

Pantheon Report

Generated at 2017-12-05 20:38:17 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

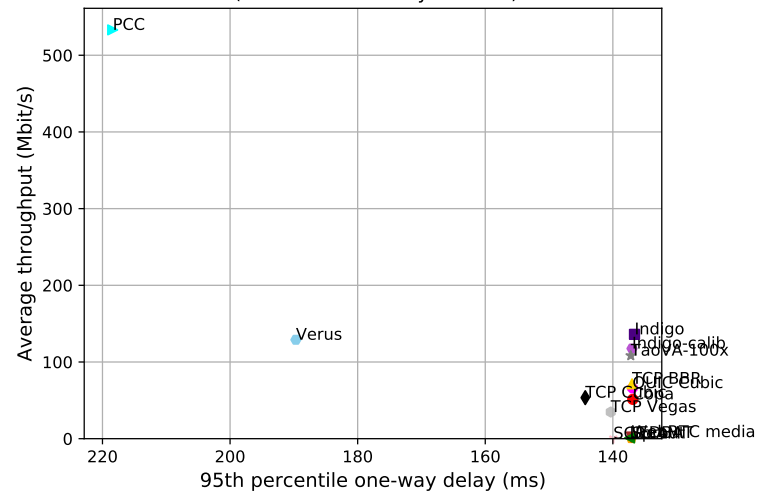
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

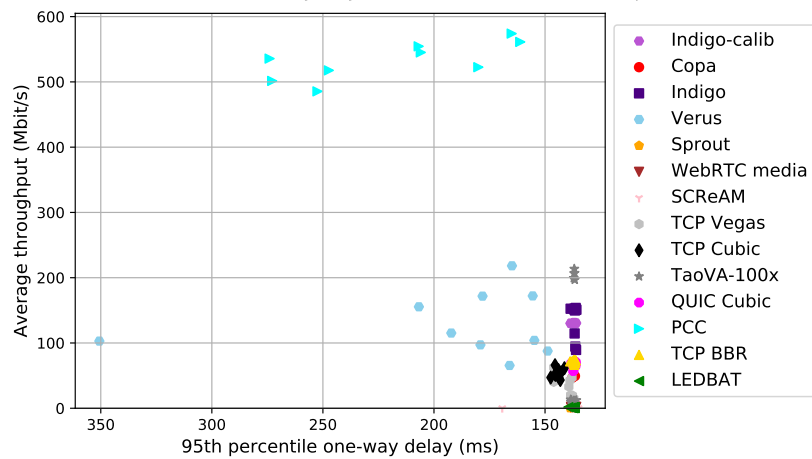
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE 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	71.57	136.99	0.99
TCP Cubic	10	53.51	144.32	1.31
LEDBAT	10	0.95	137.38	1.13
PCC	9	533.08	218.39	3.60
QUIC Cubic	10	66.00	136.93	1.11
SCReAM	10	0.21	139.93	0.89
WebRTC media	10	2.10	137.09	0.99
Sprout	10	0.40	137.08	0.87
TaoVA-100x	10	108.30	137.19	0.85
TCP Vegas	10	34.77	140.33	0.86
Verus	10	129.00	189.68	2.29
Copa	6	51.32	136.88	0.73
Indigo	10	136.04	136.61	0.88
Indigo-calib	10	117.54	137.00	1.05

Run 1: Statistics of TCP BBR

Start at: 2017-12-05 16:27:24

End at: 2017-12-05 16:27:54

Below is generated by plot.py at 2017-12-05 20:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.83 Mbit/s

95th percentile per-packet one-way delay: 138.676 ms

Loss rate: 1.02%

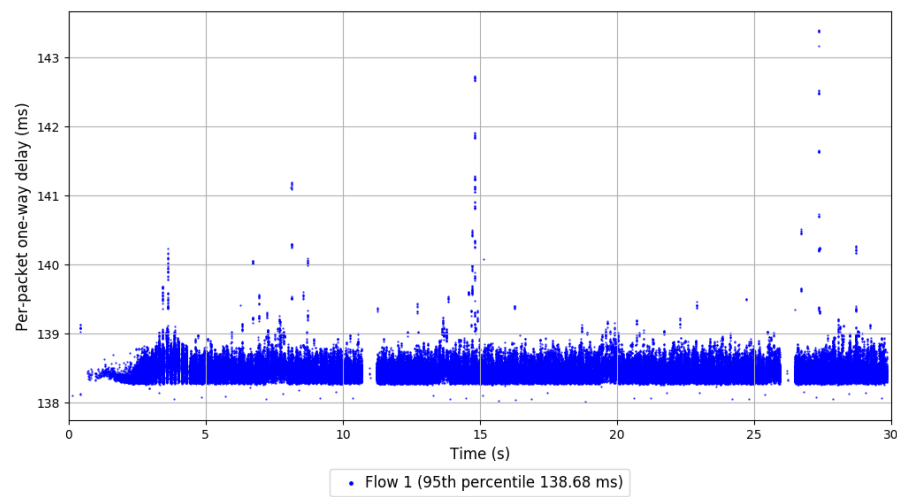
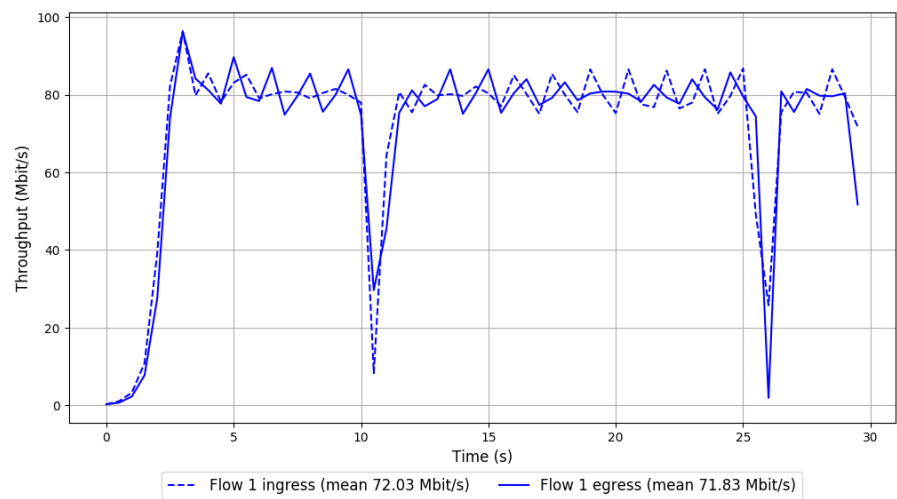
-- Flow 1:

Average throughput: 71.83 Mbit/s

95th percentile per-packet one-way delay: 138.676 ms

Loss rate: 1.02%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 16:38:39

End at: 2017-12-05 16:39:09

Below is generated by plot.py at 2017-12-05 20:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.08 Mbit/s

95th percentile per-packet one-way delay: 137.074 ms

Loss rate: 0.95%

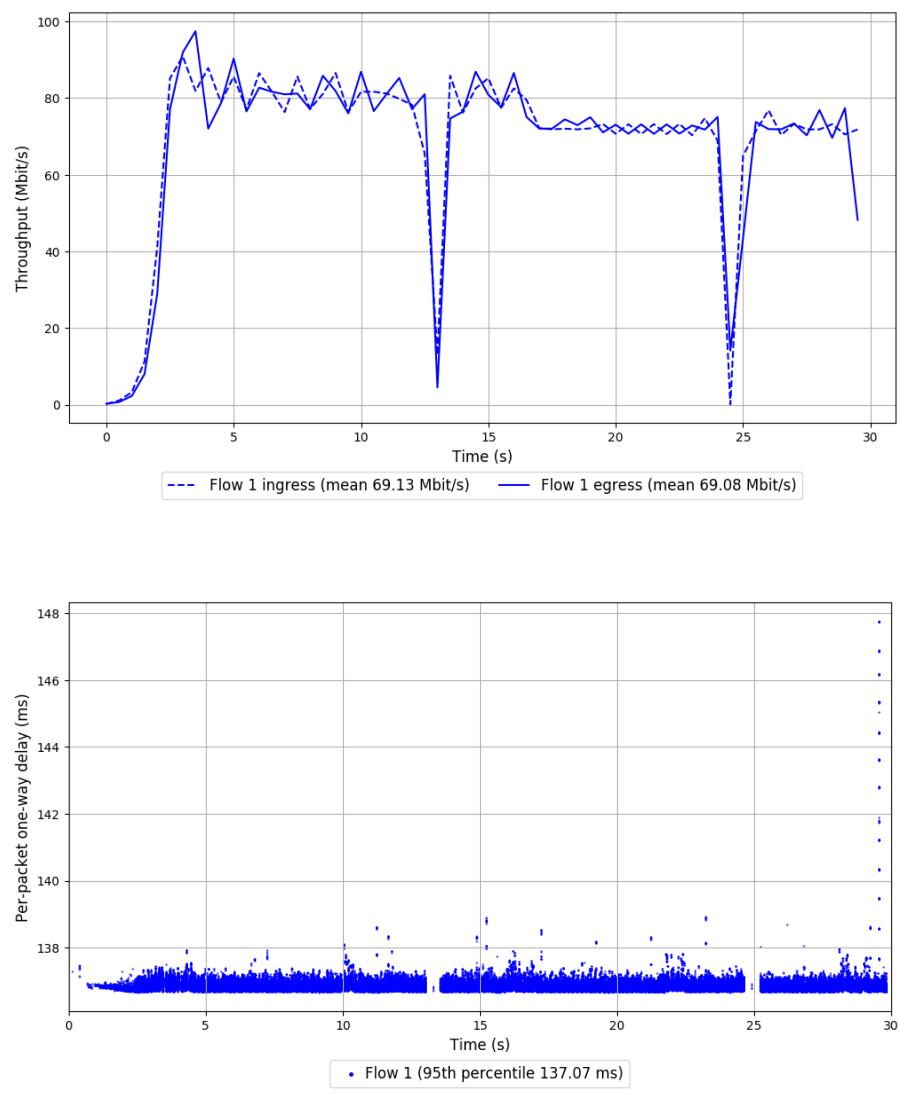
-- Flow 1:

Average throughput: 69.08 Mbit/s

95th percentile per-packet one-way delay: 137.074 ms

Loss rate: 0.95%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 16:49:53

End at: 2017-12-05 16:50:23

Below is generated by plot.py at 2017-12-05 20:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.19 Mbit/s

95th percentile per-packet one-way delay: 137.733 ms

Loss rate: 0.98%

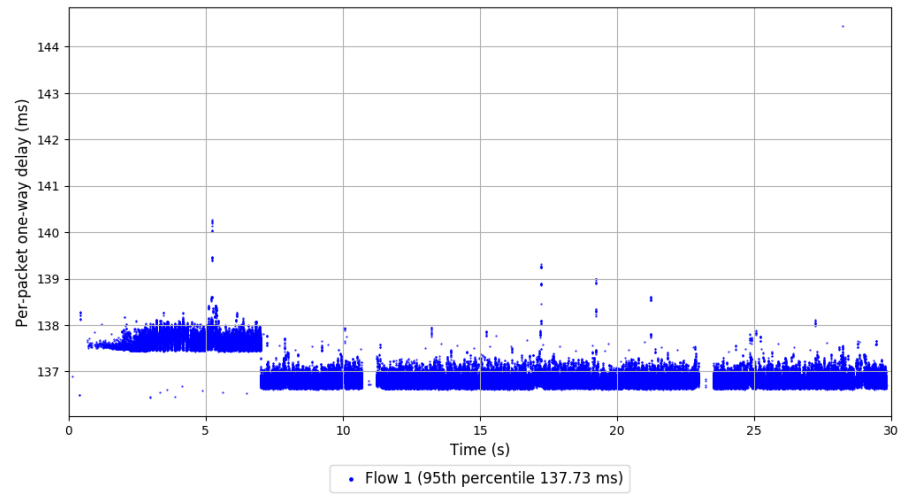
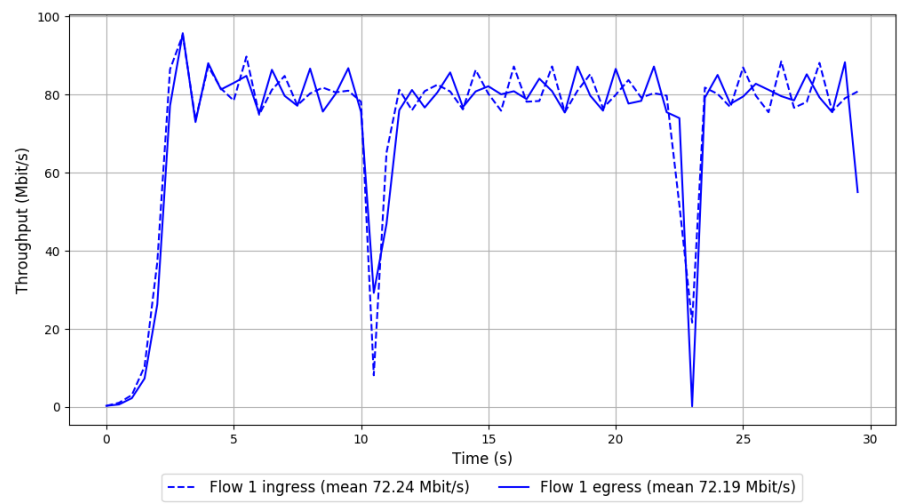
-- Flow 1:

Average throughput: 72.19 Mbit/s

95th percentile per-packet one-way delay: 137.733 ms

Loss rate: 0.98%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-05 17:01:17

End at: 2017-12-05 17:01:47

Below is generated by plot.py at 2017-12-05 20:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.59 Mbit/s

95th percentile per-packet one-way delay: 136.881 ms

Loss rate: 0.98%

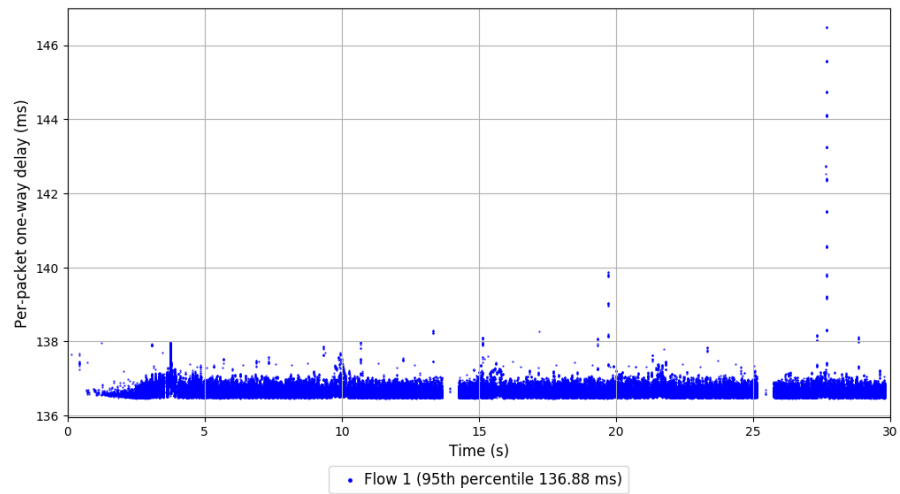
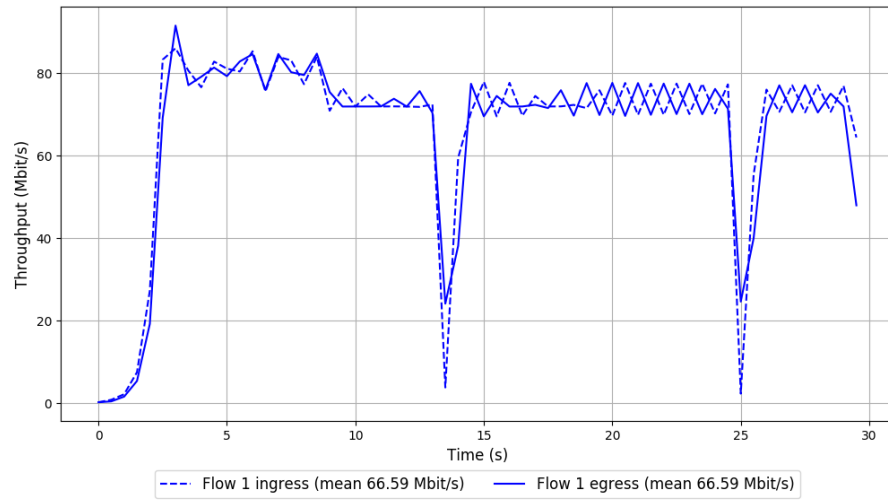
-- Flow 1:

Average throughput: 66.59 Mbit/s

95th percentile per-packet one-way delay: 136.881 ms

Loss rate: 0.98%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-05 17:12:33

End at: 2017-12-05 17:13:03

Below is generated by plot.py at 2017-12-05 20:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.53 Mbit/s

95th percentile per-packet one-way delay: 136.696 ms

Loss rate: 1.08%

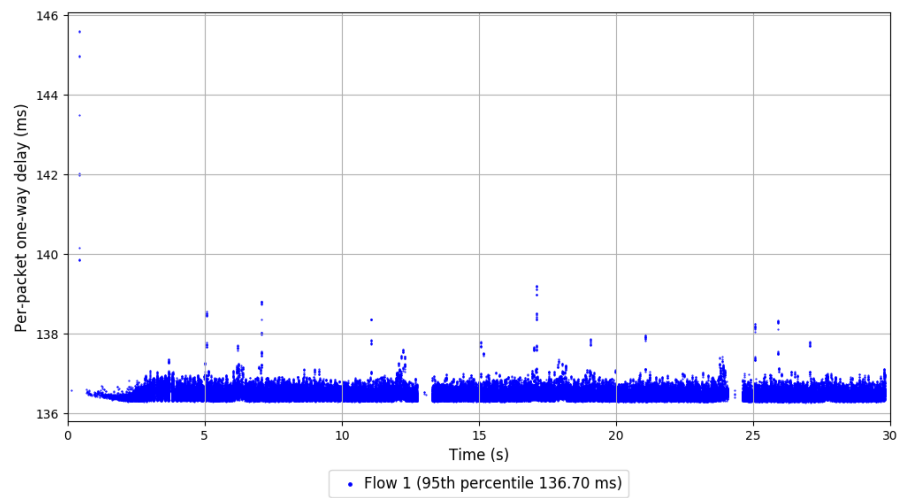
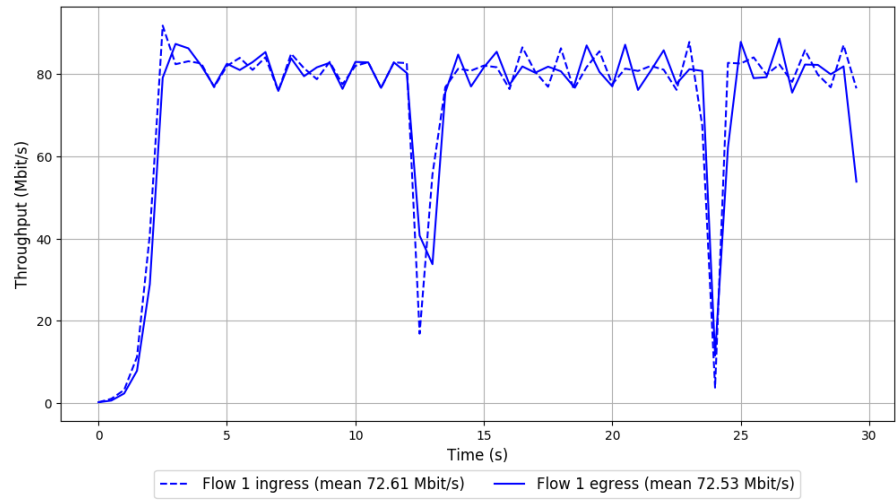
-- Flow 1:

Average throughput: 72.53 Mbit/s

95th percentile per-packet one-way delay: 136.696 ms

Loss rate: 1.08%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-05 17:23:31

End at: 2017-12-05 17:24:01

Below is generated by plot.py at 2017-12-05 20:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.40 Mbit/s

95th percentile per-packet one-way delay: 136.524 ms

Loss rate: 1.02%

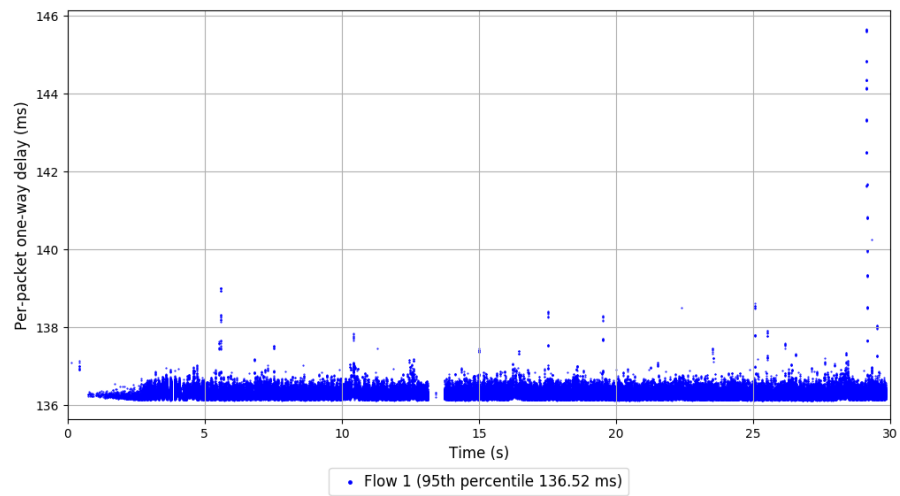
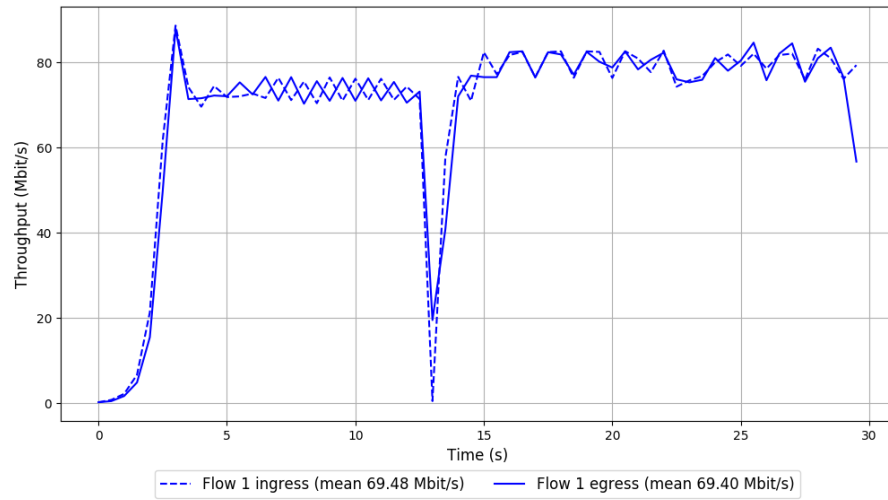
-- Flow 1:

Average throughput: 69.40 Mbit/s

95th percentile per-packet one-way delay: 136.524 ms

Loss rate: 1.02%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-05 17:34:47

End at: 2017-12-05 17:35:17

Below is generated by plot.py at 2017-12-05 20:09:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.12 Mbit/s

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

Loss rate: 0.98%

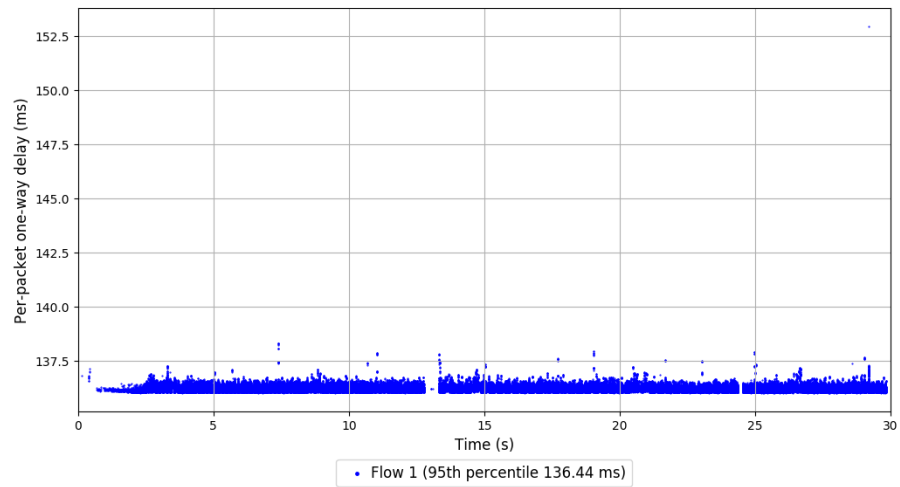
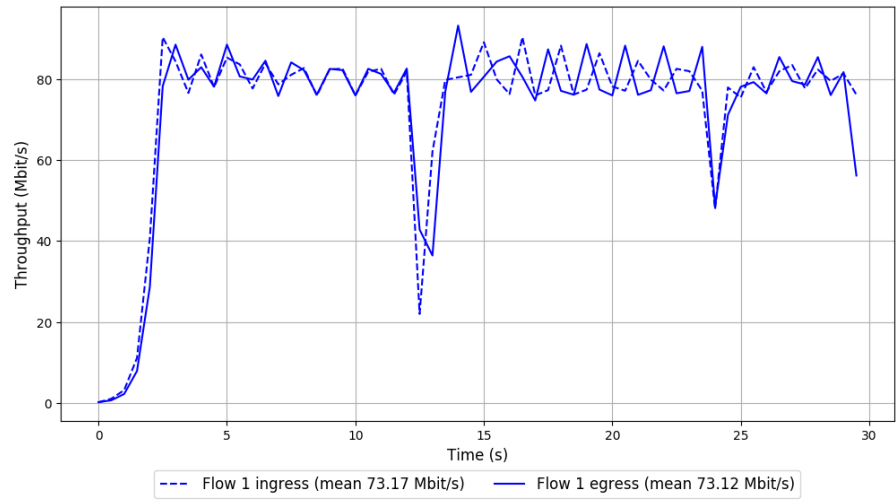
-- Flow 1:

Average throughput: 73.12 Mbit/s

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

Loss rate: 0.98%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-05 17:46:20

End at: 2017-12-05 17:46:50

Below is generated by plot.py at 2017-12-05 20:09:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.08 Mbit/s

95th percentile per-packet one-way delay: 136.914 ms

Loss rate: 0.96%

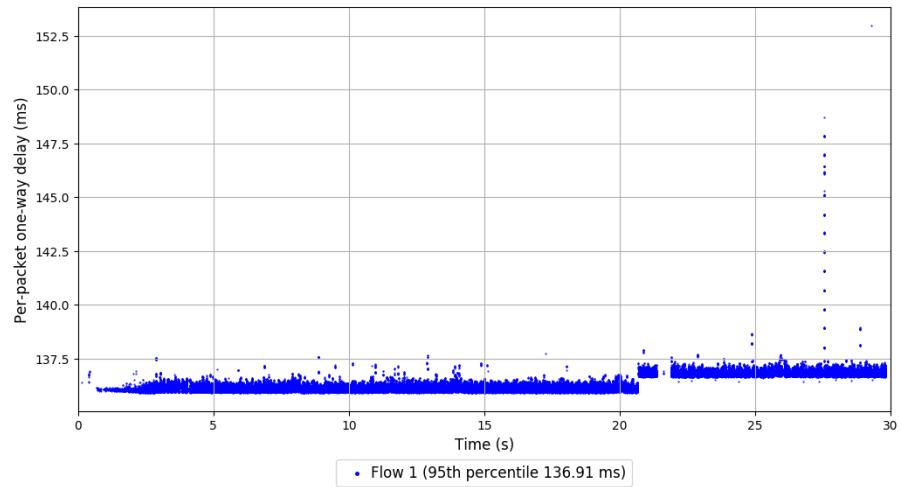
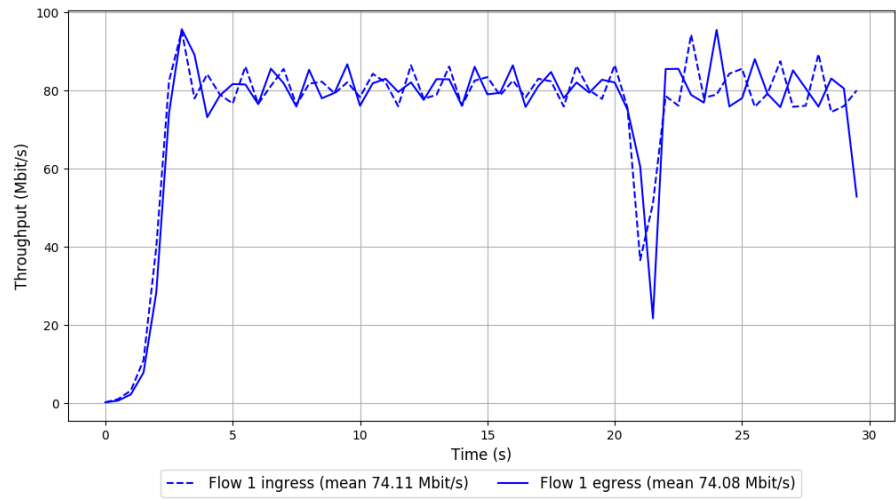
-- Flow 1:

Average throughput: 74.08 Mbit/s

95th percentile per-packet one-way delay: 136.914 ms

Loss rate: 0.96%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

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

End at: 2017-12-05 17:58:27

Below is generated by plot.py at 2017-12-05 20:10:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.48 Mbit/s

95th percentile per-packet one-way delay: 136.191 ms

Loss rate: 0.98%

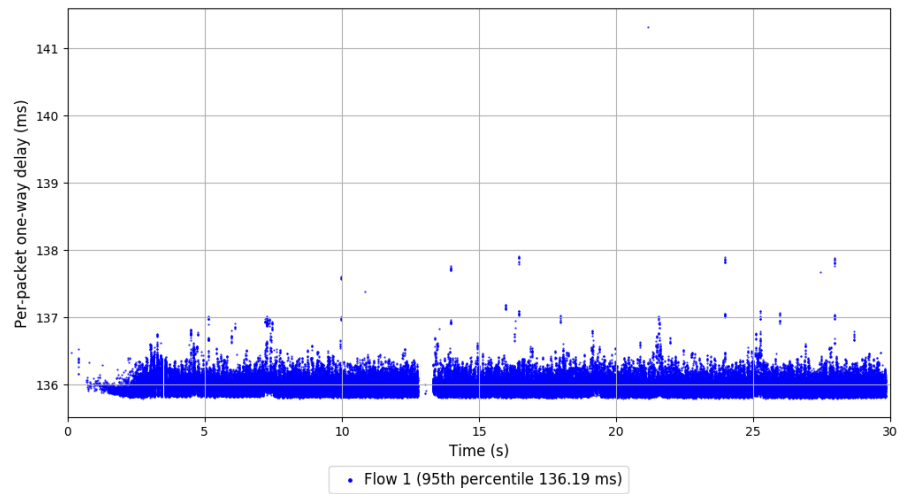
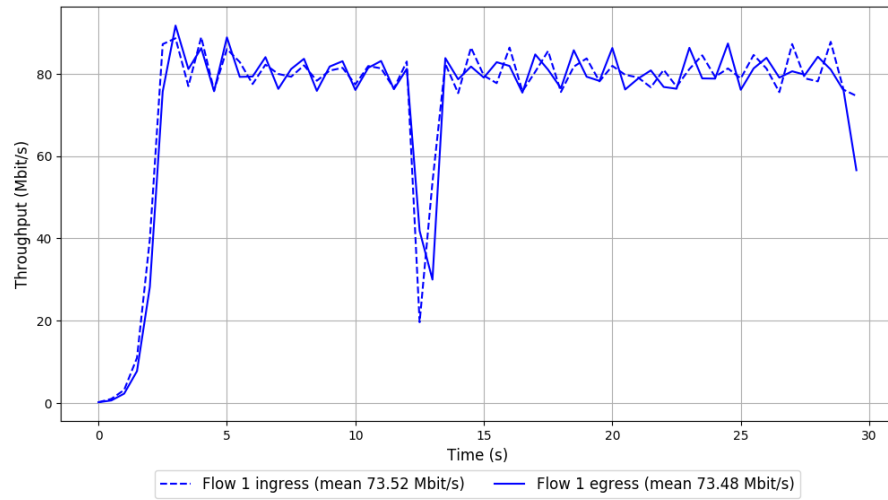
-- Flow 1:

Average throughput: 73.48 Mbit/s

95th percentile per-packet one-way delay: 136.191 ms

Loss rate: 0.98%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-05 18:09:20

End at: 2017-12-05 18:09:50

Below is generated by plot.py at 2017-12-05 20:10:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.38 Mbit/s

95th percentile per-packet one-way delay: 136.785 ms

Loss rate: 0.98%

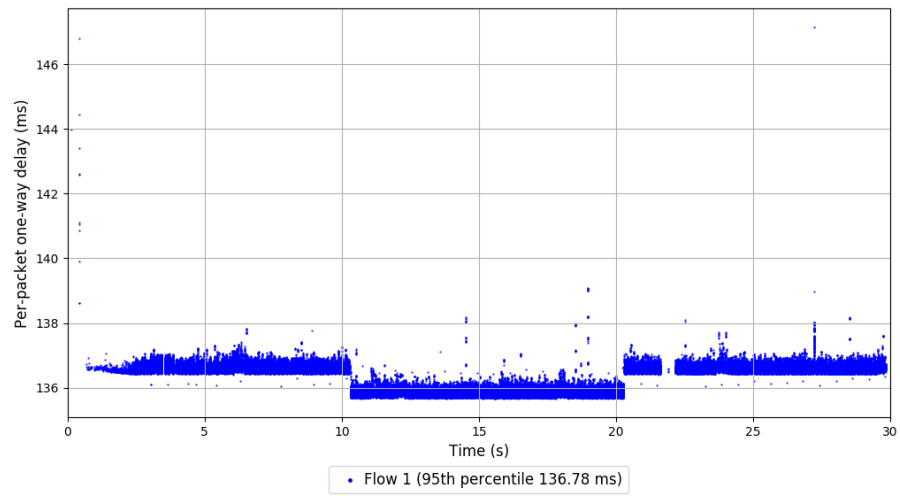
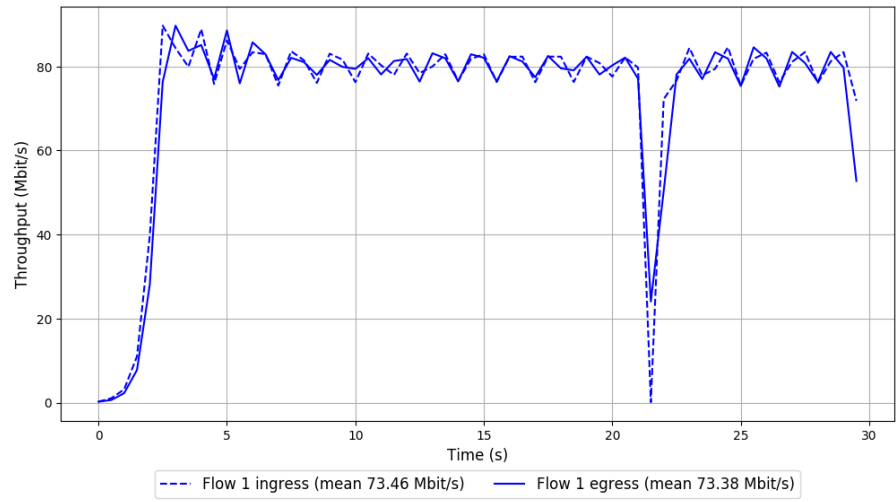
-- Flow 1:

Average throughput: 73.38 Mbit/s

95th percentile per-packet one-way delay: 136.785 ms

Loss rate: 0.98%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 16:29:35

End at: 2017-12-05 16:30:05

Below is generated by plot.py at 2017-12-05 20:10:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.06 Mbit/s

95th percentile per-packet one-way delay: 147.461 ms

Loss rate: 1.63%

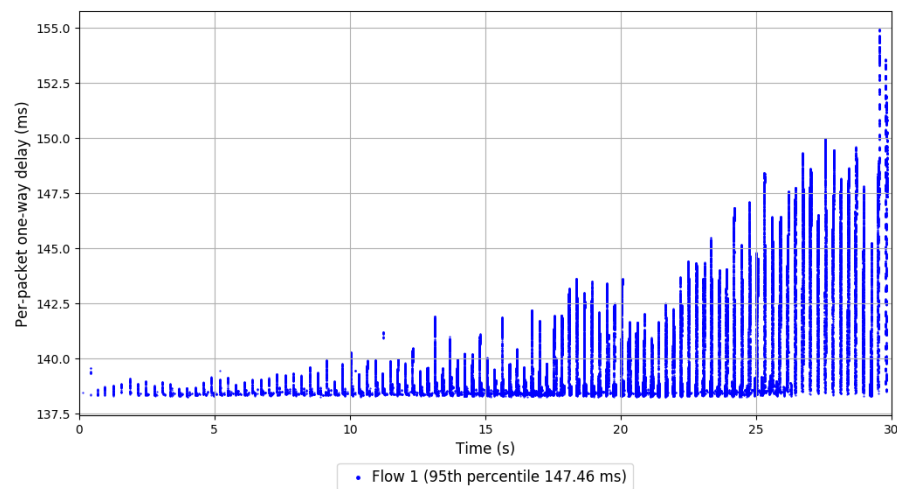
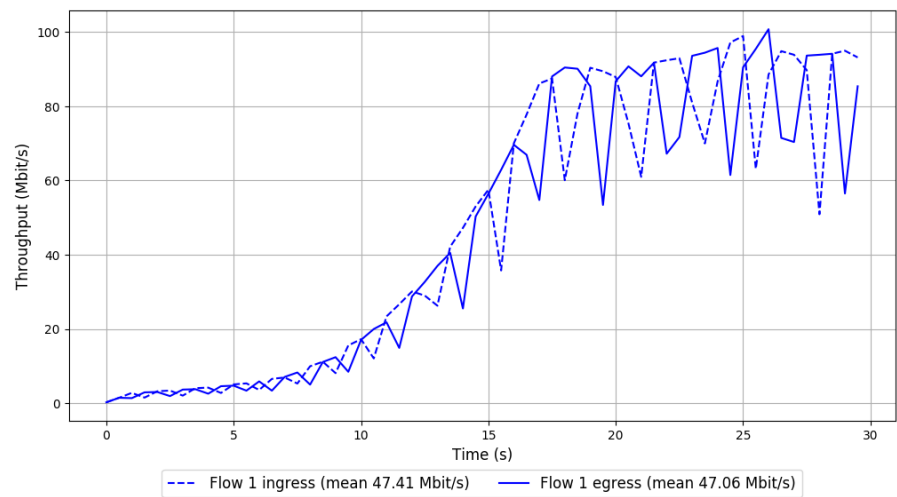
-- Flow 1:

Average throughput: 47.06 Mbit/s

95th percentile per-packet one-way delay: 147.461 ms

Loss rate: 1.63%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 16:40:51

End at: 2017-12-05 16:41:21

Below is generated by plot.py at 2017-12-05 20:10:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.09 Mbit/s

95th percentile per-packet one-way delay: 145.361 ms

Loss rate: 1.49%

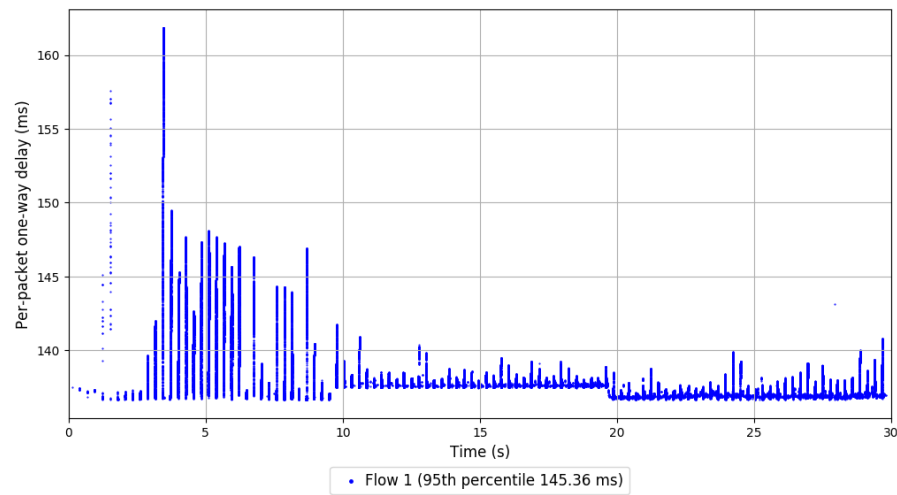
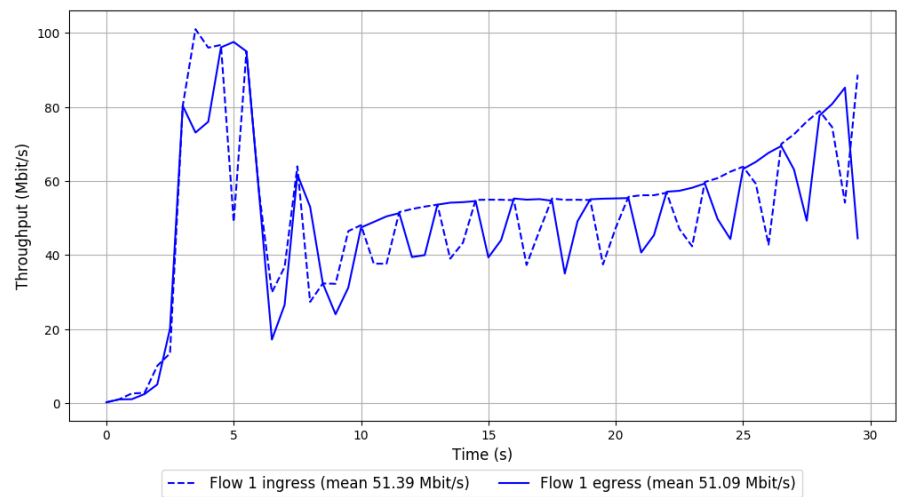
-- Flow 1:

Average throughput: 51.09 Mbit/s

95th percentile per-packet one-way delay: 145.361 ms

Loss rate: 1.49%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 16:52:05

End at: 2017-12-05 16:52:35

Below is generated by plot.py at 2017-12-05 20:10:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.87 Mbit/s

95th percentile per-packet one-way delay: 145.126 ms

Loss rate: 0.77%

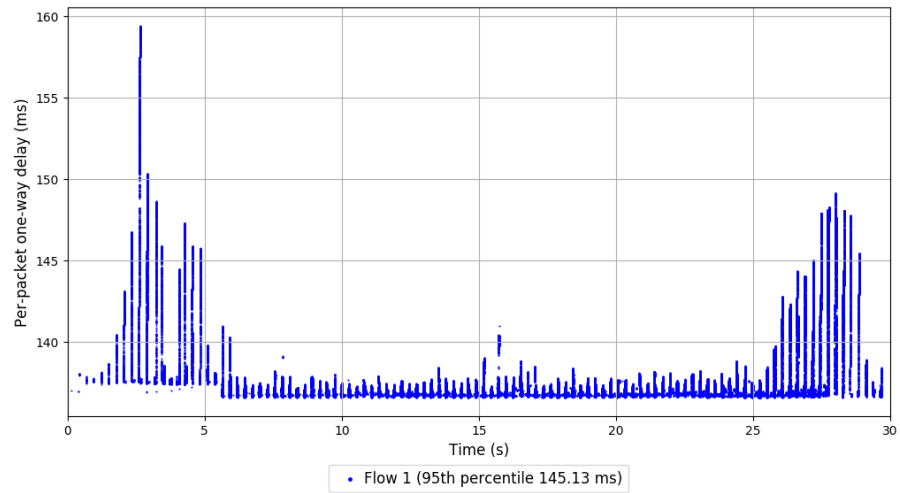
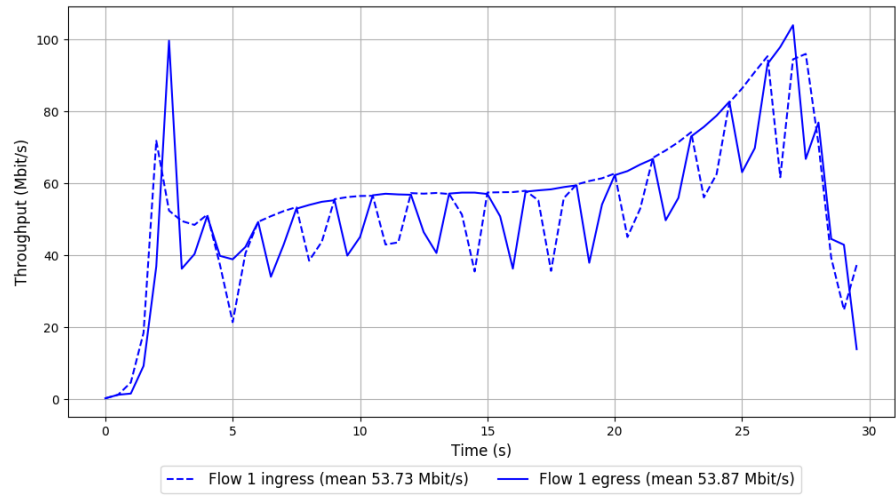
-- Flow 1:

Average throughput: 53.87 Mbit/s

95th percentile per-packet one-way delay: 145.126 ms

Loss rate: 0.77%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-05 17:03:28

End at: 2017-12-05 17:03:58

Below is generated by plot.py at 2017-12-05 20:10:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.21 Mbit/s

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

Loss rate: 1.78%

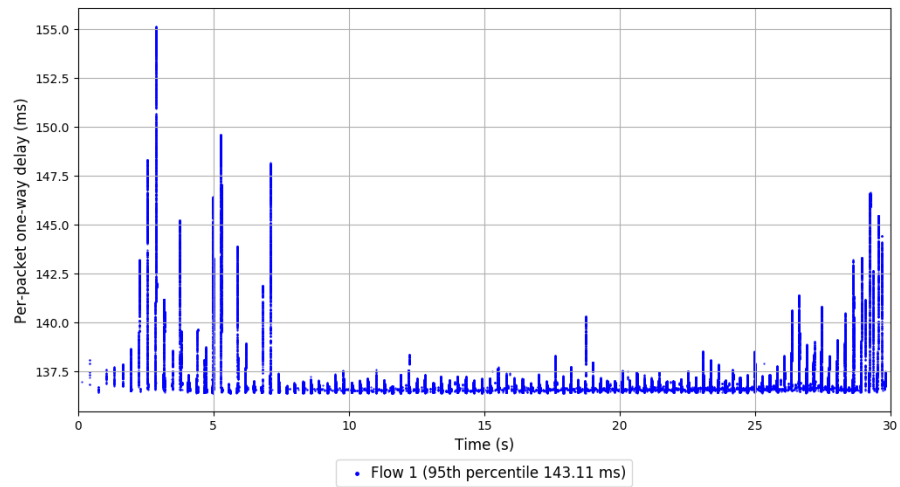
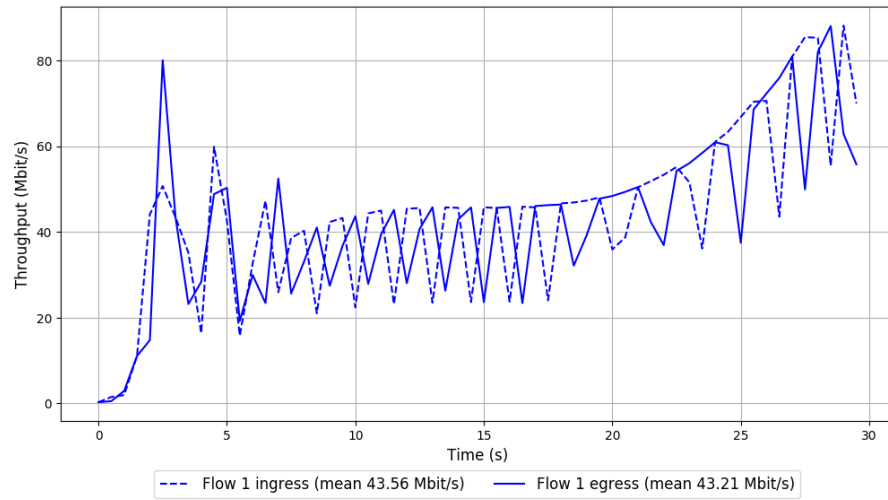
-- Flow 1:

Average throughput: 43.21 Mbit/s

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

Loss rate: 1.78%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-05 17:14:45

End at: 2017-12-05 17:15:15

Below is generated by plot.py at 2017-12-05 20:10:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.91 Mbit/s

95th percentile per-packet one-way delay: 143.693 ms

Loss rate: 1.62%

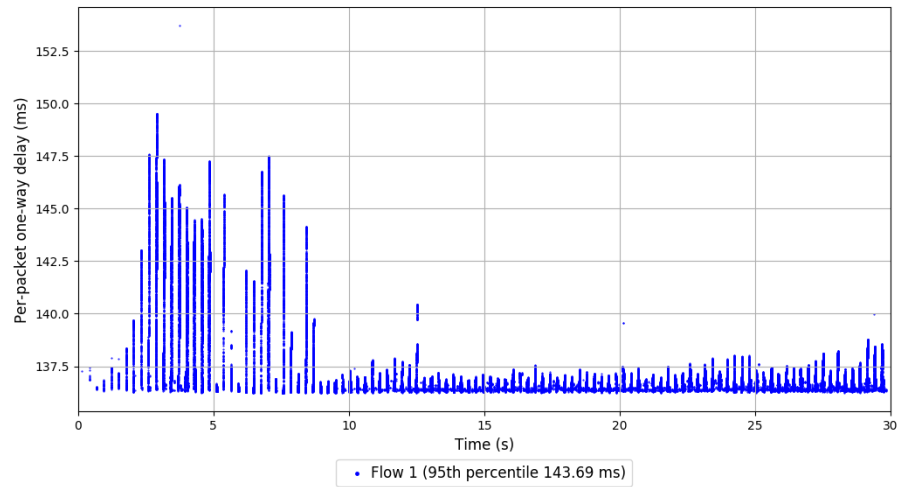
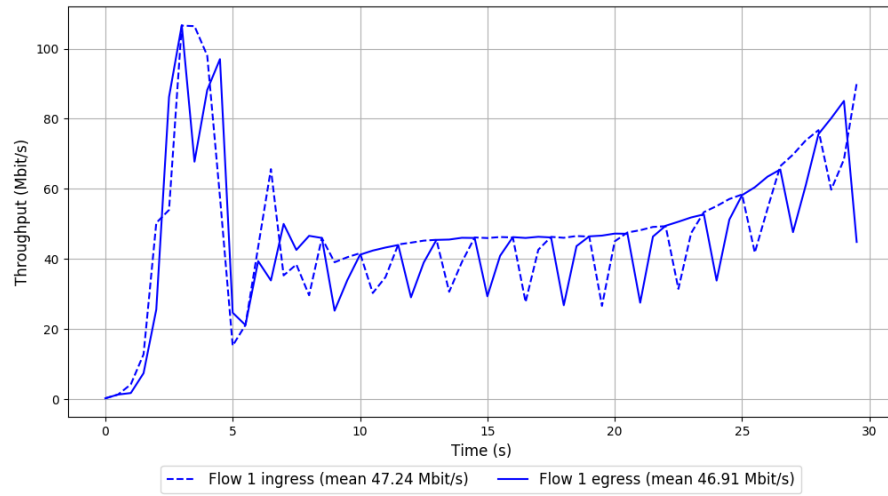
-- Flow 1:

Average throughput: 46.91 Mbit/s

95th percentile per-packet one-way delay: 143.693 ms

Loss rate: 1.62%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-05 17:25:42

End at: 2017-12-05 17:26:12

Below is generated by plot.py at 2017-12-05 20:10:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.42 Mbit/s

95th percentile per-packet one-way delay: 141.260 ms

Loss rate: 0.84%

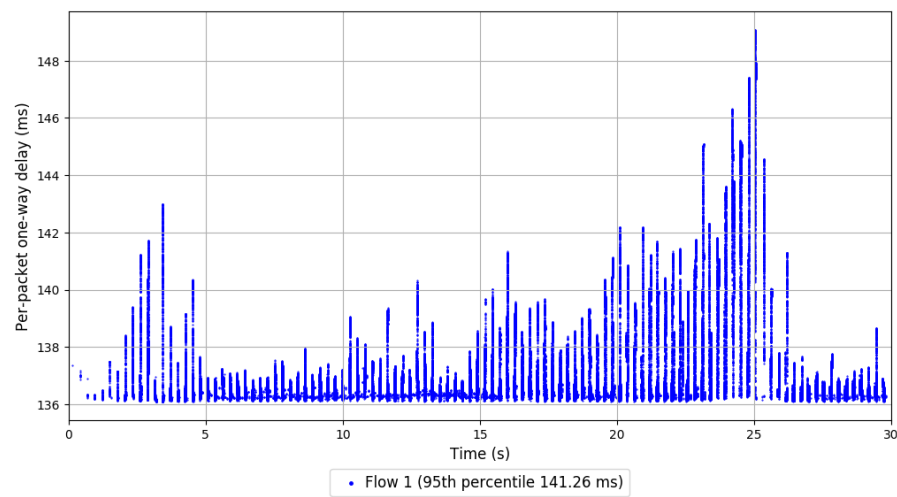
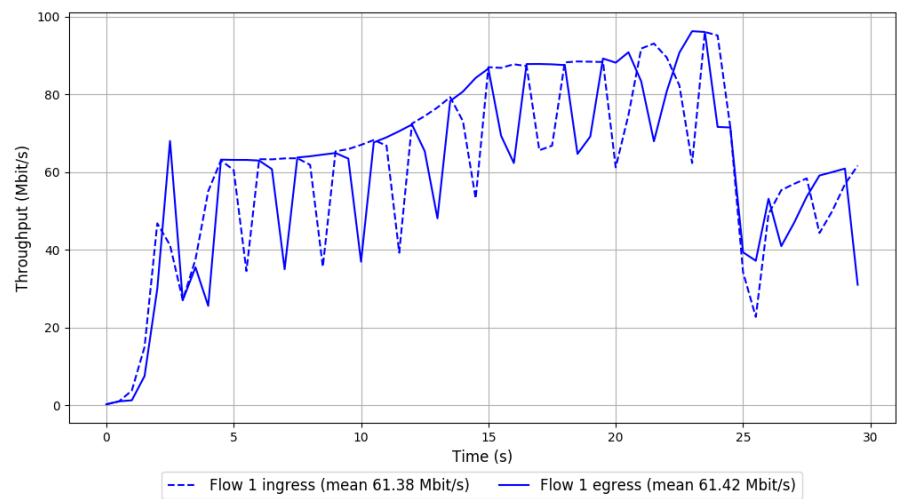
-- Flow 1:

Average throughput: 61.42 Mbit/s

95th percentile per-packet one-way delay: 141.260 ms

Loss rate: 0.84%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-05 17:36:59

