

Pantheon Report

Generated at 2017-09-18 01:38:21 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

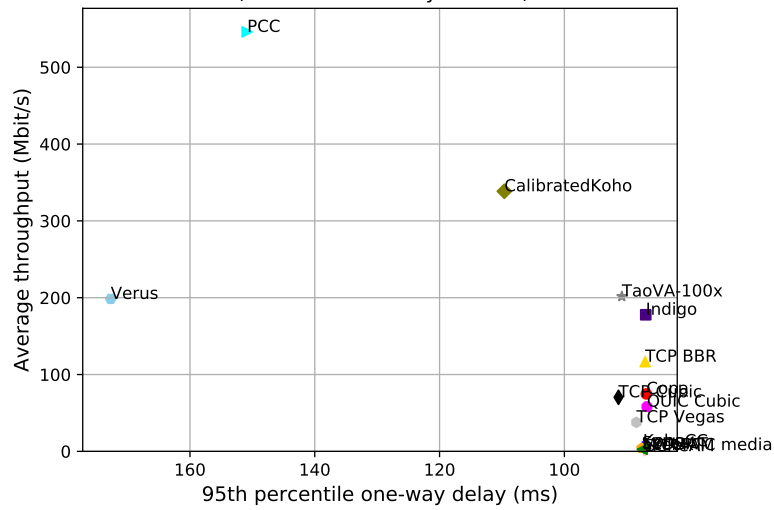
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

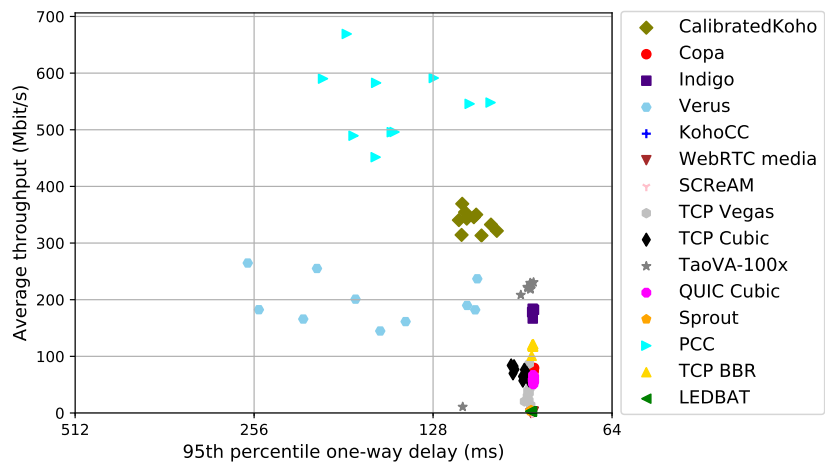
Git summary:

```
branch: master @ 57453dc11f8da93a2e03eea75289fea01b816298
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
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	7	116.69	87.05	0.68
CalibratedKoho	10	338.51	109.62	1.00
Copa	10	74.74	86.86	0.67
TCP Cubic	10	70.35	91.33	0.70
Indigo	4	177.80	86.96	0.63
KohoCC	8	6.61	87.41	0.56
LEDBAT	10	2.62	87.53	0.80
PCC	10	546.02	150.84	1.83
QUIC Cubic	9	58.19	86.77	0.89
SCReAM	10	0.21	87.11	0.63
Sprout	9	4.11	87.60	0.93
TaoVA-100x	10	201.61	90.79	0.64
TCP Vegas	10	37.78	88.46	0.55
Verus	10	198.40	172.70	4.62
WebRTC media	9	1.63	87.10	3.20

Run 1: Statistics of TCP BBR

Start at: 2017-09-17 21:02:08

End at: 2017-09-17 21:02:38

Below is generated by plot.py at 2017-09-18 00:59:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.64 Mbit/s

95th percentile per-packet one-way delay: 87.122 ms

Loss rate: 0.69%

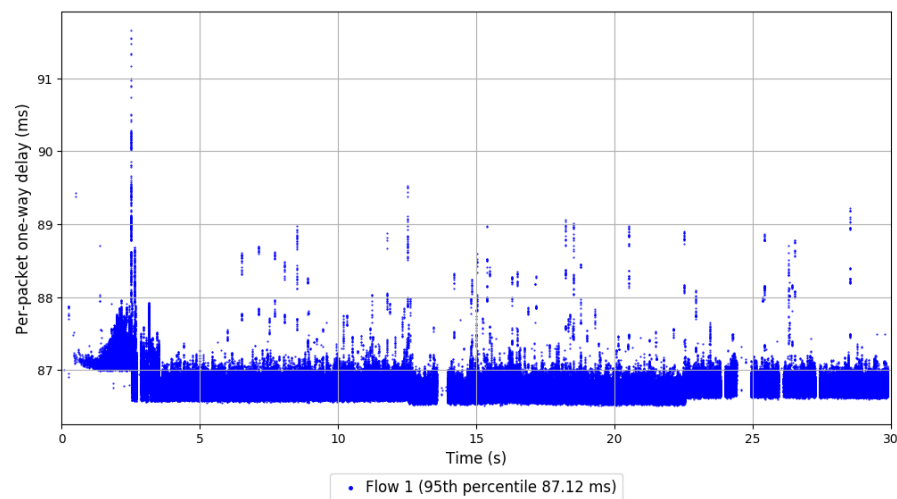
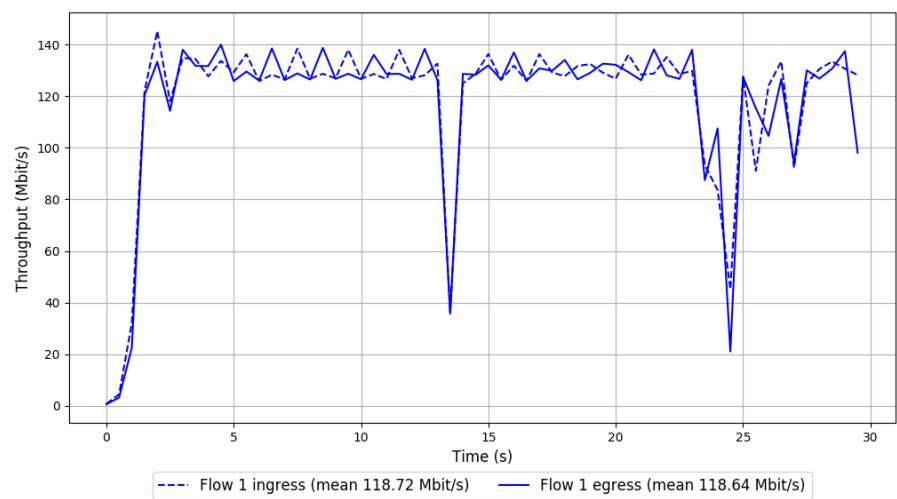
-- Flow 1:

Average throughput: 118.64 Mbit/s

95th percentile per-packet one-way delay: 87.122 ms

Loss rate: 0.69%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-09-17 21:13:48

End at: 2017-09-17 21:14:18

Below is generated by plot.py at 2017-09-18 00:59:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.07 Mbit/s

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

Loss rate: 0.59%

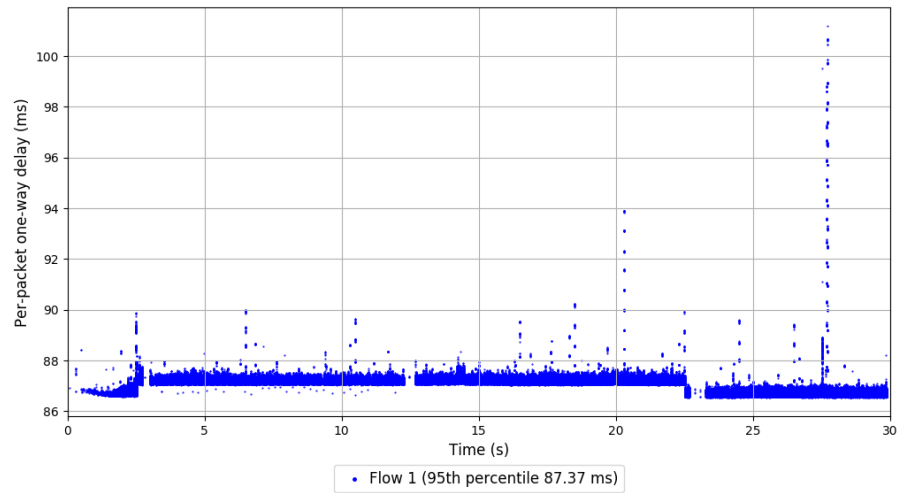
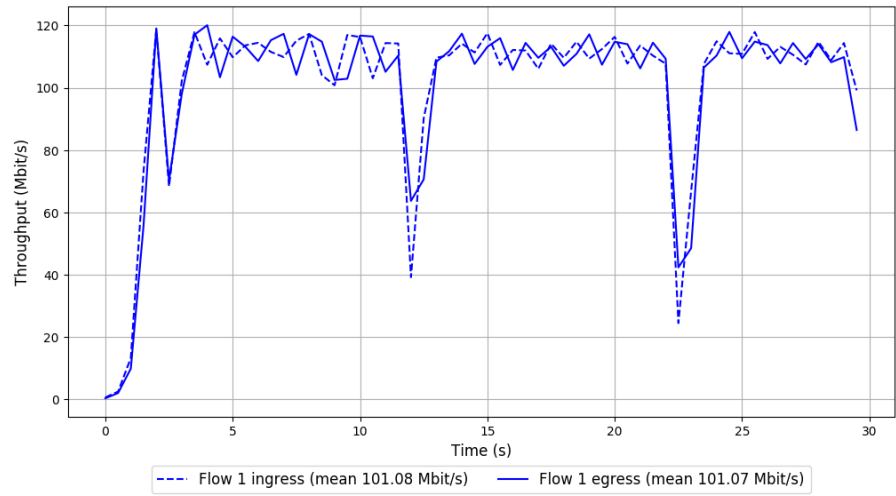
-- Flow 1:

Average throughput: 101.07 Mbit/s

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

Loss rate: 0.59%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-09-17 21:25:37

End at: 2017-09-17 21:26:08

Below is generated by plot.py at 2017-09-18 00:59:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.02 Mbit/s

95th percentile per-packet one-way delay: 86.958 ms

Loss rate: 0.63%

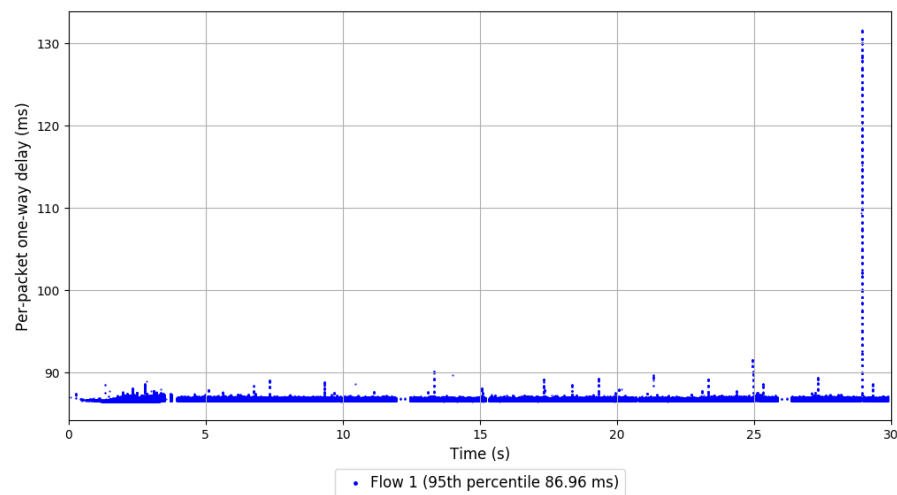
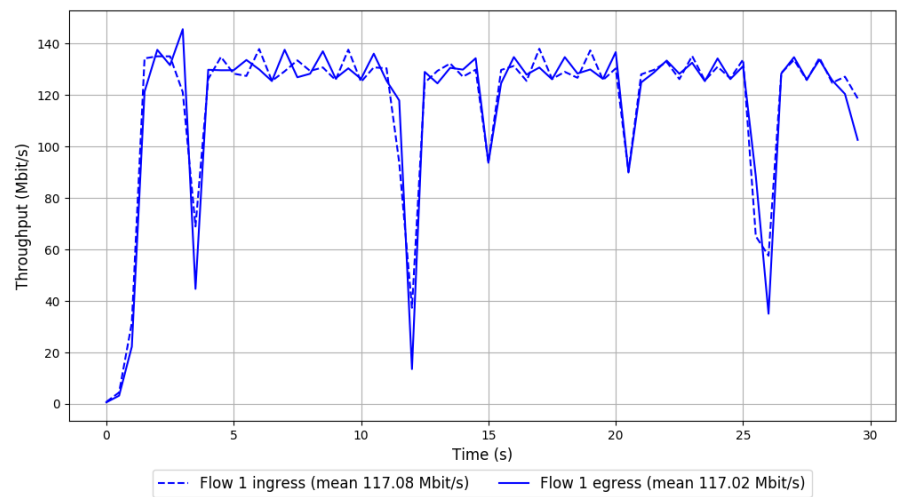
-- Flow 1:

Average throughput: 117.02 Mbit/s

95th percentile per-packet one-way delay: 86.958 ms

Loss rate: 0.63%

Run 3: Report of TCP BBR — Data Link

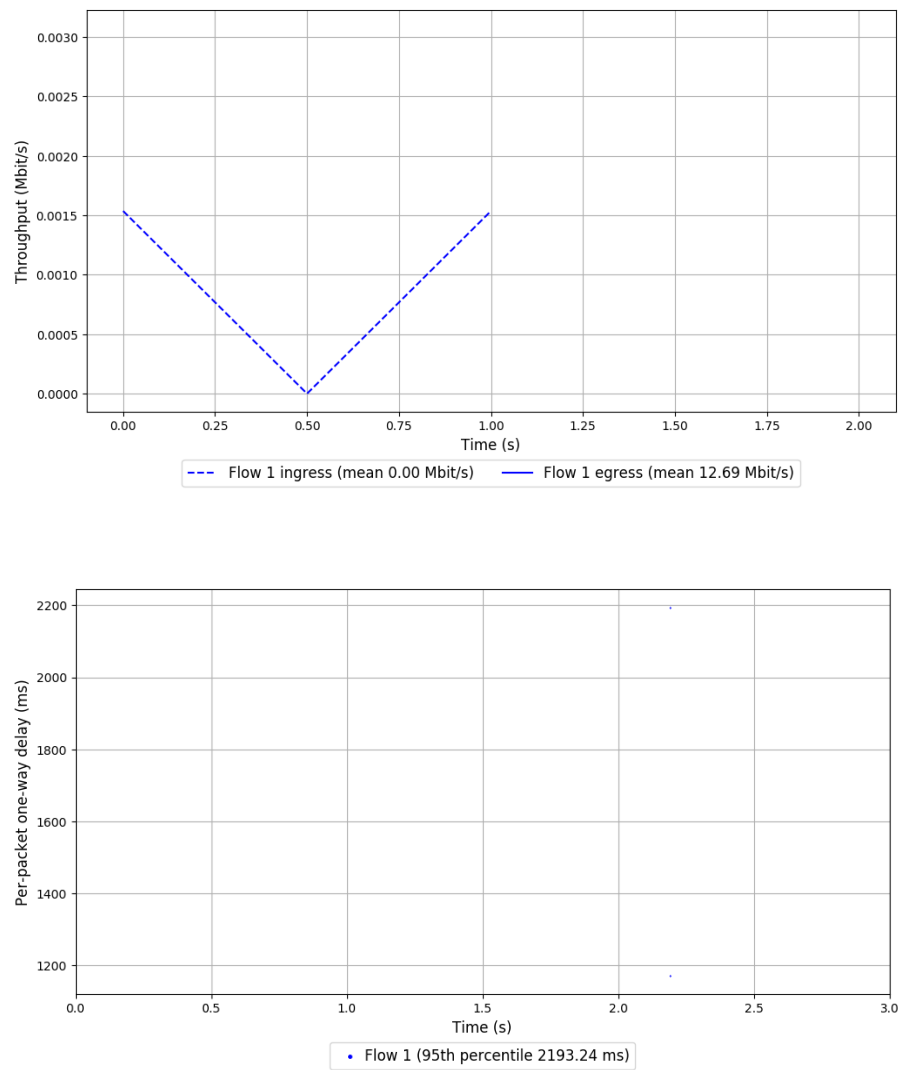


Run 4: Statistics of TCP BBR

Start at: 2017-09-17 21:37:08

End at: 2017-09-17 21:37:38

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-09-17 21:48:47

End at: 2017-09-17 21:49:18

Below is generated by plot.py at 2017-09-18 01:00:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.28 Mbit/s

95th percentile per-packet one-way delay: 87.129 ms

Loss rate: 0.61%

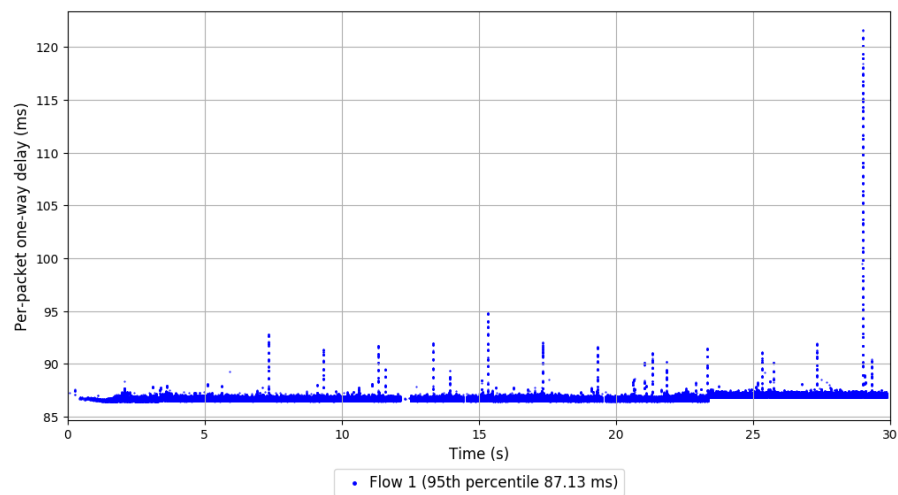
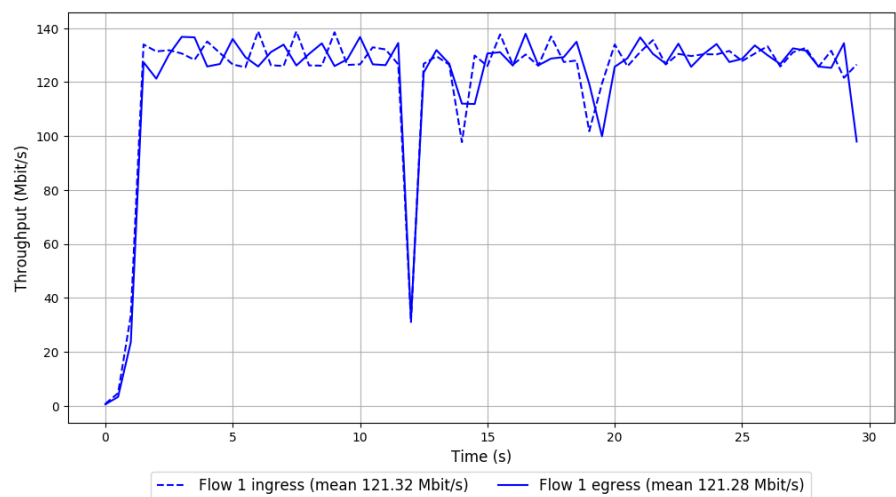
-- Flow 1:

Average throughput: 121.28 Mbit/s

95th percentile per-packet one-way delay: 87.129 ms

Loss rate: 0.61%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-09-17 22:00:41

End at: 2017-09-17 22:01:11

Below is generated by plot.py at 2017-09-18 01:00:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.69 Mbit/s

95th percentile per-packet one-way delay: 87.100 ms

Loss rate: 0.41%

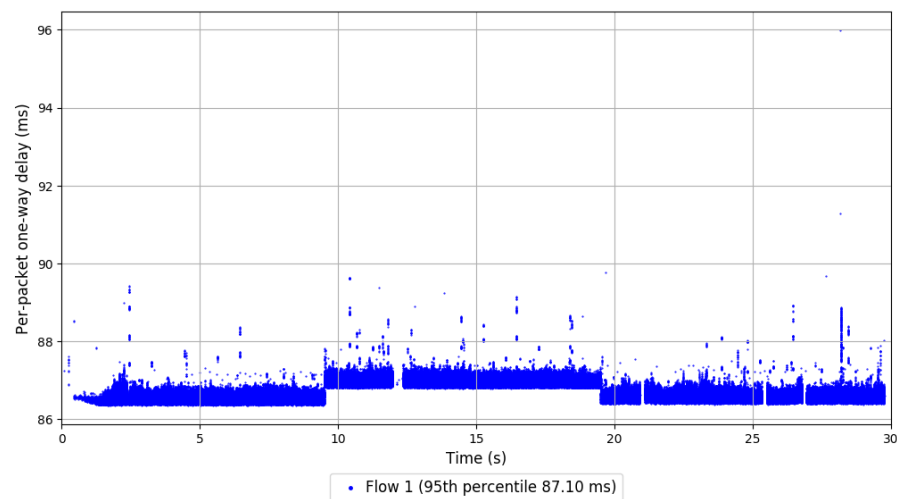
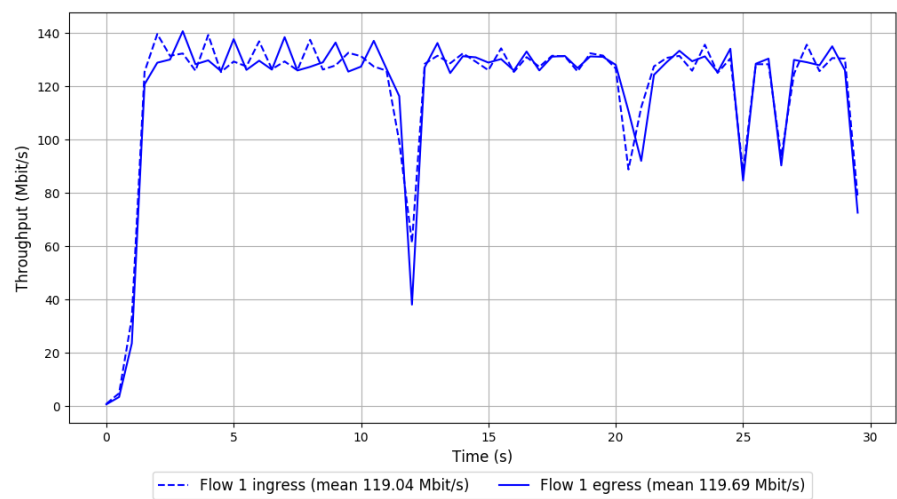
-- Flow 1:

Average throughput: 119.69 Mbit/s

95th percentile per-packet one-way delay: 87.100 ms

Loss rate: 0.41%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-09-17 22:12:32

End at: 2017-09-17 22:13:02

Below is generated by plot.py at 2017-09-18 01:00:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.60 Mbit/s

95th percentile per-packet one-way delay: 86.867 ms

Loss rate: 1.18%

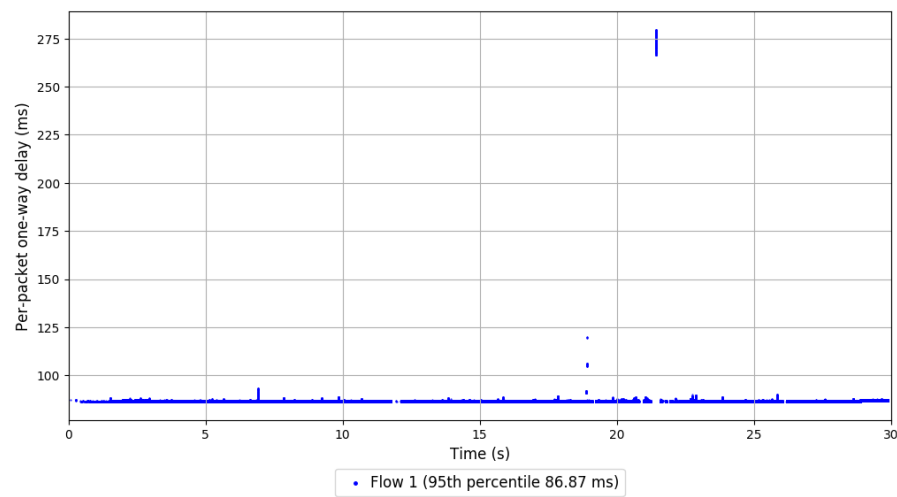
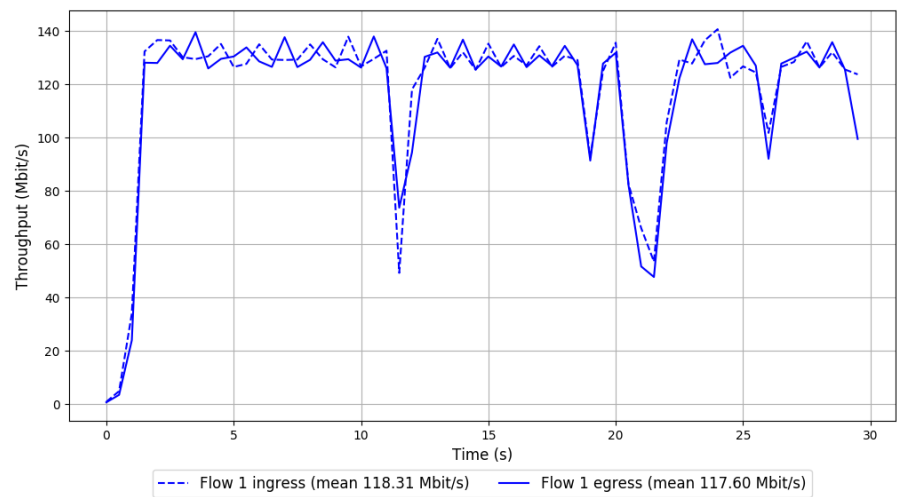
-- Flow 1:

Average throughput: 117.60 Mbit/s

95th percentile per-packet one-way delay: 86.867 ms

Loss rate: 1.18%

Run 7: Report of TCP BBR — Data Link

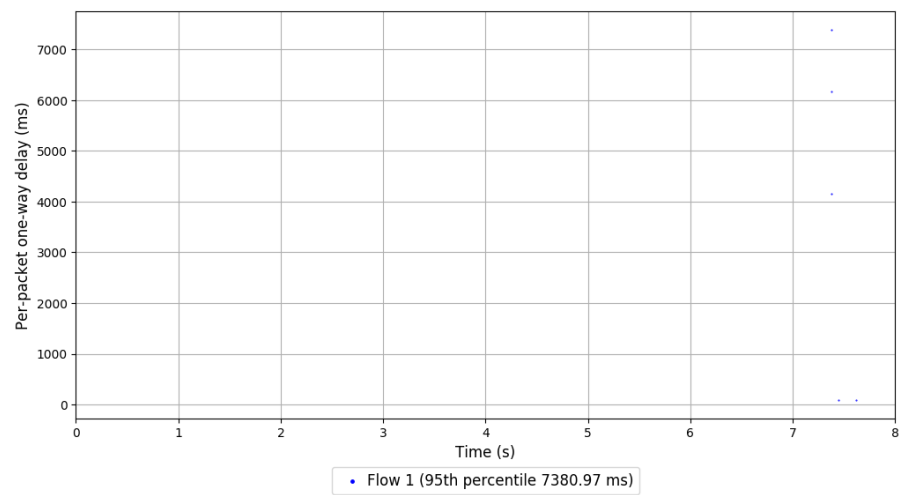
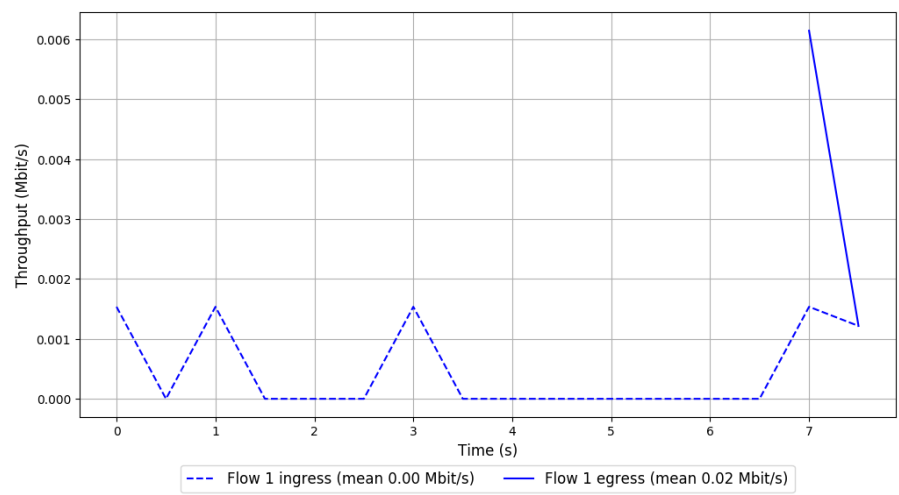


Run 8: Statistics of TCP BBR

Start at: 2017-09-17 22:24:11

End at: 2017-09-17 22:24:41

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-09-17 22:35:58

End at: 2017-09-17 22:36:28

Below is generated by plot.py at 2017-09-18 01:00:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.54 Mbit/s

95th percentile per-packet one-way delay: 86.831 ms

Loss rate: 0.65%

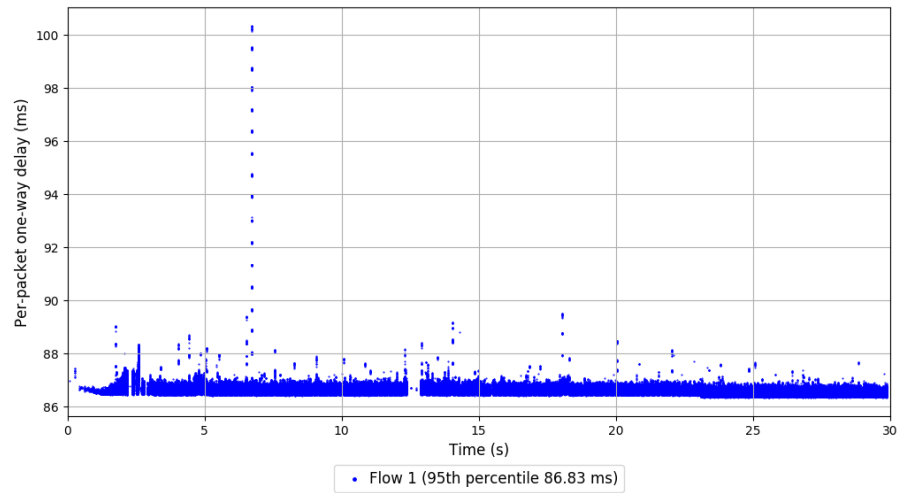
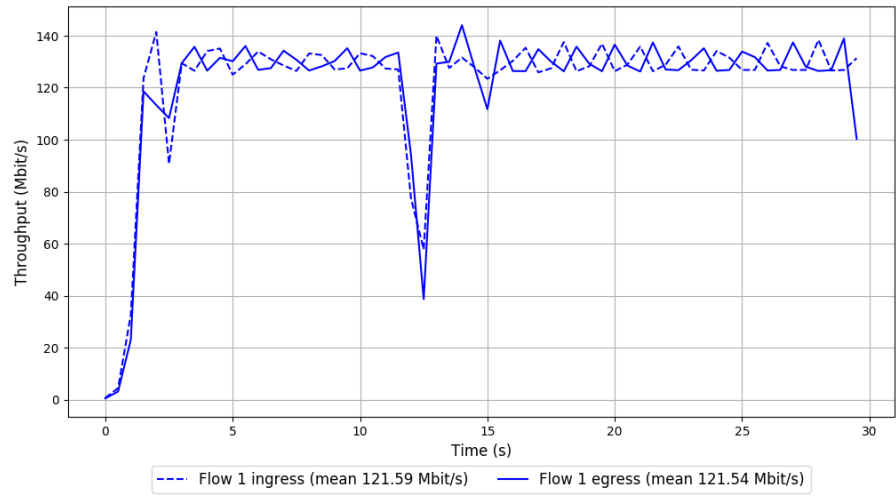
-- Flow 1:

Average throughput: 121.54 Mbit/s

95th percentile per-packet one-way delay: 86.831 ms

Loss rate: 0.65%

Run 9: Report of TCP BBR — Data Link

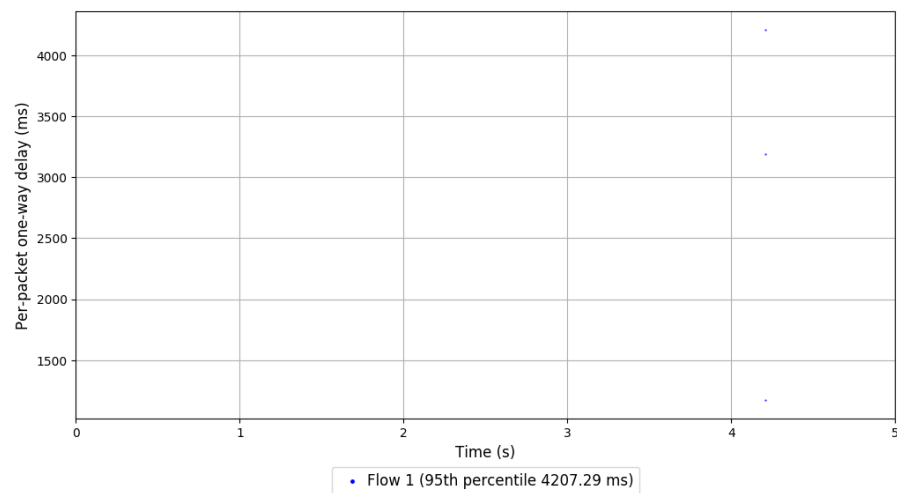
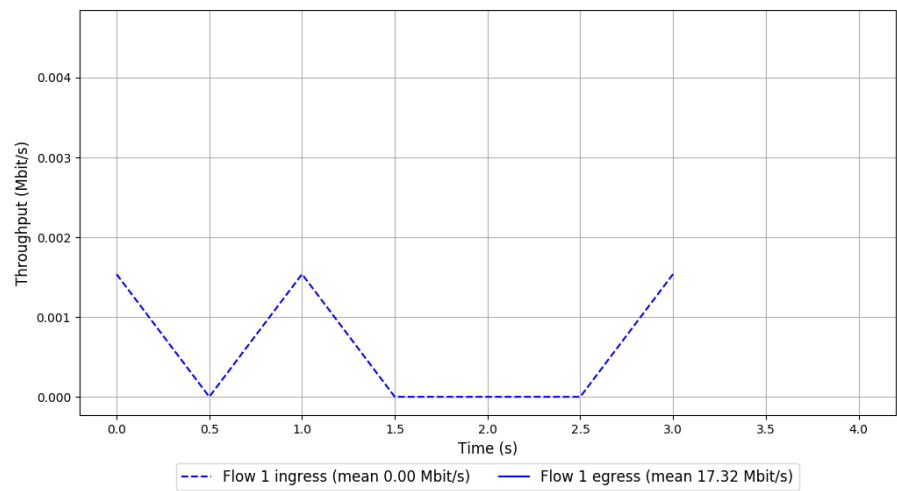


Run 10: Statistics of TCP BBR

Start at: 2017-09-17 22:47:27

End at: 2017-09-17 22:47:57

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-09-17 20:57:26

End at: 2017-09-17 20:57:56

Below is generated by plot.py at 2017-09-18 01:04:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 343.07 Mbit/s

95th percentile per-packet one-way delay: 112.347 ms

Loss rate: 1.55%

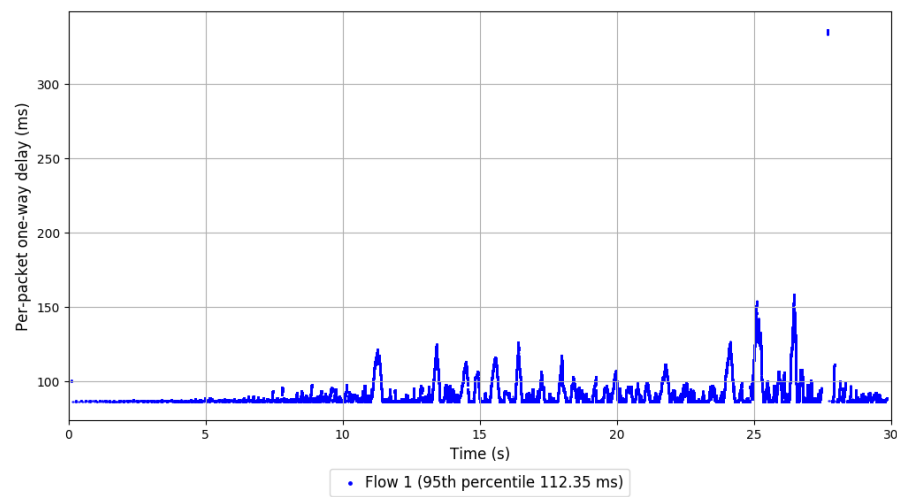
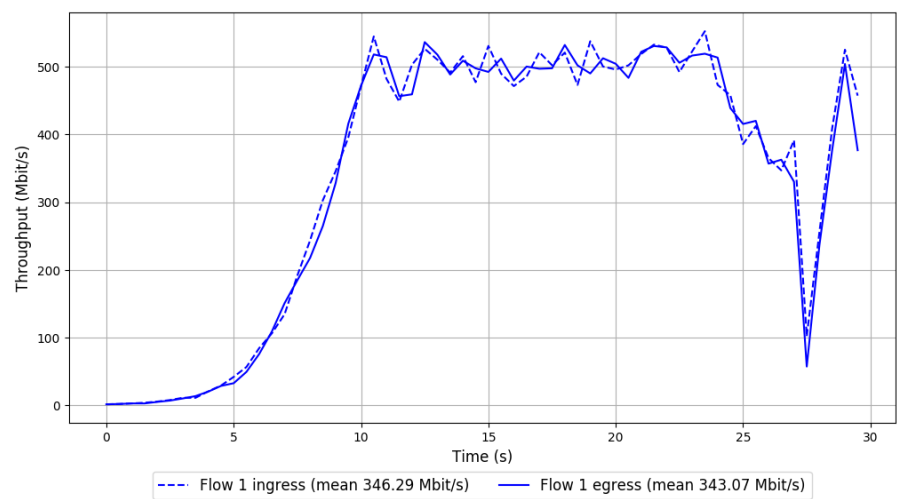
-- Flow 1:

Average throughput: 343.07 Mbit/s

95th percentile per-packet one-way delay: 112.347 ms

Loss rate: 1.55%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-09-17 21:09:05

End at: 2017-09-17 21:09:35

Below is generated by plot.py at 2017-09-18 01:05:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 354.57 Mbit/s

95th percentile per-packet one-way delay: 113.089 ms

Loss rate: 0.82%

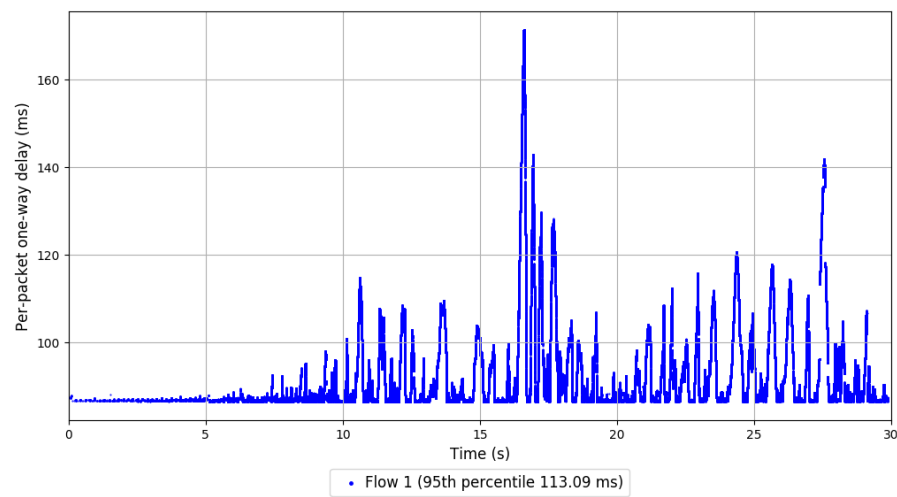
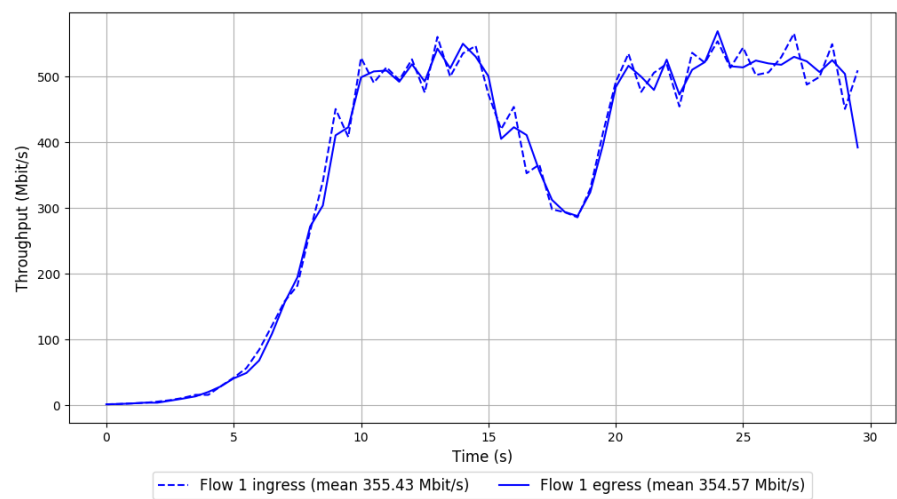
-- Flow 1:

Average throughput: 354.57 Mbit/s

95th percentile per-packet one-way delay: 113.089 ms

Loss rate: 0.82%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-09-17 21:20:35

End at: 2017-09-17 21:21:05

Below is generated by plot.py at 2017-09-18 01:05:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 314.36 Mbit/s

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

Loss rate: 0.80%

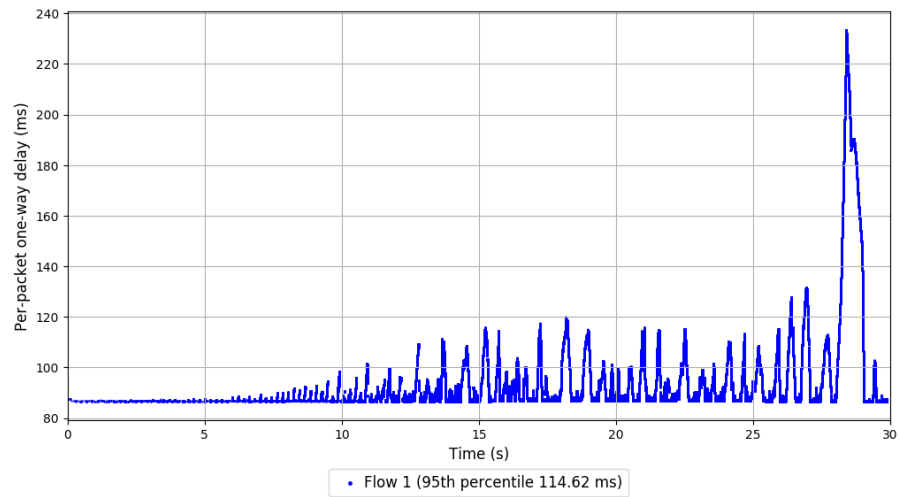
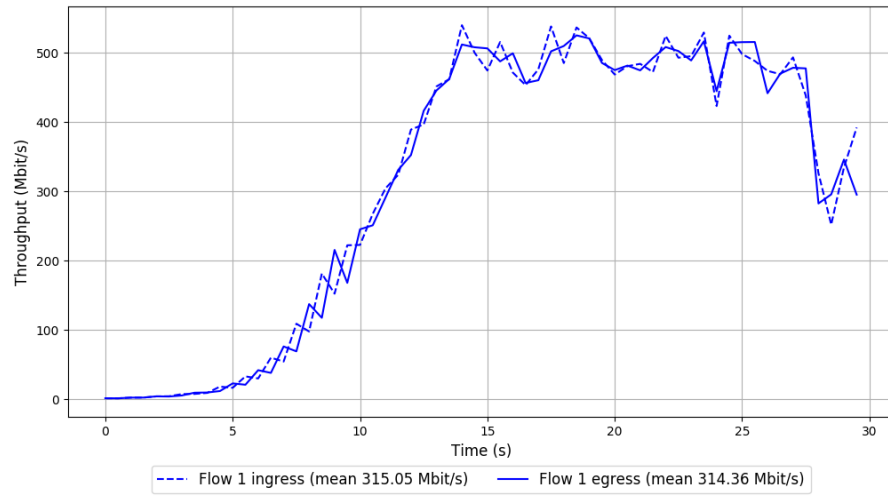
-- Flow 1:

Average throughput: 314.36 Mbit/s

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

Loss rate: 0.80%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-09-17 21:32:28

End at: 2017-09-17 21:32:58

Below is generated by plot.py at 2017-09-18 01:05:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 321.50 Mbit/s

95th percentile per-packet one-way delay: 99.995 ms

Loss rate: 1.76%

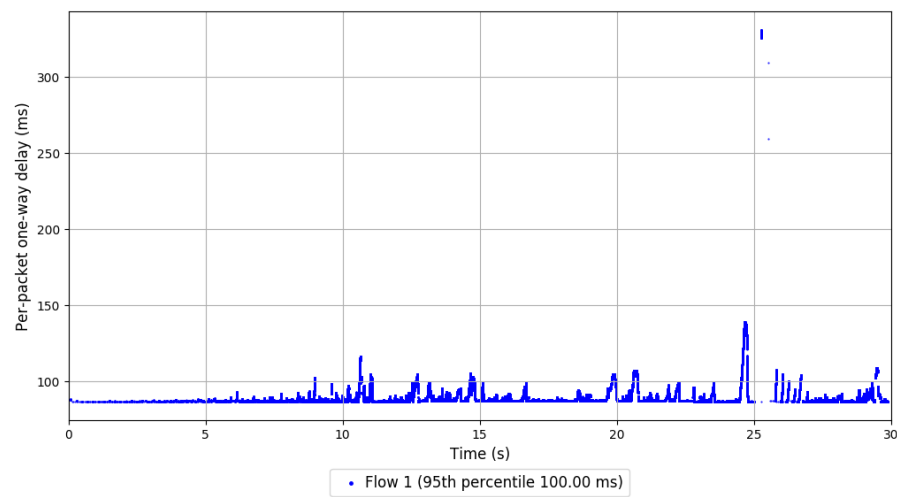
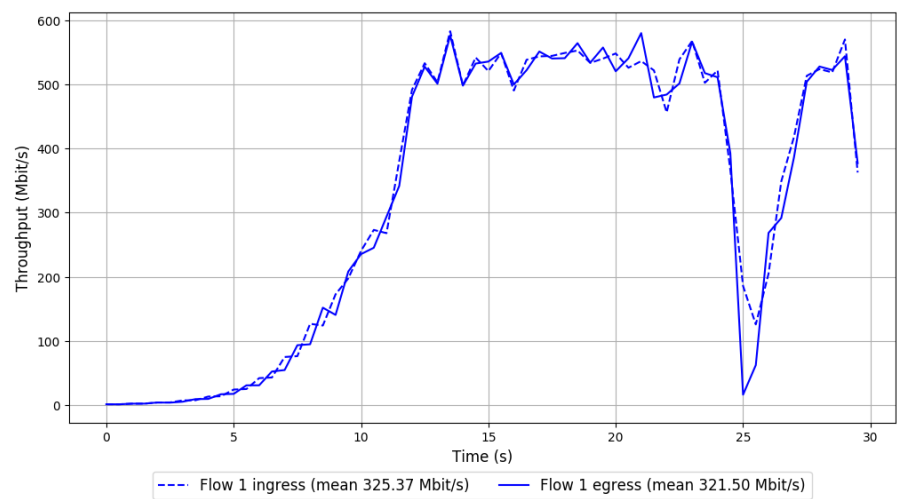
-- Flow 1:

Average throughput: 321.50 Mbit/s

95th percentile per-packet one-way delay: 99.995 ms

Loss rate: 1.76%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-09-17 21:43:55

End at: 2017-09-17 21:44:25

Below is generated by plot.py at 2017-09-18 01:05:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 313.32 Mbit/s

95th percentile per-packet one-way delay: 106.108 ms

Loss rate: 0.82%

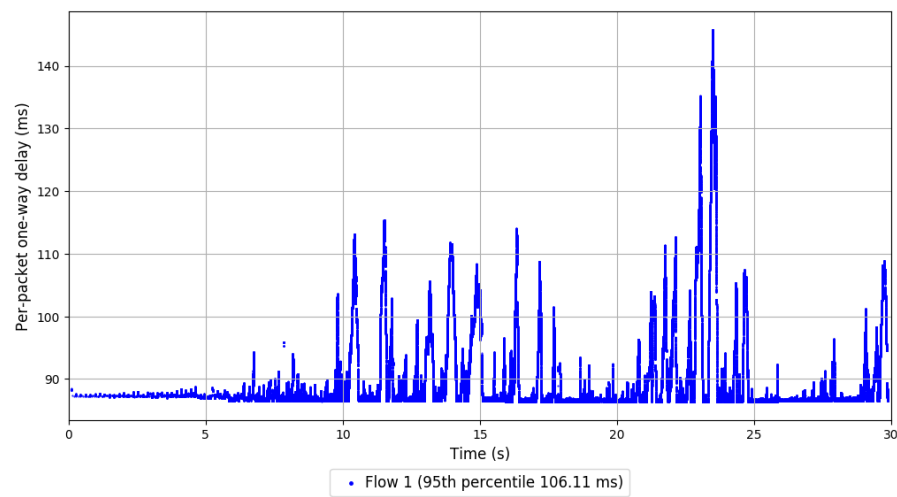
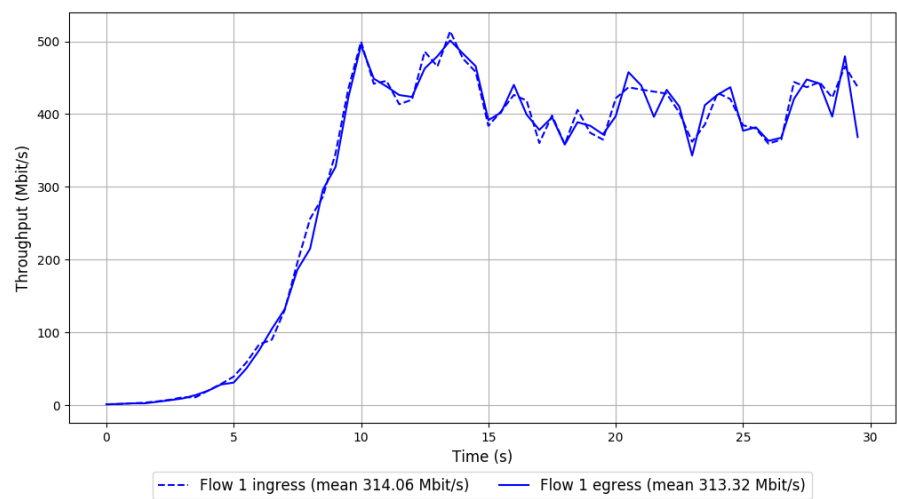
-- Flow 1:

Average throughput: 313.32 Mbit/s

95th percentile per-packet one-way delay: 106.108 ms

Loss rate: 0.82%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-09-17 21:55:48

End at: 2017-09-17 21:56:18

Below is generated by plot.py at 2017-09-18 01:05:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 332.63 Mbit/s

95th percentile per-packet one-way delay: 102.293 ms

Loss rate: 0.84%

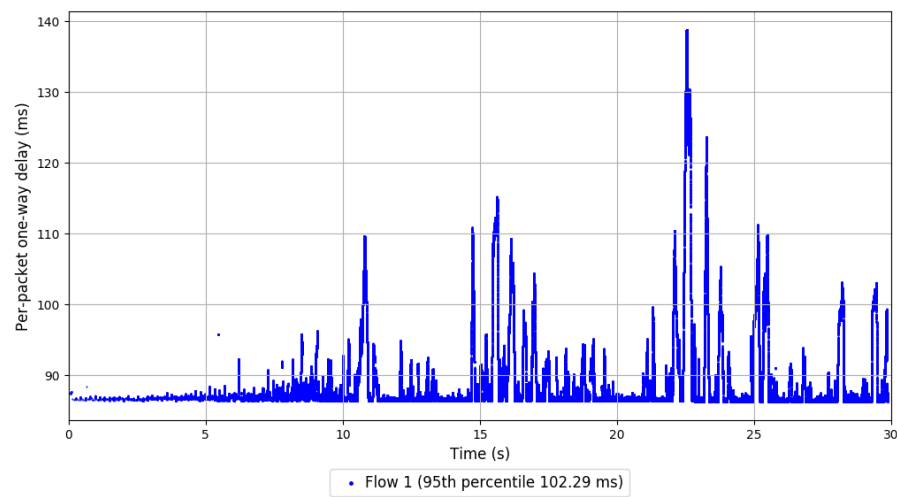
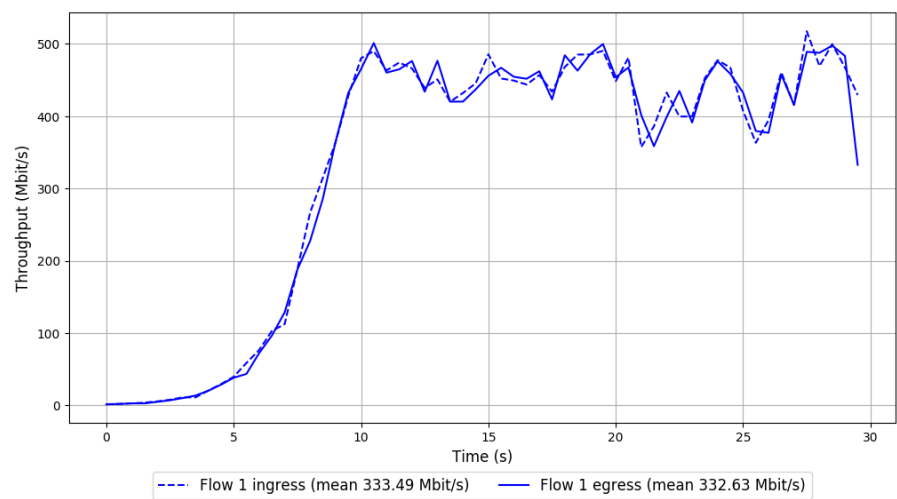
-- Flow 1:

Average throughput: 332.63 Mbit/s

95th percentile per-packet one-way delay: 102.293 ms

Loss rate: 0.84%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-09-17 22:07:50

End at: 2017-09-17 22:08:20

Below is generated by plot.py at 2017-09-18 01:05:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 340.52 Mbit/s

95th percentile per-packet one-way delay: 115.822 ms

Loss rate: 0.66%

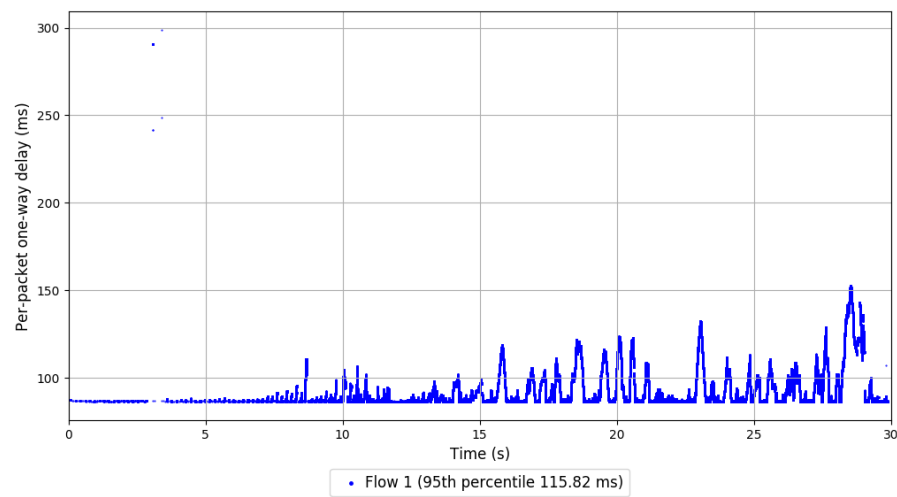
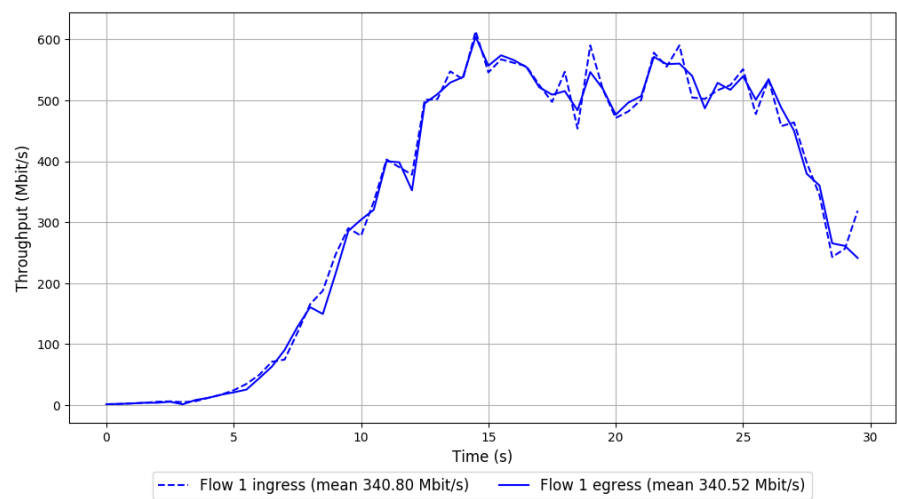
-- Flow 1:

Average throughput: 340.52 Mbit/s

95th percentile per-packet one-way delay: 115.822 ms

Loss rate: 0.66%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-09-17 22:19:28

End at: 2017-09-17 22:19:58

Below is generated by plot.py at 2017-09-18 01:05:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 350.21 Mbit/s

95th percentile per-packet one-way delay: 108.307 ms

Loss rate: 0.96%

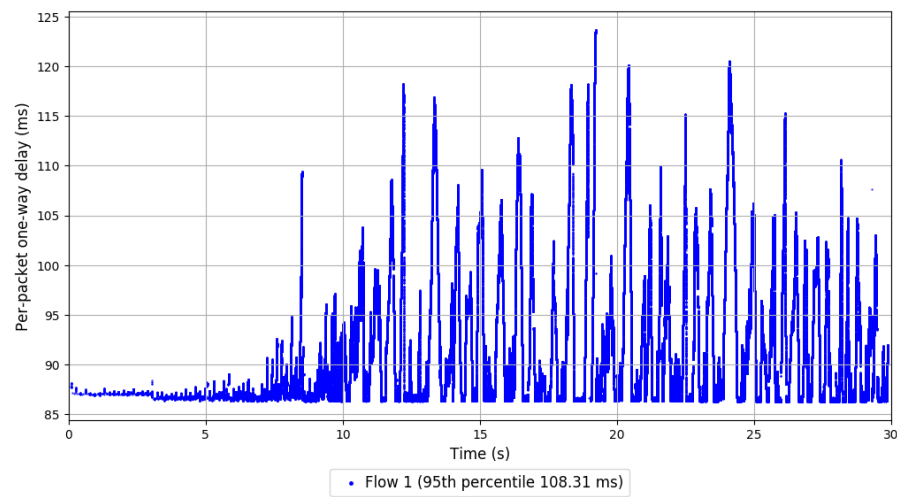
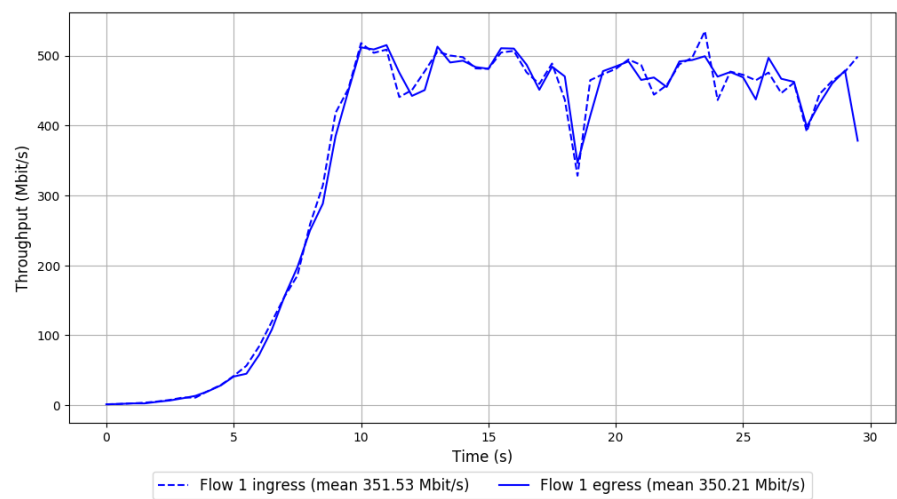
-- Flow 1:

Average throughput: 350.21 Mbit/s

95th percentile per-packet one-way delay: 108.307 ms

Loss rate: 0.96%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-09-17 22:31:03

End at: 2017-09-17 22:31:33

Below is generated by plot.py at 2017-09-18 01:10:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 345.63 Mbit/s

95th percentile per-packet one-way delay: 109.302 ms

Loss rate: 0.95%

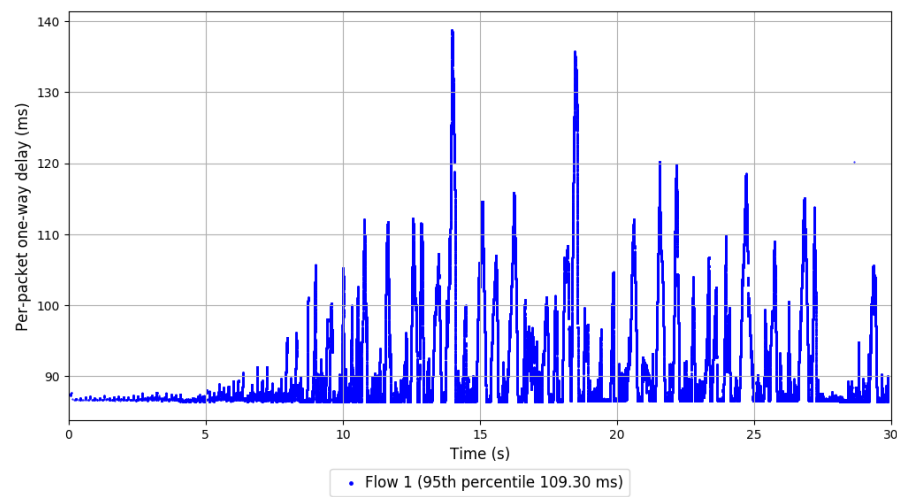
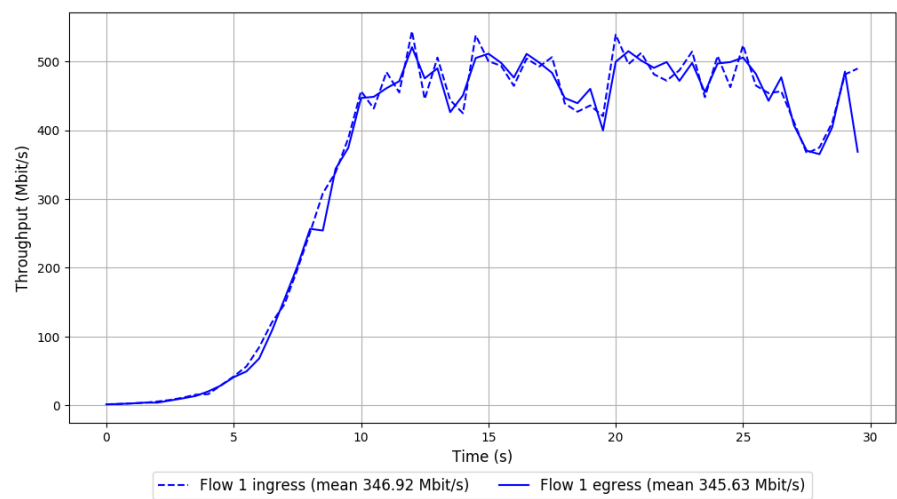
-- Flow 1:

Average throughput: 345.63 Mbit/s

95th percentile per-packet one-way delay: 109.302 ms

Loss rate: 0.95%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-09-17 22:42:49

End at: 2017-09-17 22:43:19

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 369.31 Mbit/s

95th percentile per-packet one-way delay: 114.333 ms

Loss rate: 0.84%

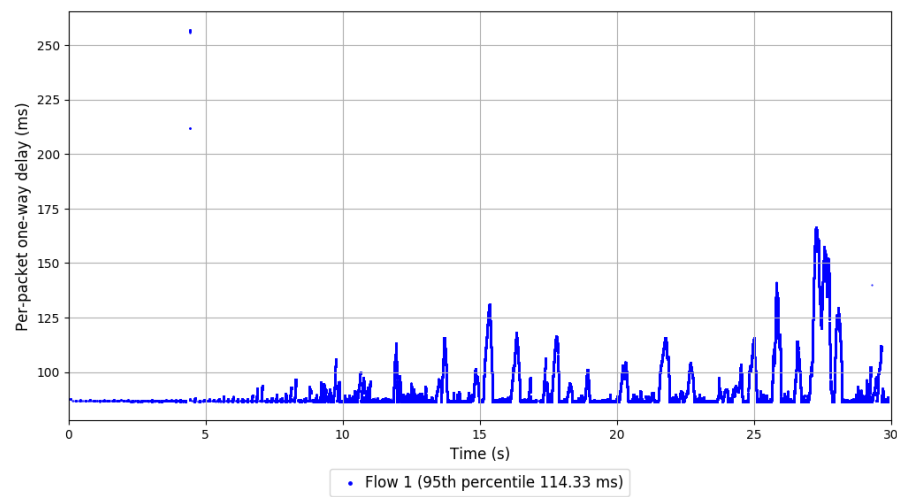
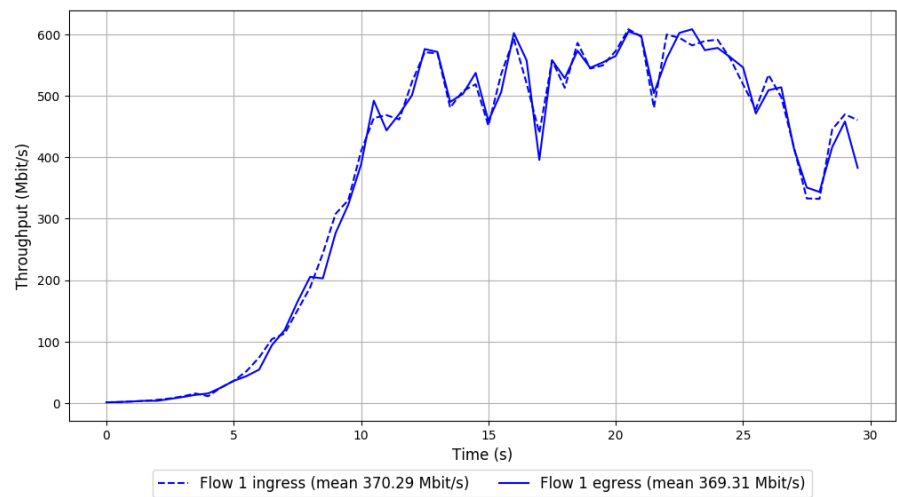
-- Flow 1:

Average throughput: 369.31 Mbit/s

95th percentile per-packet one-way delay: 114.333 ms

Loss rate: 0.84%

Run 10: Report of CalibratedKoho — Data Link

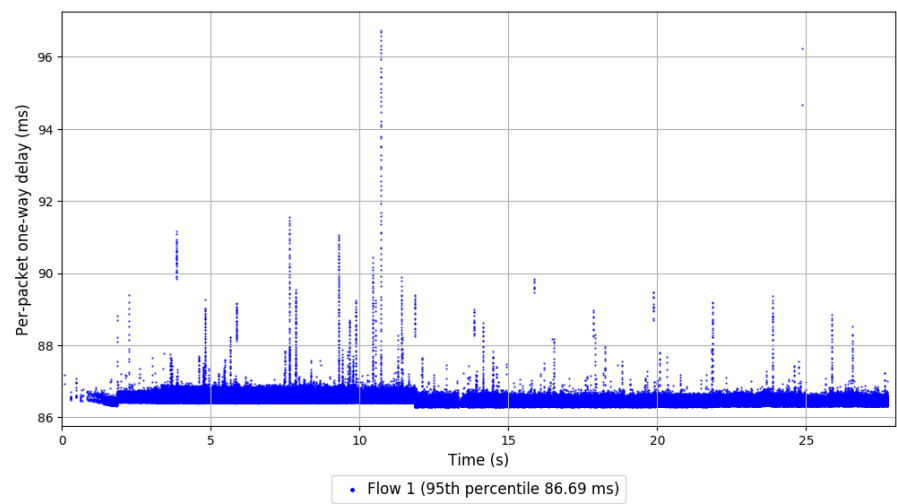
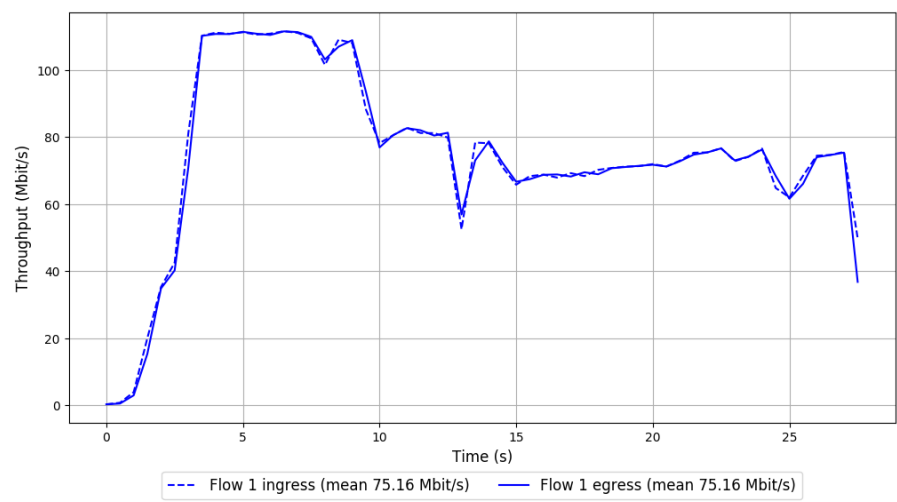


