

Pantheon Report

Generated at 2018-01-02 15:22:52 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

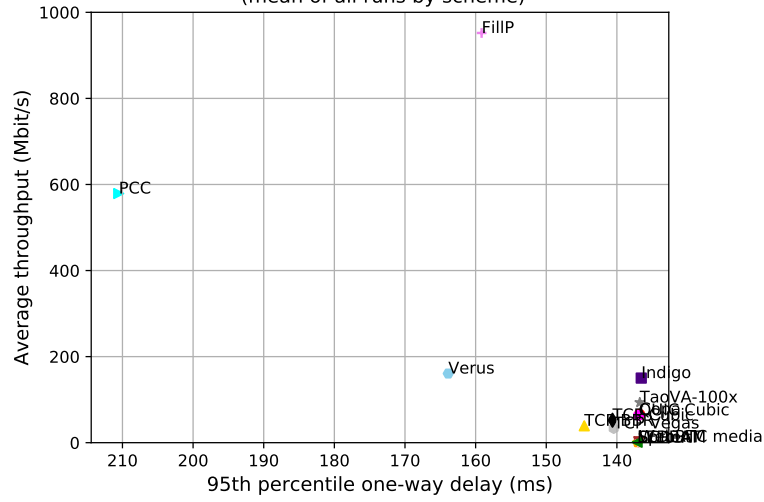
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

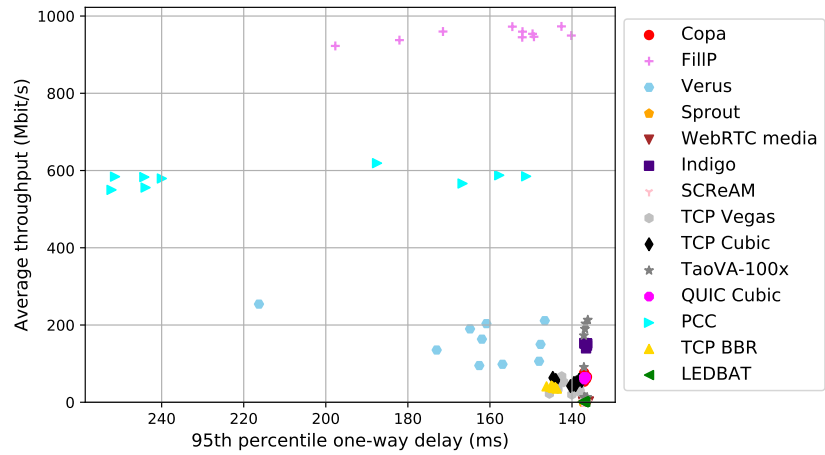
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Sydney Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from GCE Sydney Ethernet to GCE London 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	39.22	144.62	0.54
TCP Cubic	10	52.22	140.62	0.14
LEDBAT	10	0.98	137.14	0.29
PCC	9	578.94	210.52	1.38
QUIC Cubic	10	63.65	136.93	0.01
SCReAM	10	0.22	136.96	0.00
WebRTC media	10	2.10	136.91	0.00
Sprout	10	0.41	137.05	0.00
TaoVA-100x	10	93.36	136.76	0.05
TCP Vegas	10	33.15	140.45	0.54
Verus	10	160.68	163.88	0.14
Copa	8	65.73	136.79	0.00
FillP	10	952.04	159.15	0.14
Indigo	10	150.12	136.55	0.10

Run 1: Statistics of TCP BBR

Start at: 2018-01-02 11:56:17

End at: 2018-01-02 11:56:47

Below is generated by plot.py at 2018-01-02 14:34:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.47 Mbit/s

95th percentile per-packet one-way delay: 143.689 ms

Loss rate: 3.32%

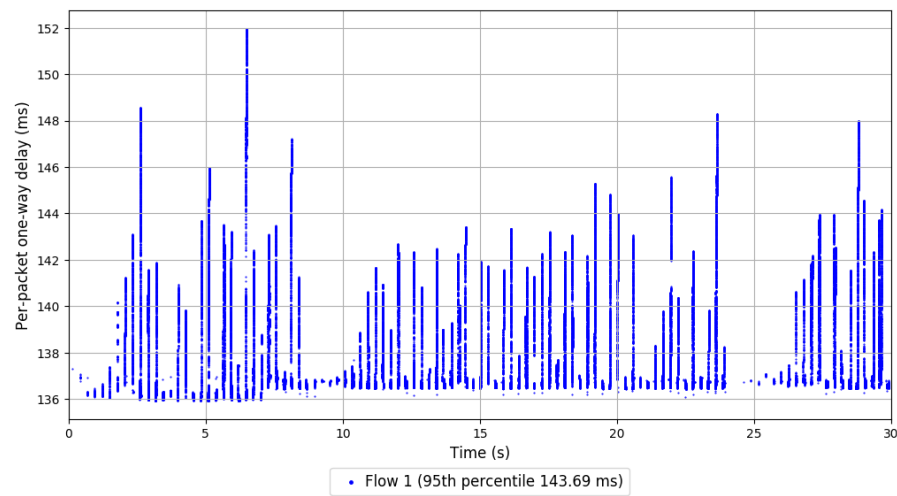
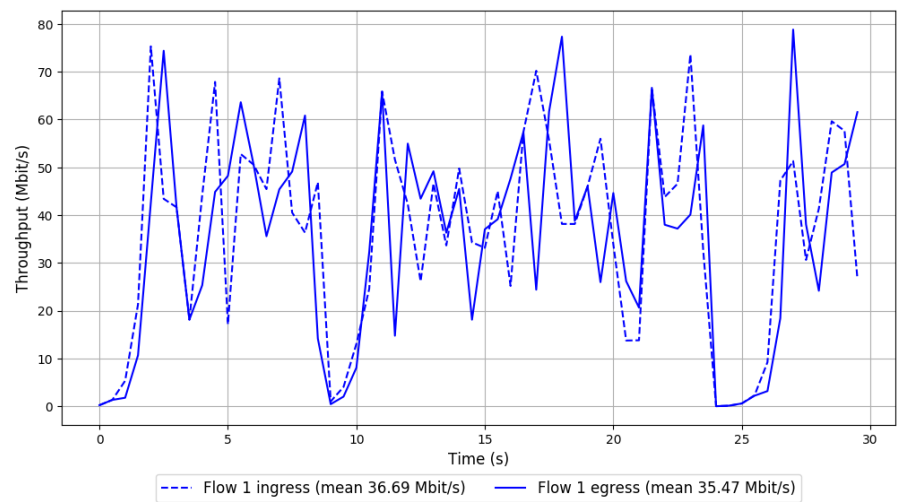
-- Flow 1:

Average throughput: 35.47 Mbit/s

95th percentile per-packet one-way delay: 143.689 ms

Loss rate: 3.32%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-02 12:08:59

End at: 2018-01-02 12:09:29

Below is generated by plot.py at 2018-01-02 14:34:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.20 Mbit/s

95th percentile per-packet one-way delay: 146.209 ms

Loss rate: 0.48%

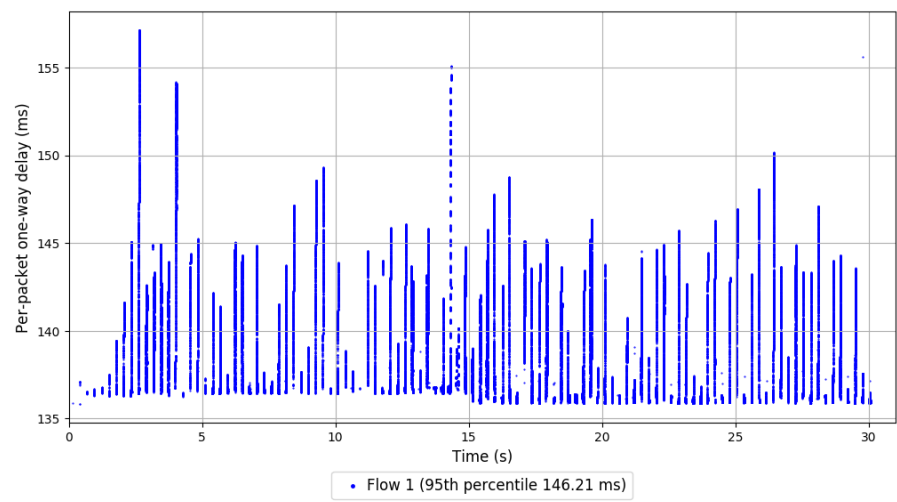
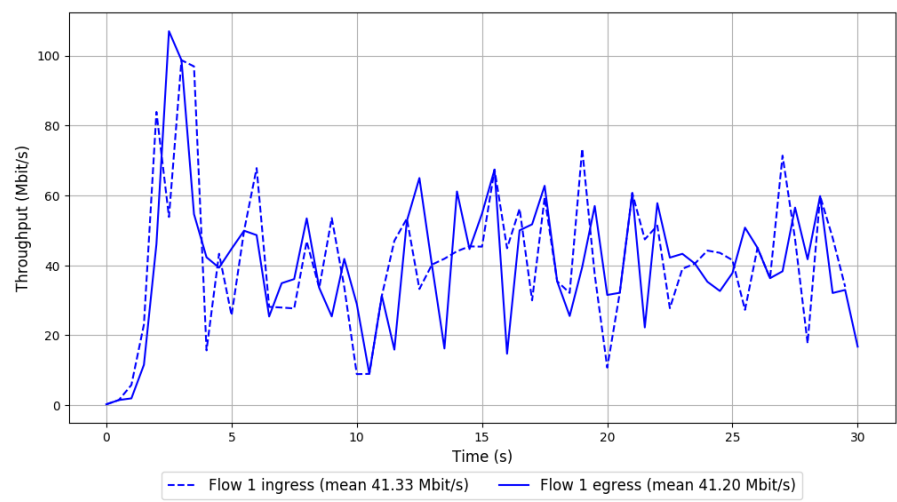
-- Flow 1:

