

Pantheon Report

Generated at 2017-11-21 02:27:29 (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.

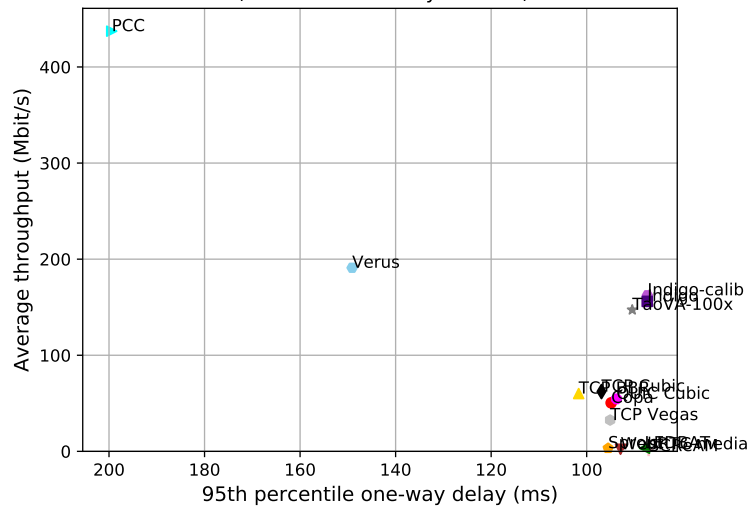
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

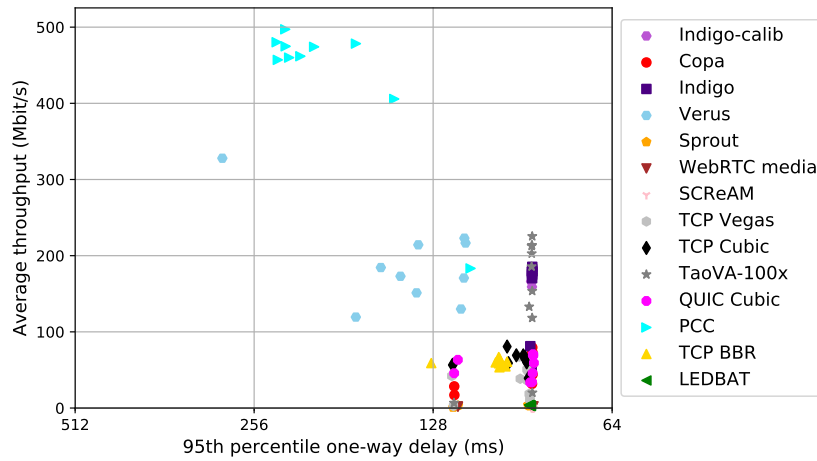
Git summary:

```
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	10	60.15	101.68	0.02
TCP Cubic	10	62.22	96.91	0.02
LEDBAT	7	3.24	87.90	0.03
PCC	10	437.25	199.43	0.87
QUIC Cubic	9	54.63	93.77	0.02
SCReAM	10	0.22	87.03	0.00
WebRTC media	10	2.15	92.92	0.00
Sprout	8	3.29	95.52	0.16
TaoVA-100x	10	147.25	90.46	0.06
TCP Vegas	10	32.55	95.10	0.02
Verus	10	191.04	149.11	0.66
Copa	8	50.47	94.88	0.00
Indigo	10	156.05	87.32	0.00
Indigo-calib	10	162.41	87.29	0.01

Run 1: Statistics of TCP BBR

Start at: 2017-11-20 23:35:34

End at: 2017-11-20 23:36:04

Below is generated by plot.py at 2017-11-21 01:51:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.91 Mbit/s

95th percentile per-packet one-way delay: 99.286 ms

Loss rate: 0.00%

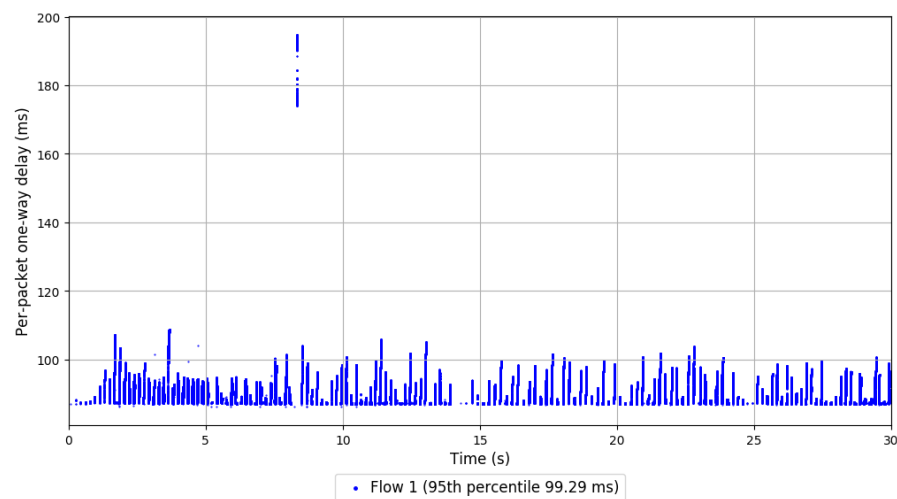
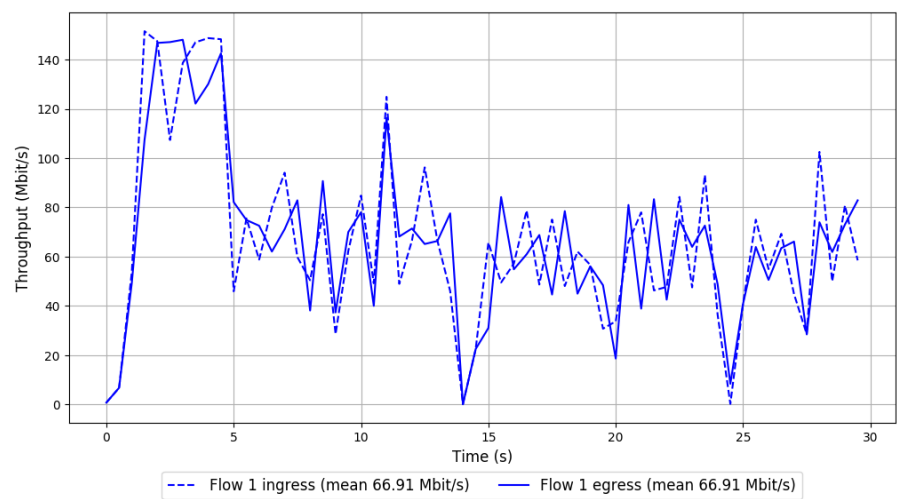
-- Flow 1:

Average throughput: 66.91 Mbit/s

95th percentile per-packet one-way delay: 99.286 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-20 23:46:27

End at: 2017-11-20 23:46:57

Below is generated by plot.py at 2017-11-21 01:51:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.74 Mbit/s

95th percentile per-packet one-way delay: 98.866 ms

Loss rate: 0.00%

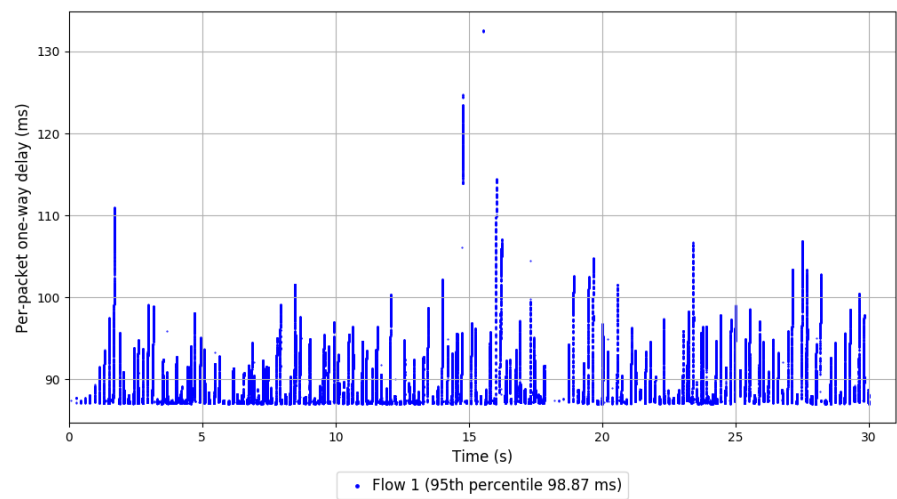
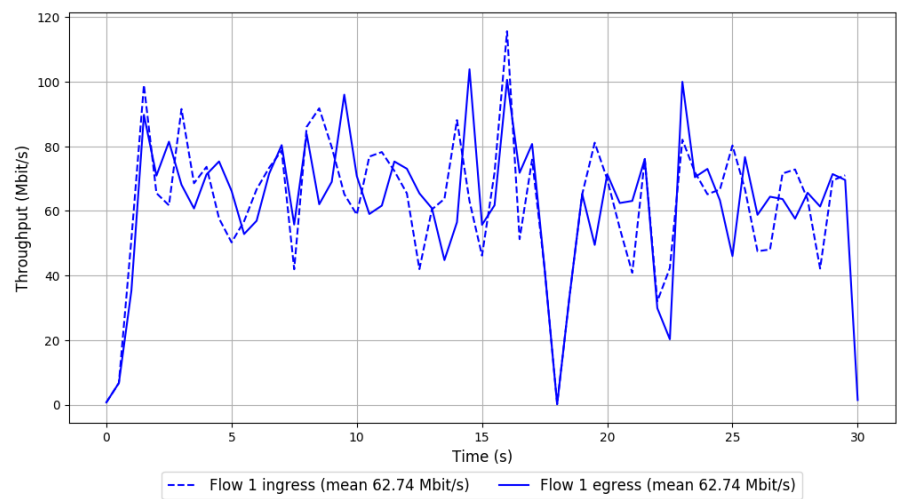
-- Flow 1:

Average throughput: 62.74 Mbit/s

95th percentile per-packet one-way delay: 98.866 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-20 23:57:25

End at: 2017-11-20 23:57:55

Below is generated by plot.py at 2017-11-21 01:51:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.40 Mbit/s

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

Loss rate: 0.01%

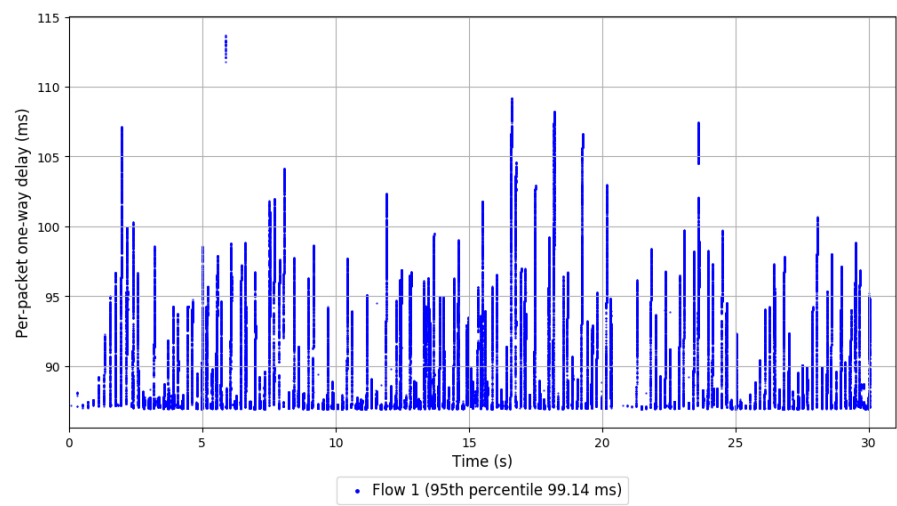
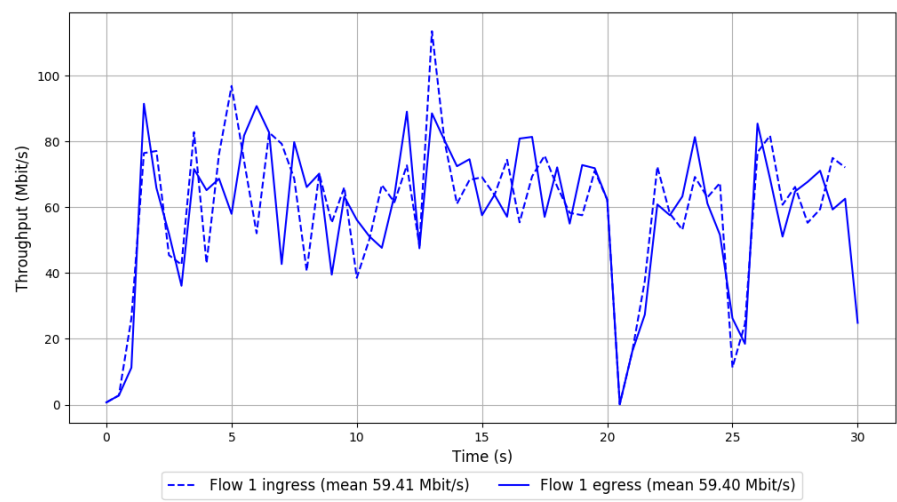
-- Flow 1:

Average throughput: 59.40 Mbit/s

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

Loss rate: 0.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-21 00:08:21

End at: 2017-11-21 00:08:51

Below is generated by plot.py at 2017-11-21 01:51:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.87 Mbit/s

95th percentile per-packet one-way delay: 96.122 ms

Loss rate: 0.00%

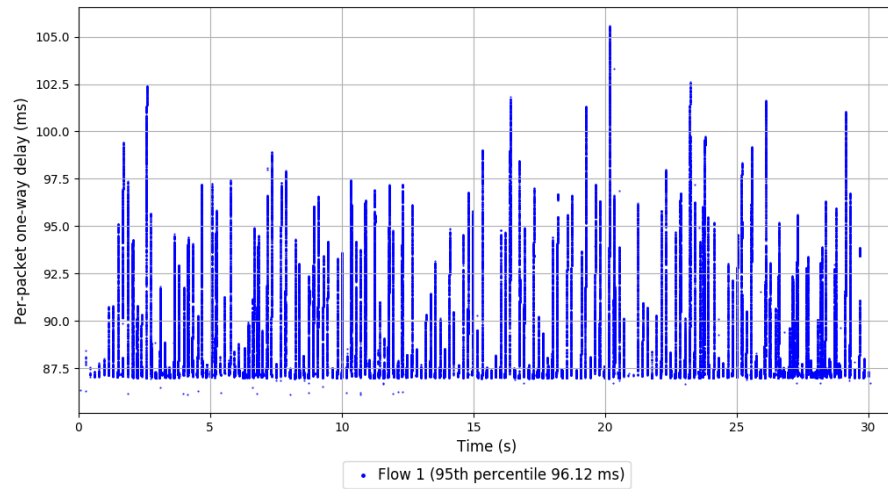
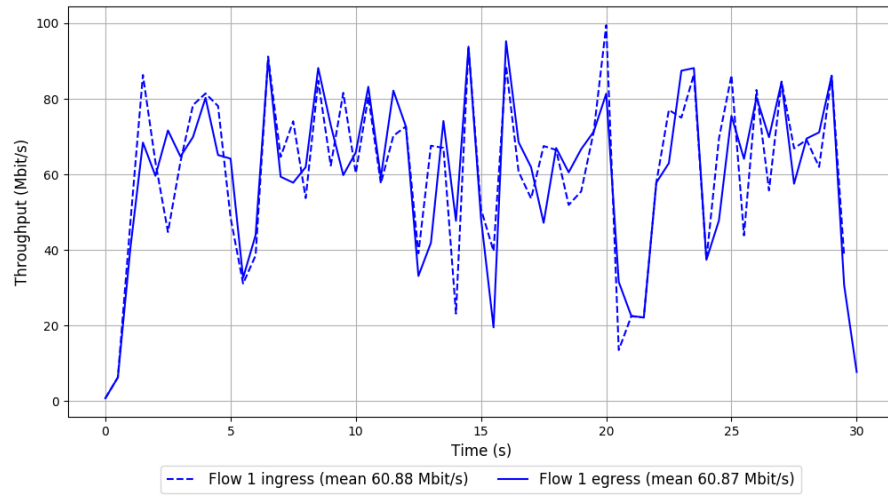
-- Flow 1:

Average throughput: 60.87 Mbit/s

95th percentile per-packet one-way delay: 96.122 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-21 00:19:16

End at: 2017-11-21 00:19:46

Below is generated by plot.py at 2017-11-21 01:51:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.69 Mbit/s

95th percentile per-packet one-way delay: 96.711 ms

Loss rate: 0.02%

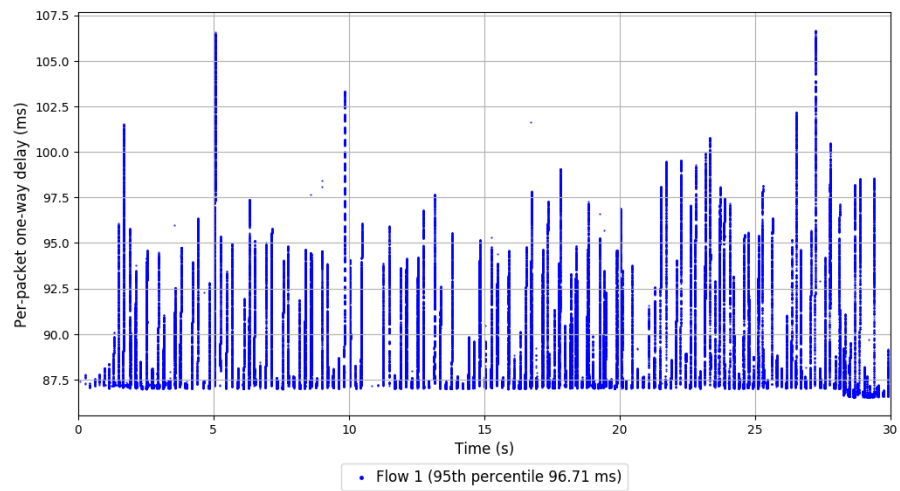
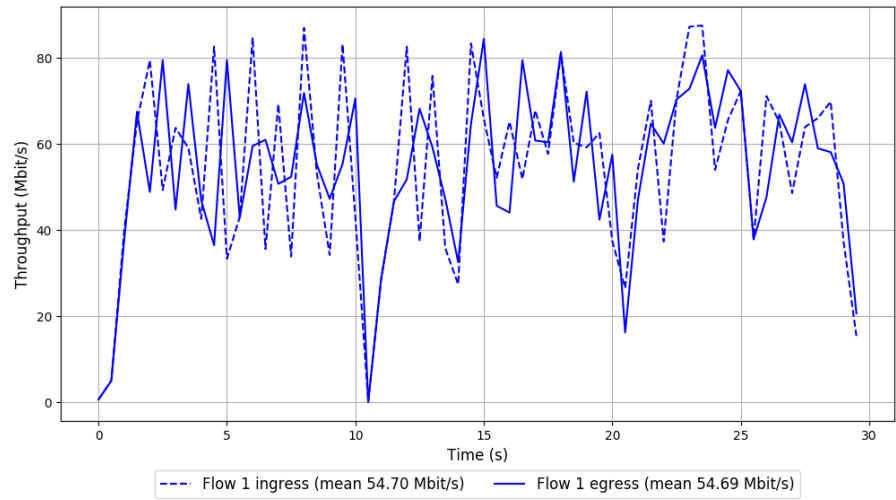
-- Flow 1:

Average throughput: 54.69 Mbit/s

95th percentile per-packet one-way delay: 96.711 ms

Loss rate: 0.02%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-21 00:29:57

End at: 2017-11-21 00:30:27

Below is generated by plot.py at 2017-11-21 01:51:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.00 Mbit/s

95th percentile per-packet one-way delay: 128.926 ms

Loss rate: 0.00%

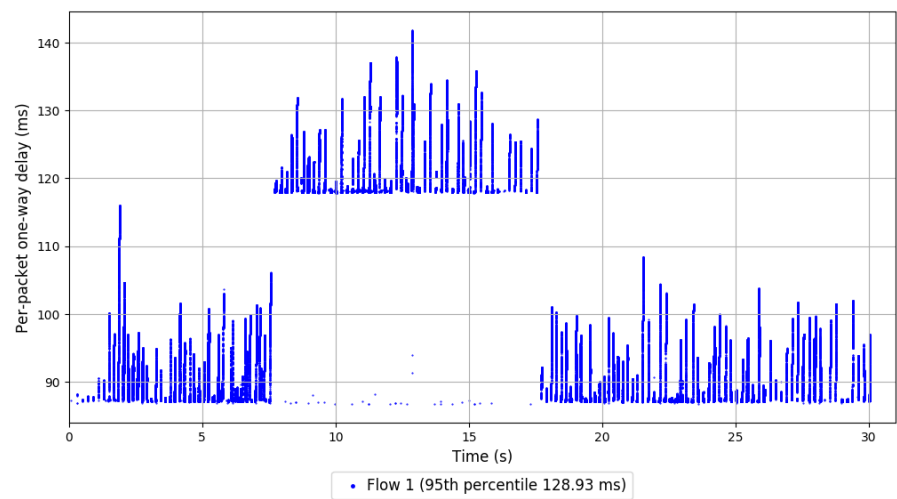
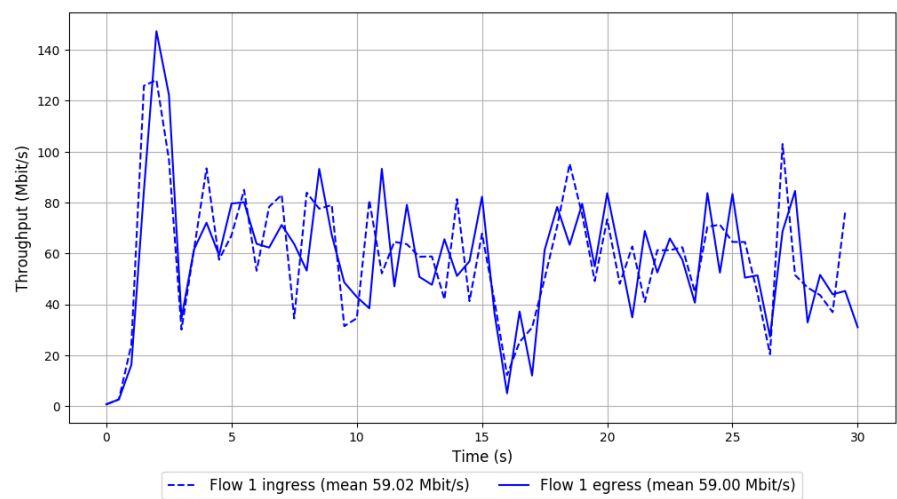
-- Flow 1:

Average throughput: 59.00 Mbit/s

95th percentile per-packet one-way delay: 128.926 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-21 00:40:30

End at: 2017-11-21 00:41:00

Below is generated by plot.py at 2017-11-21 01:51:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.71 Mbit/s

95th percentile per-packet one-way delay: 99.185 ms

Loss rate: 0.01%

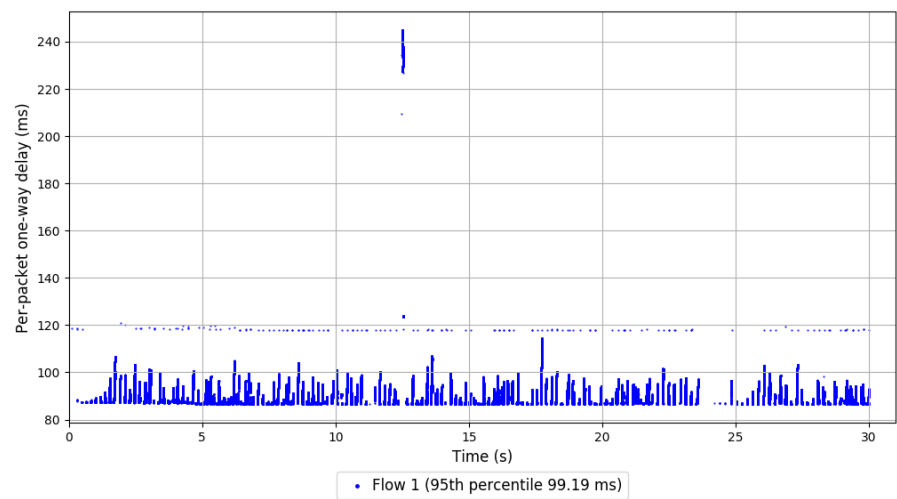
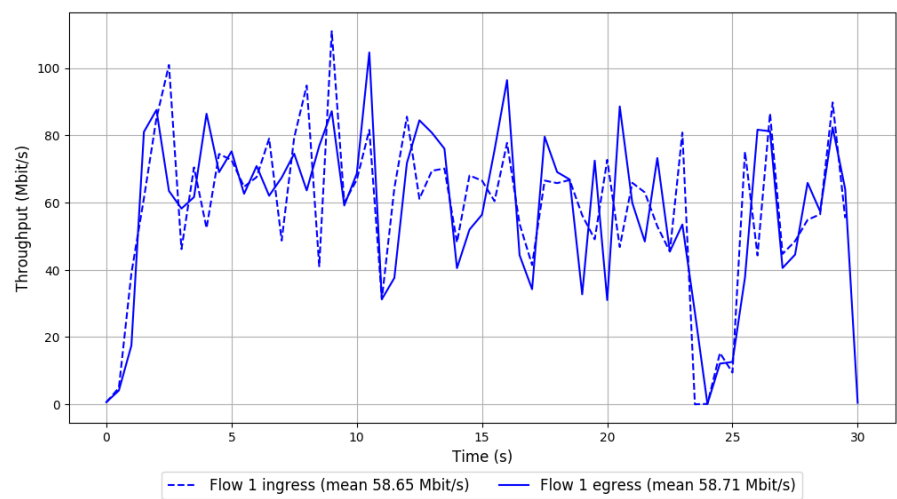
-- Flow 1:

Average throughput: 58.71 Mbit/s

95th percentile per-packet one-way delay: 99.185 ms

Loss rate: 0.01%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-21 00:51:13

End at: 2017-11-21 00:51:43

Below is generated by plot.py at 2017-11-21 01:51:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.48 Mbit/s

95th percentile per-packet one-way delay: 99.000 ms

Loss rate: 0.16%

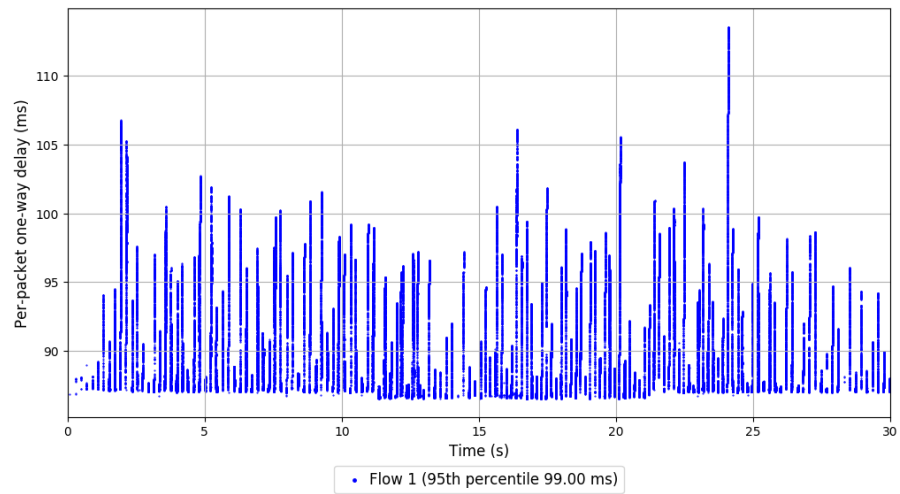
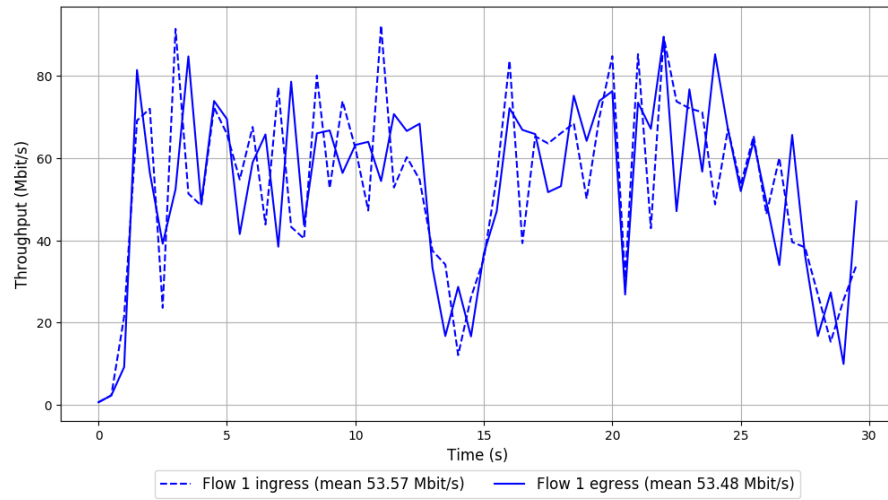
-- Flow 1:

Average throughput: 53.48 Mbit/s

95th percentile per-packet one-way delay: 99.000 ms

Loss rate: 0.16%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-21 01:01:53

End at: 2017-11-21 01:02:23

Below is generated by plot.py at 2017-11-21 01:52:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.79 Mbit/s

95th percentile per-packet one-way delay: 99.063 ms

Loss rate: 0.01%

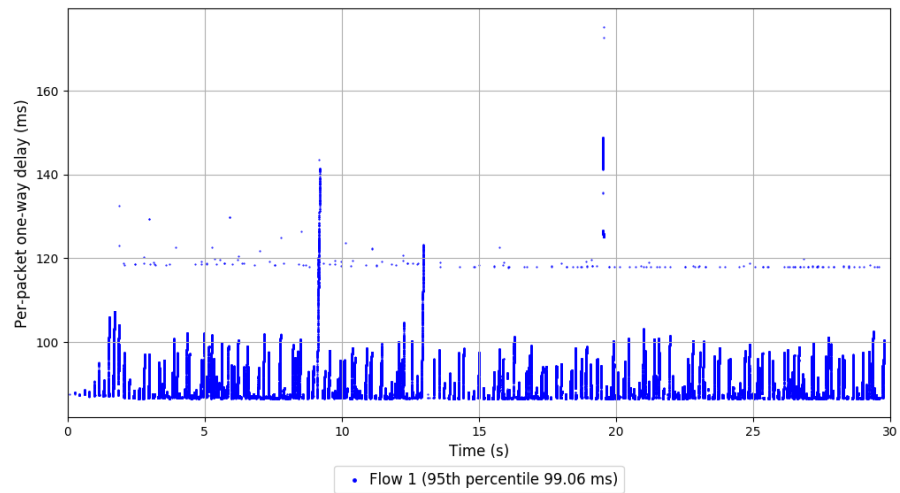
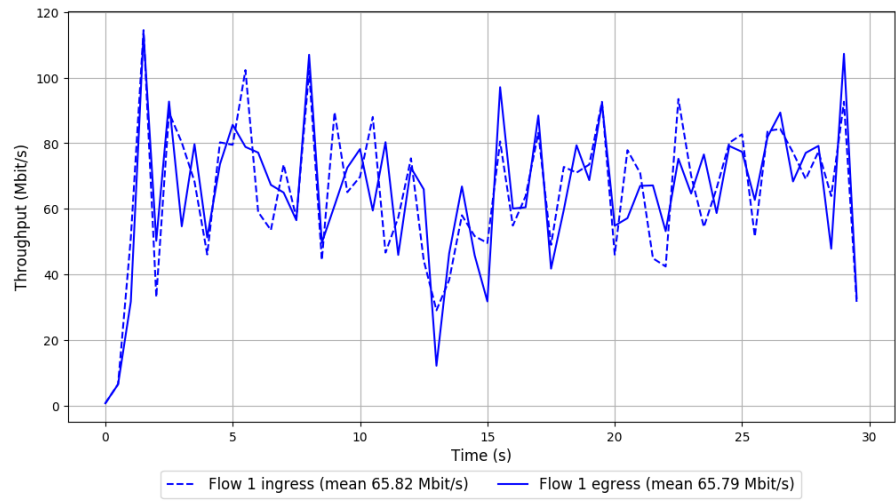
-- Flow 1:

Average throughput: 65.79 Mbit/s

95th percentile per-packet one-way delay: 99.063 ms

Loss rate: 0.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-21 01:12:52

End at: 2017-11-21 01:13:22

Below is generated by plot.py at 2017-11-21 01:52:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.91 Mbit/s

95th percentile per-packet one-way delay: 100.465 ms

Loss rate: 0.03%

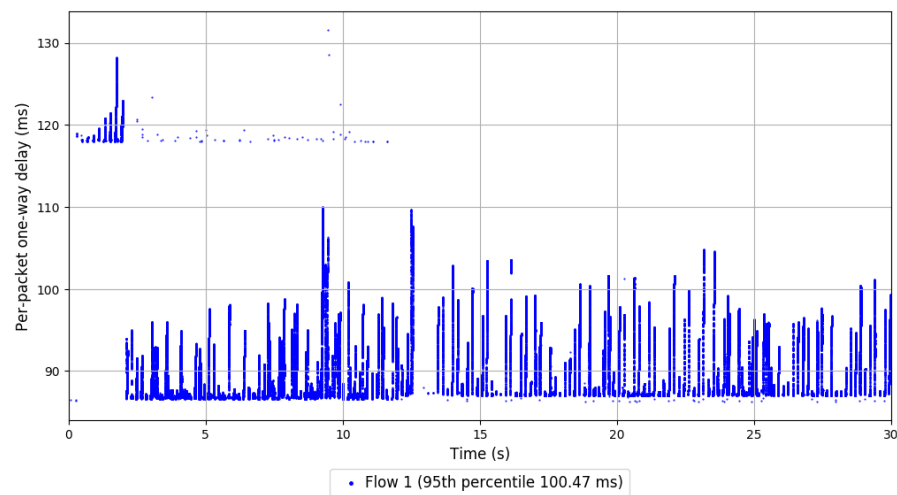
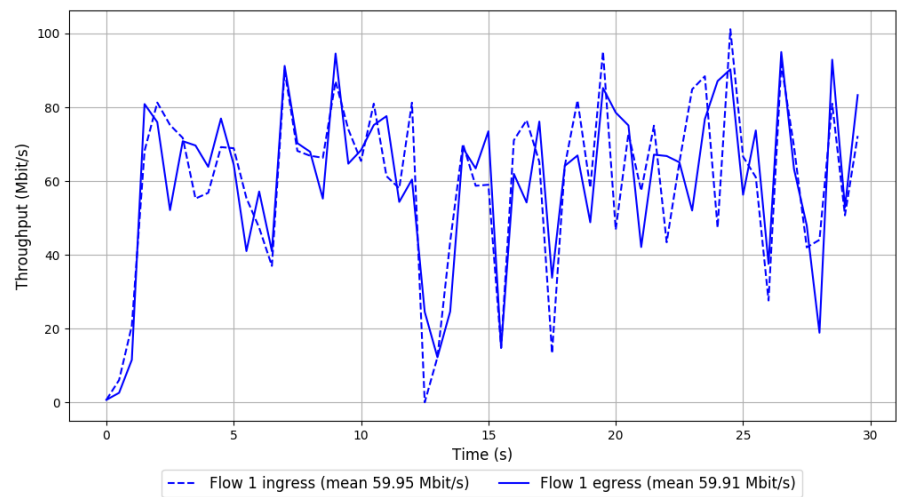
-- Flow 1:

Average throughput: 59.91 Mbit/s

95th percentile per-packet one-way delay: 100.465 ms

Loss rate: 0.03%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-20 23:30:00

End at: 2017-11-20 23:30:30

Below is generated by plot.py at 2017-11-21 01:52:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.21 Mbit/s

95th percentile per-packet one-way delay: 92.728 ms

Loss rate: 0.01%

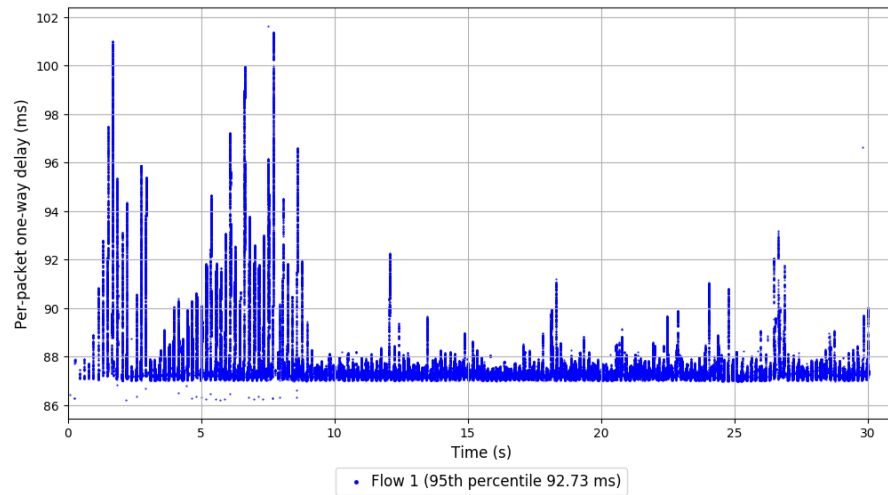
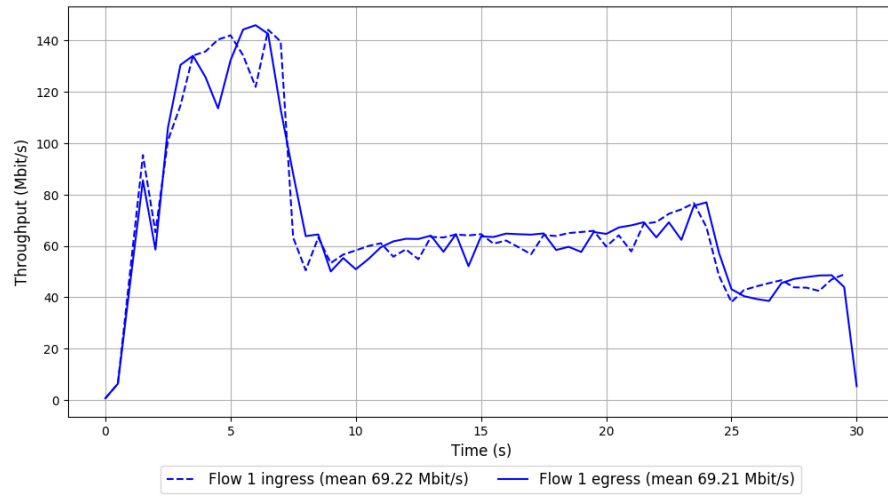
-- Flow 1:

Average throughput: 69.21 Mbit/s

95th percentile per-packet one-way delay: 92.728 ms

Loss rate: 0.01%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-20 23:40:55

End at: 2017-11-20 23:41:25

Below is generated by plot.py at 2017-11-21 01:52:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.88 Mbit/s

95th percentile per-packet one-way delay: 89.810 ms

Loss rate: 0.01%

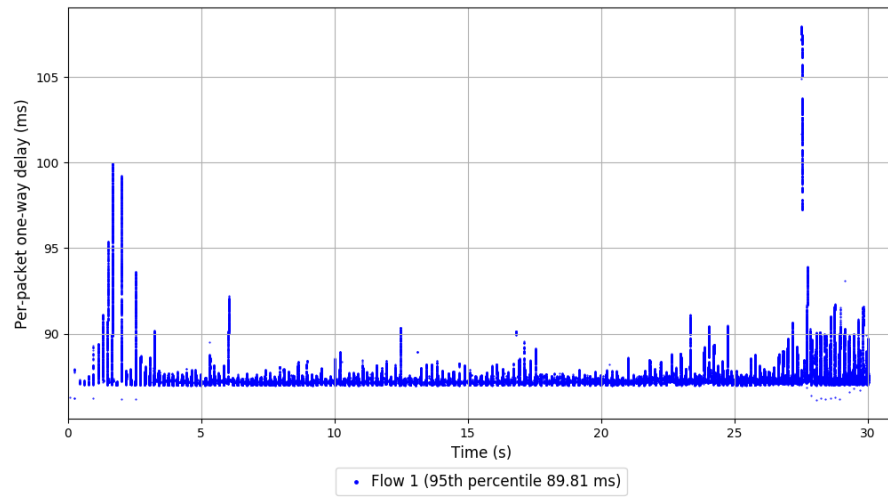
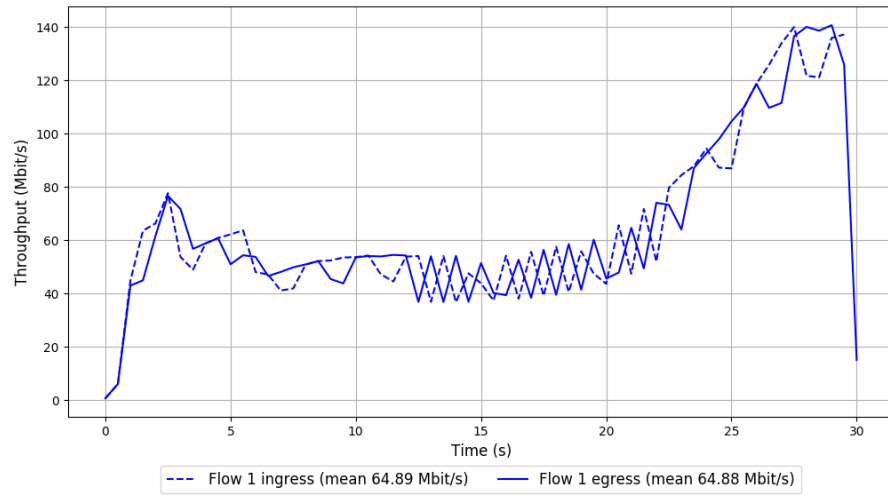
-- Flow 1:

Average throughput: 64.88 Mbit/s

95th percentile per-packet one-way delay: 89.810 ms

Loss rate: 0.01%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-20 23:51:50

End at: 2017-11-20 23:52:20

Below is generated by plot.py at 2017-11-21 01:52:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.12 Mbit/s

95th percentile per-packet one-way delay: 90.272 ms

Loss rate: 0.02%

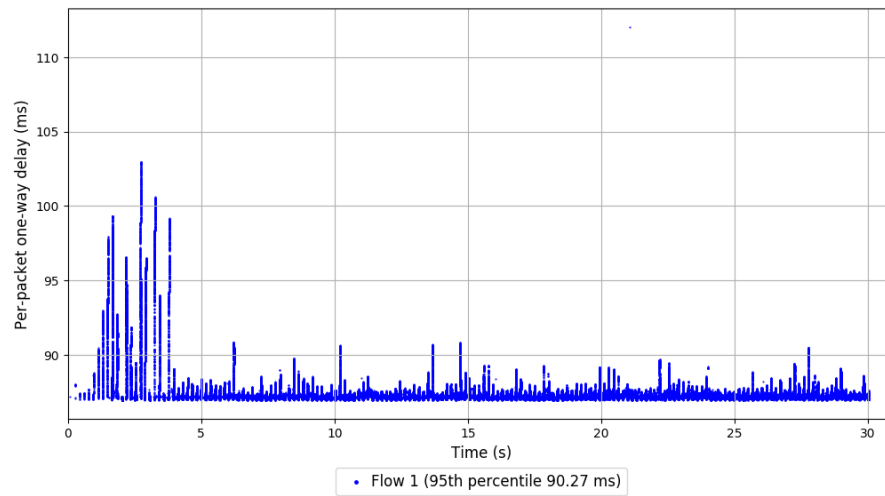
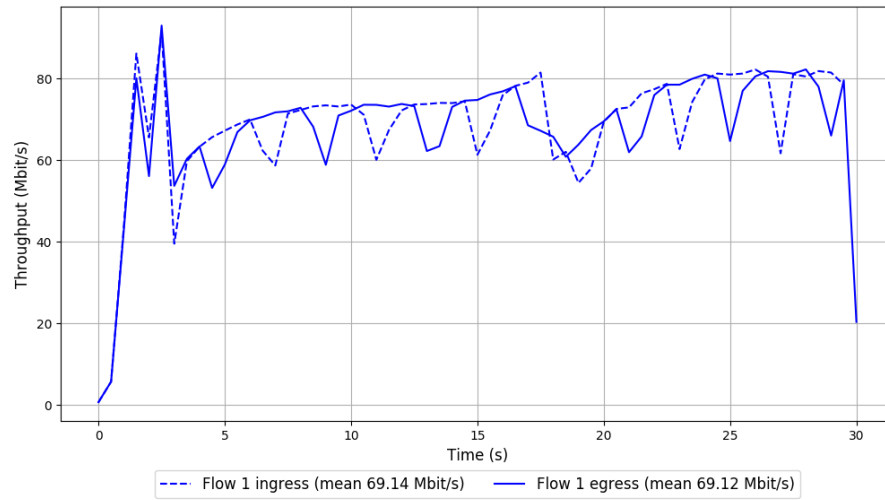
-- Flow 1:

Average throughput: 69.12 Mbit/s

95th percentile per-packet one-way delay: 90.272 ms

Loss rate: 0.02%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-21 00:02:37

End at: 2017-11-21 00:03:07

Below is generated by plot.py at 2017-11-21 01:53:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.69 Mbit/s

95th percentile per-packet one-way delay: 96.100 ms

Loss rate: 0.01%

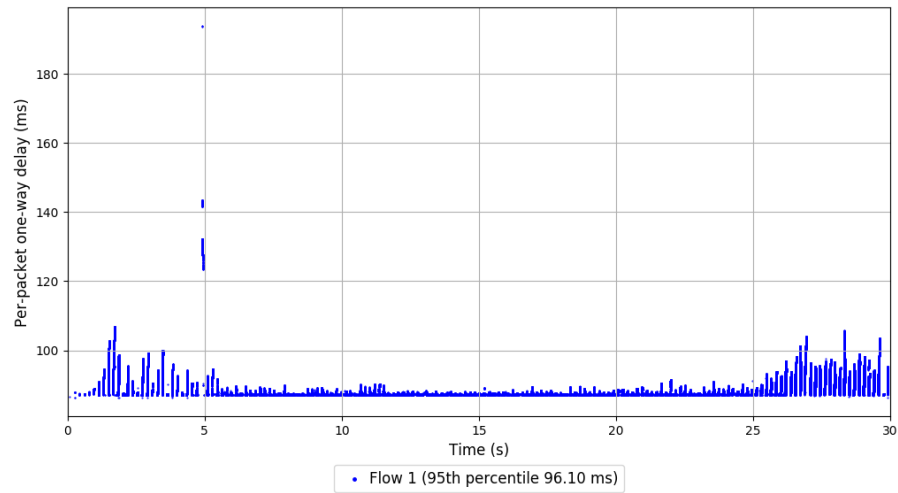
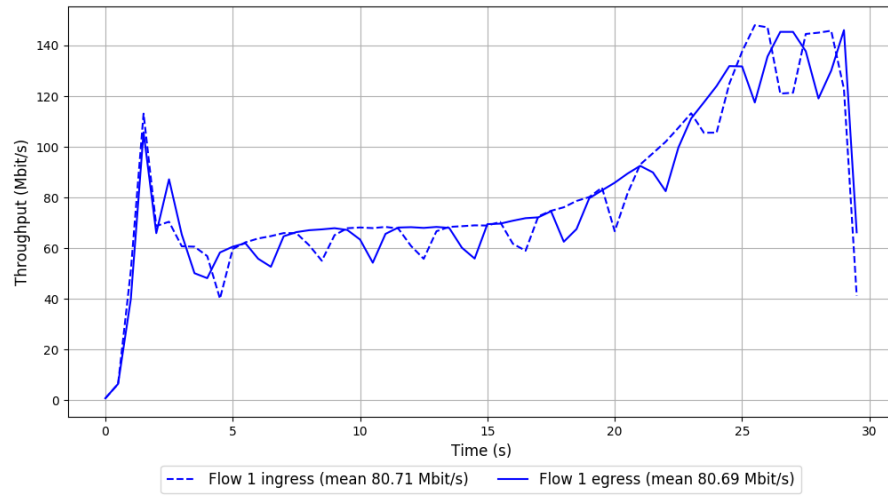
-- Flow 1:

Average throughput: 80.69 Mbit/s

95th percentile per-packet one-way delay: 96.100 ms

Loss rate: 0.01%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-21 00:13:43

End at: 2017-11-21 00:14:13

Below is generated by plot.py at 2017-11-21 01:53:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.15 Mbit/s

95th percentile per-packet one-way delay: 88.580 ms

Loss rate: 0.01%

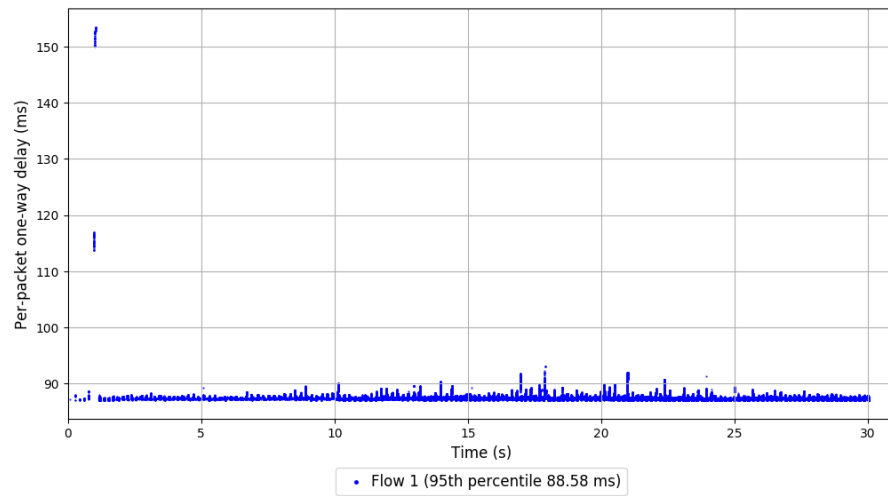
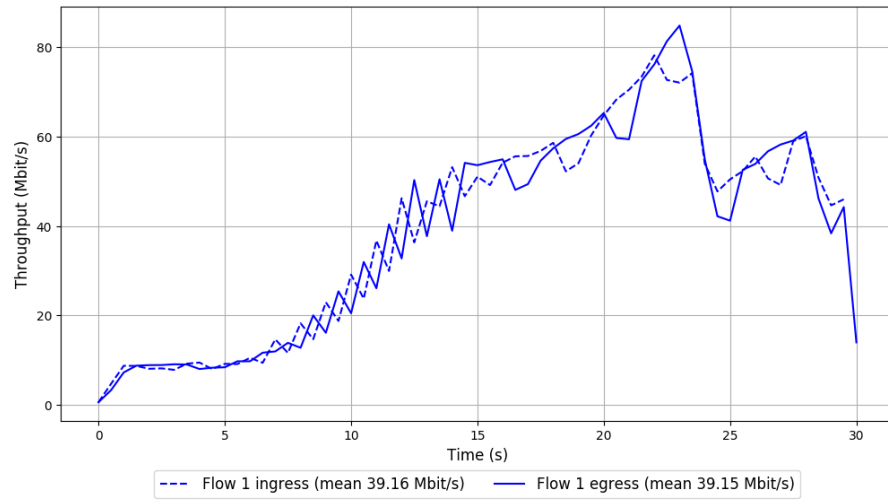
-- Flow 1:

Average throughput: 39.15 Mbit/s

95th percentile per-packet one-way delay: 88.580 ms

Loss rate: 0.01%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-21 00:24:29

End at: 2017-11-21 00:24:59

Below is generated by plot.py at 2017-11-21 01:53:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.94 Mbit/s

95th percentile per-packet one-way delay: 95.611 ms

Loss rate: 0.00%

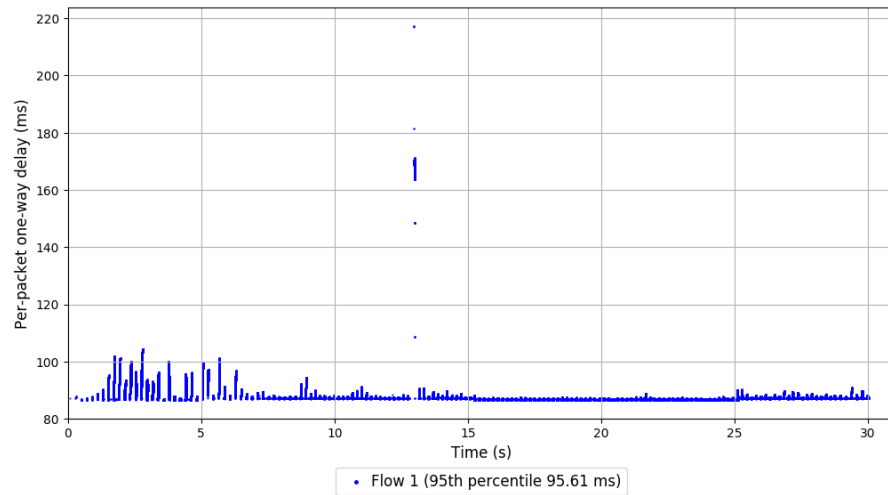
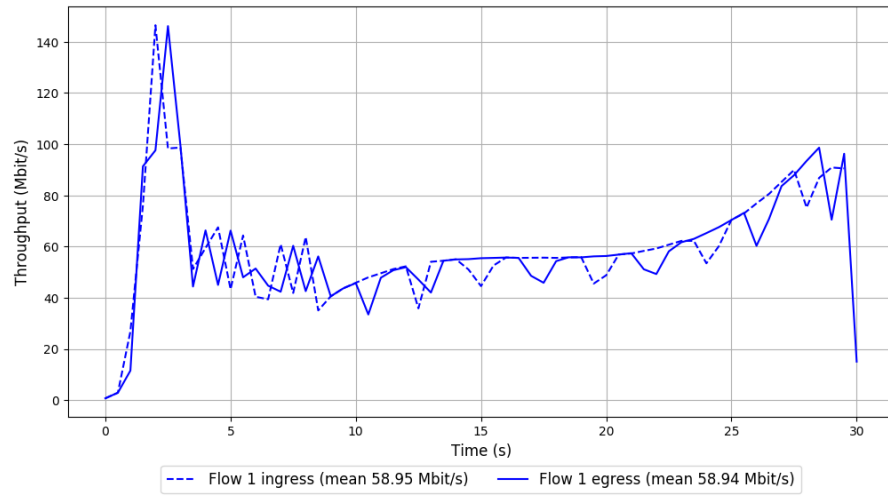
-- Flow 1:

Average throughput: 58.94 Mbit/s

95th percentile per-packet one-way delay: 95.611 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-21 00:35:02

End at: 2017-11-21 00:35:32

Below is generated by plot.py at 2017-11-21 01:53:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.97 Mbit/s

95th percentile per-packet one-way delay: 118.426 ms

Loss rate: 0.00%

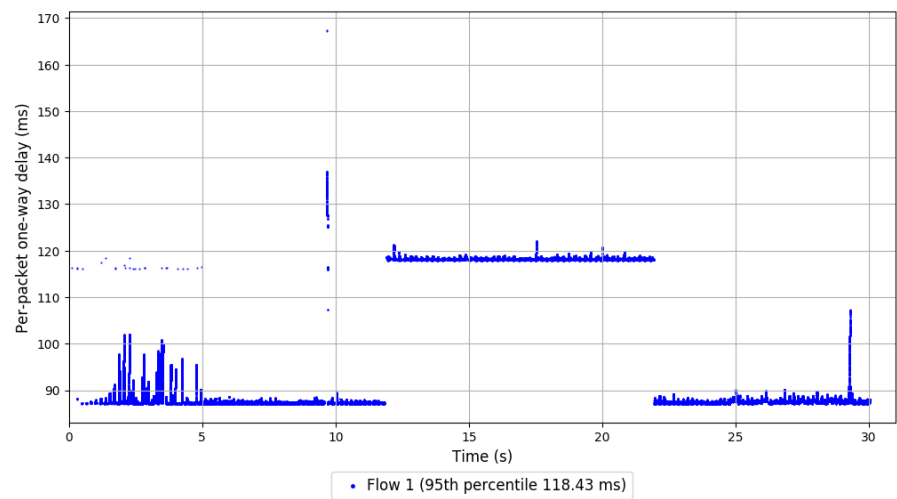
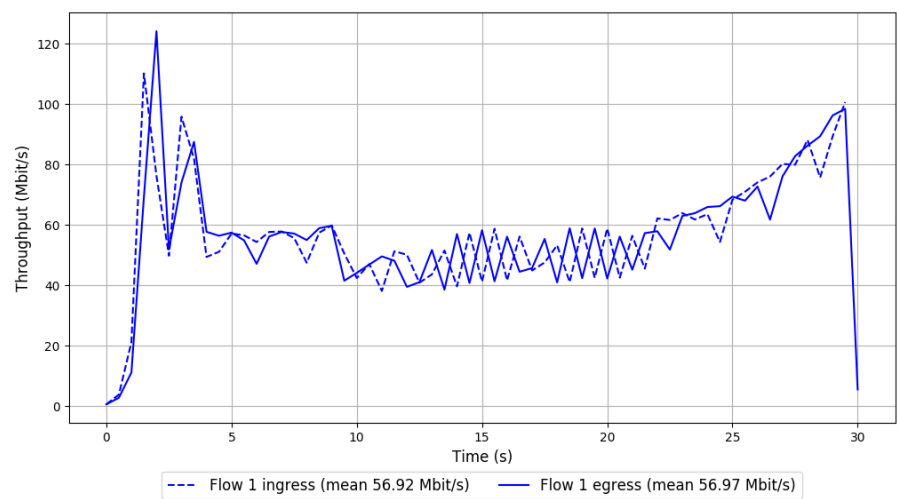
-- Flow 1:

Average throughput: 56.97 Mbit/s

95th percentile per-packet one-way delay: 118.426 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-21 00:45:52

End at: 2017-11-21 00:46:22

Below is generated by plot.py at 2017-11-21 01:53:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.03 Mbit/s

95th percentile per-packet one-way delay: 89.112 ms

Loss rate: 0.00%

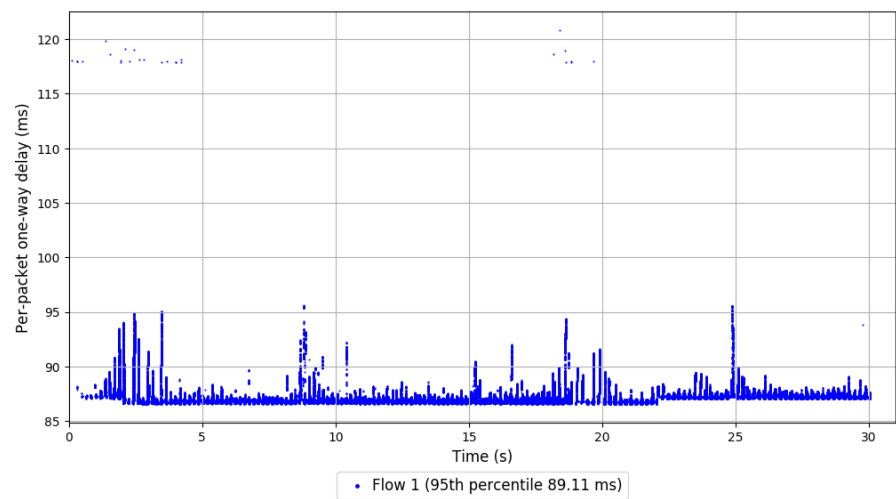
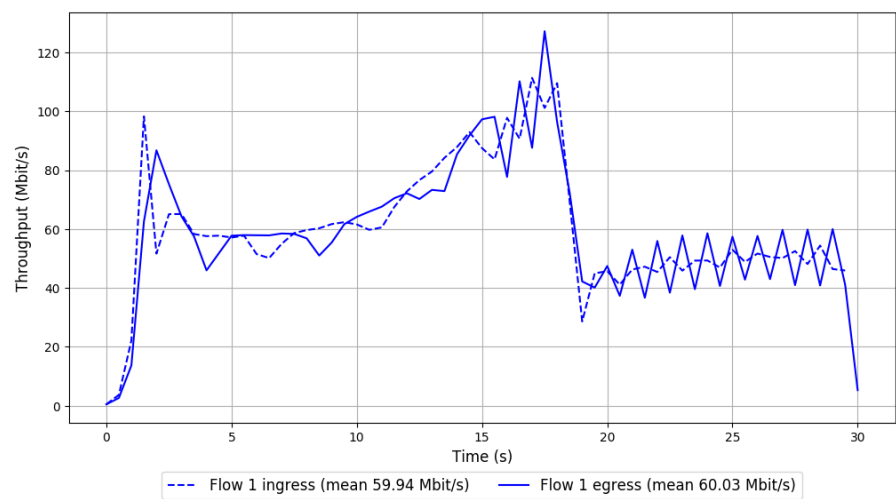
-- Flow 1:

Average throughput: 60.03 Mbit/s

95th percentile per-packet one-way delay: 89.112 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-21 00:56:26

End at: 2017-11-21 00:56:56

Below is generated by plot.py at 2017-11-21 01:53:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.74 Mbit/s

95th percentile per-packet one-way delay: 89.650 ms

Loss rate: 0.00%

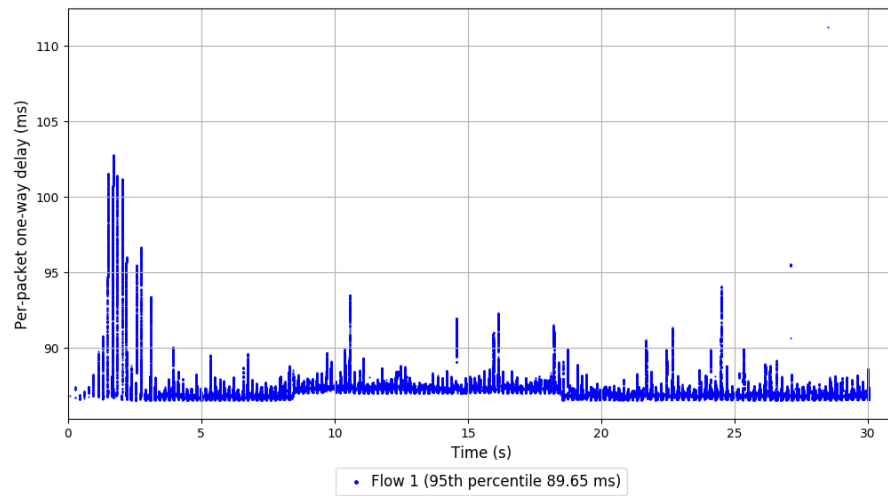
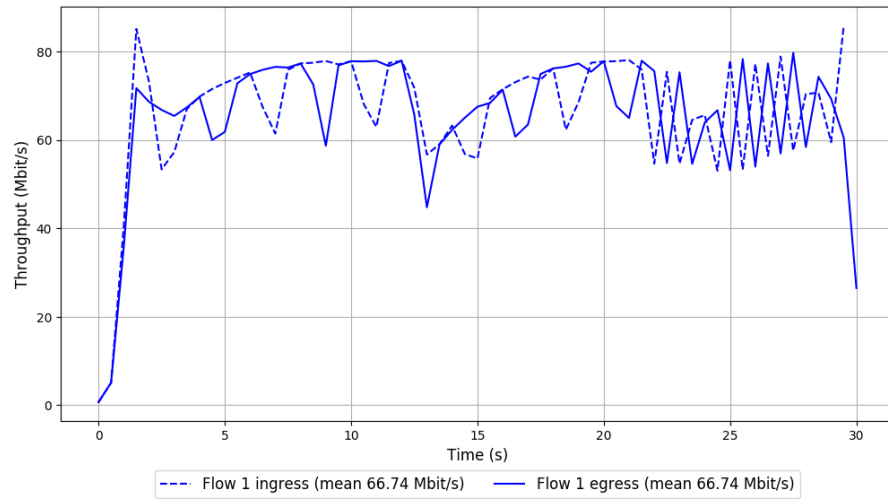
-- Flow 1:

Average throughput: 66.74 Mbit/s

95th percentile per-packet one-way delay: 89.650 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-21 01:07:18

End at: 2017-11-21 01:07:48

Below is generated by plot.py at 2017-11-21 01:53:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.49 Mbit/s

95th percentile per-packet one-way delay: 118.783 ms

Loss rate: 0.11%

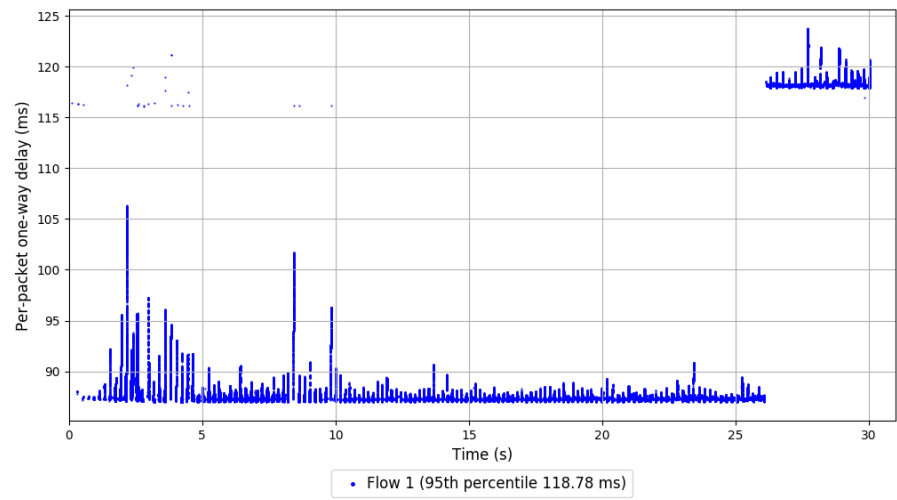
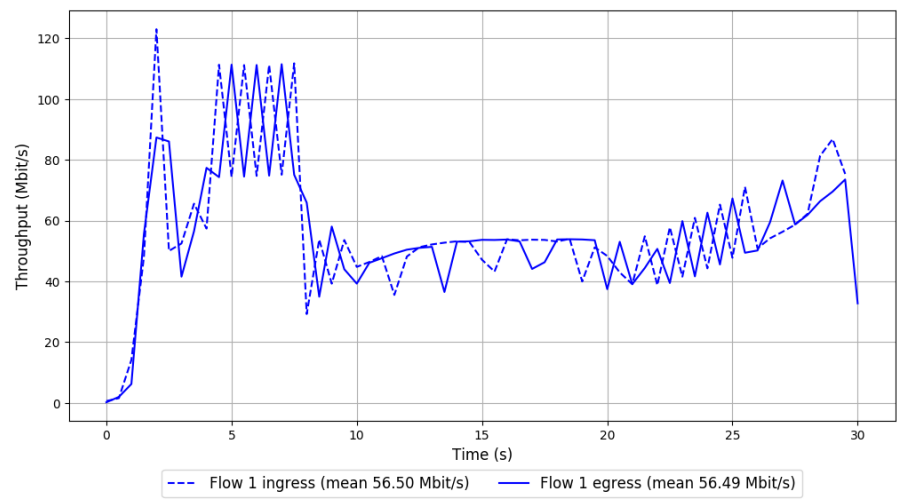
-- Flow 1:

Average throughput: 56.49 Mbit/s

95th percentile per-packet one-way delay: 118.783 ms

Loss rate: 0.11%

Run 10: Report of TCP Cubic — Data Link

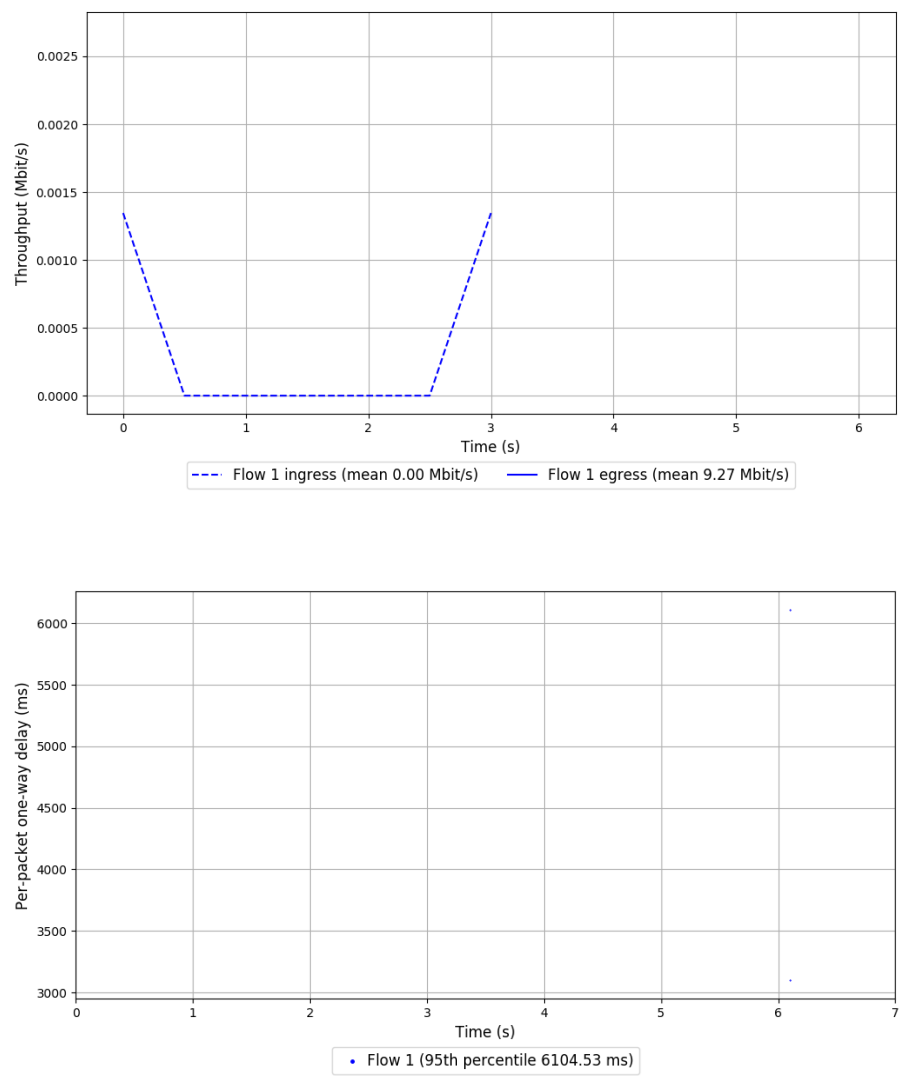


Run 1: Statistics of LEDBAT

Start at: 2017-11-20 23:34:54

End at: 2017-11-20 23:35:24

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-11-20 23:45:46

End at: 2017-11-20 23:46:16

Below is generated by plot.py at 2017-11-21 01:53:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 88.287 ms

Loss rate: 0.07%

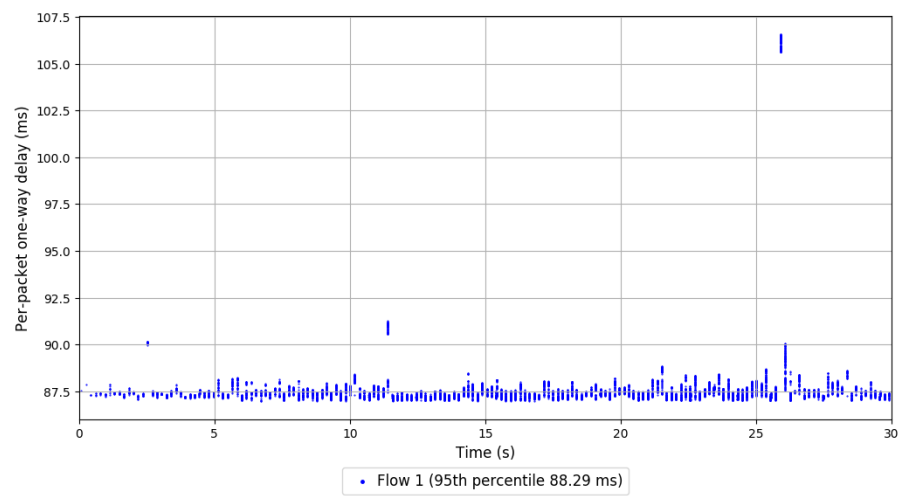
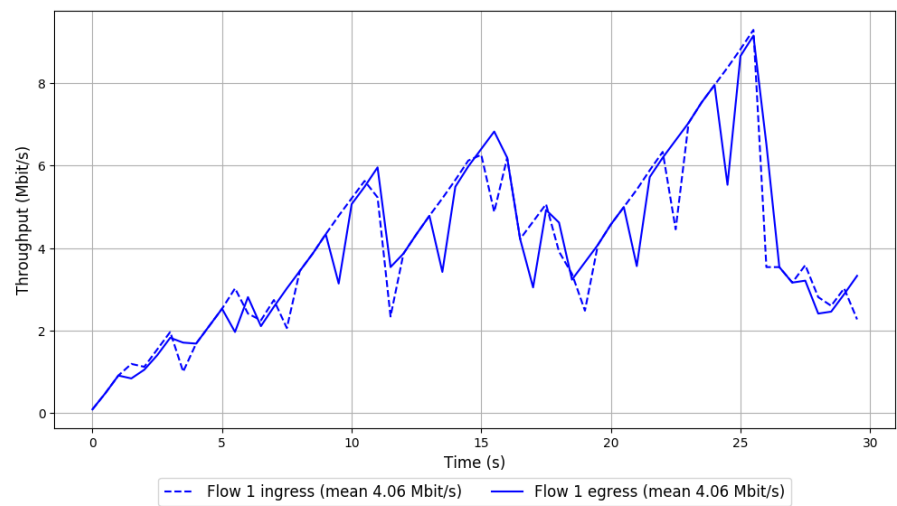
-- Flow 1:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 88.287 ms

Loss rate: 0.07%

Run 2: Report of LEDBAT — Data Link

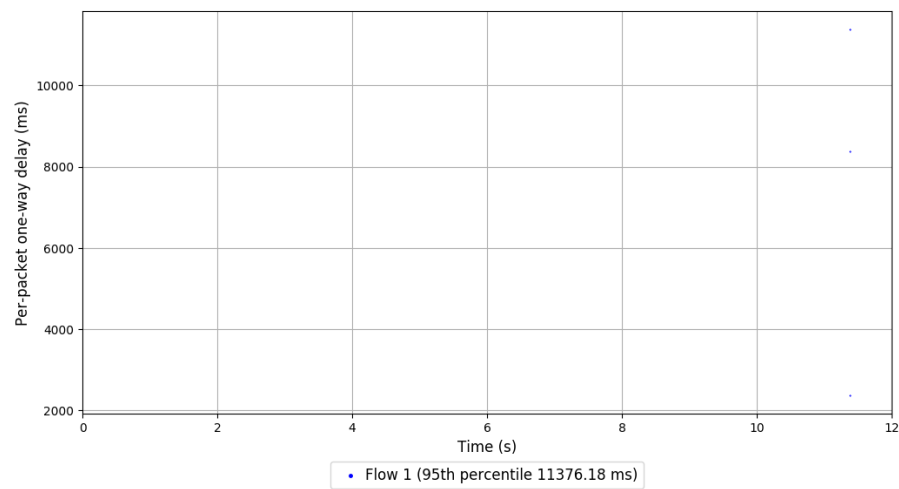
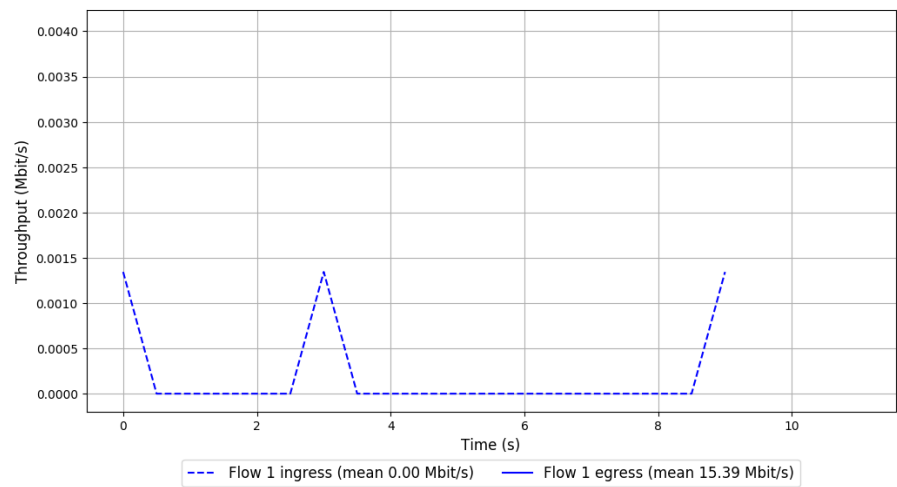


Run 3: Statistics of LEDBAT

Start at: 2017-11-20 23:56:46

End at: 2017-11-20 23:57:16

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-21 00:07:40

End at: 2017-11-21 00:08:10

Below is generated by plot.py at 2017-11-21 01:53:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 87.823 ms

Loss rate: 0.03%

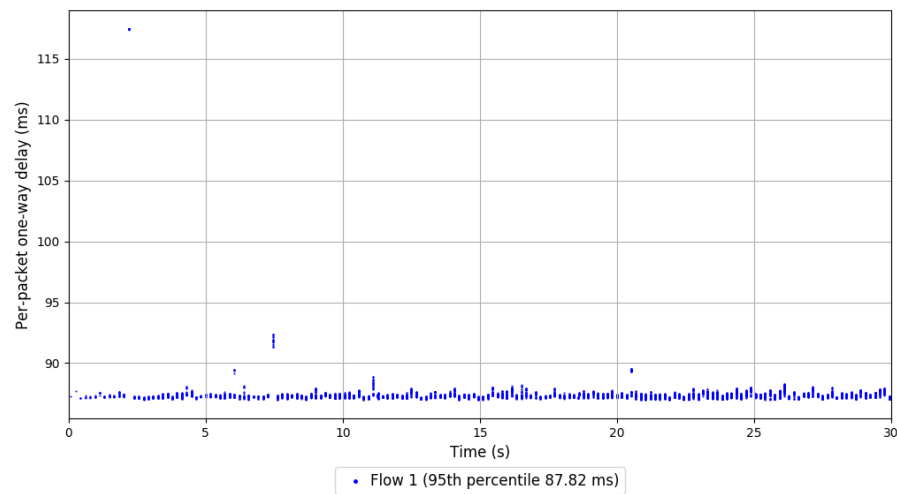
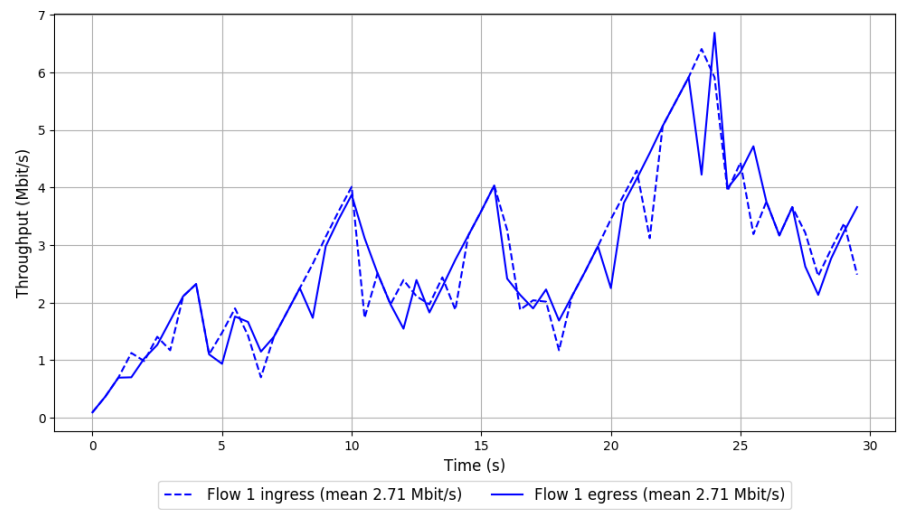
-- Flow 1:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 87.823 ms

Loss rate: 0.03%

Run 4: Report of LEDBAT — Data Link

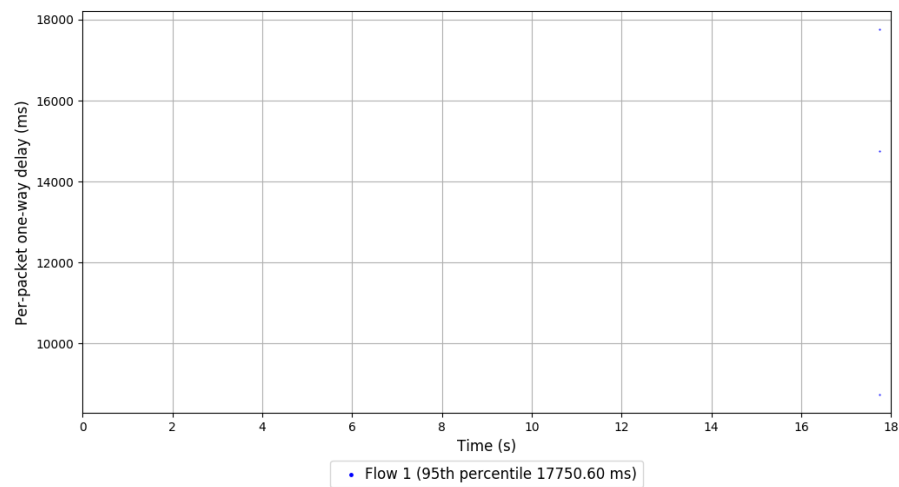
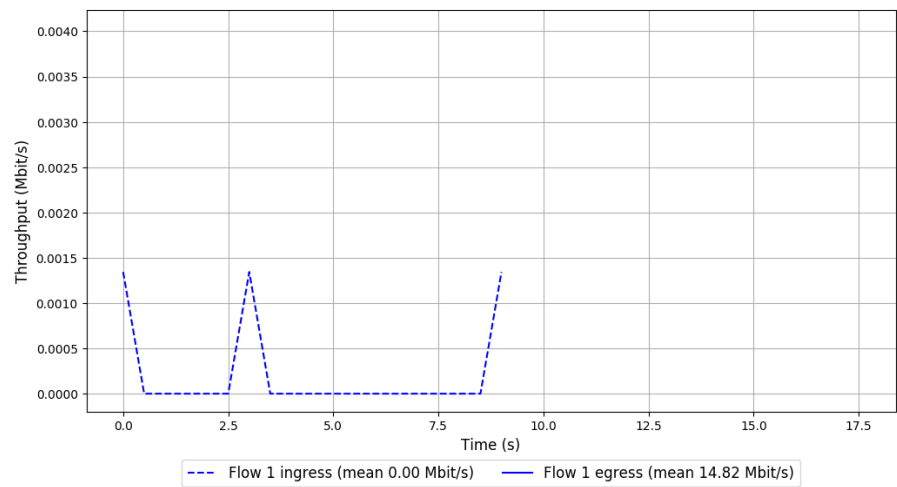


Run 5: Statistics of LEDBAT

Start at: 2017-11-21 00:18:36

End at: 2017-11-21 00:19:06

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-21 00:29:17

End at: 2017-11-21 00:29:47

Below is generated by plot.py at 2017-11-21 01:53:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 87.632 ms

Loss rate: 0.00%

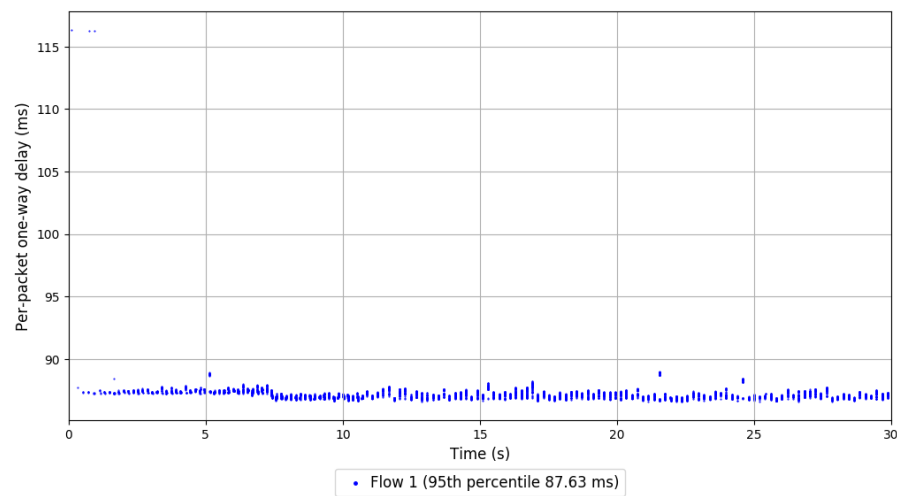
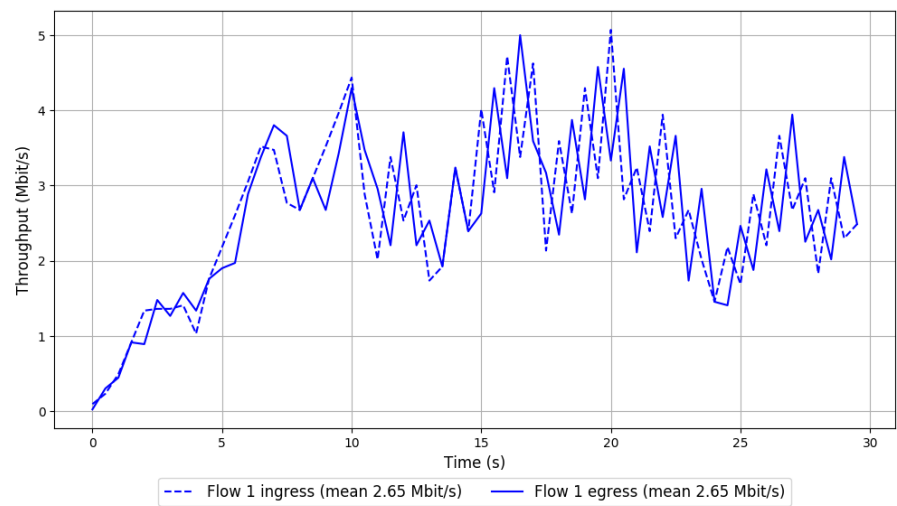
-- Flow 1:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 87.632 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-21 00:39:49

End at: 2017-11-21 00:40:19

Below is generated by plot.py at 2017-11-21 01:53:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 87.943 ms

Loss rate: 0.14%

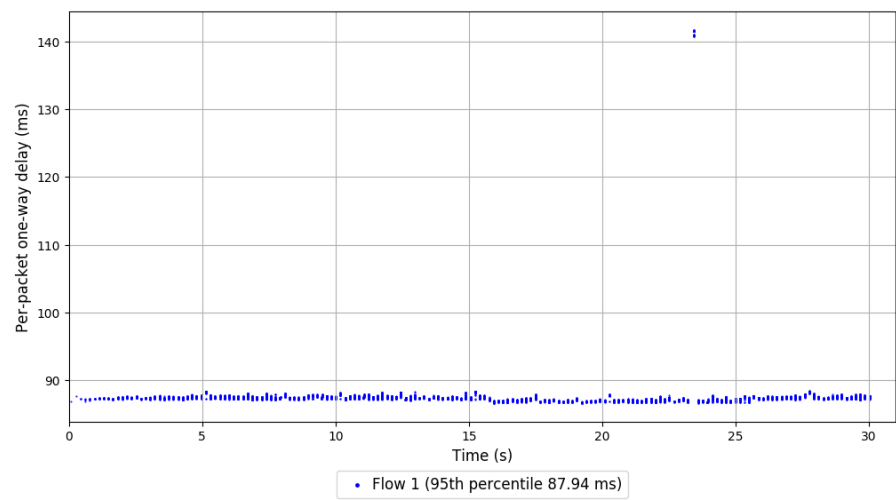
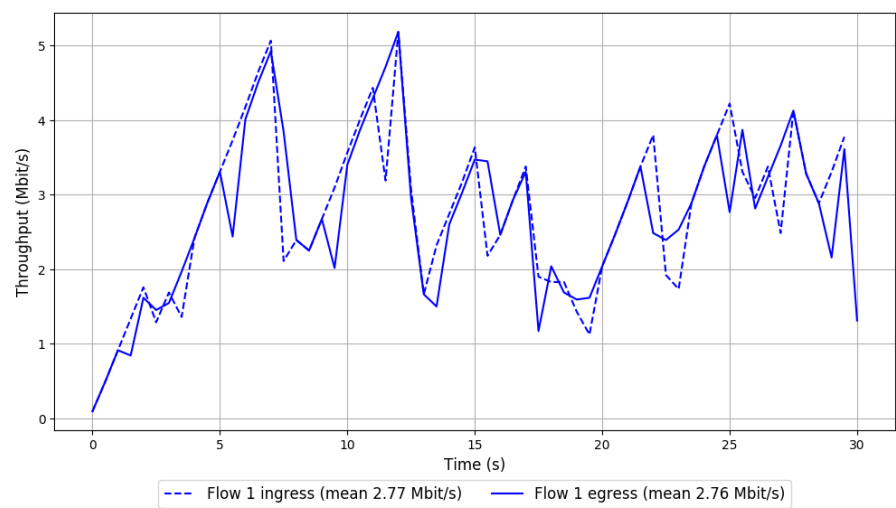
-- Flow 1:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 87.943 ms

Loss rate: 0.14%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-21 00:50:33

End at: 2017-11-21 00:51:03

Below is generated by plot.py at 2017-11-21 01:53:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 87.963 ms

Loss rate: 0.00%

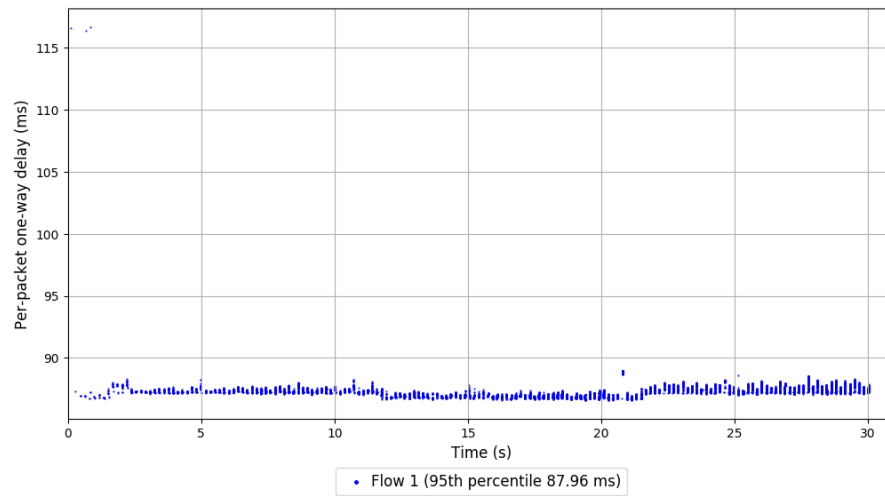
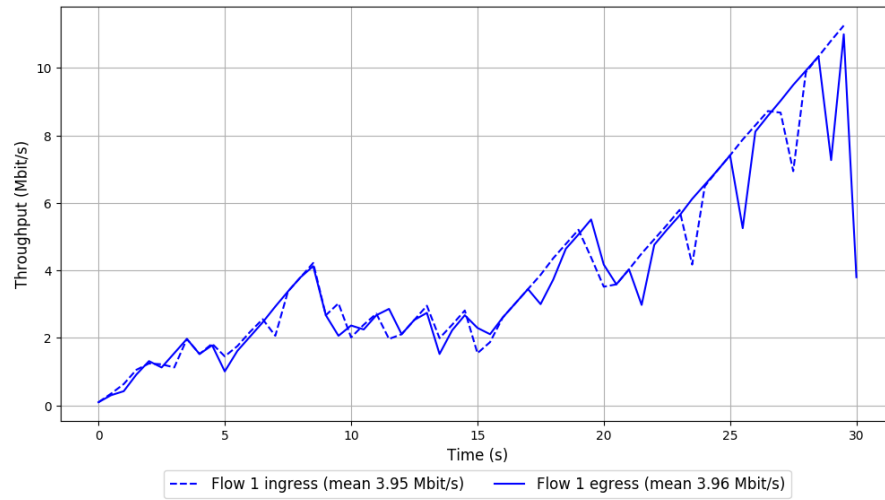
-- Flow 1:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 87.963 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-21 01:01:13

End at: 2017-11-21 01:01:43

Below is generated by plot.py at 2017-11-21 01:53:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 87.968 ms

Loss rate: 0.00%

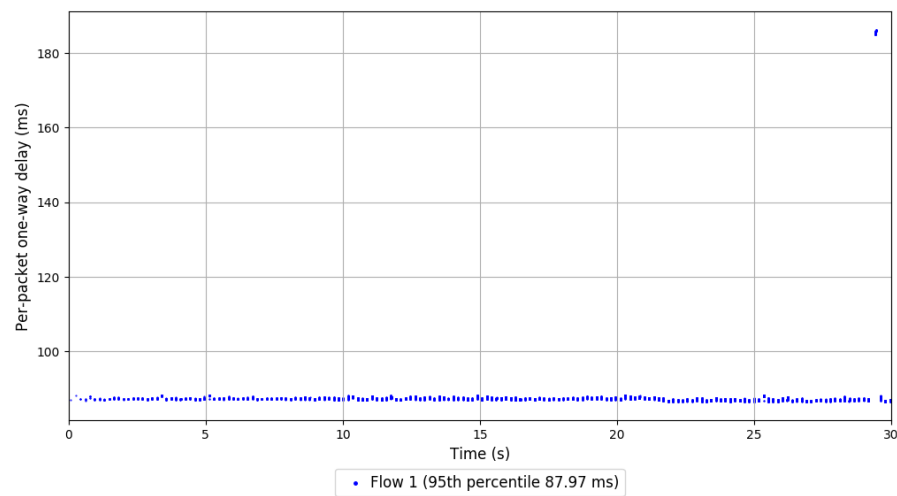
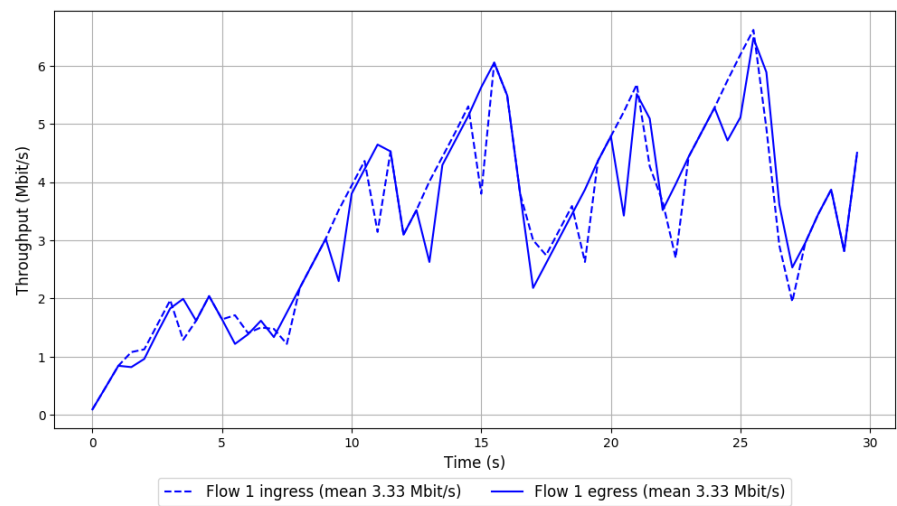
-- Flow 1:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 87.968 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-21 01:12:11

End at: 2017-11-21 01:12:41

Below is generated by plot.py at 2017-11-21 01:53:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.24 Mbit/s

95th percentile per-packet one-way delay: 87.672 ms

Loss rate: 0.00%

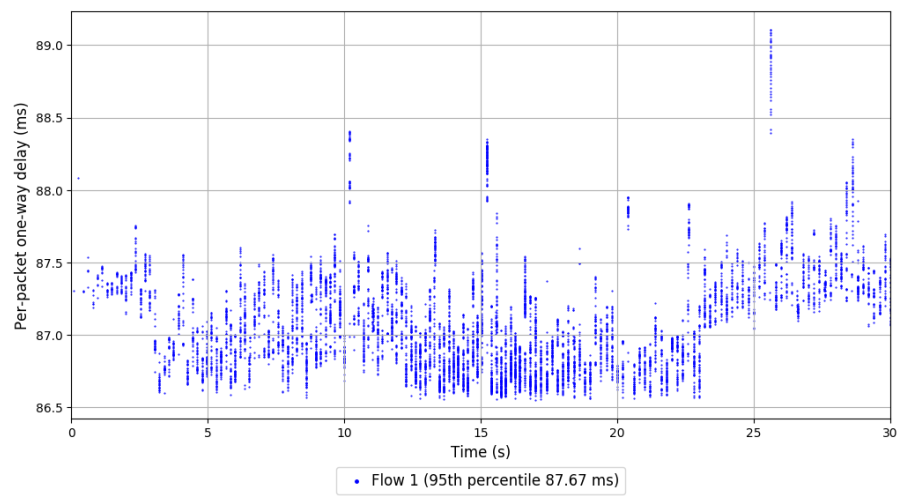
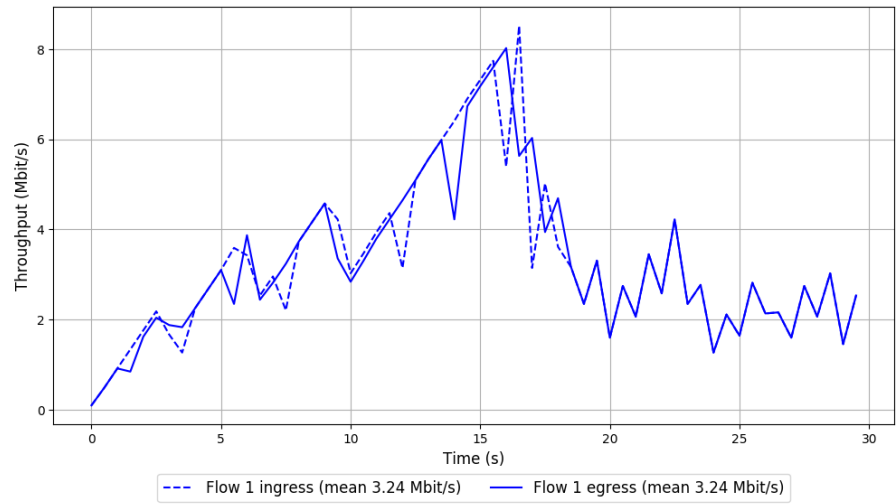
-- Flow 1:

Average throughput: 3.24 Mbit/s

95th percentile per-packet one-way delay: 87.672 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

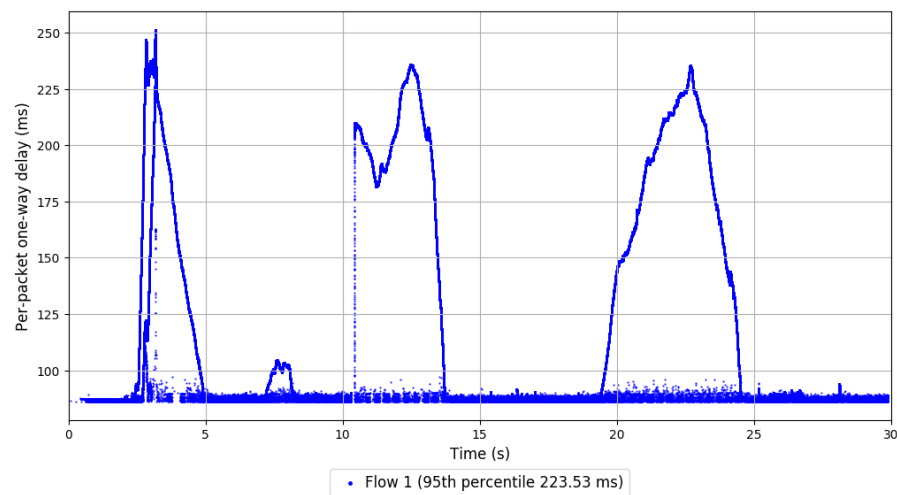
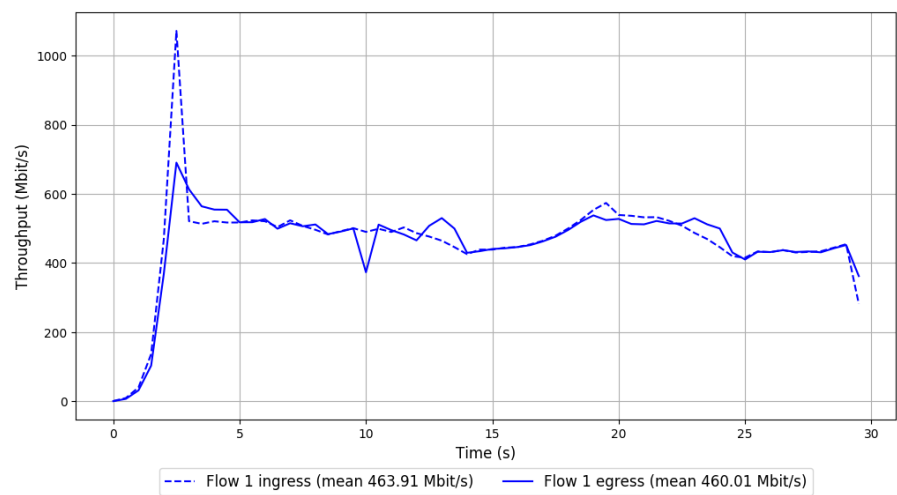