```
Run 1: Statistics of Copa

Start at: 2017-09-17 20:52:07
End at: 2017-09-17 20:52:37

# Below is generated by plot.py at 2017-09-18 01:11:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.16 Mbit/s
95th percentile per-packet one-way delay: 86.693 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 75.16 Mbit/s
95th percentile per-packet one-way delay: 86.693 ms
Loss rate: 0.63%
```


Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-09-17 21:03:38

End at: 2017-09-17 21:04:08

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.84 Mbit/s

95th percentile per-packet one-way delay: 87.052 ms

Loss rate: 0.61%

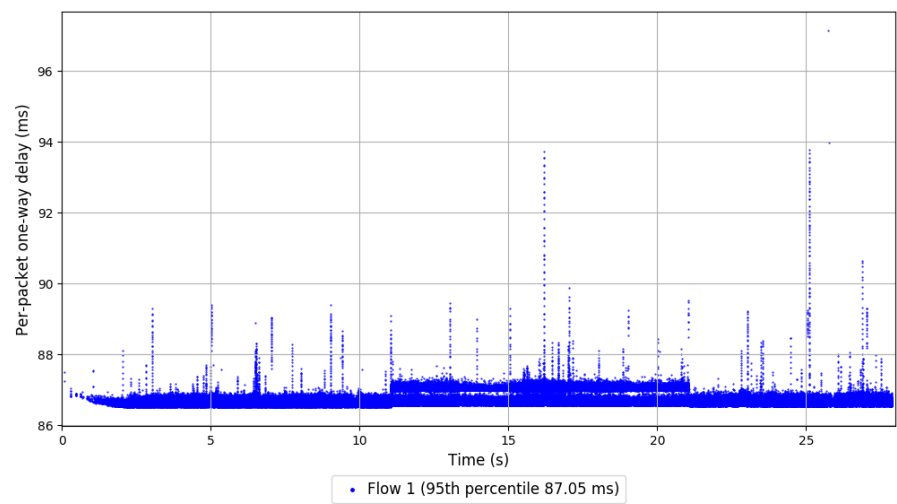
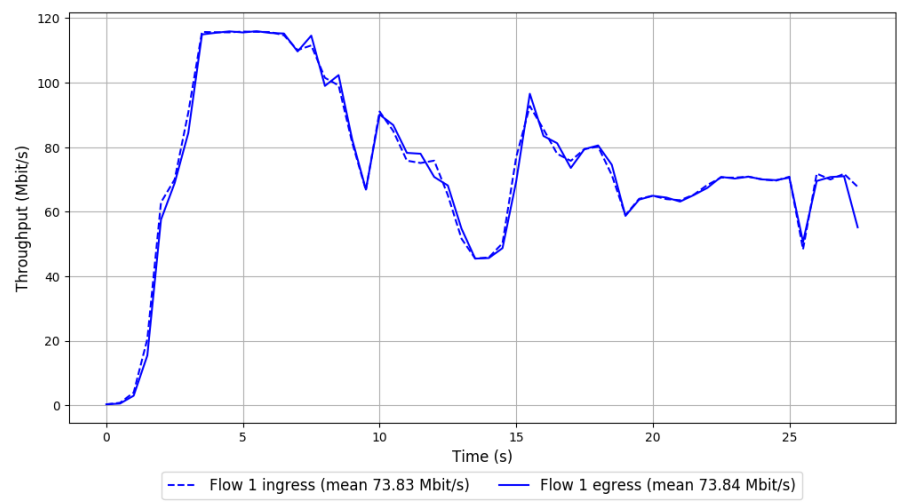
-- Flow 1:

Average throughput: 73.84 Mbit/s

95th percentile per-packet one-way delay: 87.052 ms

Loss rate: 0.61%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-09-17 21:15:18

End at: 2017-09-17 21:15:48

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.88 Mbit/s

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

Loss rate: 0.34%

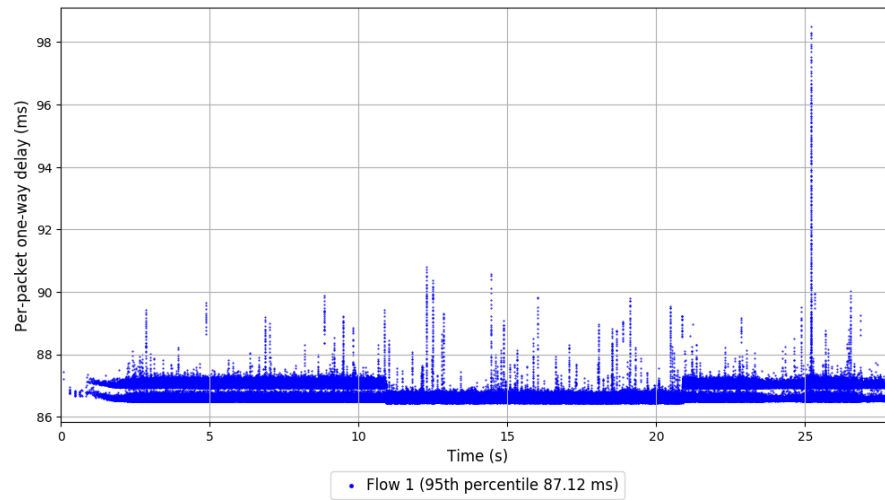
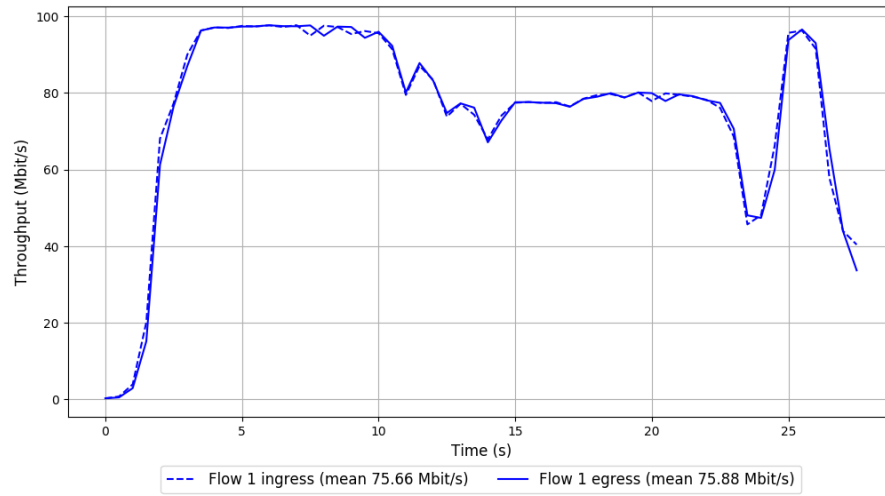
-- Flow 1:

Average throughput: 75.88 Mbit/s

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

Loss rate: 0.34%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-09-17 21:27:08

End at: 2017-09-17 21:27:38

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.22 Mbit/s

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

Loss rate: 0.76%

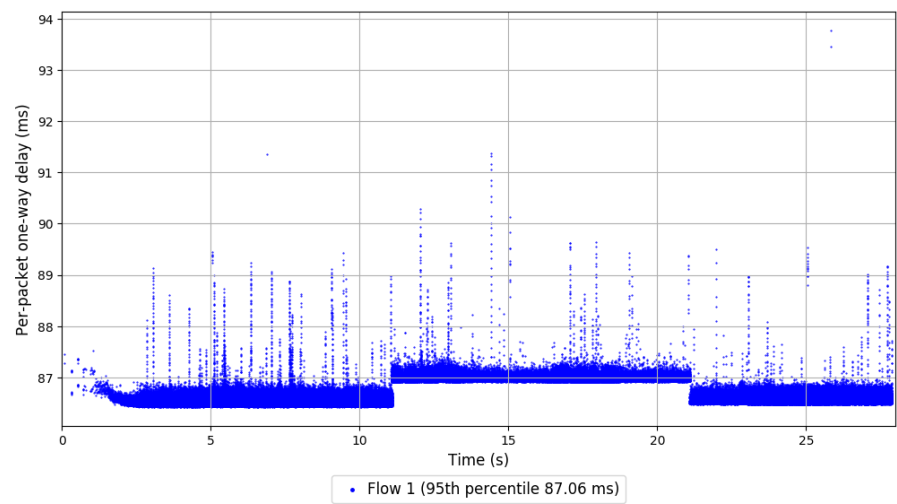
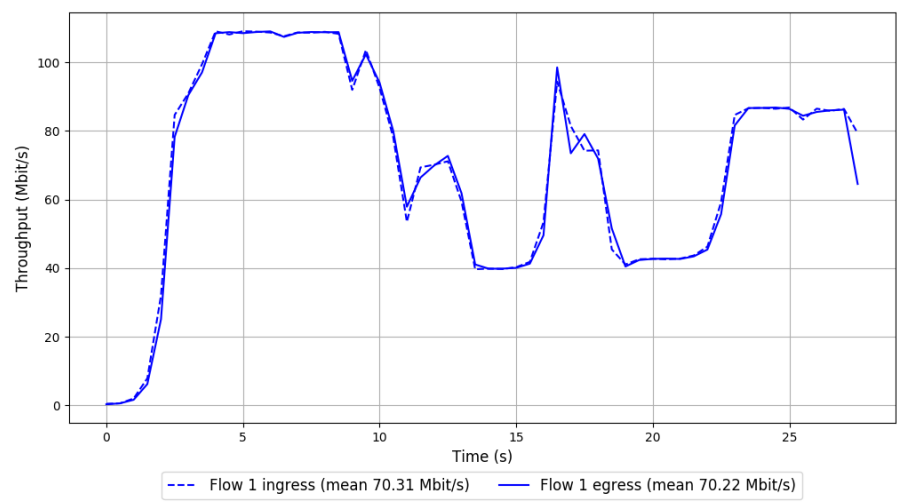
-- Flow 1:

Average throughput: 70.22 Mbit/s

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

Loss rate: 0.76%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-09-17 21:38:30

End at: 2017-09-17 21:39:00

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.81 Mbit/s

95th percentile per-packet one-way delay: 86.744 ms

Loss rate: 0.63%

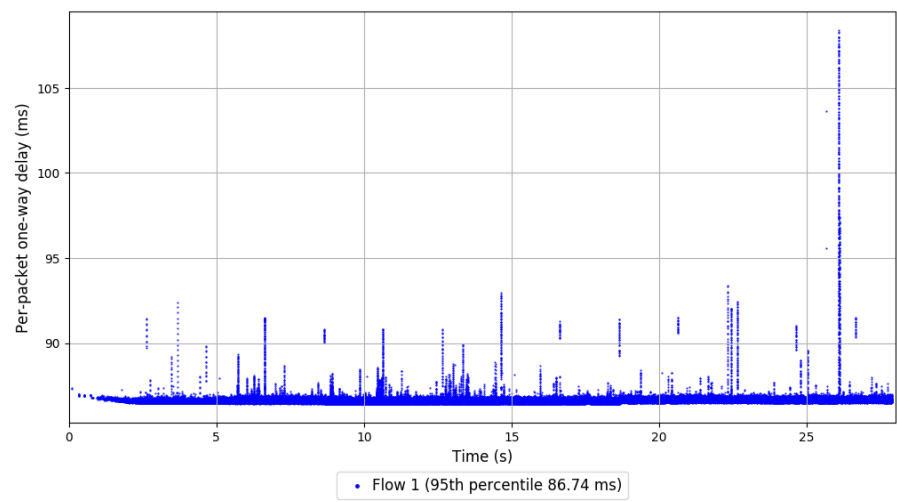
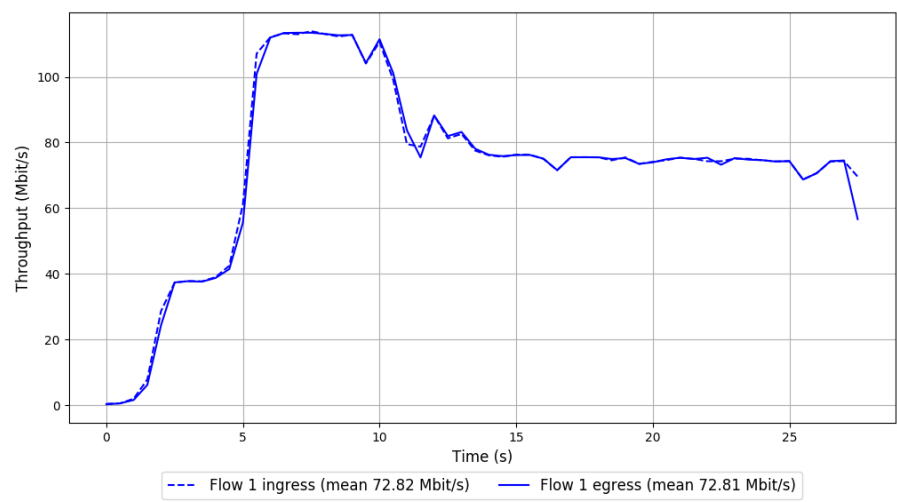
-- Flow 1:

Average throughput: 72.81 Mbit/s

95th percentile per-packet one-way delay: 86.744 ms

Loss rate: 0.63%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-09-17 21:50:18

End at: 2017-09-17 21:50:48

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.49 Mbit/s

95th percentile per-packet one-way delay: 86.912 ms

Loss rate: 0.63%

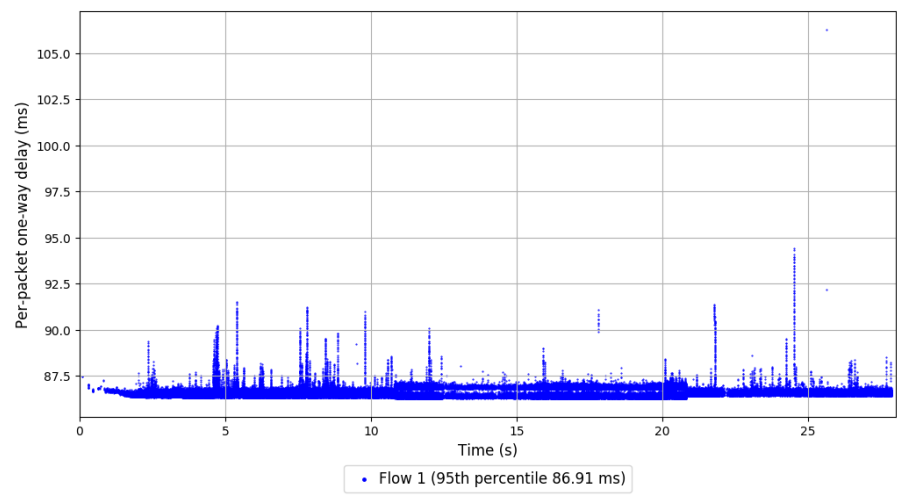
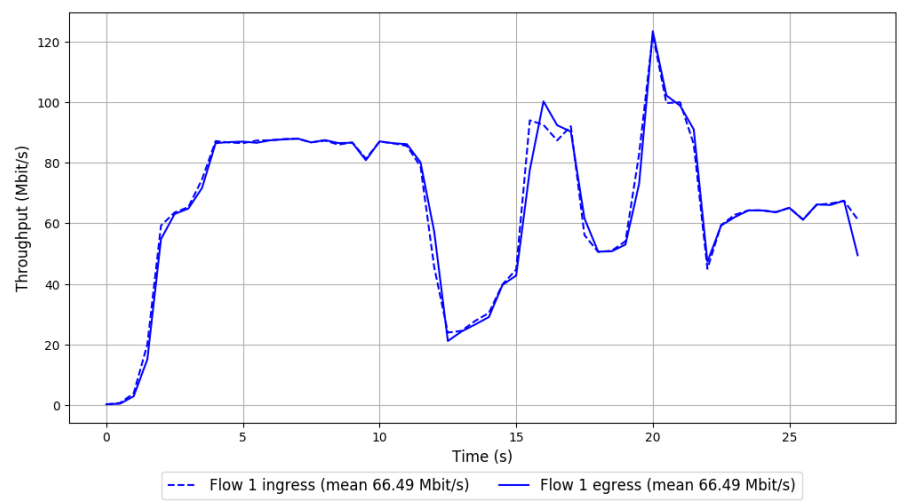
-- Flow 1:

Average throughput: 66.49 Mbit/s

95th percentile per-packet one-way delay: 86.912 ms

Loss rate: 0.63%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-09-17 22:02:13

End at: 2017-09-17 22:02:43

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.07 Mbit/s

95th percentile per-packet one-way delay: 86.947 ms

Loss rate: 0.65%

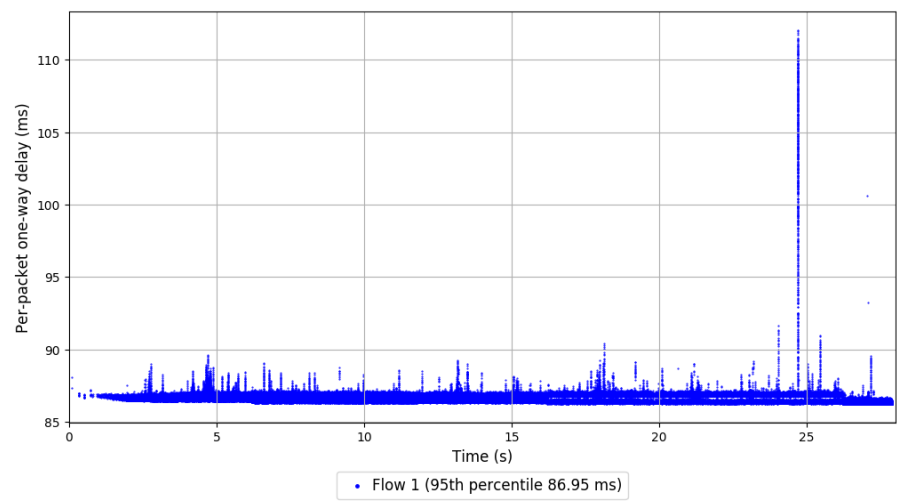
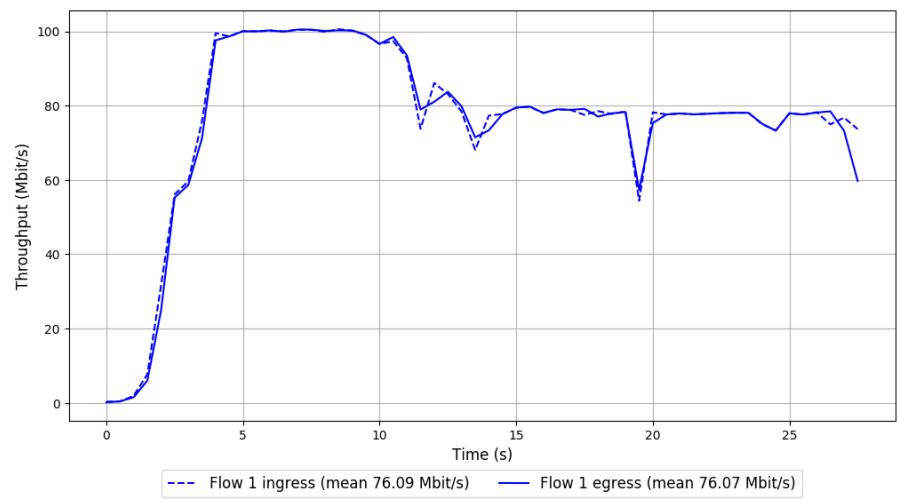
-- Flow 1:

Average throughput: 76.07 Mbit/s

95th percentile per-packet one-way delay: 86.947 ms

Loss rate: 0.65%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-09-17 22:14:02

End at: 2017-09-17 22:14:32

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.57 Mbit/s

95th percentile per-packet one-way delay: 86.822 ms

Loss rate: 0.64%

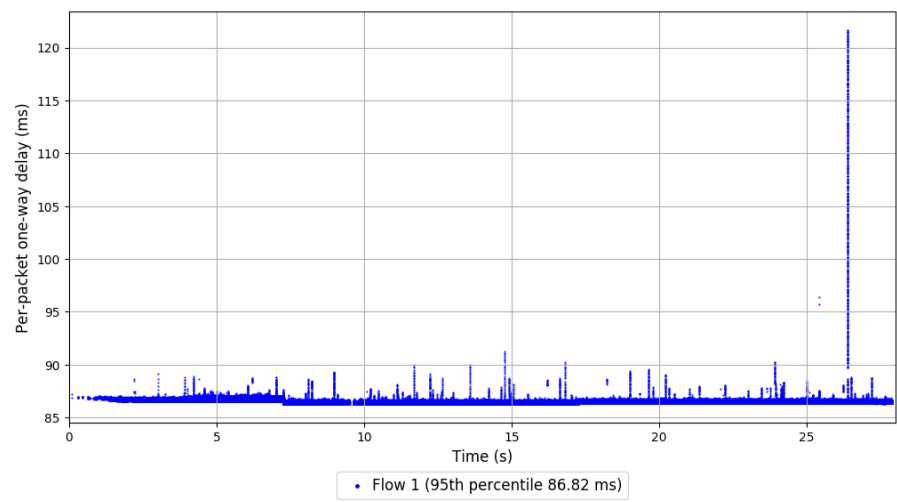
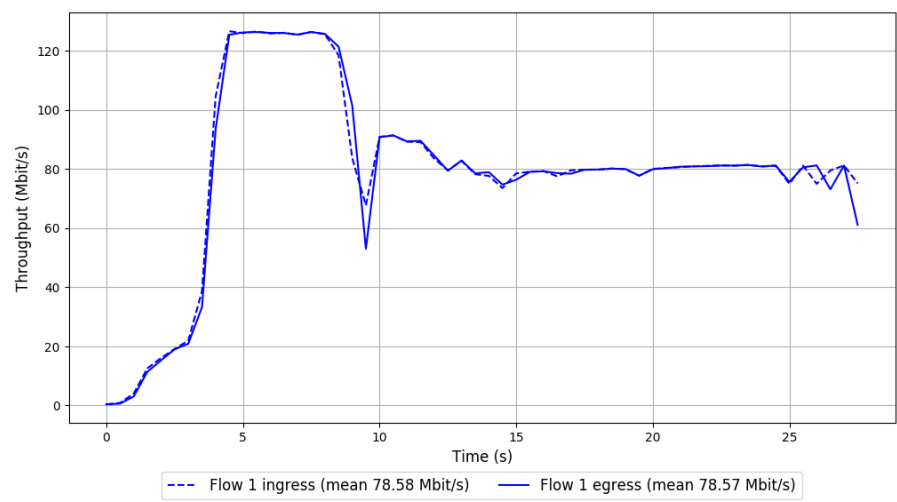
-- Flow 1:

Average throughput: 78.57 Mbit/s

95th percentile per-packet one-way delay: 86.822 ms

Loss rate: 0.64%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-09-17 22:25:34

End at: 2017-09-17 22:26:04

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.52 Mbit/s

95th percentile per-packet one-way delay: 86.543 ms

Loss rate: 0.64%

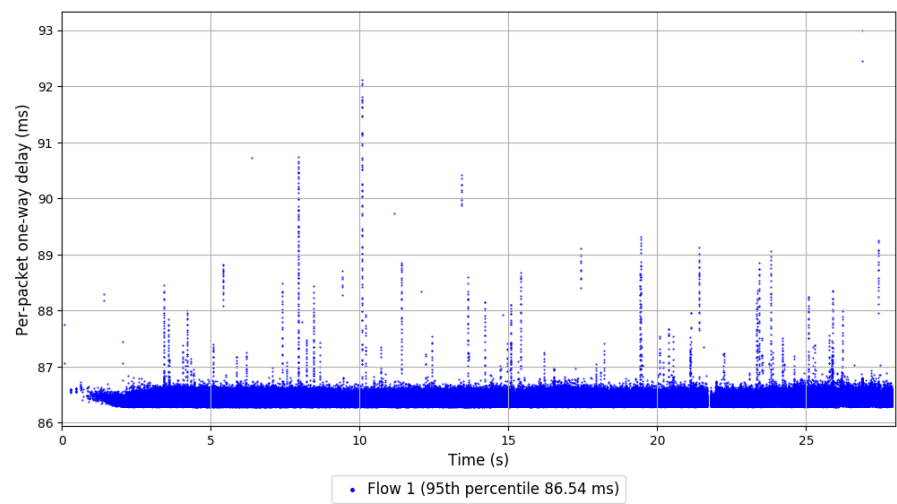
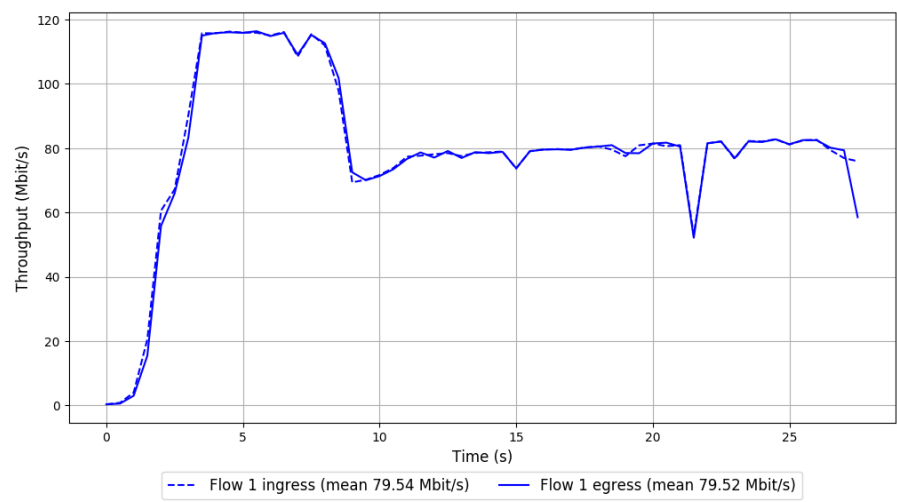
-- Flow 1:

Average throughput: 79.52 Mbit/s

95th percentile per-packet one-way delay: 86.543 ms

Loss rate: 0.64%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-09-17 22:37:28

End at: 2017-09-17 22:37:58

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.84 Mbit/s

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

Loss rate: 1.21%

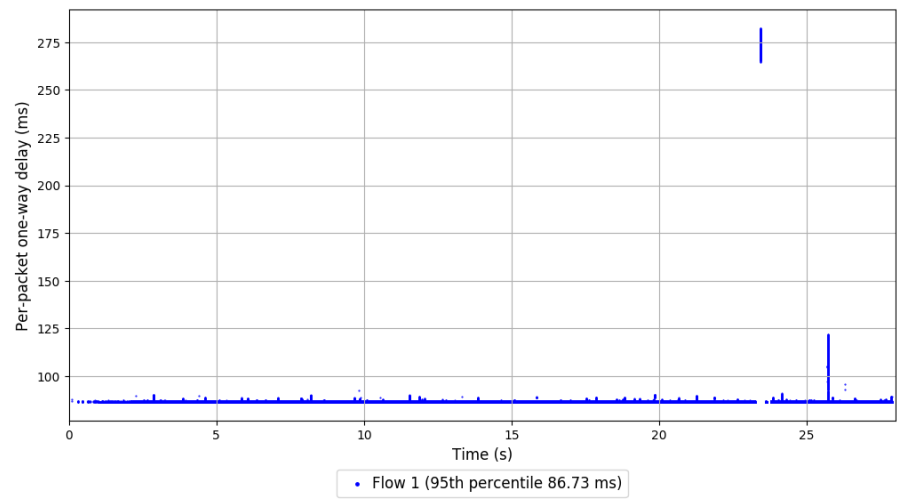
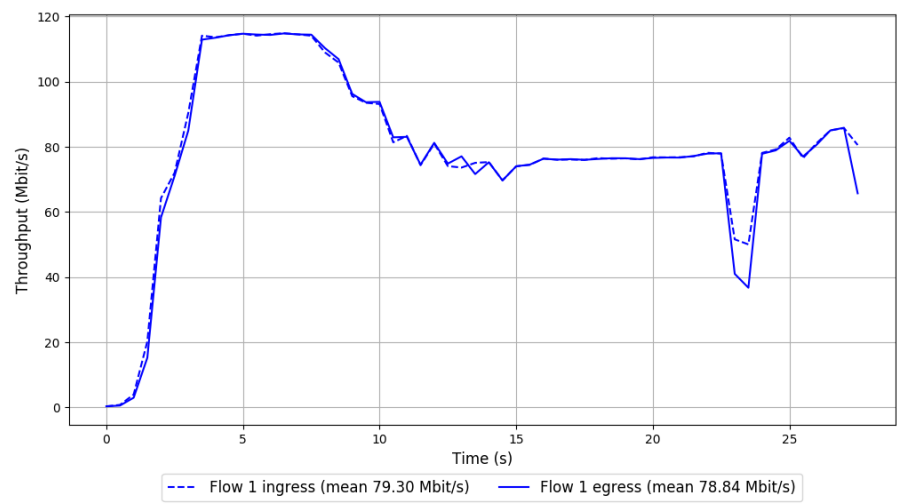
-- Flow 1:

Average throughput: 78.84 Mbit/s

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

Loss rate: 1.21%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-09-17 20:51:23

End at: 2017-09-17 20:51:53

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.34 Mbit/s

95th percentile per-packet one-way delay: 89.875 ms

Loss rate: 0.66%

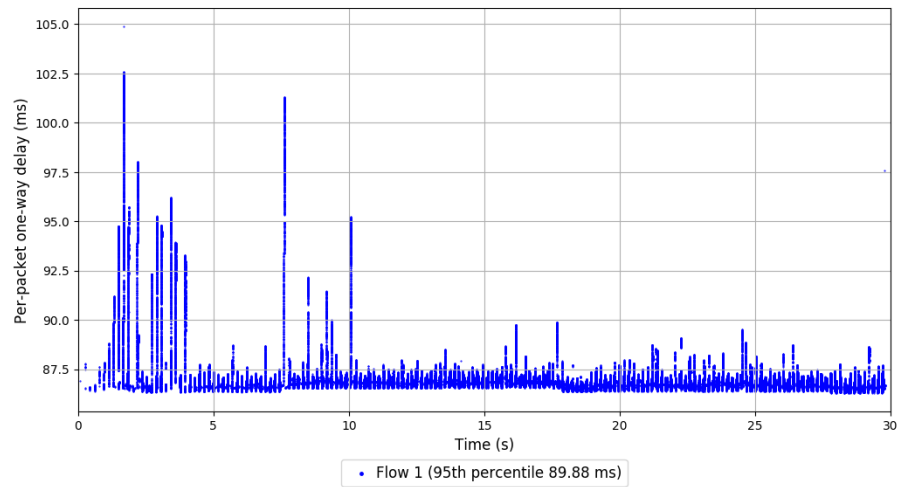
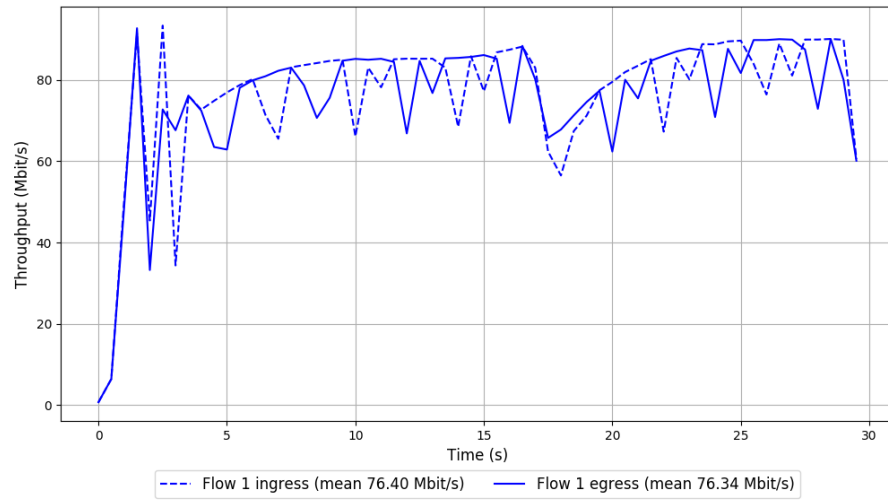
-- Flow 1:

Average throughput: 76.34 Mbit/s

95th percentile per-packet one-way delay: 89.875 ms

Loss rate: 0.66%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-09-17 21:02:55

End at: 2017-09-17 21:03:25

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.60 Mbit/s

95th percentile per-packet one-way delay: 90.541 ms

Loss rate: 0.41%

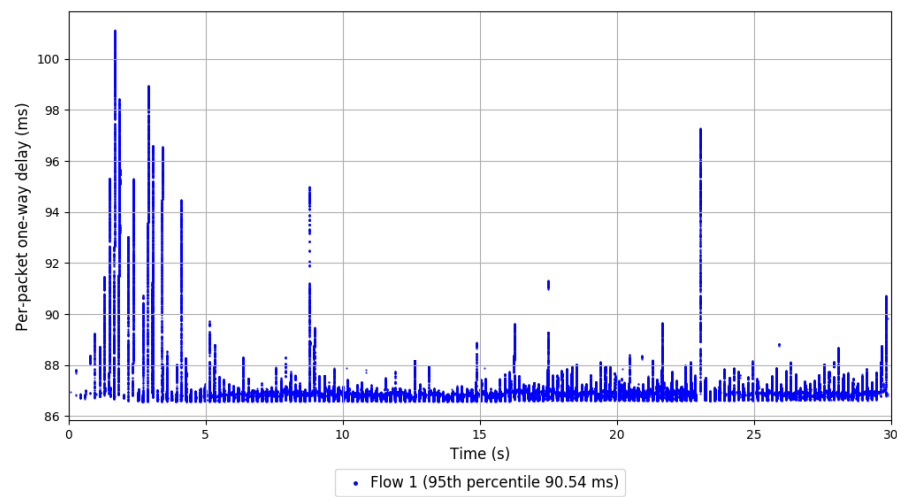
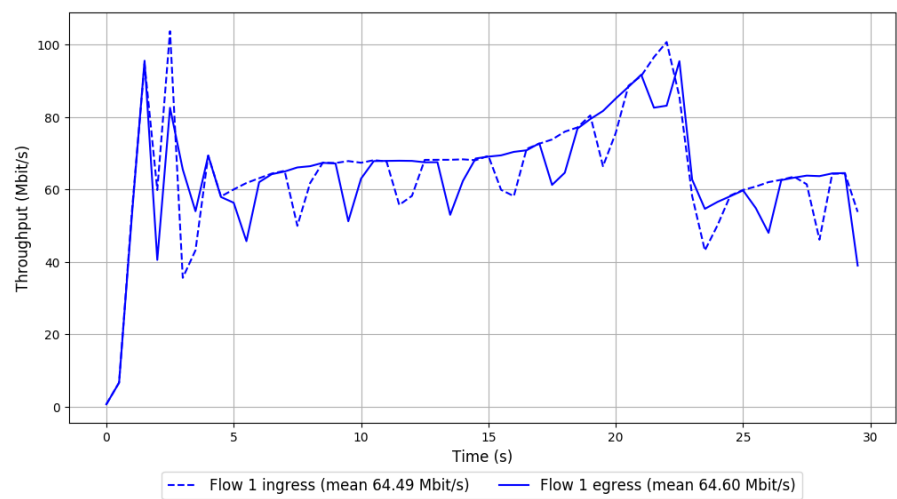
-- Flow 1:

Average throughput: 64.60 Mbit/s

95th percentile per-packet one-way delay: 90.541 ms

Loss rate: 0.41%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-09-17 21:14:34

End at: 2017-09-17 21:15:04

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.96 Mbit/s

95th percentile per-packet one-way delay: 89.801 ms

Loss rate: 0.68%

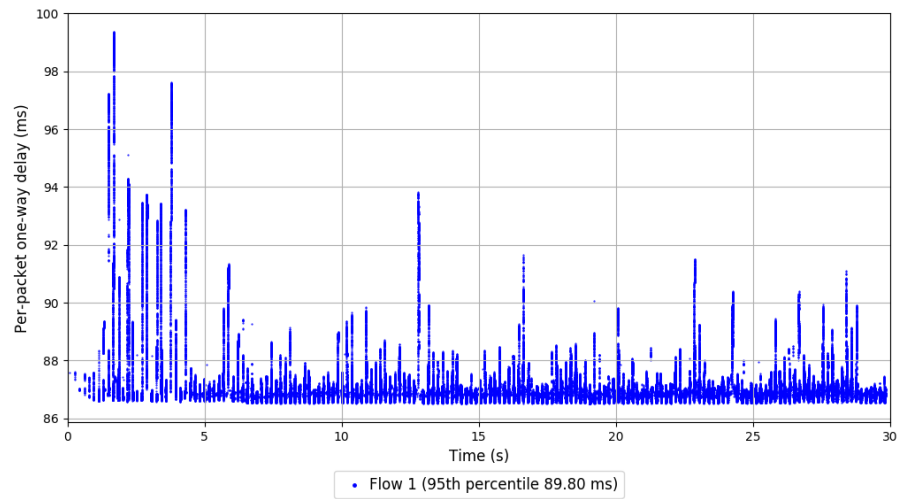
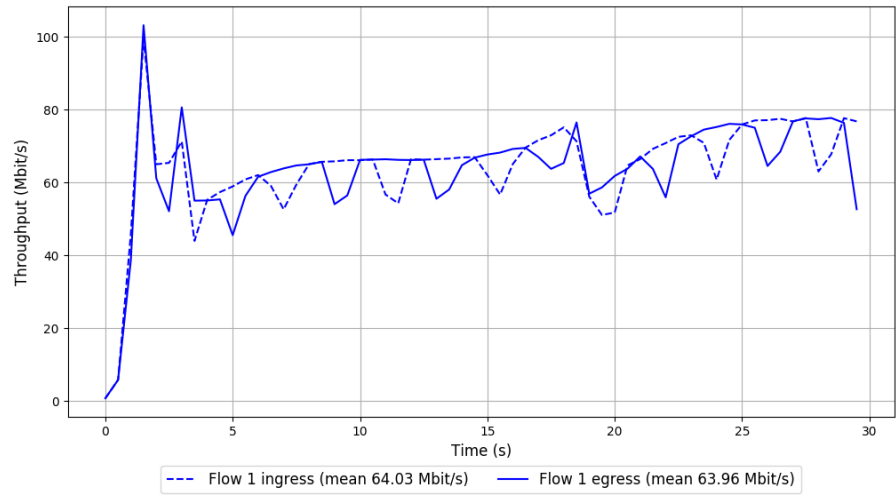
-- Flow 1:

Average throughput: 63.96 Mbit/s

95th percentile per-packet one-way delay: 89.801 ms

Loss rate: 0.68%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-09-17 21:26:24

End at: 2017-09-17 21:26:54

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.94 Mbit/s

95th percentile per-packet one-way delay: 93.207 ms

Loss rate: 0.62%

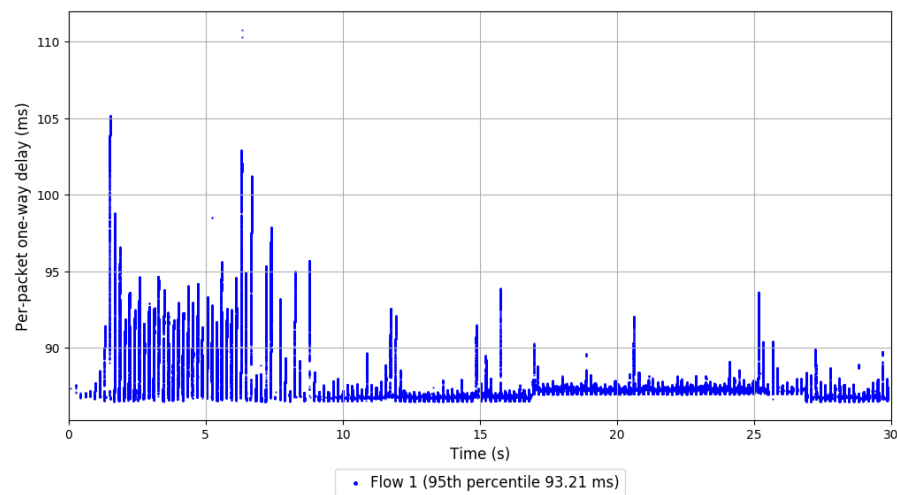
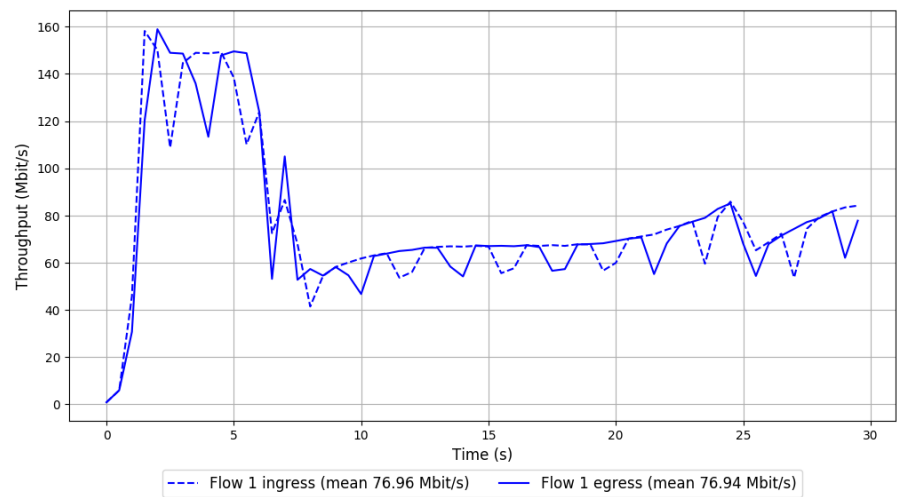
-- Flow 1:

Average throughput: 76.94 Mbit/s

95th percentile per-packet one-way delay: 93.207 ms

Loss rate: 0.62%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-09-17 21:37:47

End at: 2017-09-17 21:38:17

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.07 Mbit/s

95th percentile per-packet one-way delay: 90.419 ms

Loss rate: 1.97%

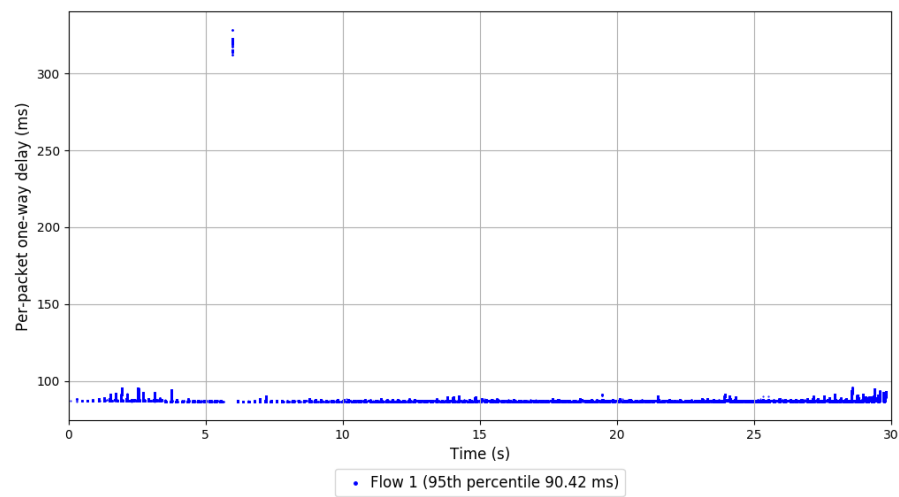
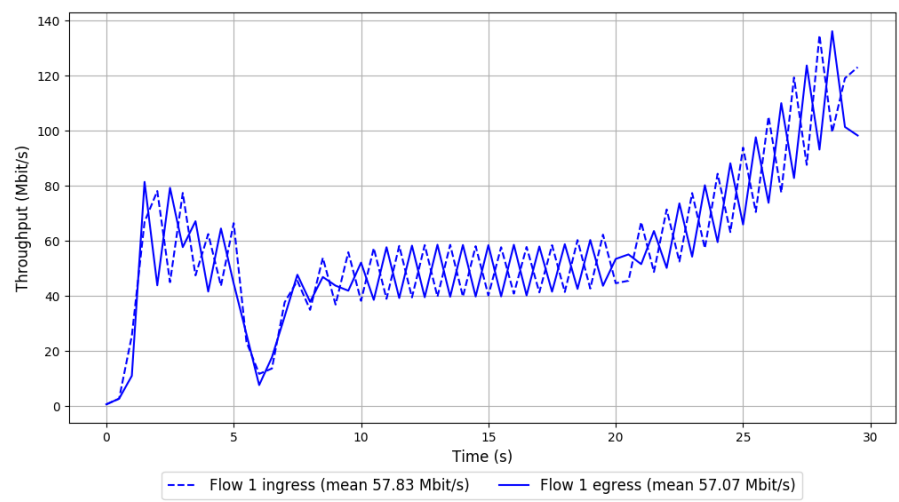
-- Flow 1:

Average throughput: 57.07 Mbit/s

95th percentile per-packet one-way delay: 90.419 ms

Loss rate: 1.97%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-09-17 21:49:34

End at: 2017-09-17 21:50:04

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.56 Mbit/s

95th percentile per-packet one-way delay: 89.091 ms

Loss rate: 0.59%

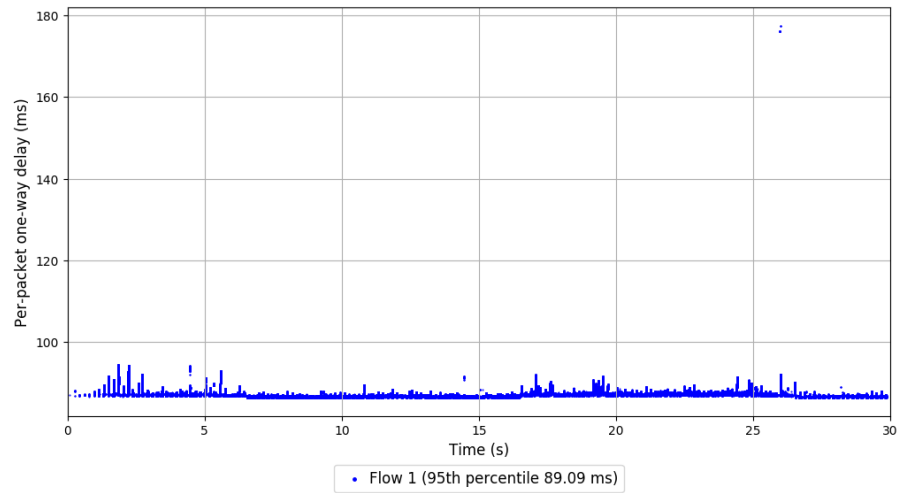
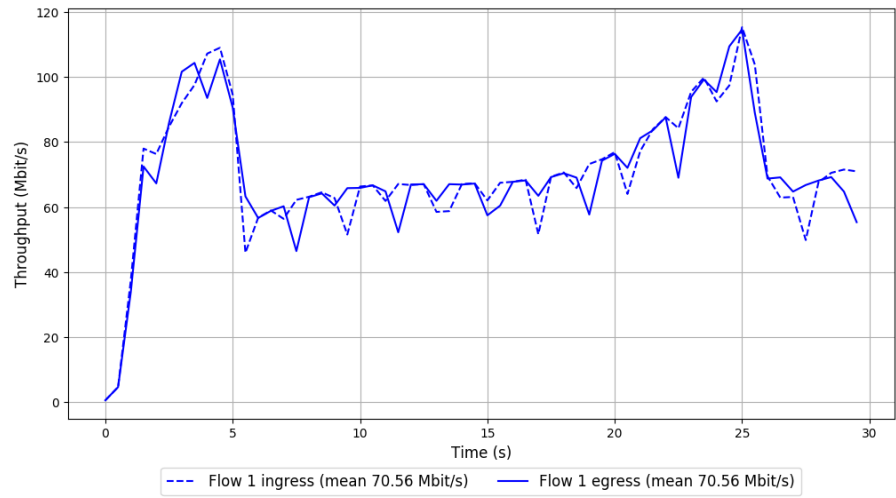
-- Flow 1:

Average throughput: 70.56 Mbit/s

95th percentile per-packet one-way delay: 89.091 ms

Loss rate: 0.59%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-09-17 22:01:28

End at: 2017-09-17 22:01:58

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.56 Mbit/s

95th percentile per-packet one-way delay: 93.546 ms

Loss rate: 0.78%

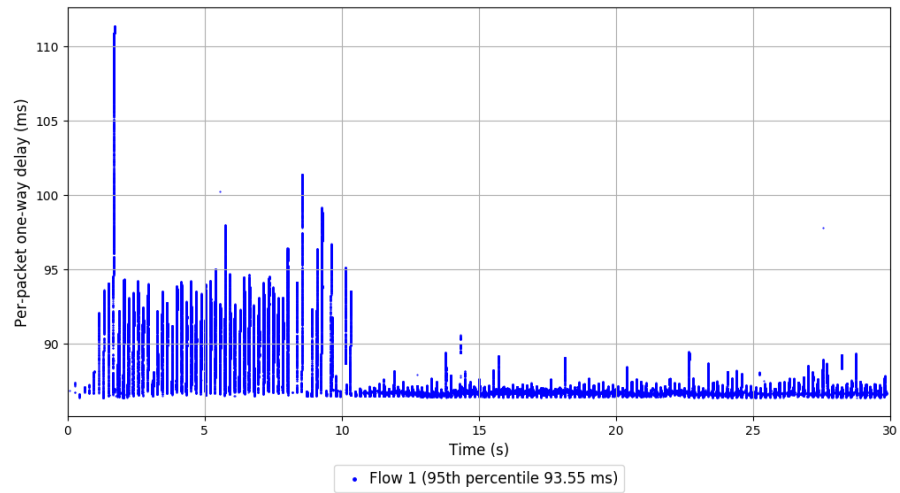
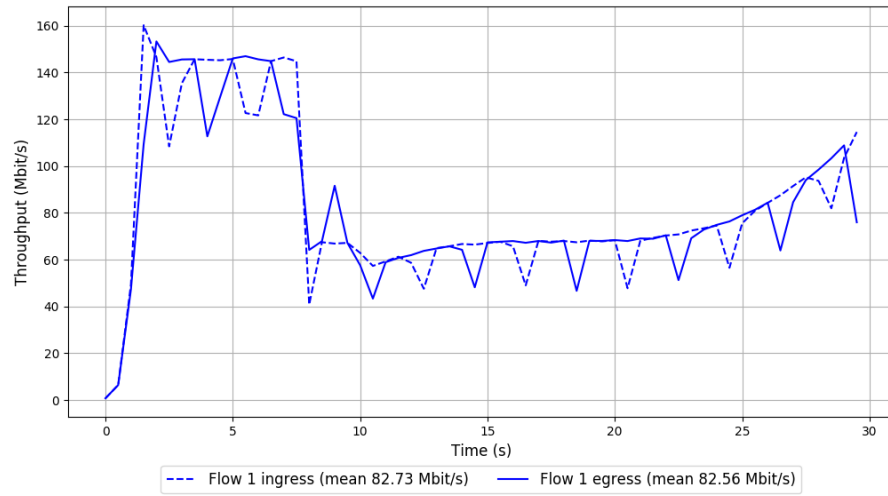
-- Flow 1:

Average throughput: 82.56 Mbit/s

95th percentile per-packet one-way delay: 93.546 ms

Loss rate: 0.78%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-09-17 22:13:19

End at: 2017-09-17 22:13:49

Below is generated by plot.py at 2017-09-18 01:11:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.61 Mbit/s

95th percentile per-packet one-way delay: 88.297 ms

Loss rate: 0.62%

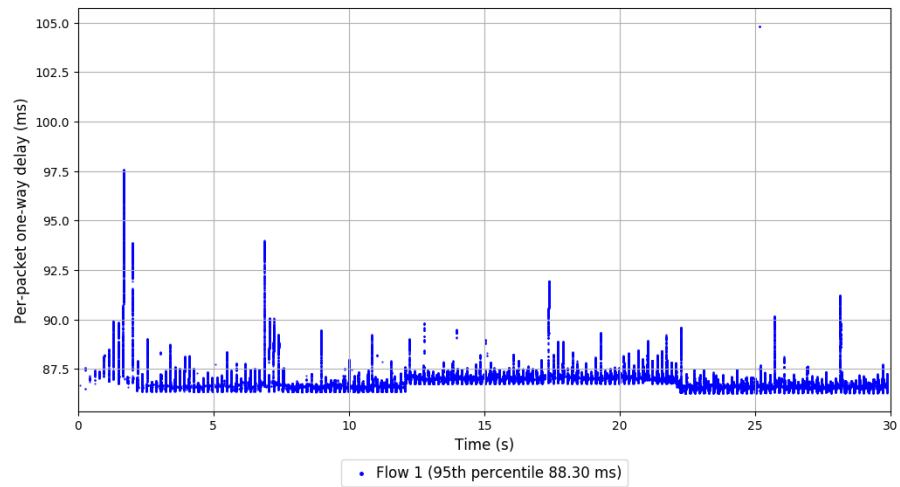
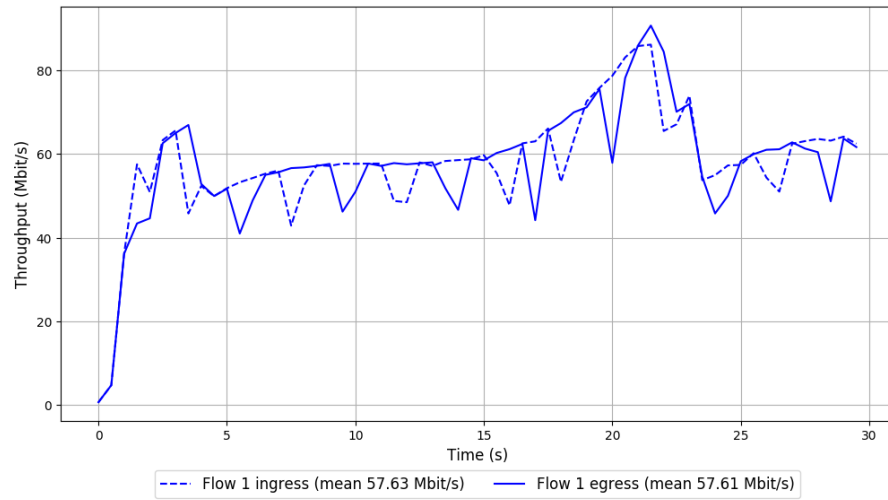
-- Flow 1:

Average throughput: 57.61 Mbit/s

95th percentile per-packet one-way delay: 88.297 ms

Loss rate: 0.62%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-09-17 22:24:50

End at: 2017-09-17 22:25:20

Below is generated by plot.py at 2017-09-18 01:11:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.97 Mbit/s

95th percentile per-packet one-way delay: 94.589 ms

Loss rate: 0.26%

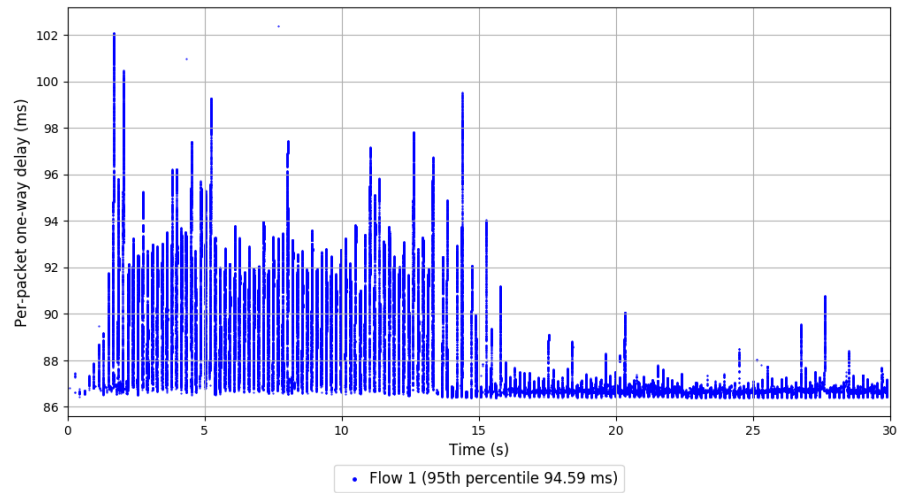
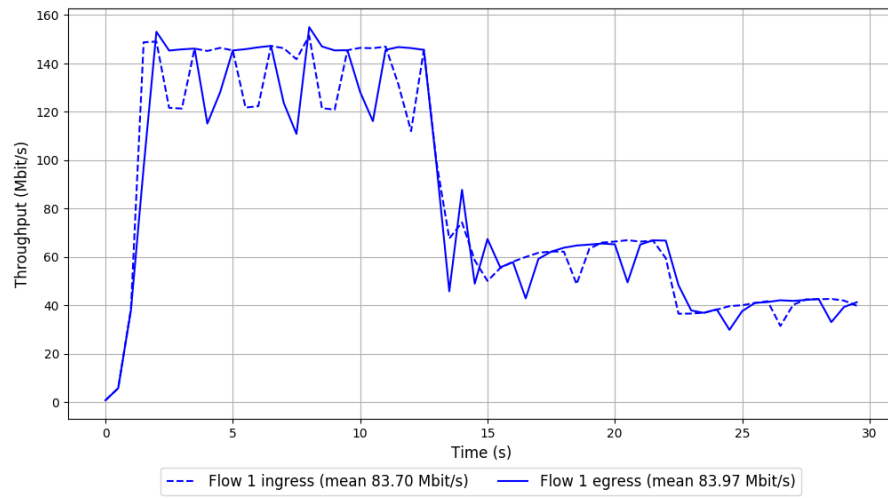
-- Flow 1:

Average throughput: 83.97 Mbit/s

95th percentile per-packet one-way delay: 94.589 ms

Loss rate: 0.26%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-09-17 22:36:44

End at: 2017-09-17 22:37:14

Below is generated by plot.py at 2017-09-18 01:11:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.90 Mbit/s

95th percentile per-packet one-way delay: 93.932 ms

Loss rate: 0.43%

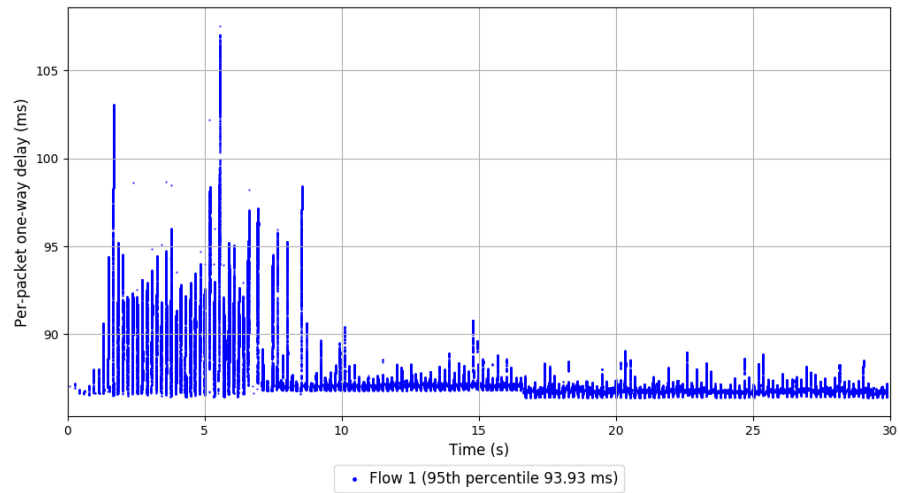
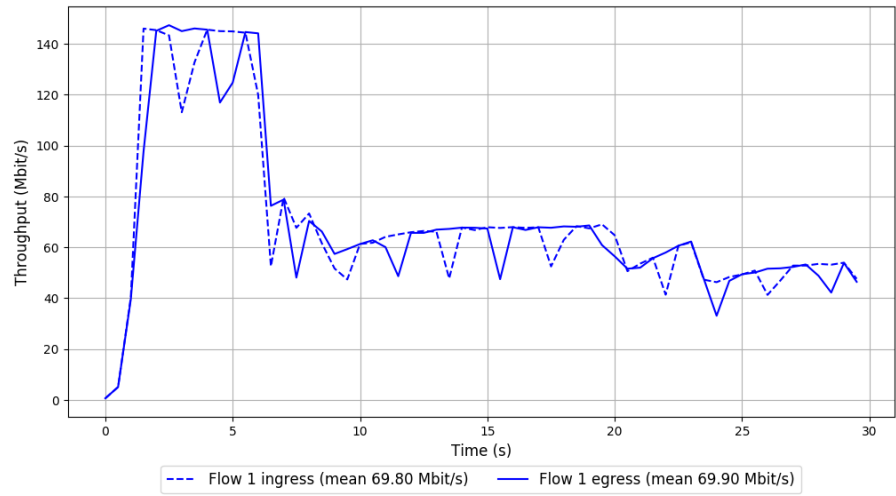
-- Flow 1:

Average throughput: 69.90 Mbit/s

95th percentile per-packet one-way delay: 93.932 ms

Loss rate: 0.43%

Run 10: Report of TCP Cubic — Data Link

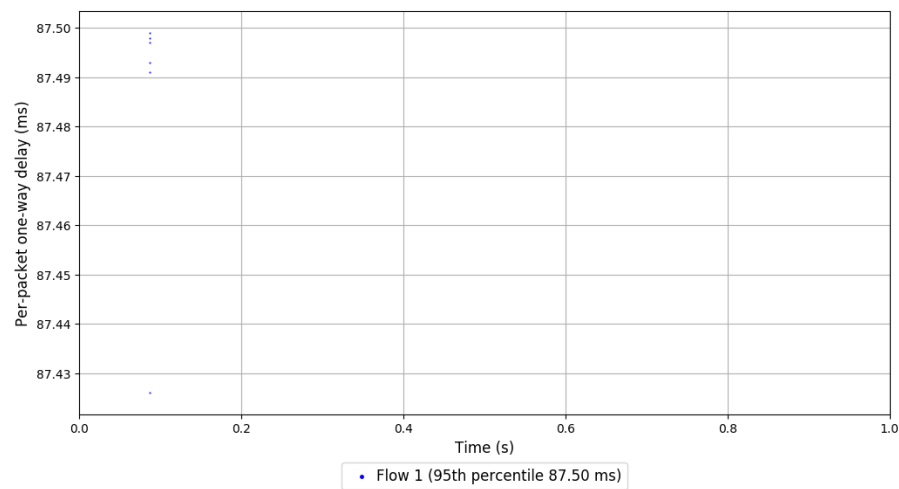
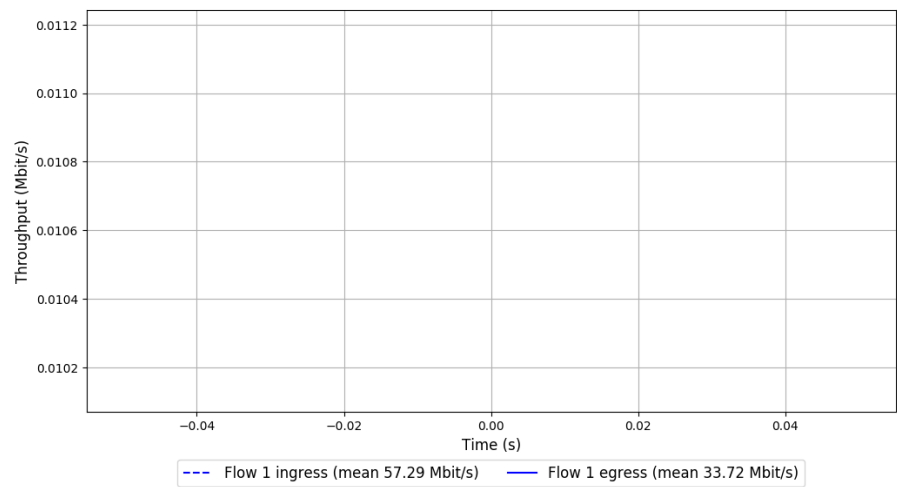


Run 1: Statistics of Indigo

Start at: 2017-09-17 21:00:49

End at: 2017-09-17 21:01:19

Run 1: Report of Indigo — Data Link

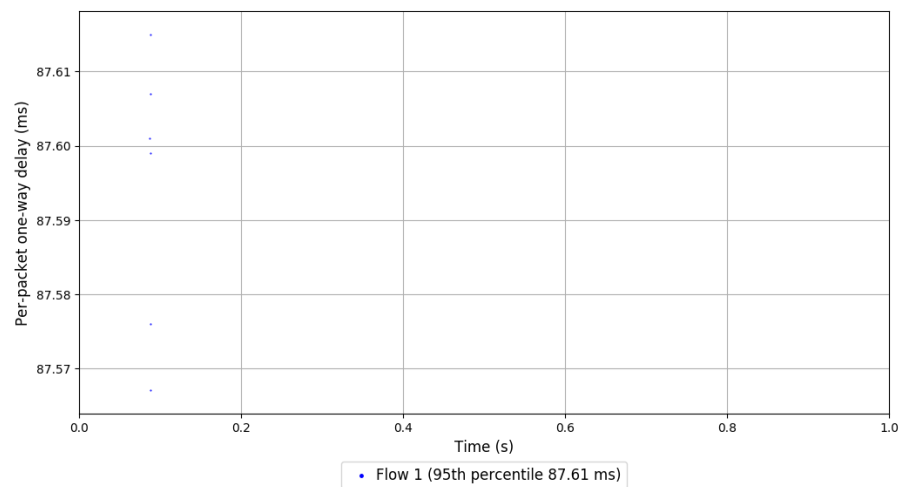
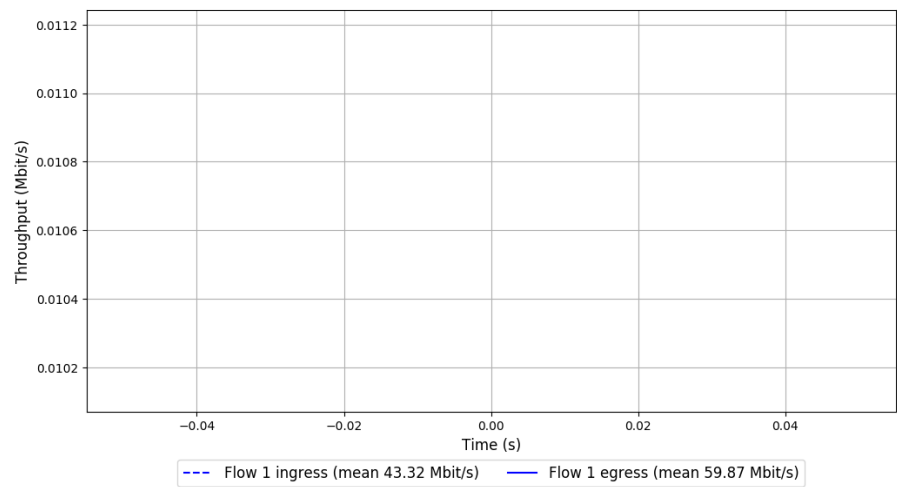


Run 2: Statistics of Indigo

Start at: 2017-09-17 21:12:29

End at: 2017-09-17 21:12:59

Run 2: Report of Indigo — Data Link

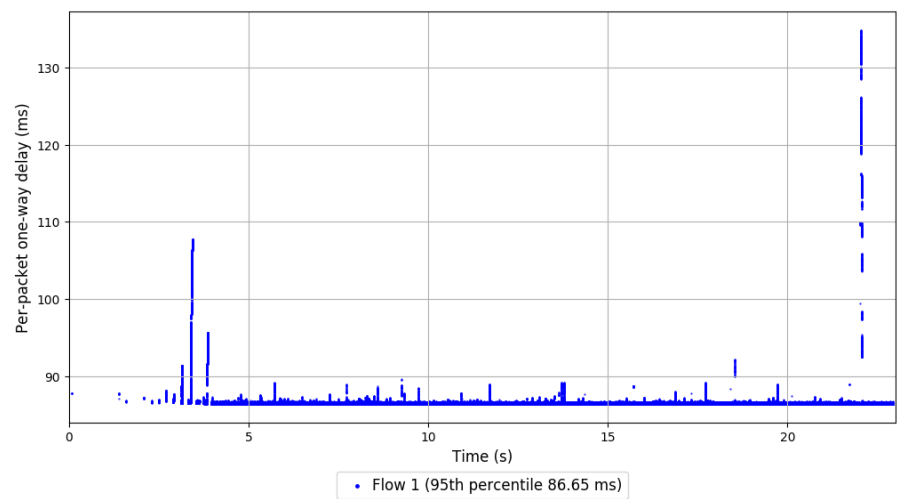
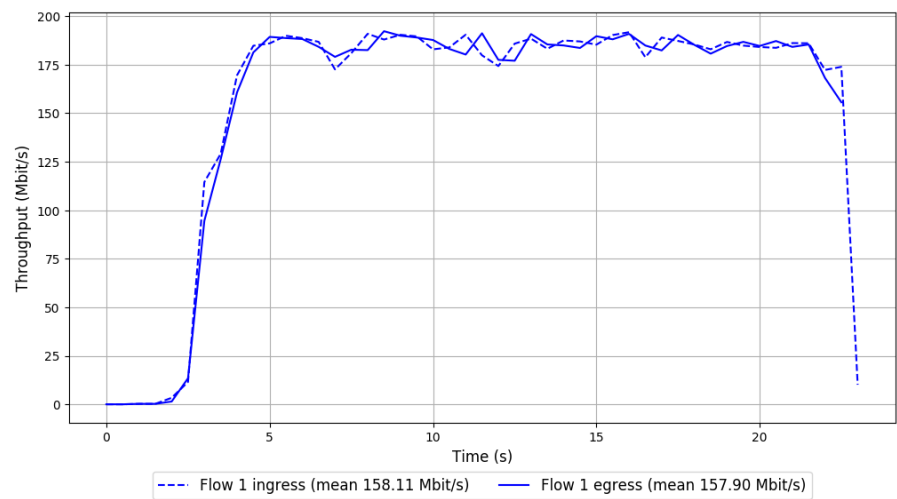


Run 3: Statistics of Indigo

Start at: 2017-09-17 21:24:10

End at: 2017-09-17 21:24:40

Run 3: Report of Indigo — Data Link

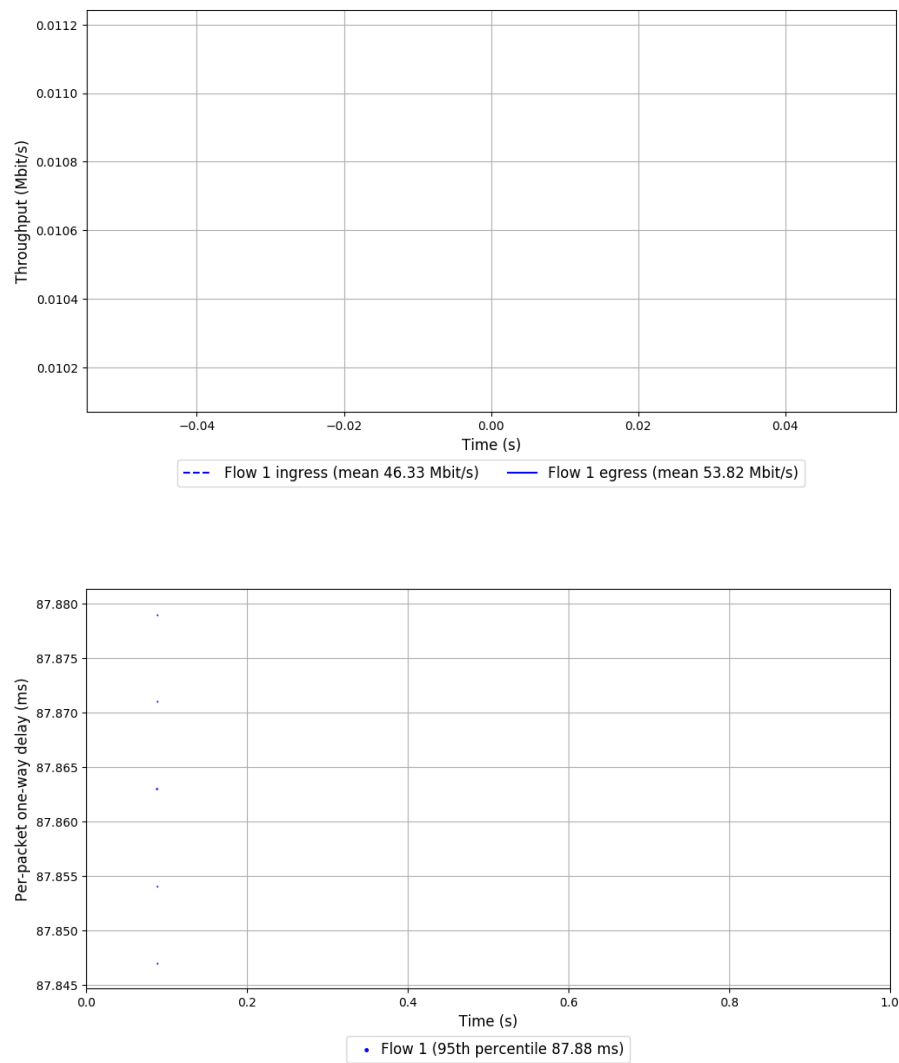


Run 4: Statistics of Indigo

Start at: 2017-09-17 21:35:49

End at: 2017-09-17 21:36:19

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-09-17 21:47:16

End at: 2017-09-17 21:47:46

Below is generated by plot.py at 2017-09-18 01:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.77 Mbit/s

95th percentile per-packet one-way delay: 87.006 ms

Loss rate: 0.63%

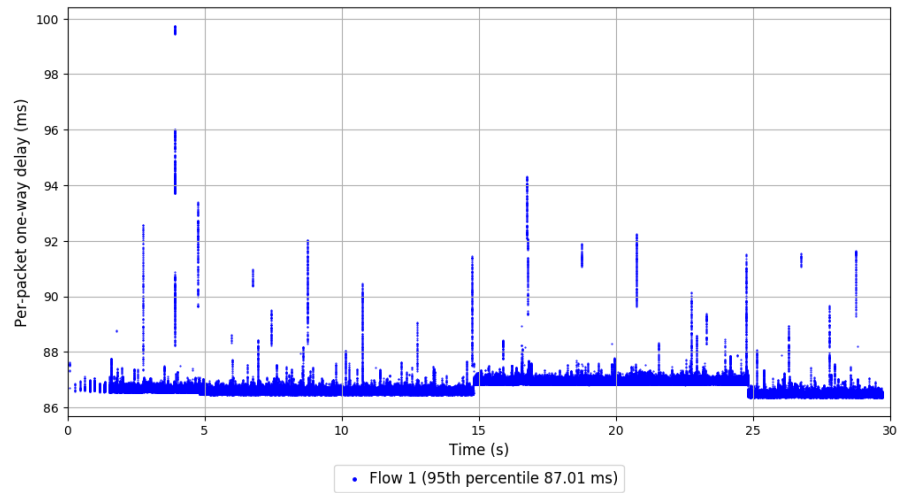
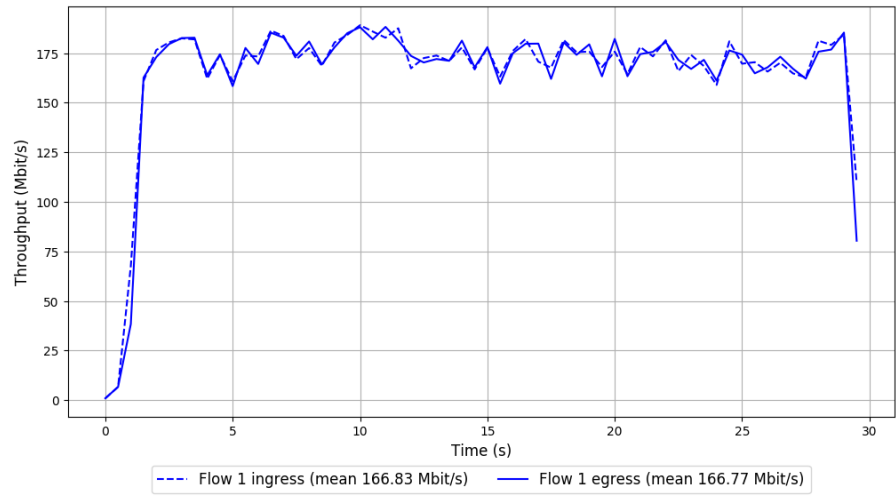
-- Flow 1:

Average throughput: 166.77 Mbit/s

95th percentile per-packet one-way delay: 87.006 ms

Loss rate: 0.63%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-09-17 21:59:09

End at: 2017-09-17 21:59:39

Below is generated by plot.py at 2017-09-18 01:13:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.11 Mbit/s

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

Loss rate: 0.64%

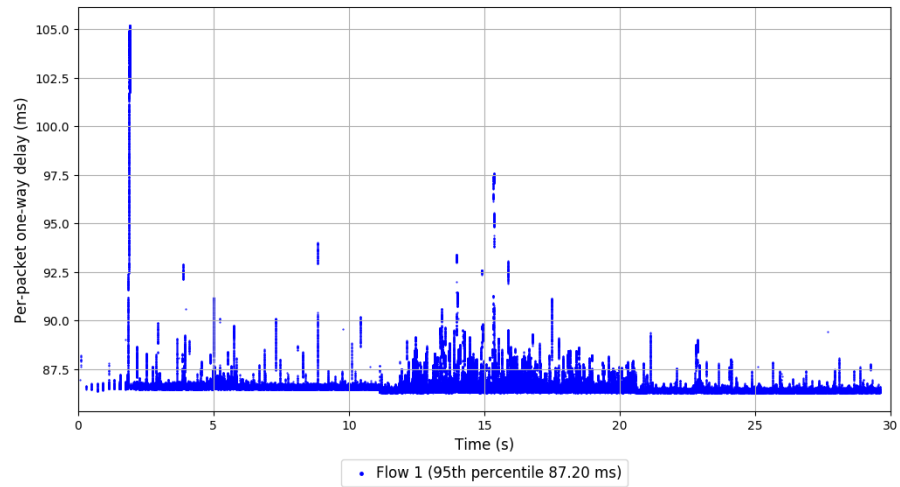
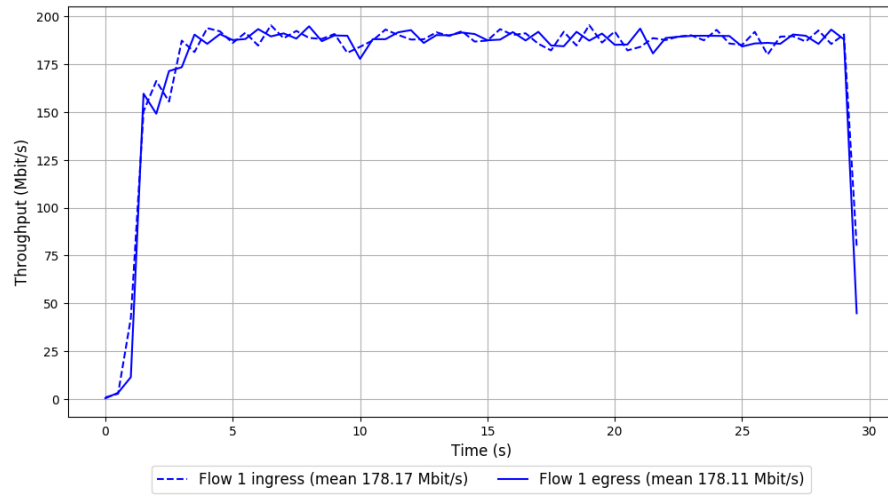
-- Flow 1:

Average throughput: 178.11 Mbit/s

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

Loss rate: 0.64%

Run 6: Report of Indigo — Data Link

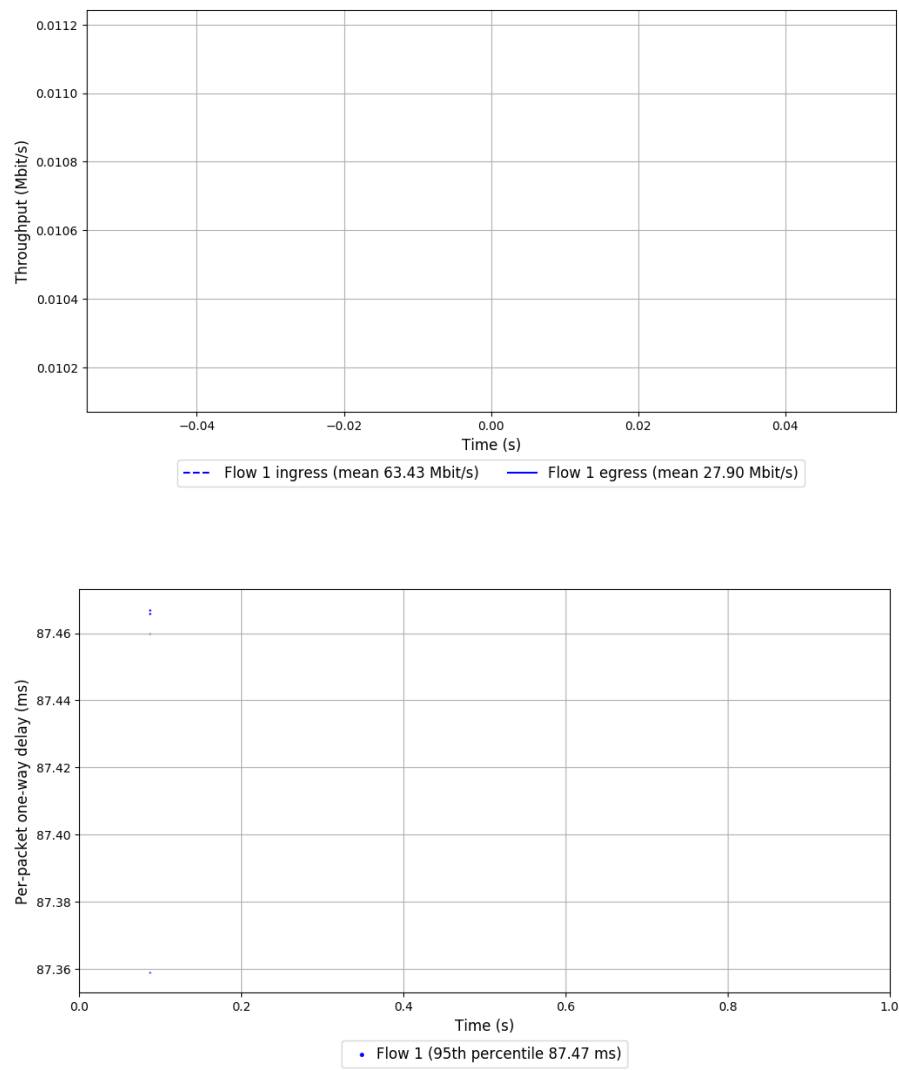


Run 7: Statistics of Indigo

Start at: 2017-09-17 22:11:13

End at: 2017-09-17 22:11:43

Run 7: Report of Indigo — Data Link

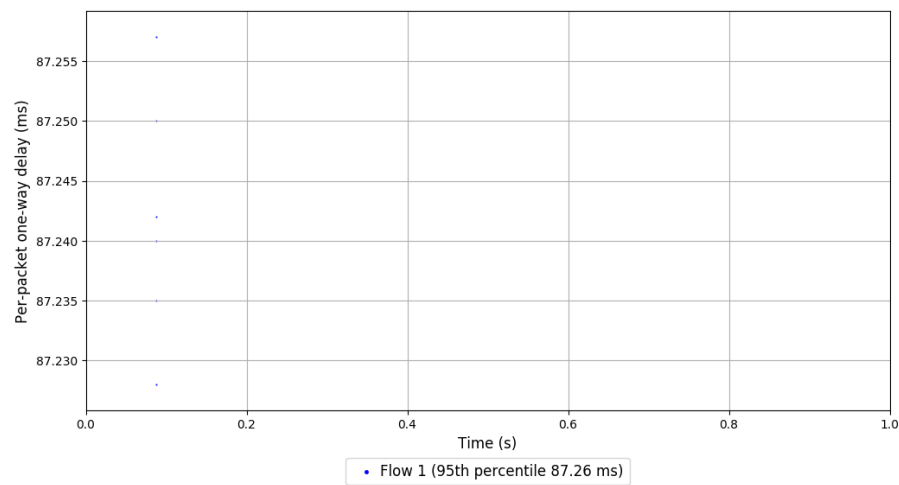
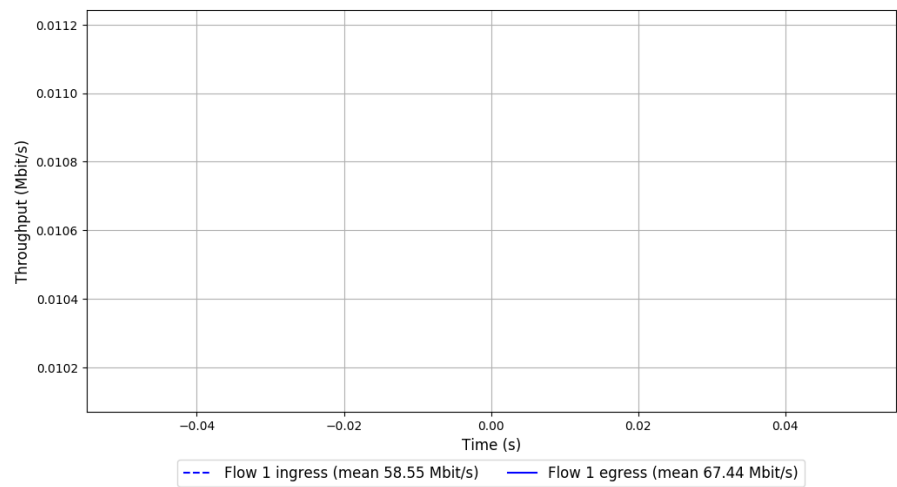


Run 8: Statistics of Indigo

Start at: 2017-09-17 22:22:52

End at: 2017-09-17 22:23:22

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-09-17 22:34:26

End at: 2017-09-17 22:34:56

Below is generated by plot.py at 2017-09-18 01:14:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.22 Mbit/s

95th percentile per-packet one-way delay: 86.597 ms

Loss rate: 0.63%

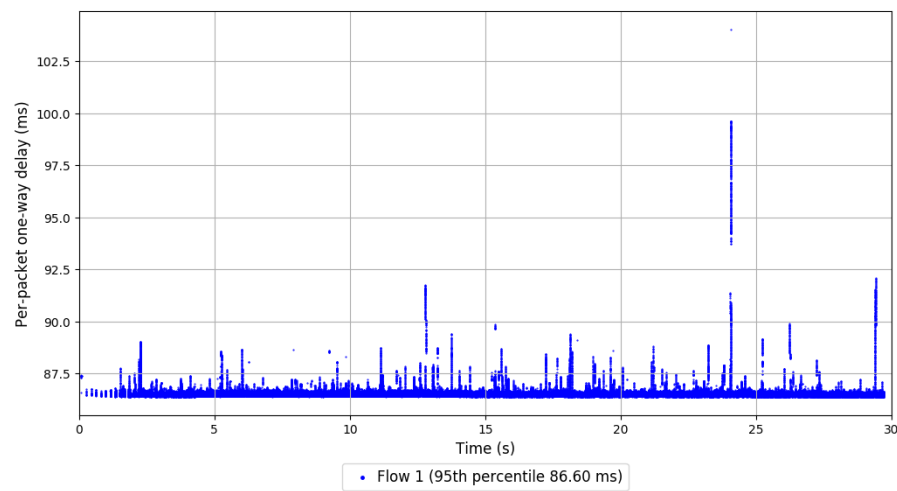
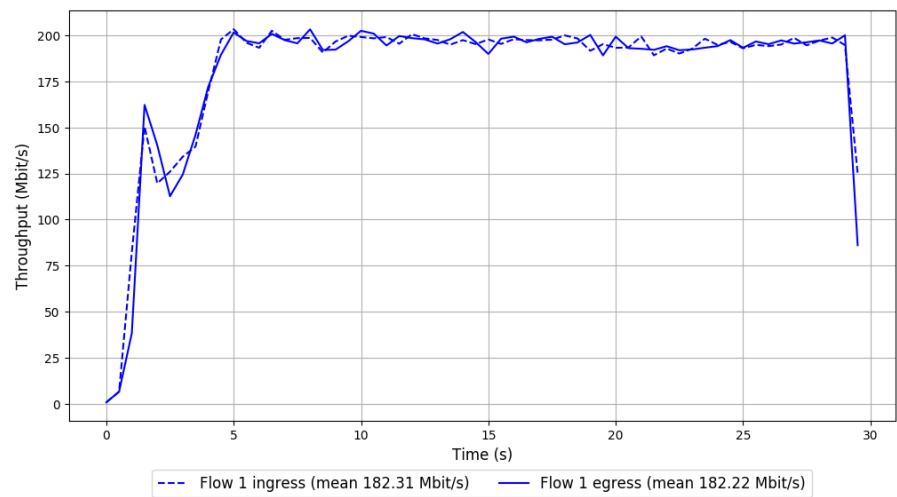
-- Flow 1:

Average throughput: 182.22 Mbit/s

95th percentile per-packet one-way delay: 86.597 ms

Loss rate: 0.63%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-09-17 22:45:54

End at: 2017-09-17 22:46:24

Below is generated by plot.py at 2017-09-18 01:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.08 Mbit/s

95th percentile per-packet one-way delay: 87.031 ms

Loss rate: 0.61%

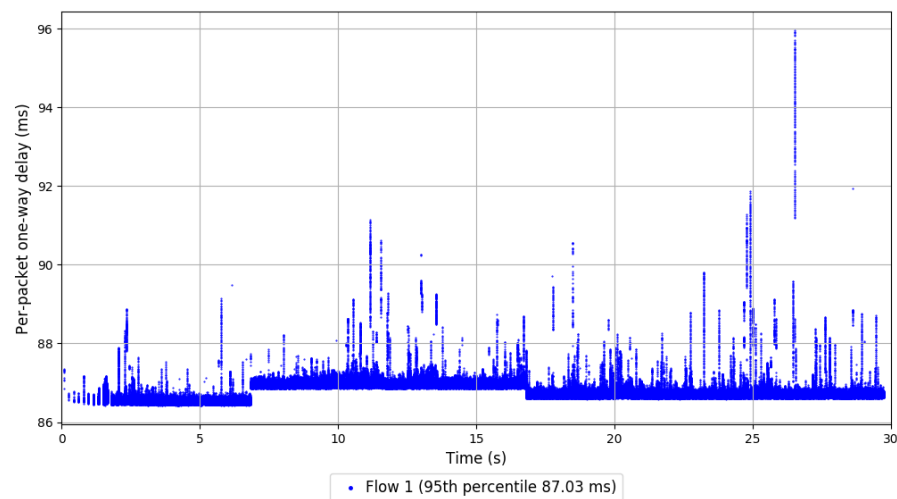
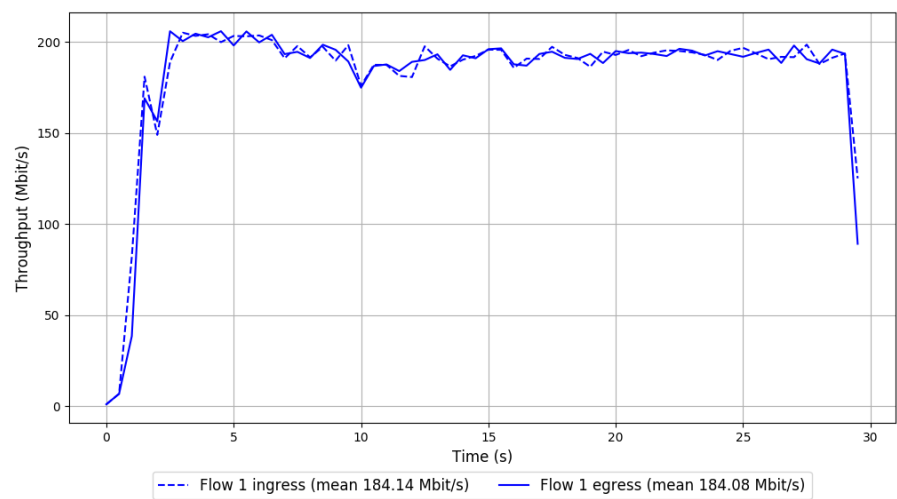
-- Flow 1:

Average throughput: 184.08 Mbit/s

95th percentile per-packet one-way delay: 87.031 ms

Loss rate: 0.61%

Run 10: Report of Indigo — Data Link

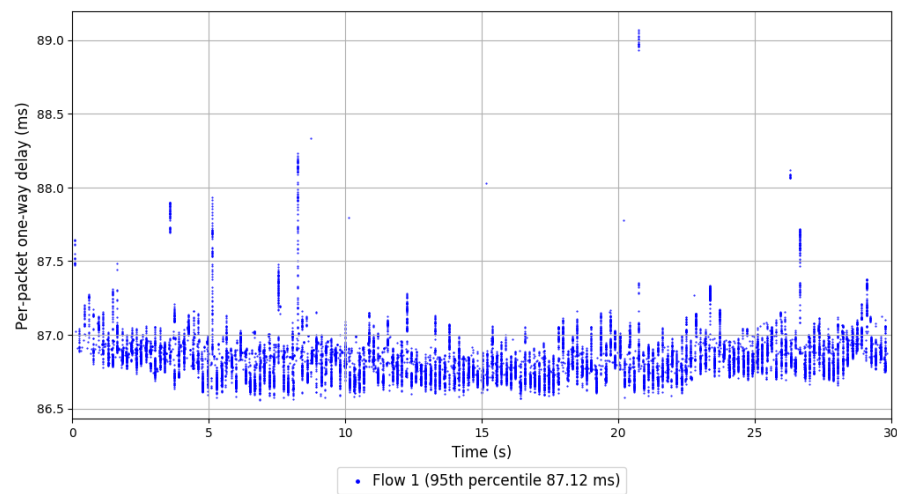
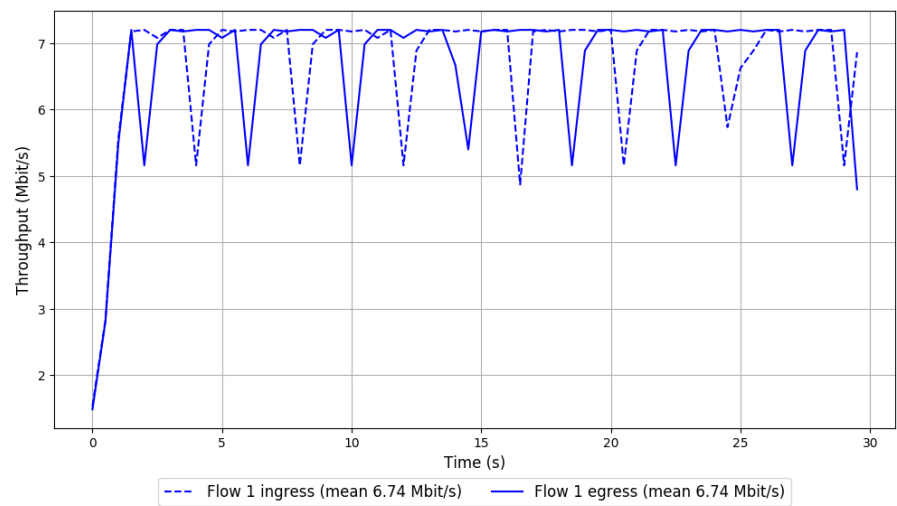


