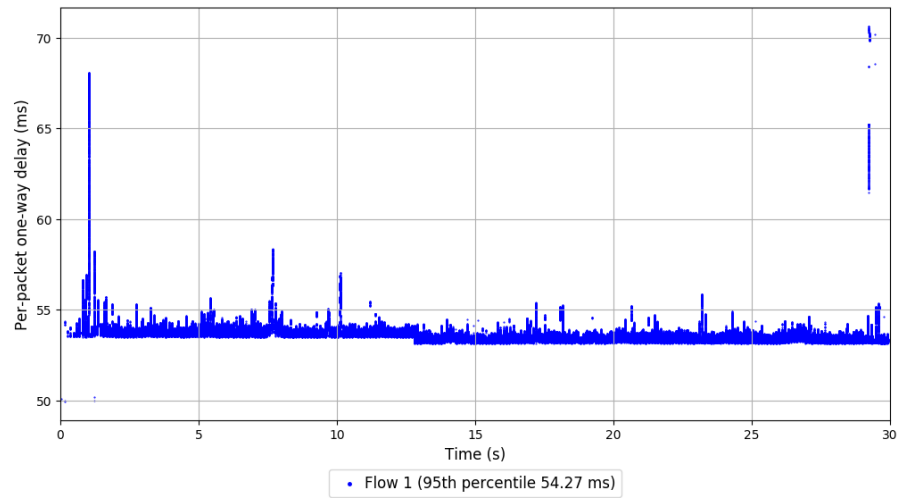
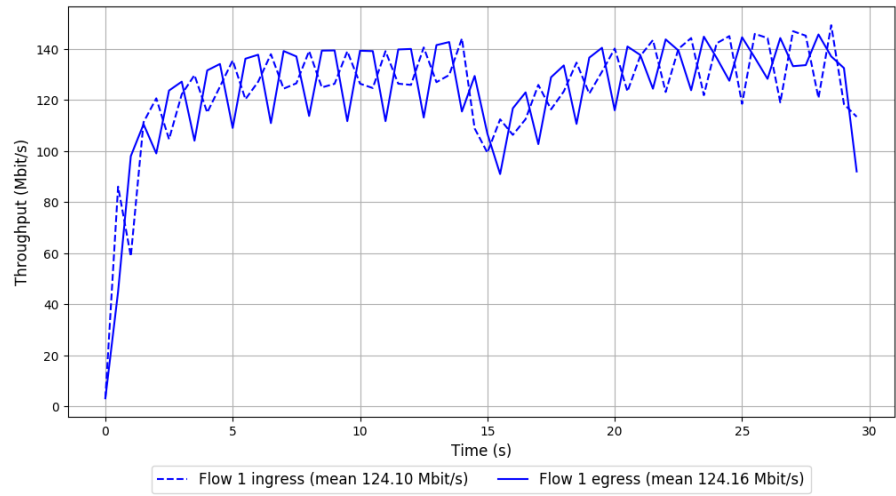
-- Flow 1:

Average throughput: 124.16 Mbit/s

95th percentile per-packet one-way delay: 54.274 ms

Loss rate: 0.30%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-11 13:50:39

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

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 136.59 Mbit/s

95th percentile per-packet one-way delay: 55.776 ms

Loss rate: 0.33%

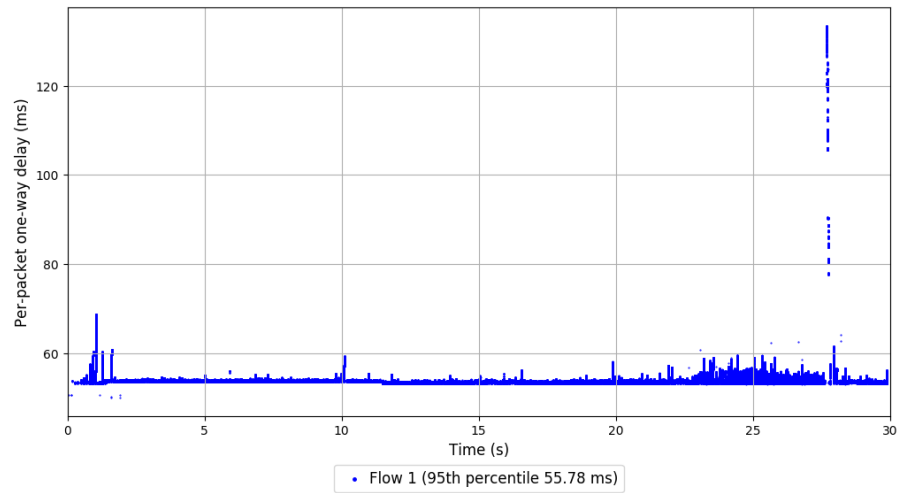
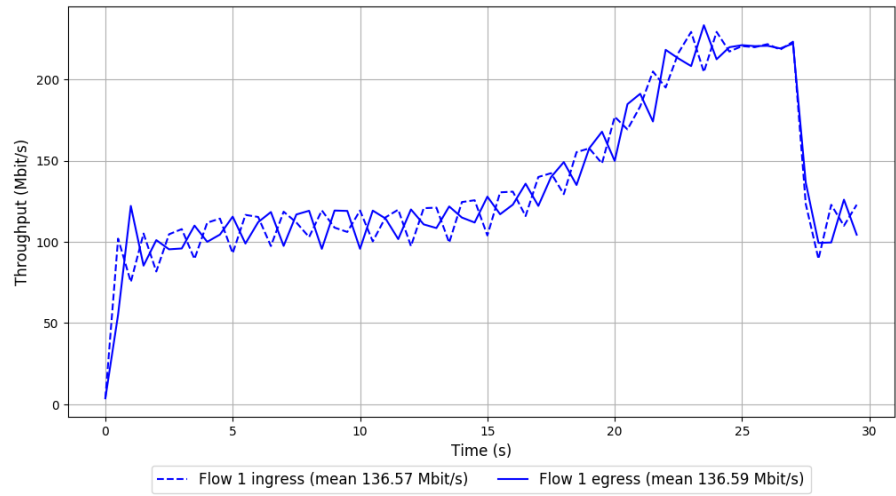
-- Flow 1:

Average throughput: 136.59 Mbit/s

95th percentile per-packet one-way delay: 55.776 ms

Loss rate: 0.33%

Run 10: Report of TCP Cubic — Data Link

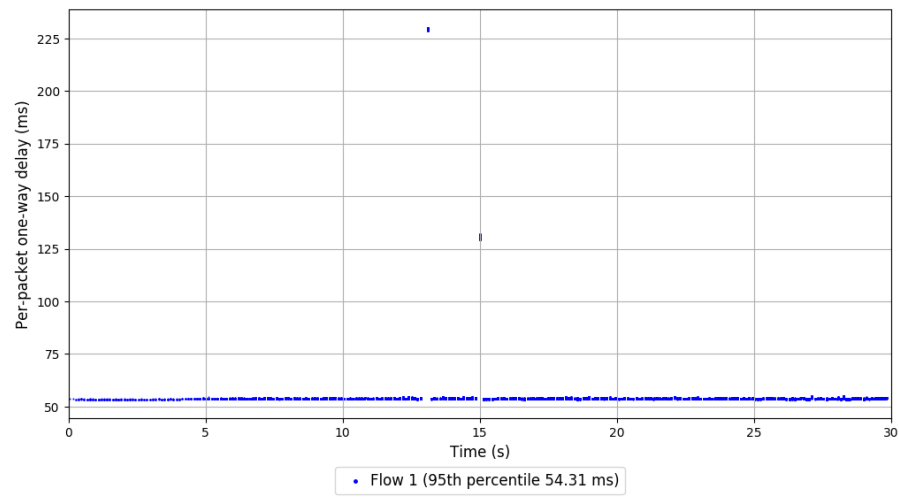
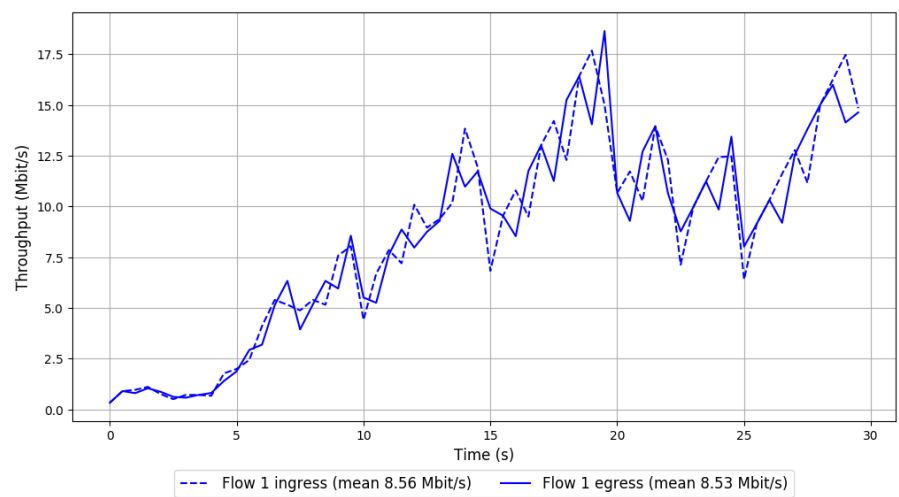


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-11 12:09:57
End at: 2017-12-11 12:10:27

# Below is generated by plot.py at 2017-12-11 15:46:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 54.314 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 54.314 ms
Loss rate: 0.74%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-11 12:20:27

End at: 2017-12-11 12:20:57

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.16 Mbit/s

95th percentile per-packet one-way delay: 53.990 ms

Loss rate: 0.80%

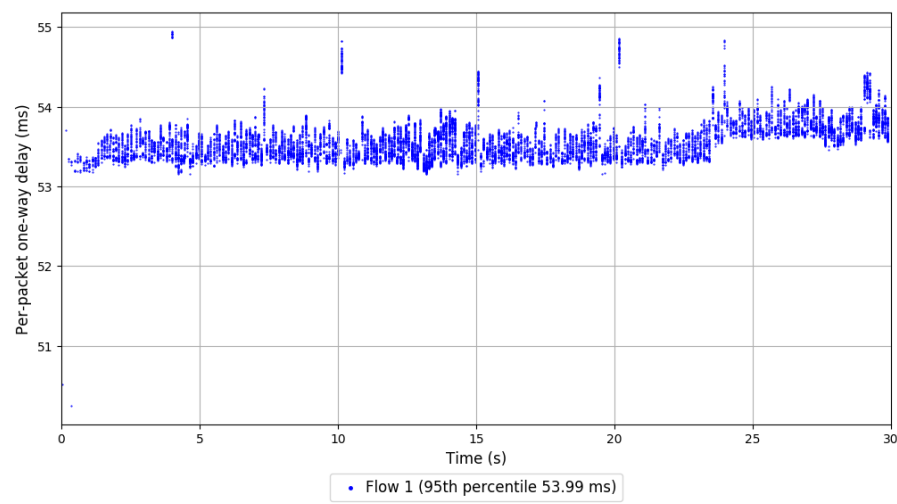
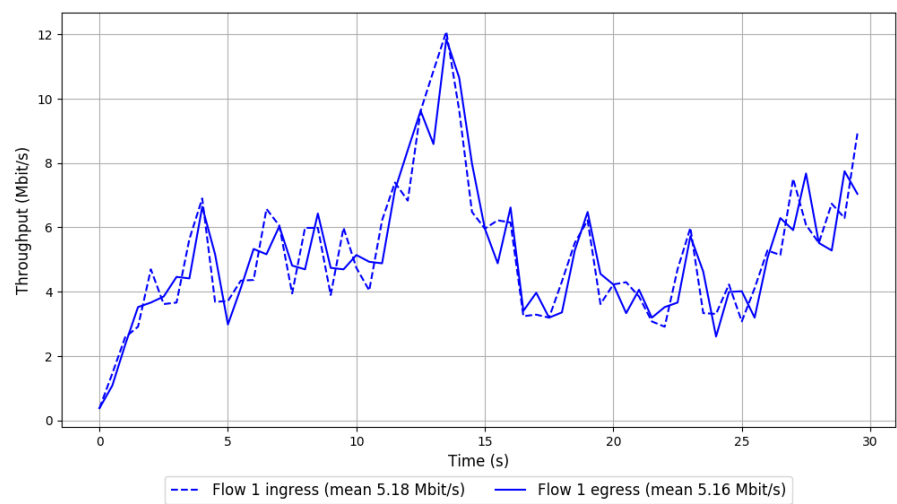
-- Flow 1:

Average throughput: 5.16 Mbit/s

95th percentile per-packet one-way delay: 53.990 ms

Loss rate: 0.80%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-11 12:30:40

End at: 2017-12-11 12:31:10

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 53.843 ms

Loss rate: 0.51%

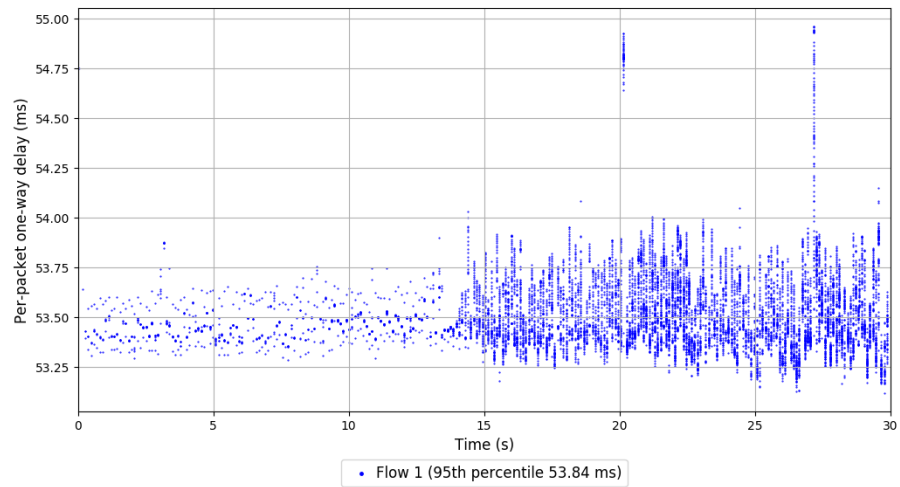
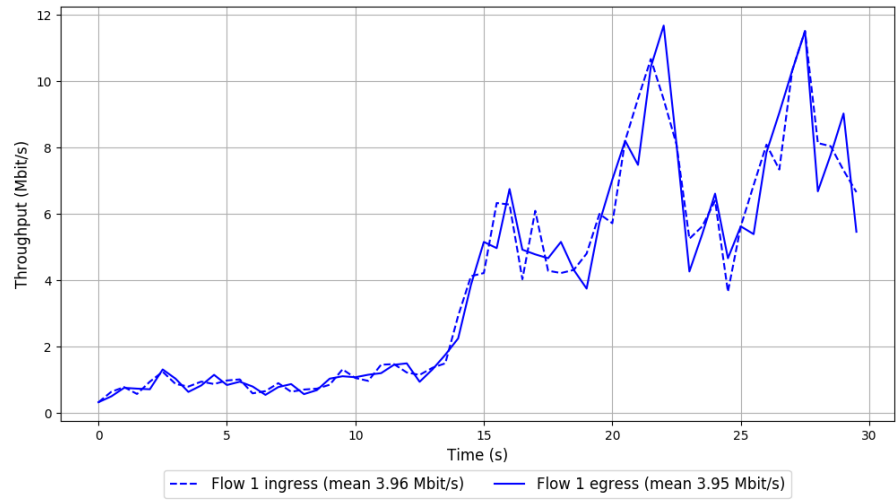
-- Flow 1:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 53.843 ms

Loss rate: 0.51%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-11 12:40:53

End at: 2017-12-11 12:41:23

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.08 Mbit/s

95th percentile per-packet one-way delay: 53.956 ms

Loss rate: 0.40%

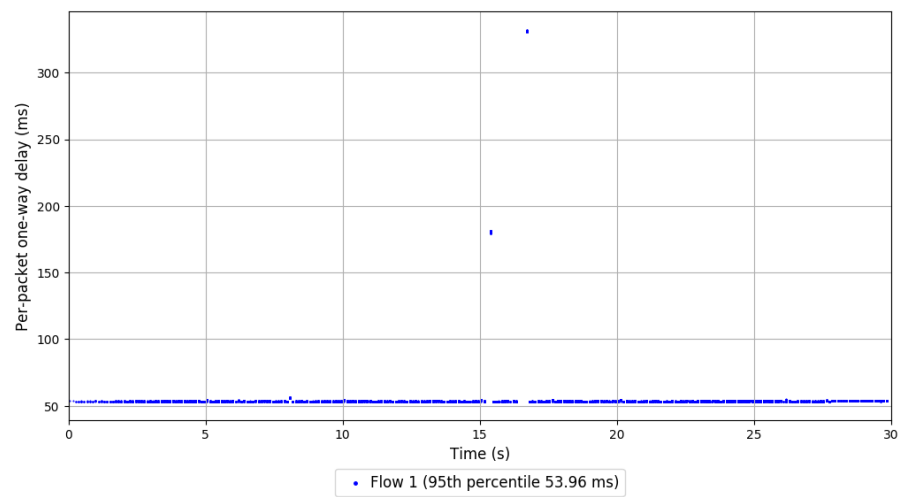
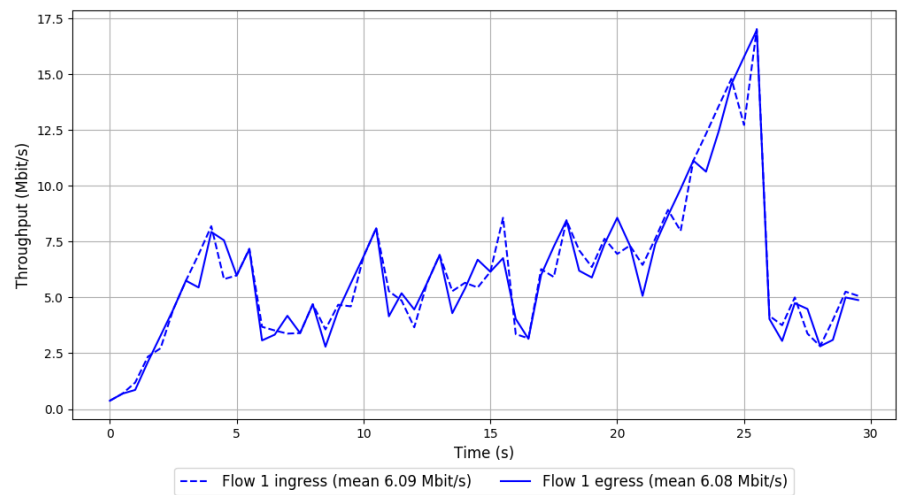
-- Flow 1:

Average throughput: 6.08 Mbit/s

95th percentile per-packet one-way delay: 53.956 ms

Loss rate: 0.40%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-11 12:51:23

End at: 2017-12-11 12:51:53

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.53 Mbit/s

95th percentile per-packet one-way delay: 54.132 ms

Loss rate: 0.73%

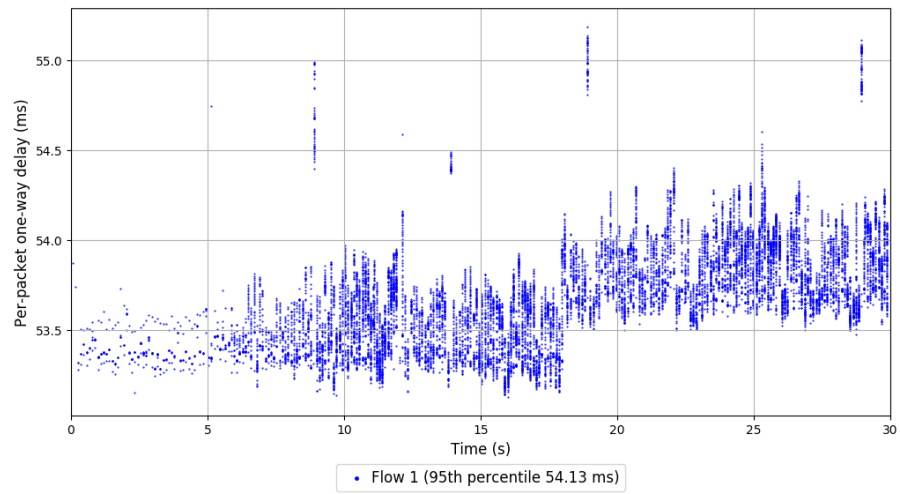
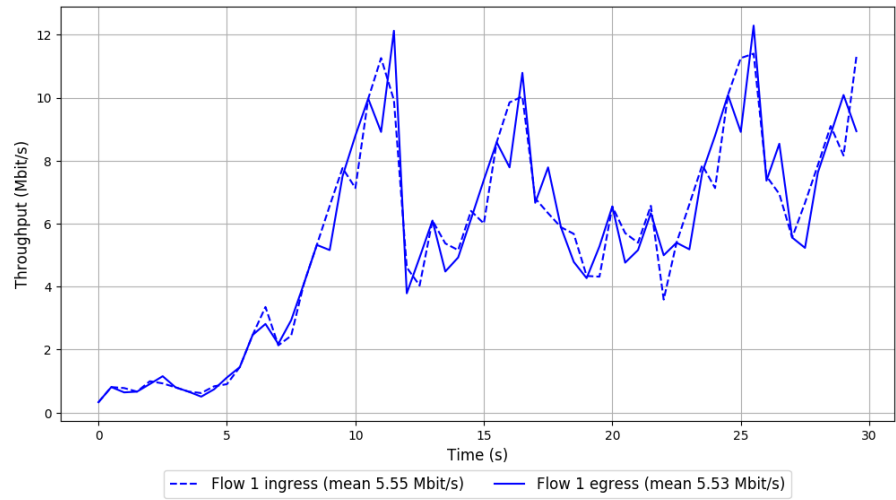
-- Flow 1:

Average throughput: 5.53 Mbit/s

95th percentile per-packet one-way delay: 54.132 ms

Loss rate: 0.73%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-11 13:01:39

End at: 2017-12-11 13:02:09

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 54.237 ms

Loss rate: 0.45%

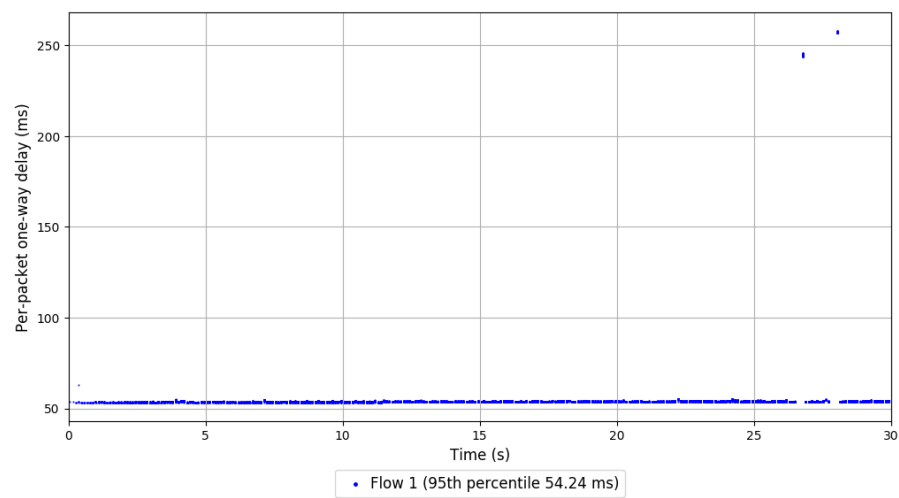
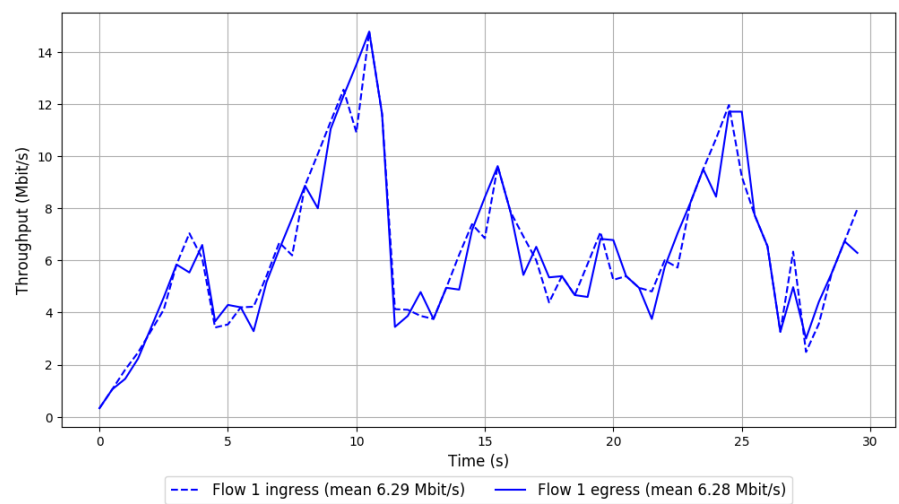
-- Flow 1:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 54.237 ms

Loss rate: 0.45%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

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

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

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 54.519 ms

Loss rate: 0.36%

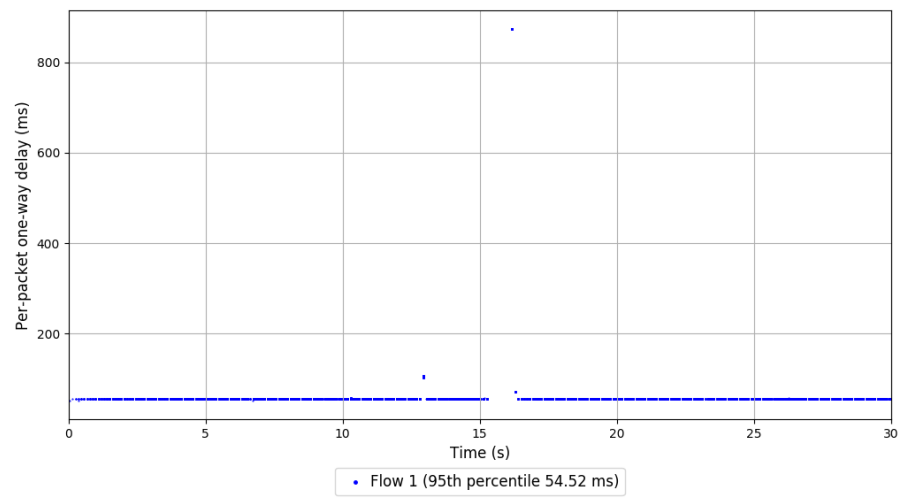
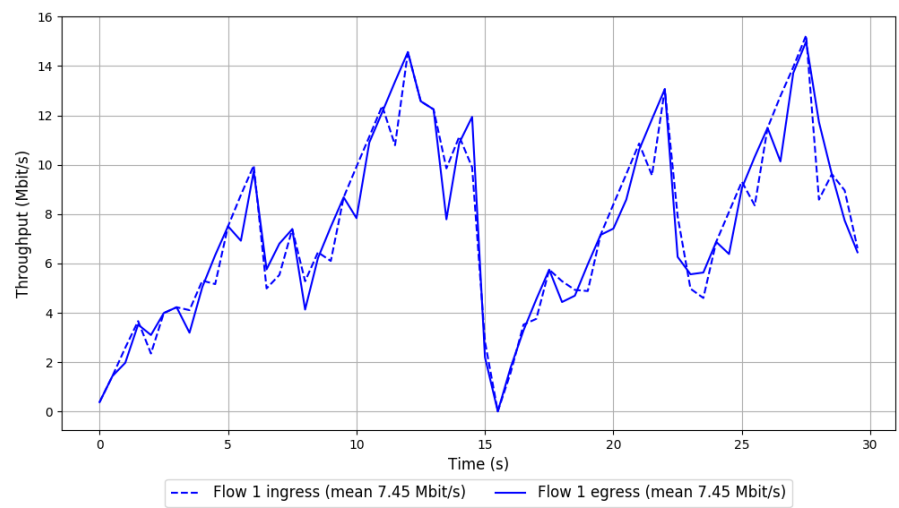
-- Flow 1:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 54.519 ms

Loss rate: 0.36%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-11 13:22:09

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

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.35 Mbit/s

95th percentile per-packet one-way delay: 54.172 ms

Loss rate: 0.41%

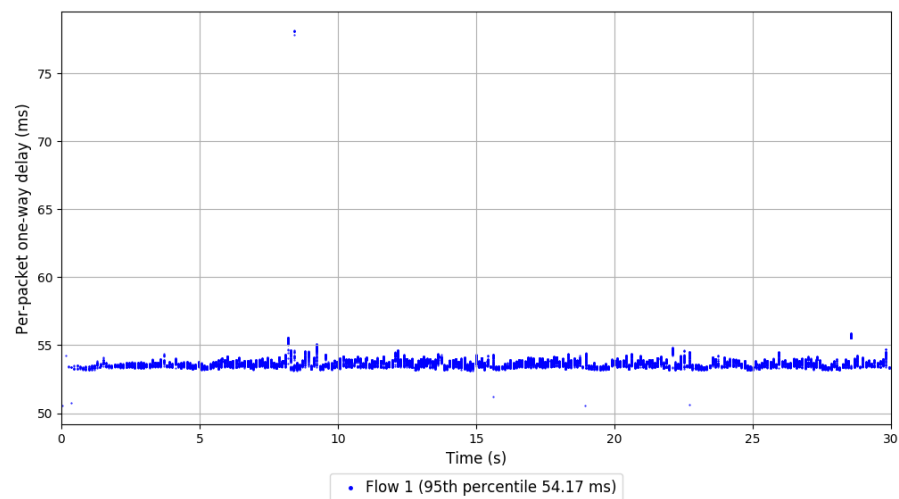
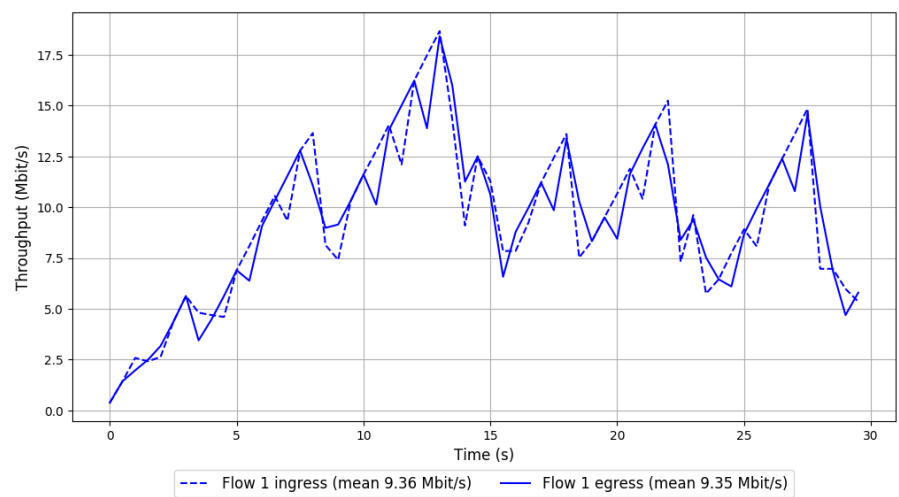
-- Flow 1:

Average throughput: 9.35 Mbit/s

95th percentile per-packet one-way delay: 54.172 ms

Loss rate: 0.41%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-11 13:32:28

End at: 2017-12-11 13:32:58

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.94 Mbit/s

95th percentile per-packet one-way delay: 54.148 ms

Loss rate: 0.54%

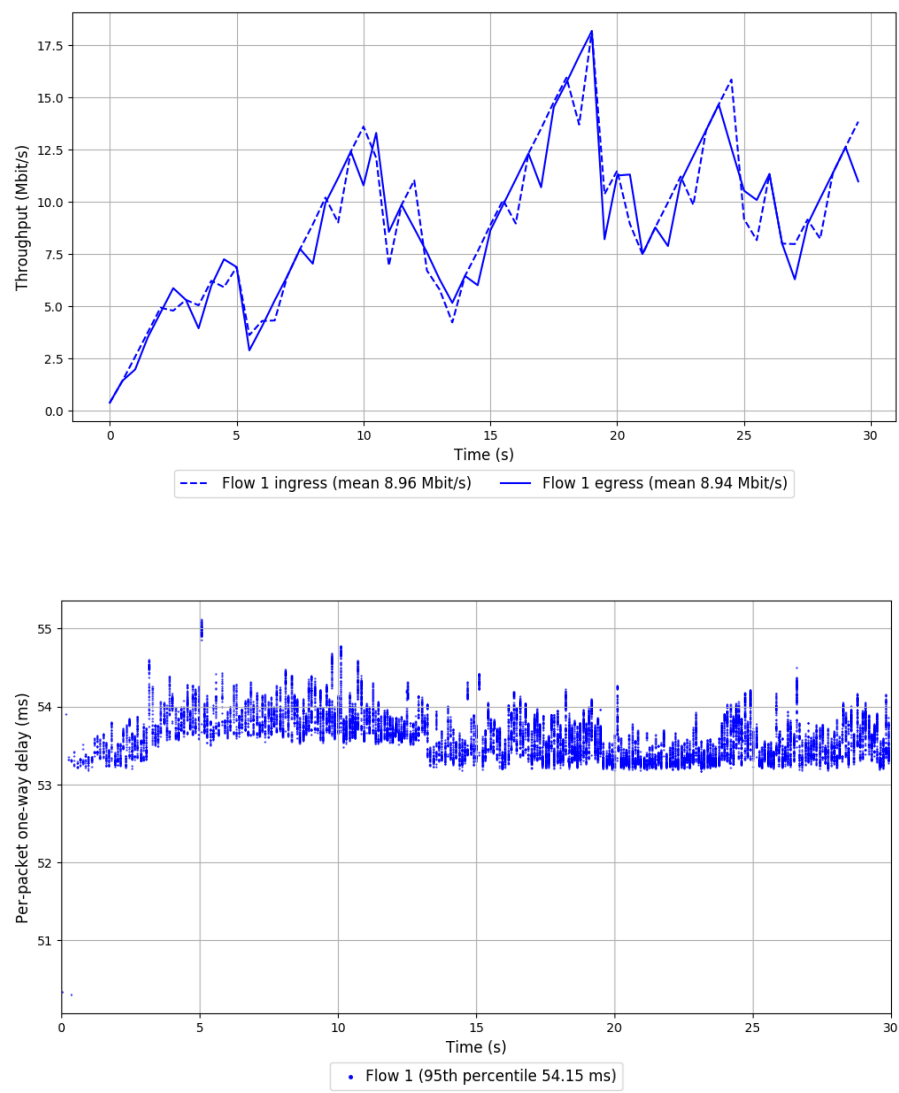
-- Flow 1:

Average throughput: 8.94 Mbit/s

95th percentile per-packet one-way delay: 54.148 ms

Loss rate: 0.54%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-11 13:42:37

End at: 2017-12-11 13:43:07

Below is generated by plot.py at 2017-12-11 15:46:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.90 Mbit/s

95th percentile per-packet one-way delay: 54.376 ms

Loss rate: 0.47%

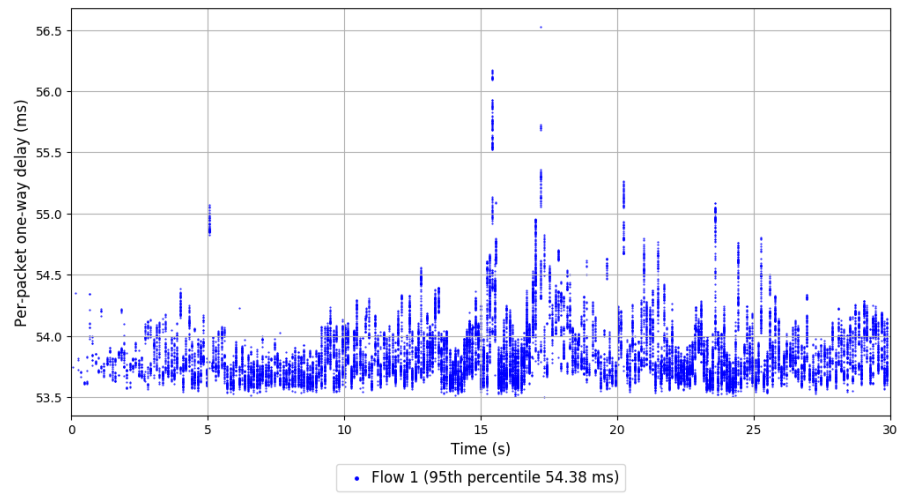
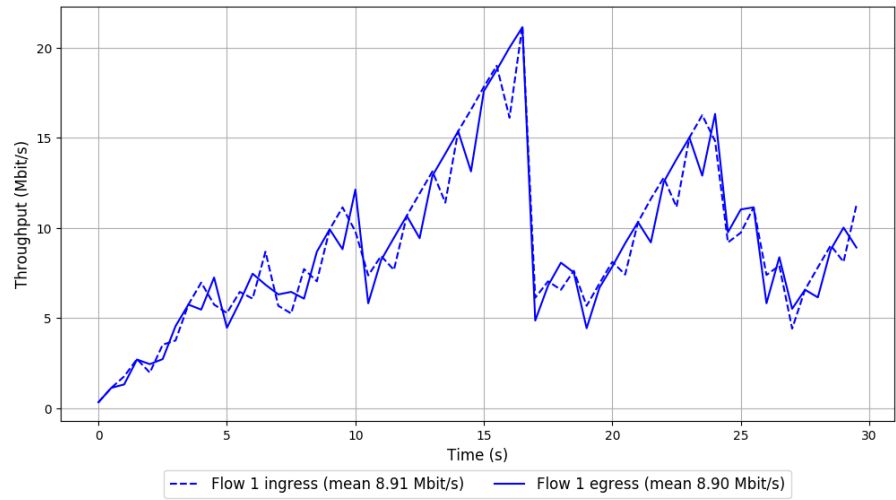
-- Flow 1:

Average throughput: 8.90 Mbit/s

95th percentile per-packet one-way delay: 54.376 ms

Loss rate: 0.47%

Run 10: Report of LEDBAT — Data Link

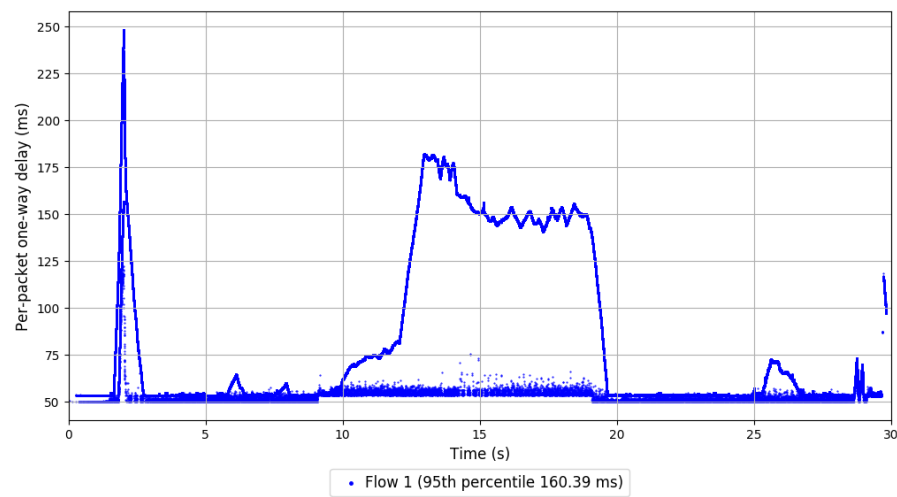
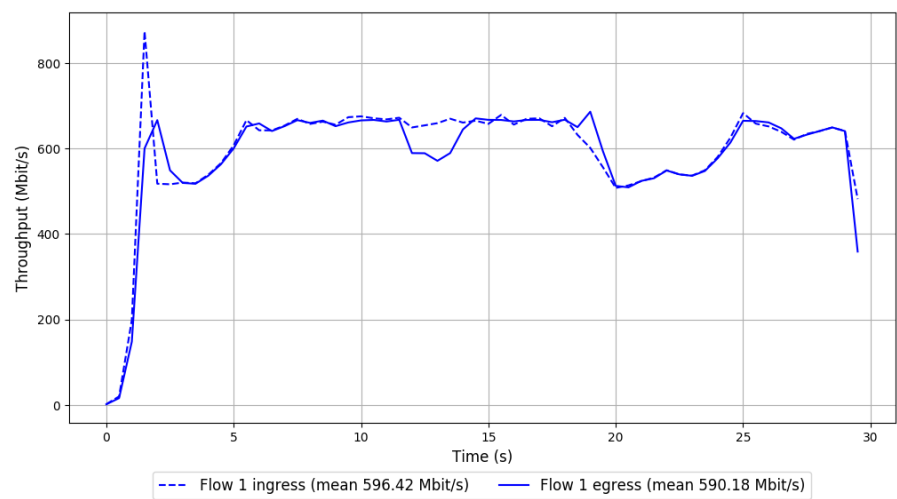


```
Run 1: Statistics of PCC

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

# Below is generated by plot.py at 2017-12-11 15:54:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 590.18 Mbit/s
95th percentile per-packet one-way delay: 160.386 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 590.18 Mbit/s
95th percentile per-packet one-way delay: 160.386 ms
Loss rate: 1.39%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-11 12:21:42

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

Below is generated by plot.py at 2017-12-11 15:54:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 559.71 Mbit/s

95th percentile per-packet one-way delay: 170.884 ms

Loss rate: 0.99%

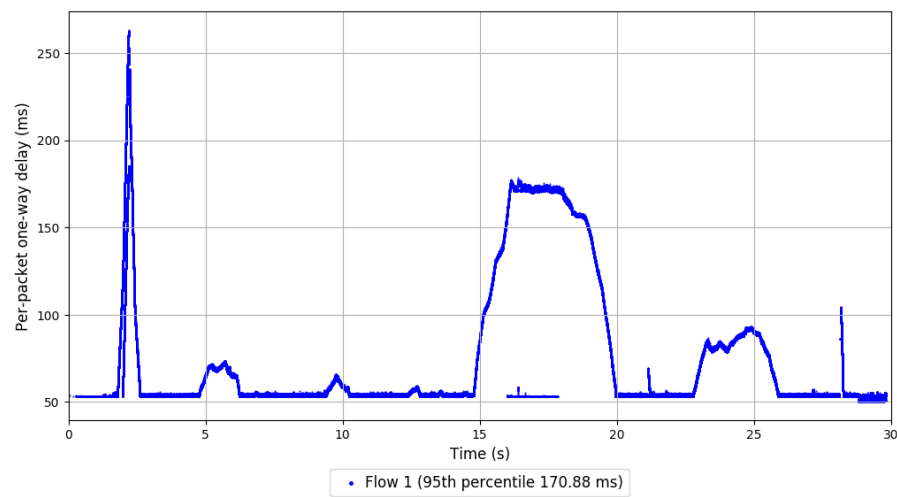
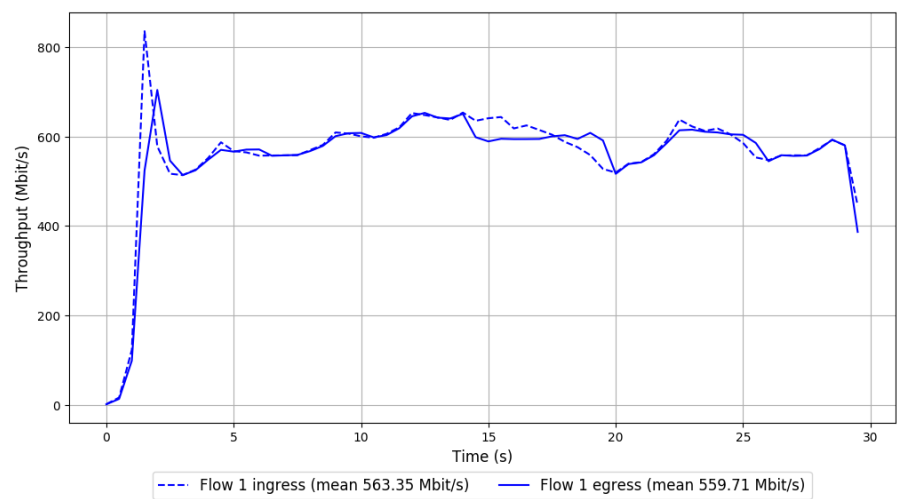
-- Flow 1:

Average throughput: 559.71 Mbit/s

95th percentile per-packet one-way delay: 170.884 ms

Loss rate: 0.99%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

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 15:54:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 570.66 Mbit/s

95th percentile per-packet one-way delay: 176.117 ms

Loss rate: 1.97%

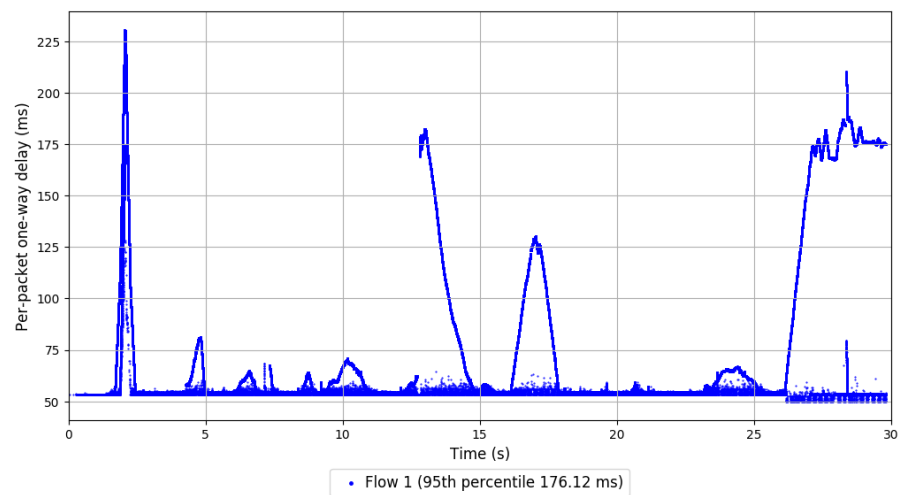
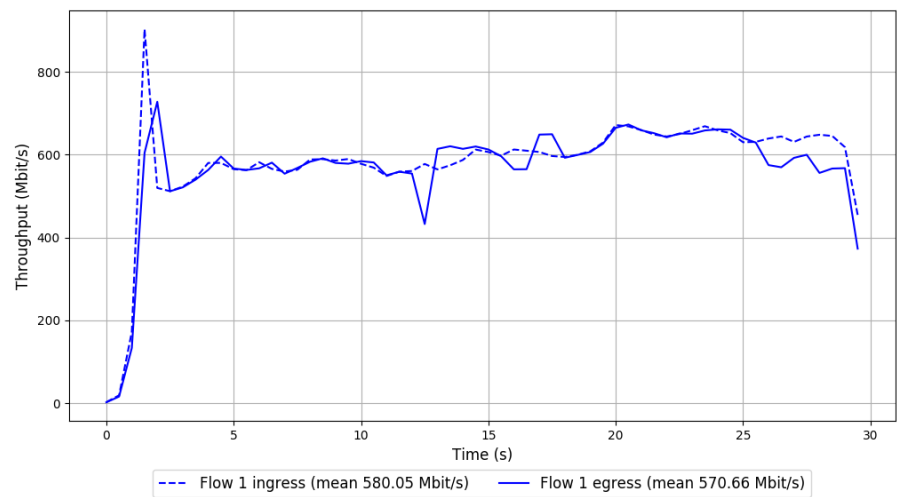
-- Flow 1:

Average throughput: 570.66 Mbit/s

95th percentile per-packet one-way delay: 176.117 ms

Loss rate: 1.97%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-11 12:42:08

End at: 2017-12-11 12:42:38

Below is generated by plot.py at 2017-12-11 15:54:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 358.64 Mbit/s

95th percentile per-packet one-way delay: 71.153 ms

Loss rate: 1.15%

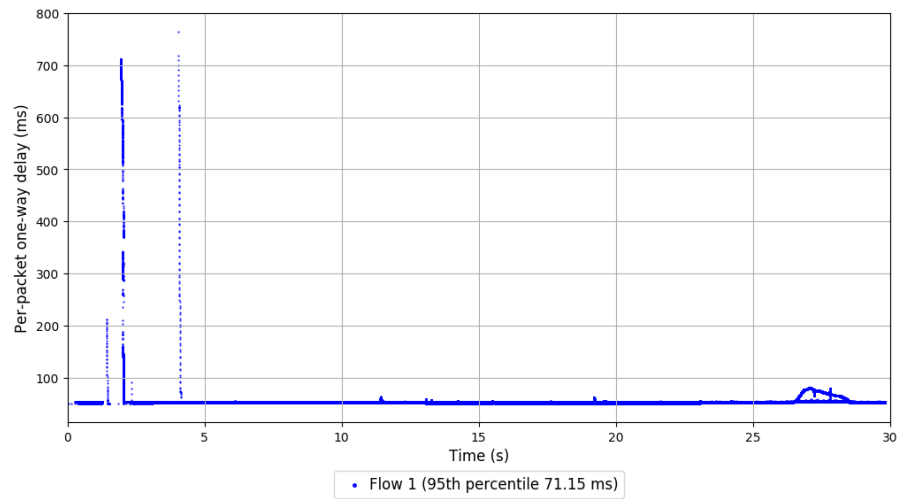
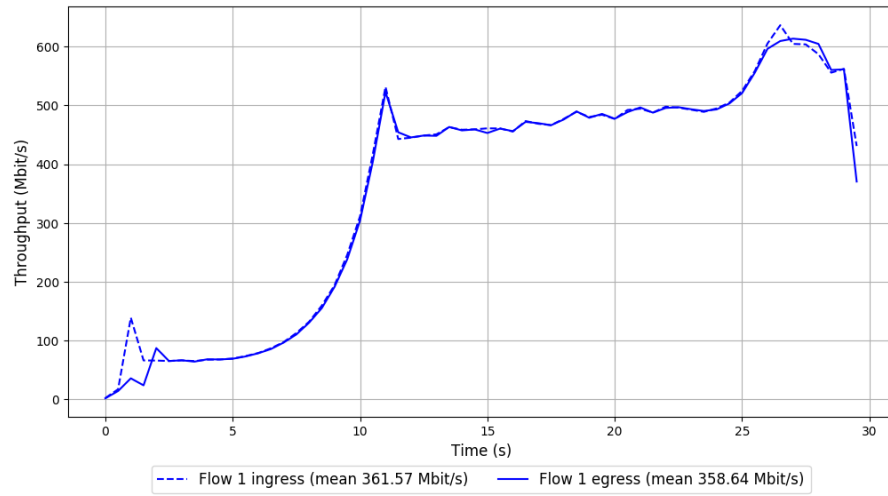
-- Flow 1:

Average throughput: 358.64 Mbit/s

95th percentile per-packet one-way delay: 71.153 ms

Loss rate: 1.15%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-11 12:52:37

End at: 2017-12-11 12:53:07

Below is generated by plot.py at 2017-12-11 15:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 579.61 Mbit/s

95th percentile per-packet one-way delay: 176.952 ms

Loss rate: 1.98%

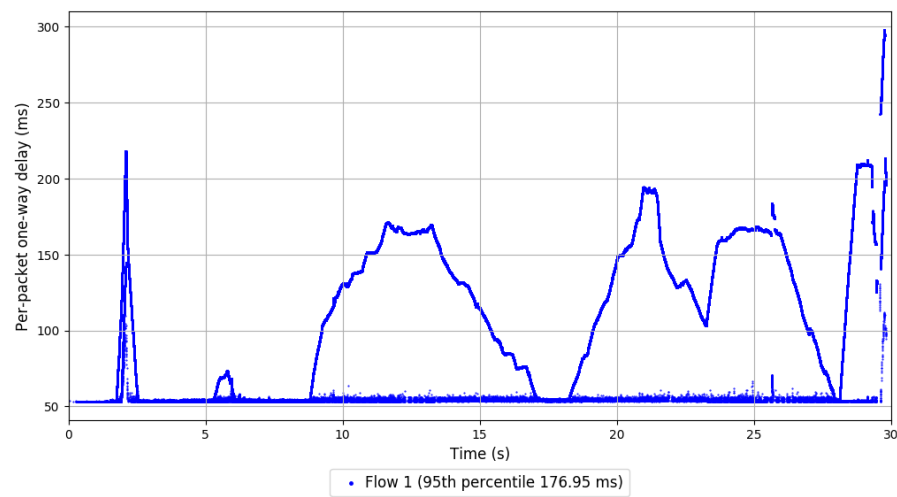
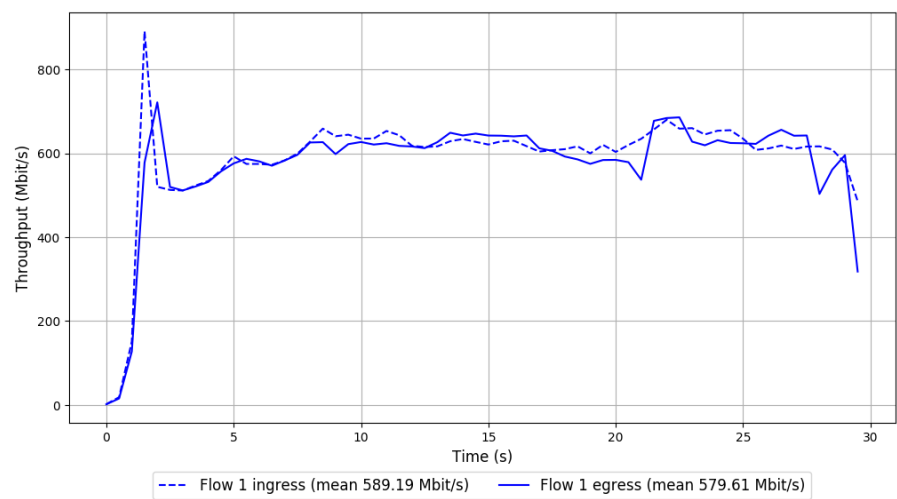
-- Flow 1:

Average throughput: 579.61 Mbit/s

95th percentile per-packet one-way delay: 176.952 ms

Loss rate: 1.98%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-11 13:02:54

End at: 2017-12-11 13:03:24

Below is generated by plot.py at 2017-12-11 15:54:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 571.02 Mbit/s

95th percentile per-packet one-way delay: 162.649 ms

Loss rate: 3.66%

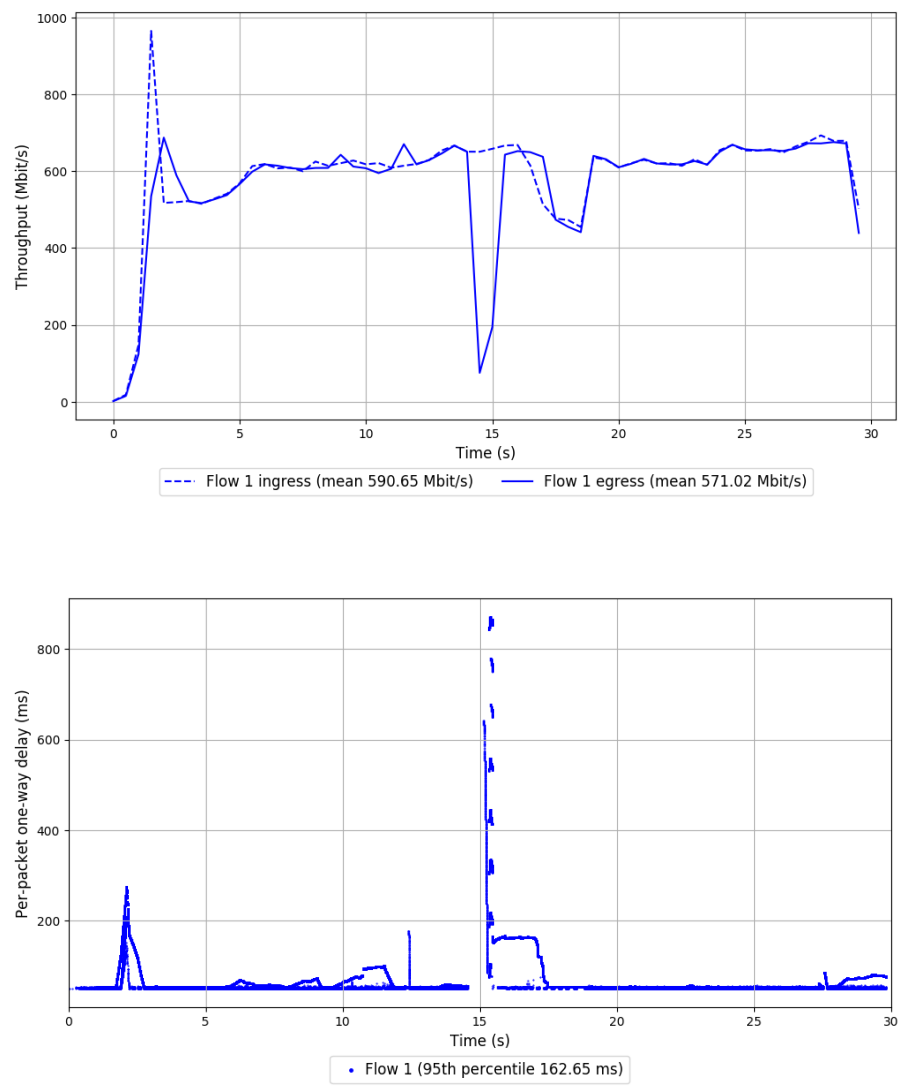
-- Flow 1:

Average throughput: 571.02 Mbit/s

95th percentile per-packet one-way delay: 162.649 ms

Loss rate: 3.66%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

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

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

Below is generated by plot.py at 2017-12-11 15:55:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 562.65 Mbit/s

95th percentile per-packet one-way delay: 207.386 ms

Loss rate: 1.05%

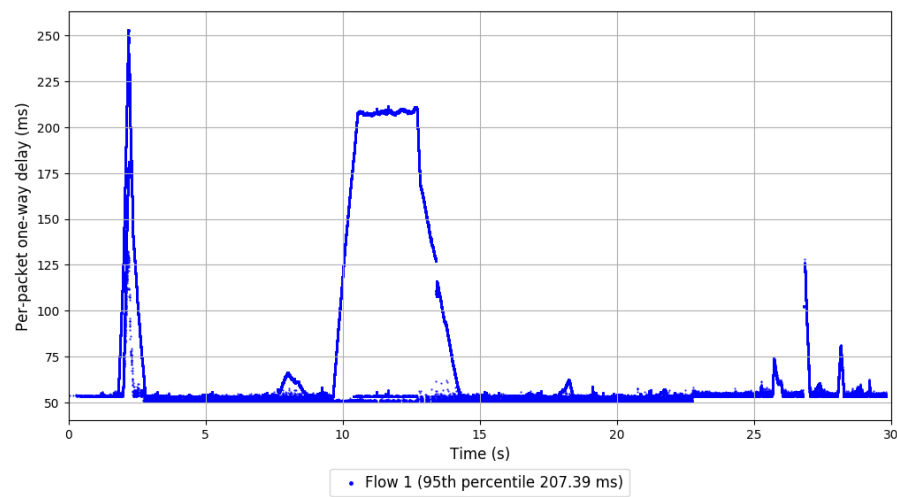
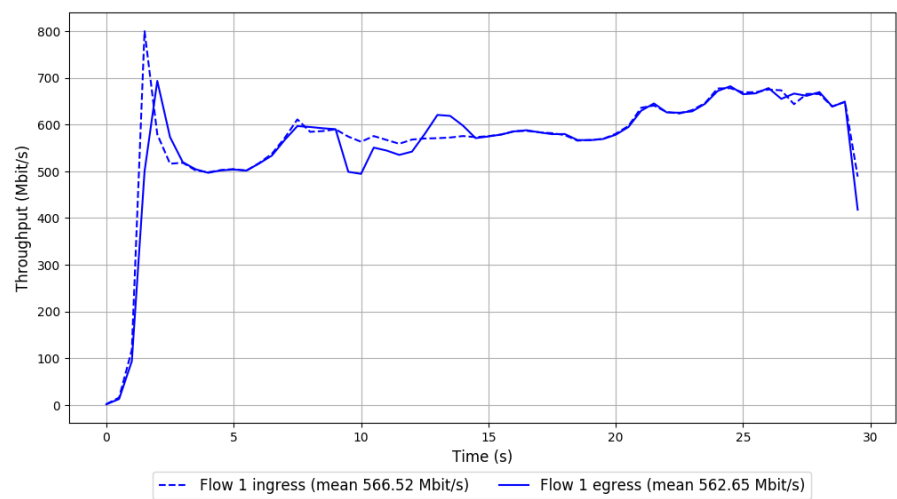
-- Flow 1:

Average throughput: 562.65 Mbit/s

95th percentile per-packet one-way delay: 207.386 ms

Loss rate: 1.05%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-11 13:23:24

End at: 2017-12-11 13:23:54

Below is generated by plot.py at 2017-12-11 15:55:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 558.38 Mbit/s

95th percentile per-packet one-way delay: 136.749 ms

Loss rate: 0.77%

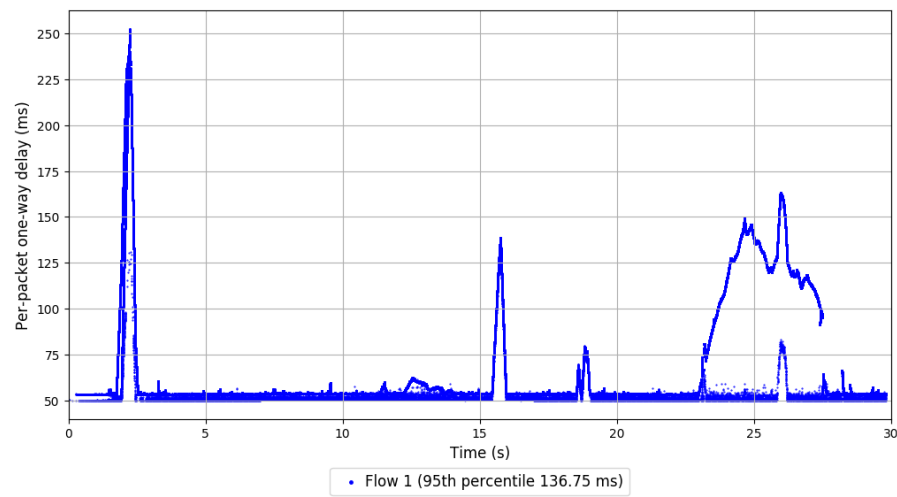
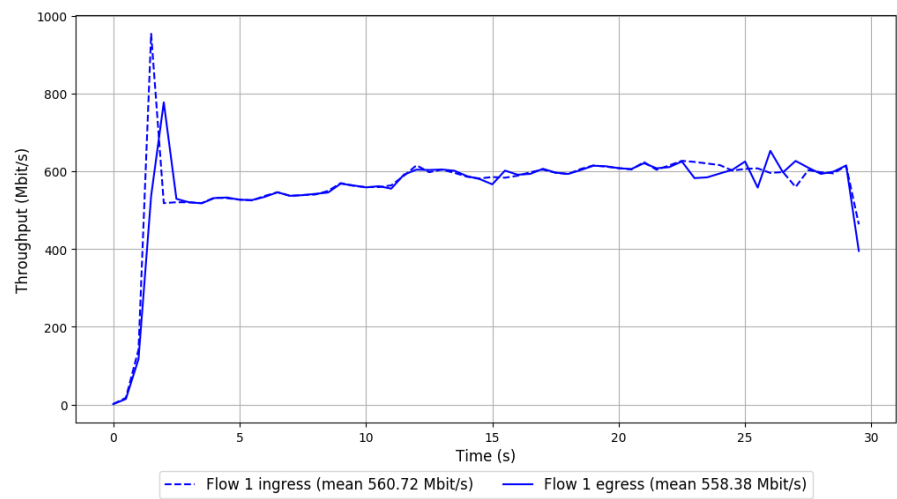
-- Flow 1:

Average throughput: 558.38 Mbit/s

95th percentile per-packet one-way delay: 136.749 ms

Loss rate: 0.77%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-11 13:33:42

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

Below is generated by plot.py at 2017-12-11 16:01:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 570.77 Mbit/s

95th percentile per-packet one-way delay: 124.869 ms

Loss rate: 1.19%

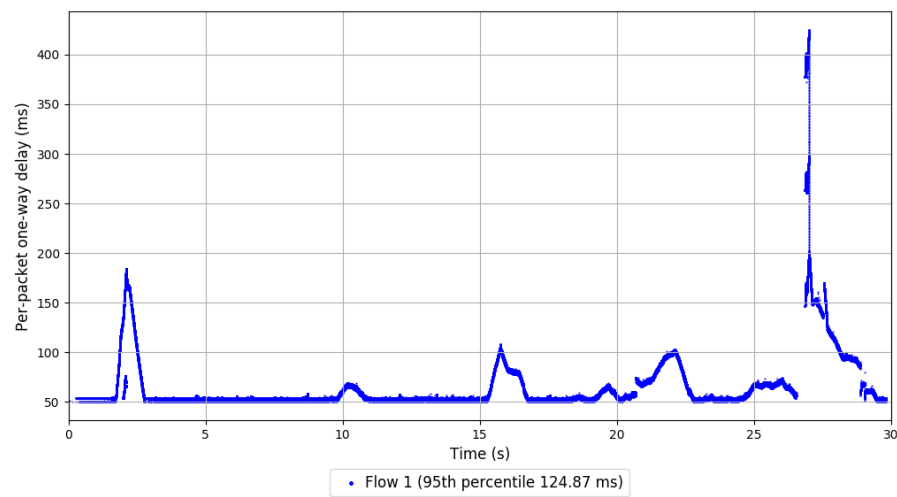
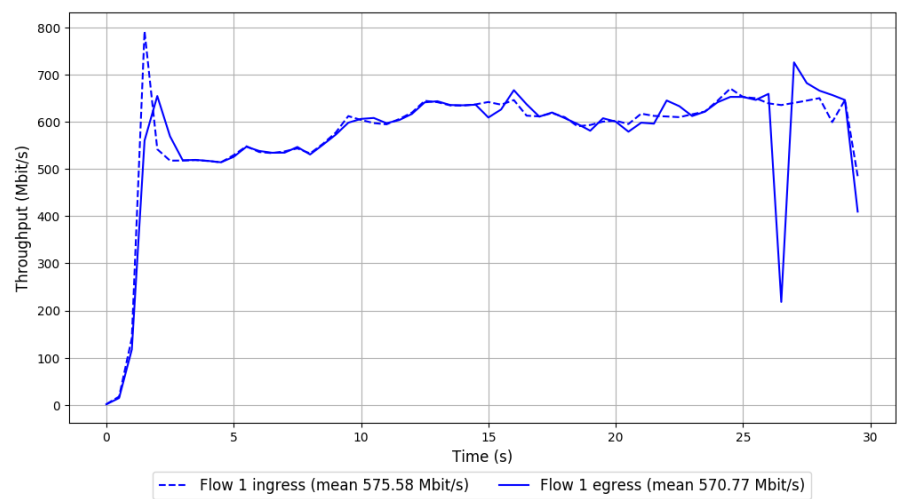
-- Flow 1:

Average throughput: 570.77 Mbit/s

95th percentile per-packet one-way delay: 124.869 ms

Loss rate: 1.19%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-11 13:43:52

End at: 2017-12-11 13:44:22

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 567.21 Mbit/s

95th percentile per-packet one-way delay: 165.501 ms

Loss rate: 0.68%

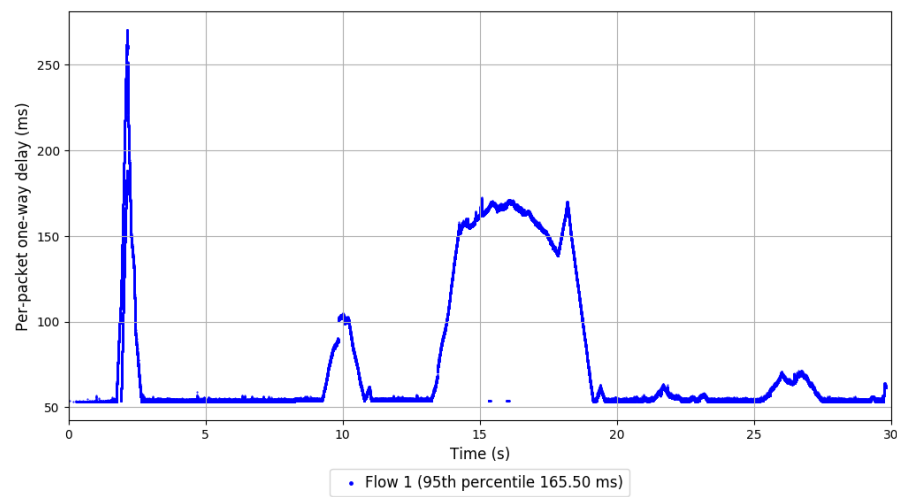
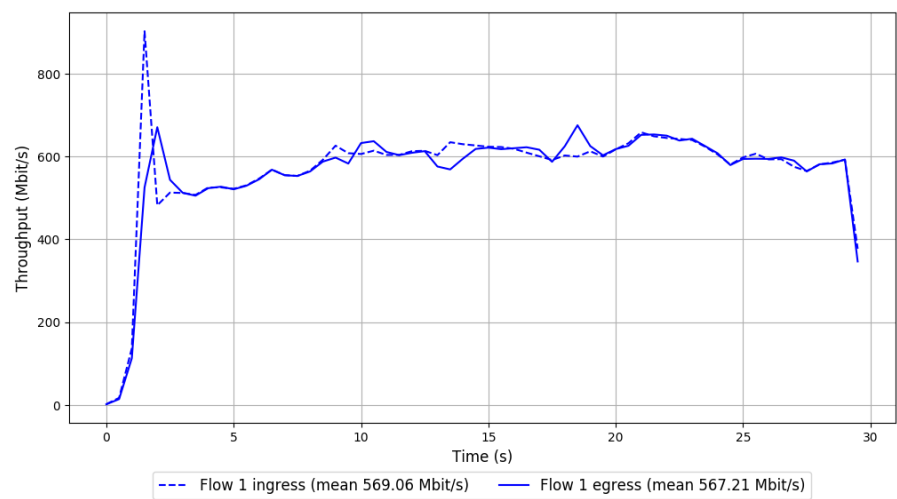
-- Flow 1:

Average throughput: 567.21 Mbit/s

95th percentile per-packet one-way delay: 165.501 ms

Loss rate: 0.68%

Run 10: Report of PCC — Data Link

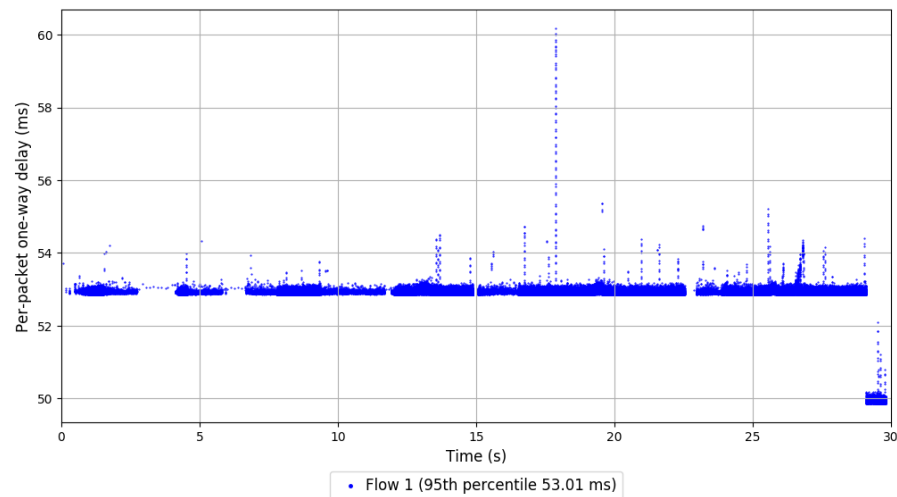
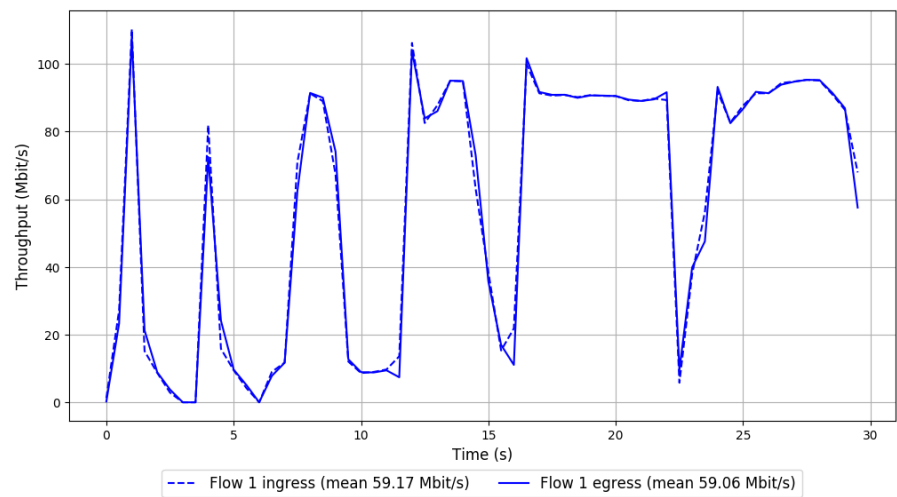


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-11 12:14:12
End at: 2017-12-11 12:14:42

# Below is generated by plot.py at 2017-12-11 16:04:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.06 Mbit/s
95th percentile per-packet one-way delay: 53.013 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 59.06 Mbit/s
95th percentile per-packet one-way delay: 53.013 ms
Loss rate: 0.55%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-11 12:24:43

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

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.28 Mbit/s

95th percentile per-packet one-way delay: 53.027 ms

Loss rate: 0.57%

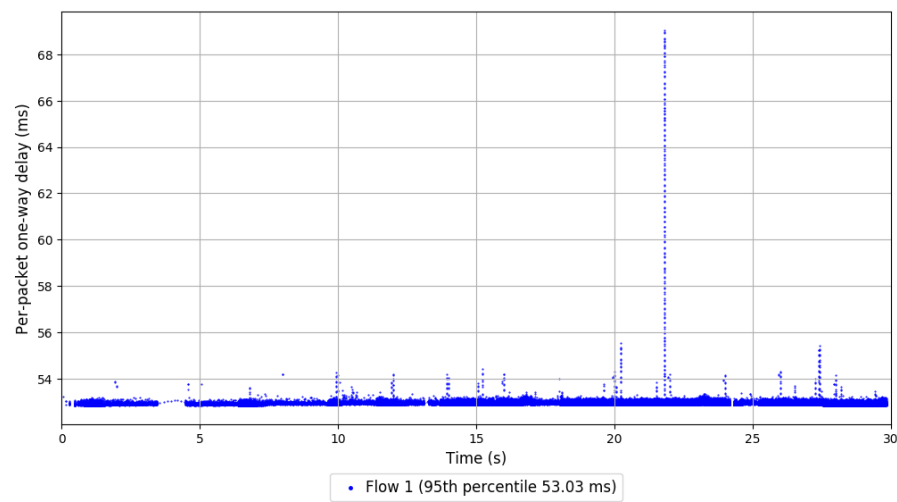
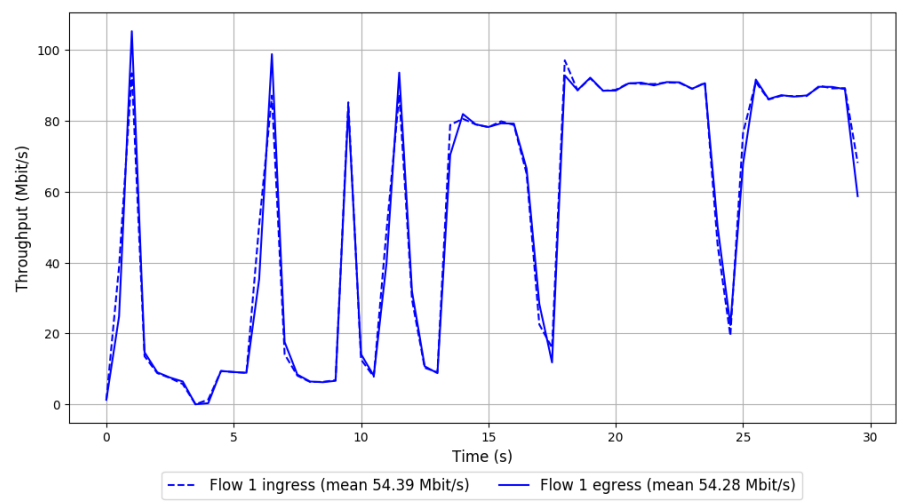
-- Flow 1:

Average throughput: 54.28 Mbit/s

95th percentile per-packet one-way delay: 53.027 ms

Loss rate: 0.57%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-11 12:34:53

End at: 2017-12-11 12:35:23

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.69 Mbit/s

95th percentile per-packet one-way delay: 53.563 ms

Loss rate: 0.47%

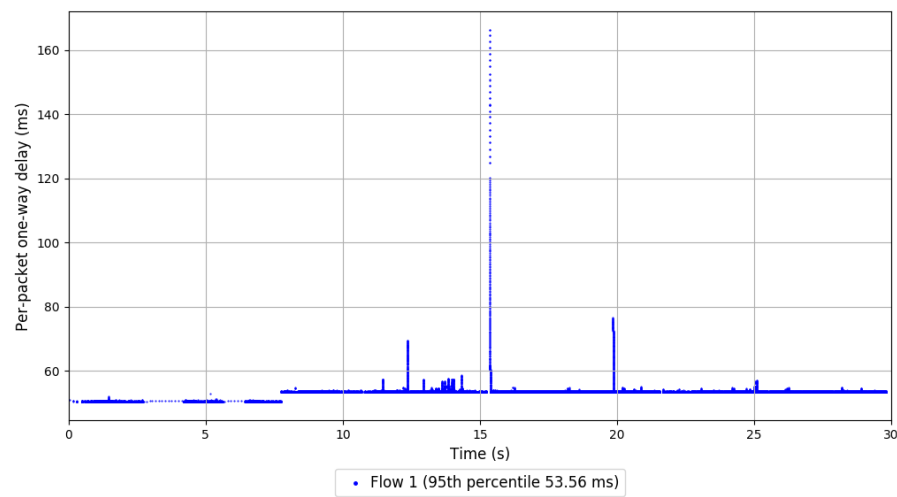
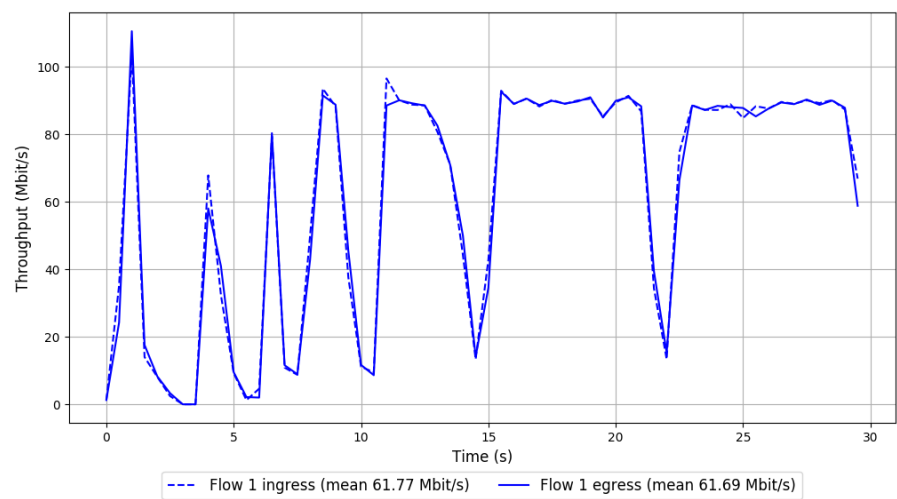
-- Flow 1:

Average throughput: 61.69 Mbit/s

95th percentile per-packet one-way delay: 53.563 ms

Loss rate: 0.47%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-11 12:44:59

End at: 2017-12-11 12:45:29

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.65 Mbit/s

95th percentile per-packet one-way delay: 53.538 ms

Loss rate: 0.52%

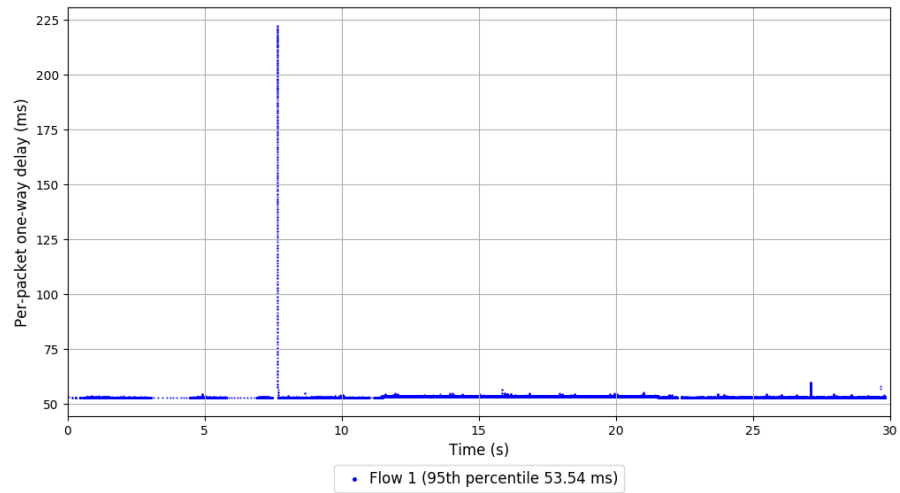
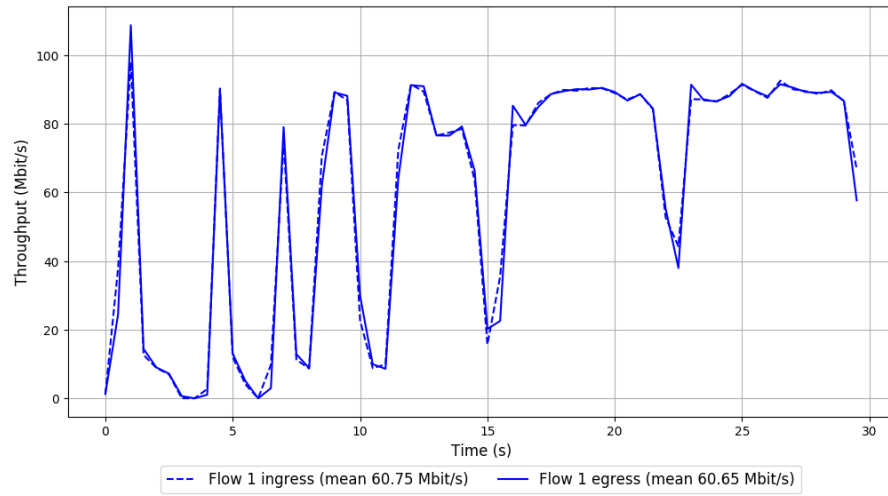
-- Flow 1:

Average throughput: 60.65 Mbit/s

95th percentile per-packet one-way delay: 53.538 ms

Loss rate: 0.52%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

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

End at: 2017-12-11 12:56:06

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.93 Mbit/s

95th percentile per-packet one-way delay: 53.605 ms

Loss rate: 0.48%

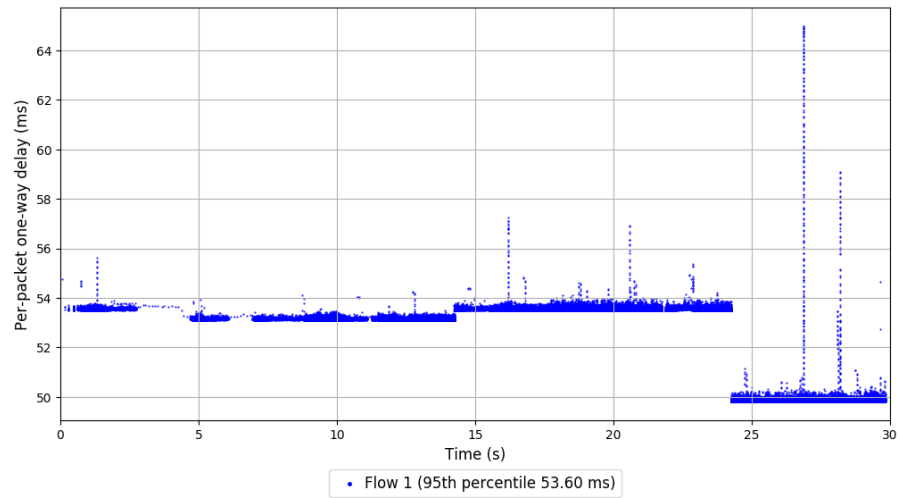
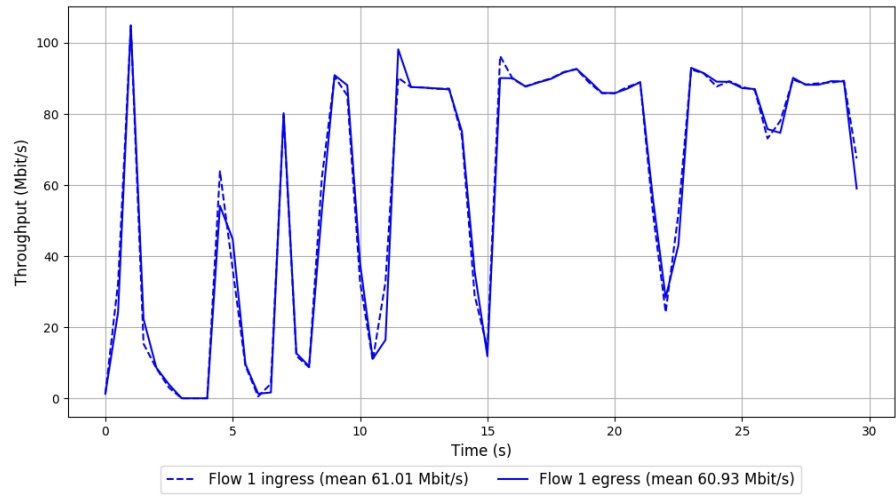
-- Flow 1:

Average throughput: 60.93 Mbit/s

95th percentile per-packet one-way delay: 53.605 ms

Loss rate: 0.48%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-11 13:05:55

End at: 2017-12-11 13:06:25

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.78 Mbit/s

95th percentile per-packet one-way delay: 53.701 ms

Loss rate: 0.51%

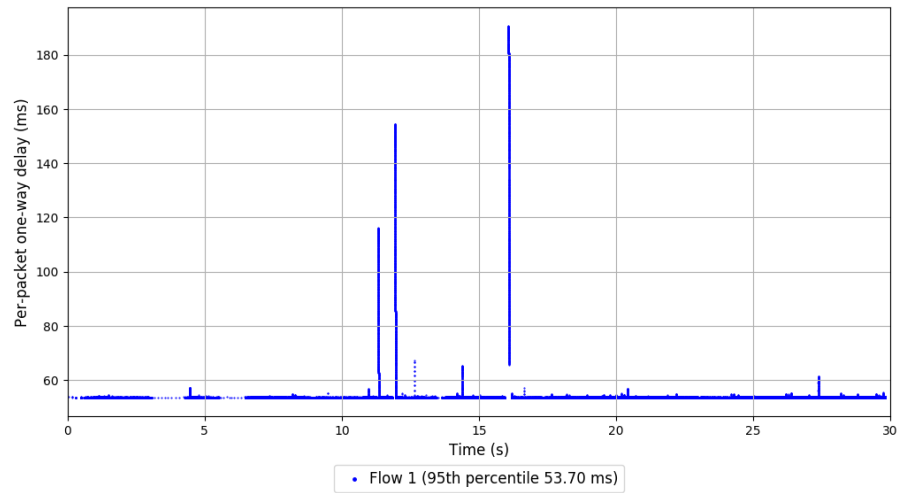
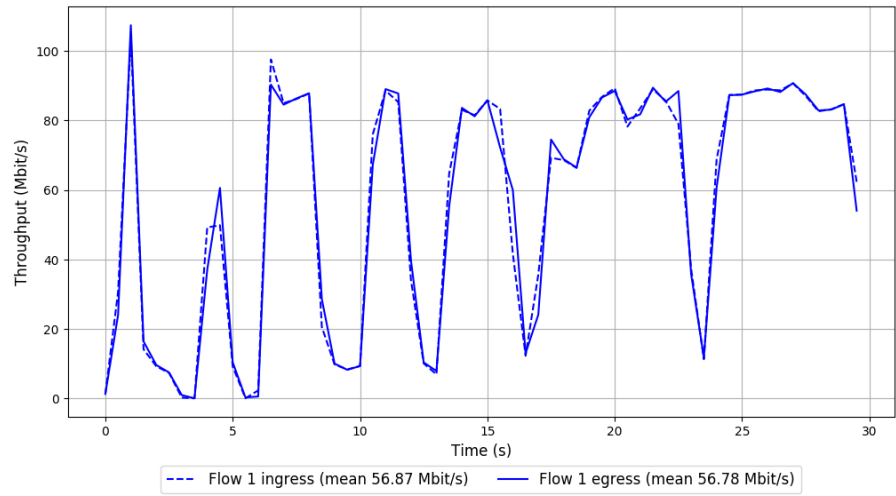
-- Flow 1:

Average throughput: 56.78 Mbit/s

95th percentile per-packet one-way delay: 53.701 ms

Loss rate: 0.51%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-11 13:16:06

End at: 2017-12-11 13:16:36

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.39 Mbit/s

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

Loss rate: 0.63%

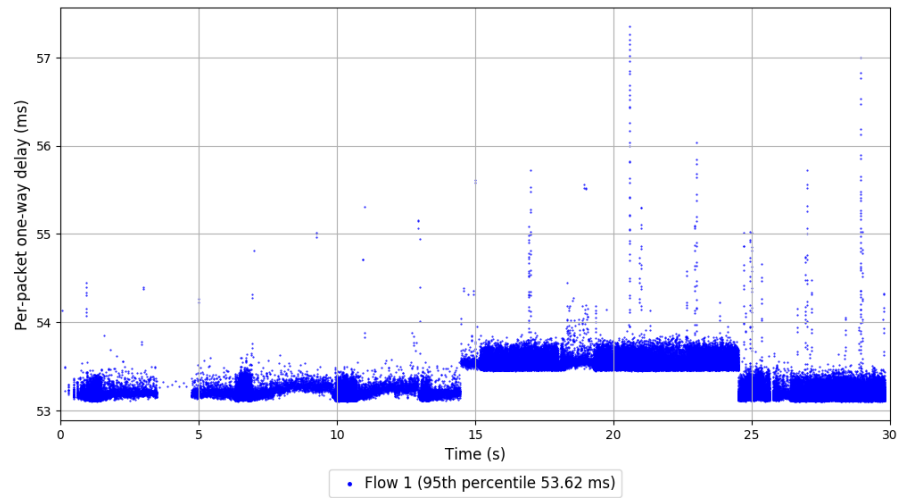
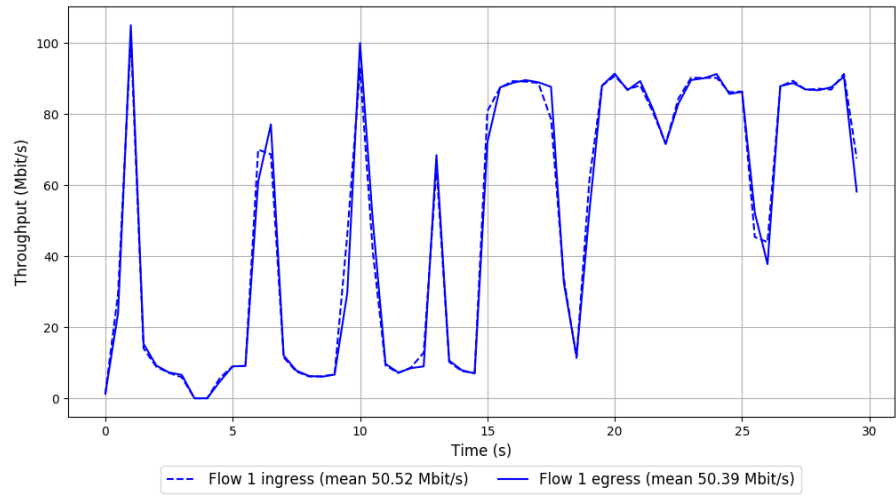
-- Flow 1:

Average throughput: 50.39 Mbit/s

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

Loss rate: 0.63%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-11 13:26:16

End at: 2017-12-11 13:26:46

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.05 Mbit/s

95th percentile per-packet one-way delay: 50.432 ms

Loss rate: 0.56%

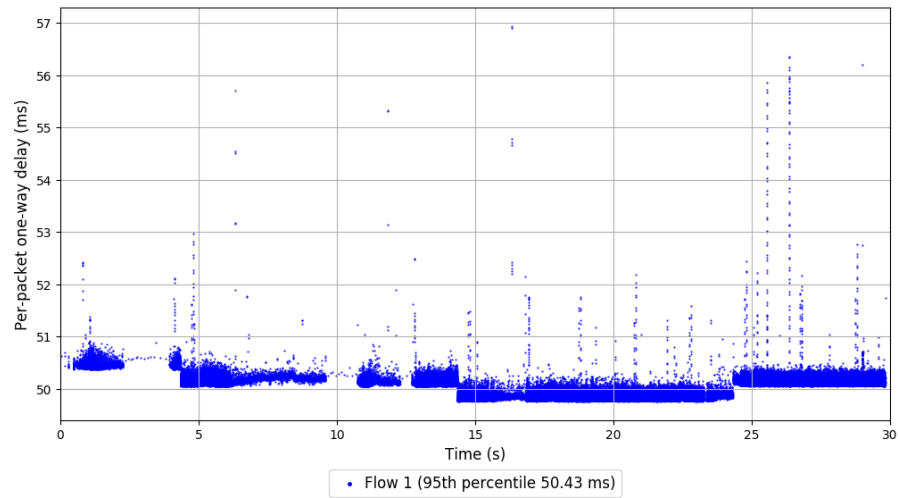
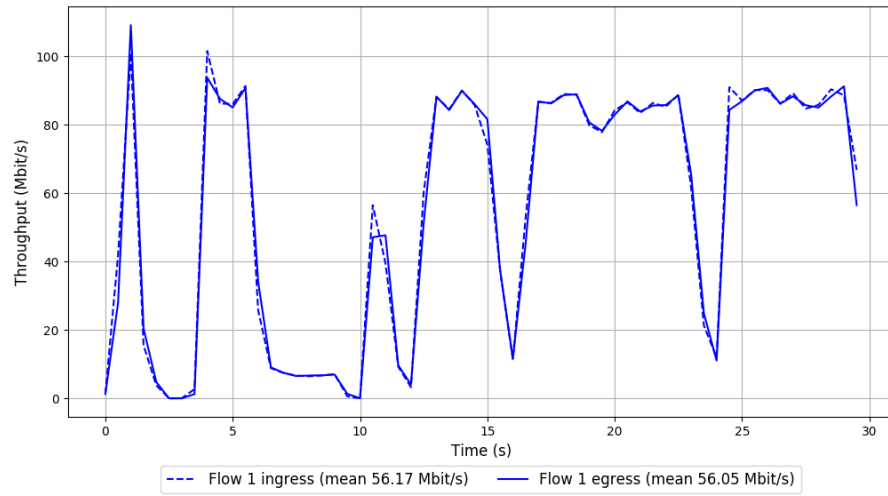
-- Flow 1:

Average throughput: 56.05 Mbit/s

95th percentile per-packet one-way delay: 50.432 ms

Loss rate: 0.56%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-11 13:36:42

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

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.24 Mbit/s

95th percentile per-packet one-way delay: 50.427 ms

Loss rate: 0.35%

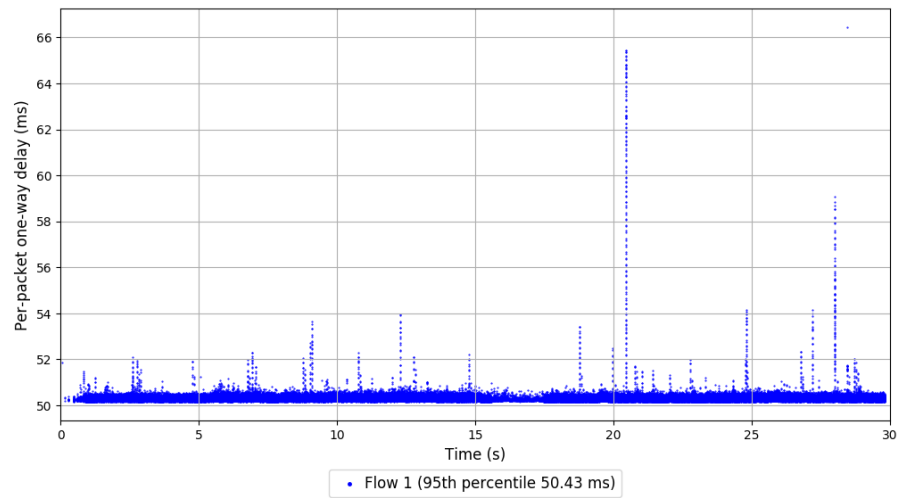
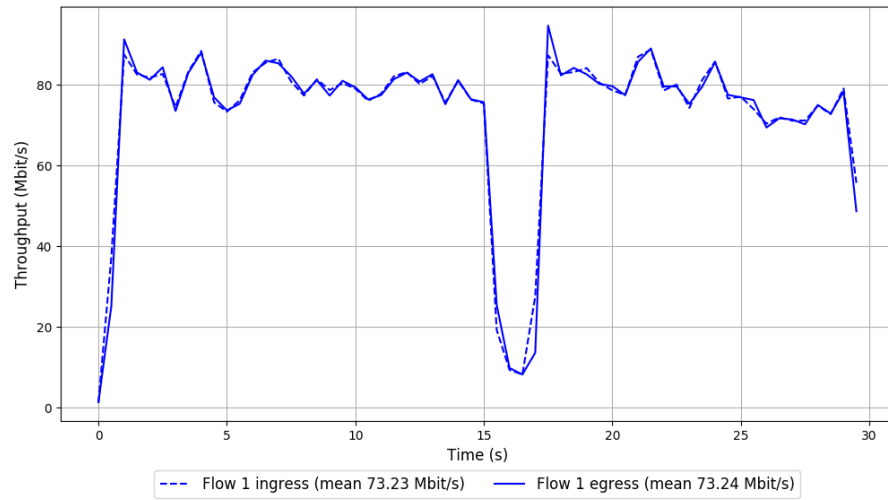
-- Flow 1:

Average throughput: 73.24 Mbit/s

95th percentile per-packet one-way delay: 50.427 ms

Loss rate: 0.35%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-11 13:46:48

End at: 2017-12-11 13:47:18

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.71 Mbit/s

95th percentile per-packet one-way delay: 53.446 ms

Loss rate: 0.41%

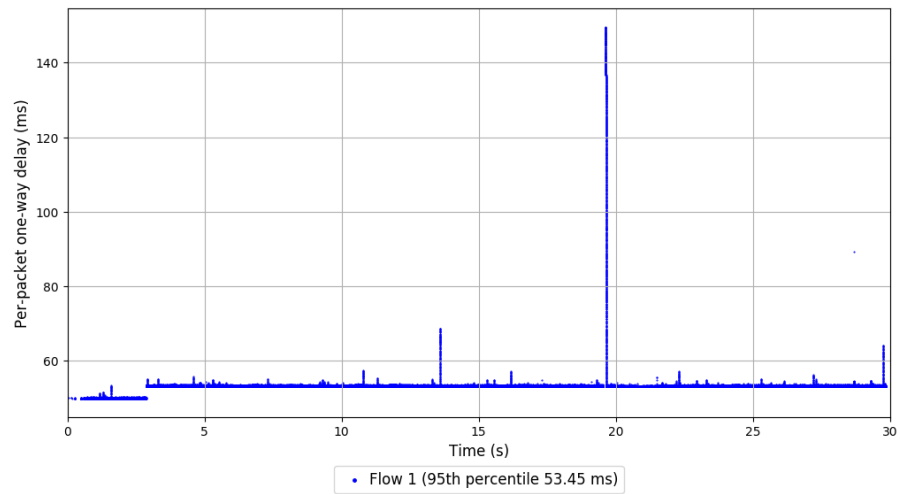
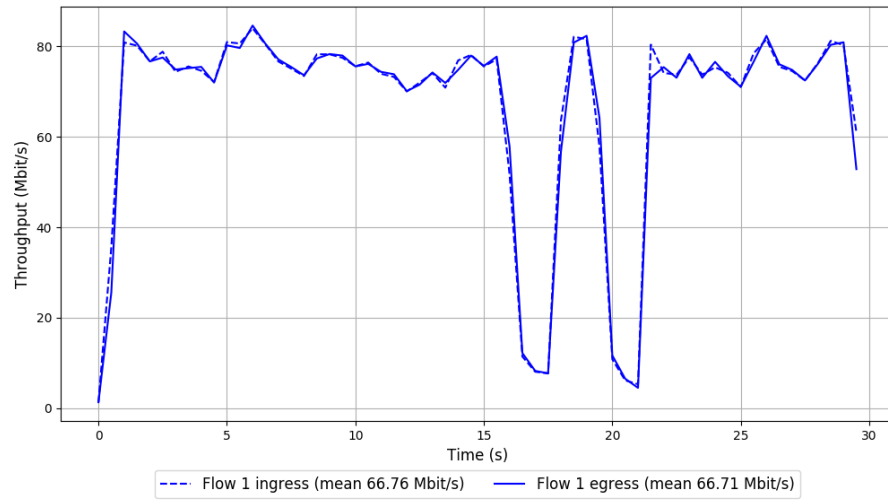
-- Flow 1:

Average throughput: 66.71 Mbit/s

95th percentile per-packet one-way delay: 53.446 ms

Loss rate: 0.41%

Run 10: Report of QUIC Cubic — Data Link

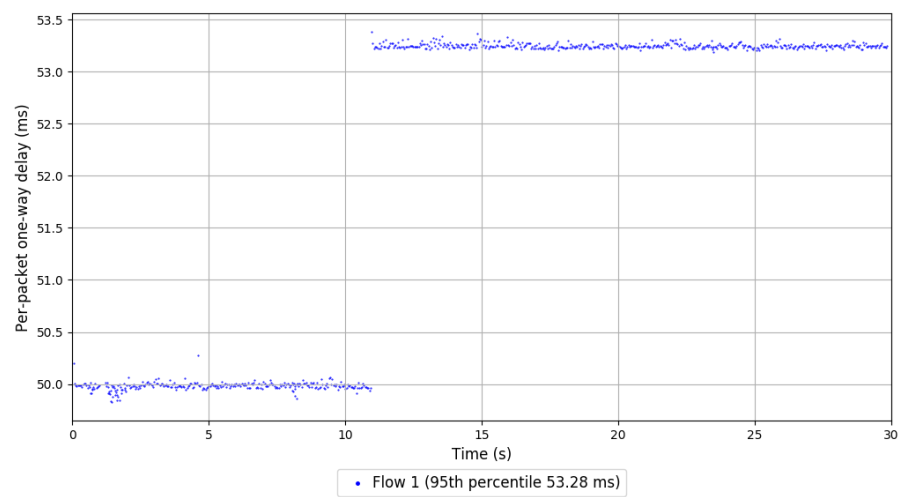
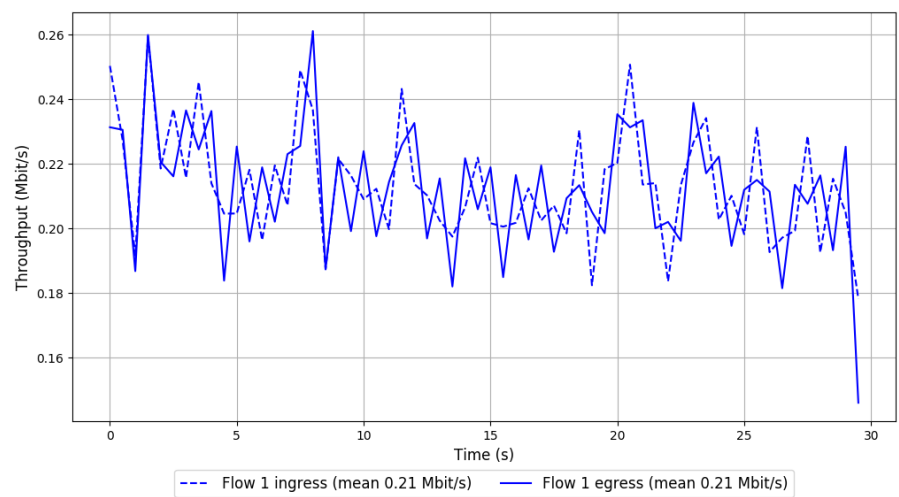