Average throughput: 41.20 Mbit/s

95th percentile per-packet one-way delay: 146.209 ms

Loss rate: 0.48%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-02 12:21:44

End at: 2018-01-02 12:22:14

Below is generated by plot.py at 2018-01-02 14:34:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.54 Mbit/s

95th percentile per-packet one-way delay: 145.111 ms

Loss rate: 0.63%

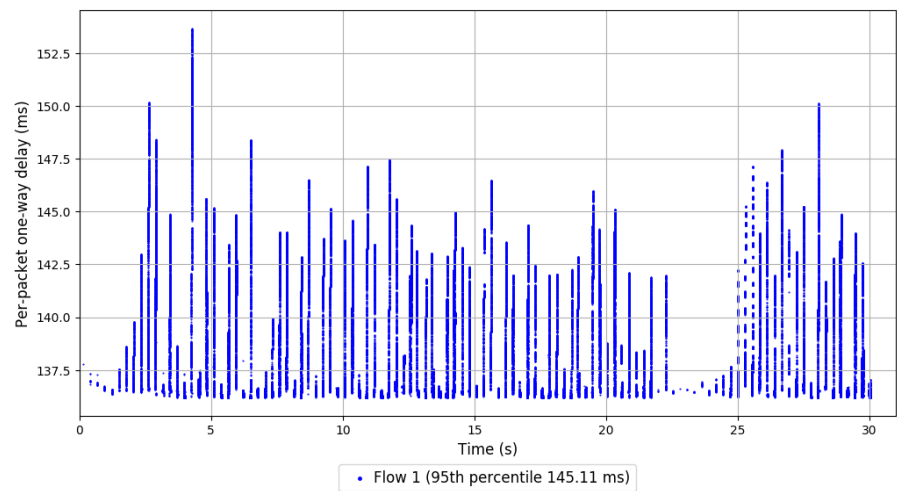
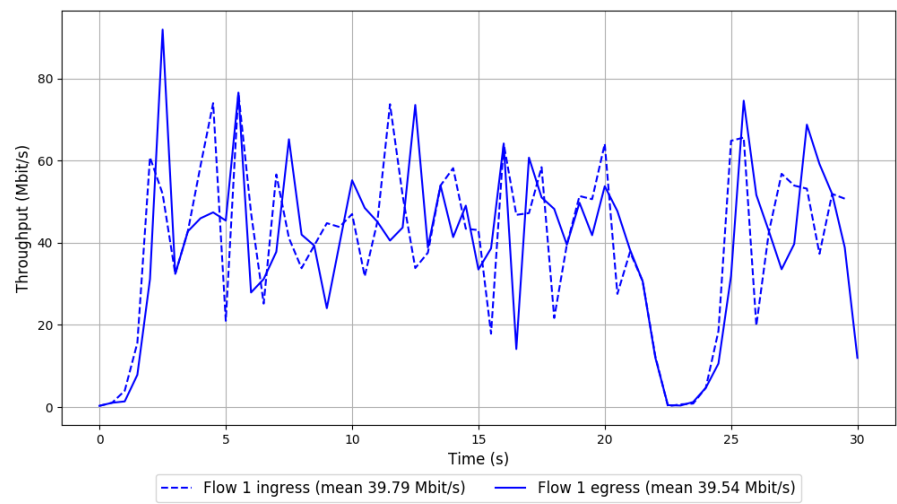
-- Flow 1:

Average throughput: 39.54 Mbit/s

95th percentile per-packet one-way delay: 145.111 ms

Loss rate: 0.63%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-02 12:34:18

End at: 2018-01-02 12:34:48

Below is generated by plot.py at 2018-01-02 14:34:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.09 Mbit/s

95th percentile per-packet one-way delay: 144.531 ms

Loss rate: 0.42%

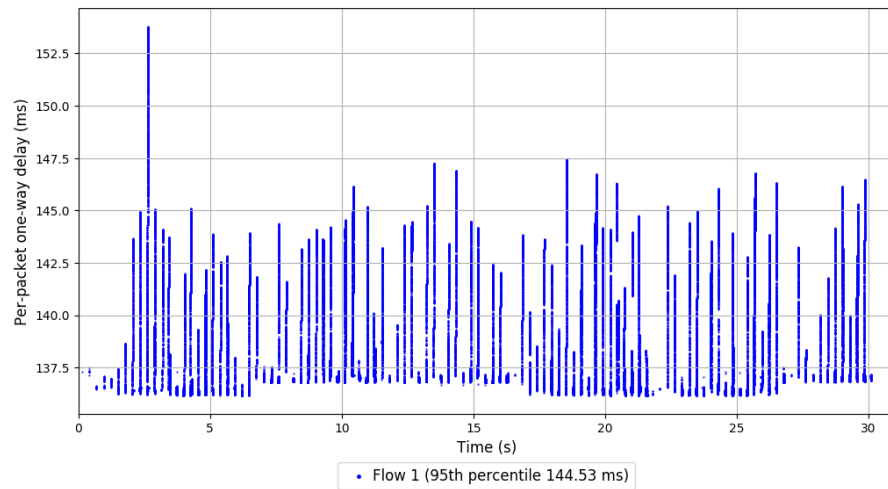
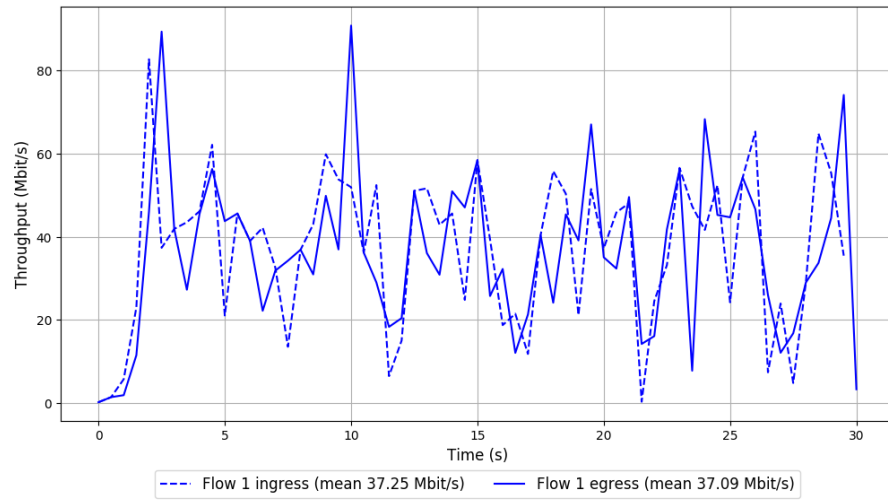
-- Flow 1:

Average throughput: 37.09 Mbit/s

95th percentile per-packet one-way delay: 144.531 ms

Loss rate: 0.42%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-02 12:47:03

End at: 2018-01-02 12:47:33

Below is generated by plot.py at 2018-01-02 14:34:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.66 Mbit/s