```
Run 1: Statistics of KohoCC

Start at: 2017-09-17 21:01:28
End at: 2017-09-17 21:01:58

# Below is generated by plot.py at 2017-09-18 01:14:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 87.118 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 87.118 ms
Loss rate: 0.59%
```

Run 1: Report of KohoCC — Data Link

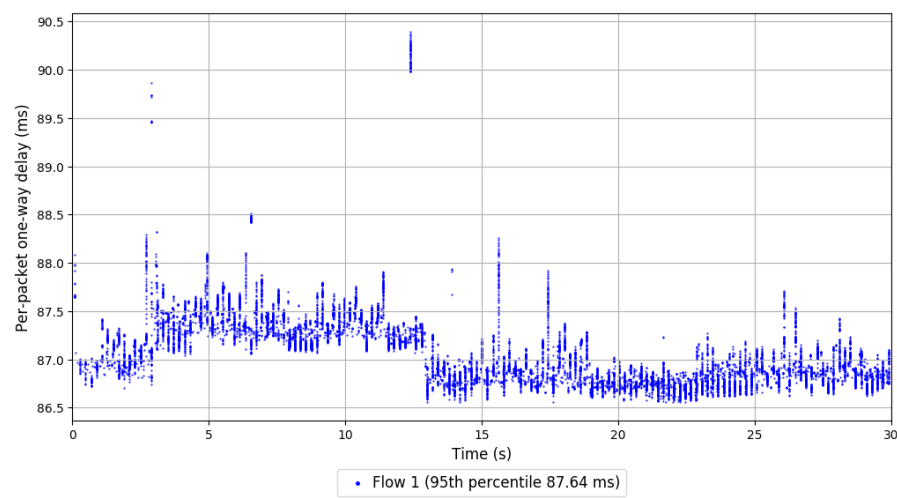
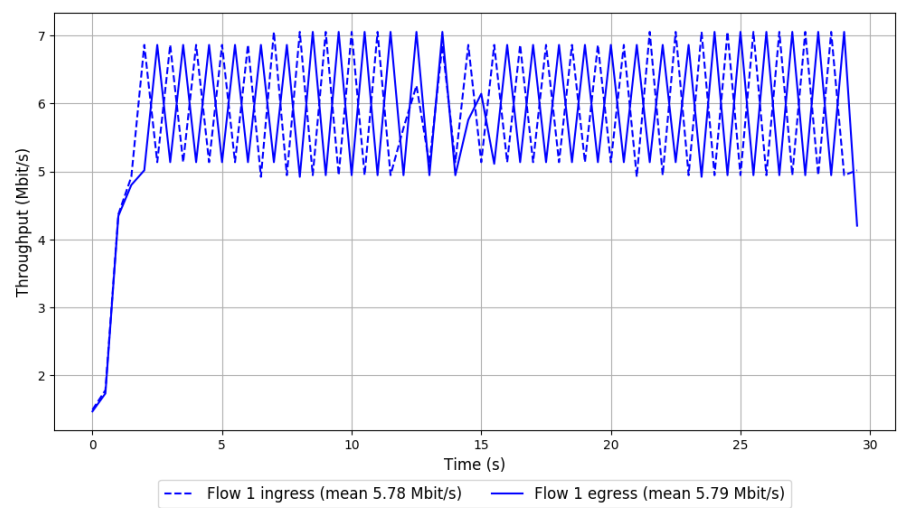


```
Run 2: Statistics of KohoCC

Start at: 2017-09-17 21:13:08
End at: 2017-09-17 21:13:38

# Below is generated by plot.py at 2017-09-18 01:14:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.79 Mbit/s
95th percentile per-packet one-way delay: 87.644 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 5.79 Mbit/s
95th percentile per-packet one-way delay: 87.644 ms
Loss rate: 0.28%
```

Run 2: Report of KohoCC — Data Link

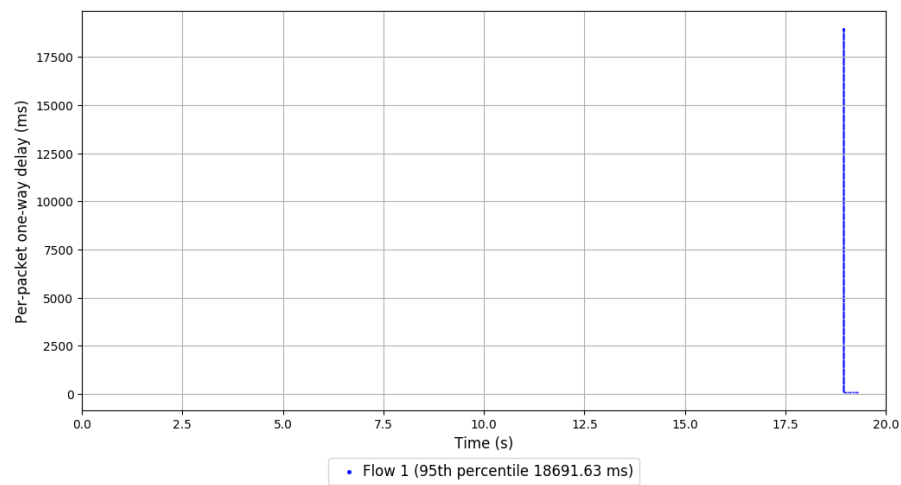
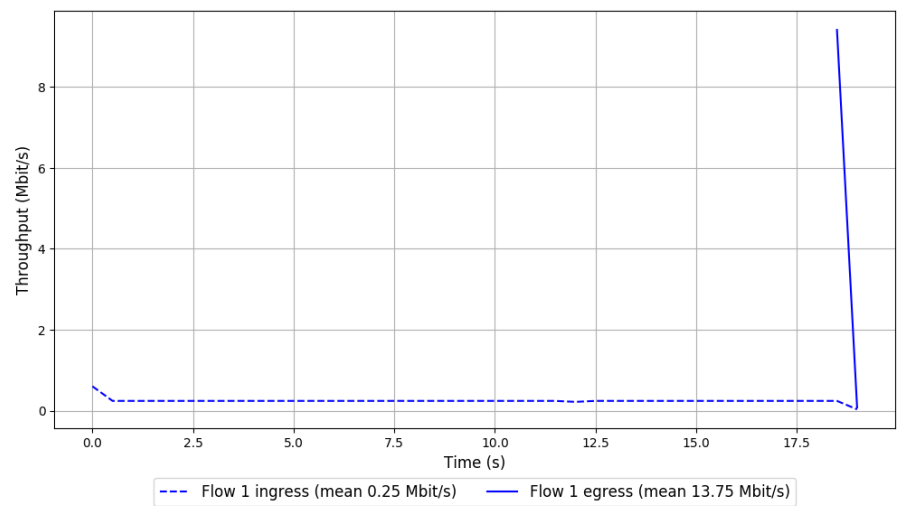


Run 3: Statistics of KohoCC

Start at: 2017-09-17 21:24:58

End at: 2017-09-17 21:25:28

Run 3: Report of KohoCC — Data Link

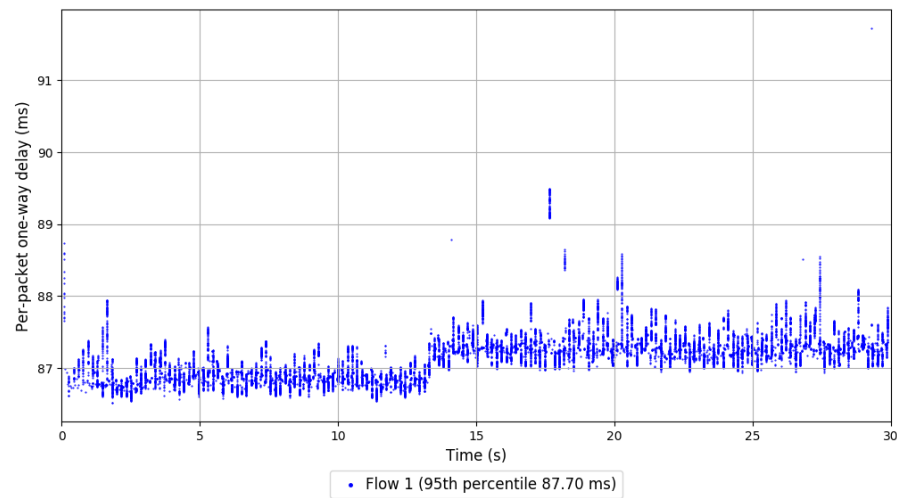
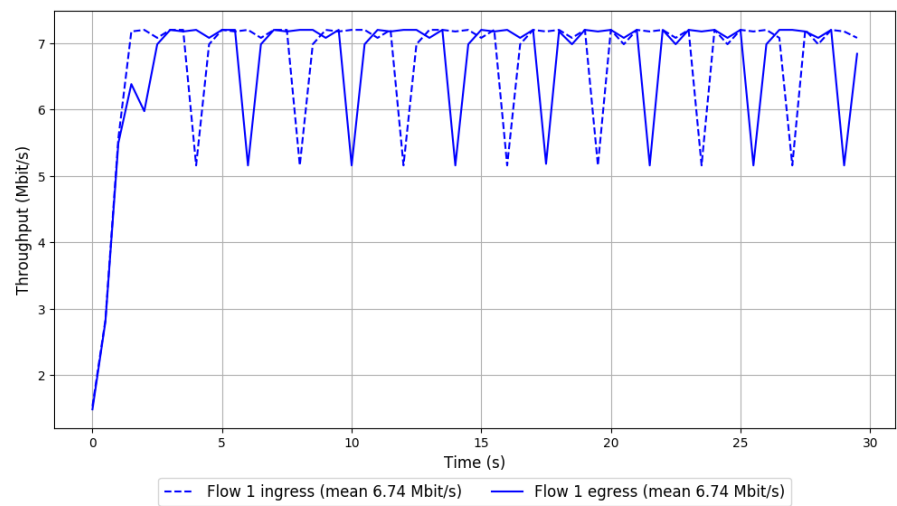


```
Run 4: Statistics of KohoCC

Start at: 2017-09-17 21:36:27
End at: 2017-09-17 21:36:58

# Below is generated by plot.py at 2017-09-18 01:14:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 87.700 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 87.700 ms
Loss rate: 0.59%
```

Run 4: Report of KohoCC — Data Link

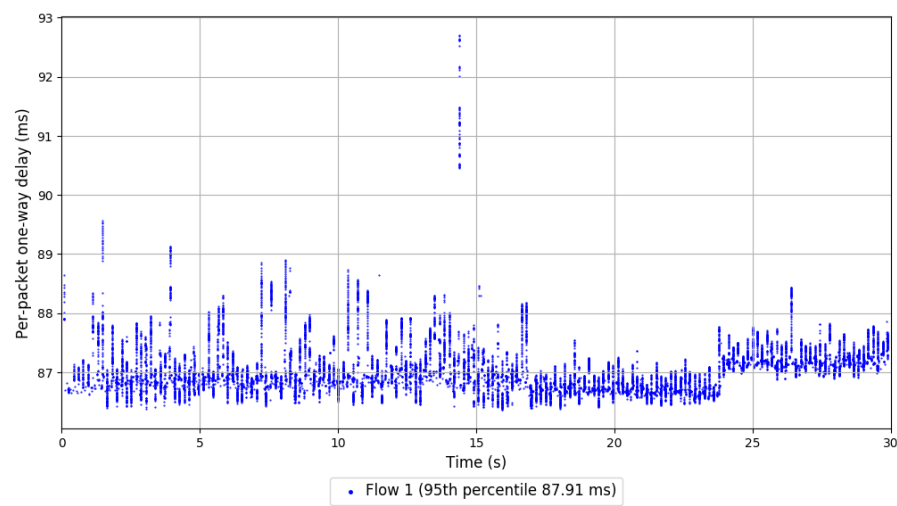
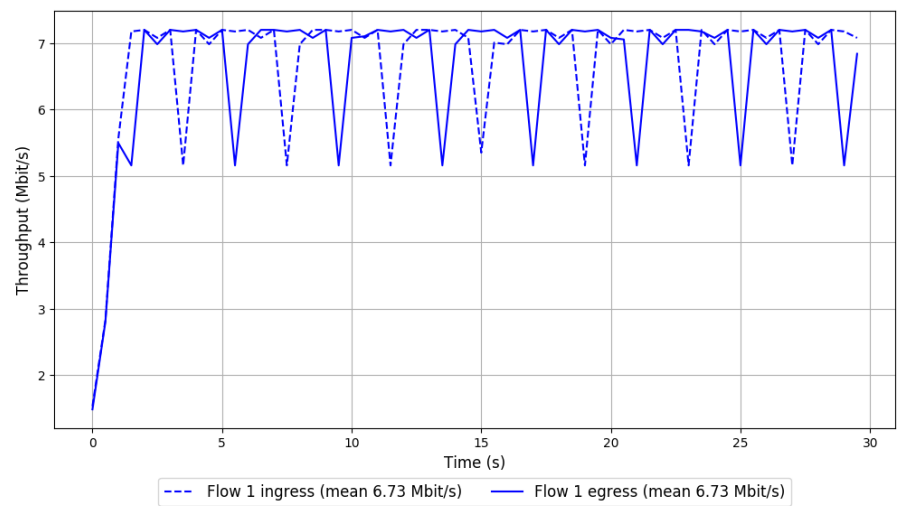