End at: 2017-12-05 17:37:29

Below is generated by plot.py at 2017-12-05 20:11:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.62 Mbit/s

95th percentile per-packet one-way delay: 143.978 ms

Loss rate: 1.28%

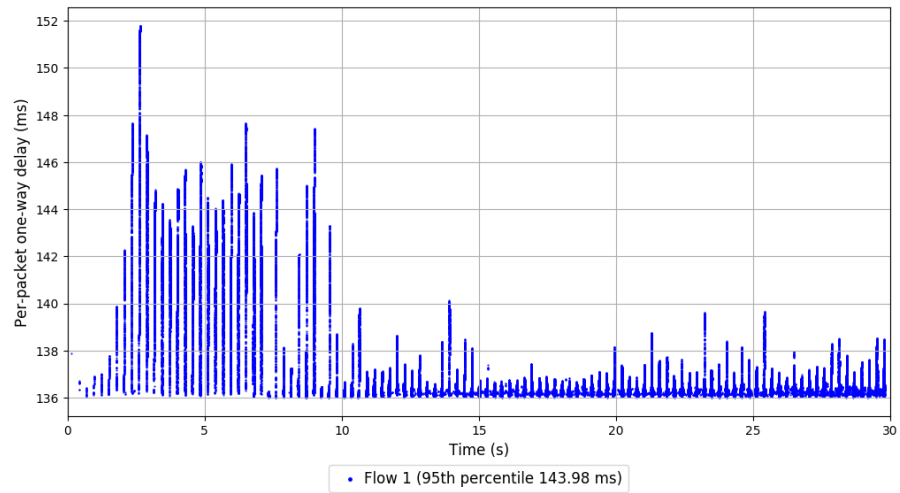
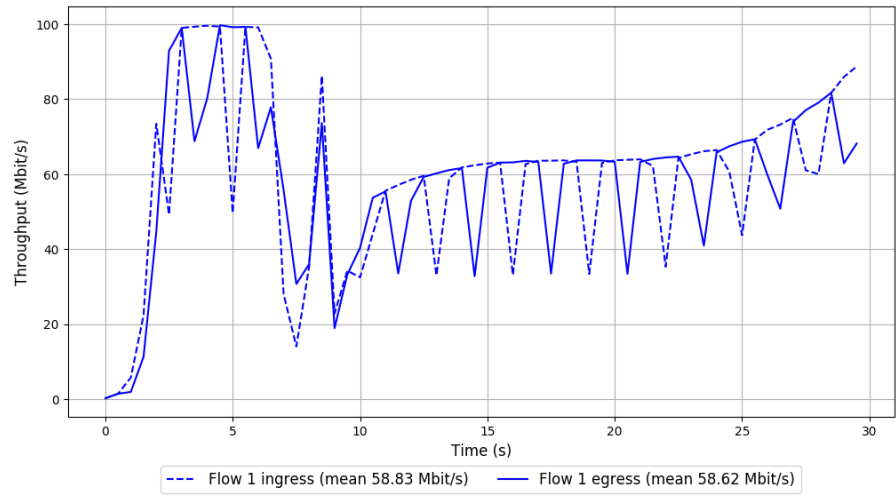
-- Flow 1:

Average throughput: 58.62 Mbit/s

95th percentile per-packet one-way delay: 143.978 ms

Loss rate: 1.28%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-05 17:48:31

End at: 2017-12-05 17:49:01

Below is generated by plot.py at 2017-12-05 20:11:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.86 Mbit/s

95th percentile per-packet one-way delay: 145.010 ms

Loss rate: 1.51%

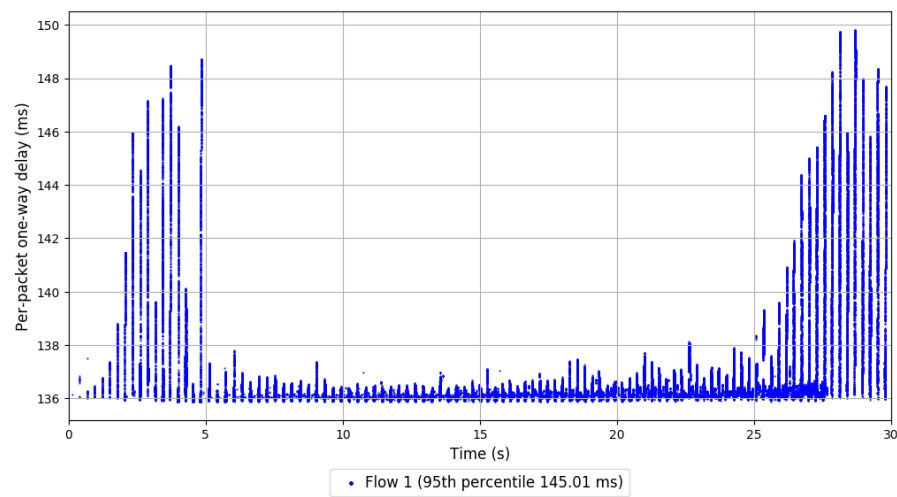
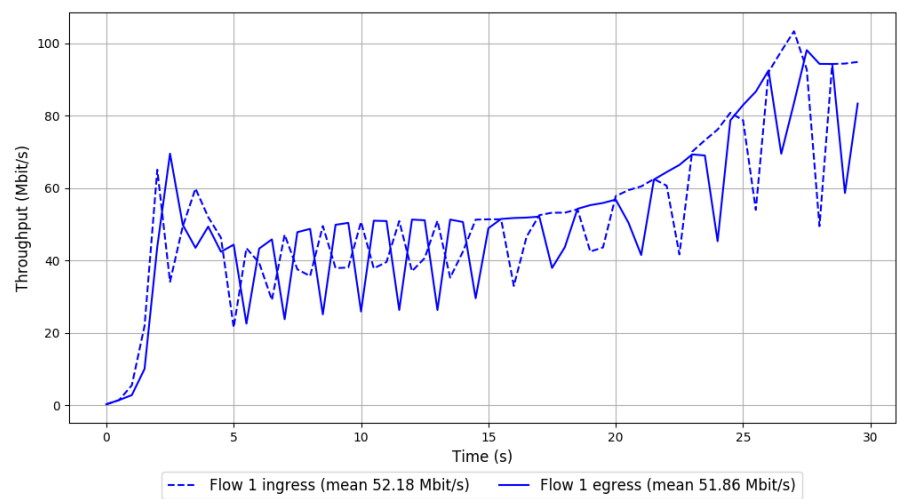
-- Flow 1:

Average throughput: 51.86 Mbit/s

95th percentile per-packet one-way delay: 145.010 ms

Loss rate: 1.51%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-05 18:00:08

End at: 2017-12-05 18:00:38

Below is generated by plot.py at 2017-12-05 20:11:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.04 Mbit/s

95th percentile per-packet one-way delay: 142.720 ms

Loss rate: 1.43%

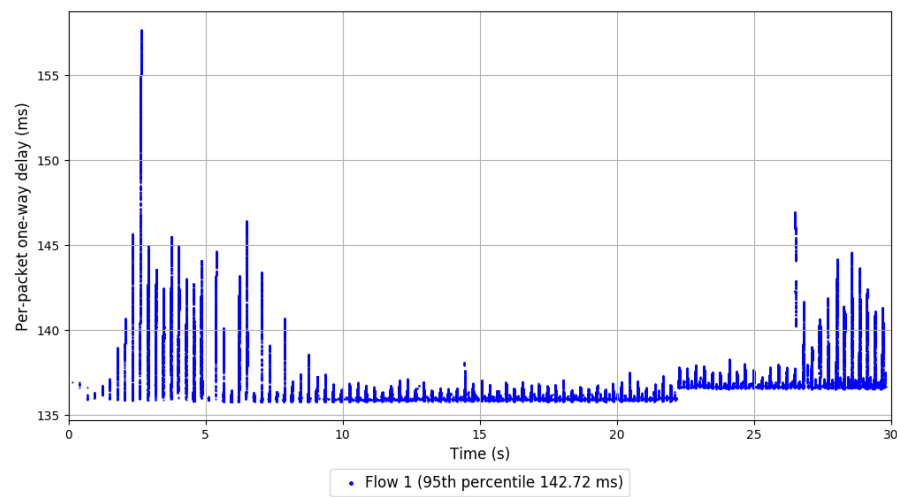
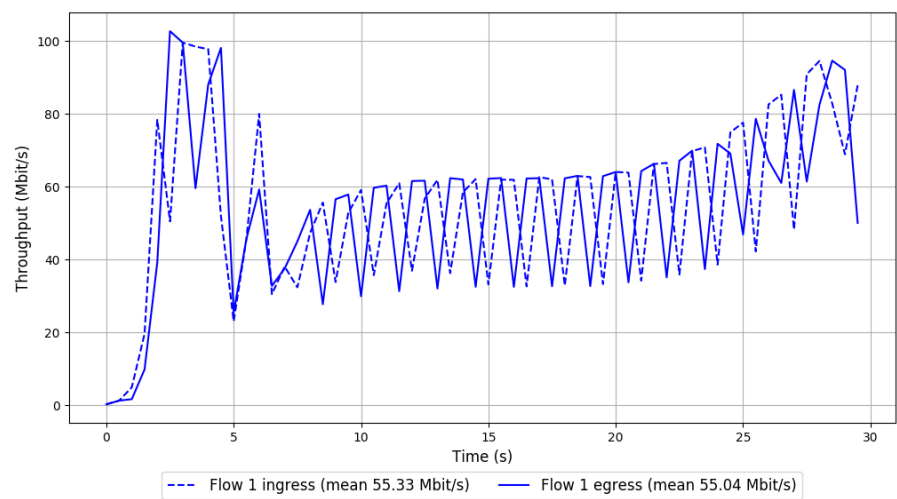
-- Flow 1:

Average throughput: 55.04 Mbit/s

95th percentile per-packet one-way delay: 142.720 ms

Loss rate: 1.43%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-05 18:11:32

End at: 2017-12-05 18:12:02

Below is generated by plot.py at 2017-12-05 20:11:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.03 Mbit/s

95th percentile per-packet one-way delay: 145.499 ms

Loss rate: 0.74%

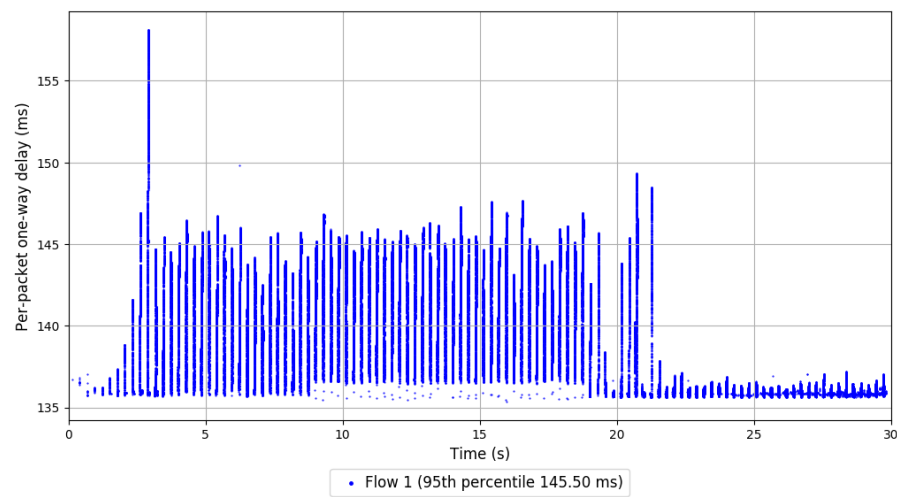
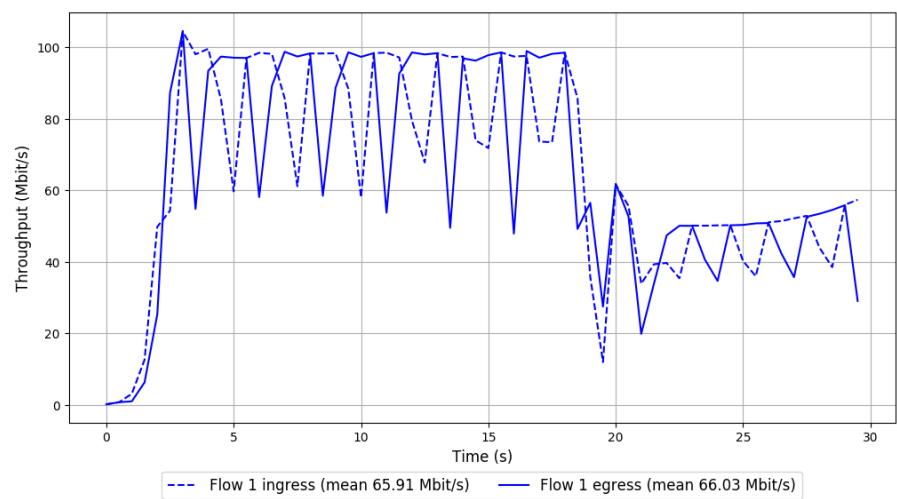
-- Flow 1:

Average throughput: 66.03 Mbit/s

95th percentile per-packet one-way delay: 145.499 ms

Loss rate: 0.74%

Run 10: Report of TCP Cubic — Data Link

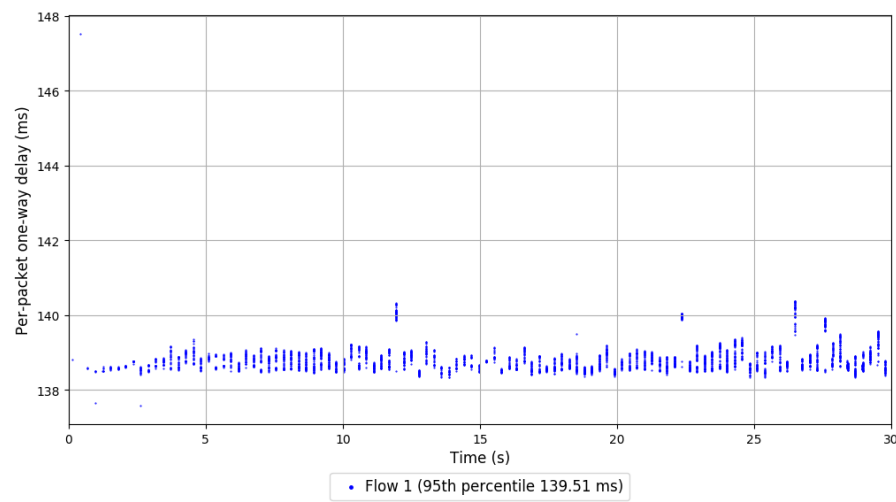
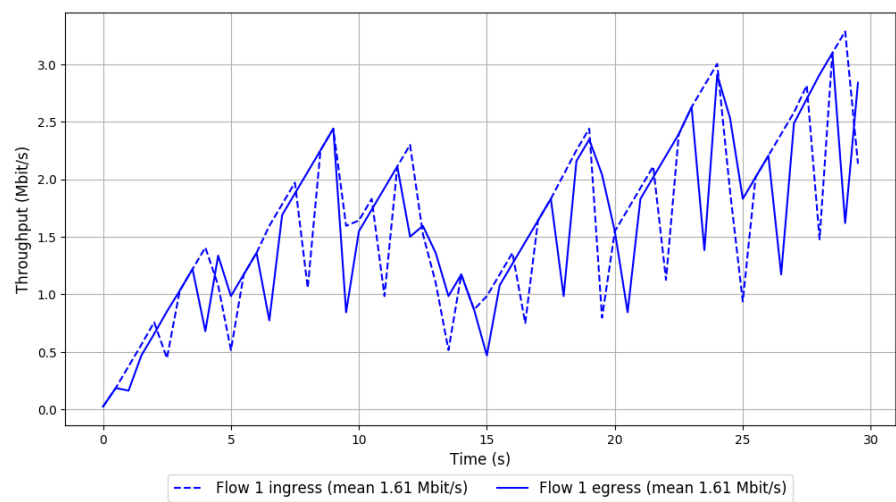


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 16:23:23
End at: 2017-12-05 16:23:53

# Below is generated by plot.py at 2017-12-05 20:11:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 139.514 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 139.514 ms
Loss rate: 1.00%
```

Run 1: Report of LEDBAT — Data Link

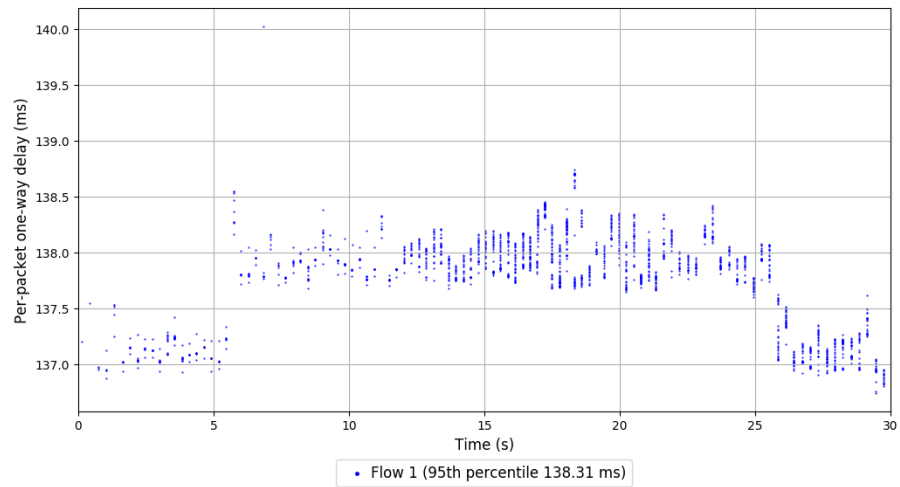
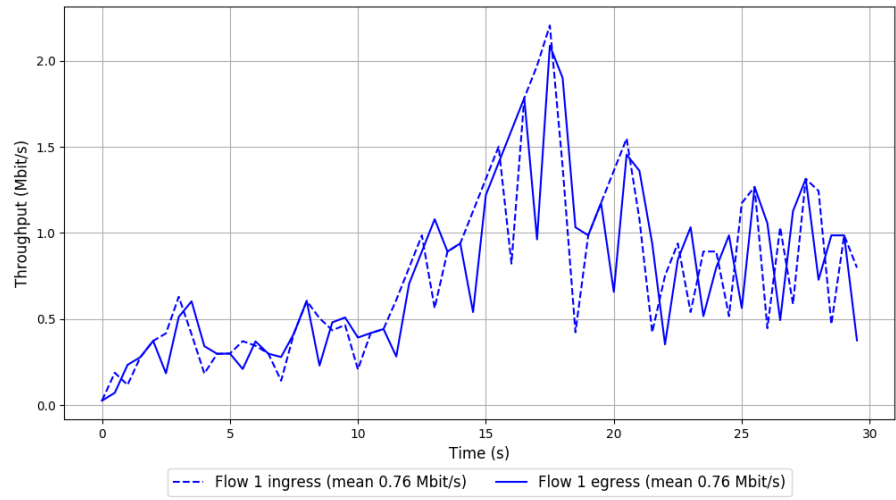


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-05 16:34:35
End at: 2017-12-05 16:35:05

# Below is generated by plot.py at 2017-12-05 20:11:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 138.314 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 138.314 ms
Loss rate: 0.93%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 16:45:52

End at: 2017-12-05 16:46:22

Below is generated by plot.py at 2017-12-05 20:11:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 137.283 ms

Loss rate: 0.95%

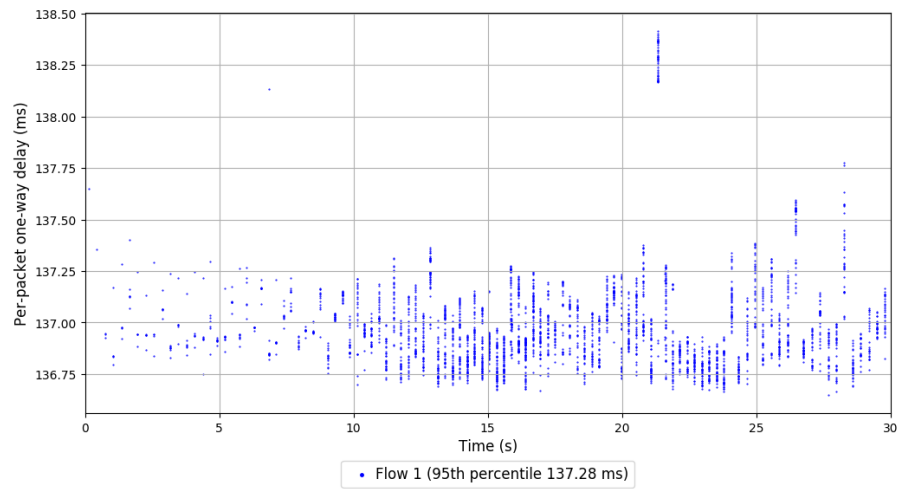
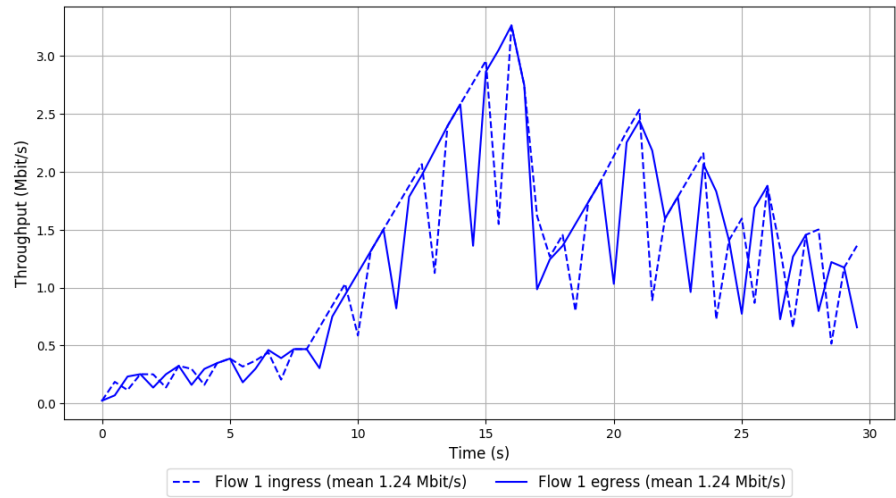
-- Flow 1:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 137.283 ms

Loss rate: 0.95%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-05 16:57:25

End at: 2017-12-05 16:57:55

Below is generated by plot.py at 2017-12-05 20:11:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 137.393 ms

Loss rate: 2.28%

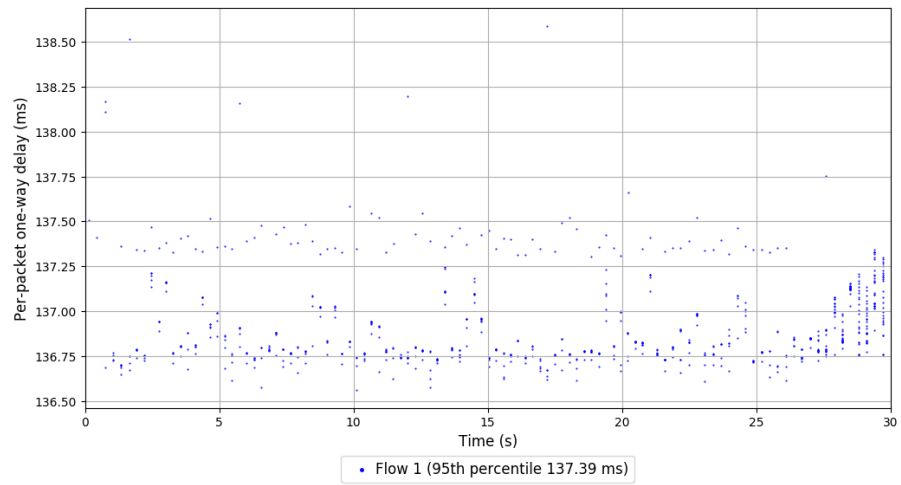
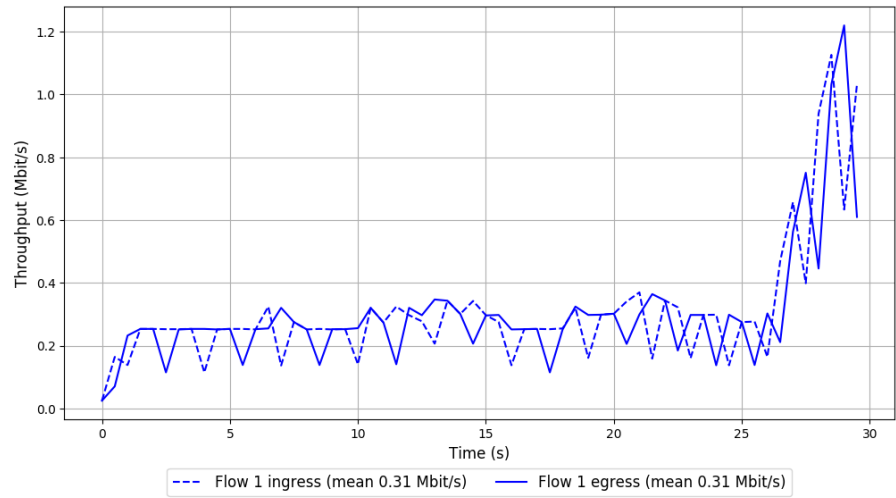
-- Flow 1:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 137.393 ms

Loss rate: 2.28%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

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

End at: 2017-12-05 17:09:07

Below is generated by plot.py at 2017-12-05 20:11:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 137.198 ms

Loss rate: 1.37%

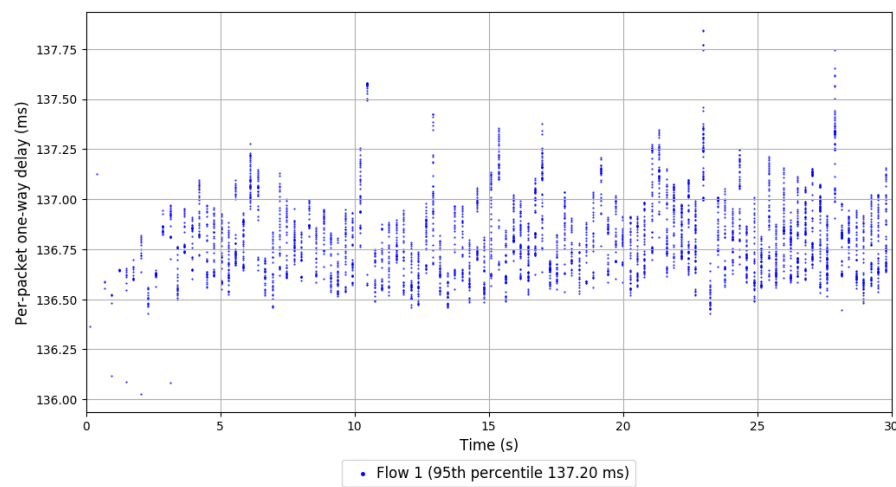
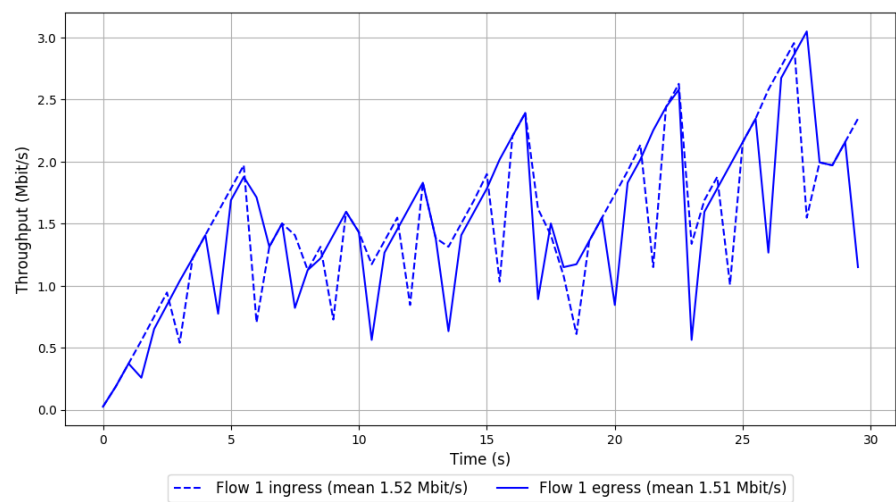
-- Flow 1:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 137.198 ms

Loss rate: 1.37%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-05 17:19:38

End at: 2017-12-05 17:20:09

Below is generated by plot.py at 2017-12-05 20:11:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.35 Mbit/s

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

Loss rate: 1.25%

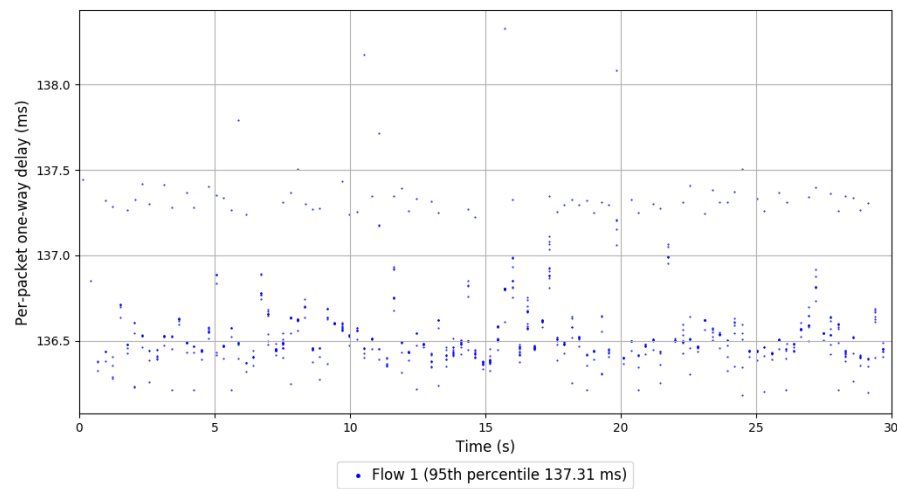
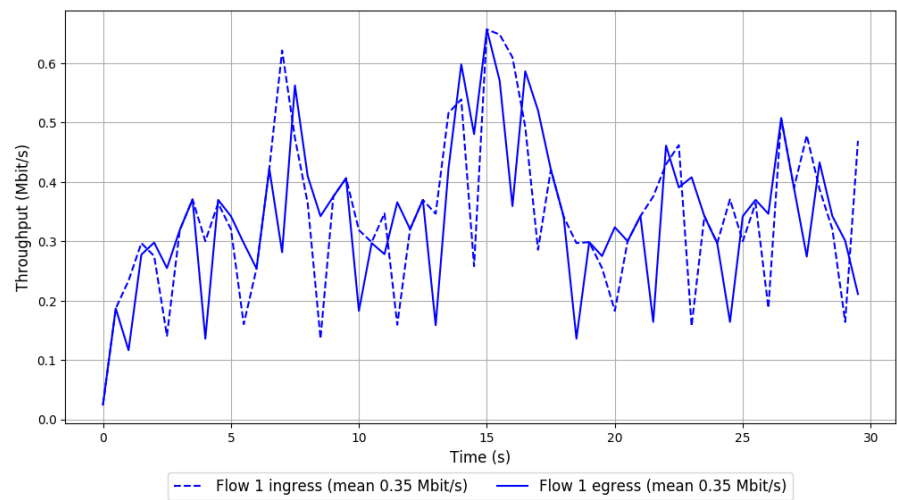
-- Flow 1:

Average throughput: 0.35 Mbit/s

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

Loss rate: 1.25%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-05 17:30:43

End at: 2017-12-05 17:31:13

Below is generated by plot.py at 2017-12-05 20:11:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 136.868 ms

Loss rate: 0.56%

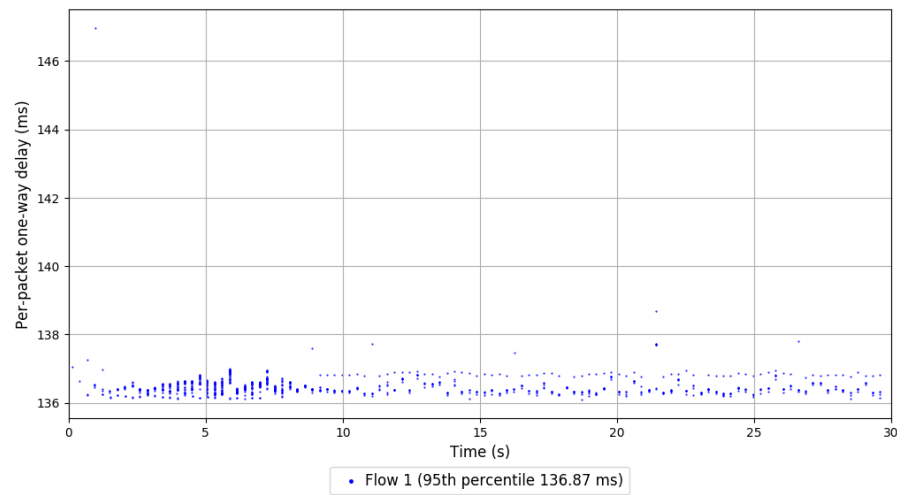
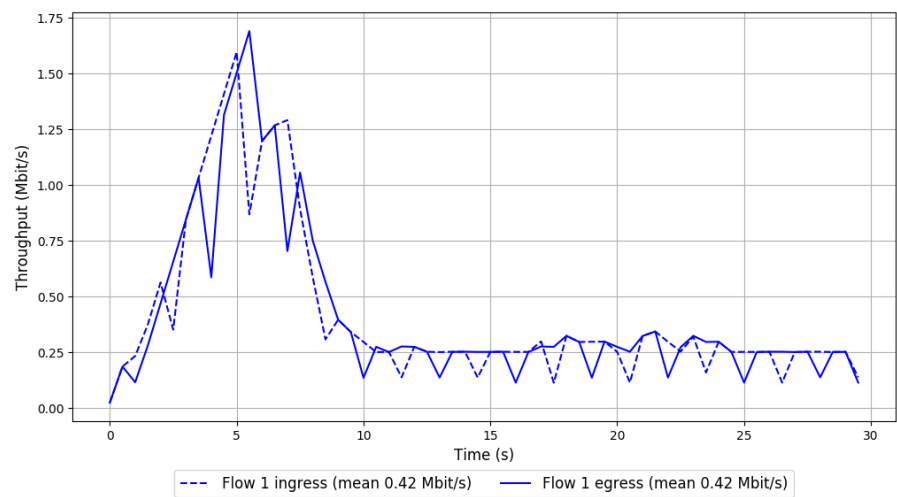
-- Flow 1:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 136.868 ms

Loss rate: 0.56%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-05 17:42:22

End at: 2017-12-05 17:42:52

Below is generated by plot.py at 2017-12-05 20:11:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.24 Mbit/s

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

Loss rate: 0.95%

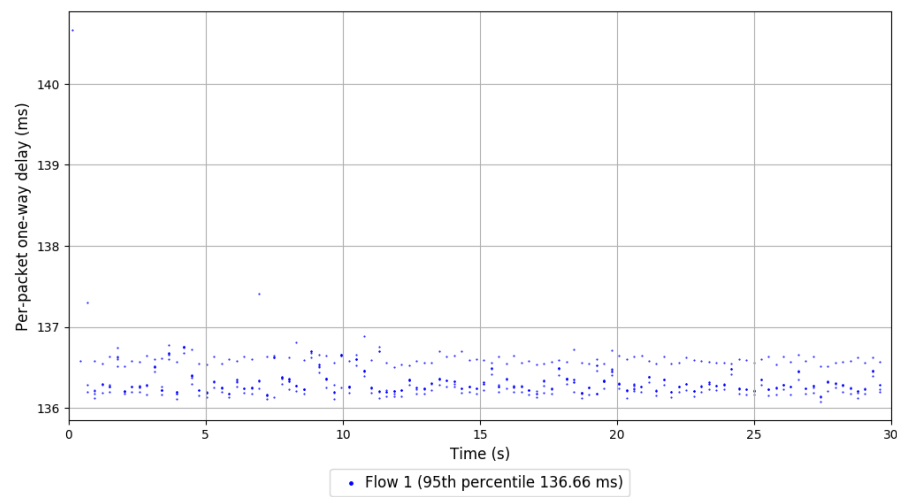
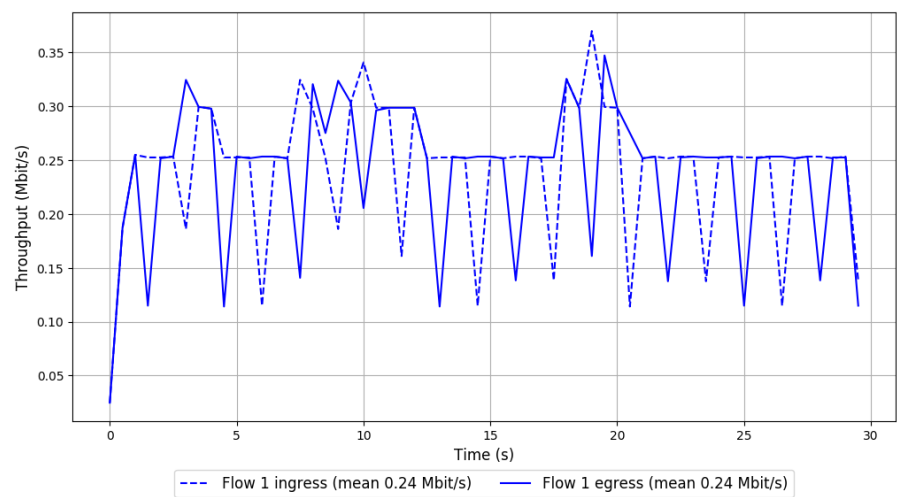
-- Flow 1:

Average throughput: 0.24 Mbit/s

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

Loss rate: 0.95%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-05 17:53:51

End at: 2017-12-05 17:54:21

Below is generated by plot.py at 2017-12-05 20:11:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 136.660 ms

Loss rate: 1.22%

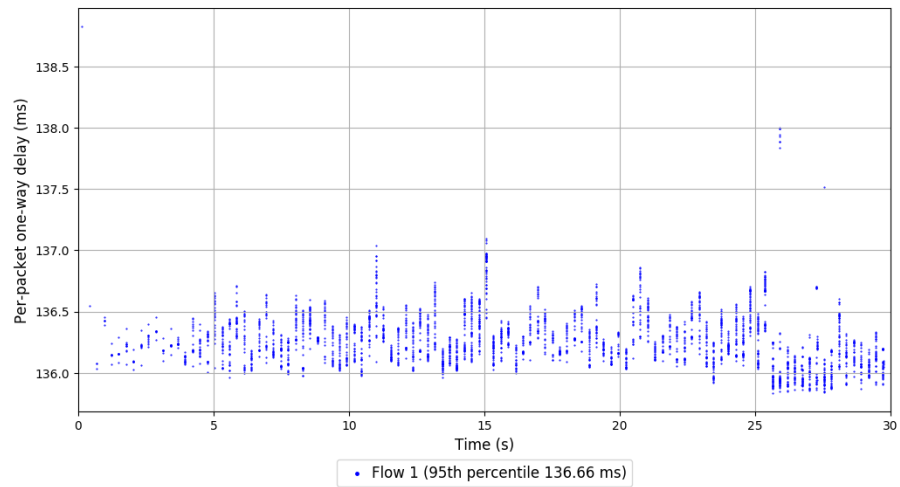
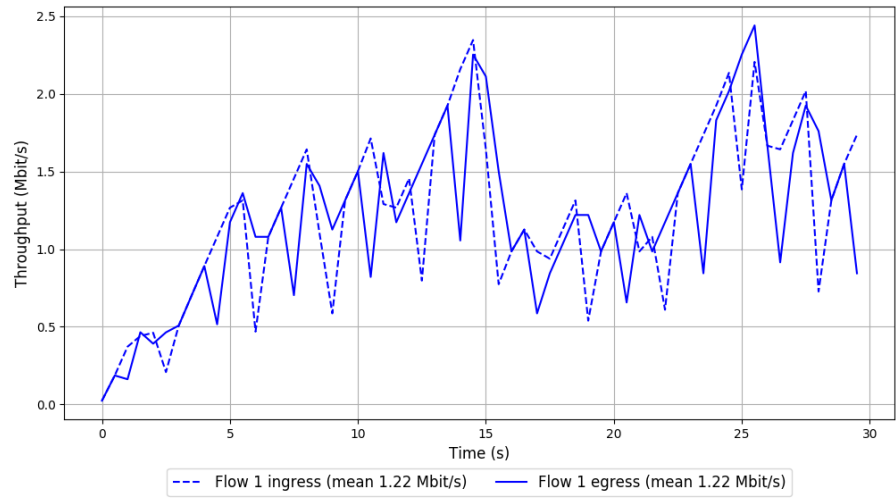
-- Flow 1:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 136.660 ms

Loss rate: 1.22%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-05 18:05:07

End at: 2017-12-05 18:05:37

Below is generated by plot.py at 2017-12-05 20:11:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 136.590 ms

Loss rate: 0.79%

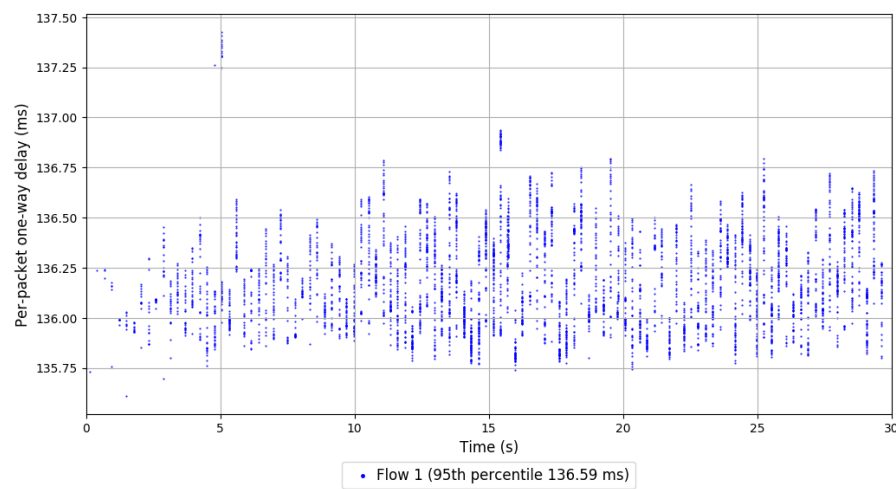
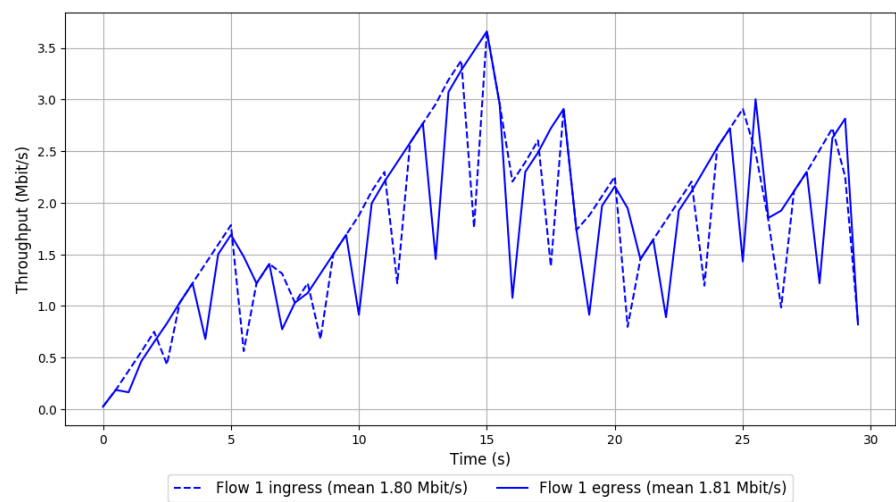
-- Flow 1:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 136.590 ms

Loss rate: 0.79%

Run 10: Report of LEDBAT — Data Link

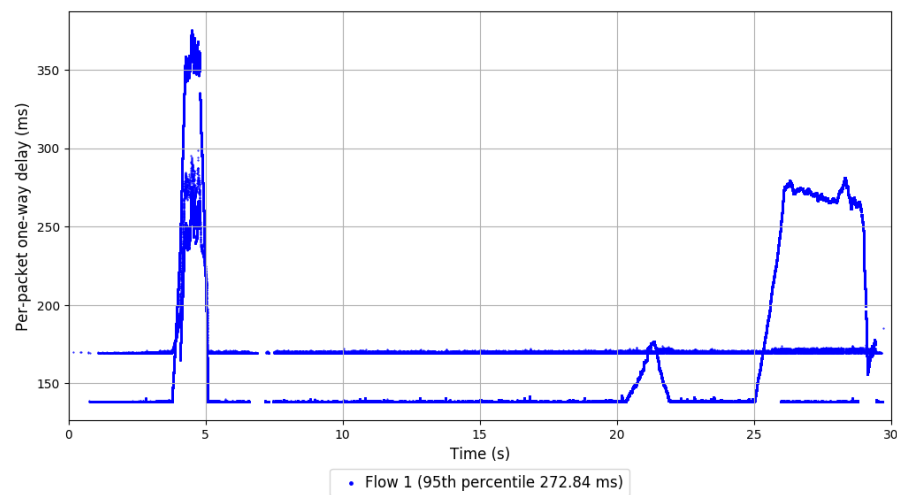
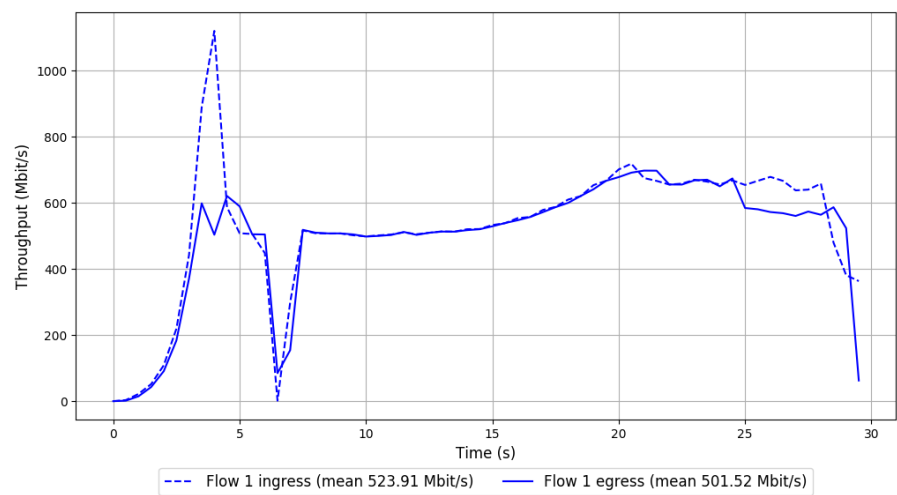


```
Run 1: Statistics of PCC

Start at: 2017-12-05 16:22:18
End at: 2017-12-05 16:22:48

# Below is generated by plot.py at 2017-12-05 20:20:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 501.52 Mbit/s
95th percentile per-packet one-way delay: 272.836 ms
Loss rate: 5.19%
-- Flow 1:
Average throughput: 501.52 Mbit/s
95th percentile per-packet one-way delay: 272.836 ms
Loss rate: 5.19%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-05 16:33:29

End at: 2017-12-05 16:33:59

Below is generated by plot.py at 2017-12-05 20:20:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 517.65 Mbit/s

95th percentile per-packet one-way delay: 247.329 ms

Loss rate: 3.47%

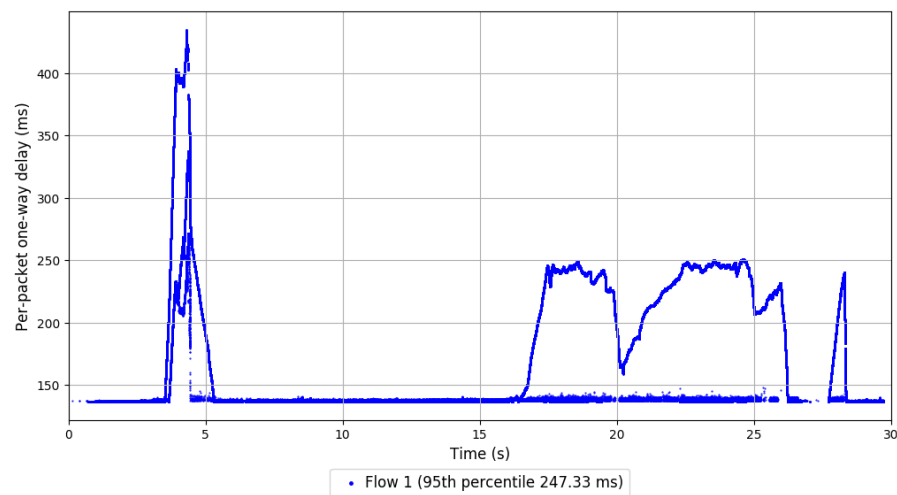
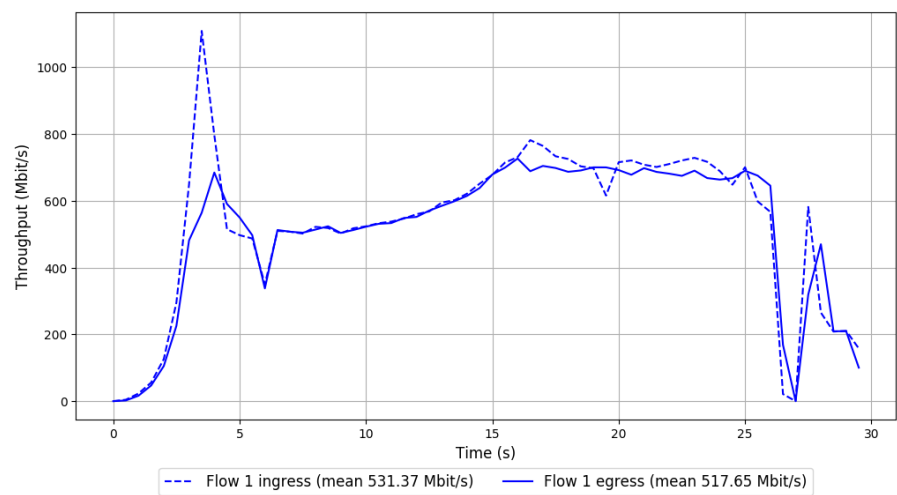
-- Flow 1:

Average throughput: 517.65 Mbit/s

95th percentile per-packet one-way delay: 247.329 ms

Loss rate: 3.47%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-05 16:44:45

End at: 2017-12-05 16:45:15

Below is generated by plot.py at 2017-12-05 20:20:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 545.15 Mbit/s

95th percentile per-packet one-way delay: 205.917 ms

Loss rate: 3.48%

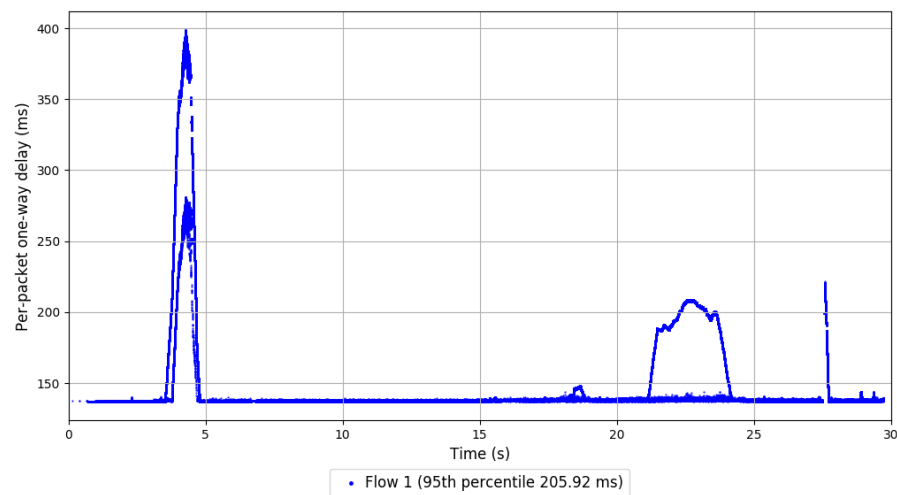
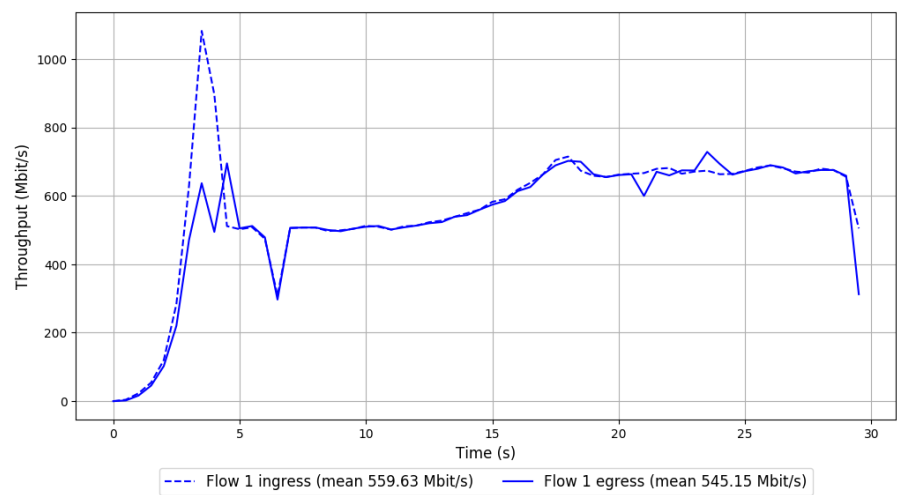
-- Flow 1:

Average throughput: 545.15 Mbit/s

95th percentile per-packet one-way delay: 205.917 ms

Loss rate: 3.48%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-05 16:56:18

End at: 2017-12-05 16:56:48

Below is generated by plot.py at 2017-12-05 20:20:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 535.69 Mbit/s

