

Pantheon Report

Generated at 2017-08-17 09:09:16 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

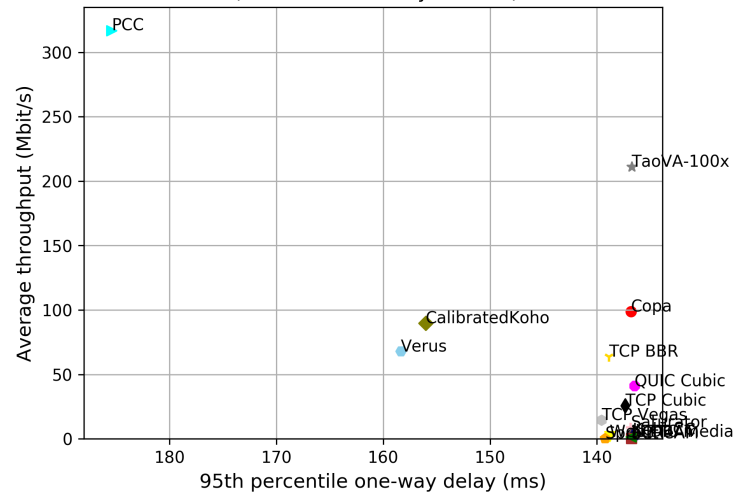
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

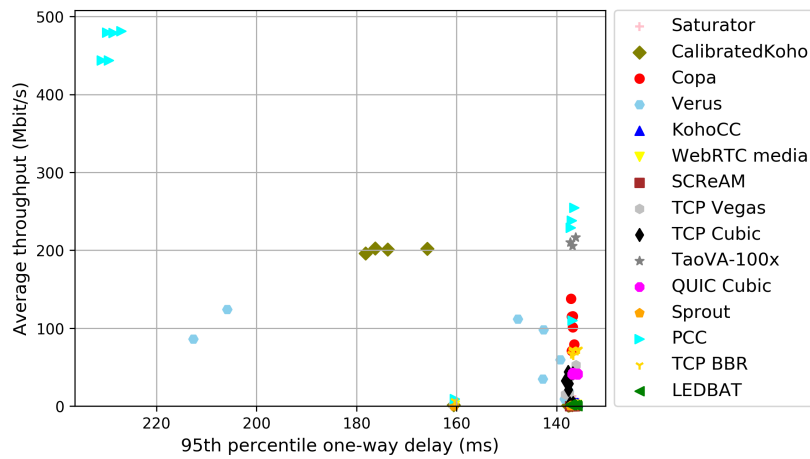
Git summary:

```
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
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 London Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	63.79	138.90	2.69
CalibratedKoho	9	89.80	156.02	36.82
Copa	7	98.89	136.83	0.96
TCP Cubic	10	25.80	137.37	2.39
KohoCC	10	3.25	136.68	22.39
LEDBAT	10	1.51	136.81	1.41
PCC	10	316.86	185.40	5.64
QUIC Cubic	10	41.03	136.47	0.52
Saturator	7	8.66	136.85	0.96
SCReAM	10	0.21	136.79	0.83
Sprout	10	0.36	139.25	1.01
TaoVA-100x	3	211.02	136.76	1.43
TCP Vegas	10	14.51	139.58	1.88
Verus	8	67.90	158.35	21.52
WebRTC media	10	1.85	138.80	1.48

Run 1: Statistics of TCP BBR

Start at: 2017-08-17 04:40:55

End at: 2017-08-17 04:41:25

Below is generated by plot.py at 2017-08-17 08:52:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.76 Mbit/s

95th percentile per-packet one-way delay: 137.100 ms

Loss rate: 3.52%

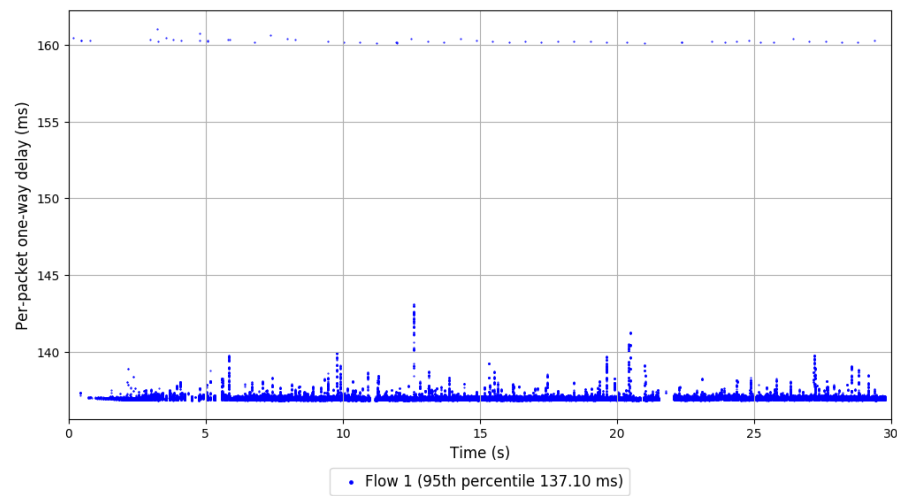
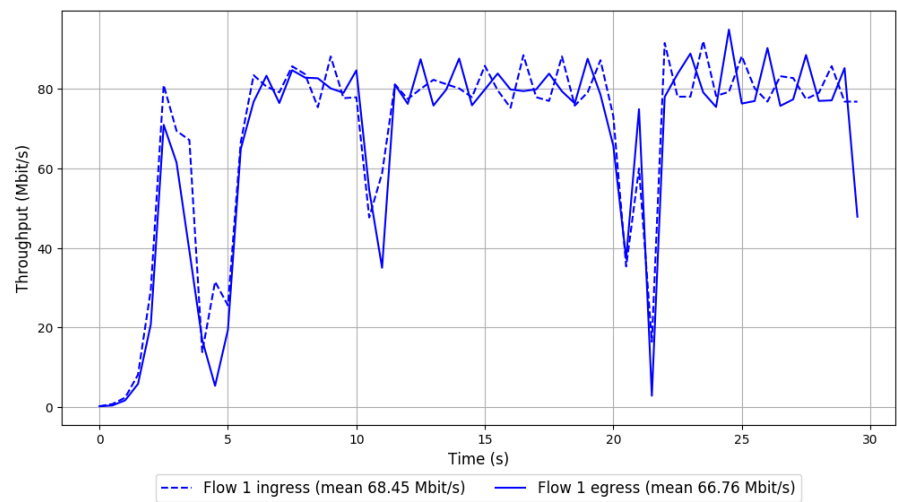
-- Flow 1:

Average throughput: 66.76 Mbit/s

95th percentile per-packet one-way delay: 137.100 ms

Loss rate: 3.52%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-17 04:52:48

End at: 2017-08-17 04:53:18

Below is generated by plot.py at 2017-08-17 08:52:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.21 Mbit/s

95th percentile per-packet one-way delay: 137.047 ms

Loss rate: 2.43%

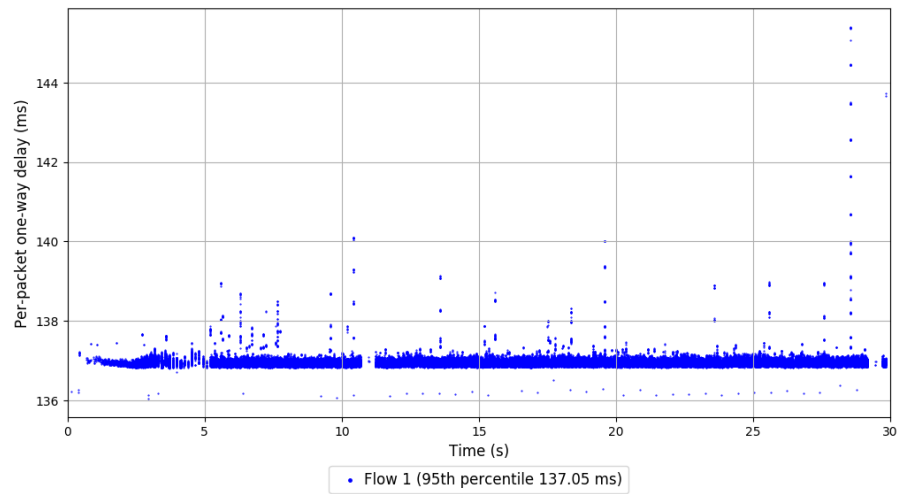
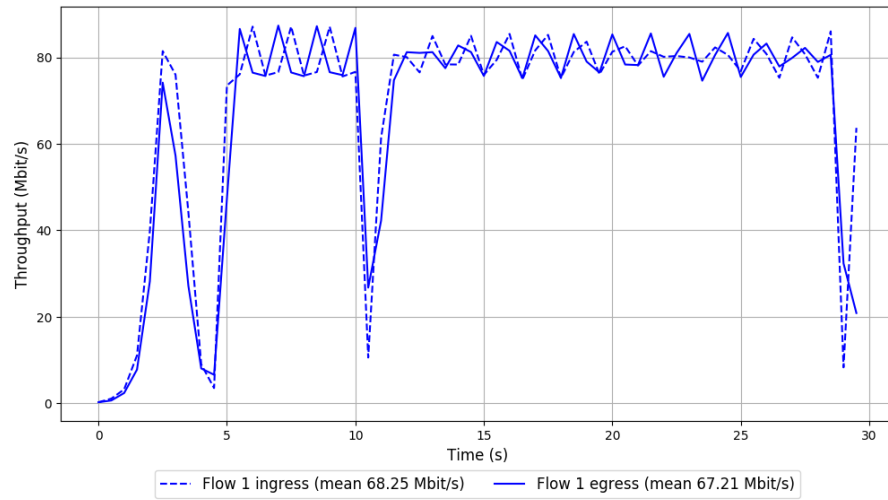
-- Flow 1:

Average throughput: 67.21 Mbit/s

95th percentile per-packet one-way delay: 137.047 ms

Loss rate: 2.43%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-17 05:04:36

End at: 2017-08-17 05:05:06

Below is generated by plot.py at 2017-08-17 08:53:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.10 Mbit/s

95th percentile per-packet one-way delay: 135.856 ms

Loss rate: 1.00%

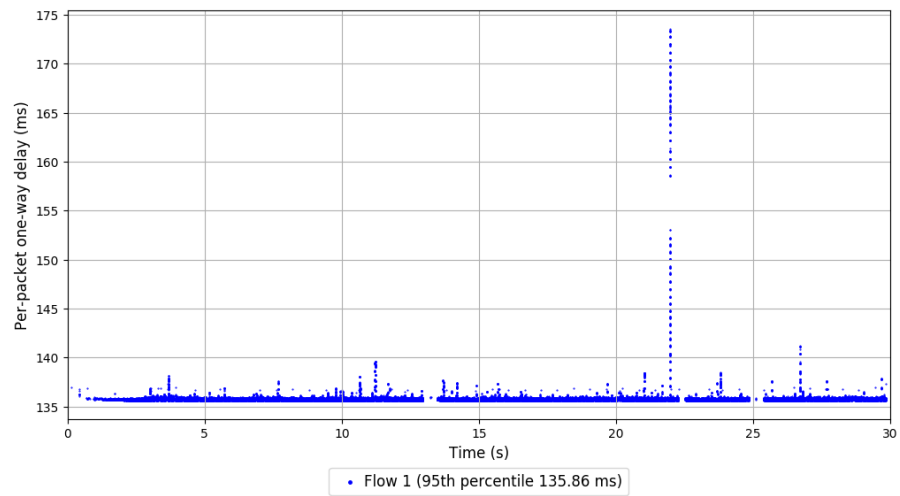
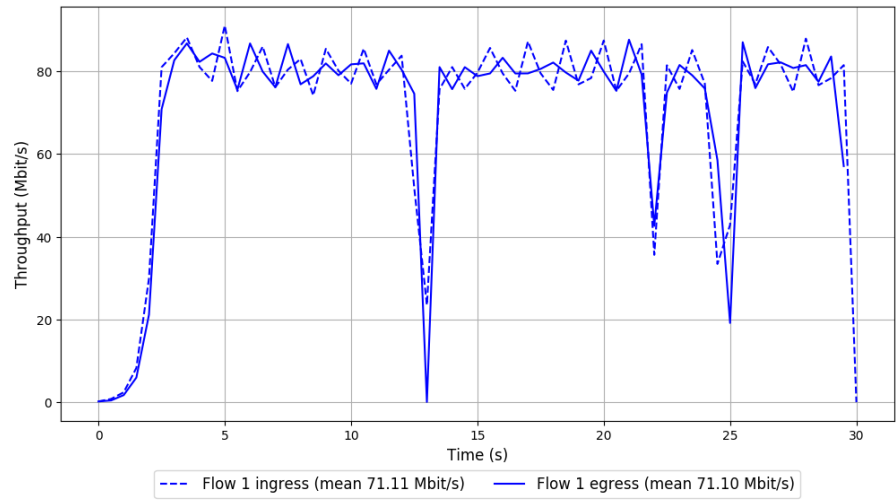
-- Flow 1:

Average throughput: 71.10 Mbit/s

95th percentile per-packet one-way delay: 135.856 ms

Loss rate: 1.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-17 05:16:05

End at: 2017-08-17 05:16:35

Below is generated by plot.py at 2017-08-17 08:53:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.29 Mbit/s

95th percentile per-packet one-way delay: 135.858 ms

Loss rate: 1.01%

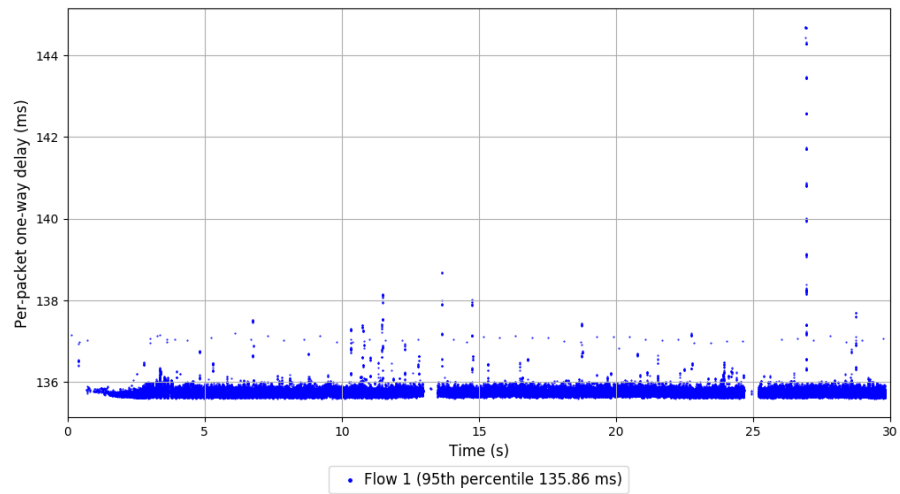
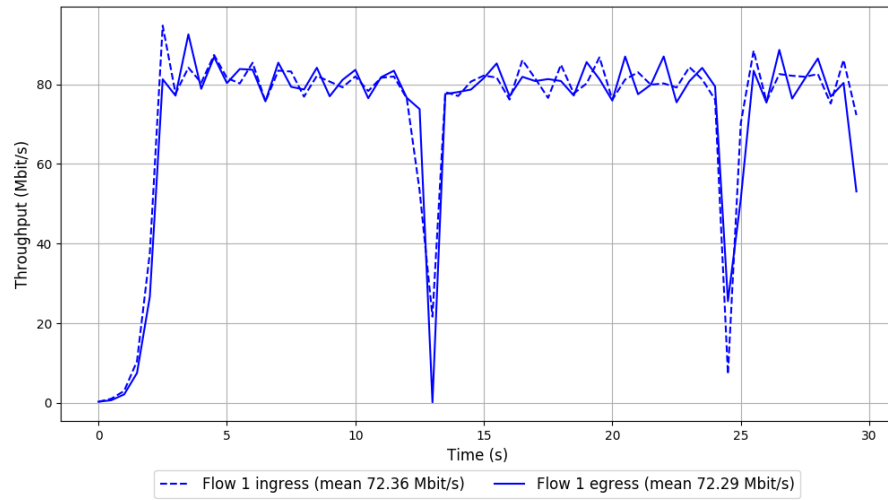
-- Flow 1:

Average throughput: 72.29 Mbit/s

95th percentile per-packet one-way delay: 135.858 ms

Loss rate: 1.01%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-17 05:27:21

End at: 2017-08-17 05:27:51

Below is generated by plot.py at 2017-08-17 08:53:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.48 Mbit/s

95th percentile per-packet one-way delay: 136.811 ms

Loss rate: 1.06%

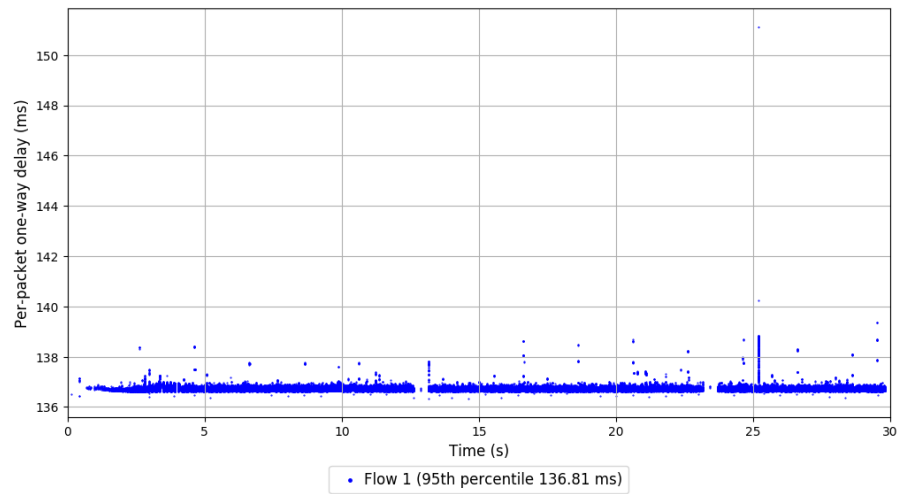
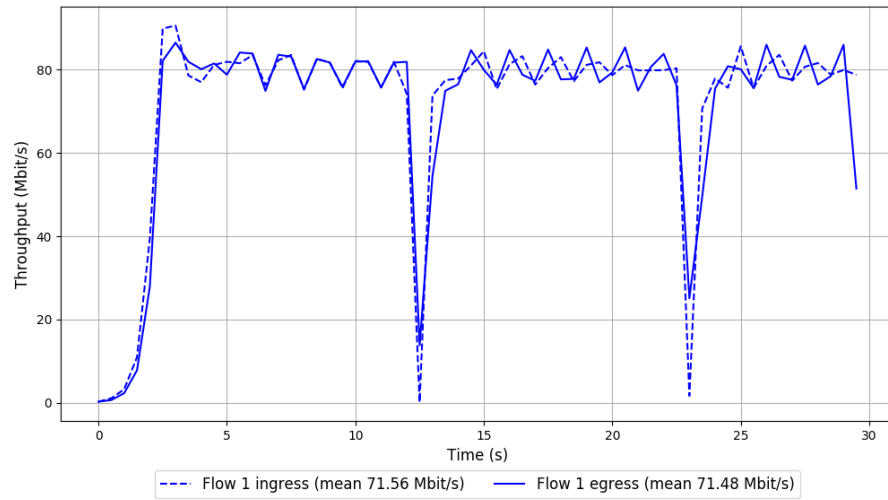
-- Flow 1:

Average throughput: 71.48 Mbit/s

95th percentile per-packet one-way delay: 136.811 ms

Loss rate: 1.06%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-17 05:39:05

End at: 2017-08-17 05:39:35

Below is generated by plot.py at 2017-08-17 08:53:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.66 Mbit/s

95th percentile per-packet one-way delay: 136.812 ms

Loss rate: 1.06%

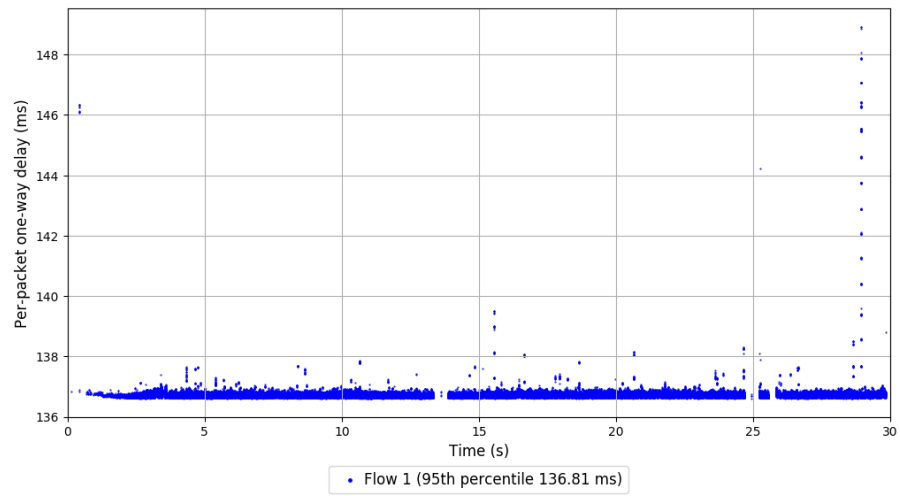
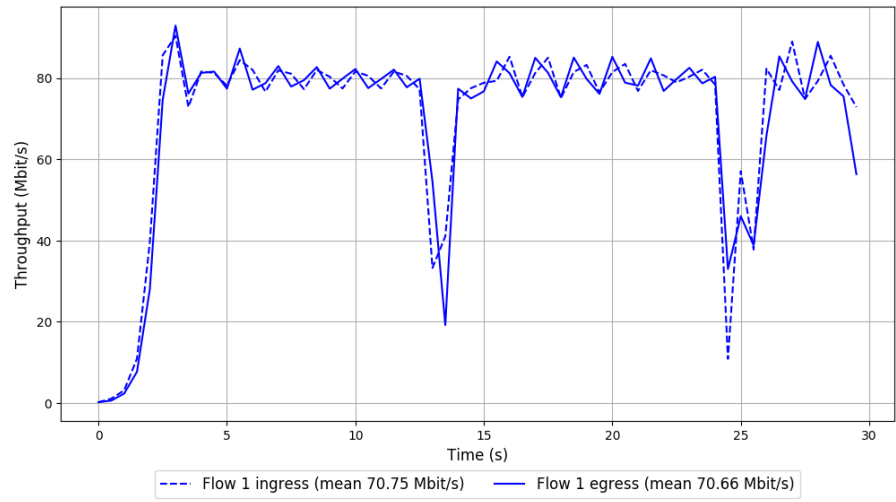
-- Flow 1:

Average throughput: 70.66 Mbit/s

95th percentile per-packet one-way delay: 136.812 ms

Loss rate: 1.06%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-17 05:50:56

End at: 2017-08-17 05:51:26

Below is generated by plot.py at 2017-08-17 08:53:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.05 Mbit/s

95th percentile per-packet one-way delay: 136.853 ms

Loss rate: 1.12%

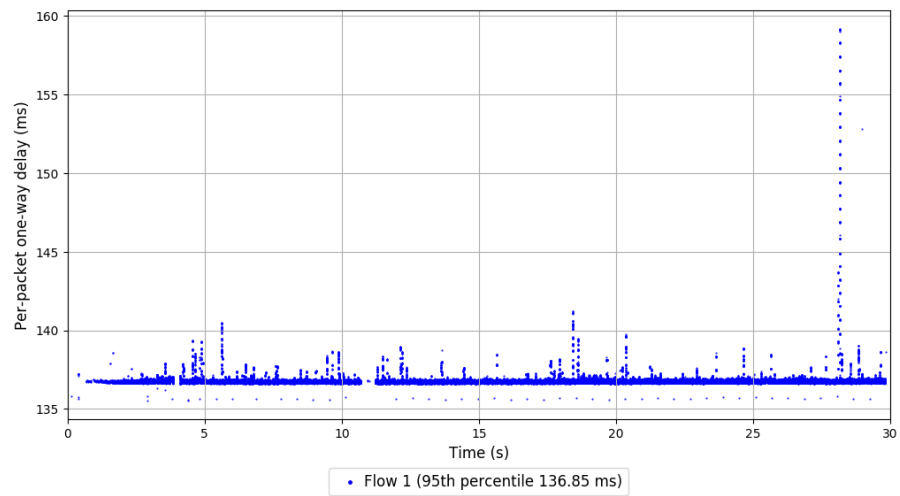
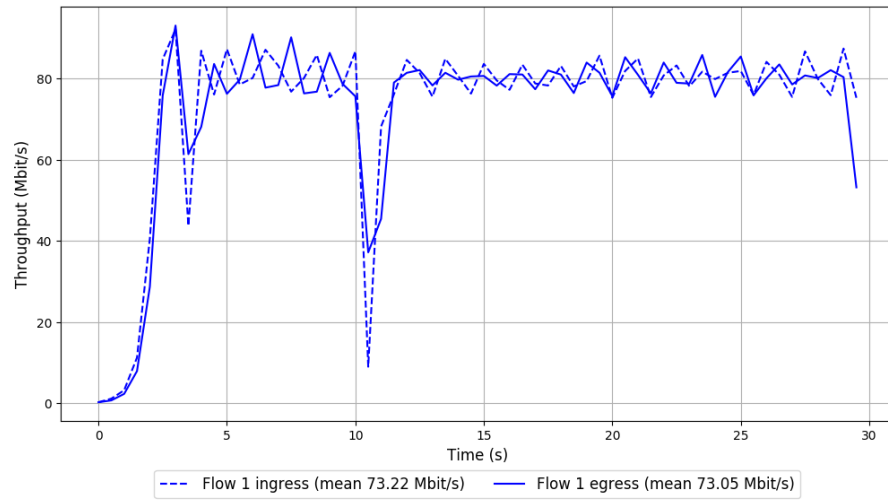
-- Flow 1:

Average throughput: 73.05 Mbit/s

95th percentile per-packet one-way delay: 136.853 ms

Loss rate: 1.12%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-17 06:02:29

End at: 2017-08-17 06:02:59

Below is generated by plot.py at 2017-08-17 08:53:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.16 Mbit/s

95th percentile per-packet one-way delay: 136.678 ms

Loss rate: 2.00%

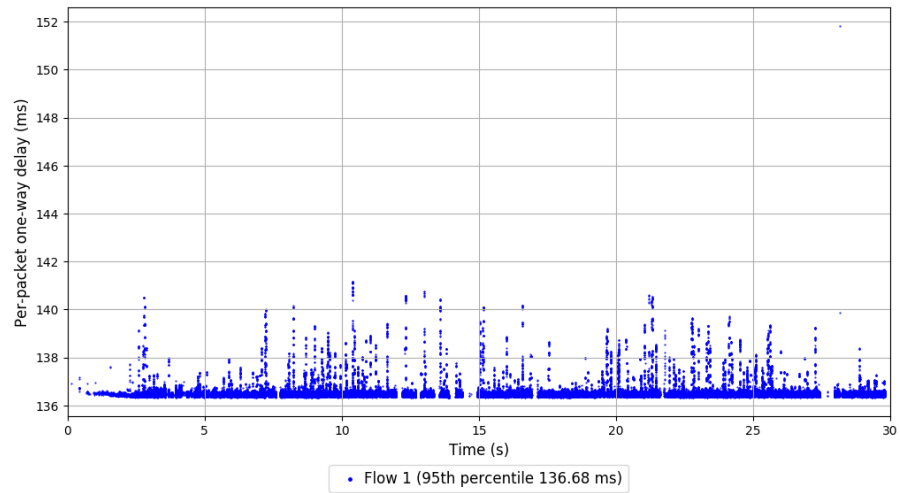
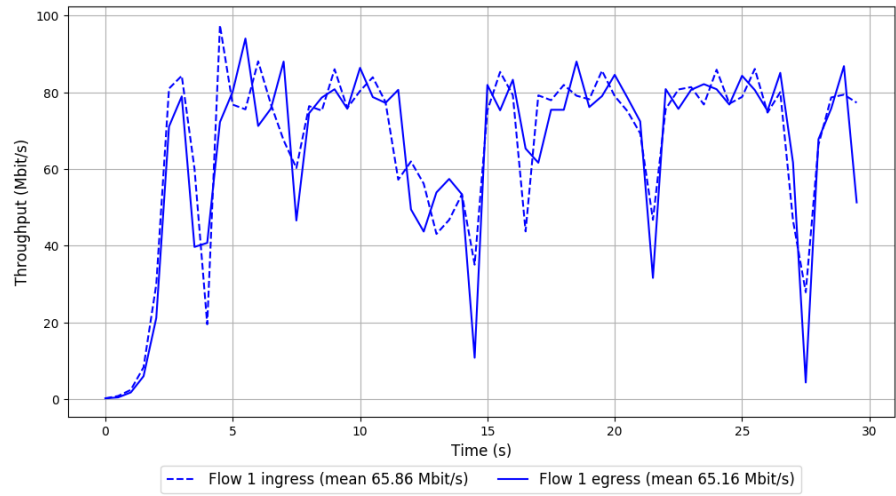
-- Flow 1:

Average throughput: 65.16 Mbit/s

95th percentile per-packet one-way delay: 136.678 ms

Loss rate: 2.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-17 06:14:28

End at: 2017-08-17 06:14:58

Below is generated by plot.py at 2017-08-17 08:53:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.13 Mbit/s

95th percentile per-packet one-way delay: 160.425 ms

Loss rate: 12.58%

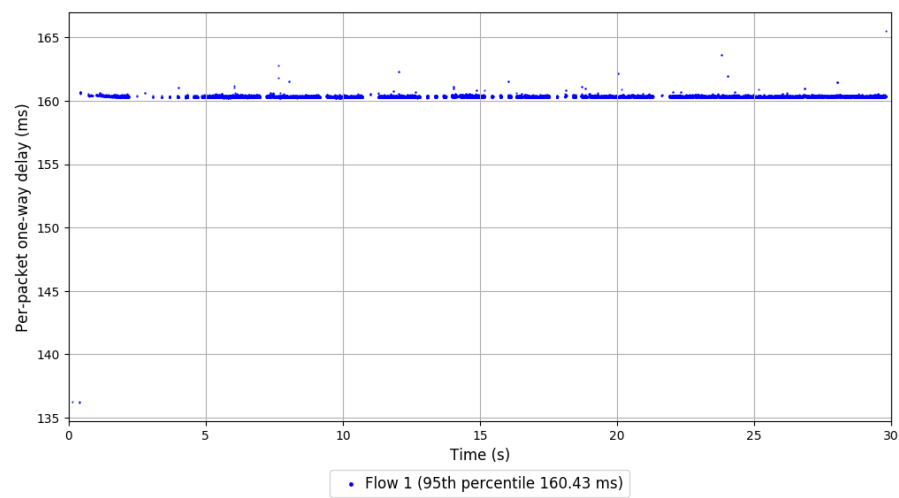
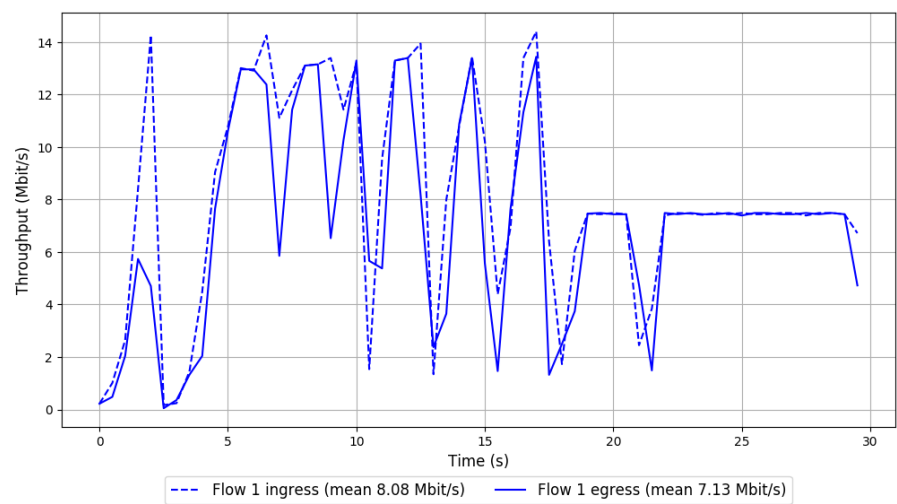
-- Flow 1:

Average throughput: 7.13 Mbit/s

95th percentile per-packet one-way delay: 160.425 ms

Loss rate: 12.58%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-17 06:25:37

End at: 2017-08-17 06:26:07

Below is generated by plot.py at 2017-08-17 08:53:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.06 Mbit/s

95th percentile per-packet one-way delay: 135.551 ms

Loss rate: 1.09%

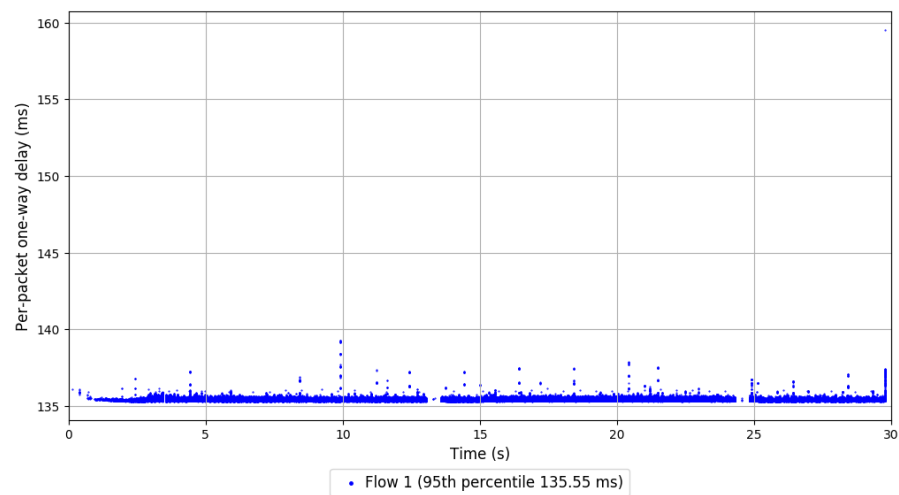
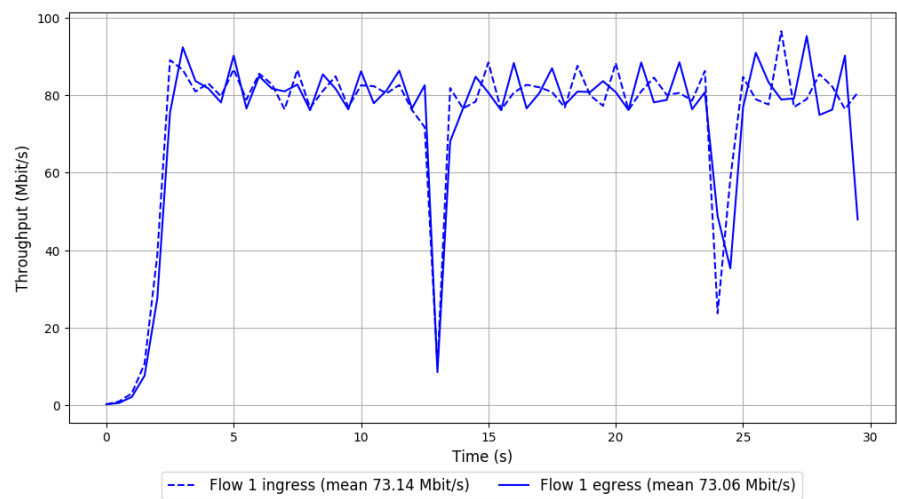
-- Flow 1:

Average throughput: 73.06 Mbit/s

95th percentile per-packet one-way delay: 135.551 ms

Loss rate: 1.09%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-17 04:32:17

End at: 2017-08-17 04:32:47

Below is generated by plot.py at 2017-08-17 08:53:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 137.306 ms

Loss rate: 64.99%

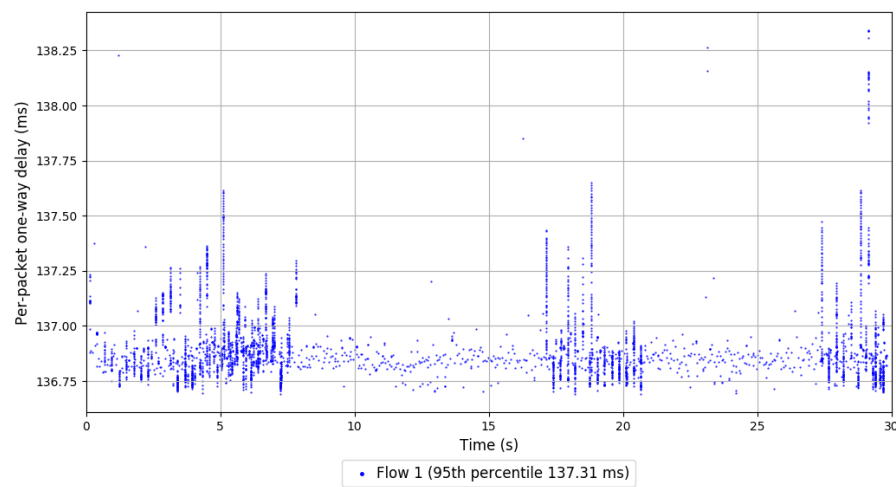
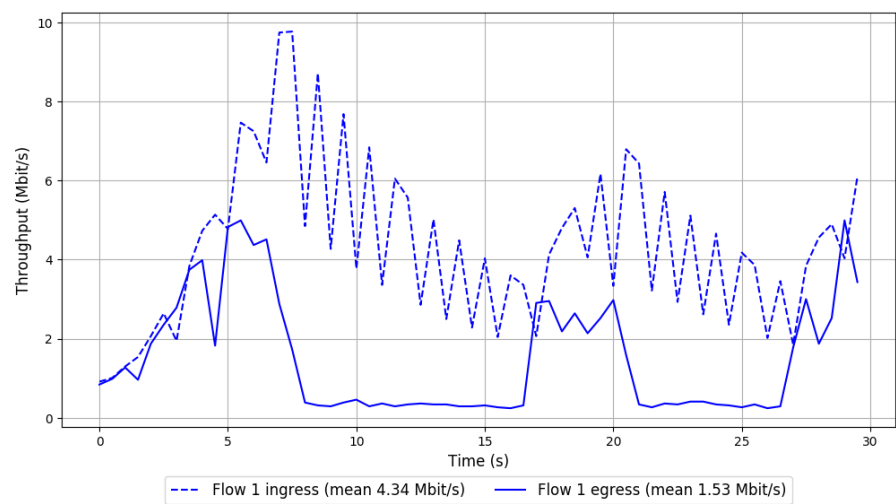
-- Flow 1:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 137.306 ms

Loss rate: 64.99%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-17 04:44:03

End at: 2017-08-17 04:44:33

Below is generated by plot.py at 2017-08-17 08:53:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 137.547 ms

Loss rate: 66.94%

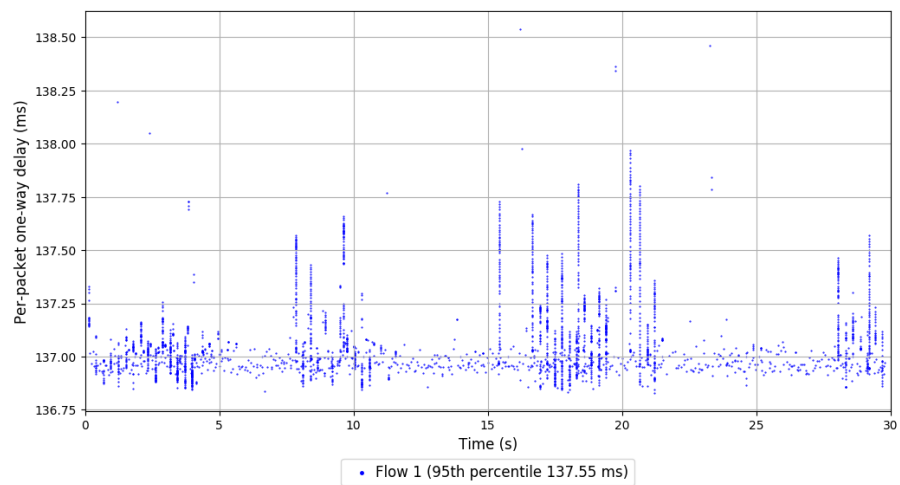
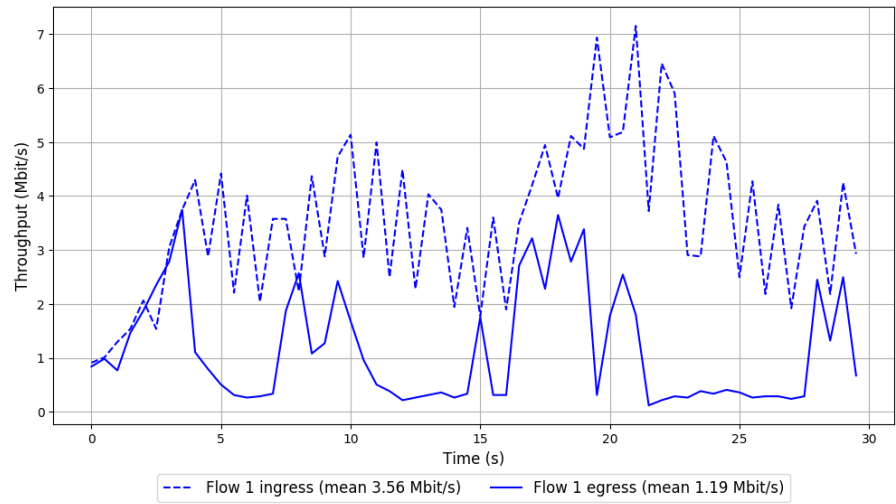
-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 137.547 ms

Loss rate: 66.94%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-17 04:55:47

End at: 2017-08-17 04:56:17

Below is generated by plot.py at 2017-08-17 08:53:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 137.666 ms

Loss rate: 67.94%

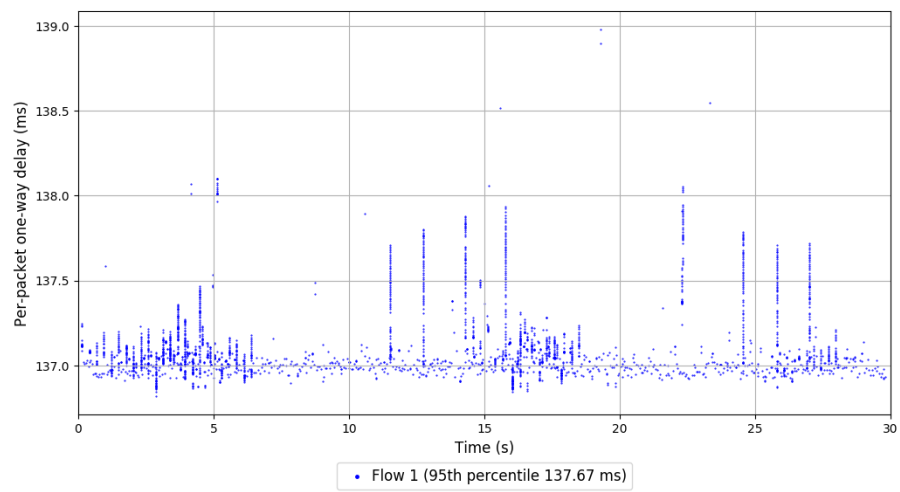
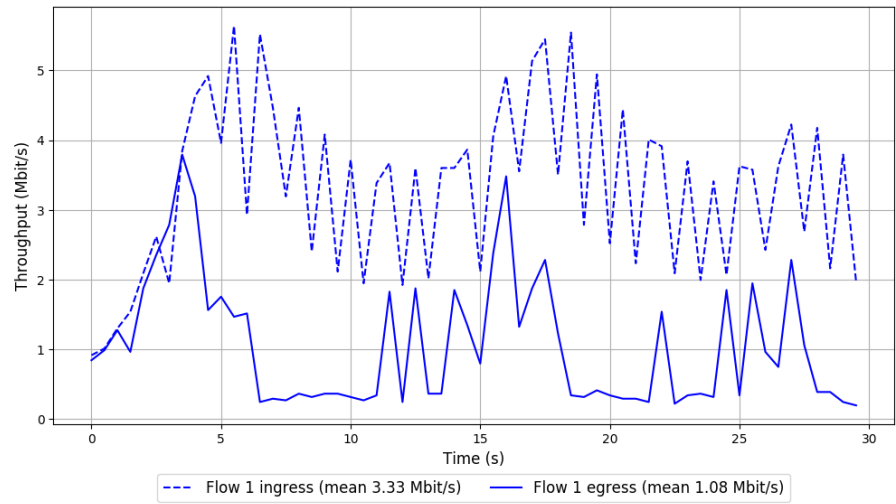
-- Flow 1:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 137.666 ms

Loss rate: 67.94%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-17 05:07:43

End at: 2017-08-17 05:08:13

Below is generated by plot.py at 2017-08-17 08:53:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 136.888 ms

Loss rate: 67.08%

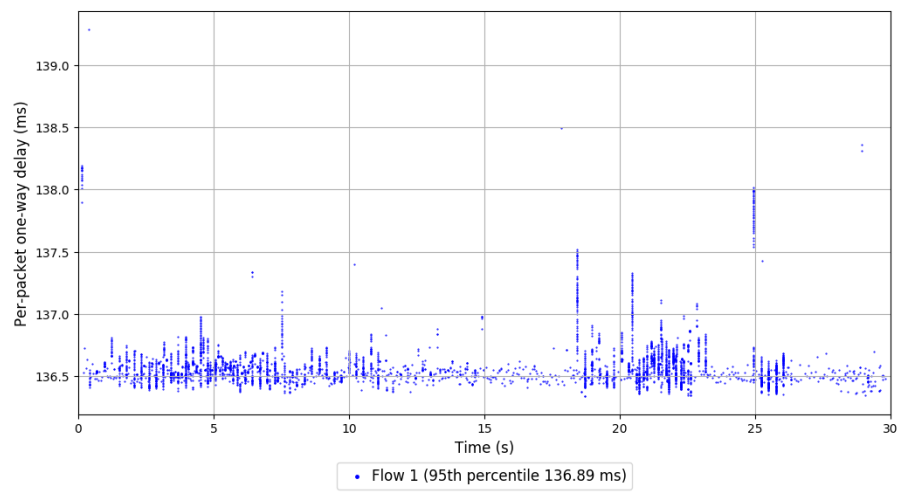
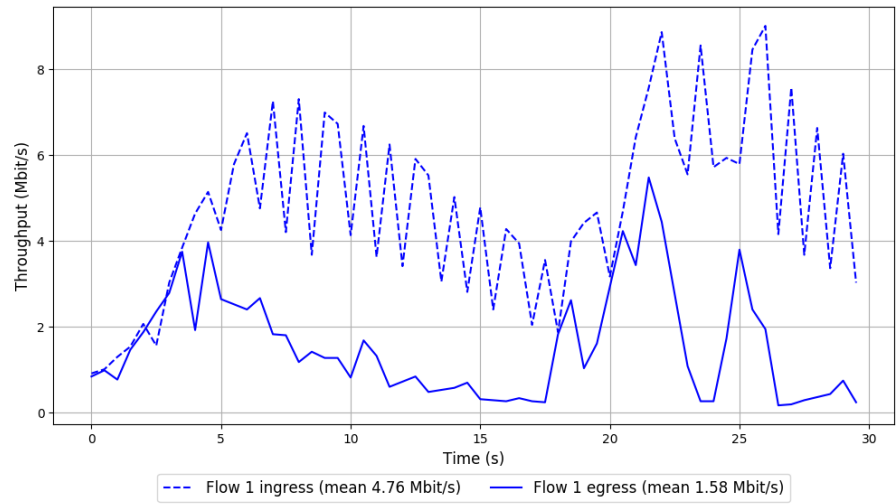
-- Flow 1:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 136.888 ms

Loss rate: 67.08%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-17 05:18:58

End at: 2017-08-17 05:19:28

Below is generated by plot.py at 2017-08-17 08:54:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.98 Mbit/s

95th percentile per-packet one-way delay: 165.871 ms

Loss rate: 1.64%

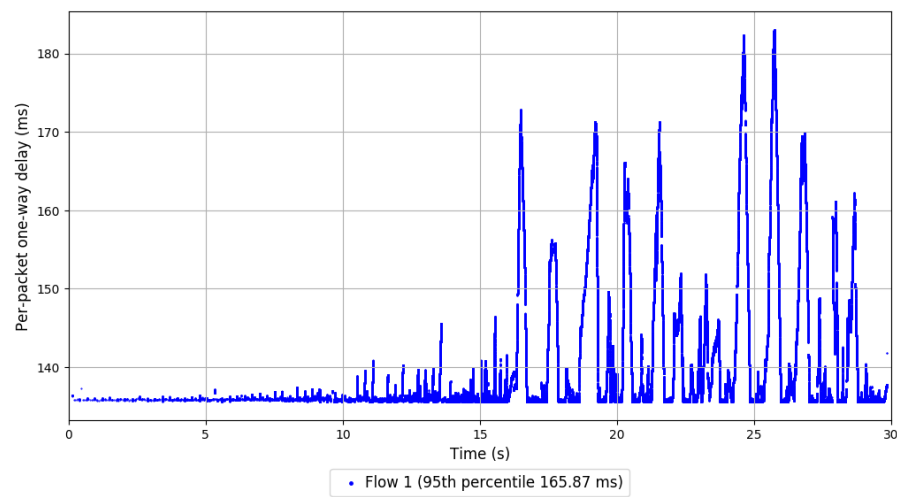
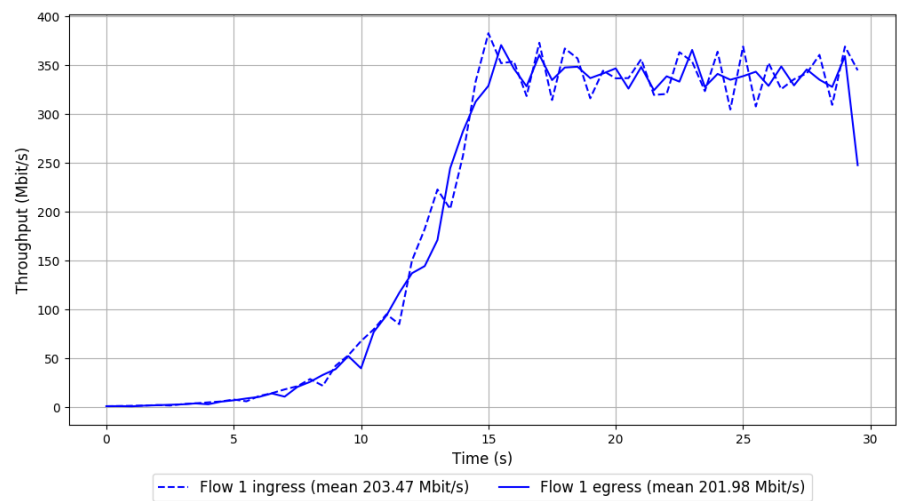
-- Flow 1:

Average throughput: 201.98 Mbit/s

95th percentile per-packet one-way delay: 165.871 ms

Loss rate: 1.64%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-17 05:30:25

End at: 2017-08-17 05:30:55

Below is generated by plot.py at 2017-08-17 08:54:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.25 Mbit/s

95th percentile per-packet one-way delay: 176.310 ms

Loss rate: 1.57%

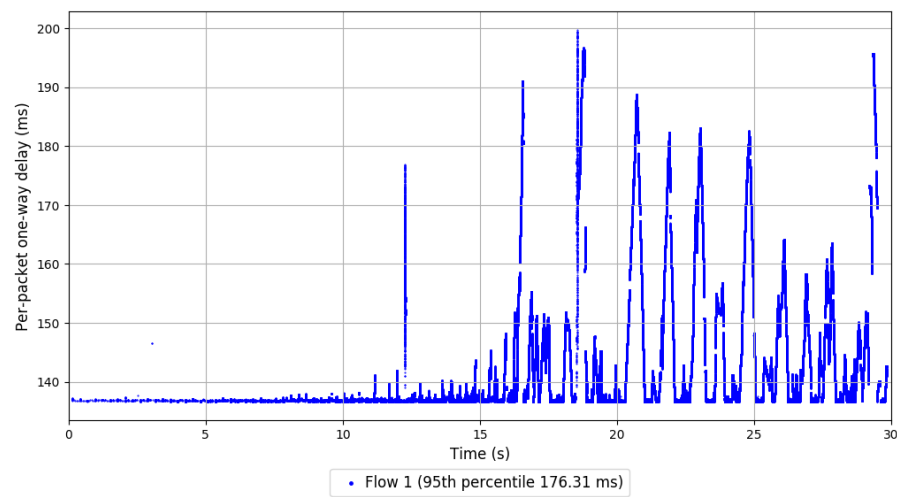
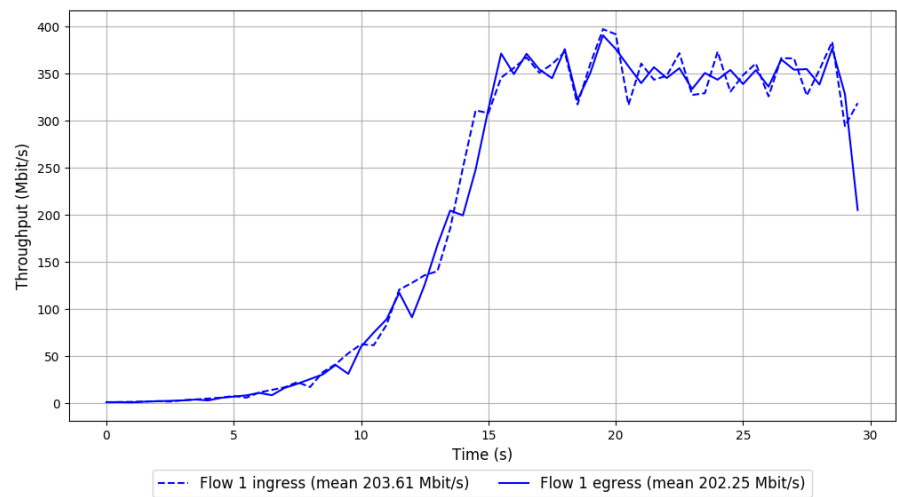
-- Flow 1:

Average throughput: 202.25 Mbit/s

95th percentile per-packet one-way delay: 176.310 ms

Loss rate: 1.57%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-17 05:42:13

End at: 2017-08-17 05:42:43

Below is generated by plot.py at 2017-08-17 08:55:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.27 Mbit/s

95th percentile per-packet one-way delay: 173.796 ms

Loss rate: 1.63%

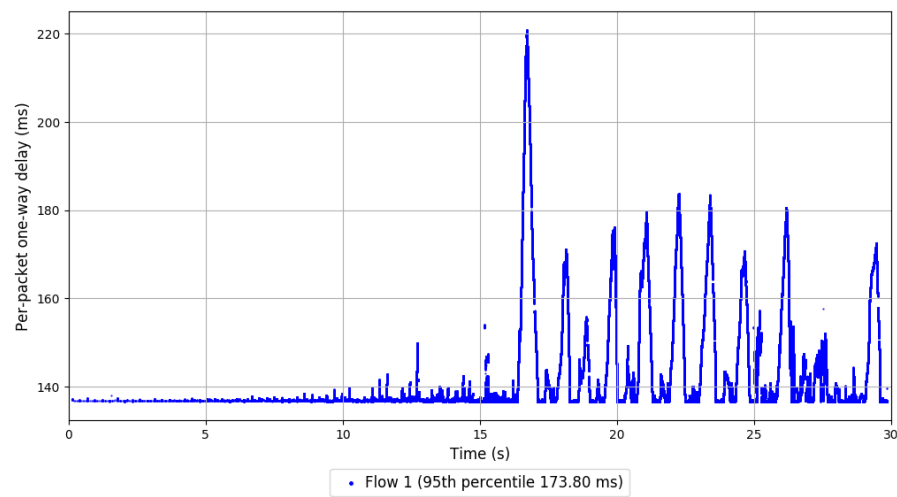
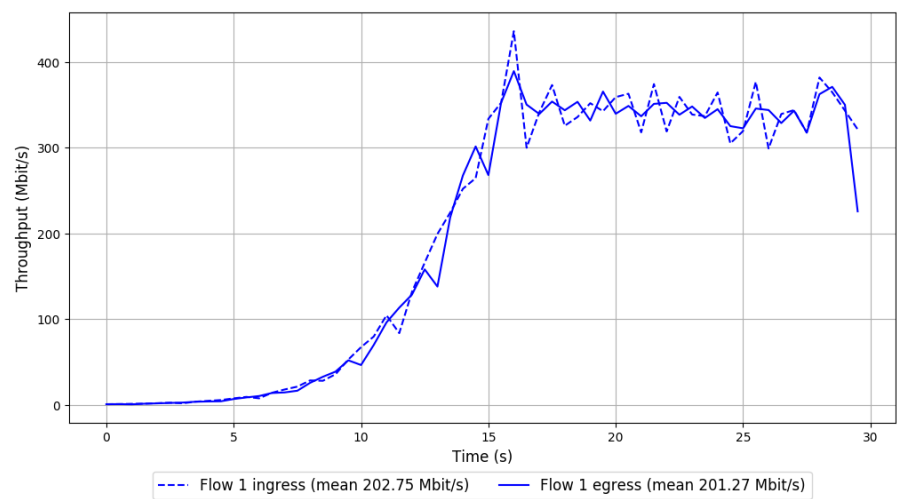
-- Flow 1:

Average throughput: 201.27 Mbit/s

95th percentile per-packet one-way delay: 173.796 ms

Loss rate: 1.63%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-17 05:54:05

End at: 2017-08-17 05:54:35

Below is generated by plot.py at 2017-08-17 08:55:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.93 Mbit/s

95th percentile per-packet one-way delay: 178.218 ms

Loss rate: 1.48%

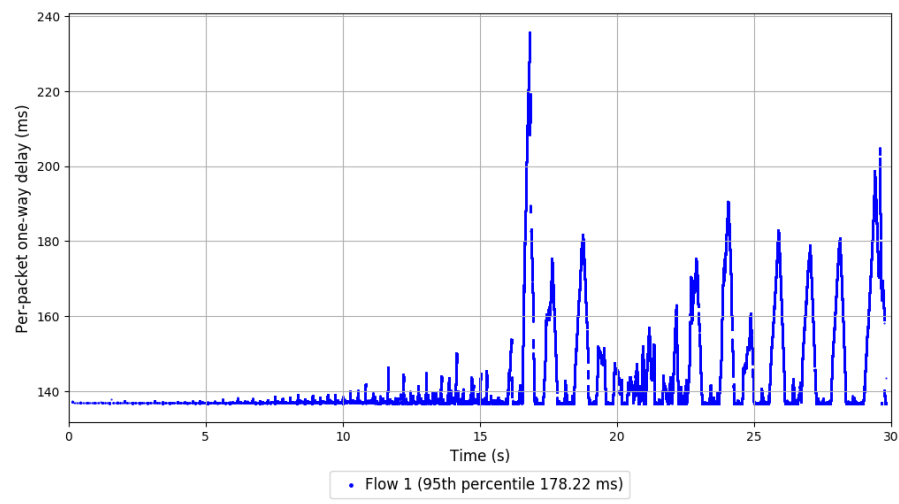
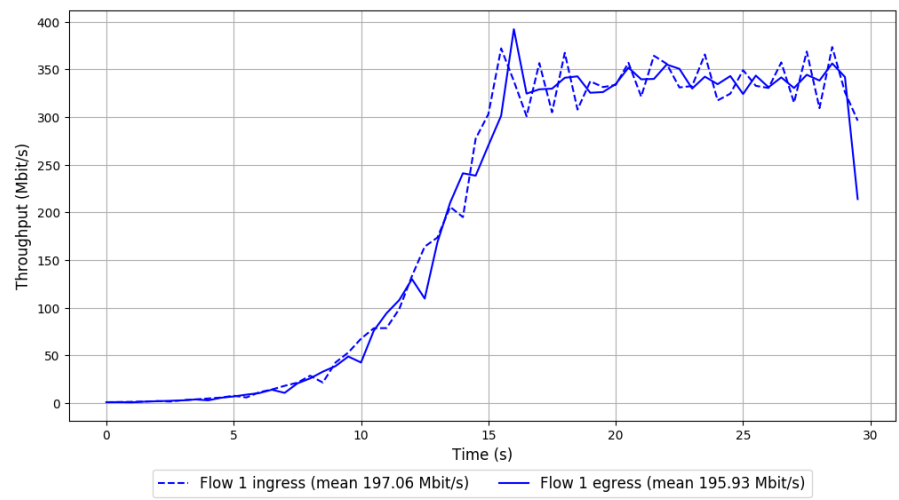
-- Flow 1:

Average throughput: 195.93 Mbit/s

95th percentile per-packet one-way delay: 178.218 ms

Loss rate: 1.48%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-17 06:05:34

End at: 2017-08-17 06:06:04

Below is generated by plot.py at 2017-08-17 08:55:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 160.599 ms

Loss rate: 58.09%

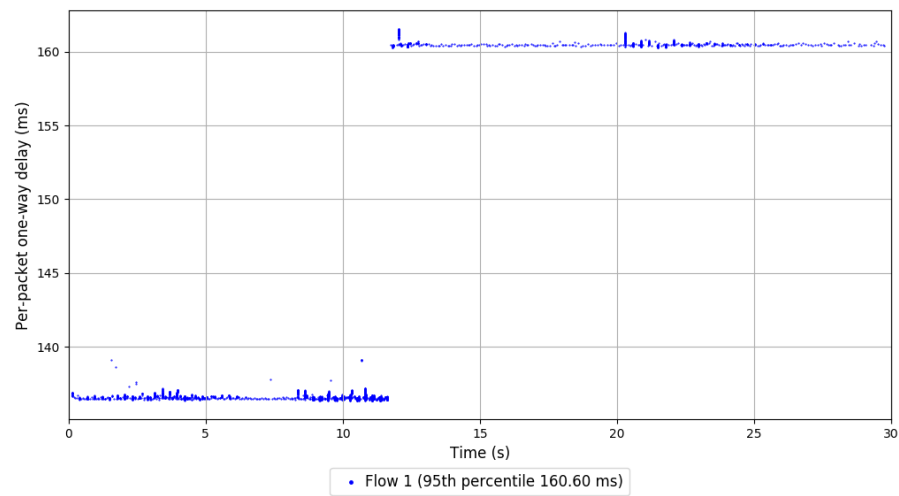
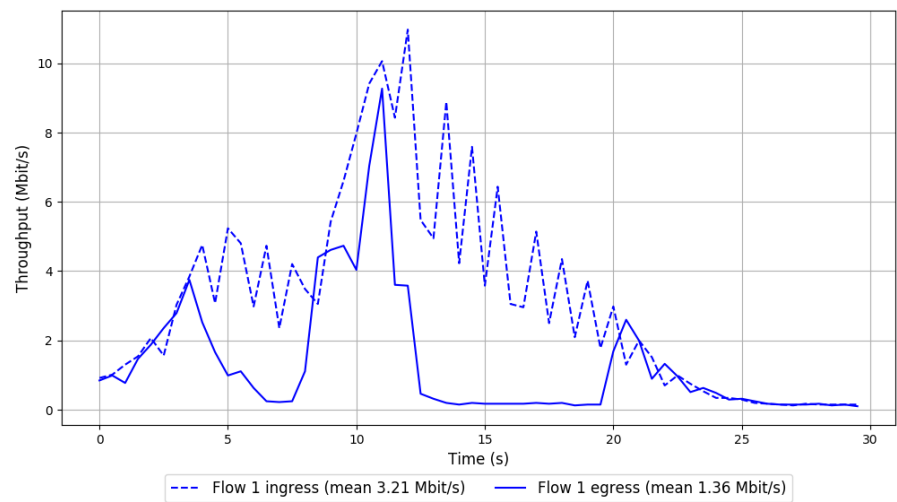
-- Flow 1:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 160.599 ms

Loss rate: 58.09%

Run 9: Report of CalibratedKoho — Data Link

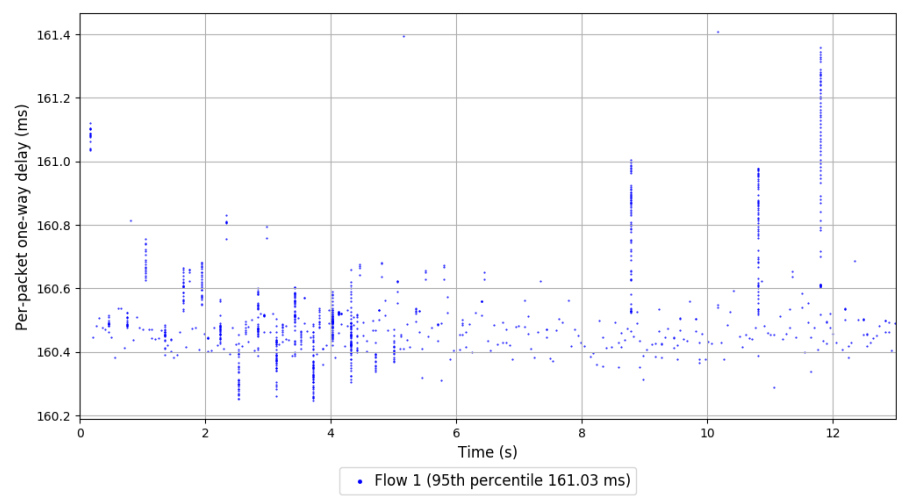
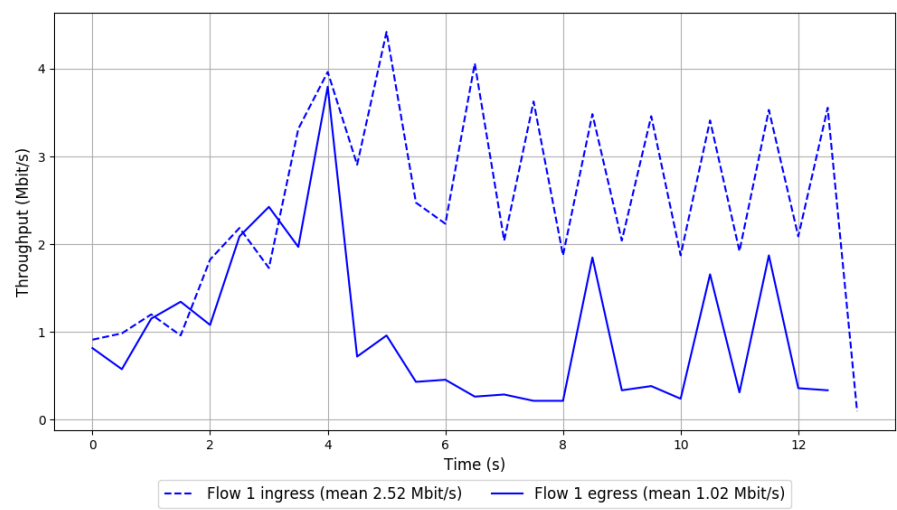


Run 10: Statistics of CalibratedKoho

Start at: 2017-08-17 06:17:20

End at: 2017-08-17 06:17:50

Run 10: Report of CalibratedKoho — Data Link

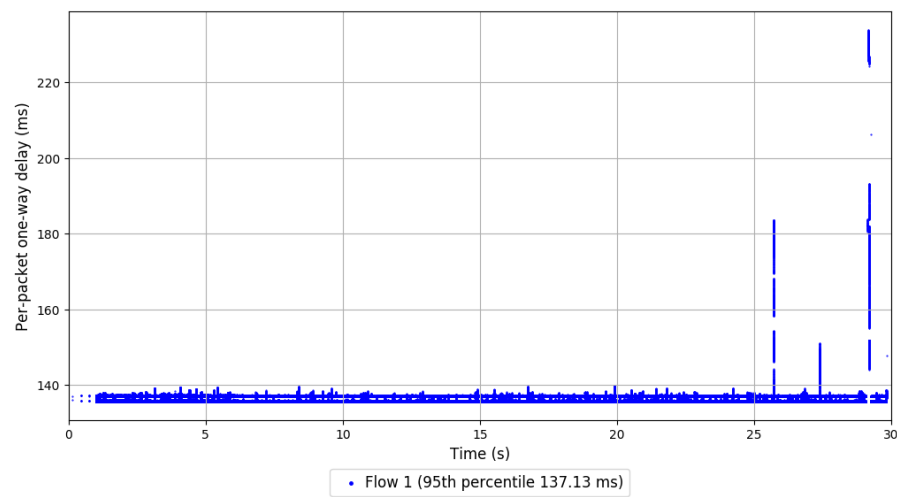
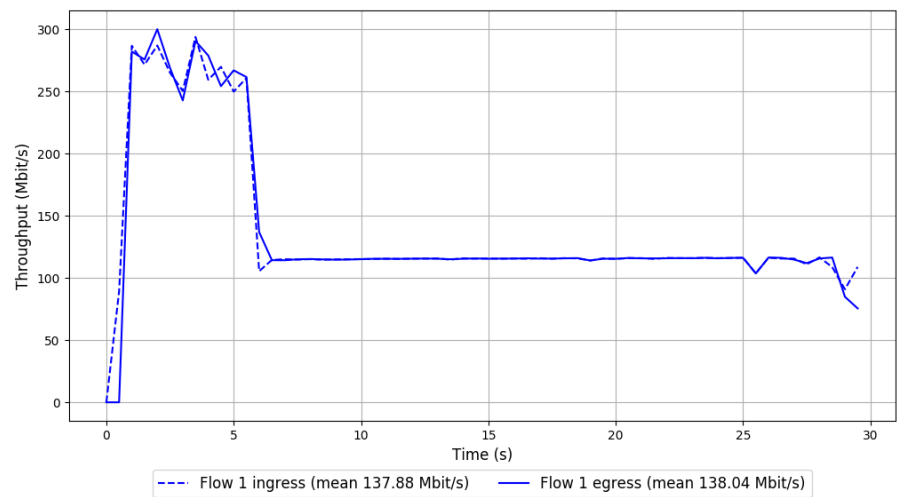


