

Pantheon Report

Generated at 2017-12-11 11:58:41 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

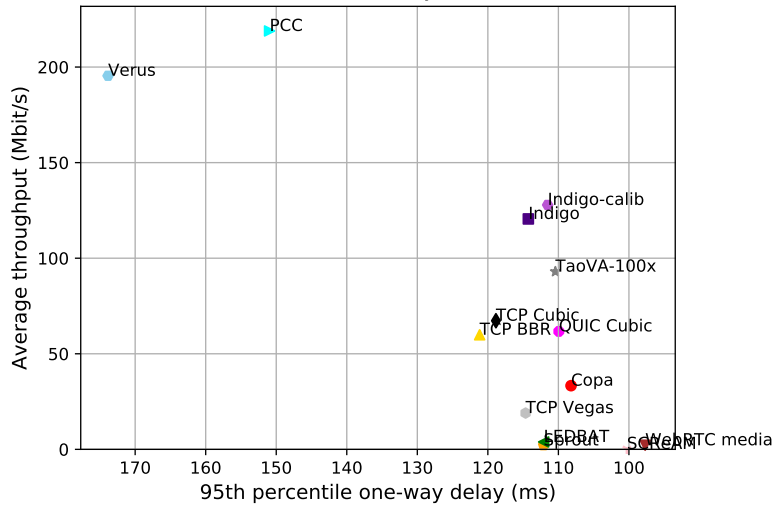
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

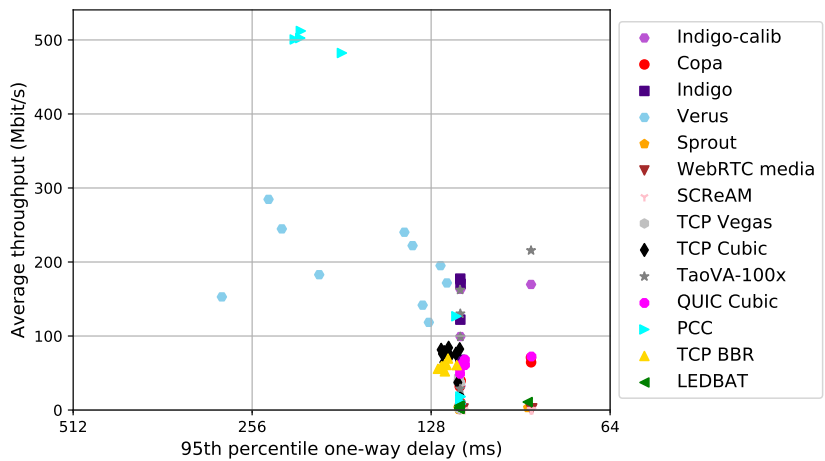
Git summary:

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	8	59.94	121.16	0.02
TCP Cubic	10	67.29	118.86	0.01
LEDBAT	10	3.87	112.09	0.02
PCC	10	218.88	150.94	0.41
QUIC Cubic	8	61.71	109.94	0.03
SCReAM	10	0.21	100.29	0.00
WebRTC media	10	2.14	97.70	0.02
Sprout	10	2.04	112.12	0.14
TaoVA-100x	7	92.98	110.43	0.01
TCP Vegas	9	18.98	114.65	0.00
Verus	10	195.44	173.84	0.70
Copa	9	33.31	108.21	0.00
Indigo	5	120.54	114.26	0.02
Indigo-calib	10	127.88	111.52	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-12-11 09:18:18

End at: 2017-12-11 09:18:48

Below is generated by plot.py at 2017-12-11 11:35:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.27 Mbit/s

95th percentile per-packet one-way delay: 121.368 ms

Loss rate: 0.12%

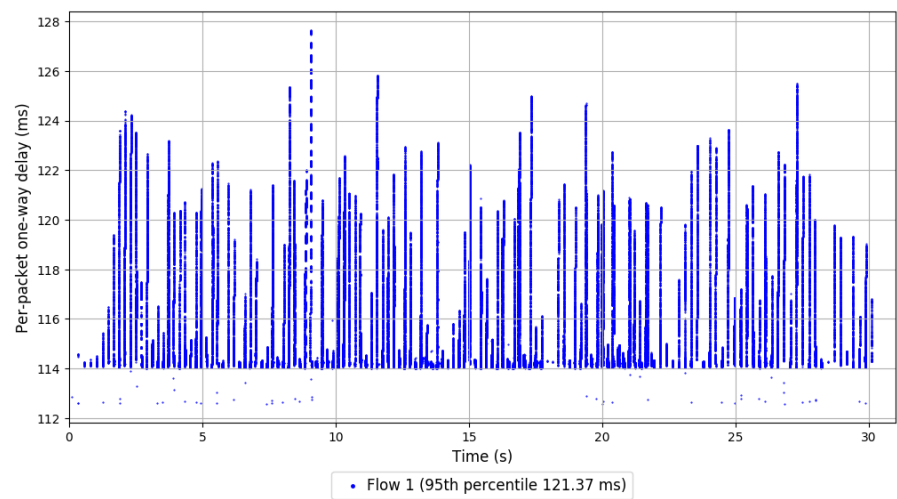
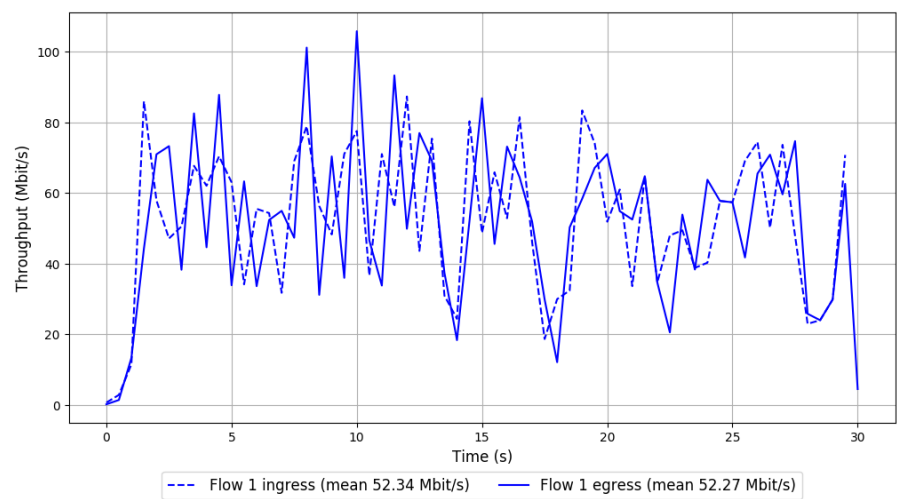
-- Flow 1:

Average throughput: 52.27 Mbit/s

95th percentile per-packet one-way delay: 121.368 ms

Loss rate: 0.12%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-11 09:28:42

End at: 2017-12-11 09:29:12

Below is generated by plot.py at 2017-12-11 11:36:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.24 Mbit/s

95th percentile per-packet one-way delay: 121.287 ms

Loss rate: 0.00%

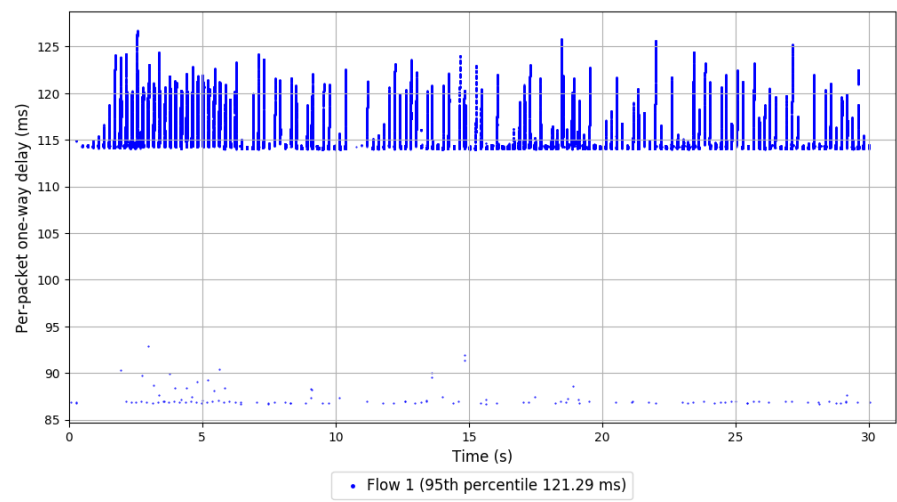
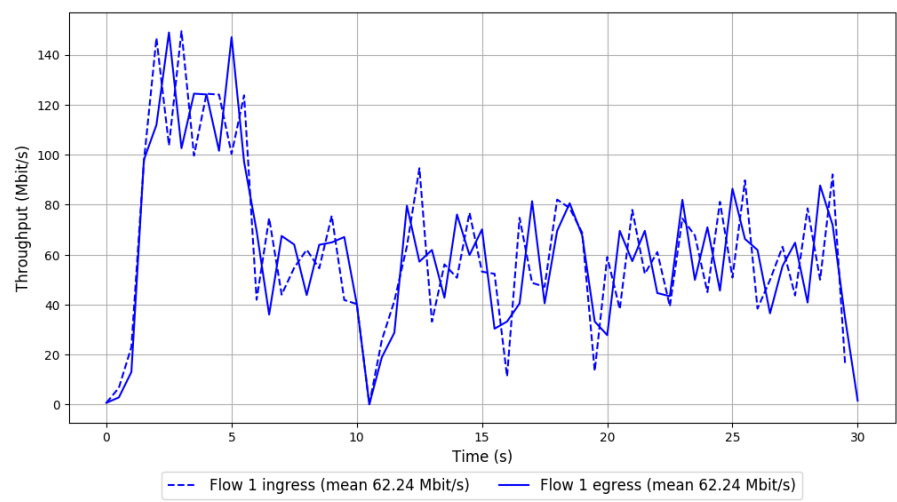
-- Flow 1:

Average throughput: 62.24 Mbit/s

95th percentile per-packet one-way delay: 121.287 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-11 09:39:19

End at: 2017-12-11 09:39:49

Below is generated by plot.py at 2017-12-11 11:36:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.73 Mbit/s

95th percentile per-packet one-way delay: 124.663 ms

Loss rate: 0.05%

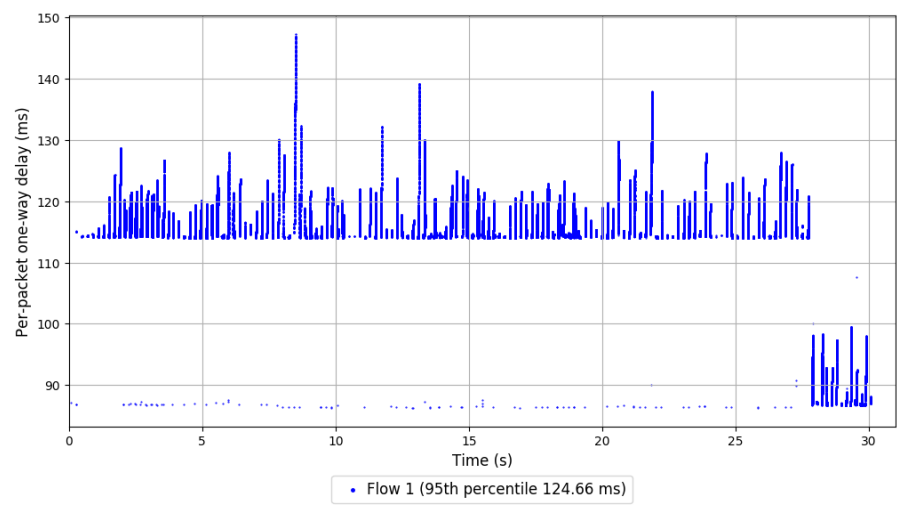
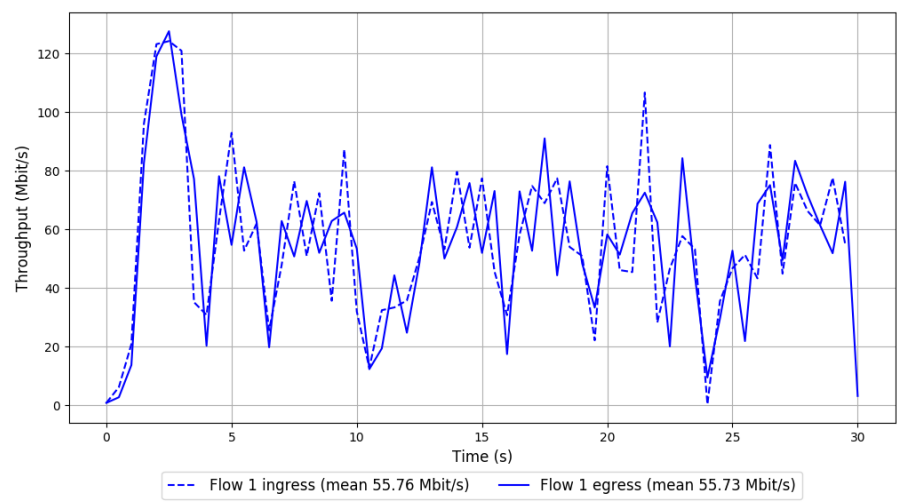
-- Flow 1:

Average throughput: 55.73 Mbit/s

95th percentile per-packet one-way delay: 124.663 ms

Loss rate: 0.05%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-11 09:49:49

End at: 2017-12-11 09:50:19

Below is generated by plot.py at 2017-12-11 11:36:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.19 Mbit/s

95th percentile per-packet one-way delay: 122.965 ms

Loss rate: 0.00%

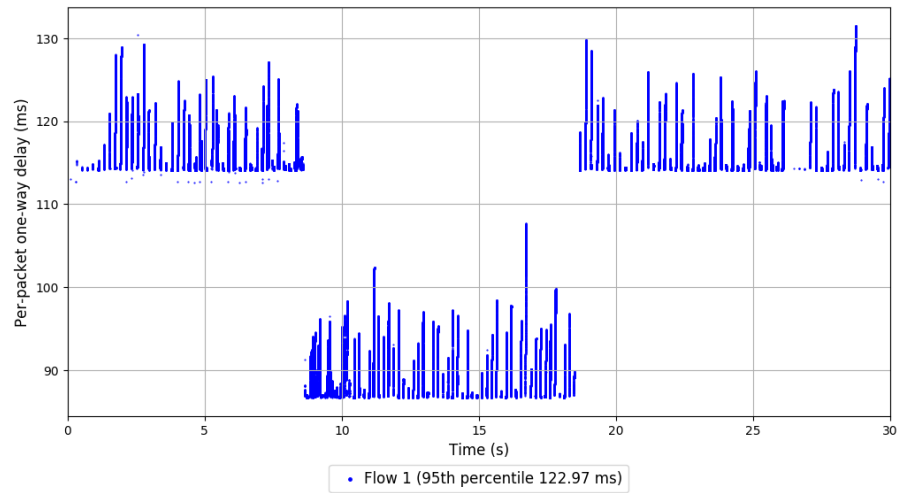
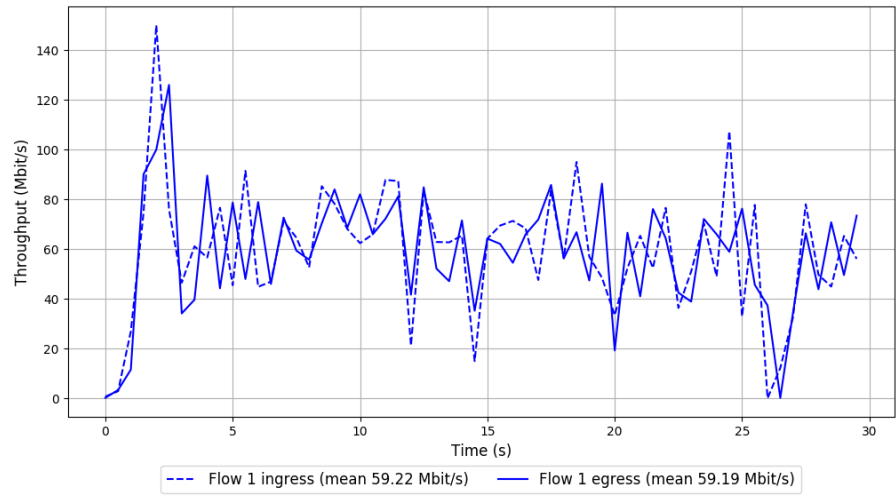
-- Flow 1:

Average throughput: 59.19 Mbit/s

95th percentile per-packet one-way delay: 122.965 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link

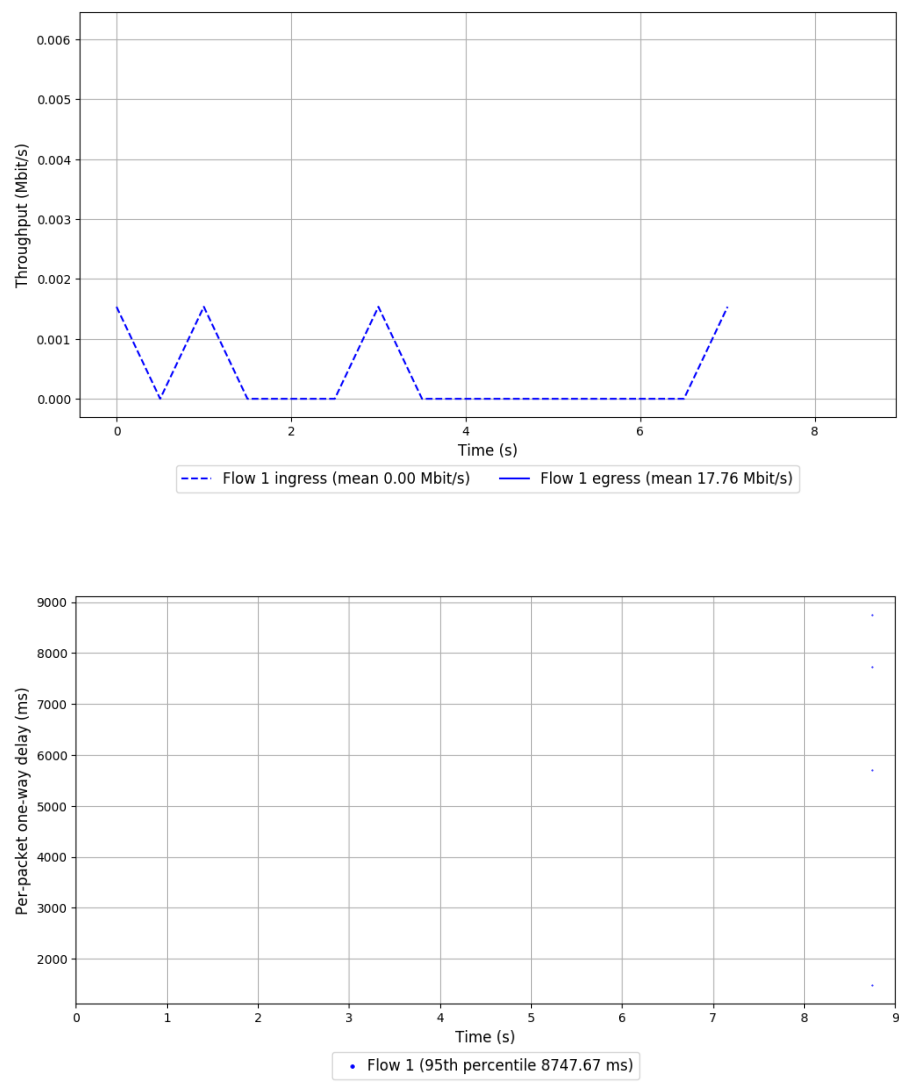


Run 5: Statistics of TCP BBR

Start at: 2017-12-11 10:00:09

End at: 2017-12-11 10:00:39

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

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

End at: 2017-12-11 10:11:01

Below is generated by plot.py at 2017-12-11 11:36:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.64 Mbit/s

95th percentile per-packet one-way delay: 115.922 ms

Loss rate: 0.00%

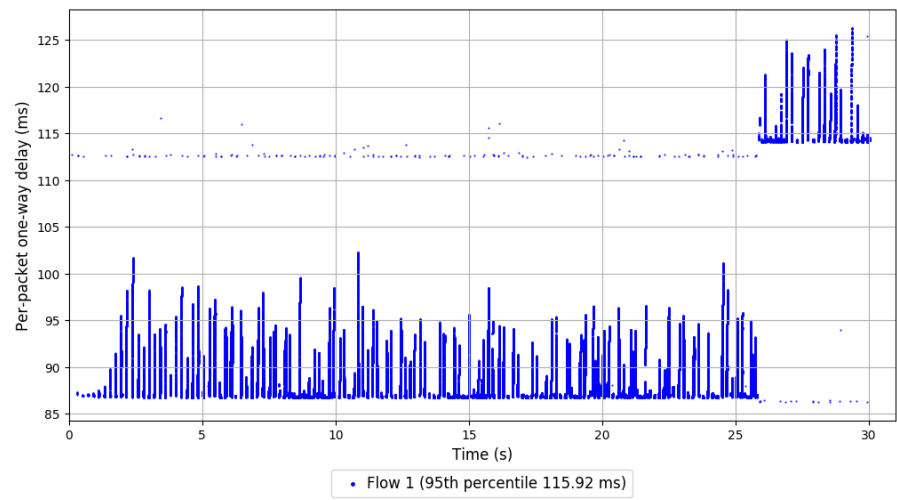
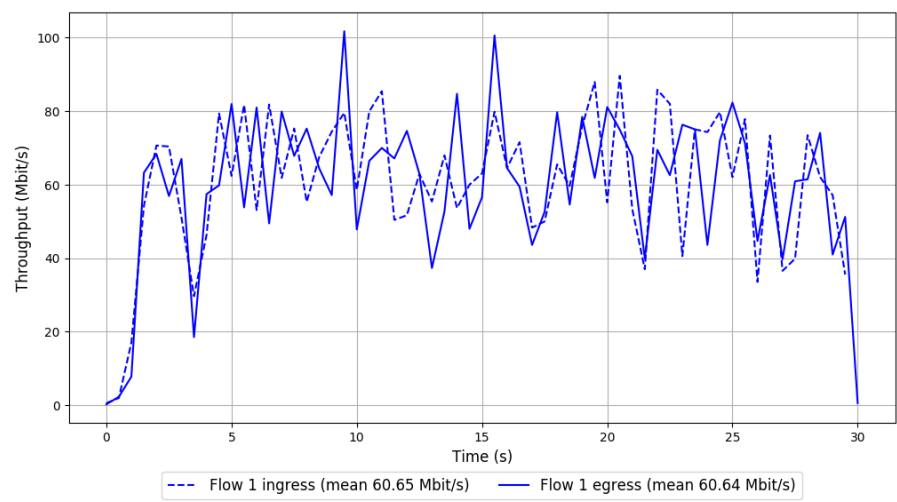
-- Flow 1:

Average throughput: 60.64 Mbit/s

95th percentile per-packet one-way delay: 115.922 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-11 10:21:10

End at: 2017-12-11 10:21:40

Below is generated by plot.py at 2017-12-11 11:36:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.59 Mbit/s

95th percentile per-packet one-way delay: 119.896 ms

Loss rate: 0.01%

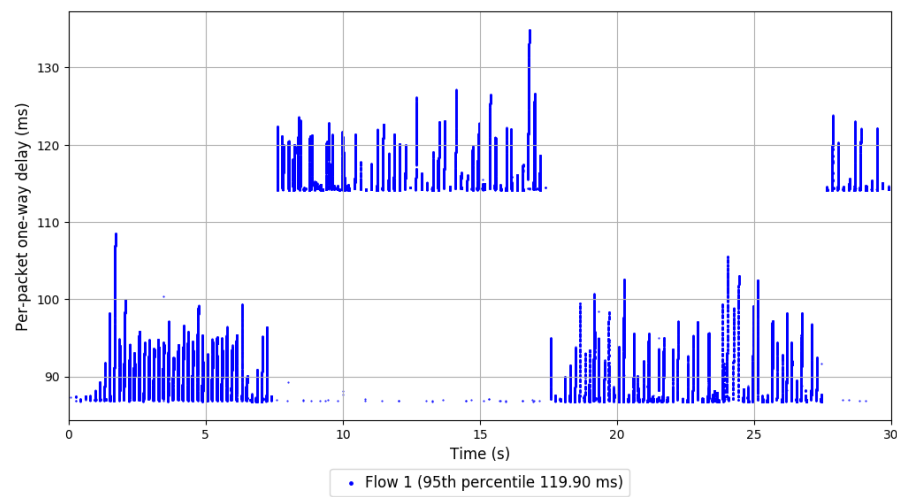
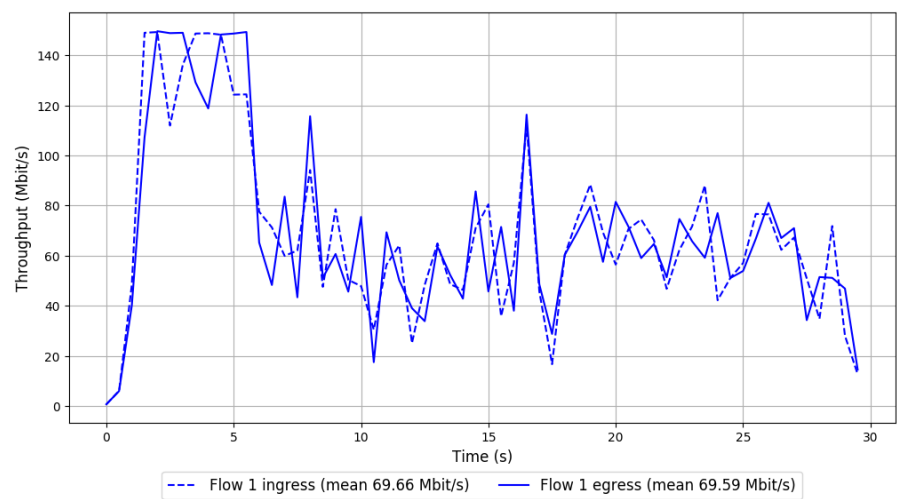
-- Flow 1:

Average throughput: 69.59 Mbit/s

95th percentile per-packet one-way delay: 119.896 ms

Loss rate: 0.01%

Run 7: Report of TCP BBR — Data Link

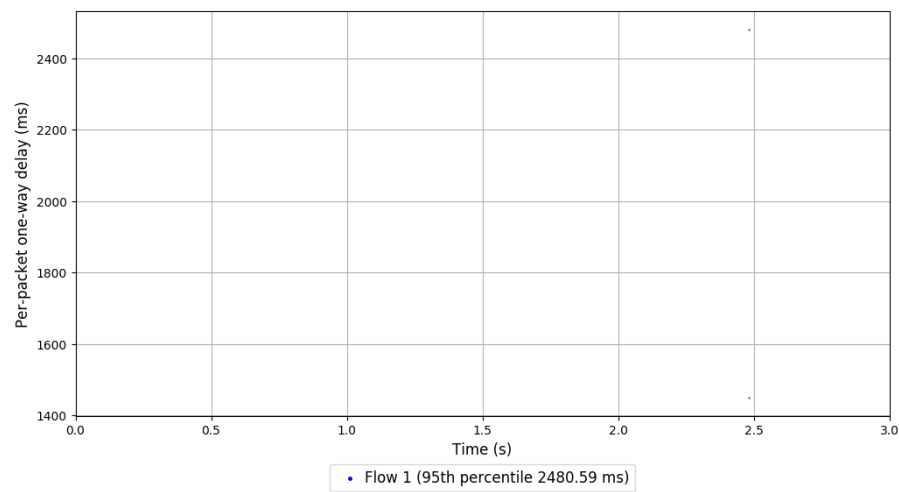
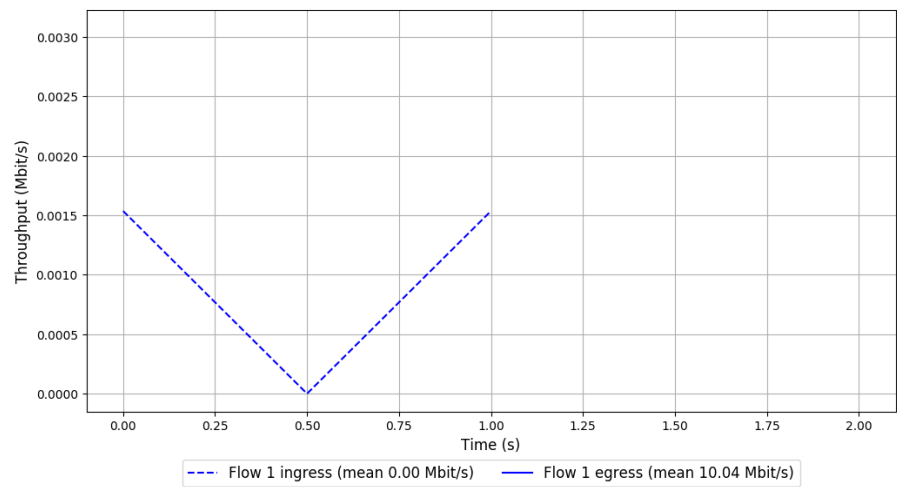


Run 8: Statistics of TCP BBR

Start at: 2017-12-11 10:31:15

End at: 2017-12-11 10:31:45

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-11 10:41:39

End at: 2017-12-11 10:42:09

Below is generated by plot.py at 2017-12-11 11:36:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.98 Mbit/s

95th percentile per-packet one-way delay: 122.665 ms

Loss rate: 0.00%

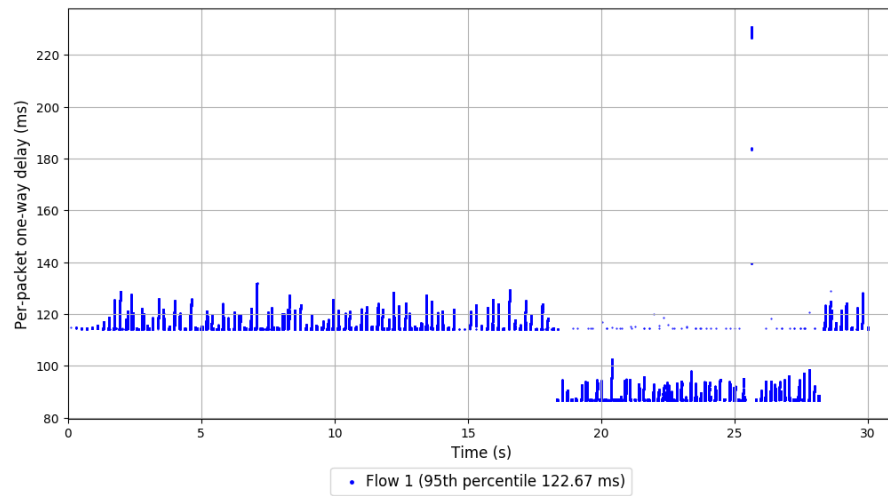
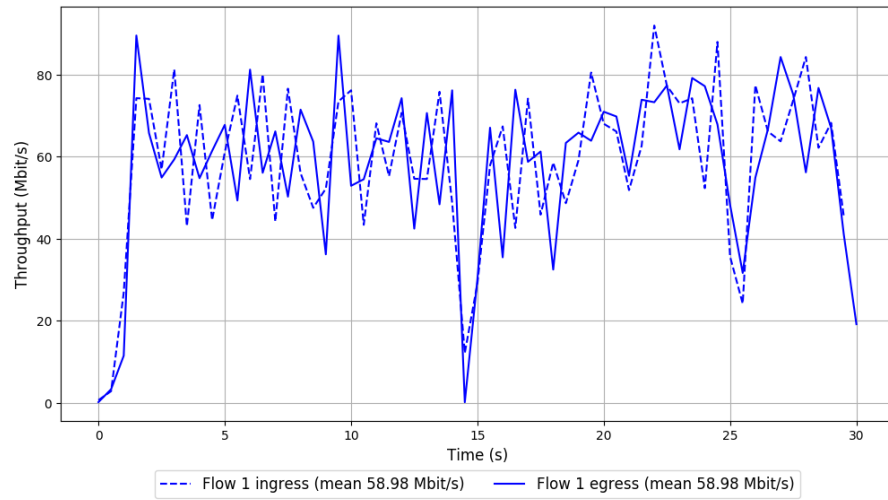
-- Flow 1:

Average throughput: 58.98 Mbit/s

95th percentile per-packet one-way delay: 122.665 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-11 10:52:00

End at: 2017-12-11 10:52:30

Below is generated by plot.py at 2017-12-11 11:36:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.90 Mbit/s

95th percentile per-packet one-way delay: 120.548 ms

Loss rate: 0.02%

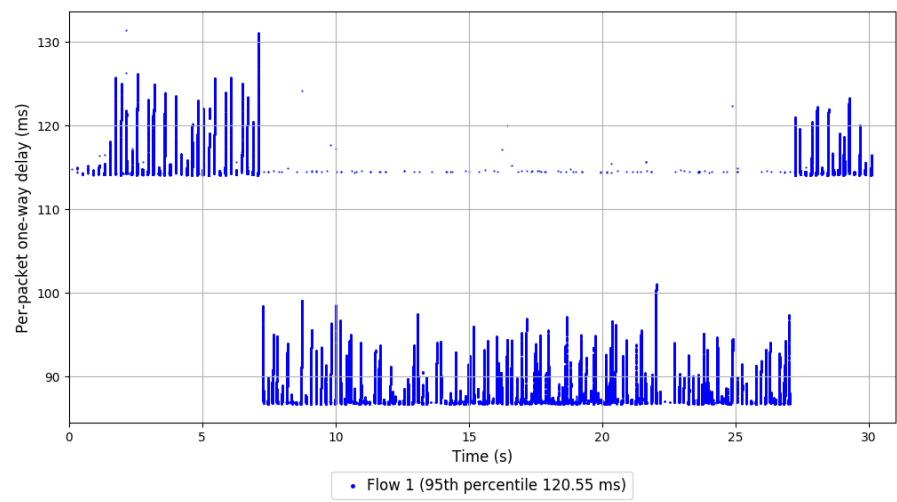
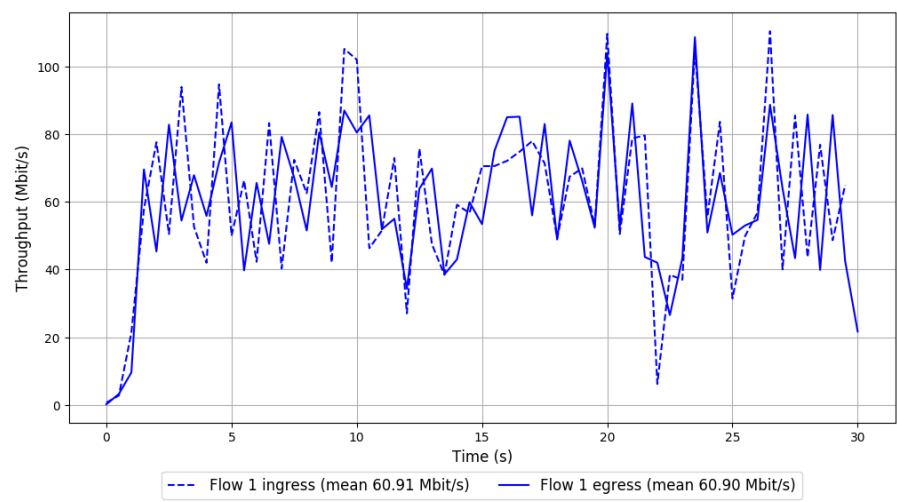
-- Flow 1:

Average throughput: 60.90 Mbit/s

95th percentile per-packet one-way delay: 120.548 ms

Loss rate: 0.02%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-11 09:16:12

End at: 2017-12-11 09:16:42

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.96 Mbit/s

95th percentile per-packet one-way delay: 114.533 ms

Loss rate: 0.00%

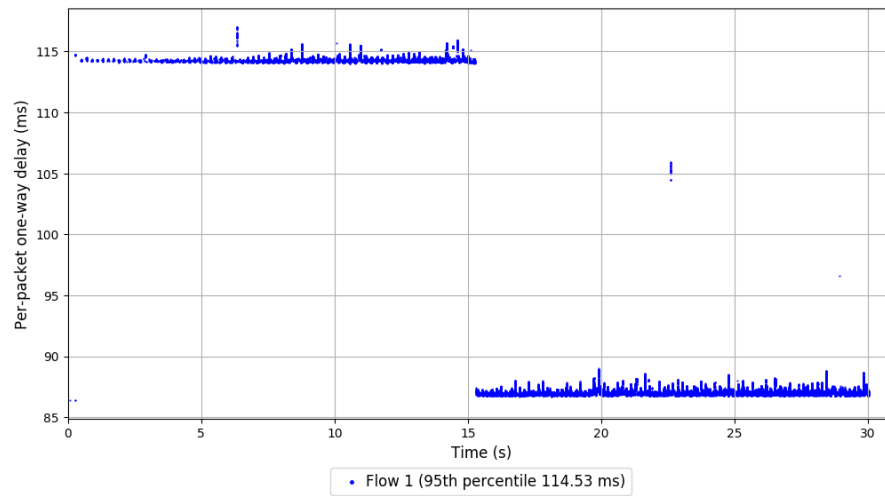
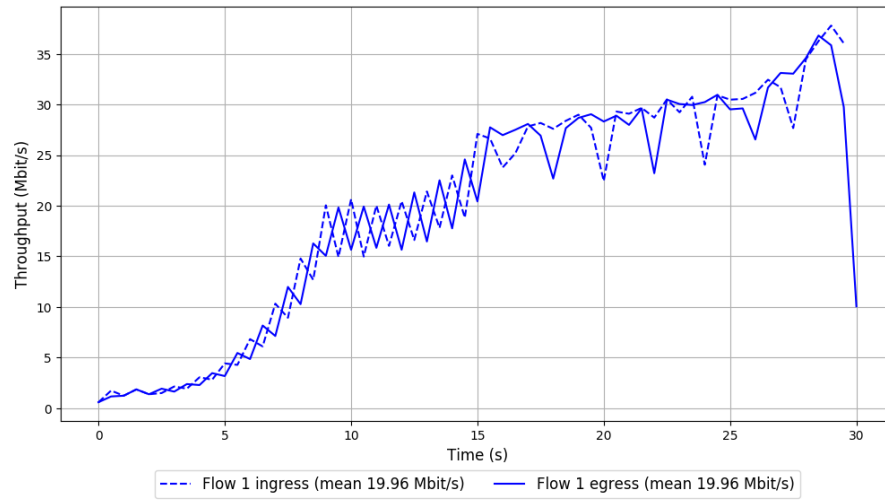
-- Flow 1:

Average throughput: 19.96 Mbit/s

95th percentile per-packet one-way delay: 114.533 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-11 09:26:33

End at: 2017-12-11 09:27:03

Below is generated by plot.py at 2017-12-11 11:37:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.16 Mbit/s

95th percentile per-packet one-way delay: 119.622 ms

Loss rate: 0.00%

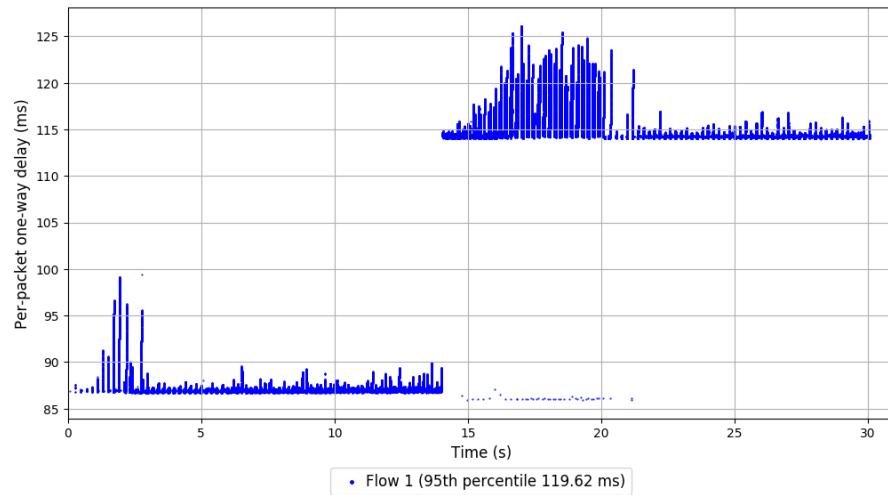
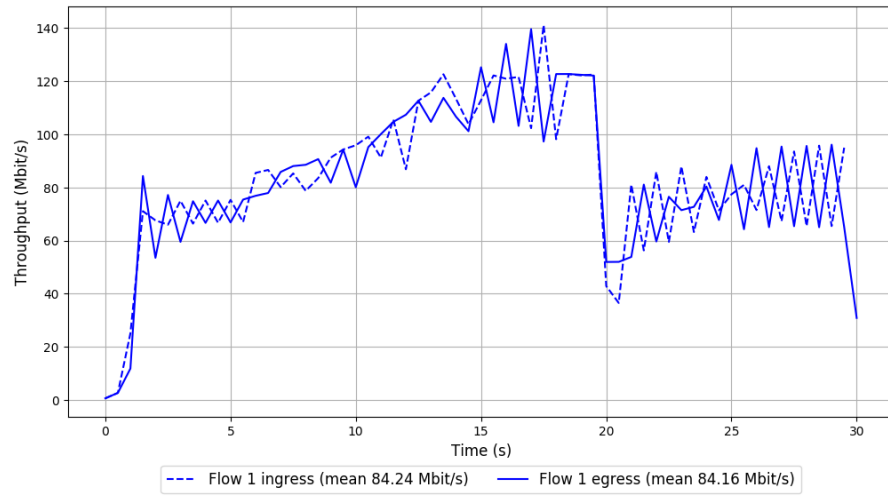
-- Flow 1:

Average throughput: 84.16 Mbit/s

95th percentile per-packet one-way delay: 119.622 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-11 09:37:08

End at: 2017-12-11 09:37:38

Below is generated by plot.py at 2017-12-11 11:37:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.05 Mbit/s

95th percentile per-packet one-way delay: 116.275 ms

Loss rate: 0.07%

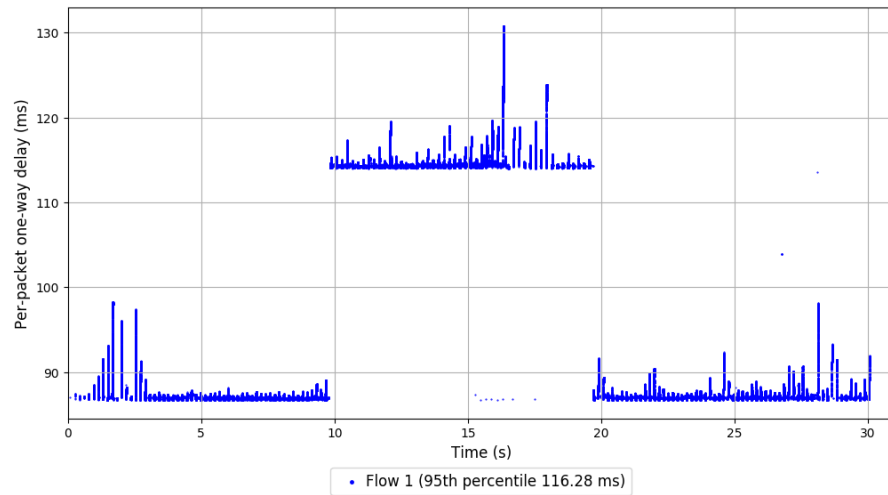
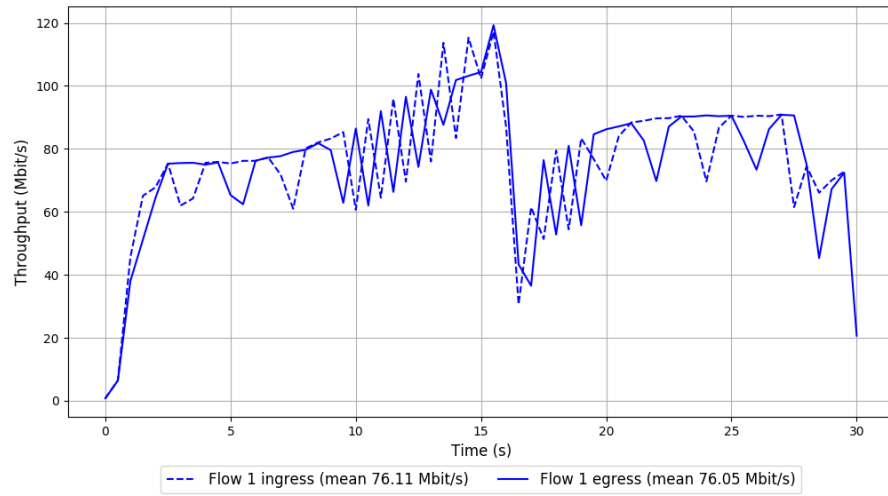
-- Flow 1:

Average throughput: 76.05 Mbit/s

95th percentile per-packet one-way delay: 116.275 ms

Loss rate: 0.07%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-11 09:47:31

End at: 2017-12-11 09:48:01

Below is generated by plot.py at 2017-12-11 11:37:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.58 Mbit/s

95th percentile per-packet one-way delay: 121.840 ms

Loss rate: 0.00%

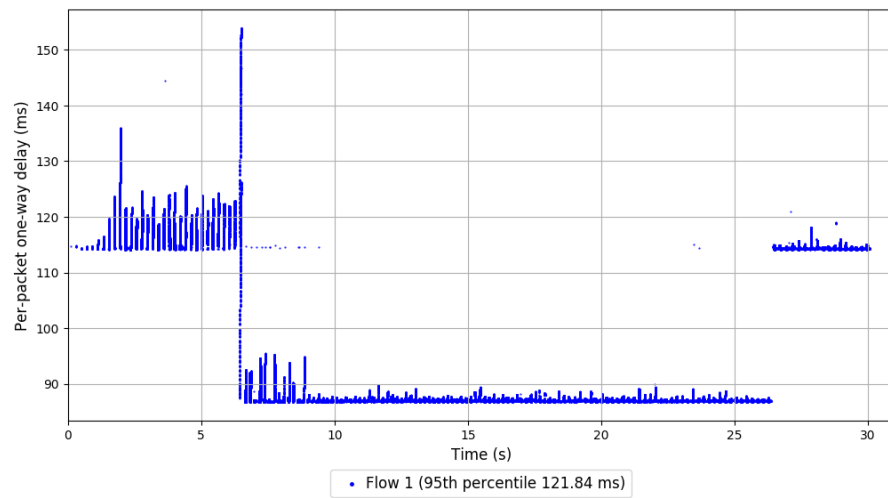
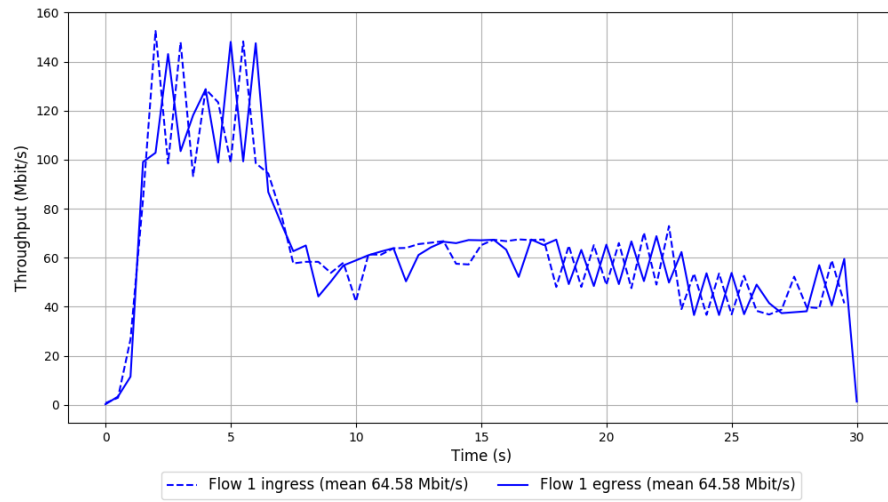
-- Flow 1:

Average throughput: 64.58 Mbit/s

95th percentile per-packet one-way delay: 121.840 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-11 09:57:59

End at: 2017-12-11 09:58:29

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.44 Mbit/s

95th percentile per-packet one-way delay: 123.115 ms

Loss rate: 0.00%

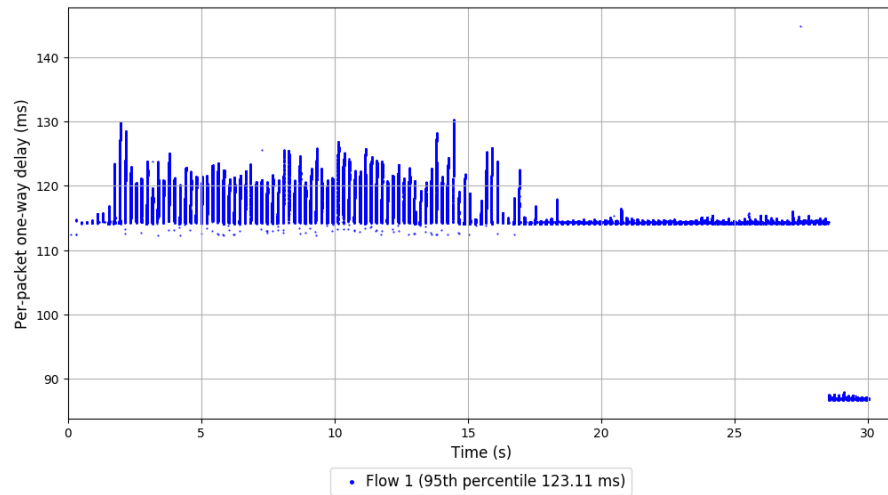
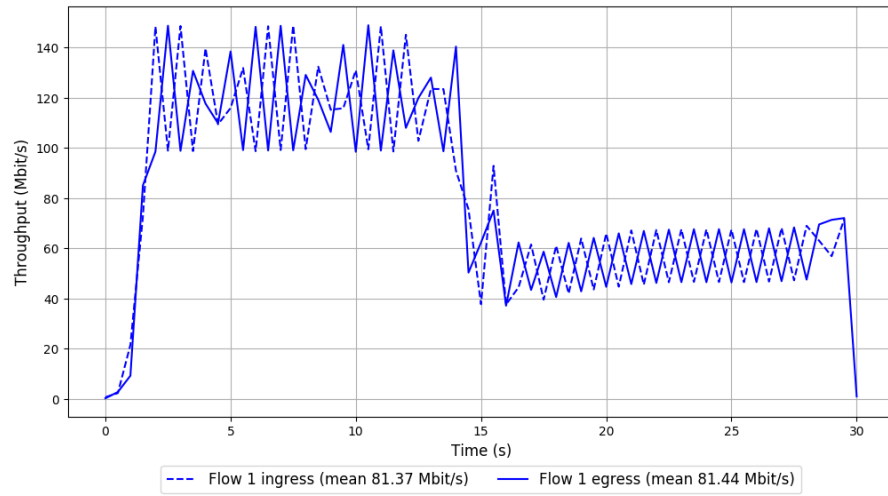
-- Flow 1:

Average throughput: 81.44 Mbit/s

95th percentile per-packet one-way delay: 123.115 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-11 10:08:14

End at: 2017-12-11 10:08:44

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.93 Mbit/s

95th percentile per-packet one-way delay: 122.504 ms

Loss rate: 0.00%

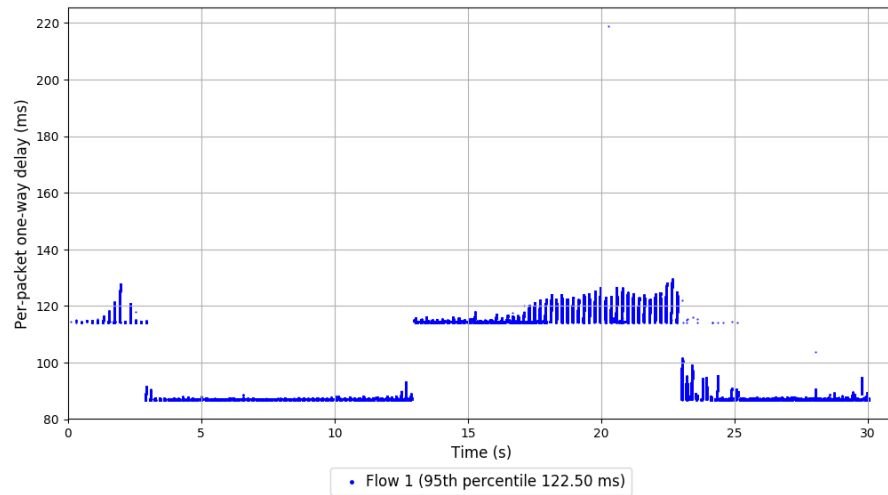
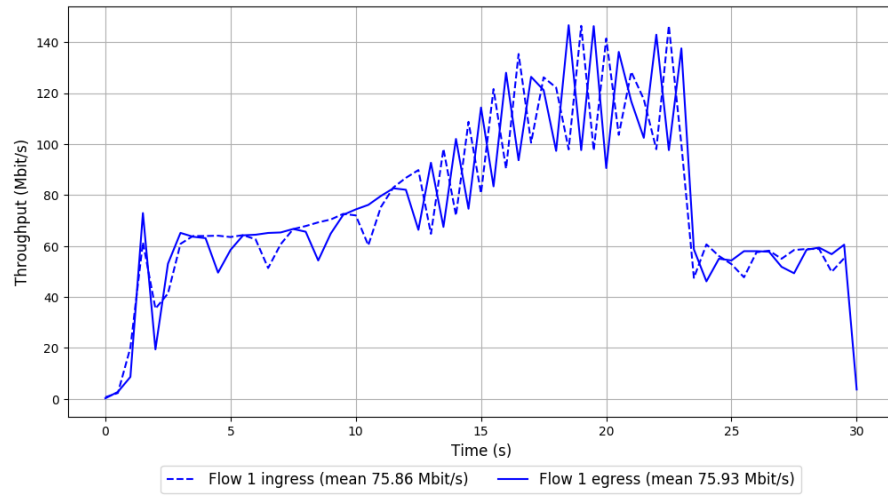
-- Flow 1:

Average throughput: 75.93 Mbit/s

95th percentile per-packet one-way delay: 122.504 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-11 10:18:51

