

Pantheon Report

Generated at 2017-09-18 13:07:44 (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.

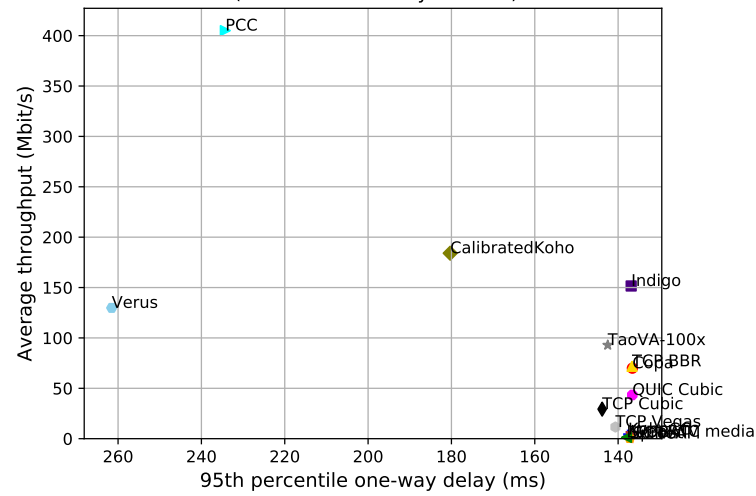
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