```
Run 1: Statistics of SCReAM

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

# Below is generated by plot.py at 2017-12-11 16:04:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.284 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.284 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

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

End at: 2017-12-11 12:23:09

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.567 ms

Loss rate: 0.38%

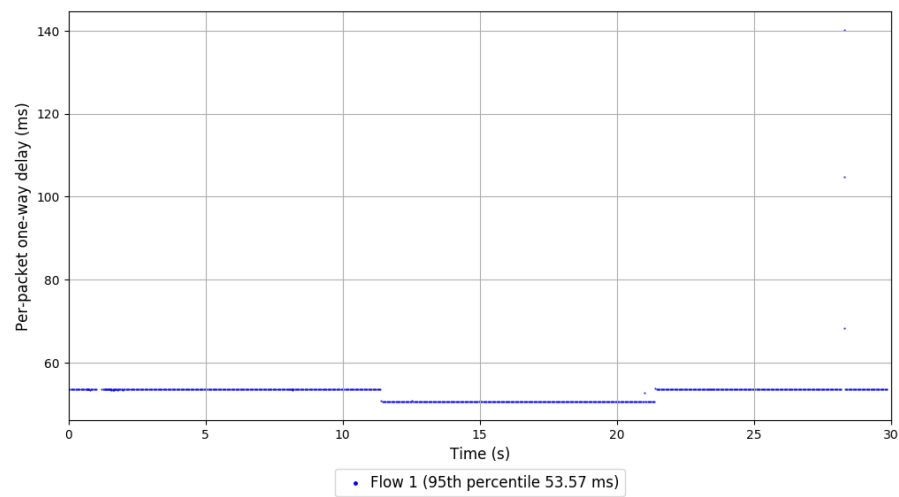
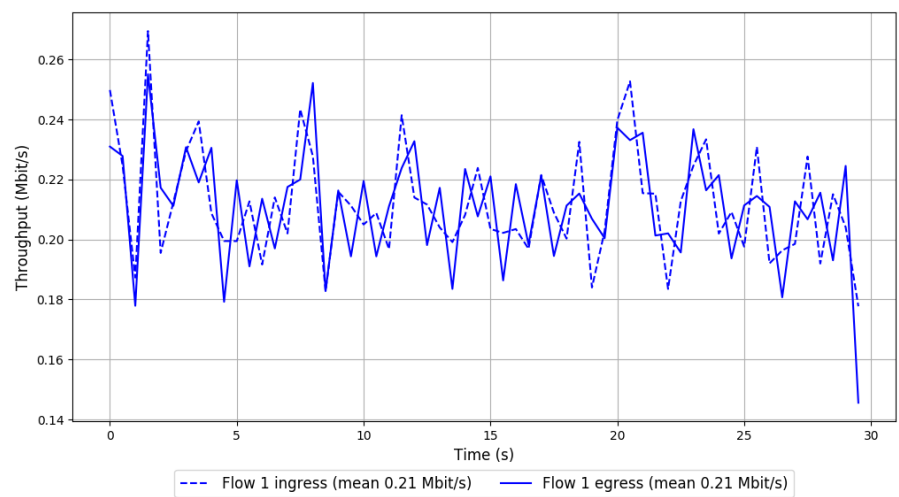
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.567 ms

Loss rate: 0.38%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-11 12:32:53

End at: 2017-12-11 12:33:23

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.25%

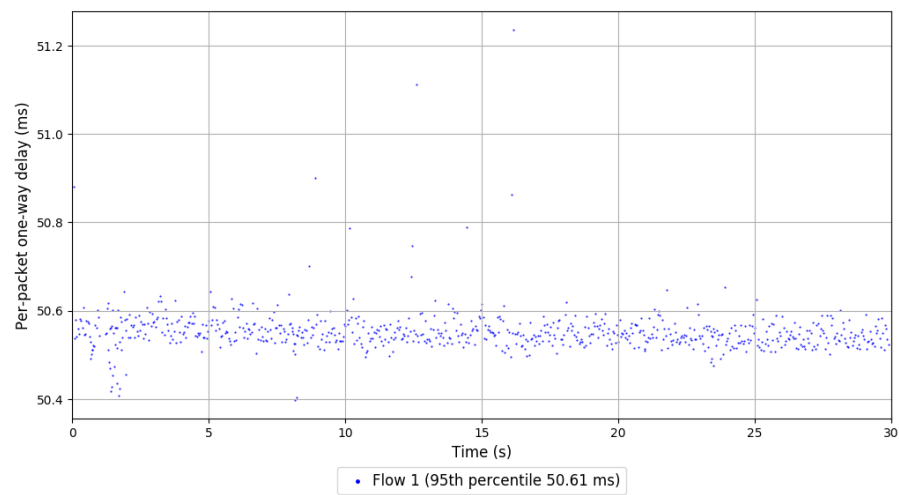
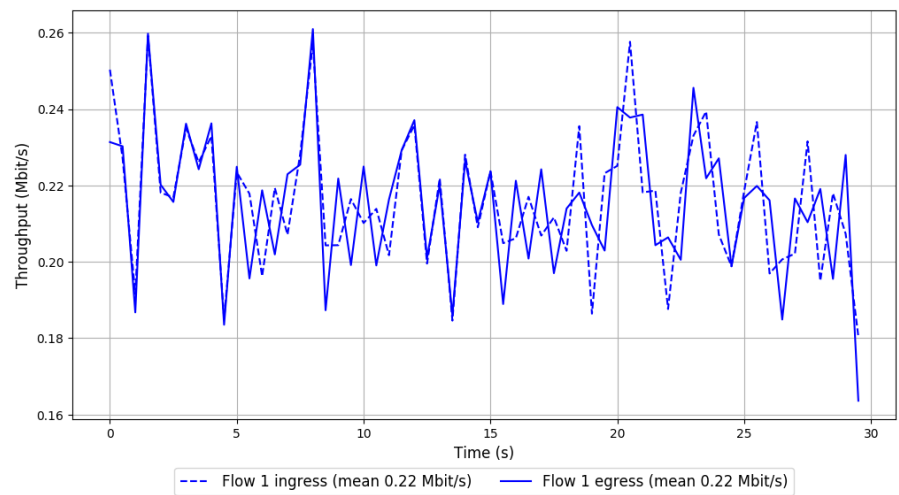
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.25%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-11 12:42:58

End at: 2017-12-11 12:43:28

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.247 ms

Loss rate: 0.26%

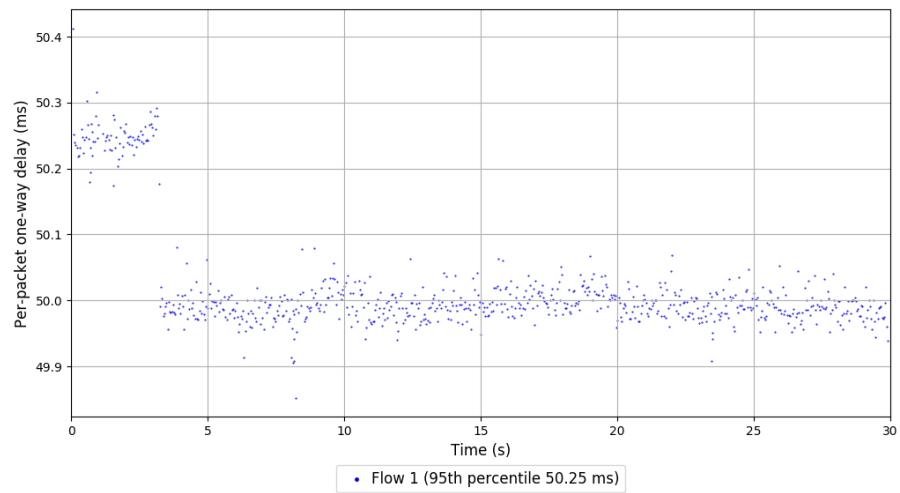
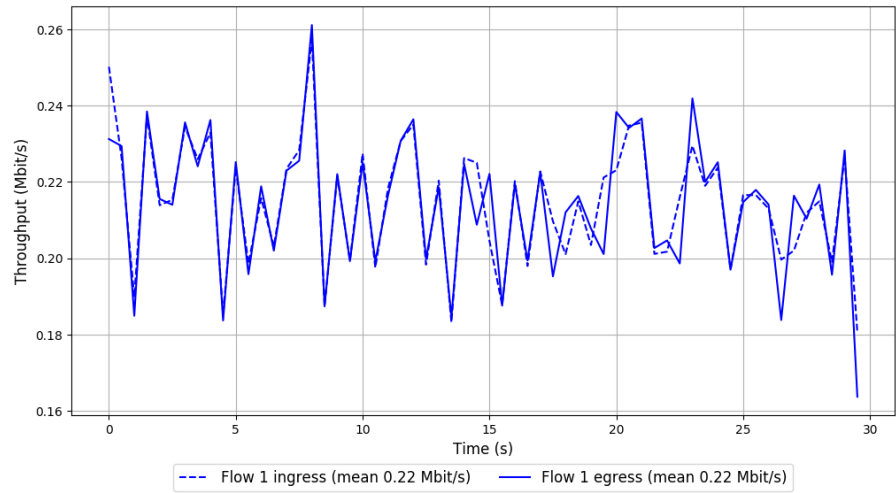
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.247 ms

Loss rate: 0.26%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-11 12:53:35

End at: 2017-12-11 12:54:05

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.062 ms

Loss rate: 0.38%

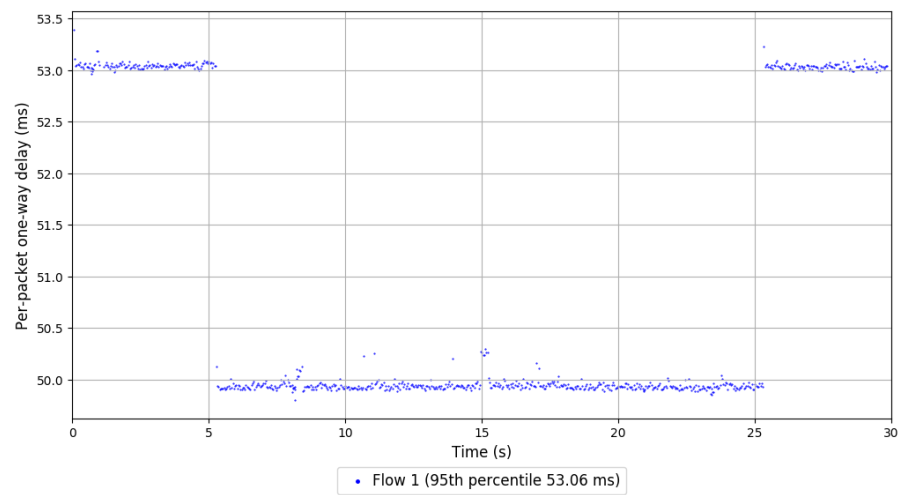
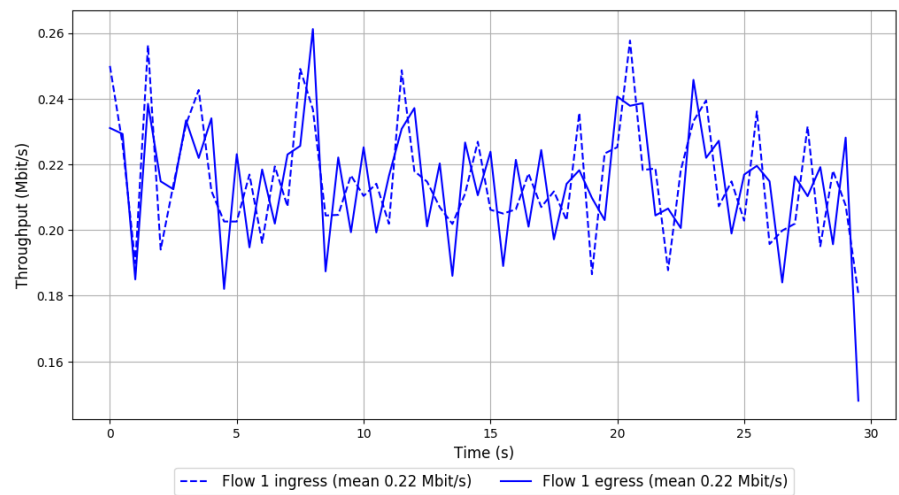
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.062 ms

Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-11 13:03:52

End at: 2017-12-11 13:04:22

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.328 ms

Loss rate: 0.38%

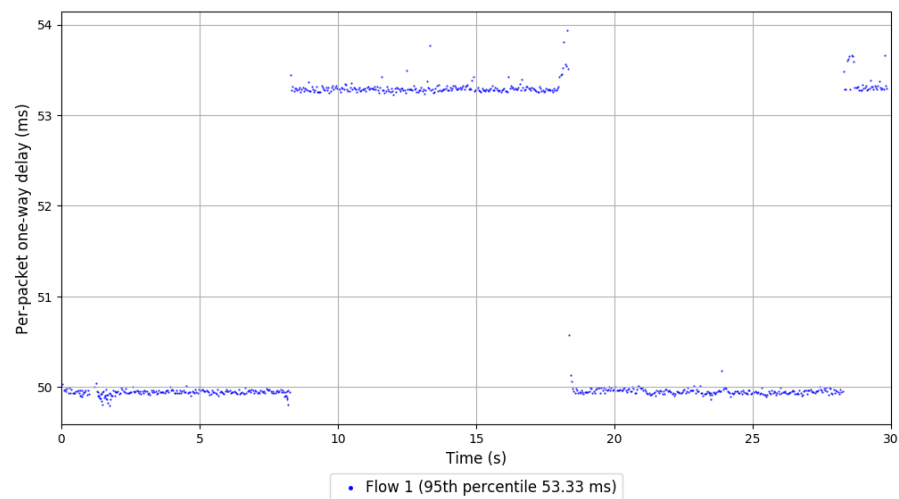
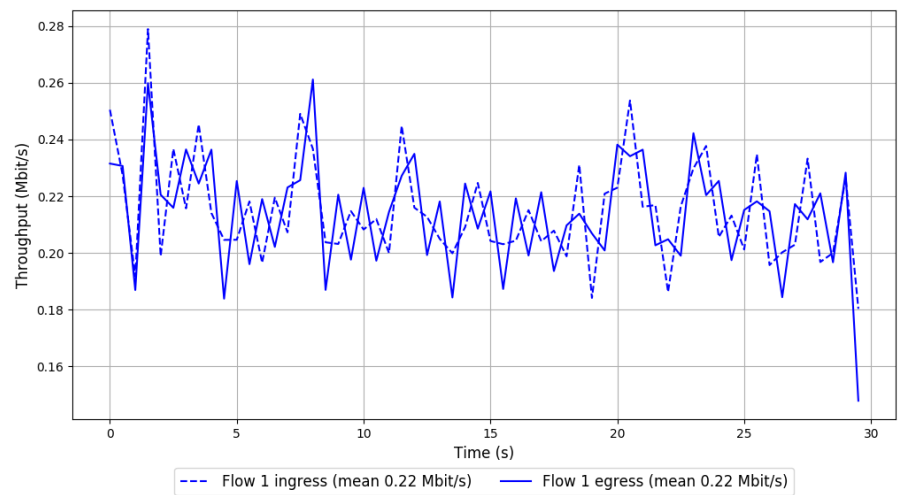
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.328 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-11 13:14:05

End at: 2017-12-11 13:14:35

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.735 ms

Loss rate: 0.38%

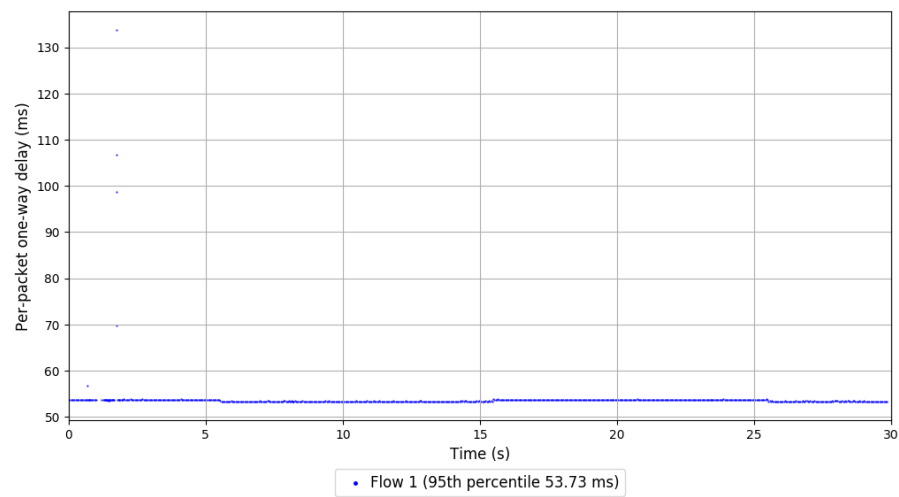
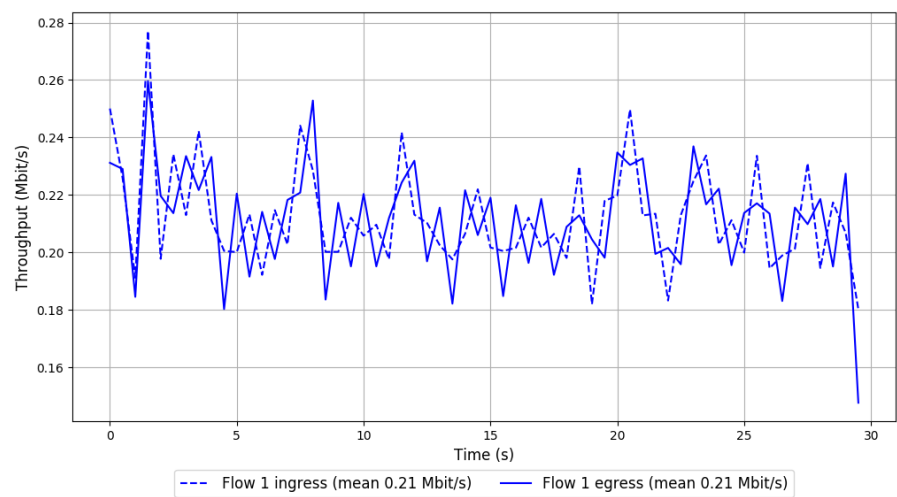
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.735 ms

Loss rate: 0.38%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-11 13:24:21

End at: 2017-12-11 13:24:51

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.601 ms

Loss rate: 0.38%

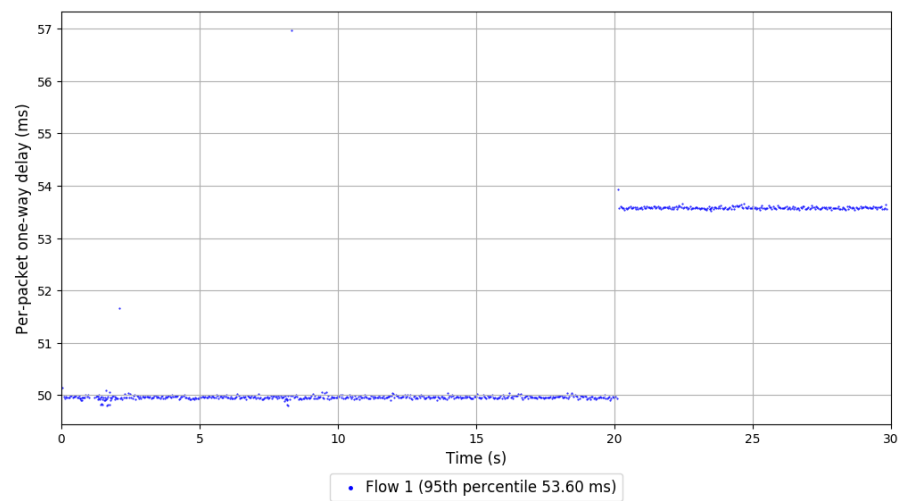
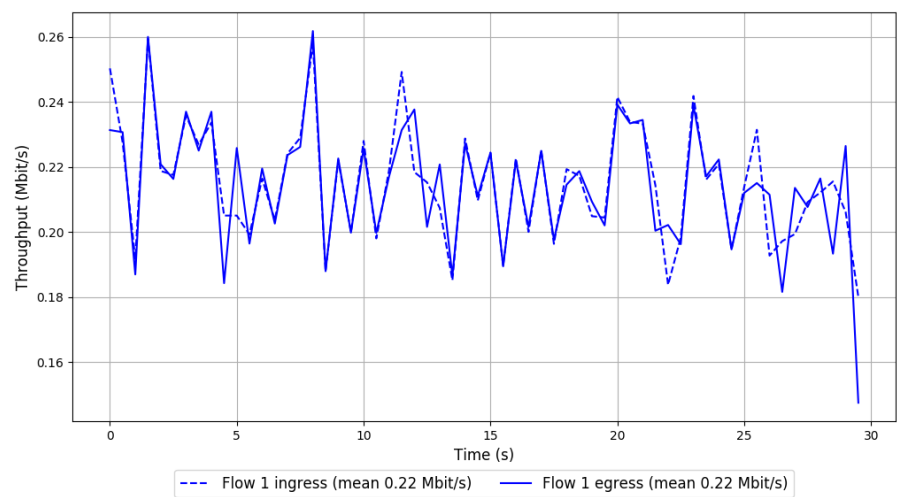
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.601 ms

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-11 13:34:40

End at: 2017-12-11 13:35:10

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.678 ms

Loss rate: 0.38%

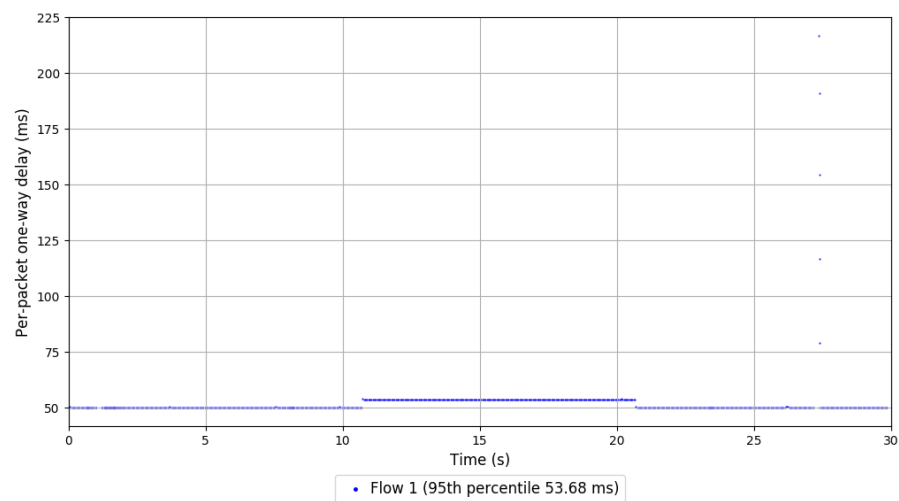
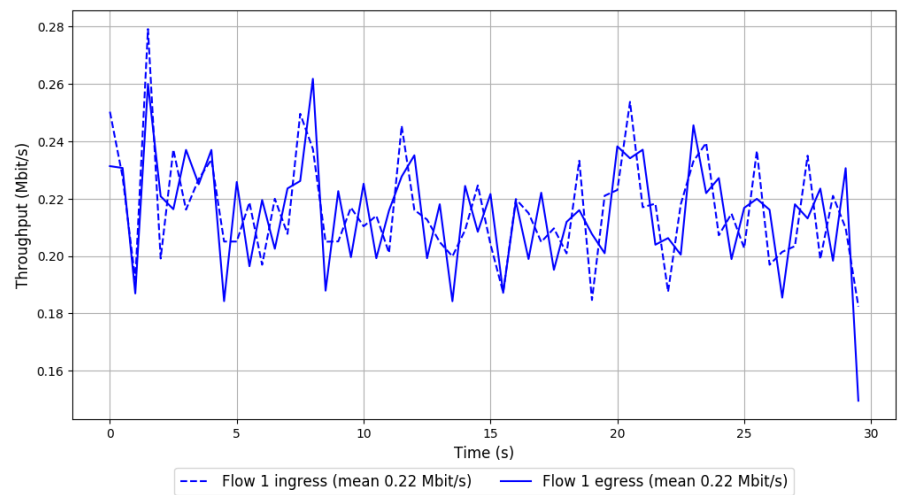
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.678 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-11 13:44:50

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

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 53.428 ms

Loss rate: 0.17%

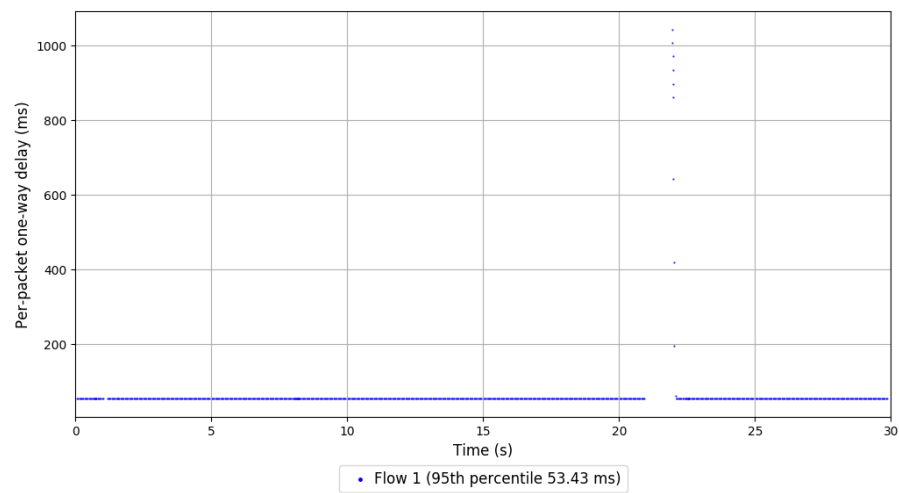
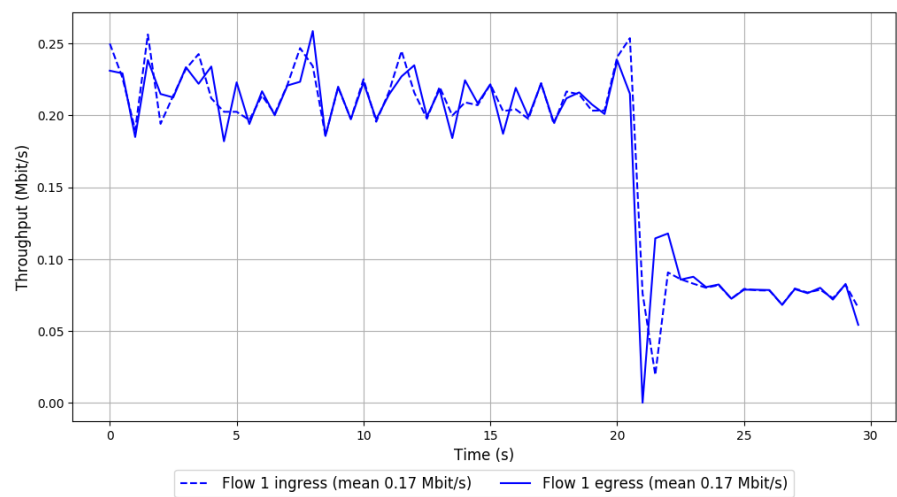
-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 53.428 ms

Loss rate: 0.17%

Run 10: Report of SReAM — Data Link

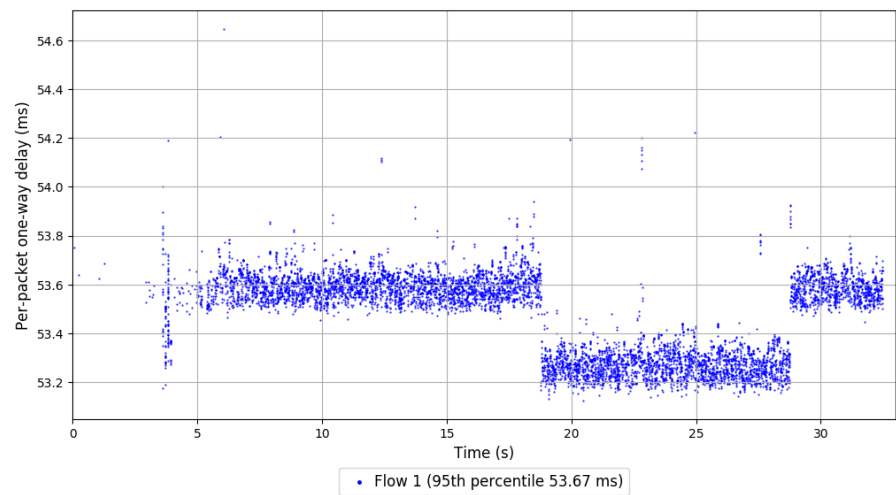
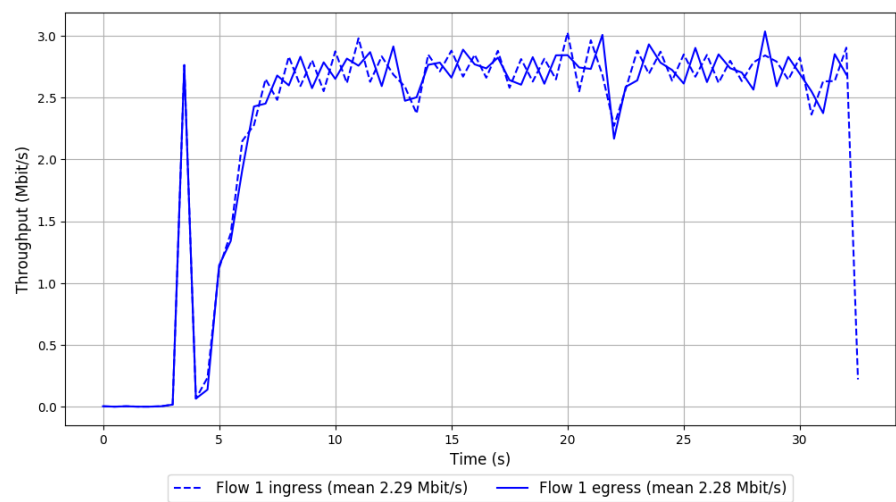


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-11 12:10:35
End at: 2017-12-11 12:11:05

# Below is generated by plot.py at 2017-12-11 16:04:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.671 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.671 ms
Loss rate: 0.45%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-11 12:21:05

End at: 2017-12-11 12:21:35

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

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

Loss rate: 0.31%

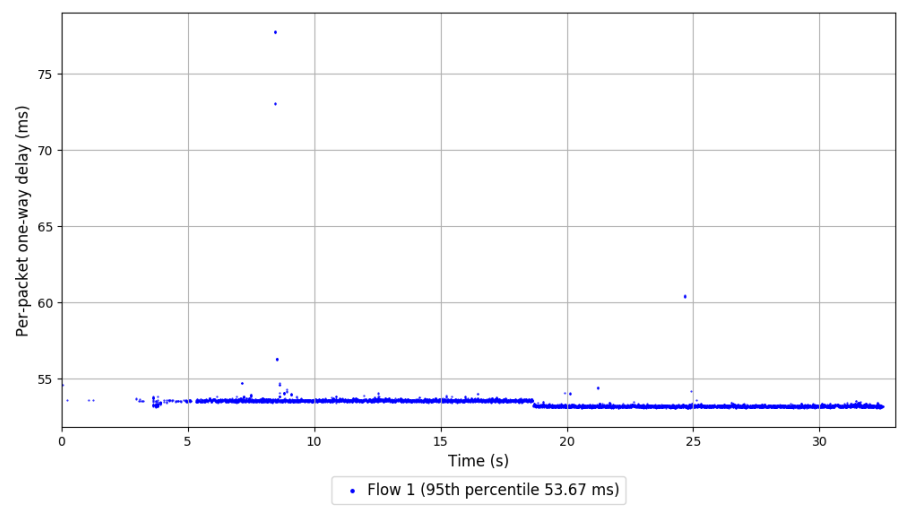
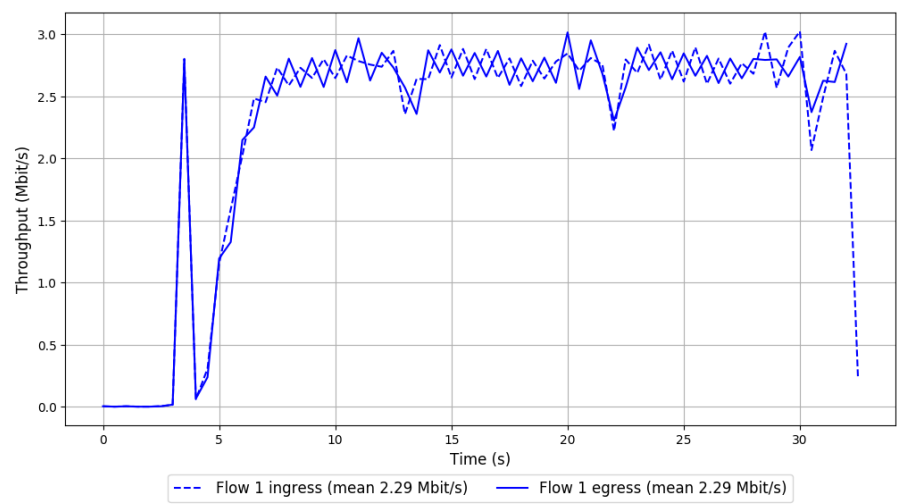
-- Flow 1:

Average throughput: 2.29 Mbit/s

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

Loss rate: 0.31%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-11 12:31:17

End at: 2017-12-11 12:31:47

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.722 ms

Loss rate: 0.31%

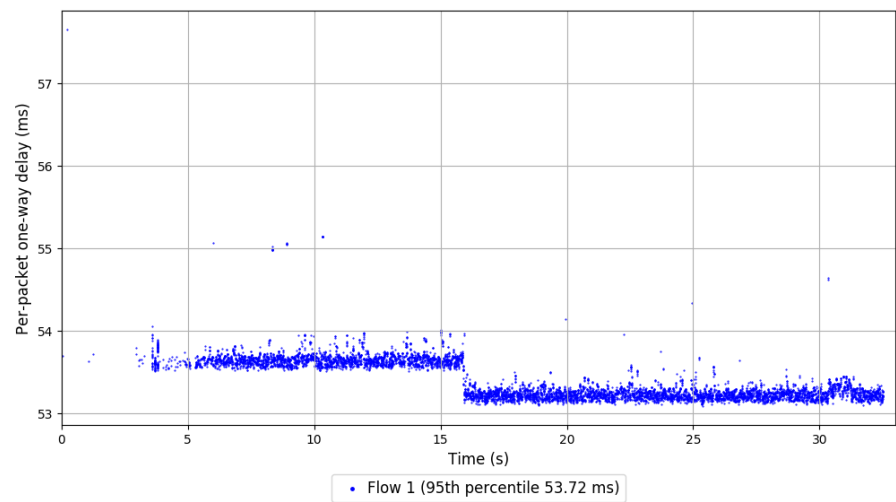
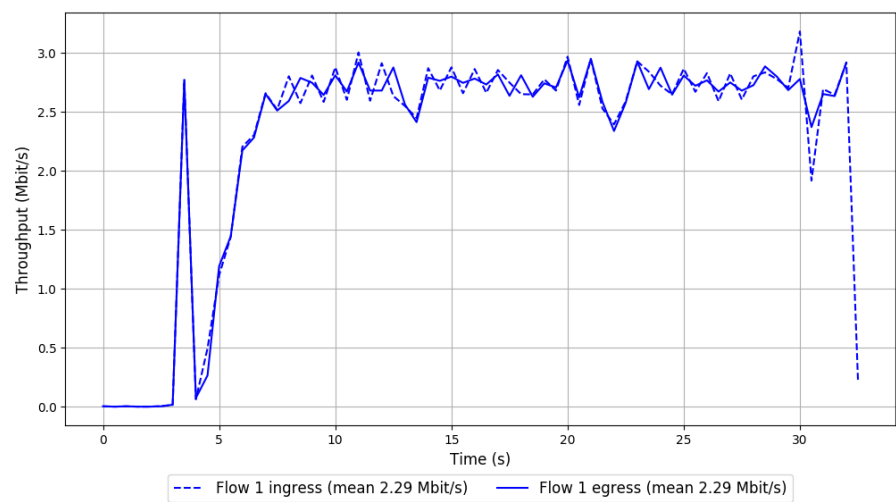
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.722 ms

Loss rate: 0.31%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-11 12:41:30

End at: 2017-12-11 12:42:00

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.293 ms

Loss rate: 0.34%

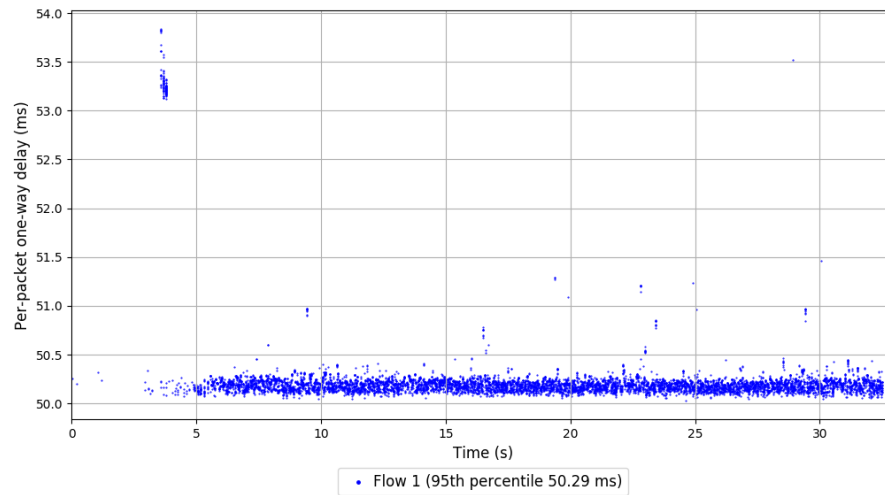
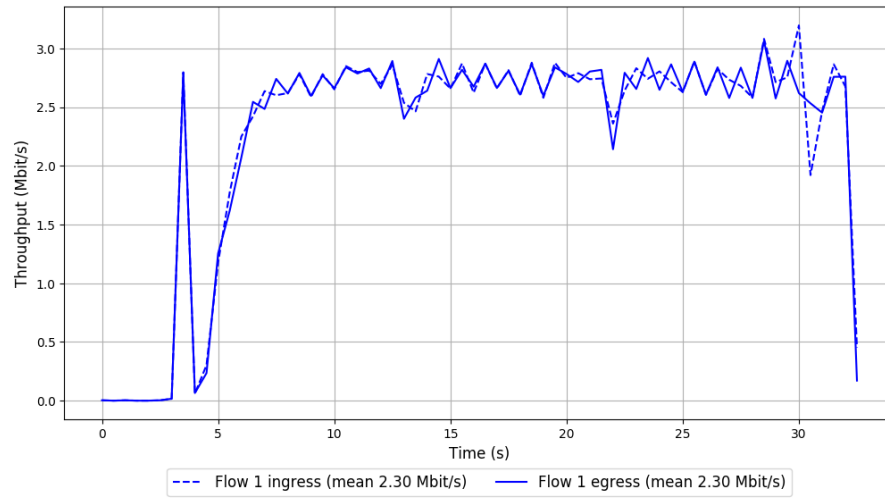
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.293 ms