End at: 2017-12-11 10:19:21

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.97 Mbit/s

95th percentile per-packet one-way delay: 118.919 ms

Loss rate: 0.00%

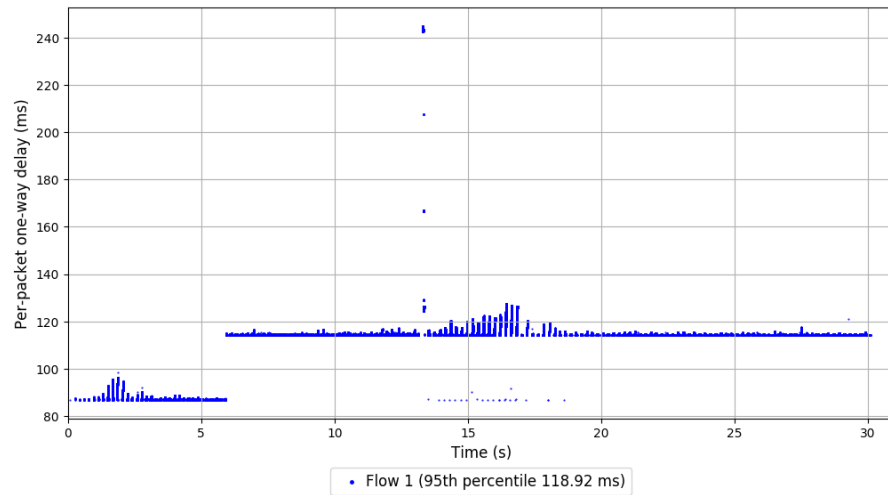
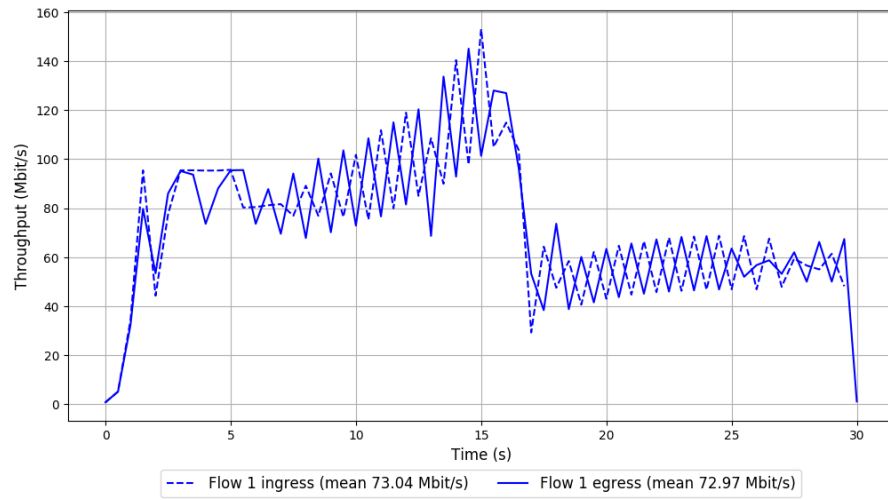
-- Flow 1:

Average throughput: 72.97 Mbit/s

95th percentile per-packet one-way delay: 118.919 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-11 10:29:00

End at: 2017-12-11 10:29:30

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.25 Mbit/s

95th percentile per-packet one-way delay: 115.436 ms

Loss rate: 0.00%

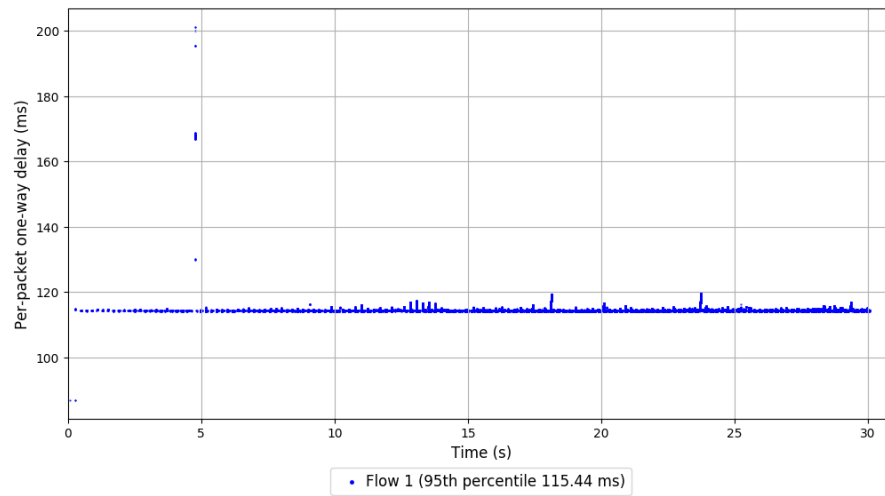
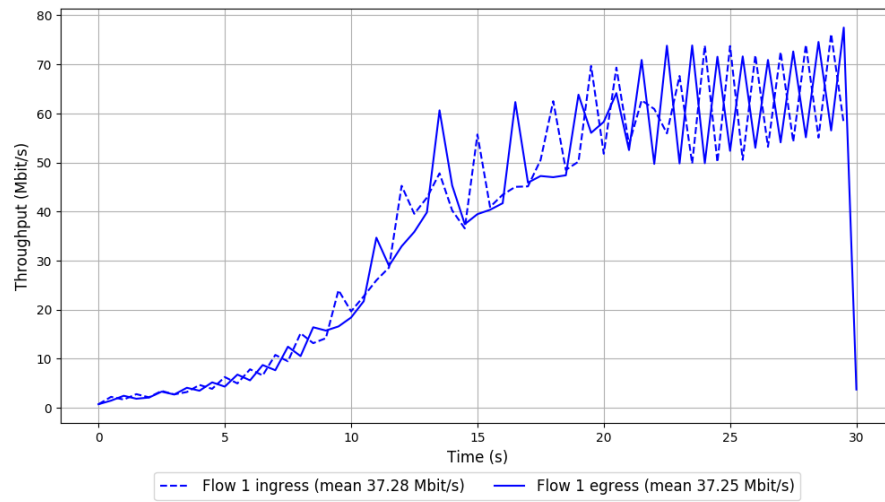
-- Flow 1:

Average throughput: 37.25 Mbit/s

95th percentile per-packet one-way delay: 115.436 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-11 10:39:22

End at: 2017-12-11 10:39:52

Below is generated by plot.py at 2017-12-11 11:37:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.30 Mbit/s

95th percentile per-packet one-way delay: 114.588 ms

Loss rate: 0.00%

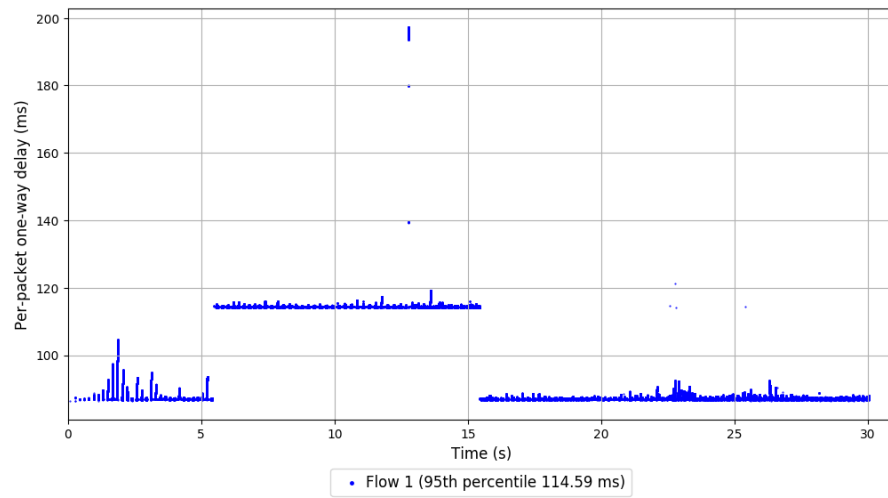
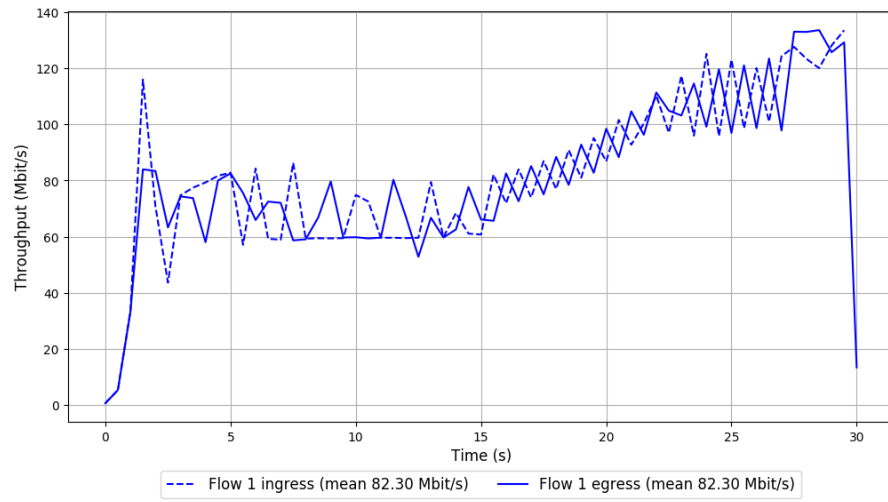
-- Flow 1:

Average throughput: 82.30 Mbit/s

95th percentile per-packet one-way delay: 114.588 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-11 10:49:40

End at: 2017-12-11 10:50:10

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.29 Mbit/s

95th percentile per-packet one-way delay: 121.726 ms

Loss rate: 0.00%

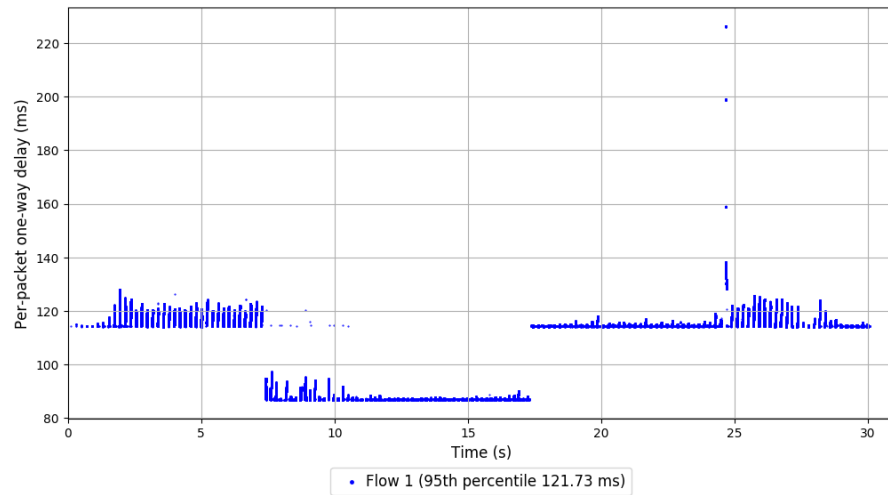
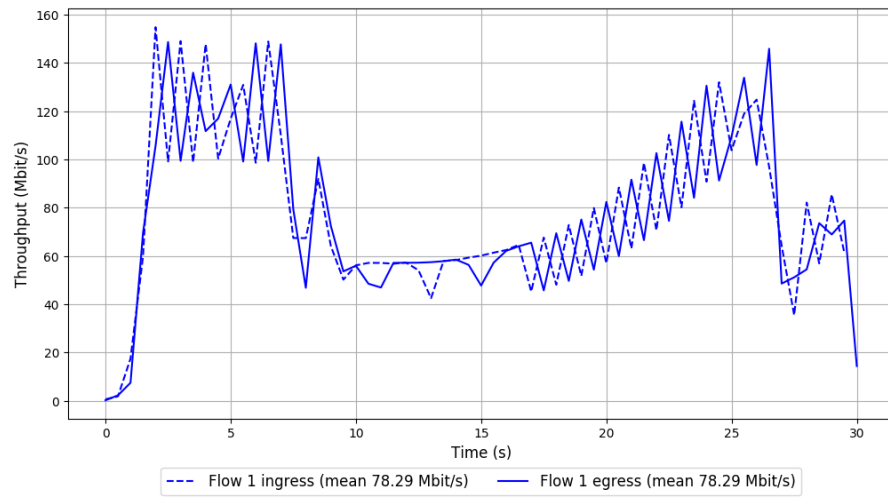
-- Flow 1:

Average throughput: 78.29 Mbit/s

95th percentile per-packet one-way delay: 121.726 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

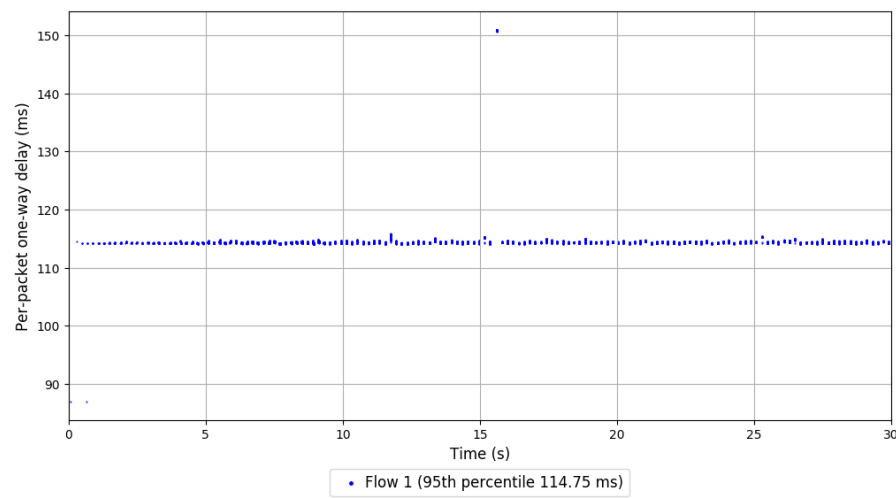
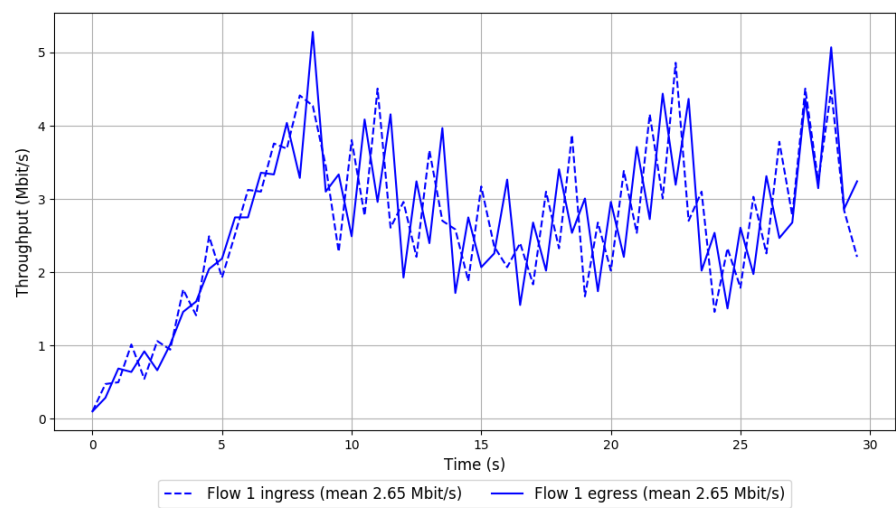


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-11 09:19:49
End at: 2017-12-11 09:20:19

# Below is generated by plot.py at 2017-12-11 11:38:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 114.752 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 114.752 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-11 09:30:06

End at: 2017-12-11 09:30:36

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.97 Mbit/s

95th percentile per-packet one-way delay: 114.699 ms

Loss rate: 0.00%

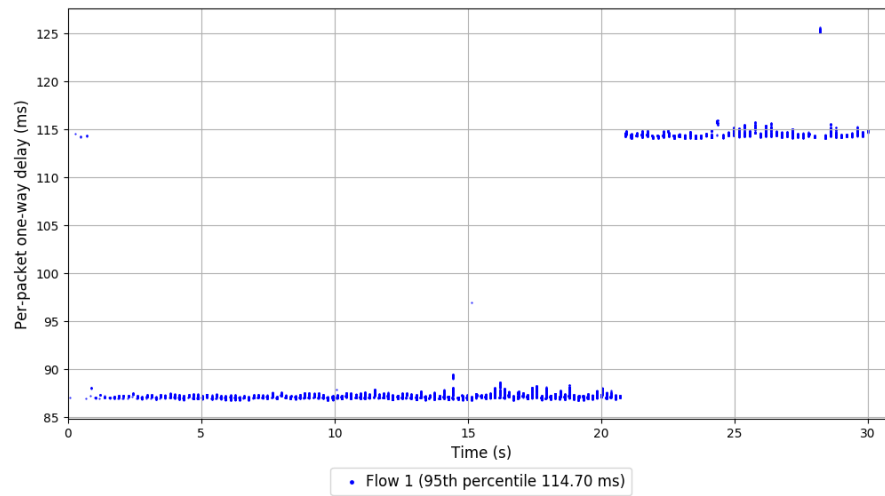
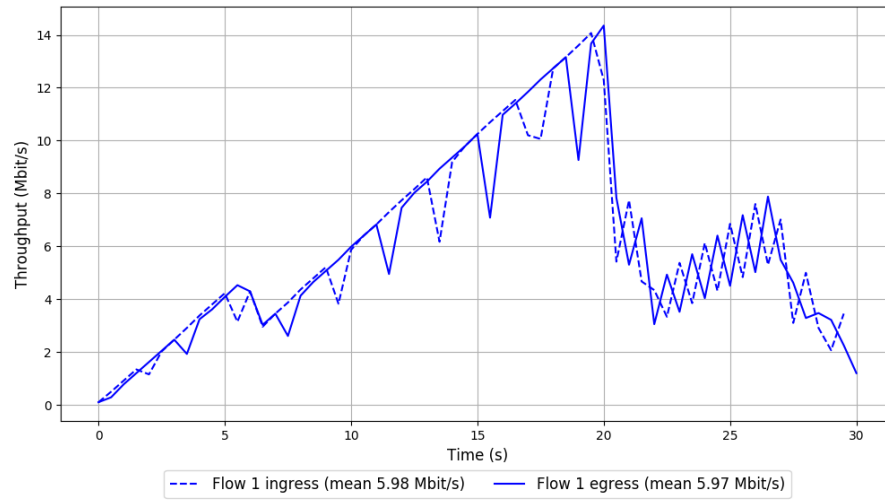
-- Flow 1:

Average throughput: 5.97 Mbit/s

95th percentile per-packet one-way delay: 114.699 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-11 09:40:50

End at: 2017-12-11 09:41:20

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 114.825 ms

Loss rate: 0.04%

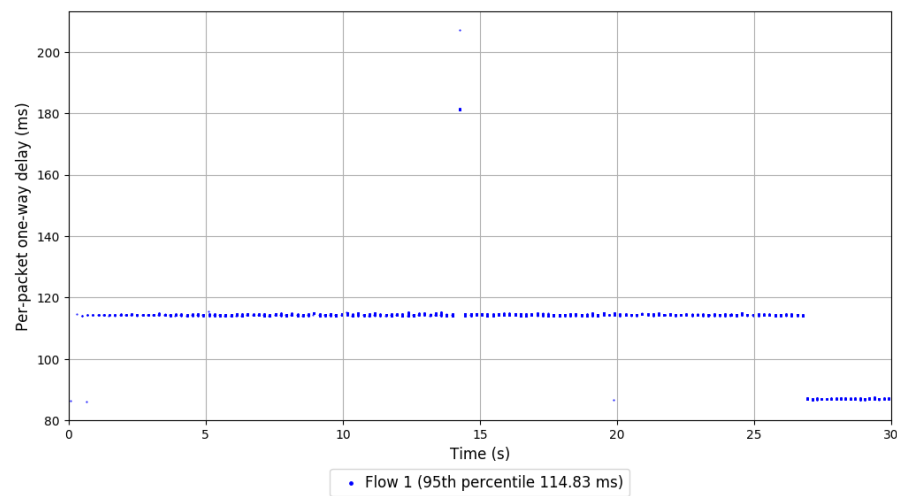
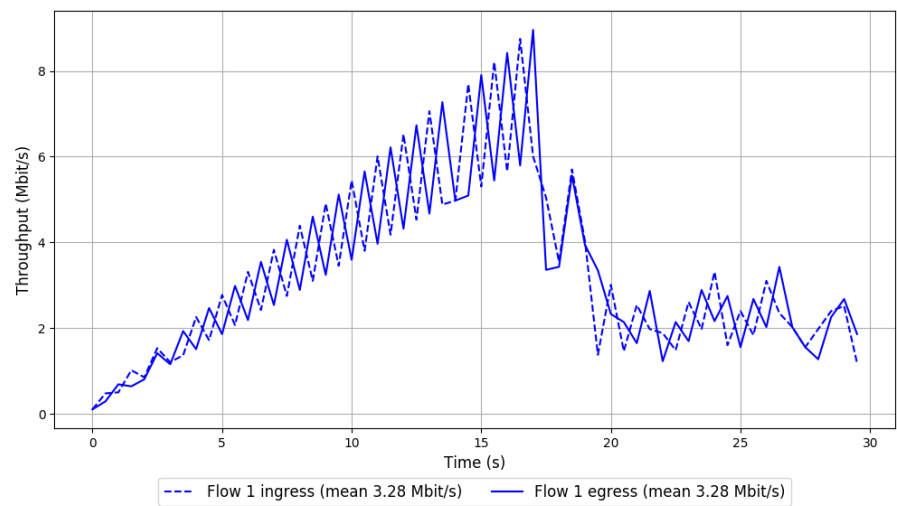
-- Flow 1:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 114.825 ms

Loss rate: 0.04%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

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

End at: 2017-12-11 09:51:43

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 114.758 ms

Loss rate: 0.00%

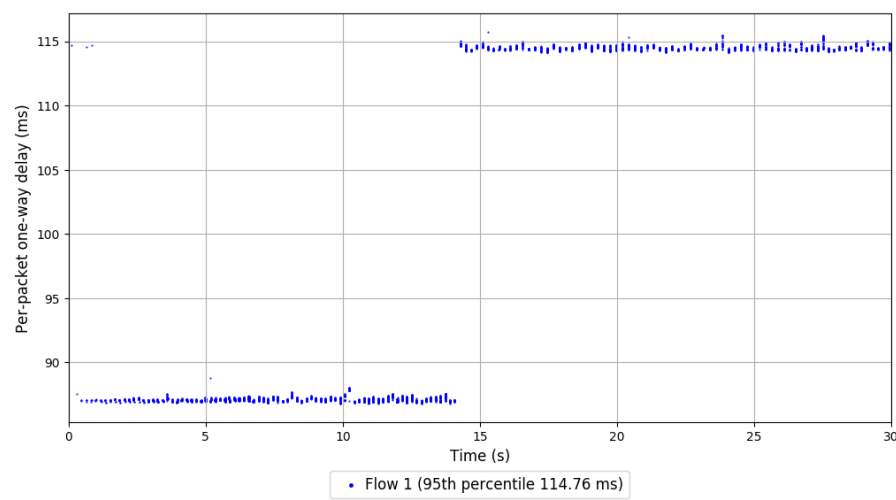
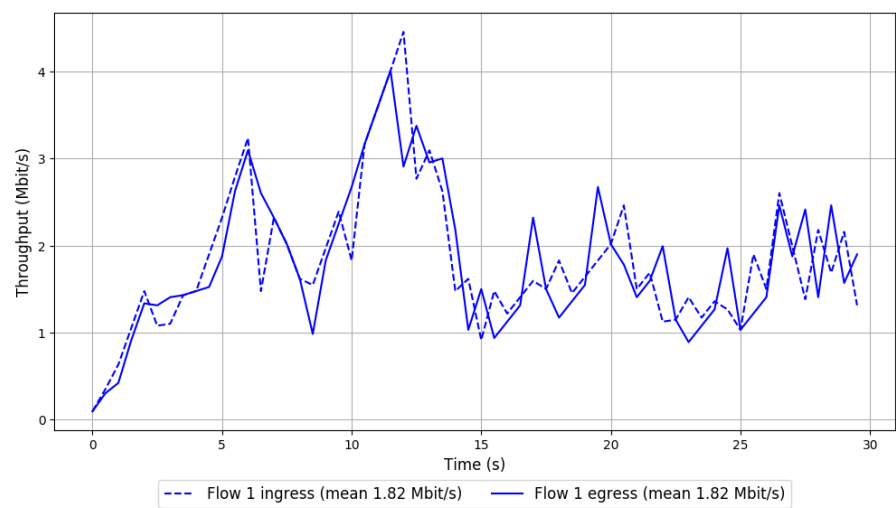
-- Flow 1:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 114.758 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-11 10:01:36

End at: 2017-12-11 10:02:06

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 114.831 ms

Loss rate: 0.04%

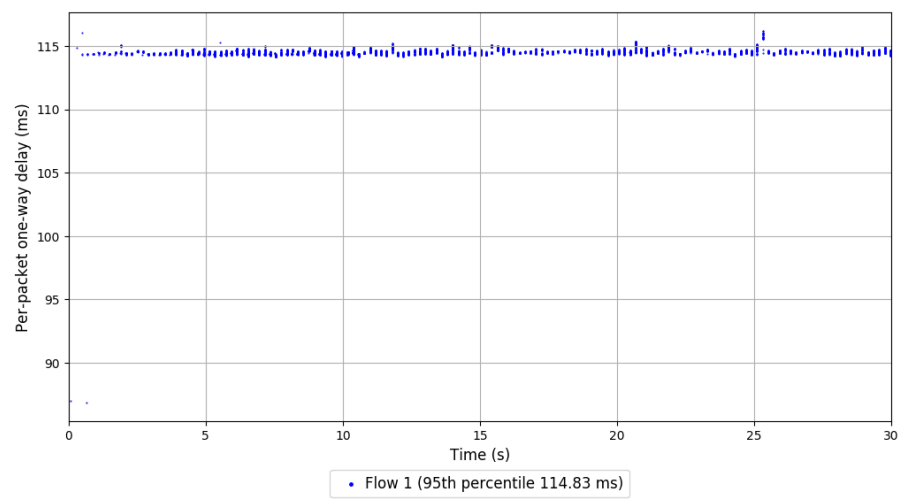
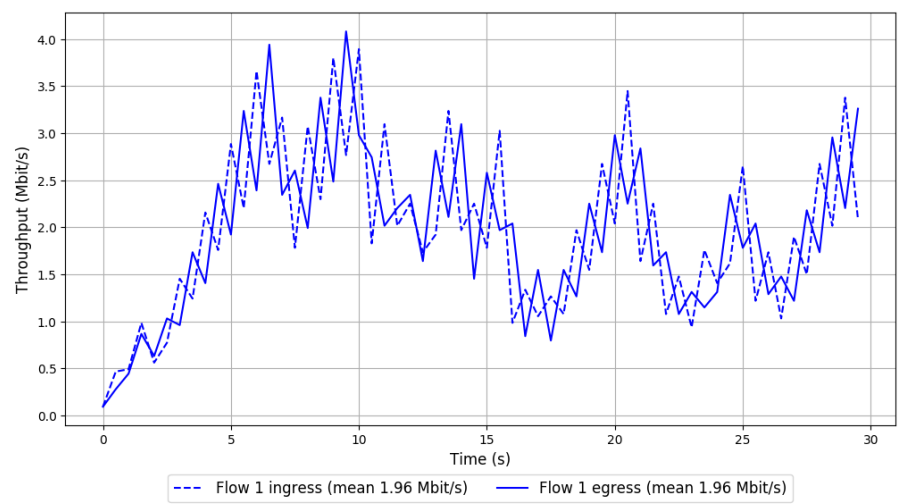
-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 114.831 ms

Loss rate: 0.04%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-11 10:11:58

End at: 2017-12-11 10:12:28

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.82 Mbit/s

95th percentile per-packet one-way delay: 88.080 ms

Loss rate: 0.00%

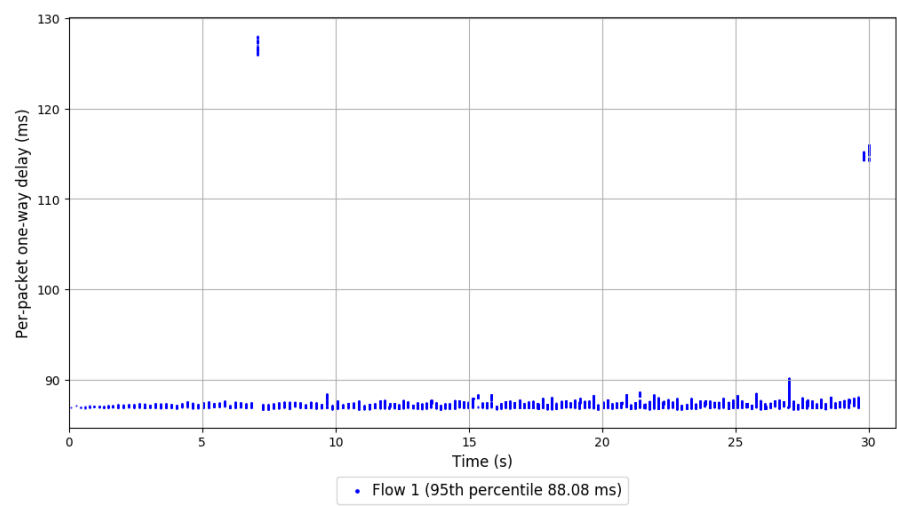
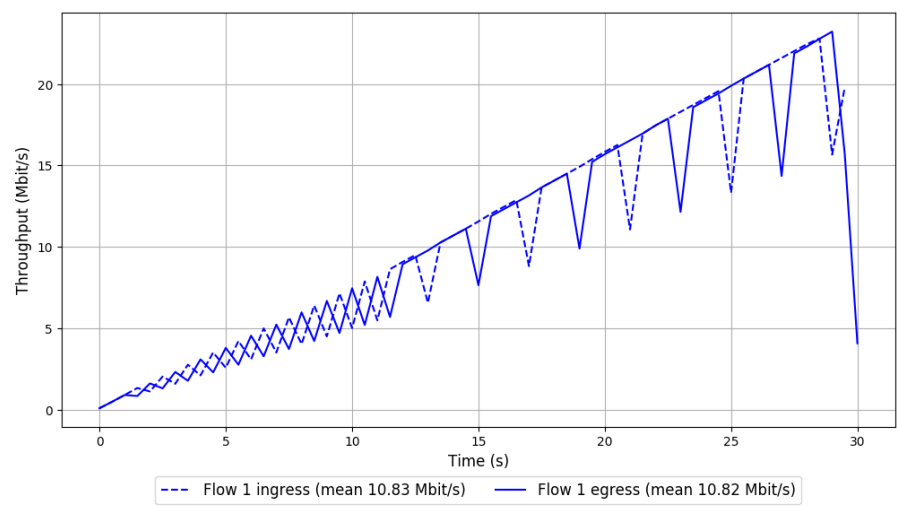
-- Flow 1:

Average throughput: 10.82 Mbit/s

95th percentile per-packet one-way delay: 88.080 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-11 10:22:39

End at: 2017-12-11 10:23:09

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 114.795 ms

Loss rate: 0.04%

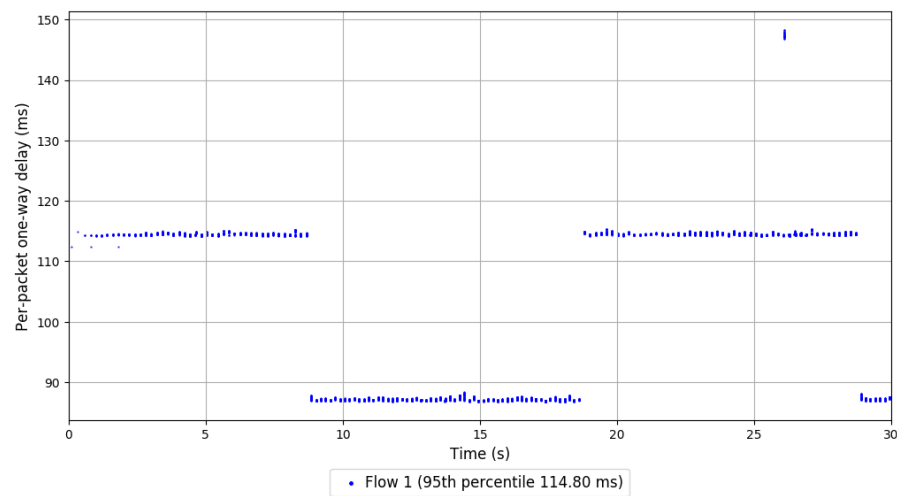
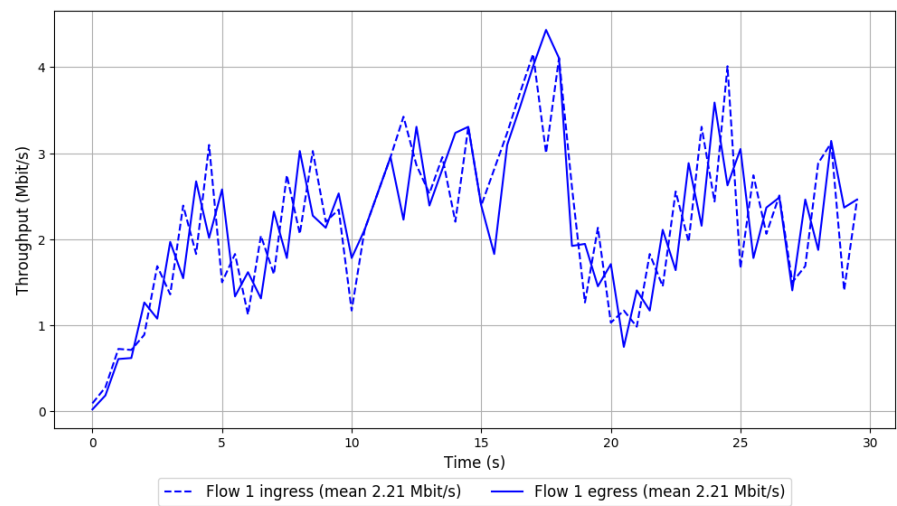
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 114.795 ms

Loss rate: 0.04%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-11 10:32:35

End at: 2017-12-11 10:33:05

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 114.835 ms

Loss rate: 0.06%

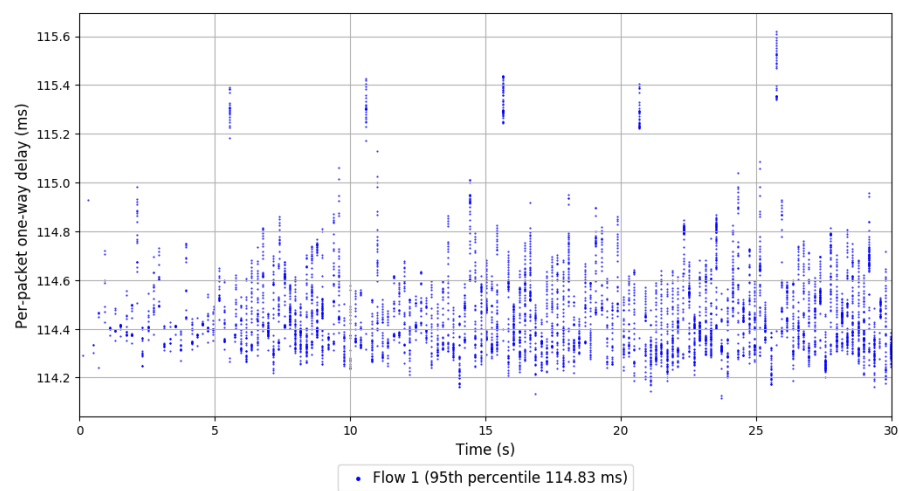
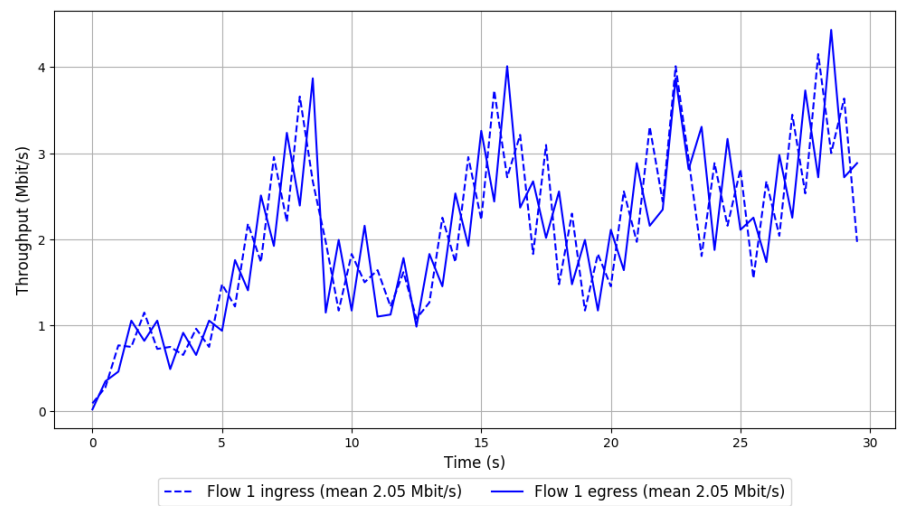
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 114.835 ms

Loss rate: 0.06%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-11 10:43:05

End at: 2017-12-11 10:43:35

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.63 Mbit/s

95th percentile per-packet one-way delay: 114.710 ms

Loss rate: 0.00%

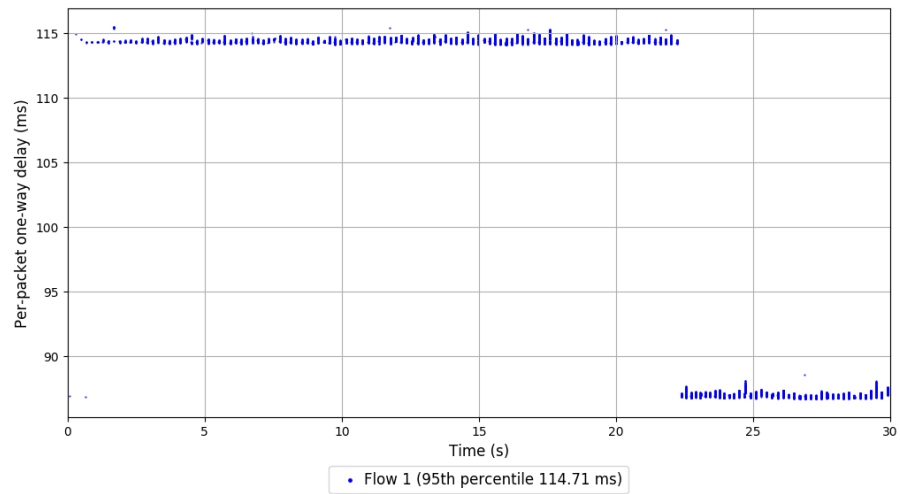
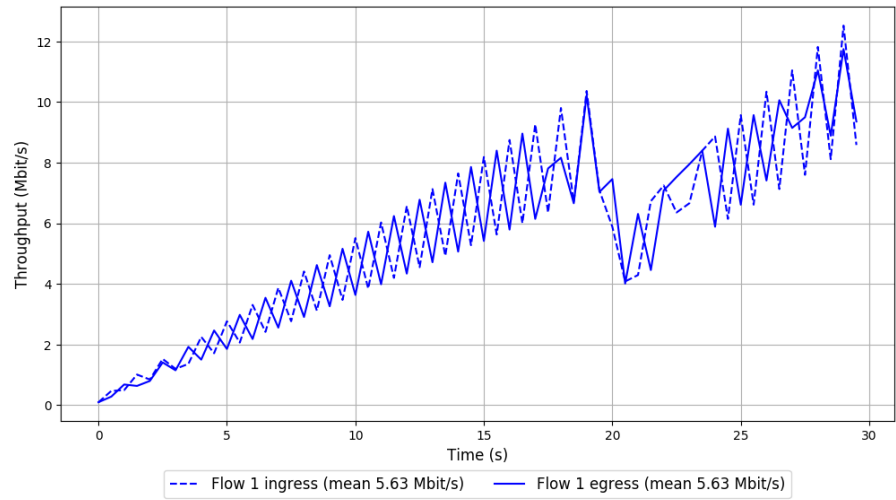
-- Flow 1:

Average throughput: 5.63 Mbit/s

95th percentile per-packet one-way delay: 114.710 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-11 10:53:29

End at: 2017-12-11 10:53:59

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 114.657 ms

Loss rate: 0.00%

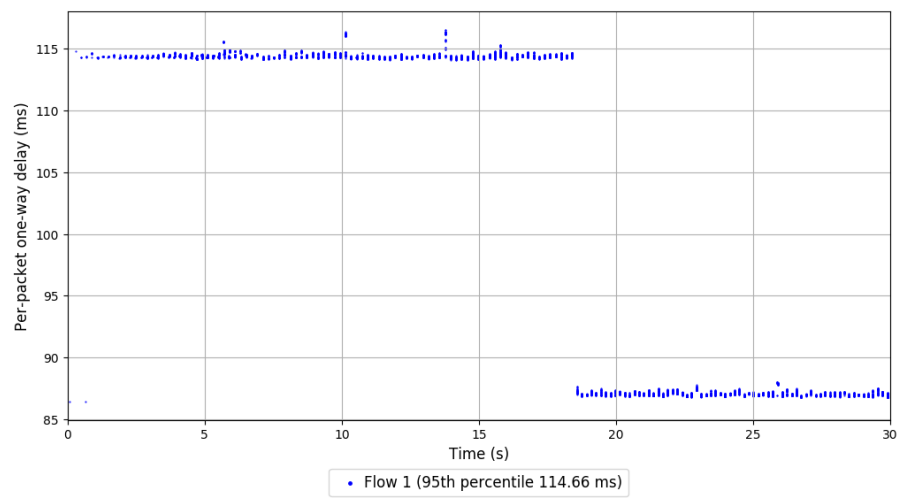
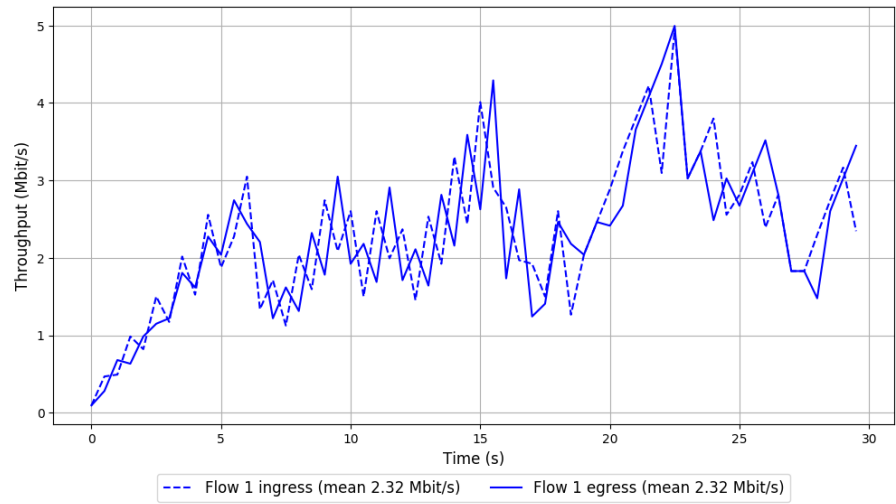
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 114.657 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

