

Pantheon Report

Generated at 2017-12-11 11:34:17 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

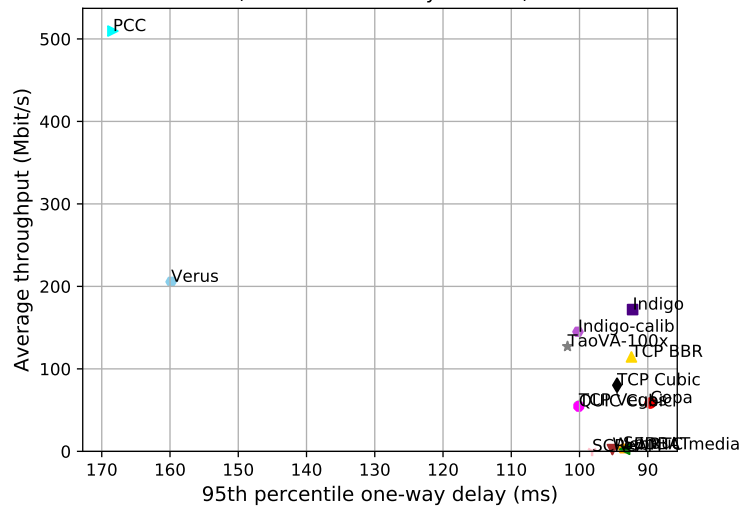
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

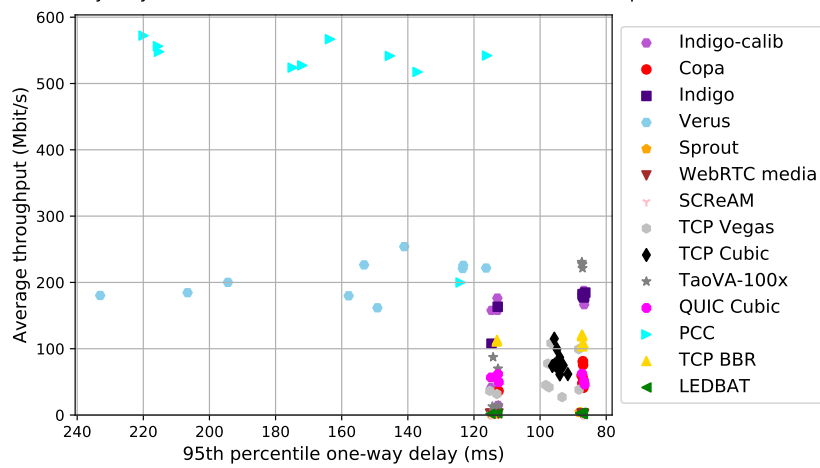
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 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 Sydney Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	114.50	92.39	0.72
TCP Cubic	10	80.13	94.50	0.77
LEDBAT	9	2.49	93.39	1.15
PCC	10	509.55	168.36	3.10
QUIC Cubic	6	54.53	100.11	1.00
SCReAM	10	0.21	98.16	0.66
WebRTC media	10	2.10	95.18	0.83
Sprout	9	3.36	93.63	0.71
TaoVA-100x	9	127.21	101.76	0.60
TCP Vegas	10	55.66	100.10	0.34
Verus	10	205.55	159.84	2.68
Copa	10	58.55	89.64	0.99
Indigo	10	171.88	92.22	0.59
Indigo-calib	10	145.01	100.23	0.74

Run 1: Statistics of TCP BBR

Start at: 2017-12-11 07:26:30

End at: 2017-12-11 07:27:00

Below is generated by plot.py at 2017-12-11 10:58:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.57 Mbit/s

95th percentile per-packet one-way delay: 87.216 ms

Loss rate: 0.71%

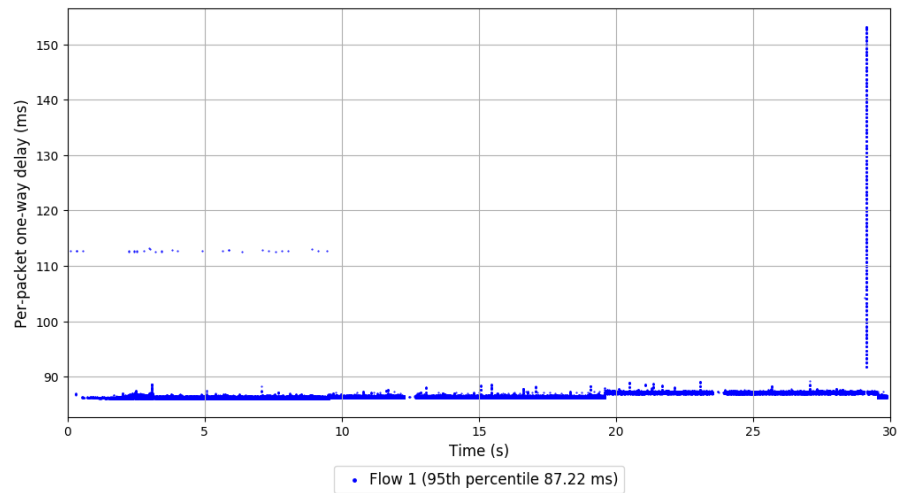
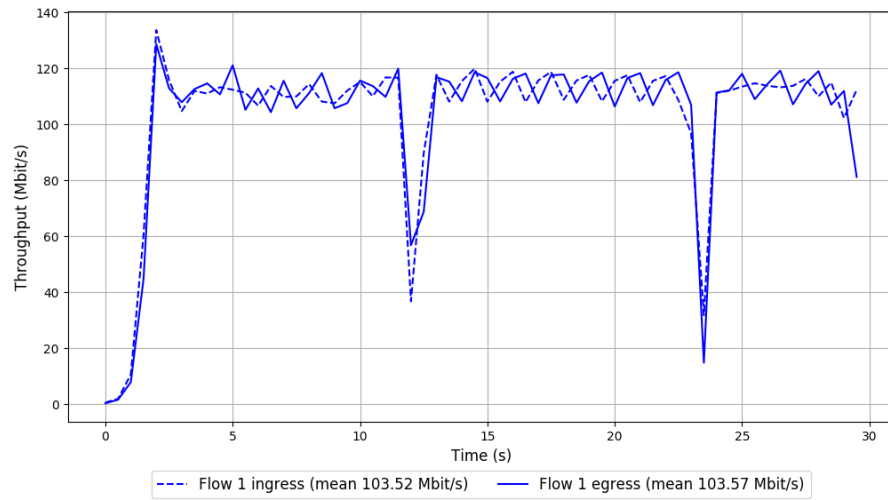
-- Flow 1:

Average throughput: 103.57 Mbit/s

95th percentile per-packet one-way delay: 87.216 ms

Loss rate: 0.71%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-11 07:37:39

End at: 2017-12-11 07:38:09

Below is generated by plot.py at 2017-12-11 10:59:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.70 Mbit/s

95th percentile per-packet one-way delay: 87.319 ms

Loss rate: 0.69%

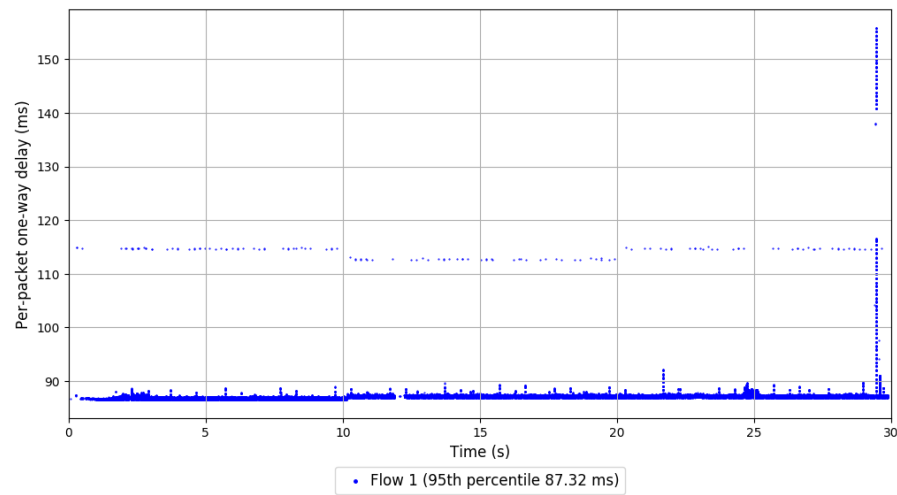
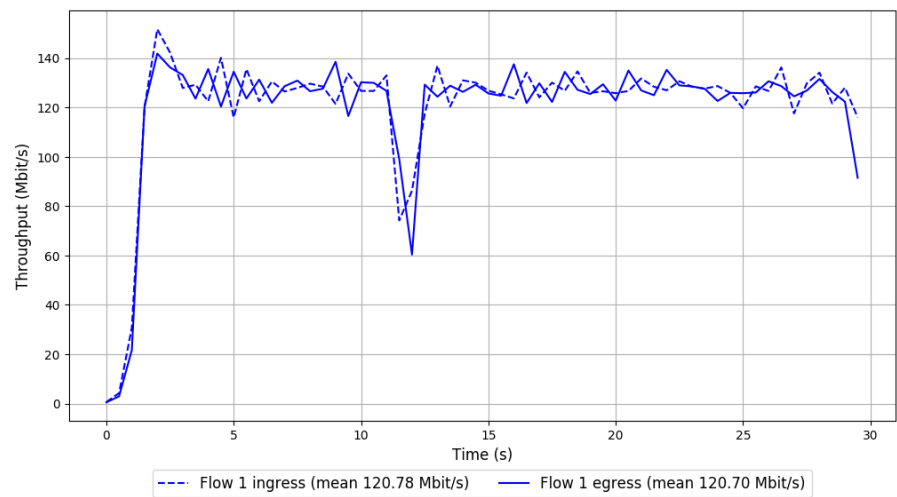
-- Flow 1:

Average throughput: 120.70 Mbit/s

95th percentile per-packet one-way delay: 87.319 ms

Loss rate: 0.69%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-11 07:48:41

End at: 2017-12-11 07:49:11

Below is generated by plot.py at 2017-12-11 10:59:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.62 Mbit/s

95th percentile per-packet one-way delay: 87.291 ms

Loss rate: 0.73%

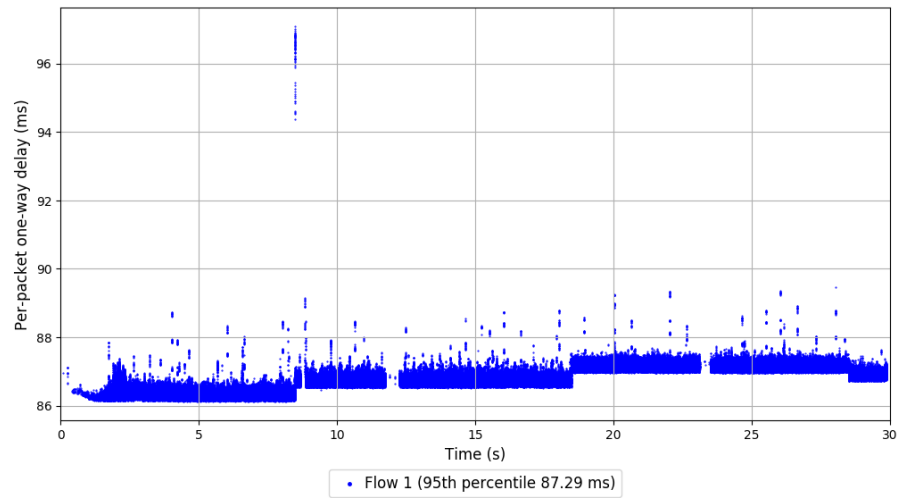
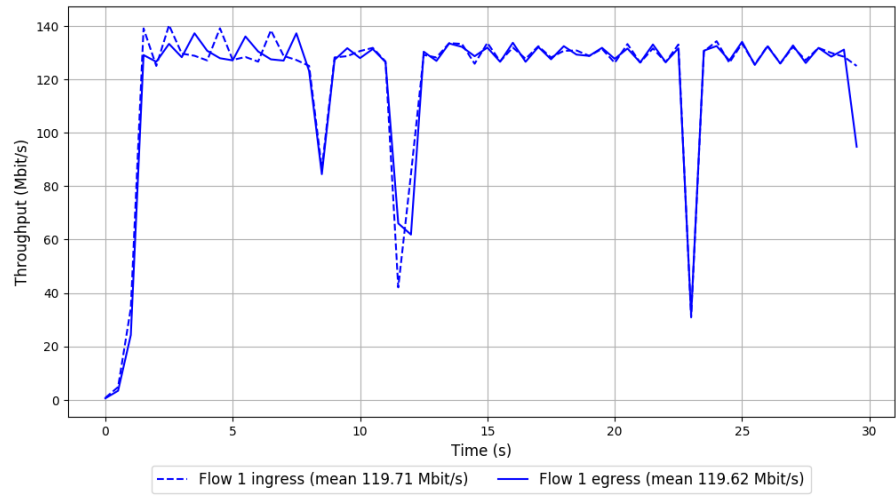
-- Flow 1:

Average throughput: 119.62 Mbit/s

95th percentile per-packet one-way delay: 87.291 ms

Loss rate: 0.73%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-11 07:59:40

End at: 2017-12-11 08:00:10

Below is generated by plot.py at 2017-12-11 10:59:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.15 Mbit/s

95th percentile per-packet one-way delay: 87.372 ms

Loss rate: 0.62%

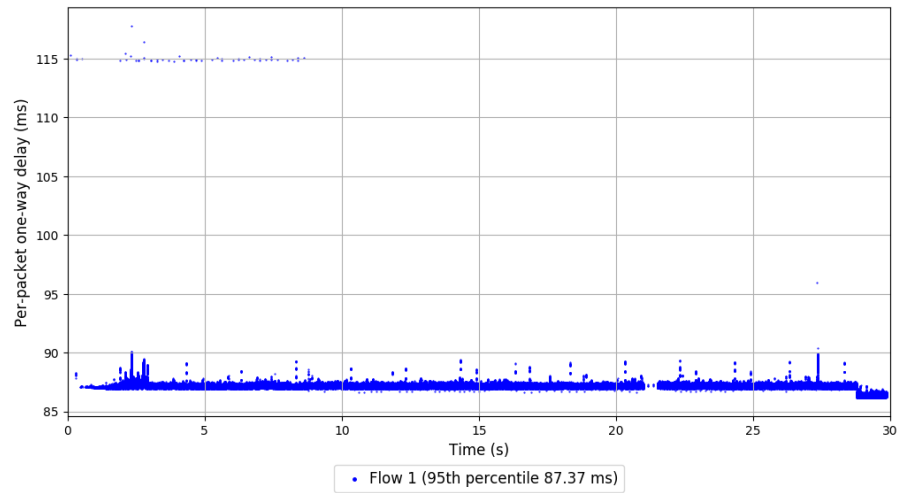
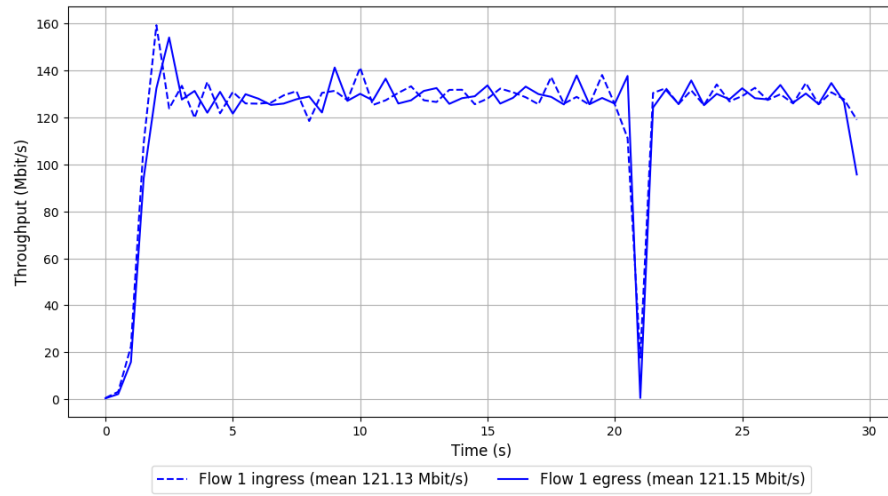
-- Flow 1:

Average throughput: 121.15 Mbit/s

95th percentile per-packet one-way delay: 87.372 ms

Loss rate: 0.62%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-11 08:10:43

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

Below is generated by plot.py at 2017-12-11 10:59:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.92 Mbit/s

95th percentile per-packet one-way delay: 87.315 ms

Loss rate: 0.88%

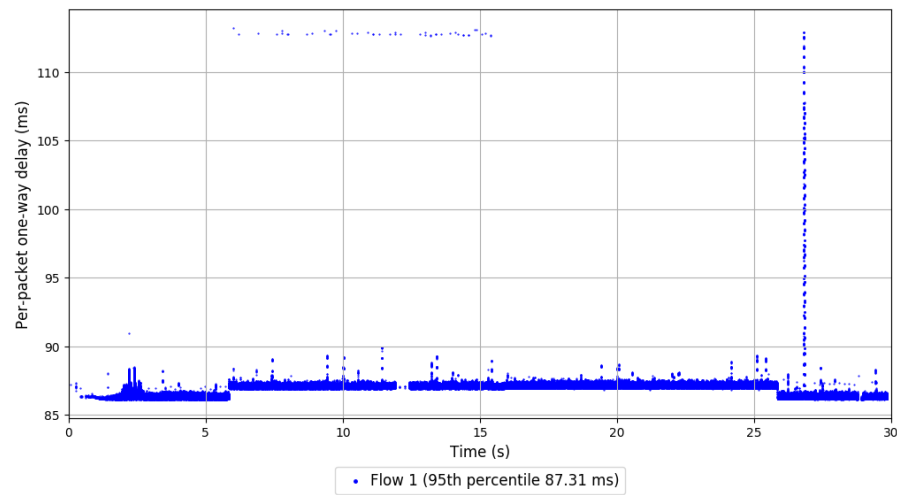
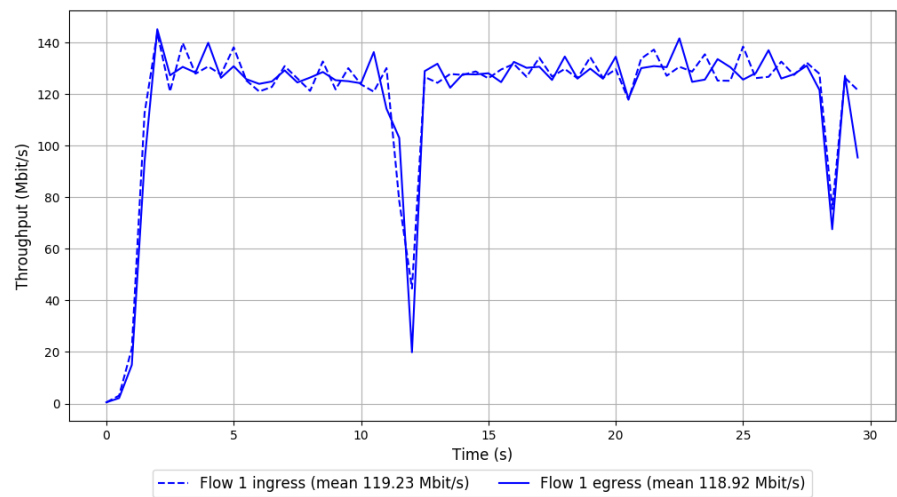
-- Flow 1:

Average throughput: 118.92 Mbit/s

95th percentile per-packet one-way delay: 87.315 ms

Loss rate: 0.88%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-11 08:22:03

End at: 2017-12-11 08:22:33

Below is generated by plot.py at 2017-12-11 10:59:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.16 Mbit/s

95th percentile per-packet one-way delay: 87.254 ms

Loss rate: 0.73%

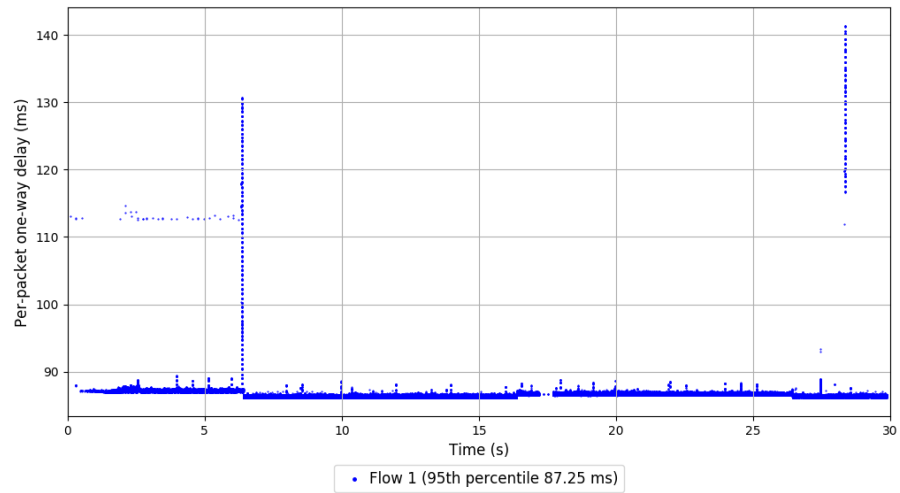
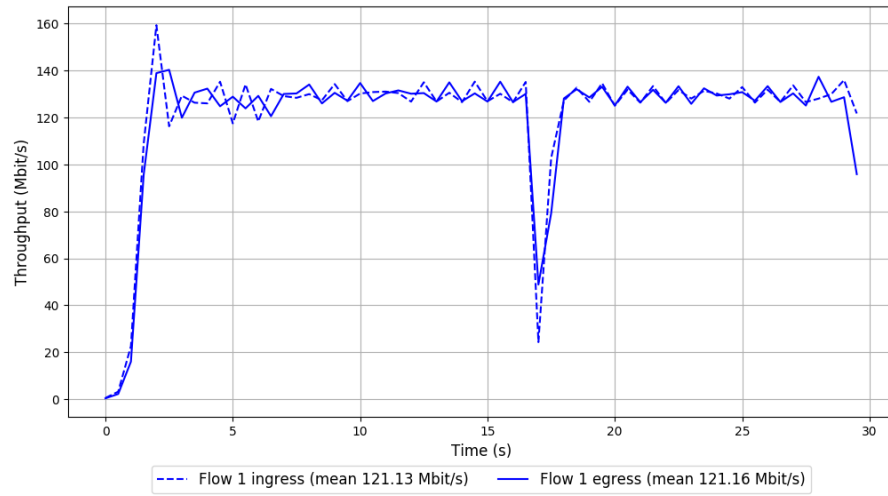
-- Flow 1:

Average throughput: 121.16 Mbit/s

95th percentile per-packet one-way delay: 87.254 ms

Loss rate: 0.73%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-11 08:32:58

End at: 2017-12-11 08:33:28

Below is generated by plot.py at 2017-12-11 10:59:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.31 Mbit/s

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

Loss rate: 0.72%

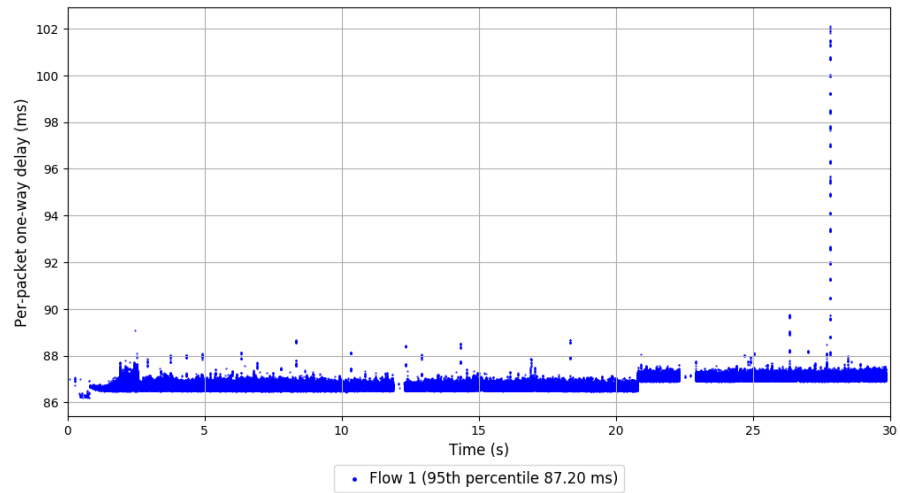
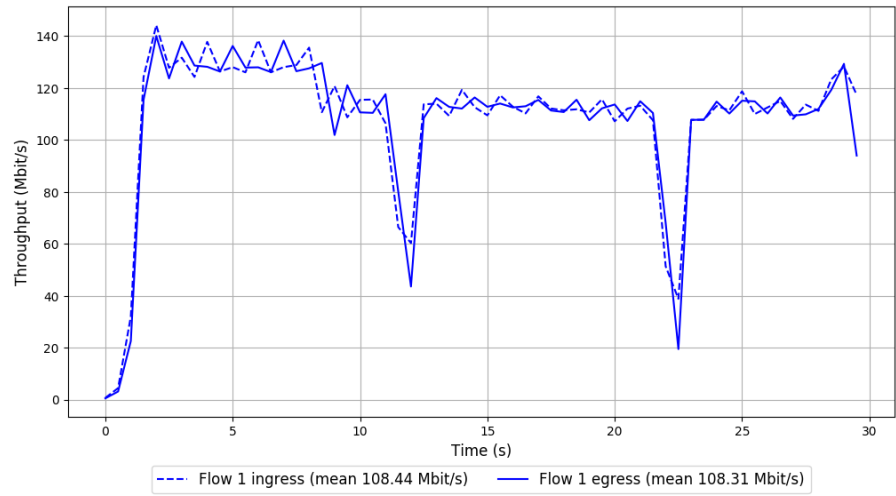
-- Flow 1:

Average throughput: 108.31 Mbit/s

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

Loss rate: 0.72%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-11 08:43:38

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

Below is generated by plot.py at 2017-12-11 10:59:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.24 Mbit/s

95th percentile per-packet one-way delay: 86.799 ms

Loss rate: 0.70%

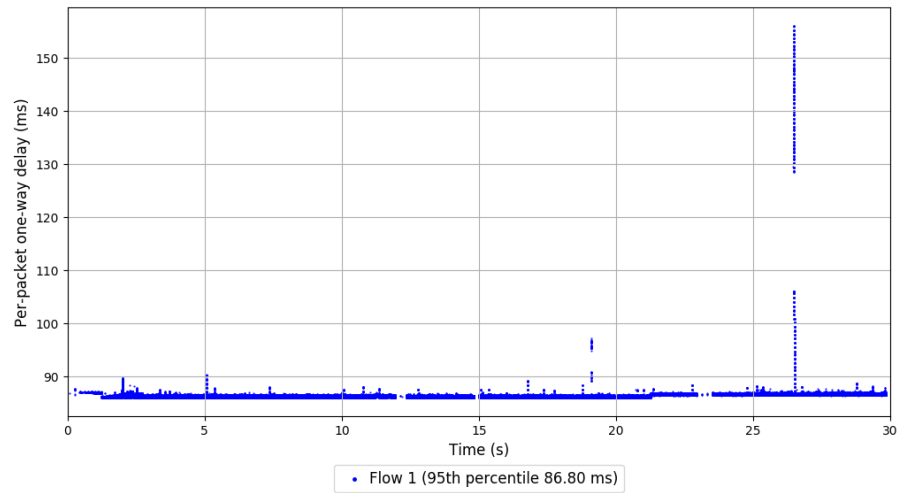
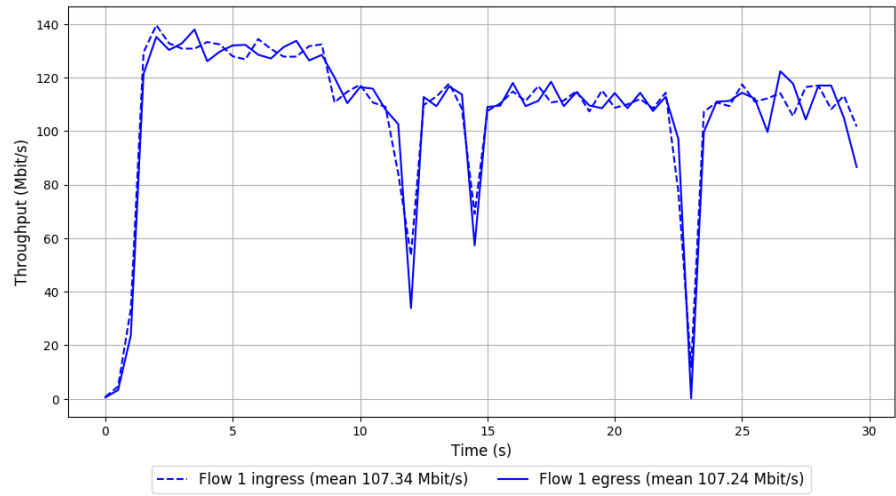
-- Flow 1:

Average throughput: 107.24 Mbit/s

95th percentile per-packet one-way delay: 86.799 ms

Loss rate: 0.70%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-11 08:54:27

End at: 2017-12-11 08:54:57

Below is generated by plot.py at 2017-12-11 11:00:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.93 Mbit/s

95th percentile per-packet one-way delay: 113.138 ms

Loss rate: 0.75%

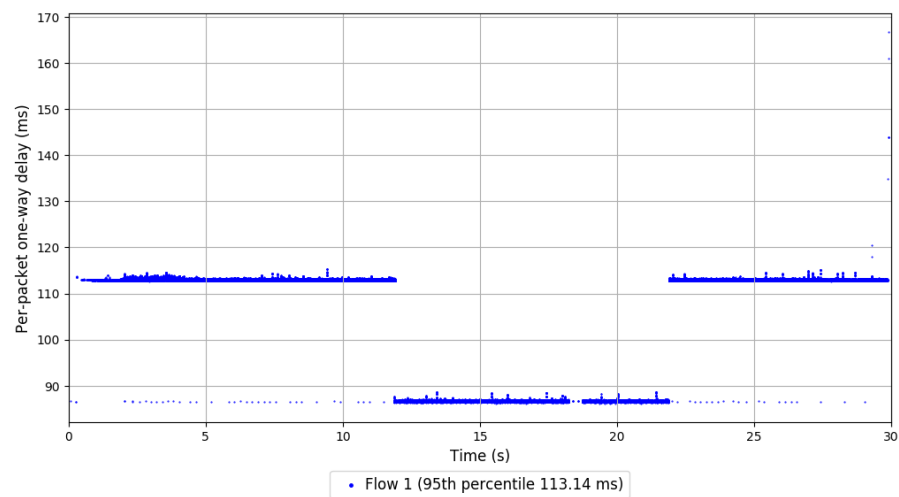
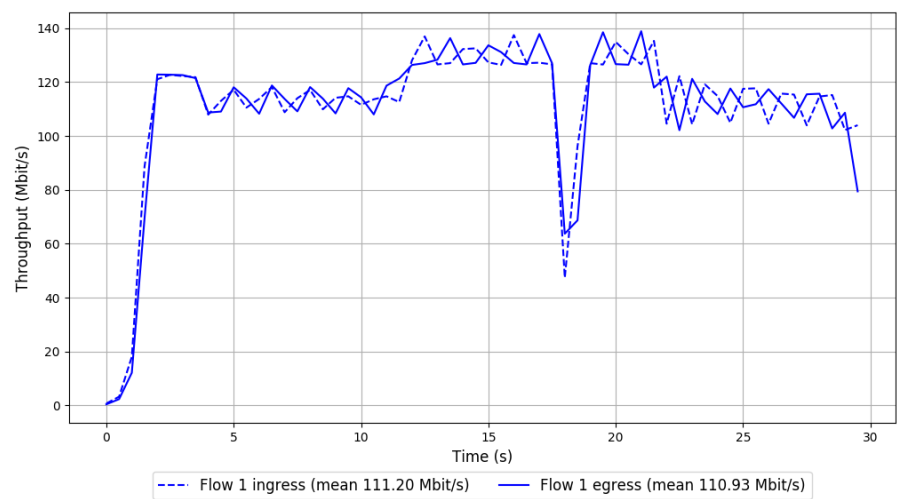
-- Flow 1:

Average throughput: 110.93 Mbit/s

95th percentile per-packet one-way delay: 113.138 ms

Loss rate: 0.75%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-11 09:05:17

End at: 2017-12-11 09:05:47

Below is generated by plot.py at 2017-12-11 11:00:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.39 Mbit/s

95th percentile per-packet one-way delay: 113.016 ms

Loss rate: 0.67%

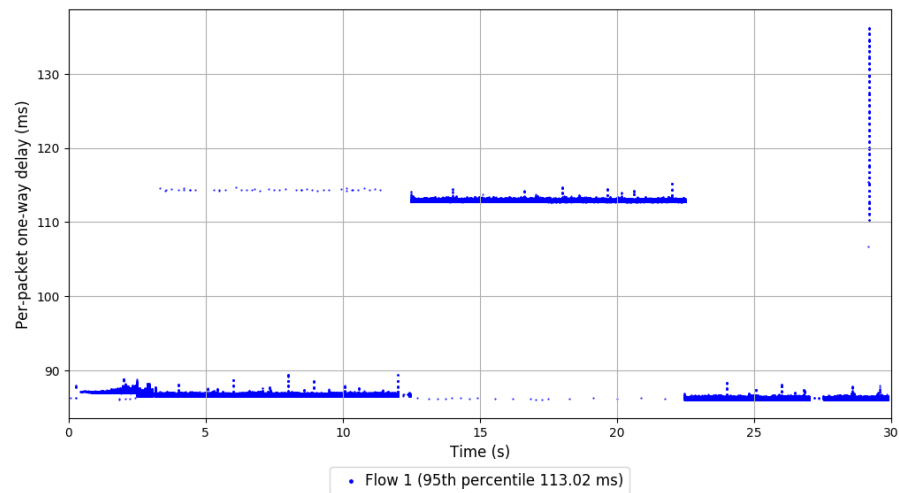
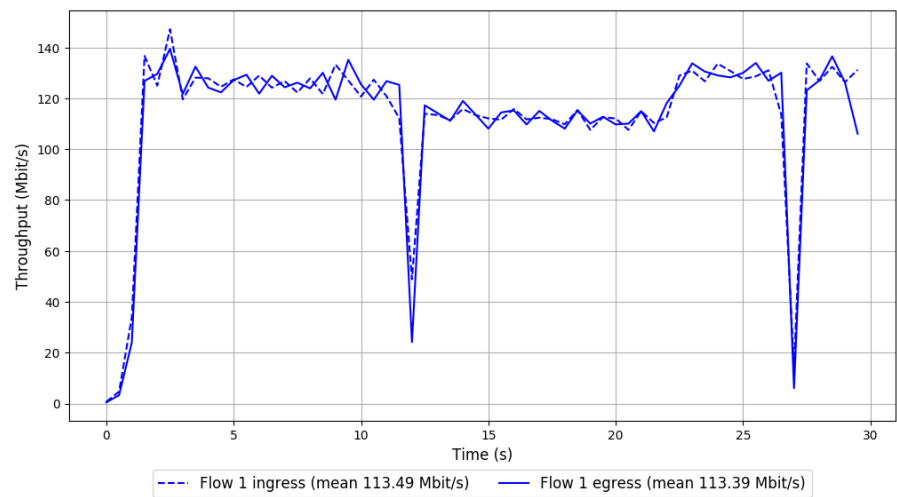
-- Flow 1:

Average throughput: 113.39 Mbit/s

95th percentile per-packet one-way delay: 113.016 ms

Loss rate: 0.67%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-11 07:22:44

End at: 2017-12-11 07:23:14

Below is generated by plot.py at 2017-12-11 11:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.19 Mbit/s

95th percentile per-packet one-way delay: 95.697 ms

Loss rate: 0.72%

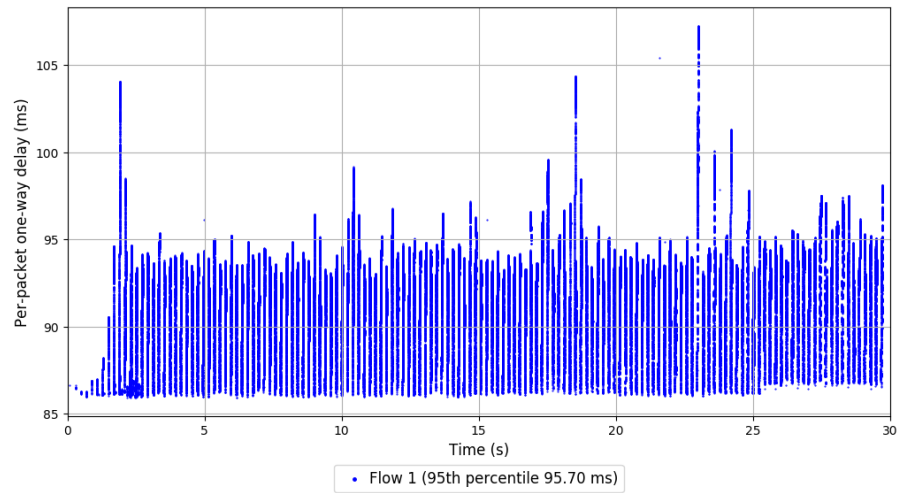
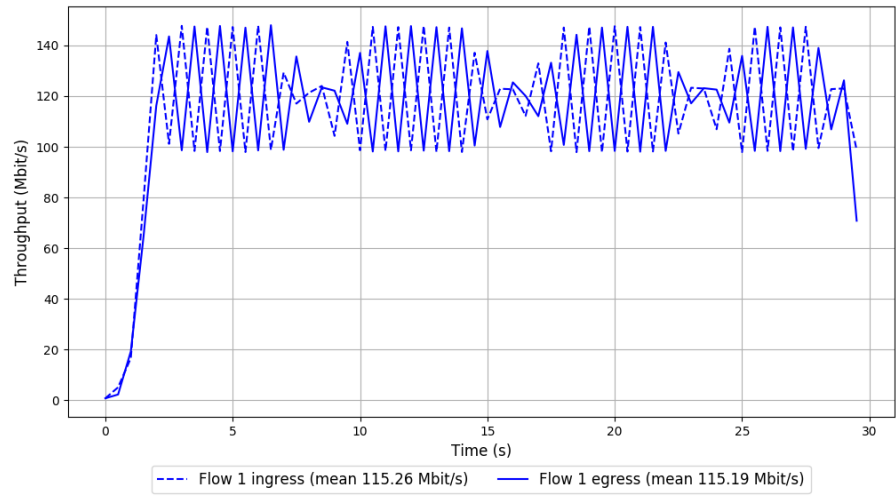
-- Flow 1:

Average throughput: 115.19 Mbit/s

95th percentile per-packet one-way delay: 95.697 ms

Loss rate: 0.72%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-11 07:33:57

End at: 2017-12-11 07:34:27

Below is generated by plot.py at 2017-12-11 11:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.30 Mbit/s

95th percentile per-packet one-way delay: 94.040 ms

Loss rate: 1.27%

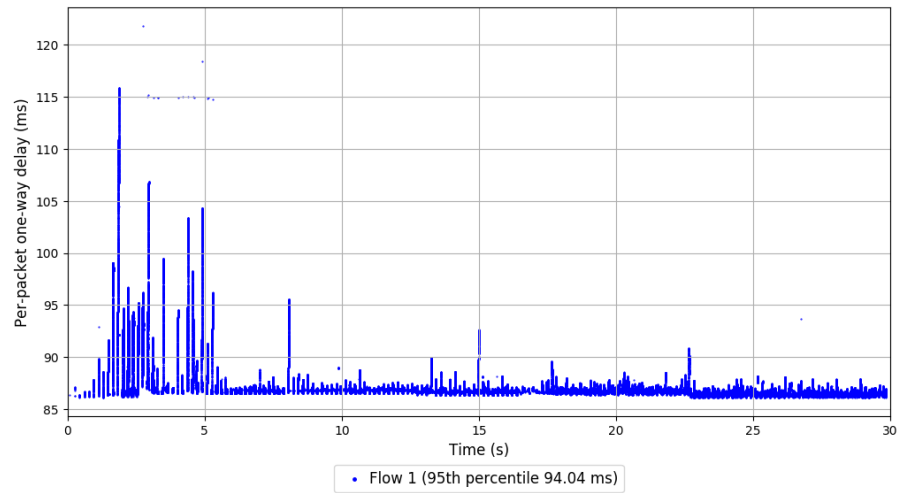
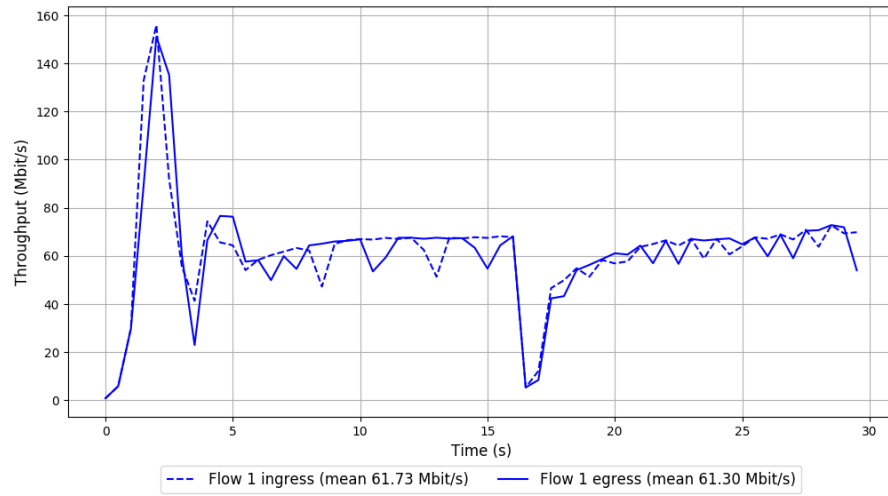
-- Flow 1:

Average throughput: 61.30 Mbit/s

95th percentile per-packet one-way delay: 94.040 ms

Loss rate: 1.27%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-11 07:45:02

End at: 2017-12-11 07:45:32

Below is generated by plot.py at 2017-12-11 11:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.71 Mbit/s

95th percentile per-packet one-way delay: 91.612 ms

Loss rate: 0.67%

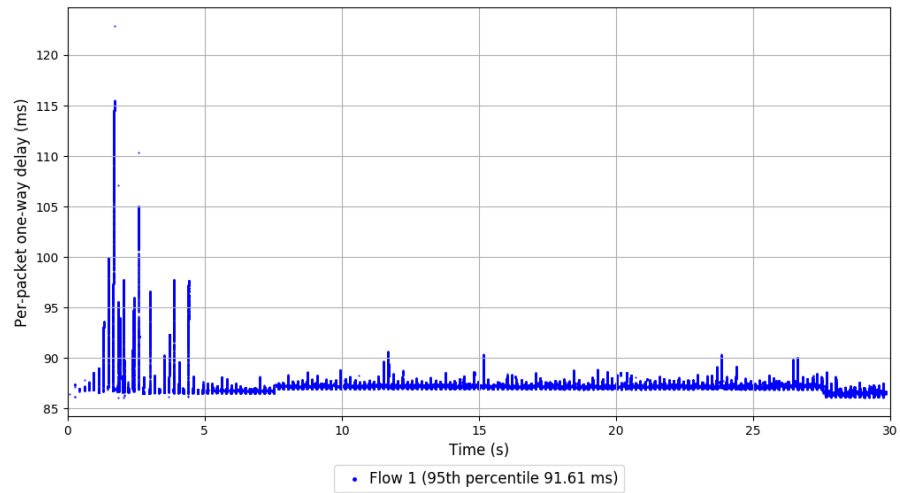
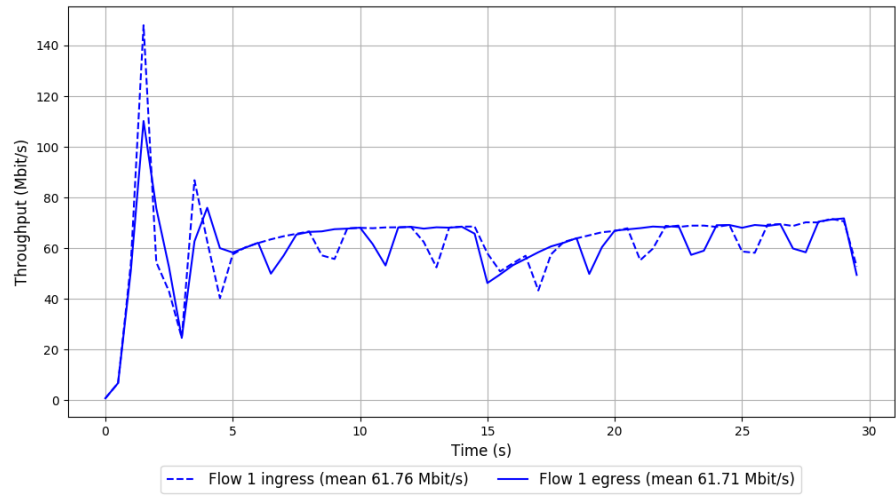
-- Flow 1:

Average throughput: 61.71 Mbit/s

95th percentile per-packet one-way delay: 91.612 ms

Loss rate: 0.67%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-11 07:55:51

End at: 2017-12-11 07:56:21

Below is generated by plot.py at 2017-12-11 11:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 99.43 Mbit/s

95th percentile per-packet one-way delay: 94.906 ms

Loss rate: 0.78%

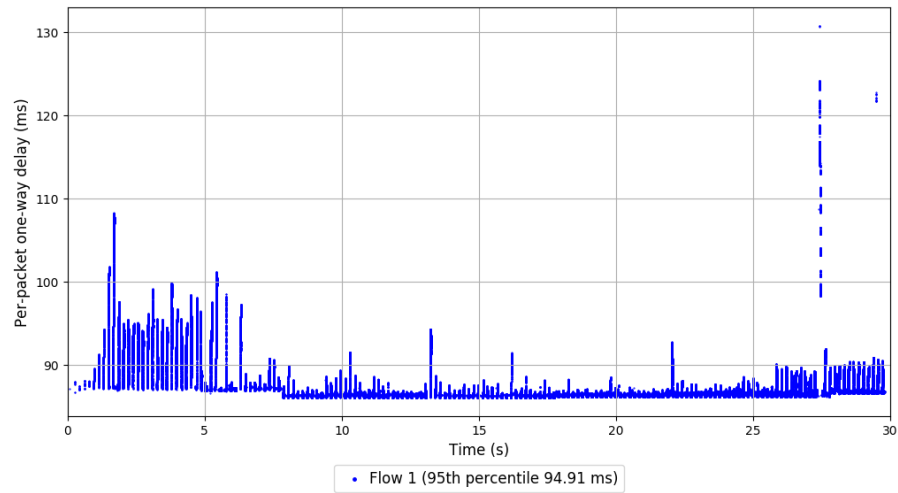
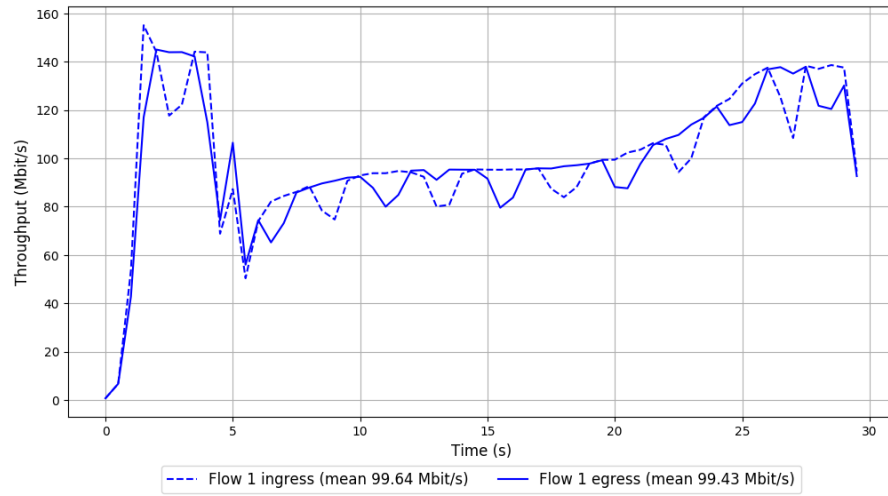
-- Flow 1:

Average throughput: 99.43 Mbit/s

95th percentile per-packet one-way delay: 94.906 ms

Loss rate: 0.78%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-11 08:06:56

End at: 2017-12-11 08:07:26

Below is generated by plot.py at 2017-12-11 11:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.10 Mbit/s

95th percentile per-packet one-way delay: 95.609 ms

Loss rate: 0.47%

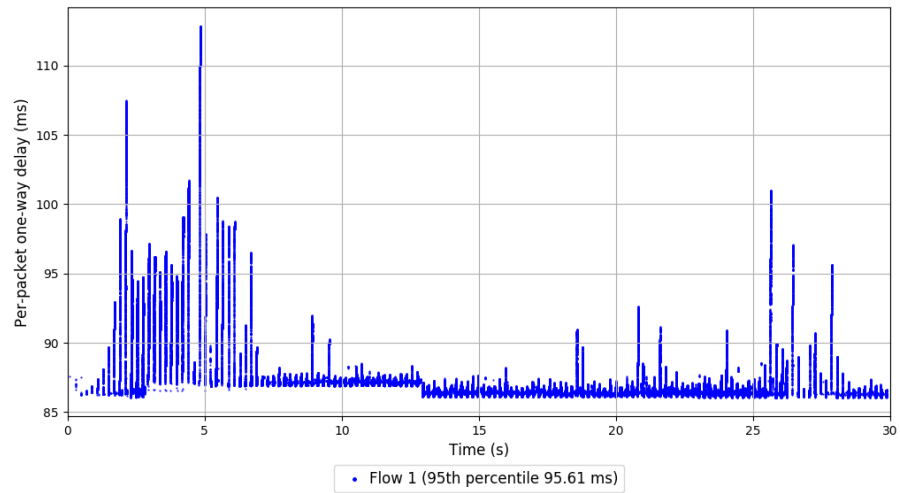
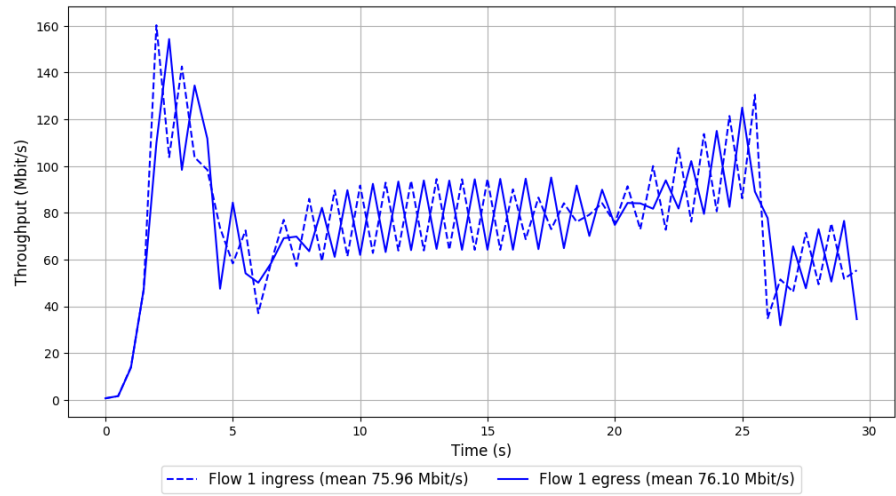
-- Flow 1:

Average throughput: 76.10 Mbit/s

95th percentile per-packet one-way delay: 95.609 ms

Loss rate: 0.47%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-11 08:18:18

End at: 2017-12-11 08:18:48

Below is generated by plot.py at 2017-12-11 11:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.66 Mbit/s

95th percentile per-packet one-way delay: 95.068 ms

Loss rate: 0.47%

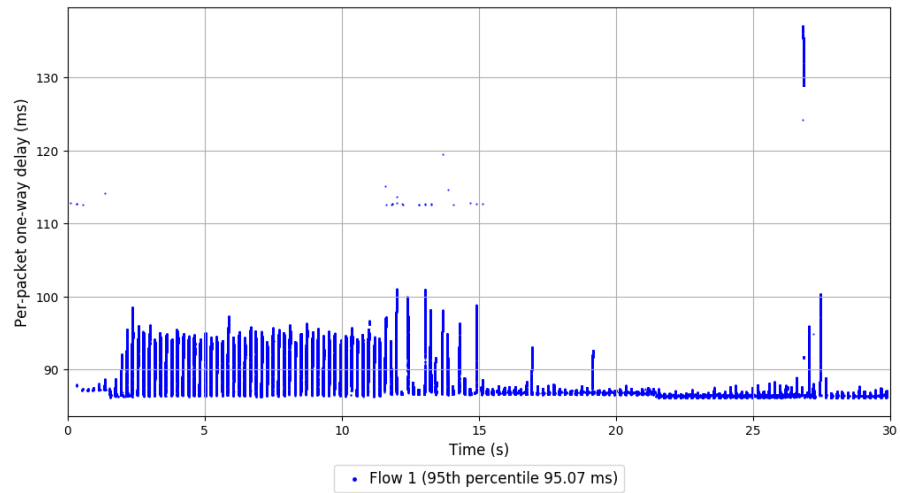
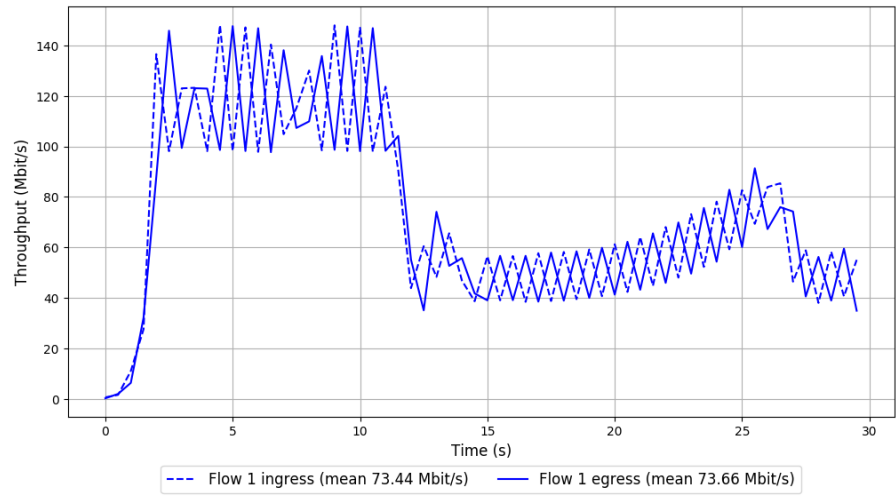
-- Flow 1:

Average throughput: 73.66 Mbit/s

95th percentile per-packet one-way delay: 95.068 ms

Loss rate: 0.47%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-11 08:29:13

End at: 2017-12-11 08:29:43

Below is generated by plot.py at 2017-12-11 11:01:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.74 Mbit/s