Loss rate: 0.34%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

End at: 2017-12-11 12:52:30

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.151 ms

Loss rate: 0.42%

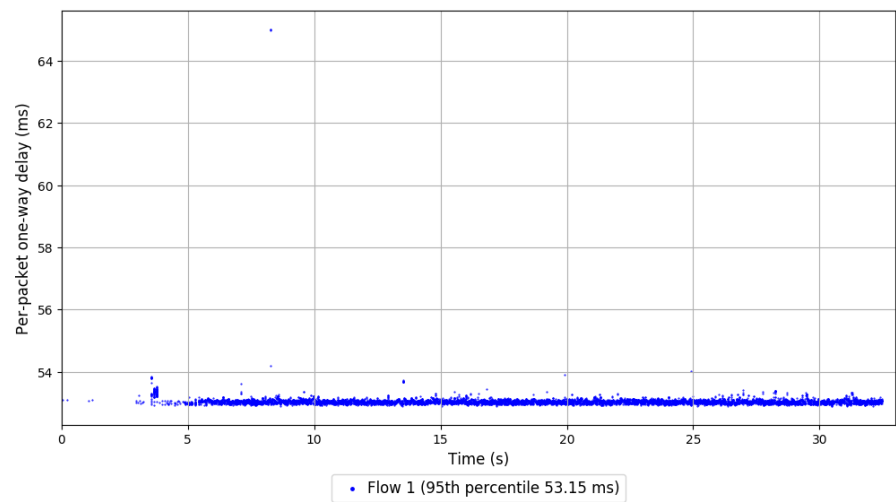
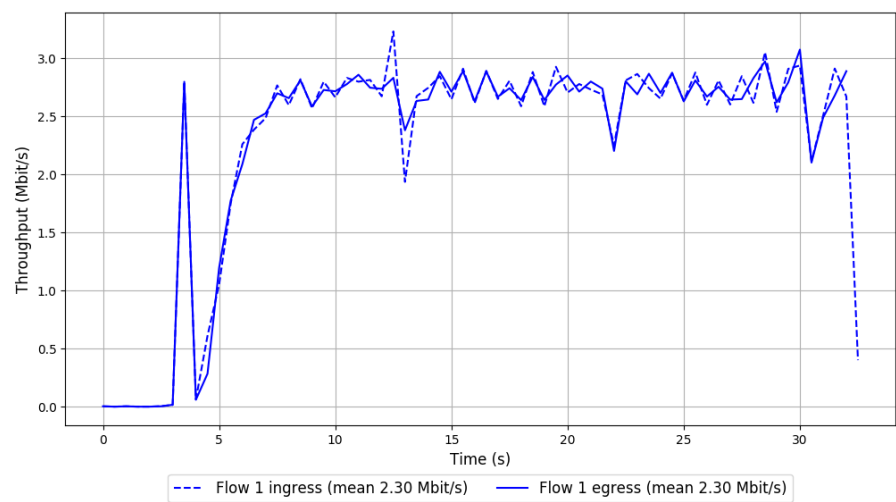
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.151 ms

Loss rate: 0.42%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-11 13:02:17

End at: 2017-12-11 13:02:47

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 53.090 ms

Loss rate: 0.31%

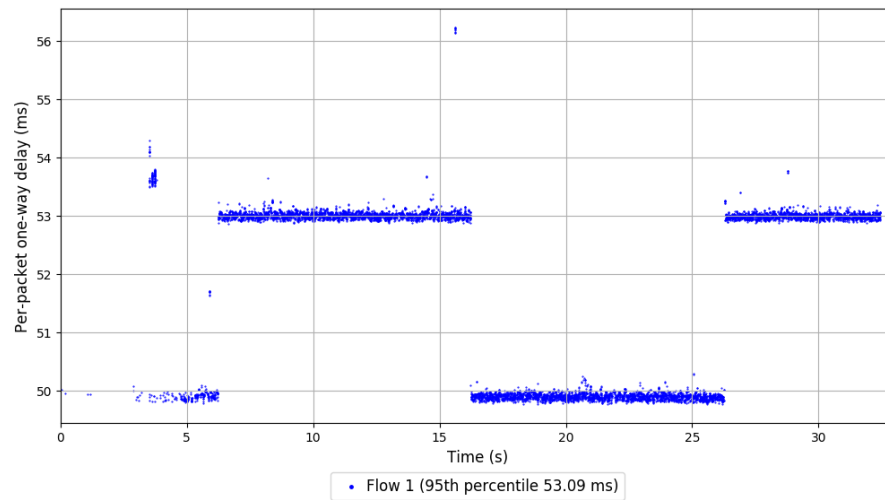
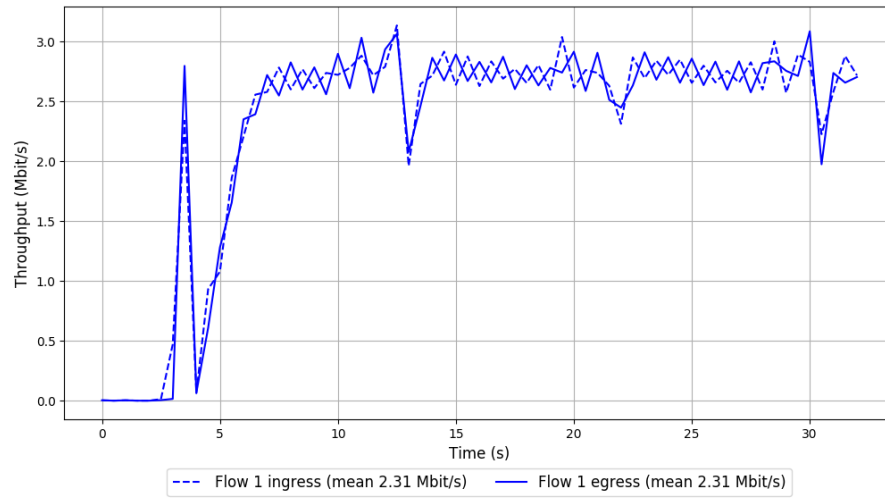
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 53.090 ms

Loss rate: 0.31%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.447 ms

Loss rate: 0.45%

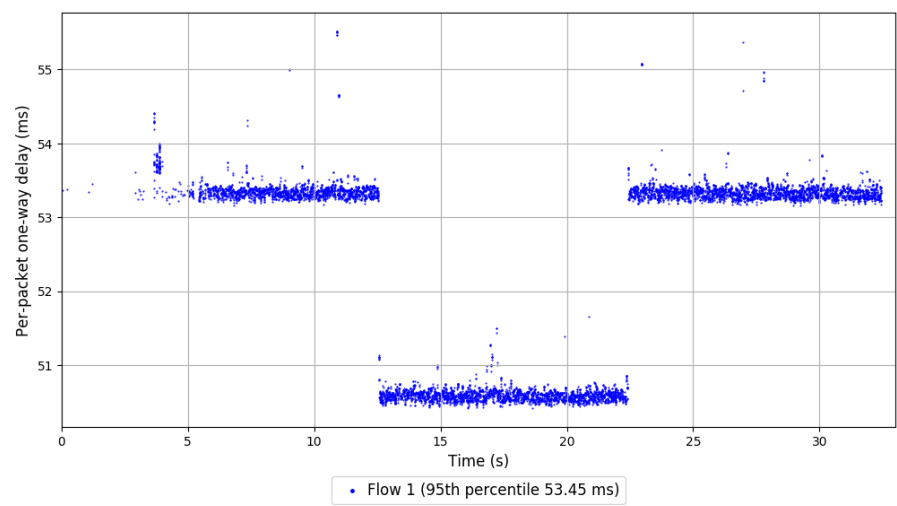
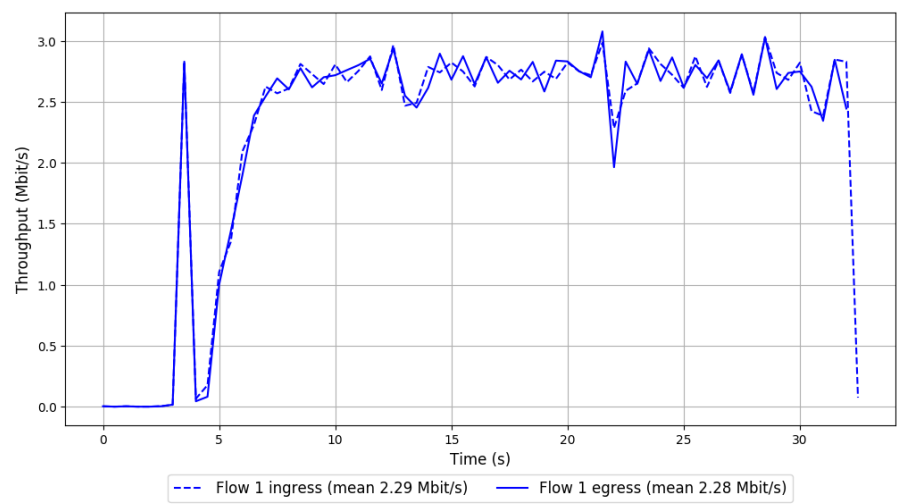
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.447 ms

Loss rate: 0.45%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-11 13:22:46

End at: 2017-12-11 13:23:17

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 50.965 ms

Loss rate: 0.71%

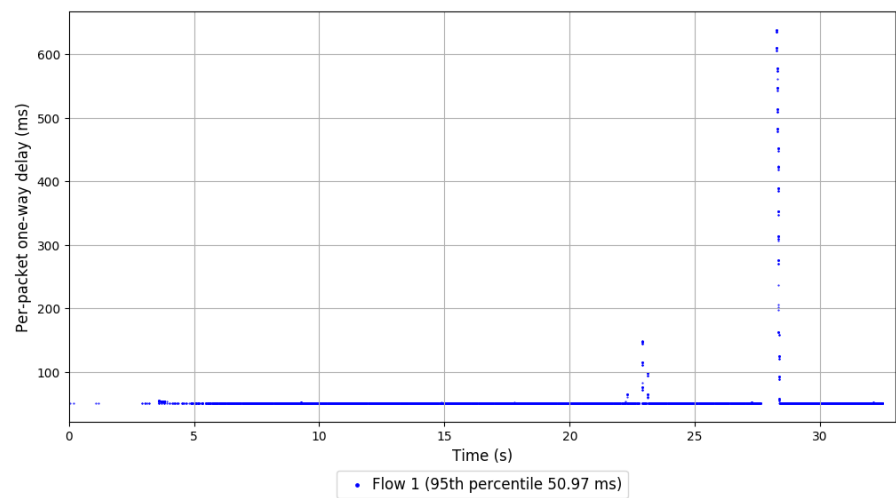
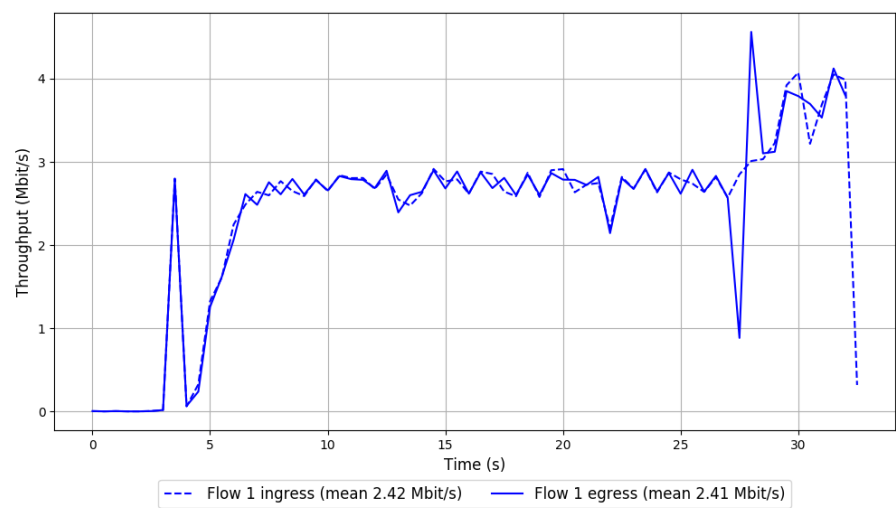
-- Flow 1:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 50.965 ms

Loss rate: 0.71%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-11 13:33:05

End at: 2017-12-11 13:33:35

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.744 ms

Loss rate: 0.45%

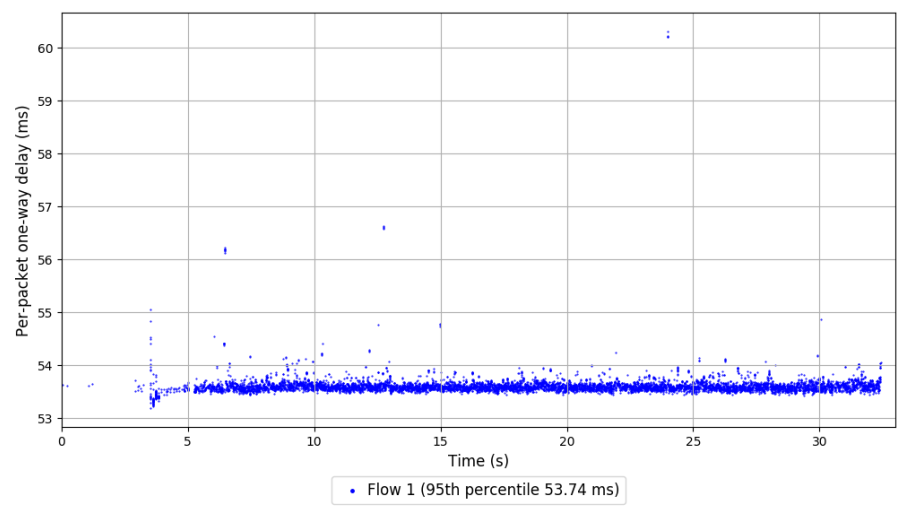
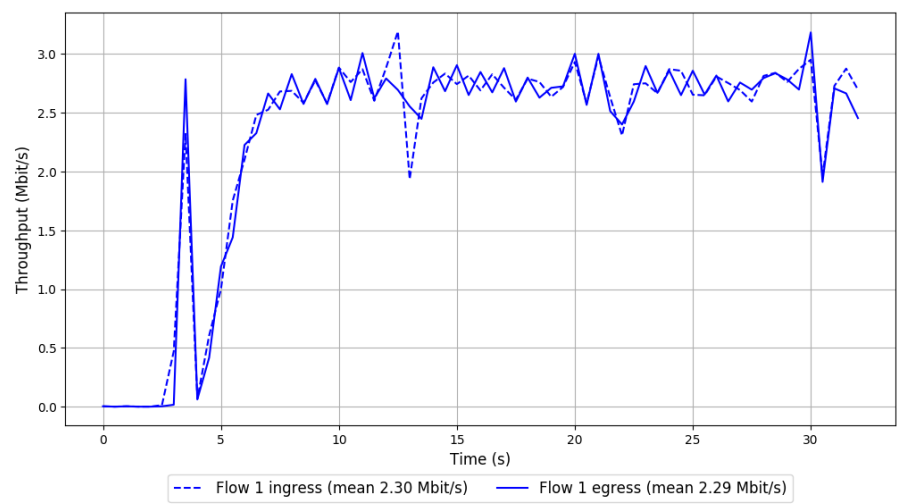
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.744 ms

Loss rate: 0.45%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-11 13:43:15

End at: 2017-12-11 13:43:45

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.806 ms

Loss rate: 0.41%

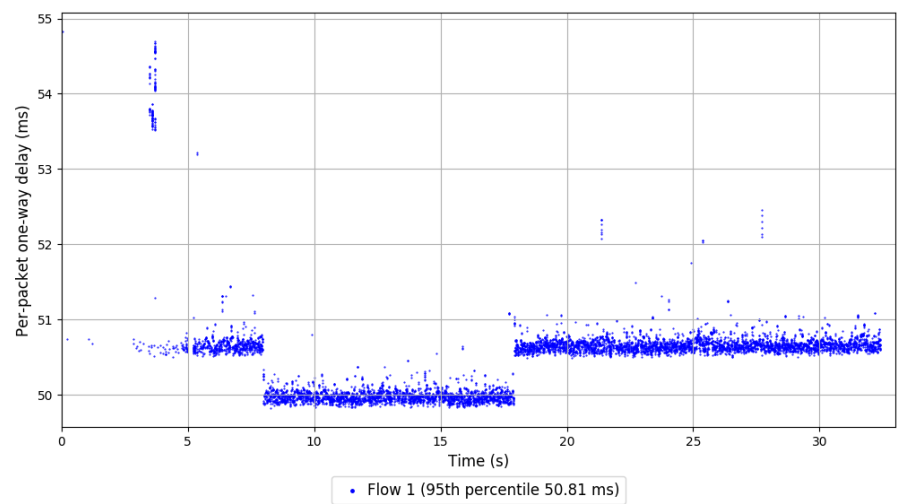
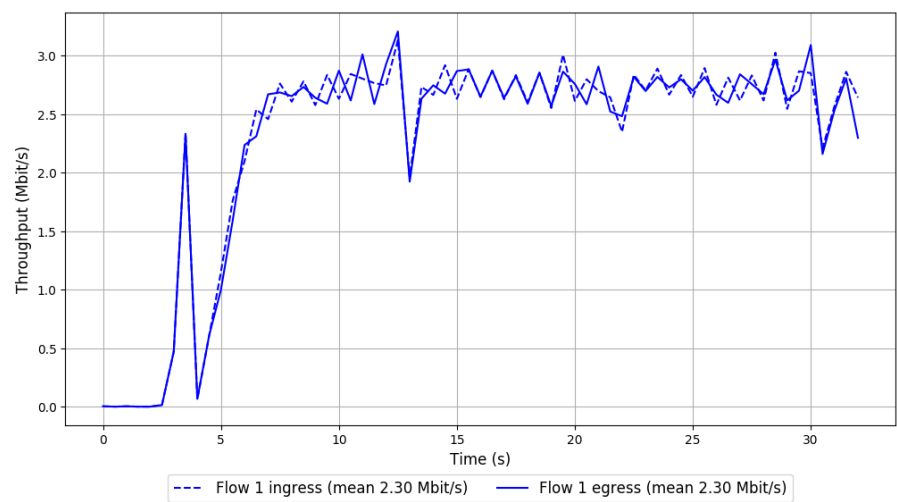
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.806 ms

Loss rate: 0.41%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

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

End at: 2017-12-11 12:19:32

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.49 Mbit/s

95th percentile per-packet one-way delay: 54.397 ms

Loss rate: 0.45%

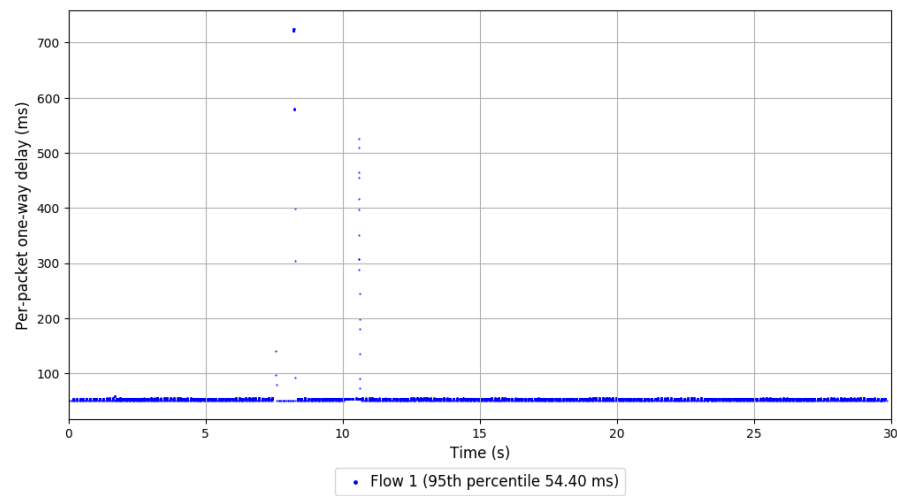
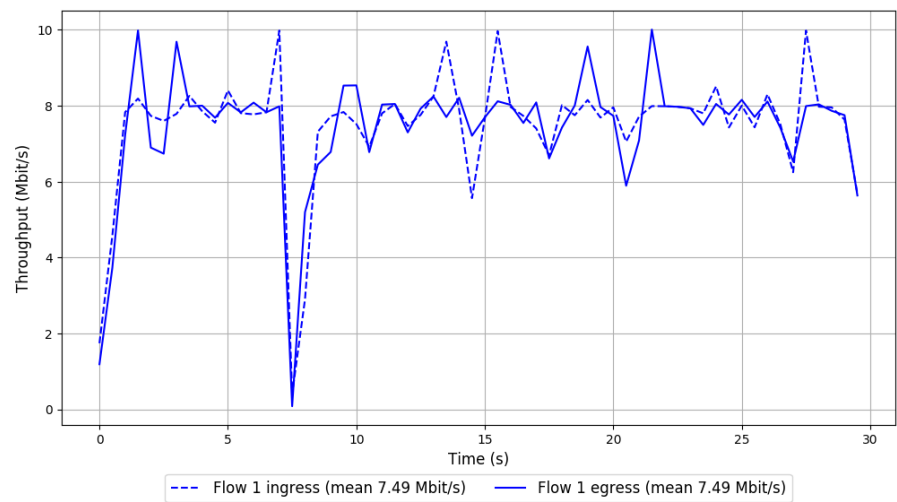
-- Flow 1:

Average throughput: 7.49 Mbit/s

95th percentile per-packet one-way delay: 54.397 ms

Loss rate: 0.45%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-11 12:29:15

End at: 2017-12-11 12:29:45

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 54.333 ms

Loss rate: 0.46%

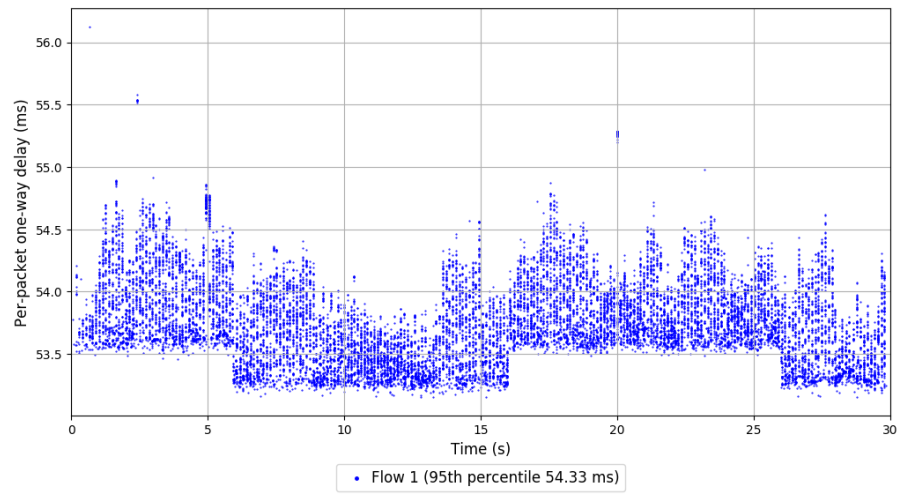
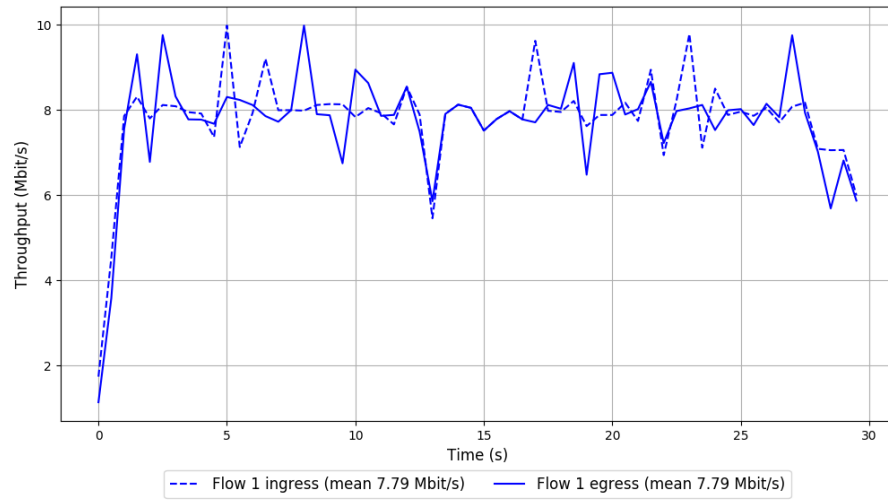
-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 54.333 ms

Loss rate: 0.46%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-11 12:39:28

End at: 2017-12-11 12:39:58

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 54.336 ms

Loss rate: 0.22%

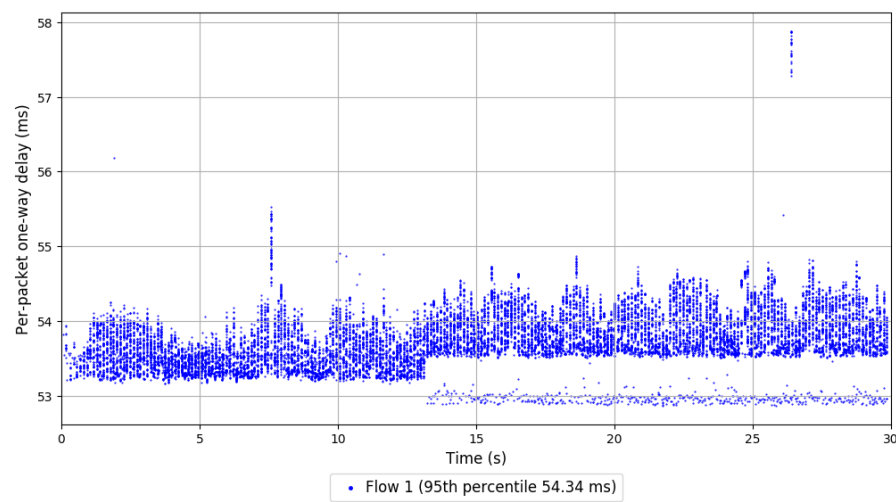
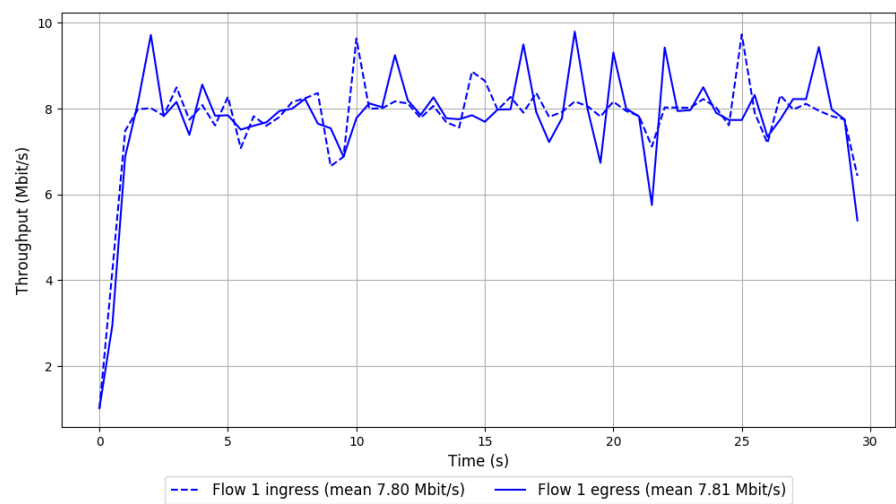
-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 54.336 ms

Loss rate: 0.22%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

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 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 54.335 ms

Loss rate: 0.45%

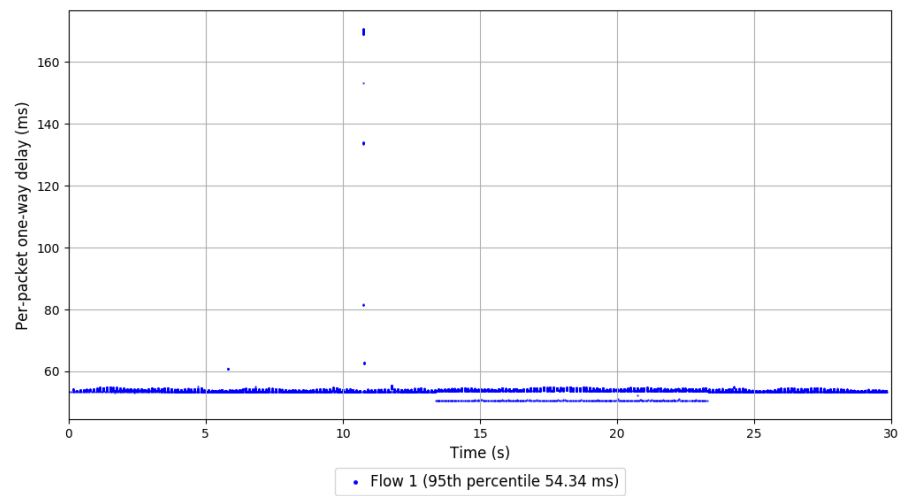
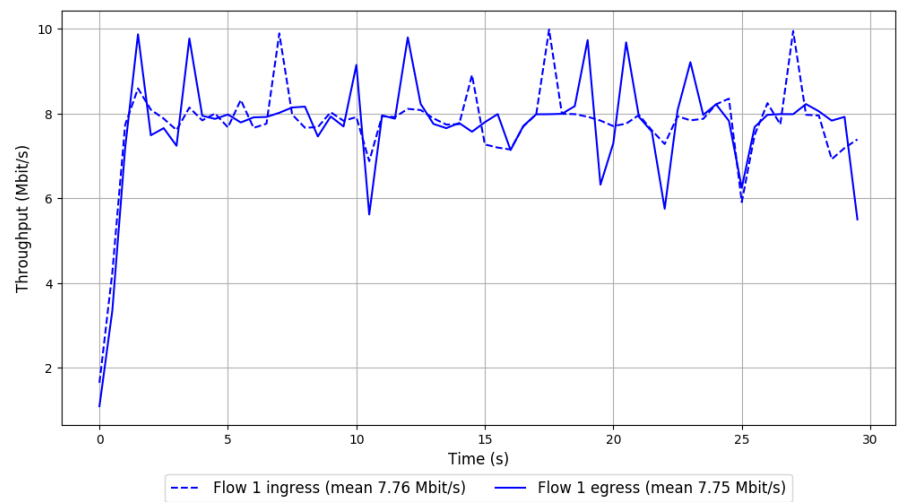
-- Flow 1:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 54.335 ms

Loss rate: 0.45%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

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

End at: 2017-12-11 13:00:43

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 54.326 ms

Loss rate: 0.36%

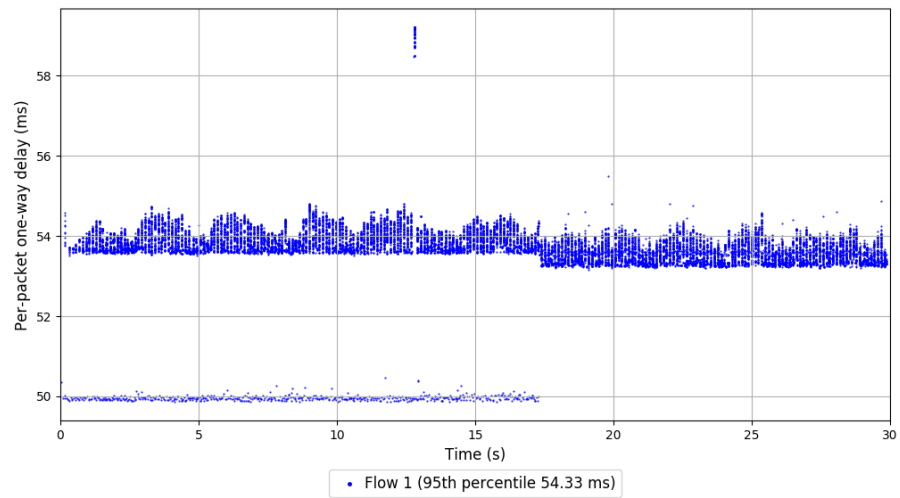
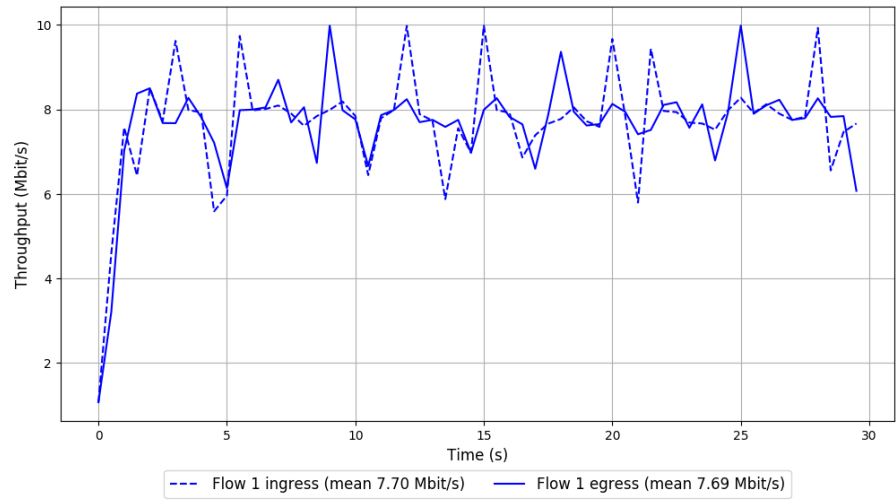
-- Flow 1:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 54.326 ms

Loss rate: 0.36%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-11 13:10:27

End at: 2017-12-11 13:10:57

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 54.339 ms

Loss rate: 0.43%

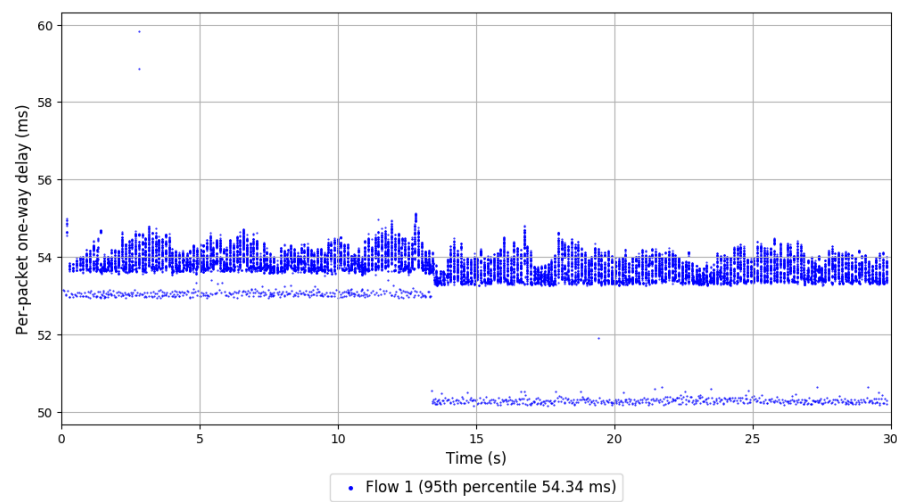
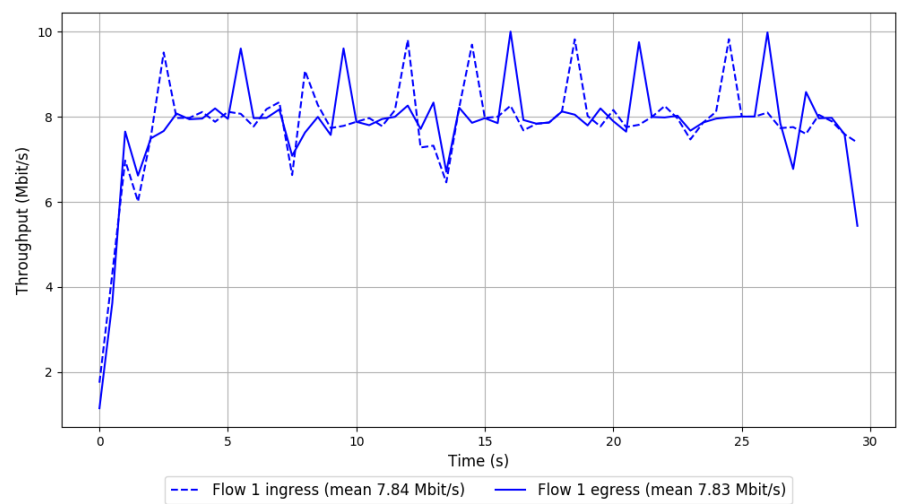
-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 54.339 ms

Loss rate: 0.43%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-11 13:20:43

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

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 54.304 ms

Loss rate: 0.53%

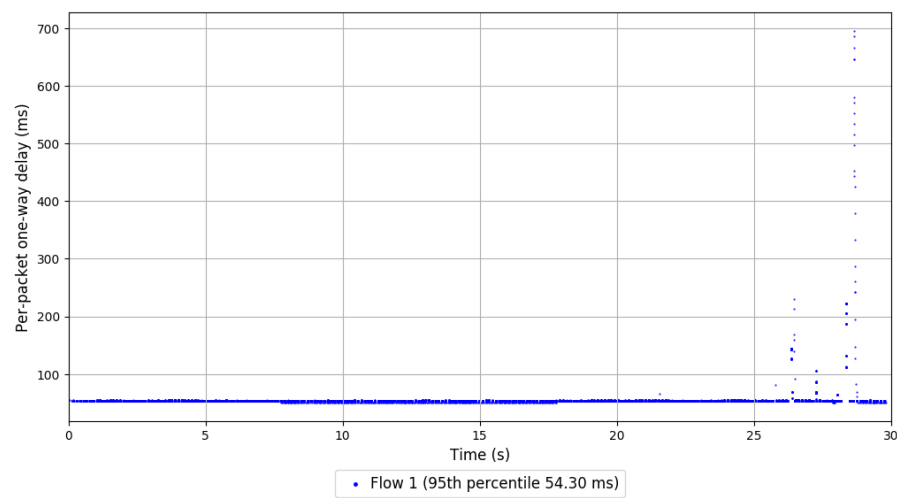
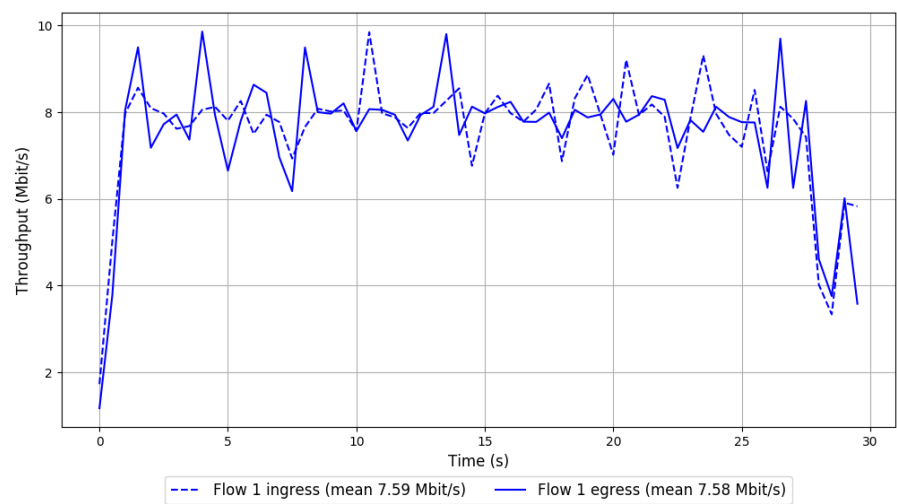
-- Flow 1:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 54.304 ms

Loss rate: 0.53%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

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

End at: 2017-12-11 13:31:32

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 54.405 ms

Loss rate: 0.43%

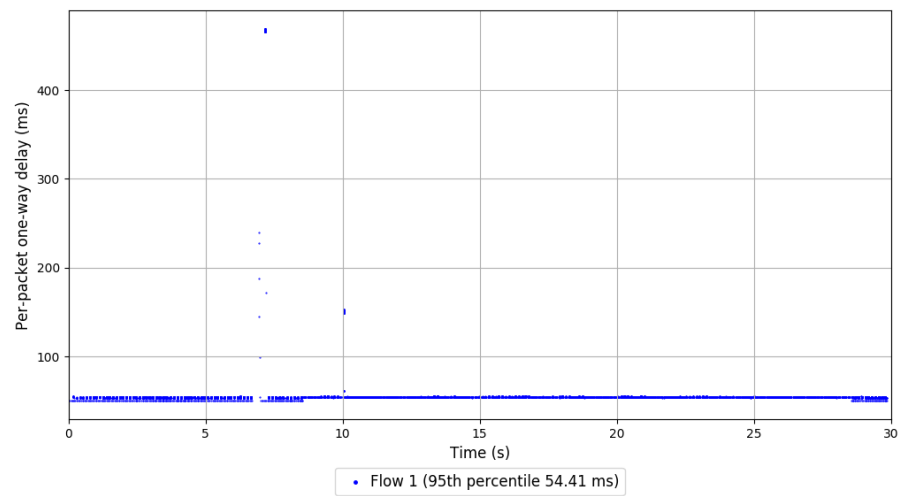
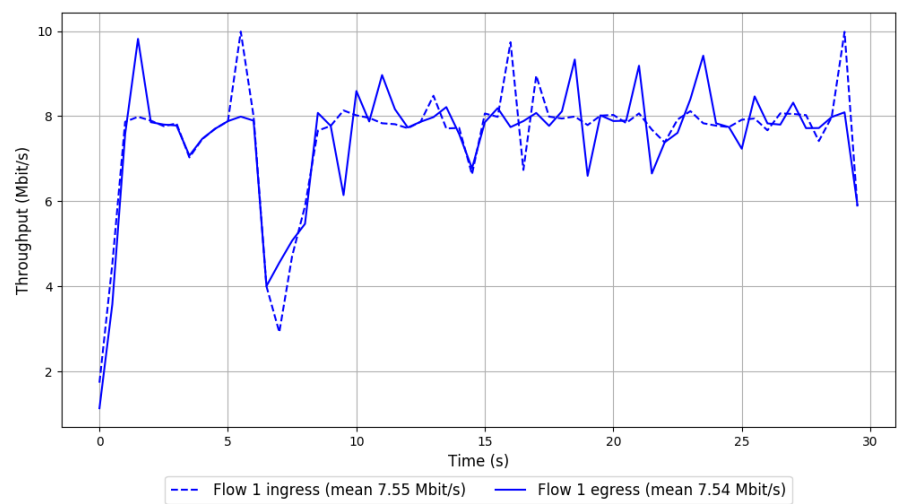
-- Flow 1:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 54.405 ms

Loss rate: 0.43%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

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

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

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 54.304 ms

Loss rate: 0.39%

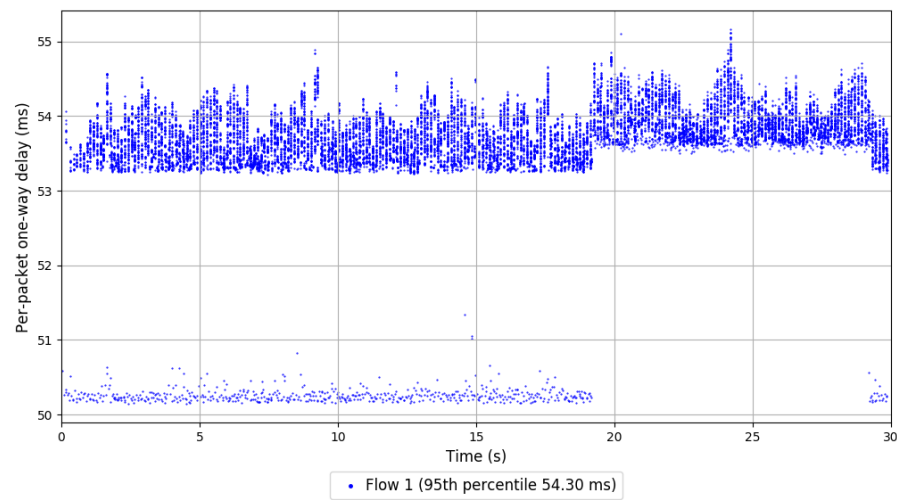
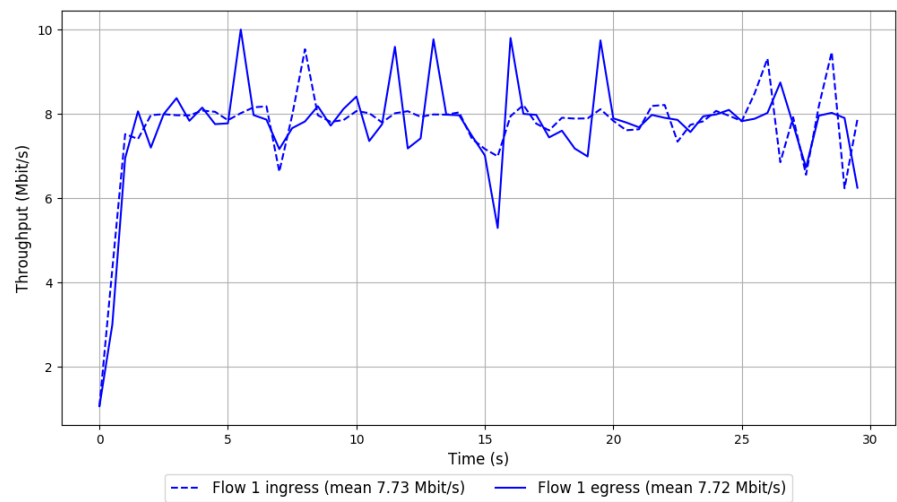
-- Flow 1:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 54.304 ms

Loss rate: 0.39%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-11 13:51:23

End at: 2017-12-11 13:51:53

Below is generated by plot.py at 2017-12-11 16:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 54.216 ms