95th percentile per-packet one-way delay: 273.987 ms

Loss rate: 4.44%

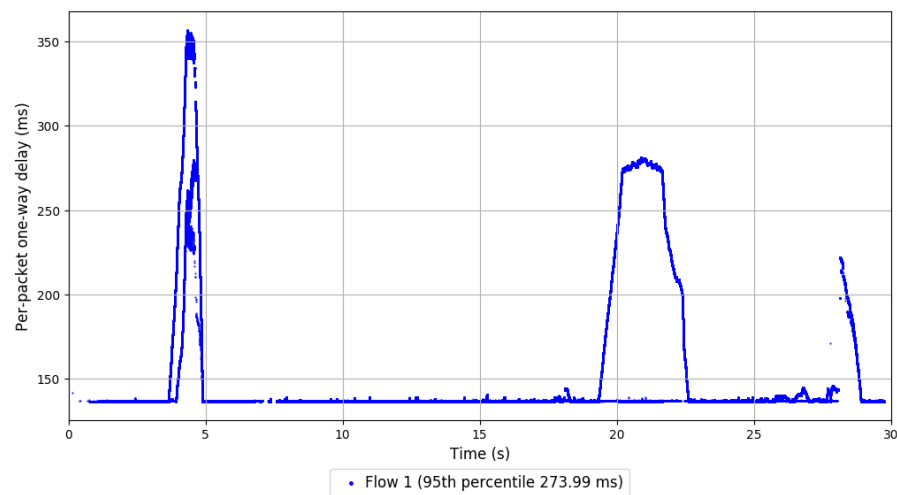
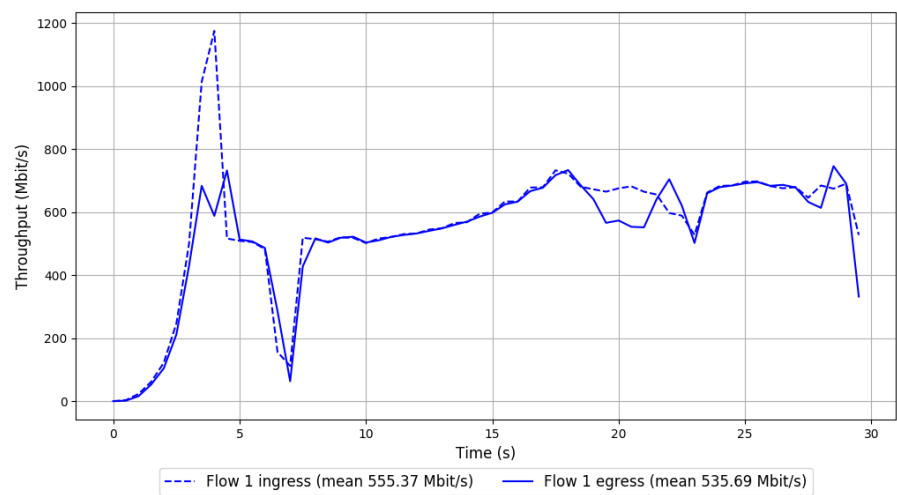
-- Flow 1:

Average throughput: 535.69 Mbit/s

95th percentile per-packet one-way delay: 273.987 ms

Loss rate: 4.44%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-05 17:07:30

End at: 2017-12-05 17:08:00

Below is generated by plot.py at 2017-12-05 20:21:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 561.24 Mbit/s

95th percentile per-packet one-way delay: 161.151 ms

Loss rate: 2.99%

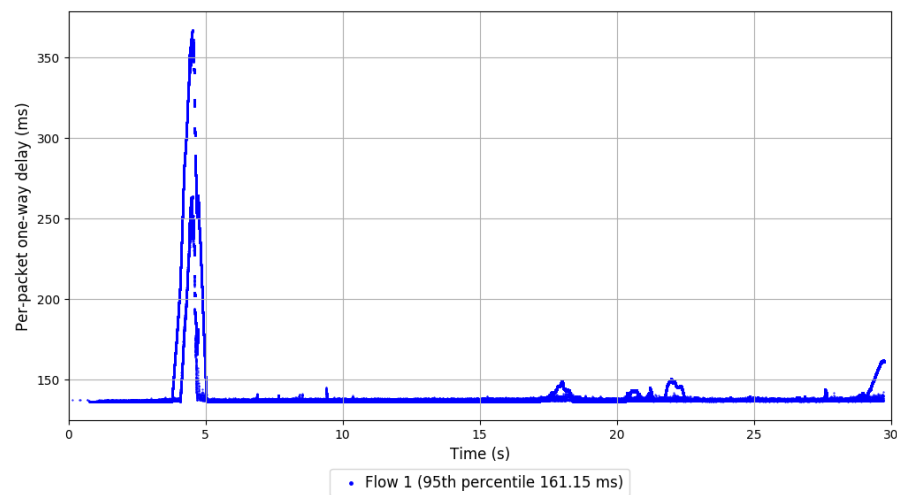
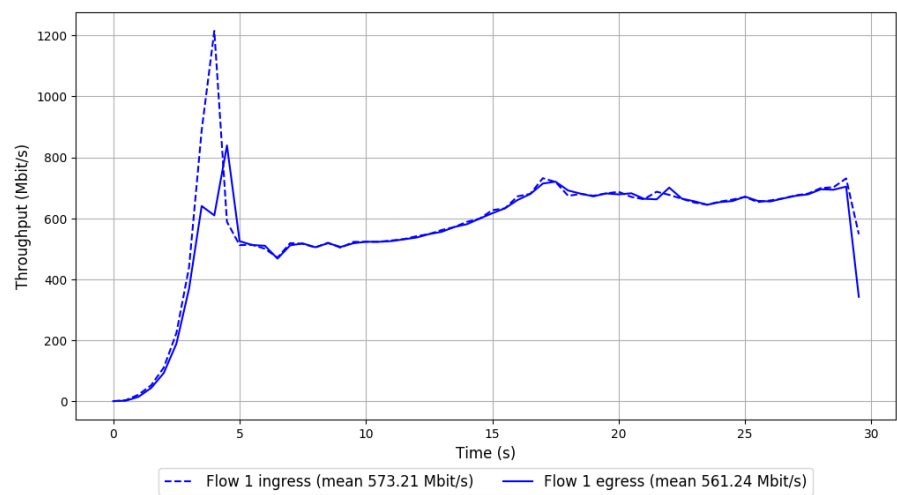
-- Flow 1:

Average throughput: 561.24 Mbit/s

95th percentile per-packet one-way delay: 161.151 ms

Loss rate: 2.99%

Run 5: Report of PCC — Data Link

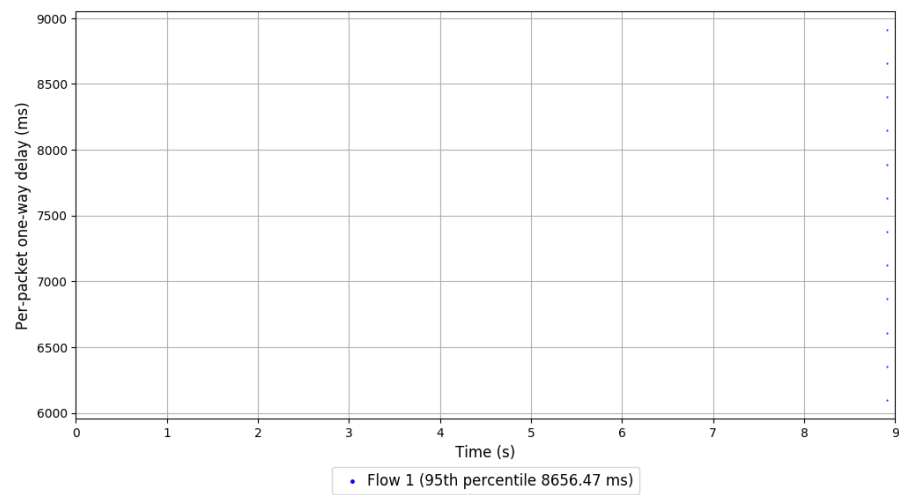
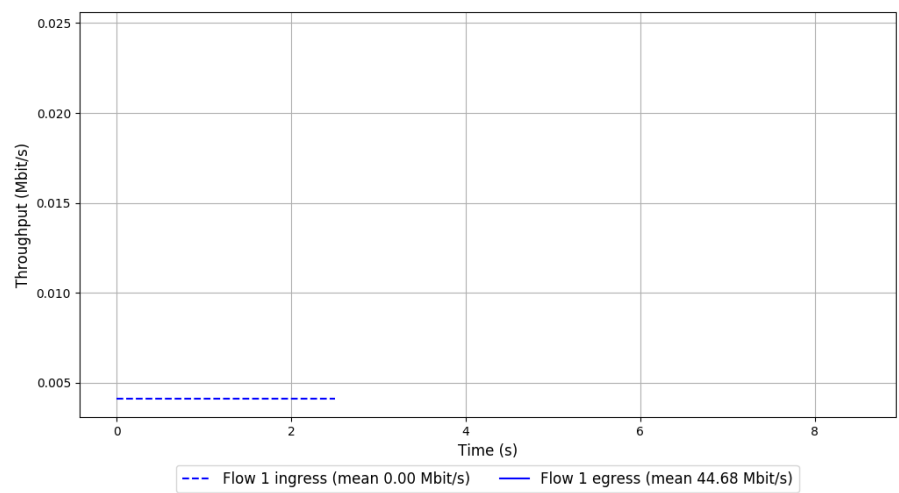


Run 6: Statistics of PCC

Start at: 2017-12-05 17:18:57

End at: 2017-12-05 17:19:27

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-05 17:29:37

End at: 2017-12-05 17:30:07

Below is generated by plot.py at 2017-12-05 20:21:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 554.49 Mbit/s

95th percentile per-packet one-way delay: 206.878 ms

Loss rate: 3.03%

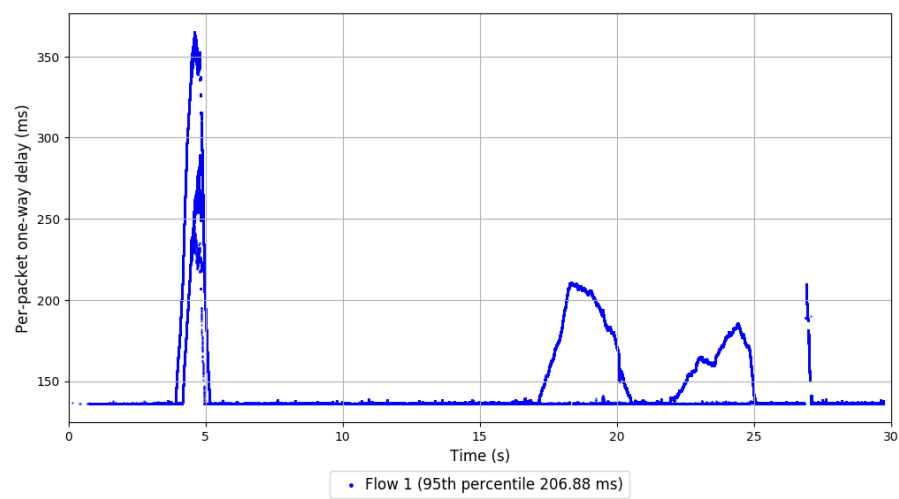
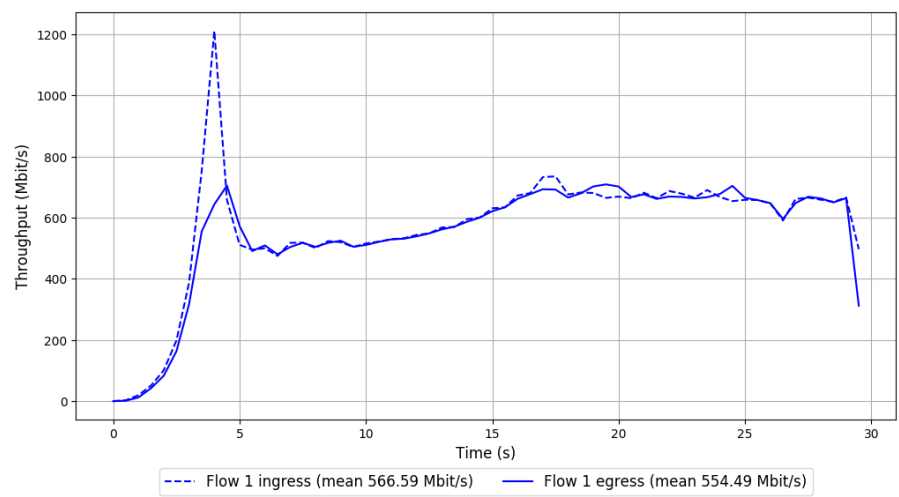
-- Flow 1:

Average throughput: 554.49 Mbit/s

95th percentile per-packet one-way delay: 206.878 ms

Loss rate: 3.03%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-05 17:41:14

End at: 2017-12-05 17:41:44

Below is generated by plot.py at 2017-12-05 20:21:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 574.00 Mbit/s

95th percentile per-packet one-way delay: 165.009 ms

Loss rate: 2.69%

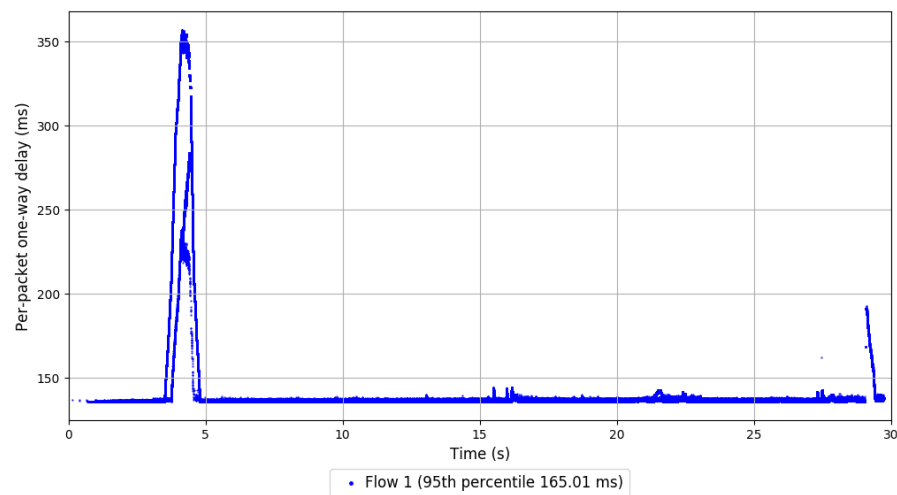
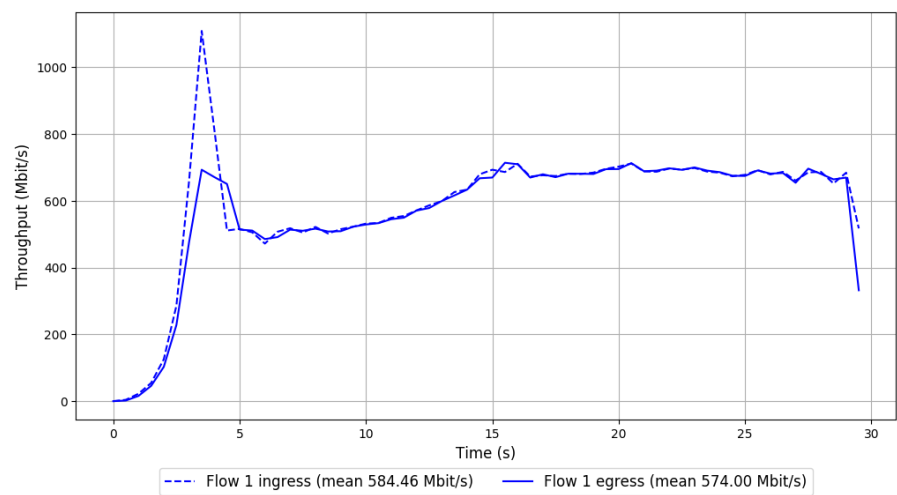
-- Flow 1:

Average throughput: 574.00 Mbit/s

95th percentile per-packet one-way delay: 165.009 ms

Loss rate: 2.69%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-05 17:52:45

End at: 2017-12-05 17:53:15

Below is generated by plot.py at 2017-12-05 20:21:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 522.53 Mbit/s

95th percentile per-packet one-way delay: 180.012 ms

Loss rate: 3.68%

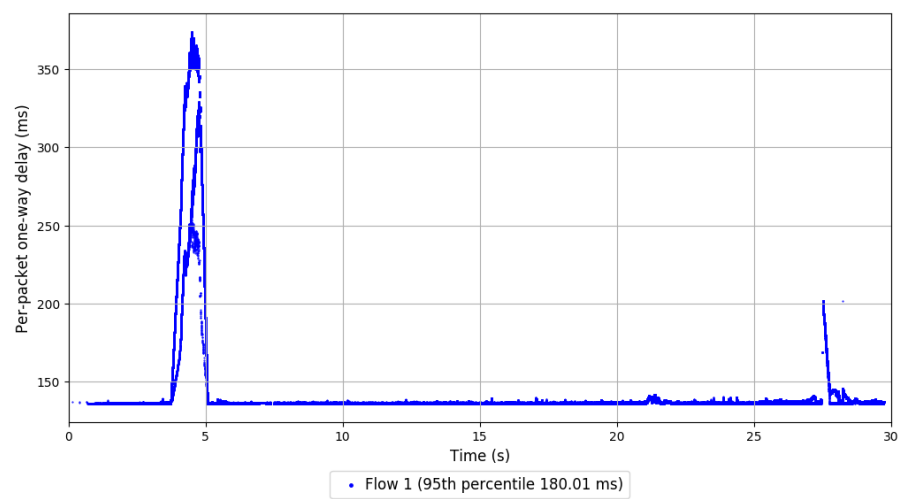
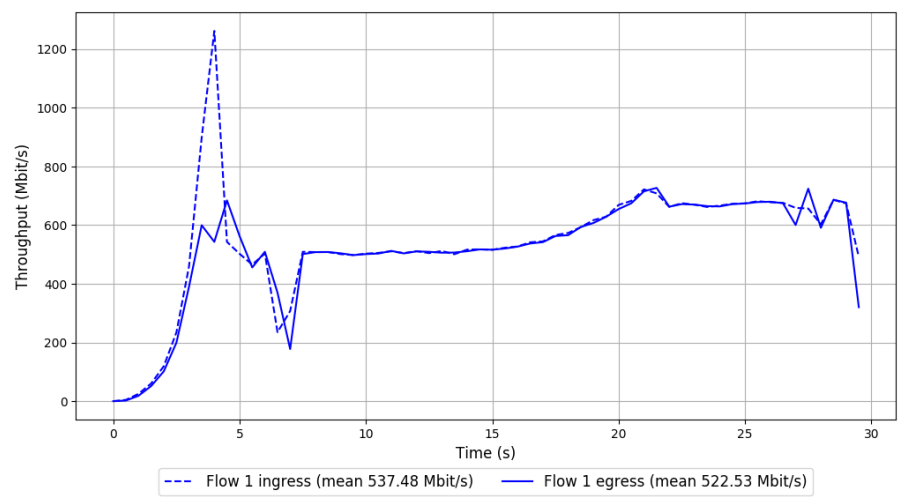
-- Flow 1:

Average throughput: 522.53 Mbit/s

95th percentile per-packet one-way delay: 180.012 ms

Loss rate: 3.68%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-05 18:04:03

End at: 2017-12-05 18:04:33

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 485.49 Mbit/s

95th percentile per-packet one-way delay: 252.435 ms

Loss rate: 3.41%

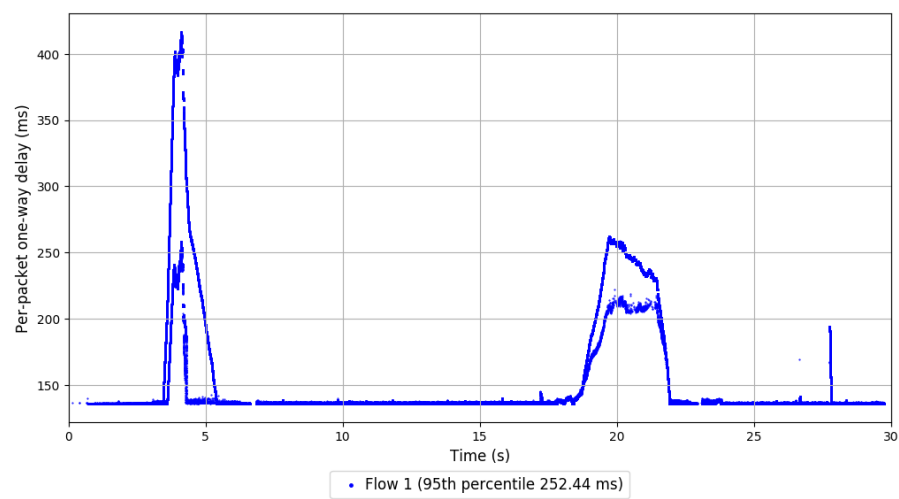
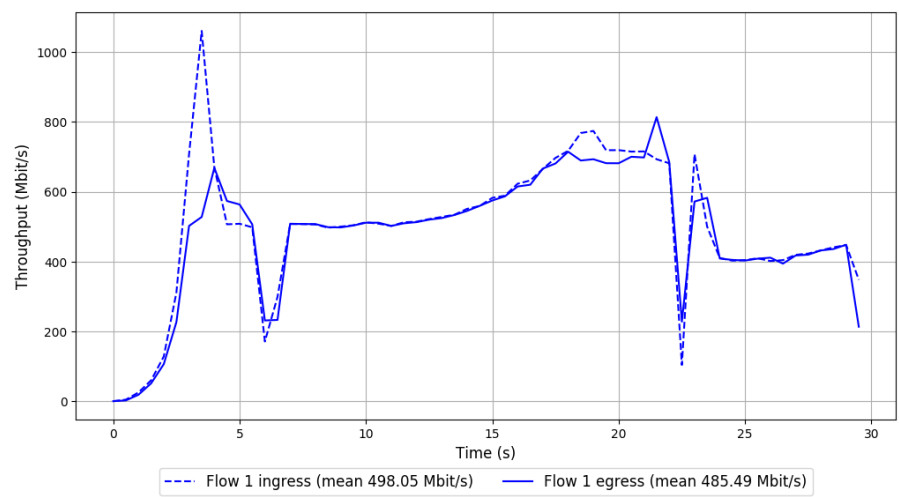
-- Flow 1:

Average throughput: 485.49 Mbit/s

95th percentile per-packet one-way delay: 252.435 ms

Loss rate: 3.41%

Run 10: Report of PCC — Data Link

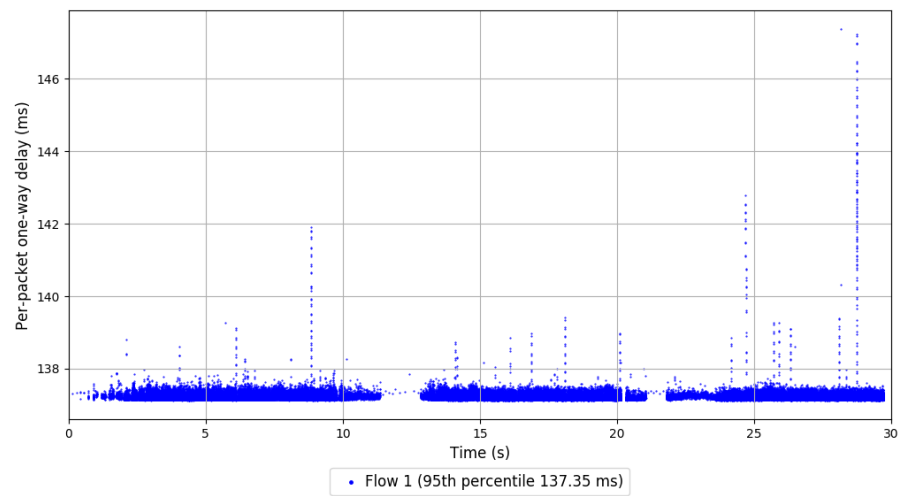
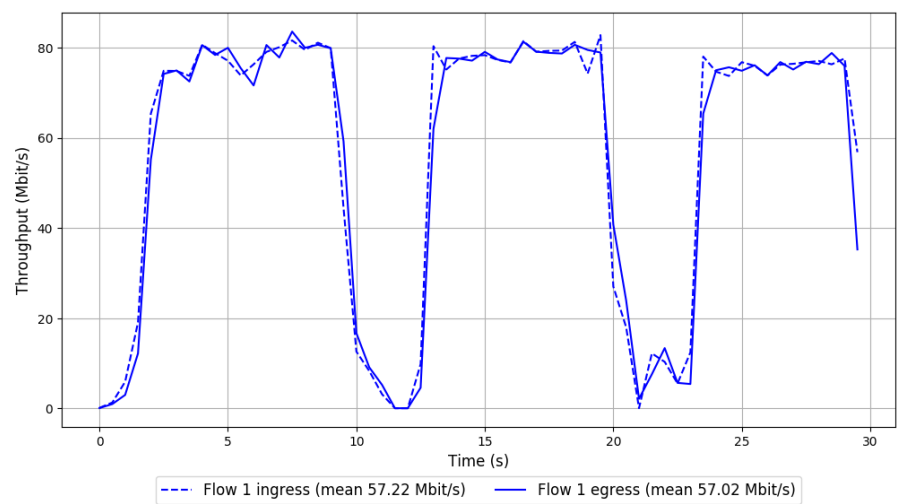


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 16:20:46
End at: 2017-12-05 16:21:16

# Below is generated by plot.py at 2017-12-05 20:29:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.02 Mbit/s
95th percentile per-packet one-way delay: 137.355 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 57.02 Mbit/s
95th percentile per-packet one-way delay: 137.355 ms
Loss rate: 1.25%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 16:31:58

End at: 2017-12-05 16:32:28

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.86 Mbit/s

95th percentile per-packet one-way delay: 137.214 ms

Loss rate: 1.06%

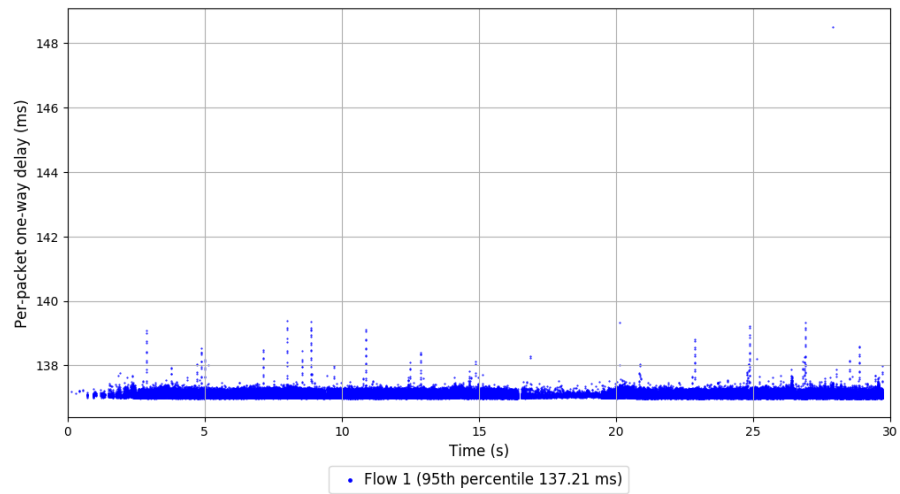
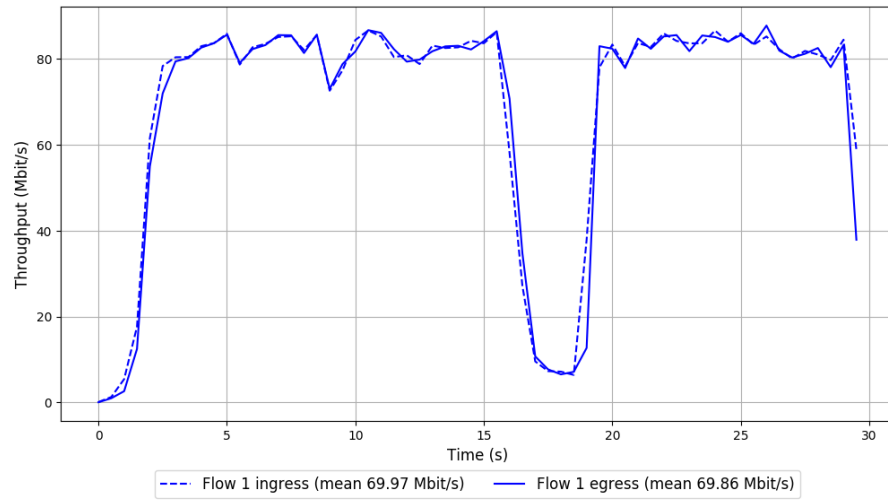
-- Flow 1:

Average throughput: 69.86 Mbit/s

95th percentile per-packet one-way delay: 137.214 ms

Loss rate: 1.06%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 16:43:13

End at: 2017-12-05 16:43:43

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.48 Mbit/s

95th percentile per-packet one-way delay: 138.179 ms

Loss rate: 1.10%

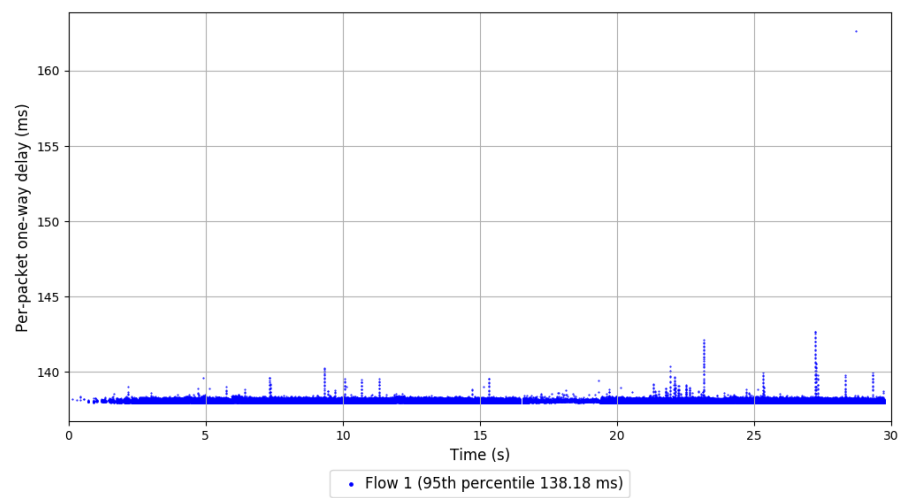
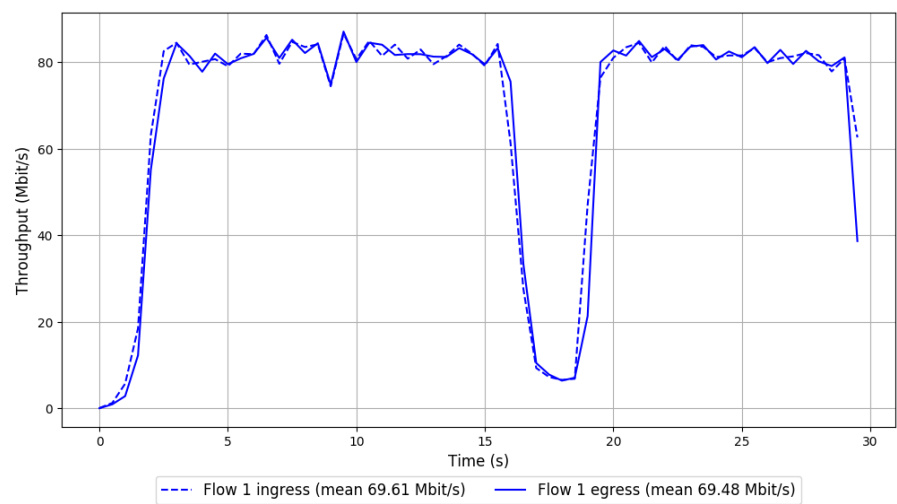
-- Flow 1:

Average throughput: 69.48 Mbit/s

95th percentile per-packet one-way delay: 138.179 ms

Loss rate: 1.10%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-05 16:54:27

End at: 2017-12-05 16:54:57

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.01 Mbit/s

95th percentile per-packet one-way delay: 137.380 ms

Loss rate: 0.99%

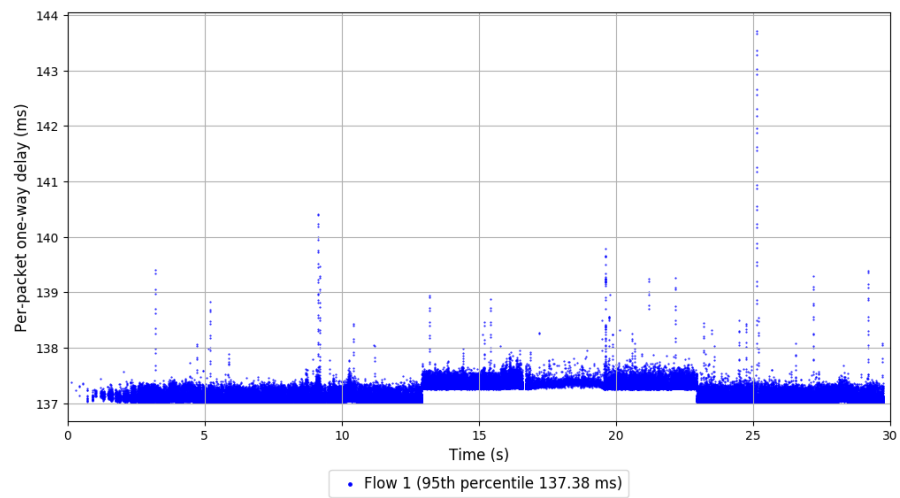
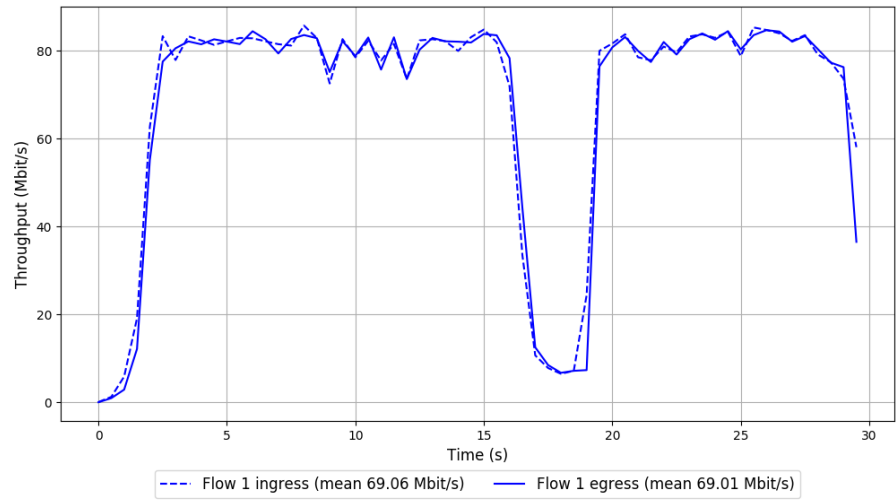
-- Flow 1:

Average throughput: 69.01 Mbit/s

95th percentile per-packet one-way delay: 137.380 ms

Loss rate: 0.99%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-05 17:05:40

End at: 2017-12-05 17:06:10

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.51 Mbit/s

95th percentile per-packet one-way delay: 136.285 ms

Loss rate: 1.16%

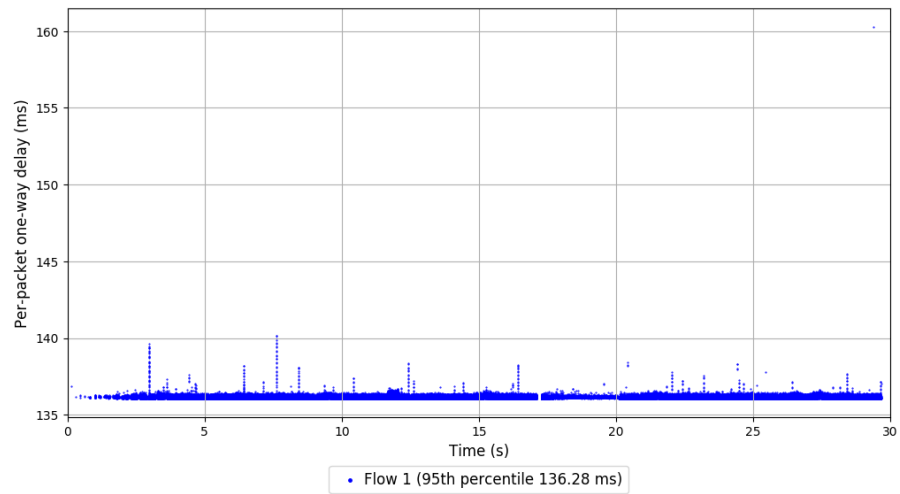
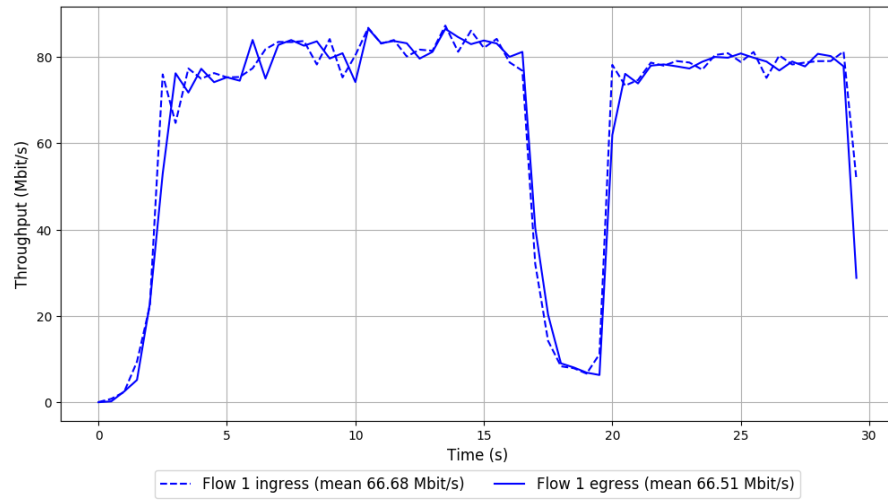
-- Flow 1:

Average throughput: 66.51 Mbit/s

95th percentile per-packet one-way delay: 136.285 ms

Loss rate: 1.16%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-05 17:17:07

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

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.58 Mbit/s

95th percentile per-packet one-way delay: 137.115 ms

Loss rate: 1.28%

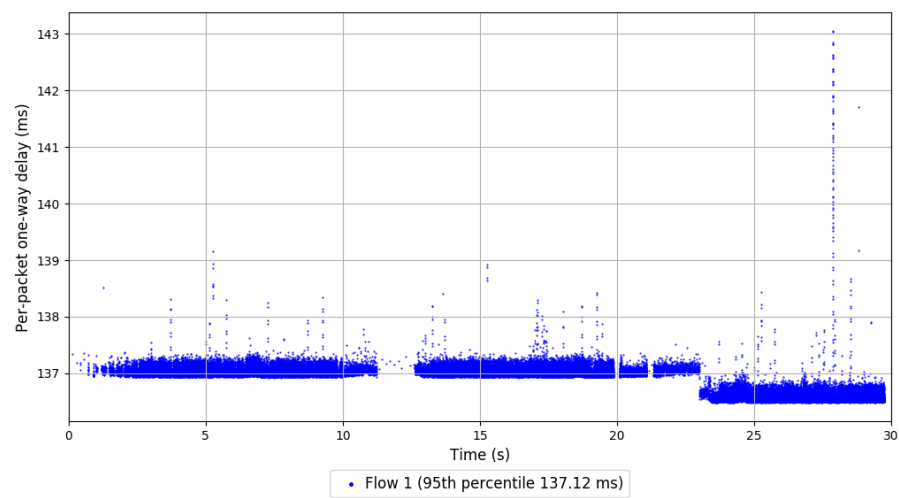
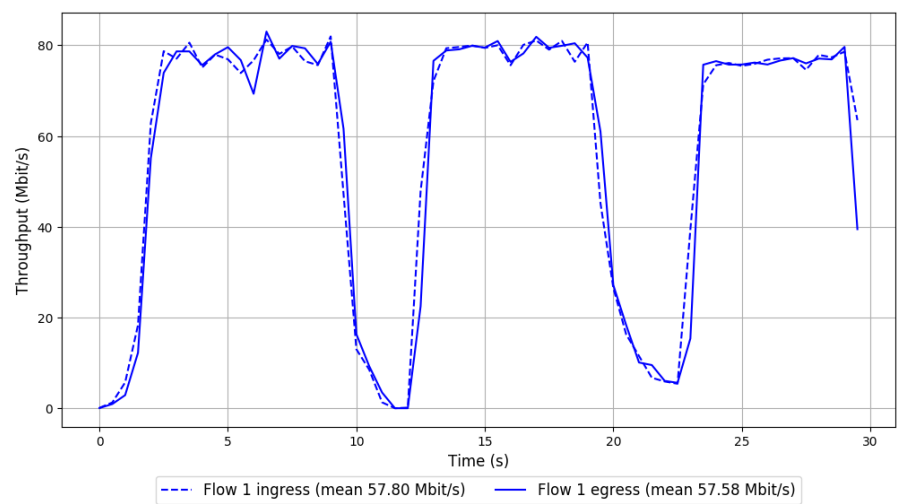
-- Flow 1:

Average throughput: 57.58 Mbit/s

95th percentile per-packet one-way delay: 137.115 ms

Loss rate: 1.28%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-05 17:28:05

End at: 2017-12-05 17:28:35

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.43 Mbit/s

95th percentile per-packet one-way delay: 136.310 ms

Loss rate: 1.11%

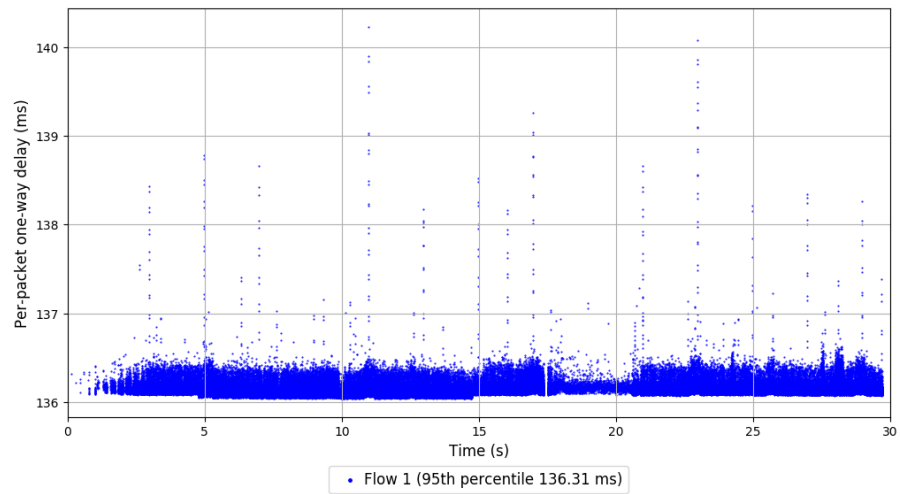
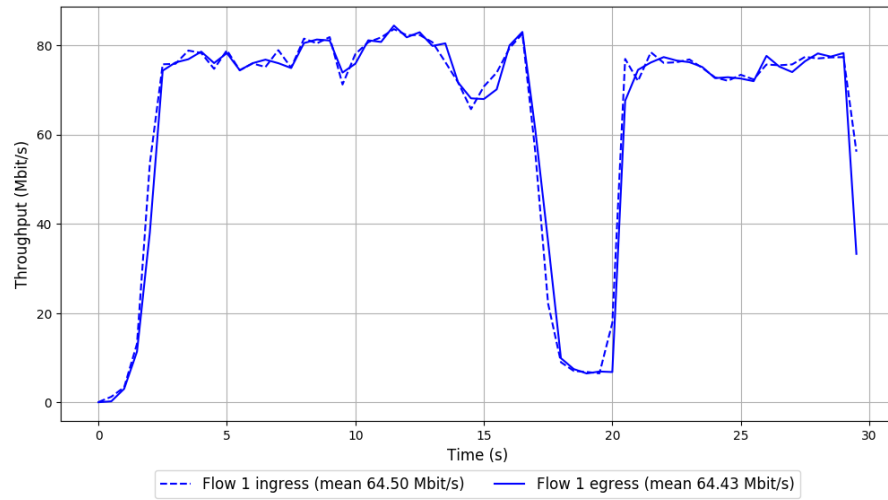
-- Flow 1:

Average throughput: 64.43 Mbit/s

95th percentile per-packet one-way delay: 136.310 ms

Loss rate: 1.11%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-05 17:39:22

End at: 2017-12-05 17:39:52

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.03 Mbit/s

95th percentile per-packet one-way delay: 136.163 ms

Loss rate: 1.08%

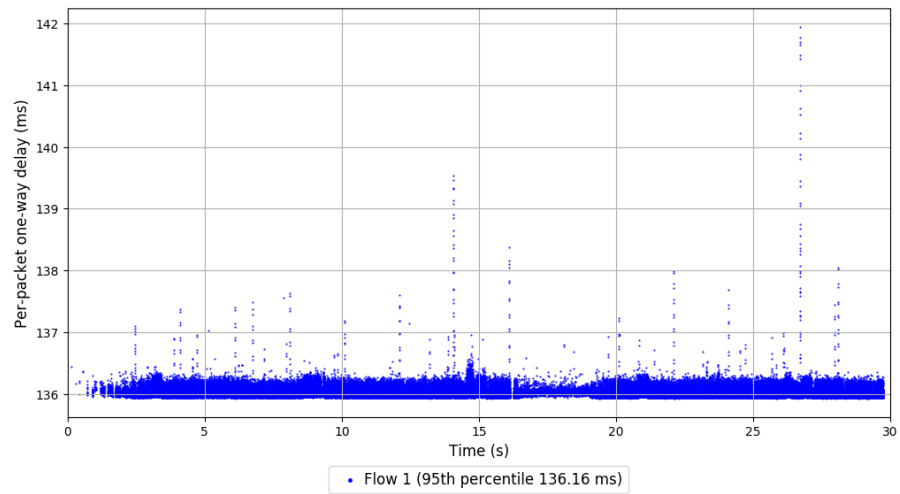
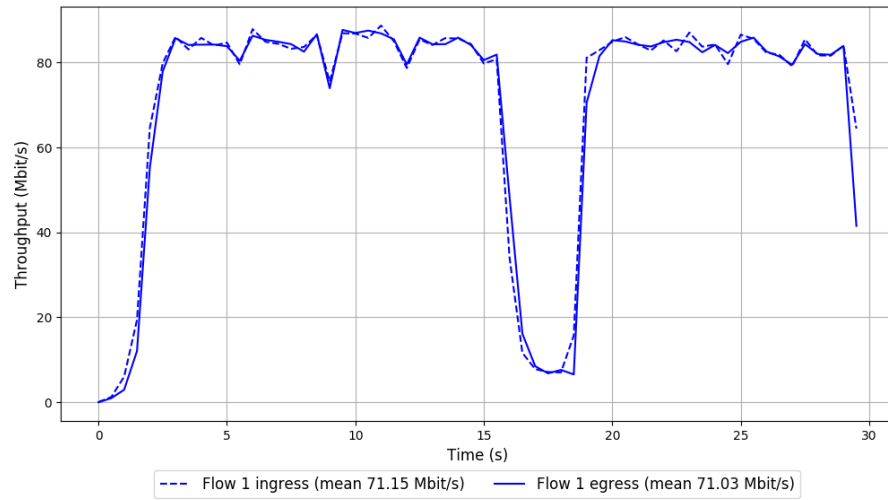
-- Flow 1:

Average throughput: 71.03 Mbit/s

95th percentile per-packet one-way delay: 136.163 ms

Loss rate: 1.08%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-05 17:50:54

End at: 2017-12-05 17:51:24

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.71 Mbit/s

95th percentile per-packet one-way delay: 137.108 ms

Loss rate: 1.03%

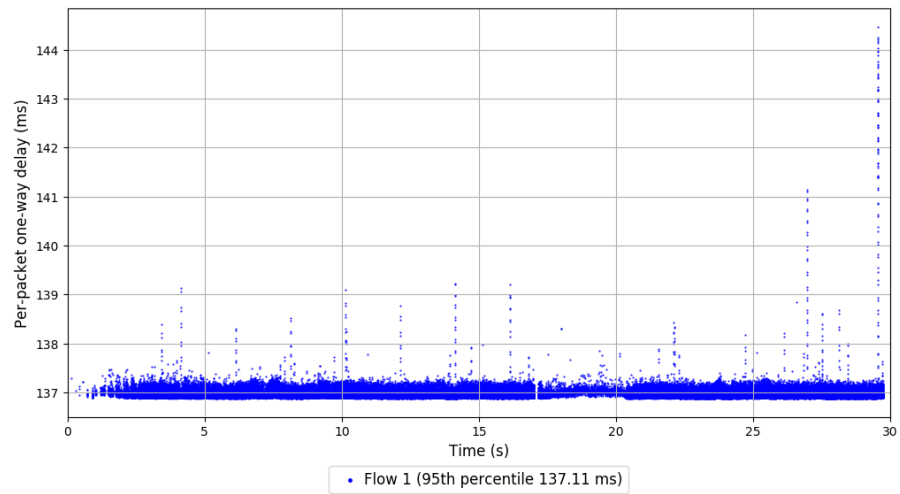
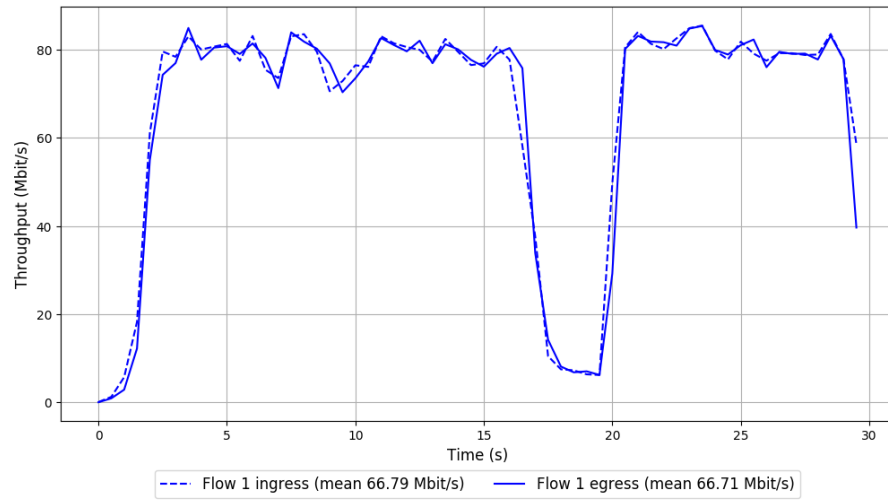
-- Flow 1:

Average throughput: 66.71 Mbit/s

95th percentile per-packet one-way delay: 137.108 ms

Loss rate: 1.03%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-05 18:02:31

End at: 2017-12-05 18:03:01

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.41 Mbit/s

95th percentile per-packet one-way delay: 136.173 ms

Loss rate: 1.07%

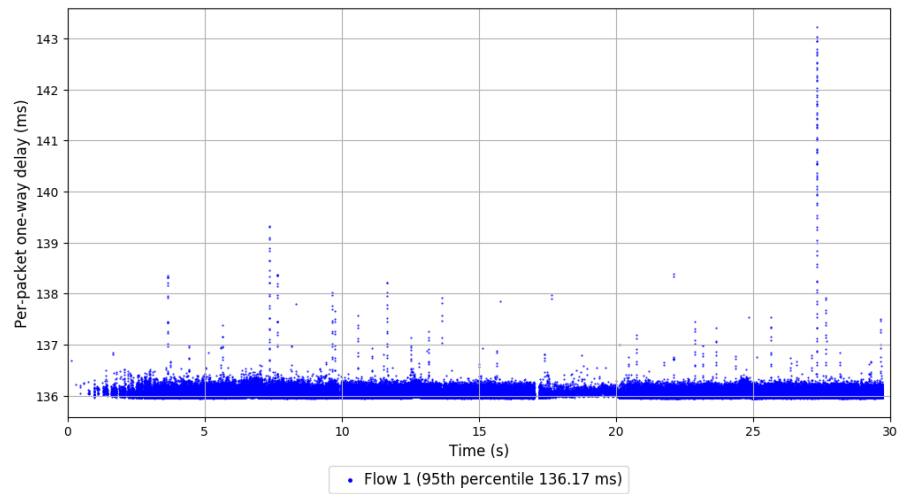
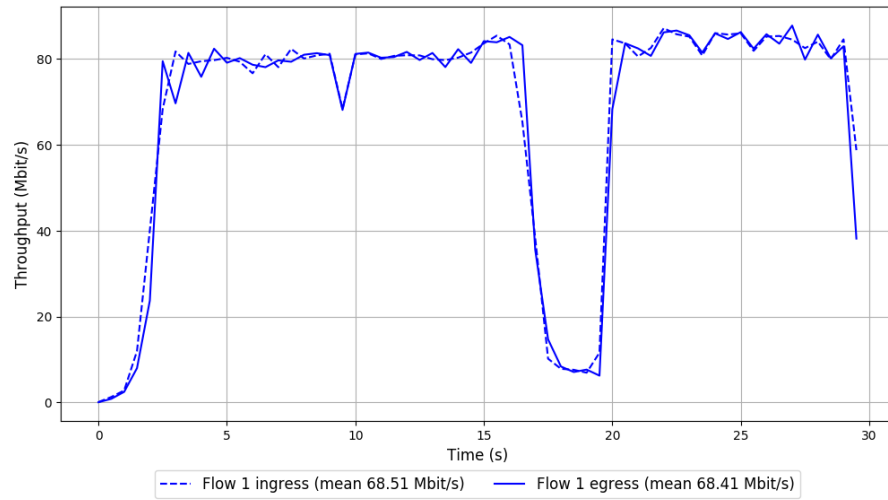
-- Flow 1:

Average throughput: 68.41 Mbit/s

95th percentile per-packet one-way delay: 136.173 ms

Loss rate: 1.07%

Run 10: Report of QUIC Cubic — Data Link

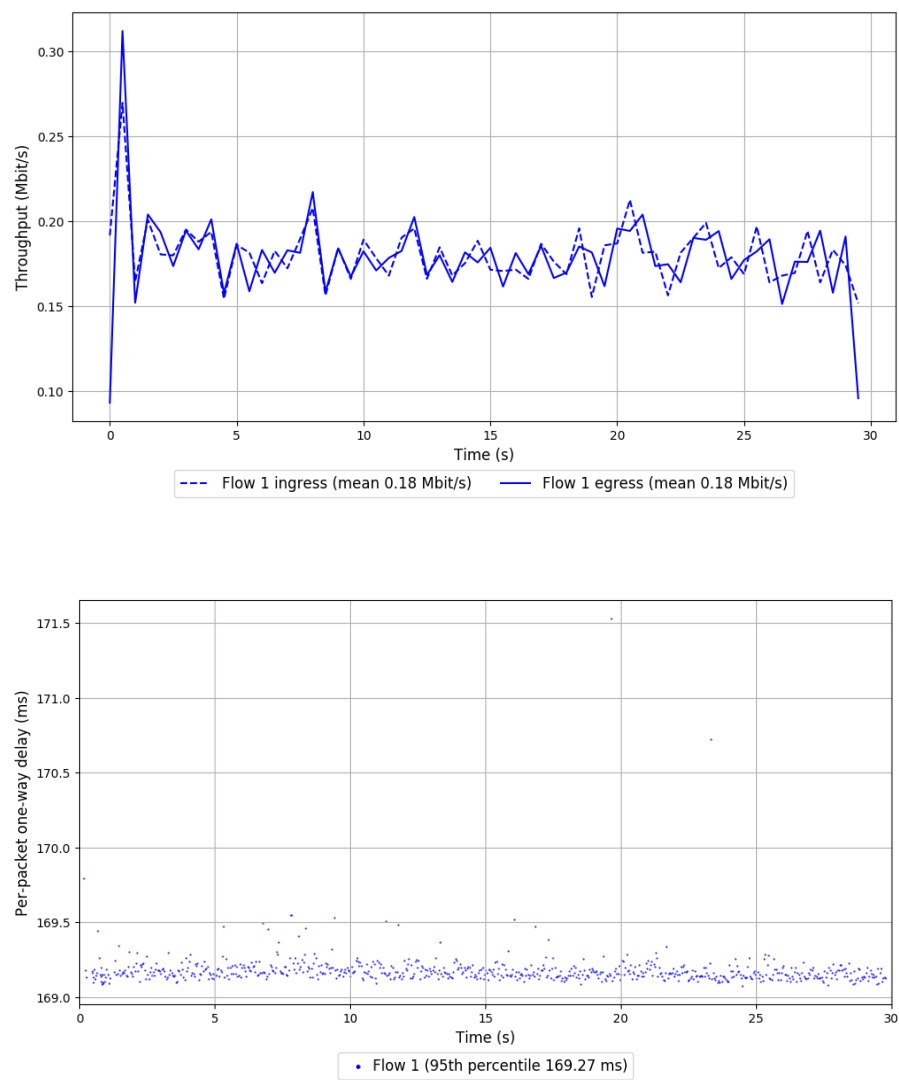


```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 16:28:53
End at: 2017-12-05 16:29:23

# Below is generated by plot.py at 2017-12-05 20:29:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 169.272 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 169.272 ms
Loss rate: 1.03%
```