```
Run 5: Statistics of KohoCC

Start at: 2017-09-17 21:48:07
End at: 2017-09-17 21:48:37

# Below is generated by plot.py at 2017-09-18 01:14:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 87.906 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 87.906 ms
Loss rate: 0.63%
```

Run 5: Report of KohoCC — Data Link

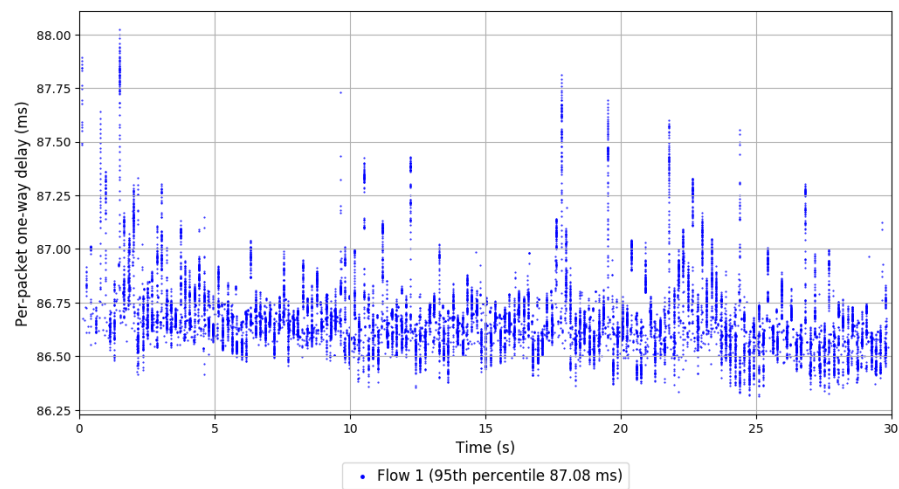
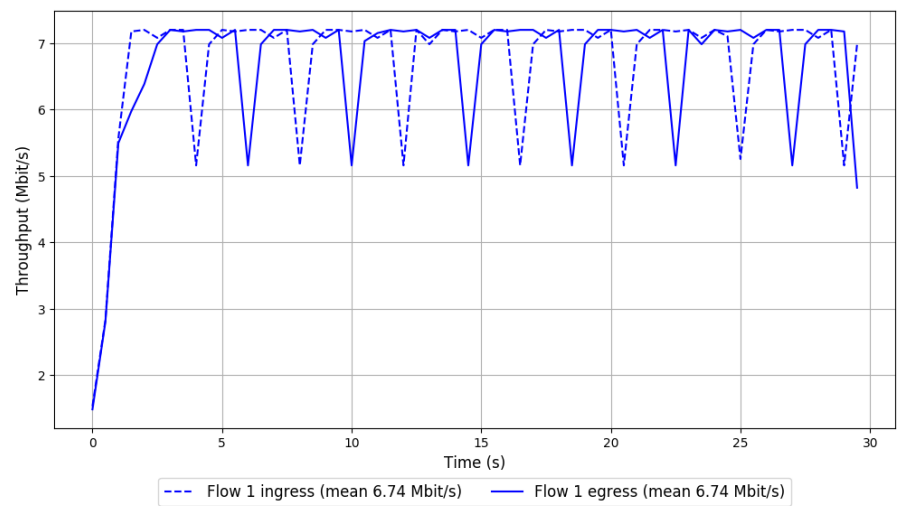


```
Run 6: Statistics of KohoCC

Start at: 2017-09-17 22:00:01
End at: 2017-09-17 22:00:31

# Below is generated by plot.py at 2017-09-18 01:14:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 87.084 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 87.084 ms
Loss rate: 0.59%
```

Run 6: Report of KohoCC — Data Link

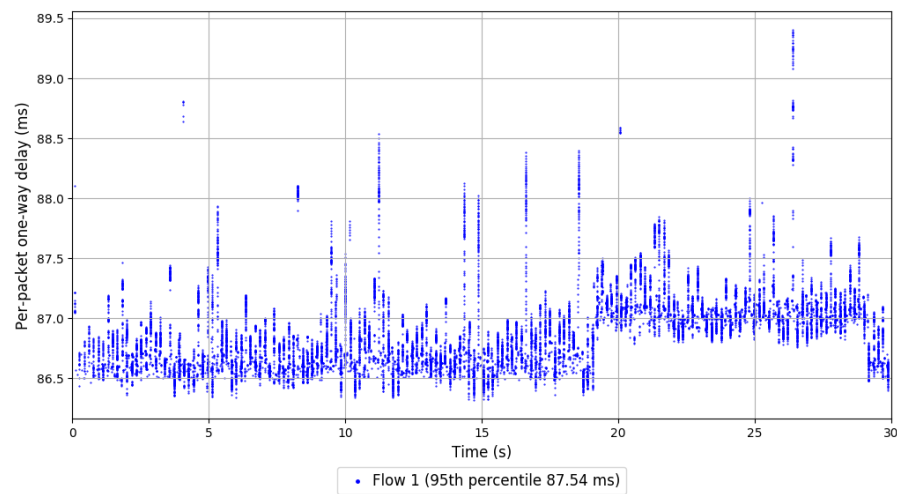
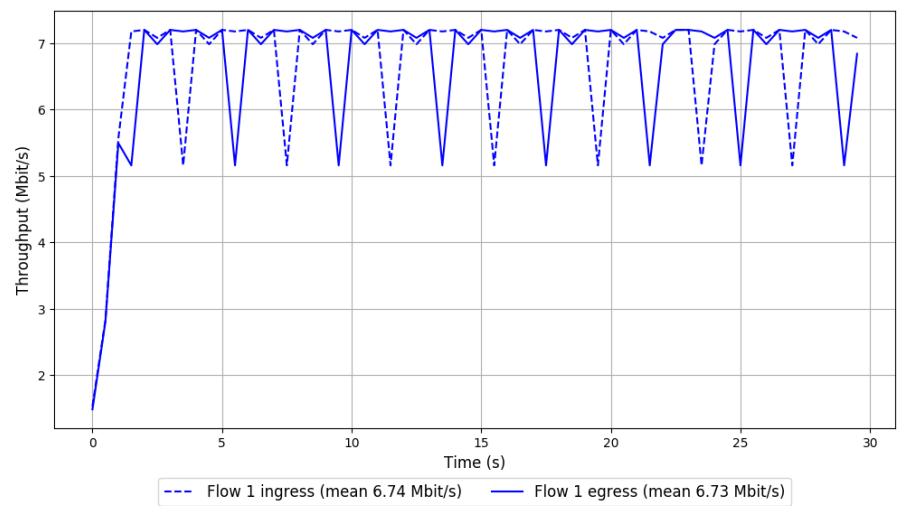


```
Run 7: Statistics of KohoCC

Start at: 2017-09-17 22:11:52
End at: 2017-09-17 22:12:22

# Below is generated by plot.py at 2017-09-18 01:14:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 87.541 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 87.541 ms
Loss rate: 0.59%
```


Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-09-17 22:23:31

End at: 2017-09-17 22:24:01

Below is generated by plot.py at 2017-09-18 01:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 87.067 ms

Loss rate: 0.60%

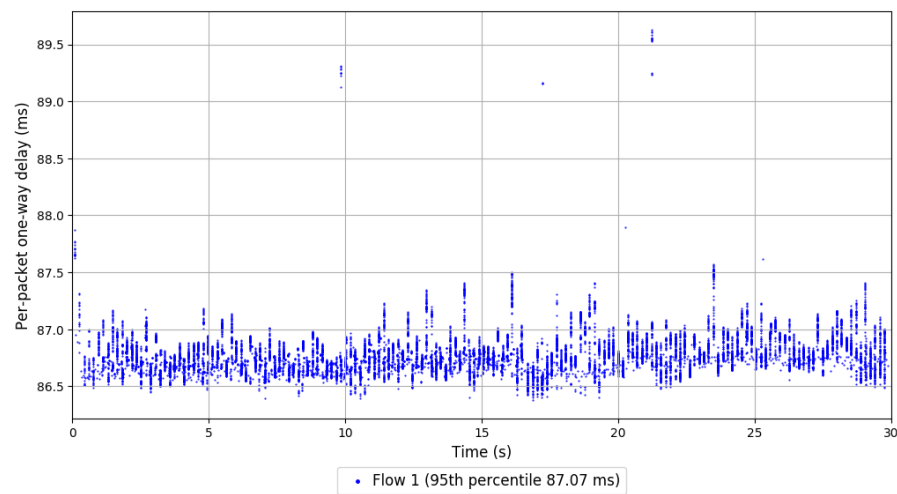
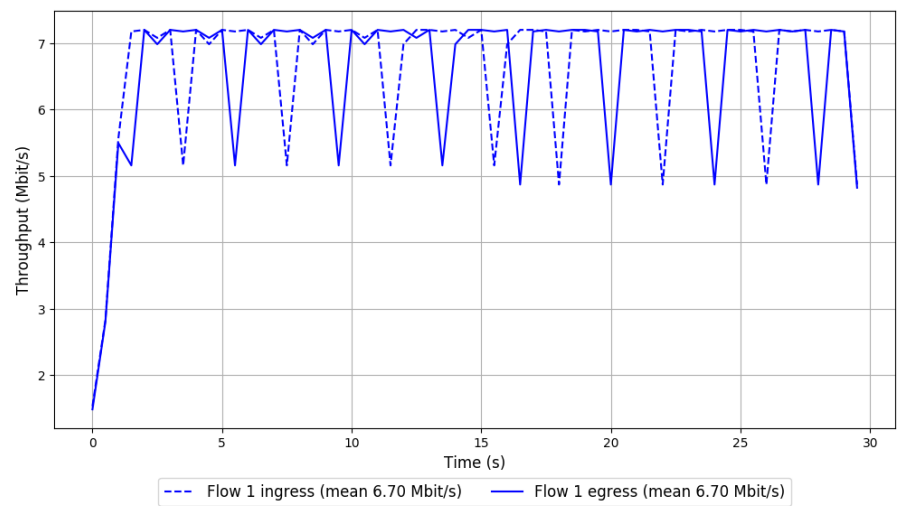
-- Flow 1:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 87.067 ms

Loss rate: 0.60%

Run 8: Report of KohoCC — Data Link

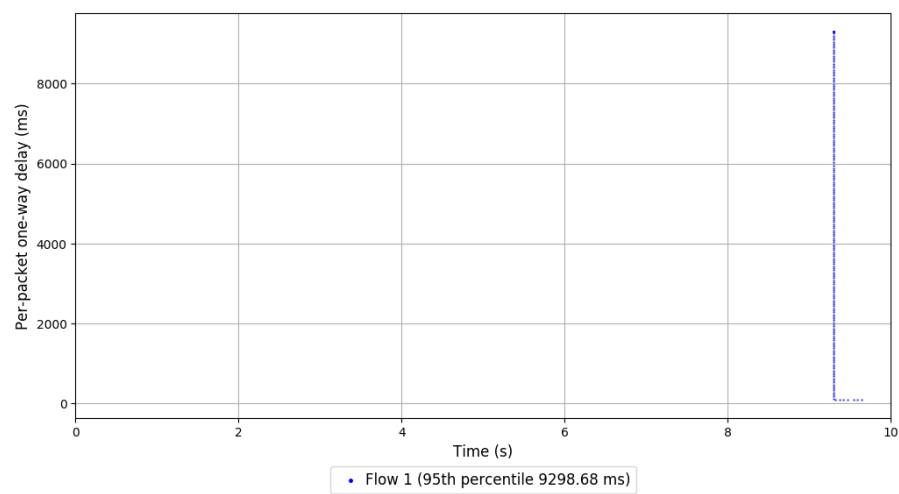
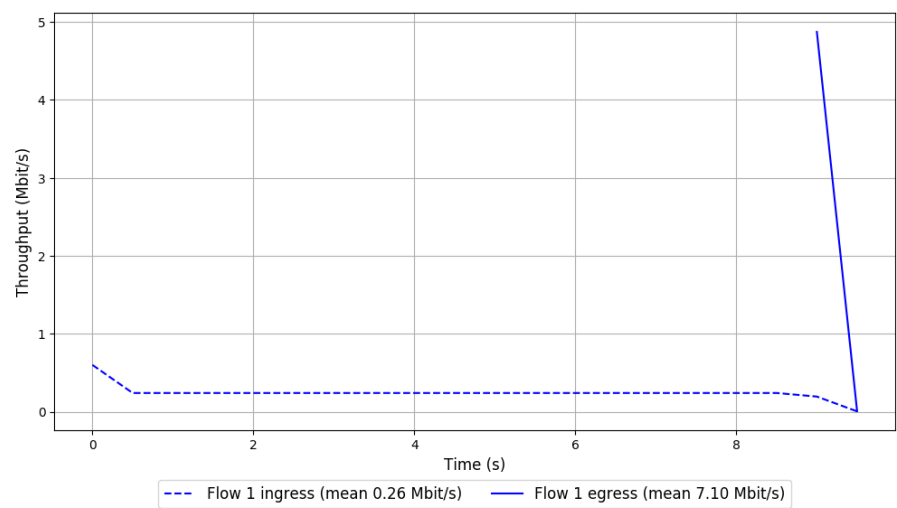


Run 9: Statistics of KohoCC

Start at: 2017-09-17 22:35:19

End at: 2017-09-17 22:35:49

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-09-17 22:46:46

End at: 2017-09-17 22:47:16

Below is generated by plot.py at 2017-09-18 01:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.73 Mbit/s

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

Loss rate: 0.60%

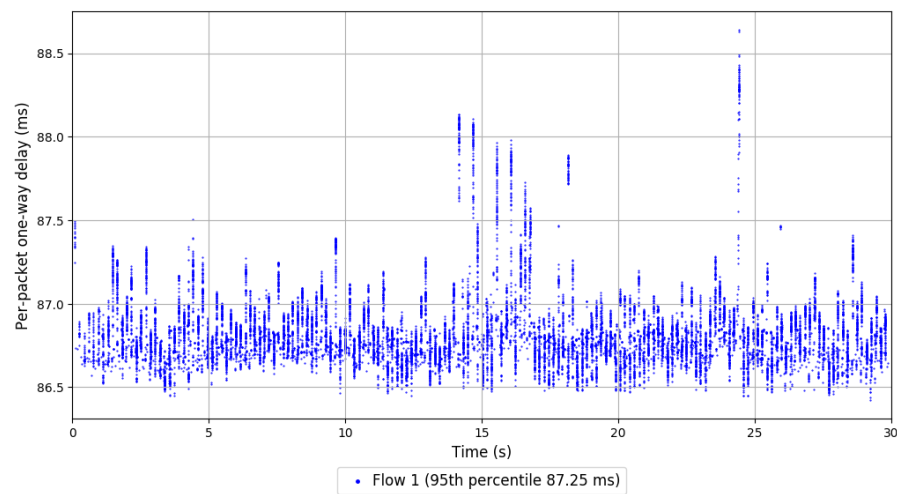
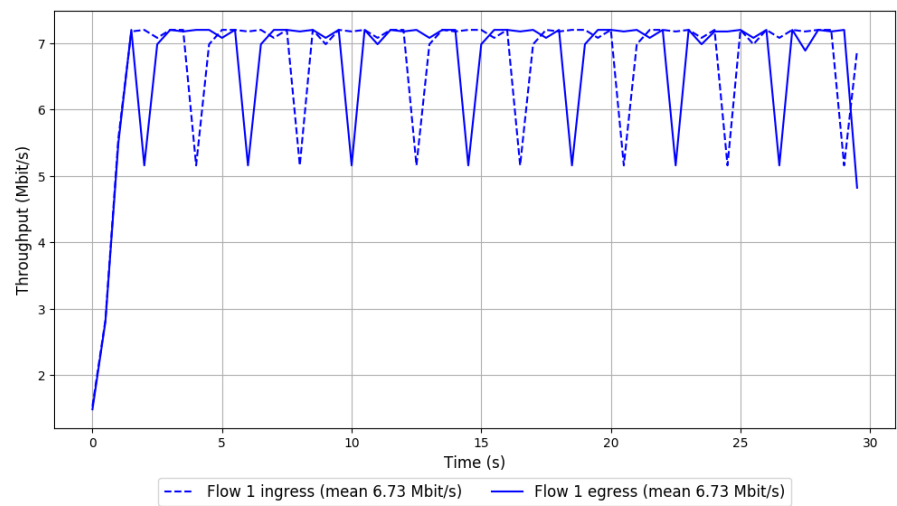
-- Flow 1:

Average throughput: 6.73 Mbit/s

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

Loss rate: 0.60%

Run 10: Report of KohoCC — Data Link

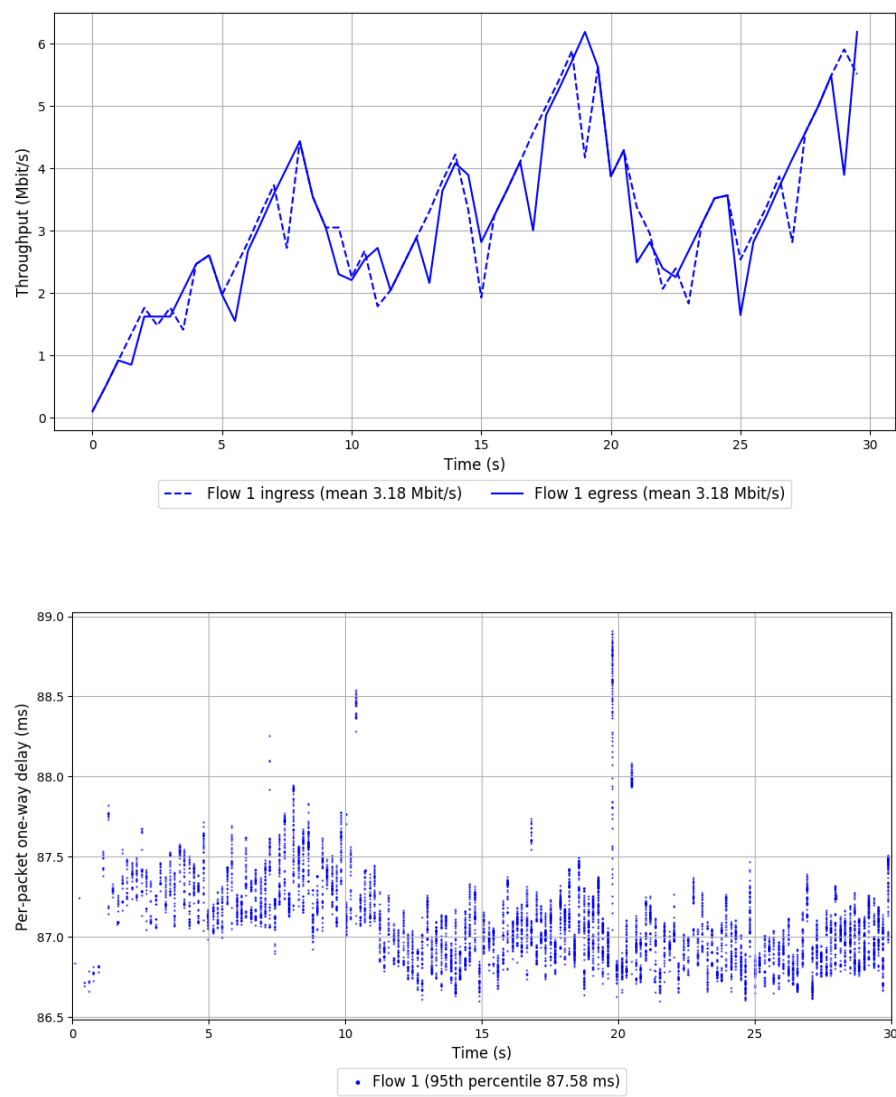


```
Run 1: Statistics of LEDBAT

Start at: 2017-09-17 20:58:30
End at: 2017-09-17 20:59:00

# Below is generated by plot.py at 2017-09-18 01:14:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 87.578 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 87.578 ms
Loss rate: 0.70%
```


Run 1: Report of LEDBAT — Data Link

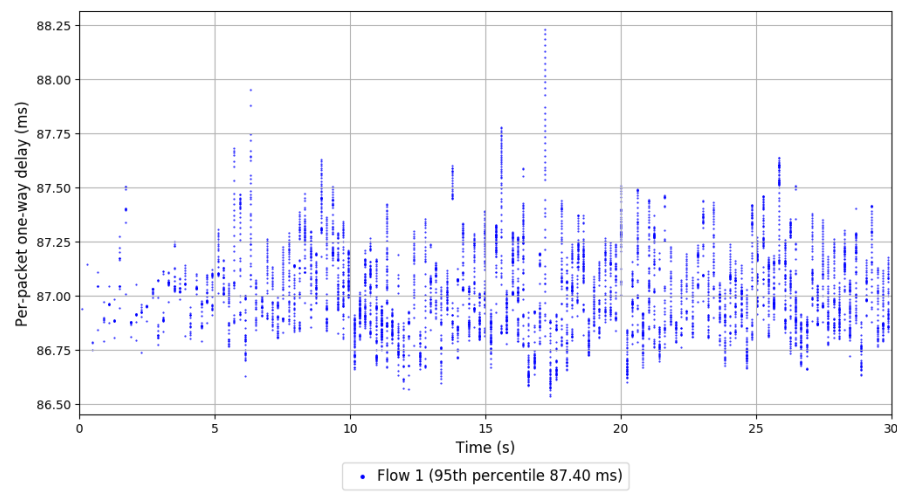
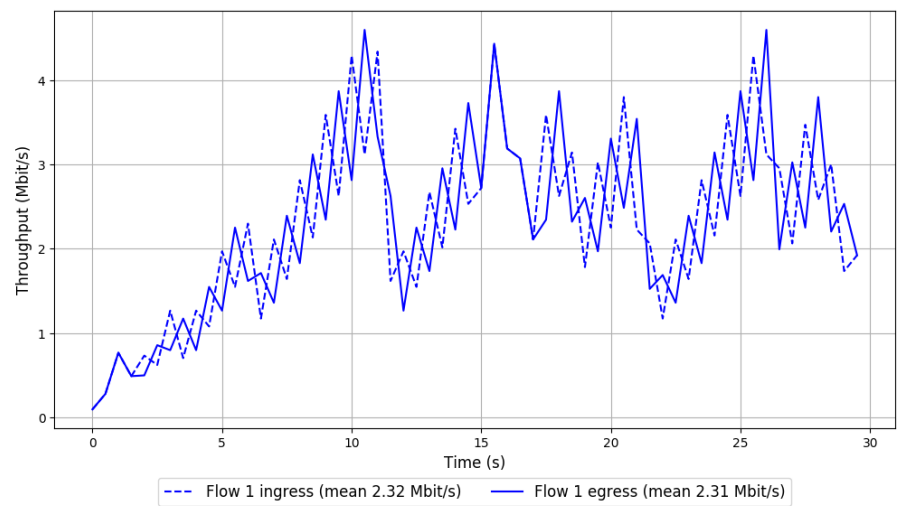


```
Run 2: Statistics of LEDBAT

Start at: 2017-09-17 21:10:09
End at: 2017-09-17 21:10:39

# Below is generated by plot.py at 2017-09-18 01:14:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 87.403 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 87.403 ms
Loss rate: 0.12%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-09-17 21:21:37

End at: 2017-09-17 21:22:07

Below is generated by plot.py at 2017-09-18 01:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 87.257 ms

Loss rate: 0.80%

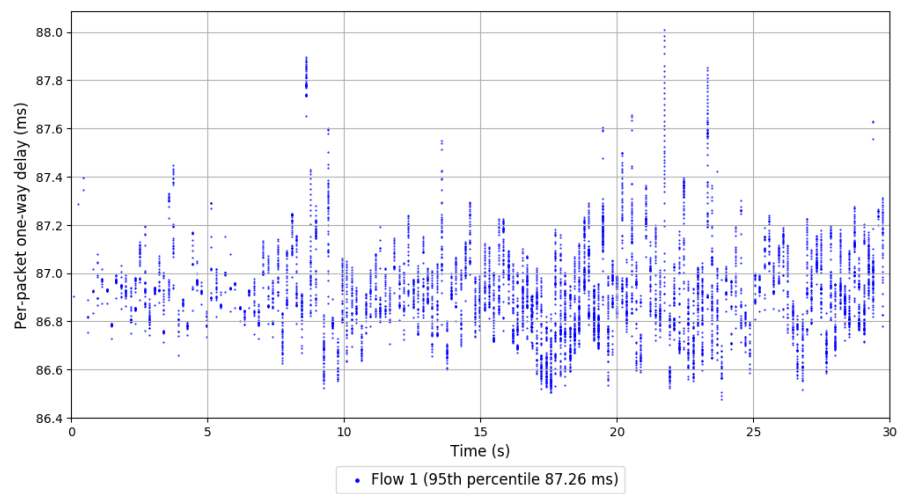
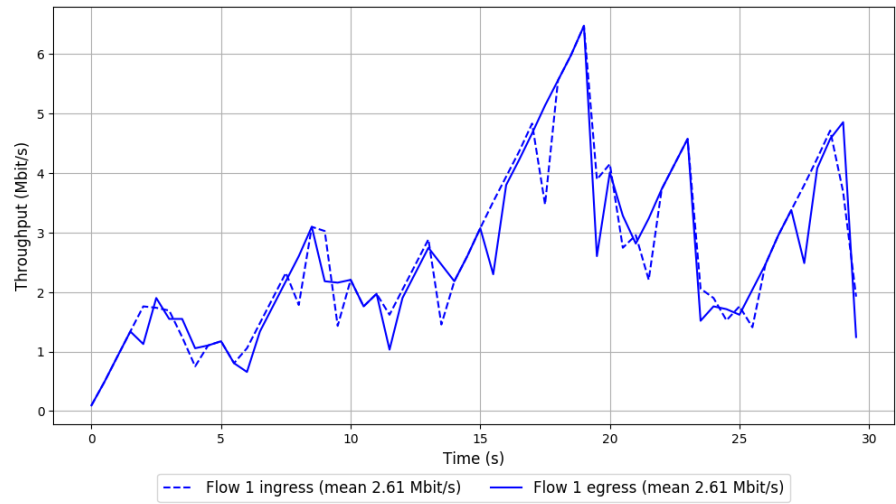
-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 87.257 ms

Loss rate: 0.80%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-09-17 21:33:30

End at: 2017-09-17 21:34:00

Below is generated by plot.py at 2017-09-18 01:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 87.454 ms

Loss rate: 1.36%

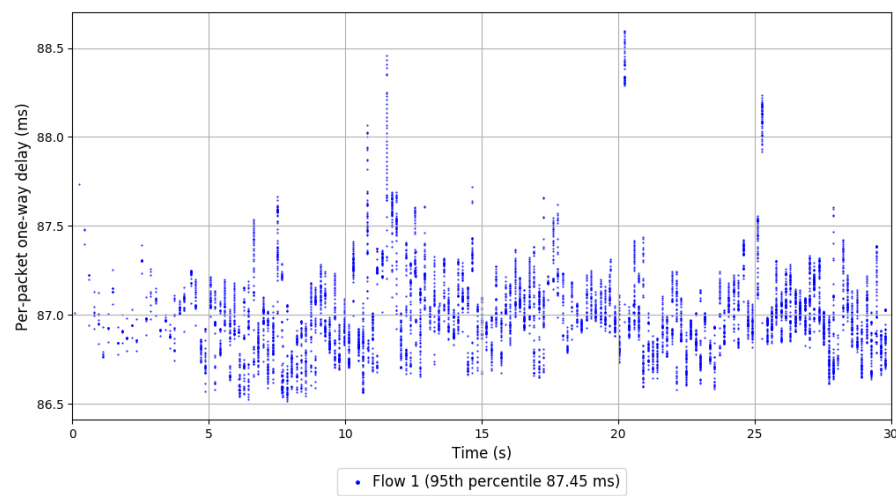
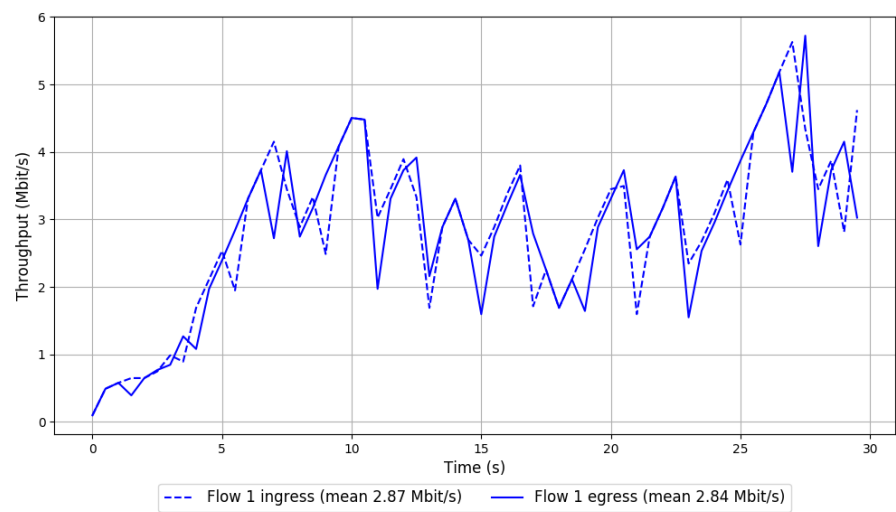
-- Flow 1:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 87.454 ms

Loss rate: 1.36%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-09-17 21:44:57

End at: 2017-09-17 21:45:27

Below is generated by plot.py at 2017-09-18 01:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 87.850 ms

Loss rate: 0.99%

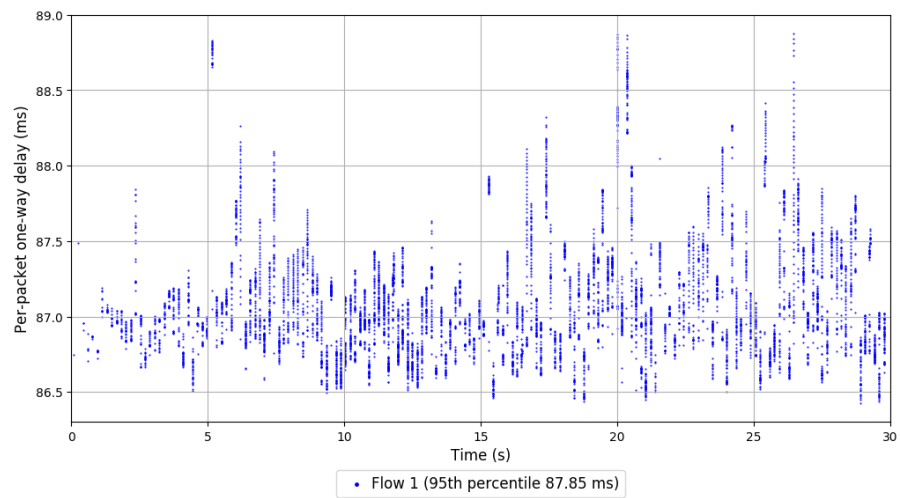
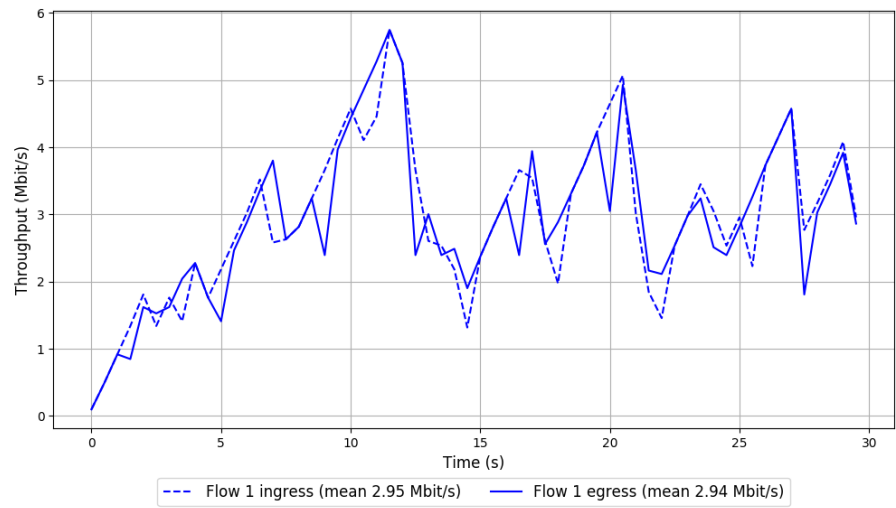
-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 87.850 ms

Loss rate: 0.99%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-09-17 21:56:51

End at: 2017-09-17 21:57:21

Below is generated by plot.py at 2017-09-18 01:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 87.641 ms

Loss rate: 0.59%

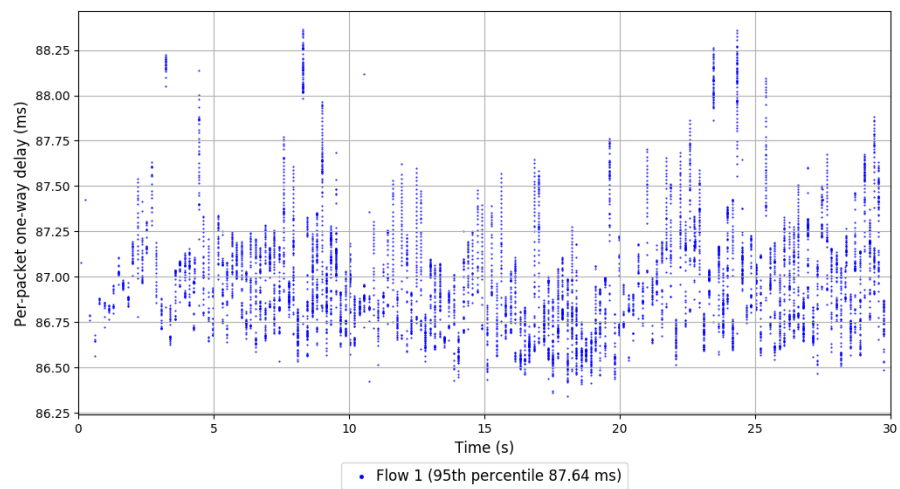
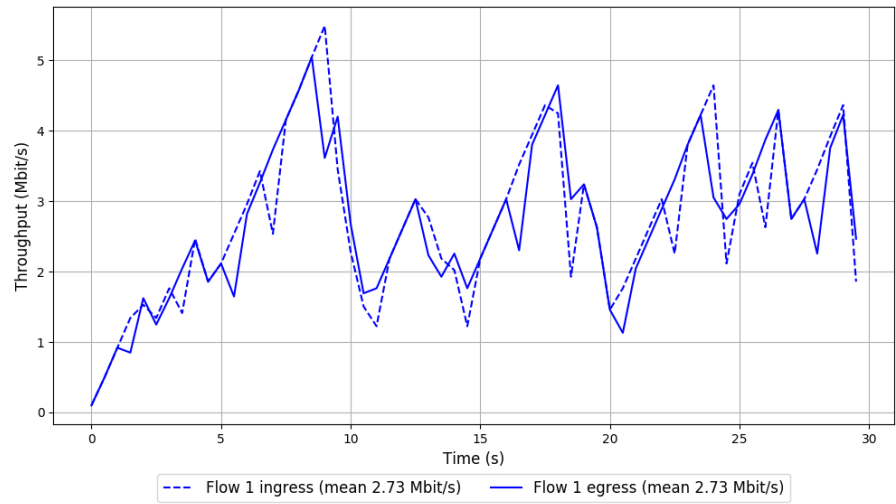
-- Flow 1:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 87.641 ms

Loss rate: 0.59%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-09-17 22:08:53

End at: 2017-09-17 22:09:23

Below is generated by plot.py at 2017-09-18 01:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 87.332 ms

Loss rate: 0.71%

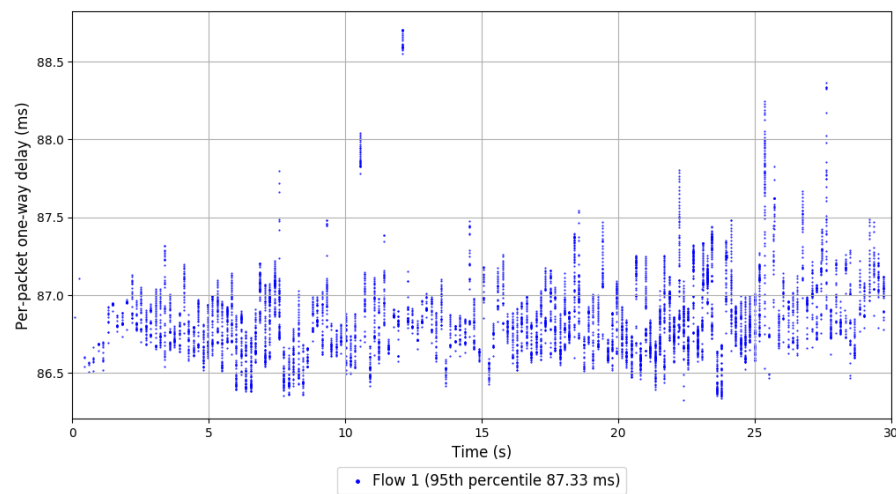
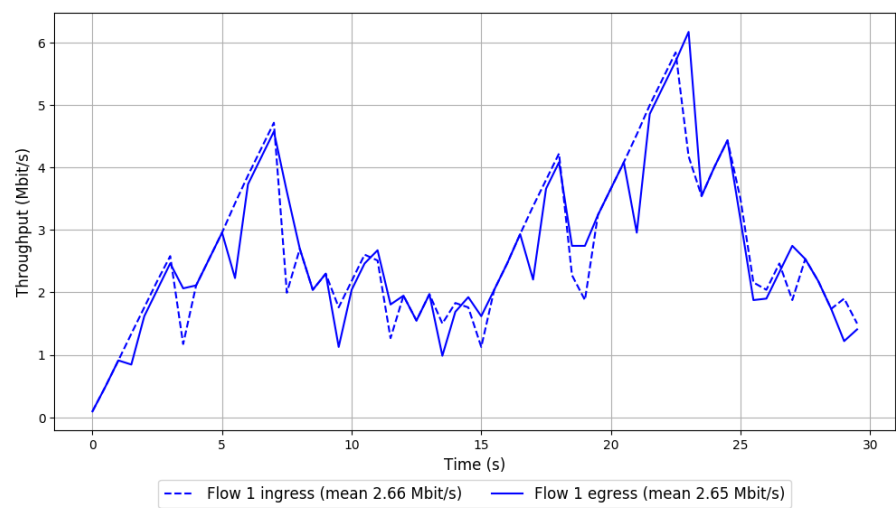
-- Flow 1:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 87.332 ms

Loss rate: 0.71%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-09-17 22:20:33

End at: 2017-09-17 22:21:03

Below is generated by plot.py at 2017-09-18 01:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 87.776 ms

Loss rate: 0.85%

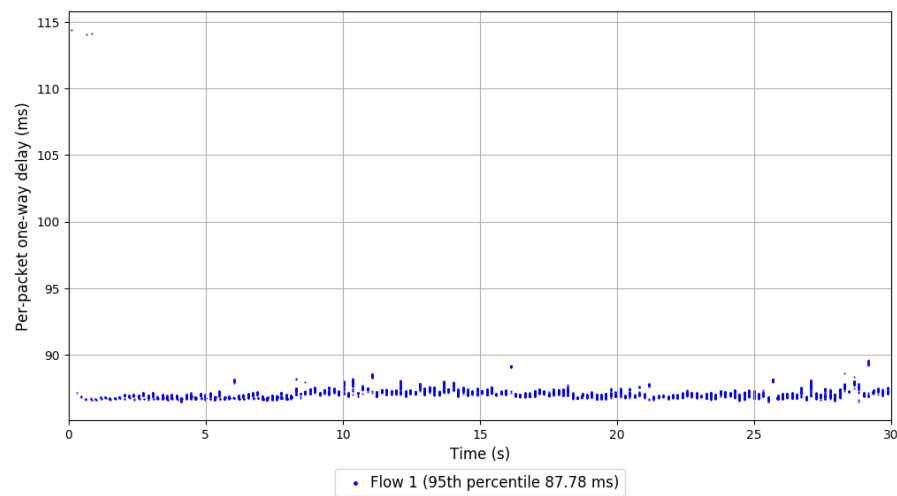
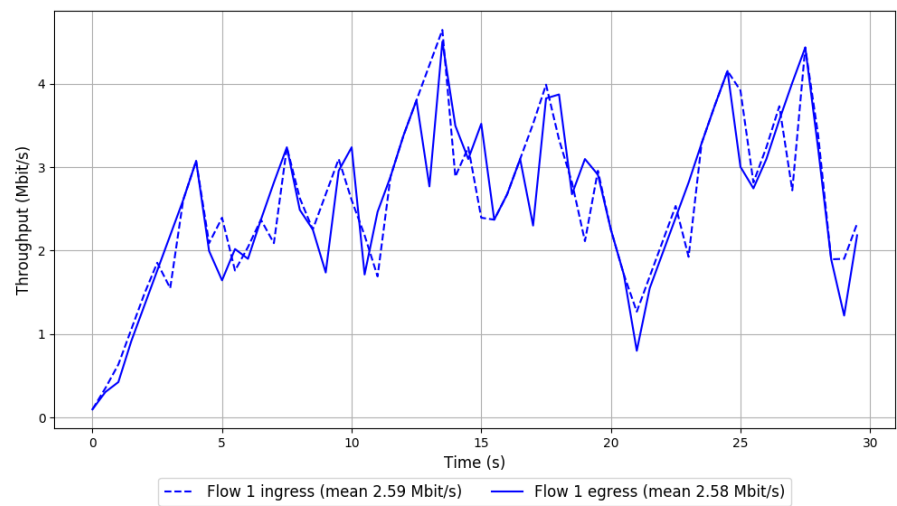
-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 87.776 ms

Loss rate: 0.85%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-09-17 22:32:07

End at: 2017-09-17 22:32:37

Below is generated by plot.py at 2017-09-18 01:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 87.354 ms

Loss rate: 0.63%

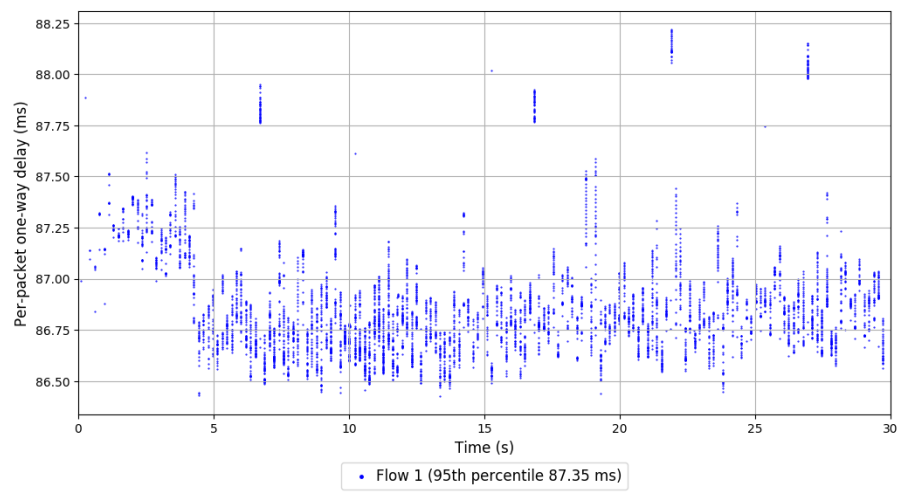
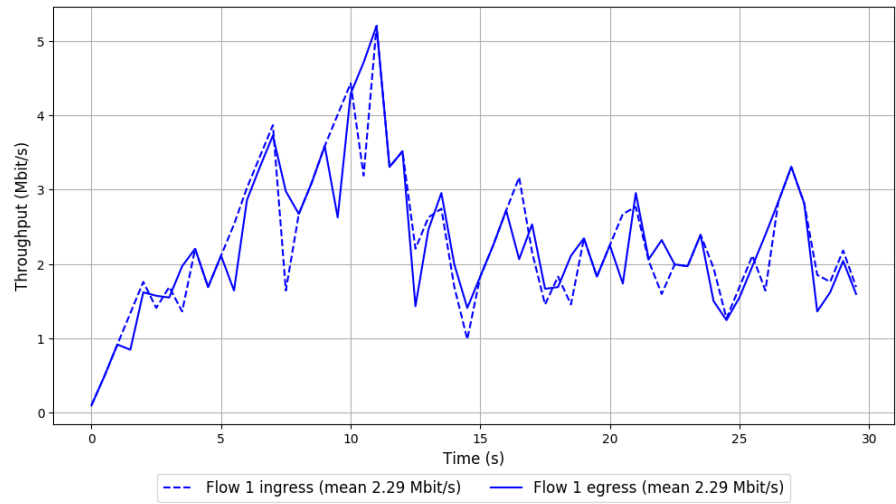
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 87.354 ms

Loss rate: 0.63%

Run 9: Report of LEDBAT — Data Link

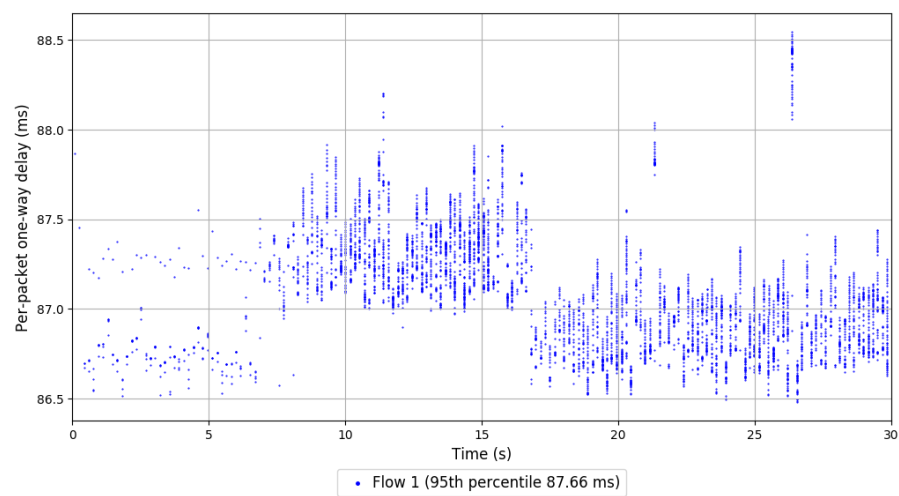
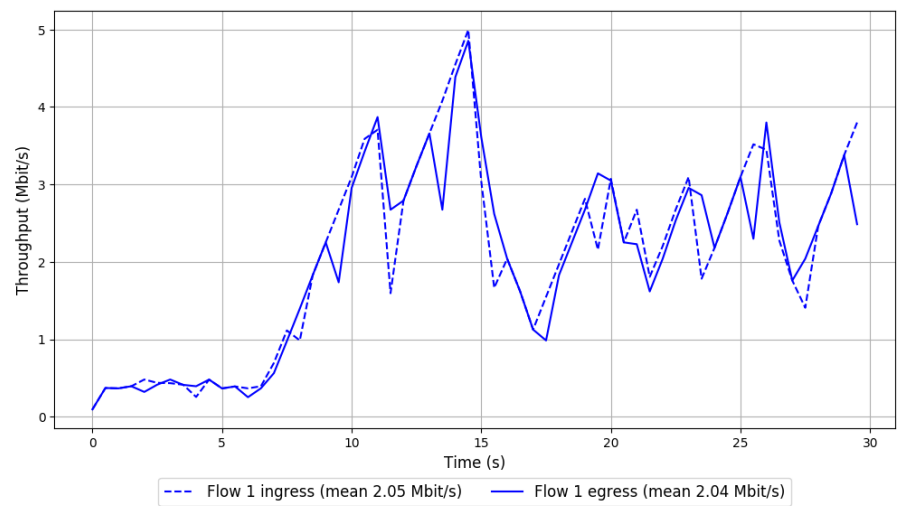


```
Run 10: Statistics of LEDBAT

Start at: 2017-09-17 22:43:54
End at: 2017-09-17 22:44:24

# Below is generated by plot.py at 2017-09-18 01:14:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 87.656 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 87.656 ms
Loss rate: 1.24%
```

Run 10: Report of LEDBAT — Data Link

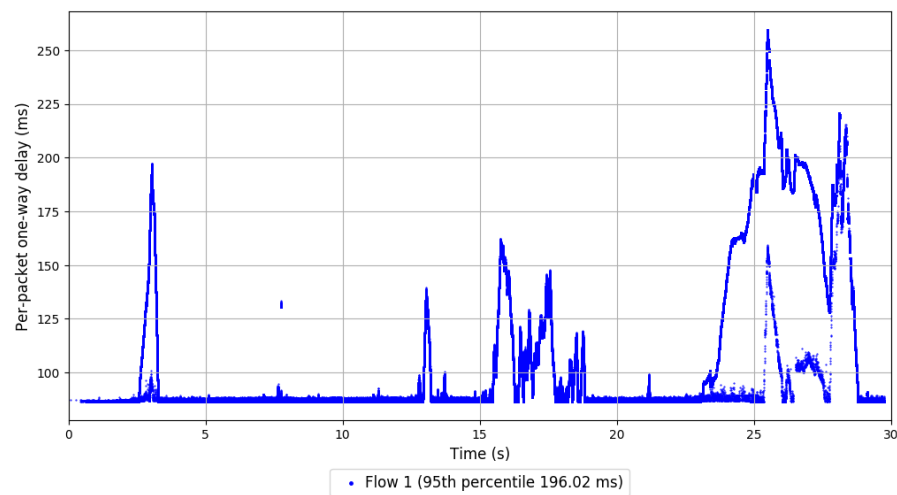
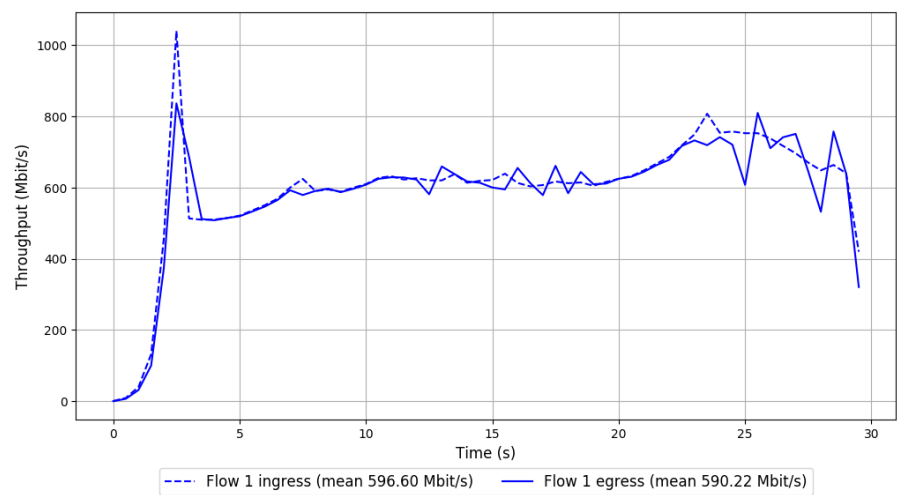


```
Run 1: Statistics of PCC

Start at: 2017-09-17 20:53:46
End at: 2017-09-17 20:54:16

# Below is generated by plot.py at 2017-09-18 01:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 590.22 Mbit/s
95th percentile per-packet one-way delay: 196.018 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 590.22 Mbit/s
95th percentile per-packet one-way delay: 196.018 ms
Loss rate: 1.64%
```