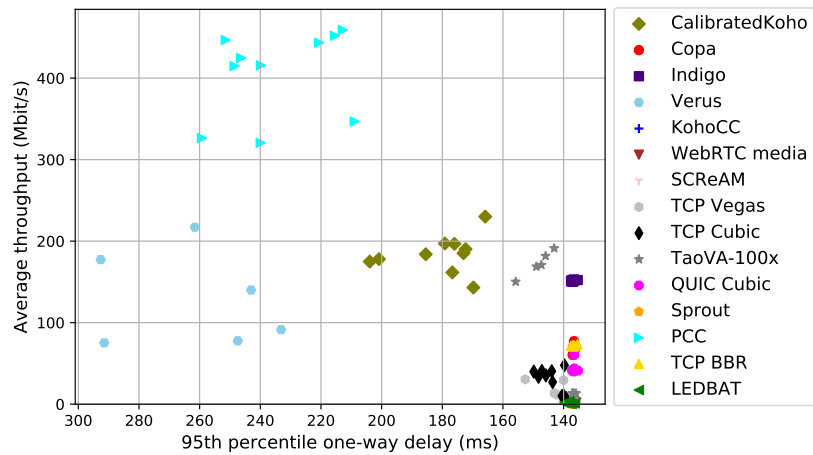
Git summary:

```
branch: master @ 57453dc11f8da93a2e03eea75289fea01b816298
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
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	71.83	136.66	1.01
CalibratedKoho	10	184.07	180.30	1.77
Copa	7	69.96	136.58	1.08
TCP Cubic	10	29.32	143.83	1.58
Indigo	10	151.56	136.87	1.03
KohoCC	8	4.20	137.62	1.19
LEDBAT	10	1.29	137.99	2.20
PCC	10	405.03	234.26	4.32
QUIC Cubic	10	43.37	136.60	0.72
SCReAM	10	0.22	136.50	0.89
Sprout	10	0.40	137.19	0.90
TaoVA-100x	10	92.91	142.49	0.99
TCP Vegas	10	11.58	140.65	1.61
Verus	6	129.82	261.53	5.43
WebRTC media	10	1.97	136.92	1.26

Run 1: Statistics of TCP BBR

Start at: 2017-09-18 08:20:35

End at: 2017-09-18 08:21:05

Below is generated by plot.py at 2017-09-18 12:40:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.56 Mbit/s

95th percentile per-packet one-way delay: 135.415 ms

Loss rate: 0.96%

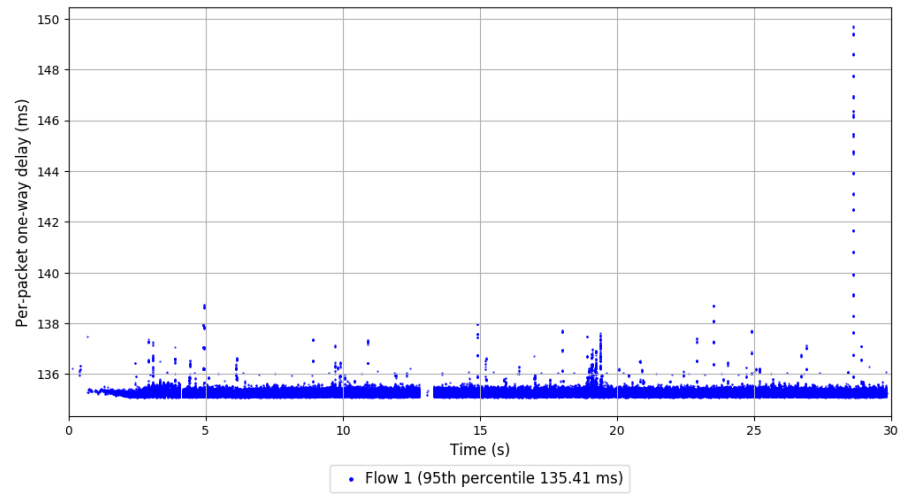
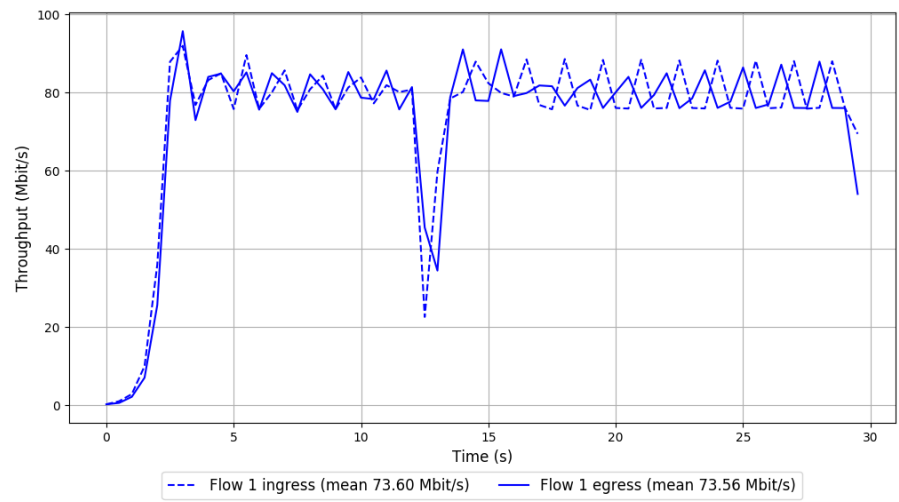
-- Flow 1:

Average throughput: 73.56 Mbit/s

95th percentile per-packet one-way delay: 135.415 ms

Loss rate: 0.96%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-09-18 08:32:32

End at: 2017-09-18 08:33:02

Below is generated by plot.py at 2017-09-18 12:40:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.36 Mbit/s

95th percentile per-packet one-way delay: 136.715 ms

Loss rate: 1.16%

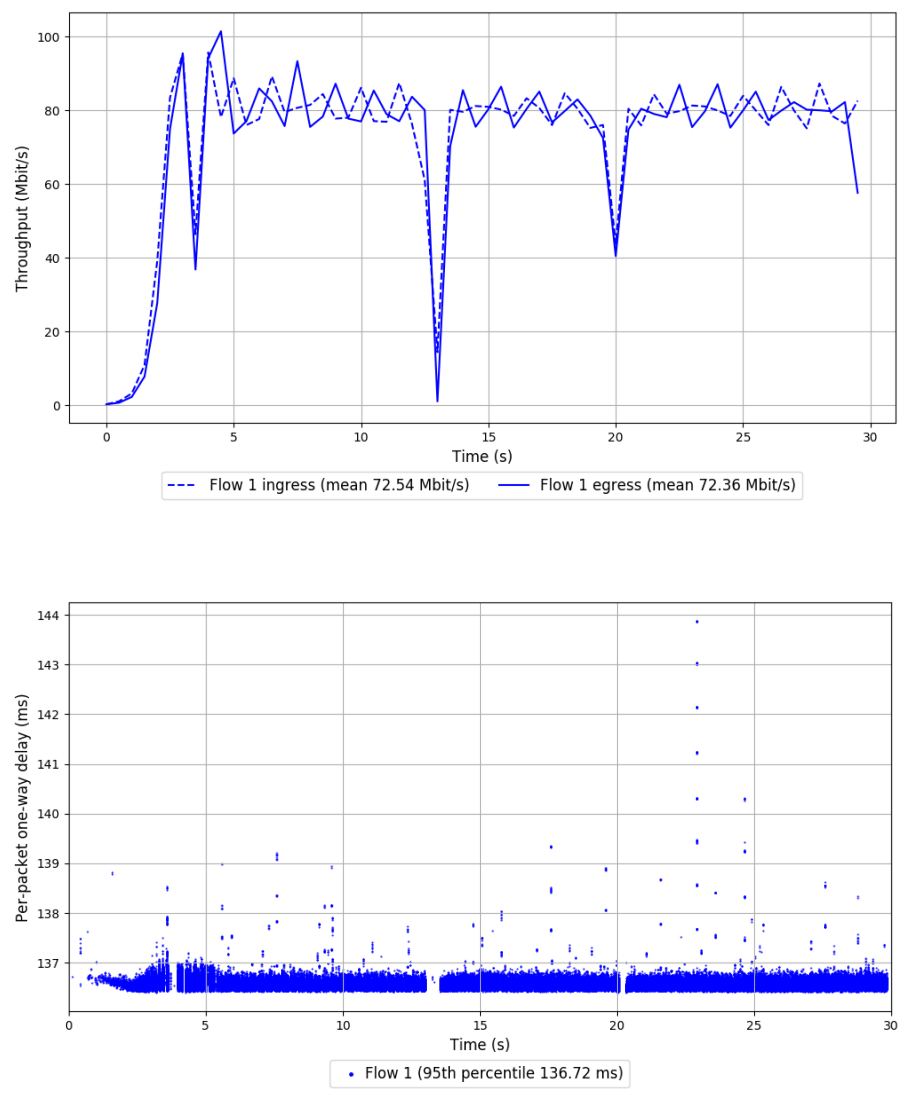
-- Flow 1:

Average throughput: 72.36 Mbit/s

95th percentile per-packet one-way delay: 136.715 ms

Loss rate: 1.16%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-09-18 08:44:44

End at: 2017-09-18 08:45:14

Below is generated by plot.py at 2017-09-18 12:40:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.16 Mbit/s

95th percentile per-packet one-way delay: 136.809 ms

Loss rate: 0.99%

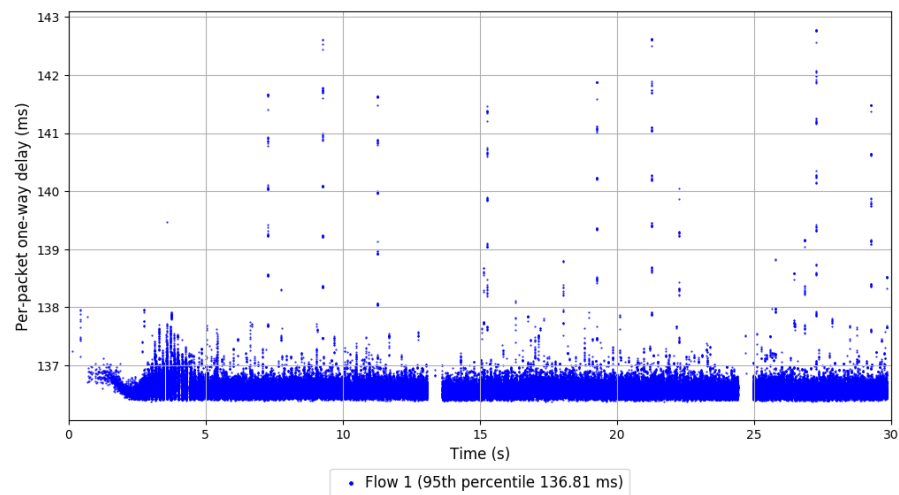
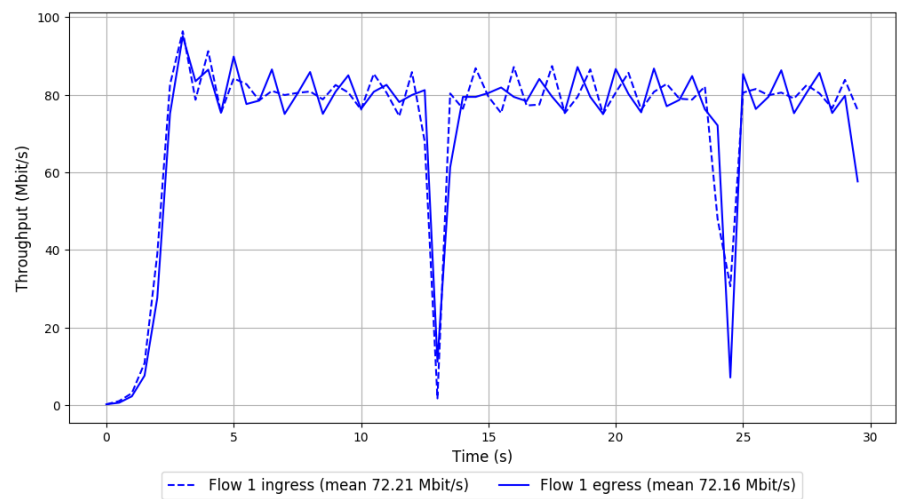
-- Flow 1:

Average throughput: 72.16 Mbit/s

95th percentile per-packet one-way delay: 136.809 ms

Loss rate: 0.99%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-09-18 08:56:45

End at: 2017-09-18 08:57:15

Below is generated by plot.py at 2017-09-18 12:40:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.16 Mbit/s

95th percentile per-packet one-way delay: 136.817 ms

Loss rate: 1.02%

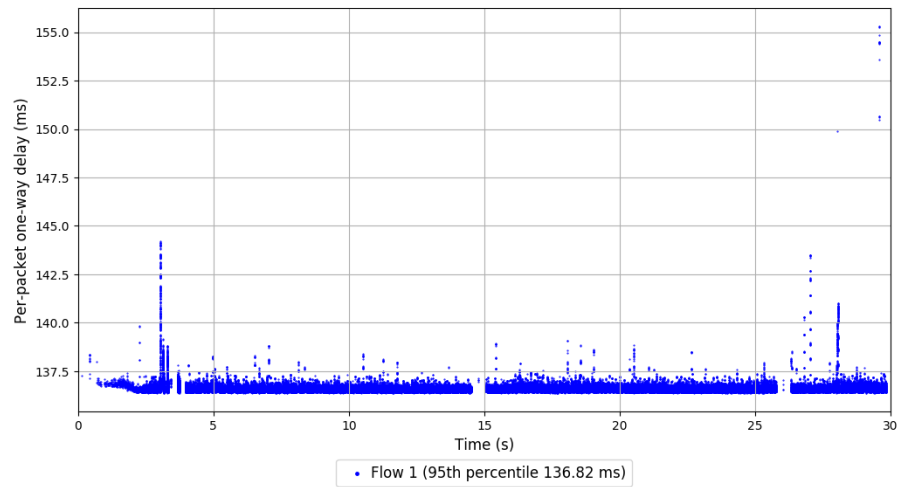
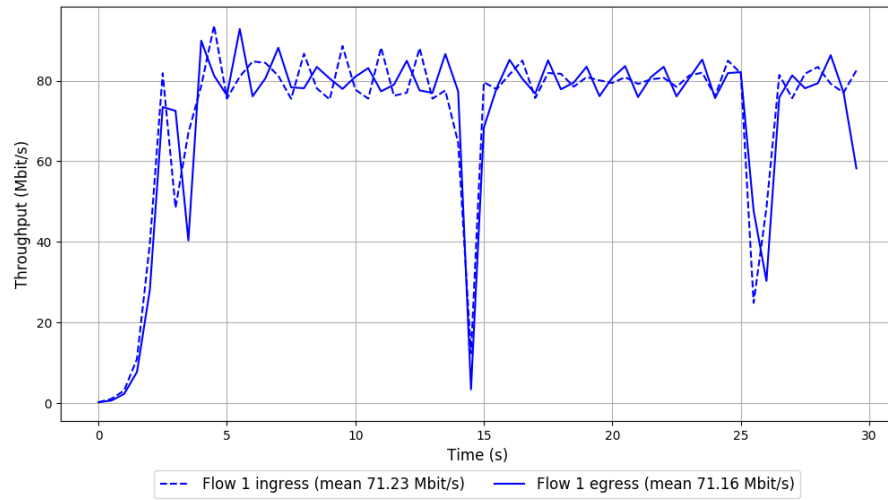
-- Flow 1:

Average throughput: 71.16 Mbit/s

95th percentile per-packet one-way delay: 136.817 ms

Loss rate: 1.02%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-09-18 09:09:08

End at: 2017-09-18 09:09:38

Below is generated by plot.py at 2017-09-18 12:40:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.99 Mbit/s

95th percentile per-packet one-way delay: 136.797 ms

Loss rate: 0.99%

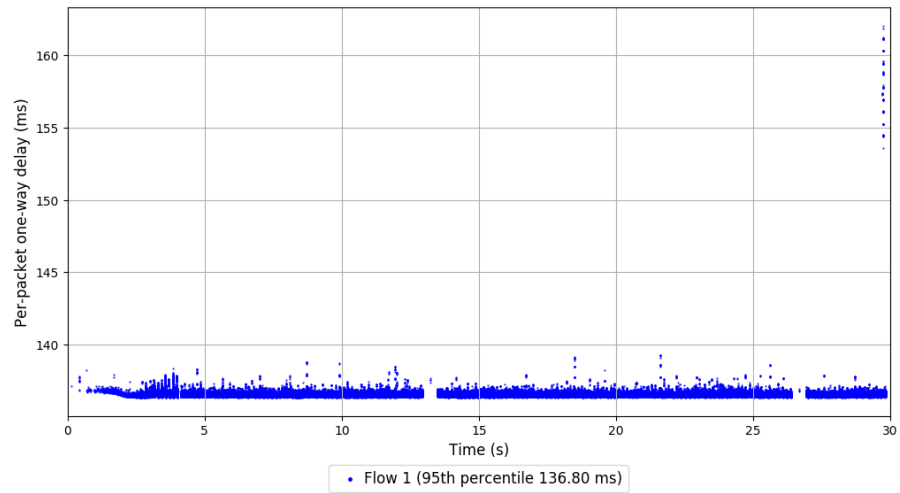
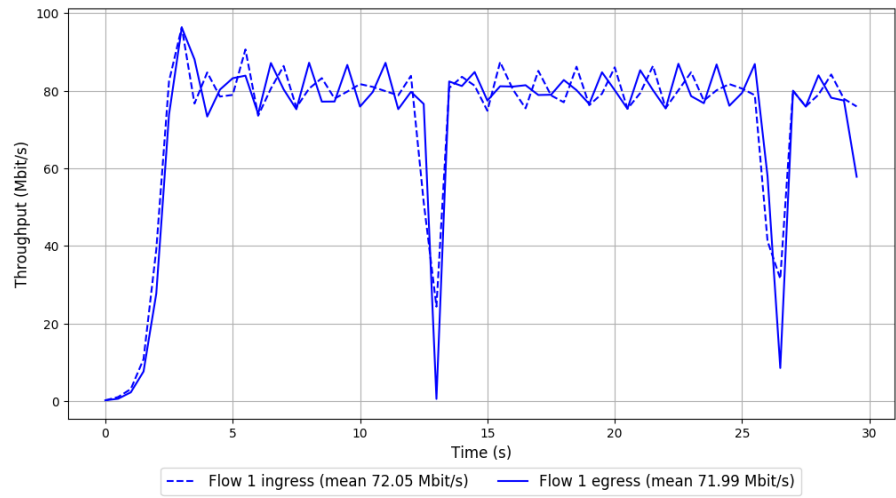
-- Flow 1:

Average throughput: 71.99 Mbit/s

95th percentile per-packet one-way delay: 136.797 ms

Loss rate: 0.99%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-09-18 09:21:31

End at: 2017-09-18 09:22:01

Below is generated by plot.py at 2017-09-18 12:40:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.27 Mbit/s

95th percentile per-packet one-way delay: 136.771 ms

Loss rate: 0.99%

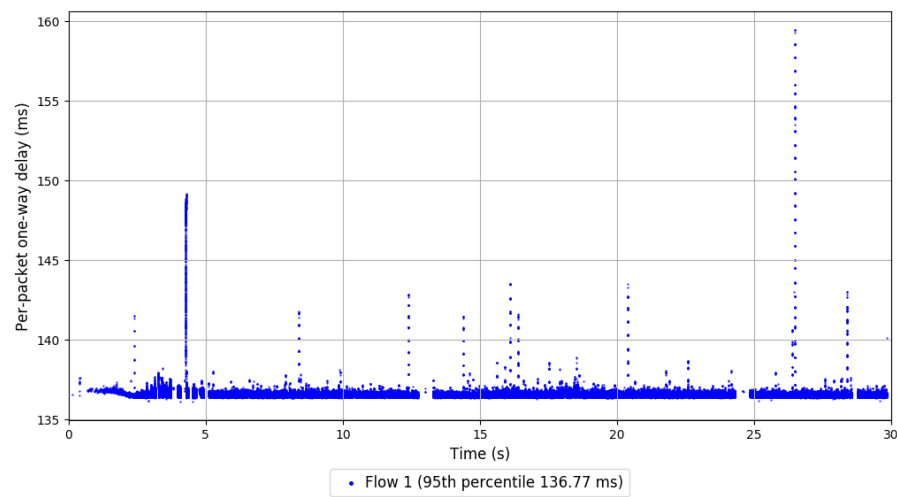
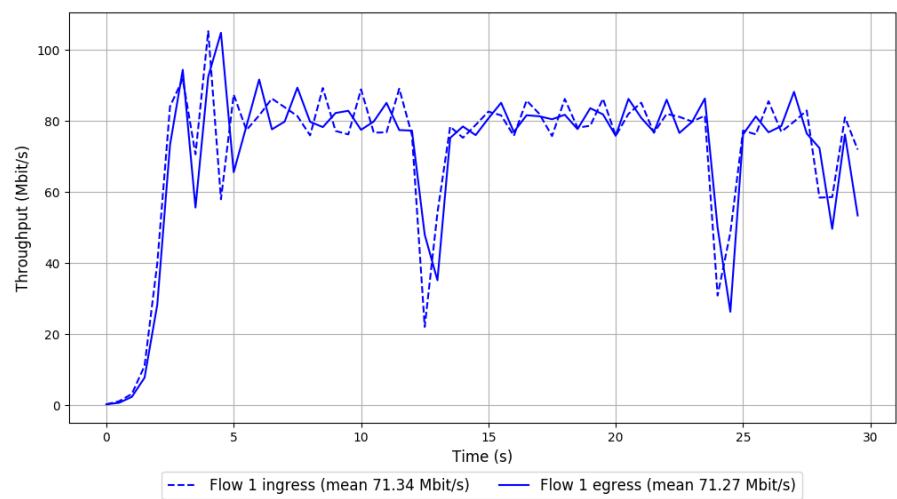
-- Flow 1:

Average throughput: 71.27 Mbit/s

95th percentile per-packet one-way delay: 136.771 ms

Loss rate: 0.99%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-09-18 09:34:06

End at: 2017-09-18 09:34:36

Below is generated by plot.py at 2017-09-18 12:40:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.95 Mbit/s

95th percentile per-packet one-way delay: 136.440 ms

Loss rate: 1.01%

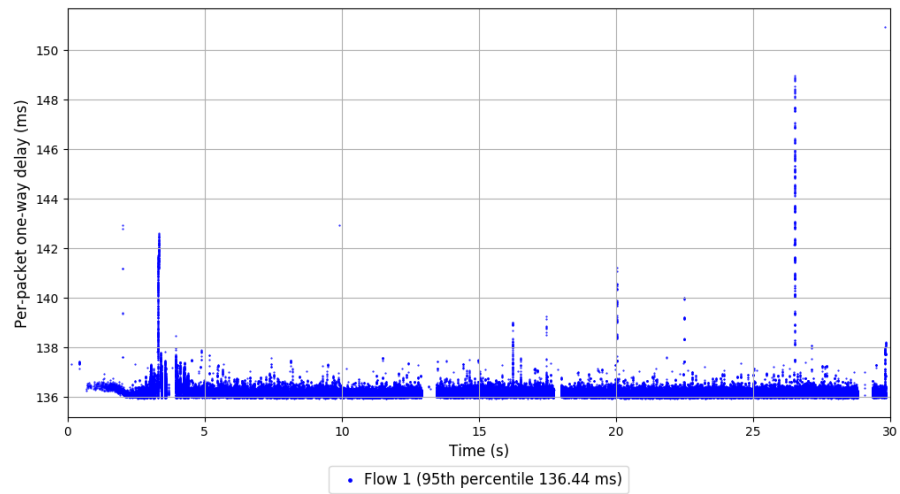
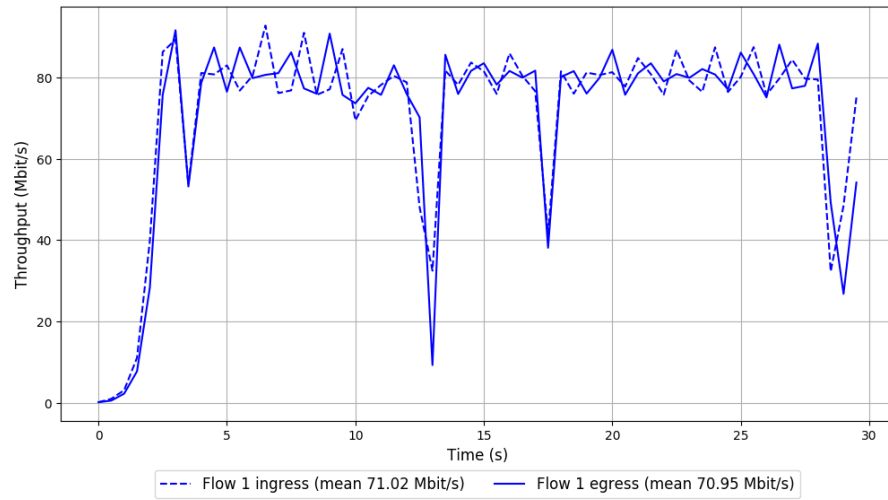
-- Flow 1:

Average throughput: 70.95 Mbit/s

95th percentile per-packet one-way delay: 136.440 ms

Loss rate: 1.01%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-09-18 09:46:09

End at: 2017-09-18 09:46:39

Below is generated by plot.py at 2017-09-18 12:40:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.54 Mbit/s

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

Loss rate: 1.00%

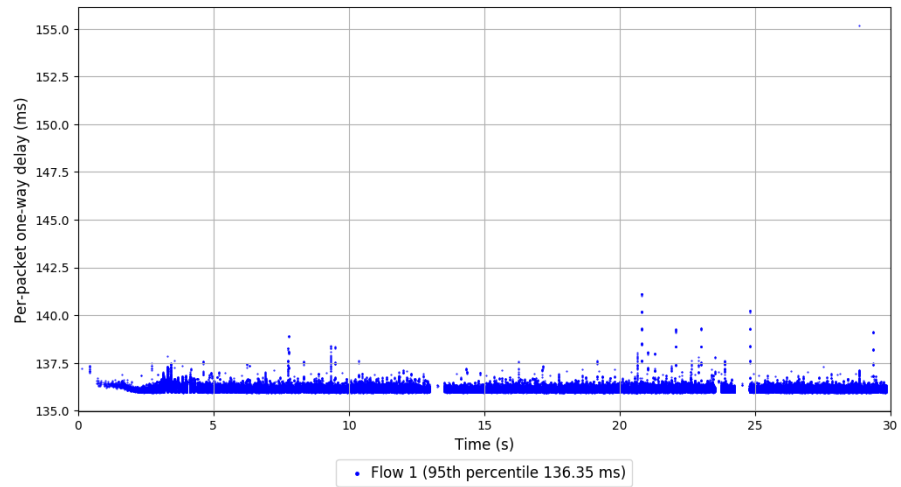
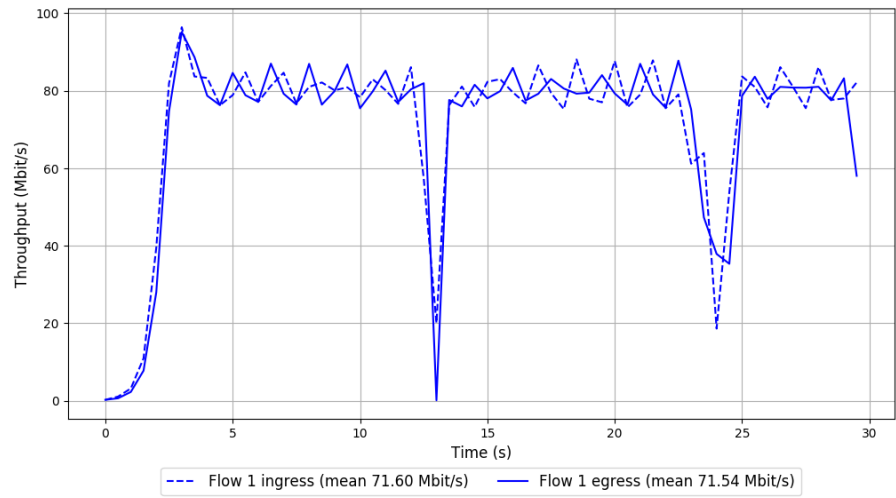
-- Flow 1:

Average throughput: 71.54 Mbit/s

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

Loss rate: 1.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-09-18 09:58:25

End at: 2017-09-18 09:58:55

Below is generated by plot.py at 2017-09-18 12:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.82 Mbit/s

95th percentile per-packet one-way delay: 136.910 ms

Loss rate: 1.01%

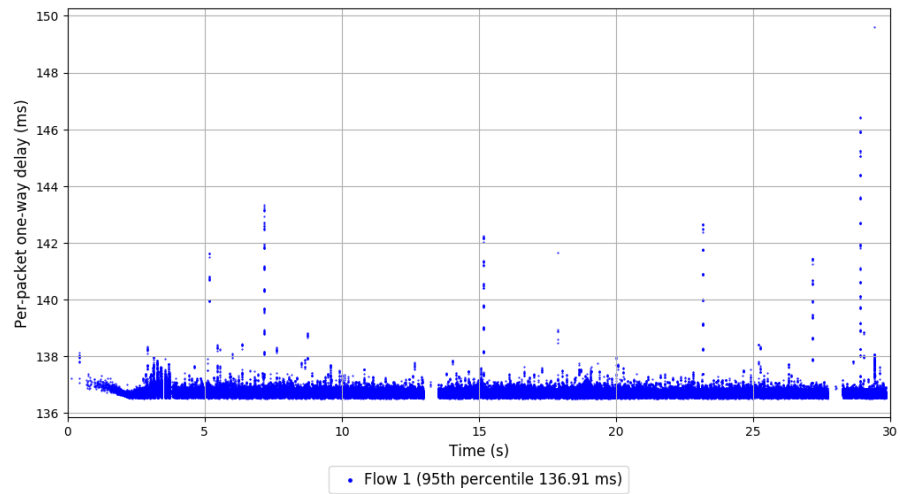
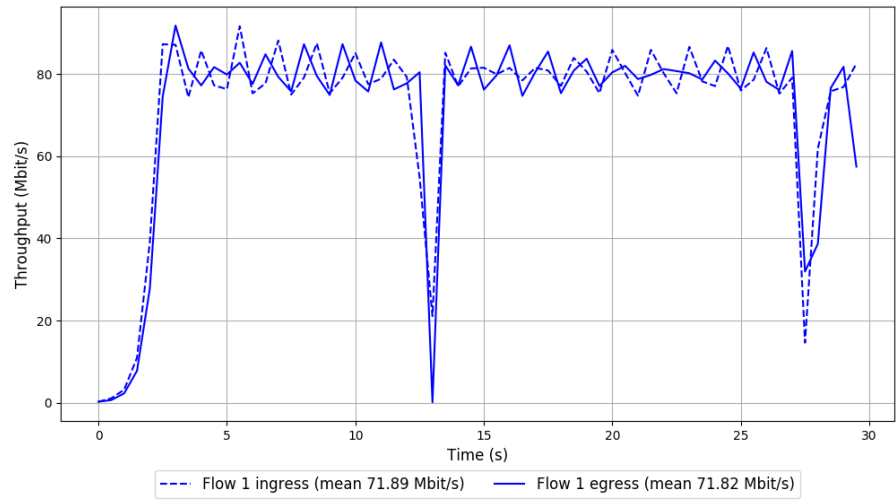
-- Flow 1:

Average throughput: 71.82 Mbit/s

95th percentile per-packet one-way delay: 136.910 ms

Loss rate: 1.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-09-18 10:10:46

End at: 2017-09-18 10:11:16

Below is generated by plot.py at 2017-09-18 12:41:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.49 Mbit/s

95th percentile per-packet one-way delay: 137.580 ms

Loss rate: 1.02%

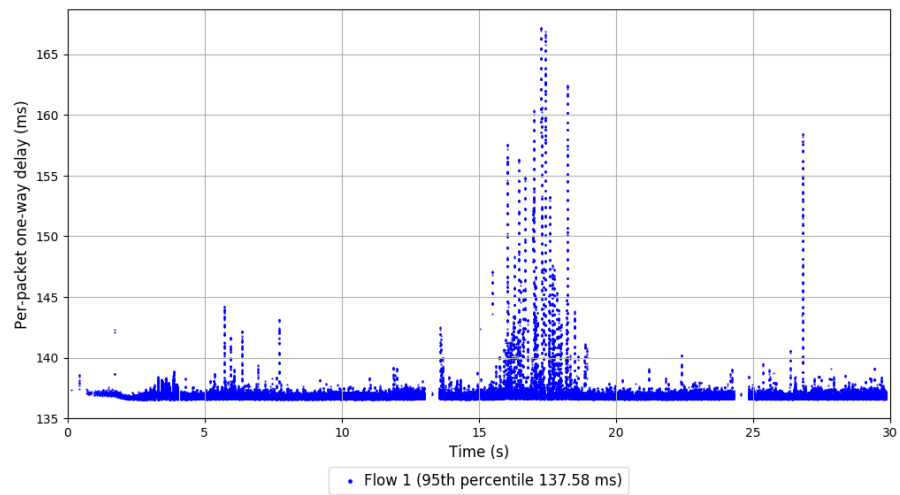
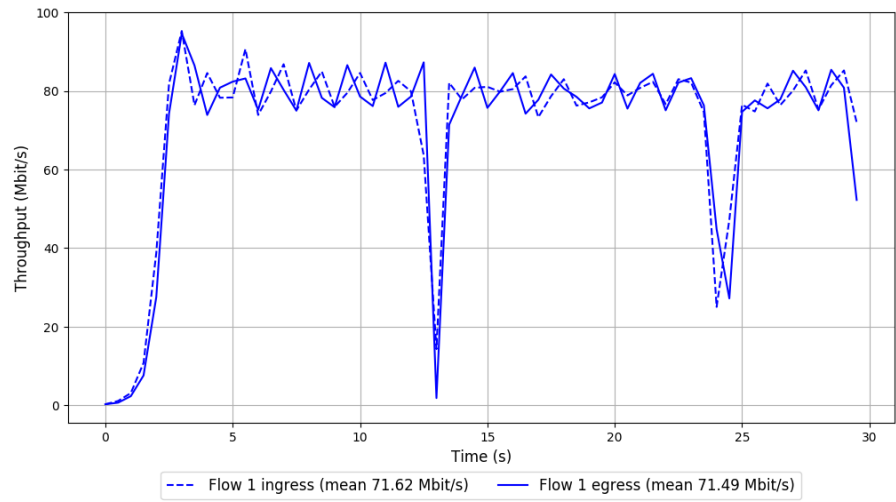
-- Flow 1:

Average throughput: 71.49 Mbit/s

95th percentile per-packet one-way delay: 137.580 ms

Loss rate: 1.02%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-09-18 08:25:52

End at: 2017-09-18 08:26:22

Below is generated by plot.py at 2017-09-18 12:44:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.11 Mbit/s

95th percentile per-packet one-way delay: 165.844 ms

Loss rate: 1.71%

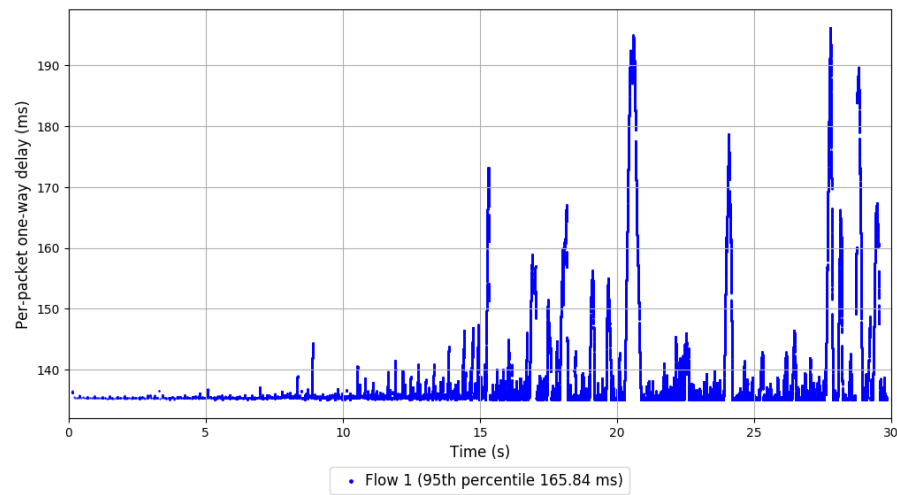
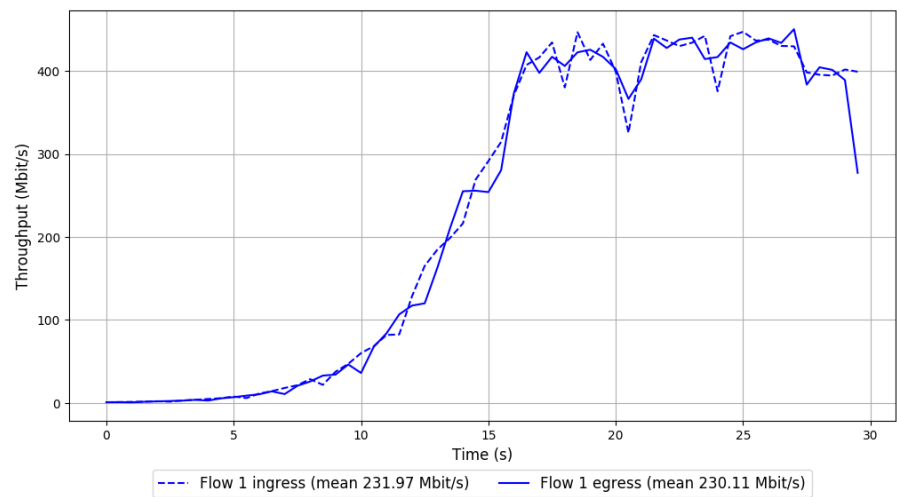
-- Flow 1:

Average throughput: 230.11 Mbit/s

95th percentile per-packet one-way delay: 165.844 ms

Loss rate: 1.71%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-09-18 08:37:54

End at: 2017-09-18 08:38:24

Below is generated by plot.py at 2017-09-18 12:44:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.93 Mbit/s

95th percentile per-packet one-way delay: 200.874 ms

Loss rate: 1.49%

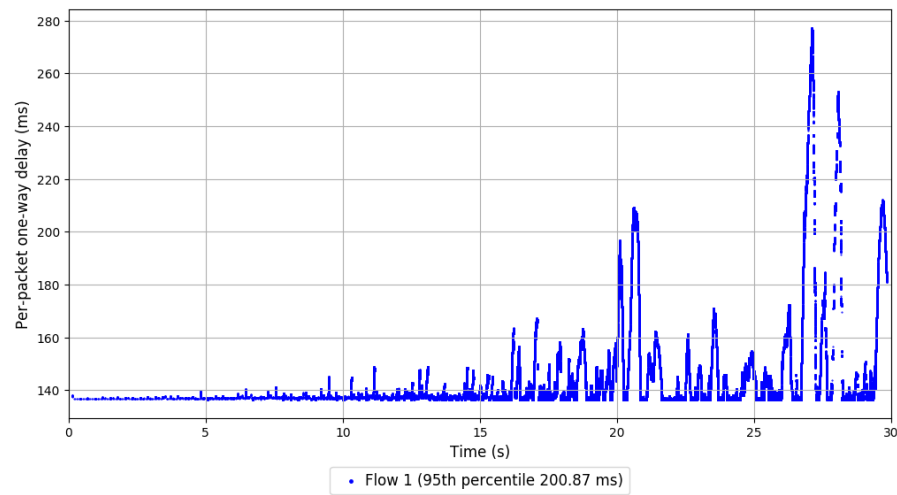
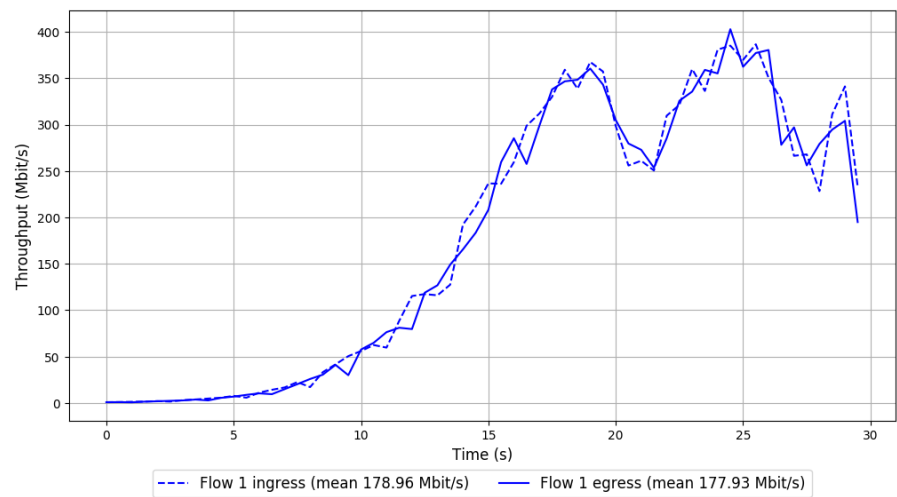
-- Flow 1:

Average throughput: 177.93 Mbit/s

95th percentile per-packet one-way delay: 200.874 ms

Loss rate: 1.49%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-09-18 08:50:06

End at: 2017-09-18 08:50:36

Below is generated by plot.py at 2017-09-18 12:44:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.94 Mbit/s

95th percentile per-packet one-way delay: 185.451 ms

Loss rate: 2.03%

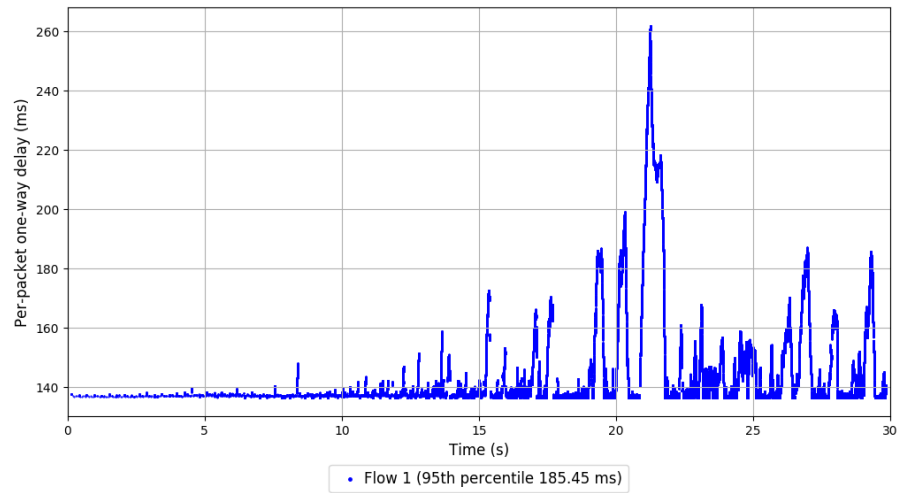
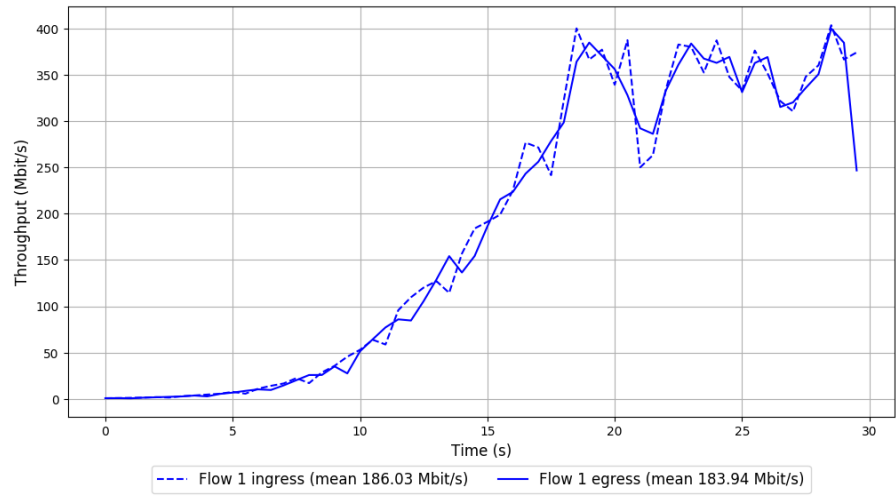
-- Flow 1:

Average throughput: 183.94 Mbit/s

95th percentile per-packet one-way delay: 185.451 ms

Loss rate: 2.03%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-09-18 09:02:28

End at: 2017-09-18 09:02:58

Below is generated by plot.py at 2017-09-18 12:44:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.94 Mbit/s

95th percentile per-packet one-way delay: 203.911 ms

Loss rate: 1.51%

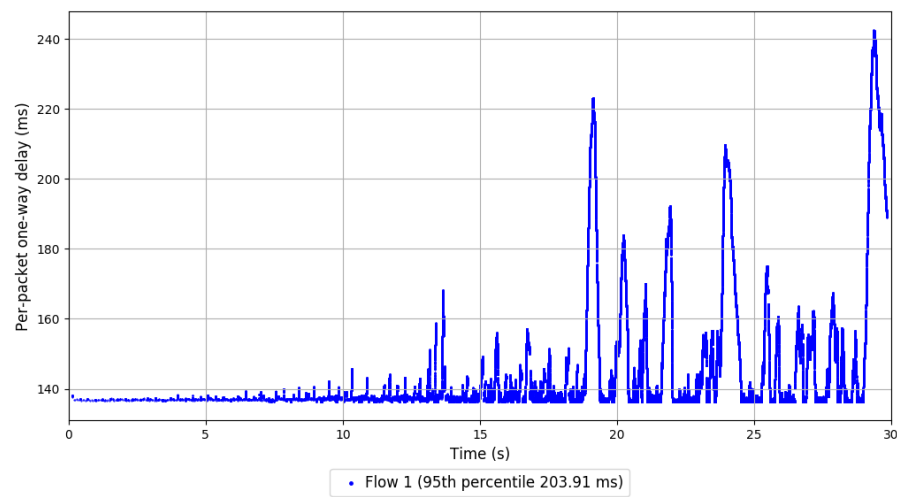
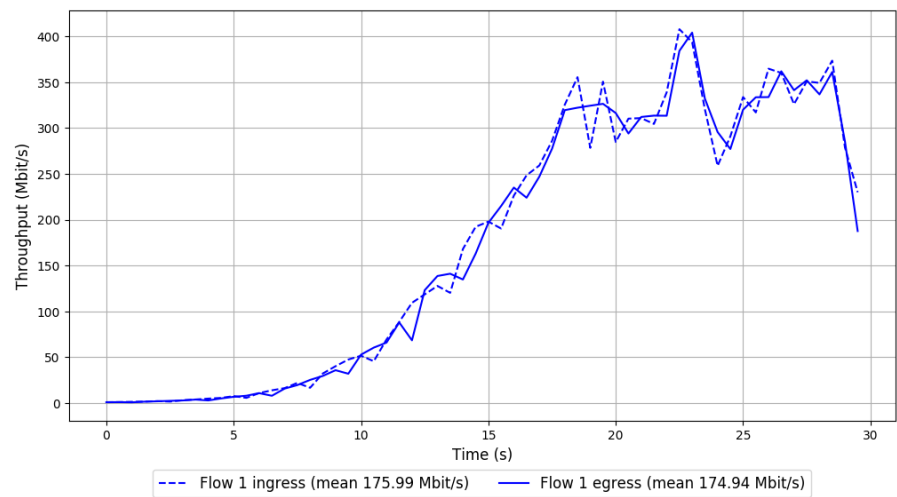
-- Flow 1:

Average throughput: 174.94 Mbit/s

95th percentile per-packet one-way delay: 203.911 ms

Loss rate: 1.51%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-09-18 09:14:49

End at: 2017-09-18 09:15:19

Below is generated by plot.py at 2017-09-18 12:44:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.69 Mbit/s

95th percentile per-packet one-way delay: 175.997 ms

Loss rate: 2.02%

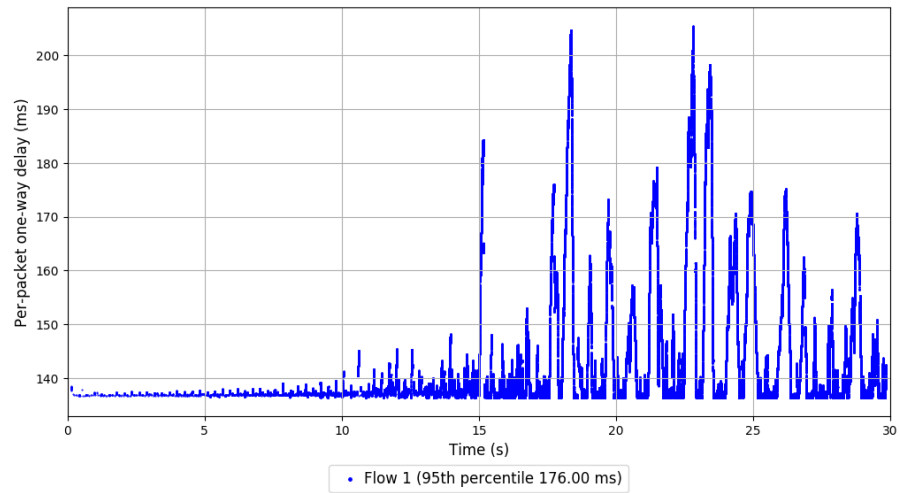
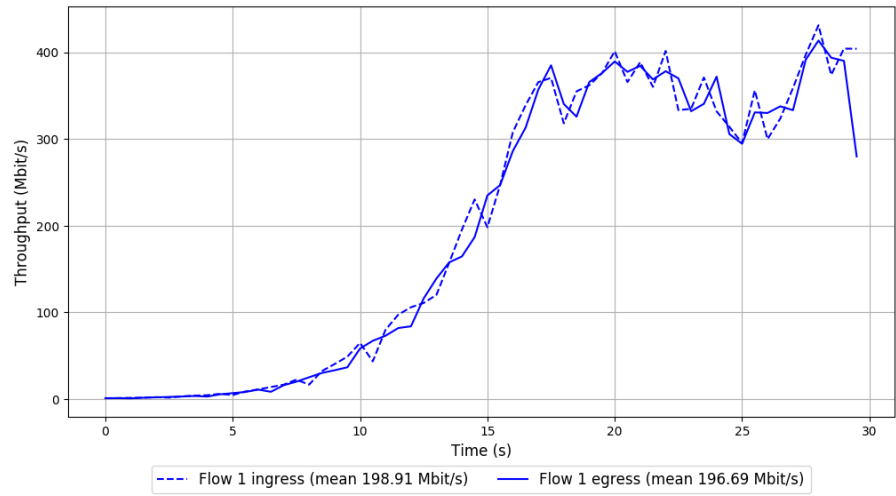
-- Flow 1:

Average throughput: 196.69 Mbit/s

95th percentile per-packet one-way delay: 175.997 ms

Loss rate: 2.02%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-09-18 09:27:11

End at: 2017-09-18 09:27:41

Below is generated by plot.py at 2017-09-18 12:44:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.13 Mbit/s

95th percentile per-packet one-way delay: 173.000 ms

Loss rate: 1.96%

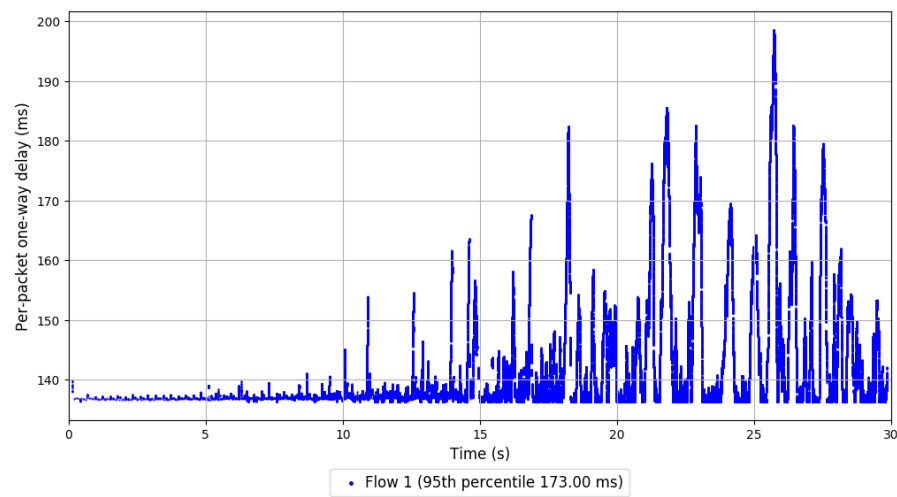
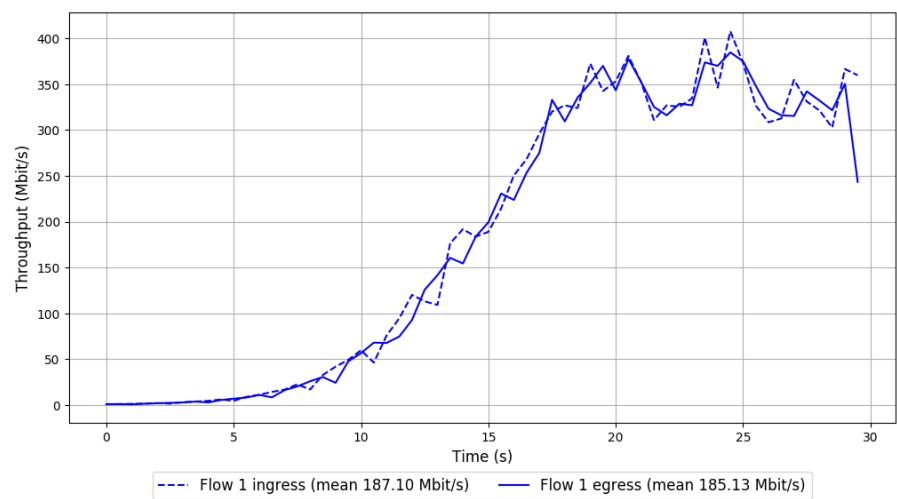
-- Flow 1:

Average throughput: 185.13 Mbit/s

95th percentile per-packet one-way delay: 173.000 ms

Loss rate: 1.96%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-09-18 09:39:28

End at: 2017-09-18 09:39:58

Below is generated by plot.py at 2017-09-18 12:44:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 161.63 Mbit/s

95th percentile per-packet one-way delay: 176.678 ms

Loss rate: 1.78%

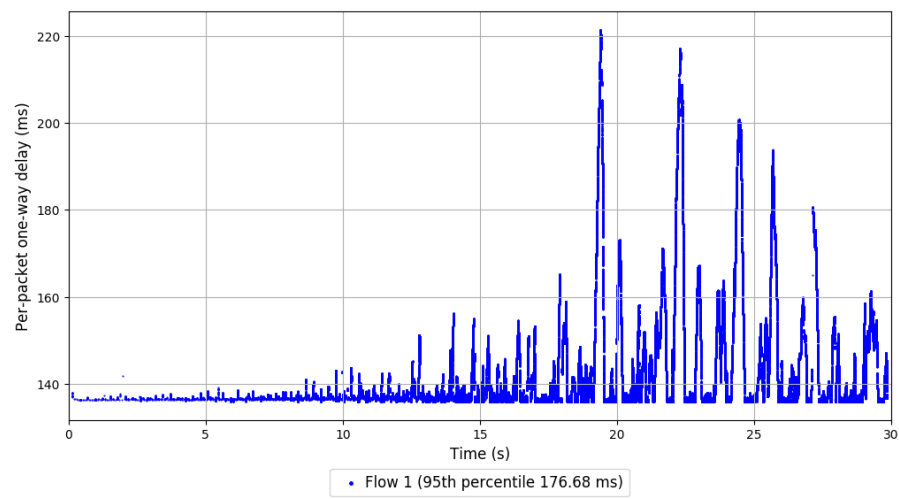
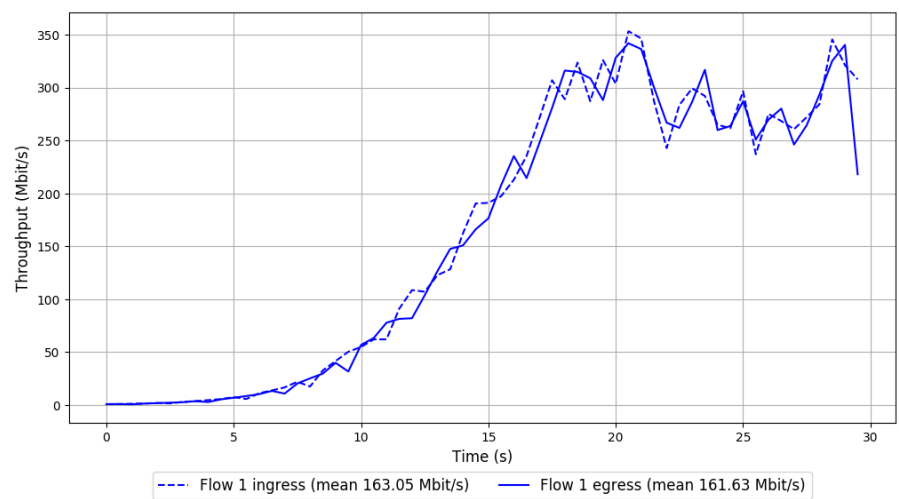
-- Flow 1:

Average throughput: 161.63 Mbit/s

95th percentile per-packet one-way delay: 176.678 ms

Loss rate: 1.78%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-09-18 09:51:46

End at: 2017-09-18 09:52:16

Below is generated by plot.py at 2017-09-18 12:44:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.17 Mbit/s

95th percentile per-packet one-way delay: 172.319 ms

Loss rate: 1.45%

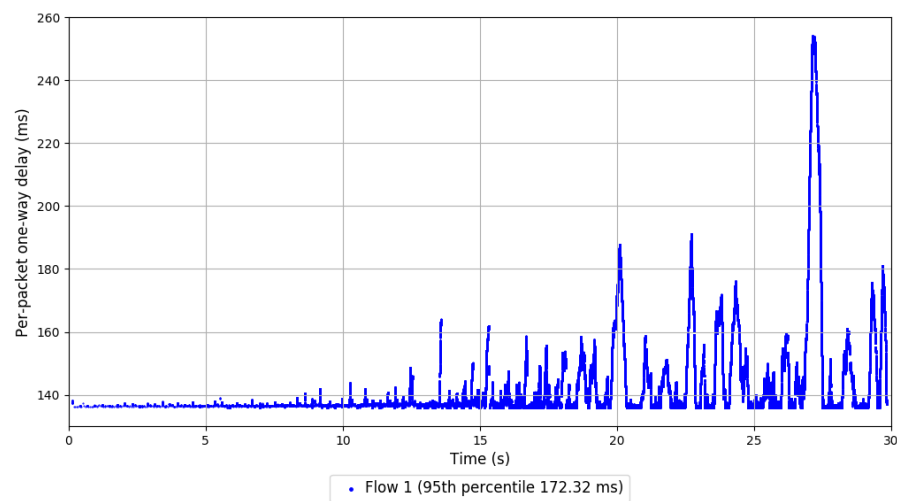
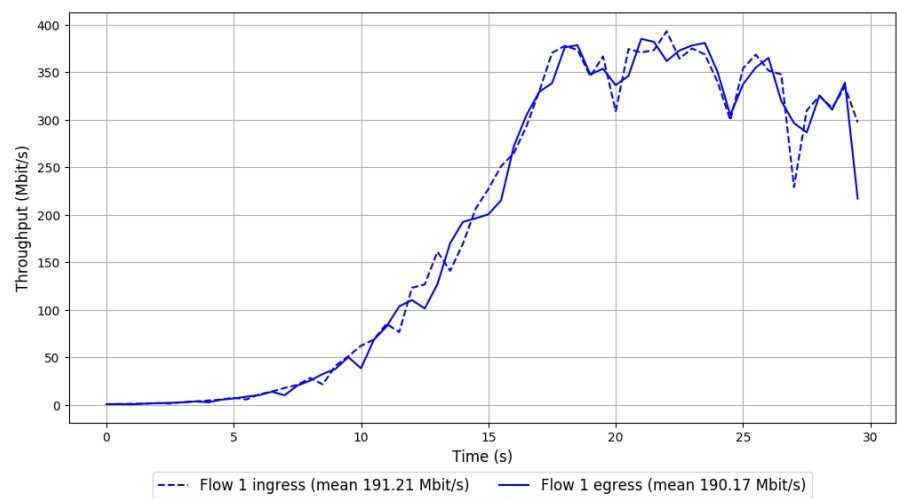
-- Flow 1:

Average throughput: 190.17 Mbit/s

95th percentile per-packet one-way delay: 172.319 ms

Loss rate: 1.45%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-09-18 10:04:05

End at: 2017-09-18 10:04:35

Below is generated by plot.py at 2017-09-18 12:47:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.08 Mbit/s

95th percentile per-packet one-way delay: 179.150 ms

Loss rate: 1.96%

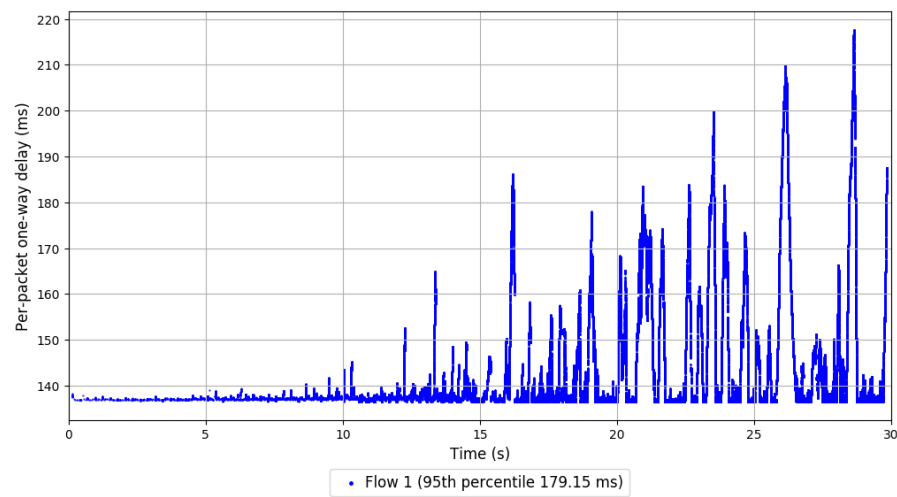
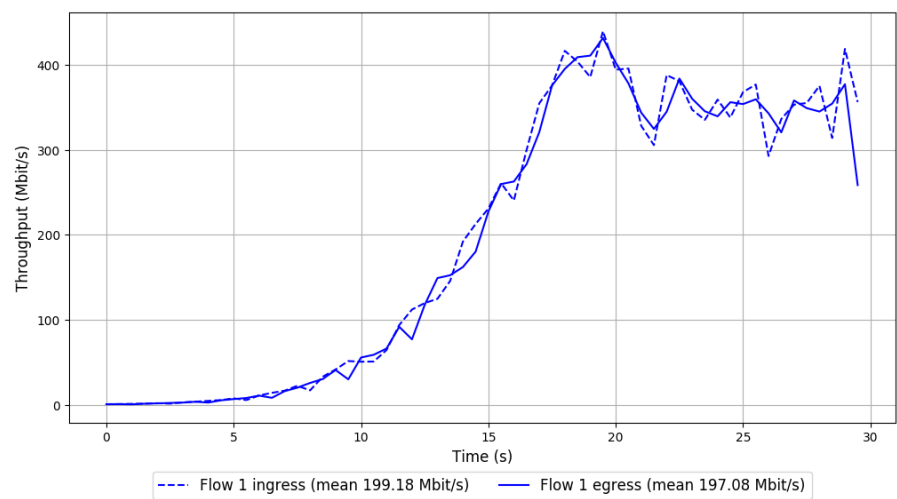
-- Flow 1:

Average throughput: 197.08 Mbit/s

95th percentile per-packet one-way delay: 179.150 ms

Loss rate: 1.96%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-09-18 10:16:10

End at: 2017-09-18 10:16:40

Below is generated by plot.py at 2017-09-18 12:47:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 143.10 Mbit/s

95th percentile per-packet one-way delay: 169.758 ms

Loss rate: 1.84%

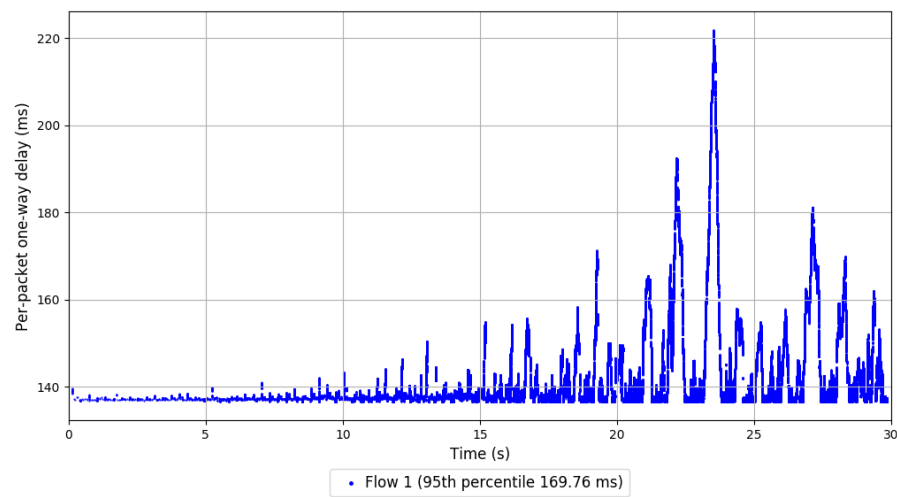
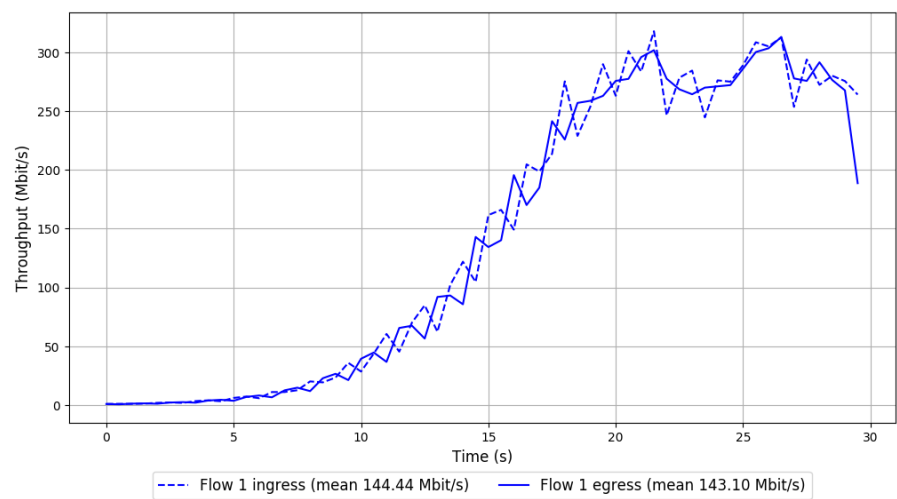
-- Flow 1:

Average throughput: 143.10 Mbit/s

95th percentile per-packet one-way delay: 169.758 ms

Loss rate: 1.84%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-09-18 08:31:40

End at: 2017-09-18 08:32:10

Below is generated by plot.py at 2017-09-18 12:47:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.33 Mbit/s

95th percentile per-packet one-way delay: 136.563 ms

Loss rate: 1.06%

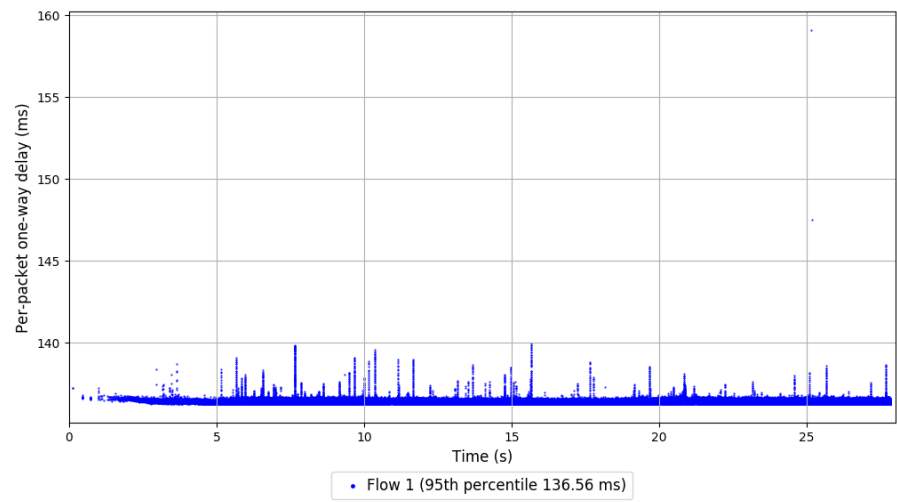
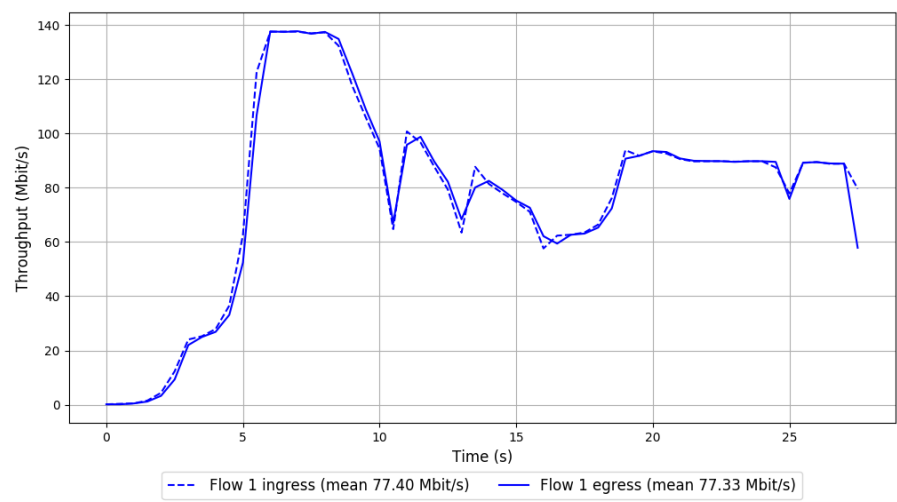
-- Flow 1:

Average throughput: 77.33 Mbit/s

95th percentile per-packet one-way delay: 136.563 ms

Loss rate: 1.06%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-09-18 08:43:52

End at: 2017-09-18 08:44:22

Below is generated by plot.py at 2017-09-18 12:47:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.54 Mbit/s

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

Loss rate: 1.05%

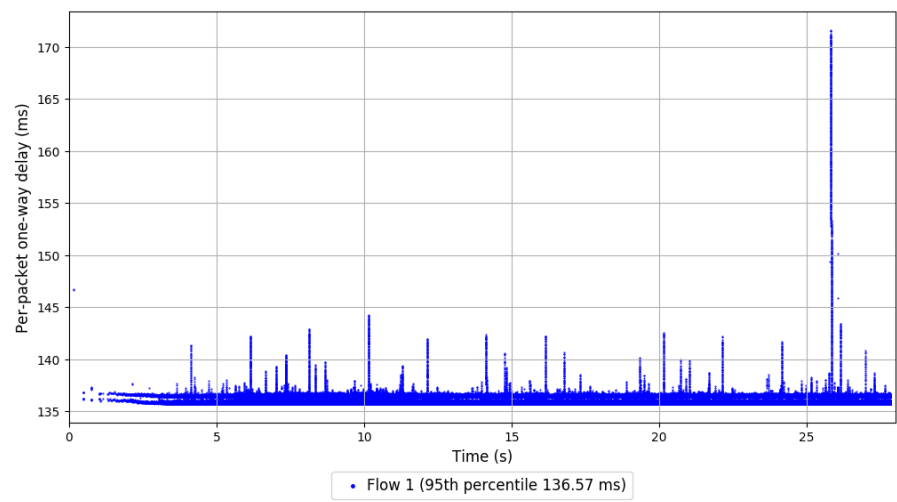
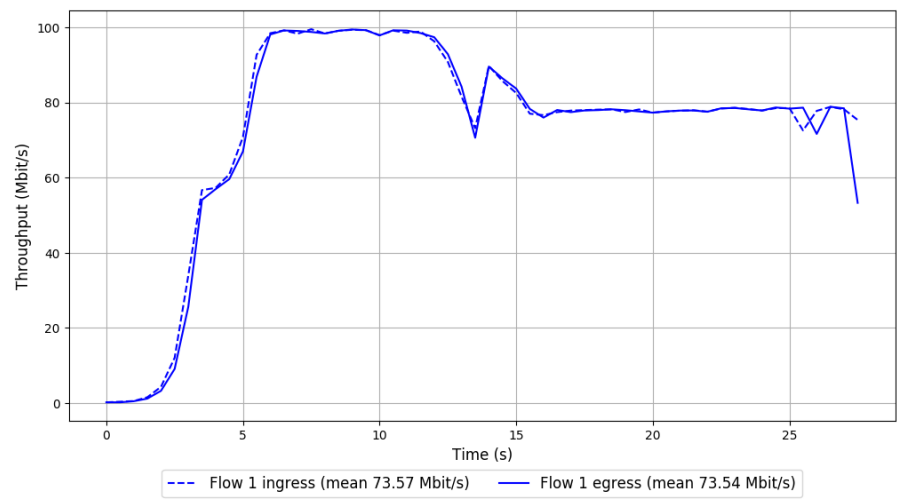
-- Flow 1:

Average throughput: 73.54 Mbit/s

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

Loss rate: 1.05%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-09-18 08:55:53

End at: 2017-09-18 08:56:23

Below is generated by plot.py at 2017-09-18 12:47:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.43 Mbit/s

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

Loss rate: 1.14%

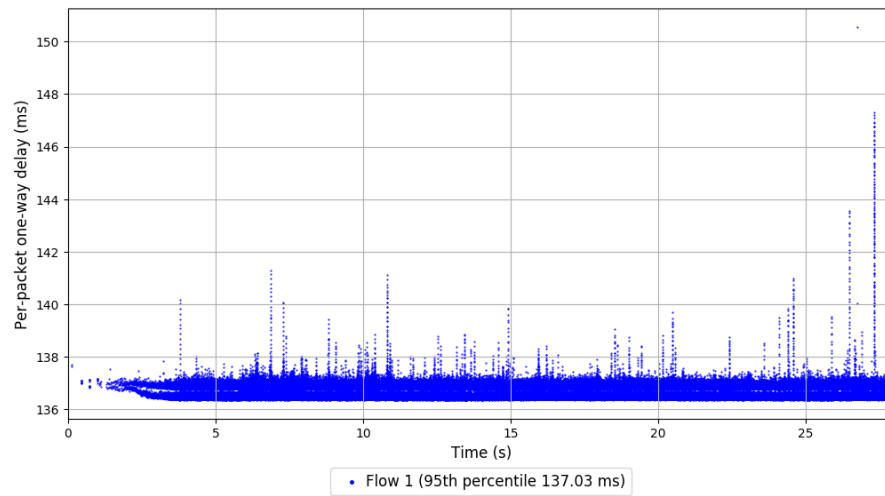
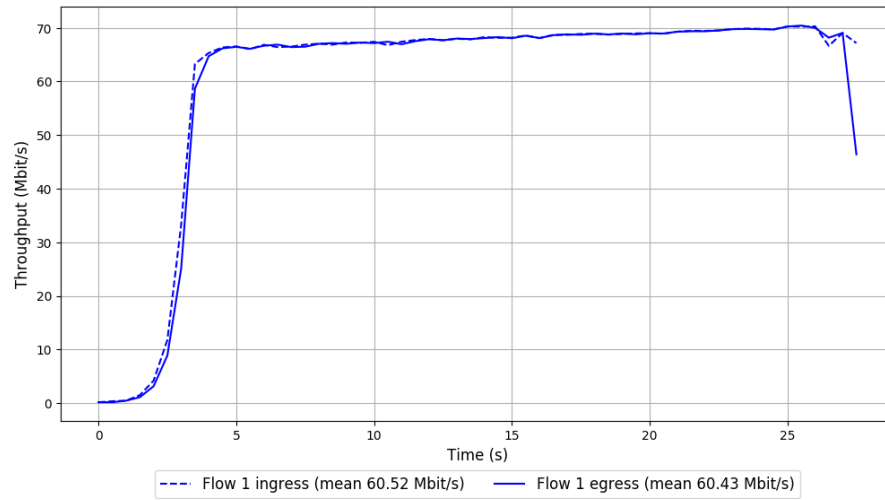
-- Flow 1:

Average throughput: 60.43 Mbit/s

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

Loss rate: 1.14%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-09-18 09:08:16

End at: 2017-09-18 09:08:46

Below is generated by plot.py at 2017-09-18 12:47:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.23 Mbit/s

95th percentile per-packet one-way delay: 136.642 ms

Loss rate: 1.04%

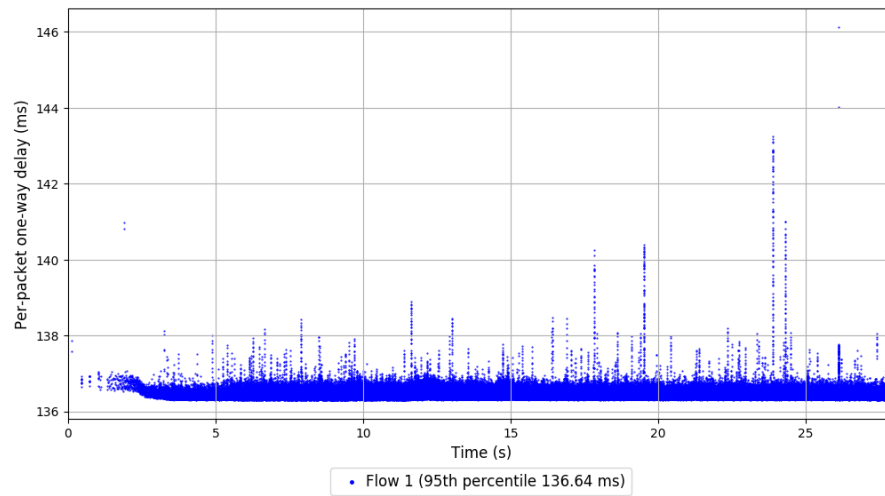
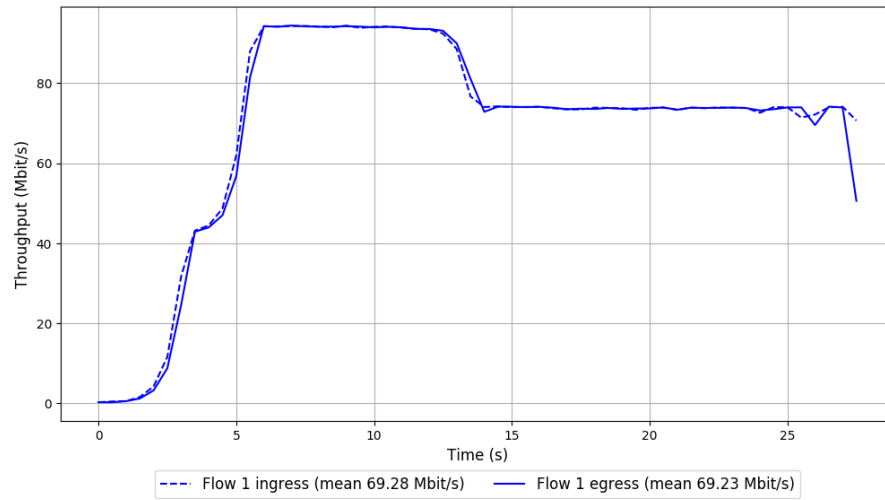
-- Flow 1:

Average throughput: 69.23 Mbit/s

95th percentile per-packet one-way delay: 136.642 ms

Loss rate: 1.04%

Run 4: Report of Copa — Data Link

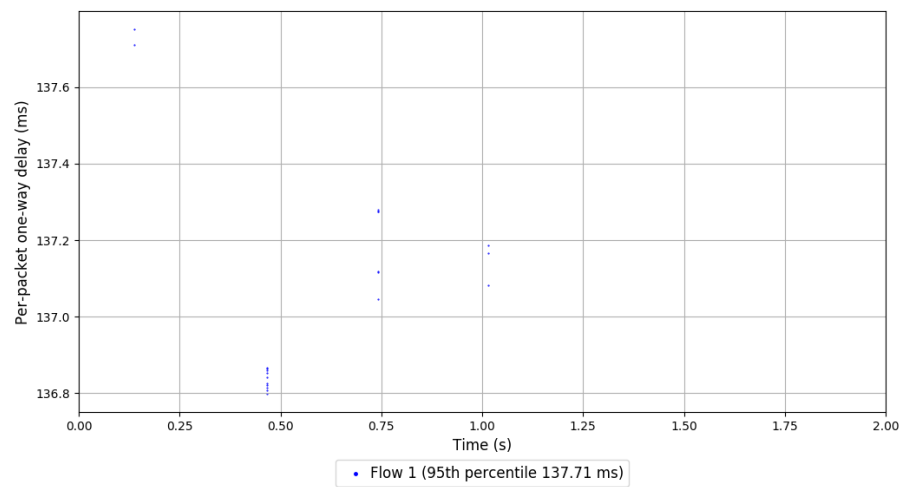
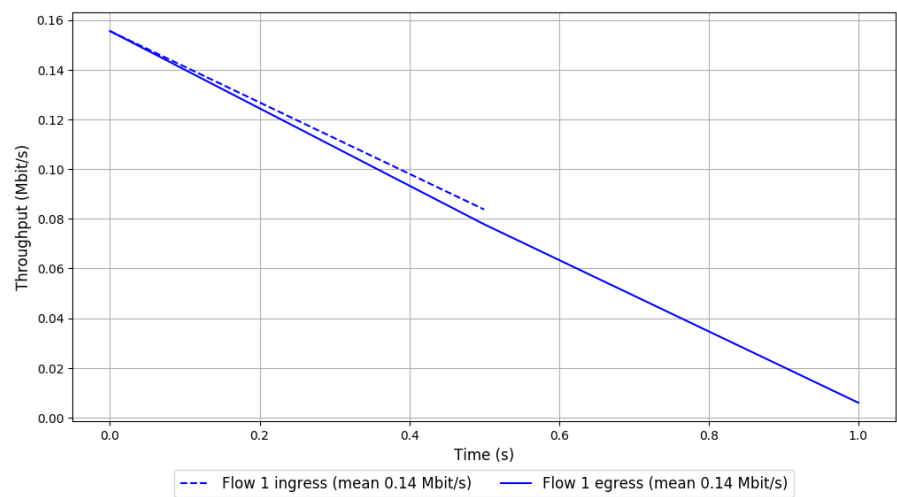


Run 5: Statistics of Copa

Start at: 2017-09-18 09:20:48

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

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-09-18 09:33:13

End at: 2017-09-18 09:33:44

Below is generated by plot.py at 2017-09-18 12:47:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.24 Mbit/s

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

Loss rate: 1.16%

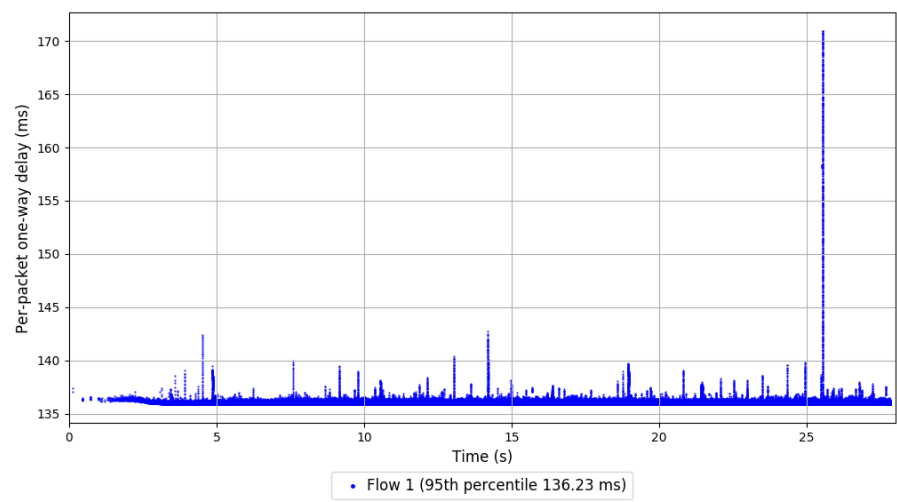
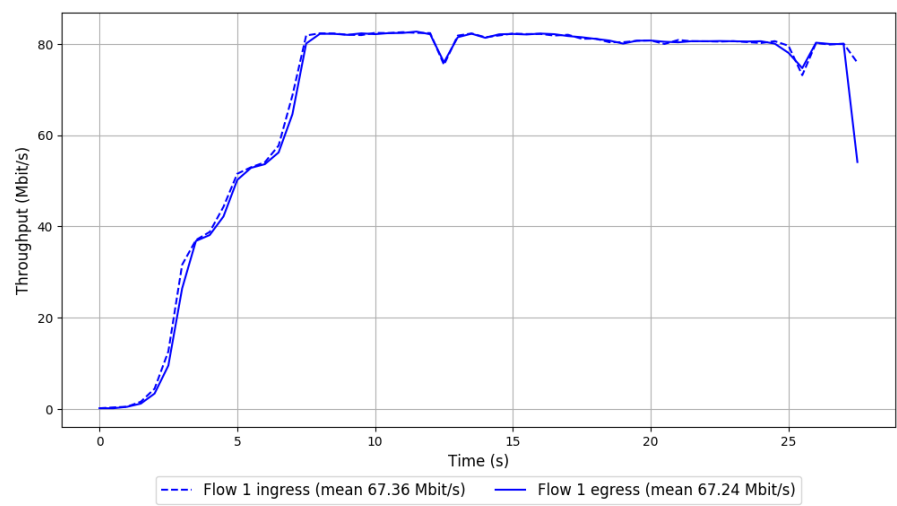
-- Flow 1:

Average throughput: 67.24 Mbit/s

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

Loss rate: 1.16%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-09-18 09:45:16

End at: 2017-09-18 09:45:46

Below is generated by plot.py at 2017-09-18 12:47:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.36 Mbit/s

95th percentile per-packet one-way delay: 136.878 ms

Loss rate: 1.05%

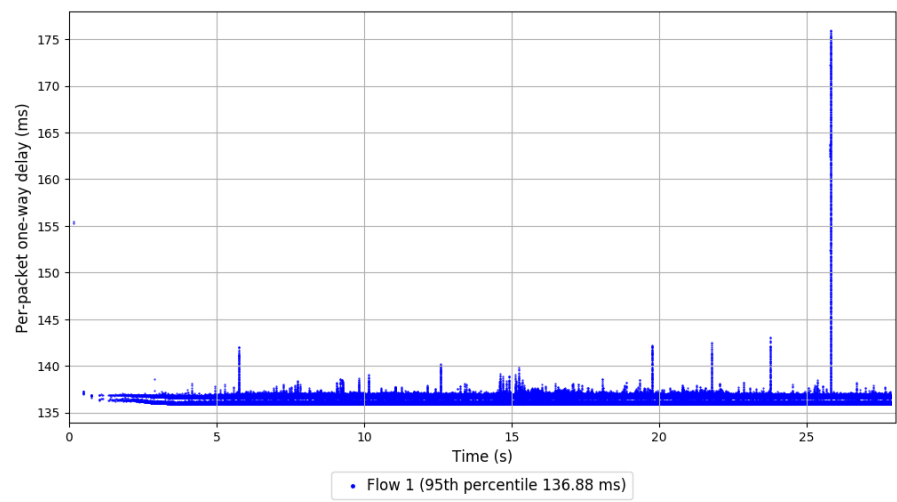
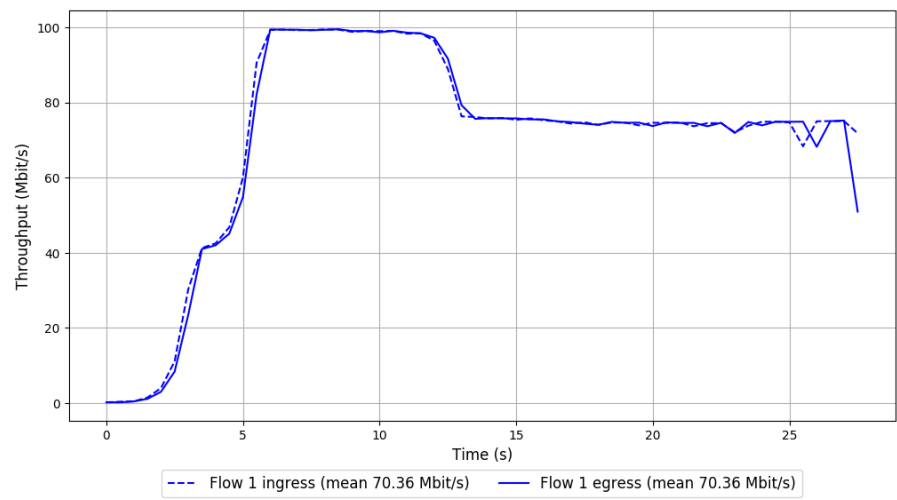
-- Flow 1:

Average throughput: 70.36 Mbit/s

95th percentile per-packet one-way delay: 136.878 ms

Loss rate: 1.05%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-09-18 09:57:32

End at: 2017-09-18 09:58:02

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.60 Mbit/s

95th percentile per-packet one-way delay: 136.172 ms

Loss rate: 1.06%

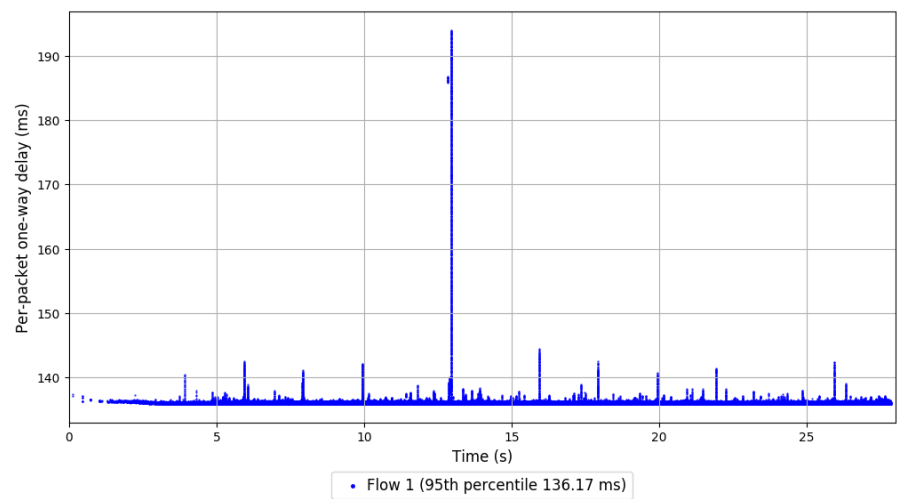
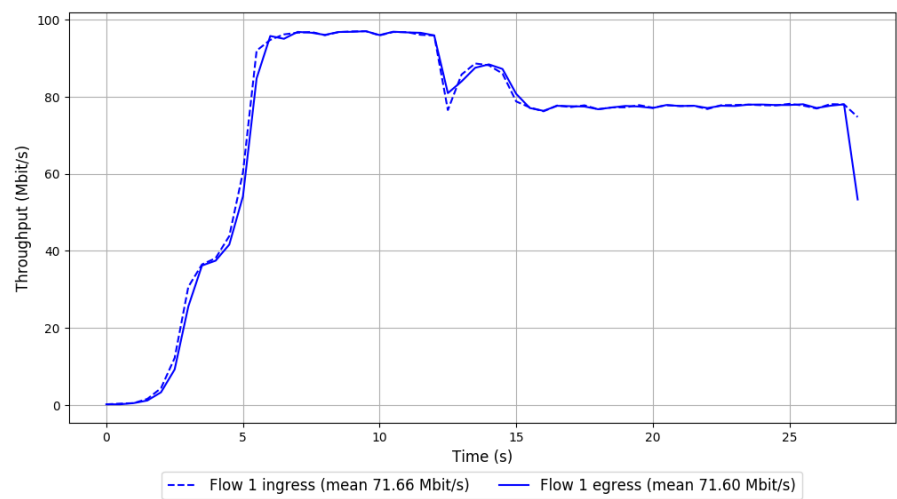
-- Flow 1:

Average throughput: 71.60 Mbit/s

95th percentile per-packet one-way delay: 136.172 ms

Loss rate: 1.06%

Run 8: Report of Copa — Data Link

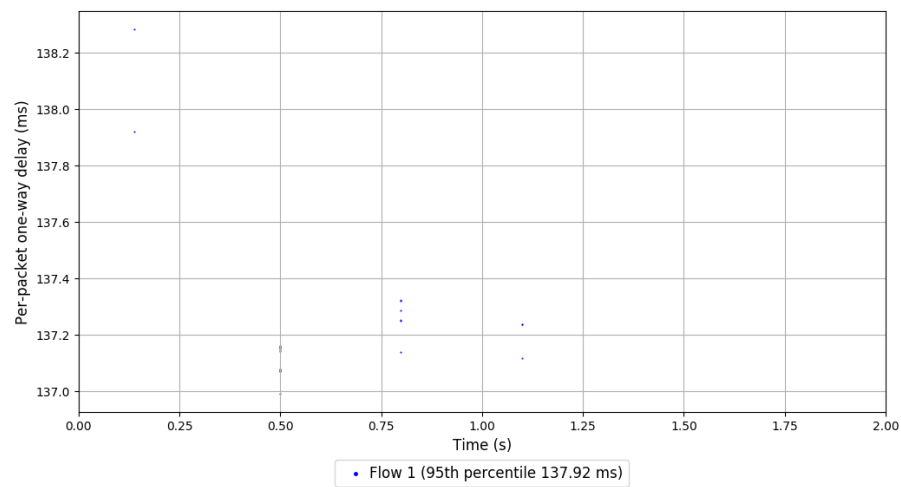
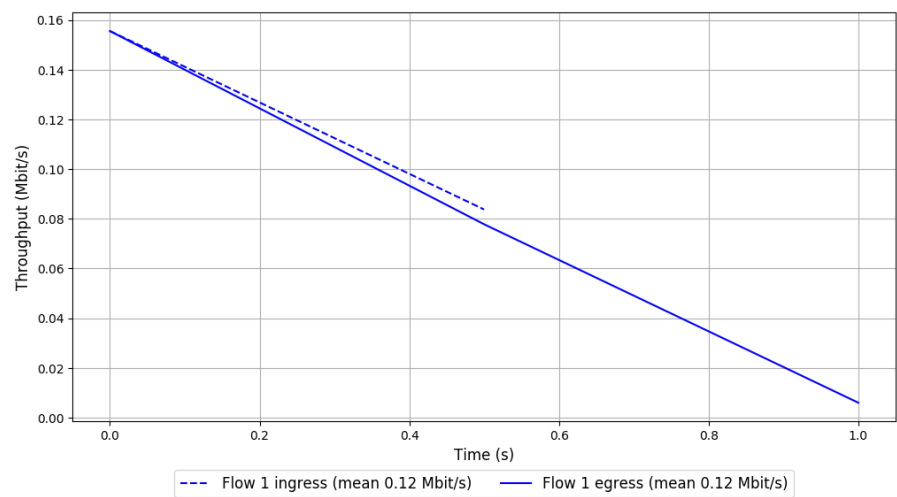


Run 9: Statistics of Copa

Start at: 2017-09-18 10:10:03

End at: 2017-09-18 10:10:33

Run 9: Report of Copa — Data Link

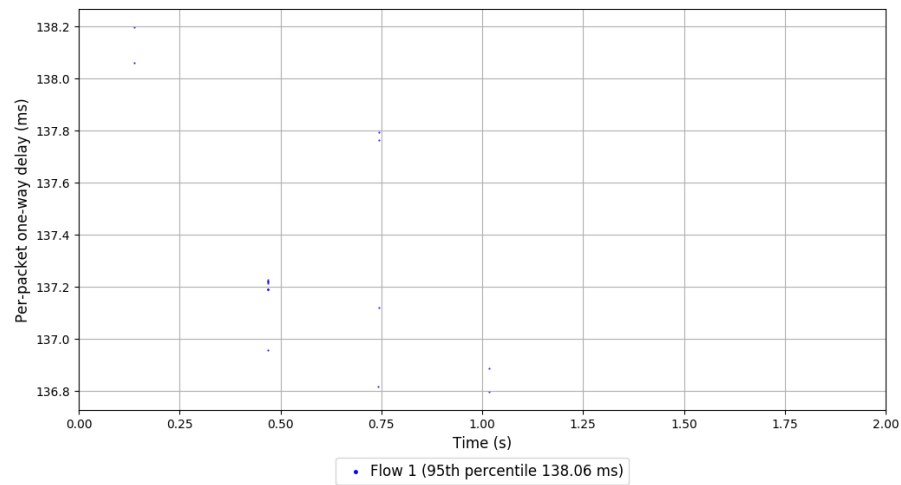
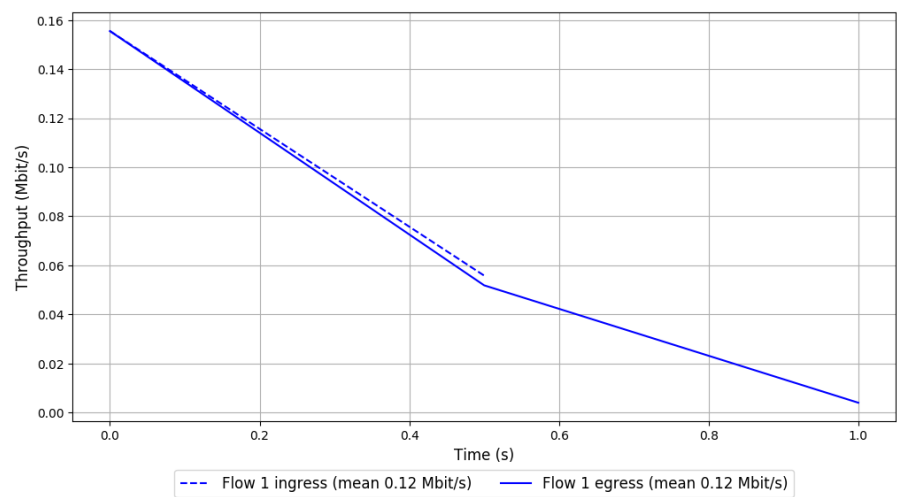


Run 10: Statistics of Copa

Start at: 2017-09-18 10:22:00

End at: 2017-09-18 10:22:30

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-09-18 08:29:08

End at: 2017-09-18 08:29:38

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.73 Mbit/s

95th percentile per-packet one-way delay: 139.729 ms

Loss rate: 0.87%

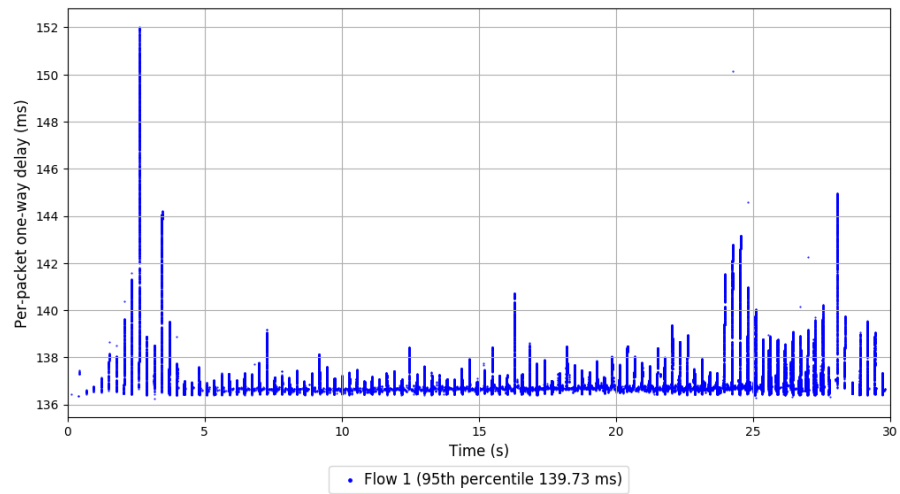
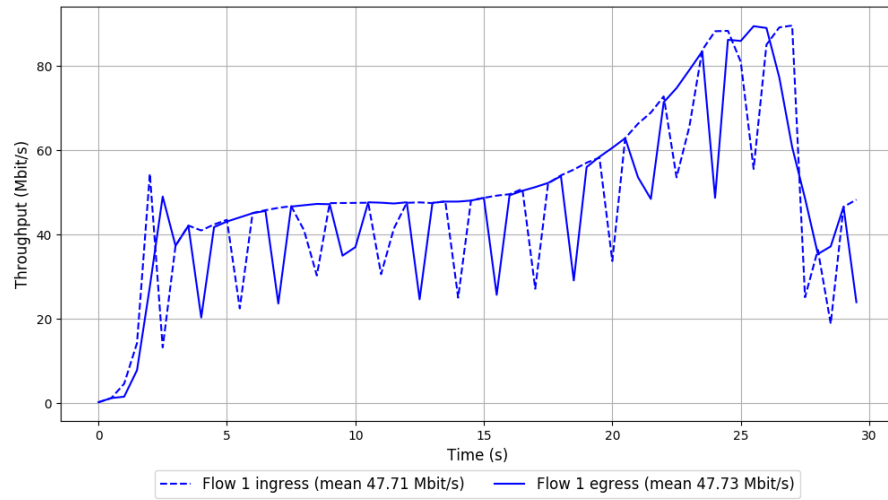
-- Flow 1:

Average throughput: 47.73 Mbit/s

95th percentile per-packet one-way delay: 139.729 ms

Loss rate: 0.87%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-09-18 08:41:18

End at: 2017-09-18 08:41:48

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.31 Mbit/s

95th percentile per-packet one-way delay: 145.854 ms

Loss rate: 1.04%

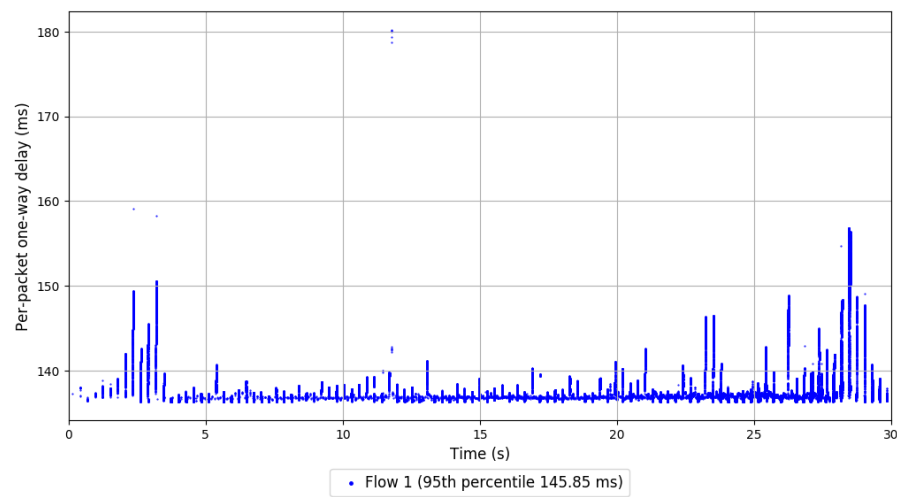
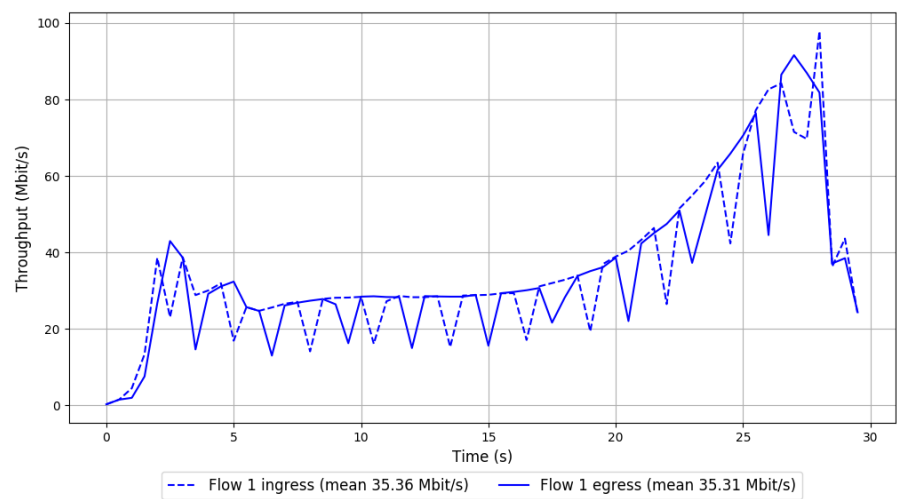
-- Flow 1:

Average throughput: 35.31 Mbit/s

95th percentile per-packet one-way delay: 145.854 ms

Loss rate: 1.04%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-09-18 08:53:20

End at: 2017-09-18 08:53:50

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 139.269 ms

Loss rate: 2.45%

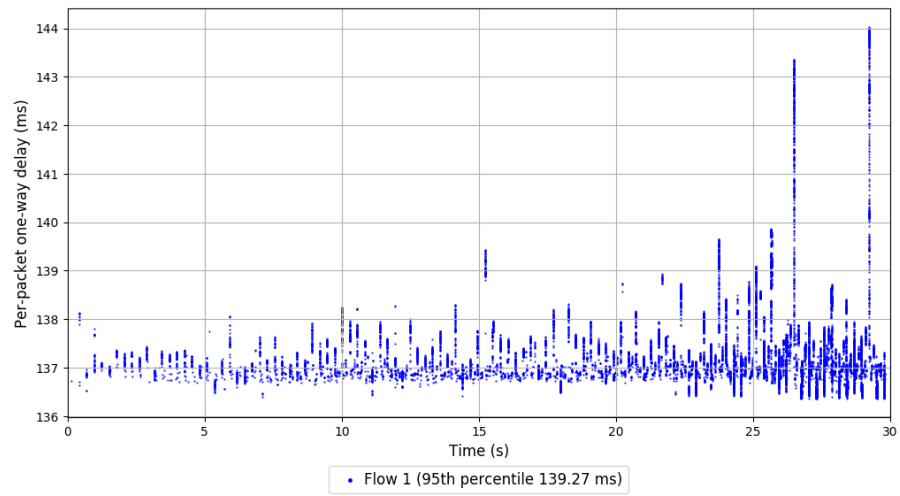
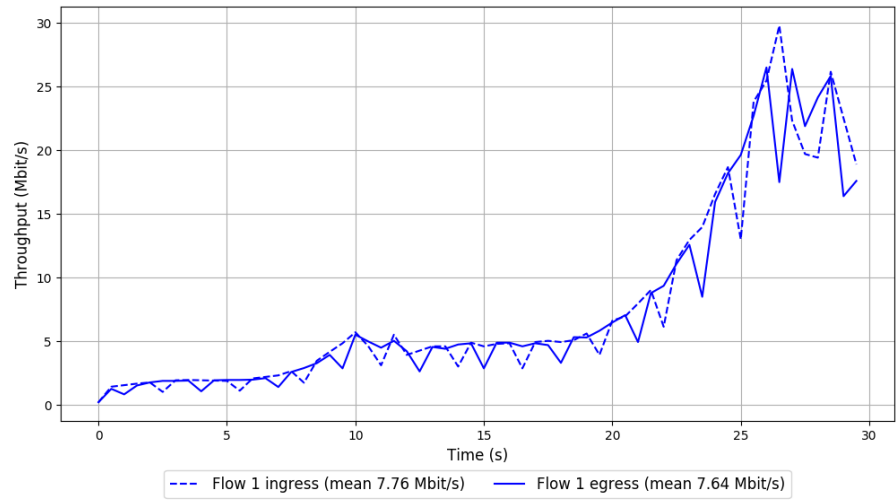
-- Flow 1:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 139.269 ms

Loss rate: 2.45%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-09-18 09:05:49

End at: 2017-09-18 09:06:19

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.07 Mbit/s

95th percentile per-packet one-way delay: 140.547 ms

Loss rate: 4.56%

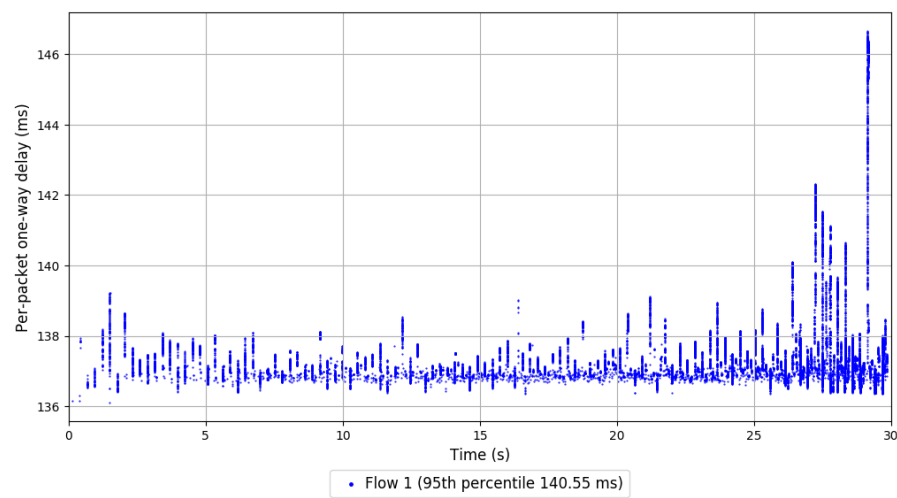
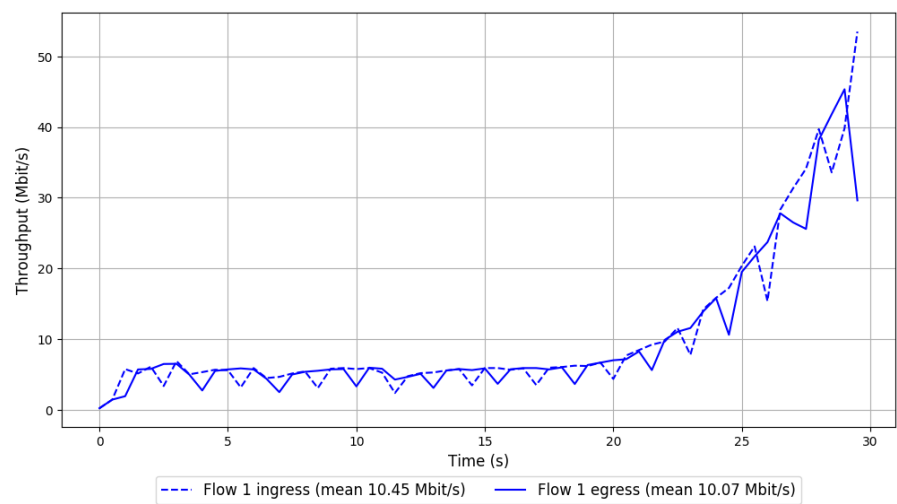
-- Flow 1:

Average throughput: 10.07 Mbit/s

95th percentile per-packet one-way delay: 140.547 ms

Loss rate: 4.56%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

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

End at: 2017-09-18 09:18:47

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.12 Mbit/s

95th percentile per-packet one-way delay: 143.628 ms

Loss rate: 1.26%

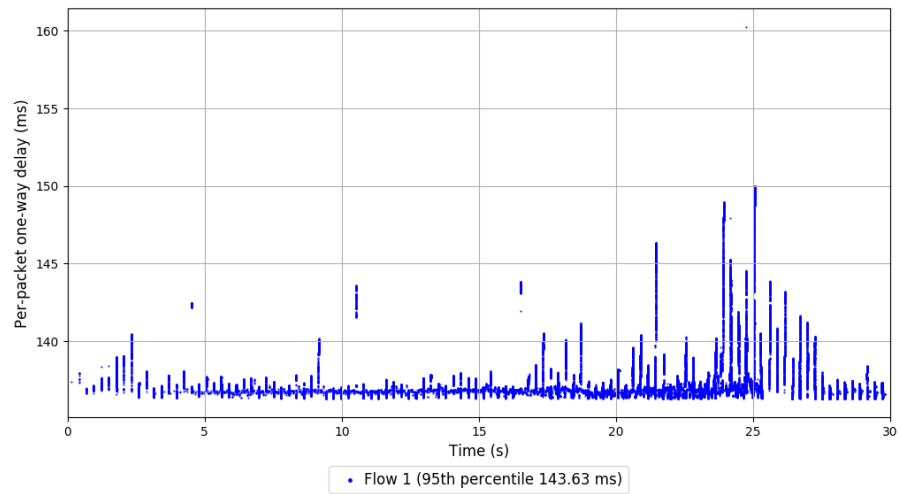
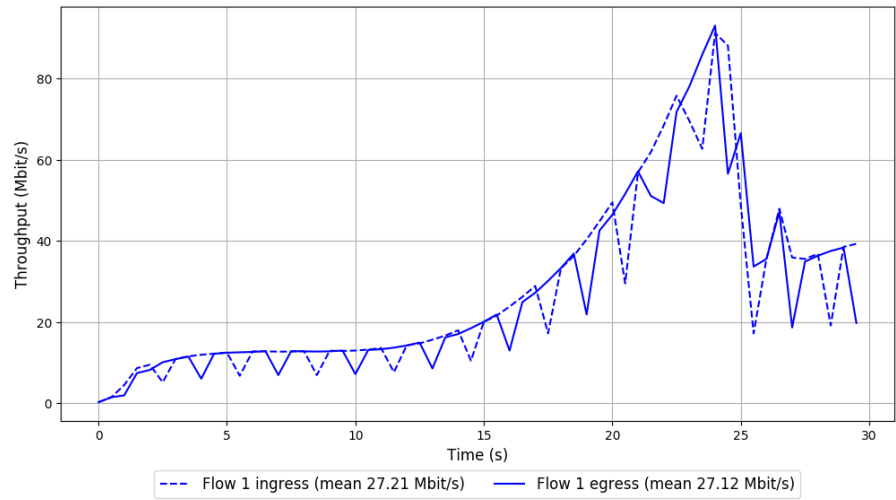
-- Flow 1:

Average throughput: 27.12 Mbit/s

95th percentile per-packet one-way delay: 143.628 ms

Loss rate: 1.26%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-09-18 09:30:41

End at: 2017-09-18 09:31:11

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.43 Mbit/s

95th percentile per-packet one-way delay: 143.918 ms

Loss rate: 0.76%

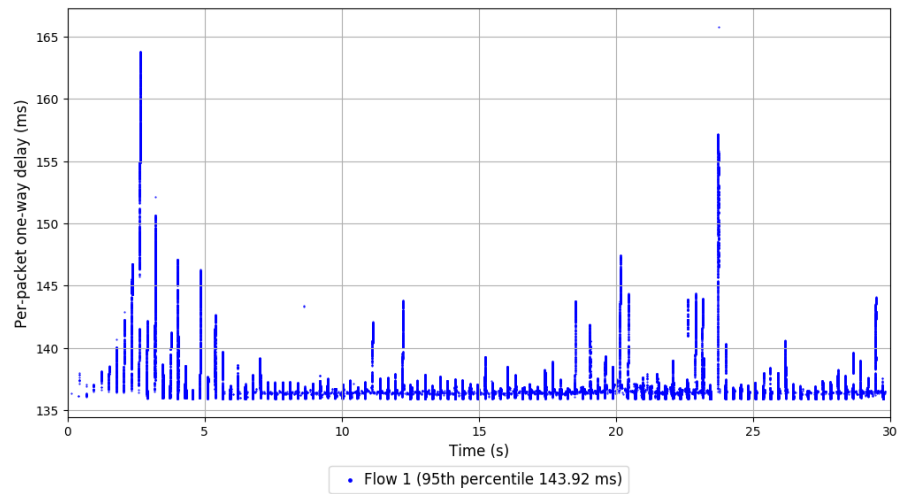
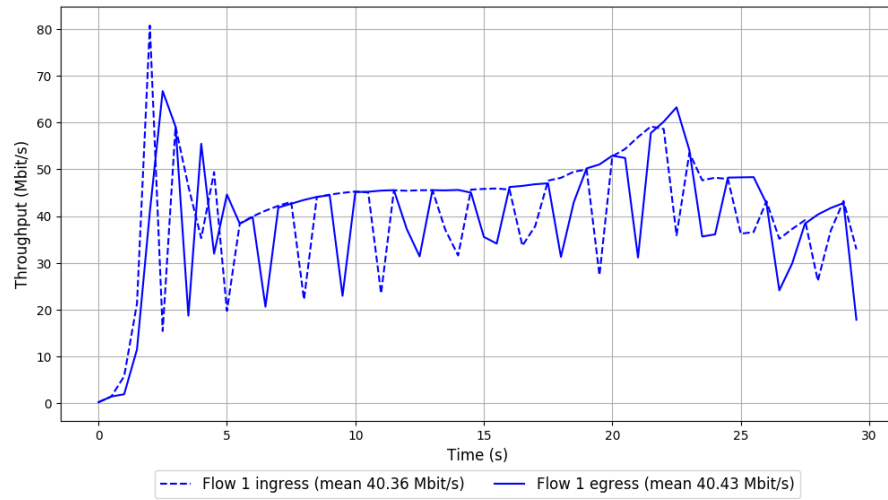
-- Flow 1:

Average throughput: 40.43 Mbit/s

95th percentile per-packet one-way delay: 143.918 ms

Loss rate: 0.76%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-09-18 09:42:41

End at: 2017-09-18 09:43:11

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.53 Mbit/s

95th percentile per-packet one-way delay: 148.284 ms

Loss rate: 1.11%

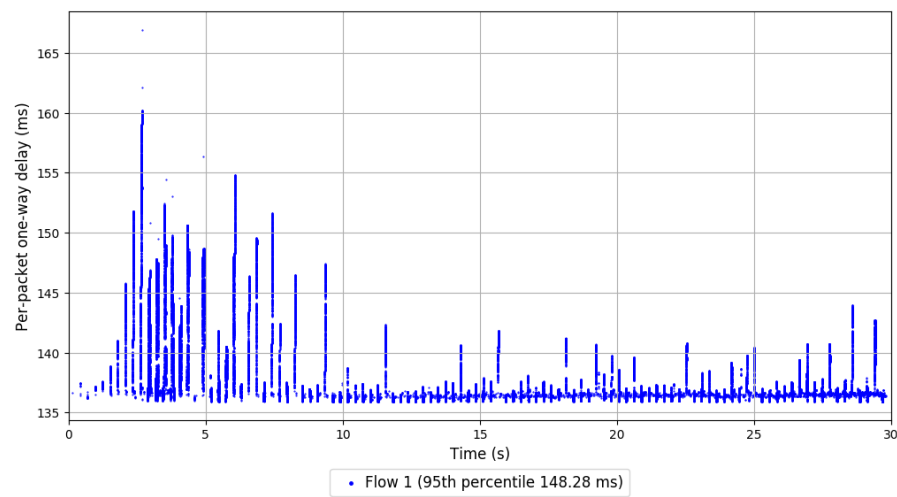
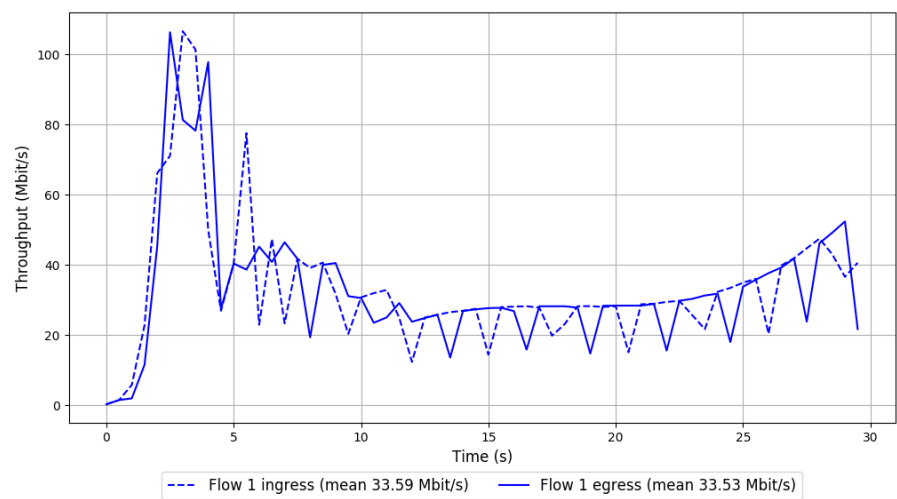
-- Flow 1:

Average throughput: 33.53 Mbit/s

95th percentile per-packet one-way delay: 148.284 ms

Loss rate: 1.11%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-09-18 09:55:03

End at: 2017-09-18 09:55:34

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.98 Mbit/s

95th percentile per-packet one-way delay: 149.839 ms

Loss rate: 0.92%

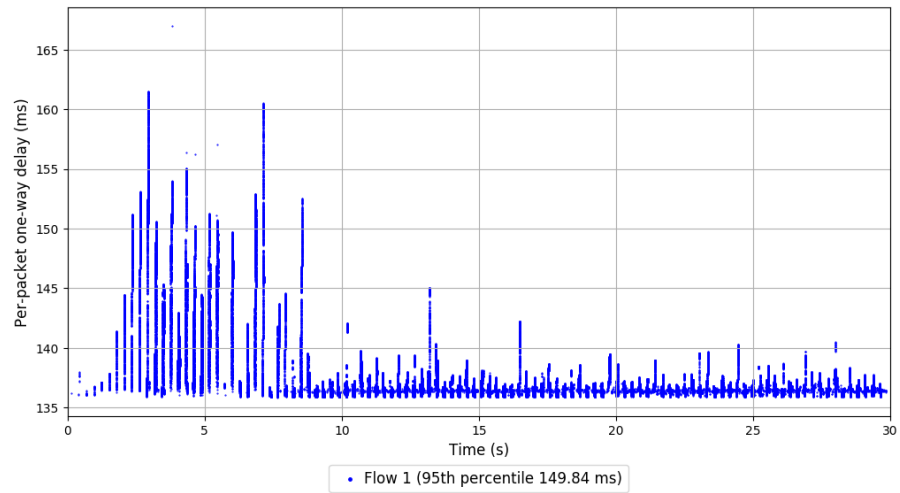
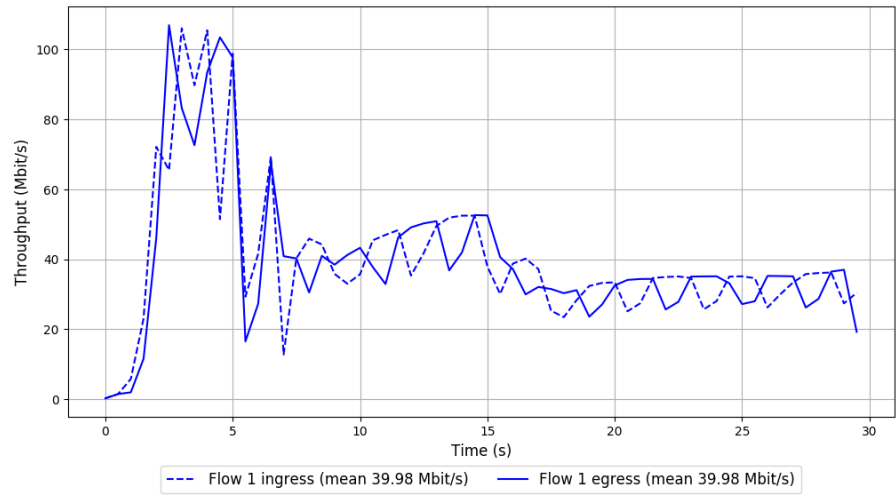
-- Flow 1:

Average throughput: 39.98 Mbit/s

95th percentile per-packet one-way delay: 149.839 ms

Loss rate: 0.92%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-09-18 10:07:26

End at: 2017-09-18 10:07:56

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.71 Mbit/s

95th percentile per-packet one-way delay: 147.169 ms

Loss rate: 0.69%

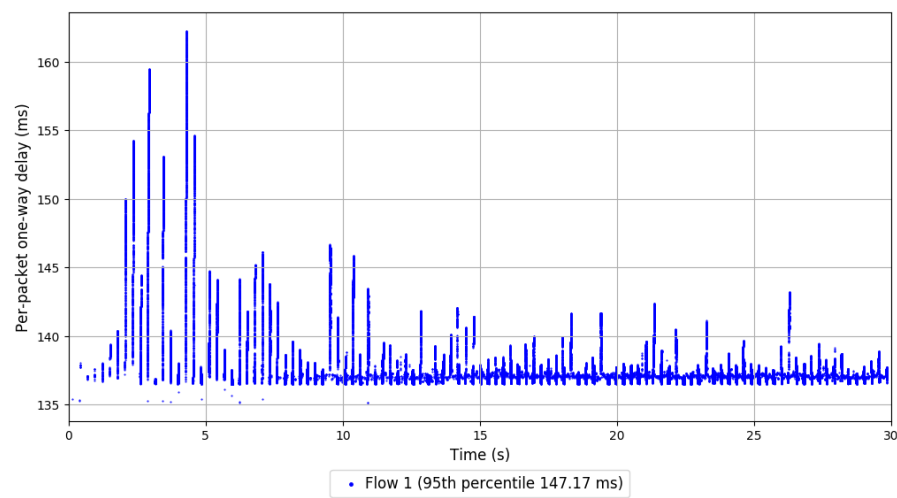
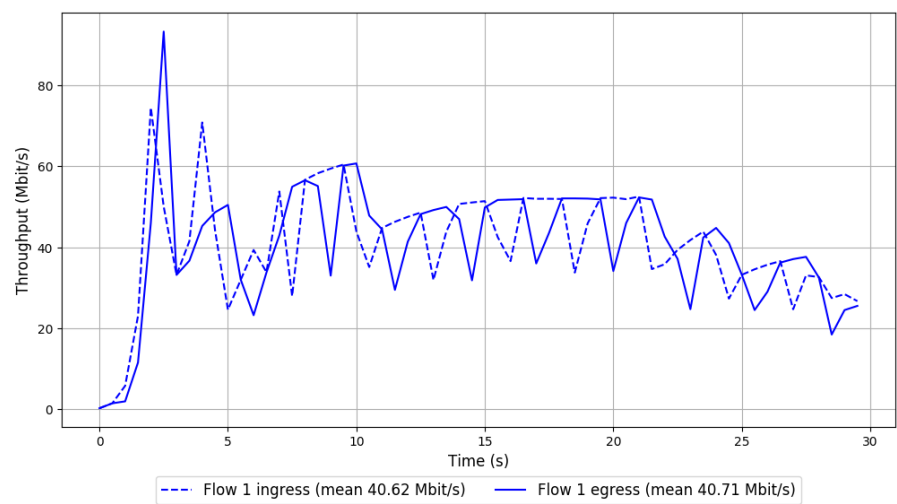
-- Flow 1:

Average throughput: 40.71 Mbit/s

95th percentile per-packet one-way delay: 147.169 ms

Loss rate: 0.69%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-09-18 10:19:31

End at: 2017-09-18 10:20:01

Below is generated by plot.py at 2017-09-18 12:48:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.73 Mbit/s

95th percentile per-packet one-way delay: 140.045 ms

Loss rate: 2.13%

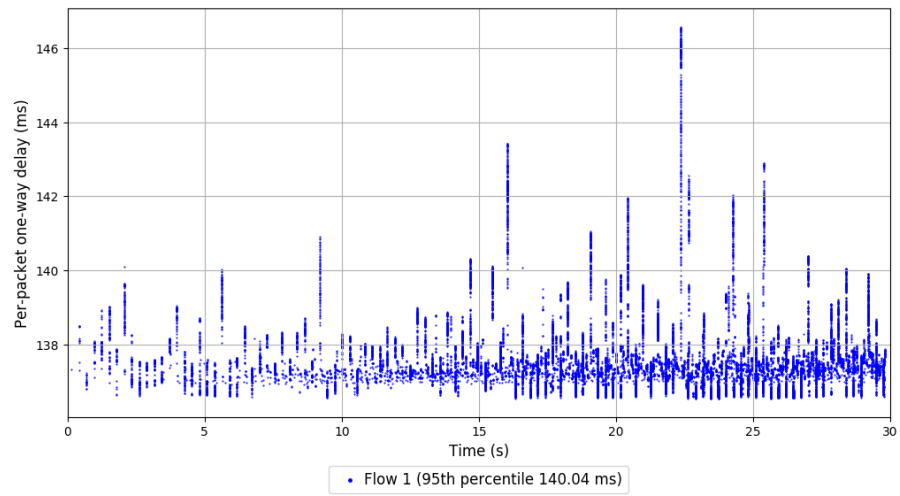
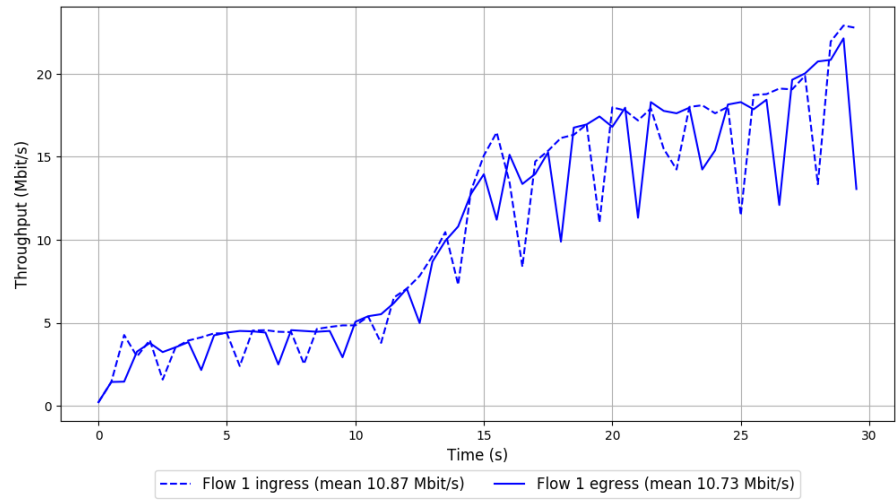
-- Flow 1:

Average throughput: 10.73 Mbit/s

95th percentile per-packet one-way delay: 140.045 ms

Loss rate: 2.13%

Run 10: Report of TCP Cubic — Data Link

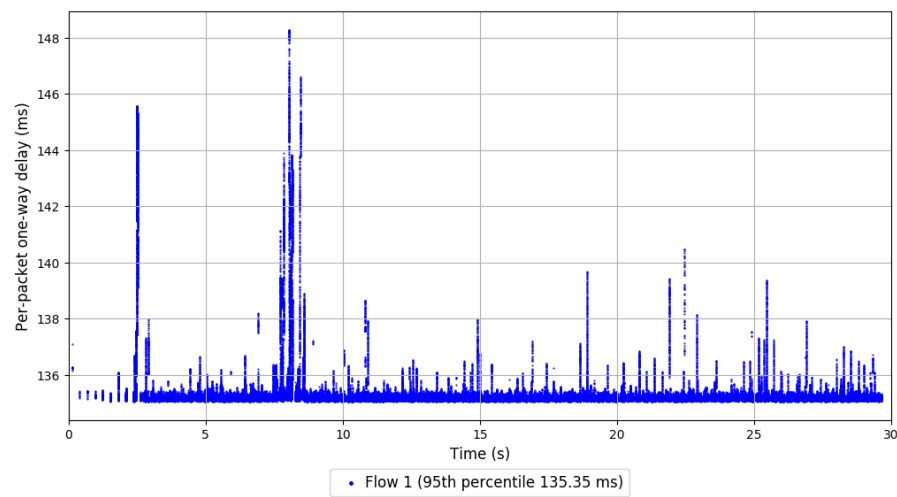
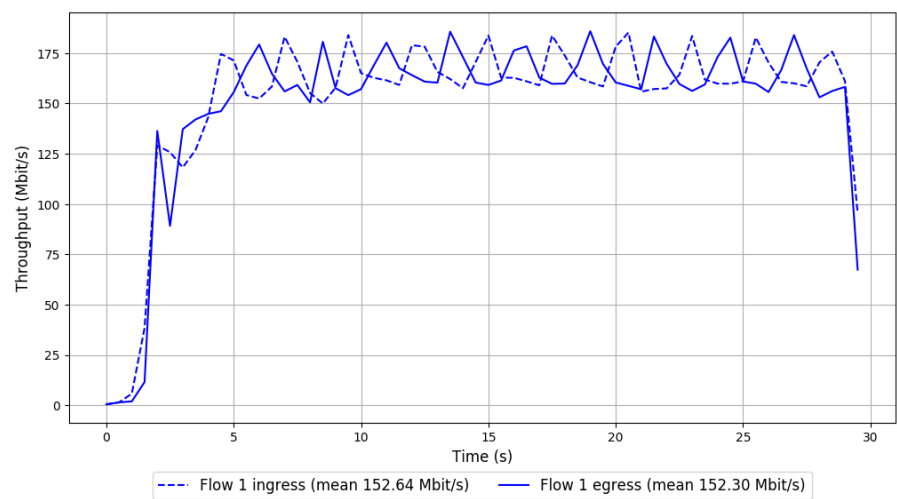