```
Run 1: Statistics of PCC

Start at: 2017-11-20 23:33:01
End at: 2017-11-20 23:33:31

# Below is generated by plot.py at 2017-11-21 02:02:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 460.01 Mbit/s
95th percentile per-packet one-way delay: 223.531 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 460.01 Mbit/s
95th percentile per-packet one-way delay: 223.531 ms
Loss rate: 0.84%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-20 23:43:56

End at: 2017-11-20 23:44:26

Below is generated by plot.py at 2017-11-21 02:02:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 405.73 Mbit/s

95th percentile per-packet one-way delay: 148.798 ms

Loss rate: 0.11%

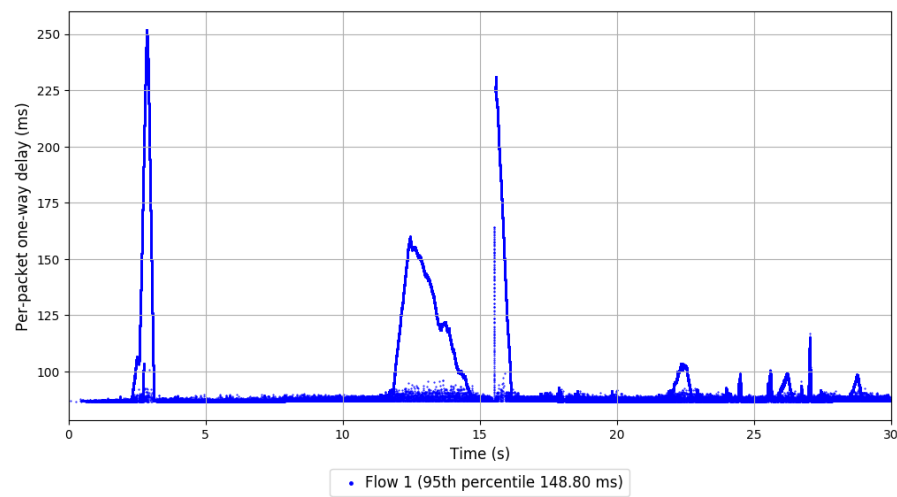
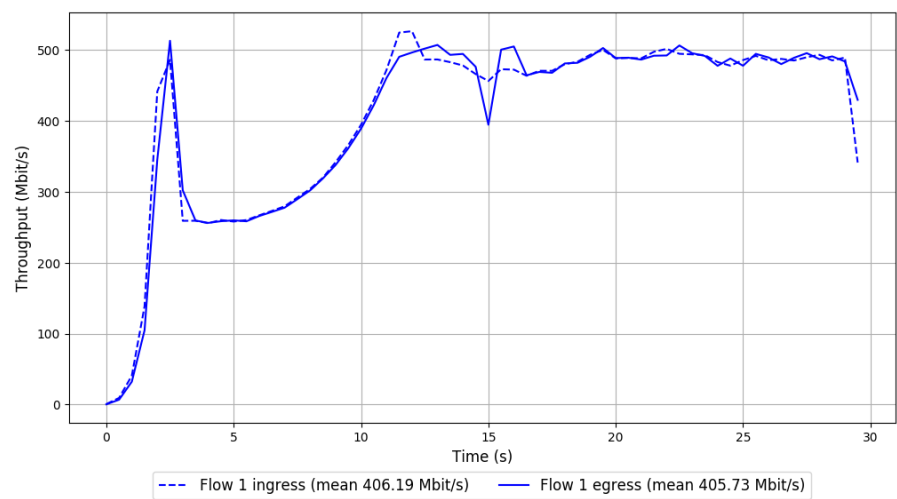
-- Flow 1:

Average throughput: 405.73 Mbit/s

95th percentile per-packet one-way delay: 148.798 ms

Loss rate: 0.11%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-20 23:54:54

End at: 2017-11-20 23:55:24

Below is generated by plot.py at 2017-11-21 02:02:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 474.82 Mbit/s

95th percentile per-packet one-way delay: 226.570 ms

Loss rate: 0.91%

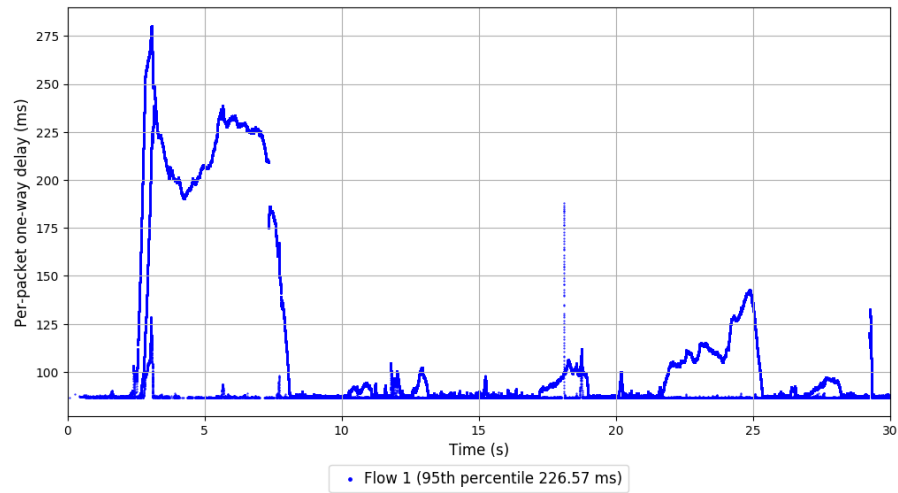
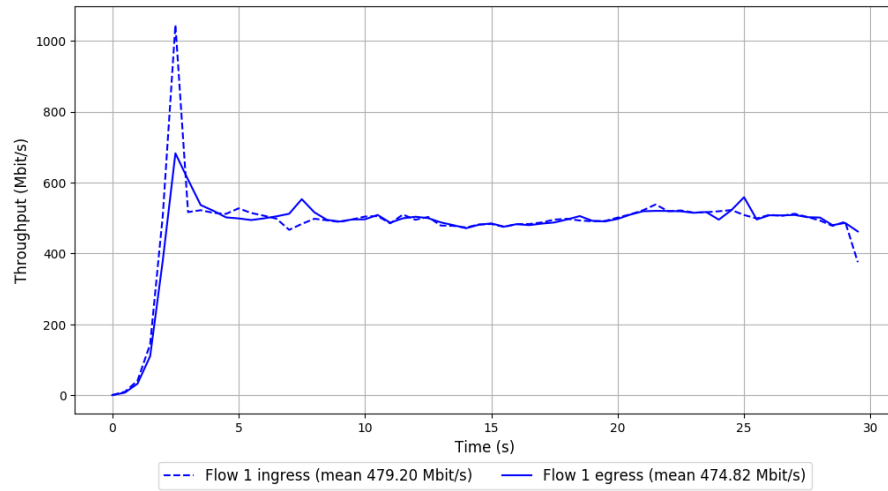
-- Flow 1:

Average throughput: 474.82 Mbit/s

95th percentile per-packet one-way delay: 226.570 ms

Loss rate: 0.91%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-21 00:05:50

End at: 2017-11-21 00:06:20

Below is generated by plot.py at 2017-11-21 02:02:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 457.02 Mbit/s

95th percentile per-packet one-way delay: 233.570 ms

Loss rate: 1.55%

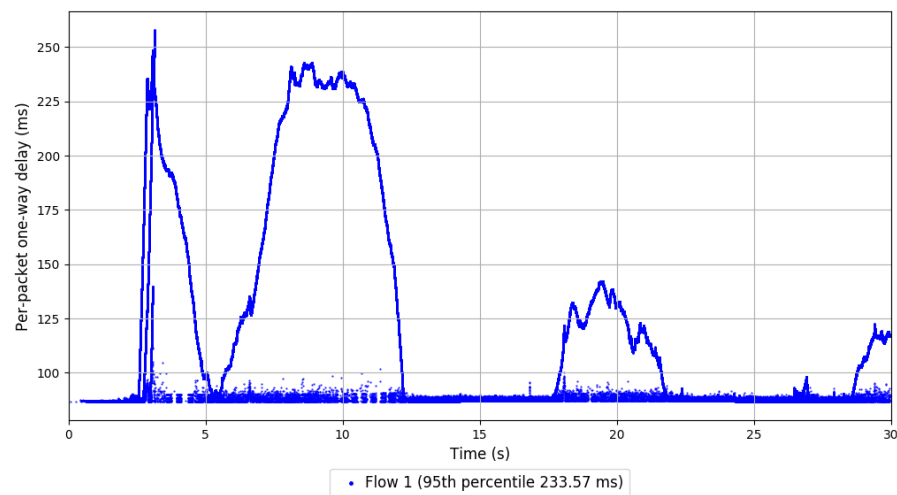
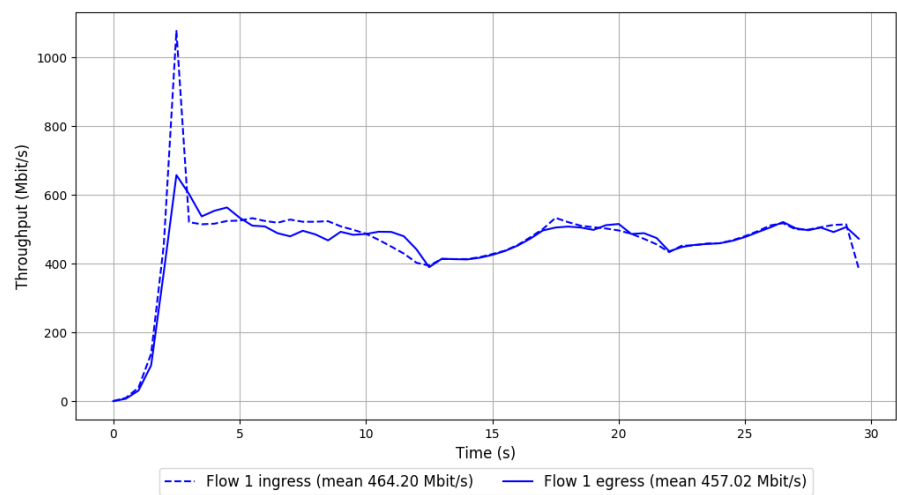
-- Flow 1:

Average throughput: 457.02 Mbit/s

95th percentile per-packet one-way delay: 233.570 ms

Loss rate: 1.55%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-21 00:16:44

End at: 2017-11-21 00:17:14

Below is generated by plot.py at 2017-11-21 02:02:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 478.35 Mbit/s

95th percentile per-packet one-way delay: 172.591 ms

Loss rate: 0.21%

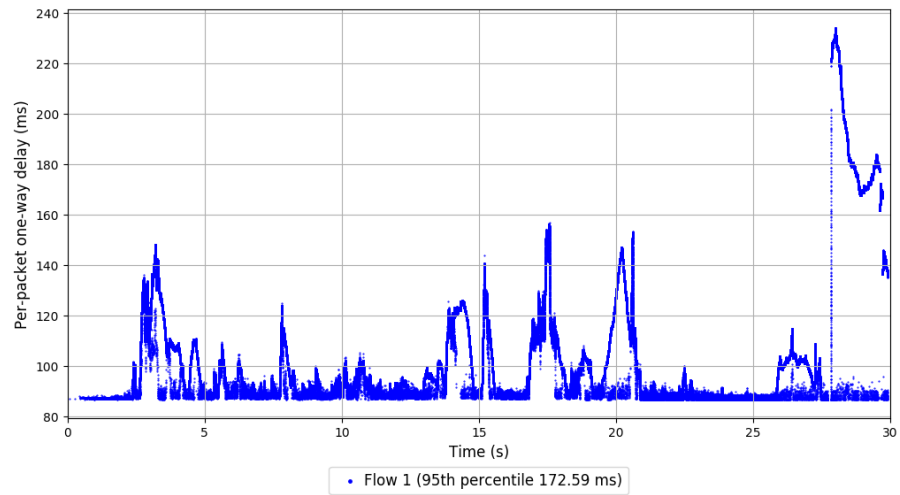
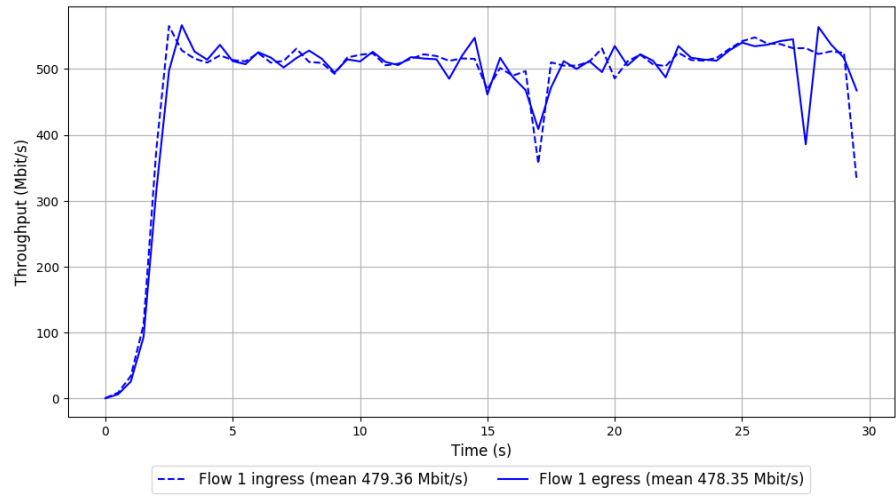
-- Flow 1:

Average throughput: 478.35 Mbit/s

95th percentile per-packet one-way delay: 172.591 ms

Loss rate: 0.21%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-21 00:27:29

End at: 2017-11-21 00:27:59

Below is generated by plot.py at 2017-11-21 02:03:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 474.19 Mbit/s

95th percentile per-packet one-way delay: 202.923 ms

Loss rate: 1.27%

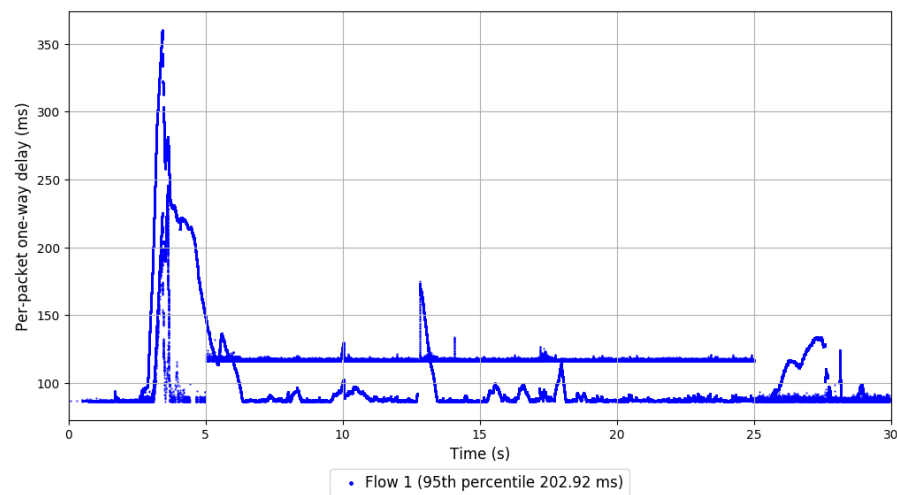
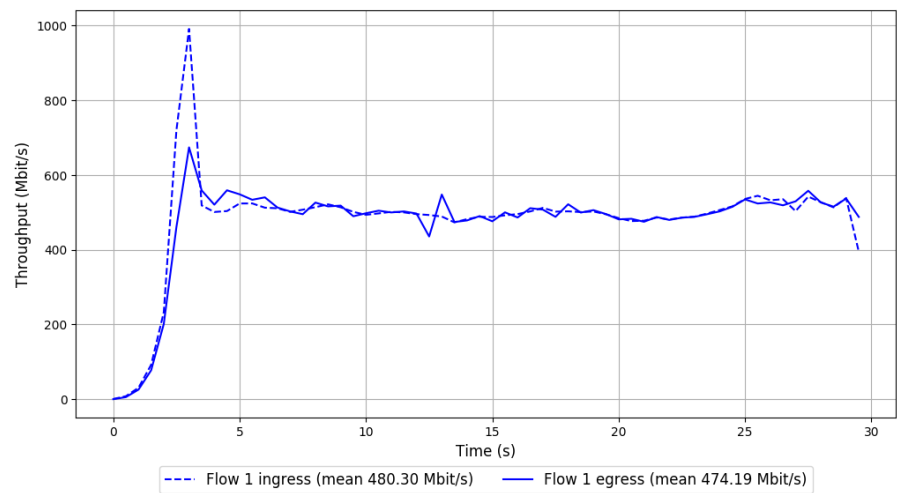
-- Flow 1:

Average throughput: 474.19 Mbit/s

95th percentile per-packet one-way delay: 202.923 ms

Loss rate: 1.27%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-21 00:37:58

End at: 2017-11-21 00:38:28

Below is generated by plot.py at 2017-11-21 02:03:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 461.80 Mbit/s

95th percentile per-packet one-way delay: 214.022 ms

Loss rate: 1.47%

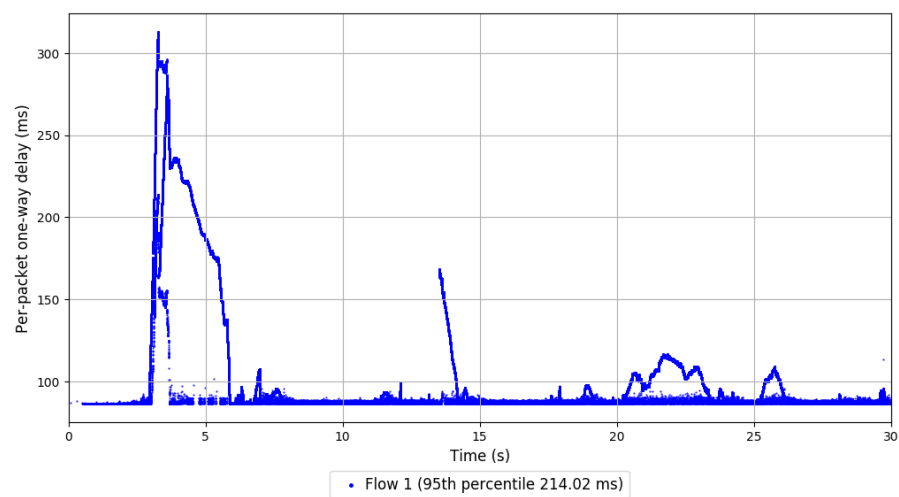
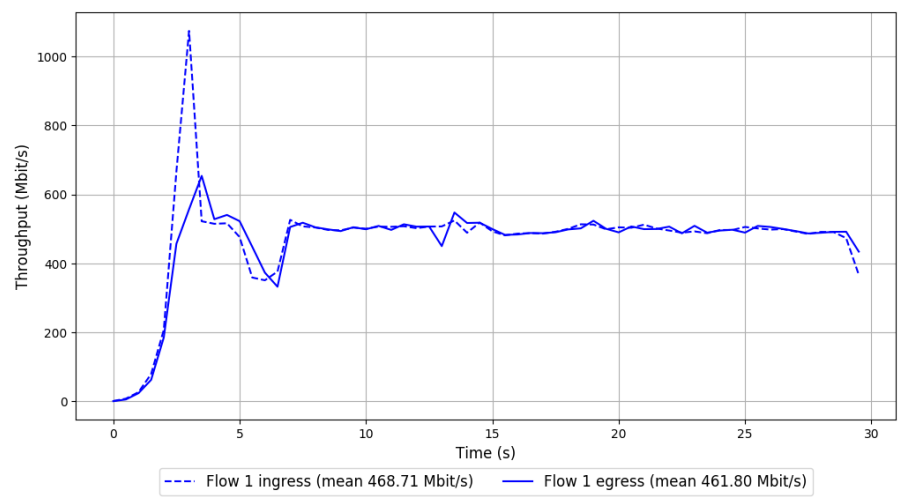
-- Flow 1:

Average throughput: 461.80 Mbit/s

95th percentile per-packet one-way delay: 214.022 ms

Loss rate: 1.47%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-21 00:48:52

End at: 2017-11-21 00:49:22

Below is generated by plot.py at 2017-11-21 02:03:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.28 Mbit/s

95th percentile per-packet one-way delay: 110.714 ms

Loss rate: 0.00%

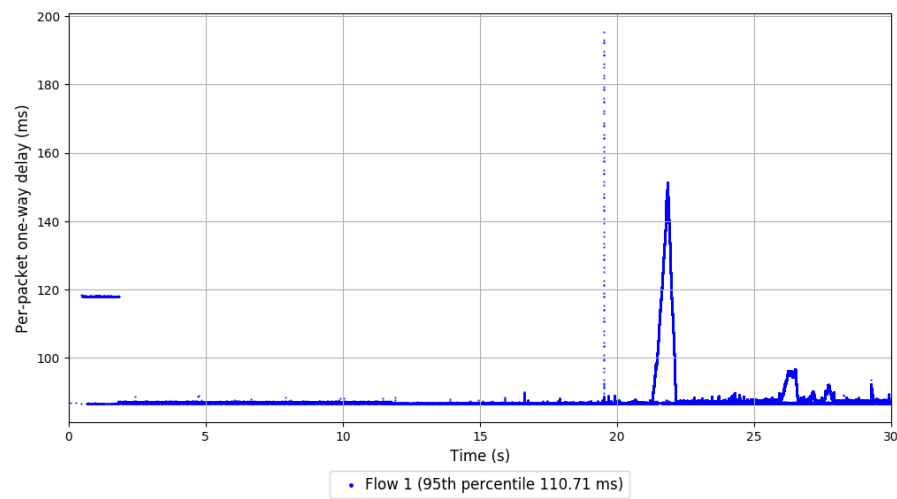
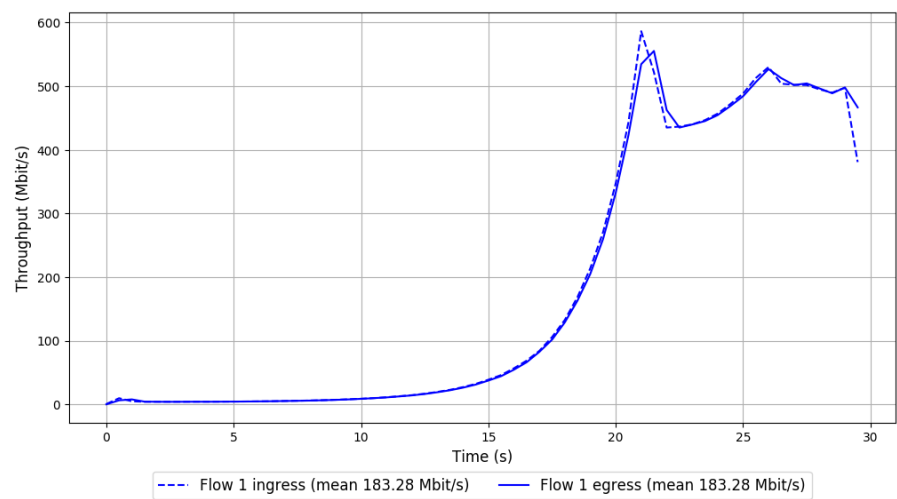
-- Flow 1:

Average throughput: 183.28 Mbit/s

95th percentile per-packet one-way delay: 110.714 ms

Loss rate: 0.00%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-21 00:59:25

End at: 2017-11-21 00:59:55

Below is generated by plot.py at 2017-11-21 02:08:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 497.15 Mbit/s

95th percentile per-packet one-way delay: 226.937 ms

Loss rate: 0.85%

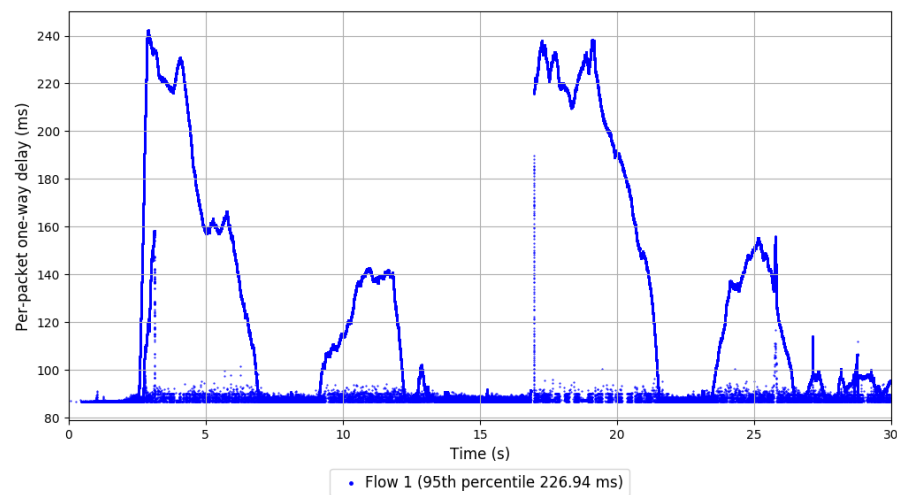
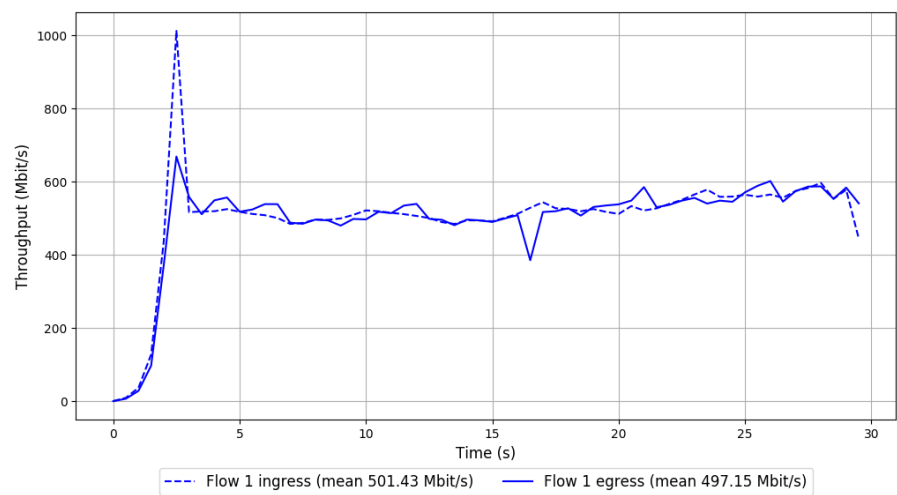
-- Flow 1:

Average throughput: 497.15 Mbit/s

95th percentile per-packet one-way delay: 226.937 ms

Loss rate: 0.85%

Run 9: Report of PCC — Data Link

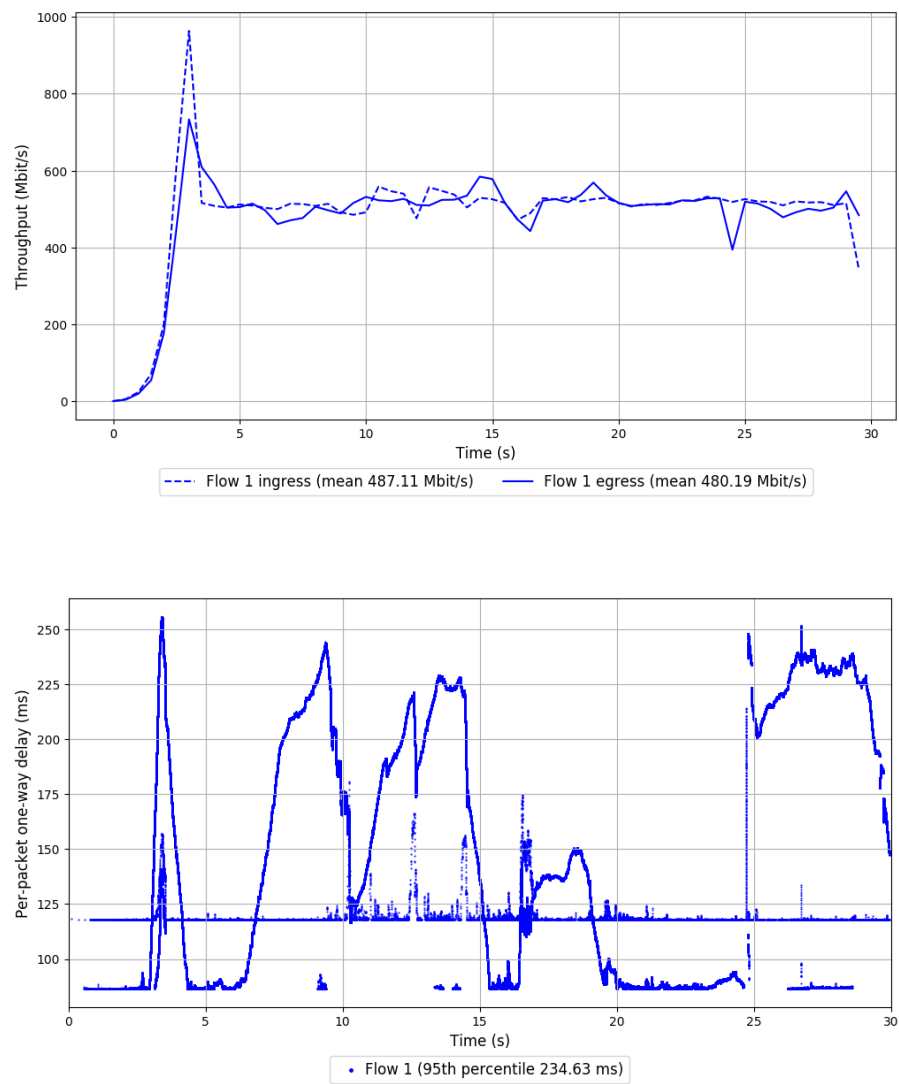


```
Run 10: Statistics of PCC

Start at: 2017-11-21 01:10:17
End at: 2017-11-21 01:10:47

# Below is generated by plot.py at 2017-11-21 02:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 480.19 Mbit/s
95th percentile per-packet one-way delay: 234.626 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 480.19 Mbit/s
95th percentile per-packet one-way delay: 234.626 ms
Loss rate: 1.52%
```

Run 10: Report of PCC — Data Link

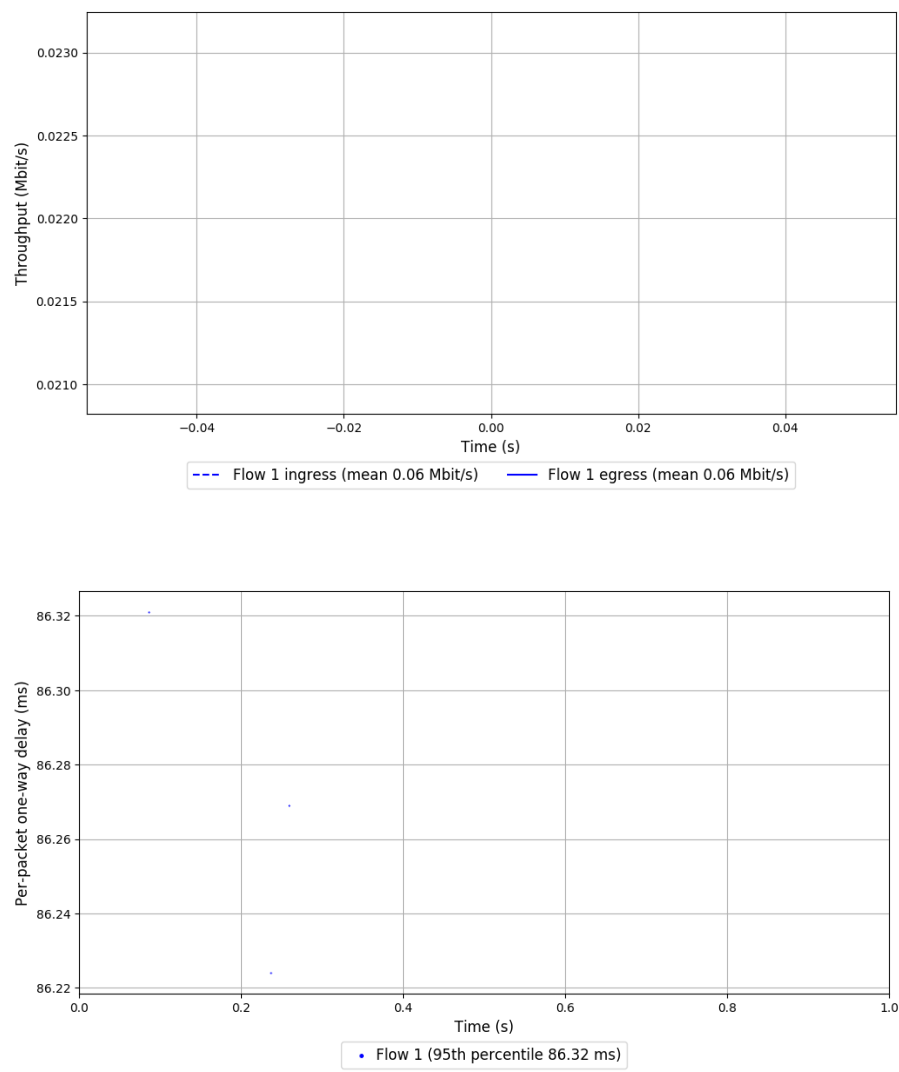


Run 1: Statistics of QUIC Cubic

Start at: 2017-11-20 23:31:42

End at: 2017-11-20 23:32:12

Run 1: Report of QUIC Cubic — Data Link

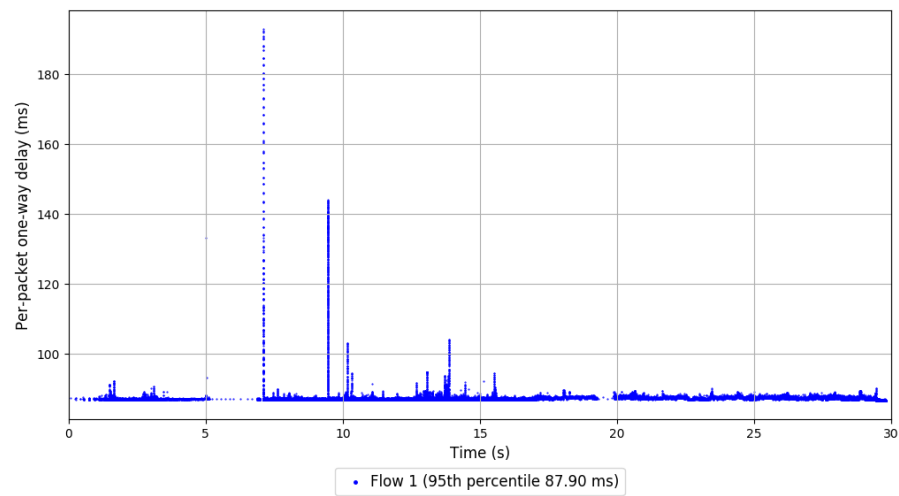
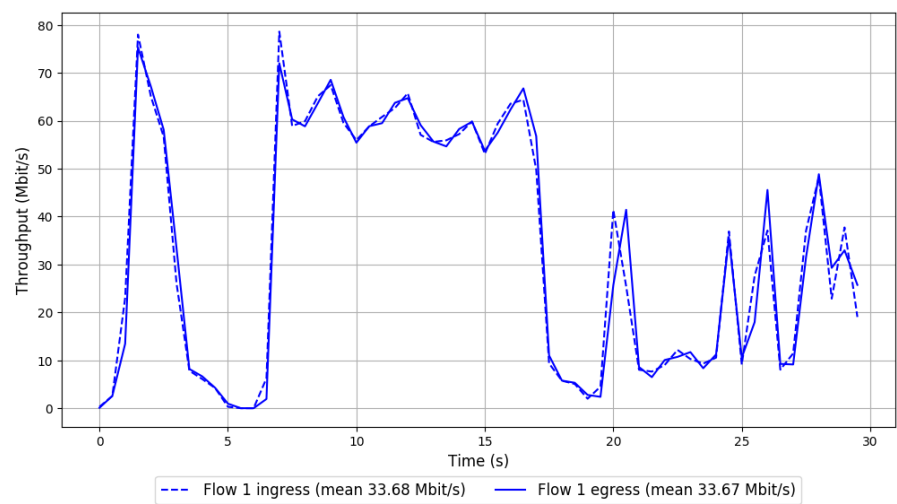


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-11-20 23:42:35
End at: 2017-11-20 23:43:05

# Below is generated by plot.py at 2017-11-21 02:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 87.898 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 87.898 ms
Loss rate: 0.03%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-20 23:53:30

End at: 2017-11-20 23:54:00

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.22 Mbit/s

95th percentile per-packet one-way delay: 86.645 ms

Loss rate: 0.00%

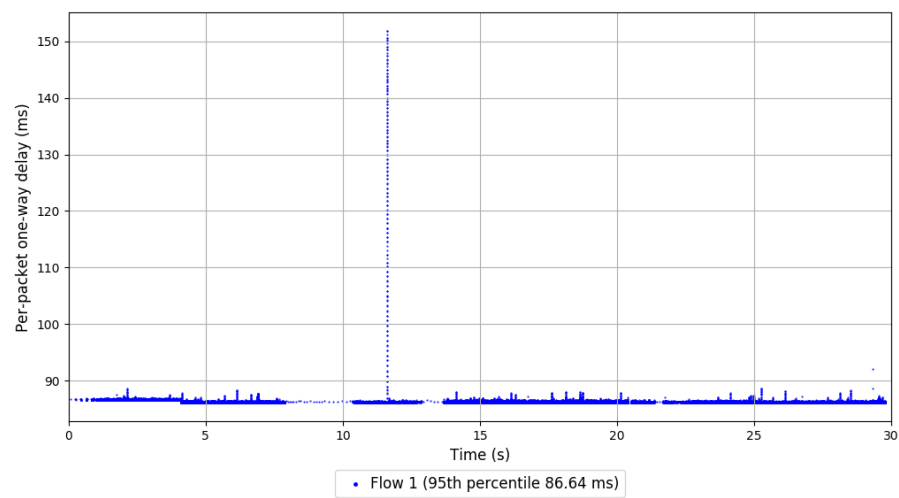
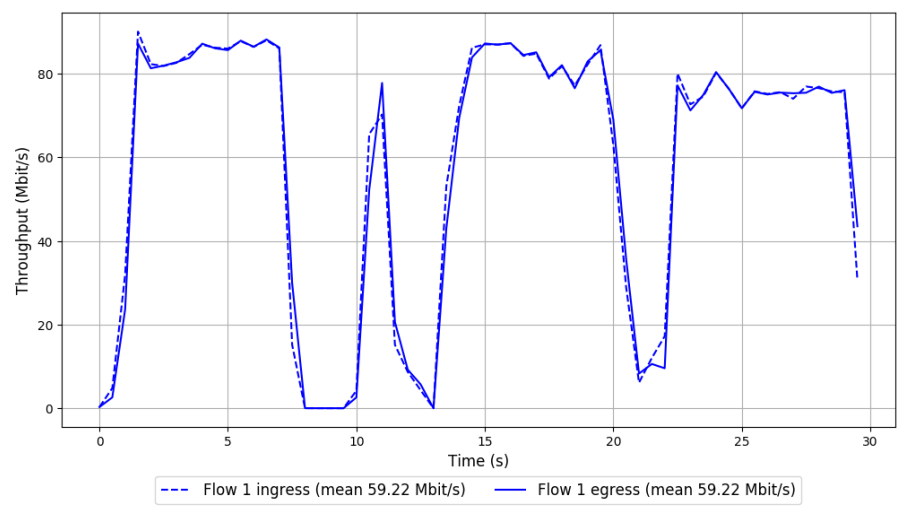
-- Flow 1:

Average throughput: 59.22 Mbit/s

95th percentile per-packet one-way delay: 86.645 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-21 00:04:26

End at: 2017-11-21 00:04:57

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.42 Mbit/s

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

Loss rate: 0.00%

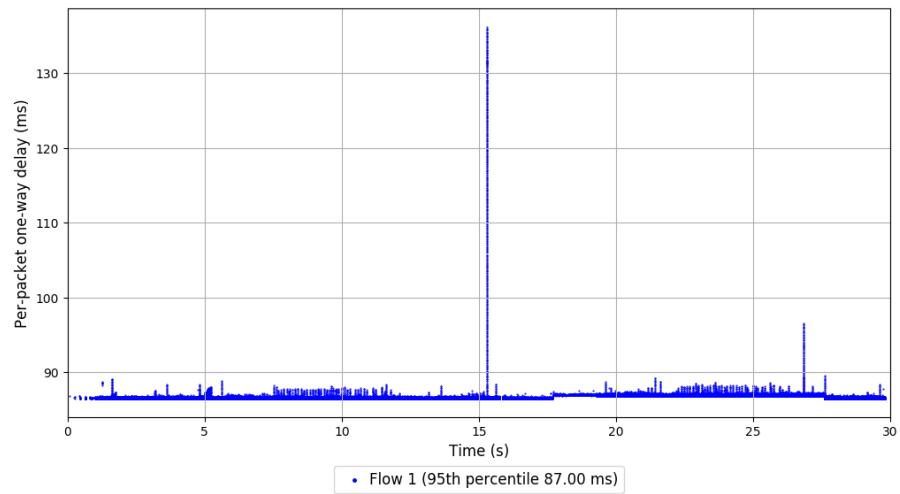
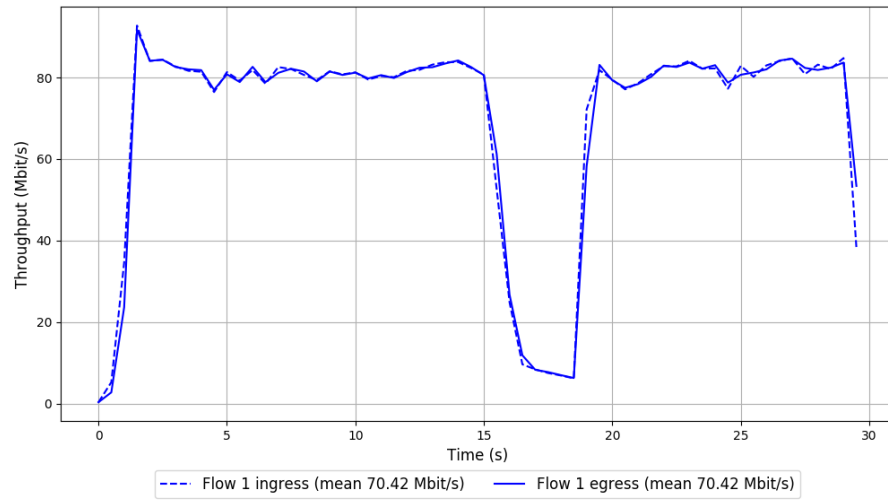
-- Flow 1:

Average throughput: 70.42 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-21 00:15:22

End at: 2017-11-21 00:15:52

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.05 Mbit/s

95th percentile per-packet one-way delay: 87.278 ms

Loss rate: 0.06%

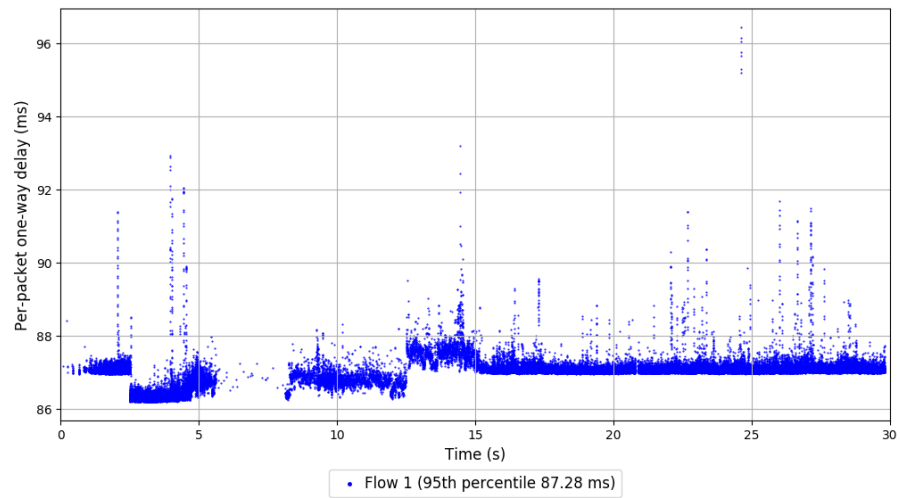
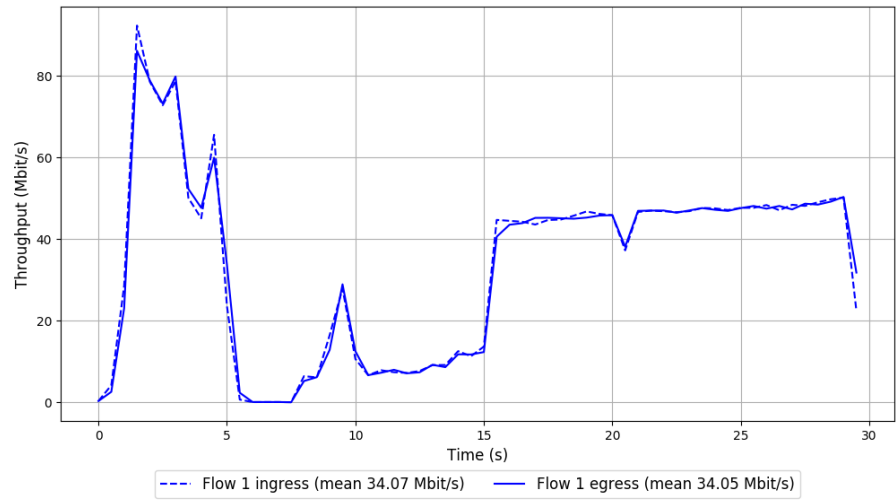
-- Flow 1:

Average throughput: 34.05 Mbit/s

95th percentile per-packet one-way delay: 87.278 ms

Loss rate: 0.06%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-21 00:26:05

End at: 2017-11-21 00:26:35

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.37 Mbit/s

95th percentile per-packet one-way delay: 86.844 ms

Loss rate: 0.00%

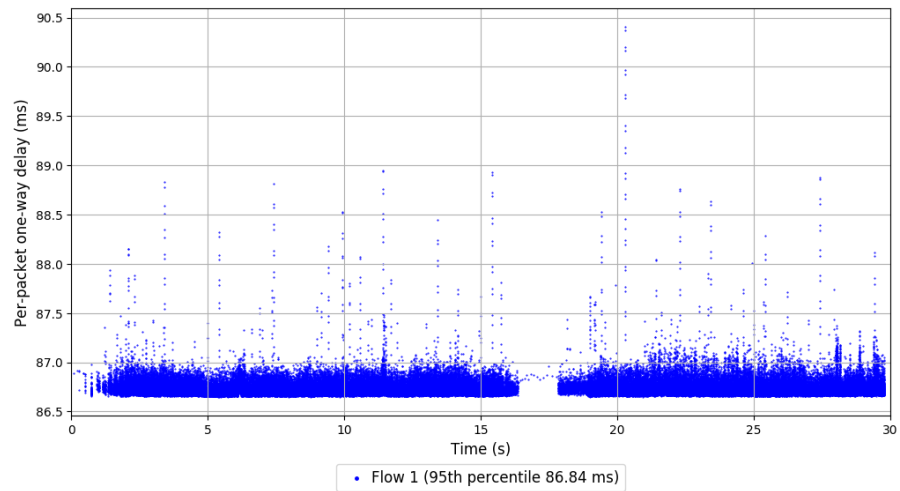
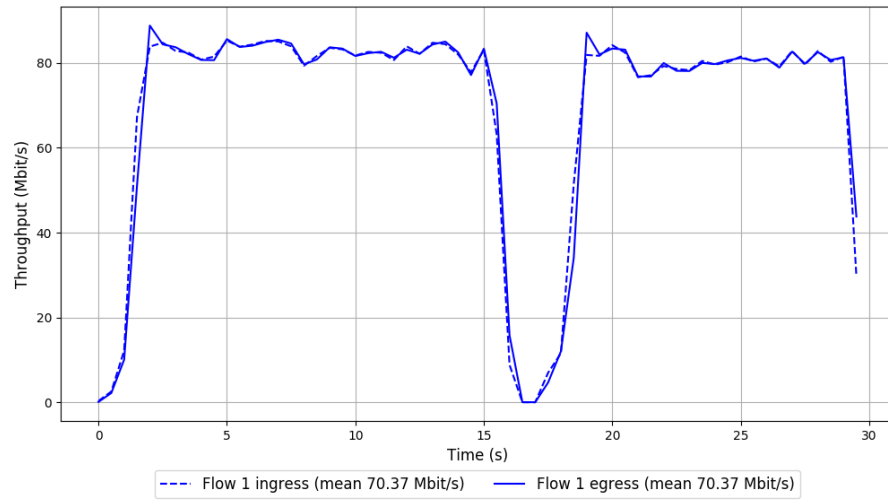
-- Flow 1:

Average throughput: 70.37 Mbit/s

95th percentile per-packet one-way delay: 86.844 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-21 00:36:36

End at: 2017-11-21 00:37:06

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.72 Mbit/s

95th percentile per-packet one-way delay: 117.992 ms

Loss rate: 0.00%

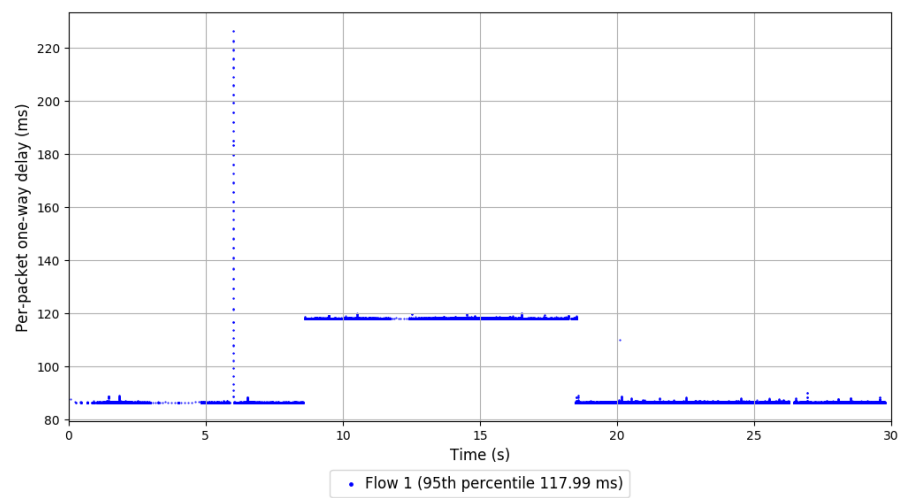
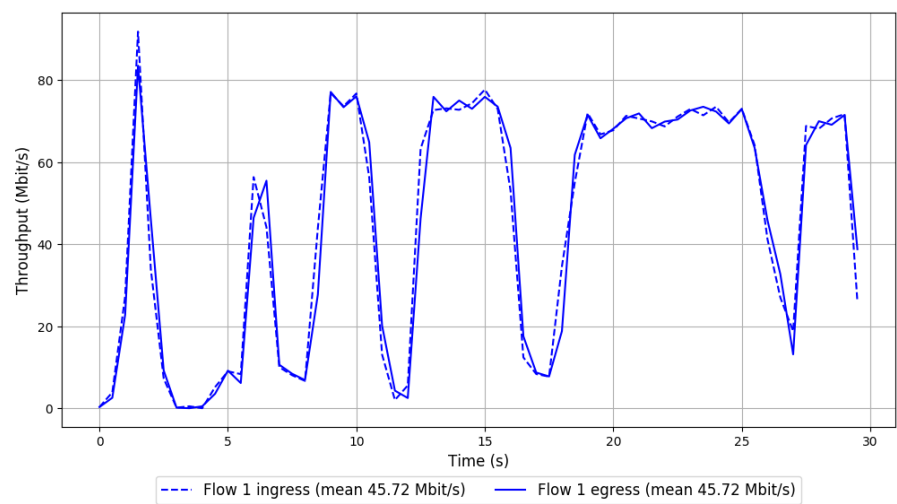
-- Flow 1:

Average throughput: 45.72 Mbit/s

95th percentile per-packet one-way delay: 117.992 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-21 00:47:30

End at: 2017-11-21 00:48:00

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.33 Mbit/s

95th percentile per-packet one-way delay: 116.320 ms

Loss rate: 0.12%

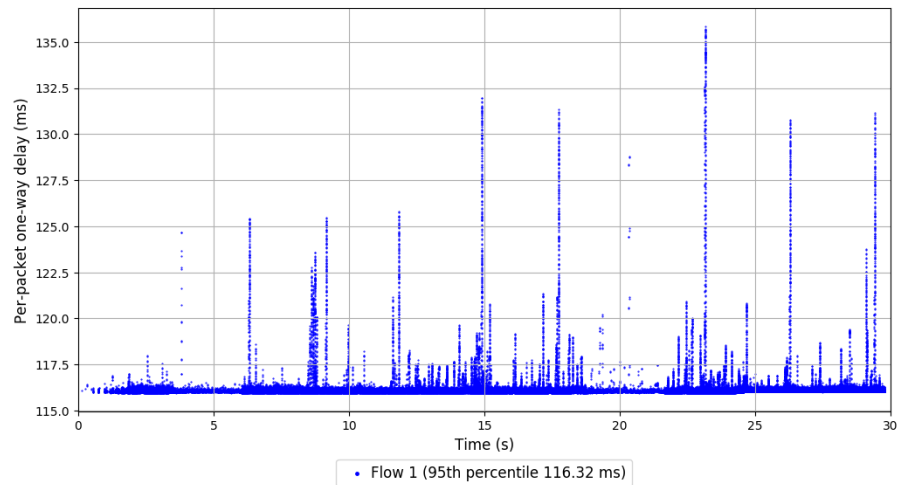
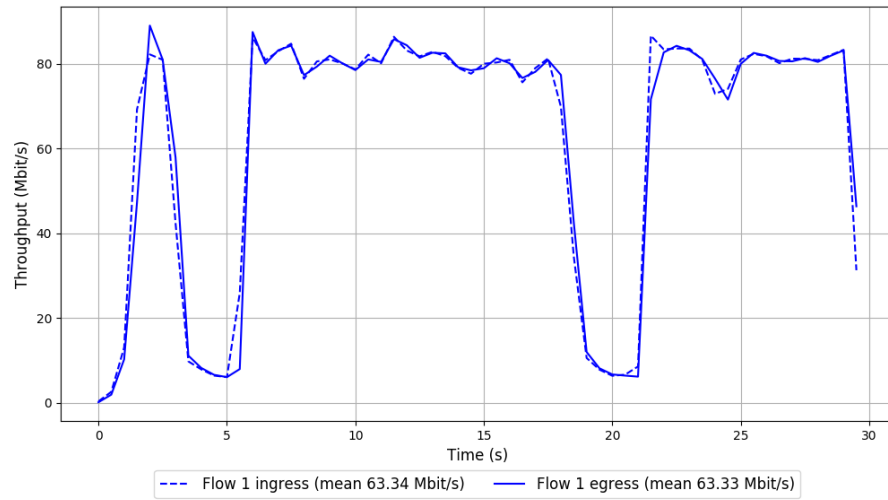
-- Flow 1:

Average throughput: 63.33 Mbit/s

95th percentile per-packet one-way delay: 116.320 ms

Loss rate: 0.12%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-21 00:58:01

End at: 2017-11-21 00:58:31

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.96 Mbit/s

95th percentile per-packet one-way delay: 86.885 ms

Loss rate: 0.00%

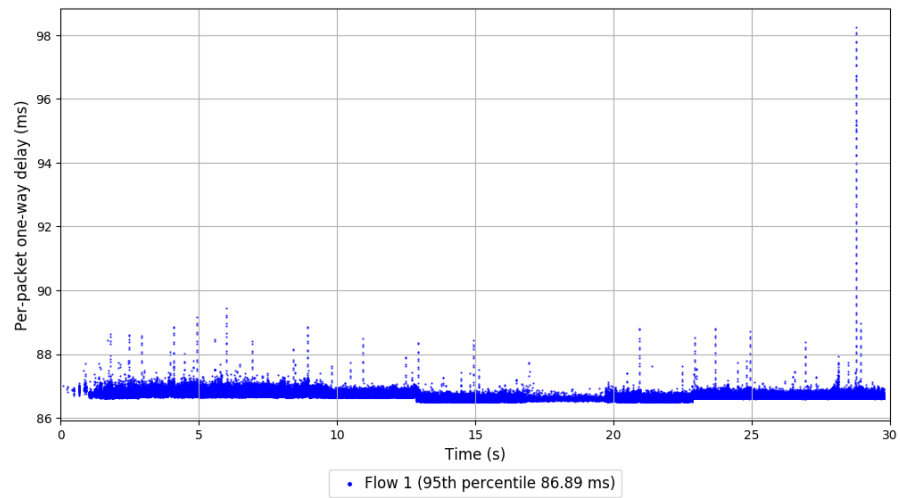
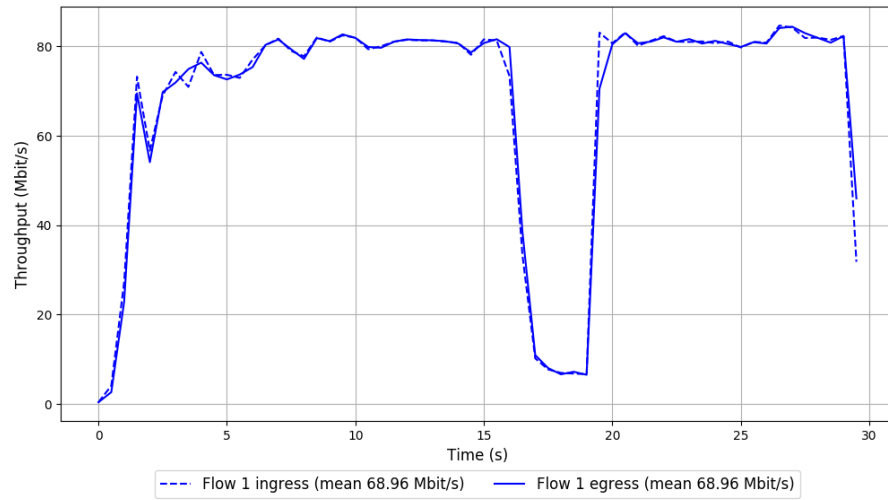
-- Flow 1:

Average throughput: 68.96 Mbit/s

95th percentile per-packet one-way delay: 86.885 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-21 01:08:55

End at: 2017-11-21 01:09:25

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.90 Mbit/s

95th percentile per-packet one-way delay: 87.082 ms

Loss rate: 0.01%

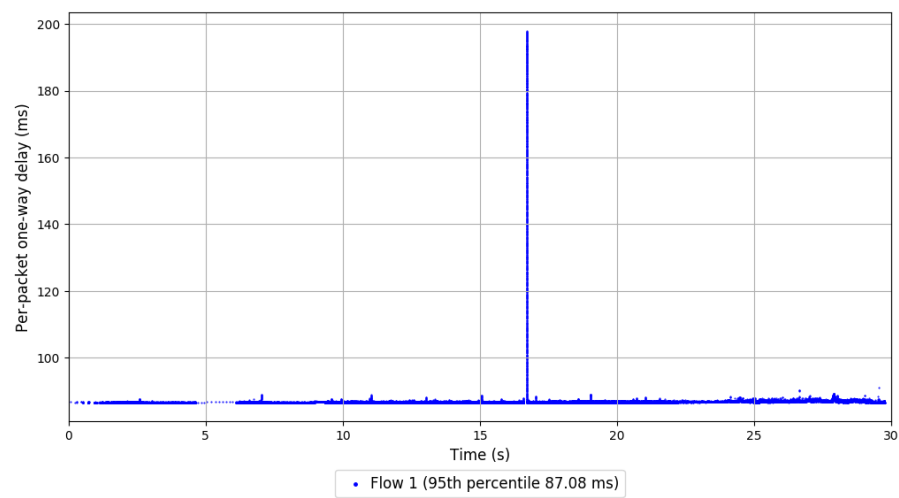
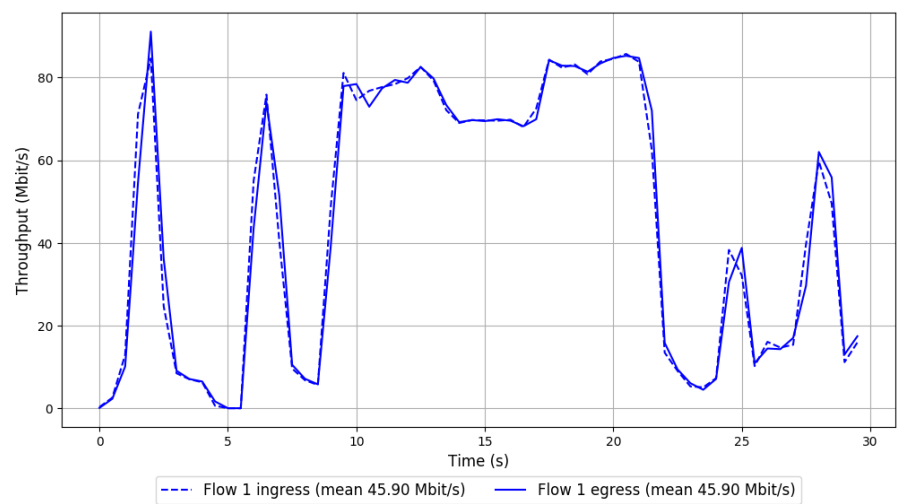
-- Flow 1:

Average throughput: 45.90 Mbit/s

95th percentile per-packet one-way delay: 87.082 ms

Loss rate: 0.01%

Run 10: Report of QUIC Cubic — Data Link

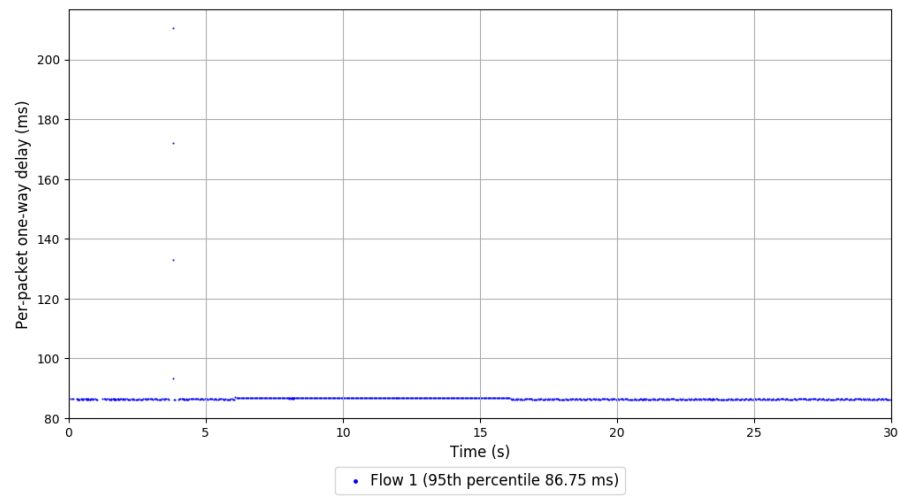
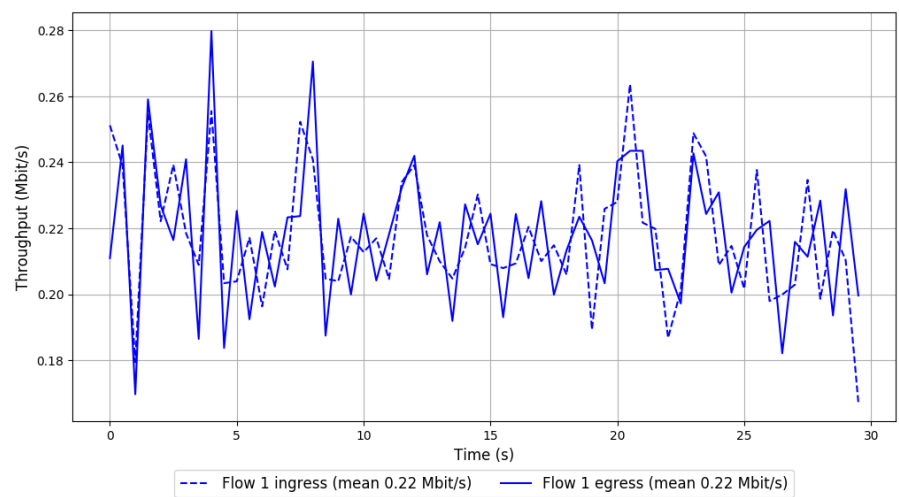


```
Run 1: Statistics of SCReAM

Start at: 2017-11-20 23:28:38
End at: 2017-11-20 23:29:08

# Below is generated by plot.py at 2017-11-21 02:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.746 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.746 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

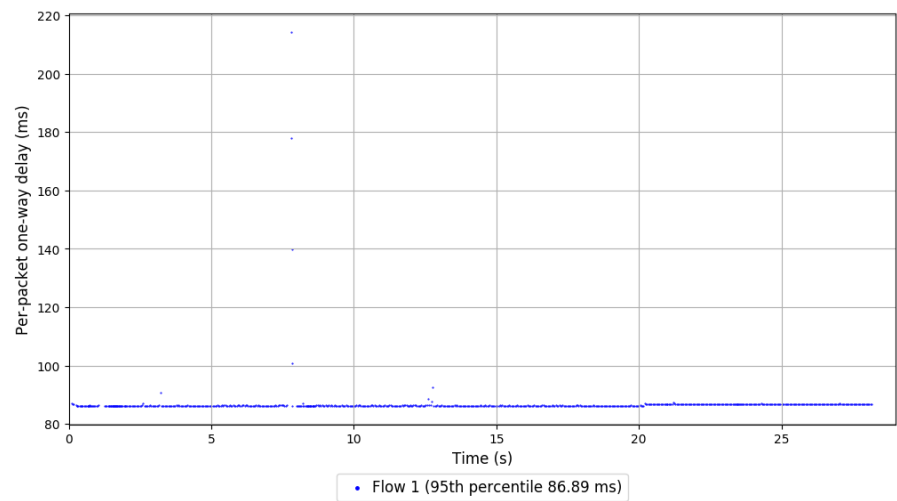
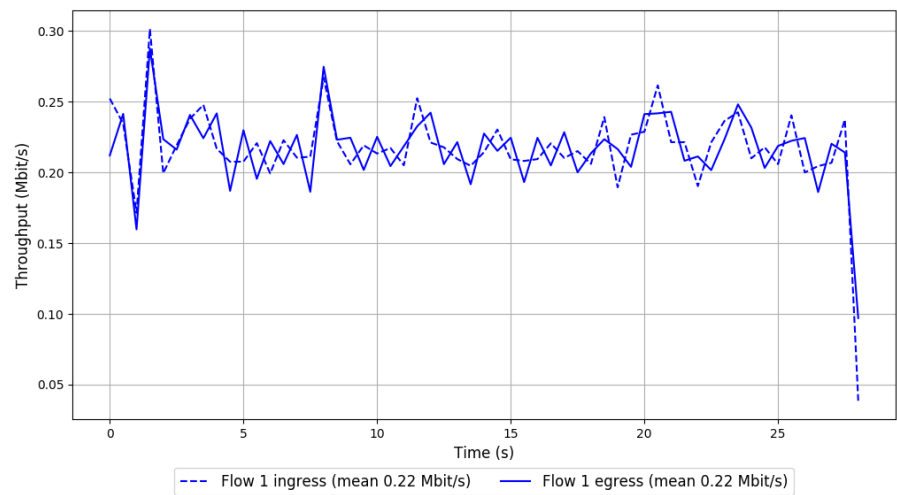