Run 1: Report of PCC — Data Link

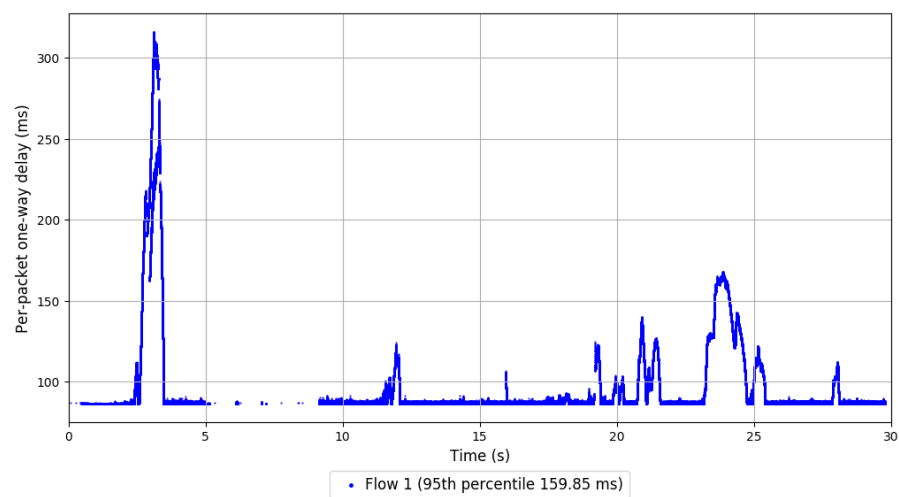
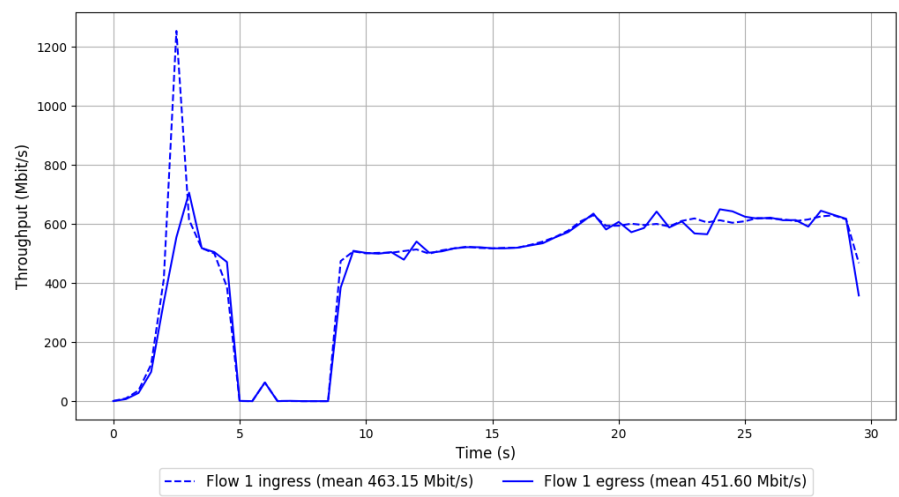


```
Run 2: Statistics of PCC

Start at: 2017-09-17 21:05:24
End at: 2017-09-17 21:05:54

# Below is generated by plot.py at 2017-09-18 01:22:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 451.60 Mbit/s
95th percentile per-packet one-way delay: 159.854 ms
Loss rate: 3.06%
-- Flow 1:
Average throughput: 451.60 Mbit/s
95th percentile per-packet one-way delay: 159.854 ms
Loss rate: 3.06%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-09-17 21:16:54

End at: 2017-09-17 21:17:24

Below is generated by plot.py at 2017-09-18 01:22:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 495.70 Mbit/s

95th percentile per-packet one-way delay: 150.199 ms

Loss rate: 1.81%

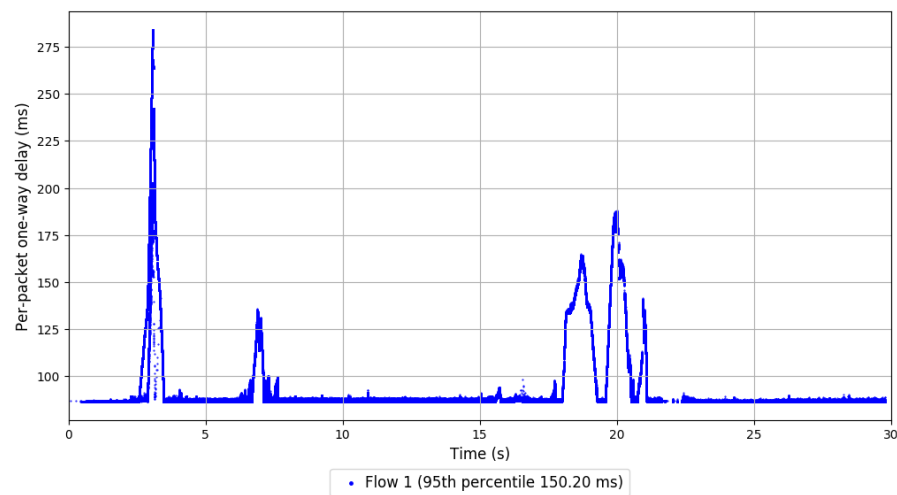
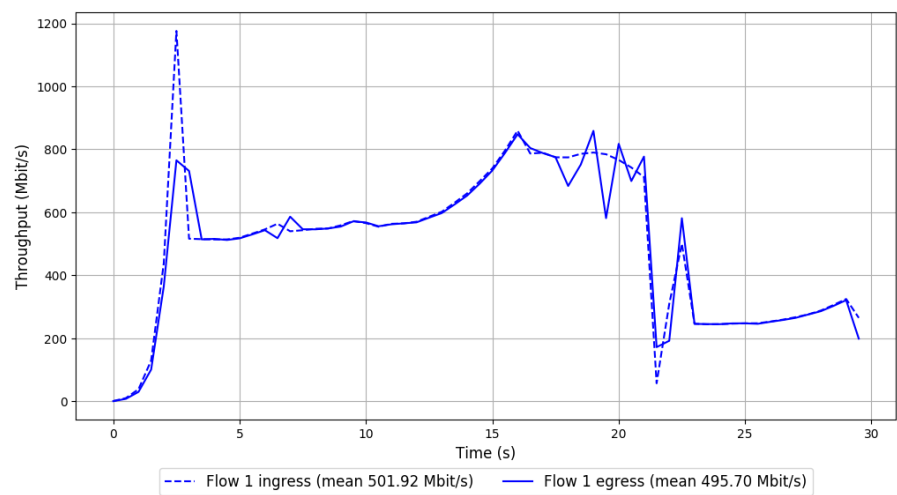
-- Flow 1:

Average throughput: 495.70 Mbit/s

95th percentile per-packet one-way delay: 150.199 ms

Loss rate: 1.81%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-09-17 21:28:45

End at: 2017-09-17 21:29:15

Below is generated by plot.py at 2017-09-18 01:22:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 548.02 Mbit/s

95th percentile per-packet one-way delay: 102.433 ms

Loss rate: 0.97%

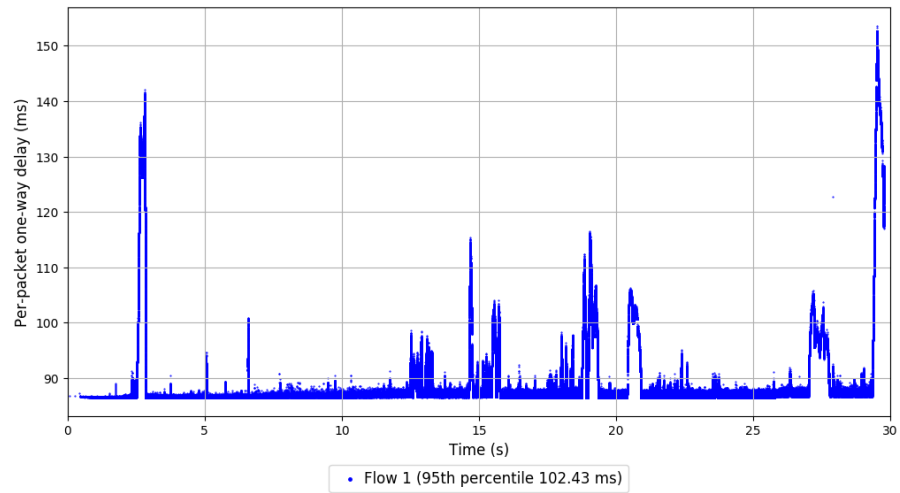
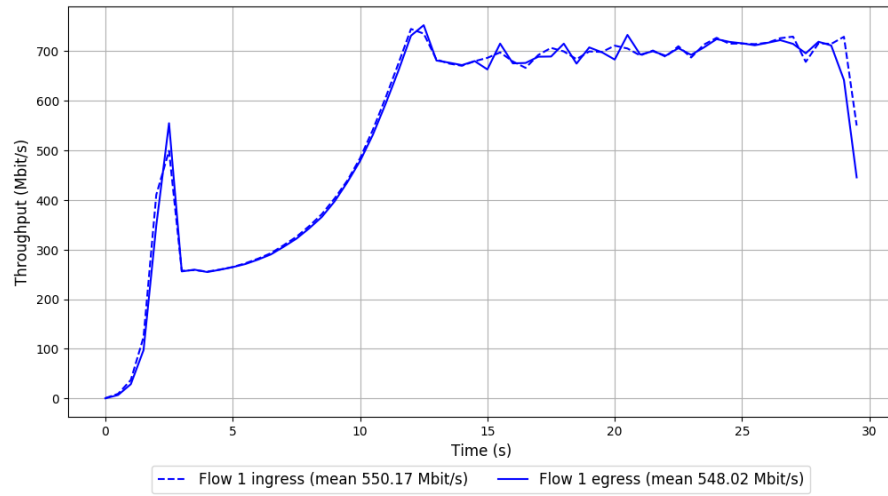
-- Flow 1:

Average throughput: 548.02 Mbit/s

95th percentile per-packet one-way delay: 102.433 ms

Loss rate: 0.97%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-09-17 21:40:13

End at: 2017-09-17 21:40:43

Below is generated by plot.py at 2017-09-18 01:22:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 545.75 Mbit/s

95th percentile per-packet one-way delay: 111.088 ms

Loss rate: 0.75%

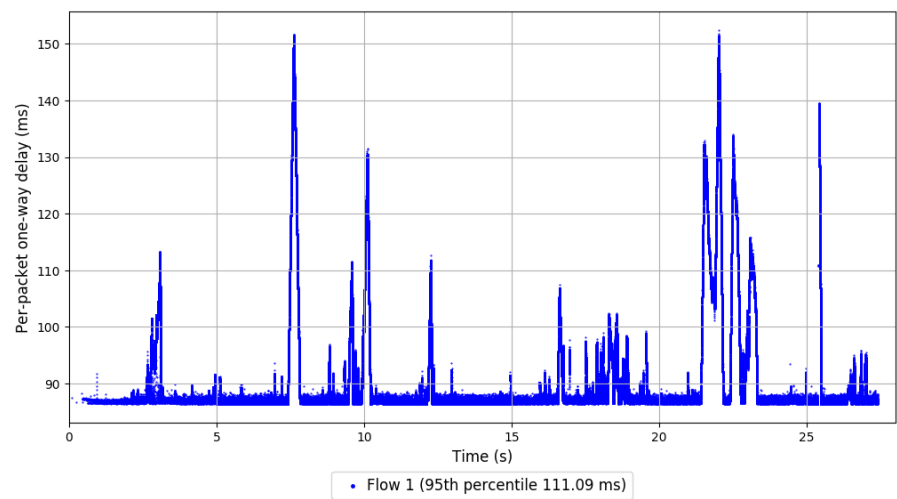
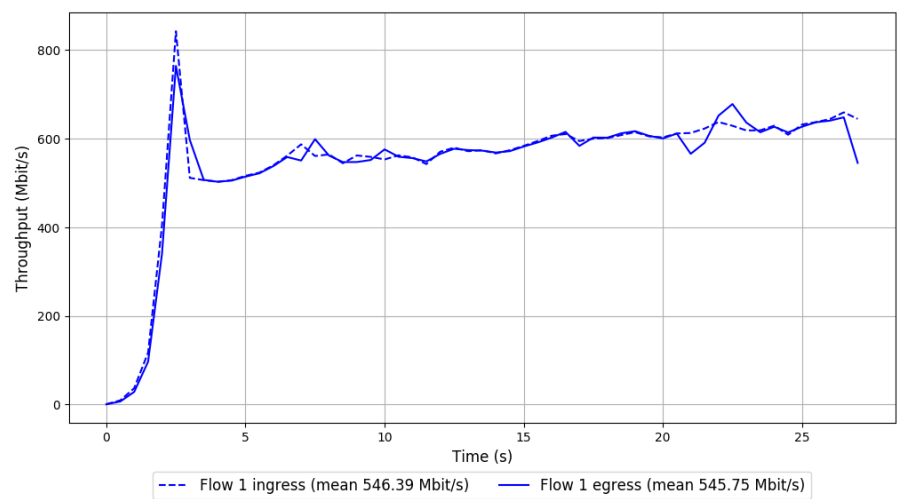
-- Flow 1:

Average throughput: 545.75 Mbit/s

95th percentile per-packet one-way delay: 111.088 ms

Loss rate: 0.75%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-09-17 21:52:01

End at: 2017-09-17 21:52:31

Below is generated by plot.py at 2017-09-18 01:23:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 591.33 Mbit/s

95th percentile per-packet one-way delay: 127.639 ms

Loss rate: 1.36%

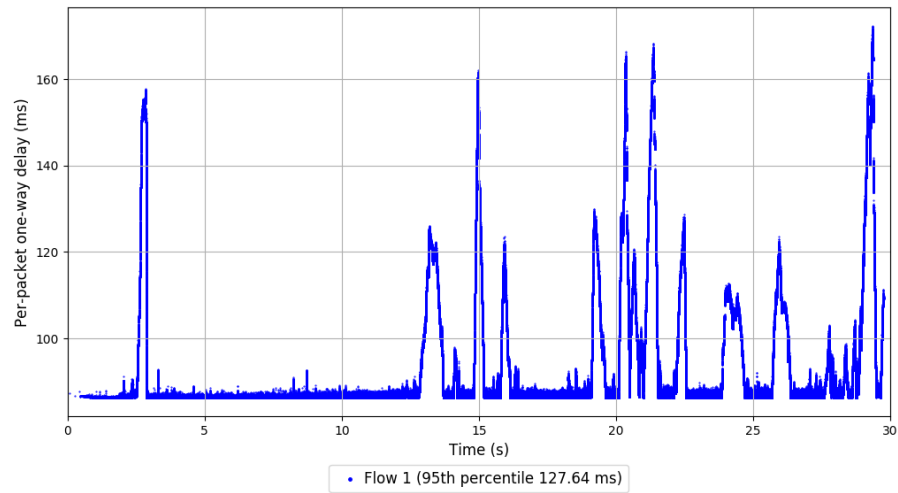
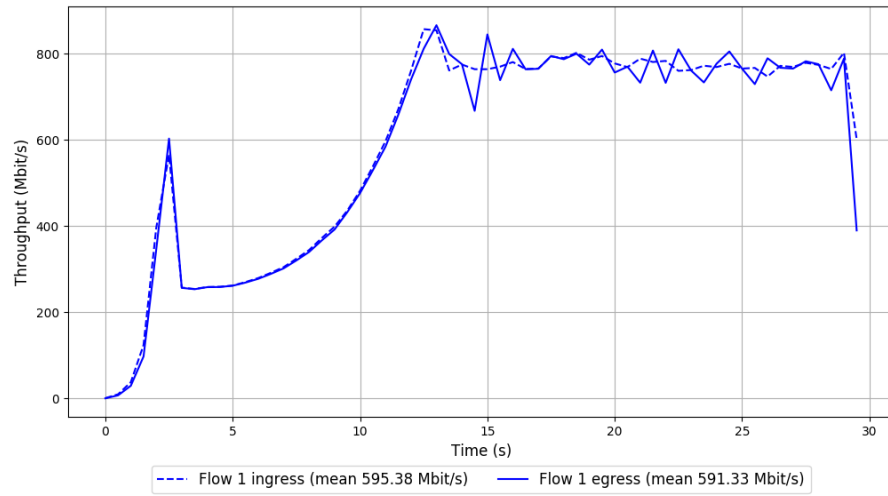
-- Flow 1:

Average throughput: 591.33 Mbit/s

95th percentile per-packet one-way delay: 127.639 ms

Loss rate: 1.36%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-09-17 22:04:06

End at: 2017-09-17 22:04:36

Below is generated by plot.py at 2017-09-18 01:23:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 496.09 Mbit/s

95th percentile per-packet one-way delay: 148.592 ms

Loss rate: 2.43%

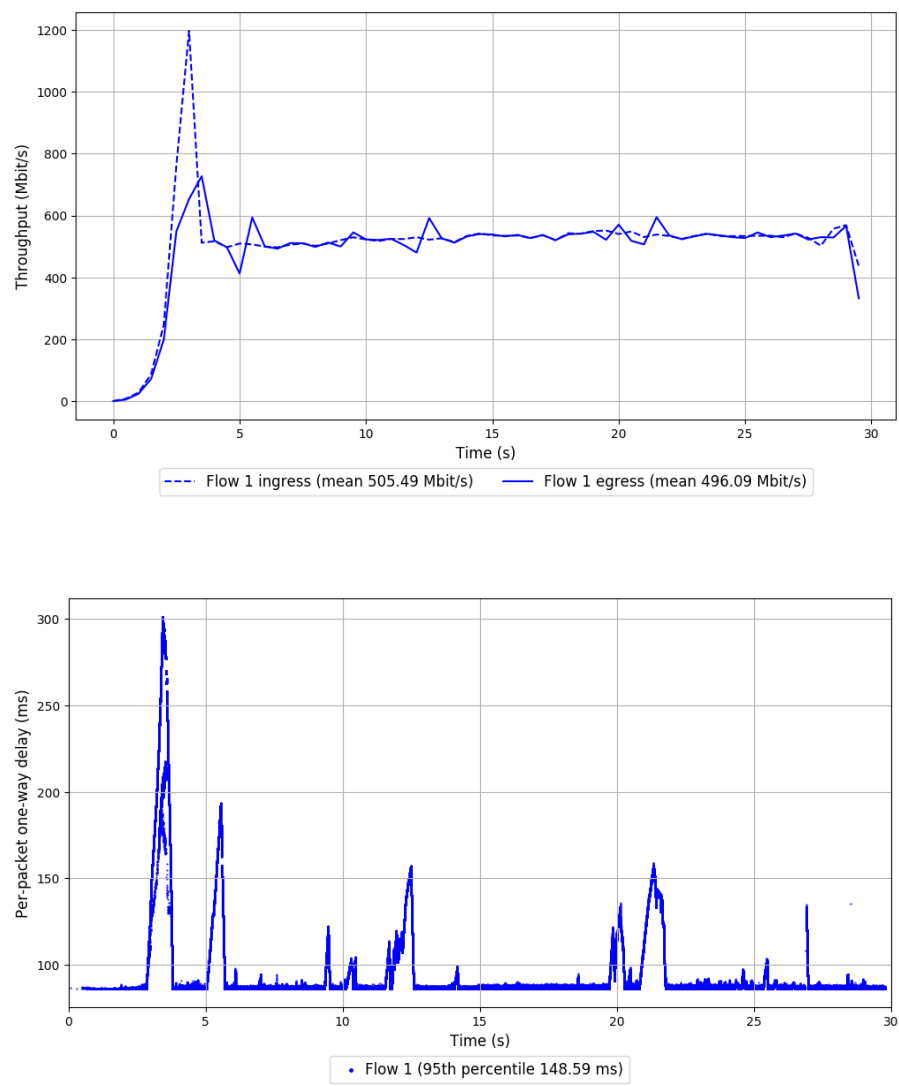
-- Flow 1:

Average throughput: 496.09 Mbit/s

95th percentile per-packet one-way delay: 148.592 ms

Loss rate: 2.43%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-09-17 22:15:42

End at: 2017-09-17 22:16:12

Below is generated by plot.py at 2017-09-18 01:24:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 582.81 Mbit/s

95th percentile per-packet one-way delay: 159.576 ms

Loss rate: 2.81%

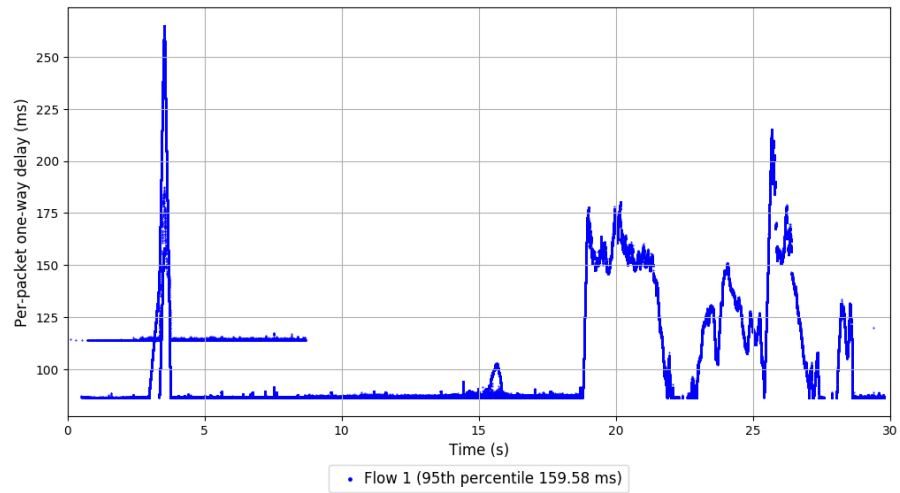
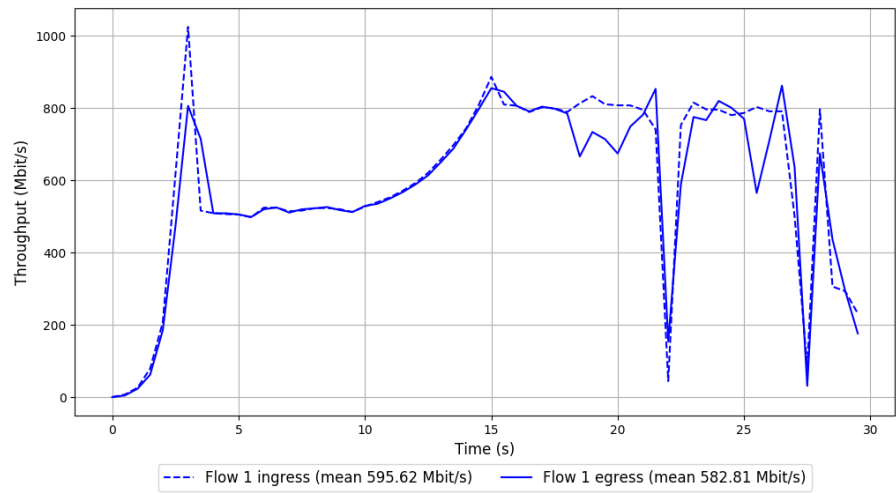
-- Flow 1:

Average throughput: 582.81 Mbit/s

95th percentile per-packet one-way delay: 159.576 ms

Loss rate: 2.81%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-09-17 22:27:13

End at: 2017-09-17 22:27:43

Below is generated by plot.py at 2017-09-18 01:31:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 669.16 Mbit/s

95th percentile per-packet one-way delay: 178.795 ms

Loss rate: 2.05%

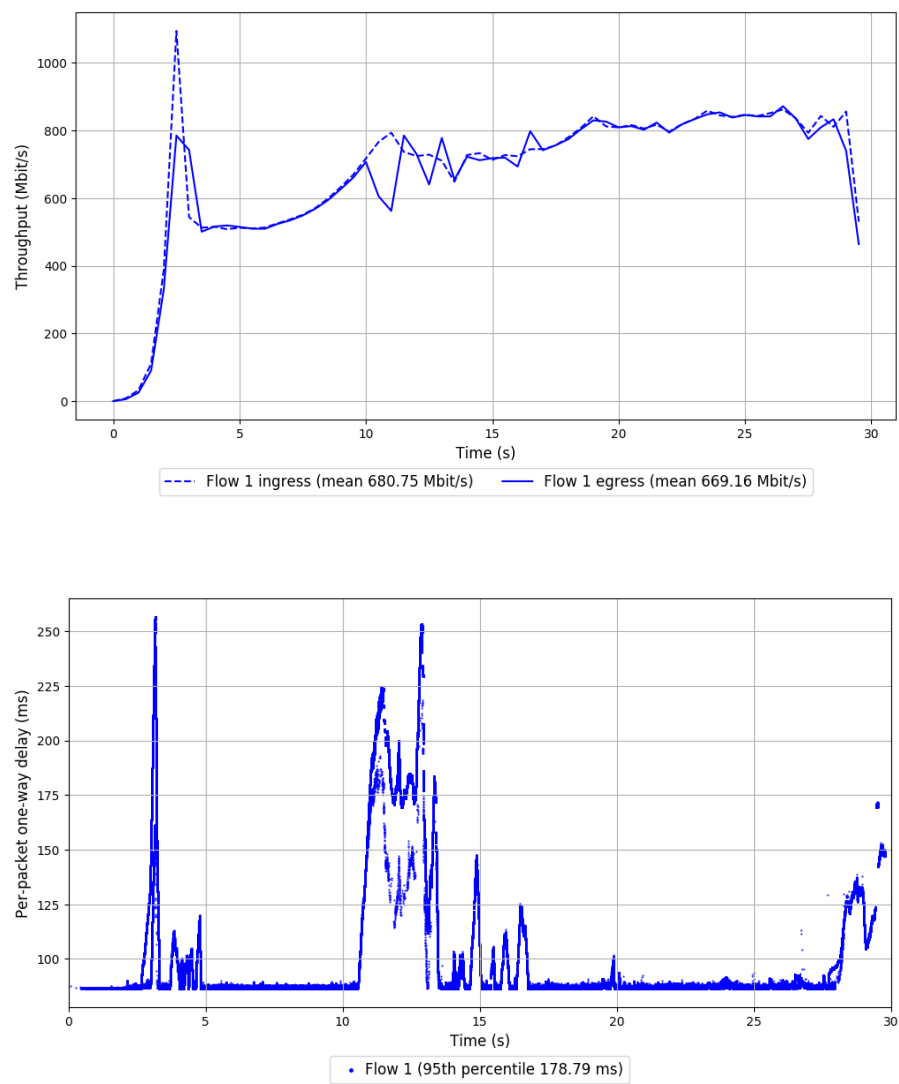
-- Flow 1:

Average throughput: 669.16 Mbit/s

95th percentile per-packet one-way delay: 178.795 ms

Loss rate: 2.05%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-09-17 22:39:08

End at: 2017-09-17 22:39:38

Below is generated by plot.py at 2017-09-18 01:31:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 489.48 Mbit/s

95th percentile per-packet one-way delay: 174.163 ms

Loss rate: 1.44%

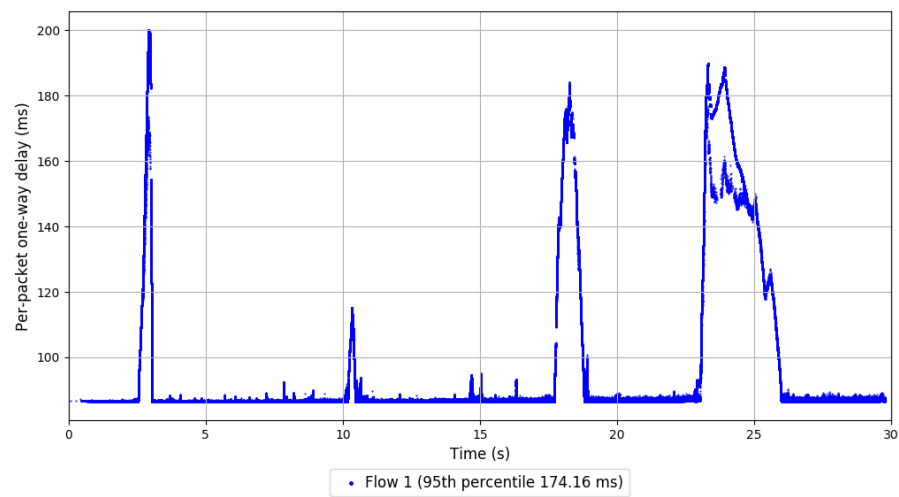
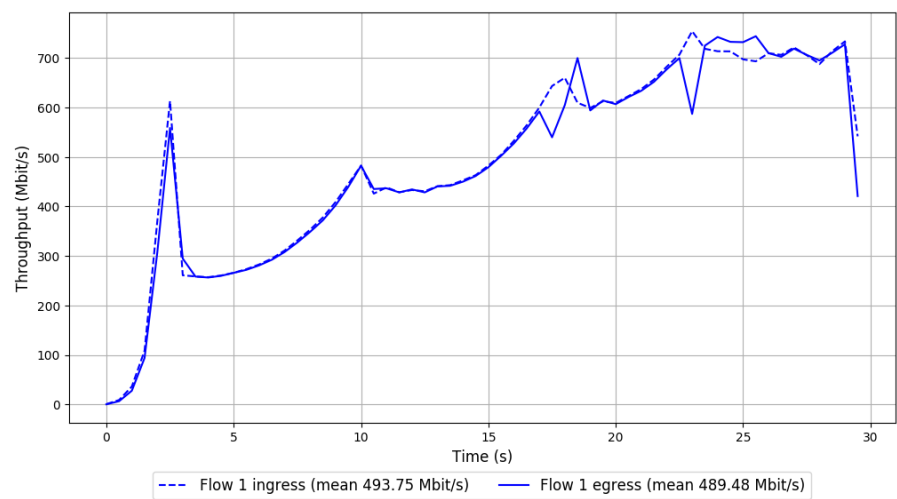
-- Flow 1:

Average throughput: 489.48 Mbit/s

95th percentile per-packet one-way delay: 174.163 ms

Loss rate: 1.44%

Run 10: Report of PCC — Data Link

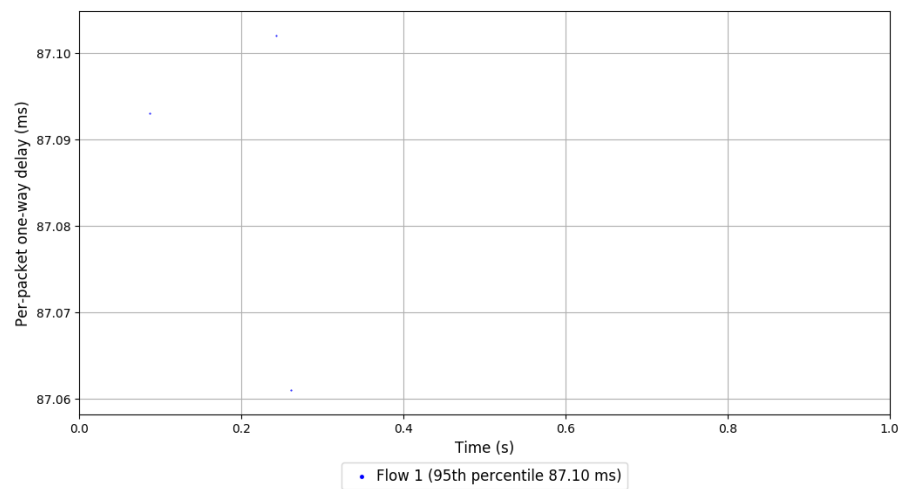
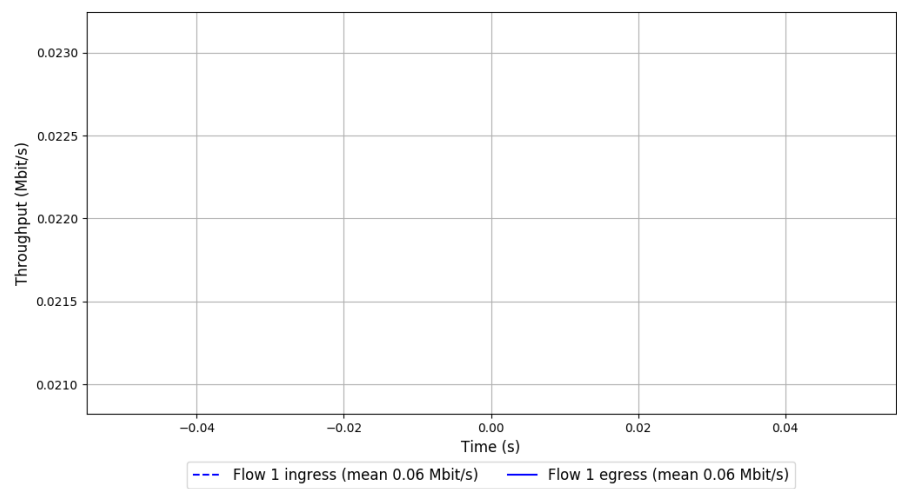


Run 1: Statistics of QUIC Cubic

Start at: 2017-09-17 20:56:07

End at: 2017-09-17 20:56:37

Run 1: Report of QUIC Cubic — Data Link

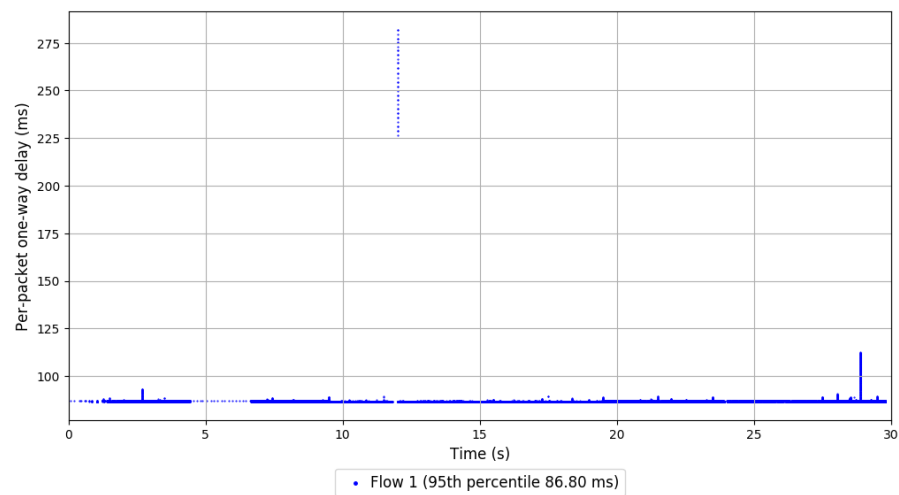
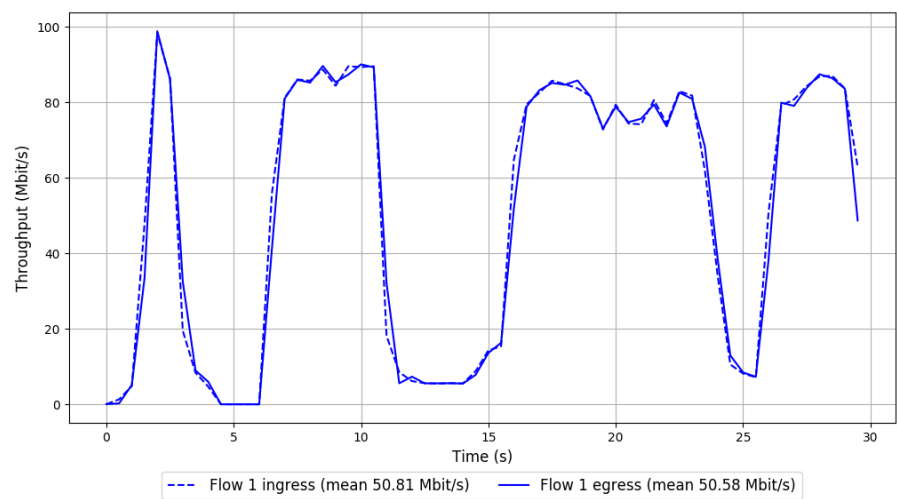


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-17 21:07:41
End at: 2017-09-17 21:08:11

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.58 Mbit/s
95th percentile per-packet one-way delay: 86.799 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 50.58 Mbit/s
95th percentile per-packet one-way delay: 86.799 ms
Loss rate: 1.05%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-09-17 21:19:12

End at: 2017-09-17 21:19:42

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.11 Mbit/s

95th percentile per-packet one-way delay: 86.710 ms

Loss rate: 0.21%

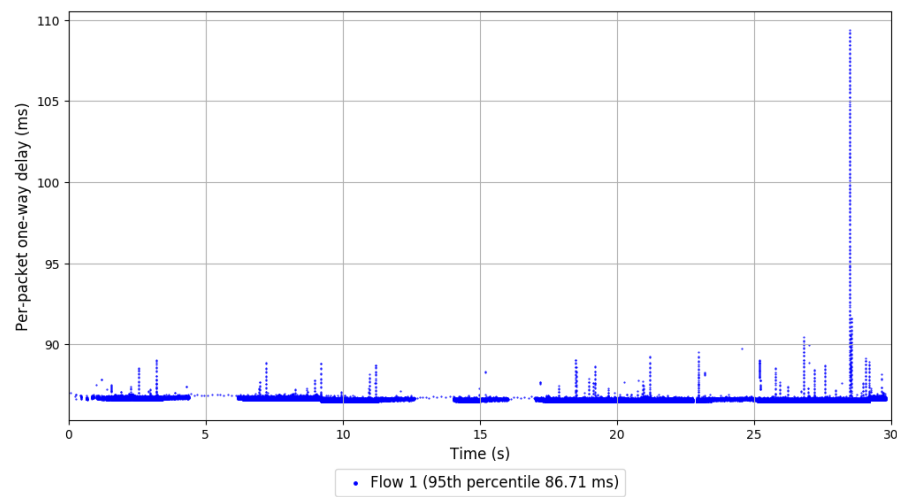
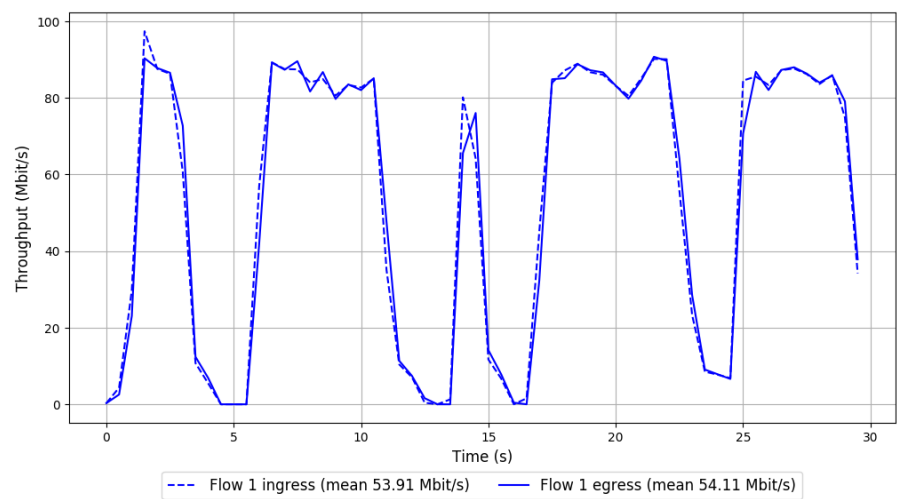
-- Flow 1:

Average throughput: 54.11 Mbit/s

95th percentile per-packet one-way delay: 86.710 ms

Loss rate: 0.21%

Run 3: Report of QUIC Cubic — Data Link

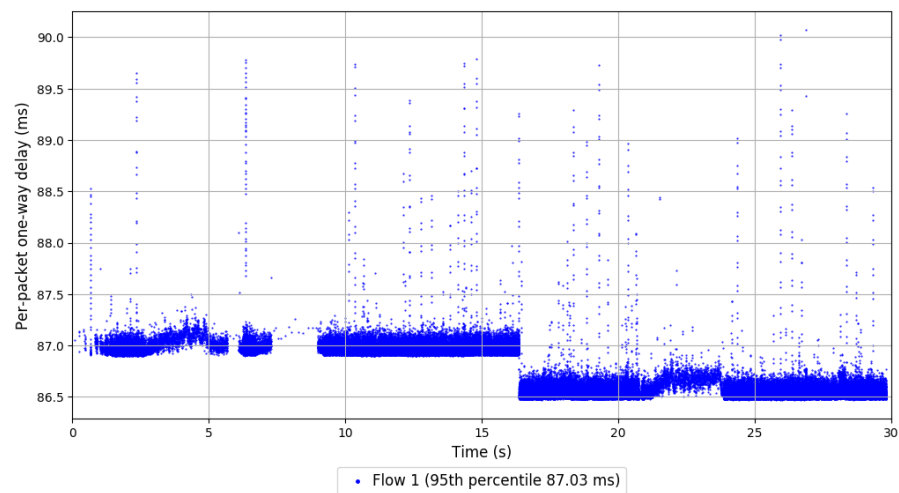
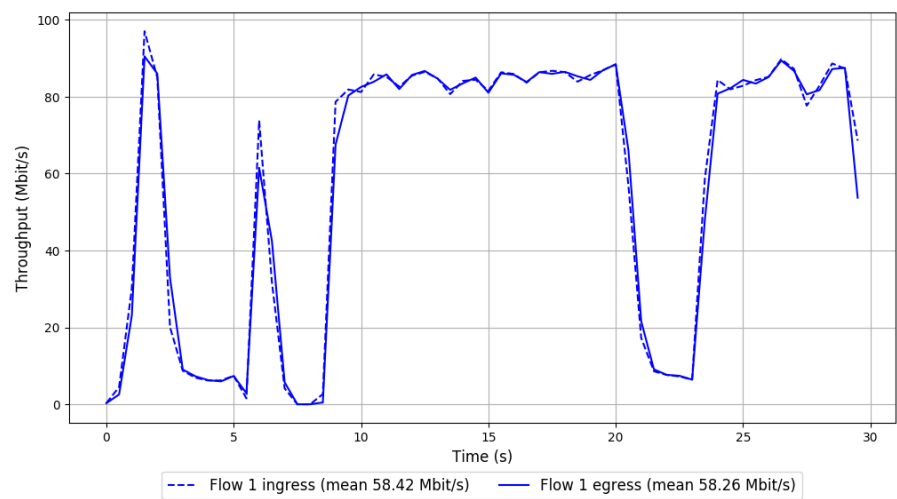


```
Run 4: Statistics of QUIC Cubic

Start at: 2017-09-17 21:31:04
End at: 2017-09-17 21:31:34

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.26 Mbit/s
95th percentile per-packet one-way delay: 87.031 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 58.26 Mbit/s
95th percentile per-packet one-way delay: 87.031 ms
Loss rate: 0.85%
```

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-09-17 21:42:31

End at: 2017-09-17 21:43:01

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.96 Mbit/s

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

Loss rate: 2.01%

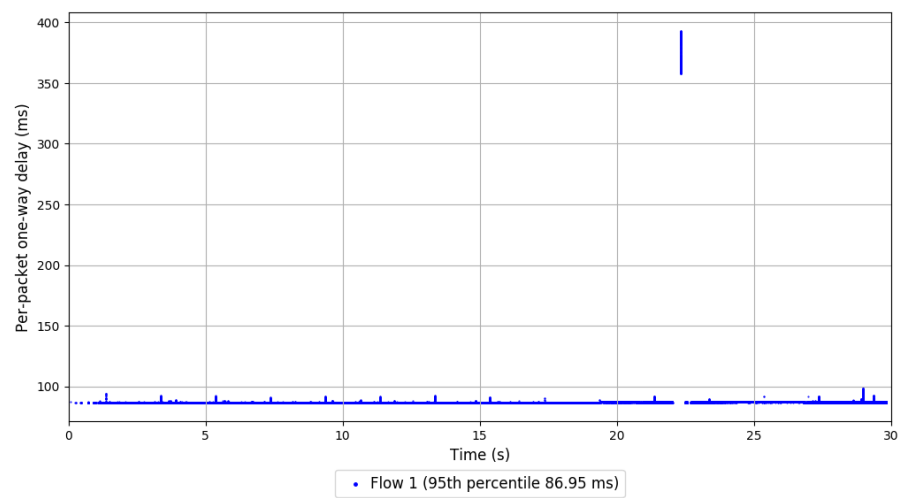
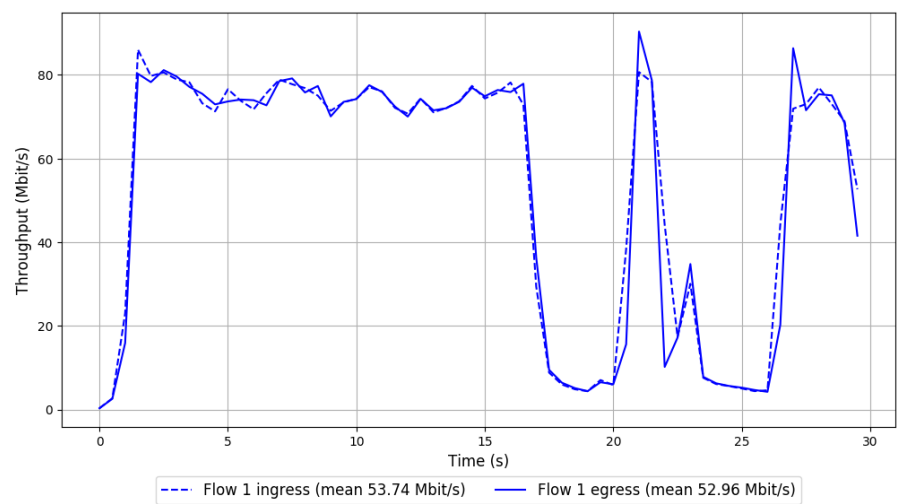
-- Flow 1:

Average throughput: 52.96 Mbit/s

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

Loss rate: 2.01%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-09-17 21:54:23

End at: 2017-09-17 21:54:53

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.46 Mbit/s

95th percentile per-packet one-way delay: 86.848 ms

Loss rate: 0.70%

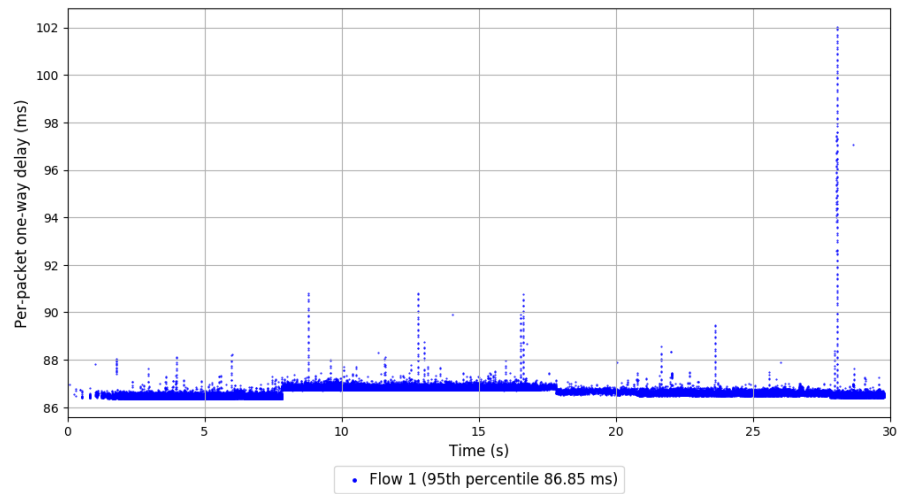
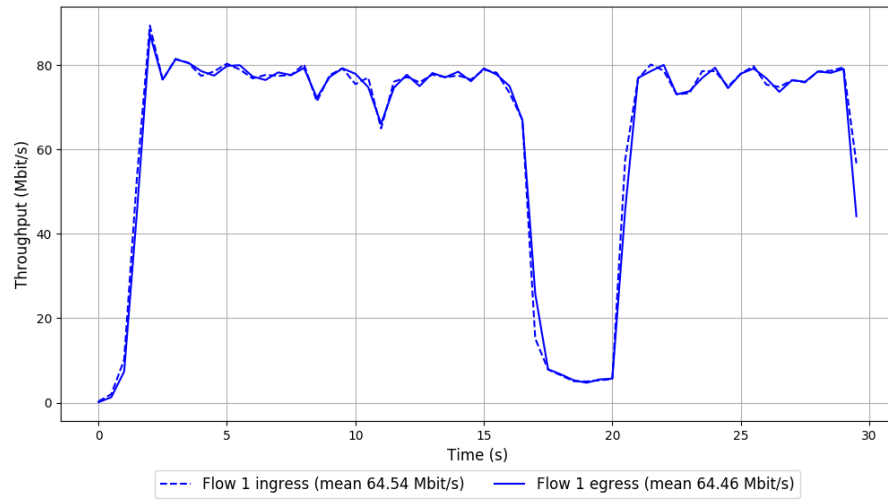
-- Flow 1:

Average throughput: 64.46 Mbit/s

95th percentile per-packet one-way delay: 86.848 ms

Loss rate: 0.70%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-09-17 22:06:23

End at: 2017-09-17 22:06:53

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.58 Mbit/s

95th percentile per-packet one-way delay: 86.520 ms

Loss rate: 0.80%

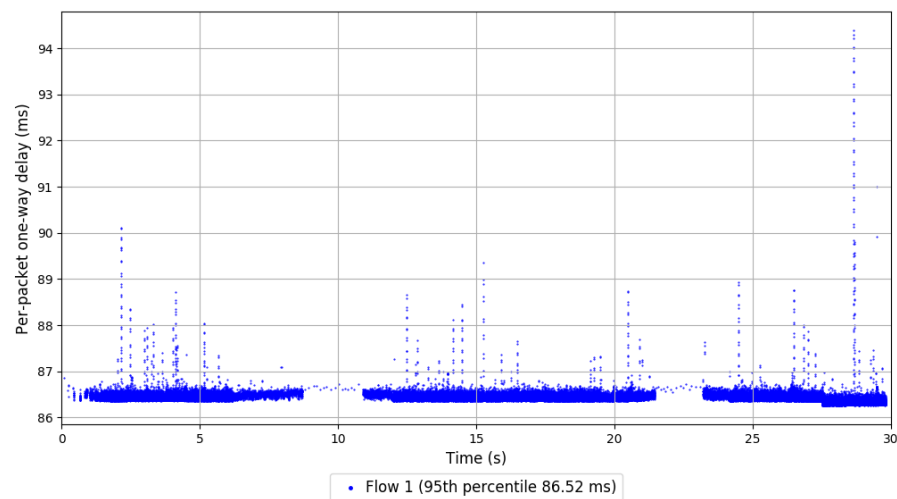
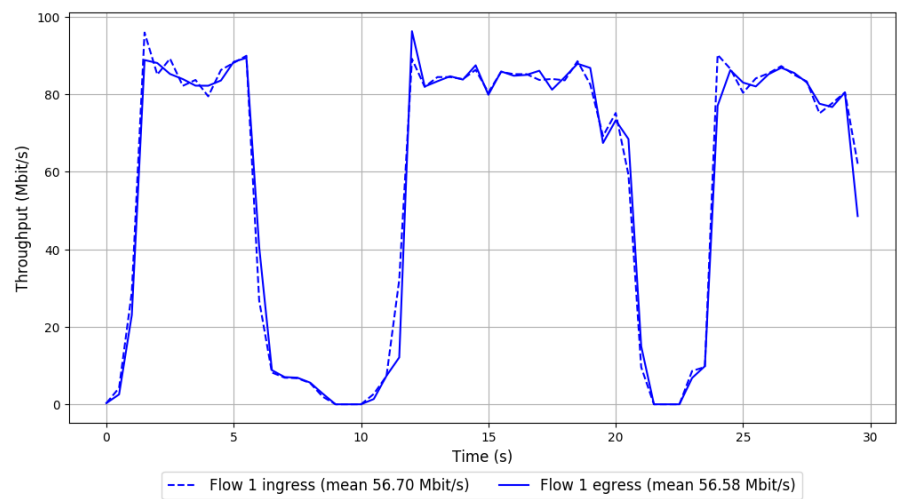
-- Flow 1:

Average throughput: 56.58 Mbit/s

95th percentile per-packet one-way delay: 86.520 ms

Loss rate: 0.80%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-09-17 22:18:02

End at: 2017-09-17 22:18:32

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.76 Mbit/s

95th percentile per-packet one-way delay: 86.666 ms

Loss rate: 0.91%

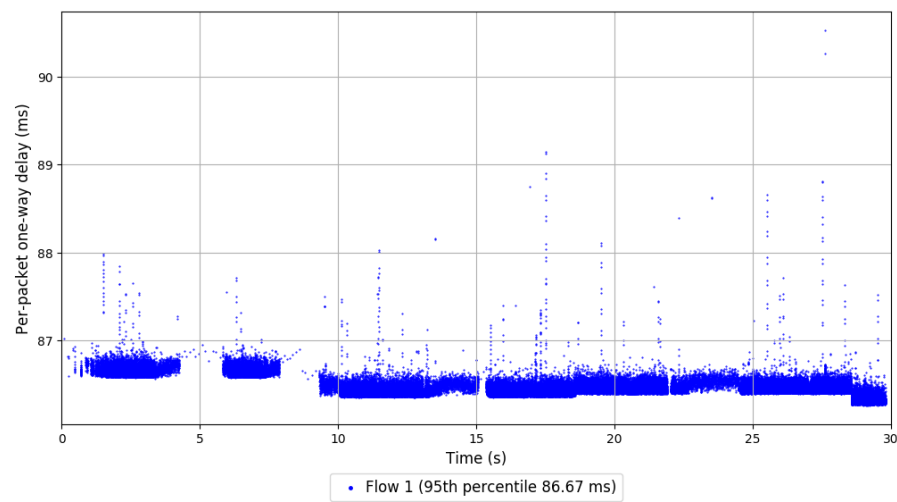
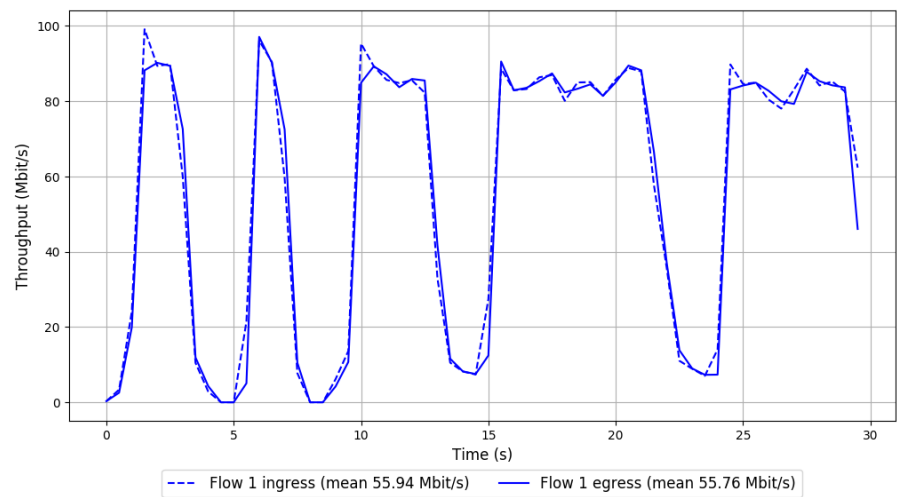
-- Flow 1:

Average throughput: 55.76 Mbit/s

95th percentile per-packet one-way delay: 86.666 ms

Loss rate: 0.91%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-09-17 22:29:38

End at: 2017-09-17 22:30:08

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.09 Mbit/s

95th percentile per-packet one-way delay: 86.898 ms

Loss rate: 0.72%

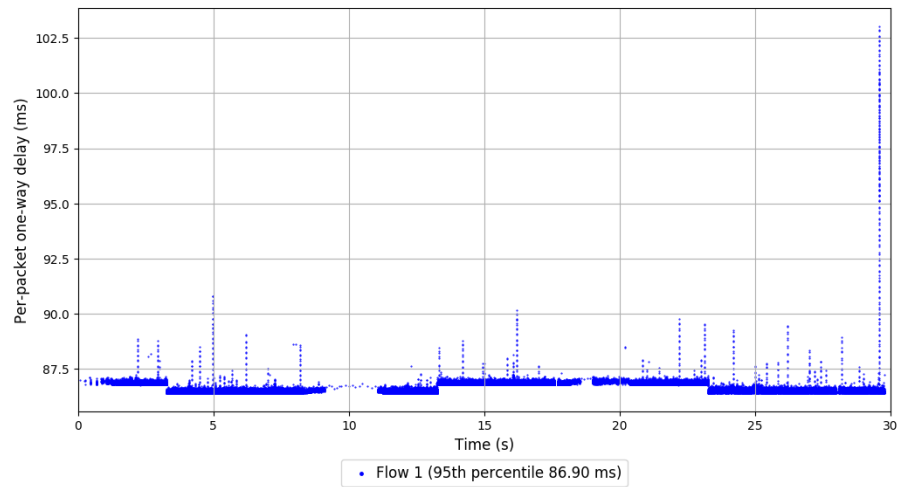
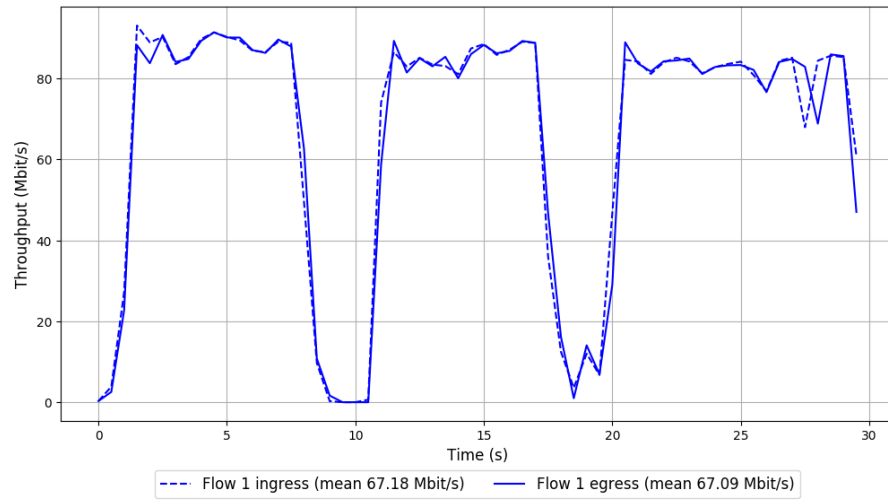
-- Flow 1:

Average throughput: 67.09 Mbit/s

95th percentile per-packet one-way delay: 86.898 ms

Loss rate: 0.72%

Run 9: Report of QUIC Cubic — Data Link

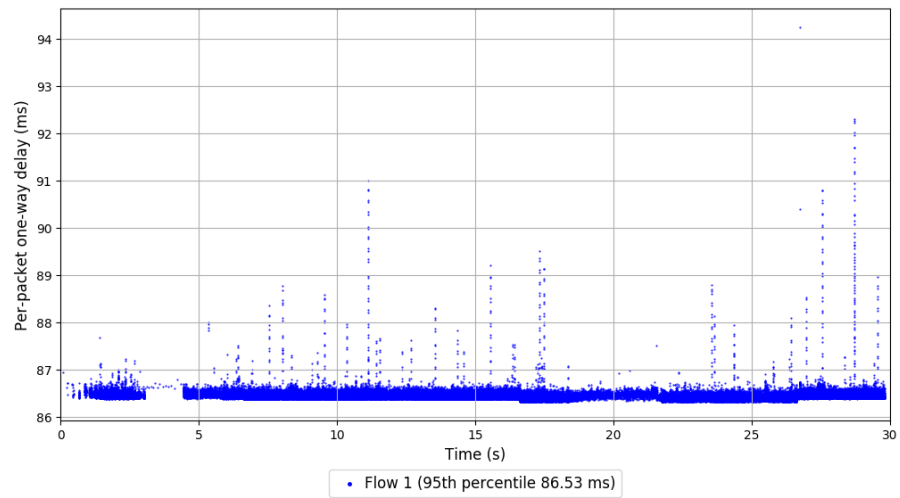
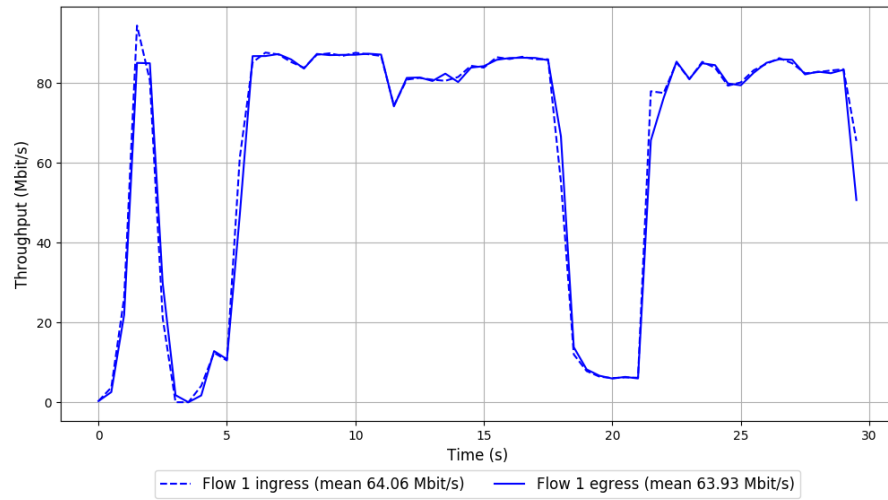


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-17 22:41:24
End at: 2017-09-17 22:41:54

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.93 Mbit/s
95th percentile per-packet one-way delay: 86.530 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 63.93 Mbit/s
95th percentile per-packet one-way delay: 86.530 ms
Loss rate: 0.78%
```

Run 10: Report of QUIC Cubic — Data Link

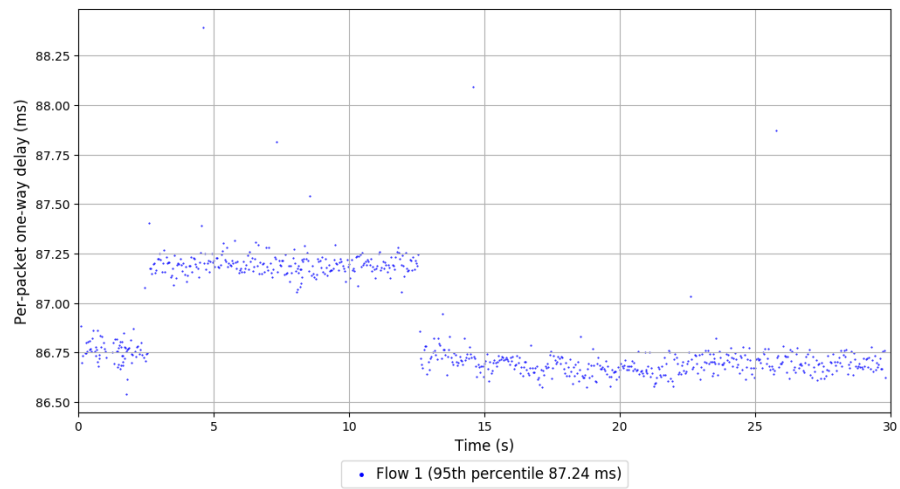
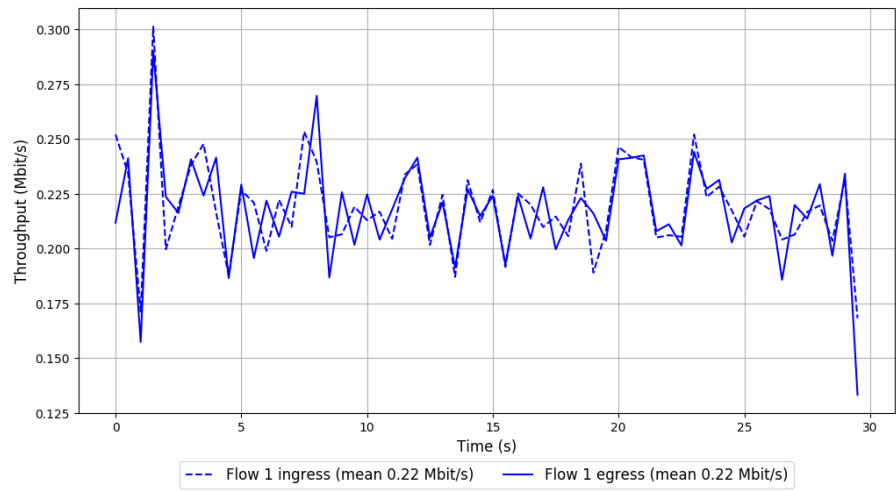


```
Run 1: Statistics of SCReAM

Start at: 2017-09-17 20:54:48
End at: 2017-09-17 20:55:18

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.241 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.241 ms
Loss rate: 0.52%
```