```
Run 1: Statistics of Indigo

Start at: 2017-09-18 08:23:31
End at: 2017-09-18 08:24:01

# Below is generated by plot.py at 2017-09-18 12:49:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.30 Mbit/s
95th percentile per-packet one-way delay: 135.355 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 152.30 Mbit/s
95th percentile per-packet one-way delay: 135.355 ms
Loss rate: 1.14%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-09-18 08:35:31

End at: 2017-09-18 08:36:01

Below is generated by plot.py at 2017-09-18 12:50:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.00 Mbit/s

95th percentile per-packet one-way delay: 136.604 ms

Loss rate: 1.00%

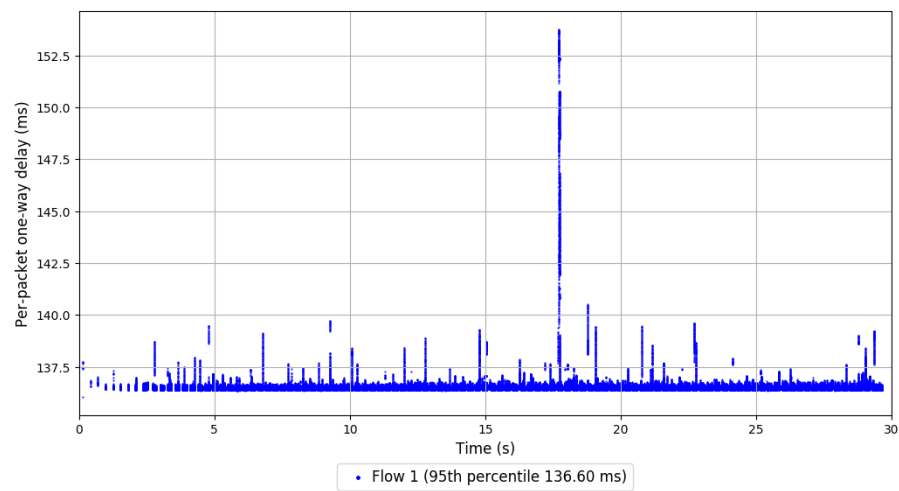
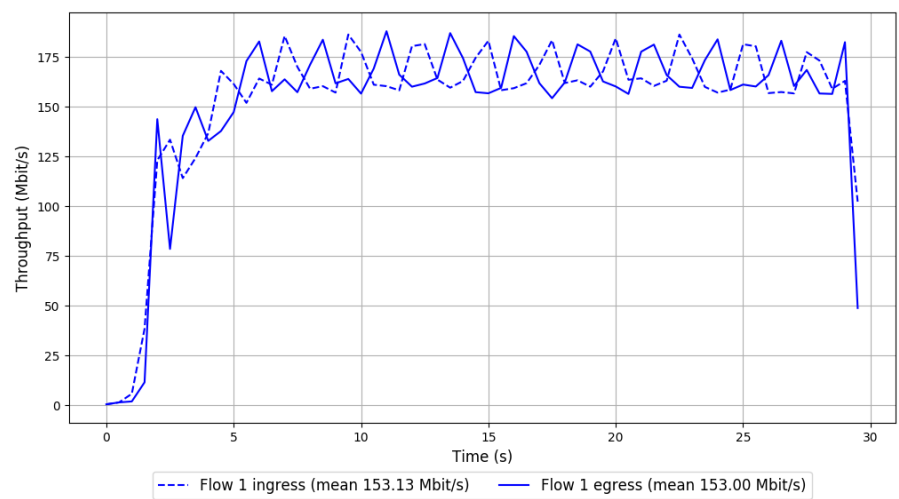
-- Flow 1:

Average throughput: 153.00 Mbit/s

95th percentile per-packet one-way delay: 136.604 ms

Loss rate: 1.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-09-18 08:47:42

End at: 2017-09-18 08:48:12

Below is generated by plot.py at 2017-09-18 12:50:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.97 Mbit/s

95th percentile per-packet one-way delay: 137.387 ms

Loss rate: 1.01%

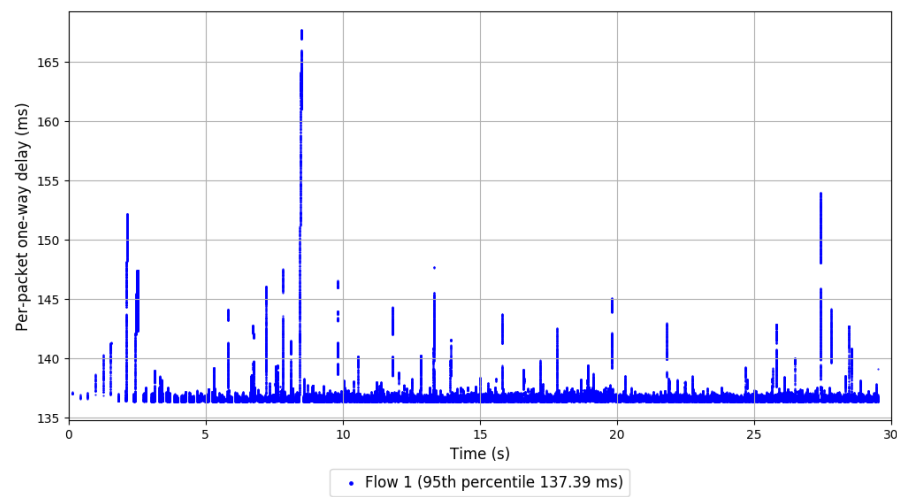
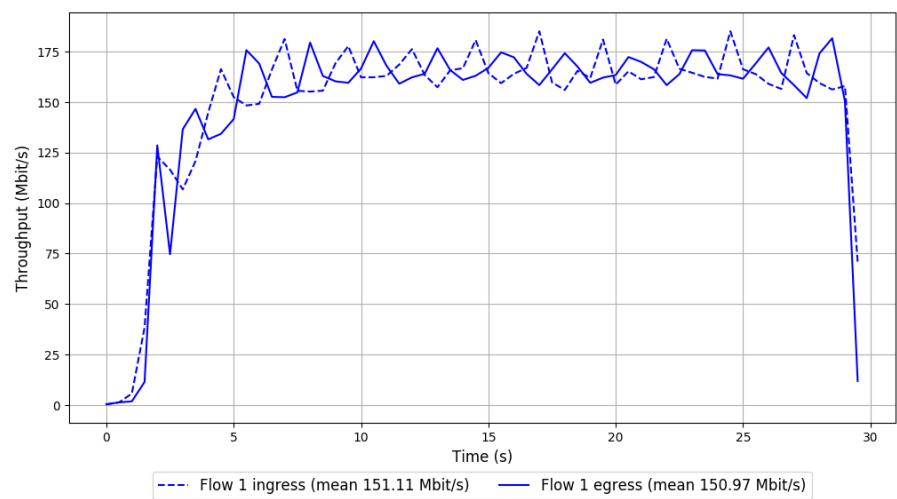
-- Flow 1:

Average throughput: 150.97 Mbit/s

95th percentile per-packet one-way delay: 137.387 ms

Loss rate: 1.01%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-09-18 08:59:45

End at: 2017-09-18 09:00:15

Below is generated by plot.py at 2017-09-18 12:50:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.23 Mbit/s

95th percentile per-packet one-way delay: 137.440 ms

Loss rate: 1.01%

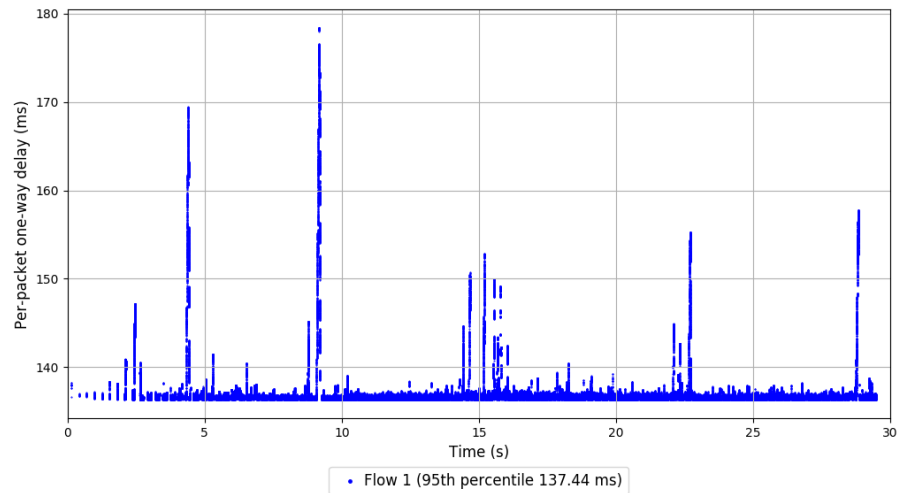
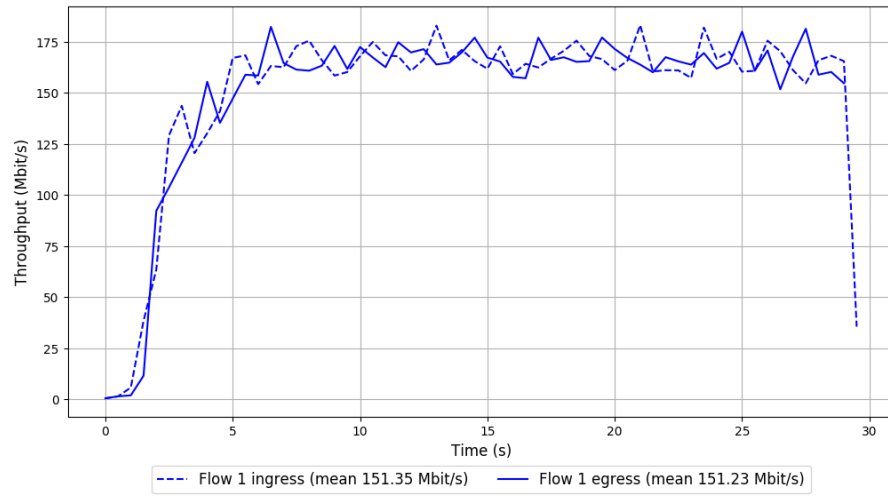
-- Flow 1:

Average throughput: 151.23 Mbit/s

95th percentile per-packet one-way delay: 137.440 ms

Loss rate: 1.01%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-09-18 09:12:05

End at: 2017-09-18 09:12:35

Below is generated by plot.py at 2017-09-18 12:50:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.17 Mbit/s

95th percentile per-packet one-way delay: 136.912 ms

Loss rate: 1.02%

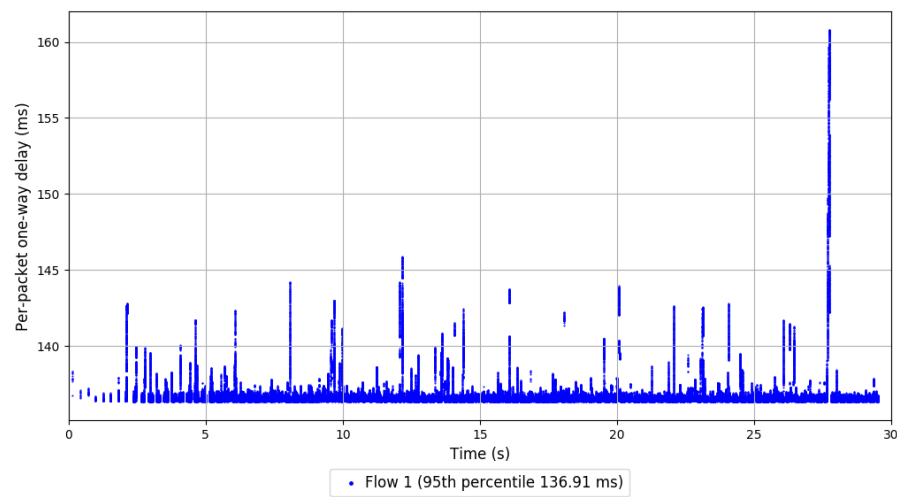
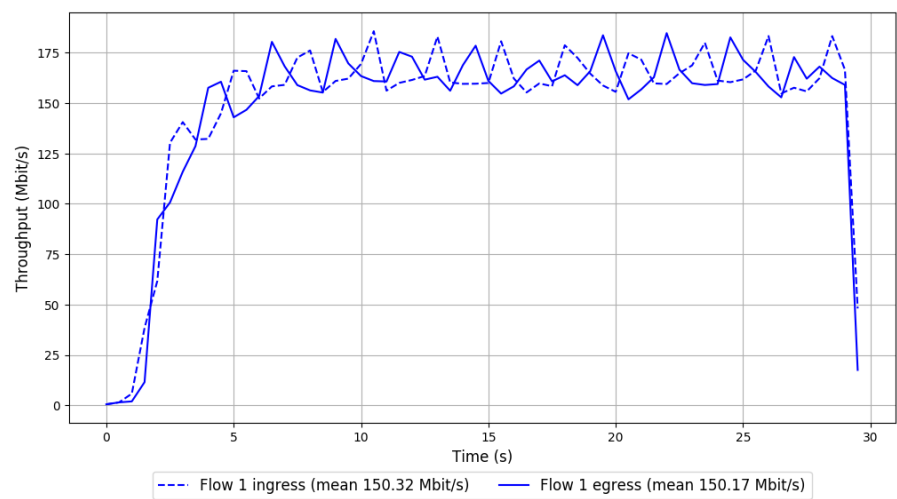
-- Flow 1:

Average throughput: 150.17 Mbit/s

95th percentile per-packet one-way delay: 136.912 ms

Loss rate: 1.02%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-09-18 09:24:29

End at: 2017-09-18 09:24:59

Below is generated by plot.py at 2017-09-18 12:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.02 Mbit/s

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

Loss rate: 1.03%

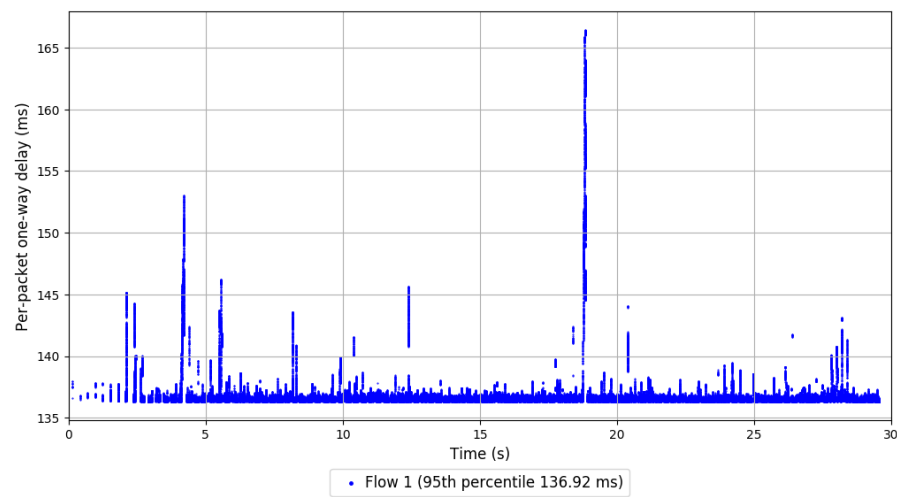
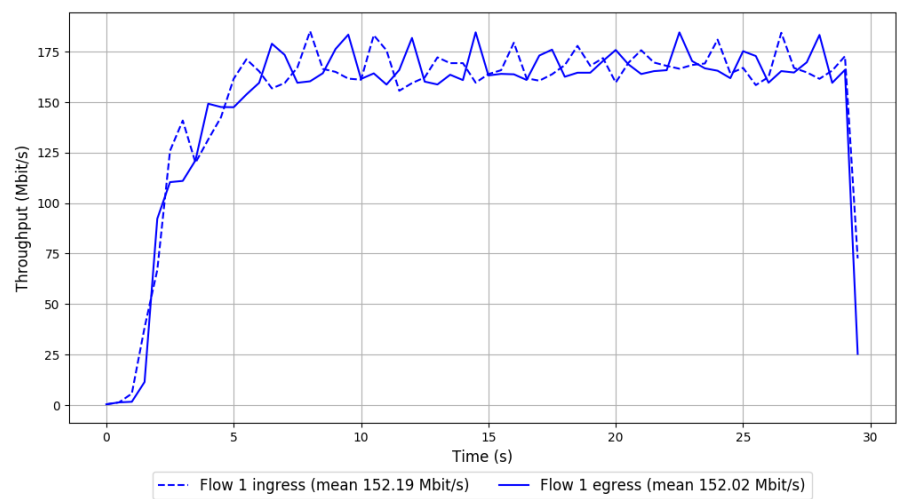
-- Flow 1:

Average throughput: 152.02 Mbit/s

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

Loss rate: 1.03%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-09-18 09:37:03

End at: 2017-09-18 09:37:33

Below is generated by plot.py at 2017-09-18 12:50:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.78 Mbit/s

95th percentile per-packet one-way delay: 136.594 ms

Loss rate: 1.00%

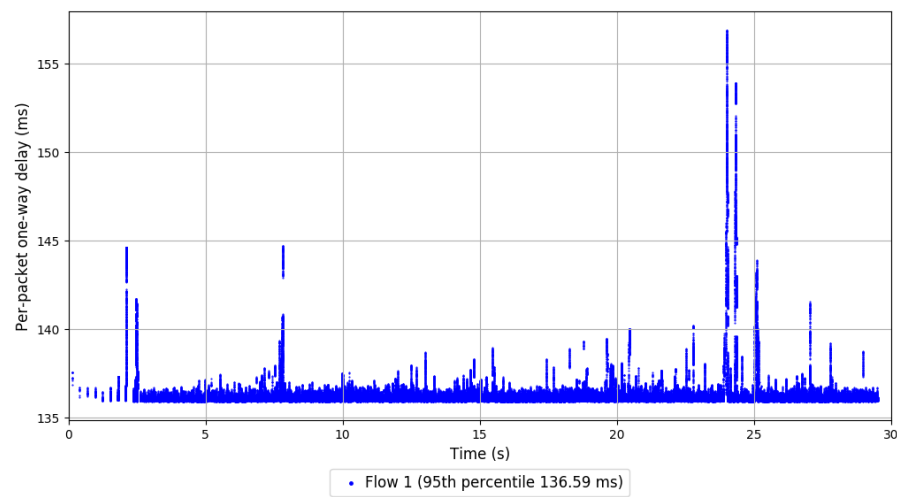
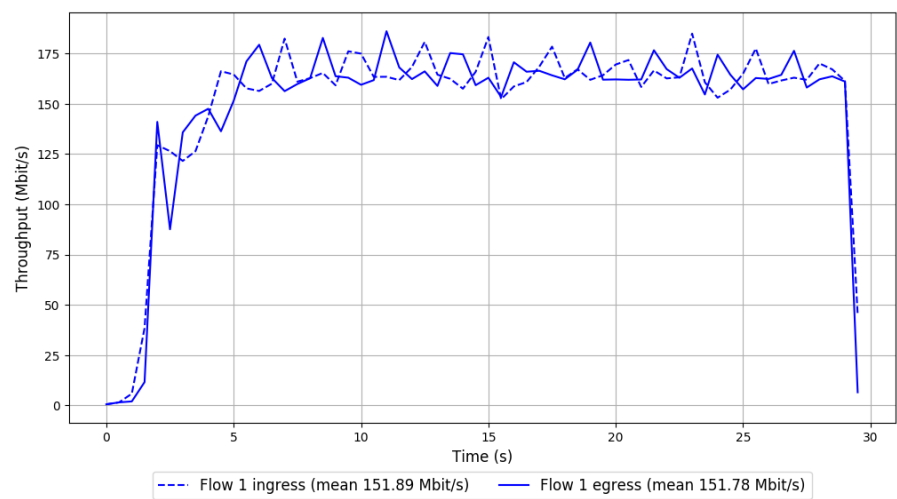
-- Flow 1:

Average throughput: 151.78 Mbit/s

95th percentile per-packet one-way delay: 136.594 ms

Loss rate: 1.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-09-18 09:49:06

End at: 2017-09-18 09:49:36

Below is generated by plot.py at 2017-09-18 12:51:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.72 Mbit/s

95th percentile per-packet one-way delay: 136.489 ms

Loss rate: 1.01%

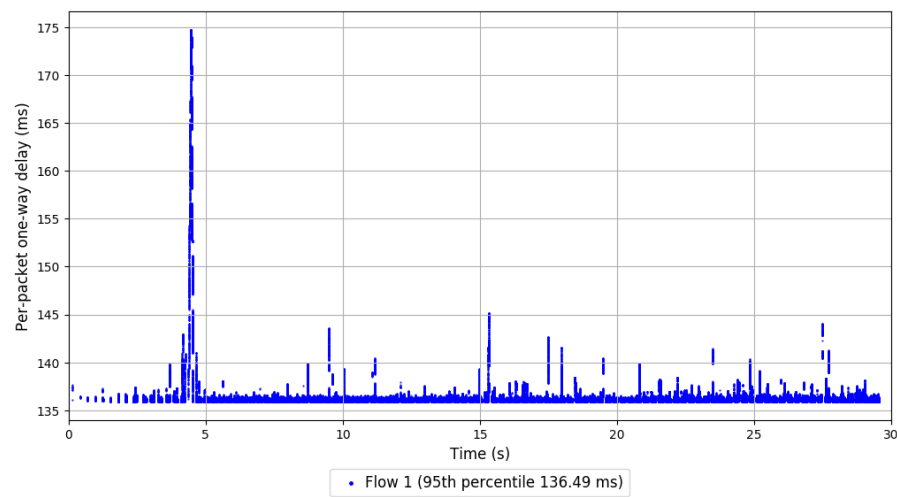
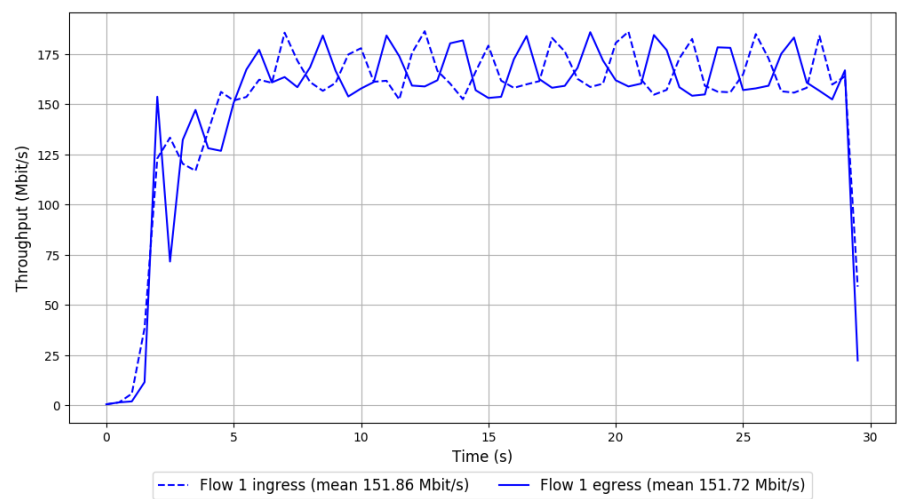
-- Flow 1:

Average throughput: 151.72 Mbit/s

95th percentile per-packet one-way delay: 136.489 ms

Loss rate: 1.01%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-09-18 10:01:22

End at: 2017-09-18 10:01:52

Below is generated by plot.py at 2017-09-18 12:52:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.62 Mbit/s

95th percentile per-packet one-way delay: 137.542 ms

Loss rate: 1.04%

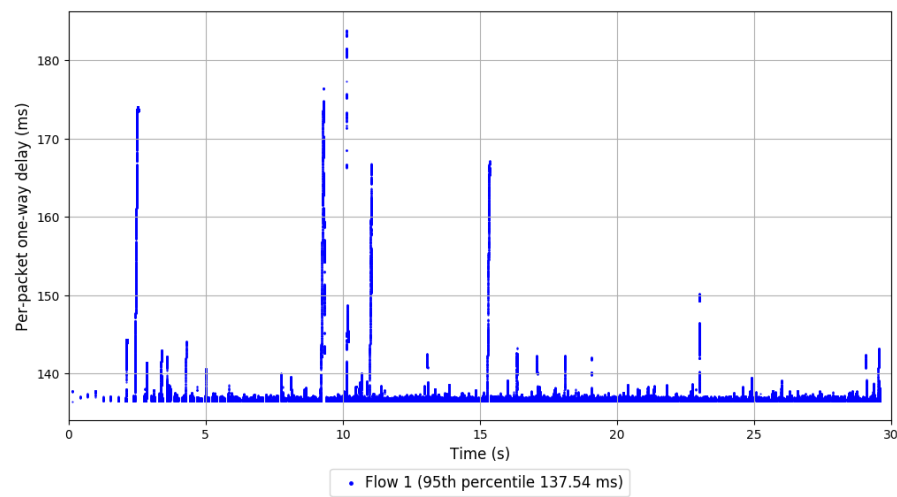
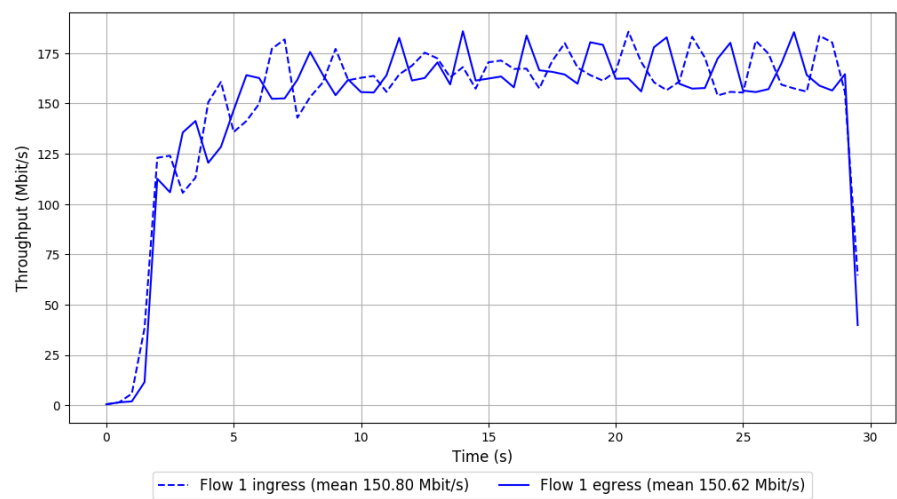
-- Flow 1:

Average throughput: 150.62 Mbit/s

95th percentile per-packet one-way delay: 137.542 ms

Loss rate: 1.04%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-09-18 10:13:44

End at: 2017-09-18 10:14:14

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.81 Mbit/s

95th percentile per-packet one-way delay: 137.443 ms

Loss rate: 1.02%

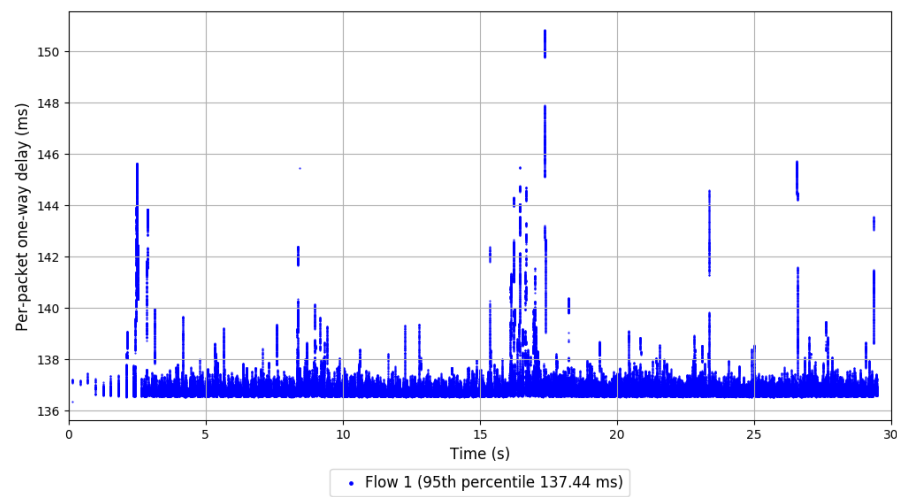
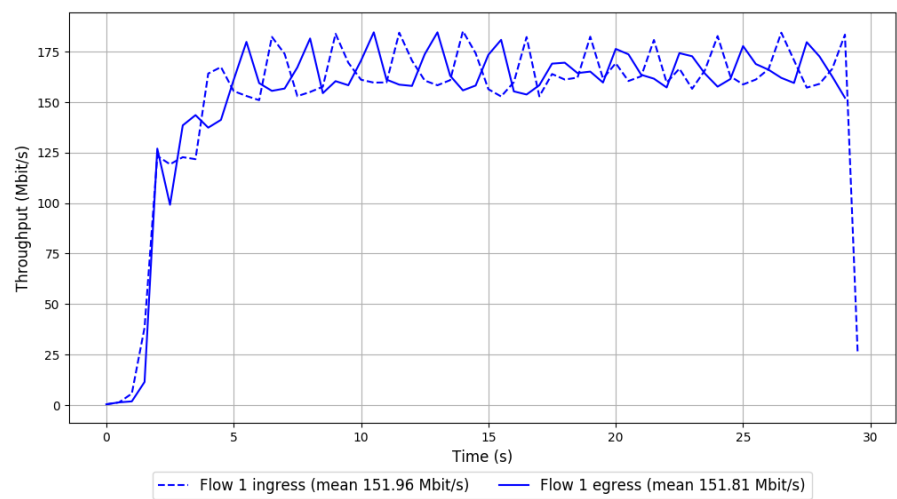
-- Flow 1:

Average throughput: 151.81 Mbit/s

95th percentile per-packet one-way delay: 137.443 ms

Loss rate: 1.02%

Run 10: Report of Indigo — Data Link

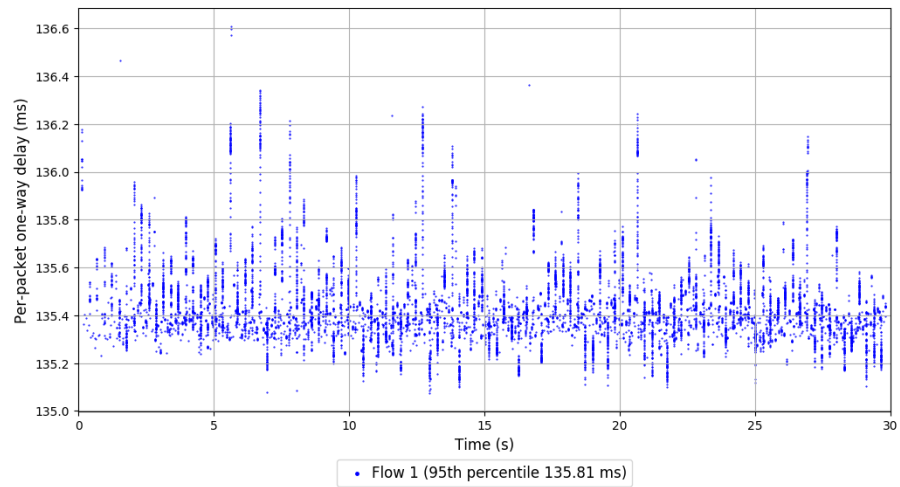
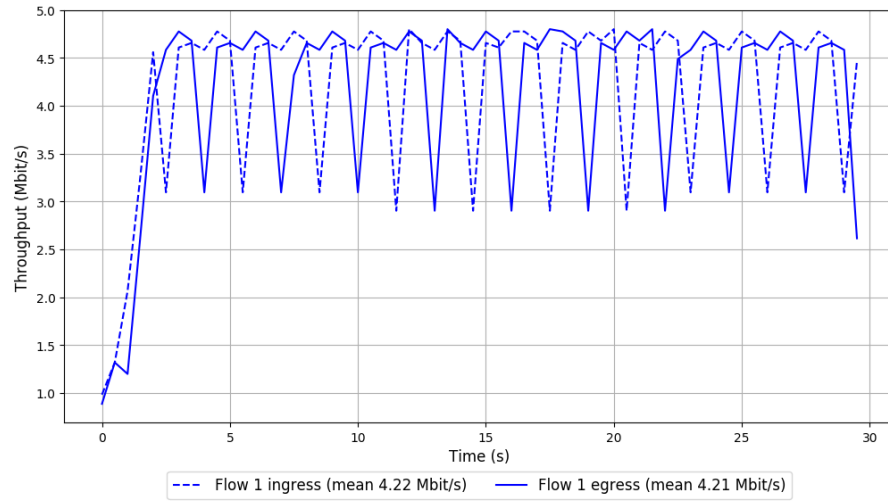


```
Run 1: Statistics of KohoCC

Start at: 2017-09-18 08:27:38
End at: 2017-09-18 08:28:08

# Below is generated by plot.py at 2017-09-18 12:52:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 135.805 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 135.805 ms
Loss rate: 1.13%
```

Run 1: Report of KohoCC — Data Link



Run 2: Statistics of KohoCC

Start at: 2017-09-18 08:39:49

End at: 2017-09-18 08:40:19

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 138.007 ms

Loss rate: 1.33%

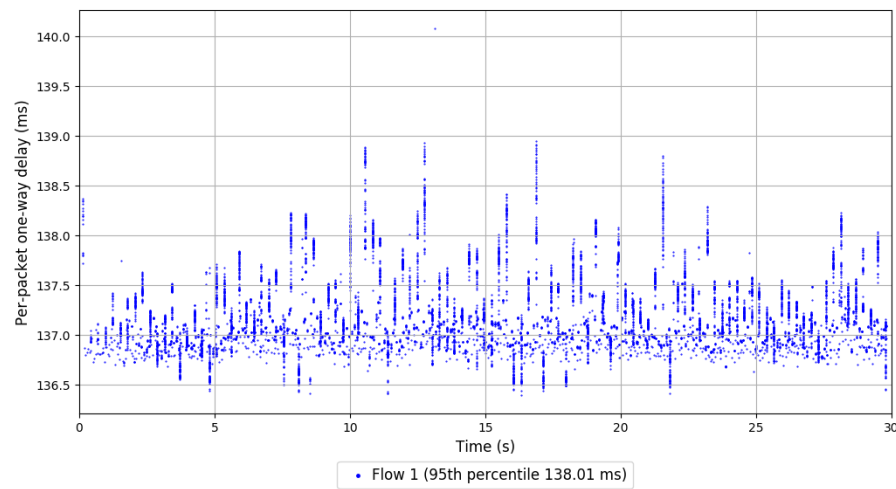
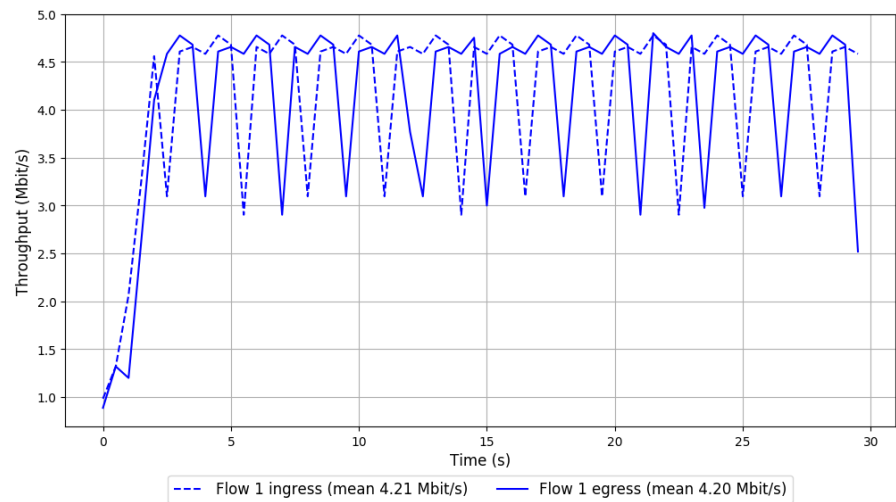
-- Flow 1:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 138.007 ms

Loss rate: 1.33%

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-09-18 08:51:50

End at: 2017-09-18 08:52:20

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 137.925 ms

Loss rate: 1.07%

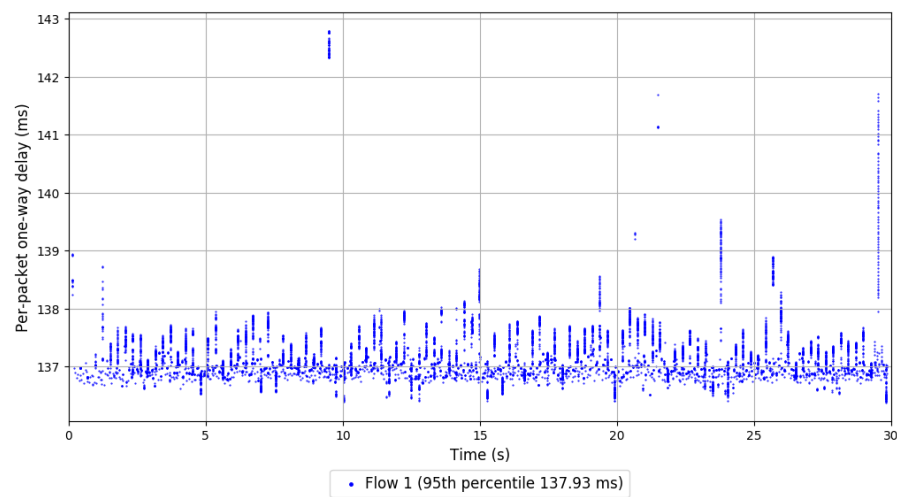
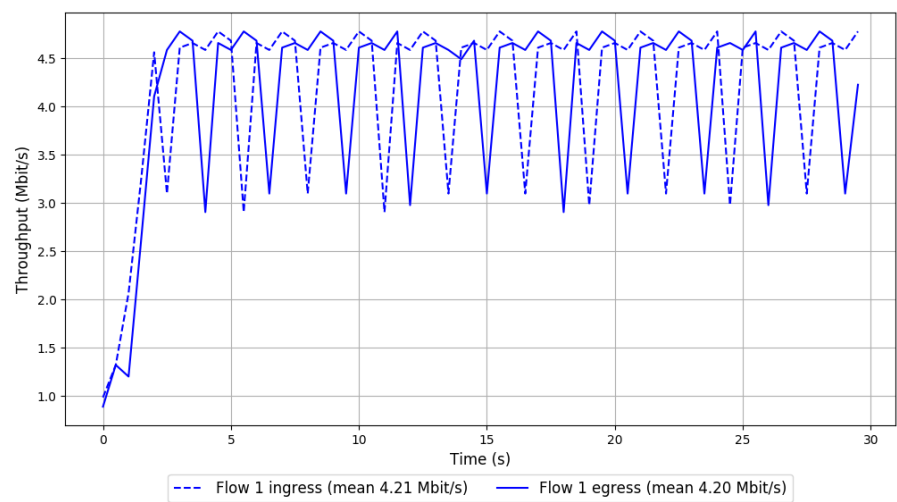
-- Flow 1:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 137.925 ms

Loss rate: 1.07%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-09-18 09:04:19

End at: 2017-09-18 09:04:49

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 137.964 ms

Loss rate: 1.38%

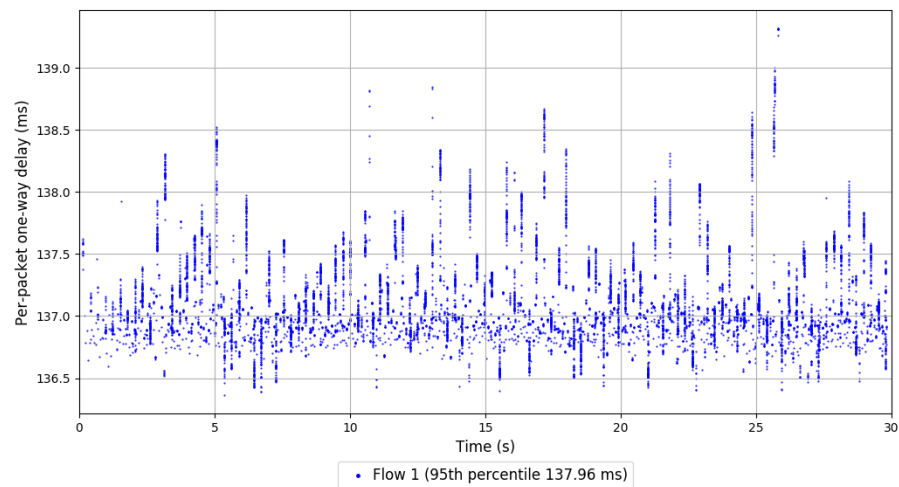
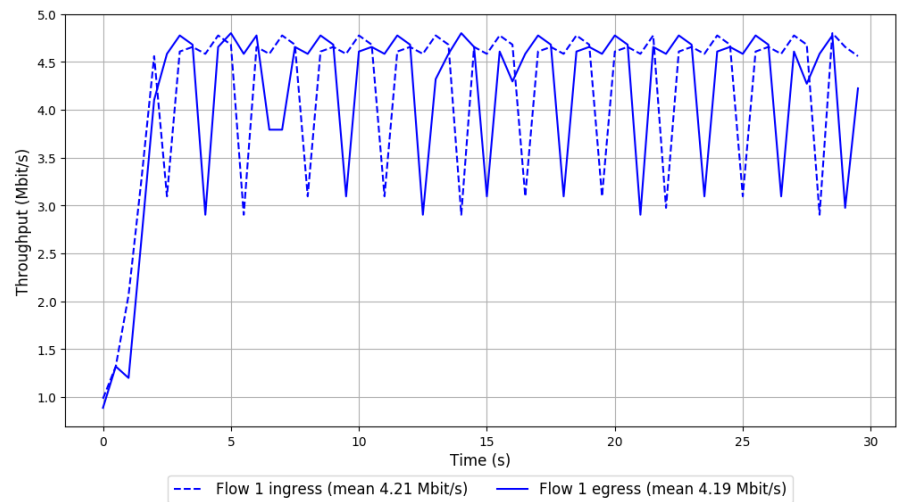
-- Flow 1:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 137.964 ms

Loss rate: 1.38%

Run 4: Report of KohoCC — Data Link

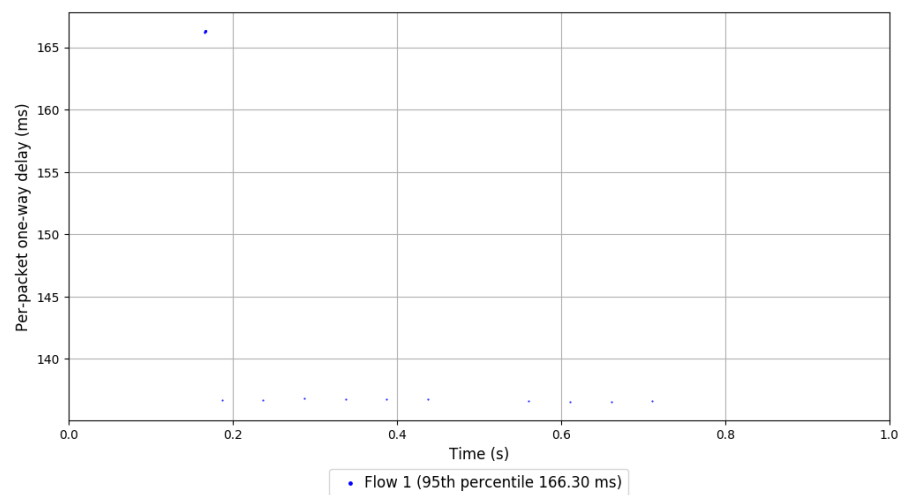
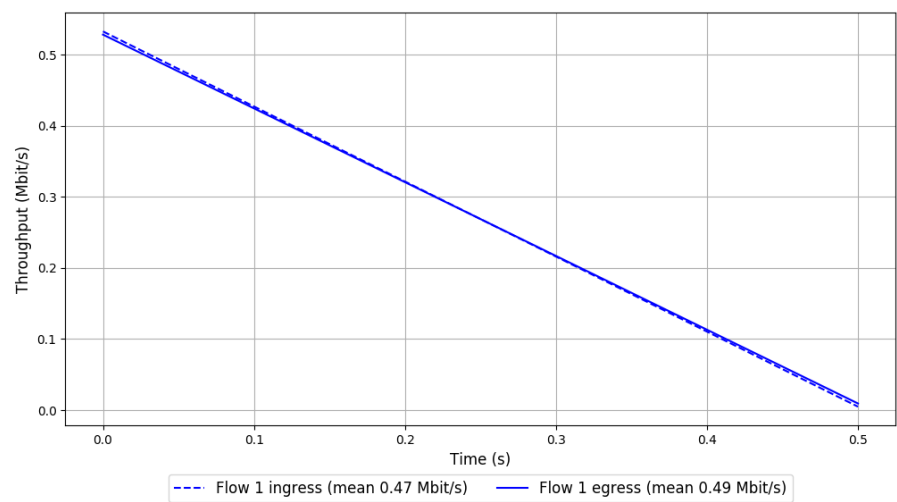