Loss rate: 0.44%

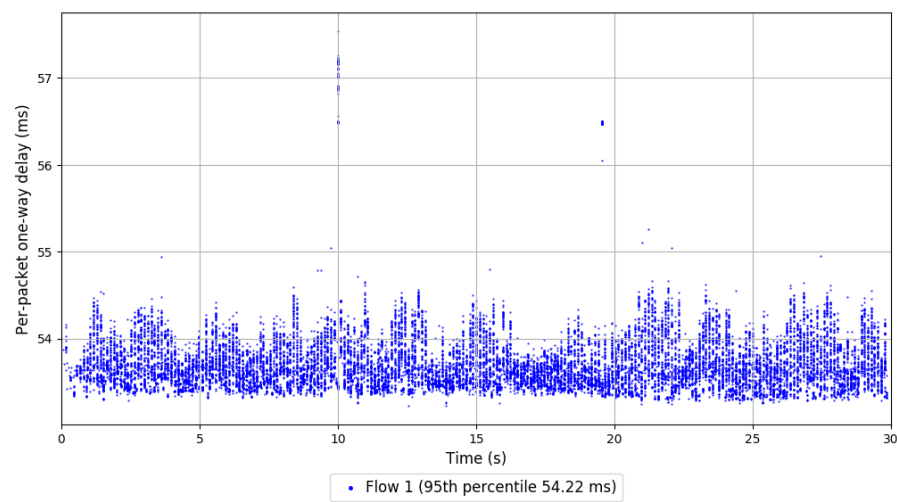
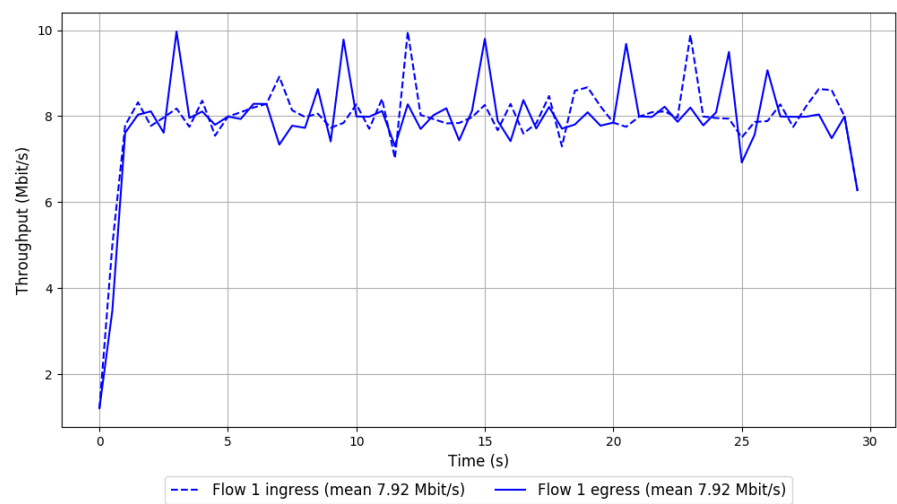
-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 54.216 ms

Loss rate: 0.44%

Run 10: Report of Sprout — Data Link

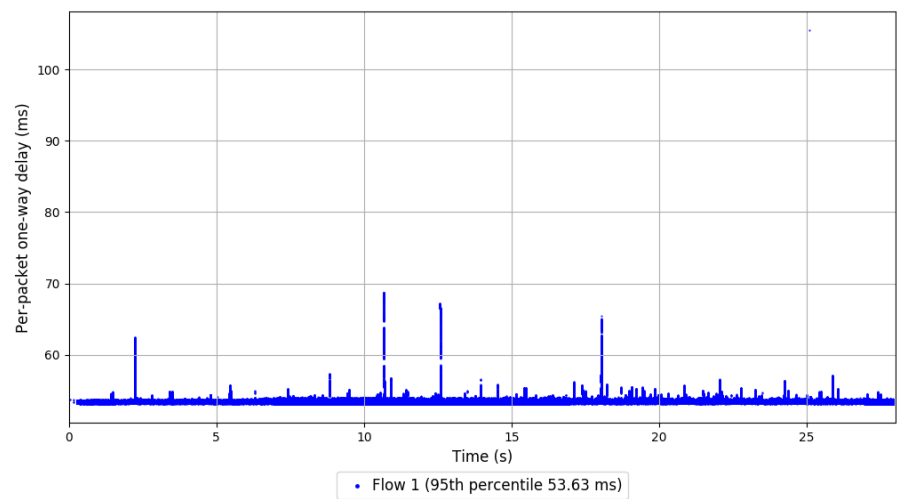
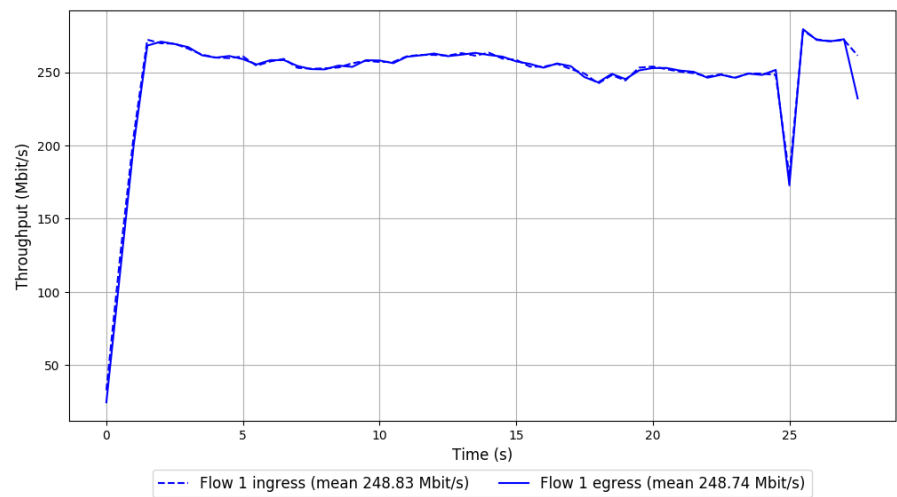


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-11 12:14:52
End at: 2017-12-11 12:15:22

# Below is generated by plot.py at 2017-12-11 16:04:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.74 Mbit/s
95th percentile per-packet one-way delay: 53.628 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 248.74 Mbit/s
95th percentile per-packet one-way delay: 53.628 ms
Loss rate: 0.42%
```


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

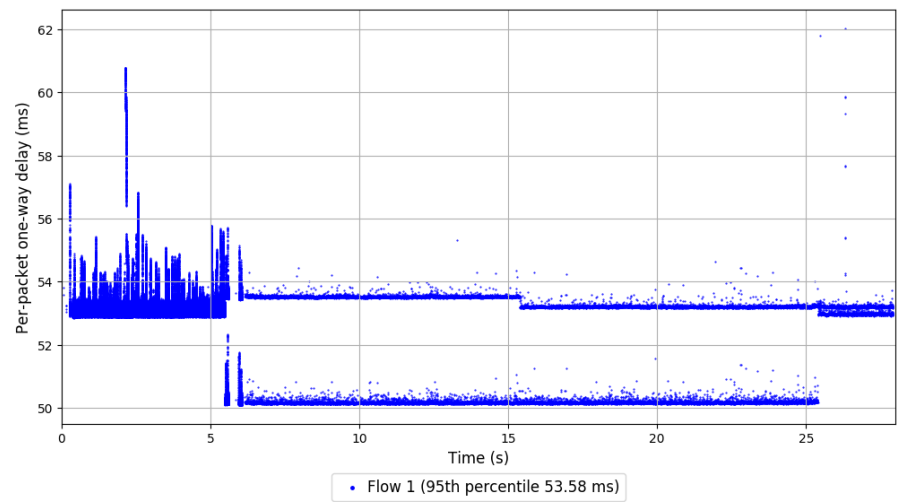
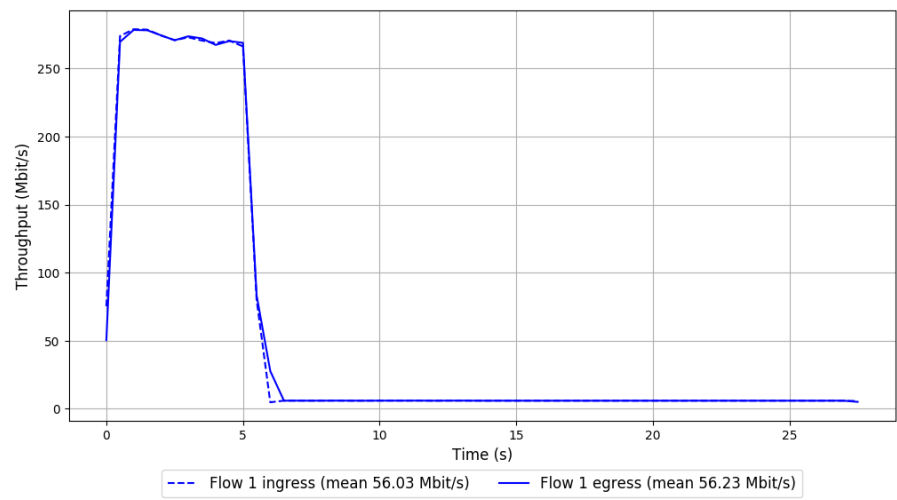


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-11 12:25:23
End at: 2017-12-11 12:25:53

# Below is generated by plot.py at 2017-12-11 16:04:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.23 Mbit/s
95th percentile per-packet one-way delay: 53.578 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 56.23 Mbit/s
95th percentile per-packet one-way delay: 53.578 ms
Loss rate: 0.04%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-11 12:35:33

End at: 2017-12-11 12:36:03

Below is generated by plot.py at 2017-12-11 16:04:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.10 Mbit/s

95th percentile per-packet one-way delay: 53.526 ms

Loss rate: 0.26%

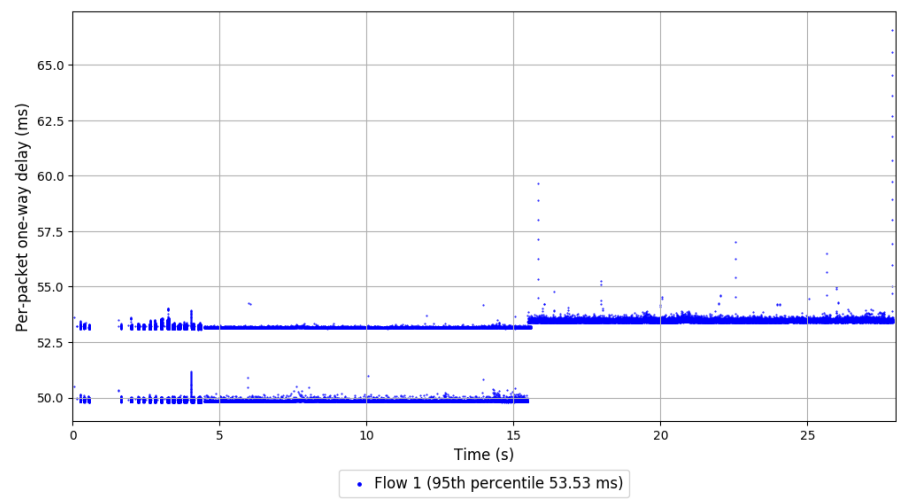
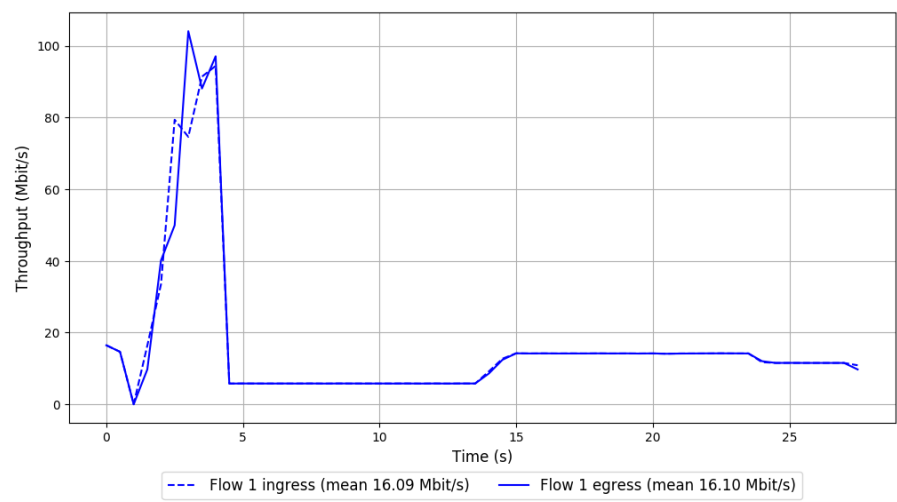
-- Flow 1:

Average throughput: 16.10 Mbit/s

95th percentile per-packet one-way delay: 53.526 ms

Loss rate: 0.26%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-11 12:45:39

End at: 2017-12-11 12:46:10

Below is generated by plot.py at 2017-12-11 16:04:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 249.35 Mbit/s

95th percentile per-packet one-way delay: 53.601 ms

Loss rate: 0.34%

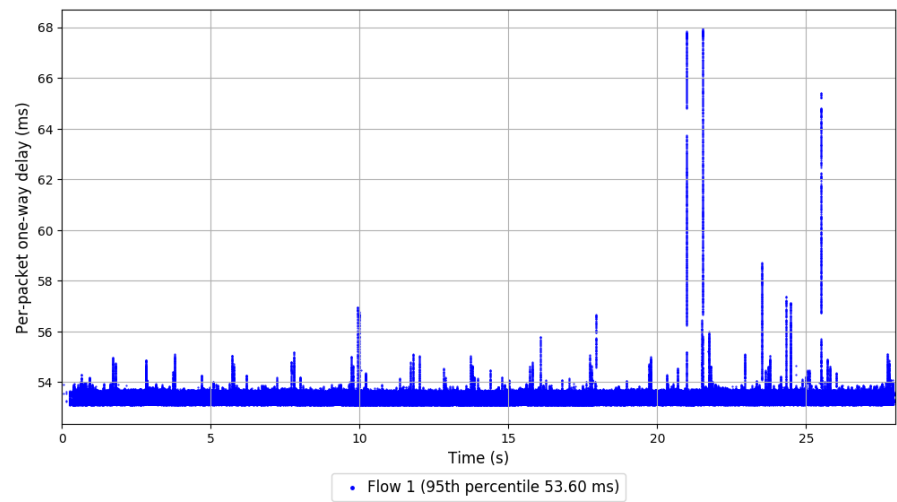
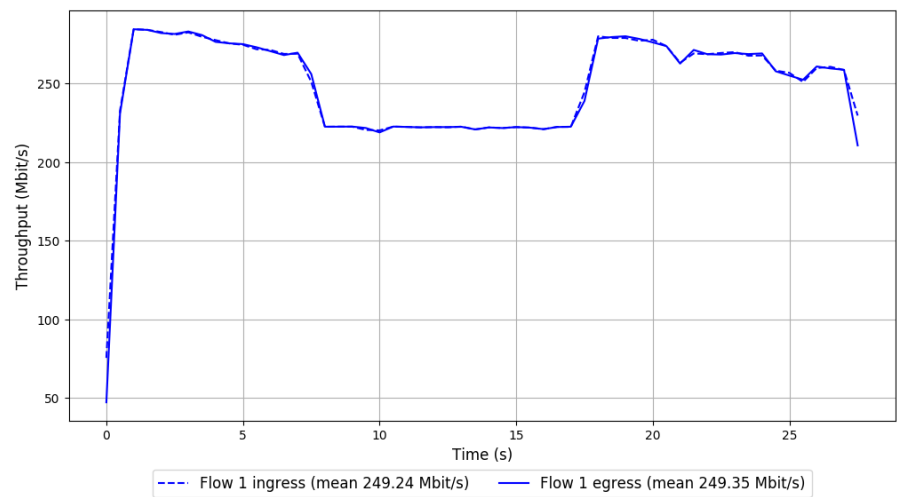
-- Flow 1:

Average throughput: 249.35 Mbit/s

95th percentile per-packet one-way delay: 53.601 ms

Loss rate: 0.34%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-11 12:56:17

End at: 2017-12-11 12:56:47

Below is generated by plot.py at 2017-12-11 16:04:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.11 Mbit/s

95th percentile per-packet one-way delay: 53.545 ms

Loss rate: 0.37%

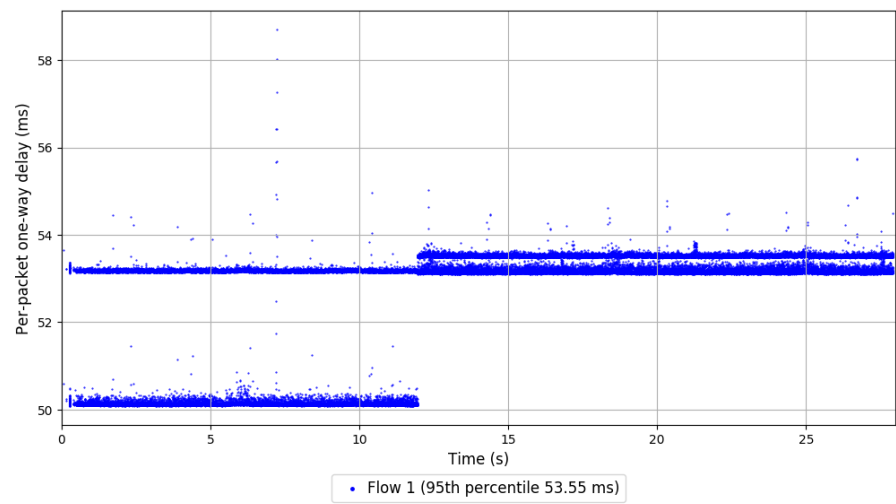
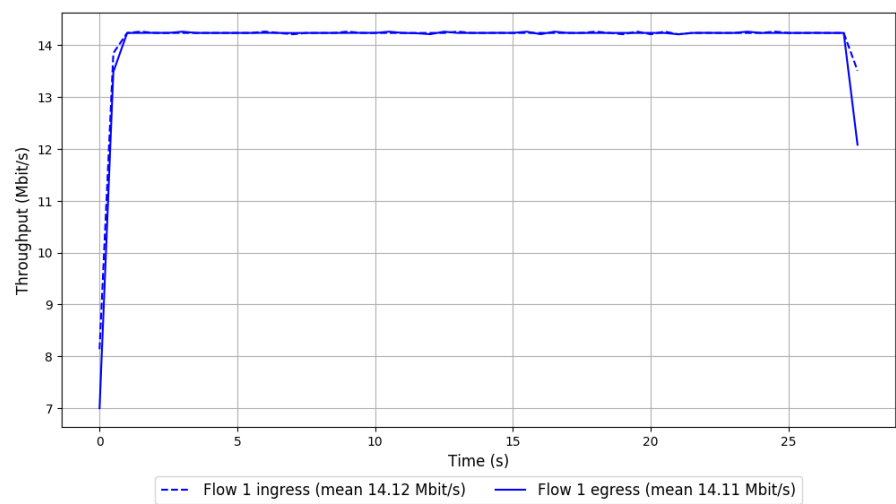
-- Flow 1:

Average throughput: 14.11 Mbit/s

95th percentile per-packet one-way delay: 53.545 ms

Loss rate: 0.37%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-11 13:06:35

End at: 2017-12-11 13:07:05

Below is generated by plot.py at 2017-12-11 16:04:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.03 Mbit/s

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

Loss rate: 0.82%

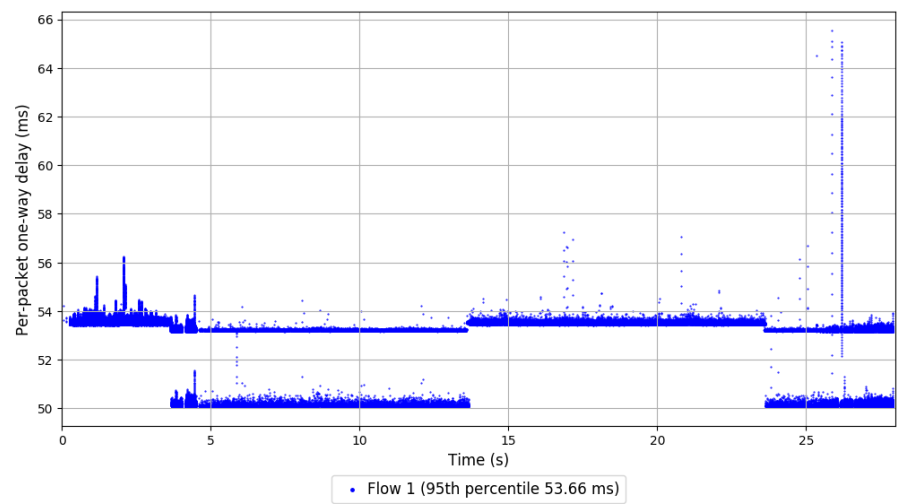
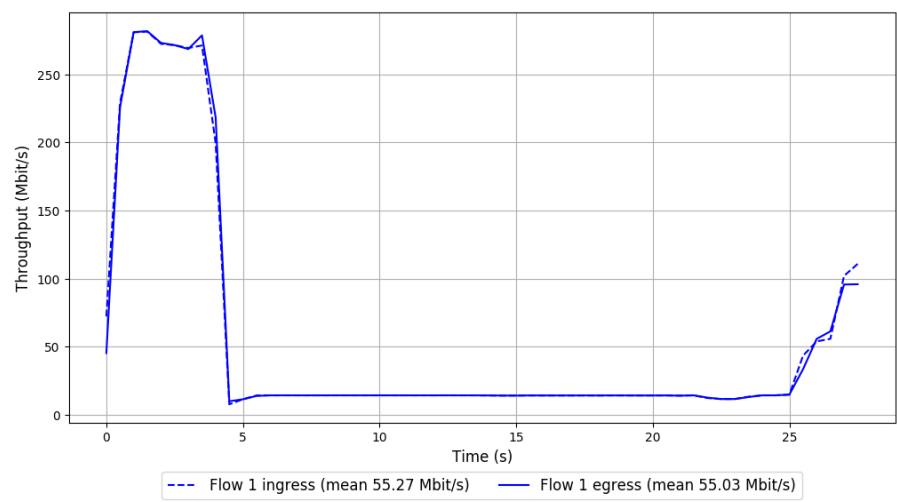
-- Flow 1:

Average throughput: 55.03 Mbit/s

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

Loss rate: 0.82%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-11 13:16:46

End at: 2017-12-11 13:17:16

Below is generated by plot.py at 2017-12-11 16:04:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.58 Mbit/s

95th percentile per-packet one-way delay: 53.591 ms

Loss rate: 0.69%

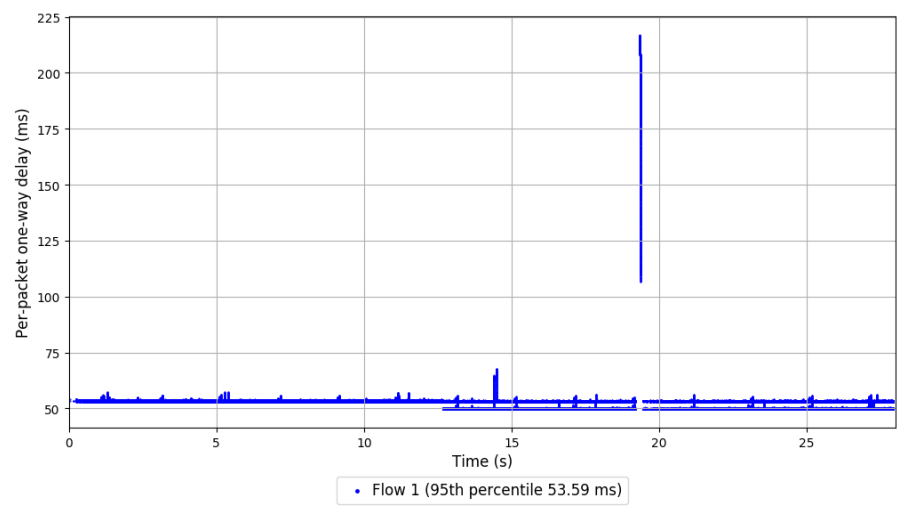
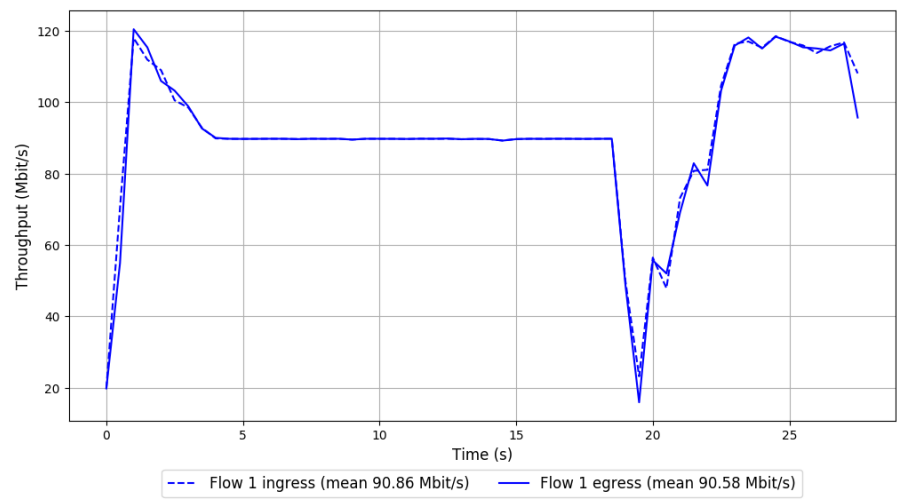
-- Flow 1:

Average throughput: 90.58 Mbit/s

95th percentile per-packet one-way delay: 53.591 ms

Loss rate: 0.69%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-11 13:26:57

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

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 243.78 Mbit/s

95th percentile per-packet one-way delay: 53.744 ms

Loss rate: 0.45%

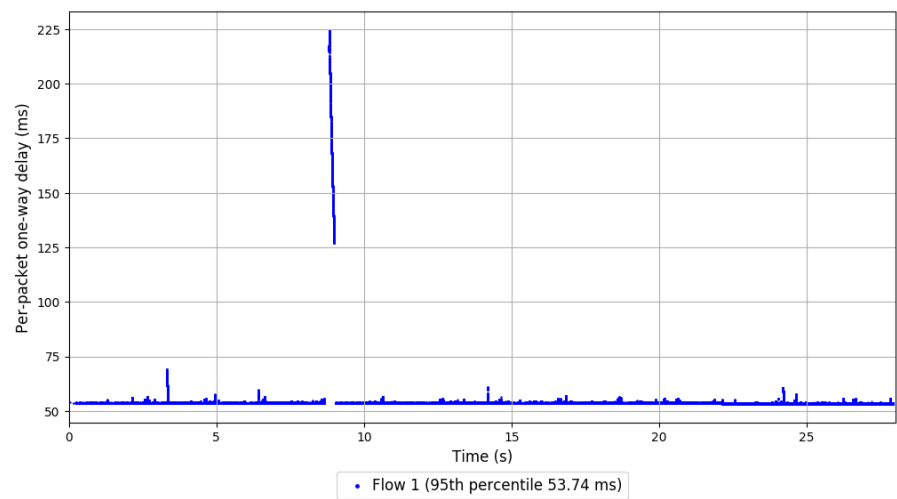
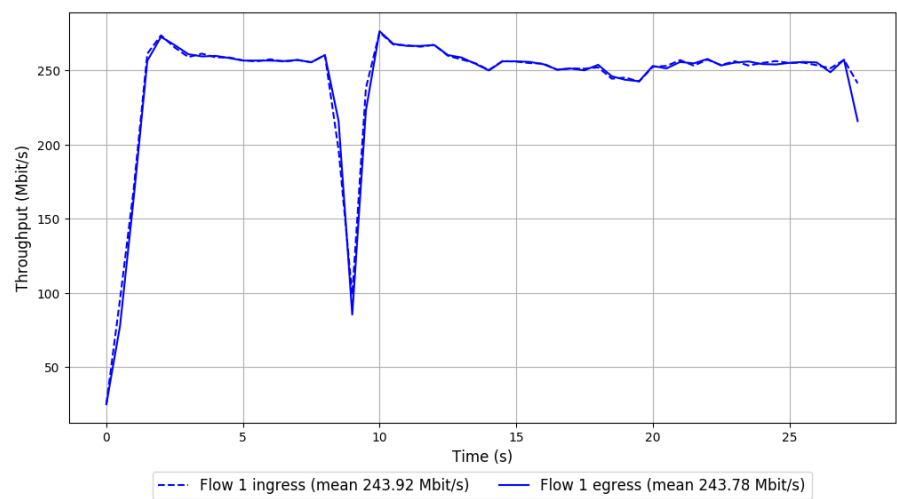
-- Flow 1:

Average throughput: 243.78 Mbit/s

95th percentile per-packet one-way delay: 53.744 ms

Loss rate: 0.45%

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

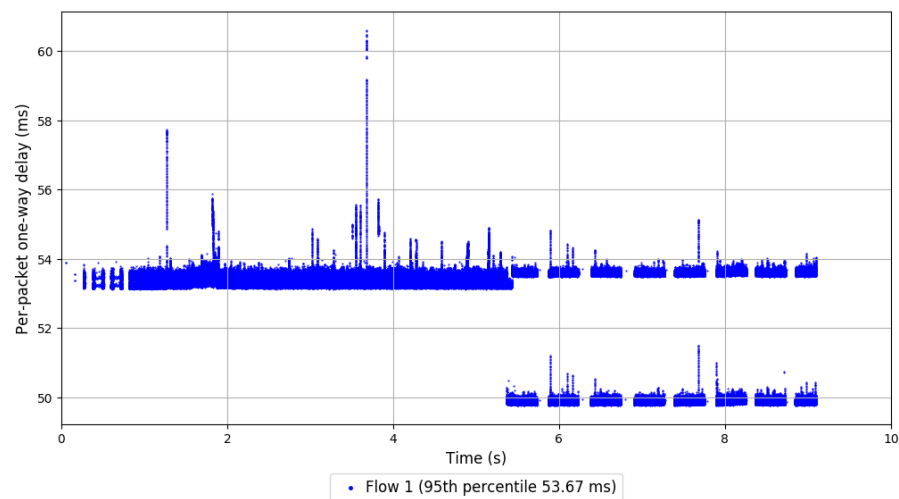
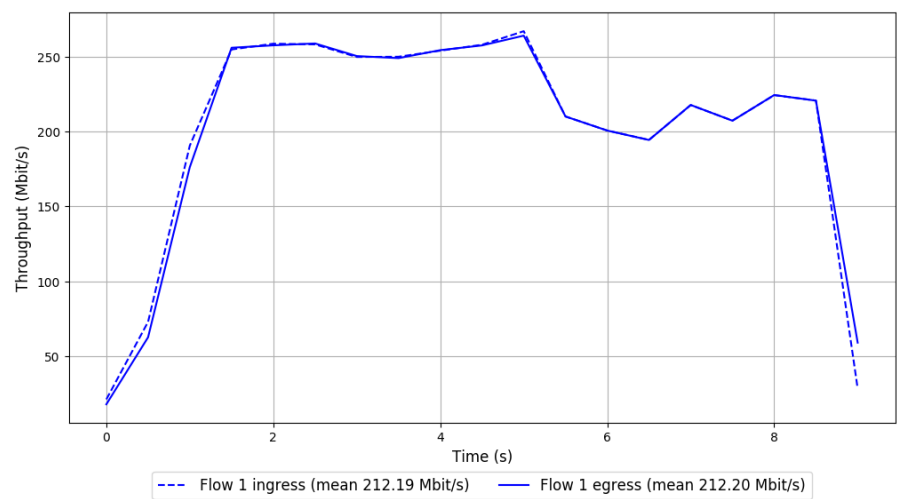


Run 9: Statistics of TaoVA-100x

Start at: 2017-12-11 13:37:23

End at: 2017-12-11 13:37:53

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

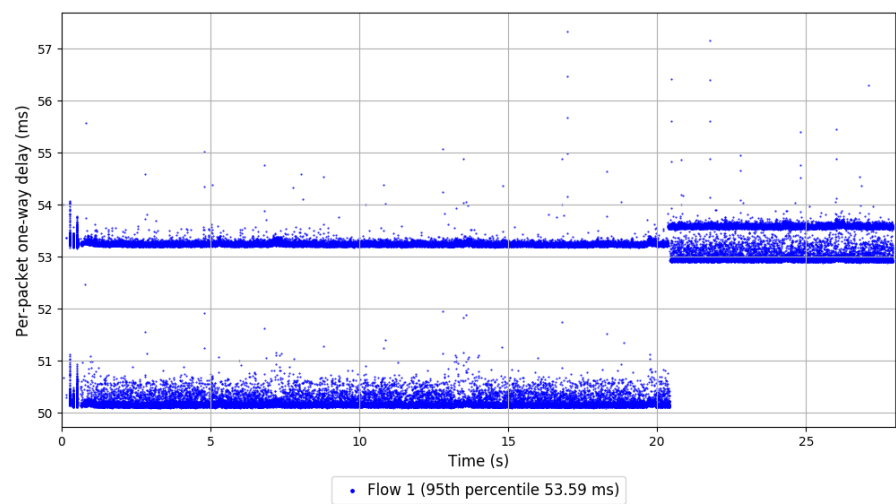
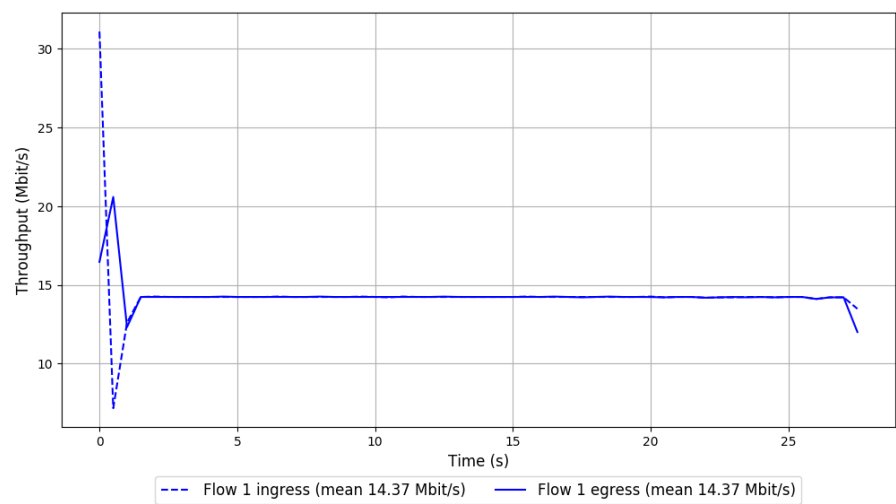


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-11 13:47:28
End at: 2017-12-11 13:47:58

# Below is generated by plot.py at 2017-12-11 16:04:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.37 Mbit/s
95th percentile per-packet one-way delay: 53.589 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 14.37 Mbit/s
95th percentile per-packet one-way delay: 53.589 ms
Loss rate: 0.37%
```

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



Run 1: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.58 Mbit/s

95th percentile per-packet one-way delay: 55.171 ms

Loss rate: 0.28%

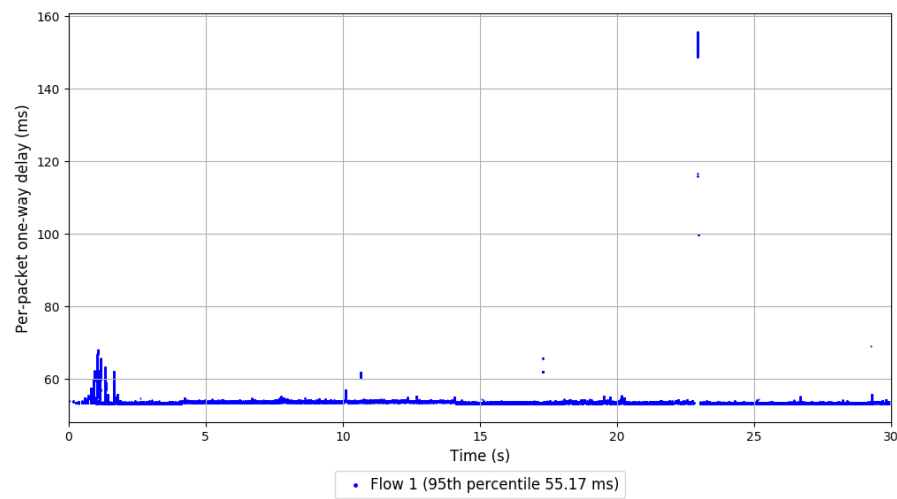
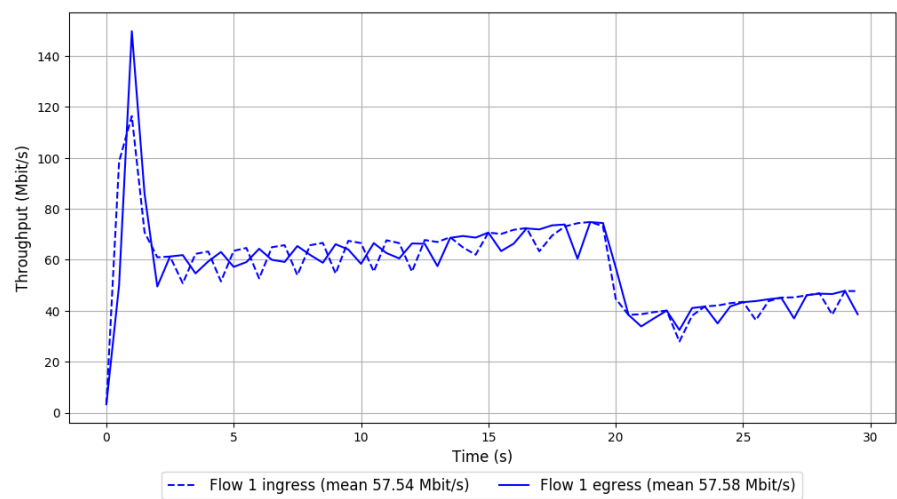
-- Flow 1:

Average throughput: 57.58 Mbit/s

95th percentile per-packet one-way delay: 55.171 ms

Loss rate: 0.28%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-11 12:23:16

End at: 2017-12-11 12:23:46

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.06 Mbit/s

95th percentile per-packet one-way delay: 53.981 ms

Loss rate: 0.41%

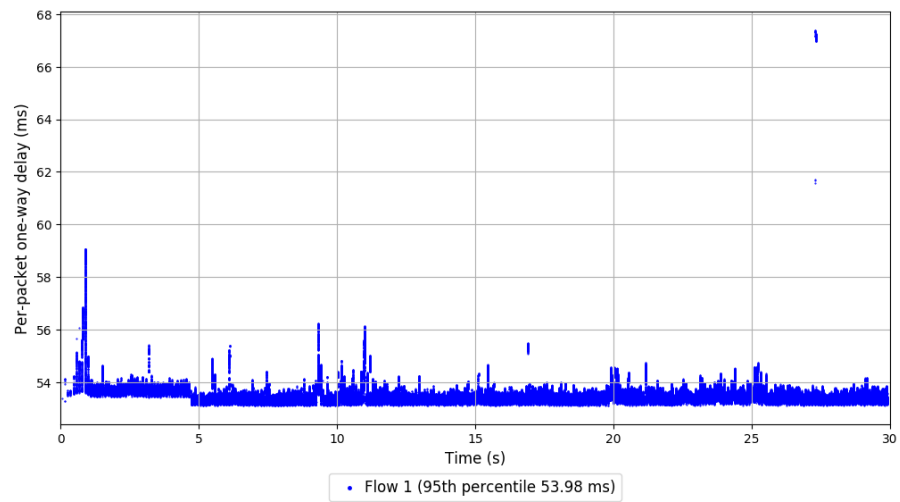
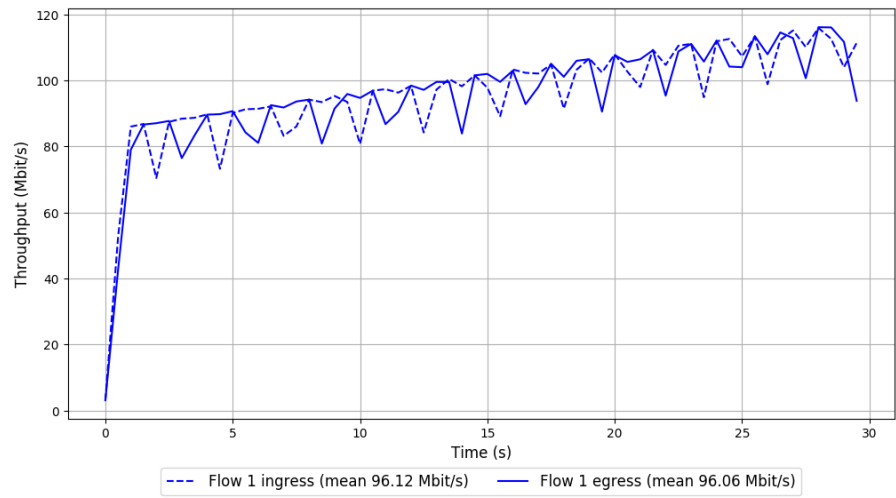
-- Flow 1:

Average throughput: 96.06 Mbit/s

95th percentile per-packet one-way delay: 53.981 ms

Loss rate: 0.41%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-11 12:33:30

End at: 2017-12-11 12:34:00

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.09 Mbit/s

95th percentile per-packet one-way delay: 54.134 ms

Loss rate: 0.44%

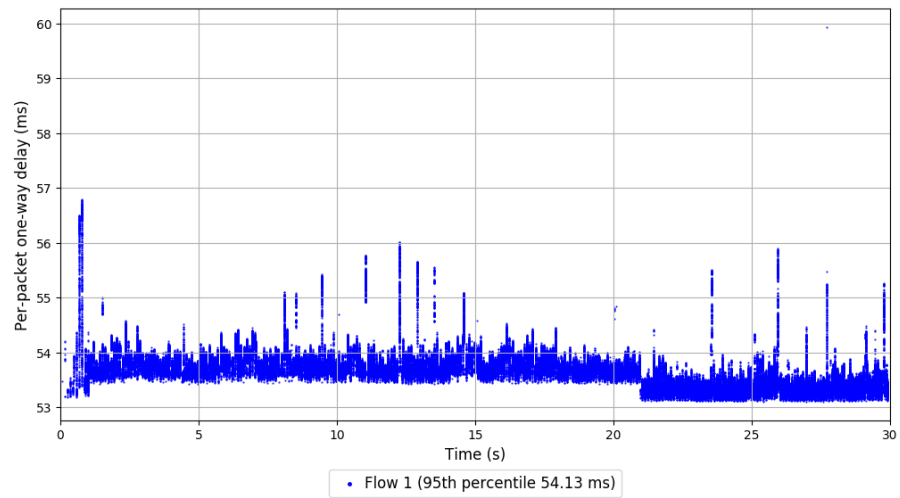
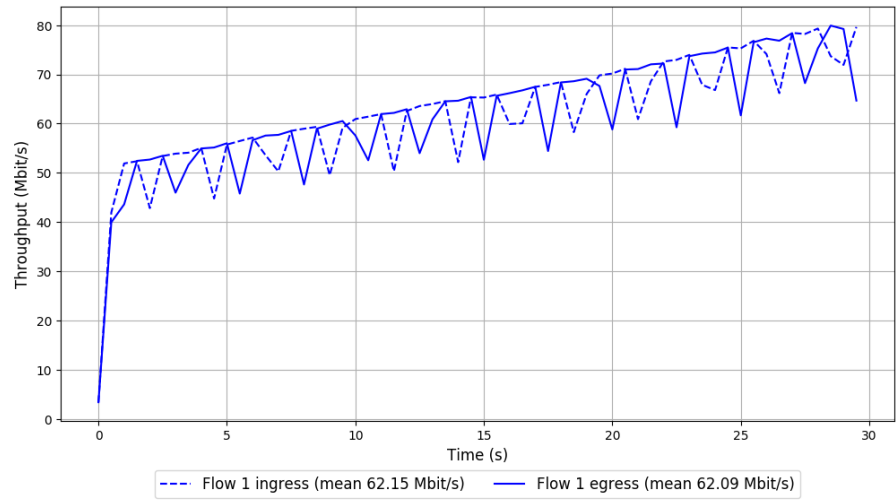
-- Flow 1:

Average throughput: 62.09 Mbit/s

95th percentile per-packet one-way delay: 54.134 ms

Loss rate: 0.44%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-11 12:43:34

End at: 2017-12-11 12:44:04

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.54 Mbit/s

95th percentile per-packet one-way delay: 53.813 ms

Loss rate: 0.34%

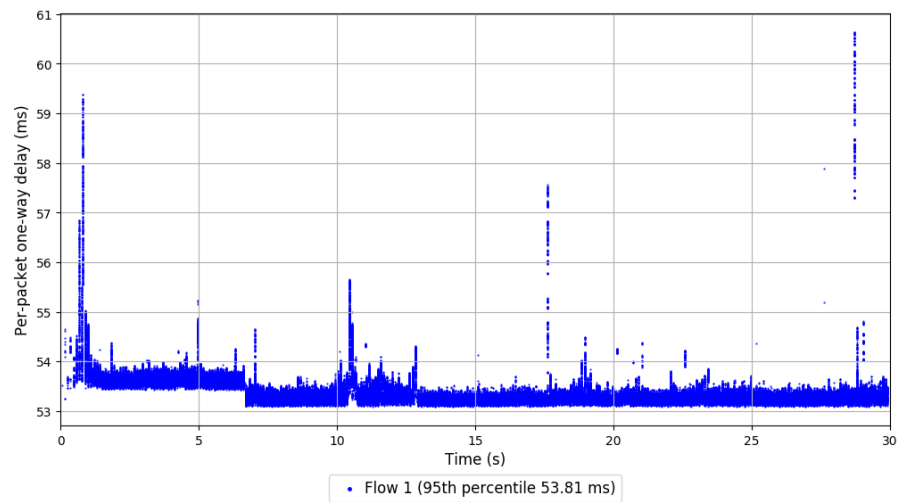
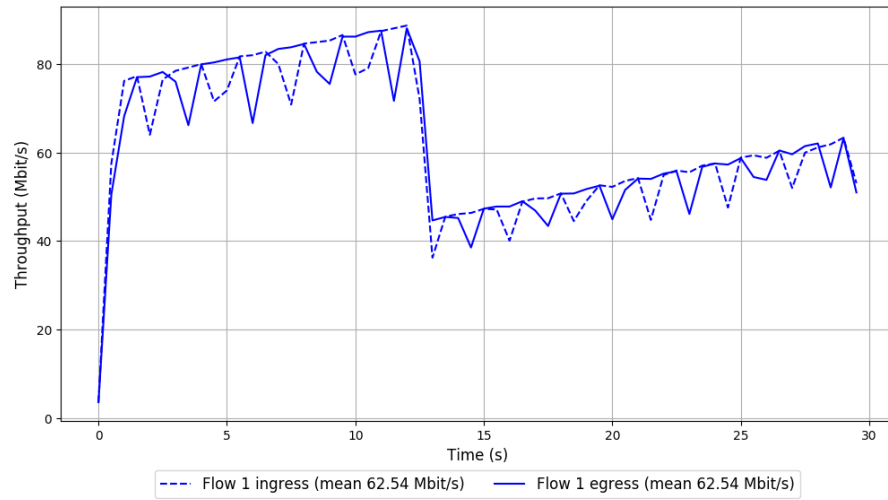
-- Flow 1:

Average throughput: 62.54 Mbit/s

95th percentile per-packet one-way delay: 53.813 ms

Loss rate: 0.34%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

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

End at: 2017-12-11 12:54:42

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.60 Mbit/s

95th percentile per-packet one-way delay: 53.816 ms

Loss rate: 0.29%

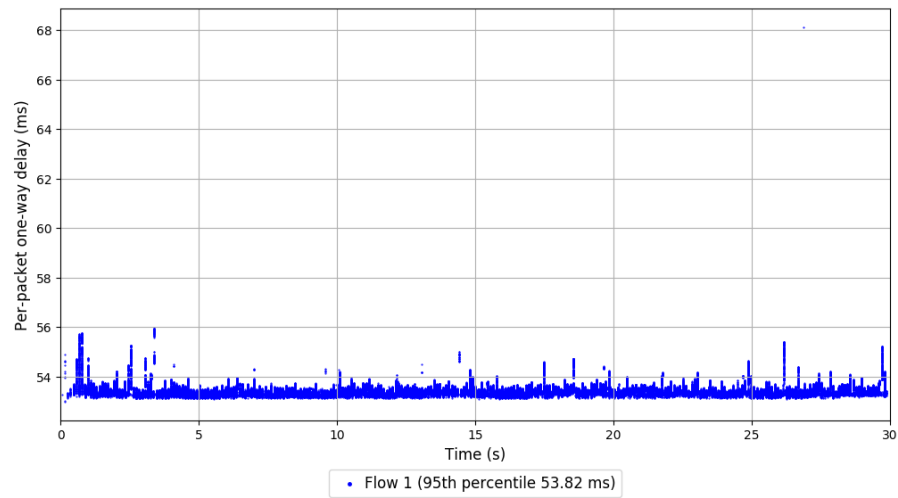
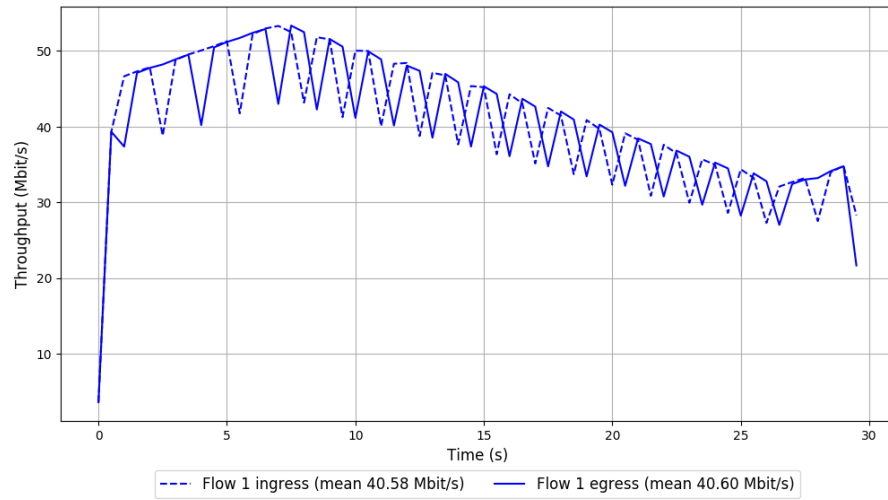
-- Flow 1:

Average throughput: 40.60 Mbit/s

95th percentile per-packet one-way delay: 53.816 ms

Loss rate: 0.29%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-11 13:04:29

End at: 2017-12-11 13:04:59

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.82 Mbit/s

95th percentile per-packet one-way delay: 53.985 ms

Loss rate: 0.43%

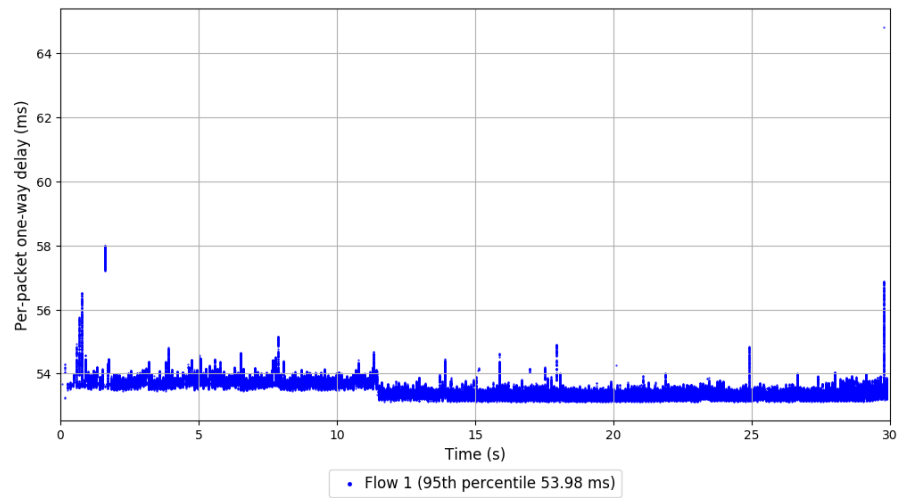
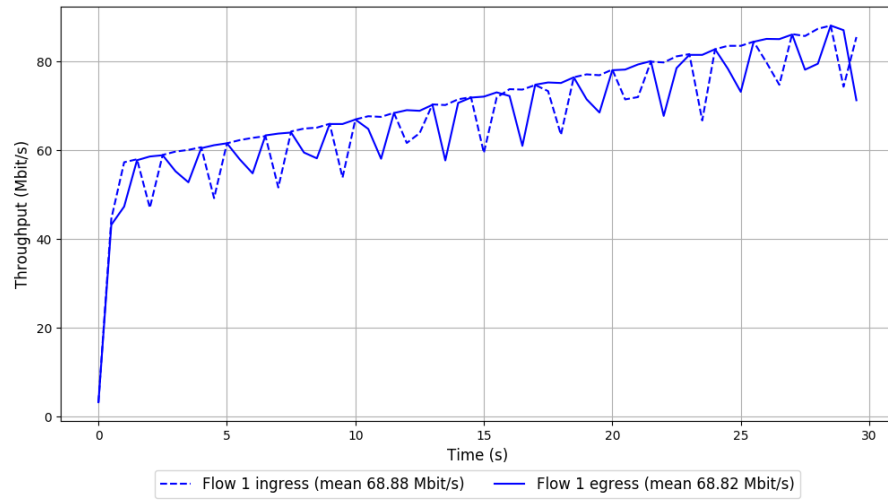
-- Flow 1:

Average throughput: 68.82 Mbit/s

95th percentile per-packet one-way delay: 53.985 ms

Loss rate: 0.43%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-11 13:14:42

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

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.12 Mbit/s

95th percentile per-packet one-way delay: 54.092 ms

Loss rate: 0.14%

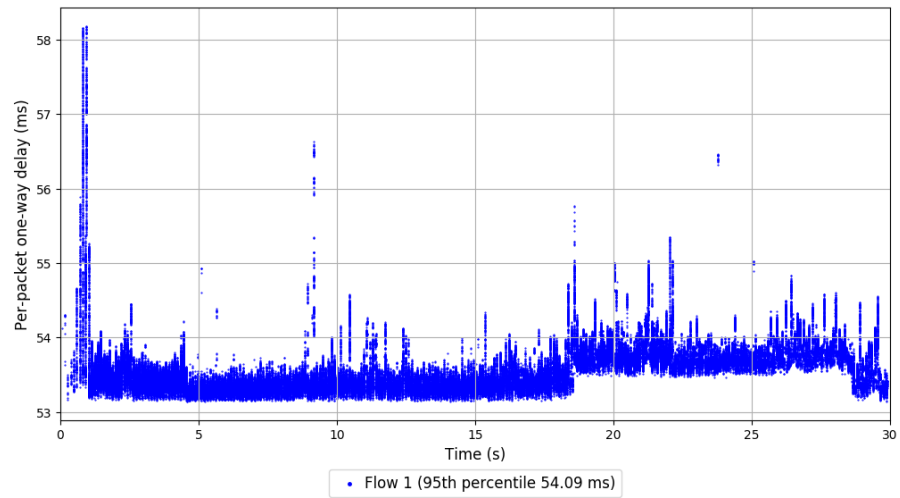
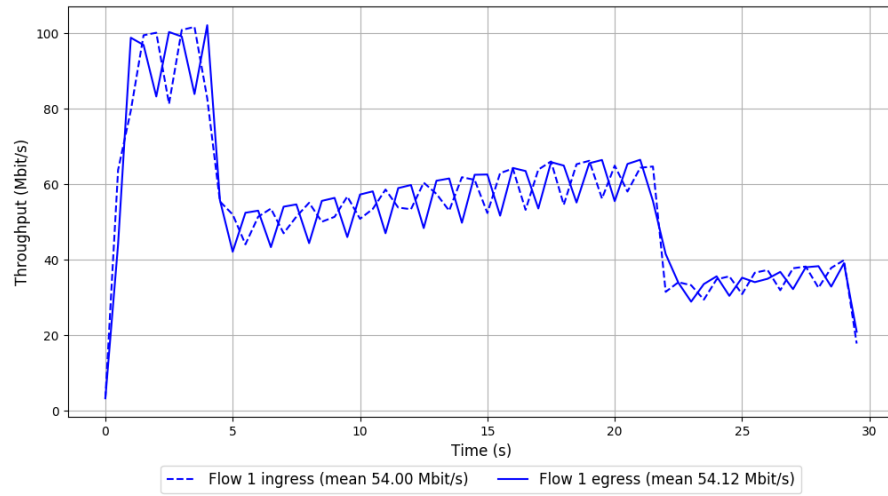
-- Flow 1:

Average throughput: 54.12 Mbit/s

95th percentile per-packet one-way delay: 54.092 ms

Loss rate: 0.14%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-11 13:24:58

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

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.89 Mbit/s

95th percentile per-packet one-way delay: 54.005 ms

Loss rate: 0.35%

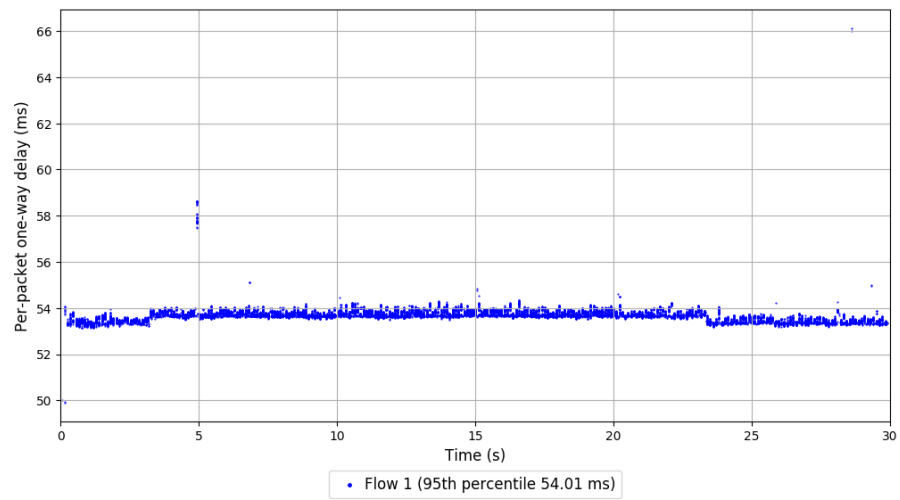
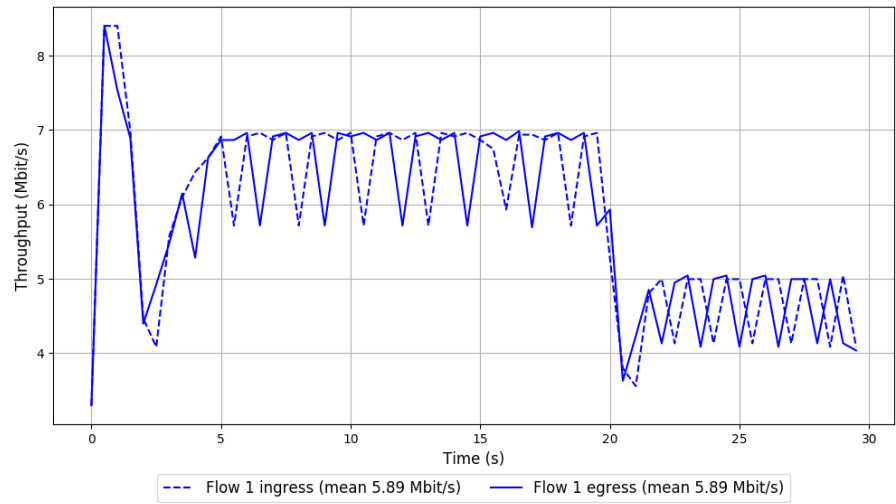
-- Flow 1:

Average throughput: 5.89 Mbit/s

95th percentile per-packet one-way delay: 54.005 ms

Loss rate: 0.35%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-11 13:35:17

End at: 2017-12-11 13:35:47

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.05 Mbit/s

95th percentile per-packet one-way delay: 58.715 ms

Loss rate: 0.31%

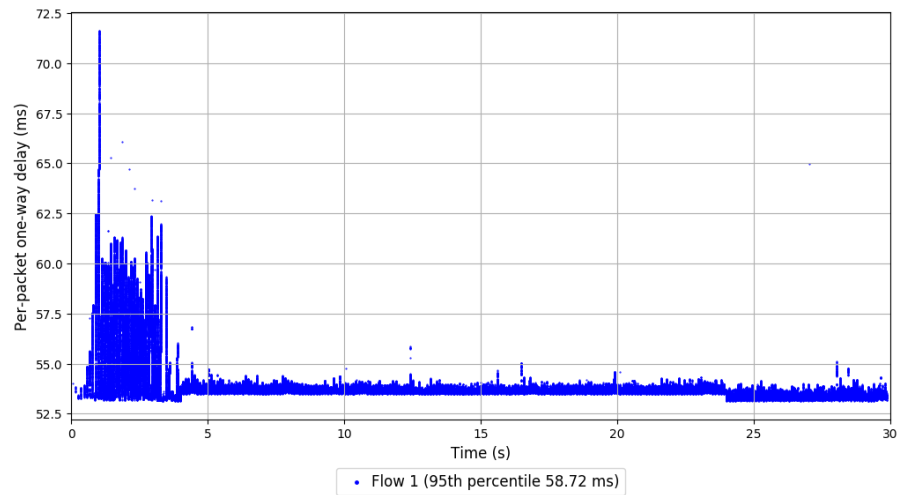
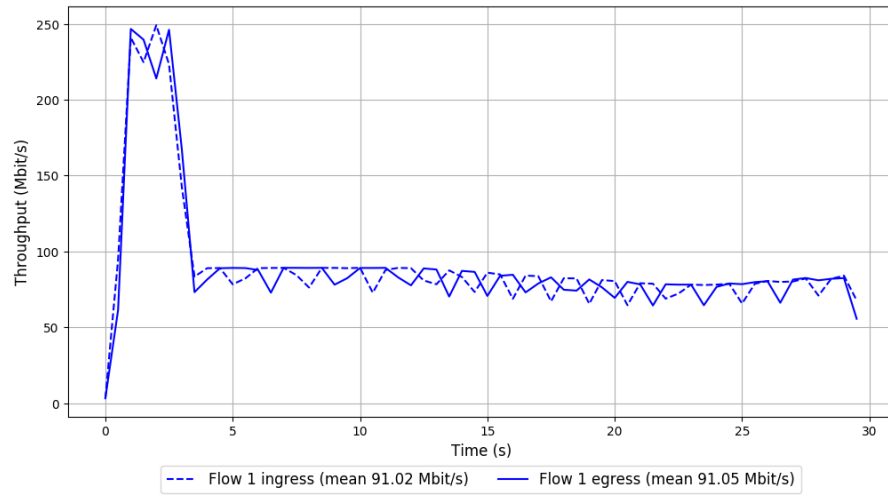
-- Flow 1:

Average throughput: 91.05 Mbit/s

95th percentile per-packet one-way delay: 58.715 ms

Loss rate: 0.31%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-11 13:45:27

End at: 2017-12-11 13:45:57

Below is generated by plot.py at 2017-12-11 16:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.20 Mbit/s

95th percentile per-packet one-way delay: 54.003 ms

Loss rate: 0.33%

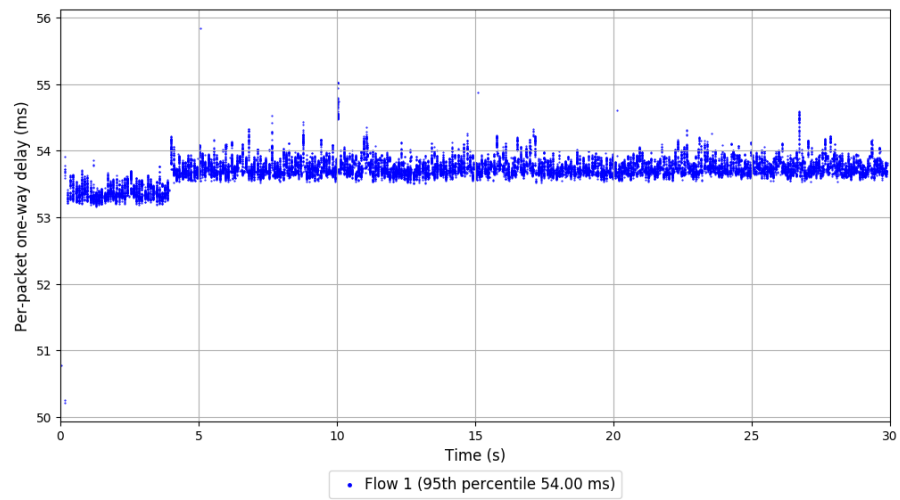
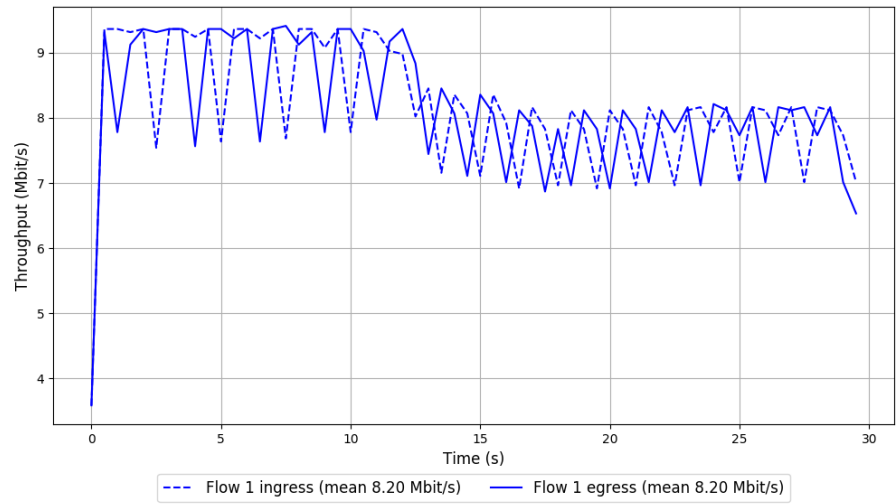
-- Flow 1:

Average throughput: 8.20 Mbit/s

95th percentile per-packet one-way delay: 54.003 ms

Loss rate: 0.33%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-11 12:16:40

End at: 2017-12-11 12:17:10

Below is generated by plot.py at 2017-12-11 16:07:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 274.06 Mbit/s

95th percentile per-packet one-way delay: 121.378 ms

Loss rate: 0.62%

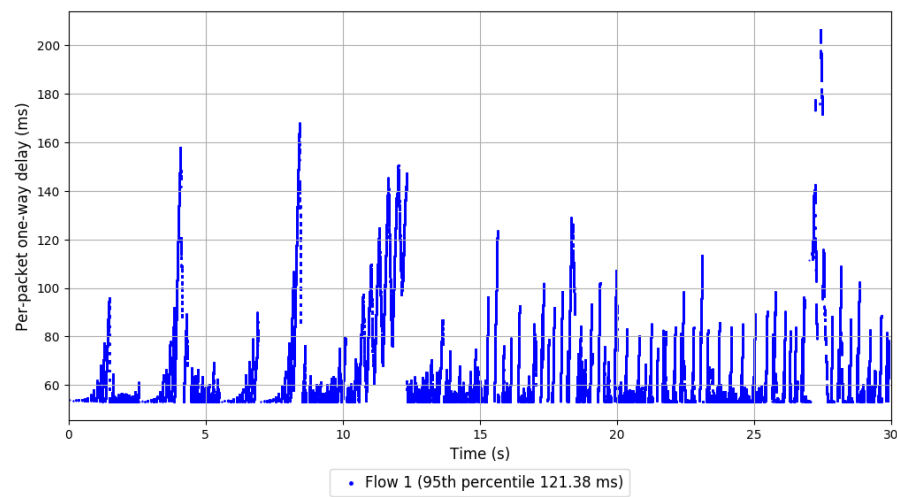
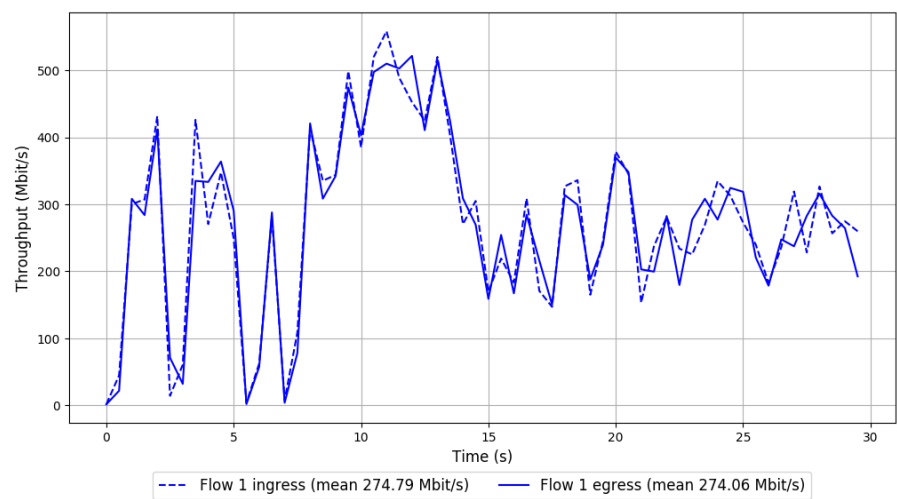
-- Flow 1:

Average throughput: 274.06 Mbit/s

95th percentile per-packet one-way delay: 121.378 ms

Loss rate: 0.62%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-11 12:26:55

End at: 2017-12-11 12:27:25

Below is generated by plot.py at 2017-12-11 16:07:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 239.45 Mbit/s

95th percentile per-packet one-way delay: 145.454 ms

Loss rate: 2.46%

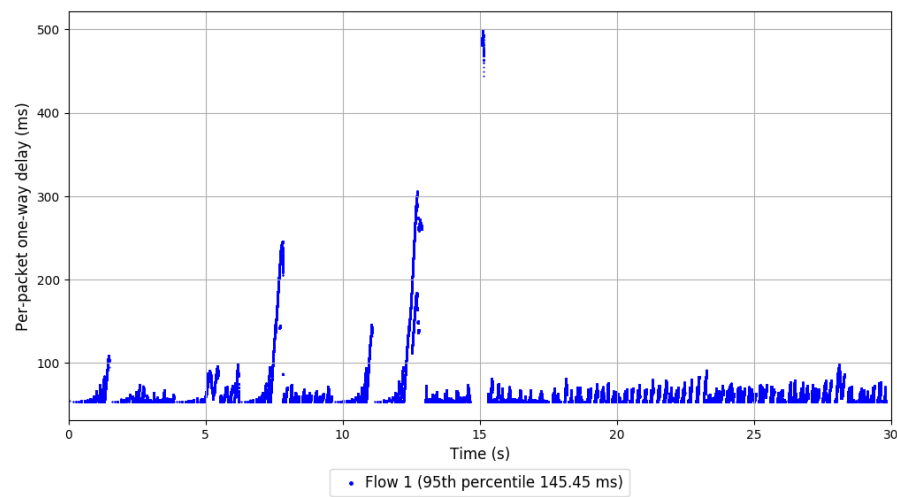
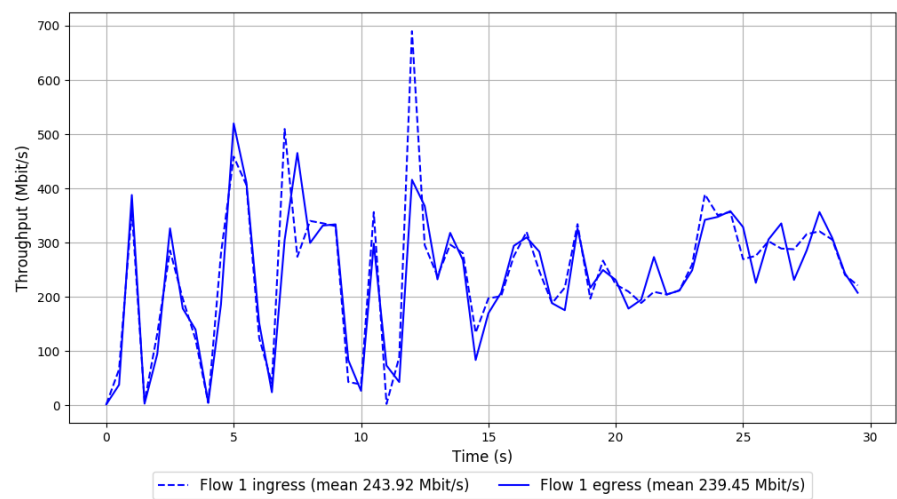
-- Flow 1:

Average throughput: 239.45 Mbit/s

95th percentile per-packet one-way delay: 145.454 ms

Loss rate: 2.46%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-11 12:37:01

End at: 2017-12-11 12:37:31

Below is generated by plot.py at 2017-12-11 16:07:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 258.11 Mbit/s

95th percentile per-packet one-way delay: 83.860 ms

Loss rate: 0.31%

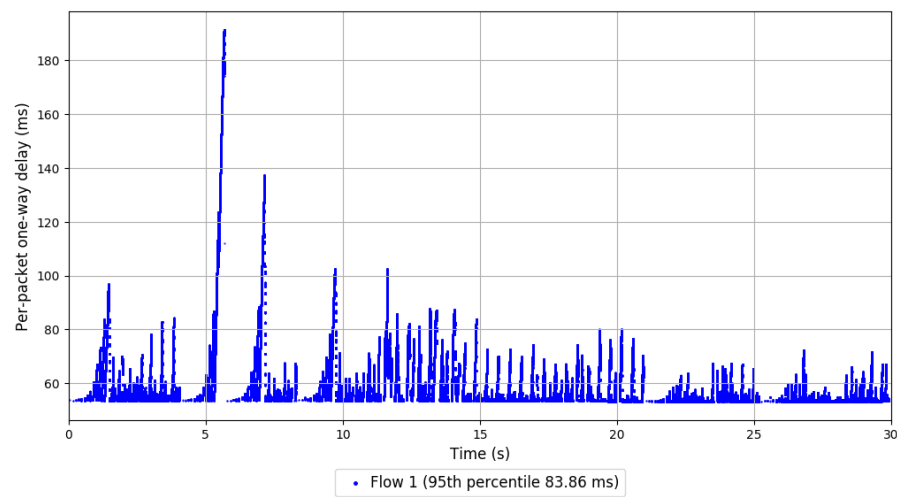
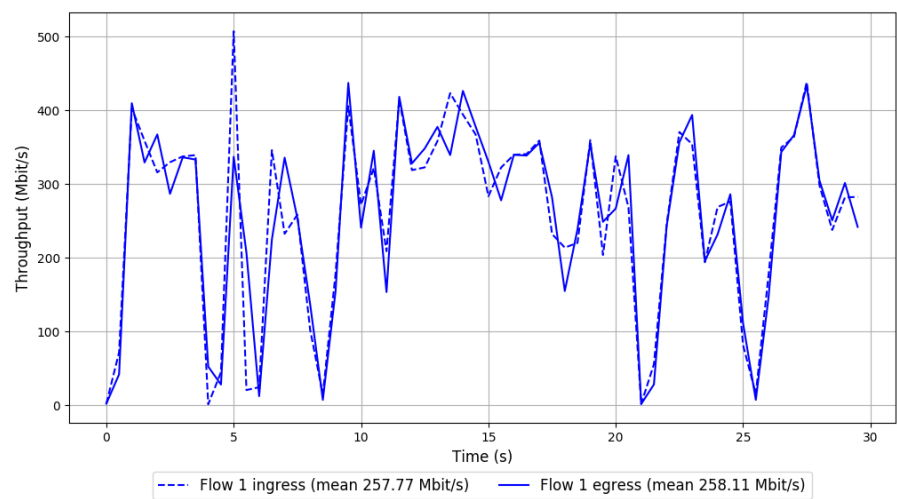
-- Flow 1:

Average throughput: 258.11 Mbit/s

95th percentile per-packet one-way delay: 83.860 ms

Loss rate: 0.31%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-11 12:47:28

End at: 2017-12-11 12:47:58

Below is generated by plot.py at 2017-12-11 16:08:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 279.44 Mbit/s

95th percentile per-packet one-way delay: 69.964 ms

Loss rate: 2.44%

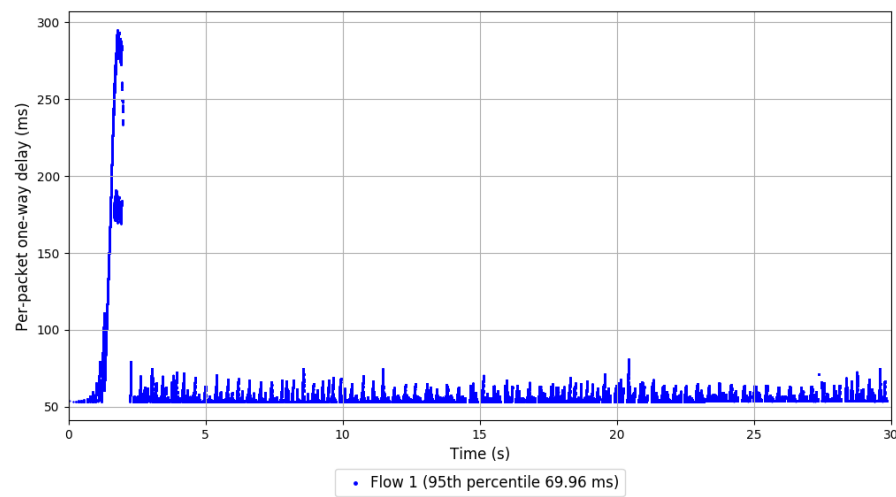
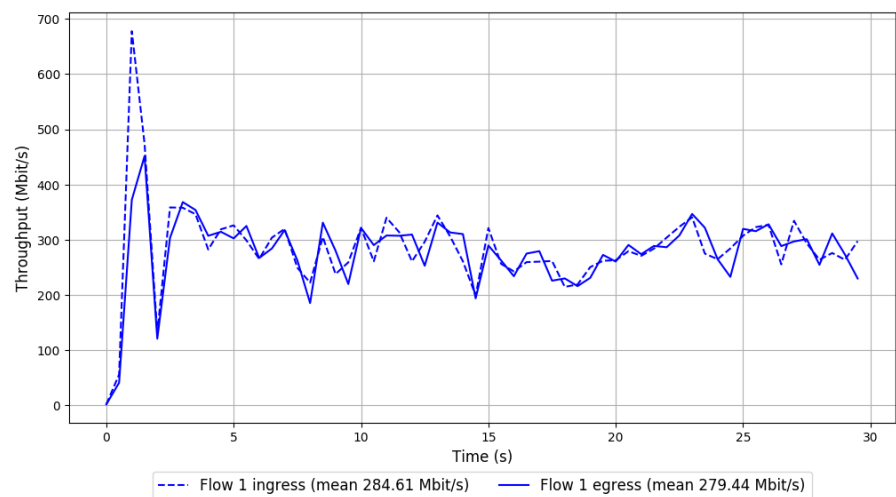
-- Flow 1:

Average throughput: 279.44 Mbit/s

95th percentile per-packet one-way delay: 69.964 ms

Loss rate: 2.44%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-11 12:57:45

End at: 2017-12-11 12:58:15

Below is generated by plot.py at 2017-12-11 16:08:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.28 Mbit/s

95th percentile per-packet one-way delay: 73.337 ms

Loss rate: 0.73%

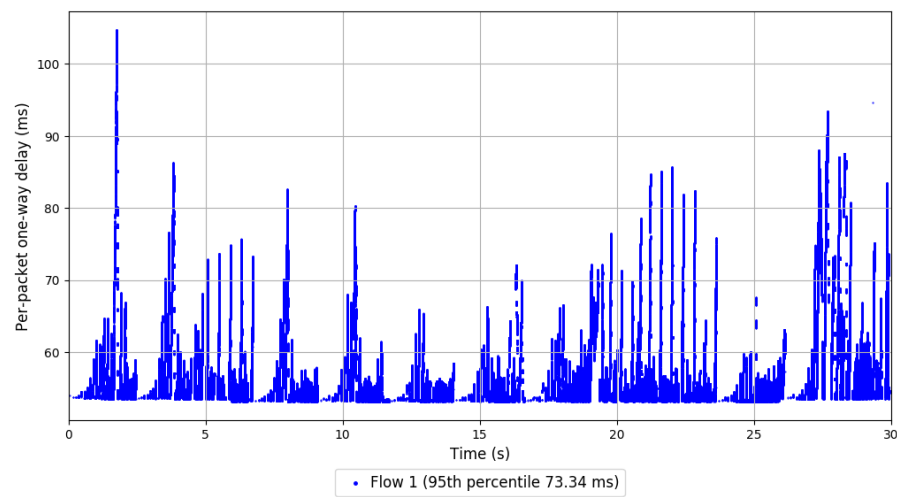
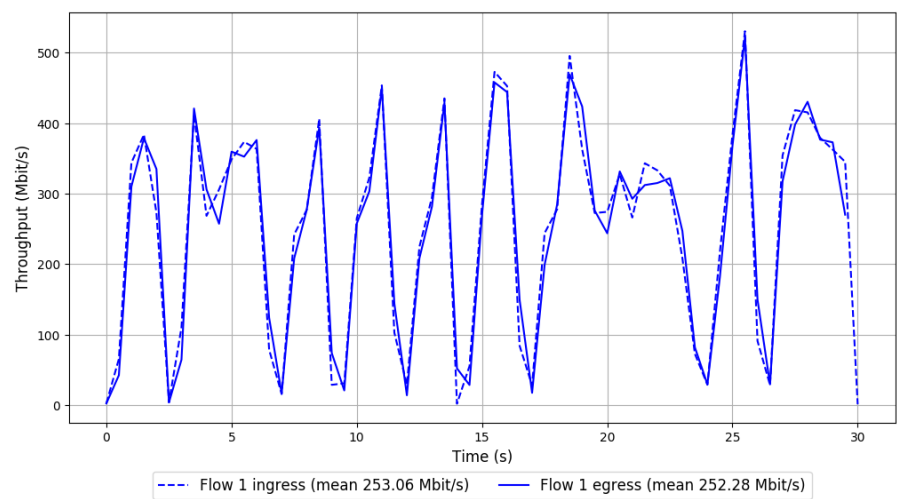
-- Flow 1:

Average throughput: 252.28 Mbit/s

95th percentile per-packet one-way delay: 73.337 ms

Loss rate: 0.73%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-11 13:08:07

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

Below is generated by plot.py at 2017-12-11 16:08:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 246.76 Mbit/s

95th percentile per-packet one-way delay: 108.439 ms

Loss rate: 0.80%

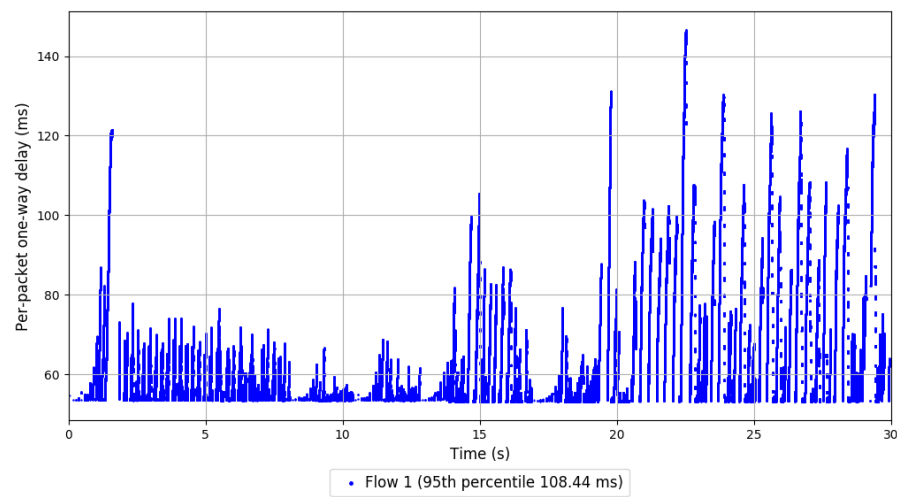
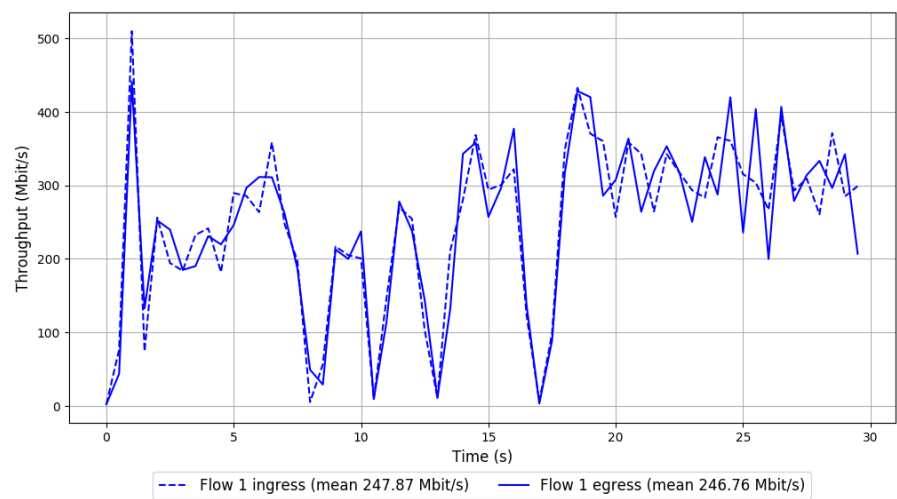
-- Flow 1:

Average throughput: 246.76 Mbit/s

95th percentile per-packet one-way delay: 108.439 ms

Loss rate: 0.80%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-11 13:18:21

End at: 2017-12-11 13:18:51

Below is generated by plot.py at 2017-12-11 16:08:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 244.21 Mbit/s

95th percentile per-packet one-way delay: 87.001 ms

Loss rate: 1.96%

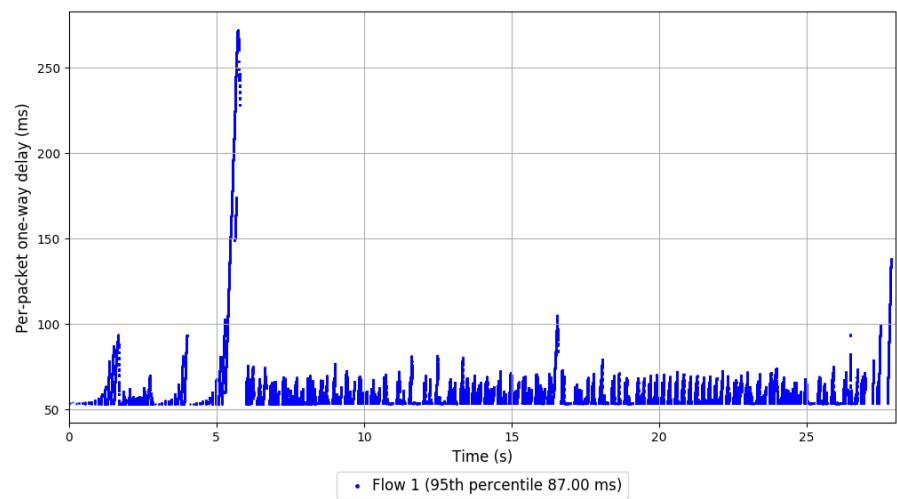
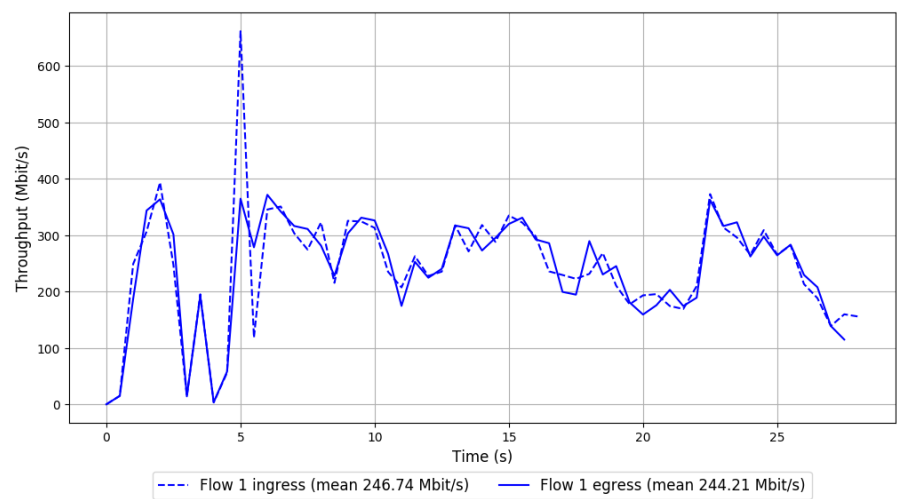
-- Flow 1:

Average throughput: 244.21 Mbit/s

95th percentile per-packet one-way delay: 87.001 ms

Loss rate: 1.96%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-11 13:28:43

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

Below is generated by plot.py at 2017-12-11 16:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.11 Mbit/s

95th percentile per-packet one-way delay: 78.799 ms

Loss rate: 0.17%

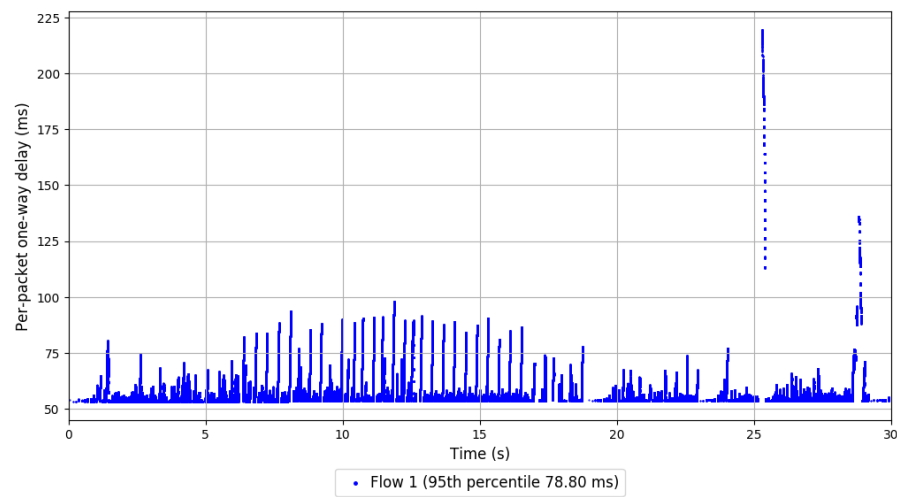
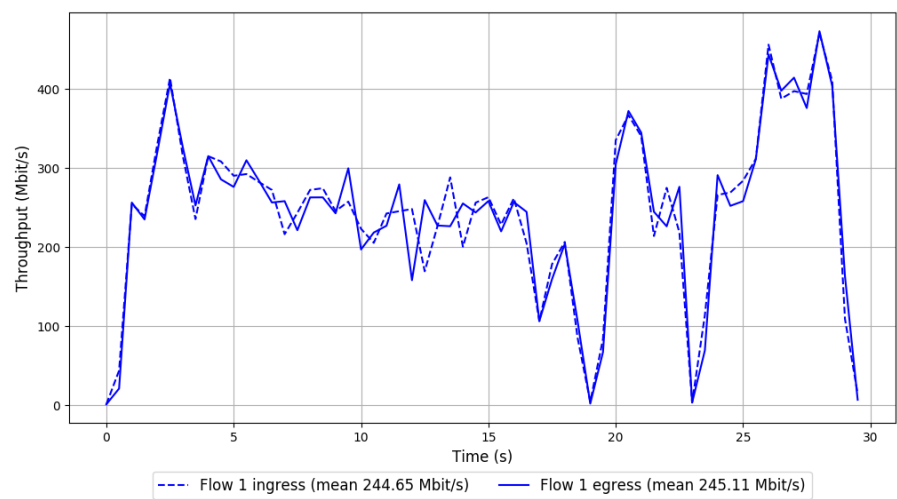
-- Flow 1:

Average throughput: 245.11 Mbit/s

95th percentile per-packet one-way delay: 78.799 ms

Loss rate: 0.17%

Run 8: Report of Verus — Data Link

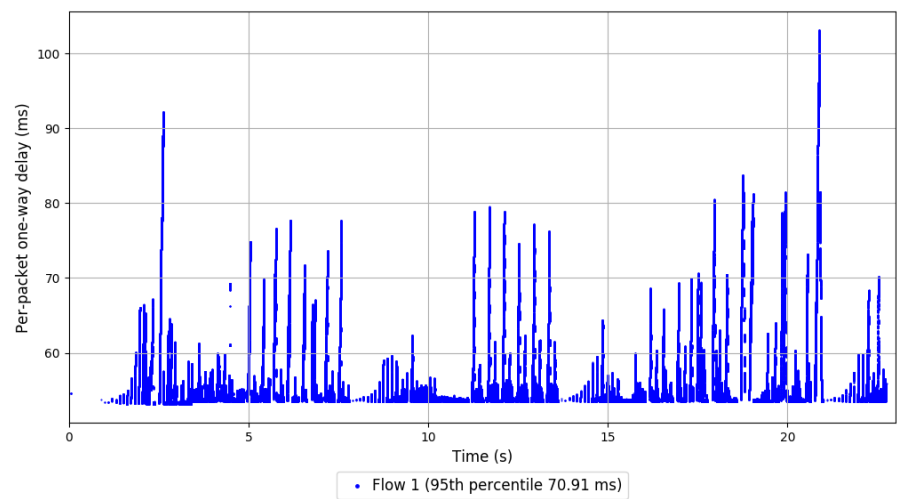
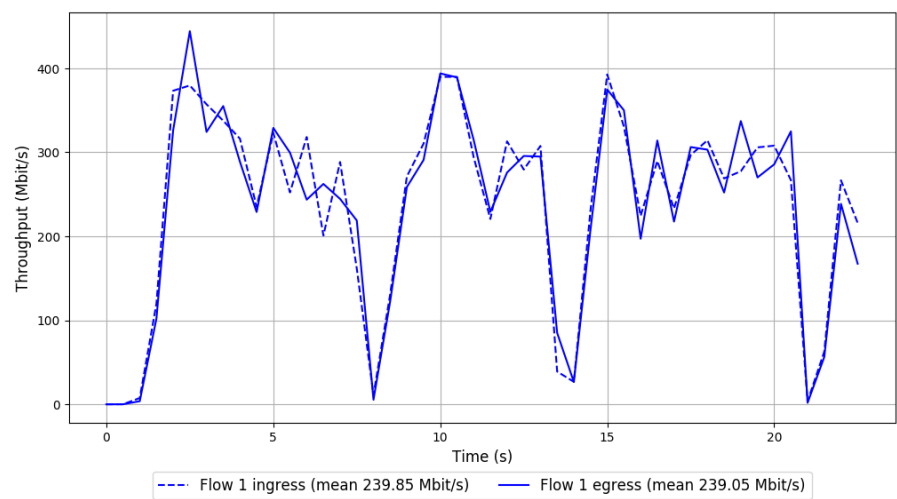