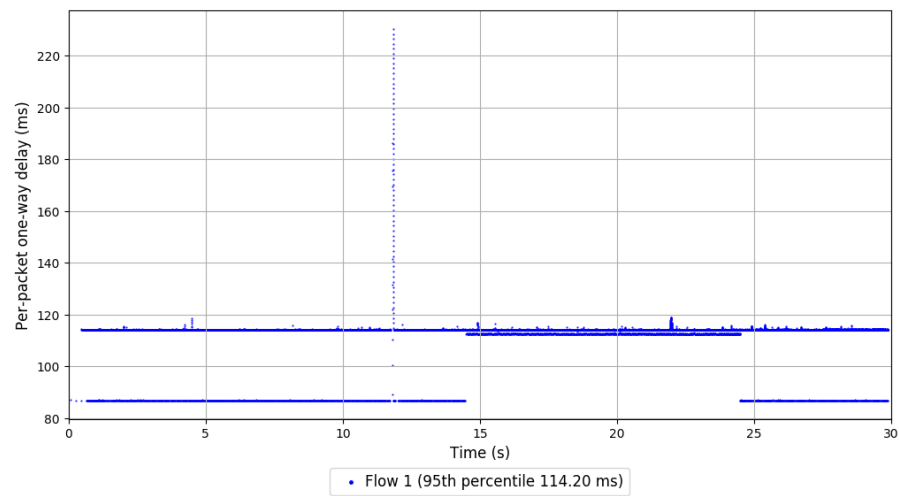
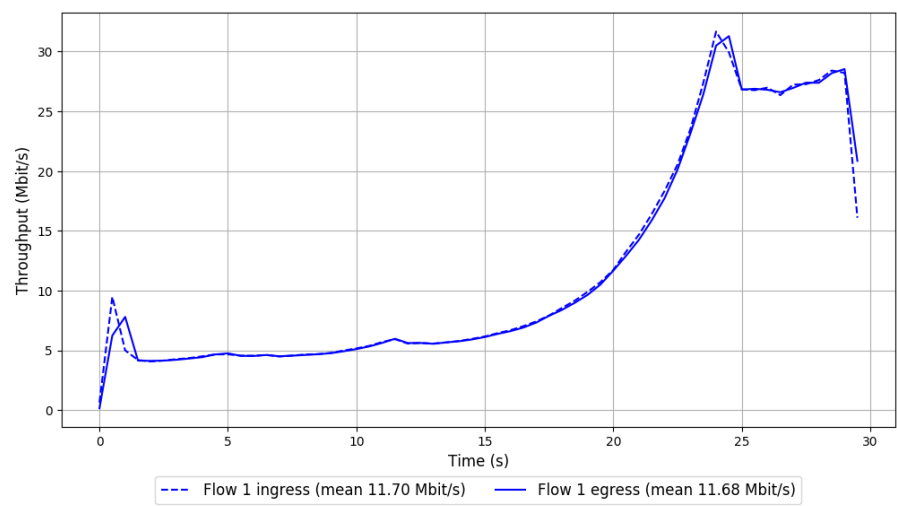


```
Run 1: Statistics of PCC

Start at: 2017-12-11 09:14:53
End at: 2017-12-11 09:15:23

# Below is generated by plot.py at 2017-12-11 11:38:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 114.198 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 114.198 ms
Loss rate: 0.22%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-11 09:25:10

End at: 2017-12-11 09:25:40

Below is generated by plot.py at 2017-12-11 11:38:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.32 Mbit/s

95th percentile per-packet one-way delay: 114.168 ms

Loss rate: 0.00%

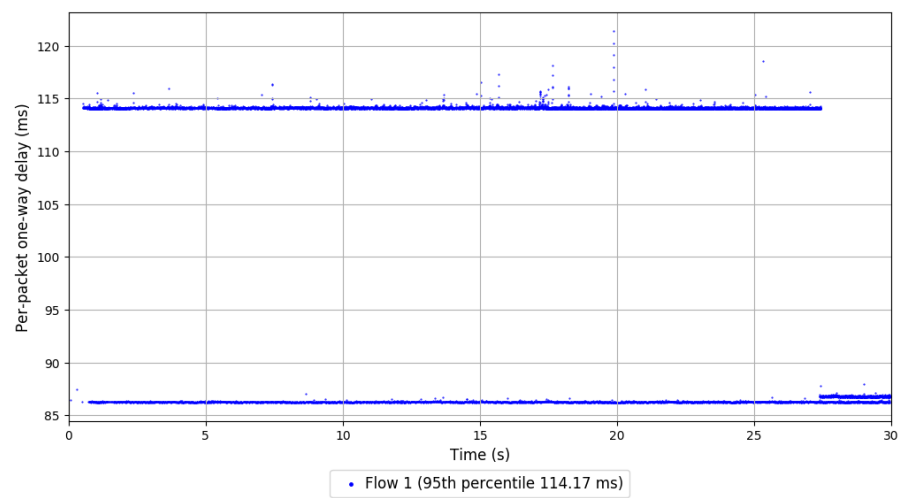
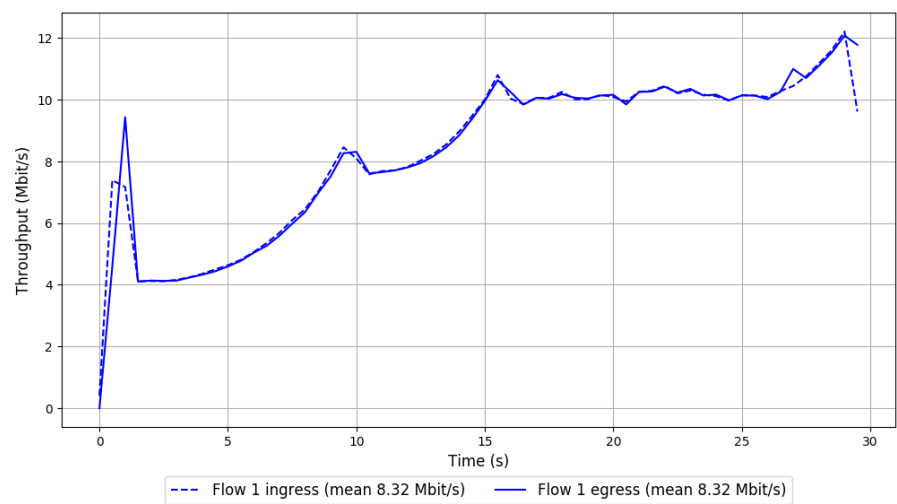
-- Flow 1:

Average throughput: 8.32 Mbit/s

95th percentile per-packet one-way delay: 114.168 ms

Loss rate: 0.00%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-11 09:35:24

End at: 2017-12-11 09:35:54

Below is generated by plot.py at 2017-12-11 11:47:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 502.54 Mbit/s

95th percentile per-packet one-way delay: 212.453 ms

Loss rate: 0.64%

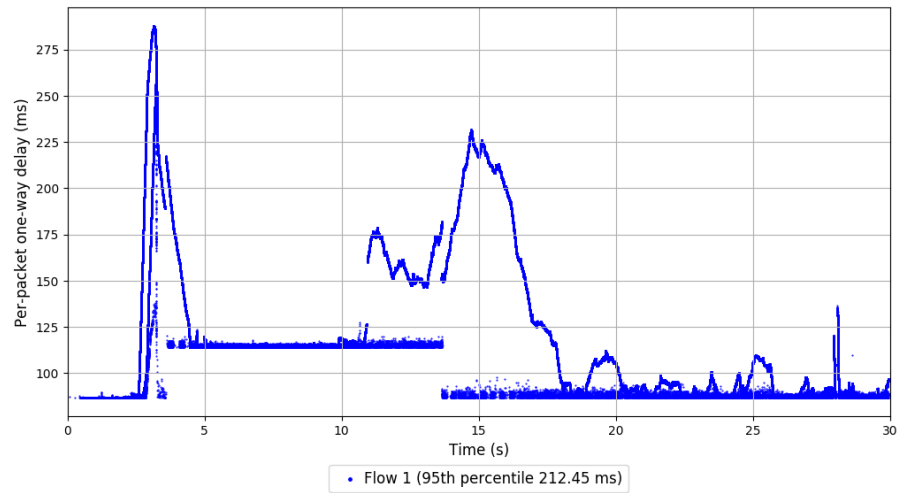
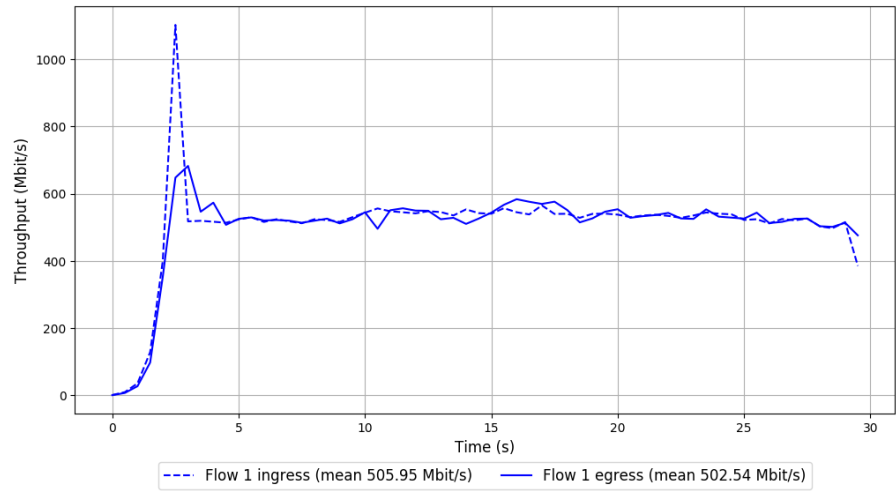
-- Flow 1:

Average throughput: 502.54 Mbit/s

95th percentile per-packet one-way delay: 212.453 ms

Loss rate: 0.64%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-11 09:45:47

End at: 2017-12-11 09:46:17

Below is generated by plot.py at 2017-12-11 11:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 500.67 Mbit/s

95th percentile per-packet one-way delay: 217.060 ms

Loss rate: 0.67%

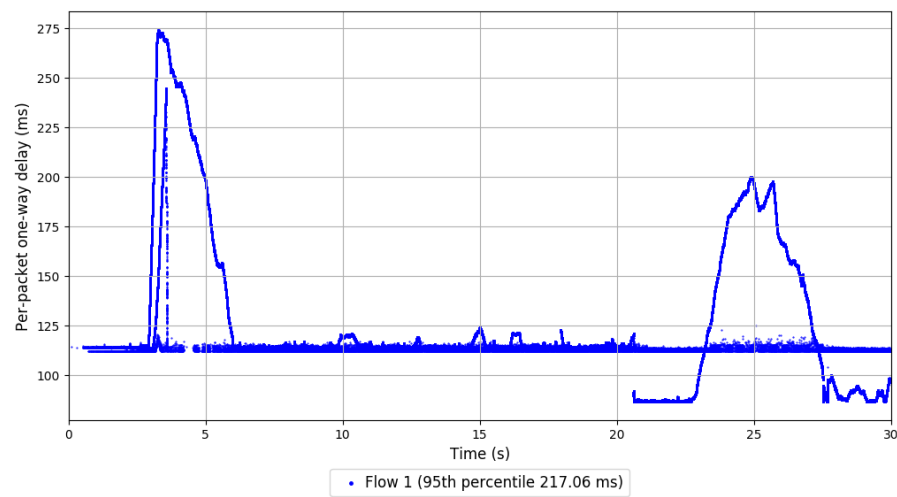
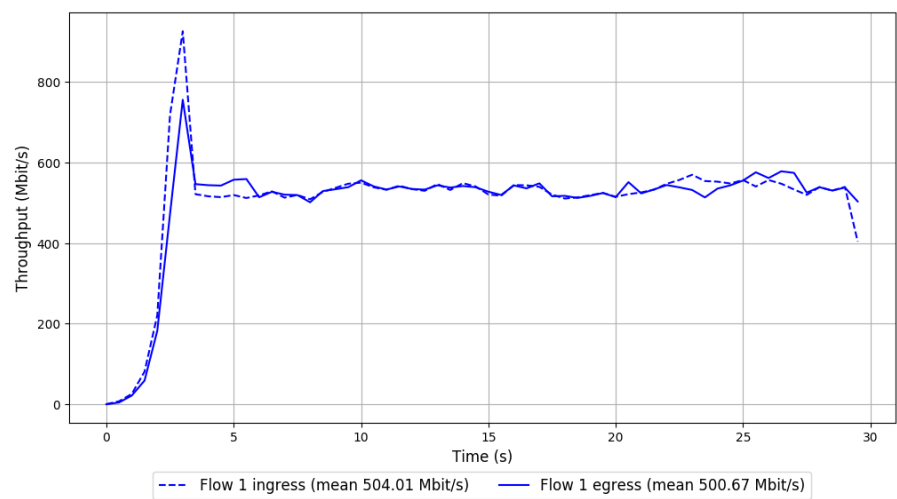
-- Flow 1:

Average throughput: 500.67 Mbit/s

95th percentile per-packet one-way delay: 217.060 ms

Loss rate: 0.67%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-11 09:56:34

End at: 2017-12-11 09:57:04

Below is generated by plot.py at 2017-12-11 11:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.22 Mbit/s

95th percentile per-packet one-way delay: 114.209 ms

Loss rate: 0.20%

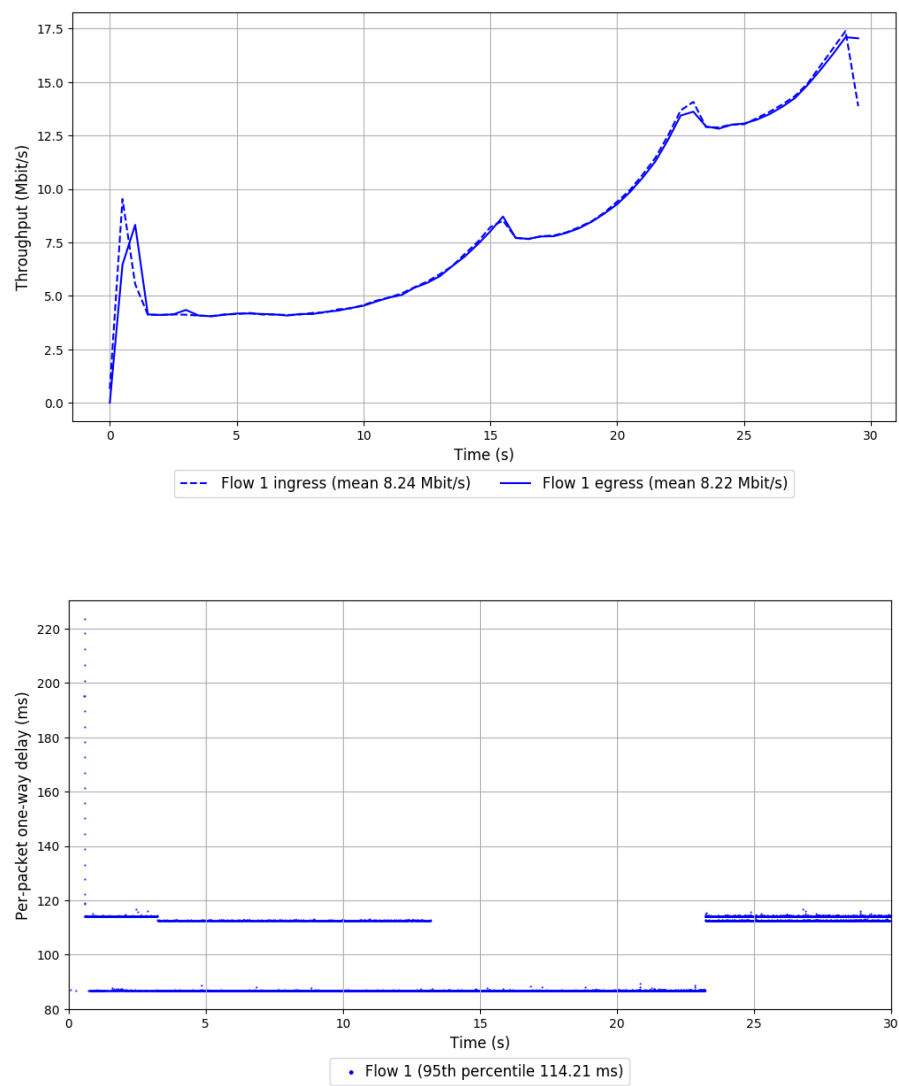
-- Flow 1:

Average throughput: 8.22 Mbit/s

95th percentile per-packet one-way delay: 114.209 ms

Loss rate: 0.20%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-11 10:06:45

End at: 2017-12-11 10:07:15

Below is generated by plot.py at 2017-12-11 11:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 126.68 Mbit/s

95th percentile per-packet one-way delay: 116.072 ms

Loss rate: 0.24%

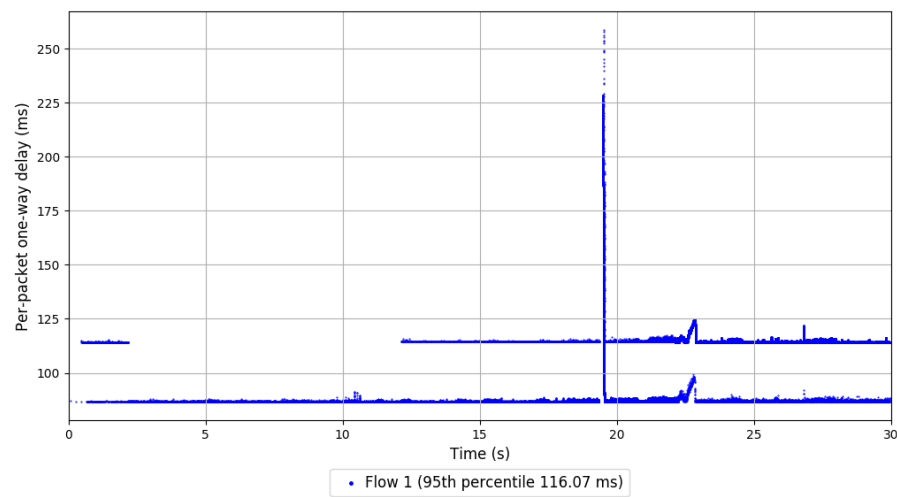
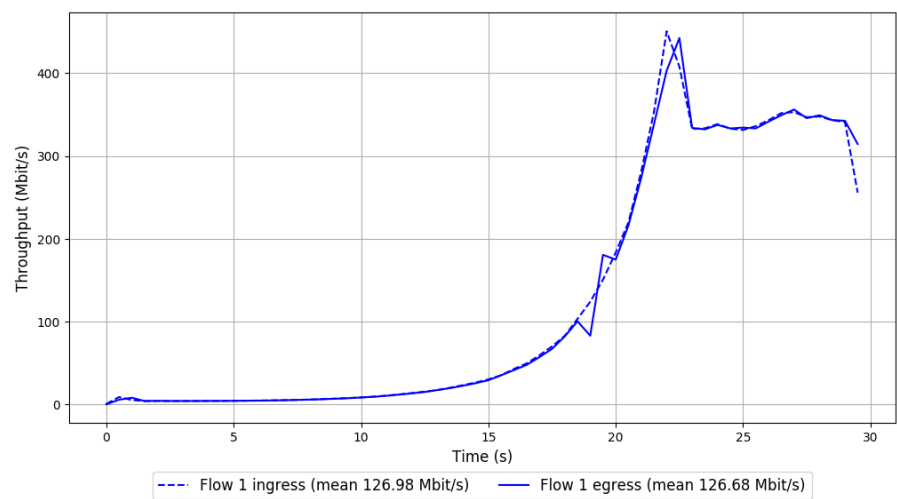
-- Flow 1:

Average throughput: 126.68 Mbit/s

95th percentile per-packet one-way delay: 116.072 ms

Loss rate: 0.24%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-11 10:17:06

End at: 2017-12-11 10:17:36

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 512.14 Mbit/s

95th percentile per-packet one-way delay: 211.993 ms

Loss rate: 1.46%

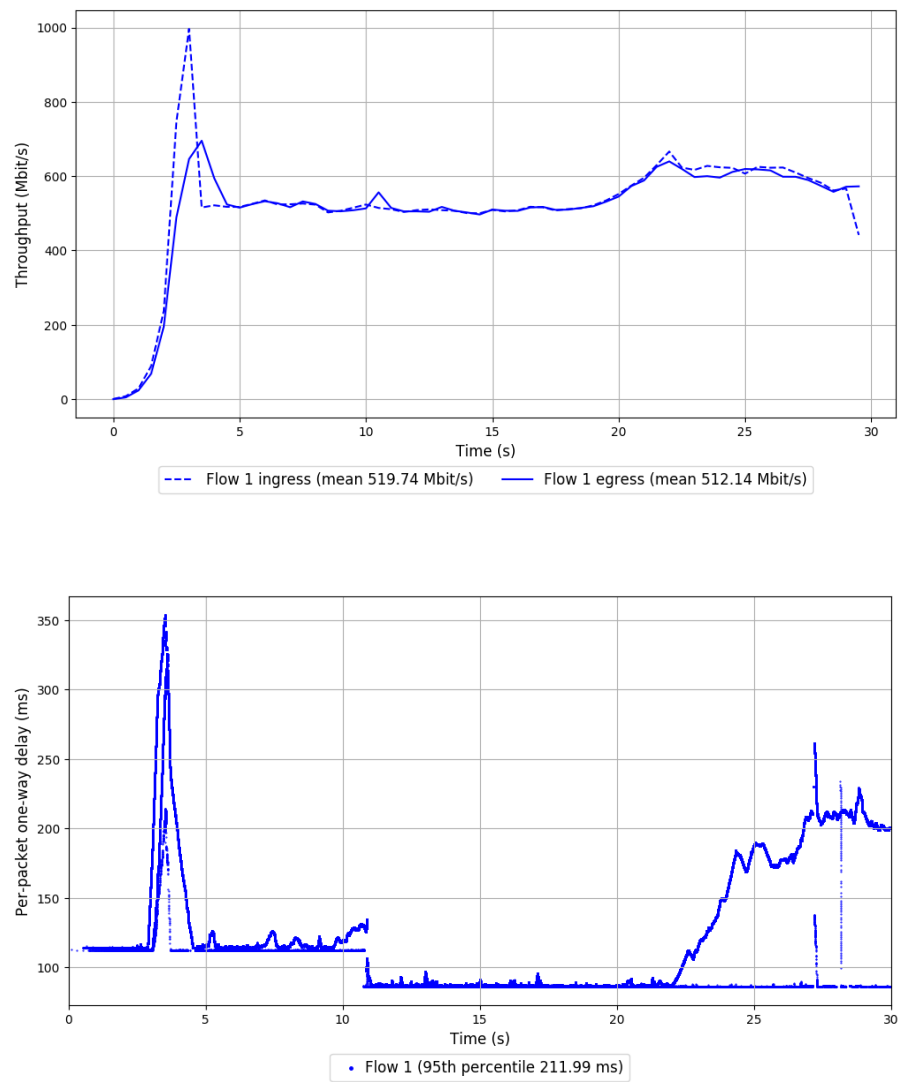
-- Flow 1:

Average throughput: 512.14 Mbit/s

95th percentile per-packet one-way delay: 211.993 ms

Loss rate: 1.46%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-11 10:27:35

End at: 2017-12-11 10:28:05

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.18 Mbit/s

95th percentile per-packet one-way delay: 114.232 ms

Loss rate: 0.00%

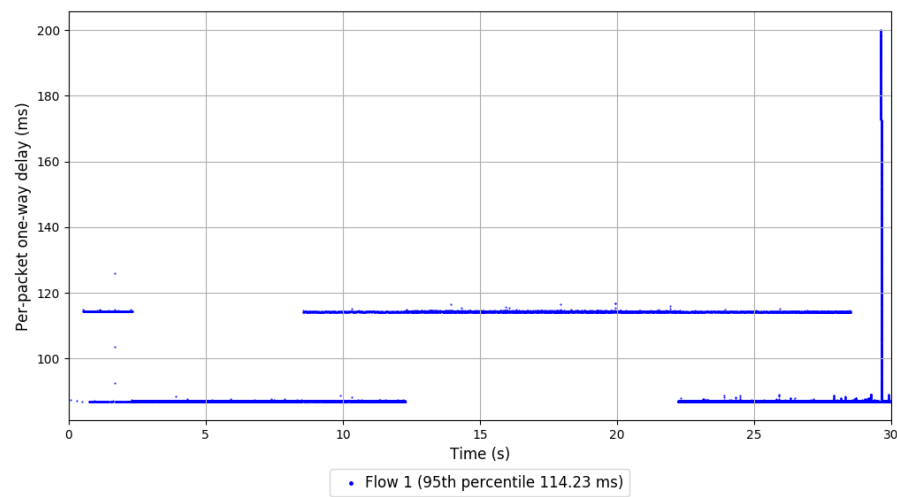
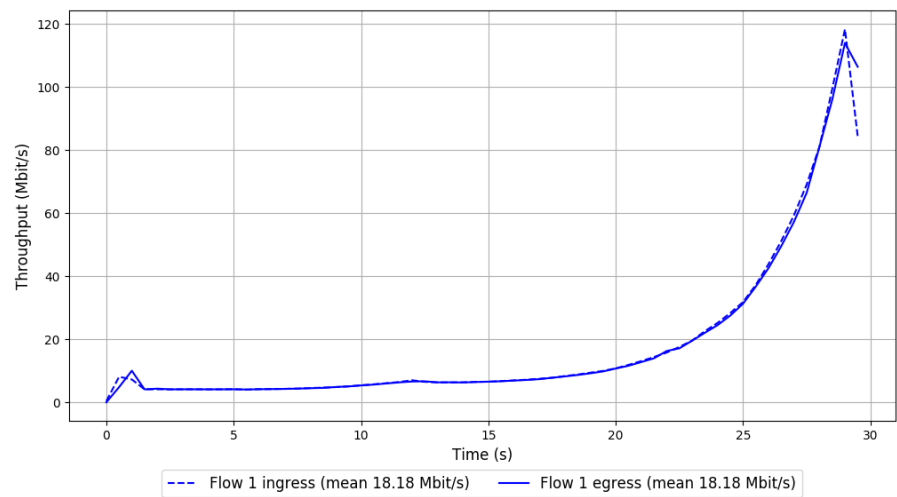
-- Flow 1:

Average throughput: 18.18 Mbit/s

95th percentile per-packet one-way delay: 114.232 ms

Loss rate: 0.00%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-11 10:37:43

End at: 2017-12-11 10:38:13

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 482.38 Mbit/s

95th percentile per-packet one-way delay: 180.821 ms

Loss rate: 0.71%

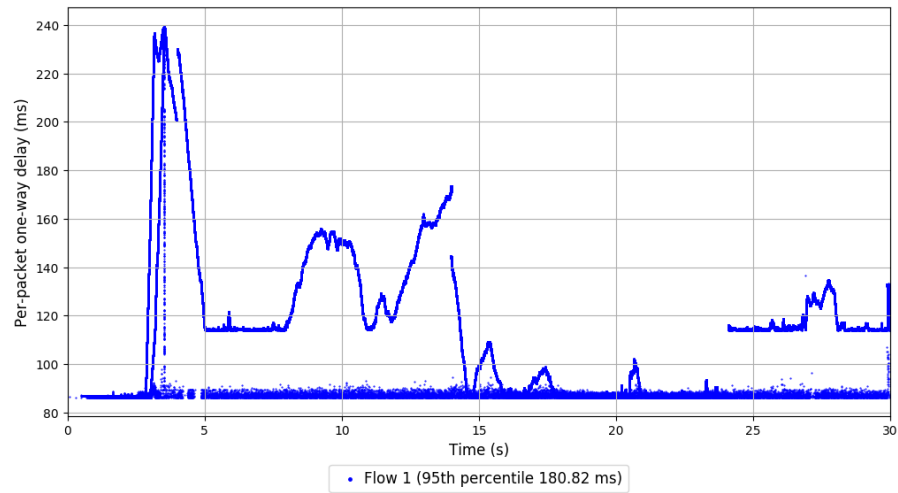
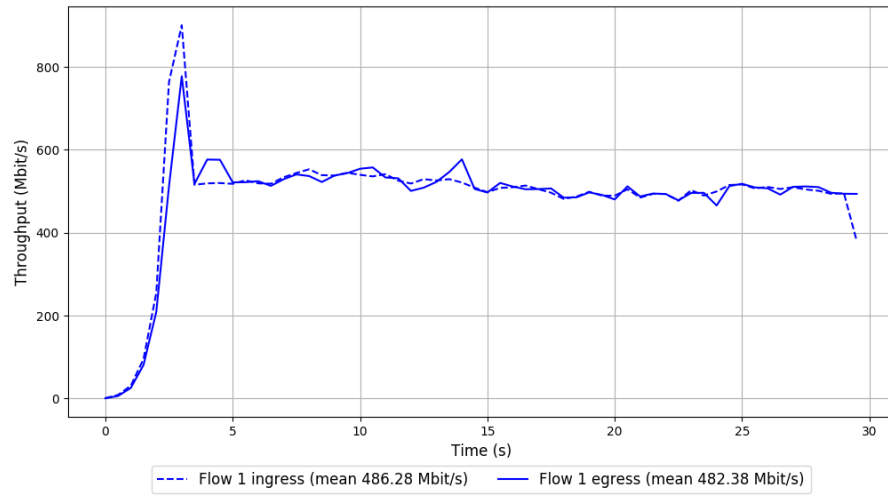
-- Flow 1:

Average throughput: 482.38 Mbit/s

95th percentile per-packet one-way delay: 180.821 ms

Loss rate: 0.71%

Run 9: Report of PCC — Data Link

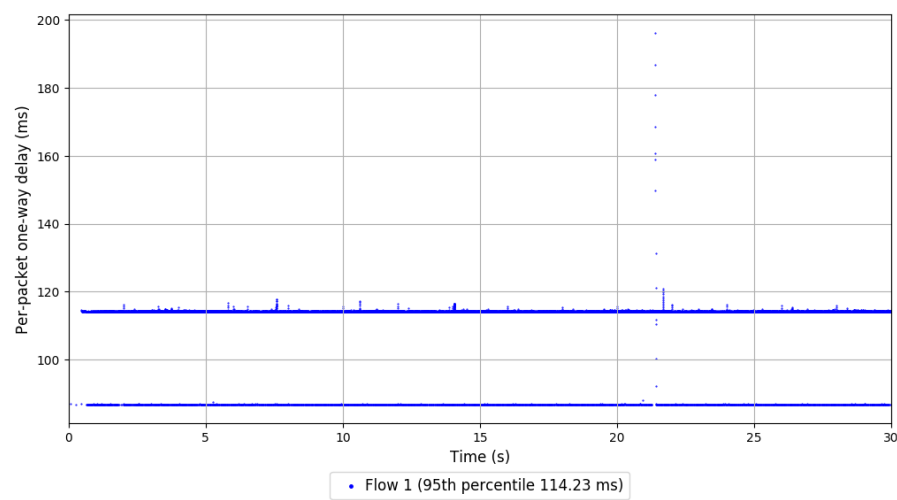
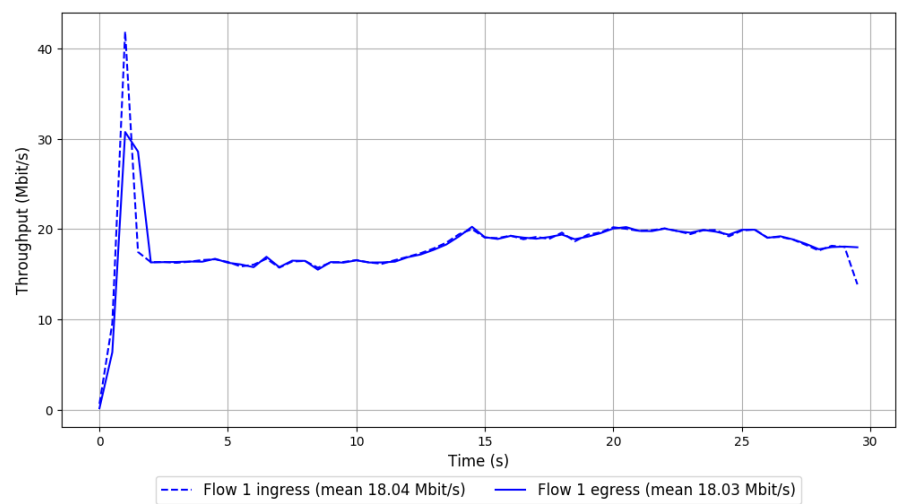


```
Run 10: Statistics of PCC

Start at: 2017-12-11 10:48:13
End at: 2017-12-11 10:48:43

# Below is generated by plot.py at 2017-12-11 11:48:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.03 Mbit/s
95th percentile per-packet one-way delay: 114.233 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 18.03 Mbit/s
95th percentile per-packet one-way delay: 114.233 ms
Loss rate: 0.00%
```

Run 10: Report of PCC — Data Link

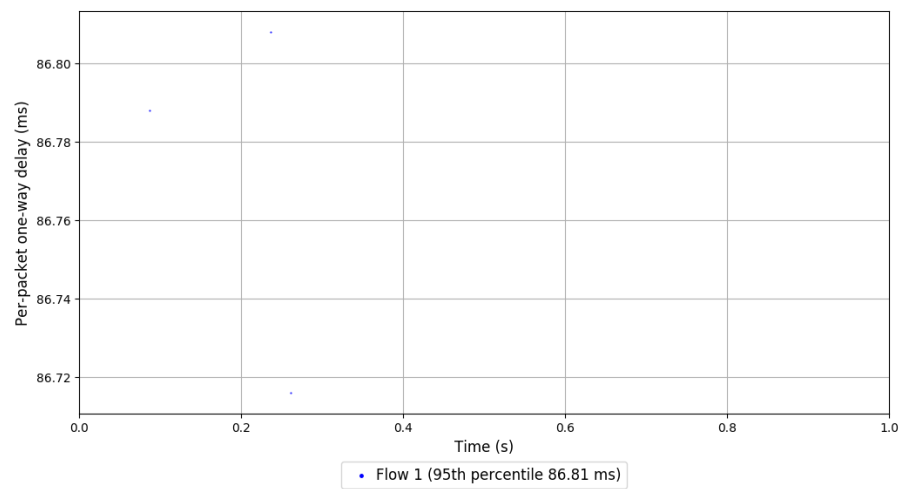
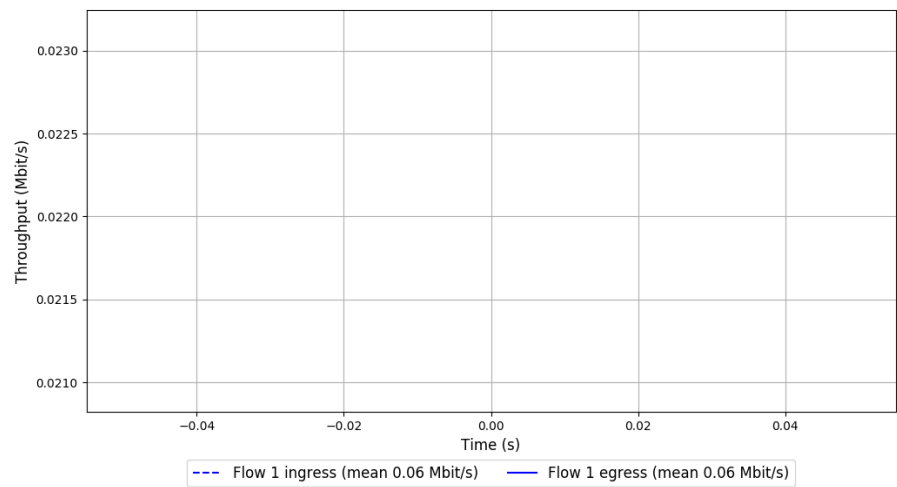


Run 1: Statistics of QUIC Cubic

Start at: 2017-12-11 09:15:33

End at: 2017-12-11 09:16:03

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-11 09:25:50

End at: 2017-12-11 09:26:20

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.02 Mbit/s

95th percentile per-packet one-way delay: 112.597 ms

Loss rate: 0.11%

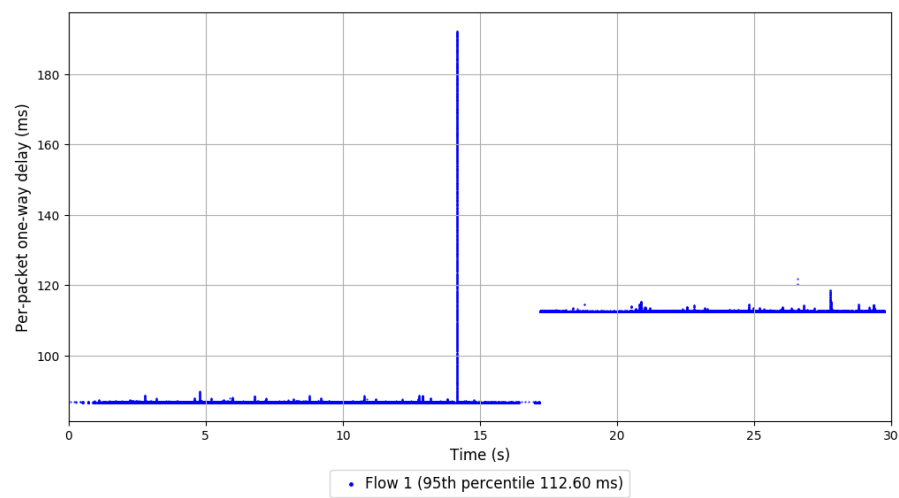
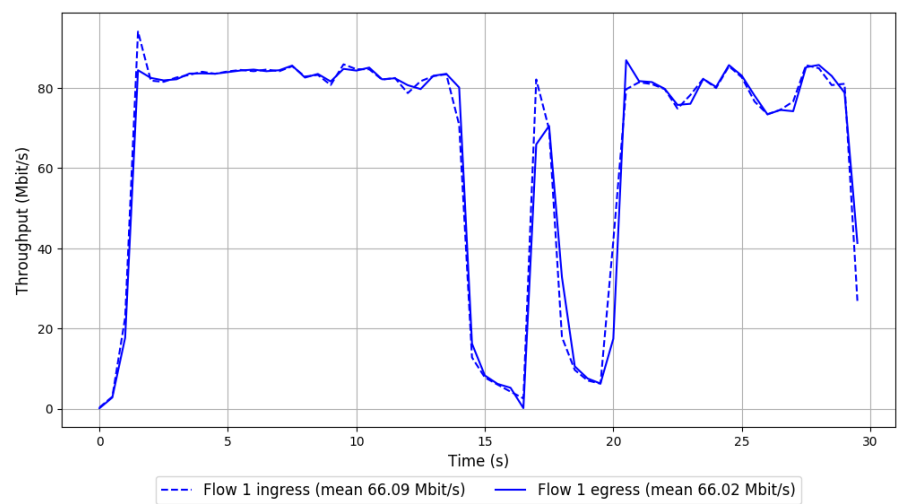
-- Flow 1:

Average throughput: 66.02 Mbit/s

95th percentile per-packet one-way delay: 112.597 ms

Loss rate: 0.11%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-11 09:36:24

End at: 2017-12-11 09:36:54

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.02 Mbit/s

95th percentile per-packet one-way delay: 114.435 ms

Loss rate: 0.00%

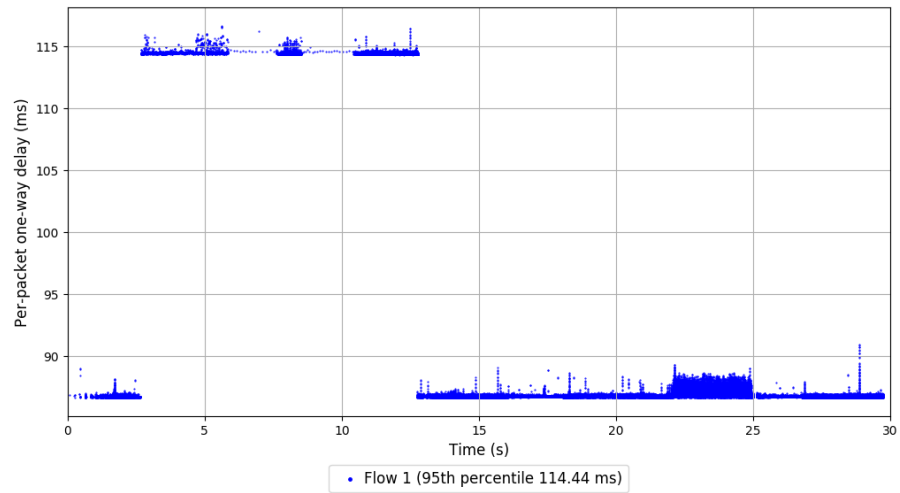
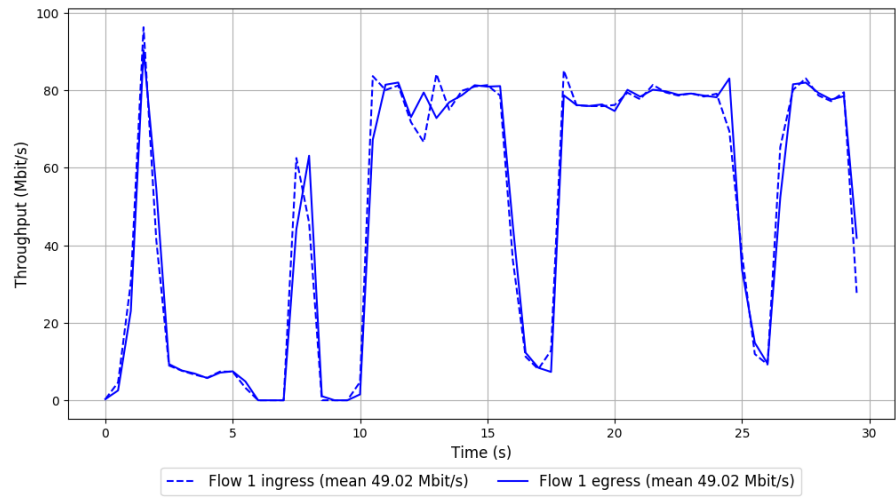
-- Flow 1:

Average throughput: 49.02 Mbit/s

95th percentile per-packet one-way delay: 114.435 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-11 09:46:47

End at: 2017-12-11 09:47:17

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.30 Mbit/s

95th percentile per-packet one-way delay: 86.797 ms

Loss rate: 0.00%

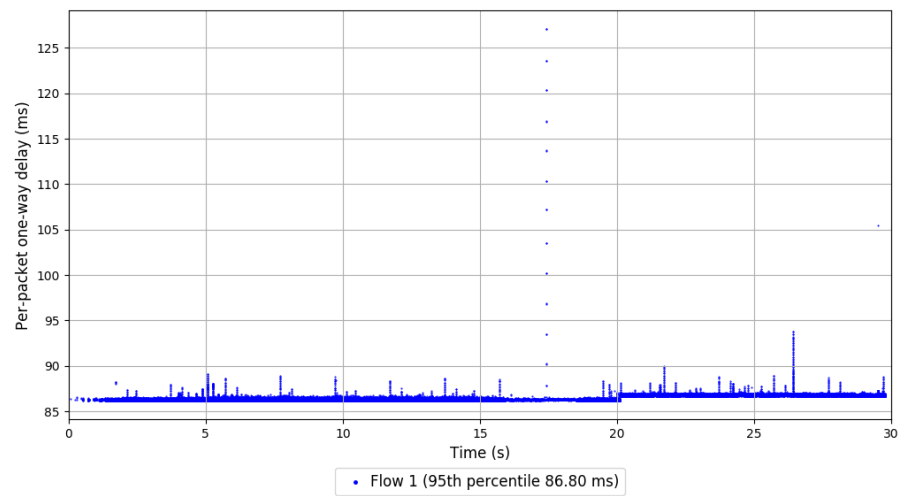
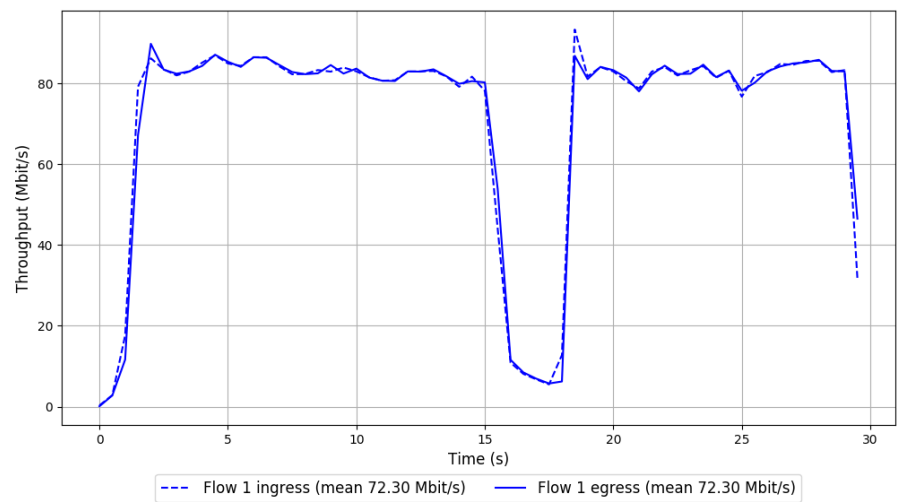
-- Flow 1:

Average throughput: 72.30 Mbit/s

95th percentile per-packet one-way delay: 86.797 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-11 09:57:14

End at: 2017-12-11 09:57:45

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.80 Mbit/s

95th percentile per-packet one-way delay: 114.174 ms

Loss rate: 0.00%

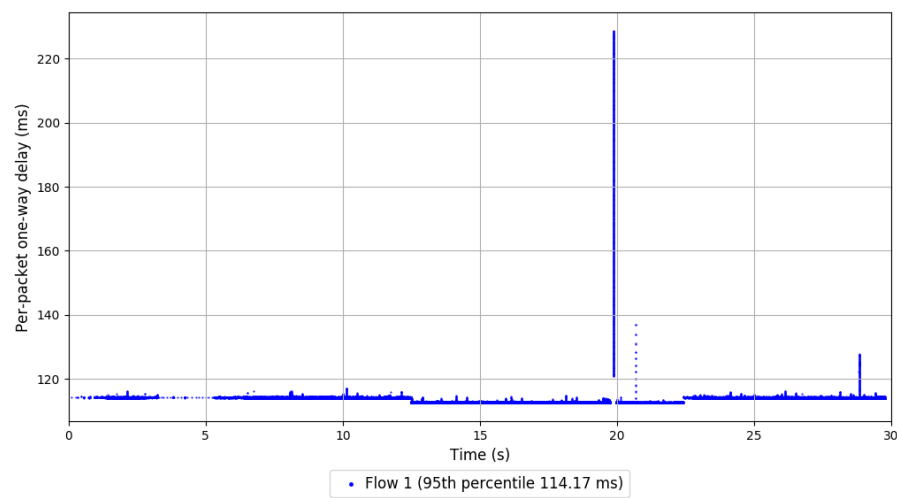
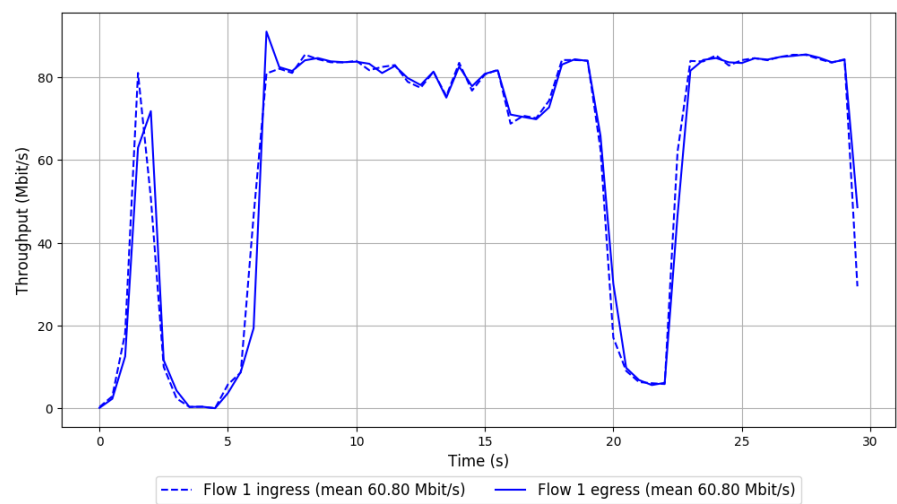
-- Flow 1:

Average throughput: 60.80 Mbit/s

95th percentile per-packet one-way delay: 114.174 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-11 10:07:30

End at: 2017-12-11 10:08:01

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 112.359 ms

Loss rate: 0.00%

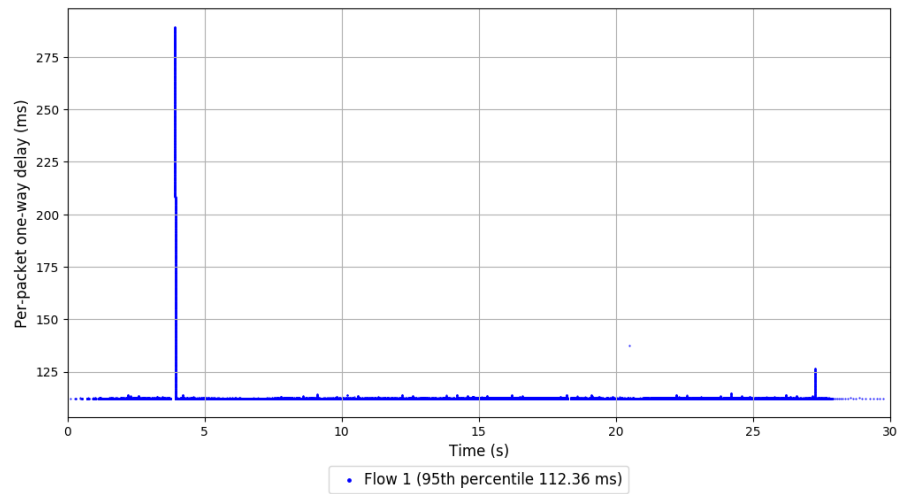
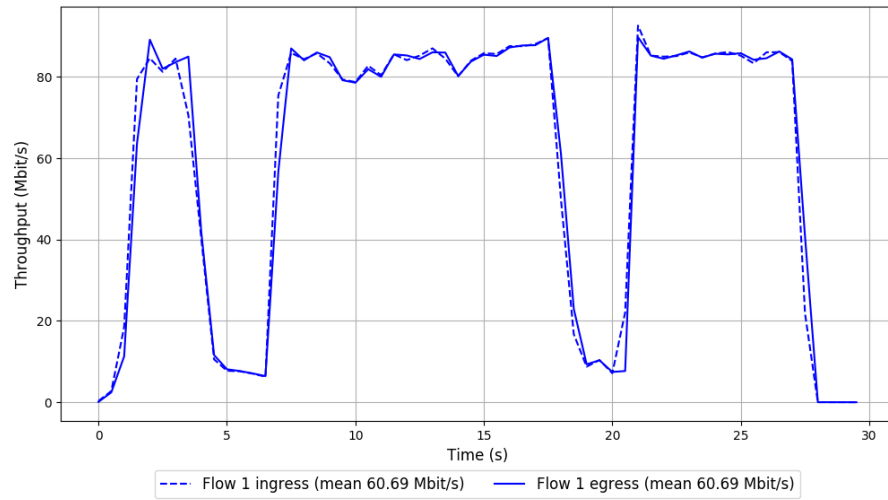
-- Flow 1:

Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 112.359 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-11 10:18:07

End at: 2017-12-11 10:18:37

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.21 Mbit/s

95th percentile per-packet one-way delay: 112.325 ms

Loss rate: 0.00%

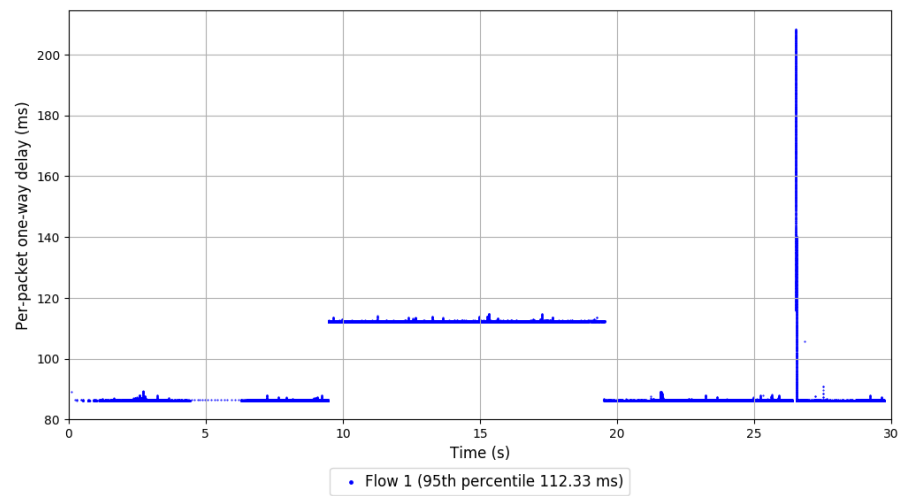
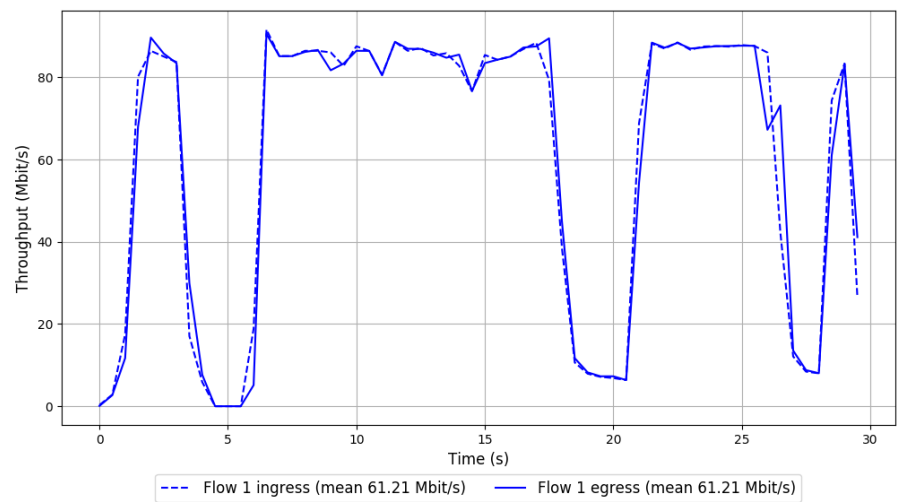
-- Flow 1:

Average throughput: 61.21 Mbit/s

95th percentile per-packet one-way delay: 112.325 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-11 10:28:16

End at: 2017-12-11 10:28:46

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.45 Mbit/s

95th percentile per-packet one-way delay: 114.504 ms

Loss rate: 0.10%

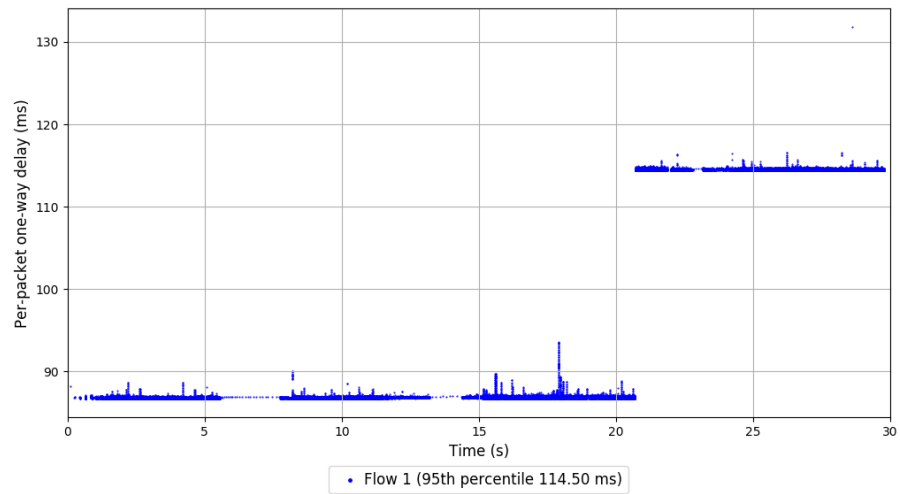
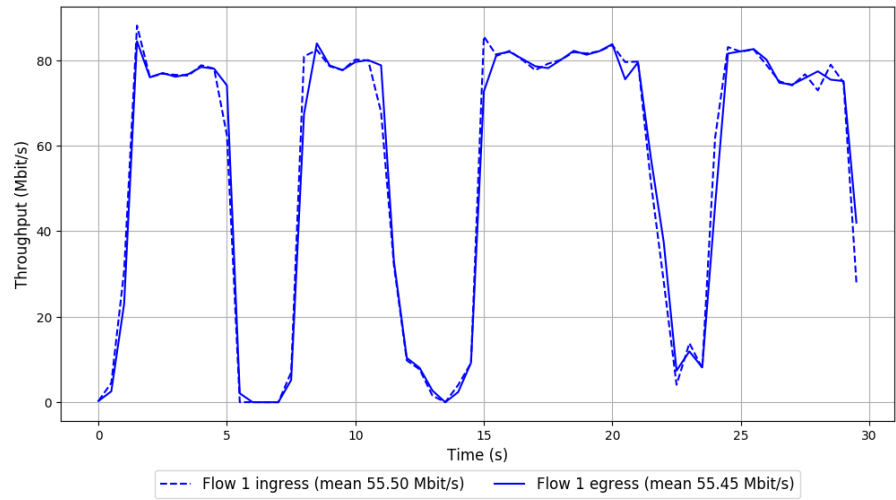
-- Flow 1:

Average throughput: 55.45 Mbit/s

95th percentile per-packet one-way delay: 114.504 ms

Loss rate: 0.10%

Run 8: Report of QUIC Cubic — Data Link

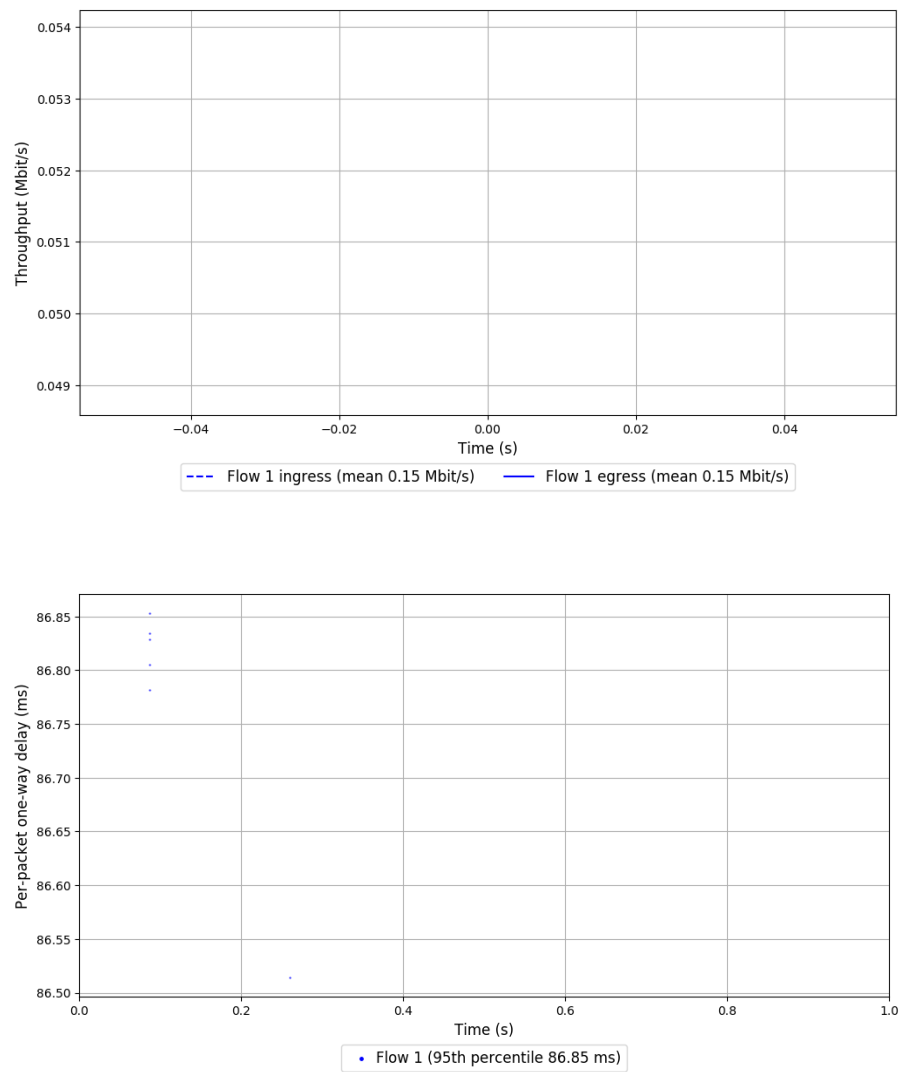


Run 9: Statistics of QUIC Cubic

Start at: 2017-12-11 10:38:43

End at: 2017-12-11 10:39:13

Run 9: Report of QUIC Cubic — Data Link

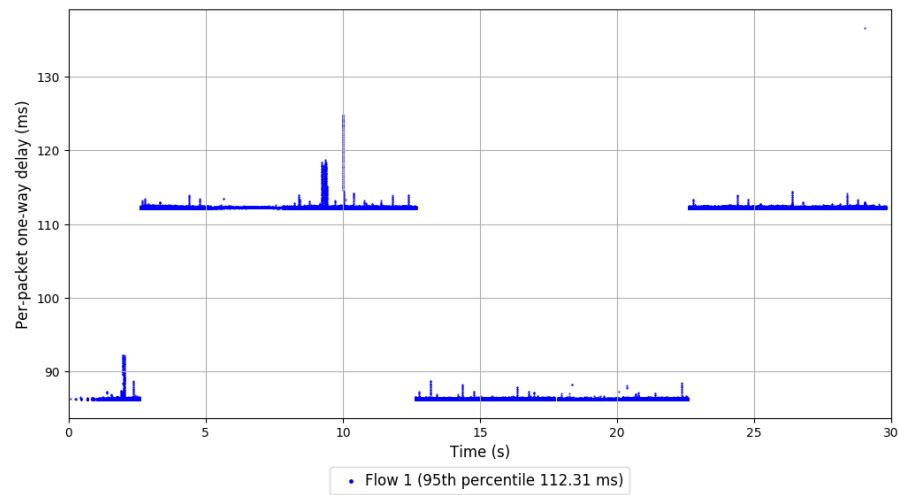
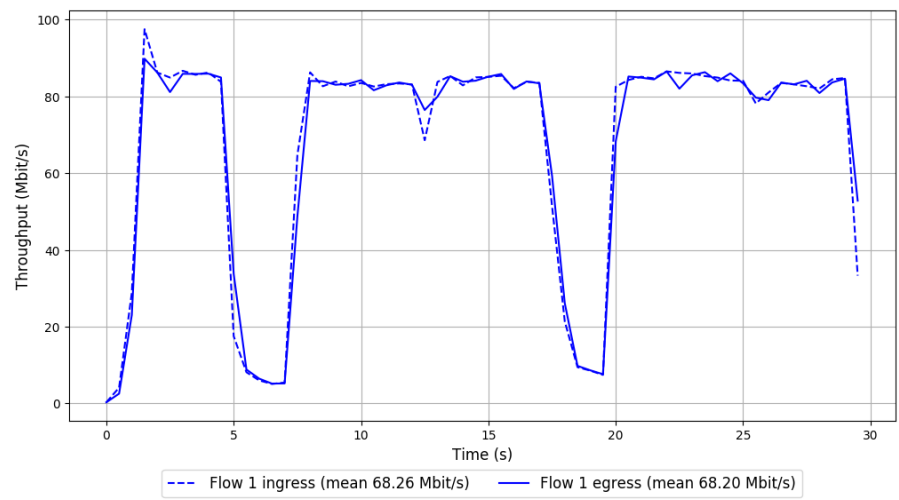


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-11 10:48:54
End at: 2017-12-11 10:49:24

# Below is generated by plot.py at 2017-12-11 11:48:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.20 Mbit/s
95th percentile per-packet one-way delay: 112.313 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.20 Mbit/s
95th percentile per-packet one-way delay: 112.313 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

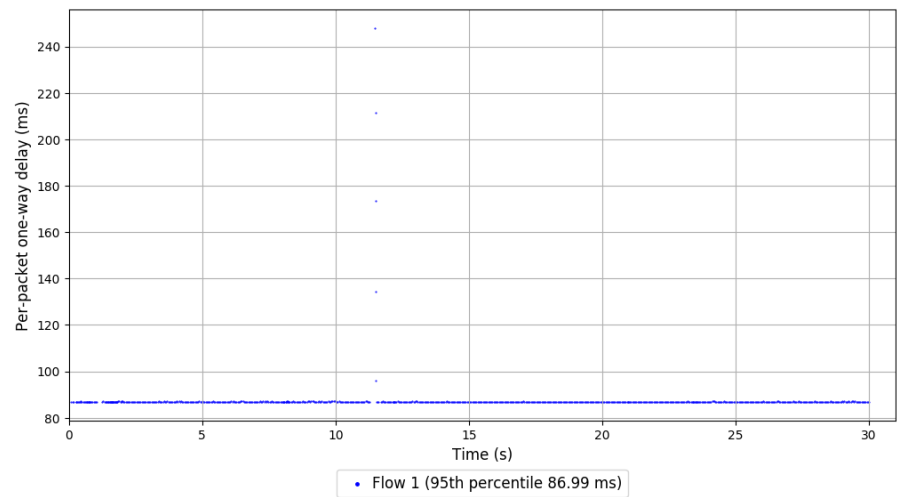
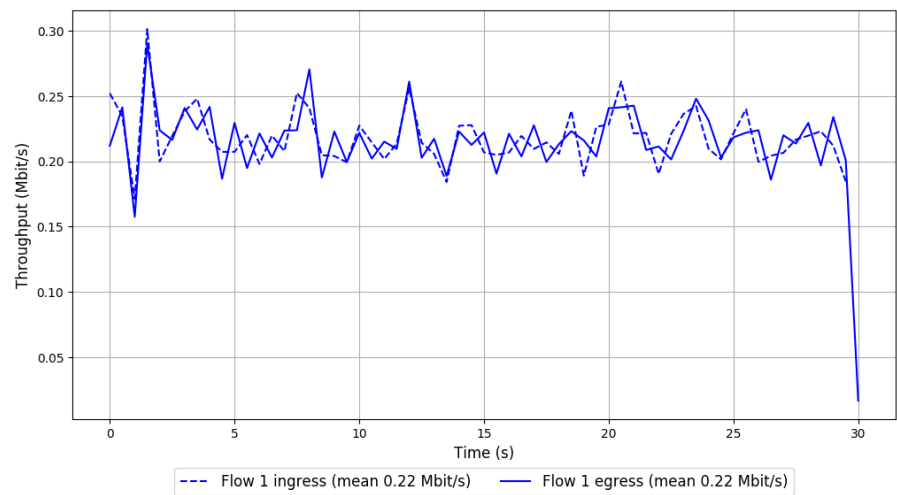


```
Run 1: Statistics of SCReAM

Start at: 2017-12-11 09:16:53
End at: 2017-12-11 09:17:23

# Below is generated by plot.py at 2017-12-11 11:48:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.989 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.989 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