Run 5: Statistics of KohoCC

Start at: 2017-09-18 09:16:49

End at: 2017-09-18 09:17:19

Run 5: Report of KohoCC — Data Link

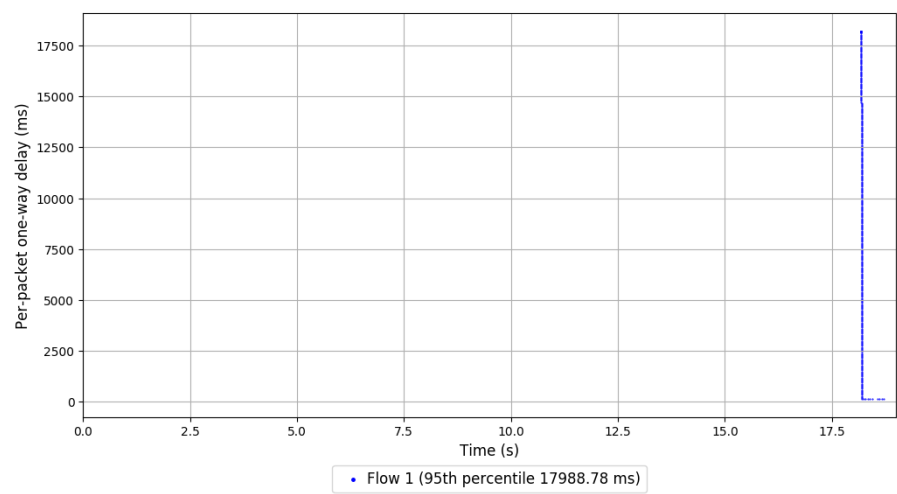
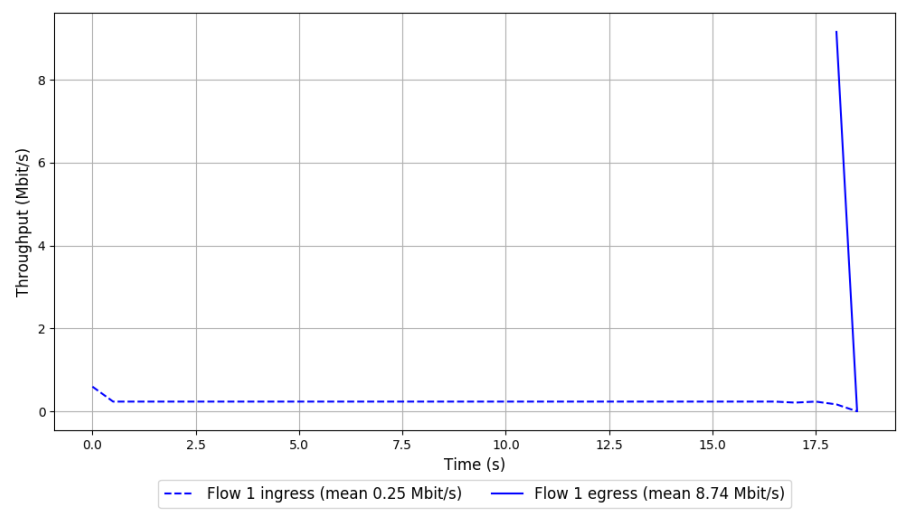


Run 6: Statistics of KohoCC

Start at: 2017-09-18 09:29:13

End at: 2017-09-18 09:29:43

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-09-18 09:41:11

End at: 2017-09-18 09:41:41

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 137.565 ms

Loss rate: 1.07%

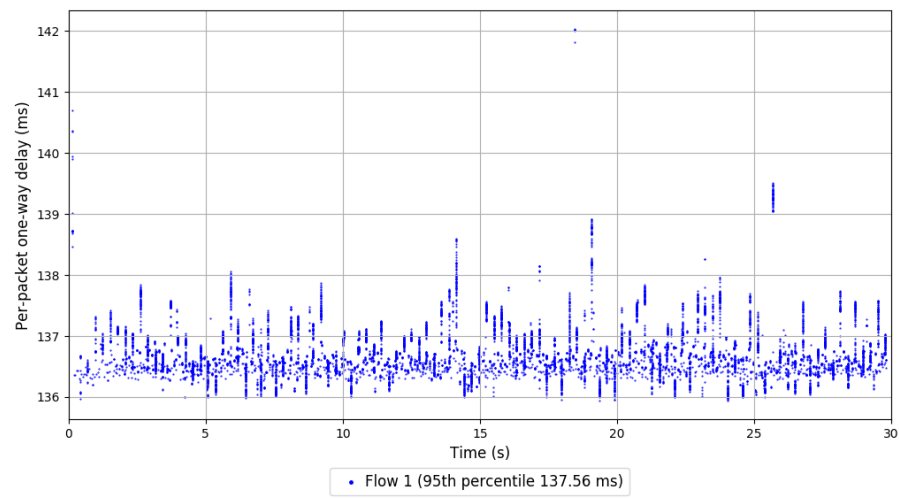
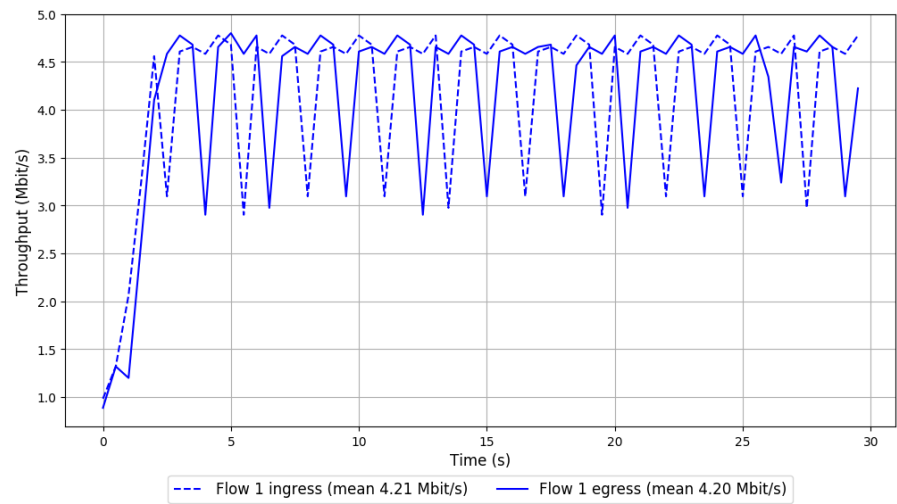
-- Flow 1:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 137.565 ms

Loss rate: 1.07%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-09-18 09:53:33

End at: 2017-09-18 09:54:03

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 137.488 ms

Loss rate: 1.27%

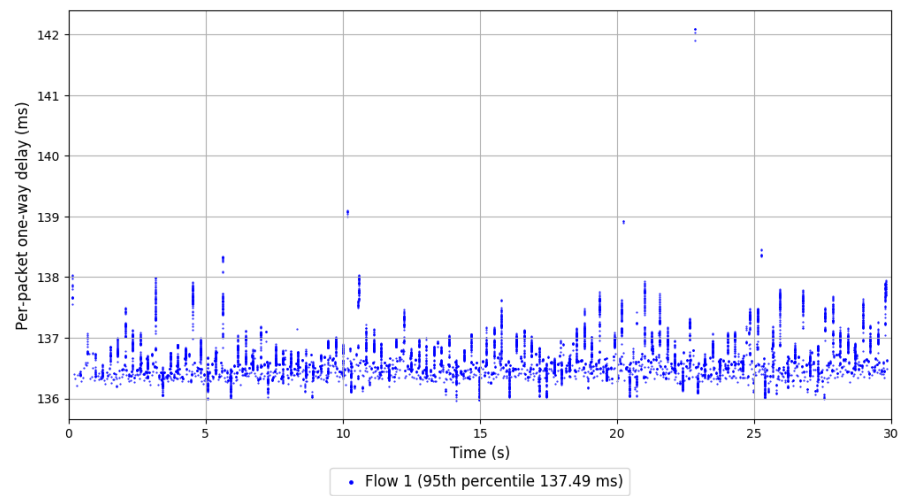
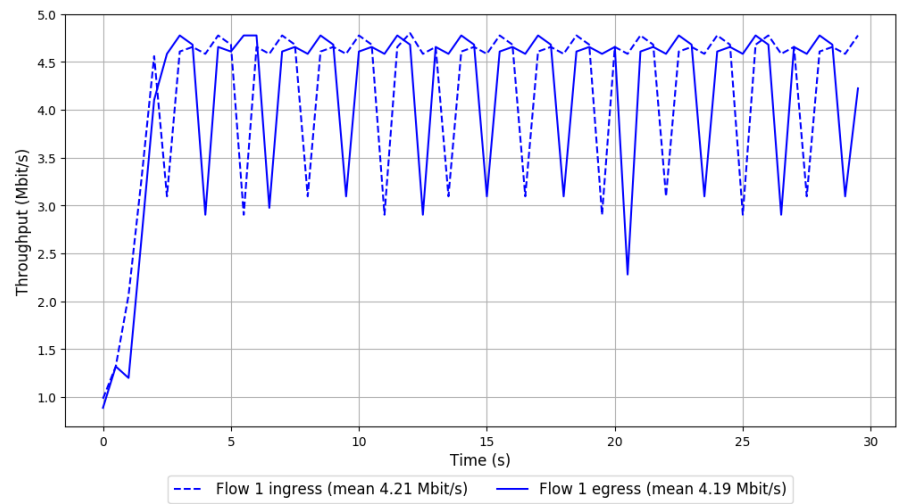
-- Flow 1:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 137.488 ms

Loss rate: 1.27%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-09-18 10:05:57

End at: 2017-09-18 10:06:27

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 138.059 ms

Loss rate: 0.96%

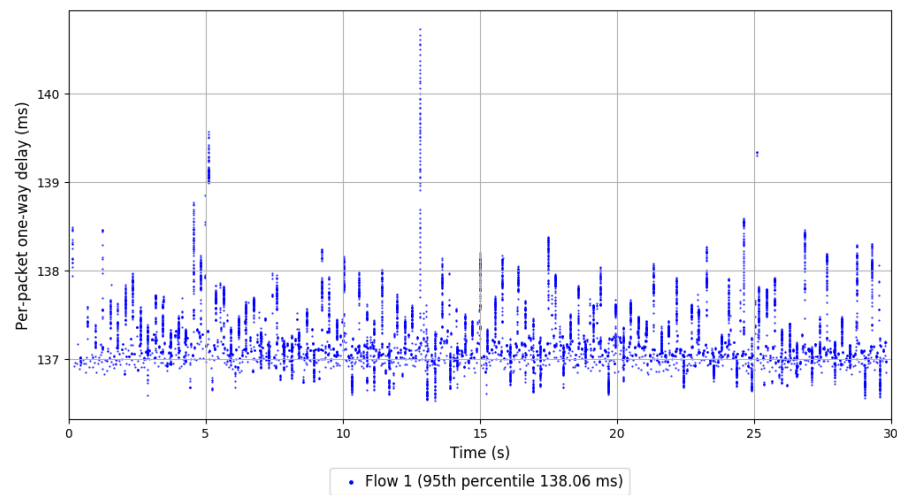
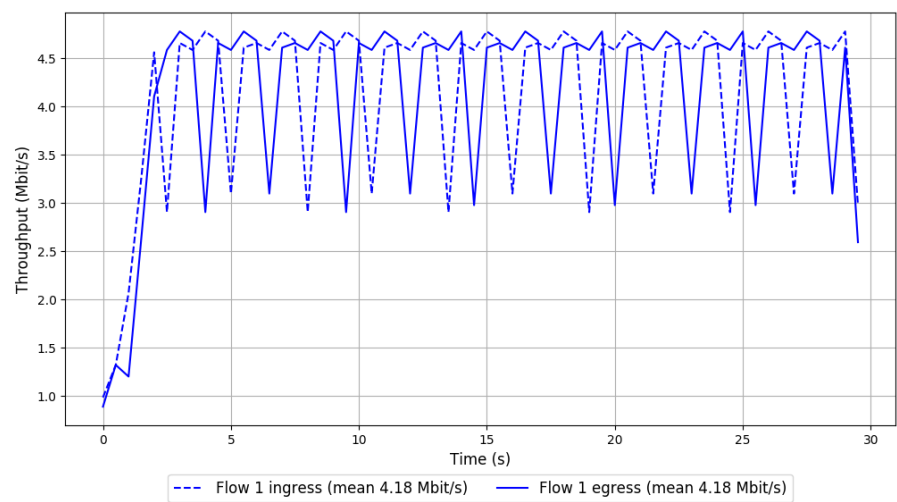
-- Flow 1:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 138.059 ms

Loss rate: 0.96%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-09-18 10:18:00

End at: 2017-09-18 10:18:30

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 138.170 ms

Loss rate: 1.31%

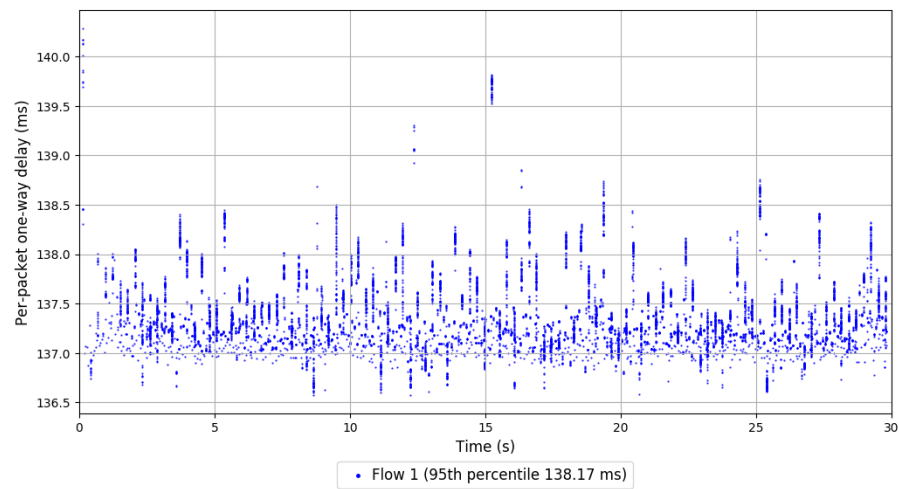
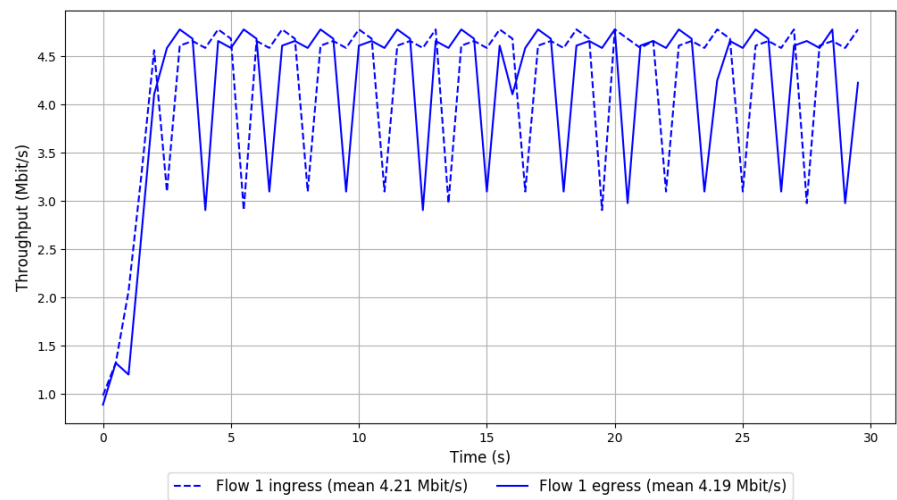
-- Flow 1:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 138.170 ms

Loss rate: 1.31%

Run 10: Report of KohoCC — Data Link

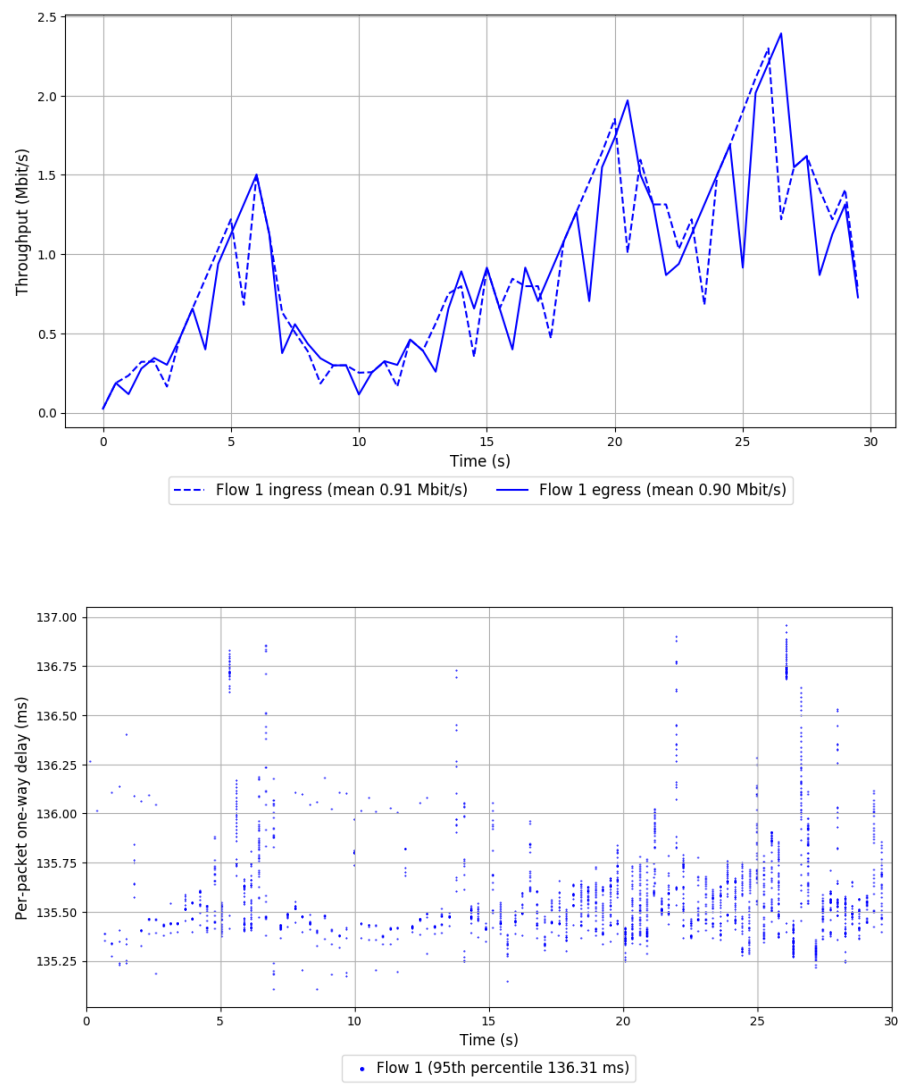


```
Run 1: Statistics of LEDBAT

Start at: 2017-09-18 08:21:23
End at: 2017-09-18 08:21:53

# Below is generated by plot.py at 2017-09-18 12:52:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 136.313 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 136.313 ms
Loss rate: 1.61%
```


Run 1: Report of LEDBAT — Data Link

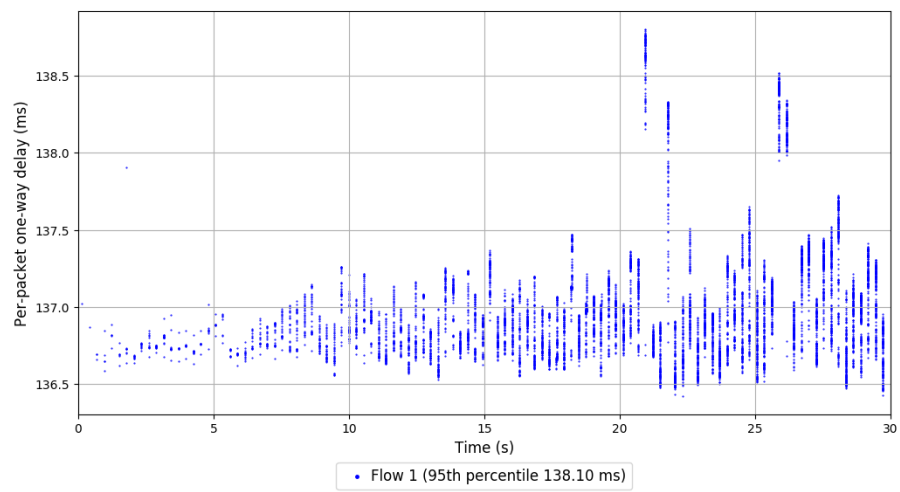
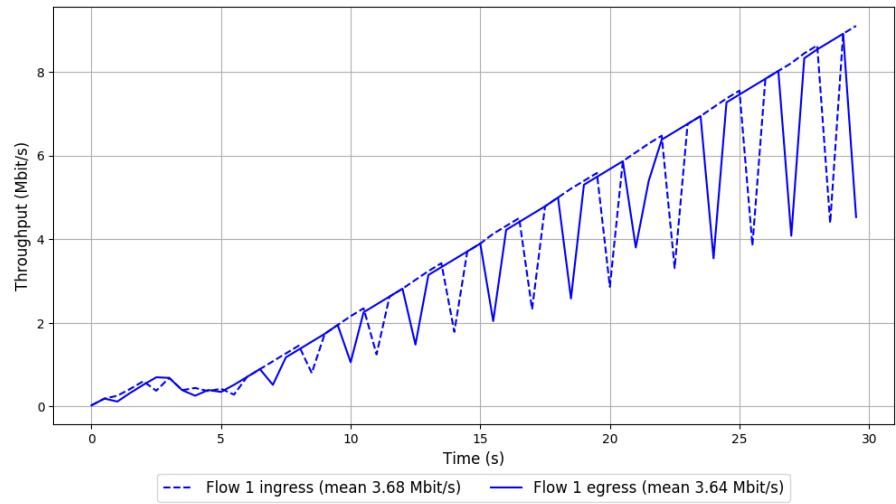


```
Run 2: Statistics of LEDBAT

Start at: 2017-09-18 08:33:20
End at: 2017-09-18 08:33:50

# Below is generated by plot.py at 2017-09-18 12:52:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 138.103 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 138.103 ms
Loss rate: 2.08%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-09-18 08:45:32

End at: 2017-09-18 08:46:03

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 137.976 ms

Loss rate: 2.64%

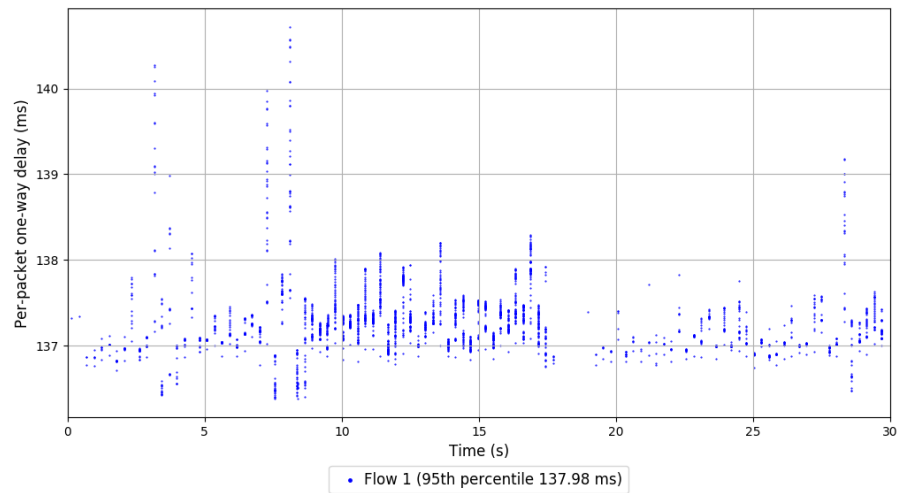
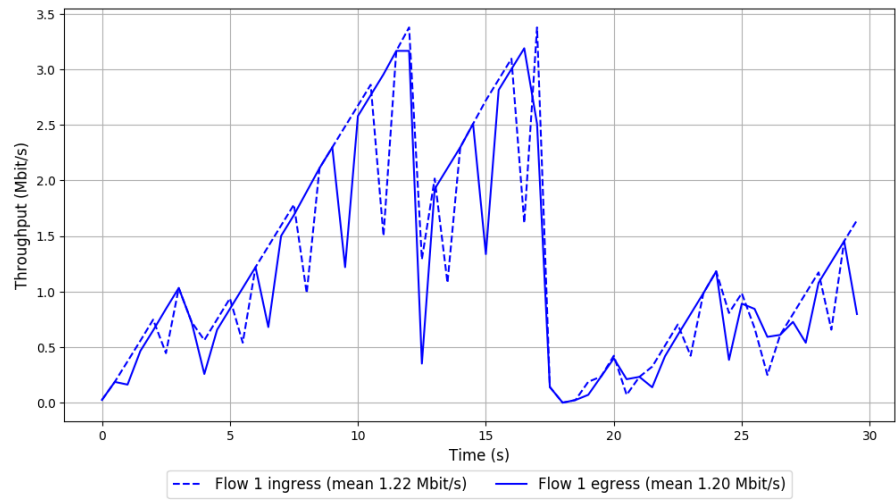
-- Flow 1:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 137.976 ms

Loss rate: 2.64%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-09-18 08:57:33

End at: 2017-09-18 08:58:03

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 138.307 ms

Loss rate: 2.57%

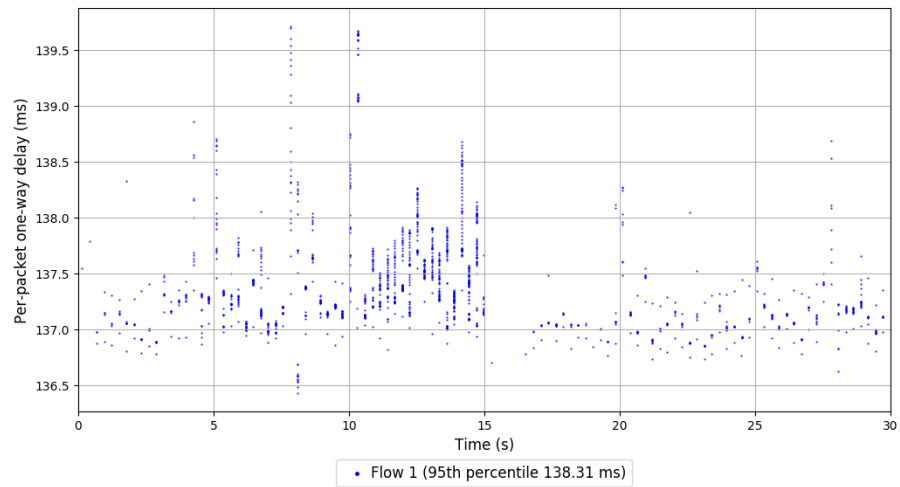
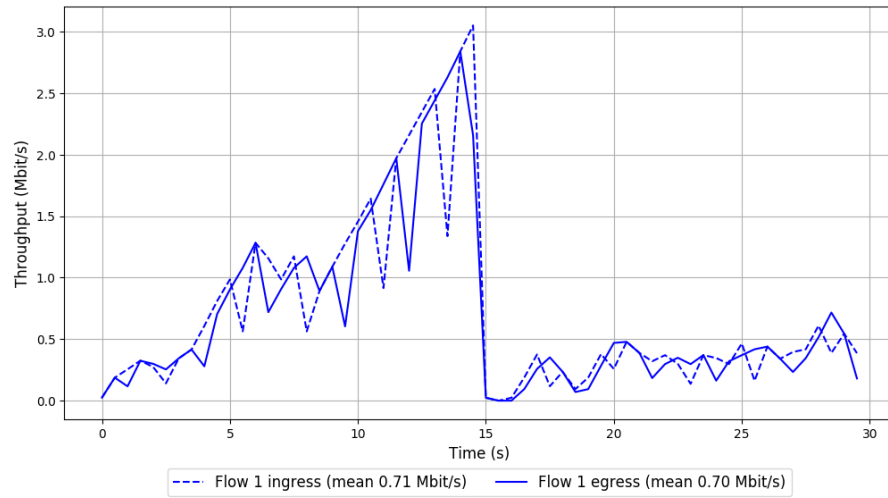
-- Flow 1:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 138.307 ms

Loss rate: 2.57%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-09-18 09:09:57

End at: 2017-09-18 09:10:27

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 138.461 ms

Loss rate: 3.13%

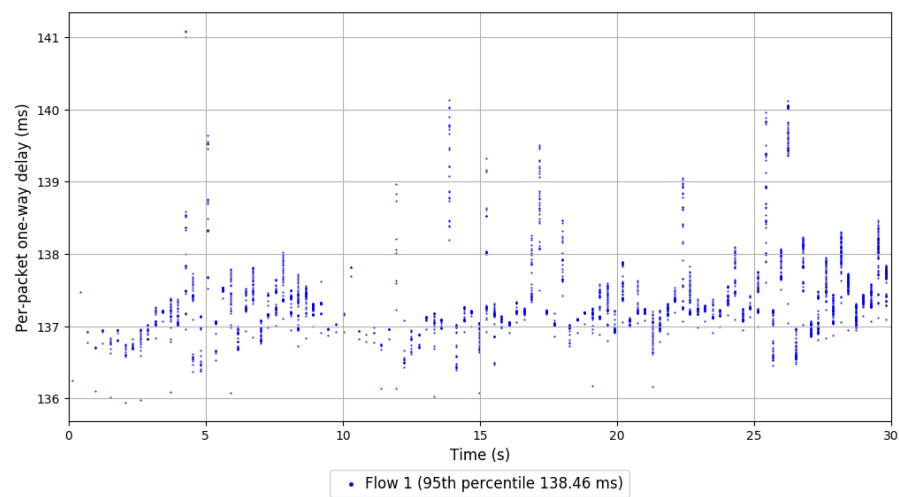
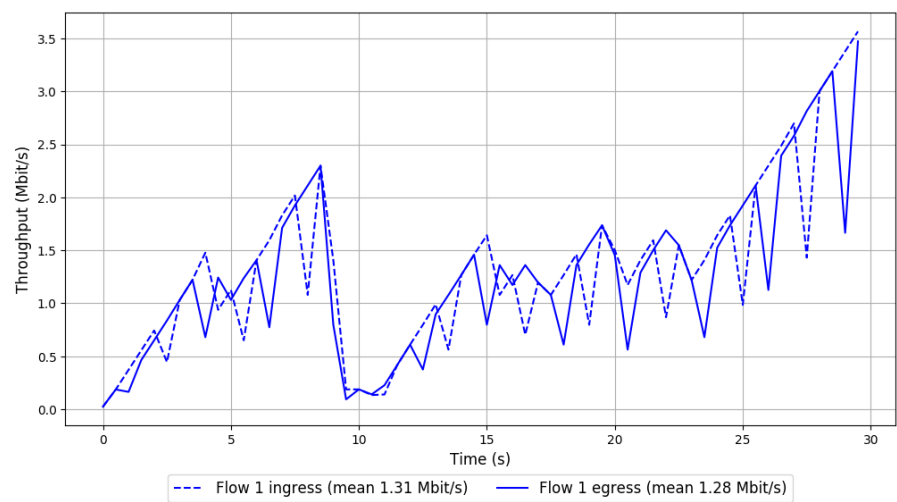
-- Flow 1:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 138.461 ms

Loss rate: 3.13%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-09-18 09:22:19

End at: 2017-09-18 09:22:50

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 138.219 ms

Loss rate: 1.99%

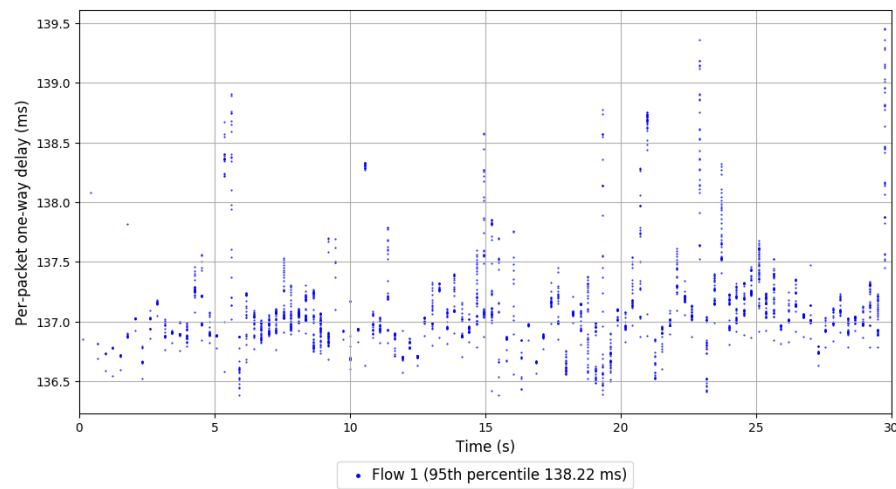
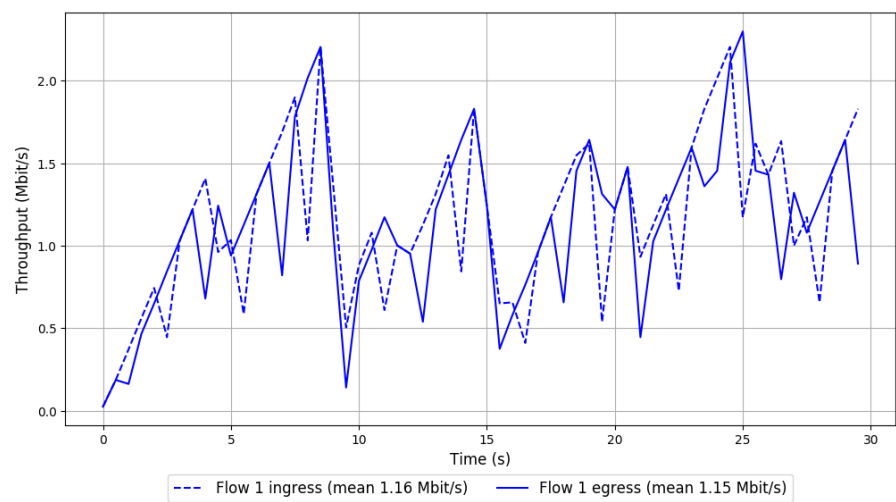
-- Flow 1:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 138.219 ms

Loss rate: 1.99%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-09-18 09:34:54

End at: 2017-09-18 09:35:24

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 137.480 ms

Loss rate: 2.68%

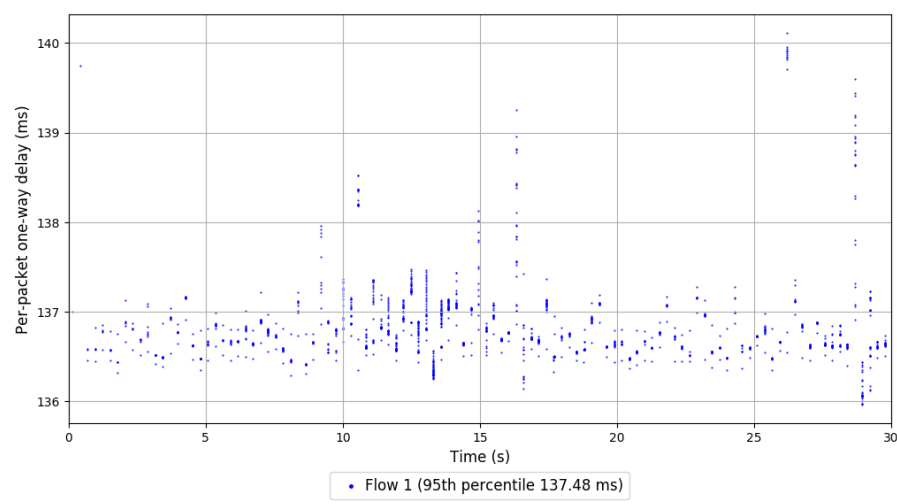
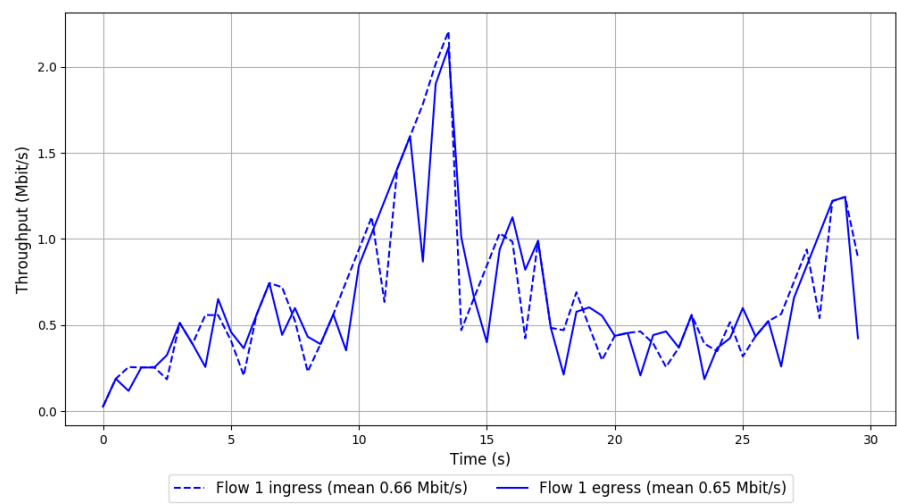
-- Flow 1:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 137.480 ms

Loss rate: 2.68%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-09-18 09:46:57

End at: 2017-09-18 09:47:27

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 137.243 ms

Loss rate: 1.09%

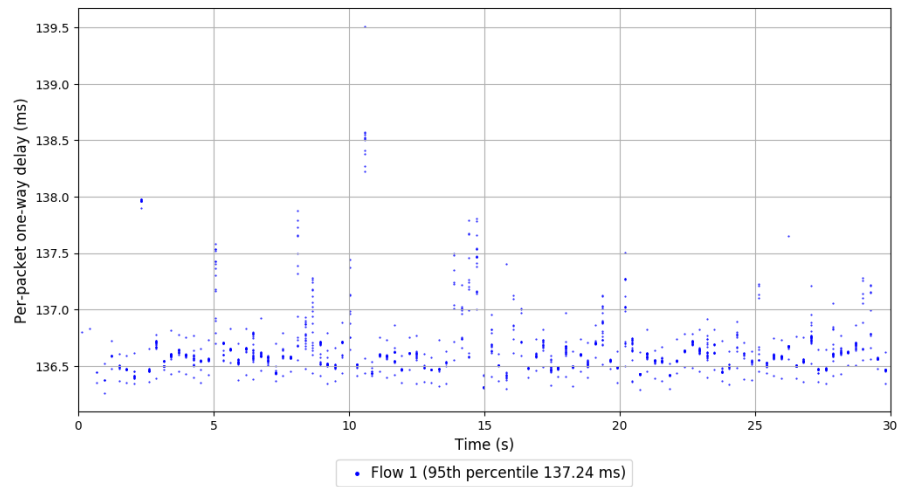
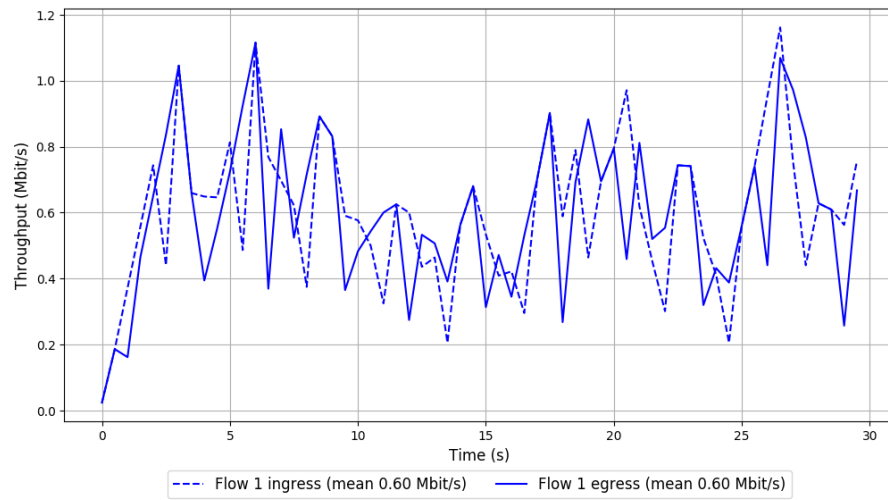
-- Flow 1:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 137.243 ms

Loss rate: 1.09%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-09-18 09:59:13

End at: 2017-09-18 09:59:43

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 138.031 ms

Loss rate: 2.05%

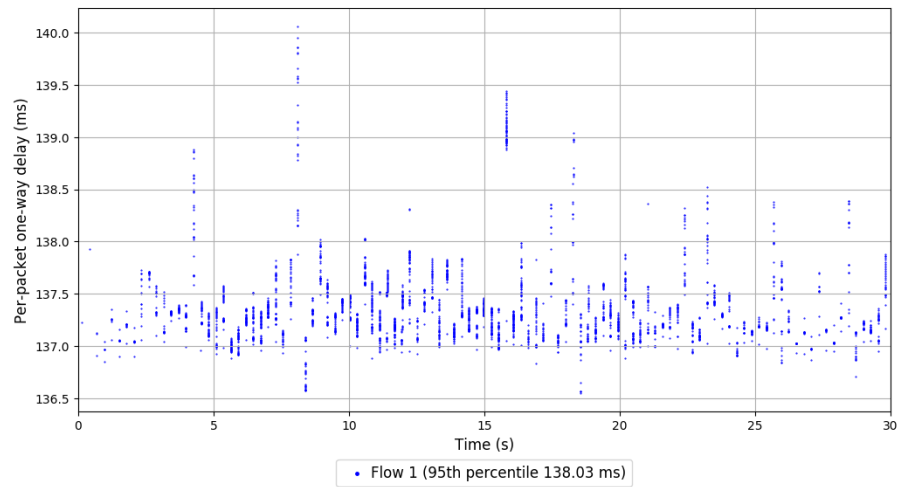
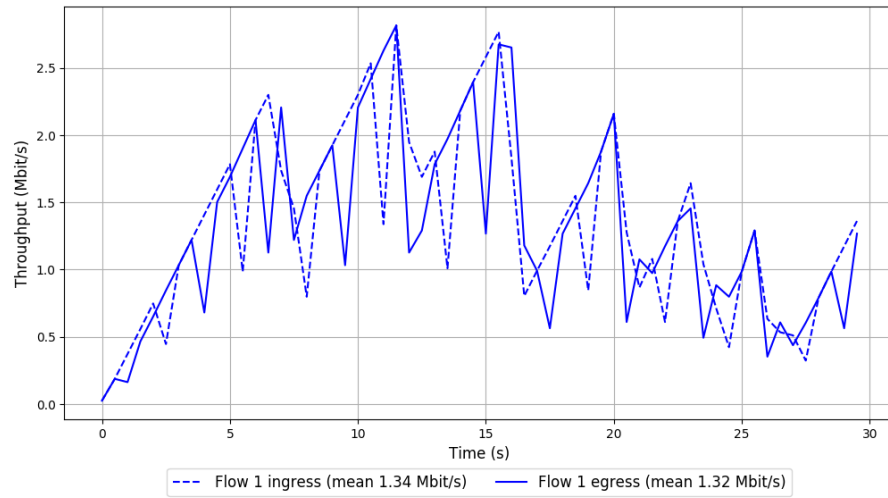
-- Flow 1:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 138.031 ms

Loss rate: 2.05%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-09-18 10:11:35

End at: 2017-09-18 10:12:05

Below is generated by plot.py at 2017-09-18 12:52:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 139.758 ms

Loss rate: 2.19%

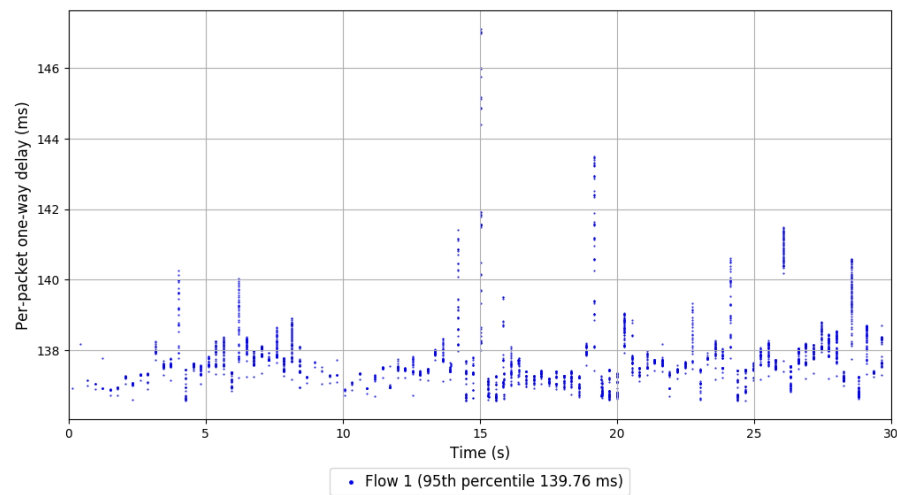
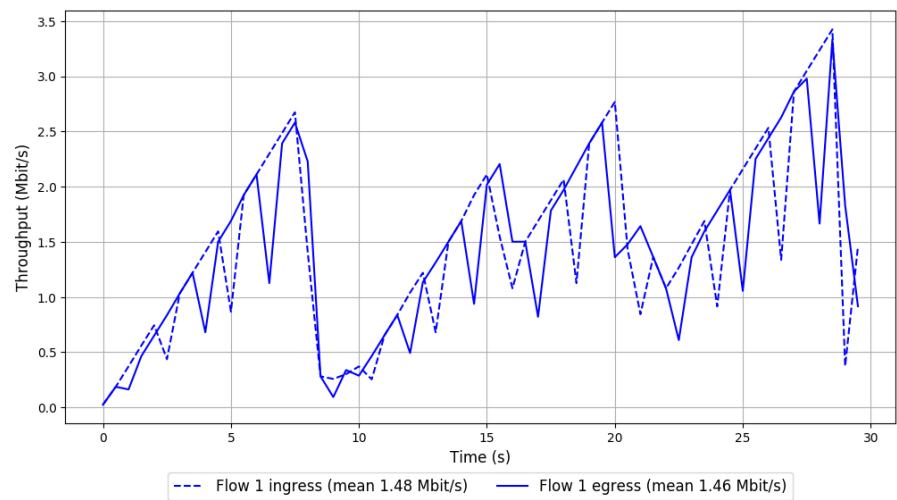
-- Flow 1:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 139.758 ms

Loss rate: 2.19%

Run 10: Report of LEDBAT — Data Link

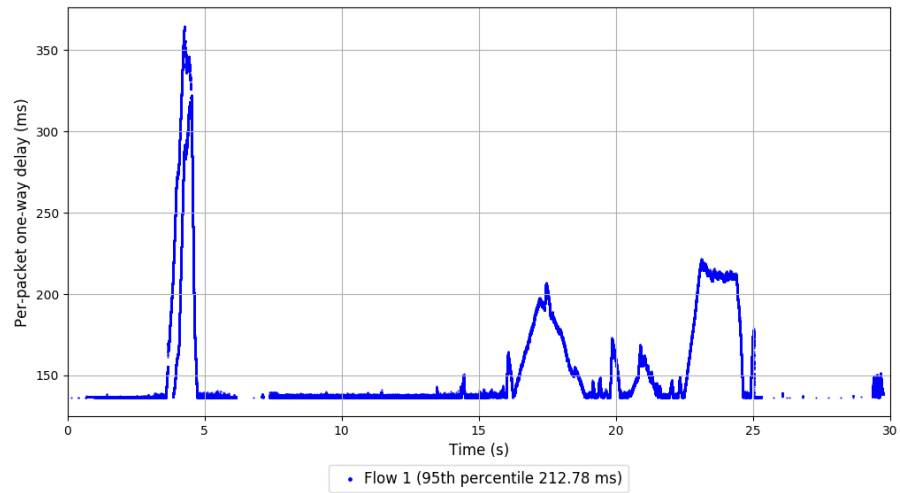
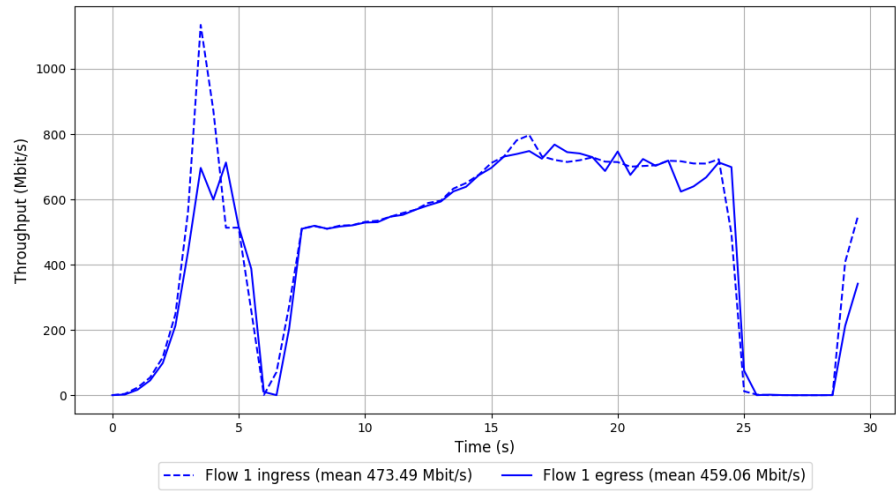


```
Run 1: Statistics of PCC

Start at: 2017-09-18 08:30:36
End at: 2017-09-18 08:31:06

# Below is generated by plot.py at 2017-09-18 12:58:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 459.06 Mbit/s
95th percentile per-packet one-way delay: 212.783 ms
Loss rate: 3.94%
-- Flow 1:
Average throughput: 459.06 Mbit/s
95th percentile per-packet one-way delay: 212.783 ms
Loss rate: 3.94%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-09-18 08:42:46

End at: 2017-09-18 08:43:16

Below is generated by plot.py at 2017-09-18 12:58:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 443.41 Mbit/s

95th percentile per-packet one-way delay: 220.548 ms

Loss rate: 4.09%

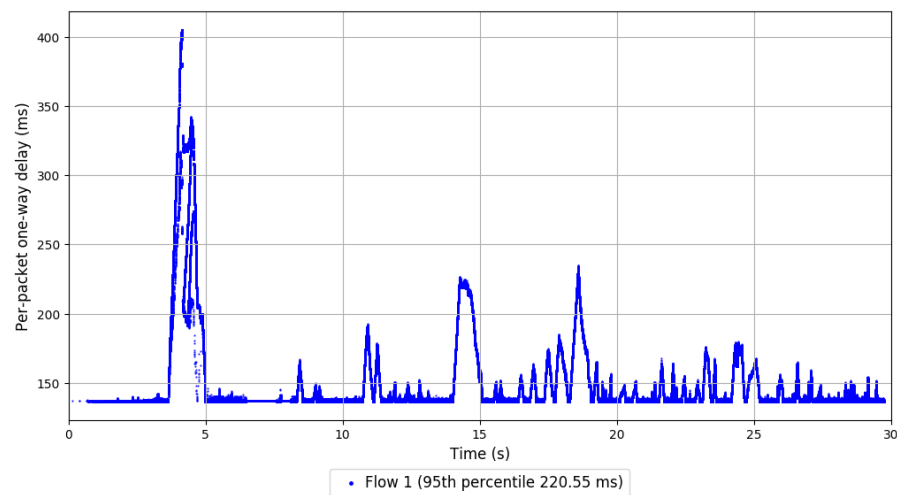
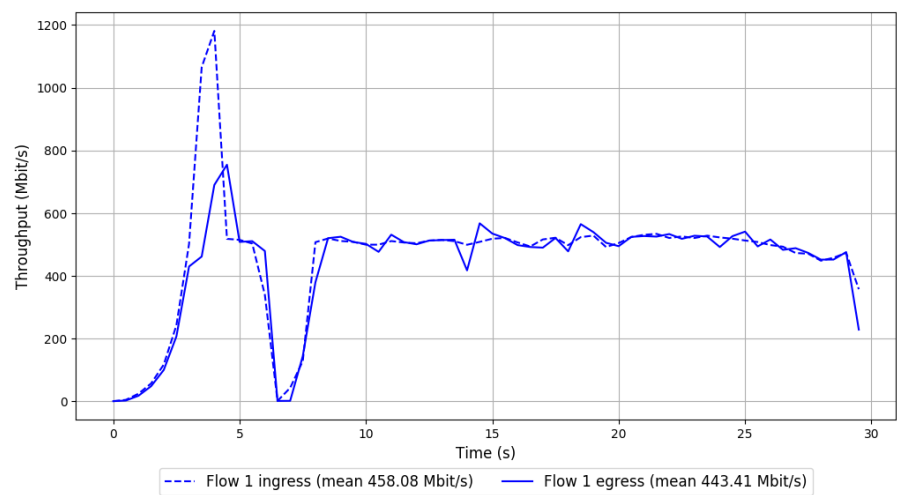
-- Flow 1:

Average throughput: 443.41 Mbit/s

95th percentile per-packet one-way delay: 220.548 ms

Loss rate: 4.09%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-09-18 08:54:46

End at: 2017-09-18 08:55:16

Below is generated by plot.py at 2017-09-18 12:58:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 424.73 Mbit/s

95th percentile per-packet one-way delay: 246.321 ms

Loss rate: 5.17%

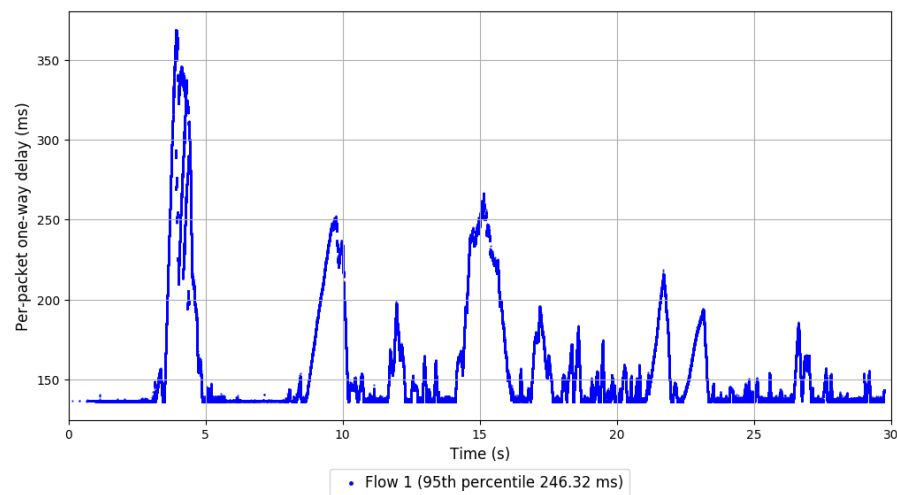
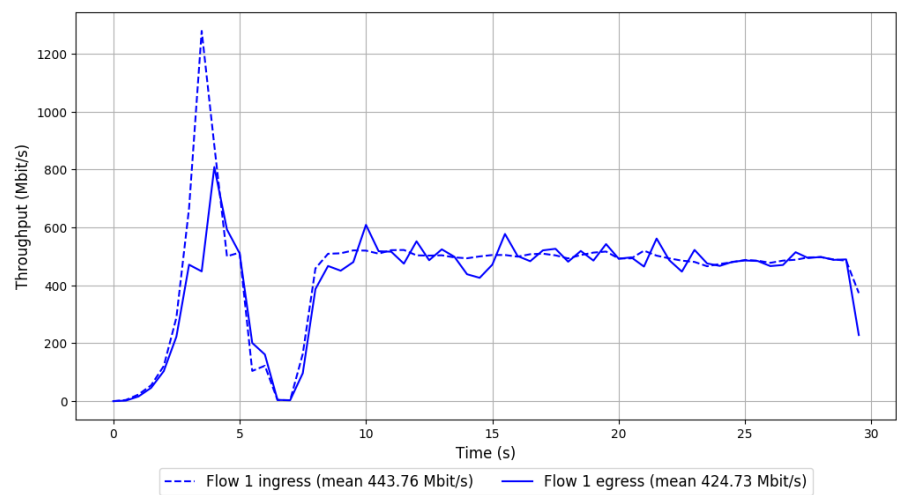
-- Flow 1:

Average throughput: 424.73 Mbit/s

95th percentile per-packet one-way delay: 246.321 ms

Loss rate: 5.17%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-09-18 09:07:16

End at: 2017-09-18 09:07:46

Below is generated by plot.py at 2017-09-18 12:58:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 320.61 Mbit/s

95th percentile per-packet one-way delay: 239.857 ms

Loss rate: 4.16%

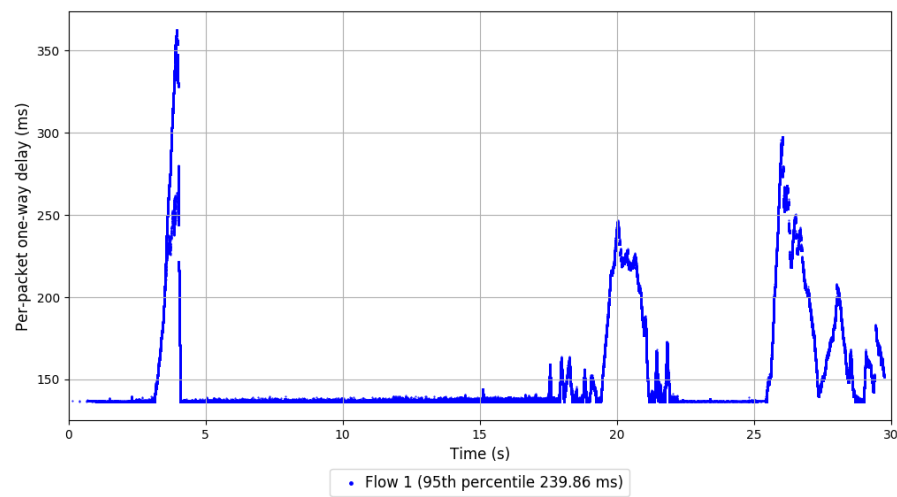
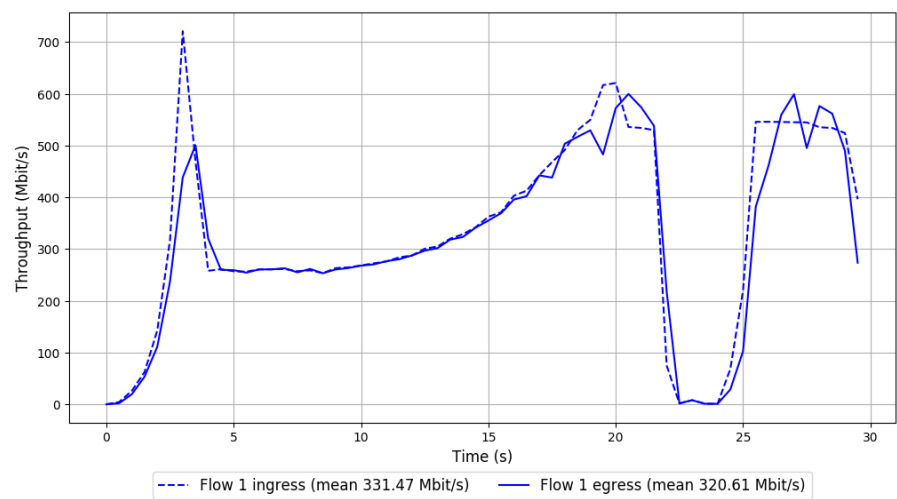
-- Flow 1:

Average throughput: 320.61 Mbit/s

95th percentile per-packet one-way delay: 239.857 ms

Loss rate: 4.16%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-09-18 09:19:45

End at: 2017-09-18 09:20:15

Below is generated by plot.py at 2017-09-18 12:58:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 415.72 Mbit/s

95th percentile per-packet one-way delay: 239.774 ms

Loss rate: 4.09%

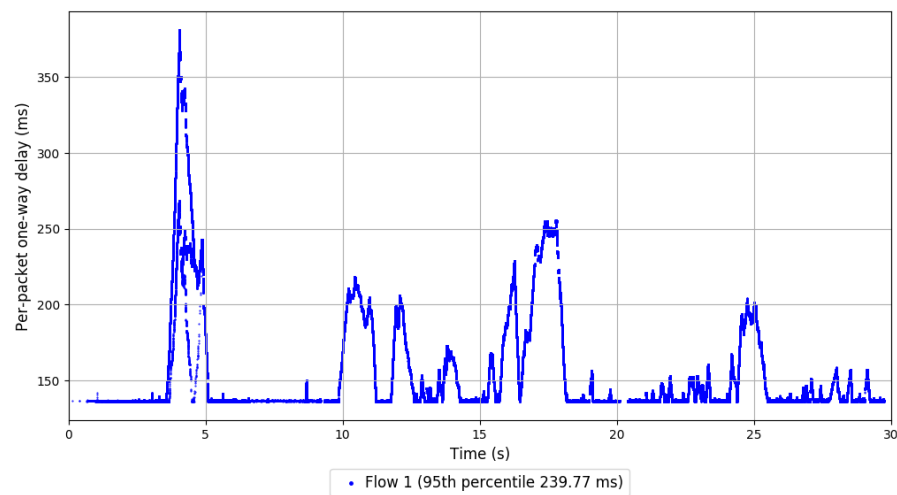
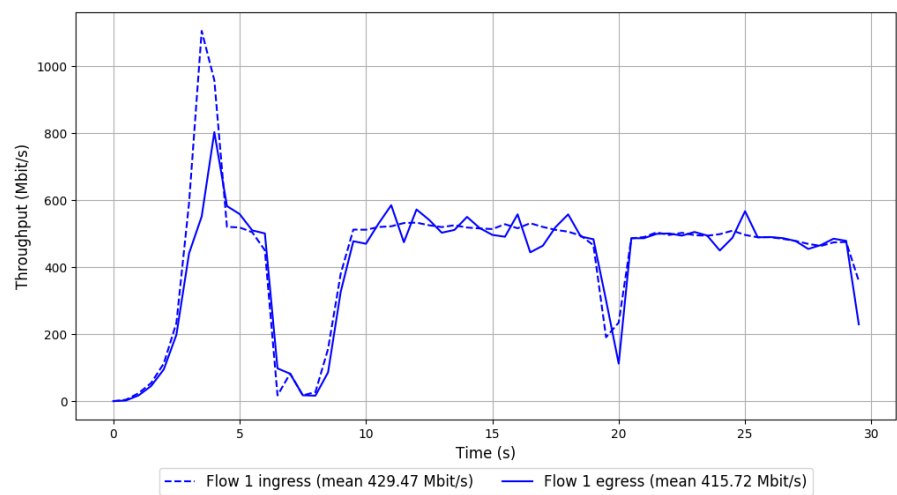
-- Flow 1:

Average throughput: 415.72 Mbit/s

95th percentile per-packet one-way delay: 239.774 ms

Loss rate: 4.09%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-09-18 09:32:10

End at: 2017-09-18 09:32:40

Below is generated by plot.py at 2017-09-18 12:58:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 414.69 Mbit/s

95th percentile per-packet one-way delay: 248.462 ms

Loss rate: 4.37%

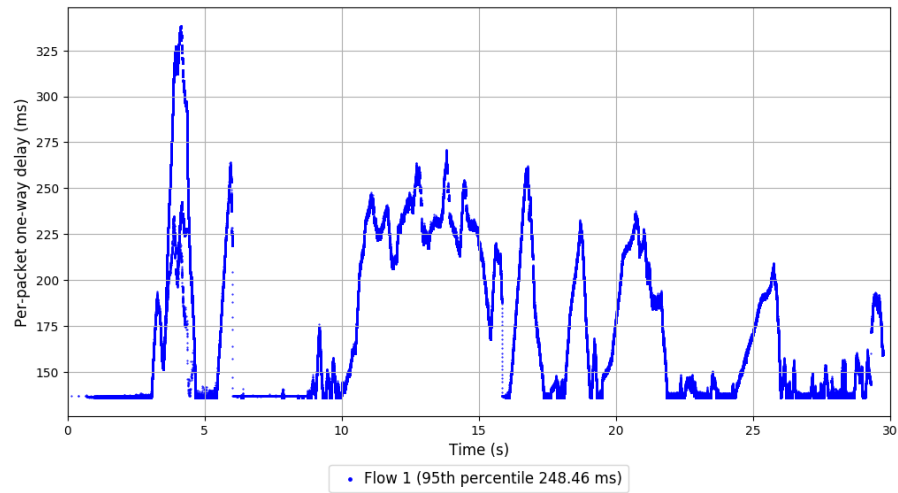
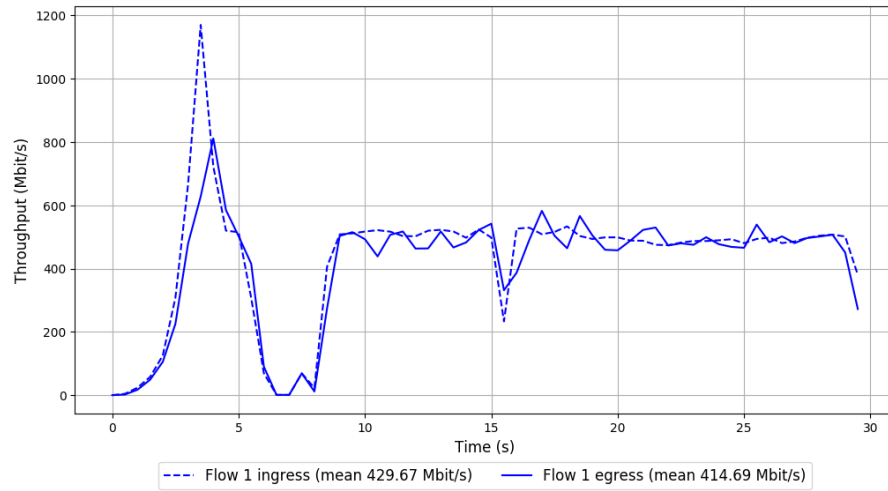
-- Flow 1:

Average throughput: 414.69 Mbit/s

95th percentile per-packet one-way delay: 248.462 ms

Loss rate: 4.37%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-09-18 09:44:10

End at: 2017-09-18 09:44:40

Below is generated by plot.py at 2017-09-18 13:01:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 446.76 Mbit/s

95th percentile per-packet one-way delay: 251.387 ms

Loss rate: 4.00%

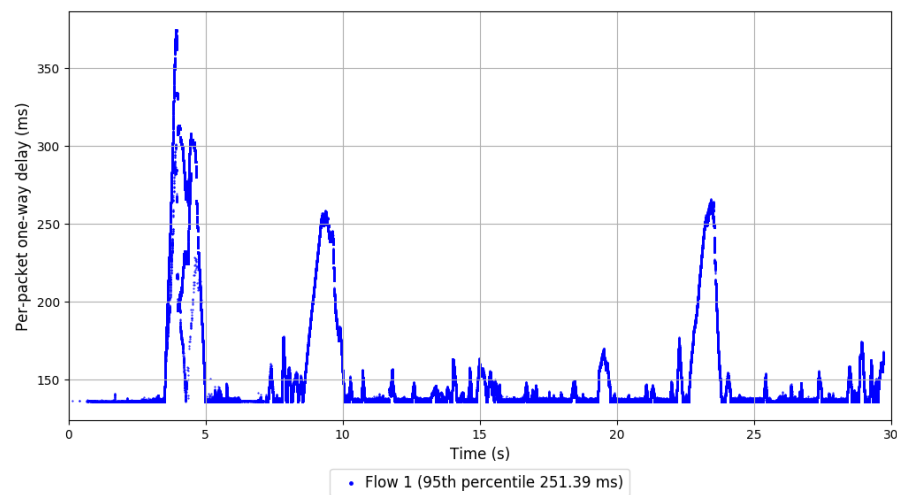
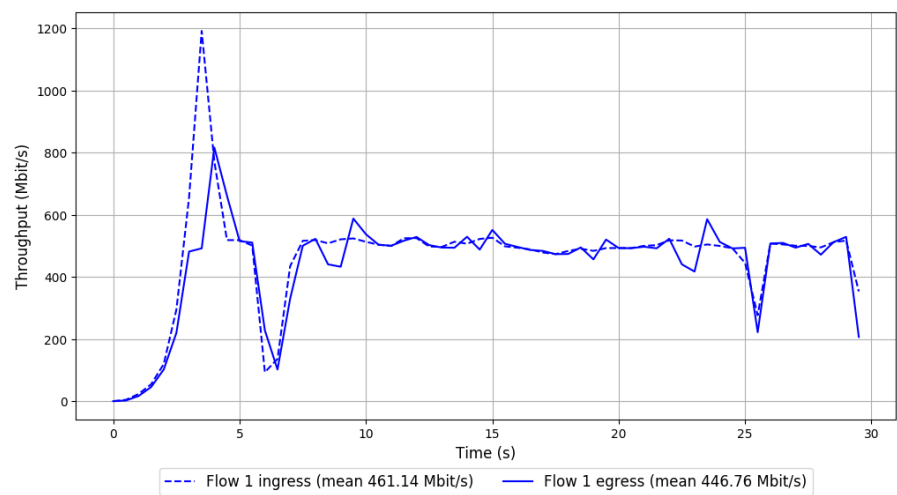
-- Flow 1:

Average throughput: 446.76 Mbit/s

95th percentile per-packet one-way delay: 251.387 ms

Loss rate: 4.00%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-09-18 09:56:32

End at: 2017-09-18 09:57:02

Below is generated by plot.py at 2017-09-18 13:01:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 326.45 Mbit/s

95th percentile per-packet one-way delay: 259.228 ms

Loss rate: 5.40%

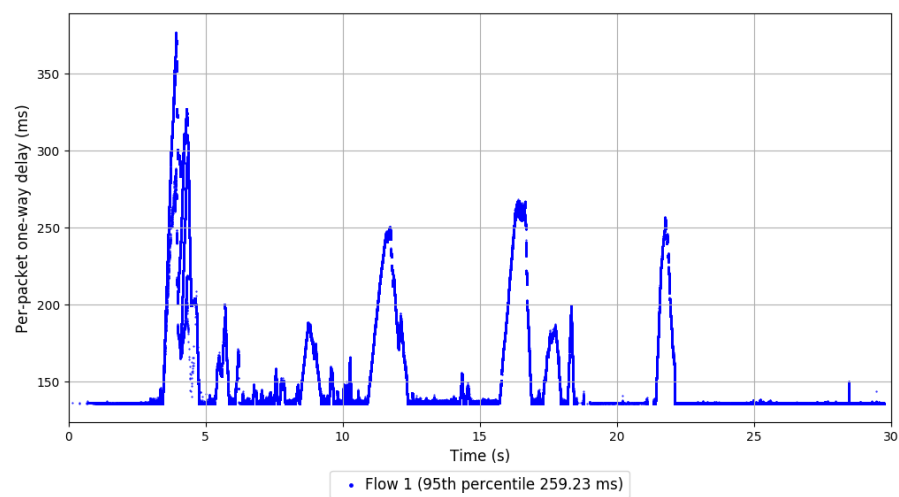
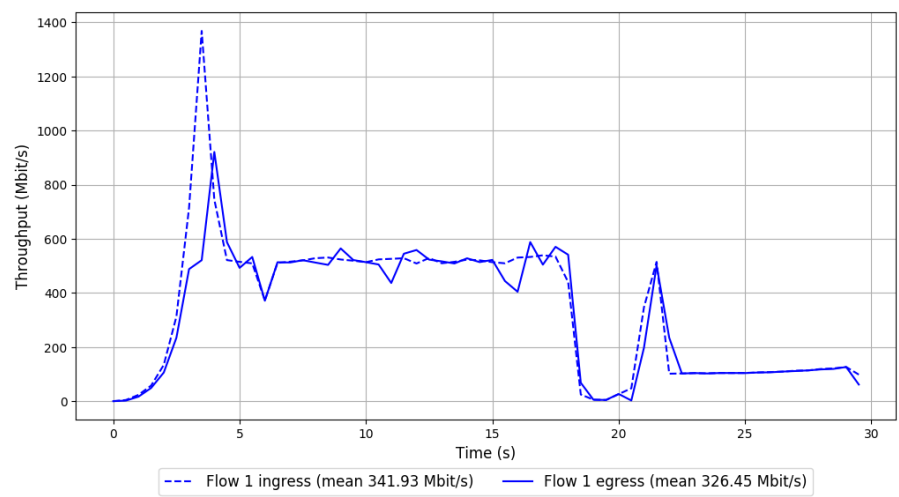
-- Flow 1:

Average throughput: 326.45 Mbit/s

95th percentile per-packet one-way delay: 259.228 ms

Loss rate: 5.40%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-09-18 10:08:55

End at: 2017-09-18 10:09:25

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 451.98 Mbit/s

95th percentile per-packet one-way delay: 215.392 ms

Loss rate: 4.32%

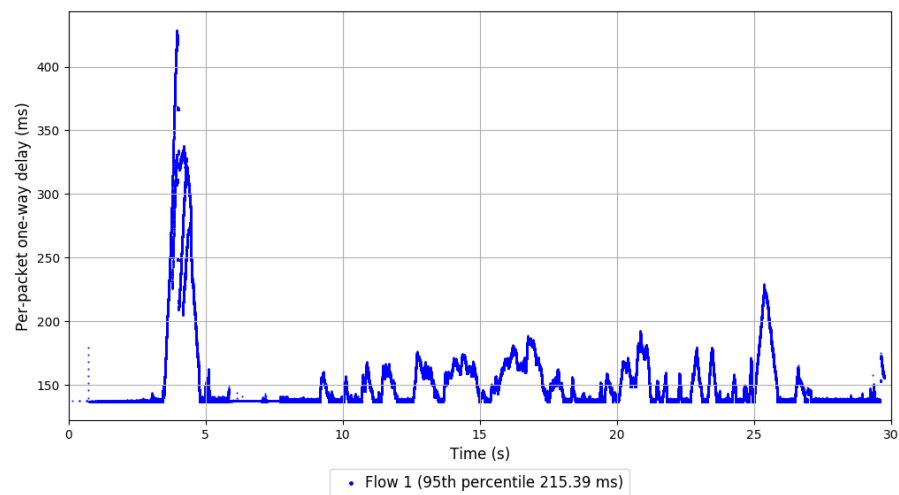
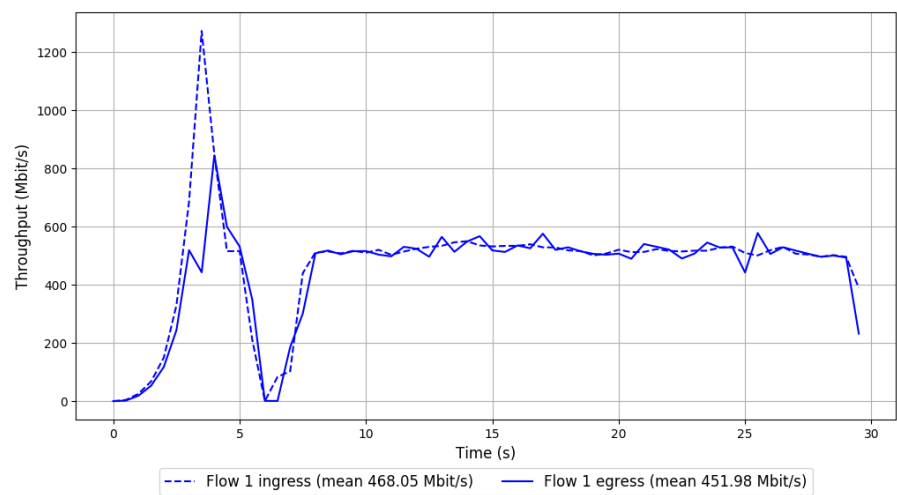
-- Flow 1:

Average throughput: 451.98 Mbit/s

95th percentile per-packet one-way delay: 215.392 ms

Loss rate: 4.32%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-09-18 10:20:58

End at: 2017-09-18 10:21:28

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 346.84 Mbit/s

95th percentile per-packet one-way delay: 208.846 ms

Loss rate: 3.65%

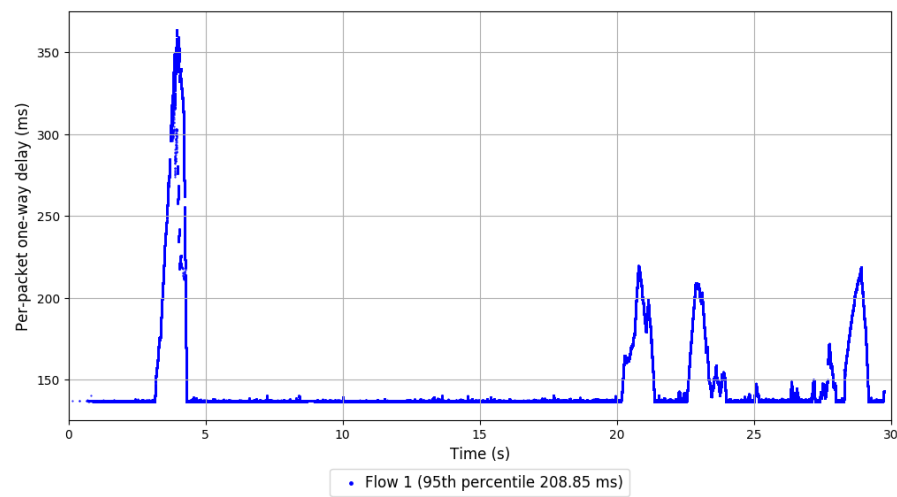
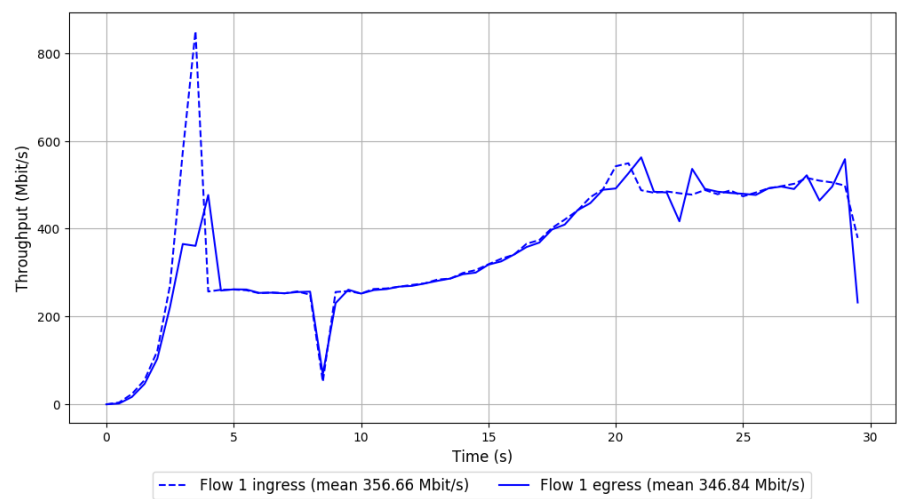
-- Flow 1:

Average throughput: 346.84 Mbit/s

95th percentile per-packet one-way delay: 208.846 ms

Loss rate: 3.65%

Run 10: Report of PCC — Data Link

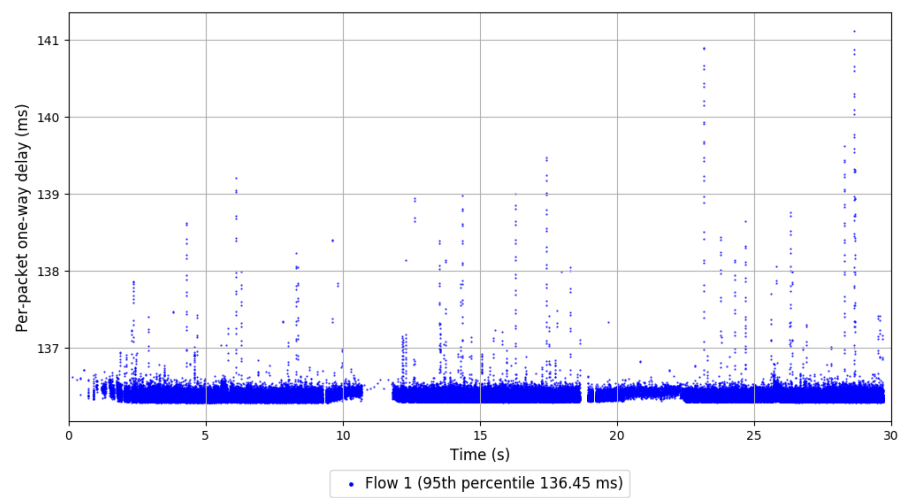
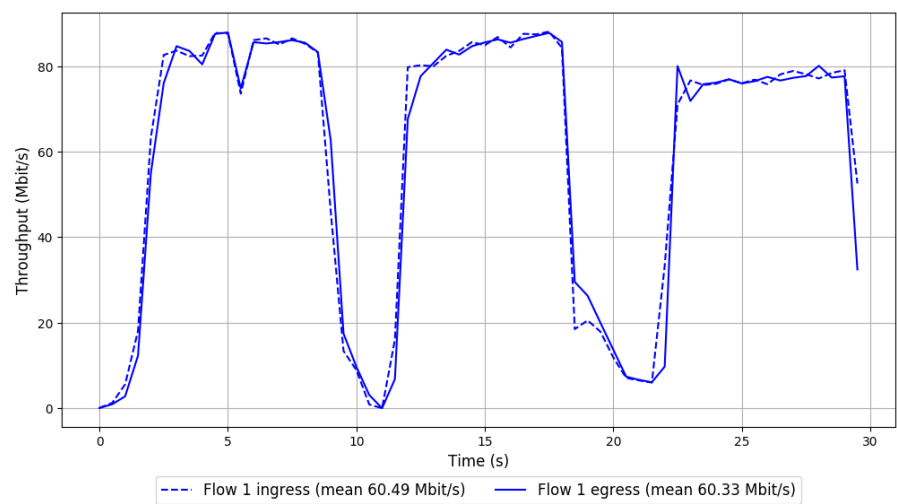


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-18 08:28:21
End at: 2017-09-18 08:28:51

# Below is generated by plot.py at 2017-09-18 13:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.33 Mbit/s
95th percentile per-packet one-way delay: 136.454 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 60.33 Mbit/s
95th percentile per-packet one-way delay: 136.454 ms
Loss rate: 1.17%
```


Run 1: Report of QUIC Cubic — Data Link

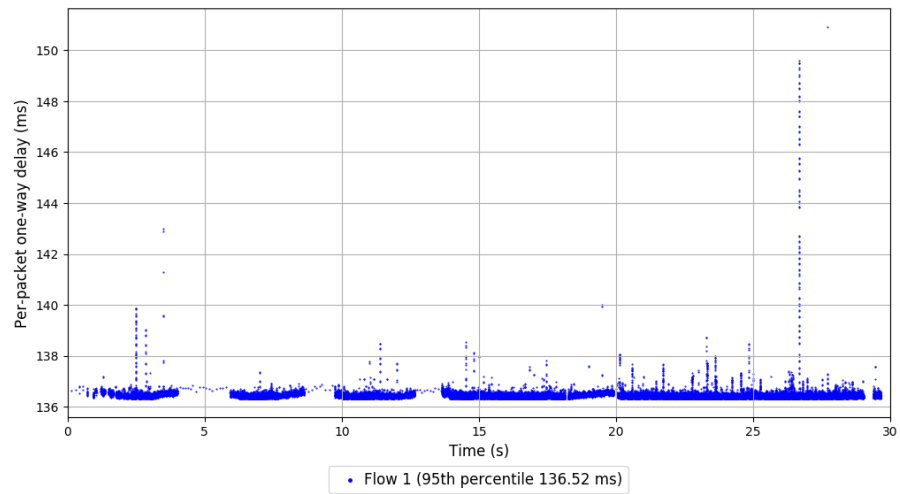
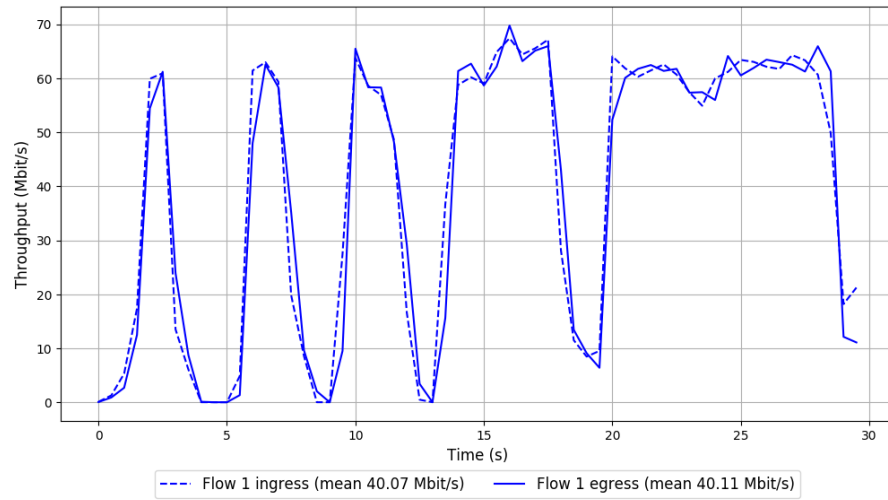


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-18 08:40:32
End at: 2017-09-18 08:41:02

# Below is generated by plot.py at 2017-09-18 13:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.11 Mbit/s
95th percentile per-packet one-way delay: 136.520 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 40.11 Mbit/s
95th percentile per-packet one-way delay: 136.520 ms
Loss rate: 0.83%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-09-18 08:52:34

End at: 2017-09-18 08:53:04

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.10 Mbit/s

95th percentile per-packet one-way delay: 137.026 ms

Loss rate: 1.33%

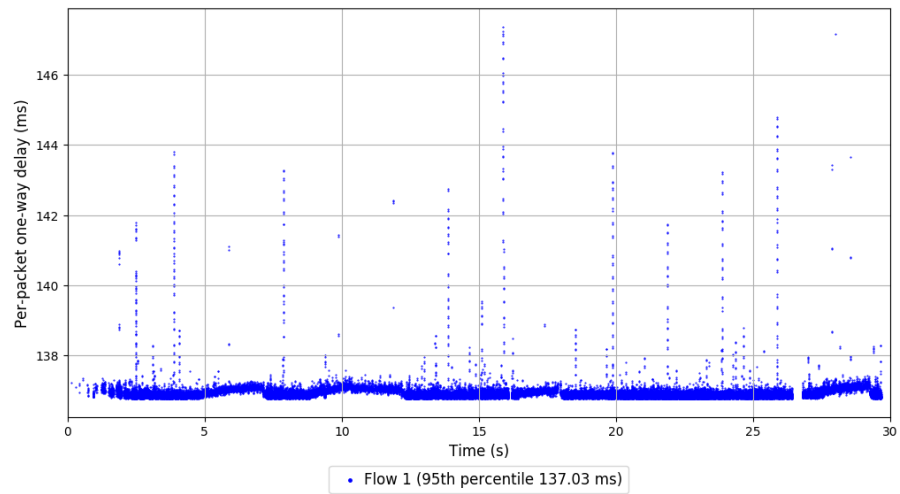
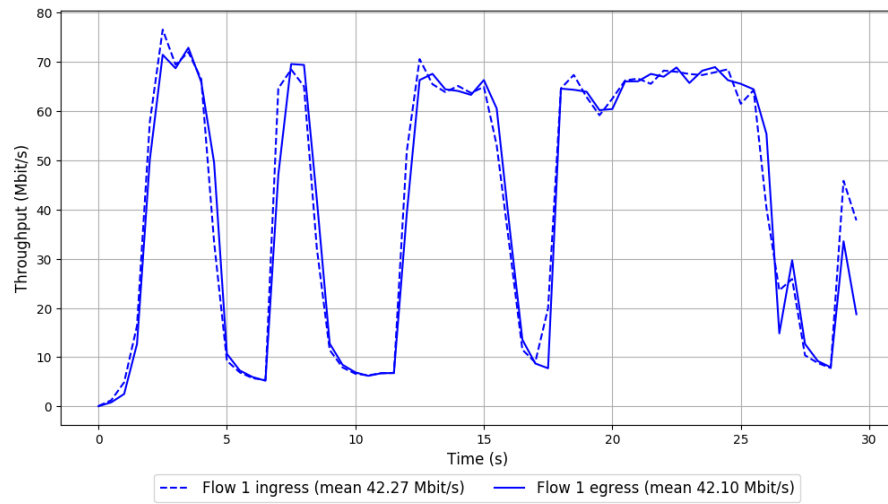
-- Flow 1:

Average throughput: 42.10 Mbit/s

95th percentile per-packet one-way delay: 137.026 ms

Loss rate: 1.33%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-09-18 09:05:03

End at: 2017-09-18 09:05:33

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.10 Mbit/s

95th percentile per-packet one-way delay: 135.239 ms

Loss rate: 0.20%

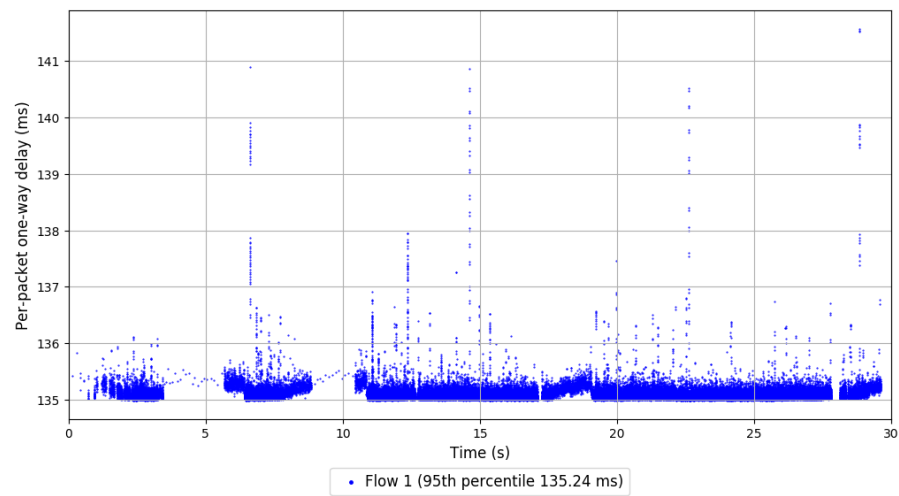
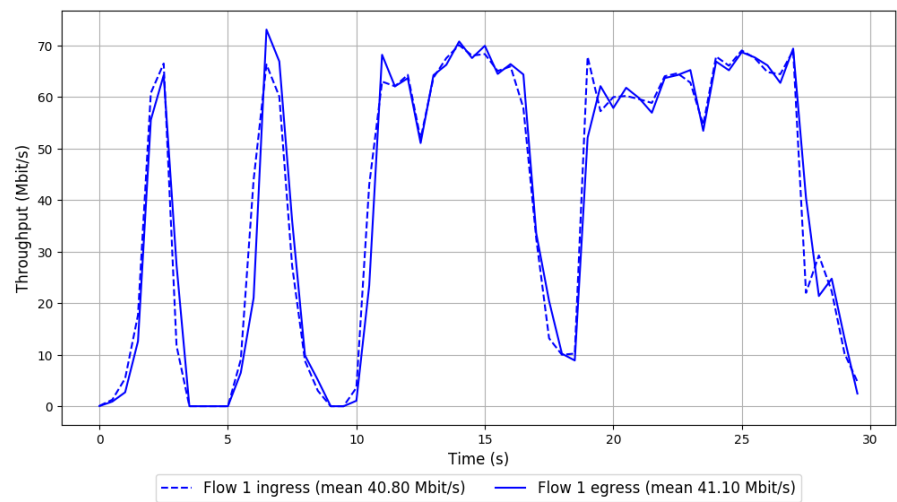
-- Flow 1:

Average throughput: 41.10 Mbit/s

95th percentile per-packet one-way delay: 135.239 ms

Loss rate: 0.20%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-09-18 09:17:31

End at: 2017-09-18 09:18:01

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.93 Mbit/s

95th percentile per-packet one-way delay: 136.460 ms

Loss rate: 0.96%

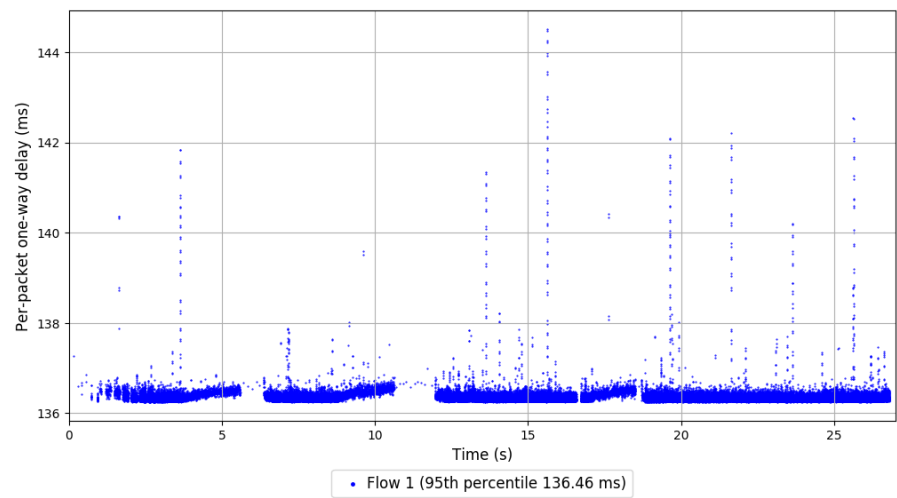
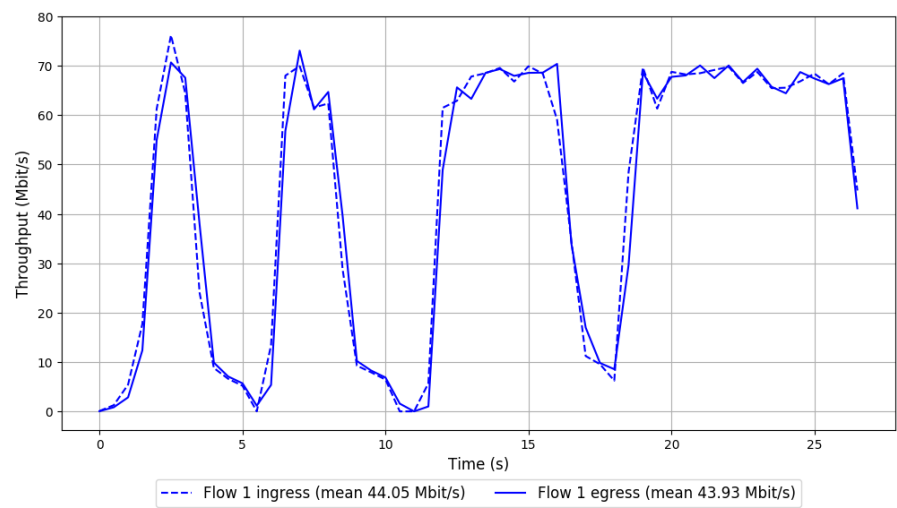
-- Flow 1:

Average throughput: 43.93 Mbit/s

95th percentile per-packet one-way delay: 136.460 ms

Loss rate: 0.96%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-09-18 09:29:55

End at: 2017-09-18 09:30:25

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.38 Mbit/s

95th percentile per-packet one-way delay: 137.040 ms

Loss rate: 0.29%

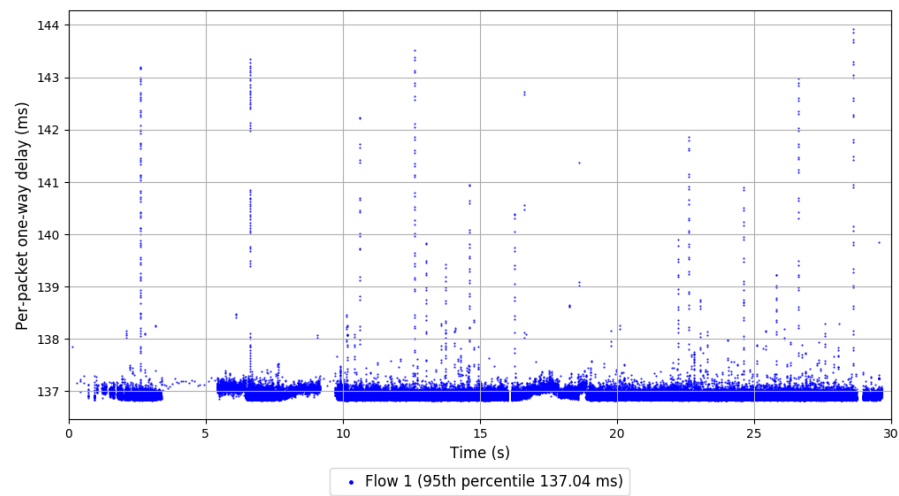
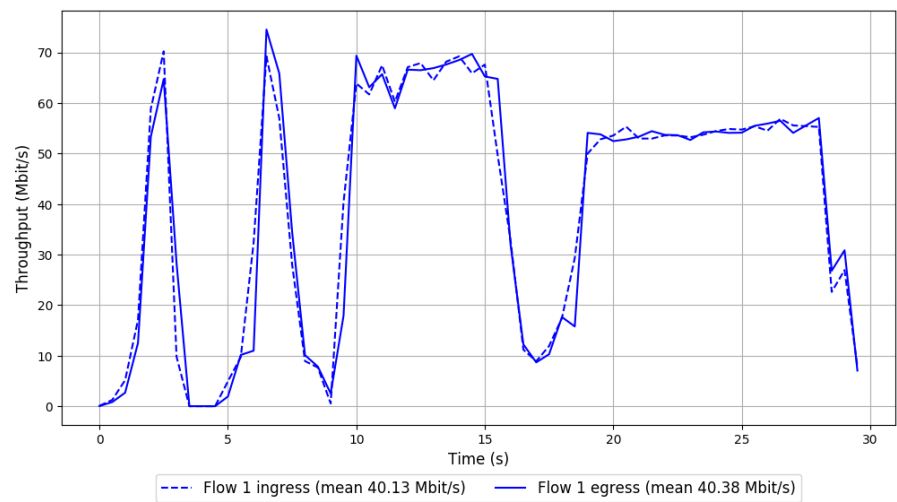
-- Flow 1:

Average throughput: 40.38 Mbit/s

95th percentile per-packet one-way delay: 137.040 ms

Loss rate: 0.29%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-09-18 09:41:55

End at: 2017-09-18 09:42:25

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.24 Mbit/s

95th percentile per-packet one-way delay: 136.370 ms

Loss rate: 0.17%

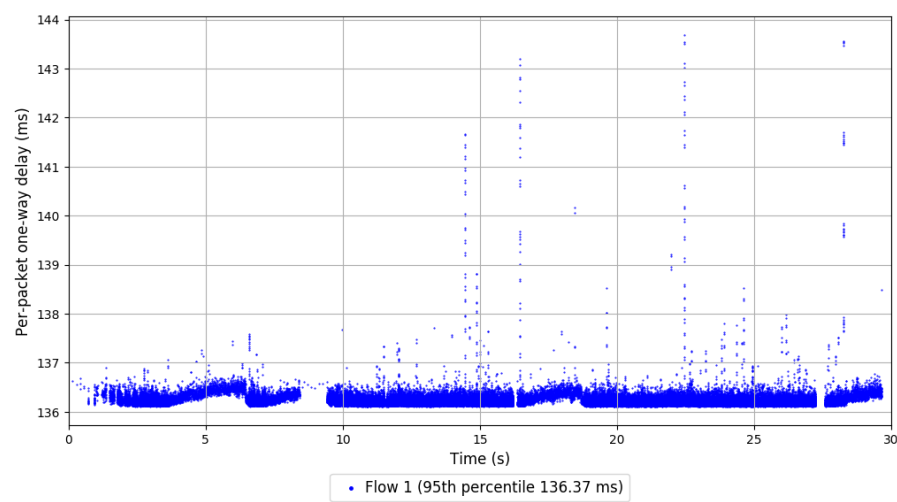
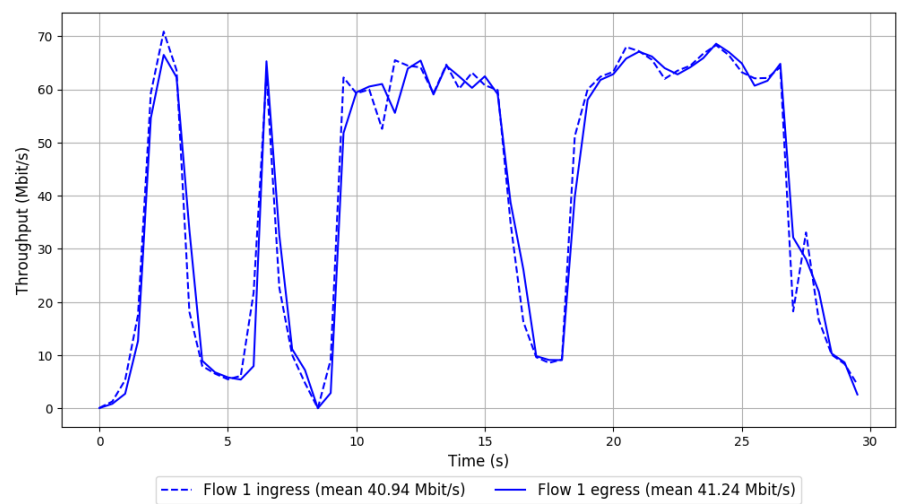
-- Flow 1:

Average throughput: 41.24 Mbit/s

95th percentile per-packet one-way delay: 136.370 ms

Loss rate: 0.17%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-09-18 09:54:16

End at: 2017-09-18 09:54:46

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.74 Mbit/s

95th percentile per-packet one-way delay: 137.242 ms

Loss rate: 0.17%

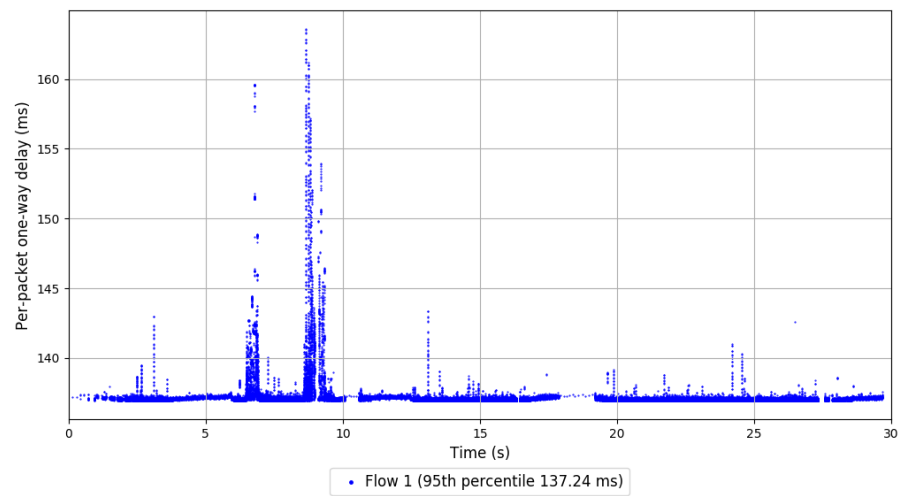
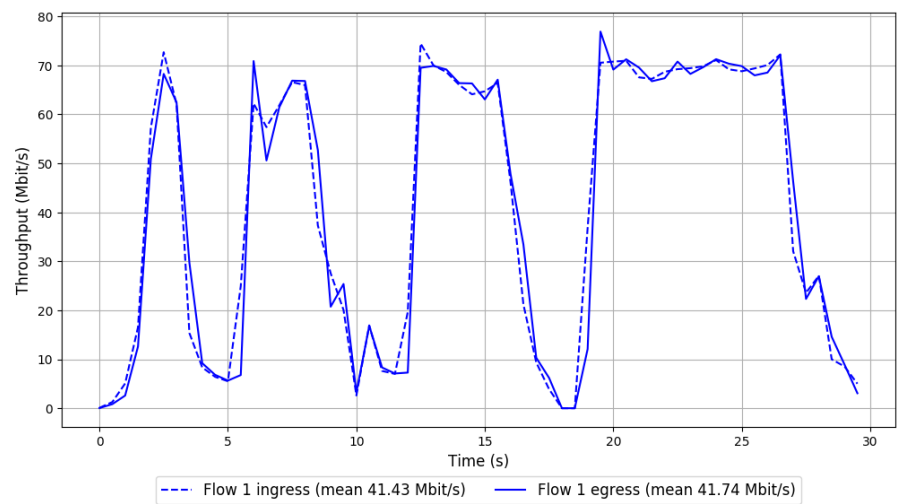
-- Flow 1:

Average throughput: 41.74 Mbit/s

95th percentile per-packet one-way delay: 137.242 ms

Loss rate: 0.17%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-09-18 10:06:40

End at: 2017-09-18 10:07:10

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.30 Mbit/s

95th percentile per-packet one-way delay: 136.986 ms

Loss rate: 1.44%

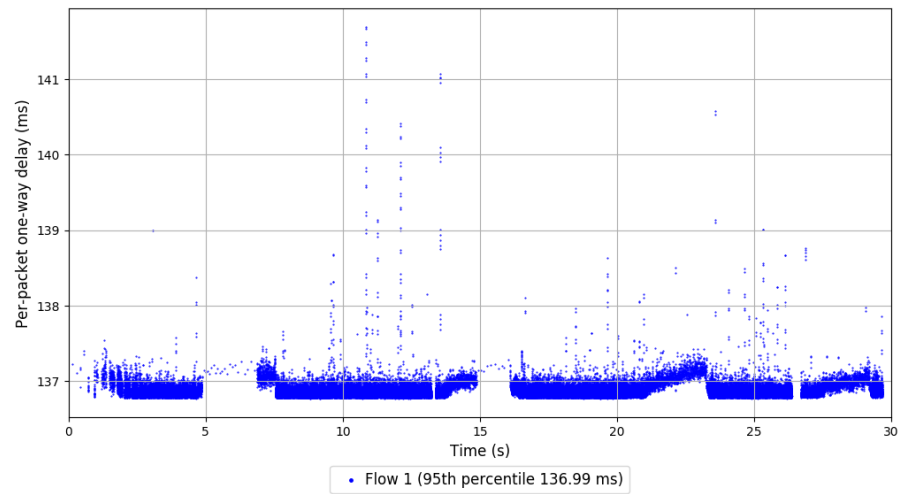
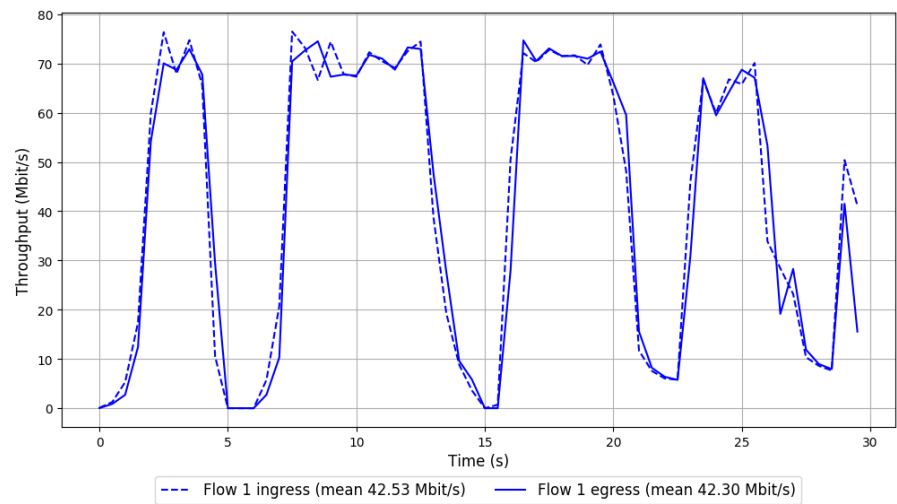
-- Flow 1:

Average throughput: 42.30 Mbit/s

95th percentile per-packet one-way delay: 136.986 ms

Loss rate: 1.44%

Run 9: Report of QUIC Cubic — Data Link

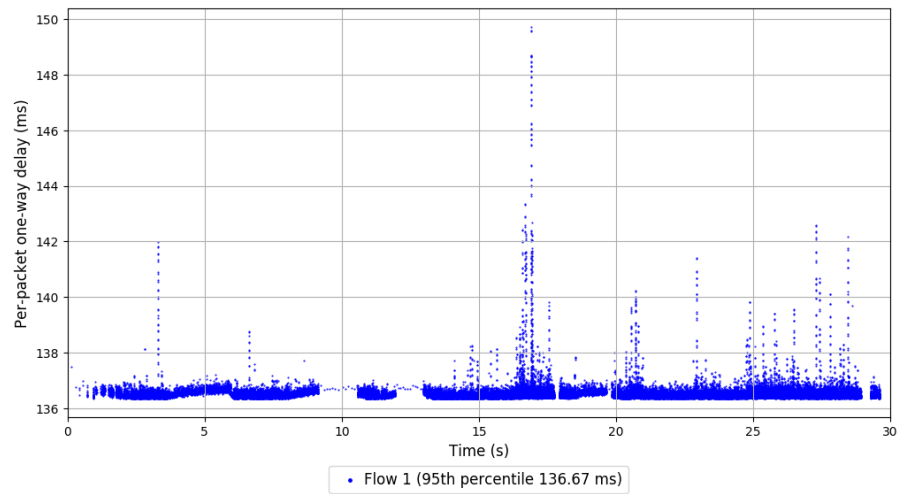
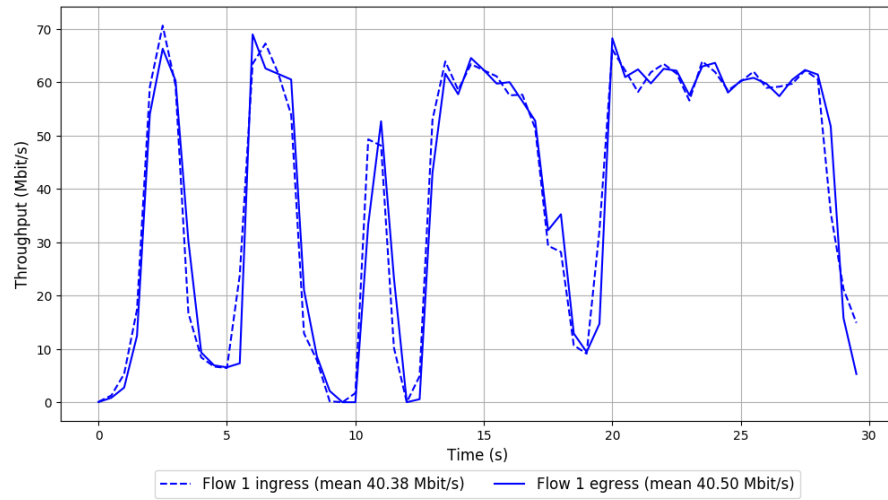


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-18 10:18:44
End at: 2017-09-18 10:19:14

# Below is generated by plot.py at 2017-09-18 13:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.50 Mbit/s
95th percentile per-packet one-way delay: 136.672 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 40.50 Mbit/s
95th percentile per-packet one-way delay: 136.672 ms
Loss rate: 0.63%
```

Run 10: Report of QUIC Cubic — Data Link

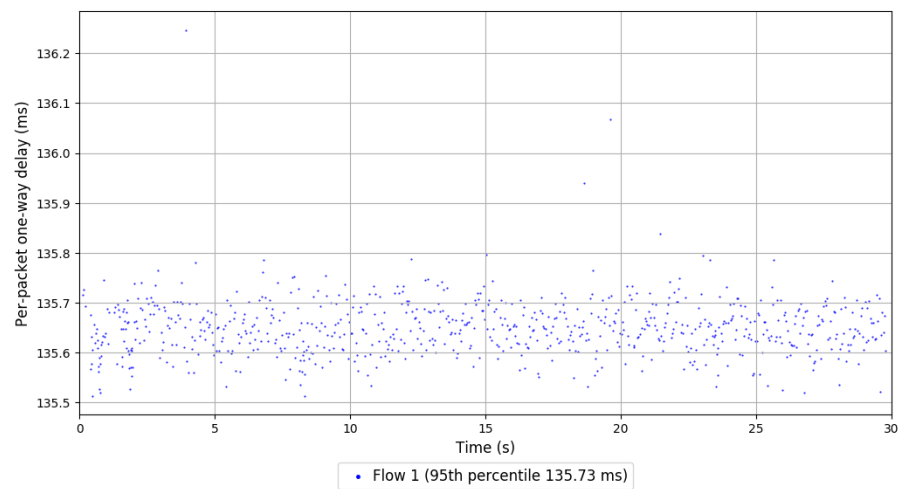
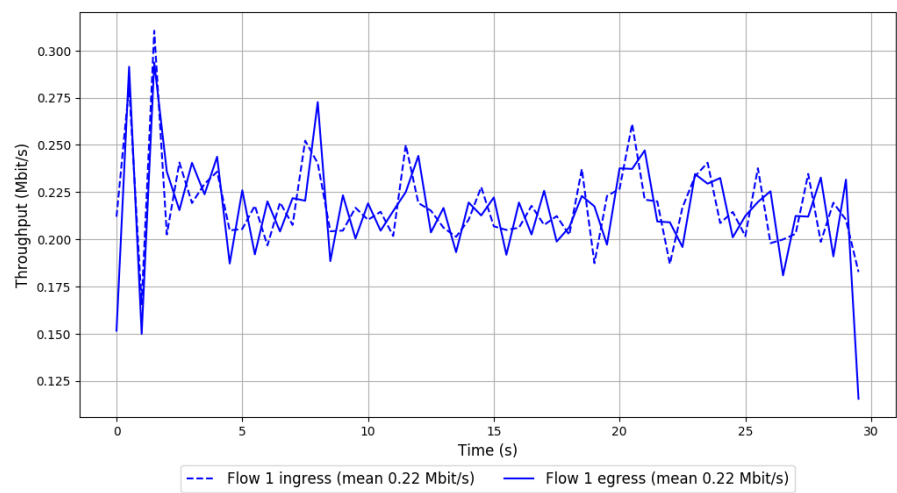


```
Run 1: Statistics of SCReAM

Start at: 2017-09-18 08:25:10
End at: 2017-09-18 08:25:40

# Below is generated by plot.py at 2017-09-18 13:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.732 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.732 ms
Loss rate: 0.89%
```