Run 1: Report of SReAM — Data Link

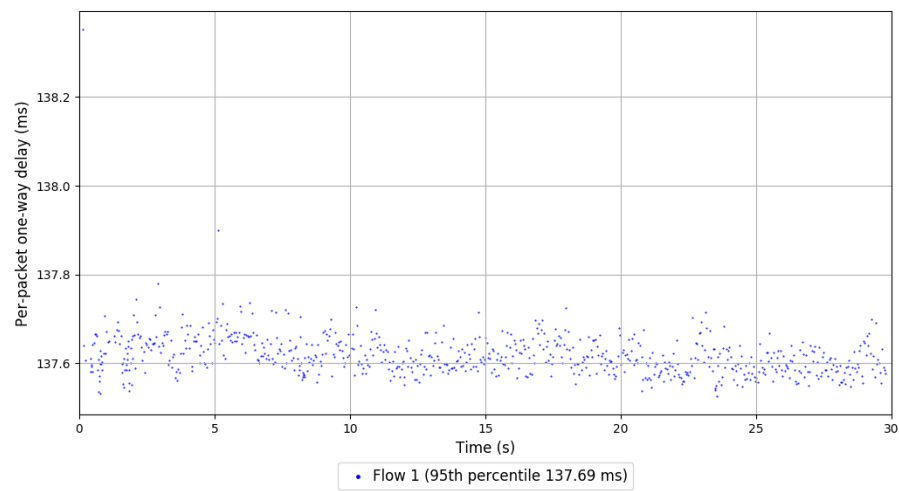
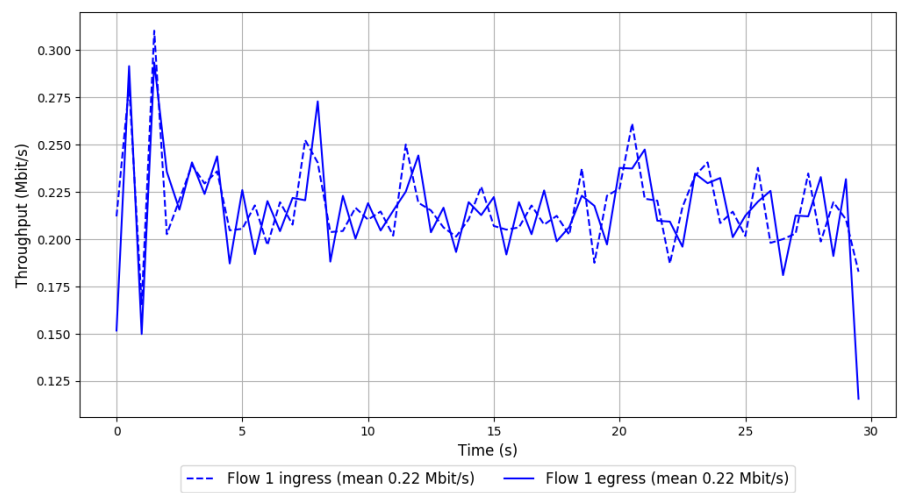


```
Run 2: Statistics of SCReAM

Start at: 2017-12-05 16:40:08
End at: 2017-12-05 16:40:38

# Below is generated by plot.py at 2017-12-05 20:29:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.685 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.685 ms
Loss rate: 0.89%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-05 16:51:23

End at: 2017-12-05 16:51:53

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.223 ms

Loss rate: 0.89%

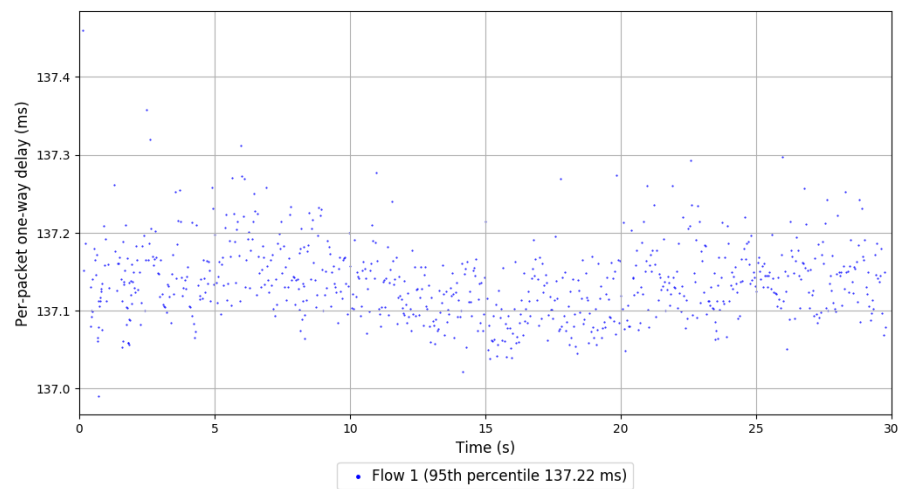
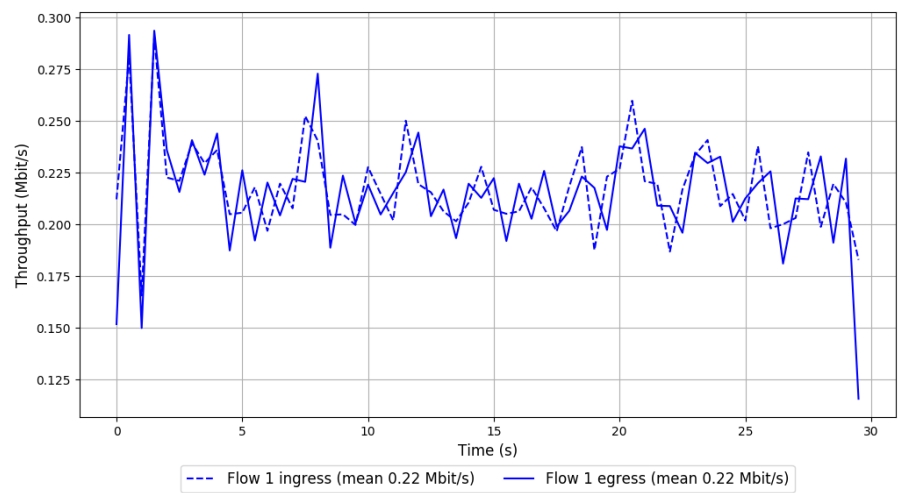
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.223 ms

Loss rate: 0.89%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-05 17:02:46

End at: 2017-12-05 17:03:16

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 137.649 ms

Loss rate: 0.89%

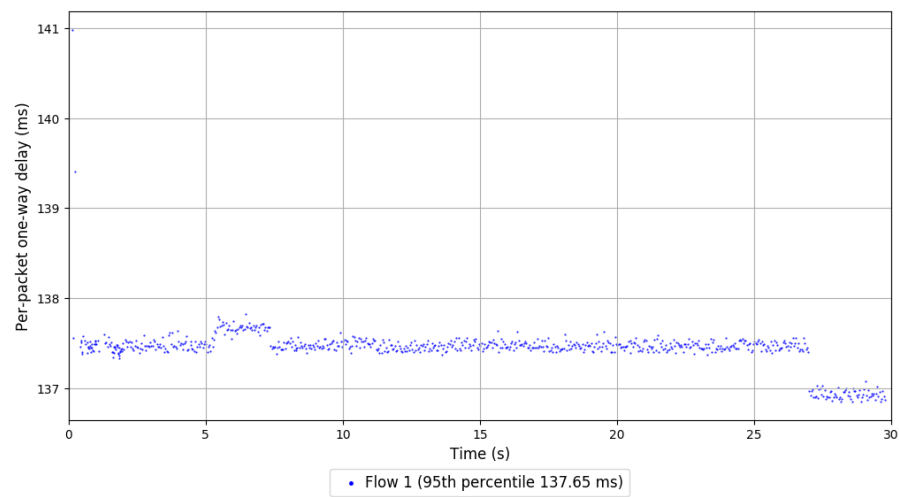
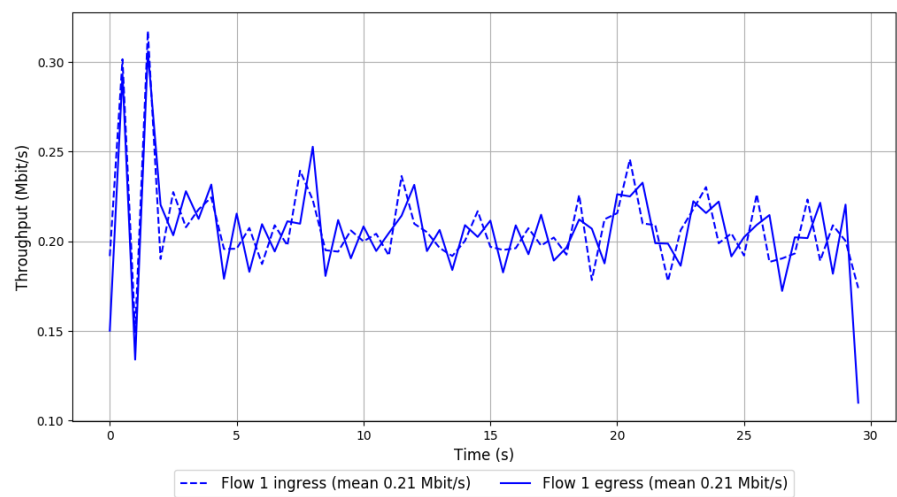
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 137.649 ms

Loss rate: 0.89%

Run 4: Report of SReAM — Data Link

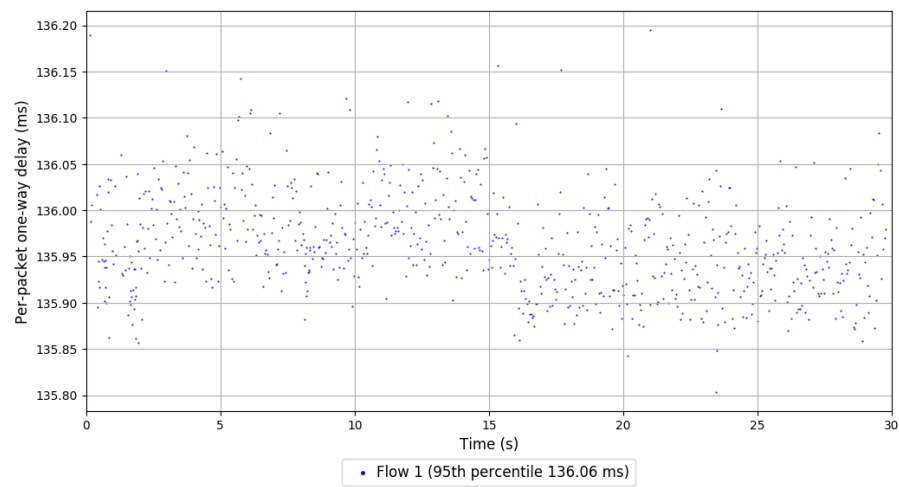
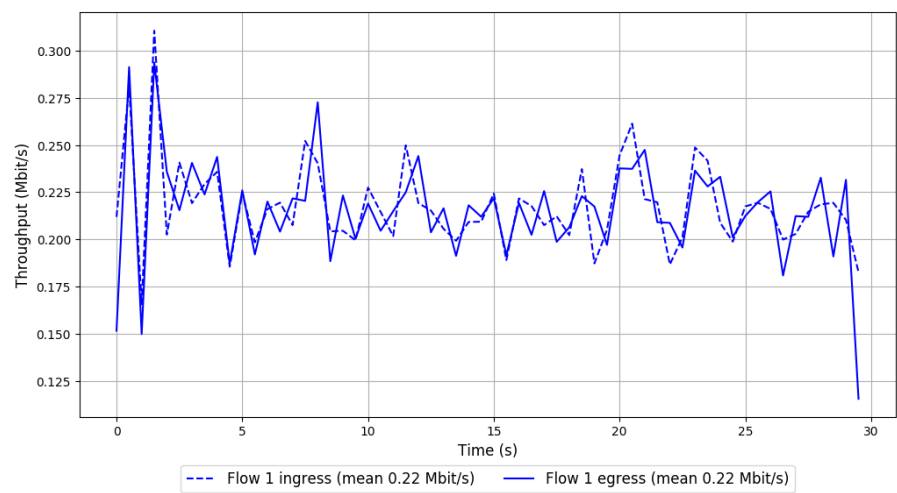


```
Run 5: Statistics of SCReAM

Start at: 2017-12-05 17:14:03
End at: 2017-12-05 17:14:33

# Below is generated by plot.py at 2017-12-05 20:29:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.055 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.055 ms
Loss rate: 0.89%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-05 17:25:00

End at: 2017-12-05 17:25:30

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.581 ms

Loss rate: 0.89%

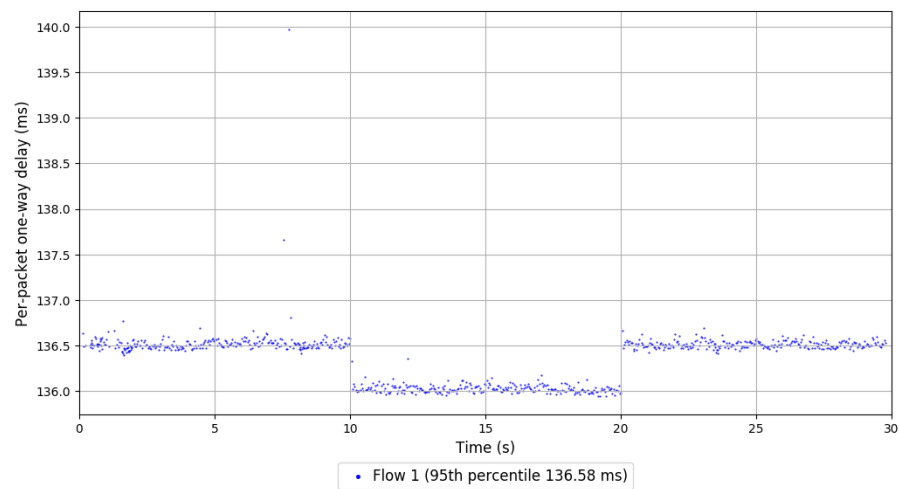
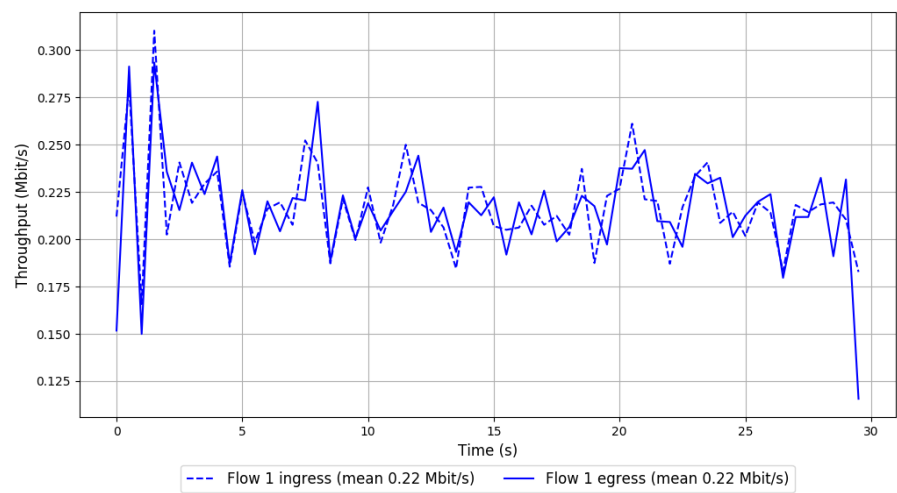
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.581 ms

Loss rate: 0.89%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-05 17:36:17

End at: 2017-12-05 17:36:47

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.836 ms

Loss rate: 0.89%

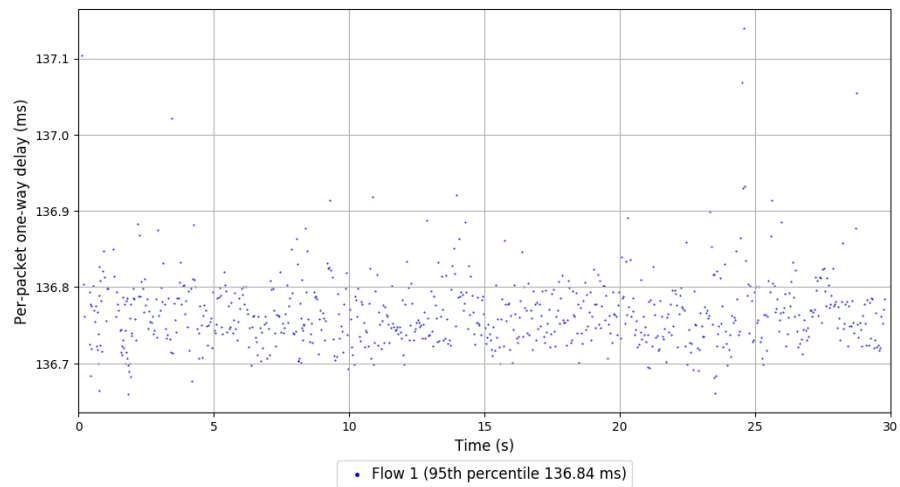
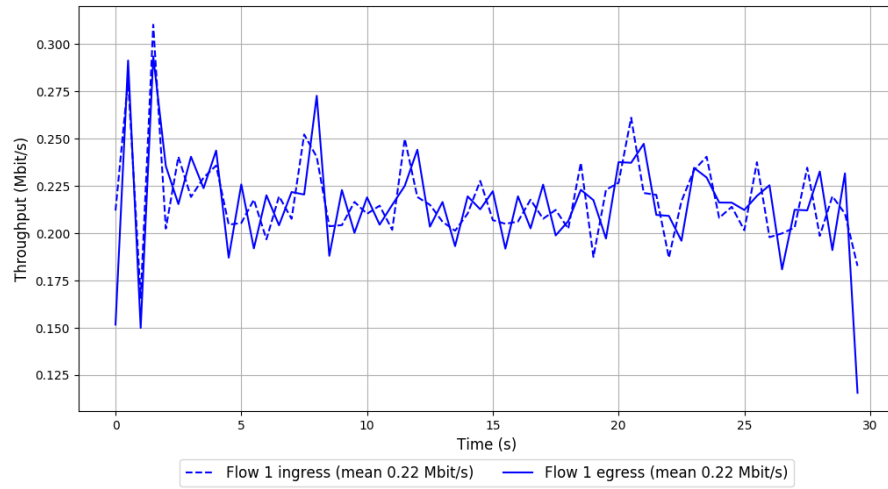
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.836 ms

Loss rate: 0.89%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-05 17:47:49

End at: 2017-12-05 17:48:19

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.244 ms

Loss rate: 0.77%

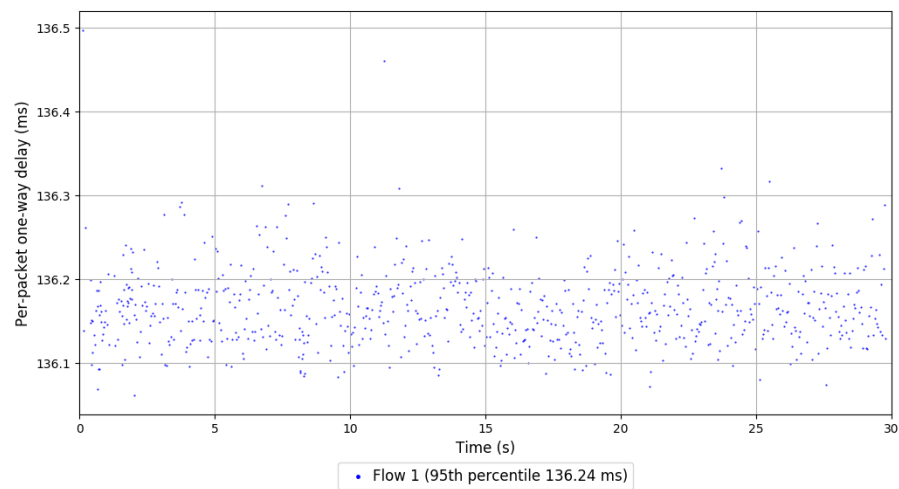
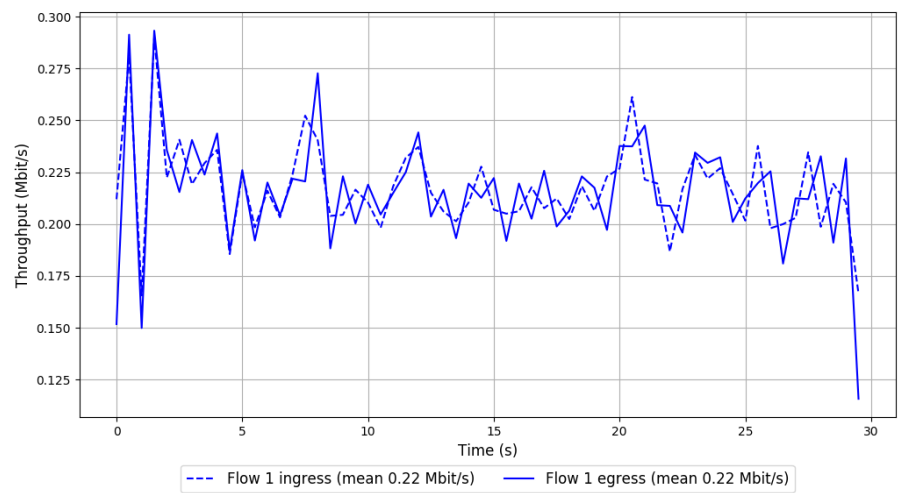
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.244 ms

Loss rate: 0.77%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-05 17:59:26

End at: 2017-12-05 17:59:56

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.866 ms

Loss rate: 0.89%

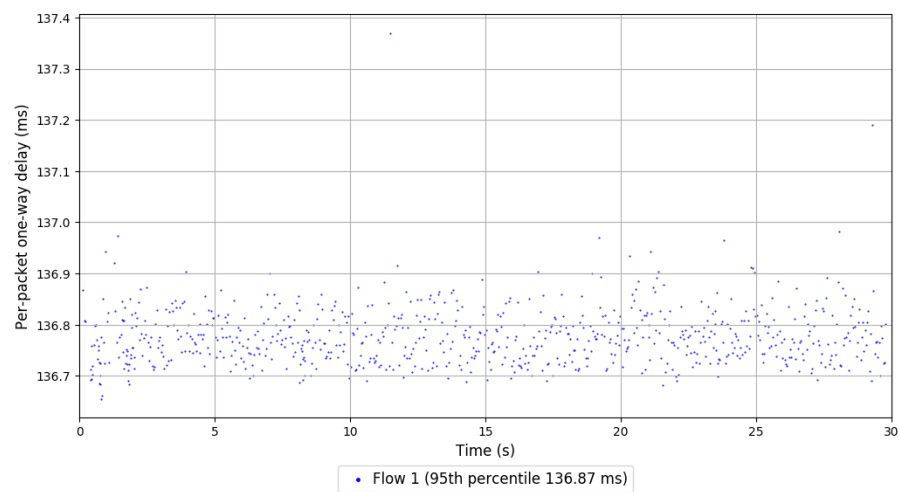
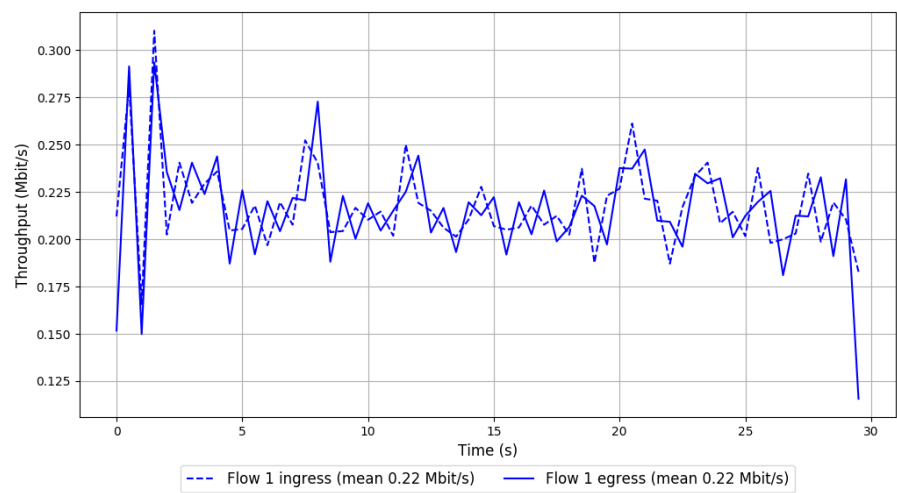
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.866 ms

Loss rate: 0.89%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-05 18:10:49

End at: 2017-12-05 18:11:19

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 134.910 ms

Loss rate: 0.89%

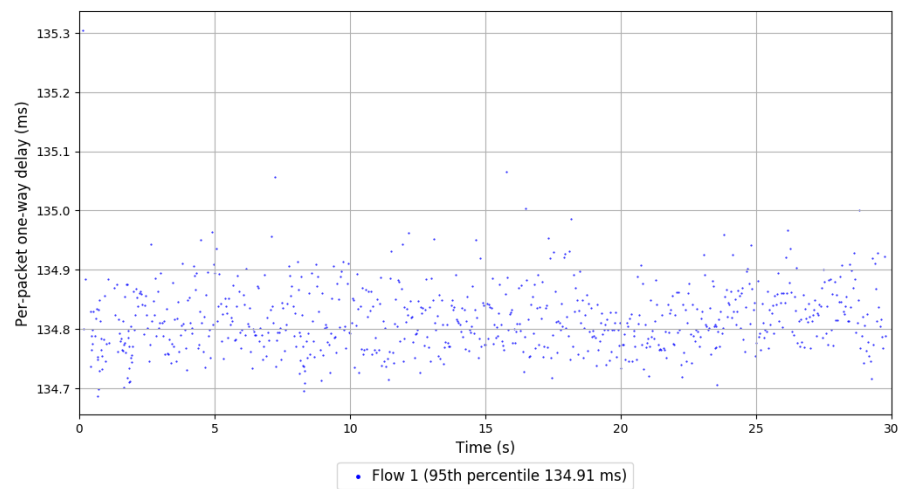
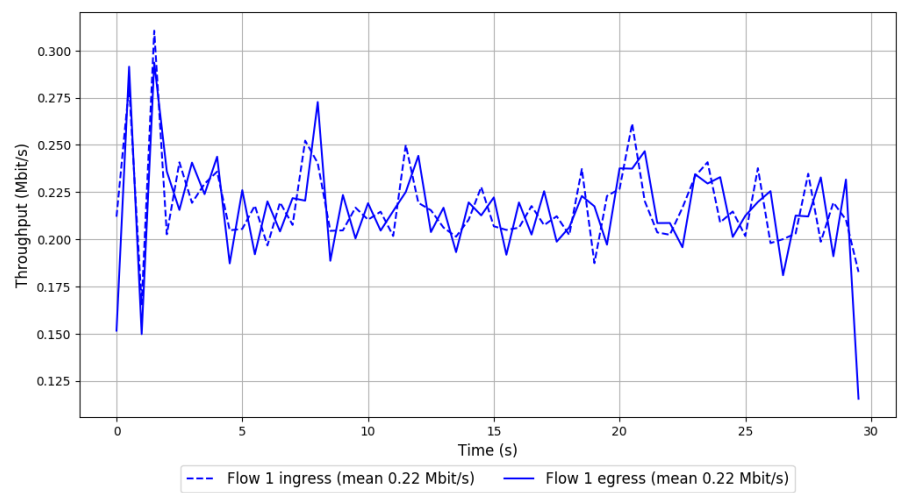
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 134.910 ms

Loss rate: 0.89%

Run 10: Report of SReAM — Data Link

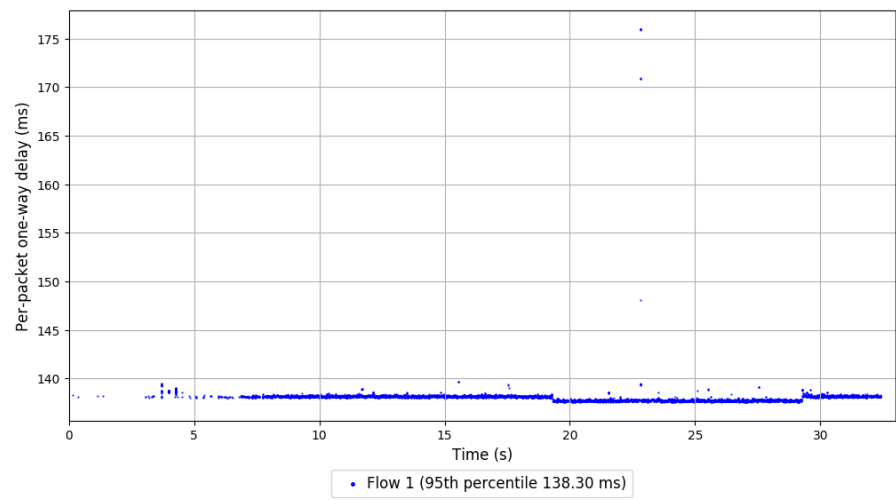
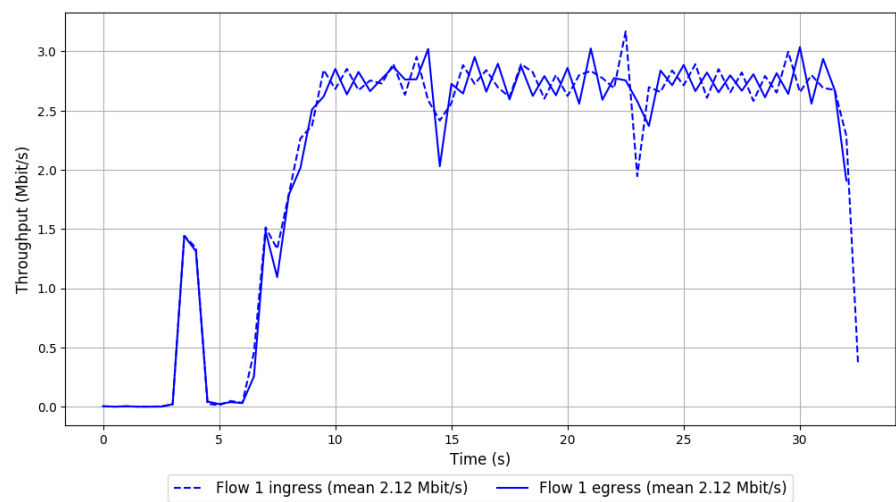


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 16:20:04
End at: 2017-12-05 16:20:34