```
Run 1: Statistics of Copa

Start at: 2017-08-17 04:31:17
End at: 2017-08-17 04:31:47

# Below is generated by plot.py at 2017-08-17 08:56:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 138.04 Mbit/s
95th percentile per-packet one-way delay: 137.132 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 138.04 Mbit/s
95th percentile per-packet one-way delay: 137.132 ms
Loss rate: 0.77%
```


Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-17 04:43:12

End at: 2017-08-17 04:43:42

Below is generated by plot.py at 2017-08-17 08:56:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.10 Mbit/s

95th percentile per-packet one-way delay: 136.961 ms

Loss rate: 0.99%

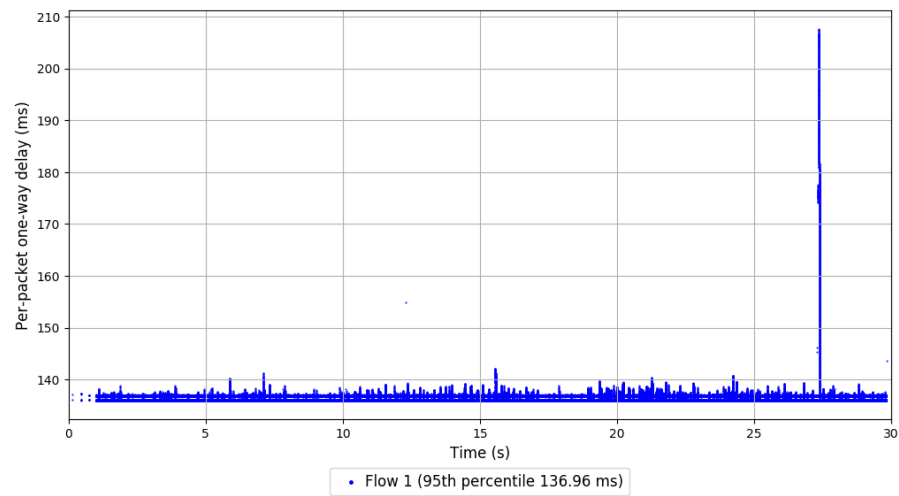
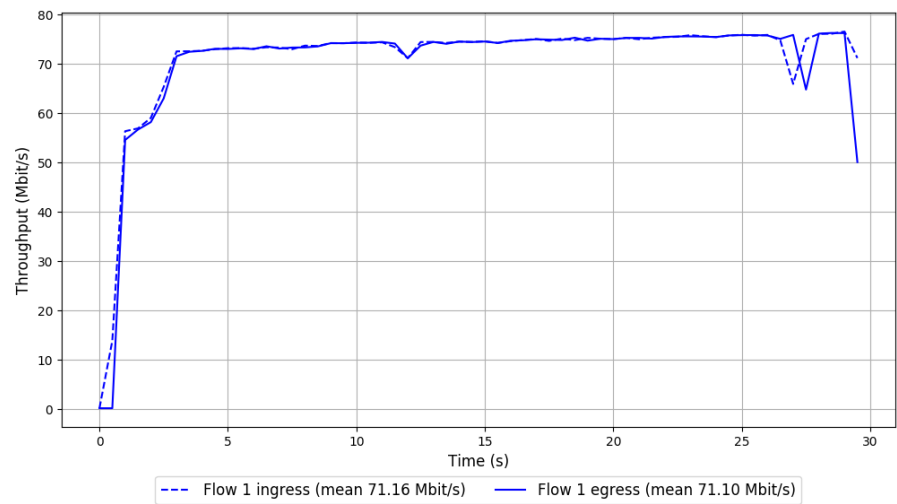
-- Flow 1:

Average throughput: 71.10 Mbit/s

95th percentile per-packet one-way delay: 136.961 ms

Loss rate: 0.99%

Run 2: Report of Copa — Data Link

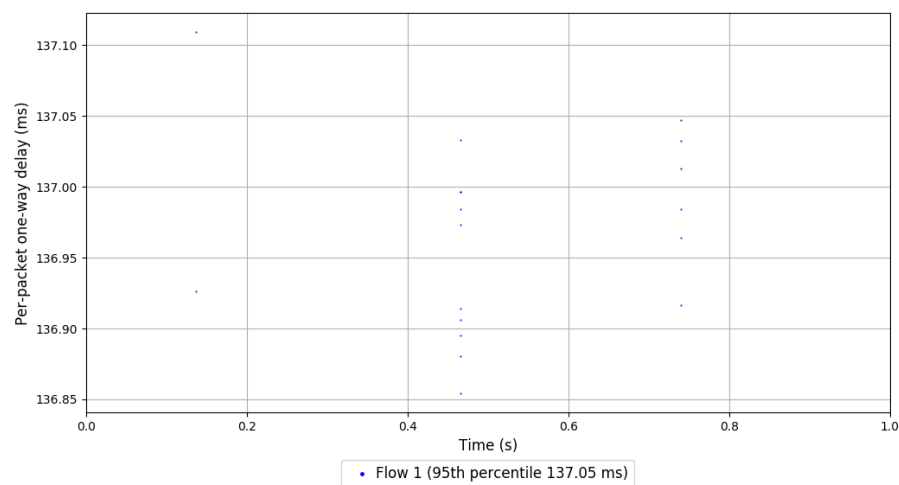
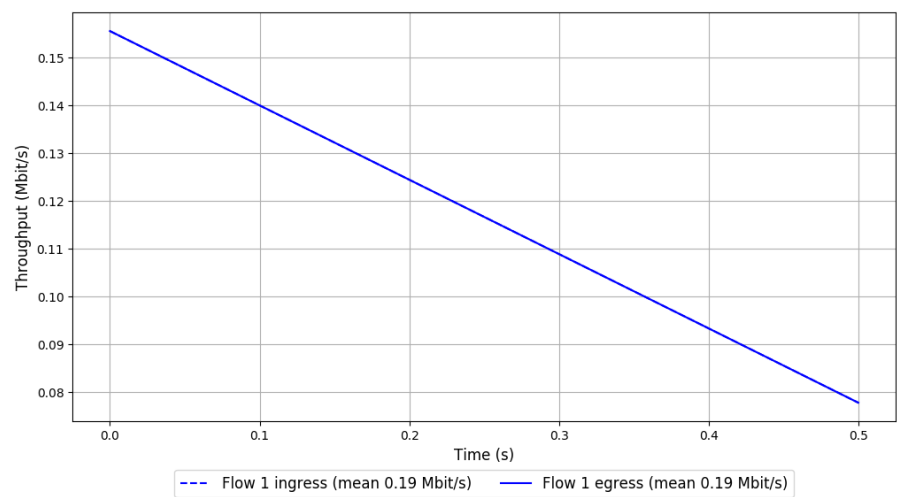


Run 3: Statistics of Copa

Start at: 2017-08-17 04:55:04

End at: 2017-08-17 04:55:34

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-17 05:06:48

End at: 2017-08-17 05:07:18

Below is generated by plot.py at 2017-08-17 08:56:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.04 Mbit/s

95th percentile per-packet one-way delay: 137.007 ms

Loss rate: 0.94%

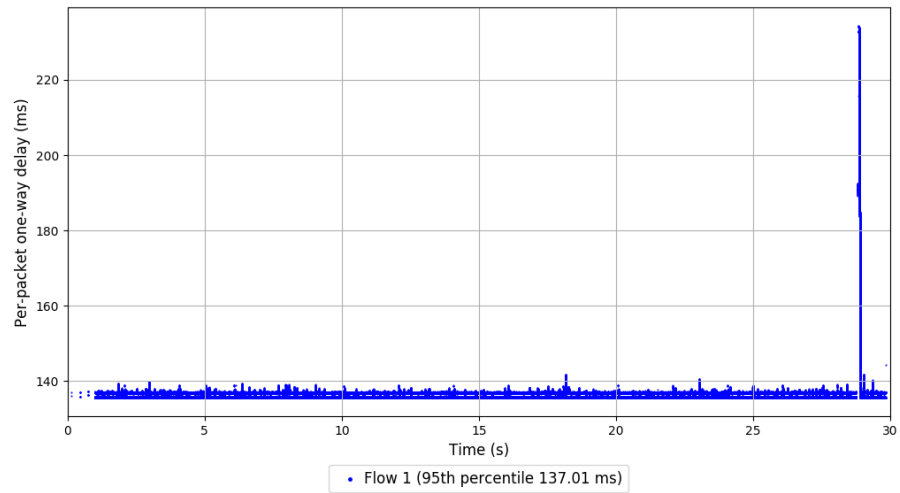
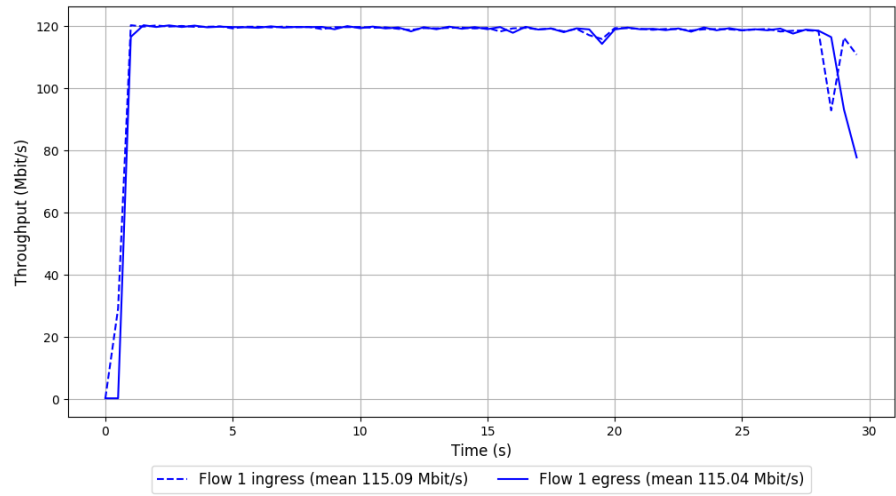
-- Flow 1:

Average throughput: 115.04 Mbit/s

95th percentile per-packet one-way delay: 137.007 ms

Loss rate: 0.94%

Run 4: Report of Copa — Data Link

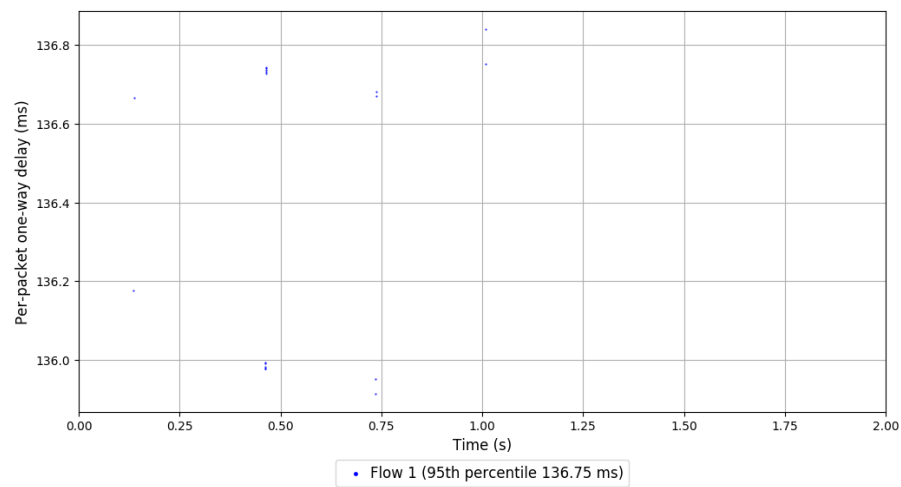
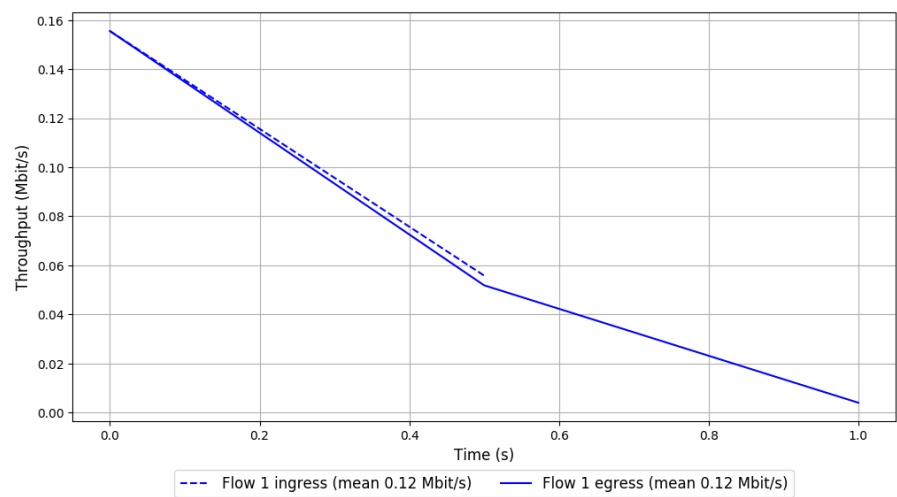


Run 5: Statistics of Copa

Start at: 2017-08-17 05:18:17

End at: 2017-08-17 05:18:47

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-17 05:29:35

End at: 2017-08-17 05:30:05

Below is generated by plot.py at 2017-08-17 08:56:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.87 Mbit/s

95th percentile per-packet one-way delay: 136.754 ms

Loss rate: 1.08%

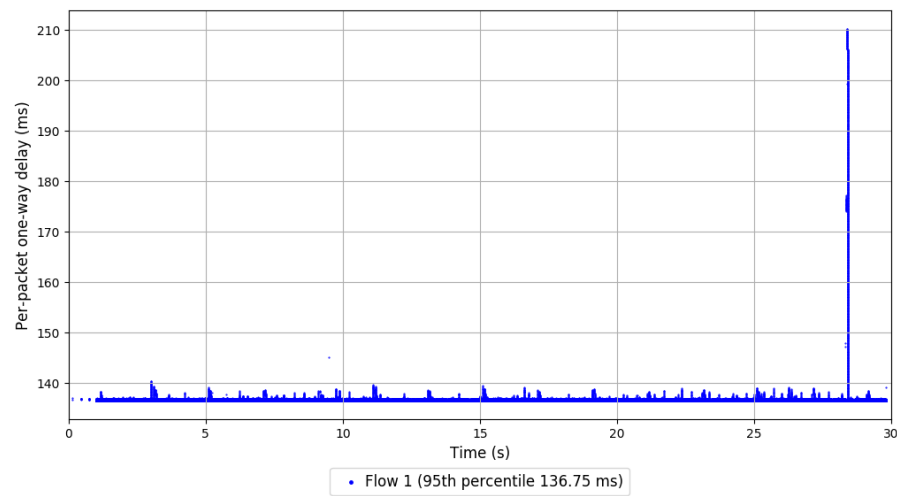
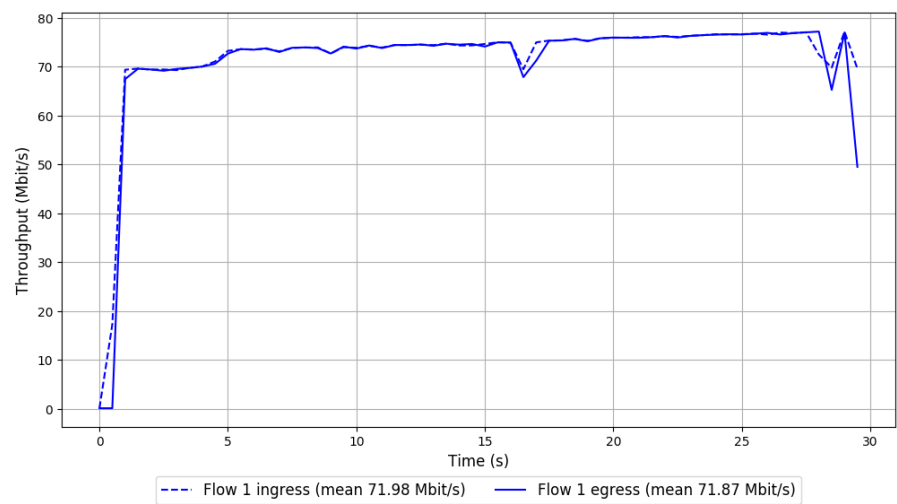
-- Flow 1:

Average throughput: 71.87 Mbit/s

95th percentile per-packet one-way delay: 136.754 ms

Loss rate: 1.08%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-17 05:41:19

End at: 2017-08-17 05:41:49

Below is generated by plot.py at 2017-08-17 08:57:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.37 Mbit/s

95th percentile per-packet one-way delay: 136.773 ms

Loss rate: 0.91%

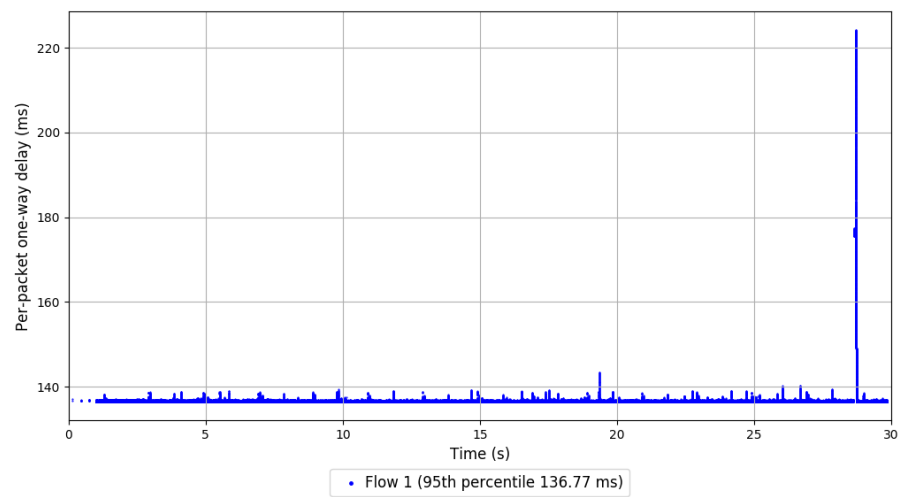
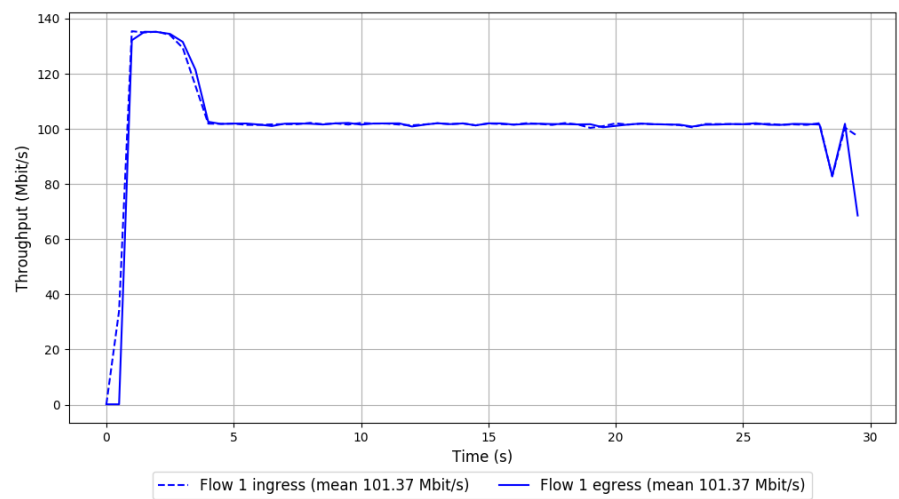
-- Flow 1:

Average throughput: 101.37 Mbit/s

95th percentile per-packet one-way delay: 136.773 ms

Loss rate: 0.91%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-17 05:53:10

End at: 2017-08-17 05:53:40

Below is generated by plot.py at 2017-08-17 08:57:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.40 Mbit/s

95th percentile per-packet one-way delay: 136.742 ms

Loss rate: 1.05%

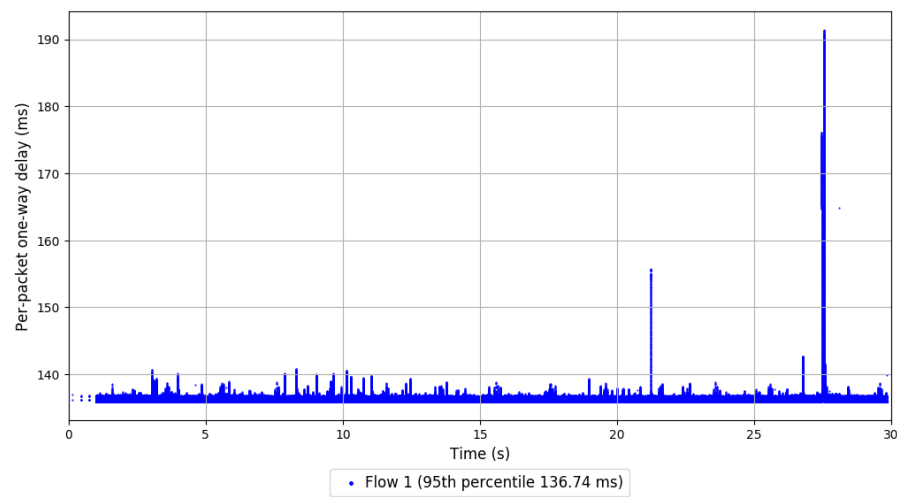
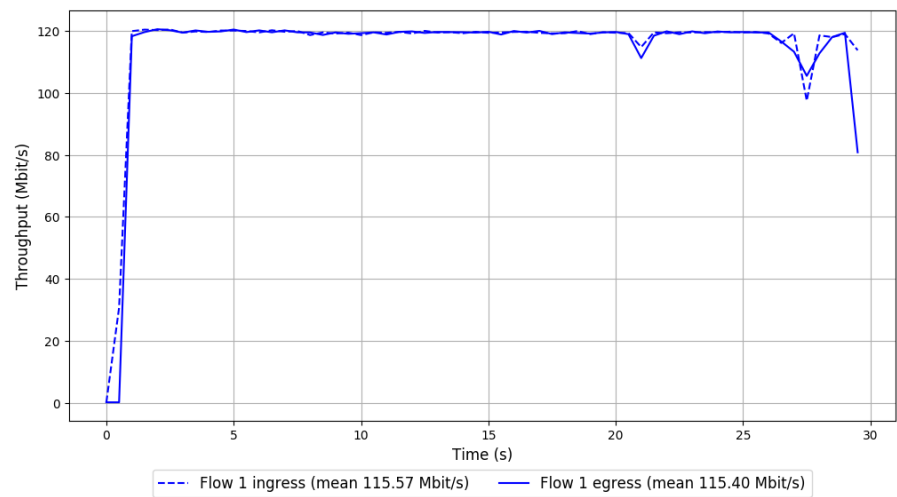
-- Flow 1:

Average throughput: 115.40 Mbit/s

95th percentile per-packet one-way delay: 136.742 ms

Loss rate: 1.05%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-17 06:04:42

End at: 2017-08-17 06:05:12

Below is generated by plot.py at 2017-08-17 08:57:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.40 Mbit/s

95th percentile per-packet one-way delay: 136.461 ms

Loss rate: 1.01%

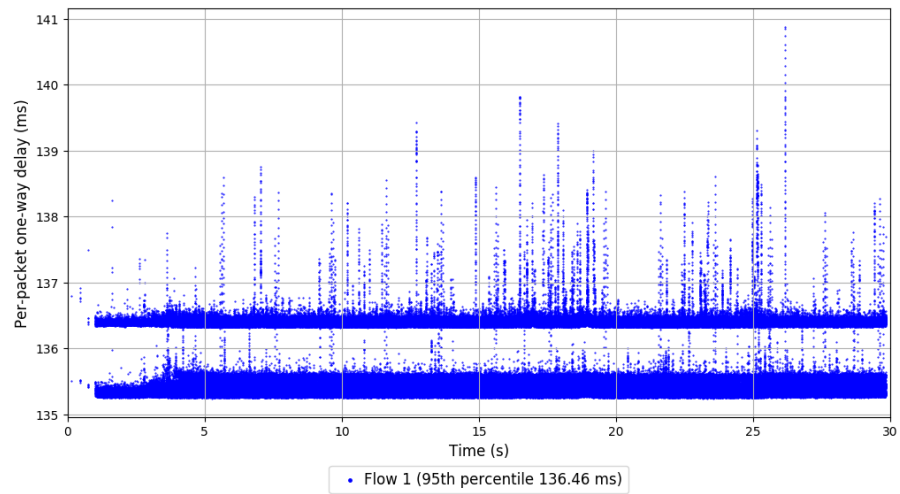
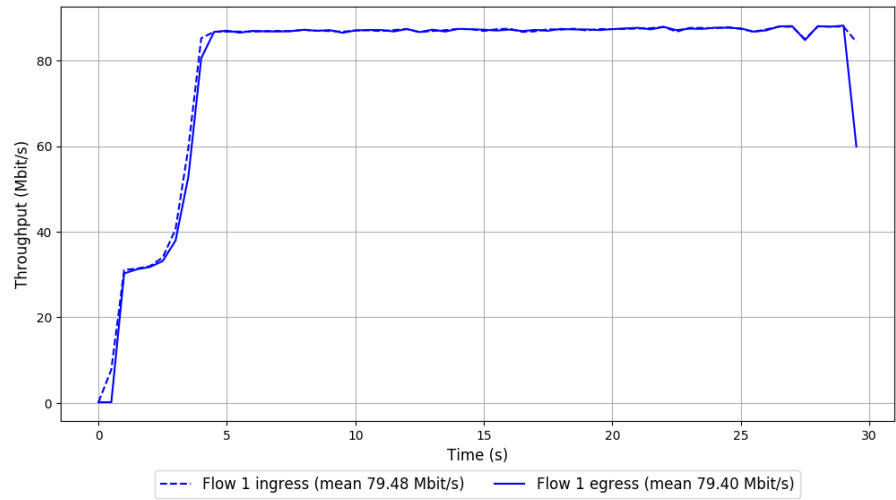
-- Flow 1:

Average throughput: 79.40 Mbit/s

95th percentile per-packet one-way delay: 136.461 ms

Loss rate: 1.01%

Run 9: Report of Copa — Data Link

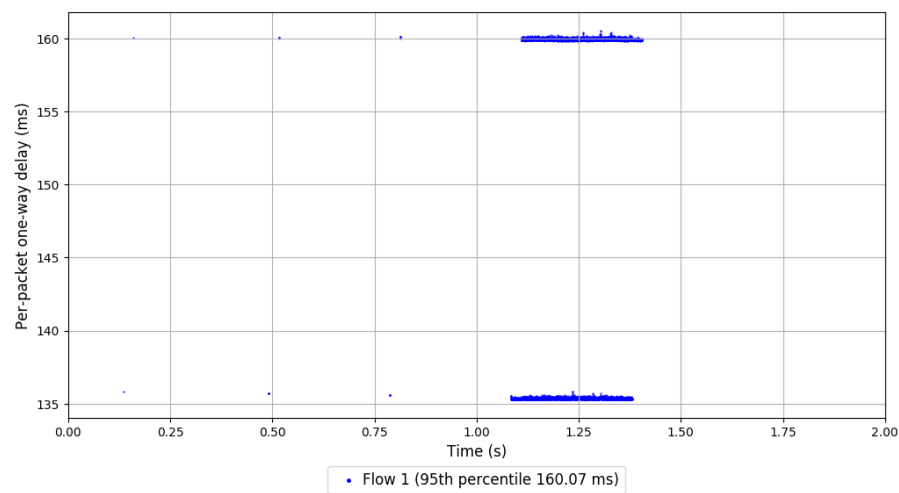
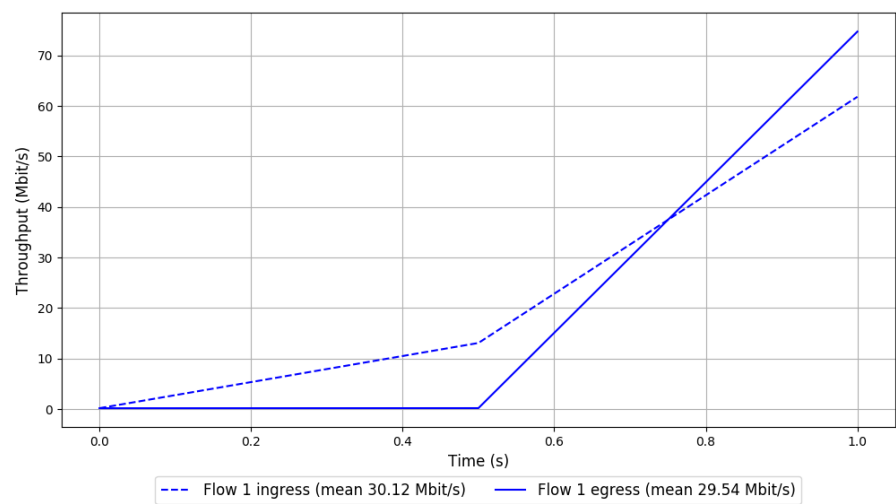


Run 10: Statistics of Copa

Start at: 2017-08-17 06:16:37

End at: 2017-08-17 06:17:07

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-17 04:39:25

End at: 2017-08-17 04:39:55

Below is generated by plot.py at 2017-08-17 08:57:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.15 Mbit/s

95th percentile per-packet one-way delay: 137.697 ms

Loss rate: 1.22%

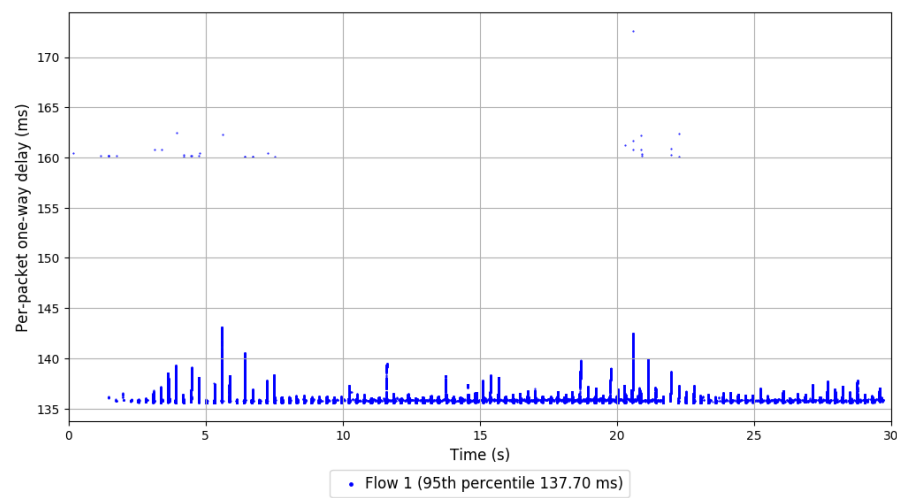
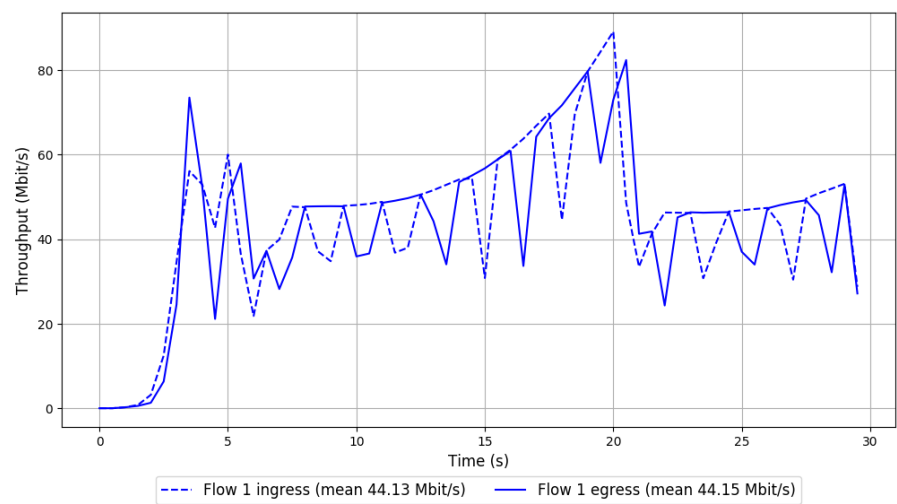
-- Flow 1:

Average throughput: 44.15 Mbit/s

95th percentile per-packet one-way delay: 137.697 ms

Loss rate: 1.22%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-17 04:51:21

End at: 2017-08-17 04:51:51

Below is generated by plot.py at 2017-08-17 08:57:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 137.296 ms

Loss rate: 4.83%

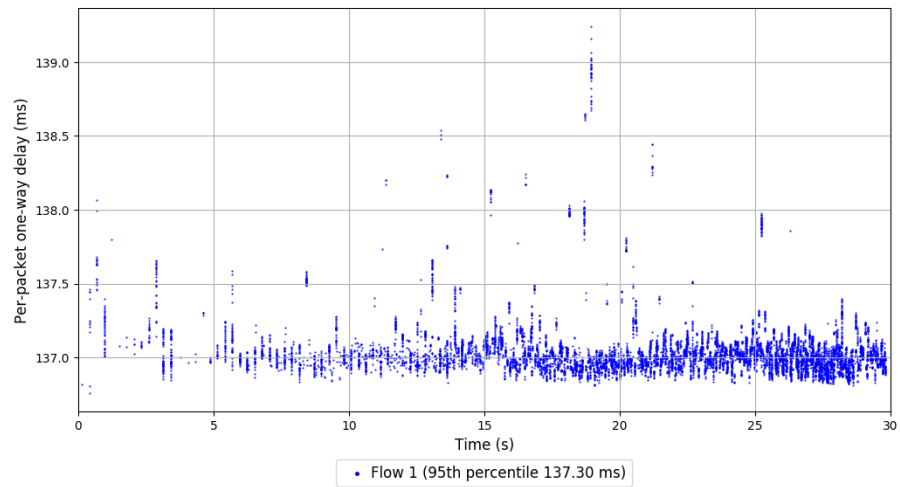
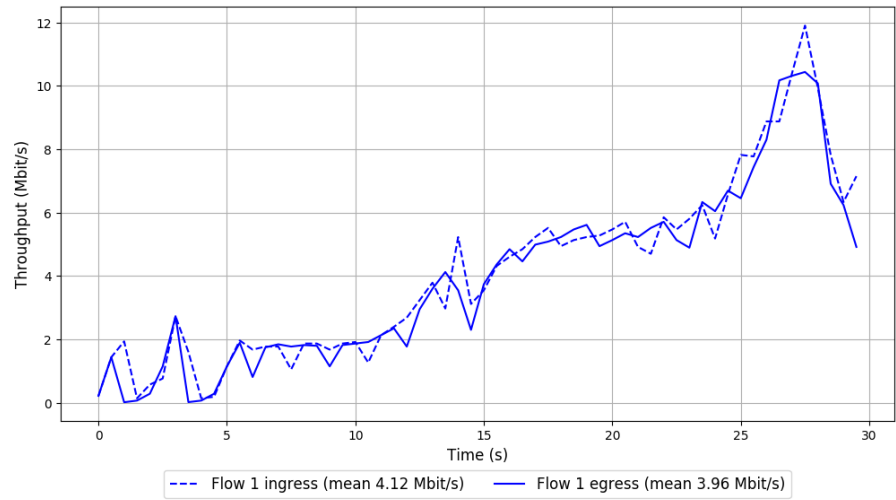
-- Flow 1:

Average throughput: 3.96 Mbit/s

95th percentile per-packet one-way delay: 137.296 ms

Loss rate: 4.83%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-17 05:03:08

End at: 2017-08-17 05:03:38

Below is generated by plot.py at 2017-08-17 08:57:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.75 Mbit/s

95th percentile per-packet one-way delay: 138.243 ms

Loss rate: 1.54%

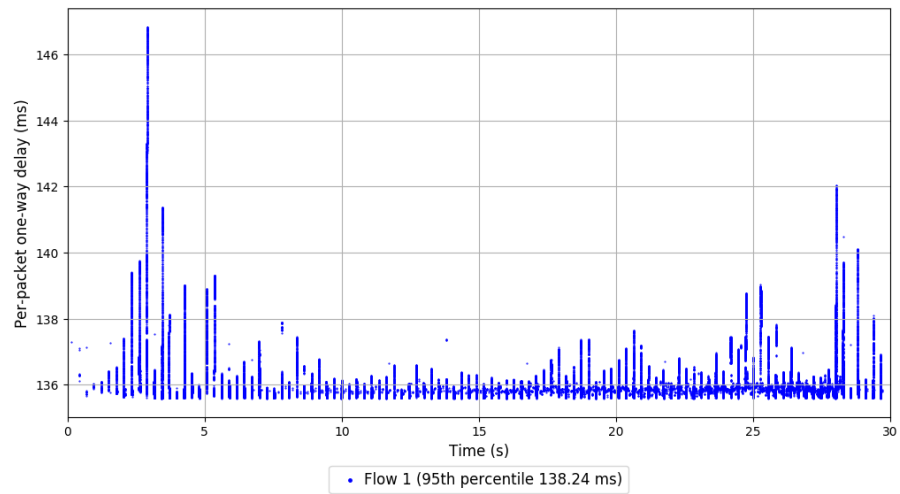
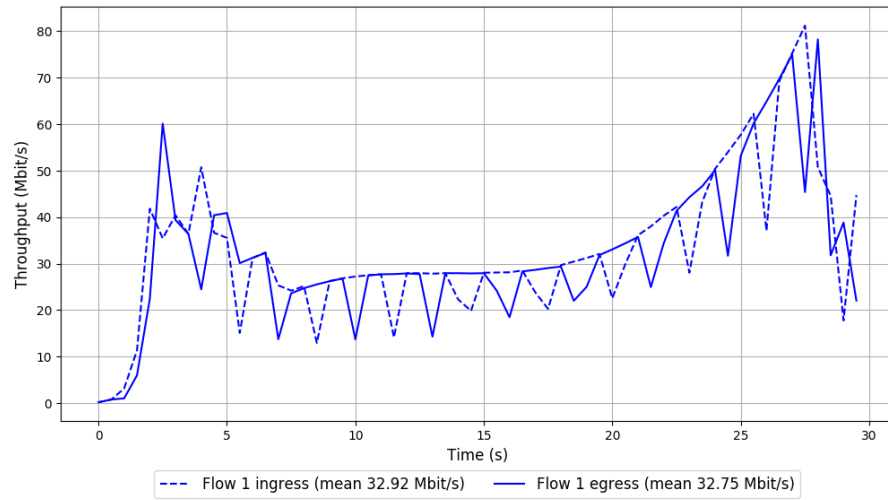
-- Flow 1:

Average throughput: 32.75 Mbit/s

95th percentile per-packet one-way delay: 138.243 ms

Loss rate: 1.54%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-17 05:14:39

End at: 2017-08-17 05:15:09

Below is generated by plot.py at 2017-08-17 08:57:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 136.722 ms

Loss rate: 3.50%

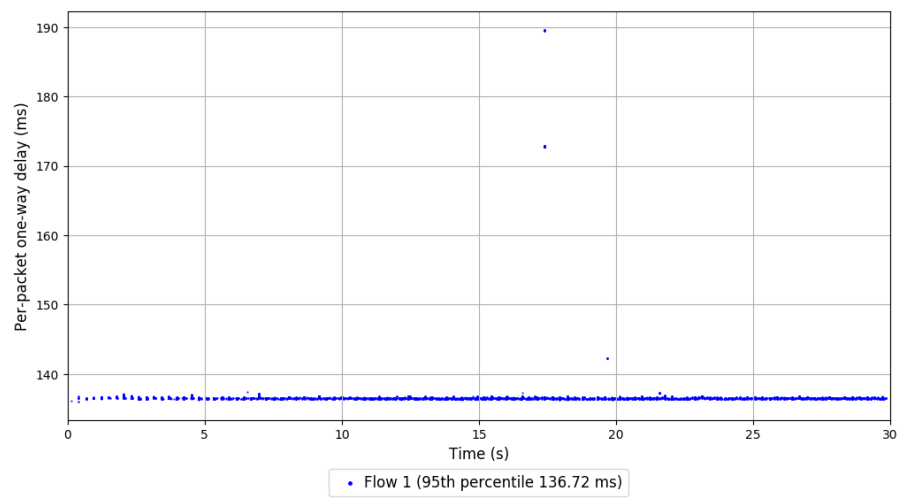
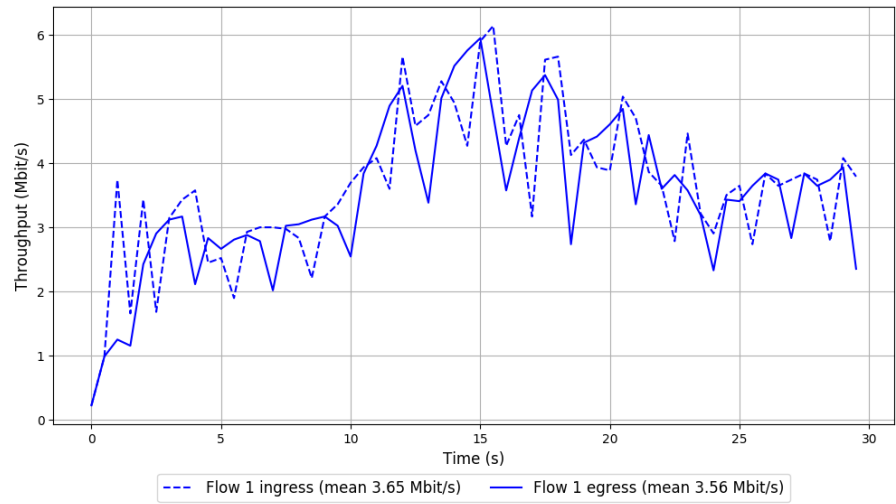
-- Flow 1:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 136.722 ms

Loss rate: 3.50%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-17 05:25:54

End at: 2017-08-17 05:26:24

Below is generated by plot.py at 2017-08-17 08:57:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.74 Mbit/s

95th percentile per-packet one-way delay: 137.453 ms

Loss rate: 1.33%

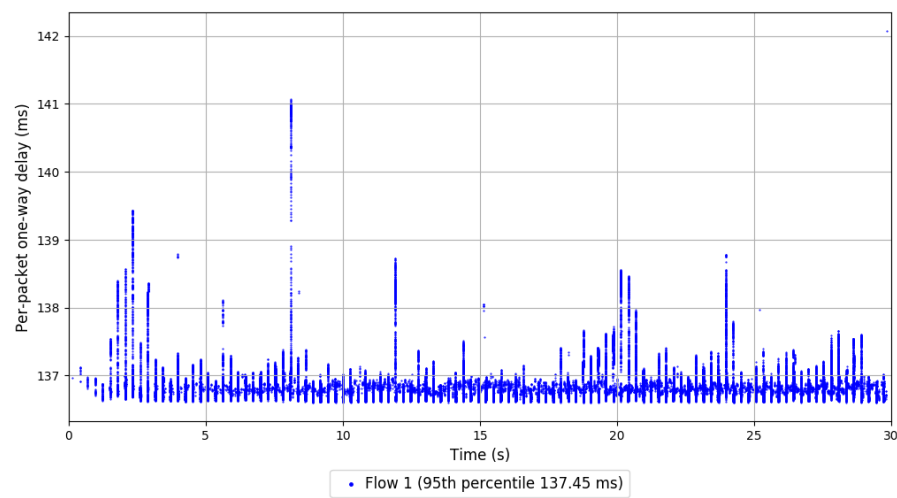
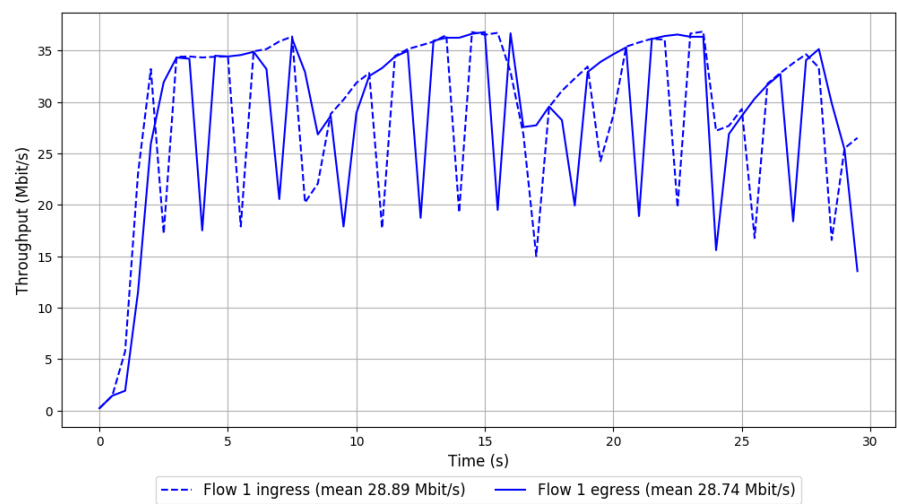
-- Flow 1:

Average throughput: 28.74 Mbit/s

95th percentile per-packet one-way delay: 137.453 ms

Loss rate: 1.33%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-17 05:37:37

End at: 2017-08-17 05:38:07

Below is generated by plot.py at 2017-08-17 08:57:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.86 Mbit/s

95th percentile per-packet one-way delay: 137.695 ms

Loss rate: 1.21%

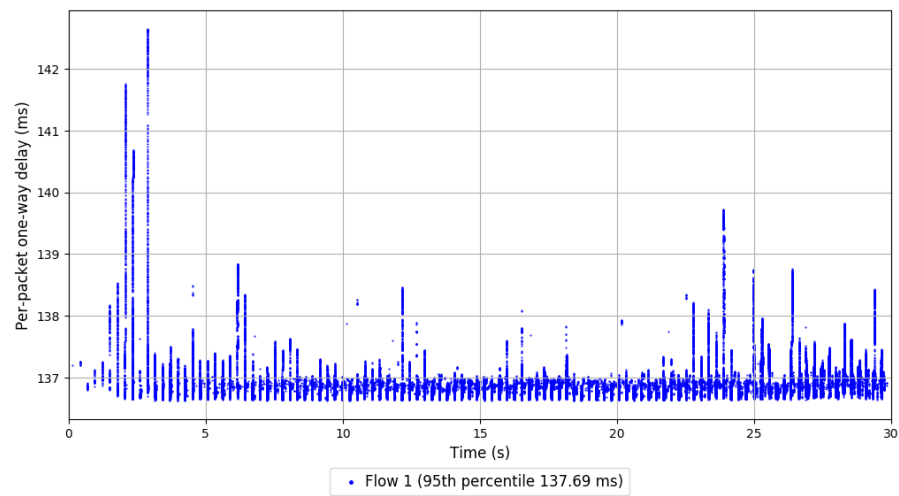
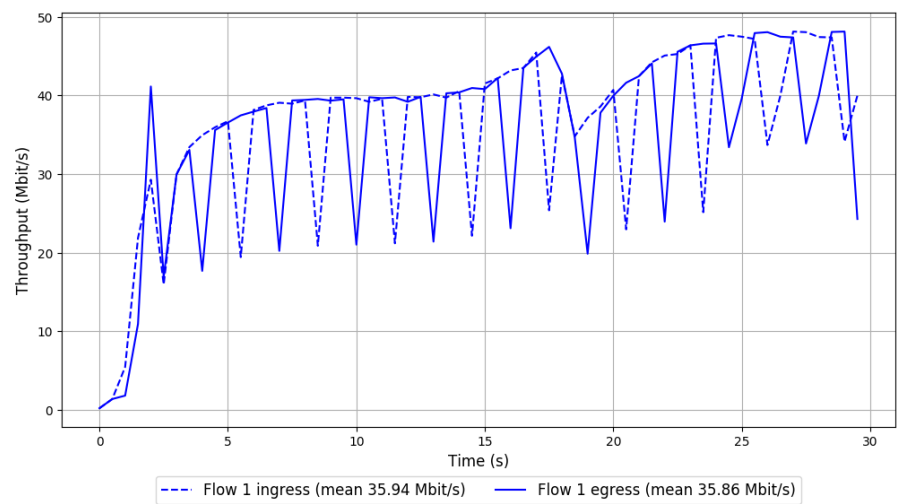
-- Flow 1:

Average throughput: 35.86 Mbit/s

95th percentile per-packet one-way delay: 137.695 ms

Loss rate: 1.21%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-17 05:49:29

End at: 2017-08-17 05:49:59

Below is generated by plot.py at 2017-08-17 08:57:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.11 Mbit/s

95th percentile per-packet one-way delay: 137.586 ms

Loss rate: 4.36%

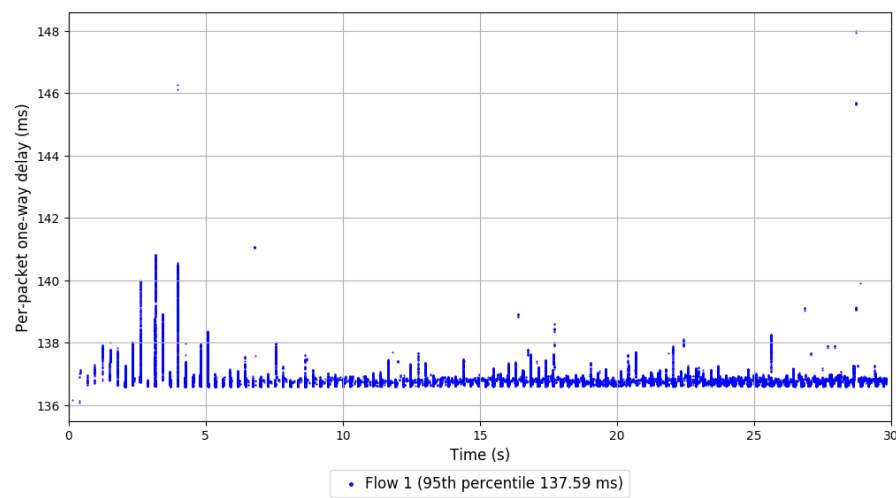
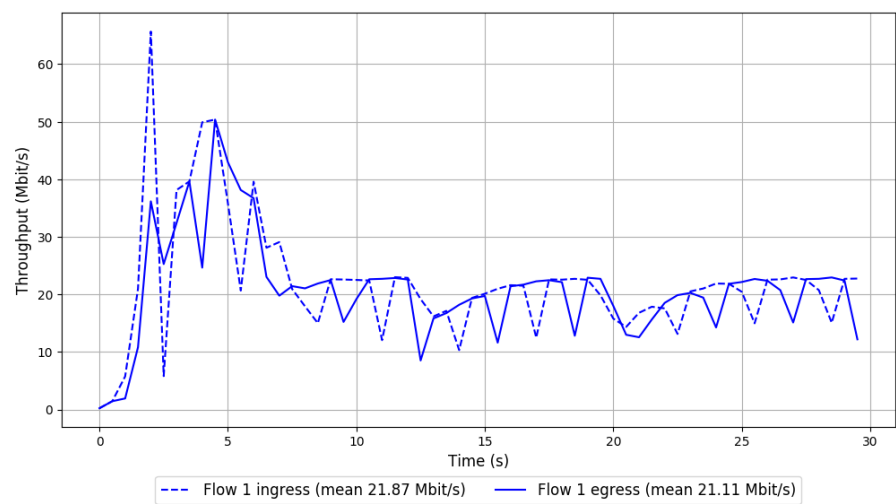
-- Flow 1:

Average throughput: 21.11 Mbit/s

95th percentile per-packet one-way delay: 137.586 ms

Loss rate: 4.36%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-17 06:01:03

End at: 2017-08-17 06:01:33

Below is generated by plot.py at 2017-08-17 08:57:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 136.720 ms

Loss rate: 3.22%

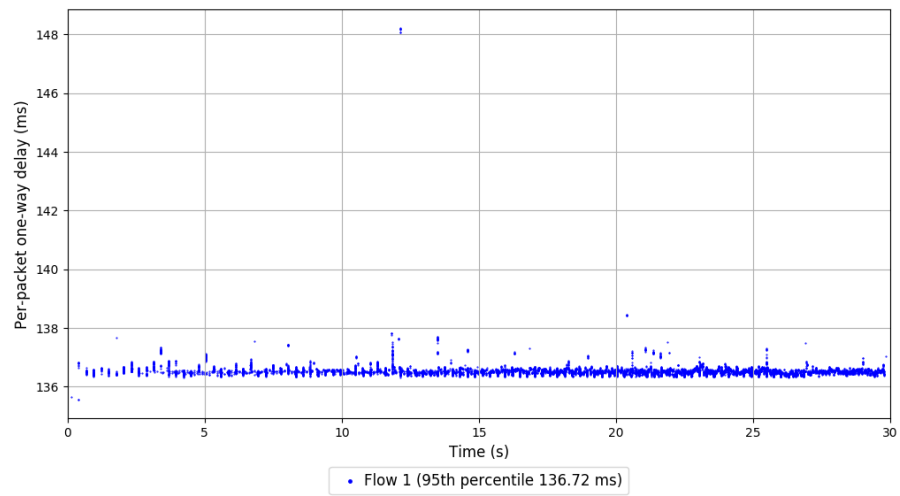
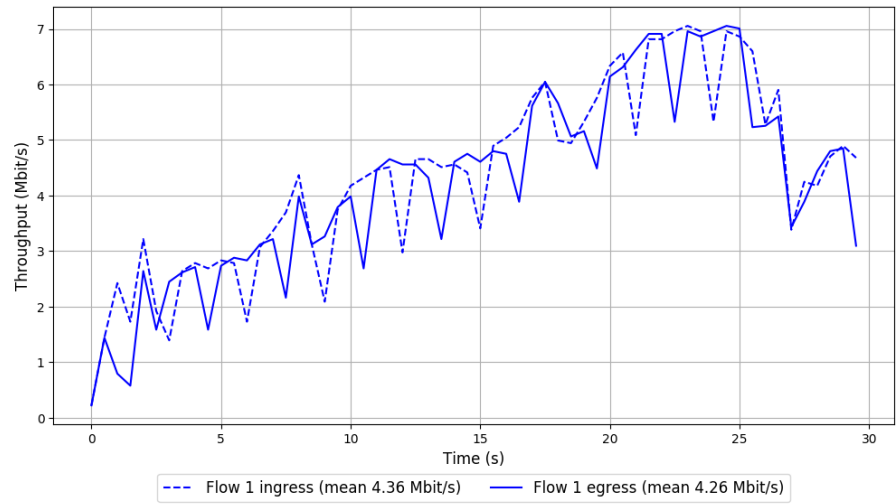
-- Flow 1:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 136.720 ms

Loss rate: 3.22%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-17 06:12:59

End at: 2017-08-17 06:13:29

Below is generated by plot.py at 2017-08-17 08:57:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.42 Mbit/s

95th percentile per-packet one-way delay: 137.481 ms

Loss rate: 1.21%

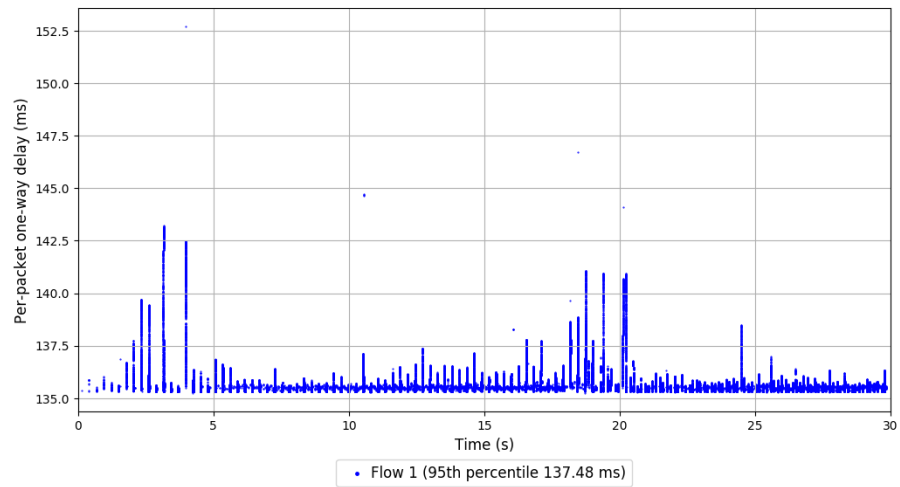
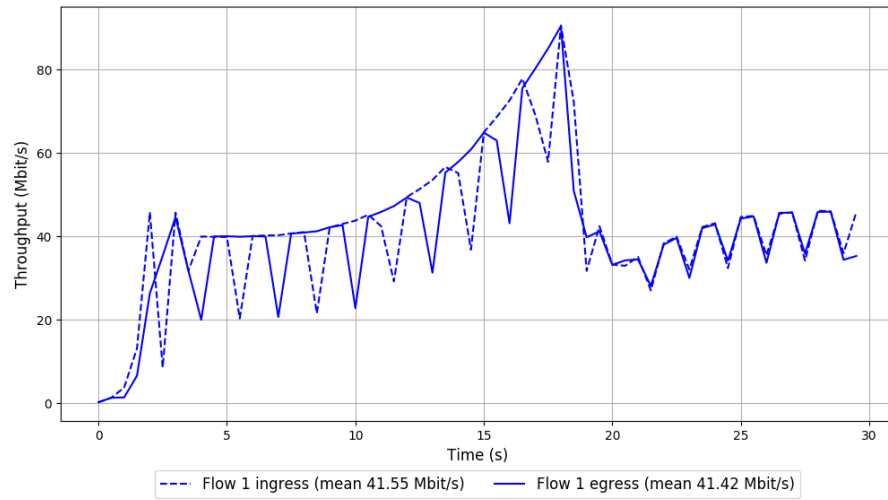
-- Flow 1:

Average throughput: 41.42 Mbit/s

95th percentile per-packet one-way delay: 137.481 ms

Loss rate: 1.21%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-17 06:24:09

End at: 2017-08-17 06:24:39

Below is generated by plot.py at 2017-08-17 08:57:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.17 Mbit/s

95th percentile per-packet one-way delay: 136.770 ms

Loss rate: 1.51%

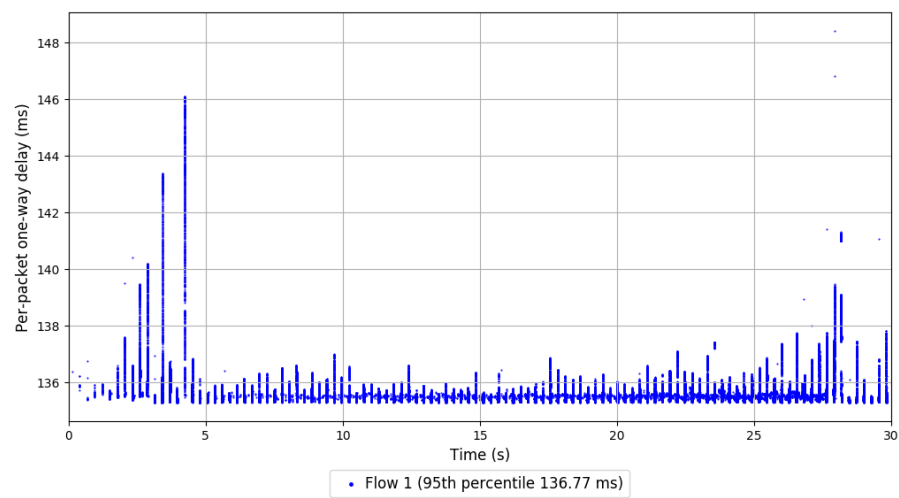
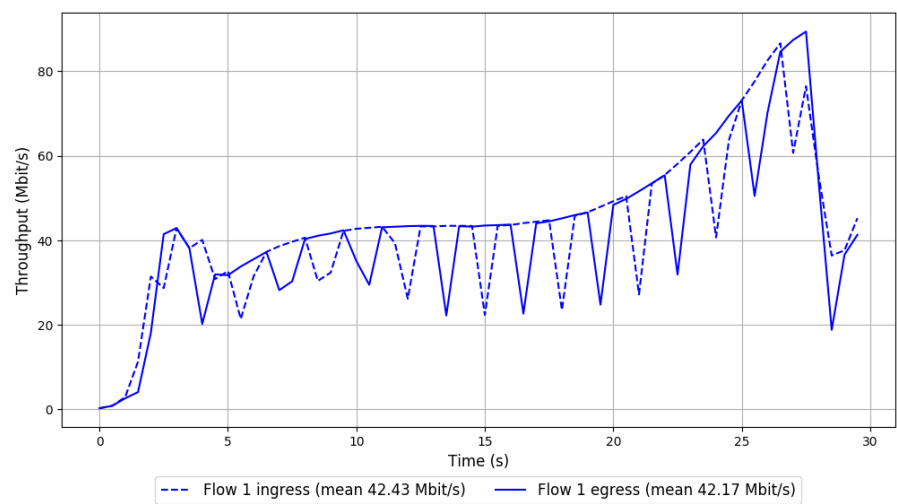
-- Flow 1:

Average throughput: 42.17 Mbit/s

95th percentile per-packet one-way delay: 136.770 ms

Loss rate: 1.51%

Run 10: Report of TCP Cubic — Data Link

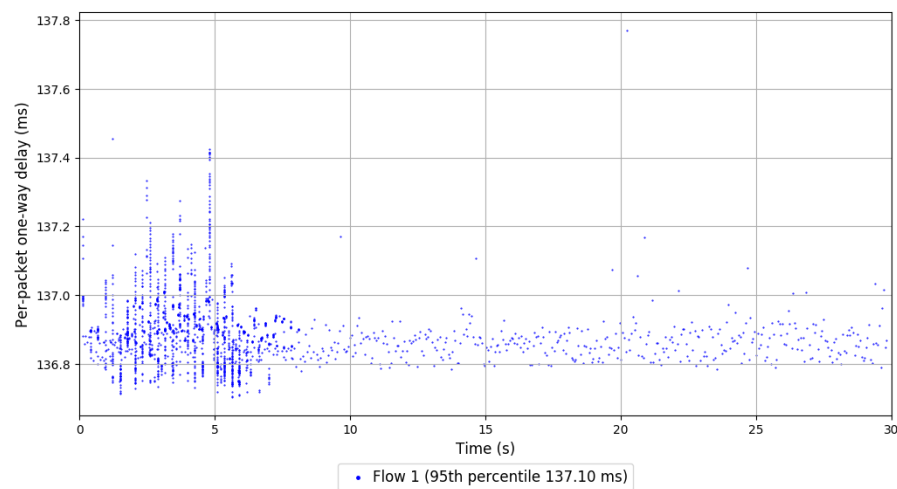
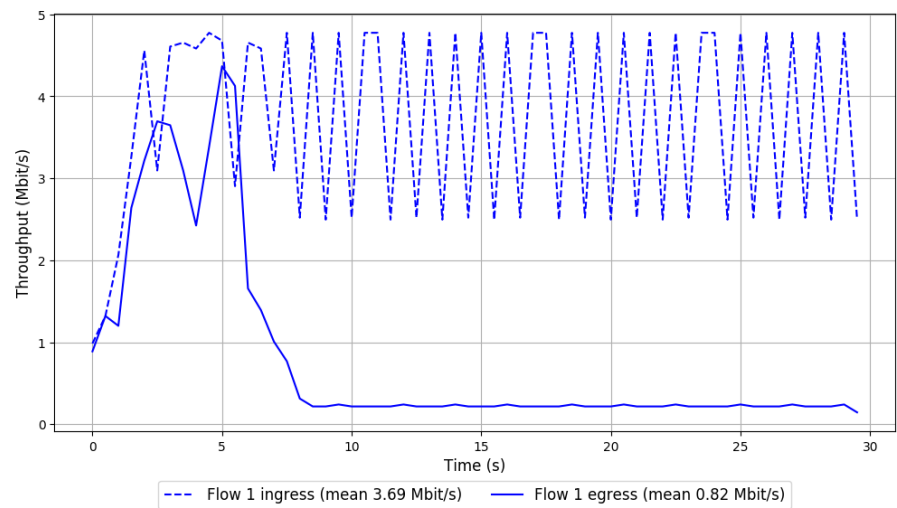