Run 9: Statistics of Verus

Start at: 2017-12-11 13:38:50

End at: 2017-12-11 13:39:20

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-11 13:48:56

End at: 2017-12-11 13:49:26

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 287.78 Mbit/s

95th percentile per-packet one-way delay: 162.984 ms

Loss rate: 1.37%

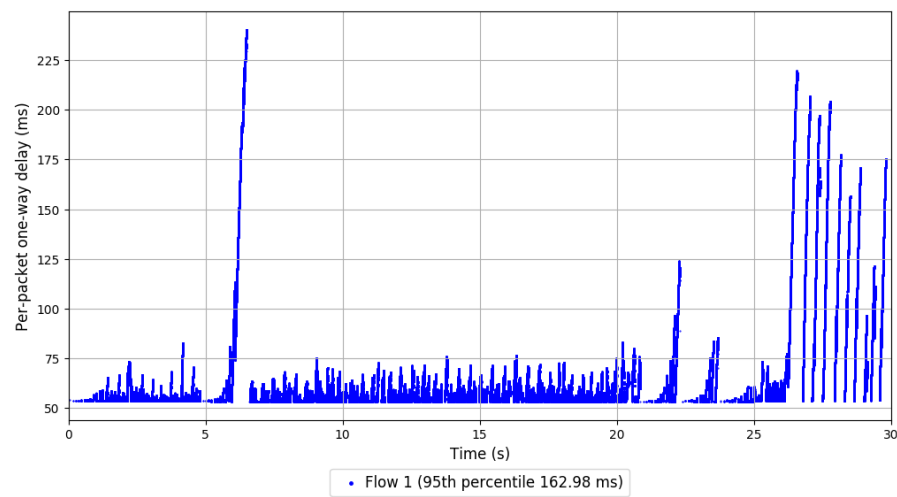
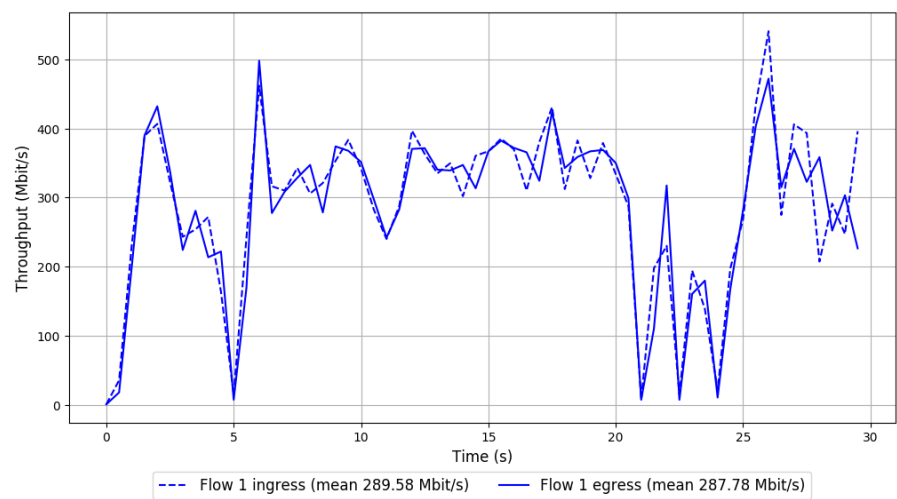
-- Flow 1:

Average throughput: 287.78 Mbit/s

95th percentile per-packet one-way delay: 162.984 ms

Loss rate: 1.37%

Run 10: Report of Verus — Data Link

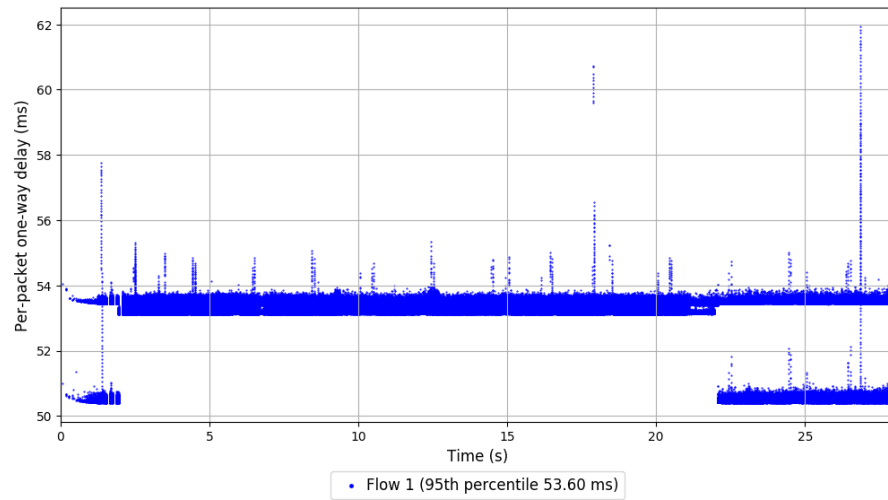
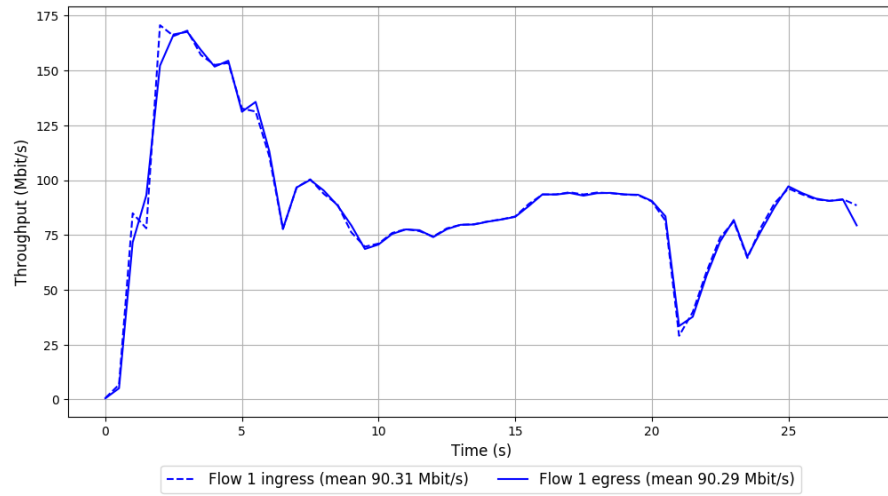


```
Run 1: Statistics of Copa

Start at: 2017-12-11 12:13:27
End at: 2017-12-11 12:13:57

# Below is generated by plot.py at 2017-12-11 16:11:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.29 Mbit/s
95th percentile per-packet one-way delay: 53.602 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 90.29 Mbit/s
95th percentile per-packet one-way delay: 53.602 ms
Loss rate: 0.38%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-11 12:23:58

End at: 2017-12-11 12:24:28

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.57 Mbit/s

95th percentile per-packet one-way delay: 53.533 ms

Loss rate: 0.32%

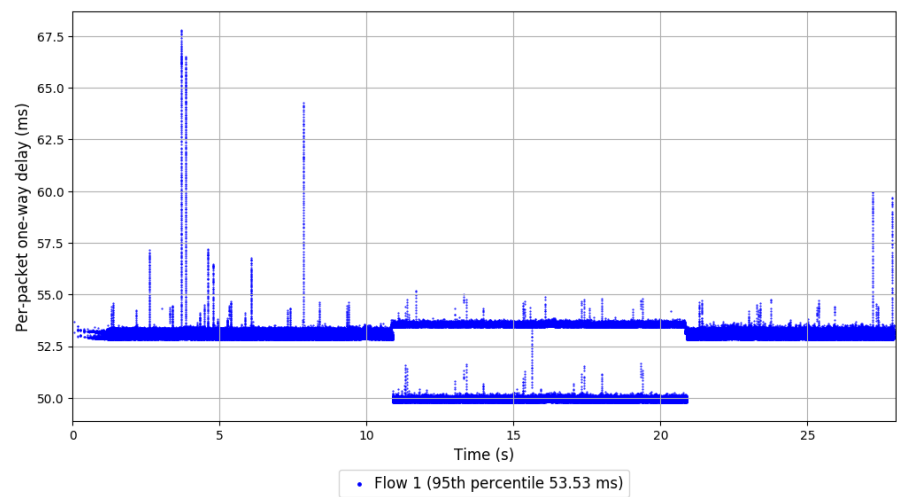
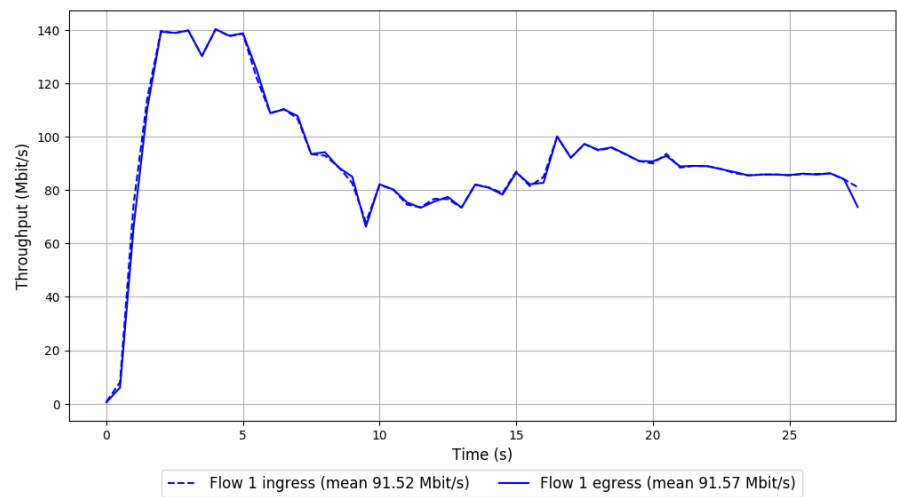
-- Flow 1:

Average throughput: 91.57 Mbit/s

95th percentile per-packet one-way delay: 53.533 ms

Loss rate: 0.32%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-11 12:34:10

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.84 Mbit/s

95th percentile per-packet one-way delay: 53.568 ms

Loss rate: 0.35%

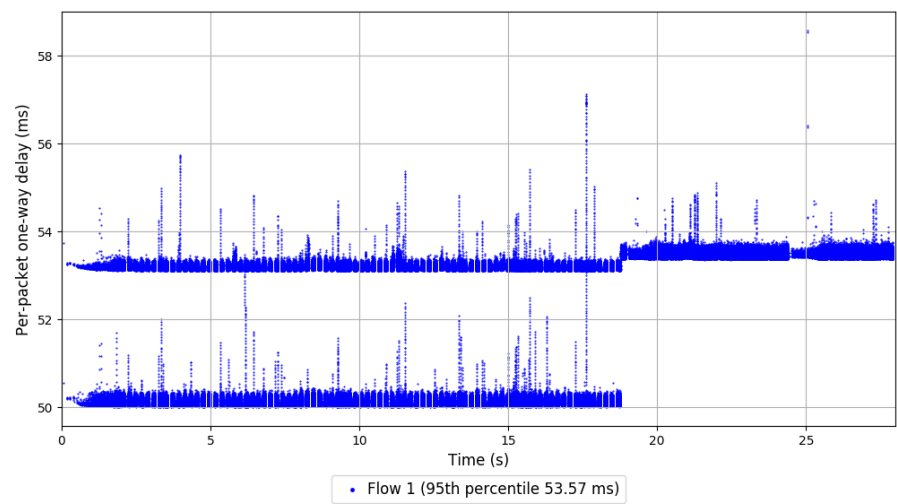
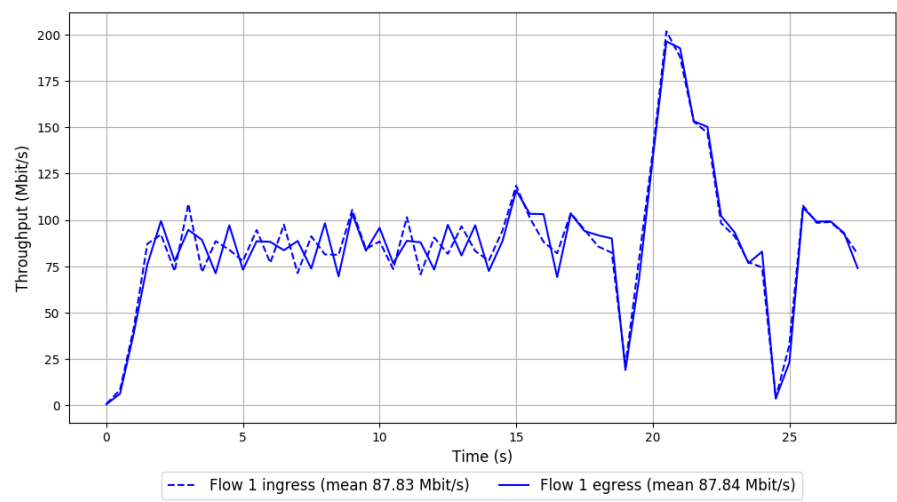
-- Flow 1:

Average throughput: 87.84 Mbit/s

95th percentile per-packet one-way delay: 53.568 ms

Loss rate: 0.35%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

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

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.81 Mbit/s

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

Loss rate: 0.36%

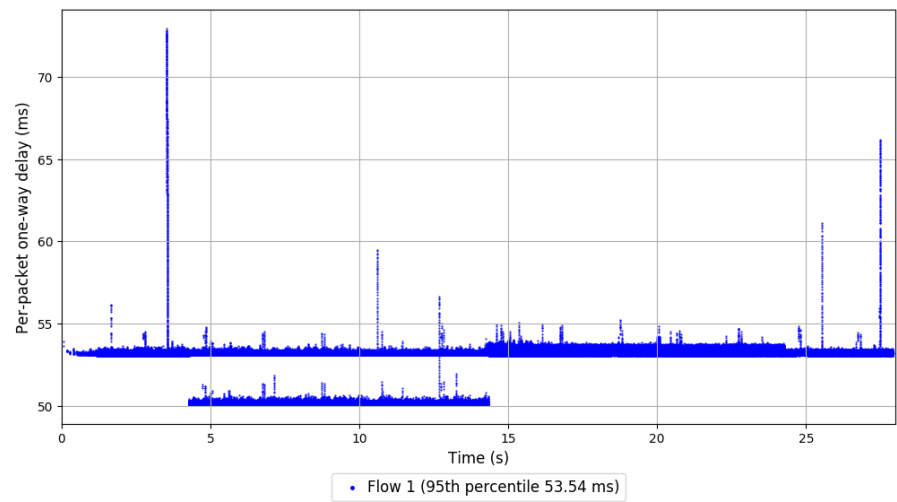
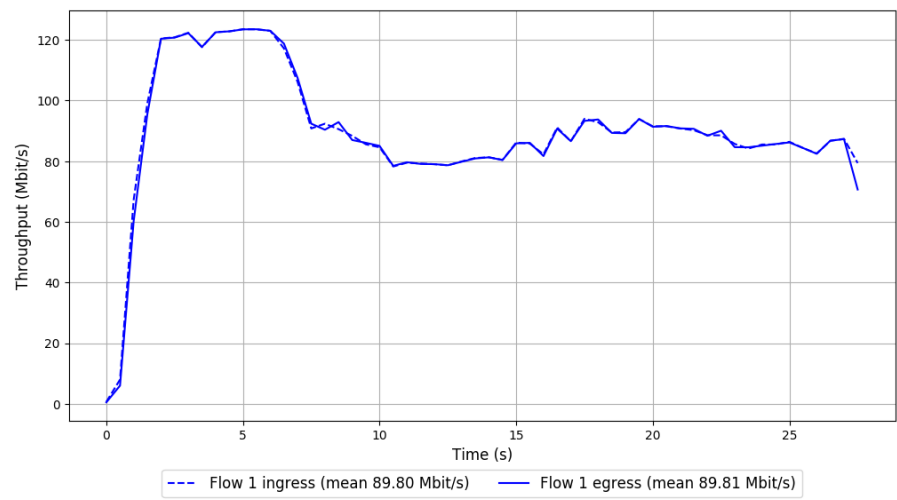
-- Flow 1:

Average throughput: 89.81 Mbit/s

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

Loss rate: 0.36%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-11 12:54:51

End at: 2017-12-11 12:55:21

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.08 Mbit/s

95th percentile per-packet one-way delay: 53.544 ms

Loss rate: 0.35%

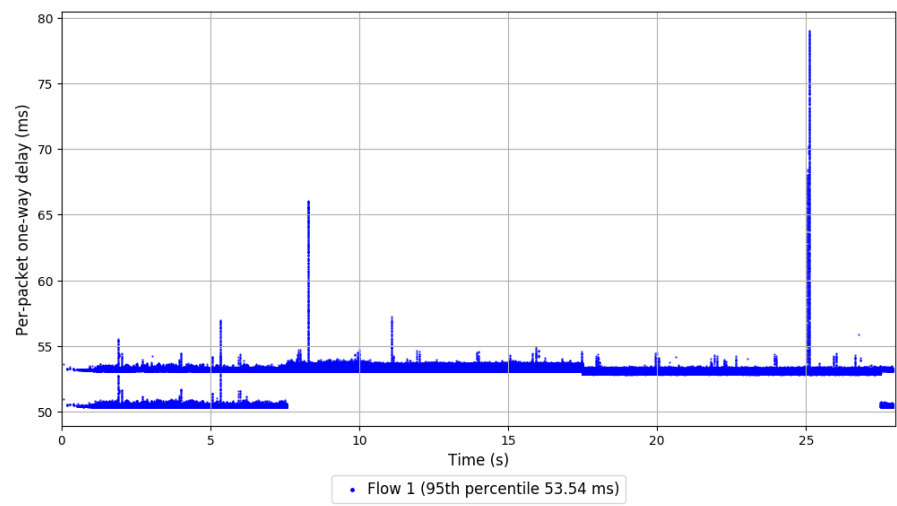
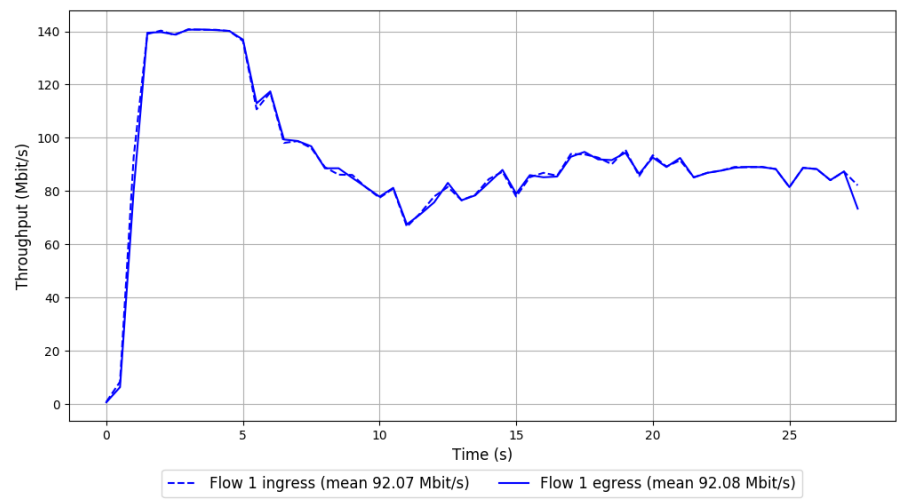
-- Flow 1:

Average throughput: 92.08 Mbit/s

95th percentile per-packet one-way delay: 53.544 ms

Loss rate: 0.35%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-11 13:05:10

End at: 2017-12-11 13:05:40

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.70 Mbit/s

95th percentile per-packet one-way delay: 53.641 ms

Loss rate: 0.35%

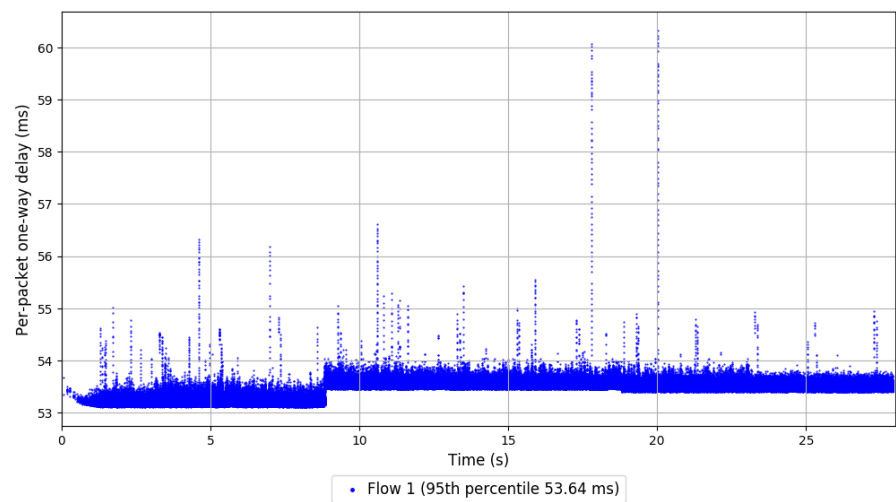
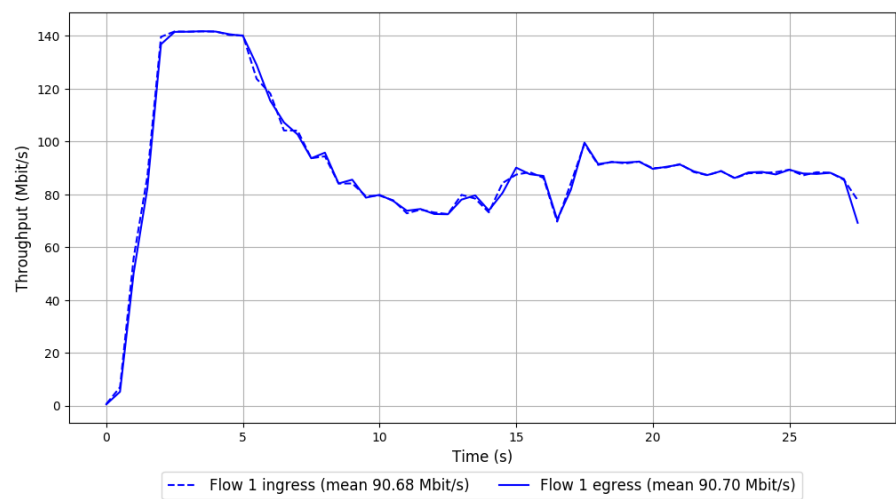
-- Flow 1:

Average throughput: 90.70 Mbit/s

95th percentile per-packet one-way delay: 53.641 ms

Loss rate: 0.35%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-11 13:15:22

End at: 2017-12-11 13:15:52

Below is generated by plot.py at 2017-12-11 16:12:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.35 Mbit/s

95th percentile per-packet one-way delay: 53.616 ms

Loss rate: 0.04%

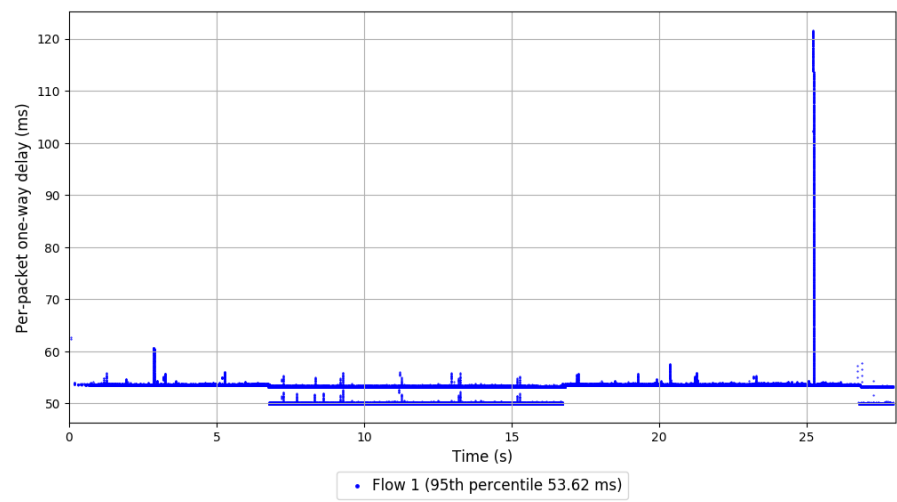
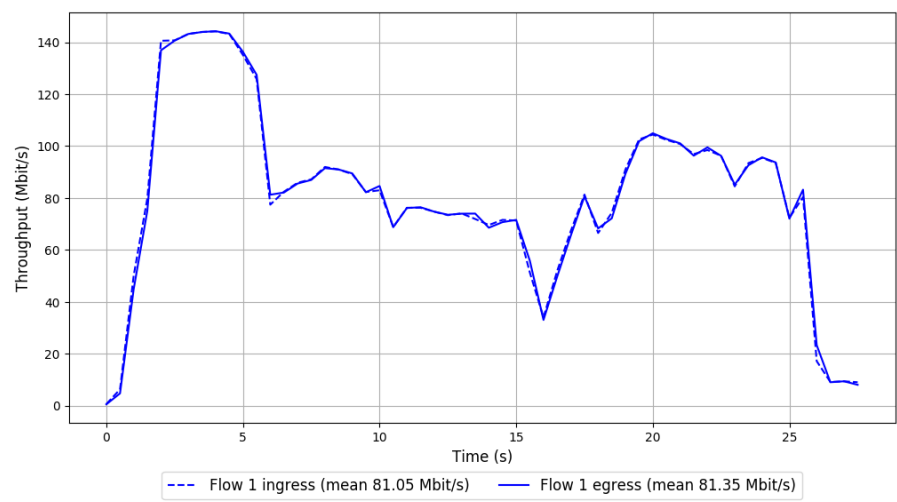
-- Flow 1:

Average throughput: 81.35 Mbit/s

95th percentile per-packet one-way delay: 53.616 ms

Loss rate: 0.04%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-11 13:25:35

End at: 2017-12-11 13:26:05

Below is generated by plot.py at 2017-12-11 16:12:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.90 Mbit/s

95th percentile per-packet one-way delay: 53.582 ms

Loss rate: 0.40%

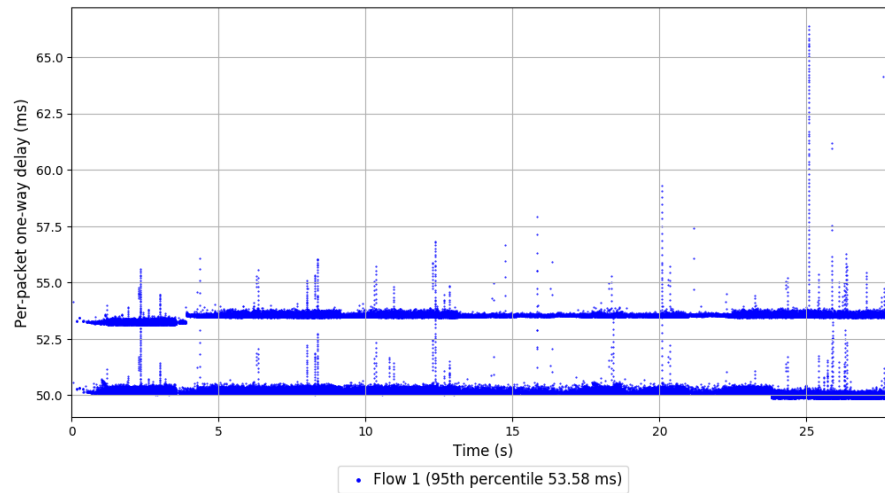
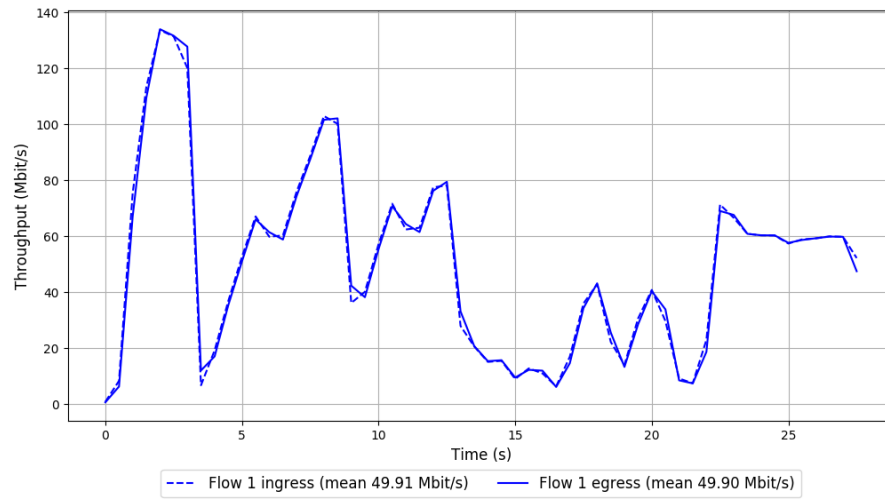
-- Flow 1:

Average throughput: 49.90 Mbit/s

95th percentile per-packet one-way delay: 53.582 ms

Loss rate: 0.40%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-11 13:35:58

End at: 2017-12-11 13:36:28

Below is generated by plot.py at 2017-12-11 16:13:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.68 Mbit/s

95th percentile per-packet one-way delay: 53.599 ms

Loss rate: 0.40%

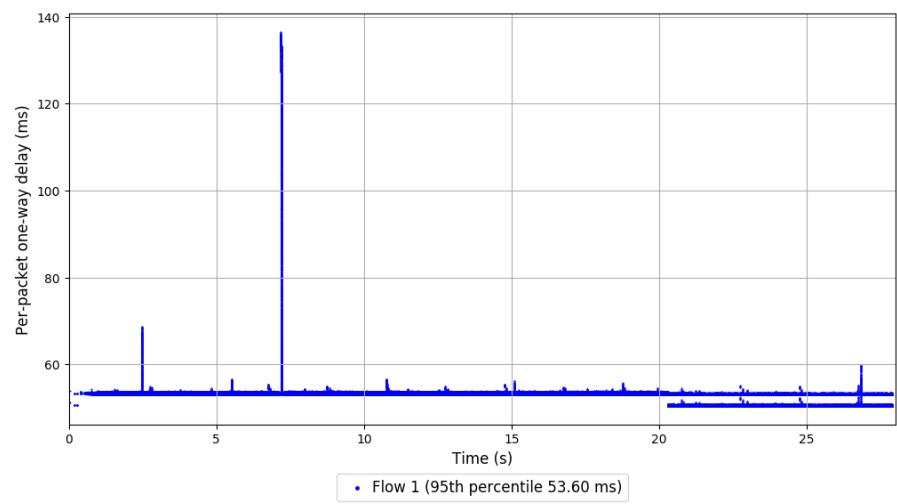
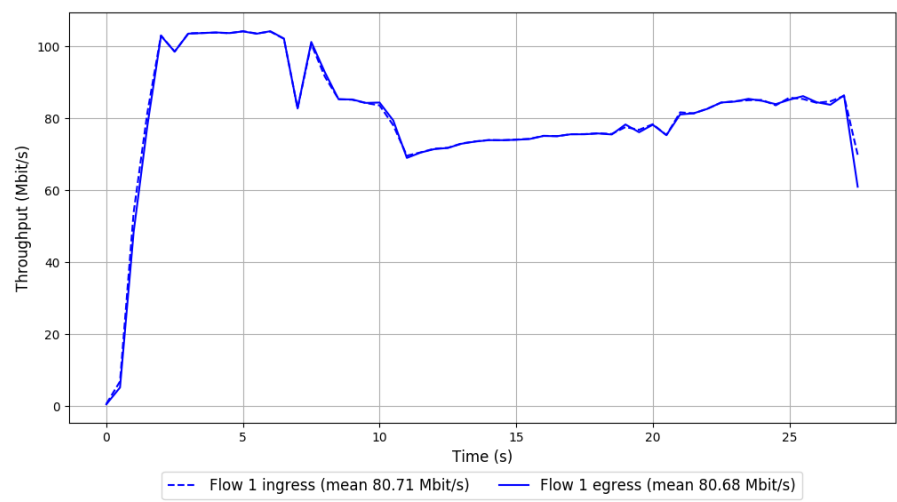
-- Flow 1:

Average throughput: 80.68 Mbit/s

95th percentile per-packet one-way delay: 53.599 ms

Loss rate: 0.40%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-11 13:46:05

End at: 2017-12-11 13:46:35

Below is generated by plot.py at 2017-12-11 16:13:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.05 Mbit/s

95th percentile per-packet one-way delay: 53.666 ms

Loss rate: 0.35%

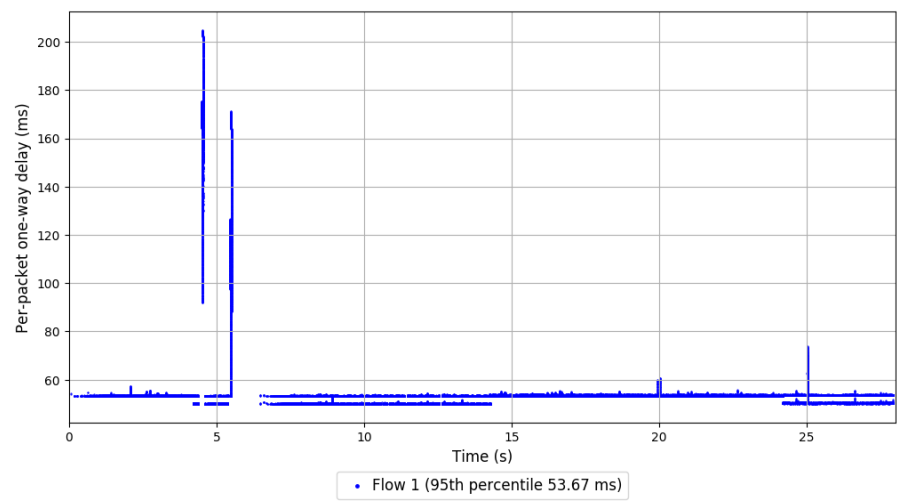
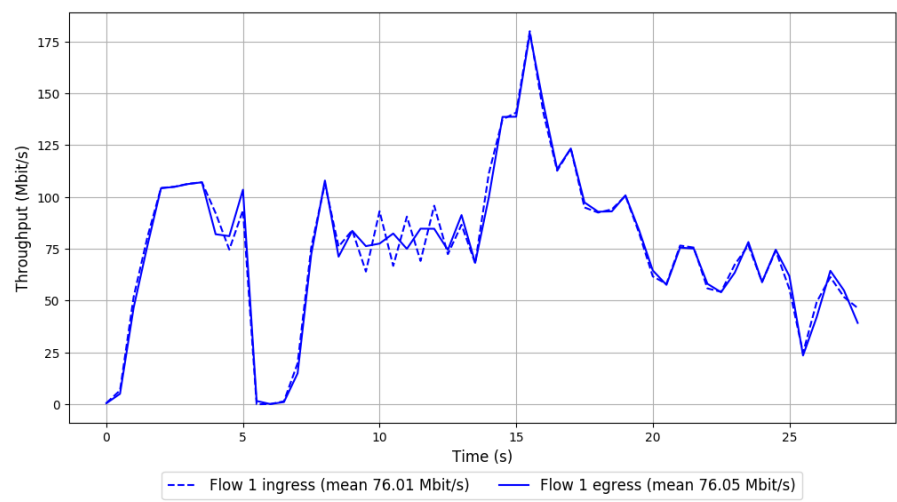
-- Flow 1:

Average throughput: 76.05 Mbit/s

95th percentile per-packet one-way delay: 53.666 ms

Loss rate: 0.35%

Run 10: Report of Copa — Data Link

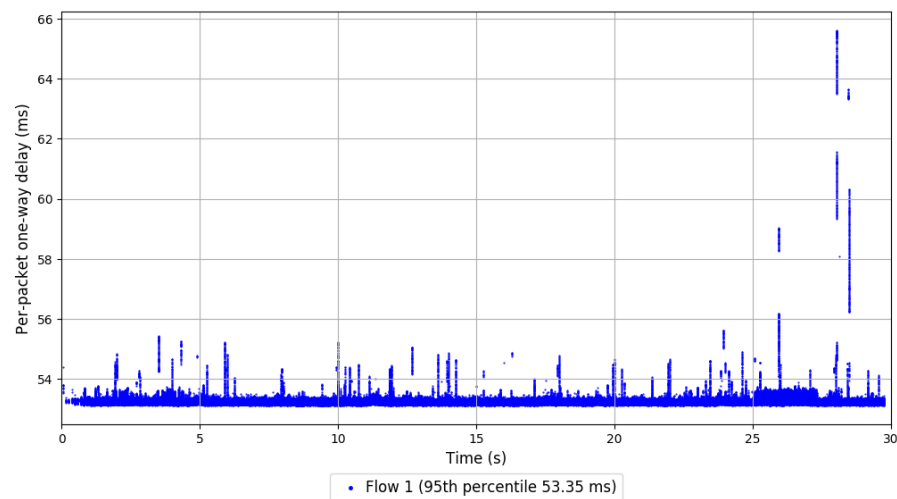
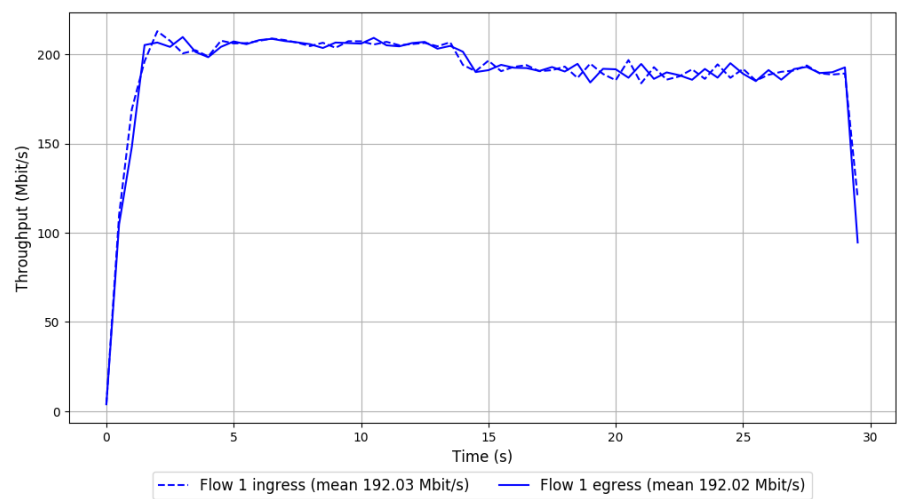


```
Run 1: Statistics of Indigo

Start at: 2017-12-11 12:17:35
End at: 2017-12-11 12:18:05

# Below is generated by plot.py at 2017-12-11 16:14:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.02 Mbit/s
95th percentile per-packet one-way delay: 53.355 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 192.02 Mbit/s
95th percentile per-packet one-way delay: 53.355 ms
Loss rate: 0.36%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-11 12:27:48

End at: 2017-12-11 12:28:18

Below is generated by plot.py at 2017-12-11 16:14:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.96 Mbit/s

95th percentile per-packet one-way delay: 53.351 ms

Loss rate: 0.34%

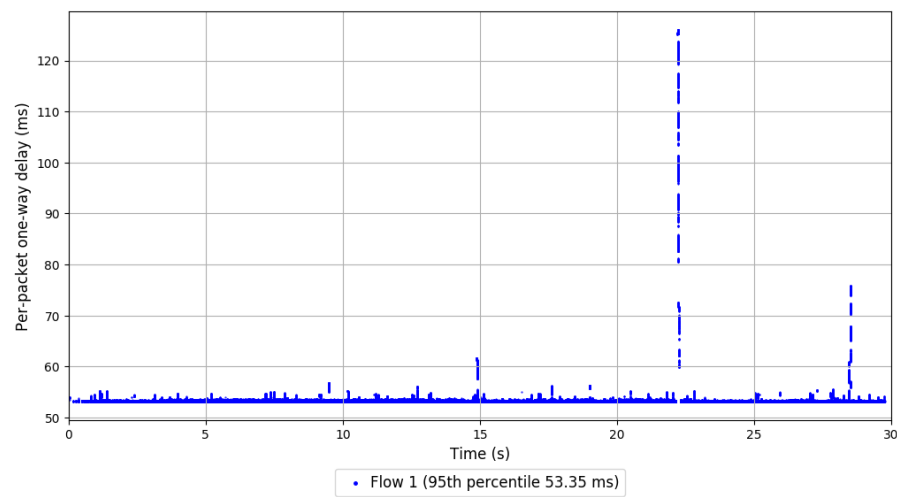
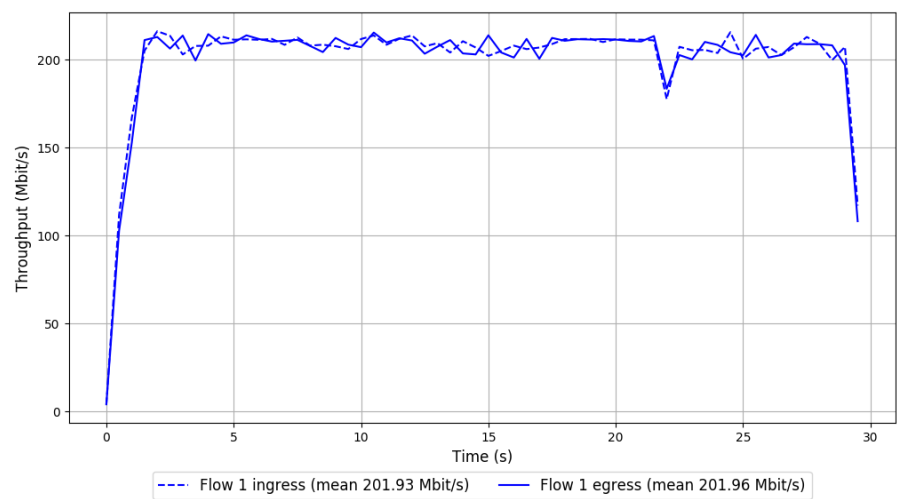
-- Flow 1:

Average throughput: 201.96 Mbit/s

95th percentile per-packet one-way delay: 53.351 ms

Loss rate: 0.34%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-11 12:37:55

End at: 2017-12-11 12:38:25

Below is generated by plot.py at 2017-12-11 16:14:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.82 Mbit/s

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

Loss rate: 0.45%

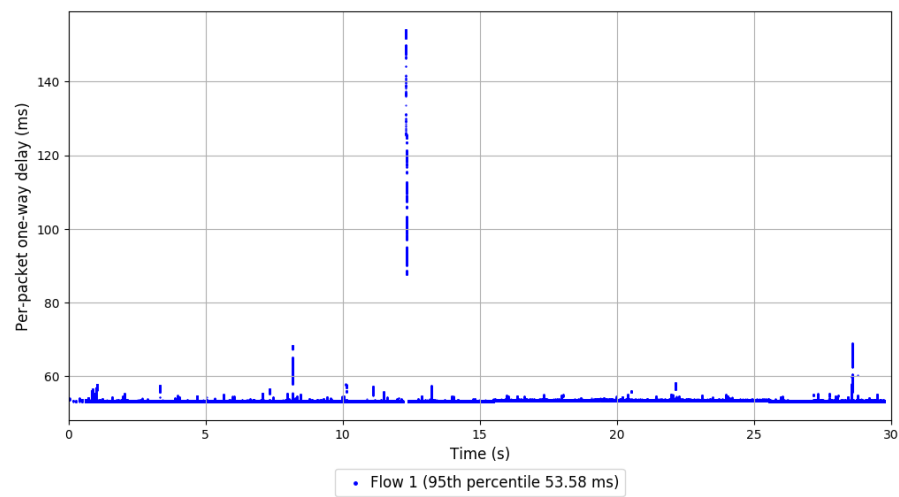
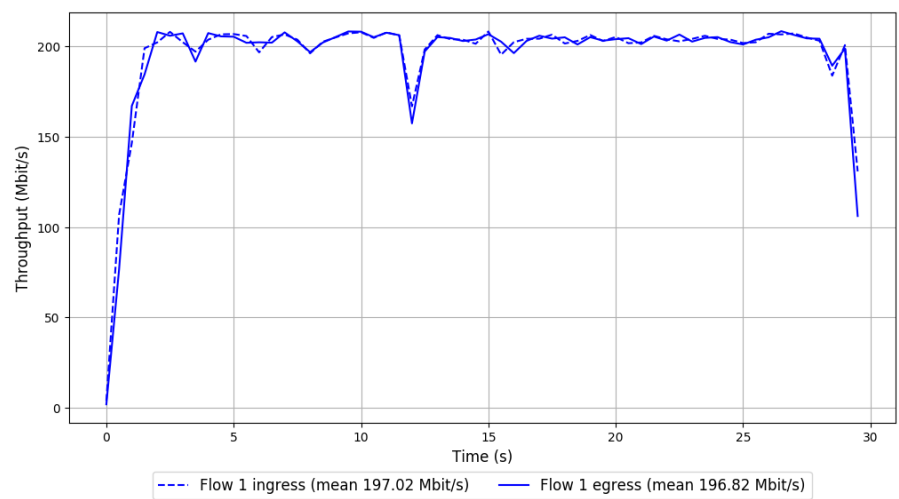
-- Flow 1:

Average throughput: 196.82 Mbit/s

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

Loss rate: 0.45%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-11 12:48:24

End at: 2017-12-11 12:48:54

Below is generated by plot.py at 2017-12-11 16:15:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.30 Mbit/s

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

Loss rate: 0.34%

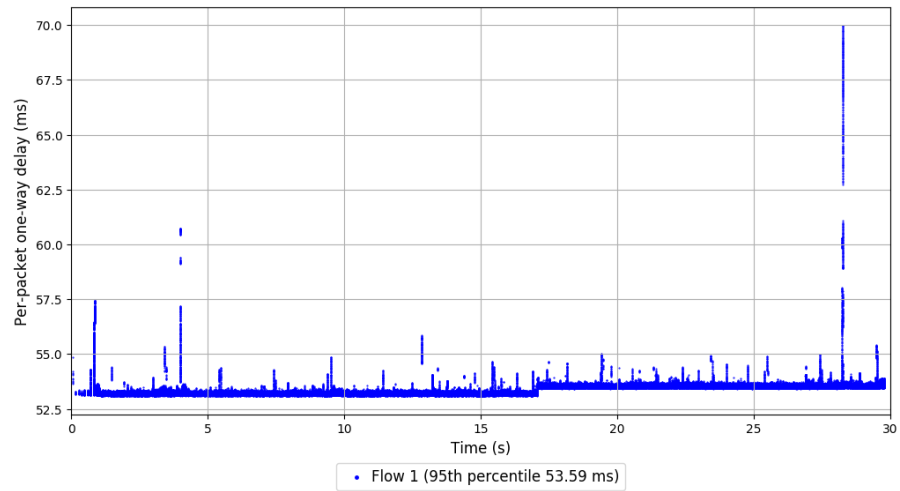
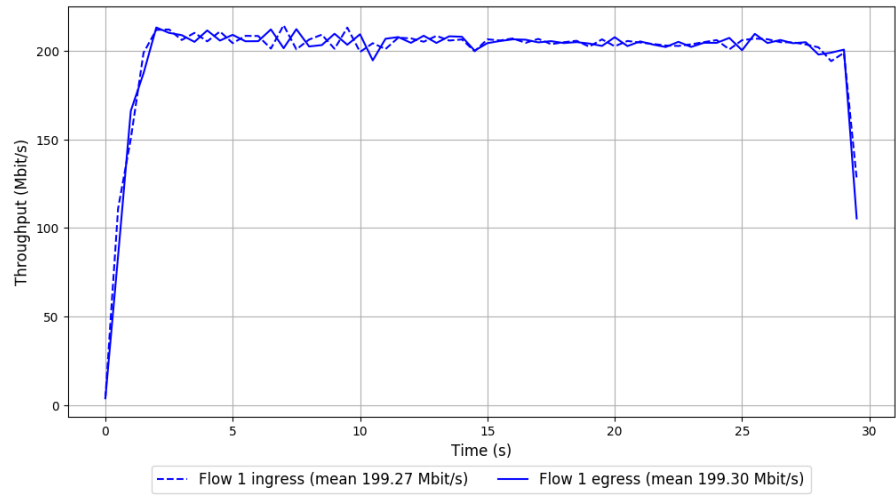
-- Flow 1:

Average throughput: 199.30 Mbit/s

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

Loss rate: 0.34%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-11 12:58:39