# Below is generated by plot.py at 2017-12-05 20:29:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 138.302 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 138.302 ms
Loss rate: 1.01%
```

Run 1: Report of WebRTC media — Data Link

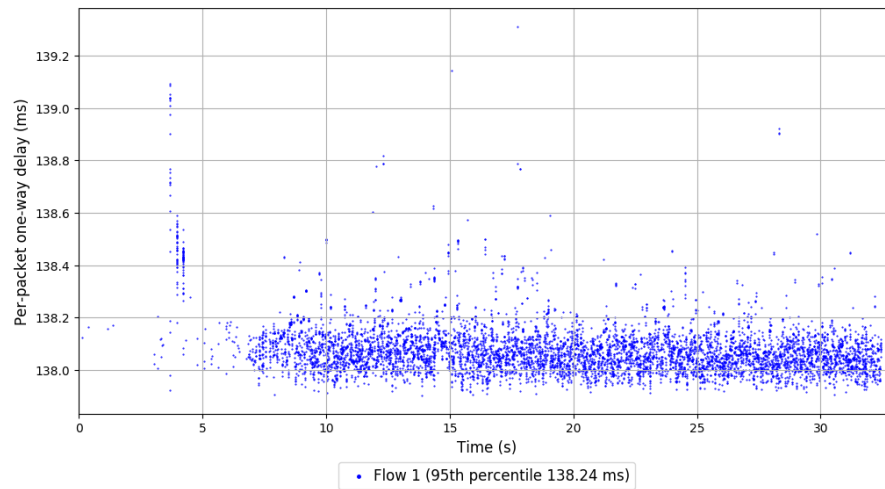
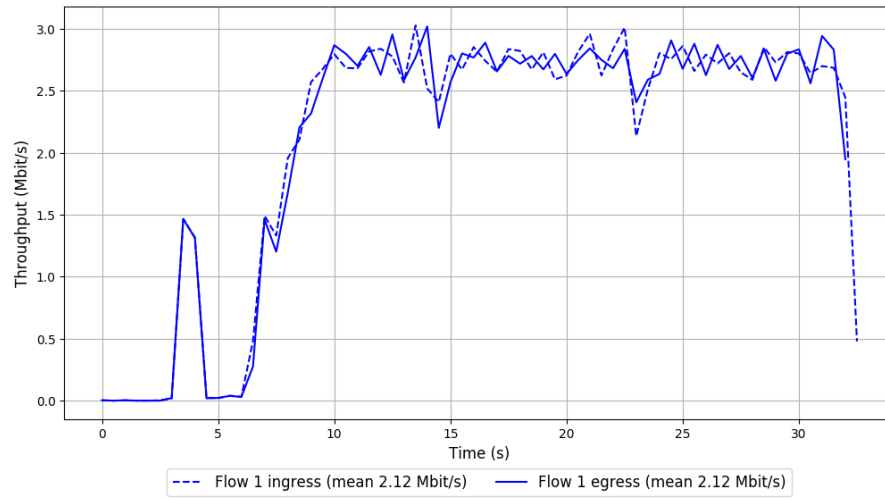


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-05 16:31:15
End at: 2017-12-05 16:31:45

# Below is generated by plot.py at 2017-12-05 20:29:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 138.238 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 138.238 ms
Loss rate: 1.06%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-05 16:42:30

End at: 2017-12-05 16:43:00

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 137.614 ms

Loss rate: 1.04%

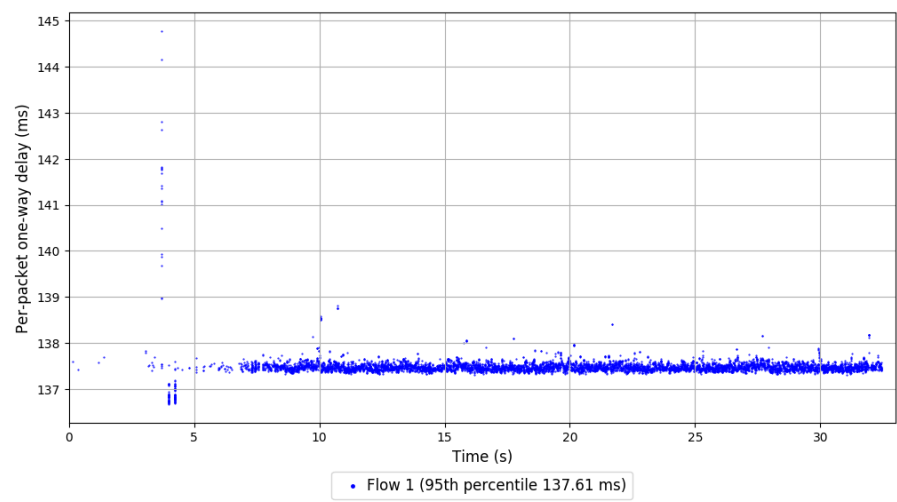
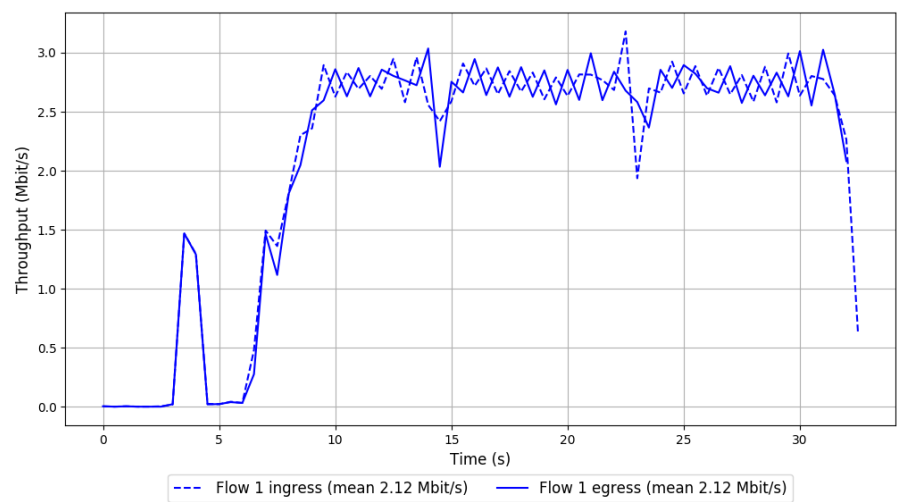
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 137.614 ms

Loss rate: 1.04%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-05 16:53:44

End at: 2017-12-05 16:54:14

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 137.148 ms

Loss rate: 1.01%

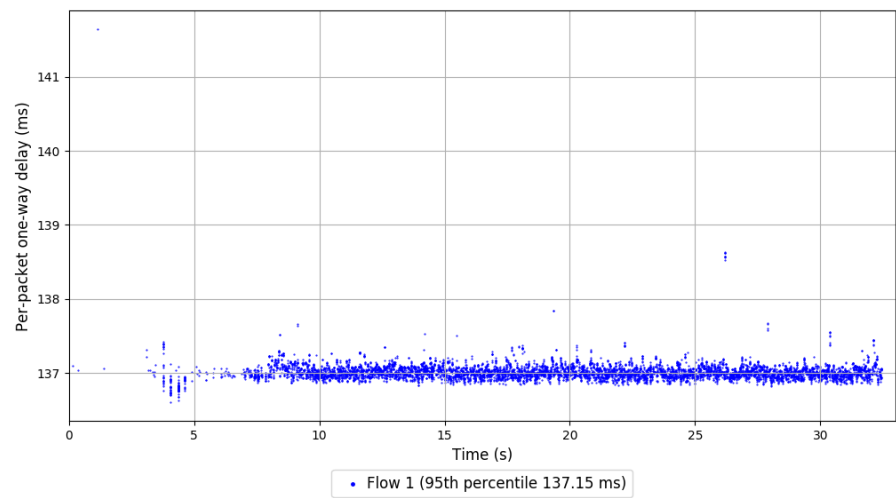
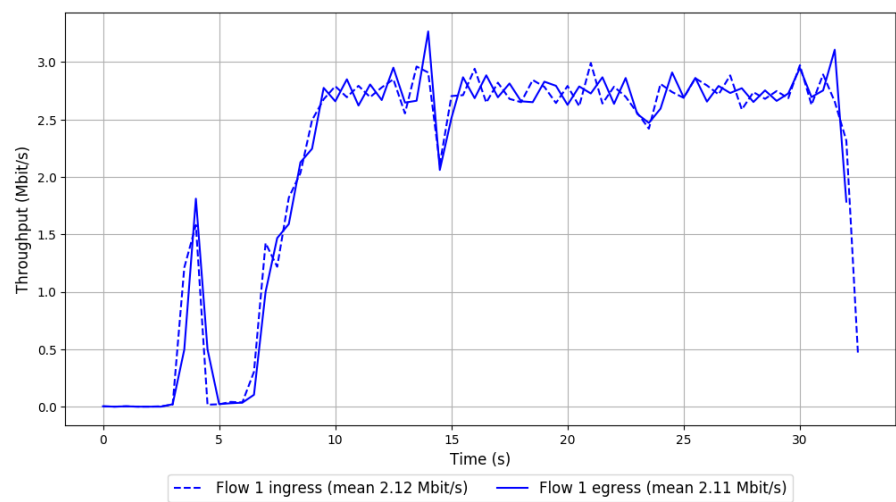
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 137.148 ms

Loss rate: 1.01%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-05 17:04:57

End at: 2017-12-05 17:05:27

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 136.258 ms

Loss rate: 0.85%

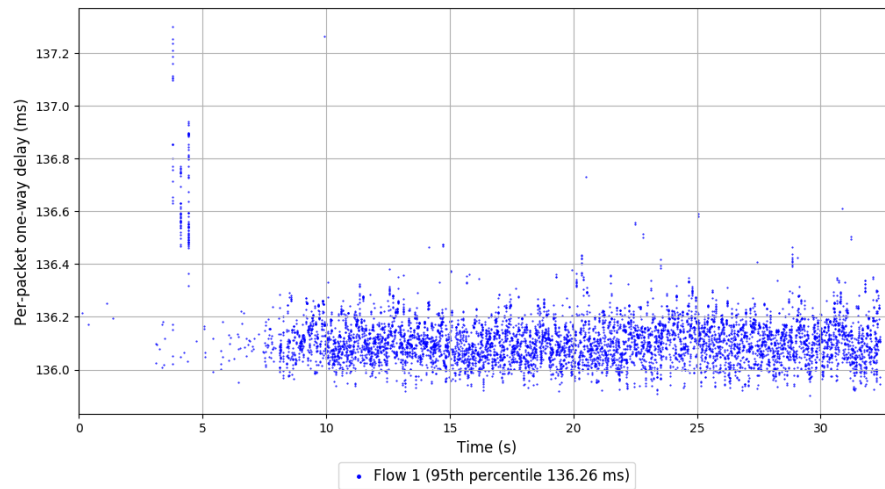
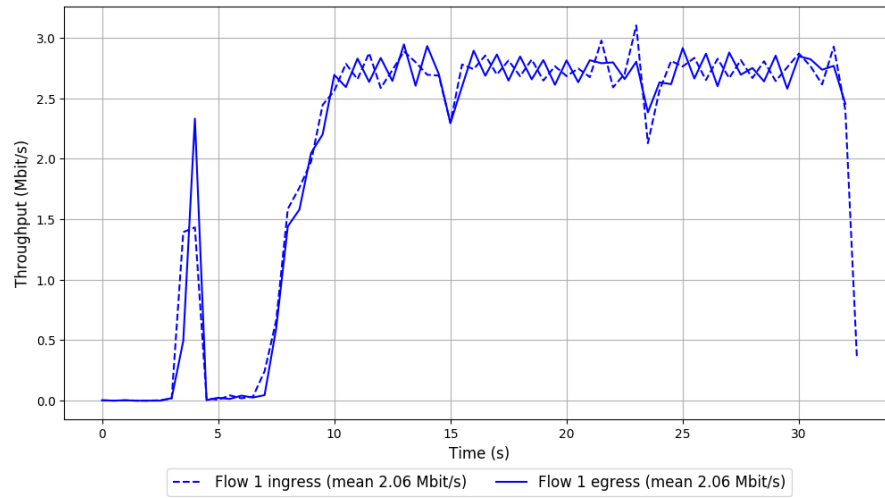
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 136.258 ms

Loss rate: 0.85%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-05 17:16:24

End at: 2017-12-05 17:16:54

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 136.816 ms

Loss rate: 0.84%

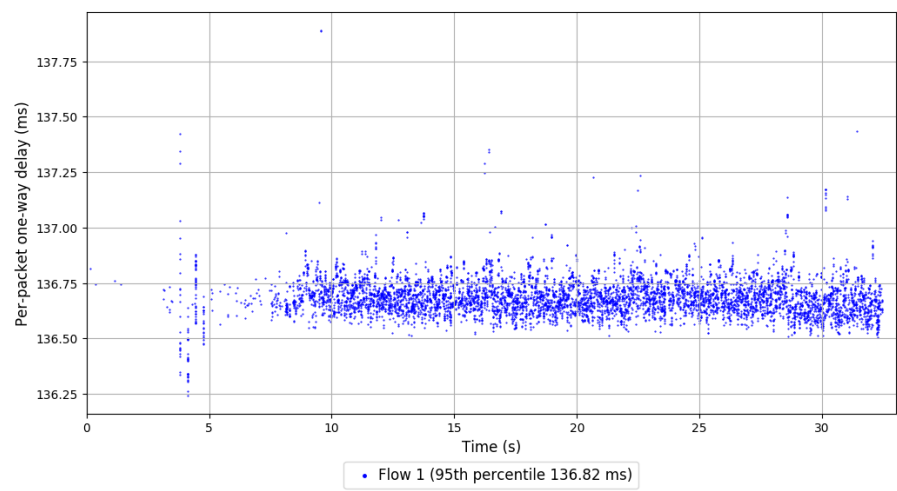
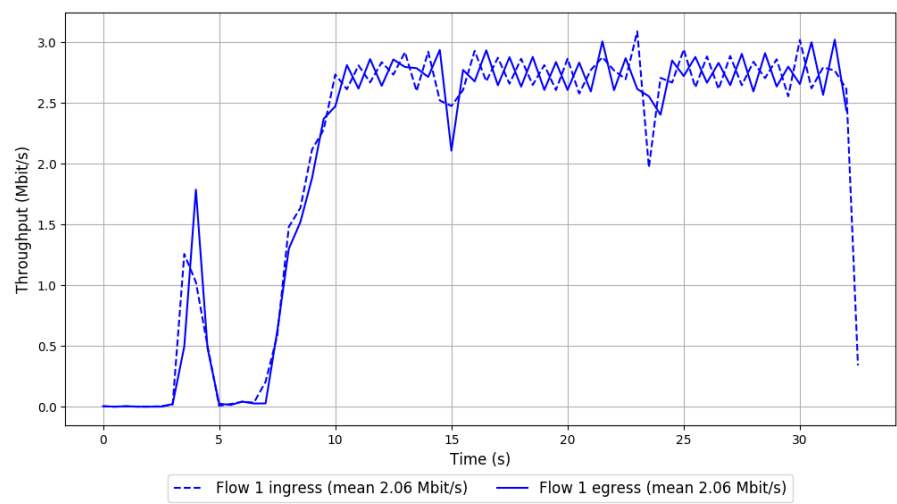
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 136.816 ms

Loss rate: 0.84%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-05 17:27:23

End at: 2017-12-05 17:27:53

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 137.077 ms

Loss rate: 1.05%

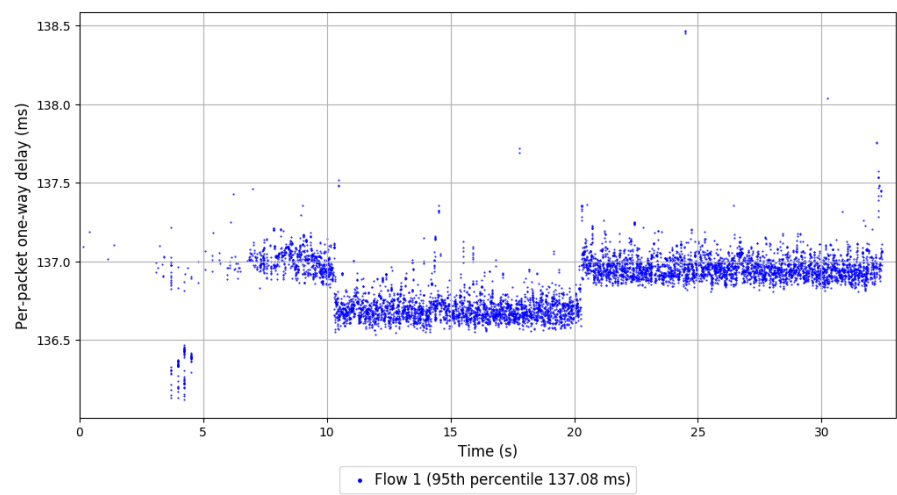
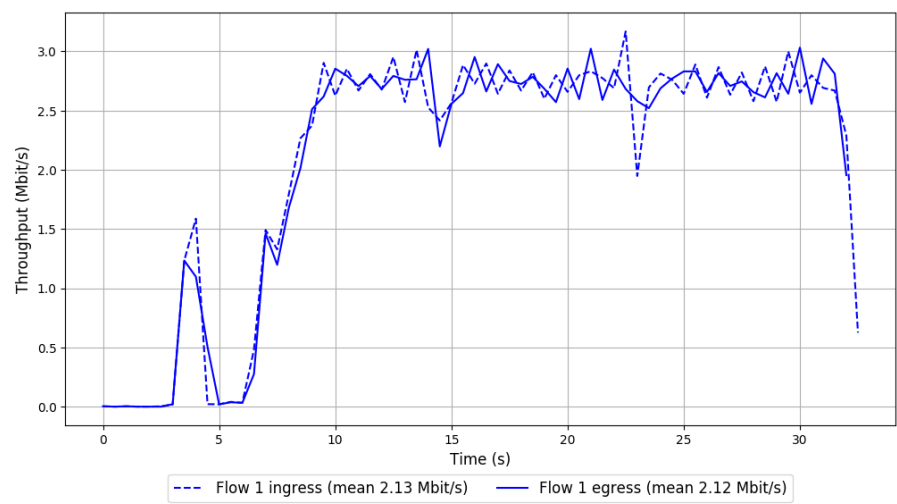
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 137.077 ms

Loss rate: 1.05%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-05 17:38:40

End at: 2017-12-05 17:39:10

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 135.970 ms

Loss rate: 1.06%

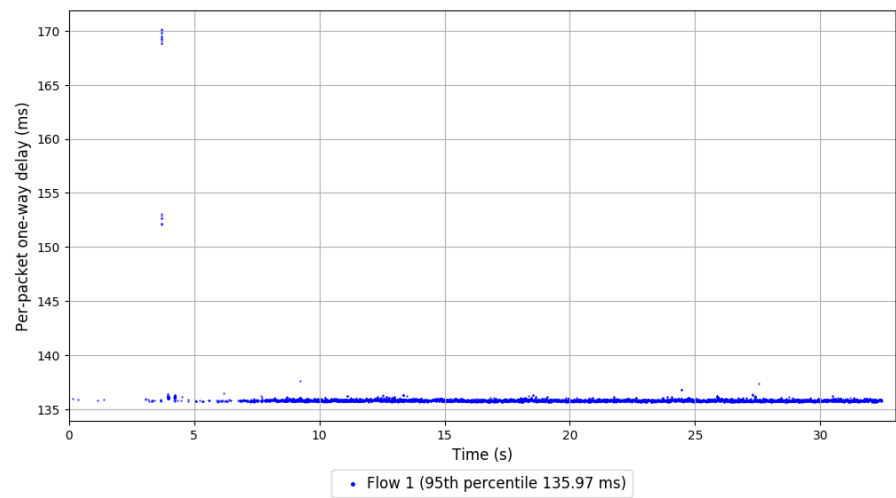
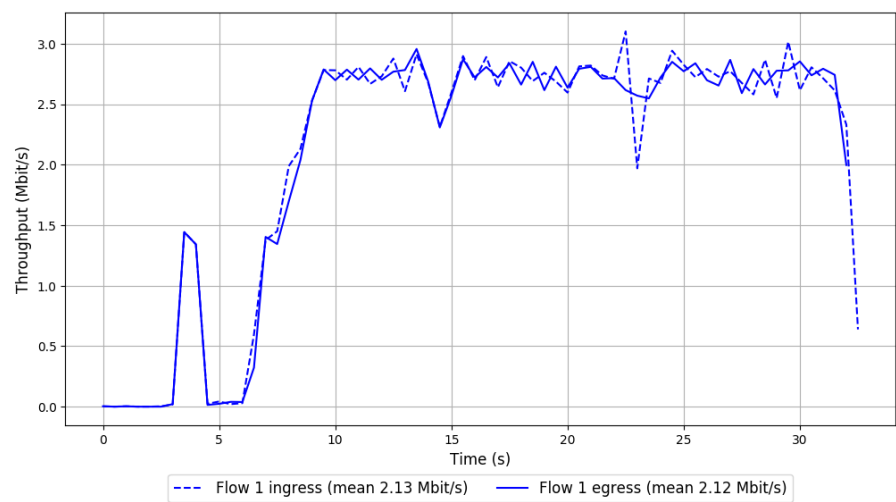
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 135.970 ms

Loss rate: 1.06%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-05 17:50:12

End at: 2017-12-05 17:50:42

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

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

Loss rate: 1.05%

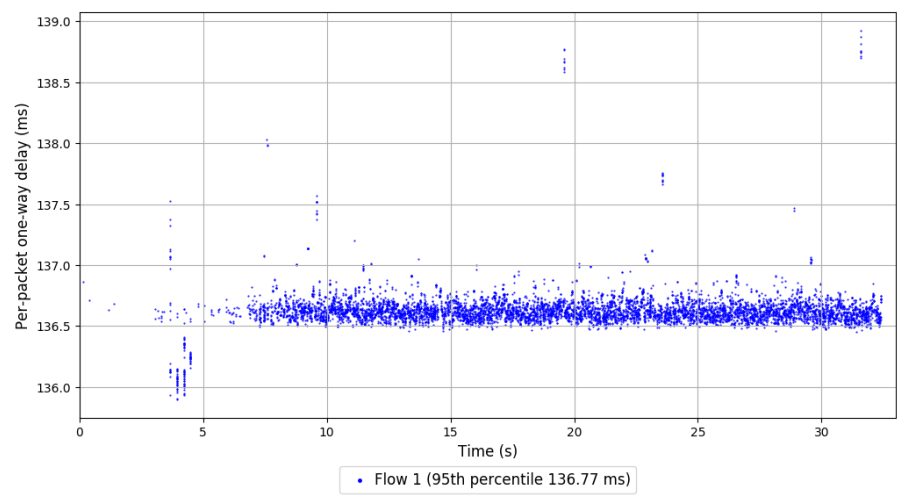
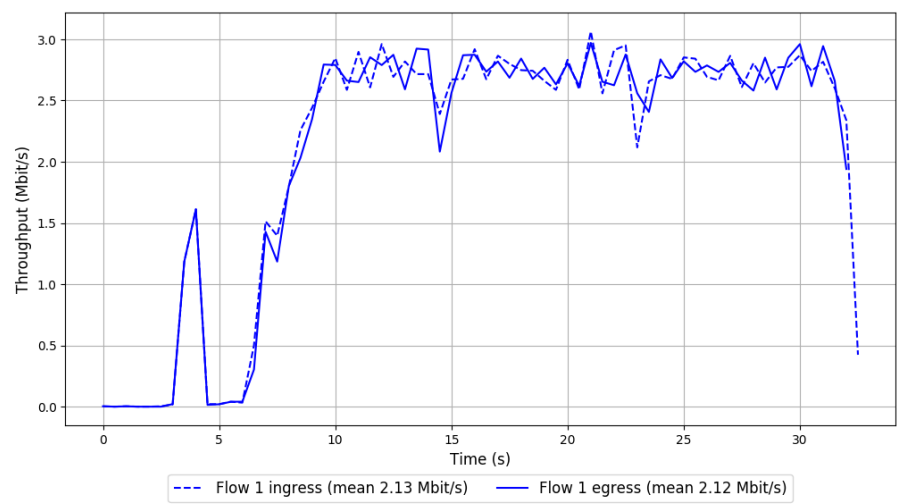
-- Flow 1:

Average throughput: 2.12 Mbit/s

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

Loss rate: 1.05%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-05 18:01:48

End at: 2017-12-05 18:02:18

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 136.755 ms

Loss rate: 0.97%

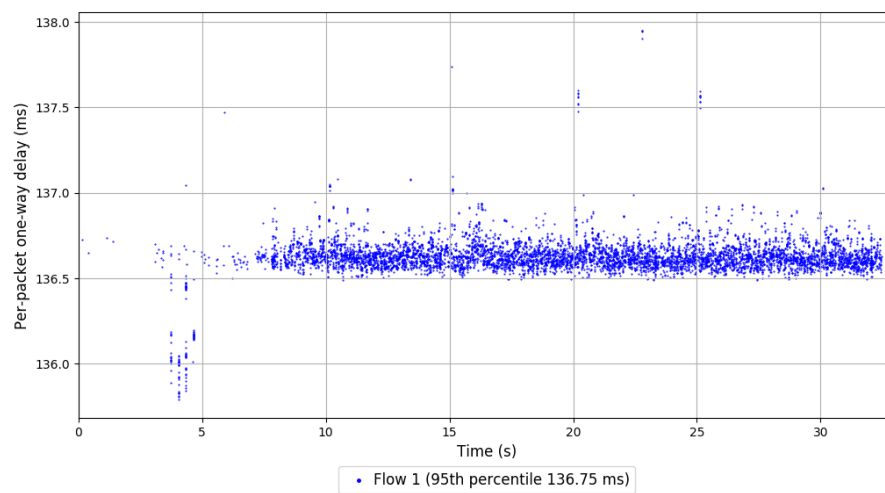
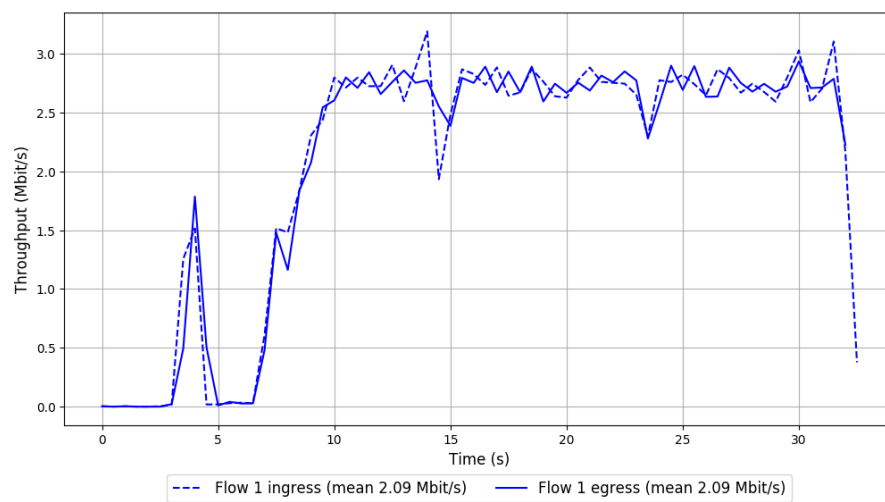
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 136.755 ms

Loss rate: 0.97%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-05 16:28:11

End at: 2017-12-05 16:28:41

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 138.674 ms

Loss rate: 0.80%

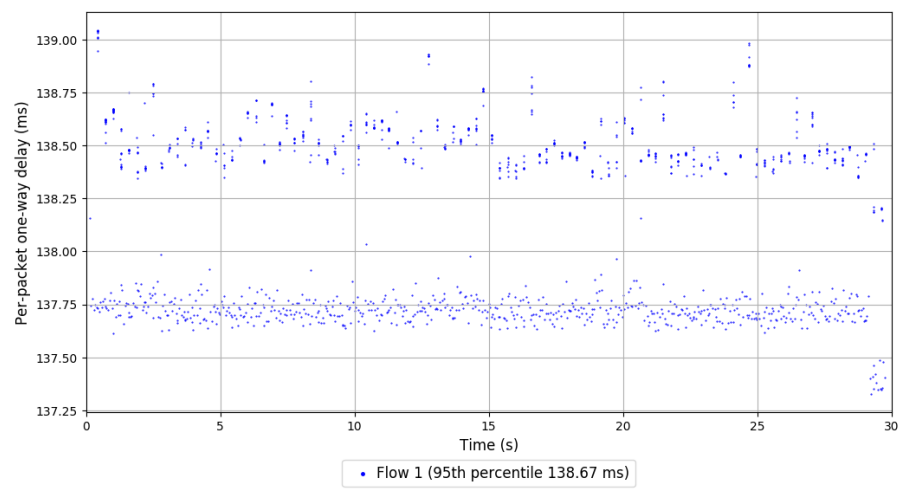
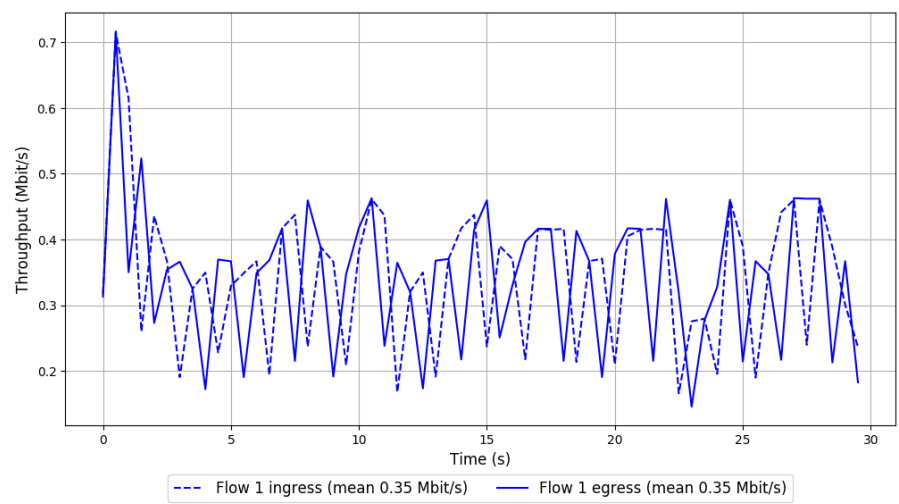
-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 138.674 ms

Loss rate: 0.80%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-05 16:39:26

End at: 2017-12-05 16:39:56

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.416 ms

Loss rate: 1.09%

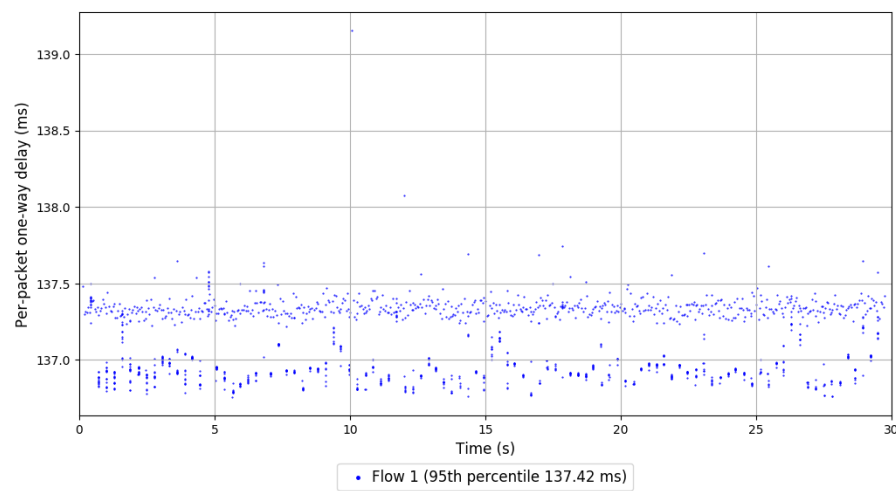
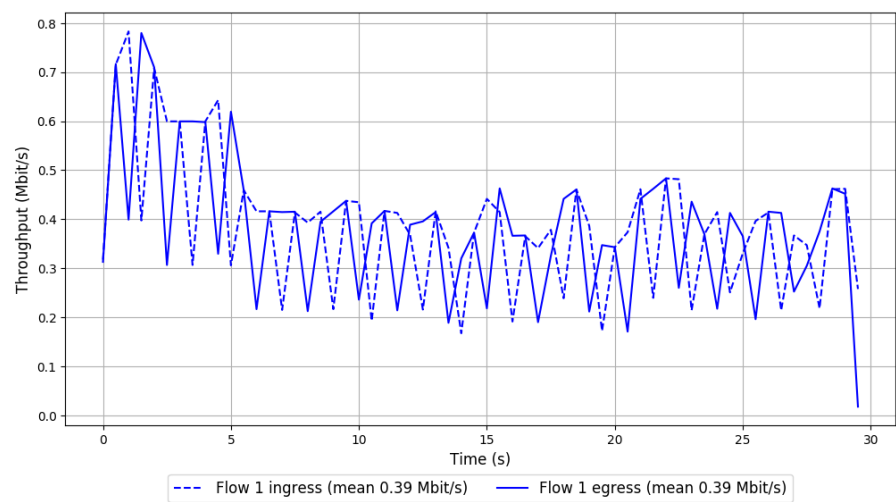
-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.416 ms

Loss rate: 1.09%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 16:50:40

End at: 2017-12-05 16:51:11

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.247 ms

Loss rate: 0.89%

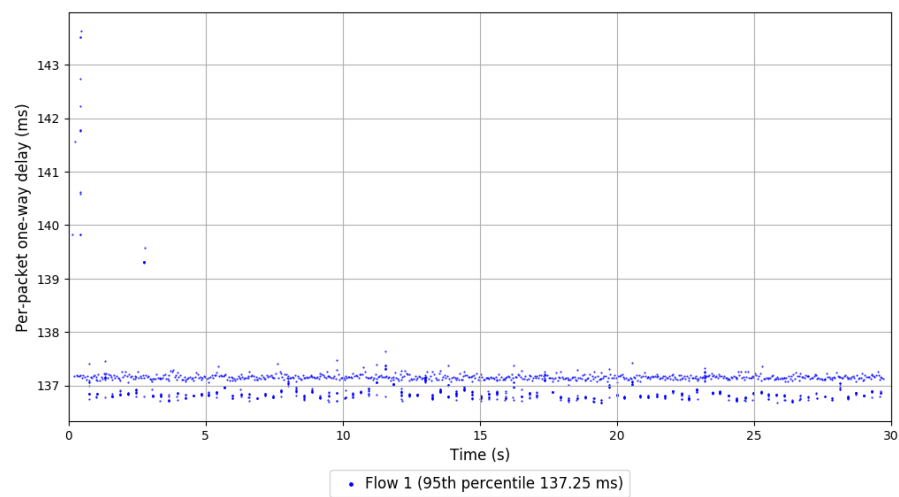
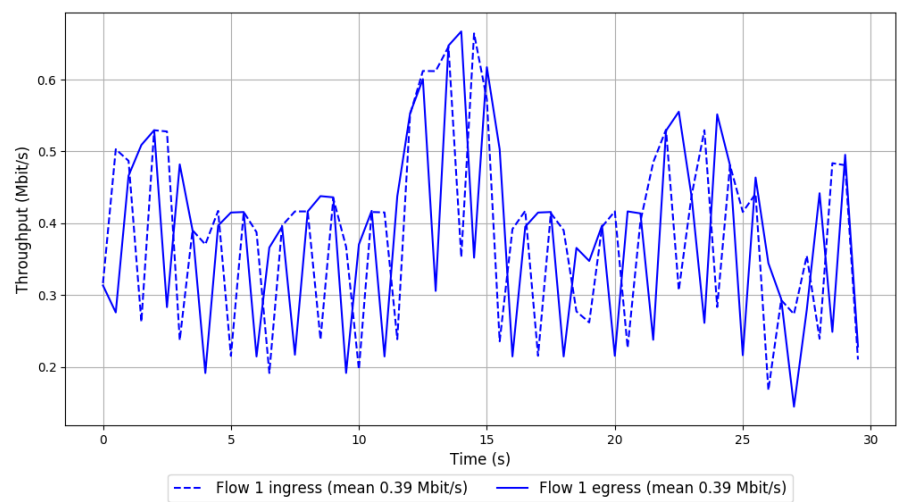
-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.247 ms

Loss rate: 0.89%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-05 17:02:04

End at: 2017-12-05 17:02:34

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 137.090 ms

Loss rate: 0.03%

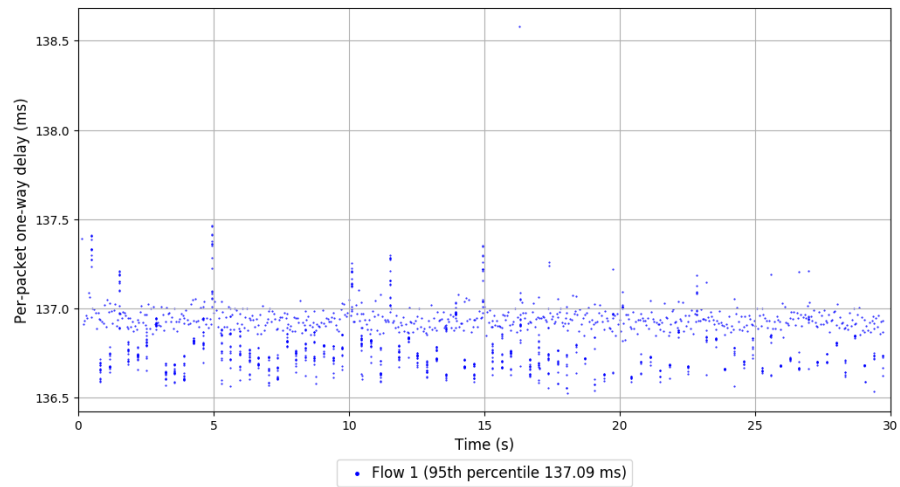
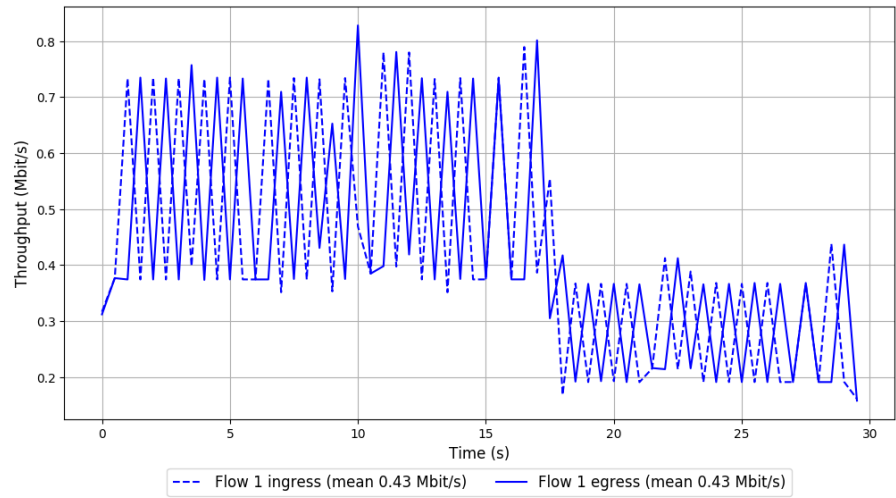
-- Flow 1:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 137.090 ms

Loss rate: 0.03%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-05 17:13:21

End at: 2017-12-05 17:13:51

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.439 ms

Loss rate: 0.89%

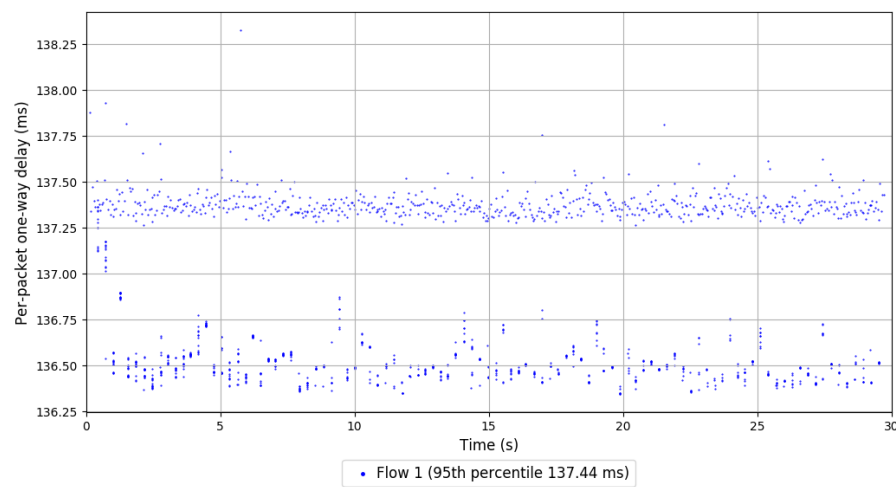
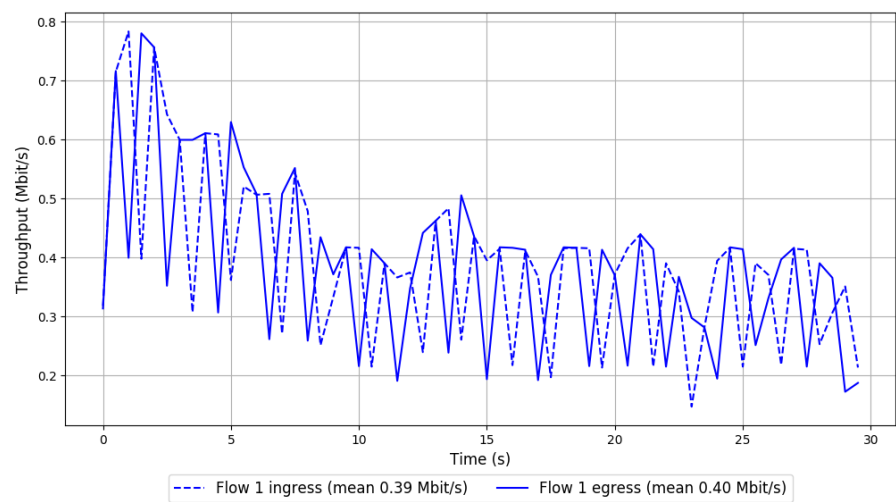
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.439 ms

Loss rate: 0.89%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-05 17:24:18

End at: 2017-12-05 17:24:48

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 137.076 ms

Loss rate: 1.39%

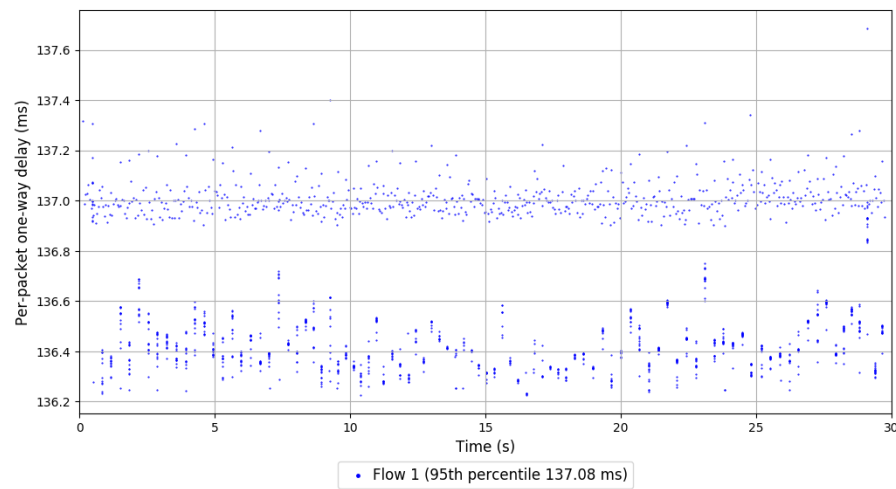
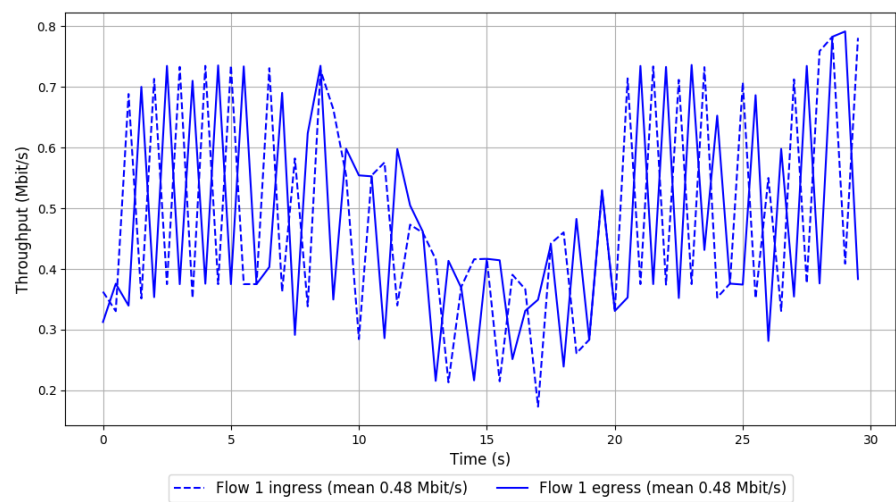
-- Flow 1:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 137.076 ms

Loss rate: 1.39%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-05 17:35:35

End at: 2017-12-05 17:36:05

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 136.566 ms

Loss rate: 0.89%

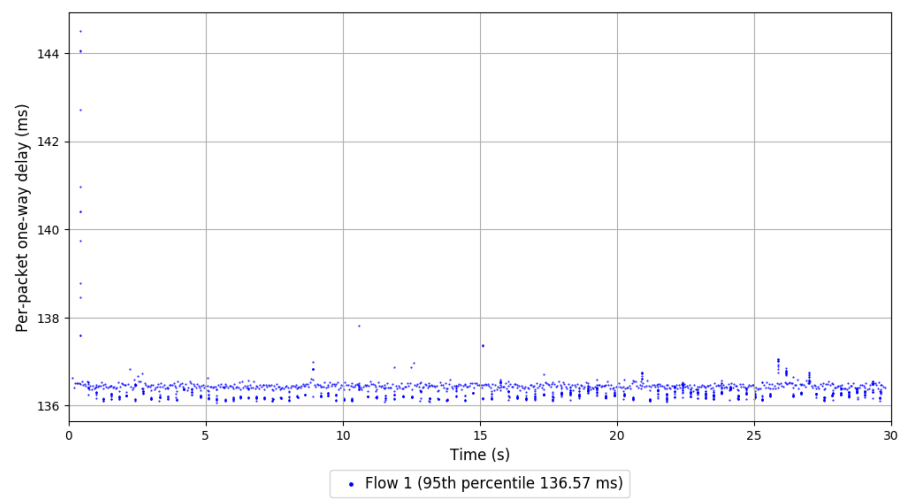
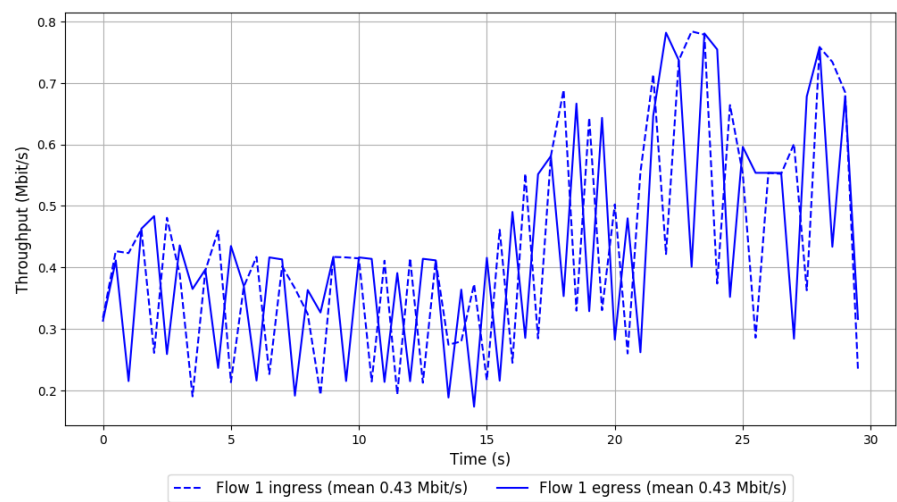
-- Flow 1:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 136.566 ms

Loss rate: 0.89%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-05 17:47:07

End at: 2017-12-05 17:47:37

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 136.798 ms

Loss rate: 0.77%

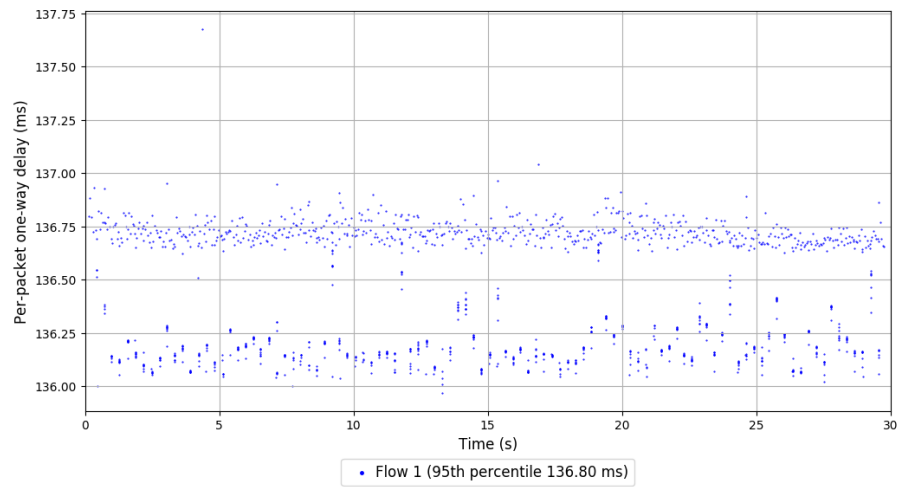
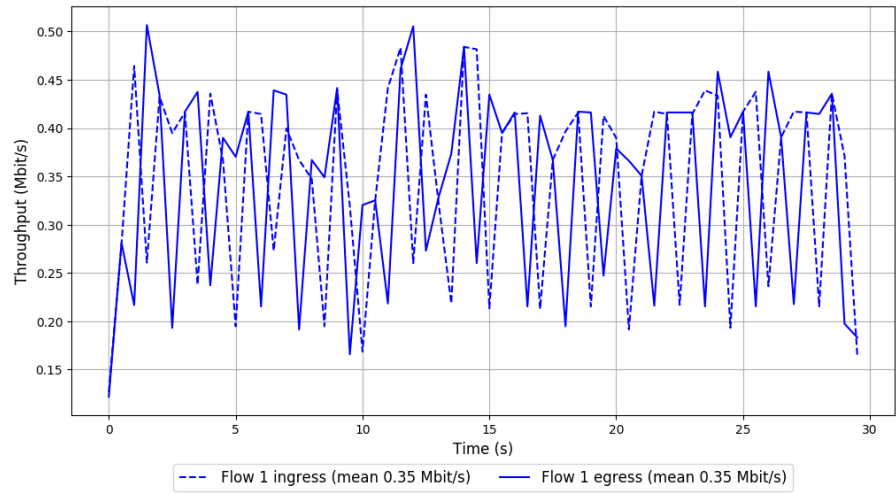
-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 136.798 ms

Loss rate: 0.77%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-05 17:58:44

End at: 2017-12-05 17:59:14

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.319 ms

Loss rate: 0.96%

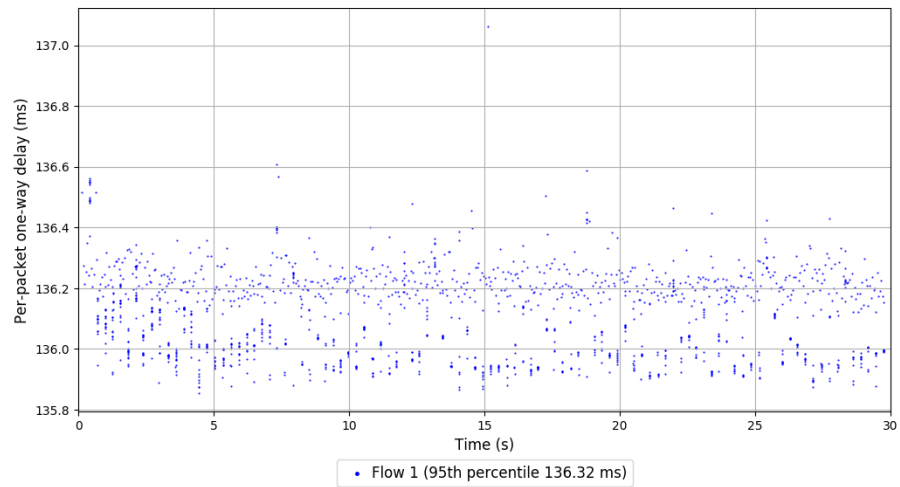
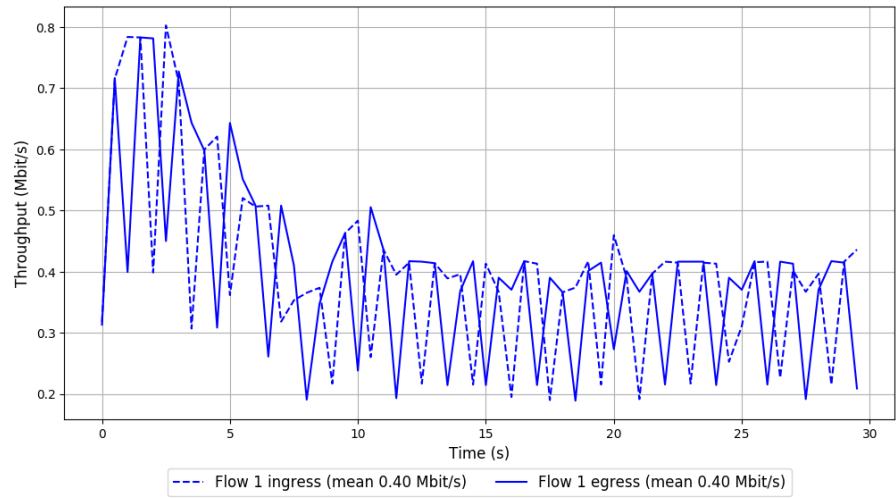
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.319 ms

Loss rate: 0.96%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-05 18:10:07

End at: 2017-12-05 18:10:37

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.204 ms

Loss rate: 1.03%

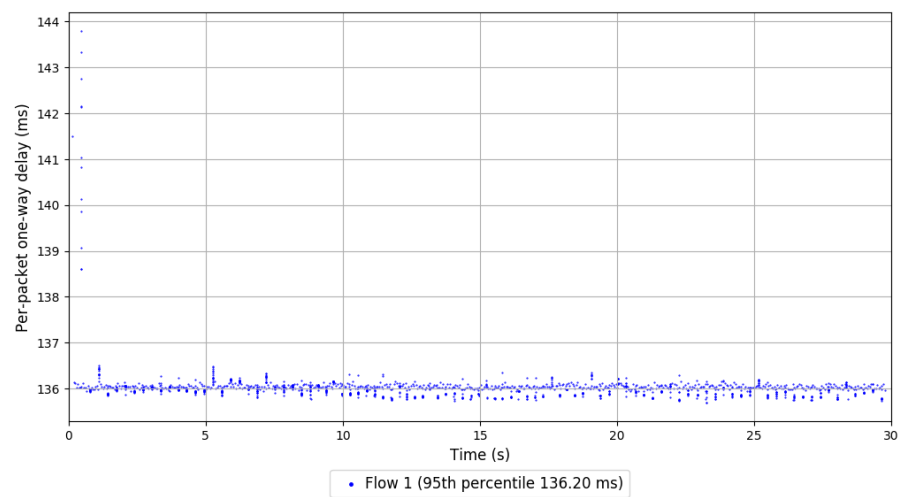
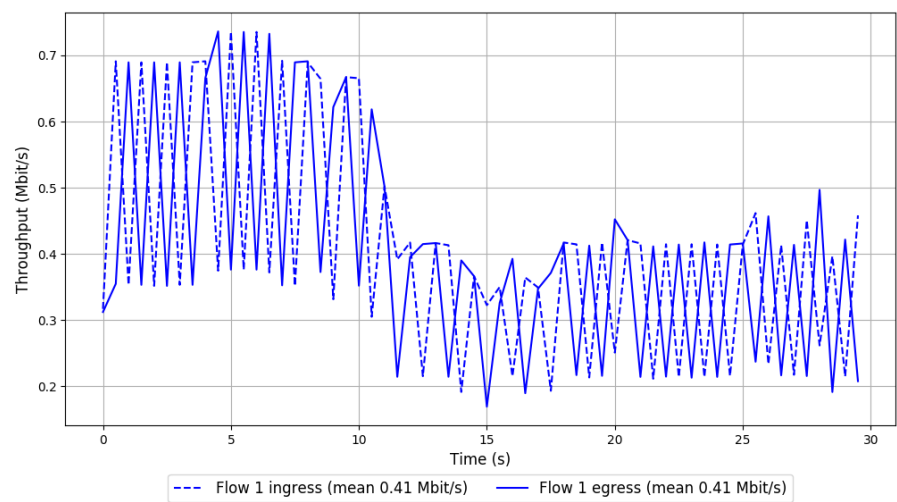
-- Flow 1:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.204 ms

Loss rate: 1.03%

Run 10: Report of Sprout — Data Link

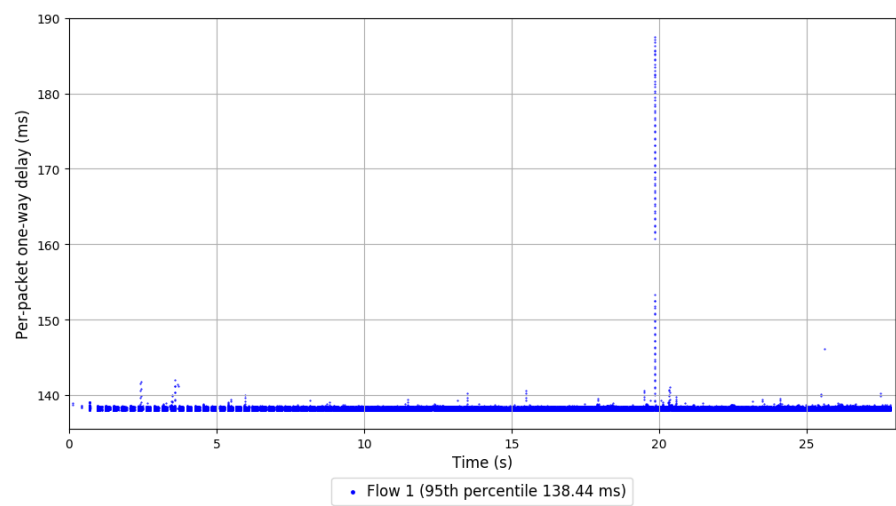
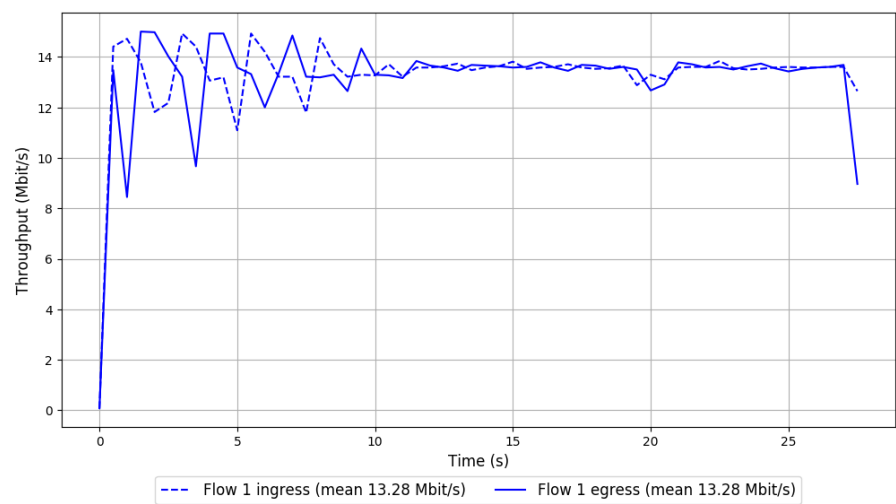


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 16:21:33
End at: 2017-12-05 16:22:03

# Below is generated by plot.py at 2017-12-05 20:29:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 138.440 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 138.440 ms
Loss rate: 1.00%
```

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

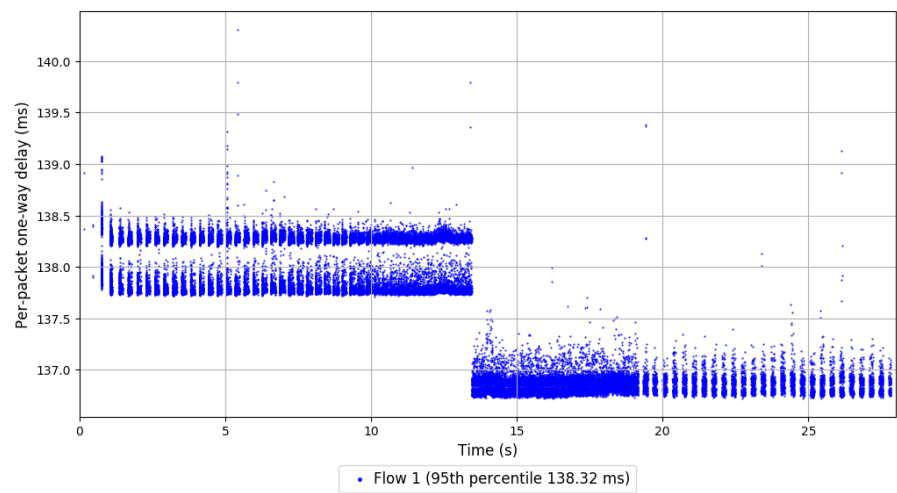
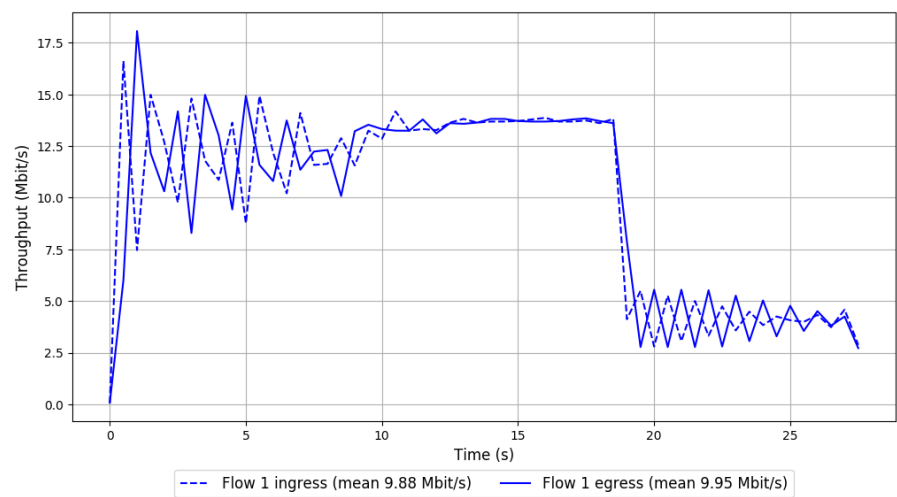


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 16:32:45
End at: 2017-12-05 16:33:15