```
Run 2: Statistics of SCReAM

Start at: 2017-11-20 23:39:32
End at: 2017-11-20 23:40:02

# Below is generated by plot.py at 2017-11-21 02:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.886 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.886 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-20 23:50:25

End at: 2017-11-20 23:50:55

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.144 ms

Loss rate: 0.00%

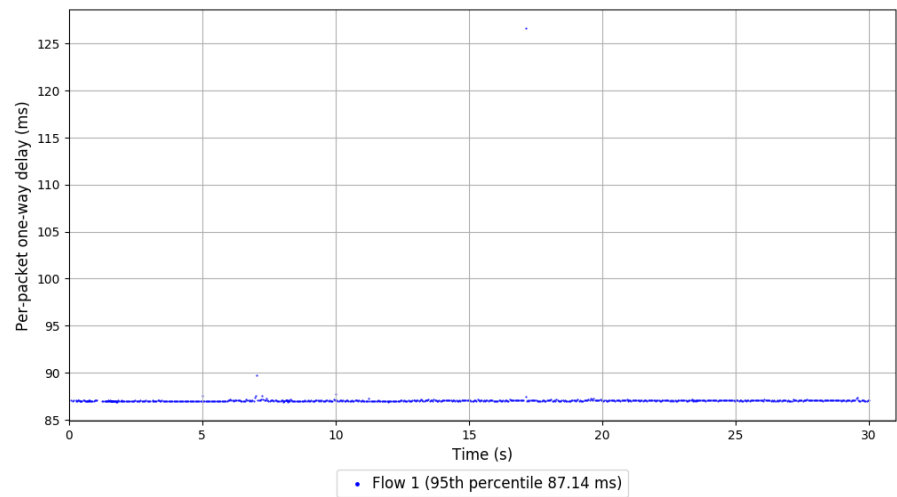
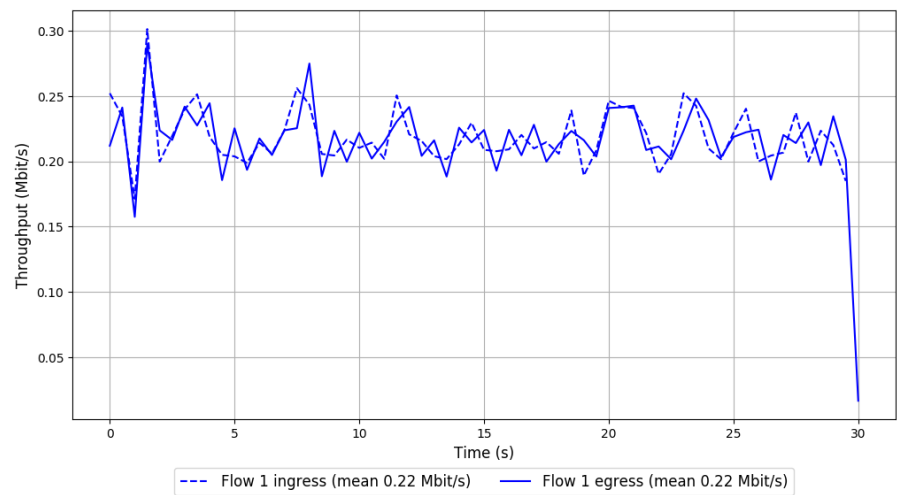
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.144 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-21 00:01:11

End at: 2017-11-21 00:01:41

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.788 ms

Loss rate: 0.00%

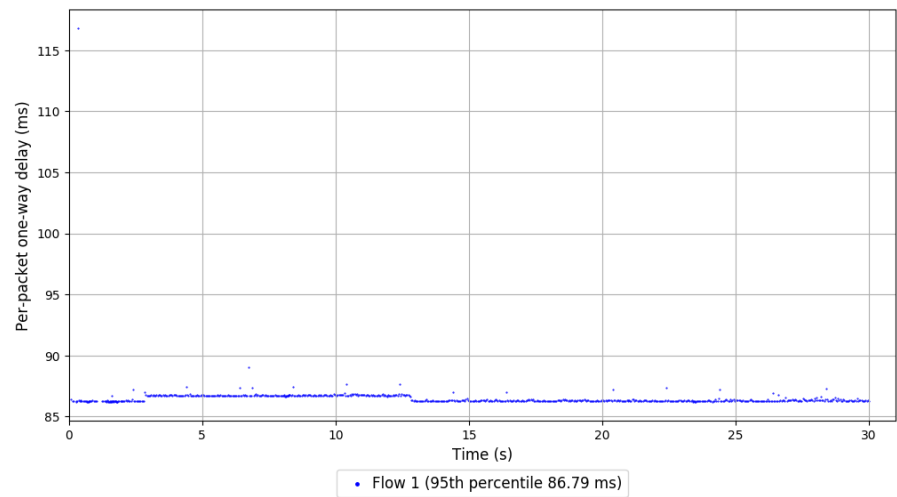
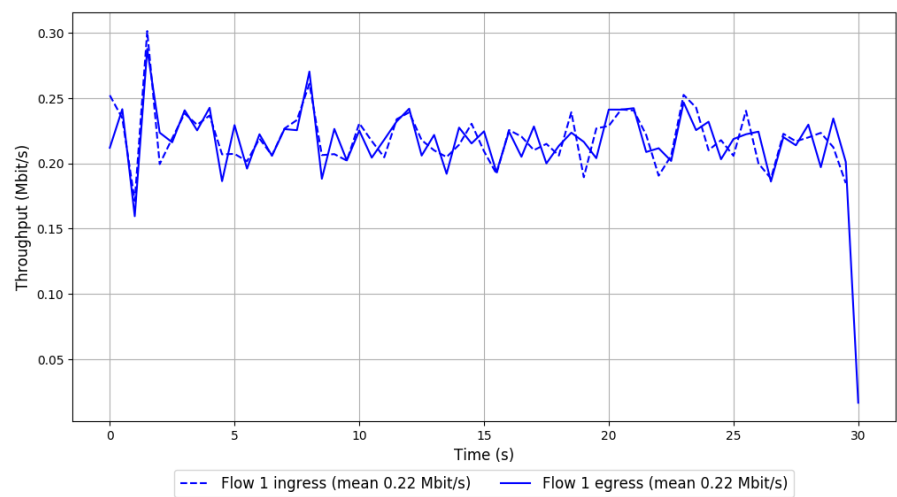
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.788 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-21 00:12:22

End at: 2017-11-21 00:12:52

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.272 ms

Loss rate: 0.00%

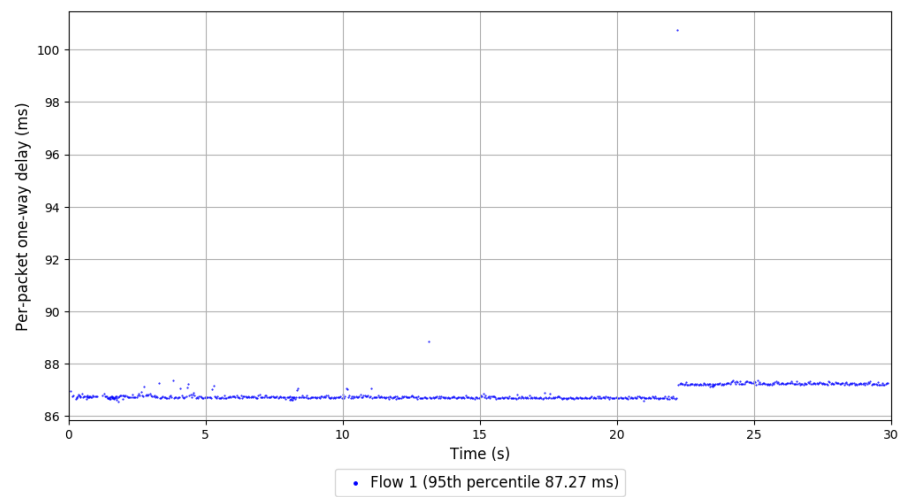
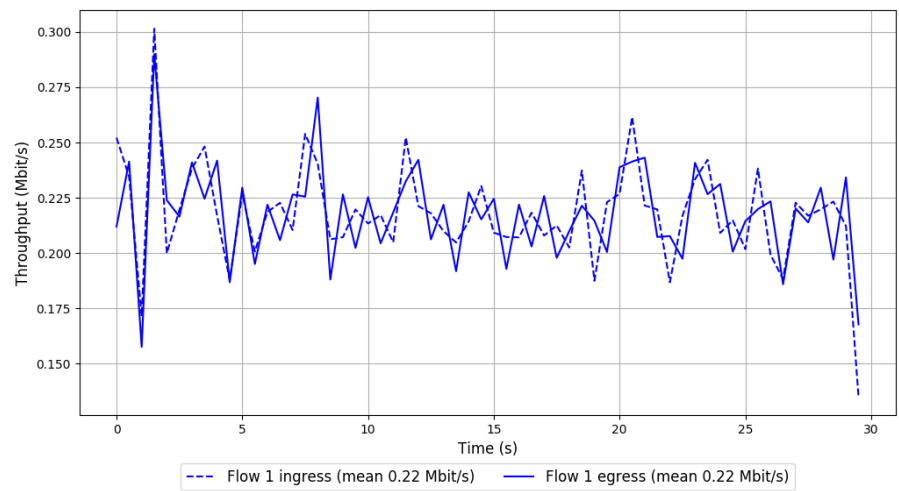
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.272 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-21 00:23:05

End at: 2017-11-21 00:23:35

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.939 ms

Loss rate: 0.00%

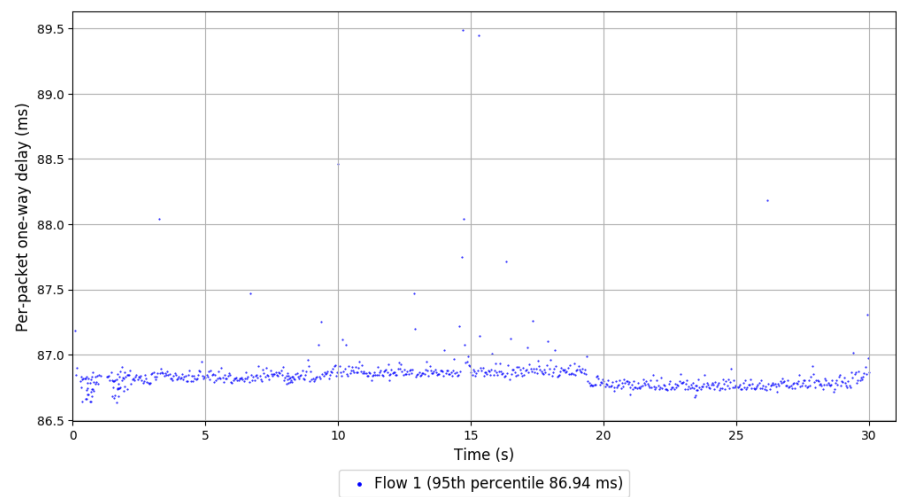
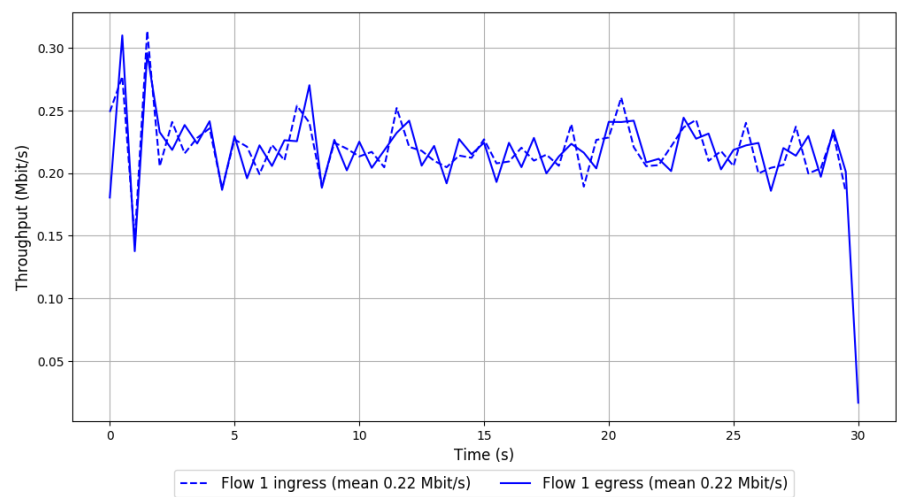
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.939 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-21 00:33:38

End at: 2017-11-21 00:34:08

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.851 ms

Loss rate: 0.00%

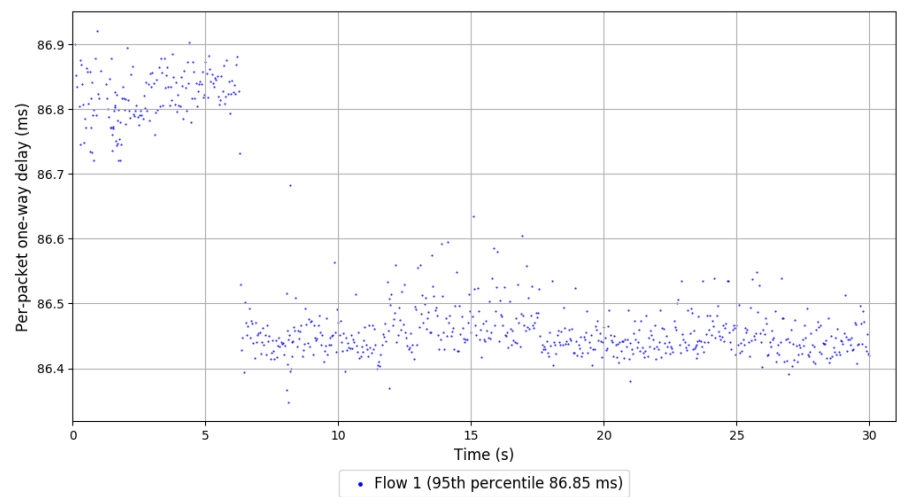
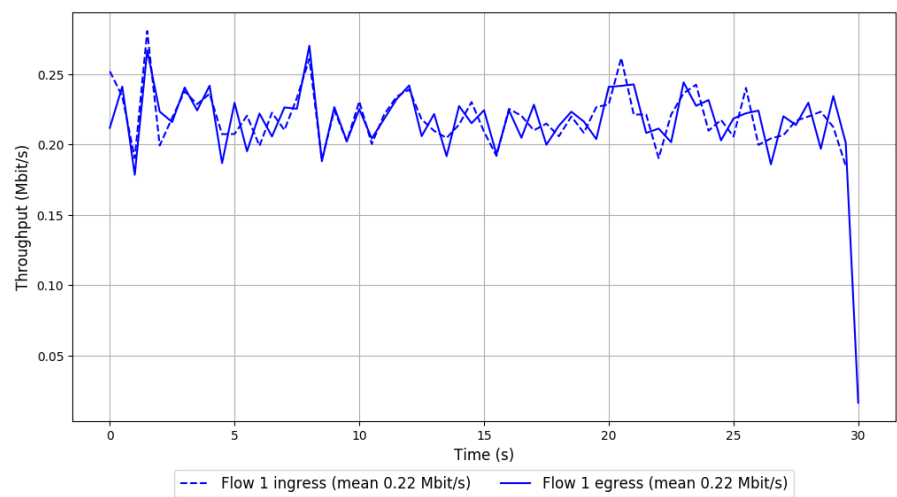
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.851 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-21 00:44:31

End at: 2017-11-21 00:45:01

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.236 ms

Loss rate: 0.00%

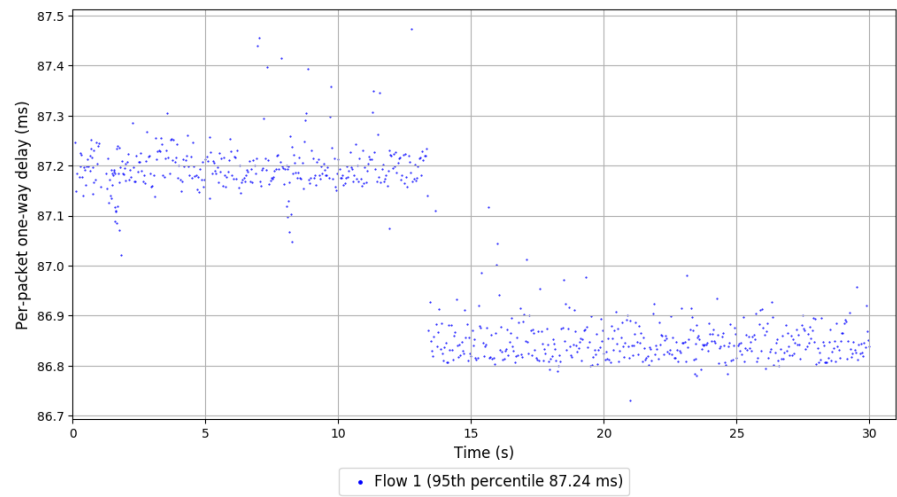
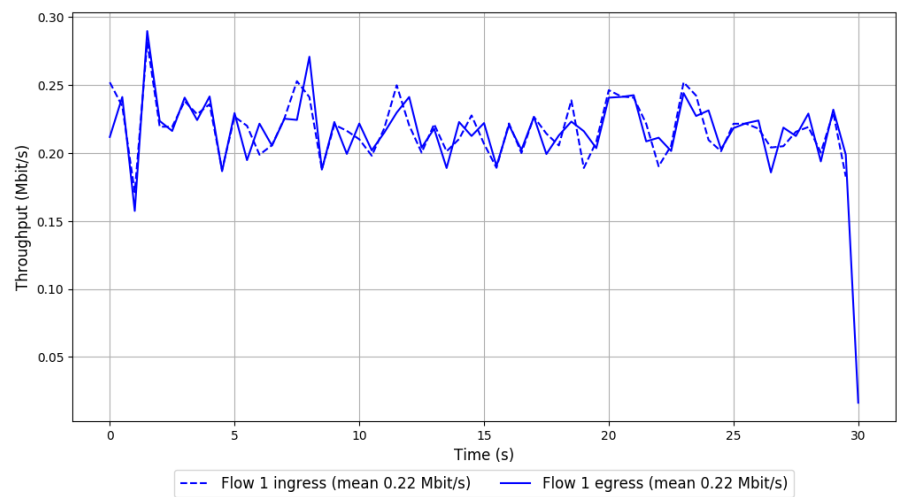
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.236 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-21 00:55:04

End at: 2017-11-21 00:55:34

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.470 ms

Loss rate: 0.00%

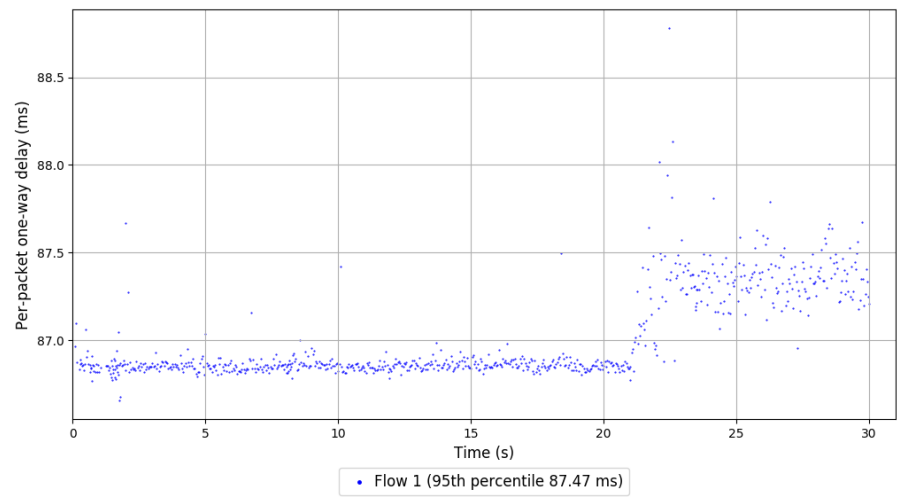
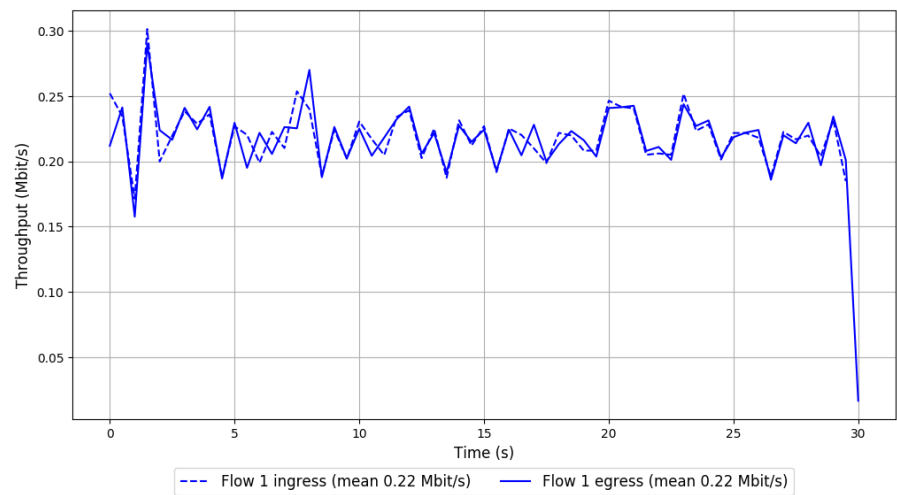
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.470 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-11-21 01:05:51

End at: 2017-11-21 01:06:21

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.952 ms

Loss rate: 0.00%

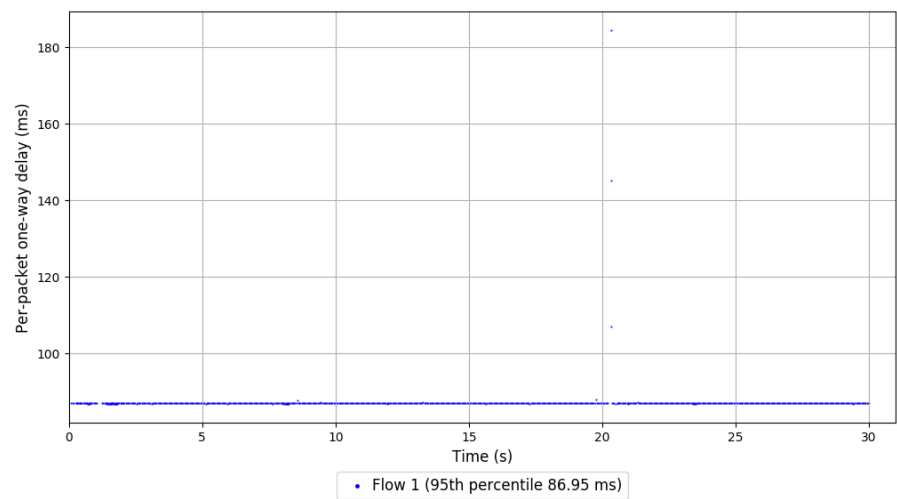
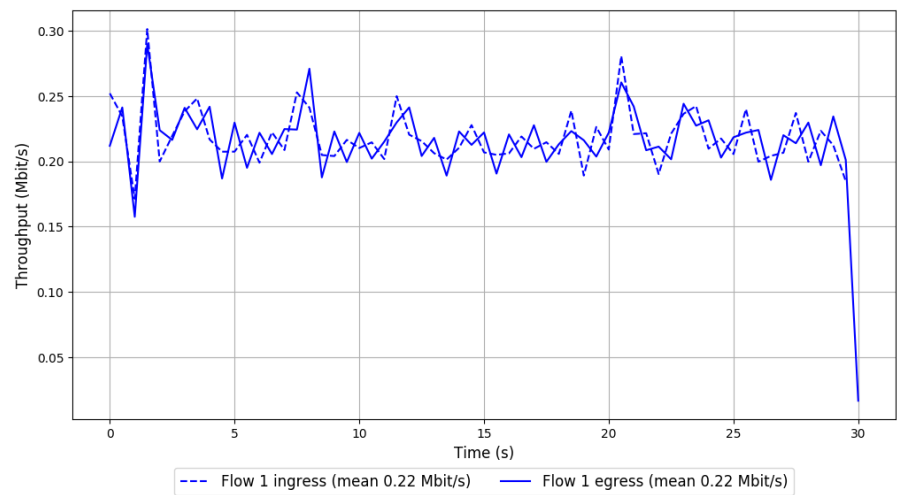
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.952 ms

Loss rate: 0.00%

Run 10: Report of SCRaM — Data Link

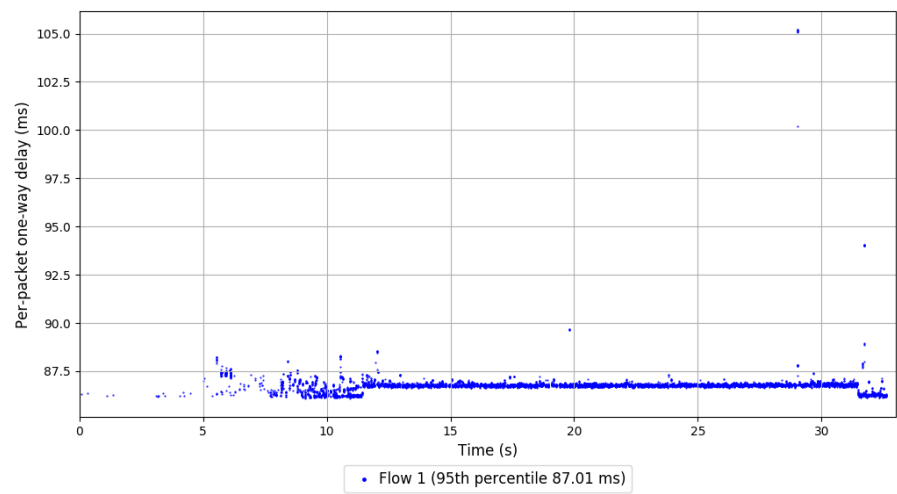
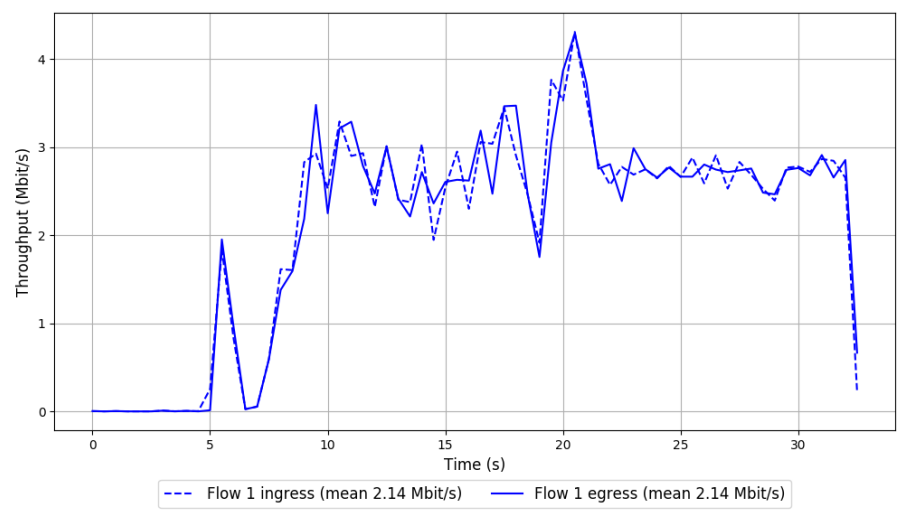


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-20 23:27:16
End at: 2017-11-20 23:27:46

# Below is generated by plot.py at 2017-11-21 02:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 87.009 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 87.009 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

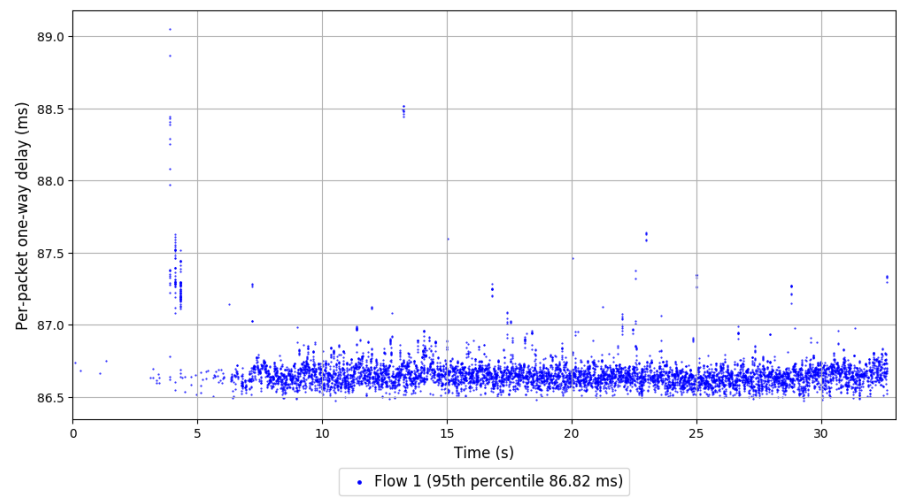
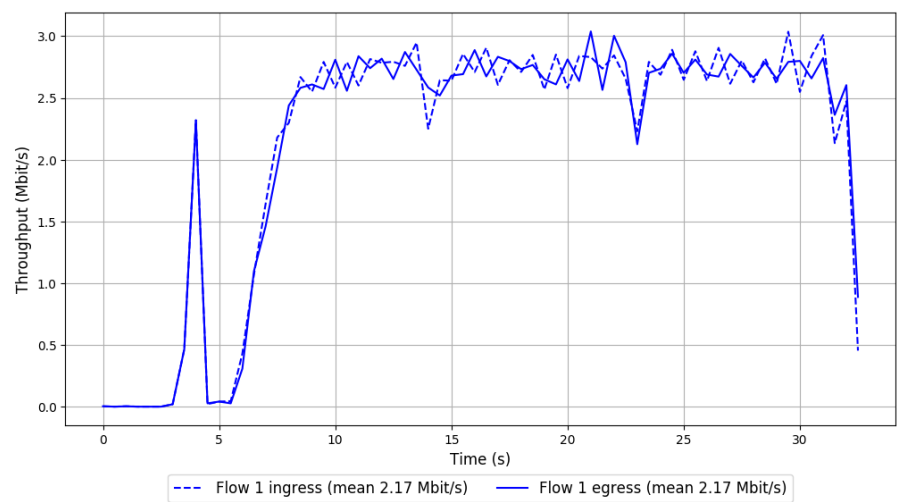


```
Run 2: Statistics of WebRTC media

Start at: 2017-11-20 23:38:00
End at: 2017-11-20 23:38:30

# Below is generated by plot.py at 2017-11-21 02:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 86.820 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 86.820 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-20 23:48:52

End at: 2017-11-20 23:49:22

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.888 ms

Loss rate: 0.00%

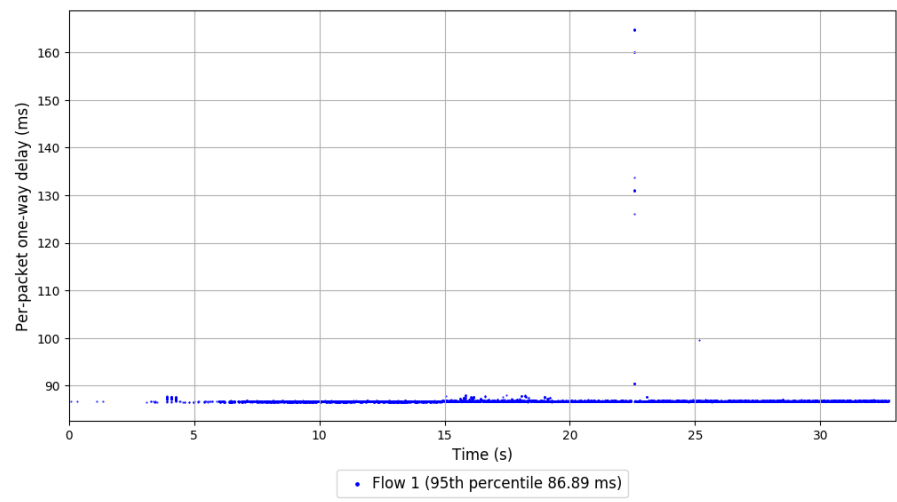
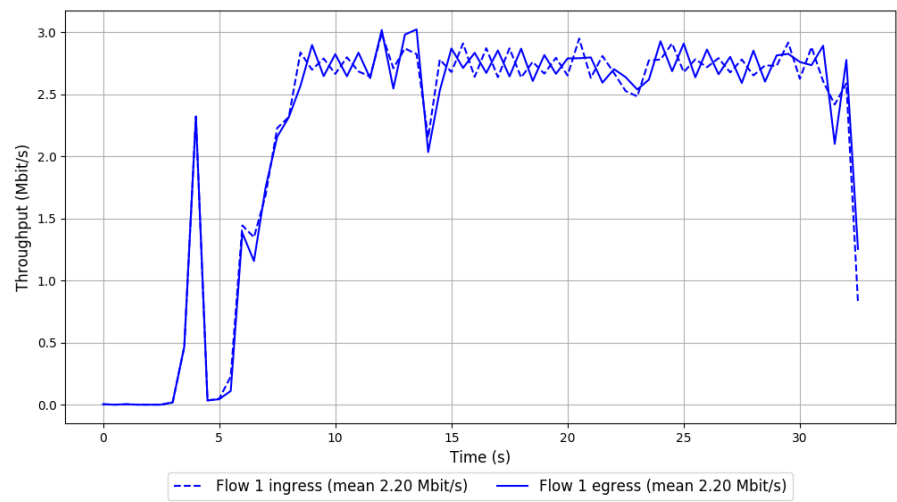
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.888 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-20 23:59:35

End at: 2017-11-21 00:00:05

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 87.136 ms

Loss rate: 0.00%

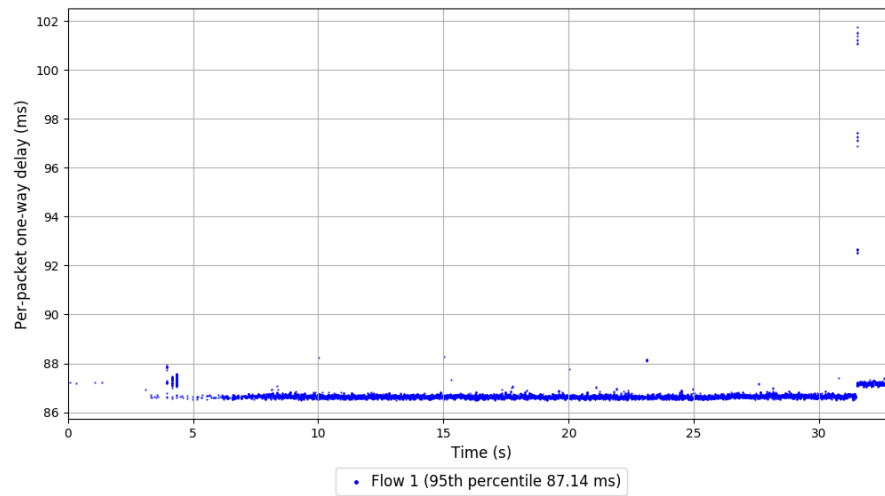
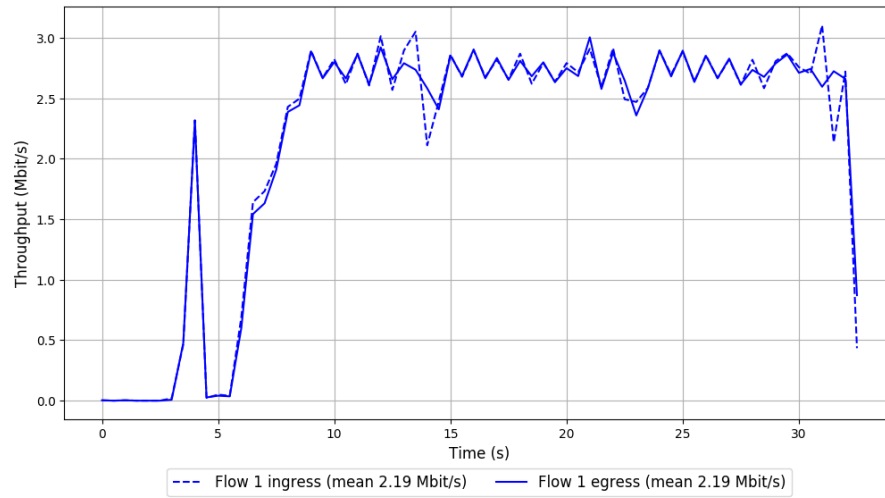
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 87.136 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-21 00:10:47

End at: 2017-11-21 00:11:17

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 87.413 ms

Loss rate: 0.00%

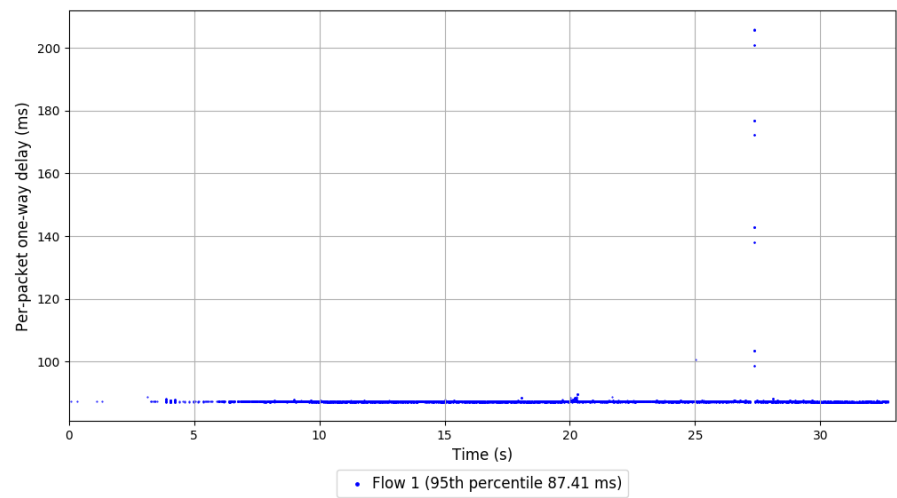
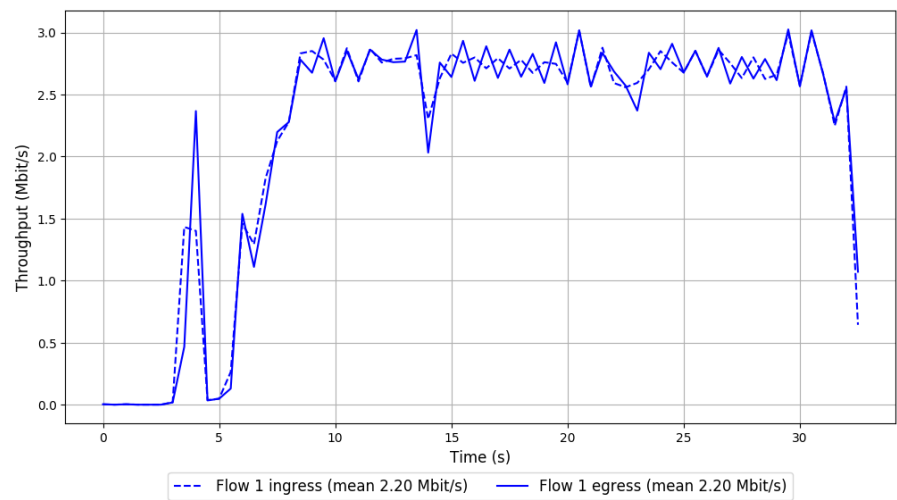
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 87.413 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-21 00:21:33

End at: 2017-11-21 00:22:03

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.908 ms

Loss rate: 0.00%

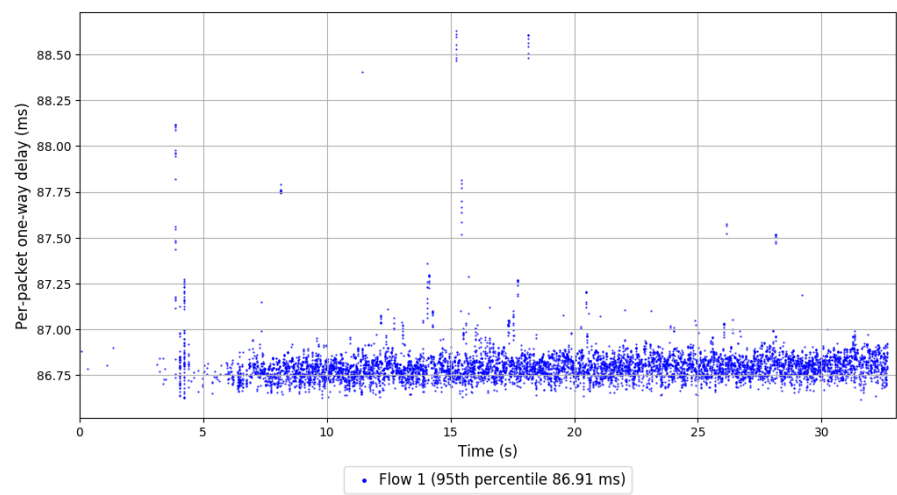
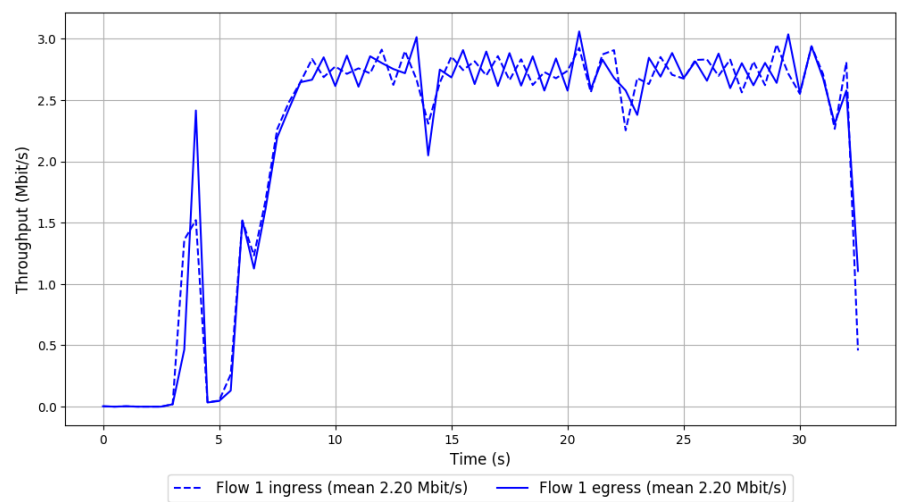
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 86.908 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-21 00:32:06

End at: 2017-11-21 00:32:36

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 116.325 ms

Loss rate: 0.00%

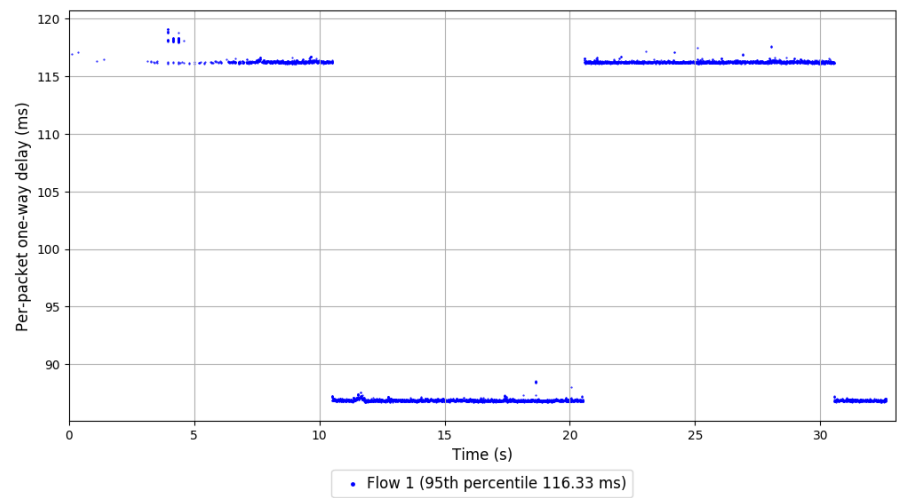
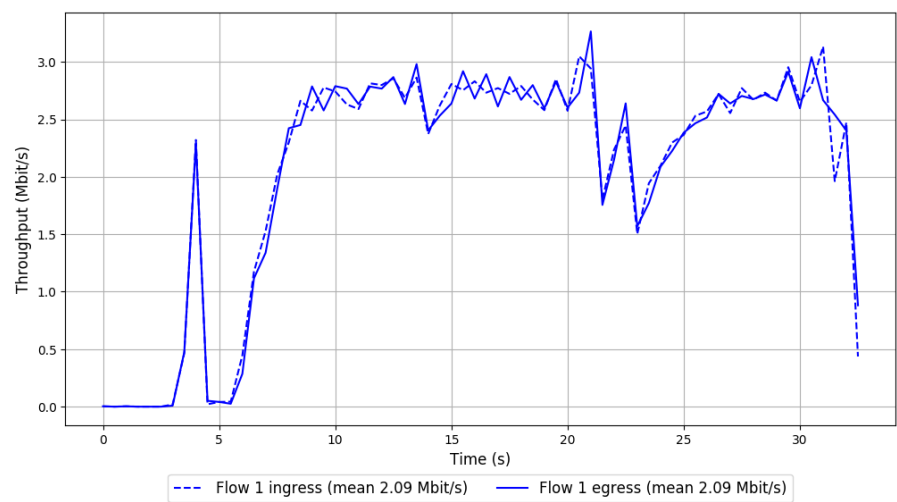
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 116.325 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-21 00:42:58

End at: 2017-11-21 00:43:28

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 87.369 ms

Loss rate: 0.00%

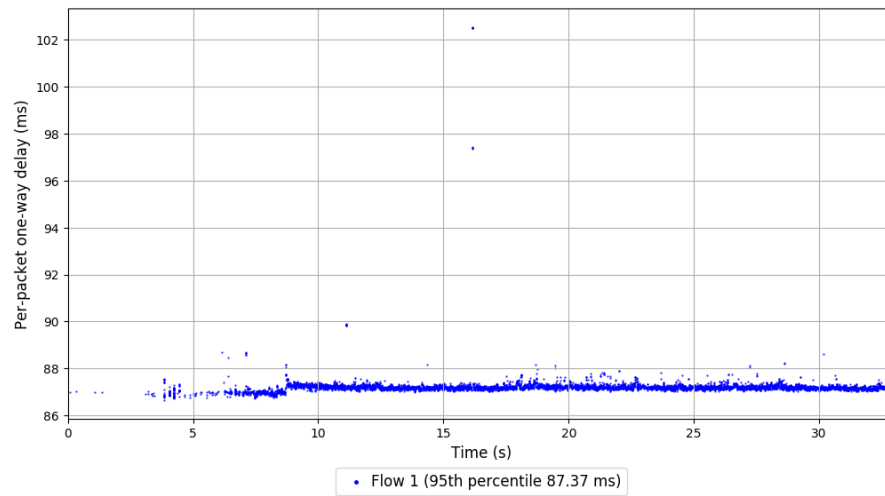
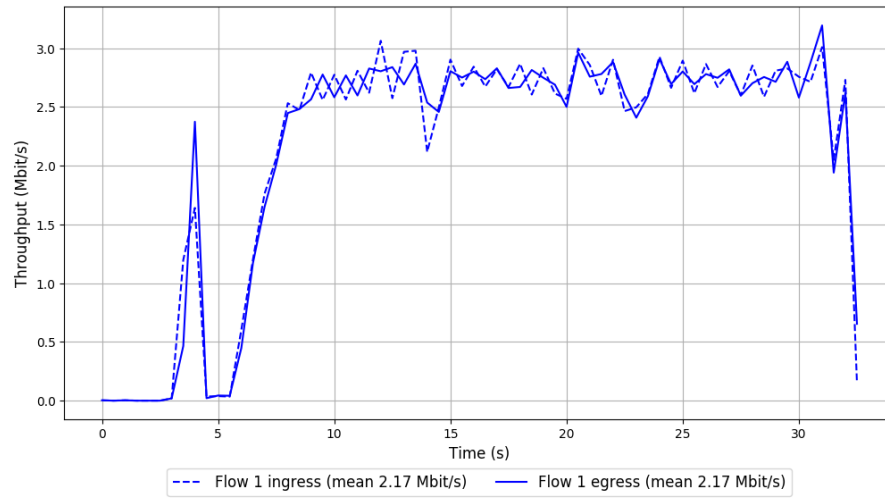
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 87.369 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-21 00:53:30

End at: 2017-11-21 00:54:00

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 87.051 ms

Loss rate: 0.01%

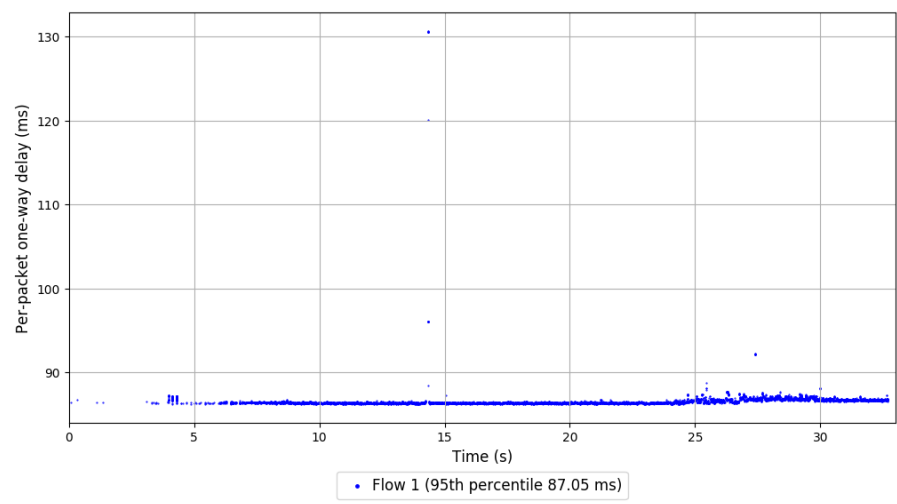
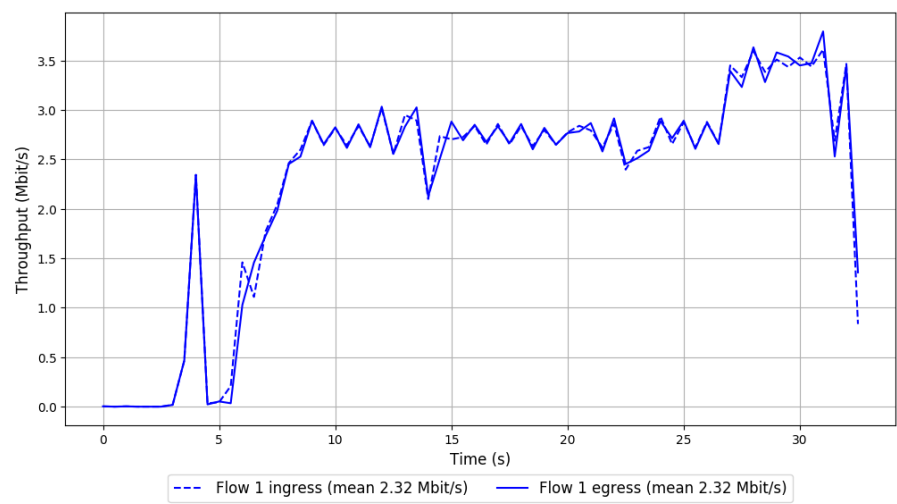
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 87.051 ms

Loss rate: 0.01%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-21 01:04:20

End at: 2017-11-21 01:04:50

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 116.255 ms

Loss rate: 0.00%

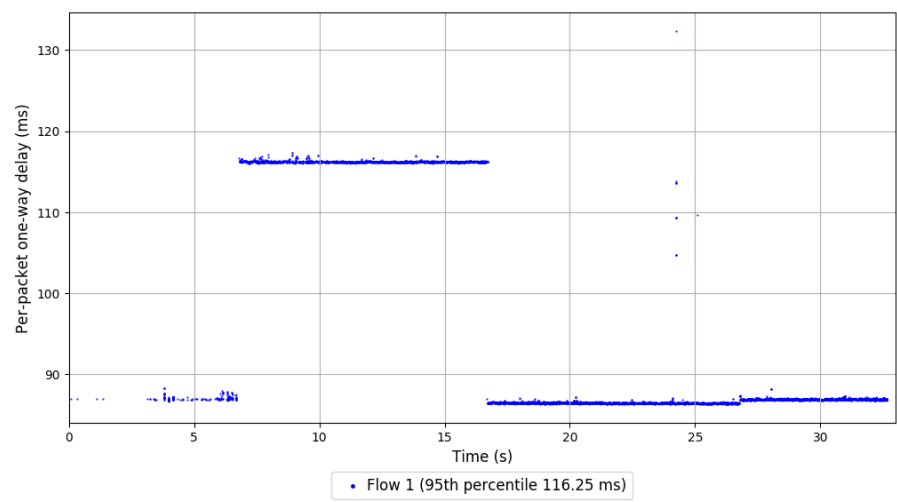
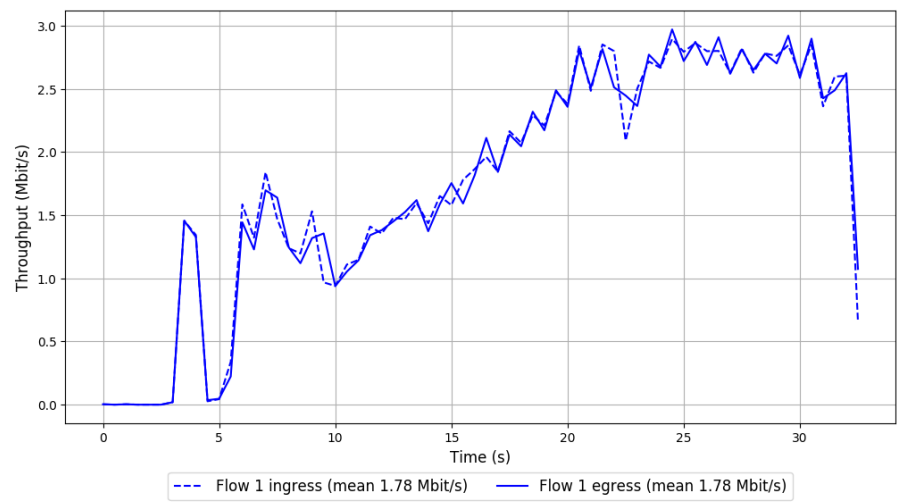
-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 116.255 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

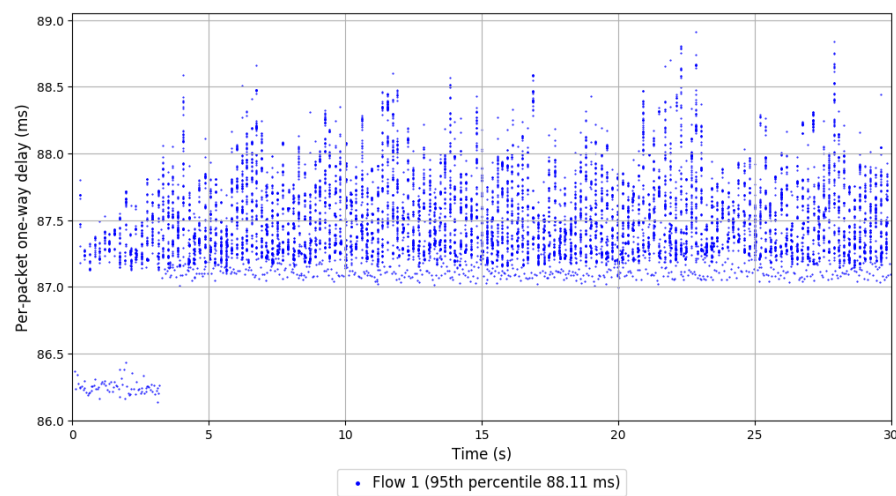
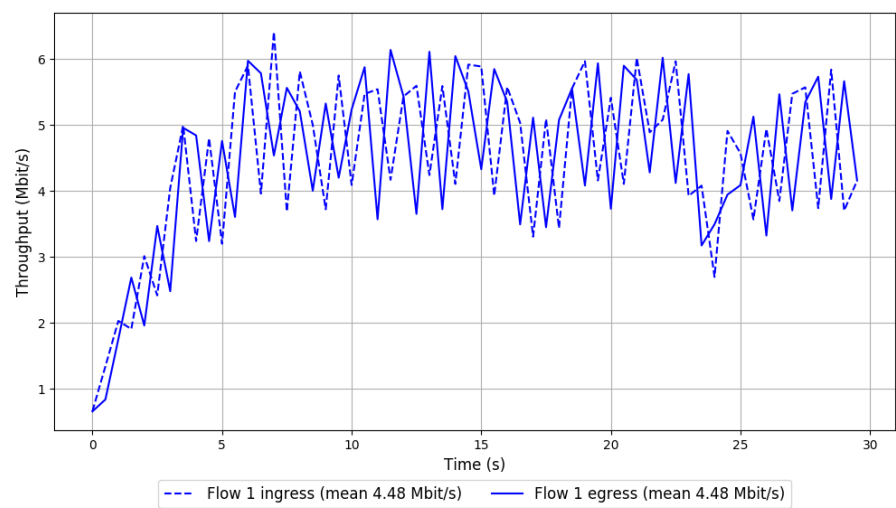