```
Run 1: Statistics of KohoCC

Start at: 2017-08-17 04:33:01
End at: 2017-08-17 04:33:31

# Below is generated by plot.py at 2017-08-17 08:57:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 137.096 ms
Loss rate: 78.02%
-- Flow 1:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 137.096 ms
Loss rate: 78.02%
```


Run 1: Report of KohoCC — Data Link

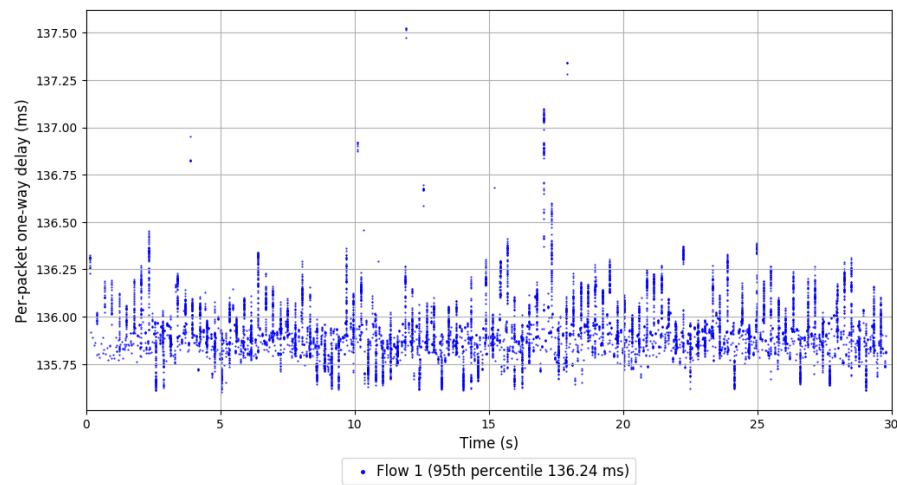
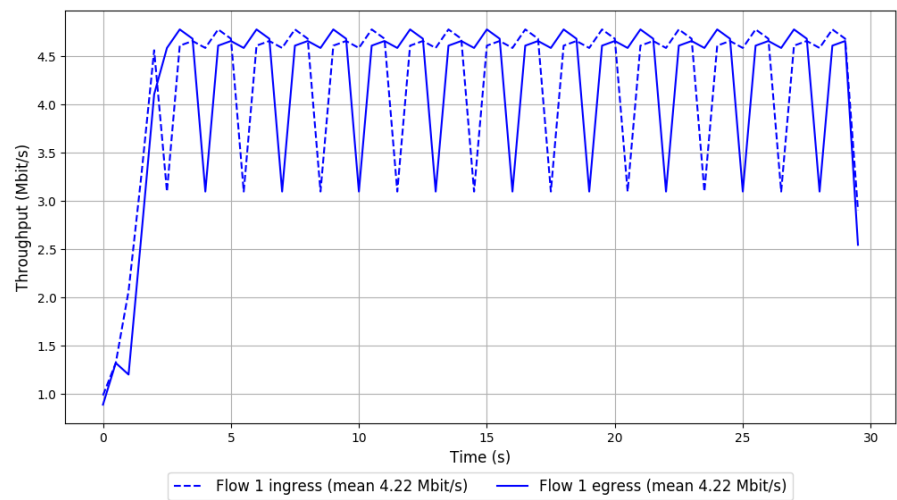


```
Run 2: Statistics of KohoCC

Start at: 2017-08-17 04:44:47
End at: 2017-08-17 04:45:17

# Below is generated by plot.py at 2017-08-17 08:57:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 136.236 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 136.236 ms
Loss rate: 0.95%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-17 04:56:30

End at: 2017-08-17 04:57:00

Below is generated by plot.py at 2017-08-17 08:57:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.269 ms

Loss rate: 89.54%

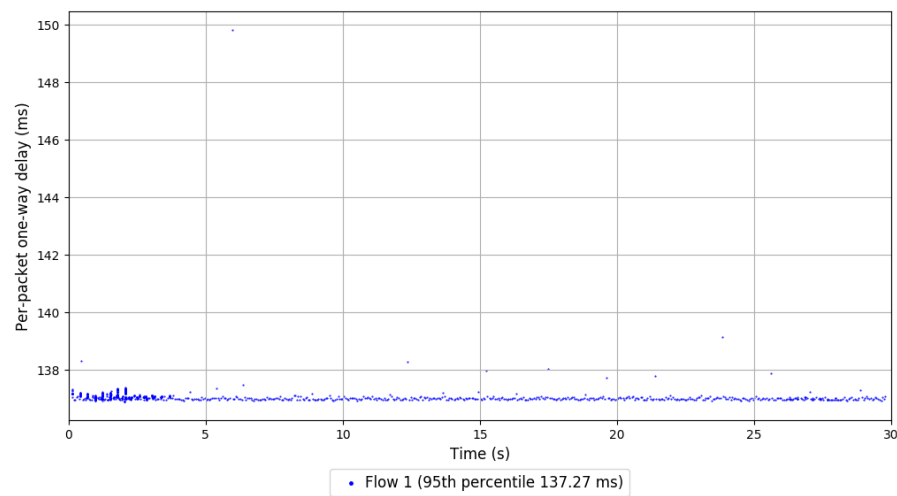
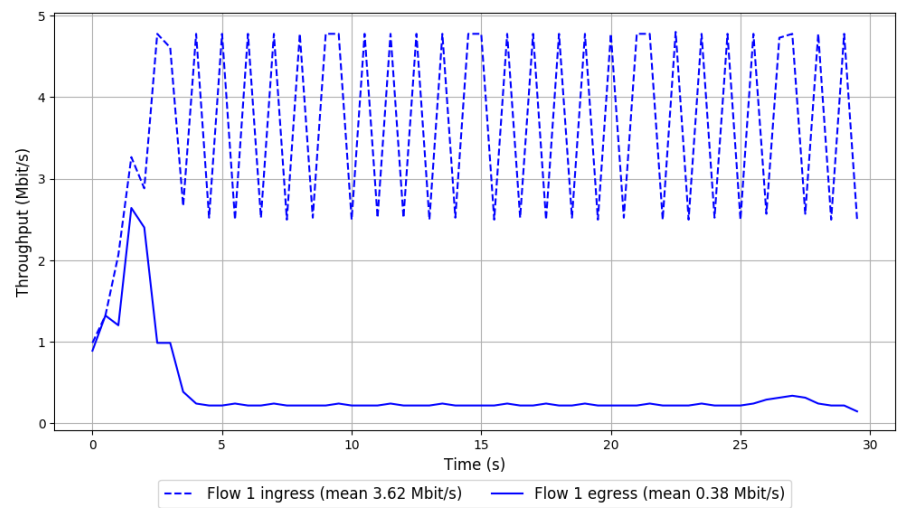
-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.269 ms

Loss rate: 89.54%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-17 05:08:26

End at: 2017-08-17 05:08:56

Below is generated by plot.py at 2017-08-17 08:58:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 136.226 ms

Loss rate: 0.95%

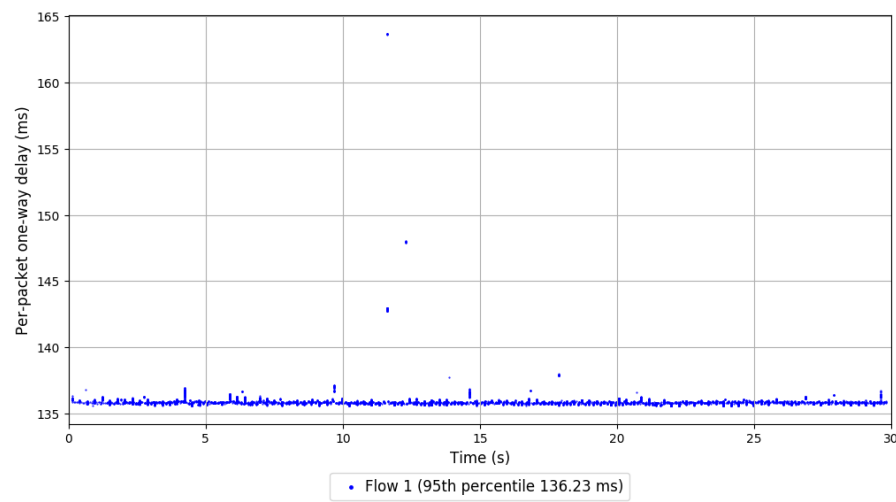
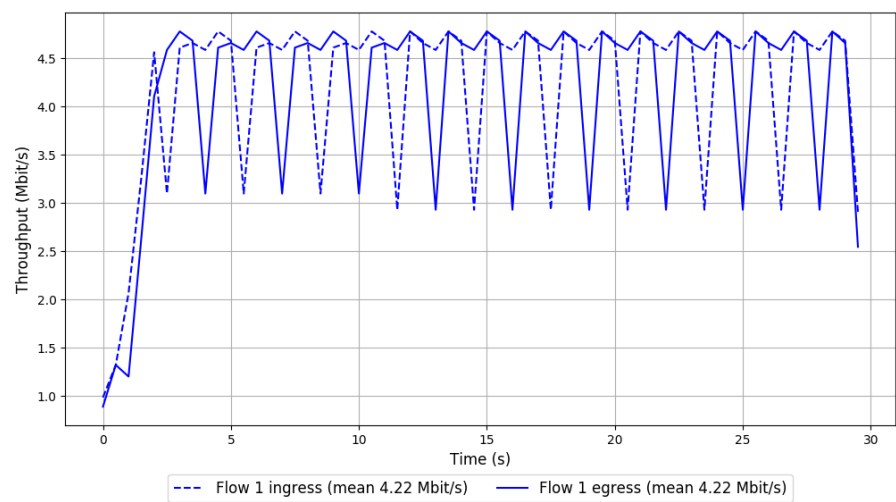
-- Flow 1:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 136.226 ms

Loss rate: 0.95%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-17 05:19:57

End at: 2017-08-17 05:20:27

Below is generated by plot.py at 2017-08-17 08:58:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 136.789 ms

Loss rate: 49.70%

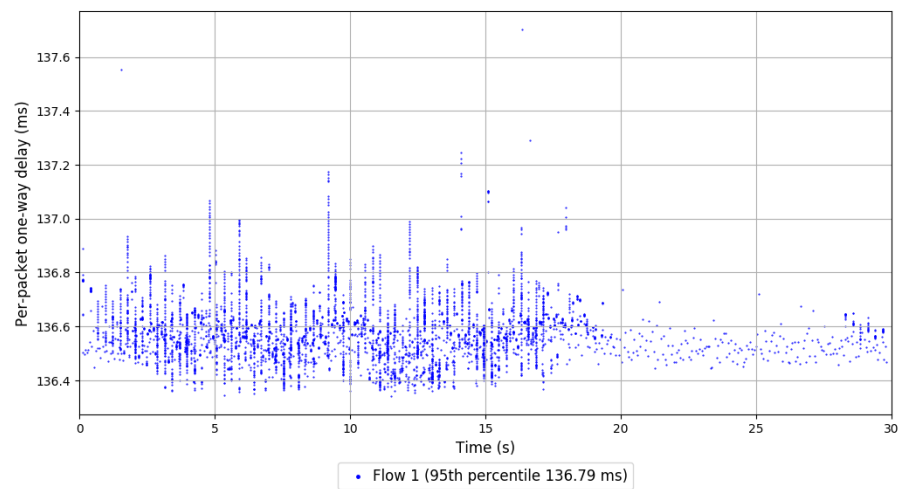
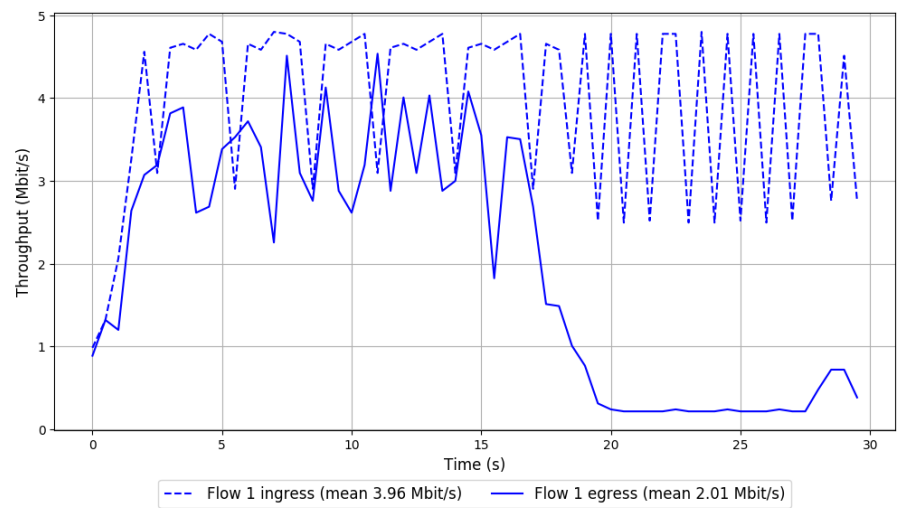
-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 136.789 ms

Loss rate: 49.70%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-17 05:31:24

End at: 2017-08-17 05:31:54

Below is generated by plot.py at 2017-08-17 08:58:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 137.208 ms

Loss rate: 0.97%

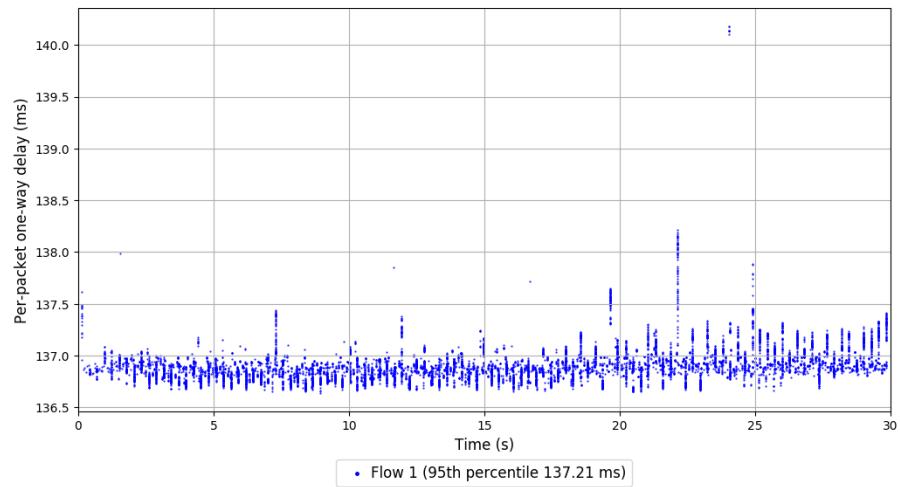
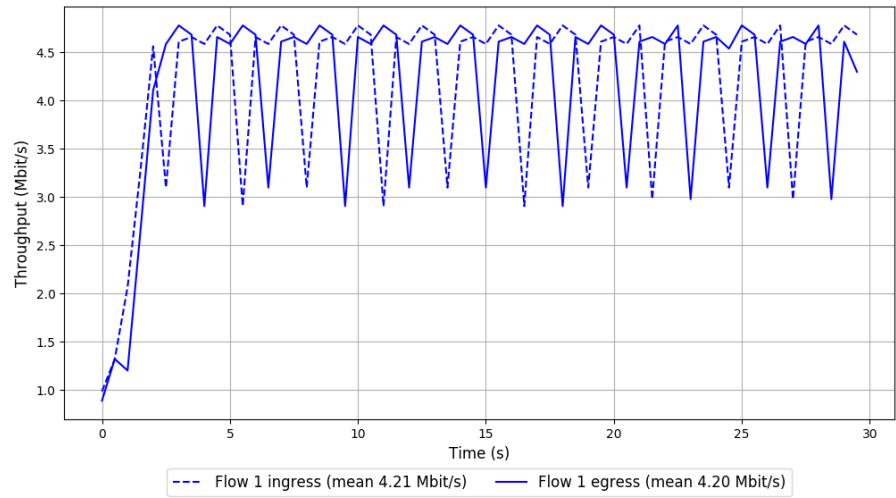
-- Flow 1:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 137.208 ms

Loss rate: 0.97%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-17 05:43:12

End at: 2017-08-17 05:43:42

Below is generated by plot.py at 2017-08-17 08:58:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 137.158 ms

Loss rate: 0.95%

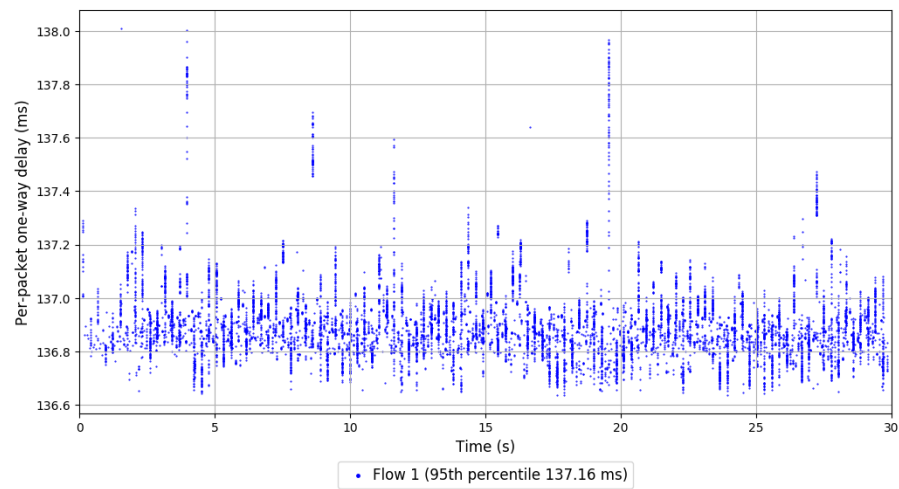
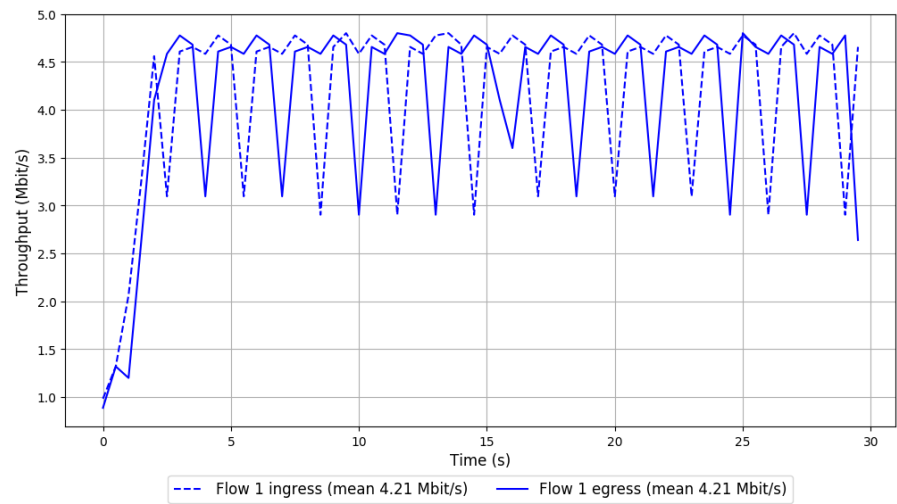
-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 137.158 ms

Loss rate: 0.95%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-17 05:55:03

End at: 2017-08-17 05:55:33

Below is generated by plot.py at 2017-08-17 08:58:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 137.163 ms

Loss rate: 0.99%

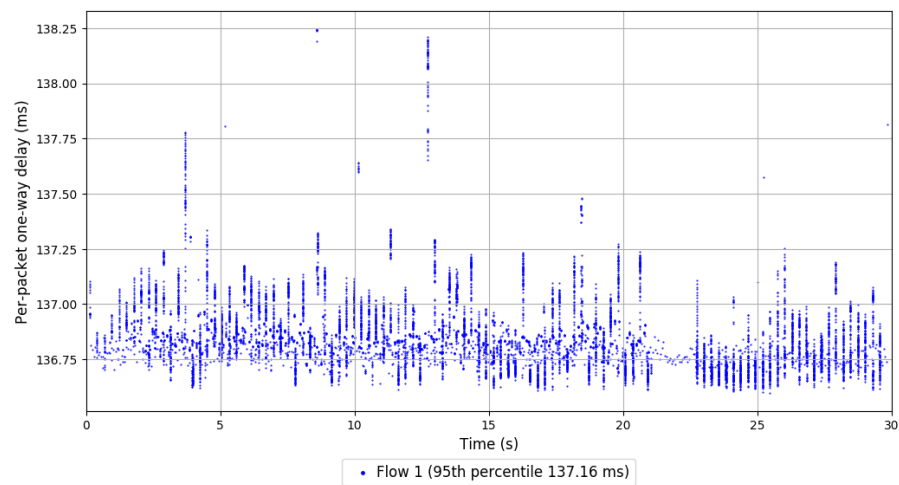
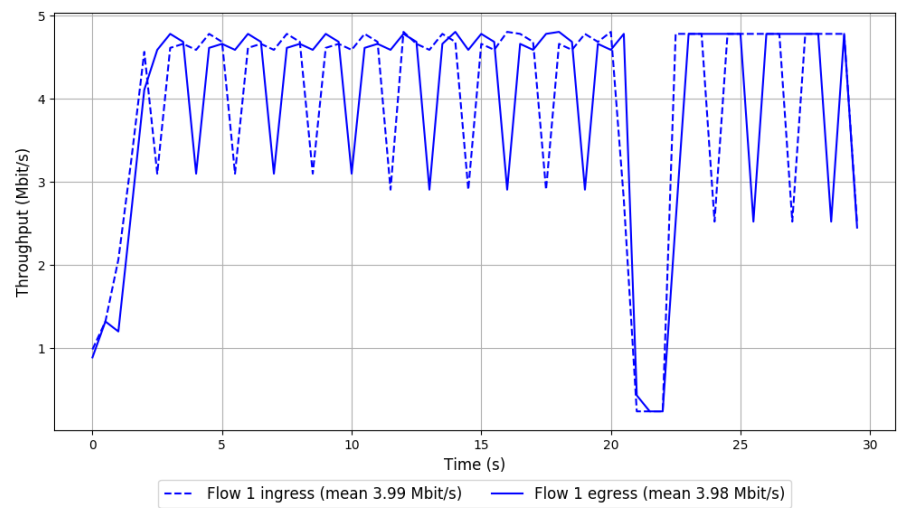
-- Flow 1:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 137.163 ms

Loss rate: 0.99%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-17 06:06:17

End at: 2017-08-17 06:06:47

Below is generated by plot.py at 2017-08-17 08:58:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 135.892 ms

Loss rate: 0.94%

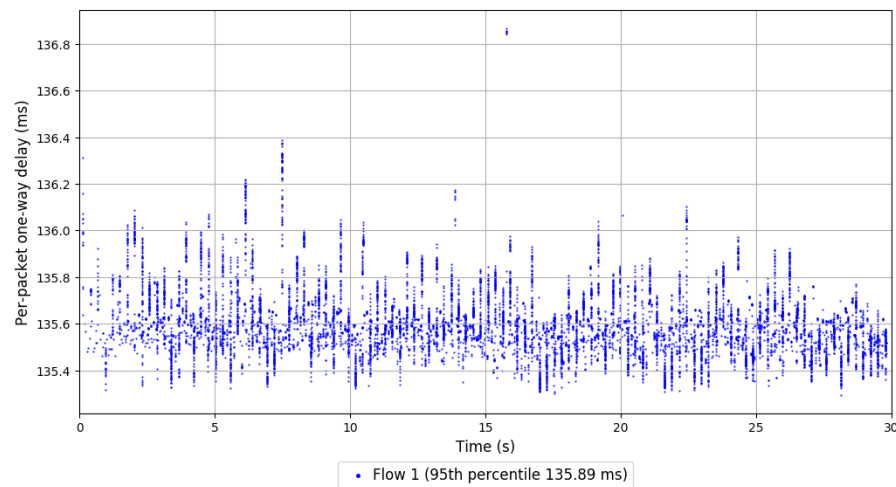
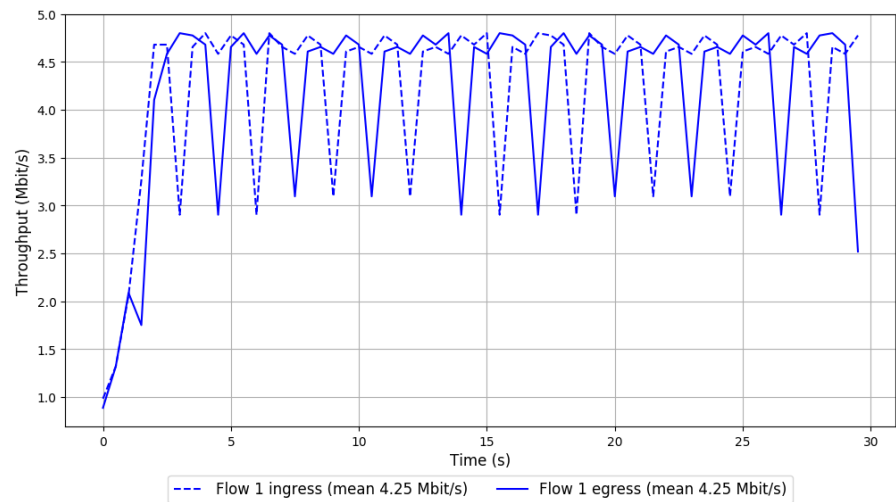
-- Flow 1:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 135.892 ms

Loss rate: 0.94%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-17 06:18:02

End at: 2017-08-17 06:18:32

Below is generated by plot.py at 2017-08-17 08:58:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 135.780 ms

Loss rate: 0.94%

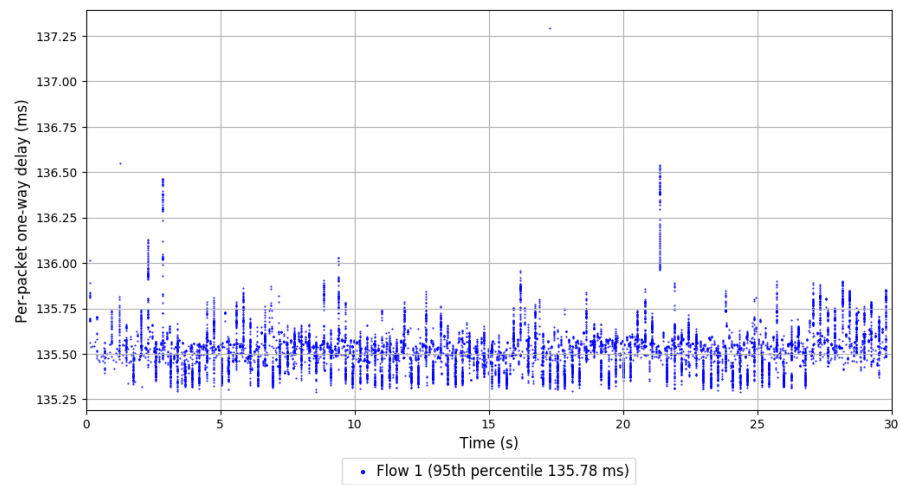
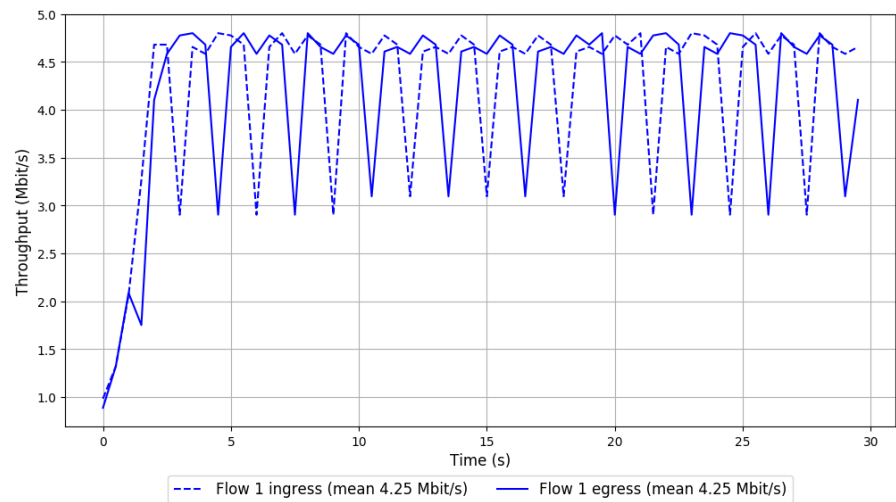
-- Flow 1:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 135.780 ms

Loss rate: 0.94%

Run 10: Report of KohoCC — Data Link

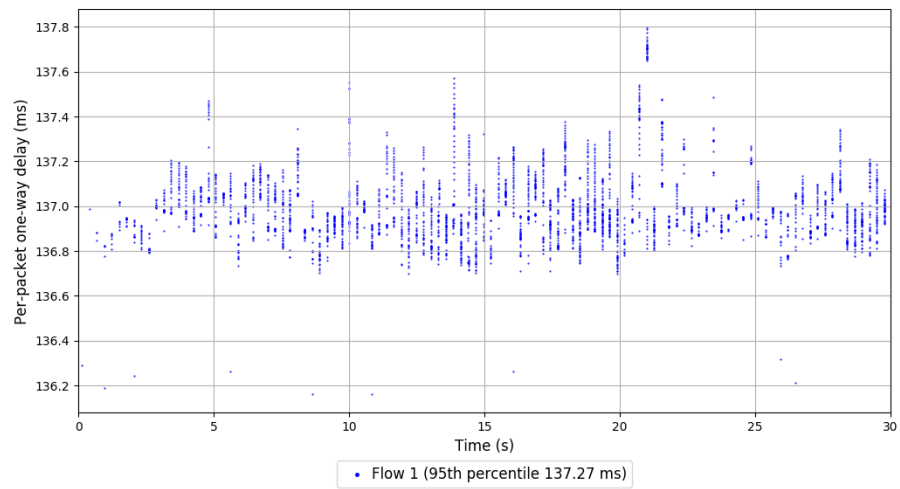
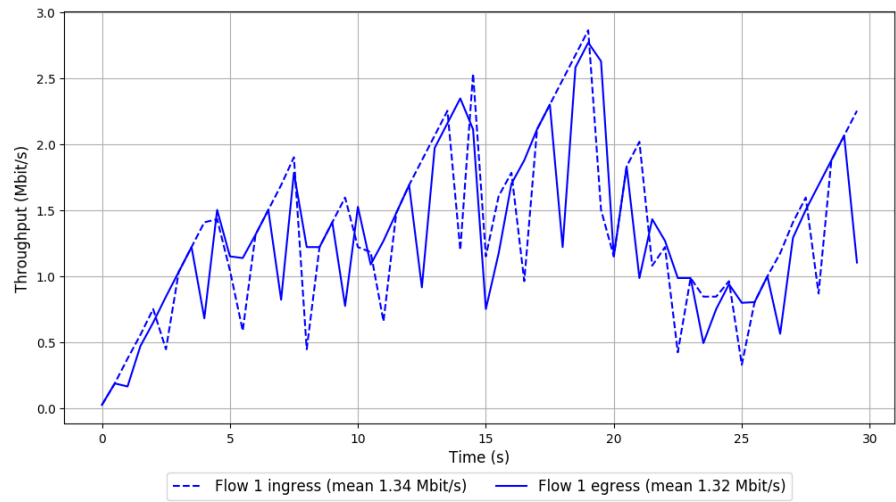


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-17 04:35:11
End at: 2017-08-17 04:35:41

# Below is generated by plot.py at 2017-08-17 08:58:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 137.268 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 137.268 ms
Loss rate: 2.71%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-08-17 04:47:25

End at: 2017-08-17 04:47:55

Below is generated by plot.py at 2017-08-17 08:58:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 136.350 ms

Loss rate: 0.47%

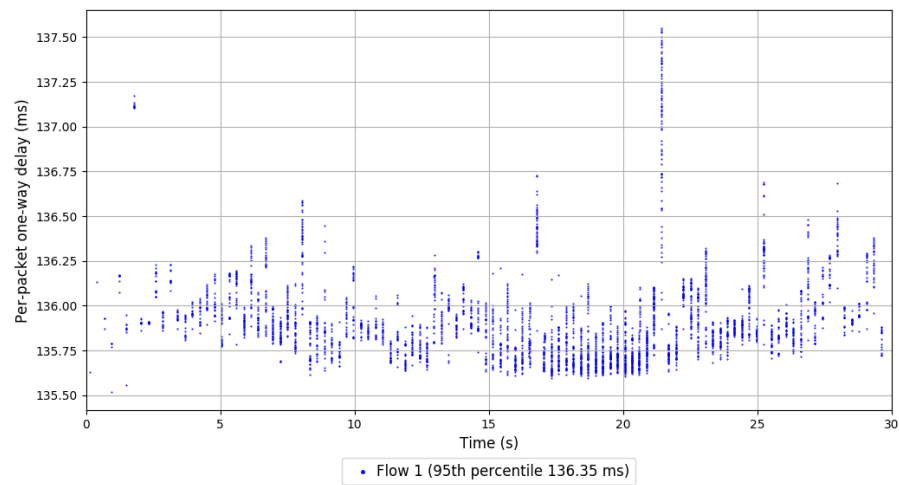
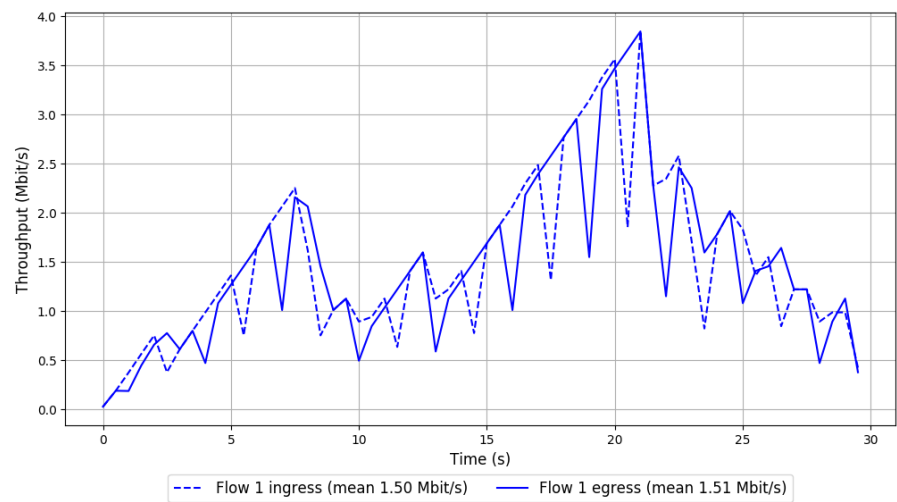
-- Flow 1:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 136.350 ms

Loss rate: 0.47%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-17 04:58:57

End at: 2017-08-17 04:59:27

Below is generated by plot.py at 2017-08-17 08:58:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 137.290 ms

Loss rate: 2.37%

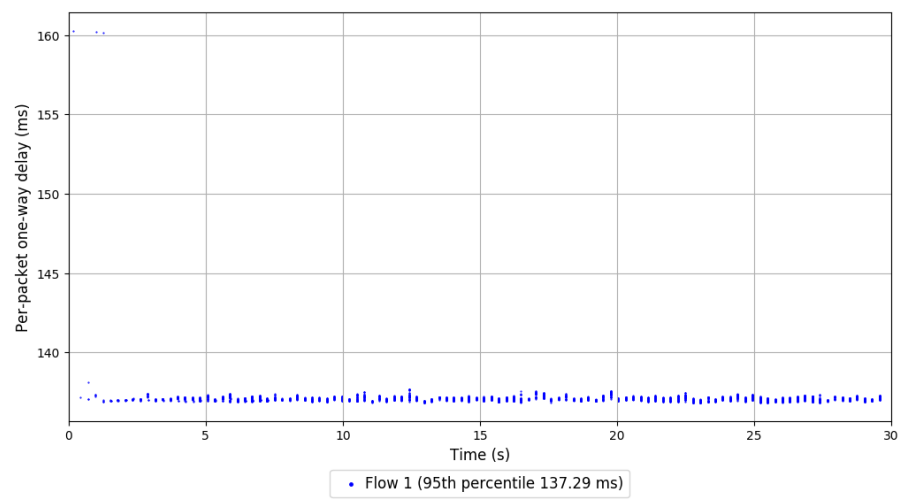
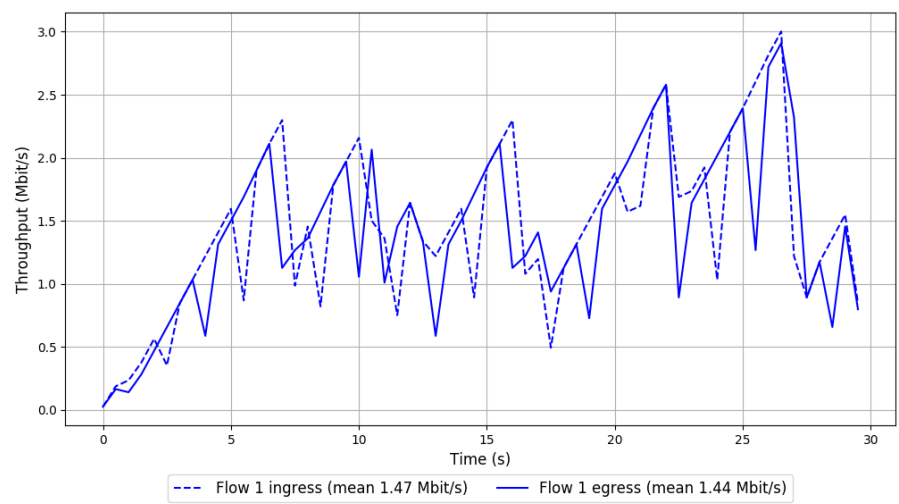
-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 137.290 ms

Loss rate: 2.37%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-17 05:10:36

End at: 2017-08-17 05:11:06

Below is generated by plot.py at 2017-08-17 08:58:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 136.937 ms

Loss rate: 1.57%

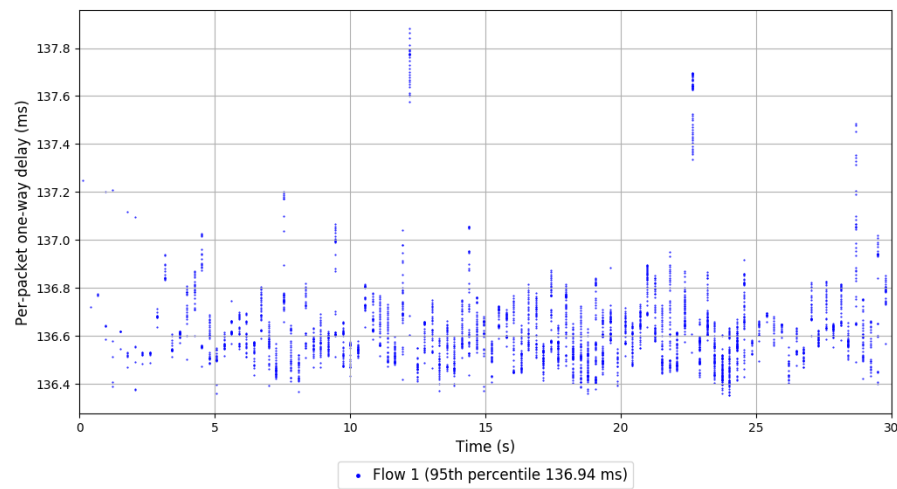
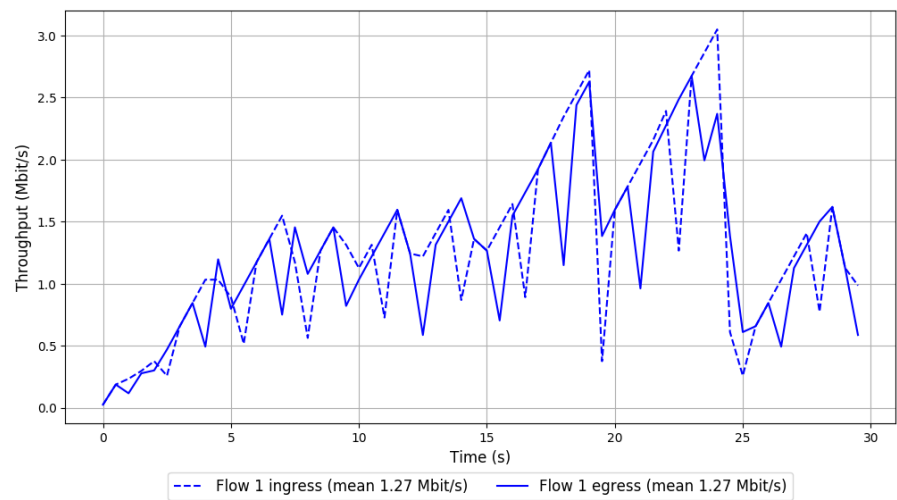
-- Flow 1:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 136.937 ms

Loss rate: 1.57%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-17 05:22:09

End at: 2017-08-17 05:22:39

Below is generated by plot.py at 2017-08-17 08:58:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 137.126 ms

Loss rate: 1.34%

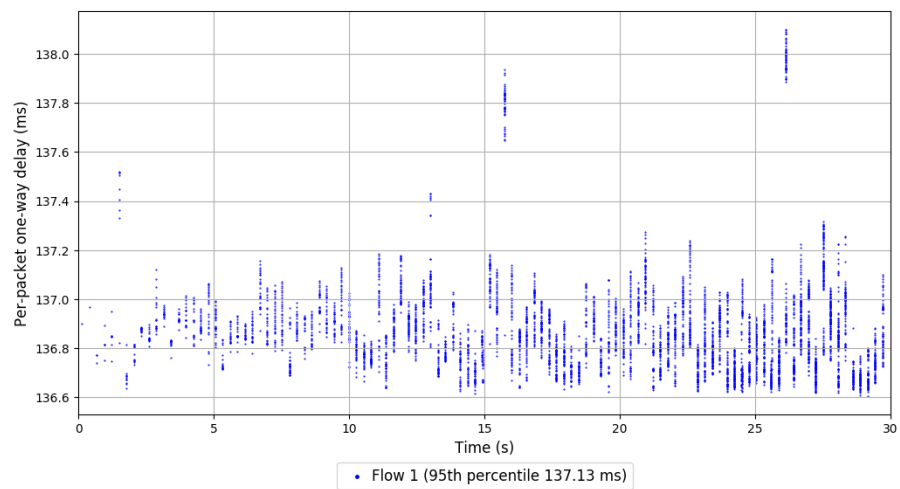
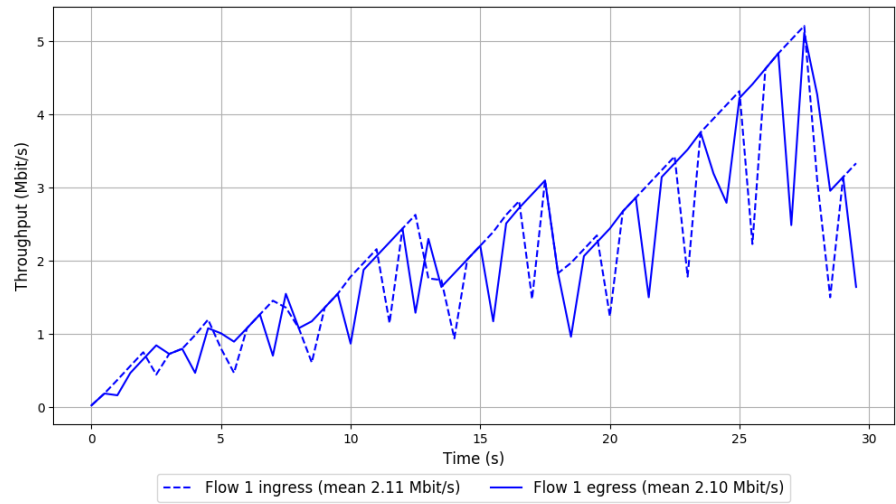
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 137.126 ms