# Below is generated by plot.py at 2017-12-05 20:29:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 138.321 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 138.321 ms
Loss rate: 0.26%
```

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

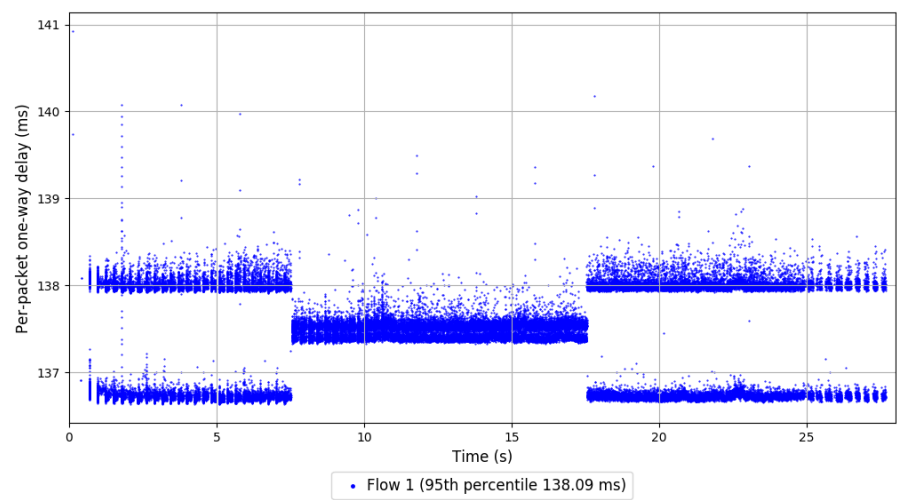
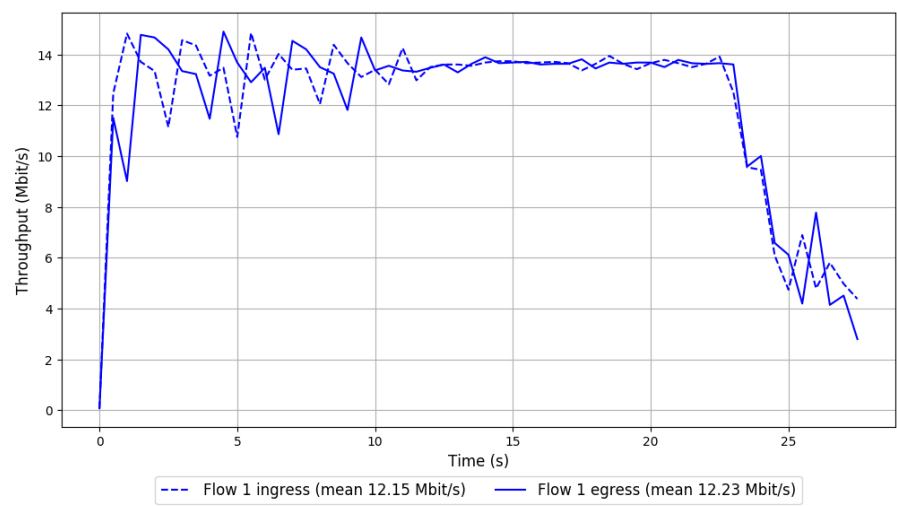


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 16:44:01
End at: 2017-12-05 16:44:31

# Below is generated by plot.py at 2017-12-05 20:29:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.23 Mbit/s
95th percentile per-packet one-way delay: 138.088 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 12.23 Mbit/s
95th percentile per-packet one-way delay: 138.088 ms
Loss rate: 0.56%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-05 16:55:15

End at: 2017-12-05 16:55:45

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.36 Mbit/s

95th percentile per-packet one-way delay: 137.053 ms

Loss rate: 1.11%

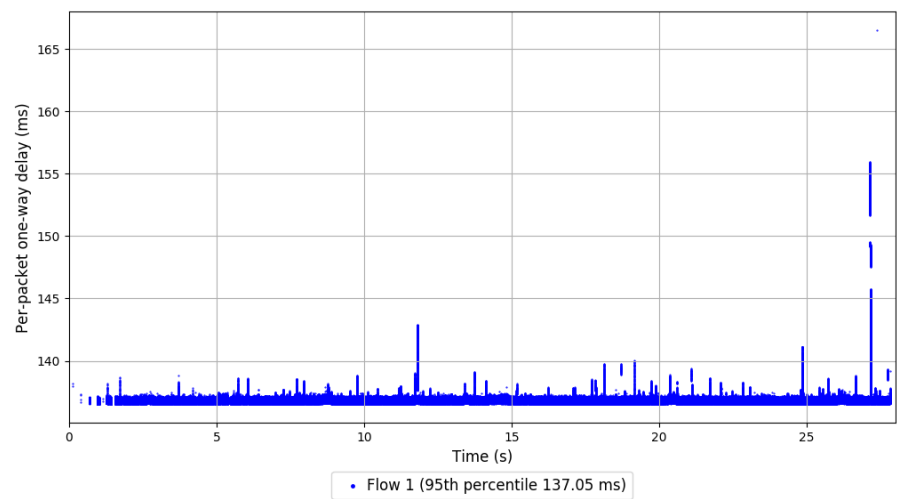
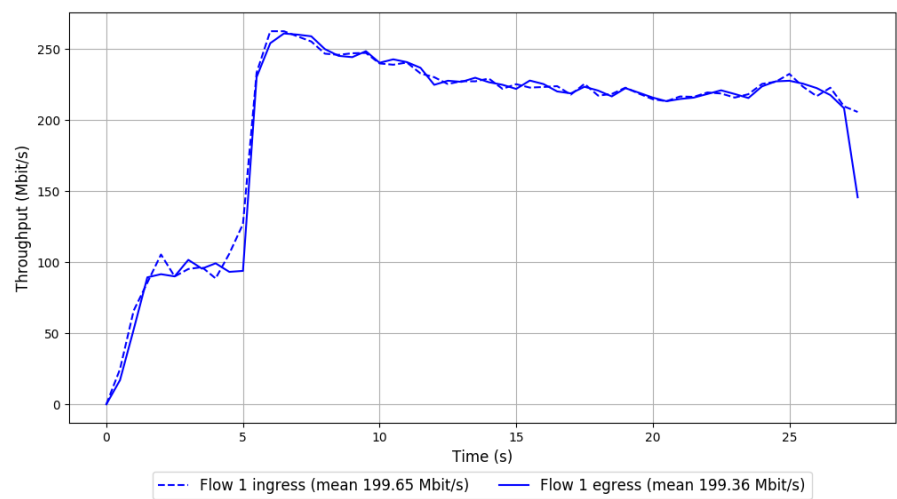
-- Flow 1:

Average throughput: 199.36 Mbit/s

95th percentile per-packet one-way delay: 137.053 ms

Loss rate: 1.11%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-05 17:06:27

End at: 2017-12-05 17:06:57

Below is generated by plot.py at 2017-12-05 20:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.78 Mbit/s

95th percentile per-packet one-way delay: 136.620 ms

Loss rate: 1.16%

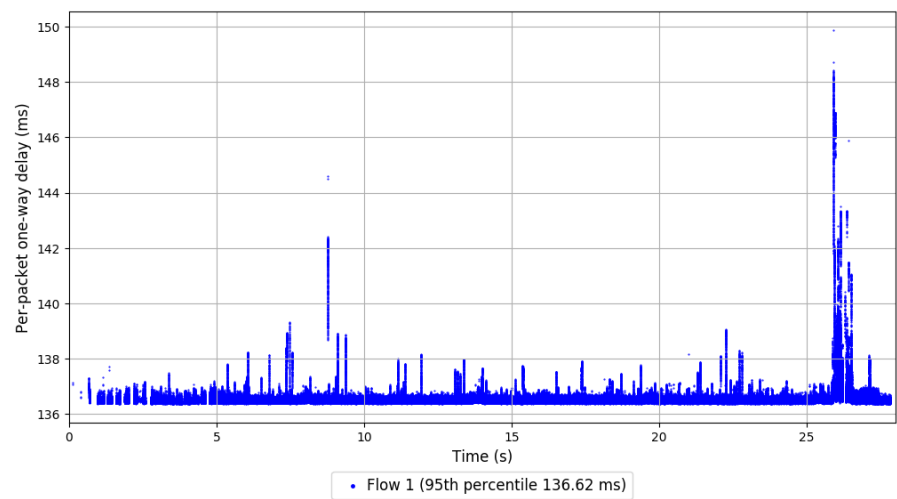
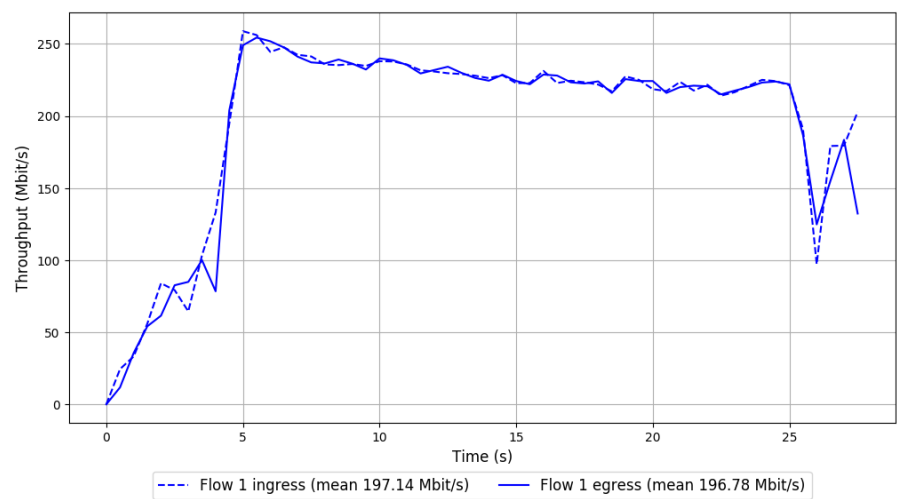
-- Flow 1:

Average throughput: 196.78 Mbit/s

95th percentile per-packet one-way delay: 136.620 ms

Loss rate: 1.16%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-05 17:17:54

End at: 2017-12-05 17:18:24

Below is generated by plot.py at 2017-12-05 20:29:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 206.59 Mbit/s

95th percentile per-packet one-way delay: 136.872 ms

Loss rate: 1.13%

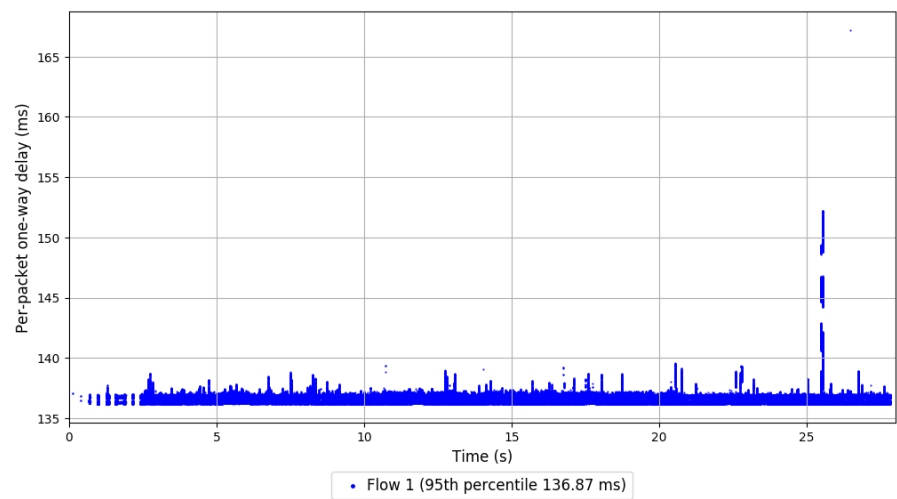
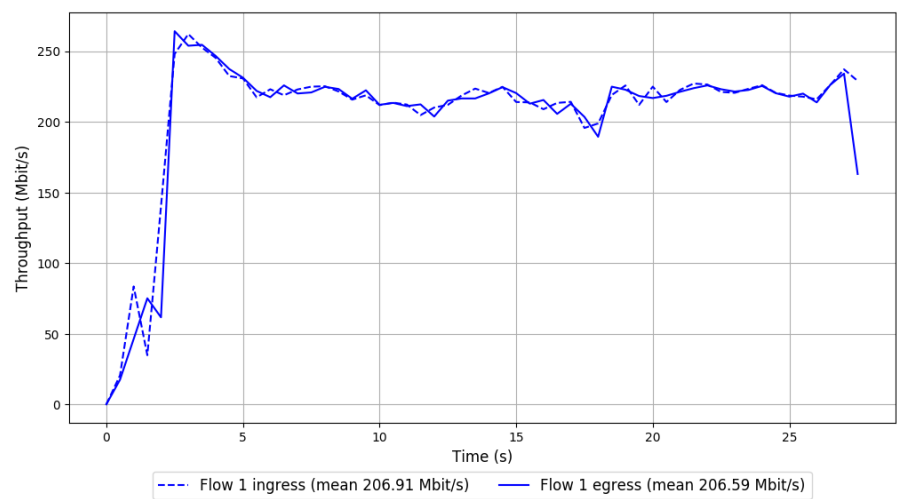
-- Flow 1:

Average throughput: 206.59 Mbit/s

95th percentile per-packet one-way delay: 136.872 ms

Loss rate: 1.13%

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

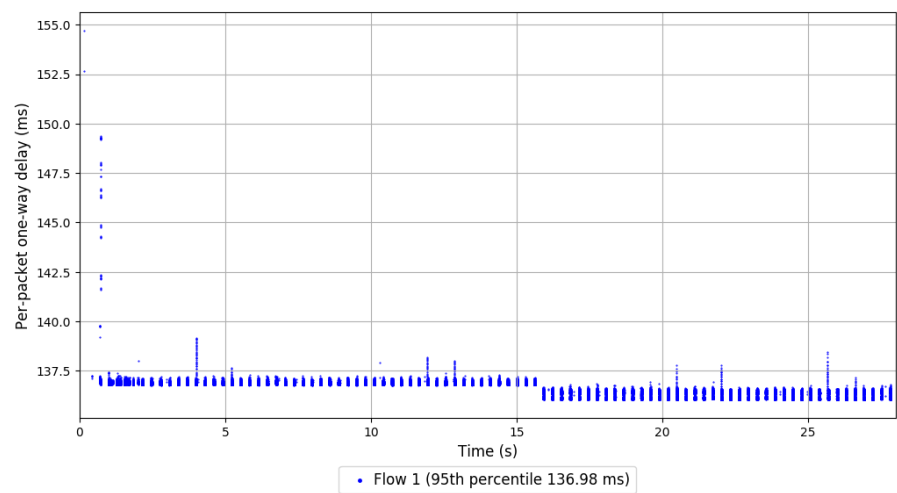
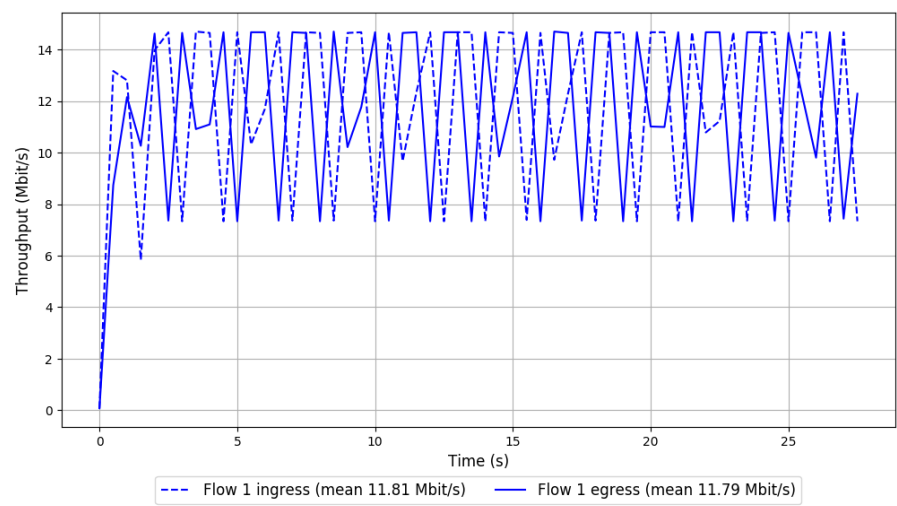


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-12-05 17:28:52
End at: 2017-12-05 17:29:22

# Below is generated by plot.py at 2017-12-05 20:29:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 136.983 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 136.983 ms
Loss rate: 0.35%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-05 17:40:10

End at: 2017-12-05 17:40:40

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.59 Mbit/s

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

Loss rate: 0.85%

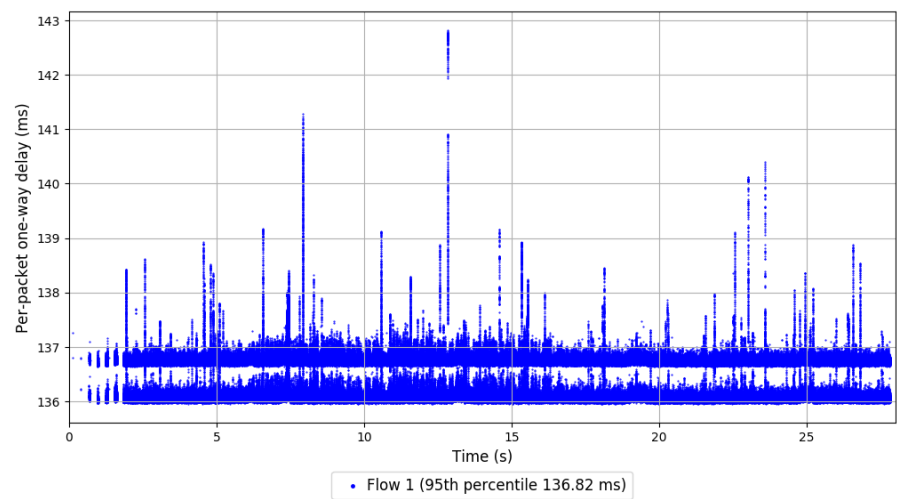
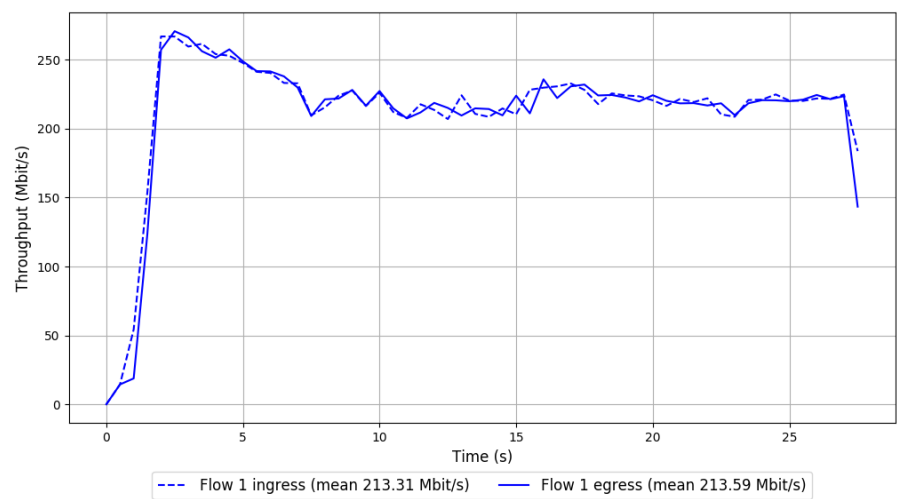
-- Flow 1:

Average throughput: 213.59 Mbit/s

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

Loss rate: 0.85%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-05 17:51:41

End at: 2017-12-05 17:52:11

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.20 Mbit/s

95th percentile per-packet one-way delay: 136.714 ms

Loss rate: 1.02%

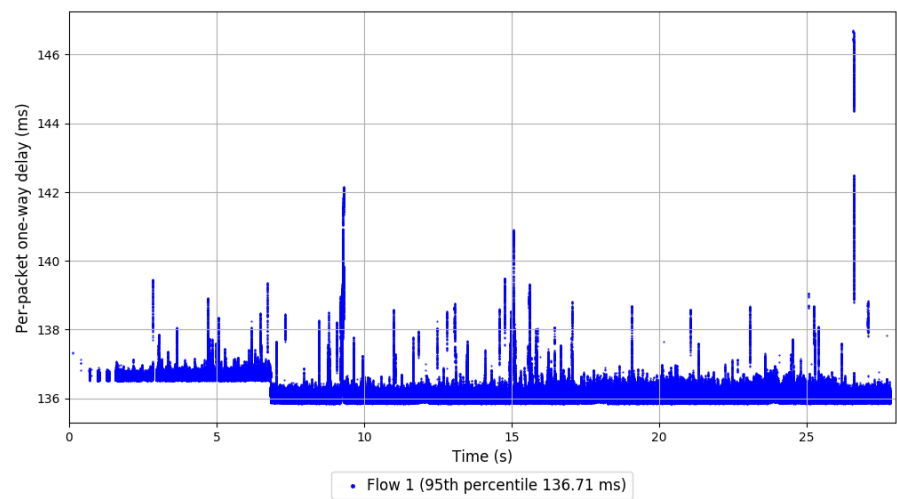
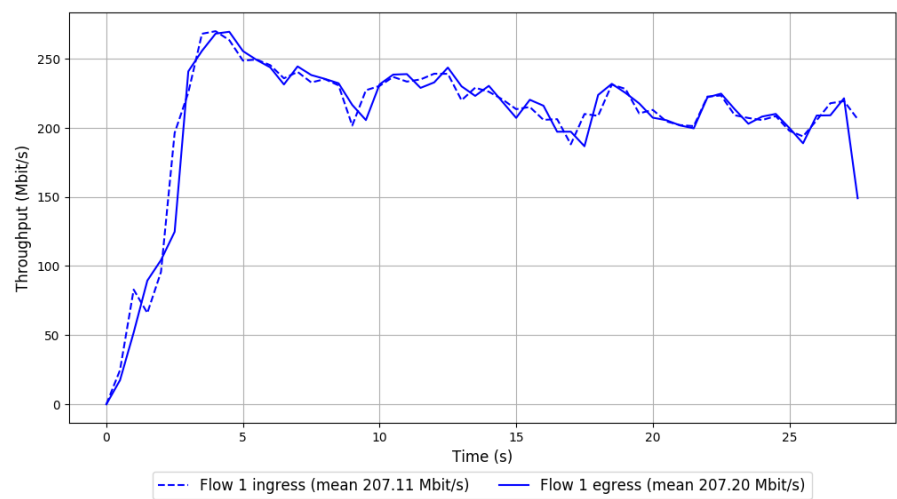
-- Flow 1:

Average throughput: 207.20 Mbit/s

95th percentile per-packet one-way delay: 136.714 ms

Loss rate: 1.02%

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

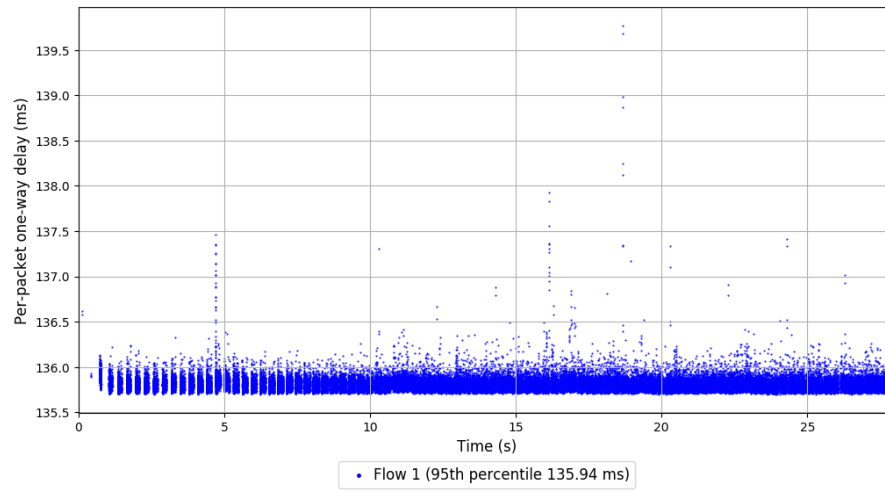
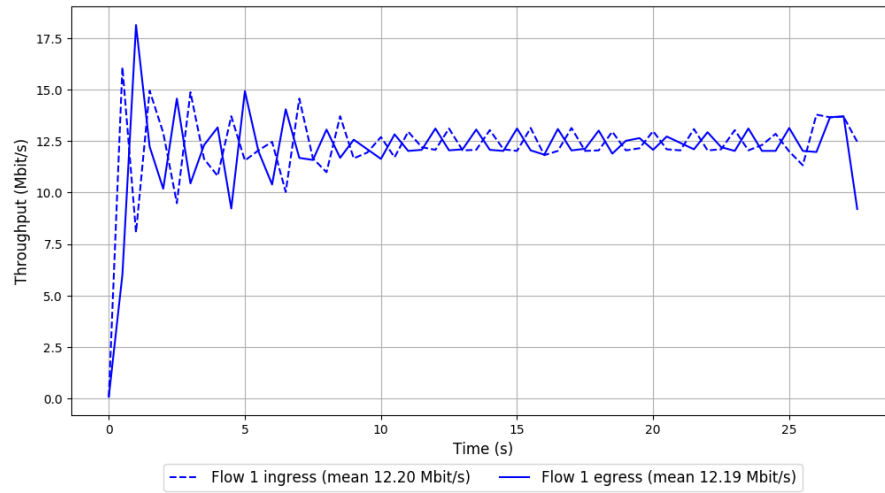


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-05 18:03:18
End at: 2017-12-05 18:03:48

# Below is generated by plot.py at 2017-12-05 20:29:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 135.941 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 135.941 ms
Loss rate: 1.04%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 16:26:38

End at: 2017-12-05 16:27:08

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.11 Mbit/s

95th percentile per-packet one-way delay: 139.280 ms

Loss rate: 1.03%

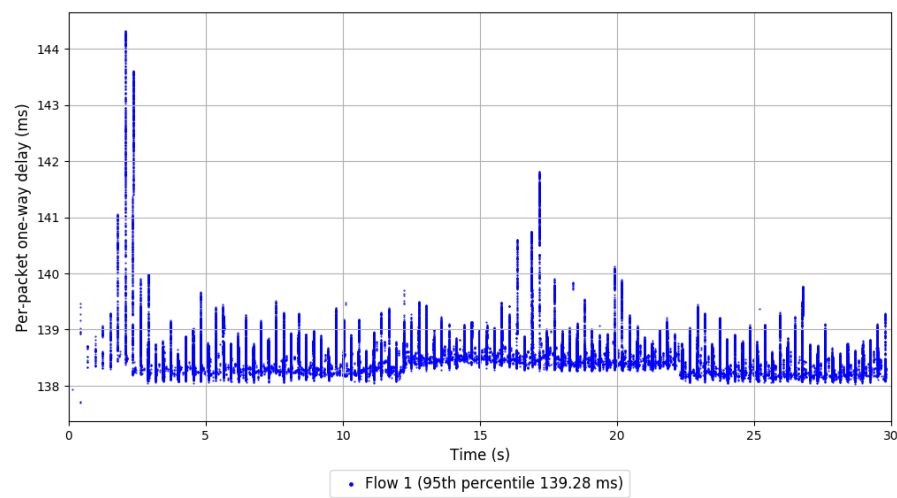
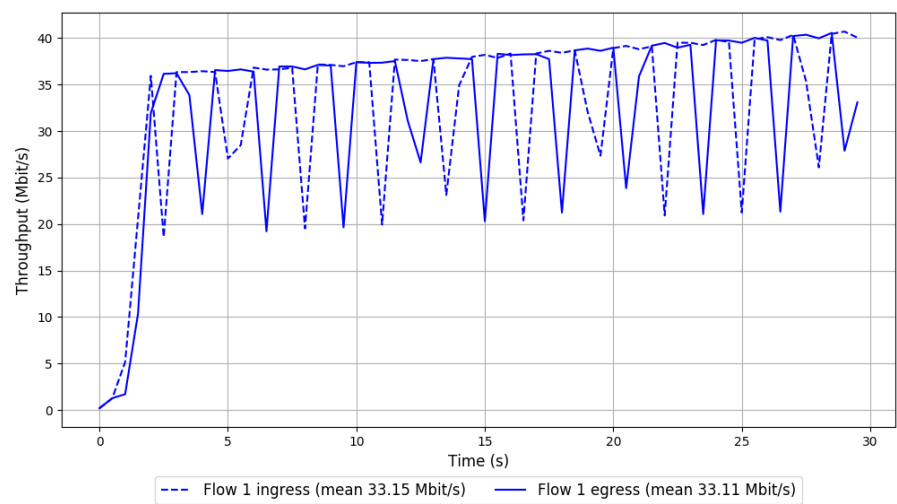
-- Flow 1:

Average throughput: 33.11 Mbit/s

95th percentile per-packet one-way delay: 139.280 ms

Loss rate: 1.03%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 16:37:55

End at: 2017-12-05 16:38:25

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.49 Mbit/s

95th percentile per-packet one-way delay: 137.539 ms

Loss rate: 1.02%

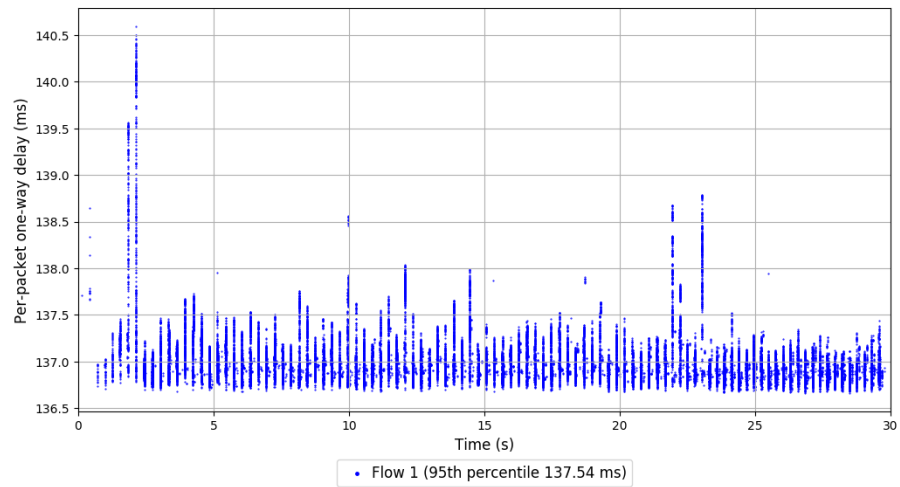
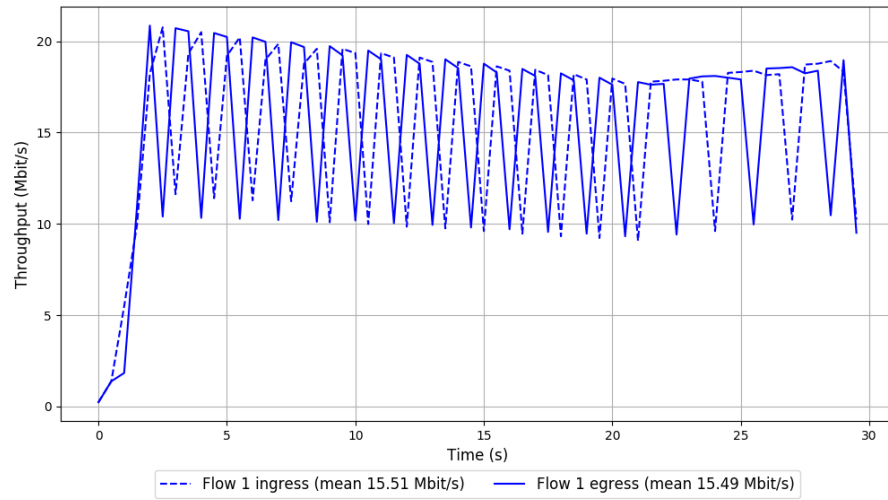
-- Flow 1:

Average throughput: 15.49 Mbit/s

95th percentile per-packet one-way delay: 137.539 ms

Loss rate: 1.02%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 16:49:08

End at: 2017-12-05 16:49:38

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.19 Mbit/s

95th percentile per-packet one-way delay: 138.488 ms

Loss rate: 0.71%

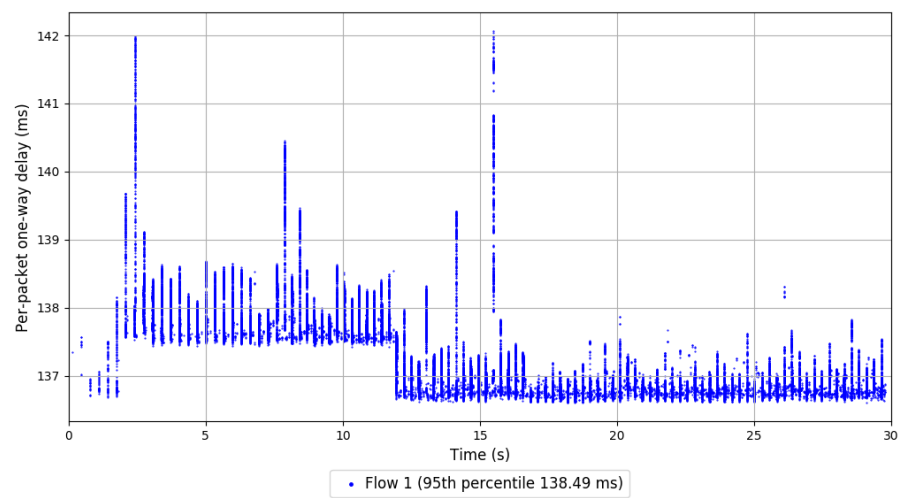
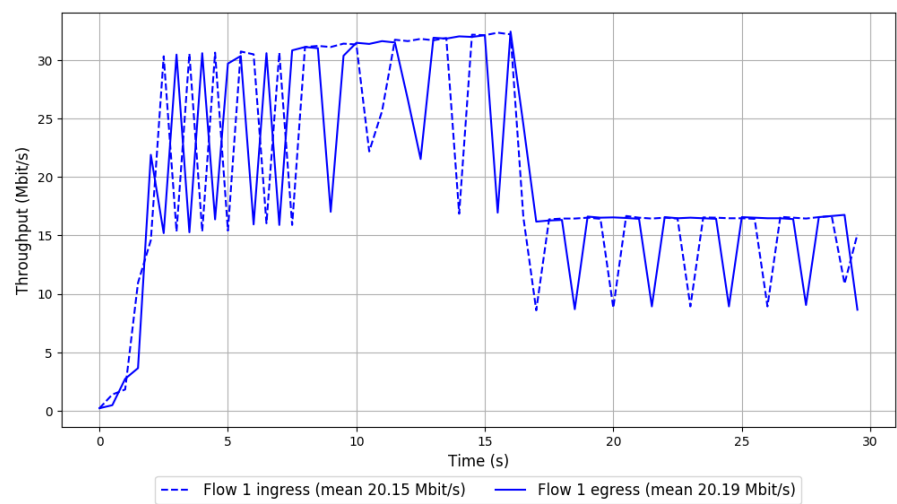
-- Flow 1:

Average throughput: 20.19 Mbit/s

95th percentile per-packet one-way delay: 138.488 ms

Loss rate: 0.71%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-05 17:00:31

End at: 2017-12-05 17:01:01

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.79 Mbit/s

95th percentile per-packet one-way delay: 138.779 ms

Loss rate: 0.98%

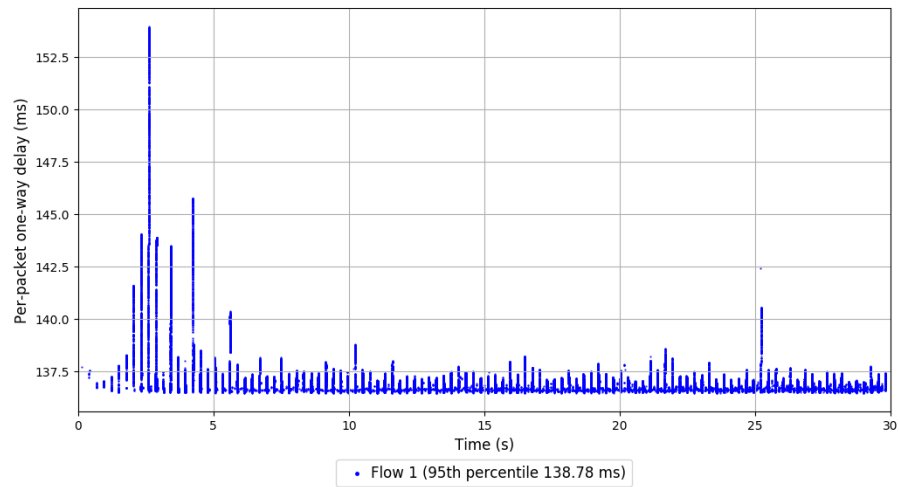
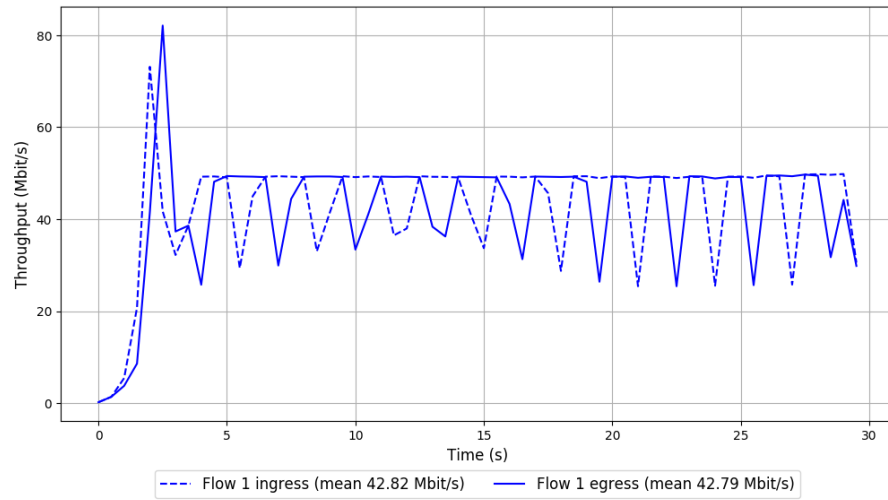
-- Flow 1:

Average throughput: 42.79 Mbit/s

95th percentile per-packet one-way delay: 138.779 ms

Loss rate: 0.98%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-05 17:11:47

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

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.00 Mbit/s

95th percentile per-packet one-way delay: 137.845 ms

Loss rate: 0.56%

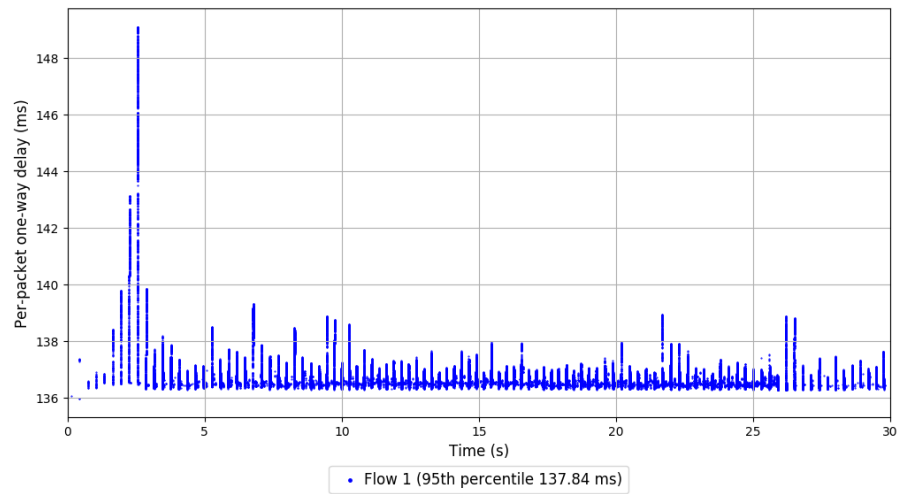
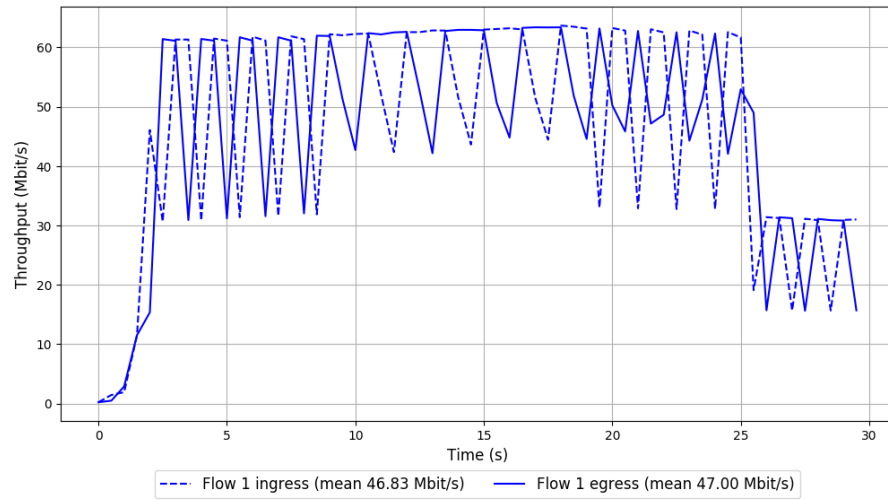
-- Flow 1:

Average throughput: 47.00 Mbit/s

95th percentile per-packet one-way delay: 137.845 ms

Loss rate: 0.56%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-05 17:22:46

End at: 2017-12-05 17:23:16

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.50 Mbit/s

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

Loss rate: 1.04%

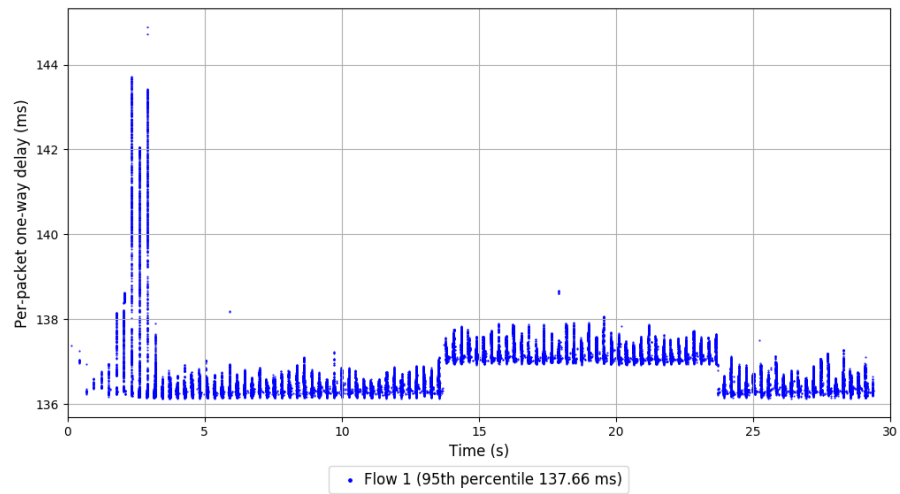
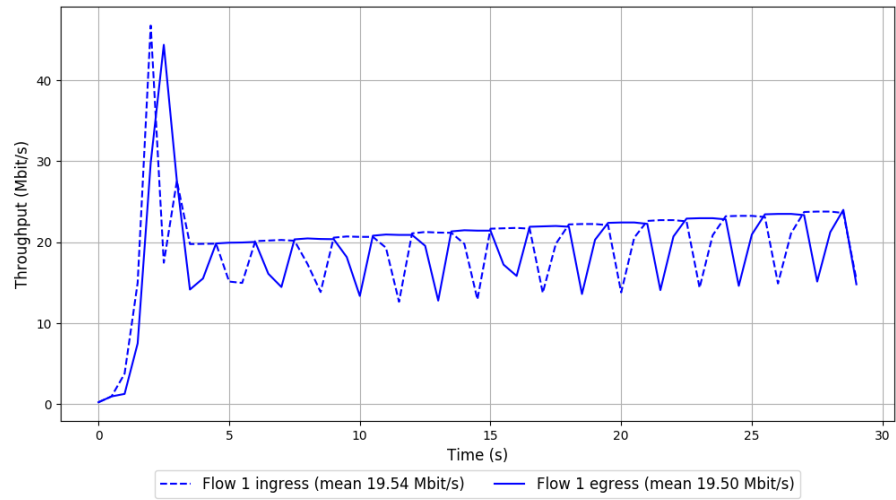
-- Flow 1:

Average throughput: 19.50 Mbit/s

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

Loss rate: 1.04%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-05 17:34:01

End at: 2017-12-05 17:34:31

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.38 Mbit/s

95th percentile per-packet one-way delay: 146.083 ms

Loss rate: 0.66%

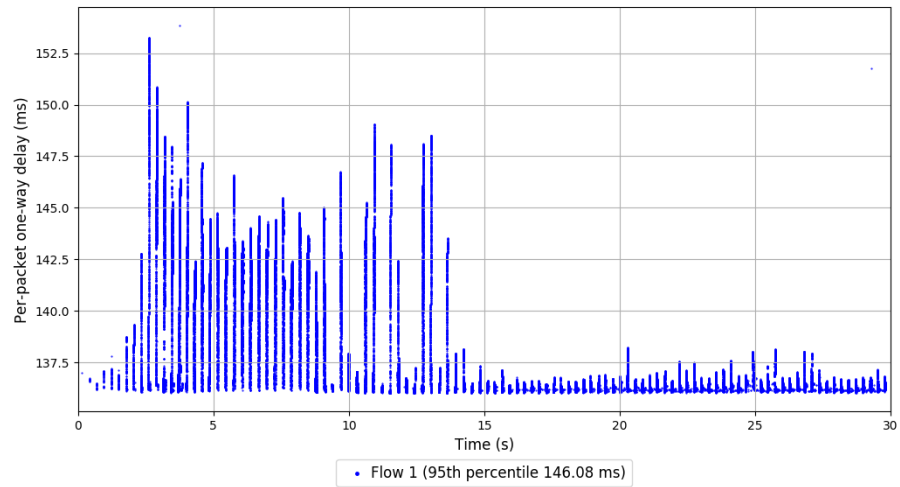
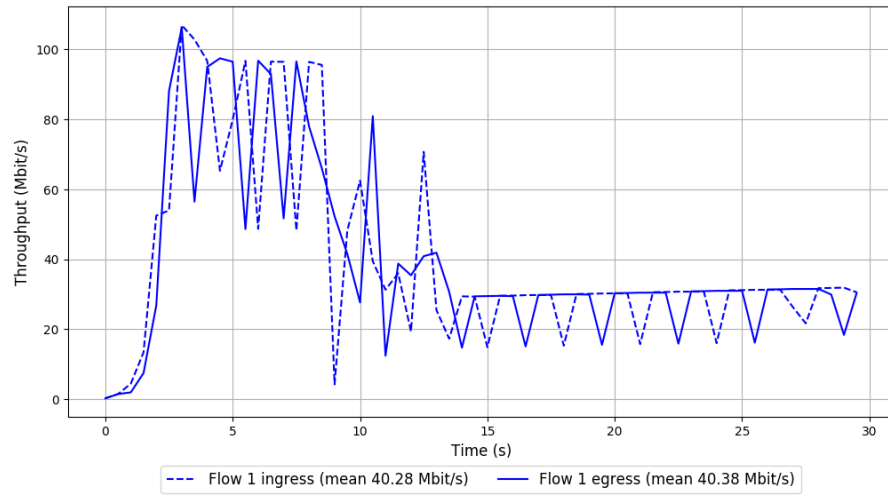
-- Flow 1:

Average throughput: 40.38 Mbit/s

95th percentile per-packet one-way delay: 146.083 ms

Loss rate: 0.66%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-05 17:45:35

End at: 2017-12-05 17:46:05

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.01 Mbit/s

95th percentile per-packet one-way delay: 137.018 ms

Loss rate: 1.02%

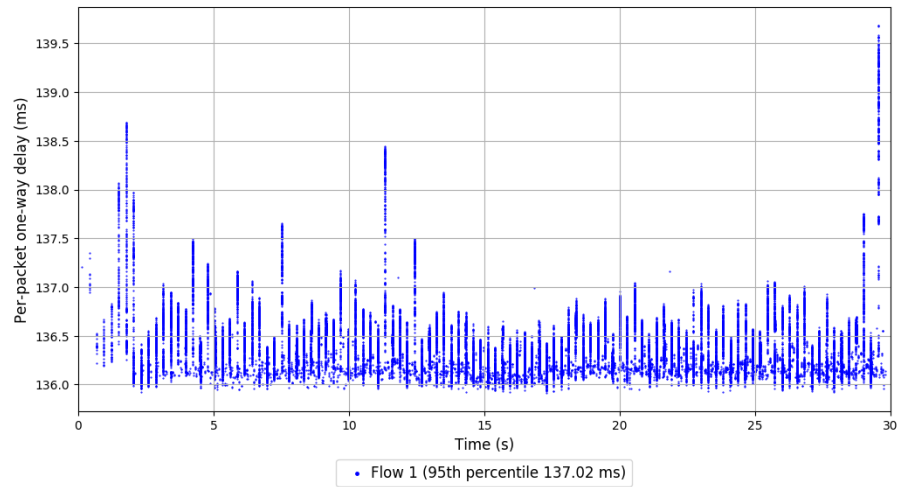
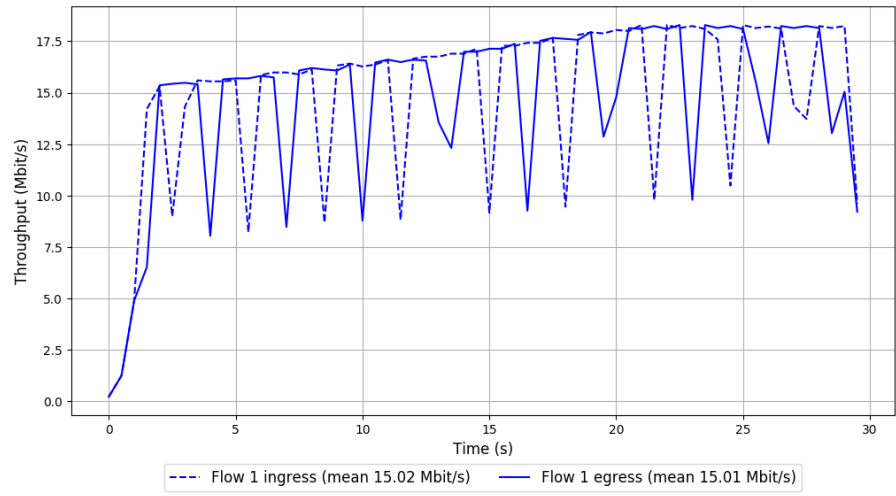
-- Flow 1:

Average throughput: 15.01 Mbit/s

95th percentile per-packet one-way delay: 137.018 ms

Loss rate: 1.02%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-05 17:57:10

End at: 2017-12-05 17:57:40

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.70 Mbit/s

95th percentile per-packet one-way delay: 144.527 ms

Loss rate: 0.90%

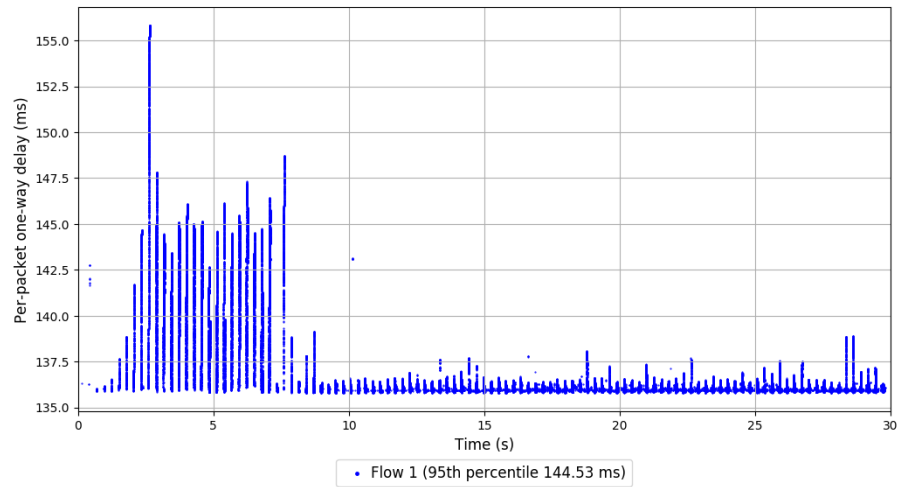
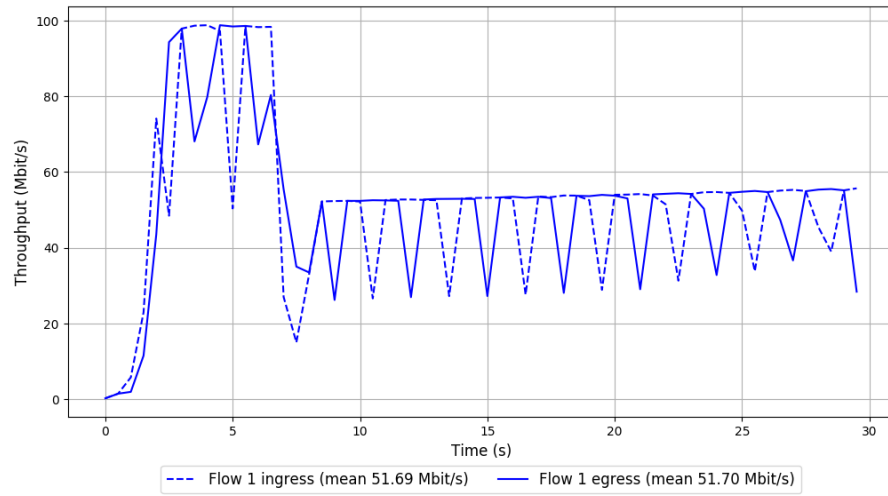
-- Flow 1:

Average throughput: 51.70 Mbit/s

95th percentile per-packet one-way delay: 144.527 ms

Loss rate: 0.90%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-05 18:08:33

End at: 2017-12-05 18:09:03

Below is generated by plot.py at 2017-12-05 20:29:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.52 Mbit/s

95th percentile per-packet one-way delay: 146.081 ms

Loss rate: 0.67%

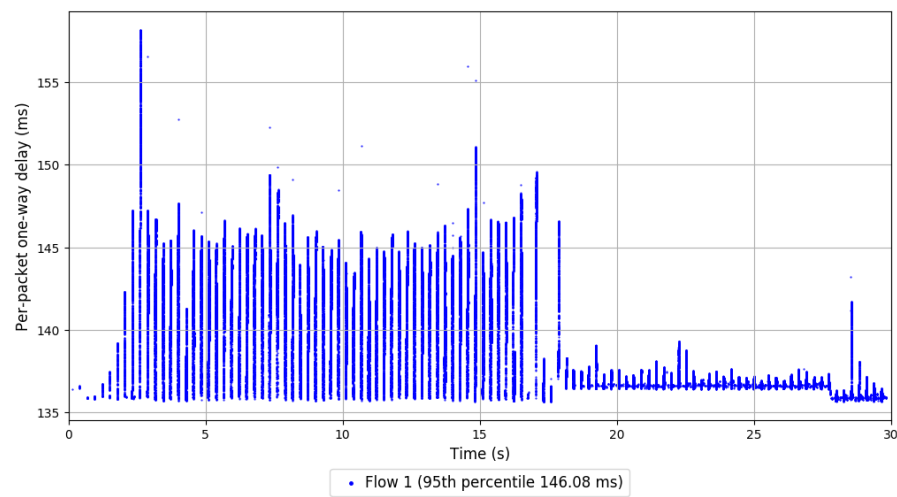
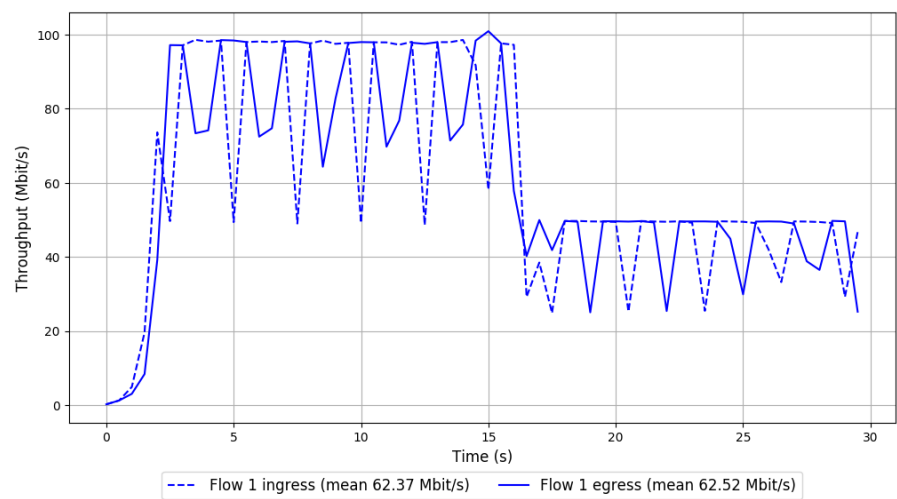
-- Flow 1:

Average throughput: 62.52 Mbit/s

95th percentile per-packet one-way delay: 146.081 ms

Loss rate: 0.67%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-05 16:24:05

End at: 2017-12-05 16:24:35

Below is generated by plot.py at 2017-12-05 20:29:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.12 Mbit/s

95th percentile per-packet one-way delay: 155.542 ms

Loss rate: 0.87%

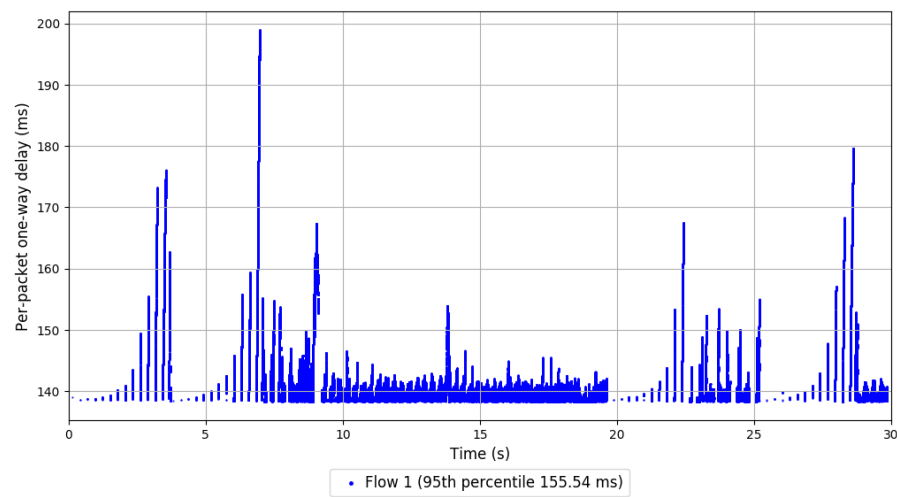
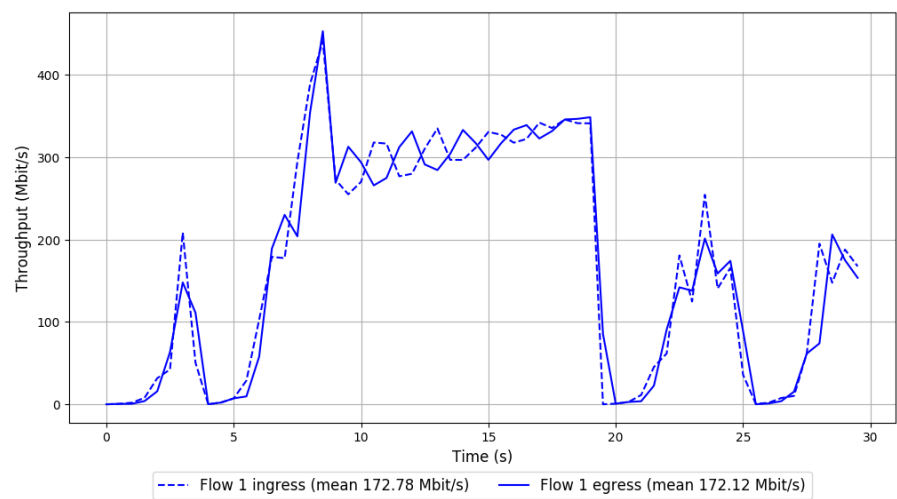
-- Flow 1:

Average throughput: 172.12 Mbit/s

95th percentile per-packet one-way delay: 155.542 ms

Loss rate: 0.87%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-05 16:35:17

End at: 2017-12-05 16:35:47

Below is generated by plot.py at 2017-12-05 20:30:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 155.44 Mbit/s

95th percentile per-packet one-way delay: 206.789 ms

Loss rate: 1.26%

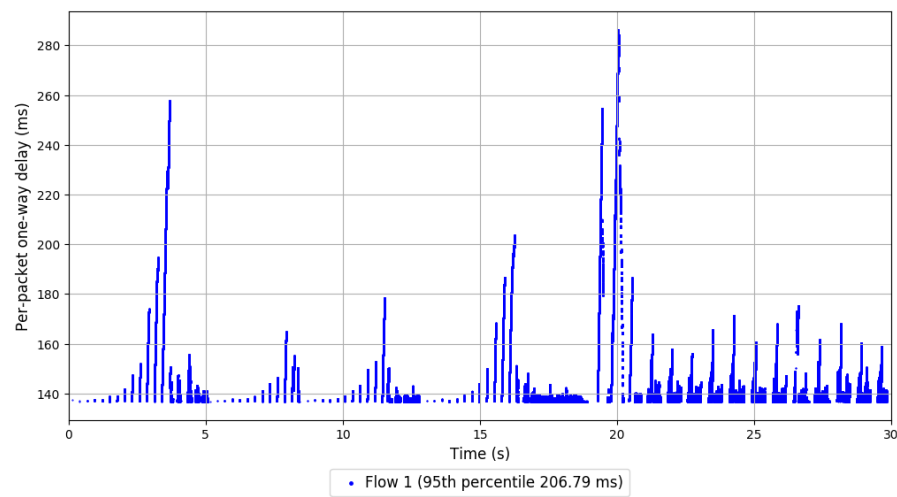
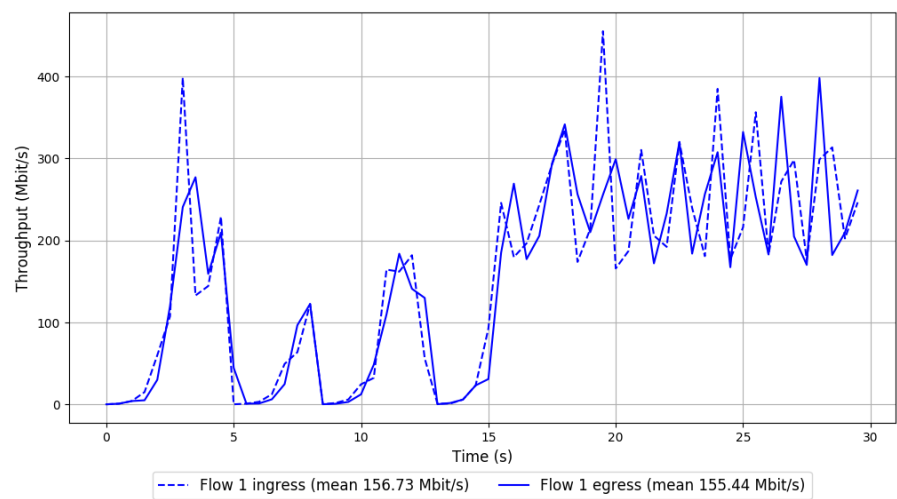
-- Flow 1:

Average throughput: 155.44 Mbit/s

95th percentile per-packet one-way delay: 206.789 ms

Loss rate: 1.26%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 16:46:34

End at: 2017-12-05 16:47:04

Below is generated by plot.py at 2017-12-05 20:30:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.66 Mbit/s

95th percentile per-packet one-way delay: 148.813 ms

Loss rate: 0.03%

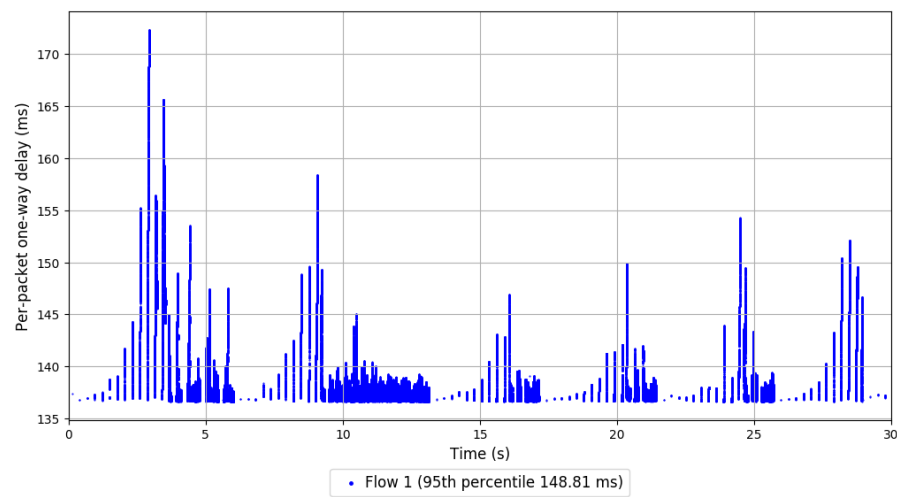
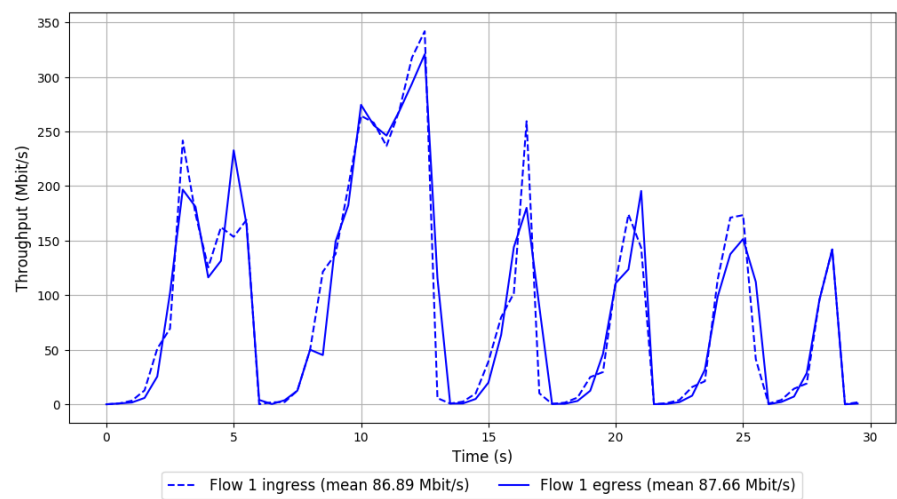
-- Flow 1:

Average throughput: 87.66 Mbit/s

95th percentile per-packet one-way delay: 148.813 ms

Loss rate: 0.03%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-05 16:58:07

End at: 2017-12-05 16:58:37

Below is generated by plot.py at 2017-12-05 20:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.13 Mbit/s

95th percentile per-packet one-way delay: 179.081 ms

Loss rate: 0.00%

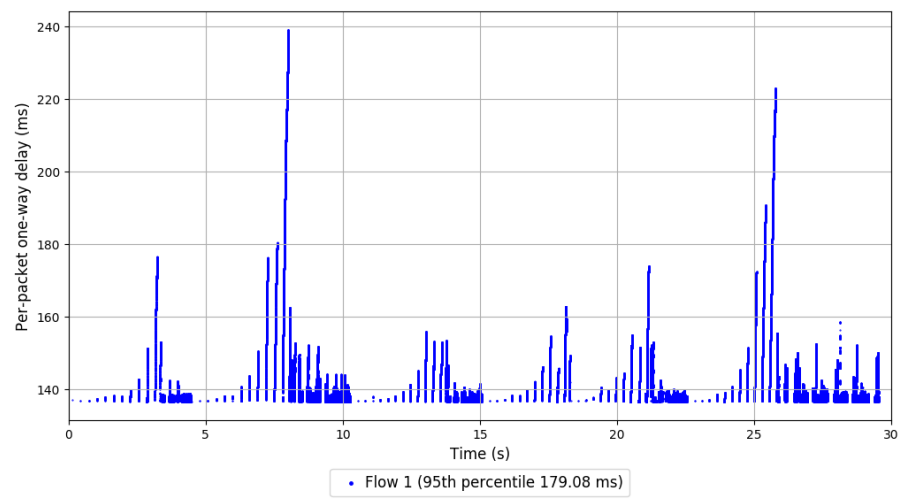
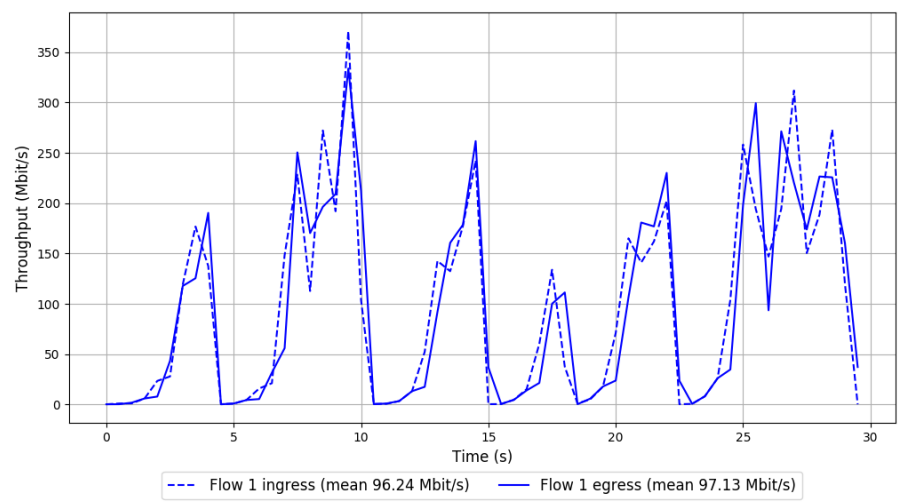
-- Flow 1:

Average throughput: 97.13 Mbit/s

95th percentile per-packet one-way delay: 179.081 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-05 17:09:19

End at: 2017-12-05 17:09:49

Below is generated by plot.py at 2017-12-05 20:30:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.89 Mbit/s

95th percentile per-packet one-way delay: 350.637 ms

Loss rate: 13.60%

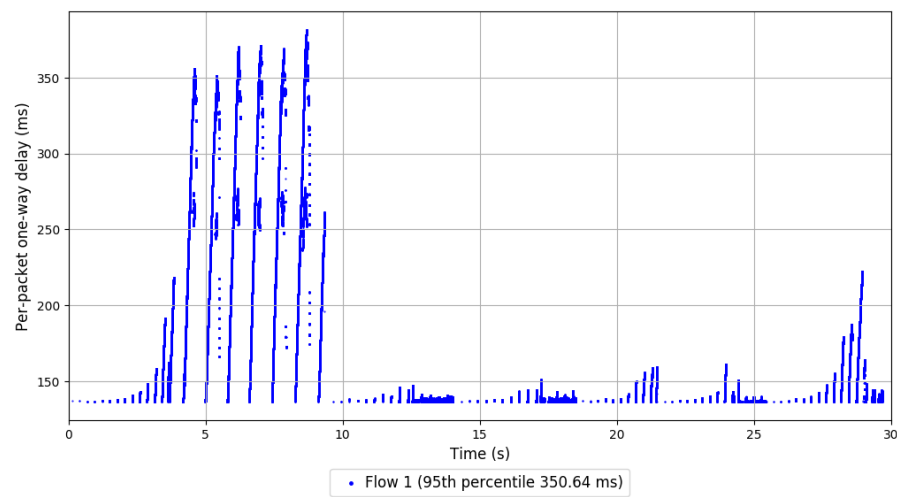
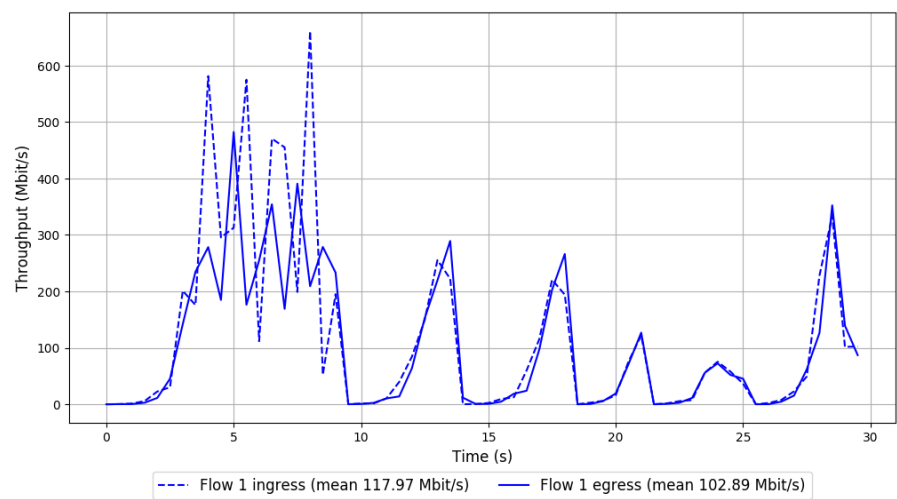
-- Flow 1:

Average throughput: 102.89 Mbit/s

95th percentile per-packet one-way delay: 350.637 ms

Loss rate: 13.60%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-05 17:20:21

End at: 2017-12-05 17:20:51

Below is generated by plot.py at 2017-12-05 20:31:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.99 Mbit/s

95th percentile per-packet one-way delay: 154.817 ms

Loss rate: 1.65%

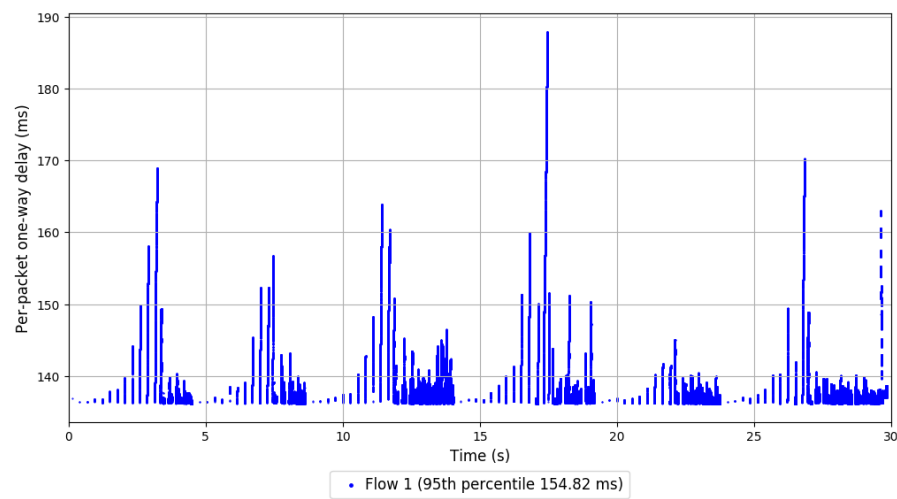
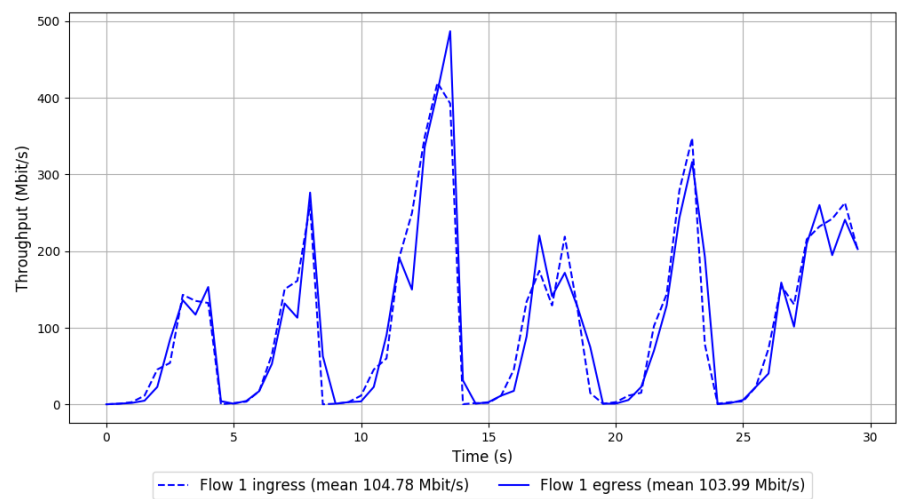
-- Flow 1:

Average throughput: 103.99 Mbit/s

95th percentile per-packet one-way delay: 154.817 ms

Loss rate: 1.65%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-05 17:31:26

End at: 2017-12-05 17:31:56

Below is generated by plot.py at 2017-12-05 20:31:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.22 Mbit/s

95th percentile per-packet one-way delay: 192.207 ms

Loss rate: 2.08%

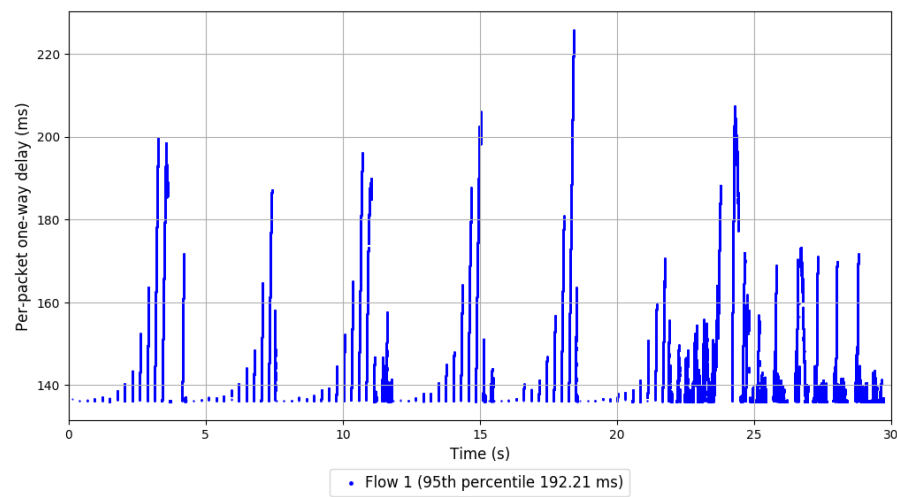
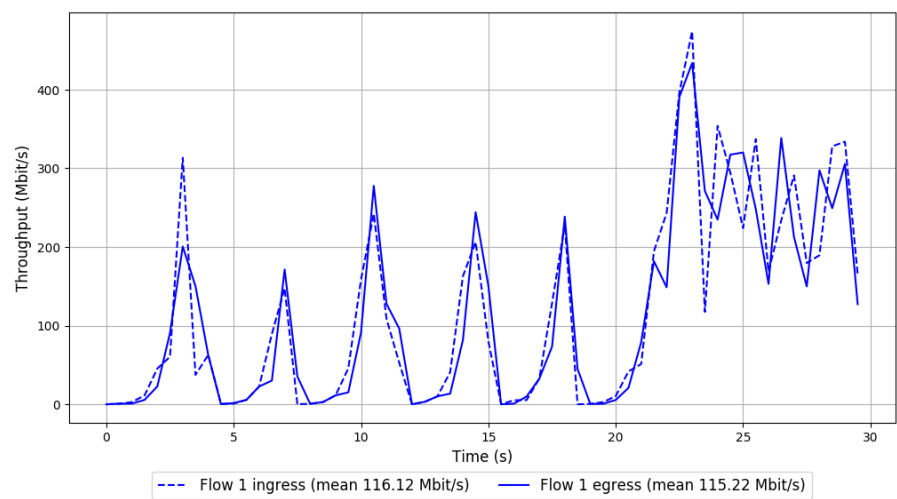
-- Flow 1:

Average throughput: 115.22 Mbit/s

95th percentile per-packet one-way delay: 192.207 ms

Loss rate: 2.08%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-05 17:43:04

End at: 2017-12-05 17:43:34

Below is generated by plot.py at 2017-12-05 20:31:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.56 Mbit/s

95th percentile per-packet one-way delay: 165.947 ms

Loss rate: 0.53%

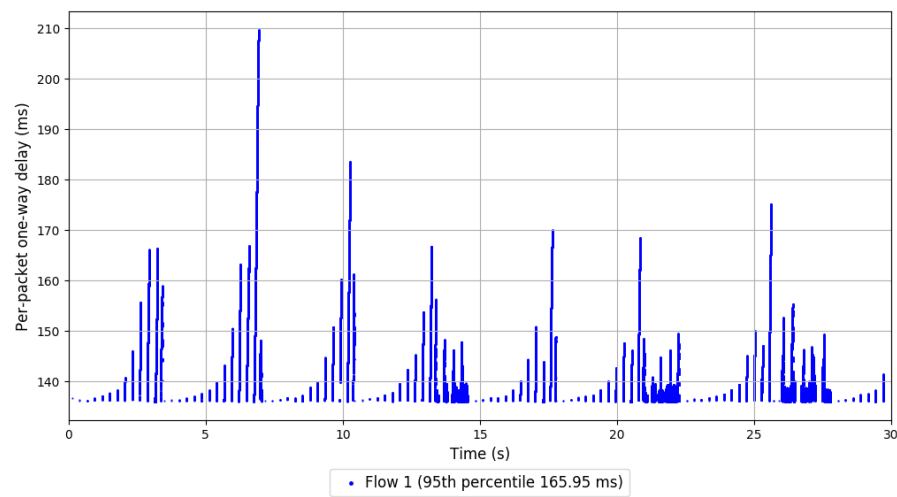
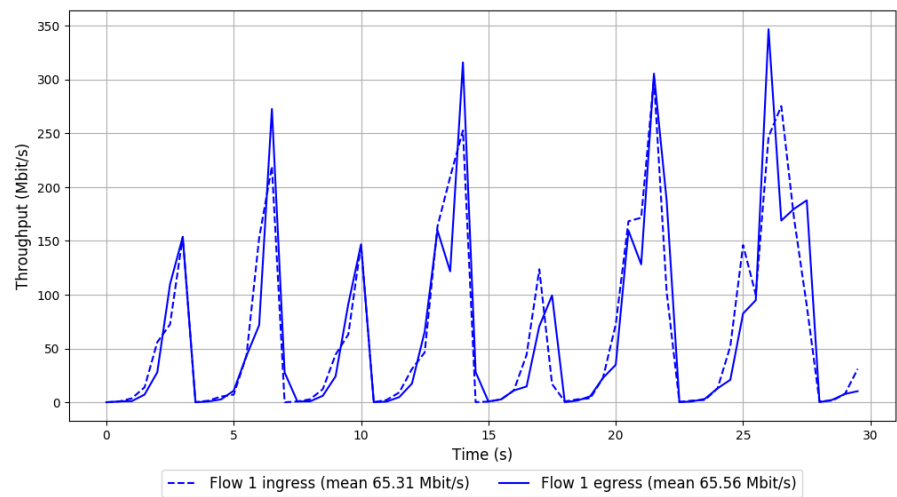
-- Flow 1:

Average throughput: 65.56 Mbit/s

95th percentile per-packet one-way delay: 165.947 ms

Loss rate: 0.53%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-05 17:54:33

End at: 2017-12-05 17:55:03

Below is generated by plot.py at 2017-12-05 20:32:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.76 Mbit/s

95th percentile per-packet one-way delay: 178.127 ms

Loss rate: 1.42%

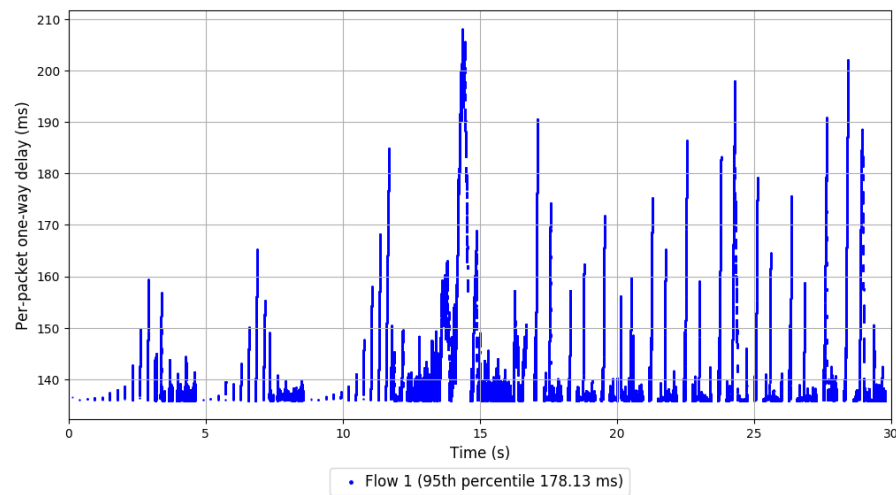
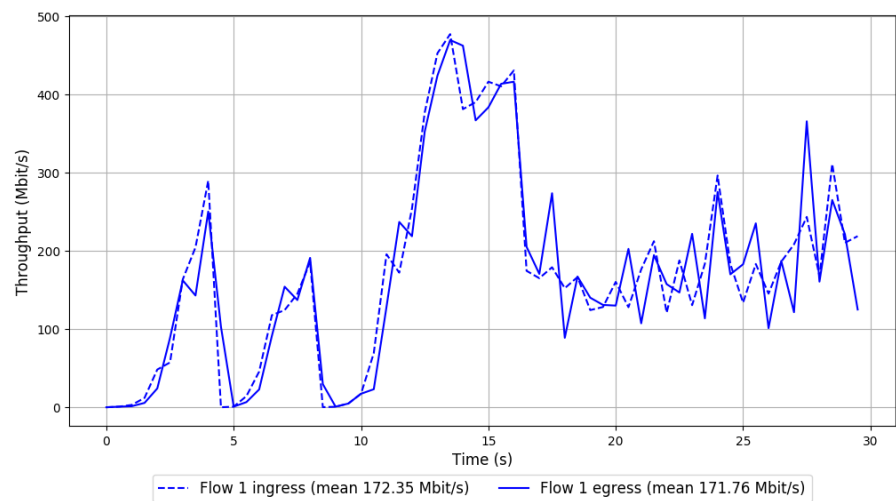
-- Flow 1:

Average throughput: 171.76 Mbit/s

95th percentile per-packet one-way delay: 178.127 ms

Loss rate: 1.42%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-05 18:05:49

End at: 2017-12-05 18:06:19

Below is generated by plot.py at 2017-12-05 20:33:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.25 Mbit/s

95th percentile per-packet one-way delay: 164.885 ms

Loss rate: 1.45%

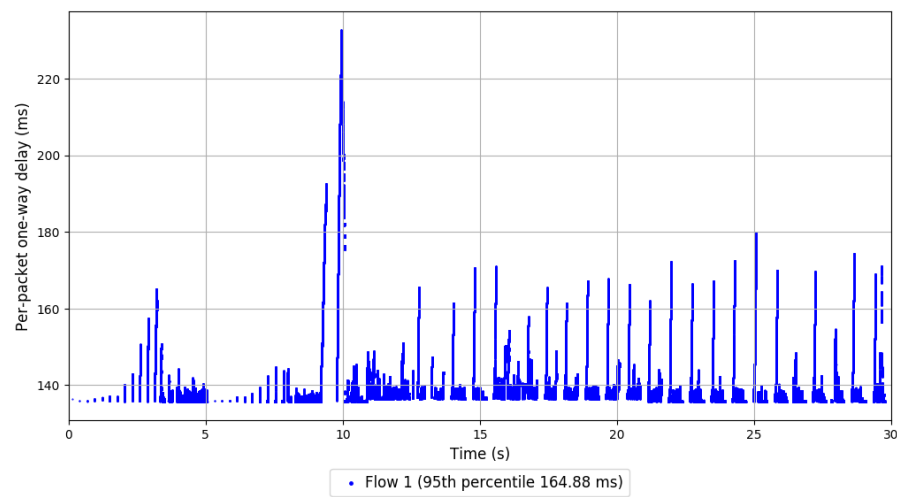
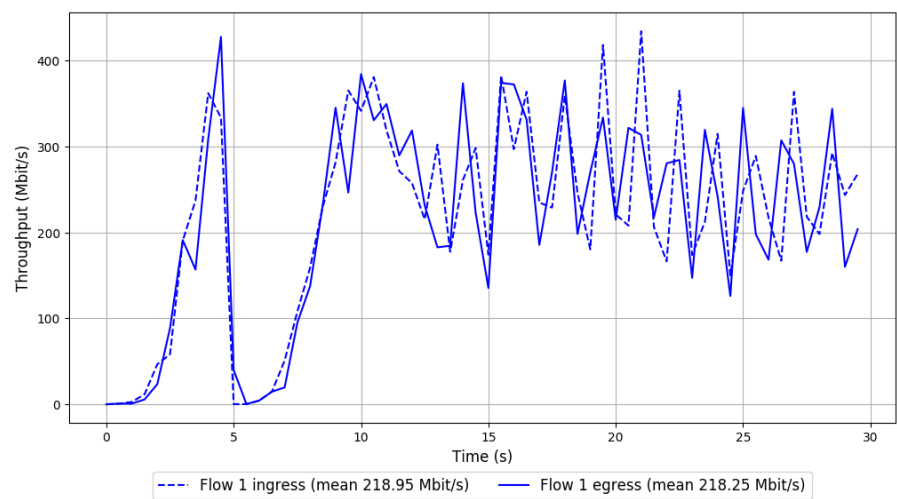
-- Flow 1:

Average throughput: 218.25 Mbit/s

95th percentile per-packet one-way delay: 164.885 ms

Loss rate: 1.45%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-05 16:25:56

End at: 2017-12-05 16:26:26

Run 1: Report of Copa — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of Copa

Start at: 2017-12-05 16:37:07

End at: 2017-12-05 16:37:37

Below is generated by plot.py at 2017-12-05 20:33:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.93 Mbit/s

95th percentile per-packet one-way delay: 137.671 ms

Loss rate: 0.40%

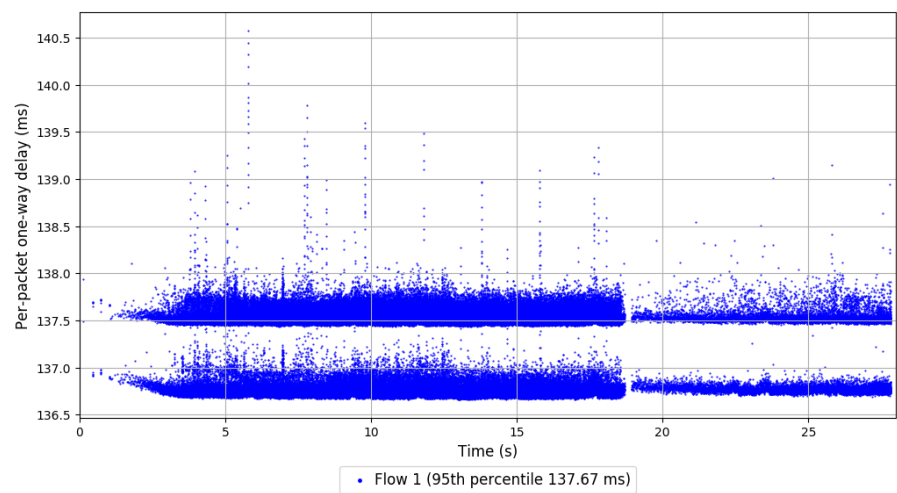
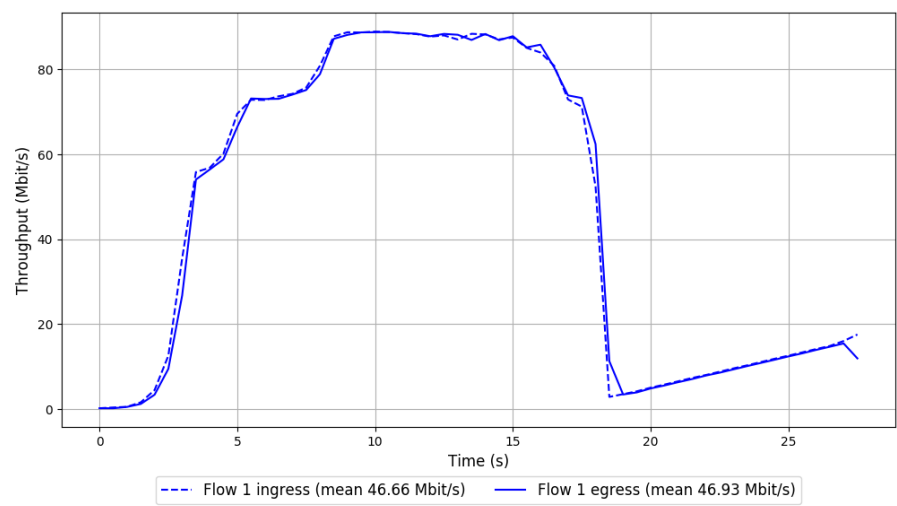
-- Flow 1:

Average throughput: 46.93 Mbit/s

95th percentile per-packet one-way delay: 137.671 ms

Loss rate: 0.40%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-05 16:48:18

End at: 2017-12-05 16:48:48

Below is generated by plot.py at 2017-12-05 20:33:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.14 Mbit/s

95th percentile per-packet one-way delay: 137.341 ms

Loss rate: 1.00%

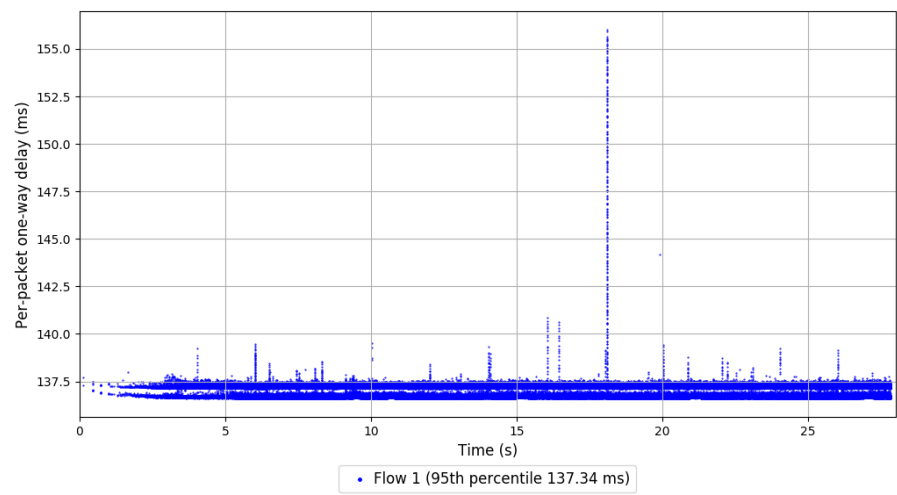
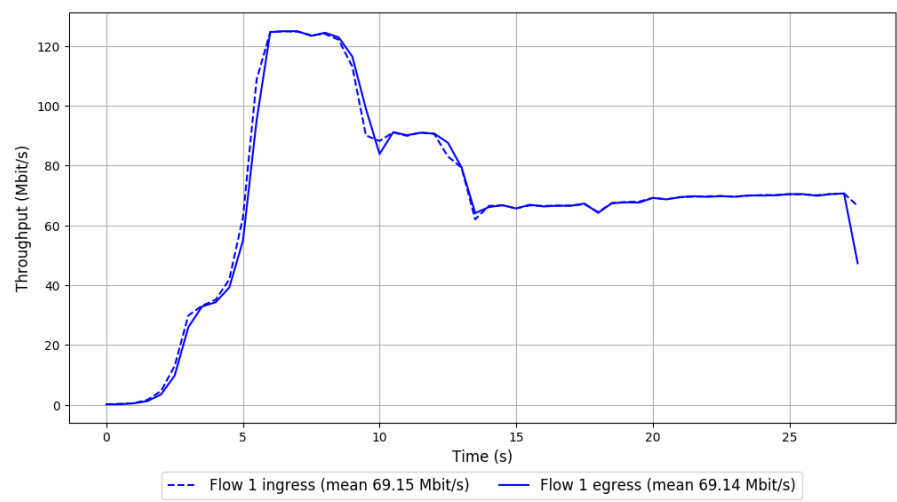
-- Flow 1:

Average throughput: 69.14 Mbit/s

95th percentile per-packet one-way delay: 137.341 ms

Loss rate: 1.00%

Run 3: Report of Copa — Data Link

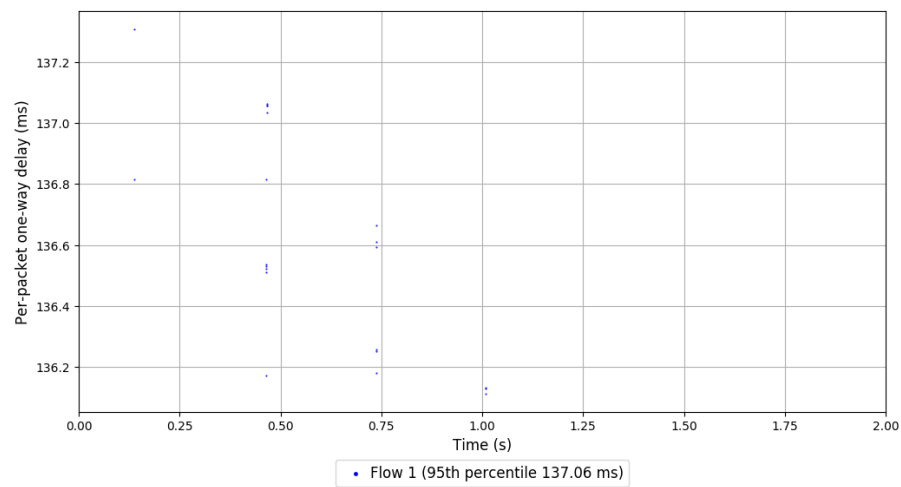
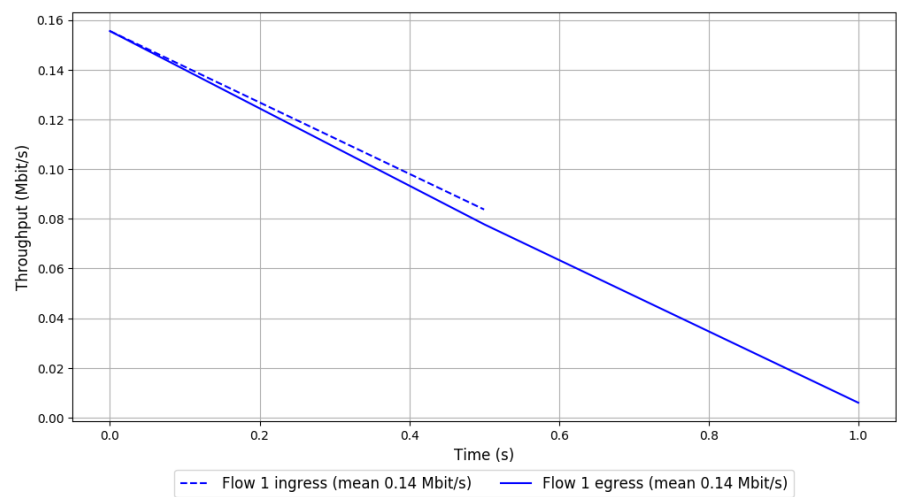


Run 4: Statistics of Copa

Start at: 2017-12-05 16:59:49

End at: 2017-12-05 17:00:19

Run 4: Report of Copa — Data Link

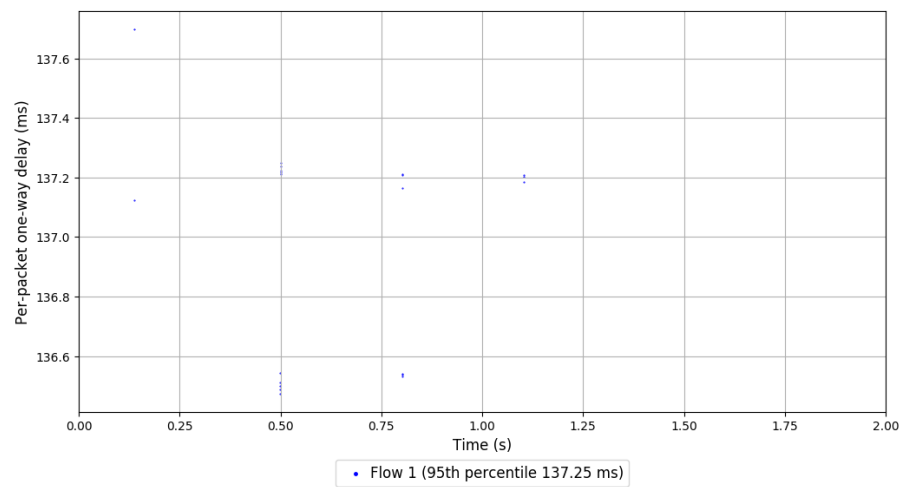
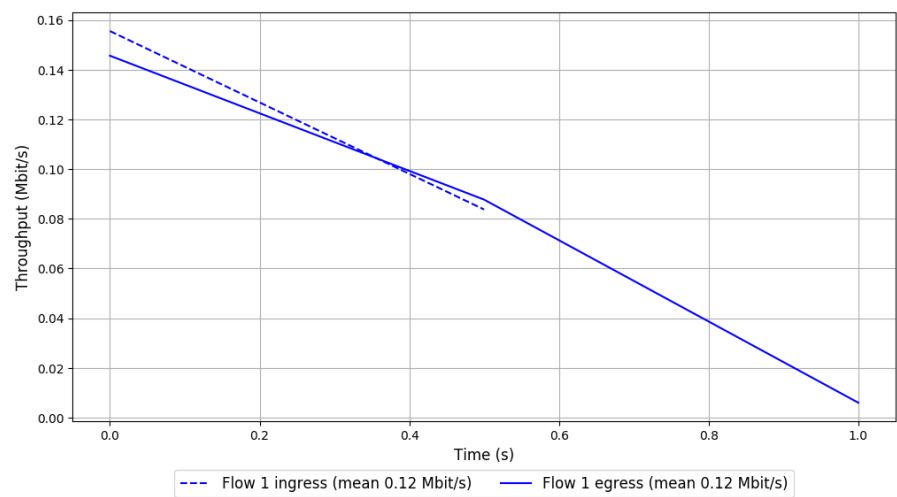


Run 5: Statistics of Copa

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

End at: 2017-12-05 17:11:35

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-05 17:22:02

End at: 2017-12-05 17:22:33

Below is generated by plot.py at 2017-12-05 20:33:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.92 Mbit/s

95th percentile per-packet one-way delay: 136.626 ms

Loss rate: 0.76%

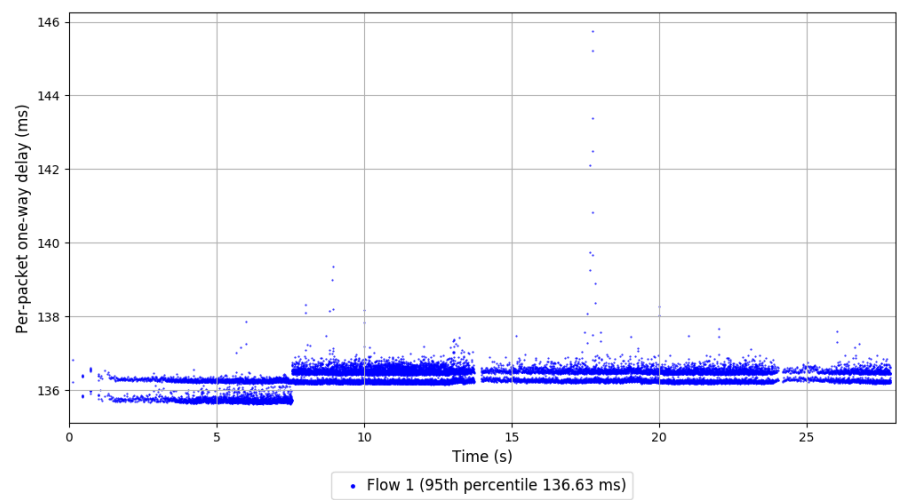
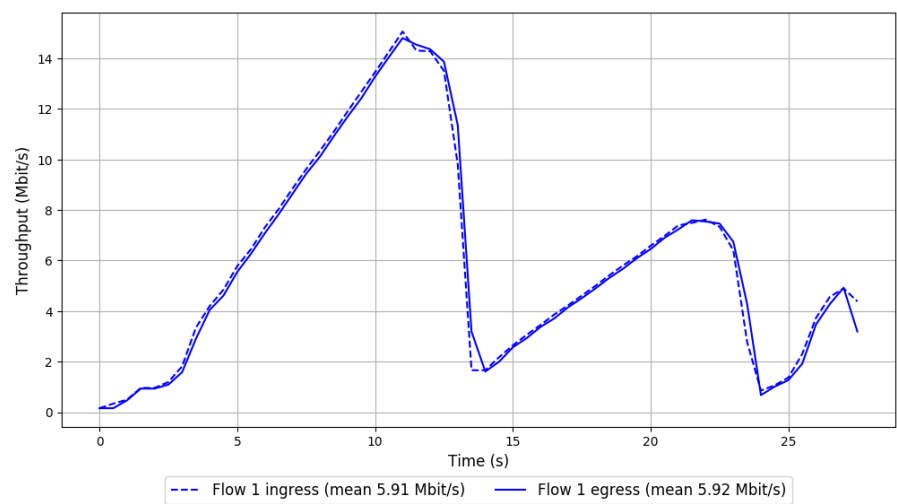
-- Flow 1:

Average throughput: 5.92 Mbit/s

95th percentile per-packet one-way delay: 136.626 ms

Loss rate: 0.76%

Run 6: Report of Copa — Data Link

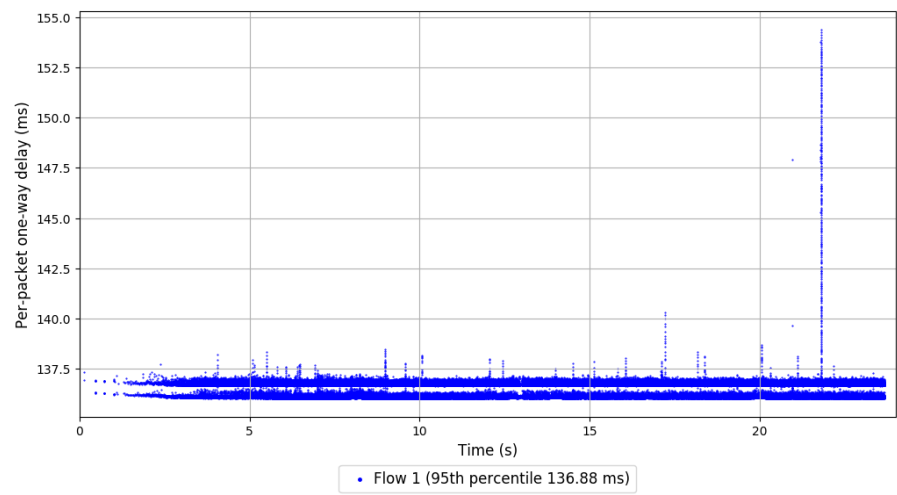
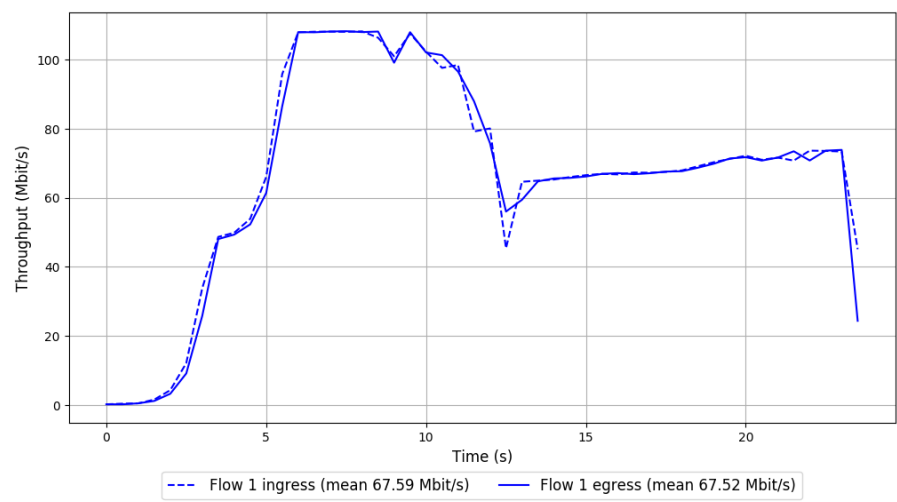


Run 7: Statistics of Copa

Start at: 2017-12-05 17:33:12

End at: 2017-12-05 17:33:42

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-05 17:44:47

End at: 2017-12-05 17:45:17

Below is generated by plot.py at 2017-12-05 20:33:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.40 Mbit/s

95th percentile per-packet one-way delay: 136.538 ms

Loss rate: 0.33%

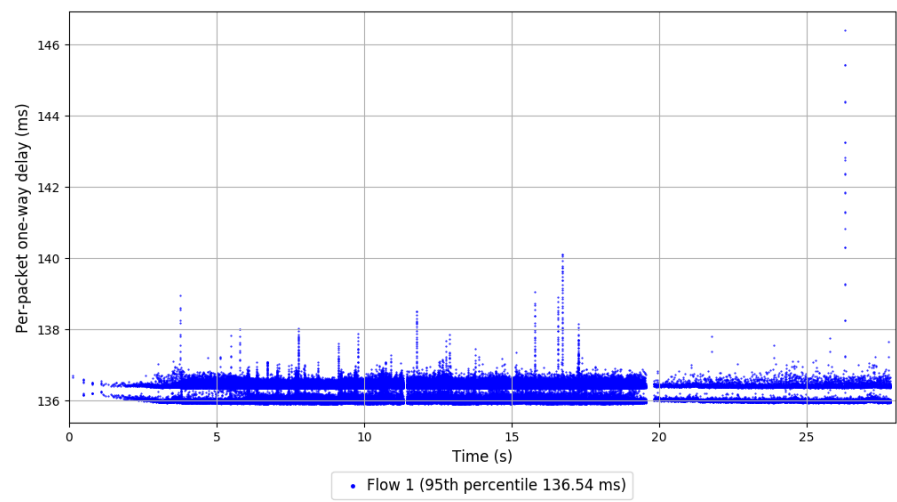
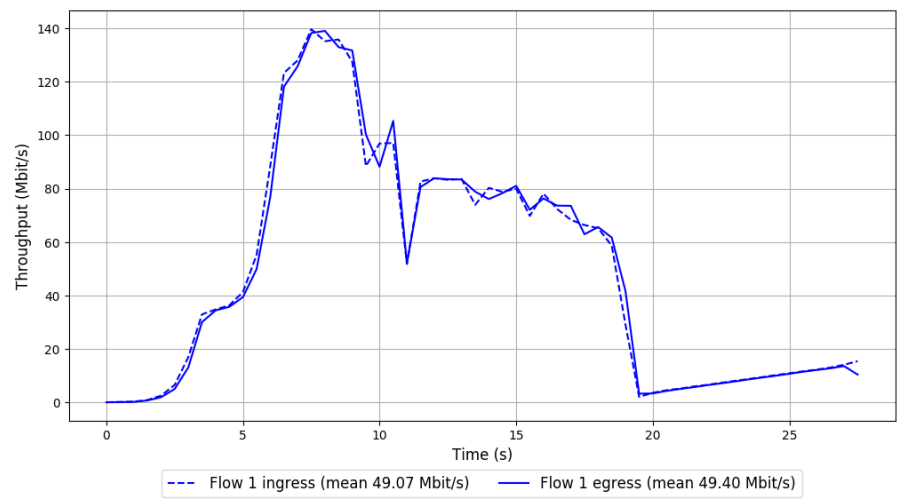
-- Flow 1:

Average throughput: 49.40 Mbit/s

95th percentile per-packet one-way delay: 136.538 ms

Loss rate: 0.33%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-05 17:56:20

End at: 2017-12-05 17:56:50

Below is generated by plot.py at 2017-12-05 20:33:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.30 Mbit/s

95th percentile per-packet one-way delay: 136.517 ms

Loss rate: 0.99%

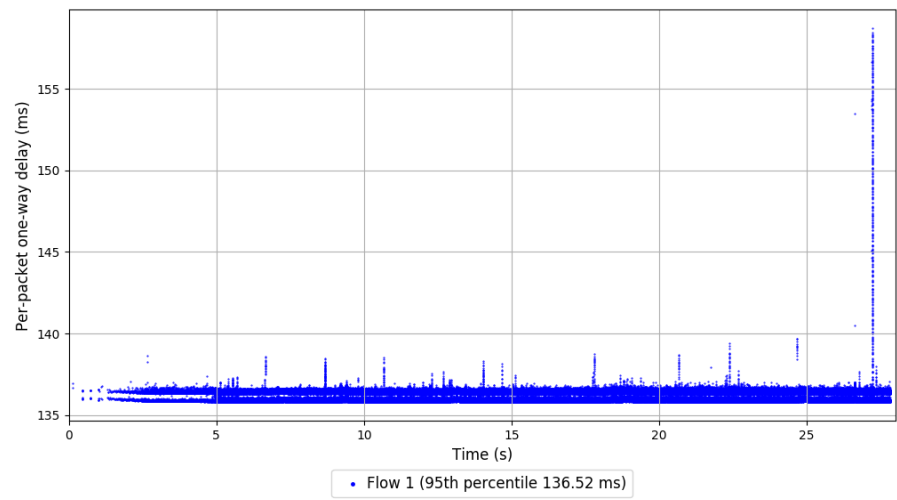
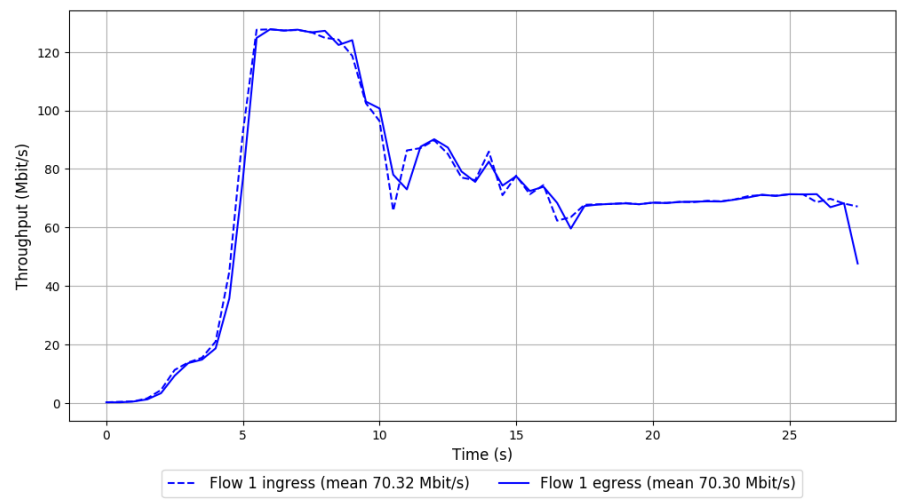
-- Flow 1:

Average throughput: 70.30 Mbit/s

95th percentile per-packet one-way delay: 136.517 ms

Loss rate: 0.99%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-05 18:07:43

End at: 2017-12-05 18:08:13

Below is generated by plot.py at 2017-12-05 20:33:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.24 Mbit/s

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

Loss rate: 0.91%

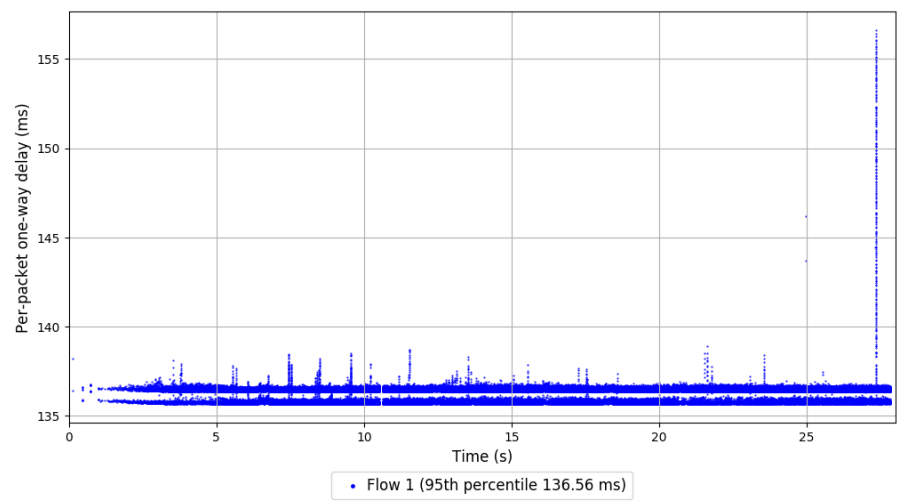
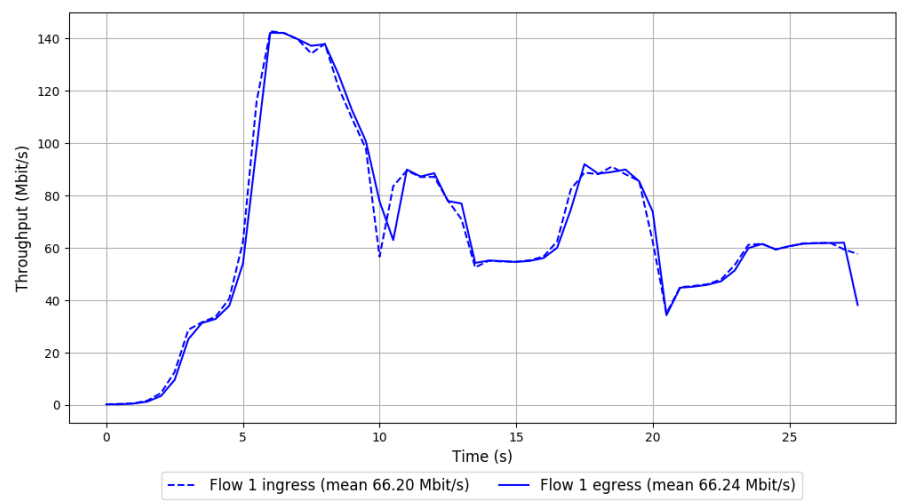
-- Flow 1:

Average throughput: 66.24 Mbit/s

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

Loss rate: 0.91%

Run 10: Report of Copa — Data Link

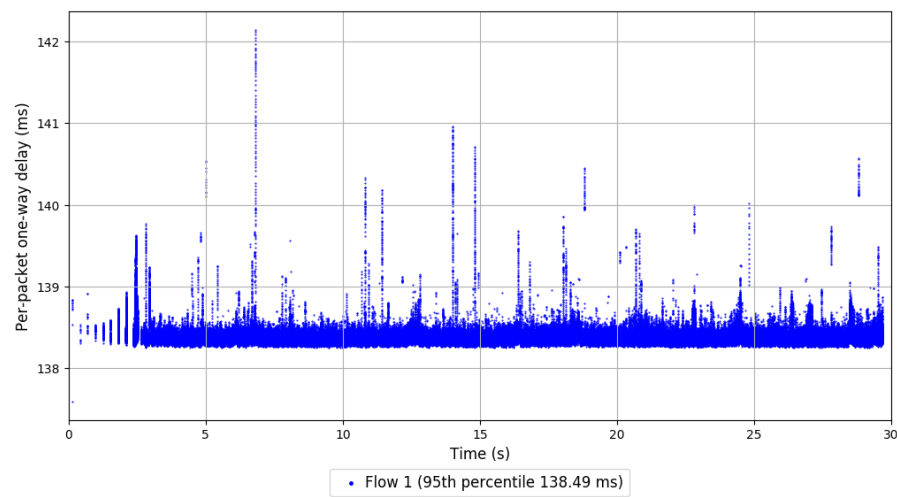
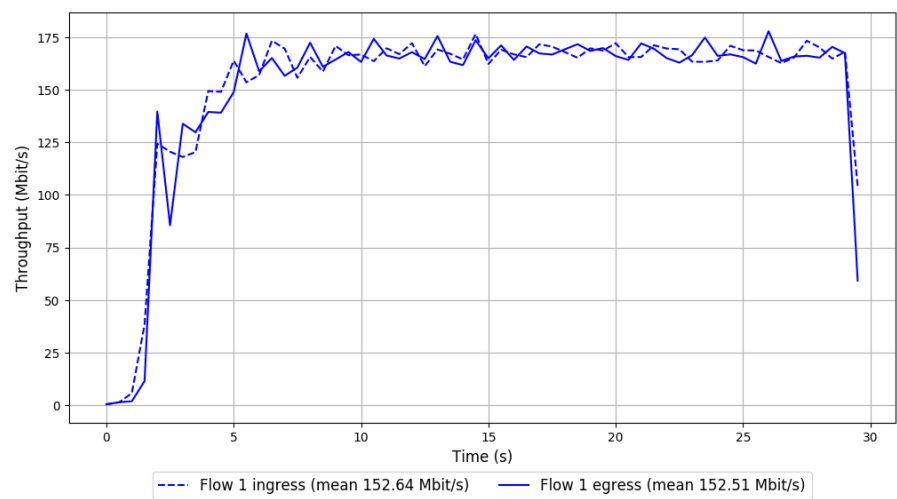