```
Run 1: Statistics of Sprout

Start at: 2017-11-20 23:32:21
End at: 2017-11-20 23:32:51

# Below is generated by plot.py at 2017-11-21 02:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 88.106 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 88.106 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-20 23:43:17

End at: 2017-11-20 23:43:47

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 88.494 ms

Loss rate: 0.03%

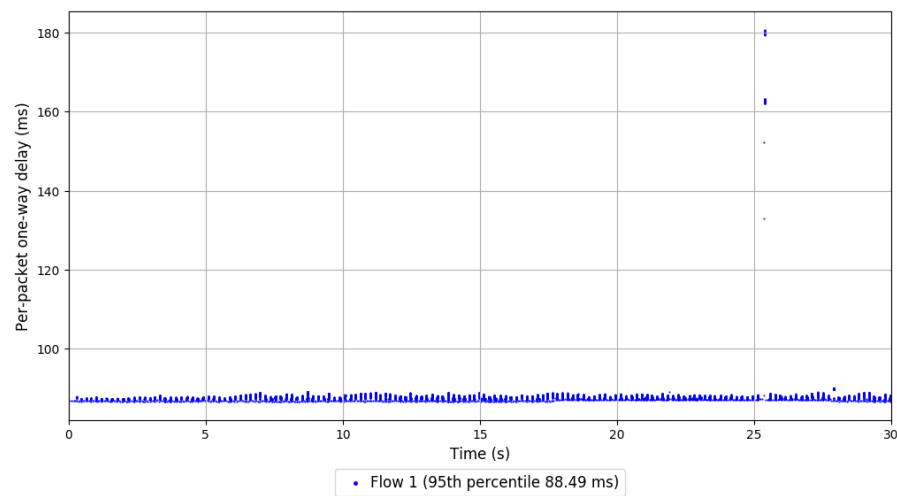
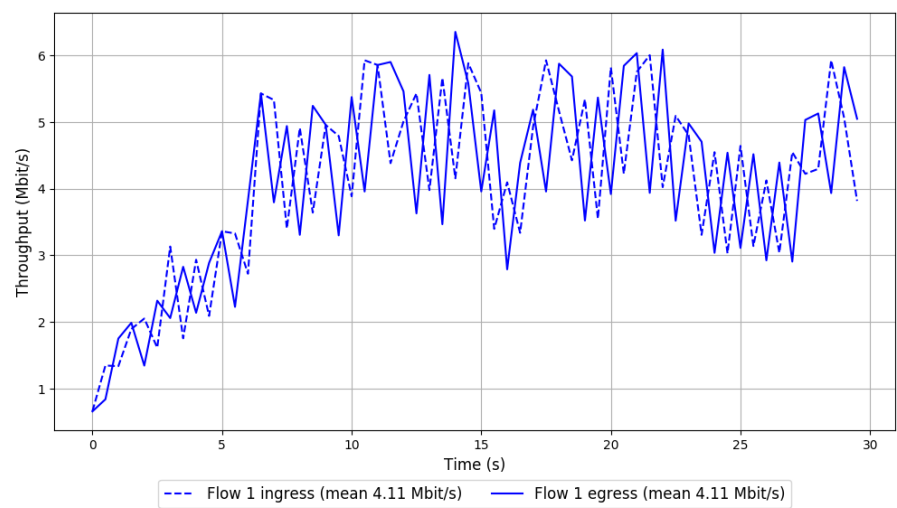
-- Flow 1:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 88.494 ms

Loss rate: 0.03%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-20 23:54:13

End at: 2017-11-20 23:54:43

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 88.036 ms

Loss rate: 0.00%

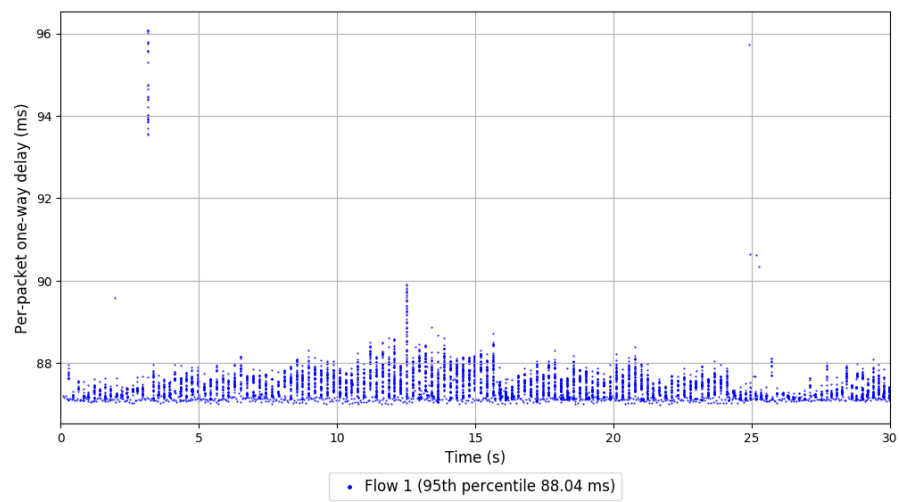
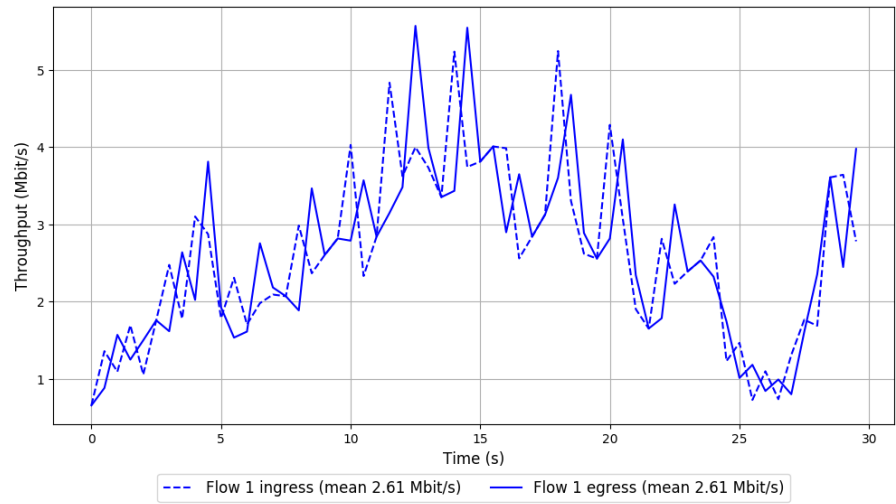
-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 88.036 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-21 00:05:10

End at: 2017-11-21 00:05:40

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 88.630 ms

Loss rate: 0.09%

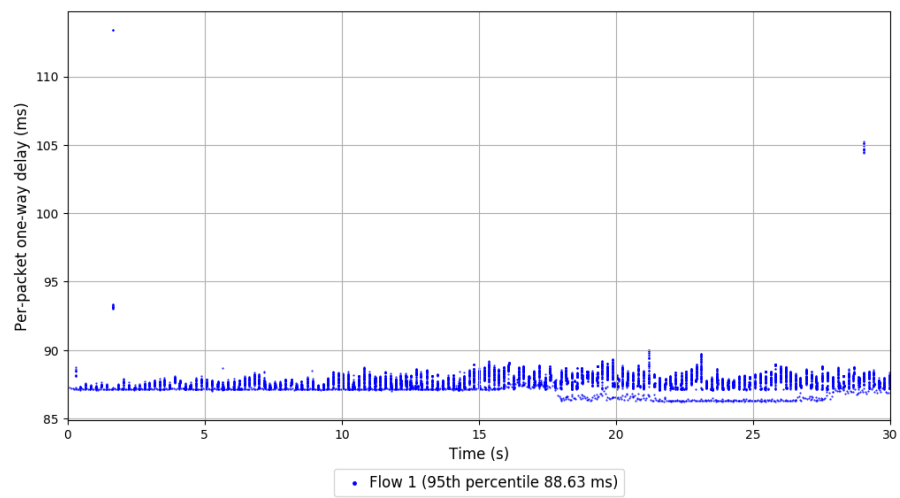
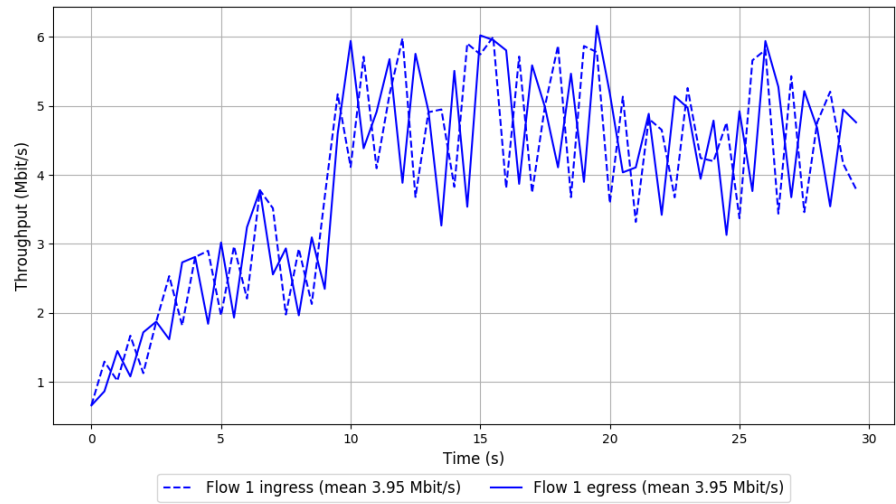
-- Flow 1:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 88.630 ms

Loss rate: 0.09%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-21 00:16:04

End at: 2017-11-21 00:16:34

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.24 Mbit/s

95th percentile per-packet one-way delay: 88.180 ms

Loss rate: 0.96%

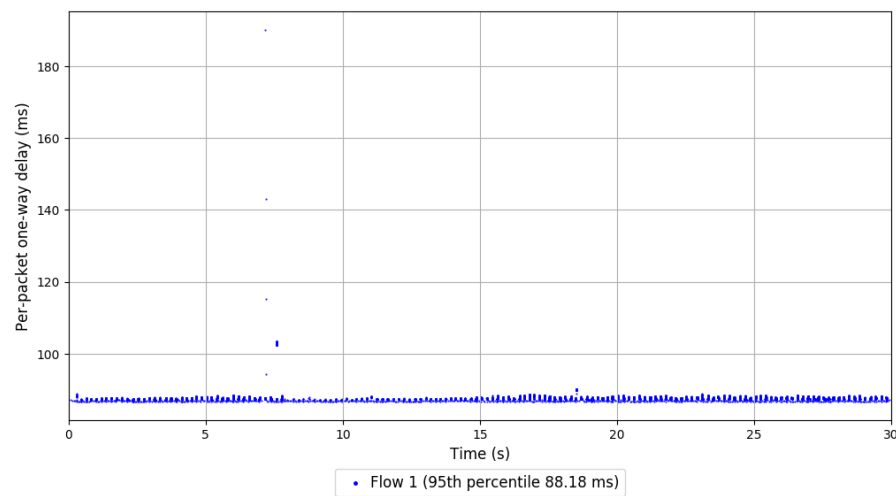
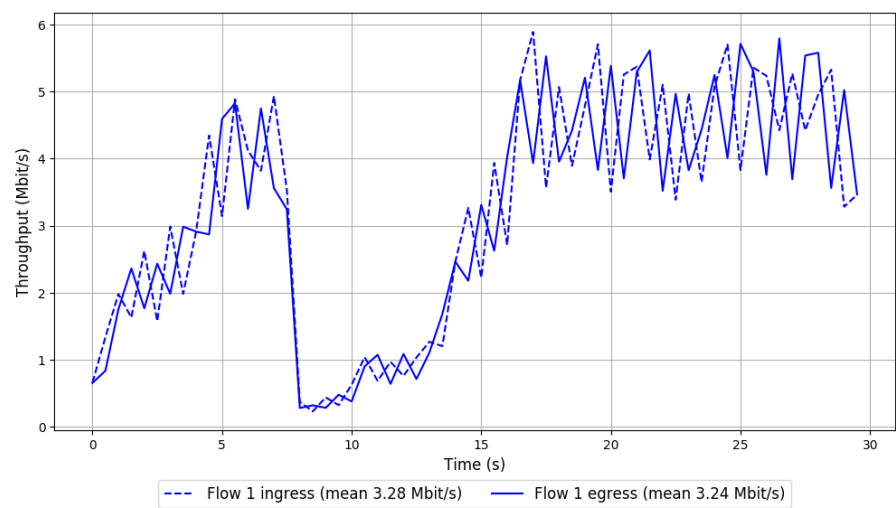
-- Flow 1:

Average throughput: 3.24 Mbit/s

95th percentile per-packet one-way delay: 88.180 ms

Loss rate: 0.96%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-21 00:26:49

End at: 2017-11-21 00:27:19

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 118.444 ms

Loss rate: 0.00%

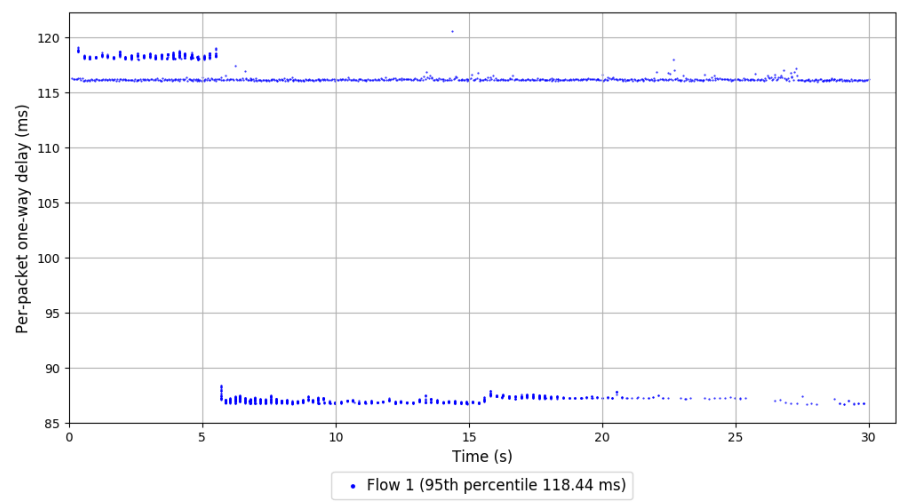
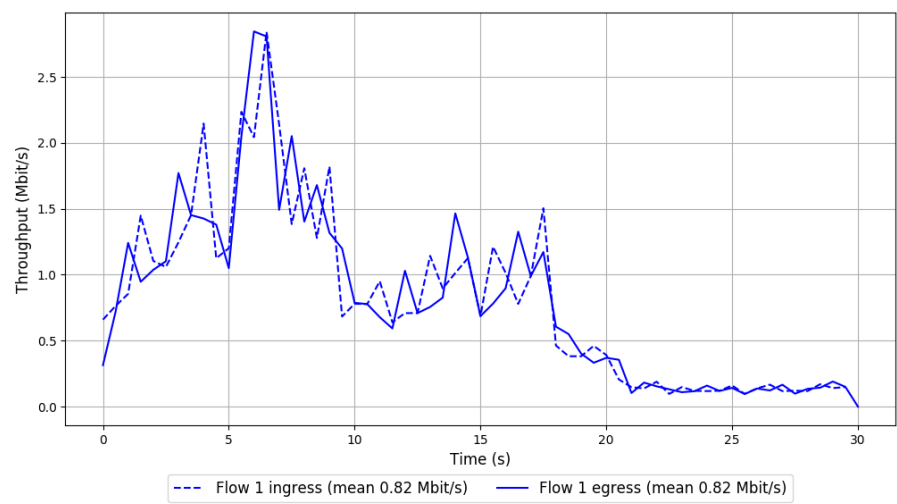
-- Flow 1:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 118.444 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-21 00:37:18

End at: 2017-11-21 00:37:48

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.35 Mbit/s

95th percentile per-packet one-way delay: 116.182 ms

Loss rate: 0.17%

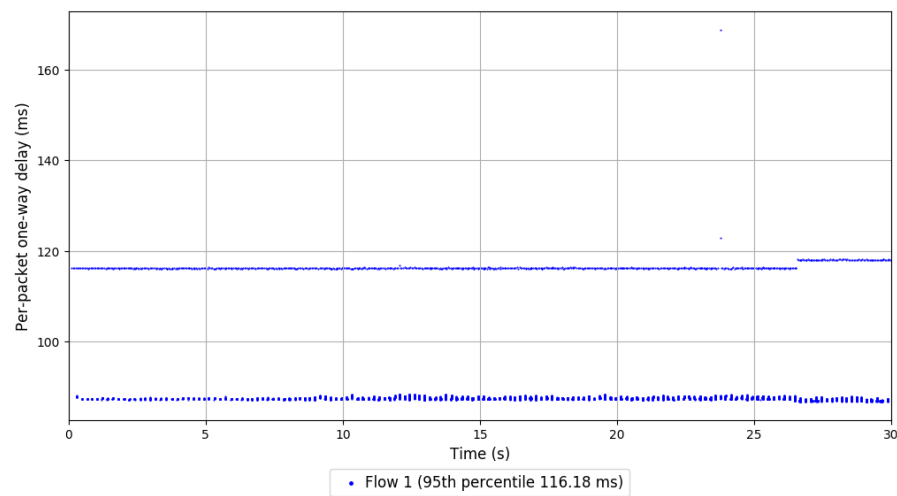
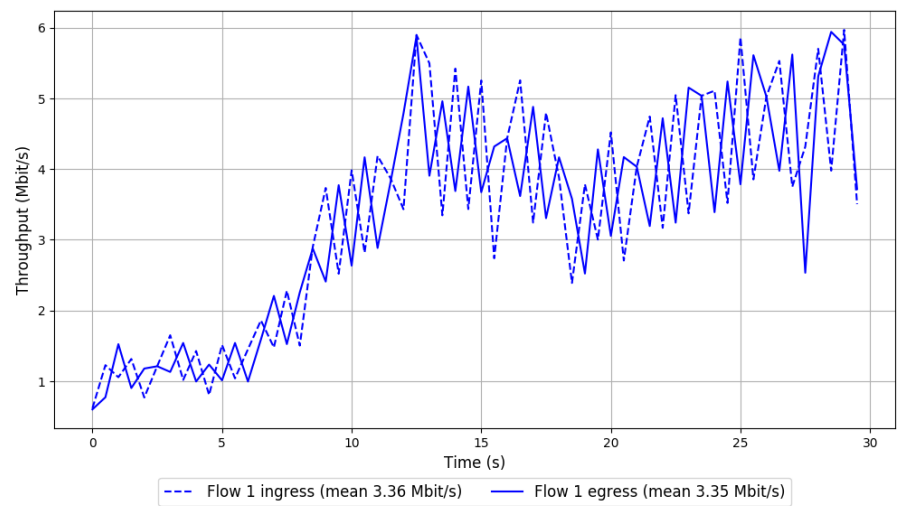
-- Flow 1:

Average throughput: 3.35 Mbit/s

95th percentile per-packet one-way delay: 116.182 ms

Loss rate: 0.17%

Run 7: Report of Sprout — Data Link

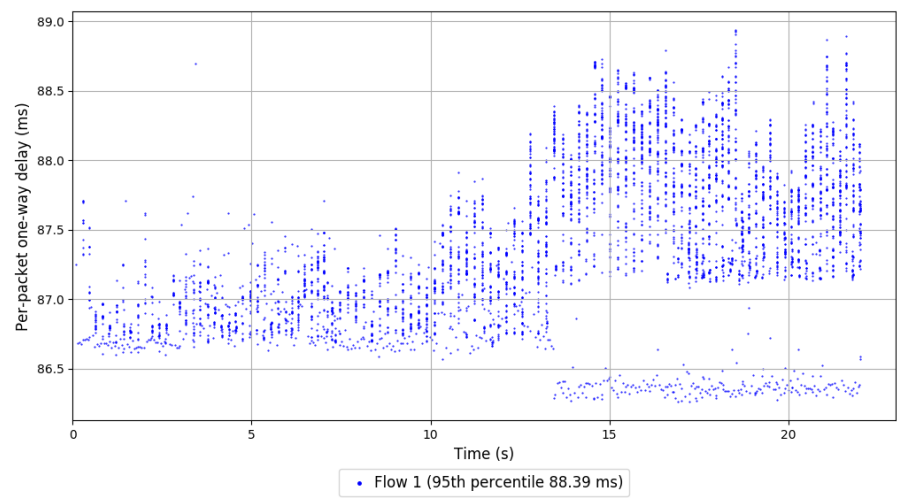
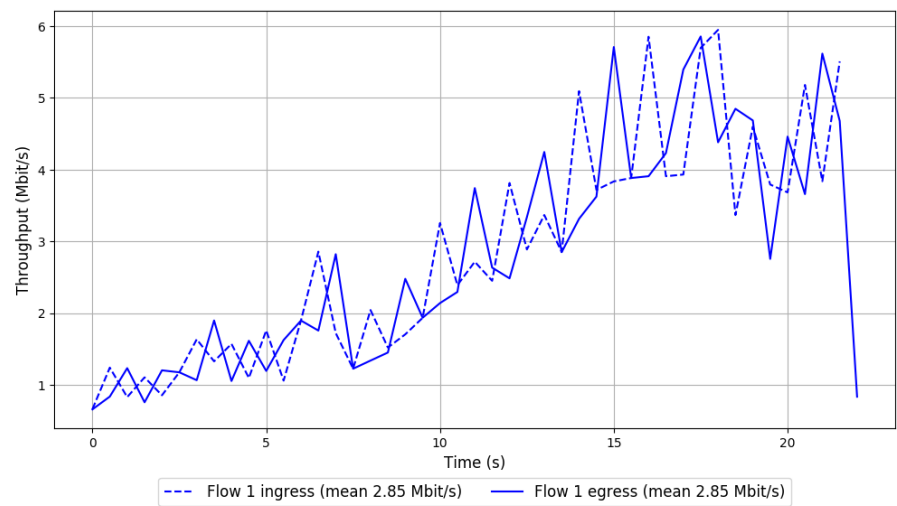


Run 8: Statistics of Sprout

Start at: 2017-11-21 00:48:13

End at: 2017-11-21 00:48:43

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-21 00:58:45

End at: 2017-11-21 00:59:15

Below is generated by plot.py at 2017-11-21 02:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 88.068 ms

Loss rate: 0.00%

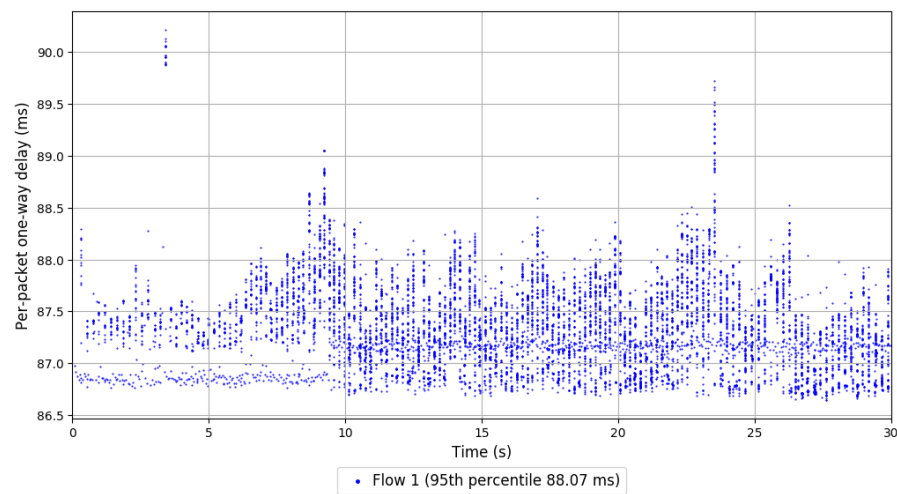
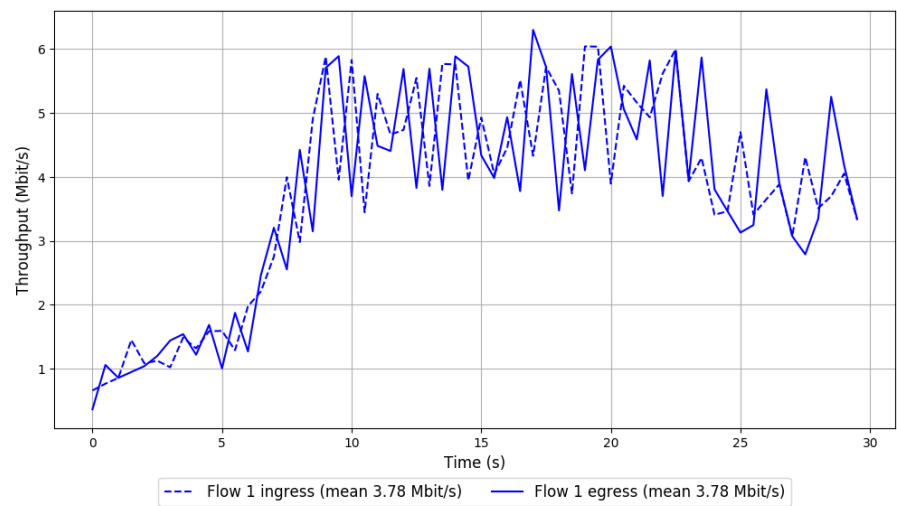
-- Flow 1:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 88.068 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link

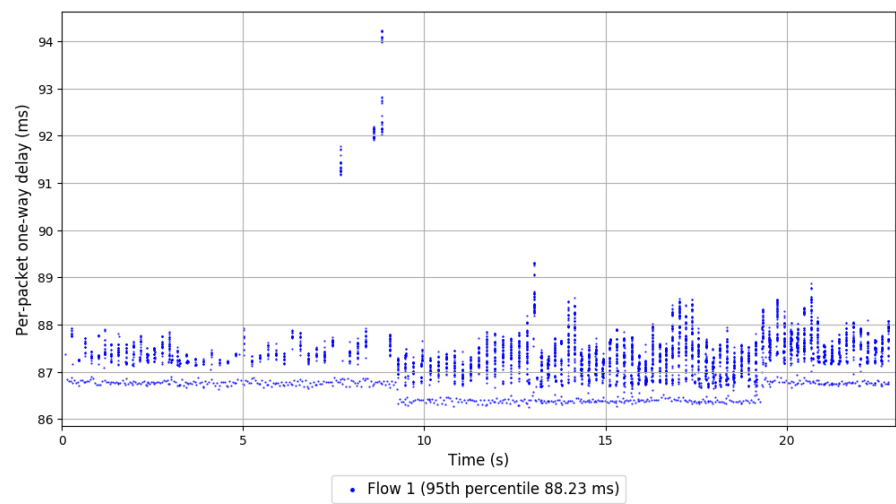
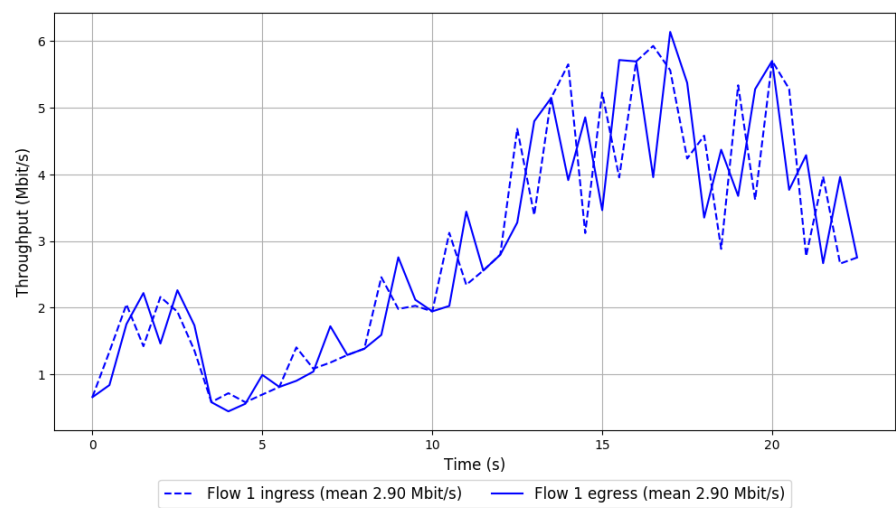


Run 10: Statistics of Sprout

Start at: 2017-11-21 01:09:38

End at: 2017-11-21 01:10:08

Run 10: Report of Sprout — Data Link

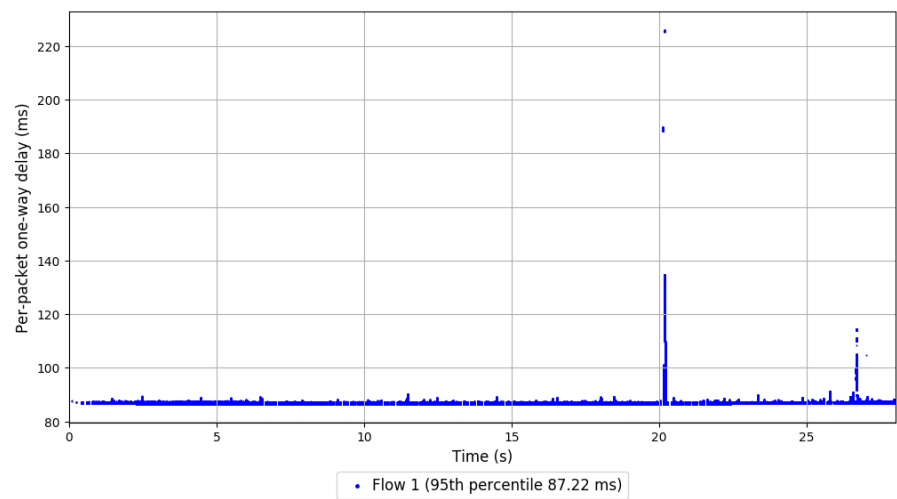
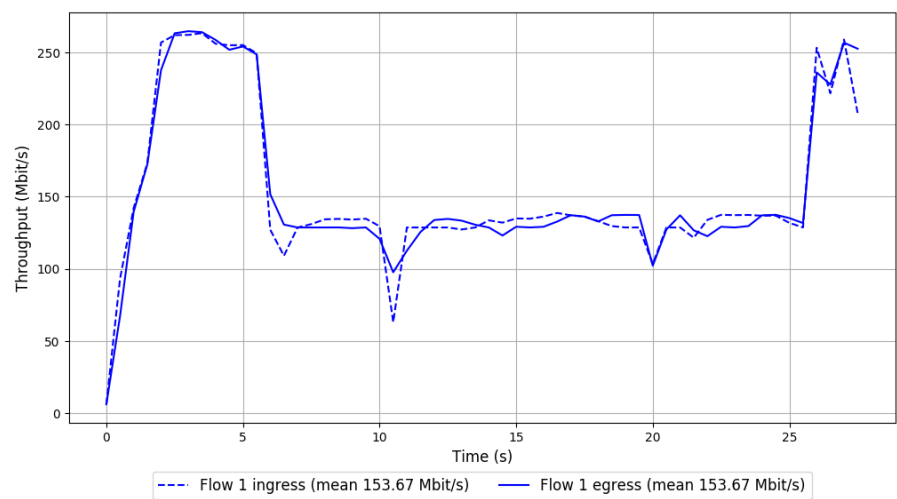


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-20 23:26:20
End at: 2017-11-20 23:26:50