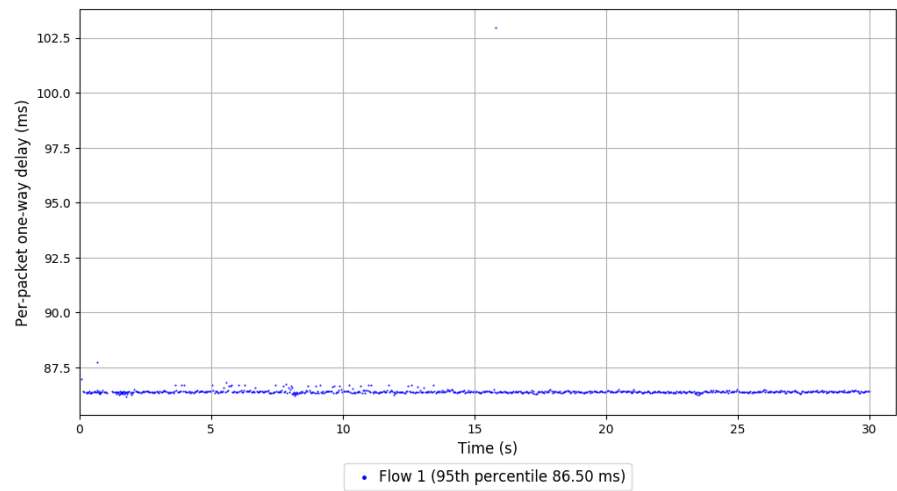
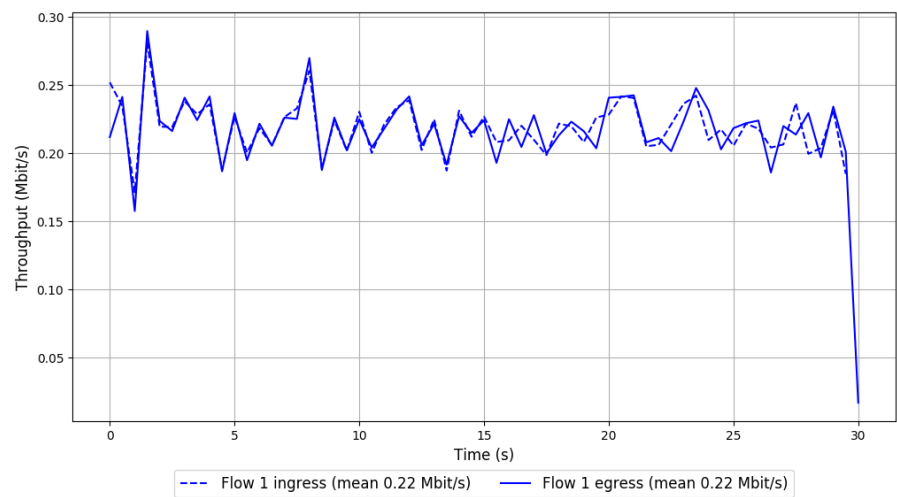


```
Run 2: Statistics of SCReAM

Start at: 2017-12-11 09:27:19
End at: 2017-12-11 09:27:49

# Below is generated by plot.py at 2017-12-11 11:48:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.496 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.496 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-11 09:37:51

End at: 2017-12-11 09:38:22

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.606 ms

Loss rate: 0.00%

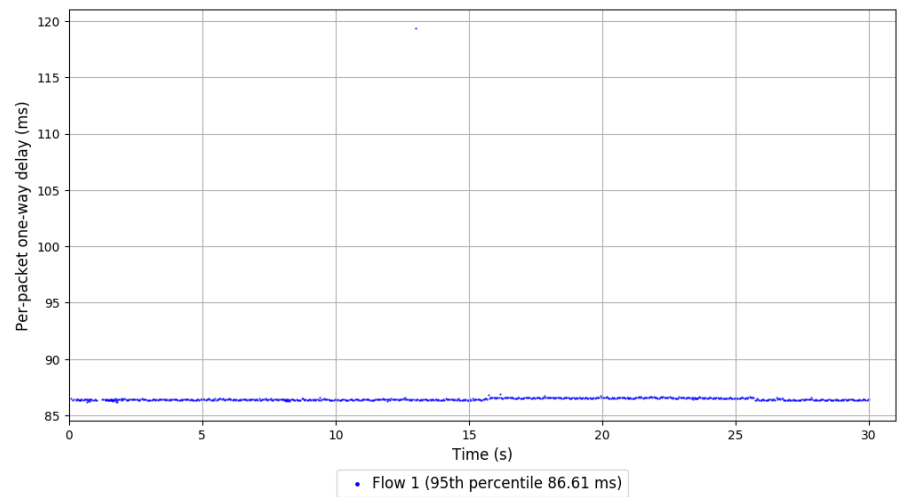
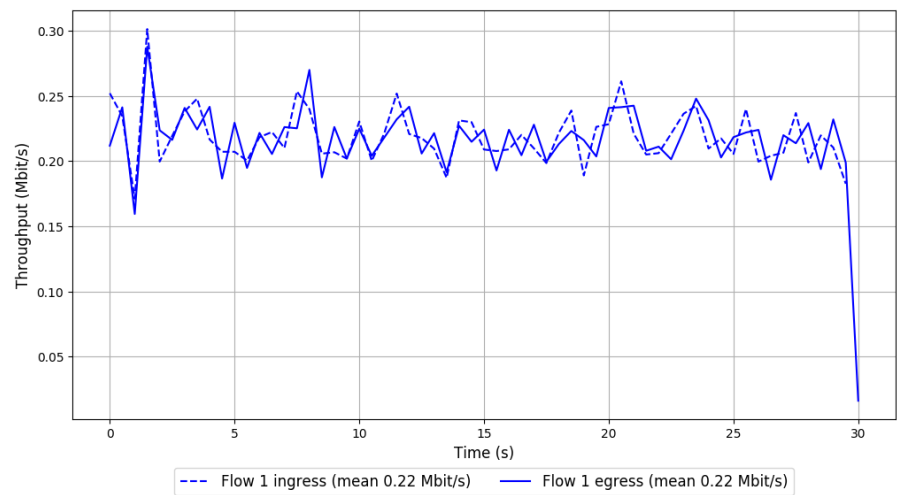
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.606 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-11 09:48:15

End at: 2017-12-11 09:48:45

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 112.714 ms

Loss rate: 0.00%

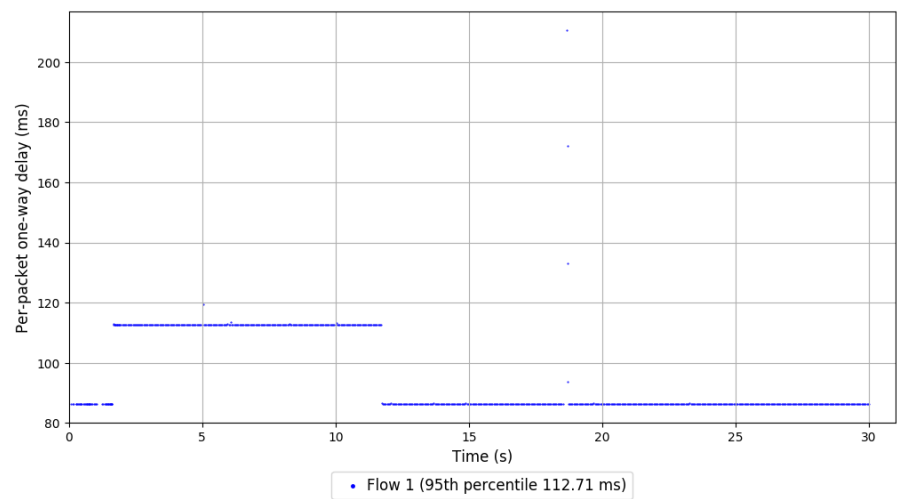
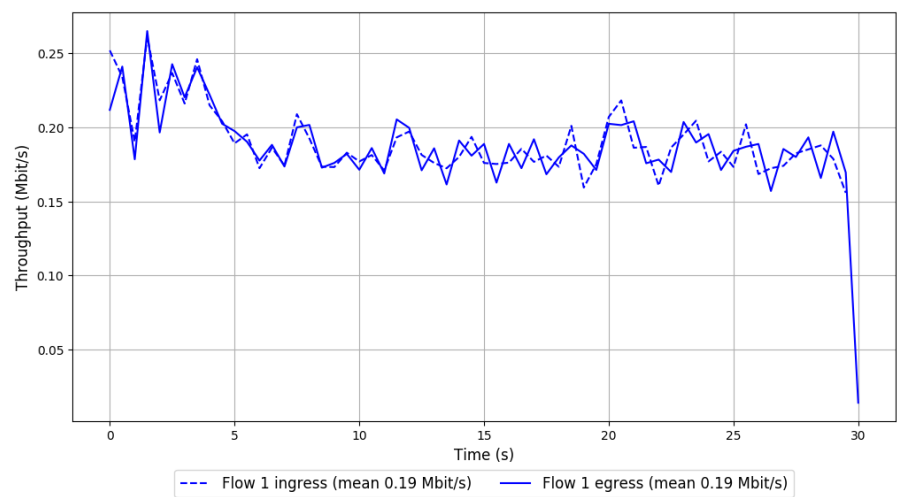
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 112.714 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-11 09:58:44

End at: 2017-12-11 09:59:14

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 114.339 ms

Loss rate: 0.00%

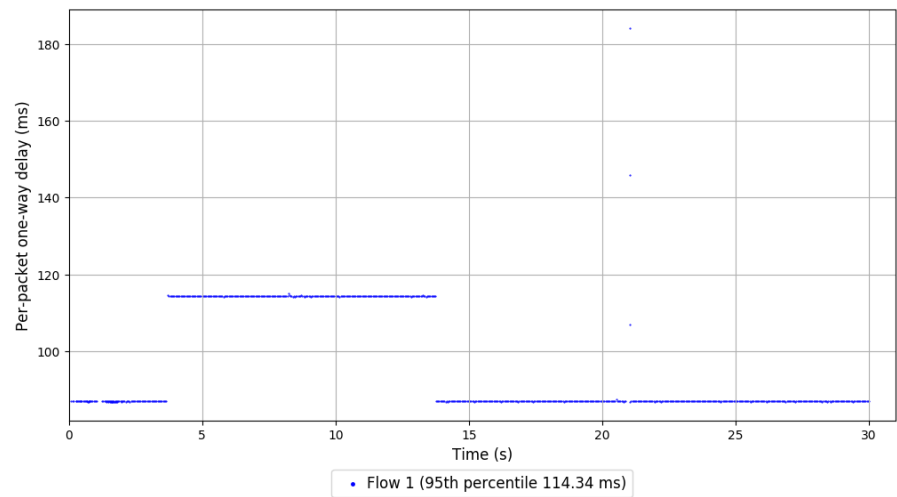
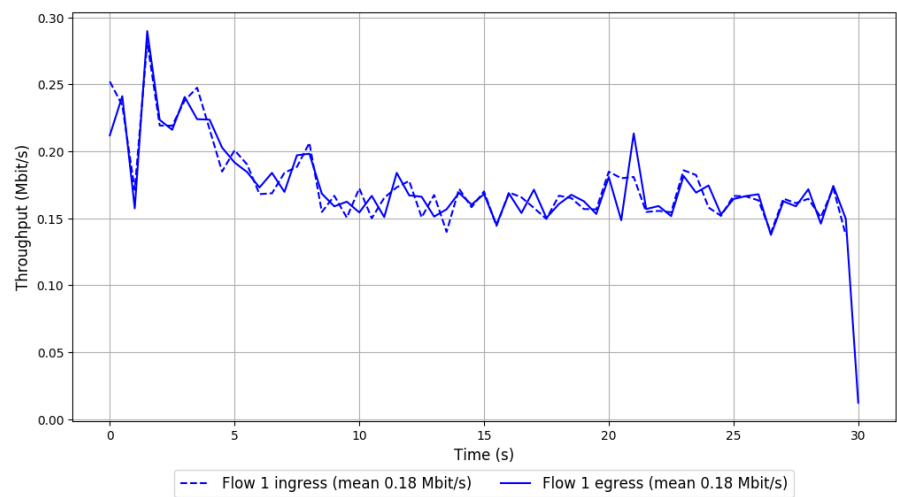
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 114.339 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-11 10:08:59

End at: 2017-12-11 10:09:29

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.731 ms

Loss rate: 0.00%

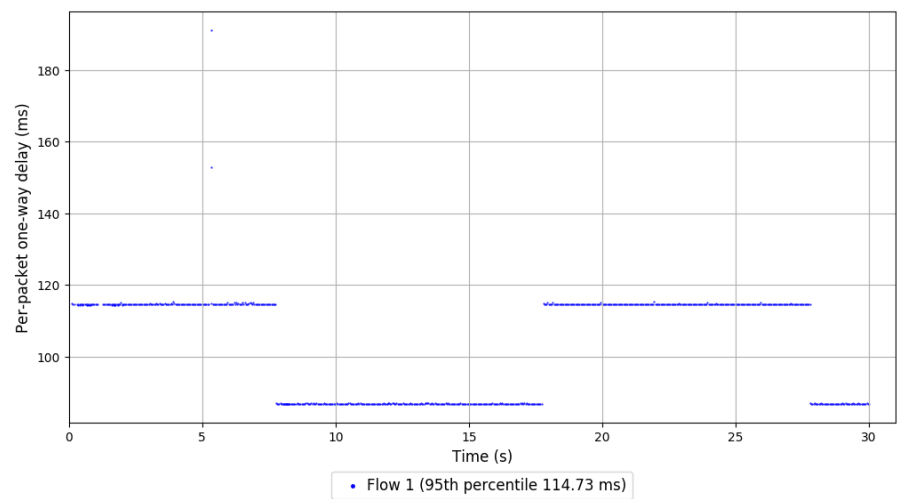
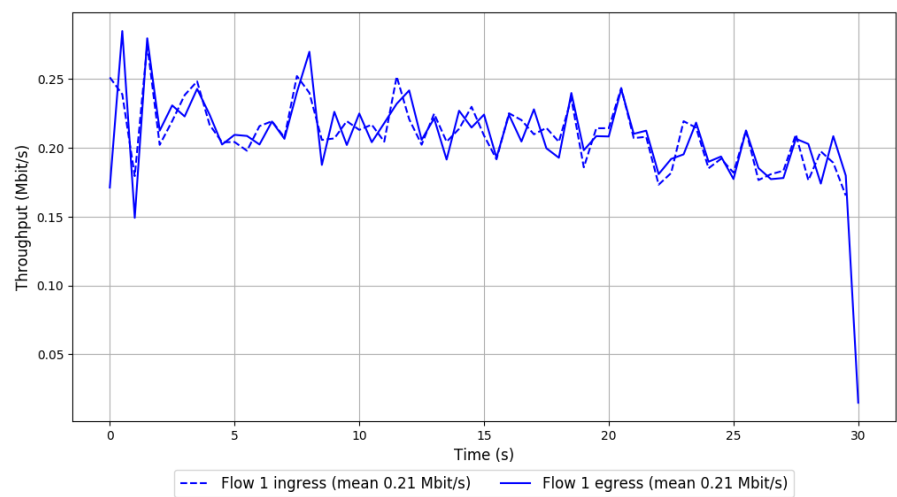
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.731 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-11 10:19:37

End at: 2017-12-11 10:20:07

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.638 ms

Loss rate: 0.00%

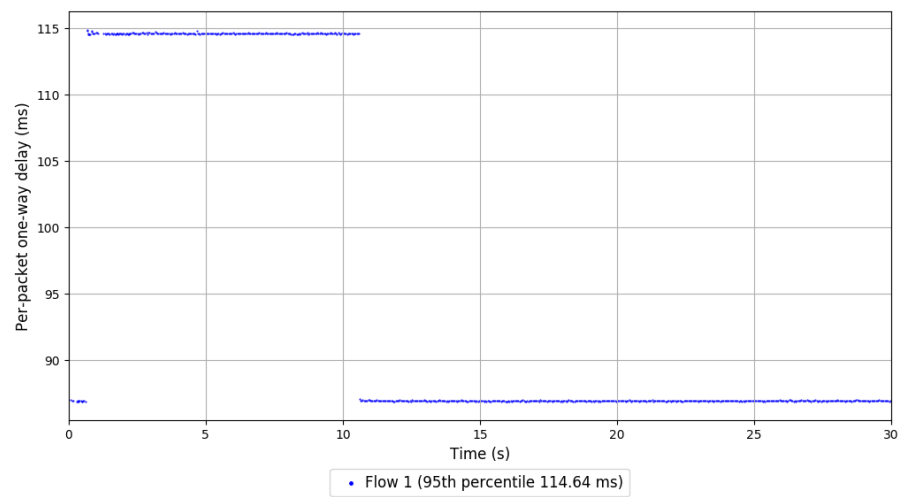
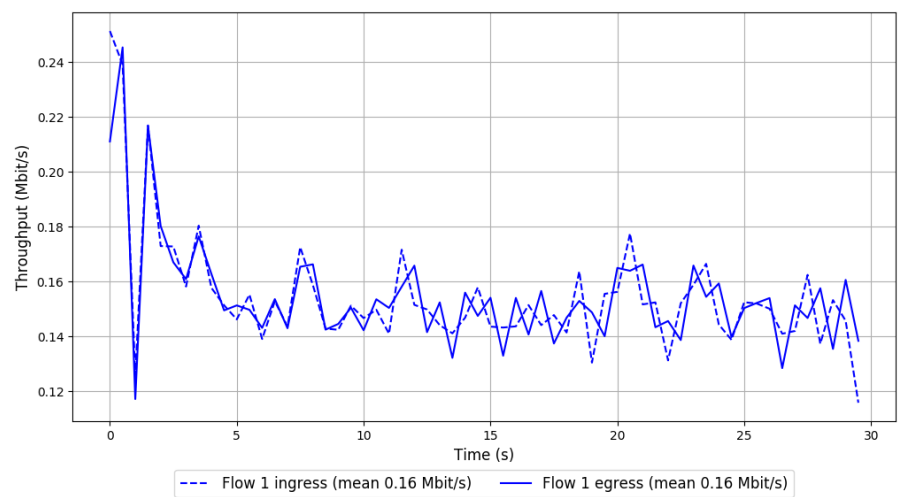
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.638 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-11 10:29:43

End at: 2017-12-11 10:30:13

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.465 ms

Loss rate: 0.00%

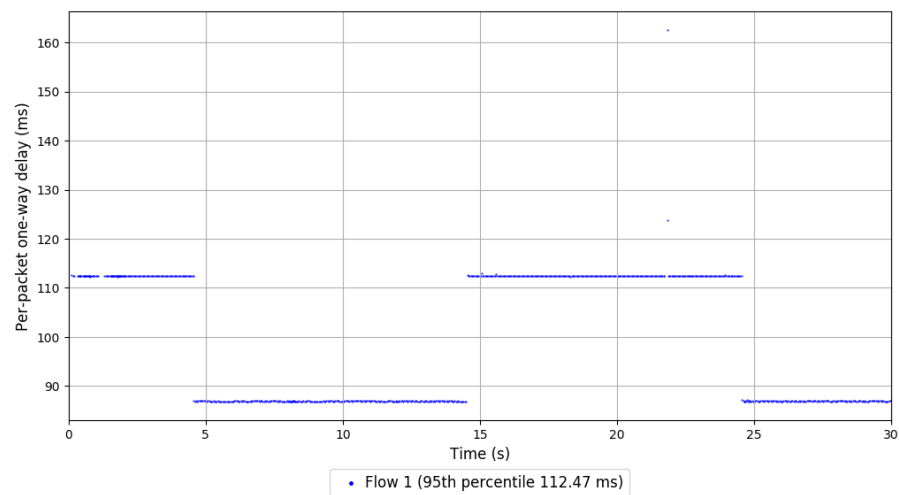
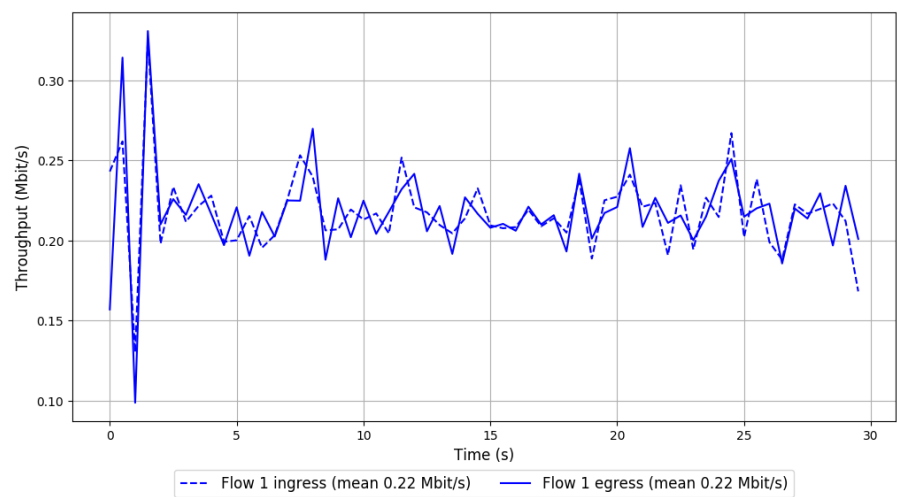
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.465 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-11 10:40:07

End at: 2017-12-11 10:40:37

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.996 ms

Loss rate: 0.00%

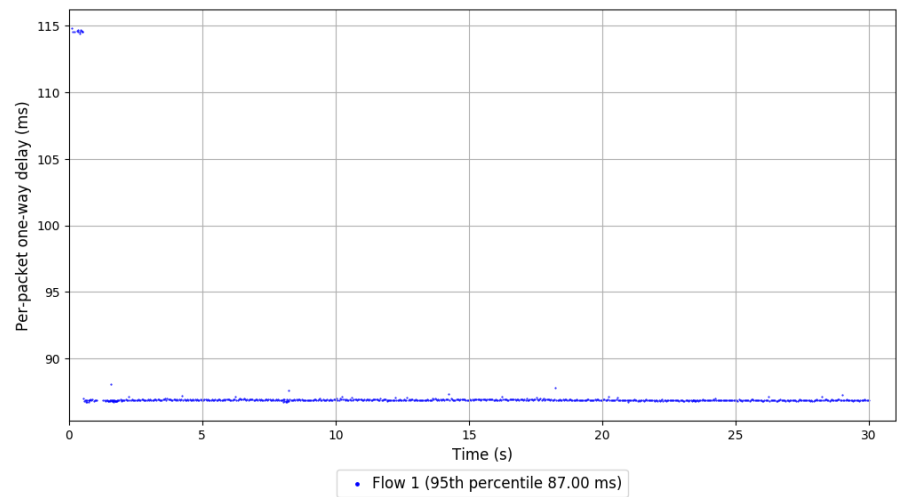
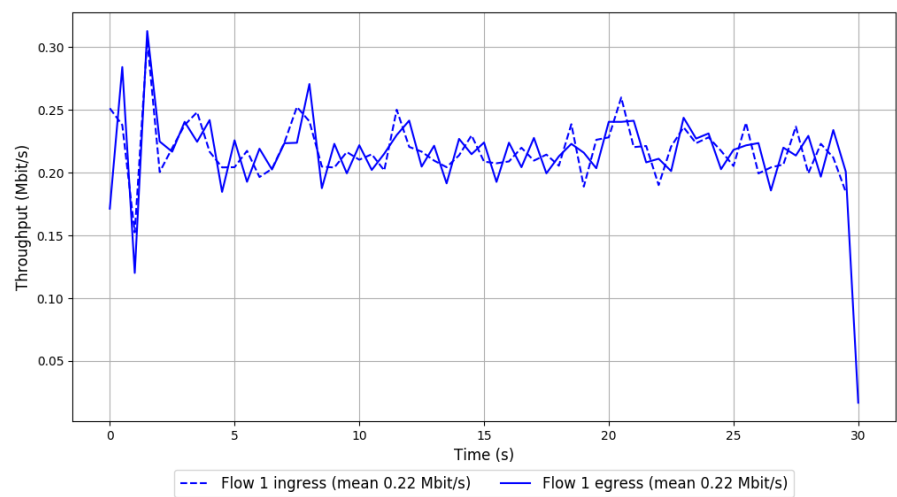
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.996 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

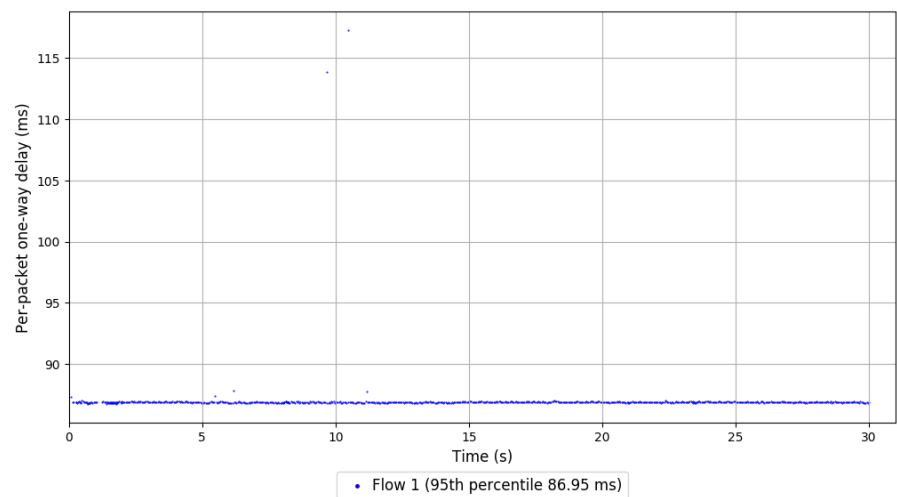
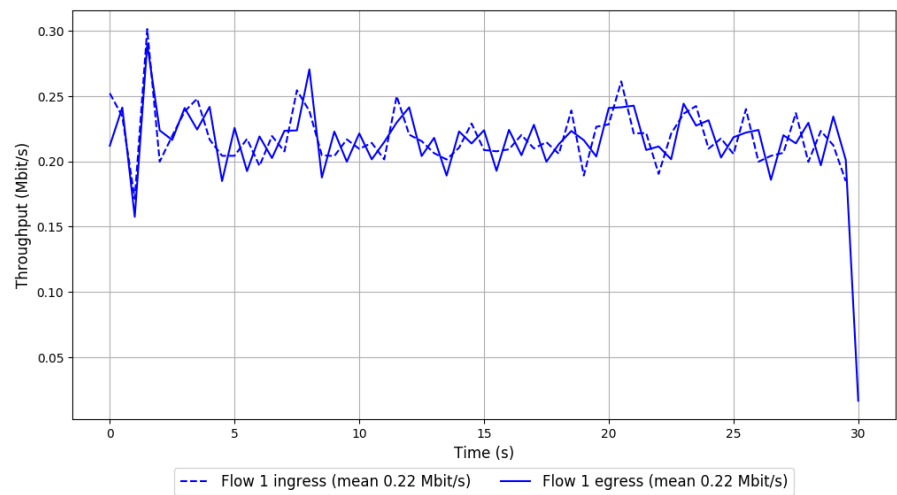


```
Run 10: Statistics of SReAM

Start at: 2017-12-11 10:50:25
End at: 2017-12-11 10:50:55

# Below is generated by plot.py at 2017-12-11 11:48:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.949 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.949 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

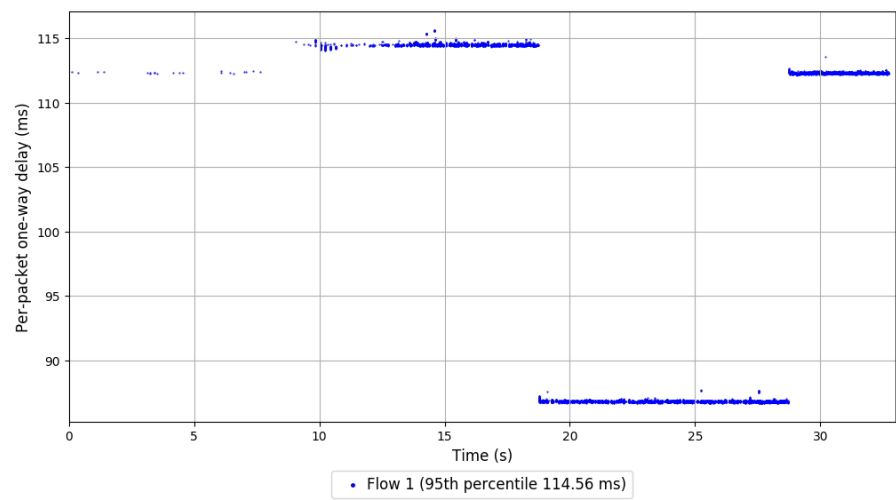
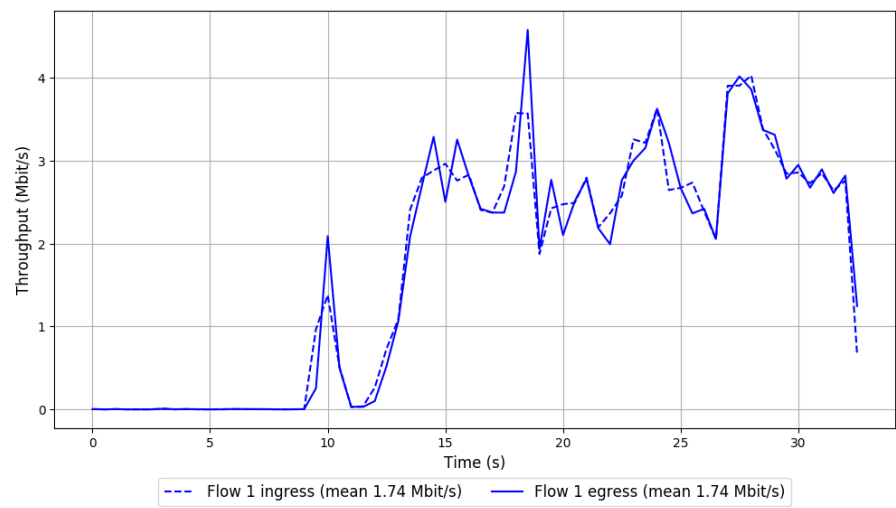


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-11 09:12:51
End at: 2017-12-11 09:13:21

# Below is generated by plot.py at 2017-12-11 11:48:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 114.565 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 114.565 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

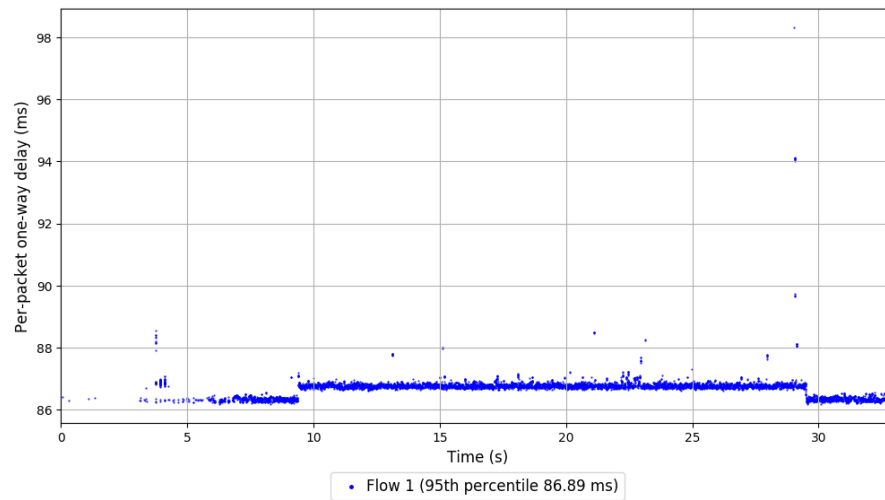
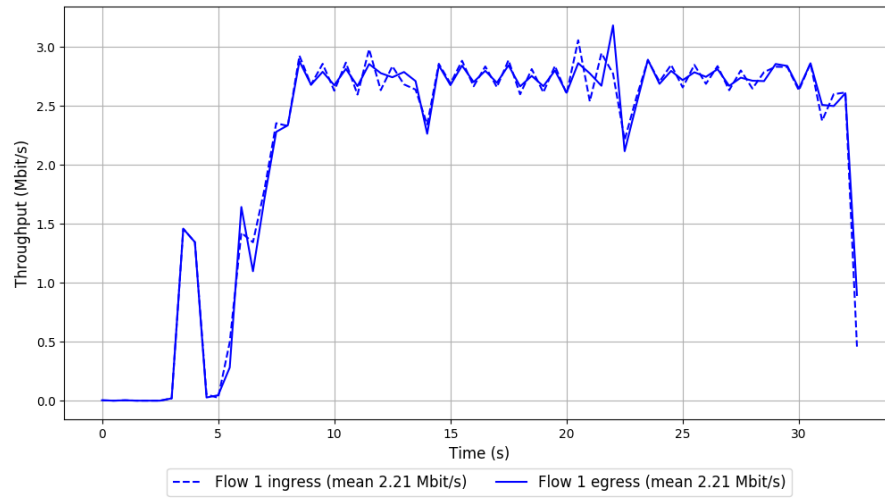


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-11 09:23:10
End at: 2017-12-11 09:23:40

# Below is generated by plot.py at 2017-12-11 11:48:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-11 09:33:23

End at: 2017-12-11 09:33:53

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 112.869 ms

Loss rate: 0.00%

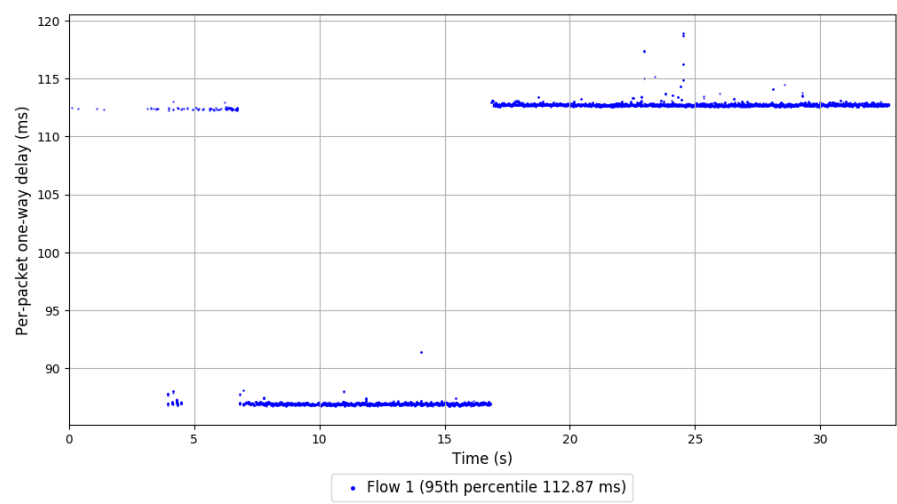
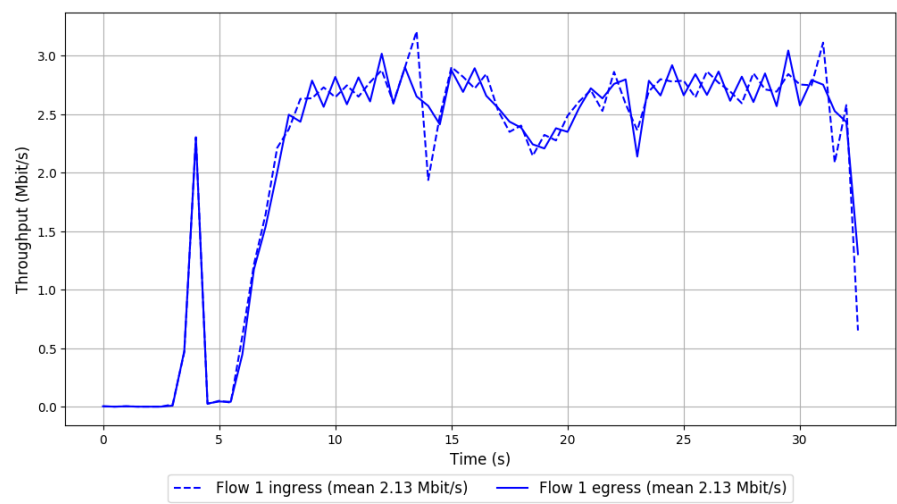
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 112.869 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-11 09:43:48

End at: 2017-12-11 09:44:18

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.580 ms

Loss rate: 0.01%

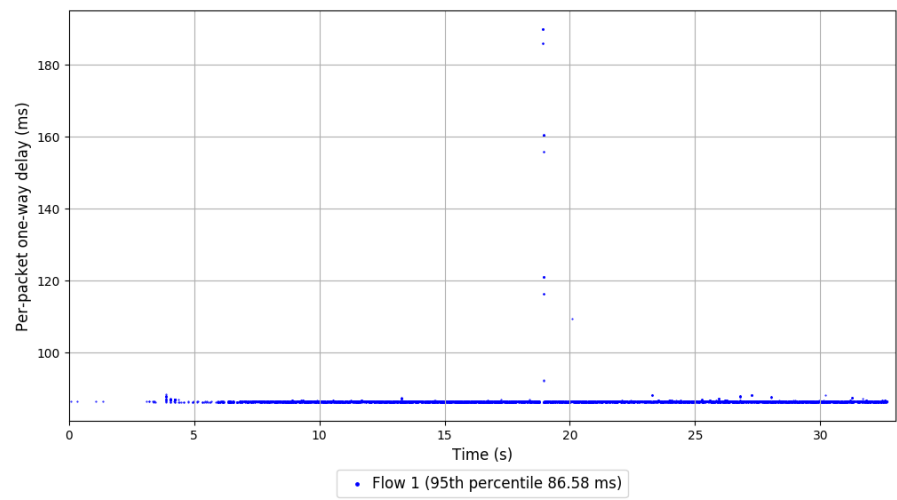
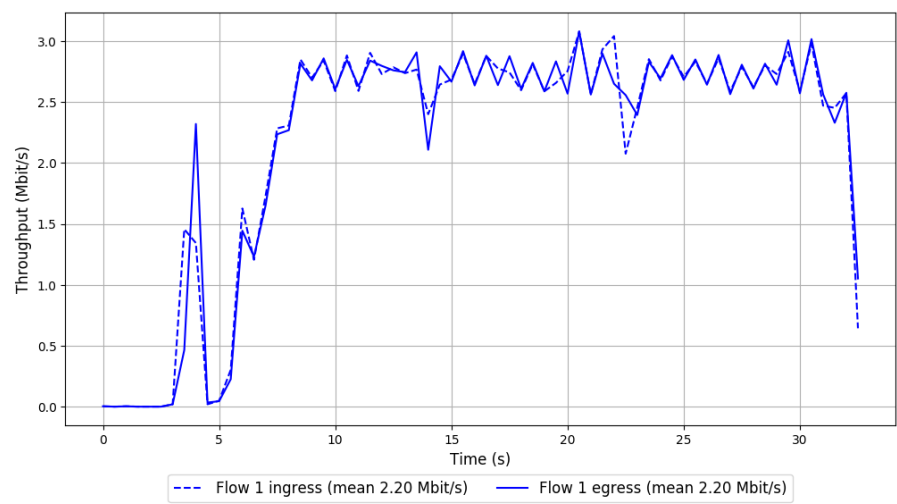
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.580 ms

Loss rate: 0.01%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-11 09:54:34

End at: 2017-12-11 09:55:04

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.944 ms

Loss rate: 0.00%

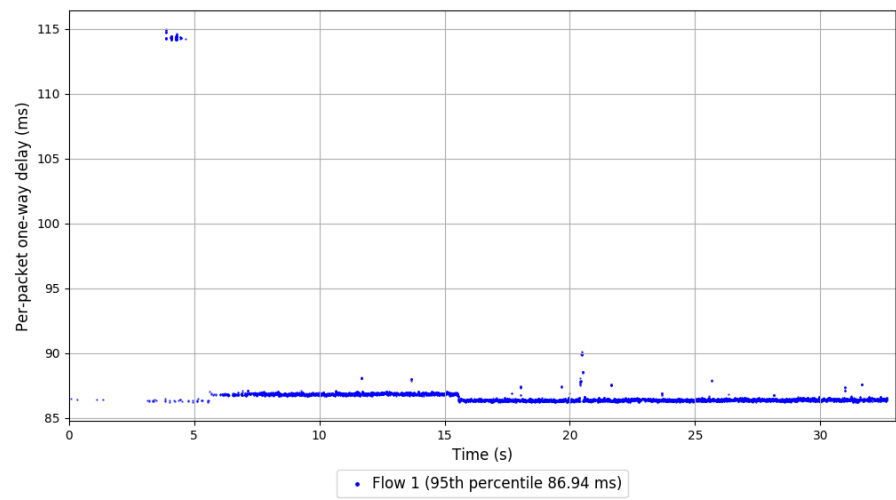
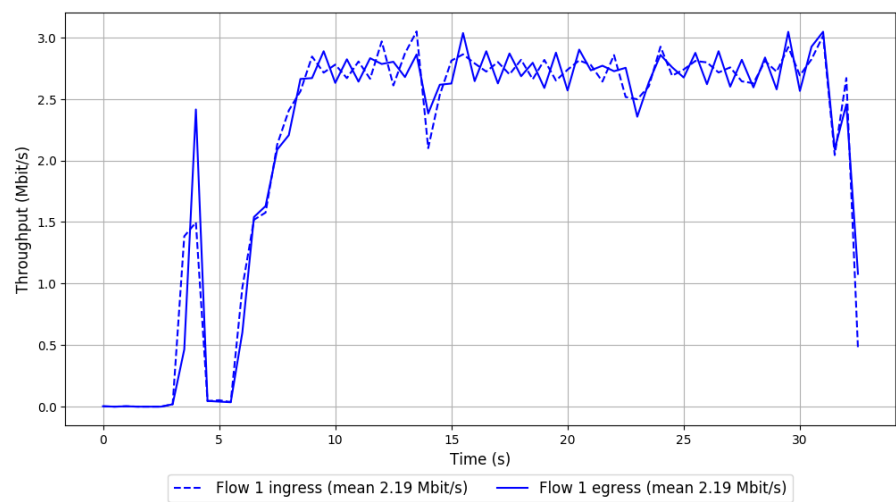
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.944 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-11 10:04:42

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

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 86.565 ms

Loss rate: 0.00%

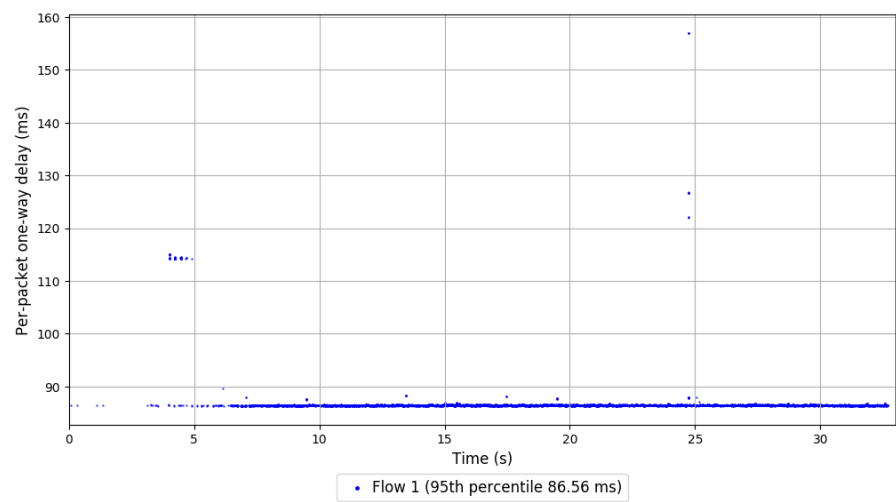
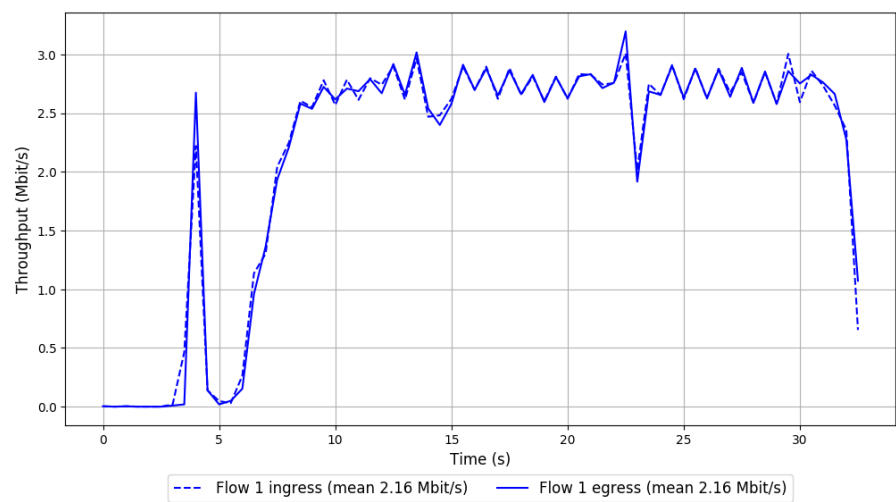
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 86.565 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-11 10:15:04

End at: 2017-12-11 10:15:34

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.972 ms

Loss rate: 0.00%

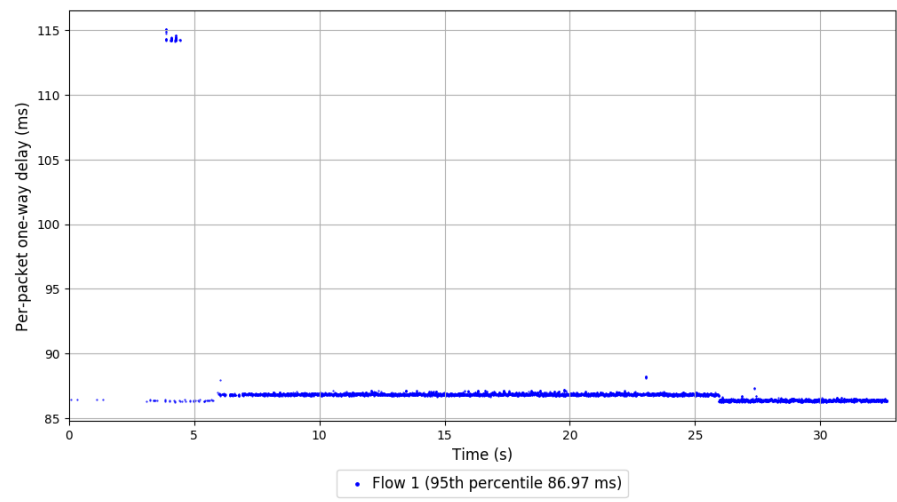
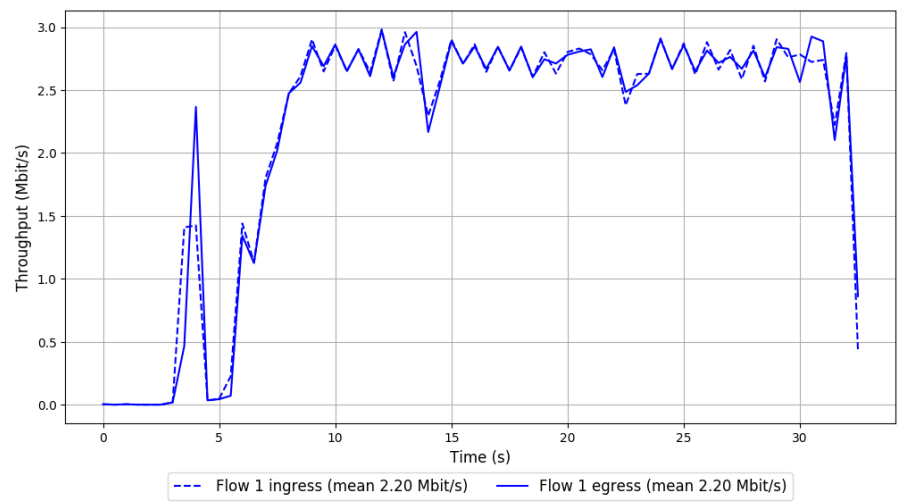
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.972 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-11 10:25:34

End at: 2017-12-11 10:26:04

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 87.005 ms

Loss rate: 0.00%

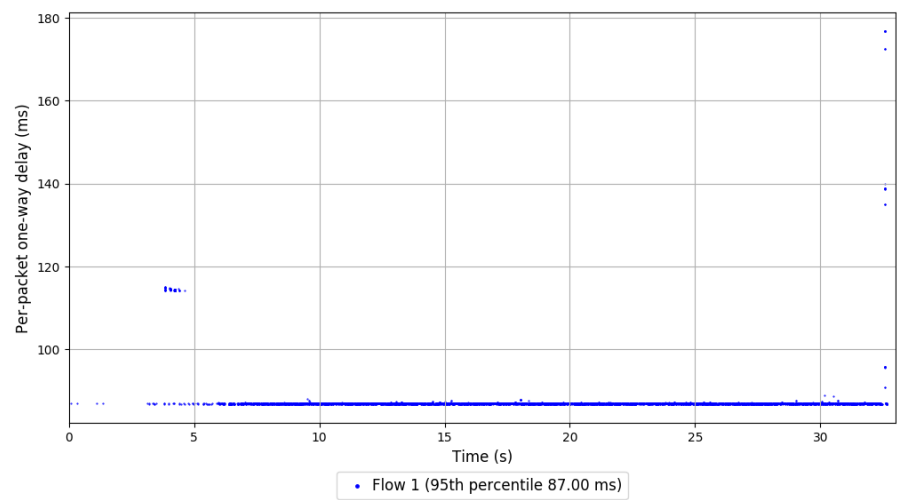
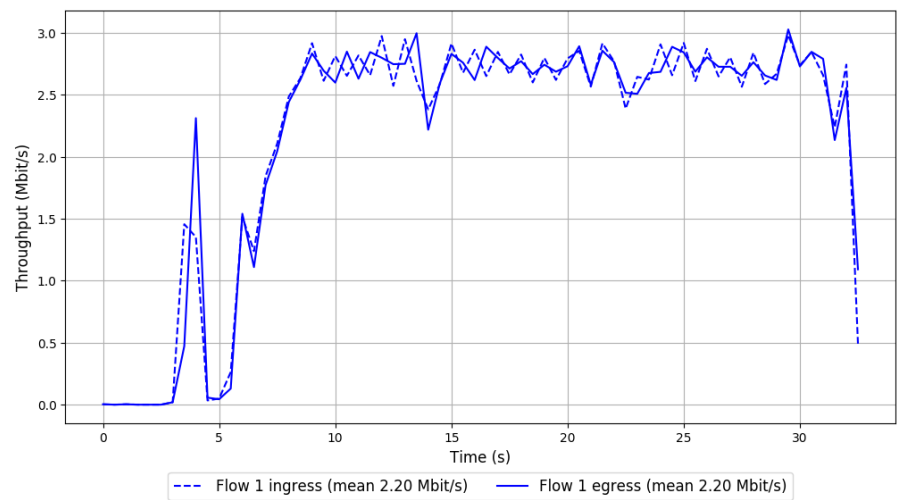
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 87.005 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-11 10:35:40

End at: 2017-12-11 10:36:10

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.387 ms

Loss rate: 0.08%

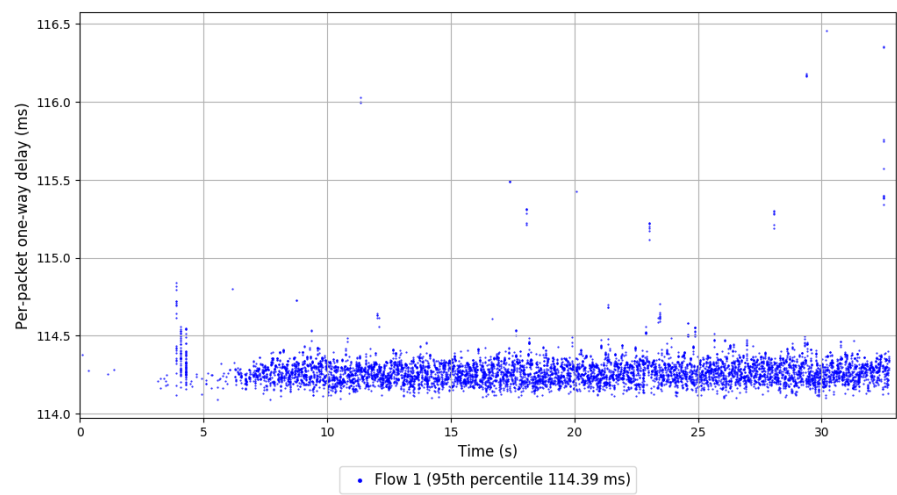
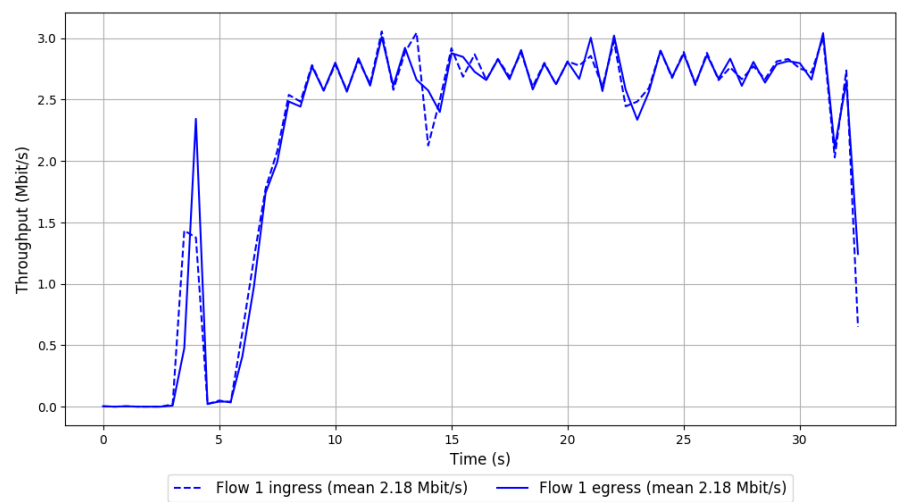
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.387 ms