95th percentile per-packet one-way delay: 94.069 ms

Loss rate: 0.57%

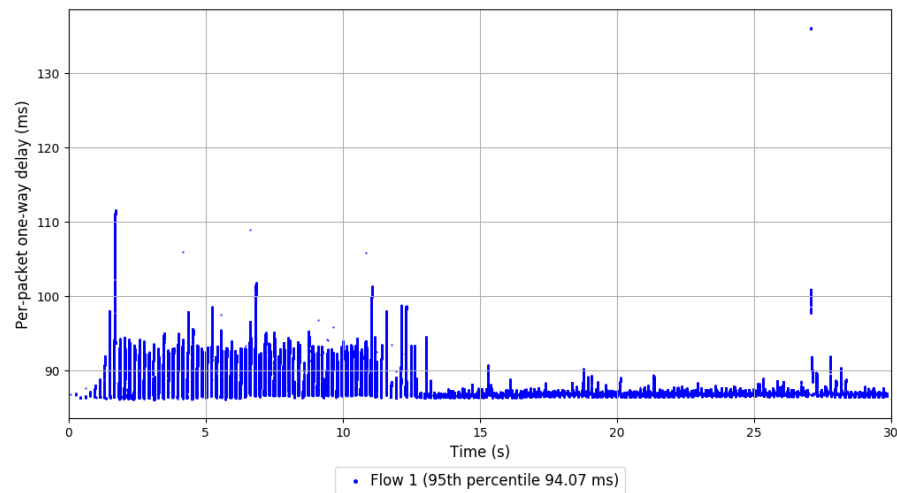
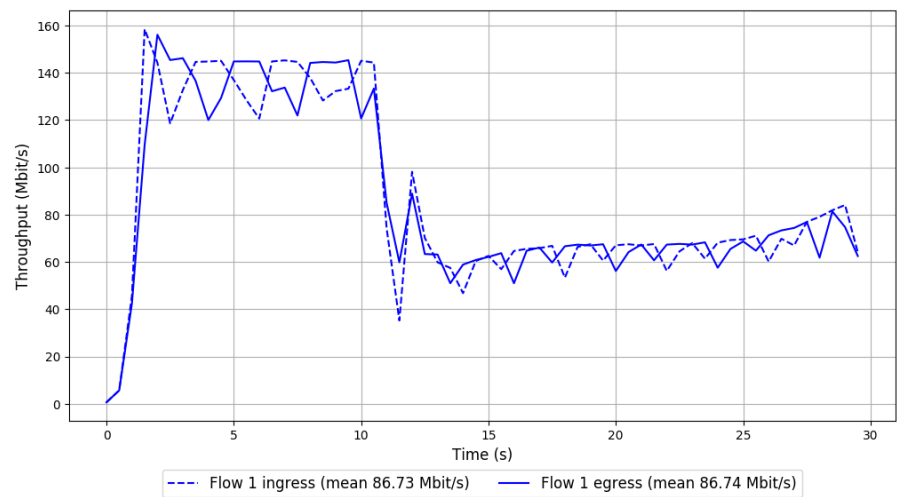
-- Flow 1:

Average throughput: 86.74 Mbit/s

95th percentile per-packet one-way delay: 94.069 ms

Loss rate: 0.57%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-11 08:39:55

End at: 2017-12-11 08:40:25

Below is generated by plot.py at 2017-12-11 11:01:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.77 Mbit/s

95th percentile per-packet one-way delay: 92.992 ms

Loss rate: 0.41%

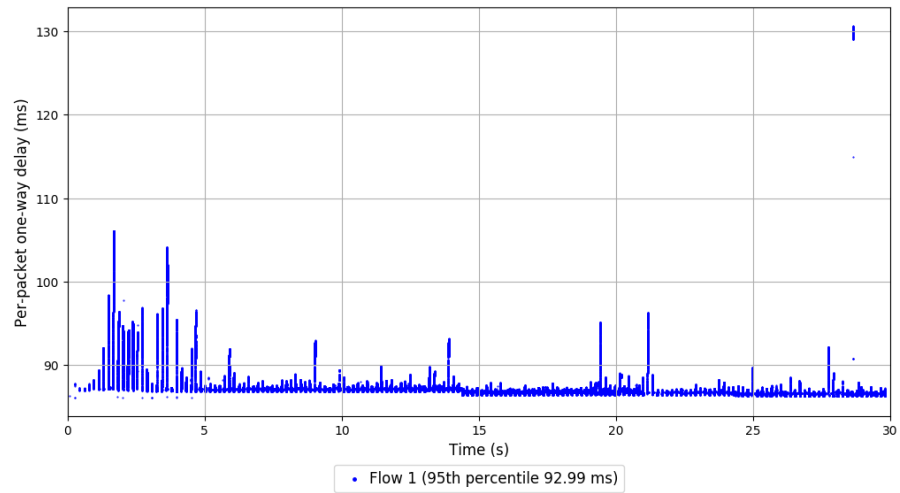
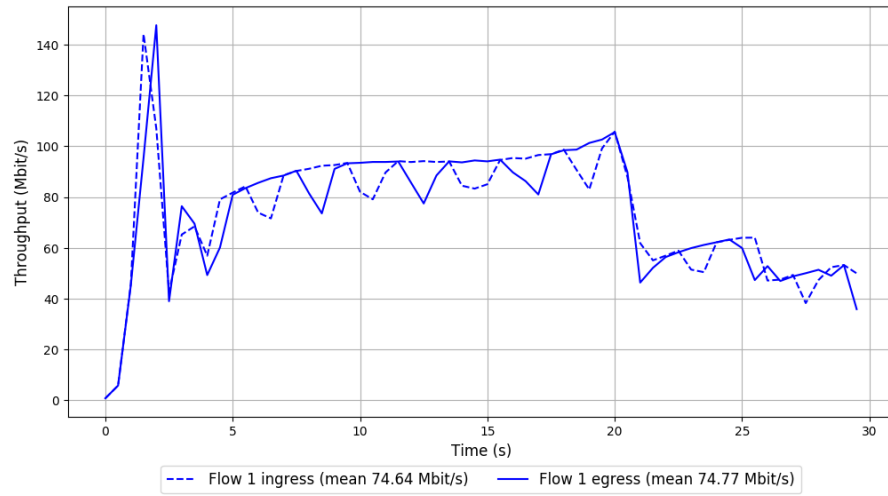
-- Flow 1:

Average throughput: 74.77 Mbit/s

95th percentile per-packet one-way delay: 92.992 ms

Loss rate: 0.41%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-11 08:50:44

End at: 2017-12-11 08:51:14

Below is generated by plot.py at 2017-12-11 11:01:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.91 Mbit/s

95th percentile per-packet one-way delay: 96.285 ms

Loss rate: 1.07%

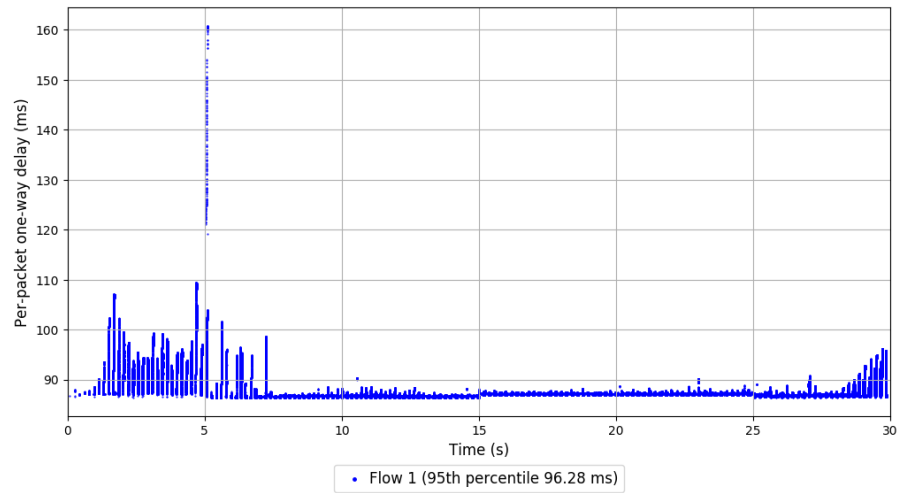
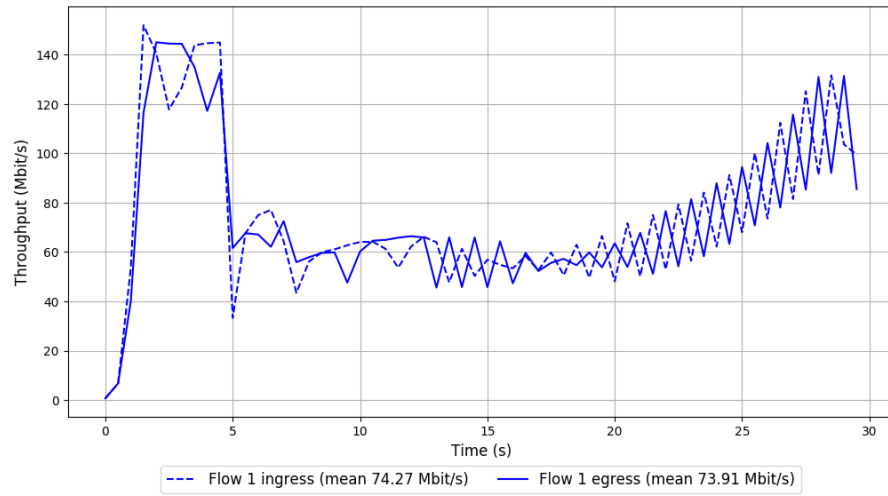
-- Flow 1:

Average throughput: 73.91 Mbit/s

95th percentile per-packet one-way delay: 96.285 ms

Loss rate: 1.07%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-11 09:01:31

End at: 2017-12-11 09:02:01

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.53 Mbit/s

95th percentile per-packet one-way delay: 94.737 ms

Loss rate: 1.22%

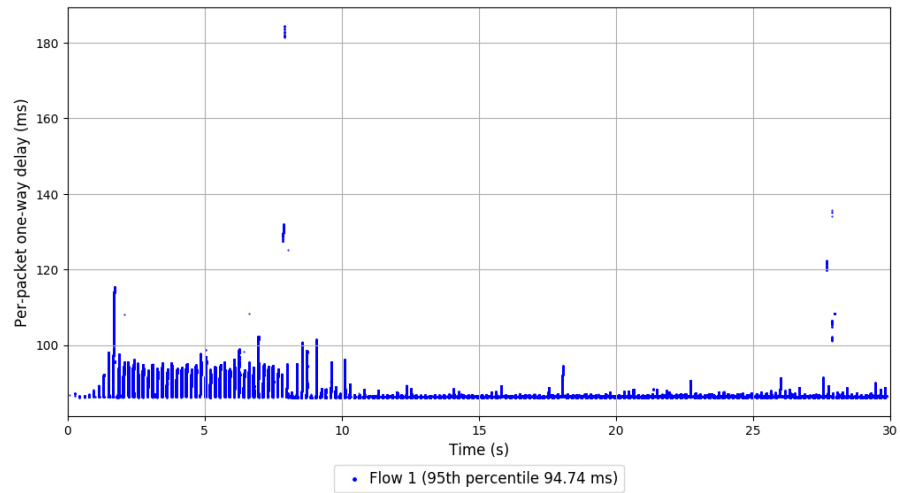
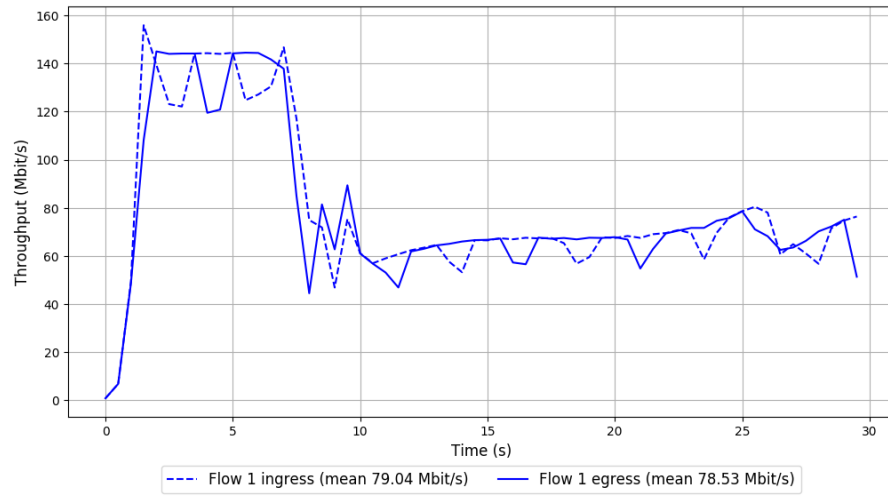
-- Flow 1:

Average throughput: 78.53 Mbit/s

95th percentile per-packet one-way delay: 94.737 ms

Loss rate: 1.22%

Run 10: Report of TCP Cubic — Data Link

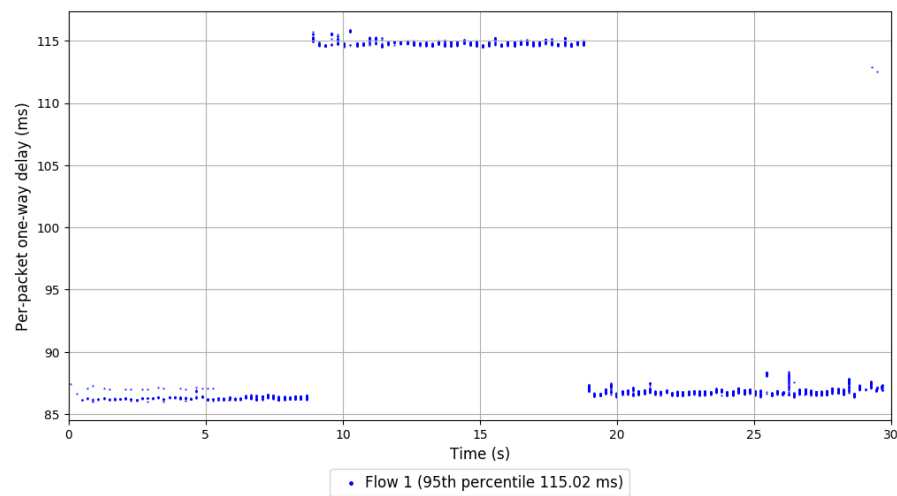
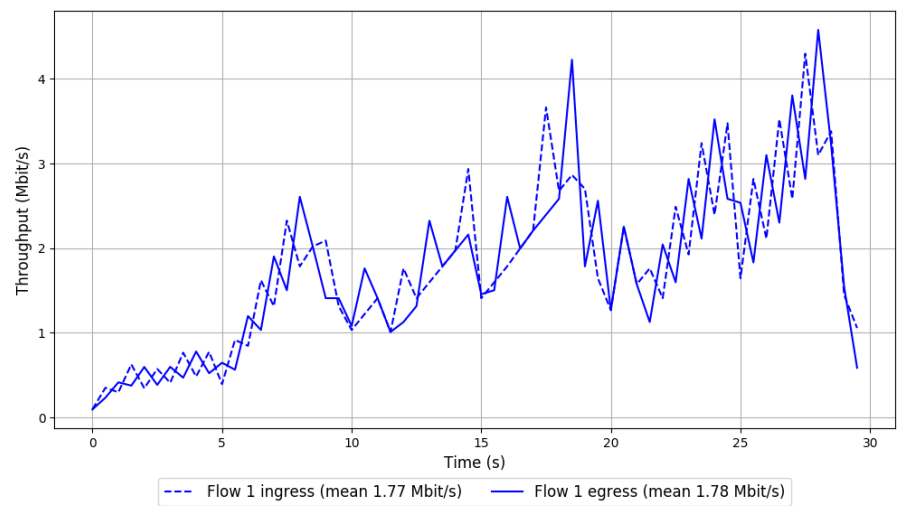


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-11 07:20:40
End at: 2017-12-11 07:21:10

# Below is generated by plot.py at 2017-12-11 11:02:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 115.024 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 115.024 ms
Loss rate: 0.51%
```


Run 1: Report of LEDBAT — Data Link

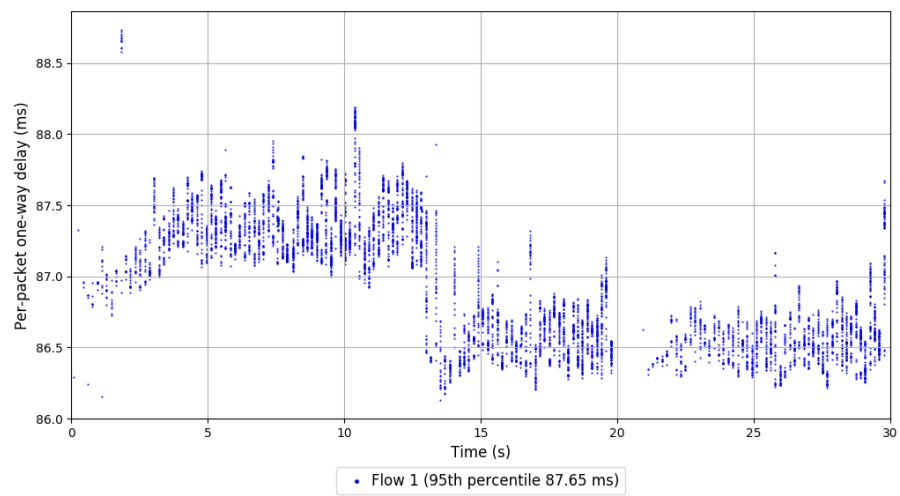
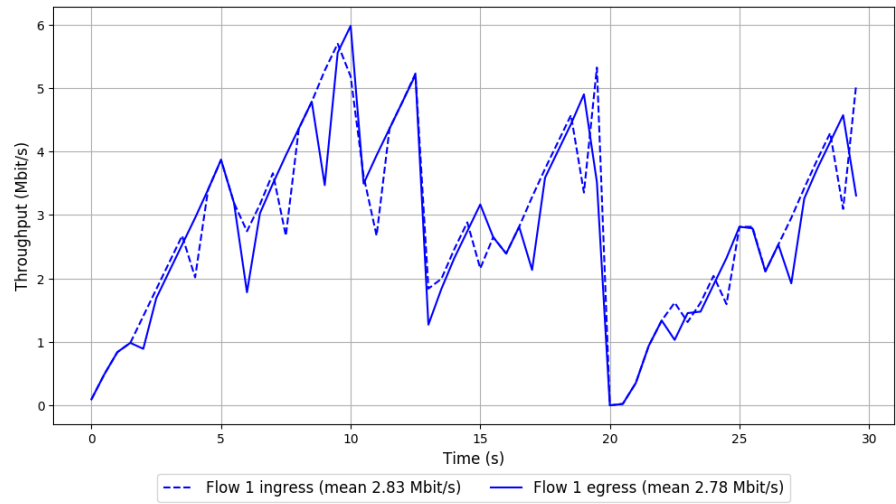


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-11 07:31:56
End at: 2017-12-11 07:32:26

# Below is generated by plot.py at 2017-12-11 11:02:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.78 Mbit/s
95th percentile per-packet one-way delay: 87.646 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 2.78 Mbit/s
95th percentile per-packet one-way delay: 87.646 ms
Loss rate: 2.14%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-11 07:42:56

End at: 2017-12-11 07:43:26

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 112.941 ms

Loss rate: 1.52%

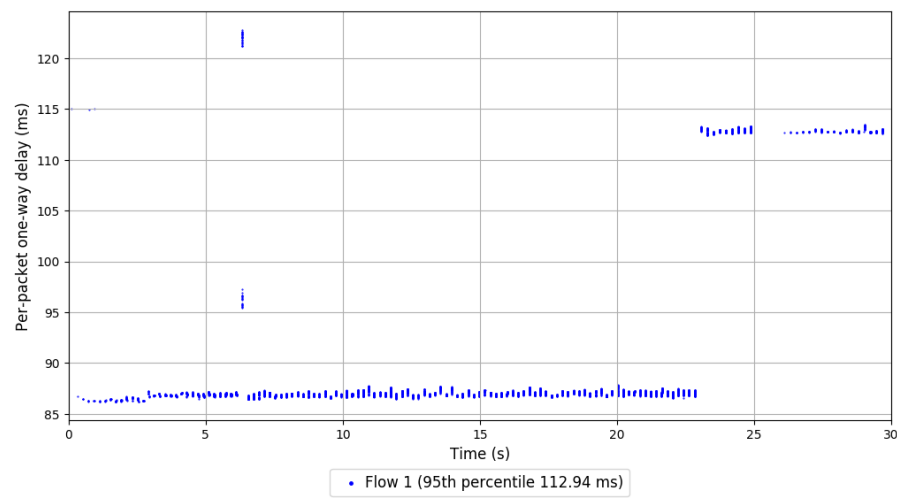
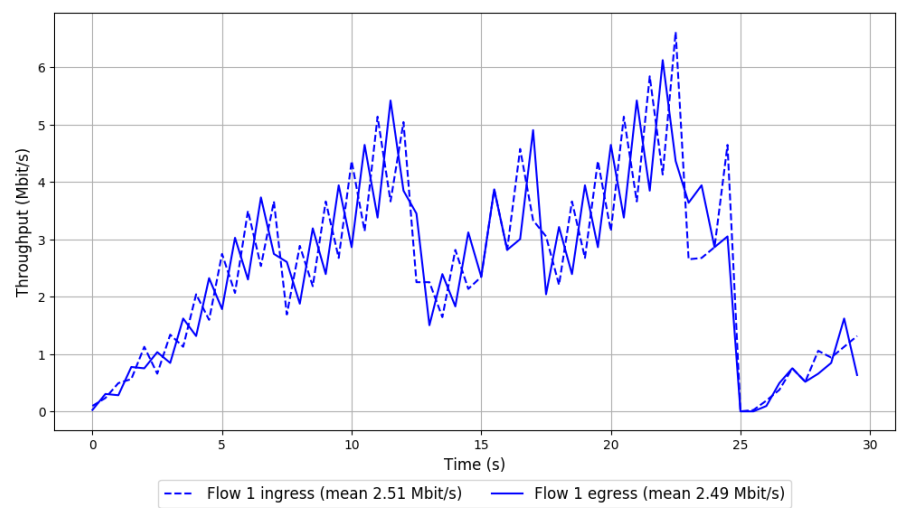
-- Flow 1:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 112.941 ms

Loss rate: 1.52%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-11 07:53:46

End at: 2017-12-11 07:54:16

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 87.060 ms

Loss rate: 0.71%

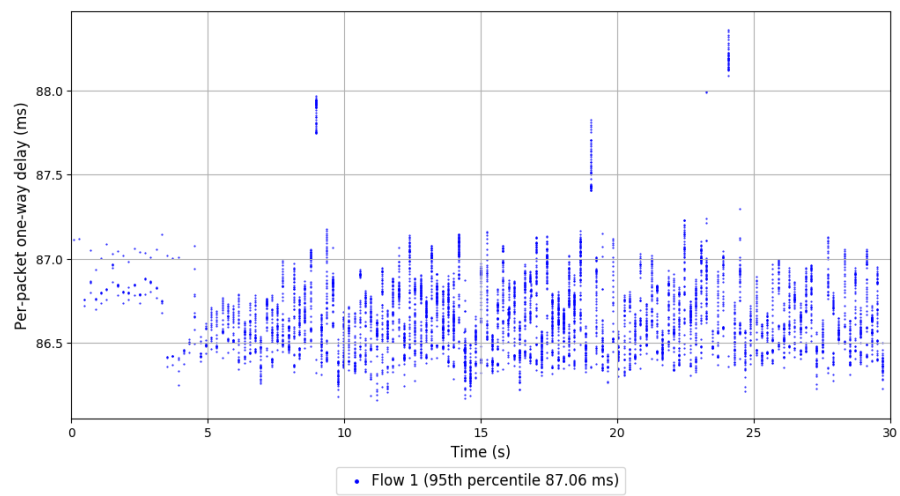
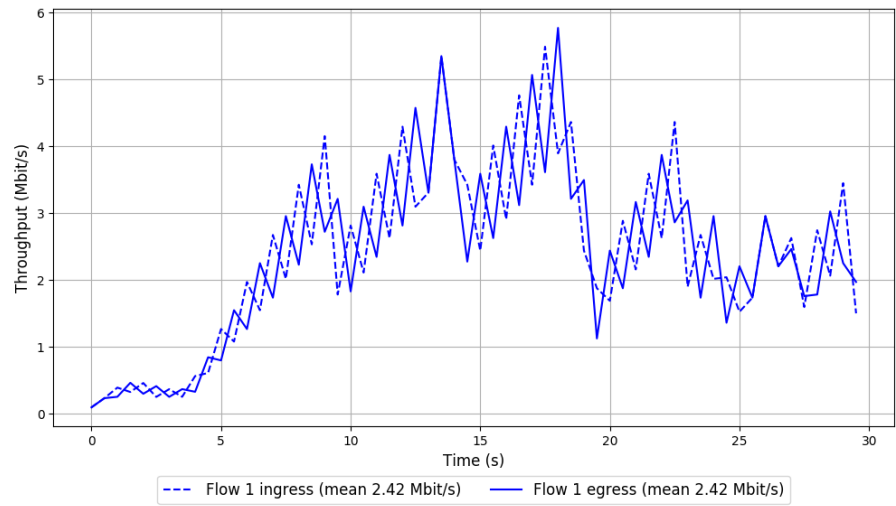
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 87.060 ms

Loss rate: 0.71%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-11 08:04:56

End at: 2017-12-11 08:05:26

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 87.671 ms

Loss rate: 1.19%

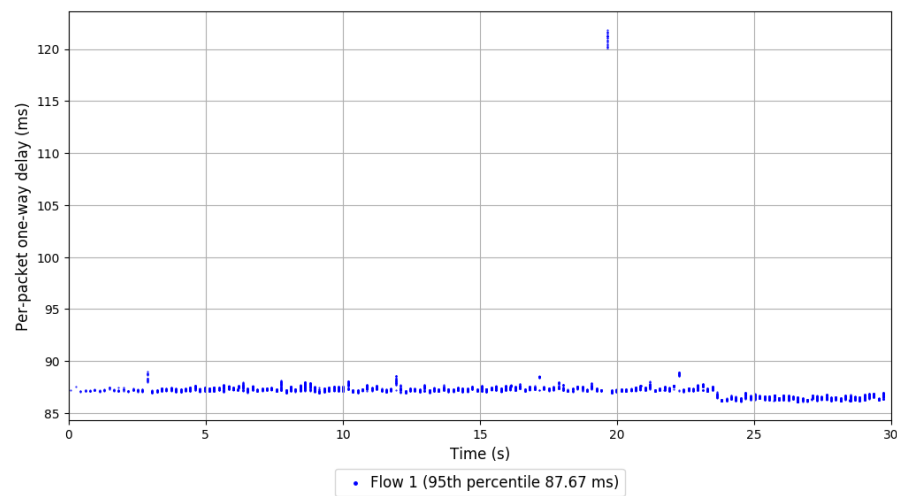
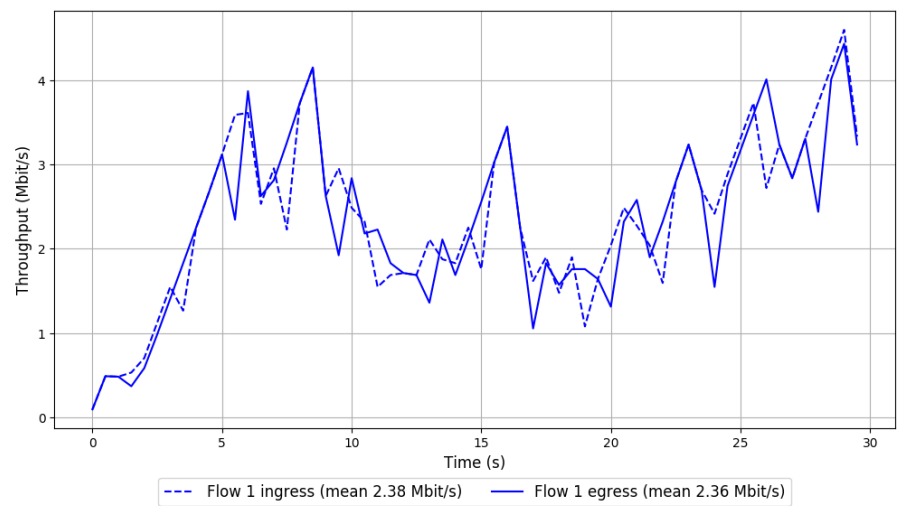
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 87.671 ms

Loss rate: 1.19%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-11 08:16:12

End at: 2017-12-11 08:16:42

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 87.866 ms

Loss rate: 1.40%

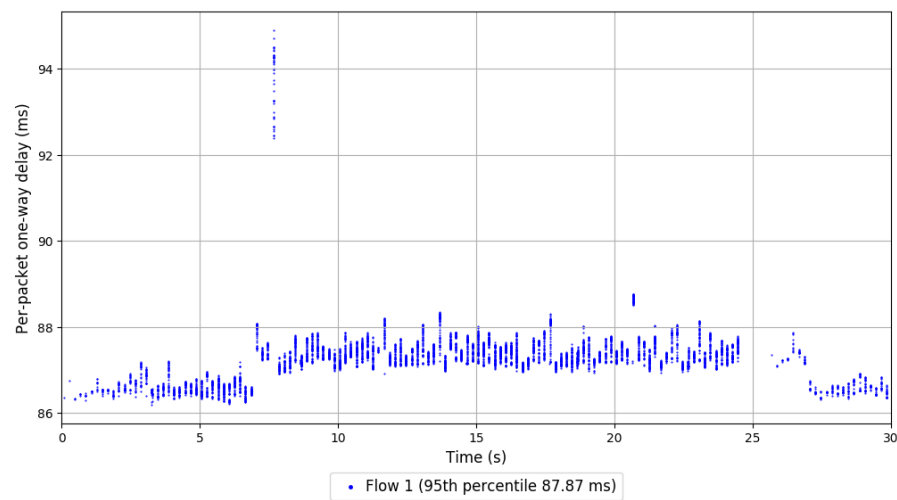
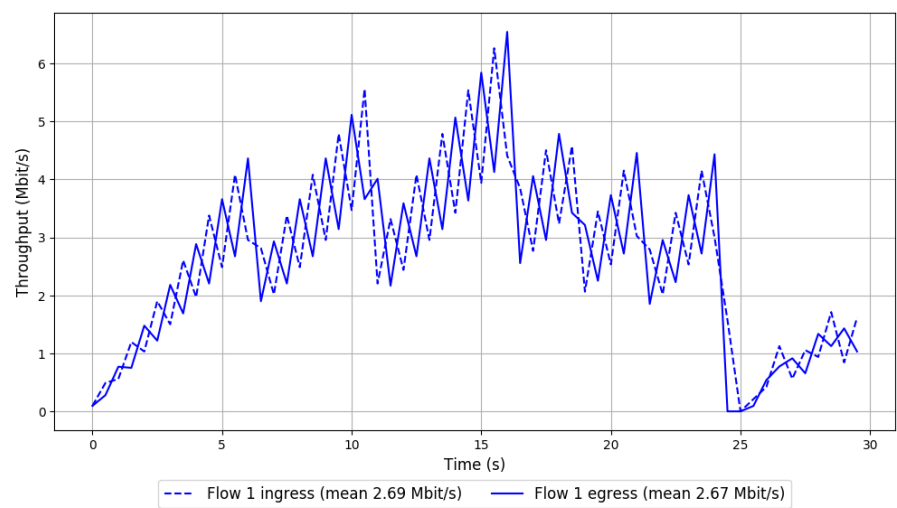
-- Flow 1:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 87.866 ms

Loss rate: 1.40%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-11 08:27:09

End at: 2017-12-11 08:27:39

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.37 Mbit/s

95th percentile per-packet one-way delay: 87.415 ms

Loss rate: 0.97%

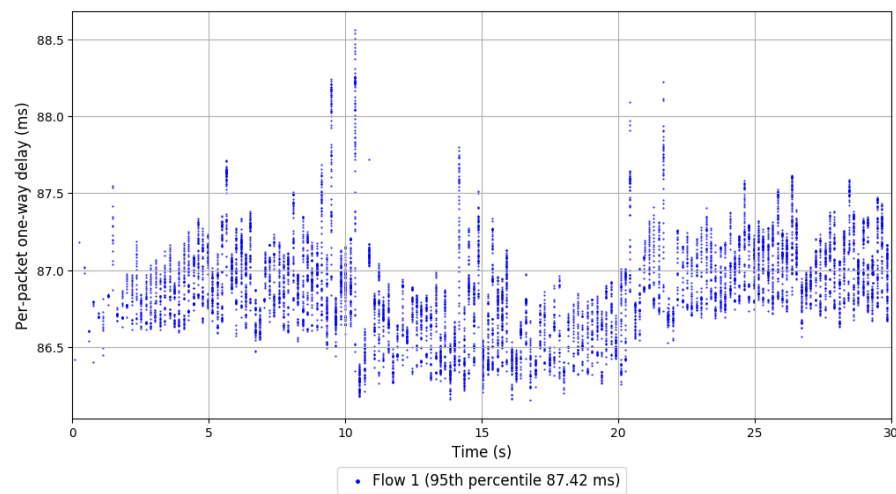
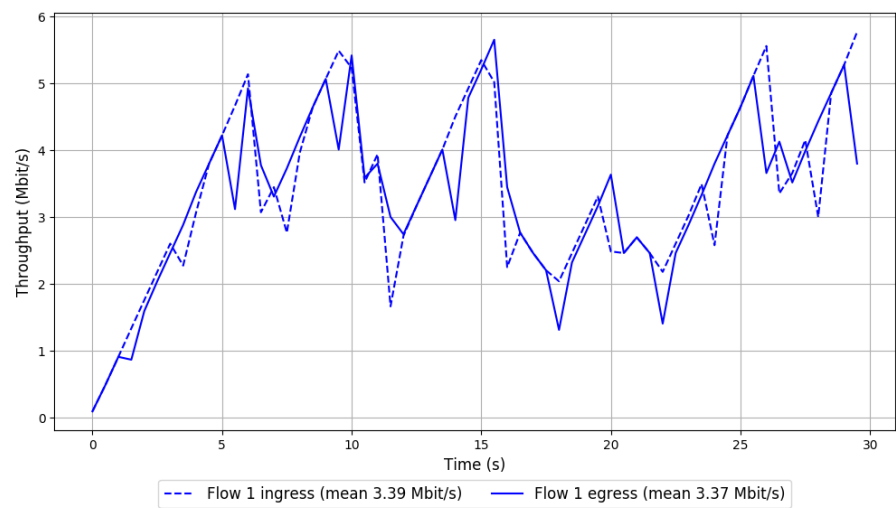
-- Flow 1:

Average throughput: 3.37 Mbit/s

95th percentile per-packet one-way delay: 87.415 ms

Loss rate: 0.97%

Run 7: Report of LEDBAT — Data Link

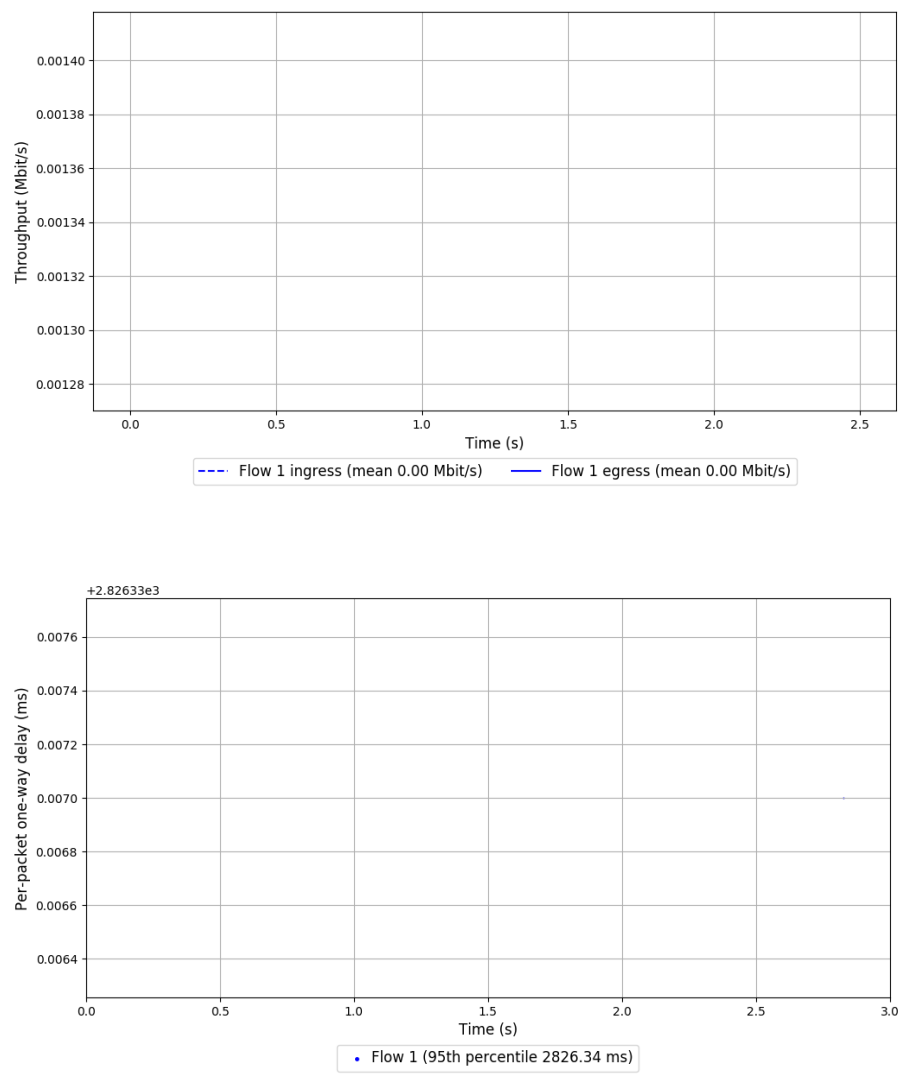


Run 8: Statistics of LEDBAT

Start at: 2017-12-11 08:37:52

End at: 2017-12-11 08:38:22

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-11 08:48:44

End at: 2017-12-11 08:49:14

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.30 Mbit/s

95th percentile per-packet one-way delay: 87.770 ms

Loss rate: 0.62%

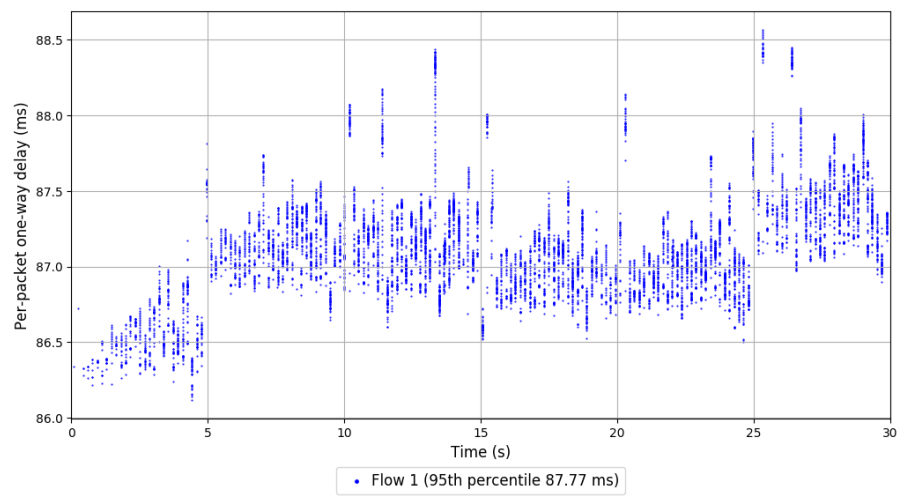
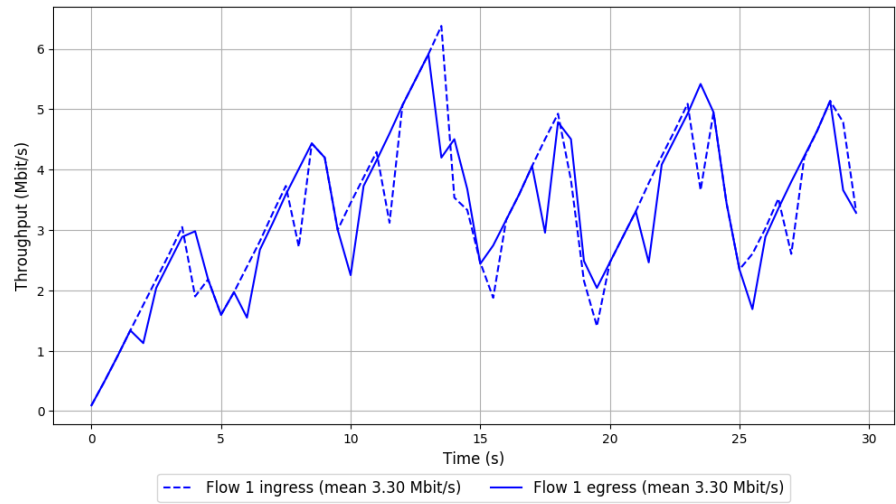
-- Flow 1:

Average throughput: 3.30 Mbit/s

95th percentile per-packet one-way delay: 87.770 ms

Loss rate: 0.62%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-11 08:59:32

End at: 2017-12-11 09:00:02

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 87.157 ms

Loss rate: 1.27%

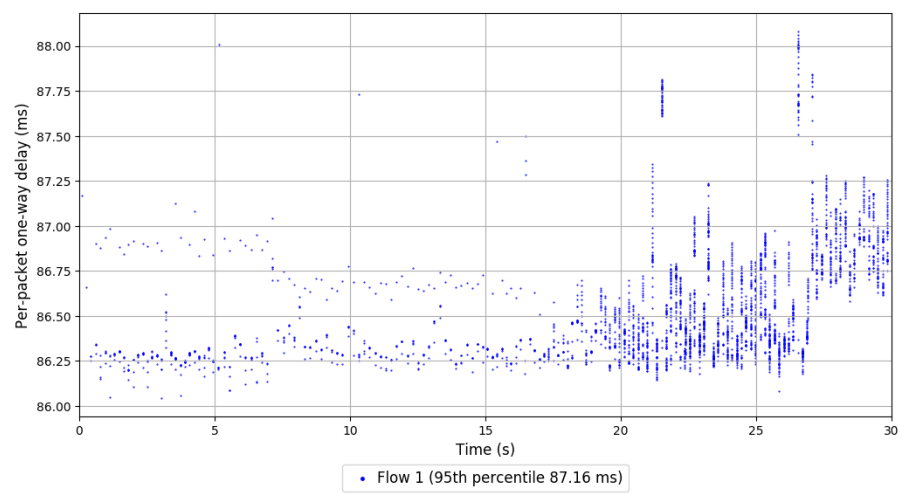
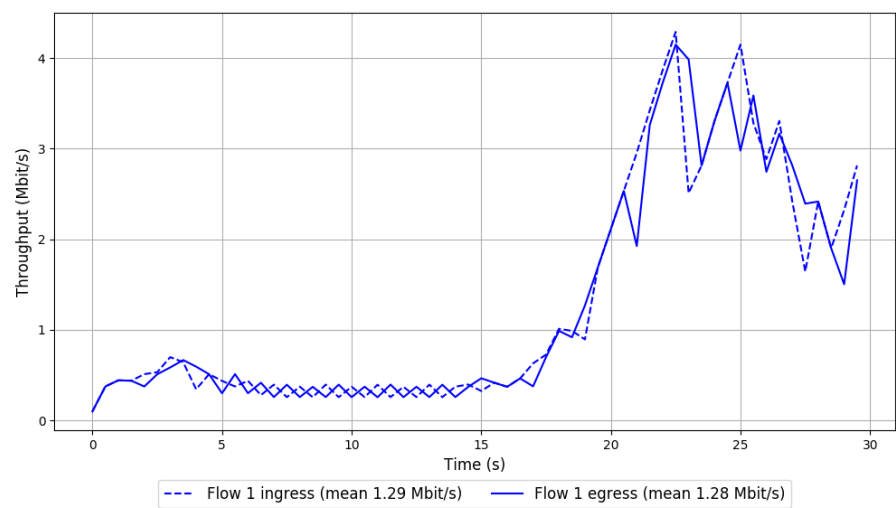
-- Flow 1:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 87.157 ms

Loss rate: 1.27%

Run 10: Report of LEDBAT — Data Link

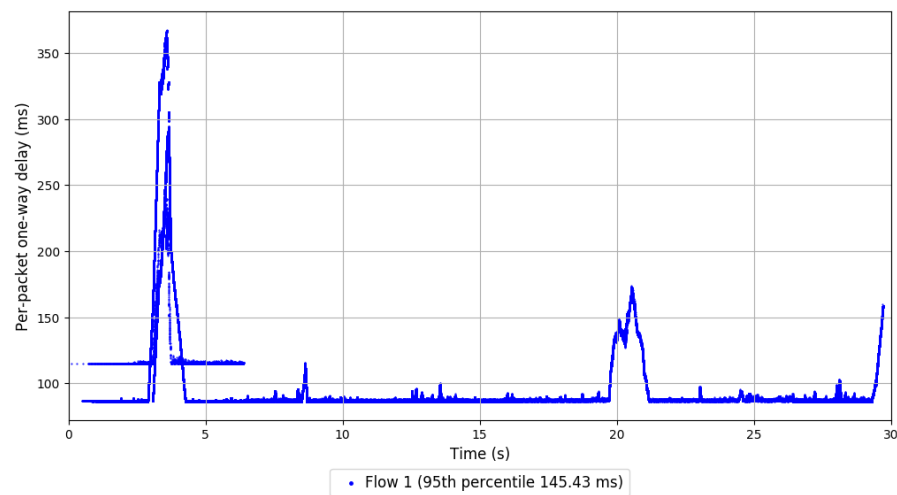
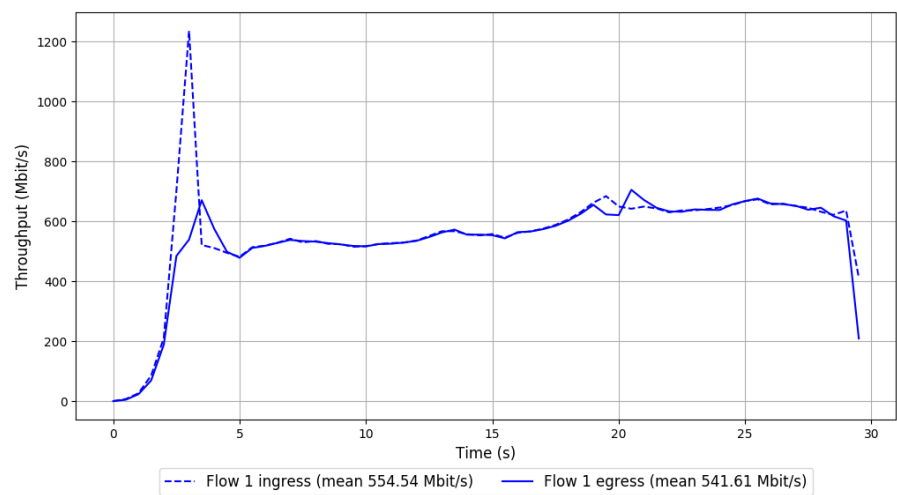


```
Run 1: Statistics of PCC

Start at: 2017-12-11 07:30:53
End at: 2017-12-11 07:31:23

# Below is generated by plot.py at 2017-12-11 11:11:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 541.61 Mbit/s
95th percentile per-packet one-way delay: 145.427 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 541.61 Mbit/s
95th percentile per-packet one-way delay: 145.427 ms
Loss rate: 3.07%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-11 07:41:52

End at: 2017-12-11 07:42:22

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 527.32 Mbit/s

95th percentile per-packet one-way delay: 171.924 ms

Loss rate: 4.07%

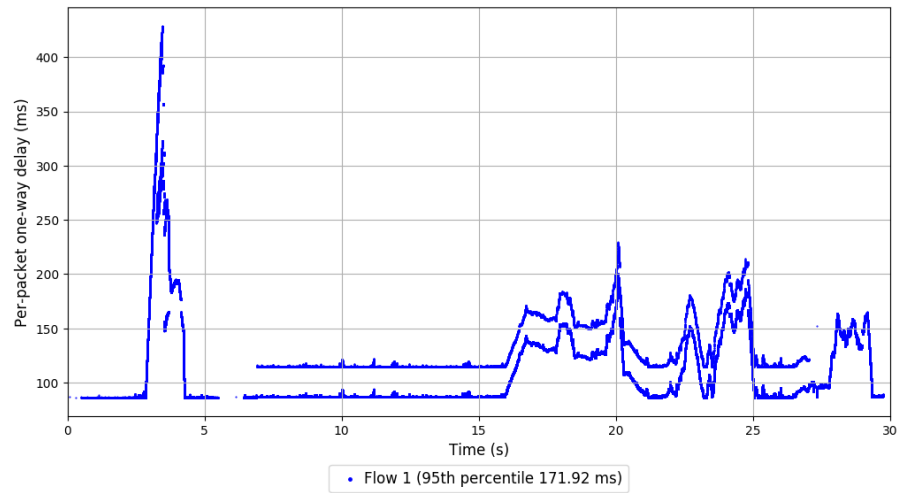
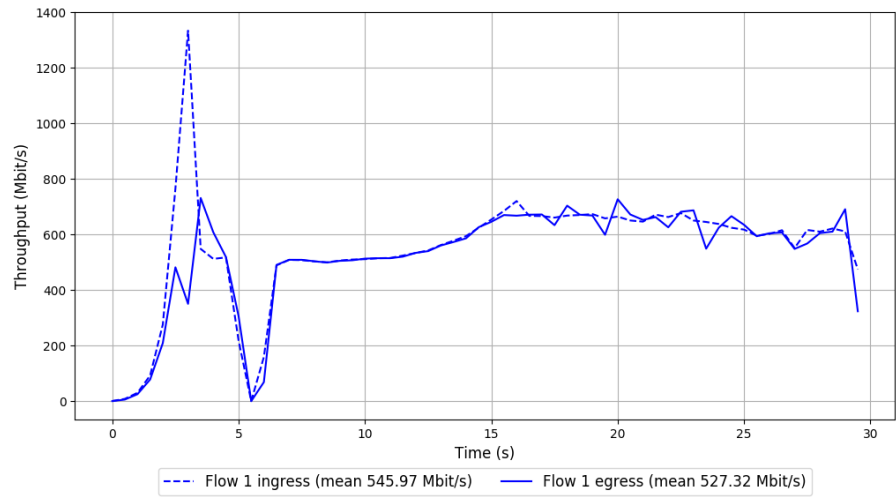
-- Flow 1:

Average throughput: 527.32 Mbit/s

95th percentile per-packet one-way delay: 171.924 ms

Loss rate: 4.07%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-11 07:52:42

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 523.95 Mbit/s

95th percentile per-packet one-way delay: 174.830 ms

Loss rate: 3.28%

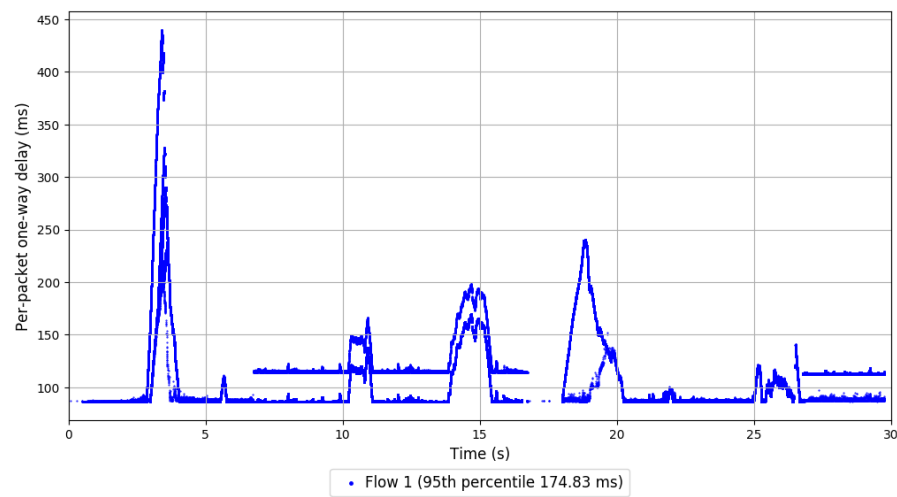
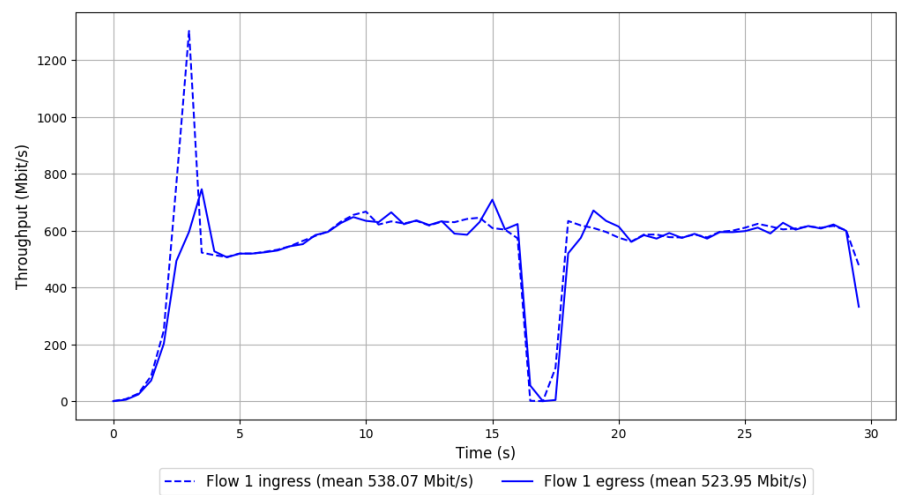
-- Flow 1:

Average throughput: 523.95 Mbit/s

95th percentile per-packet one-way delay: 174.830 ms

Loss rate: 3.28%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-11 08:03:52

End at: 2017-12-11 08:04:22

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 542.13 Mbit/s

95th percentile per-packet one-way delay: 116.042 ms

Loss rate: 2.63%

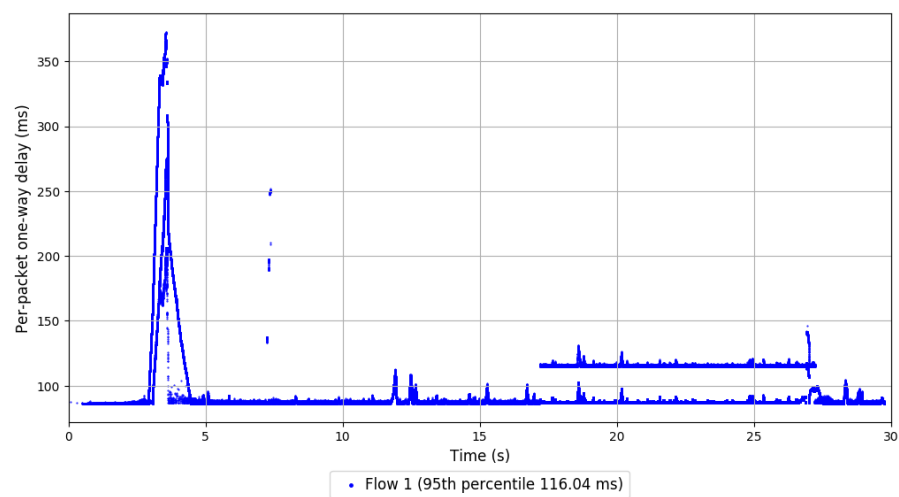
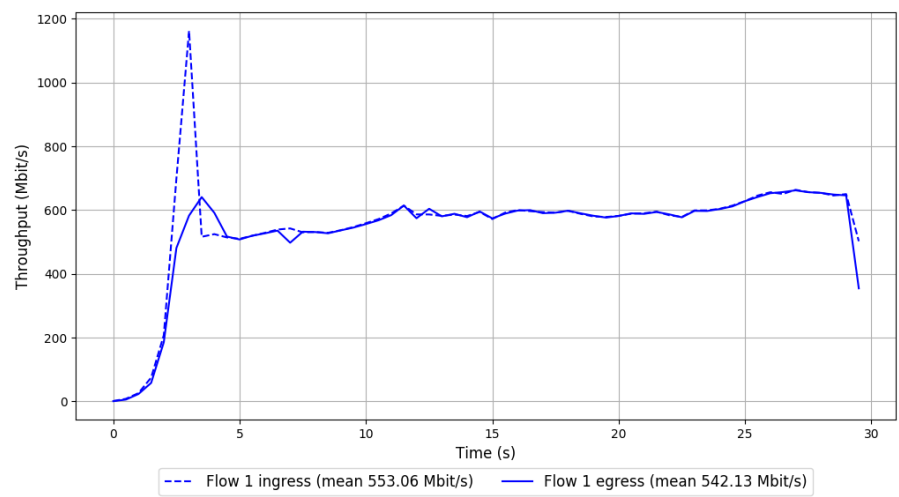
-- Flow 1:

Average throughput: 542.13 Mbit/s

95th percentile per-packet one-way delay: 116.042 ms

Loss rate: 2.63%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-11 08:15:07

End at: 2017-12-11 08:15:37

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 572.24 Mbit/s

95th percentile per-packet one-way delay: 219.921 ms

Loss rate: 3.80%

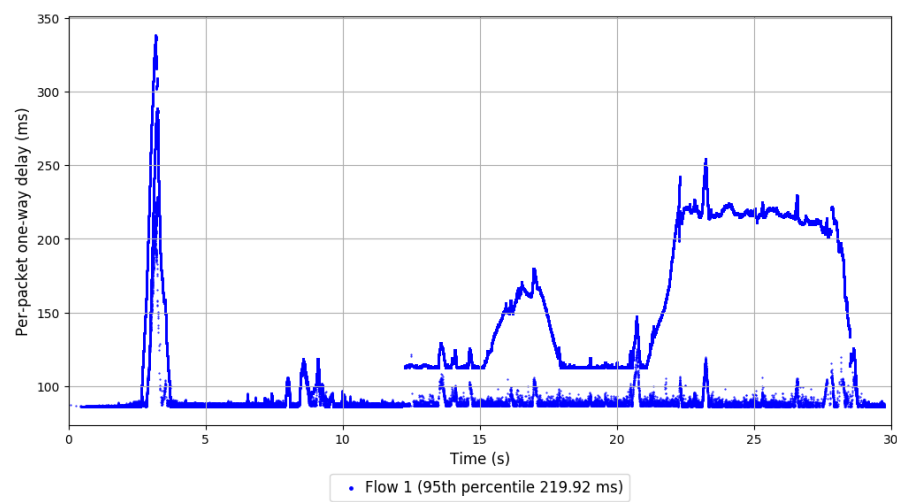
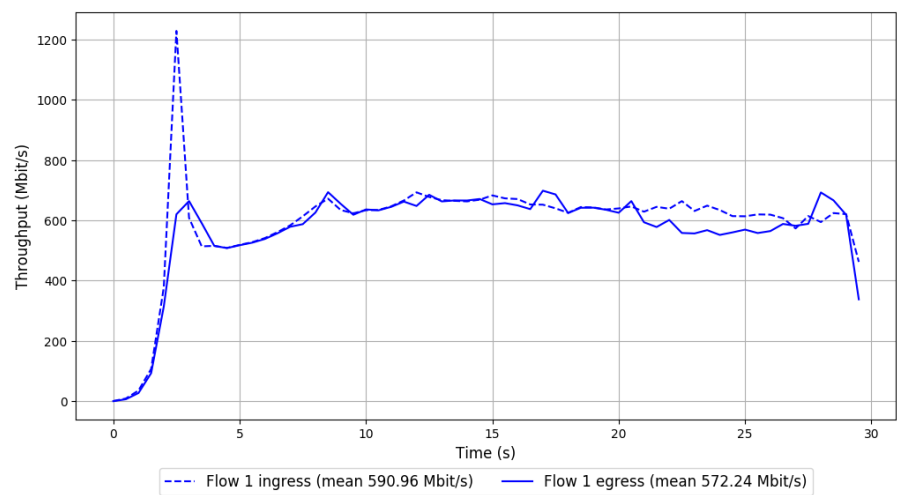
-- Flow 1:

Average throughput: 572.24 Mbit/s

95th percentile per-packet one-way delay: 219.921 ms

Loss rate: 3.80%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-11 08:26:06

End at: 2017-12-11 08:26:36

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 556.26 Mbit/s

95th percentile per-packet one-way delay: 215.564 ms

Loss rate: 2.79%

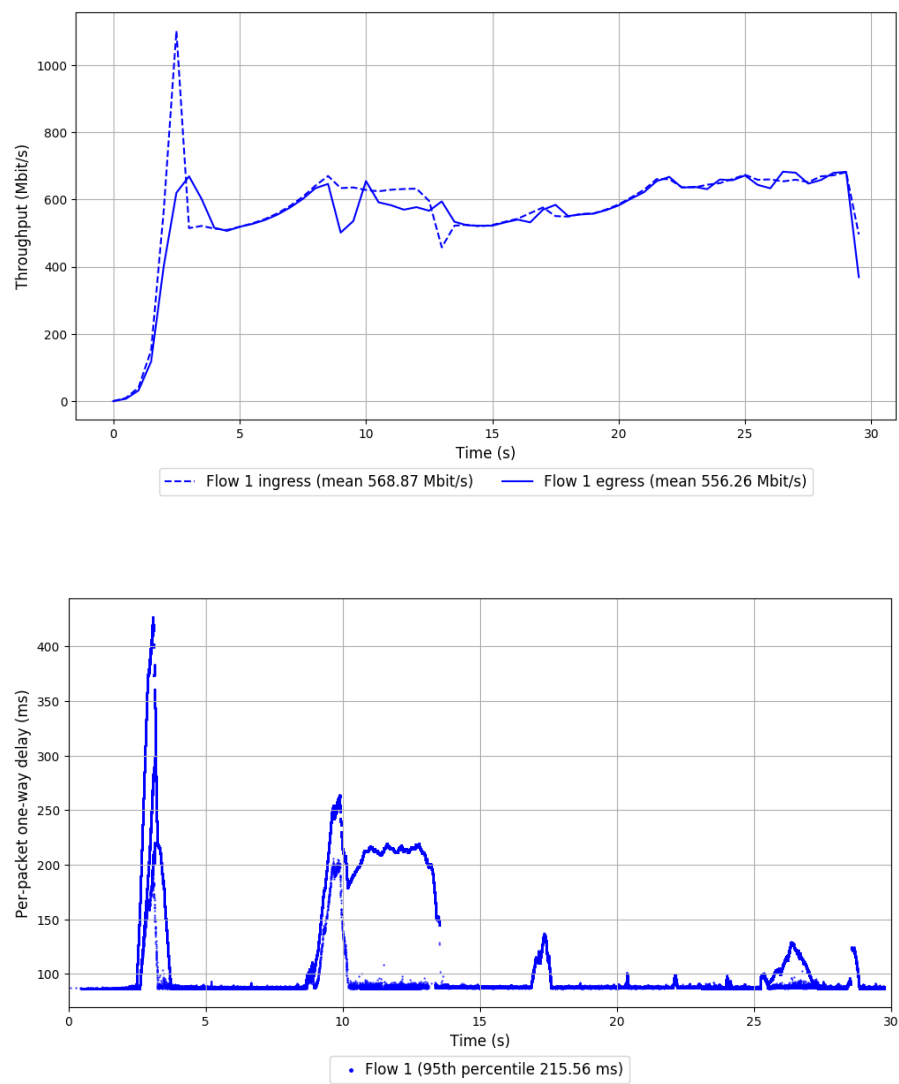
-- Flow 1:

Average throughput: 556.26 Mbit/s

95th percentile per-packet one-way delay: 215.564 ms

Loss rate: 2.79%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-11 08:37:03

End at: 2017-12-11 08:37:33

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.87 Mbit/s

95th percentile per-packet one-way delay: 124.041 ms

Loss rate: 2.16%

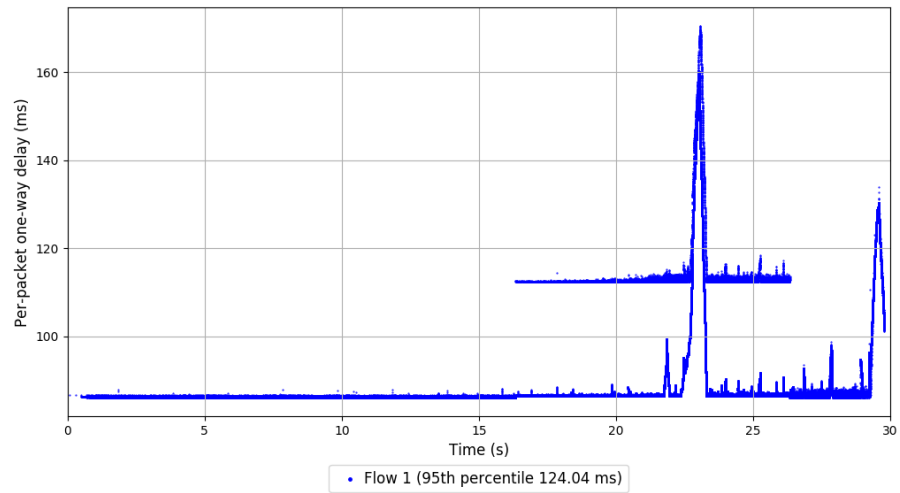
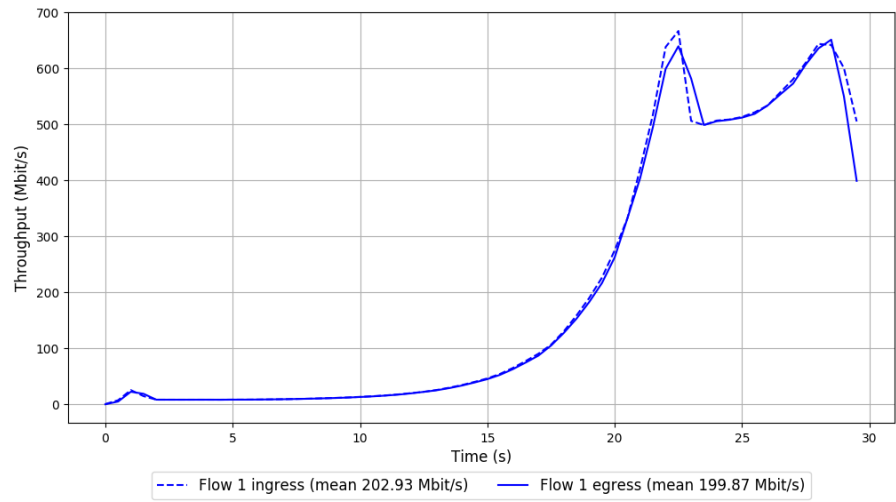
-- Flow 1:

Average throughput: 199.87 Mbit/s

95th percentile per-packet one-way delay: 124.041 ms

Loss rate: 2.16%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-11 08:47:41

End at: 2017-12-11 08:48:11

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 547.87 Mbit/s

95th percentile per-packet one-way delay: 215.264 ms

Loss rate: 3.63%

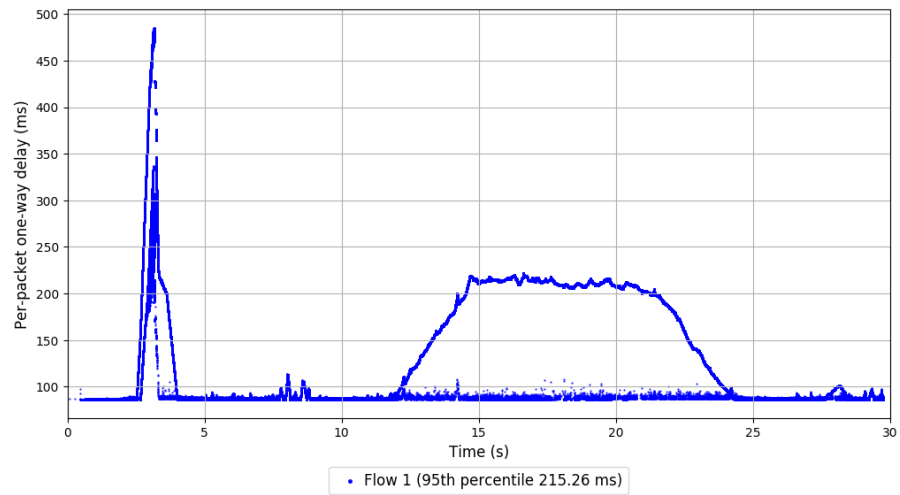
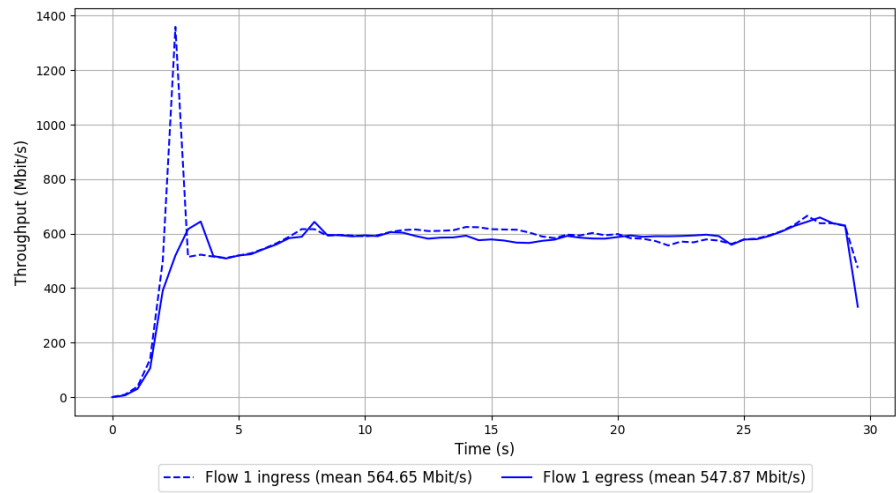
-- Flow 1:

Average throughput: 547.87 Mbit/s

95th percentile per-packet one-way delay: 215.264 ms

Loss rate: 3.63%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-11 08:58:27

End at: 2017-12-11 08:58:57

Below is generated by plot.py at 2017-12-11 11:17:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 566.84 Mbit/s

95th percentile per-packet one-way delay: 163.548 ms

Loss rate: 2.60%

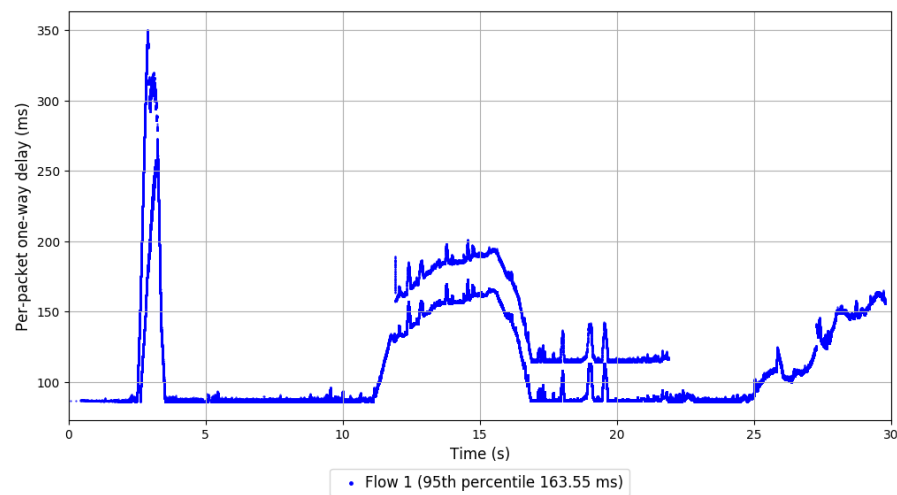
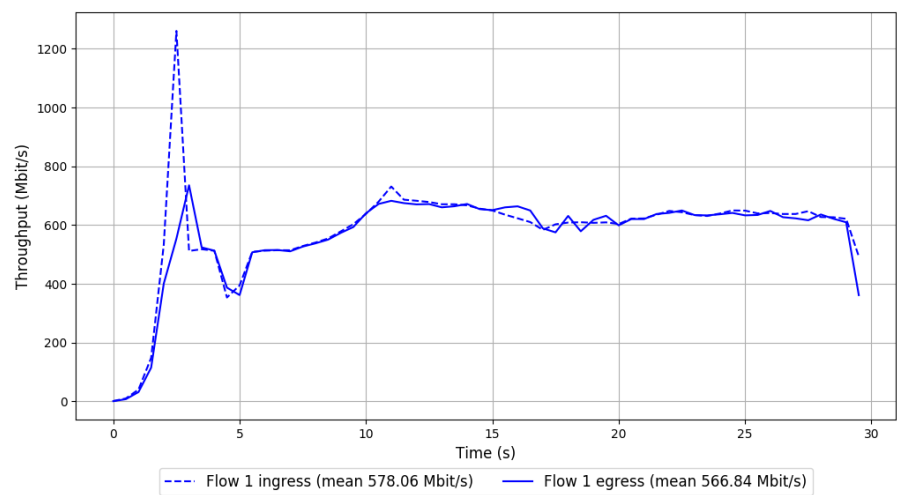
-- Flow 1:

Average throughput: 566.84 Mbit/s

95th percentile per-packet one-way delay: 163.548 ms

Loss rate: 2.60%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

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

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

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 517.43 Mbit/s

95th percentile per-packet one-way delay: 137.046 ms

Loss rate: 2.97%

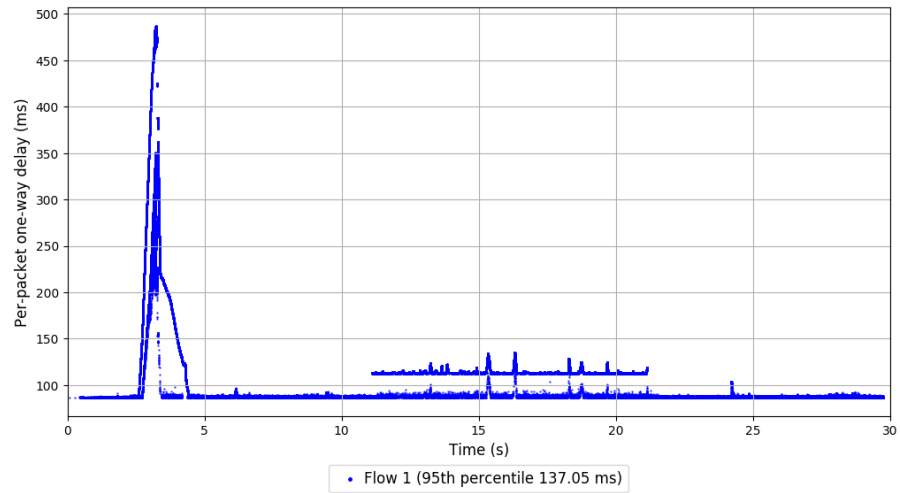
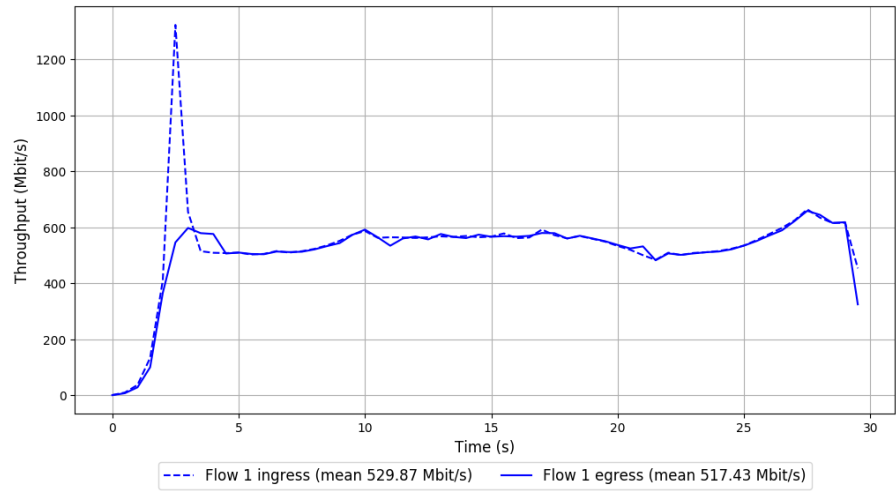
-- Flow 1:

Average throughput: 517.43 Mbit/s

95th percentile per-packet one-way delay: 137.046 ms

Loss rate: 2.97%

Run 10: Report of PCC — Data Link

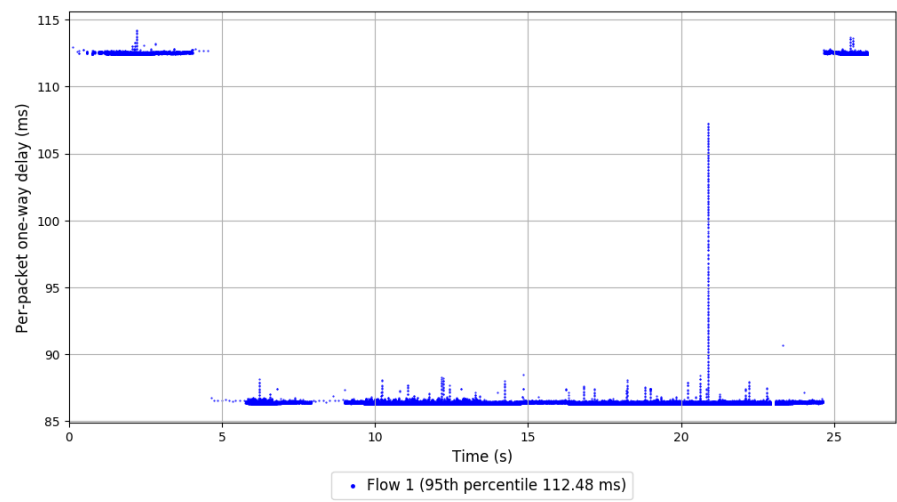
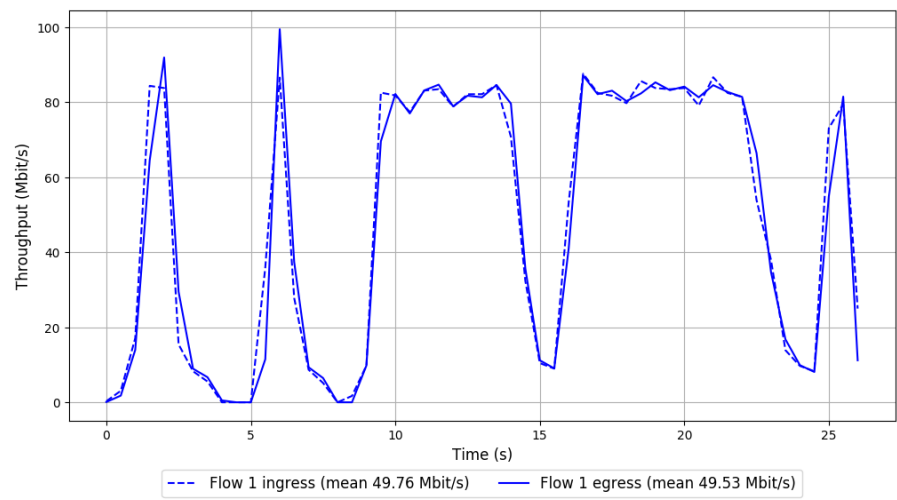


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-11 07:21:21
End at: 2017-12-11 07:21:51

# Below is generated by plot.py at 2017-12-11 11:20:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.53 Mbit/s
95th percentile per-packet one-way delay: 112.482 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 49.53 Mbit/s
95th percentile per-packet one-way delay: 112.482 ms
Loss rate: 1.22%
```


Run 1: Report of QUIC Cubic — Data Link

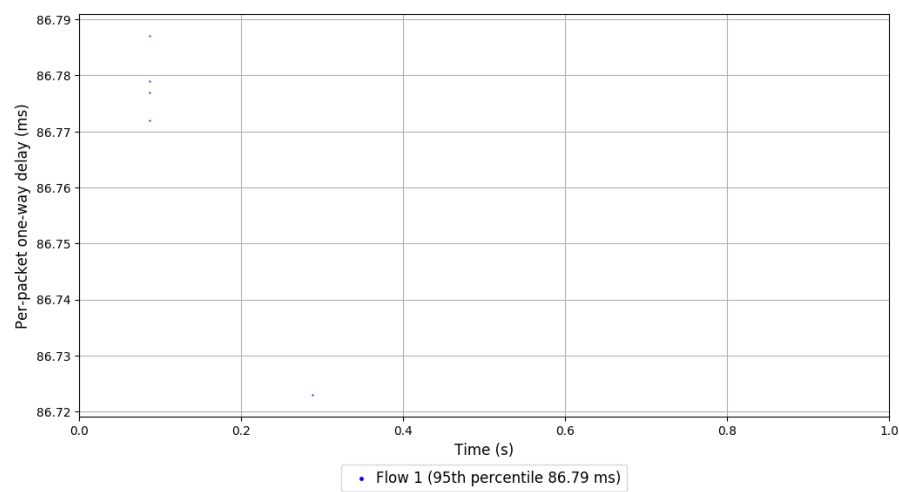
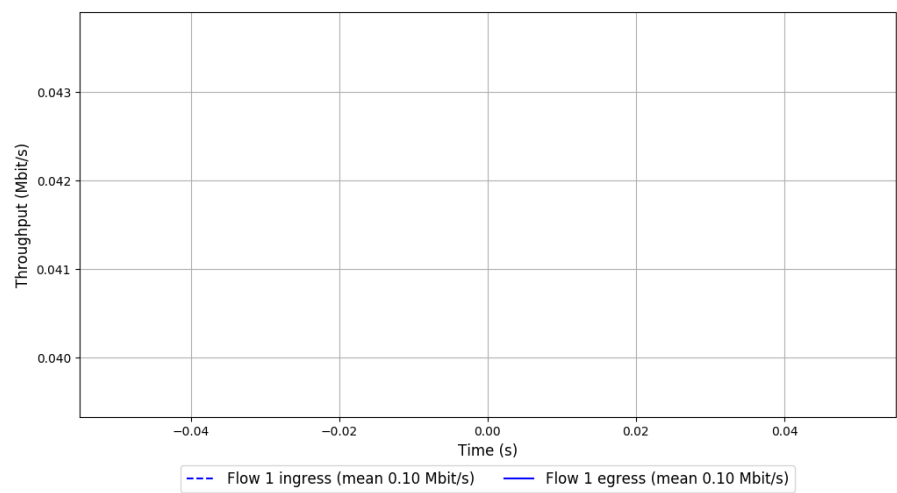


Run 2: Statistics of QUIC Cubic

Start at: 2017-12-11 07:32:37

End at: 2017-12-11 07:33:07

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-11 07:43:37

End at: 2017-12-11 07:44:07

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.69 Mbit/s

95th percentile per-packet one-way delay: 114.871 ms

Loss rate: 0.91%

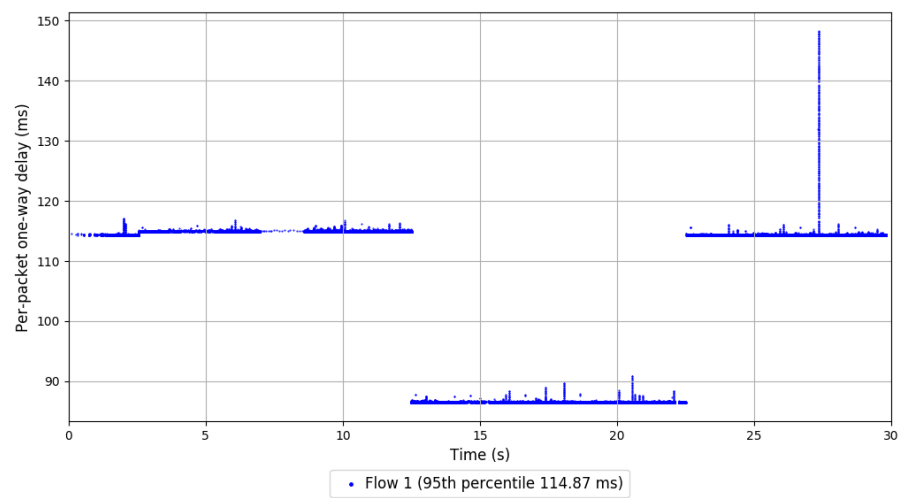
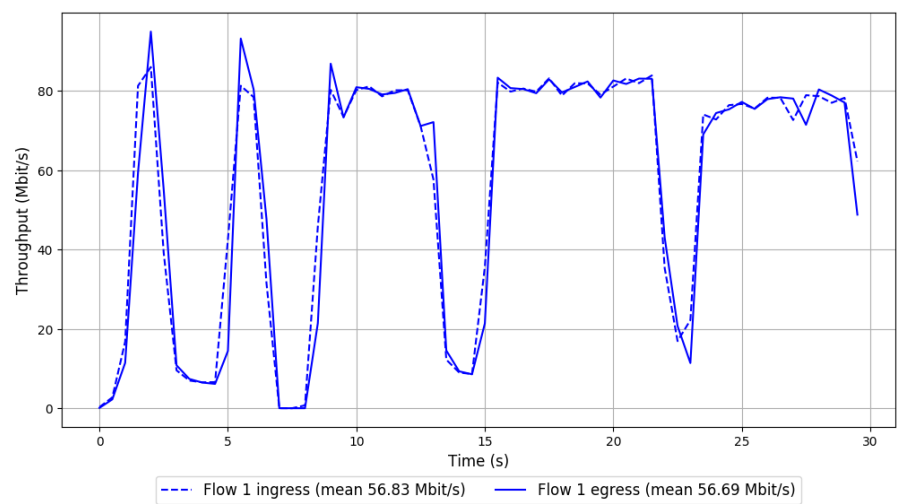
-- Flow 1:

Average throughput: 56.69 Mbit/s

95th percentile per-packet one-way delay: 114.871 ms

Loss rate: 0.91%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-11 07:54:26

End at: 2017-12-11 07:54:56

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.76 Mbit/s

95th percentile per-packet one-way delay: 112.725 ms

Loss rate: 1.00%

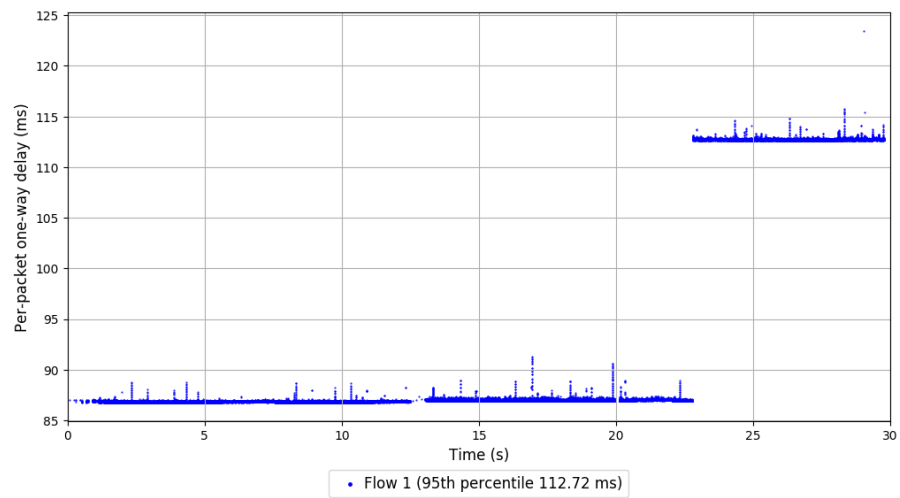
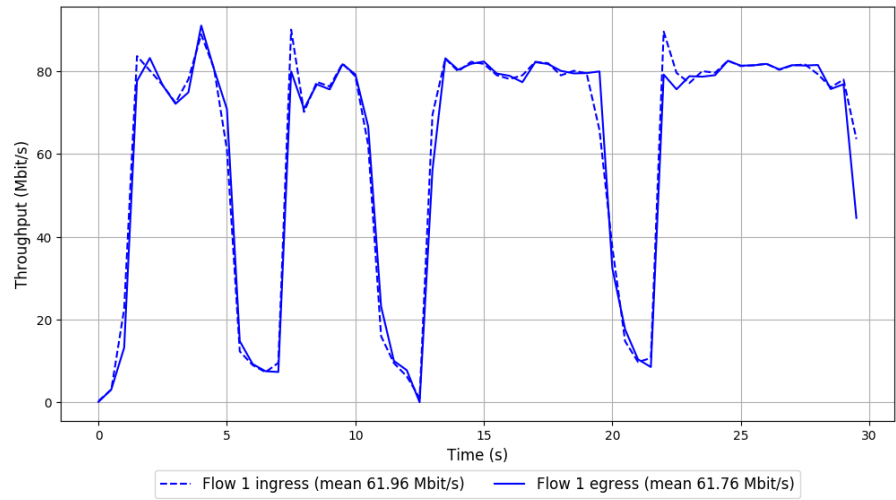
-- Flow 1:

Average throughput: 61.76 Mbit/s

95th percentile per-packet one-way delay: 112.725 ms

Loss rate: 1.00%

Run 4: Report of QUIC Cubic — Data Link

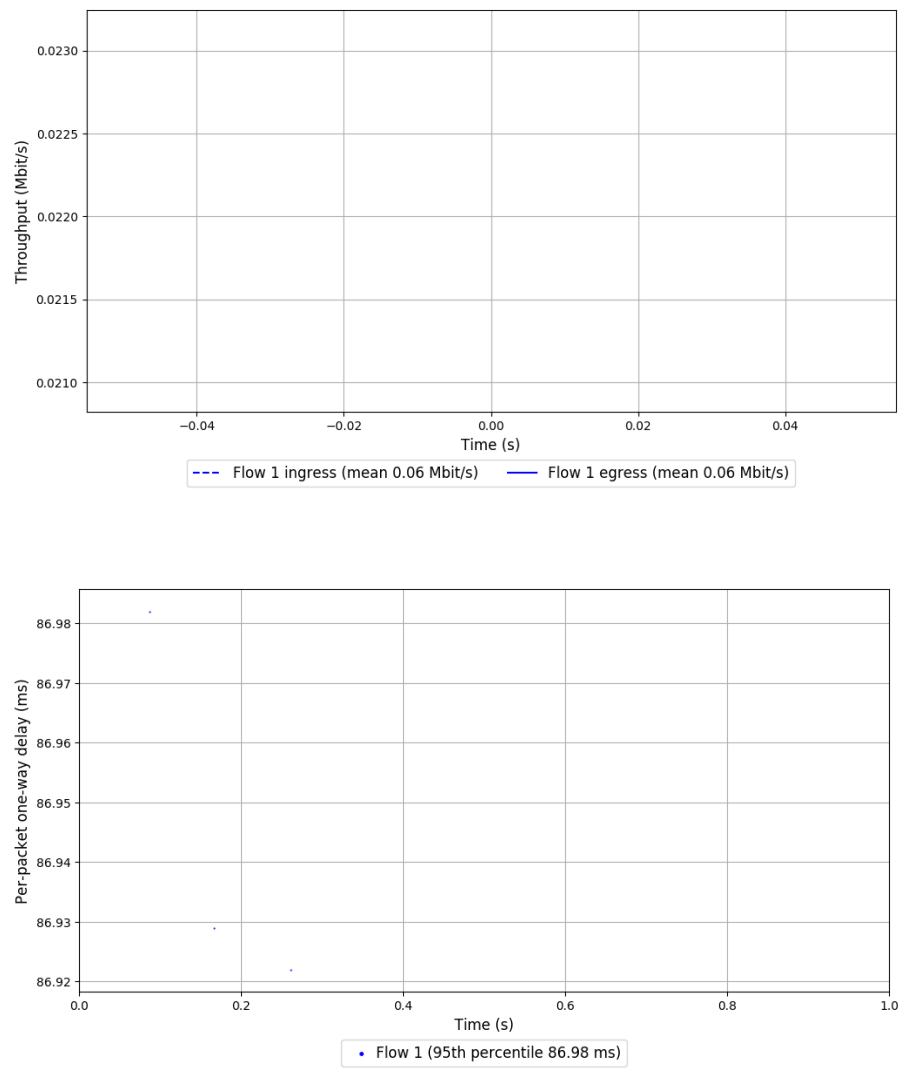


Run 5: Statistics of QUIC Cubic

Start at: 2017-12-11 08:05:36

End at: 2017-12-11 08:06:06

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-11 08:16:53

End at: 2017-12-11 08:17:23

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.40 Mbit/s

95th percentile per-packet one-way delay: 87.318 ms

Loss rate: 0.85%

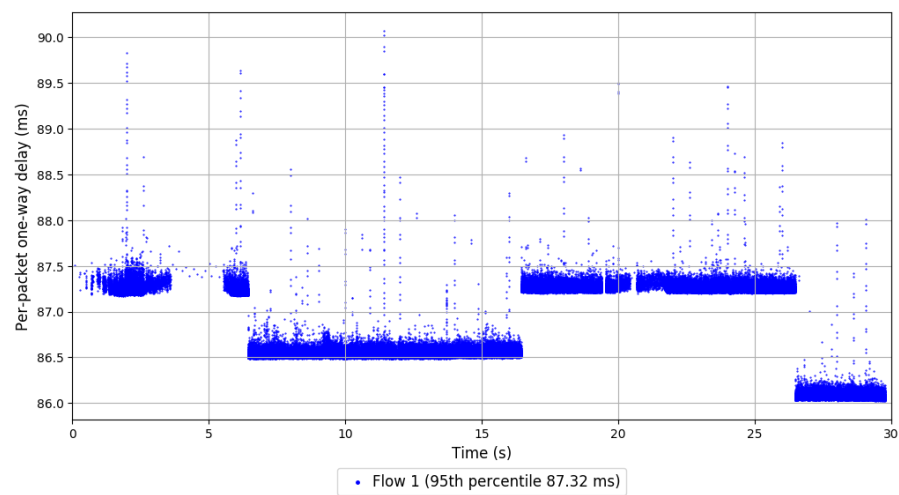
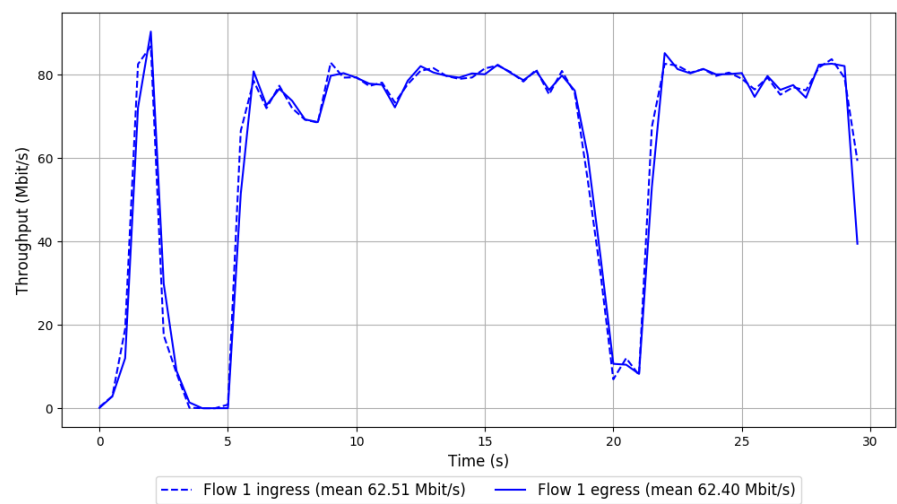
-- Flow 1:

Average throughput: 62.40 Mbit/s

95th percentile per-packet one-way delay: 87.318 ms

Loss rate: 0.85%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-11 08:27:48

End at: 2017-12-11 08:28:18

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.06 Mbit/s

95th percentile per-packet one-way delay: 86.505 ms

Loss rate: 1.01%

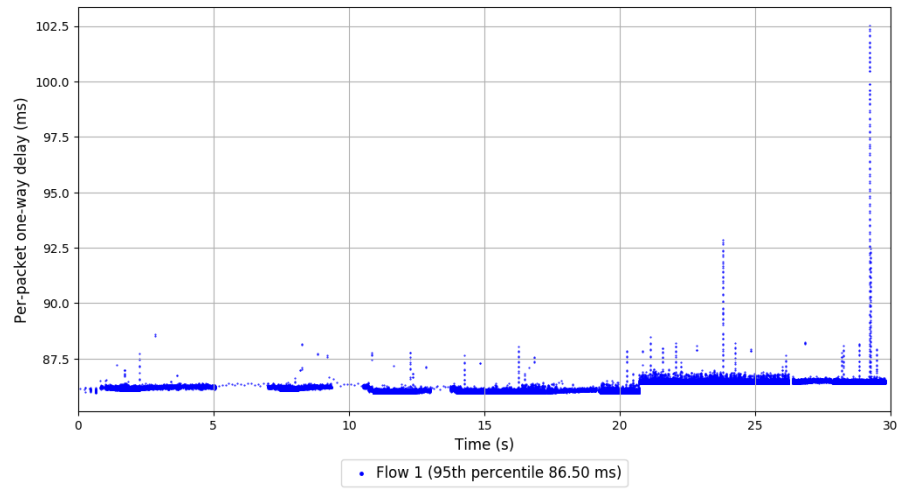
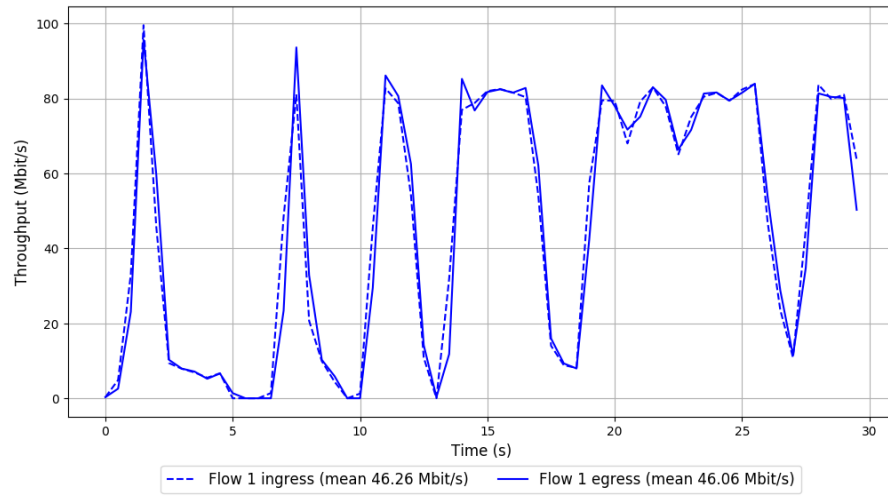
-- Flow 1:

Average throughput: 46.06 Mbit/s

95th percentile per-packet one-way delay: 86.505 ms

Loss rate: 1.01%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-11 08:38:32

End at: 2017-12-11 08:39:02

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.77 Mbit/s

95th percentile per-packet one-way delay: 86.732 ms

Loss rate: 0.99%

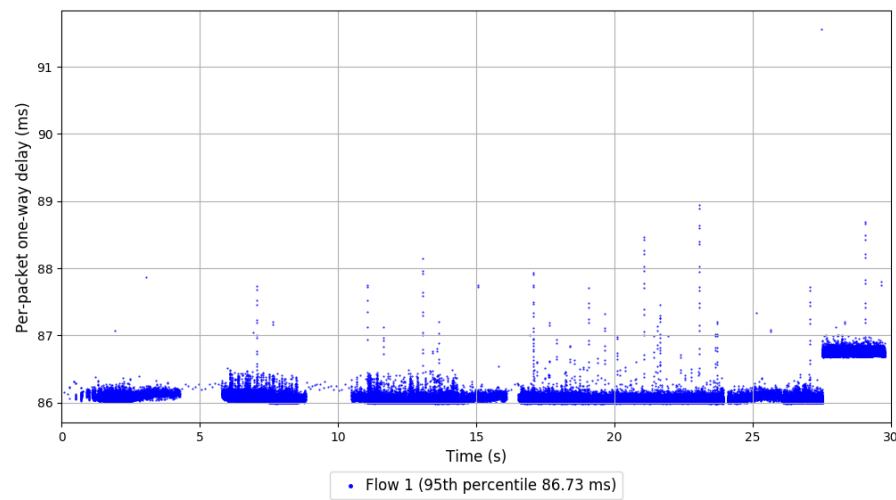
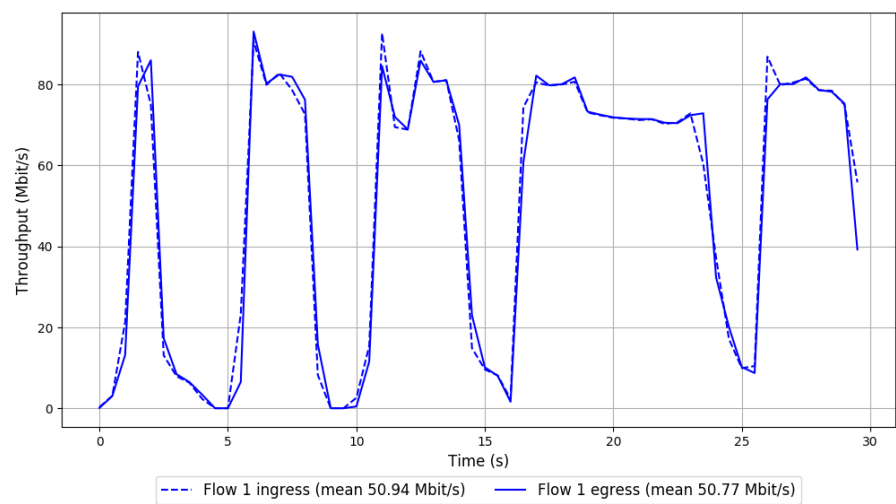
-- Flow 1:

Average throughput: 50.77 Mbit/s

95th percentile per-packet one-way delay: 86.732 ms

Loss rate: 0.99%

Run 8: Report of QUIC Cubic — Data Link

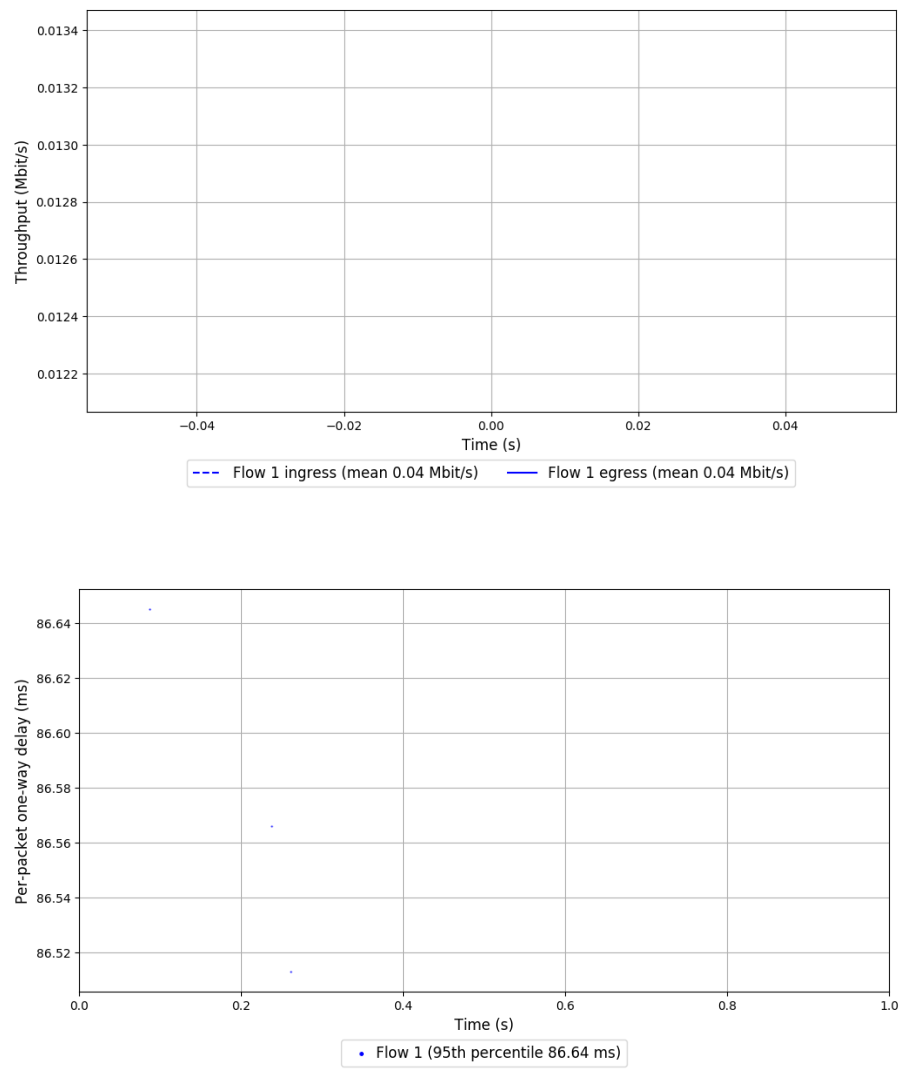


Run 9: Statistics of QUIC Cubic

Start at: 2017-12-11 08:49:25

End at: 2017-12-11 08:49:55

Run 9: Report of QUIC Cubic — Data Link

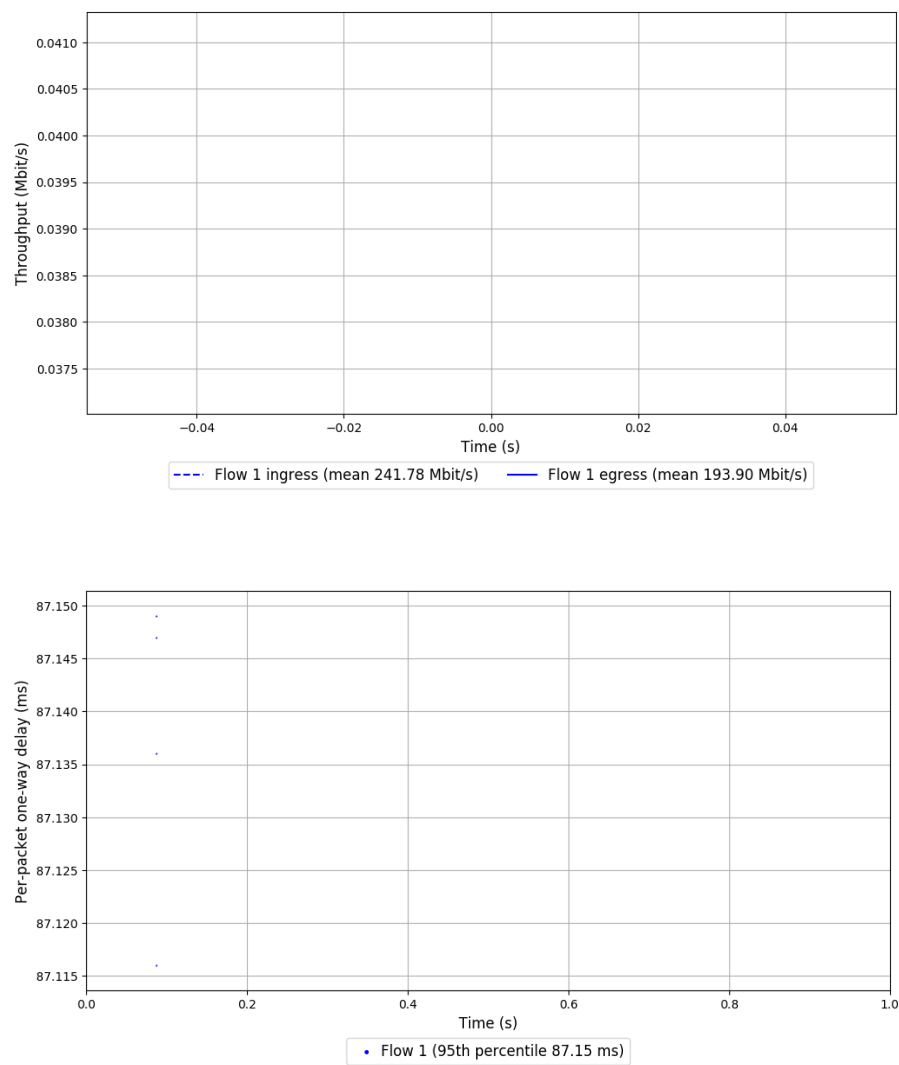


Run 10: Statistics of QUIC Cubic

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

End at: 2017-12-11 09:00:41

Run 10: Report of QUIC Cubic — Data Link

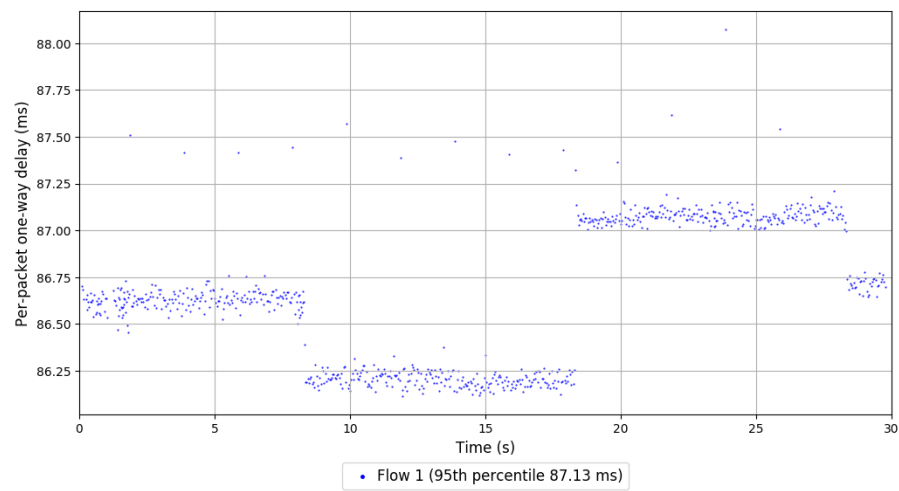
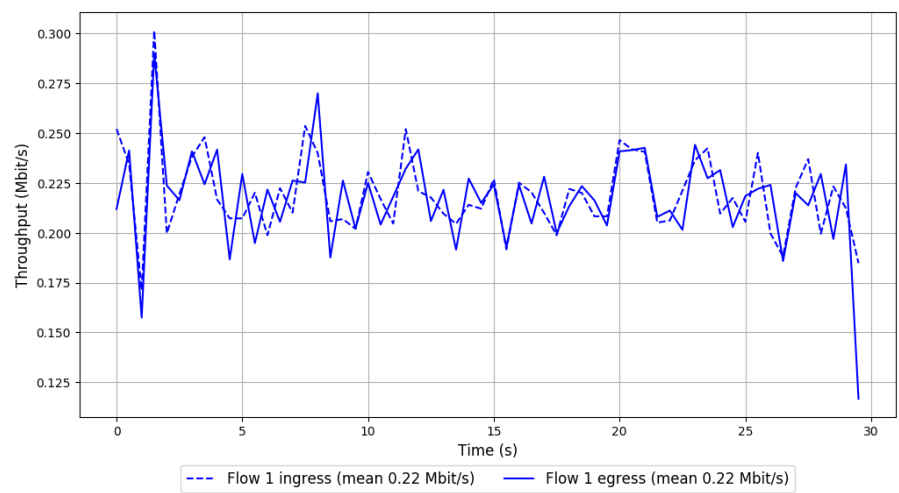