# Below is generated by plot.py at 2017-11-21 02:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 153.67 Mbit/s
95th percentile per-packet one-way delay: 87.222 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 153.67 Mbit/s
95th percentile per-packet one-way delay: 87.222 ms
Loss rate: 0.00%
```

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

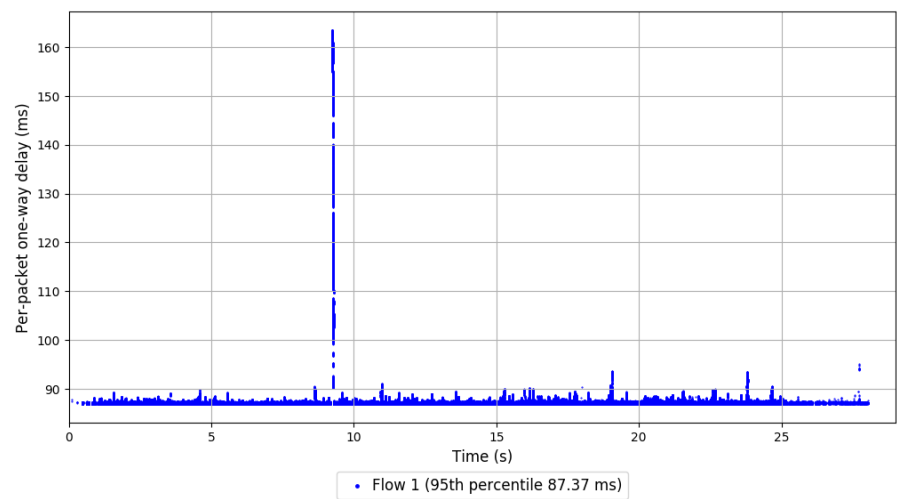
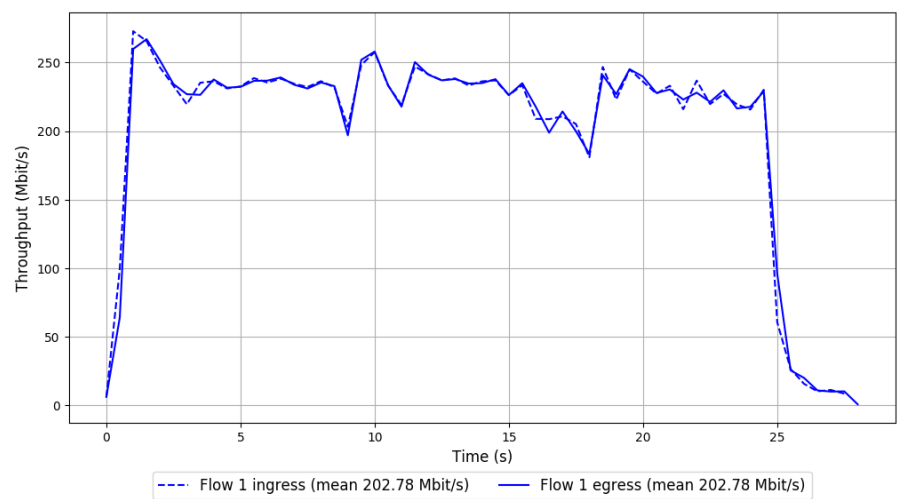


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-20 23:37:01
End at: 2017-11-20 23:37:31

# Below is generated by plot.py at 2017-11-21 02:11:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.78 Mbit/s
95th percentile per-packet one-way delay: 87.370 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.78 Mbit/s
95th percentile per-packet one-way delay: 87.370 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-20 23:47:55

End at: 2017-11-20 23:48:25

Below is generated by plot.py at 2017-11-21 02:11:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.76 Mbit/s

95th percentile per-packet one-way delay: 87.421 ms

Loss rate: 0.00%

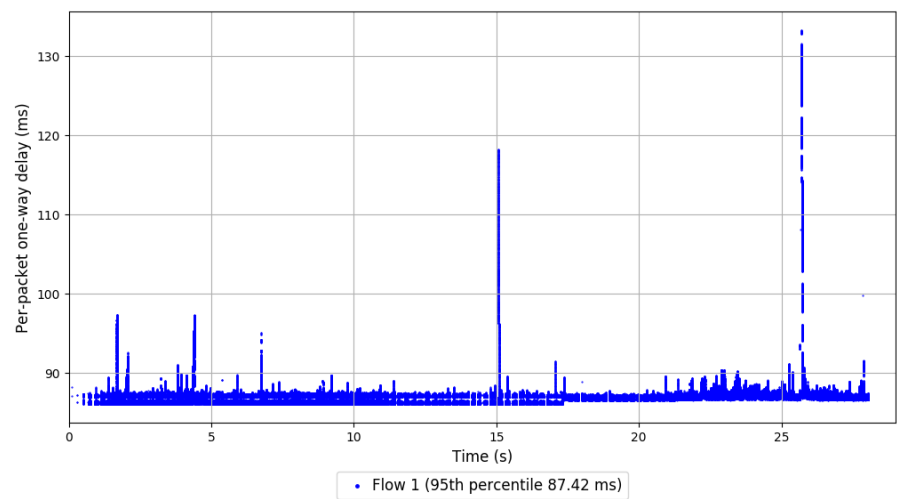
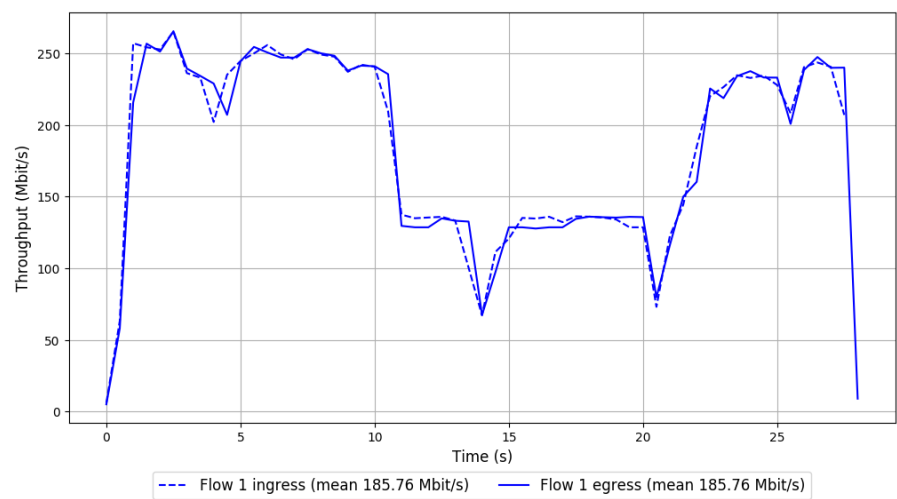
-- Flow 1:

Average throughput: 185.76 Mbit/s

95th percentile per-packet one-way delay: 87.421 ms

Loss rate: 0.00%

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

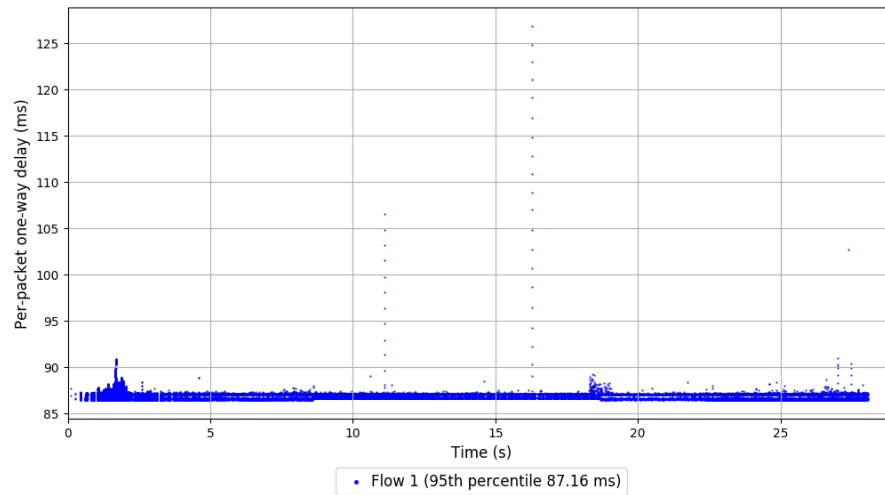
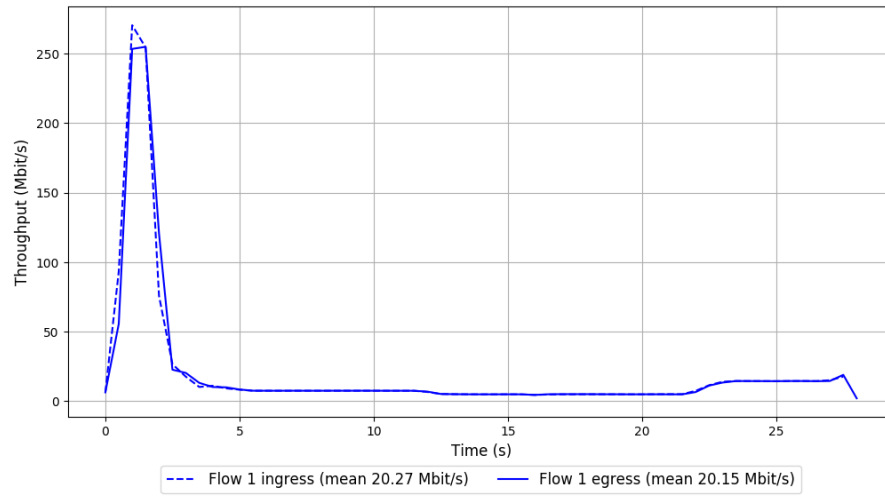


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-11-20 23:58:54
End at: 2017-11-20 23:59:24

# Below is generated by plot.py at 2017-11-21 02:11:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.15 Mbit/s
95th percentile per-packet one-way delay: 87.157 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 20.15 Mbit/s
95th percentile per-packet one-way delay: 87.157 ms
Loss rate: 0.58%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-21 00:09:46

End at: 2017-11-21 00:10:16

Below is generated by plot.py at 2017-11-21 02:12:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.84 Mbit/s

95th percentile per-packet one-way delay: 87.282 ms

Loss rate: 0.00%

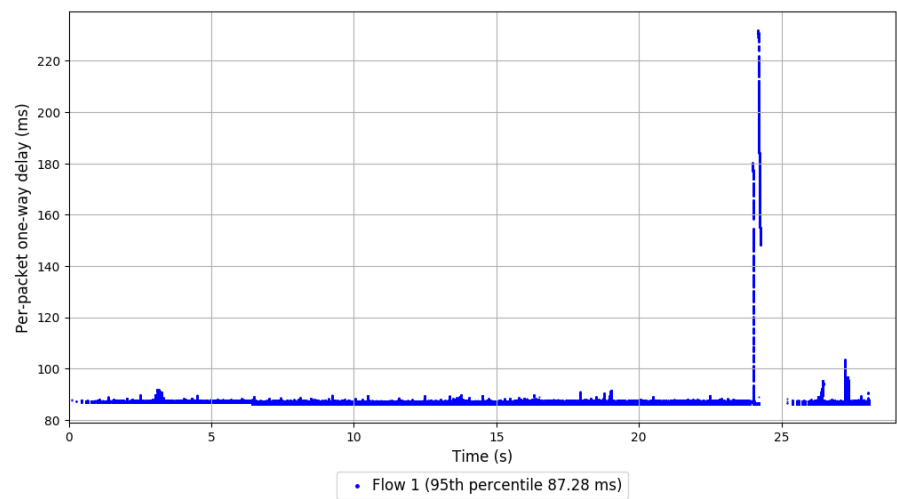
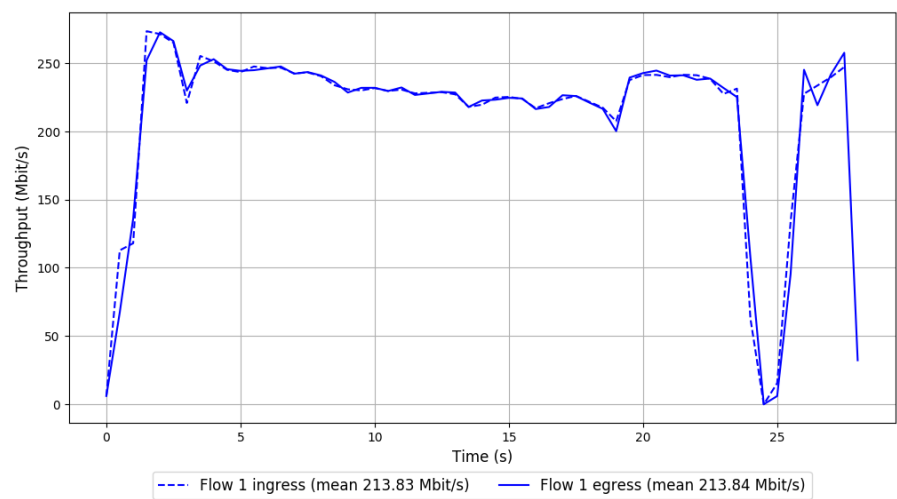
-- Flow 1:

Average throughput: 213.84 Mbit/s

95th percentile per-packet one-way delay: 87.282 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-21 00:20:41

End at: 2017-11-21 00:21:11

Below is generated by plot.py at 2017-11-21 02:12:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 133.03 Mbit/s

95th percentile per-packet one-way delay: 88.239 ms

Loss rate: 0.00%

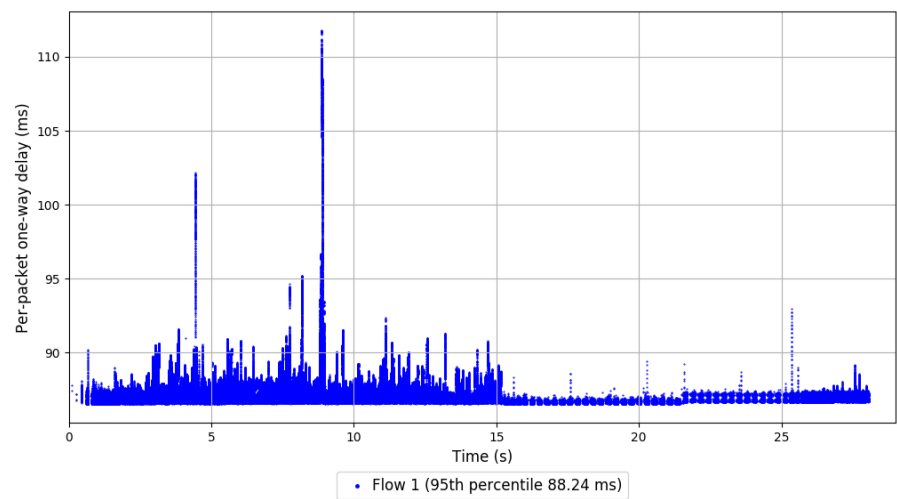
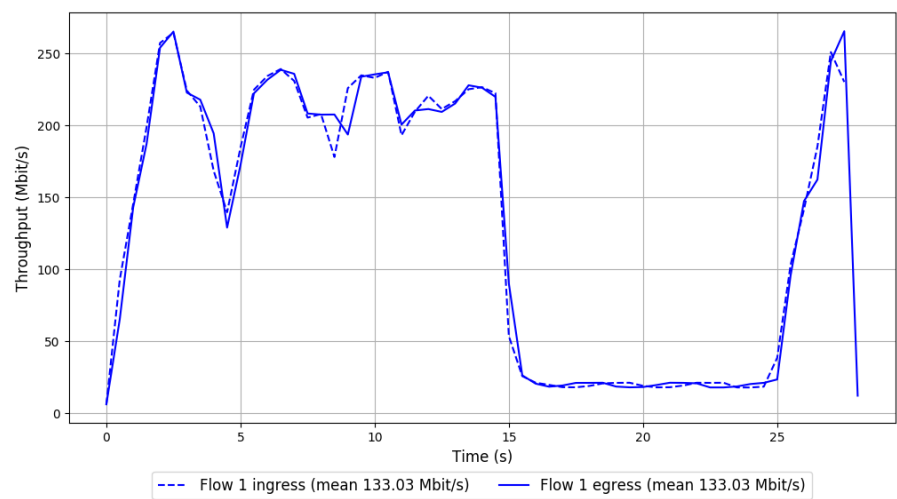
-- Flow 1:

Average throughput: 133.03 Mbit/s

95th percentile per-packet one-way delay: 88.239 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-21 00:31:26

End at: 2017-11-21 00:31:56

Below is generated by plot.py at 2017-11-21 02:12:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.74 Mbit/s

95th percentile per-packet one-way delay: 118.061 ms

Loss rate: 0.00%

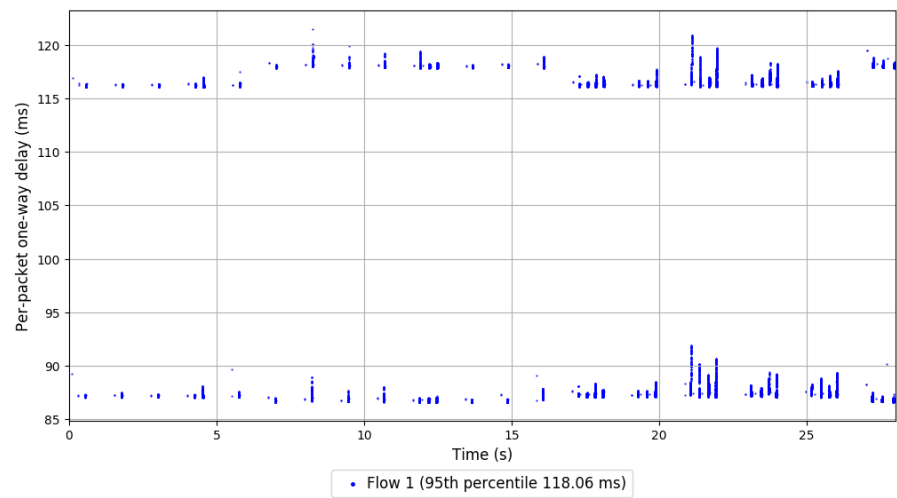
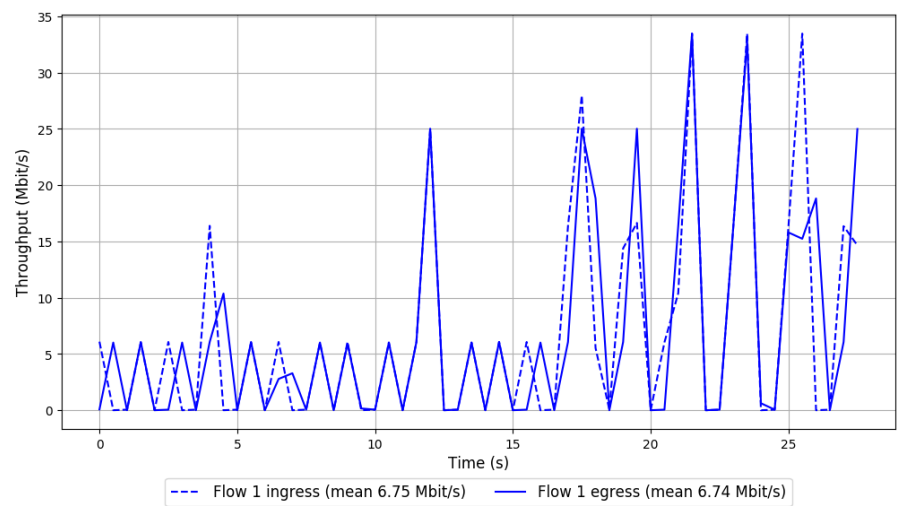
-- Flow 1:

Average throughput: 6.74 Mbit/s

95th percentile per-packet one-way delay: 118.061 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-21 00:41:57

End at: 2017-11-21 00:42:27

Below is generated by plot.py at 2017-11-21 02:12:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.75 Mbit/s

95th percentile per-packet one-way delay: 87.393 ms

Loss rate: 0.00%

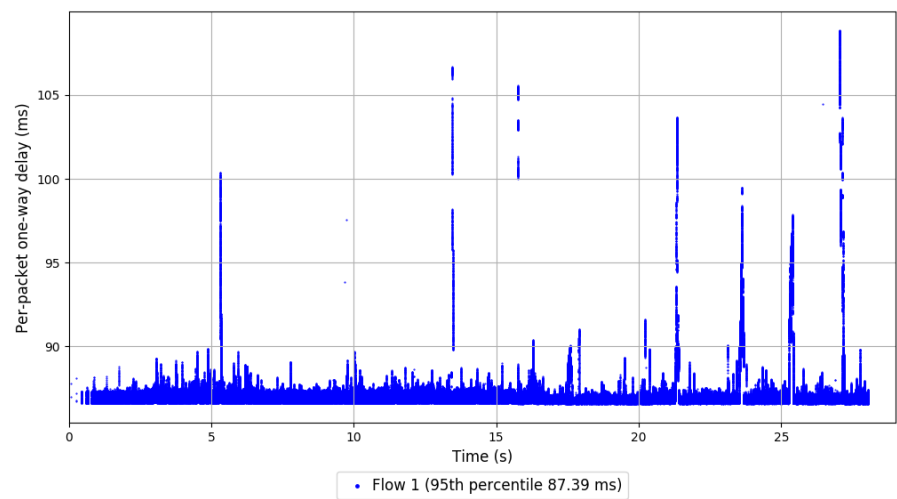
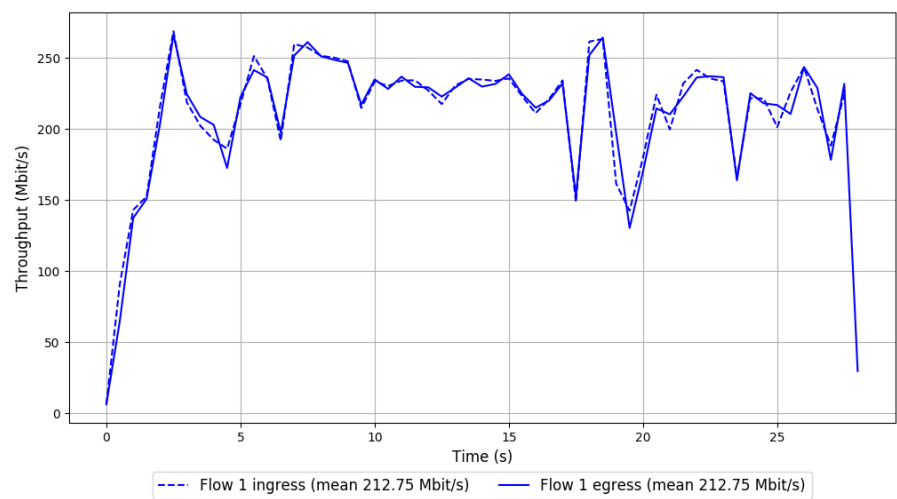
-- Flow 1:

Average throughput: 212.75 Mbit/s

95th percentile per-packet one-way delay: 87.393 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-21 00:52:40

End at: 2017-11-21 00:53:10

Below is generated by plot.py at 2017-11-21 02:12:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.36 Mbit/s

95th percentile per-packet one-way delay: 87.224 ms

Loss rate: 0.00%

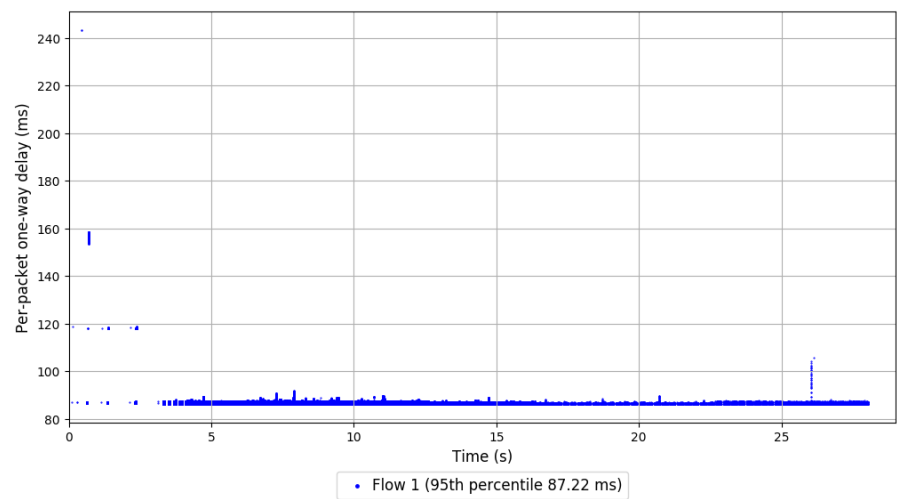
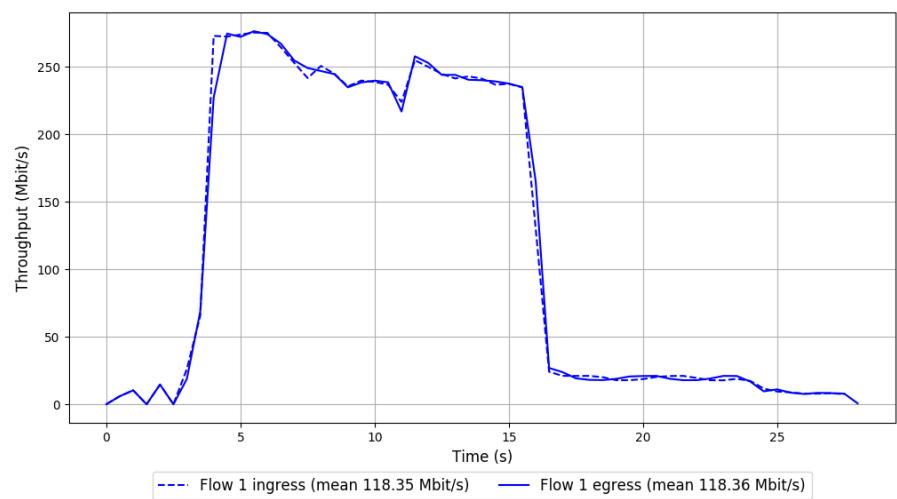
-- Flow 1:

Average throughput: 118.36 Mbit/s

95th percentile per-packet one-way delay: 87.224 ms

Loss rate: 0.00%

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

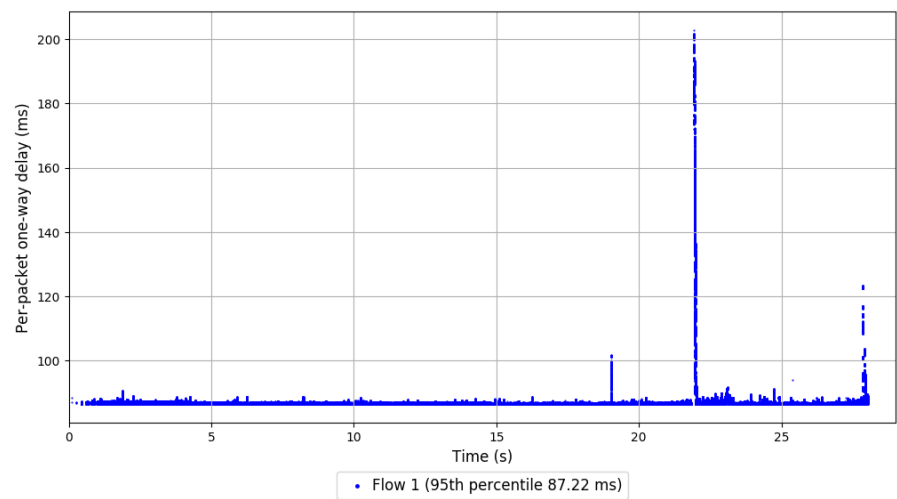
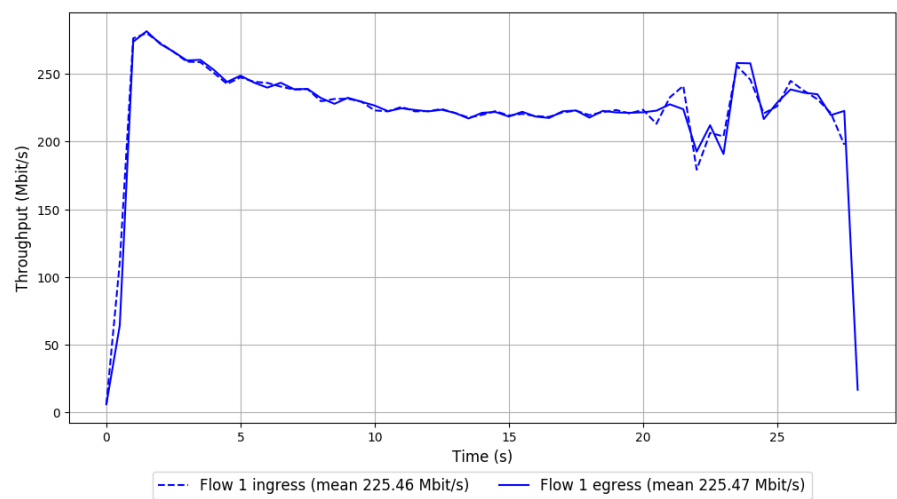


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-21 01:03:18
End at: 2017-11-21 01:03:48

# Below is generated by plot.py at 2017-11-21 02:17:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.47 Mbit/s
95th percentile per-packet one-way delay: 87.215 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.47 Mbit/s
95th percentile per-packet one-way delay: 87.215 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-20 23:36:18

End at: 2017-11-20 23:36:48

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.13 Mbit/s

95th percentile per-packet one-way delay: 88.601 ms

Loss rate: 0.00%

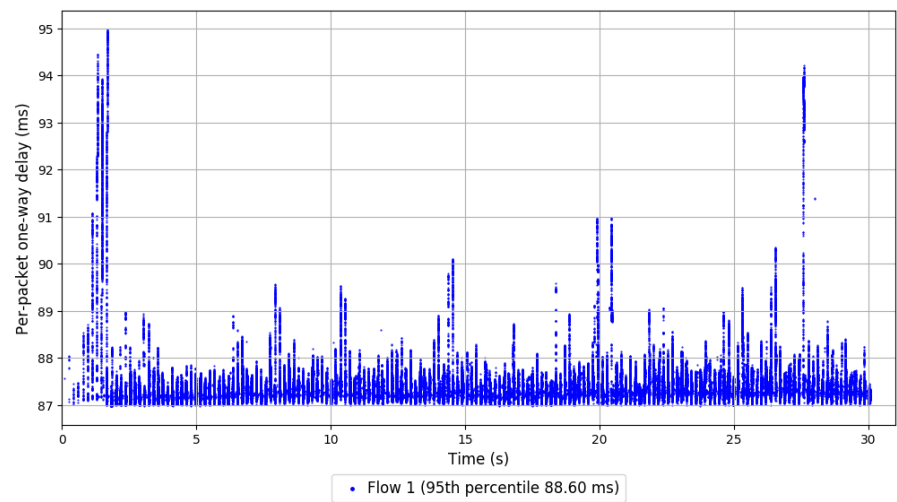
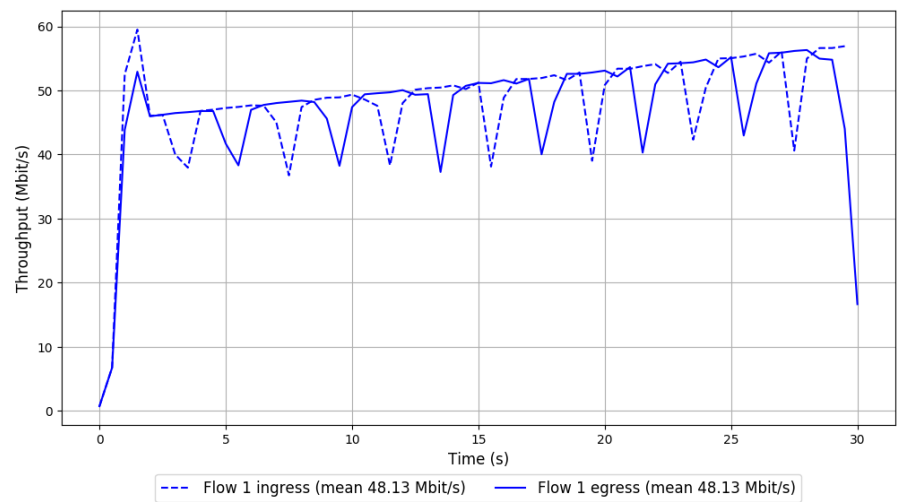
-- Flow 1:

Average throughput: 48.13 Mbit/s

95th percentile per-packet one-way delay: 88.601 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-20 23:47:12

End at: 2017-11-20 23:47:42

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.83 Mbit/s

95th percentile per-packet one-way delay: 88.783 ms

Loss rate: 0.01%

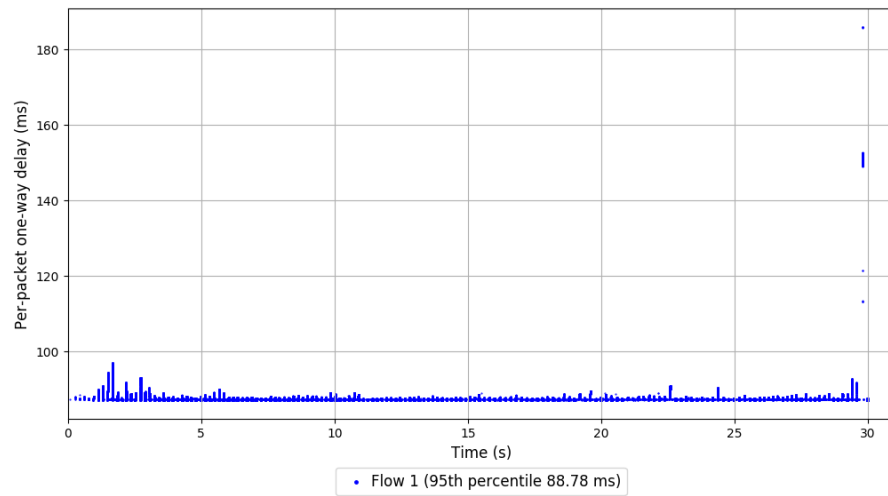
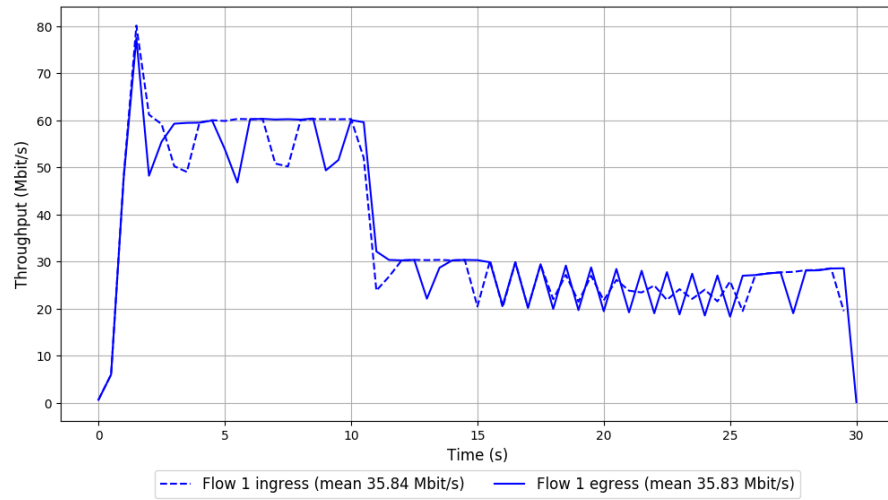
-- Flow 1:

Average throughput: 35.83 Mbit/s

95th percentile per-packet one-way delay: 88.783 ms

Loss rate: 0.01%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-20 23:58:10

End at: 2017-11-20 23:58:40

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.49 Mbit/s

95th percentile per-packet one-way delay: 91.648 ms

Loss rate: 0.00%

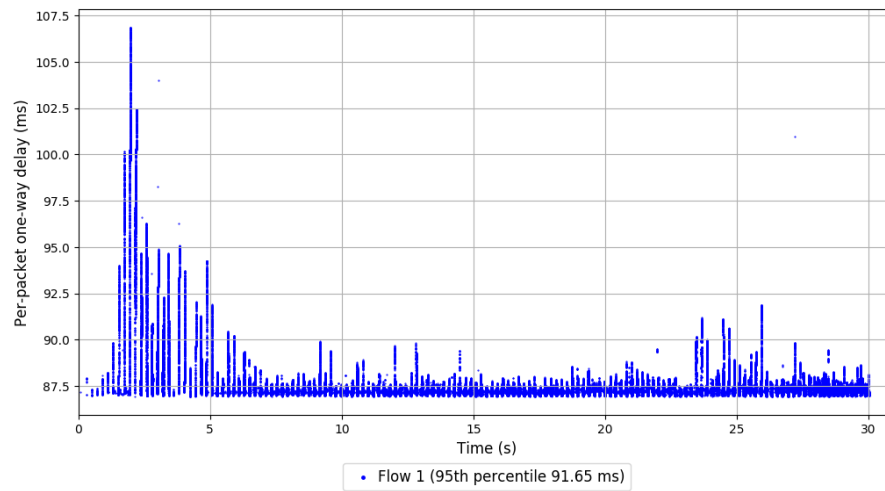
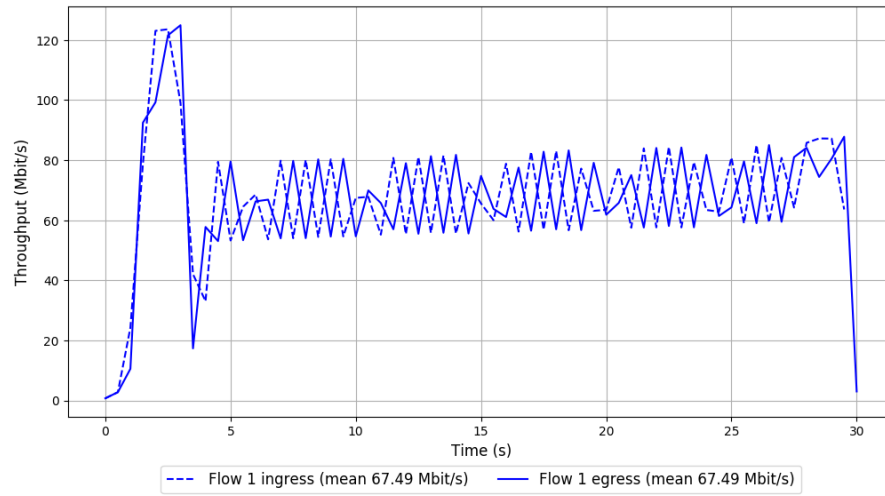
-- Flow 1:

Average throughput: 67.49 Mbit/s

95th percentile per-packet one-way delay: 91.648 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-21 00:09:05

End at: 2017-11-21 00:09:35

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.36 Mbit/s

95th percentile per-packet one-way delay: 88.027 ms

Loss rate: 0.07%

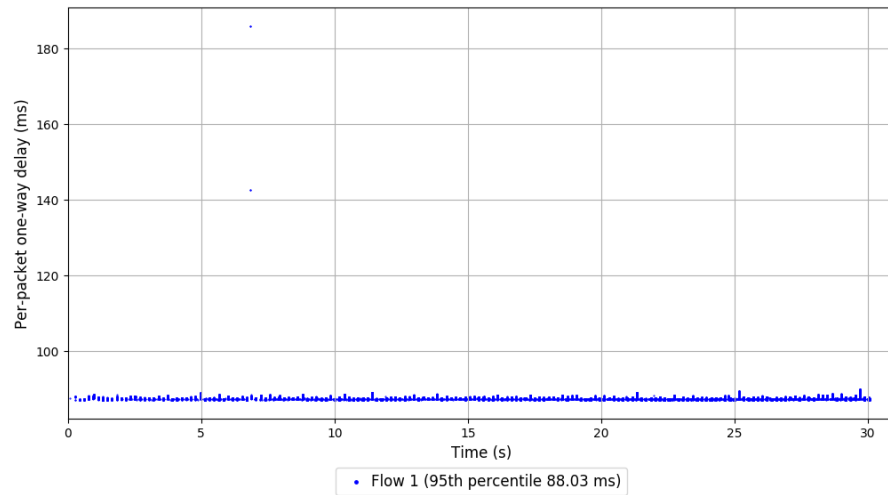
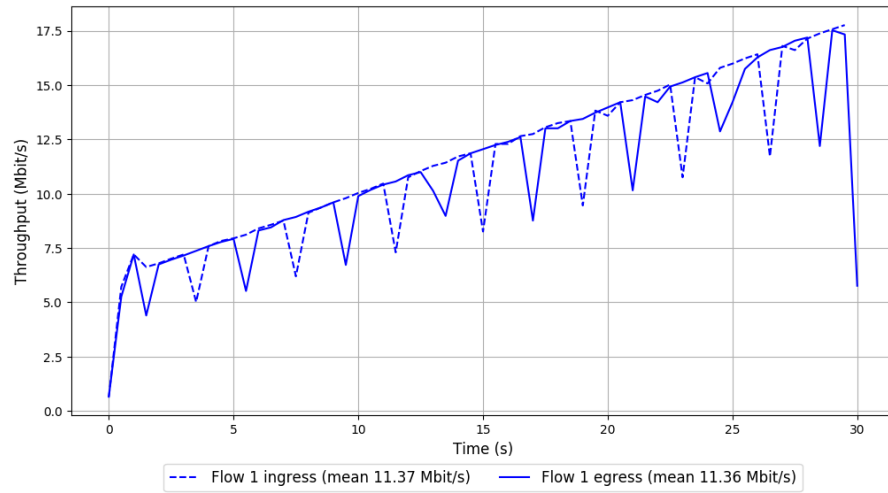
-- Flow 1:

Average throughput: 11.36 Mbit/s

95th percentile per-packet one-way delay: 88.027 ms

Loss rate: 0.07%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-21 00:20:00

End at: 2017-11-21 00:20:30

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.21 Mbit/s

95th percentile per-packet one-way delay: 87.882 ms

Loss rate: 0.03%

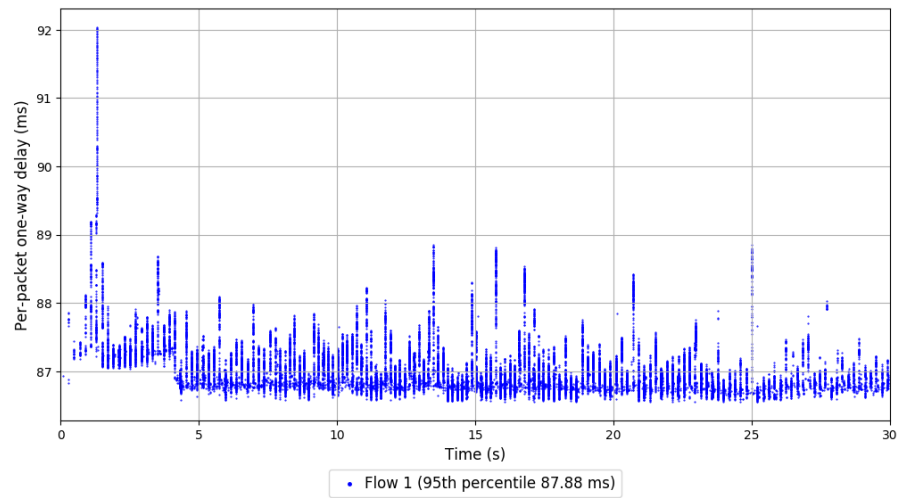
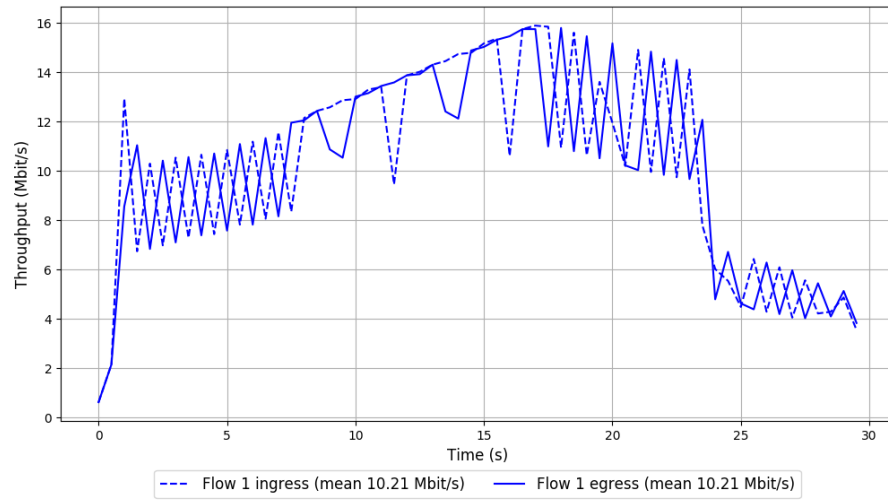
-- Flow 1:

Average throughput: 10.21 Mbit/s

95th percentile per-packet one-way delay: 87.882 ms

Loss rate: 0.03%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-21 00:30:41

End at: 2017-11-21 00:31:11

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.65 Mbit/s

95th percentile per-packet one-way delay: 89.016 ms

Loss rate: 0.00%

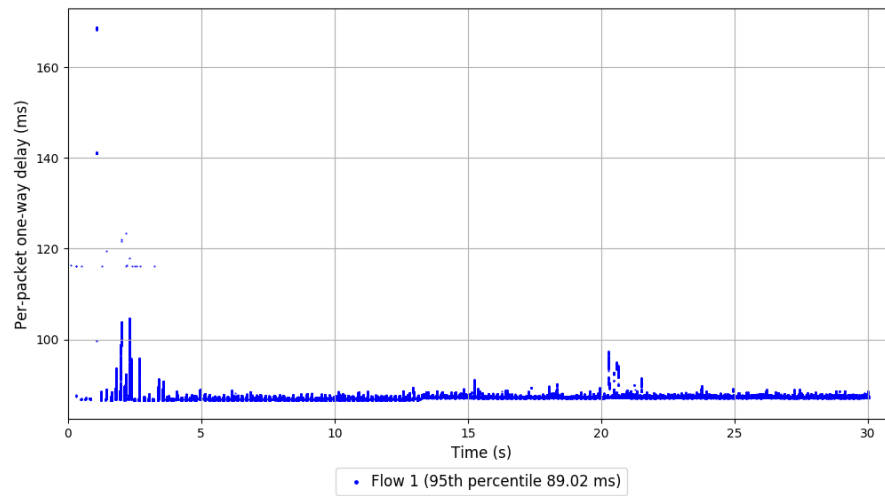
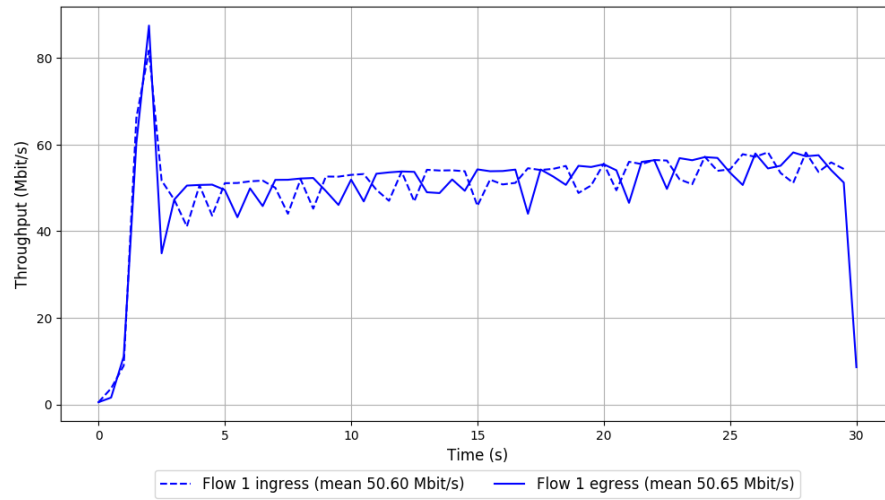
-- Flow 1:

Average throughput: 50.65 Mbit/s

95th percentile per-packet one-way delay: 89.016 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-21 00:41:14

End at: 2017-11-21 00:41:44

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.45 Mbit/s

95th percentile per-packet one-way delay: 91.351 ms

Loss rate: 0.01%

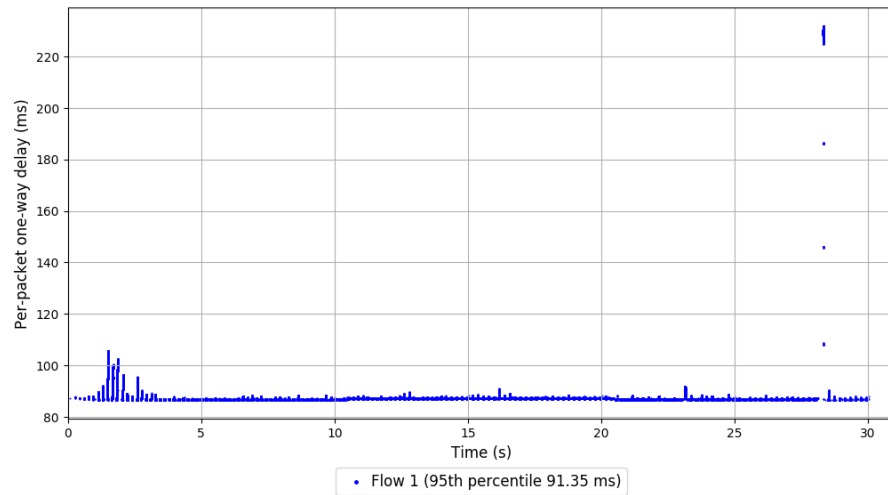
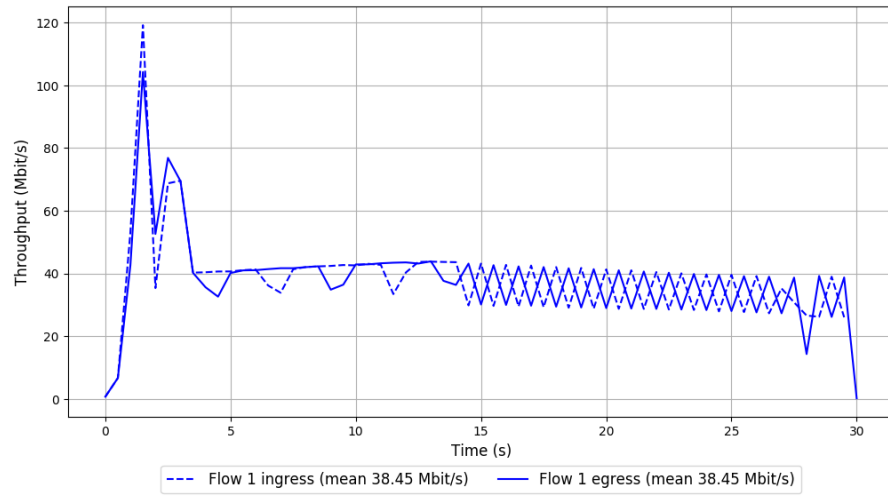
-- Flow 1:

Average throughput: 38.45 Mbit/s

95th percentile per-packet one-way delay: 91.351 ms

Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-21 00:51:56

End at: 2017-11-21 00:52:26

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.07 Mbit/s

95th percentile per-packet one-way delay: 119.092 ms

Loss rate: 0.00%

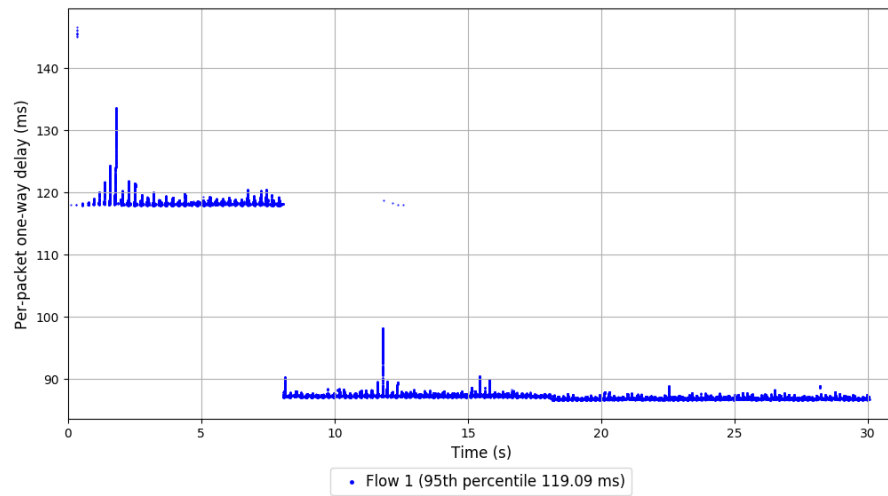
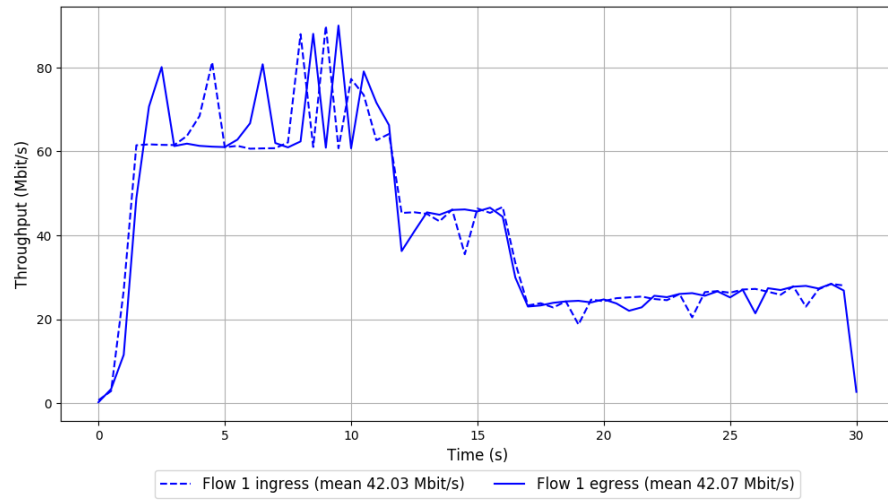
-- Flow 1:

Average throughput: 42.07 Mbit/s

95th percentile per-packet one-way delay: 119.092 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-21 01:02:37

End at: 2017-11-21 01:03:07

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.63 Mbit/s

95th percentile per-packet one-way delay: 88.252 ms

Loss rate: 0.05%

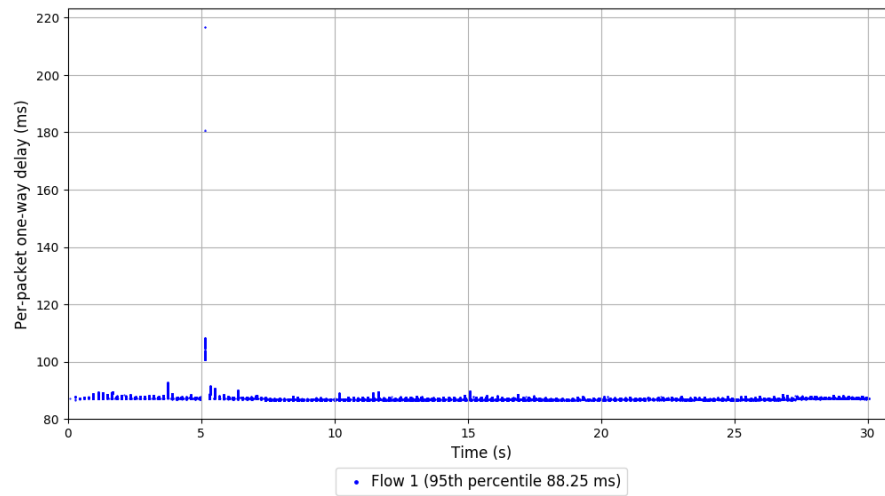
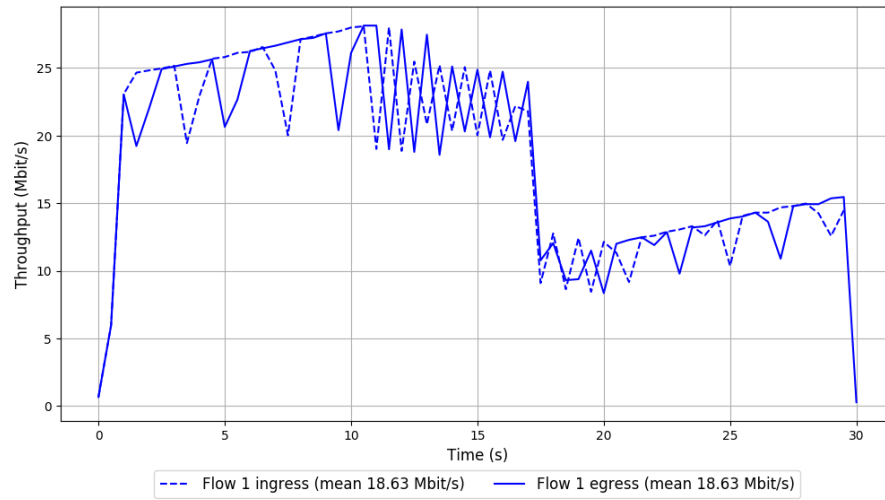
-- Flow 1:

Average throughput: 18.63 Mbit/s

95th percentile per-packet one-way delay: 88.252 ms

Loss rate: 0.05%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-21 01:13:36

End at: 2017-11-21 01:14:06

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 118.317 ms

Loss rate: 0.00%

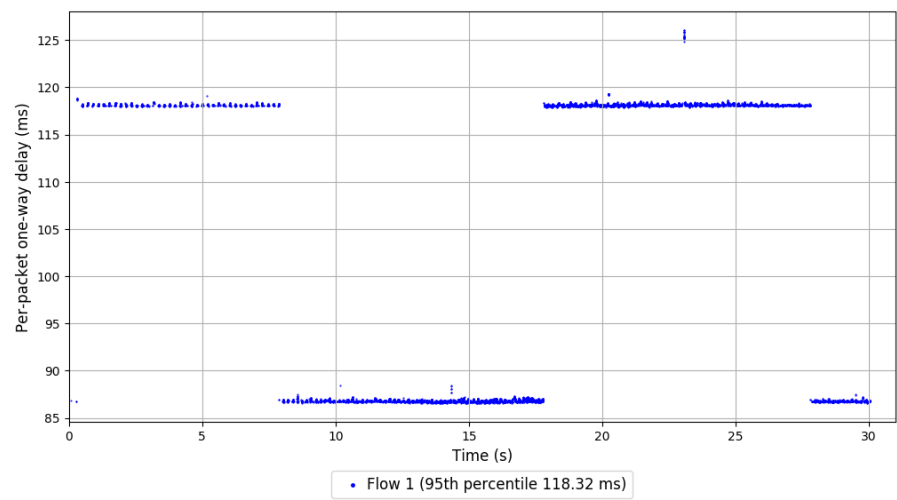
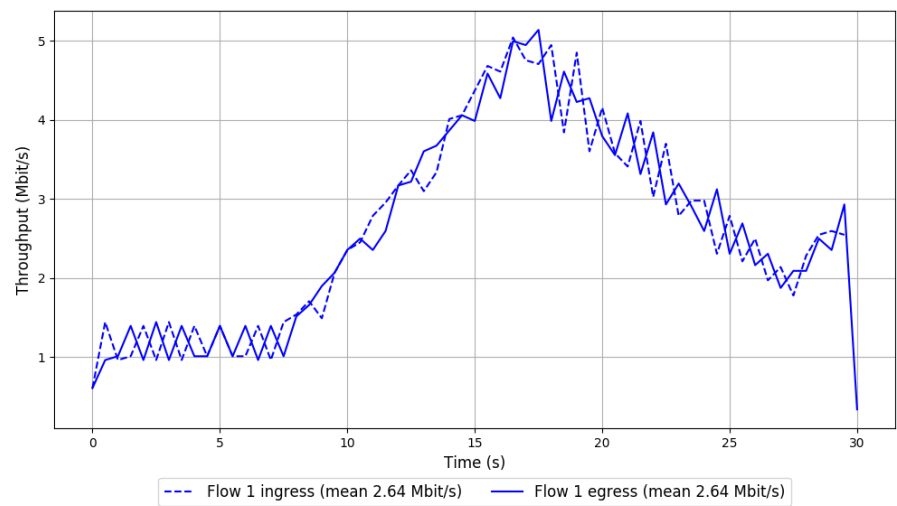
-- Flow 1:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 118.317 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-20 23:30:44

End at: 2017-11-20 23:31:14

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.26 Mbit/s

95th percentile per-packet one-way delay: 135.568 ms

Loss rate: 0.26%

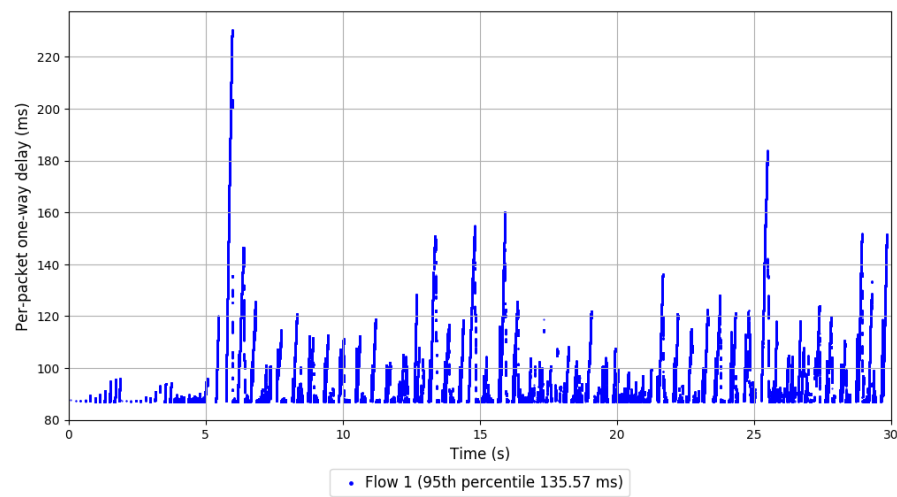
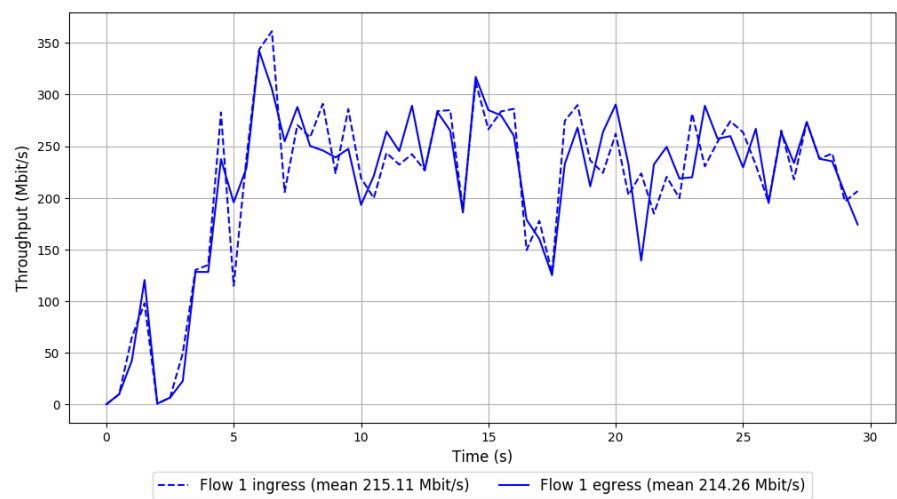
-- Flow 1:

Average throughput: 214.26 Mbit/s

95th percentile per-packet one-way delay: 135.568 ms

Loss rate: 0.26%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-20 23:41:38

End at: 2017-11-20 23:42:08

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.67 Mbit/s

95th percentile per-packet one-way delay: 113.622 ms

Loss rate: 0.00%

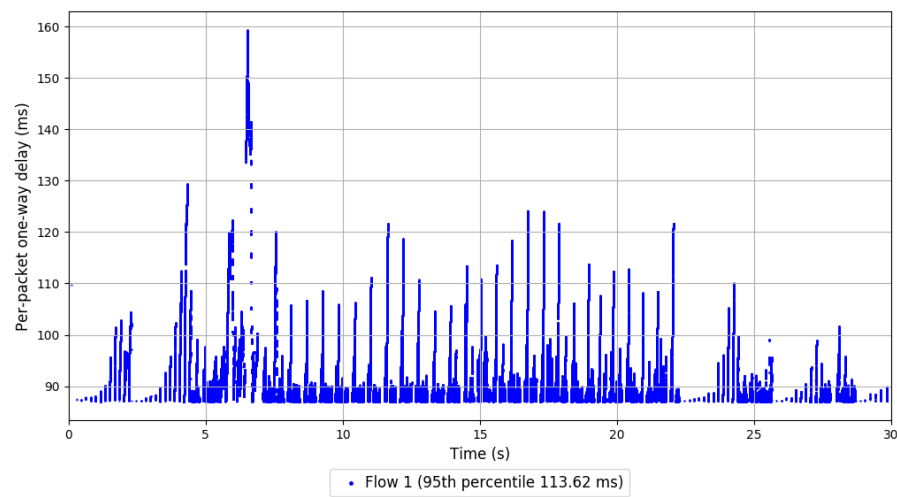
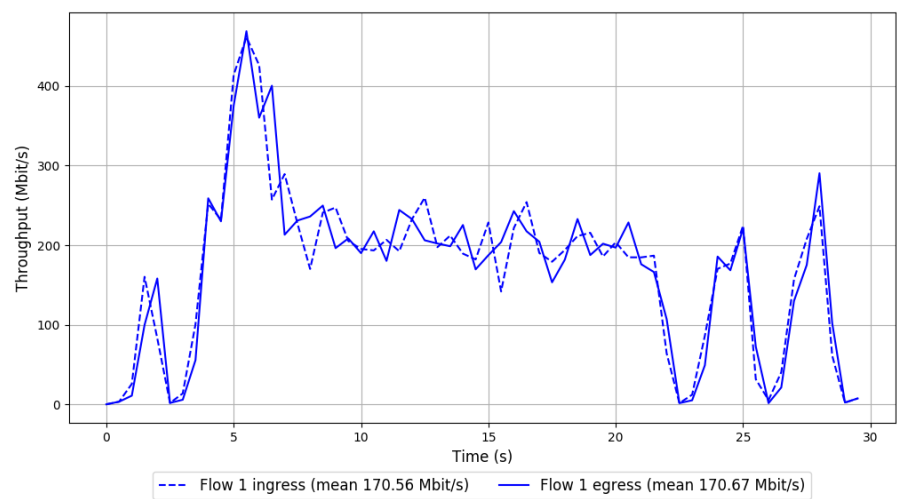
-- Flow 1:

Average throughput: 170.67 Mbit/s

95th percentile per-packet one-way delay: 113.622 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-20 23:52:34

End at: 2017-11-20 23:53:04

Below is generated by plot.py at 2017-11-21 02:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.97 Mbit/s

95th percentile per-packet one-way delay: 113.416 ms

Loss rate: 0.01%

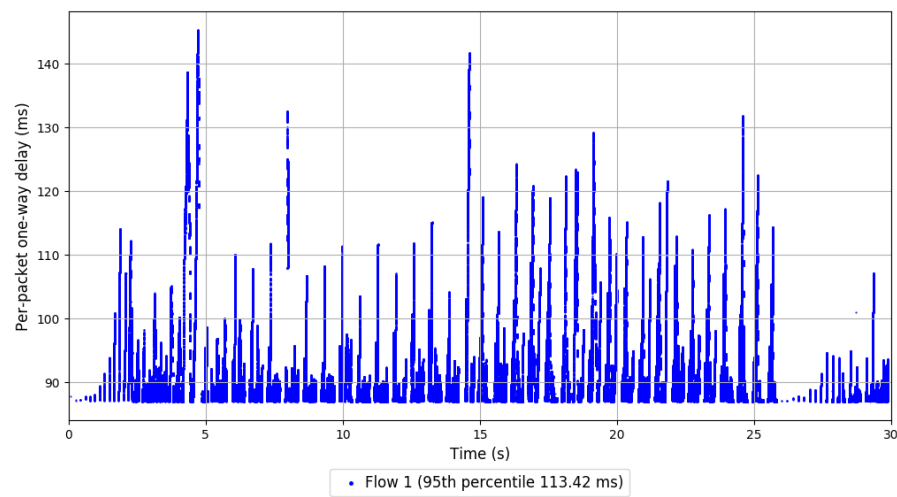
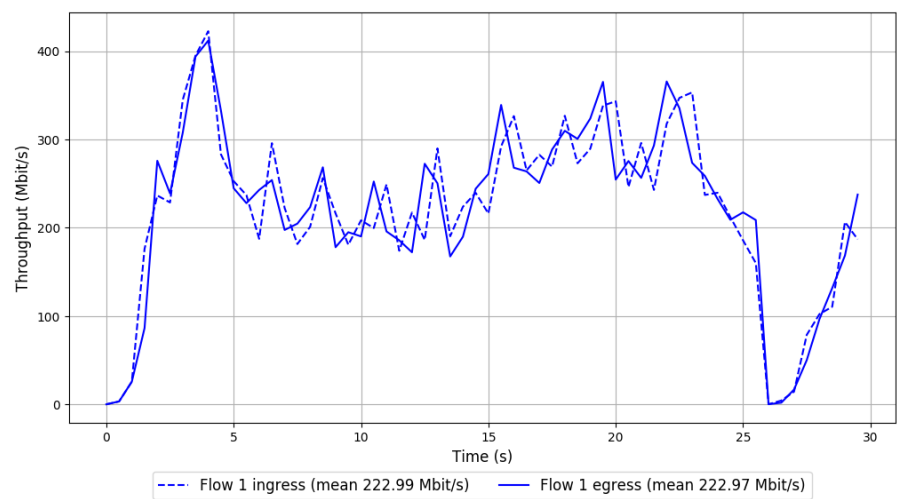
-- Flow 1:

Average throughput: 222.97 Mbit/s

95th percentile per-packet one-way delay: 113.416 ms

Loss rate: 0.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-21 00:03:22

End at: 2017-11-21 00:03:52

Below is generated by plot.py at 2017-11-21 02:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 327.92 Mbit/s

95th percentile per-packet one-way delay: 289.548 ms

Loss rate: 5.49%

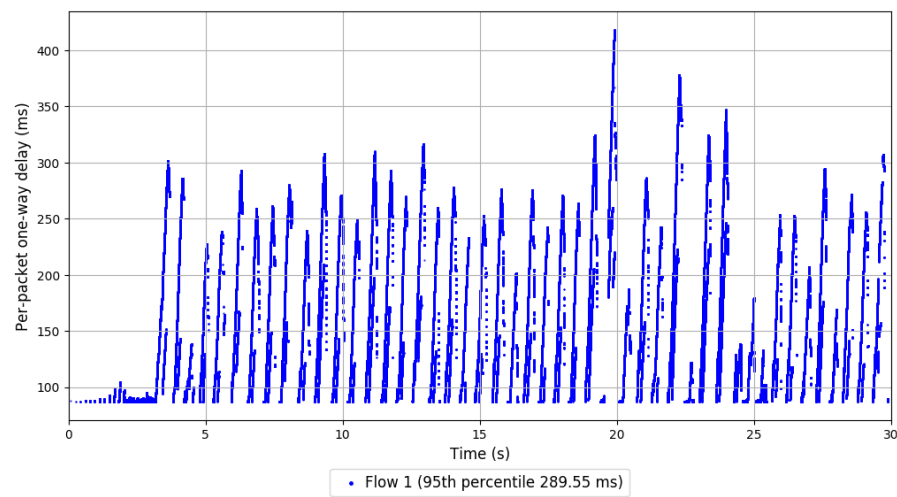
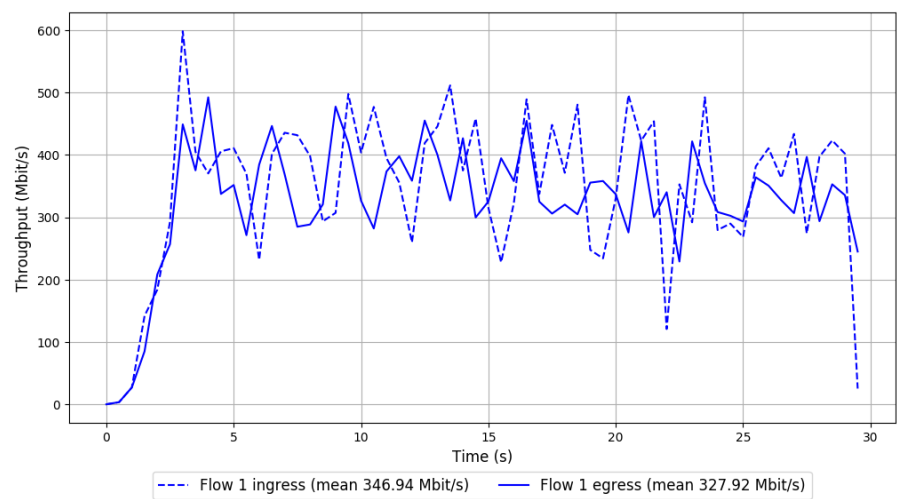
-- Flow 1:

Average throughput: 327.92 Mbit/s

95th percentile per-packet one-way delay: 289.548 ms

Loss rate: 5.49%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-21 00:14:25

End at: 2017-11-21 00:14:55

Below is generated by plot.py at 2017-11-21 02:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.62 Mbit/s

95th percentile per-packet one-way delay: 112.883 ms

Loss rate: 0.18%

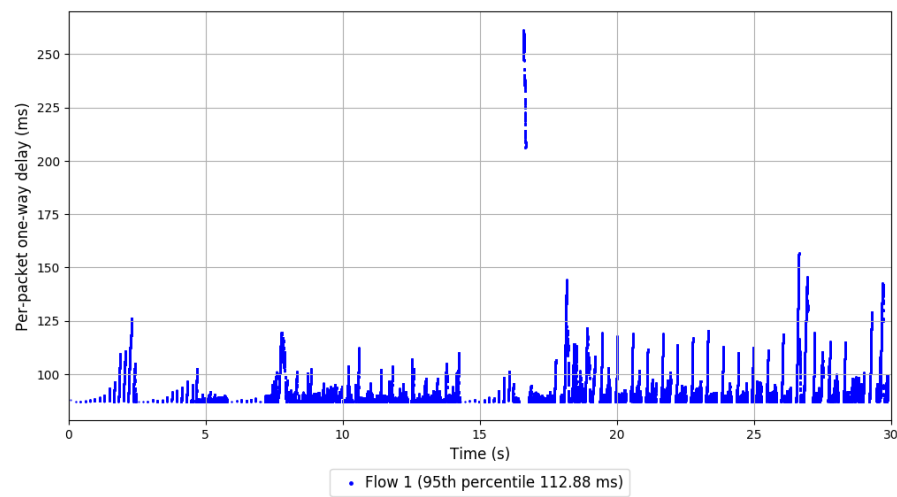
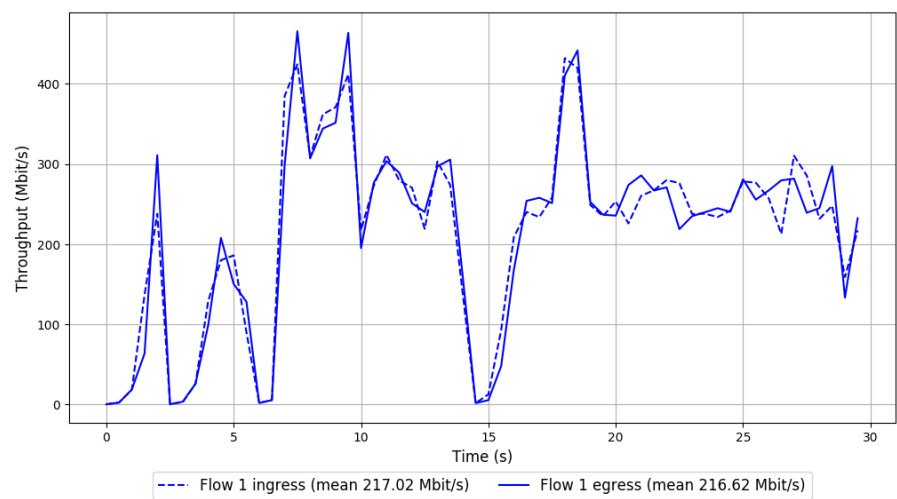
-- Flow 1:

Average throughput: 216.62 Mbit/s

95th percentile per-packet one-way delay: 112.883 ms

Loss rate: 0.18%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-21 00:25:13

End at: 2017-11-21 00:25:43

Below is generated by plot.py at 2017-11-21 02:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.19 Mbit/s

95th percentile per-packet one-way delay: 136.468 ms

Loss rate: 0.00%

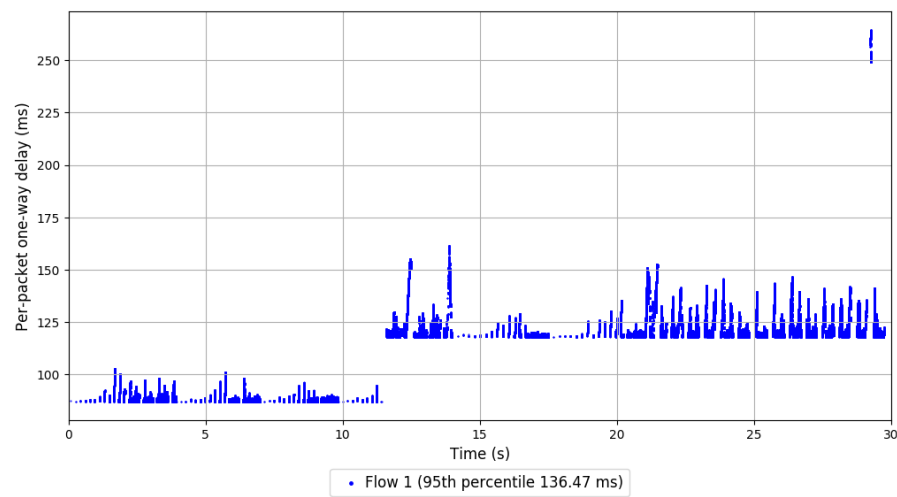
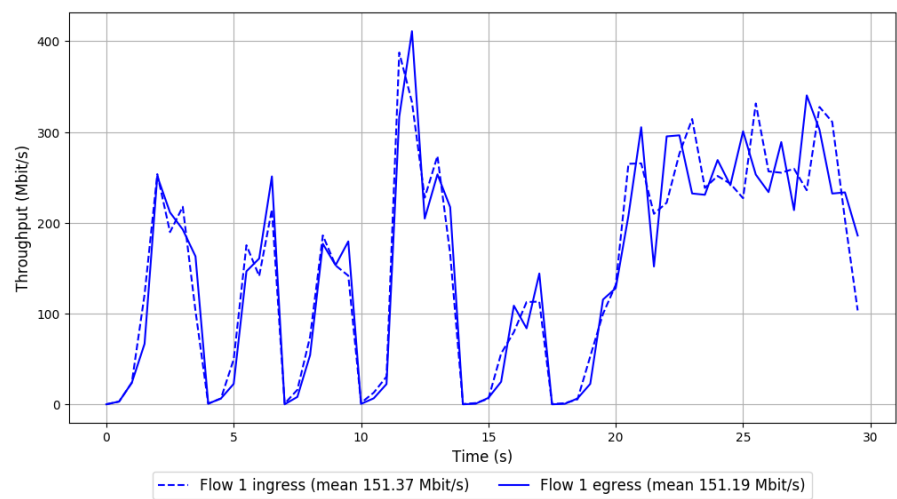
-- Flow 1:

Average throughput: 151.19 Mbit/s

95th percentile per-packet one-way delay: 136.468 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-21 00:35:45

End at: 2017-11-21 00:36:15

Below is generated by plot.py at 2017-11-21 02:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 129.97 Mbit/s

95th percentile per-packet one-way delay: 114.912 ms

Loss rate: 0.00%

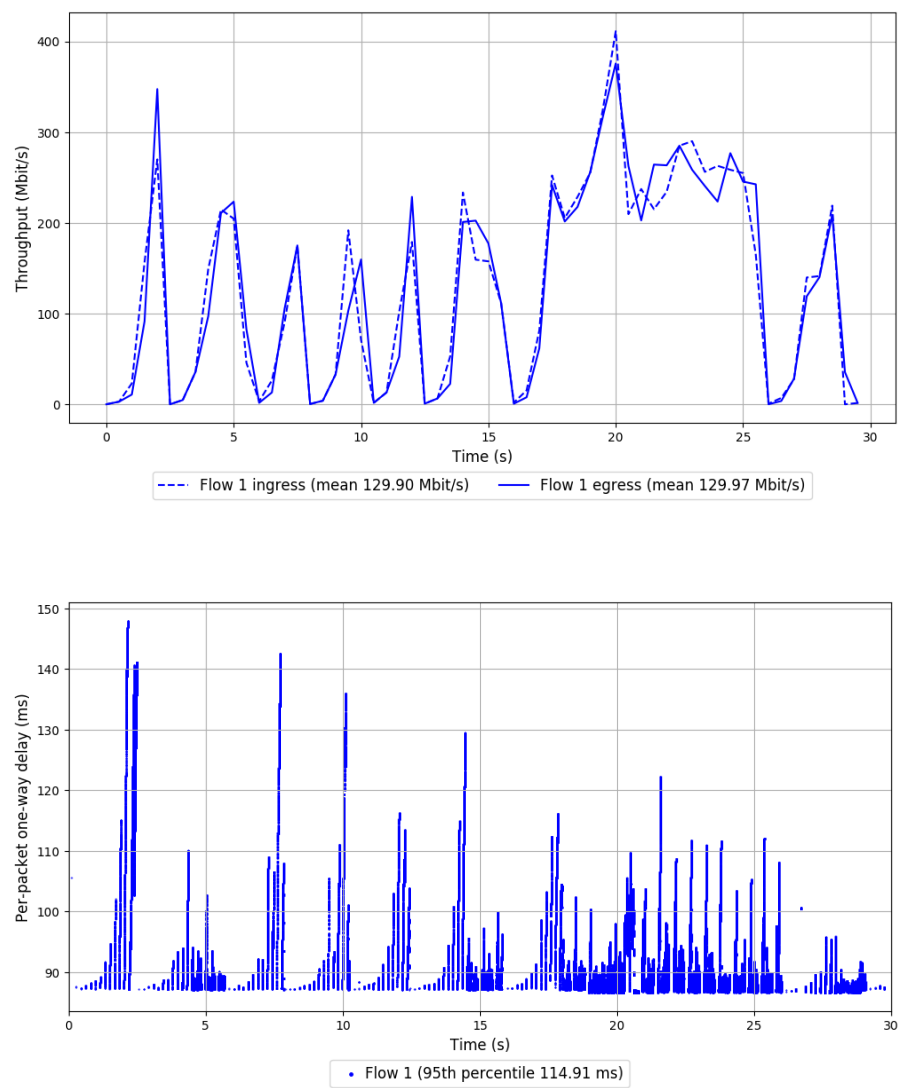
-- Flow 1:

Average throughput: 129.97 Mbit/s

95th percentile per-packet one-way delay: 114.912 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-21 00:46:36

End at: 2017-11-21 00:47:06

Below is generated by plot.py at 2017-11-21 02:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.97 Mbit/s

95th percentile per-packet one-way delay: 145.249 ms

Loss rate: 0.01%

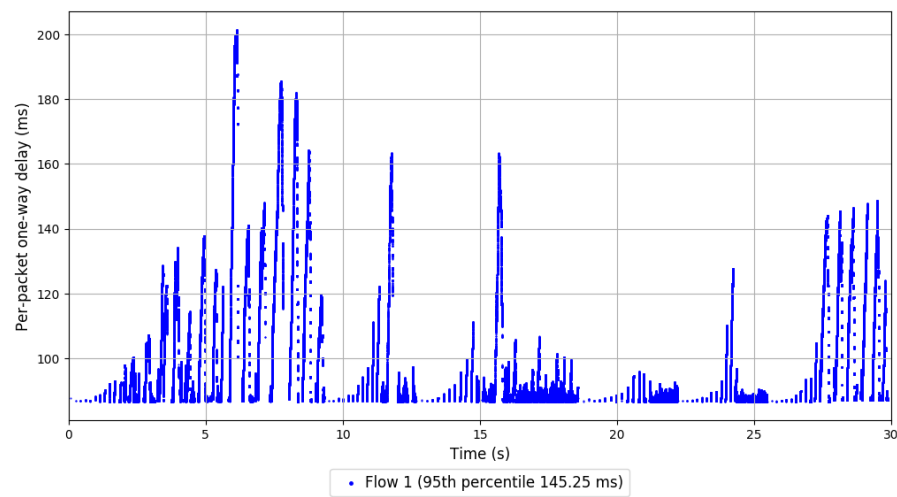
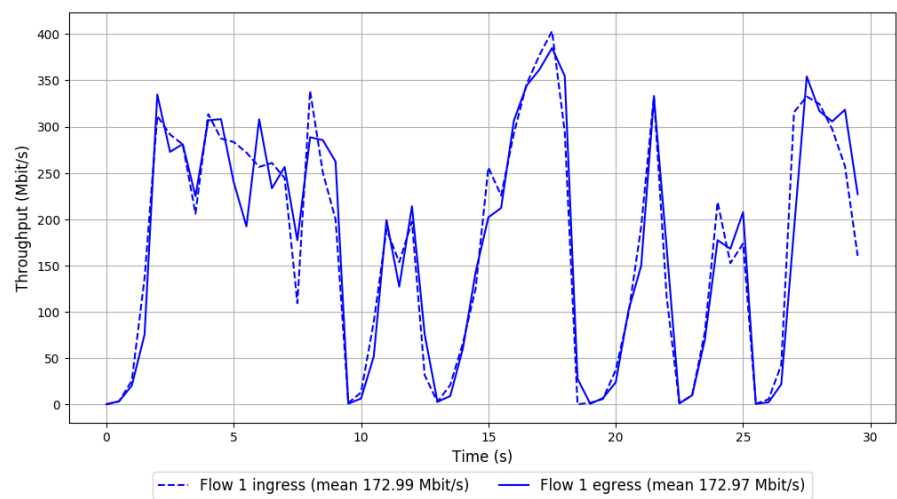
-- Flow 1:

Average throughput: 172.97 Mbit/s

95th percentile per-packet one-way delay: 145.249 ms

Loss rate: 0.01%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-21 00:57:11

End at: 2017-11-21 00:57:41

Below is generated by plot.py at 2017-11-21 02:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.40 Mbit/s

95th percentile per-packet one-way delay: 172.662 ms

Loss rate: 0.50%

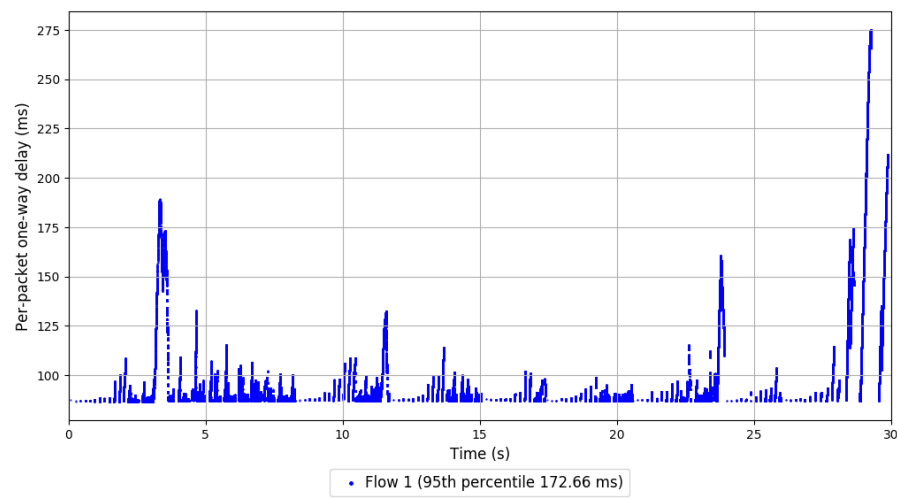
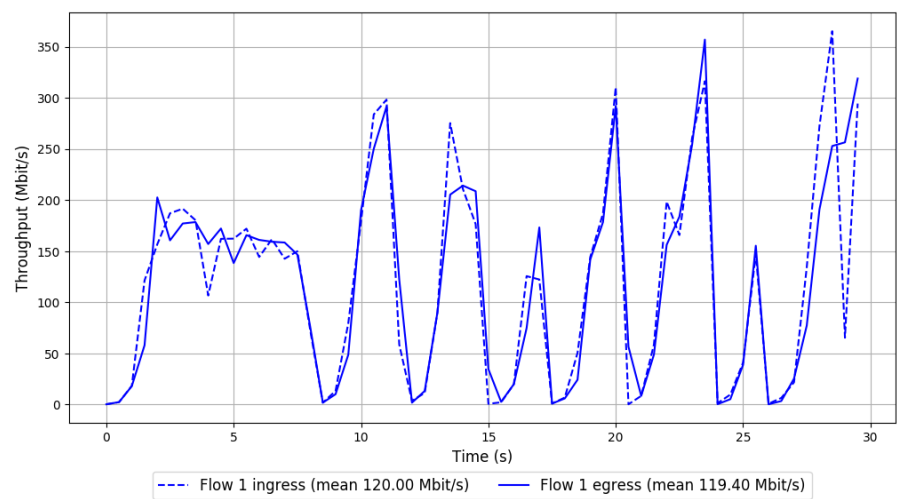
-- Flow 1:

Average throughput: 119.40 Mbit/s

95th percentile per-packet one-way delay: 172.662 ms

Loss rate: 0.50%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-21 01:08:01

End at: 2017-11-21 01:08:31

Below is generated by plot.py at 2017-11-21 02:19:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.44 Mbit/s

95th percentile per-packet one-way delay: 156.728 ms

Loss rate: 0.15%

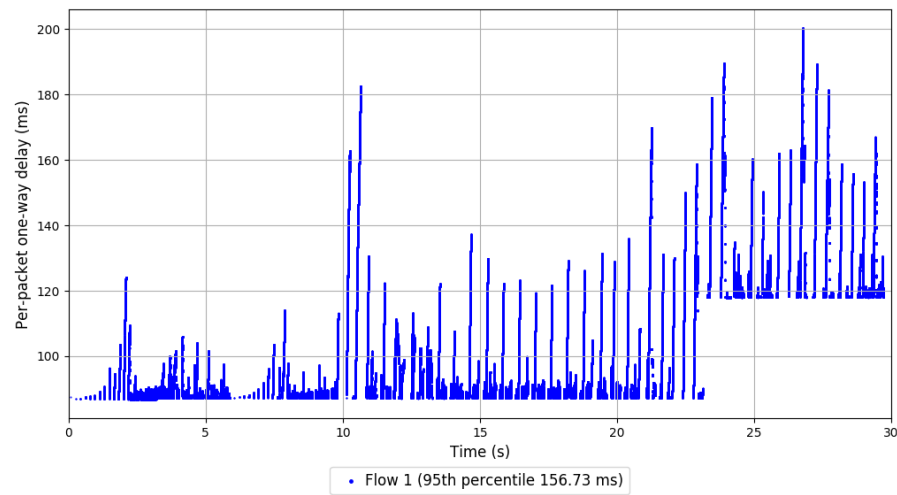
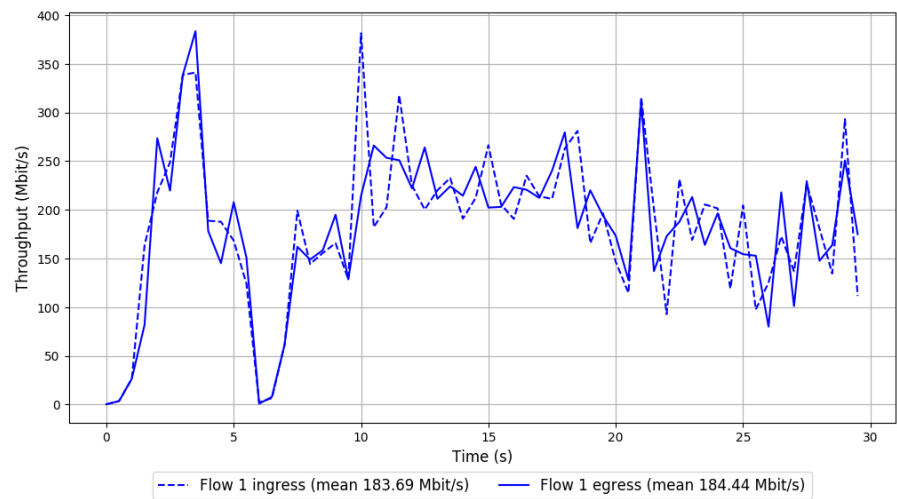
-- Flow 1:

Average throughput: 184.44 Mbit/s

95th percentile per-packet one-way delay: 156.728 ms

Loss rate: 0.15%

Run 10: Report of Verus — Data Link

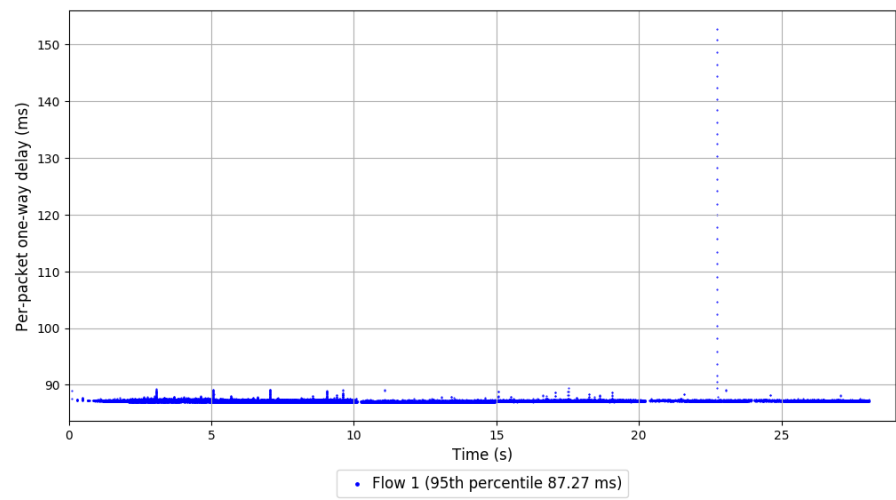
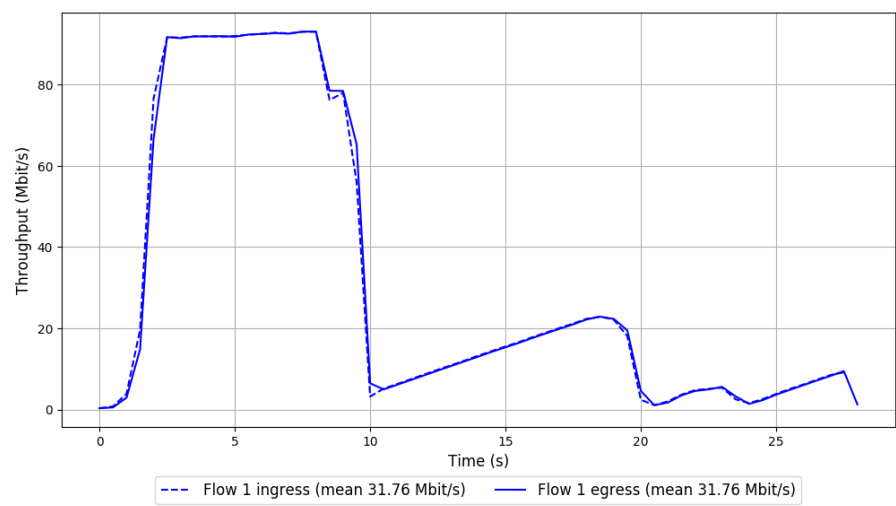