Loss rate: 1.34%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-17 05:33:34

End at: 2017-08-17 05:34:04

Below is generated by plot.py at 2017-08-17 08:58:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 137.183 ms

Loss rate: 1.81%

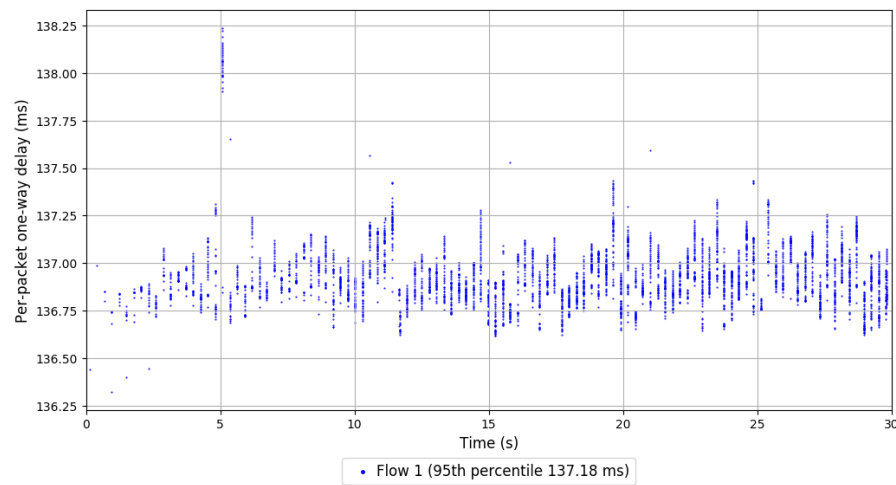
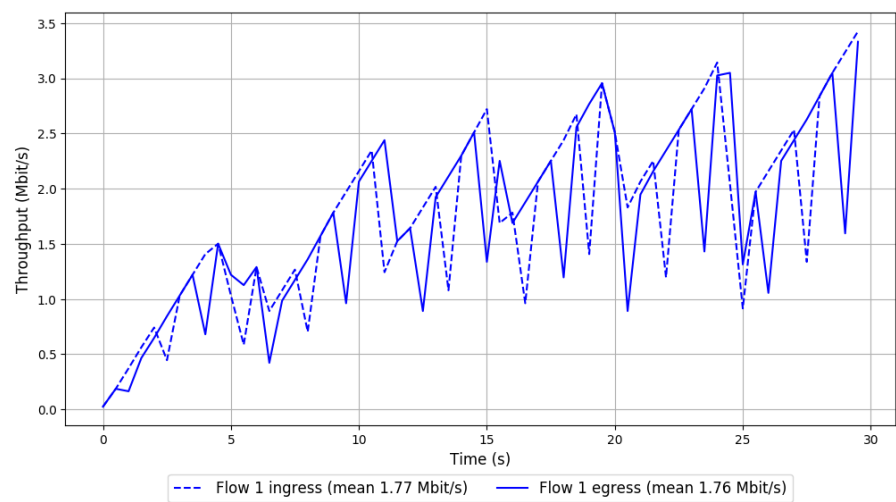
-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 137.183 ms

Loss rate: 1.81%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-17 05:45:22

End at: 2017-08-17 05:45:53

Below is generated by plot.py at 2017-08-17 08:58:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 137.201 ms

Loss rate: 0.70%

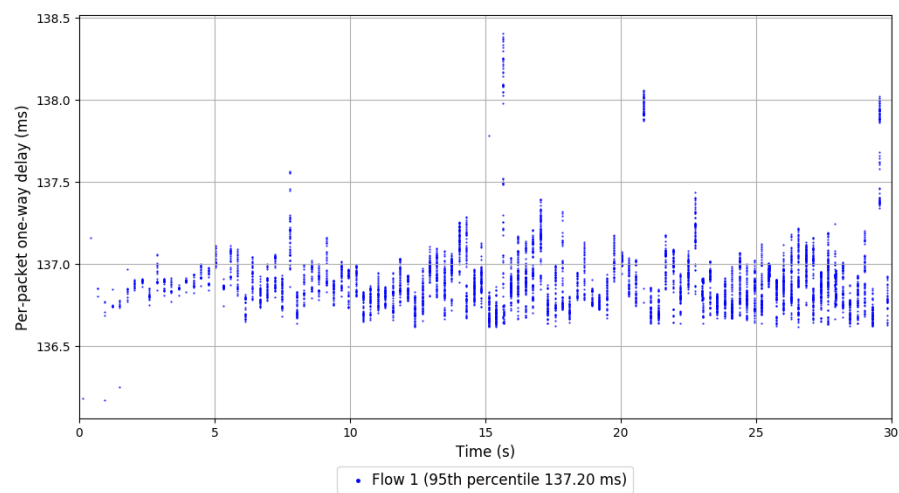
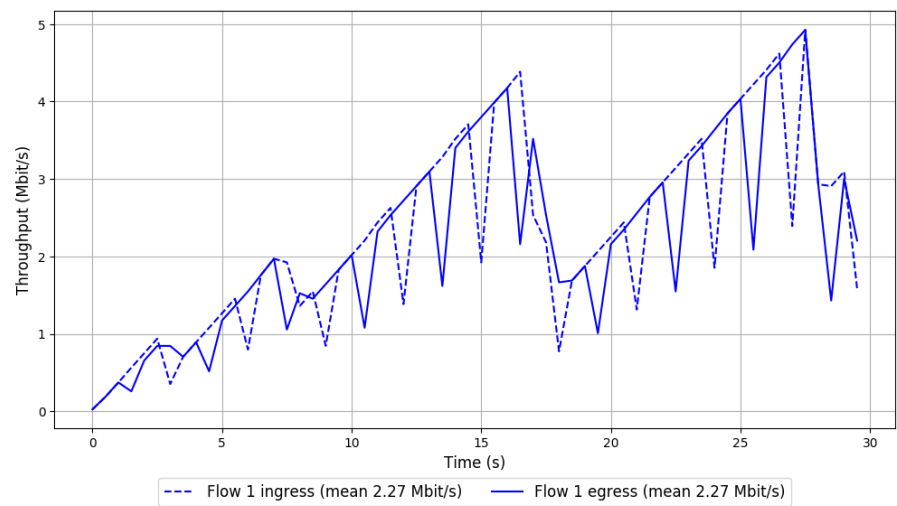
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 137.201 ms

Loss rate: 0.70%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-17 05:57:12

End at: 2017-08-17 05:57:42

Below is generated by plot.py at 2017-08-17 08:58:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 136.889 ms

Loss rate: 2.00%

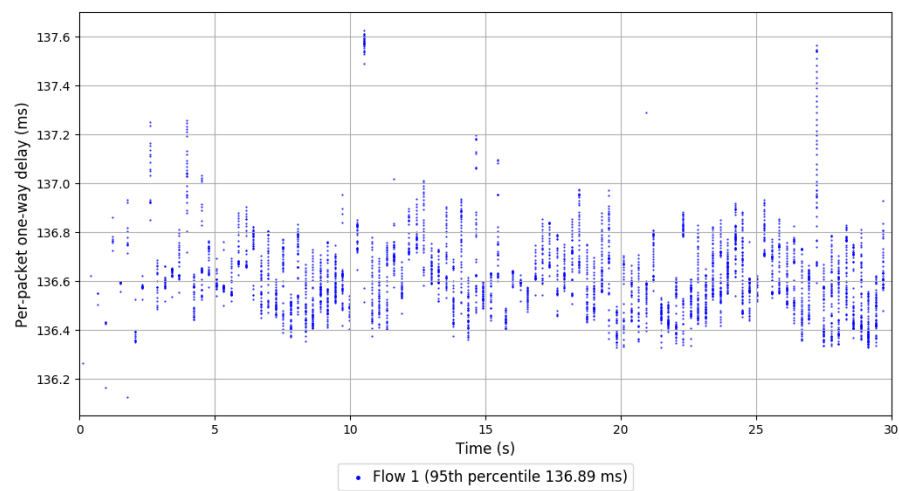
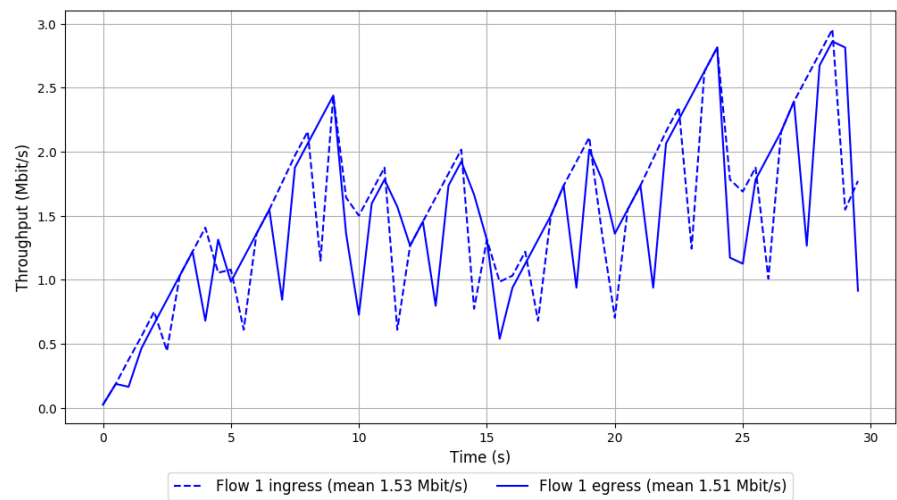
-- Flow 1:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 136.889 ms

Loss rate: 2.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-17 06:08:54

End at: 2017-08-17 06:09:24

Below is generated by plot.py at 2017-08-17 08:58:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 136.003 ms

Loss rate: 1.16%

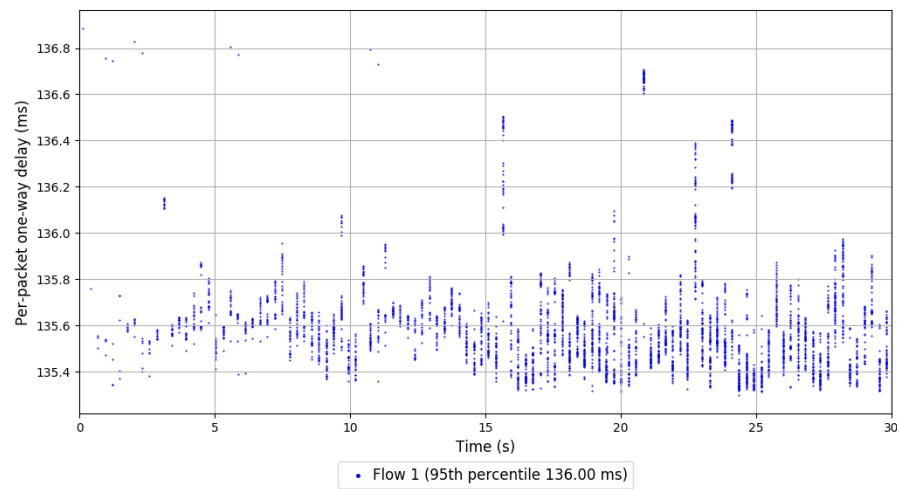
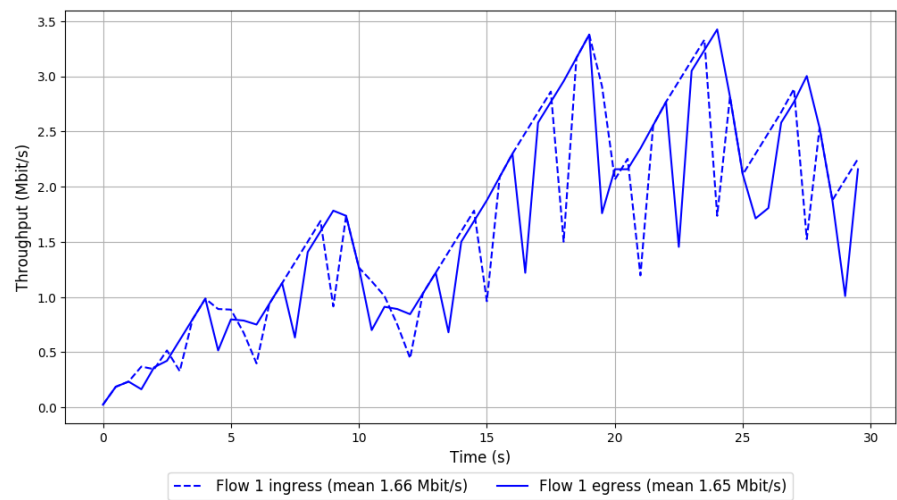
-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 136.003 ms

Loss rate: 1.16%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-17 06:20:33

End at: 2017-08-17 06:21:03

Below is generated by plot.py at 2017-08-17 08:58:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 135.840 ms

Loss rate: 0.00%

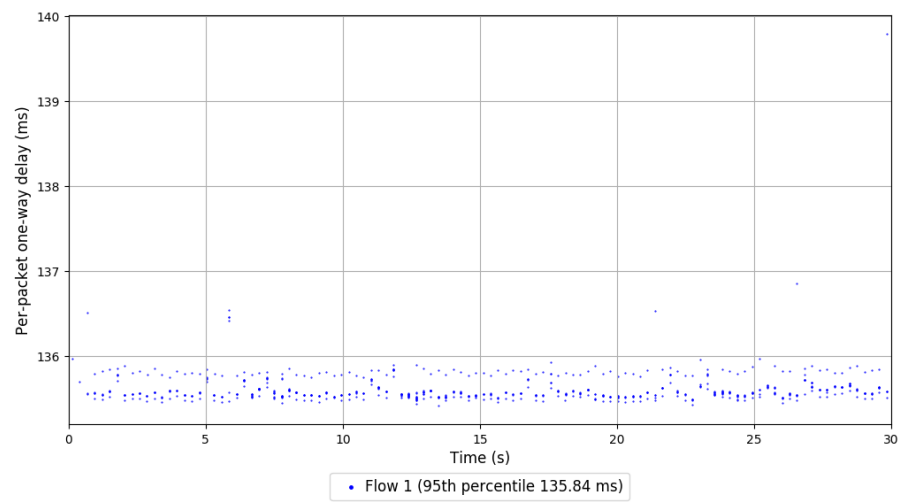
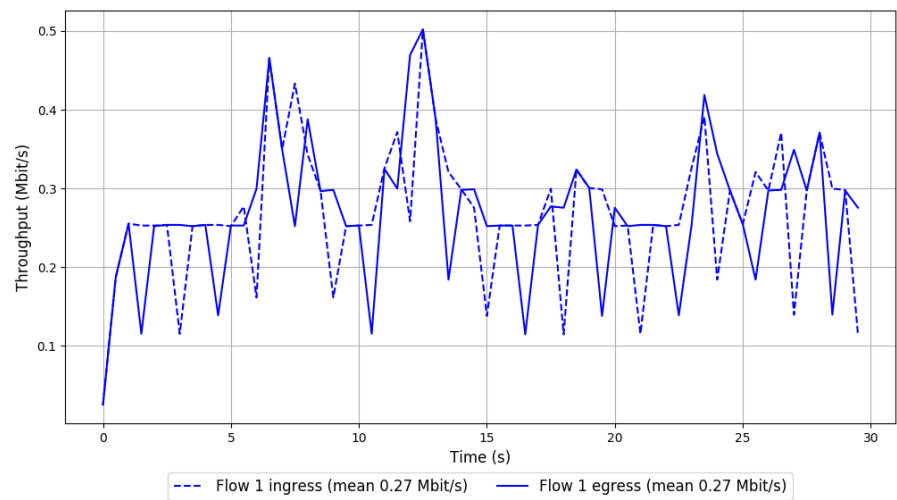
-- Flow 1:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 135.840 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

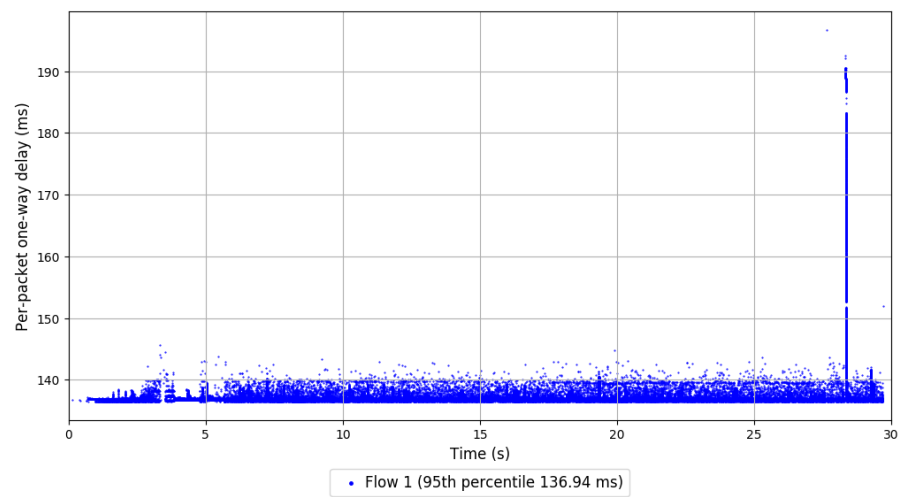
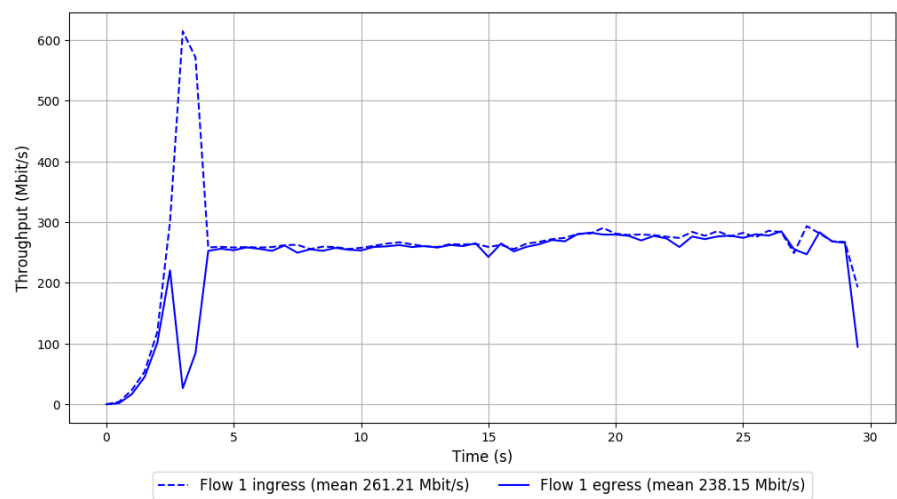


```
Run 1: Statistics of PCC

Start at: 2017-08-17 04:38:13
End at: 2017-08-17 04:38:43

# Below is generated by plot.py at 2017-08-17 08:59:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 238.15 Mbit/s
95th percentile per-packet one-way delay: 136.937 ms
Loss rate: 9.65%
-- Flow 1:
Average throughput: 238.15 Mbit/s
95th percentile per-packet one-way delay: 136.937 ms
Loss rate: 9.65%
```


Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-17 04:50:25

End at: 2017-08-17 04:50:55

Below is generated by plot.py at 2017-08-17 08:59:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 229.11 Mbit/s

95th percentile per-packet one-way delay: 137.200 ms

Loss rate: 10.46%

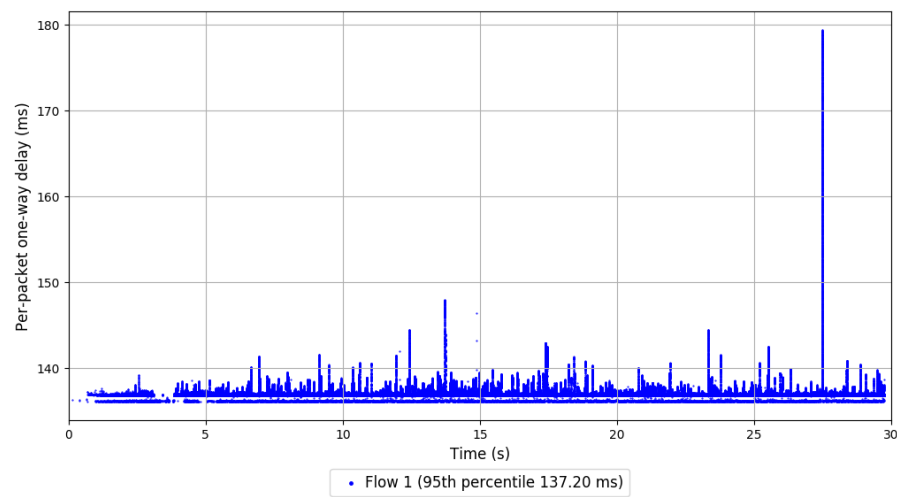
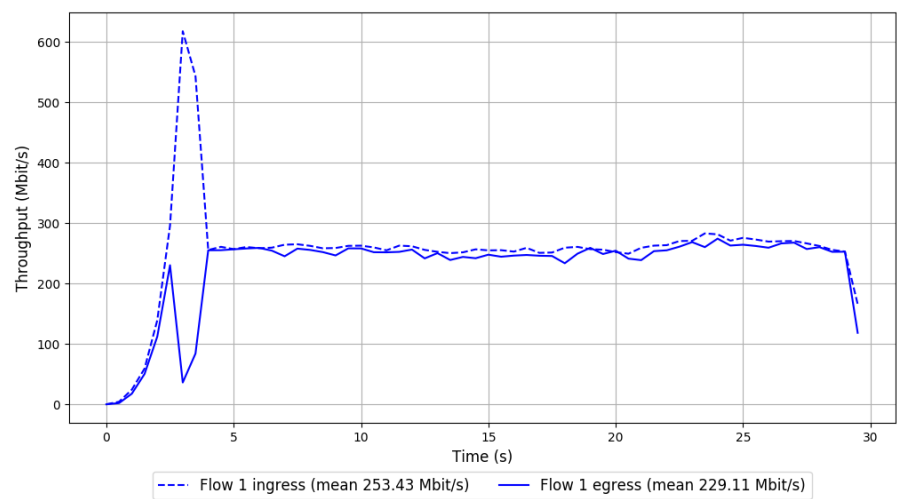
-- Flow 1:

Average throughput: 229.11 Mbit/s

95th percentile per-packet one-way delay: 137.200 ms

Loss rate: 10.46%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-17 05:02:04

End at: 2017-08-17 05:02:34

Below is generated by plot.py at 2017-08-17 09:00:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 481.34 Mbit/s

95th percentile per-packet one-way delay: 227.057 ms

Loss rate: 1.97%

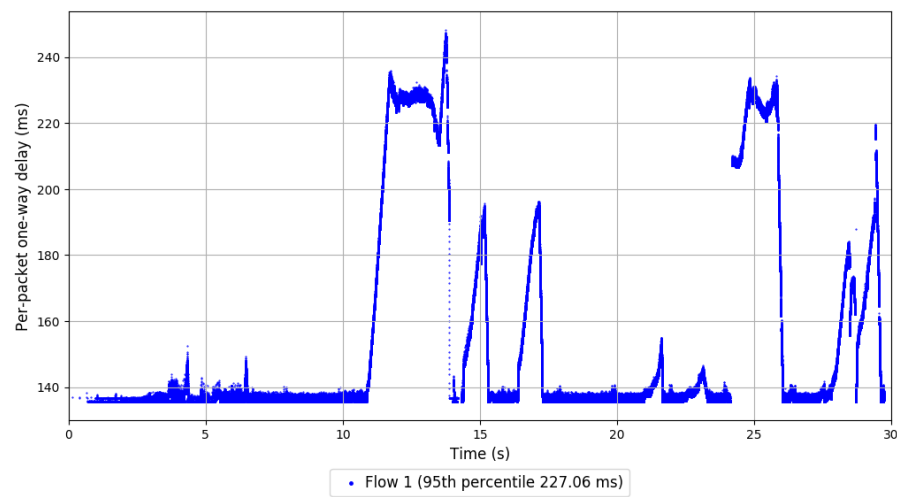
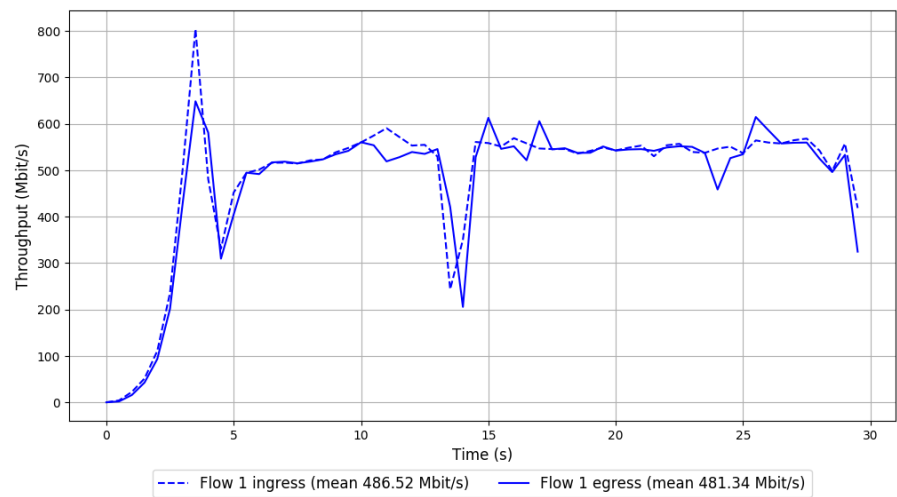
-- Flow 1:

Average throughput: 481.34 Mbit/s

95th percentile per-packet one-way delay: 227.057 ms

Loss rate: 1.97%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-17 05:13:34

End at: 2017-08-17 05:14:04

Below is generated by plot.py at 2017-08-17 09:00:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 479.26 Mbit/s

95th percentile per-packet one-way delay: 229.951 ms

Loss rate: 2.80%

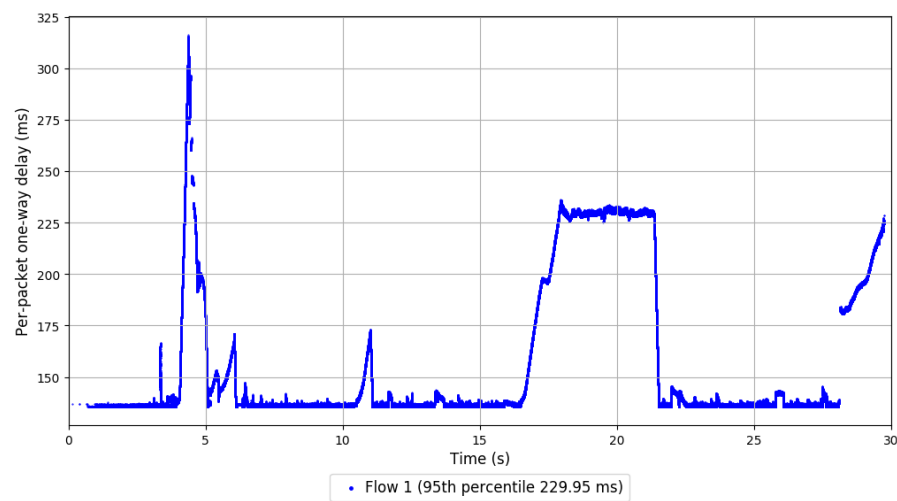
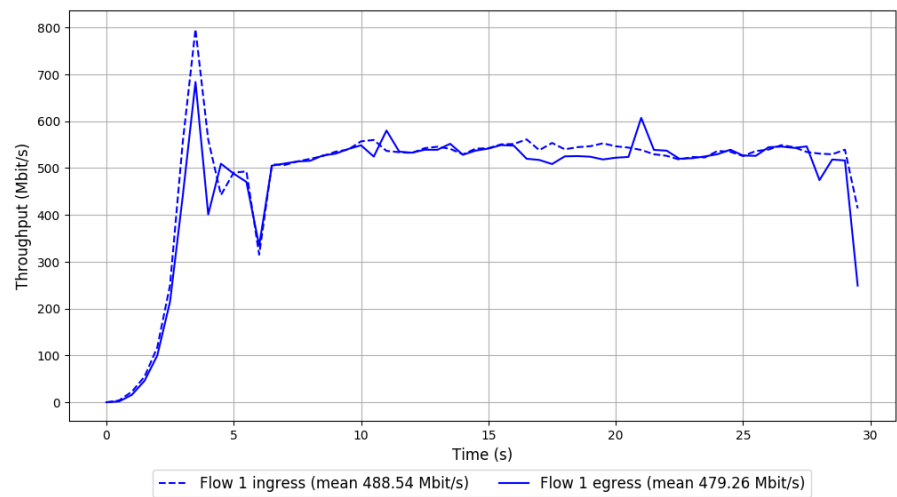
-- Flow 1:

Average throughput: 479.26 Mbit/s

95th percentile per-packet one-way delay: 229.951 ms

Loss rate: 2.80%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-17 05:25:06

End at: 2017-08-17 05:25:36

Below is generated by plot.py at 2017-08-17 09:01:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.17 Mbit/s

95th percentile per-packet one-way delay: 136.823 ms

Loss rate: 3.27%

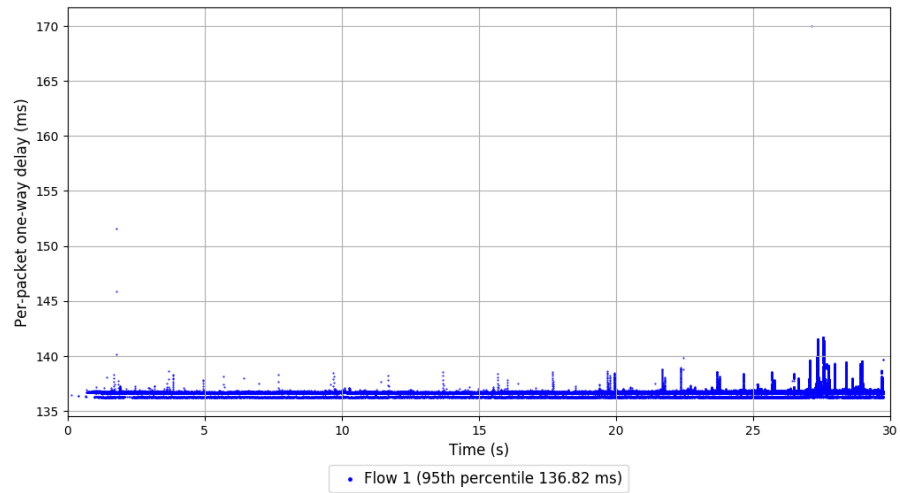
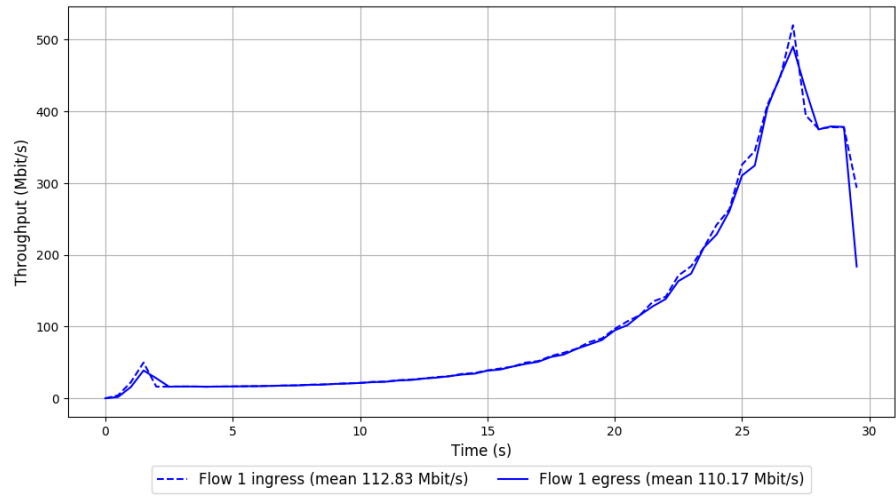
-- Flow 1:

Average throughput: 110.17 Mbit/s

95th percentile per-packet one-way delay: 136.823 ms

Loss rate: 3.27%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-17 05:36:35

End at: 2017-08-17 05:37:05

Below is generated by plot.py at 2017-08-17 09:02:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 443.88 Mbit/s

95th percentile per-packet one-way delay: 229.553 ms

Loss rate: 2.95%

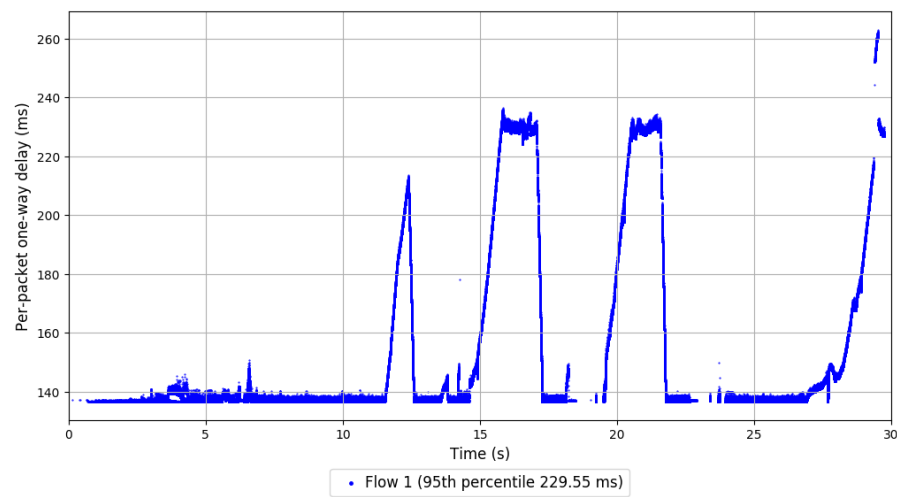
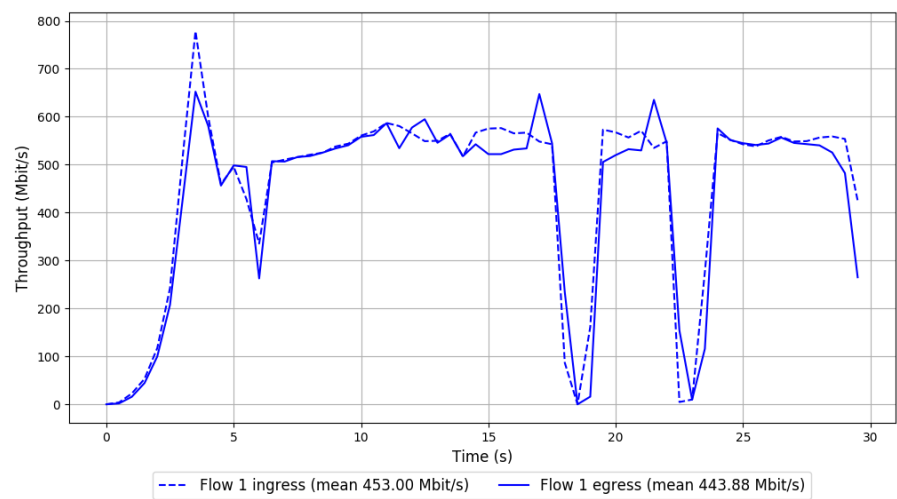
-- Flow 1:

Average throughput: 443.88 Mbit/s

95th percentile per-packet one-way delay: 229.553 ms

Loss rate: 2.95%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-17 05:48:25

End at: 2017-08-17 05:48:55

Below is generated by plot.py at 2017-08-17 09:02:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 443.60 Mbit/s

95th percentile per-packet one-way delay: 231.020 ms

Loss rate: 3.97%

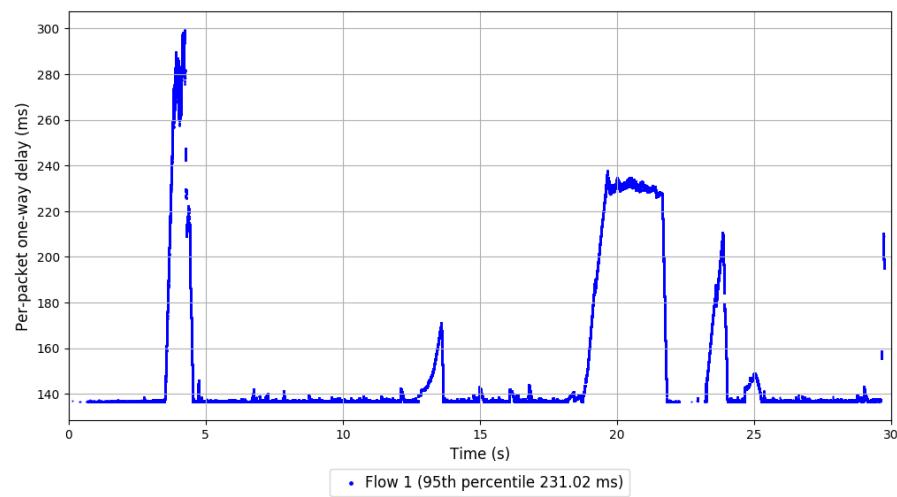
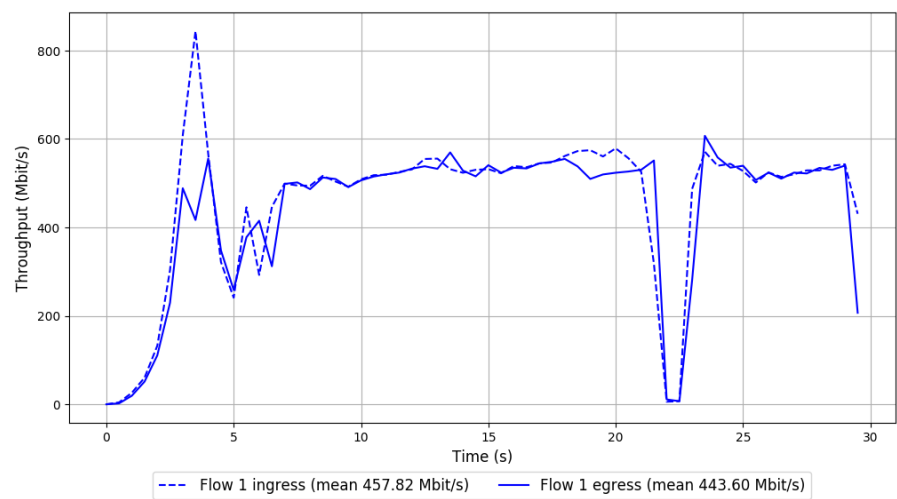
-- Flow 1:

Average throughput: 443.60 Mbit/s

95th percentile per-packet one-way delay: 231.020 ms

Loss rate: 3.97%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-17 06:00:09

End at: 2017-08-17 06:00:39

Below is generated by plot.py at 2017-08-17 09:02:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 254.72 Mbit/s

95th percentile per-packet one-way delay: 136.455 ms

Loss rate: 10.97%

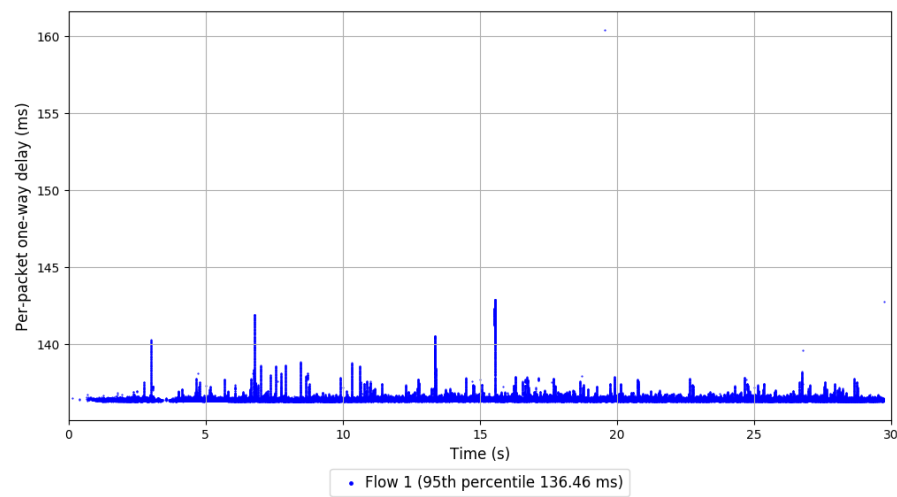
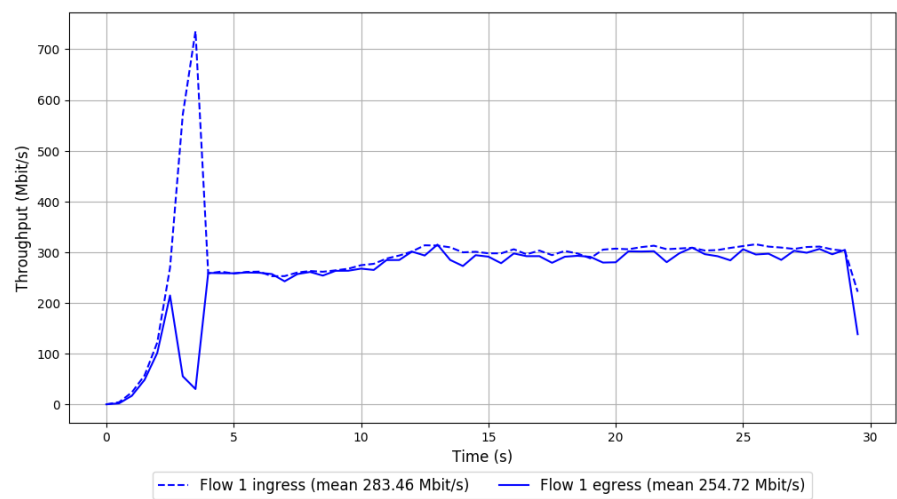
-- Flow 1:

Average throughput: 254.72 Mbit/s

95th percentile per-packet one-way delay: 136.455 ms

Loss rate: 10.97%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-17 06:11:54

End at: 2017-08-17 06:12:24

Below is generated by plot.py at 2017-08-17 09:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 479.14 Mbit/s

95th percentile per-packet one-way delay: 228.609 ms

Loss rate: 2.59%

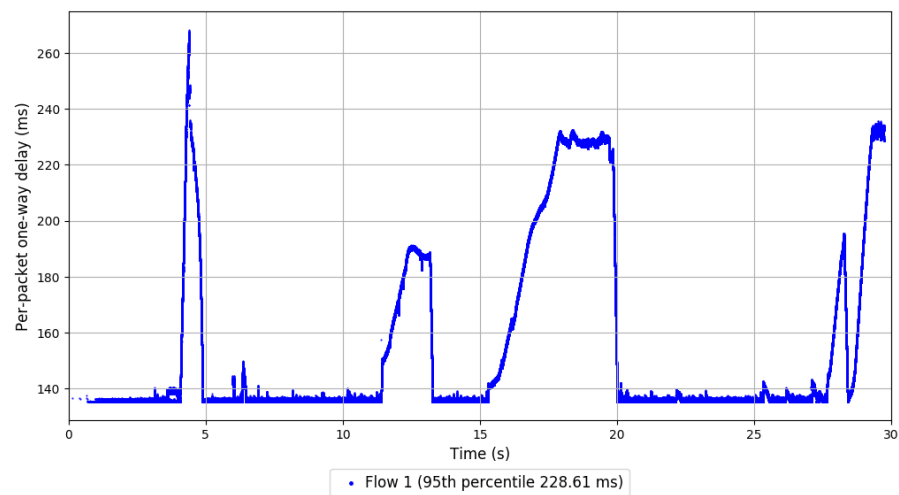
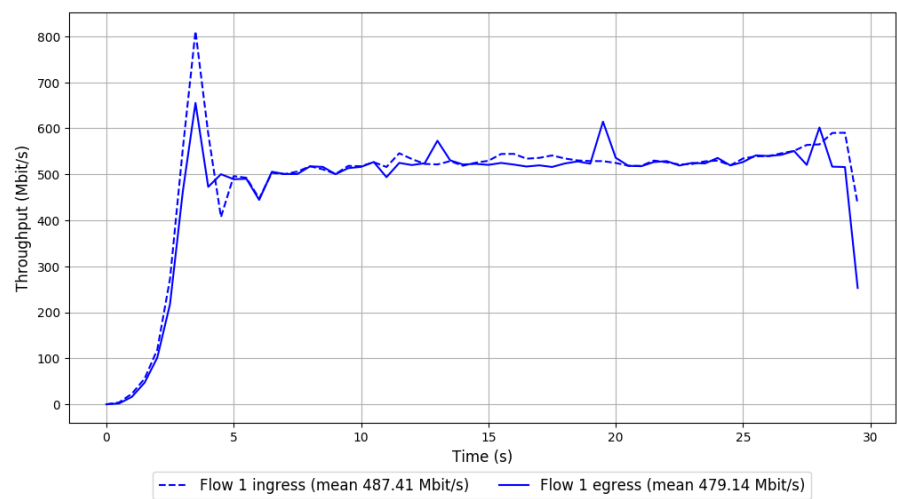
-- Flow 1:

Average throughput: 479.14 Mbit/s

95th percentile per-packet one-way delay: 228.609 ms

Loss rate: 2.59%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-17 06:23:26

End at: 2017-08-17 06:23:56

Below is generated by plot.py at 2017-08-17 09:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.28 Mbit/s

95th percentile per-packet one-way delay: 160.362 ms

Loss rate: 7.77%

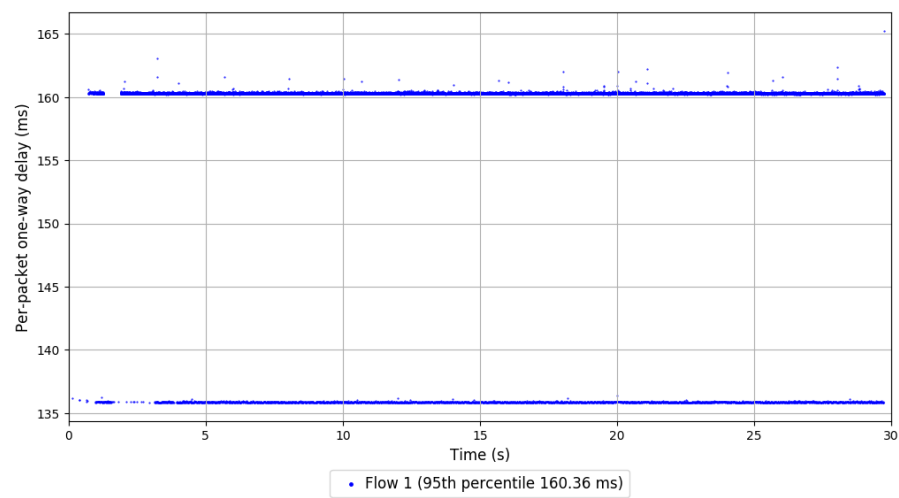
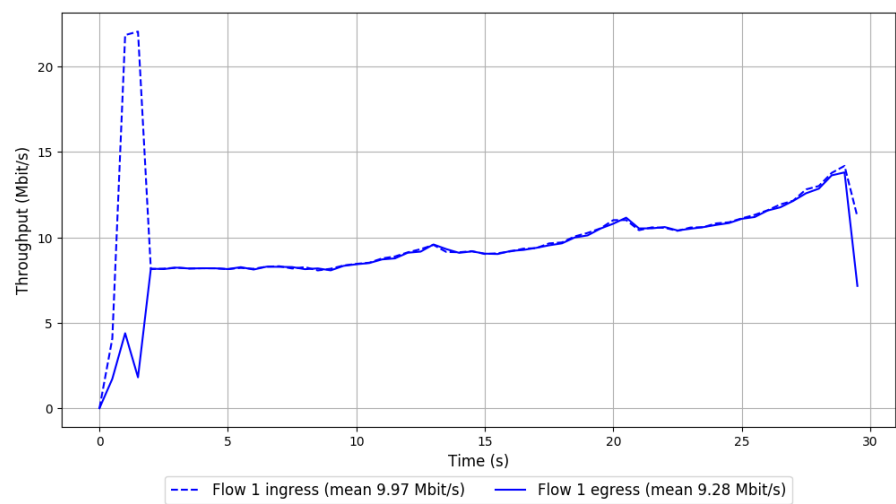
-- Flow 1:

Average throughput: 9.28 Mbit/s

95th percentile per-packet one-way delay: 160.362 ms

Loss rate: 7.77%

Run 10: Report of PCC — Data Link

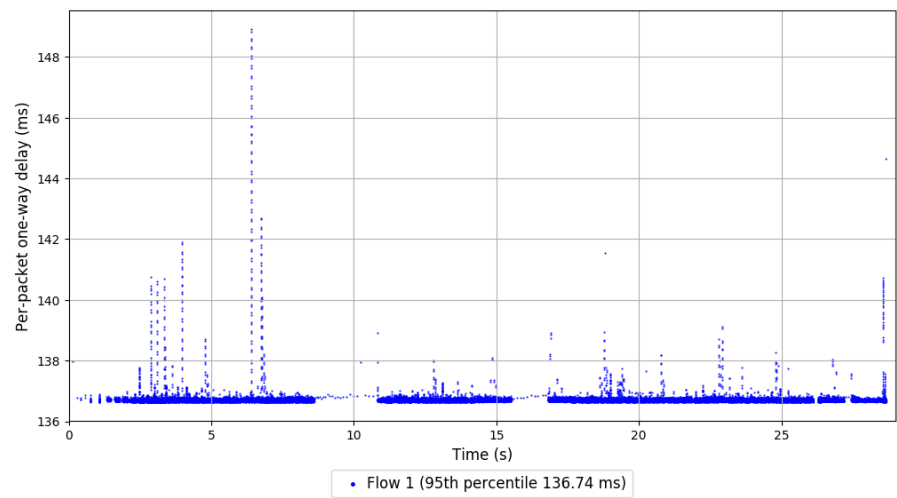
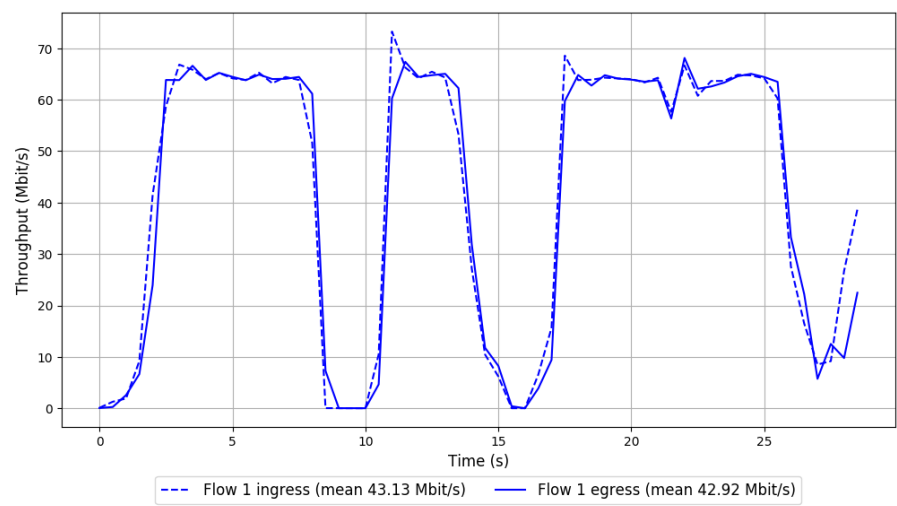


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-17 04:36:44
End at: 2017-08-17 04:37:14