```
Run 1: Statistics of SCReAM

Start at: 2017-12-11 07:23:31
End at: 2017-12-11 07:24:01

# Below is generated by plot.py at 2017-12-11 11:20:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.131 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.131 ms
Loss rate: 0.77%
```

Run 1: Report of SReAM — Data Link

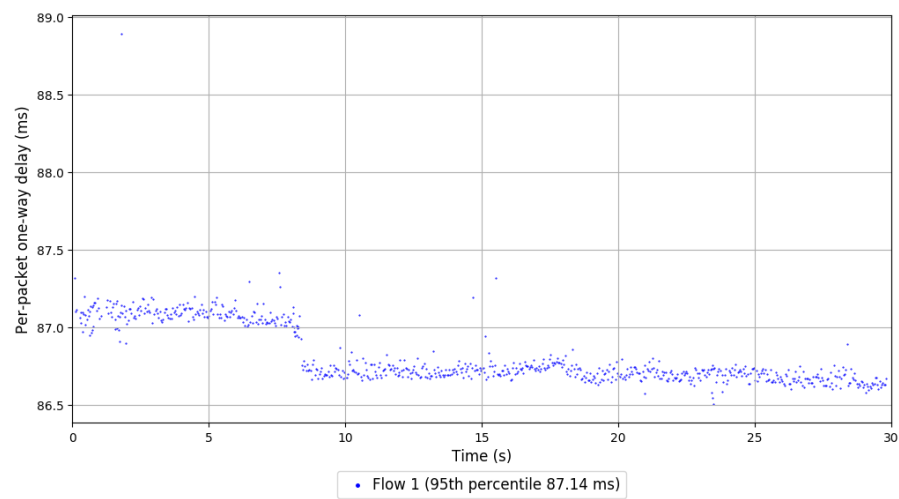
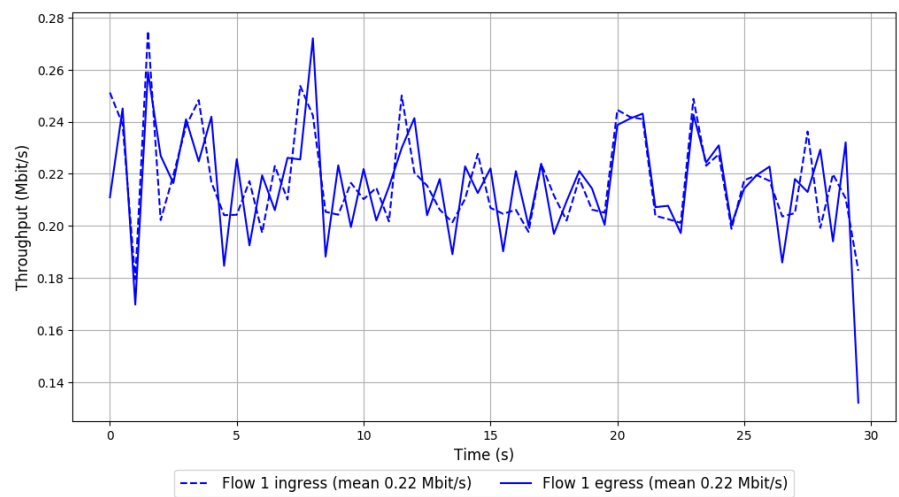


```
Run 2: Statistics of SCReAM

Start at: 2017-12-11 07:34:41
End at: 2017-12-11 07:35:11

# Below is generated by plot.py at 2017-12-11 11:20:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.137 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.137 ms
Loss rate: 0.64%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-11 07:45:46

End at: 2017-12-11 07:46:16

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 115.019 ms

Loss rate: 0.66%

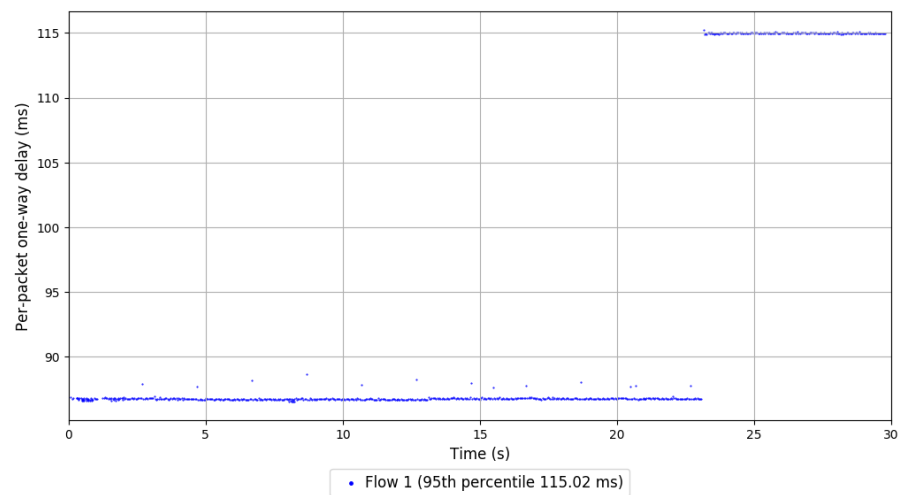
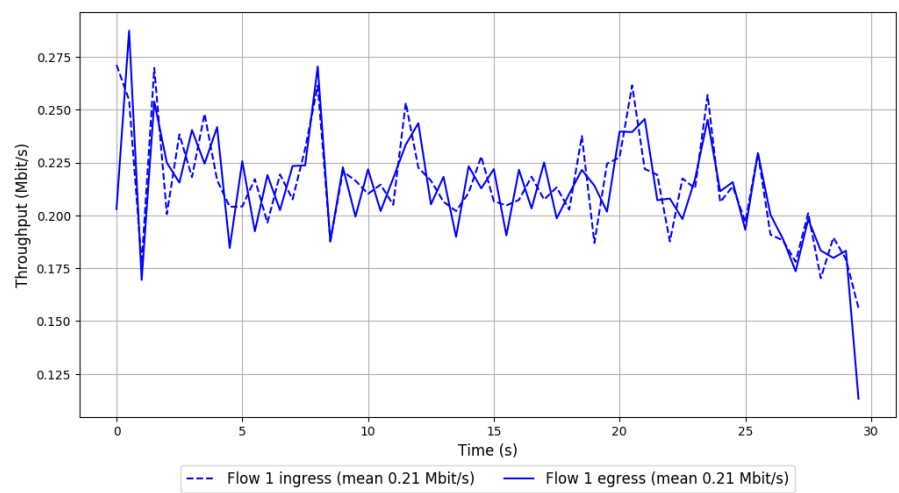
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 115.019 ms

Loss rate: 0.66%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-11 07:56:38

End at: 2017-12-11 07:57:08

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 115.173 ms

Loss rate: 0.70%

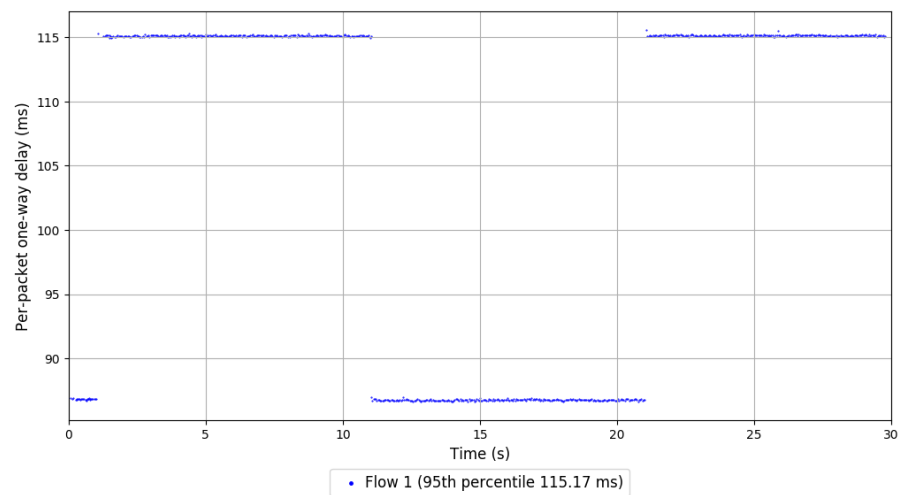
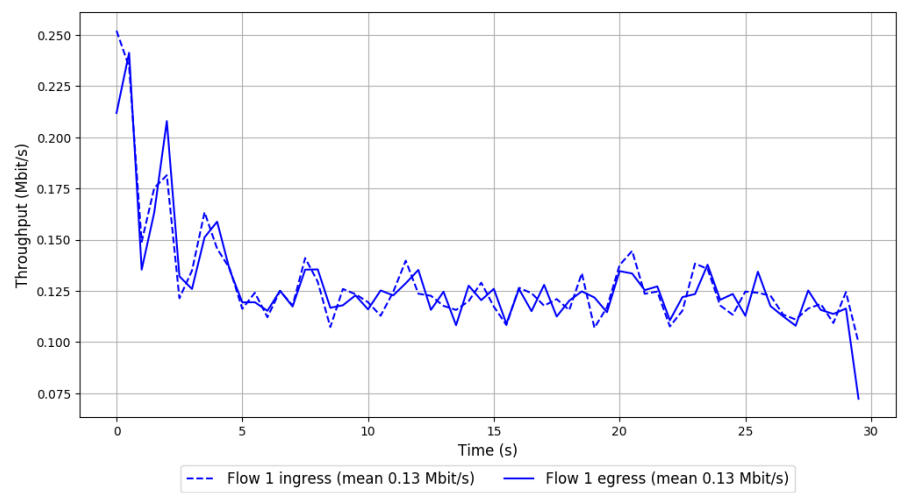
-- Flow 1:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 115.173 ms

Loss rate: 0.70%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-11 08:07:41

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

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.943 ms

Loss rate: 0.64%

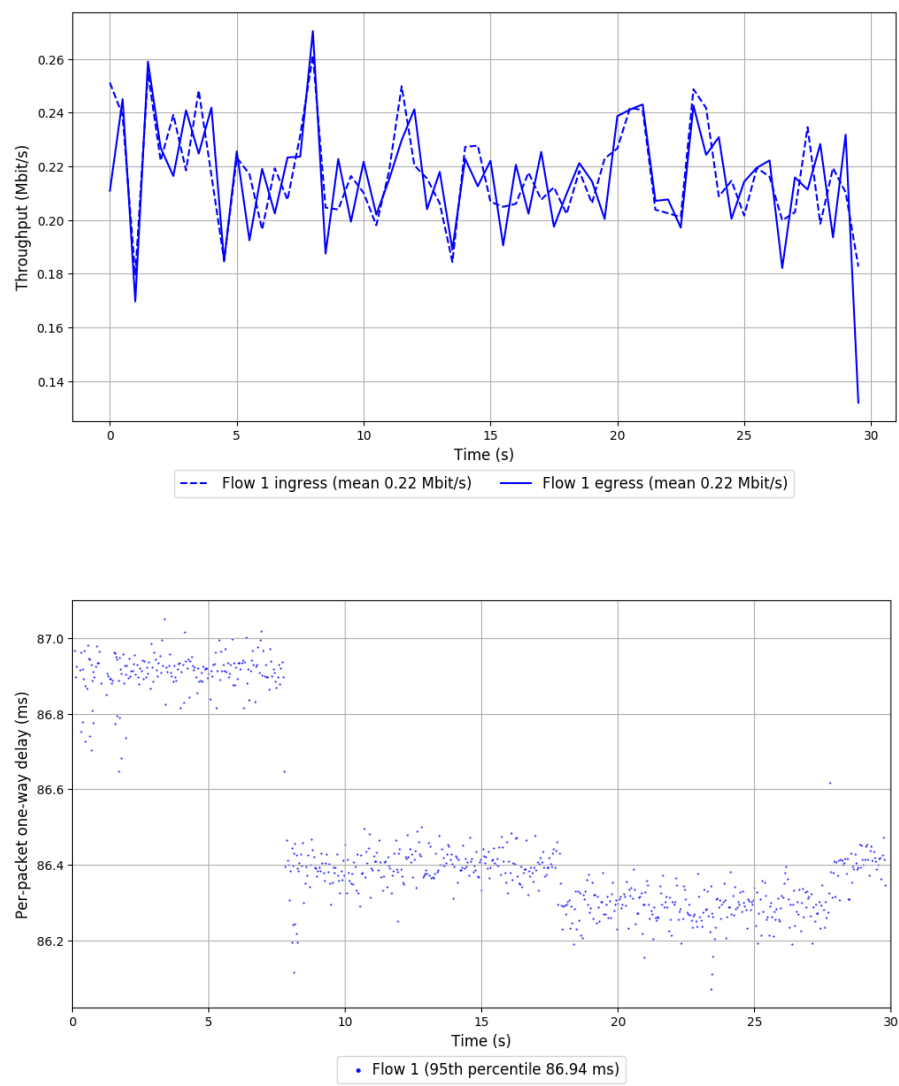
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.943 ms

Loss rate: 0.64%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-11 08:19:03

End at: 2017-12-11 08:19:33

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.119 ms

Loss rate: 0.64%

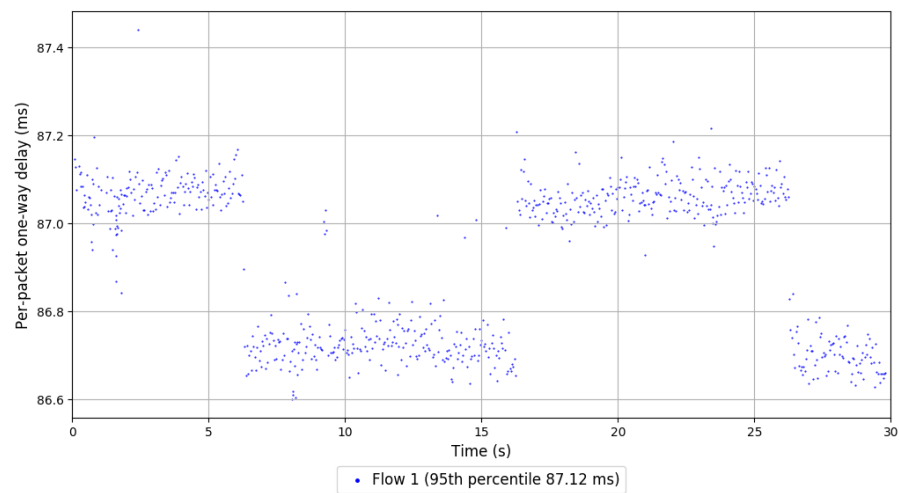
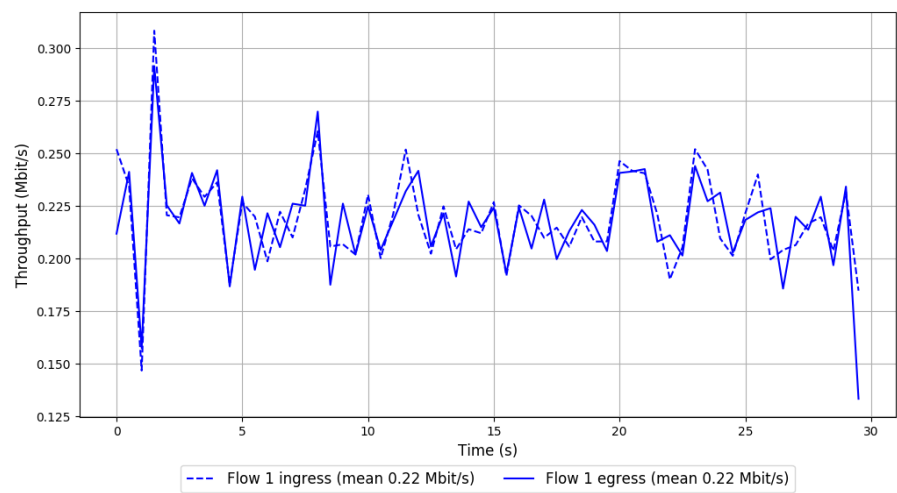
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.119 ms

Loss rate: 0.64%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-11 08:29:58

End at: 2017-12-11 08:30:28

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.990 ms

Loss rate: 0.68%

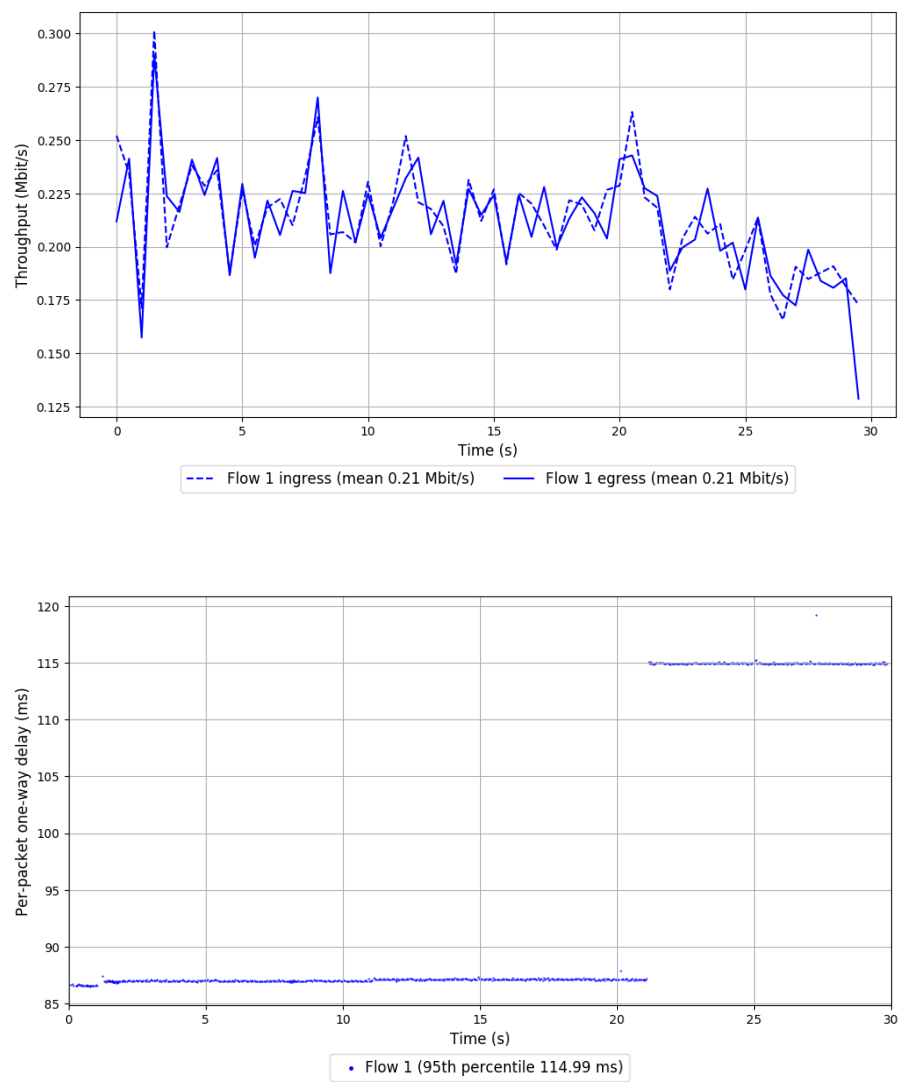
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.990 ms

Loss rate: 0.68%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-11 08:40:39

End at: 2017-12-11 08:41:09

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.432 ms

Loss rate: 0.58%

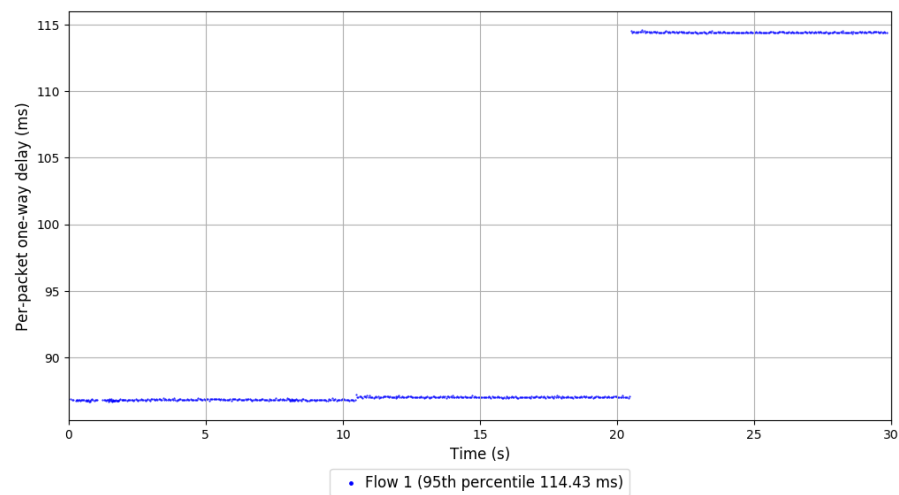
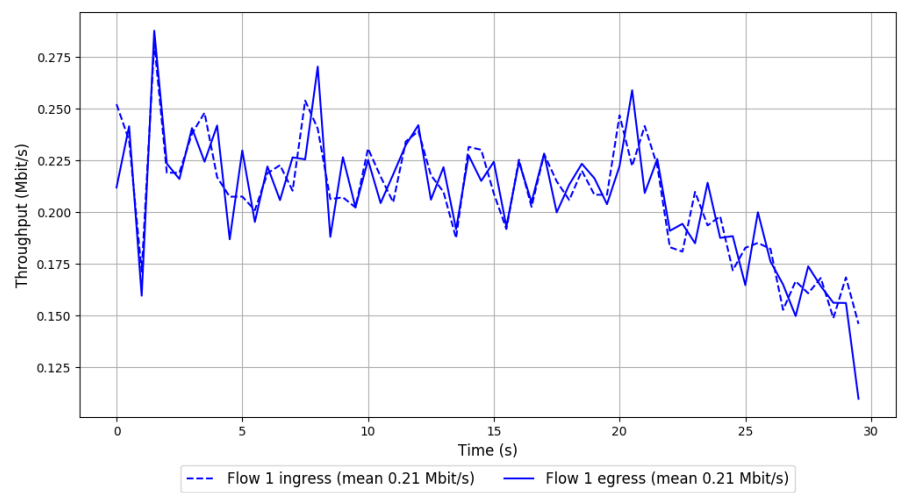
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.432 ms

Loss rate: 0.58%

Run 8: Report of SCRaM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-11 08:51:29

End at: 2017-12-11 08:51:59

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.63%

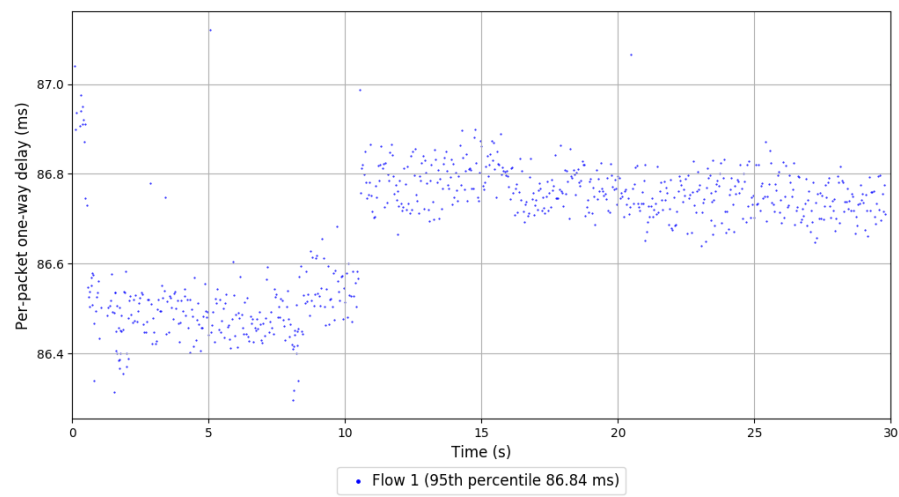
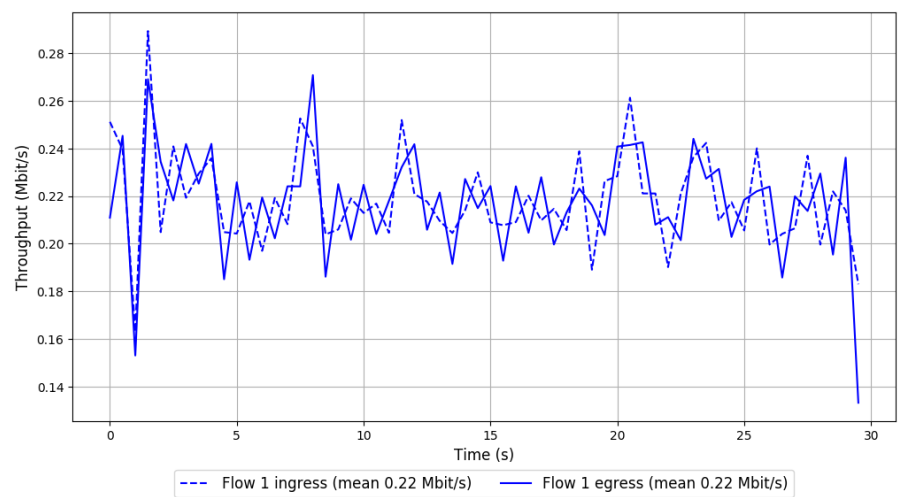
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.63%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-11 09:02:17

End at: 2017-12-11 09:02:47

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.787 ms

Loss rate: 0.64%

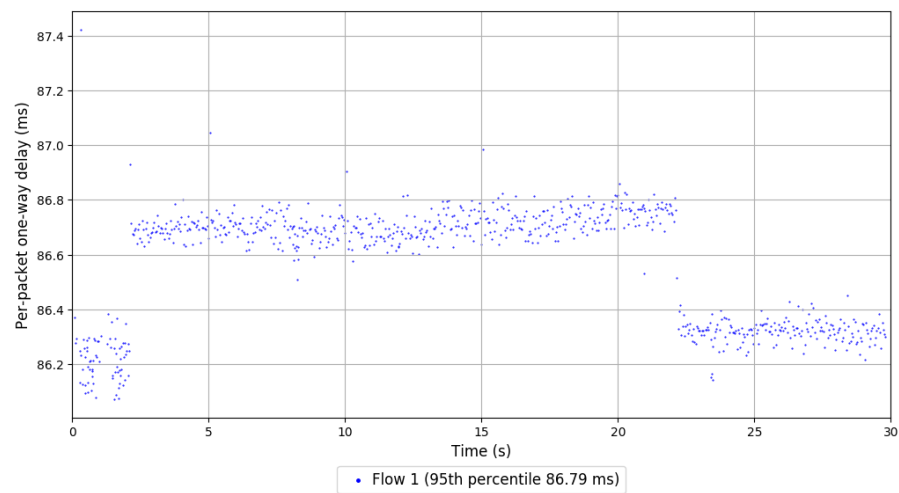
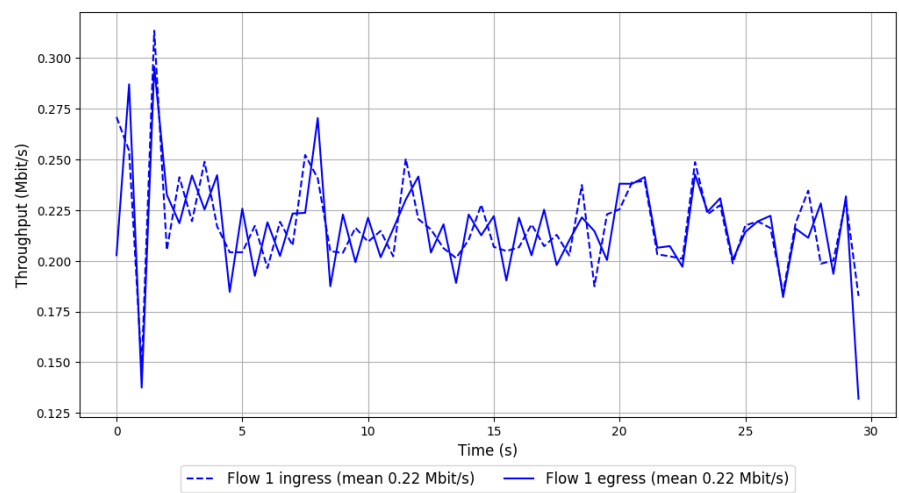
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.787 ms

Loss rate: 0.64%

Run 10: Report of SReAM — Data Link

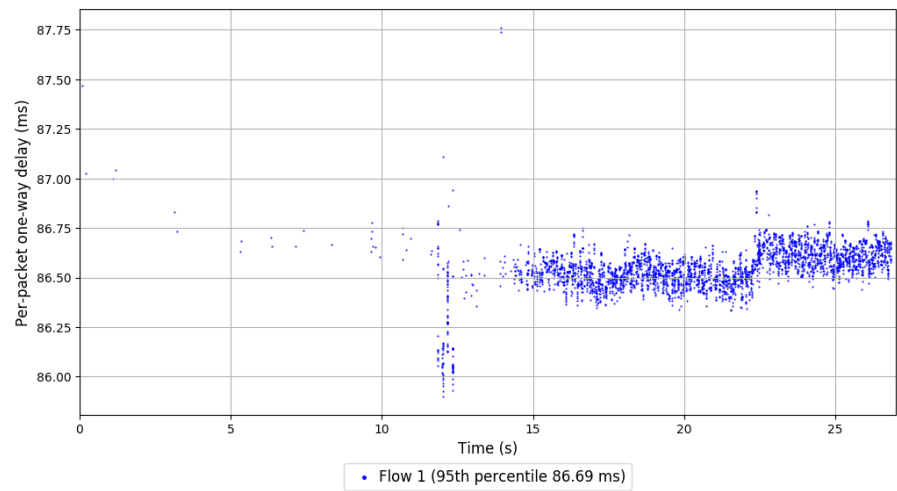
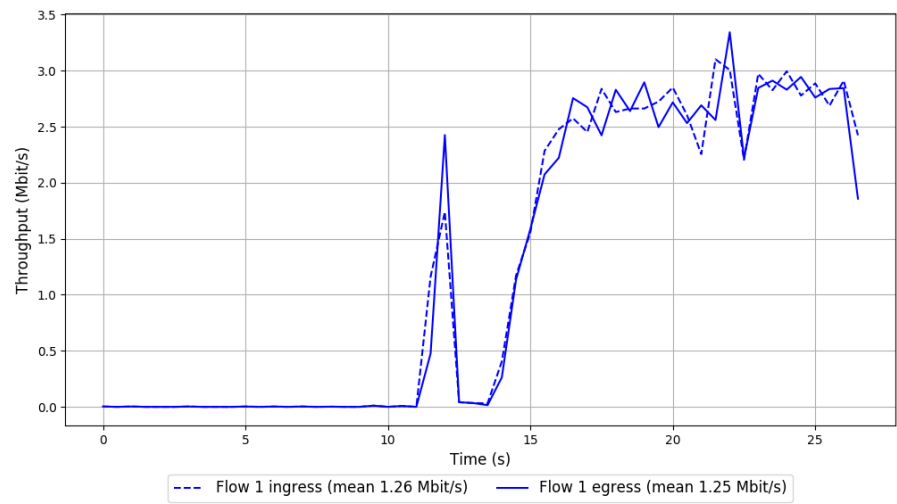


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-11 07:22:04
End at: 2017-12-11 07:22:34

# Below is generated by plot.py at 2017-12-11 11:20:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 86.694 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 86.694 ms
Loss rate: 1.57%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-11 07:33:16

End at: 2017-12-11 07:33:46

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.989 ms

Loss rate: 0.78%

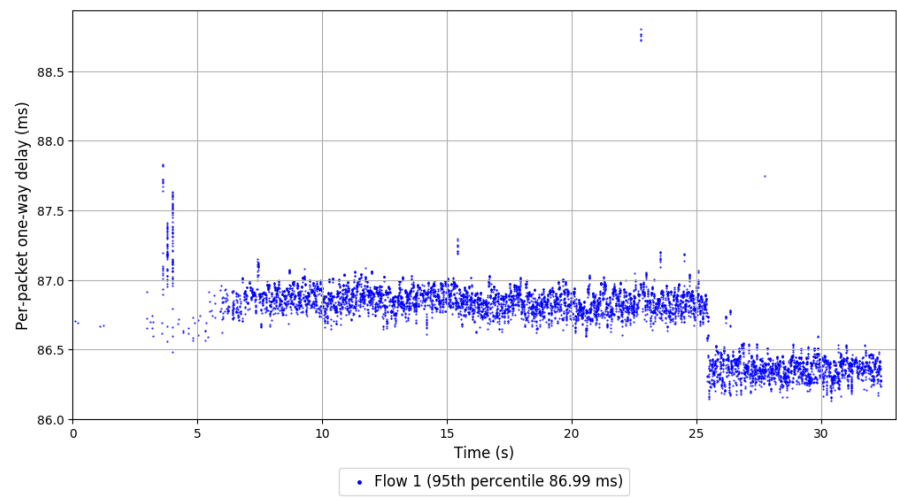
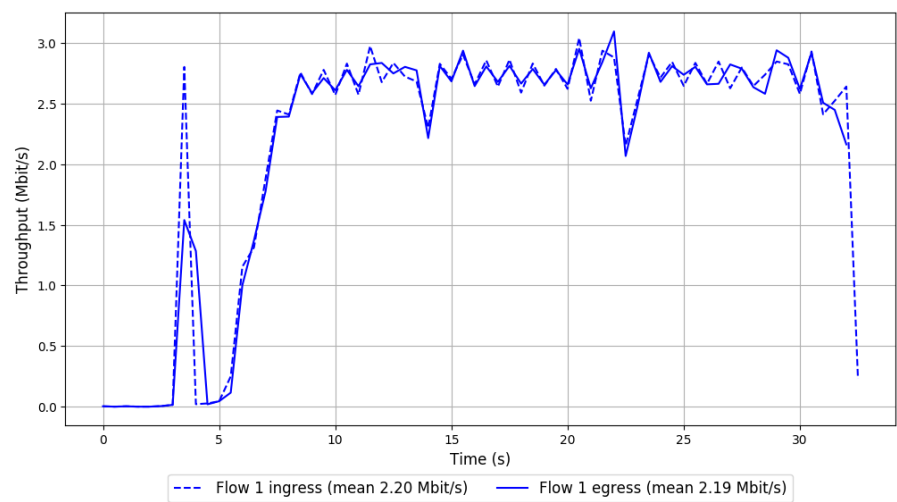
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 86.989 ms

Loss rate: 0.78%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-11 07:44:21

End at: 2017-12-11 07:44:51

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 115.147 ms

Loss rate: 0.76%

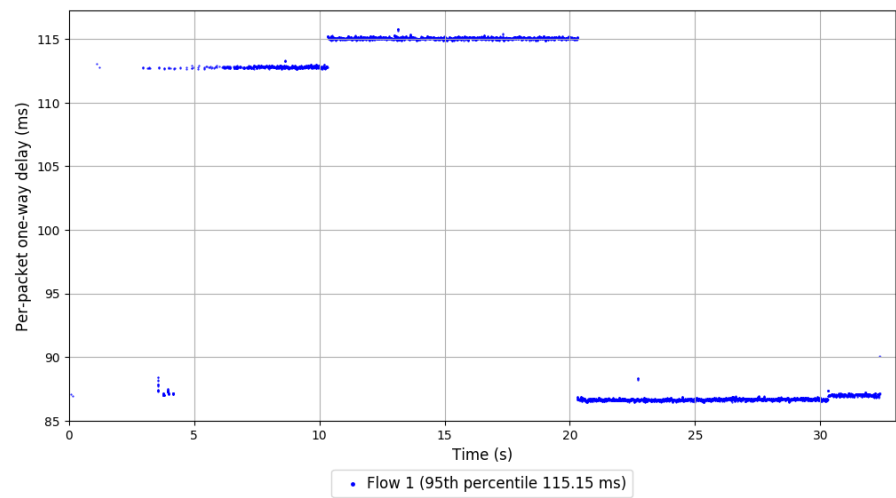
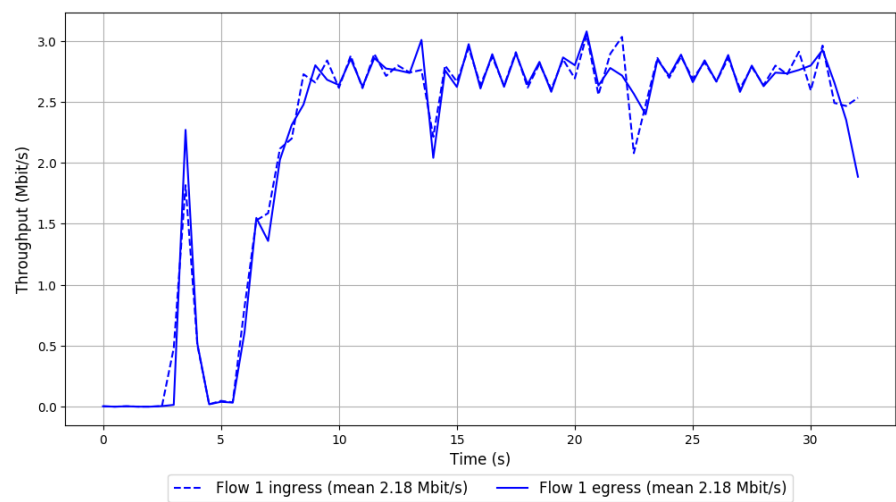
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 115.147 ms

Loss rate: 0.76%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-11 07:55:11

End at: 2017-12-11 07:55:41

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 112.579 ms

Loss rate: 0.63%

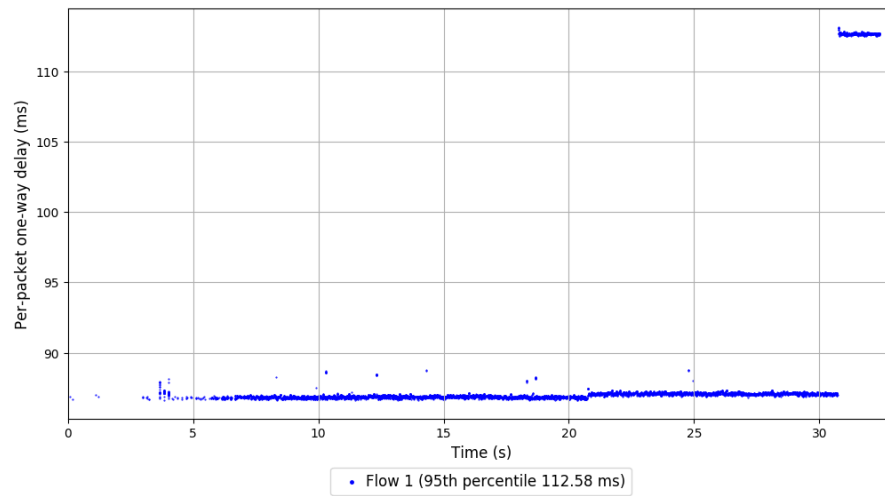
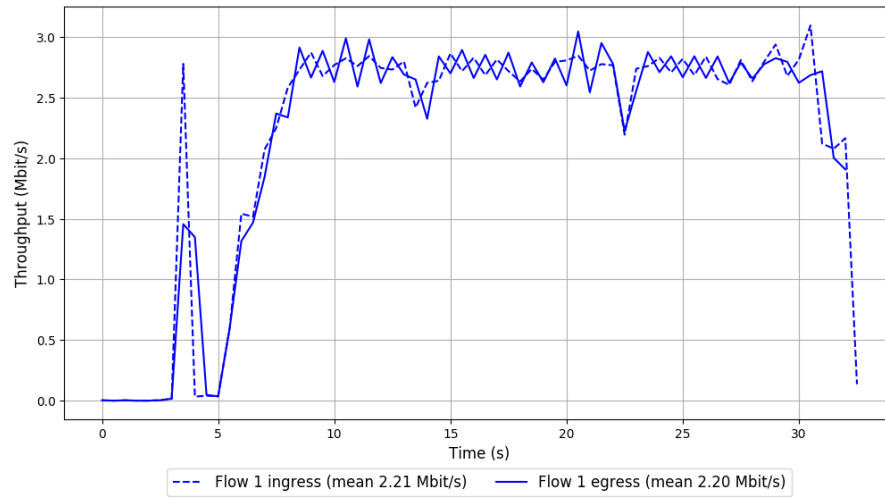
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 112.579 ms

Loss rate: 0.63%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-11 08:06:16

End at: 2017-12-11 08:06:46

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

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

Loss rate: 0.77%

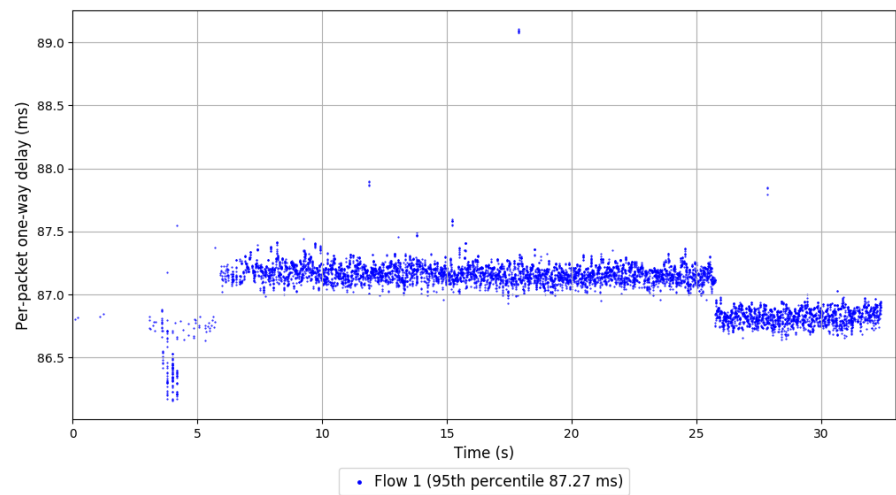
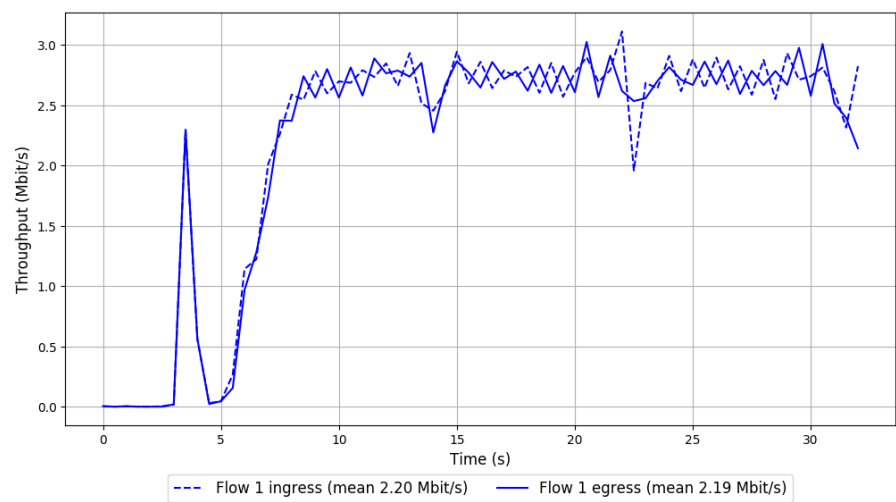
-- Flow 1:

Average throughput: 2.19 Mbit/s

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

Loss rate: 0.77%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-11 08:17:37

End at: 2017-12-11 08:18:07

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.865 ms

Loss rate: 0.78%

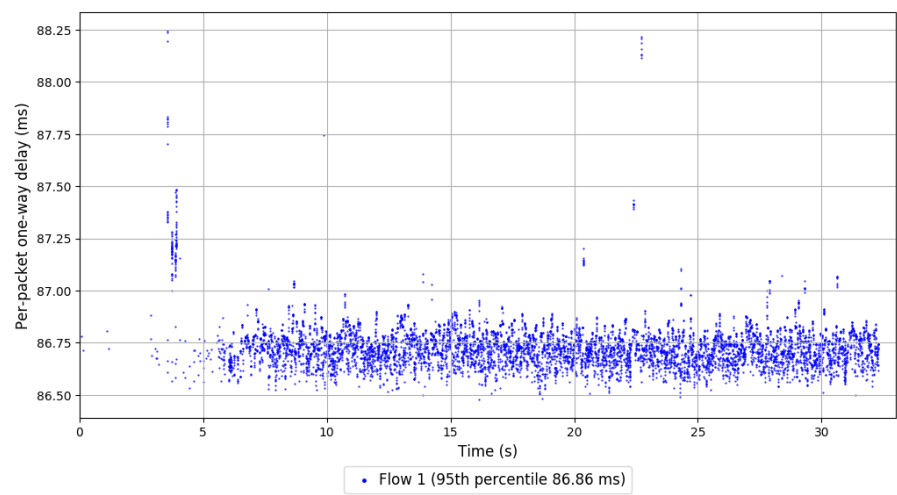
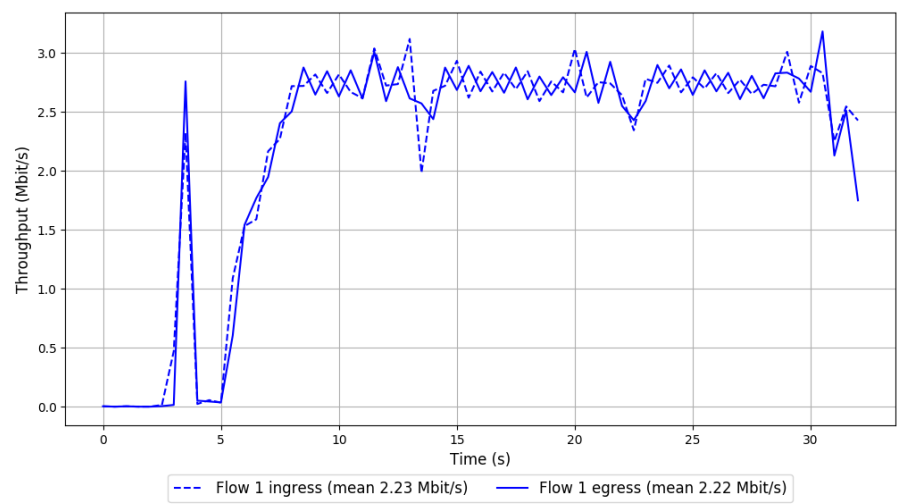
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.865 ms

Loss rate: 0.78%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-11 08:28:32

End at: 2017-12-11 08:29:02

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.452 ms

Loss rate: 0.77%

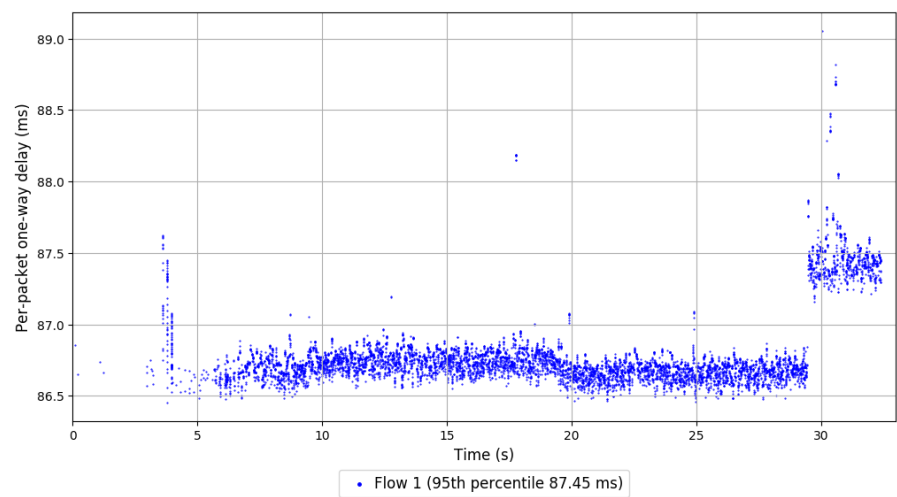
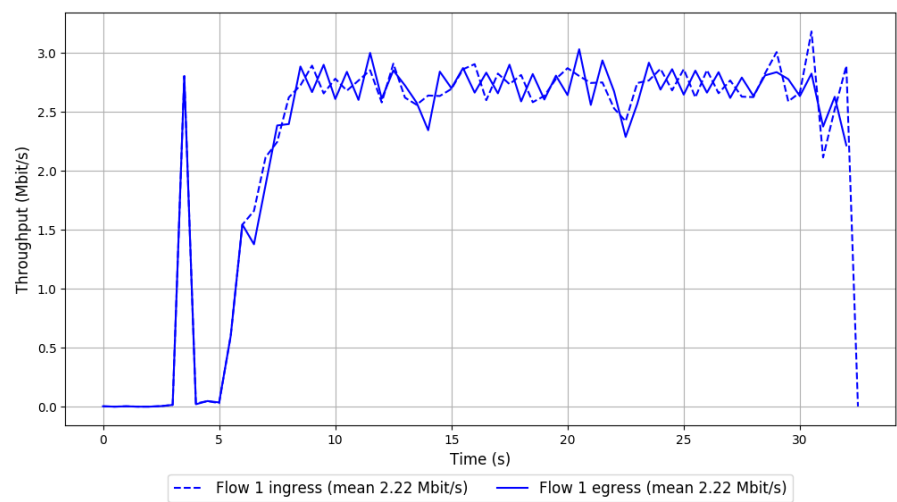
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.452 ms

Loss rate: 0.77%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-11 08:39:15

End at: 2017-12-11 08:39:45

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 114.782 ms

Loss rate: 0.81%

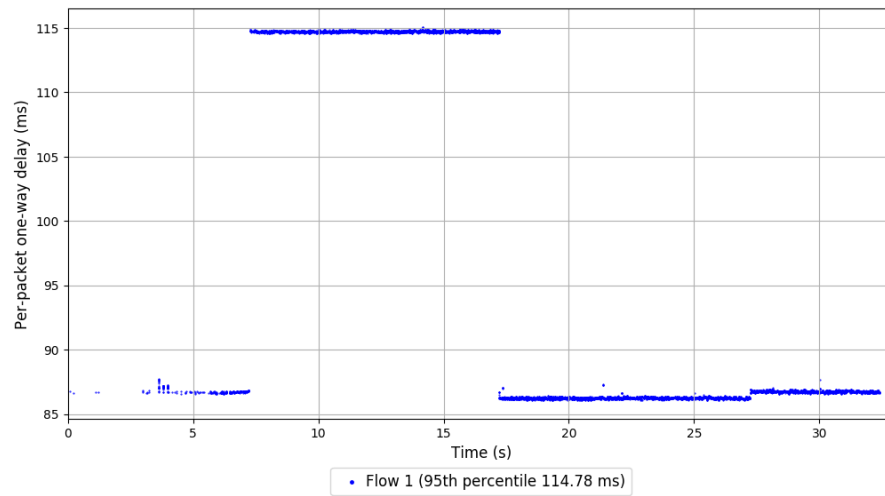
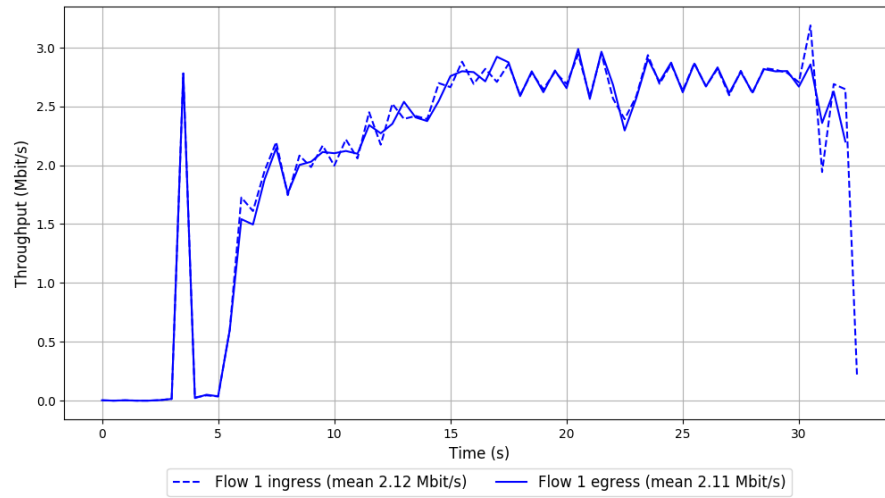
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 114.782 ms

Loss rate: 0.81%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-11 08:50:04

End at: 2017-12-11 08:50:34

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.872 ms

Loss rate: 0.63%

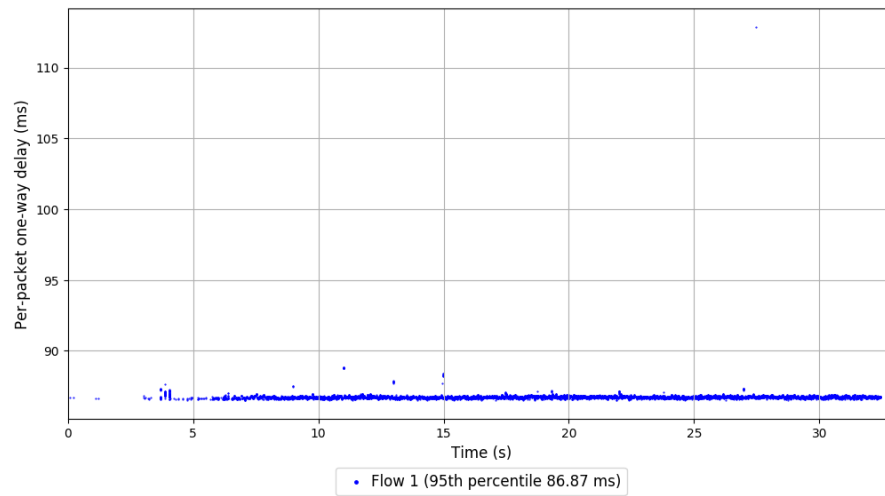
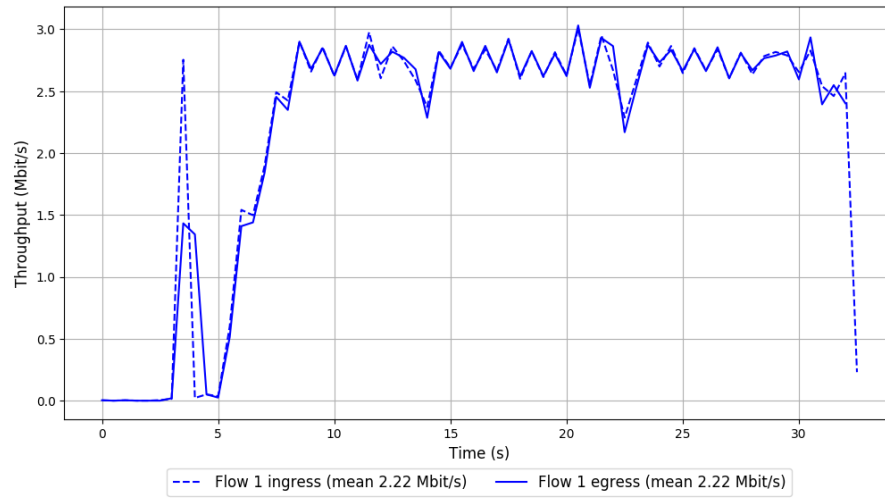
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.872 ms

Loss rate: 0.63%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-11 09:00:50