95th percentile per-packet one-way delay: 144.065 ms

Loss rate: 0.00%

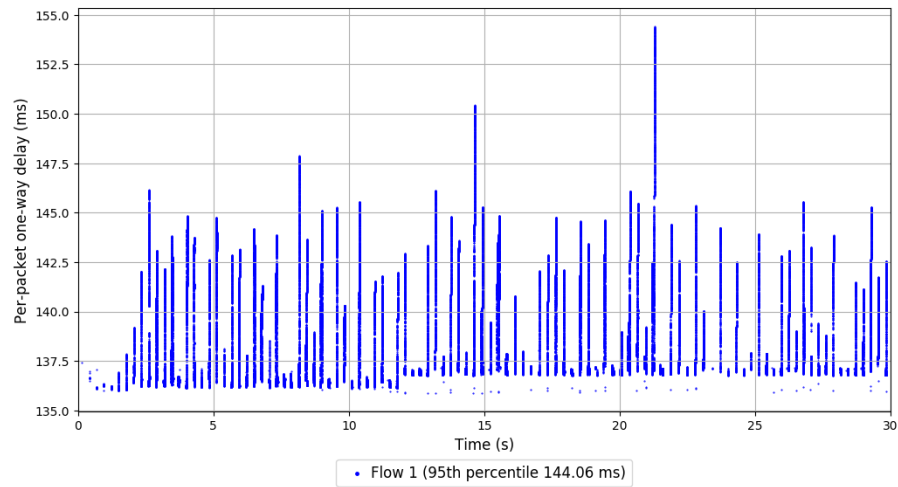
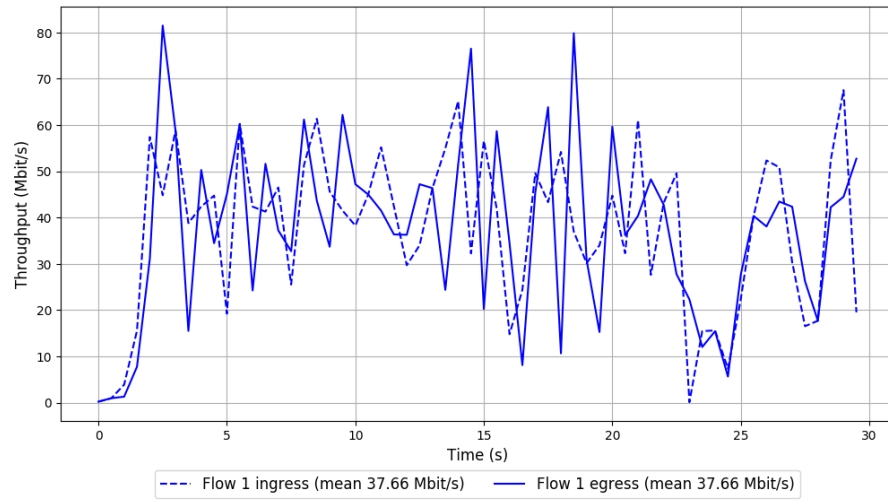
-- Flow 1:

Average throughput: 37.66 Mbit/s

95th percentile per-packet one-way delay: 144.065 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-02 13:00:10

End at: 2018-01-02 13:00:40

Below is generated by plot.py at 2018-01-02 14:34:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.54 Mbit/s

95th percentile per-packet one-way delay: 144.759 ms

Loss rate: 0.05%

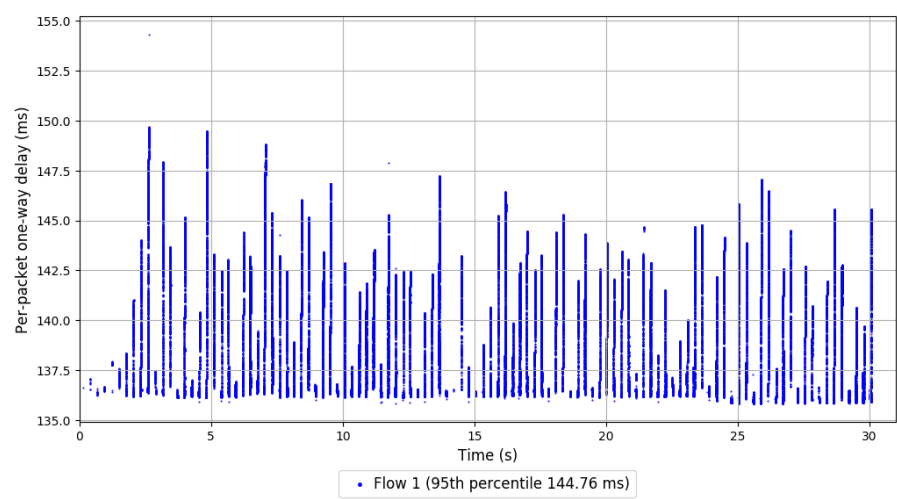
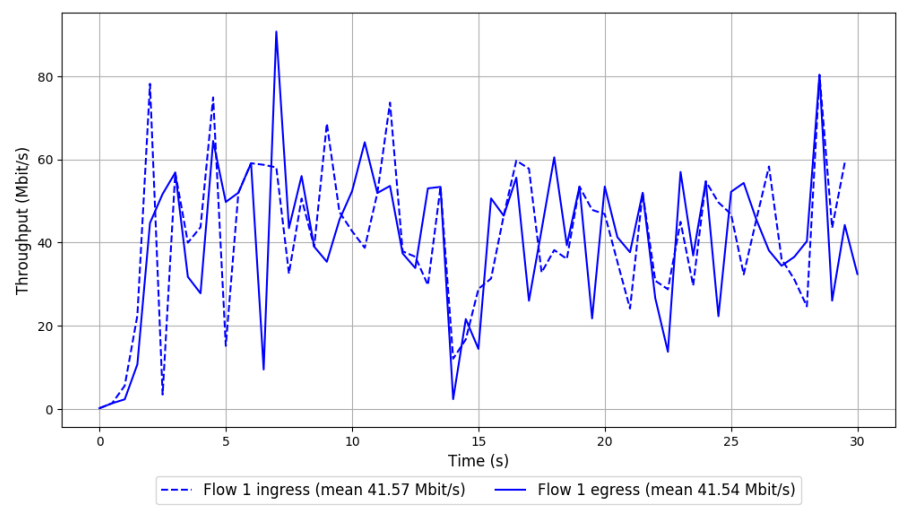
-- Flow 1:

Average throughput: 41.54 Mbit/s

95th percentile per-packet one-way delay: 144.759 ms

Loss rate: 0.05%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-02 13:13:20

End at: 2018-01-02 13:13:50

Below is generated by plot.py at 2018-01-02 14:34:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.03 Mbit/s

95th percentile per-packet one-way delay: 144.040 ms

Loss rate: 0.21%

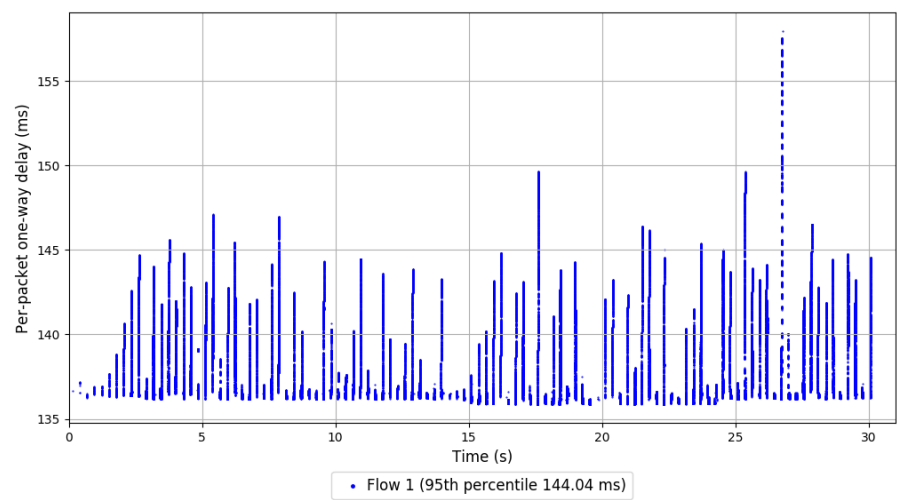
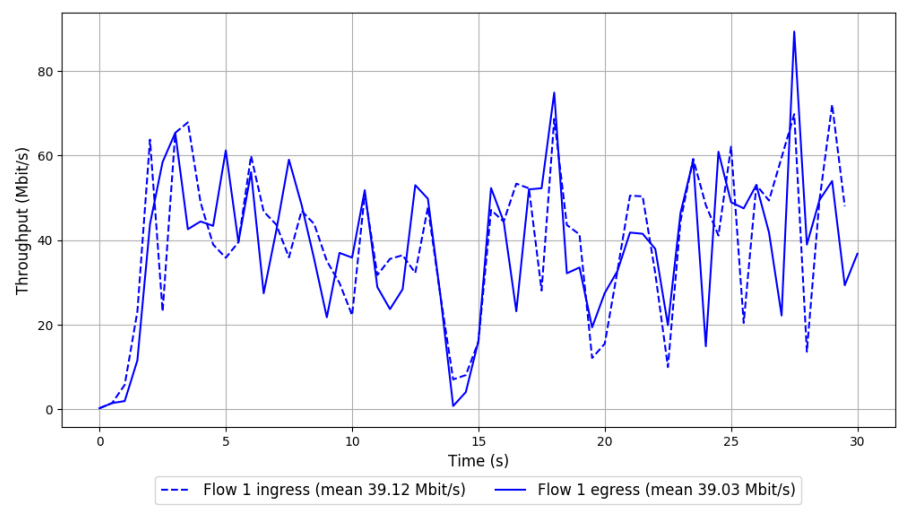
-- Flow 1:

Average throughput: 39.03 Mbit/s

95th percentile per-packet one-way delay: 144.040 ms

Loss rate: 0.21%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-02 13:25:56

End at: 2018-01-02 13:26:26

Below is generated by plot.py at 2018-01-02 14:34:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.96 Mbit/s

95th percentile per-packet one-way delay: 144.100 ms

Loss rate: 0.02%

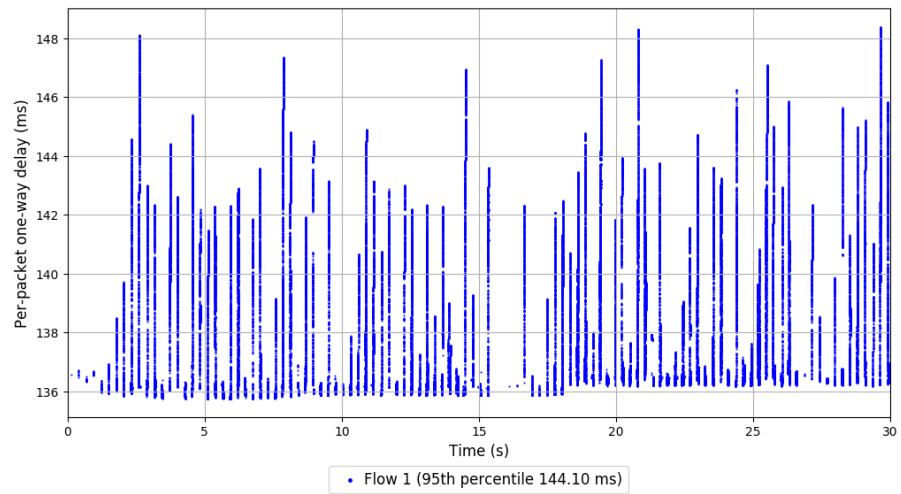
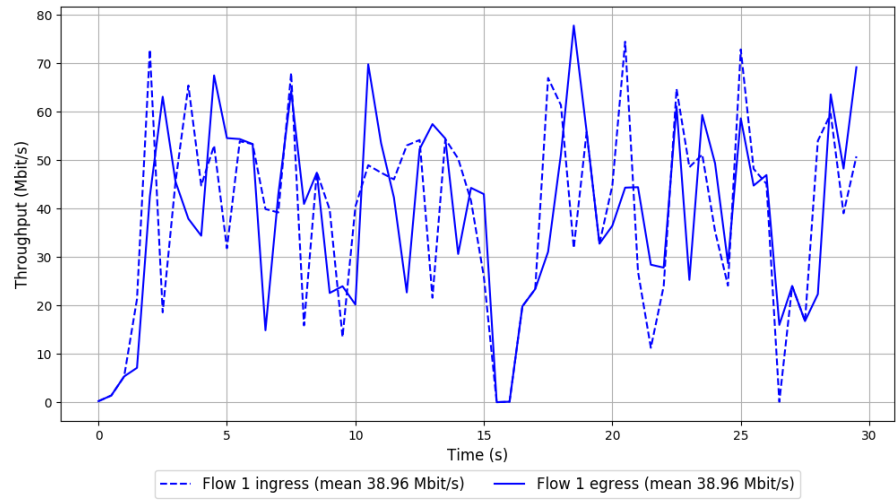
-- Flow 1:

Average throughput: 38.96 Mbit/s

95th percentile per-packet one-way delay: 144.100 ms

Loss rate: 0.02%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-02 13:38:50

End at: 2018-01-02 13:39:20

Below is generated by plot.py at 2018-01-02 14:35:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.42 Mbit/s

95th percentile per-packet one-way delay: 144.650 ms

Loss rate: 0.30%

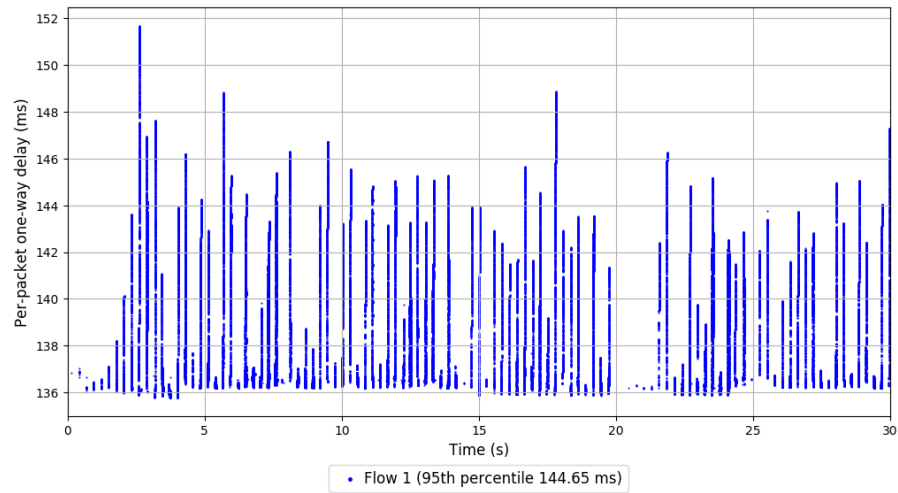
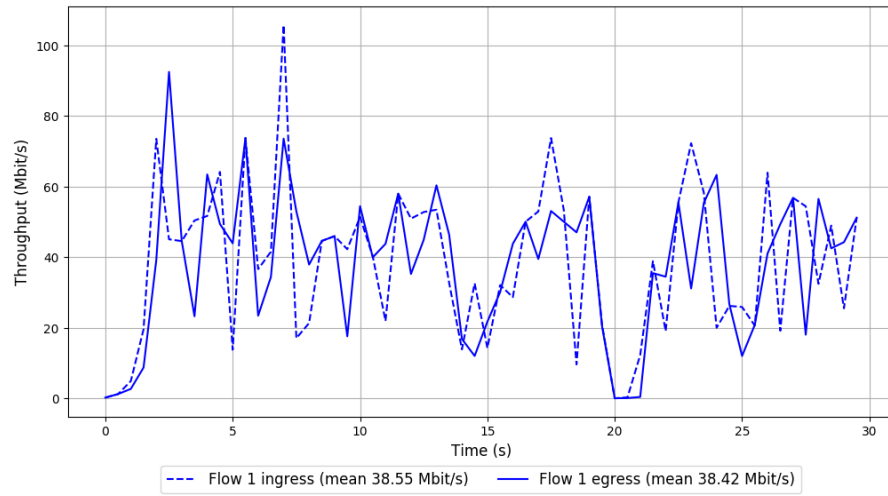
-- Flow 1:

Average throughput: 38.42 Mbit/s

95th percentile per-packet one-way delay: 144.650 ms

Loss rate: 0.30%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-02 13:52:02

End at: 2018-01-02 13:52:32

Below is generated by plot.py at 2018-01-02 14:35:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.32 Mbit/s