Run 1: Report of SReAM — Data Link

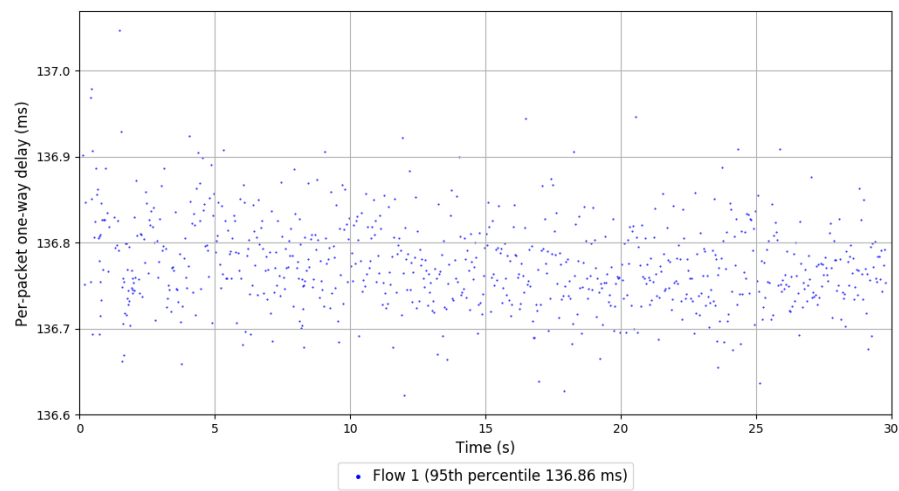
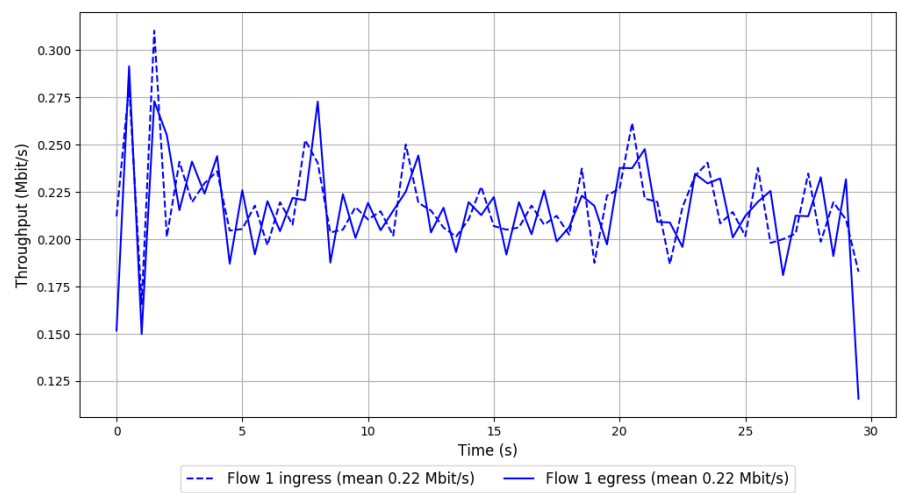


```
Run 2: Statistics of SCReAM

Start at: 2017-09-18 08:37:12
End at: 2017-09-18 08:37:42

# Below is generated by plot.py at 2017-09-18 13:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.863 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.863 ms
Loss rate: 0.89%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-09-18 08:49:23

End at: 2017-09-18 08:49:53

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.849 ms

Loss rate: 0.89%

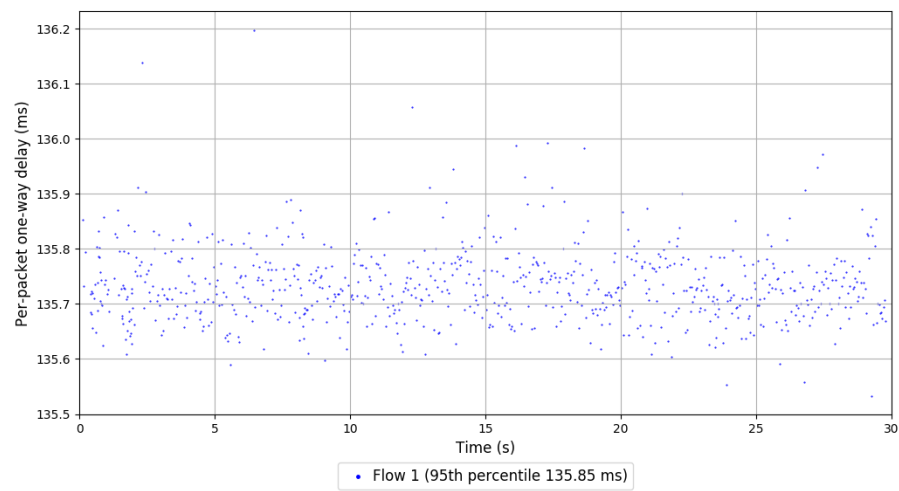
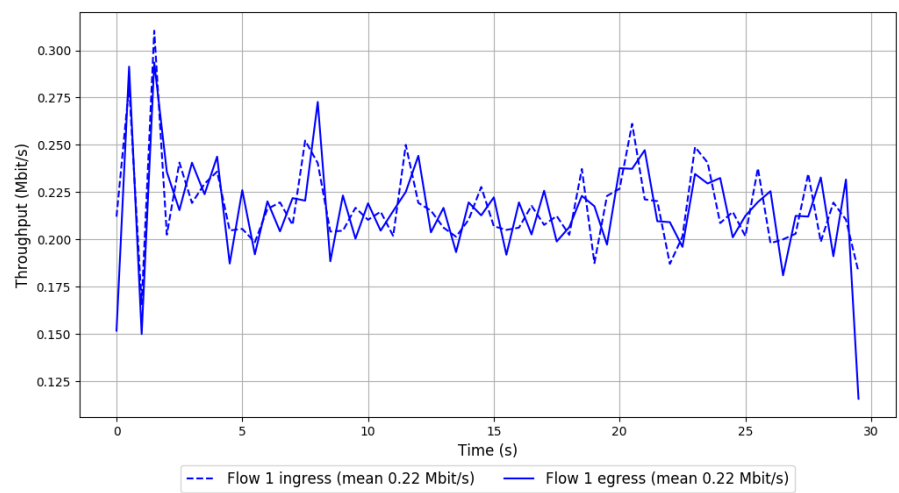
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.849 ms

Loss rate: 0.89%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-09-18 09:01:45

End at: 2017-09-18 09:02:15

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.655 ms

Loss rate: 0.89%

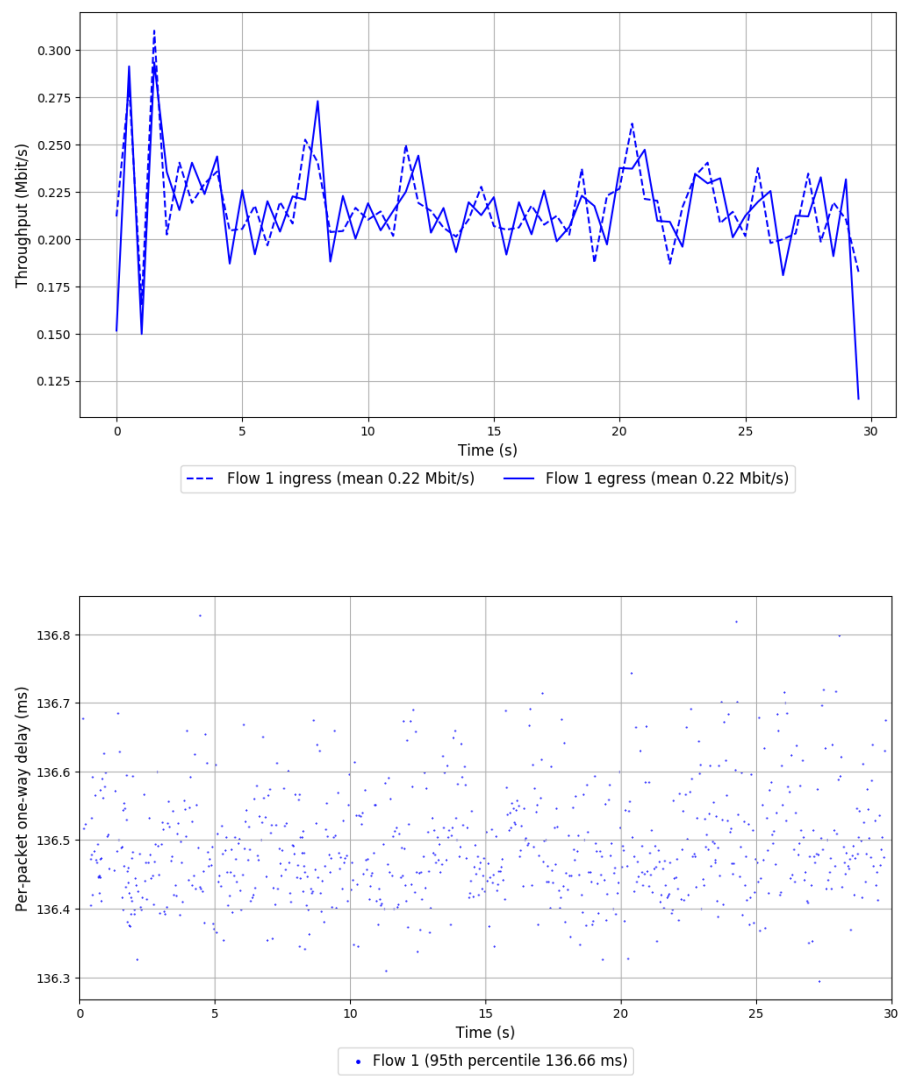
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.655 ms

Loss rate: 0.89%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-09-18 09:14:07

End at: 2017-09-18 09:14:37

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.036 ms

Loss rate: 0.89%

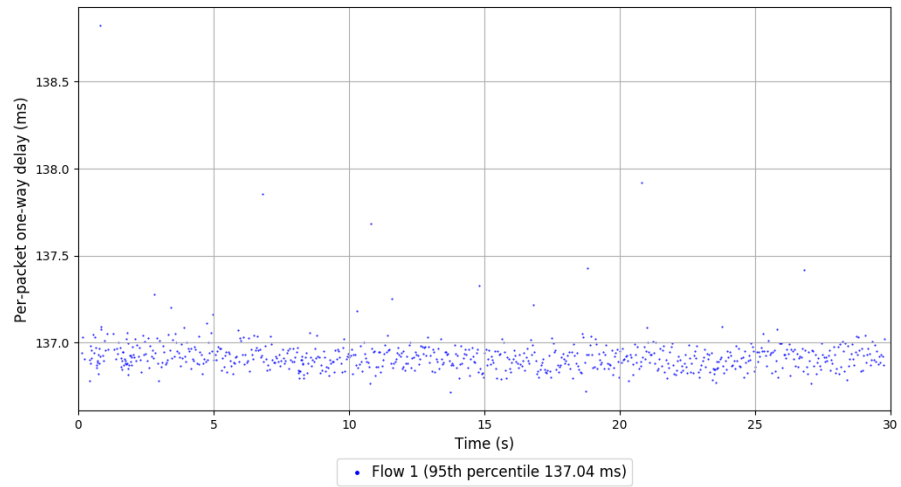
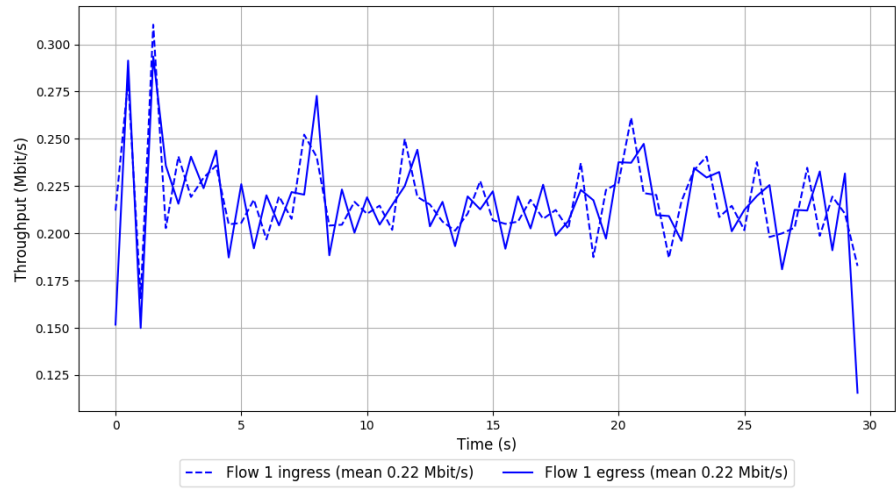
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.036 ms

Loss rate: 0.89%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-09-18 09:26:28

End at: 2017-09-18 09:26:58

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.580 ms

Loss rate: 0.89%

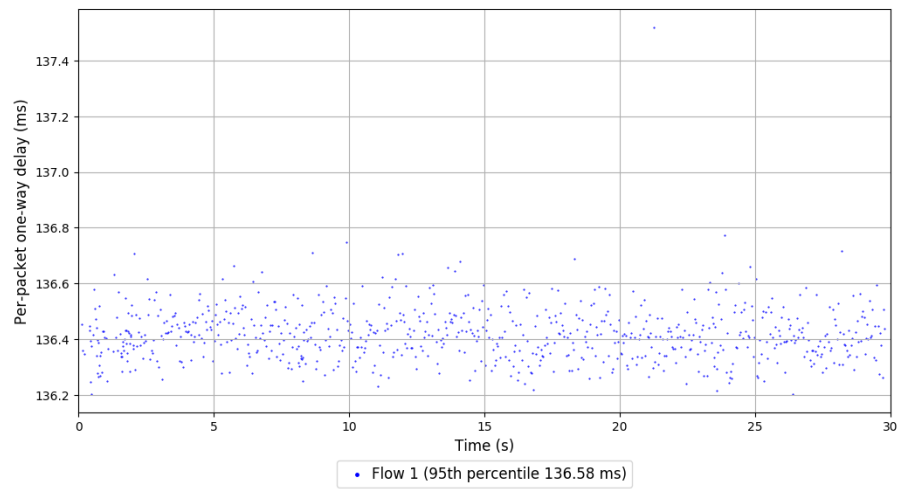
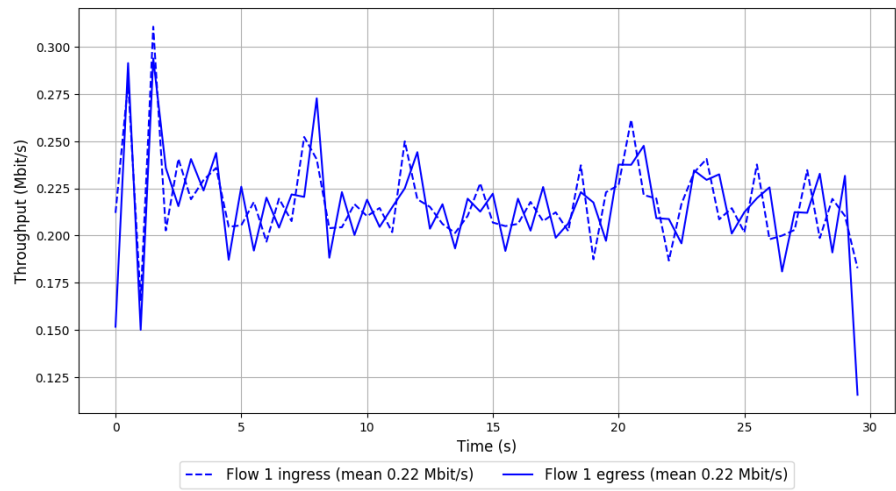
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.580 ms

Loss rate: 0.89%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-09-18 09:38:45

End at: 2017-09-18 09:39:15

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.520 ms

Loss rate: 0.90%

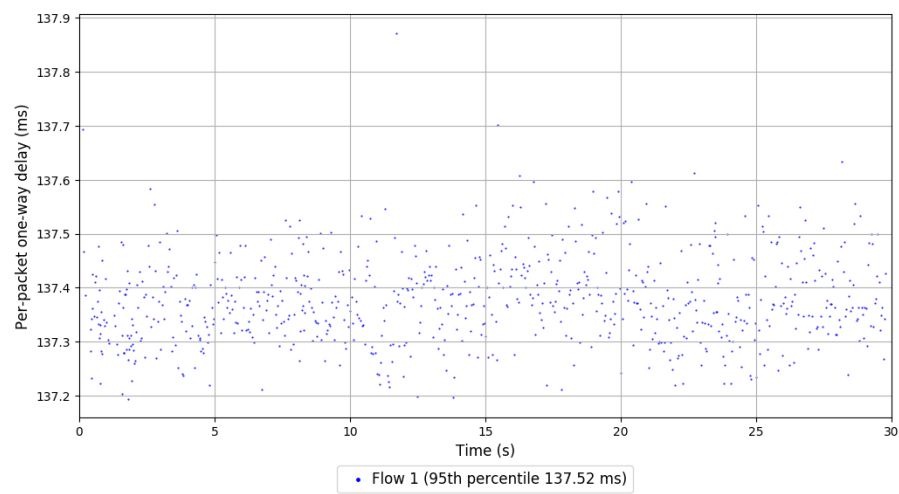
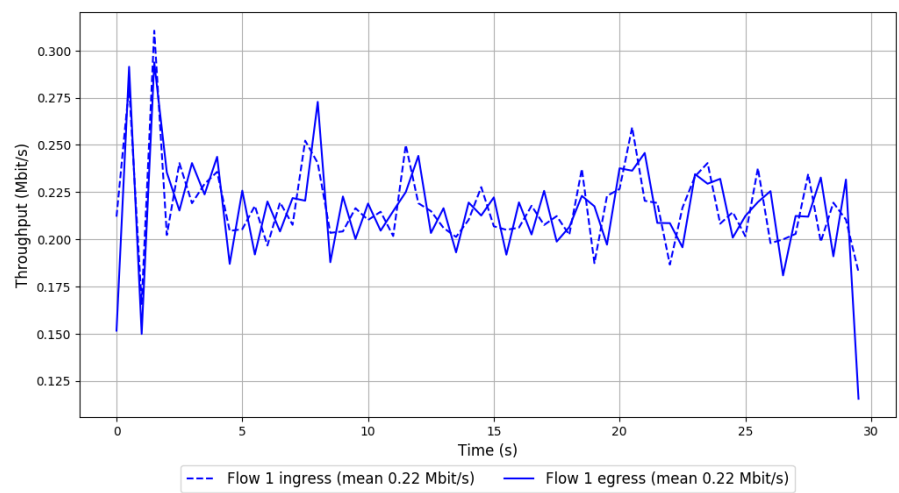
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.520 ms

Loss rate: 0.90%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-09-18 09:51:04

End at: 2017-09-18 09:51:34

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.668 ms

Loss rate: 0.89%

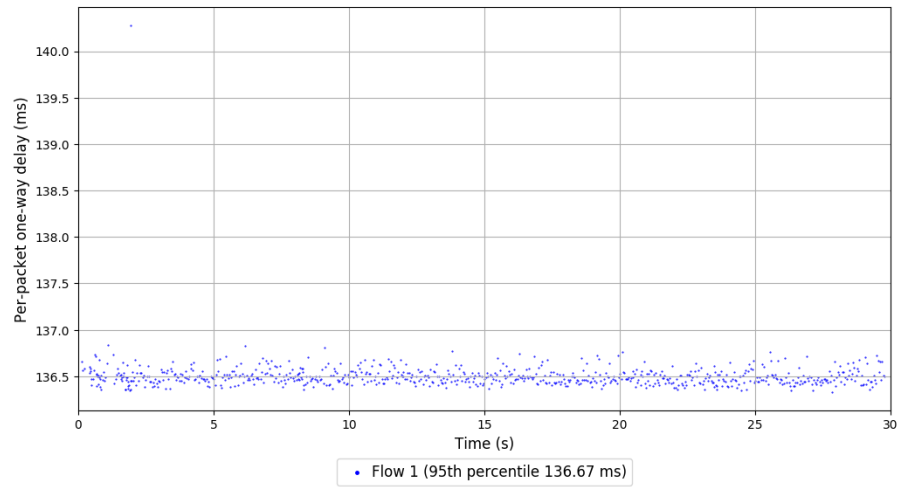
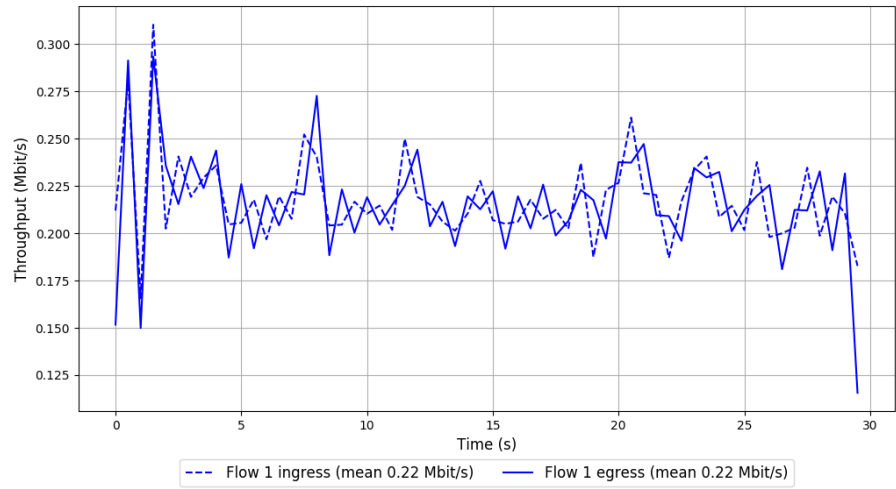
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.668 ms

Loss rate: 0.89%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-09-18 10:03:23

End at: 2017-09-18 10:03:53

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 136.482 ms

Loss rate: 0.89%

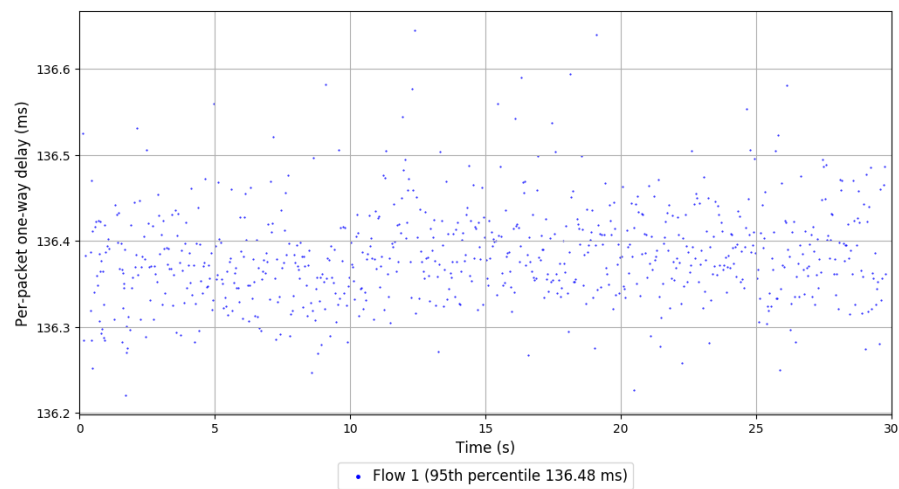
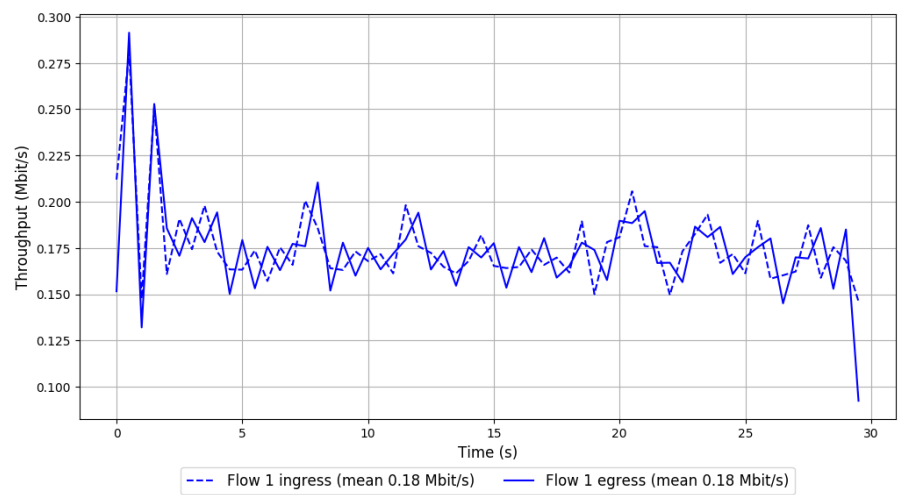
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 136.482 ms

Loss rate: 0.89%

Run 9: Report of SReAM — Data Link

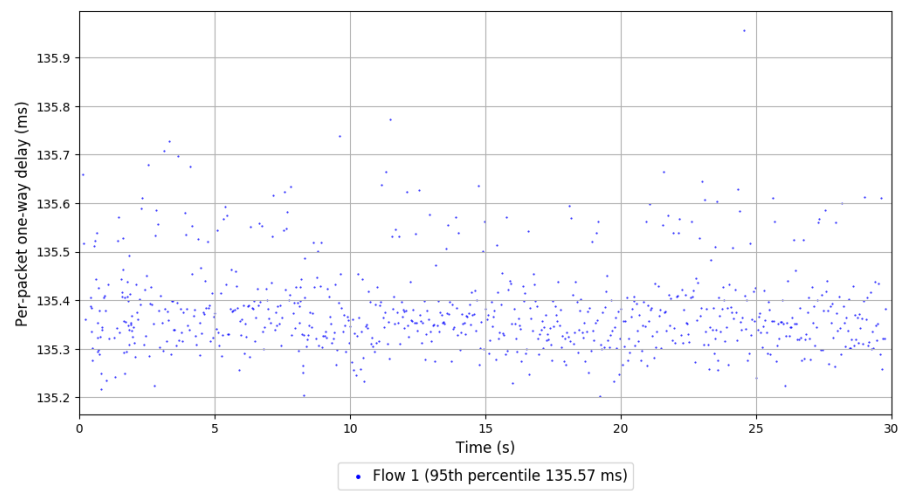
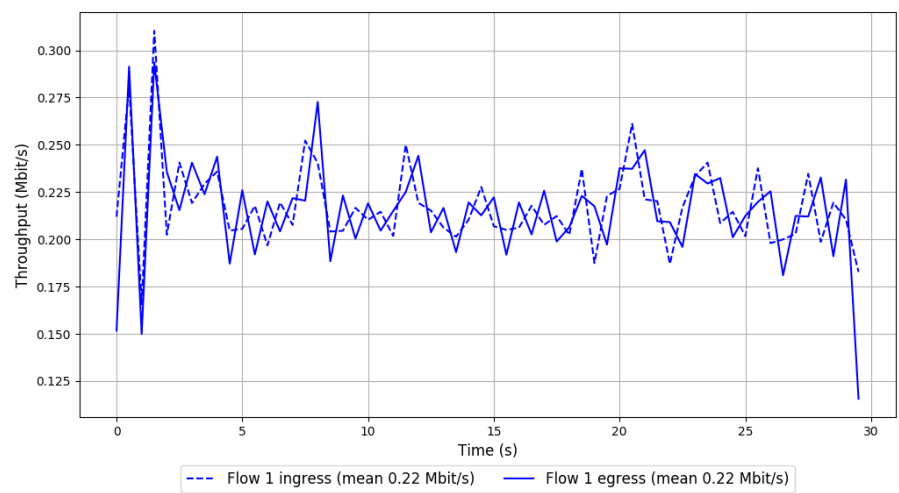


```
Run 10: Statistics of SReAM

Start at: 2017-09-18 10:15:28
End at: 2017-09-18 10:15:58

# Below is generated by plot.py at 2017-09-18 13:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.574 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.574 ms
Loss rate: 0.89%
```

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-09-18 08:29:54

End at: 2017-09-18 08:30:24

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 137.147 ms

Loss rate: 1.09%

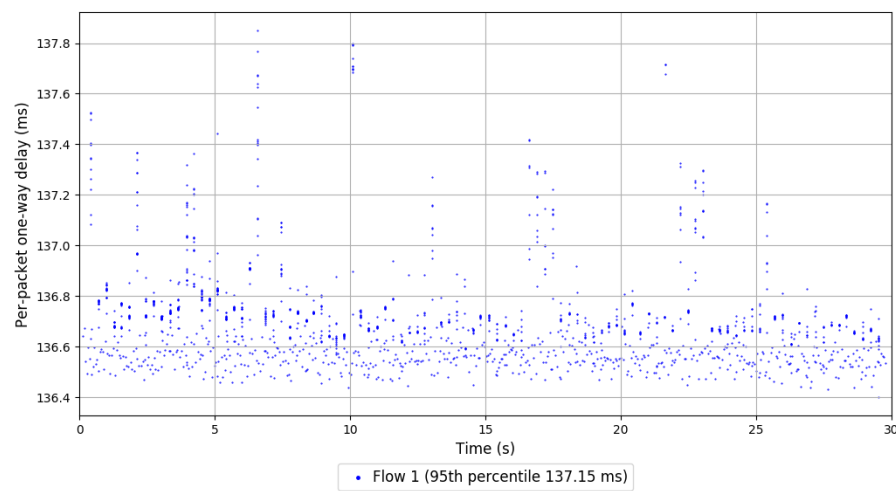
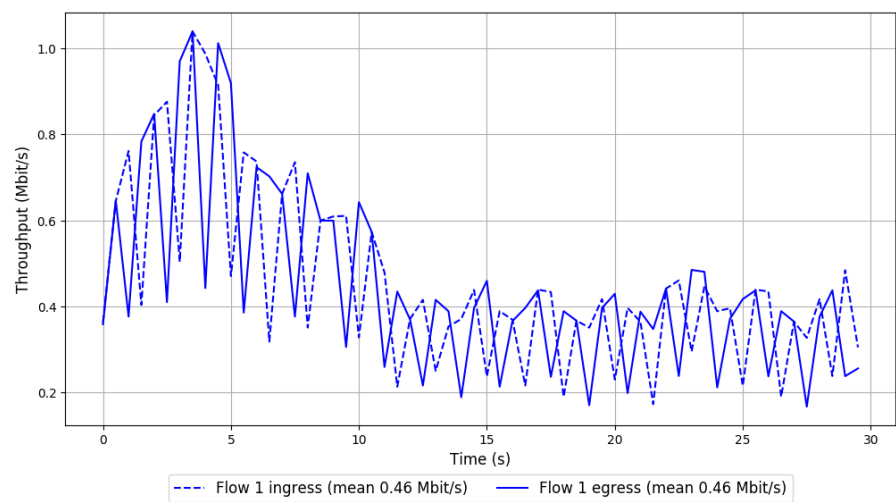
-- Flow 1:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 137.147 ms

Loss rate: 1.09%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-09-18 08:42:04

End at: 2017-09-18 08:42:34

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.374 ms

Loss rate: 0.81%

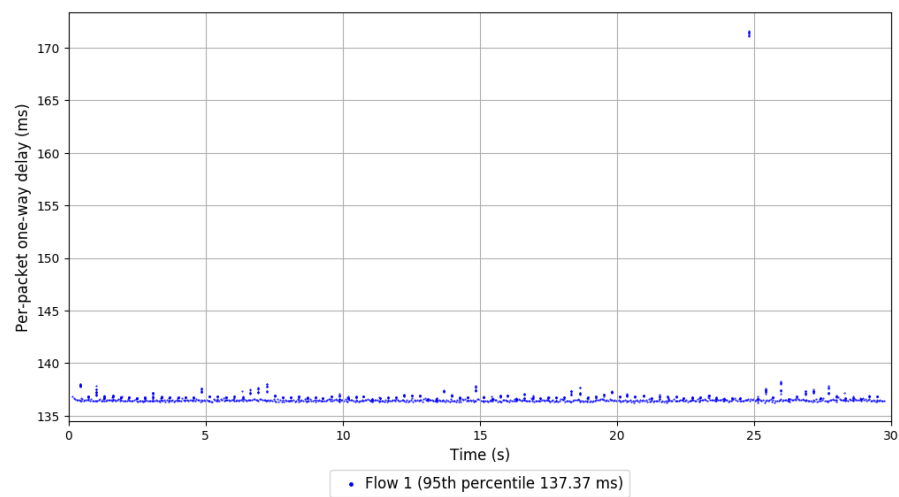
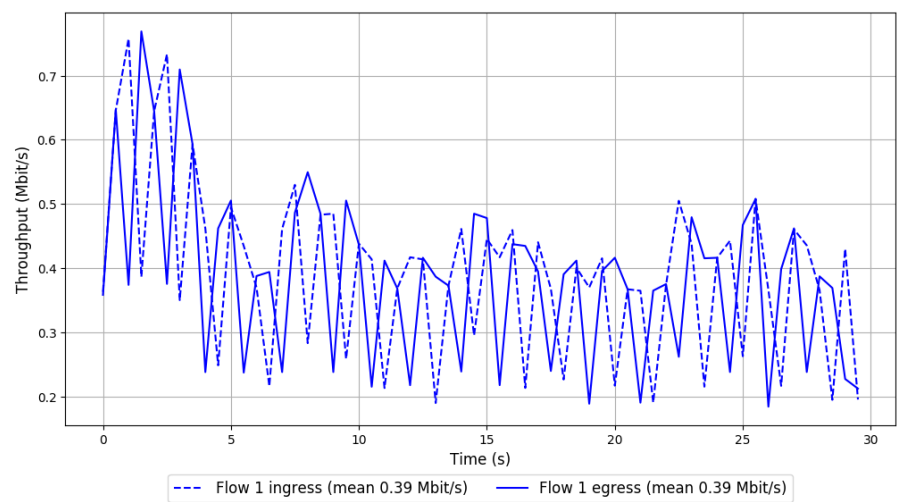
-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.374 ms

Loss rate: 0.81%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-09-18 08:54:04

End at: 2017-09-18 08:54:34

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 137.659 ms

Loss rate: 0.57%

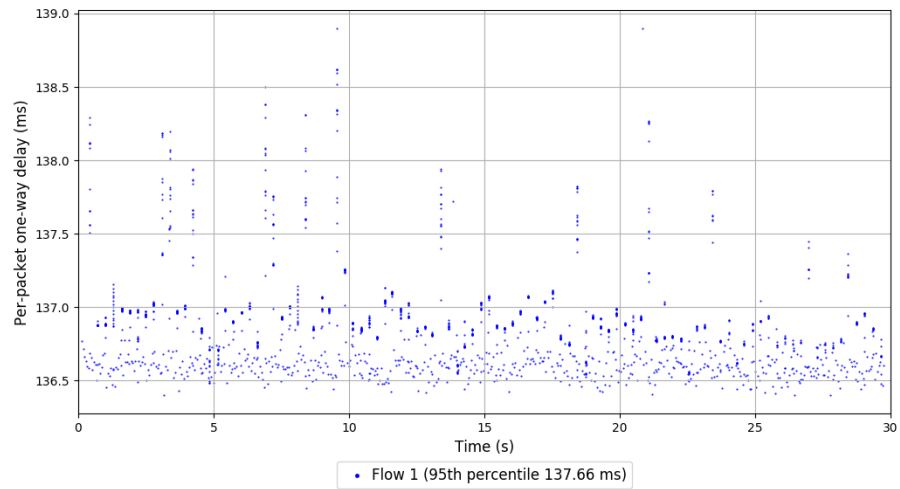
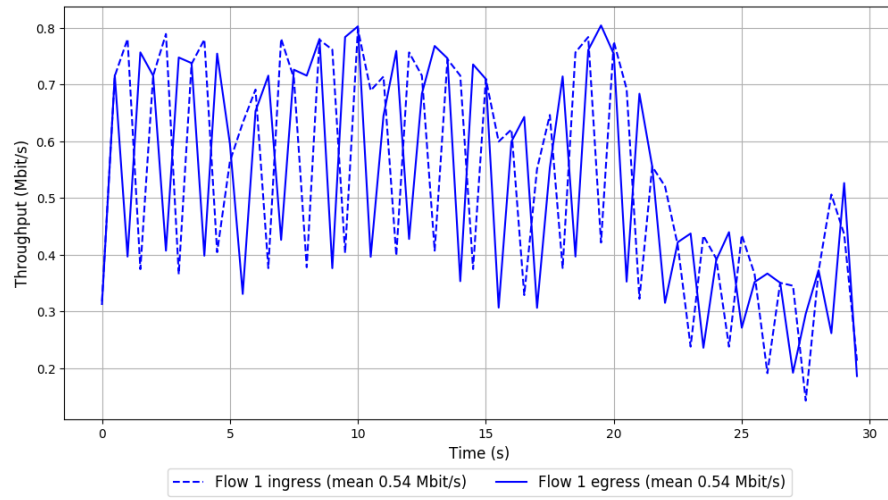
-- Flow 1:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 137.659 ms

Loss rate: 0.57%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-09-18 09:06:33

End at: 2017-09-18 09:07:03

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.35 Mbit/s

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

Loss rate: 0.87%

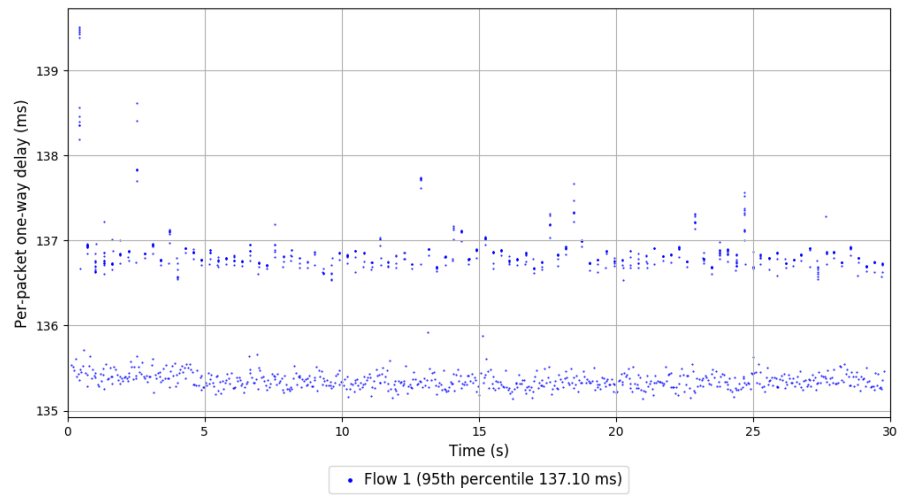
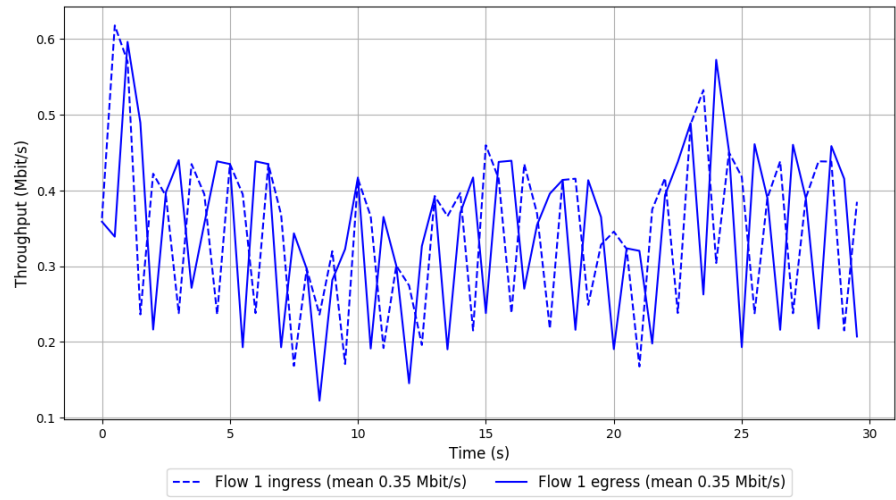
-- Flow 1:

Average throughput: 0.35 Mbit/s

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

Loss rate: 0.87%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-09-18 09:19:02

End at: 2017-09-18 09:19:32

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 137.102 ms

Loss rate: 1.08%

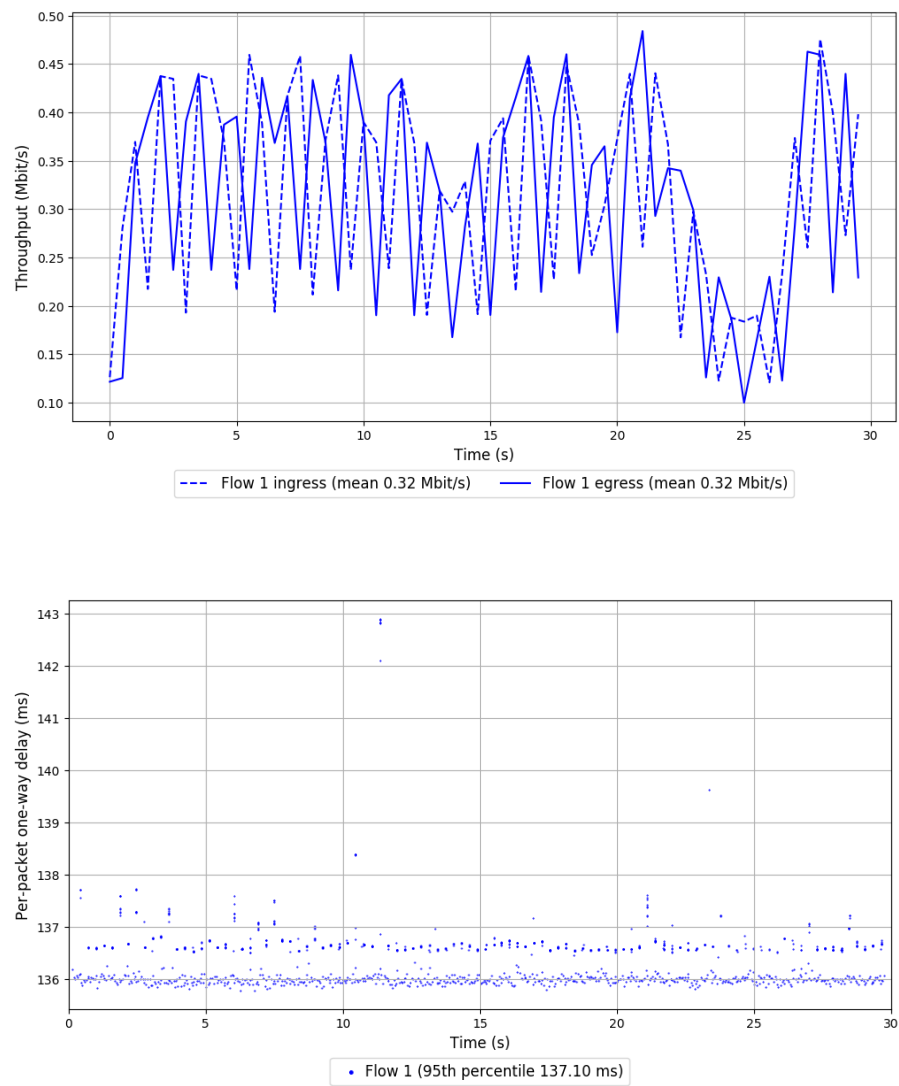
-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 137.102 ms

Loss rate: 1.08%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-09-18 09:31:27

End at: 2017-09-18 09:31:57

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.137 ms

Loss rate: 1.04%

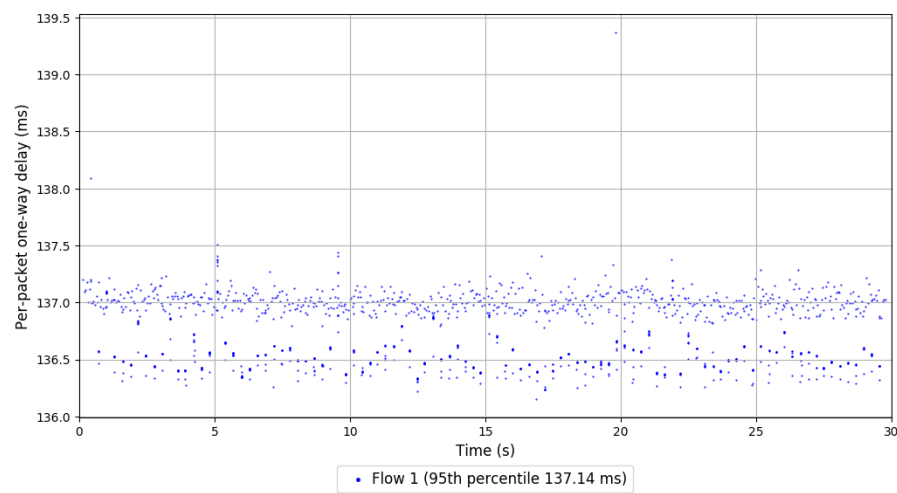
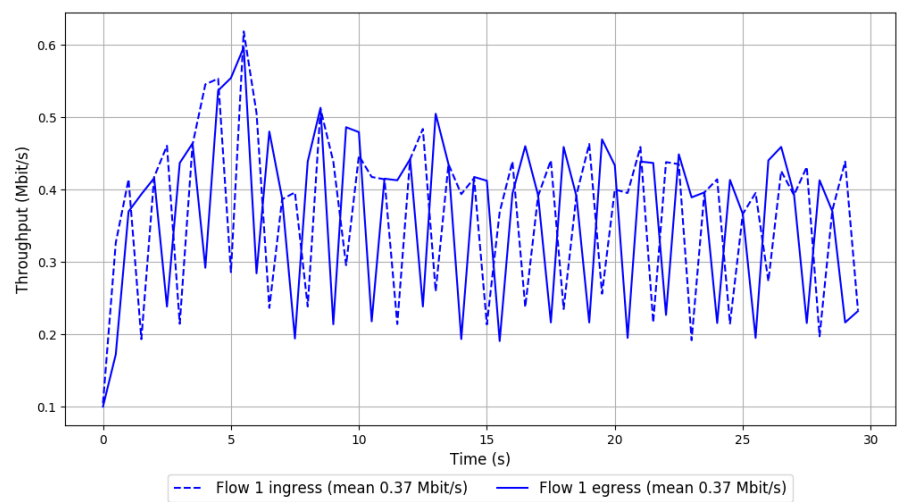
-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.137 ms

Loss rate: 1.04%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-09-18 09:43:28

End at: 2017-09-18 09:43:58

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.700 ms

Loss rate: 0.77%

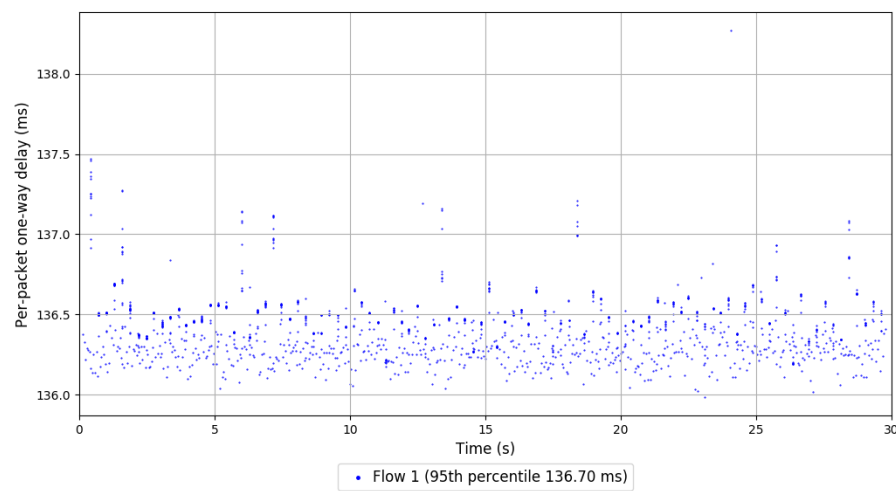
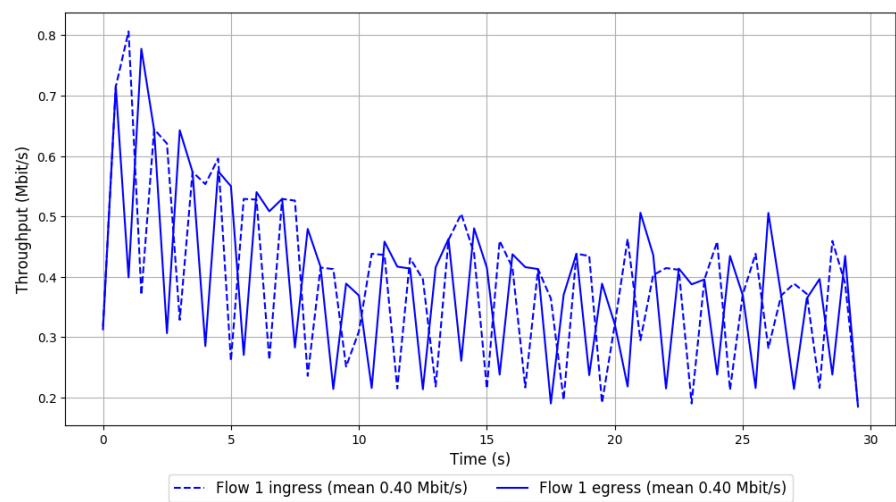
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.700 ms

Loss rate: 0.77%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-09-18 09:55:50

End at: 2017-09-18 09:56:20

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.800 ms

Loss rate: 0.86%

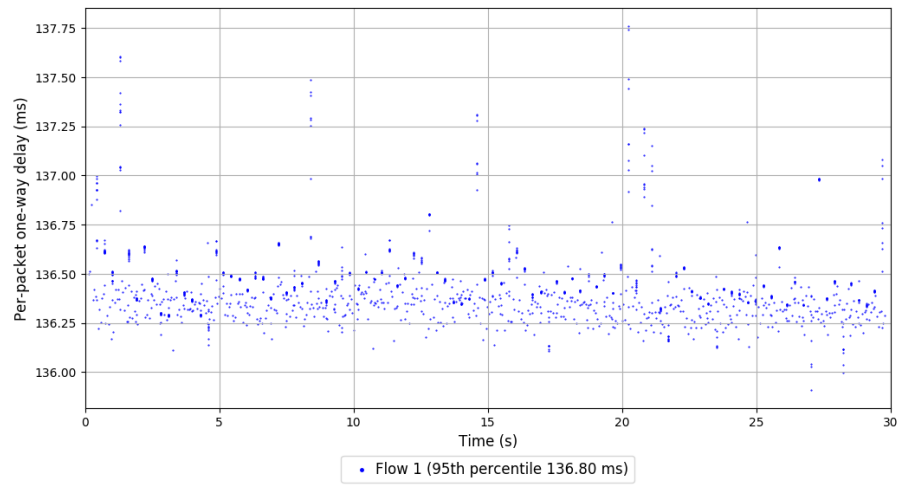
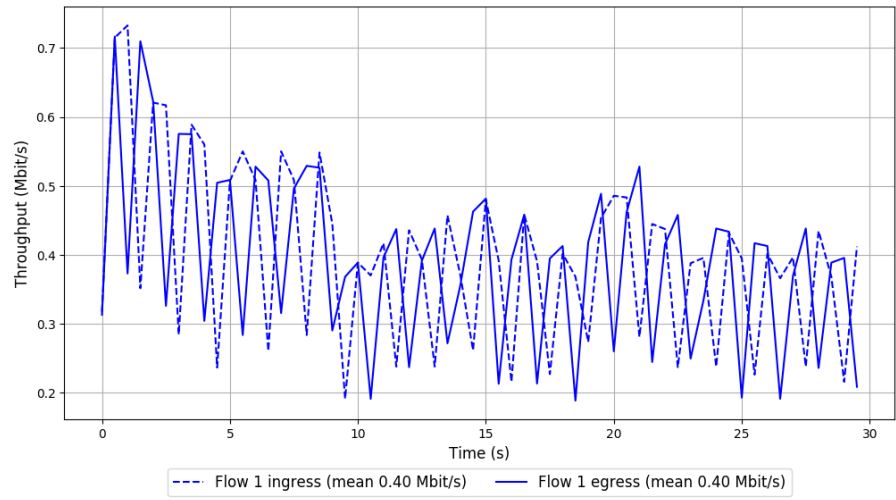
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.800 ms

Loss rate: 0.86%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-09-18 10:08:12

End at: 2017-09-18 10:08:42

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.423 ms

Loss rate: 1.00%

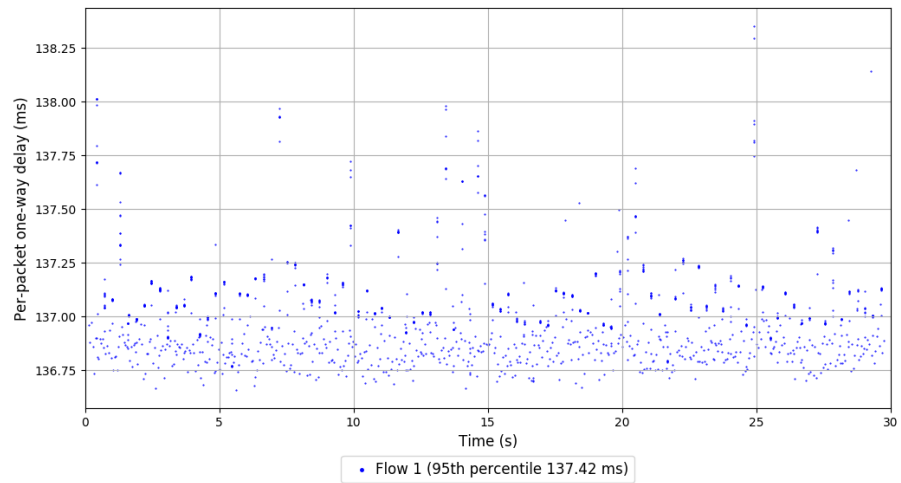
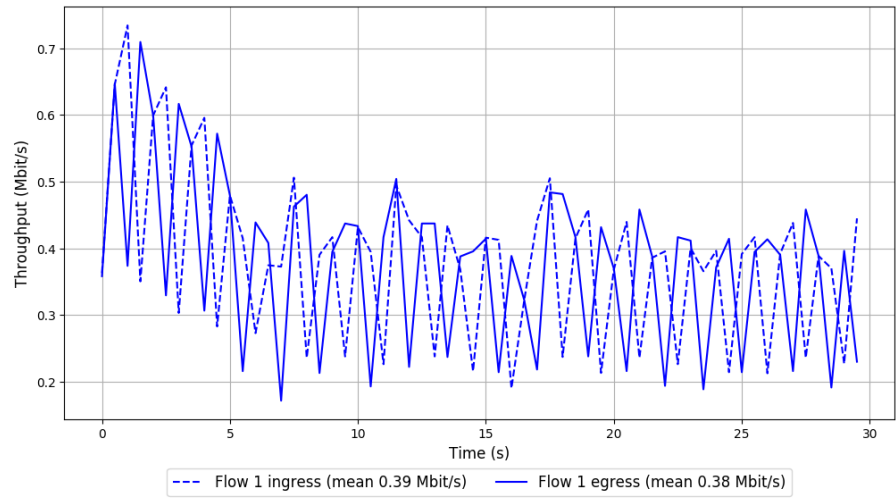
-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.423 ms

Loss rate: 1.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-09-18 10:20:15

End at: 2017-09-18 10:20:45

Below is generated by plot.py at 2017-09-18 13:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.496 ms

Loss rate: 0.93%

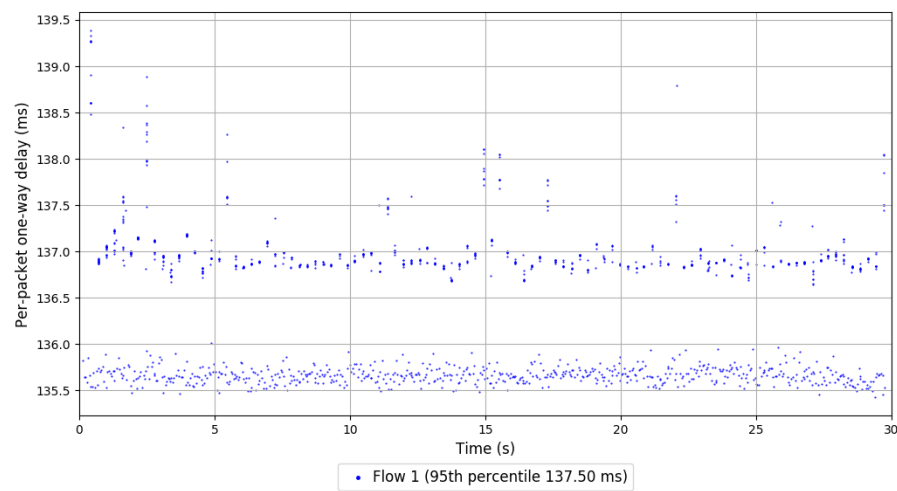
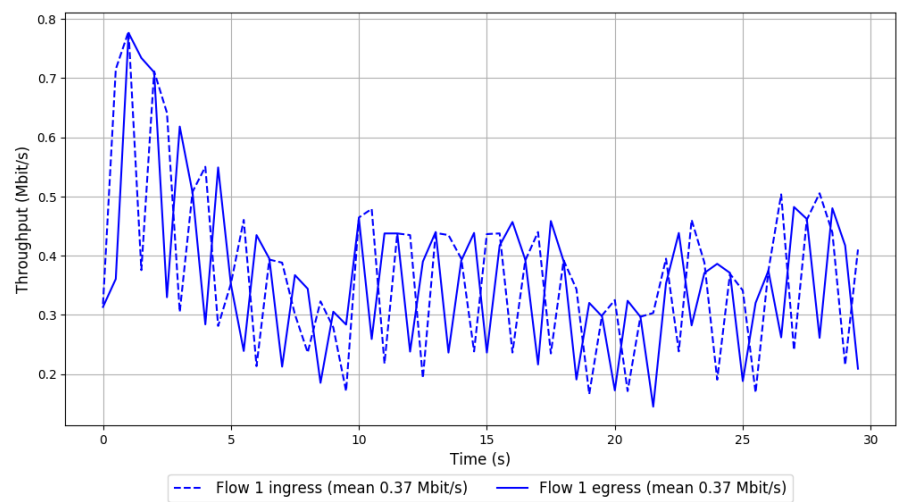
-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.496 ms

Loss rate: 0.93%

Run 10: Report of Sprout — Data Link

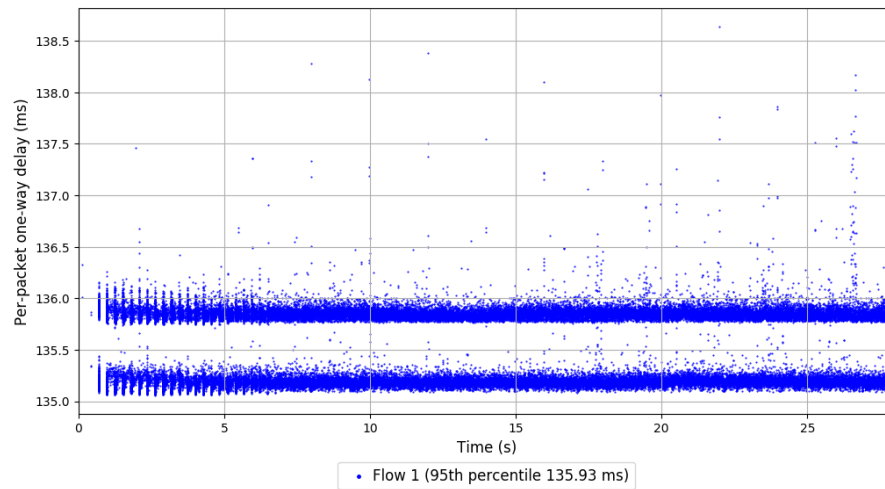
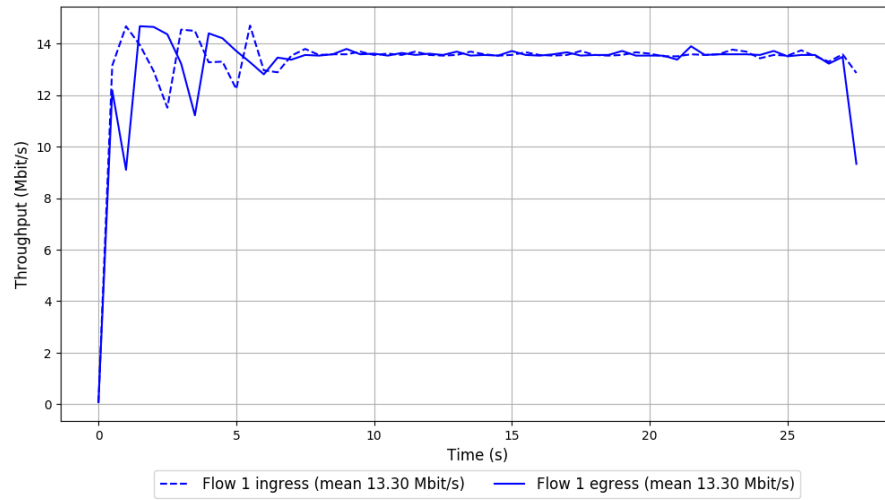


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-09-18 08:24:26
End at: 2017-09-18 08:24:56

# Below is generated by plot.py at 2017-09-18 13:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.30 Mbit/s
95th percentile per-packet one-way delay: 135.926 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 13.30 Mbit/s
95th percentile per-packet one-way delay: 135.926 ms
Loss rate: 0.99%
```