Loss rate: 0.08%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

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

End at: 2017-12-11 10:46:41

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 114.241 ms

Loss rate: 0.08%

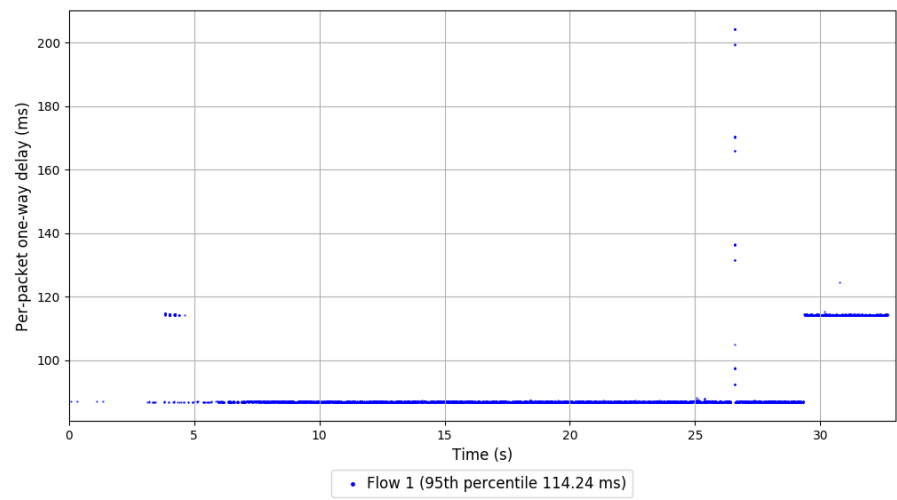
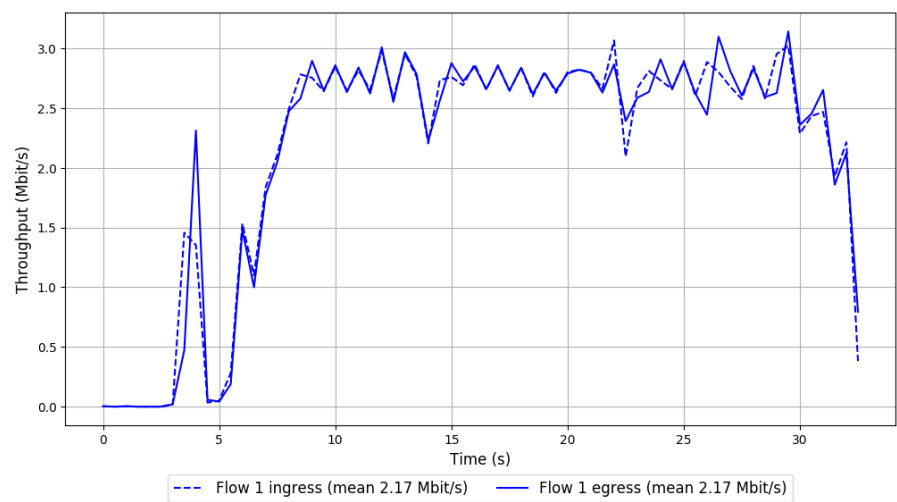
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 114.241 ms

Loss rate: 0.08%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-11 09:14:13

End at: 2017-12-11 09:14:43

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 114.600 ms

Loss rate: 0.22%

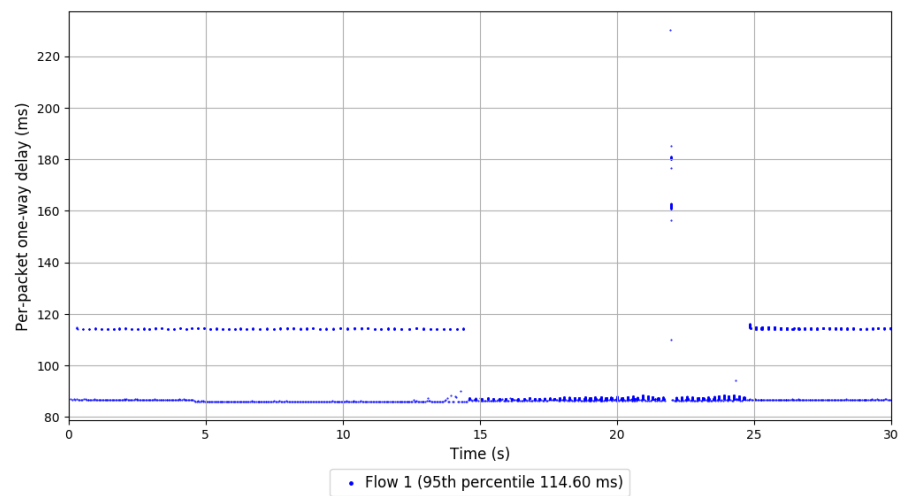
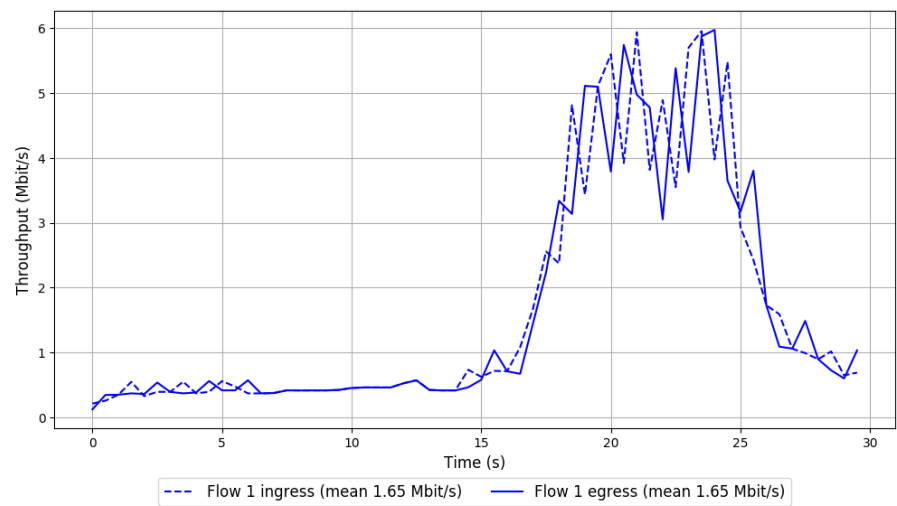
-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 114.600 ms

Loss rate: 0.22%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-11 09:24:29

End at: 2017-12-11 09:25:00

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 115.126 ms

Loss rate: 1.17%

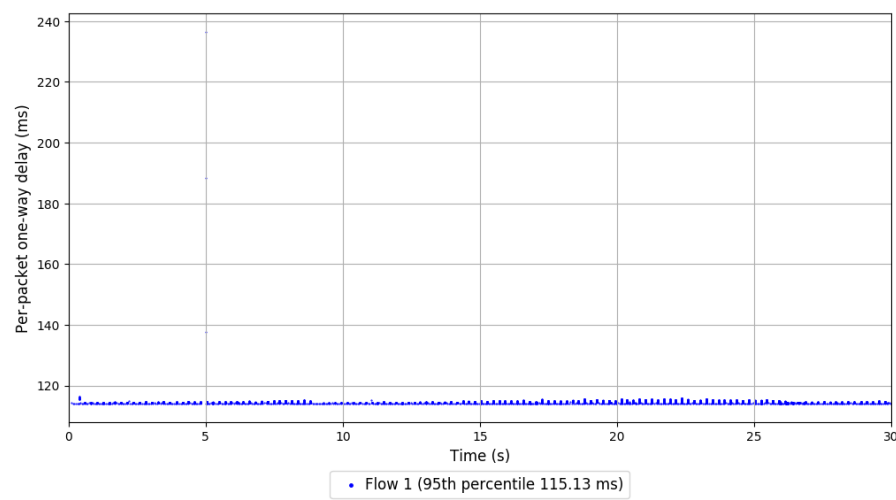
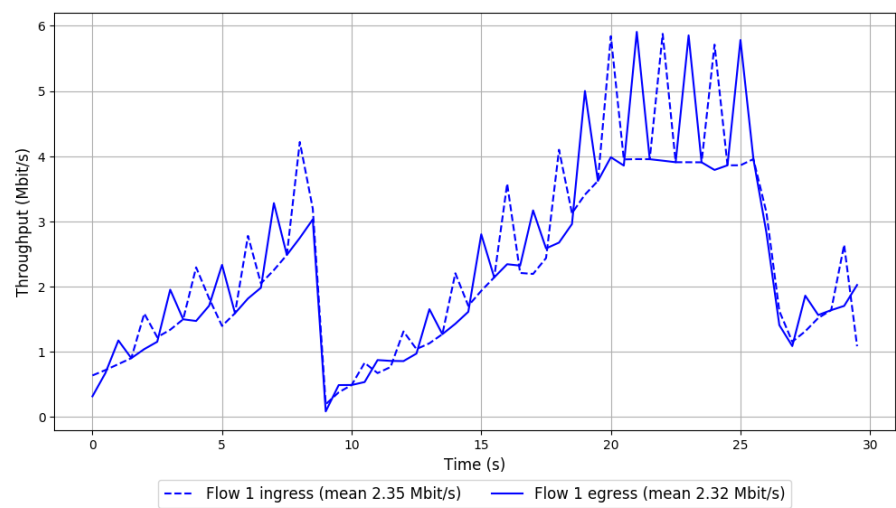
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 115.126 ms

Loss rate: 1.17%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-11 09:34:44

End at: 2017-12-11 09:35:14

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 114.650 ms

Loss rate: 0.00%

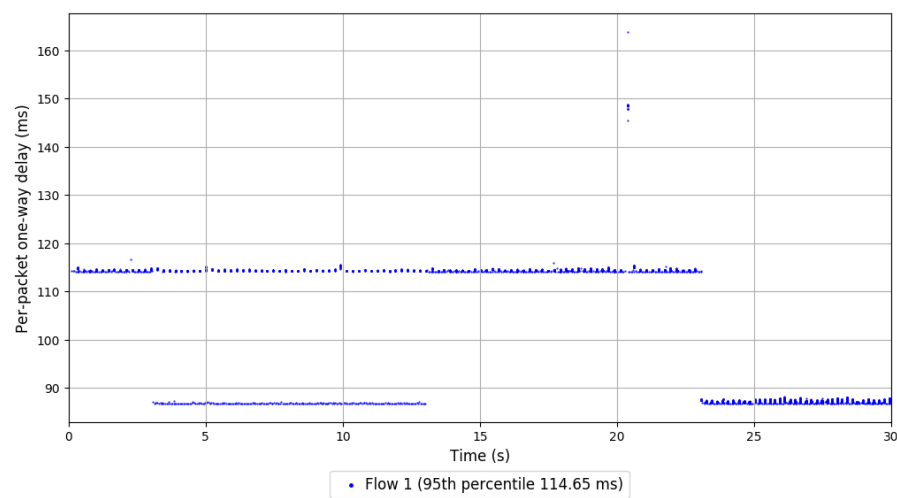
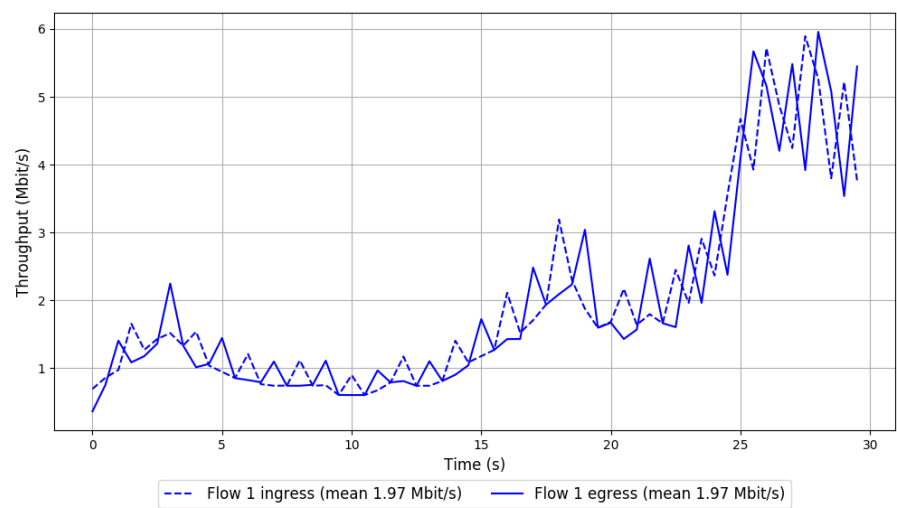
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 114.650 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-11 09:45:07

End at: 2017-12-11 09:45:37

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 114.572 ms

Loss rate: 0.00%

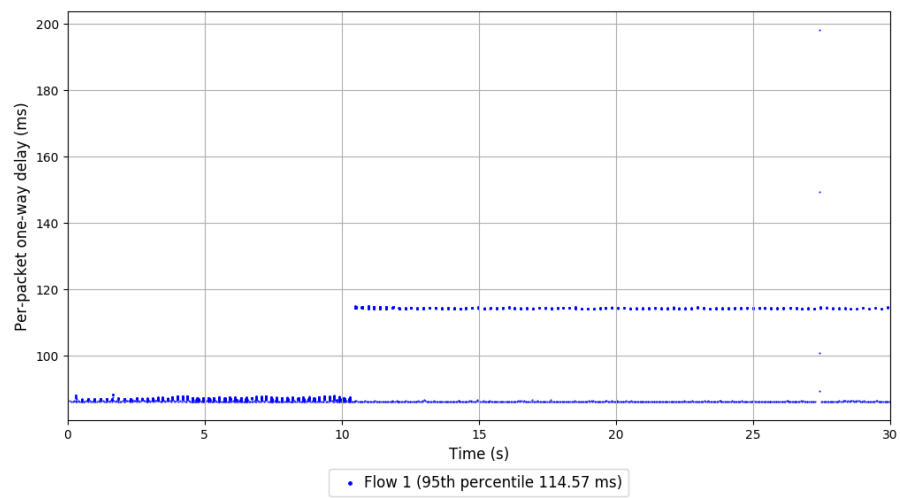
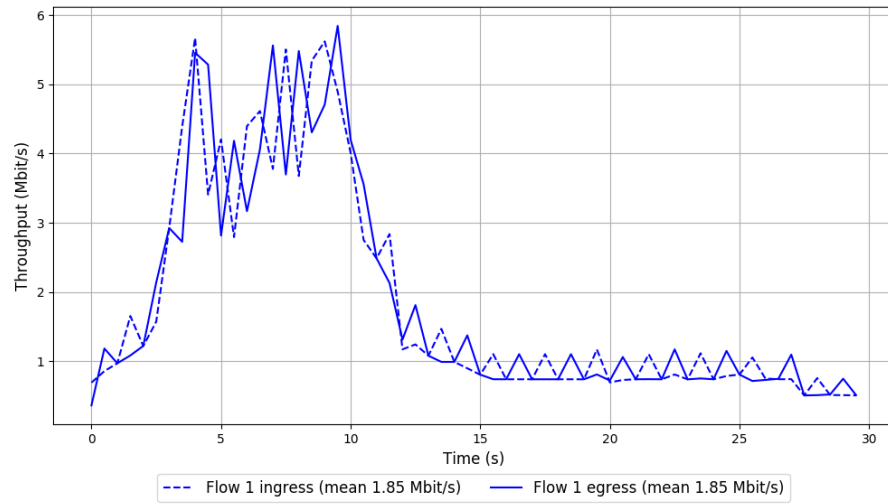
-- Flow 1:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 114.572 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-11 09:55:53

End at: 2017-12-11 09:56:23

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 87.956 ms

Loss rate: 0.00%

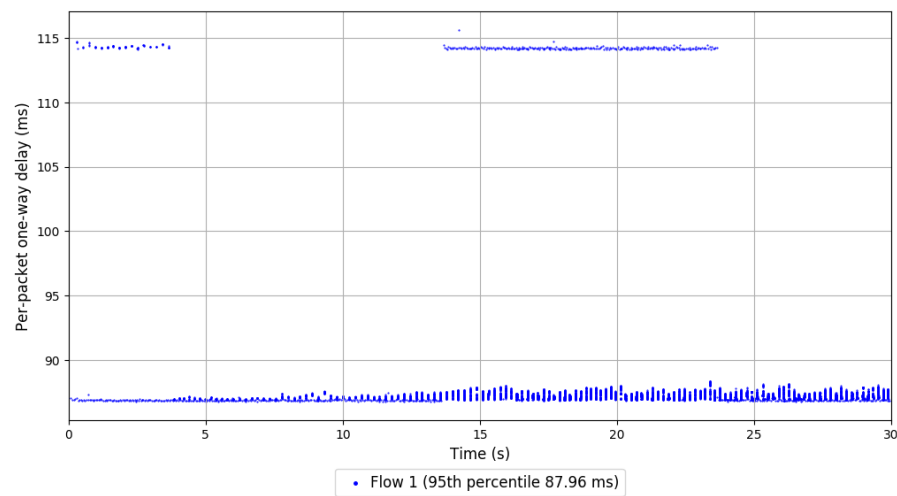
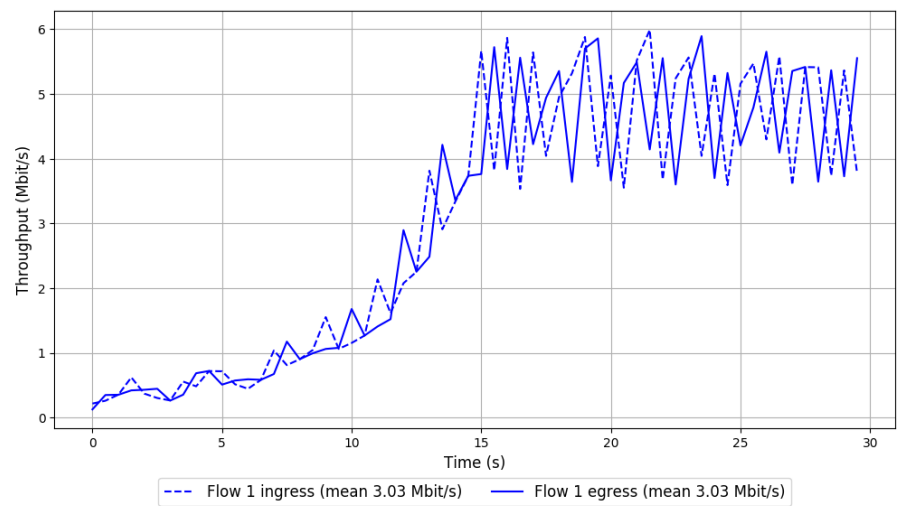
-- Flow 1:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 87.956 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-11 10:06:05

End at: 2017-12-11 10:06:35

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 115.057 ms

Loss rate: 0.02%

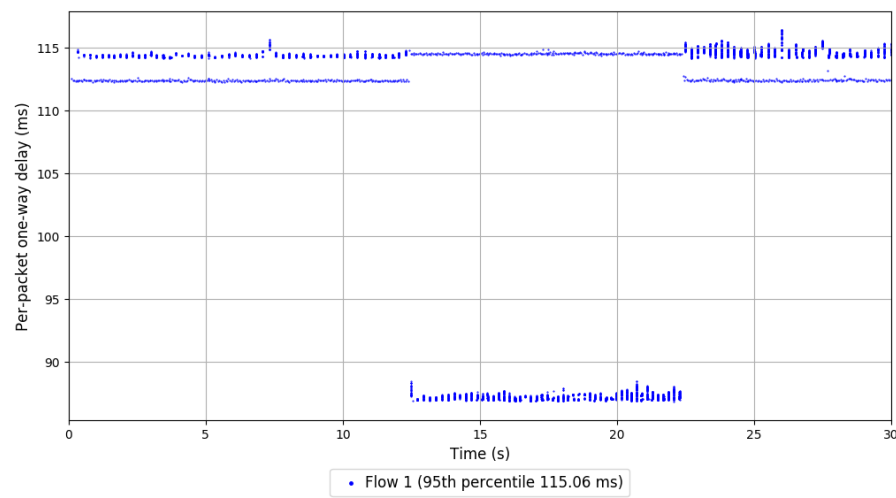
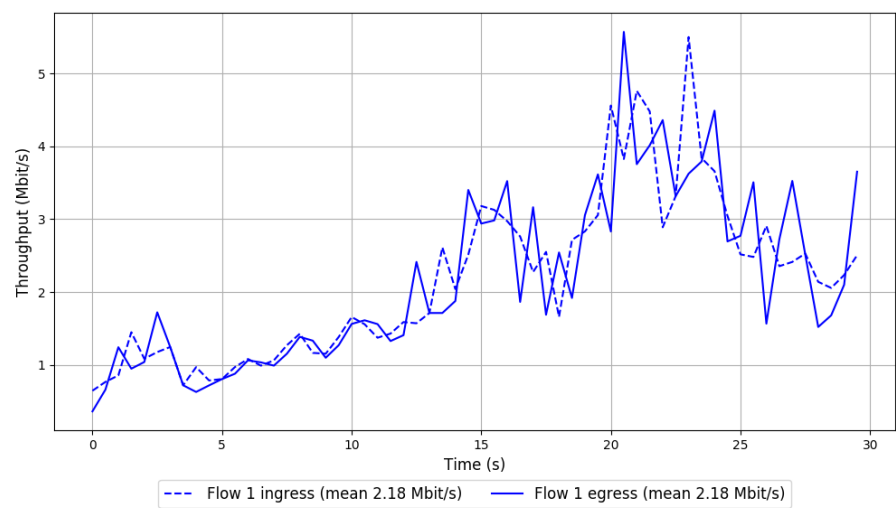
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 115.057 ms

Loss rate: 0.02%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-11 10:16:26

End at: 2017-12-11 10:16:56

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 114.855 ms

Loss rate: 0.00%

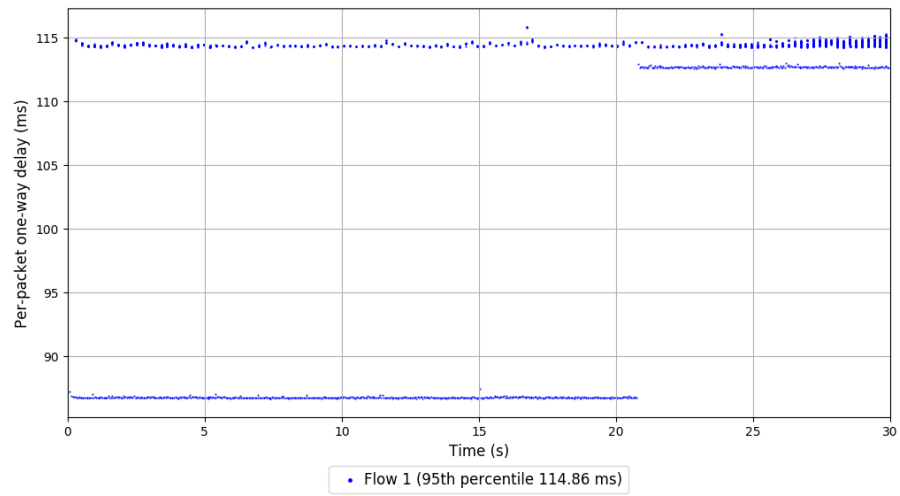
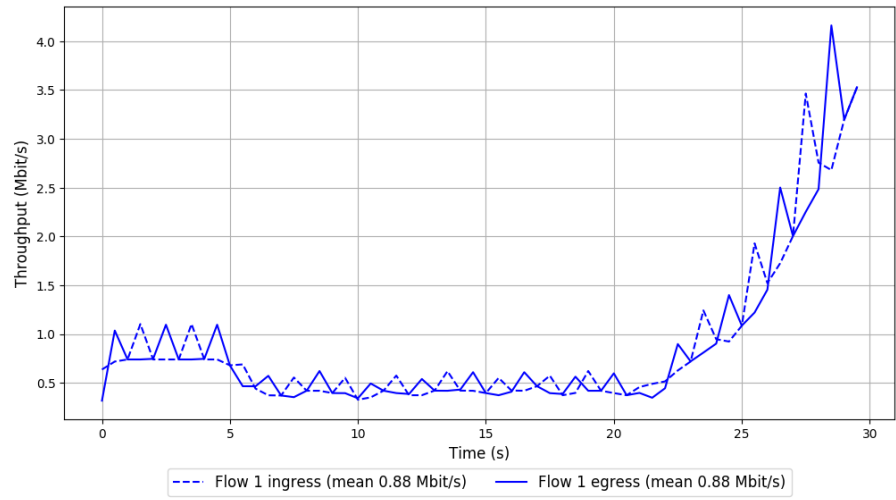
-- Flow 1:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 114.855 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-11 10:26:55

End at: 2017-12-11 10:27:25

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 114.616 ms

Loss rate: 0.01%

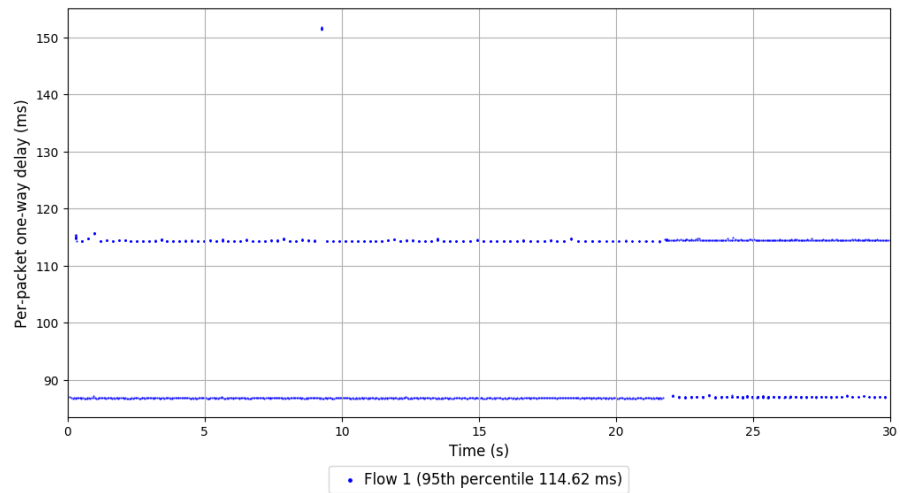
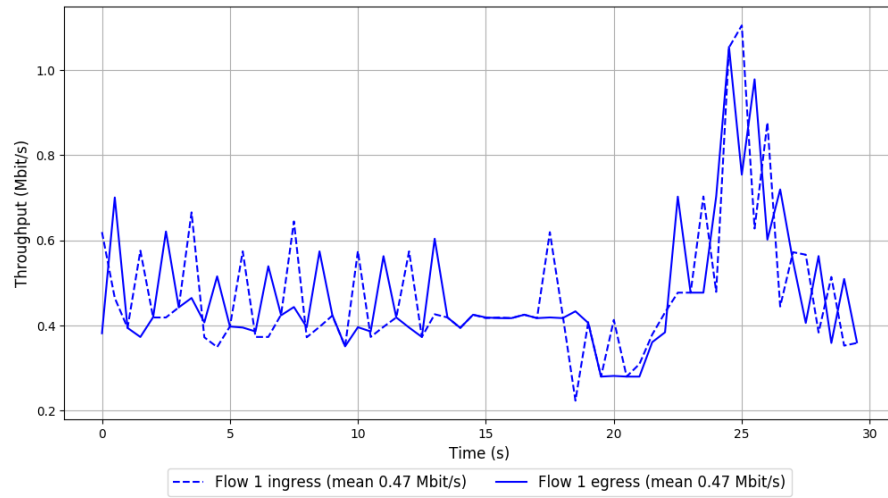
-- Flow 1:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 114.616 ms

Loss rate: 0.01%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-11 10:37:03

End at: 2017-12-11 10:37:33

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 114.620 ms

Loss rate: 0.00%

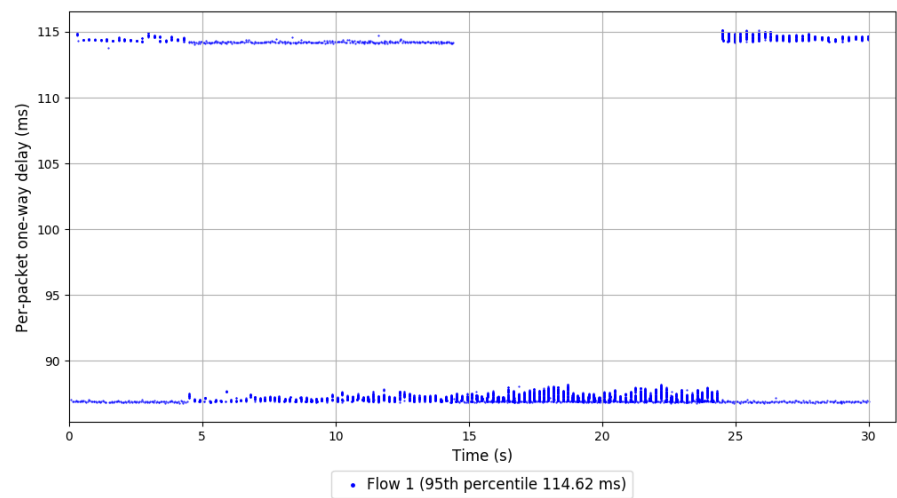
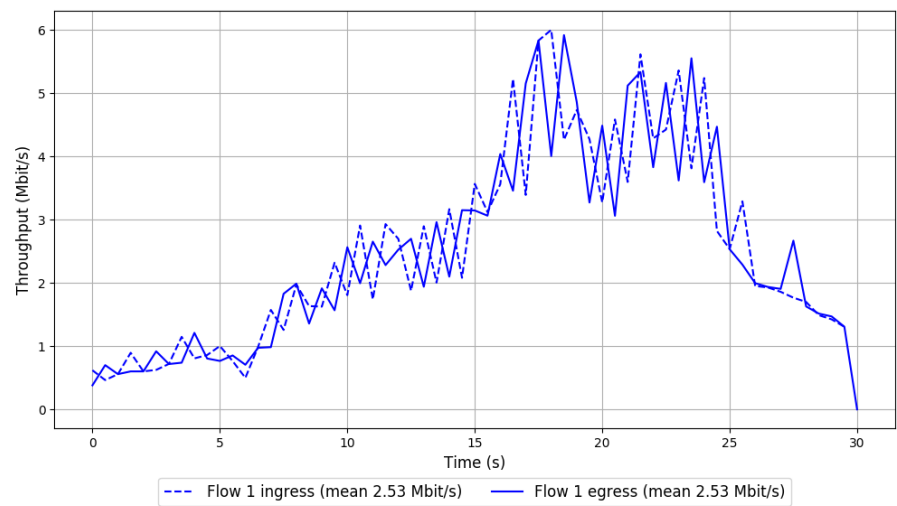
-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 114.620 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-11 10:47:32

End at: 2017-12-11 10:48:02

Below is generated by plot.py at 2017-12-11 11:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 115.108 ms

Loss rate: 0.00%

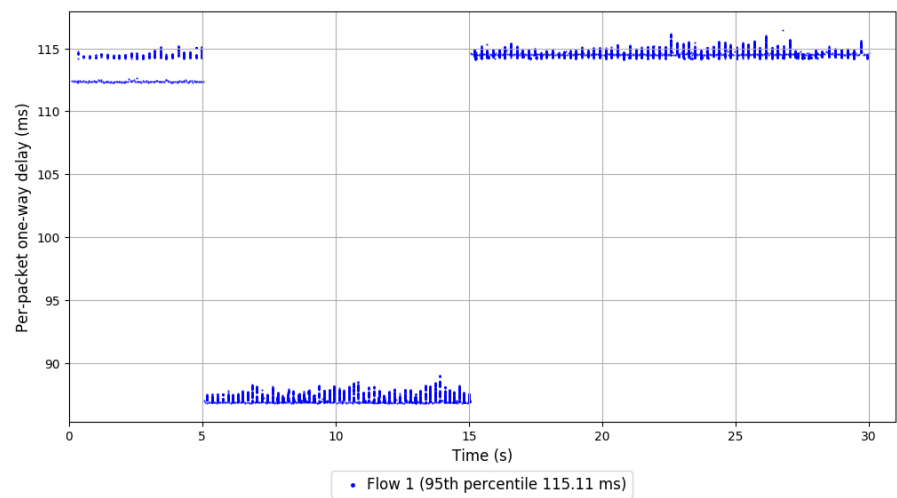
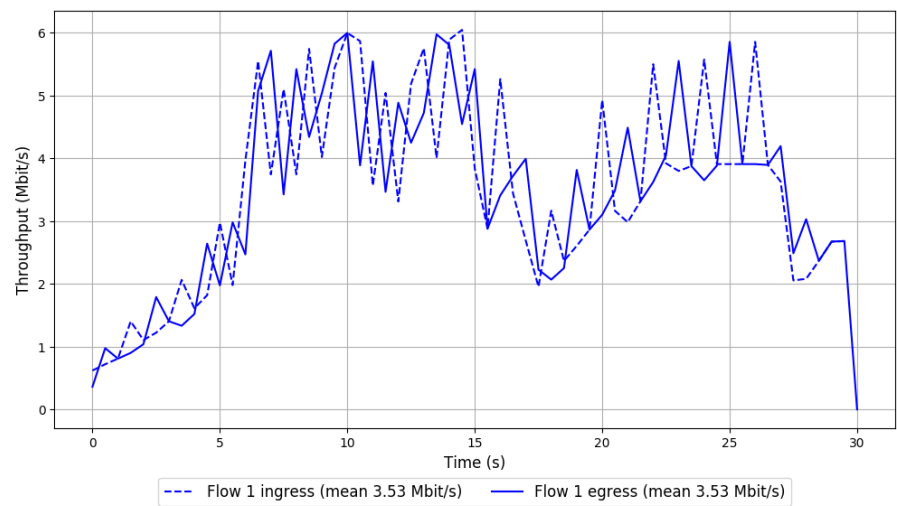
-- Flow 1:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 115.108 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

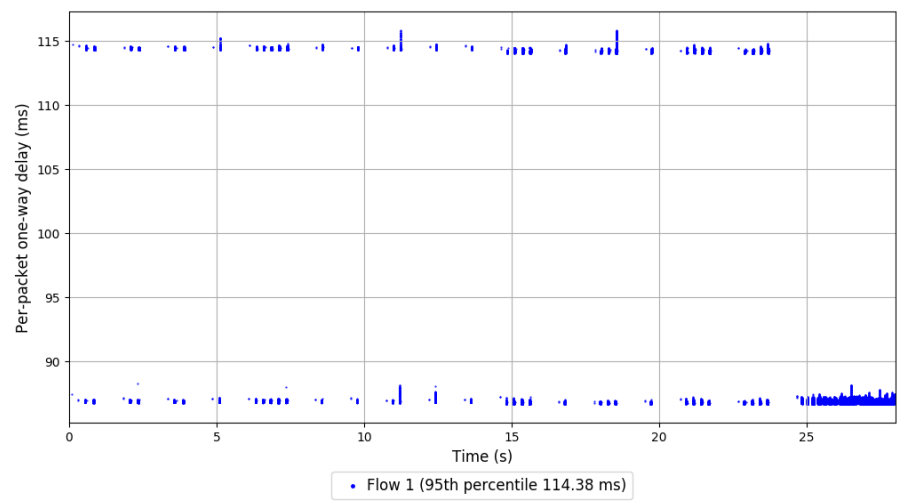
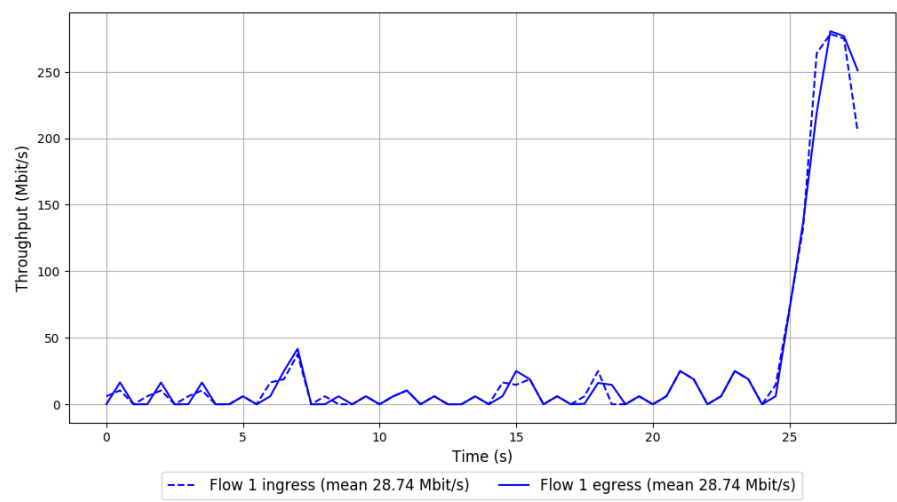


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-11 09:10:21
End at: 2017-12-11 09:10:51

# Below is generated by plot.py at 2017-12-11 11:48:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.74 Mbit/s
95th percentile per-packet one-way delay: 114.384 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.74 Mbit/s
95th percentile per-packet one-way delay: 114.384 ms
Loss rate: 0.00%
```


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

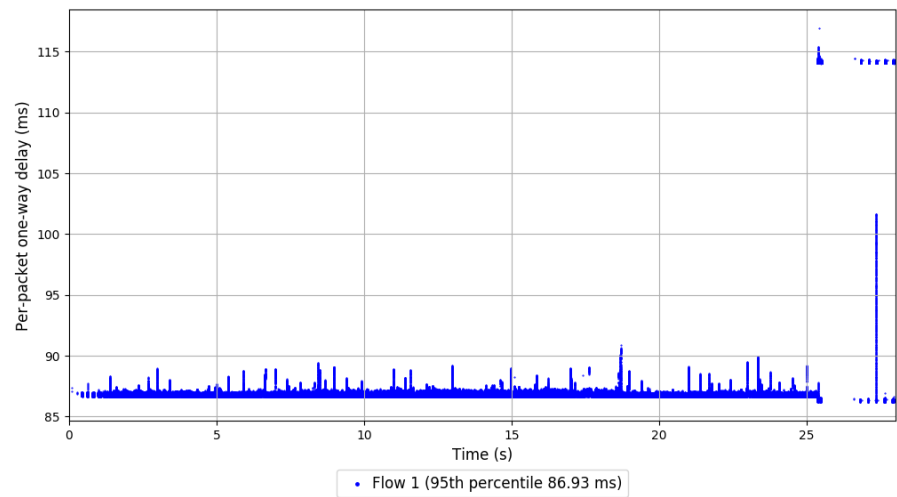
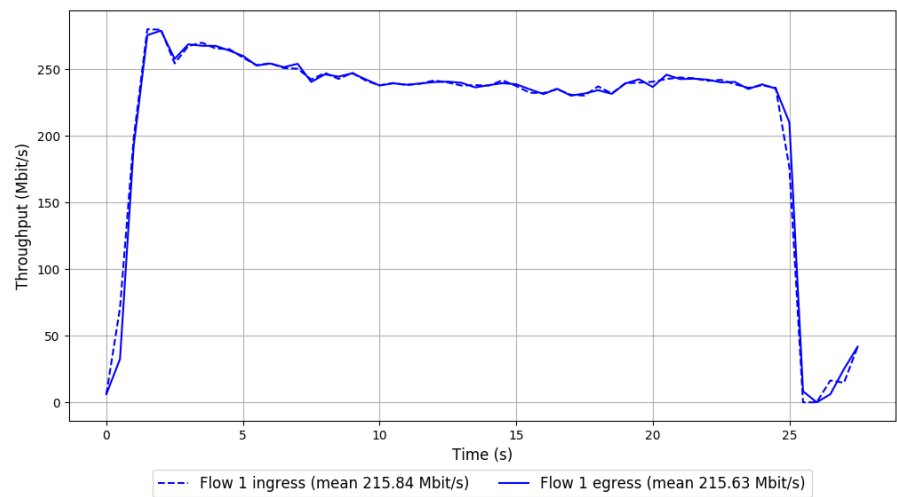


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-11 09:20:30
End at: 2017-12-11 09:21:00

# Below is generated by plot.py at 2017-12-11 11:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.63 Mbit/s
95th percentile per-packet one-way delay: 86.932 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 215.63 Mbit/s
95th percentile per-packet one-way delay: 86.932 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-11 09:30:49

End at: 2017-12-11 09:31:19

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.20 Mbit/s

95th percentile per-packet one-way delay: 114.306 ms

Loss rate: 0.00%

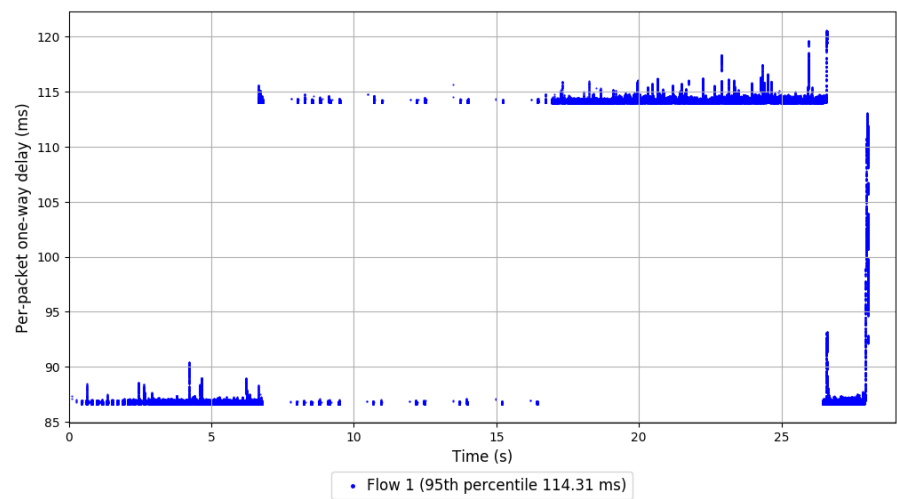
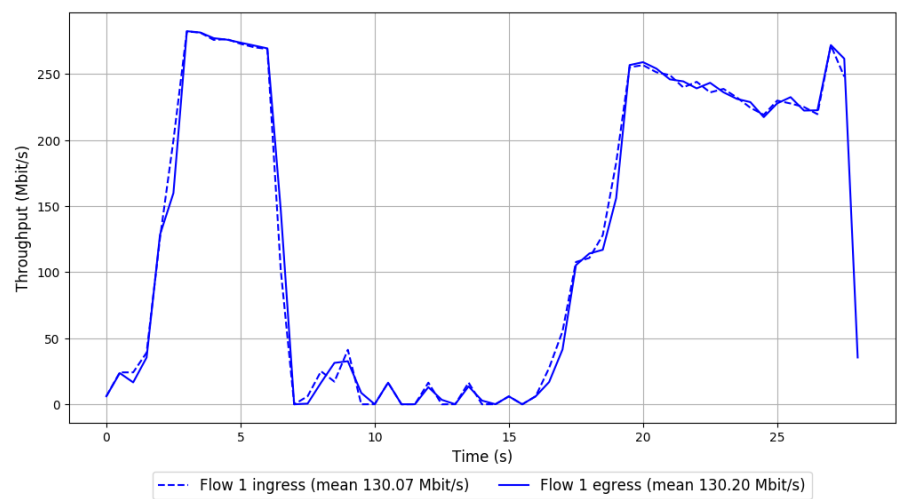
-- Flow 1:

Average throughput: 130.20 Mbit/s

95th percentile per-packet one-way delay: 114.306 ms

Loss rate: 0.00%

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

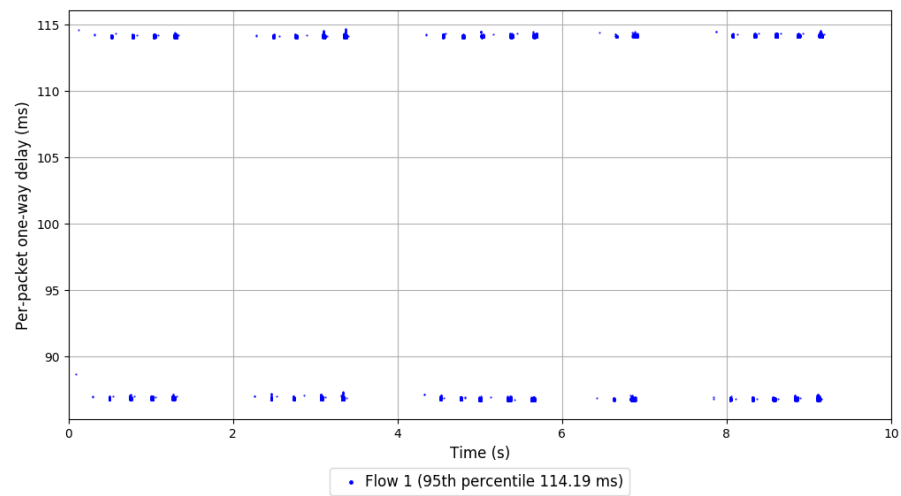
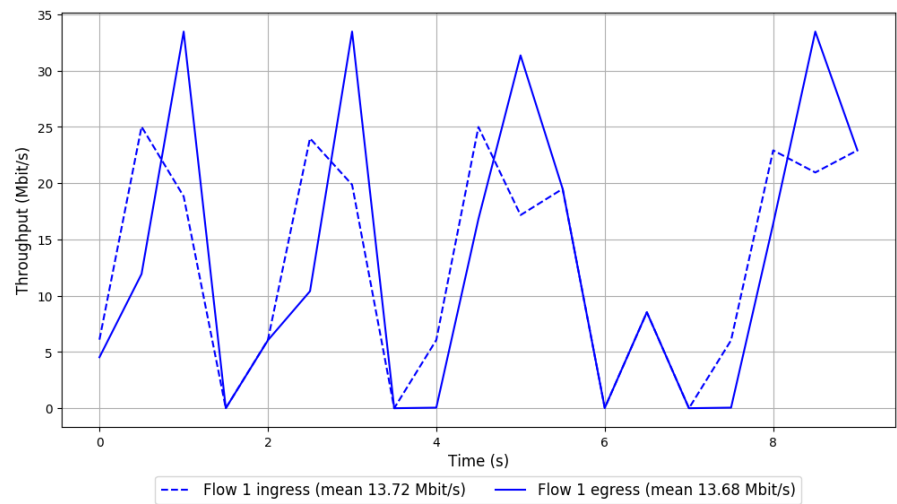


Run 4: Statistics of TaoVA-100x

Start at: 2017-12-11 09:41:30

End at: 2017-12-11 09:42:00

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-11 09:51:54

End at: 2017-12-11 09:52:24

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 162.30 Mbit/s

95th percentile per-packet one-way delay: 114.438 ms

Loss rate: 0.04%

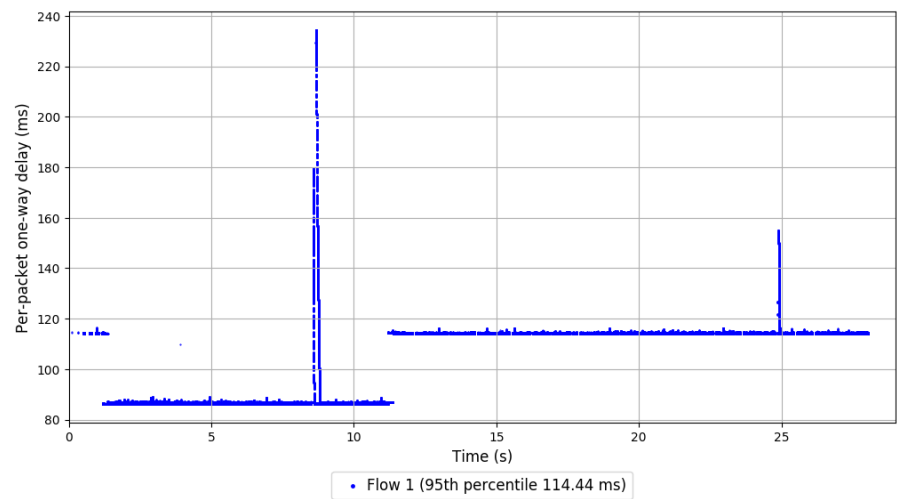
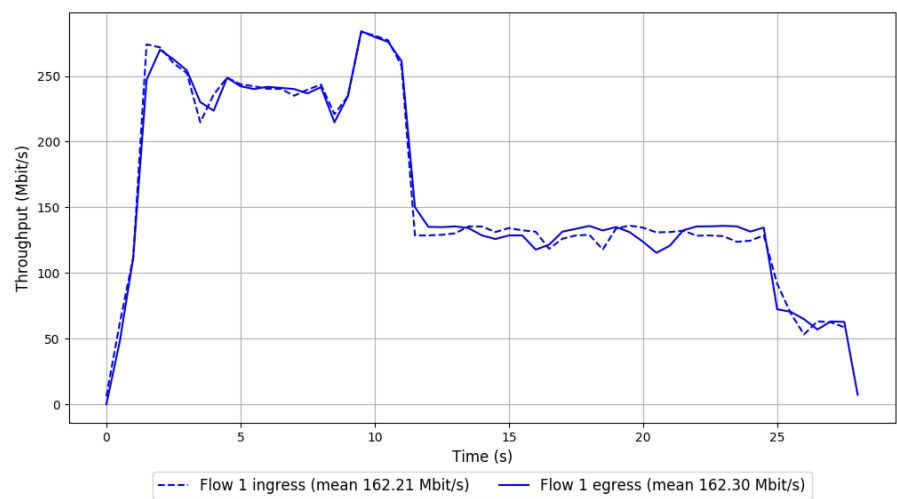
-- Flow 1:

Average throughput: 162.30 Mbit/s

95th percentile per-packet one-way delay: 114.438 ms

Loss rate: 0.04%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-11 10:02:16

End at: 2017-12-11 10:02:46

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.34 Mbit/s

95th percentile per-packet one-way delay: 114.278 ms

Loss rate: 0.00%

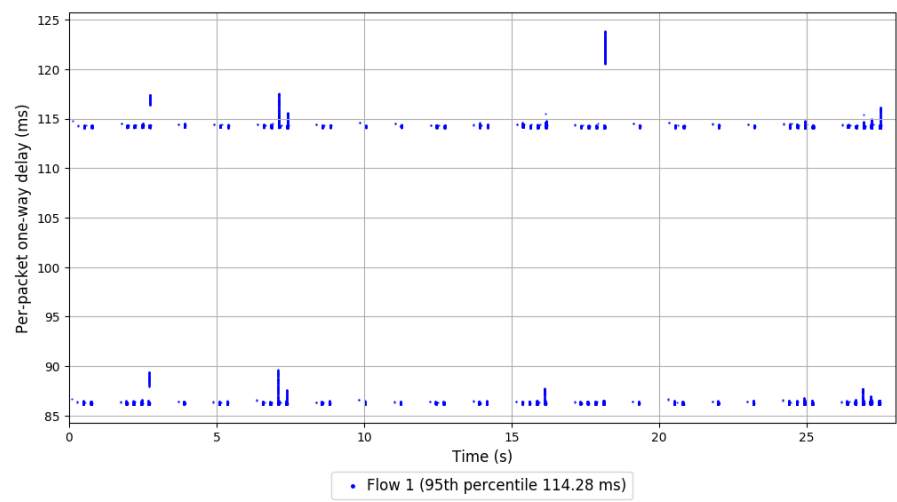
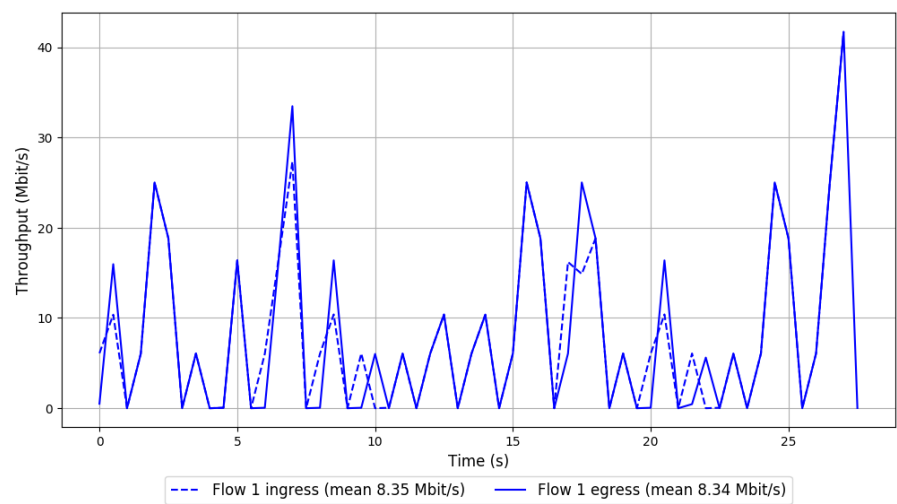
-- Flow 1:

Average throughput: 8.34 Mbit/s

95th percentile per-packet one-way delay: 114.278 ms

Loss rate: 0.00%

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

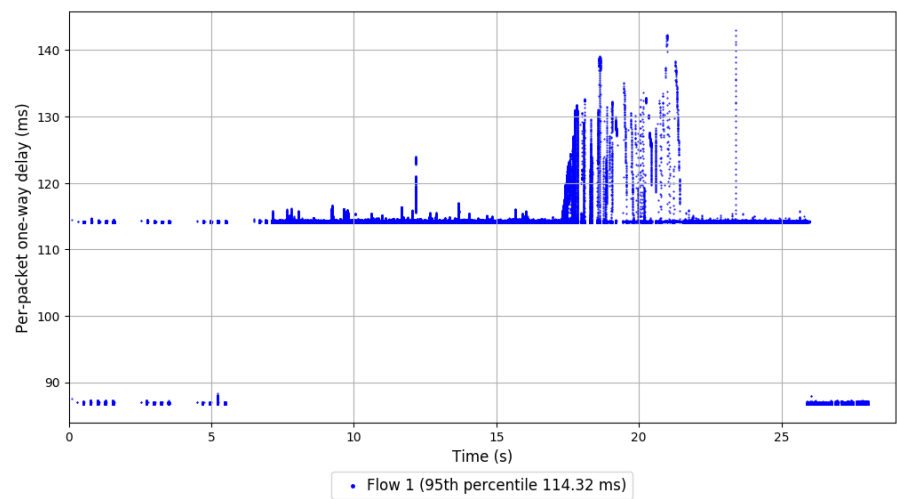
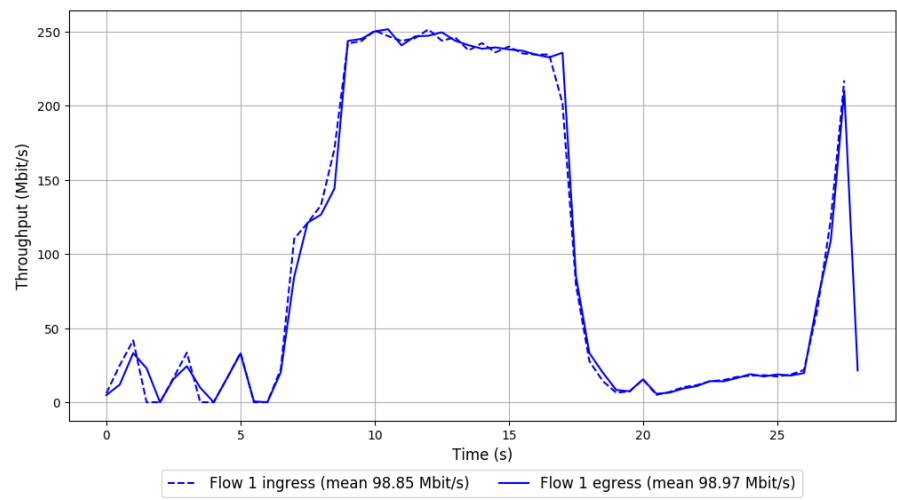


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-12-11 10:12:39
End at: 2017-12-11 10:13:09

# Below is generated by plot.py at 2017-12-11 11:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 98.97 Mbit/s
95th percentile per-packet one-way delay: 114.323 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 98.97 Mbit/s
95th percentile per-packet one-way delay: 114.323 ms
Loss rate: 0.00%
```