95th percentile per-packet one-way delay: 145.036 ms

Loss rate: 0.01%

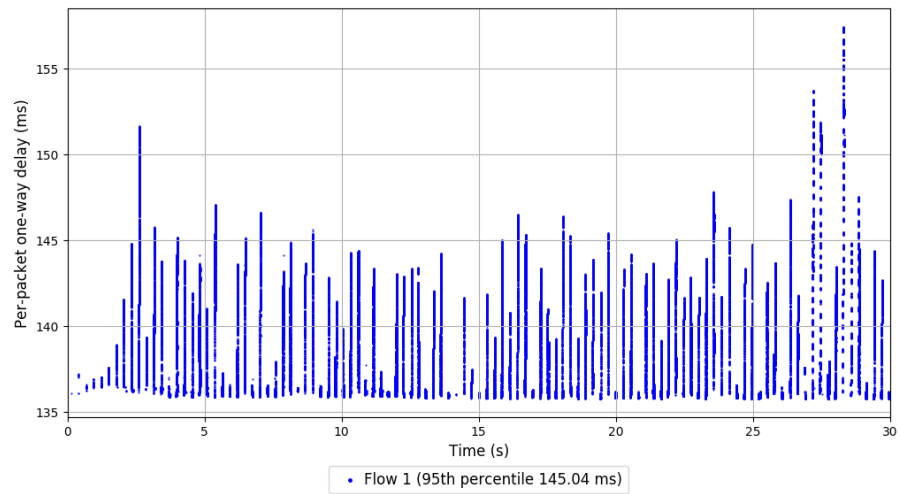
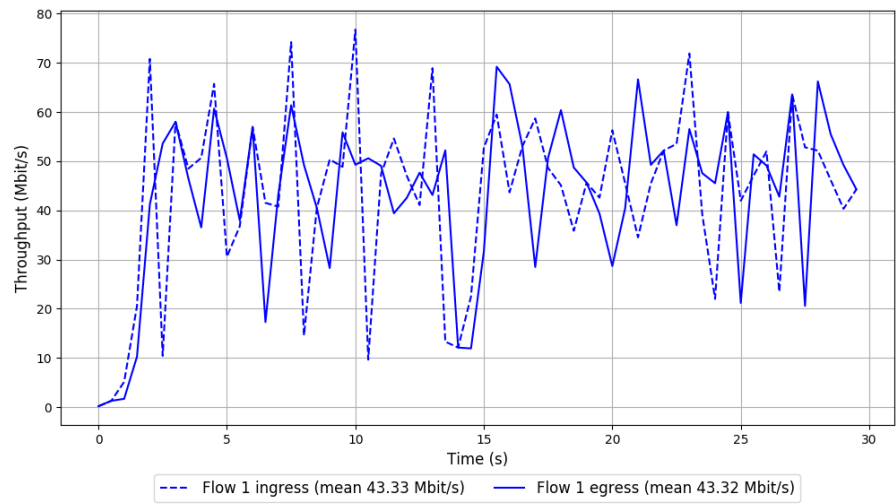
-- Flow 1:

Average throughput: 43.32 Mbit/s

95th percentile per-packet one-way delay: 145.036 ms

Loss rate: 0.01%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-02 11:50:28

End at: 2018-01-02 11:50:58

Below is generated by plot.py at 2018-01-02 14:35:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.00 Mbit/s

95th percentile per-packet one-way delay: 140.350 ms

Loss rate: 0.01%

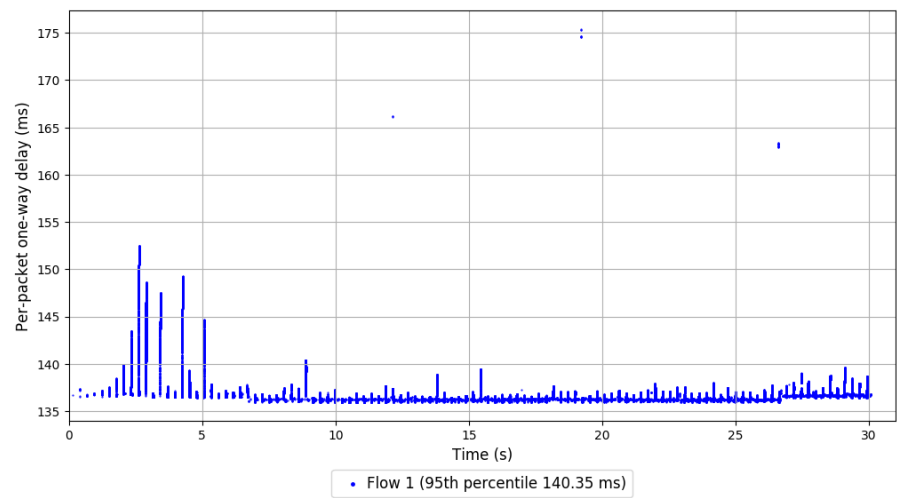
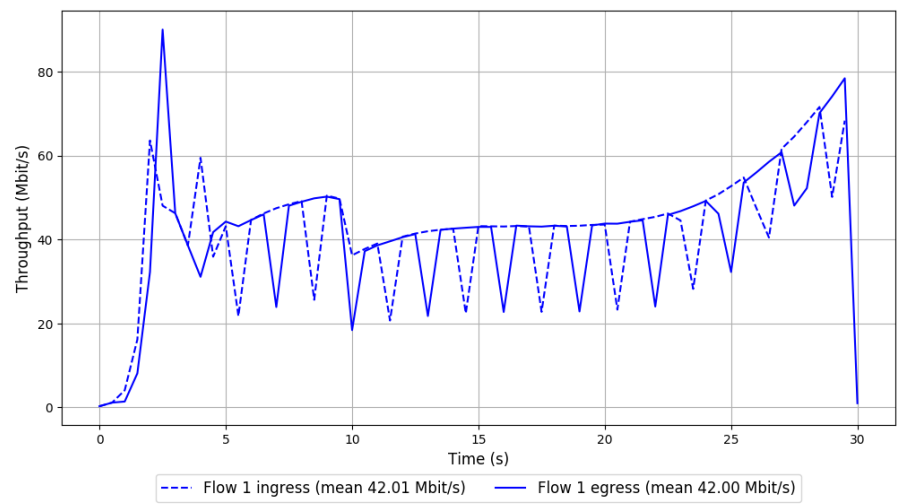
-- Flow 1:

Average throughput: 42.00 Mbit/s

95th percentile per-packet one-way delay: 140.350 ms

Loss rate: 0.01%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-02 12:03:24

End at: 2018-01-02 12:03:54

Below is generated by plot.py at 2018-01-02 14:35:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.27 Mbit/s

95th percentile per-packet one-way delay: 139.746 ms

Loss rate: 0.00%

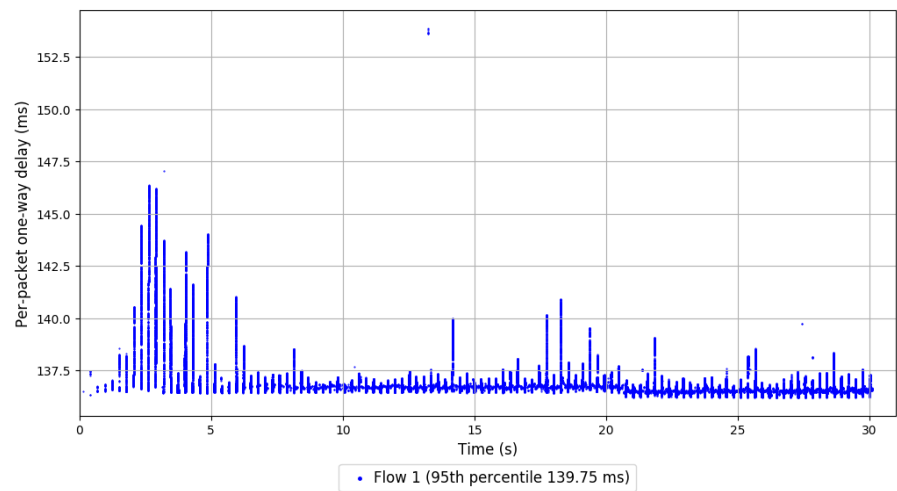
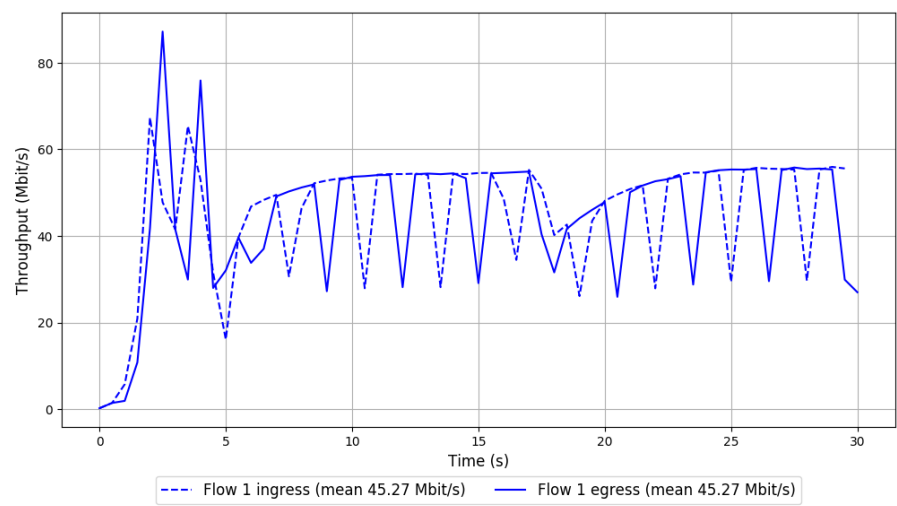
-- Flow 1:

Average throughput: 45.27 Mbit/s

95th percentile per-packet one-way delay: 139.746 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-02 12:16:10