# Below is generated by plot.py at 2017-08-17 09:04:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.92 Mbit/s
95th percentile per-packet one-way delay: 136.740 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 42.92 Mbit/s
95th percentile per-packet one-way delay: 136.740 ms
Loss rate: 1.43%
```

Run 1: Report of QUIC Cubic — Data Link

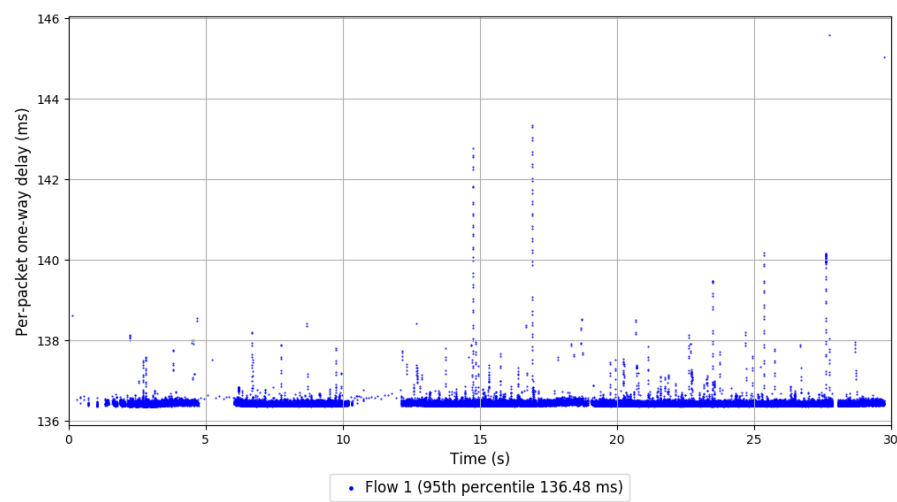
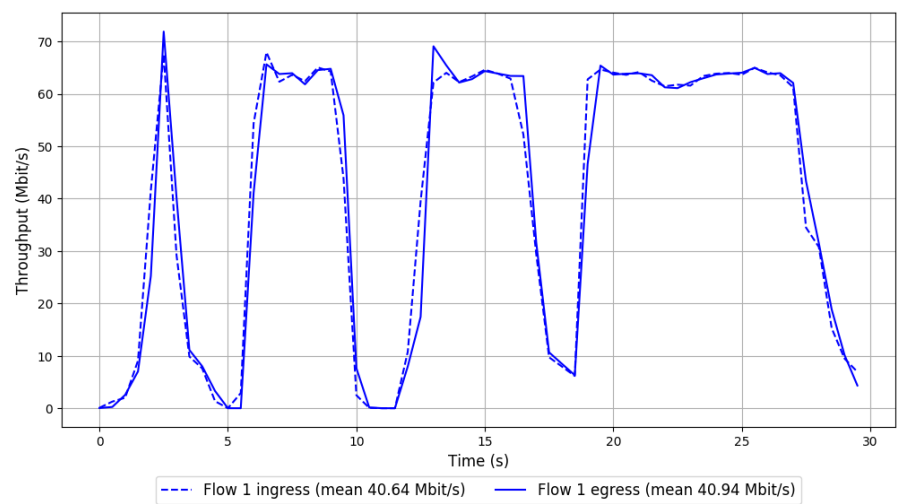


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-08-17 04:48:55
End at: 2017-08-17 04:49:25

# Below is generated by plot.py at 2017-08-17 09:04:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 136.480 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 136.480 ms
Loss rate: 0.21%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-17 05:00:35

End at: 2017-08-17 05:01:05

Below is generated by plot.py at 2017-08-17 09:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.62 Mbit/s

95th percentile per-packet one-way delay: 136.208 ms

Loss rate: 0.20%

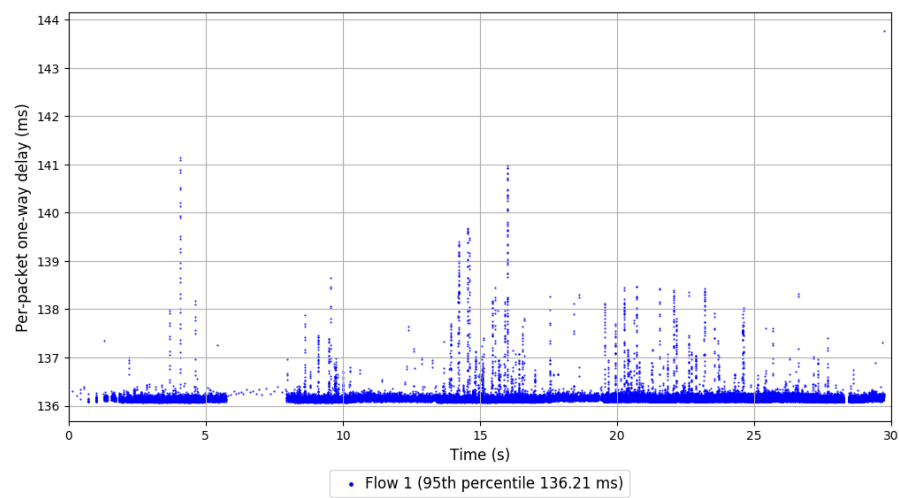
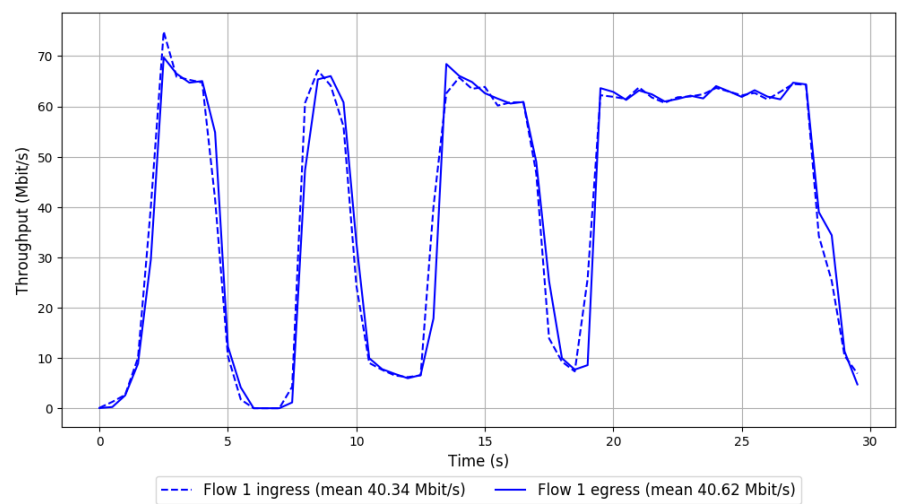
-- Flow 1:

Average throughput: 40.62 Mbit/s

95th percentile per-packet one-way delay: 136.208 ms

Loss rate: 0.20%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-17 05:12:06

End at: 2017-08-17 05:12:37

Below is generated by plot.py at 2017-08-17 09:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.24 Mbit/s

95th percentile per-packet one-way delay: 135.762 ms

Loss rate: 1.35%

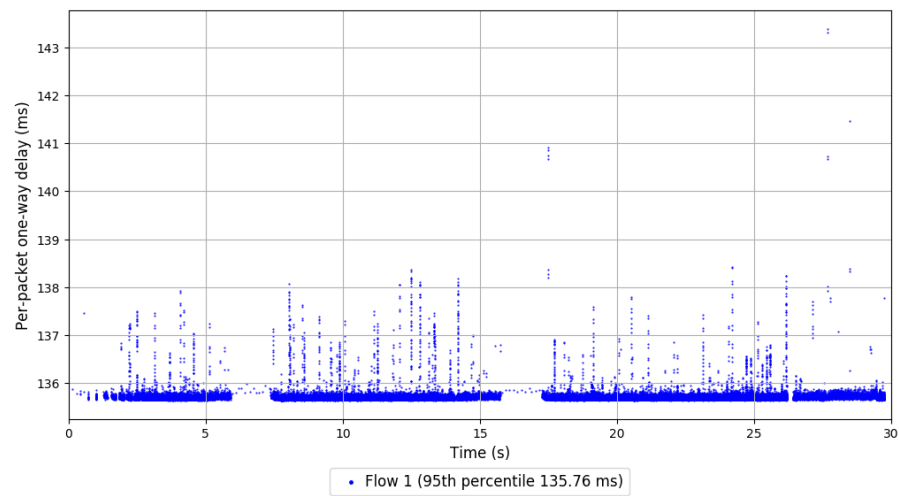
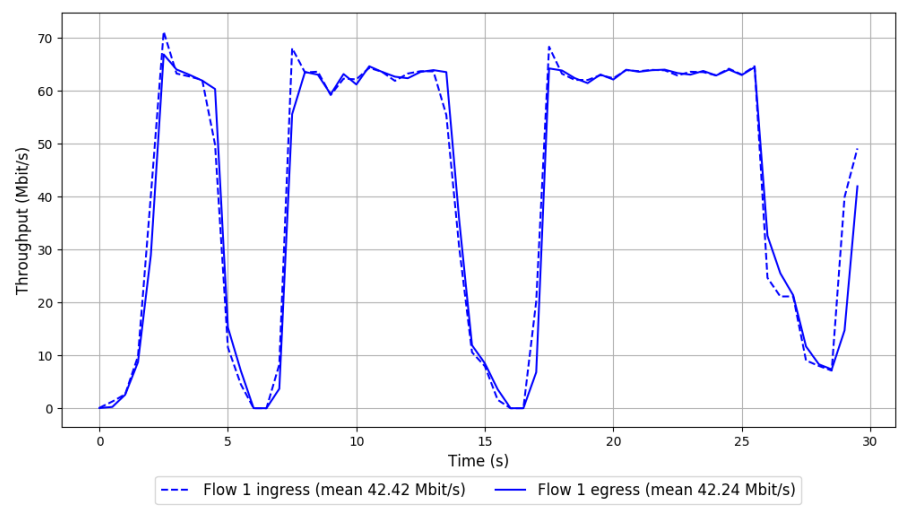
-- Flow 1:

Average throughput: 42.24 Mbit/s

95th percentile per-packet one-way delay: 135.762 ms

Loss rate: 1.35%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-17 05:23:38

End at: 2017-08-17 05:24:08

Below is generated by plot.py at 2017-08-17 09:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.70 Mbit/s

95th percentile per-packet one-way delay: 136.916 ms

Loss rate: 0.21%

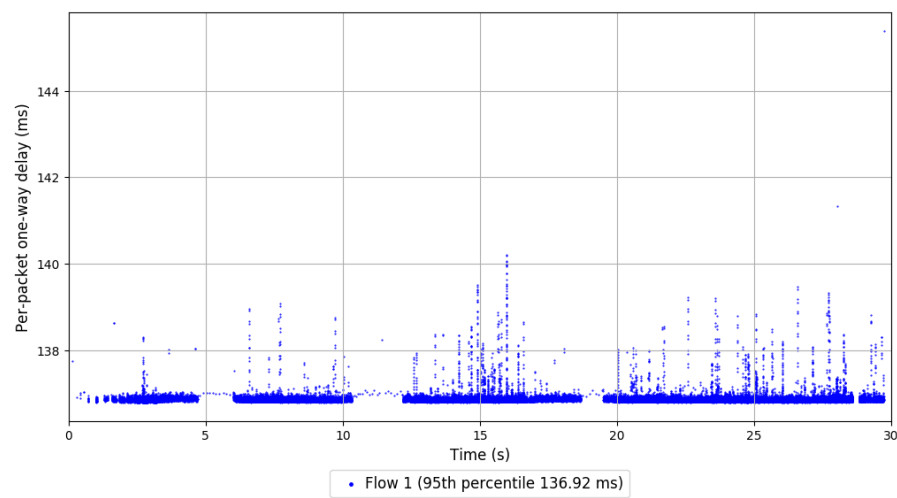
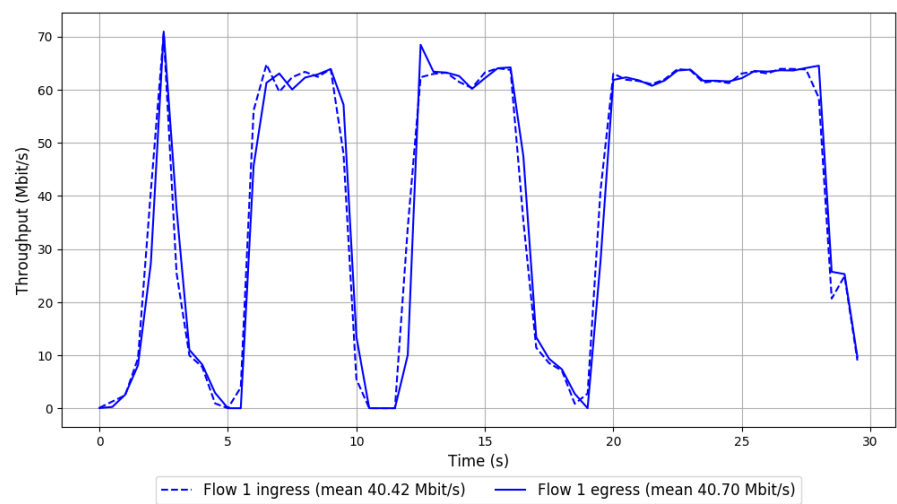
-- Flow 1:

Average throughput: 40.70 Mbit/s

95th percentile per-packet one-way delay: 136.916 ms

Loss rate: 0.21%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-17 05:35:07

End at: 2017-08-17 05:35:37

Below is generated by plot.py at 2017-08-17 09:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.60 Mbit/s

95th percentile per-packet one-way delay: 136.701 ms

Loss rate: 0.27%

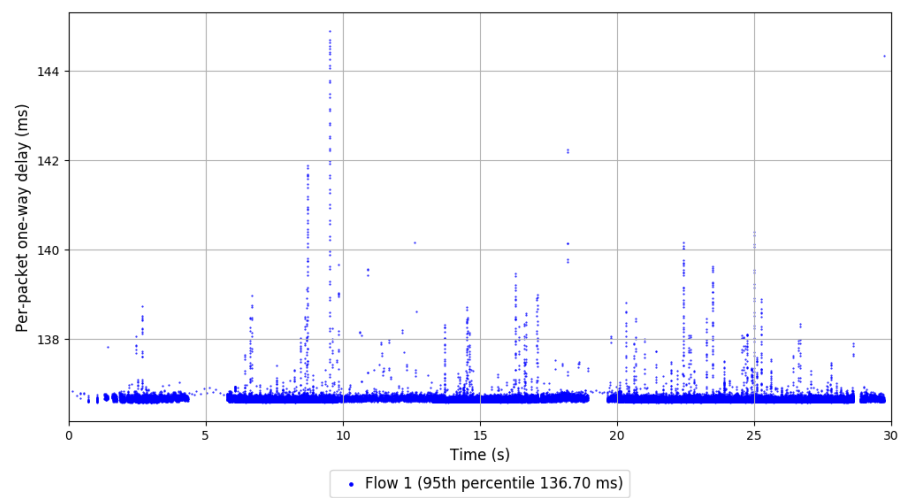
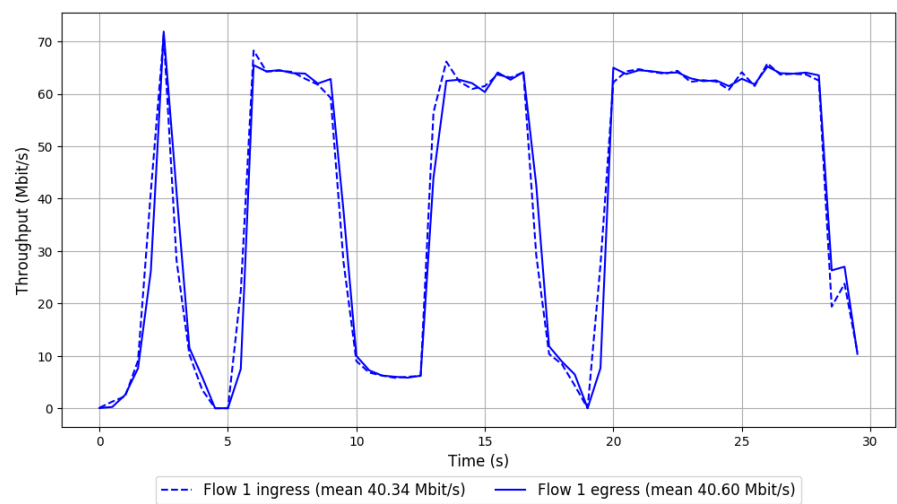
-- Flow 1:

Average throughput: 40.60 Mbit/s

95th percentile per-packet one-way delay: 136.701 ms

Loss rate: 0.27%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-17 05:46:57

End at: 2017-08-17 05:47:27

Below is generated by plot.py at 2017-08-17 09:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.31 Mbit/s

95th percentile per-packet one-way delay: 136.813 ms

Loss rate: 0.48%

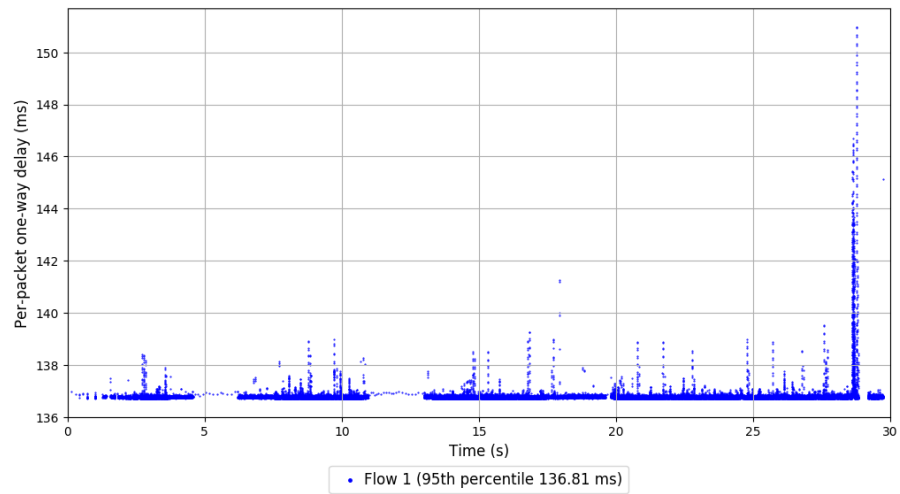
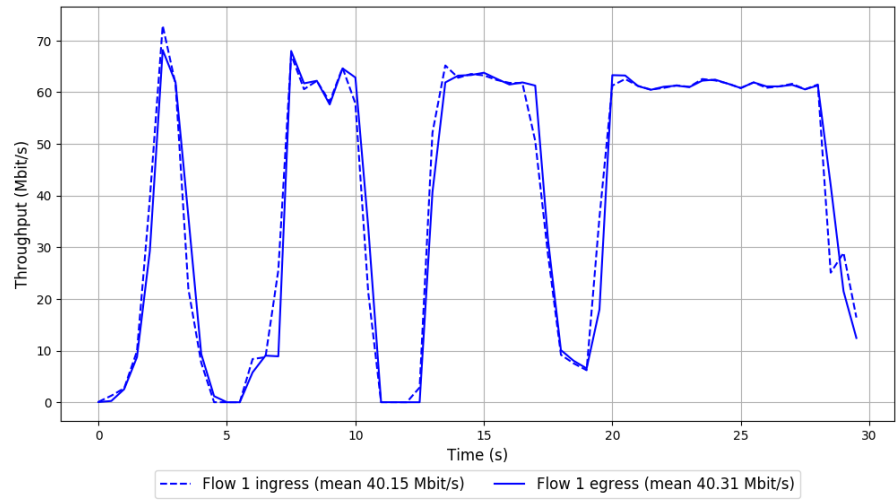
-- Flow 1:

Average throughput: 40.31 Mbit/s

95th percentile per-packet one-way delay: 136.813 ms

Loss rate: 0.48%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-17 05:58:41

End at: 2017-08-17 05:59:11

Below is generated by plot.py at 2017-08-17 09:04:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.20 Mbit/s

95th percentile per-packet one-way delay: 136.592 ms

Loss rate: 0.17%

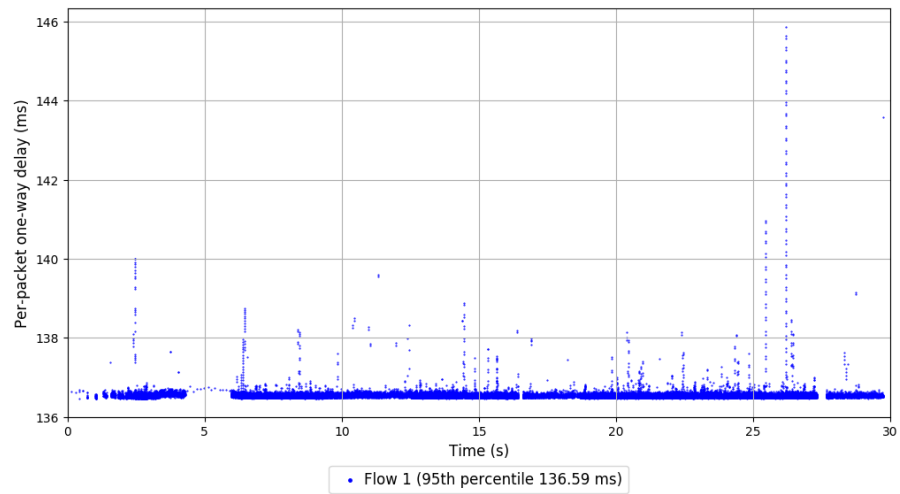
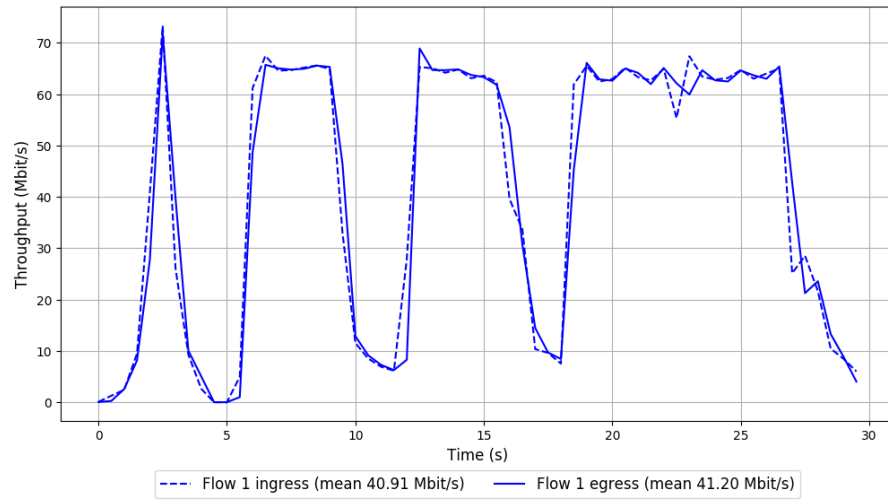
-- Flow 1:

Average throughput: 41.20 Mbit/s

95th percentile per-packet one-way delay: 136.592 ms

Loss rate: 0.17%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-17 06:10:27

End at: 2017-08-17 06:10:57

Below is generated by plot.py at 2017-08-17 09:04:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.51 Mbit/s

95th percentile per-packet one-way delay: 136.762 ms

Loss rate: 0.39%

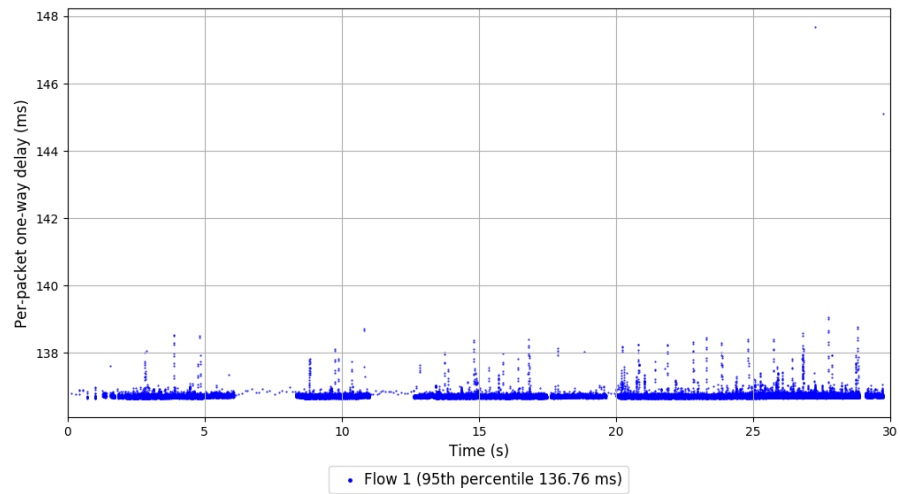
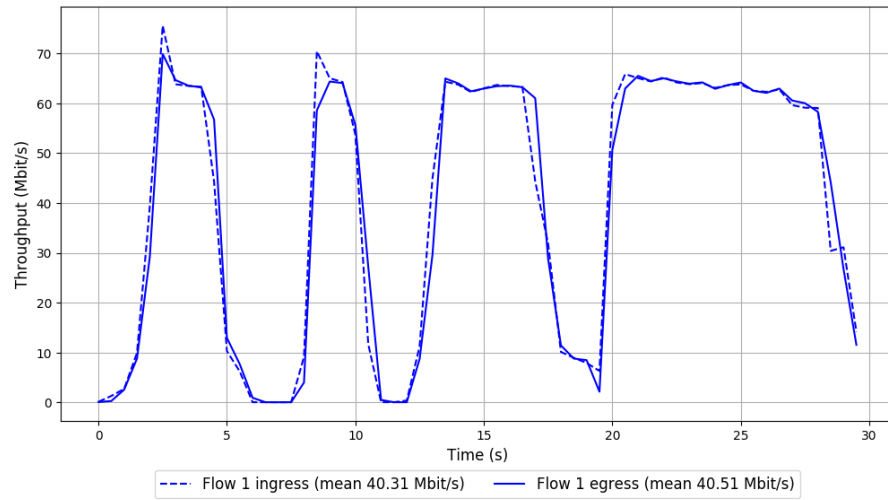
-- Flow 1:

Average throughput: 40.51 Mbit/s

95th percentile per-packet one-way delay: 136.762 ms

Loss rate: 0.39%

Run 9: Report of QUIC Cubic — Data Link

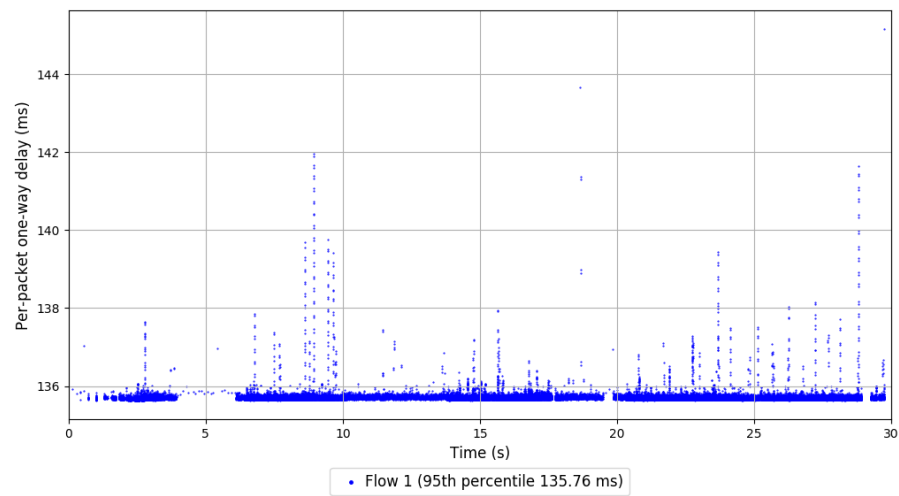
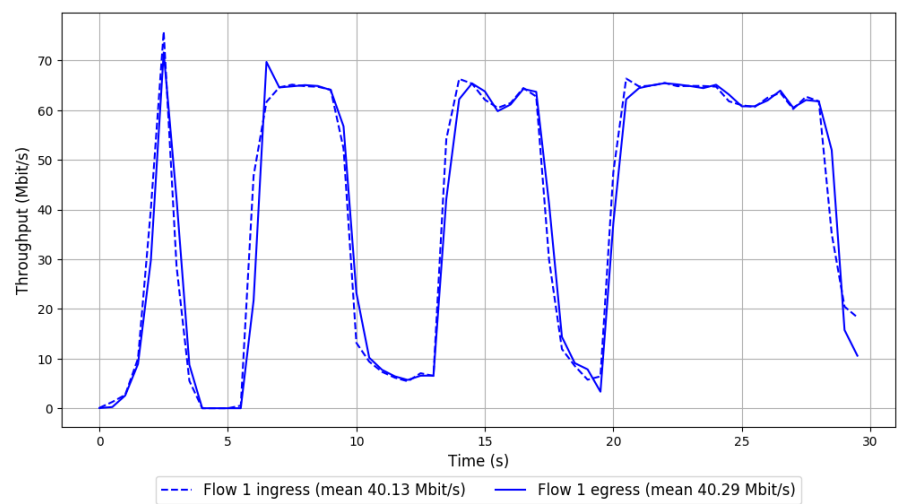


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-17 06:21:58
End at: 2017-08-17 06:22:28

# Below is generated by plot.py at 2017-08-17 09:04:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.29 Mbit/s
95th percentile per-packet one-way delay: 135.756 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 40.29 Mbit/s
95th percentile per-packet one-way delay: 135.756 ms
Loss rate: 0.52%
```

Run 10: Report of QUIC Cubic — Data Link

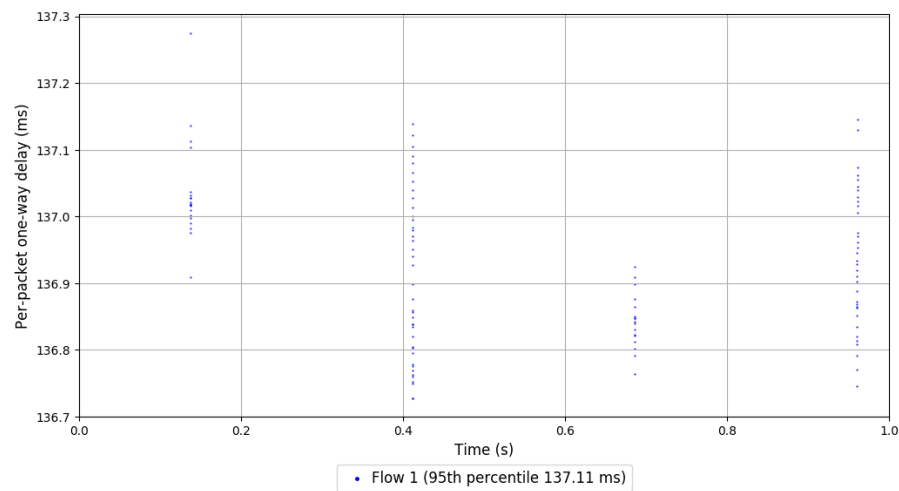
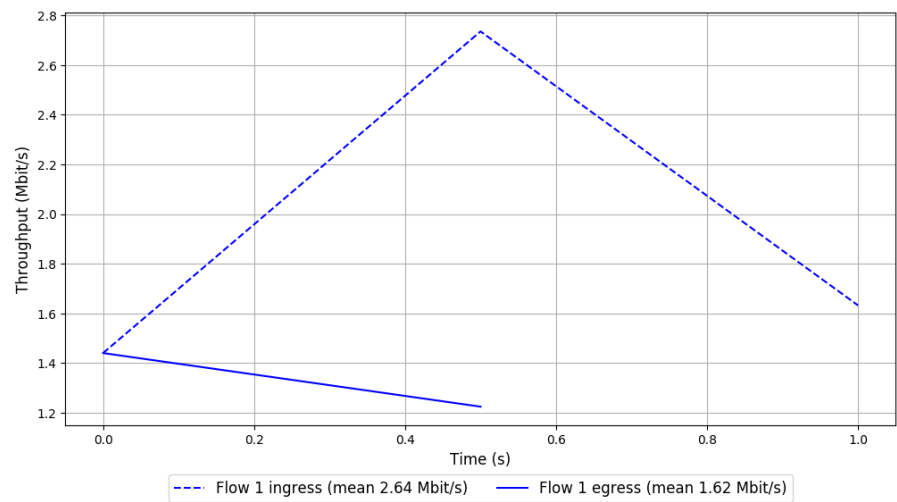


Run 1: Statistics of Saturator

Start at: 2017-08-17 04:30:35

End at: 2017-08-17 04:31:05

Run 1: Report of Saturator — Data Link



Run 2: Statistics of Saturator

Start at: 2017-08-17 04:42:27

End at: 2017-08-17 04:42:57

Below is generated by plot.py at 2017-08-17 09:04:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.67 Mbit/s

95th percentile per-packet one-way delay: 136.684 ms

Loss rate: 0.93%

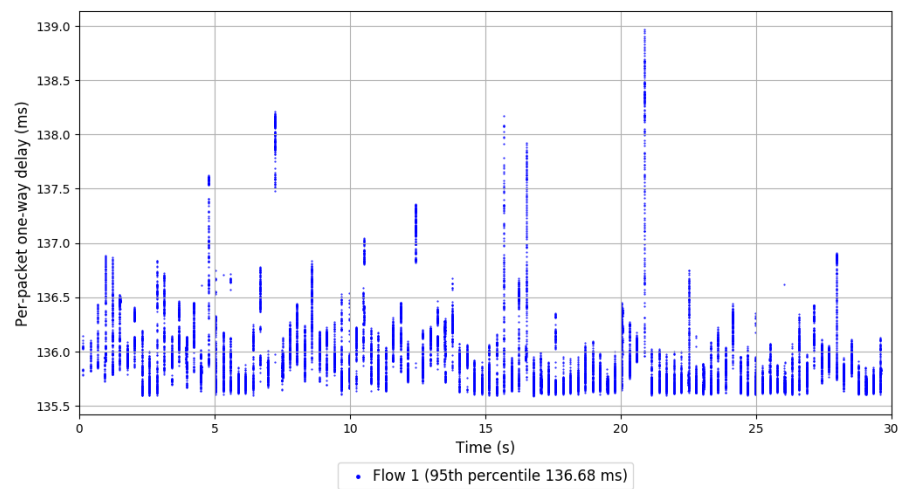
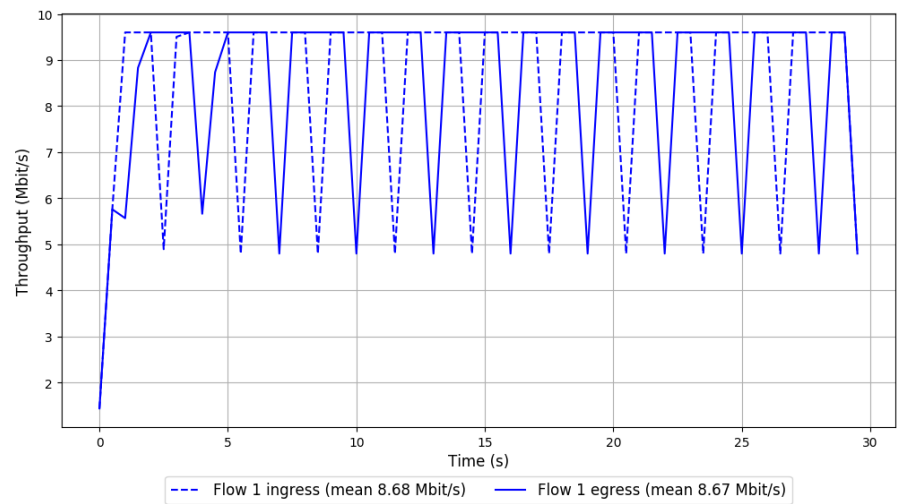
-- Flow 1:

Average throughput: 8.67 Mbit/s

95th percentile per-packet one-way delay: 136.684 ms

Loss rate: 0.93%

Run 2: Report of Saturator — Data Link



Run 3: Statistics of Saturator

Start at: 2017-08-17 04:54:19

End at: 2017-08-17 04:54:49

Below is generated by plot.py at 2017-08-17 09:04:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.67 Mbit/s

95th percentile per-packet one-way delay: 136.326 ms

Loss rate: 0.95%

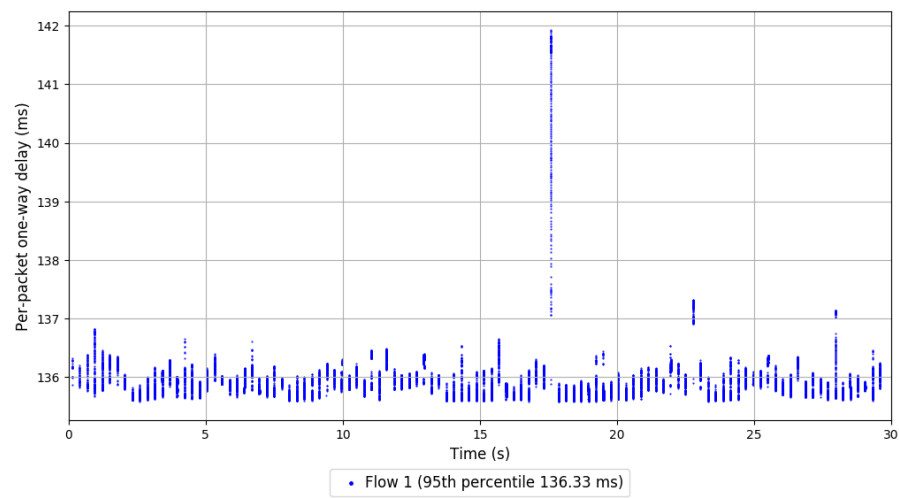
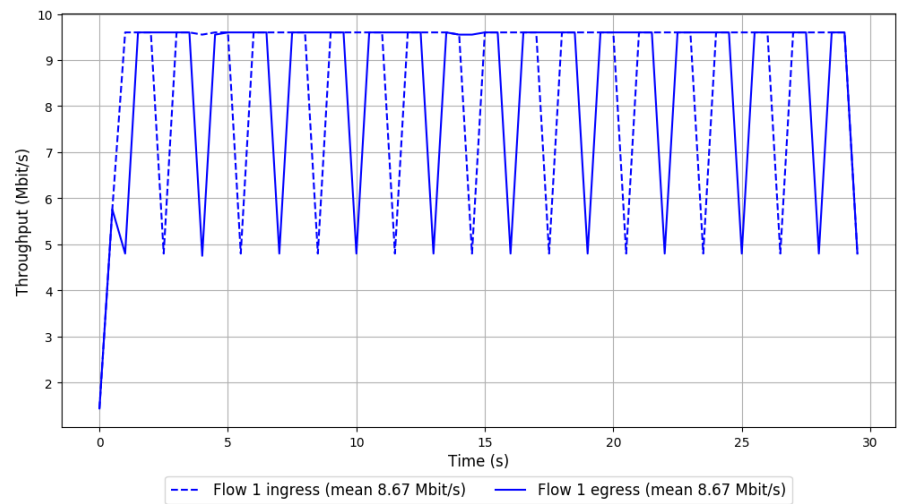
-- Flow 1:

Average throughput: 8.67 Mbit/s

95th percentile per-packet one-way delay: 136.326 ms

Loss rate: 0.95%

Run 3: Report of Saturator — Data Link

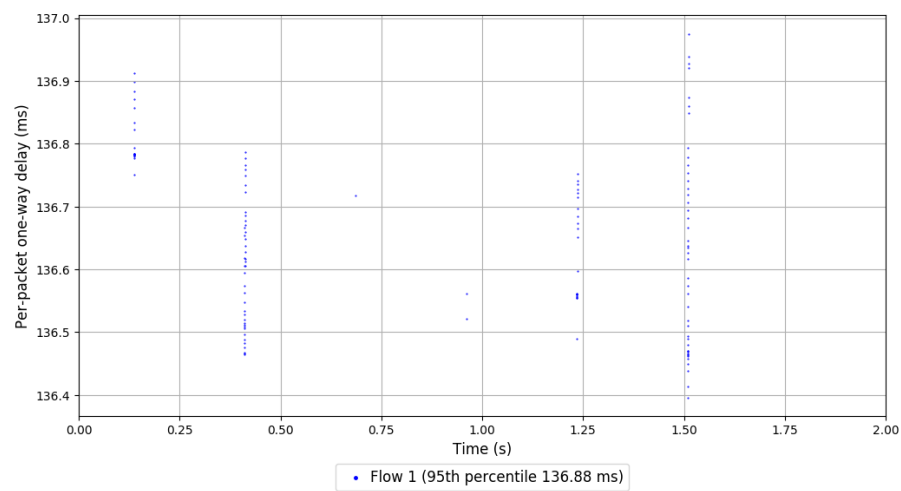
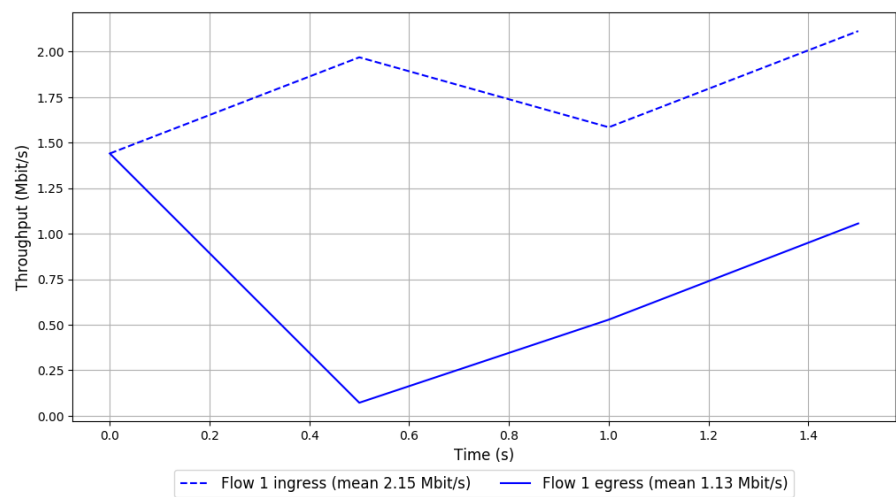


Run 4: Statistics of Saturator

Start at: 2017-08-17 05:06:06

End at: 2017-08-17 05:06:36

Run 4: Report of Saturator — Data Link

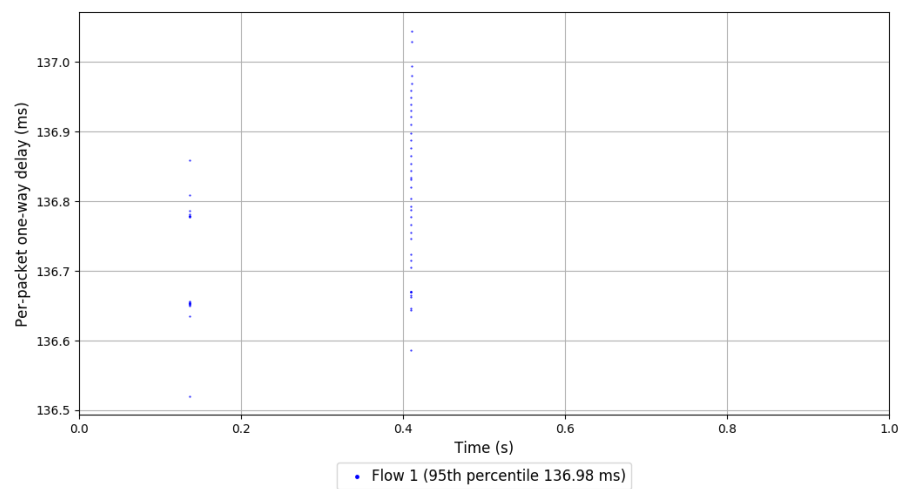
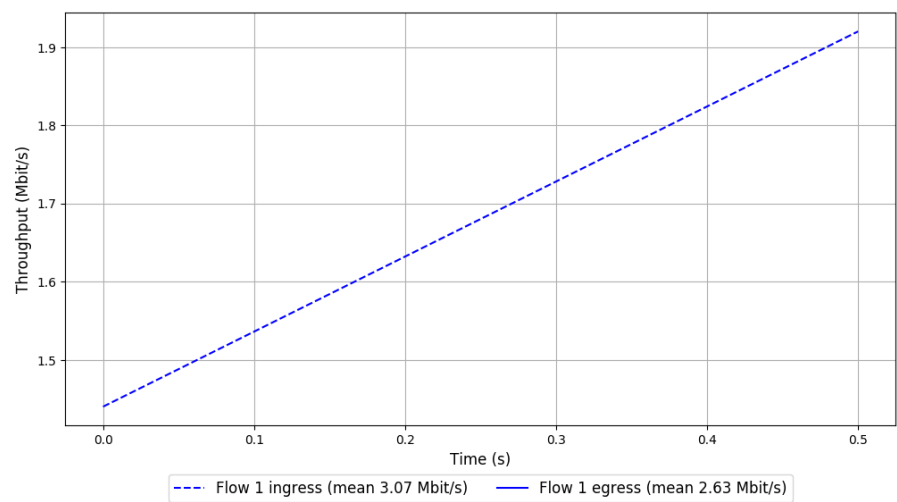


Run 5: Statistics of Saturator

Start at: 2017-08-17 05:17:35

End at: 2017-08-17 05:18:05

Run 5: Report of Saturator — Data Link



Run 6: Statistics of Saturator

Start at: 2017-08-17 05:28:51

End at: 2017-08-17 05:29:21

Below is generated by plot.py at 2017-08-17 09:04:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.65 Mbit/s

95th percentile per-packet one-way delay: 137.450 ms

Loss rate: 0.93%

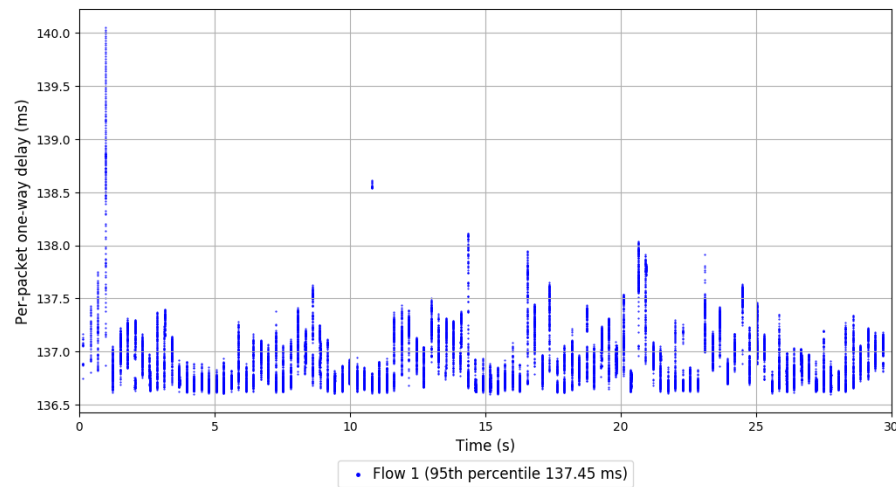
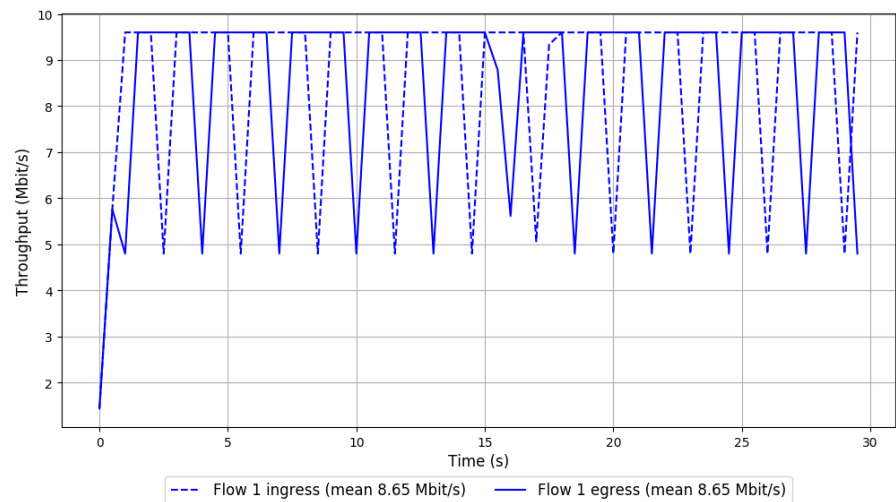
-- Flow 1:

Average throughput: 8.65 Mbit/s

95th percentile per-packet one-way delay: 137.450 ms

Loss rate: 0.93%

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: 2017-08-17 05:40:35

End at: 2017-08-17 05:41:05

Below is generated by plot.py at 2017-08-17 09:04:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.64 Mbit/s

95th percentile per-packet one-way delay: 137.294 ms

Loss rate: 0.99%

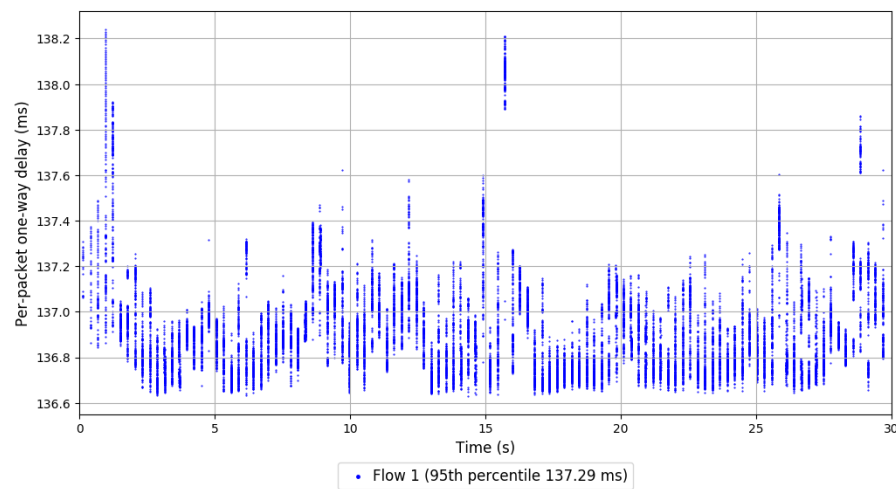
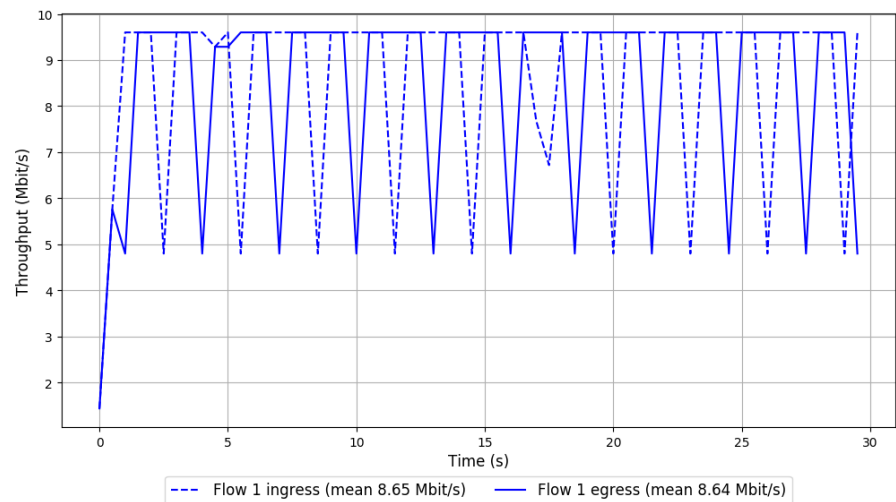
-- Flow 1:

Average throughput: 8.64 Mbit/s

95th percentile per-packet one-way delay: 137.294 ms

Loss rate: 0.99%

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-17 05:52:27

End at: 2017-08-17 05:52:57

Below is generated by plot.py at 2017-08-17 09:04:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.63 Mbit/s

95th percentile per-packet one-way delay: 137.684 ms

Loss rate: 0.98%

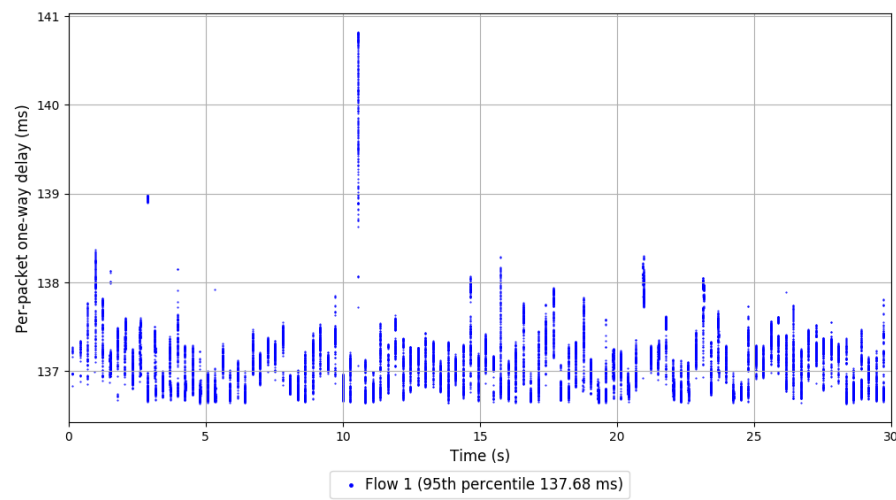
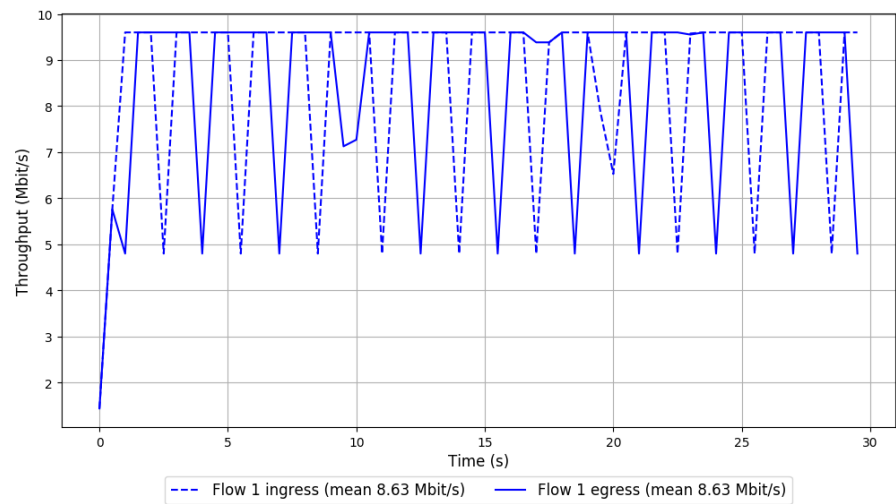
-- Flow 1:

Average throughput: 8.63 Mbit/s

95th percentile per-packet one-way delay: 137.684 ms

Loss rate: 0.98%

Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

Start at: 2017-08-17 06:03:58

End at: 2017-08-17 06:04:28

Below is generated by plot.py at 2017-08-17 09:04:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 136.232 ms

Loss rate: 0.92%

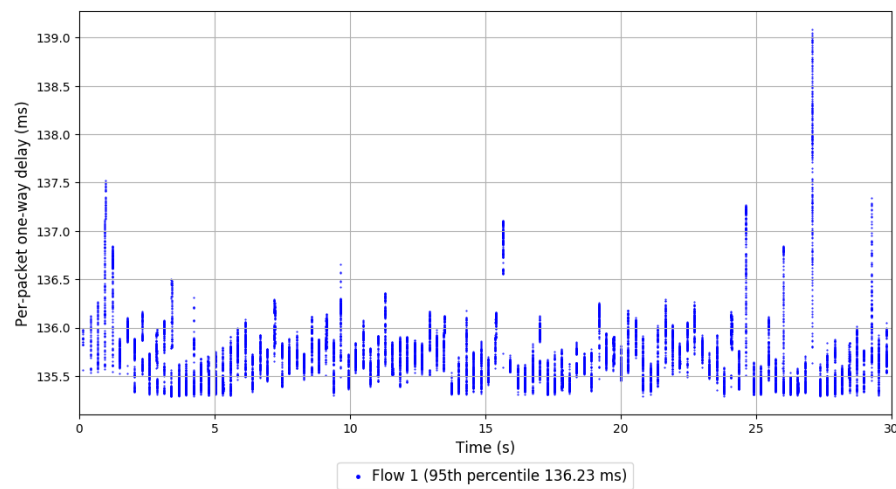
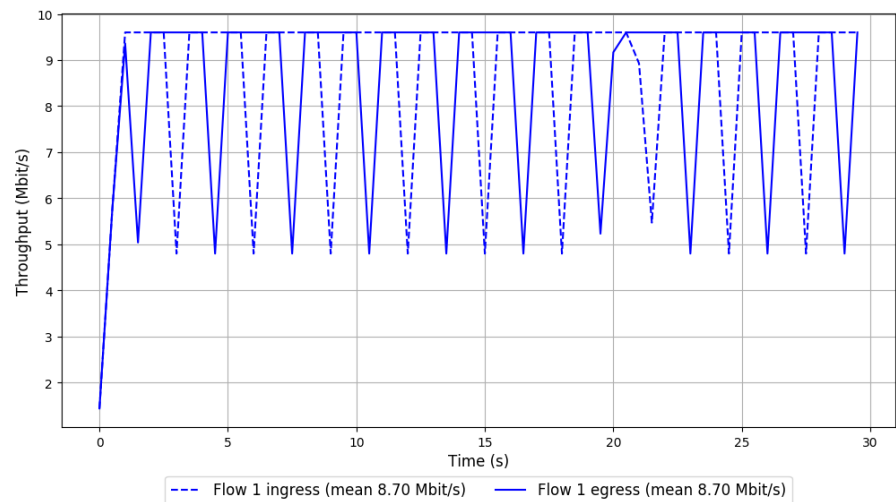
-- Flow 1:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 136.232 ms

Loss rate: 0.92%

Run 9: Report of Saturator — Data Link



Run 10: Statistics of Saturator

Start at: 2017-08-17 06:15:54

End at: 2017-08-17 06:16:24

Below is generated by plot.py at 2017-08-17 09:04:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.64 Mbit/s

95th percentile per-packet one-way delay: 136.261 ms

Loss rate: 1.05%

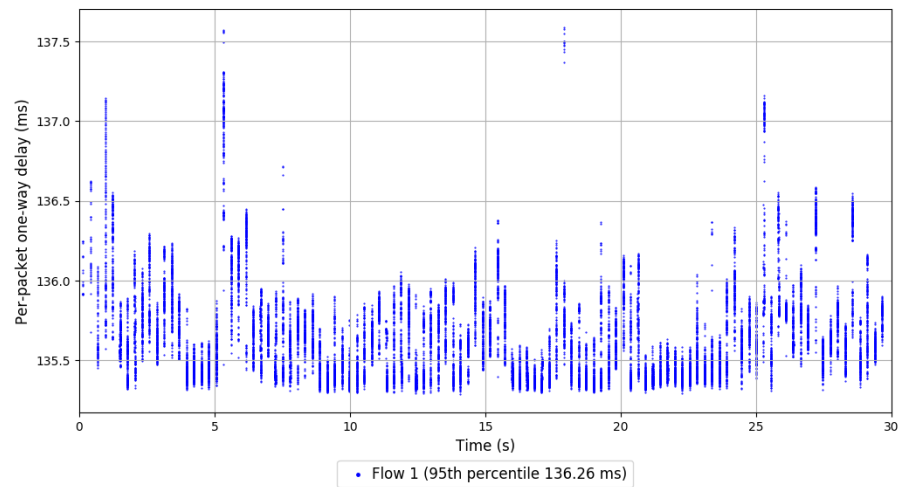
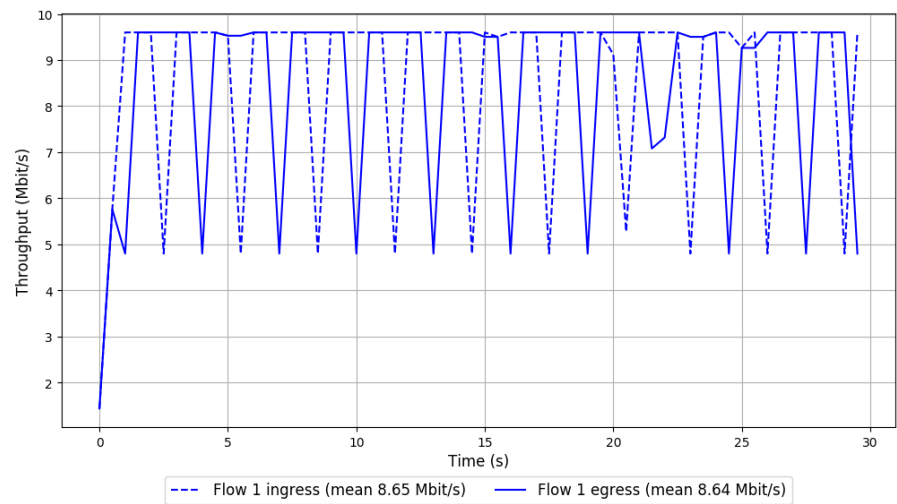
-- Flow 1:

Average throughput: 8.64 Mbit/s

95th percentile per-packet one-way delay: 136.261 ms

Loss rate: 1.05%

Run 10: Report of Saturator — Data Link

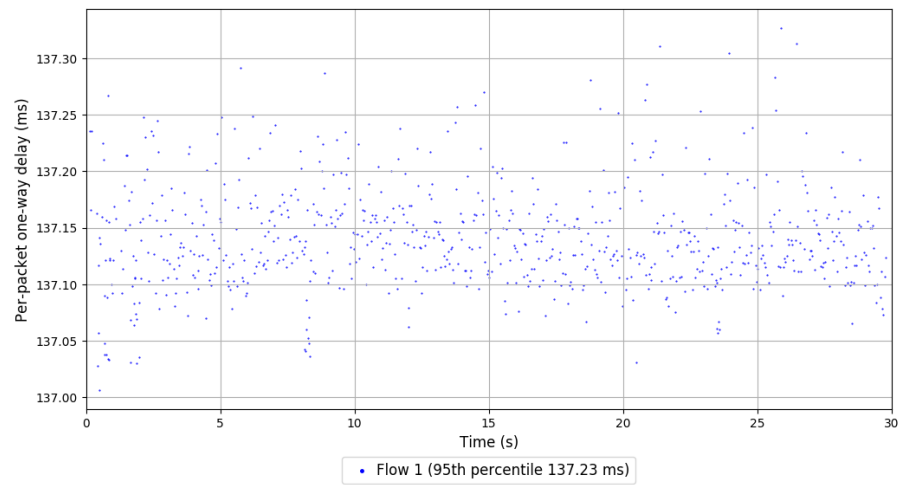
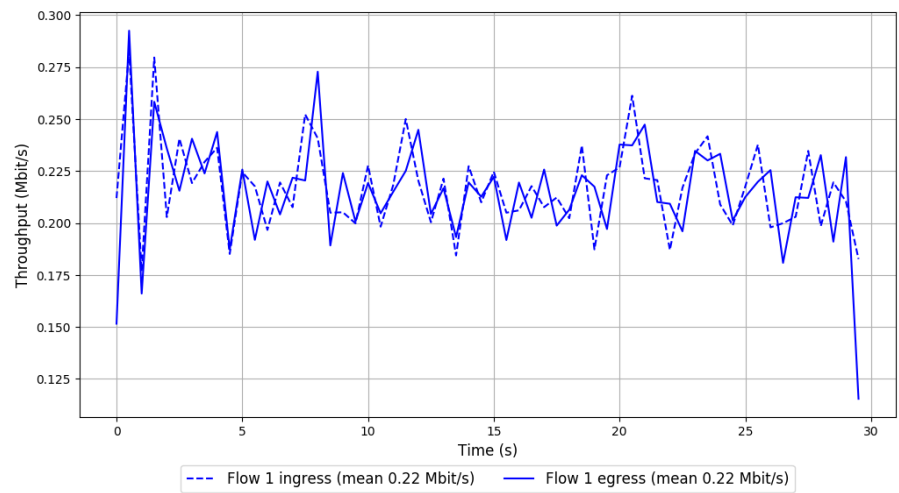


```
Run 1: Statistics of SCReAM

Start at: 2017-08-17 04:37:30
End at: 2017-08-17 04:38:00

# Below is generated by plot.py at 2017-08-17 09:04:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.230 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.230 ms
Loss rate: 0.90%
```