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

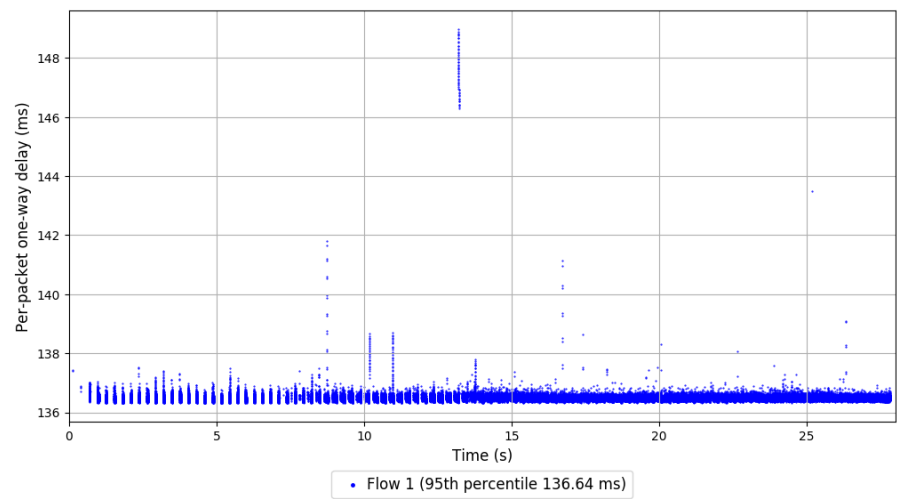
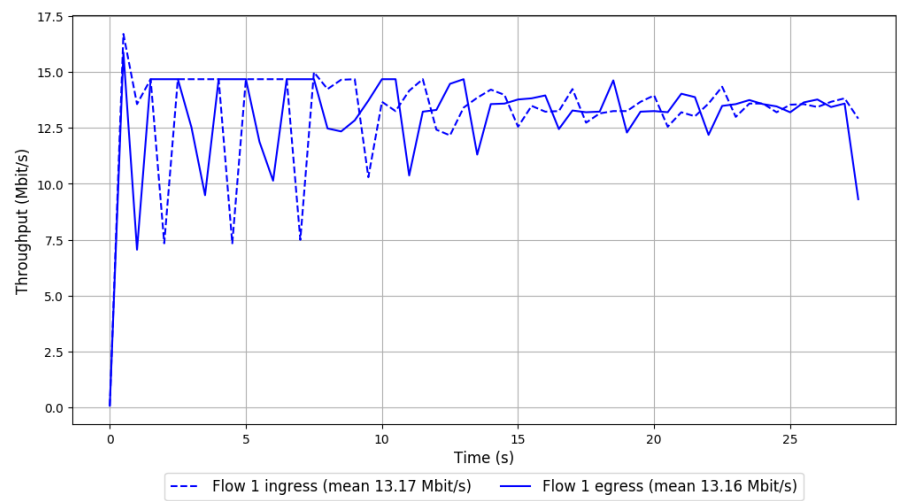


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-09-18 08:36:27
End at: 2017-09-18 08:36:57

# Below is generated by plot.py at 2017-09-18 13:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.16 Mbit/s
95th percentile per-packet one-way delay: 136.639 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 13.16 Mbit/s
95th percentile per-packet one-way delay: 136.639 ms
Loss rate: 1.02%
```

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

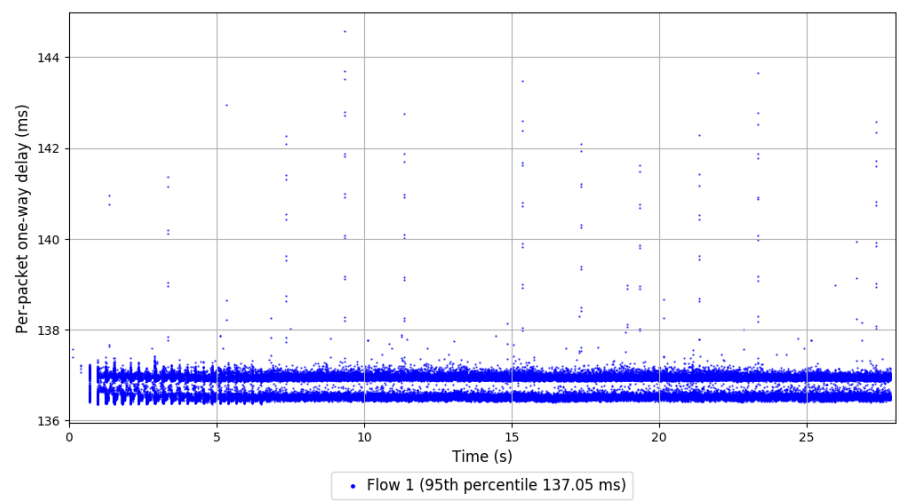
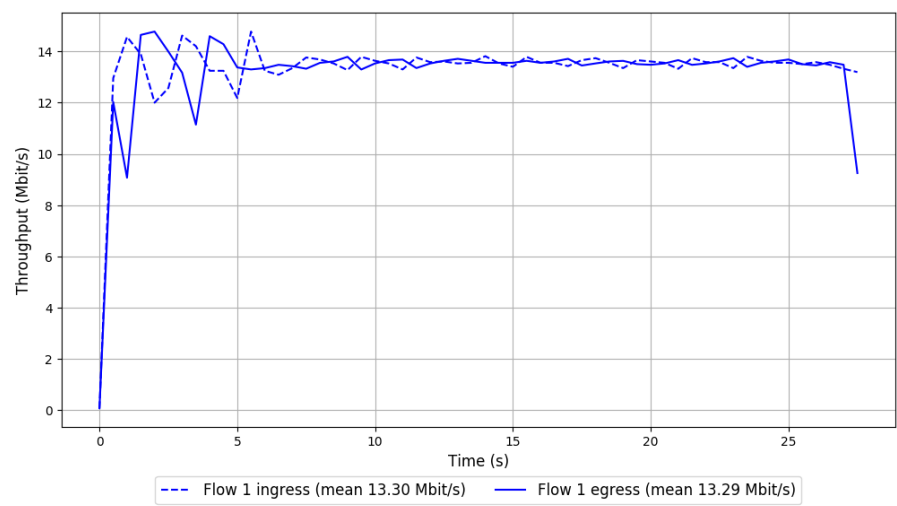


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-09-18 08:48:38
End at: 2017-09-18 08:49:08

# Below is generated by plot.py at 2017-09-18 13:05:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.29 Mbit/s
95th percentile per-packet one-way delay: 137.048 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 13.29 Mbit/s
95th percentile per-packet one-way delay: 137.048 ms
Loss rate: 1.01%
```


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



Run 4: Statistics of TaoVA-100x

Start at: 2017-09-18 09:00:41

End at: 2017-09-18 09:01:11

Below is generated by plot.py at 2017-09-18 13:06:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.75 Mbit/s

95th percentile per-packet one-way delay: 147.339 ms

Loss rate: 1.02%

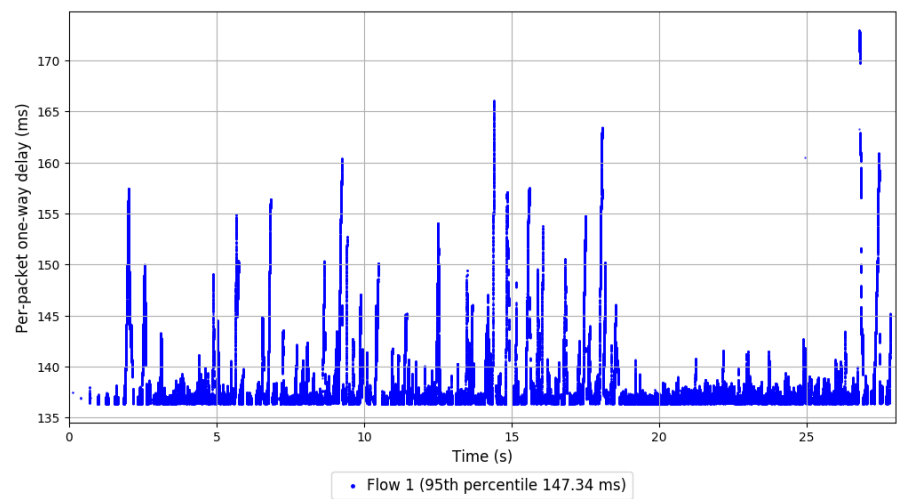
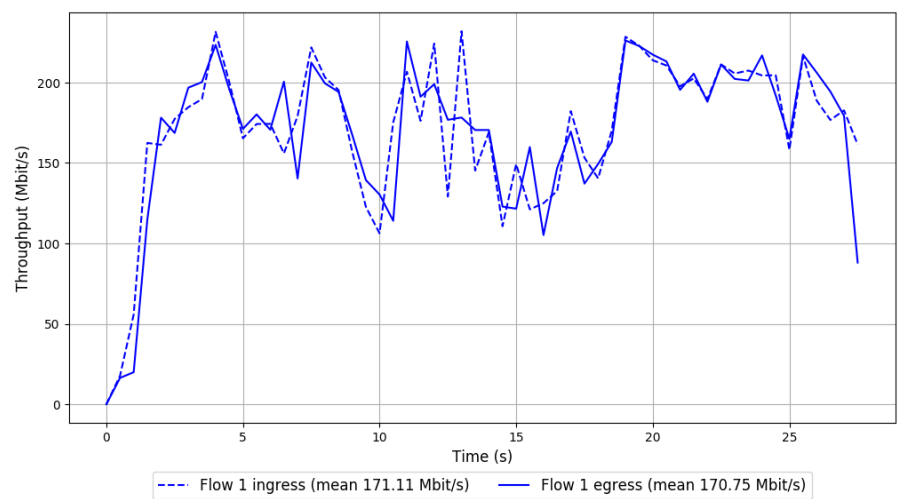
-- Flow 1:

Average throughput: 170.75 Mbit/s

95th percentile per-packet one-way delay: 147.339 ms

Loss rate: 1.02%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-09-18 09:13:02

End at: 2017-09-18 09:13:32

Below is generated by plot.py at 2017-09-18 13:06:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.25 Mbit/s

95th percentile per-packet one-way delay: 143.113 ms

Loss rate: 0.94%

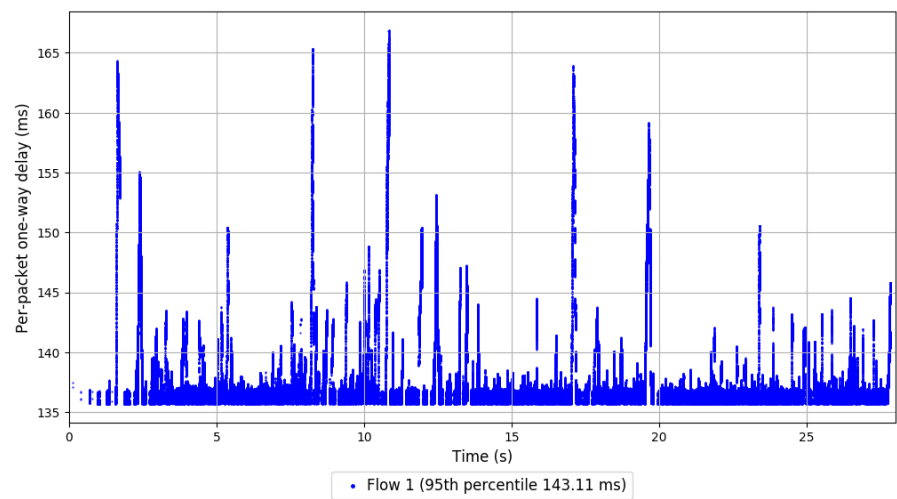
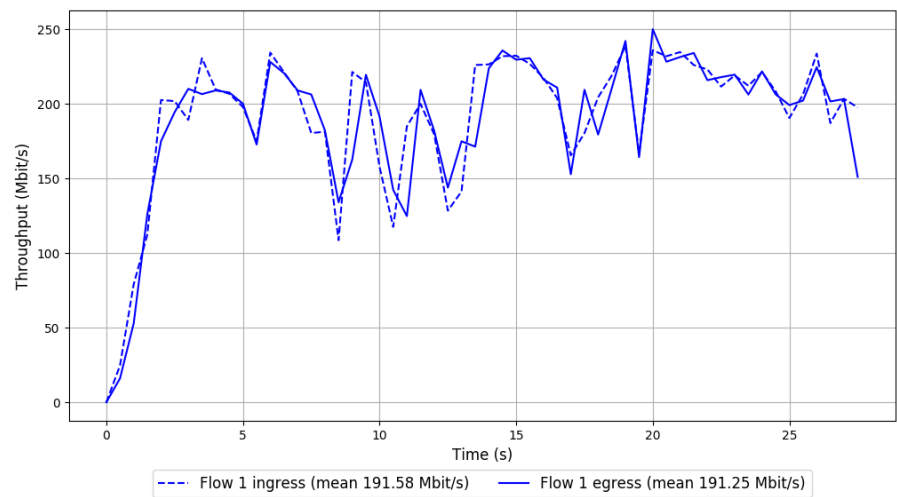
-- Flow 1:

Average throughput: 191.25 Mbit/s

95th percentile per-packet one-way delay: 143.113 ms

Loss rate: 0.94%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-09-18 09:25:25

End at: 2017-09-18 09:25:55

Below is generated by plot.py at 2017-09-18 13:06:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.74 Mbit/s

95th percentile per-packet one-way delay: 149.011 ms

Loss rate: 0.92%

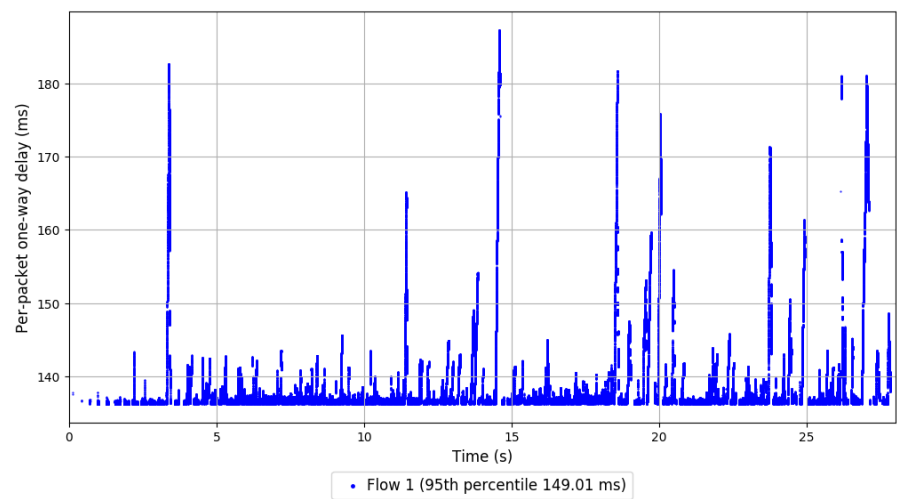
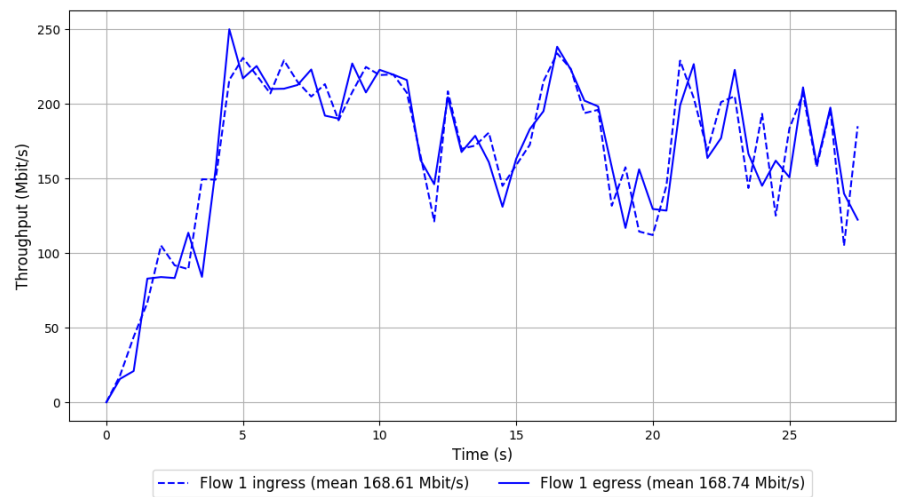
-- Flow 1:

Average throughput: 168.74 Mbit/s

95th percentile per-packet one-way delay: 149.011 ms

Loss rate: 0.92%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-09-18 09:38:00

End at: 2017-09-18 09:38:30

Below is generated by plot.py at 2017-09-18 13:06:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.17 Mbit/s

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

Loss rate: 1.01%

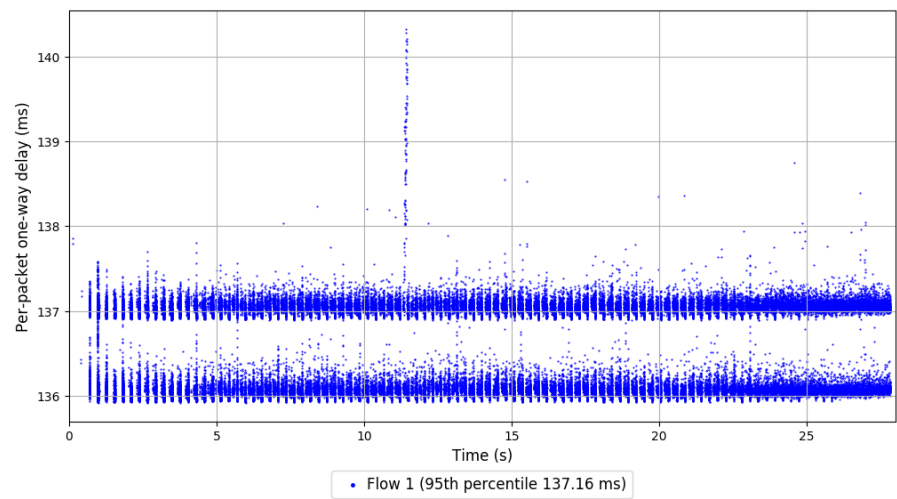
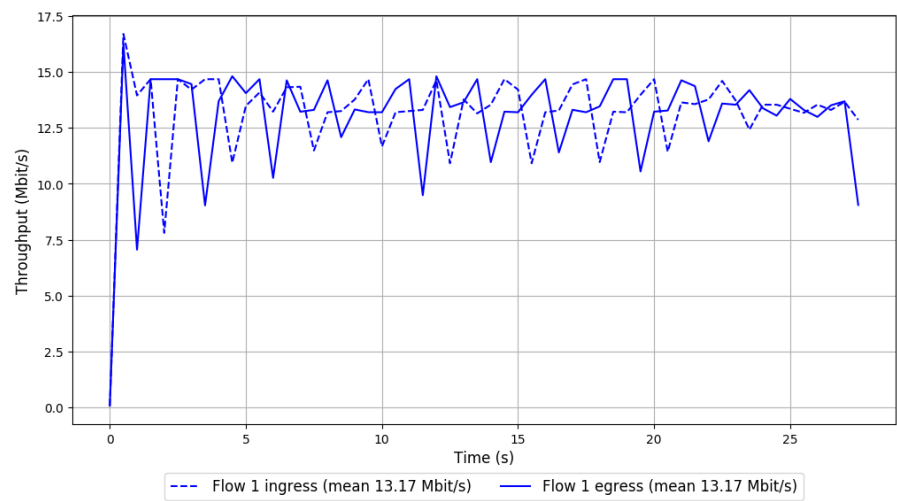
-- Flow 1:

Average throughput: 13.17 Mbit/s

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

Loss rate: 1.01%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-09-18 09:50:03

End at: 2017-09-18 09:50:33

Below is generated by plot.py at 2017-09-18 13:06:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.25 Mbit/s

95th percentile per-packet one-way delay: 155.799 ms

Loss rate: 0.83%

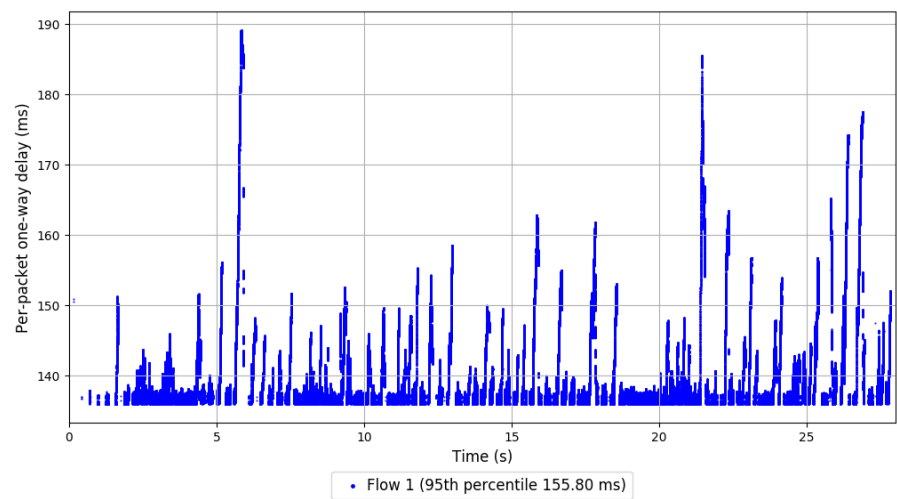
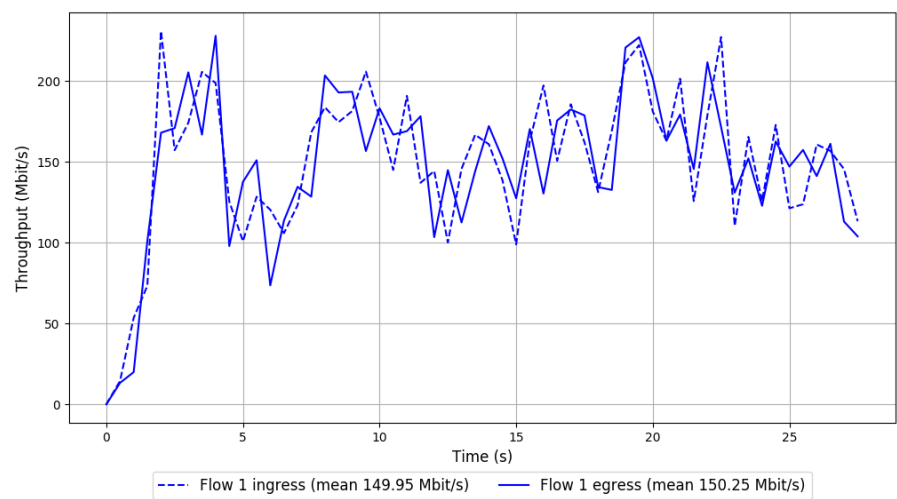
-- Flow 1:

Average throughput: 150.25 Mbit/s

95th percentile per-packet one-way delay: 155.799 ms

Loss rate: 0.83%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-09-18 10:02:19

End at: 2017-09-18 10:02:49

Below is generated by plot.py at 2017-09-18 13:07:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.88 Mbit/s

95th percentile per-packet one-way delay: 145.948 ms

Loss rate: 1.10%

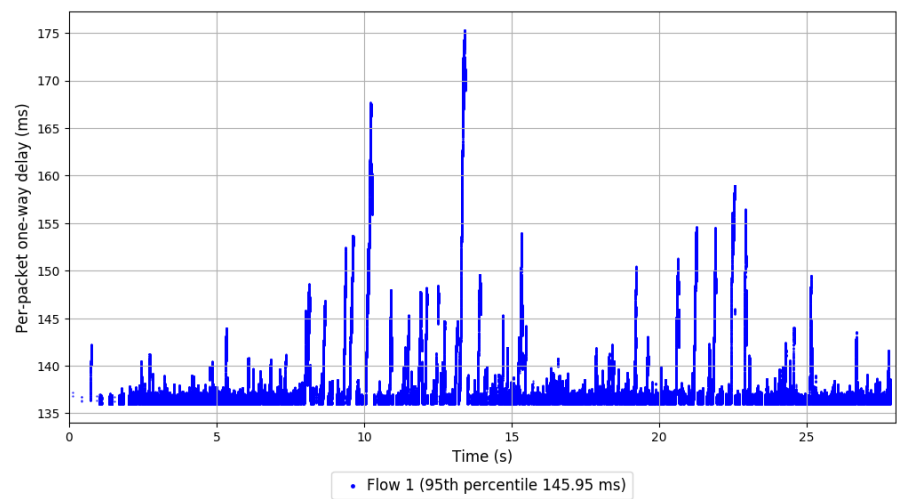
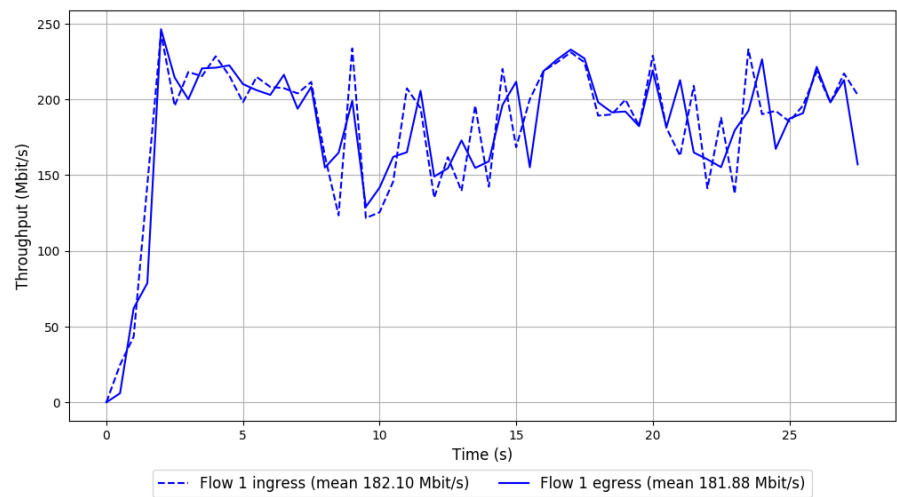
-- Flow 1:

Average throughput: 181.88 Mbit/s

95th percentile per-packet one-way delay: 145.948 ms

Loss rate: 1.10%

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

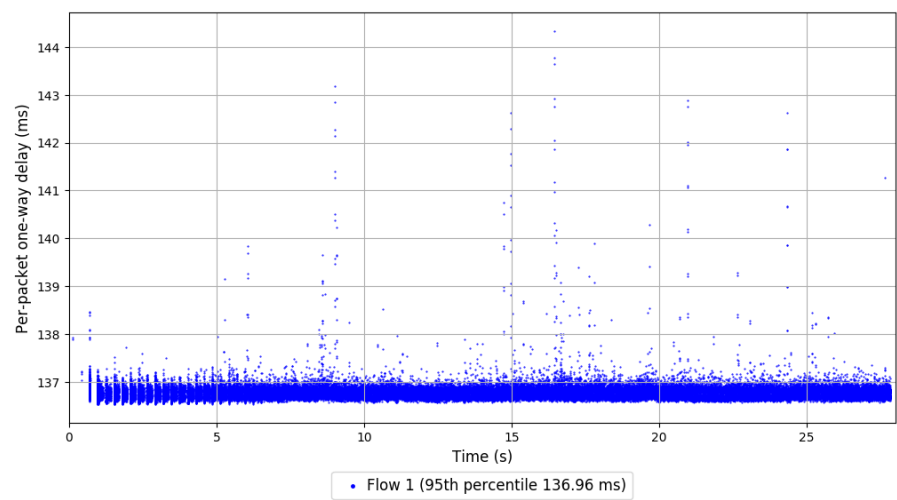
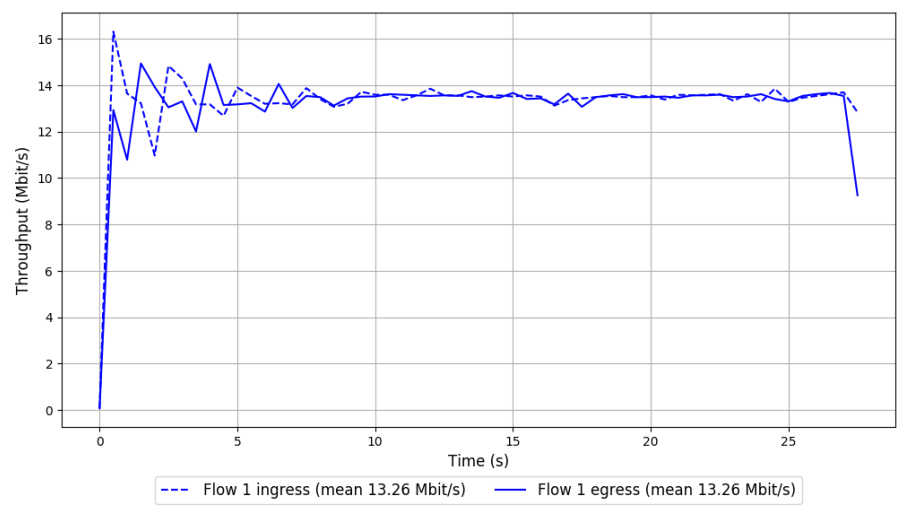


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-09-18 10:14:43
End at: 2017-09-18 10:15:13

# Below is generated by plot.py at 2017-09-18 13:07:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.26 Mbit/s
95th percentile per-packet one-way delay: 136.958 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 13.26 Mbit/s
95th percentile per-packet one-way delay: 136.958 ms
Loss rate: 1.05%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-09-18 08:22:05

End at: 2017-09-18 08:22:35

Below is generated by plot.py at 2017-09-18 13:07:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 135.857 ms

Loss rate: 1.49%

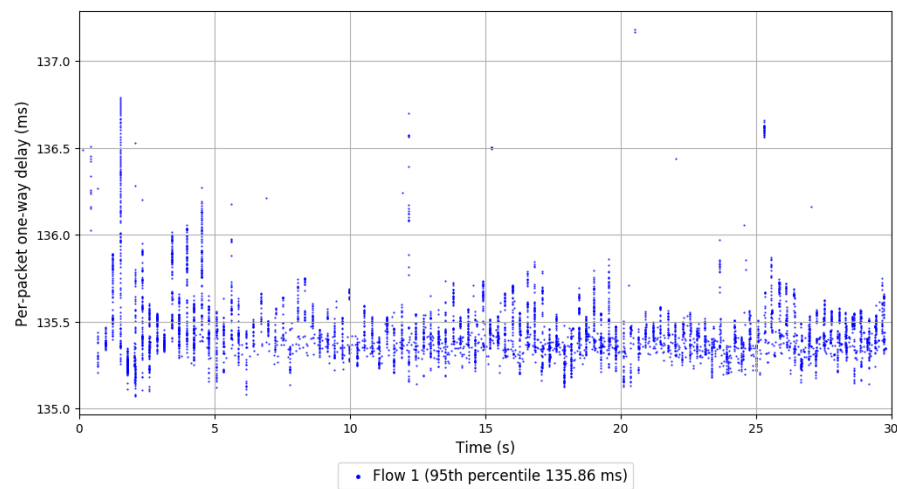
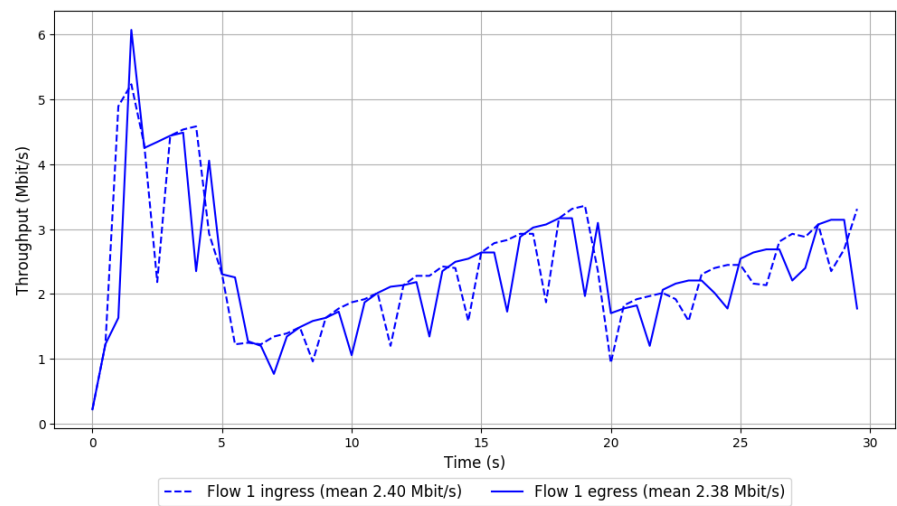
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 135.857 ms

Loss rate: 1.49%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-09-18 08:34:03

End at: 2017-09-18 08:34:33

Below is generated by plot.py at 2017-09-18 13:07:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.43 Mbit/s

95th percentile per-packet one-way delay: 140.001 ms

Loss rate: 0.76%

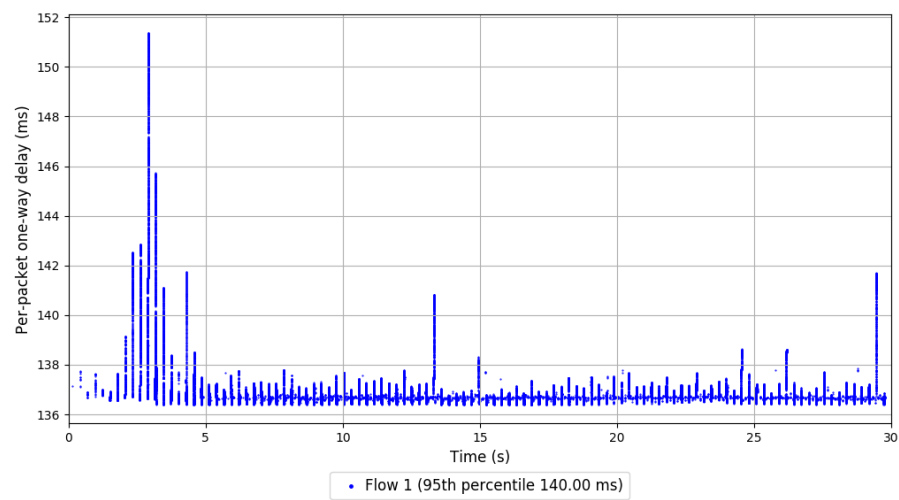
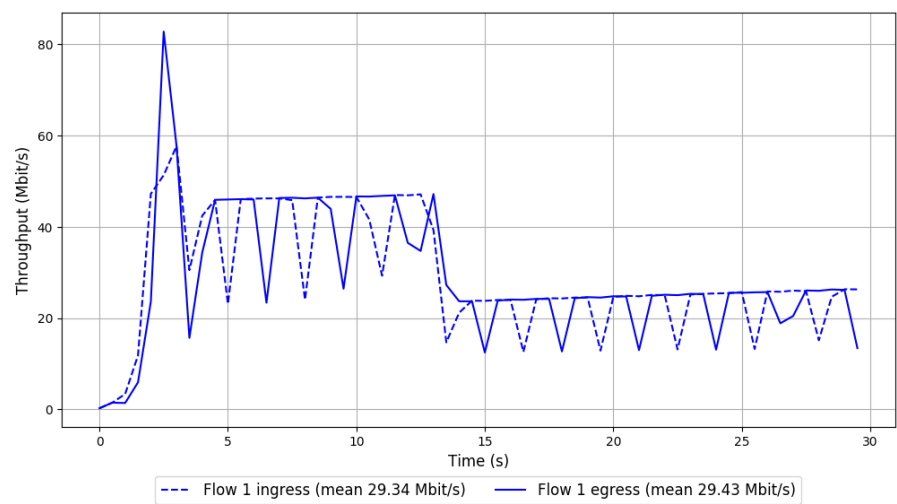
-- Flow 1:

Average throughput: 29.43 Mbit/s

95th percentile per-packet one-way delay: 140.001 ms

Loss rate: 0.76%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-09-18 08:46:15

End at: 2017-09-18 08:46:45

Below is generated by plot.py at 2017-09-18 13:07:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 140.100 ms

Loss rate: 1.85%

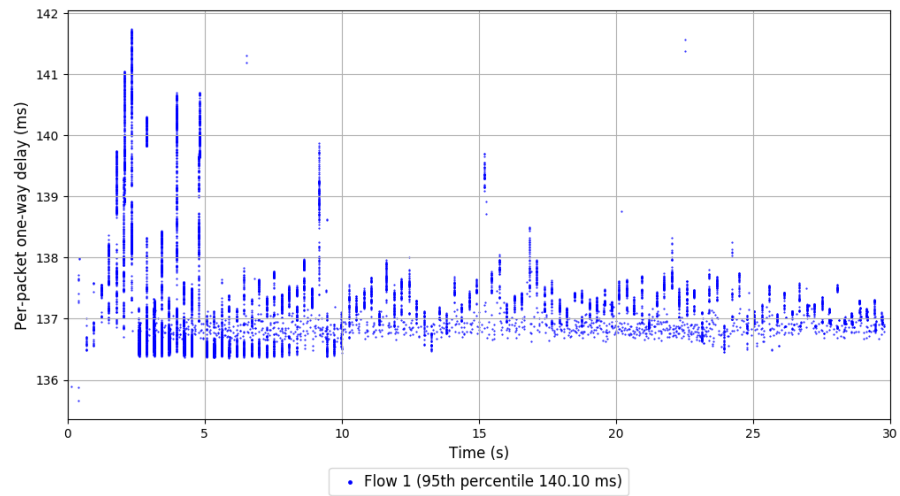
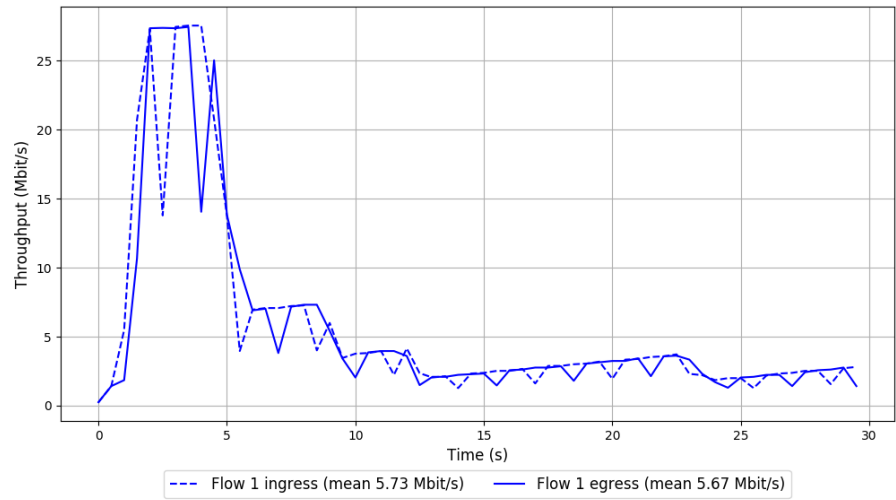
-- Flow 1:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 140.100 ms

Loss rate: 1.85%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-09-18 08:58:16

End at: 2017-09-18 08:58:46

Below is generated by plot.py at 2017-09-18 13:07:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.43 Mbit/s

95th percentile per-packet one-way delay: 152.656 ms

Loss rate: 0.64%

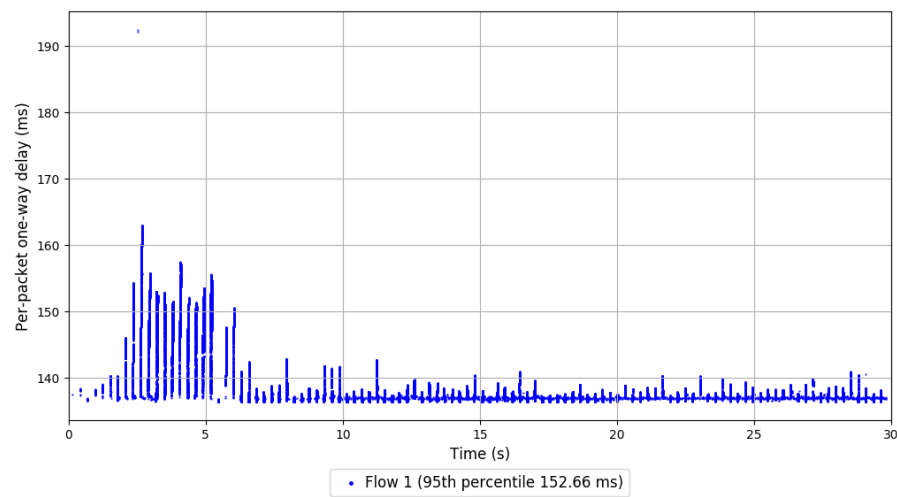
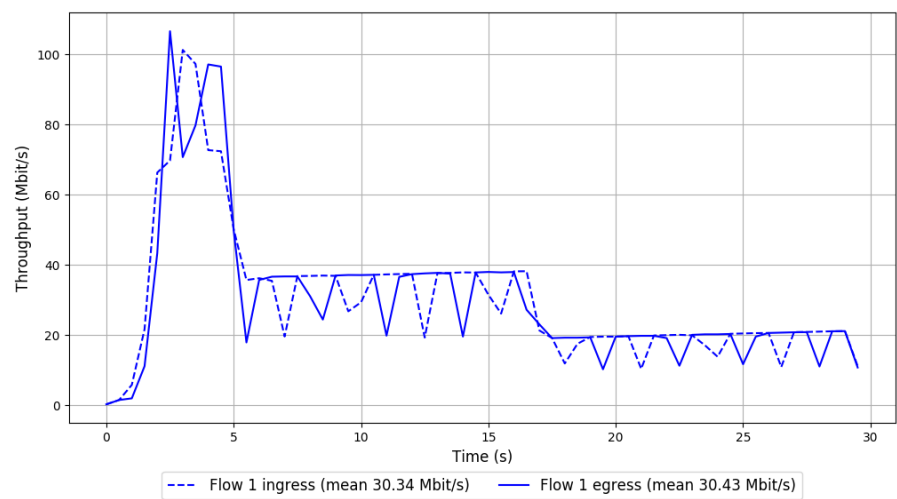
-- Flow 1:

Average throughput: 30.43 Mbit/s

95th percentile per-packet one-way delay: 152.656 ms

Loss rate: 0.64%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-09-18 09:10:39

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

Below is generated by plot.py at 2017-09-18 13:07:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 137.371 ms

Loss rate: 2.71%

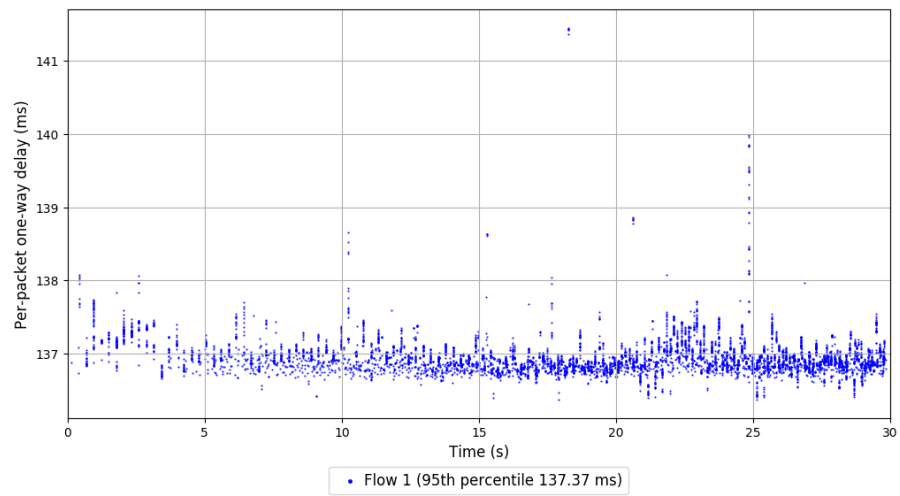
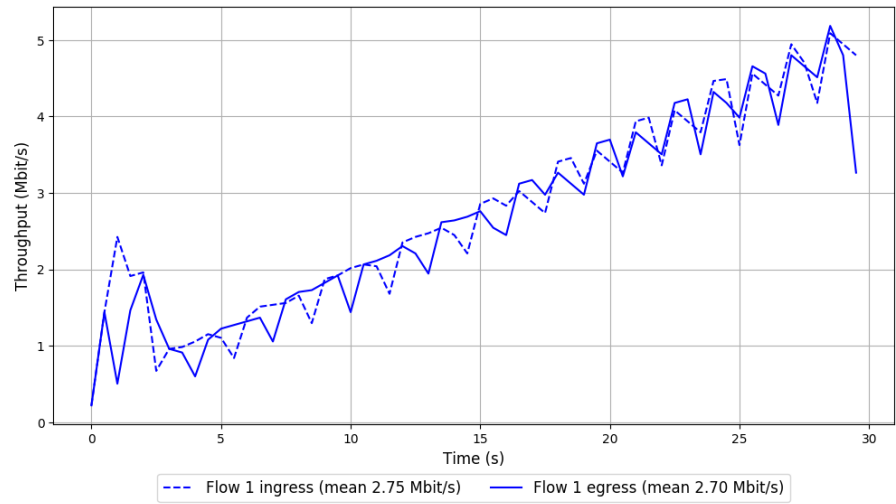
-- Flow 1:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 137.371 ms

Loss rate: 2.71%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-09-18 09:23:02

End at: 2017-09-18 09:23:32

Below is generated by plot.py at 2017-09-18 13:07:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.81 Mbit/s

95th percentile per-packet one-way delay: 142.287 ms

Loss rate: 4.71%

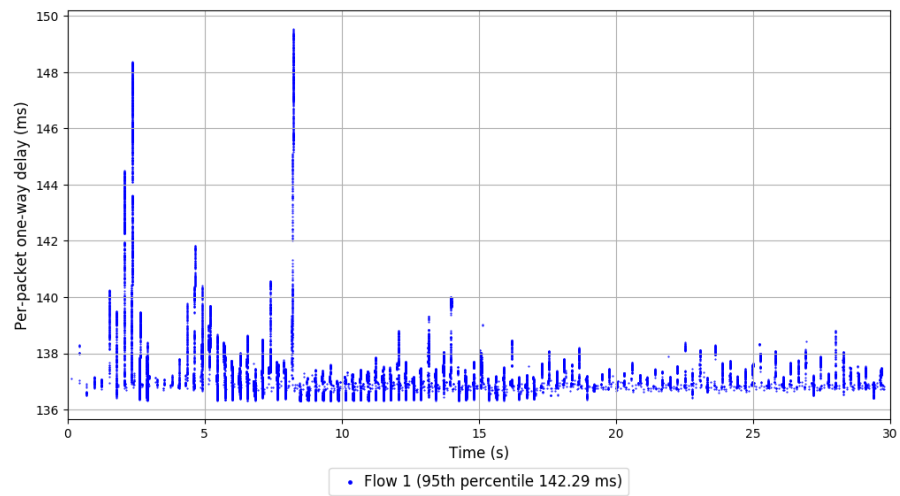
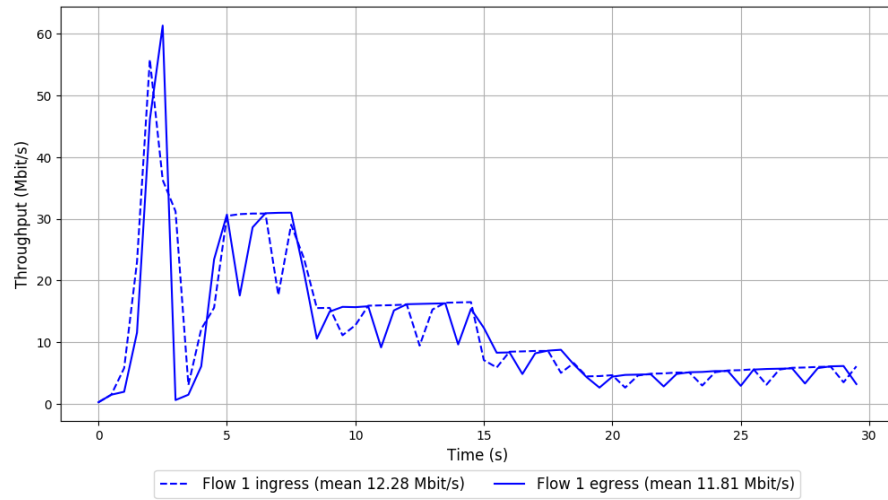
-- Flow 1:

Average throughput: 11.81 Mbit/s

95th percentile per-packet one-way delay: 142.287 ms

Loss rate: 4.71%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-09-18 09:35:37

End at: 2017-09-18 09:36:07

Below is generated by plot.py at 2017-09-18 13:07:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 138.526 ms

Loss rate: 0.52%

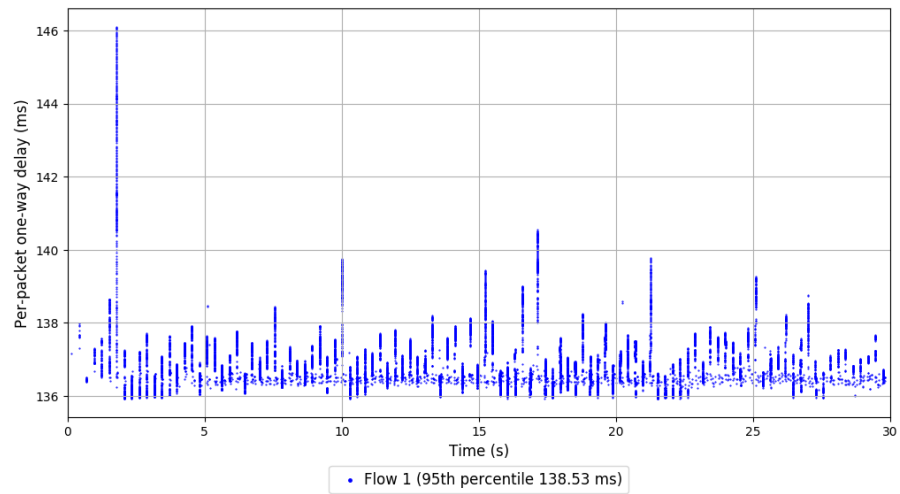
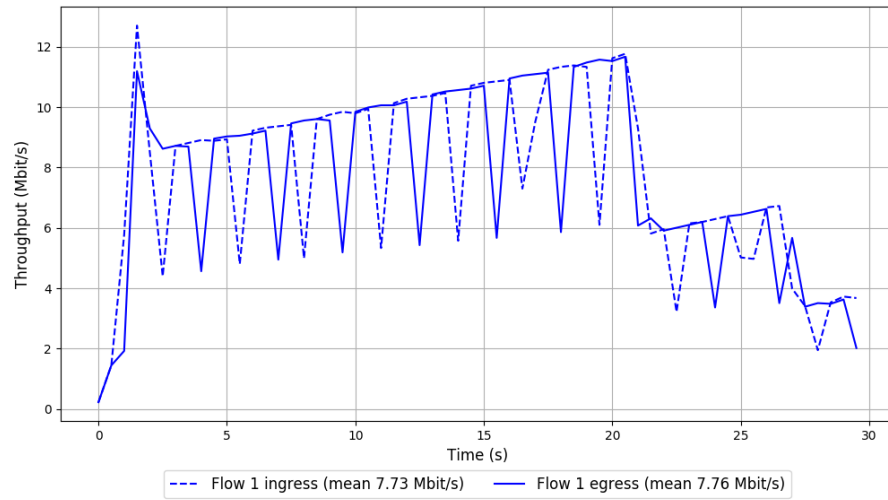
-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 138.526 ms

Loss rate: 0.52%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-09-18 09:47:39

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

Below is generated by plot.py at 2017-09-18 13:07:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.33 Mbit/s

95th percentile per-packet one-way delay: 138.132 ms

Loss rate: 1.19%

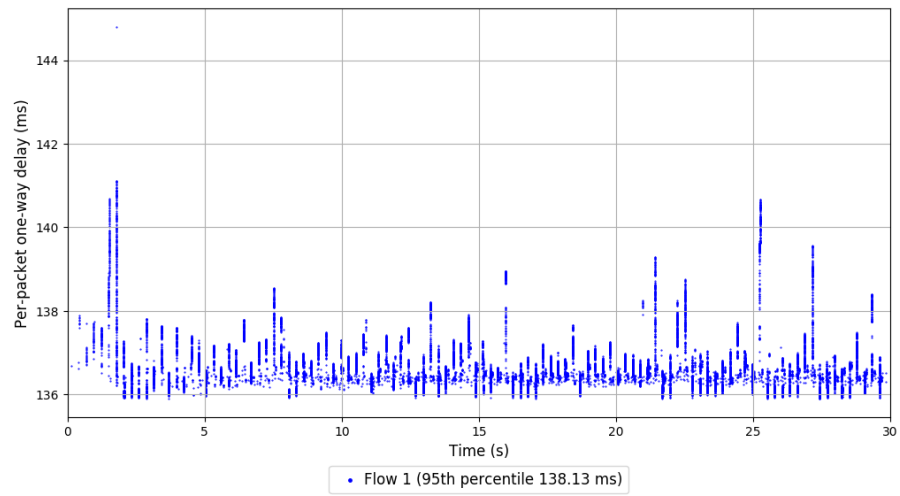
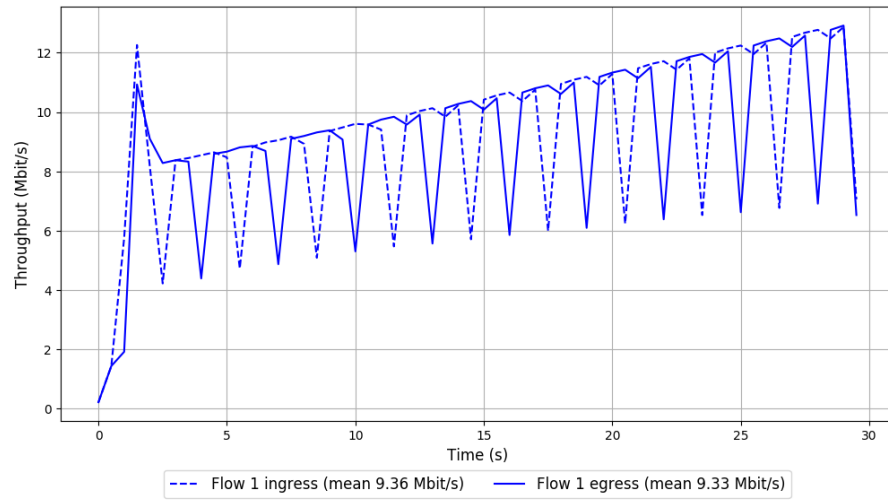
-- Flow 1:

Average throughput: 9.33 Mbit/s

95th percentile per-packet one-way delay: 138.132 ms

Loss rate: 1.19%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-09-18 09:59:55

End at: 2017-09-18 10:00:25

Below is generated by plot.py at 2017-09-18 13:07:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.42 Mbit/s

95th percentile per-packet one-way delay: 143.039 ms

Loss rate: 0.61%

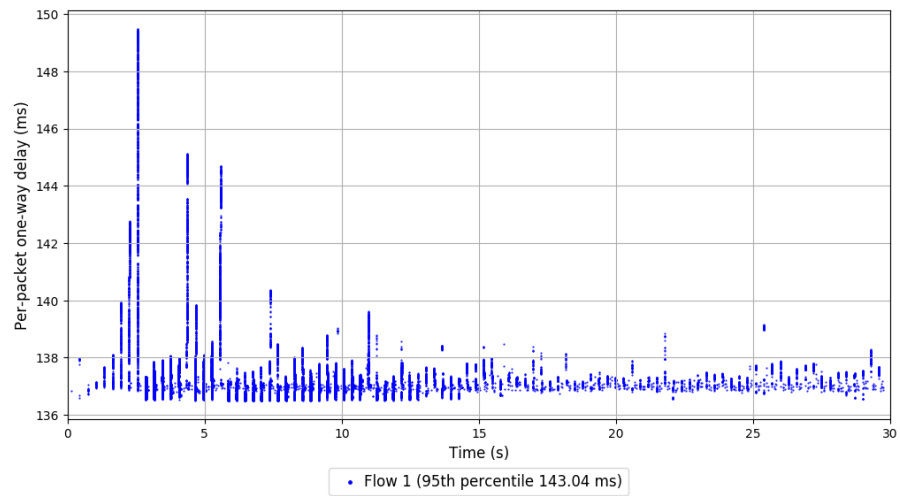
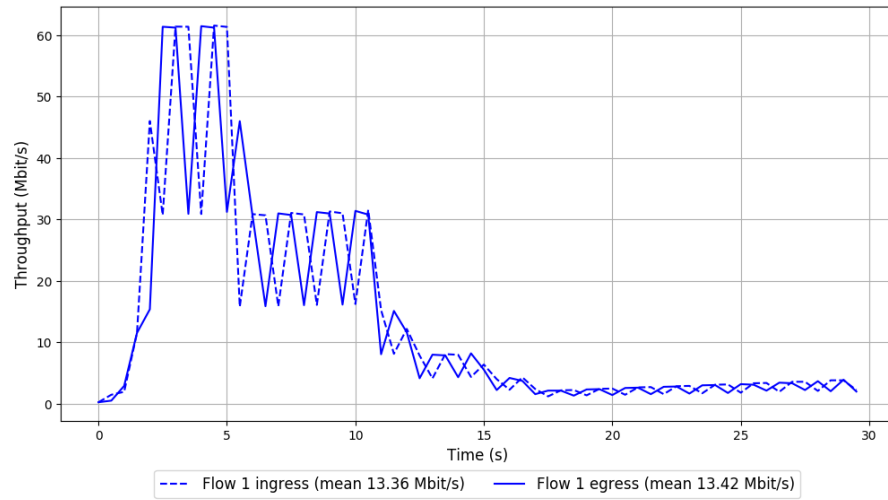
-- Flow 1:

Average throughput: 13.42 Mbit/s

95th percentile per-packet one-way delay: 143.039 ms

Loss rate: 0.61%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-09-18 10:12:18

End at: 2017-09-18 10:12:48

Below is generated by plot.py at 2017-09-18 13:07:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 138.535 ms

Loss rate: 1.61%

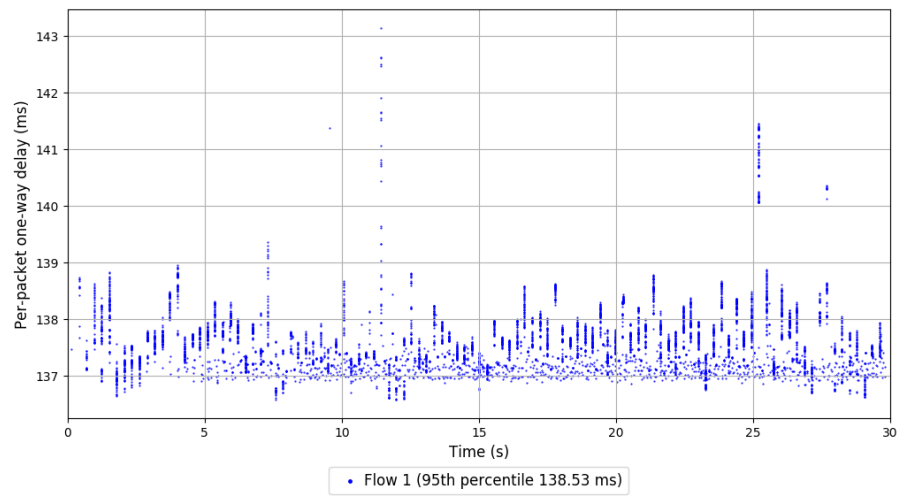
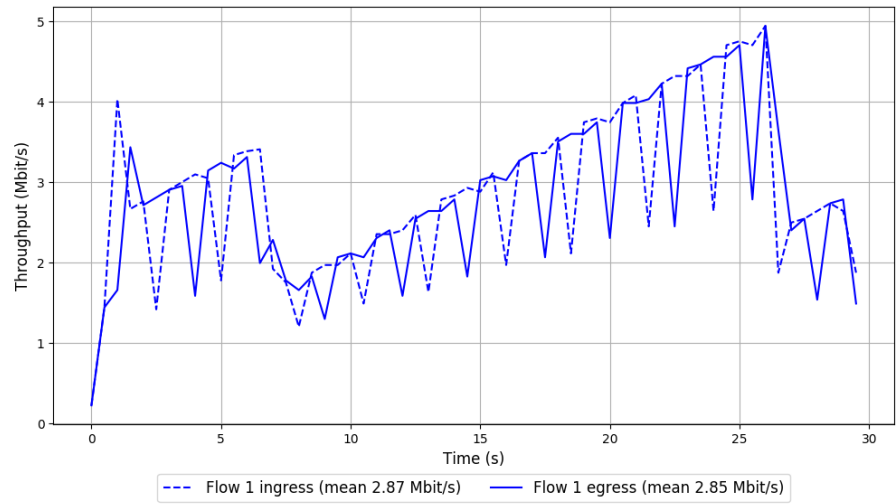
-- Flow 1:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 138.535 ms