End at: 2018-01-02 12:16:40

Below is generated by plot.py at 2018-01-02 14:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.46 Mbit/s

95th percentile per-packet one-way delay: 144.012 ms

Loss rate: 0.50%

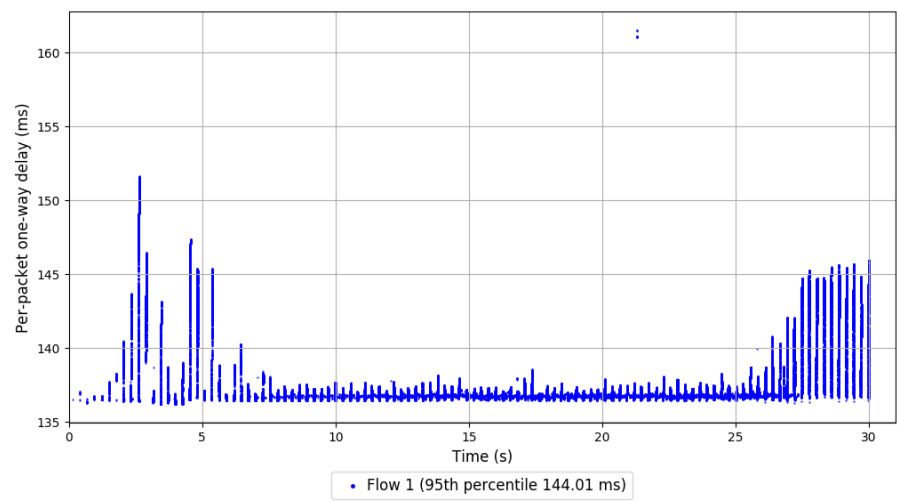
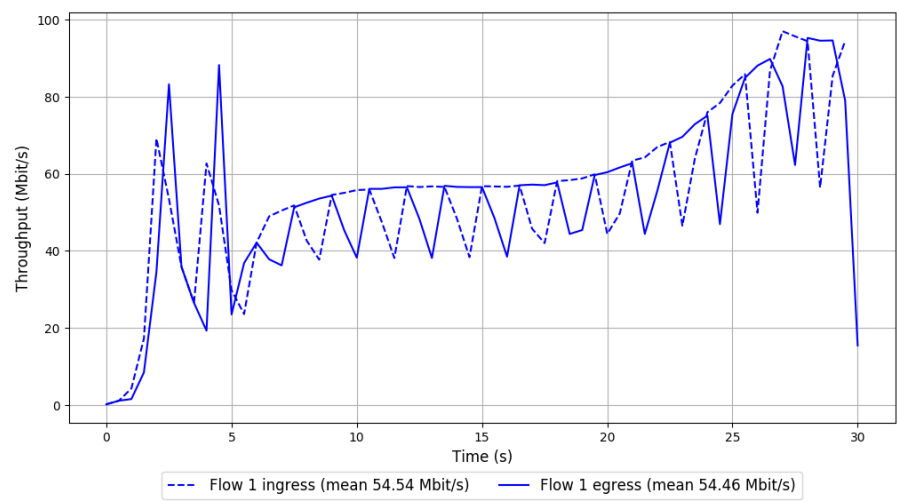
-- Flow 1:

Average throughput: 54.46 Mbit/s

95th percentile per-packet one-way delay: 144.012 ms

Loss rate: 0.50%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-02 12:28:52

End at: 2018-01-02 12:29:22

Below is generated by plot.py at 2018-01-02 14:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.40 Mbit/s

95th percentile per-packet one-way delay: 139.148 ms

Loss rate: 0.16%

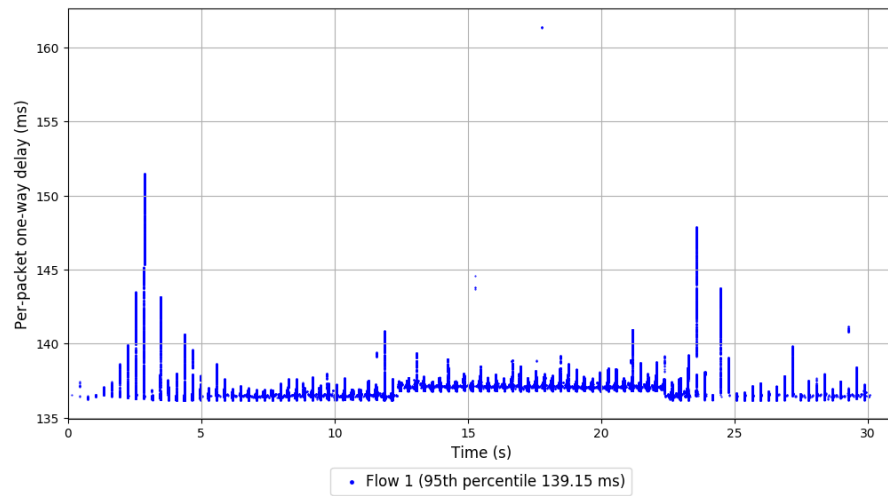
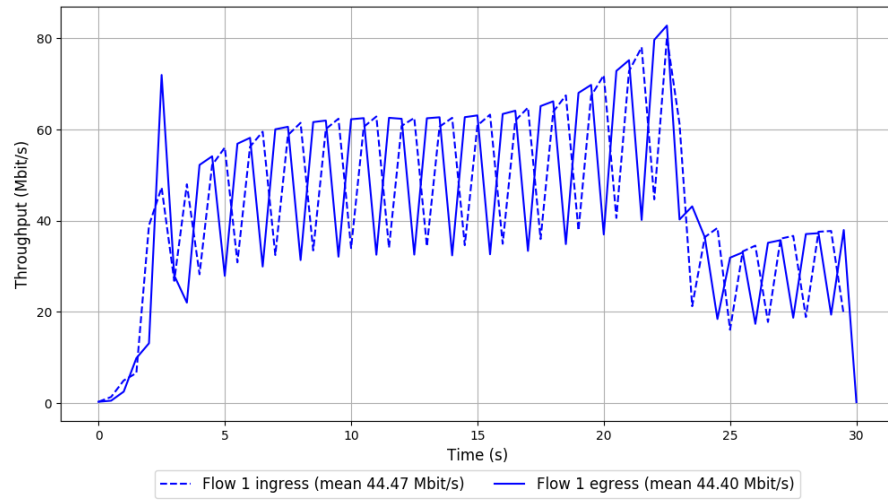
-- Flow 1:

Average throughput: 44.40 Mbit/s

95th percentile per-packet one-way delay: 139.148 ms

Loss rate: 0.16%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-02 12:41:28

End at: 2018-01-02 12:41:58

Below is generated by plot.py at 2018-01-02 14:35:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.85 Mbit/s

95th percentile per-packet one-way delay: 143.959 ms

Loss rate: 0.00%

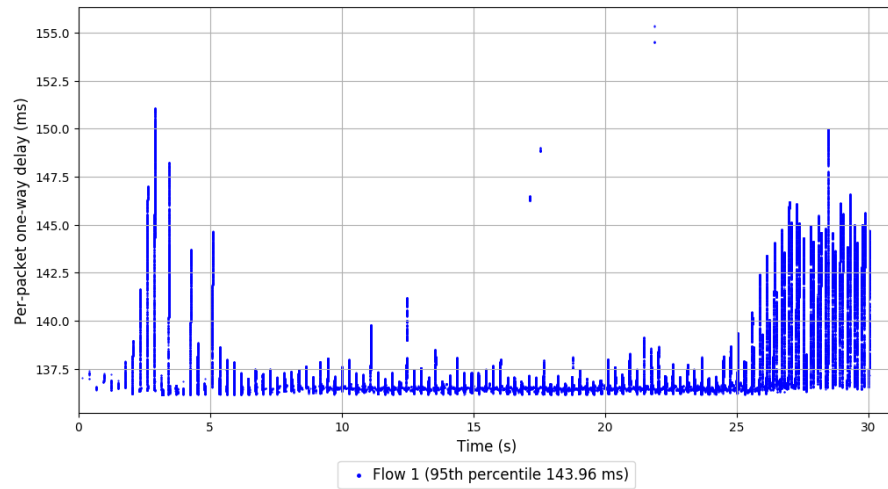
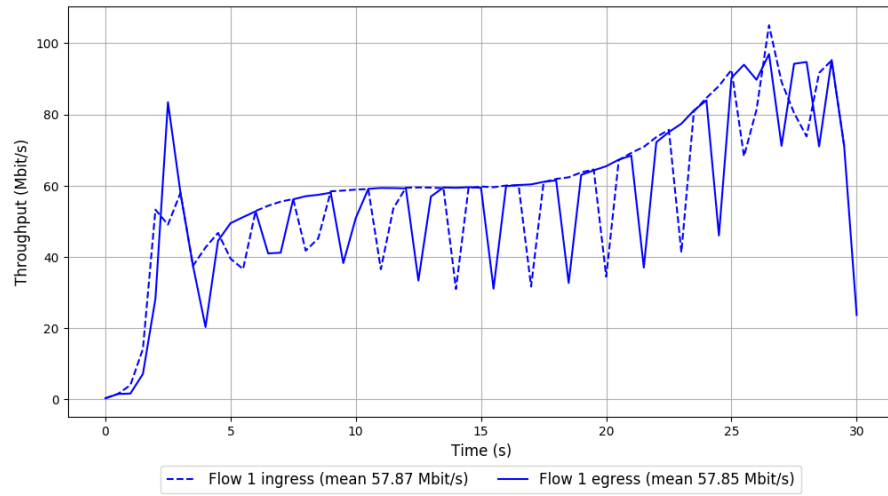
-- Flow 1:

Average throughput: 57.85 Mbit/s

95th percentile per-packet one-way delay: 143.959 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-02 12:54:17

End at: 2018-01-02 12:54:47

Below is generated by plot.py at 2018-01-02 14:35:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.10 Mbit/s

95th percentile per-packet one-way delay: 139.516 ms

Loss rate: 0.45%

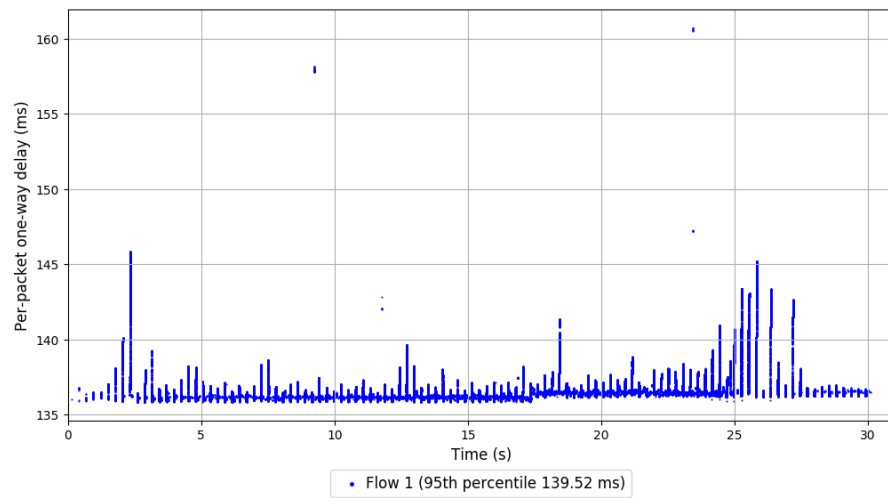
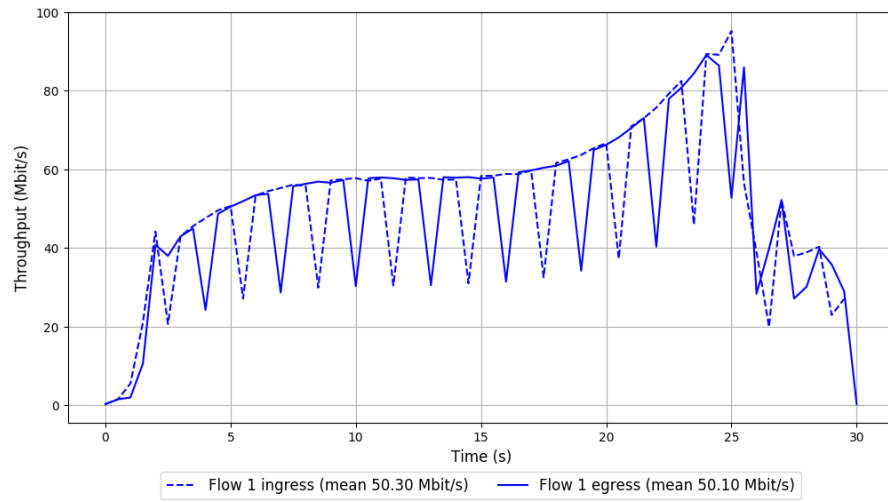
-- Flow 1:

Average throughput: 50.10 Mbit/s

95th percentile per-packet one-way delay: 139.516 ms

Loss rate: 0.45%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-02 13:07:25

End at: 2018-01-02 13:07:55

Below is generated by plot.py at 2018-01-02 14:36:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.74 Mbit/s

95th percentile per-packet one-way delay: 138.935 ms

Loss rate: 0.24%

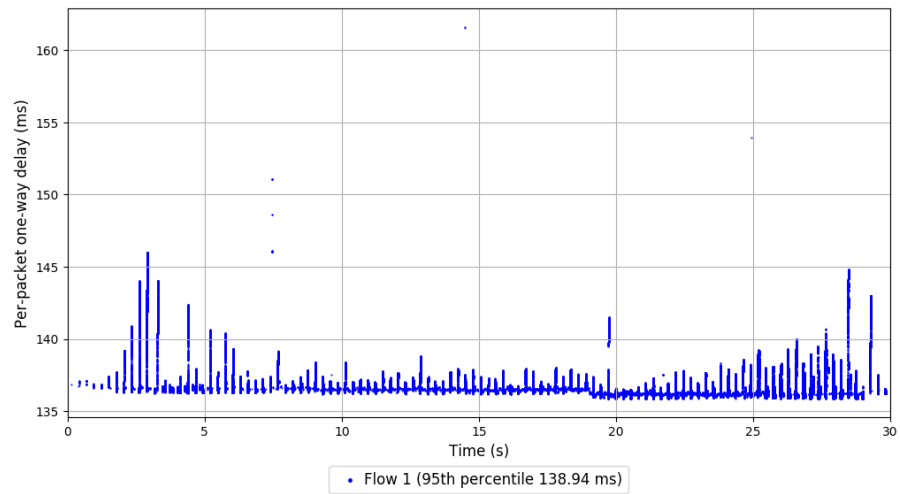
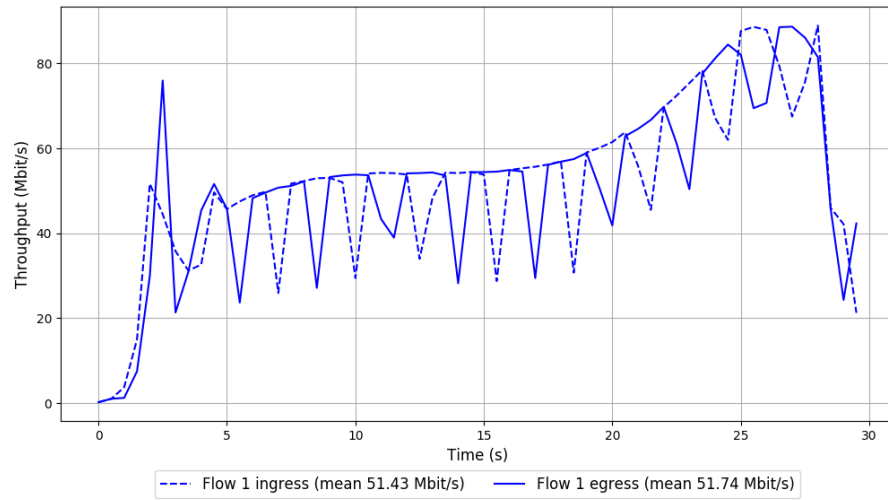
-- Flow 1:

Average throughput: 51.74 Mbit/s

95th percentile per-packet one-way delay: 138.935 ms

Loss rate: 0.24%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-02 13:20:19

End at: 2018-01-02 13:20:49

Below is generated by plot.py at 2018-01-02 14:36:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.16 Mbit/s