Run 1: Report of SReAM — Data Link

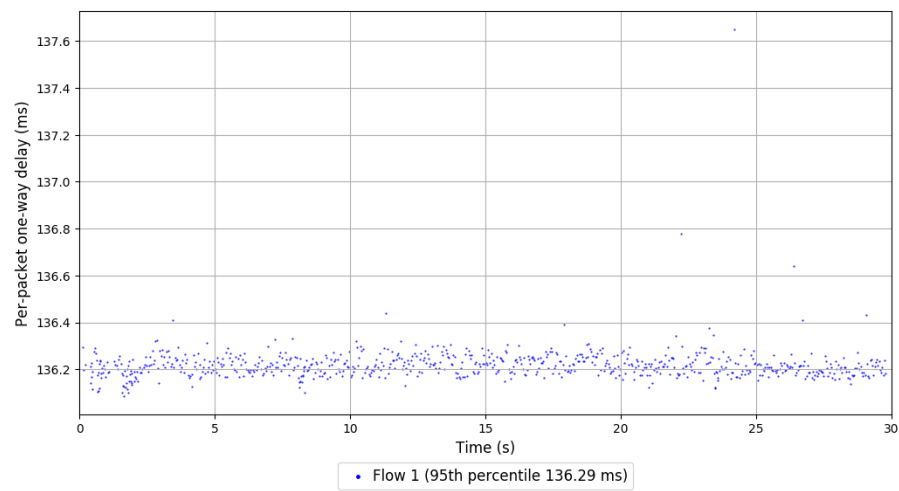
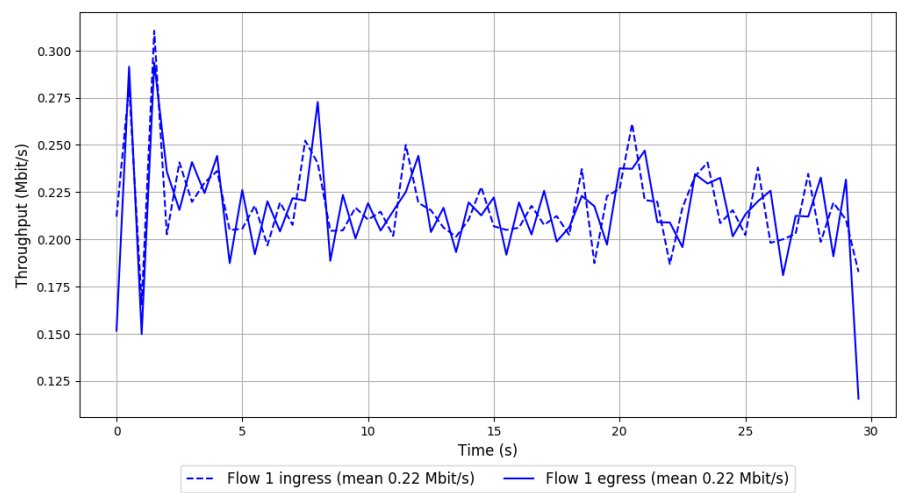


```
Run 2: Statistics of SCReAM

Start at: 2017-08-17 04:49:42
End at: 2017-08-17 04:50:12

# Below is generated by plot.py at 2017-08-17 09:04:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.291 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.291 ms
Loss rate: 0.89%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-17 05:01:22

End at: 2017-08-17 05:01:52

Below is generated by plot.py at 2017-08-17 09:04:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.273 ms

Loss rate: 0.89%

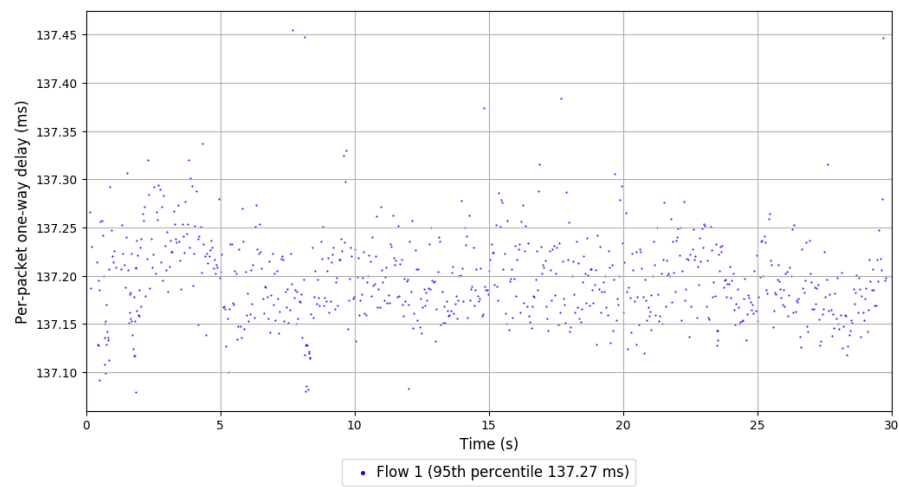
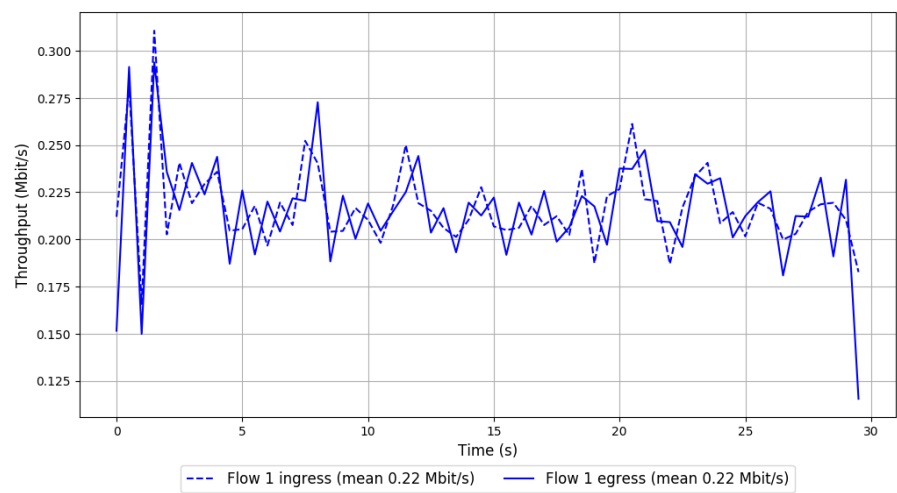
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.273 ms

Loss rate: 0.89%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-17 05:12:52

End at: 2017-08-17 05:13:22

Below is generated by plot.py at 2017-08-17 09:04:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.294 ms

Loss rate: 0.90%

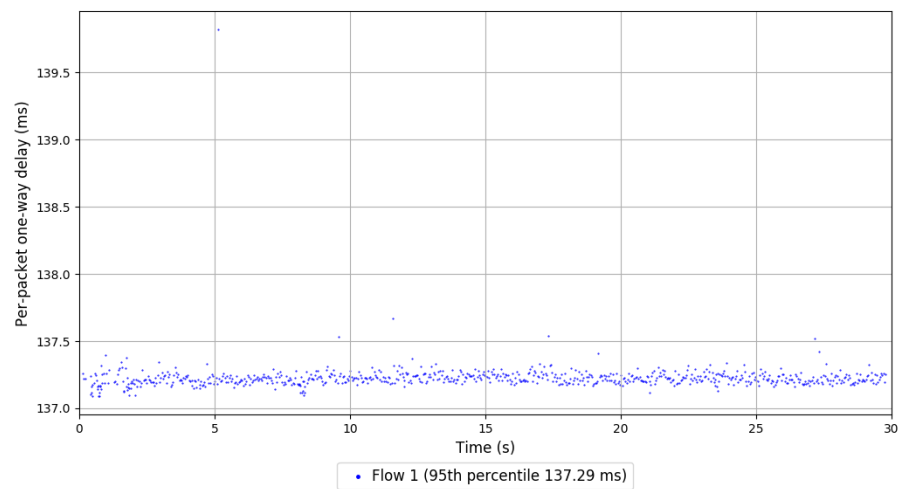
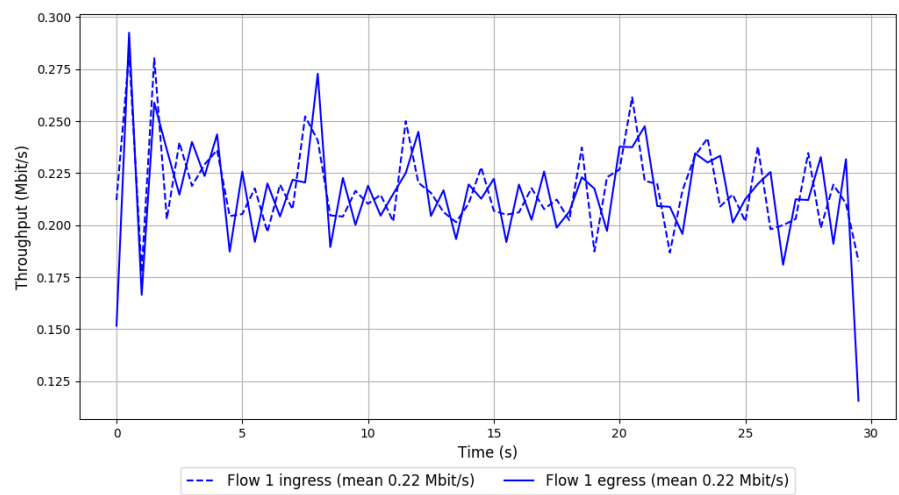
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.294 ms

Loss rate: 0.90%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-17 05:24:24

End at: 2017-08-17 05:24:54

Below is generated by plot.py at 2017-08-17 09:04:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.564 ms

Loss rate: 0.90%

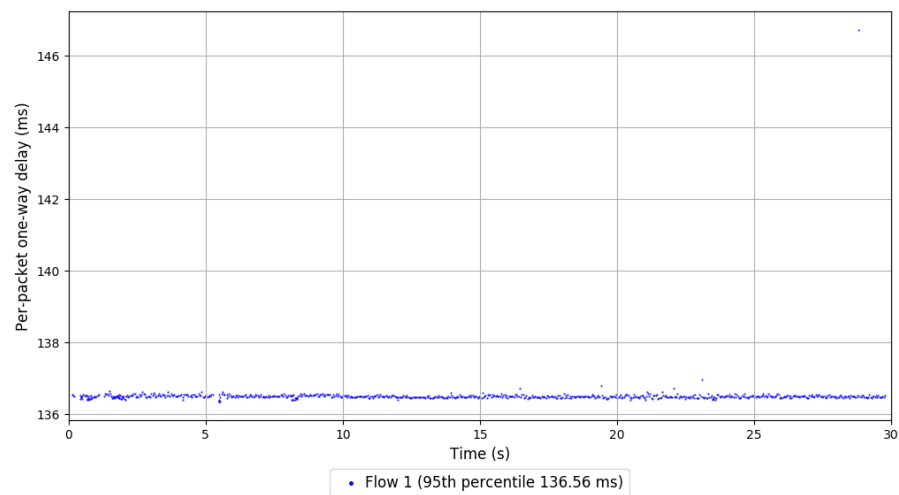
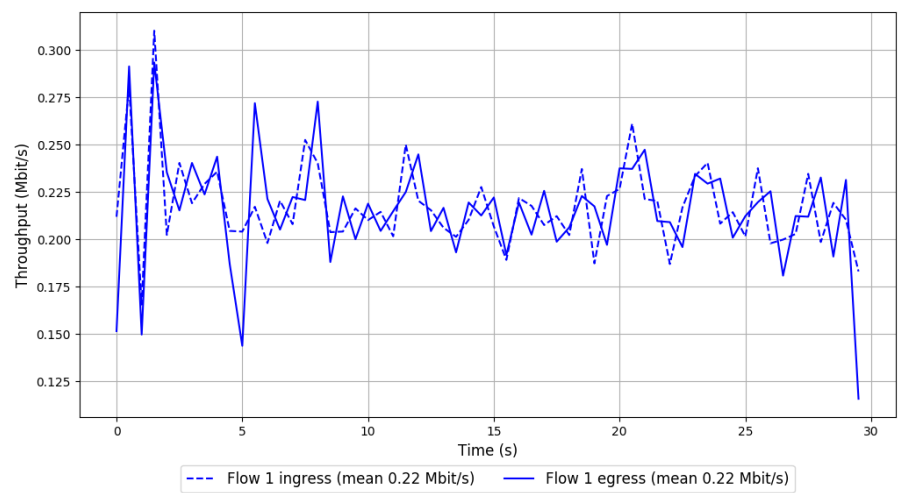
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.564 ms

Loss rate: 0.90%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-17 05:35:53

End at: 2017-08-17 05:36:23

Below is generated by plot.py at 2017-08-17 09:04:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 136.432 ms

Loss rate: 0.88%

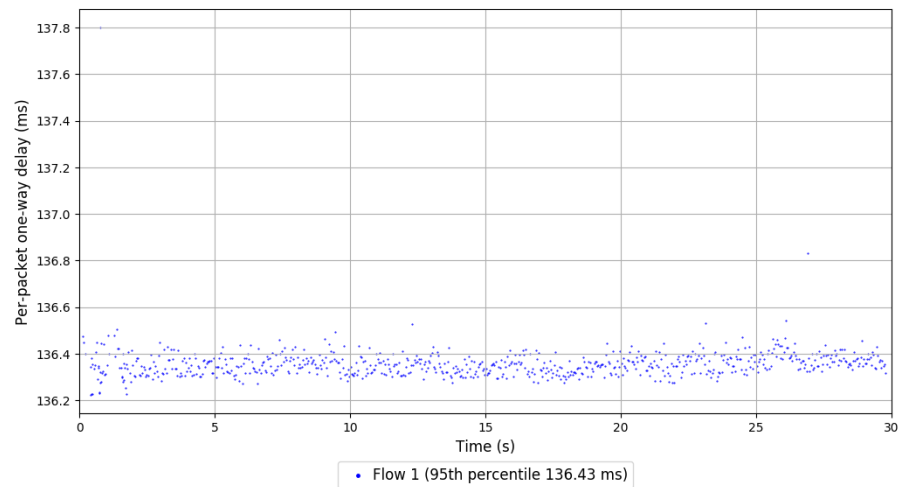
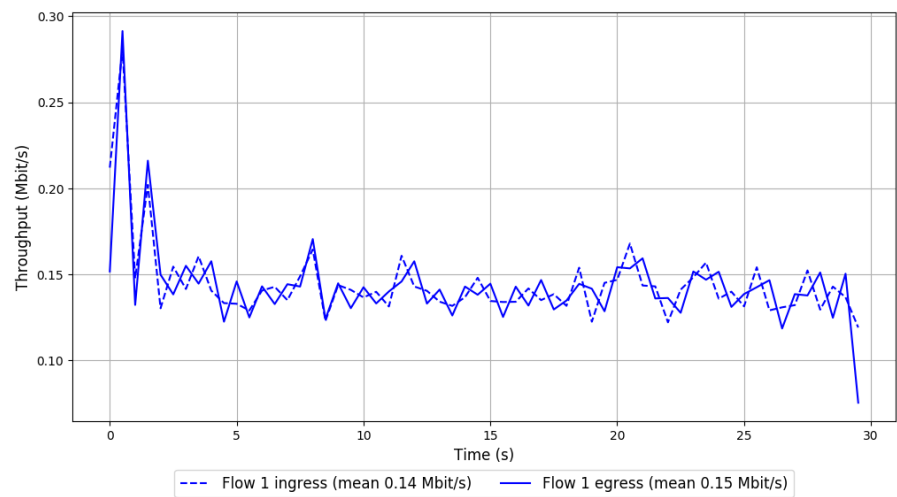
-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 136.432 ms

Loss rate: 0.88%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-17 05:47:43

End at: 2017-08-17 05:48:13

Below is generated by plot.py at 2017-08-17 09:04:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 136.577 ms

Loss rate: 0.38%

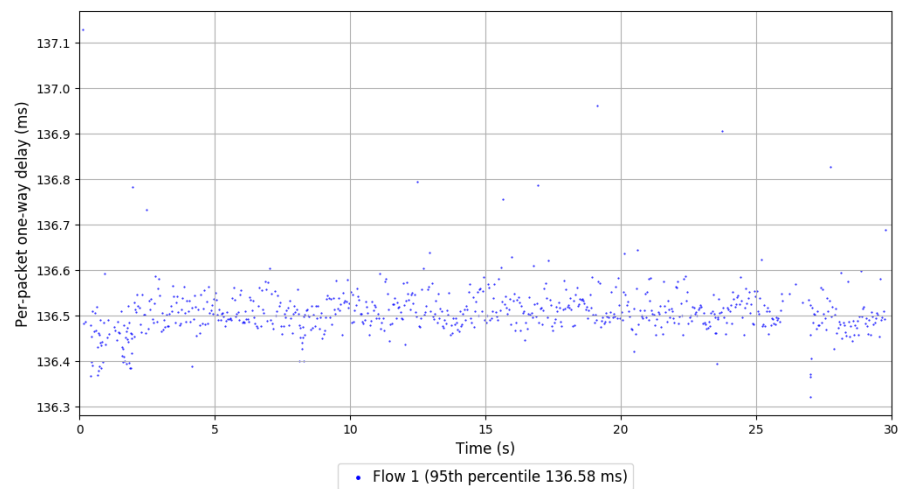
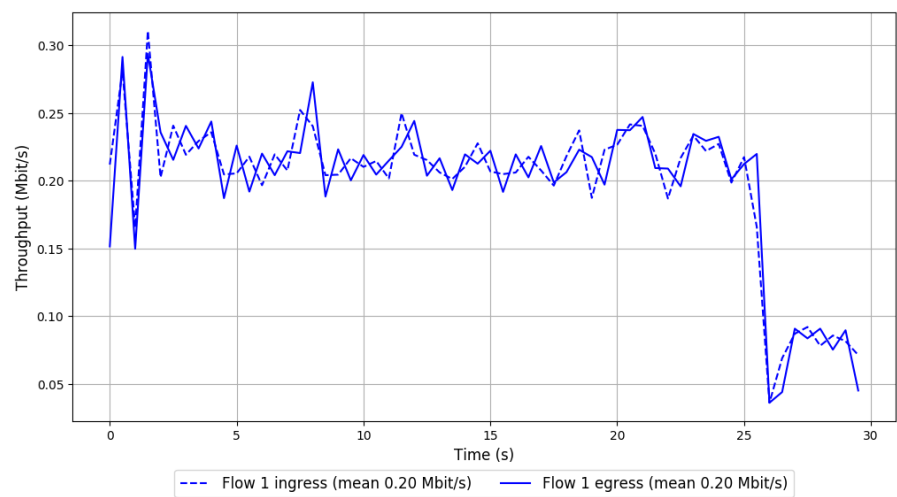
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 136.577 ms

Loss rate: 0.38%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-17 05:59:27

End at: 2017-08-17 05:59:57

Below is generated by plot.py at 2017-08-17 09:04:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.852 ms

Loss rate: 0.89%

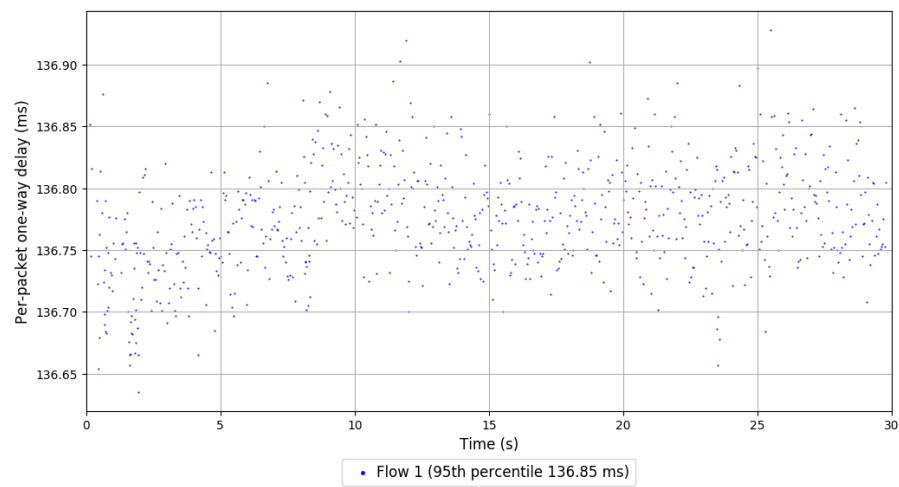
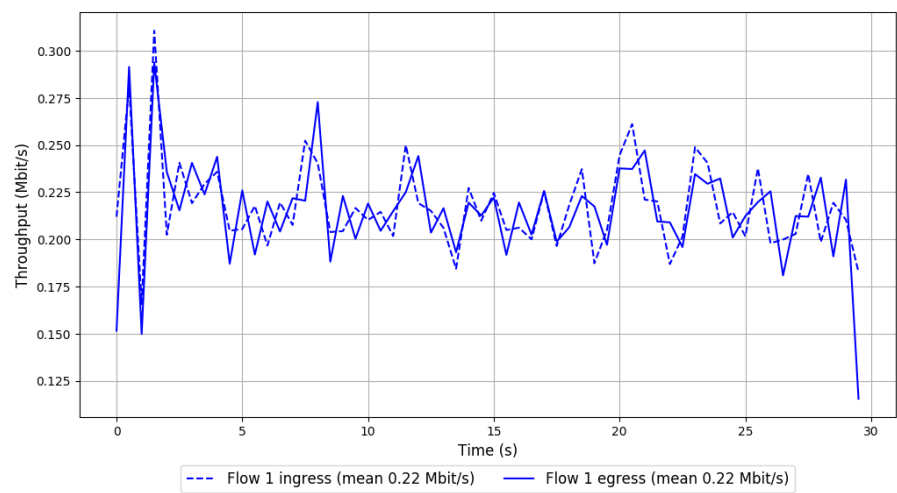
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.852 ms

Loss rate: 0.89%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-17 06:11:12

End at: 2017-08-17 06:11:42

Below is generated by plot.py at 2017-08-17 09:04:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.574 ms

Loss rate: 0.90%

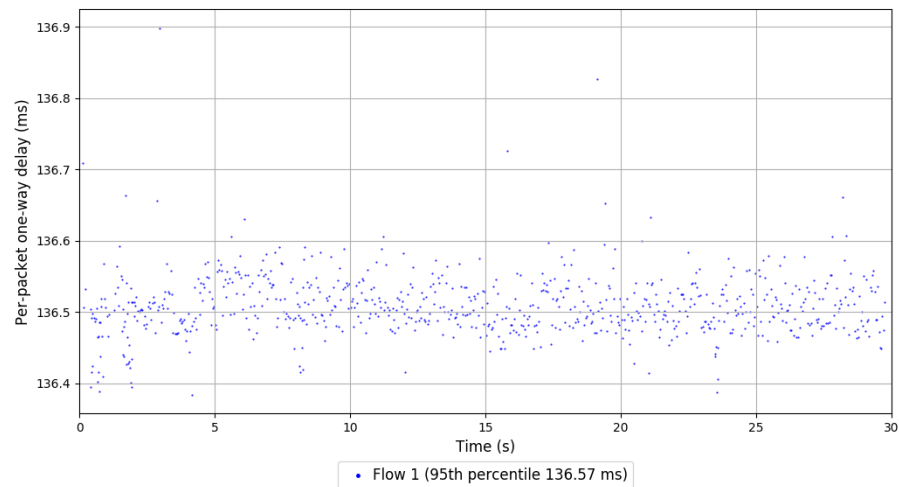
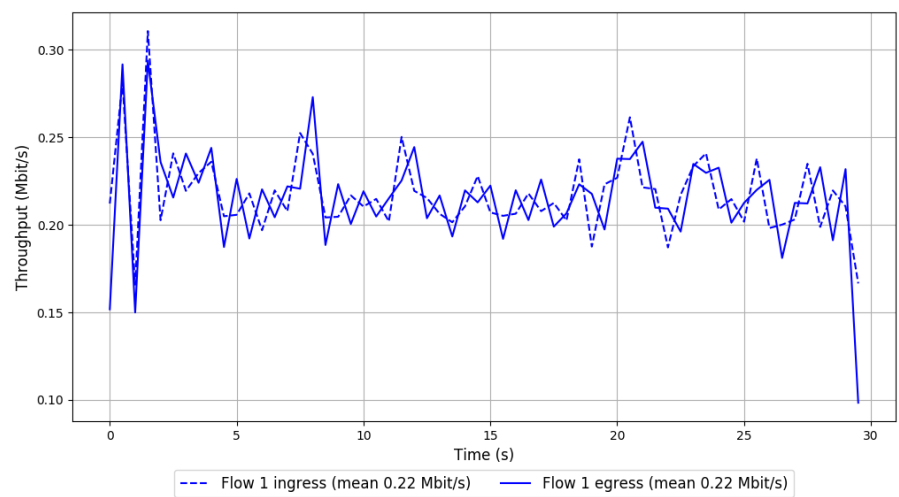
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.574 ms

Loss rate: 0.90%

Run 9: Report of SReAM — Data Link

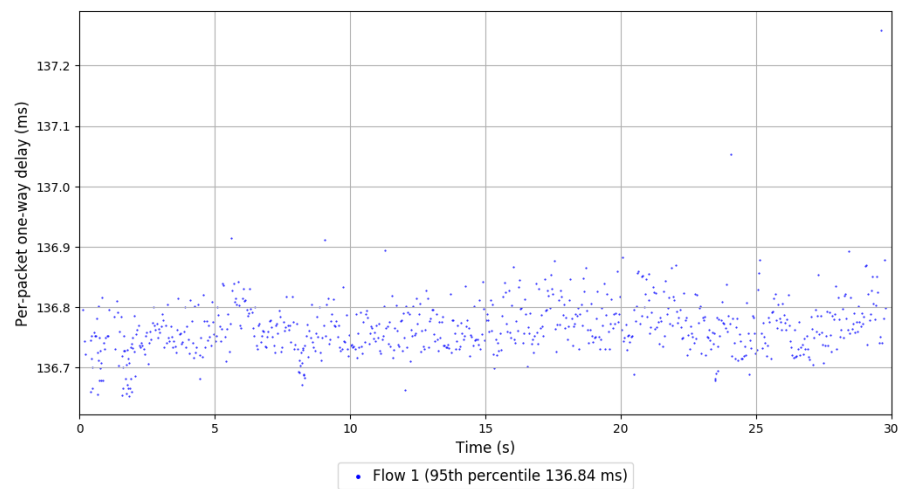
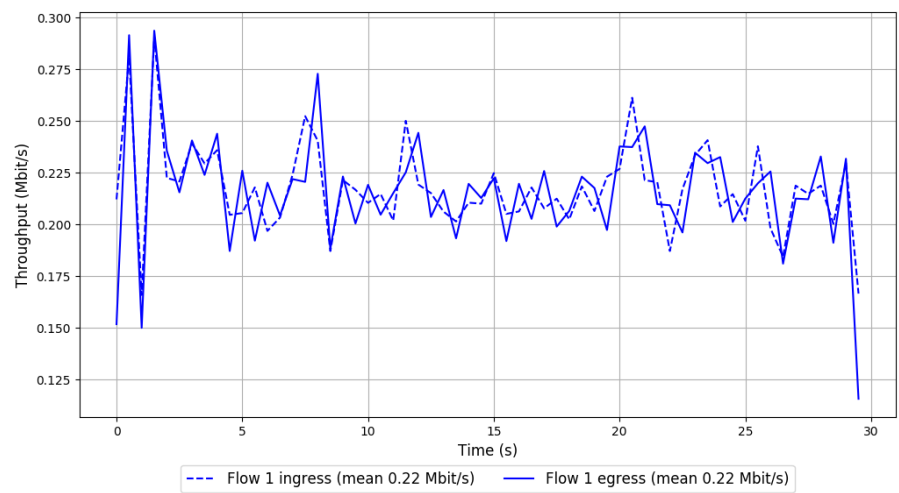


```
Run 10: Statistics of SReAM

Start at: 2017-08-17 06:22:44
End at: 2017-08-17 06:23:14

# Below is generated by plot.py at 2017-08-17 09:04:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.839 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.839 ms
Loss rate: 0.77%
```

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-08-17 04:40:12

End at: 2017-08-17 04:40:42

Below is generated by plot.py at 2017-08-17 09:04:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.139 ms

Loss rate: 0.94%

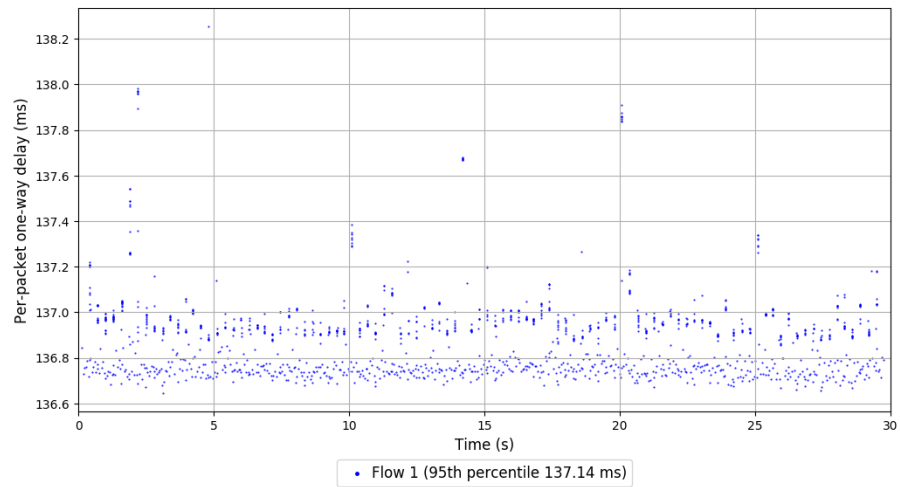
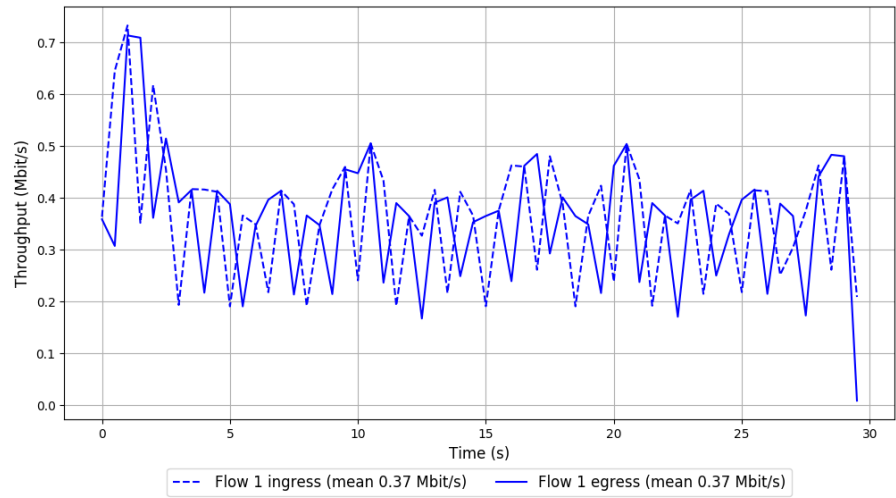
-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.139 ms

Loss rate: 0.94%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-17 04:52:05

End at: 2017-08-17 04:52:35

Below is generated by plot.py at 2017-08-17 09:04:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.271 ms

Loss rate: 0.78%

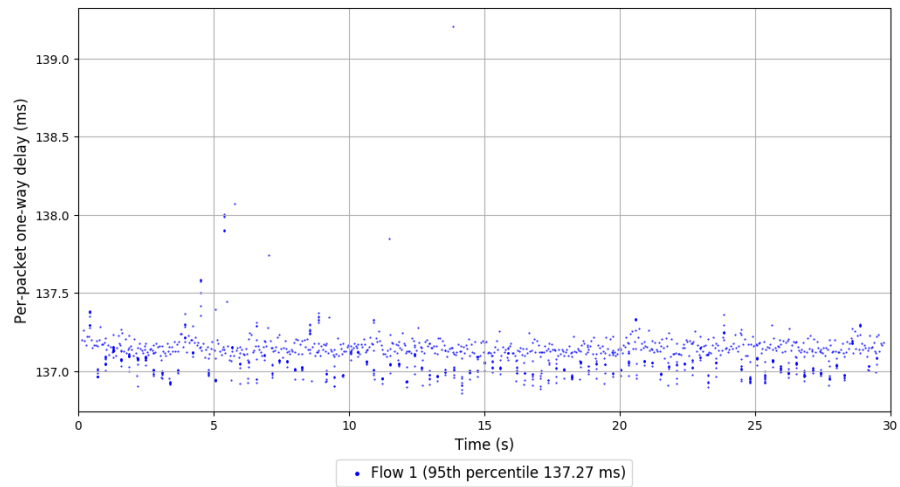
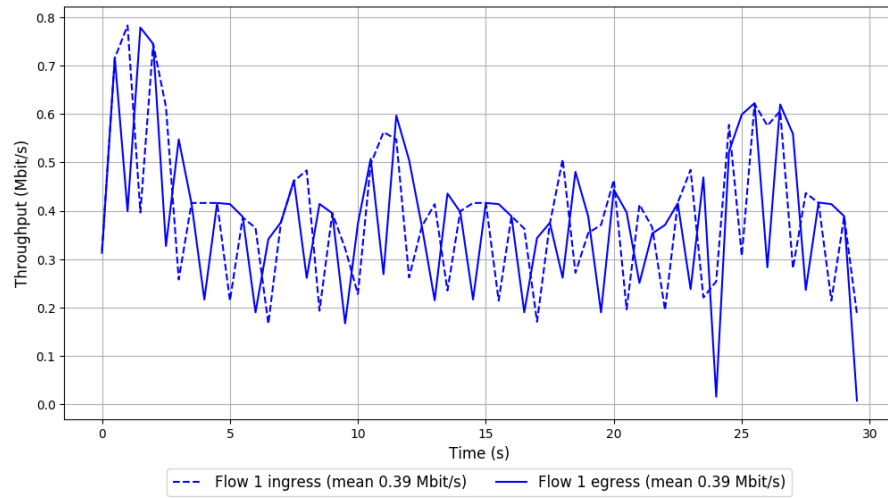
-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.271 ms

Loss rate: 0.78%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-17 05:03:53

End at: 2017-08-17 05:04:23

Below is generated by plot.py at 2017-08-17 09:04:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 137.162 ms

Loss rate: 1.29%

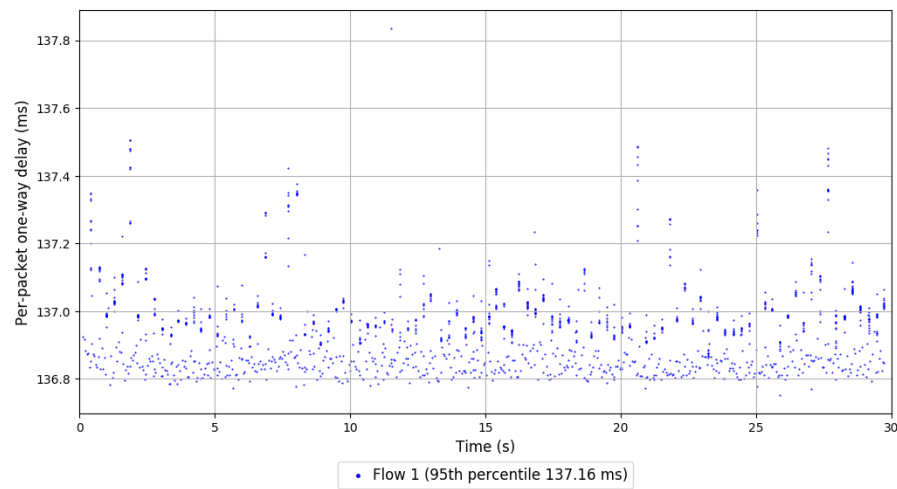
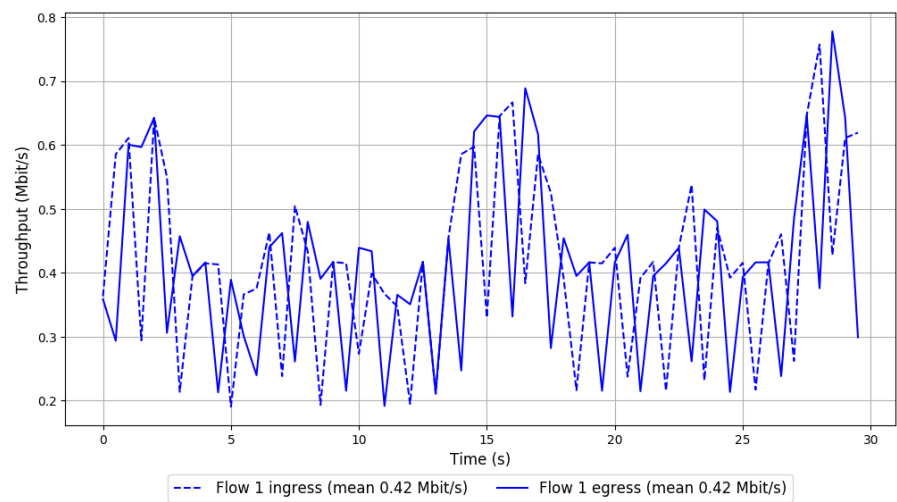
-- Flow 1:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 137.162 ms

Loss rate: 1.29%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-17 05:15:22

End at: 2017-08-17 05:15:52

Below is generated by plot.py at 2017-08-17 09:04:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 136.667 ms

Loss rate: 2.27%

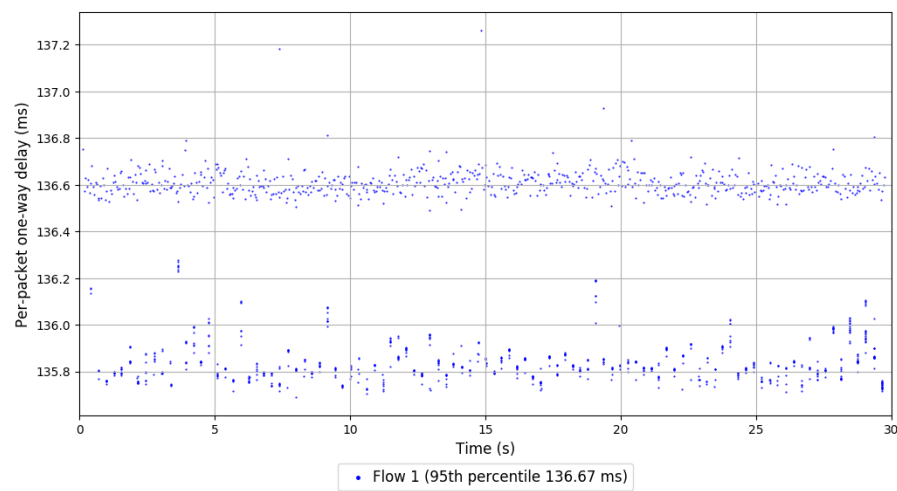
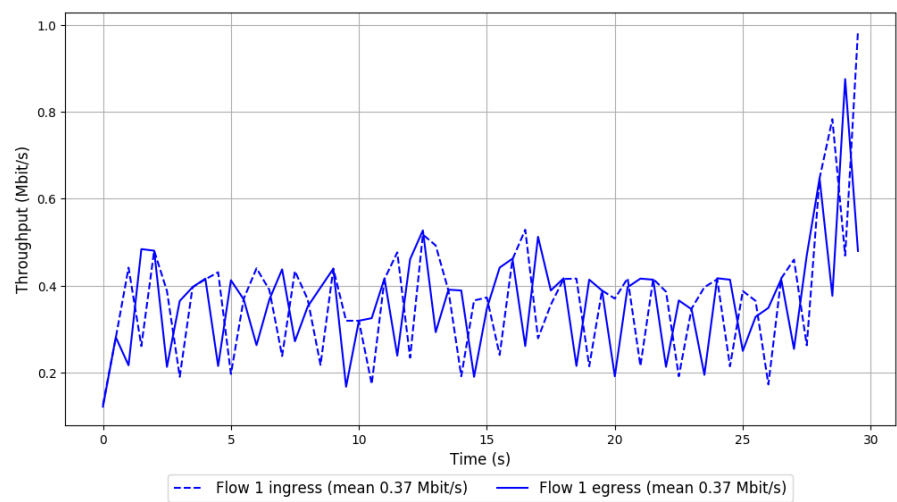
-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 136.667 ms

Loss rate: 2.27%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-17 05:26:38

End at: 2017-08-17 05:27:08

Below is generated by plot.py at 2017-08-17 09:04:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.004 ms

Loss rate: 0.64%

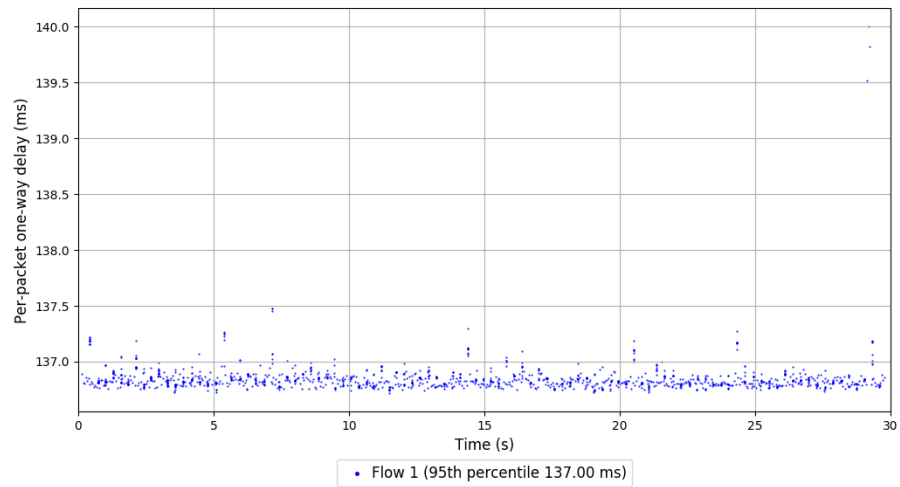
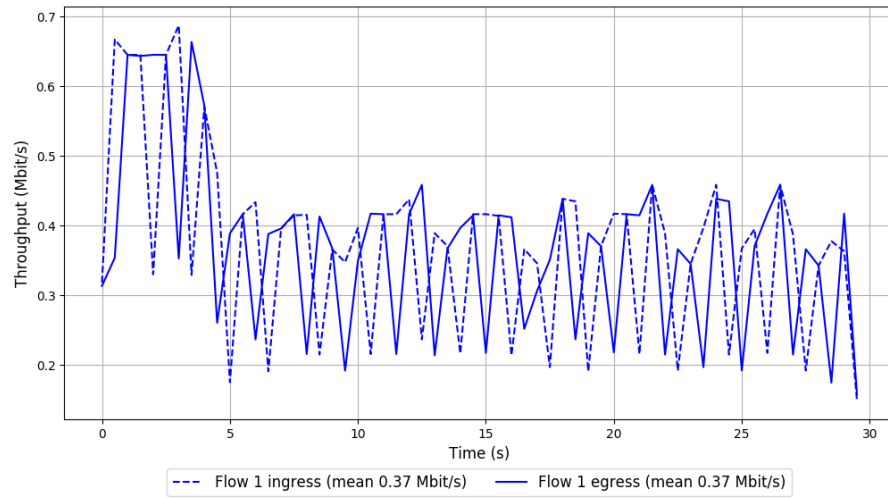
-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.004 ms

Loss rate: 0.64%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-17 05:38:22

End at: 2017-08-17 05:38:52

Below is generated by plot.py at 2017-08-17 09:04:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 136.996 ms

Loss rate: 1.02%

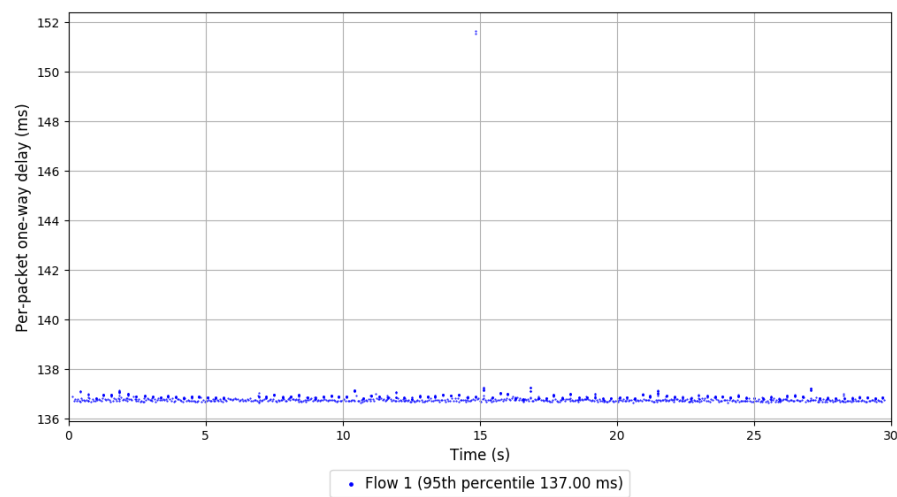
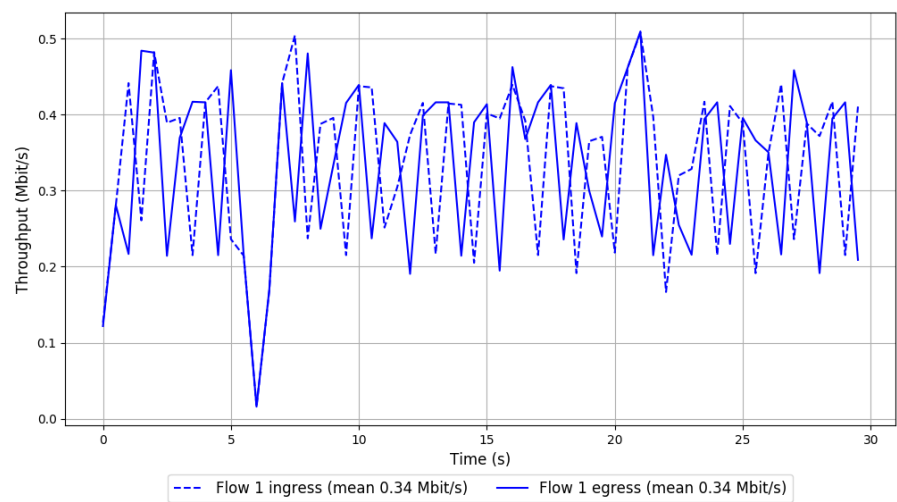
-- Flow 1:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 136.996 ms

Loss rate: 1.02%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-17 05:50:13

End at: 2017-08-17 05:50:43

Below is generated by plot.py at 2017-08-17 09:04:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 136.907 ms

Loss rate: 1.03%

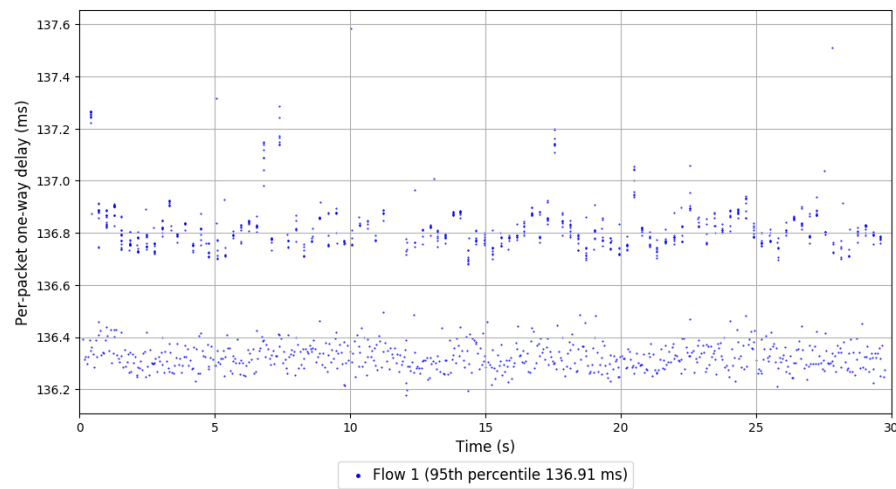
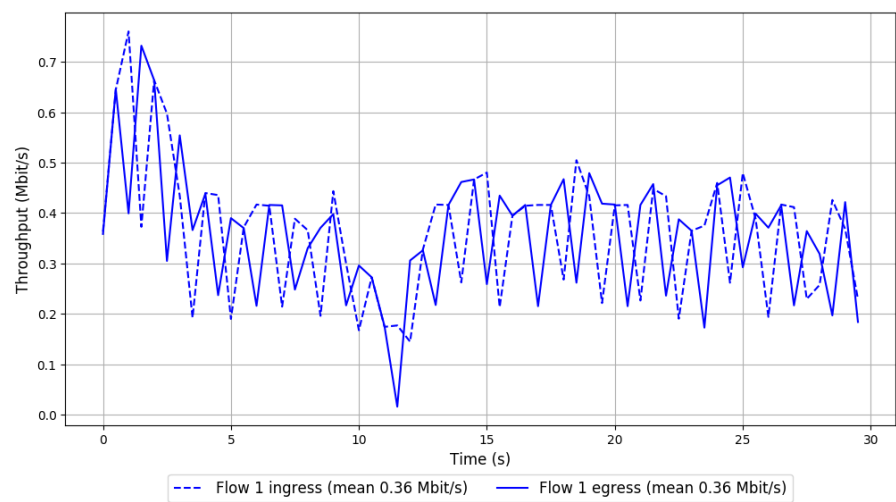
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 136.907 ms

Loss rate: 1.03%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-17 06:01:46

End at: 2017-08-17 06:02:16

Below is generated by plot.py at 2017-08-17 09:04:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.024 ms

Loss rate: 0.86%

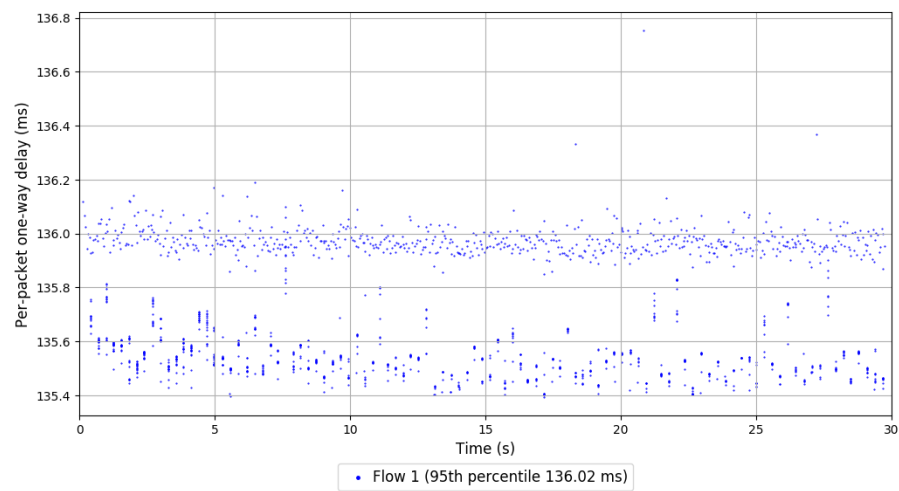
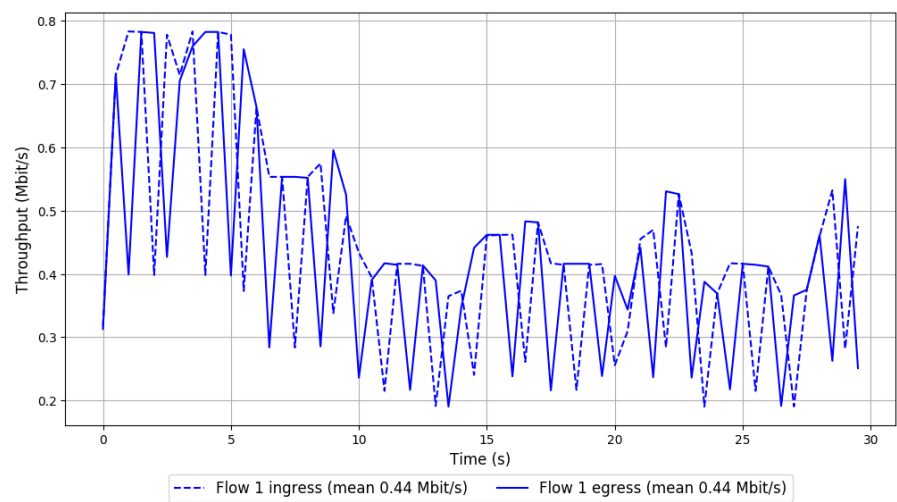
-- Flow 1:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.024 ms

Loss rate: 0.86%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-17 06:13:45

End at: 2017-08-17 06:14:15

Below is generated by plot.py at 2017-08-17 09:04:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 160.500 ms

Loss rate: 0.38%

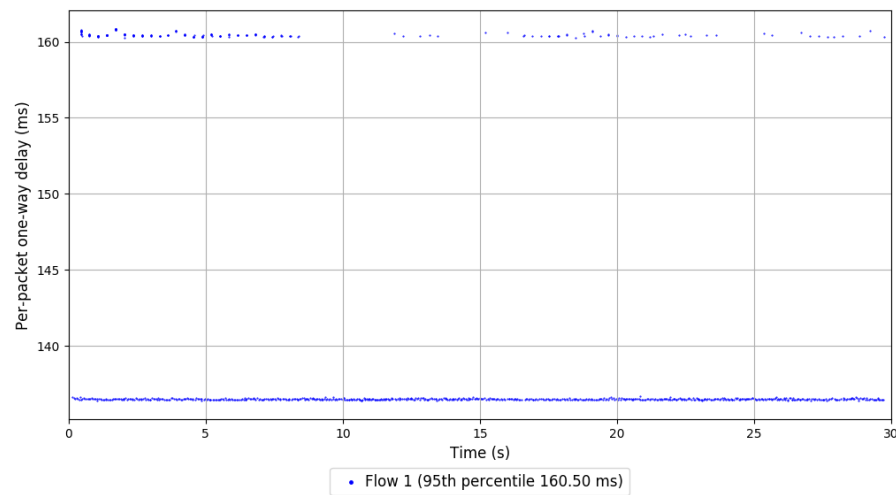
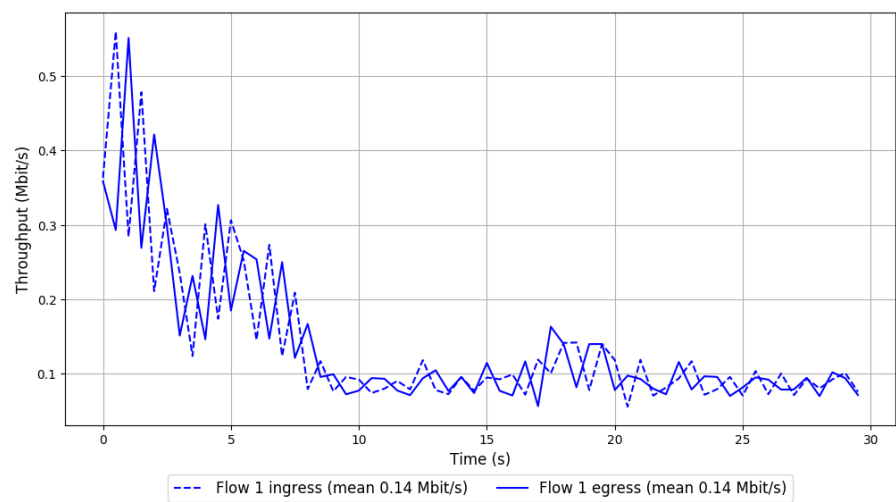
-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 160.500 ms

Loss rate: 0.38%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-17 06:24:55

End at: 2017-08-17 06:25:25

Below is generated by plot.py at 2017-08-17 09:04:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.849 ms

Loss rate: 0.84%

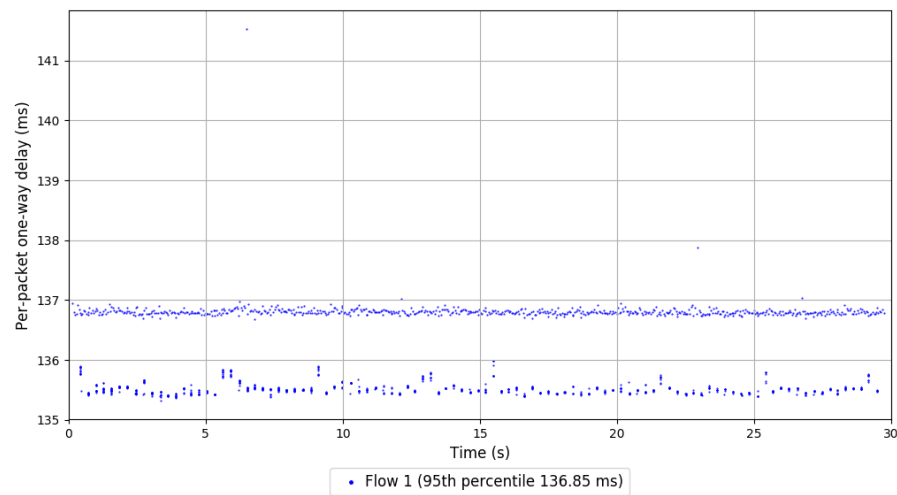
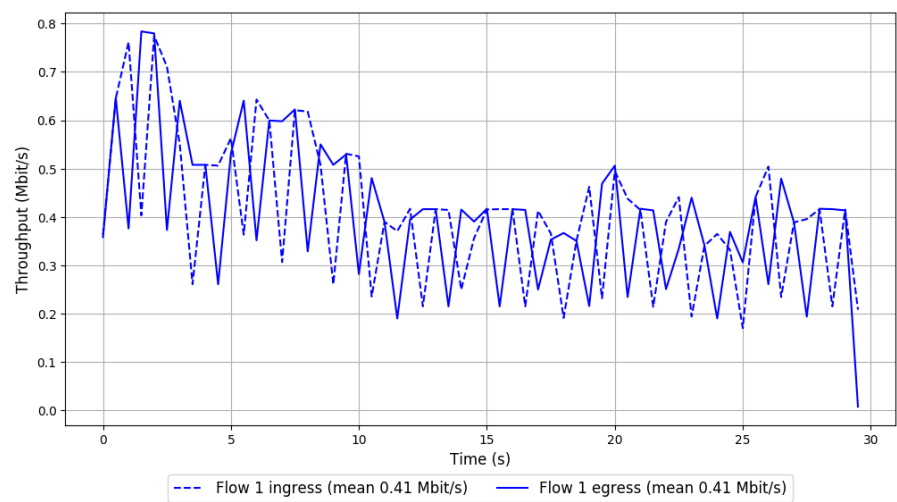
-- Flow 1:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.849 ms

Loss rate: 0.84%

Run 10: Report of Sprout — Data Link

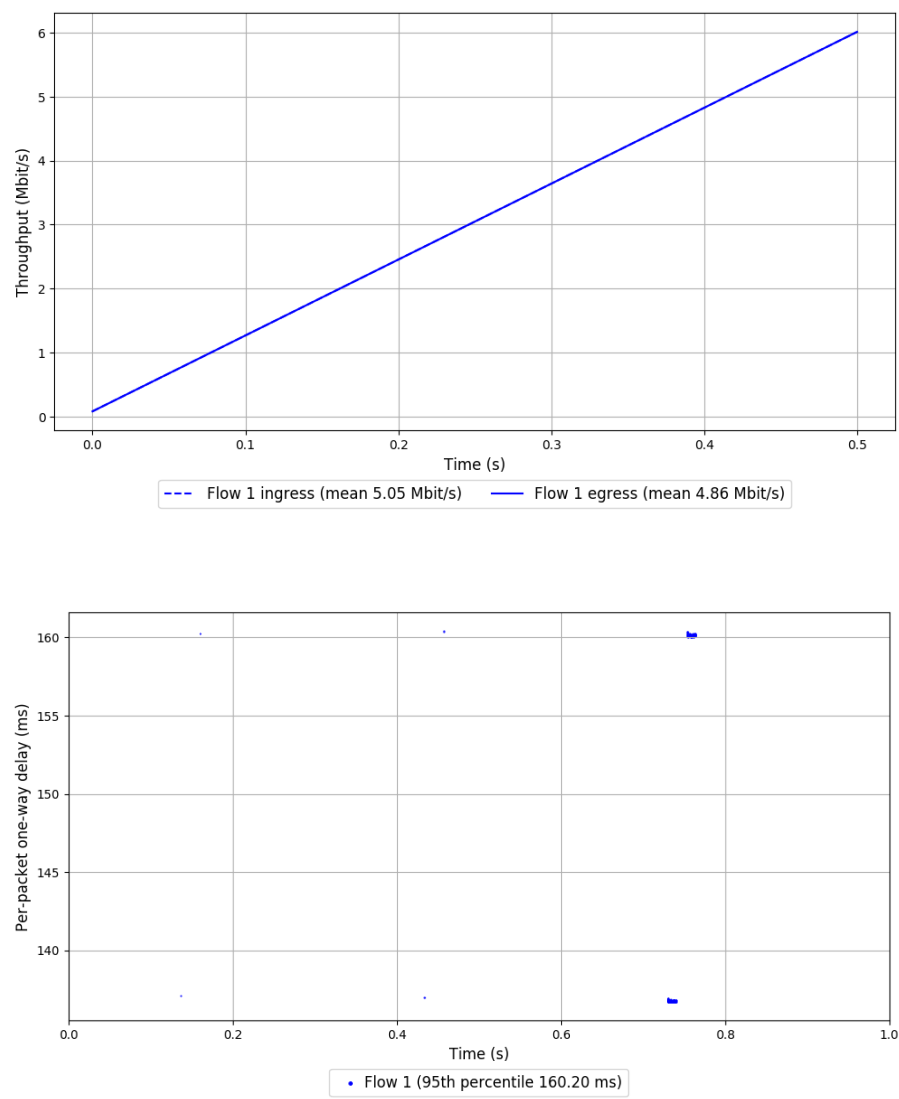


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-17 04:33:45

End at: 2017-08-17 04:34:15

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

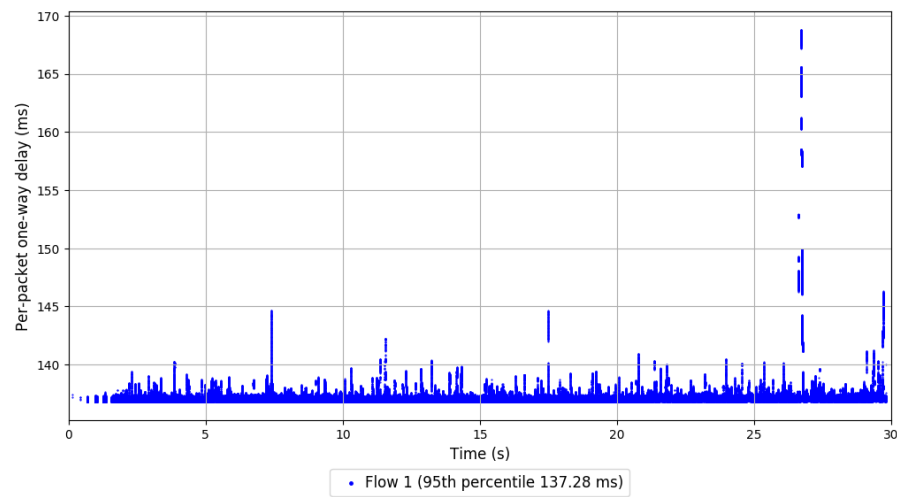
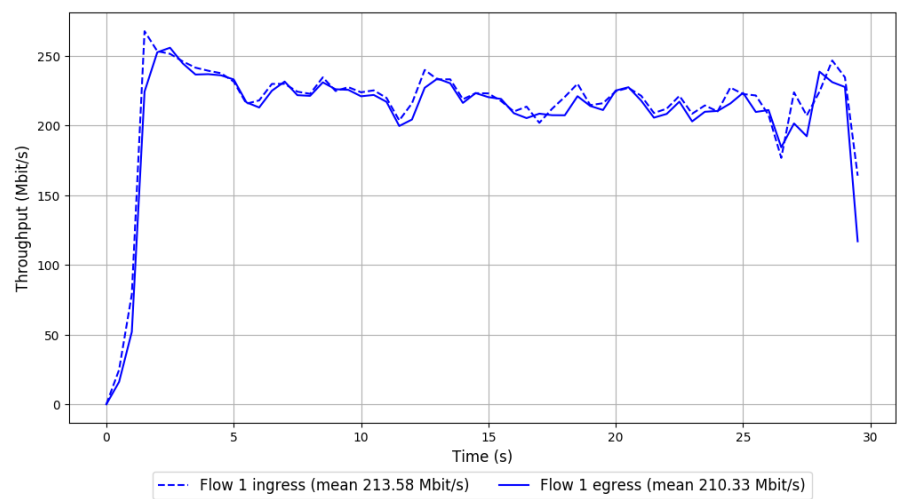


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-08-17 04:45:31
End at: 2017-08-17 04:46:01

# Below is generated by plot.py at 2017-08-17 09:06:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.33 Mbit/s
95th percentile per-packet one-way delay: 137.275 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 210.33 Mbit/s
95th percentile per-packet one-way delay: 137.275 ms
Loss rate: 2.39%
```