End at: 2017-12-11 09:01:20

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.179 ms

Loss rate: 0.79%

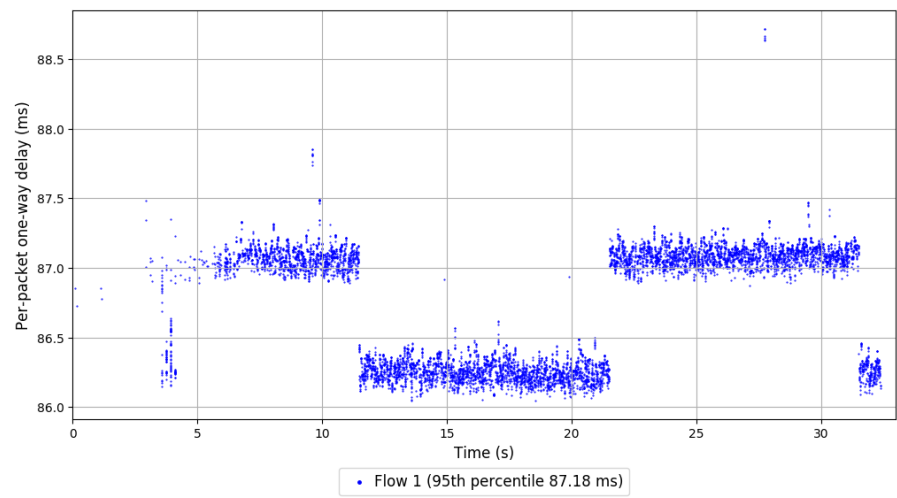
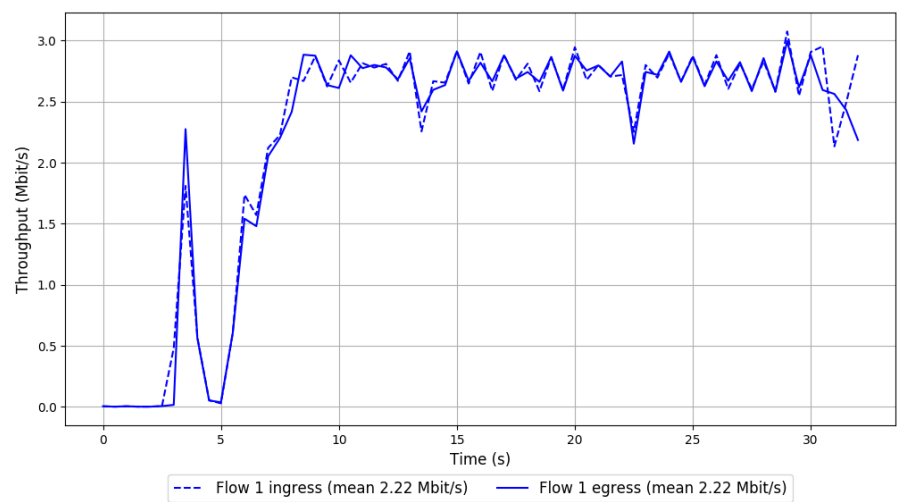
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.179 ms

Loss rate: 0.79%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-11 07:24:11

End at: 2017-12-11 07:24:41

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 87.787 ms

Loss rate: 0.82%

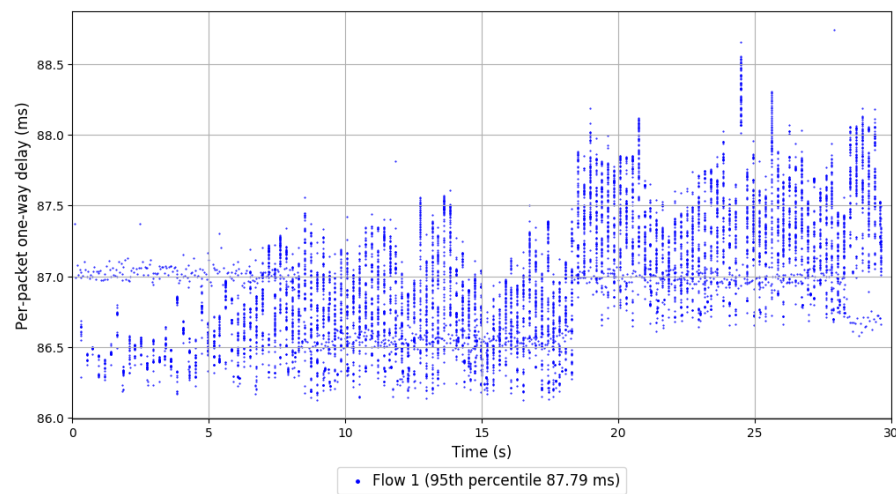
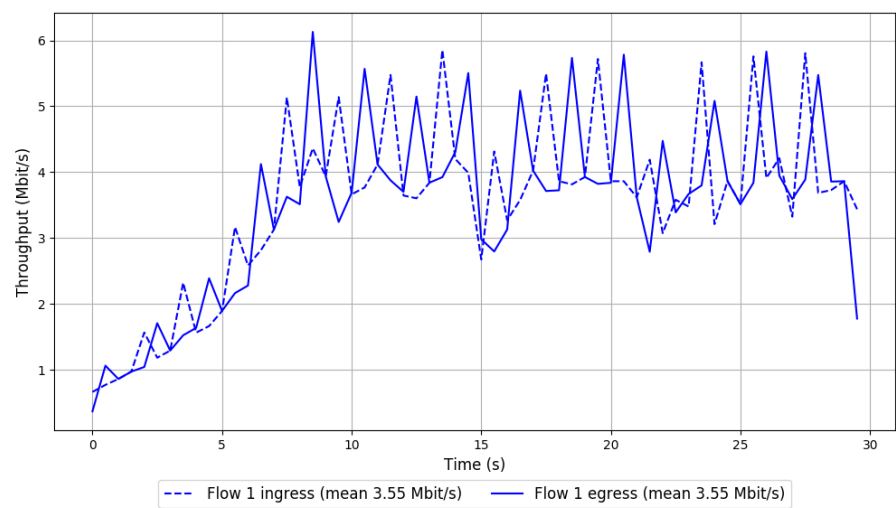
-- Flow 1:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 87.787 ms

Loss rate: 0.82%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-11 07:35:21

End at: 2017-12-11 07:35:51

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 87.275 ms

Loss rate: 1.67%

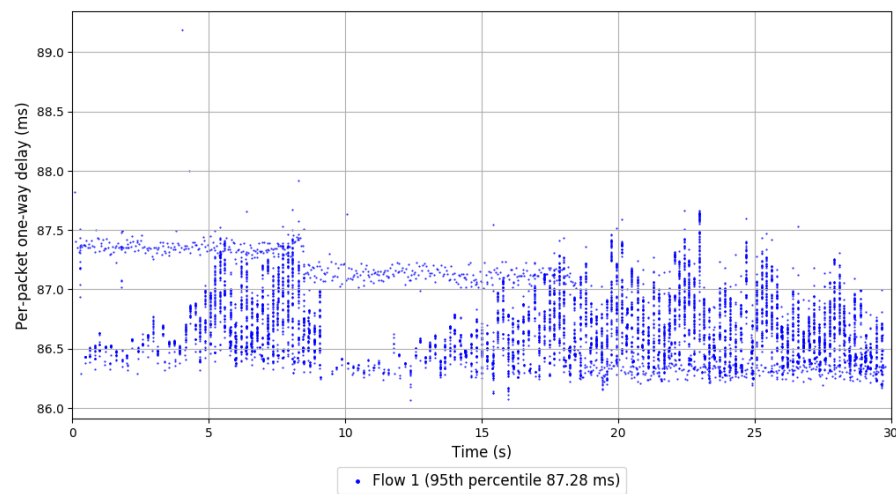
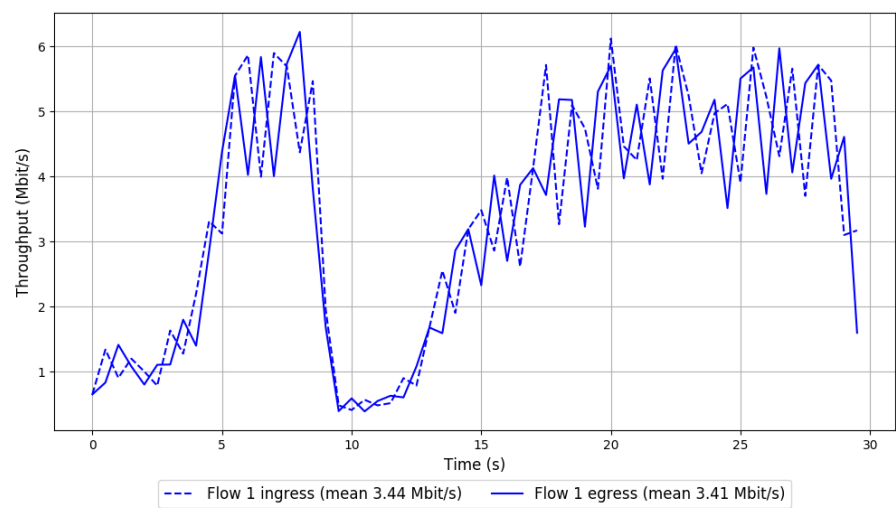
-- Flow 1:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 87.275 ms

Loss rate: 1.67%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-11 07:46:26

End at: 2017-12-11 07:46:56

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.97 Mbit/s

95th percentile per-packet one-way delay: 87.885 ms

Loss rate: 0.75%

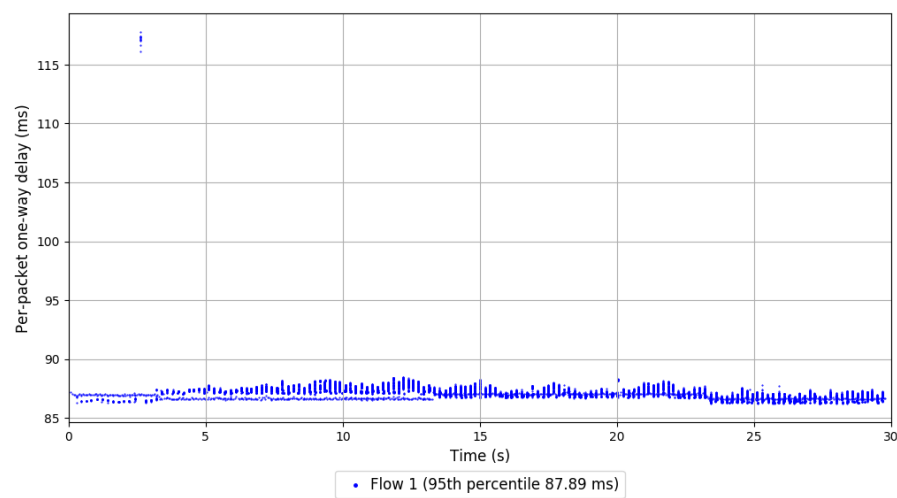
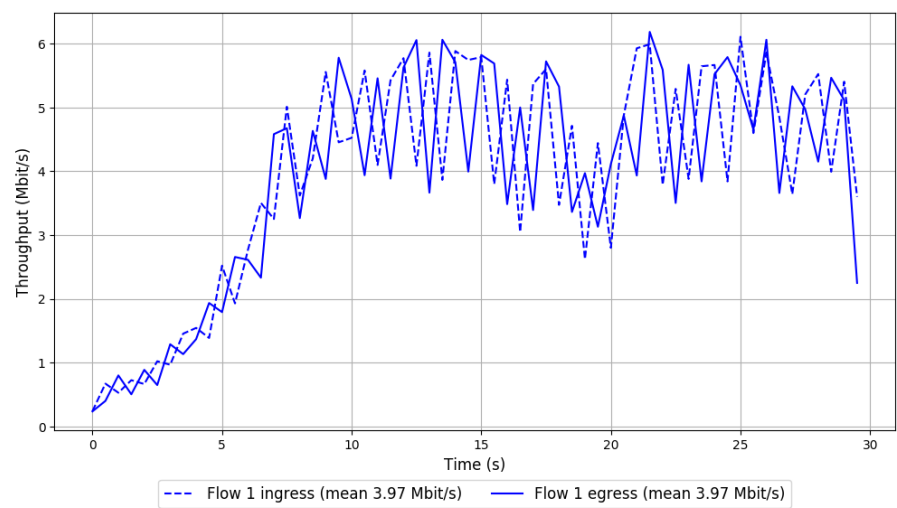
-- Flow 1:

Average throughput: 3.97 Mbit/s

95th percentile per-packet one-way delay: 87.885 ms

Loss rate: 0.75%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-11 07:57:18

End at: 2017-12-11 07:57:48

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 113.028 ms

Loss rate: 0.13%

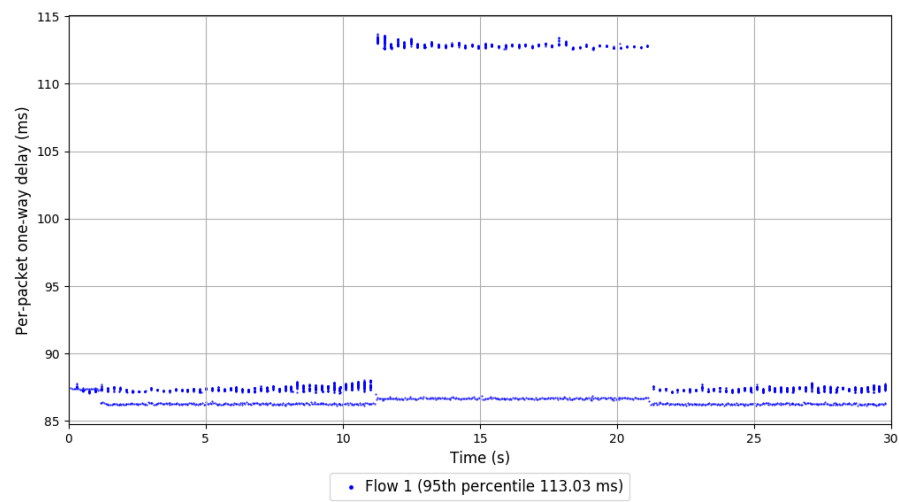
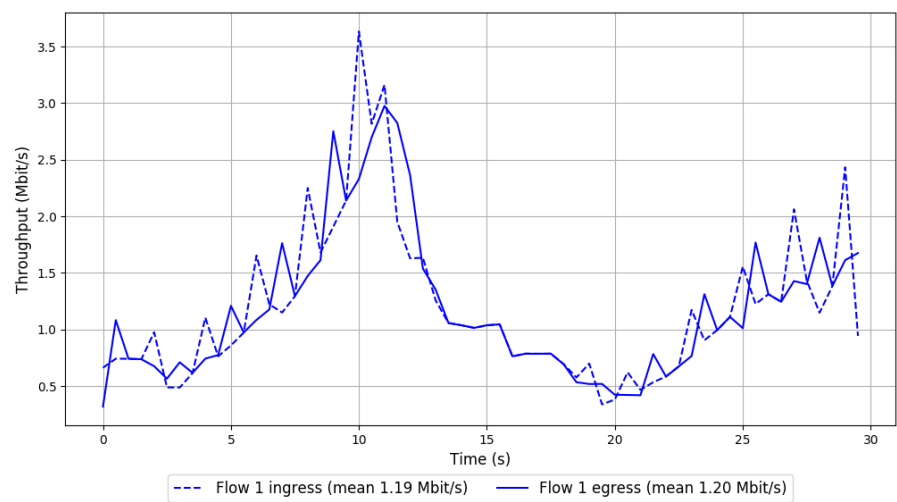
-- Flow 1:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 113.028 ms

Loss rate: 0.13%

Run 4: Report of Sprout — Data Link

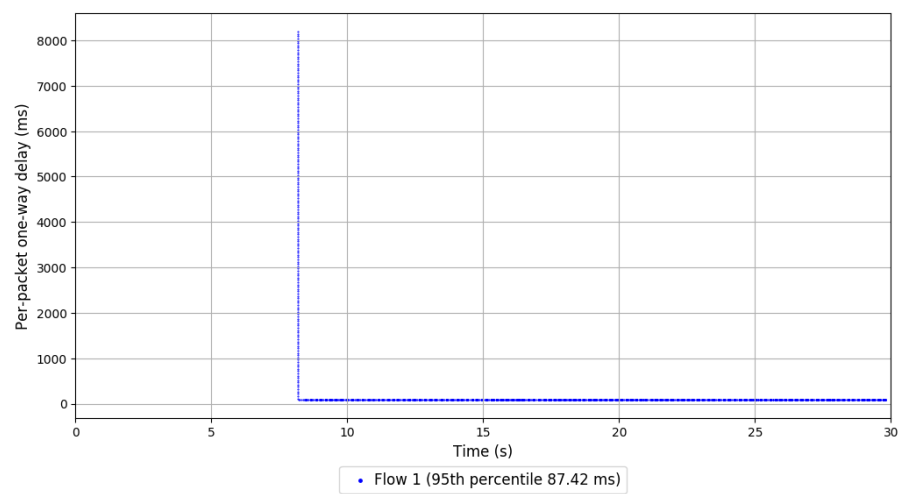
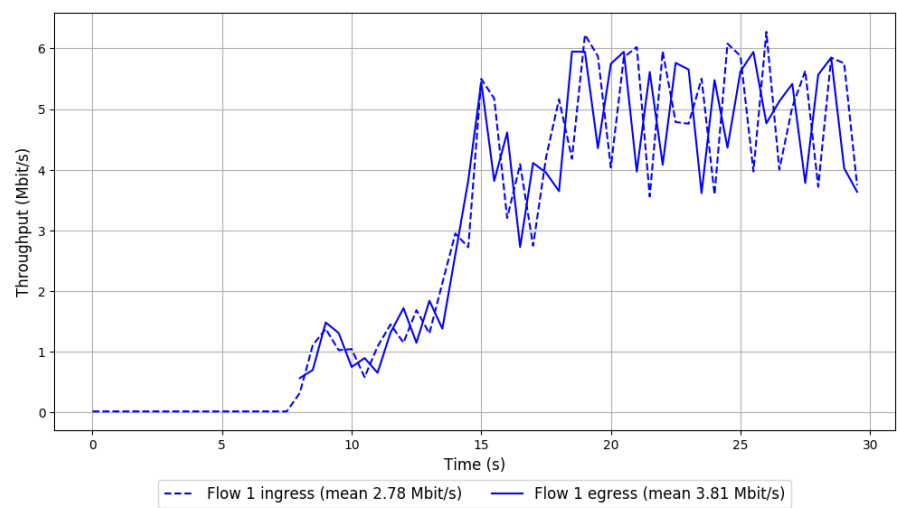


Run 5: Statistics of Sprout

Start at: 2017-12-11 08:08:21

End at: 2017-12-11 08:08:51

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-11 08:19:43

End at: 2017-12-11 08:20:13

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 88.054 ms

Loss rate: 0.80%

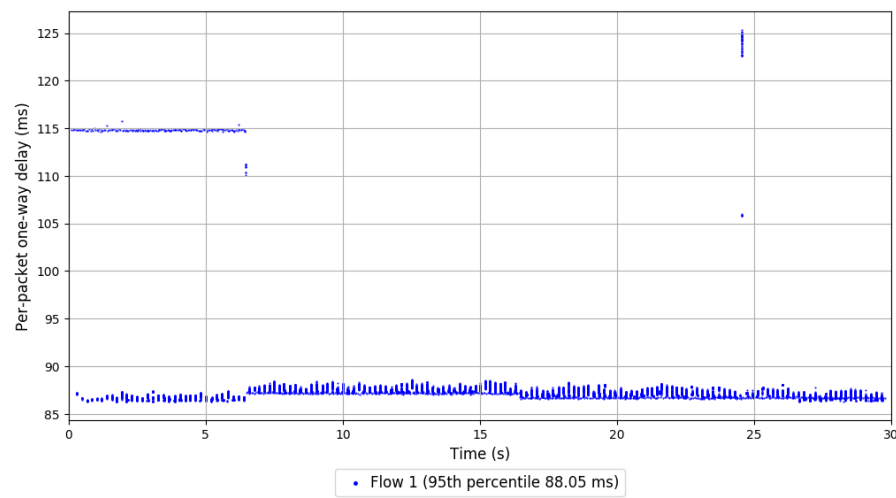
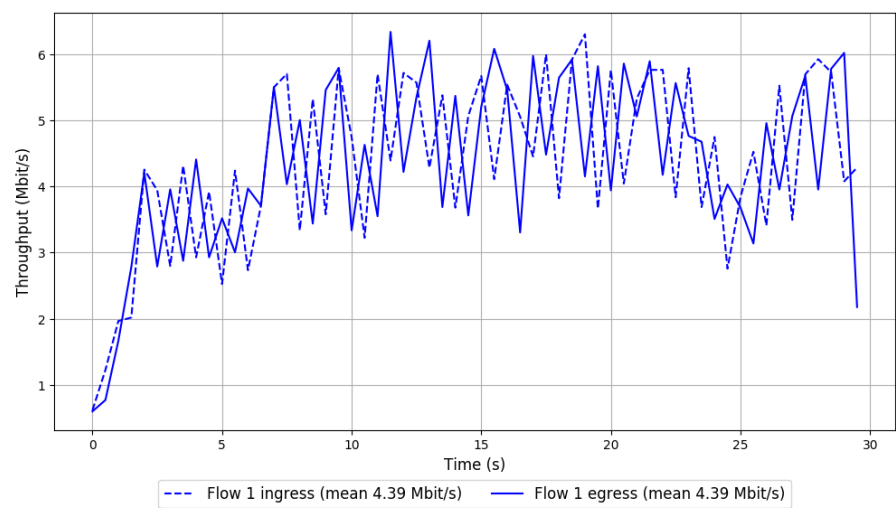
-- Flow 1:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 88.054 ms

Loss rate: 0.80%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-11 08:30:38

End at: 2017-12-11 08:31:08

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 88.031 ms

Loss rate: 0.65%

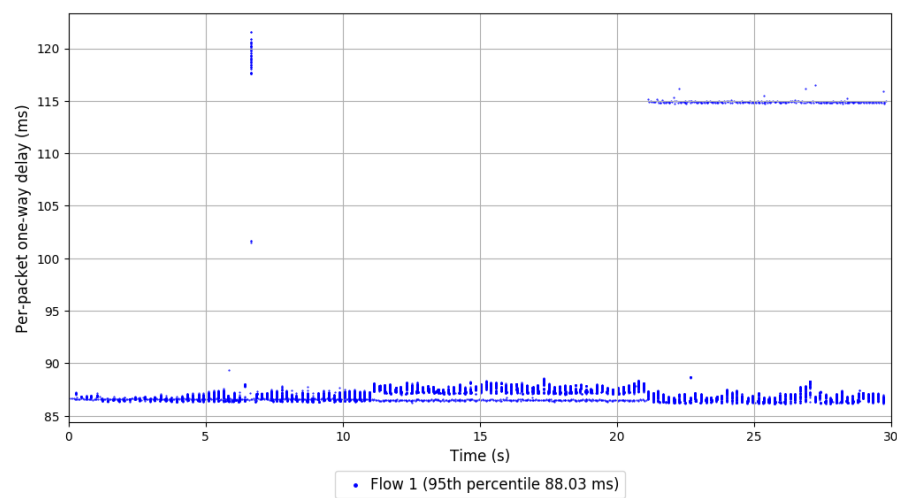
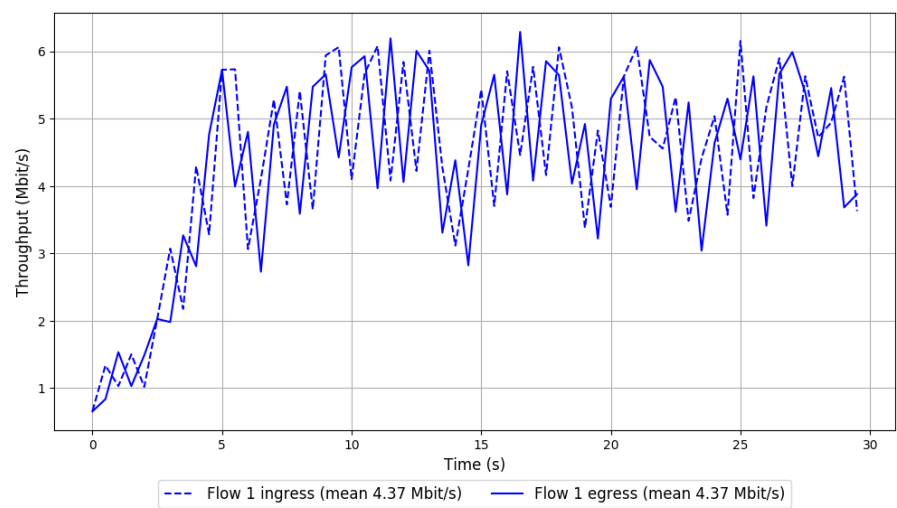
-- Flow 1:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 88.031 ms

Loss rate: 0.65%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-11 08:41:19

End at: 2017-12-11 08:41:49

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.47 Mbit/s

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

Loss rate: 0.06%

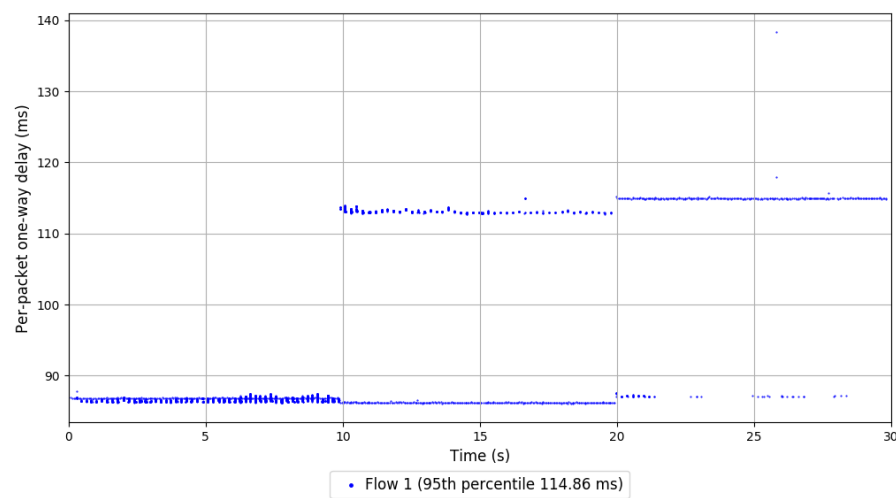
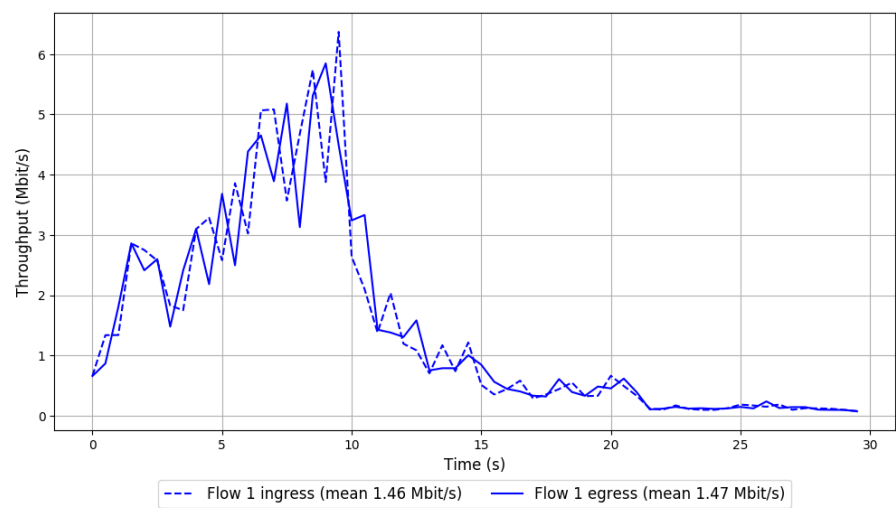
-- Flow 1:

Average throughput: 1.47 Mbit/s

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

Loss rate: 0.06%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

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

End at: 2017-12-11 08:52:39

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 87.955 ms

Loss rate: 0.87%

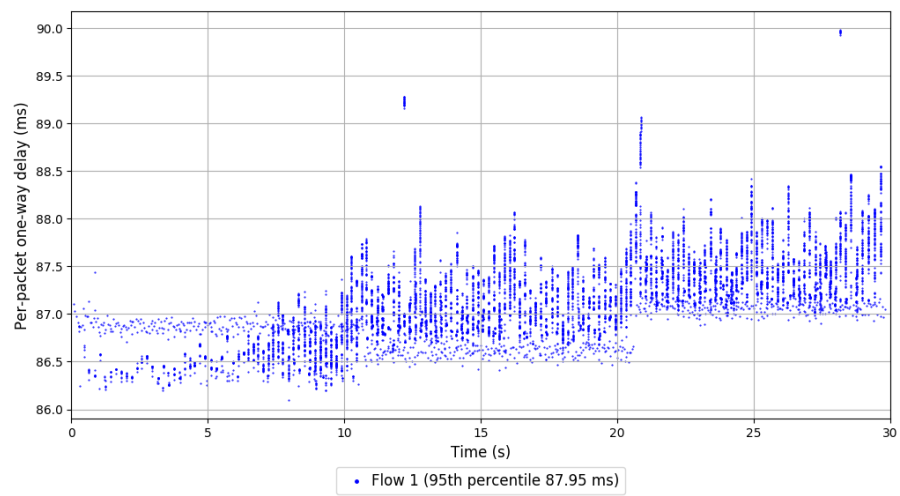
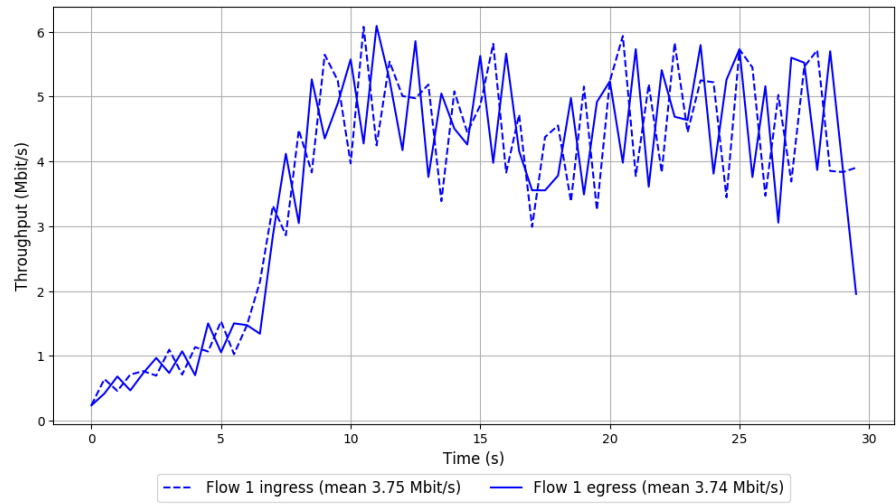
-- Flow 1:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 87.955 ms

Loss rate: 0.87%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-11 09:02:56

End at: 2017-12-11 09:03:26

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 87.771 ms

Loss rate: 0.67%

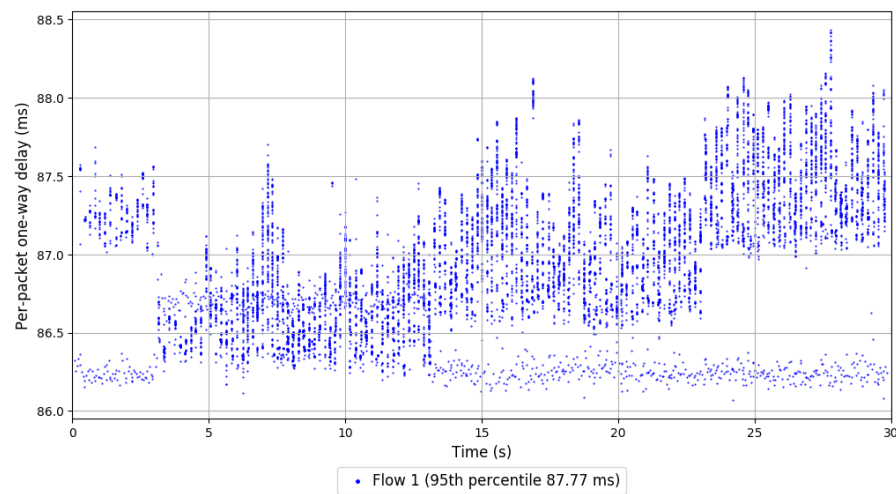
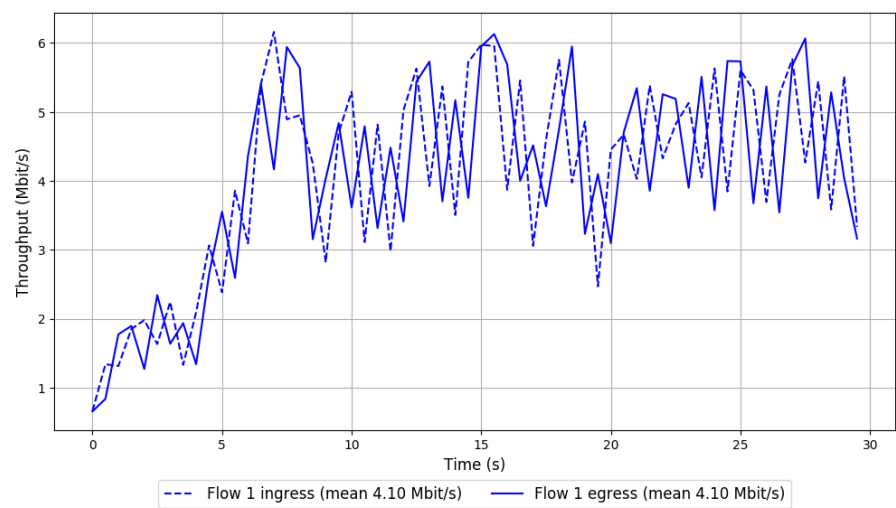
-- Flow 1:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 87.771 ms

Loss rate: 0.67%

Run 10: Report of Sprout — Data Link

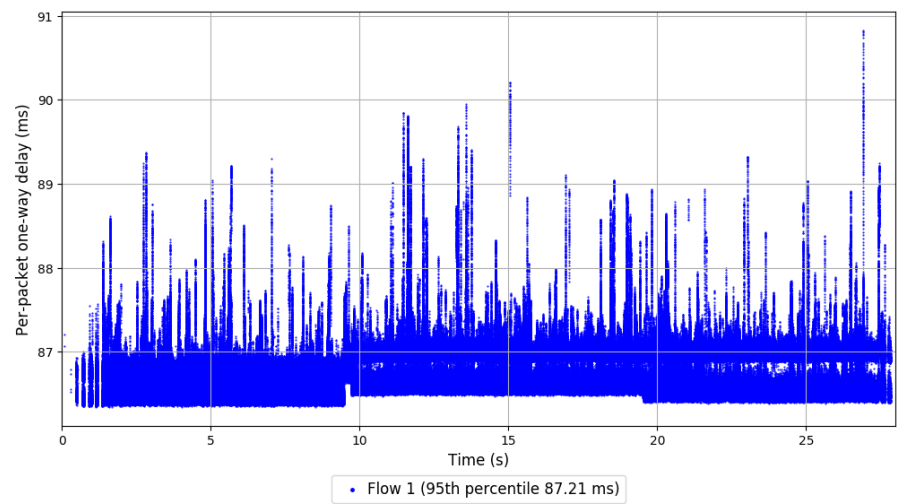
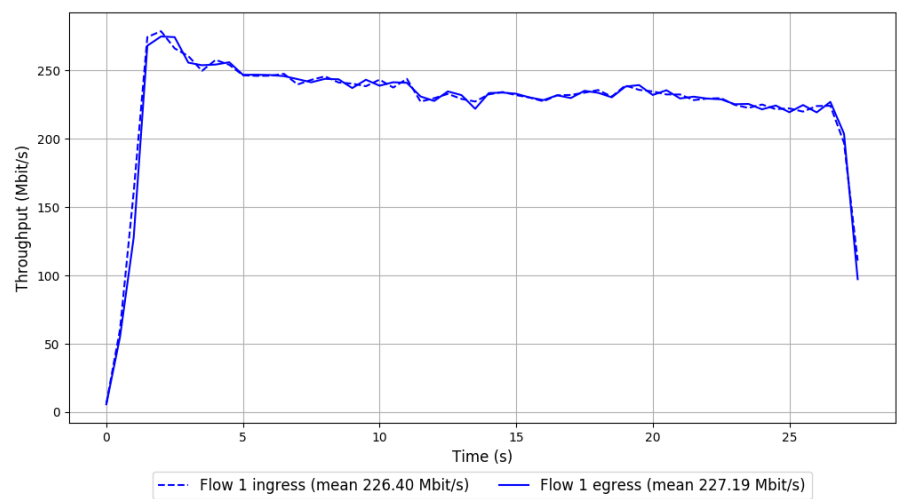


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-11 07:29:08
End at: 2017-12-11 07:29:38

# Below is generated by plot.py at 2017-12-11 11:20:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 227.19 Mbit/s
95th percentile per-packet one-way delay: 87.206 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 227.19 Mbit/s
95th percentile per-packet one-way delay: 87.206 ms
Loss rate: 0.36%
```


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

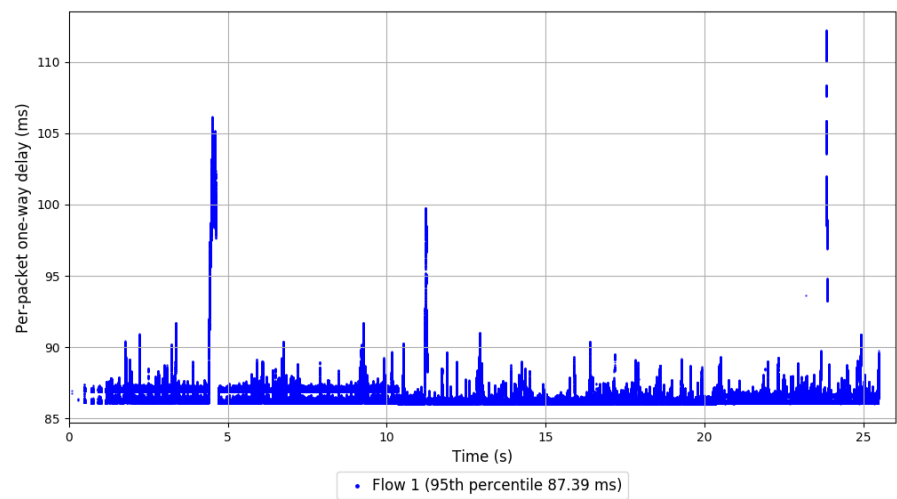
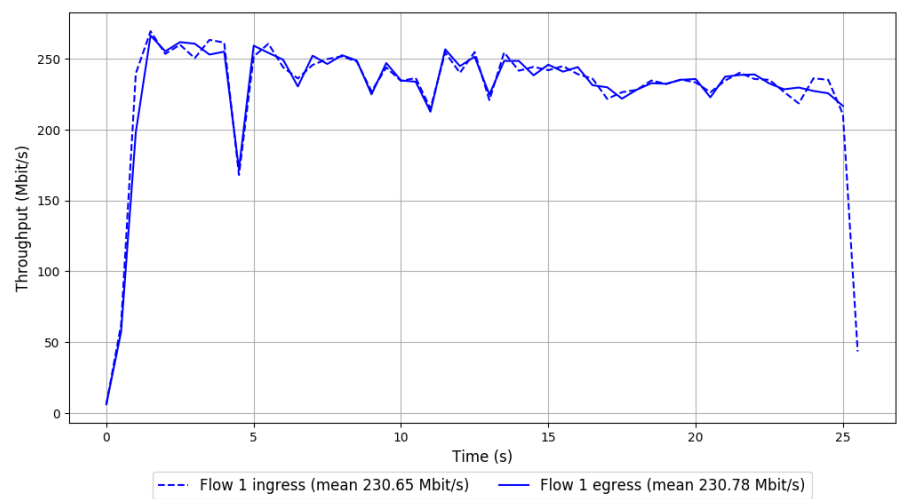


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-11 07:40:04
End at: 2017-12-11 07:40:34

# Below is generated by plot.py at 2017-12-11 11:20:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 230.78 Mbit/s
95th percentile per-packet one-way delay: 87.385 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 230.78 Mbit/s
95th percentile per-packet one-way delay: 87.385 ms
Loss rate: 0.71%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-11 07:51:18

End at: 2017-12-11 07:51:48

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.85 Mbit/s

95th percentile per-packet one-way delay: 114.417 ms

Loss rate: 0.80%

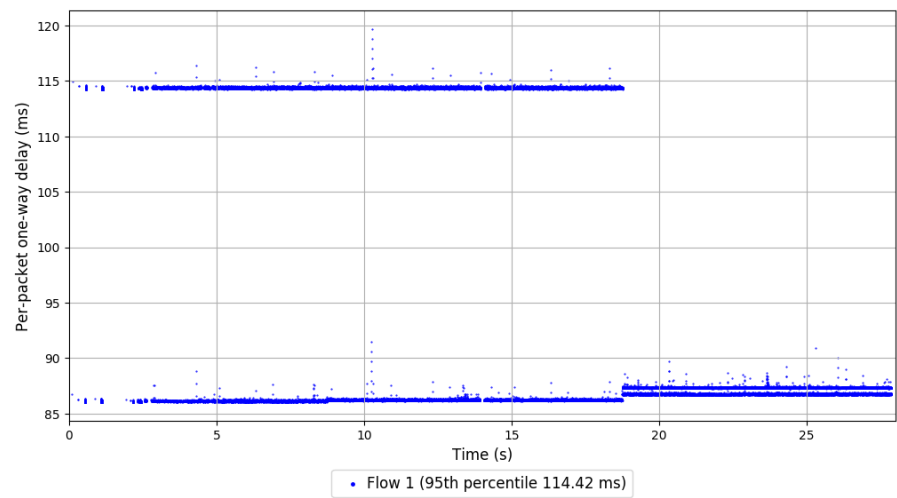
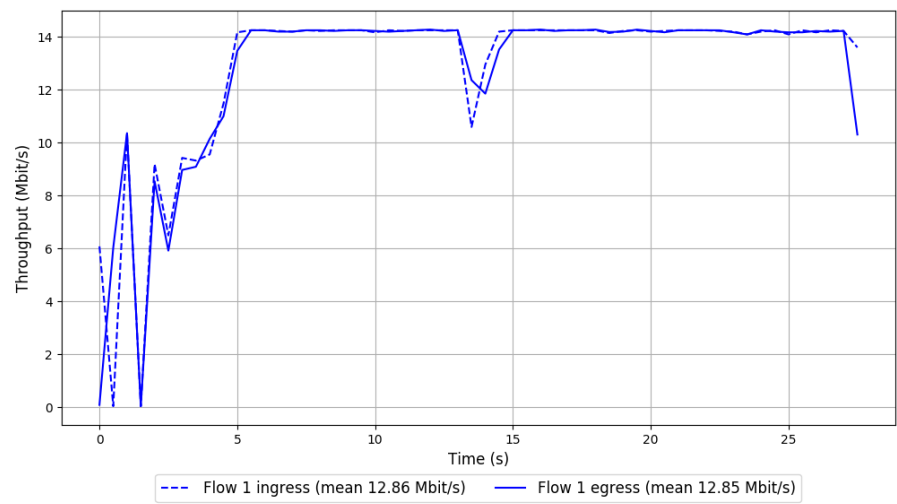
-- Flow 1:

Average throughput: 12.85 Mbit/s

95th percentile per-packet one-way delay: 114.417 ms

Loss rate: 0.80%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-11 08:02:07

End at: 2017-12-11 08:02:37

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 228.17 Mbit/s

95th percentile per-packet one-way delay: 87.299 ms

Loss rate: 0.77%

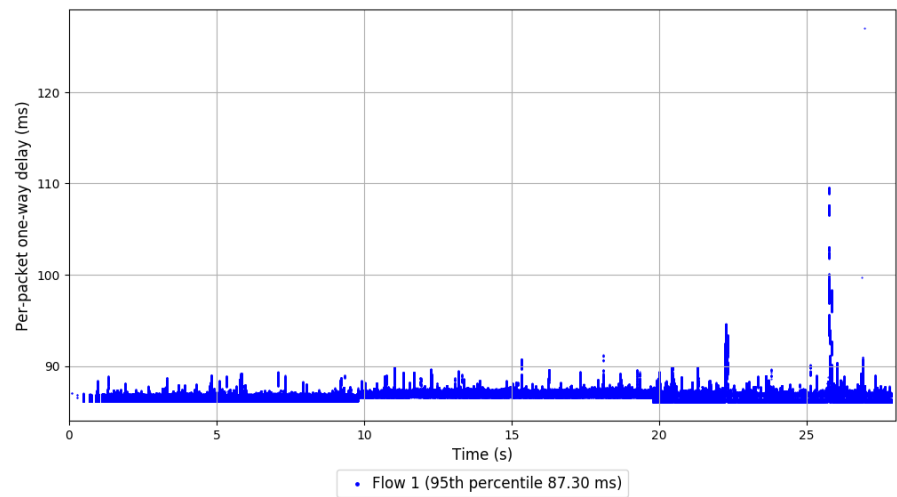
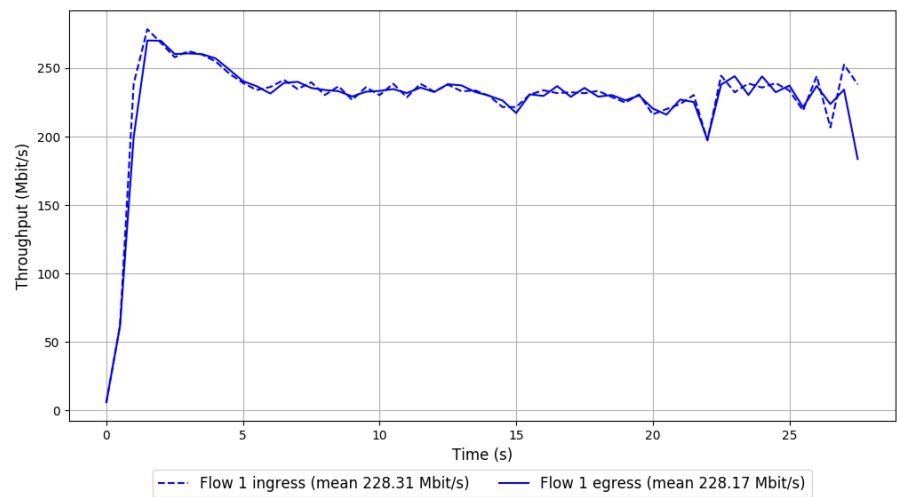
-- Flow 1:

Average throughput: 228.17 Mbit/s

95th percentile per-packet one-way delay: 87.299 ms

Loss rate: 0.77%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-11 08:13:21

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

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.53 Mbit/s

95th percentile per-packet one-way delay: 87.162 ms

Loss rate: 0.74%

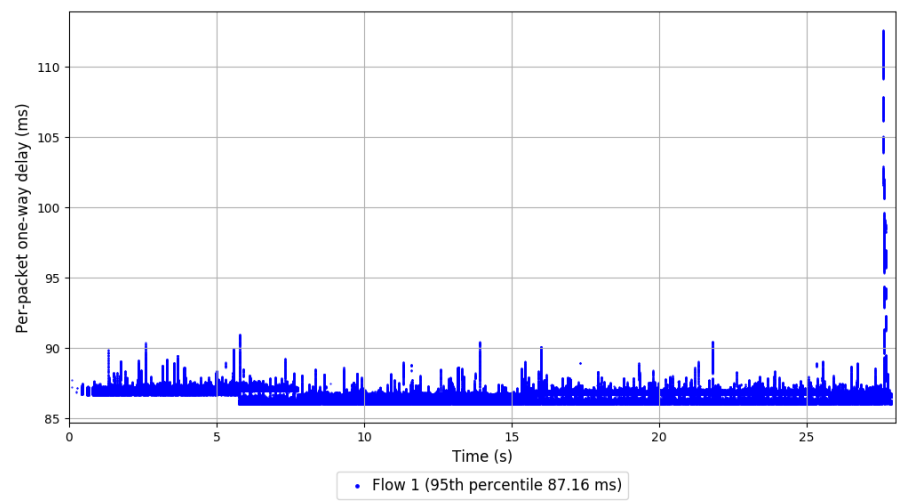
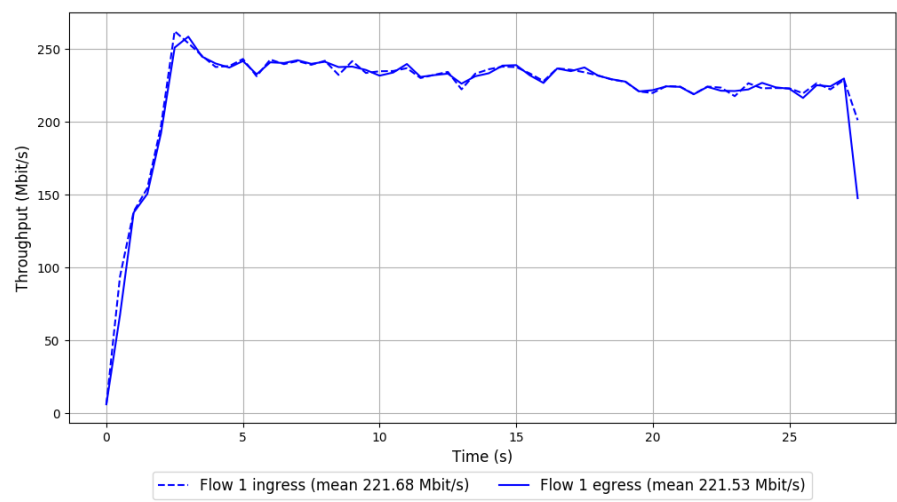
-- Flow 1:

Average throughput: 221.53 Mbit/s

95th percentile per-packet one-way delay: 87.162 ms

Loss rate: 0.74%

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

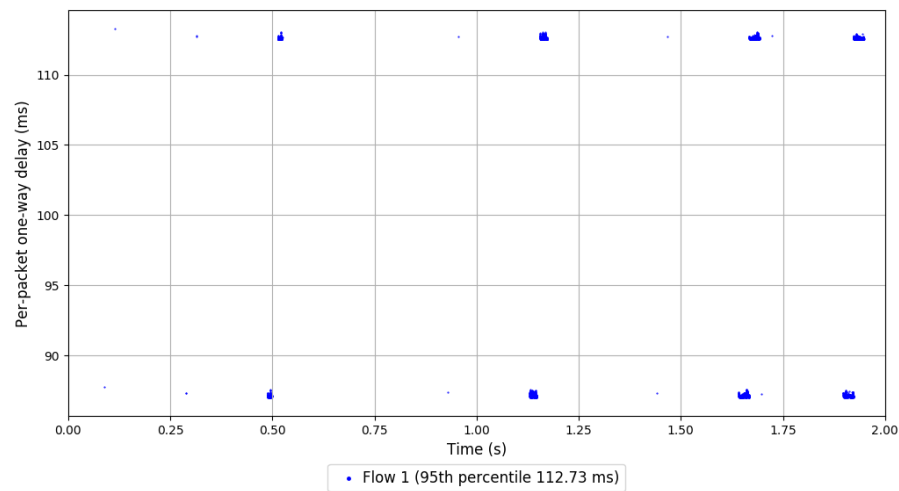
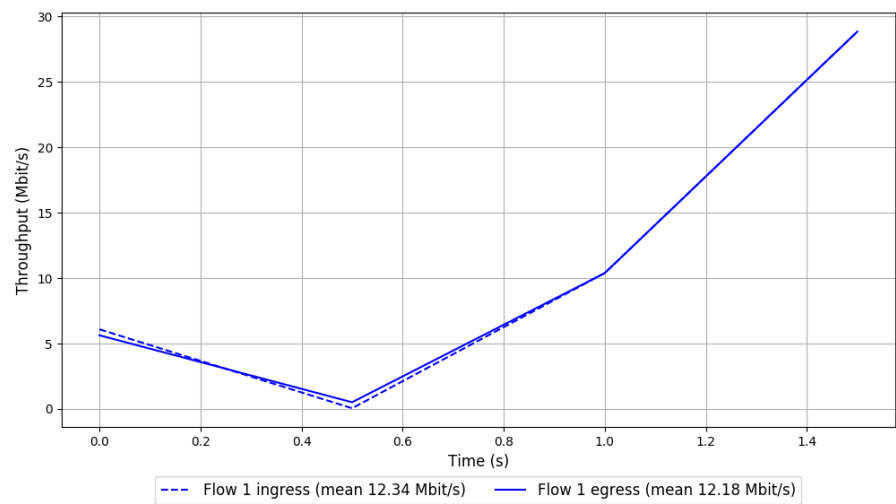


Run 6: Statistics of TaoVA-100x

Start at: 2017-12-11 08:24:39

End at: 2017-12-11 08:25:09

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-11 08:35:32

End at: 2017-12-11 08:36:02

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.30 Mbit/s

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

Loss rate: 0.13%

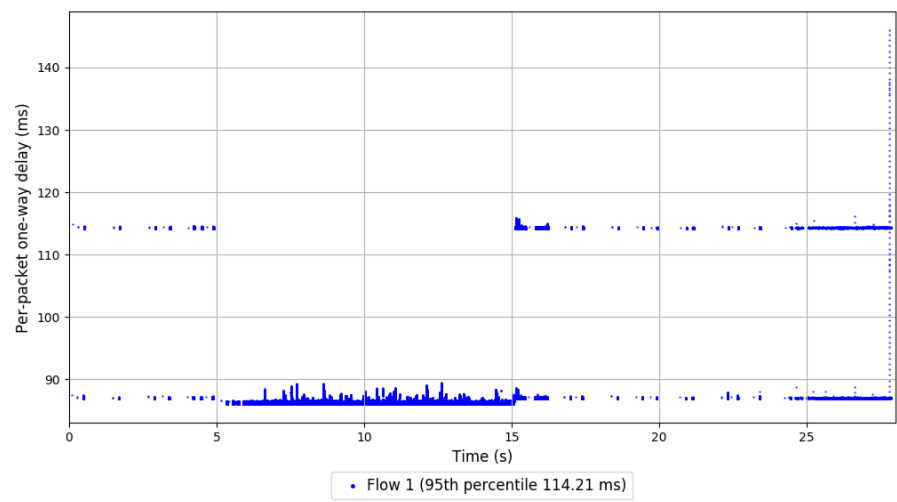
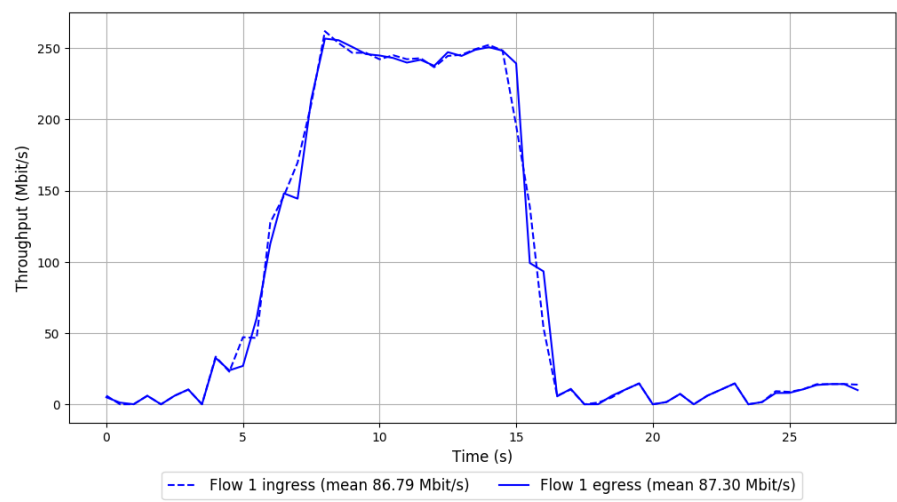
-- Flow 1:

Average throughput: 87.30 Mbit/s

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

Loss rate: 0.13%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-11 08:46:10

End at: 2017-12-11 08:46:40

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.97 Mbit/s

95th percentile per-packet one-way delay: 112.734 ms

Loss rate: 1.42%

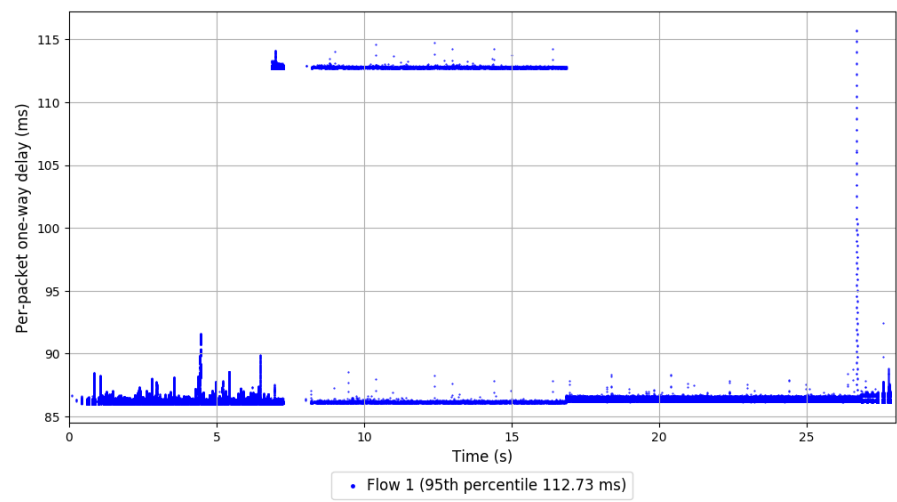
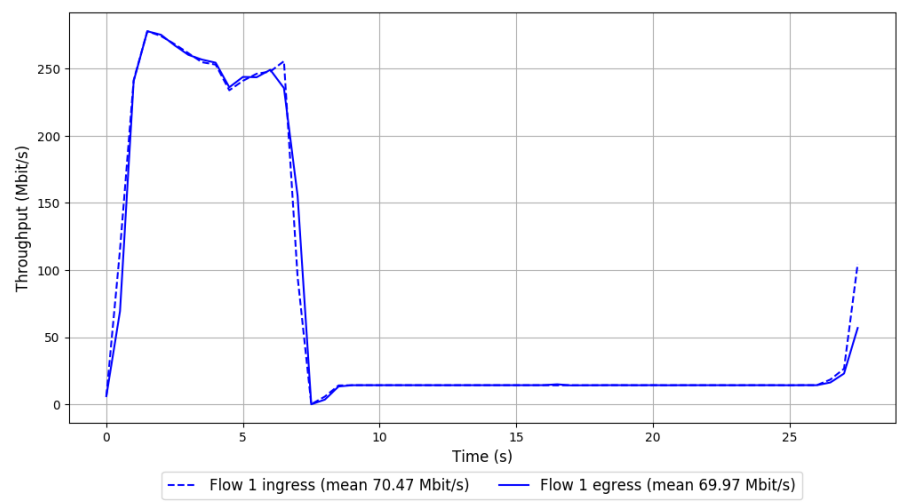
-- Flow 1:

Average throughput: 69.97 Mbit/s

95th percentile per-packet one-way delay: 112.734 ms

Loss rate: 1.42%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-11 08:57:02

End at: 2017-12-11 08:57:32

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.47 Mbit/s

95th percentile per-packet one-way delay: 112.628 ms

Loss rate: 0.34%

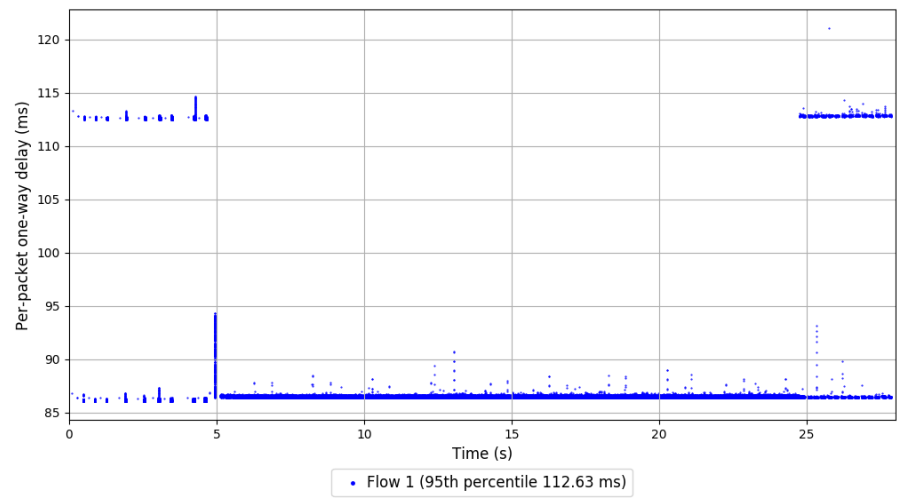
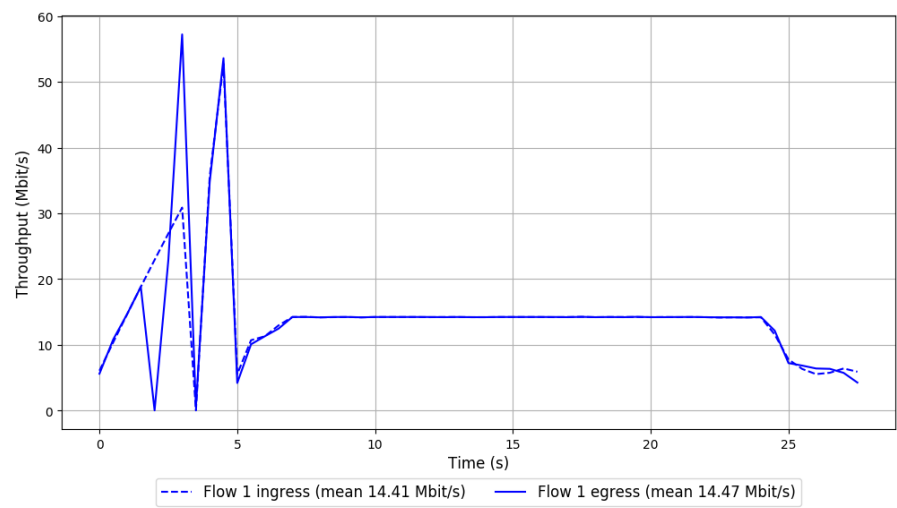
-- Flow 1:

Average throughput: 14.47 Mbit/s

95th percentile per-packet one-way delay: 112.628 ms

Loss rate: 0.34%

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

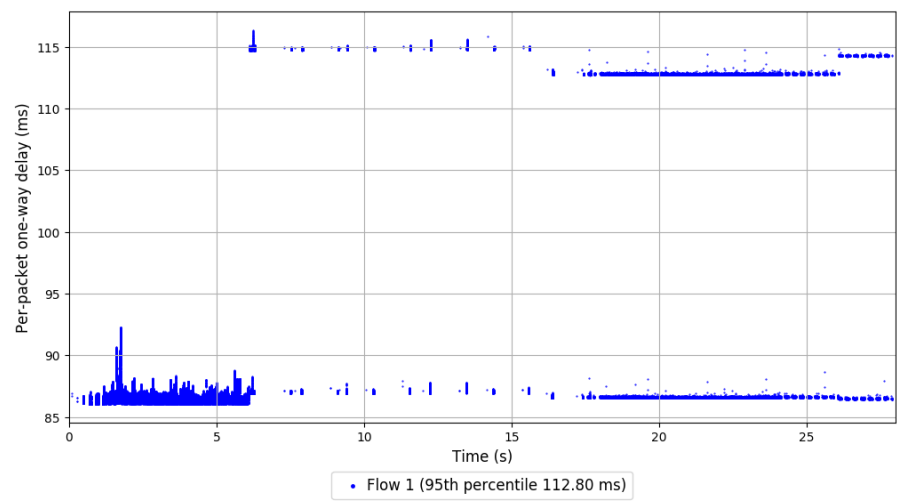
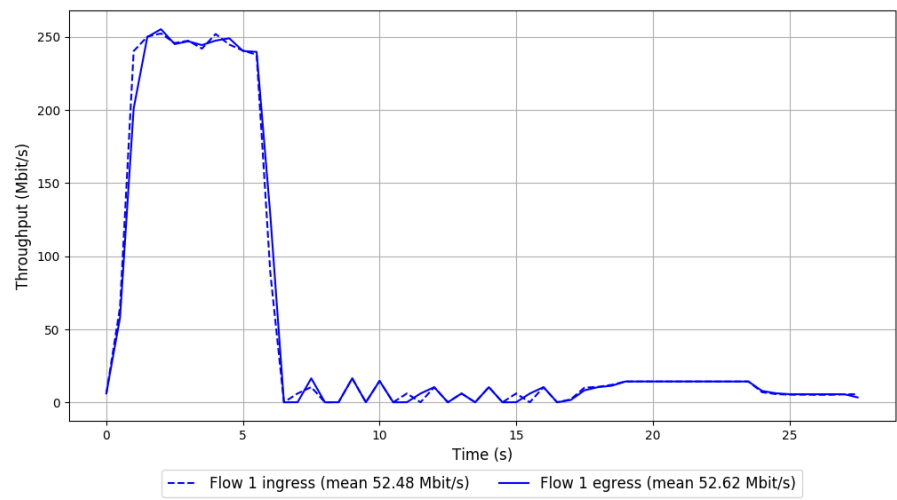


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-11 09:07:51
End at: 2017-12-11 09:08:21

# Below is generated by plot.py at 2017-12-11 11:20:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.62 Mbit/s
95th percentile per-packet one-way delay: 112.798 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 52.62 Mbit/s
95th percentile per-packet one-way delay: 112.798 ms
Loss rate: 0.12%
```