Loss rate: 1.61%

Run 10: Report of TCP Vegas — Data Link

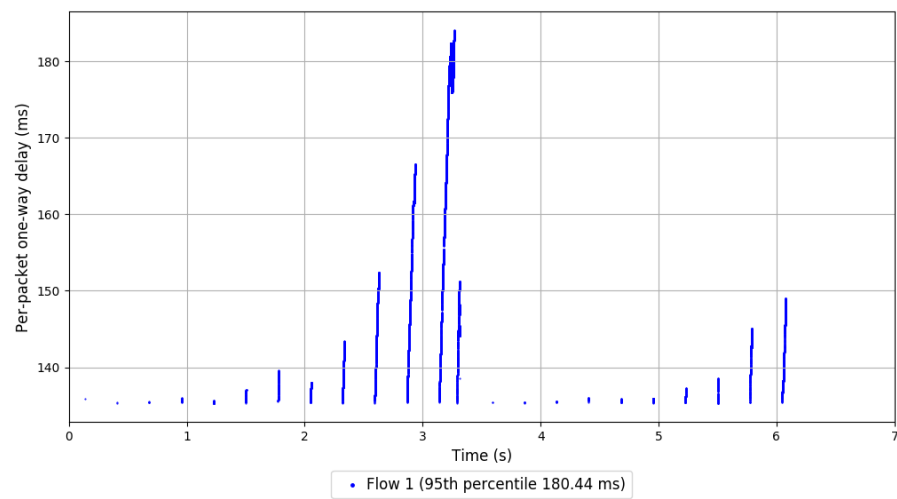
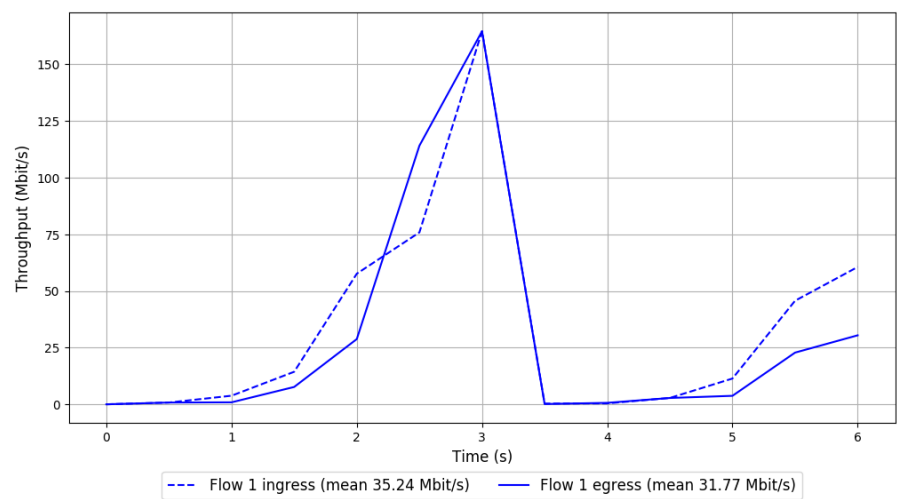


Run 1: Statistics of Verus

Start at: 2017-09-18 08:26:54

End at: 2017-09-18 08:27:24

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-09-18 08:38:53

End at: 2017-09-18 08:39:23

Below is generated by plot.py at 2017-09-18 13:07:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.06 Mbit/s

95th percentile per-packet one-way delay: 243.016 ms

Loss rate: 5.43%

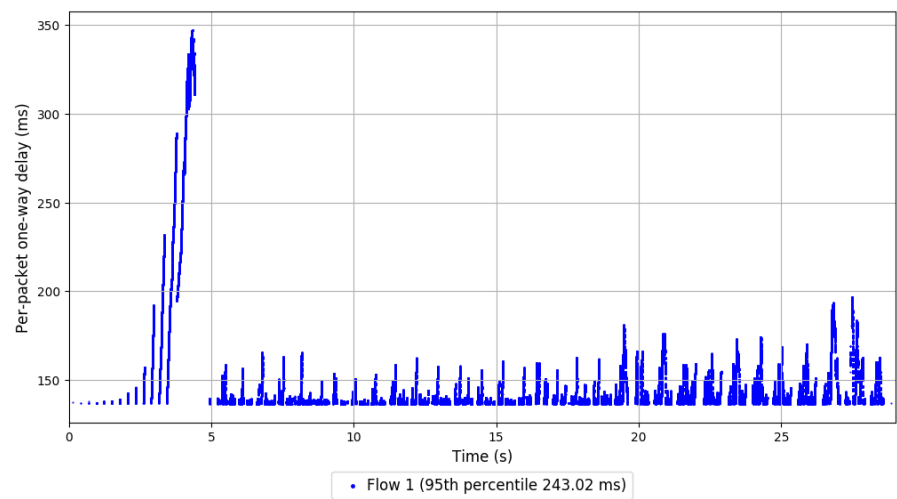
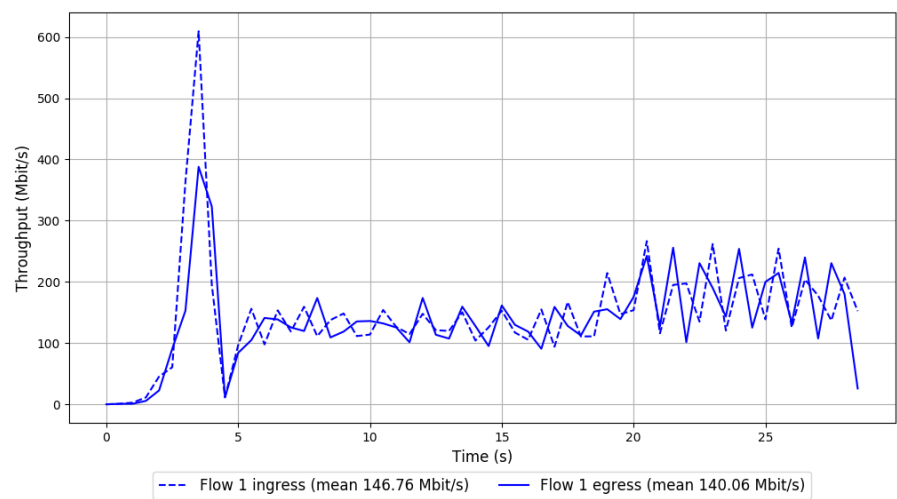
-- Flow 1:

Average throughput: 140.06 Mbit/s

95th percentile per-packet one-way delay: 243.016 ms

Loss rate: 5.43%

Run 2: Report of Verus — Data Link

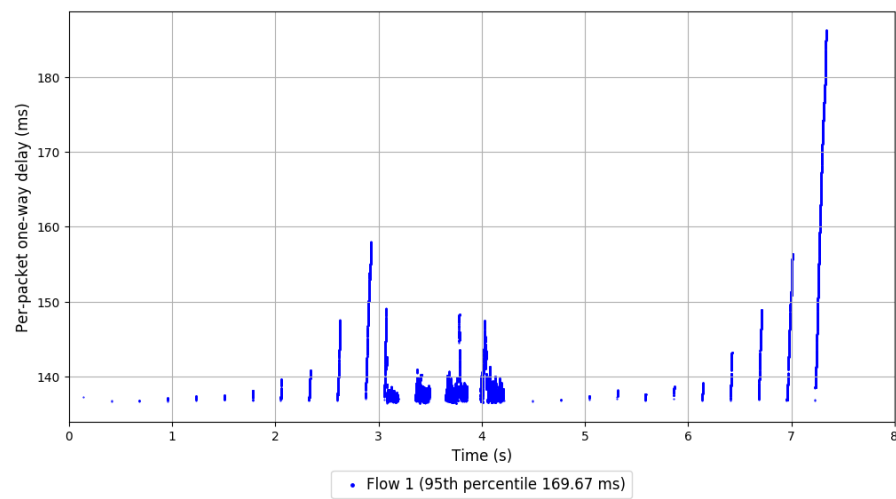
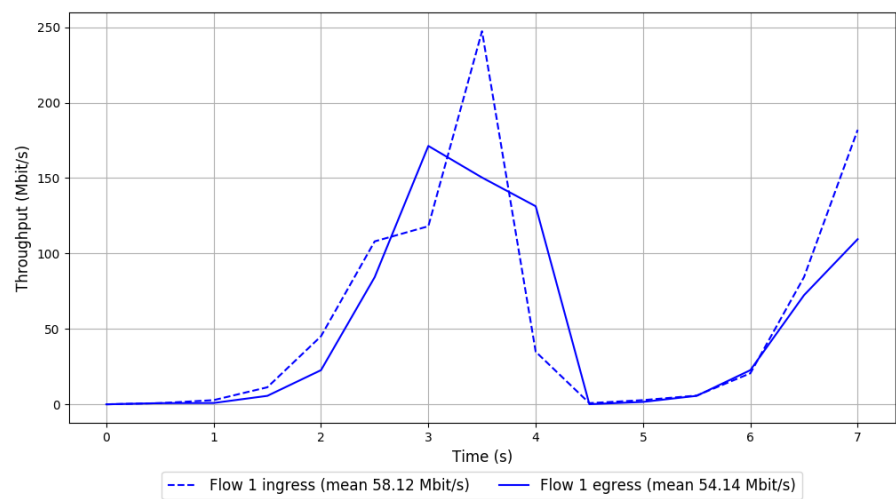


Run 3: Statistics of Verus

Start at: 2017-09-18 08:51:05

End at: 2017-09-18 08:51:35

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-09-18 09:03:27

End at: 2017-09-18 09:03:57

Below is generated by plot.py at 2017-09-18 13:07:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.43 Mbit/s

95th percentile per-packet one-way delay: 233.122 ms

Loss rate: 3.22%

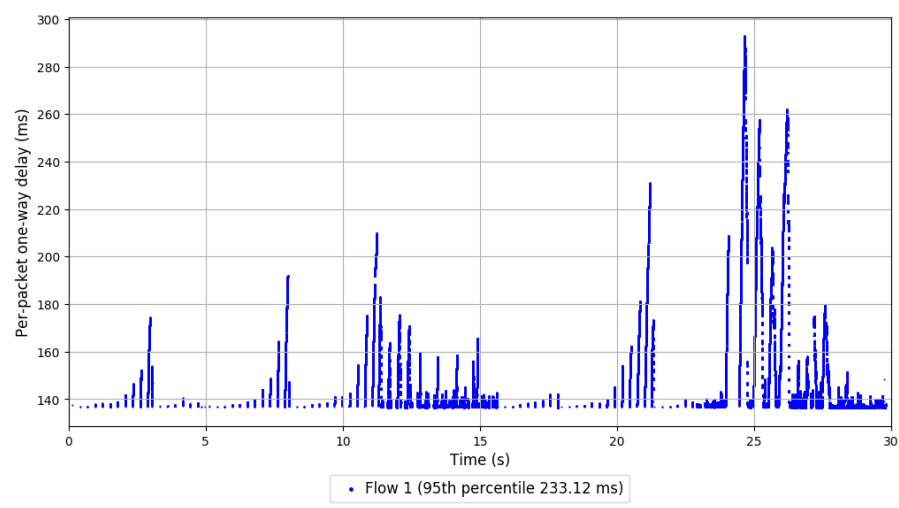
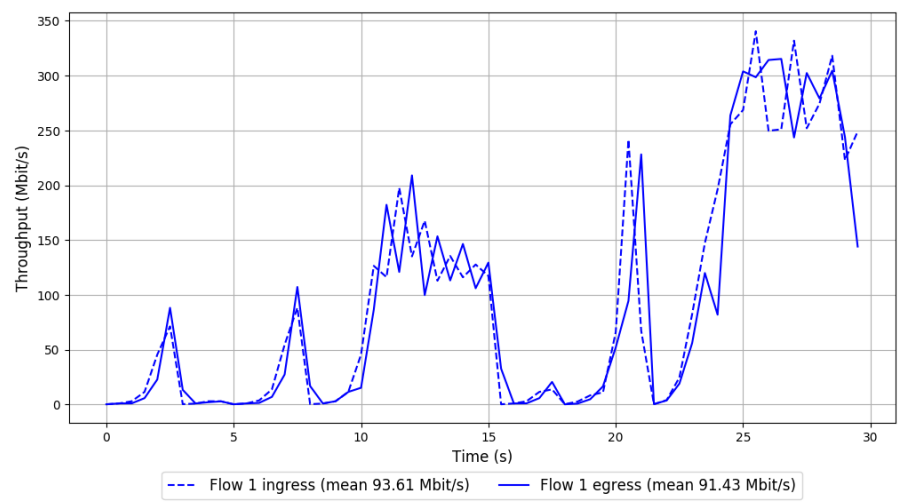
-- Flow 1:

Average throughput: 91.43 Mbit/s

95th percentile per-packet one-way delay: 233.122 ms

Loss rate: 3.22%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-09-18 09:15:50

End at: 2017-09-18 09:16:20

Below is generated by plot.py at 2017-09-18 13:07:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.34 Mbit/s

95th percentile per-packet one-way delay: 292.621 ms

Loss rate: 4.82%

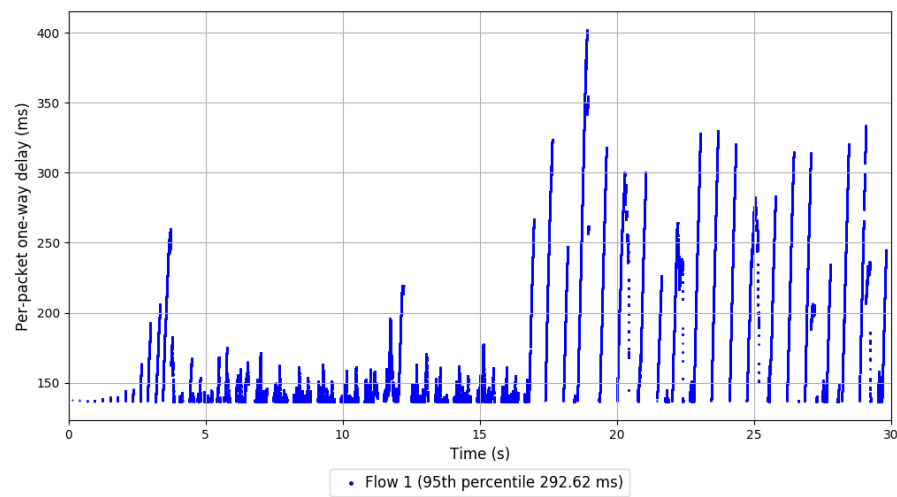
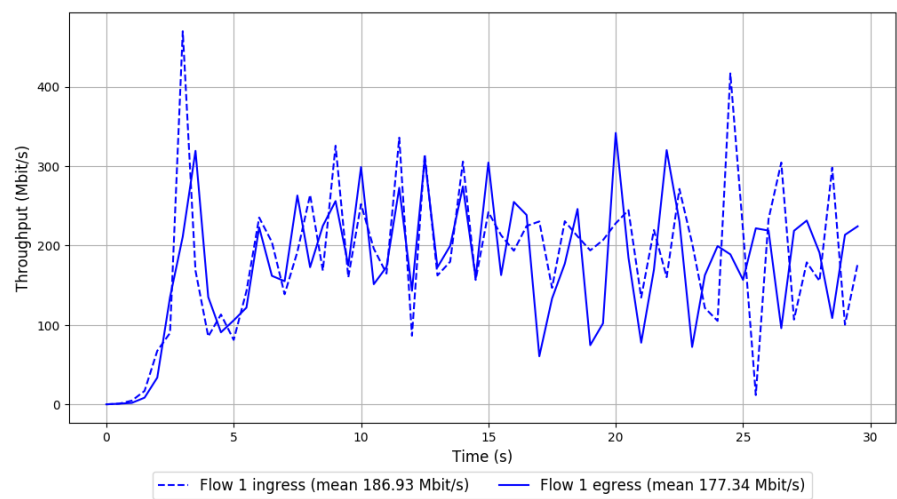
-- Flow 1:

Average throughput: 177.34 Mbit/s

95th percentile per-packet one-way delay: 292.621 ms

Loss rate: 4.82%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-09-18 09:28:10

End at: 2017-09-18 09:28:40

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.09 Mbit/s

95th percentile per-packet one-way delay: 261.572 ms

Loss rate: 3.09%

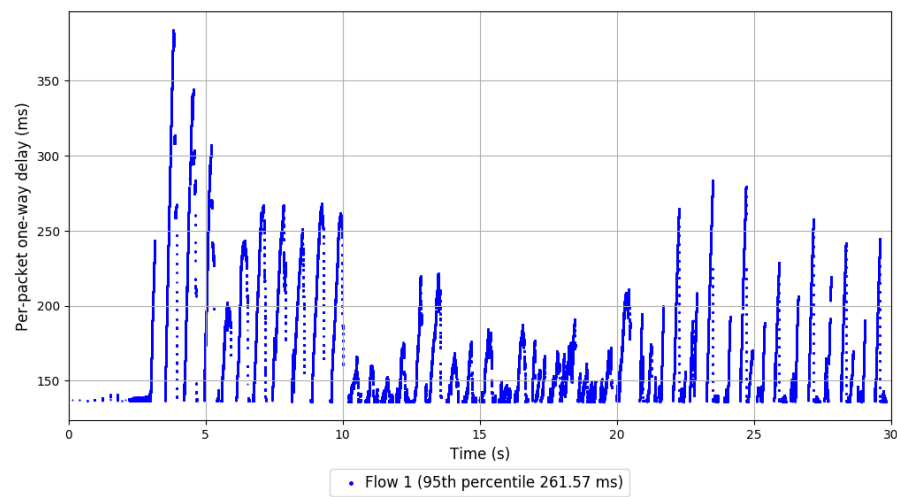
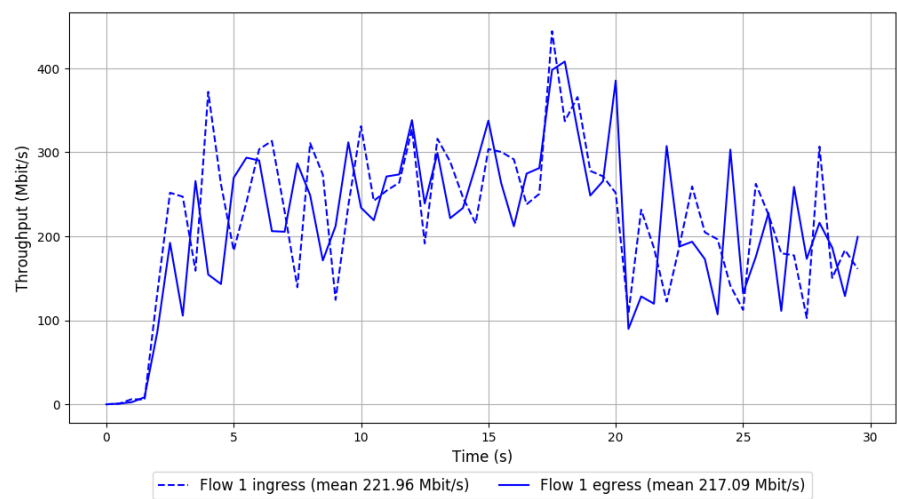
-- Flow 1:

Average throughput: 217.09 Mbit/s

95th percentile per-packet one-way delay: 261.572 ms

Loss rate: 3.09%

Run 6: Report of Verus — Data Link

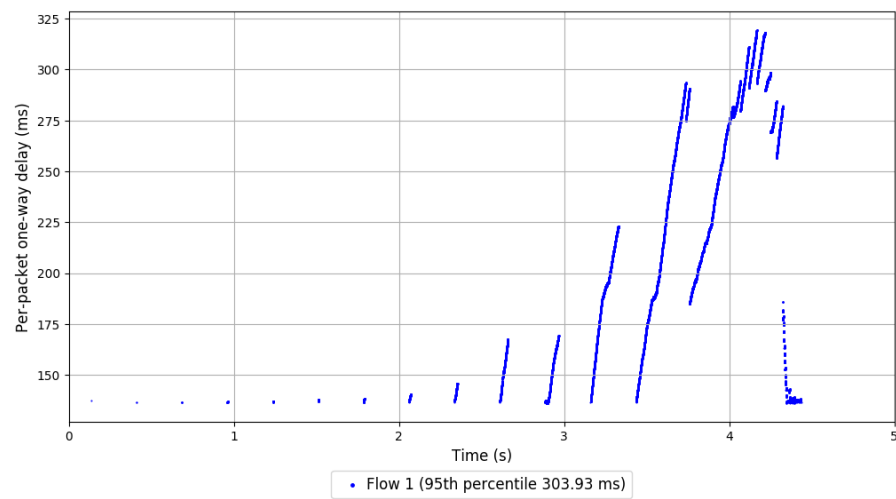
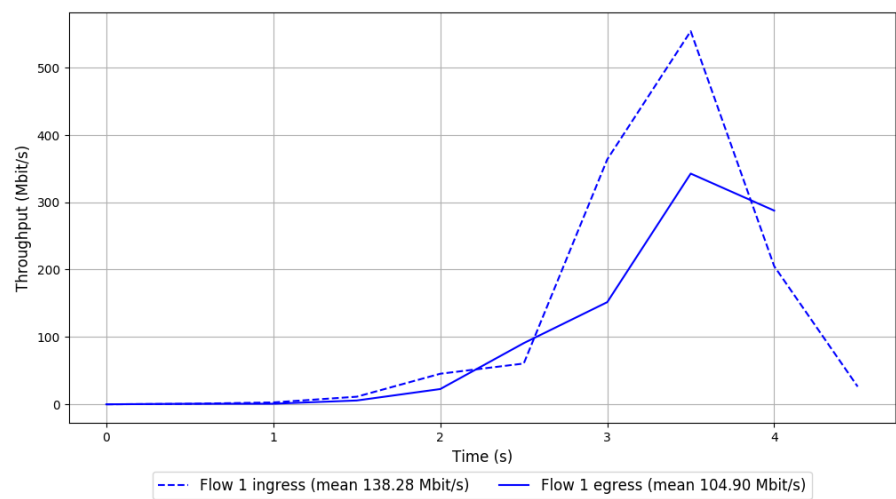


Run 7: Statistics of Verus

Start at: 2017-09-18 09:40:26

End at: 2017-09-18 09:40:56

Run 7: Report of Verus — Data Link

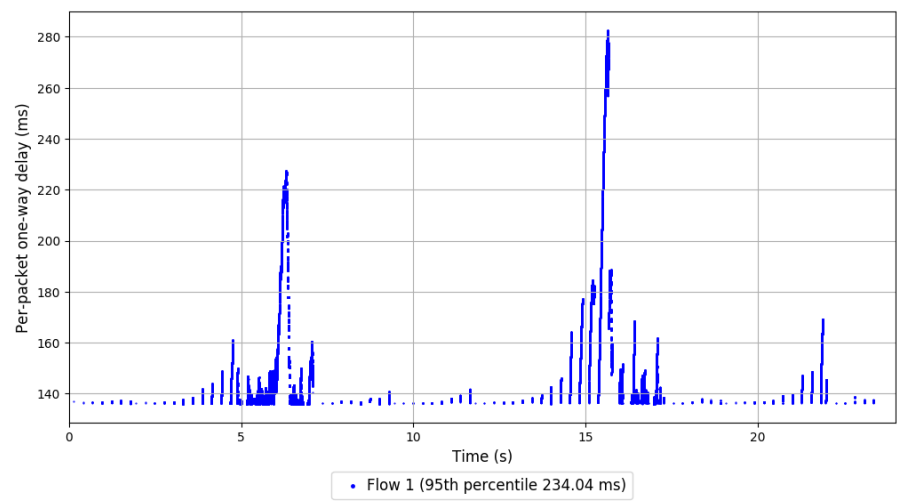
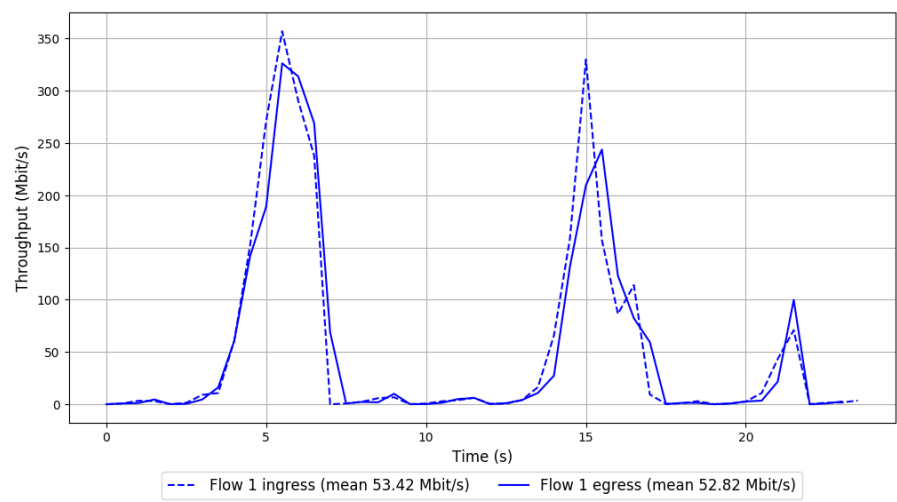


Run 8: Statistics of Verus

Start at: 2017-09-18 09:52:46

End at: 2017-09-18 09:53:16

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-09-18 10:05:07

End at: 2017-09-18 10:05:37

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.22 Mbit/s

95th percentile per-packet one-way delay: 291.448 ms

Loss rate: 10.83%

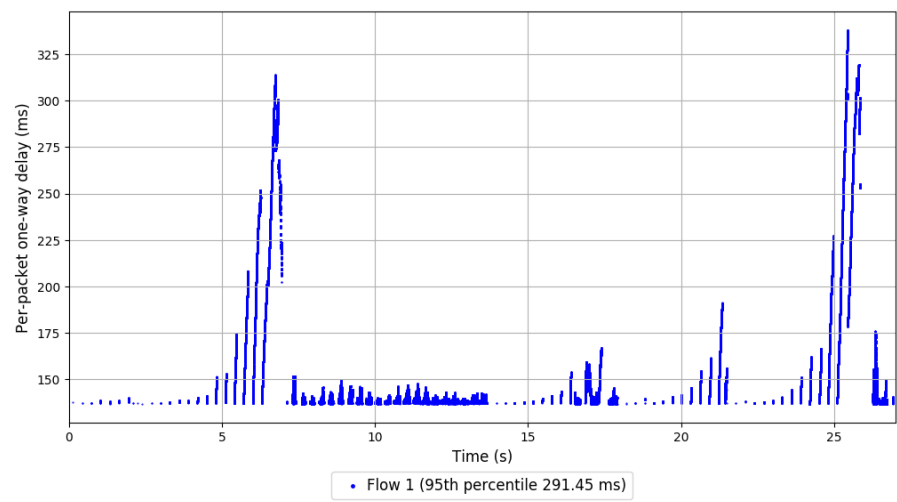
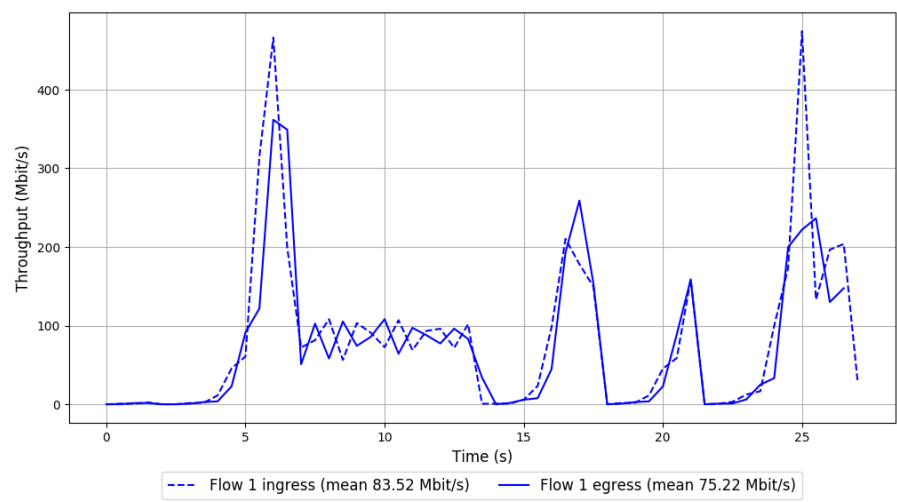
-- Flow 1:

Average throughput: 75.22 Mbit/s

95th percentile per-packet one-way delay: 291.448 ms

Loss rate: 10.83%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-09-18 10:17:09

End at: 2017-09-18 10:17:39

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.76 Mbit/s

95th percentile per-packet one-way delay: 247.416 ms

Loss rate: 5.22%

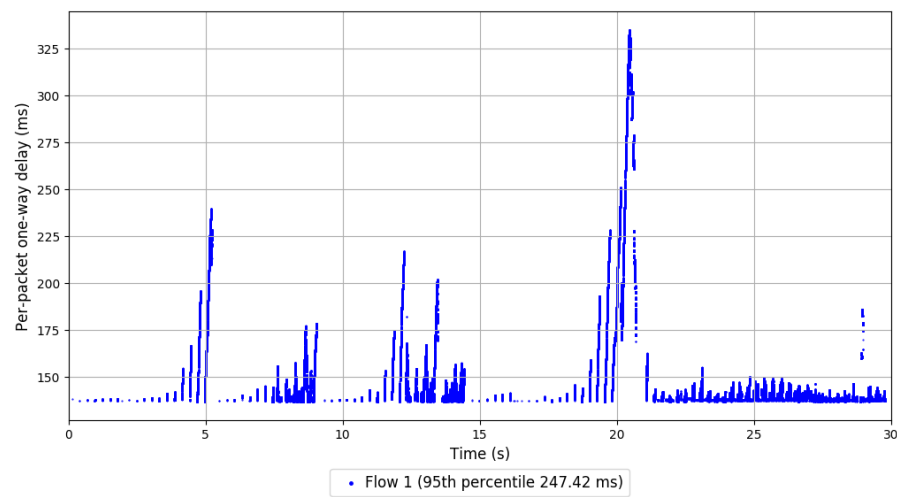
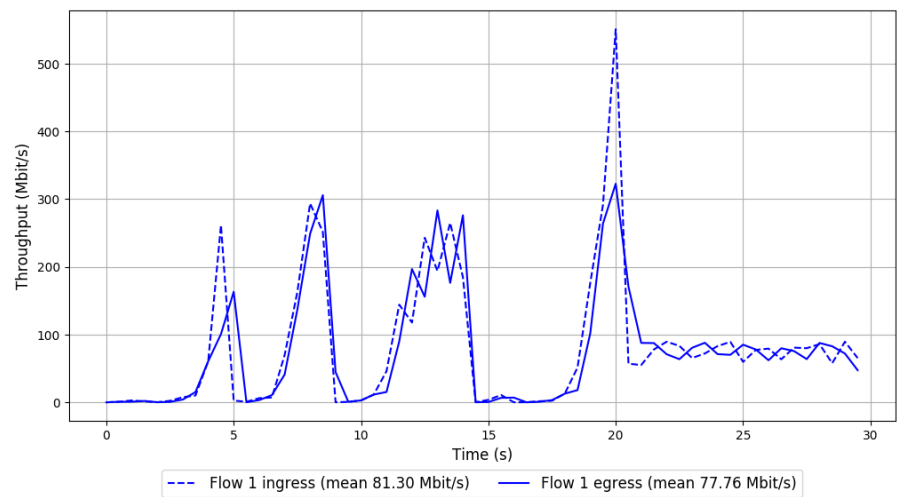
-- Flow 1:

Average throughput: 77.76 Mbit/s

95th percentile per-packet one-way delay: 247.416 ms

Loss rate: 5.22%

Run 10: Report of Verus — Data Link

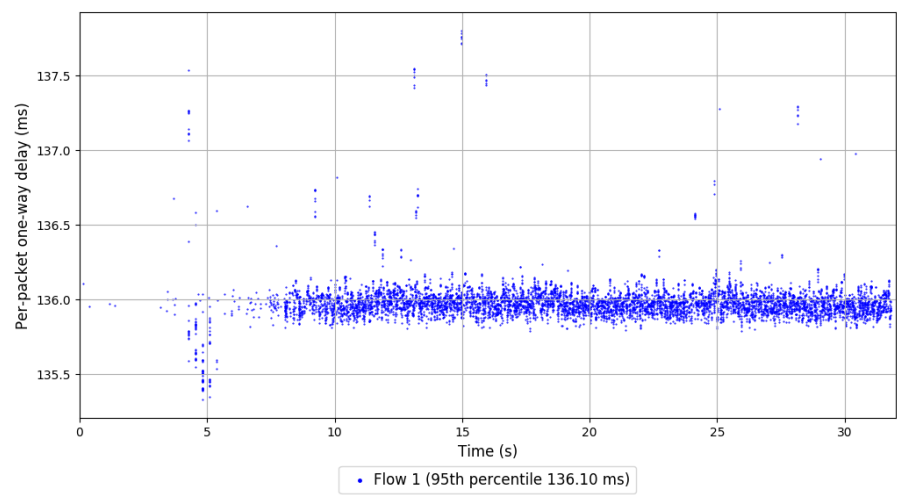
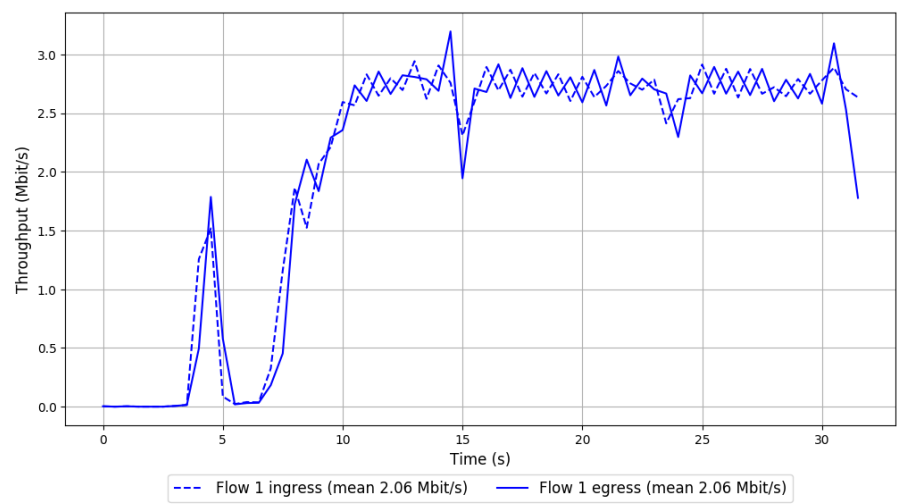


```
Run 1: Statistics of WebRTC media

Start at: 2017-09-18 08:22:48
End at: 2017-09-18 08:23:18

# Below is generated by plot.py at 2017-09-18 13:07:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 136.098 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 136.098 ms
Loss rate: 1.26%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-09-18 08:34:48

End at: 2017-09-18 08:35:18

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 137.070 ms

Loss rate: 1.34%

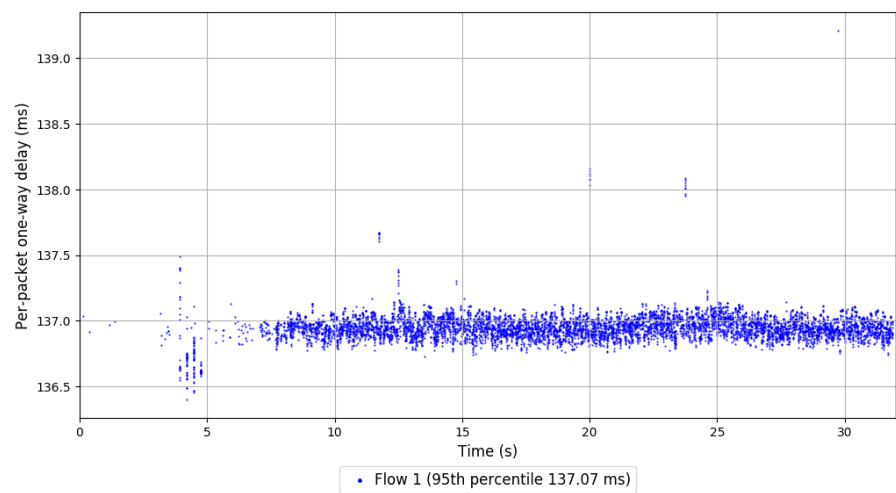
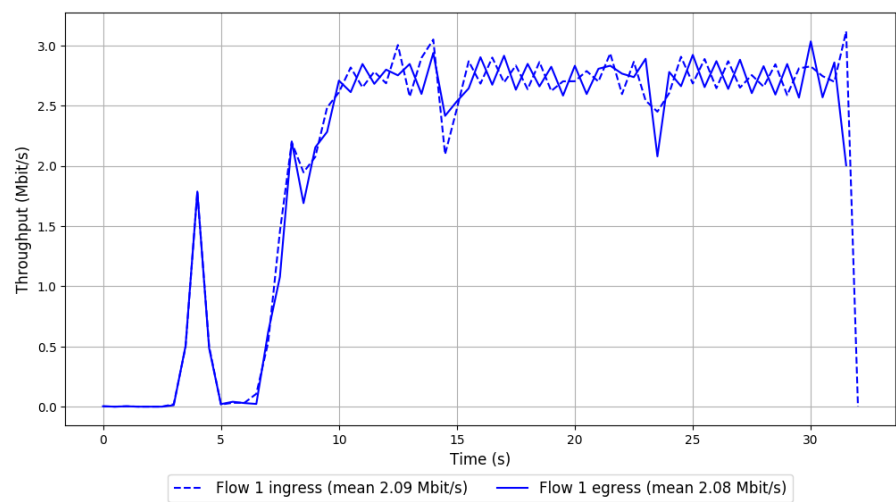
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 137.070 ms

Loss rate: 1.34%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-09-18 08:46:59

End at: 2017-09-18 08:47:29

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.00 Mbit/s

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

Loss rate: 1.15%

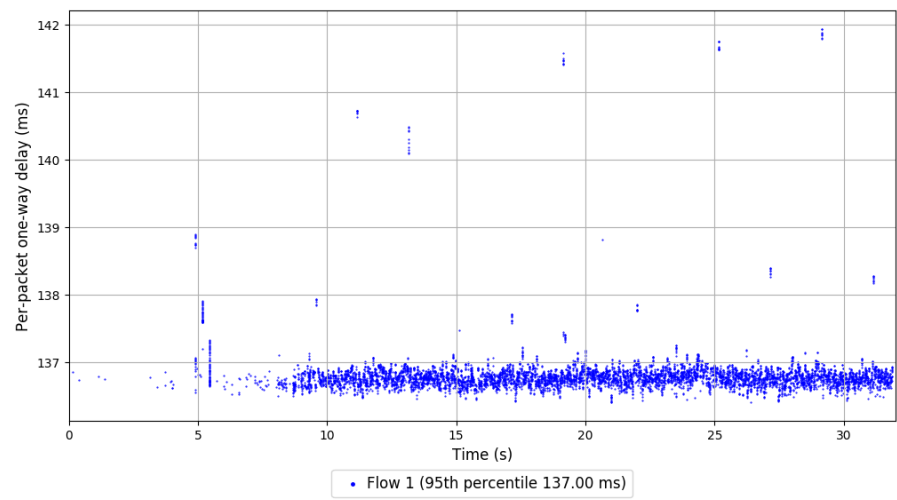
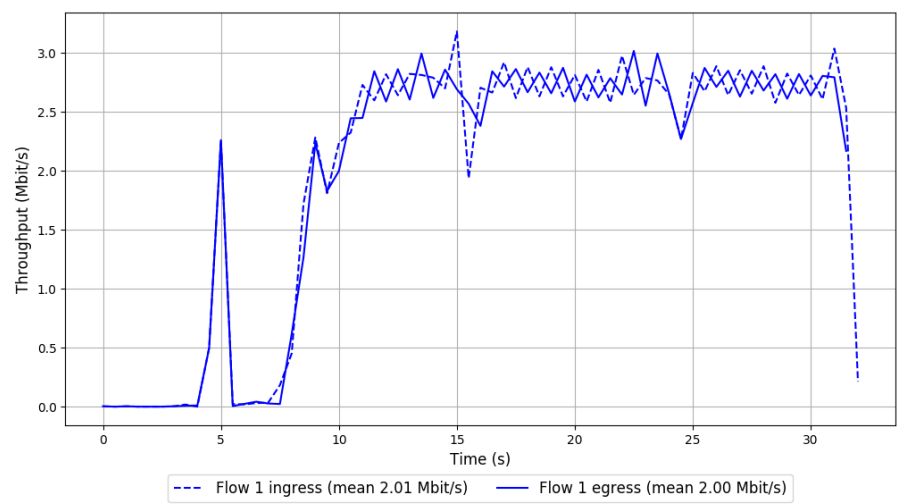
-- Flow 1:

Average throughput: 2.00 Mbit/s

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

Loss rate: 1.15%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-09-18 08:59:02

End at: 2017-09-18 08:59:32

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 137.009 ms

Loss rate: 1.47%

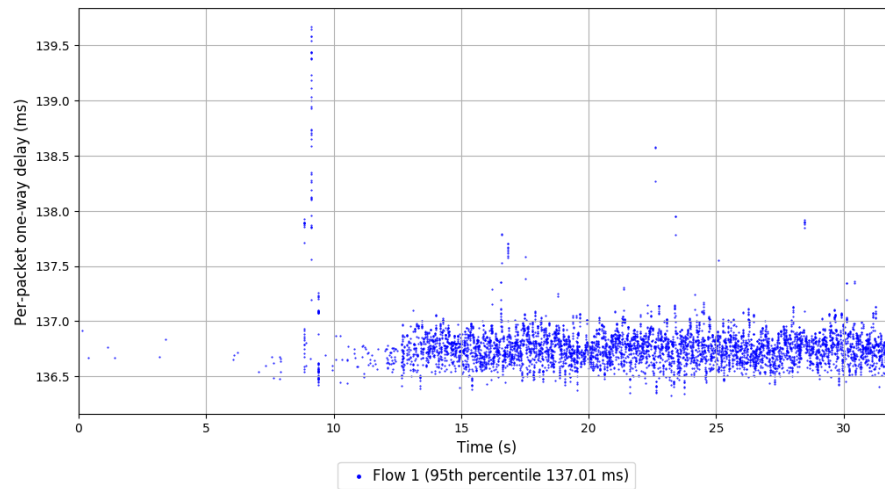
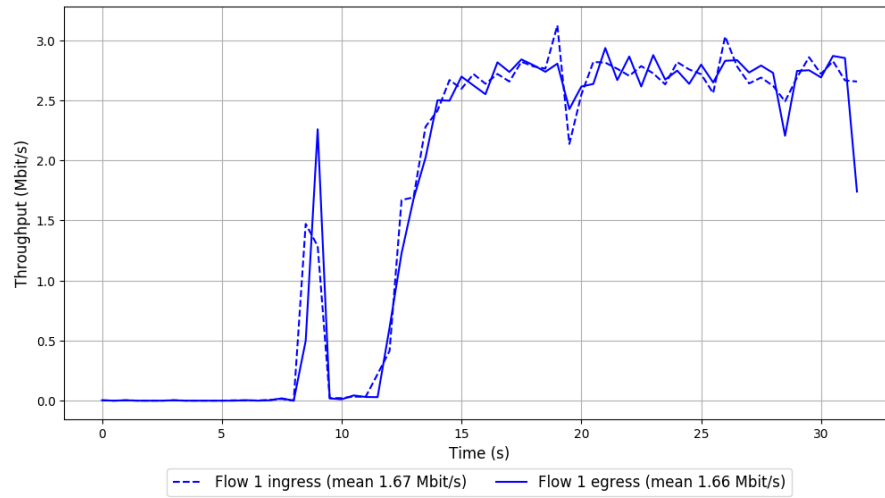
-- Flow 1:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 137.009 ms

Loss rate: 1.47%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-09-18 09:11:22

End at: 2017-09-18 09:11:52

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 136.922 ms

Loss rate: 1.18%

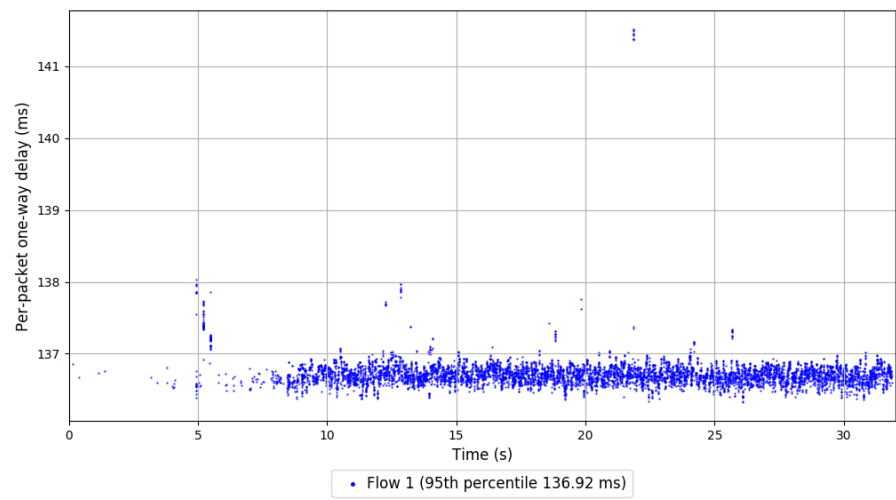
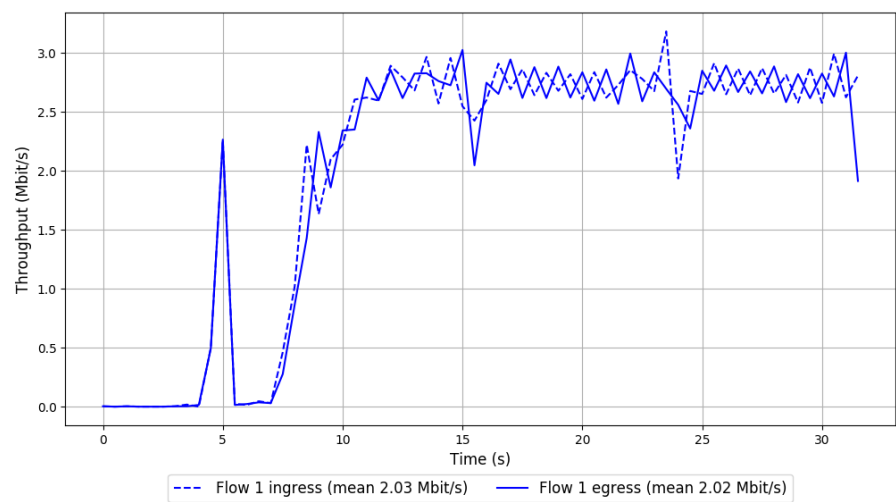
-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 136.922 ms

Loss rate: 1.18%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-09-18 09:23:46

End at: 2017-09-18 09:24:16

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 137.550 ms

Loss rate: 1.15%

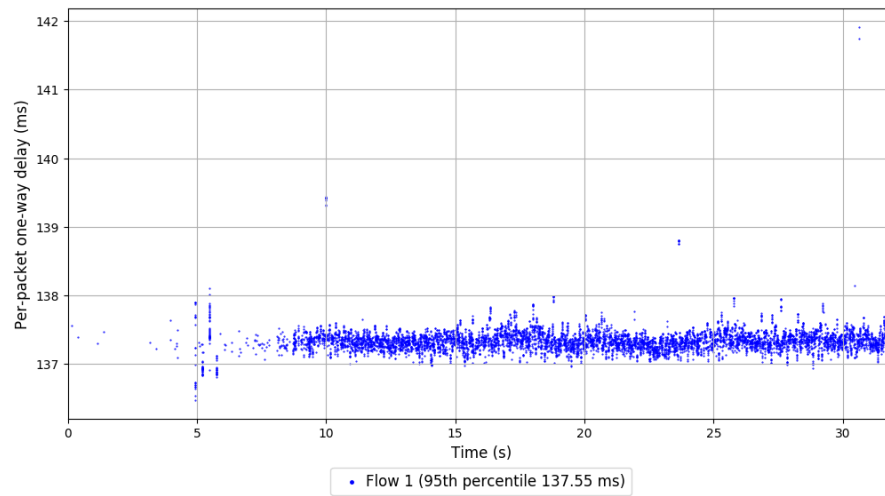
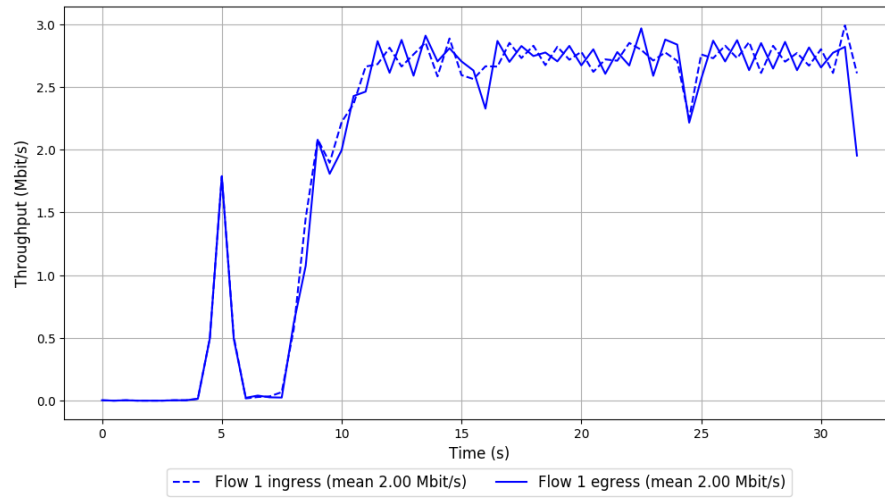
-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 137.550 ms

Loss rate: 1.15%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-09-18 09:36:20

End at: 2017-09-18 09:36:50

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 136.928 ms

Loss rate: 1.20%

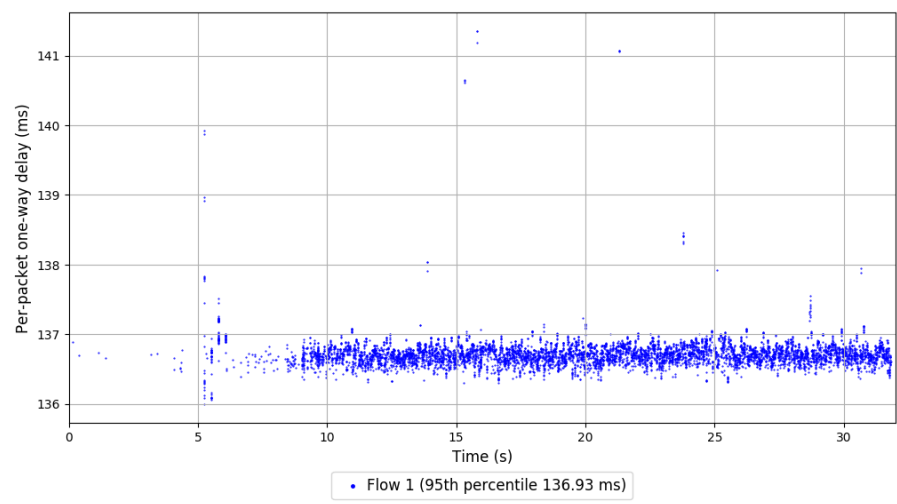
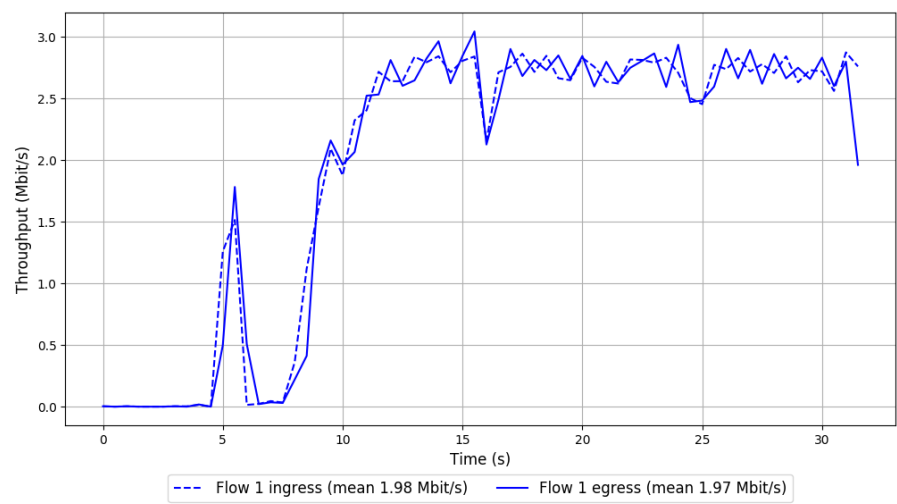
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 136.928 ms

Loss rate: 1.20%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-09-18 09:48:23

End at: 2017-09-18 09:48:53

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 137.340 ms

Loss rate: 1.23%

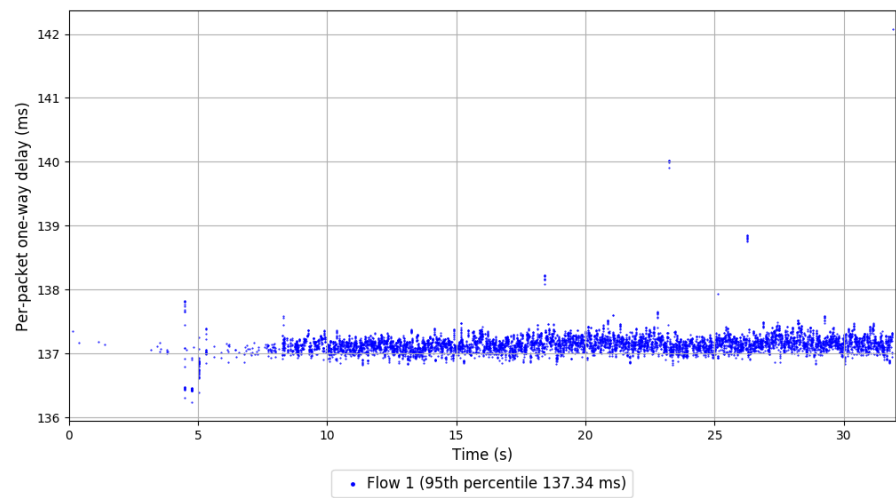
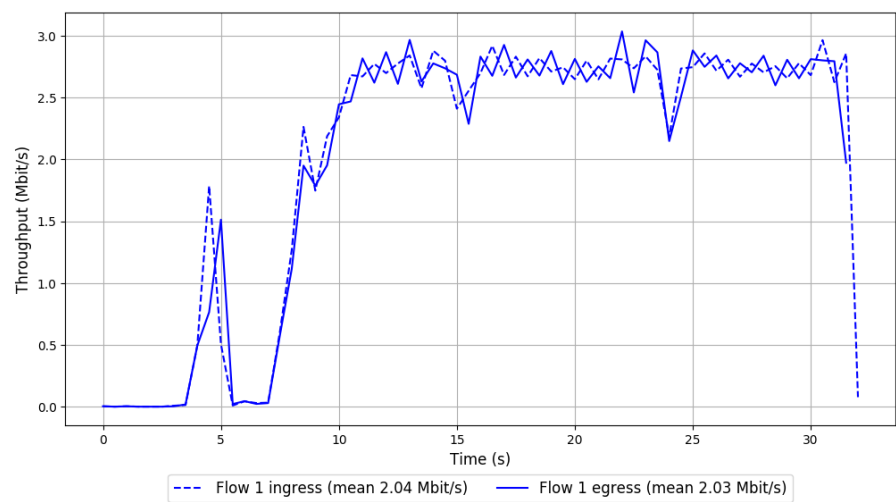
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 137.340 ms

Loss rate: 1.23%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-09-18 10:00:39

End at: 2017-09-18 10:01:09

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.01 Mbit/s

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

Loss rate: 1.18%

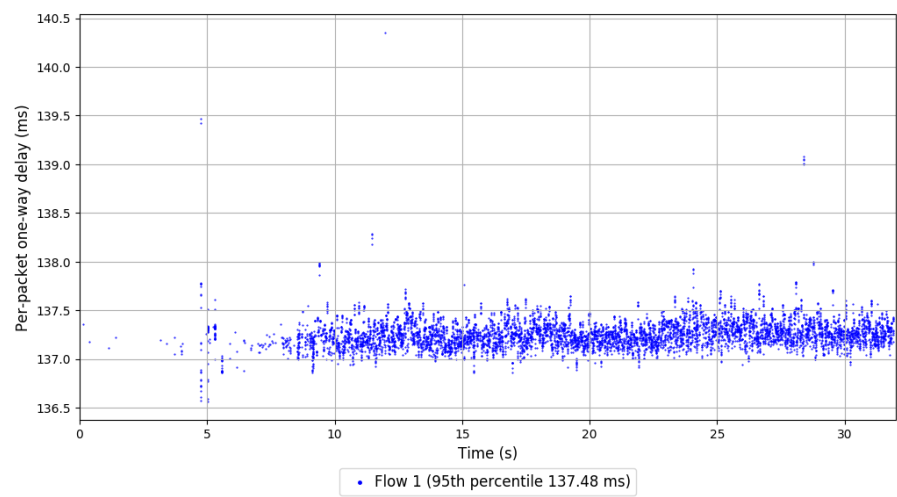
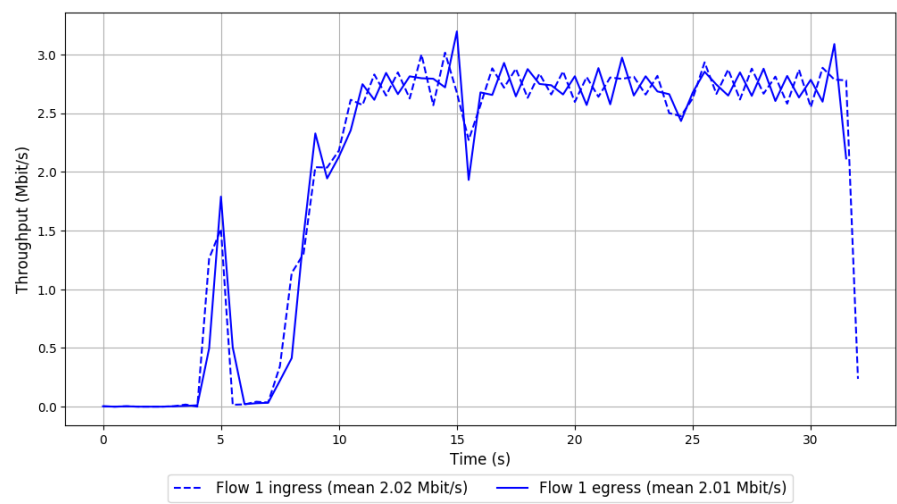
-- Flow 1:

Average throughput: 2.01 Mbit/s

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

Loss rate: 1.18%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-09-18 10:13:01

End at: 2017-09-18 10:13:31

Below is generated by plot.py at 2017-09-18 13:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 135.794 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 135.794 ms

Loss rate: 1.42%

Run 10: Report of WebRTC media — Data Link