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

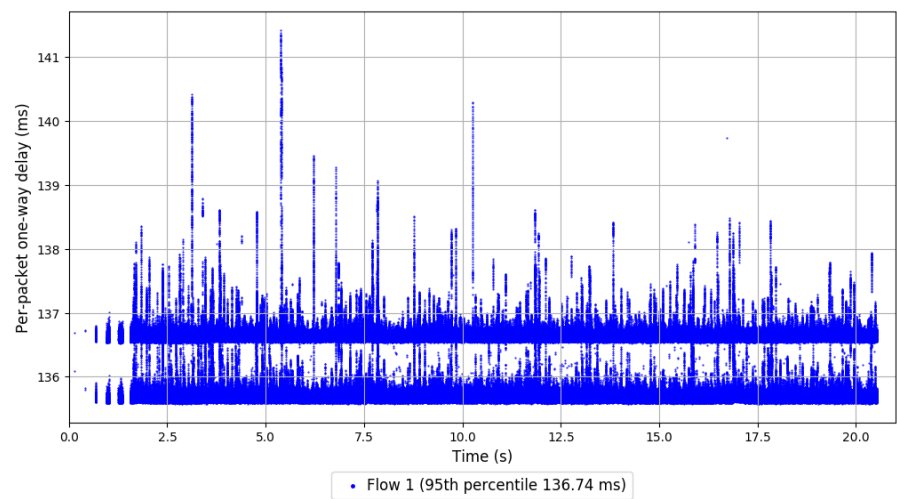
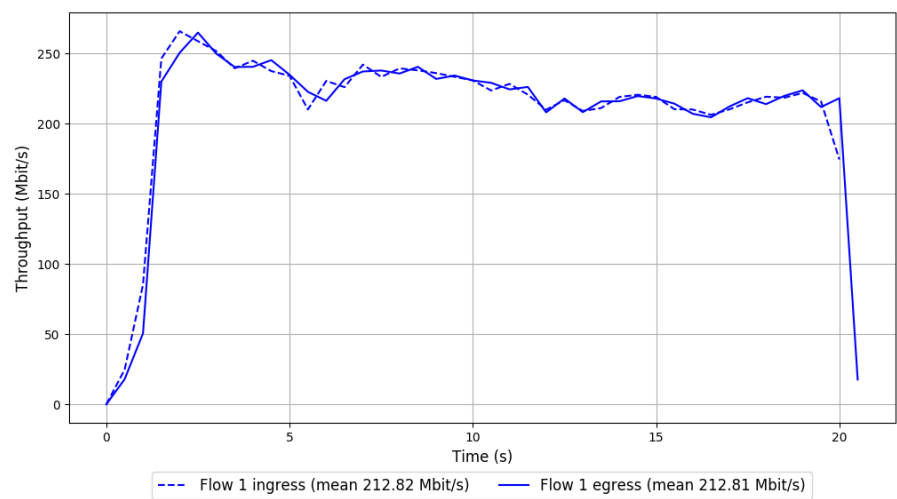


Run 3: Statistics of TaoVA-100x

Start at: 2017-08-17 04:57:14

End at: 2017-08-17 04:57:44

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

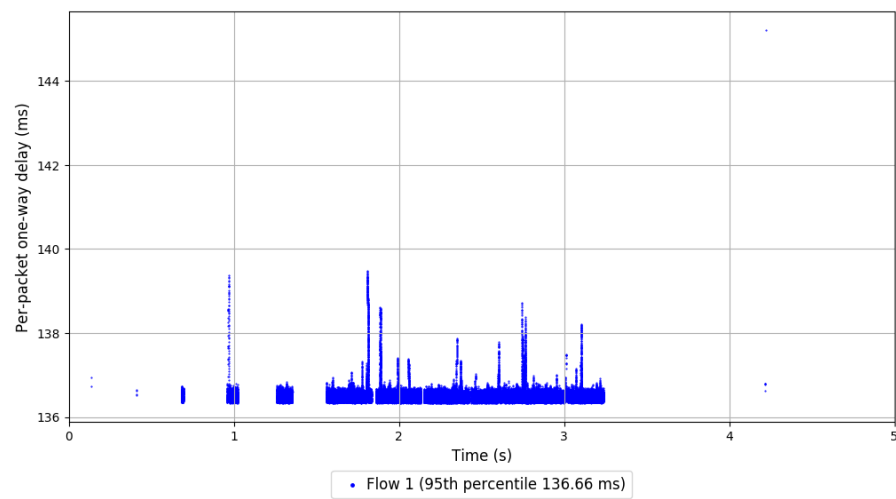
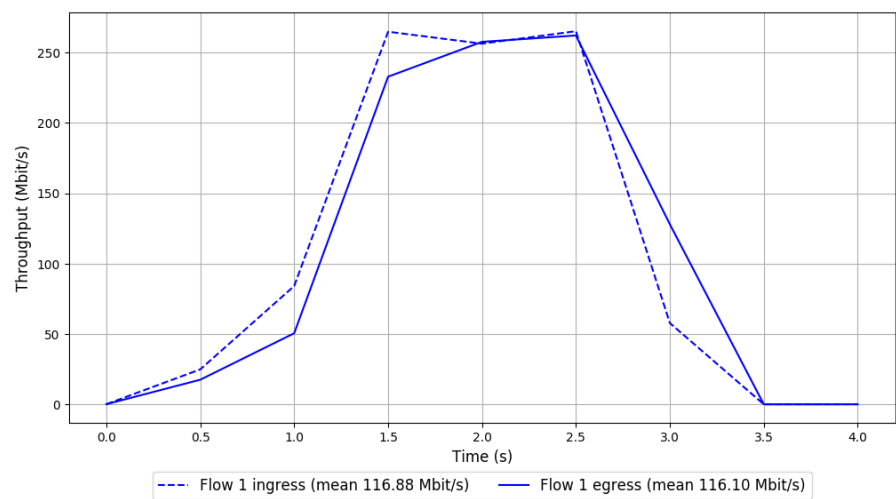


Run 4: Statistics of TaoVA-100x

Start at: 2017-08-17 05:09:09

End at: 2017-08-17 05:09:39

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

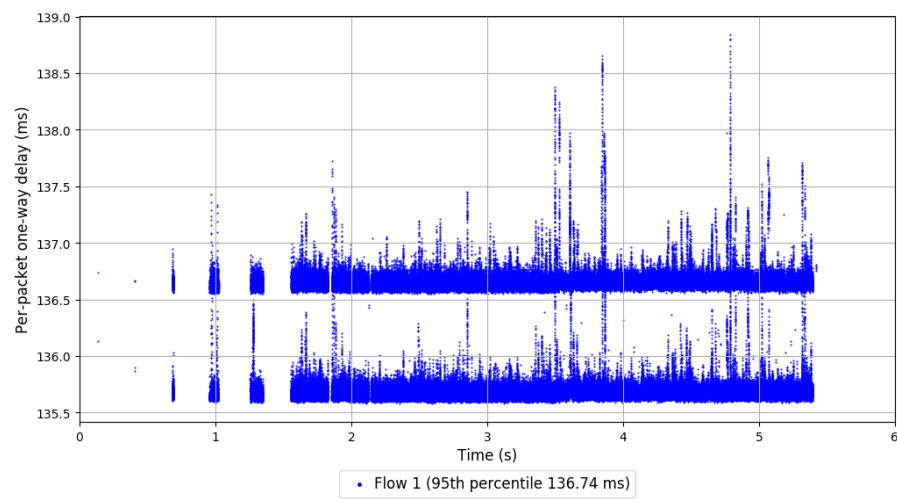
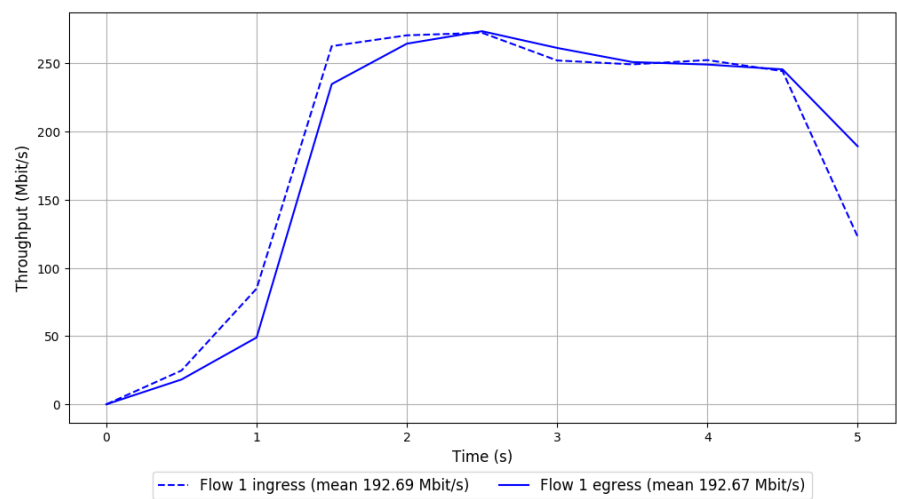


Run 5: Statistics of TaoVA-100x

Start at: 2017-08-17 05:20:40

End at: 2017-08-17 05:21:10

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

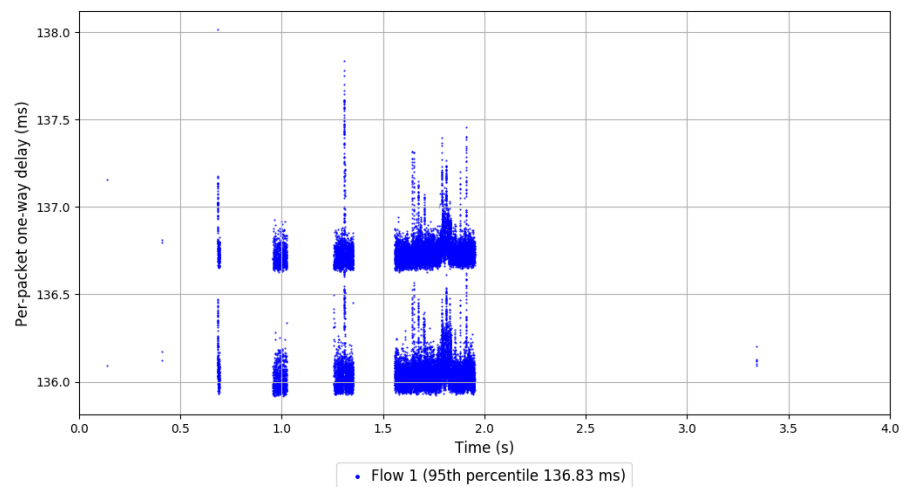
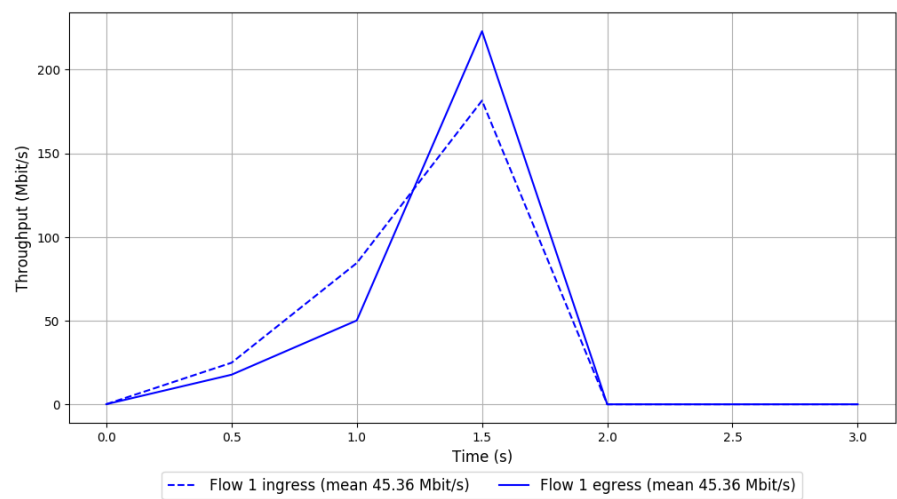


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-17 05:32:07

End at: 2017-08-17 05:32:37

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

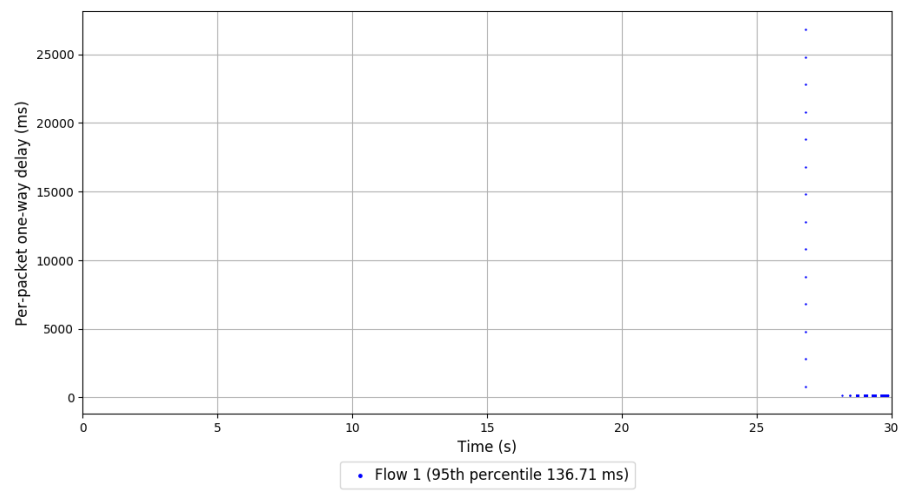
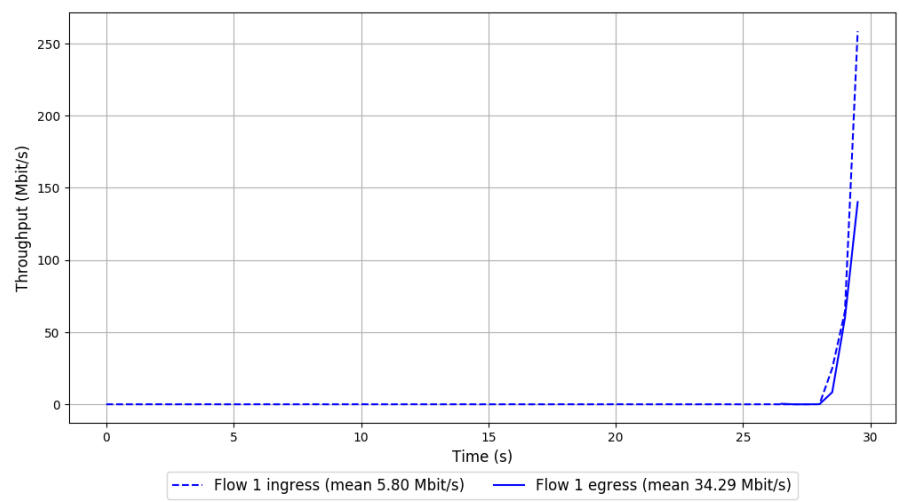


Run 7: Statistics of TaoVA-100x

Start at: 2017-08-17 05:43:55

End at: 2017-08-17 05:44:25

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-08-17 05:55:46

End at: 2017-08-17 05:56:16

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

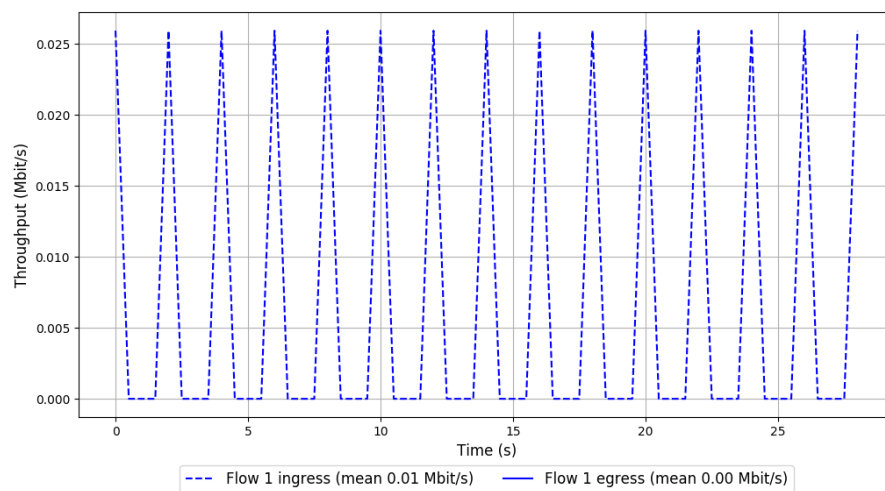


Figure is missing

Run 9: Statistics of TaoVA-100x

Start at: 2017-08-17 06:07:00

End at: 2017-08-17 06:07:30

Below is generated by plot.py at 2017-08-17 09:07:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.87 Mbit/s

95th percentile per-packet one-way delay: 136.184 ms

Loss rate: 0.96%

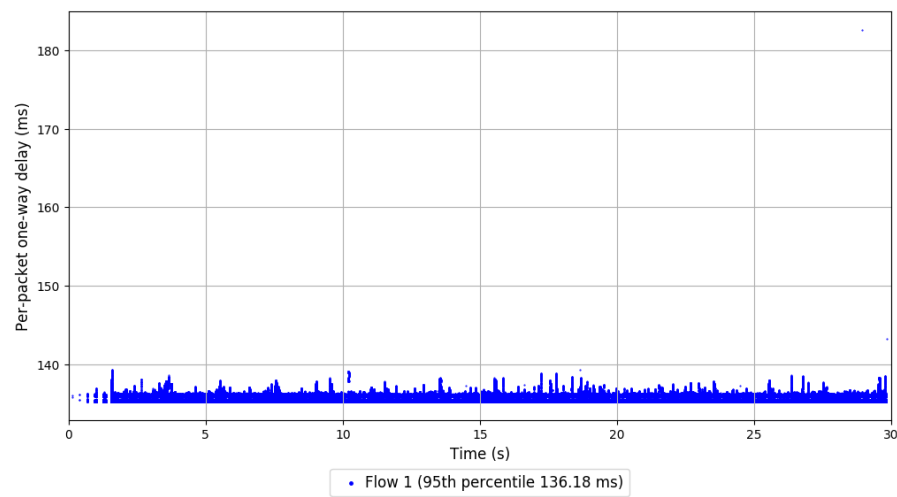
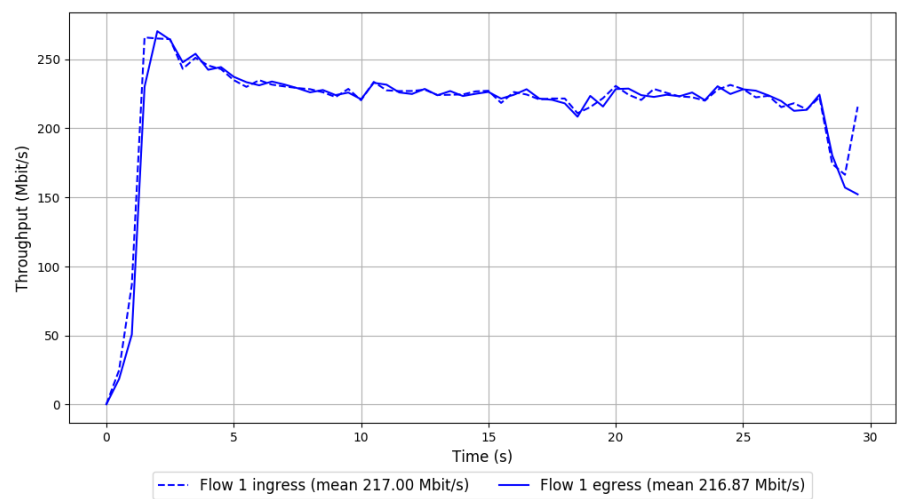
-- Flow 1:

Average throughput: 216.87 Mbit/s

95th percentile per-packet one-way delay: 136.184 ms

Loss rate: 0.96%

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

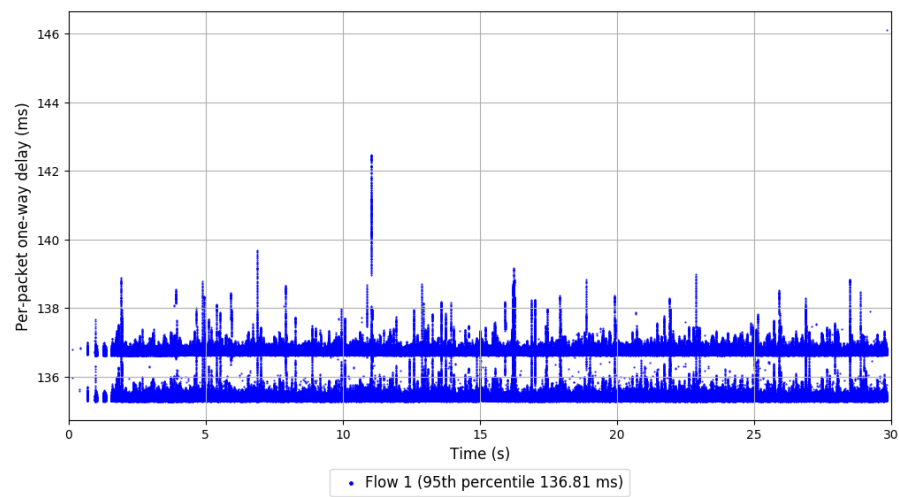
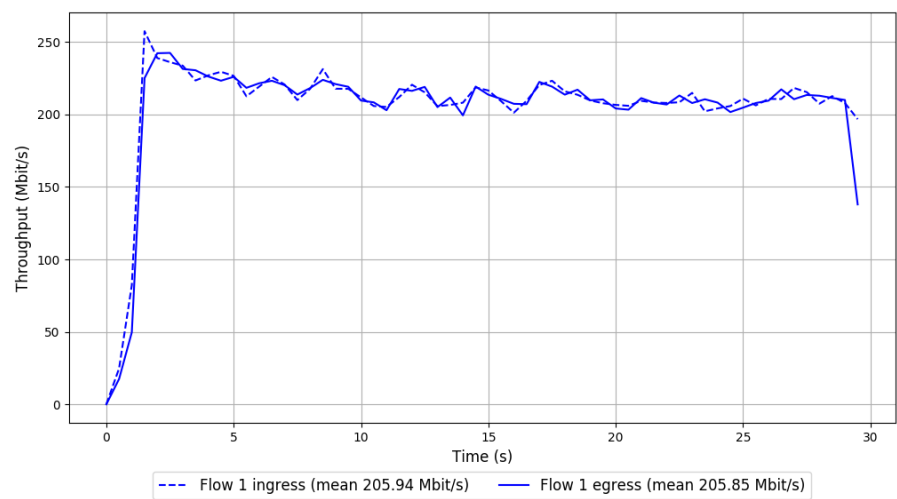


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-17 06:18:46
End at: 2017-08-17 06:19:16

# Below is generated by plot.py at 2017-08-17 09:07:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 205.85 Mbit/s
95th percentile per-packet one-way delay: 136.814 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 205.85 Mbit/s
95th percentile per-packet one-way delay: 136.814 ms
Loss rate: 0.93%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-17 04:34:28

End at: 2017-08-17 04:34:58

Below is generated by plot.py at 2017-08-17 09:07:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 137.027 ms

Loss rate: 3.42%

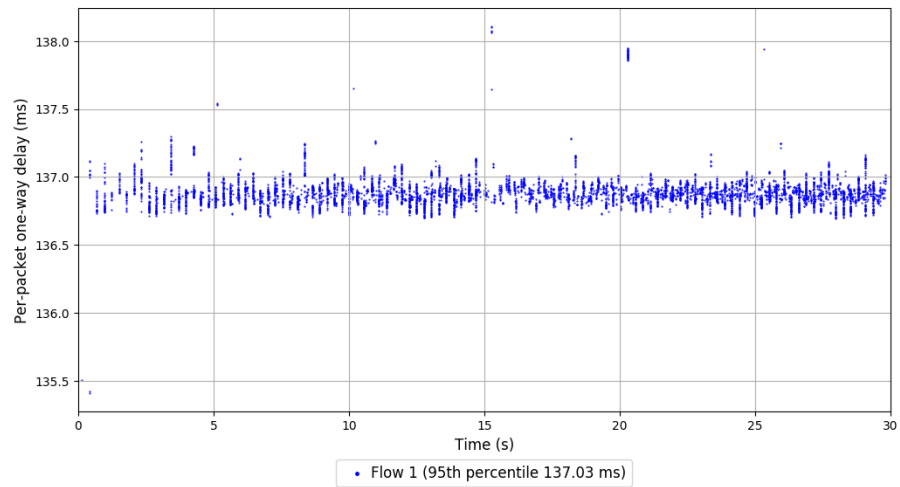
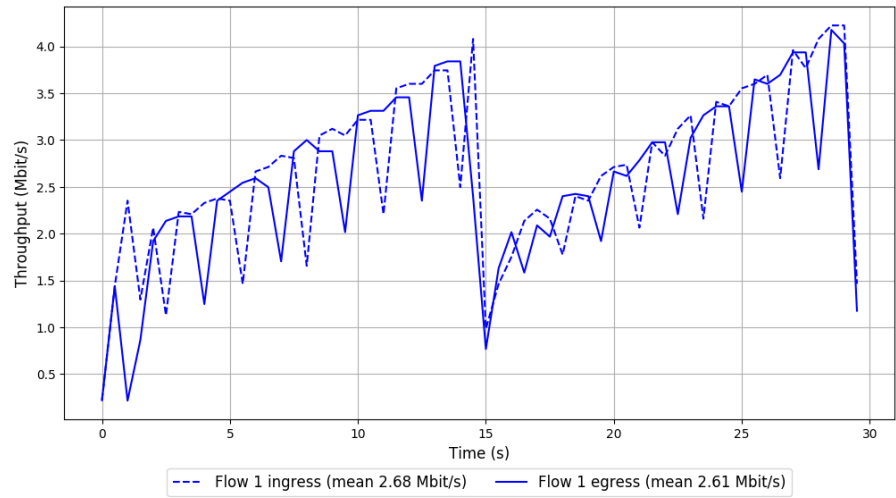
-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 137.027 ms

Loss rate: 3.42%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-17 04:46:39

End at: 2017-08-17 04:47:09

Below is generated by plot.py at 2017-08-17 09:07:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.55 Mbit/s

95th percentile per-packet one-way delay: 137.768 ms

Loss rate: 1.01%

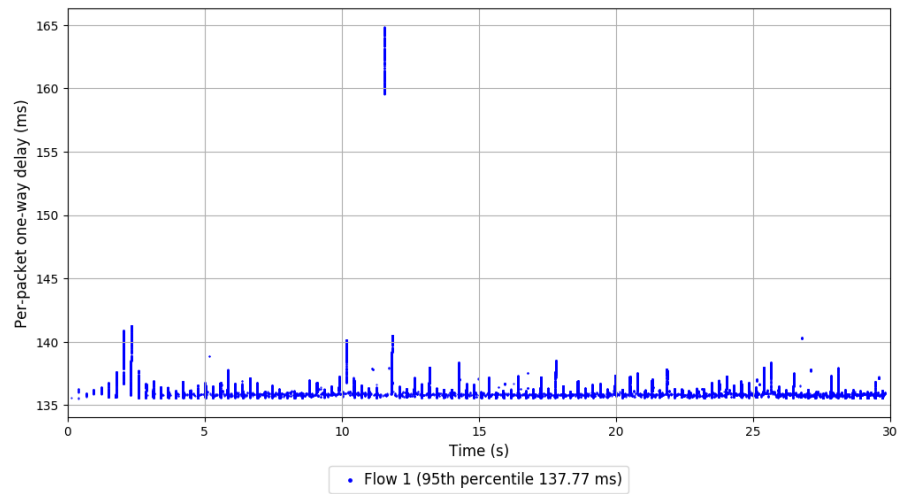
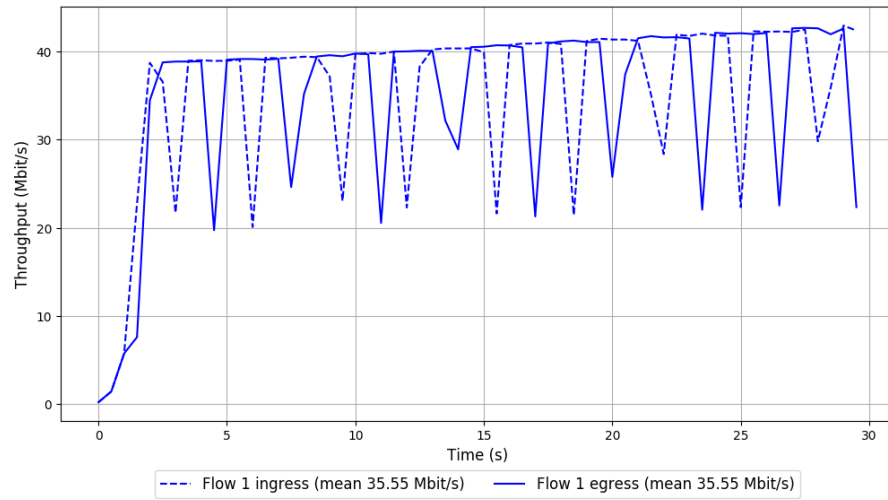
-- Flow 1:

Average throughput: 35.55 Mbit/s

95th percentile per-packet one-way delay: 137.768 ms

Loss rate: 1.01%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-17 04:58:13

End at: 2017-08-17 04:58:43

Below is generated by plot.py at 2017-08-17 09:07:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 137.277 ms

Loss rate: 3.17%

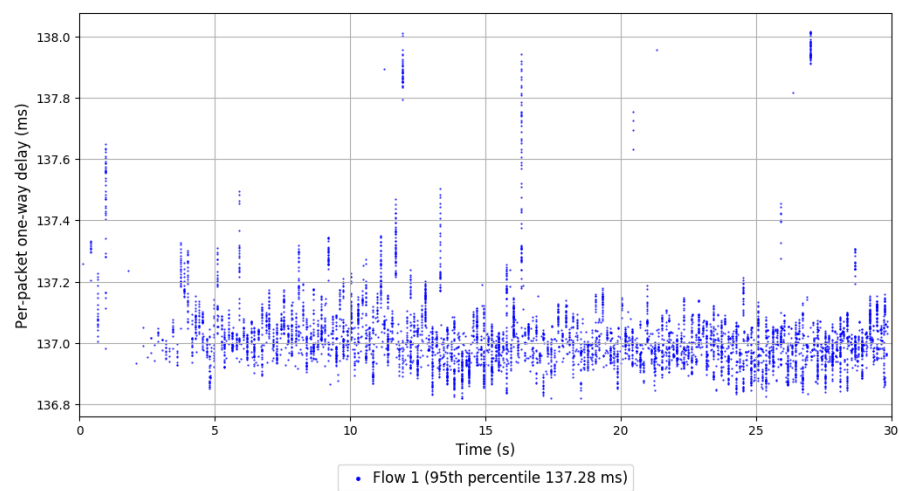
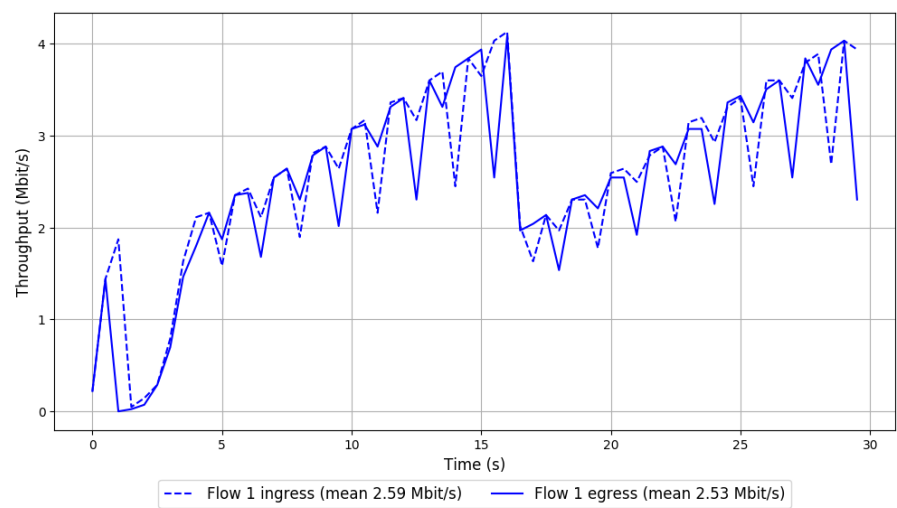
-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 137.277 ms

Loss rate: 3.17%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-17 05:09:54

End at: 2017-08-17 05:10:24

Below is generated by plot.py at 2017-08-17 09:07:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 136.691 ms

Loss rate: 2.89%

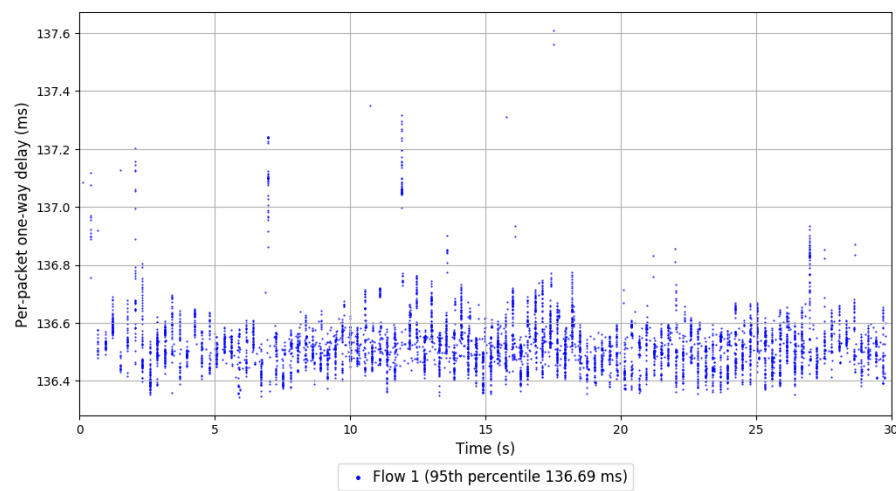
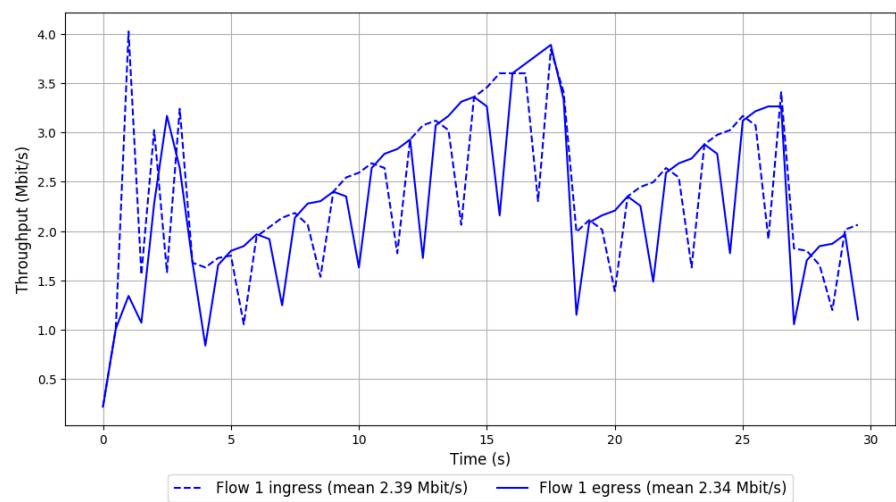
-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 136.691 ms

Loss rate: 2.89%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-17 05:21:27

End at: 2017-08-17 05:21:57

Below is generated by plot.py at 2017-08-17 09:07:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 136.926 ms

Loss rate: 2.21%

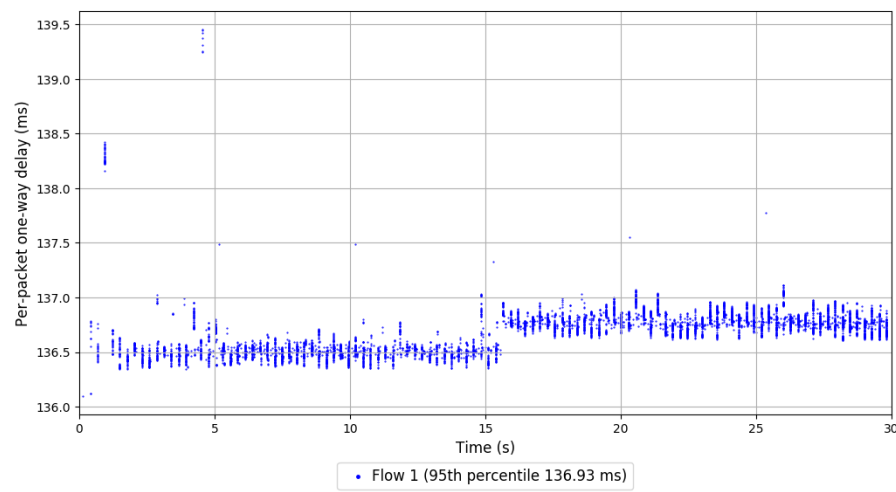
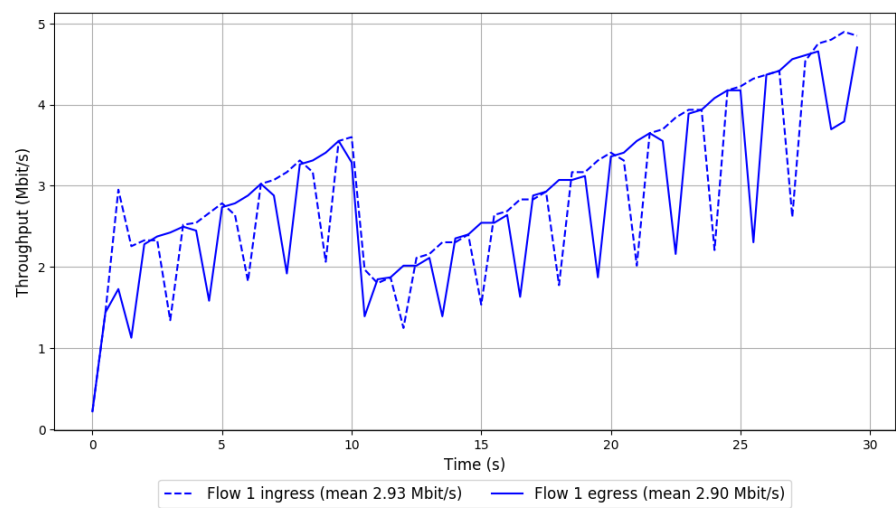
-- Flow 1:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 136.926 ms

Loss rate: 2.21%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-17 05:32:50

End at: 2017-08-17 05:33:20

Below is generated by plot.py at 2017-08-17 09:07:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.26 Mbit/s

95th percentile per-packet one-way delay: 137.563 ms

Loss rate: 1.11%

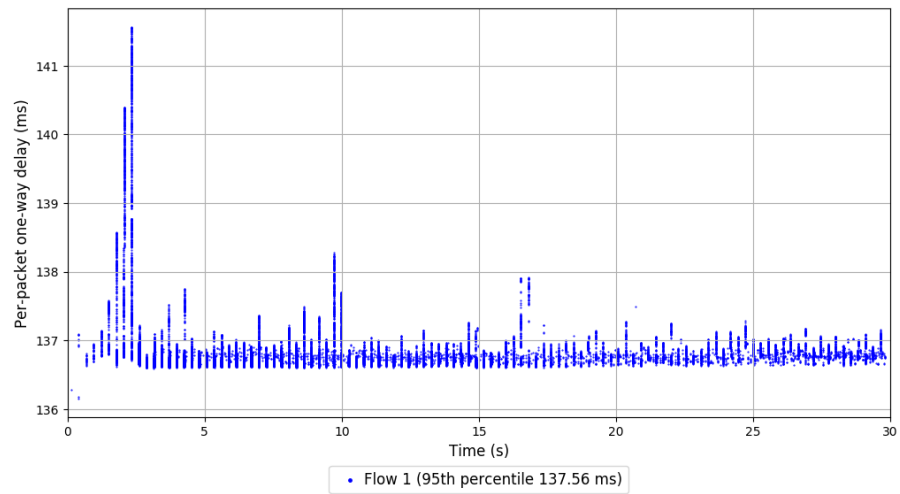
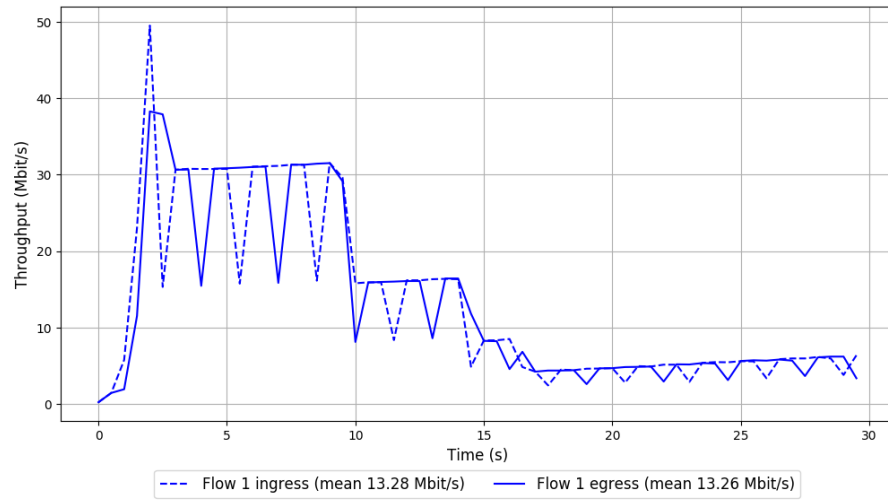
-- Flow 1:

Average throughput: 13.26 Mbit/s

95th percentile per-packet one-way delay: 137.563 ms

Loss rate: 1.11%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-17 05:44:38

End at: 2017-08-17 05:45:08

Below is generated by plot.py at 2017-08-17 09:07:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.56 Mbit/s

95th percentile per-packet one-way delay: 137.489 ms

Loss rate: 1.89%

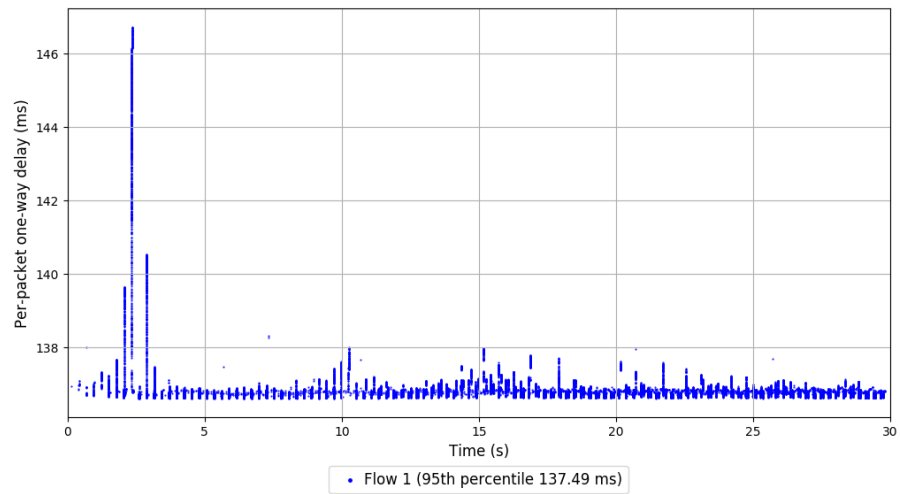
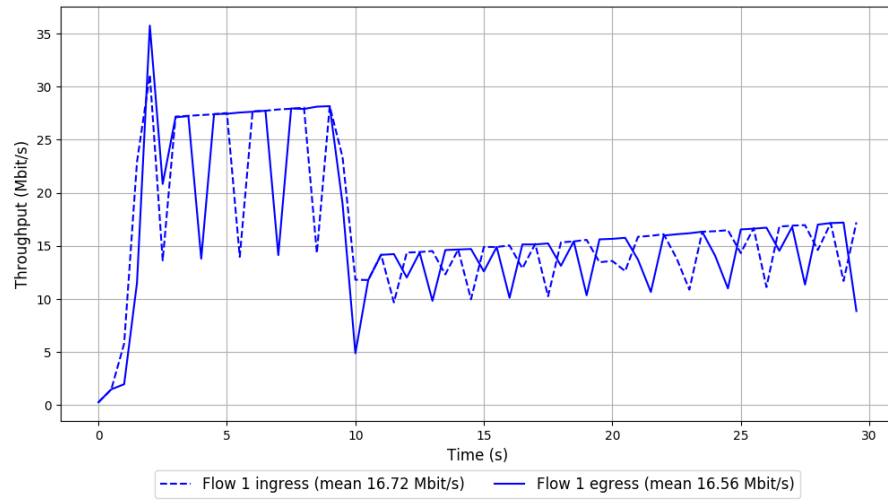
-- Flow 1:

Average throughput: 16.56 Mbit/s

95th percentile per-packet one-way delay: 137.489 ms

Loss rate: 1.89%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-17 05:56:28

End at: 2017-08-17 05:56:58

Below is generated by plot.py at 2017-08-17 09:07:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.37 Mbit/s

95th percentile per-packet one-way delay: 138.277 ms

Loss rate: 1.10%

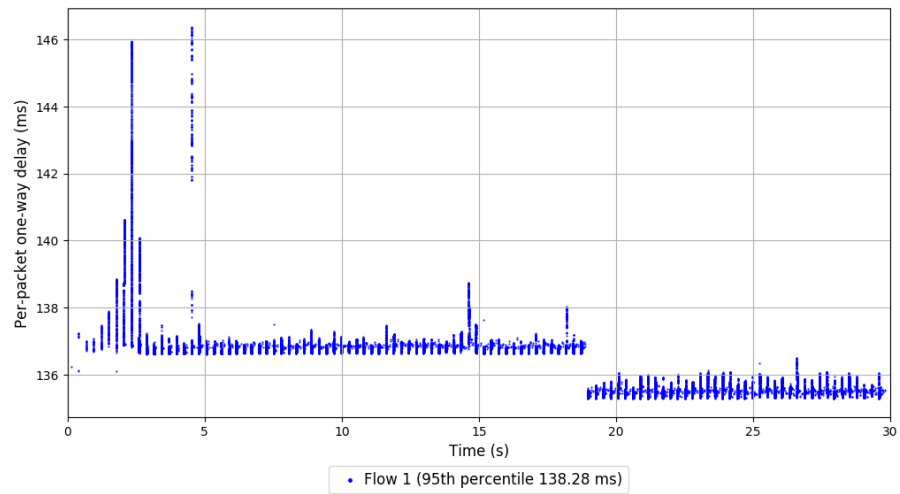
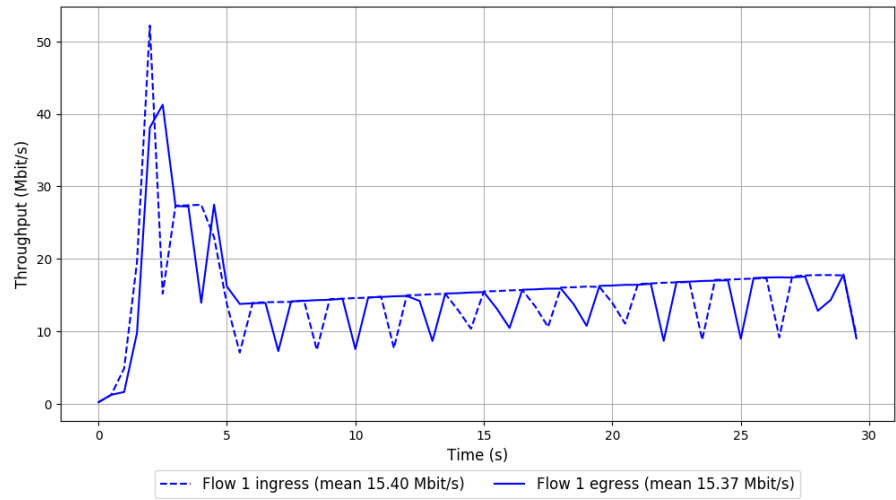
-- Flow 1:

Average throughput: 15.37 Mbit/s

95th percentile per-packet one-way delay: 138.277 ms

Loss rate: 1.10%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-17 06:08:08

End at: 2017-08-17 06:08:38

Below is generated by plot.py at 2017-08-17 09:08:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.58 Mbit/s

95th percentile per-packet one-way delay: 136.138 ms

Loss rate: 1.01%

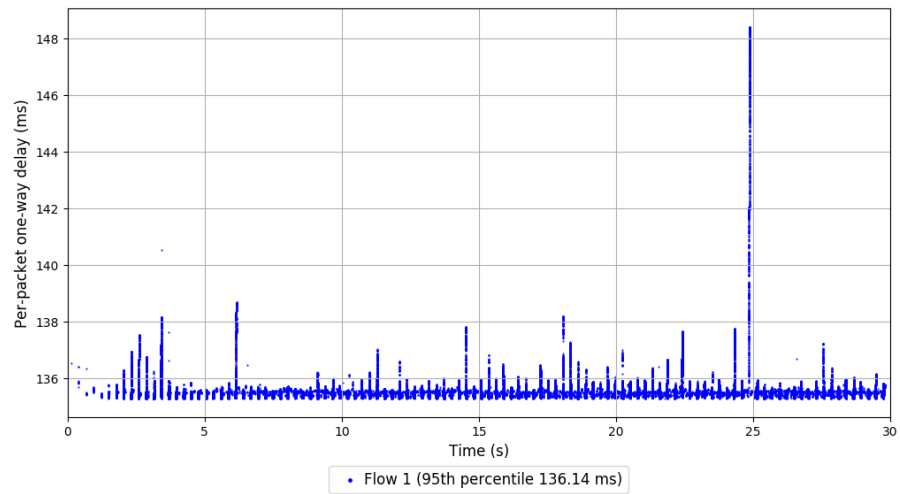
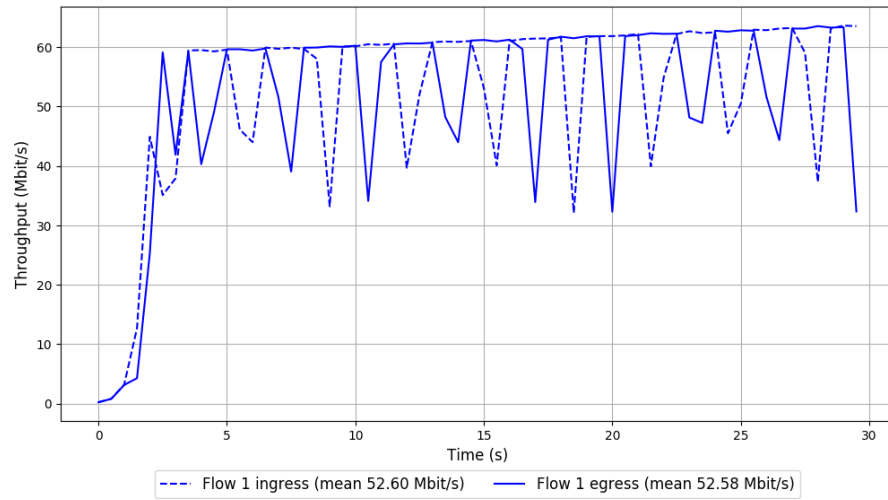
-- Flow 1:

Average throughput: 52.58 Mbit/s

95th percentile per-packet one-way delay: 136.138 ms

Loss rate: 1.01%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-17 06:19:51

End at: 2017-08-17 06:20:21

Below is generated by plot.py at 2017-08-17 09:08:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 160.648 ms

Loss rate: 1.00%

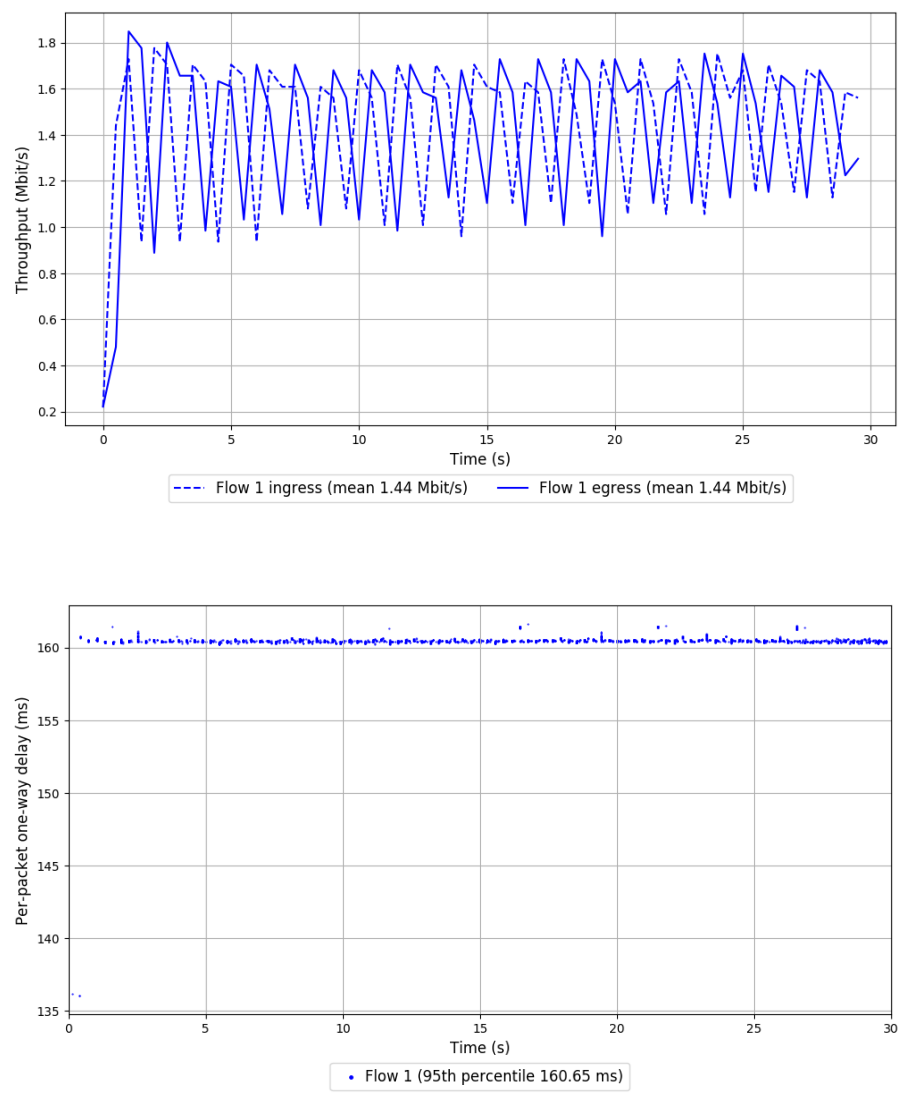
-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 160.648 ms