Run 1: Report of SCRaM — Data Link

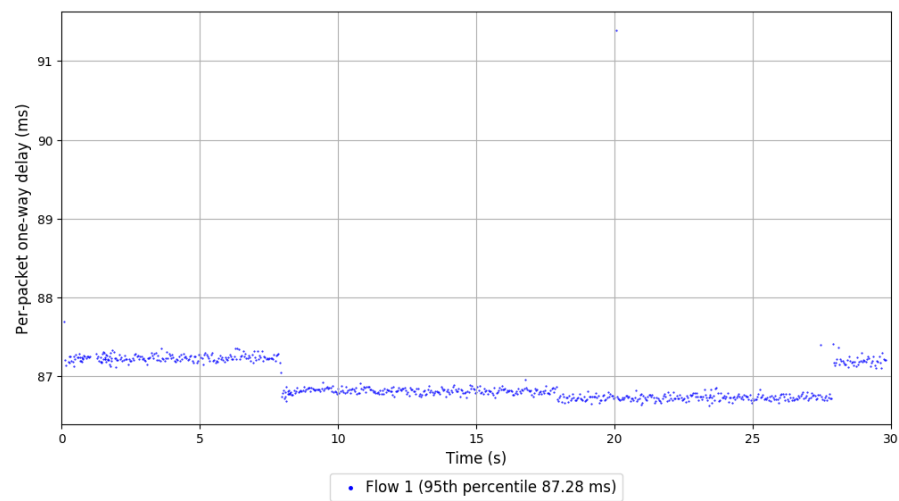
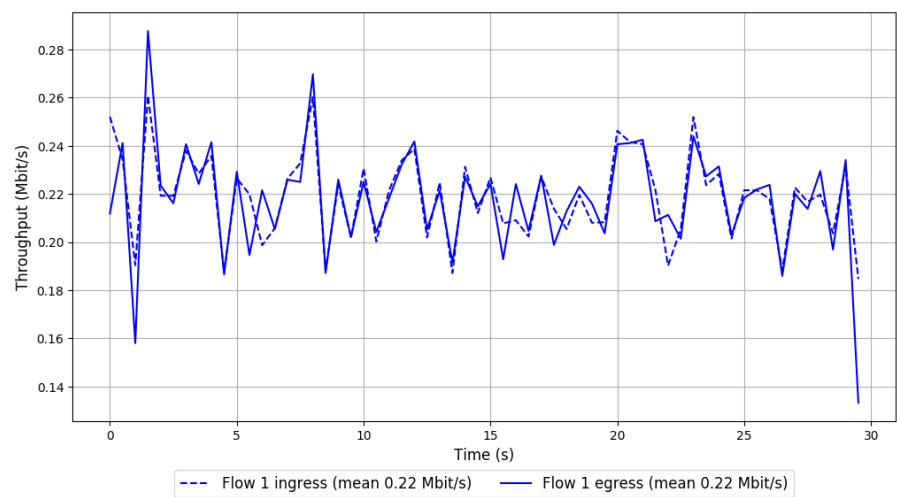


```
Run 2: Statistics of SCReAM

Start at: 2017-09-17 21:06:23
End at: 2017-09-17 21:06:53

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.278 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.278 ms
Loss rate: 0.64%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-09-17 21:17:53

End at: 2017-09-17 21:18:23

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 86.878 ms

Loss rate: 1.30%

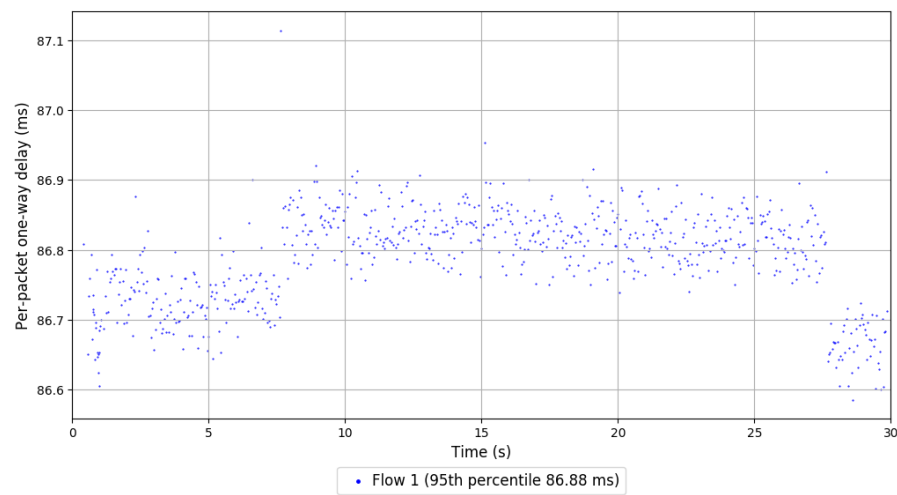
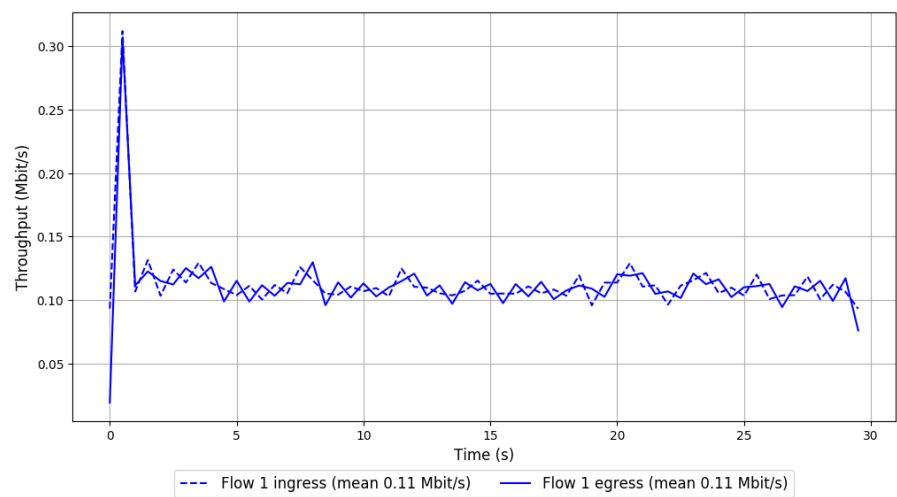
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 86.878 ms

Loss rate: 1.30%

Run 3: Report of SCRaM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-09-17 21:29:46

End at: 2017-09-17 21:30:16

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.035 ms

Loss rate: 0.51%

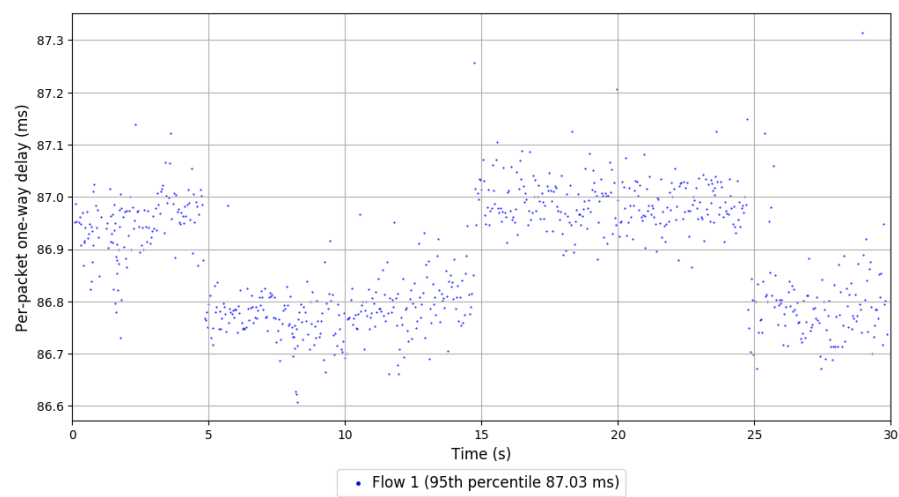
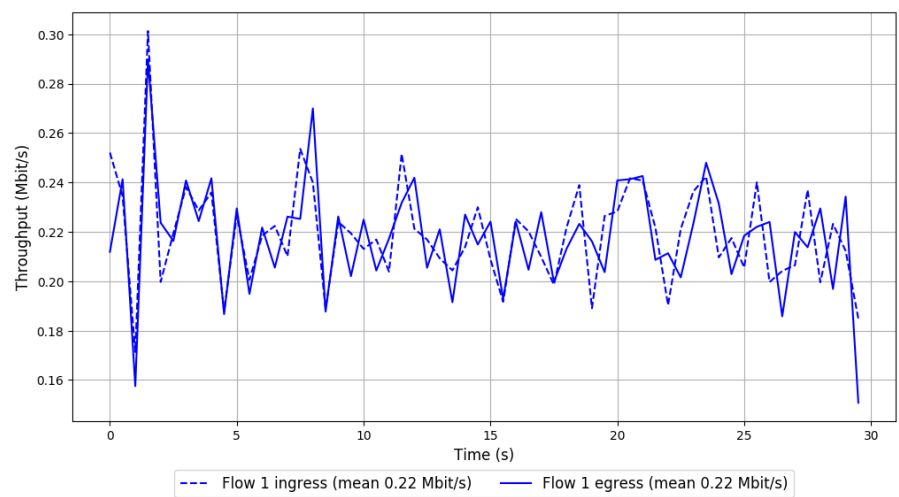
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.035 ms

Loss rate: 0.51%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-09-17 21:41:13

End at: 2017-09-17 21:41:43

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.329 ms

Loss rate: 0.64%

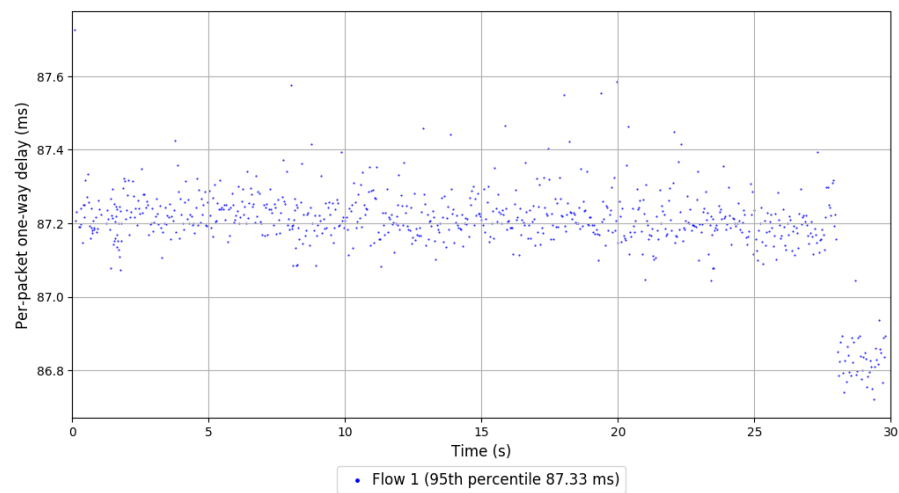
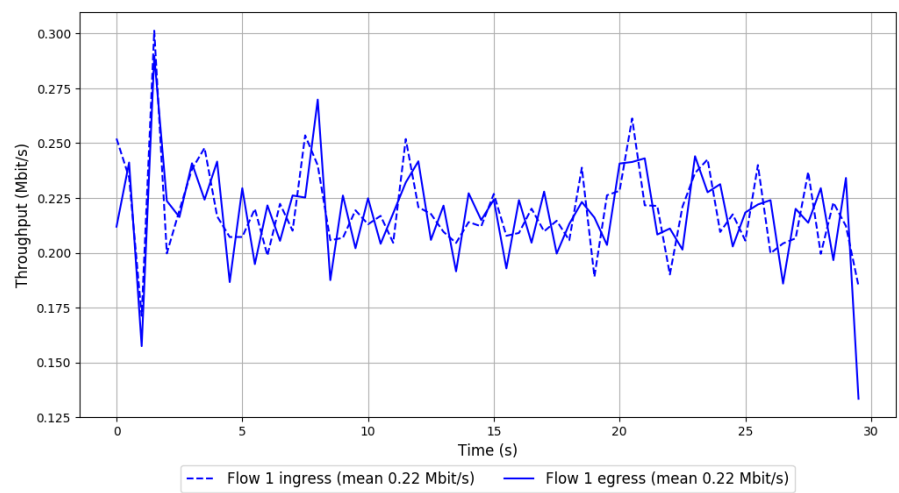
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.329 ms

Loss rate: 0.64%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-09-17 21:53:04

End at: 2017-09-17 21:53:34

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.875 ms

Loss rate: 0.51%

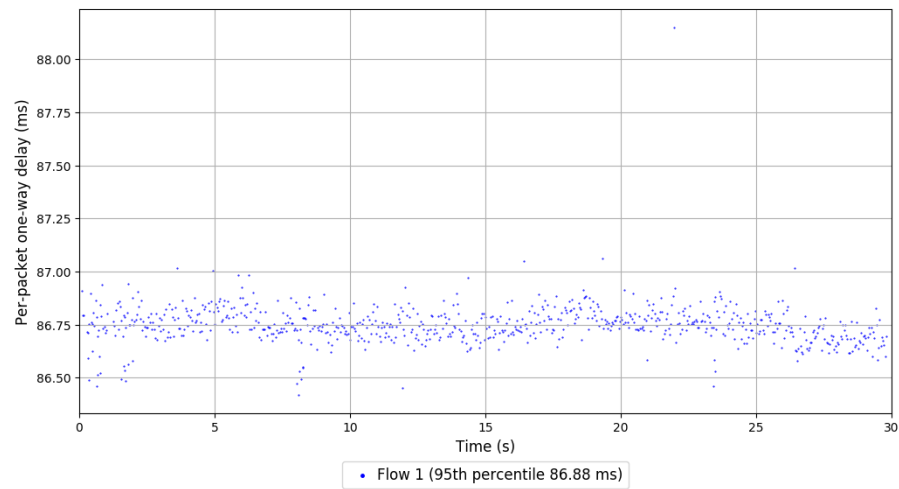
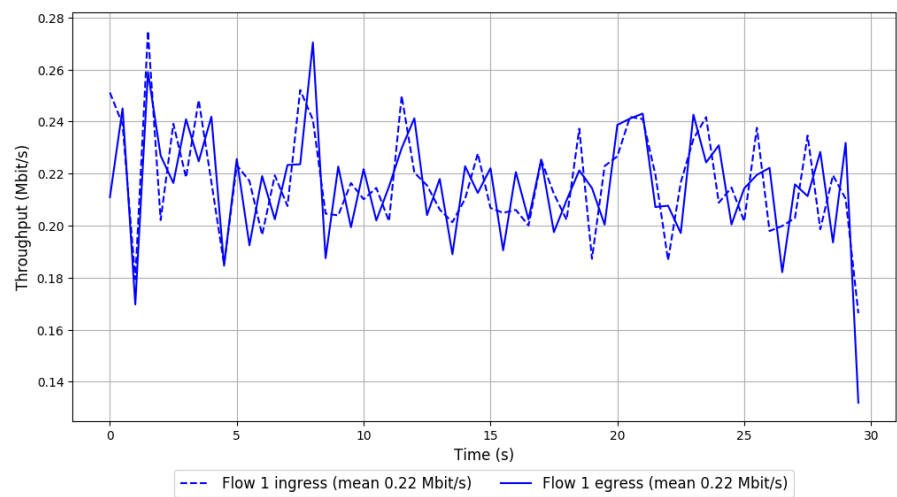
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.875 ms

Loss rate: 0.51%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-09-17 22:05:05

End at: 2017-09-17 22:05:35

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.000 ms

Loss rate: 0.64%

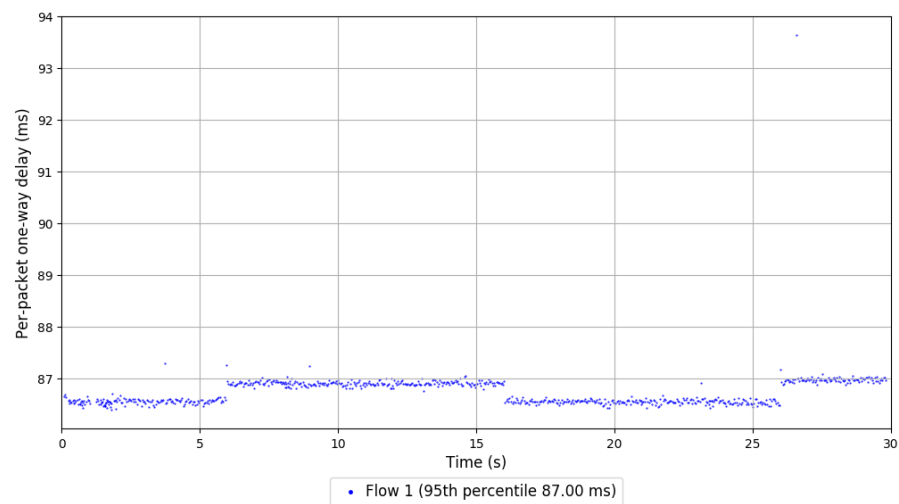
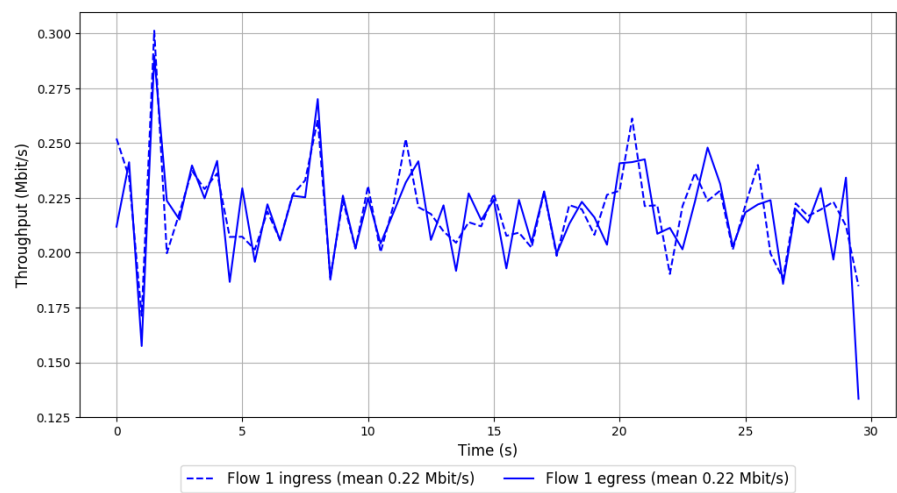
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.000 ms

Loss rate: 0.64%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-09-17 22:16:44

End at: 2017-09-17 22:17:14

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.164 ms

Loss rate: 0.51%

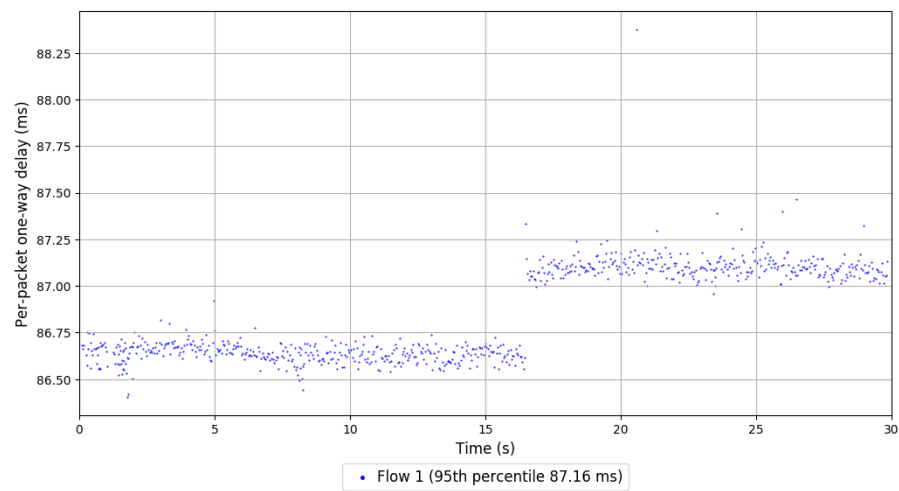
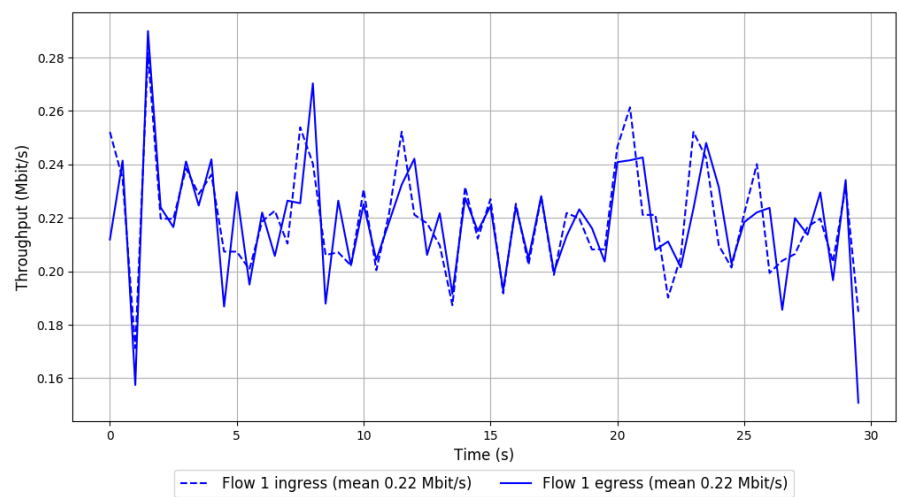
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.164 ms

Loss rate: 0.51%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-09-17 22:28:19

End at: 2017-09-17 22:28:49

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.155 ms

Loss rate: 0.51%

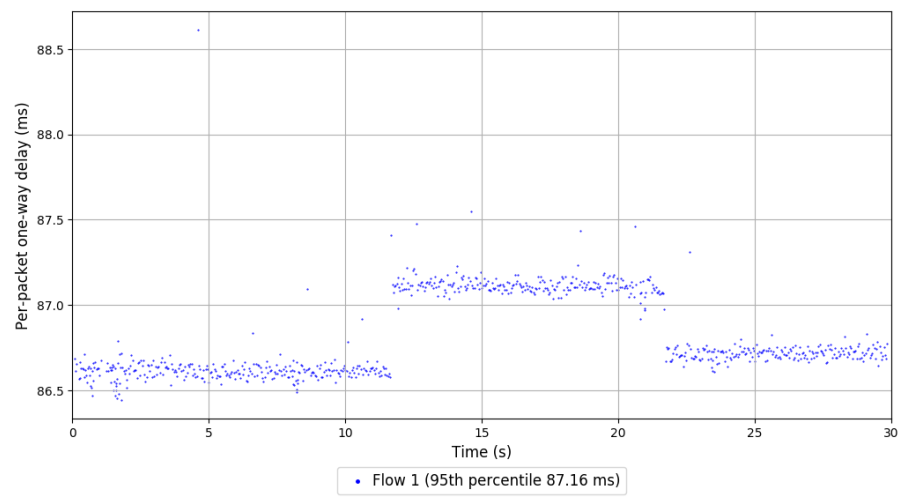
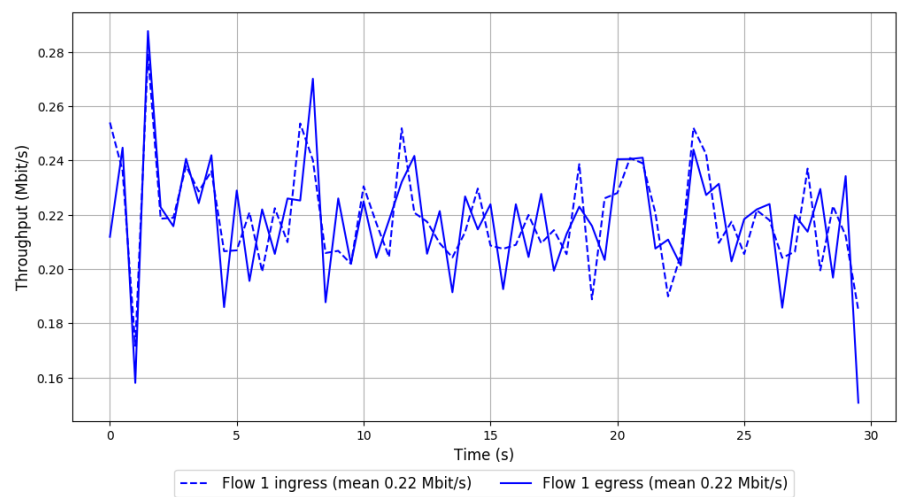
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.155 ms

Loss rate: 0.51%

Run 9: Report of SReAM — Data Link

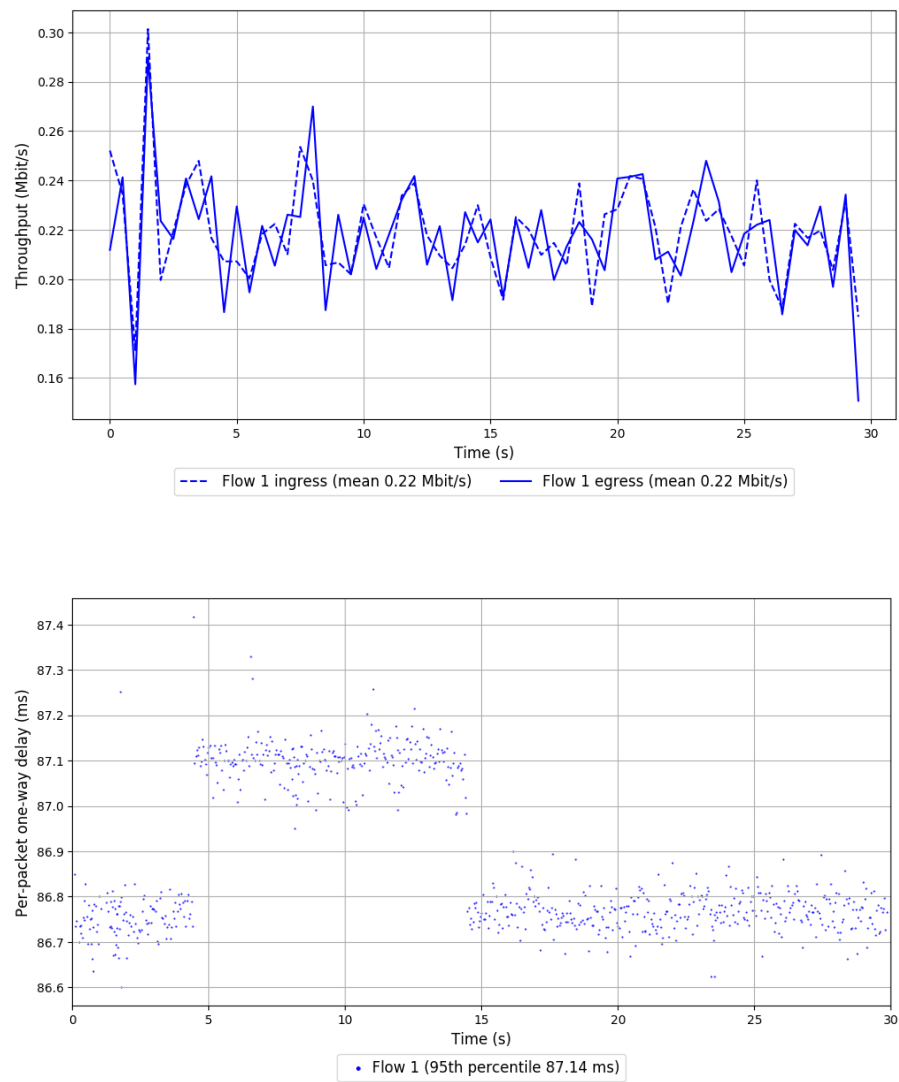


```
Run 10: Statistics of SReAM

Start at: 2017-09-17 22:40:06
End at: 2017-09-17 22:40:36

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.137 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.137 ms
Loss rate: 0.51%
```

Run 10: Report of SReAM — Data Link

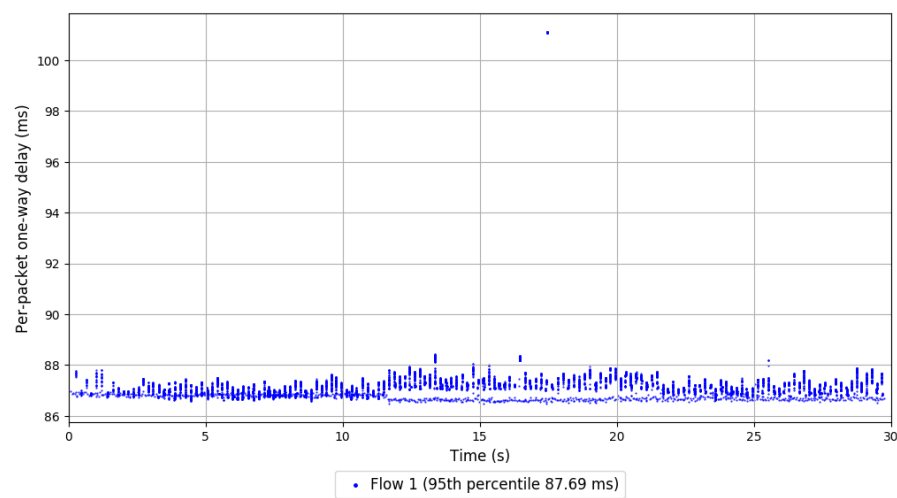
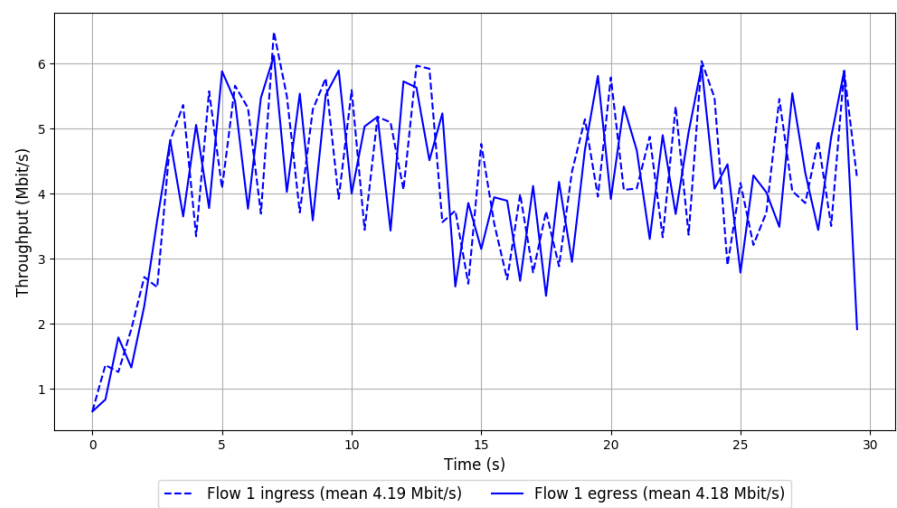


```
Run 1: Statistics of Sprout

Start at: 2017-09-17 20:59:09
End at: 2017-09-17 20:59:39

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 87.695 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 87.695 ms
Loss rate: 0.93%
```


Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-09-17 21:10:49

End at: 2017-09-17 21:11:19

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 87.641 ms

Loss rate: 0.85%

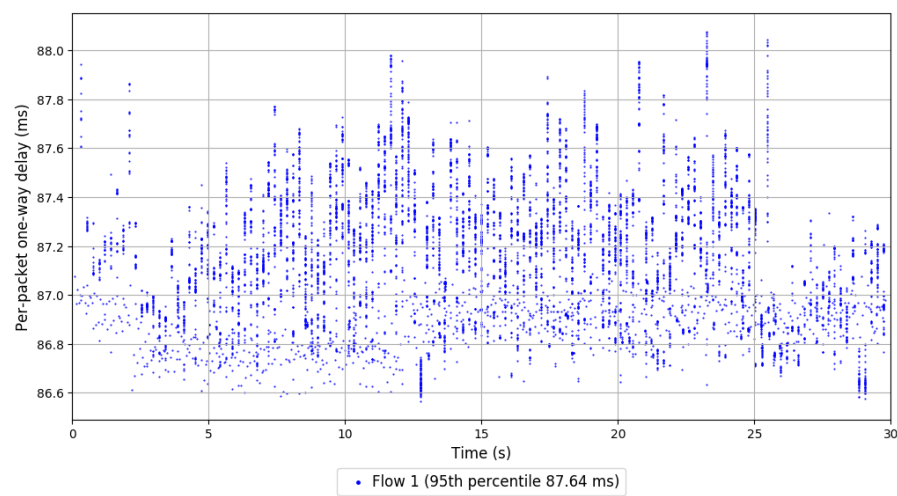
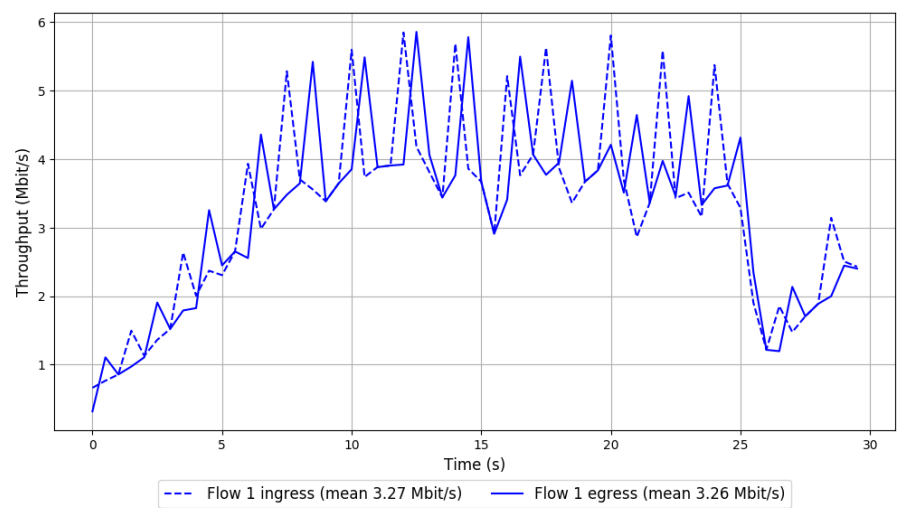
-- Flow 1:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 87.641 ms

Loss rate: 0.85%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-09-17 21:22:17

End at: 2017-09-17 21:22:47

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 87.400 ms

Loss rate: 0.69%

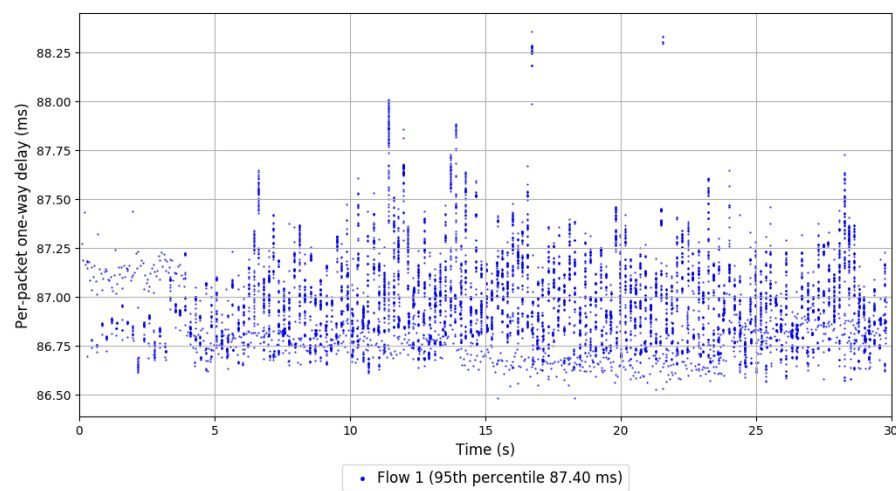
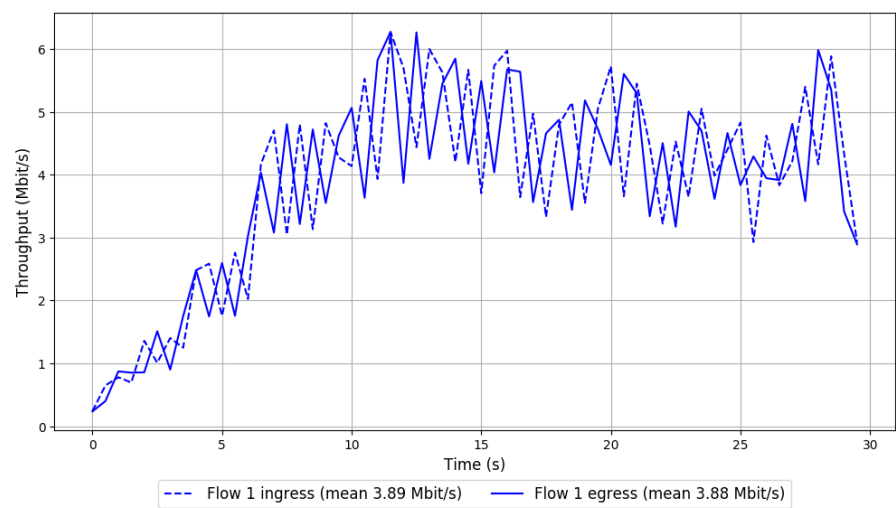
-- Flow 1:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 87.400 ms

Loss rate: 0.69%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-09-17 21:34:10

End at: 2017-09-17 21:34:40

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 87.463 ms

Loss rate: 0.54%

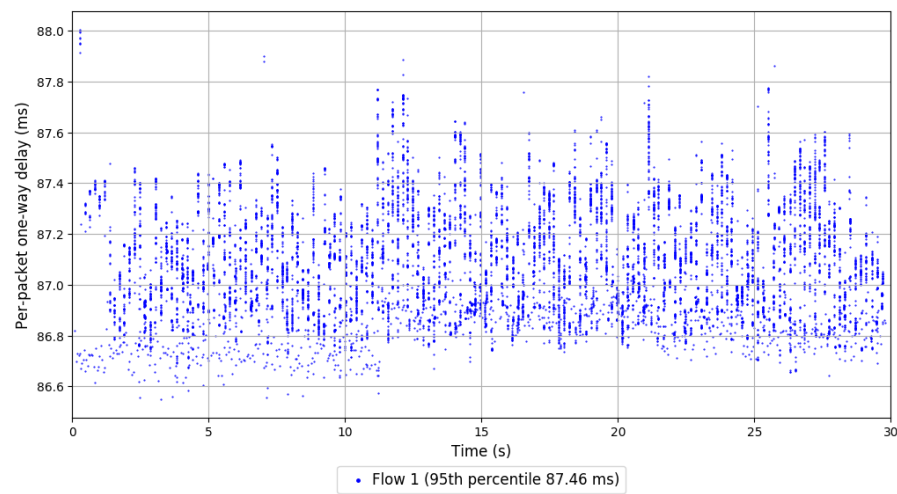
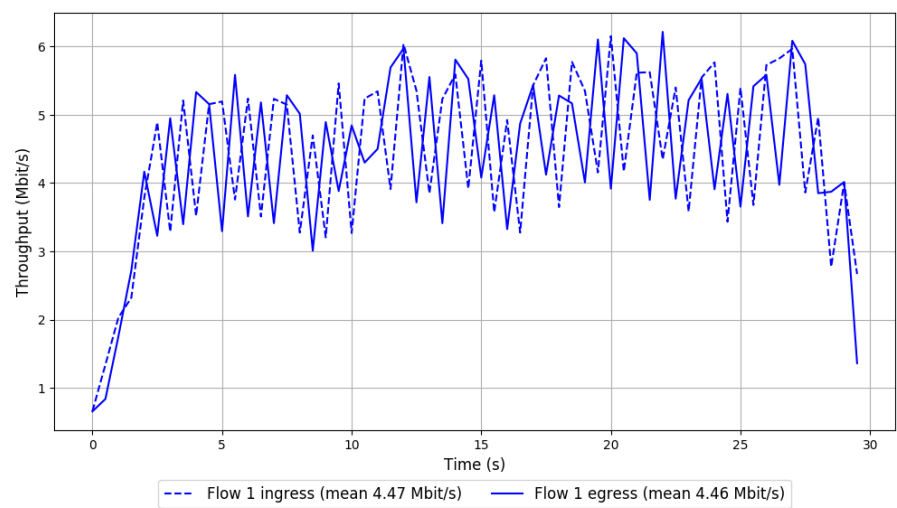
-- Flow 1:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 87.463 ms

Loss rate: 0.54%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-09-17 21:45:36

End at: 2017-09-17 21:46:06

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 87.713 ms

Loss rate: 0.97%

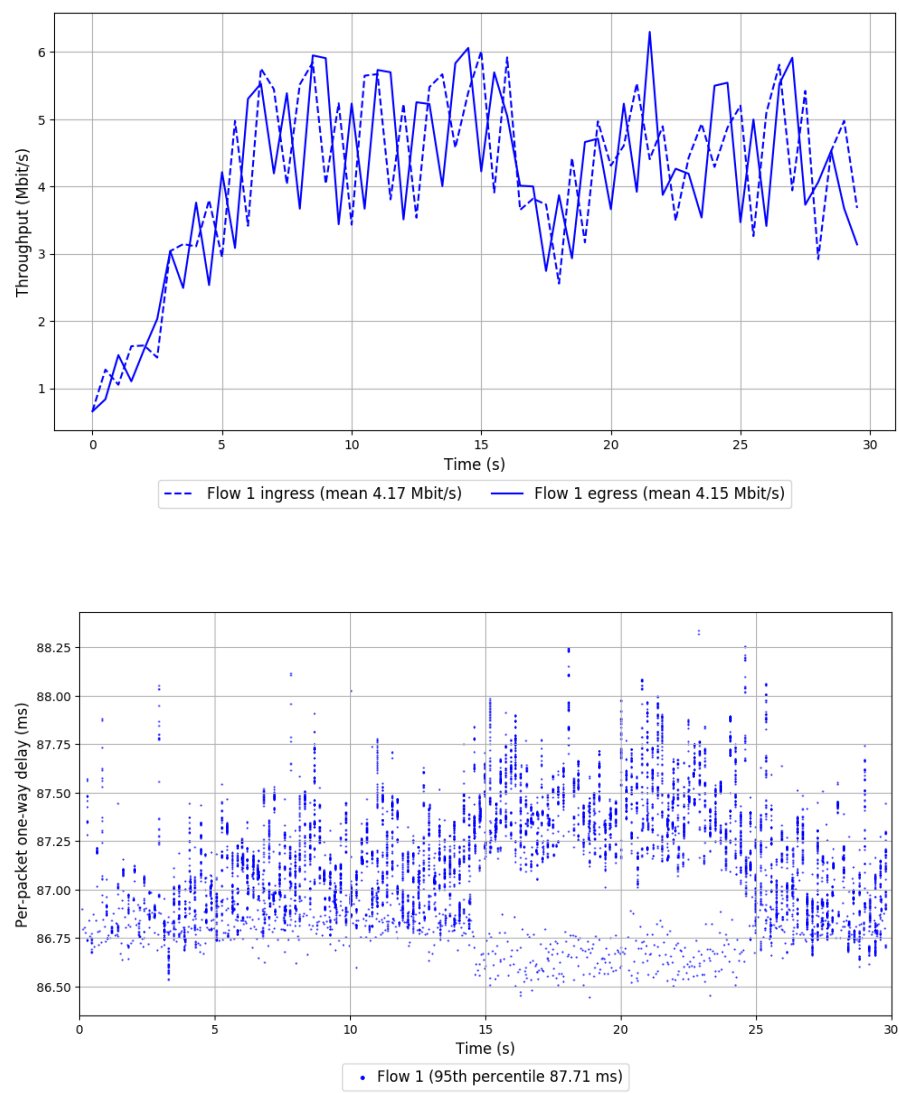
-- Flow 1:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 87.713 ms

Loss rate: 0.97%

Run 5: Report of Sprout — Data Link

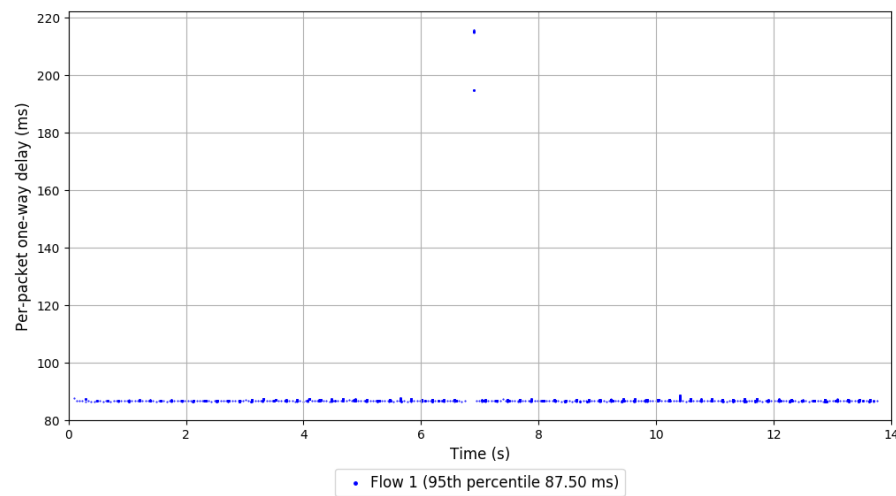
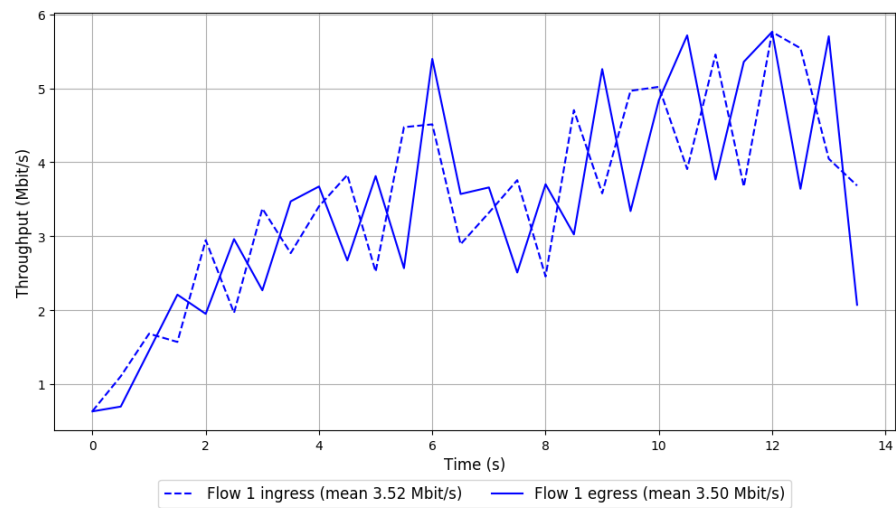


Run 6: Statistics of Sprout

Start at: 2017-09-17 21:57:30

End at: 2017-09-17 21:58:00

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-09-17 22:09:33

End at: 2017-09-17 22:10:03

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 87.482 ms

Loss rate: 0.76%

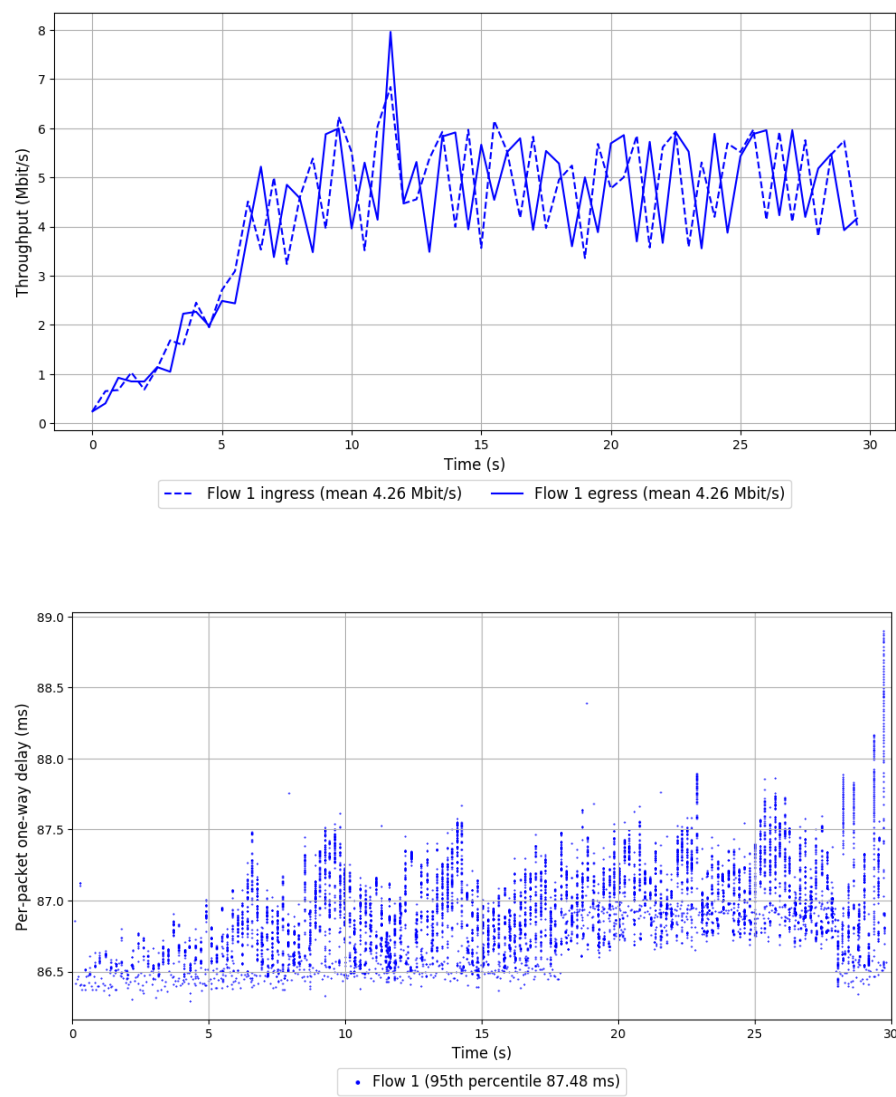
-- Flow 1:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 87.482 ms

Loss rate: 0.76%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-09-17 22:21:12

End at: 2017-09-17 22:21:42

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 87.583 ms

Loss rate: 0.70%

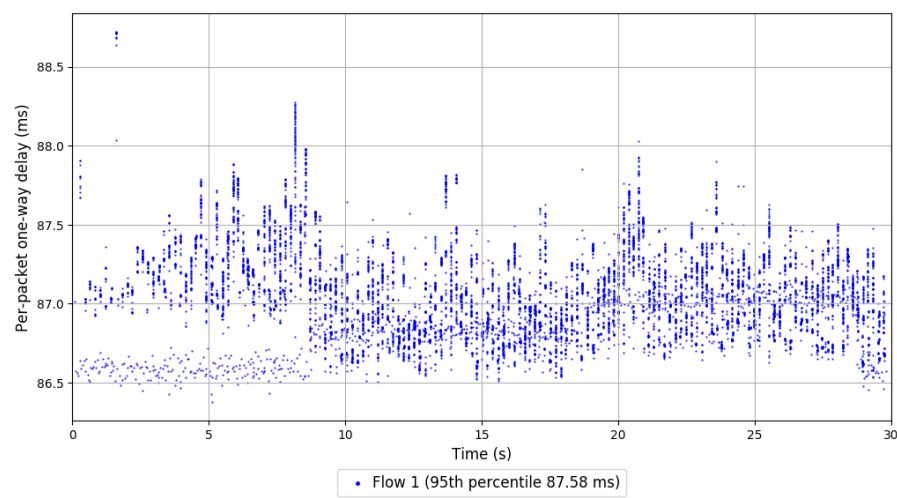
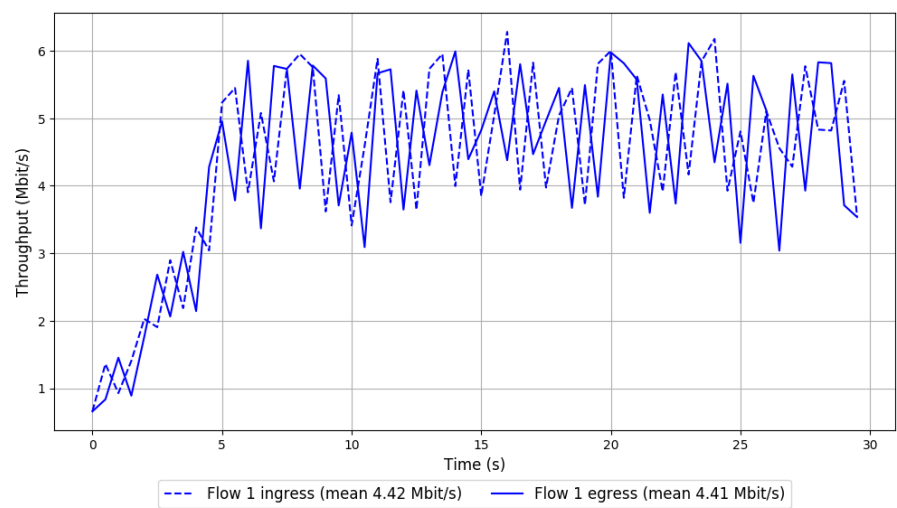
-- Flow 1:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 87.583 ms

Loss rate: 0.70%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-09-17 22:32:46

End at: 2017-09-17 22:33:16

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 87.566 ms

Loss rate: 1.29%

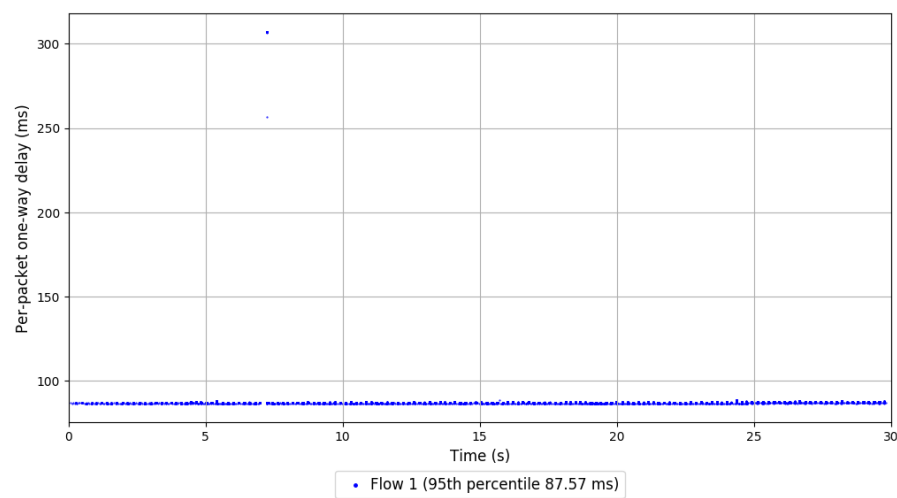
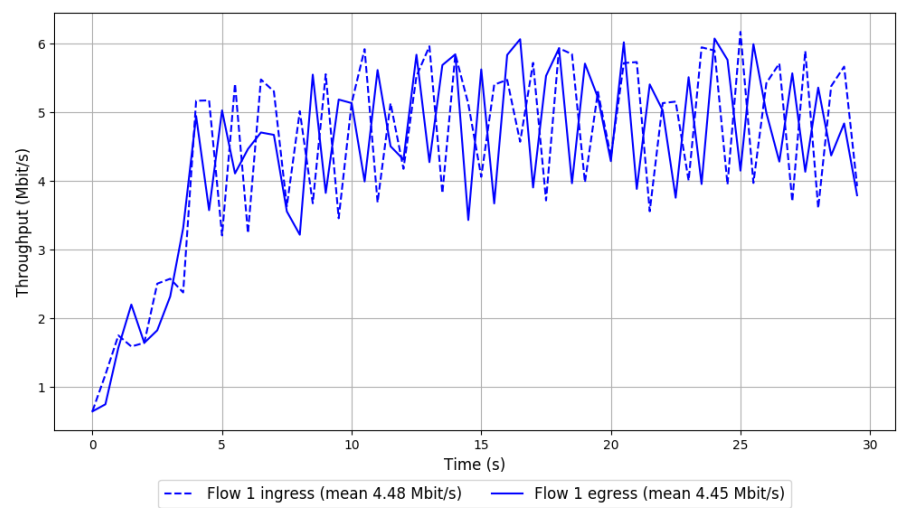
-- Flow 1:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 87.566 ms

Loss rate: 1.29%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-09-17 22:44:33

End at: 2017-09-17 22:45:04

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 87.876 ms

Loss rate: 1.61%

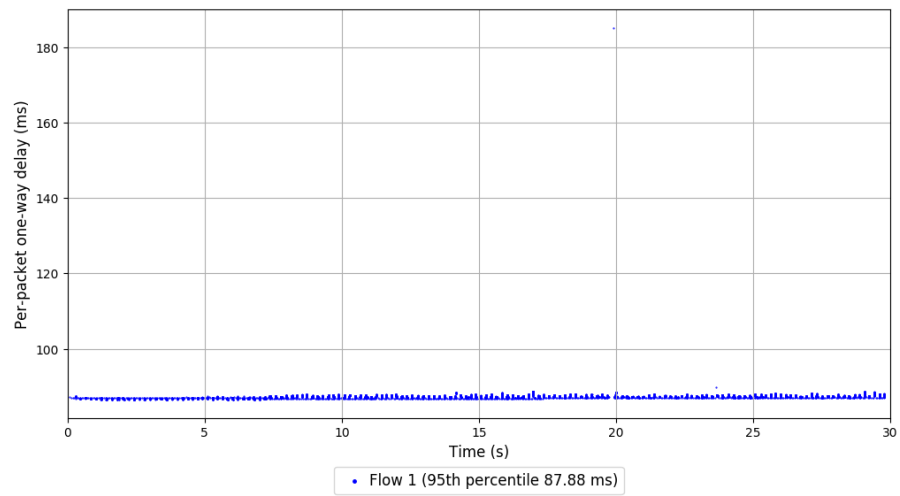
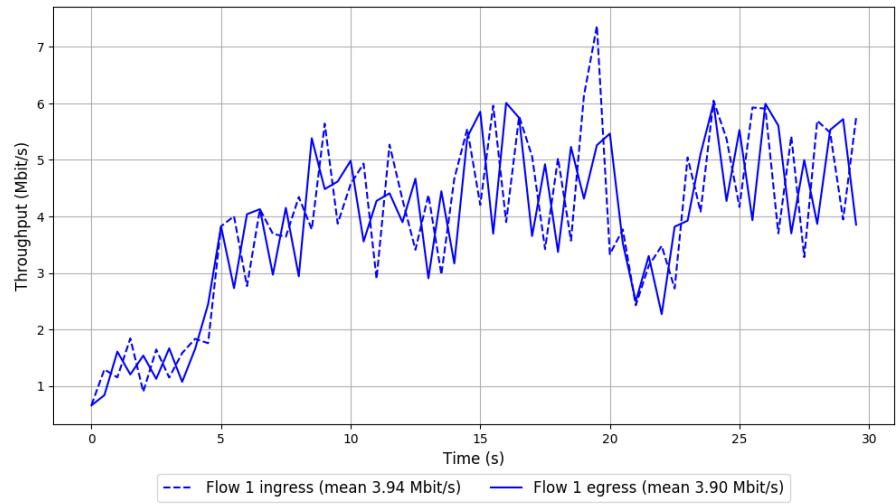
-- Flow 1:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 87.876 ms

Loss rate: 1.61%

Run 10: Report of Sprout — Data Link

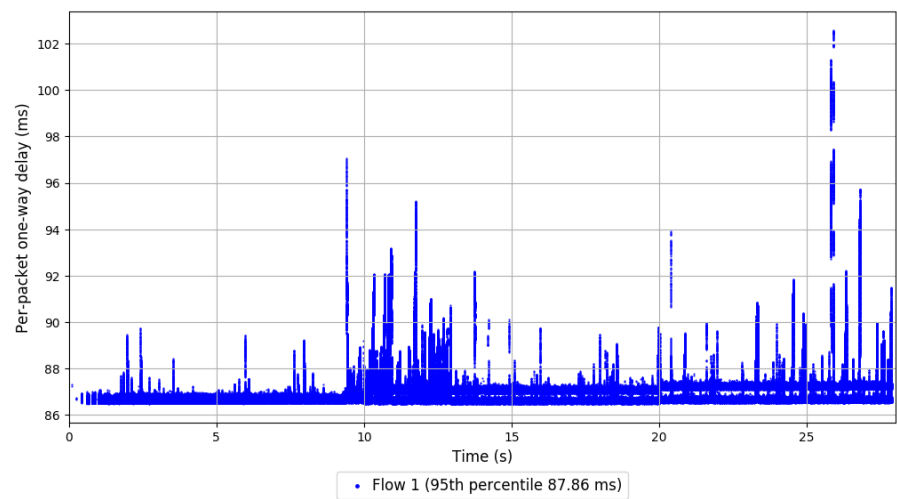
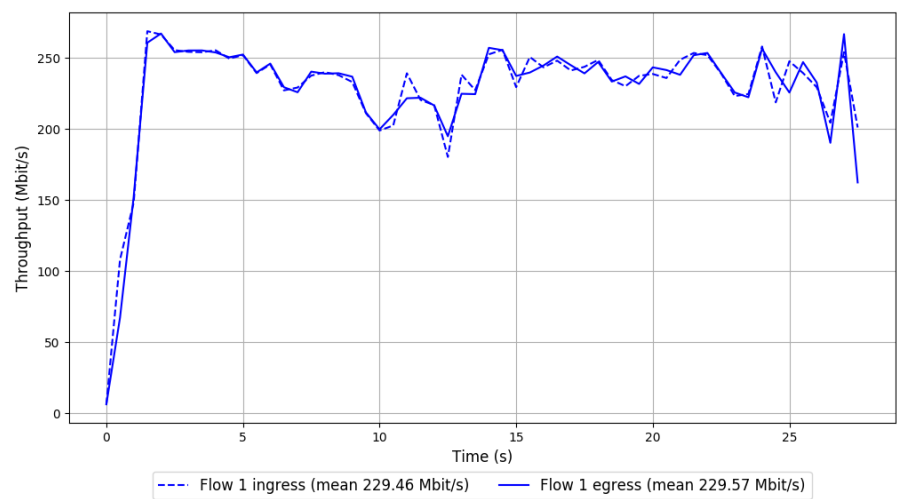


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-09-17 20:59:49
End at: 2017-09-17 21:00:19

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 229.57 Mbit/s
95th percentile per-packet one-way delay: 87.857 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 229.57 Mbit/s
95th percentile per-packet one-way delay: 87.857 ms
Loss rate: 0.58%
```

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

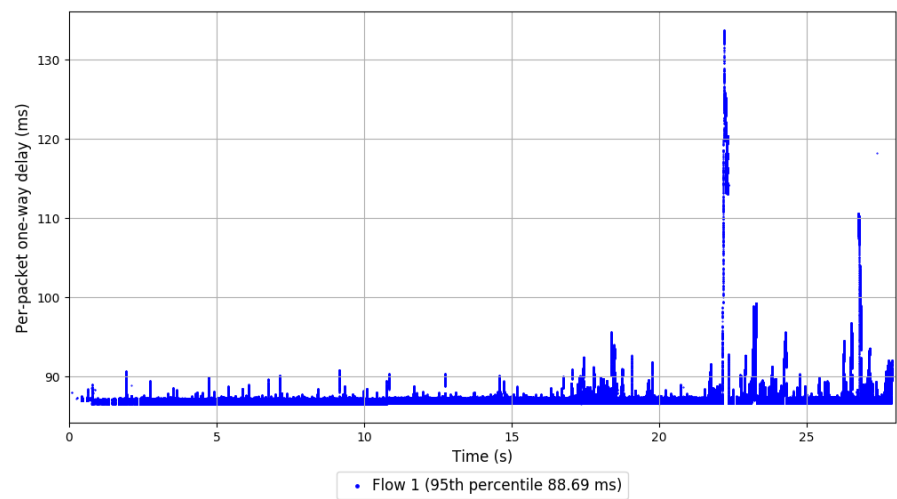
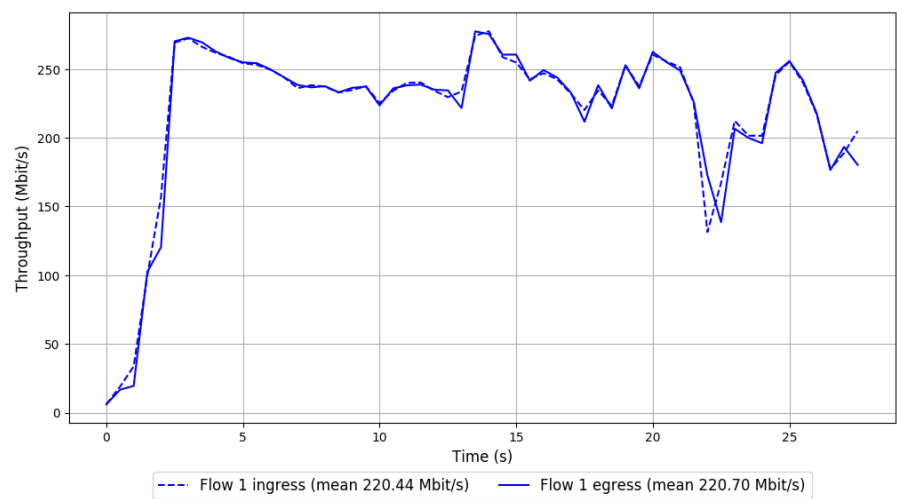