```
Run 1: Statistics of Indigo

Start at: 2017-12-05 16:25:02
End at: 2017-12-05 16:25:32

# Below is generated by plot.py at 2017-12-05 20:34:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.51 Mbit/s
95th percentile per-packet one-way delay: 138.486 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 152.51 Mbit/s
95th percentile per-packet one-way delay: 138.486 ms
Loss rate: 1.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-05 16:36:12

End at: 2017-12-05 16:36:42

Below is generated by plot.py at 2017-12-05 20:35:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.37 Mbit/s

95th percentile per-packet one-way delay: 136.894 ms

Loss rate: 0.97%

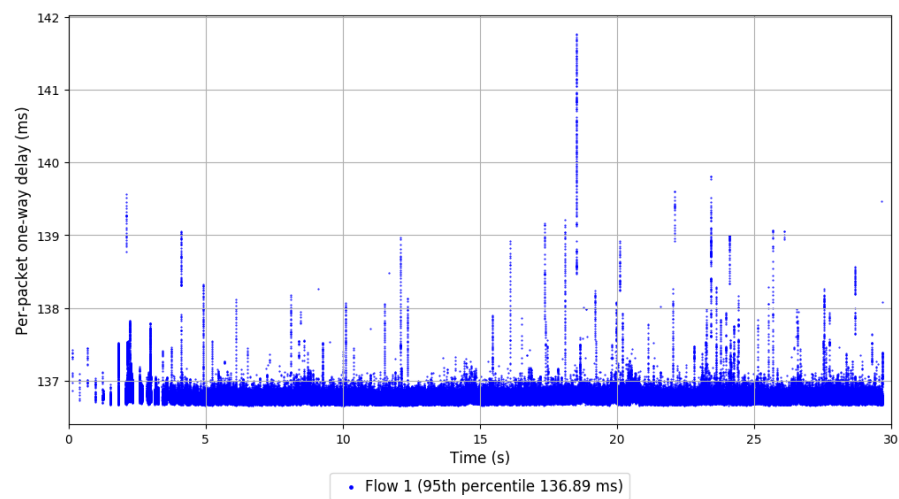
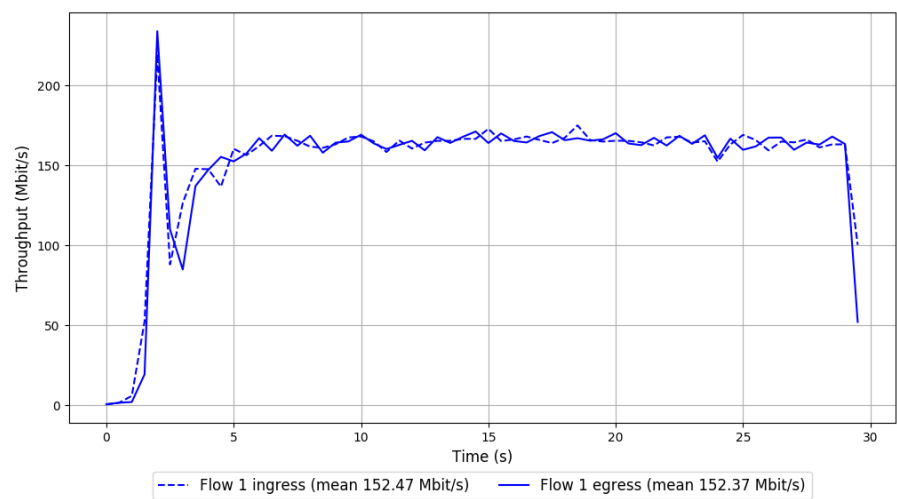
-- Flow 1:

Average throughput: 152.37 Mbit/s

95th percentile per-packet one-way delay: 136.894 ms

Loss rate: 0.97%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-05 16:47:24

End at: 2017-12-05 16:47:54

Below is generated by plot.py at 2017-12-05 20:35:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.55 Mbit/s