Loss rate: 1.00%

Run 10: Report of TCP Vegas — Data Link

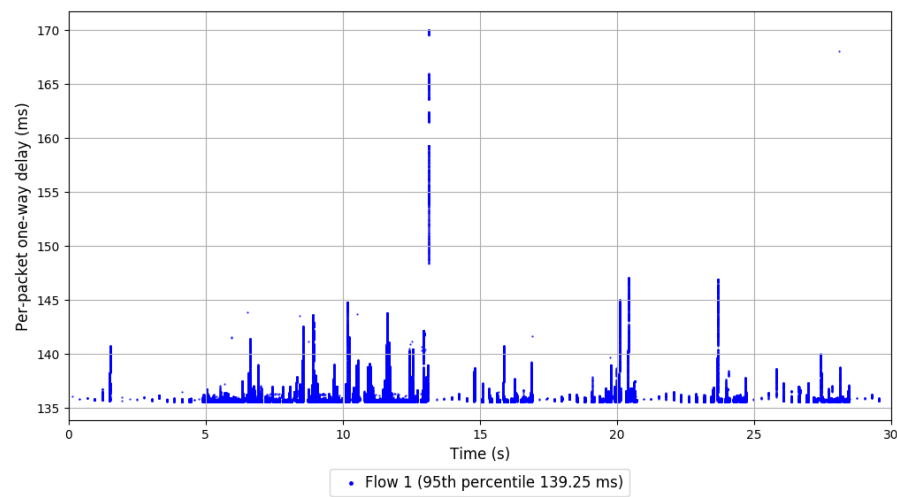
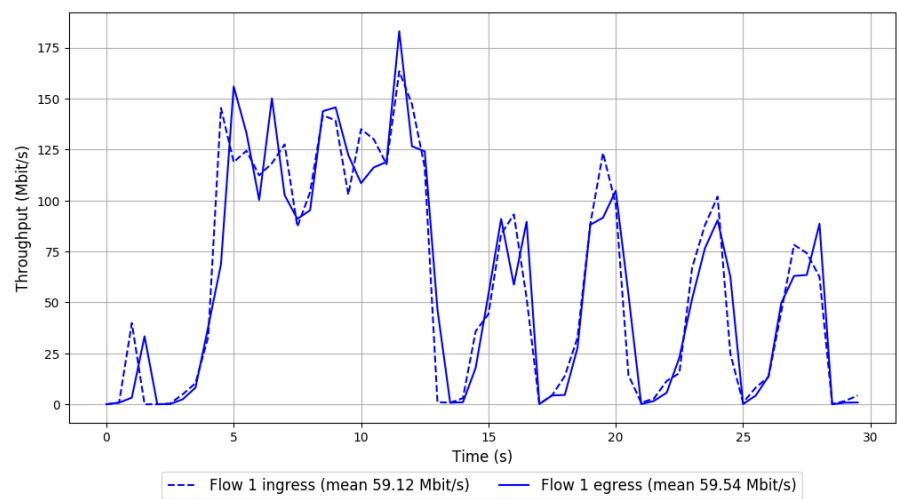


```
Run 1: Statistics of Verus

Start at: 2017-08-17 04:35:55
End at: 2017-08-17 04:36:25

# Below is generated by plot.py at 2017-08-17 09:08:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.54 Mbit/s
95th percentile per-packet one-way delay: 139.253 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 59.54 Mbit/s
95th percentile per-packet one-way delay: 139.253 ms
Loss rate: 0.23%
```

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-17 04:48:08

End at: 2017-08-17 04:48:38

Below is generated by plot.py at 2017-08-17 09:08:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.19 Mbit/s

95th percentile per-packet one-way delay: 137.546 ms

Loss rate: 66.86%

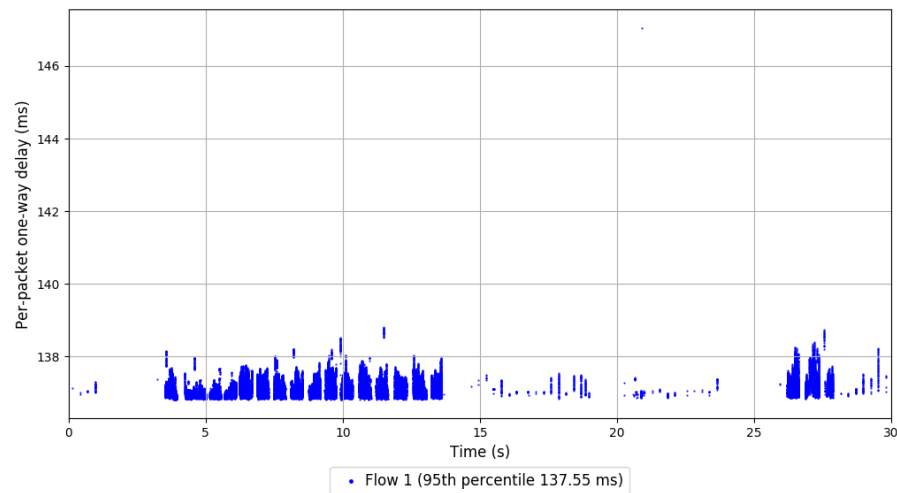
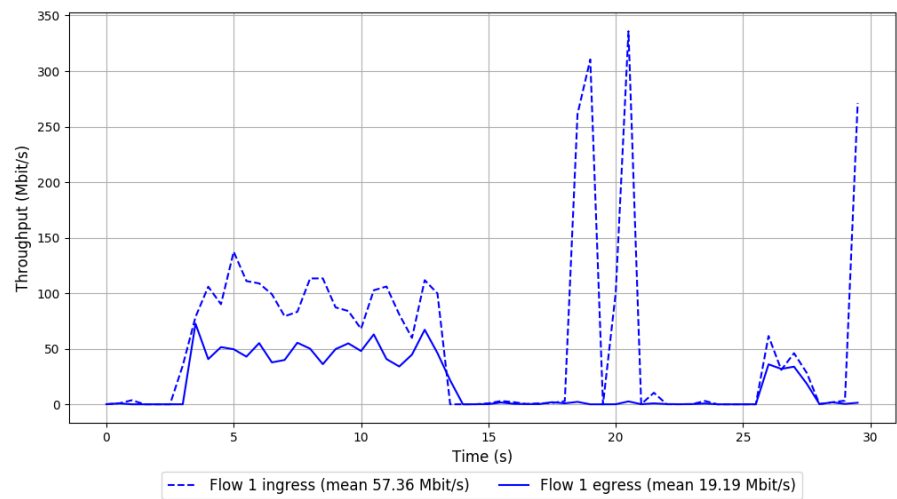
-- Flow 1:

Average throughput: 19.19 Mbit/s

95th percentile per-packet one-way delay: 137.546 ms

Loss rate: 66.86%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-17 04:59:40

End at: 2017-08-17 05:00:10

Below is generated by plot.py at 2017-08-17 09:08:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 124.04 Mbit/s

95th percentile per-packet one-way delay: 205.867 ms

Loss rate: 2.18%

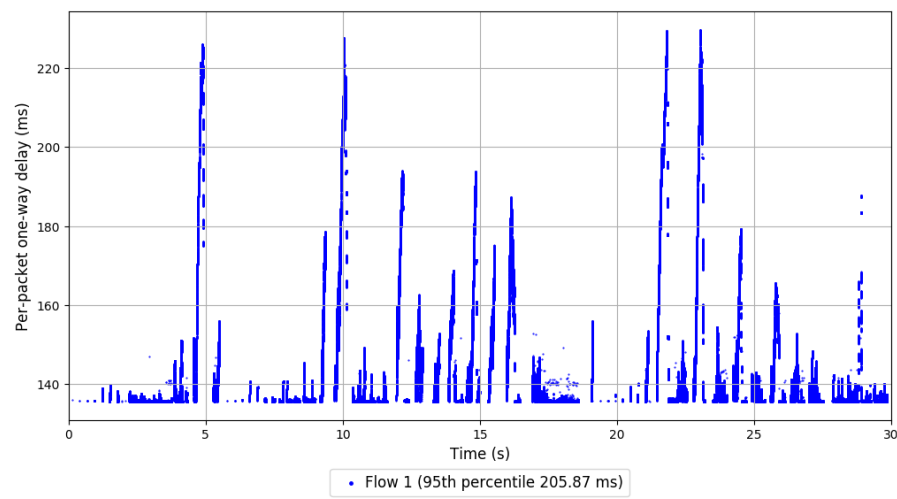
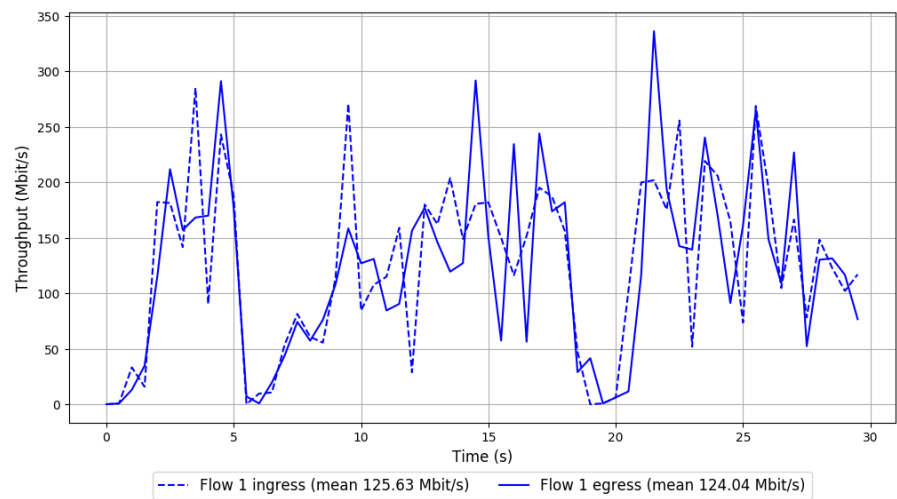
-- Flow 1:

Average throughput: 124.04 Mbit/s

95th percentile per-packet one-way delay: 205.867 ms

Loss rate: 2.18%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-17 05:11:19

End at: 2017-08-17 05:11:49

Below is generated by plot.py at 2017-08-17 09:08:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.15 Mbit/s

95th percentile per-packet one-way delay: 138.374 ms

Loss rate: 93.64%

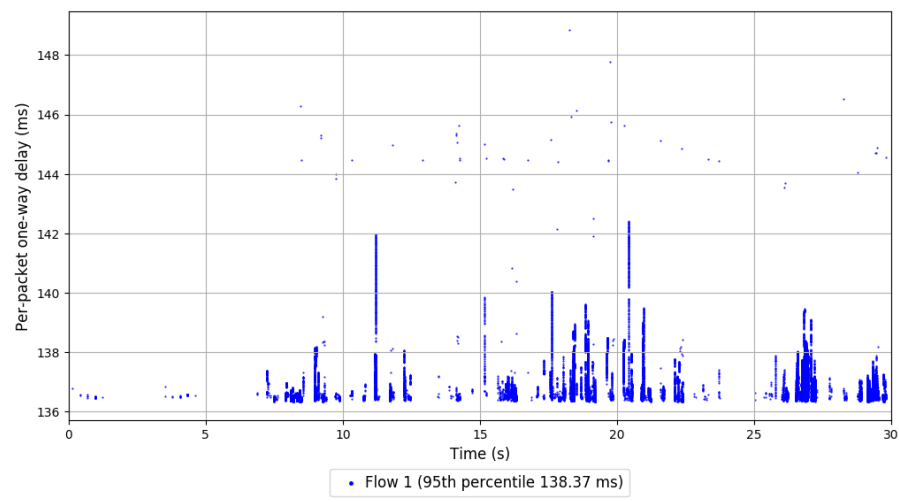
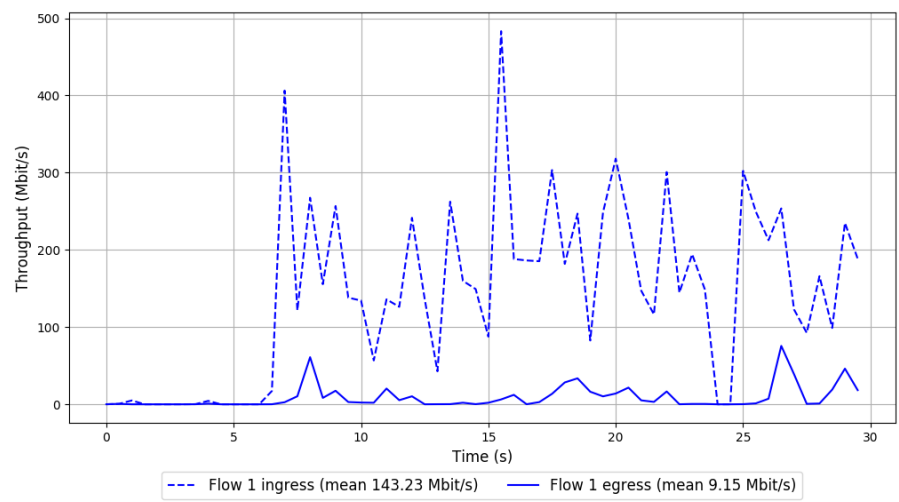
-- Flow 1:

Average throughput: 9.15 Mbit/s

95th percentile per-packet one-way delay: 138.374 ms

Loss rate: 93.64%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-17 05:22:52

End at: 2017-08-17 05:23:22

Below is generated by plot.py at 2017-08-17 09:08:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.89 Mbit/s

95th percentile per-packet one-way delay: 142.756 ms

Loss rate: 4.57%

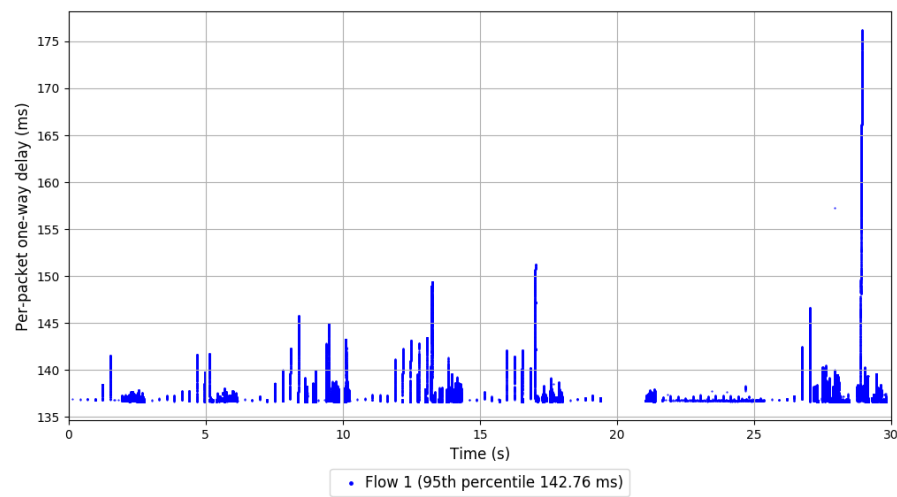
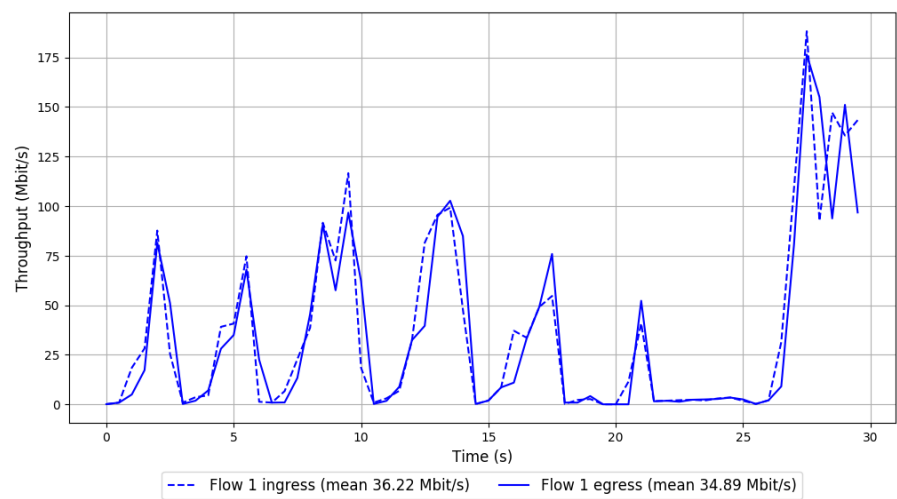
-- Flow 1:

Average throughput: 34.89 Mbit/s

95th percentile per-packet one-way delay: 142.756 ms

Loss rate: 4.57%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-17 05:34:17

End at: 2017-08-17 05:34:47

Below is generated by plot.py at 2017-08-17 09:08:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.25 Mbit/s

95th percentile per-packet one-way delay: 212.686 ms

Loss rate: 3.15%

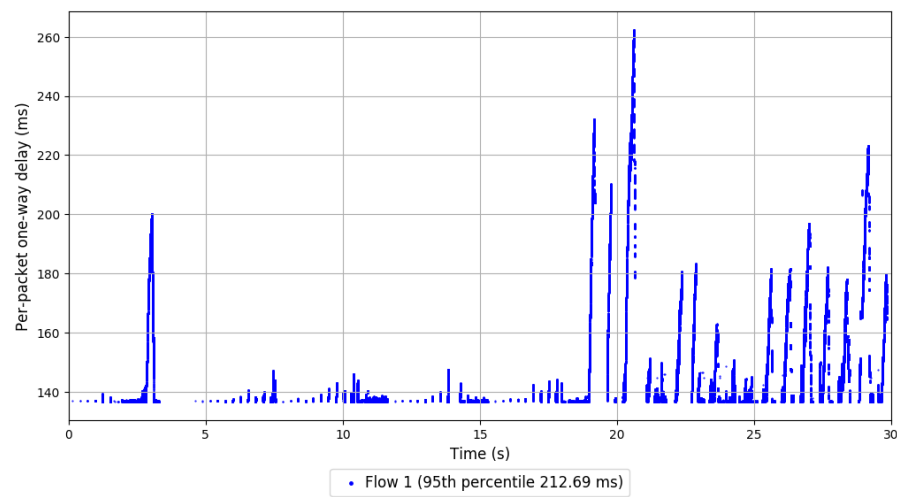
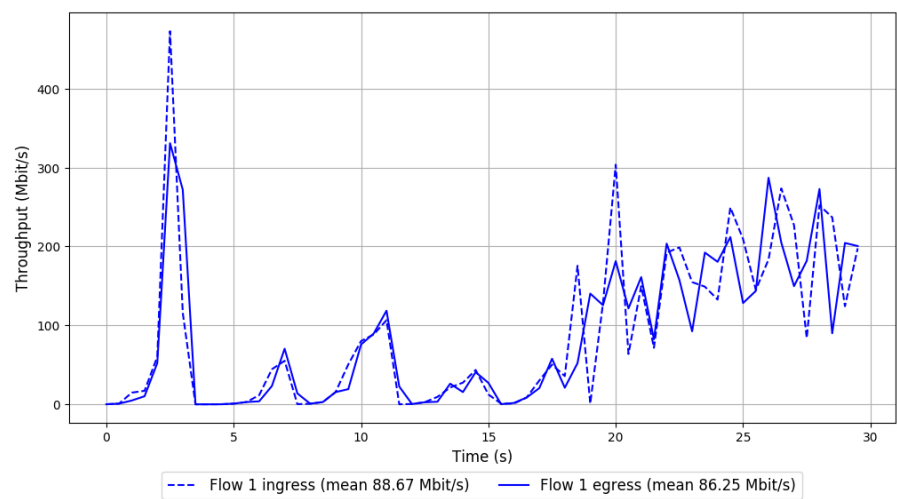
-- Flow 1:

Average throughput: 86.25 Mbit/s

95th percentile per-packet one-way delay: 212.686 ms

Loss rate: 3.15%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-17 05:46:05

End at: 2017-08-17 05:46:35

Below is generated by plot.py at 2017-08-17 09:08:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.96 Mbit/s

95th percentile per-packet one-way delay: 147.739 ms

Loss rate: 1.07%

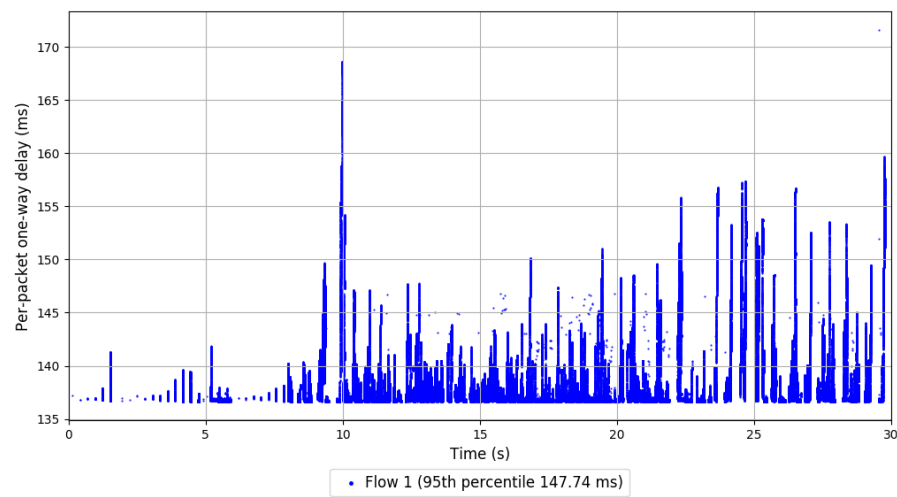
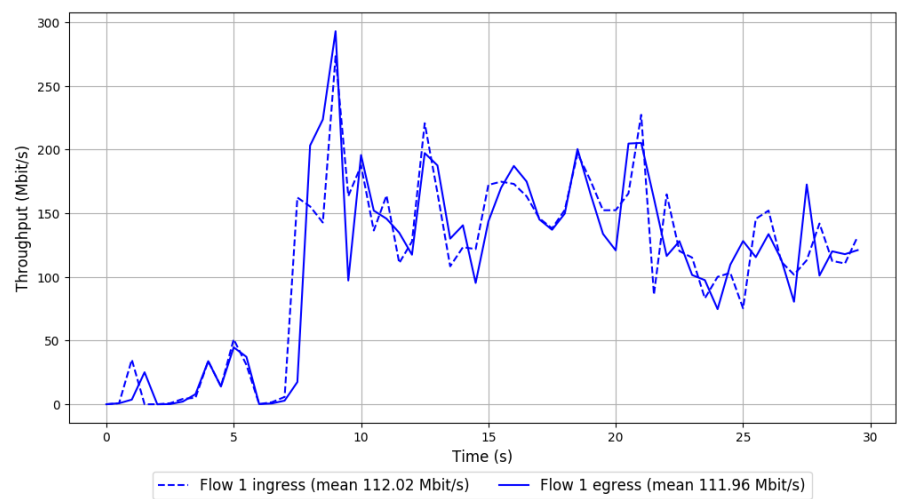
-- Flow 1:

Average throughput: 111.96 Mbit/s

95th percentile per-packet one-way delay: 147.739 ms

Loss rate: 1.07%

Run 7: Report of Verus — Data Link

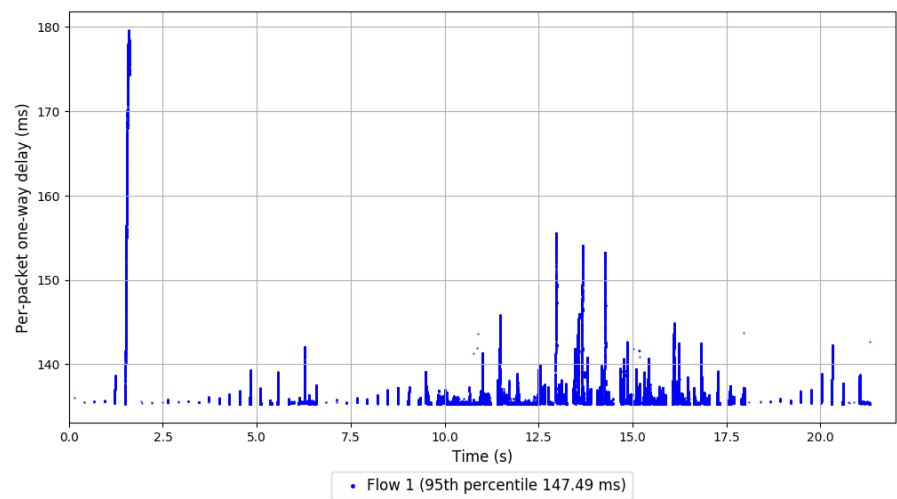
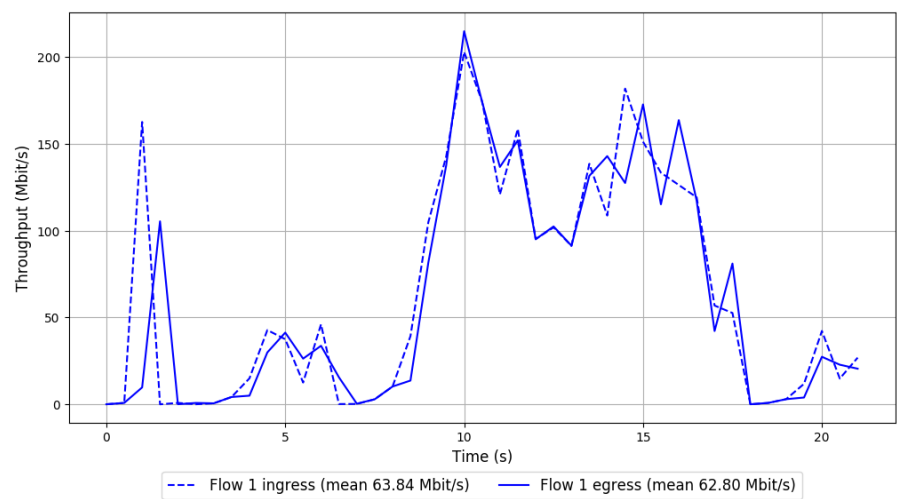


Run 8: Statistics of Verus

Start at: 2017-08-17 05:57:55

End at: 2017-08-17 05:58:25

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-17 06:09:36

End at: 2017-08-17 06:10:06

Below is generated by plot.py at 2017-08-17 09:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.16 Mbit/s

95th percentile per-packet one-way delay: 142.589 ms

Loss rate: 0.49%

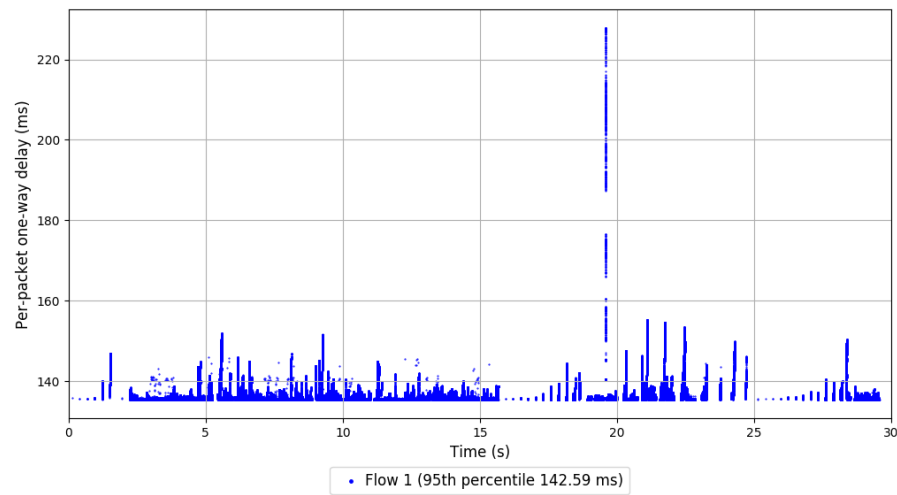
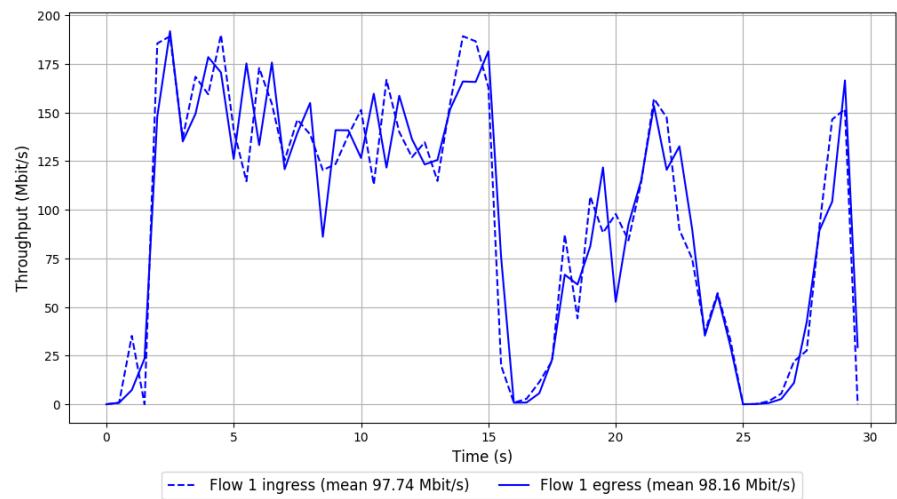
-- Flow 1:

Average throughput: 98.16 Mbit/s

95th percentile per-packet one-way delay: 142.589 ms

Loss rate: 0.49%

Run 9: Report of Verus — Data Link

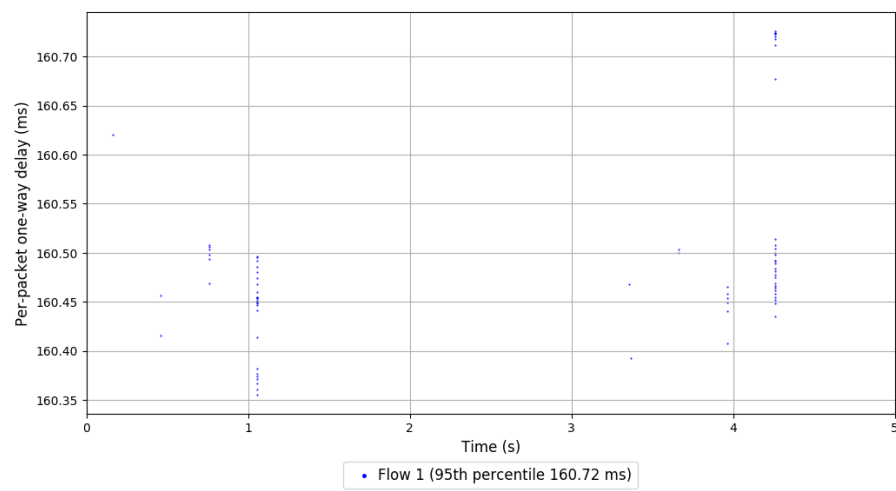
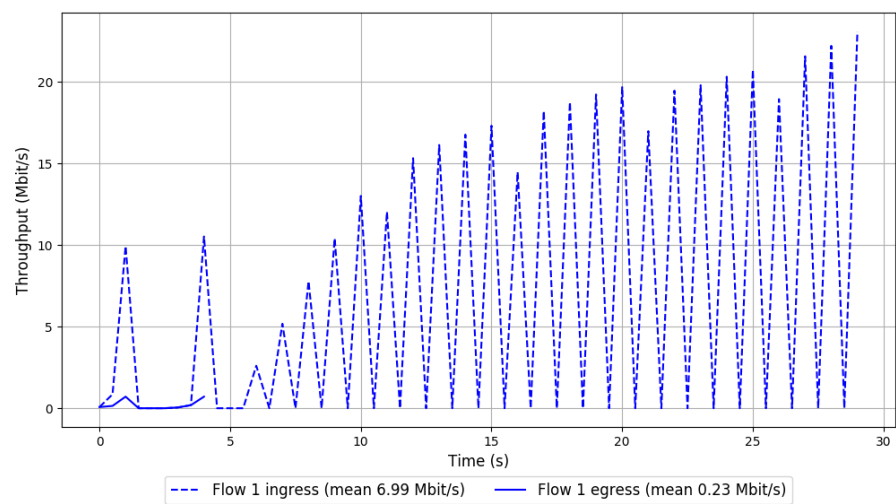


Run 10: Statistics of Verus

Start at: 2017-08-17 06:21:15

End at: 2017-08-17 06:21:45

Run 10: Report of Verus — Data Link

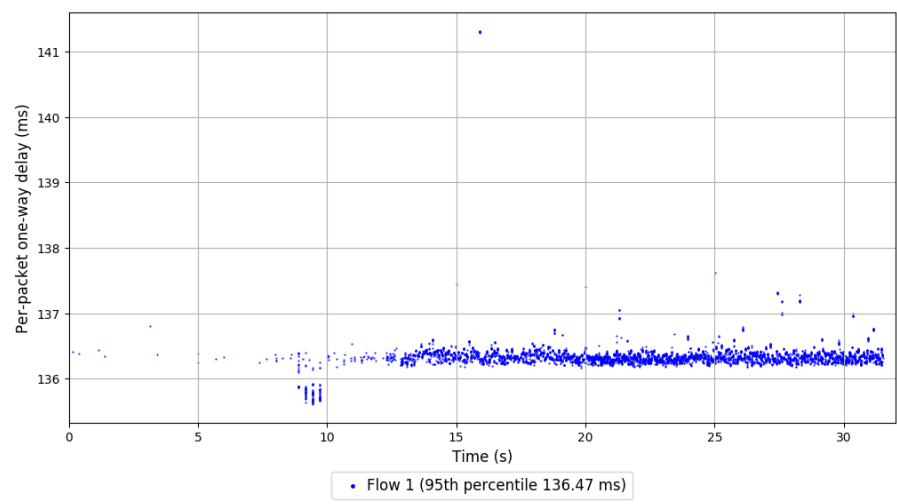
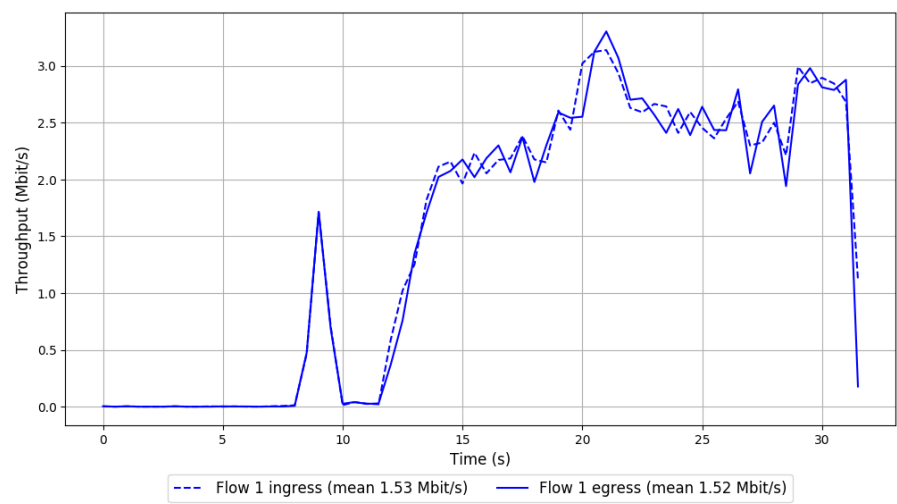


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-17 04:29:52
End at: 2017-08-17 04:30:22

# Below is generated by plot.py at 2017-08-17 09:09:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 136.468 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 136.468 ms
Loss rate: 1.68%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-17 04:41:44

End at: 2017-08-17 04:42:14

Below is generated by plot.py at 2017-08-17 09:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 136.898 ms

Loss rate: 1.47%

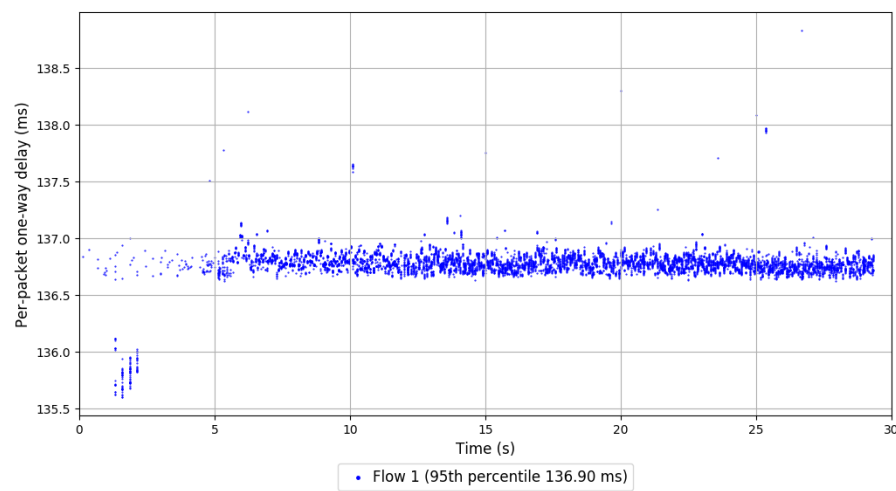
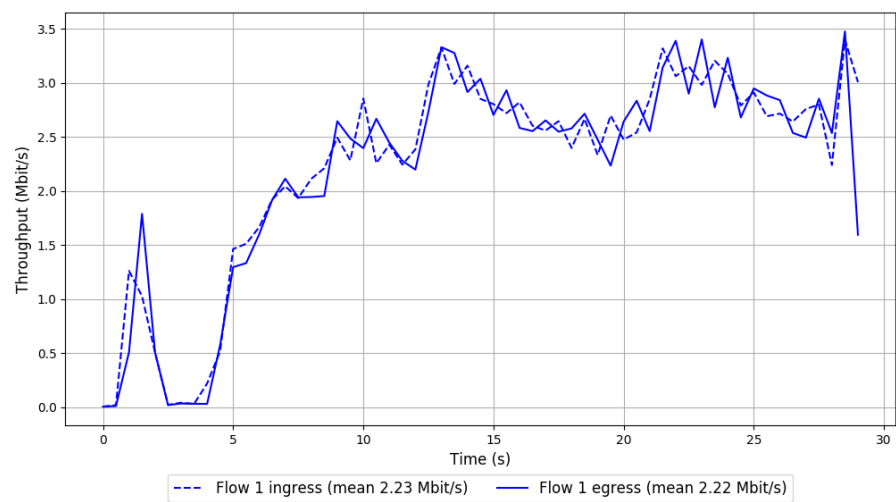
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 136.898 ms

Loss rate: 1.47%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-17 04:53:36

End at: 2017-08-17 04:54:06

Below is generated by plot.py at 2017-08-17 09:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 160.335 ms

Loss rate: 2.24%

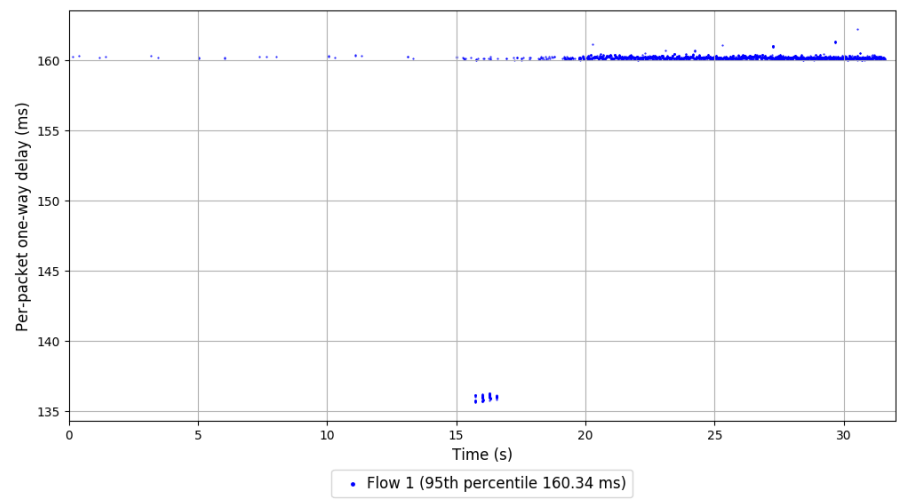
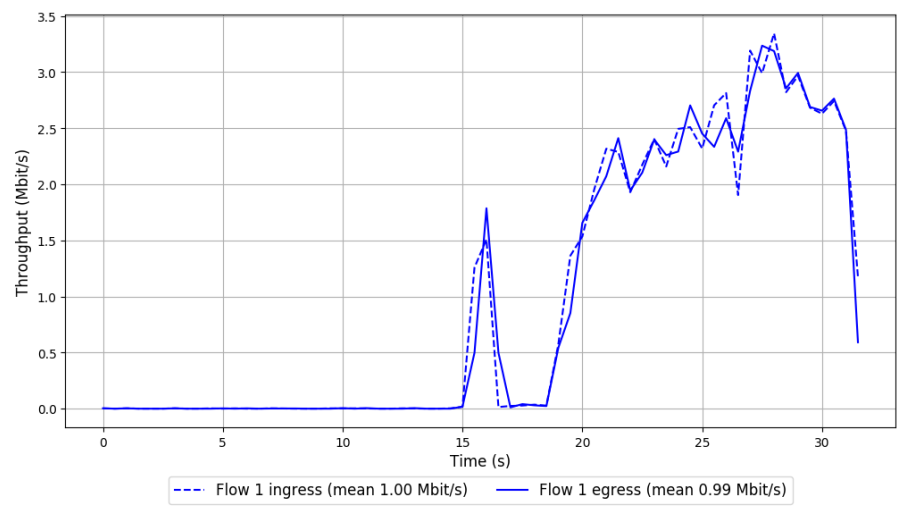
-- Flow 1:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 160.335 ms

Loss rate: 2.24%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-17 05:05:23

End at: 2017-08-17 05:05:53

Below is generated by plot.py at 2017-08-17 09:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 136.718 ms

Loss rate: 1.61%

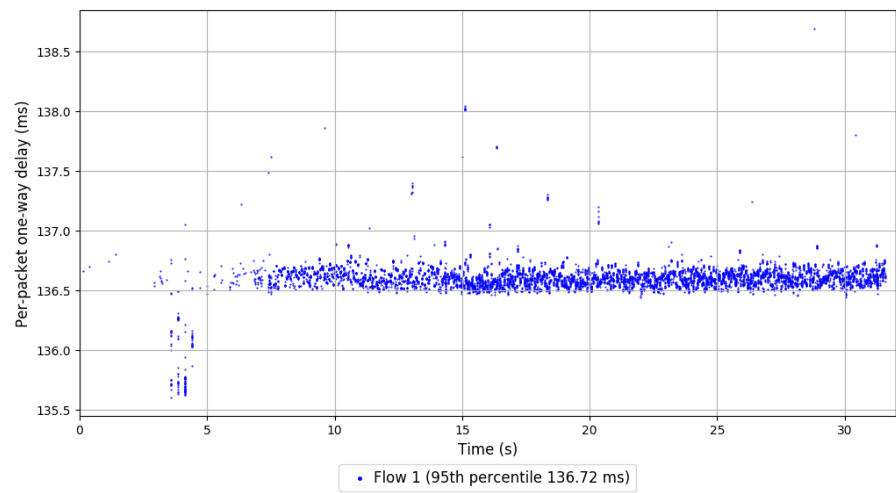
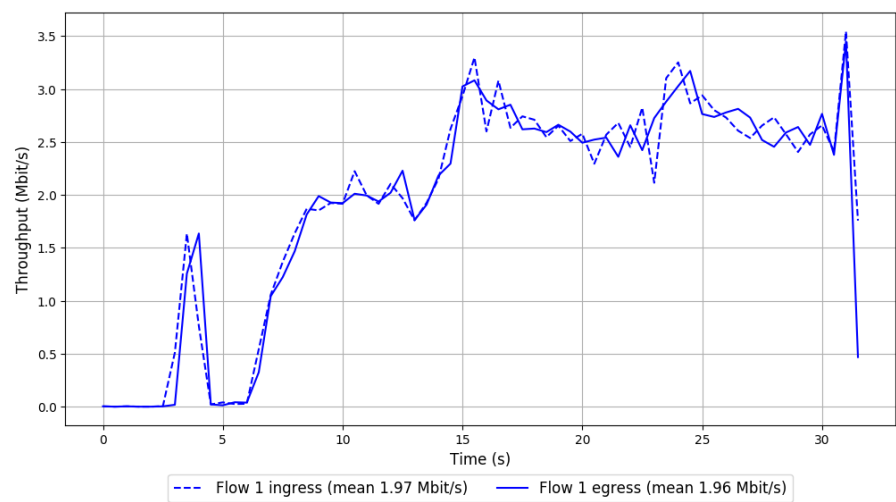
-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 136.718 ms

Loss rate: 1.61%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-17 05:16:52

End at: 2017-08-17 05:17:22

Below is generated by plot.py at 2017-08-17 09:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 136.469 ms

Loss rate: 1.55%

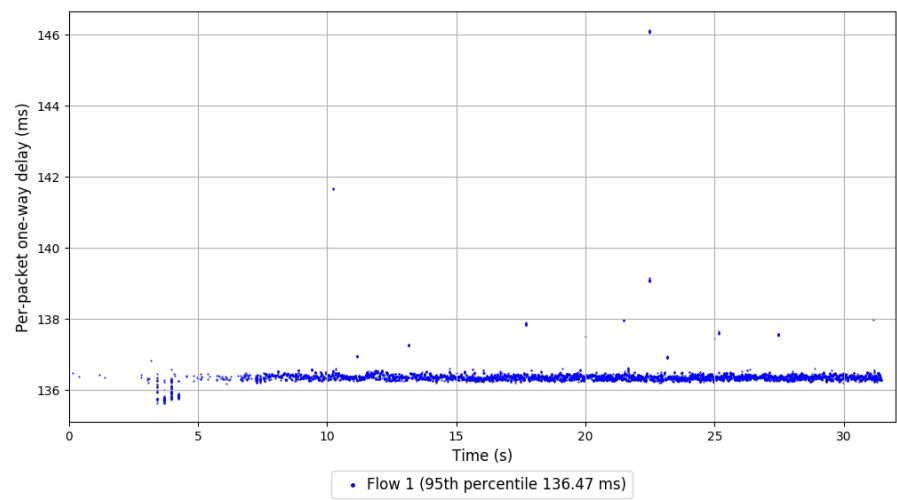
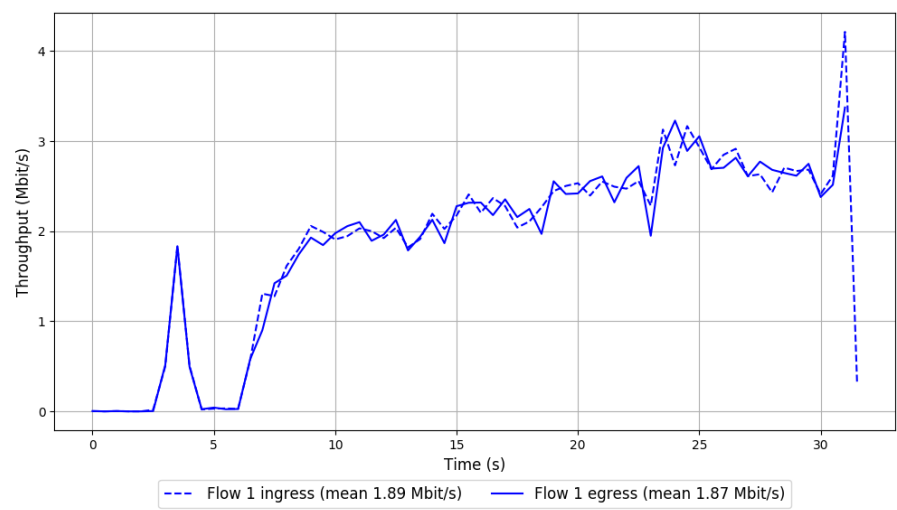
-- Flow 1:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 136.469 ms

Loss rate: 1.55%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-17 05:28:08

End at: 2017-08-17 05:28:38

Below is generated by plot.py at 2017-08-17 09:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 136.643 ms

Loss rate: 1.64%

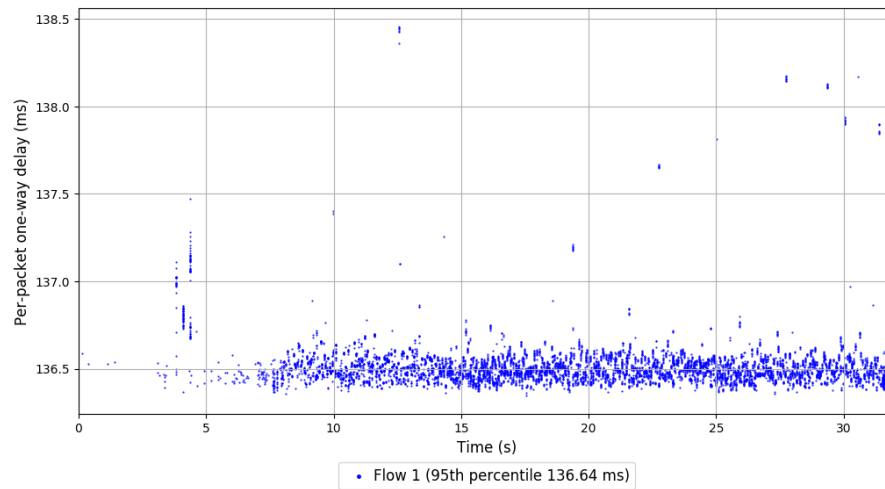
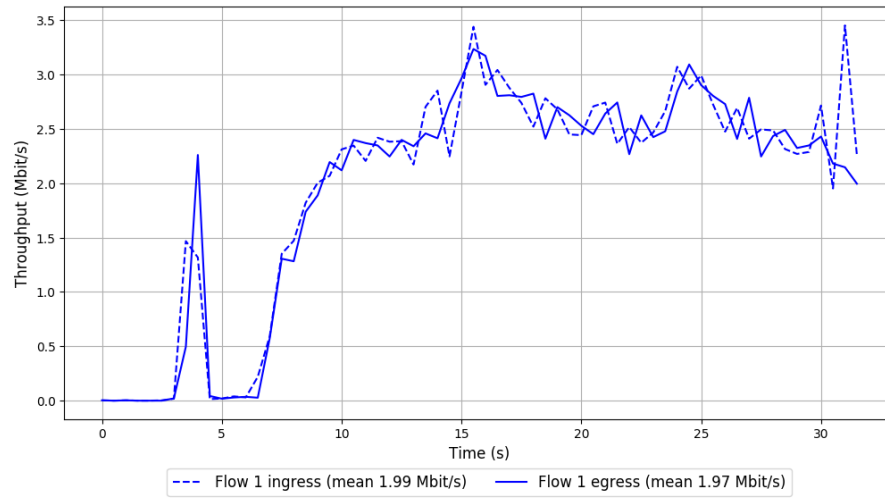
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 136.643 ms

Loss rate: 1.64%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-17 05:39:52

End at: 2017-08-17 05:40:22

Below is generated by plot.py at 2017-08-17 09:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 136.276 ms

Loss rate: 0.95%

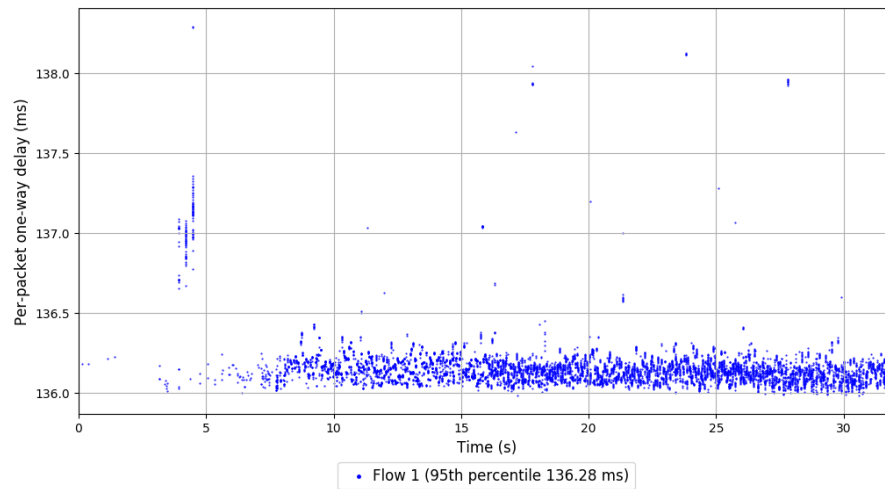
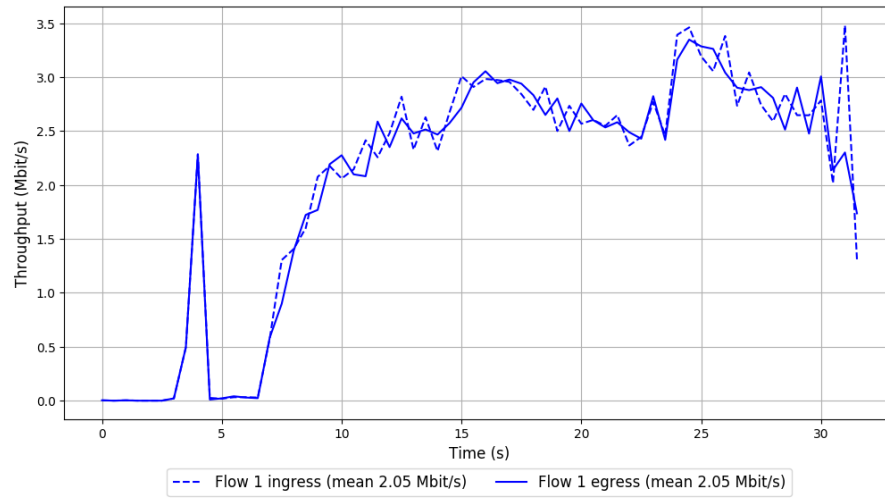
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 136.276 ms

Loss rate: 0.95%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-17 05:51:44

End at: 2017-08-17 05:52:14

Below is generated by plot.py at 2017-08-17 09:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 135.873 ms

Loss rate: 1.05%

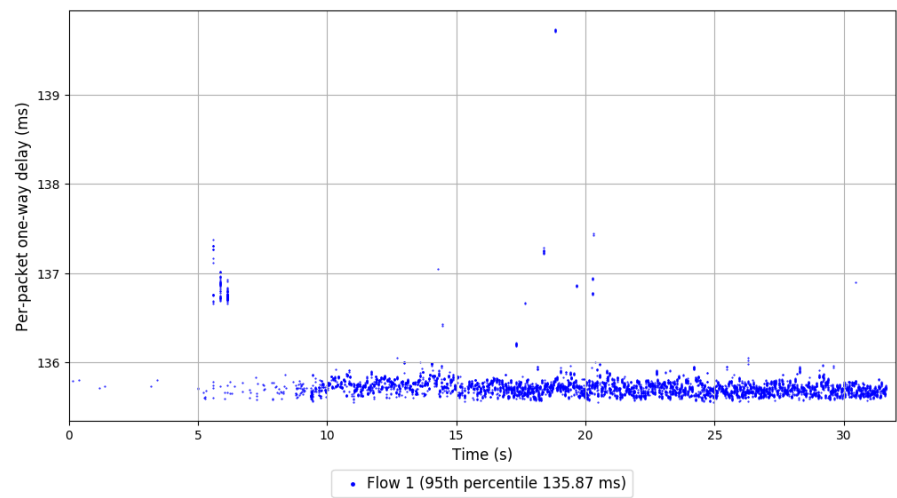
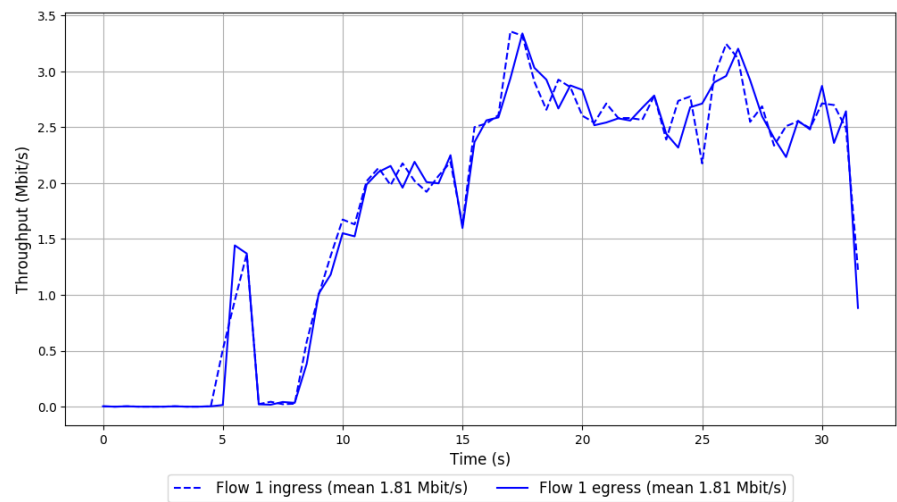
-- Flow 1:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 135.873 ms

Loss rate: 1.05%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-17 06:03:16

End at: 2017-08-17 06:03:46

Below is generated by plot.py at 2017-08-17 09:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 136.086 ms

Loss rate: 1.47%

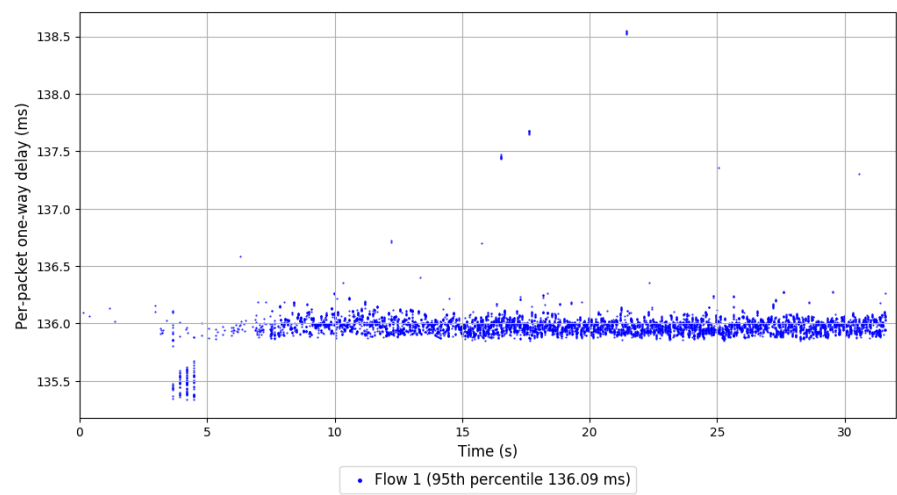
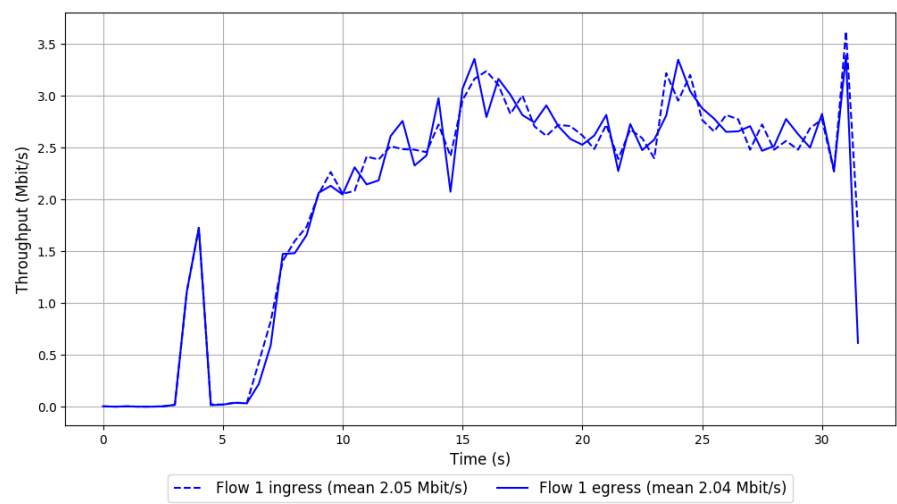
-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 136.086 ms

Loss rate: 1.47%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-17 06:15:11

End at: 2017-08-17 06:15:41

Below is generated by plot.py at 2017-08-17 09:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 136.237 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 136.237 ms

Loss rate: 1.11%

Run 10: Report of WebRTC media — Data Link