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-09-17 21:11:28
End at: 2017-09-17 21:11:58

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.70 Mbit/s
95th percentile per-packet one-way delay: 88.692 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 220.70 Mbit/s
95th percentile per-packet one-way delay: 88.692 ms
Loss rate: 0.51%
```

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

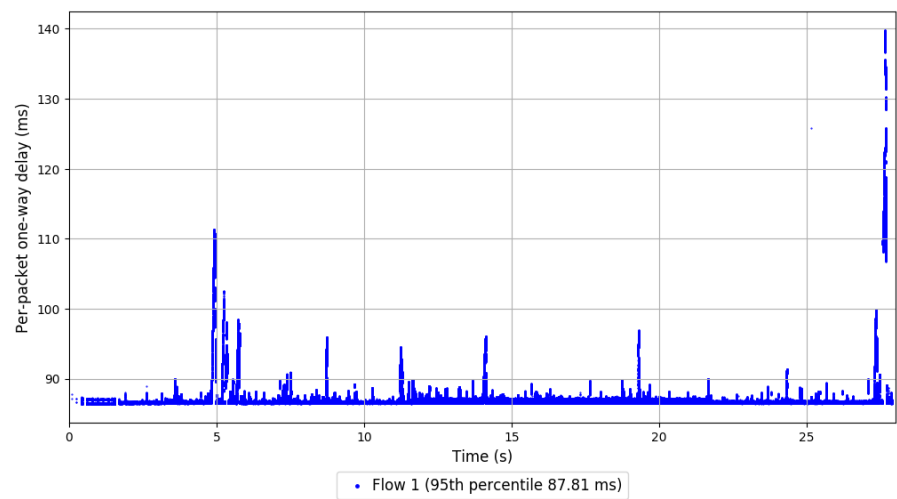
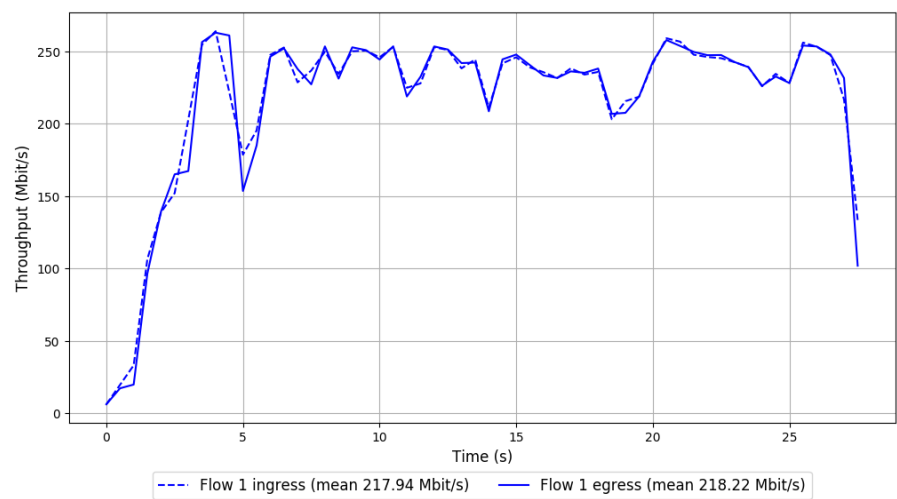


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-09-17 21:22:57
End at: 2017-09-17 21:23:27

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.22 Mbit/s
95th percentile per-packet one-way delay: 87.814 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 218.22 Mbit/s
95th percentile per-packet one-way delay: 87.814 ms
Loss rate: 0.50%
```


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



Run 4: Statistics of TaoVA-100x

Start at: 2017-09-17 21:34:49

End at: 2017-09-17 21:35:19

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.41 Mbit/s

95th percentile per-packet one-way delay: 87.746 ms

Loss rate: 0.68%

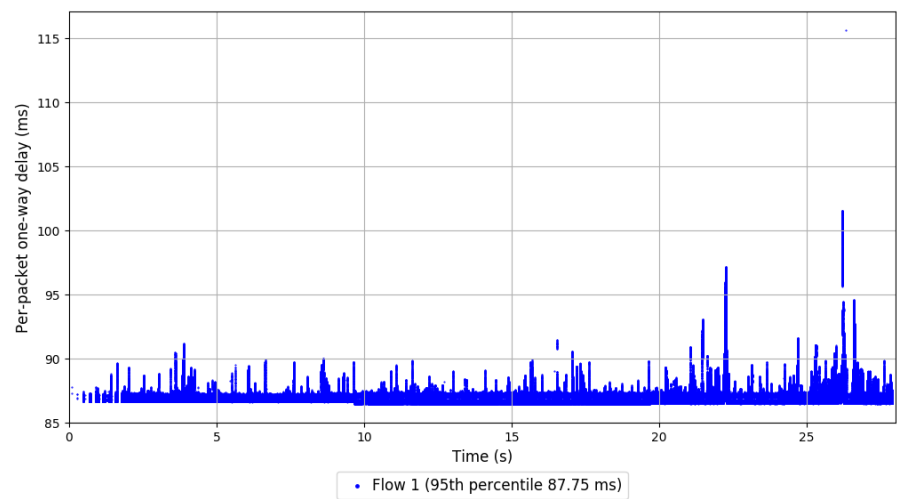
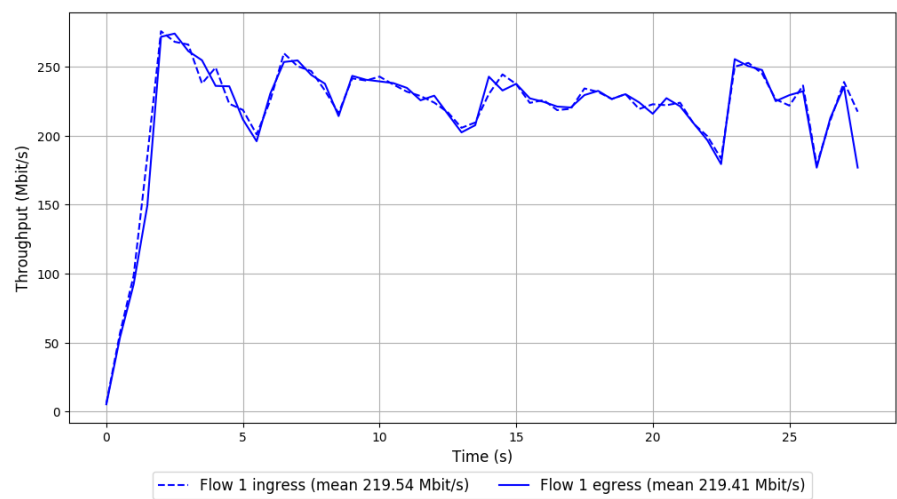
-- Flow 1:

Average throughput: 219.41 Mbit/s

95th percentile per-packet one-way delay: 87.746 ms

Loss rate: 0.68%

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

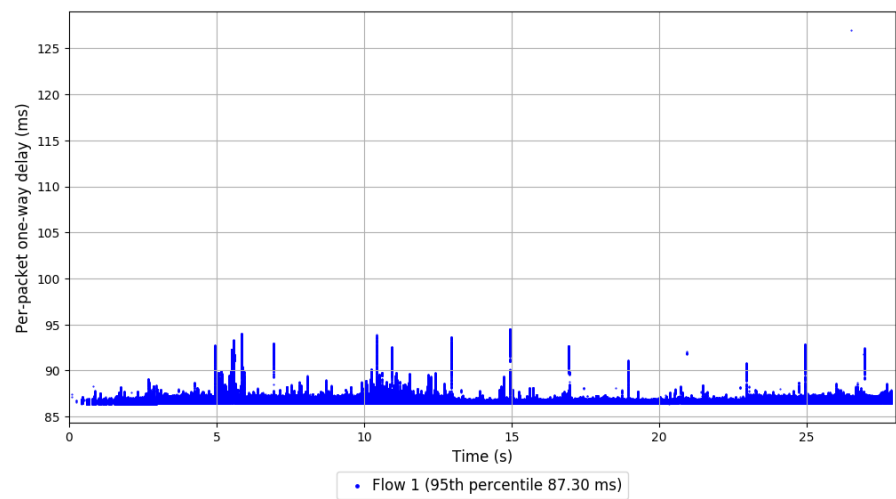
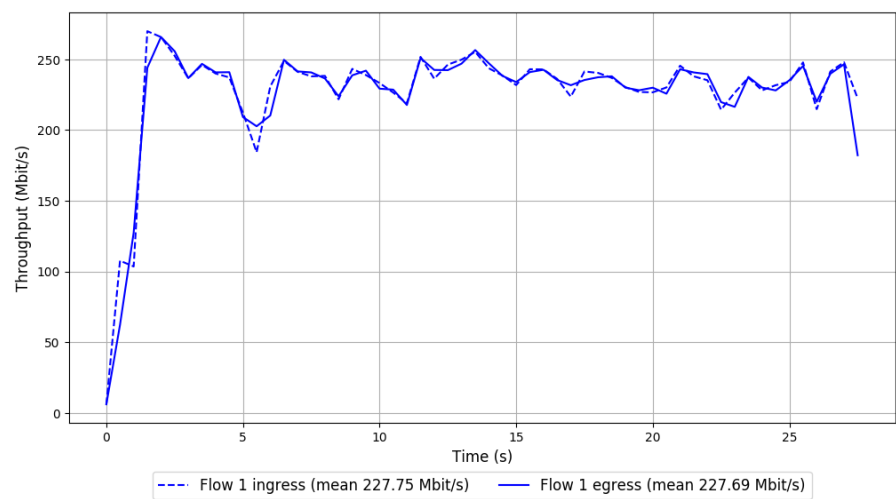


```
Run 5: Statistics of TaoVA-100x

Start at: 2017-09-17 21:46:16
End at: 2017-09-17 21:46:46

# Below is generated by plot.py at 2017-09-18 01:31:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 227.69 Mbit/s
95th percentile per-packet one-way delay: 87.299 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 227.69 Mbit/s
95th percentile per-packet one-way delay: 87.299 ms
Loss rate: 0.65%
```

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-09-17 21:58:10

End at: 2017-09-17 21:58:40

Below is generated by plot.py at 2017-09-18 01:31:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.43 Mbit/s

95th percentile per-packet one-way delay: 91.132 ms

Loss rate: 0.63%

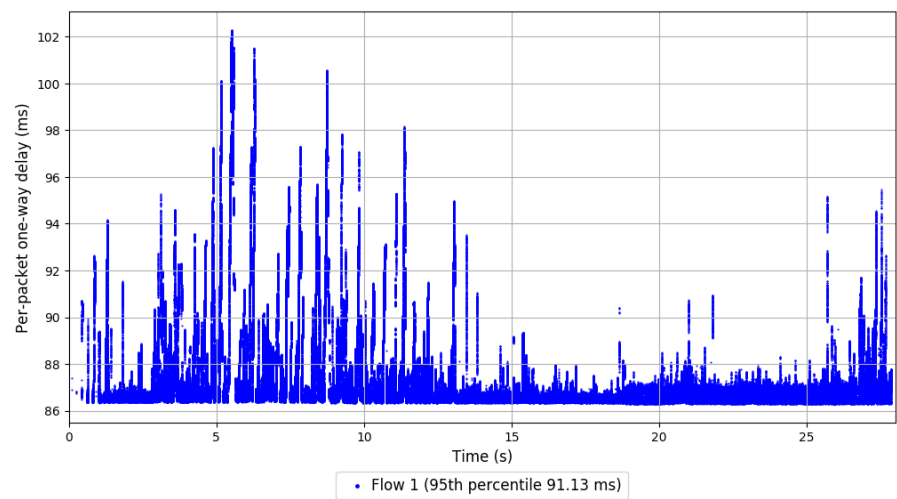
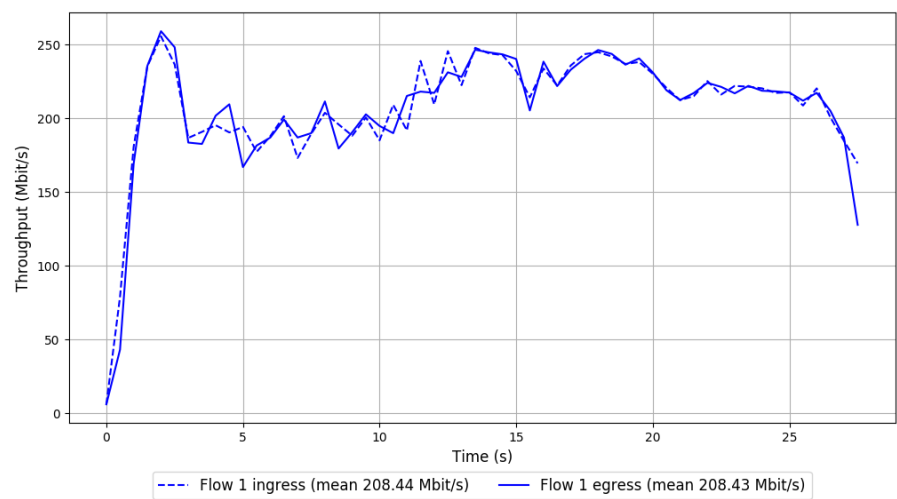
-- Flow 1:

Average throughput: 208.43 Mbit/s

95th percentile per-packet one-way delay: 91.132 ms

Loss rate: 0.63%

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

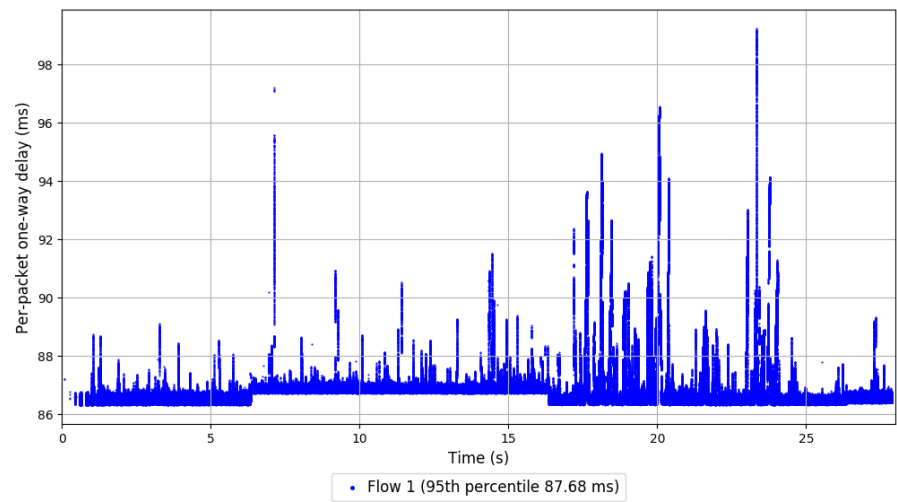
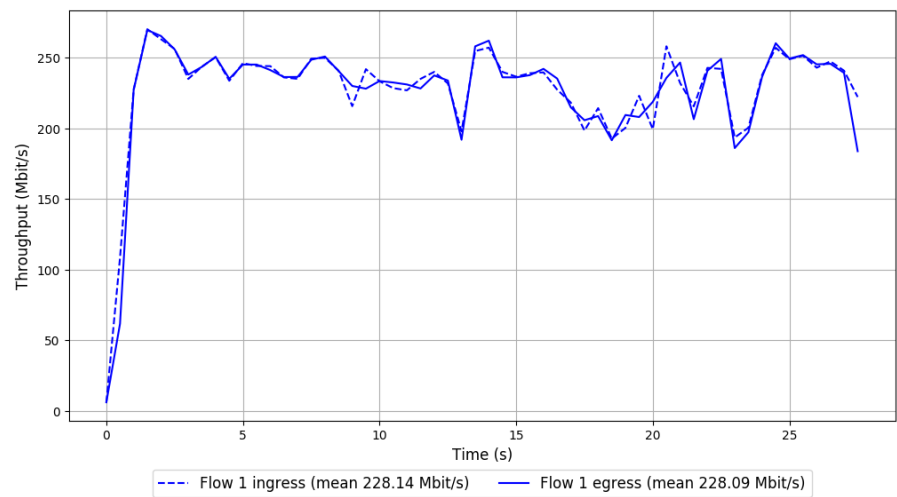


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-09-17 22:10:13
End at: 2017-09-17 22:10:43

# Below is generated by plot.py at 2017-09-18 01:36:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.09 Mbit/s
95th percentile per-packet one-way delay: 87.681 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 228.09 Mbit/s
95th percentile per-packet one-way delay: 87.681 ms
Loss rate: 0.65%
```


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



Run 8: Statistics of TaoVA-100x

Start at: 2017-09-17 22:21:52

End at: 2017-09-17 22:22:22

Below is generated by plot.py at 2017-09-18 01:36:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.49 Mbit/s

95th percentile per-packet one-way delay: 88.833 ms

Loss rate: 0.71%

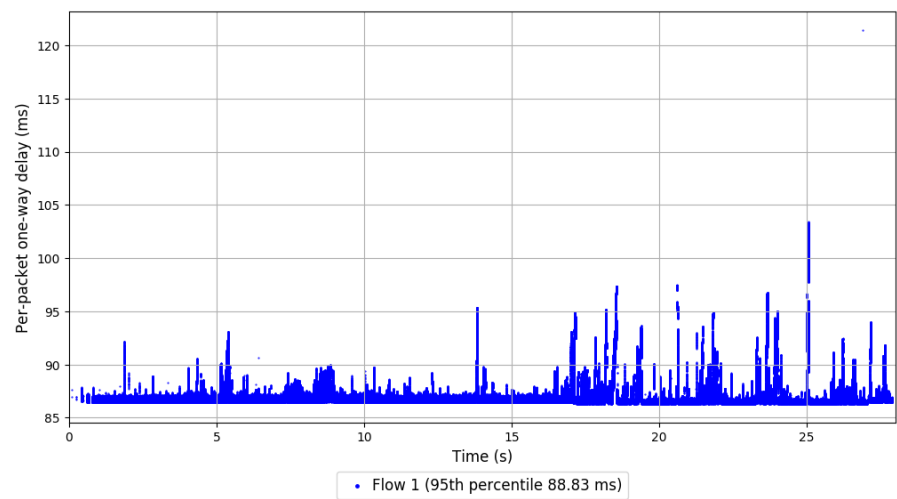
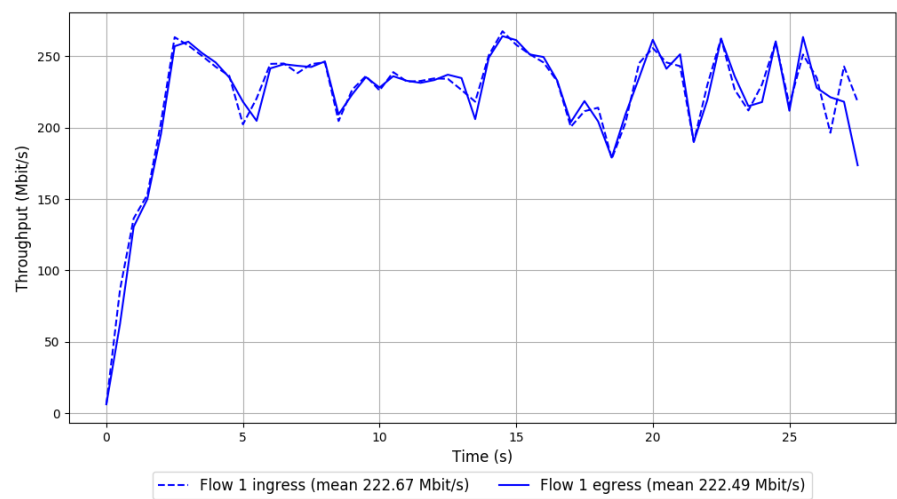
-- Flow 1:

Average throughput: 222.49 Mbit/s

95th percentile per-packet one-way delay: 88.833 ms

Loss rate: 0.71%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-09-17 22:33:26

End at: 2017-09-17 22:33:56

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.69 Mbit/s

95th percentile per-packet one-way delay: 86.741 ms

Loss rate: 0.67%

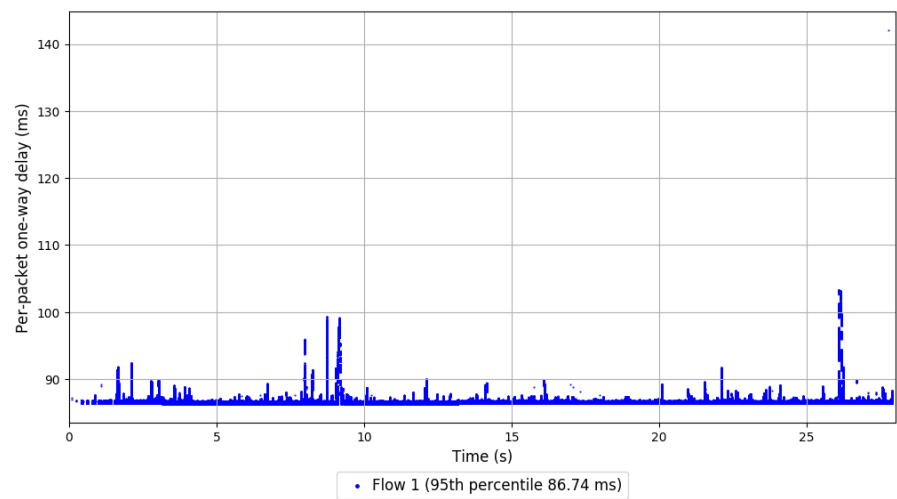
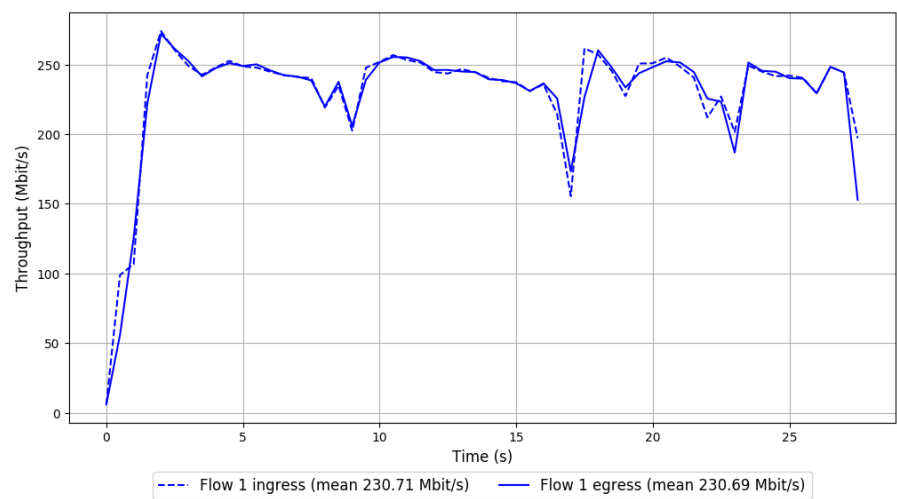
-- Flow 1:

Average throughput: 230.69 Mbit/s

95th percentile per-packet one-way delay: 86.741 ms

Loss rate: 0.67%

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

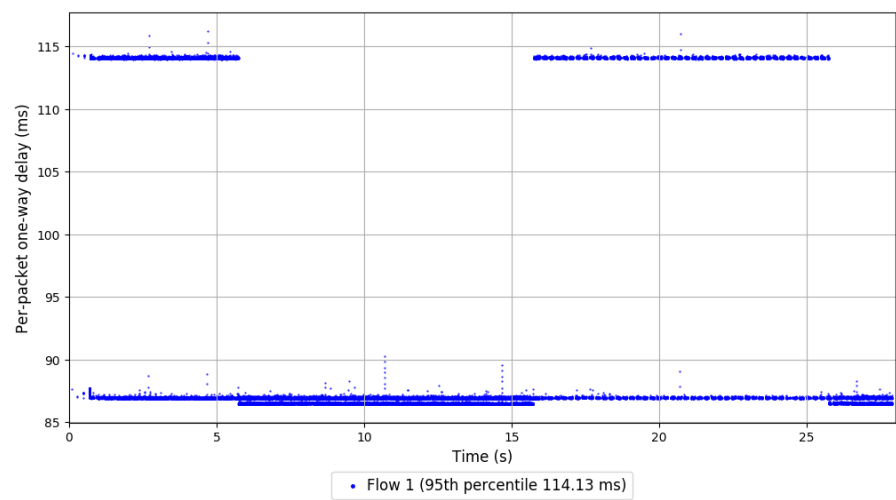
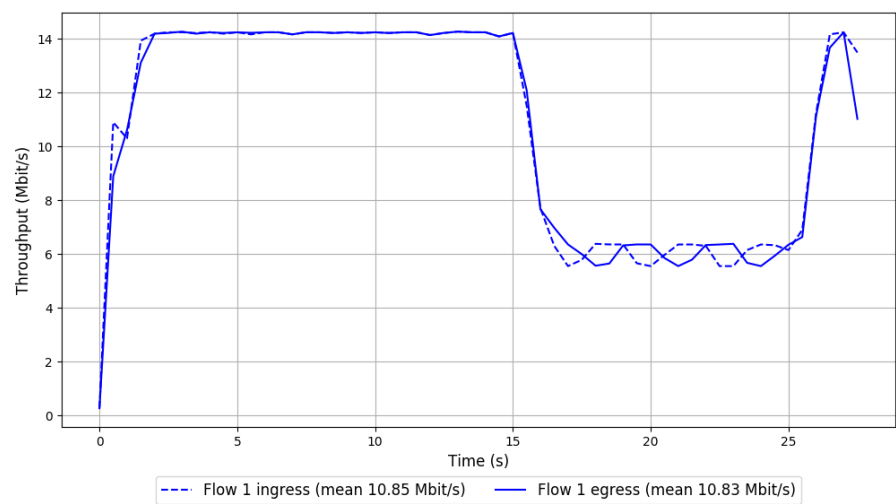


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-09-17 22:45:13
End at: 2017-09-17 22:45:43

# Below is generated by plot.py at 2017-09-18 01:37:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.83 Mbit/s
95th percentile per-packet one-way delay: 114.131 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 10.83 Mbit/s
95th percentile per-packet one-way delay: 114.131 ms
Loss rate: 0.81%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-09-17 20:56:45

End at: 2017-09-17 20:57:15

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.66 Mbit/s

95th percentile per-packet one-way delay: 87.682 ms

Loss rate: 0.83%

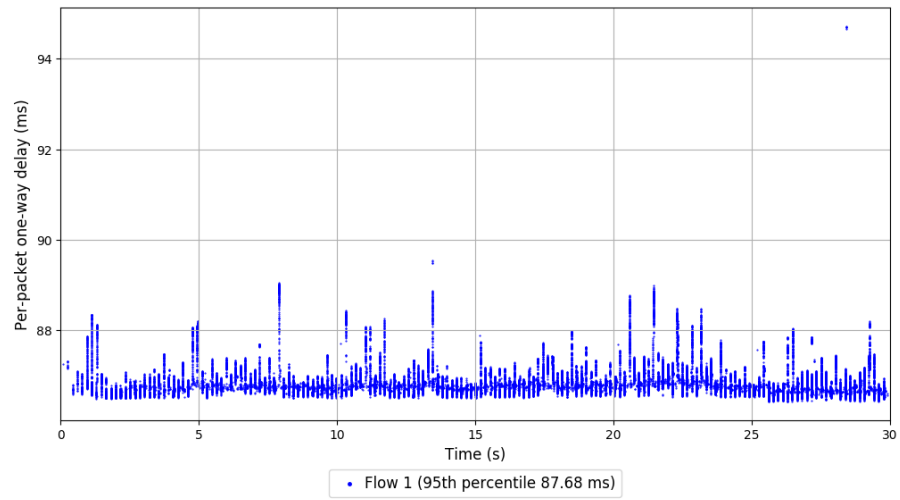
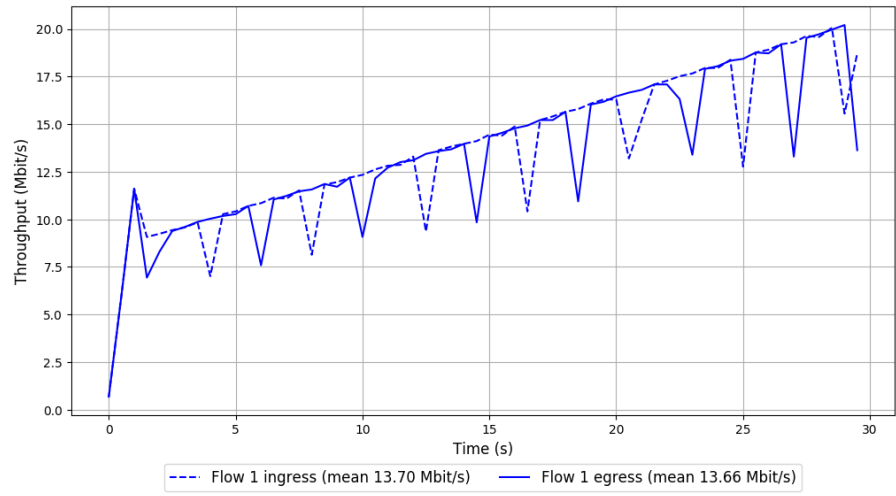
-- Flow 1:

Average throughput: 13.66 Mbit/s

95th percentile per-packet one-way delay: 87.682 ms

Loss rate: 0.83%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-09-17 21:08:24

End at: 2017-09-17 21:08:54

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.97 Mbit/s

95th percentile per-packet one-way delay: 88.653 ms

Loss rate: 0.29%

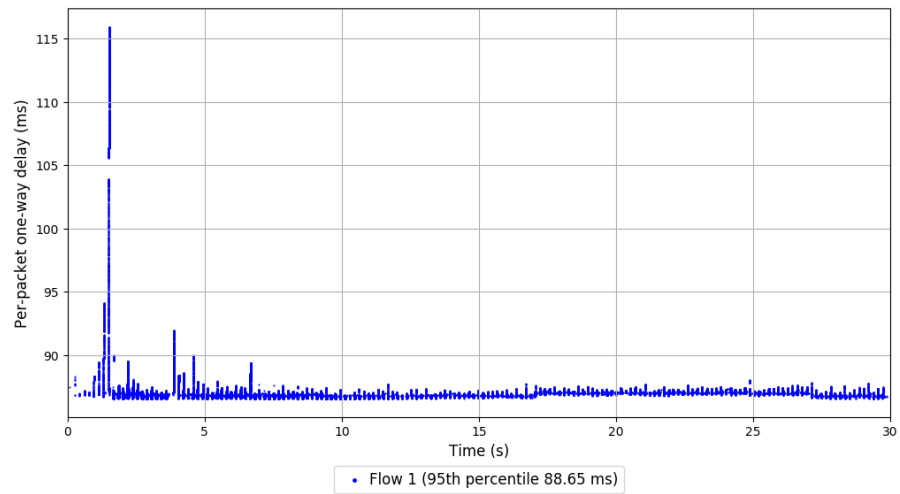
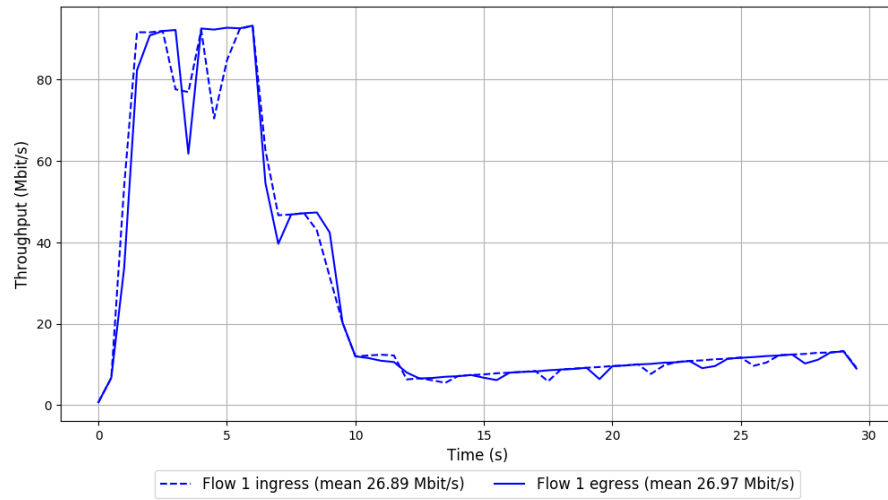
-- Flow 1:

Average throughput: 26.97 Mbit/s

95th percentile per-packet one-way delay: 88.653 ms

Loss rate: 0.29%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-09-17 21:19:54

End at: 2017-09-17 21:20:24

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.37 Mbit/s

95th percentile per-packet one-way delay: 88.843 ms

Loss rate: 0.29%

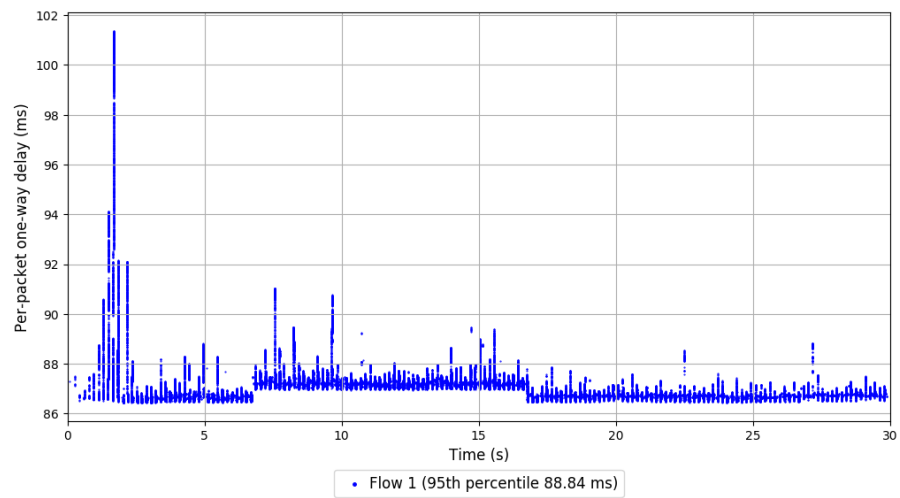
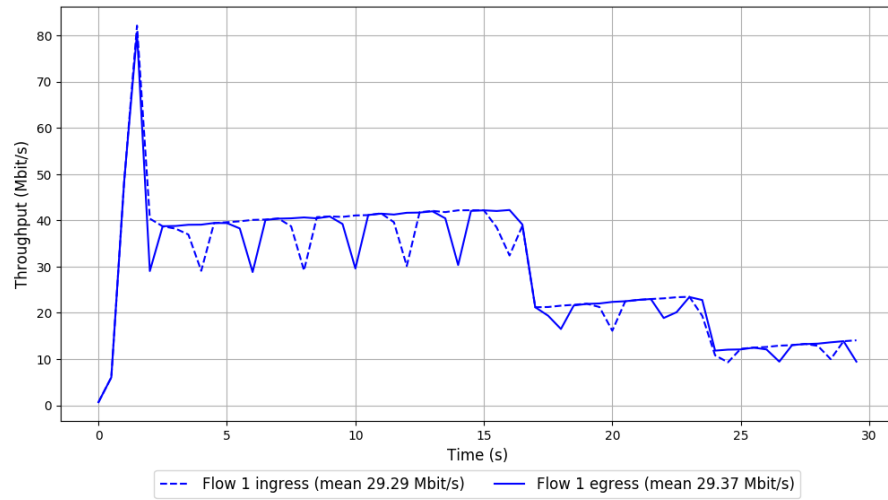
-- Flow 1:

Average throughput: 29.37 Mbit/s

95th percentile per-packet one-way delay: 88.843 ms

Loss rate: 0.29%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-09-17 21:31:47

End at: 2017-09-17 21:32:17

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.69 Mbit/s

95th percentile per-packet one-way delay: 88.298 ms

Loss rate: 1.49%

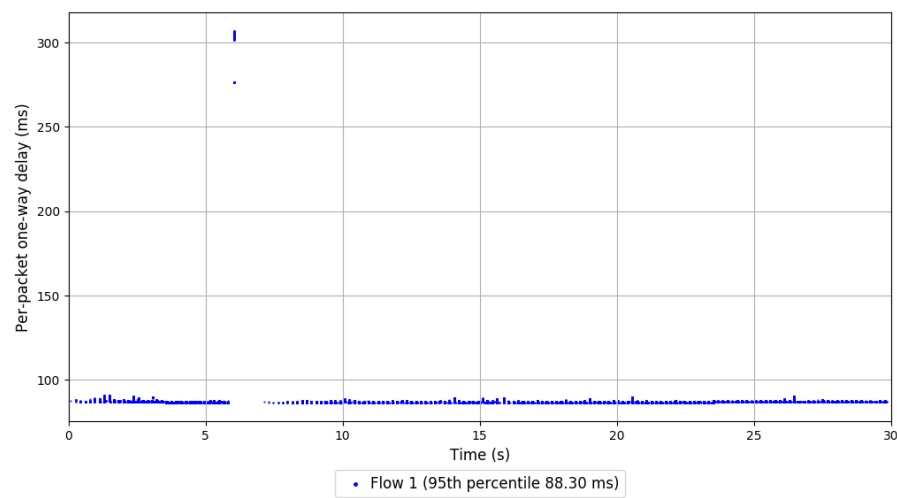
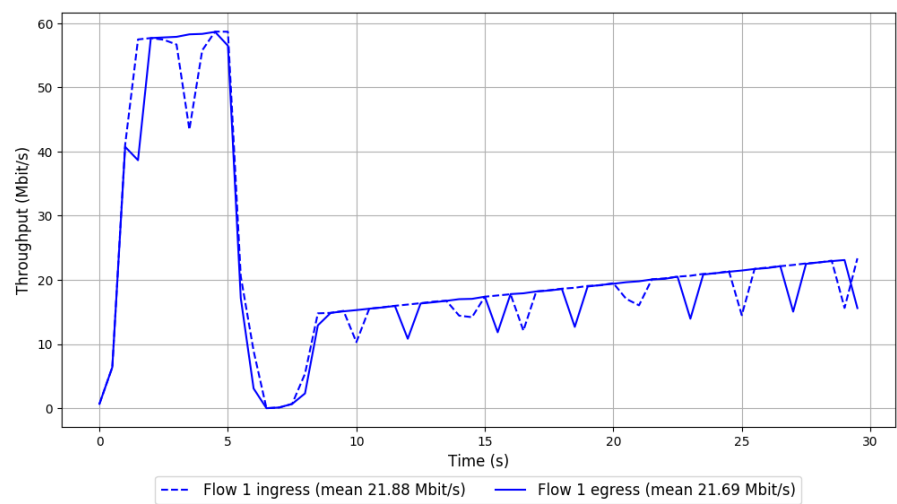
-- Flow 1:

Average throughput: 21.69 Mbit/s

95th percentile per-packet one-way delay: 88.298 ms

Loss rate: 1.49%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-09-17 21:43:14

End at: 2017-09-17 21:43:44

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.39 Mbit/s

95th percentile per-packet one-way delay: 89.843 ms

Loss rate: 0.29%

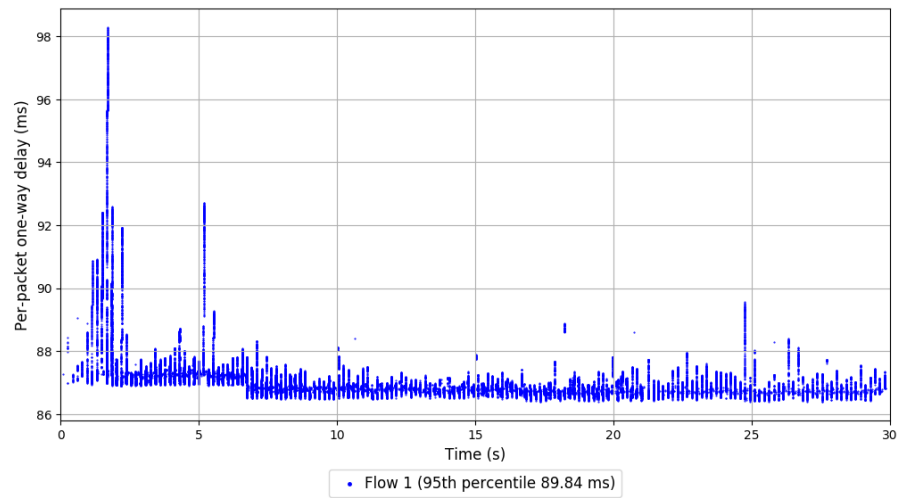
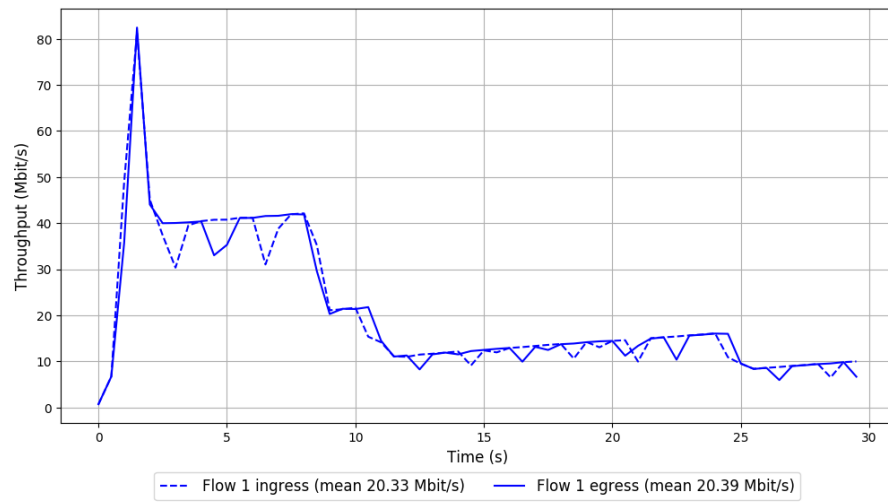
-- Flow 1:

Average throughput: 20.39 Mbit/s

95th percentile per-packet one-way delay: 89.843 ms

Loss rate: 0.29%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-09-17 21:55:06

End at: 2017-09-17 21:55:36

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.25 Mbit/s

95th percentile per-packet one-way delay: 88.671 ms

Loss rate: 0.39%

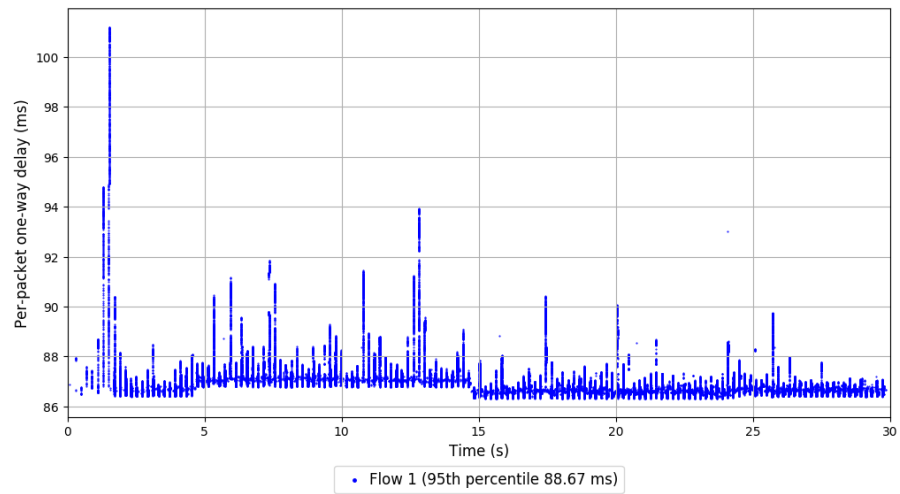
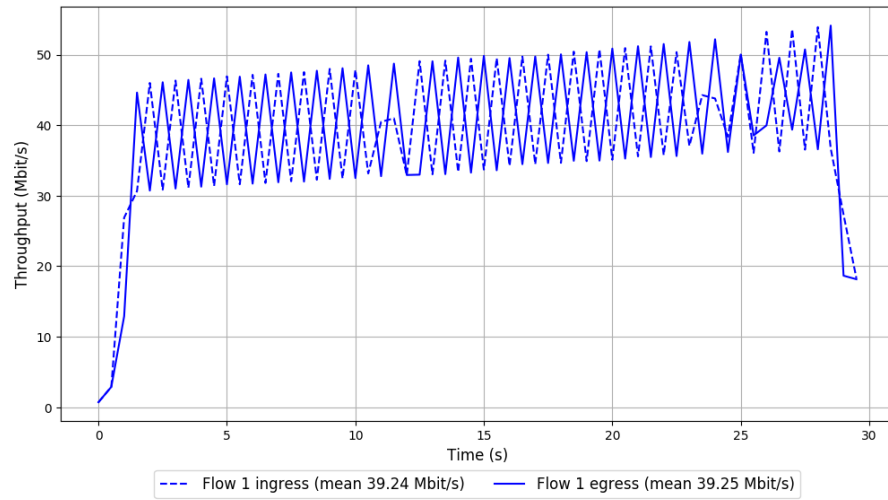
-- Flow 1:

Average throughput: 39.25 Mbit/s

95th percentile per-packet one-way delay: 88.671 ms

Loss rate: 0.39%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-09-17 22:07:06

End at: 2017-09-17 22:07:36

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.04 Mbit/s

95th percentile per-packet one-way delay: 88.159 ms

Loss rate: 0.37%

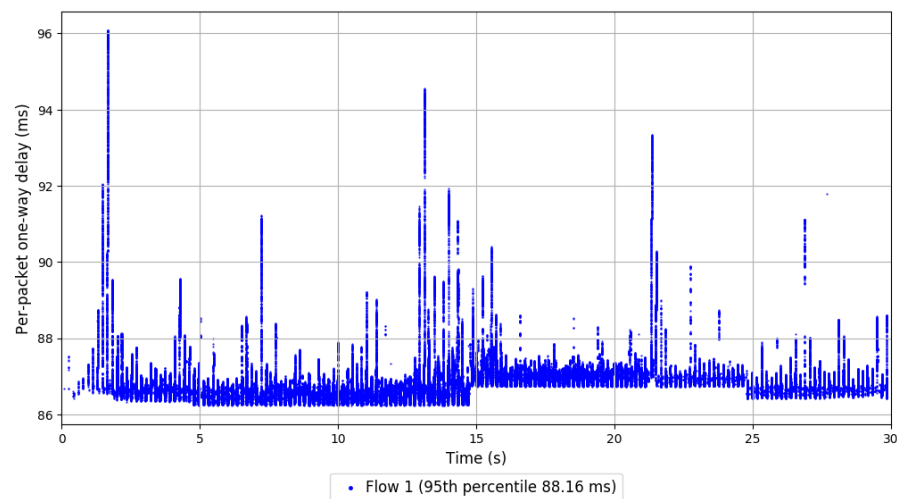
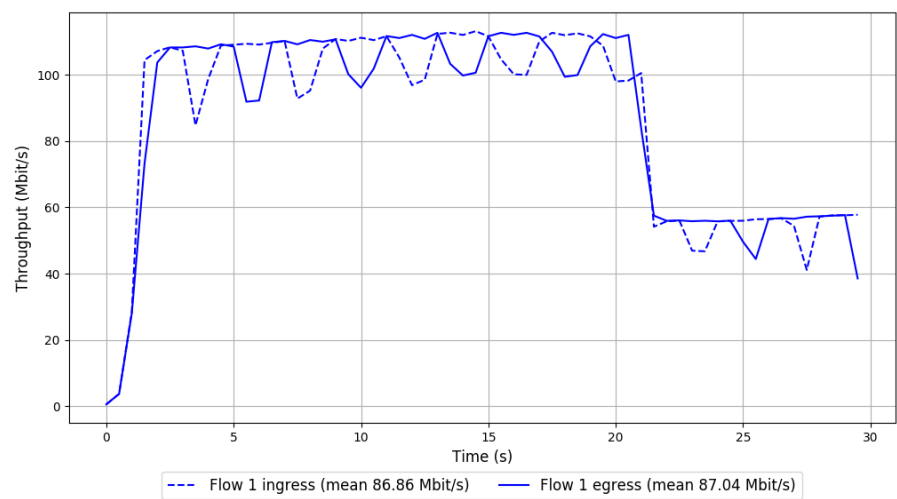
-- Flow 1:

Average throughput: 87.04 Mbit/s

95th percentile per-packet one-way delay: 88.159 ms

Loss rate: 0.37%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-09-17 22:18:45

End at: 2017-09-17 22:19:15

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.79 Mbit/s

95th percentile per-packet one-way delay: 88.210 ms

Loss rate: 0.65%

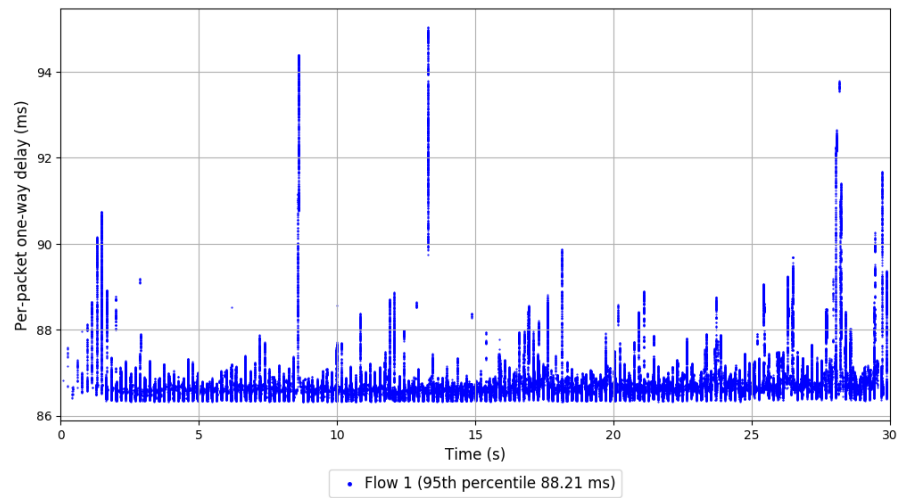
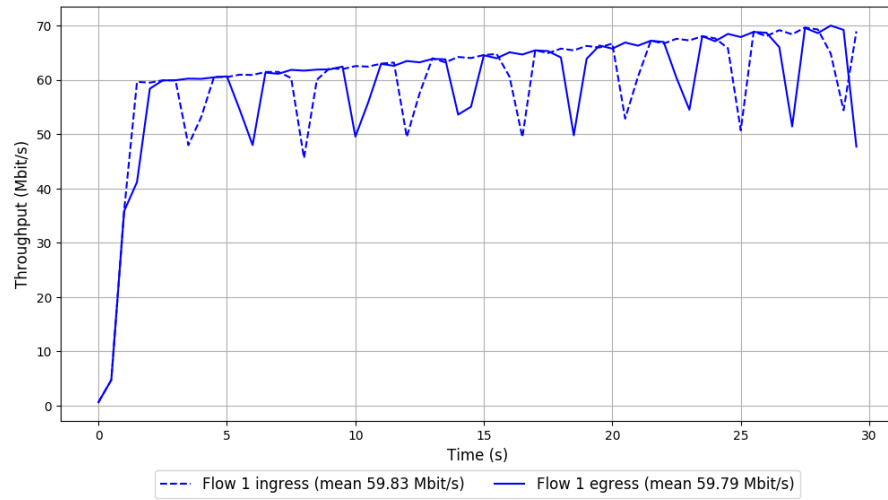
-- Flow 1:

Average throughput: 59.79 Mbit/s

95th percentile per-packet one-way delay: 88.210 ms

Loss rate: 0.65%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-09-17 22:30:21

End at: 2017-09-17 22:30:51

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.05 Mbit/s

95th percentile per-packet one-way delay: 87.976 ms

Loss rate: 0.37%

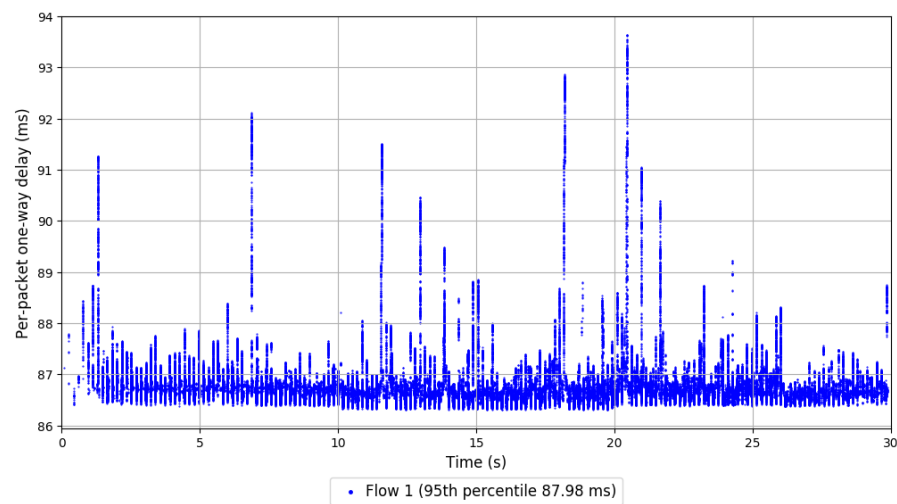
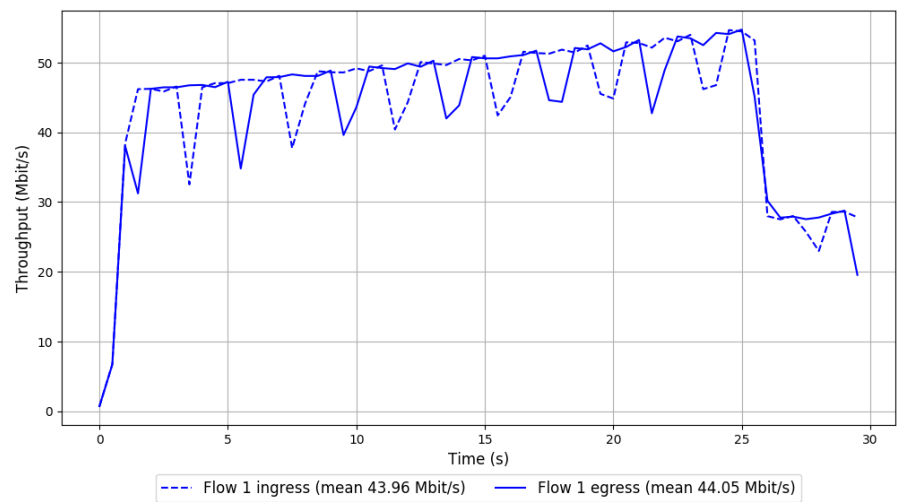
-- Flow 1:

Average throughput: 44.05 Mbit/s

95th percentile per-packet one-way delay: 87.976 ms

Loss rate: 0.37%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-09-17 22:42:07

End at: 2017-09-17 22:42:37

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.57 Mbit/s

95th percentile per-packet one-way delay: 88.229 ms

Loss rate: 0.49%

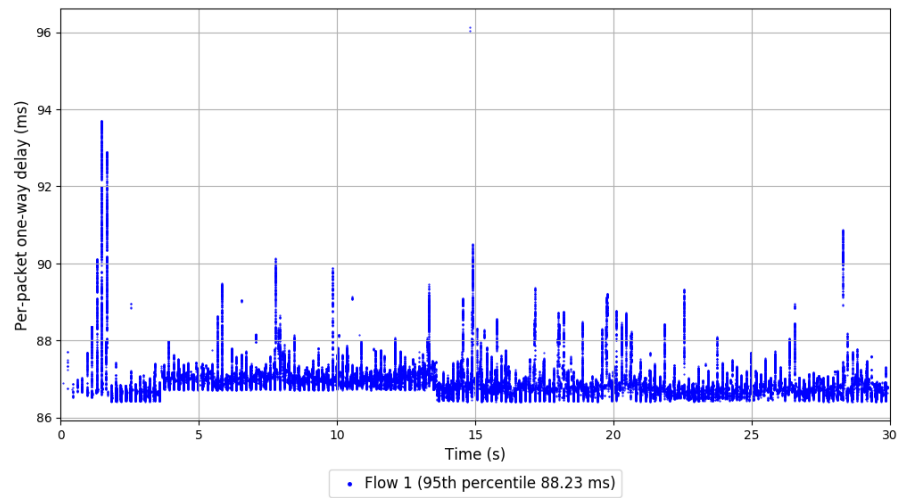
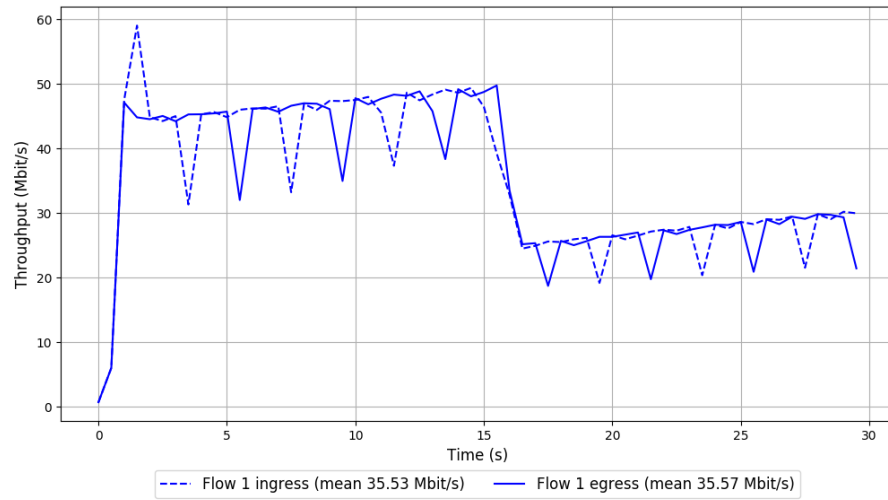
-- Flow 1:

Average throughput: 35.57 Mbit/s

95th percentile per-packet one-way delay: 88.229 ms

Loss rate: 0.49%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-09-17 20:52:53

End at: 2017-09-17 20:53:23

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.13 Mbit/s

95th percentile per-packet one-way delay: 108.728 ms

Loss rate: 0.25%

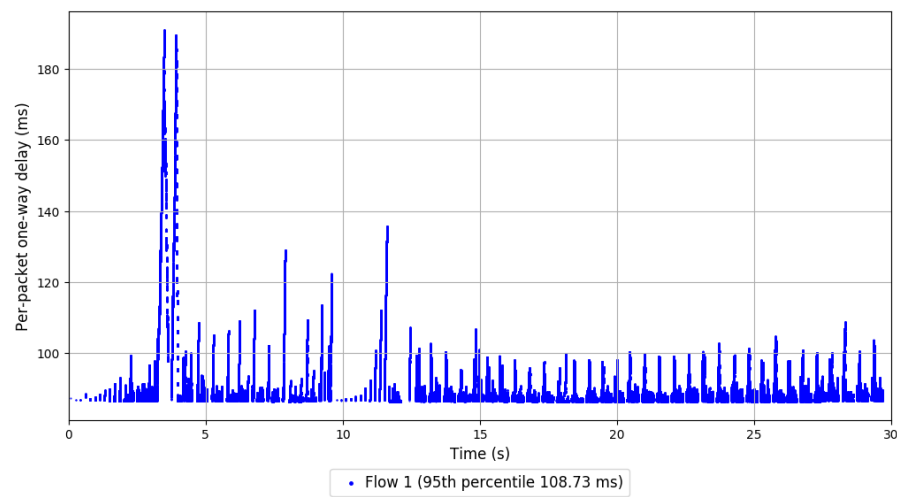
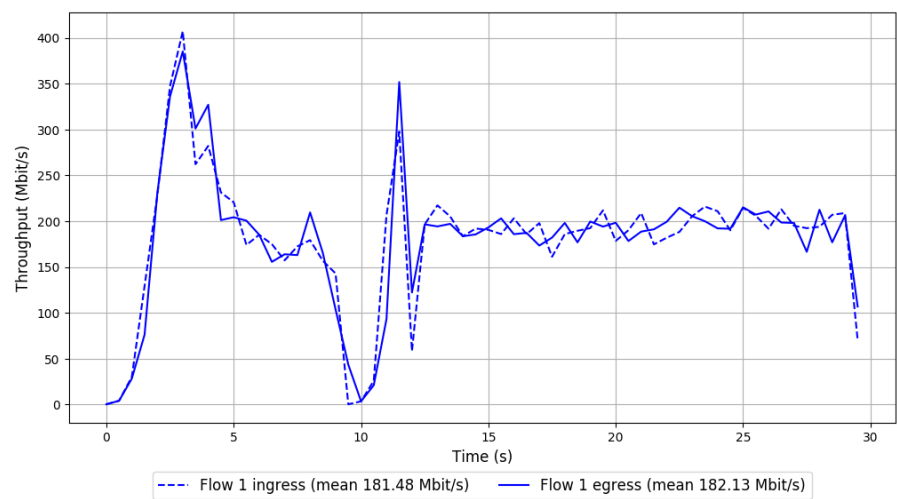
-- Flow 1:

Average throughput: 182.13 Mbit/s

95th percentile per-packet one-way delay: 108.728 ms

Loss rate: 0.25%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-09-17 21:04:25

End at: 2017-09-17 21:04:55

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 264.73 Mbit/s

95th percentile per-packet one-way delay: 262.370 ms

Loss rate: 17.80%

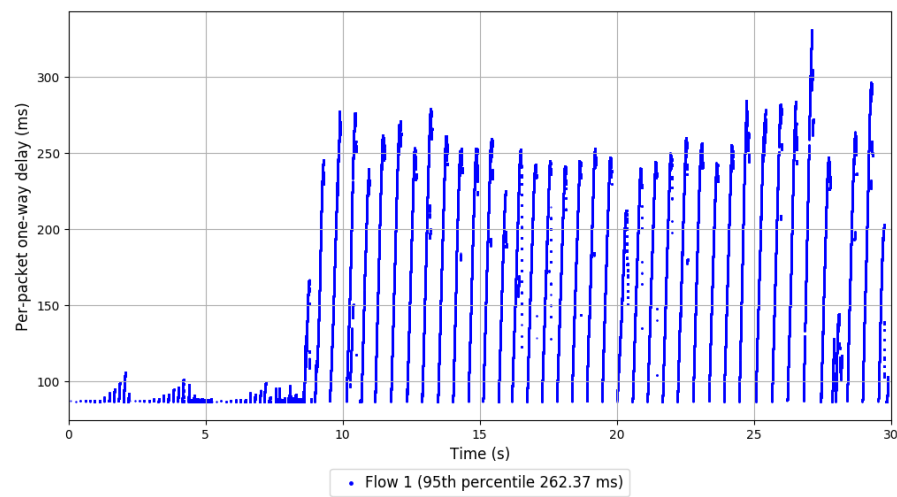
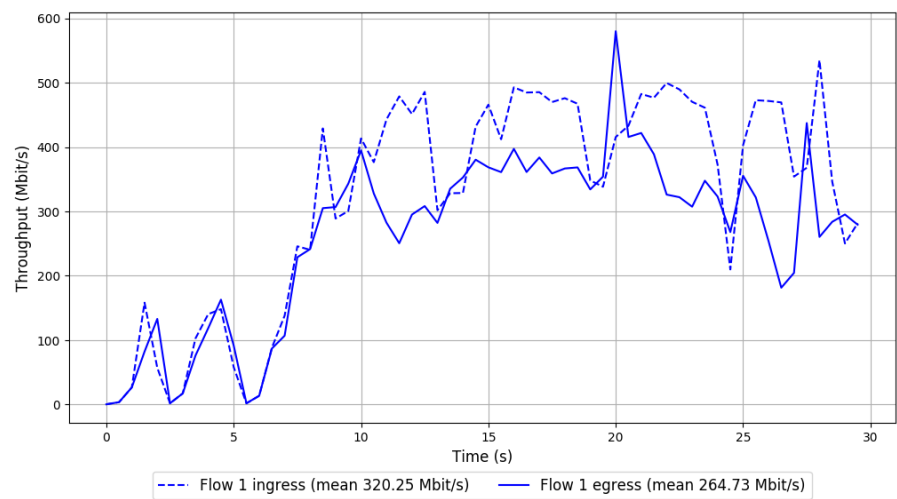
-- Flow 1:

Average throughput: 264.73 Mbit/s

95th percentile per-packet one-way delay: 262.370 ms

Loss rate: 17.80%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-09-17 21:16:05

End at: 2017-09-17 21:16:35

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 144.75 Mbit/s

95th percentile per-packet one-way delay: 157.070 ms

Loss rate: 2.05%

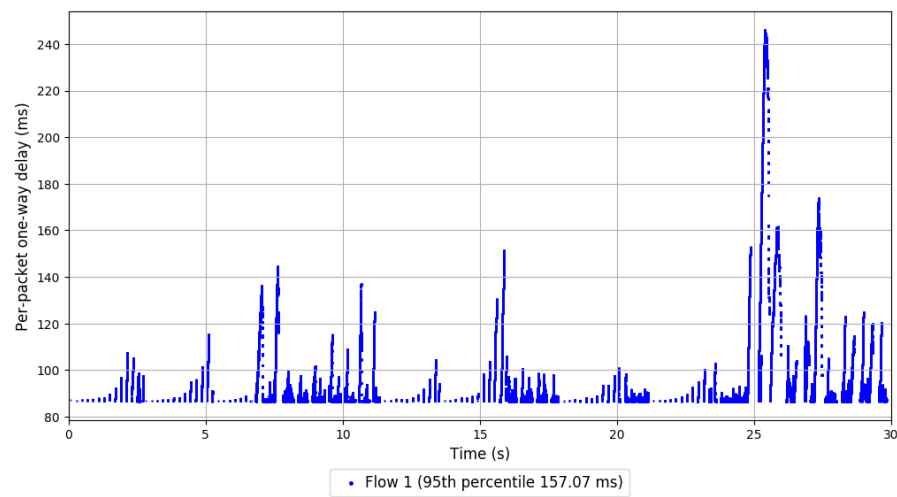
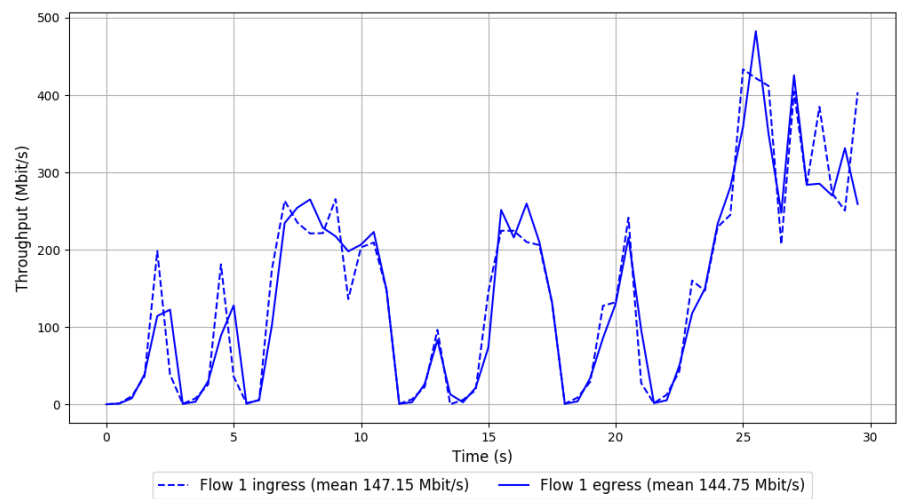
-- Flow 1:

Average throughput: 144.75 Mbit/s

95th percentile per-packet one-way delay: 157.070 ms

Loss rate: 2.05%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-09-17 21:27:54

End at: 2017-09-17 21:28:24

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 165.84 Mbit/s

95th percentile per-packet one-way delay: 211.617 ms

Loss rate: 3.52%

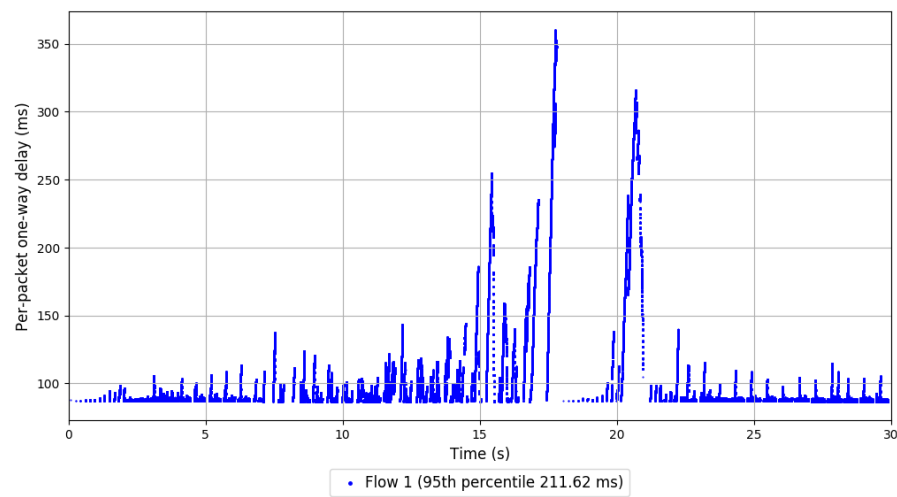
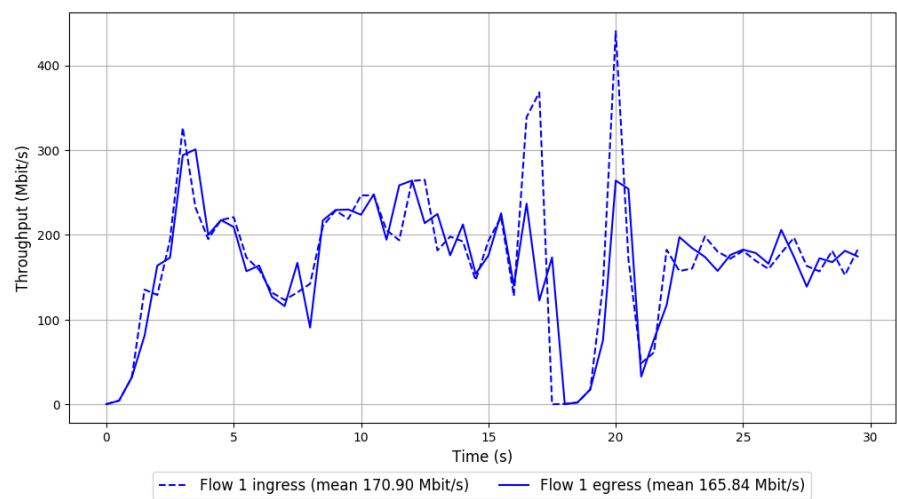
-- Flow 1:

Average throughput: 165.84 Mbit/s

95th percentile per-packet one-way delay: 211.617 ms

Loss rate: 3.52%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-09-17 21:39:17

End at: 2017-09-17 21:39:47

Below is generated by plot.py at 2017-09-18 01:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 236.92 Mbit/s

95th percentile per-packet one-way delay: 107.856 ms

Loss rate: 0.72%

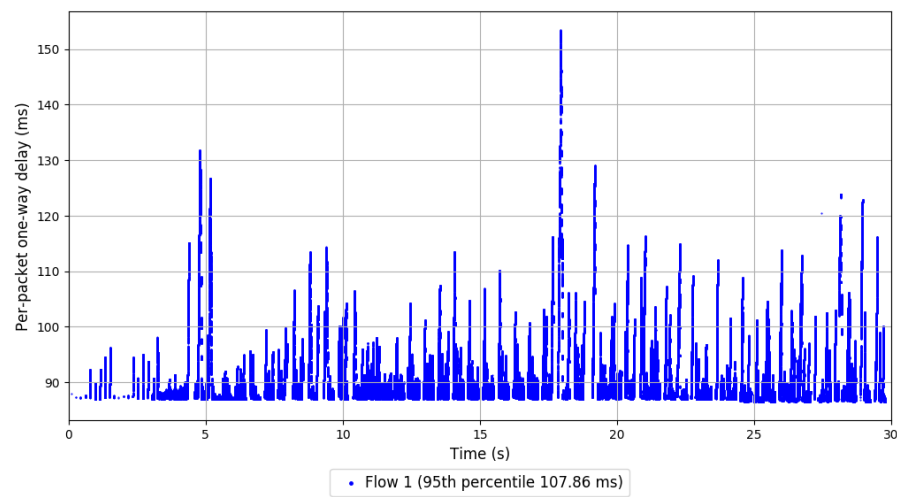
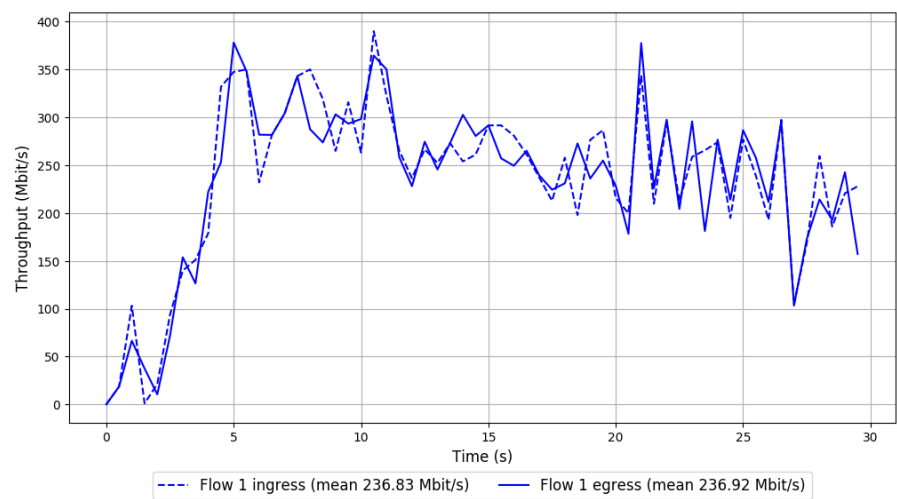
-- Flow 1:

Average throughput: 236.92 Mbit/s

95th percentile per-packet one-way delay: 107.856 ms

Loss rate: 0.72%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-09-17 21:51:04

End at: 2017-09-17 21:51:34

Below is generated by plot.py at 2017-09-18 01:38:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 255.11 Mbit/s

95th percentile per-packet one-way delay: 200.683 ms

Loss rate: 3.99%

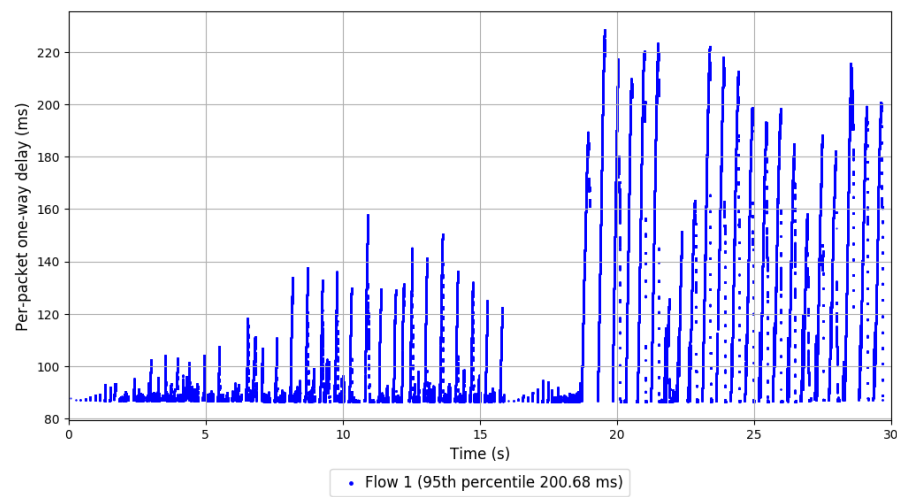
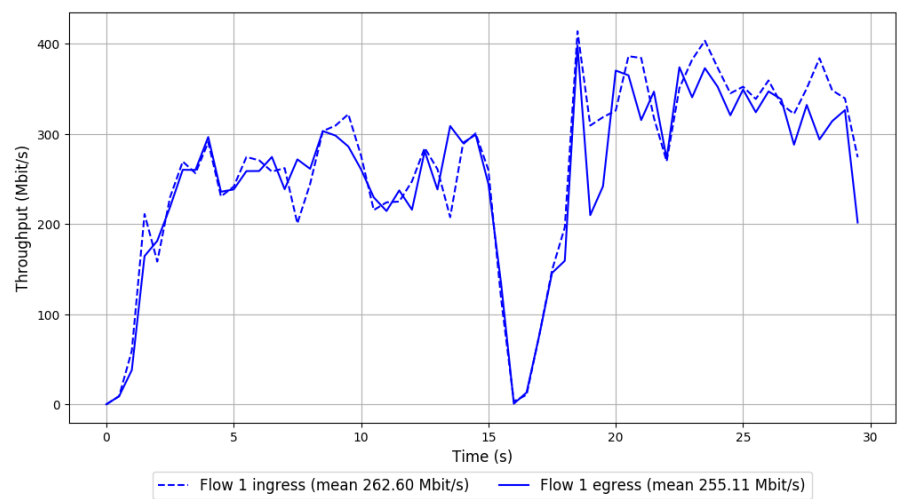
-- Flow 1:

Average throughput: 255.11 Mbit/s

95th percentile per-packet one-way delay: 200.683 ms

Loss rate: 3.99%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-09-17 22:03:01

End at: 2017-09-17 22:03:31

Below is generated by plot.py at 2017-09-18 01:38:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.34 Mbit/s

95th percentile per-packet one-way delay: 251.307 ms

Loss rate: 15.21%

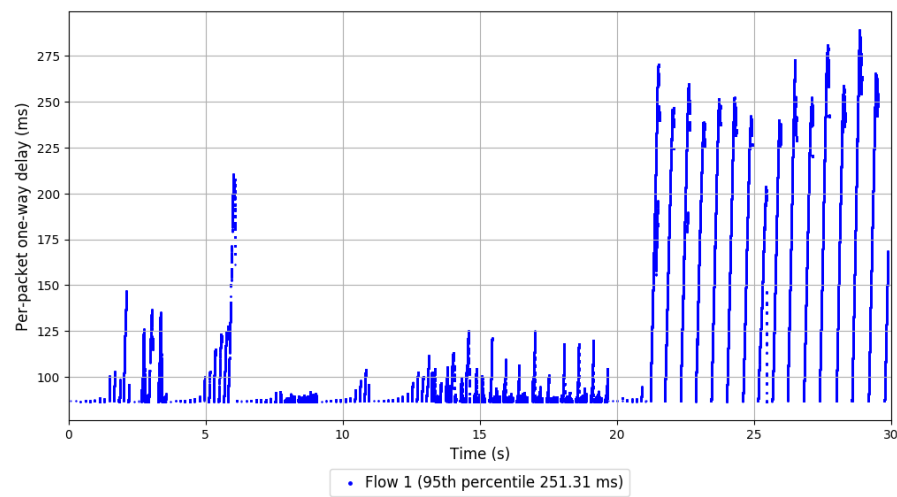
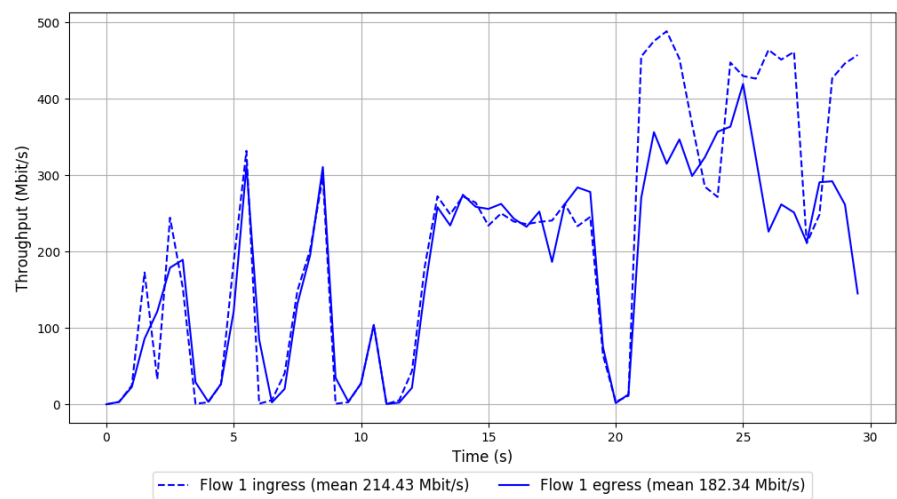
-- Flow 1:

Average throughput: 182.34 Mbit/s

95th percentile per-packet one-way delay: 251.307 ms

Loss rate: 15.21%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-09-17 22:14:48

End at: 2017-09-17 22:15:18

Below is generated by plot.py at 2017-09-18 01:38:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.97 Mbit/s

95th percentile per-packet one-way delay: 172.831 ms

Loss rate: 1.15%

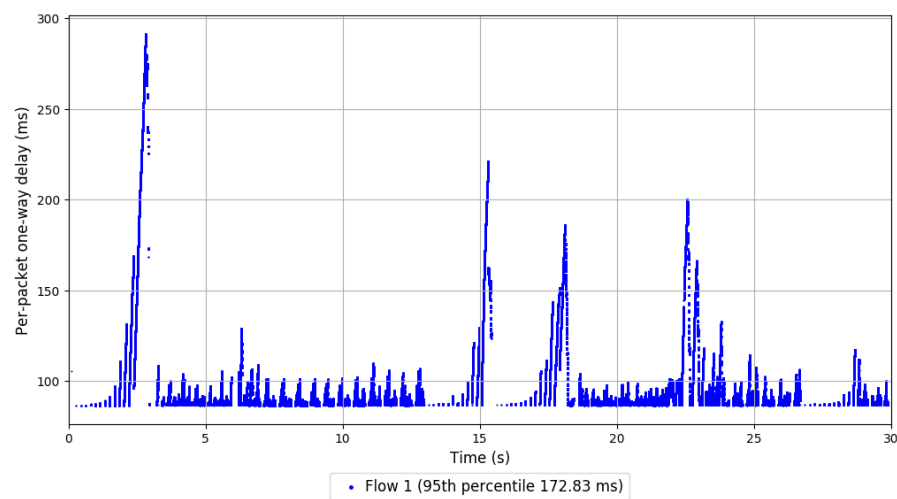
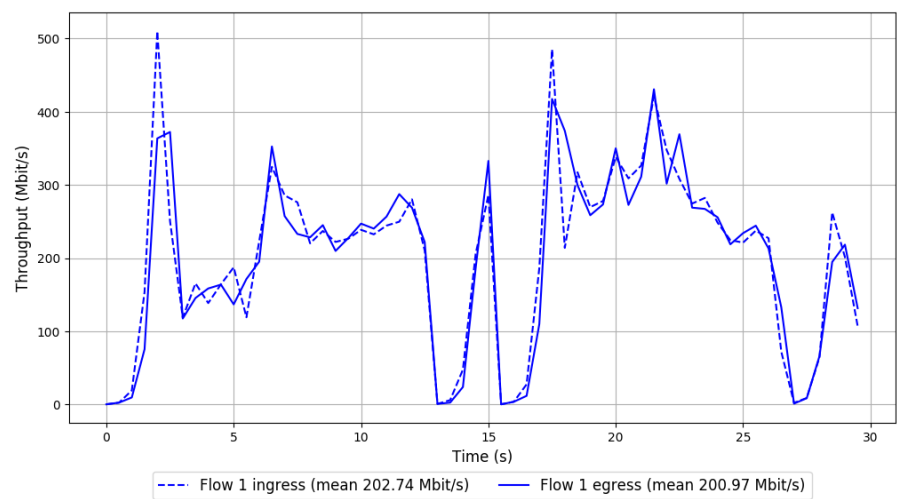
-- Flow 1:

Average throughput: 200.97 Mbit/s

95th percentile per-packet one-way delay: 172.831 ms

Loss rate: 1.15%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-09-17 22:26:22

End at: 2017-09-17 22:26:52

Below is generated by plot.py at 2017-09-18 01:38:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 161.36 Mbit/s

95th percentile per-packet one-way delay: 142.357 ms

Loss rate: 1.20%

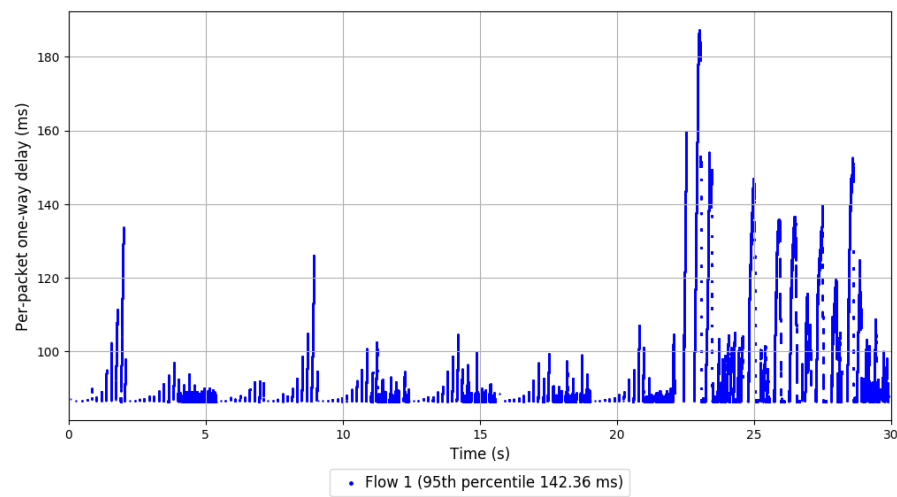
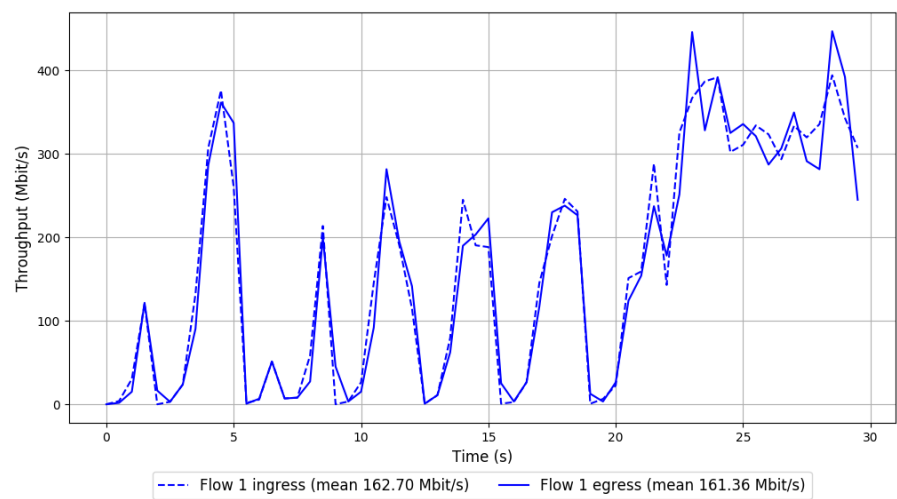
-- Flow 1:

Average throughput: 161.36 Mbit/s

95th percentile per-packet one-way delay: 142.357 ms

Loss rate: 1.20%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-09-17 22:38:15

End at: 2017-09-17 22:38:45

Below is generated by plot.py at 2017-09-18 01:38:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.86 Mbit/s

95th percentile per-packet one-way delay: 112.203 ms

Loss rate: 0.26%

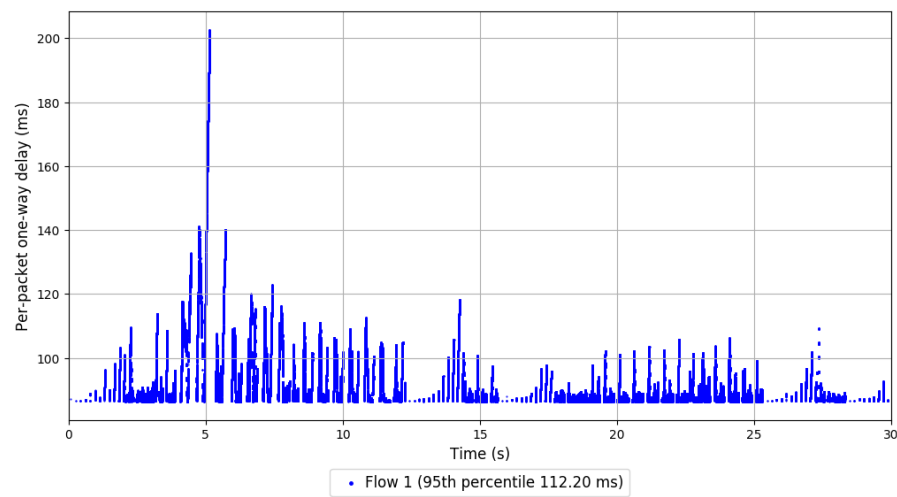
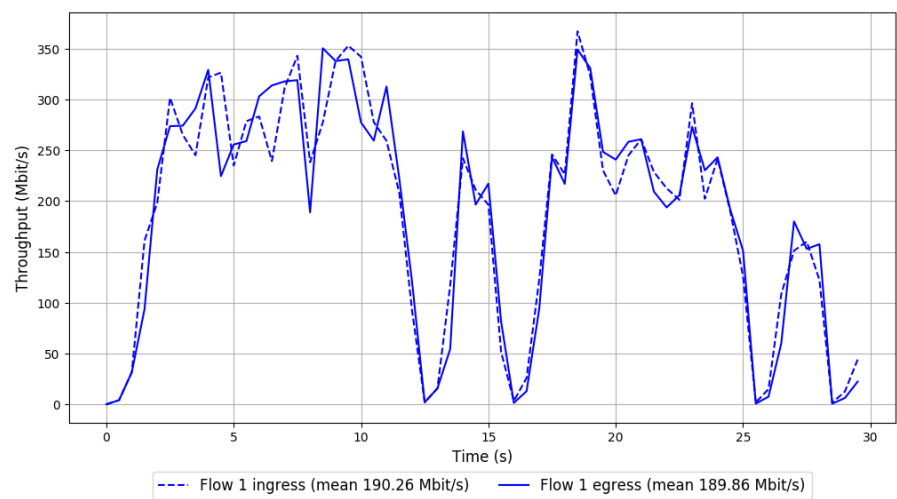
-- Flow 1:

Average throughput: 189.86 Mbit/s

95th percentile per-packet one-way delay: 112.203 ms

Loss rate: 0.26%

Run 10: Report of Verus — Data Link

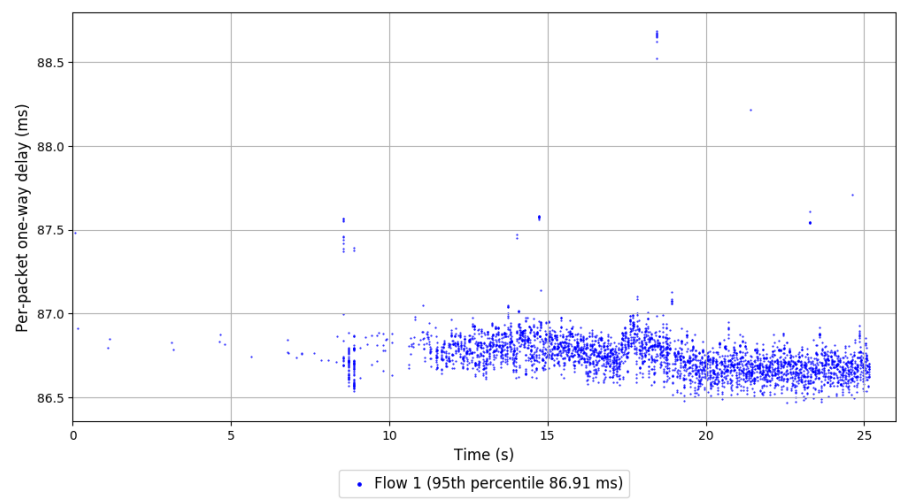
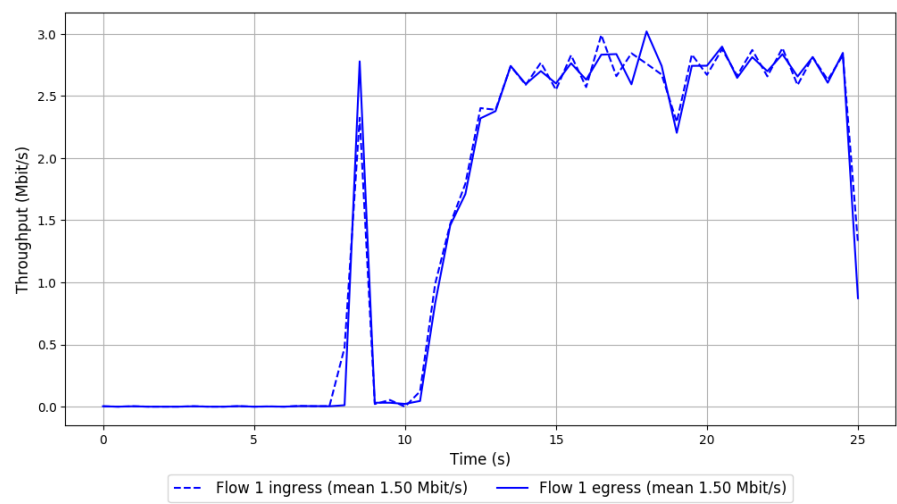