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



Run 1: Statistics of TCP Vegas

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

End at: 2017-12-11 07:30:40

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.75 Mbit/s

95th percentile per-packet one-way delay: 97.309 ms

Loss rate: 0.20%

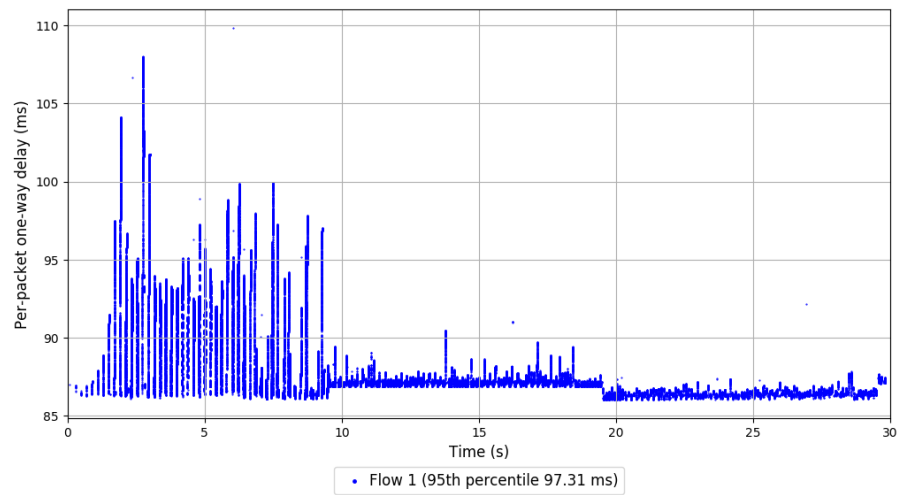
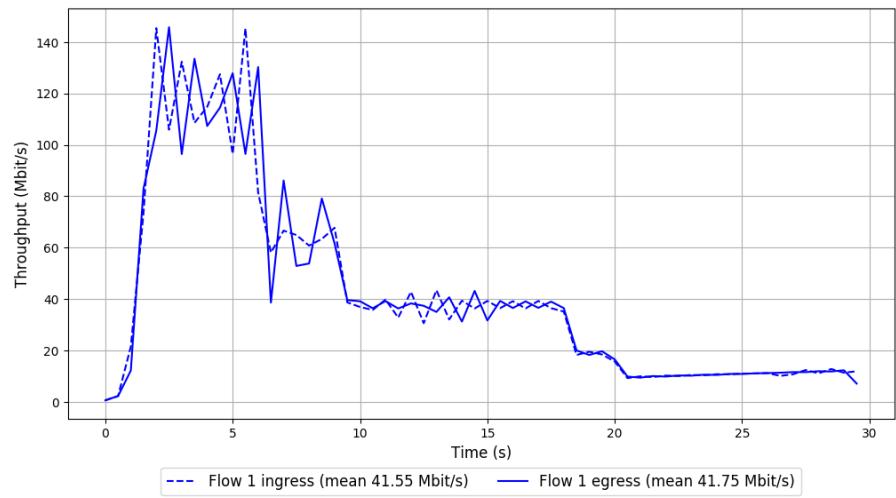
-- Flow 1:

Average throughput: 41.75 Mbit/s

95th percentile per-packet one-way delay: 97.309 ms

Loss rate: 0.20%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-11 07:41:05

End at: 2017-12-11 07:41:35

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.37 Mbit/s

95th percentile per-packet one-way delay: 96.708 ms

Loss rate: 0.21%

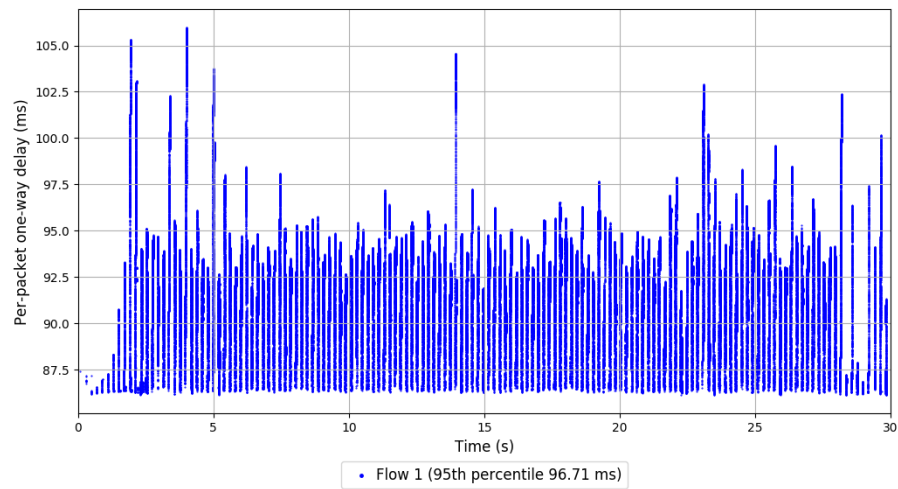
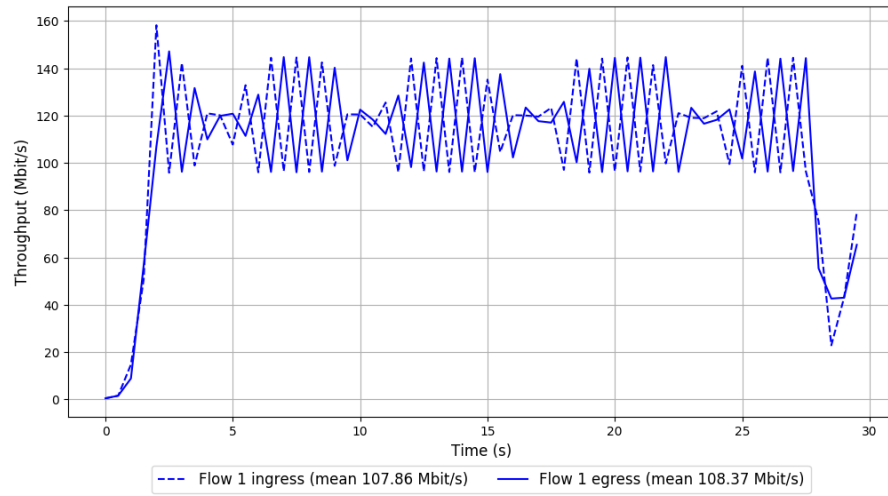
-- Flow 1:

Average throughput: 108.37 Mbit/s

95th percentile per-packet one-way delay: 96.708 ms

Loss rate: 0.21%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-11 07:52:00

End at: 2017-12-11 07:52:30

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.06 Mbit/s

95th percentile per-packet one-way delay: 93.359 ms

Loss rate: 0.21%

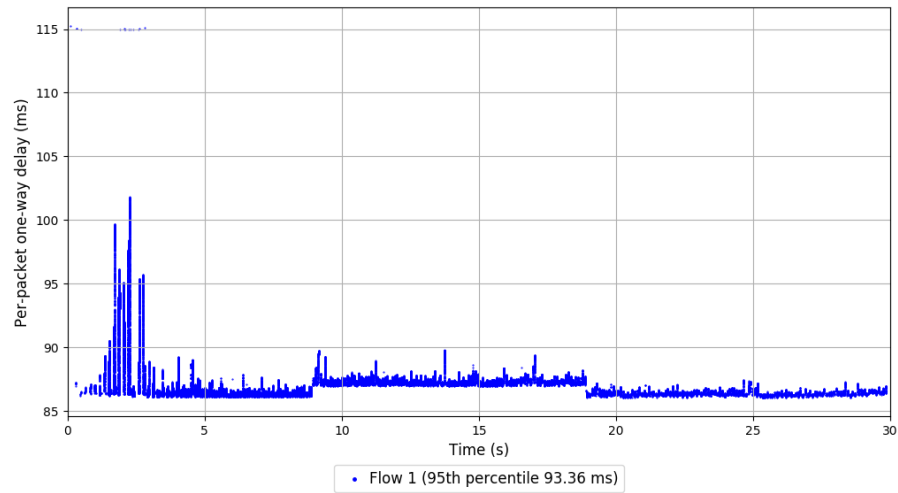
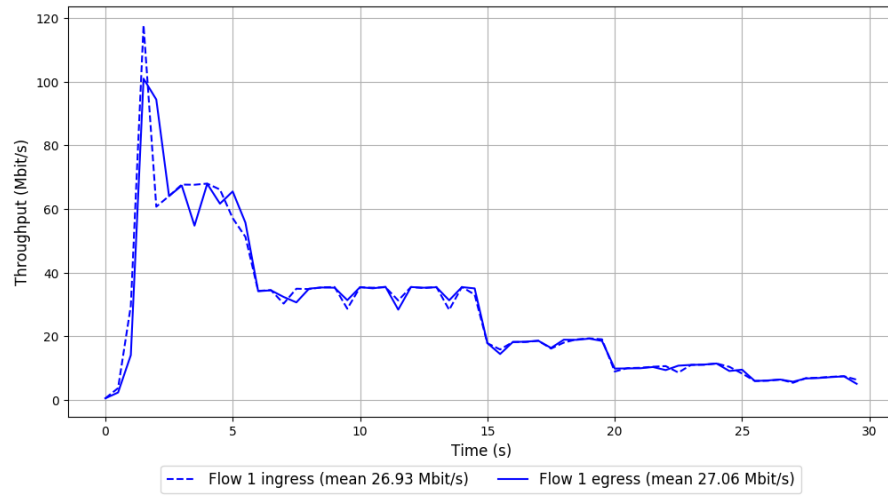
-- Flow 1:

Average throughput: 27.06 Mbit/s

95th percentile per-packet one-way delay: 93.359 ms

Loss rate: 0.21%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-11 08:03:09

End at: 2017-12-11 08:03:39

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.69 Mbit/s

95th percentile per-packet one-way delay: 113.060 ms

Loss rate: 0.38%

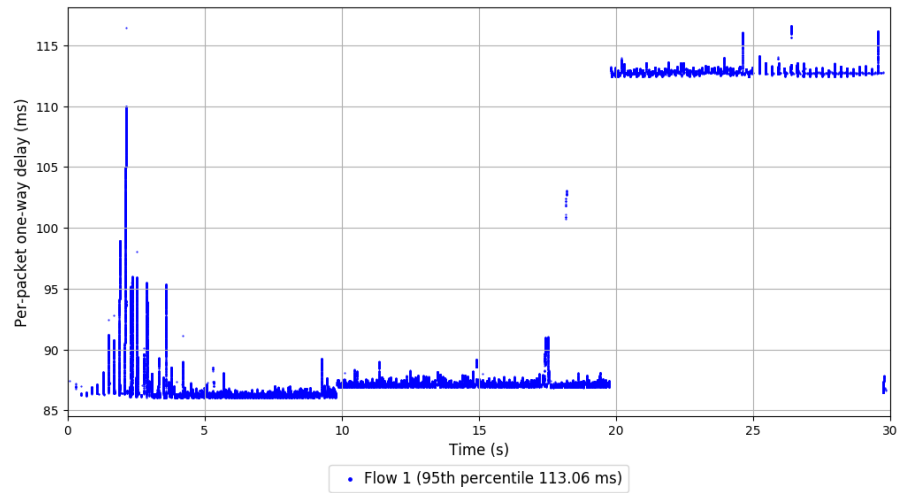
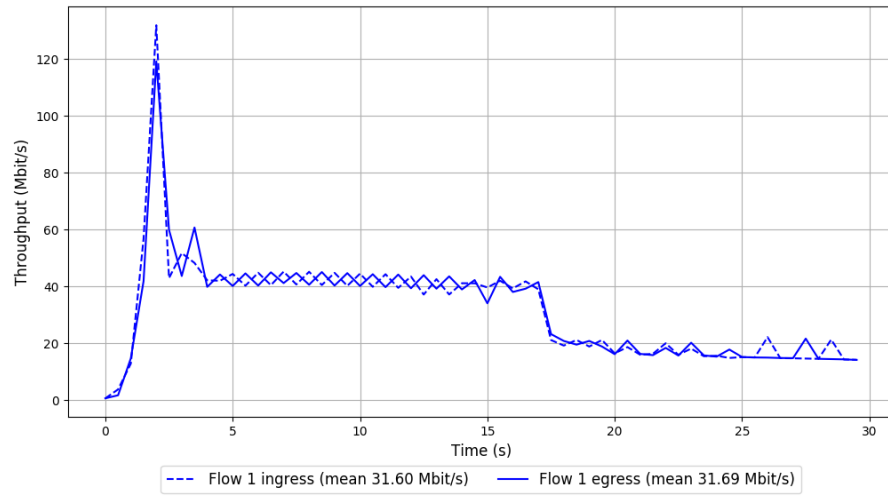
-- Flow 1:

Average throughput: 31.69 Mbit/s

95th percentile per-packet one-way delay: 113.060 ms

Loss rate: 0.38%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-11 08:14:24

End at: 2017-12-11 08:14:54

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.42 Mbit/s

95th percentile per-packet one-way delay: 115.204 ms

Loss rate: 0.62%

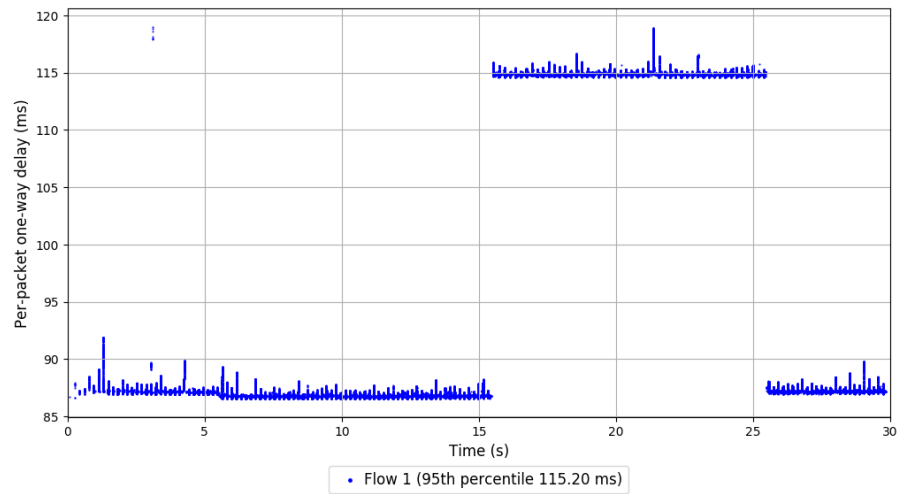
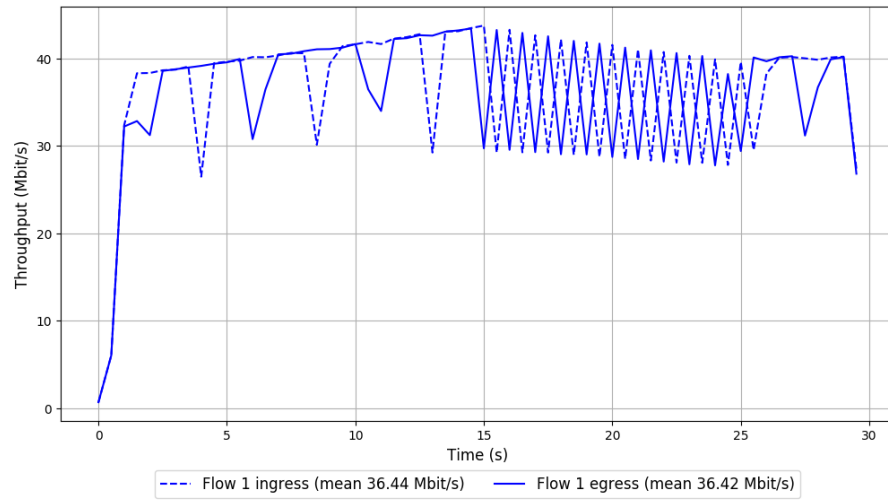
-- Flow 1:

Average throughput: 36.42 Mbit/s

95th percentile per-packet one-way delay: 115.204 ms

Loss rate: 0.62%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-11 08:25:20

End at: 2017-12-11 08:25:50

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 99.41 Mbit/s

95th percentile per-packet one-way delay: 88.312 ms

Loss rate: 0.30%

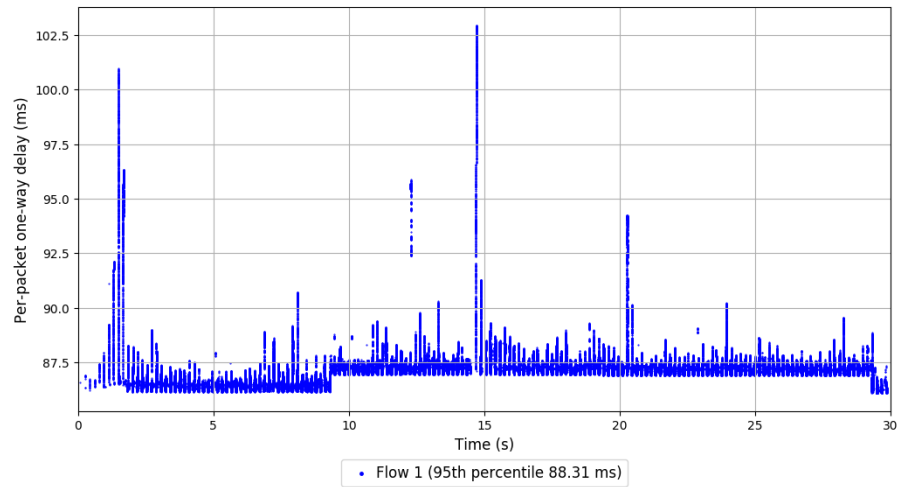
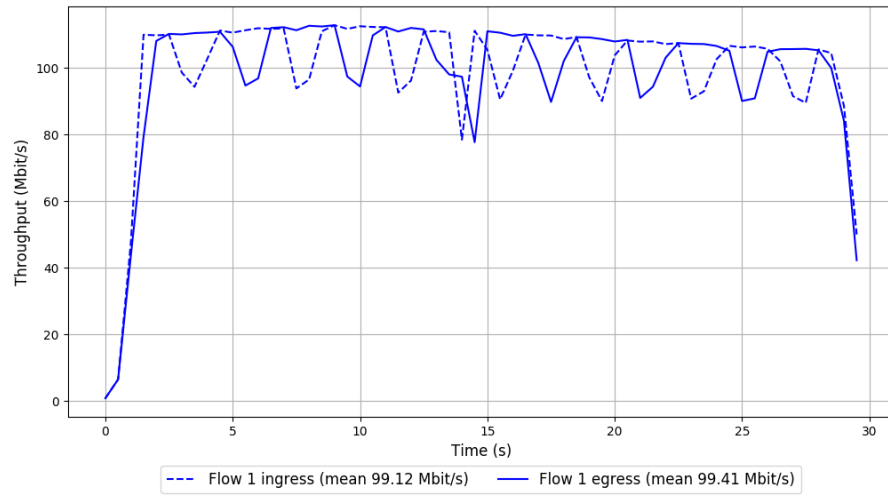
-- Flow 1:

Average throughput: 99.41 Mbit/s

95th percentile per-packet one-way delay: 88.312 ms

Loss rate: 0.30%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-11 08:36:20

End at: 2017-12-11 08:36:51

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.23 Mbit/s

95th percentile per-packet one-way delay: 98.266 ms

Loss rate: 0.04%

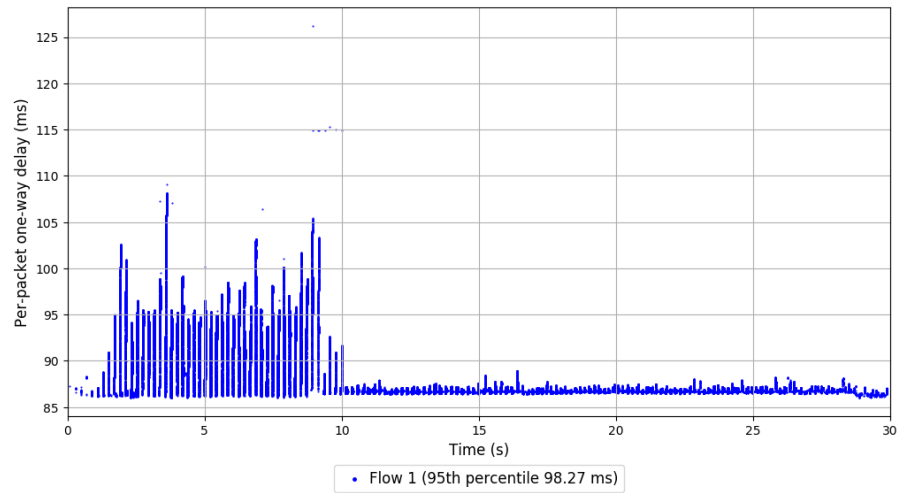
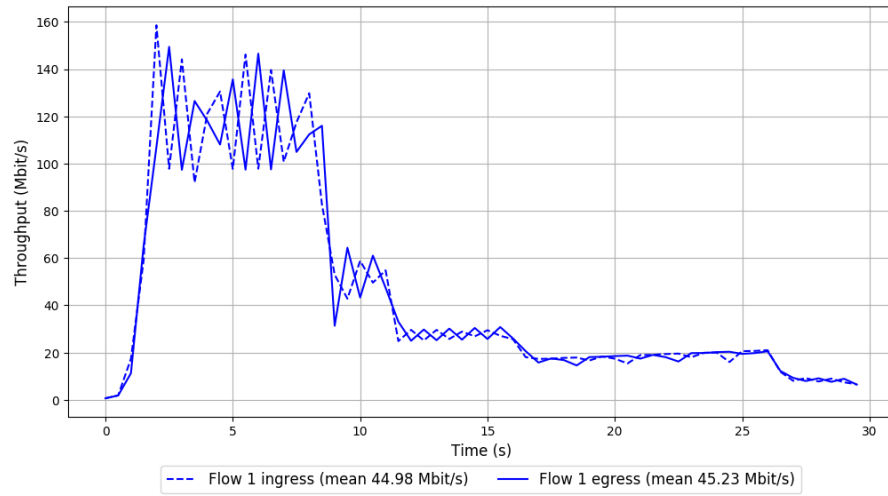
-- Flow 1:

Average throughput: 45.23 Mbit/s

95th percentile per-packet one-way delay: 98.266 ms

Loss rate: 0.04%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-11 08:46:57

End at: 2017-12-11 08:47:27

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.63 Mbit/s

95th percentile per-packet one-way delay: 97.666 ms

Loss rate: 0.76%

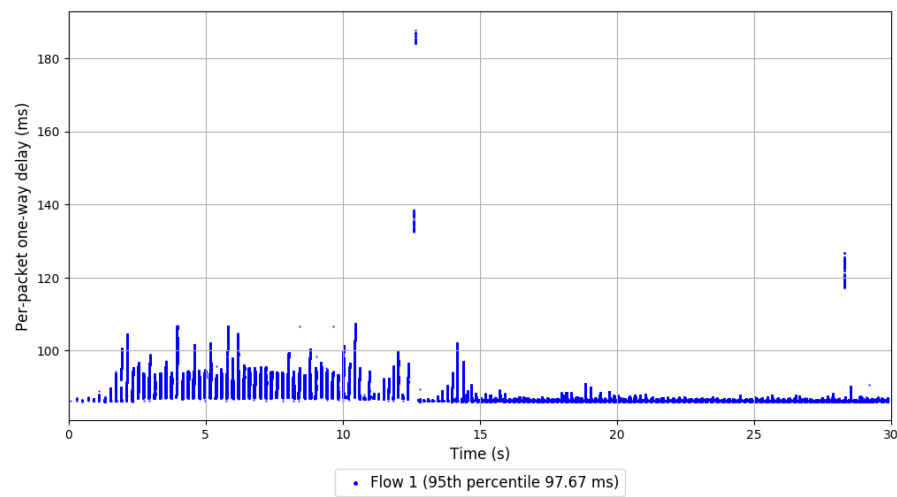
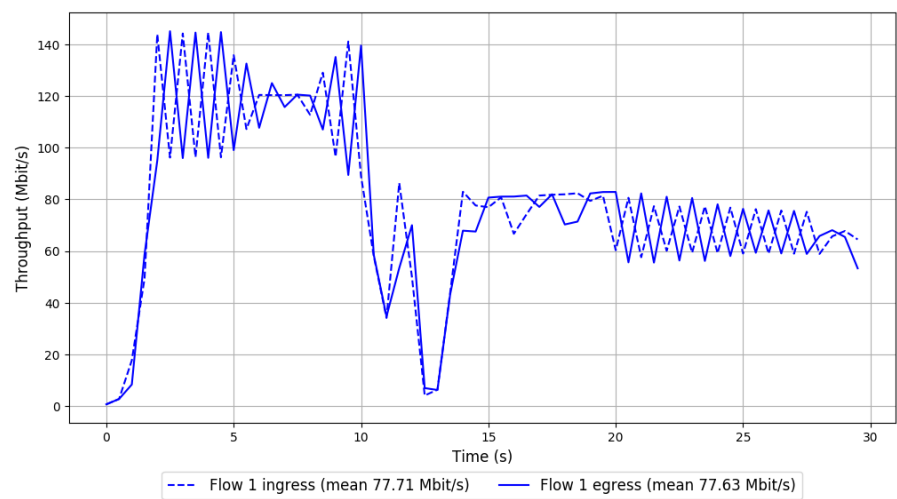
-- Flow 1:

Average throughput: 77.63 Mbit/s

95th percentile per-packet one-way delay: 97.666 ms

Loss rate: 0.76%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-11 08:57:44

End at: 2017-12-11 08:58:14

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.74 Mbit/s

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

Loss rate: 0.28%

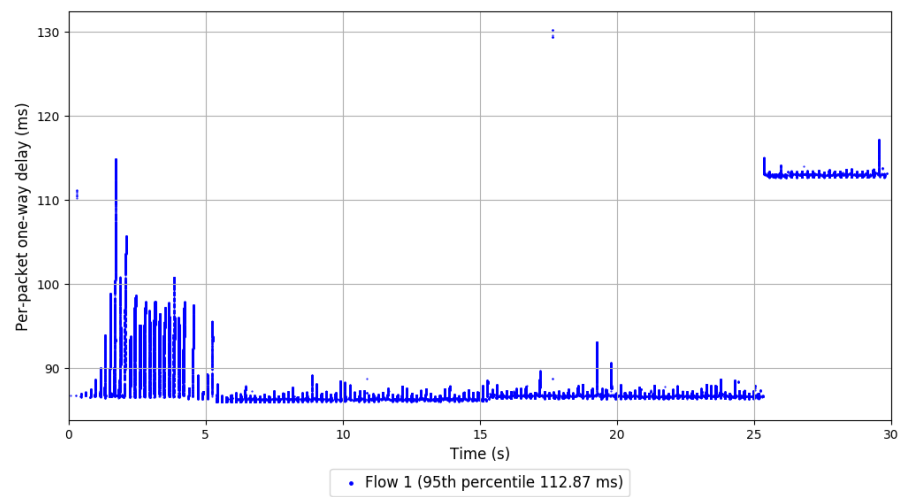
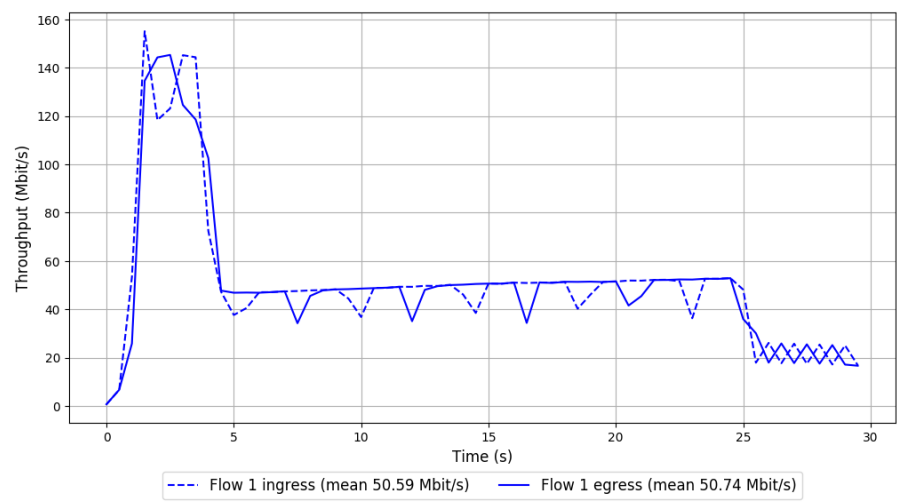
-- Flow 1:

Average throughput: 50.74 Mbit/s

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

Loss rate: 0.28%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-11 09:08:36

End at: 2017-12-11 09:09:06

Below is generated by plot.py at 2017-12-11 11:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.28 Mbit/s

95th percentile per-packet one-way delay: 88.224 ms

Loss rate: 0.37%

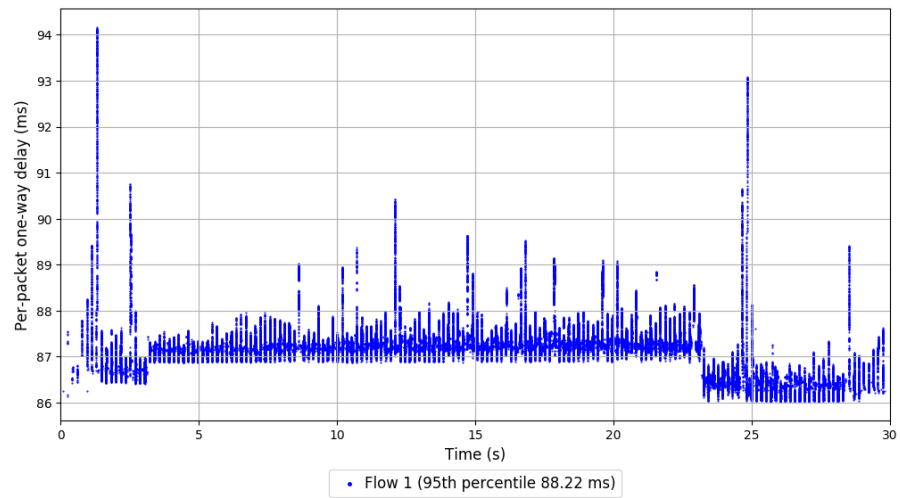
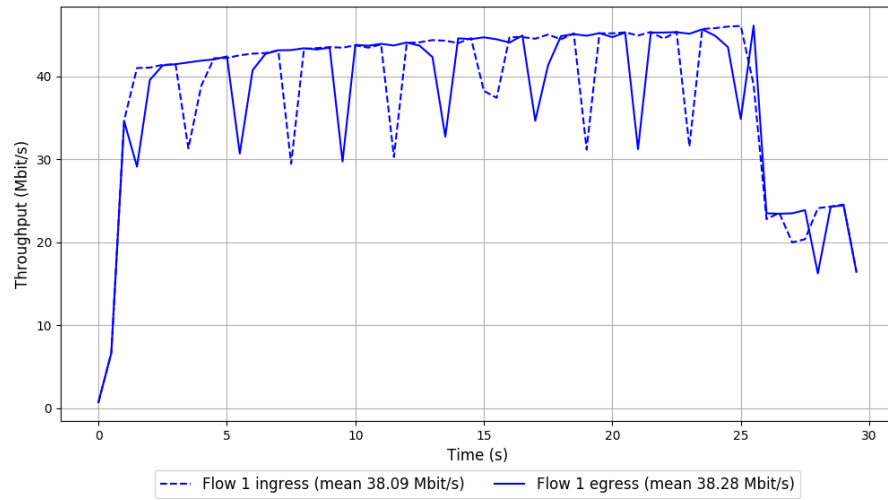
-- Flow 1:

Average throughput: 38.28 Mbit/s

95th percentile per-packet one-way delay: 88.224 ms

Loss rate: 0.37%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-11 07:28:08

End at: 2017-12-11 07:28:38

Below is generated by plot.py at 2017-12-11 11:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 253.98 Mbit/s

95th percentile per-packet one-way delay: 141.089 ms

Loss rate: 2.88%

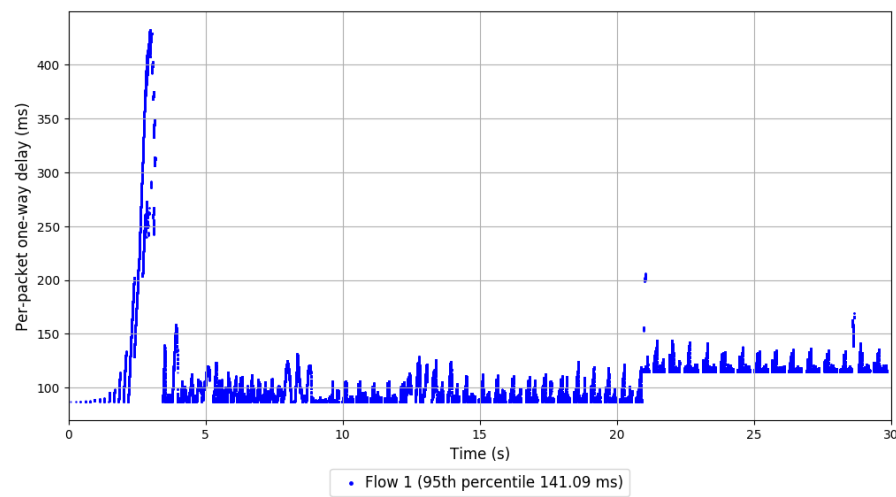
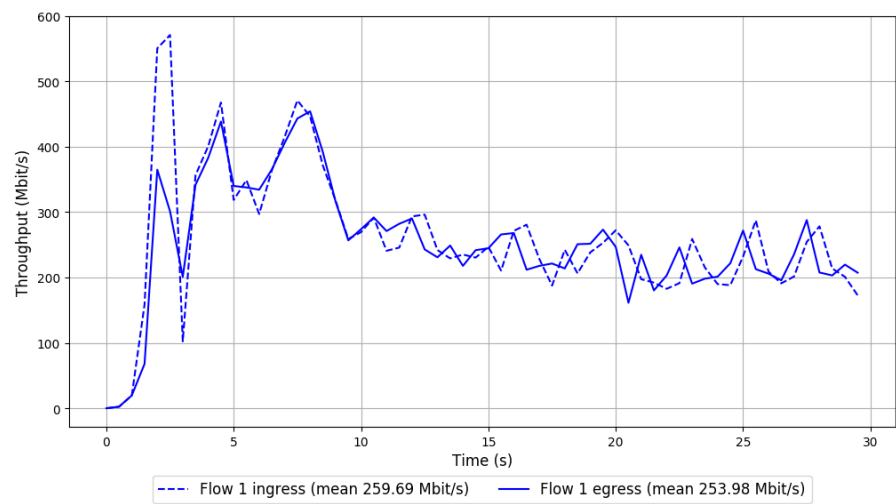
-- Flow 1:

Average throughput: 253.98 Mbit/s

95th percentile per-packet one-way delay: 141.089 ms

Loss rate: 2.88%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-11 07:39:10

End at: 2017-12-11 07:39:40

Below is generated by plot.py at 2017-12-11 11:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.30 Mbit/s

95th percentile per-packet one-way delay: 233.042 ms

Loss rate: 5.72%

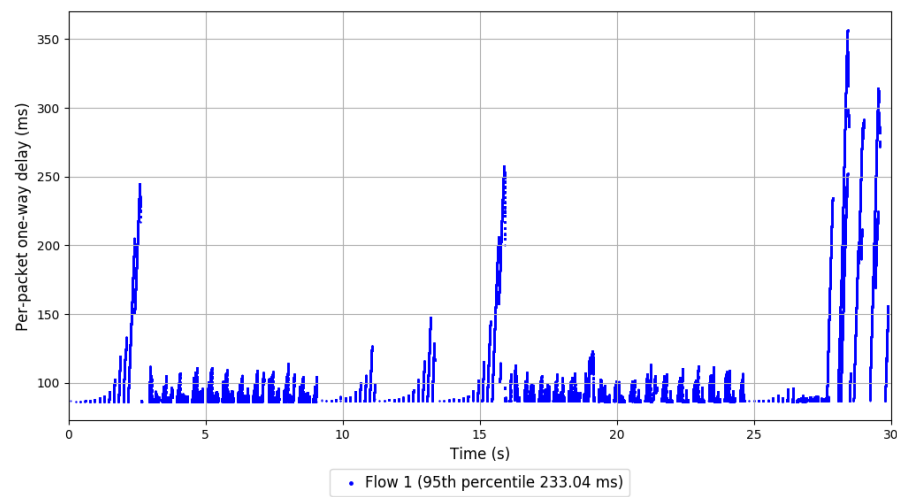
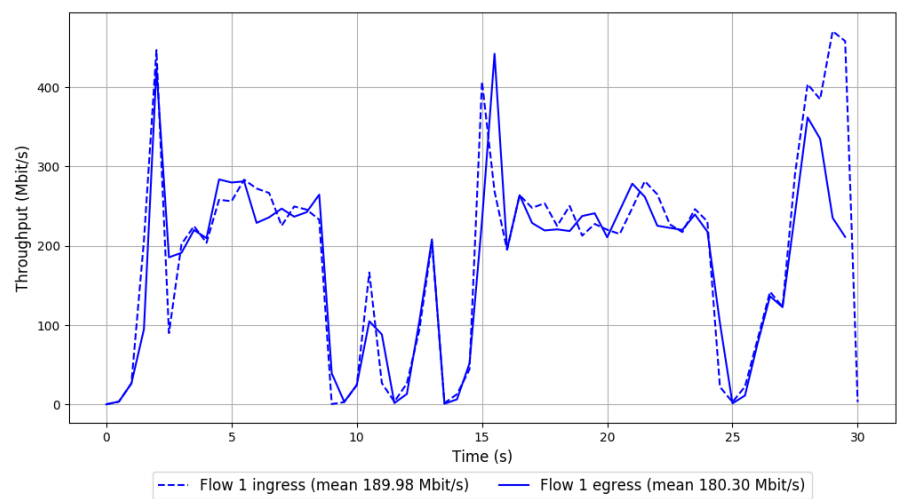
-- Flow 1:

Average throughput: 180.30 Mbit/s

95th percentile per-packet one-way delay: 233.042 ms

Loss rate: 5.72%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-11 07:50:23

End at: 2017-12-11 07:50:53

Below is generated by plot.py at 2017-12-11 11:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.12 Mbit/s

95th percentile per-packet one-way delay: 194.408 ms

Loss rate: 4.78%

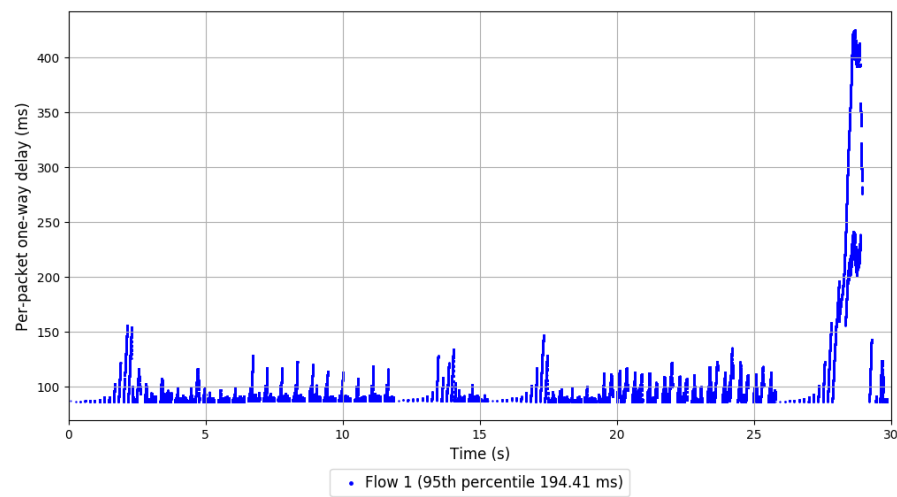
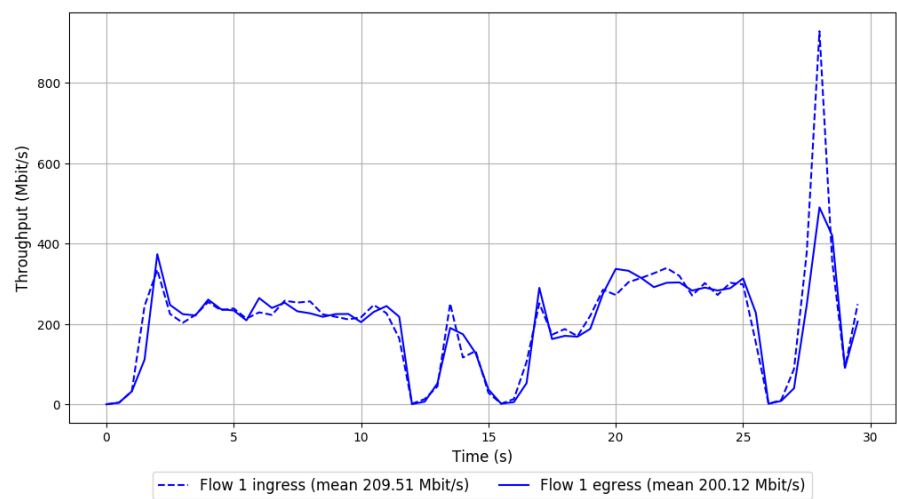
-- Flow 1:

Average throughput: 200.12 Mbit/s

95th percentile per-packet one-way delay: 194.408 ms

Loss rate: 4.78%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

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

End at: 2017-12-11 08:01:40

Below is generated by plot.py at 2017-12-11 11:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.02 Mbit/s

95th percentile per-packet one-way delay: 123.407 ms

Loss rate: 2.03%

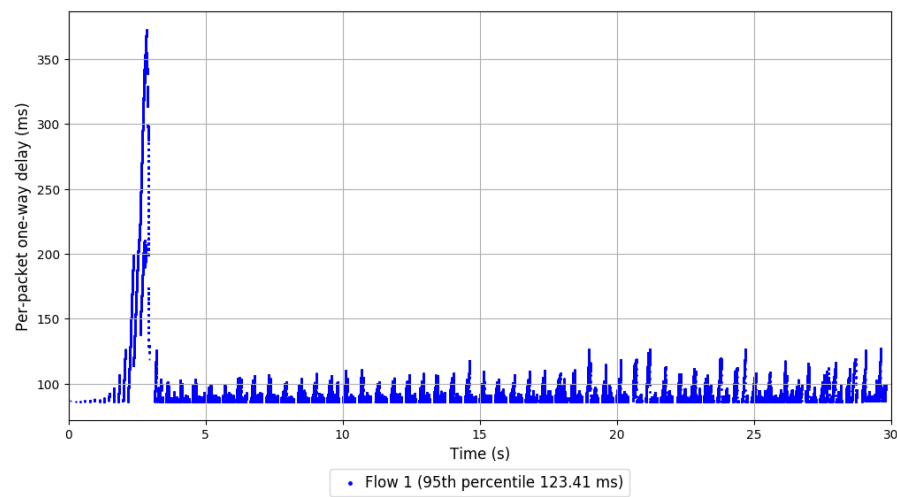
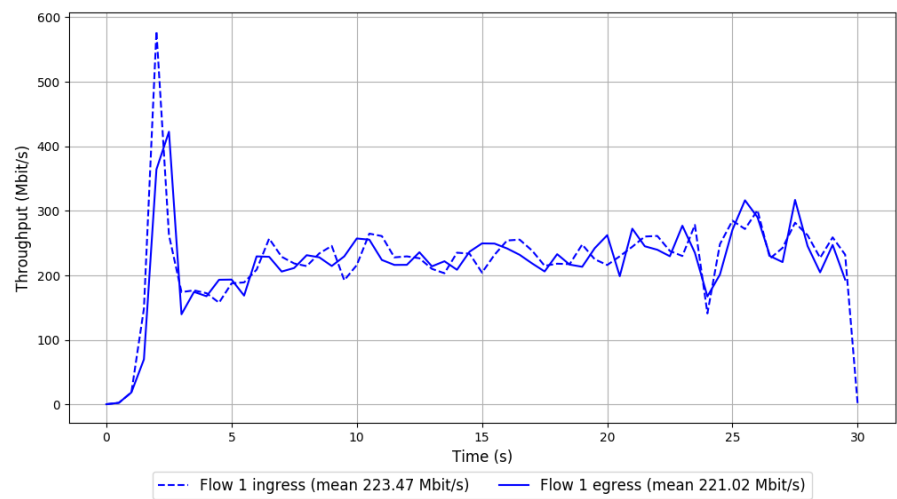
-- Flow 1:

Average throughput: 221.02 Mbit/s

95th percentile per-packet one-way delay: 123.407 ms

Loss rate: 2.03%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-11 08:12:24

End at: 2017-12-11 08:12:54

Below is generated by plot.py at 2017-12-11 11:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.68 Mbit/s

95th percentile per-packet one-way delay: 116.326 ms

Loss rate: 0.83%

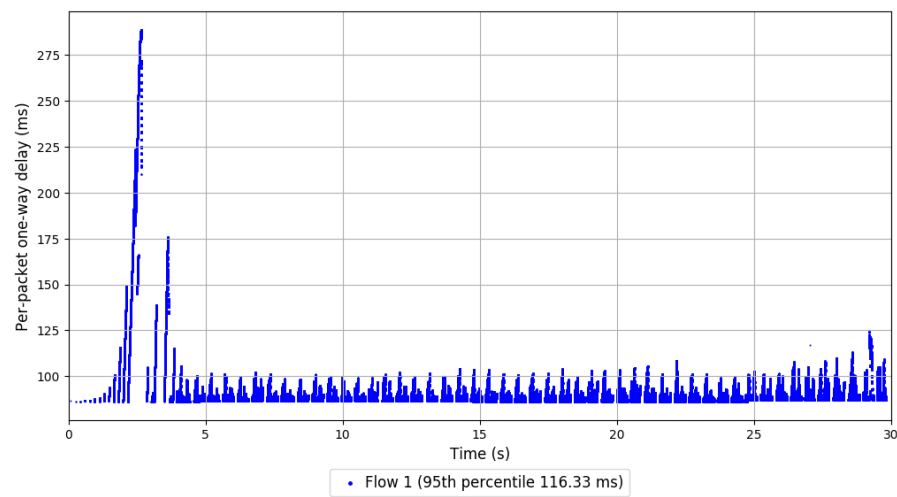
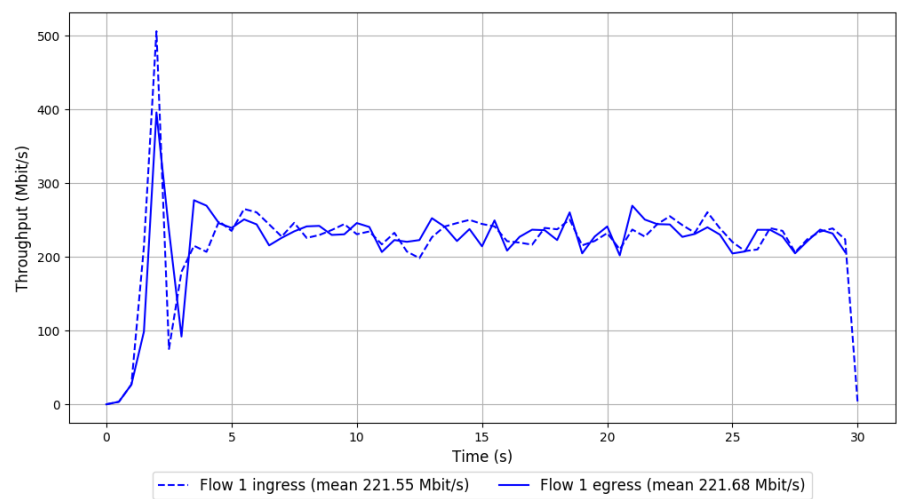
-- Flow 1:

Average throughput: 221.68 Mbit/s

95th percentile per-packet one-way delay: 116.326 ms

Loss rate: 0.83%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-11 08:23:43

End at: 2017-12-11 08:24:13

Below is generated by plot.py at 2017-12-11 11:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.51 Mbit/s

95th percentile per-packet one-way delay: 153.223 ms

Loss rate: 0.88%

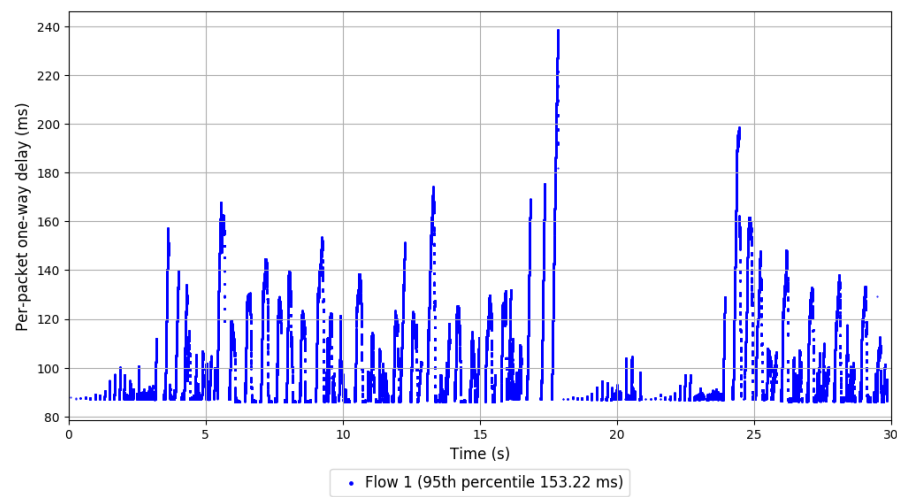
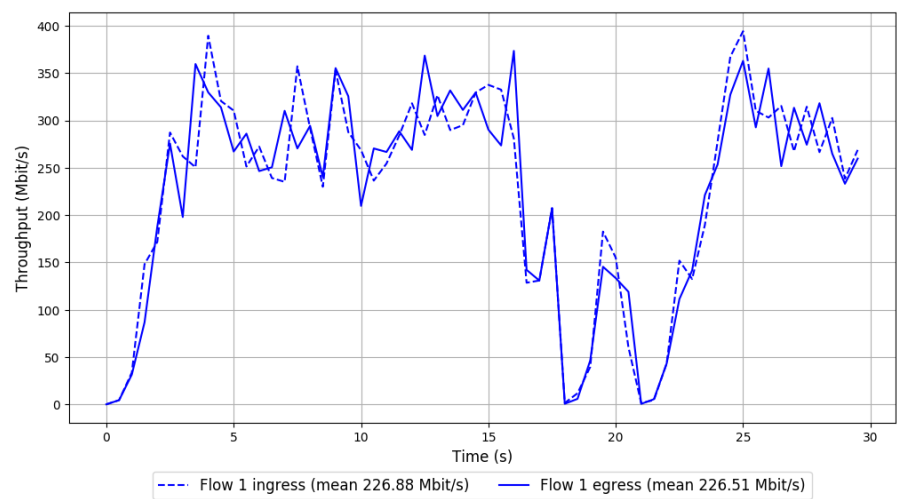
-- Flow 1:

Average throughput: 226.51 Mbit/s

95th percentile per-packet one-way delay: 153.223 ms

Loss rate: 0.88%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-11 08:34:38

End at: 2017-12-11 08:35:08

Below is generated by plot.py at 2017-12-11 11:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.55 Mbit/s

95th percentile per-packet one-way delay: 206.611 ms

Loss rate: 2.78%

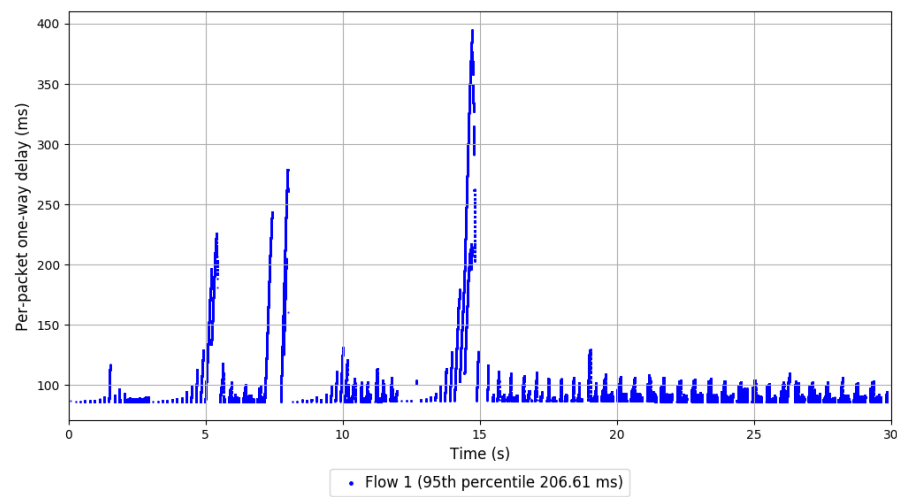
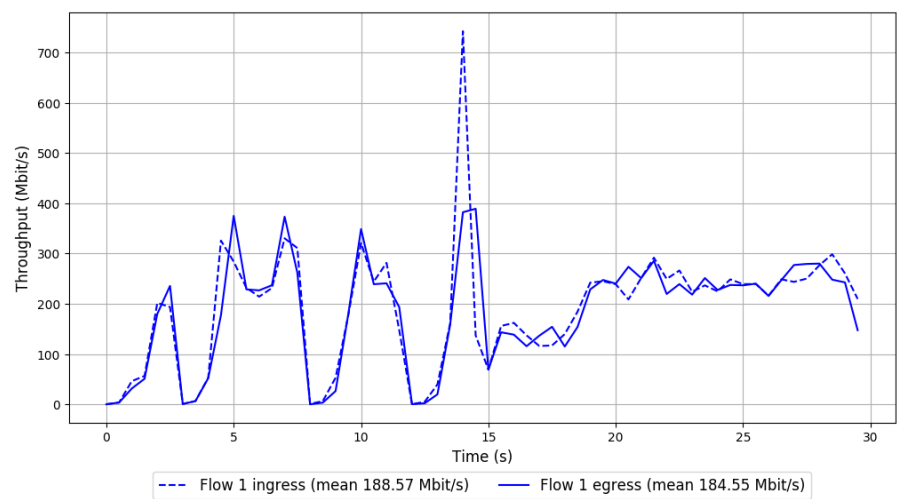
-- Flow 1:

Average throughput: 184.55 Mbit/s

95th percentile per-packet one-way delay: 206.611 ms

Loss rate: 2.78%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-11 08:45:18

End at: 2017-12-11 08:45:48

Below is generated by plot.py at 2017-12-11 11:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 161.75 Mbit/s

95th percentile per-packet one-way delay: 149.196 ms

Loss rate: 1.66%

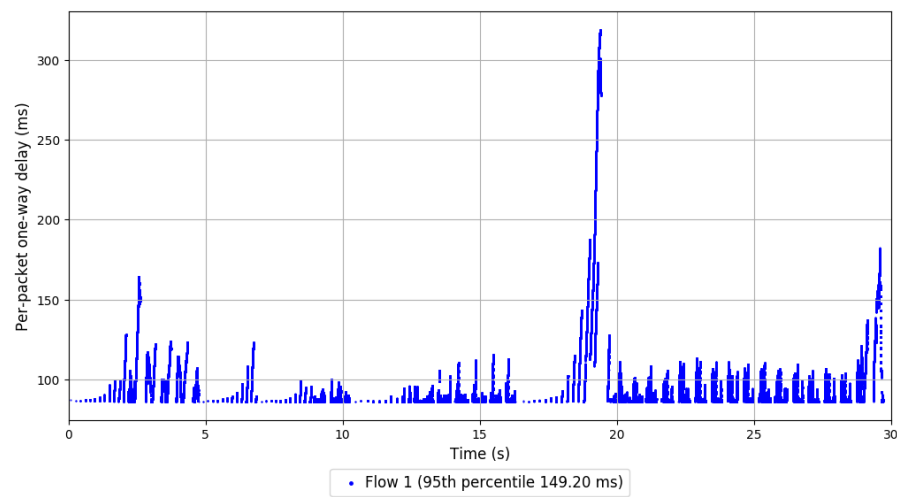
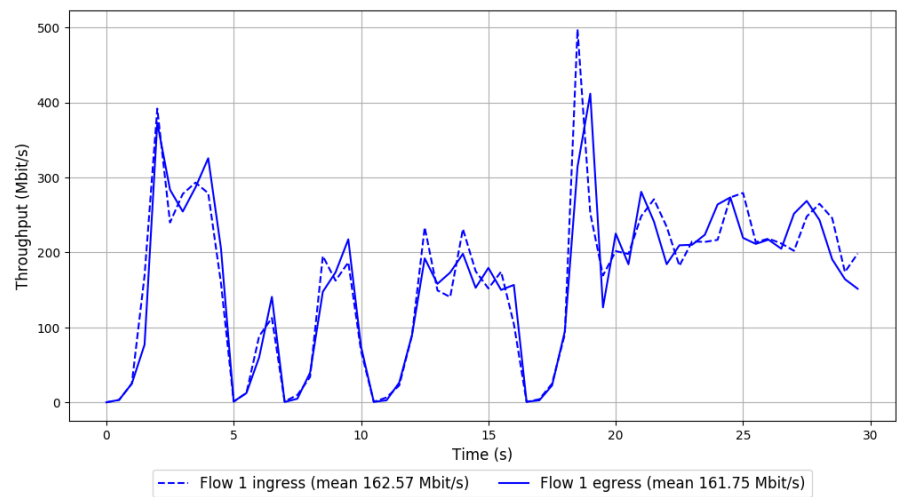
-- Flow 1:

Average throughput: 161.75 Mbit/s

95th percentile per-packet one-way delay: 149.196 ms

Loss rate: 1.66%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-11 08:56:06

End at: 2017-12-11 08:56:36

Below is generated by plot.py at 2017-12-11 11:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 225.74 Mbit/s

95th percentile per-packet one-way delay: 123.239 ms

Loss rate: 0.88%

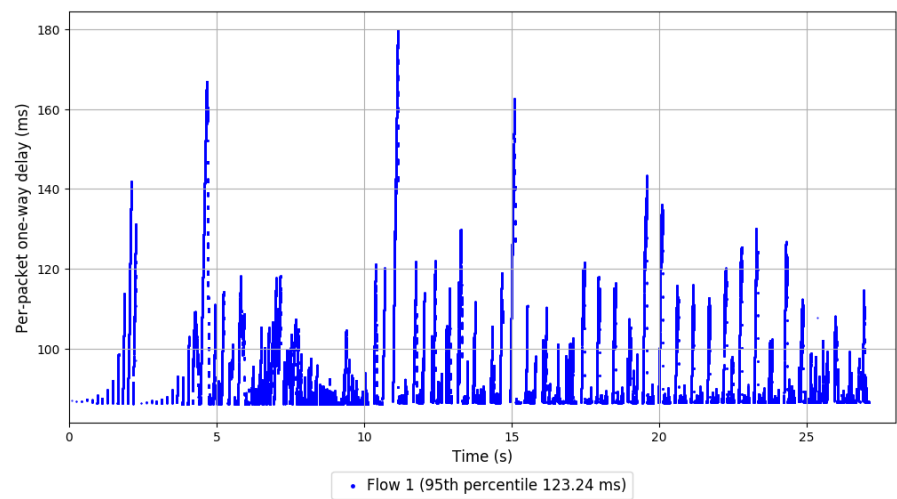
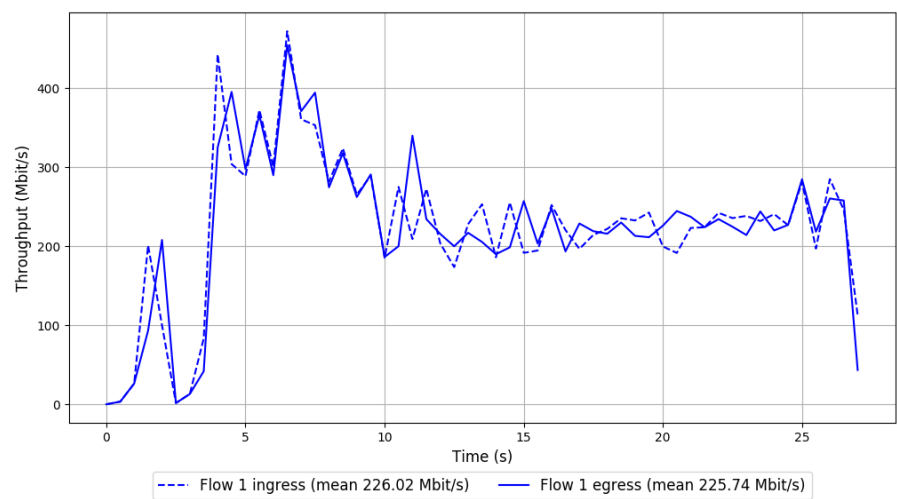
-- Flow 1:

Average throughput: 225.74 Mbit/s

95th percentile per-packet one-way delay: 123.239 ms

Loss rate: 0.88%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-11 09:06:57

End at: 2017-12-11 09:07:27

Below is generated by plot.py at 2017-12-11 11:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.84 Mbit/s

95th percentile per-packet one-way delay: 157.890 ms

Loss rate: 4.33%

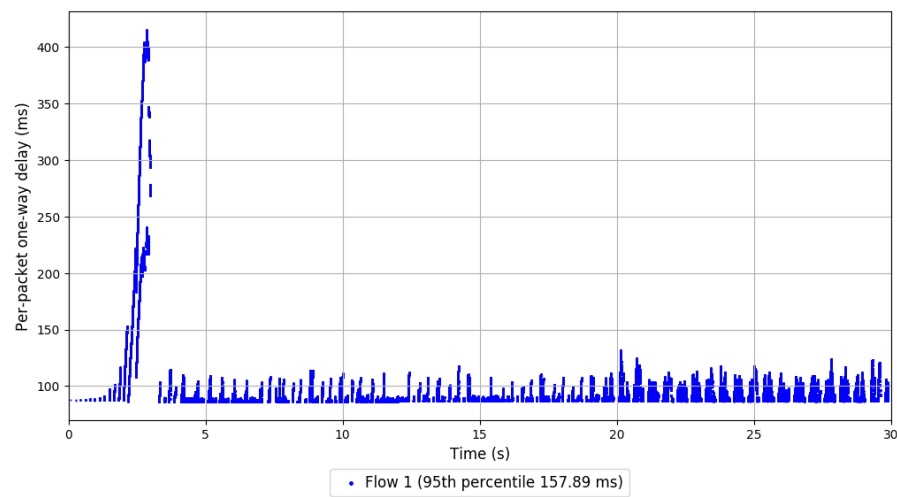
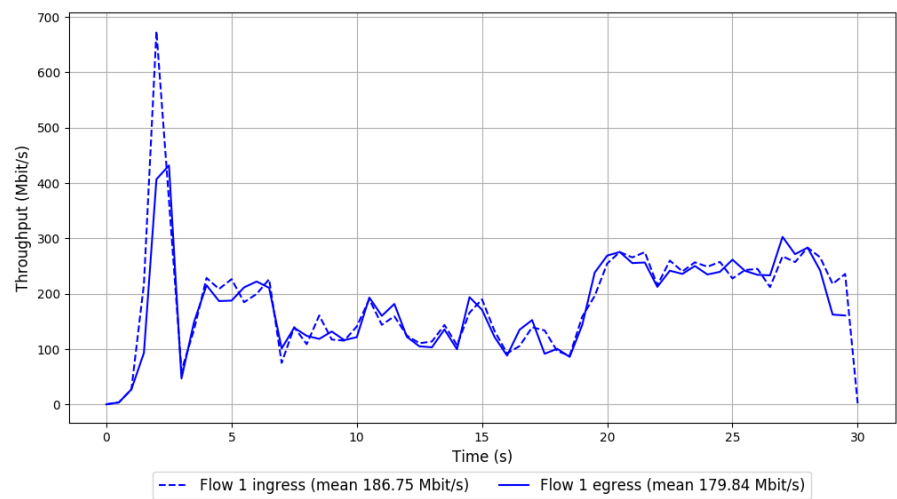
-- Flow 1:

Average throughput: 179.84 Mbit/s

95th percentile per-packet one-way delay: 157.890 ms

Loss rate: 4.33%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-11 07:25:43

End at: 2017-12-11 07:26:13

Below is generated by plot.py at 2017-12-11 11:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.61 Mbit/s

95th percentile per-packet one-way delay: 87.227 ms

Loss rate: 1.62%

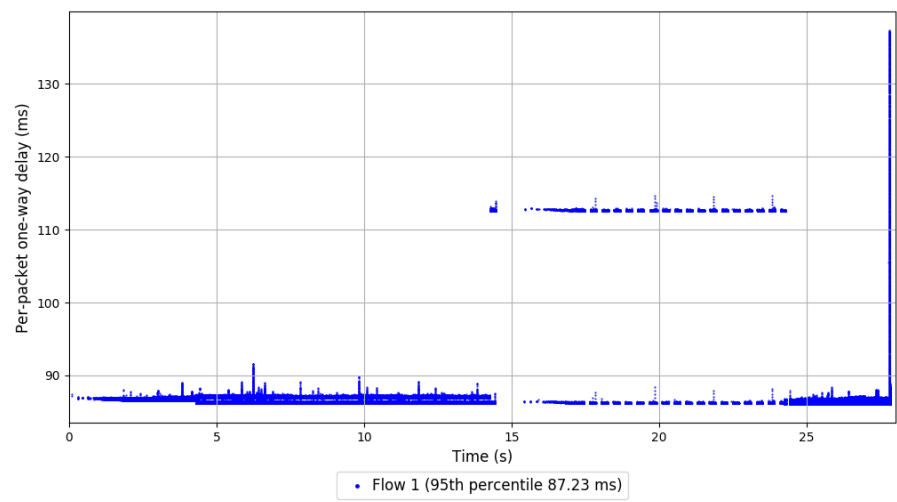
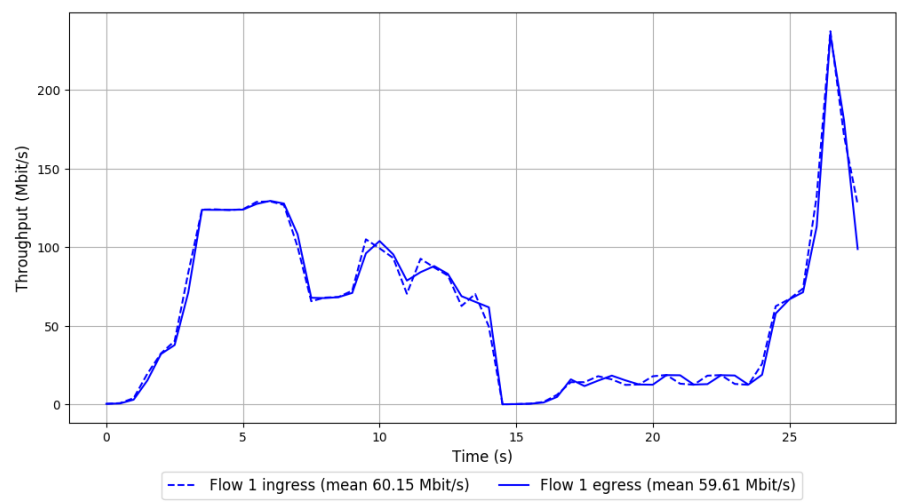
-- Flow 1:

Average throughput: 59.61 Mbit/s

95th percentile per-packet one-way delay: 87.227 ms

Loss rate: 1.62%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-11 07:36:55

End at: 2017-12-11 07:37:25

Below is generated by plot.py at 2017-12-11 11:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.32 Mbit/s

95th percentile per-packet one-way delay: 112.559 ms

Loss rate: 0.39%

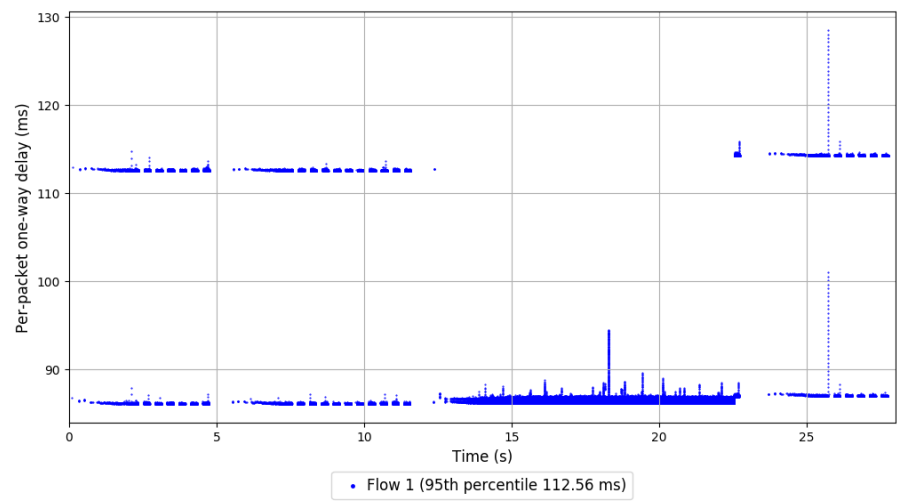
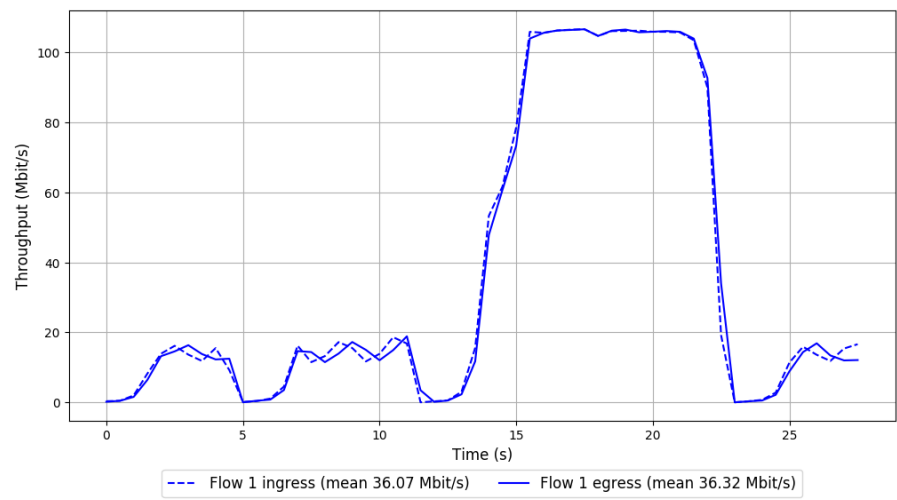
-- Flow 1:

Average throughput: 36.32 Mbit/s

95th percentile per-packet one-way delay: 112.559 ms

Loss rate: 0.39%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-11 07:47:55

End at: 2017-12-11 07:48:25

Below is generated by plot.py at 2017-12-11 11:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.89 Mbit/s

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

Loss rate: 1.45%

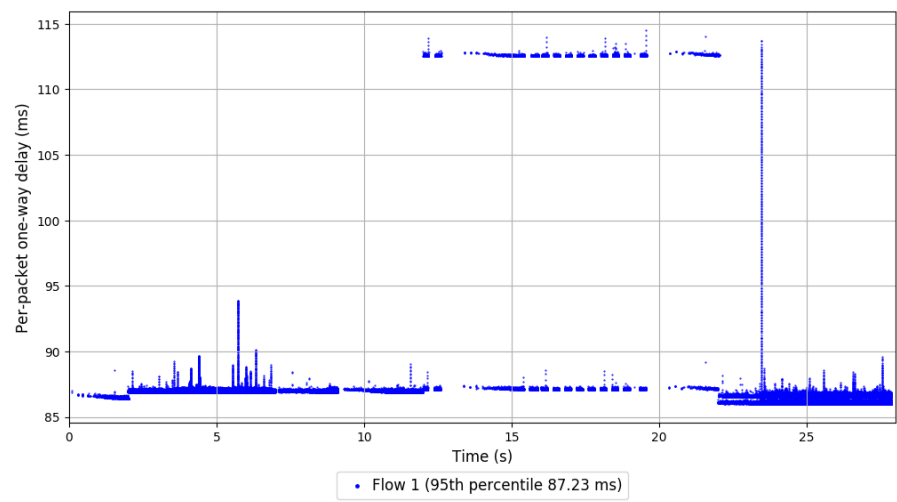
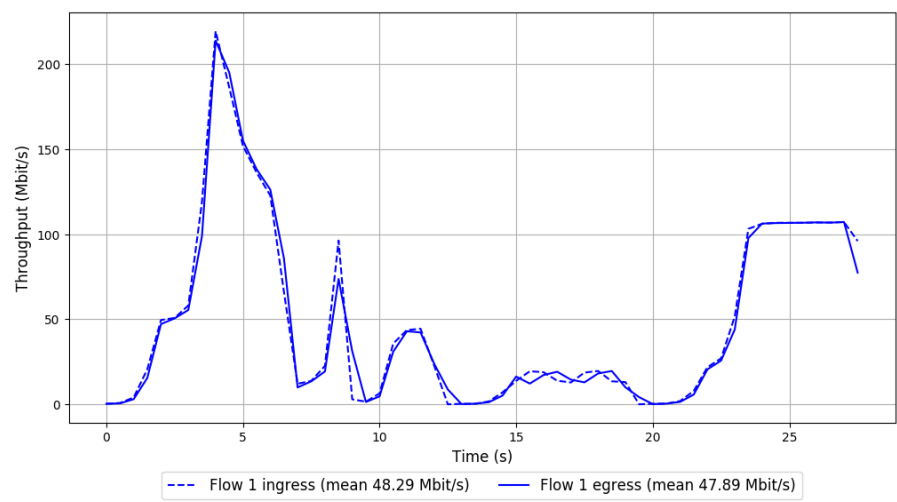
-- Flow 1:

Average throughput: 47.89 Mbit/s

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

Loss rate: 1.45%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-11 07:58:52

End at: 2017-12-11 07:59:22

Below is generated by plot.py at 2017-12-11 11:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.14 Mbit/s

95th percentile per-packet one-way delay: 87.055 ms

Loss rate: 0.67%

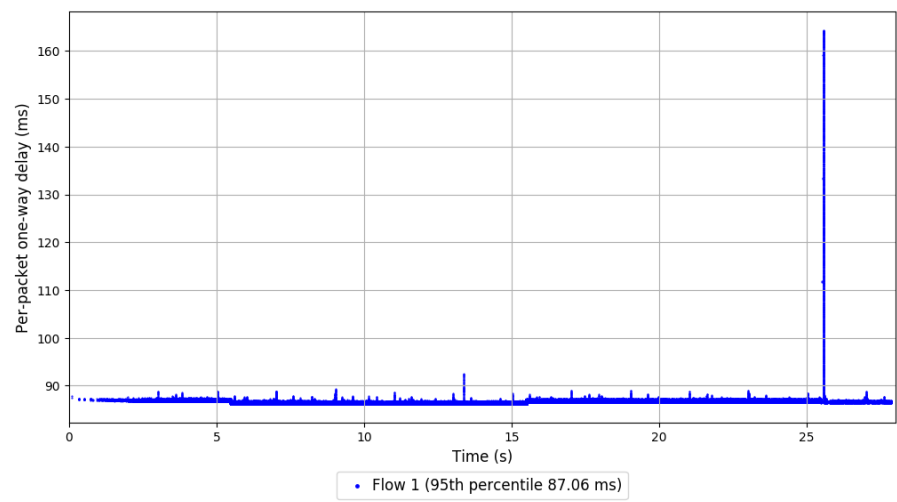
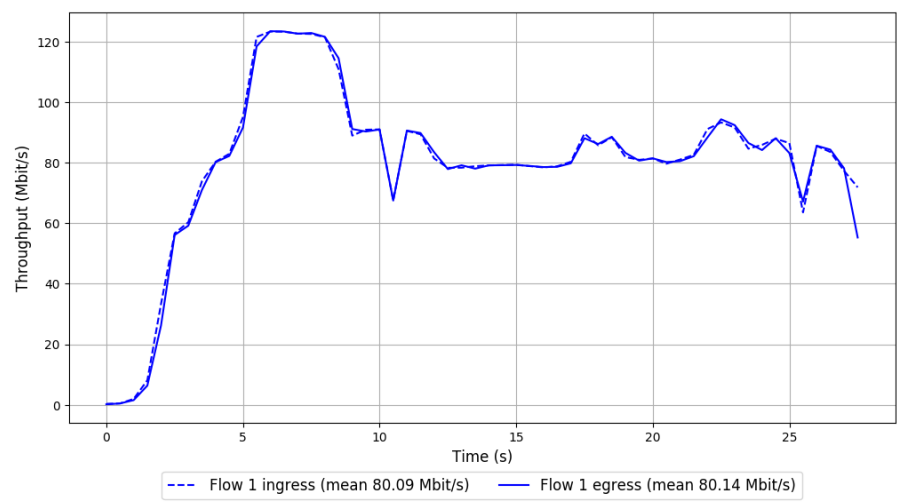
-- Flow 1:

Average throughput: 80.14 Mbit/s

95th percentile per-packet one-way delay: 87.055 ms

Loss rate: 0.67%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-11 08:09:55

End at: 2017-12-11 08:10:25

Below is generated by plot.py at 2017-12-11 11:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.55 Mbit/s

95th percentile per-packet one-way delay: 86.993 ms

Loss rate: 0.32%

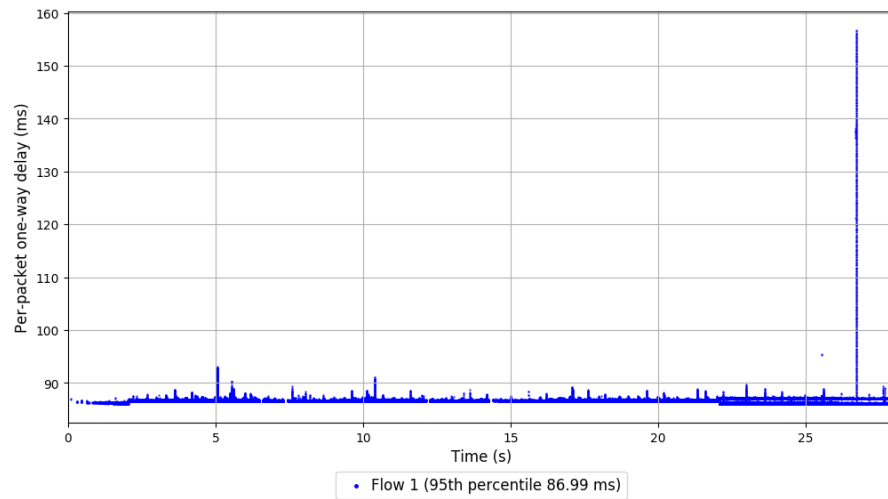
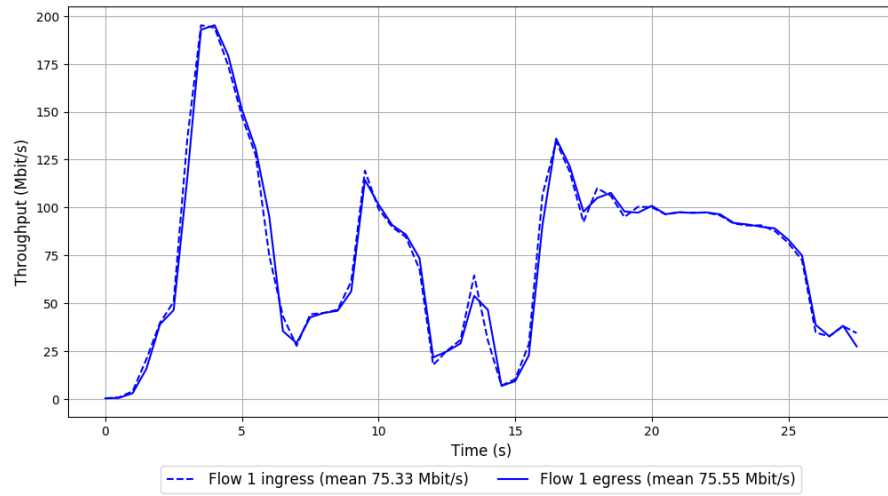
-- Flow 1:

Average throughput: 75.55 Mbit/s

95th percentile per-packet one-way delay: 86.993 ms

Loss rate: 0.32%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-11 08:21:17

End at: 2017-12-11 08:21:47

Below is generated by plot.py at 2017-12-11 11:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.81 Mbit/s

95th percentile per-packet one-way delay: 87.458 ms

Loss rate: 0.96%

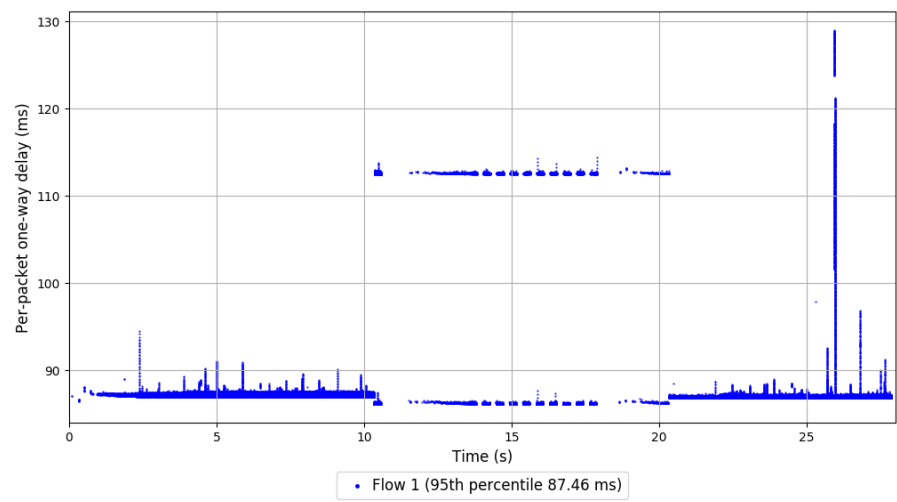
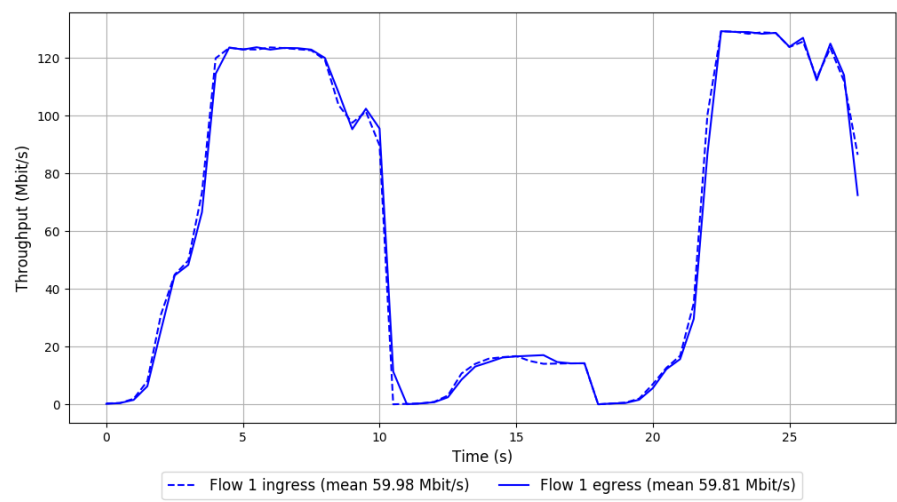
-- Flow 1:

Average throughput: 59.81 Mbit/s

95th percentile per-packet one-way delay: 87.458 ms

Loss rate: 0.96%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-11 08:32:13

End at: 2017-12-11 08:32:43

Below is generated by plot.py at 2017-12-11 11:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 86.943 ms

Loss rate: 0.90%

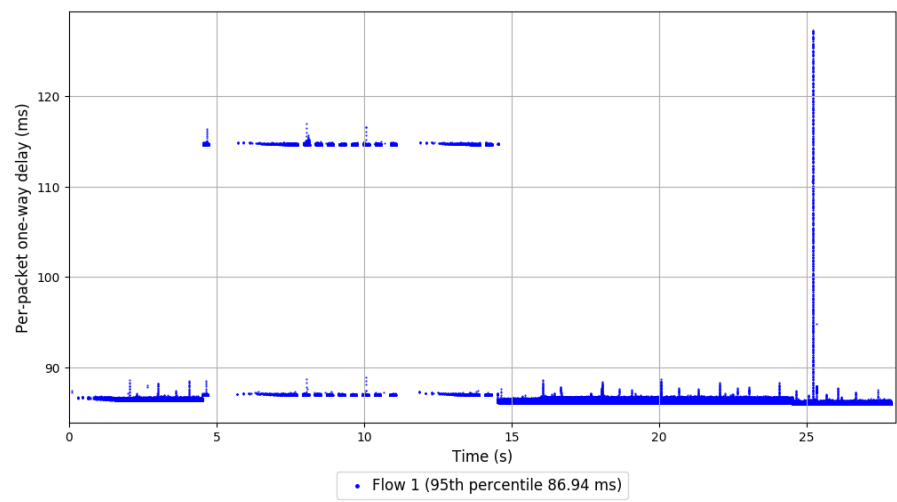
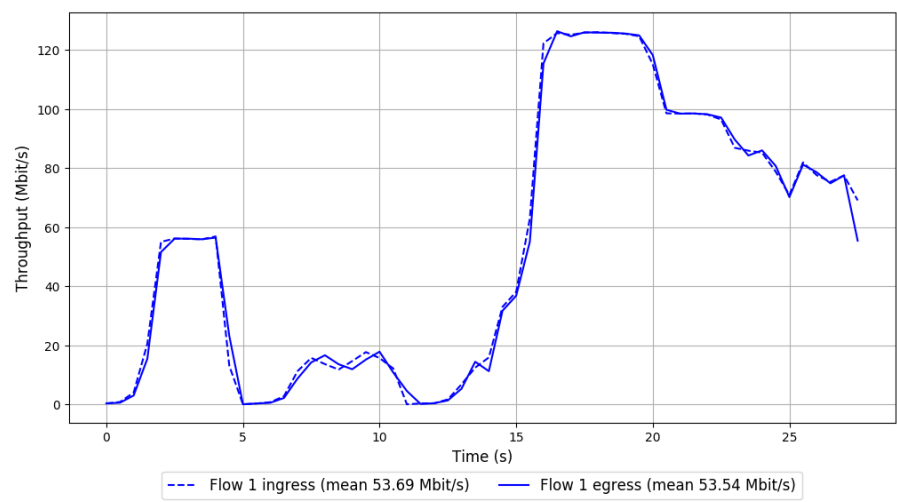
-- Flow 1:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 86.943 ms

Loss rate: 0.90%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-11 08:42:53

End at: 2017-12-11 08:43:23

Below is generated by plot.py at 2017-12-11 11:27:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.07 Mbit/s

95th percentile per-packet one-way delay: 86.917 ms

Loss rate: 1.88%

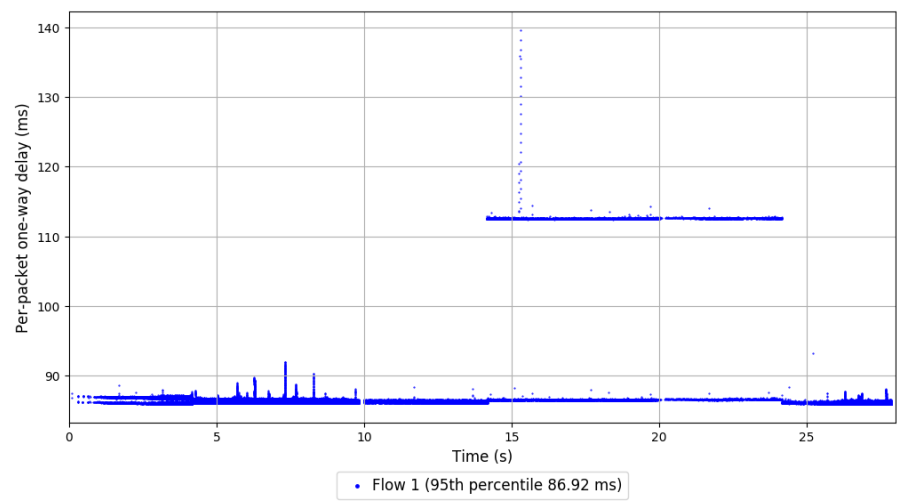
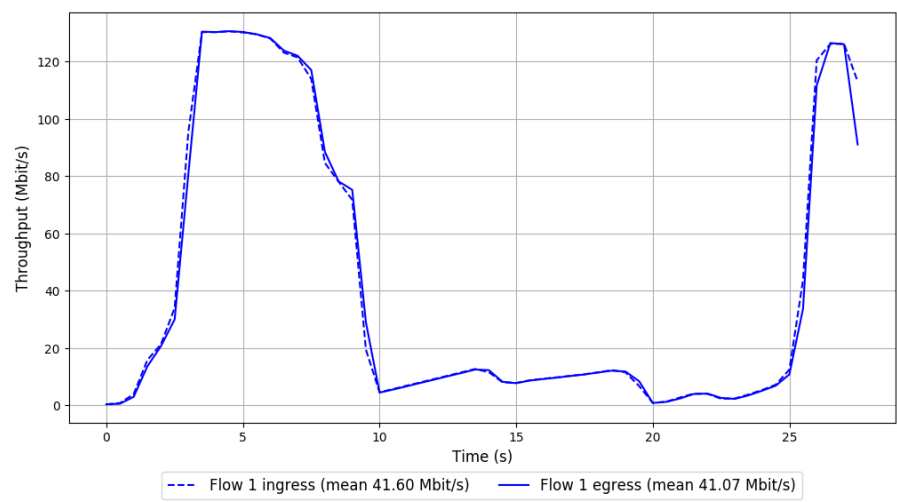
-- Flow 1:

Average throughput: 41.07 Mbit/s

95th percentile per-packet one-way delay: 86.917 ms

Loss rate: 1.88%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-11 08:53:43

End at: 2017-12-11 08:54:13

Below is generated by plot.py at 2017-12-11 11:27:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.39 Mbit/s

95th percentile per-packet one-way delay: 86.976 ms

Loss rate: 1.04%

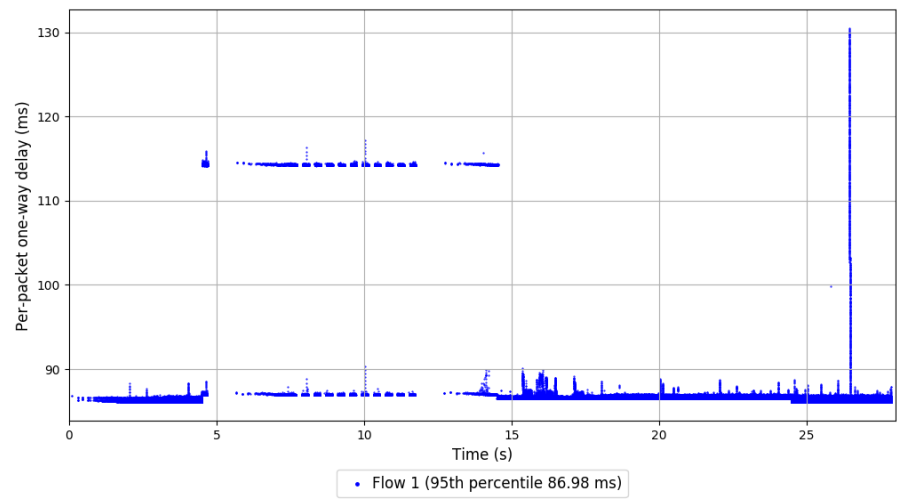
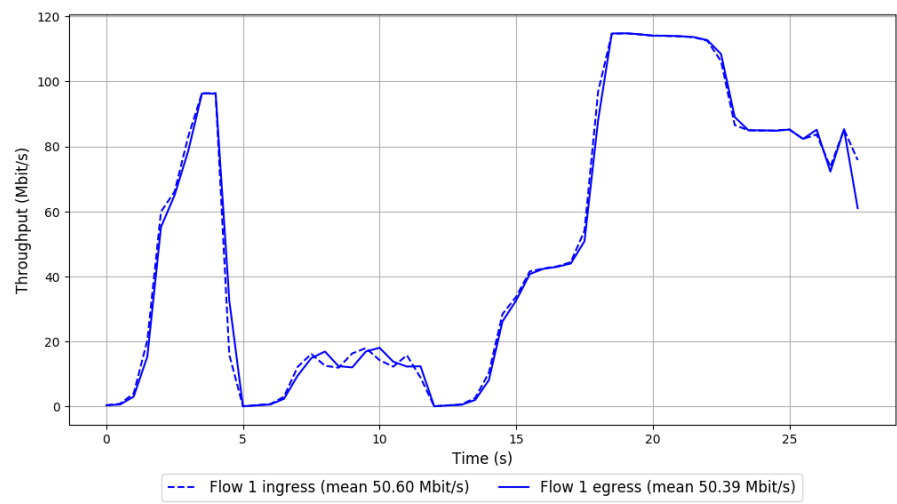
-- Flow 1:

Average throughput: 50.39 Mbit/s

95th percentile per-packet one-way delay: 86.976 ms

Loss rate: 1.04%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-11 09:04:29

End at: 2017-12-11 09:04:59

Below is generated by plot.py at 2017-12-11 11:29:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.22 Mbit/s

95th percentile per-packet one-way delay: 87.057 ms

Loss rate: 0.65%

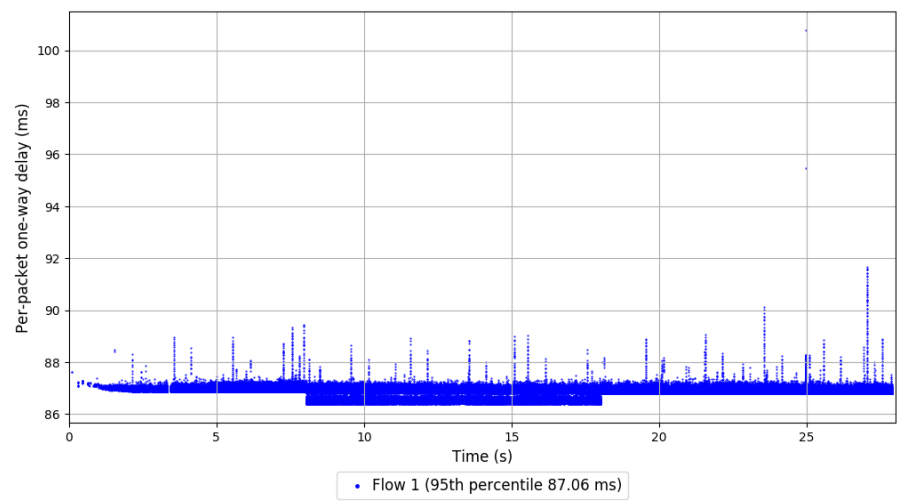
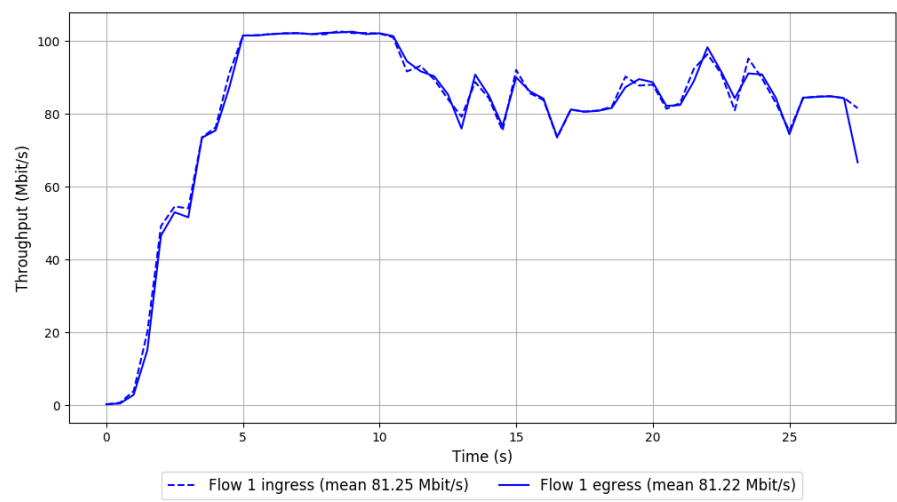
-- Flow 1:

Average throughput: 81.22 Mbit/s

95th percentile per-packet one-way delay: 87.057 ms

Loss rate: 0.65%

Run 10: Report of Copa — Data Link



Run 1: Statistics of Indigo

Start at: 2017-12-11 07:24:51

End at: 2017-12-11 07:25:21

Below is generated by plot.py at 2017-12-11 11:29:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.85 Mbit/s

95th percentile per-packet one-way delay: 86.945 ms

Loss rate: 0.74%

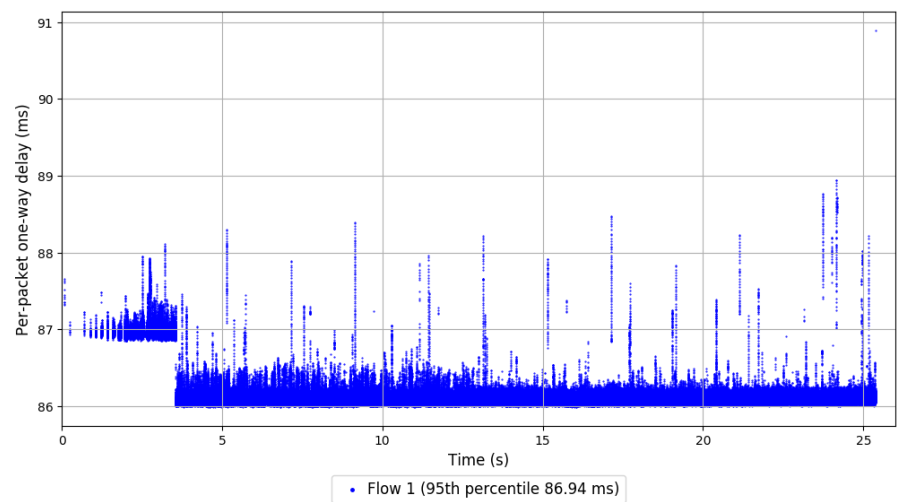
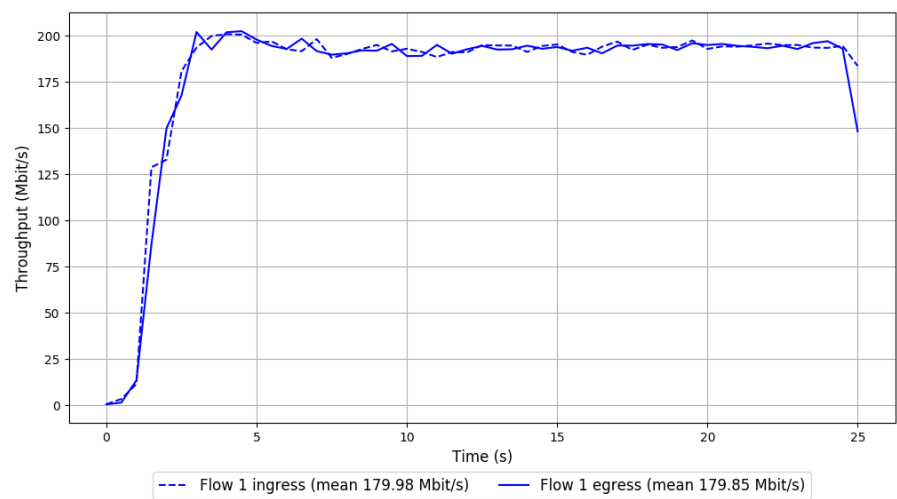
-- Flow 1:

Average throughput: 179.85 Mbit/s

95th percentile per-packet one-way delay: 86.945 ms

Loss rate: 0.74%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-11 07:36:01

End at: 2017-12-11 07:36:31

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.33 Mbit/s

95th percentile per-packet one-way delay: 86.734 ms

Loss rate: 0.70%

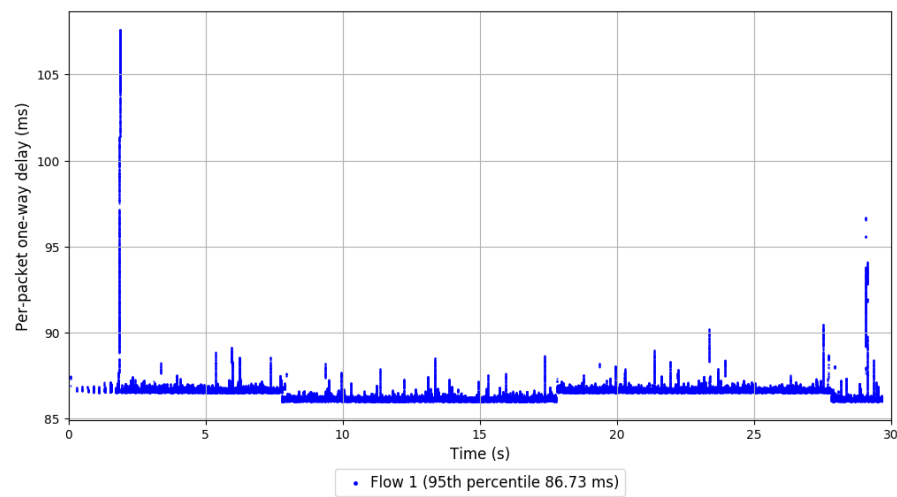
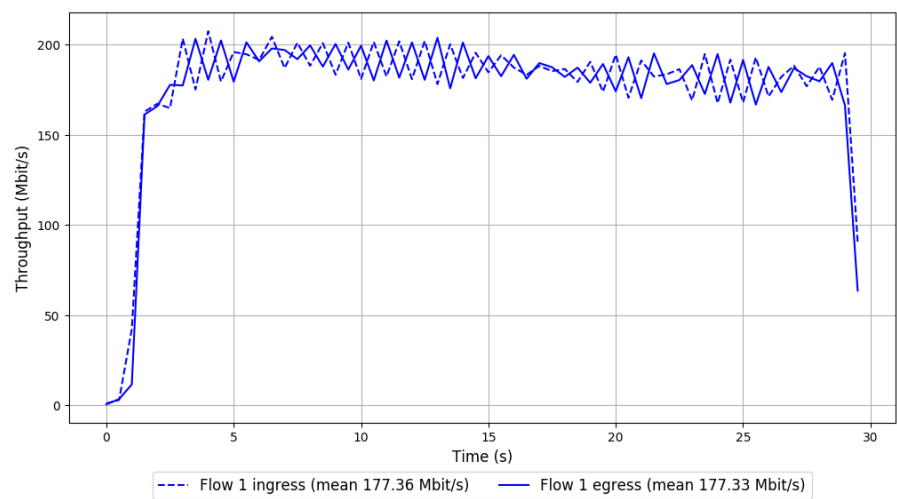
-- Flow 1:

Average throughput: 177.33 Mbit/s

95th percentile per-packet one-way delay: 86.734 ms

Loss rate: 0.70%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-11 07:47:06

End at: 2017-12-11 07:47:36

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.60 Mbit/s

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

Loss rate: 0.45%

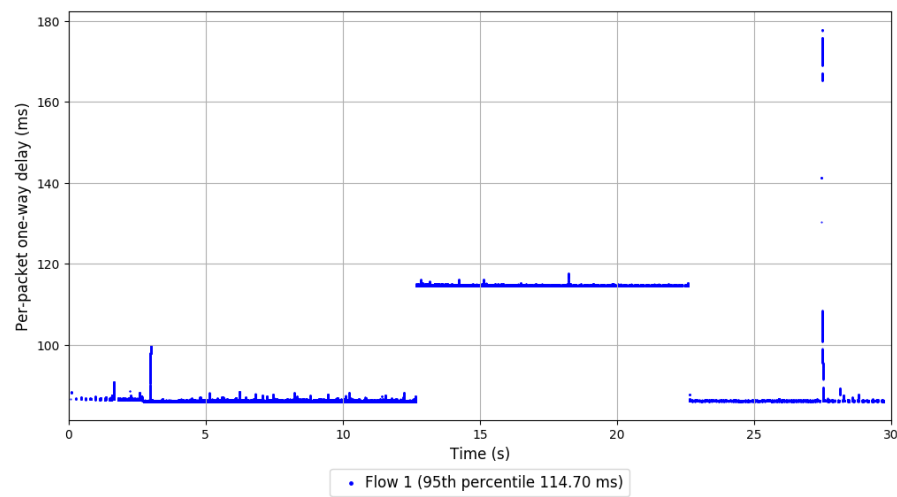
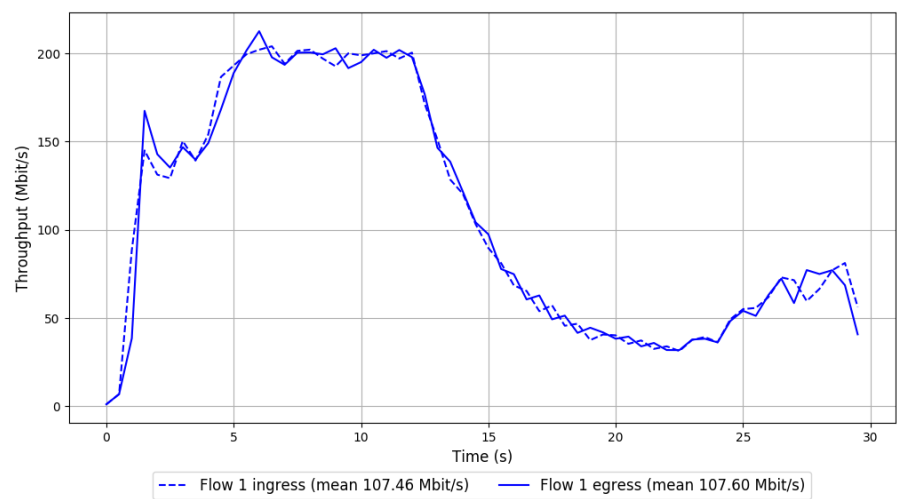
-- Flow 1:

Average throughput: 107.60 Mbit/s

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

Loss rate: 0.45%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-11 07:57:58

End at: 2017-12-11 07:58:28

Below is generated by plot.py at 2017-12-11 11:30:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.25 Mbit/s

95th percentile per-packet one-way delay: 86.816 ms

Loss rate: 0.61%

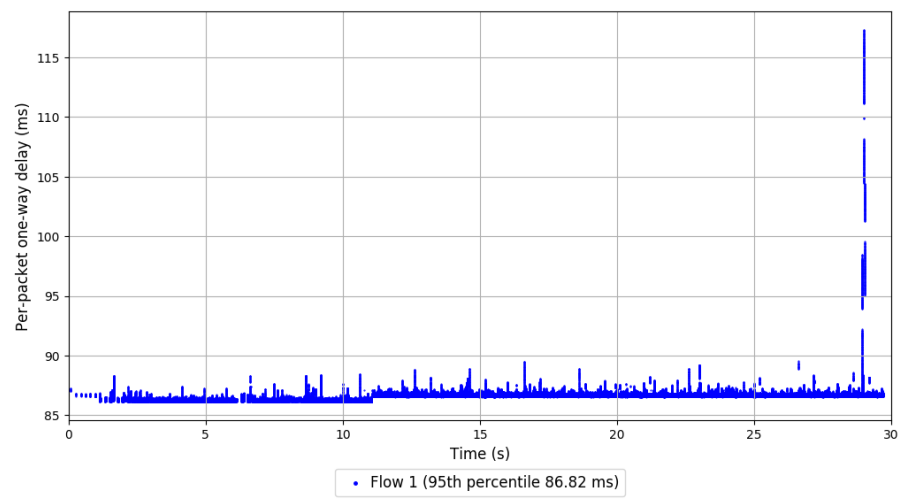
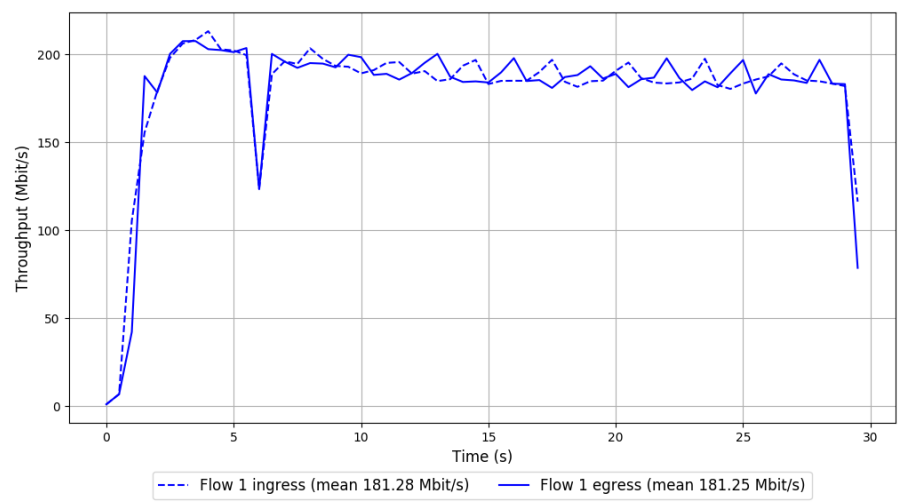
-- Flow 1:

Average throughput: 181.25 Mbit/s

95th percentile per-packet one-way delay: 86.816 ms

Loss rate: 0.61%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-11 08:09:02

End at: 2017-12-11 08:09:32

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.09 Mbit/s

95th percentile per-packet one-way delay: 87.007 ms

Loss rate: 0.73%

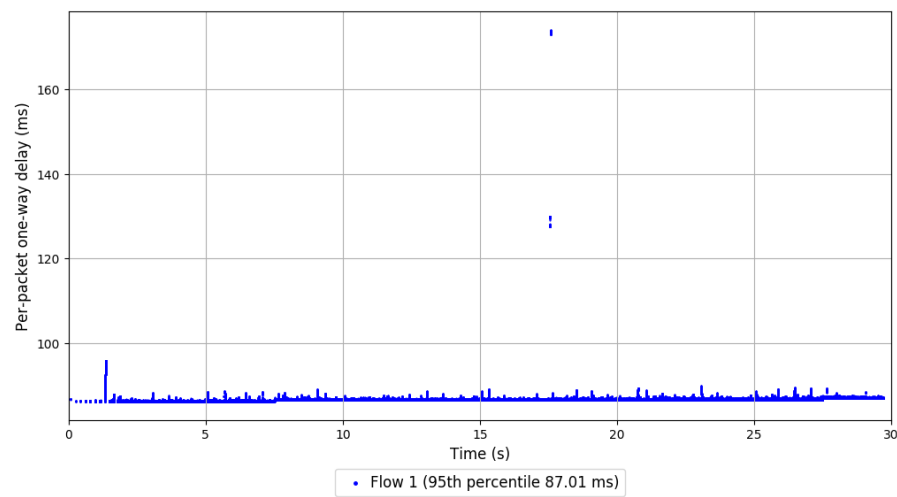
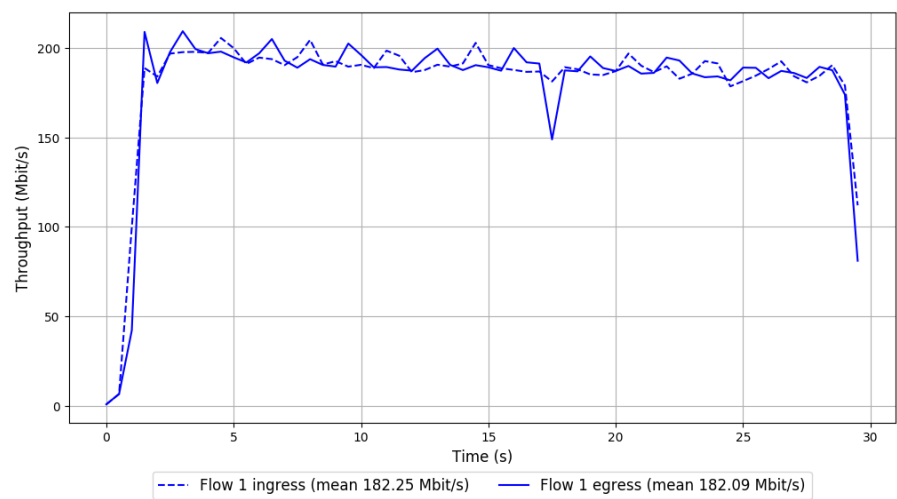
-- Flow 1:

Average throughput: 182.09 Mbit/s

95th percentile per-packet one-way delay: 87.007 ms

Loss rate: 0.73%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-11 08:20:23

End at: 2017-12-11 08:20:53

Below is generated by plot.py at 2017-12-11 11:30:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.93 Mbit/s

95th percentile per-packet one-way delay: 86.702 ms

Loss rate: 0.66%

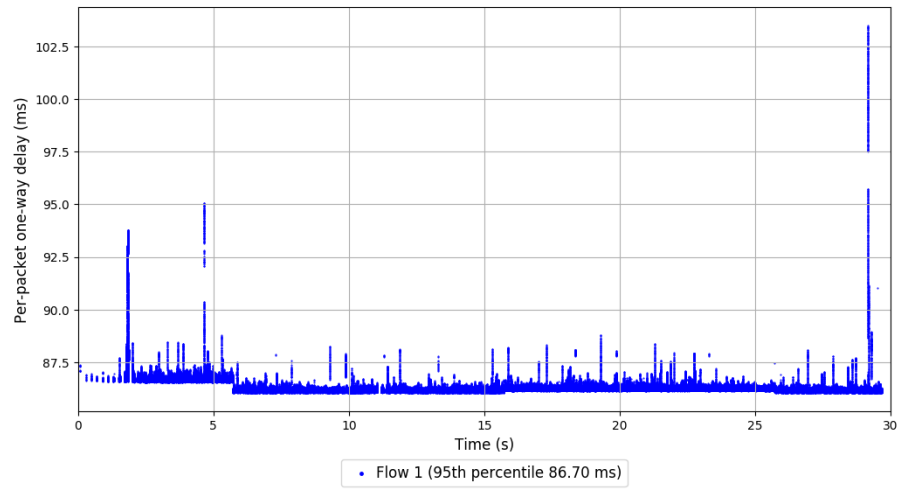
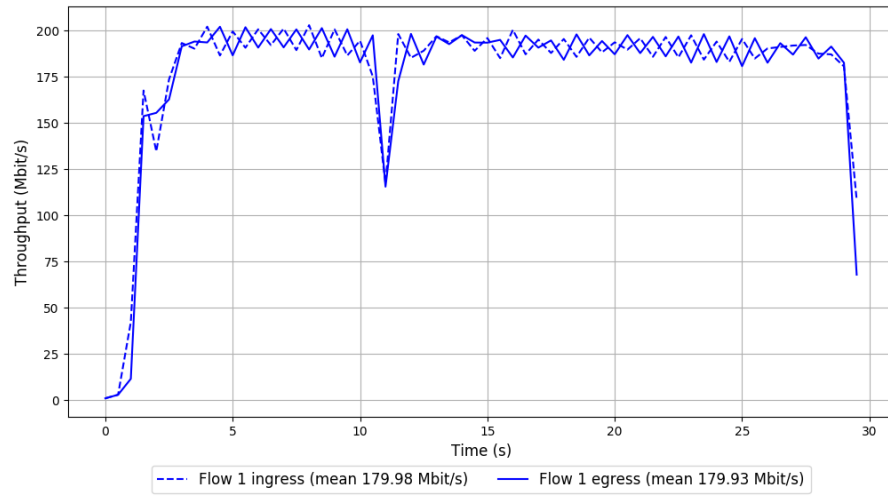
-- Flow 1:

Average throughput: 179.93 Mbit/s

95th percentile per-packet one-way delay: 86.702 ms

Loss rate: 0.66%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-11 08:31:19

End at: 2017-12-11 08:31:49

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.38 Mbit/s

95th percentile per-packet one-way delay: 87.055 ms

Loss rate: 0.56%

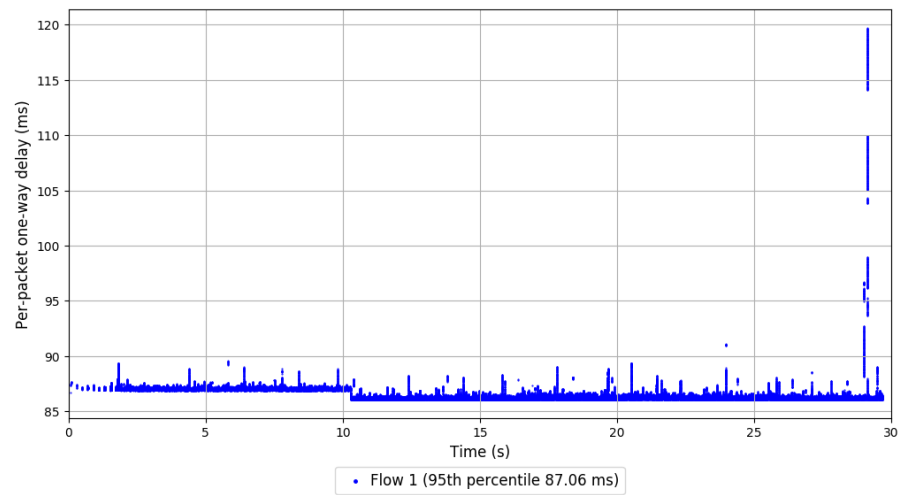
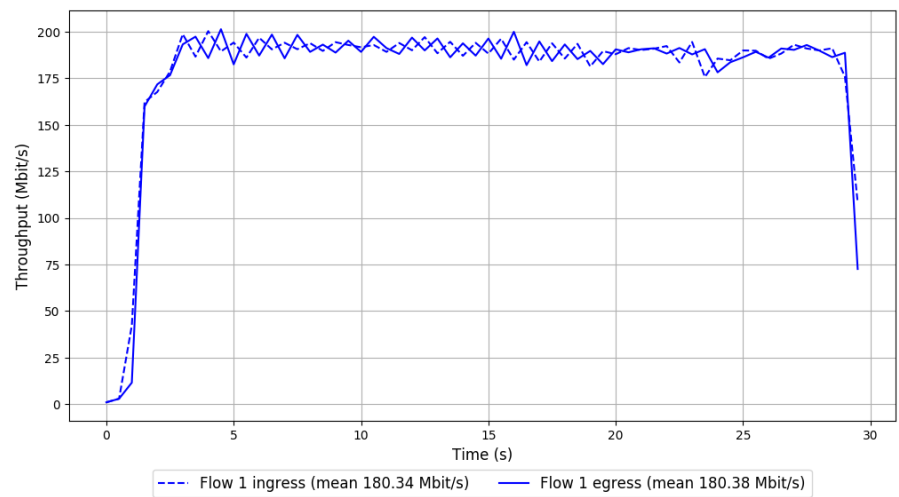
-- Flow 1:

Average throughput: 180.38 Mbit/s

95th percentile per-packet one-way delay: 87.055 ms

Loss rate: 0.56%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-11 08:41:59

End at: 2017-12-11 08:42:29

Below is generated by plot.py at 2017-12-11 11:32:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.36 Mbit/s

95th percentile per-packet one-way delay: 87.139 ms

Loss rate: 0.63%

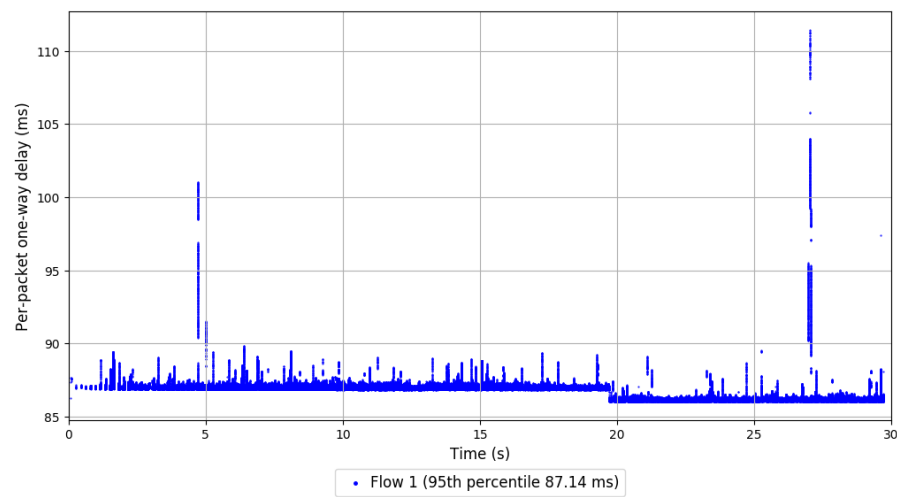
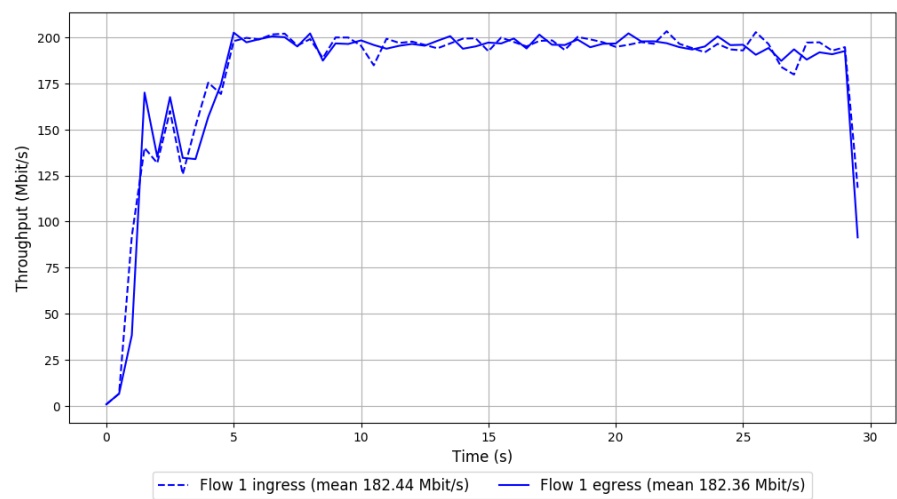
-- Flow 1:

Average throughput: 182.36 Mbit/s

95th percentile per-packet one-way delay: 87.139 ms

Loss rate: 0.63%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-11 08:52:48

End at: 2017-12-11 08:53:18

Below is generated by plot.py at 2017-12-11 11:32:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.69 Mbit/s

95th percentile per-packet one-way delay: 86.319 ms

Loss rate: 0.62%

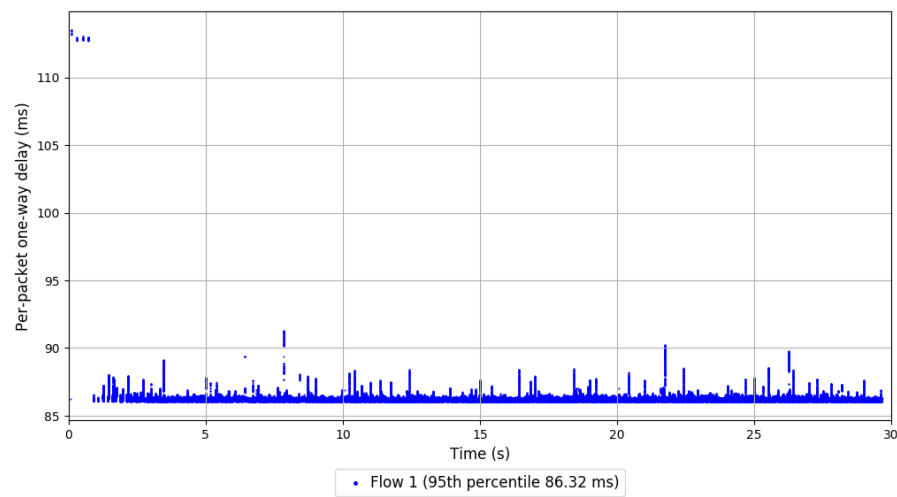
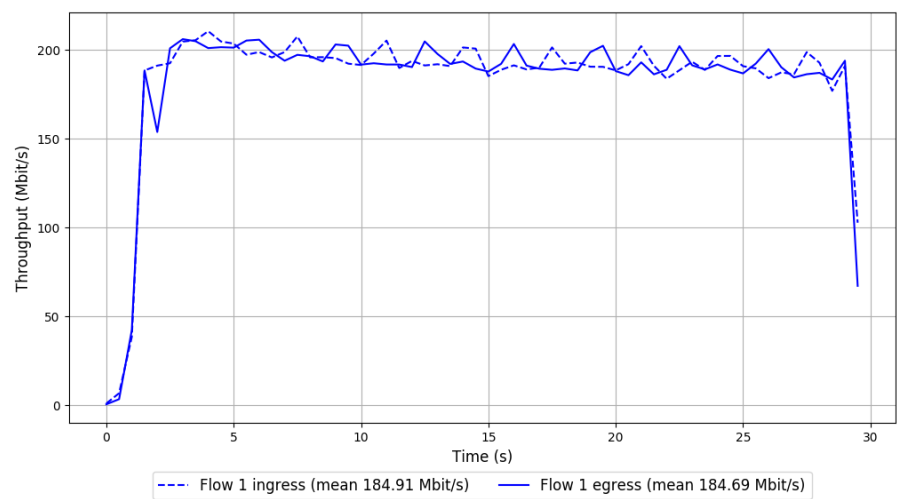
-- Flow 1:

Average throughput: 184.69 Mbit/s

95th percentile per-packet one-way delay: 86.319 ms

Loss rate: 0.62%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-11 09:03:37

End at: 2017-12-11 09:04:07

Below is generated by plot.py at 2017-12-11 11:32:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 163.35 Mbit/s

95th percentile per-packet one-way delay: 112.828 ms

Loss rate: 0.19%

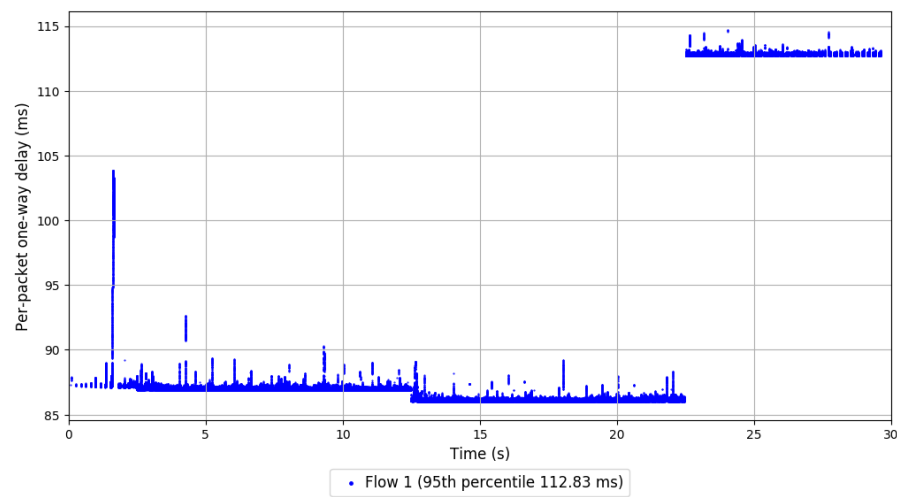
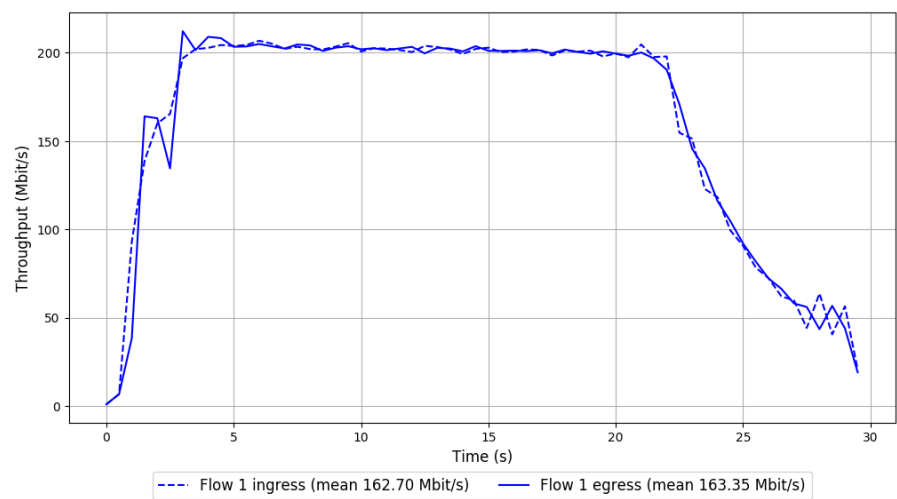
-- Flow 1:

Average throughput: 163.35 Mbit/s

95th percentile per-packet one-way delay: 112.828 ms

Loss rate: 0.19%

Run 10: Report of Indigo — Data Link

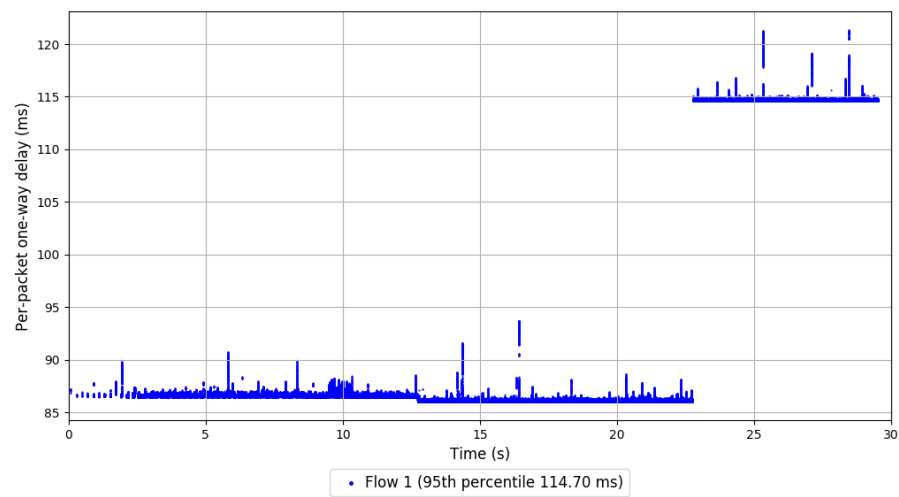
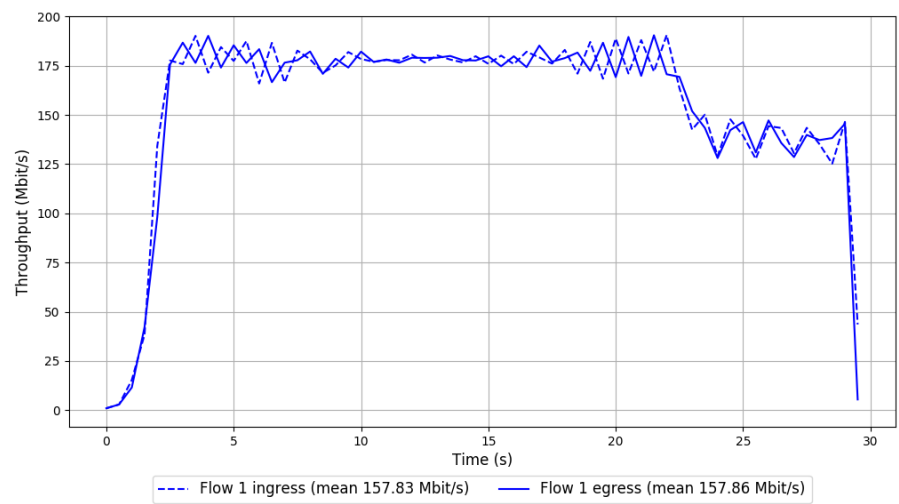


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-11 07:27:16
End at: 2017-12-11 07:27:46

# Below is generated by plot.py at 2017-12-11 11:32:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 157.86 Mbit/s
95th percentile per-packet one-way delay: 114.697 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 157.86 Mbit/s
95th percentile per-packet one-way delay: 114.697 ms
Loss rate: 0.67%
```

Run 1: Report of Indigo-calib — Data Link

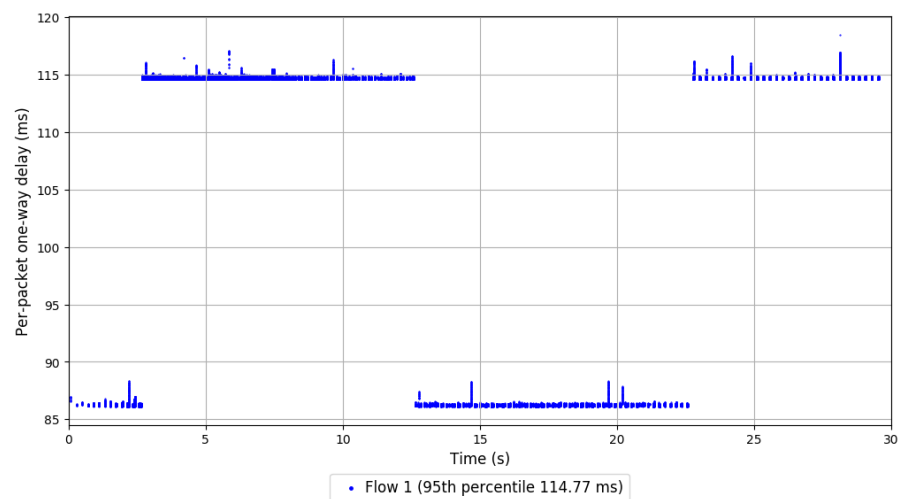
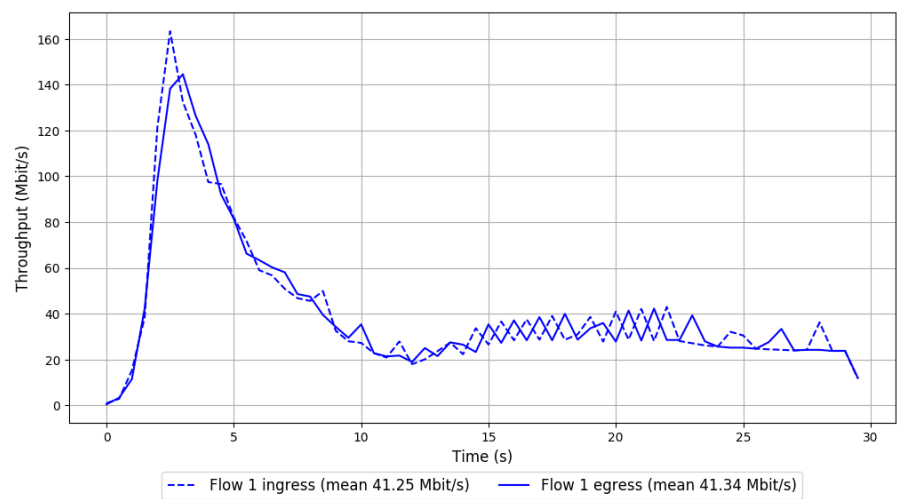


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-11 07:38:26
End at: 2017-12-11 07:38:56

# Below is generated by plot.py at 2017-12-11 11:32:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.34 Mbit/s
95th percentile per-packet one-way delay: 114.767 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 41.34 Mbit/s
95th percentile per-packet one-way delay: 114.767 ms
Loss rate: 0.48%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-11 07:49:28

End at: 2017-12-11 07:49:58

Below is generated by plot.py at 2017-12-11 11:33:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.89 Mbit/s

95th percentile per-packet one-way delay: 86.782 ms

Loss rate: 0.61%

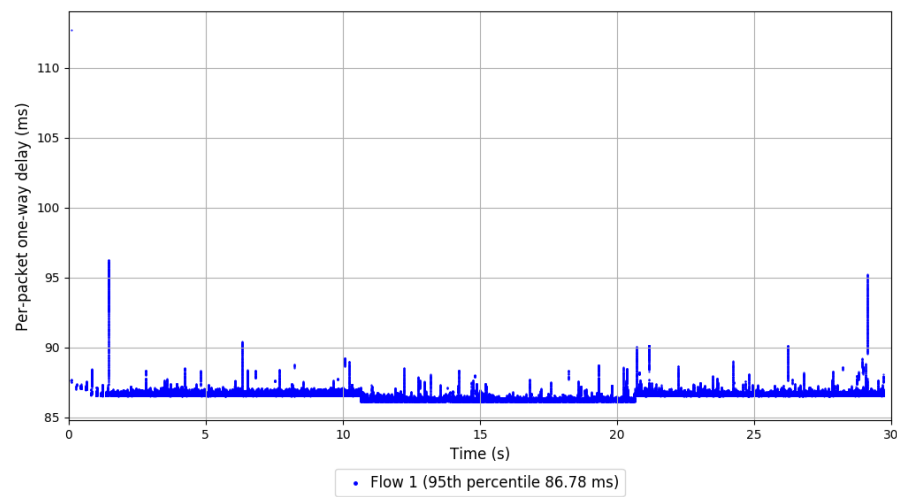
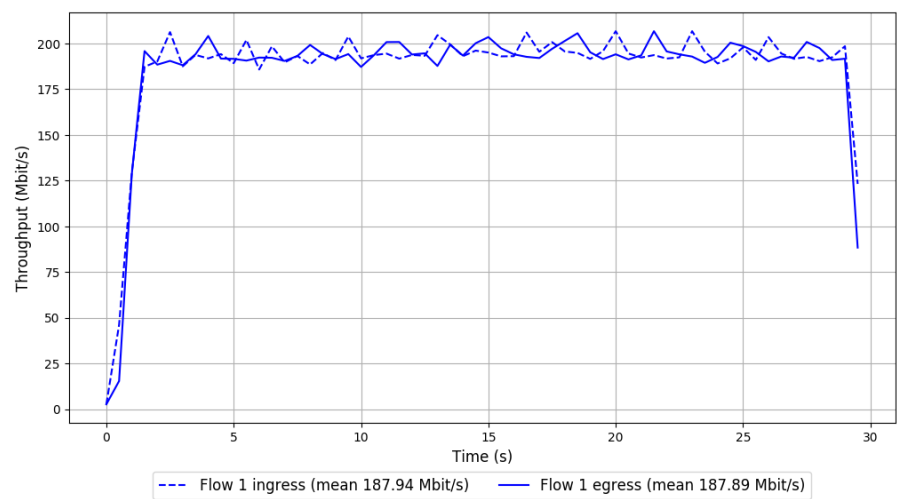
-- Flow 1:

Average throughput: 187.89 Mbit/s

95th percentile per-packet one-way delay: 86.782 ms

Loss rate: 0.61%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-11 08:00:28

End at: 2017-12-11 08:00:58

Below is generated by plot.py at 2017-12-11 11:33:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.47 Mbit/s

95th percentile per-packet one-way delay: 112.729 ms

Loss rate: 1.74%

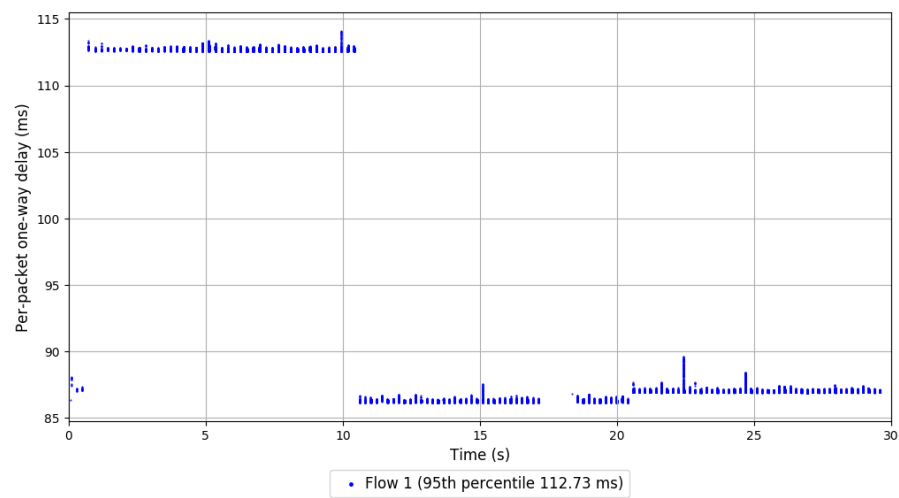
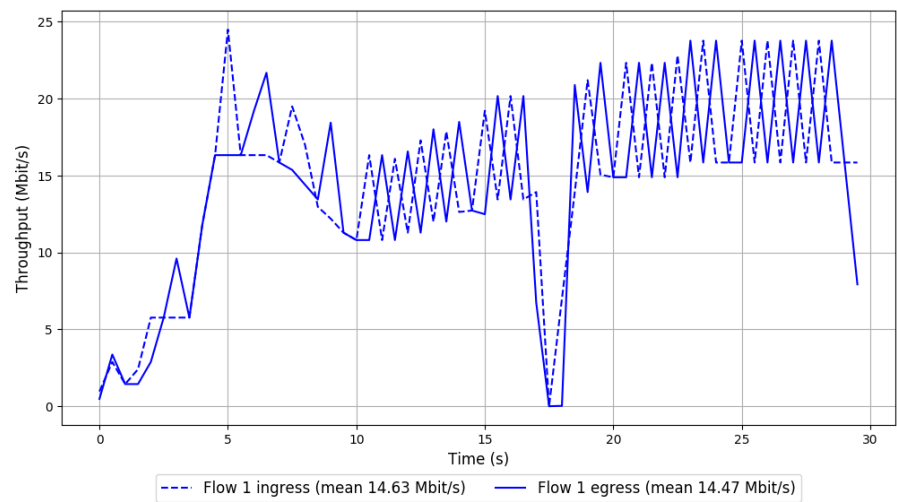
-- Flow 1:

Average throughput: 14.47 Mbit/s

95th percentile per-packet one-way delay: 112.729 ms

Loss rate: 1.74%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-11 08:11:30

End at: 2017-12-11 08:12:00

Below is generated by plot.py at 2017-12-11 11:33:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.17 Mbit/s

95th percentile per-packet one-way delay: 87.095 ms

Loss rate: 0.62%

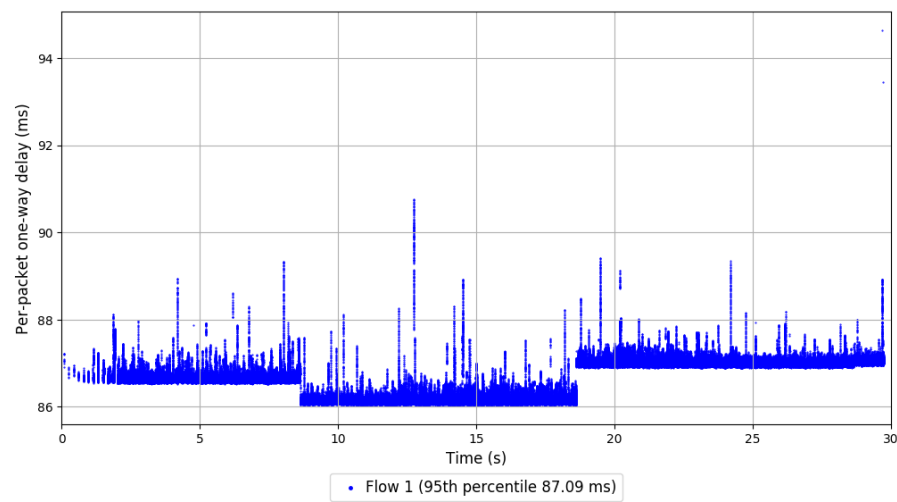
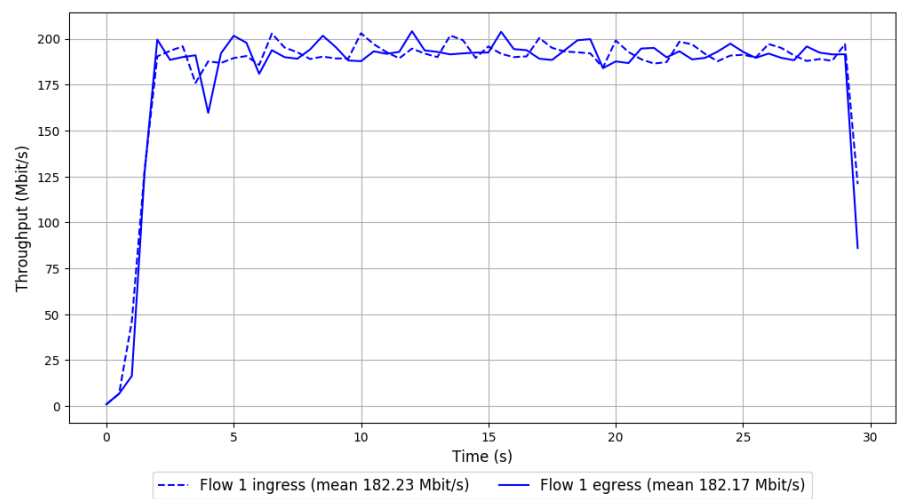
-- Flow 1:

Average throughput: 182.17 Mbit/s

95th percentile per-packet one-way delay: 87.095 ms

Loss rate: 0.62%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-11 08:22:50

End at: 2017-12-11 08:23:20

Below is generated by plot.py at 2017-12-11 11:33:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.38 Mbit/s

95th percentile per-packet one-way delay: 112.918 ms

Loss rate: 0.65%

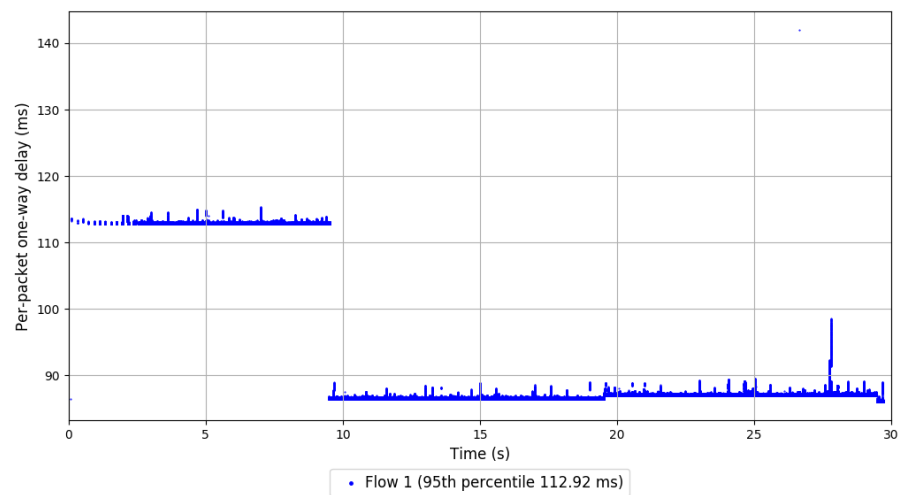
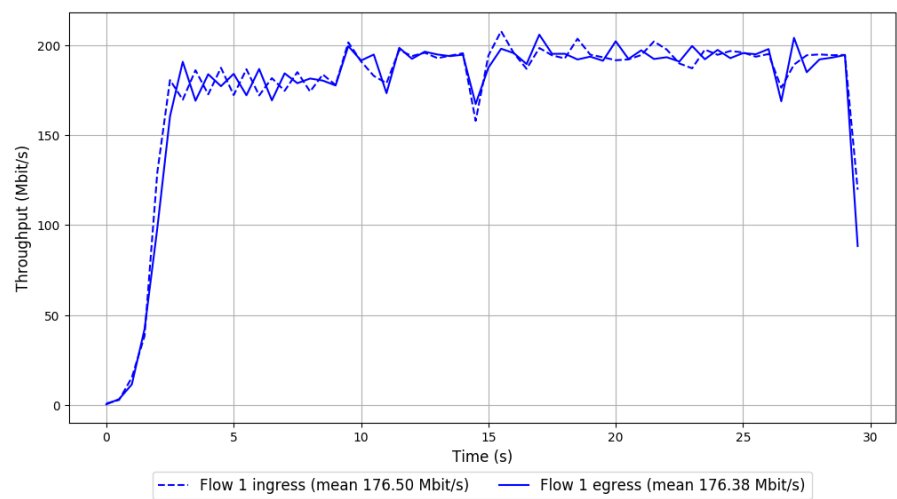
-- Flow 1:

Average throughput: 176.38 Mbit/s

95th percentile per-packet one-way delay: 112.918 ms

Loss rate: 0.65%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-11 08:33:45

End at: 2017-12-11 08:34:15

Below is generated by plot.py at 2017-12-11 11:33:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.33 Mbit/s

95th percentile per-packet one-way delay: 86.695 ms

Loss rate: 0.62%

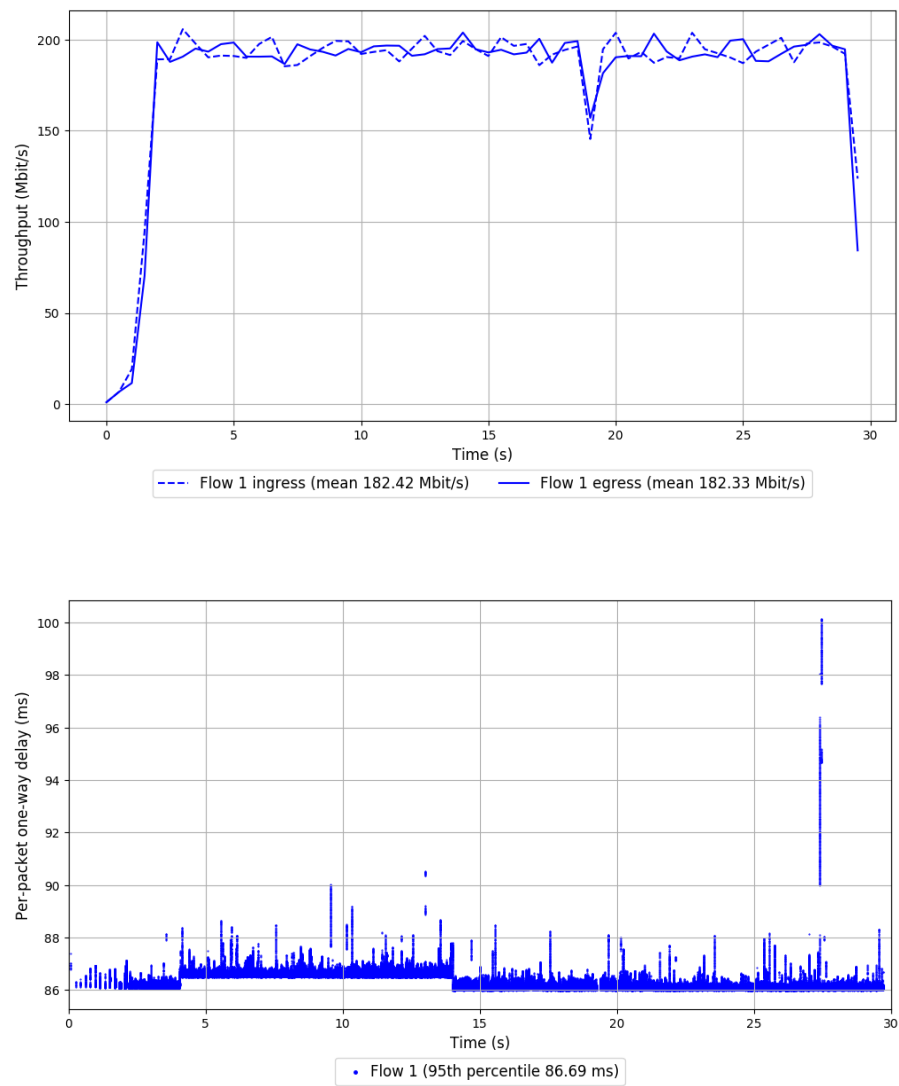
-- Flow 1:

Average throughput: 182.33 Mbit/s

95th percentile per-packet one-way delay: 86.695 ms

Loss rate: 0.62%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-11 08:44:25

End at: 2017-12-11 08:44:55

Below is generated by plot.py at 2017-12-11 11:34:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.46 Mbit/s

95th percentile per-packet one-way delay: 86.659 ms

Loss rate: 0.69%

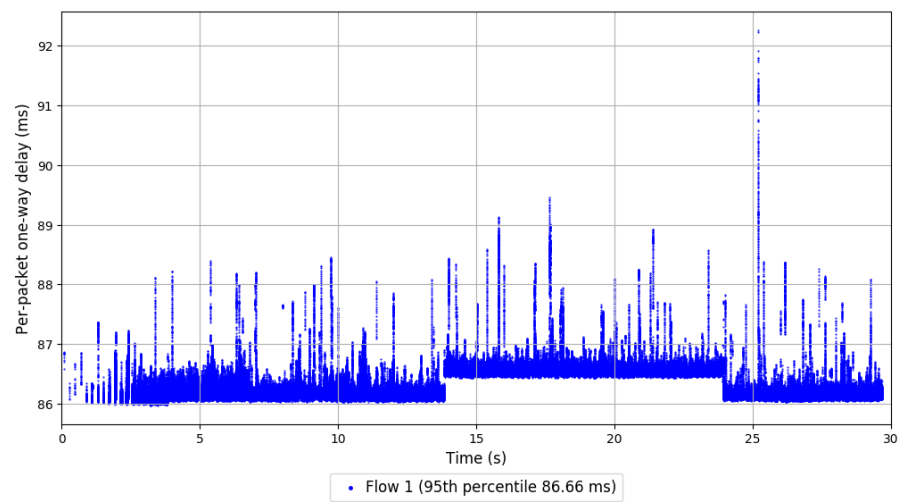
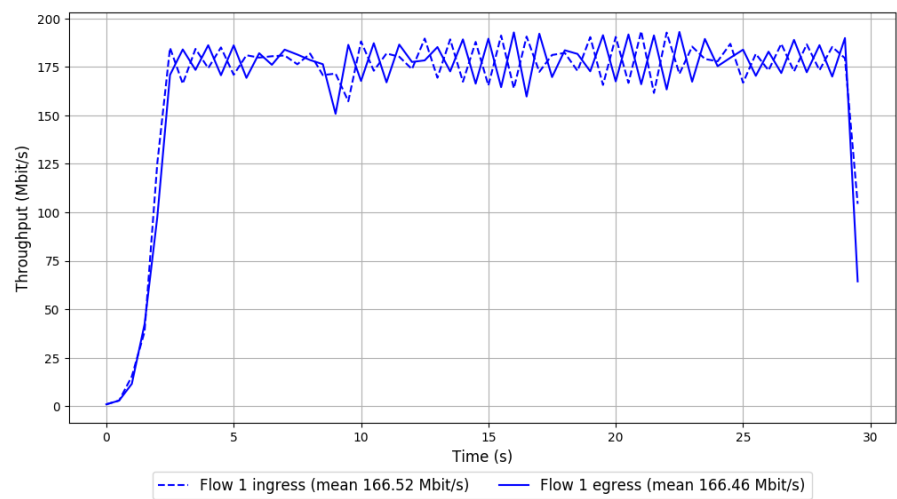
-- Flow 1:

Average throughput: 166.46 Mbit/s

95th percentile per-packet one-way delay: 86.659 ms

Loss rate: 0.69%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-11 08:55:14

End at: 2017-12-11 08:55:44

Below is generated by plot.py at 2017-12-11 11:34:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 157.90 Mbit/s

95th percentile per-packet one-way delay: 112.901 ms

Loss rate: 0.73%

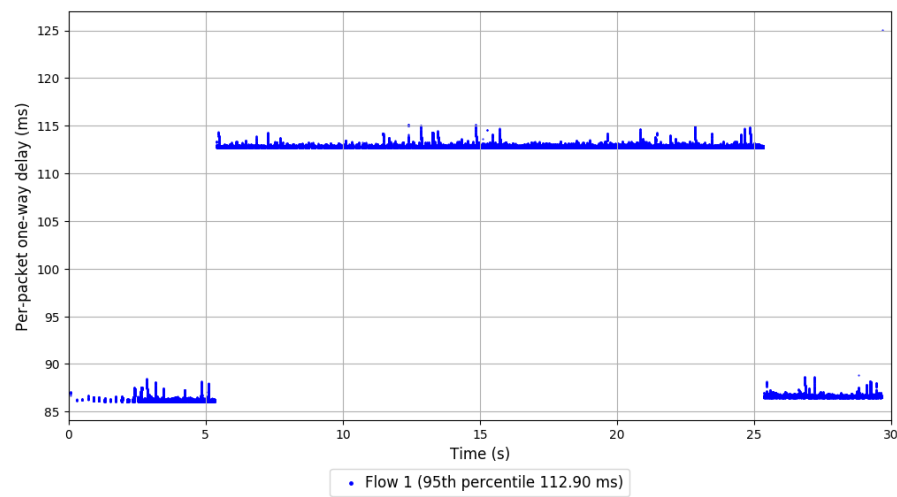
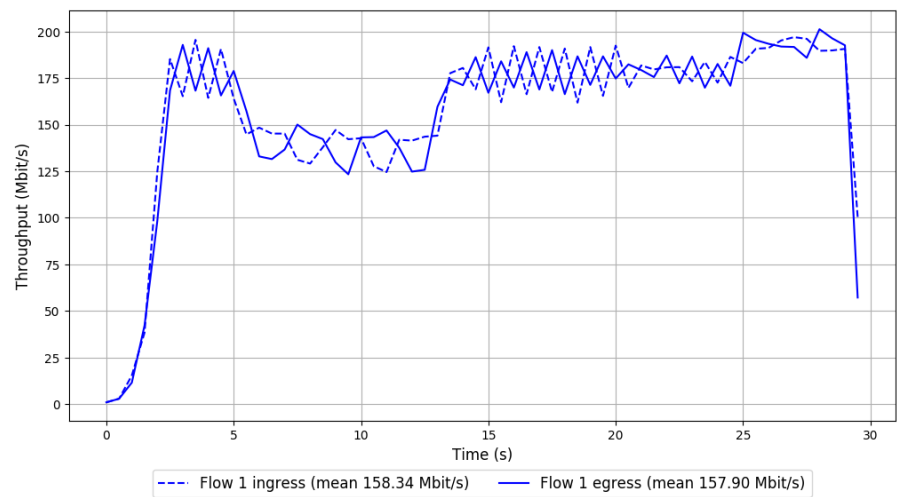
-- Flow 1:

Average throughput: 157.90 Mbit/s

95th percentile per-packet one-way delay: 112.901 ms

Loss rate: 0.73%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-11 09:06:04

End at: 2017-12-11 09:06:34

Below is generated by plot.py at 2017-12-11 11:34:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.34 Mbit/s

95th percentile per-packet one-way delay: 87.041 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 183.34 Mbit/s

95th percentile per-packet one-way delay: 87.041 ms

Loss rate: 0.62%

Run 10: Report of Indigo-calib — Data Link