```
Run 1: Statistics of Copa

Start at: 2017-11-20 23:29:17
End at: 2017-11-20 23:29:47

# Below is generated by plot.py at 2017-11-21 02:19:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.76 Mbit/s
95th percentile per-packet one-way delay: 87.272 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.76 Mbit/s
95th percentile per-packet one-way delay: 87.272 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link

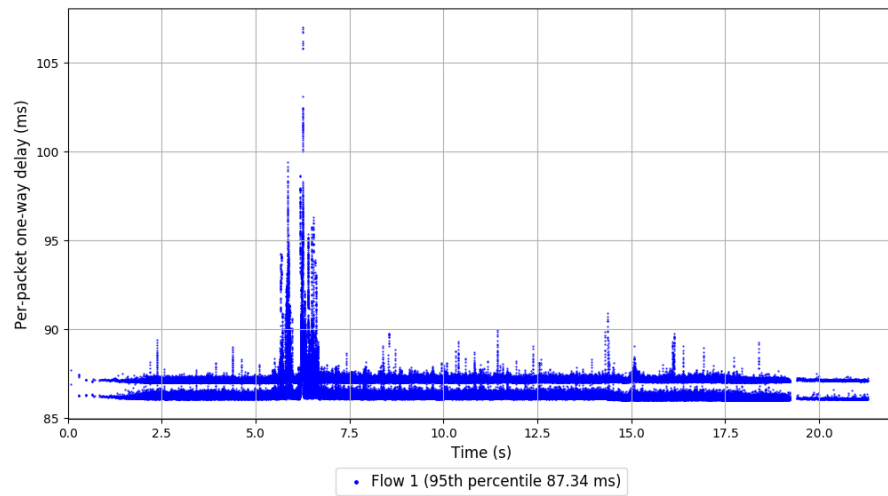
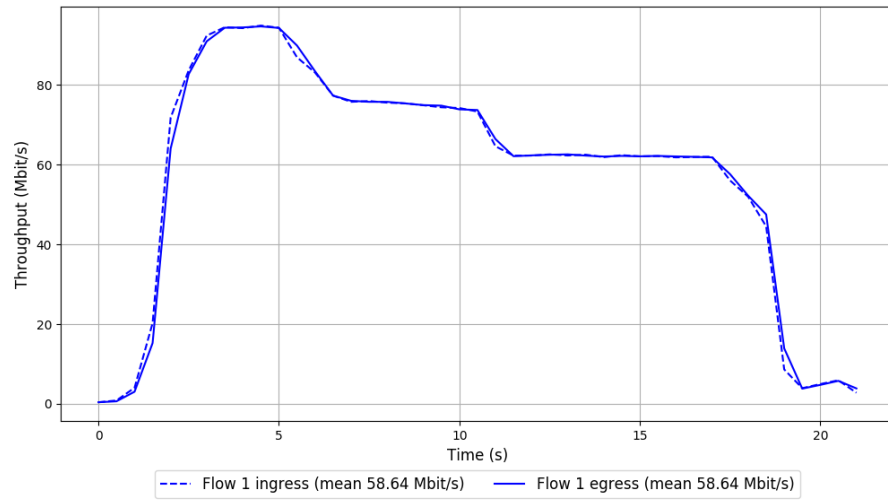


Run 2: Statistics of Copa

Start at: 2017-11-20 23:40:11

End at: 2017-11-20 23:40:41

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-20 23:51:04

End at: 2017-11-20 23:51:34

Below is generated by plot.py at 2017-11-21 02:19:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.61 Mbit/s

95th percentile per-packet one-way delay: 87.211 ms

Loss rate: 0.00%

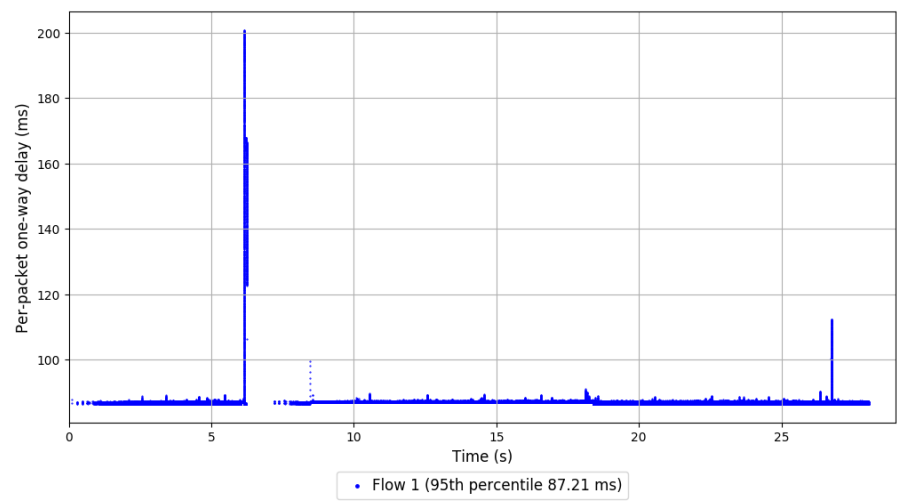
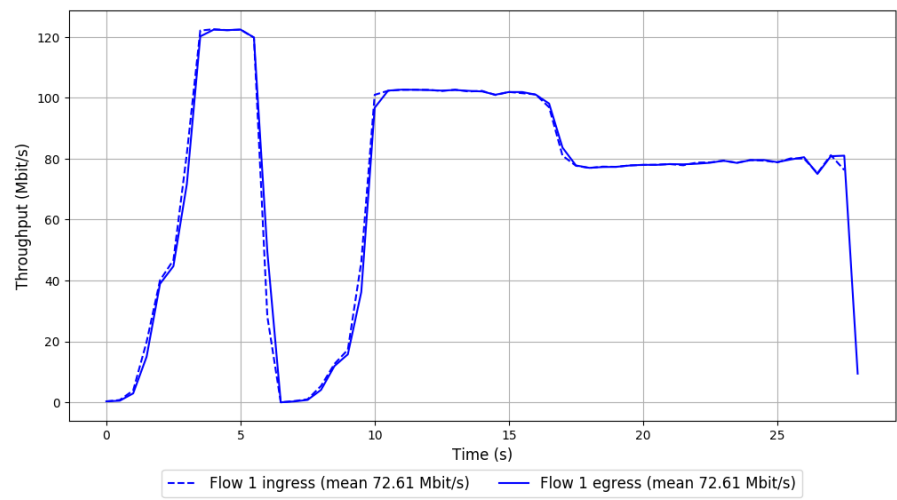
-- Flow 1:

Average throughput: 72.61 Mbit/s

95th percentile per-packet one-way delay: 87.211 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-21 00:01:50

End at: 2017-11-21 00:02:21

Below is generated by plot.py at 2017-11-21 02:20:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.85 Mbit/s

95th percentile per-packet one-way delay: 87.207 ms

Loss rate: 0.01%

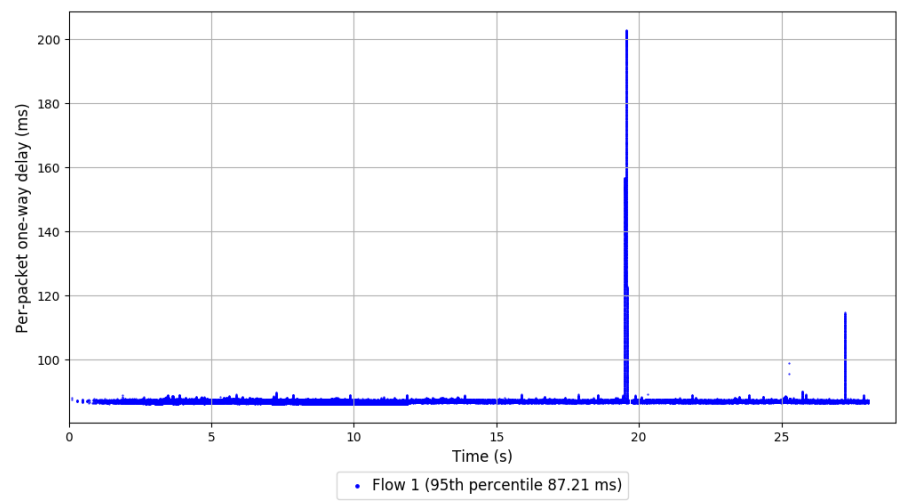
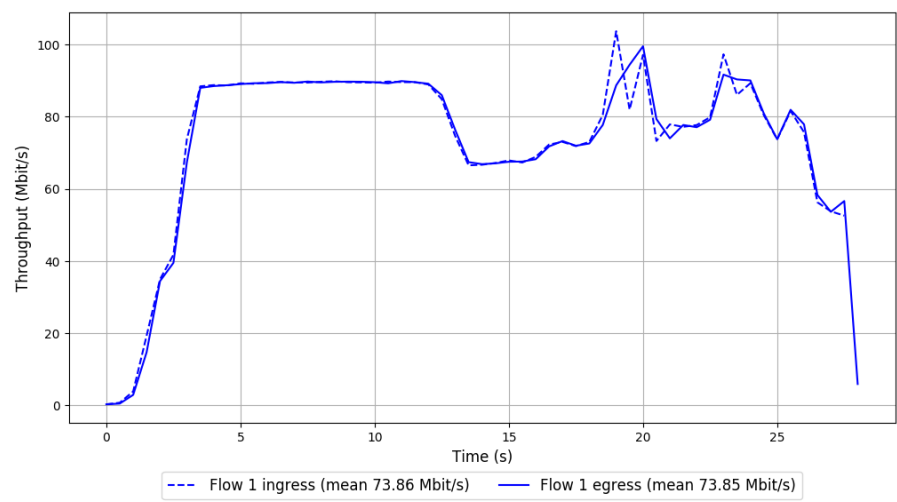
-- Flow 1:

Average throughput: 73.85 Mbit/s

95th percentile per-packet one-way delay: 87.207 ms

Loss rate: 0.01%

Run 4: Report of Copa — Data Link

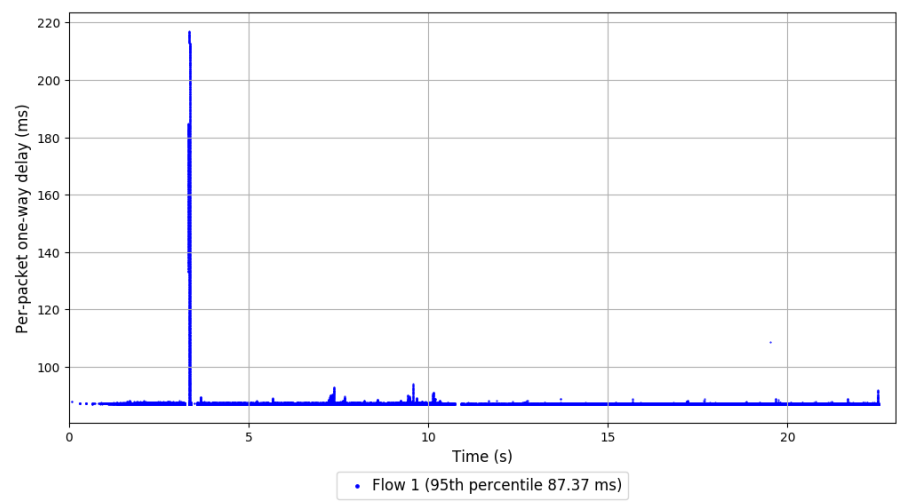
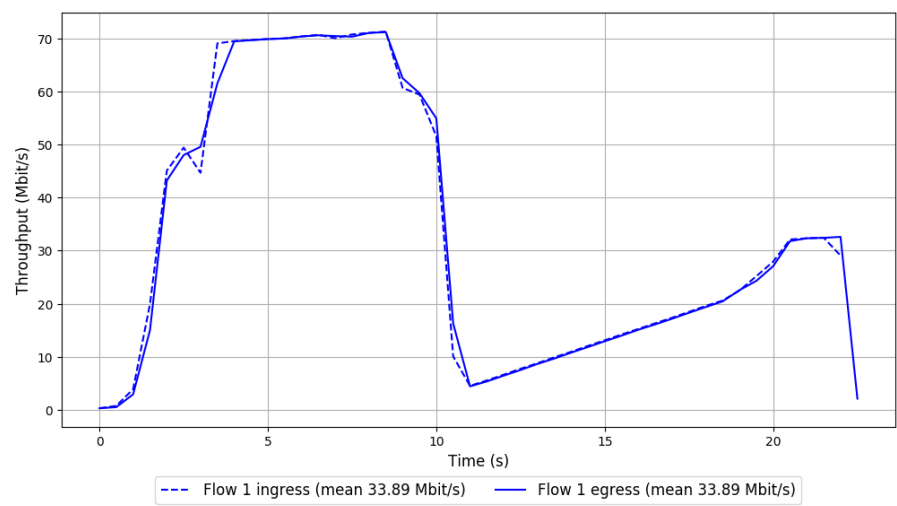


Run 5: Statistics of Copa

Start at: 2017-11-21 00:13:01

End at: 2017-11-21 00:13:31

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-21 00:23:44

End at: 2017-11-21 00:24:14

Below is generated by plot.py at 2017-11-21 02:20:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.53 Mbit/s

95th percentile per-packet one-way delay: 87.202 ms

Loss rate: 0.00%

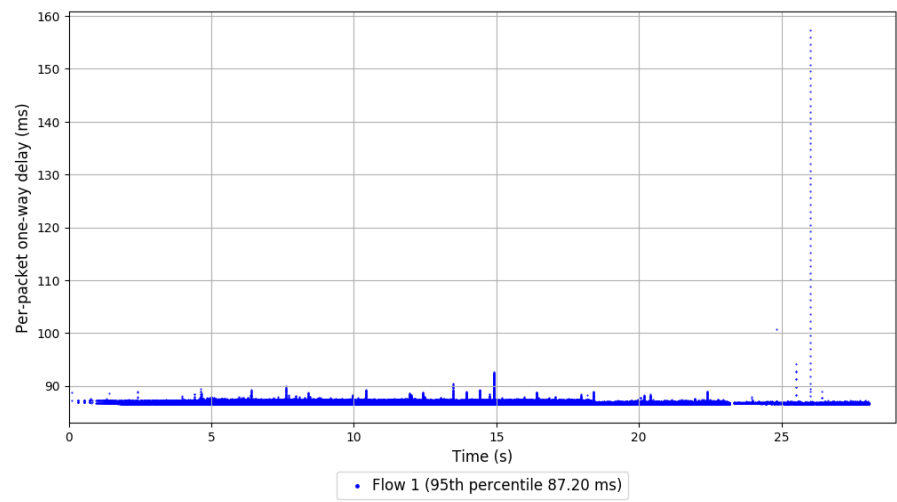
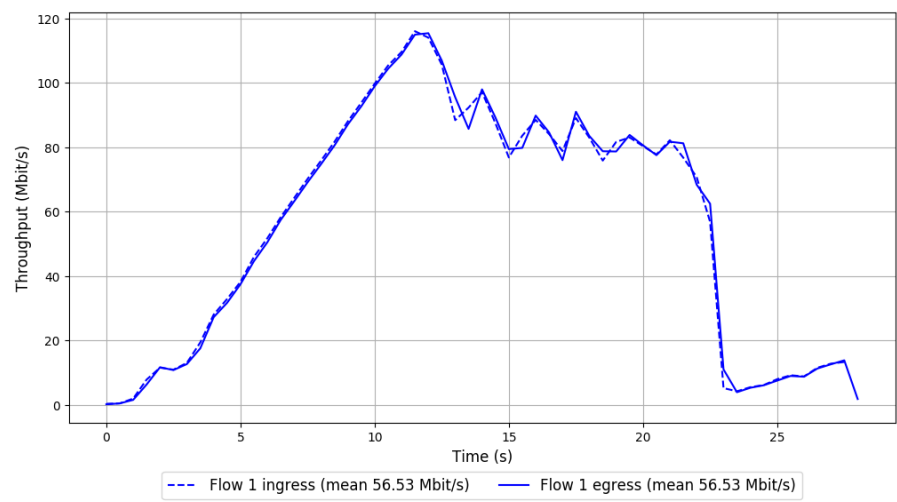
-- Flow 1:

Average throughput: 56.53 Mbit/s

95th percentile per-packet one-way delay: 87.202 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-21 00:34:18

End at: 2017-11-21 00:34:48

Below is generated by plot.py at 2017-11-21 02:20:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.04 Mbit/s

95th percentile per-packet one-way delay: 87.086 ms

Loss rate: 0.00%

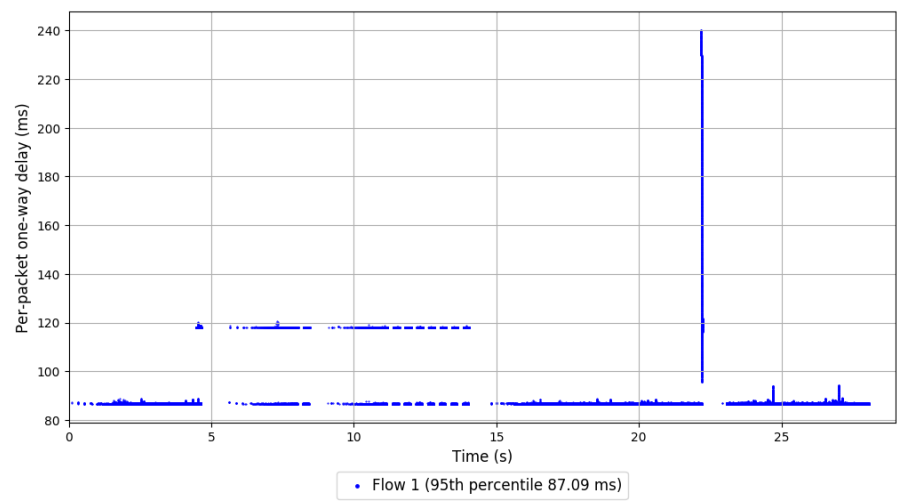
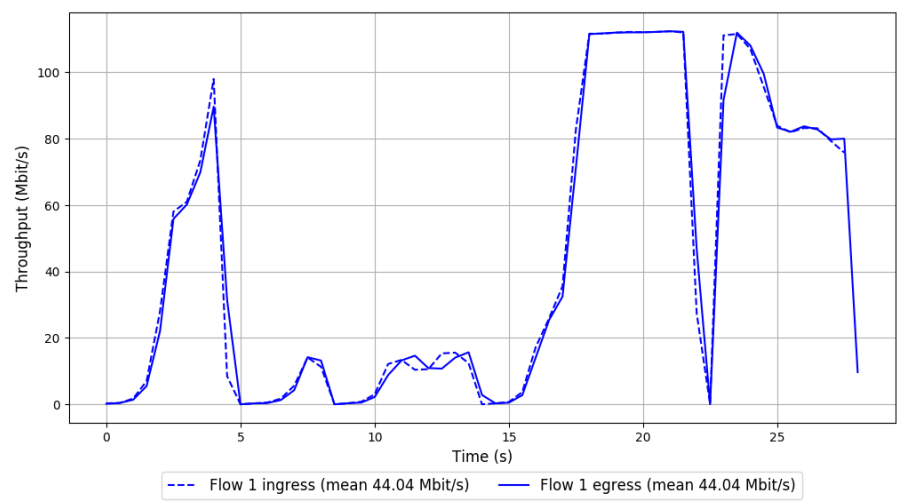
-- Flow 1:

Average throughput: 44.04 Mbit/s

95th percentile per-packet one-way delay: 87.086 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-21 00:45:10

End at: 2017-11-21 00:45:40

Below is generated by plot.py at 2017-11-21 02:20:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.05 Mbit/s

95th percentile per-packet one-way delay: 117.892 ms

Loss rate: 0.02%

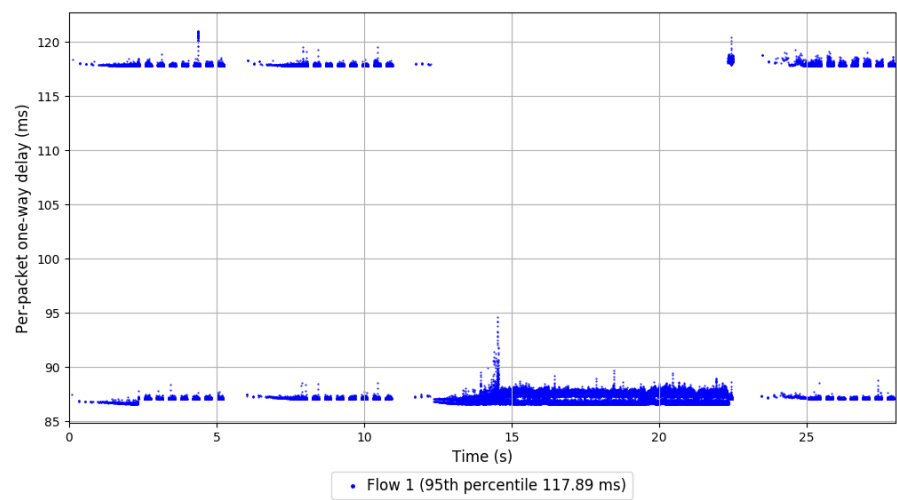
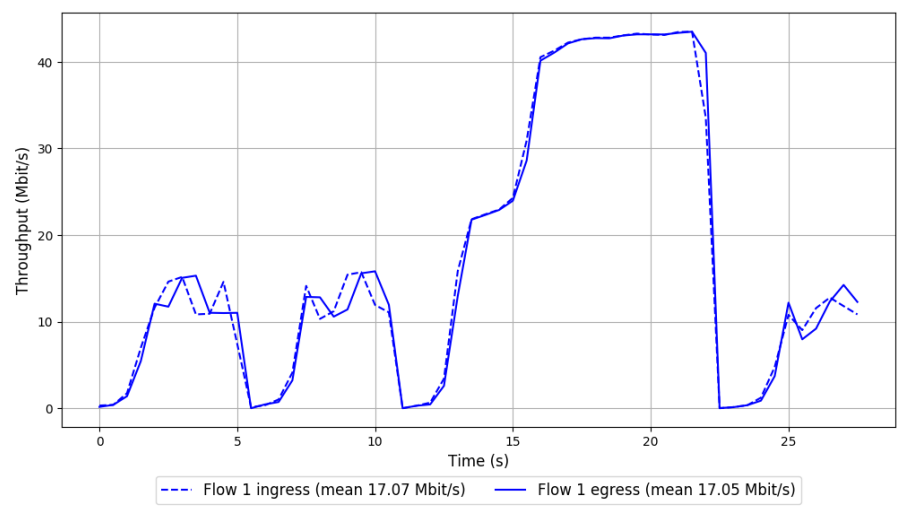
-- Flow 1:

Average throughput: 17.05 Mbit/s

95th percentile per-packet one-way delay: 117.892 ms

Loss rate: 0.02%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-21 00:55:44

End at: 2017-11-21 00:56:14

Below is generated by plot.py at 2017-11-21 02:20:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 117.952 ms

Loss rate: 0.00%

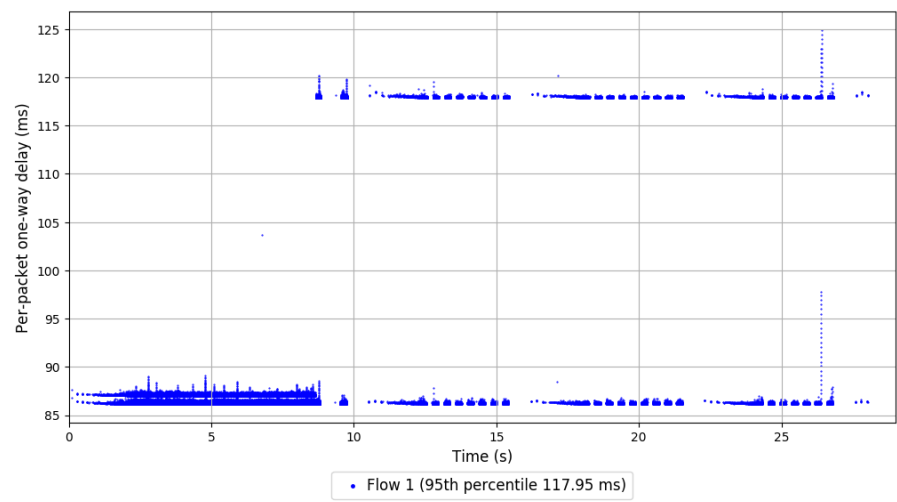
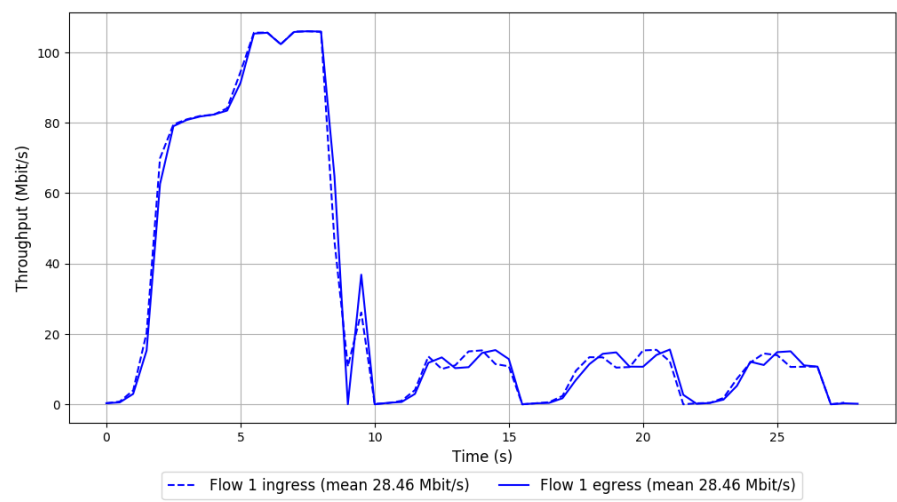
-- Flow 1:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 117.952 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-21 01:06:30

End at: 2017-11-21 01:07:00

Below is generated by plot.py at 2017-11-21 02:22:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.49 Mbit/s

95th percentile per-packet one-way delay: 87.187 ms

Loss rate: 0.00%

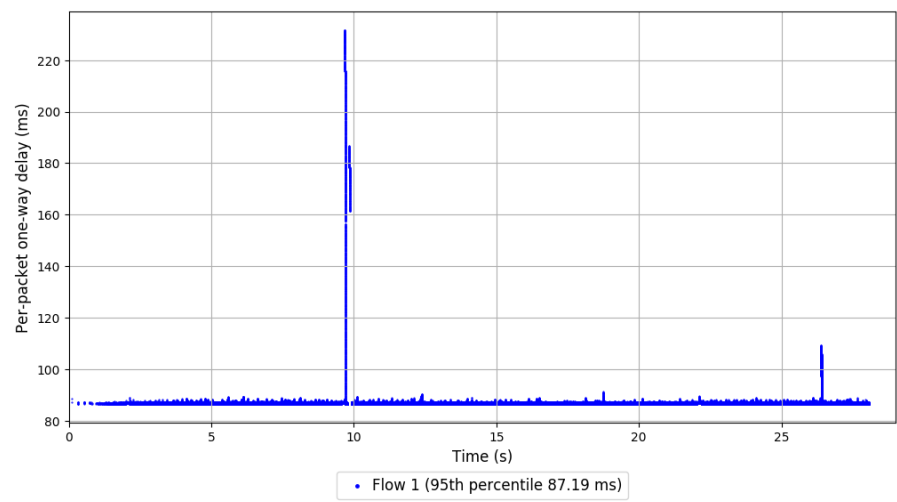
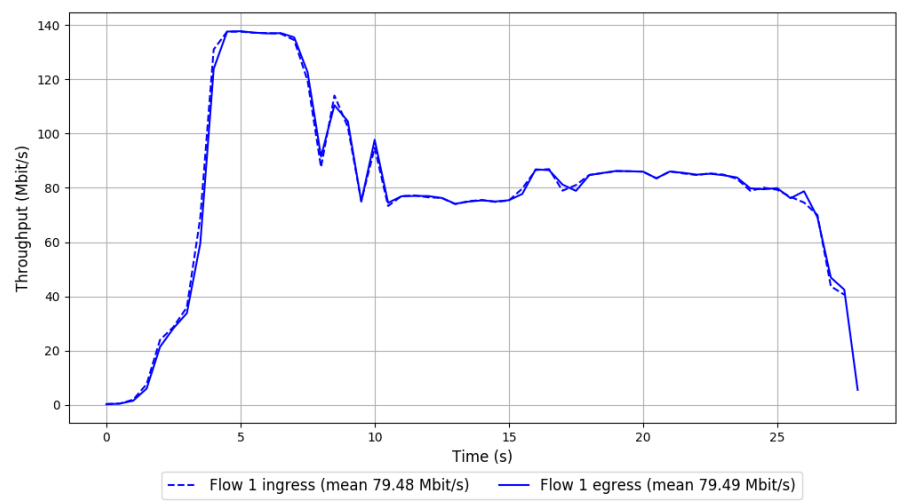
-- Flow 1:

Average throughput: 79.49 Mbit/s

95th percentile per-packet one-way delay: 87.187 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

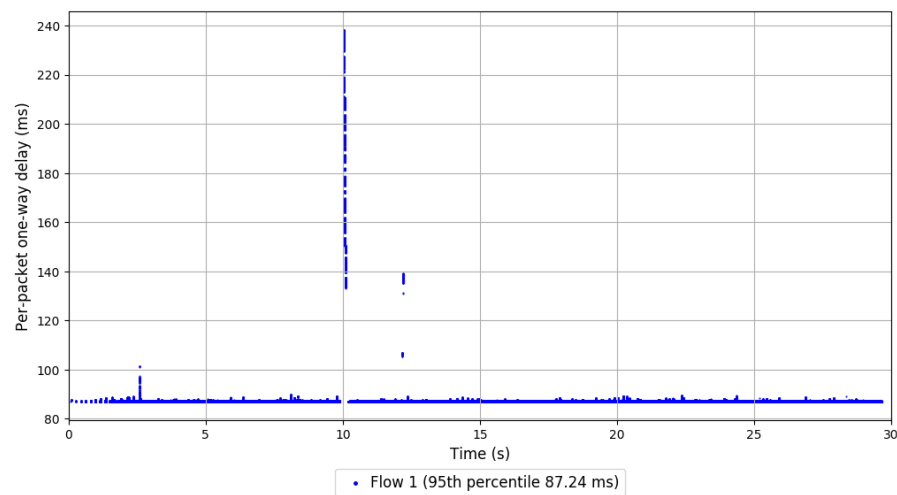
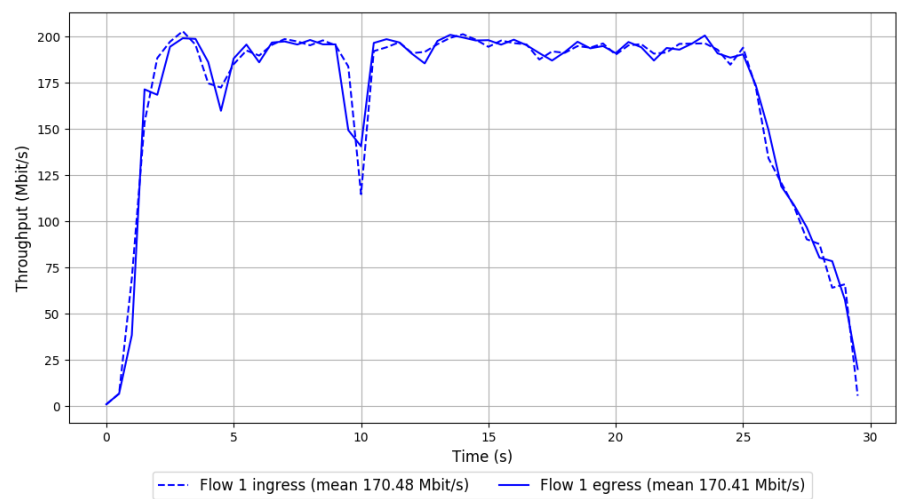


```
Run 1: Statistics of Indigo

Start at: 2017-11-20 23:34:02
End at: 2017-11-20 23:34:32

# Below is generated by plot.py at 2017-11-21 02:22:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 170.41 Mbit/s
95th percentile per-packet one-way delay: 87.244 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 170.41 Mbit/s
95th percentile per-packet one-way delay: 87.244 ms
Loss rate: 0.04%
```