End at: 2017-12-11 12:59:09

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.92 Mbit/s

95th percentile per-packet one-way delay: 53.608 ms

Loss rate: 0.38%

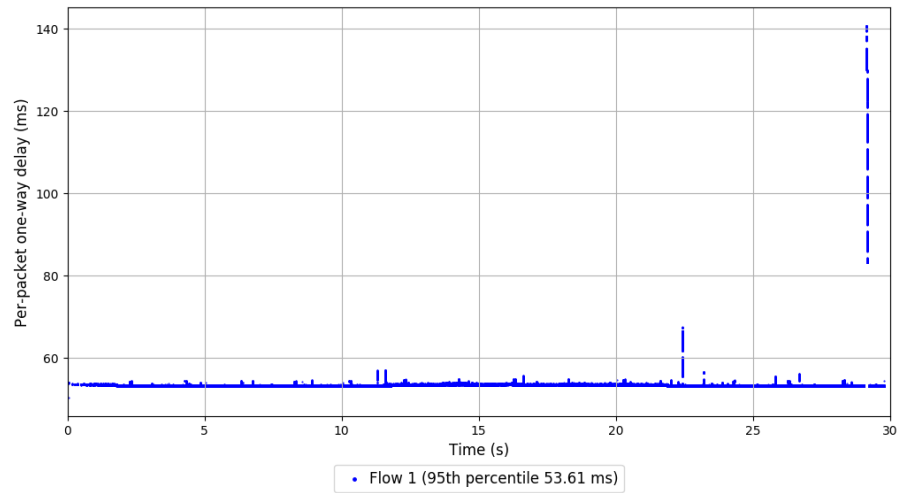
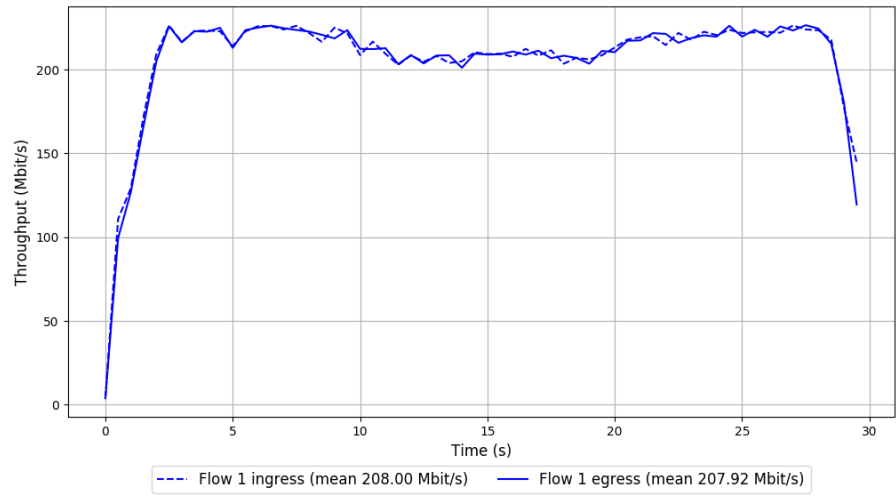
-- Flow 1:

Average throughput: 207.92 Mbit/s

95th percentile per-packet one-way delay: 53.608 ms

Loss rate: 0.38%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-11 13:09:01

End at: 2017-12-11 13:09:31

Below is generated by plot.py at 2017-12-11 16:15:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.59 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.38%

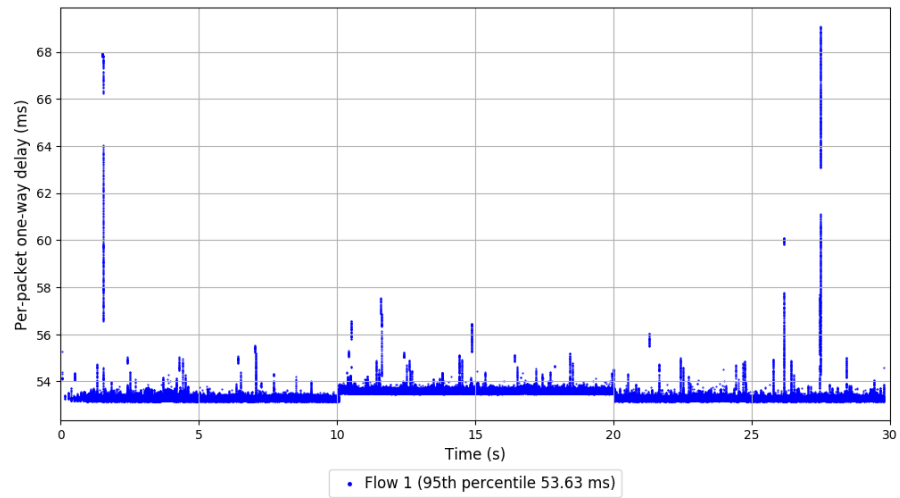
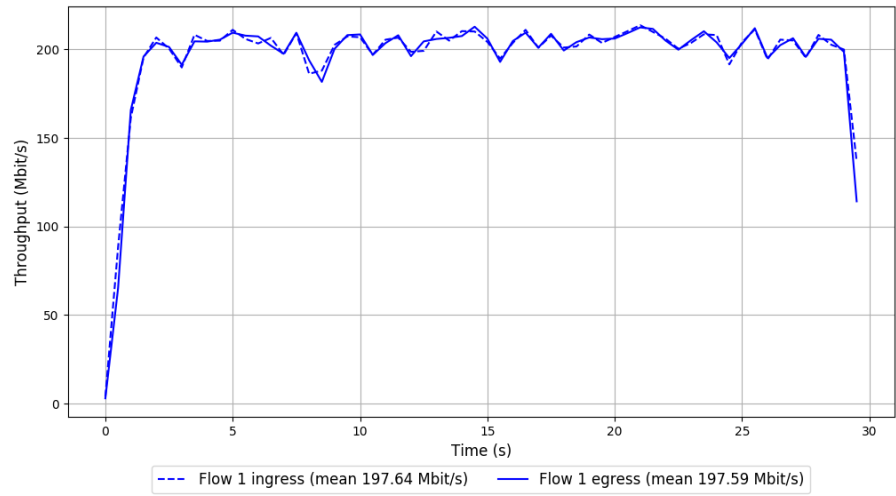
-- Flow 1:

Average throughput: 197.59 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.38%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

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

End at: 2017-12-11 13:19:43

Below is generated by plot.py at 2017-12-11 16:16:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.22 Mbit/s

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

Loss rate: 0.35%

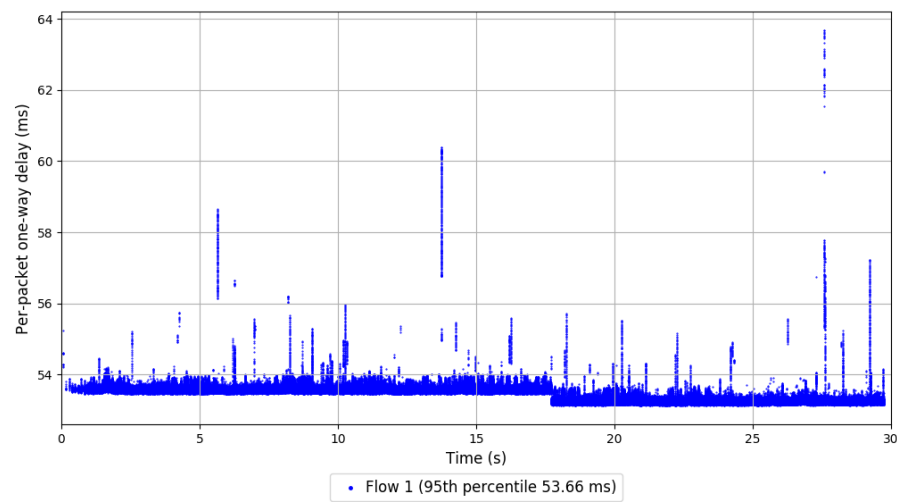
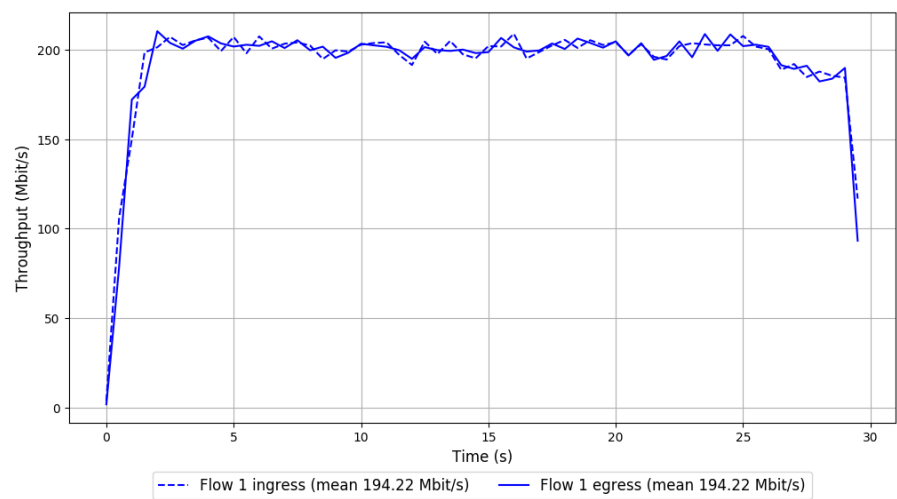
-- Flow 1:

Average throughput: 194.22 Mbit/s

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

Loss rate: 0.35%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-11 13:29:36

End at: 2017-12-11 13:30:06

Below is generated by plot.py at 2017-12-11 16:16:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.43 Mbit/s

95th percentile per-packet one-way delay: 53.639 ms

Loss rate: 0.38%

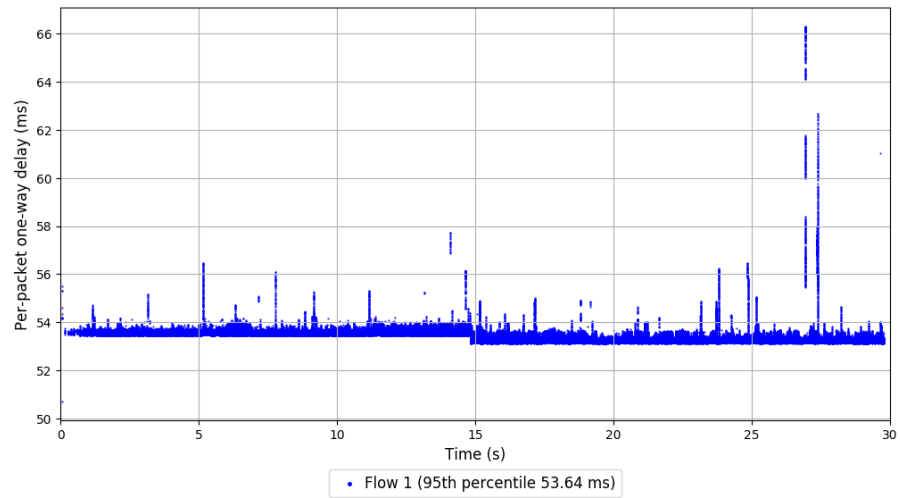
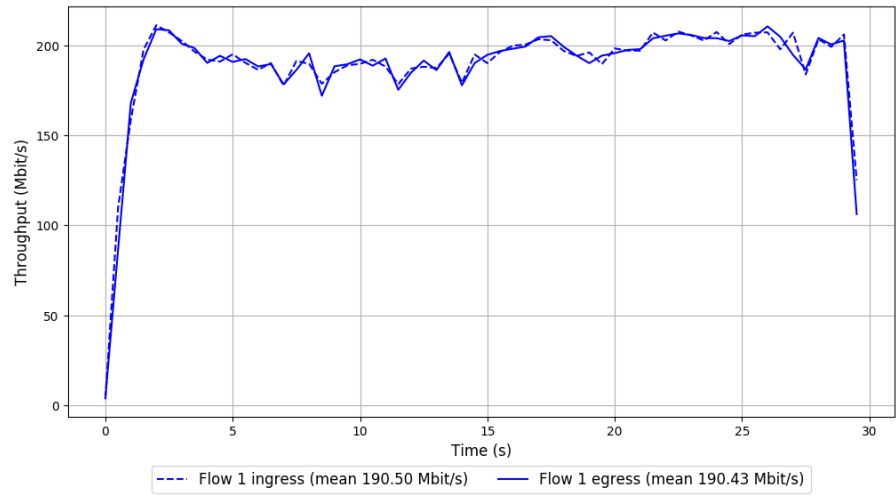
-- Flow 1:

Average throughput: 190.43 Mbit/s

95th percentile per-packet one-way delay: 53.639 ms

Loss rate: 0.38%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

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

End at: 2017-12-11 13:40:09

Below is generated by plot.py at 2017-12-11 16:17:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.94 Mbit/s

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

Loss rate: 0.38%

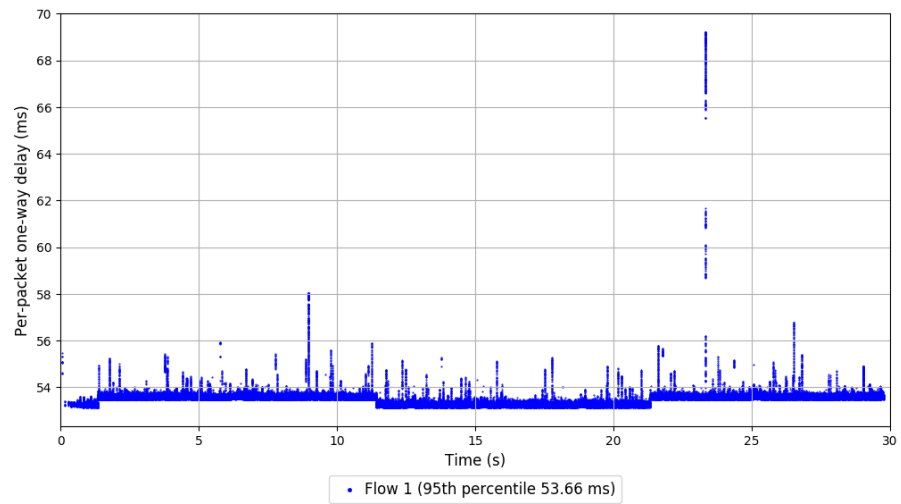
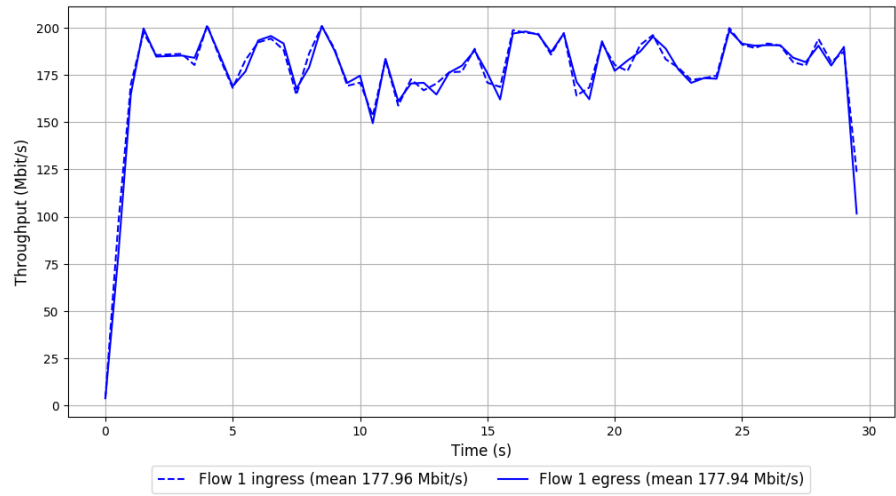
-- Flow 1:

Average throughput: 177.94 Mbit/s

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

Loss rate: 0.38%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-11 13:49:52

End at: 2017-12-11 13:50:22

Below is generated by plot.py at 2017-12-11 16:17:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 160.80 Mbit/s

95th percentile per-packet one-way delay: 53.674 ms

Loss rate: 0.66%

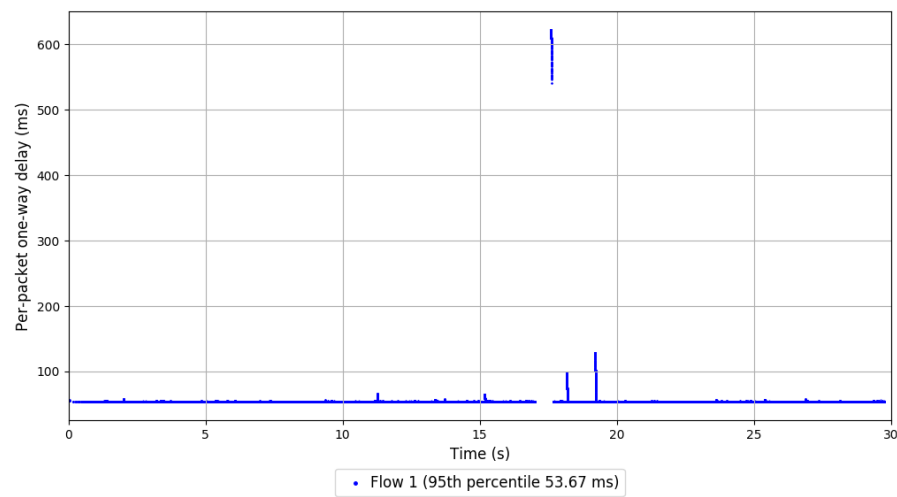
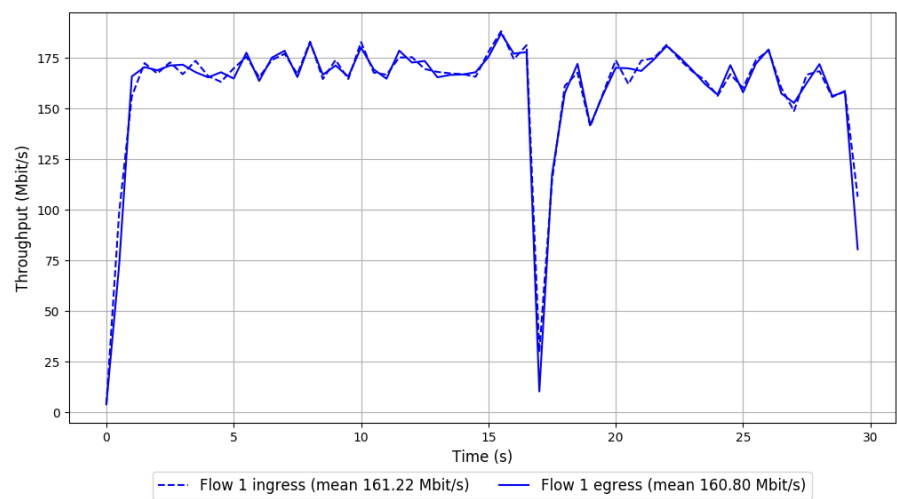
-- Flow 1:

Average throughput: 160.80 Mbit/s

95th percentile per-packet one-way delay: 53.674 ms

Loss rate: 0.66%

Run 10: Report of Indigo — Data Link

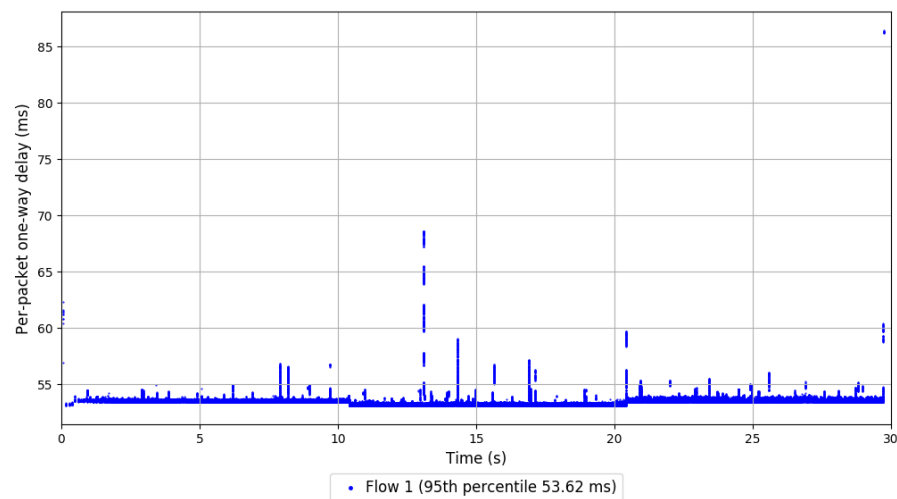
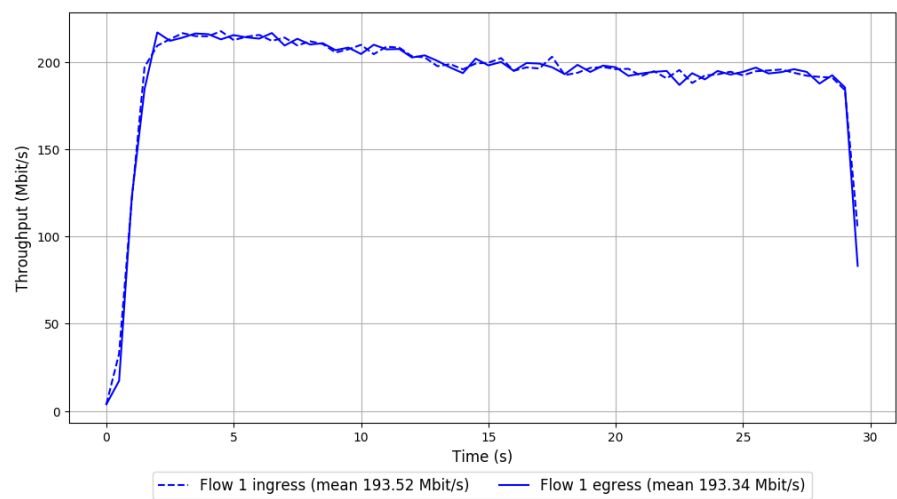


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-11 12:15:50
End at: 2017-12-11 12:16:20

# Below is generated by plot.py at 2017-12-11 16:18:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.34 Mbit/s
95th percentile per-packet one-way delay: 53.620 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 193.34 Mbit/s
95th percentile per-packet one-way delay: 53.620 ms
Loss rate: 0.35%
```

Run 1: Report of Indigo-calib — Data Link

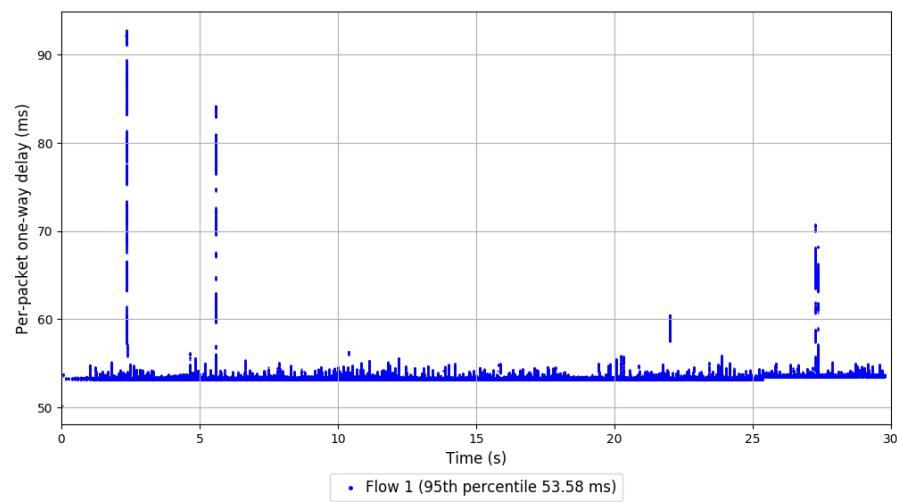
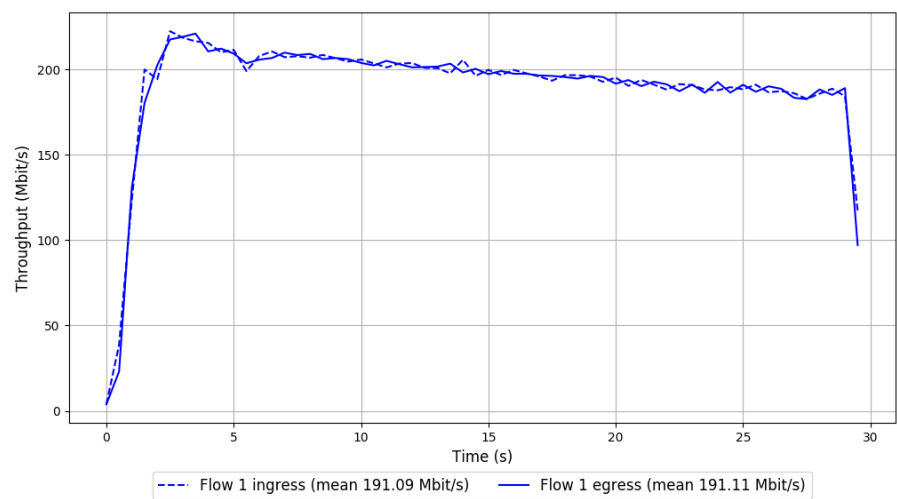


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-11 12:26:05
End at: 2017-12-11 12:26:35

# Below is generated by plot.py at 2017-12-11 16:18:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.11 Mbit/s
95th percentile per-packet one-way delay: 53.581 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 191.11 Mbit/s
95th percentile per-packet one-way delay: 53.581 ms
Loss rate: 0.33%
```

Run 2: Report of Indigo-calib — Data Link

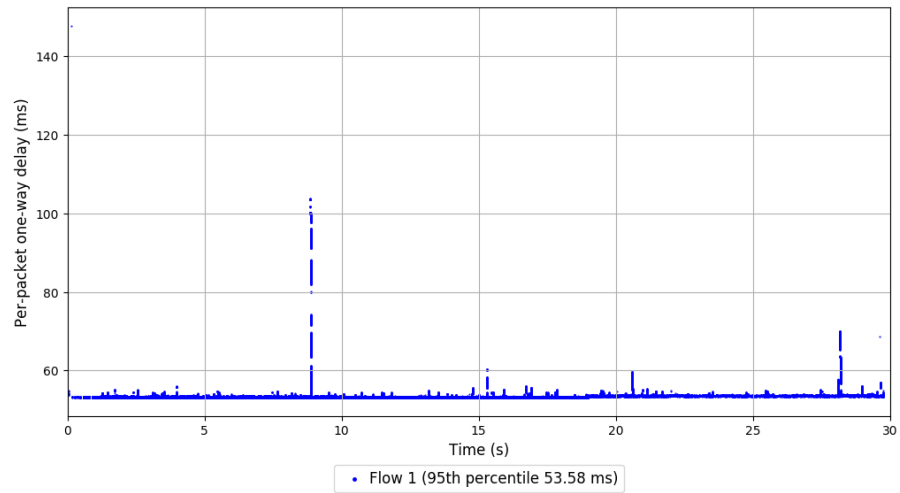
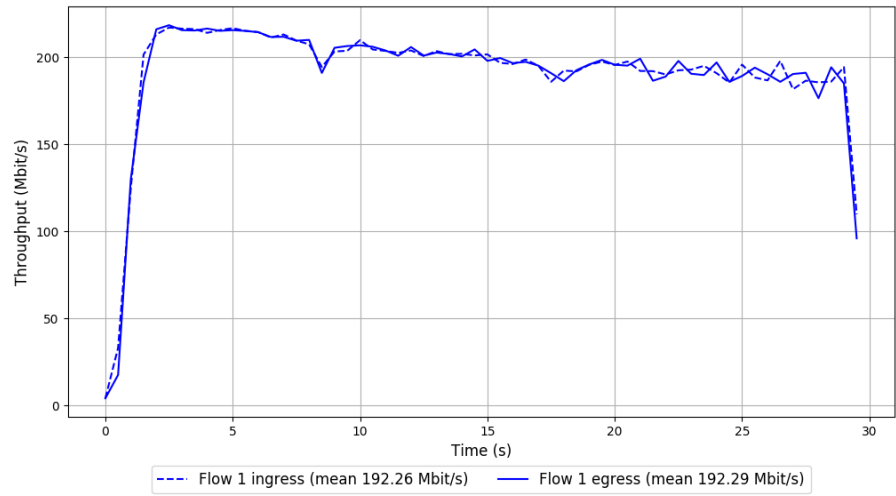


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-11 12:36:12
End at: 2017-12-11 12:36:42

# Below is generated by plot.py at 2017-12-11 16:18:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.29 Mbit/s
95th percentile per-packet one-way delay: 53.582 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 192.29 Mbit/s
95th percentile per-packet one-way delay: 53.582 ms
Loss rate: 0.33%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-11 12:46:38

End at: 2017-12-11 12:47:08

Below is generated by plot.py at 2017-12-11 16:18:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.65 Mbit/s

95th percentile per-packet one-way delay: 53.614 ms

Loss rate: 0.37%

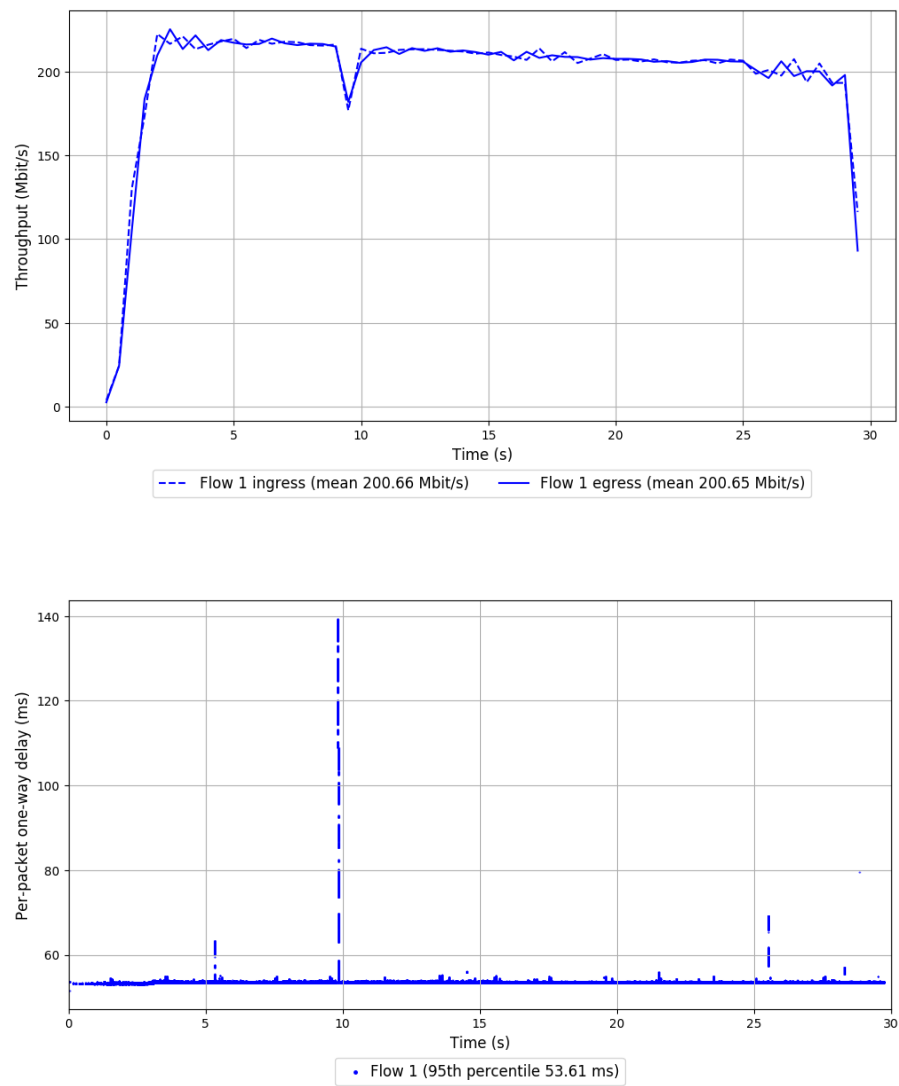
-- Flow 1:

Average throughput: 200.65 Mbit/s

95th percentile per-packet one-way delay: 53.614 ms

Loss rate: 0.37%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-11 12:56:55

End at: 2017-12-11 12:57:25

Below is generated by plot.py at 2017-12-11 16:19:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.53 Mbit/s

95th percentile per-packet one-way delay: 53.633 ms

Loss rate: 0.35%

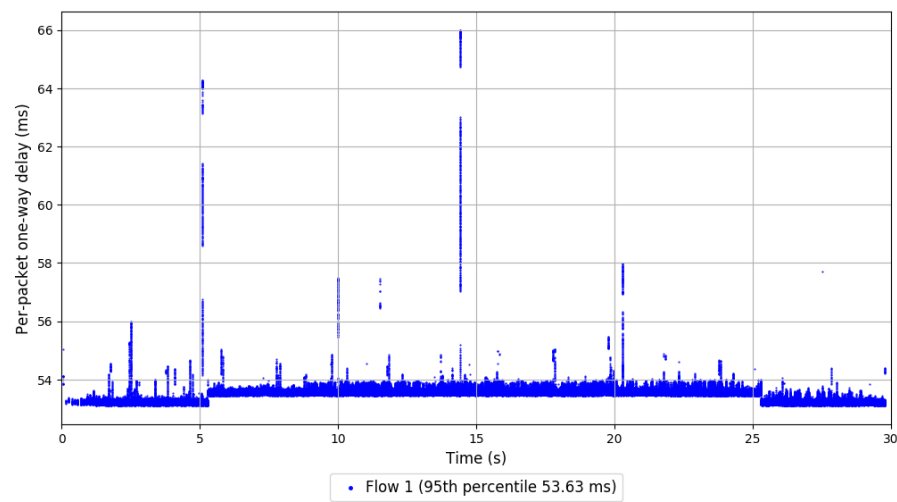
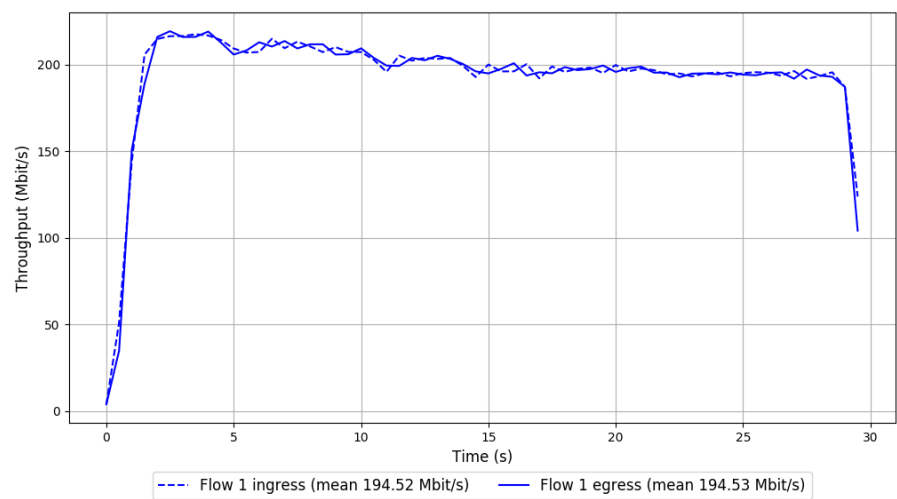
-- Flow 1:

Average throughput: 194.53 Mbit/s

95th percentile per-packet one-way delay: 53.633 ms

Loss rate: 0.35%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-11 13:07:17

End at: 2017-12-11 13:07:47

Below is generated by plot.py at 2017-12-11 16:19:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.95 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.41%

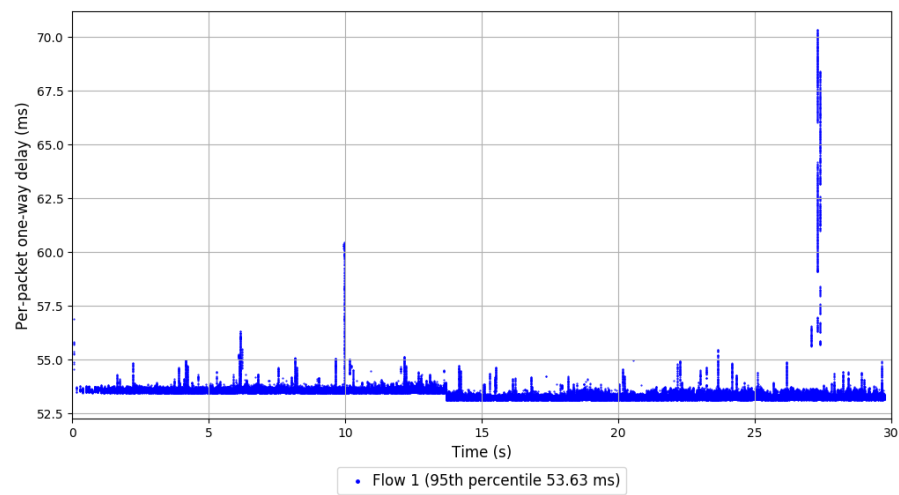
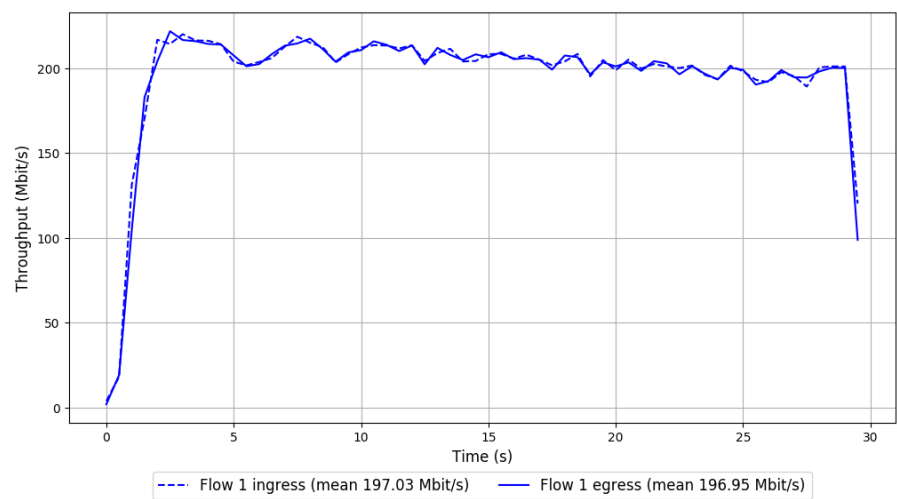
-- Flow 1:

Average throughput: 196.95 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.41%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-11 13:17:31

End at: 2017-12-11 13:18:01

Below is generated by plot.py at 2017-12-11 16:19:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.12 Mbit/s

95th percentile per-packet one-way delay: 53.654 ms

Loss rate: 0.34%

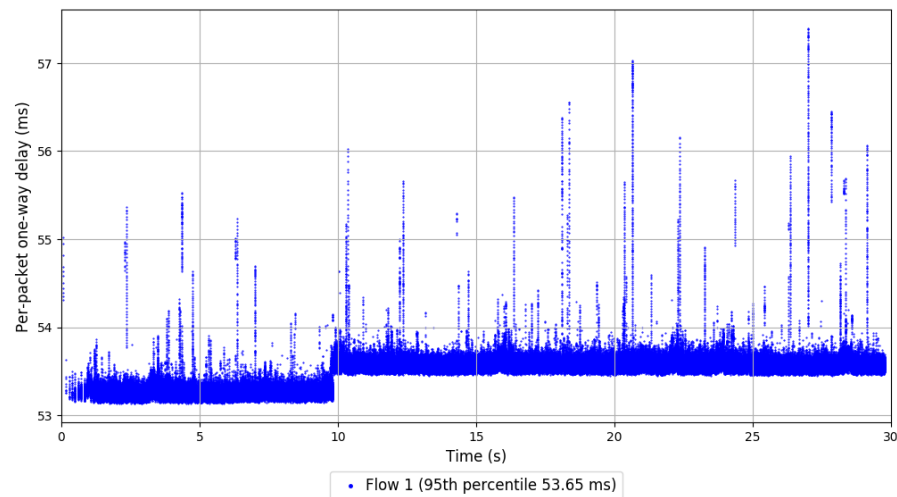
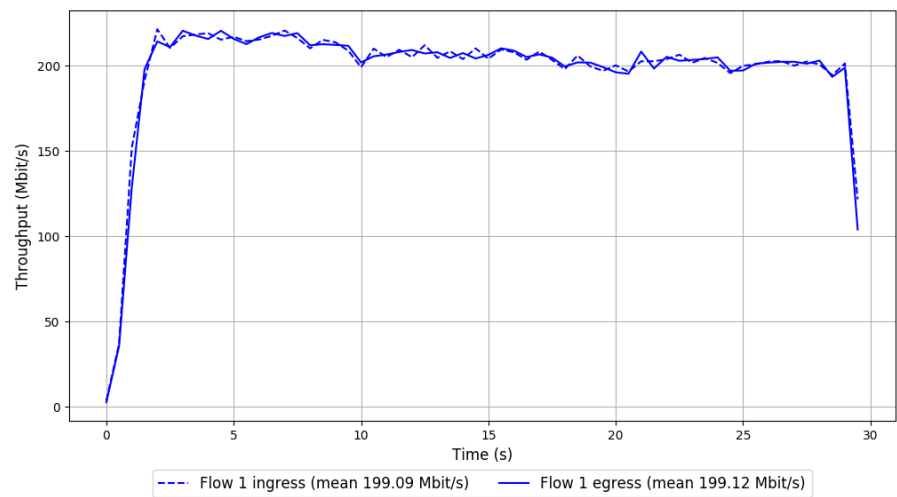
-- Flow 1:

Average throughput: 199.12 Mbit/s

95th percentile per-packet one-way delay: 53.654 ms

Loss rate: 0.34%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-11 13:27:54

End at: 2017-12-11 13:28:24

Below is generated by plot.py at 2017-12-11 16:19:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.39 Mbit/s

95th percentile per-packet one-way delay: 53.676 ms

Loss rate: 0.34%

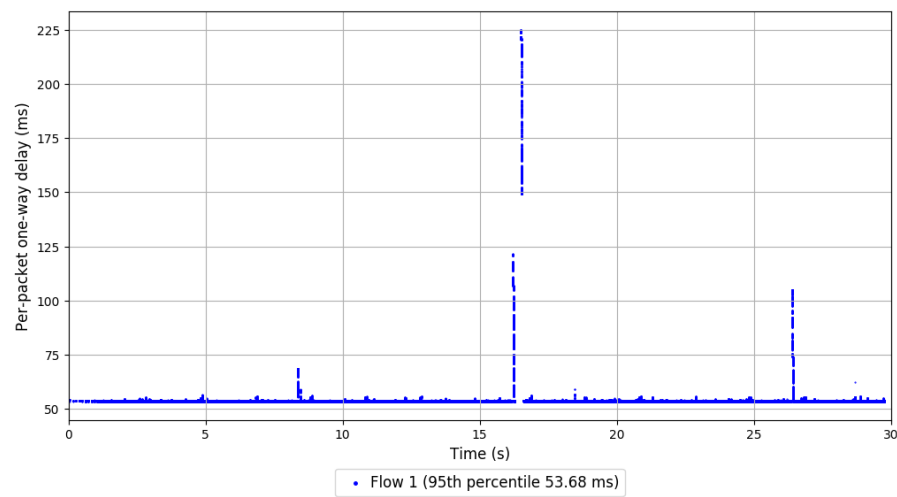
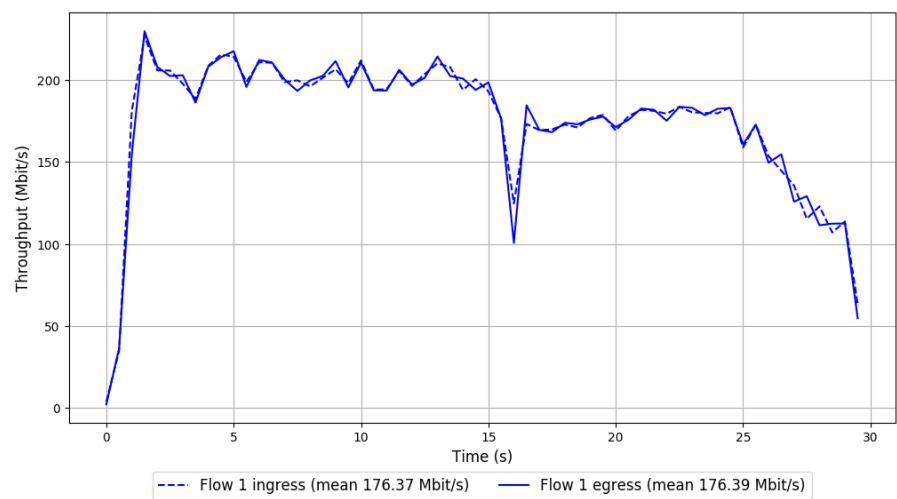
-- Flow 1:

Average throughput: 176.39 Mbit/s

95th percentile per-packet one-way delay: 53.676 ms

Loss rate: 0.34%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-11 13:38:05

End at: 2017-12-11 13:38:36

Below is generated by plot.py at 2017-12-11 16:19:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.40 Mbit/s

95th percentile per-packet one-way delay: 53.661 ms

Loss rate: 0.50%

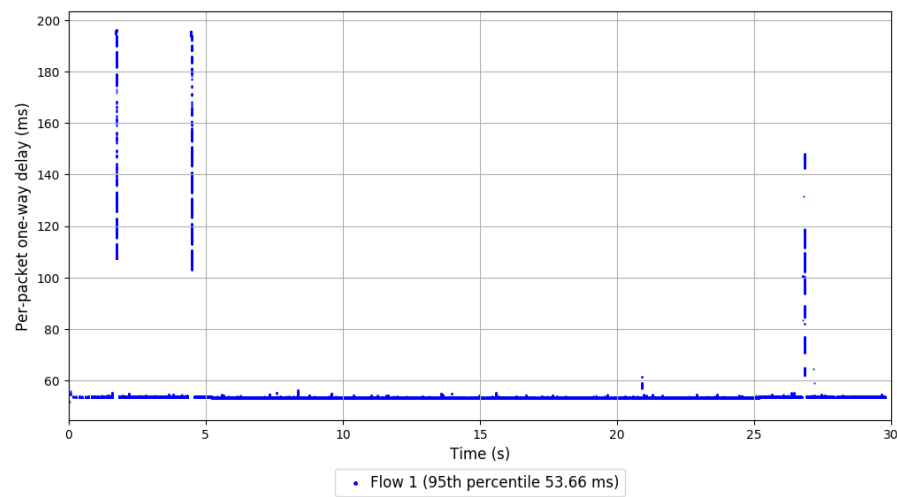
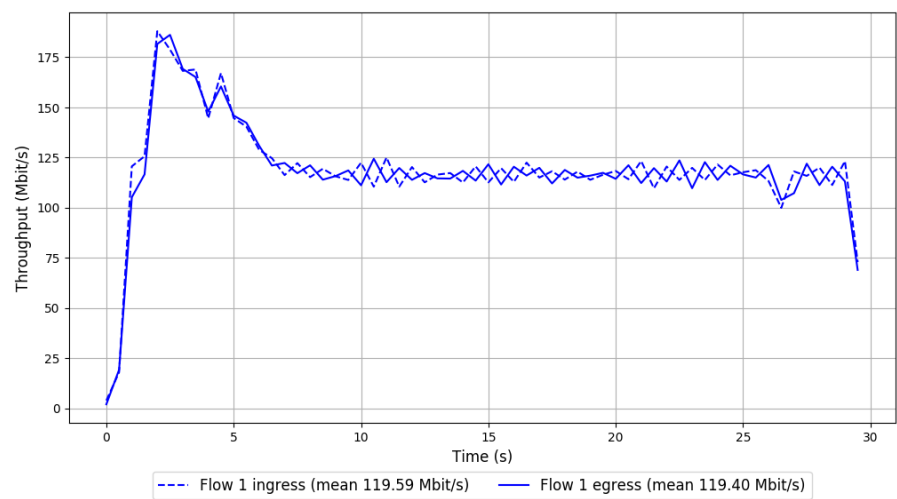
-- Flow 1:

Average throughput: 119.40 Mbit/s

95th percentile per-packet one-way delay: 53.661 ms

Loss rate: 0.50%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-11 13:48:07

End at: 2017-12-11 13:48:37

Below is generated by plot.py at 2017-12-11 16:19:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.87 Mbit/s

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

Loss rate: 0.58%

-- Flow 1:

Average throughput: 181.87 Mbit/s

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

Loss rate: 0.58%

Run 10: Report of Indigo-calib — Data Link