95th percentile per-packet one-way delay: 136.865 ms

Loss rate: 0.99%

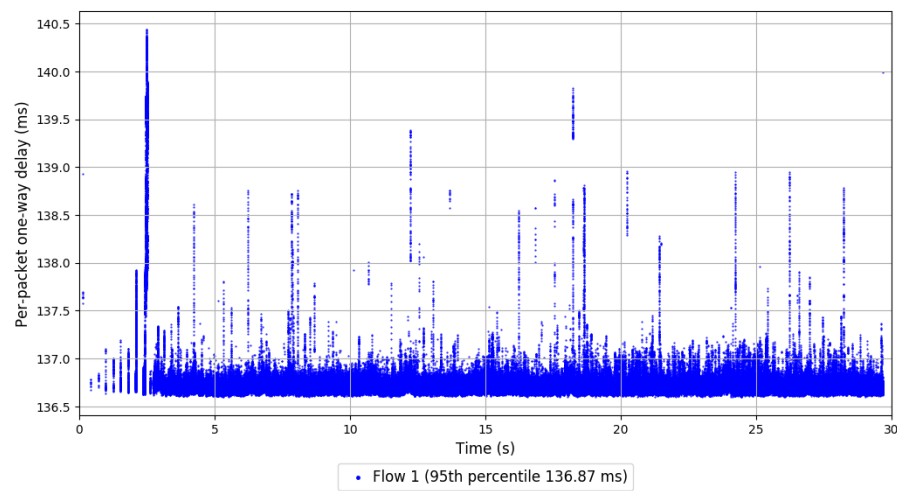
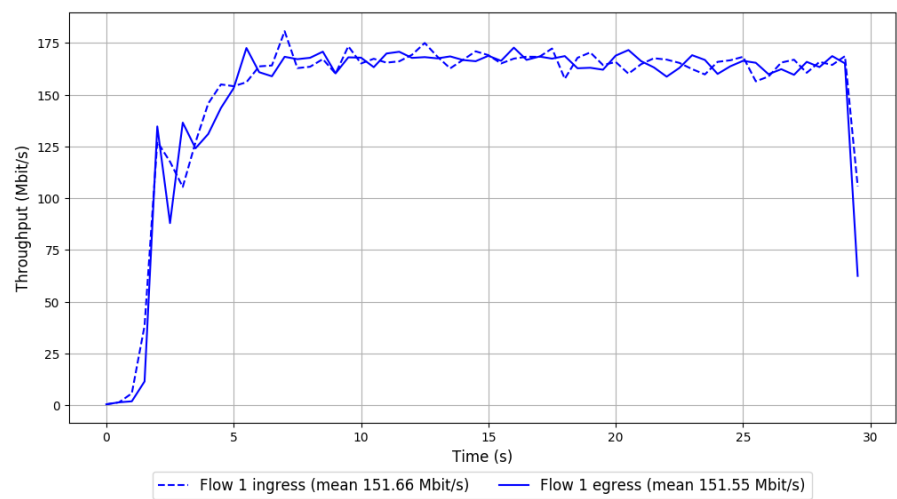
-- Flow 1:

Average throughput: 151.55 Mbit/s

95th percentile per-packet one-way delay: 136.865 ms

Loss rate: 0.99%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-05 16:58:57

End at: 2017-12-05 16:59:27

Below is generated by plot.py at 2017-12-05 20:35:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 114.62 Mbit/s

95th percentile per-packet one-way delay: 136.690 ms

Loss rate: 0.39%

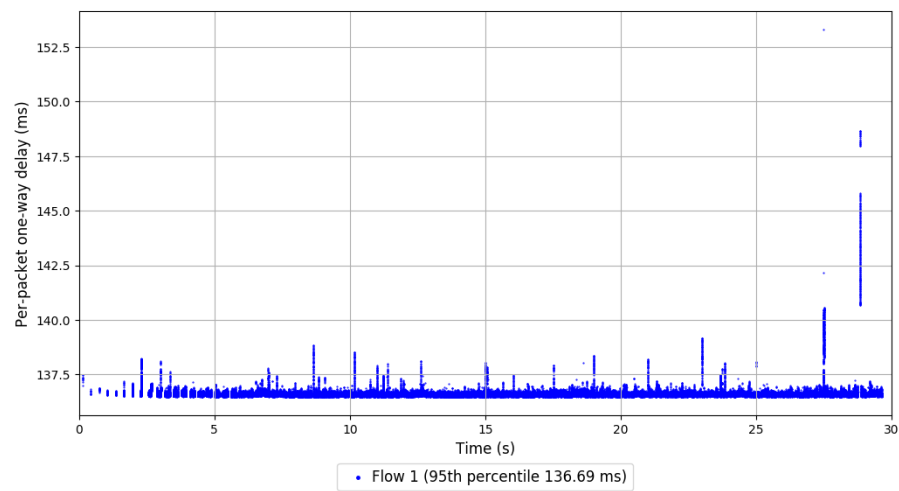
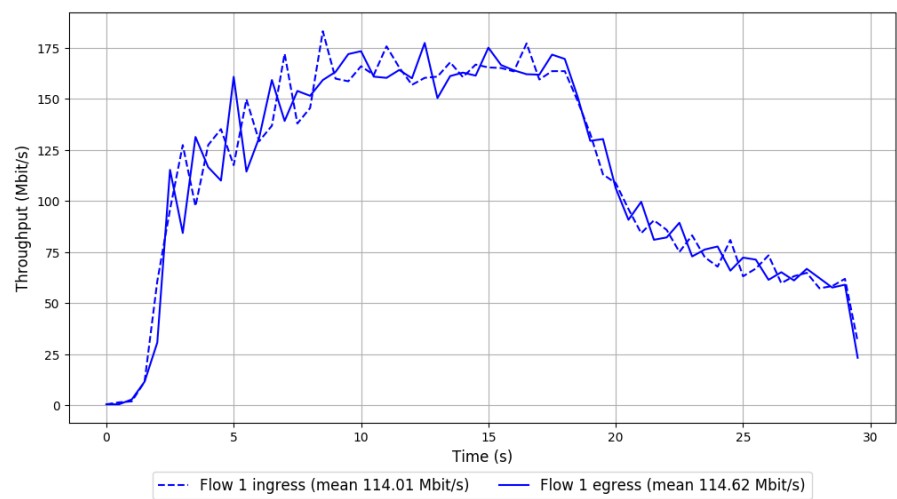
-- Flow 1:

Average throughput: 114.62 Mbit/s

95th percentile per-packet one-way delay: 136.690 ms

Loss rate: 0.39%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-05 17:10:11

End at: 2017-12-05 17:10:41

Below is generated by plot.py at 2017-12-05 20:35:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 149.79 Mbit/s

95th percentile per-packet one-way delay: 136.507 ms

Loss rate: 0.98%

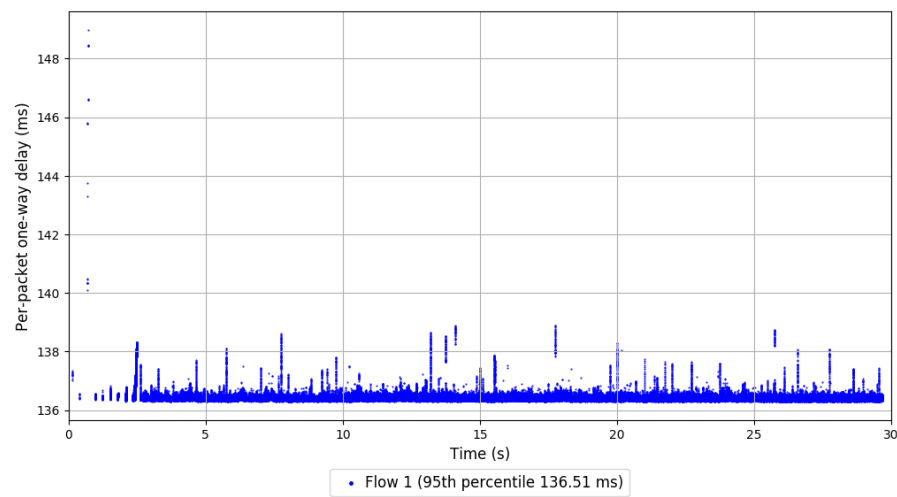
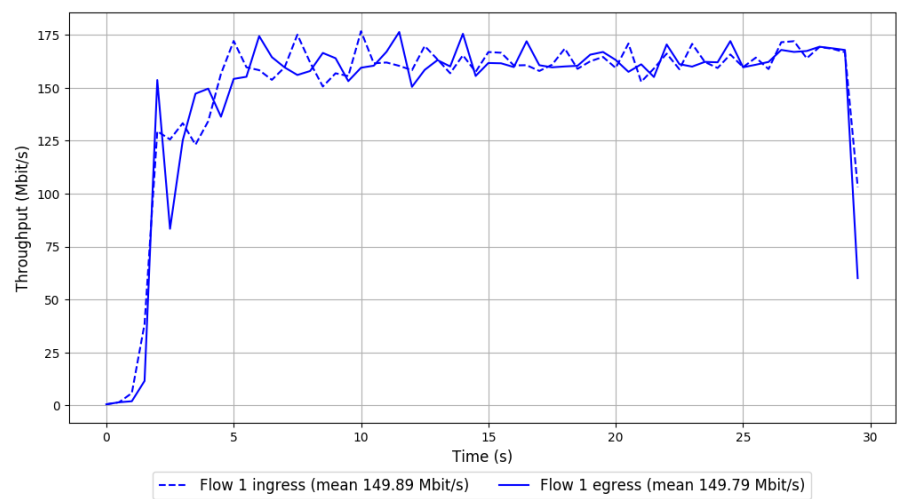
-- Flow 1:

Average throughput: 149.79 Mbit/s

95th percentile per-packet one-way delay: 136.507 ms

Loss rate: 0.98%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-05 17:21:12

End at: 2017-12-05 17:21:42

Below is generated by plot.py at 2017-12-05 20:35:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.47 Mbit/s

95th percentile per-packet one-way delay: 136.368 ms

Loss rate: 0.33%

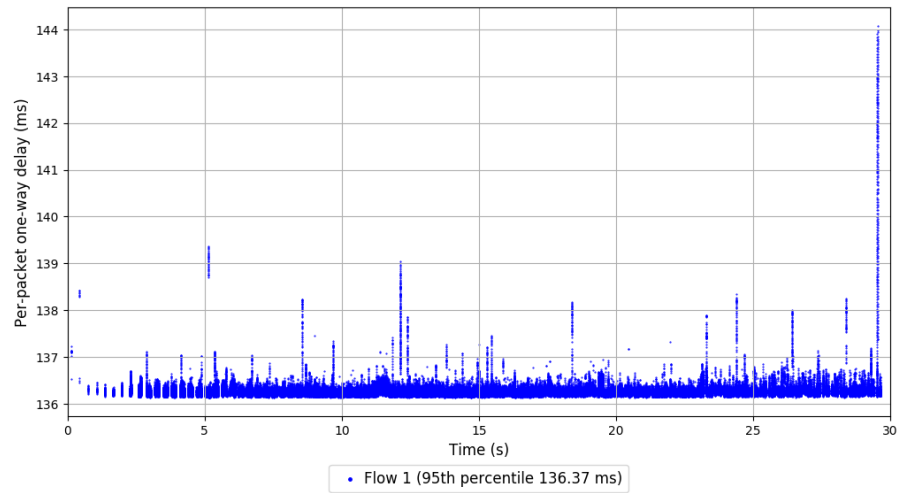
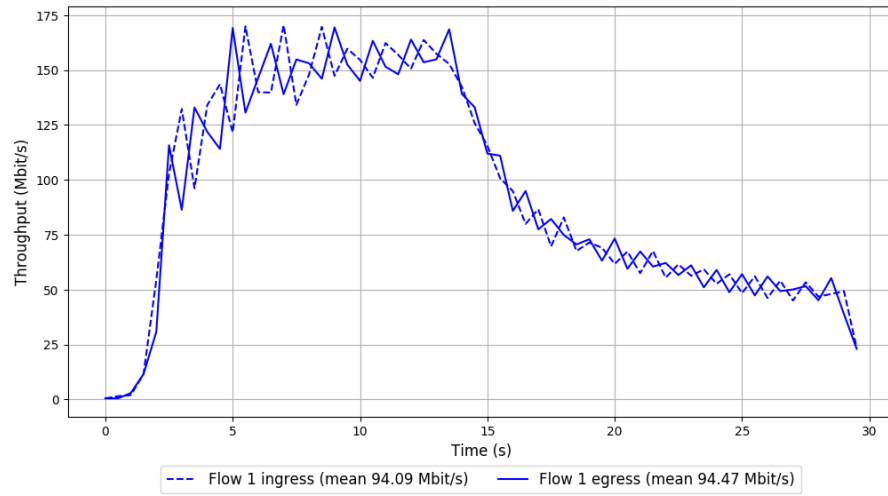
-- Flow 1:

Average throughput: 94.47 Mbit/s

95th percentile per-packet one-way delay: 136.368 ms

Loss rate: 0.33%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-05 17:32:17

End at: 2017-12-05 17:32:47

Below is generated by plot.py at 2017-12-05 20:36:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.69 Mbit/s

95th percentile per-packet one-way delay: 136.203 ms

Loss rate: 1.00%

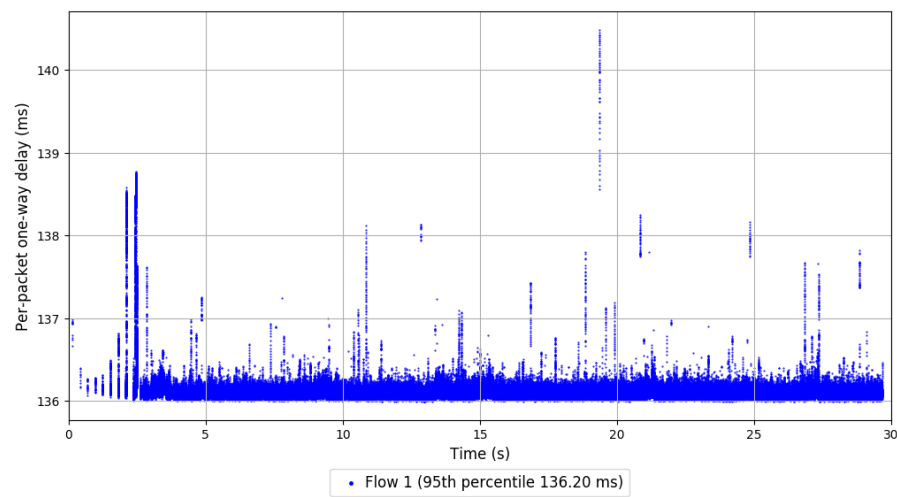
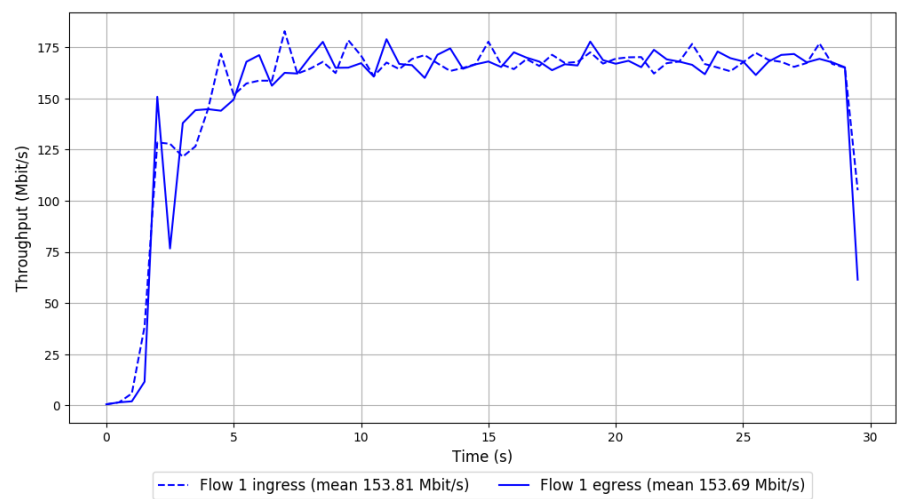
-- Flow 1:

Average throughput: 153.69 Mbit/s

95th percentile per-packet one-way delay: 136.203 ms

Loss rate: 1.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-05 17:43:52

End at: 2017-12-05 17:44:22

Below is generated by plot.py at 2017-12-05 20:36:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.04 Mbit/s

95th percentile per-packet one-way delay: 136.111 ms

Loss rate: 1.01%

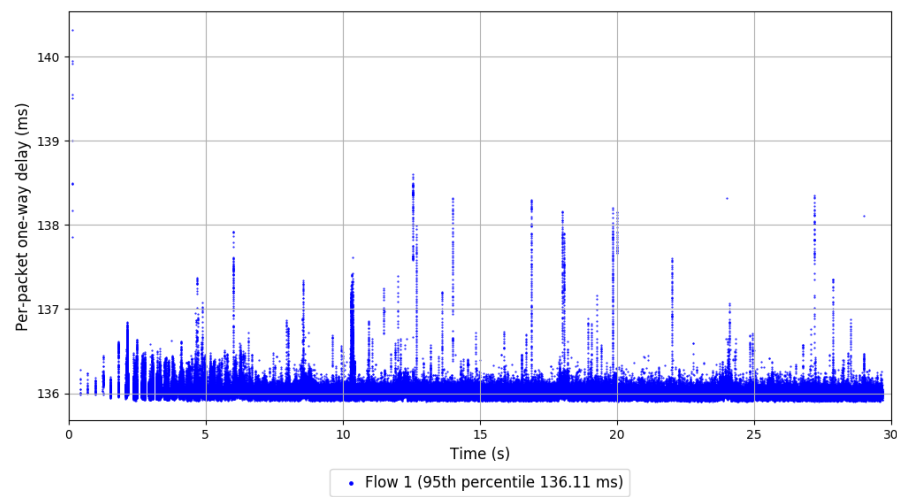
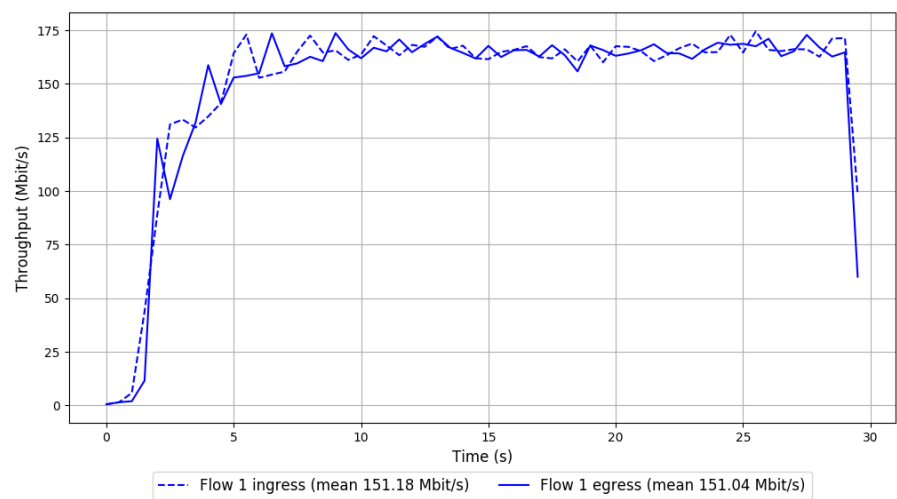
-- Flow 1:

Average throughput: 151.04 Mbit/s

95th percentile per-packet one-way delay: 136.111 ms

Loss rate: 1.01%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-05 17:55:30

End at: 2017-12-05 17:56:00

Below is generated by plot.py at 2017-12-05 20:36:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.38 Mbit/s

95th percentile per-packet one-way delay: 136.036 ms

Loss rate: 1.12%

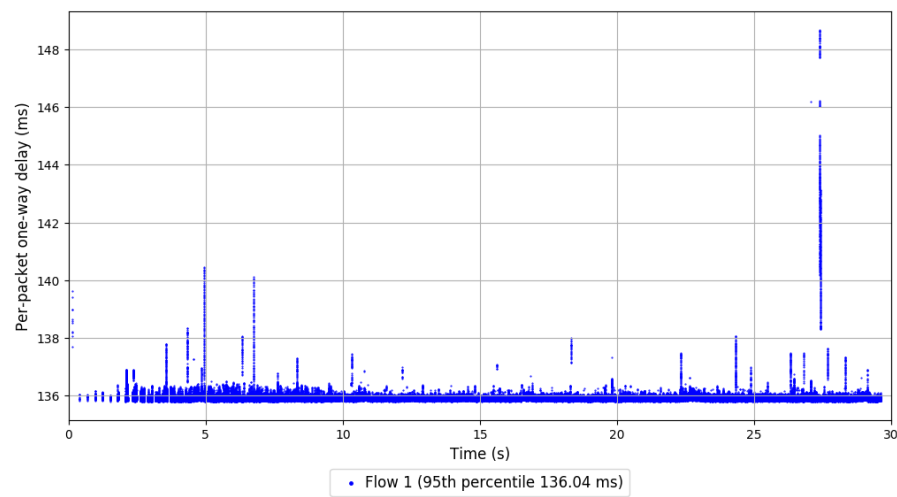
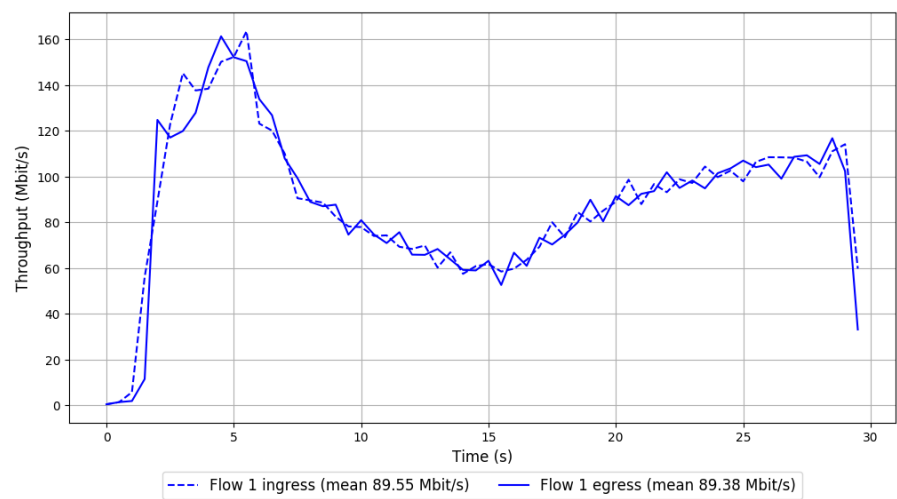
-- Flow 1:

Average throughput: 89.38 Mbit/s

95th percentile per-packet one-way delay: 136.036 ms

Loss rate: 1.12%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-05 18:06:49

End at: 2017-12-05 18:07:19

Below is generated by plot.py at 2017-12-05 20:37:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.01 Mbit/s

95th percentile per-packet one-way delay: 135.900 ms

Loss rate: 1.03%

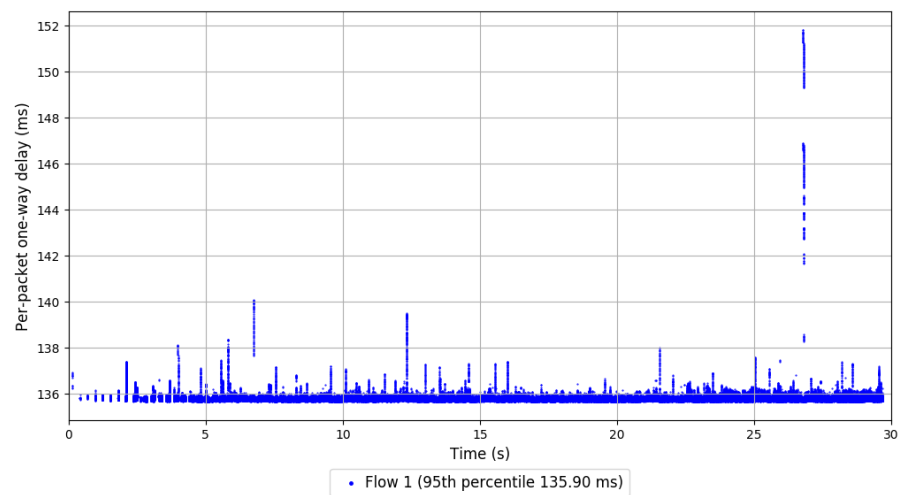
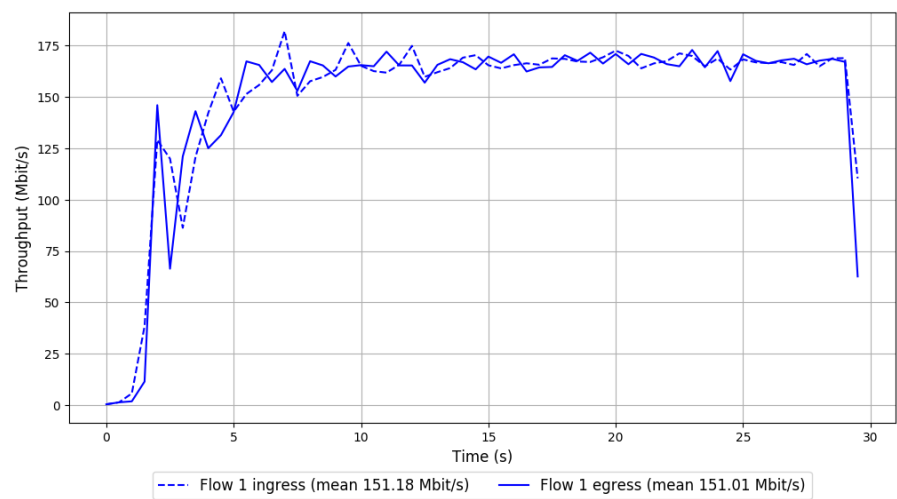
-- Flow 1:

Average throughput: 151.01 Mbit/s

95th percentile per-packet one-way delay: 135.900 ms

Loss rate: 1.03%

Run 10: Report of Indigo — Data Link

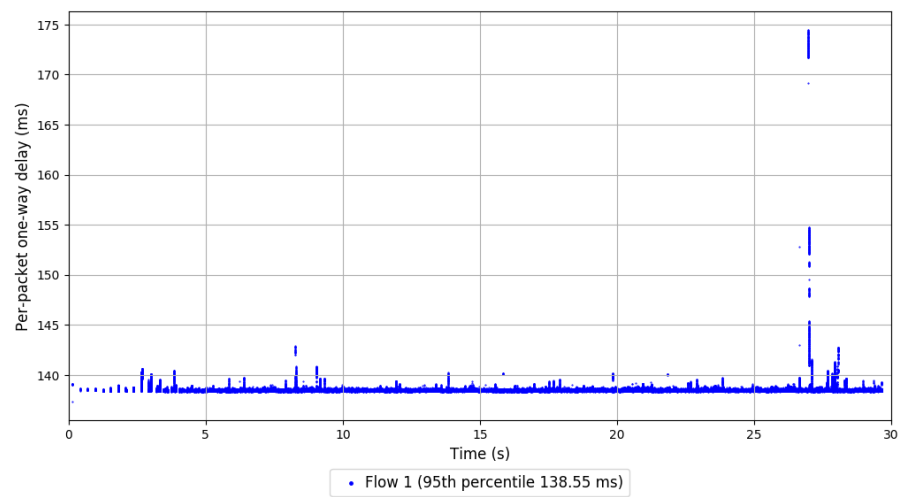
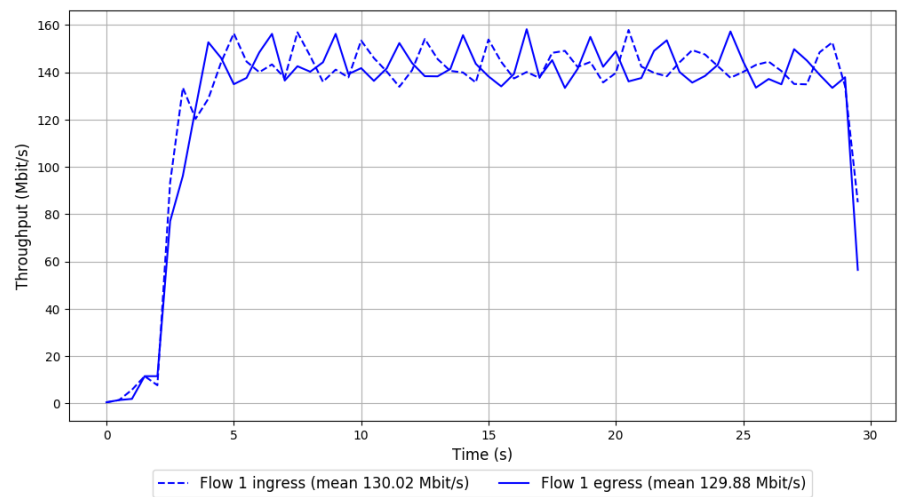


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 16:19:10
End at: 2017-12-05 16:19:40

# Below is generated by plot.py at 2017-12-05 20:37:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 129.88 Mbit/s
95th percentile per-packet one-way delay: 138.554 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 129.88 Mbit/s
95th percentile per-packet one-way delay: 138.554 ms
Loss rate: 1.03%
```

Run 1: Report of Indigo-calib — Data Link

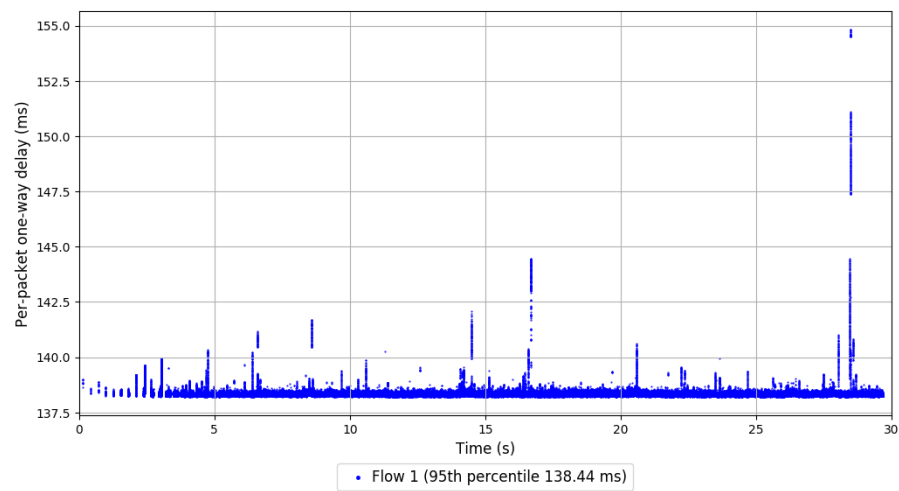
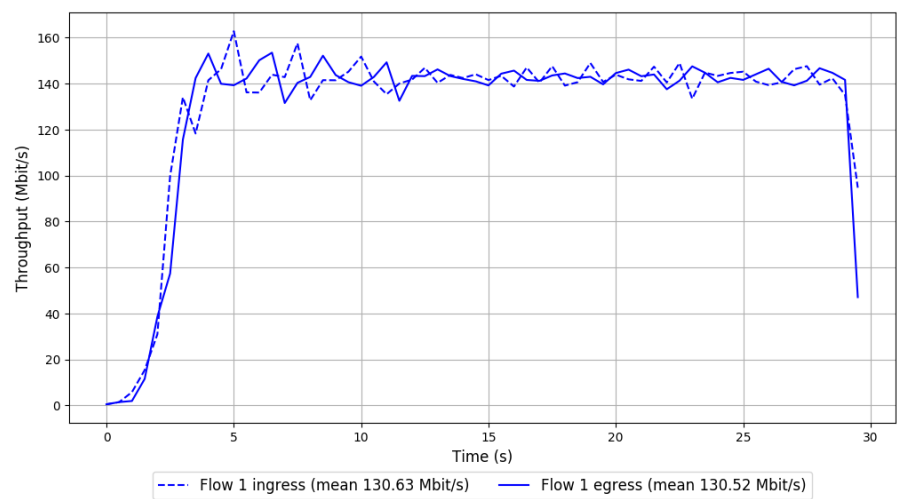


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 16:30:22
End at: 2017-12-05 16:30:52

# Below is generated by plot.py at 2017-12-05 20:37:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 130.52 Mbit/s
95th percentile per-packet one-way delay: 138.437 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 130.52 Mbit/s
95th percentile per-packet one-way delay: 138.437 ms
Loss rate: 1.01%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 16:41:37

End at: 2017-12-05 16:42:07

Below is generated by plot.py at 2017-12-05 20:37:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.45 Mbit/s

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

Loss rate: 0.97%

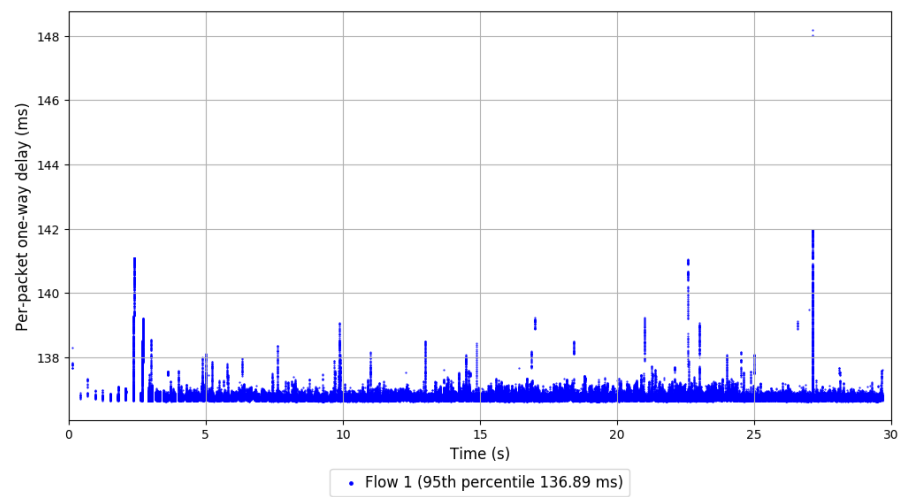
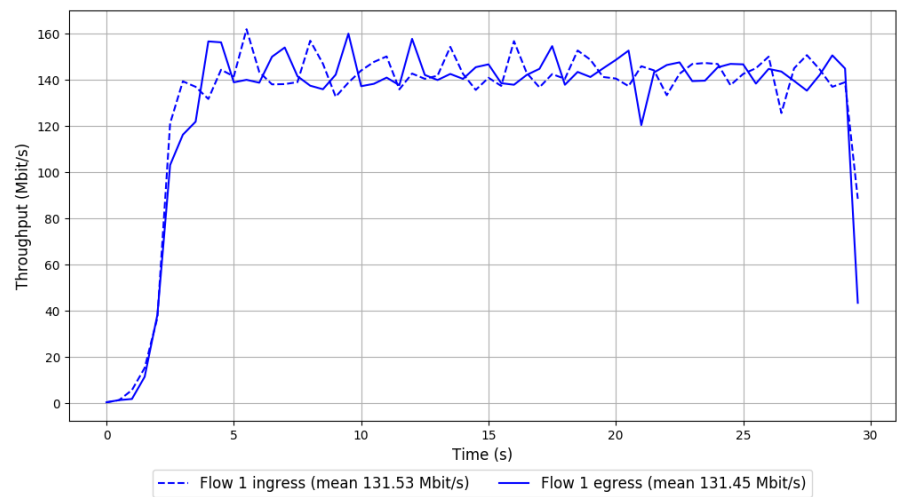
-- Flow 1:

Average throughput: 131.45 Mbit/s

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

Loss rate: 0.97%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-05 16:52:51

End at: 2017-12-05 16:53:21

Below is generated by plot.py at 2017-12-05 20:37:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 129.22 Mbit/s

95th percentile per-packet one-way delay: 136.792 ms

Loss rate: 0.97%

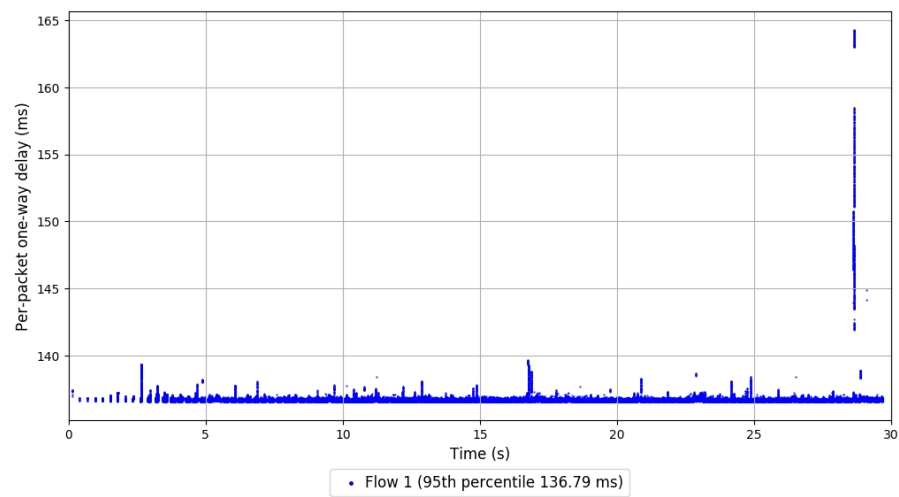
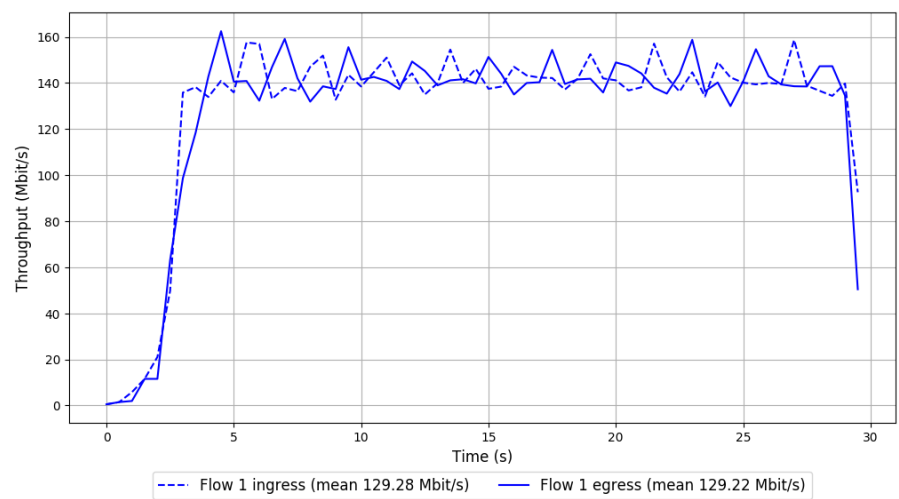
-- Flow 1:

Average throughput: 129.22 Mbit/s

95th percentile per-packet one-way delay: 136.792 ms

Loss rate: 0.97%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-05 17:04:15

End at: 2017-12-05 17:04:45

Below is generated by plot.py at 2017-12-05 20:37:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 136.887 ms

Loss rate: 1.76%

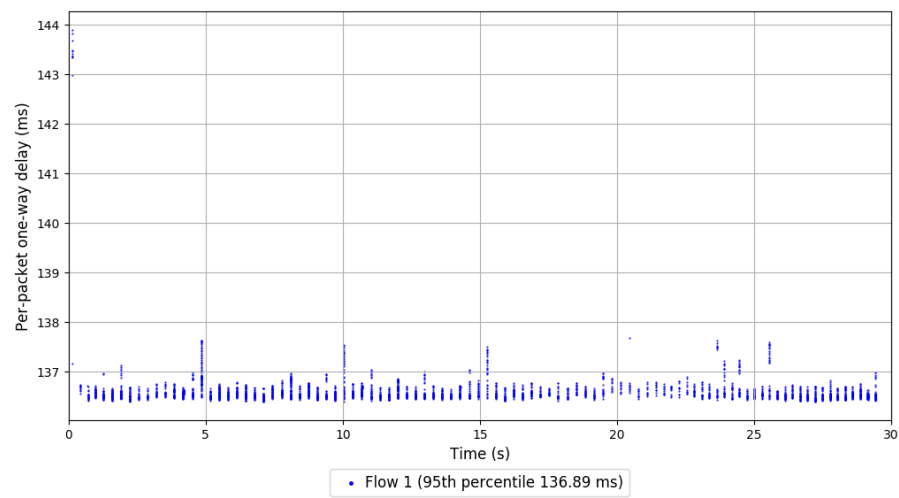
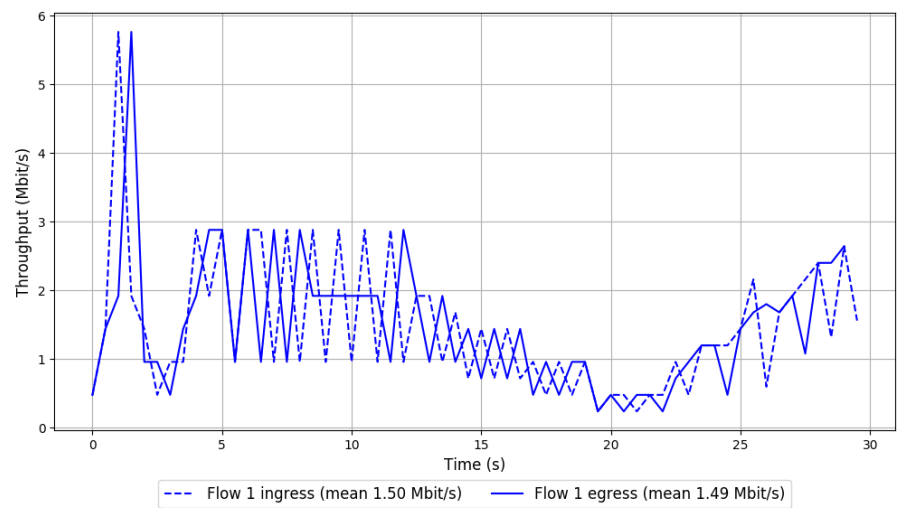
-- Flow 1:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 136.887 ms

Loss rate: 1.76%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-05 17:15:31

End at: 2017-12-05 17:16:01

Below is generated by plot.py at 2017-12-05 20:37:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.19 Mbit/s

95th percentile per-packet one-way delay: 136.459 ms

Loss rate: 0.98%

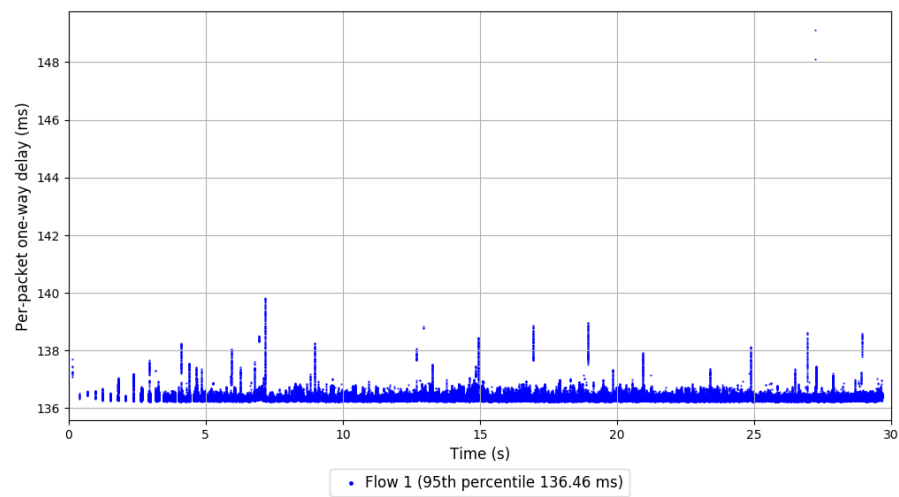
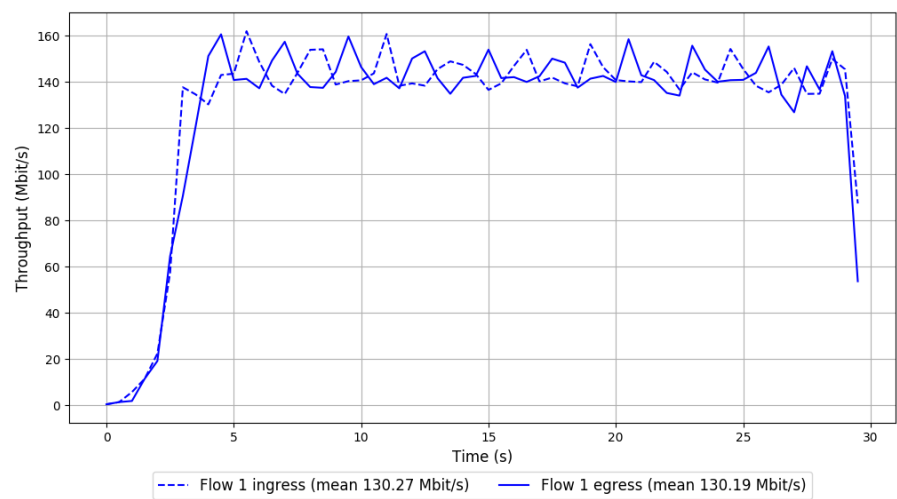
-- Flow 1:

Average throughput: 130.19 Mbit/s

95th percentile per-packet one-way delay: 136.459 ms

Loss rate: 0.98%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-05 17:26:30

End at: 2017-12-05 17:27:00

Below is generated by plot.py at 2017-12-05 20:38:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.54 Mbit/s

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

Loss rate: 0.84%

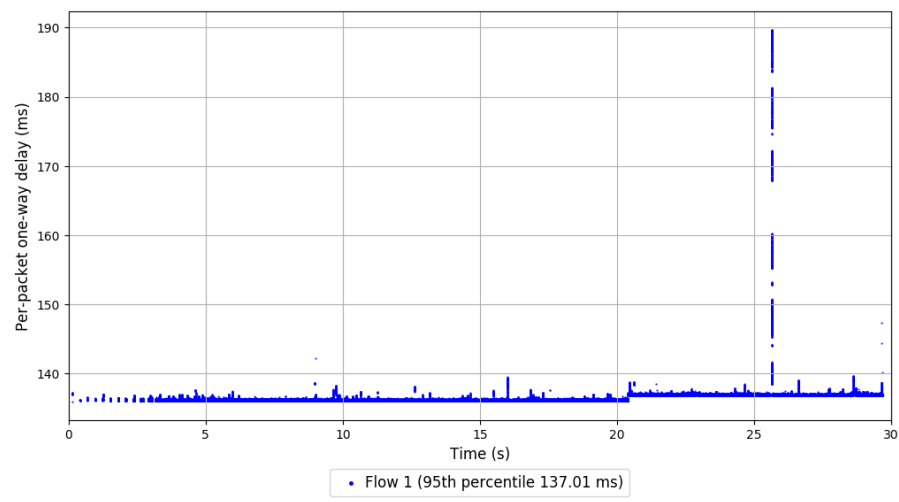
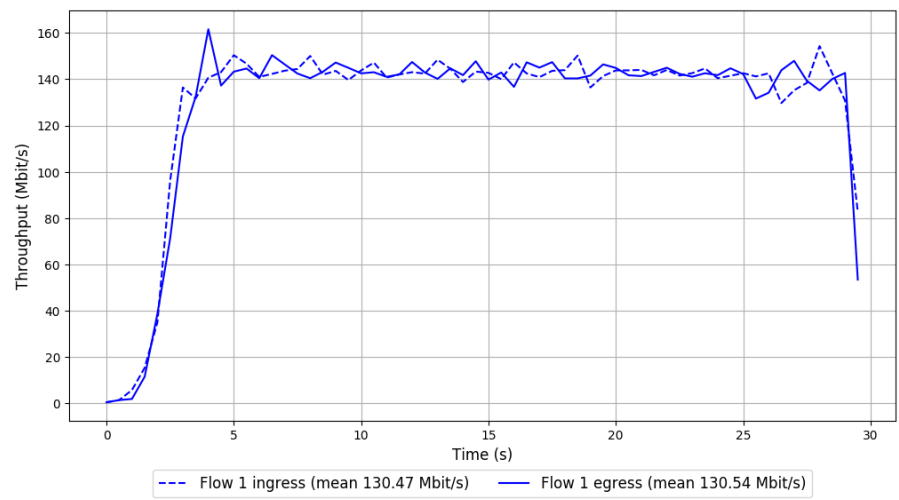
-- Flow 1:

Average throughput: 130.54 Mbit/s

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

Loss rate: 0.84%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-05 17:37:47

End at: 2017-12-05 17:38:17

Below is generated by plot.py at 2017-12-05 20:38:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.29 Mbit/s

95th percentile per-packet one-way delay: 136.886 ms

Loss rate: 1.00%

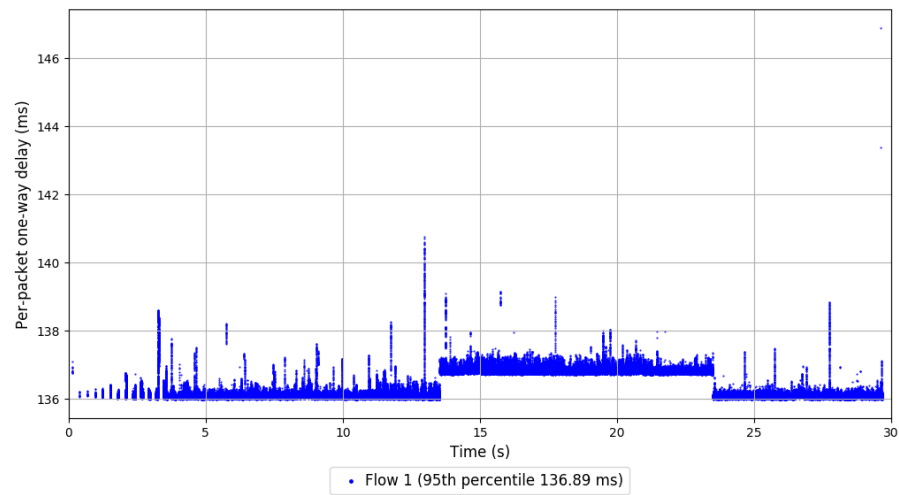
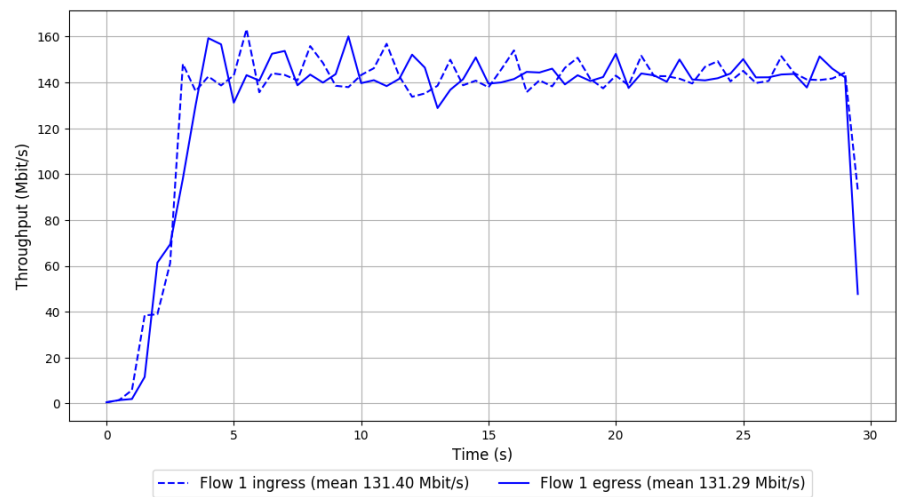
-- Flow 1:

Average throughput: 131.29 Mbit/s

95th percentile per-packet one-way delay: 136.886 ms

Loss rate: 1.00%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-05 17:49:18

End at: 2017-12-05 17:49:48

Below is generated by plot.py at 2017-12-05 20:38:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.31 Mbit/s

95th percentile per-packet one-way delay: 136.123 ms

Loss rate: 0.99%

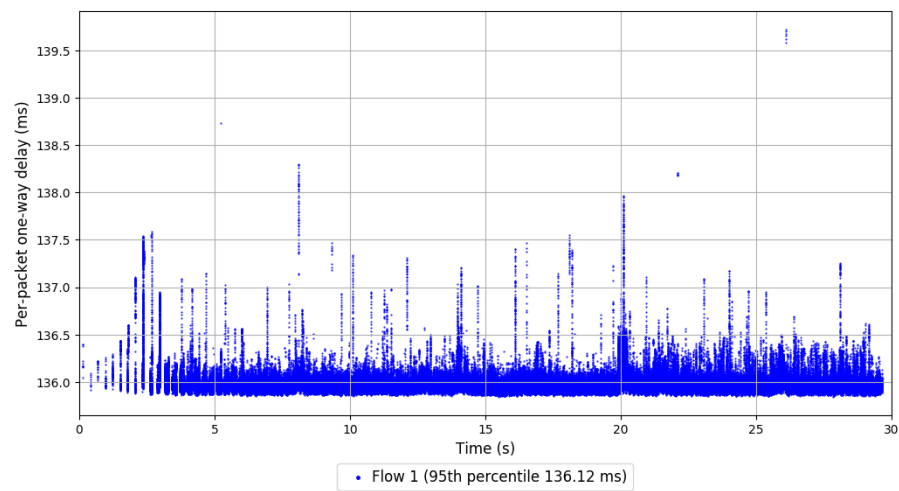
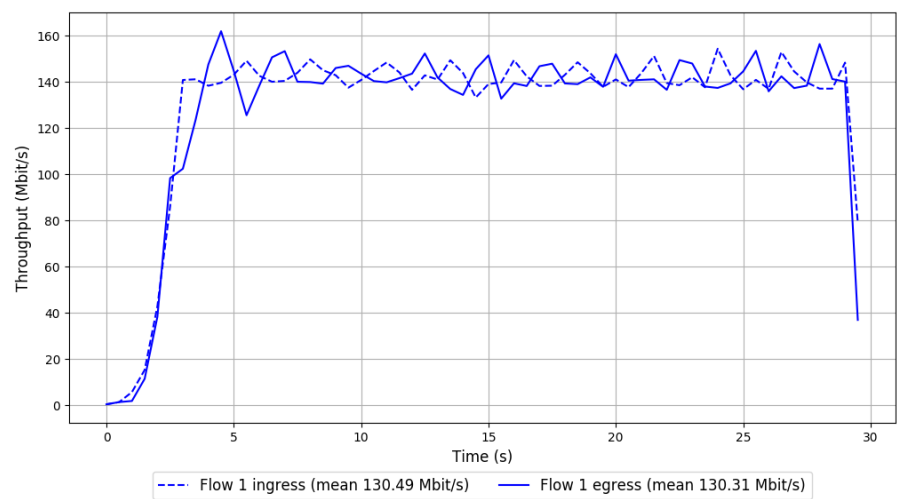
-- Flow 1:

Average throughput: 130.31 Mbit/s

95th percentile per-packet one-way delay: 136.123 ms

Loss rate: 0.99%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-05 18:00:55

End at: 2017-12-05 18:01:25

Below is generated by plot.py at 2017-12-05 20:38:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.51 Mbit/s

95th percentile per-packet one-way delay: 135.981 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 130.51 Mbit/s

95th percentile per-packet one-way delay: 135.981 ms

Loss rate: 0.98%

Run 10: Report of Indigo-calib — Data Link