```
Run 1: Statistics of WebRTC media

Start at: 2017-09-17 20:55:27
End at: 2017-09-17 20:55:57

# Below is generated by plot.py at 2017-09-18 01:38:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 86.909 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 86.909 ms
Loss rate: 1.16%
```


Run 1: Report of WebRTC media — Data Link

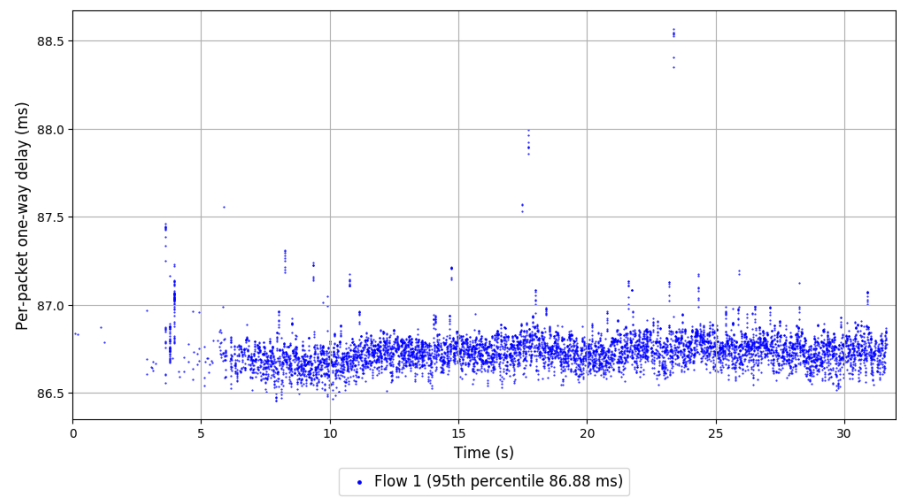
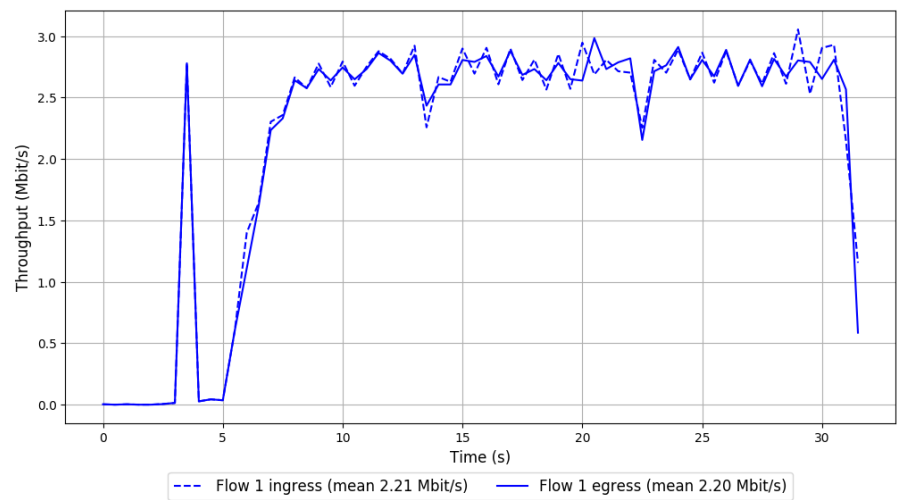


```
Run 2: Statistics of WebRTC media

Start at: 2017-09-17 21:07:02
End at: 2017-09-17 21:07:32

# Below is generated by plot.py at 2017-09-18 01:38:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 86.878 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 86.878 ms
Loss rate: 0.68%
```

Run 2: Report of WebRTC media — Data Link

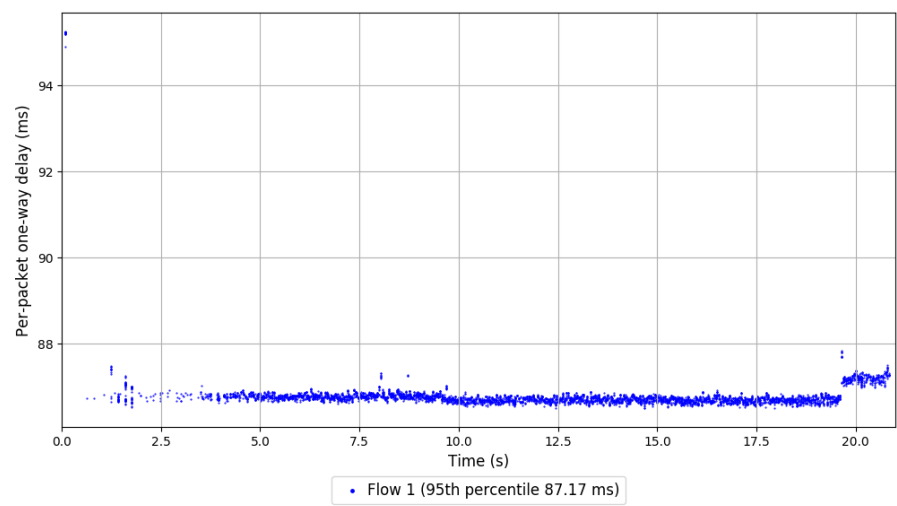
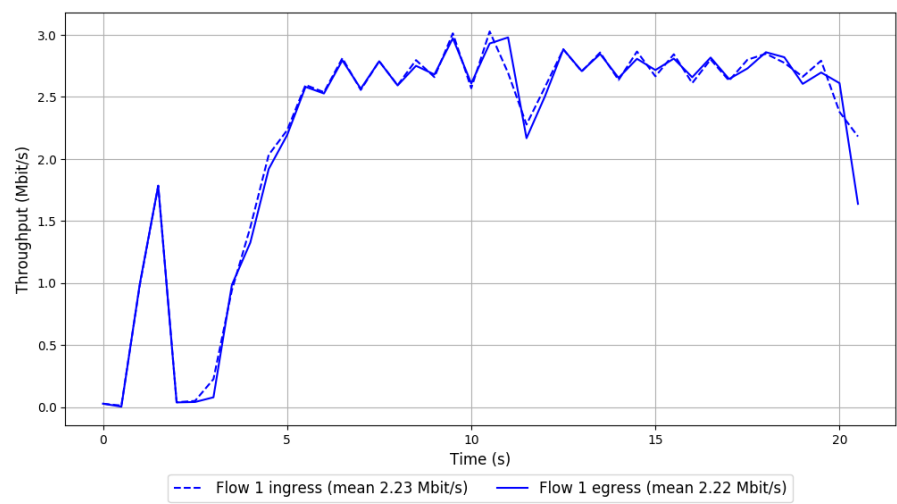


Run 3: Statistics of WebRTC media

Start at: 2017-09-17 21:18:32

End at: 2017-09-17 21:19:02

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-09-17 21:30:25

End at: 2017-09-17 21:30:55

Below is generated by plot.py at 2017-09-18 01:38:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 87.480 ms

Loss rate: 0.70%

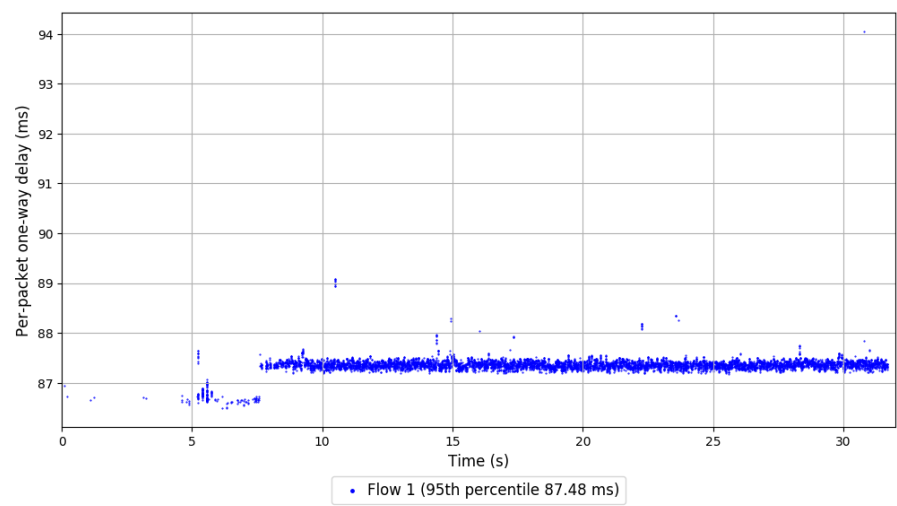
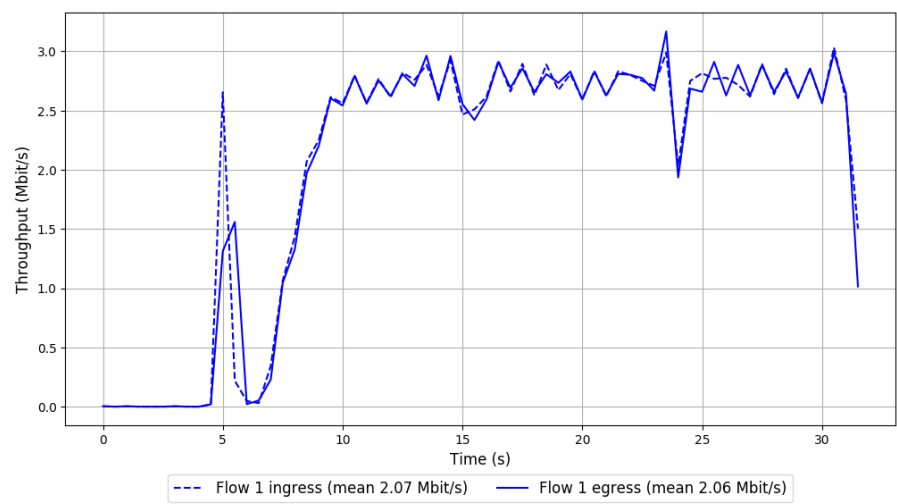
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 87.480 ms

Loss rate: 0.70%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-09-17 21:41:52

End at: 2017-09-17 21:42:22

Below is generated by plot.py at 2017-09-18 01:38:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 86.991 ms

Loss rate: 0.54%

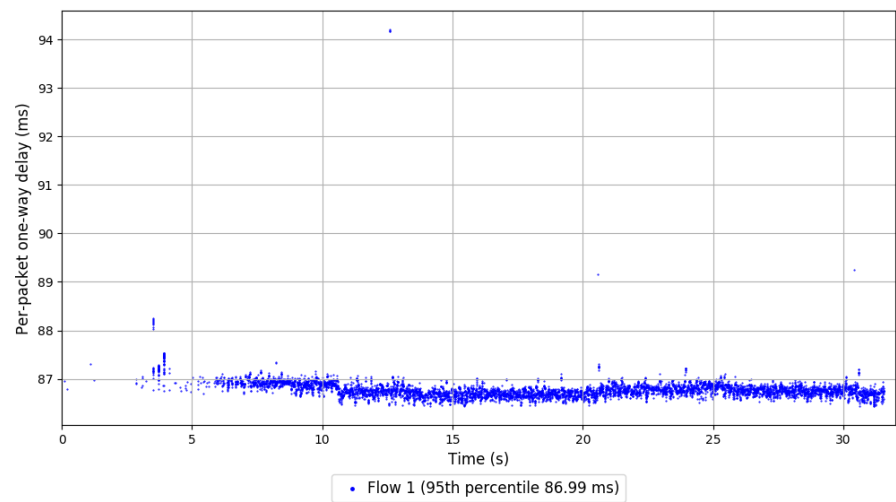
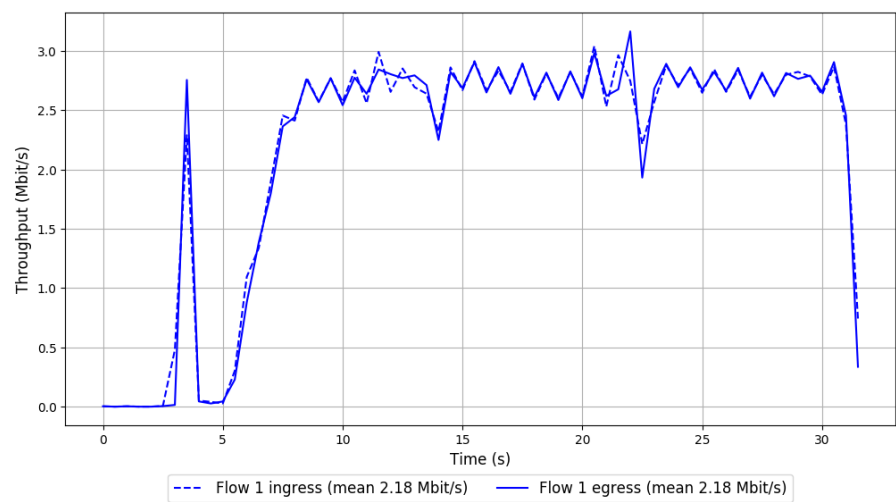
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 86.991 ms

Loss rate: 0.54%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-09-17 21:53:43

End at: 2017-09-17 21:54:13

Below is generated by plot.py at 2017-09-18 01:38:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.169 ms

Loss rate: 0.62%

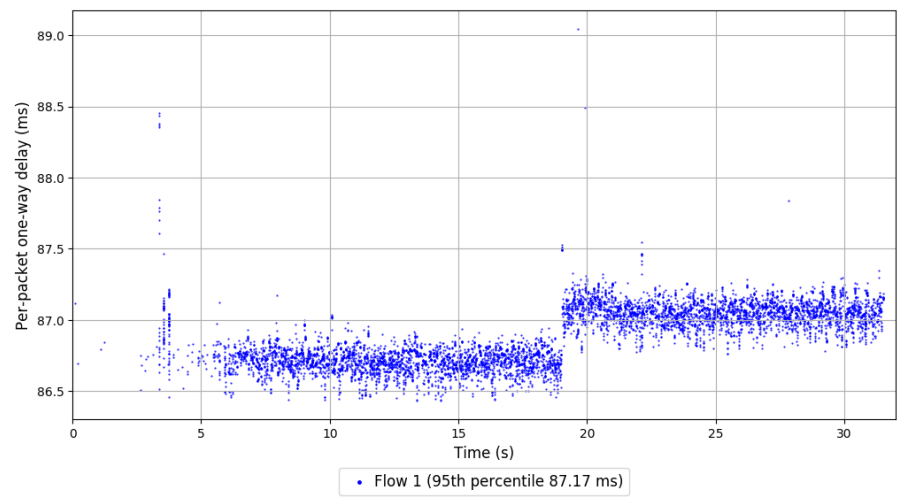
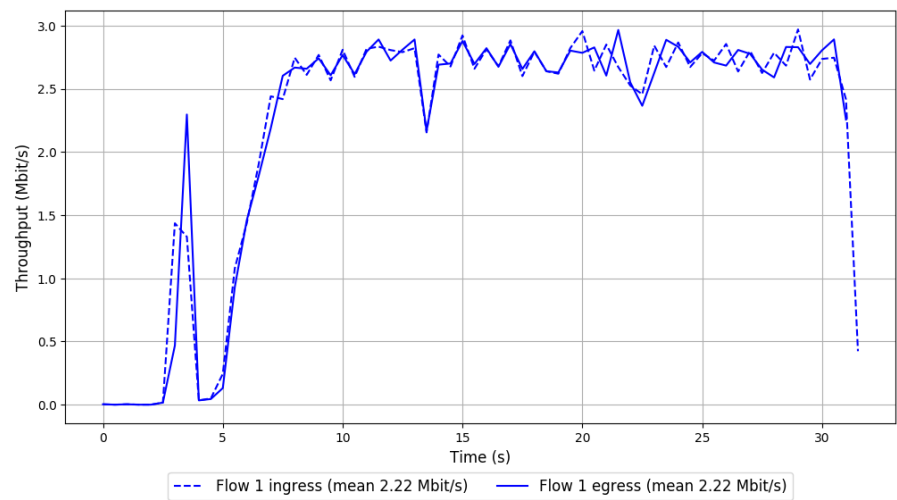
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.169 ms

Loss rate: 0.62%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-09-17 22:05:44

End at: 2017-09-17 22:06:14

Below is generated by plot.py at 2017-09-18 01:38:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.677 ms

Loss rate: 0.61%

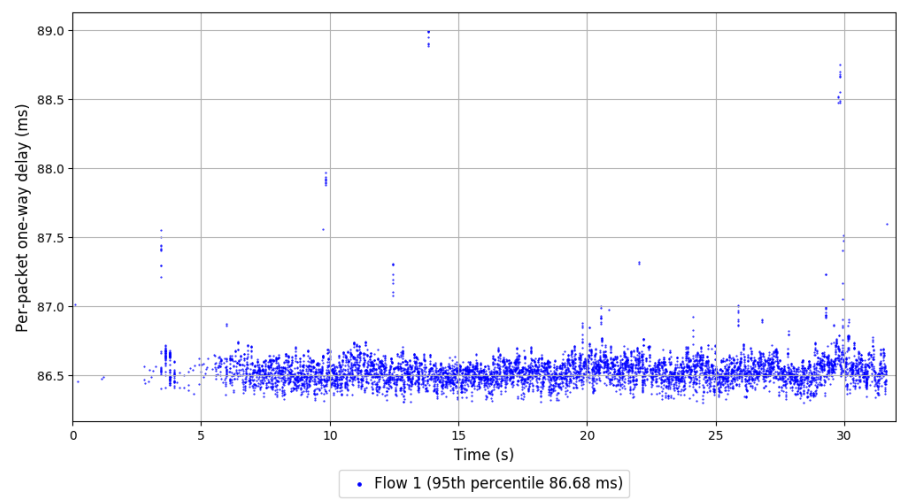
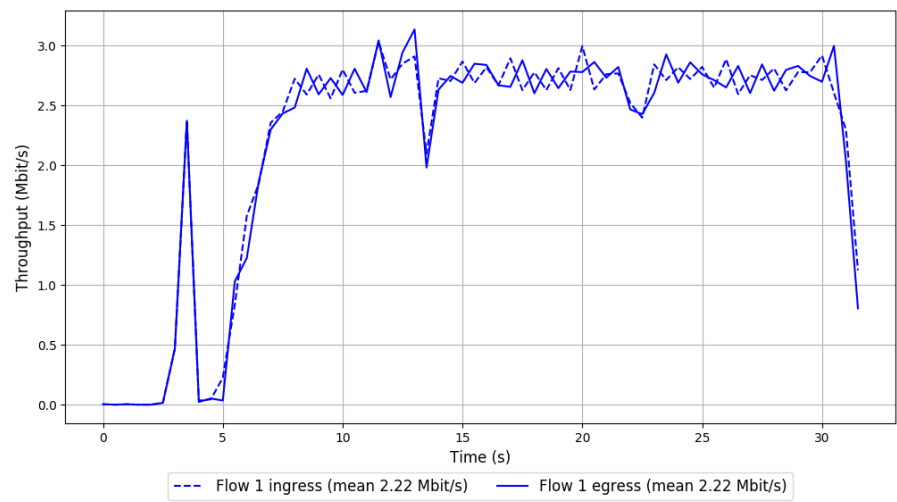
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.677 ms

Loss rate: 0.61%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-09-17 22:17:23

End at: 2017-09-17 22:17:53

Below is generated by plot.py at 2017-09-18 01:38:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.640 ms

Loss rate: 23.33%

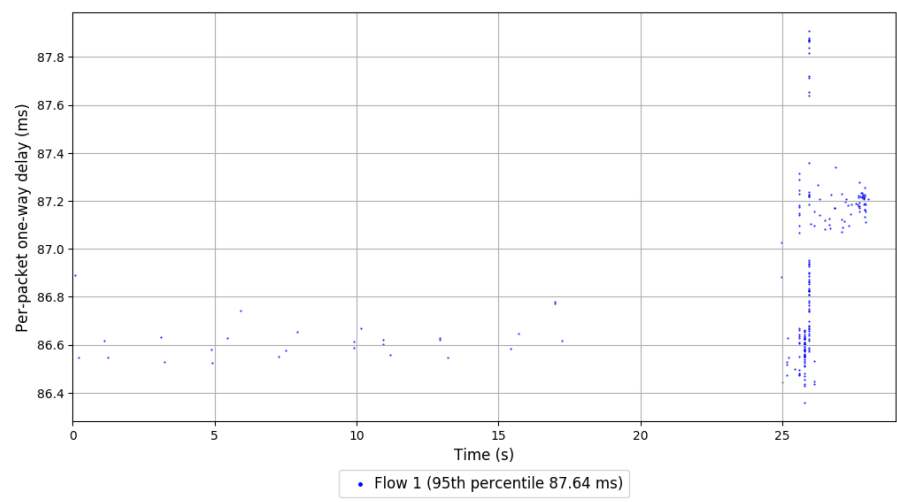
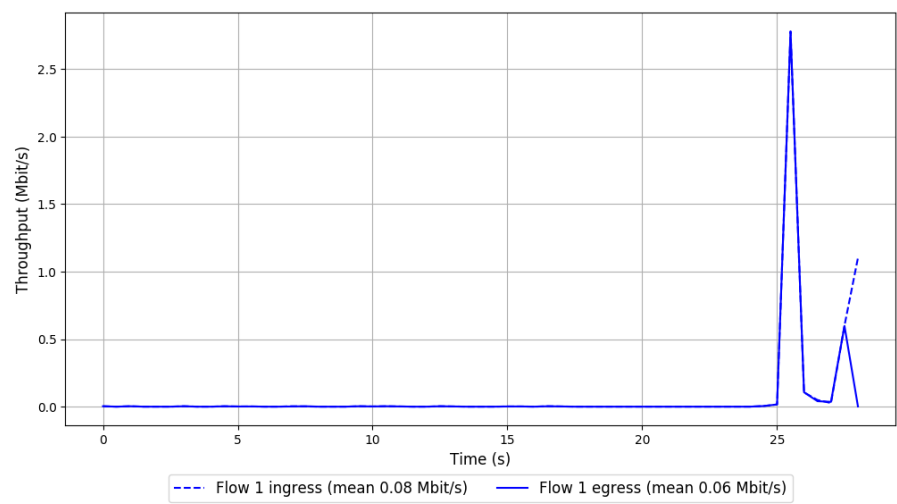
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.640 ms

Loss rate: 23.33%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-09-17 22:28:58

End at: 2017-09-17 22:29:28

Below is generated by plot.py at 2017-09-18 01:38:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.852 ms

Loss rate: 0.74%

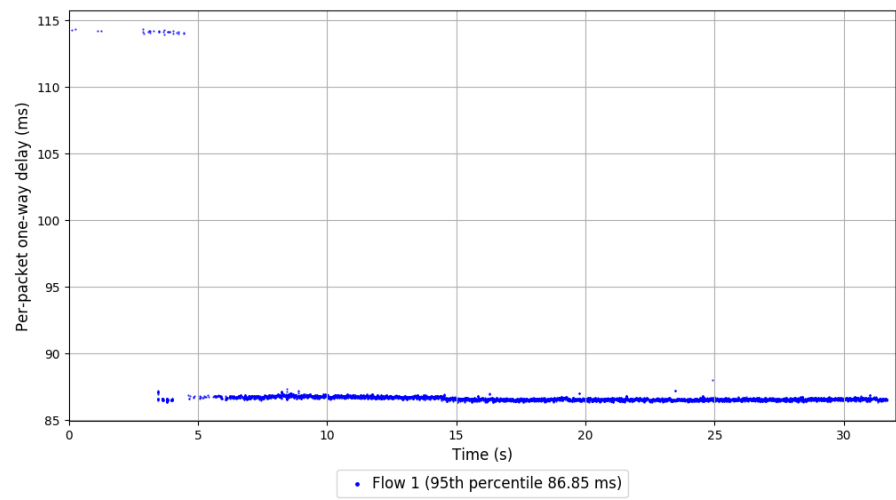
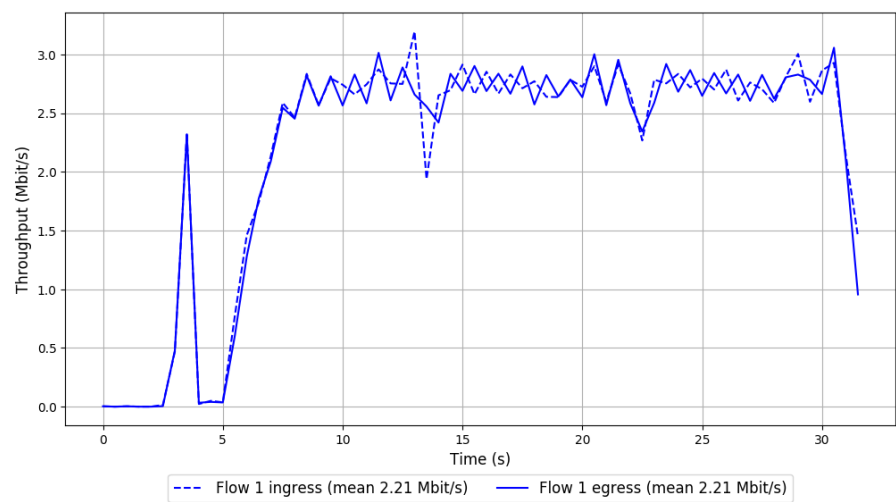
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.852 ms

Loss rate: 0.74%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-09-17 22:40:45

End at: 2017-09-17 22:41:15

Below is generated by plot.py at 2017-09-18 01:38:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 87.347 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 87.347 ms

Loss rate: 0.39%

Run 10: Report of WebRTC media — Data Link