Run 1: Report of Indigo — Data Link

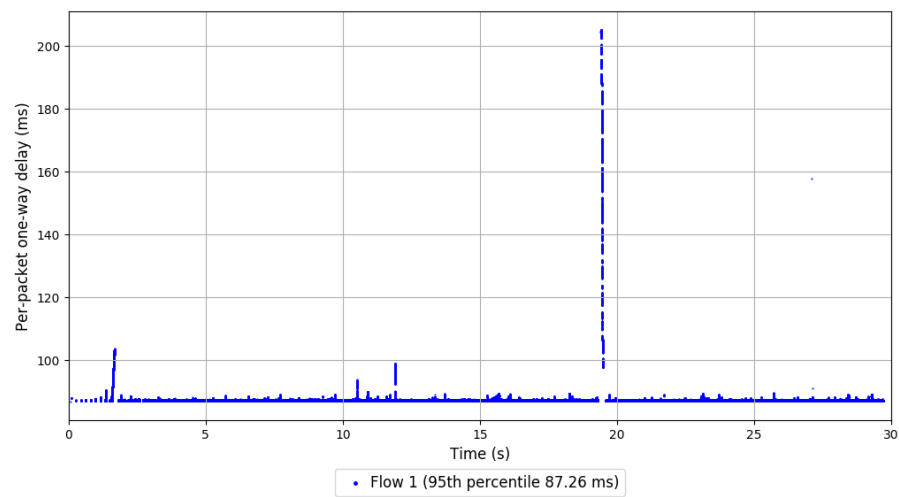
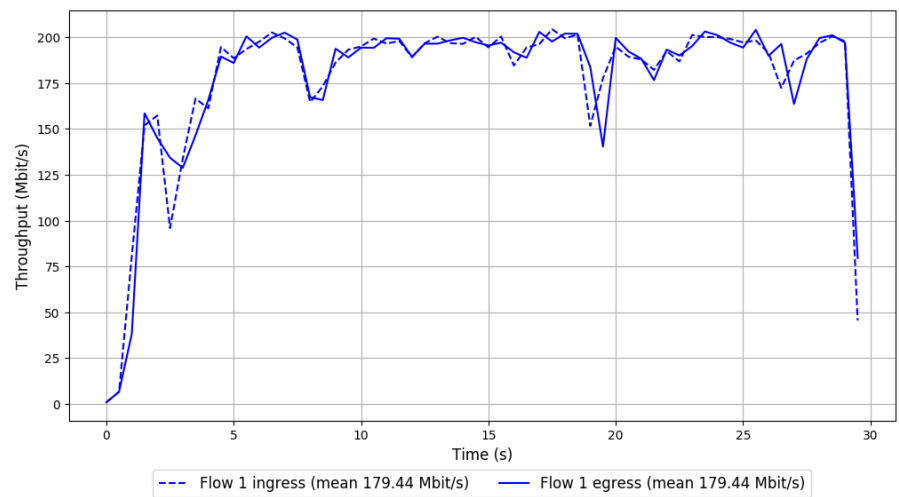


```
Run 2: Statistics of Indigo

Start at: 2017-11-20 23:44:52
End at: 2017-11-20 23:45:22

# Below is generated by plot.py at 2017-11-21 02:23:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.44 Mbit/s
95th percentile per-packet one-way delay: 87.262 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 179.44 Mbit/s
95th percentile per-packet one-way delay: 87.262 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-20 23:55:53

End at: 2017-11-20 23:56:23

Below is generated by plot.py at 2017-11-21 02:23:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.74 Mbit/s

95th percentile per-packet one-way delay: 87.234 ms

Loss rate: 0.00%

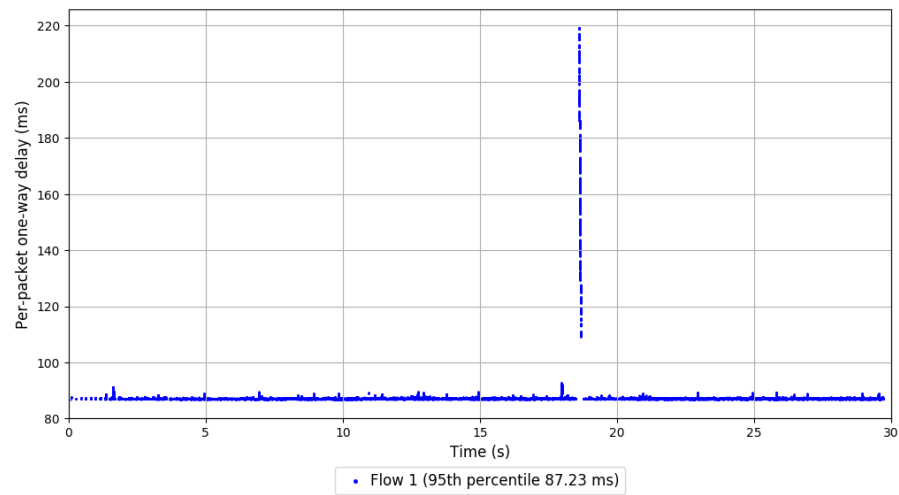
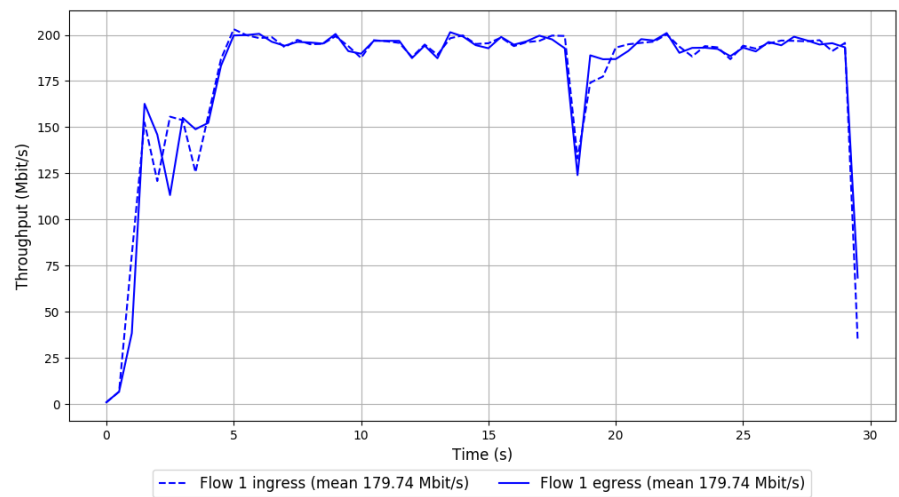
-- Flow 1:

Average throughput: 179.74 Mbit/s

95th percentile per-packet one-way delay: 87.234 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-21 00:06:47

End at: 2017-11-21 00:07:18

Below is generated by plot.py at 2017-11-21 02:23:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.76 Mbit/s

95th percentile per-packet one-way delay: 87.285 ms

Loss rate: 0.00%

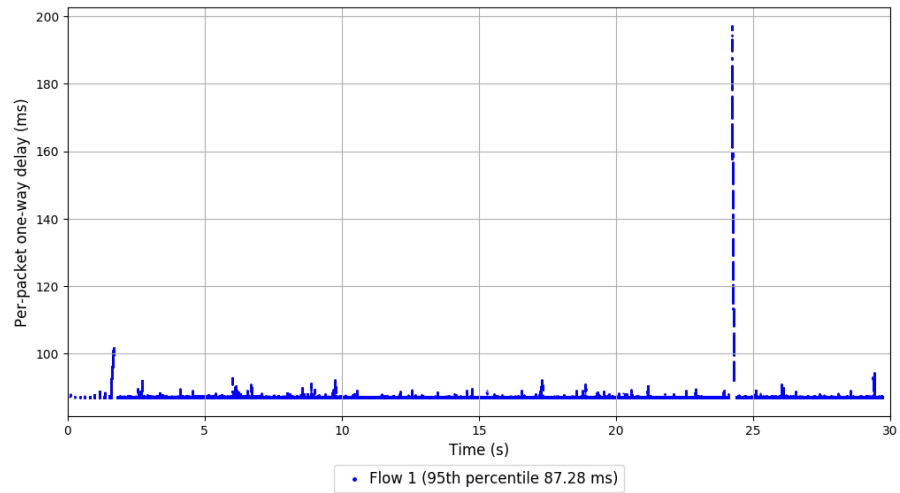
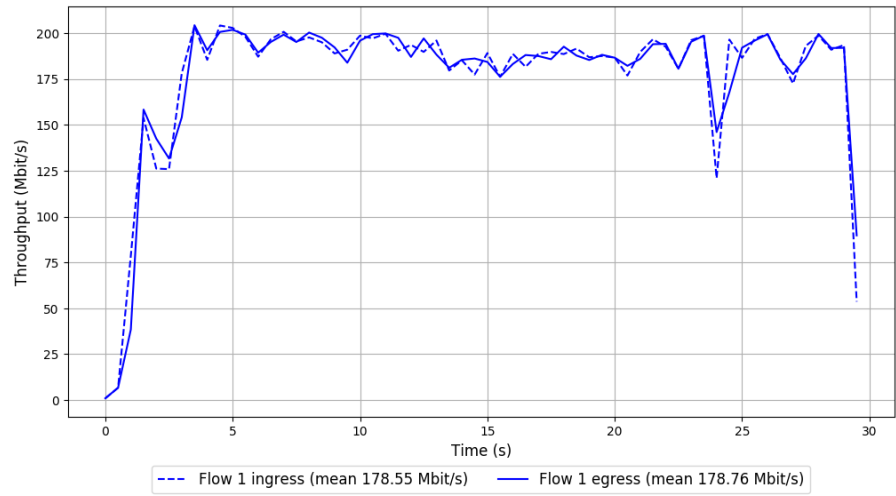
-- Flow 1:

Average throughput: 178.76 Mbit/s

95th percentile per-packet one-way delay: 87.285 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-21 00:17:43

End at: 2017-11-21 00:18:13

Below is generated by plot.py at 2017-11-21 02:23:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.11 Mbit/s

95th percentile per-packet one-way delay: 87.263 ms

Loss rate: 0.00%

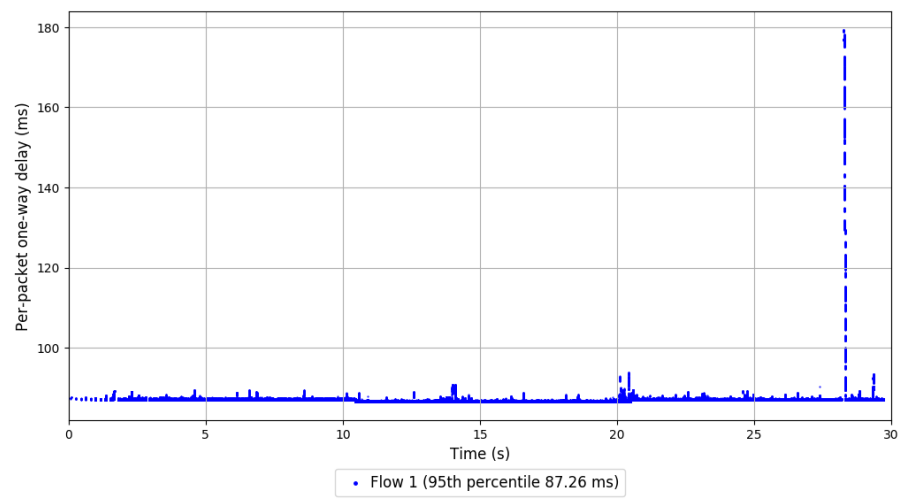
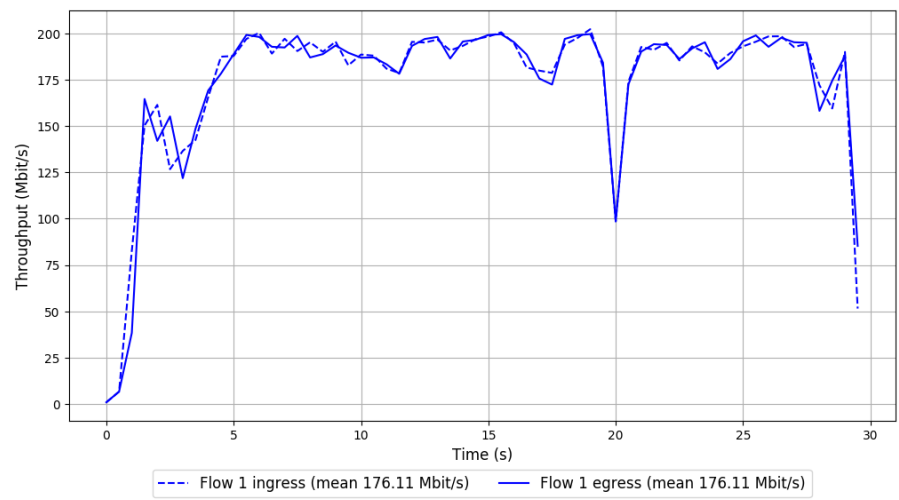
-- Flow 1:

Average throughput: 176.11 Mbit/s

95th percentile per-packet one-way delay: 87.263 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-21 00:28:33

End at: 2017-11-21 00:29:03

Below is generated by plot.py at 2017-11-21 02:23:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.93 Mbit/s

95th percentile per-packet one-way delay: 87.397 ms

Loss rate: 0.00%

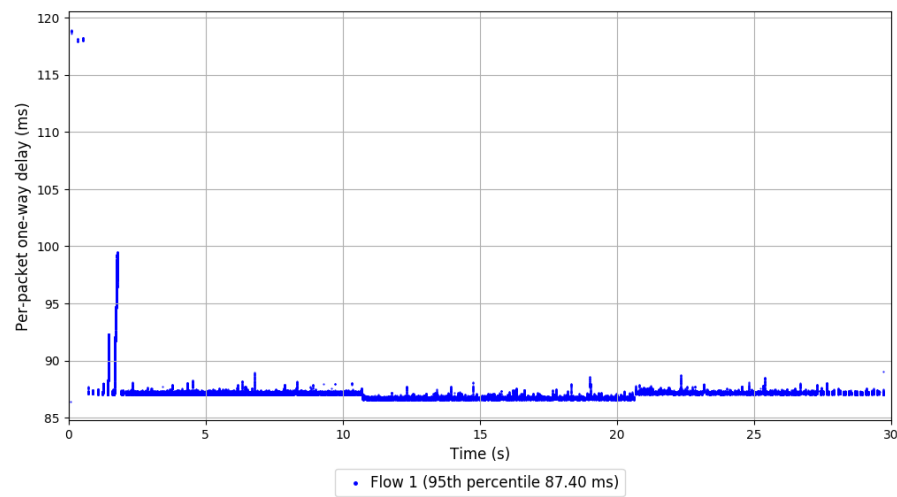
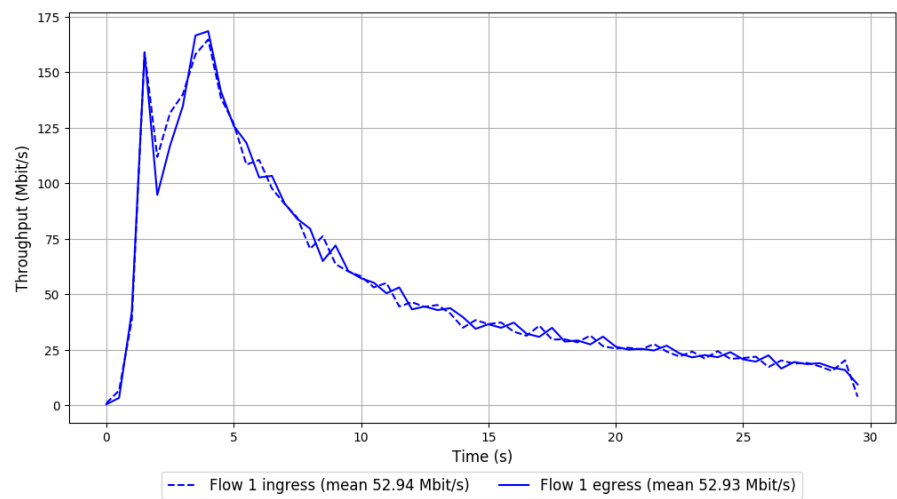
-- Flow 1:

Average throughput: 52.93 Mbit/s

95th percentile per-packet one-way delay: 87.397 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-21 00:38:58

End at: 2017-11-21 00:39:28

Below is generated by plot.py at 2017-11-21 02:23:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.41 Mbit/s

95th percentile per-packet one-way delay: 87.268 ms

Loss rate: 0.00%

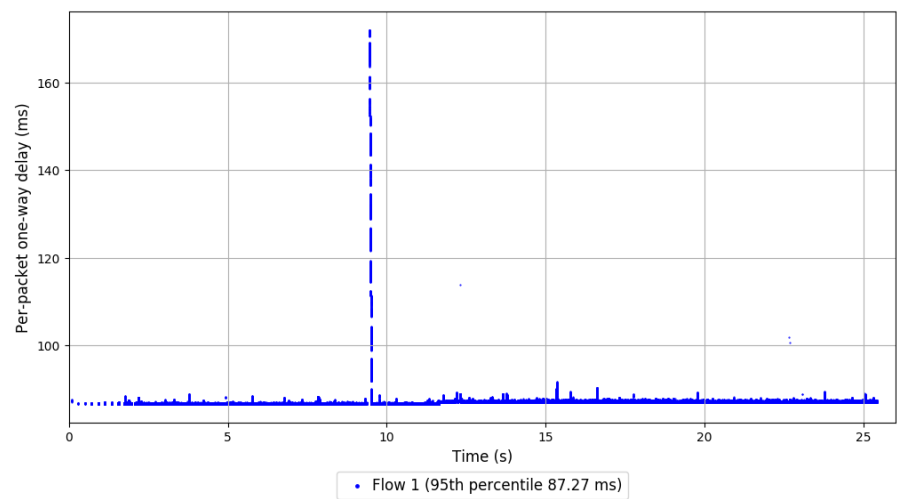
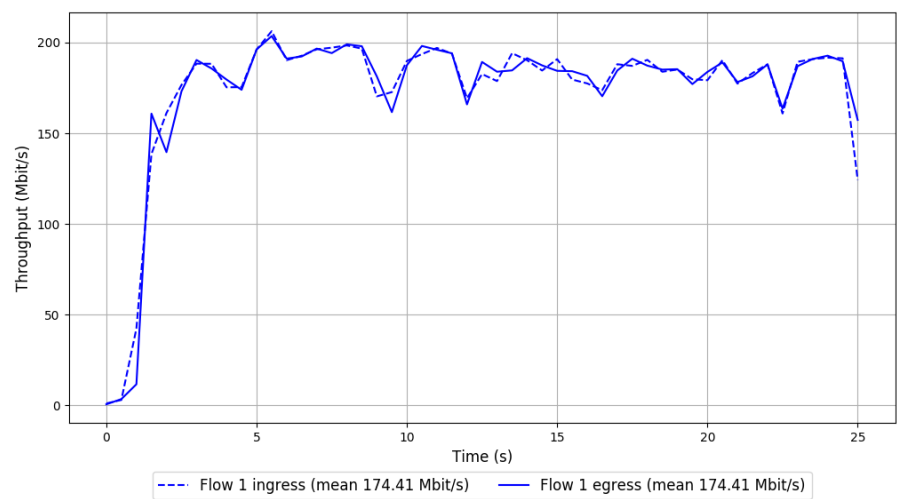
-- Flow 1:

Average throughput: 174.41 Mbit/s

95th percentile per-packet one-way delay: 87.268 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-21 00:49:40

End at: 2017-11-21 00:50:10

Below is generated by plot.py at 2017-11-21 02:24:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.39 Mbit/s

95th percentile per-packet one-way delay: 87.195 ms

Loss rate: 0.00%

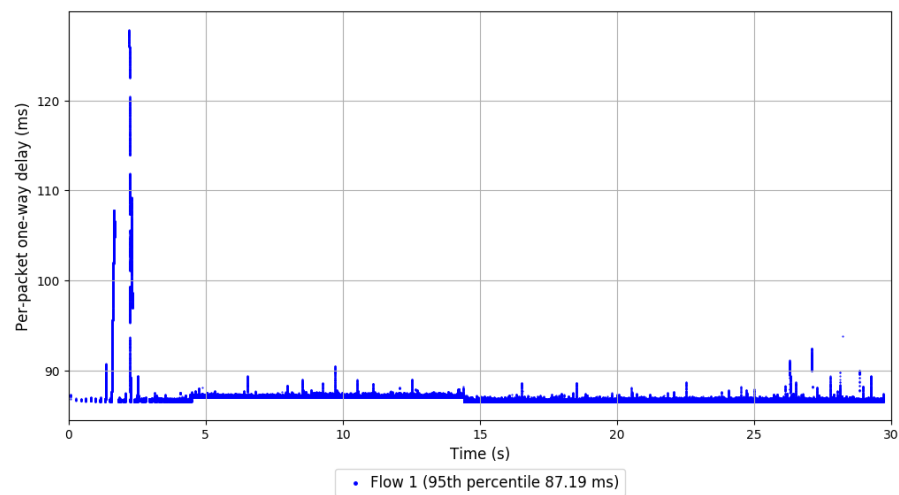
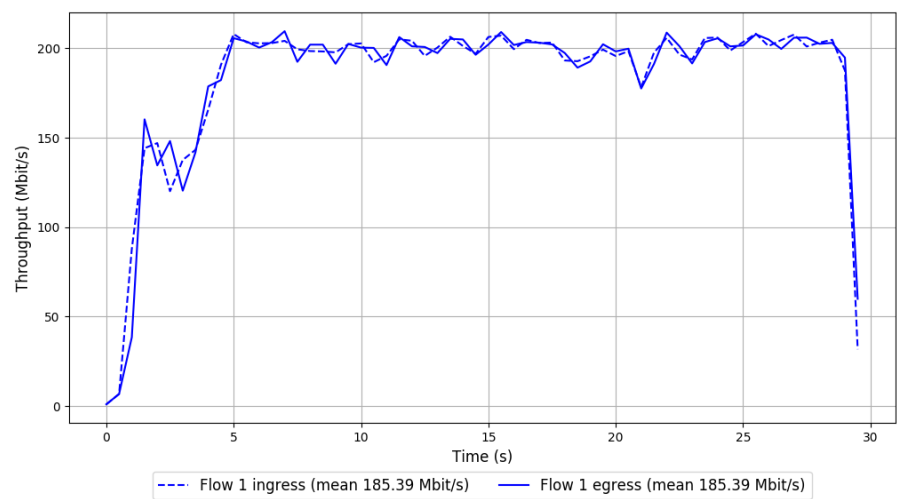
-- Flow 1:

Average throughput: 185.39 Mbit/s

95th percentile per-packet one-way delay: 87.195 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-21 01:00:24

End at: 2017-11-21 01:00:55

Below is generated by plot.py at 2017-11-21 02:24:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.19 Mbit/s

95th percentile per-packet one-way delay: 87.863 ms

Loss rate: 0.00%

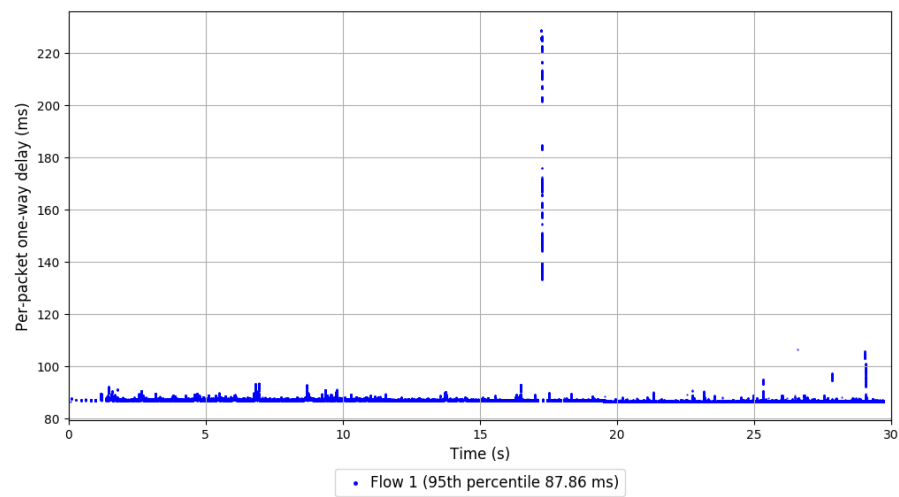
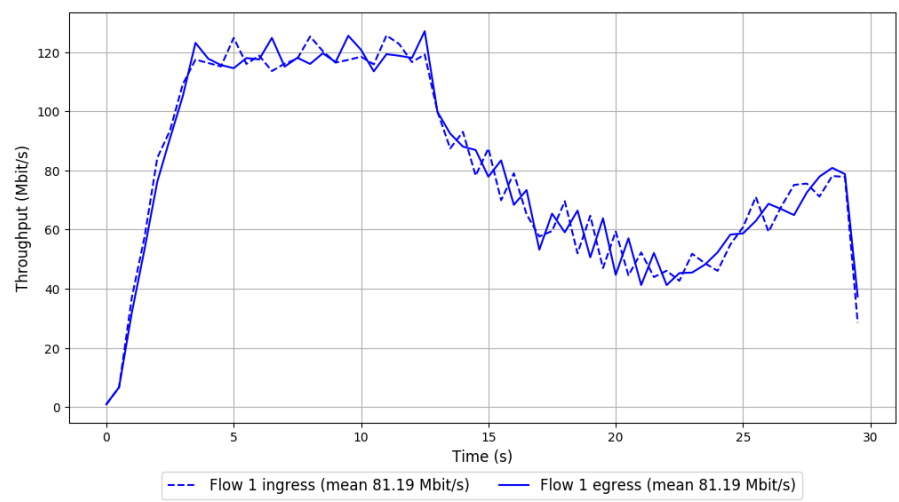
-- Flow 1:

Average throughput: 81.19 Mbit/s

95th percentile per-packet one-way delay: 87.863 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-21 01:11:17

End at: 2017-11-21 01:11:47

Below is generated by plot.py at 2017-11-21 02:26:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.15 Mbit/s

95th percentile per-packet one-way delay: 87.205 ms

Loss rate: 0.00%

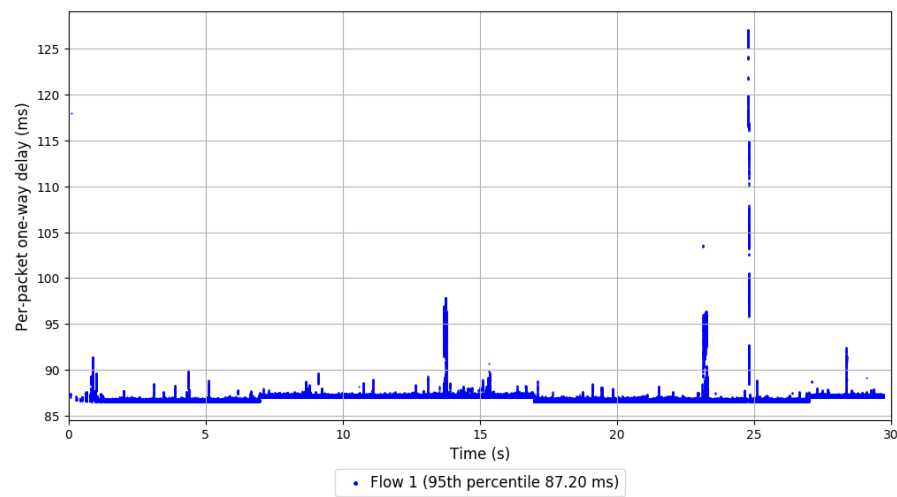
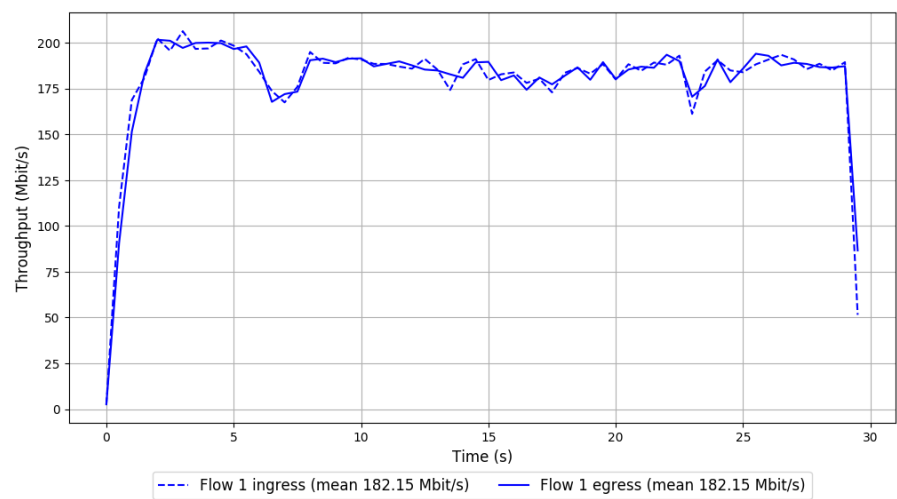
-- Flow 1:

Average throughput: 182.15 Mbit/s

95th percentile per-packet one-way delay: 87.205 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

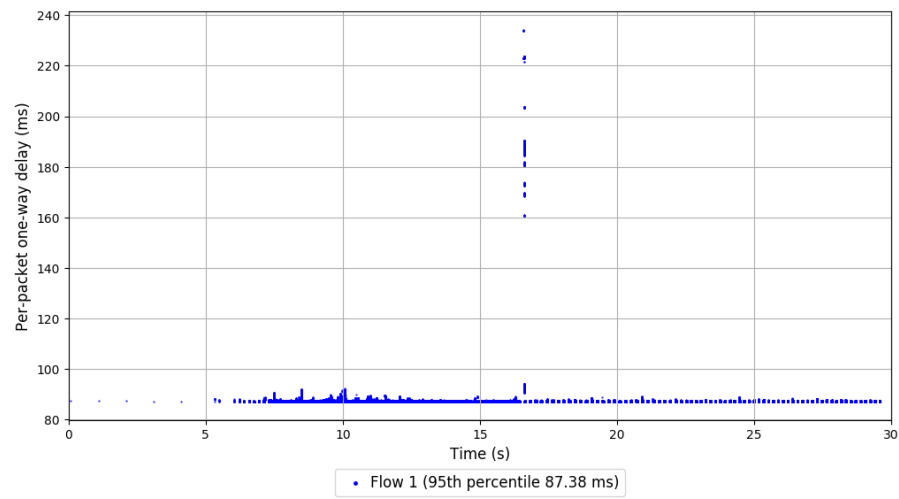
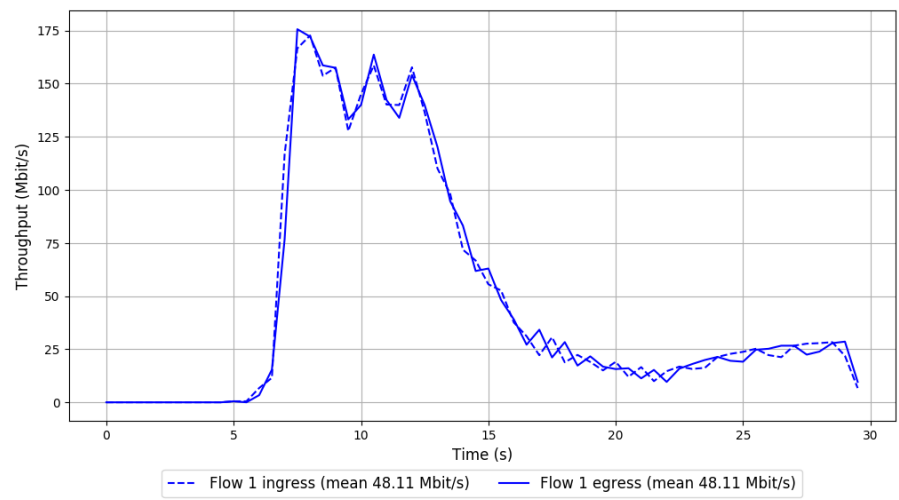


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-20 23:27:55
End at: 2017-11-20 23:28:25

# Below is generated by plot.py at 2017-11-21 02:26:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.11 Mbit/s
95th percentile per-packet one-way delay: 87.378 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.11 Mbit/s
95th percentile per-packet one-way delay: 87.378 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

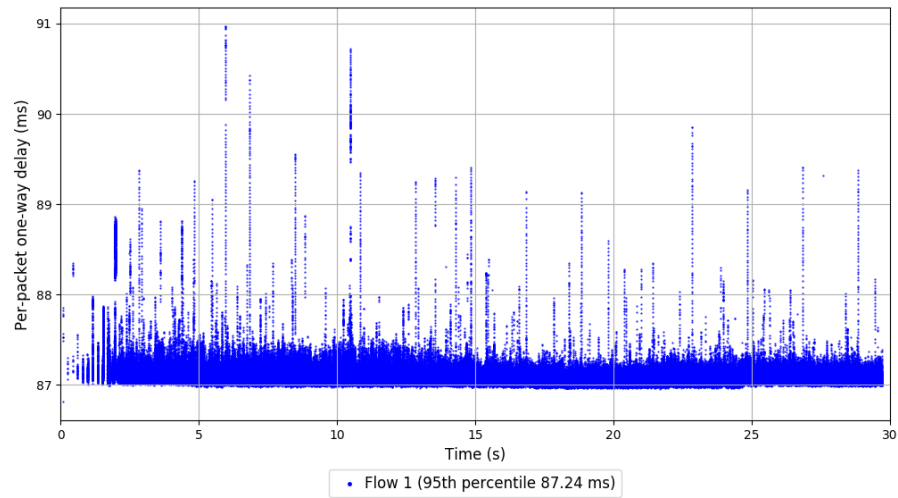
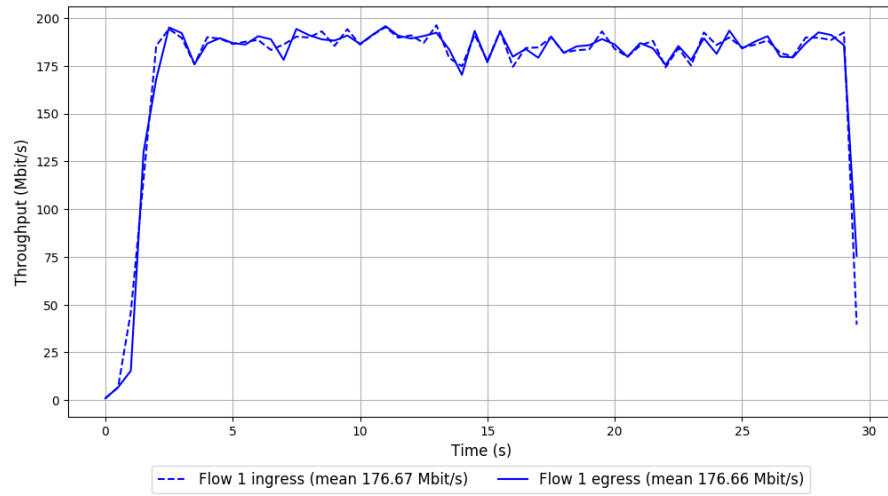


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-20 23:38:39
End at: 2017-11-20 23:39:09

# Below is generated by plot.py at 2017-11-21 02:26:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 176.66 Mbit/s
95th percentile per-packet one-way delay: 87.237 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 176.66 Mbit/s
95th percentile per-packet one-way delay: 87.237 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

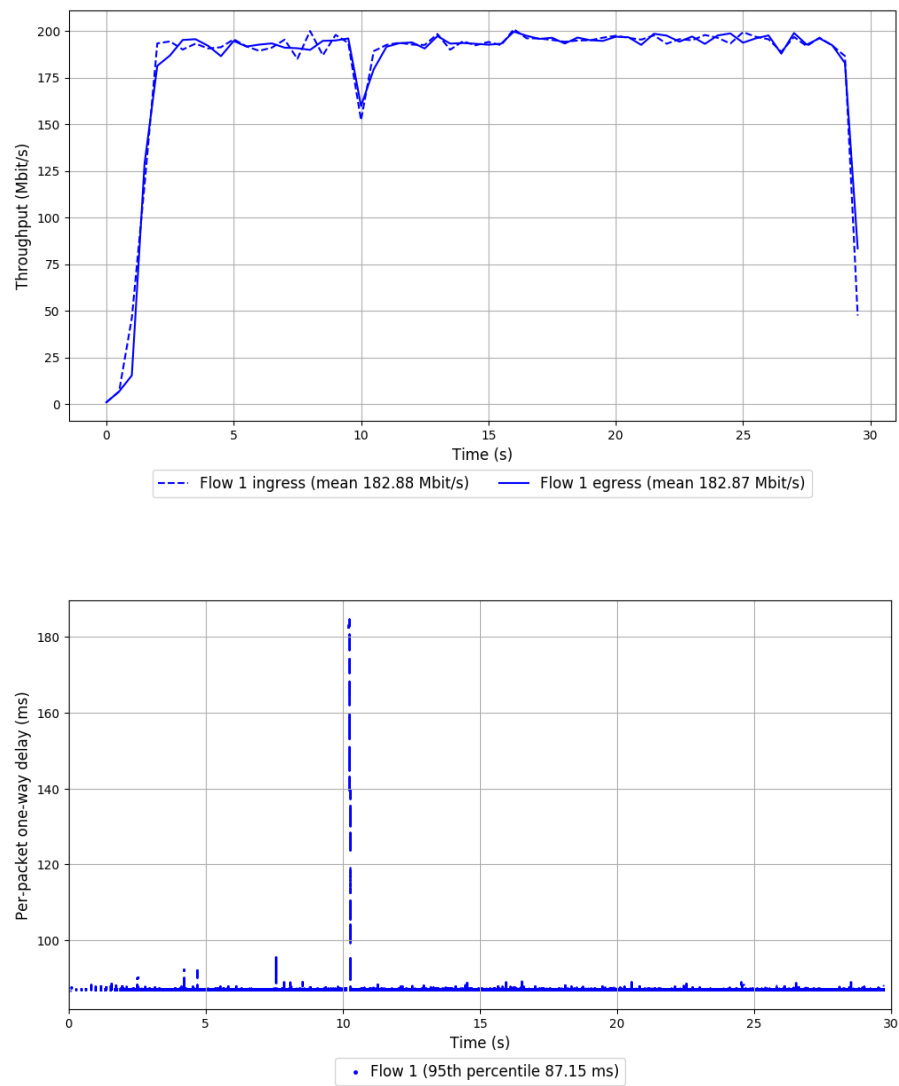


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-20 23:49:32
End at: 2017-11-20 23:50:02

# Below is generated by plot.py at 2017-11-21 02:26:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 182.87 Mbit/s
95th percentile per-packet one-way delay: 87.149 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 182.87 Mbit/s
95th percentile per-packet one-way delay: 87.149 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-21 00:00:16

End at: 2017-11-21 00:00:46

Below is generated by plot.py at 2017-11-21 02:26:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.32 Mbit/s

95th percentile per-packet one-way delay: 87.602 ms

Loss rate: 0.00%

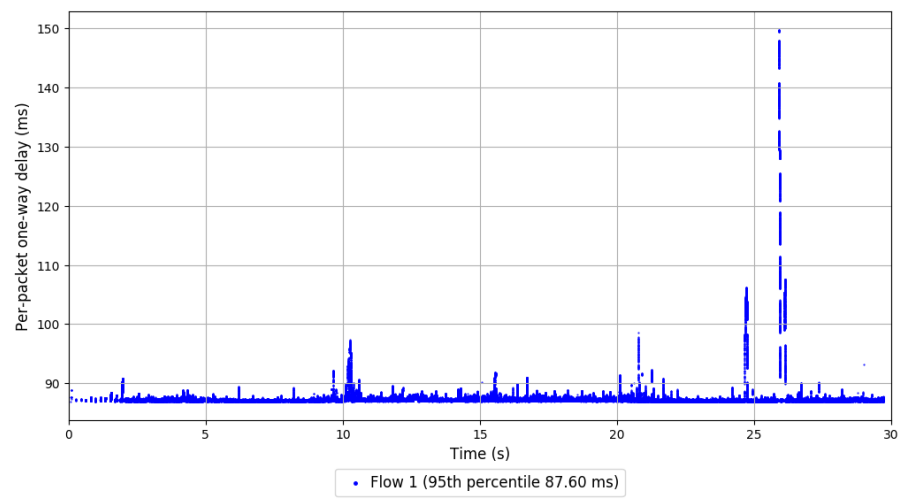
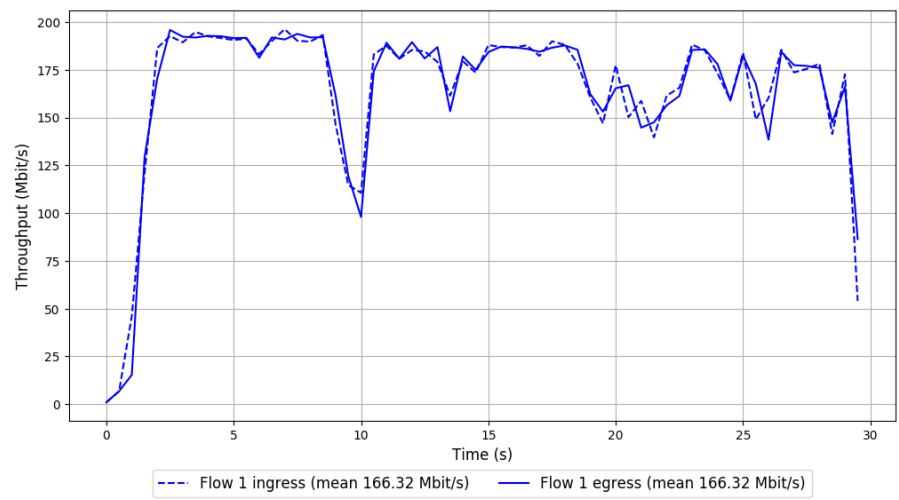
-- Flow 1:

Average throughput: 166.32 Mbit/s

95th percentile per-packet one-way delay: 87.602 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-21 00:11:27

End at: 2017-11-21 00:11:57

Below is generated by plot.py at 2017-11-21 02:26:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.75 Mbit/s

95th percentile per-packet one-way delay: 87.255 ms

Loss rate: 0.00%

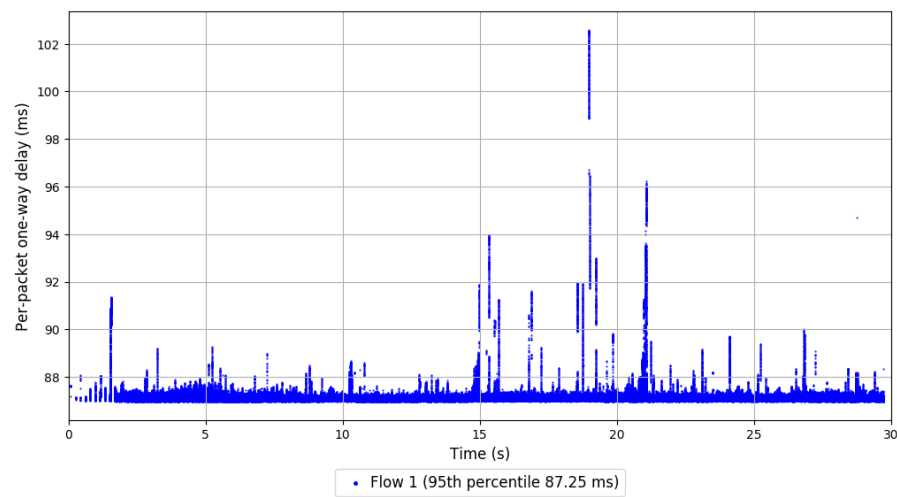
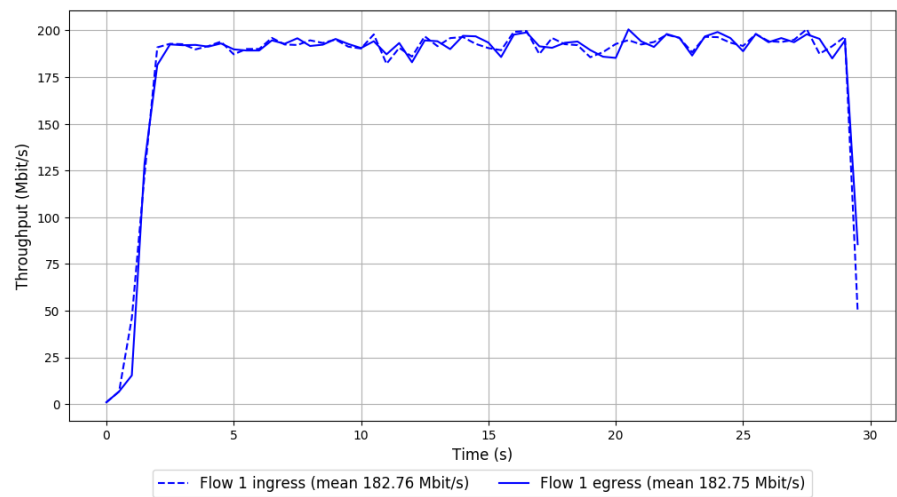
-- Flow 1:

Average throughput: 182.75 Mbit/s

95th percentile per-packet one-way delay: 87.255 ms

Loss rate: 0.00%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-21 00:22:12

End at: 2017-11-21 00:22:42

Below is generated by plot.py at 2017-11-21 02:26:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.35 Mbit/s

95th percentile per-packet one-way delay: 87.221 ms

Loss rate: 0.00%

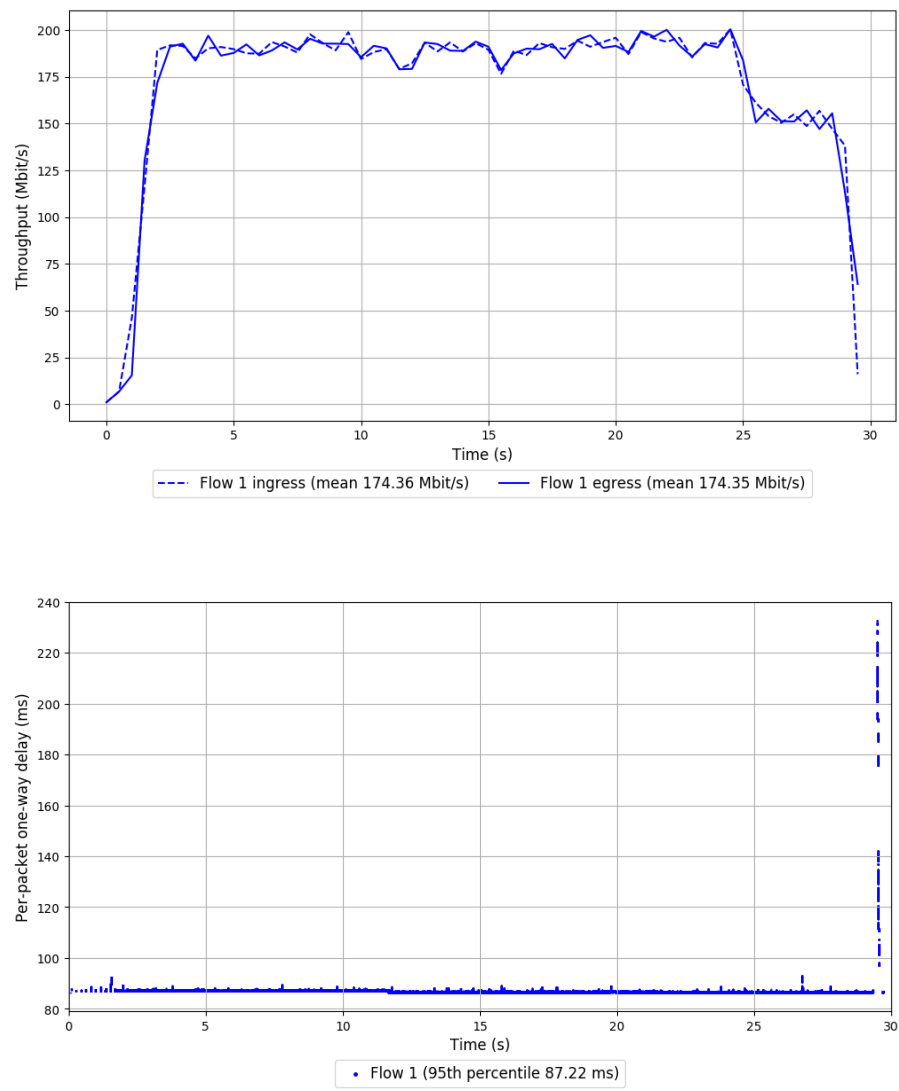
-- Flow 1:

Average throughput: 174.35 Mbit/s

95th percentile per-packet one-way delay: 87.221 ms

Loss rate: 0.00%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-21 00:32:46

End at: 2017-11-21 00:33:16

Below is generated by plot.py at 2017-11-21 02:26:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.65 Mbit/s

95th percentile per-packet one-way delay: 87.324 ms

Loss rate: 0.00%

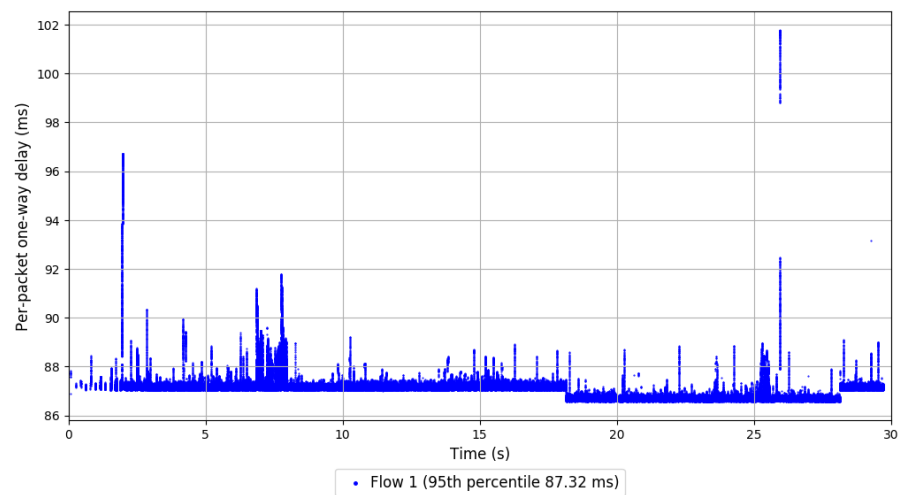
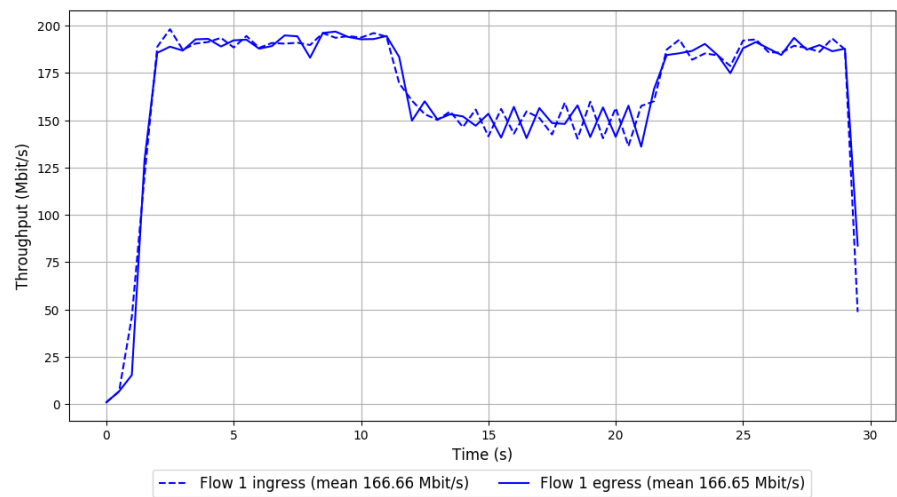
-- Flow 1:

Average throughput: 166.65 Mbit/s

95th percentile per-packet one-way delay: 87.324 ms

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-21 00:43:38

End at: 2017-11-21 00:44:08

Below is generated by plot.py at 2017-11-21 02:27:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.60 Mbit/s

95th percentile per-packet one-way delay: 87.265 ms

Loss rate: 0.09%

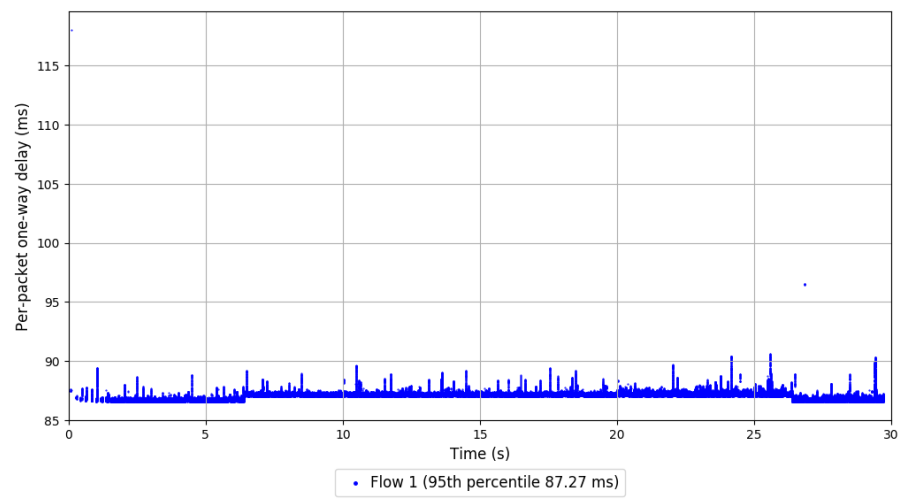
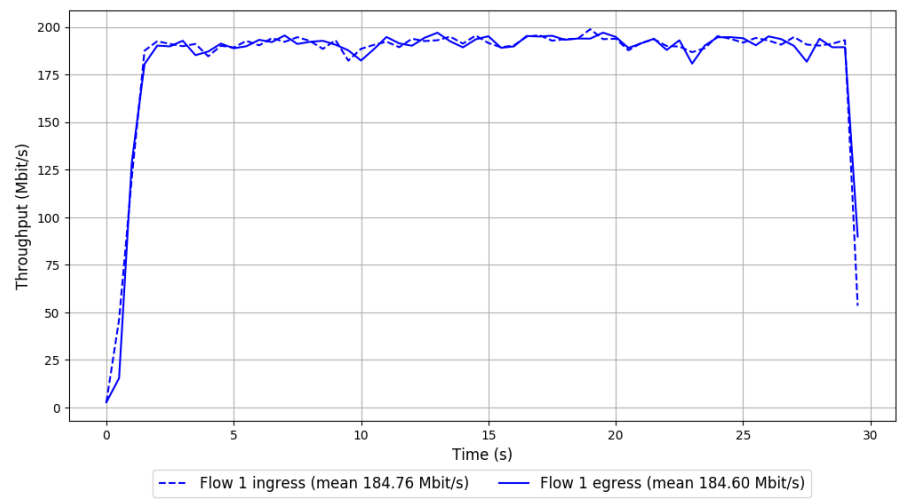
-- Flow 1:

Average throughput: 184.60 Mbit/s

95th percentile per-packet one-way delay: 87.265 ms

Loss rate: 0.09%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-21 00:54:11

End at: 2017-11-21 00:54:41

Below is generated by plot.py at 2017-11-21 02:27:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.72 Mbit/s

95th percentile per-packet one-way delay: 87.166 ms

Loss rate: 0.00%

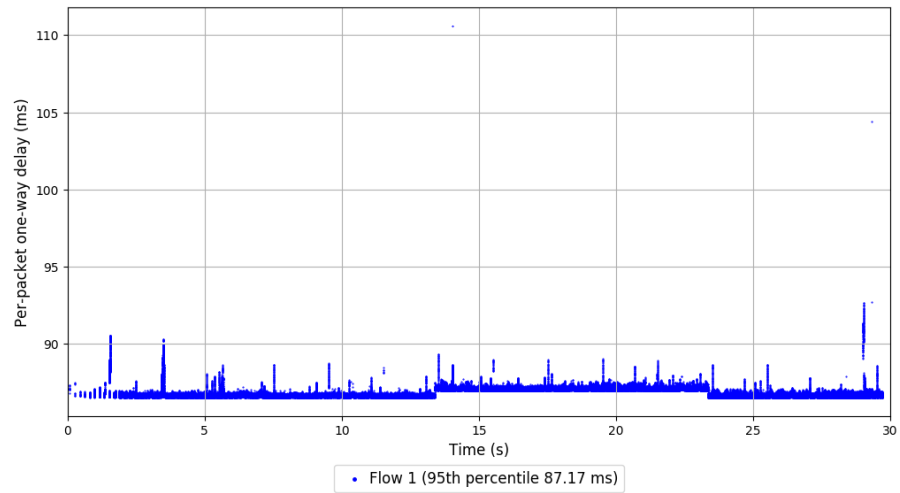
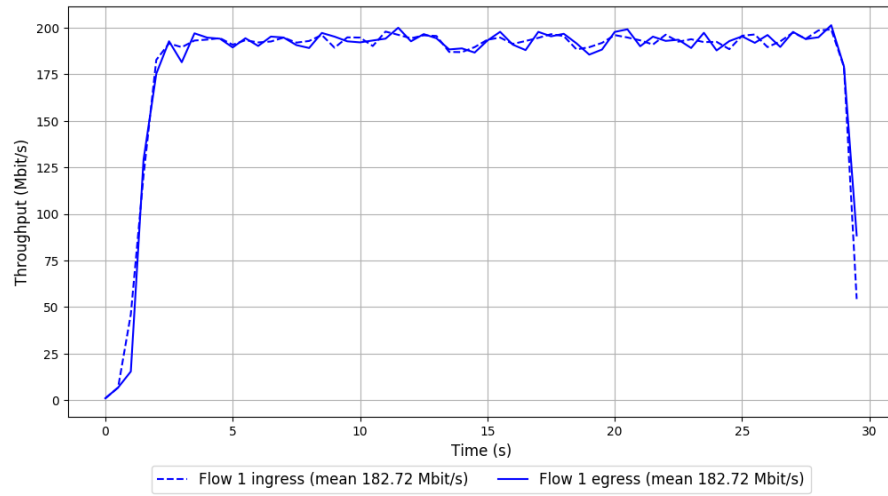
-- Flow 1:

Average throughput: 182.72 Mbit/s

95th percentile per-packet one-way delay: 87.166 ms

Loss rate: 0.00%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-21 01:05:00

End at: 2017-11-21 01:05:30

Below is generated by plot.py at 2017-11-21 02:27:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 159.10 Mbit/s

95th percentile per-packet one-way delay: 87.292 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 159.10 Mbit/s

95th percentile per-packet one-way delay: 87.292 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