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

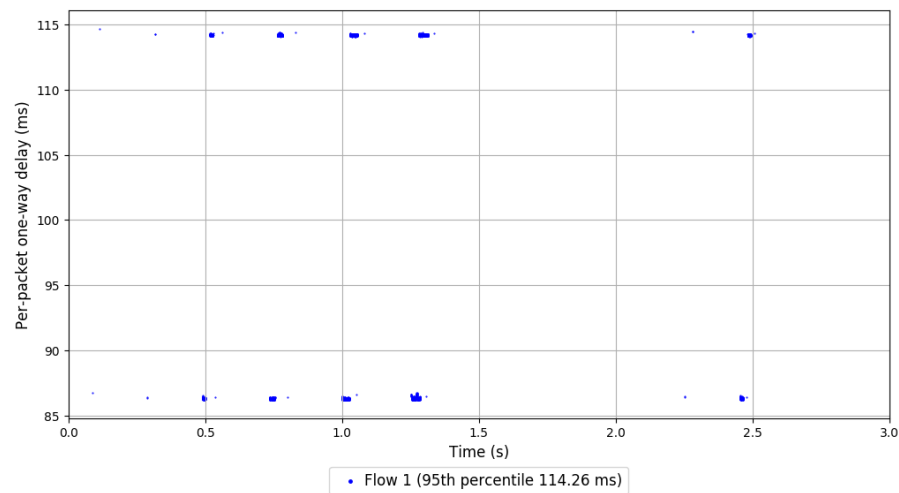
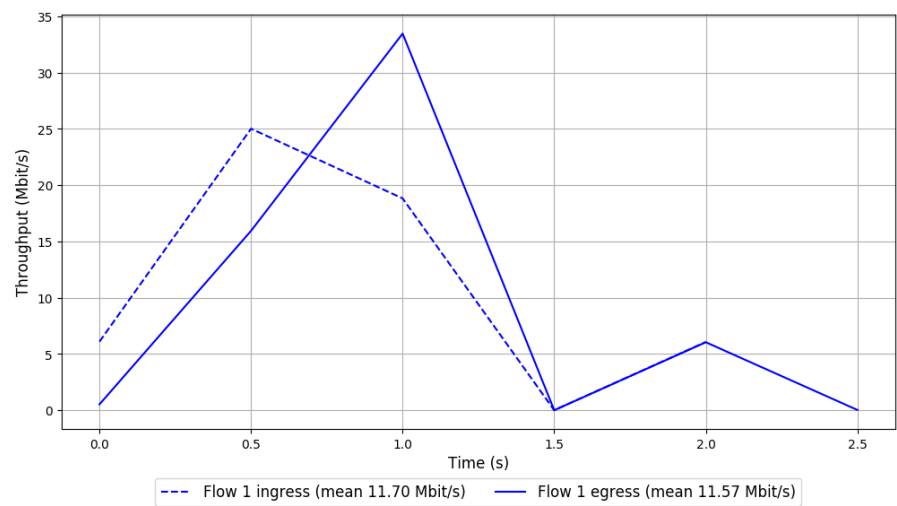


Run 8: Statistics of TaoVA-100x

Start at: 2017-12-11 10:23:19

End at: 2017-12-11 10:23:49

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

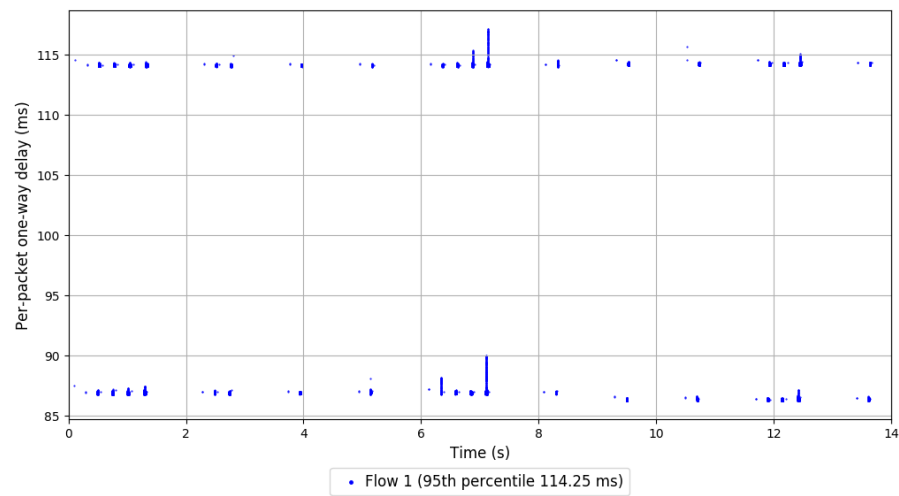
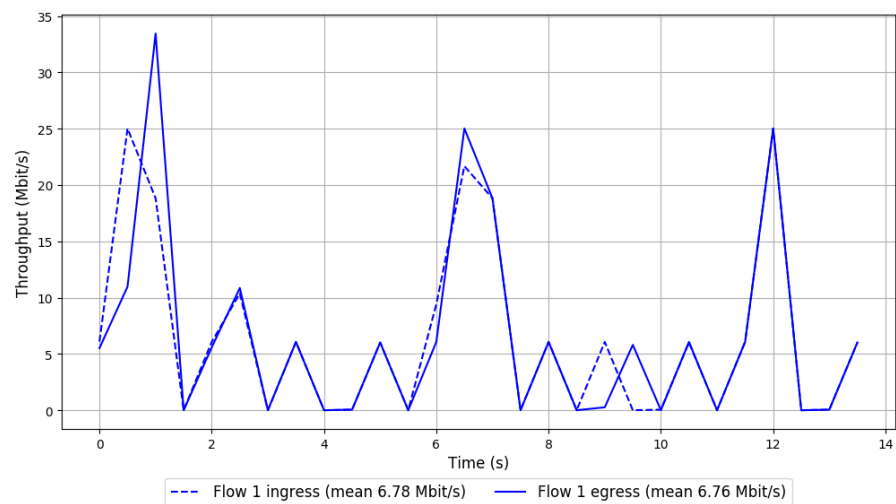


Run 9: Statistics of TaoVA-100x

Start at: 2017-12-11 10:33:16

End at: 2017-12-11 10:33:46

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

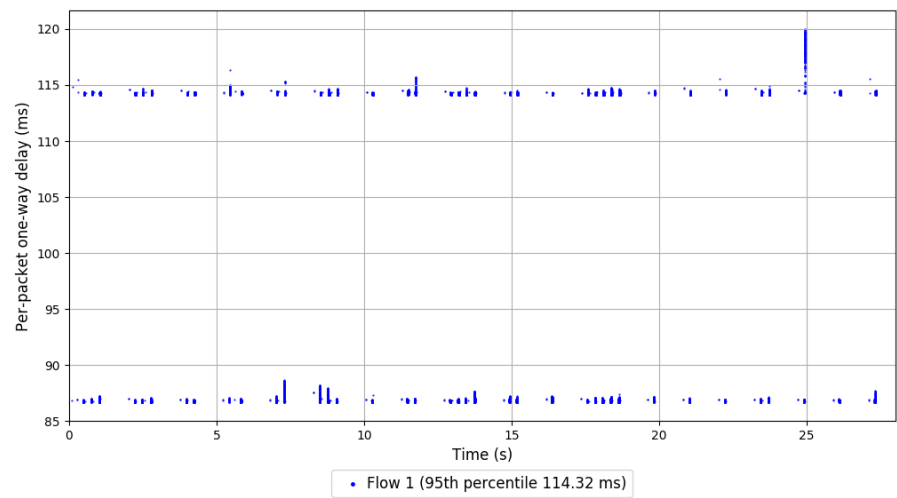
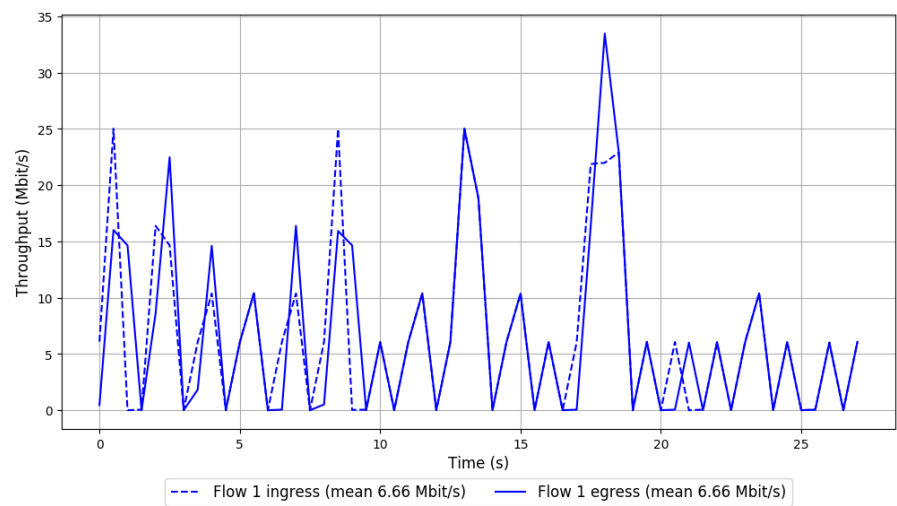


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-11 10:43:46
End at: 2017-12-11 10:44:16

# Below is generated by plot.py at 2017-12-11 11:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 114.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 114.319 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-11 09:13:32

End at: 2017-12-11 09:14:02

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 114.351 ms

Loss rate: 0.00%

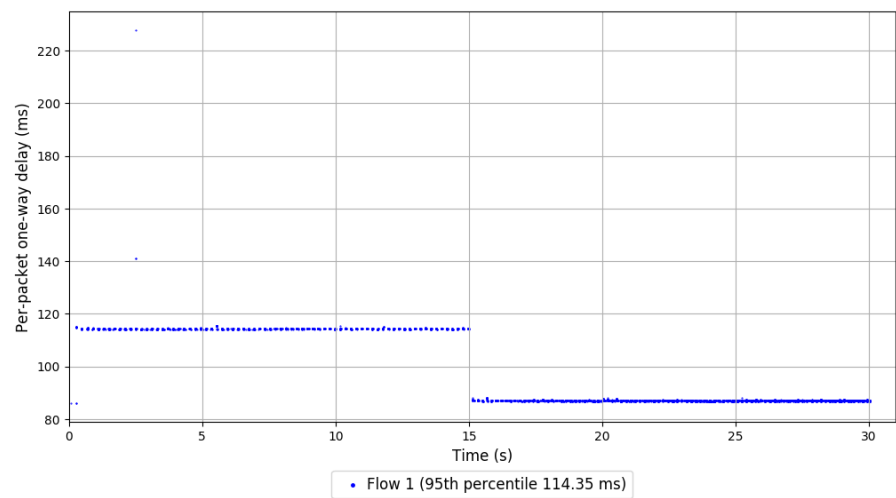
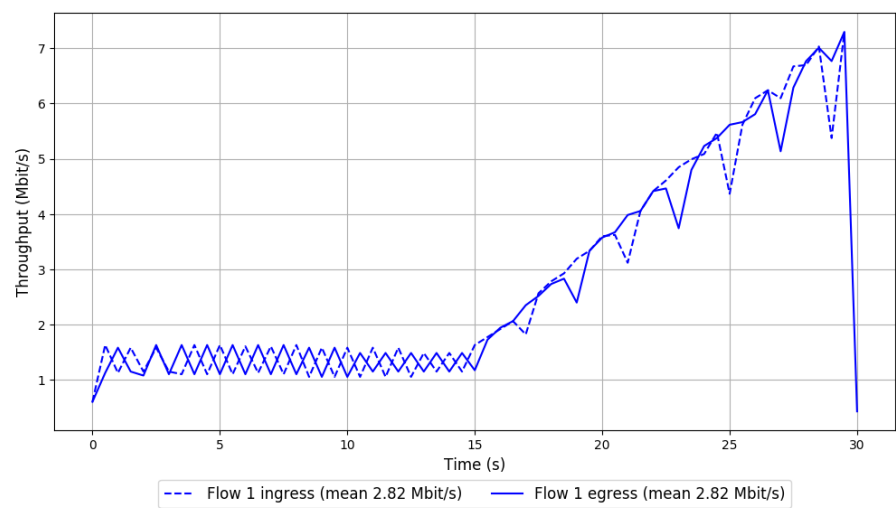
-- Flow 1:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 114.351 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link

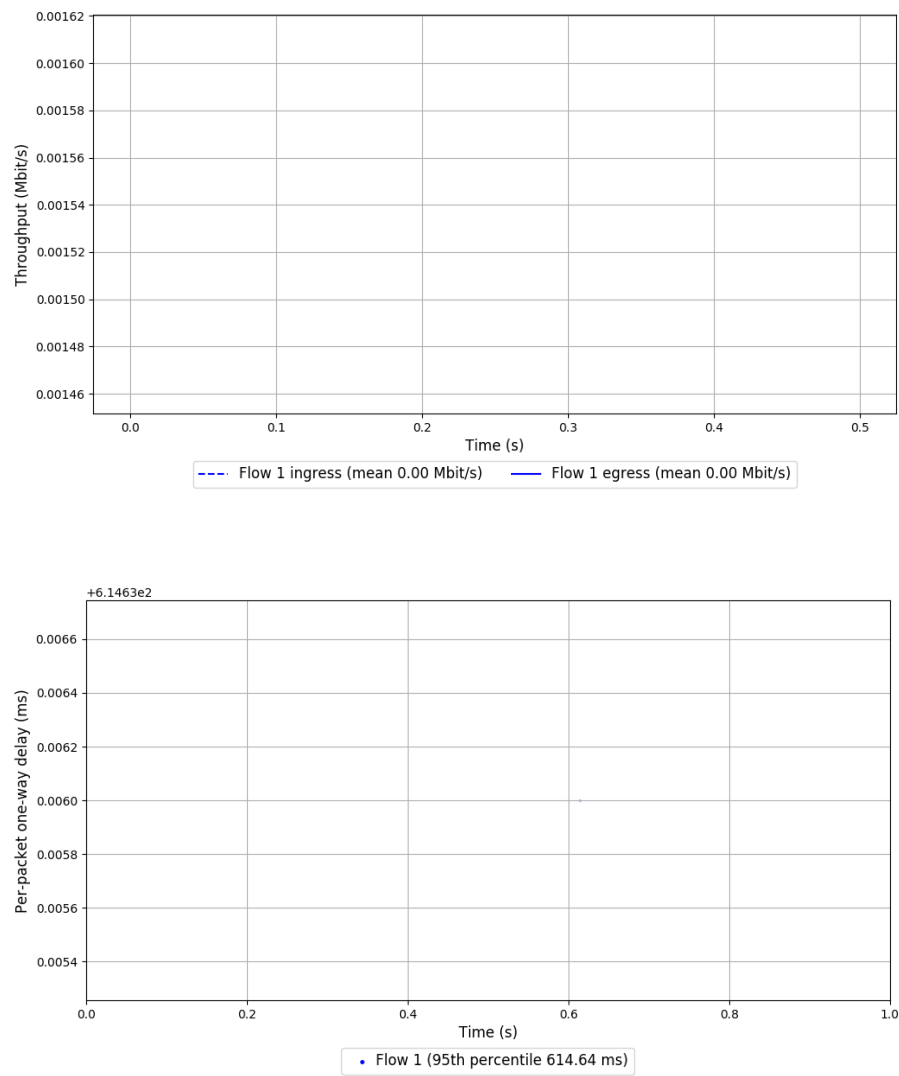


Run 2: Statistics of TCP Vegas

Start at: 2017-12-11 09:23:51

End at: 2017-12-11 09:24:21

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-11 09:34:03

End at: 2017-12-11 09:34:33

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 114.450 ms

Loss rate: 0.00%

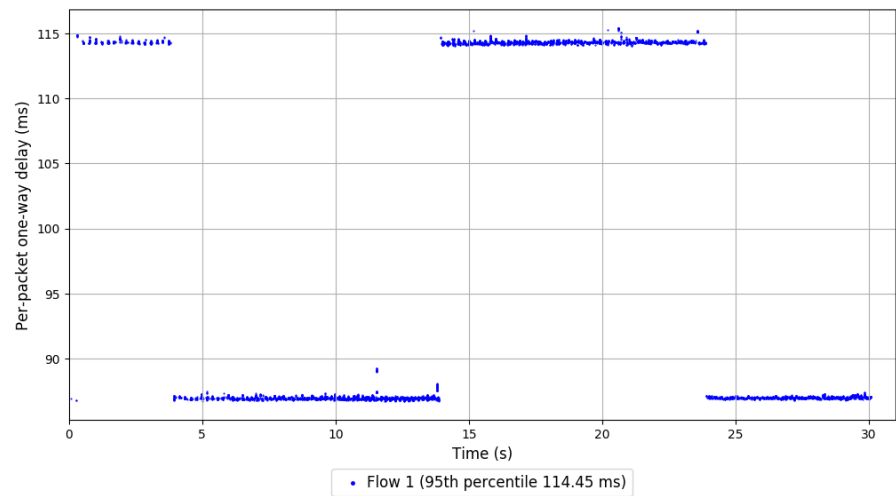
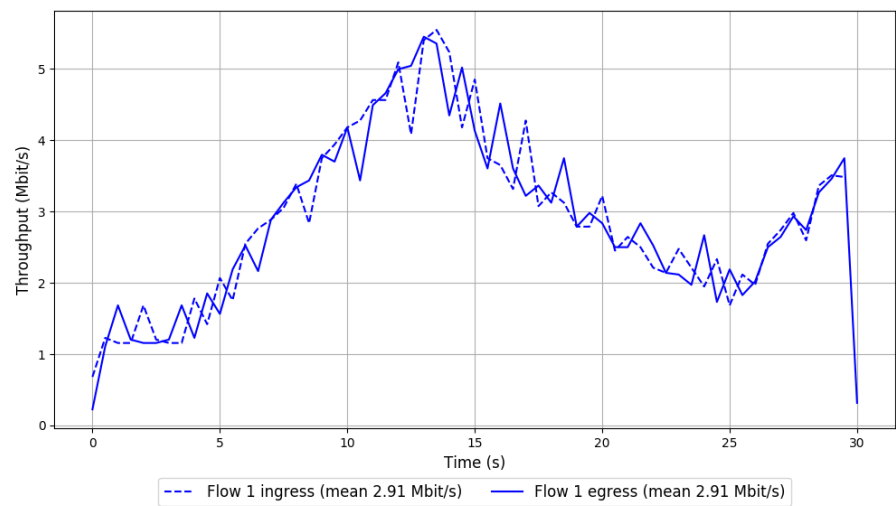
-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 114.450 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-11 09:44:28

End at: 2017-12-11 09:44:58

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 114.485 ms

Loss rate: 0.00%

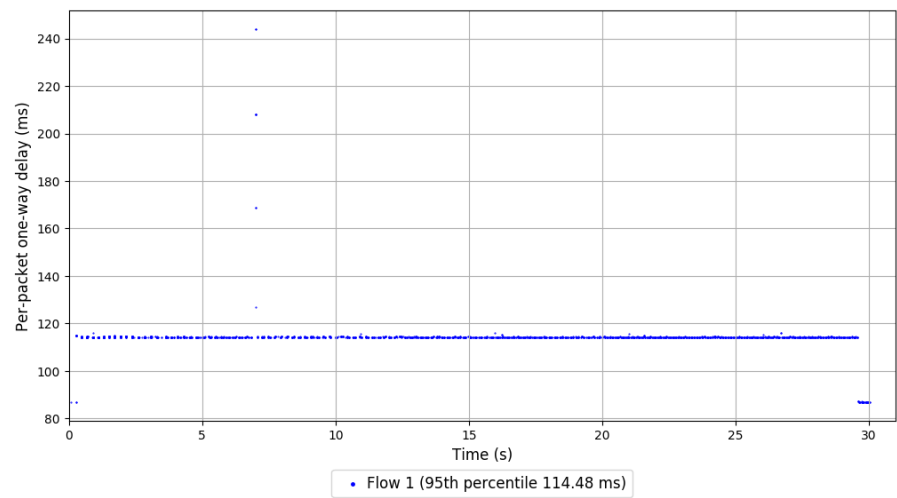
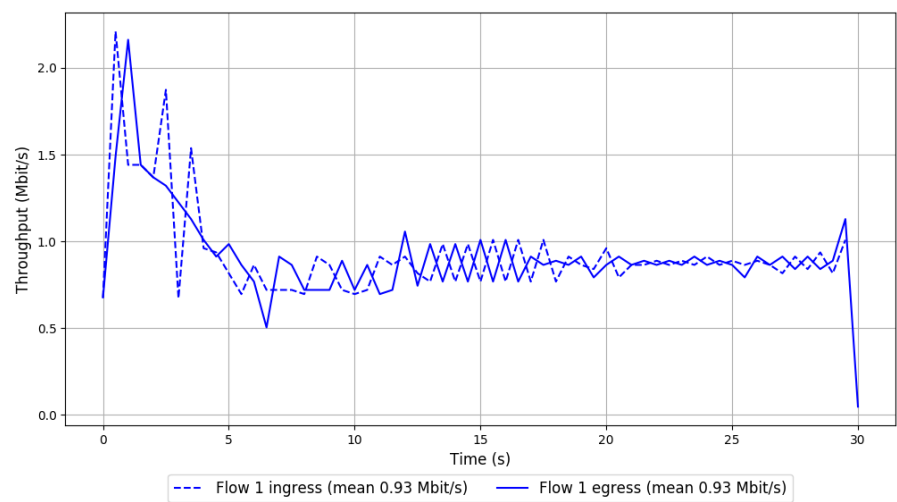
-- Flow 1:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 114.485 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-11 09:55:14

End at: 2017-12-11 09:55:44

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 114.642 ms

Loss rate: 0.00%

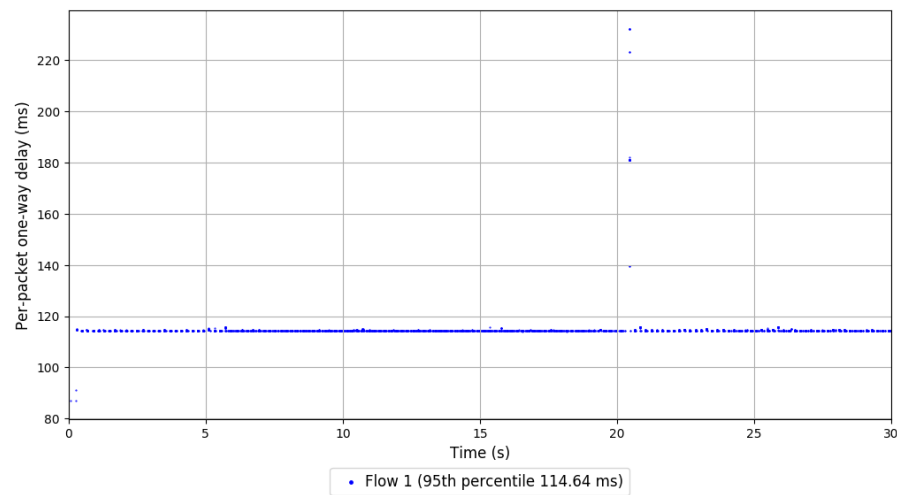
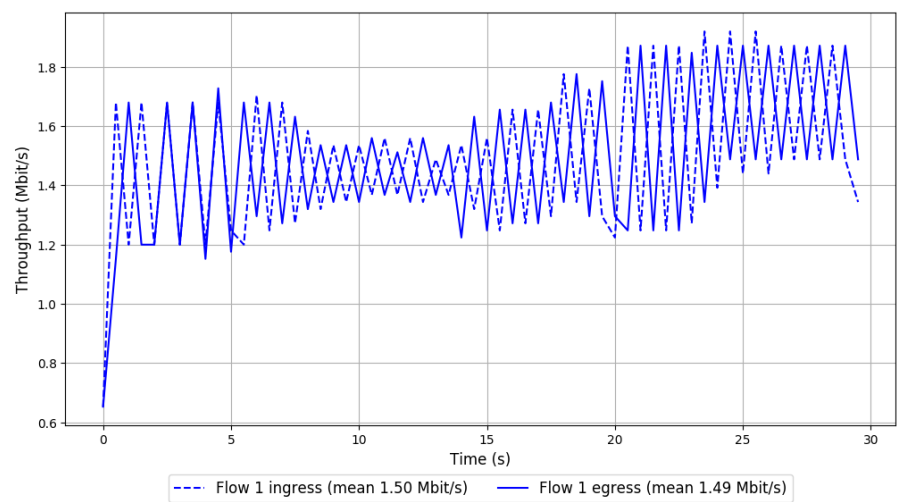
-- Flow 1:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 114.642 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-11 10:05:22

End at: 2017-12-11 10:05:52

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.93 Mbit/s

95th percentile per-packet one-way delay: 115.251 ms

Loss rate: 0.00%

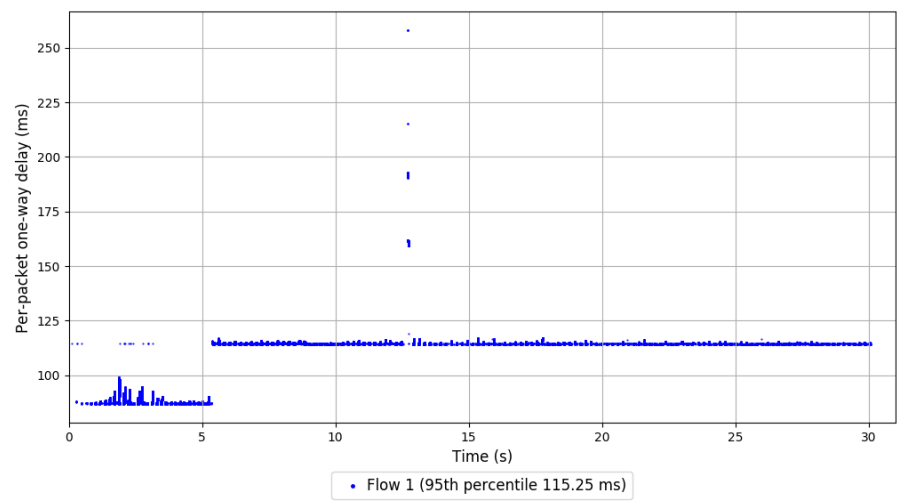
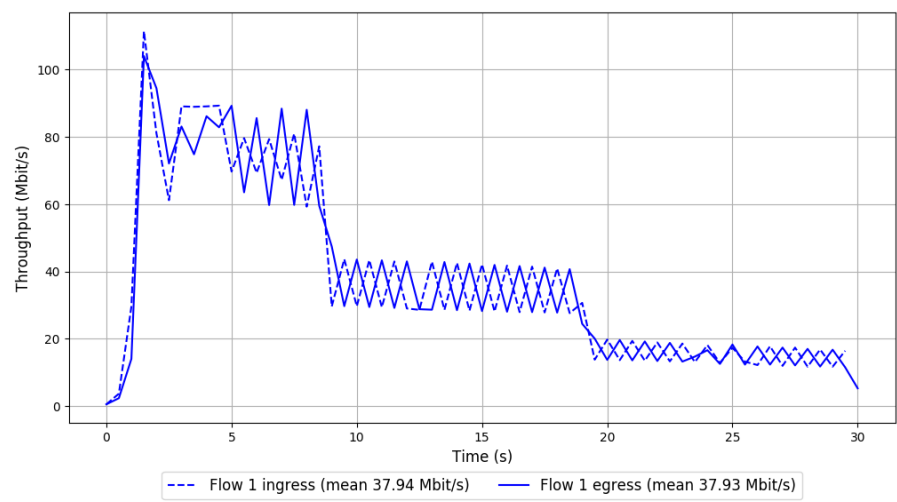
-- Flow 1:

Average throughput: 37.93 Mbit/s

95th percentile per-packet one-way delay: 115.251 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-11 10:15:44

End at: 2017-12-11 10:16:14

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.60 Mbit/s

95th percentile per-packet one-way delay: 114.248 ms

Loss rate: 0.00%

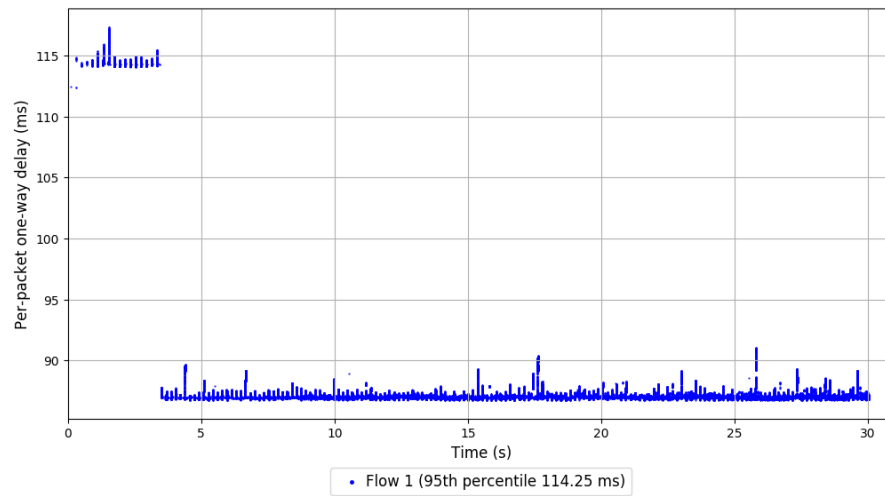
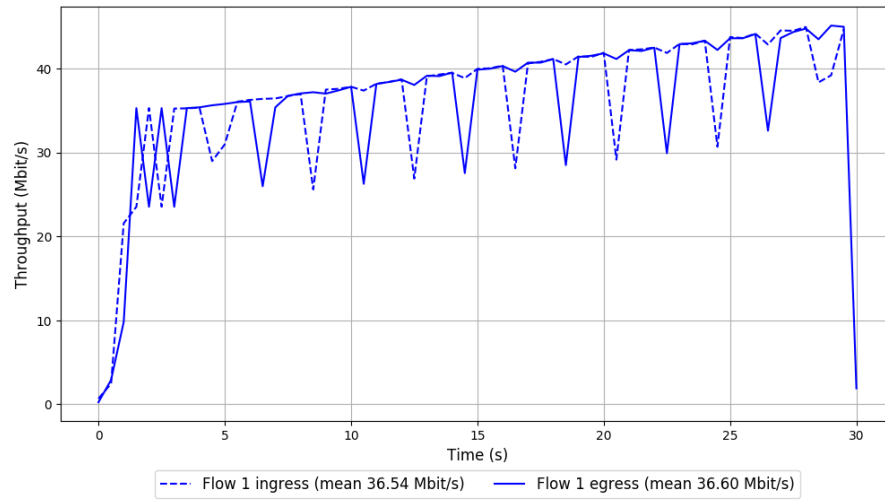
-- Flow 1:

Average throughput: 36.60 Mbit/s

95th percentile per-packet one-way delay: 114.248 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-11 10:26:15

End at: 2017-12-11 10:26:45

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 114.509 ms

Loss rate: 0.00%

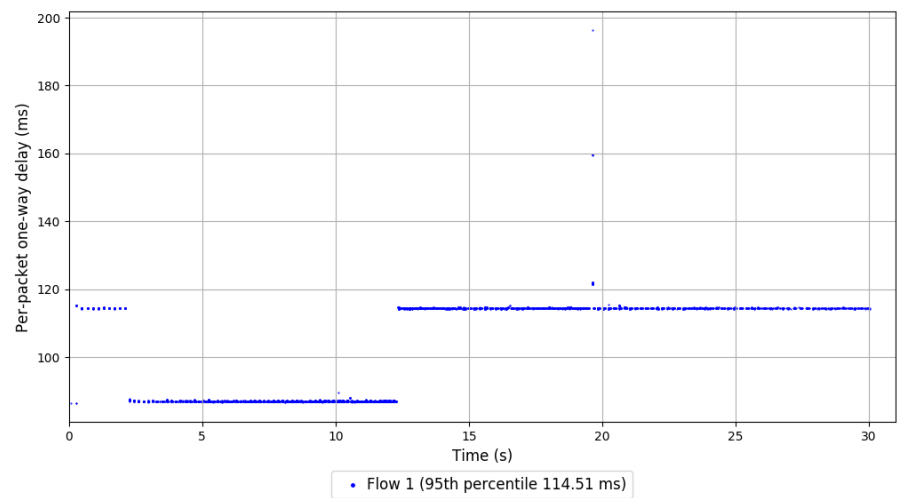
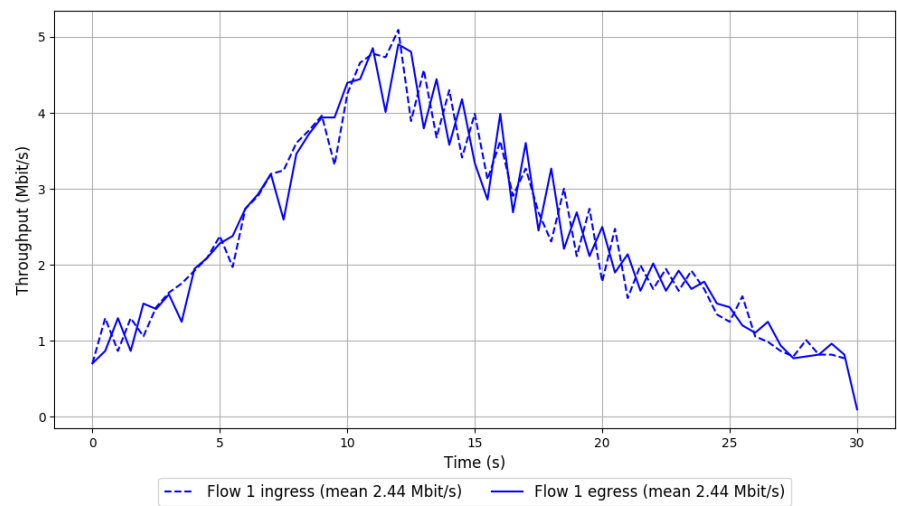
-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 114.509 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-11 10:36:20

End at: 2017-12-11 10:36:50

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.46 Mbit/s

95th percentile per-packet one-way delay: 115.111 ms

Loss rate: 0.00%

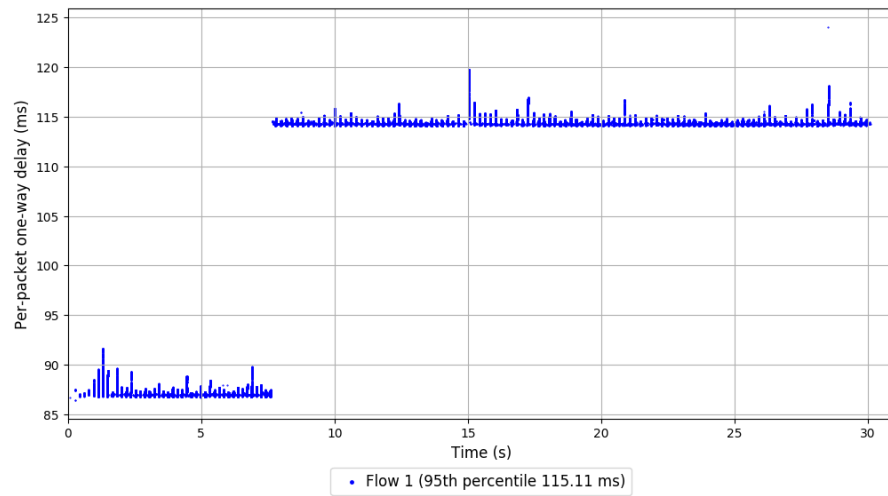
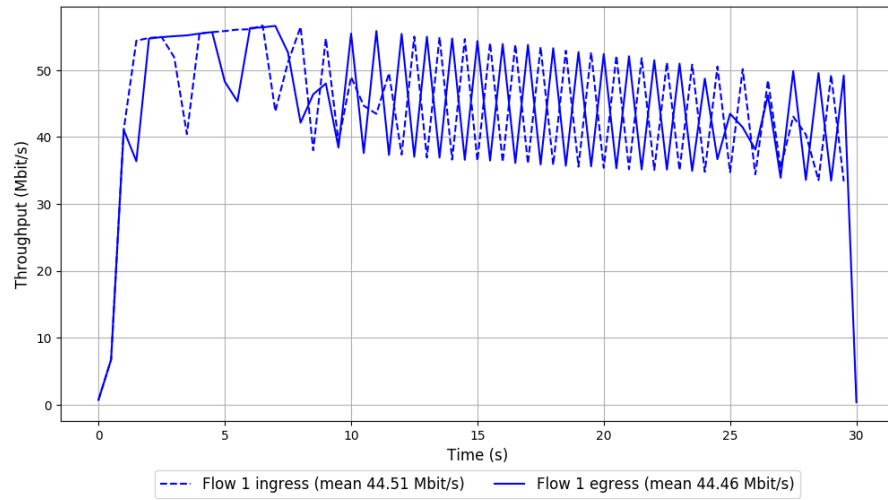
-- Flow 1:

Average throughput: 44.46 Mbit/s

95th percentile per-packet one-way delay: 115.111 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-11 10:46:50

End at: 2017-12-11 10:47:20

Below is generated by plot.py at 2017-12-11 11:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.25 Mbit/s

95th percentile per-packet one-way delay: 114.811 ms

Loss rate: 0.02%

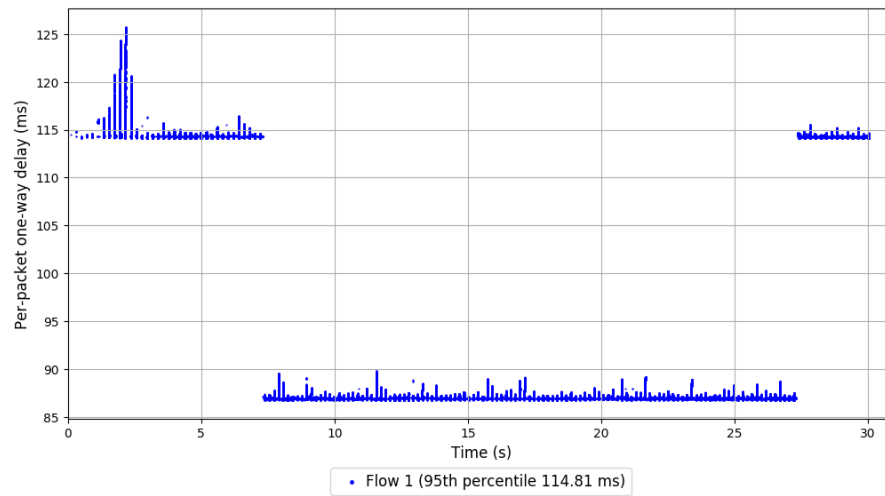
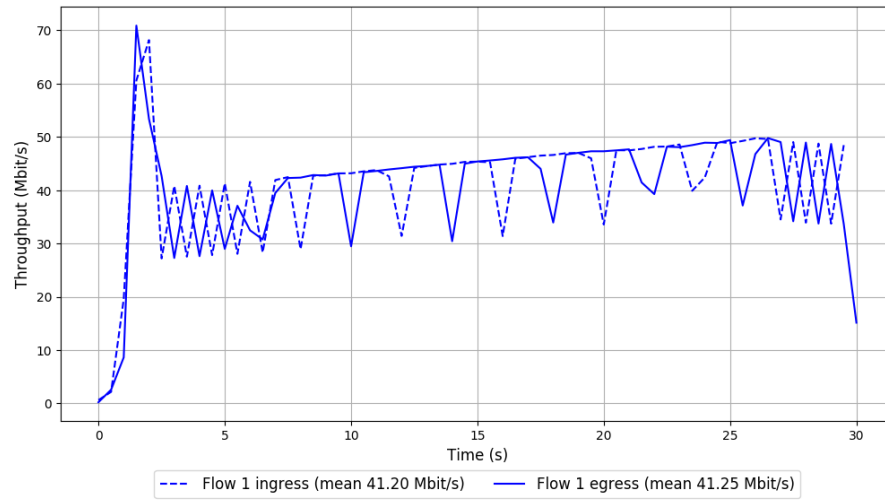
-- Flow 1:

Average throughput: 41.25 Mbit/s

95th percentile per-packet one-way delay: 114.811 ms

Loss rate: 0.02%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-11 09:11:53

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 244.74 Mbit/s

95th percentile per-packet one-way delay: 228.195 ms

Loss rate: 0.28%

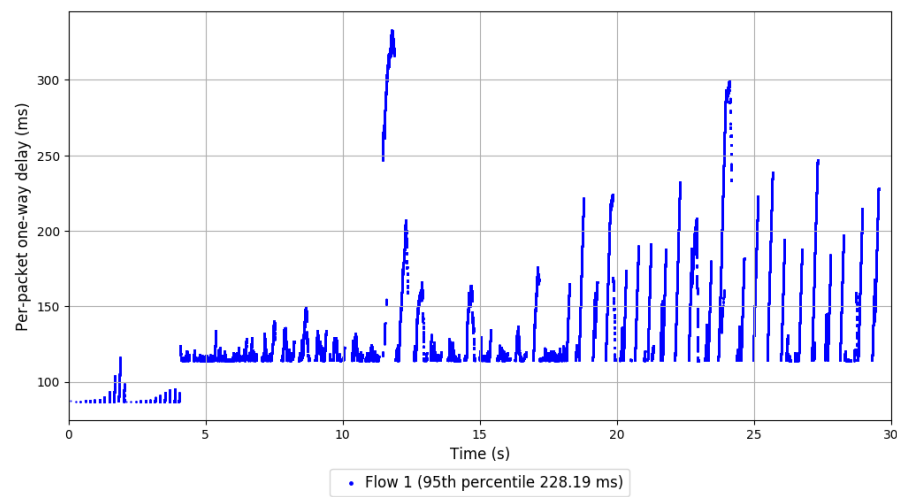
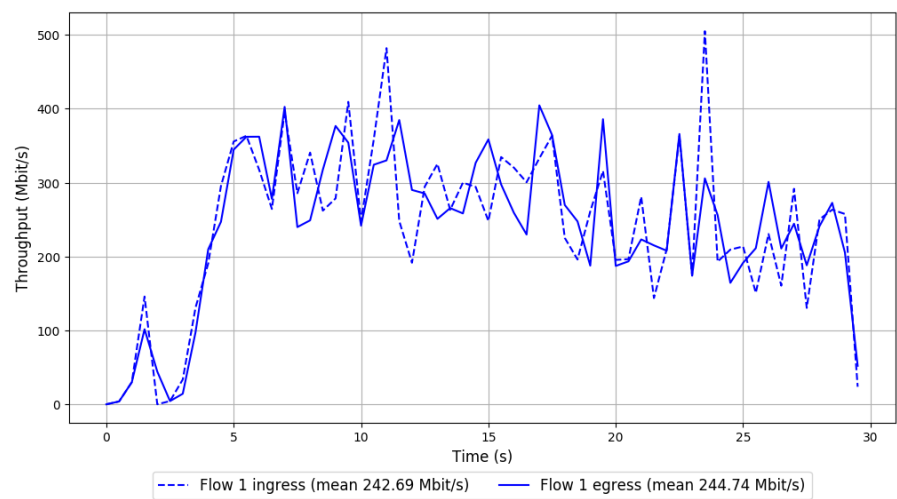
-- Flow 1:

Average throughput: 244.74 Mbit/s

95th percentile per-packet one-way delay: 228.195 ms

Loss rate: 0.28%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-11 09:22:16

End at: 2017-12-11 09:22:46

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.08 Mbit/s

95th percentile per-packet one-way delay: 123.430 ms

Loss rate: 0.00%

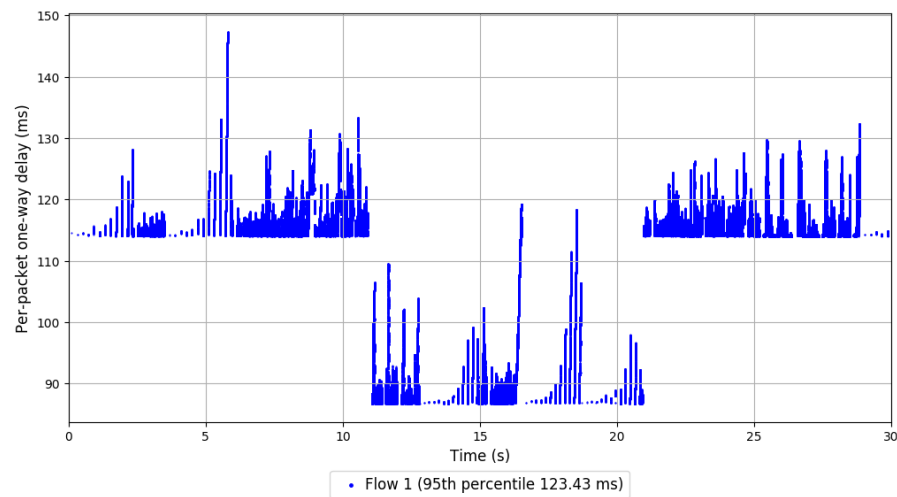
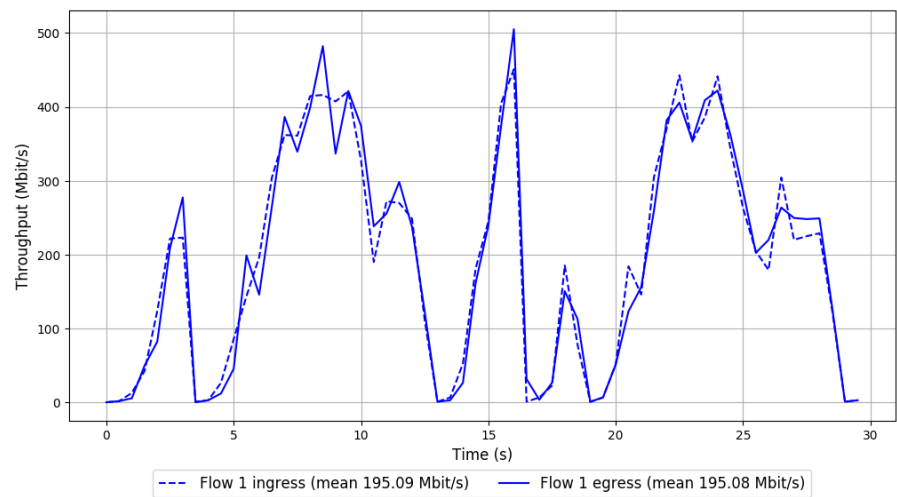
-- Flow 1:

Average throughput: 195.08 Mbit/s

95th percentile per-packet one-way delay: 123.430 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-11 09:32:34

End at: 2017-12-11 09:33:04

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.46 Mbit/s

95th percentile per-packet one-way delay: 129.136 ms

Loss rate: 0.26%

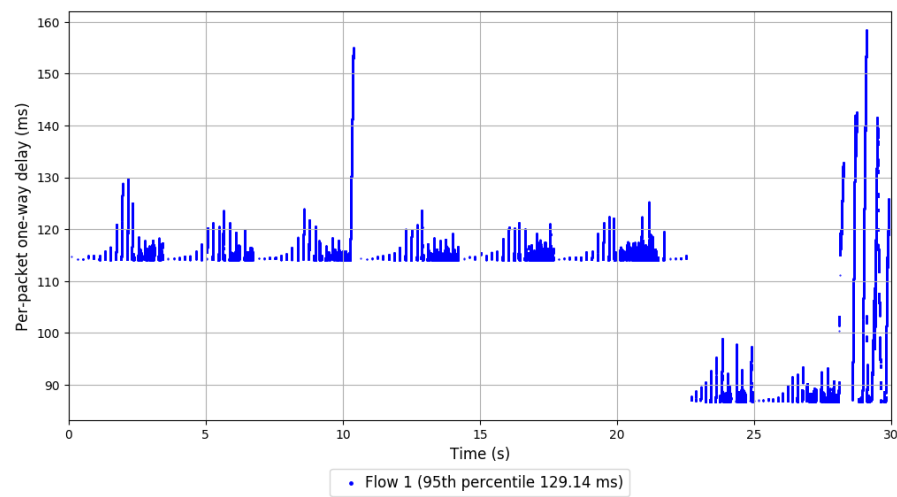
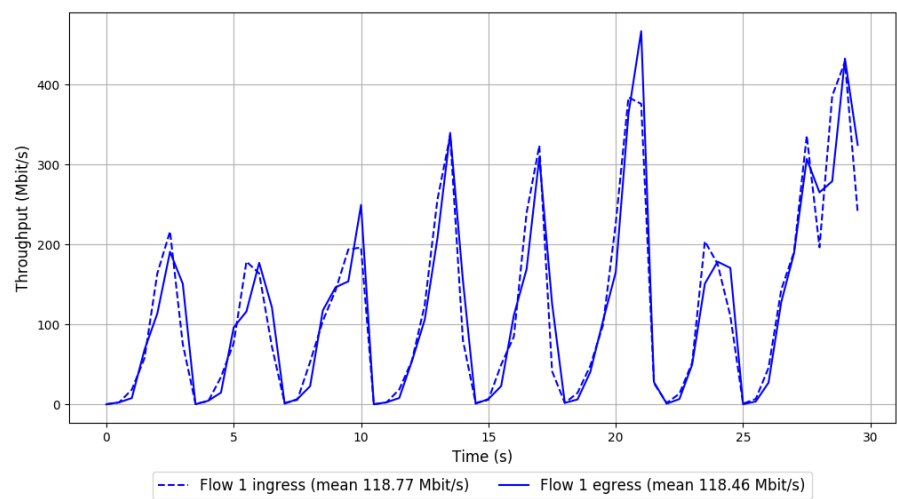
-- Flow 1:

Average throughput: 118.46 Mbit/s

95th percentile per-packet one-way delay: 129.136 ms

Loss rate: 0.26%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-11 09:42:55

End at: 2017-12-11 09:43:25

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.86 Mbit/s

95th percentile per-packet one-way delay: 197.444 ms

Loss rate: 0.01%

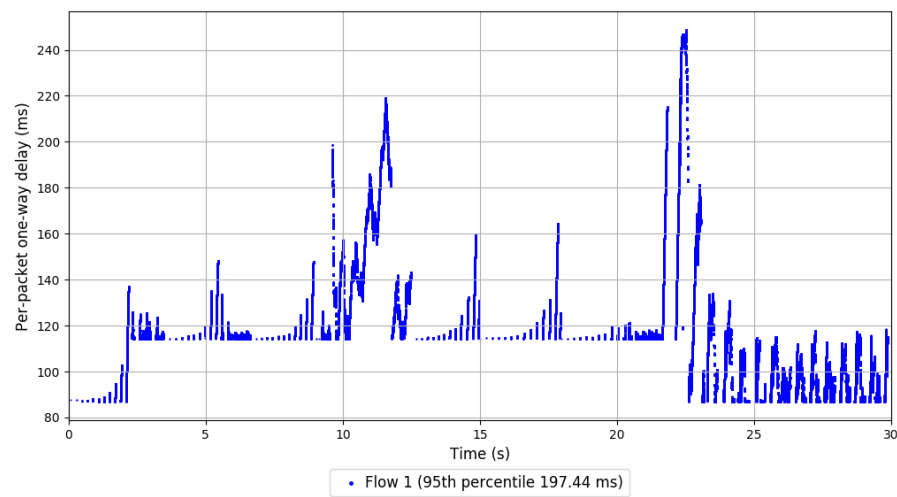
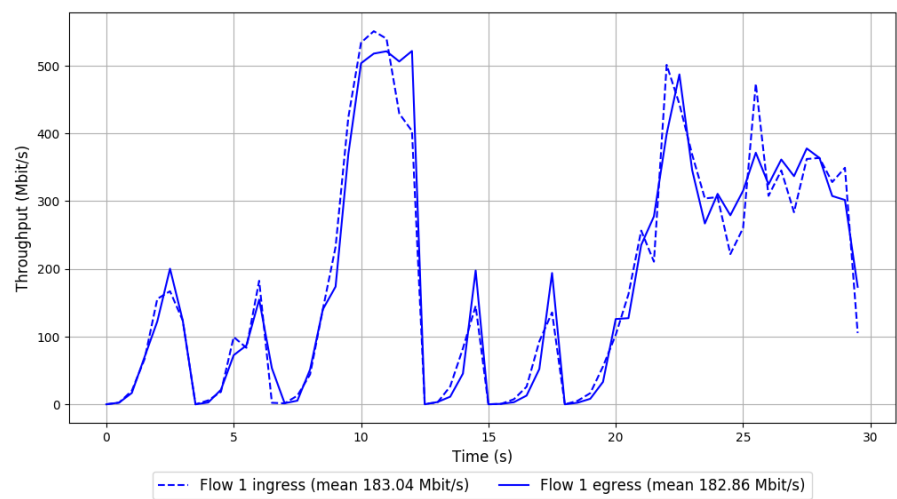
-- Flow 1:

Average throughput: 182.86 Mbit/s

95th percentile per-packet one-way delay: 197.444 ms

Loss rate: 0.01%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-11 09:53:34

End at: 2017-12-11 09:54:04

Below is generated by plot.py at 2017-12-11 11:53:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 284.64 Mbit/s

95th percentile per-packet one-way delay: 240.238 ms

Loss rate: 0.87%

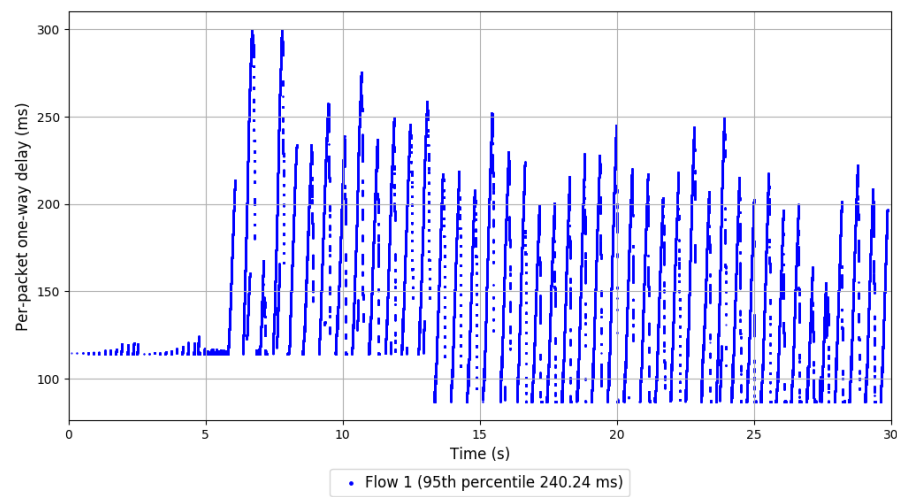
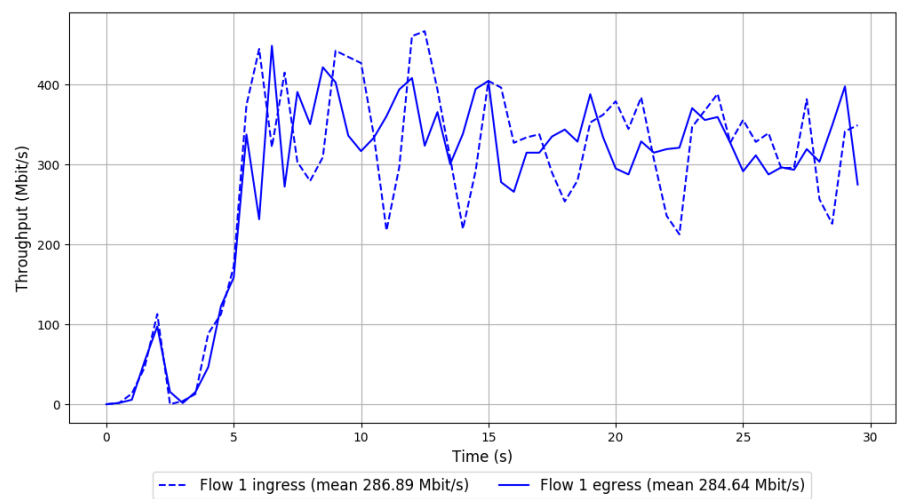
-- Flow 1:

Average throughput: 284.64 Mbit/s

95th percentile per-packet one-way delay: 240.238 ms

Loss rate: 0.87%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-11 10:03:50

End at: 2017-12-11 10:04:20

Below is generated by plot.py at 2017-12-11 11:53:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.87 Mbit/s

95th percentile per-packet one-way delay: 287.828 ms

Loss rate: 5.32%

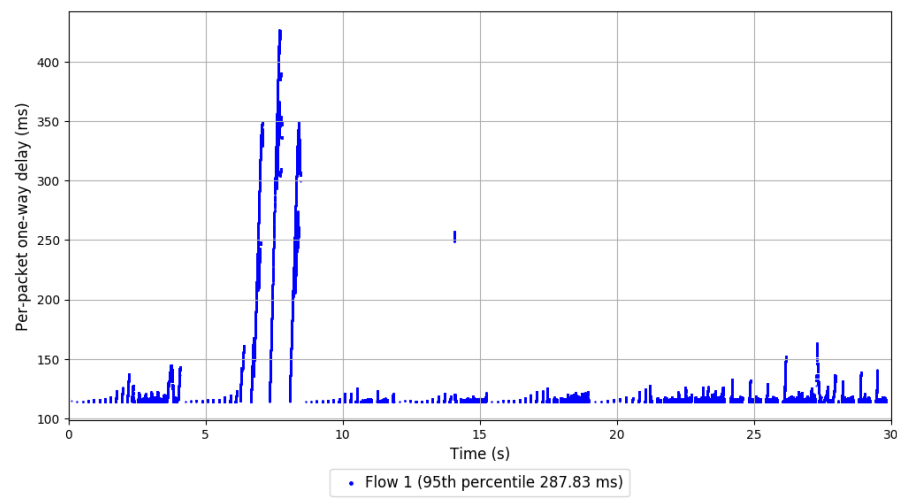
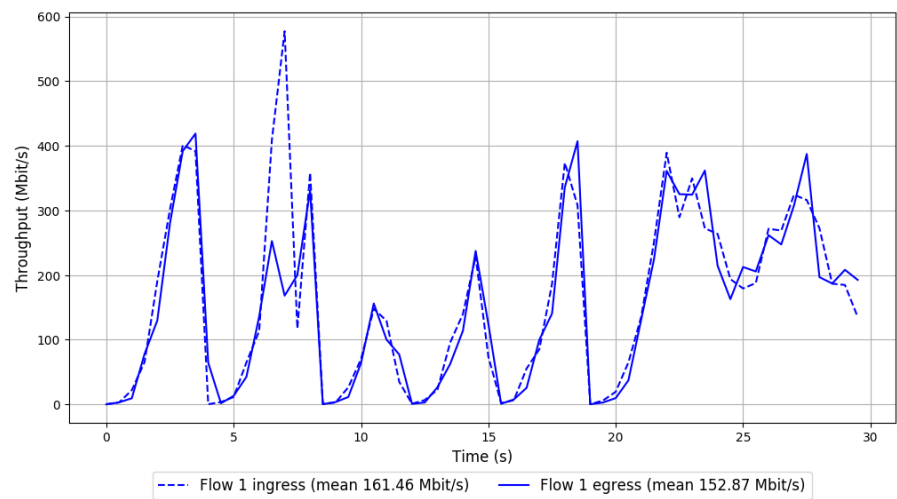
-- Flow 1:

Average throughput: 152.87 Mbit/s

95th percentile per-packet one-way delay: 287.828 ms

Loss rate: 5.32%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-11 10:14:11

End at: 2017-12-11 10:14:41

Below is generated by plot.py at 2017-12-11 11:53:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.70 Mbit/s

95th percentile per-packet one-way delay: 120.409 ms

Loss rate: 0.04%

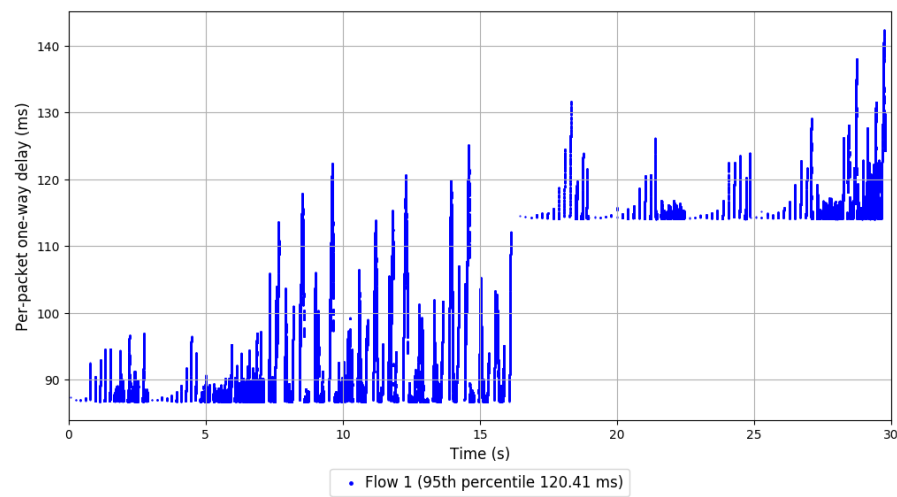
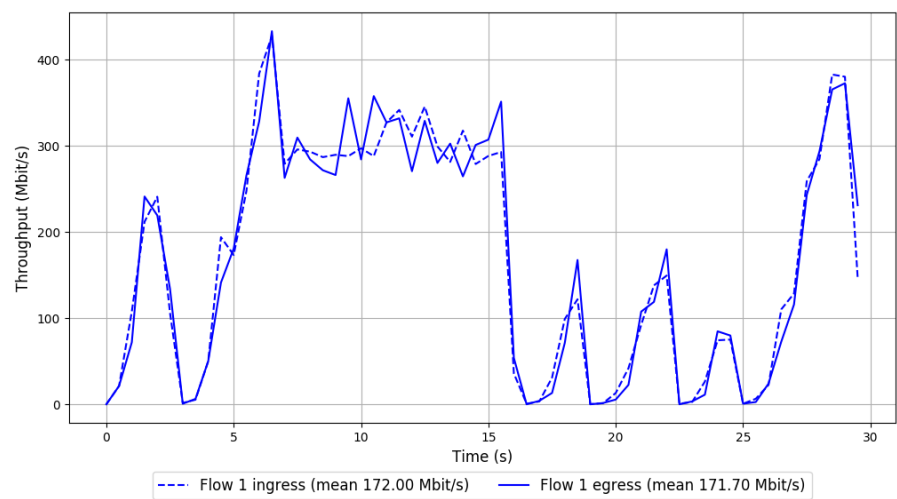
-- Flow 1:

Average throughput: 171.70 Mbit/s

95th percentile per-packet one-way delay: 120.409 ms

Loss rate: 0.04%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-11 10:24:44

End at: 2017-12-11 10:25:14

Below is generated by plot.py at 2017-12-11 11:53:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 141.69 Mbit/s

95th percentile per-packet one-way delay: 132.272 ms

Loss rate: 0.00%

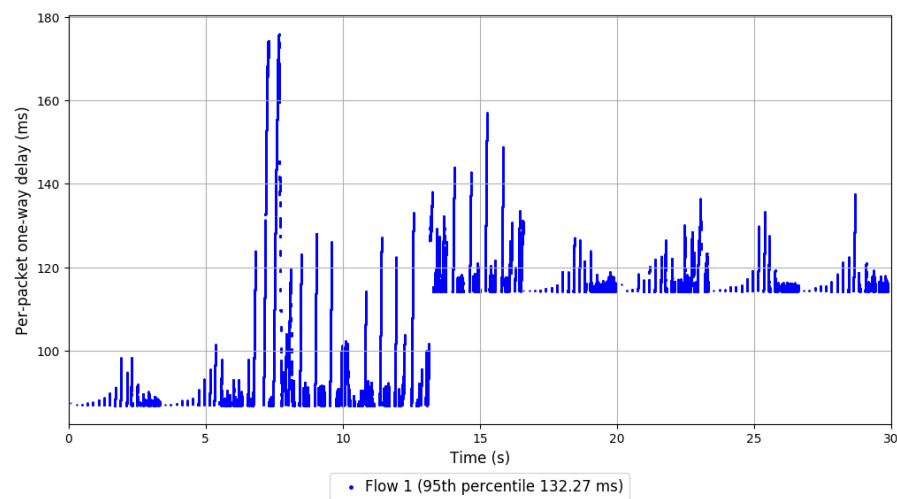
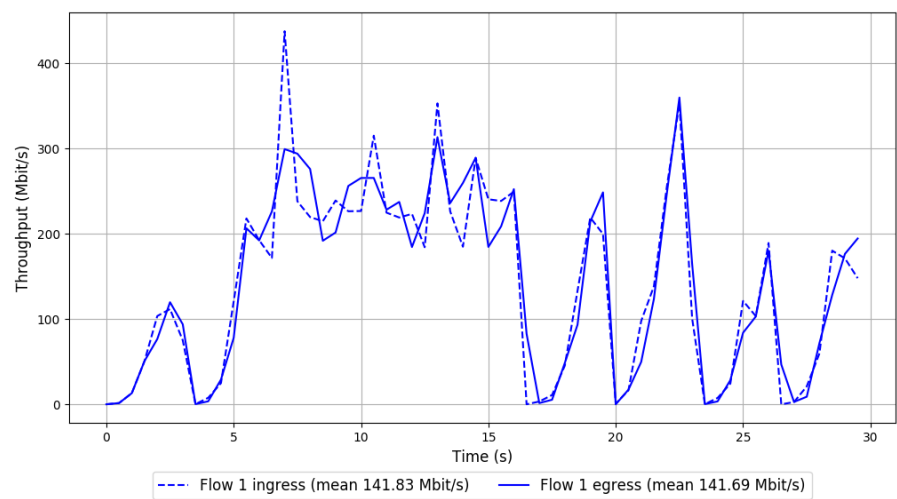
-- Flow 1:

Average throughput: 141.69 Mbit/s

95th percentile per-packet one-way delay: 132.272 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-11 10:34:43

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

Below is generated by plot.py at 2017-12-11 11:54:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.10 Mbit/s

95th percentile per-packet one-way delay: 137.533 ms

Loss rate: 0.00%

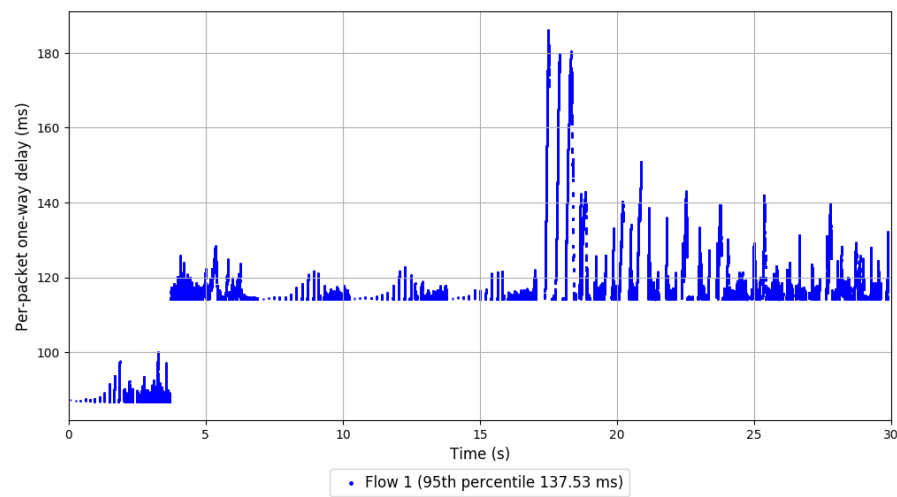
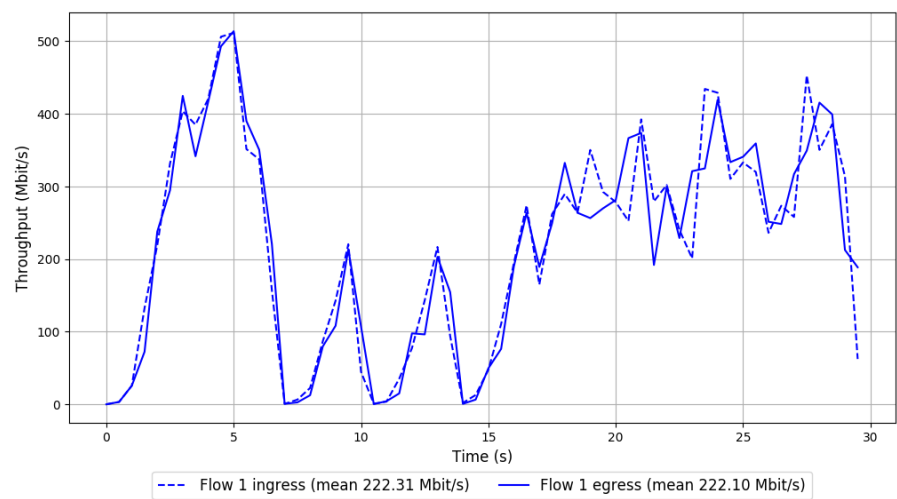
-- Flow 1:

Average throughput: 222.10 Mbit/s

95th percentile per-packet one-way delay: 137.533 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-11 10:45:13

End at: 2017-12-11 10:45:44

Below is generated by plot.py at 2017-12-11 11:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 240.22 Mbit/s

95th percentile per-packet one-way delay: 141.956 ms

Loss rate: 0.17%

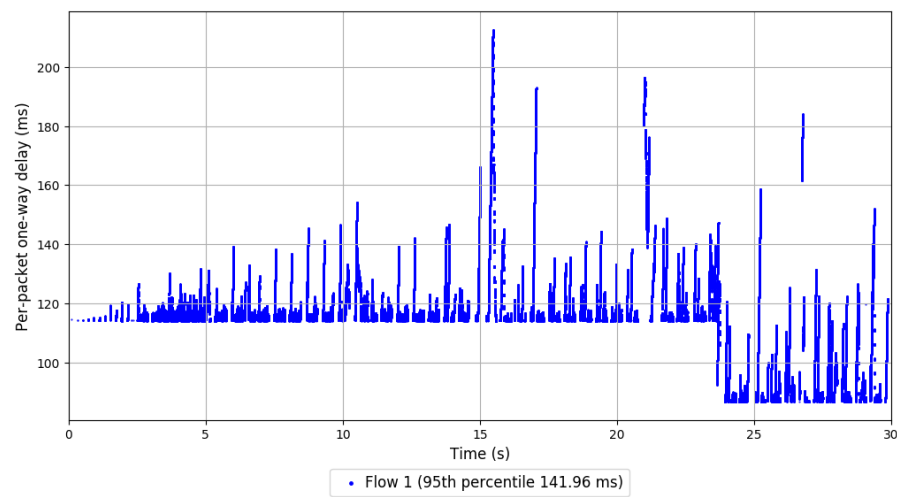
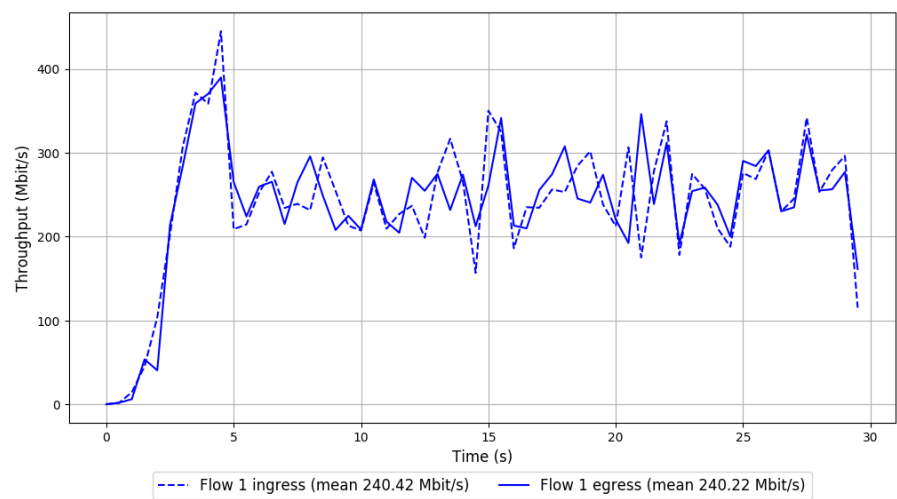
-- Flow 1:

Average throughput: 240.22 Mbit/s

95th percentile per-packet one-way delay: 141.956 ms

Loss rate: 0.17%

Run 10: Report of Verus — Data Link

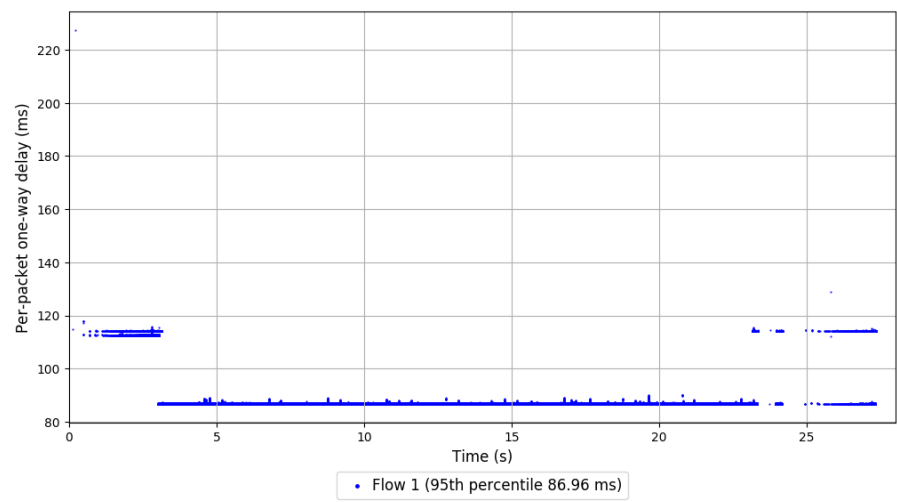
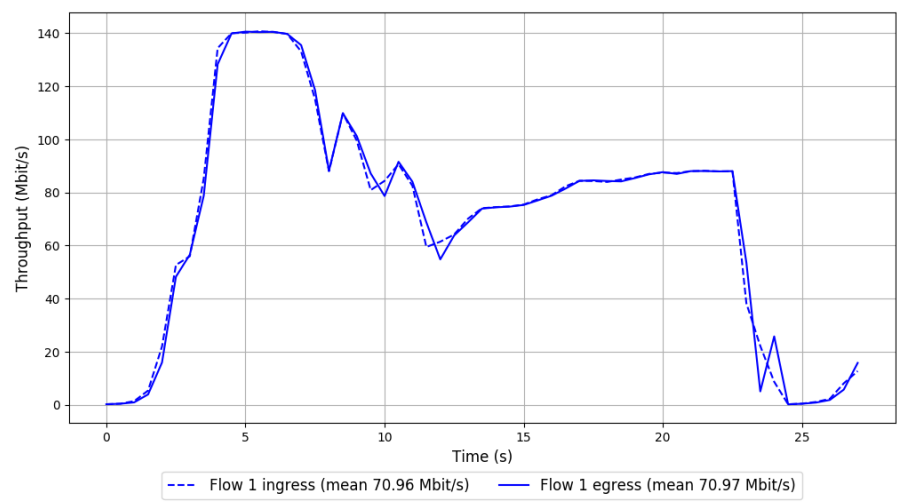


```
Run 1: Statistics of Copa

Start at: 2017-12-11 09:19:02
End at: 2017-12-11 09:19:32

# Below is generated by plot.py at 2017-12-11 11:55:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.97 Mbit/s
95th percentile per-packet one-way delay: 86.962 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.97 Mbit/s
95th percentile per-packet one-way delay: 86.962 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-11 09:29:26

End at: 2017-12-11 09:29:56

Below is generated by plot.py at 2017-12-11 11:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.22 Mbit/s

95th percentile per-packet one-way delay: 114.389 ms

Loss rate: 0.00%

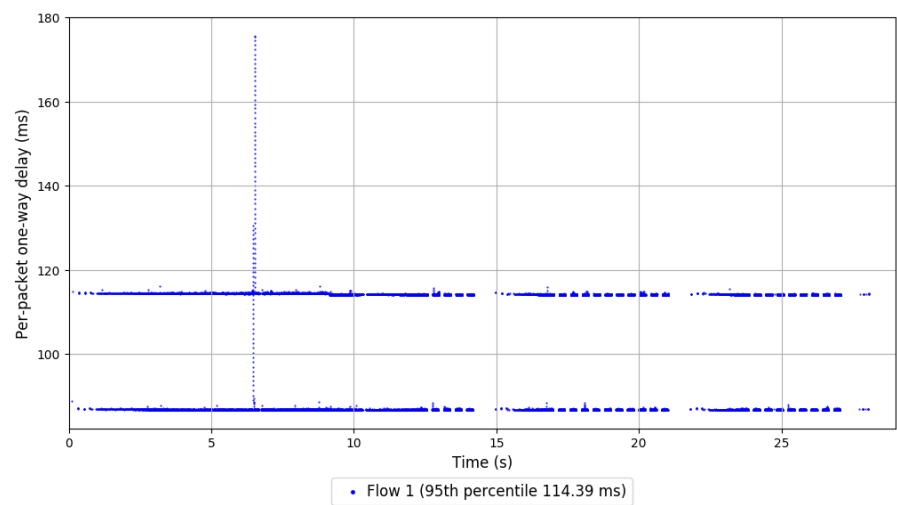
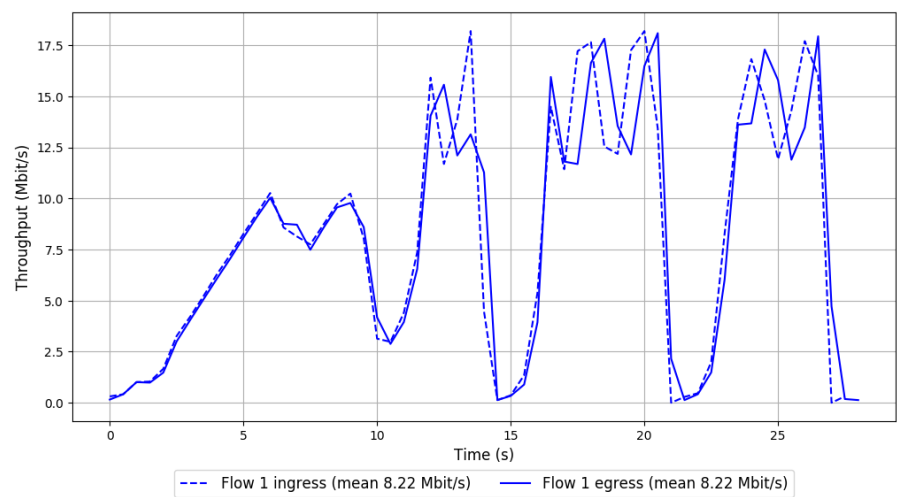
-- Flow 1:

Average throughput: 8.22 Mbit/s

95th percentile per-packet one-way delay: 114.389 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-11 09:40:03

End at: 2017-12-11 09:40:33

Below is generated by plot.py at 2017-12-11 11:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.48 Mbit/s

95th percentile per-packet one-way delay: 86.913 ms

Loss rate: 0.00%

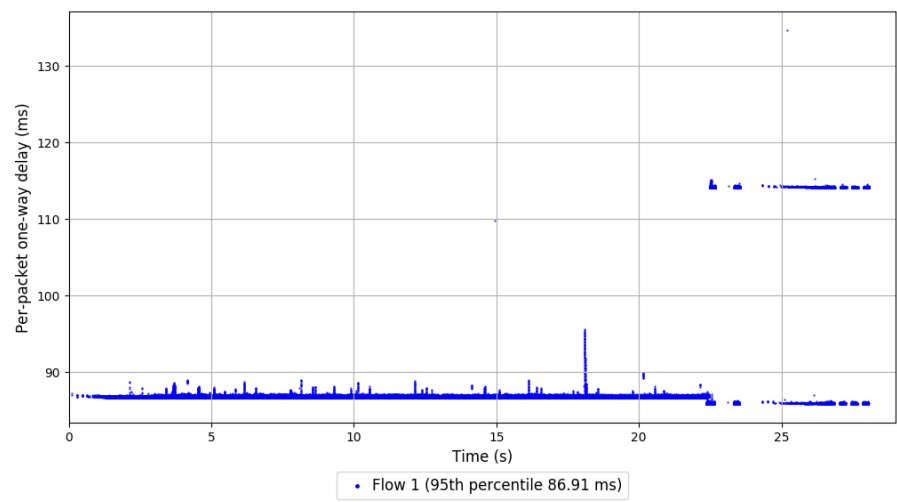
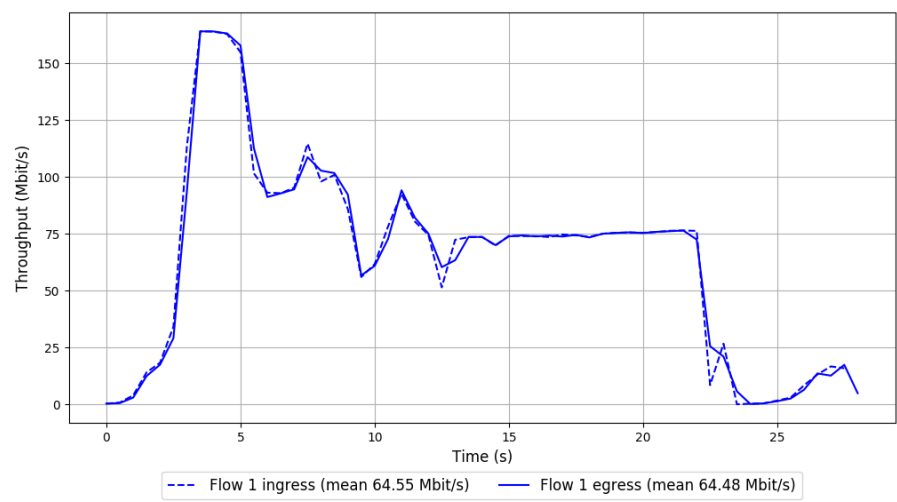
-- Flow 1:

Average throughput: 64.48 Mbit/s

95th percentile per-packet one-way delay: 86.913 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-11 09:50:32

End at: 2017-12-11 09:51:02

Below is generated by plot.py at 2017-12-11 11:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.94 Mbit/s

95th percentile per-packet one-way delay: 114.219 ms

Loss rate: 0.00%

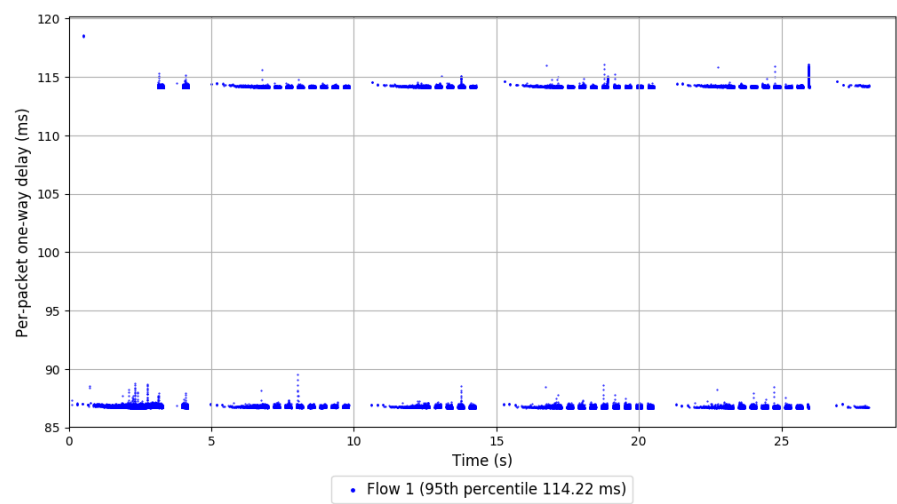
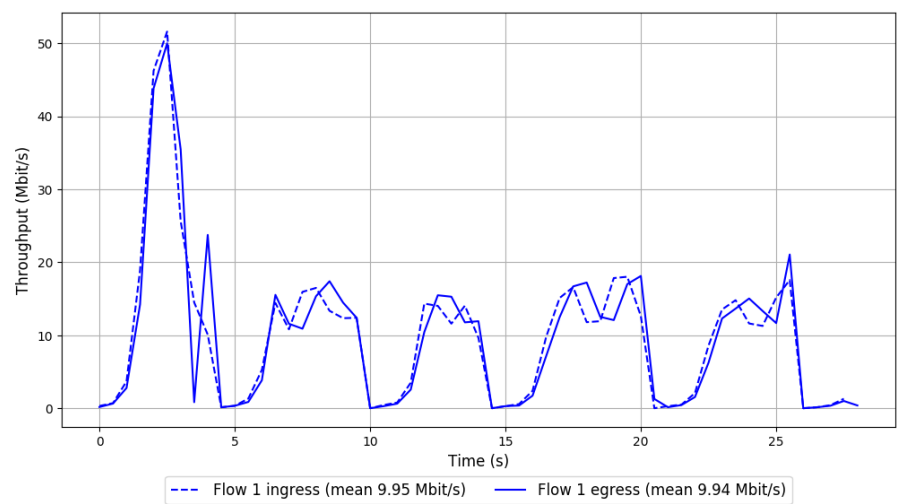
-- Flow 1:

Average throughput: 9.94 Mbit/s

95th percentile per-packet one-way delay: 114.219 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-11 10:00:49

End at: 2017-12-11 10:01:19

Below is generated by plot.py at 2017-12-11 11:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.10 Mbit/s

95th percentile per-packet one-way delay: 114.203 ms

Loss rate: 0.00%

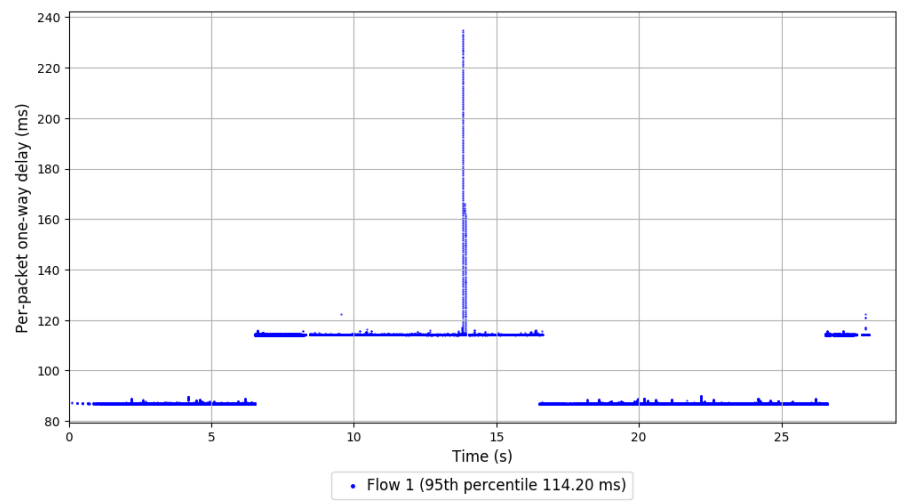
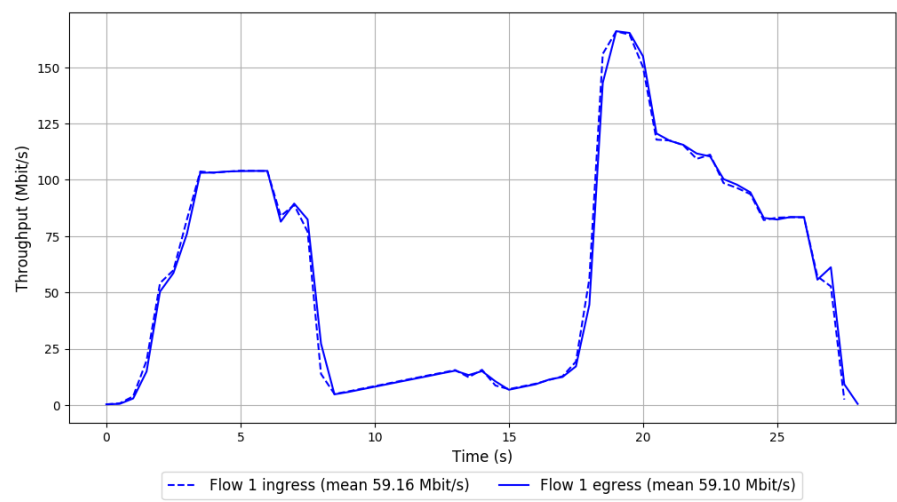
-- Flow 1:

Average throughput: 59.10 Mbit/s

95th percentile per-packet one-way delay: 114.203 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-11 10:11:16

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

Below is generated by plot.py at 2017-12-11 11:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.76 Mbit/s

95th percentile per-packet one-way delay: 114.211 ms

Loss rate: 0.00%

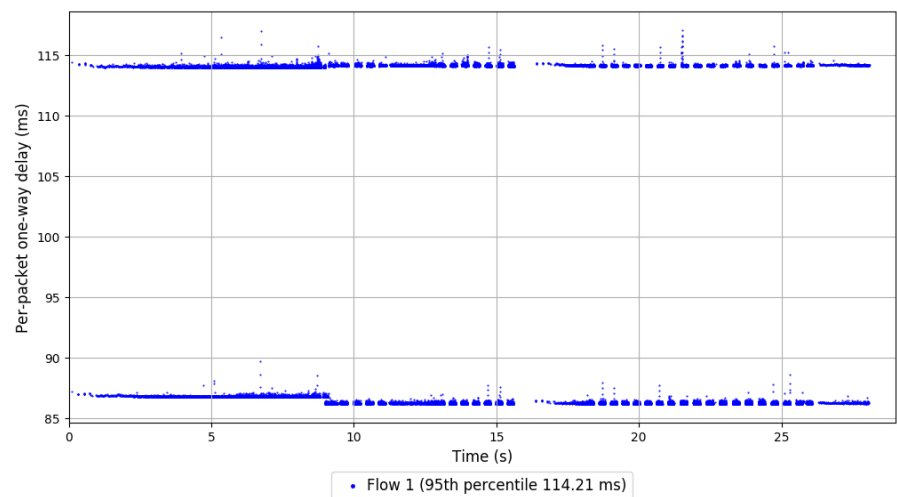
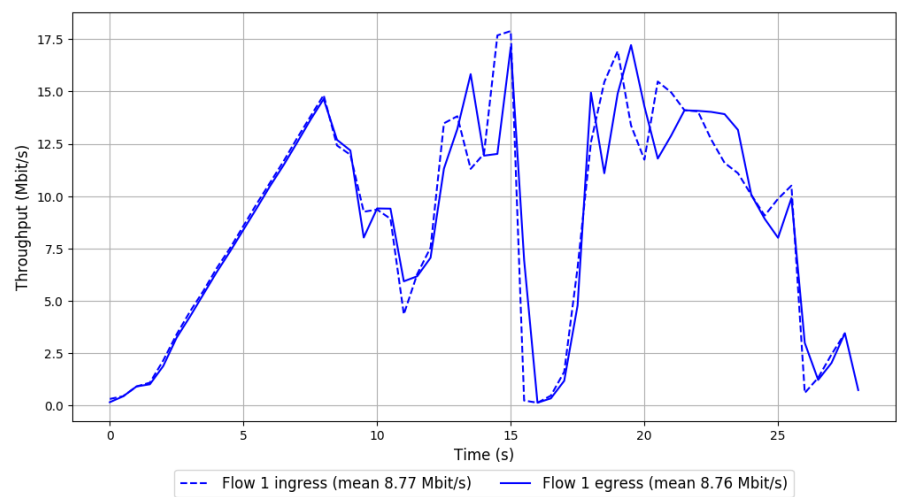
-- Flow 1:

Average throughput: 8.76 Mbit/s

95th percentile per-packet one-way delay: 114.211 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-11 10:21:55

End at: 2017-12-11 10:22:25

Below is generated by plot.py at 2017-12-11 11:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.86 Mbit/s

95th percentile per-packet one-way delay: 114.587 ms

Loss rate: 0.00%

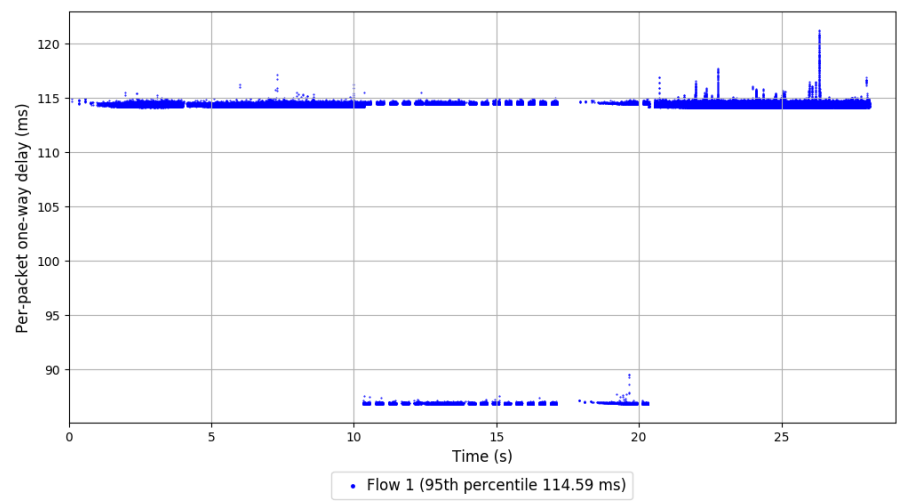
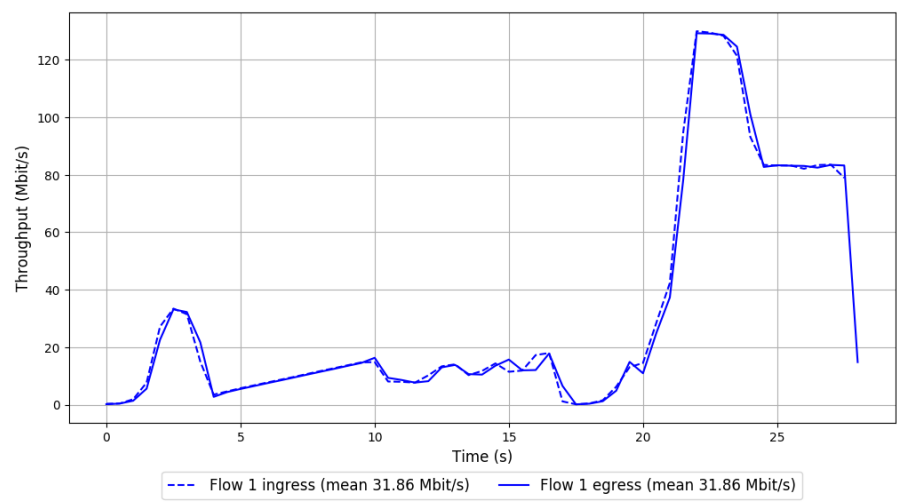
-- Flow 1:

Average throughput: 31.86 Mbit/s

95th percentile per-packet one-way delay: 114.587 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link

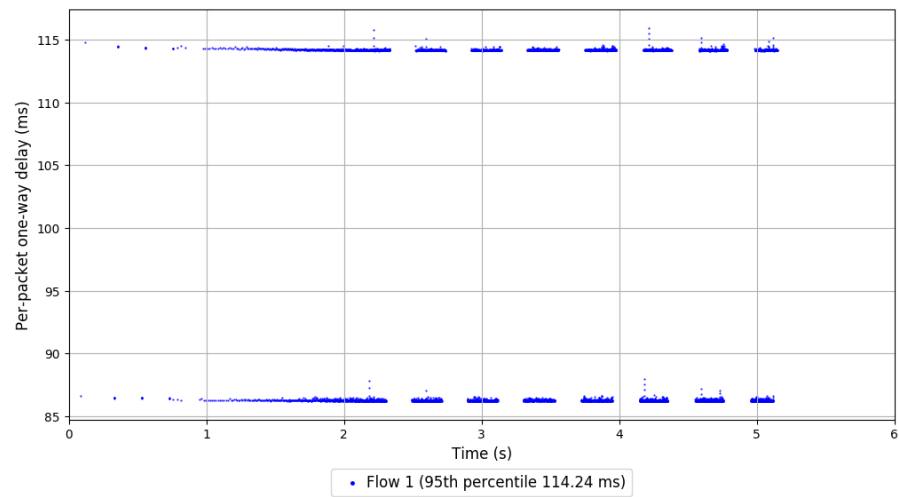
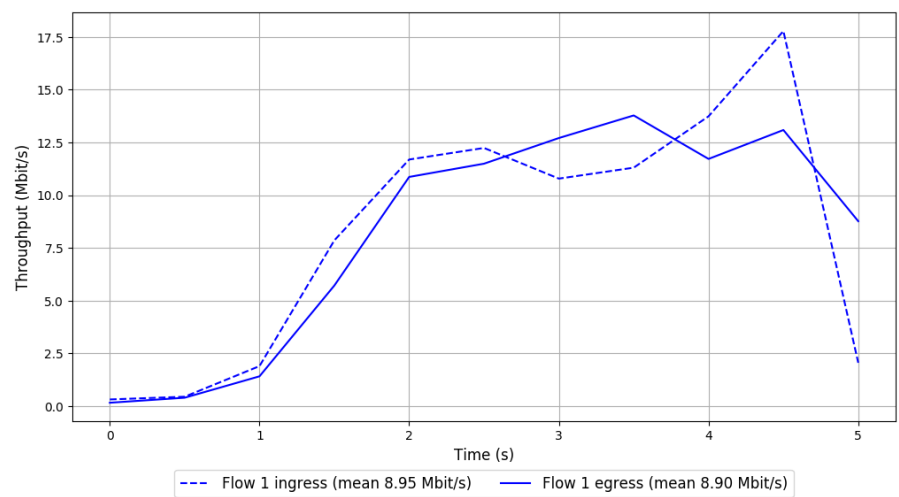


Run 8: Statistics of Copa

Start at: 2017-12-11 10:31:55

End at: 2017-12-11 10:32:25

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-11 10:42:24

End at: 2017-12-11 10:42:54

Below is generated by plot.py at 2017-12-11 11:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.82 Mbit/s

95th percentile per-packet one-way delay: 114.231 ms

Loss rate: 0.00%

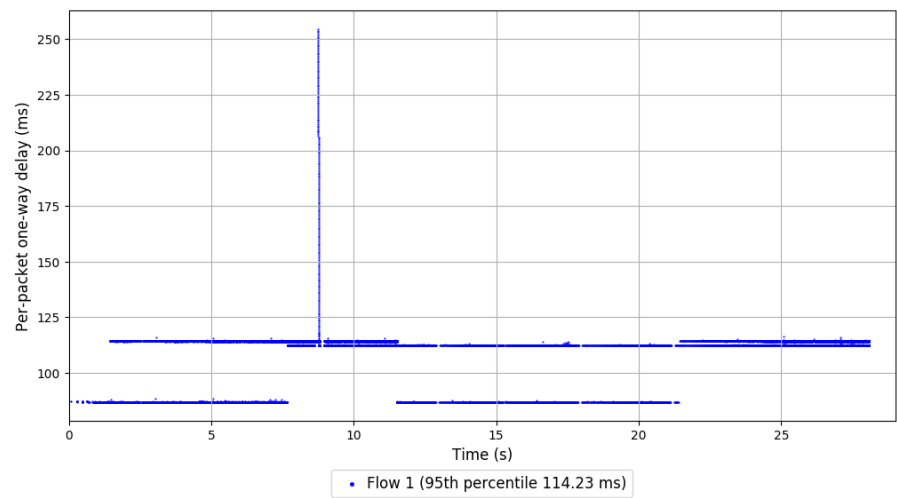
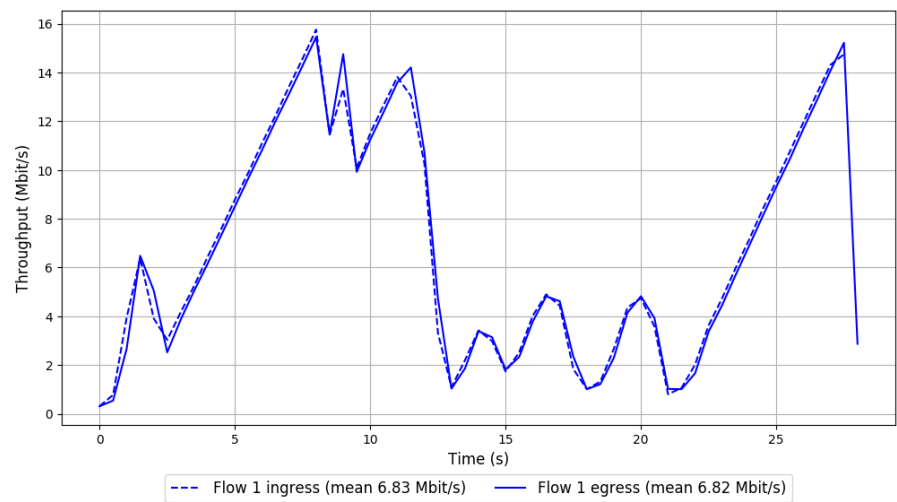
-- Flow 1:

Average throughput: 6.82 Mbit/s

95th percentile per-packet one-way delay: 114.231 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-11 10:52:45

End at: 2017-12-11 10:53:15

Below is generated by plot.py at 2017-12-11 11:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.63 Mbit/s

95th percentile per-packet one-way delay: 114.151 ms

Loss rate: 0.00%

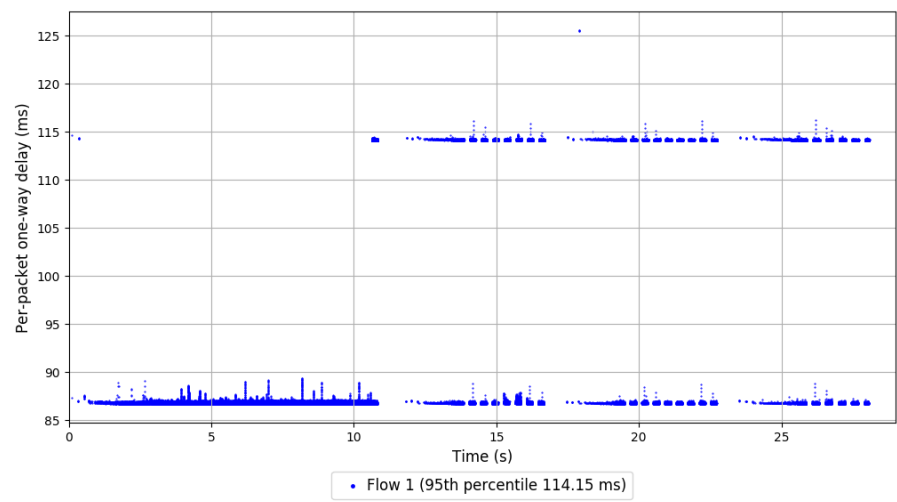
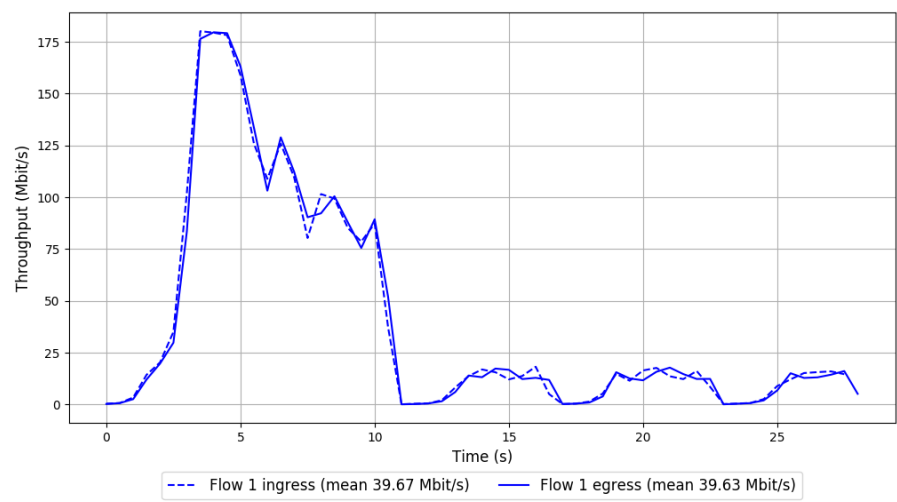
-- Flow 1:

Average throughput: 39.63 Mbit/s

95th percentile per-packet one-way delay: 114.151 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

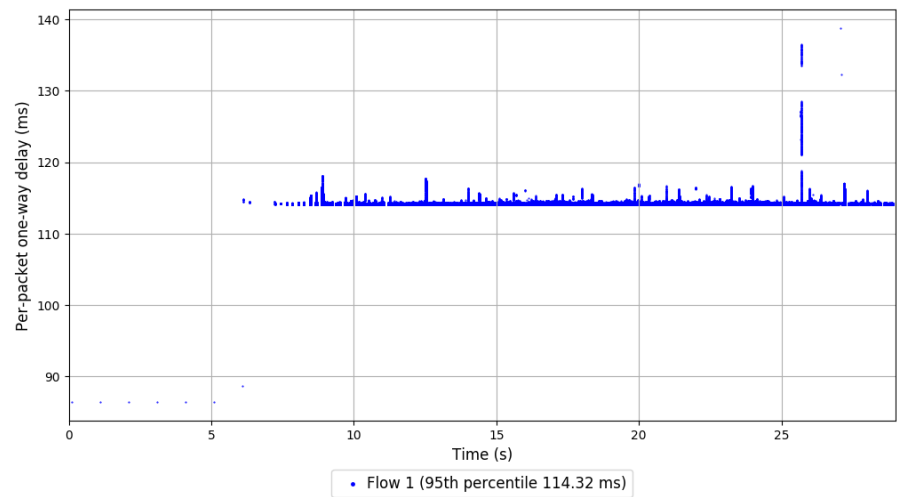
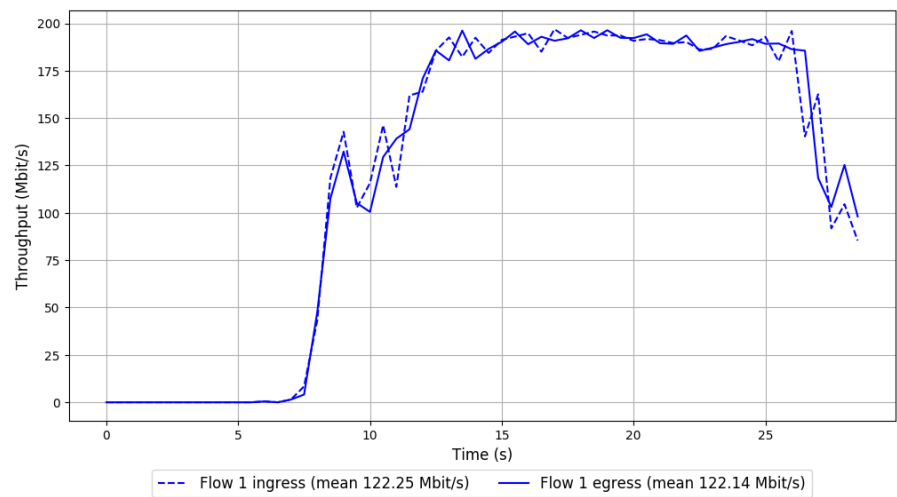


```
Run 1: Statistics of Indigo

Start at: 2017-12-11 09:11:04
End at: 2017-12-11 09:11:34

# Below is generated by plot.py at 2017-12-11 11:55:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 122.14 Mbit/s
95th percentile per-packet one-way delay: 114.316 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 122.14 Mbit/s
95th percentile per-packet one-way delay: 114.316 ms
Loss rate: 0.00%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-11 09:21:31

End at: 2017-12-11 09:22:01

Below is generated by plot.py at 2017-12-11 11:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.76 Mbit/s

95th percentile per-packet one-way delay: 114.191 ms

Loss rate: 0.08%

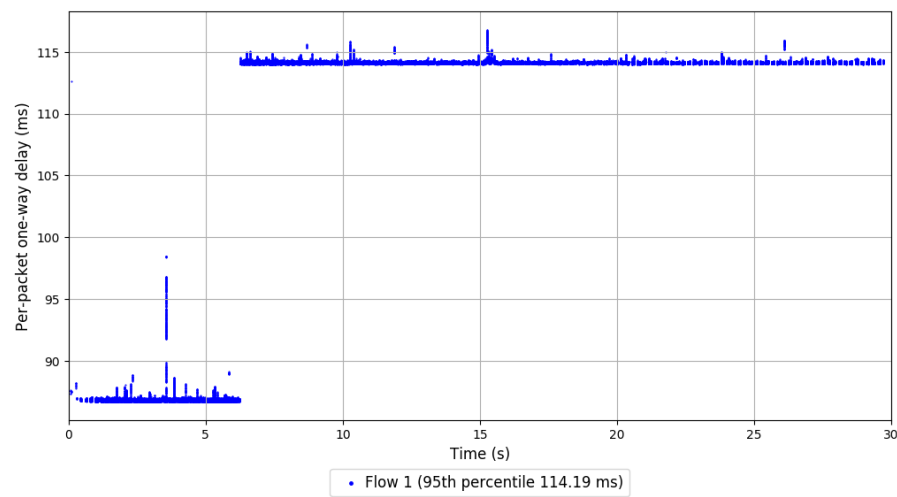
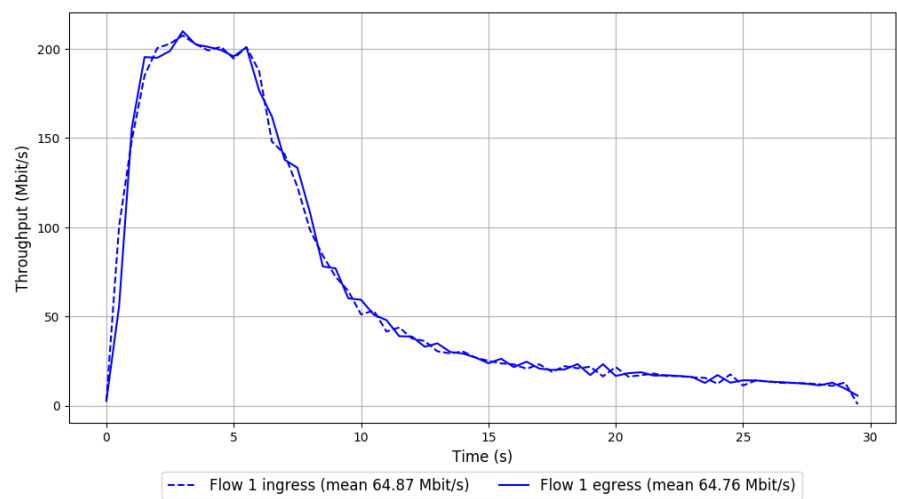
-- Flow 1:

Average throughput: 64.76 Mbit/s

95th percentile per-packet one-way delay: 114.191 ms

Loss rate: 0.08%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-11 09:31:41

End at: 2017-12-11 09:32:11

Below is generated by plot.py at 2017-12-11 11:56:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.44 Mbit/s

95th percentile per-packet one-way delay: 114.209 ms

Loss rate: 0.00%

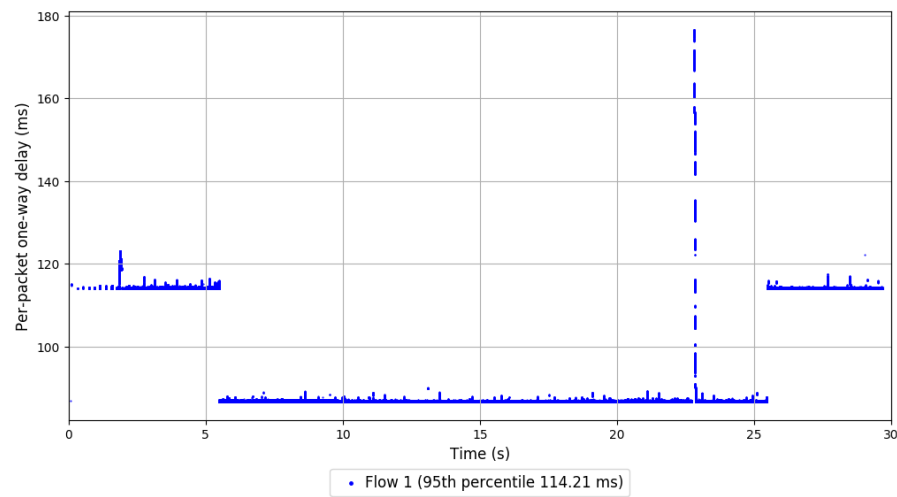
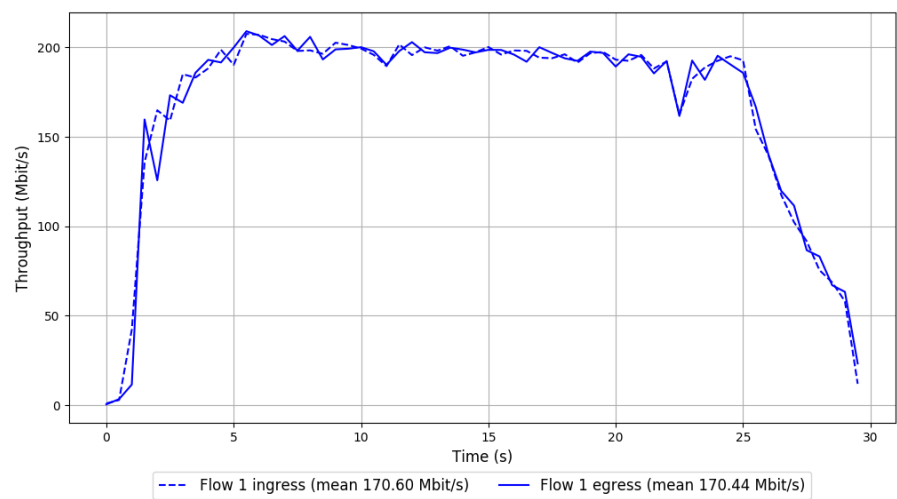
-- Flow 1:

Average throughput: 170.44 Mbit/s

95th percentile per-packet one-way delay: 114.209 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

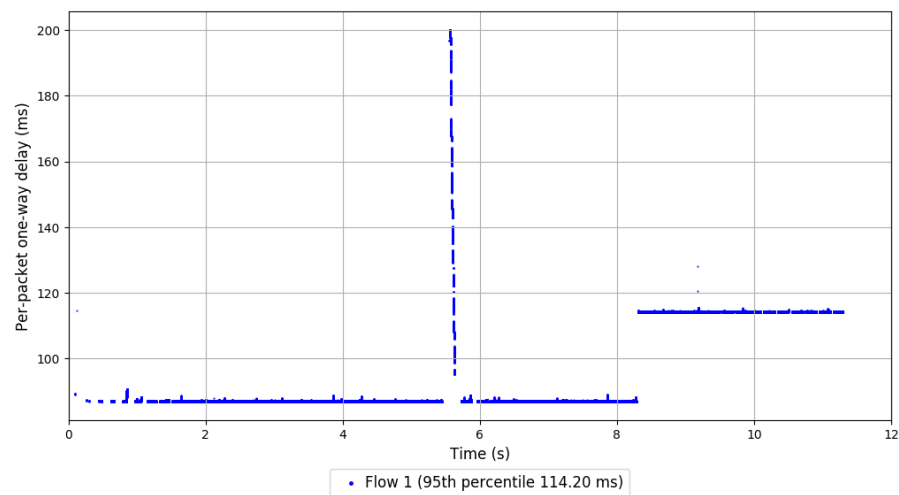
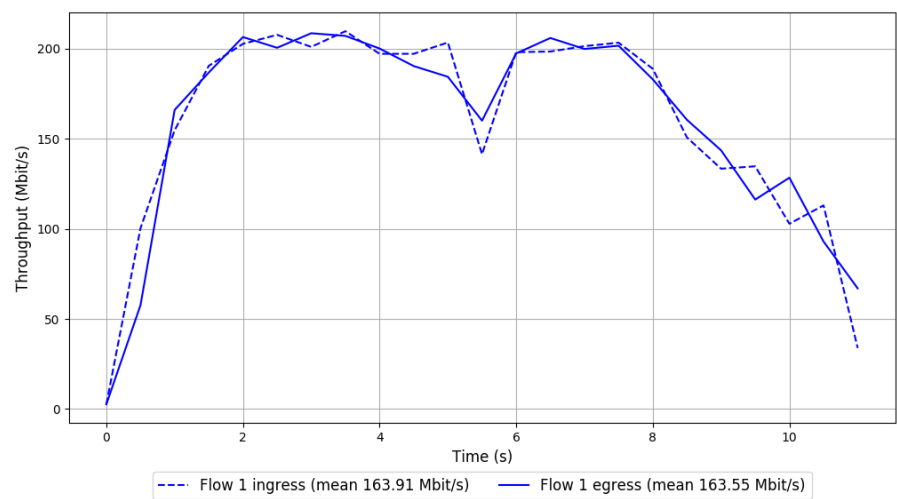


Run 4: Statistics of Indigo

Start at: 2017-12-11 09:42:10

End at: 2017-12-11 09:42:40

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-11 09:52:49

End at: 2017-12-11 09:53:19

Below is generated by plot.py at 2017-12-11 11:56:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.85 Mbit/s

95th percentile per-packet one-way delay: 114.241 ms

Loss rate: 0.00%

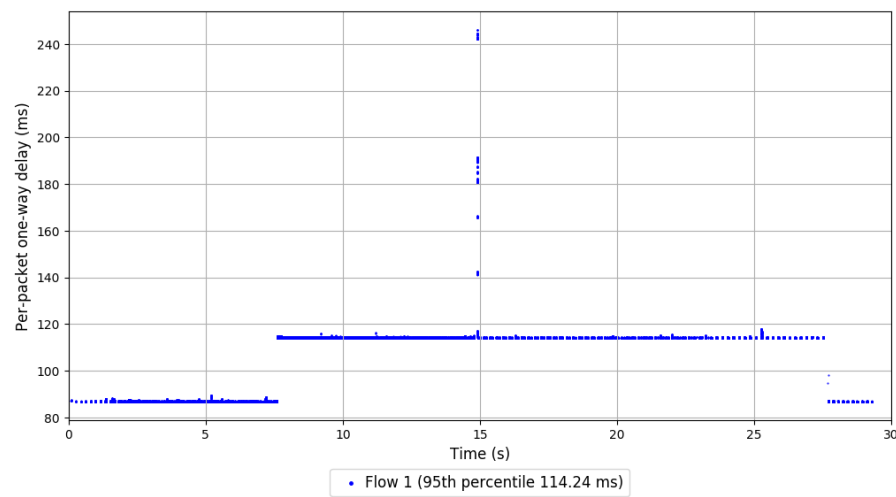
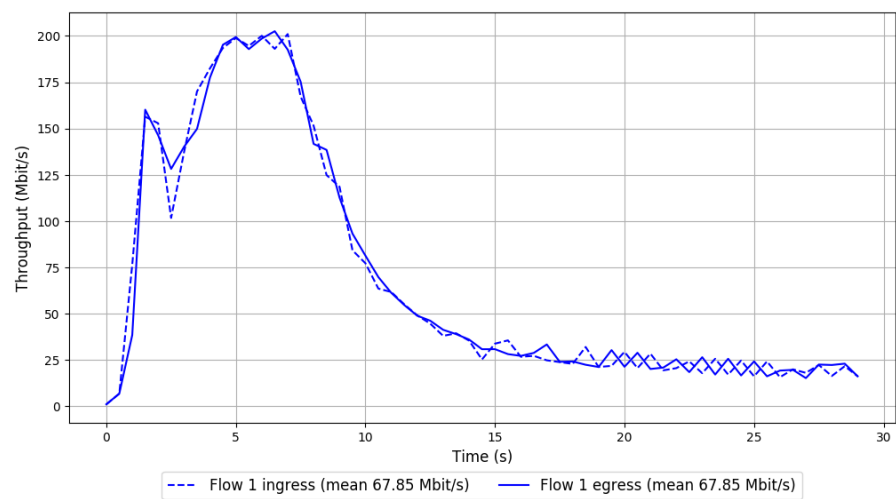
-- Flow 1:

Average throughput: 67.85 Mbit/s

95th percentile per-packet one-way delay: 114.241 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-11 10:02:57

End at: 2017-12-11 10:03:27

Below is generated by plot.py at 2017-12-11 11:56:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.53 Mbit/s

95th percentile per-packet one-way delay: 114.342 ms

Loss rate: 0.00%

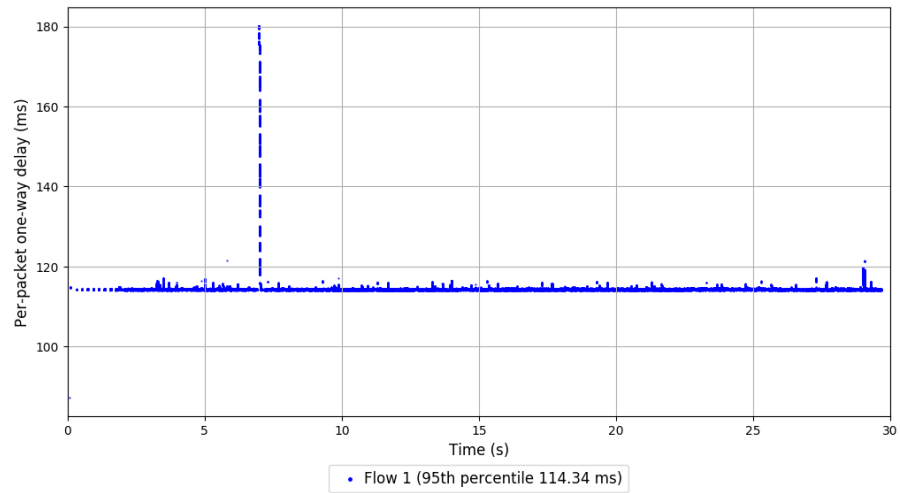
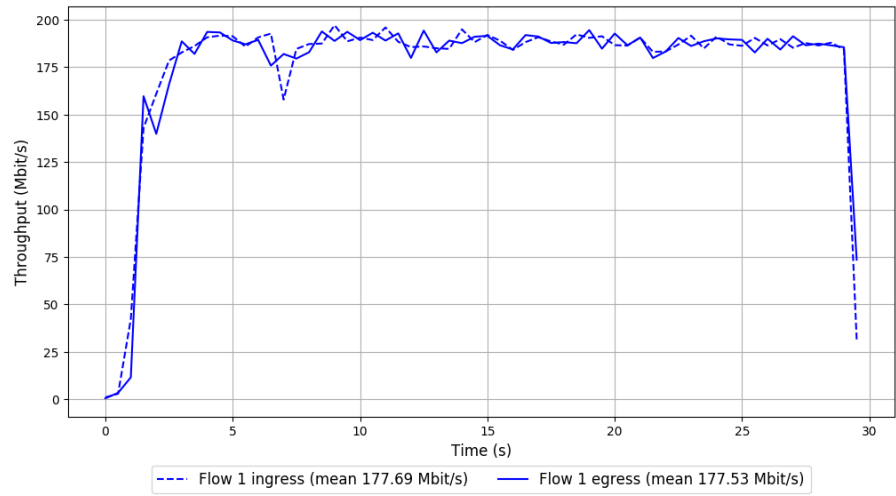
-- Flow 1:

Average throughput: 177.53 Mbit/s

95th percentile per-packet one-way delay: 114.342 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link

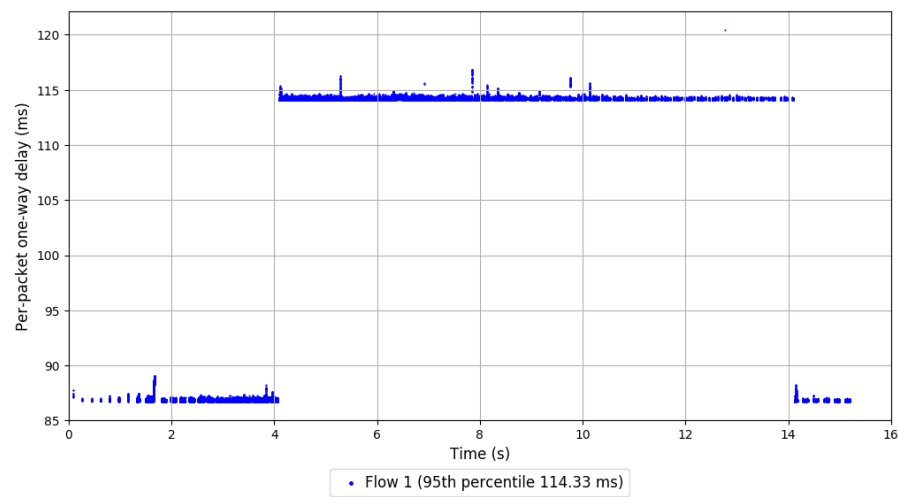
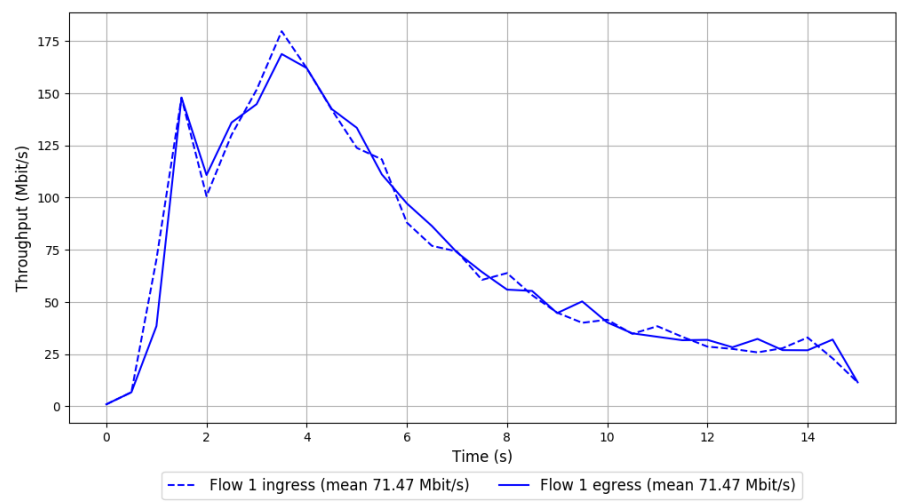


Run 7: Statistics of Indigo

Start at: 2017-12-11 10:13:28

End at: 2017-12-11 10:13:58

Run 7: Report of Indigo — Data Link

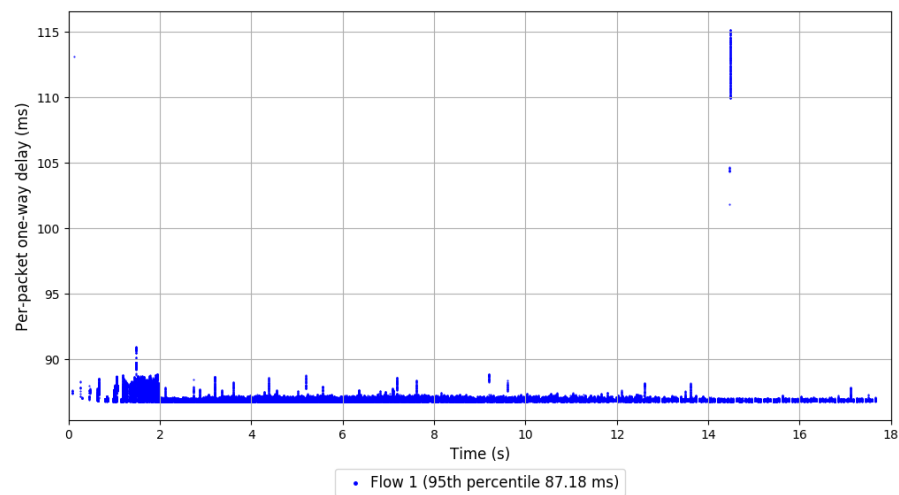
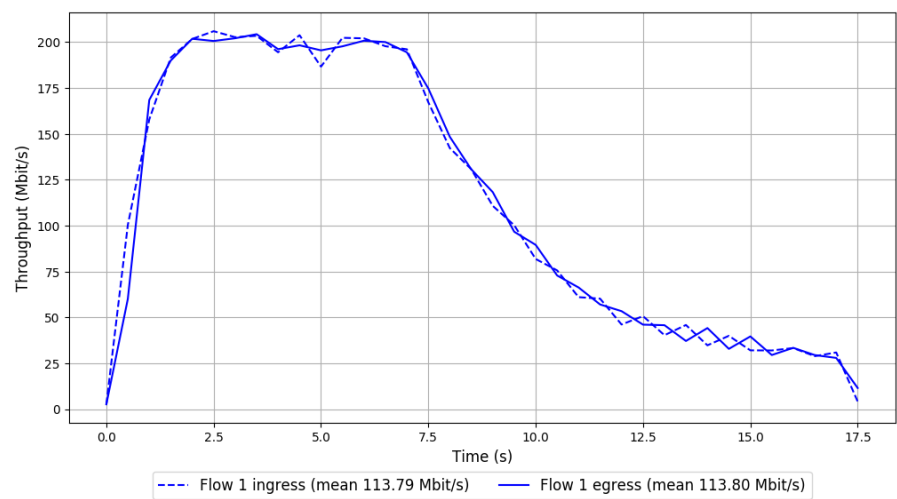


Run 8: Statistics of Indigo

Start at: 2017-12-11 10:23:59

End at: 2017-12-11 10:24:29

Run 8: Report of Indigo — Data Link

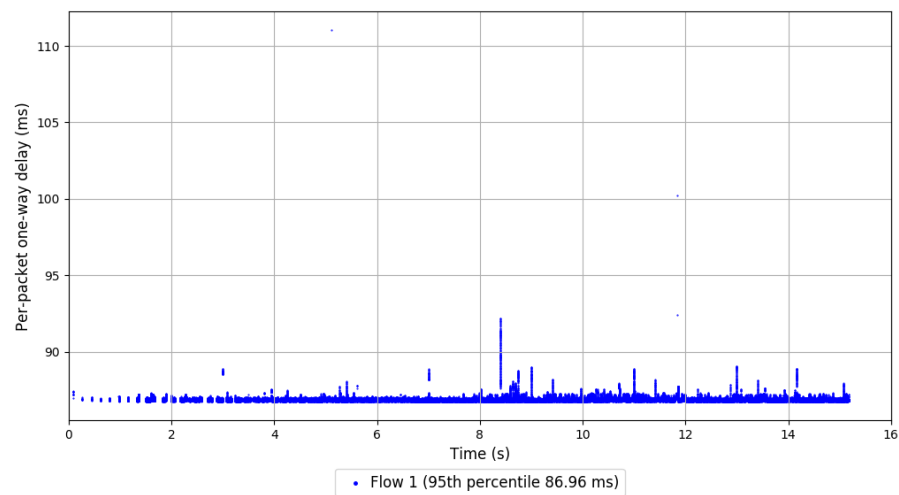
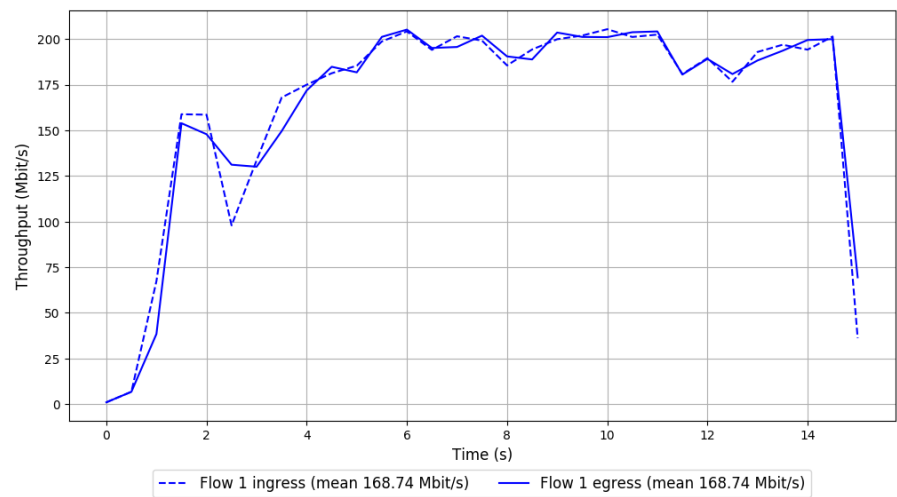


Run 9: Statistics of Indigo

Start at: 2017-12-11 10:33:57

End at: 2017-12-11 10:34:27

Run 9: Report of Indigo — Data Link

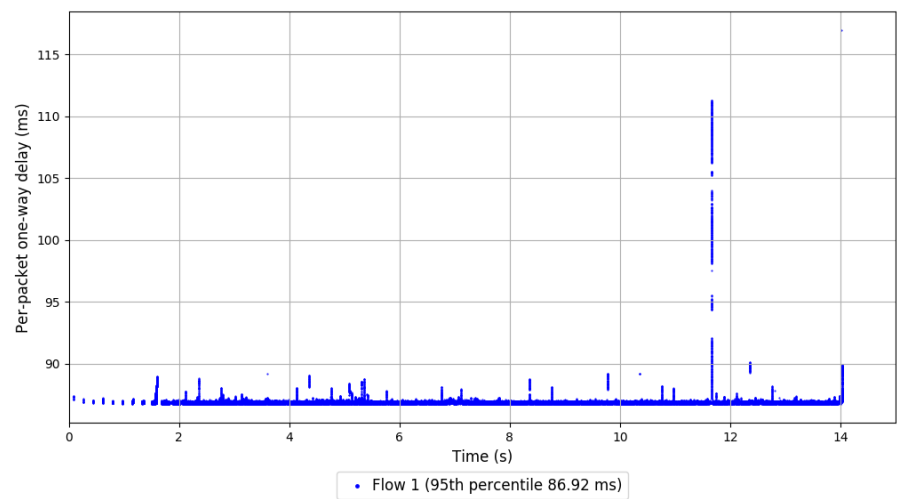
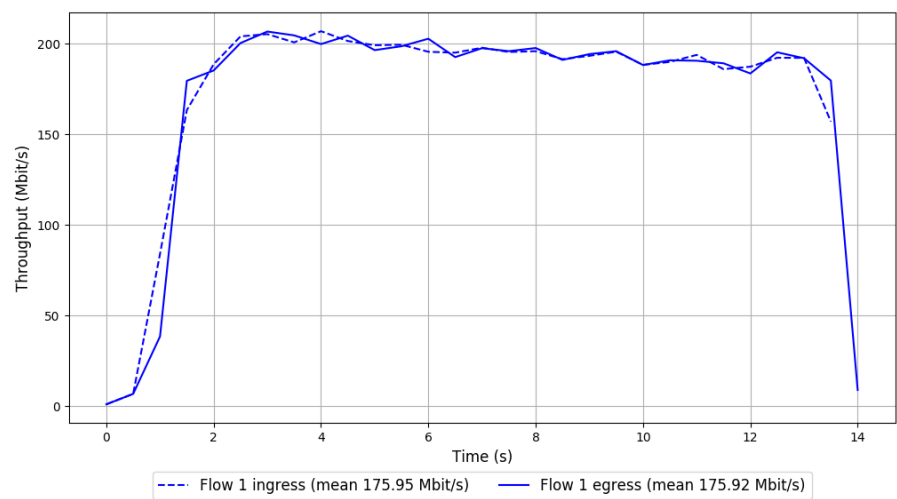


Run 10: Statistics of Indigo

Start at: 2017-12-11 10:44:27

End at: 2017-12-11 10:44:57

Run 10: Report of Indigo — Data Link

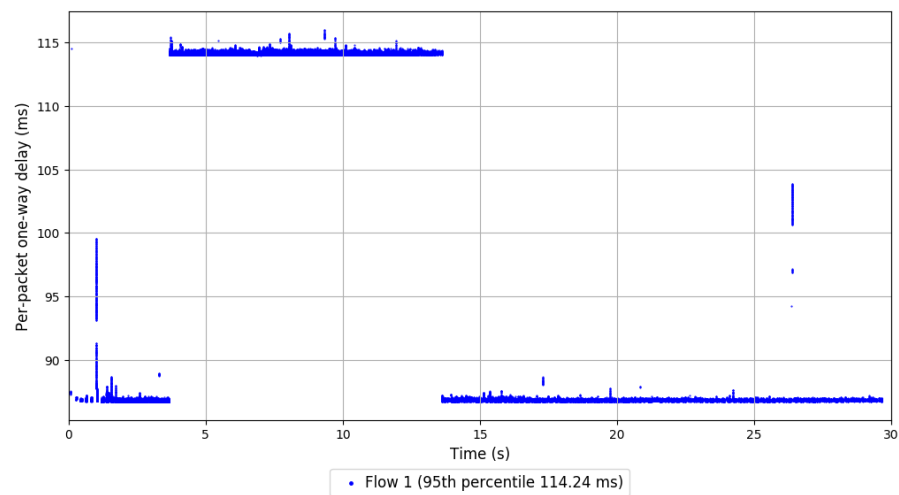
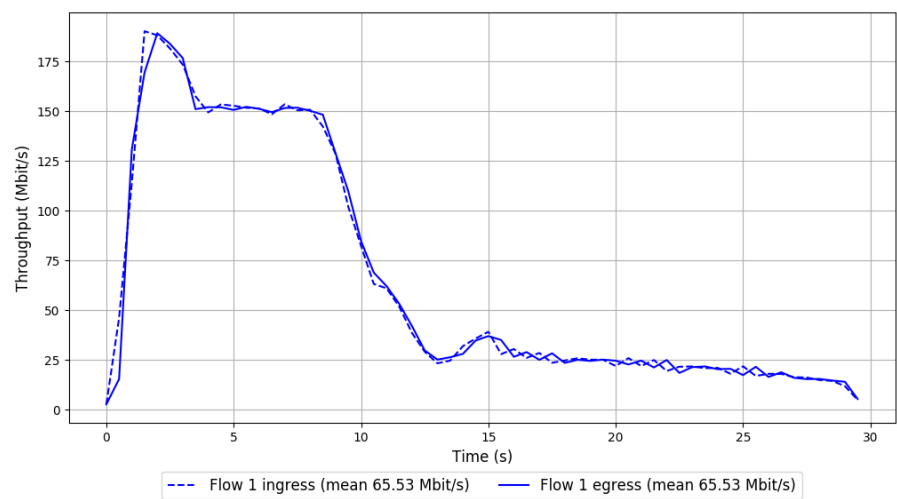


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-11 09:17:33
End at: 2017-12-11 09:18:03

# Below is generated by plot.py at 2017-12-11 11:56:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.53 Mbit/s
95th percentile per-packet one-way delay: 114.238 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.53 Mbit/s
95th percentile per-packet one-way delay: 114.238 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

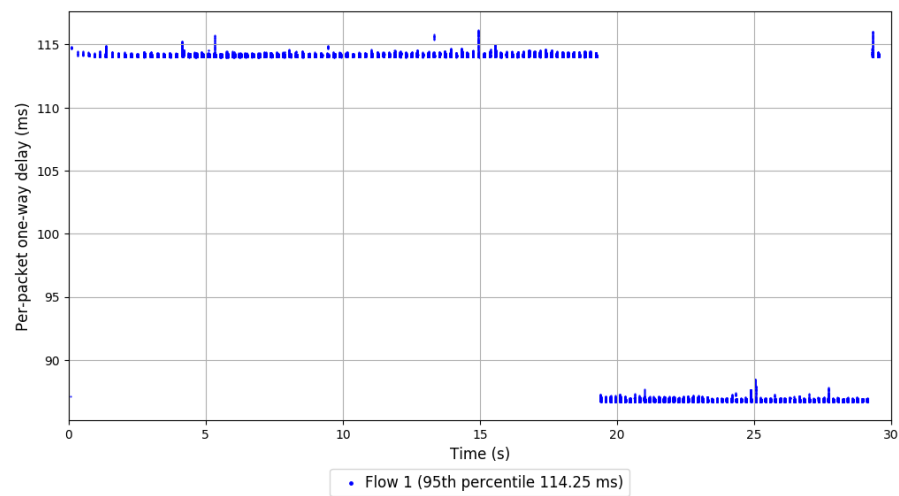
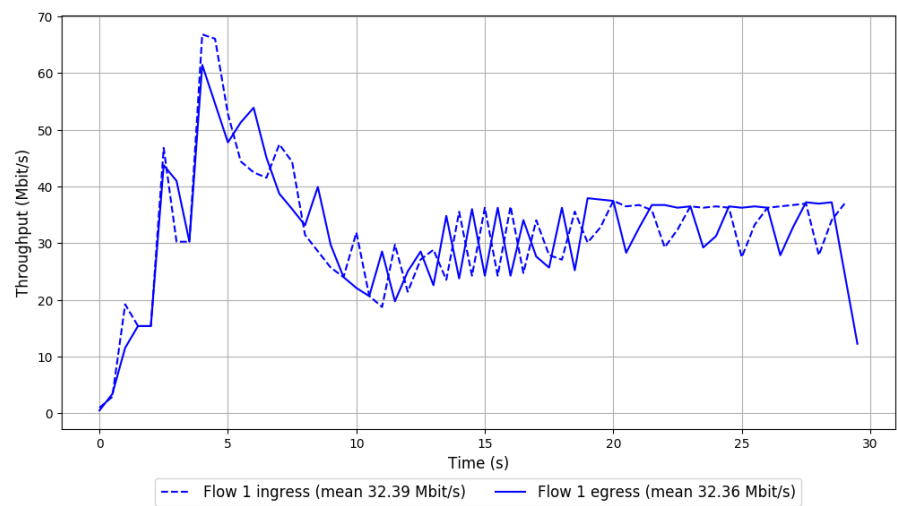


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-11 09:27:58
End at: 2017-12-11 09:28:28

# Below is generated by plot.py at 2017-12-11 11:56:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.36 Mbit/s
95th percentile per-packet one-way delay: 114.245 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.36 Mbit/s
95th percentile per-packet one-way delay: 114.245 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

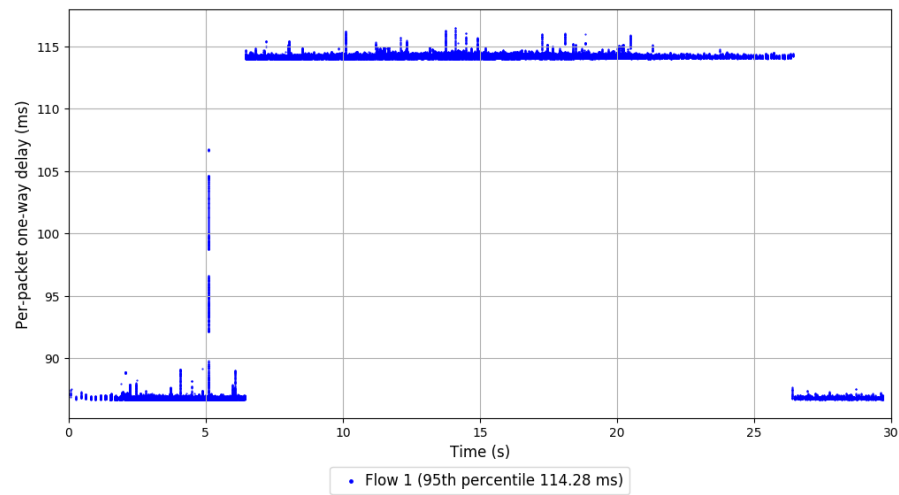
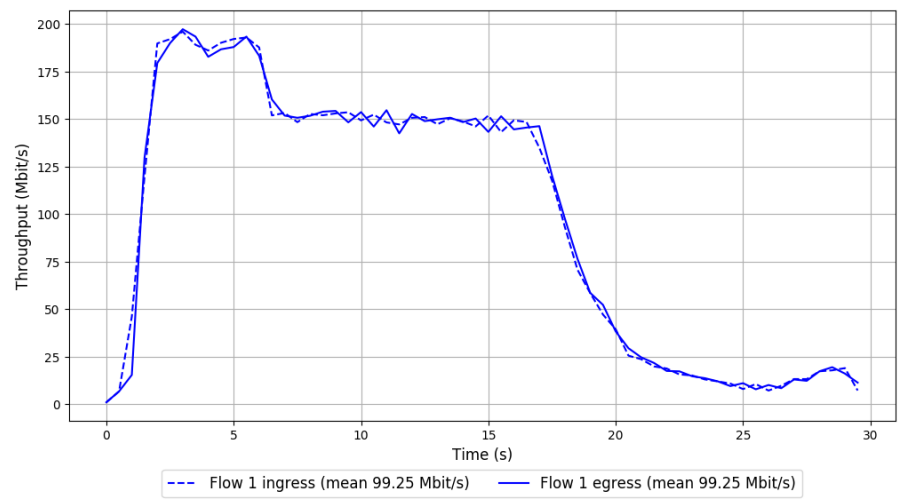


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-11 09:38:31
End at: 2017-12-11 09:39:01

# Below is generated by plot.py at 2017-12-11 11:57:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 99.25 Mbit/s
95th percentile per-packet one-way delay: 114.282 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 99.25 Mbit/s
95th percentile per-packet one-way delay: 114.282 ms
Loss rate: 0.00%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-11 09:48:55

End at: 2017-12-11 09:49:25

Below is generated by plot.py at 2017-12-11 11:58:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.95 Mbit/s

95th percentile per-packet one-way delay: 114.229 ms

Loss rate: 0.00%

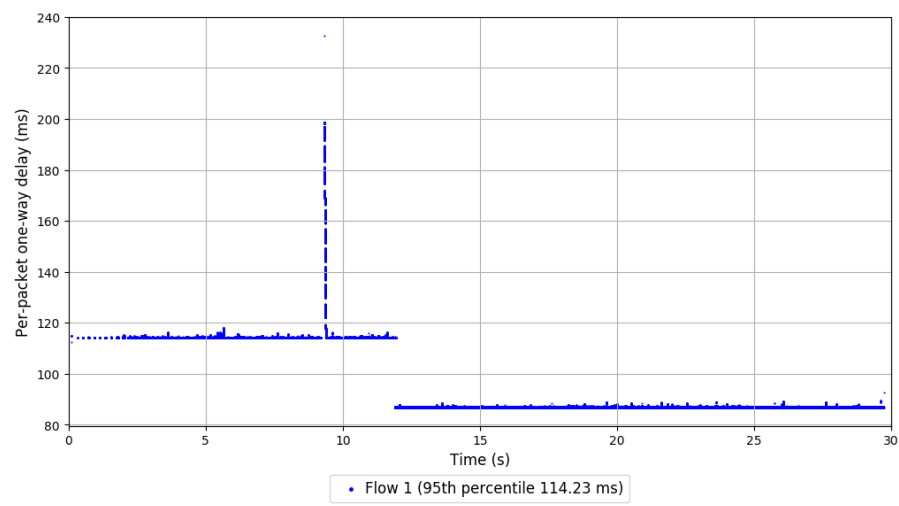
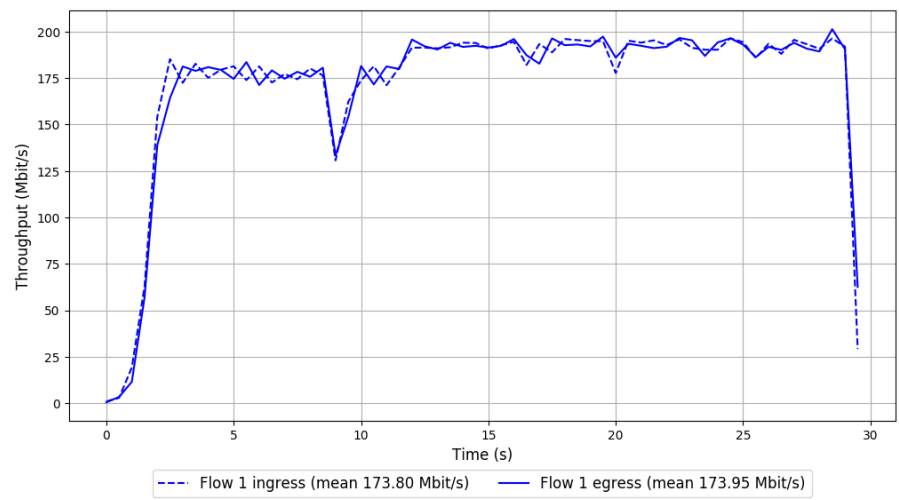
-- Flow 1:

Average throughput: 173.95 Mbit/s

95th percentile per-packet one-way delay: 114.229 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-11 09:59:23

End at: 2017-12-11 09:59:53

Below is generated by plot.py at 2017-12-11 11:58:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.65 Mbit/s

95th percentile per-packet one-way delay: 114.274 ms

Loss rate: 0.00%

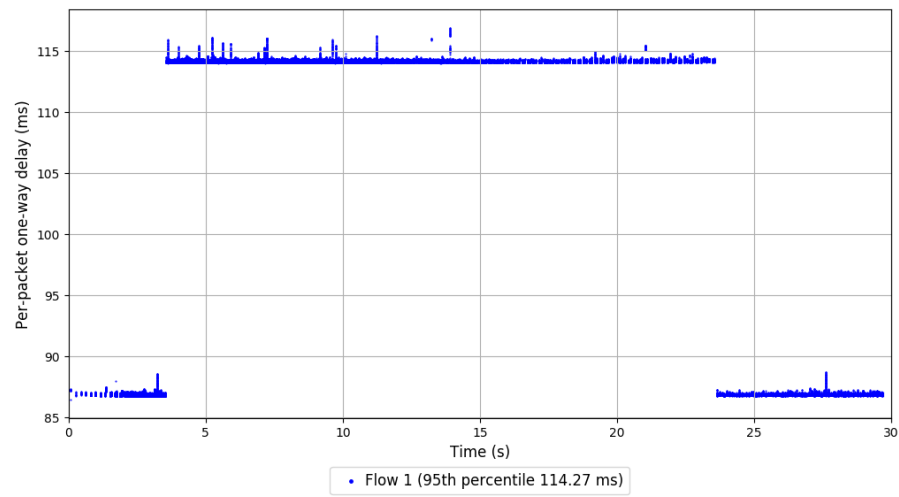
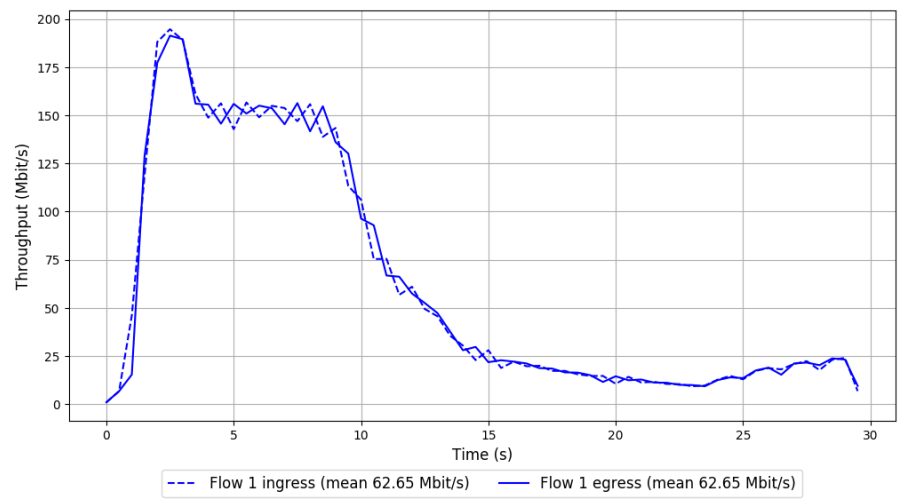
-- Flow 1:

Average throughput: 62.65 Mbit/s

95th percentile per-packet one-way delay: 114.274 ms

Loss rate: 0.00%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-11 10:09:39

End at: 2017-12-11 10:10:09

Below is generated by plot.py at 2017-12-11 11:58:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 163.08 Mbit/s

95th percentile per-packet one-way delay: 114.255 ms

Loss rate: 0.00%

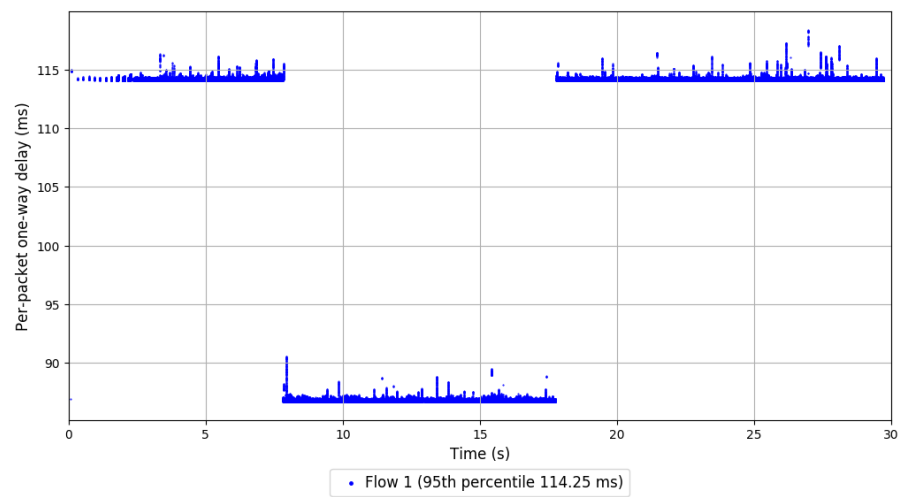
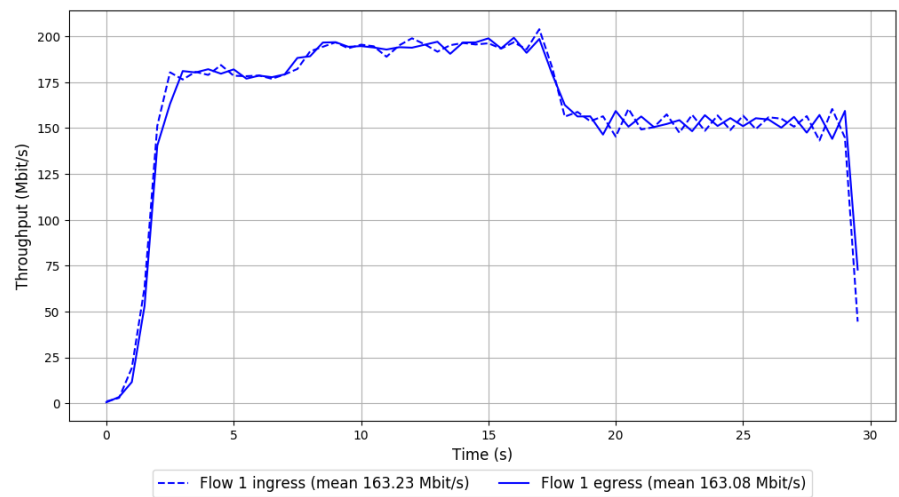
-- Flow 1:

Average throughput: 163.08 Mbit/s

95th percentile per-packet one-way delay: 114.255 ms

Loss rate: 0.00%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-11 10:20:17

End at: 2017-12-11 10:20:47

Below is generated by plot.py at 2017-12-11 11:58:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 175.78 Mbit/s

95th percentile per-packet one-way delay: 114.262 ms

Loss rate: 0.00%

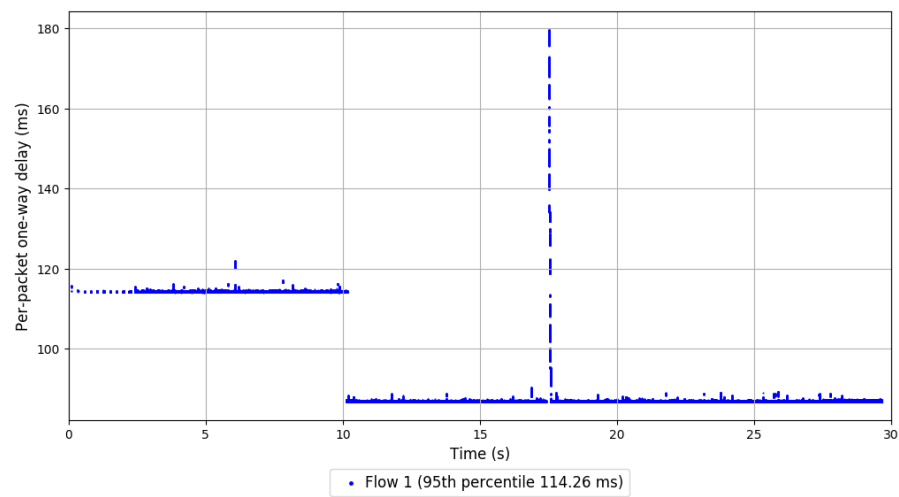
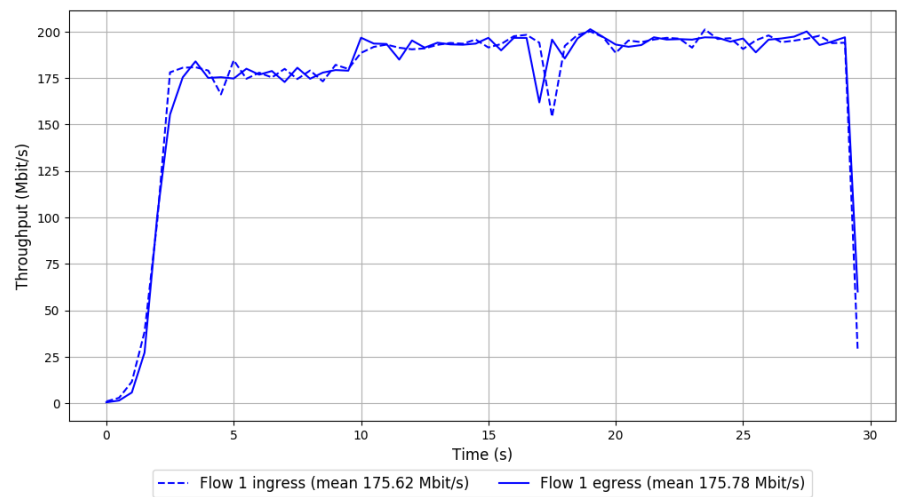
-- Flow 1:

Average throughput: 175.78 Mbit/s

95th percentile per-packet one-way delay: 114.262 ms

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-11 10:30:22

End at: 2017-12-11 10:30:52

Below is generated by plot.py at 2017-12-11 11:58:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.12 Mbit/s

95th percentile per-packet one-way delay: 114.191 ms

Loss rate: 0.00%

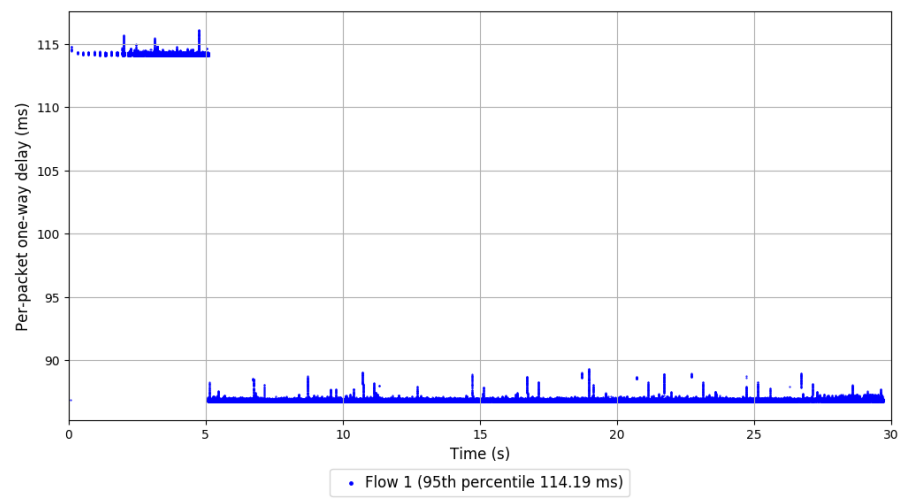
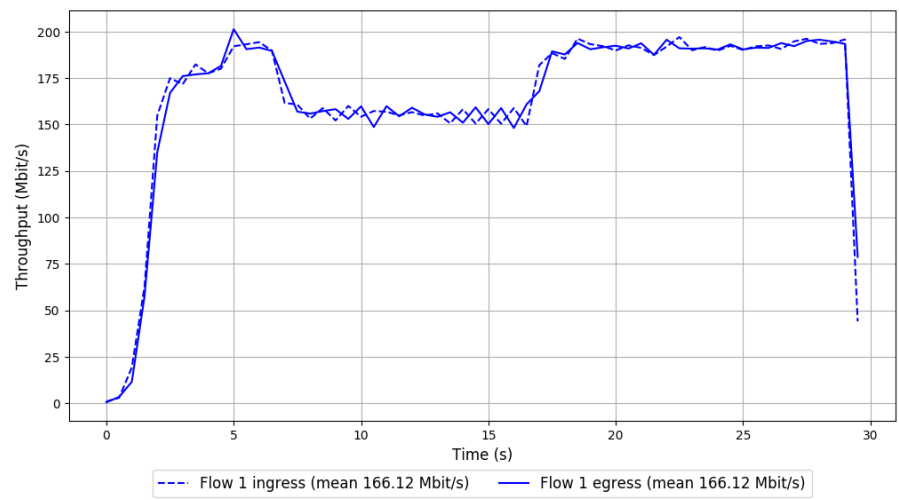
-- Flow 1:

Average throughput: 166.12 Mbit/s

95th percentile per-packet one-way delay: 114.191 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-11 10:40:46

End at: 2017-12-11 10:41:16

Below is generated by plot.py at 2017-12-11 11:58:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.68 Mbit/s

95th percentile per-packet one-way delay: 86.928 ms

Loss rate: 0.00%

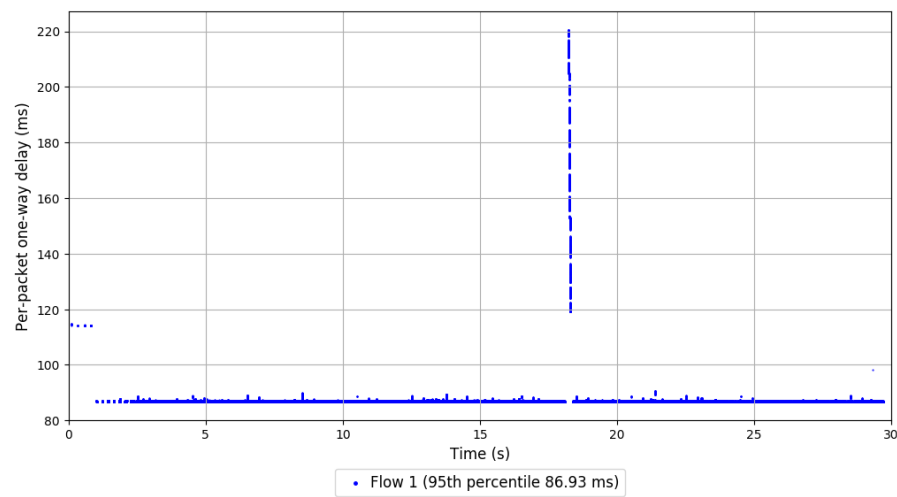
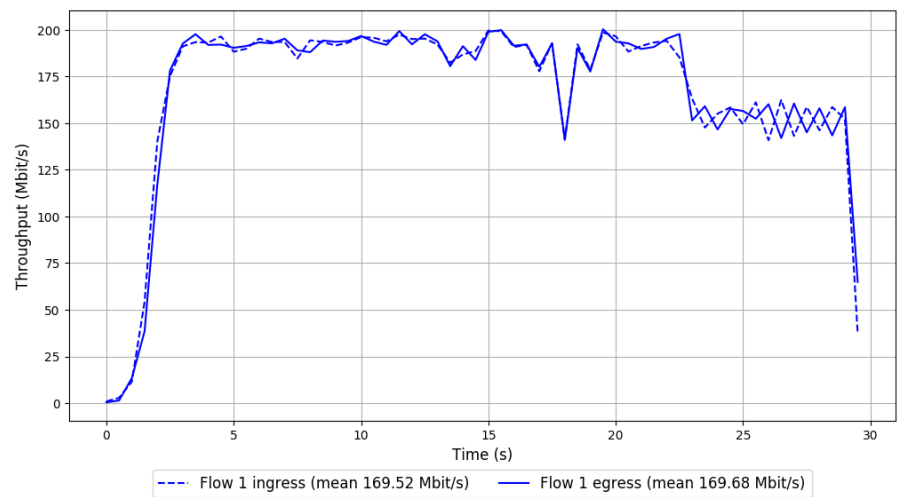
-- Flow 1:

Average throughput: 169.68 Mbit/s

95th percentile per-packet one-way delay: 86.928 ms

Loss rate: 0.00%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-11 10:51:05

End at: 2017-12-11 10:51:35

Below is generated by plot.py at 2017-12-11 11:58:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.37 Mbit/s

95th percentile per-packet one-way delay: 114.326 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 170.37 Mbit/s

95th percentile per-packet one-way delay: 114.326 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