95th percentile per-packet one-way delay: 138.263 ms

Loss rate: 0.00%

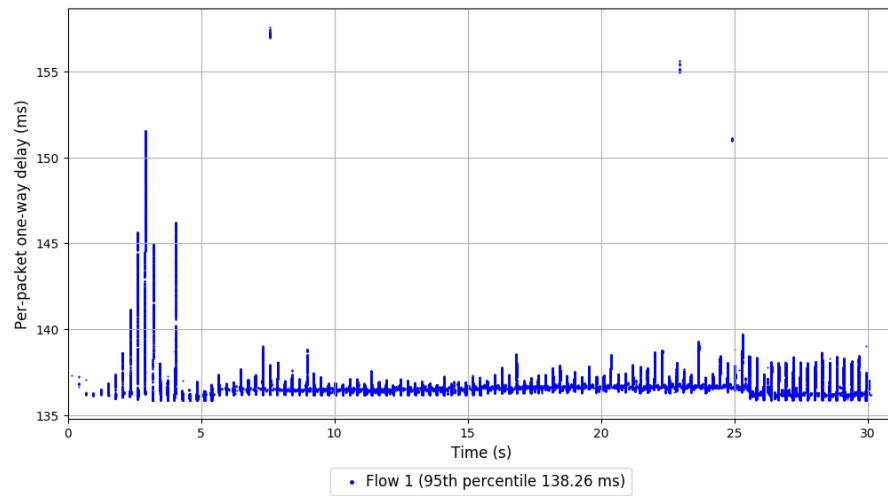
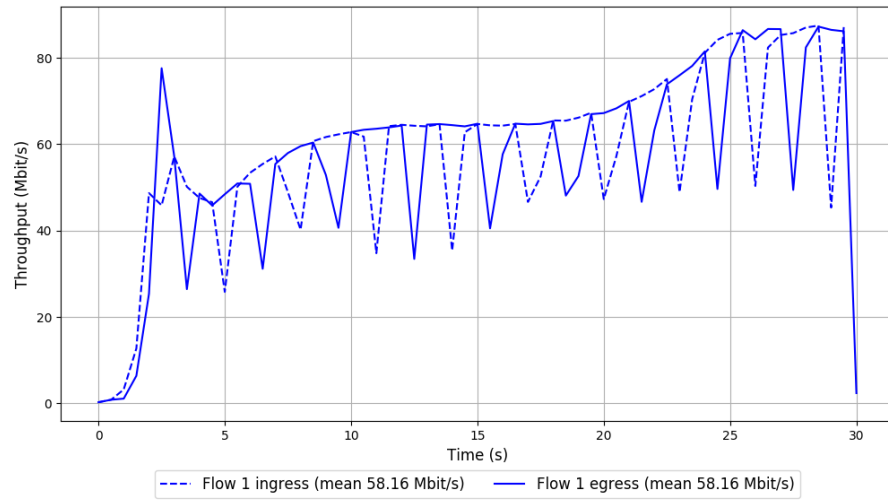
-- Flow 1:

Average throughput: 58.16 Mbit/s

95th percentile per-packet one-way delay: 138.263 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-02 13:33:13

End at: 2018-01-02 13:33:43

Below is generated by plot.py at 2018-01-02 14:36:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.00 Mbit/s

95th percentile per-packet one-way delay: 137.627 ms

Loss rate: 0.00%

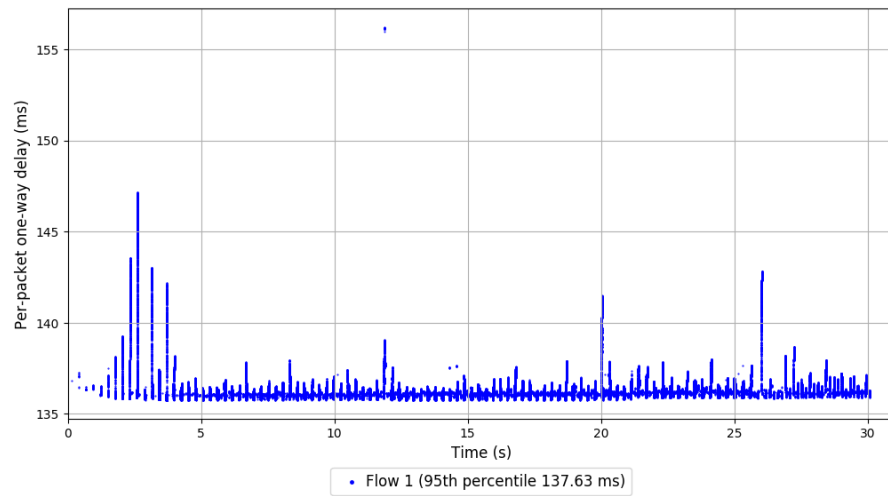
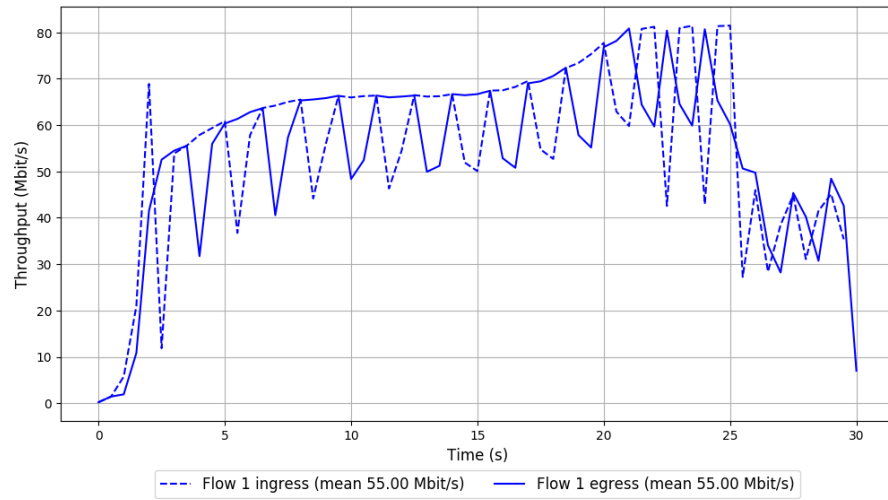
-- Flow 1:

Average throughput: 55.00 Mbit/s

95th percentile per-packet one-way delay: 137.627 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-02 13:46:03

End at: 2018-01-02 13:46:33

Below is generated by plot.py at 2018-01-02 14:36:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.20 Mbit/s

95th percentile per-packet one-way delay: 144.676 ms

Loss rate: 0.00%

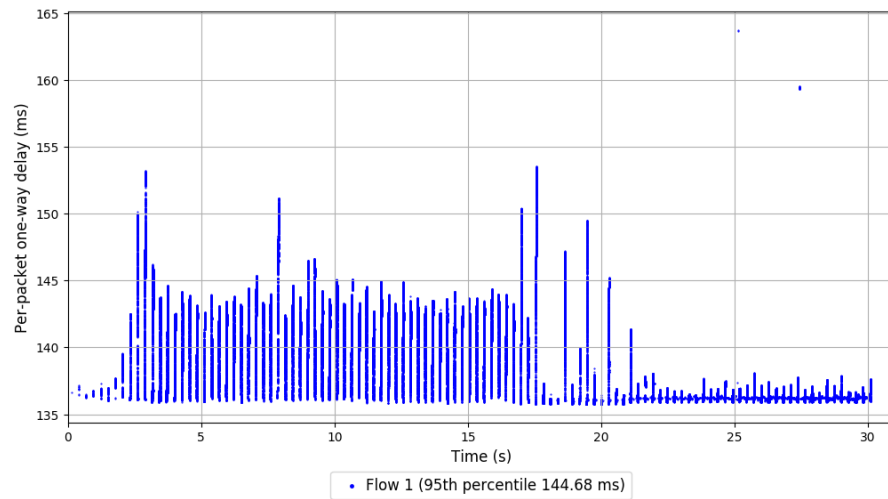
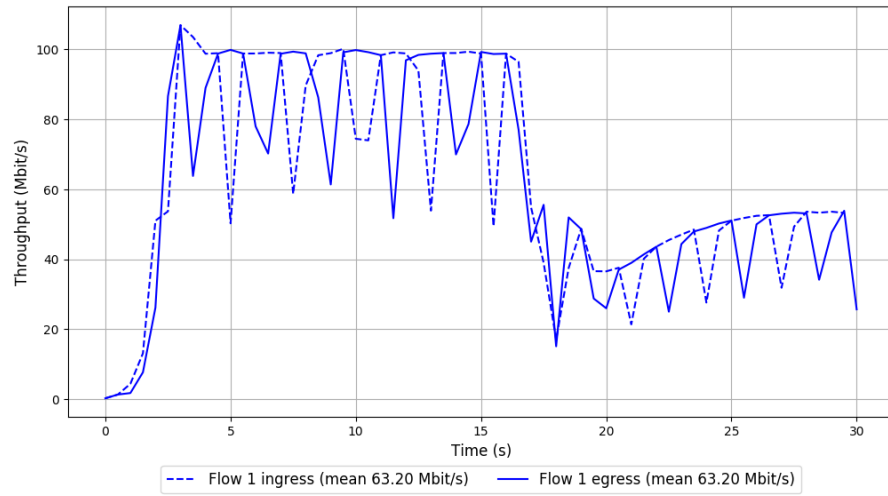
-- Flow 1:

Average throughput: 63.20 Mbit/s

95th percentile per-packet one-way delay: 144.676 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

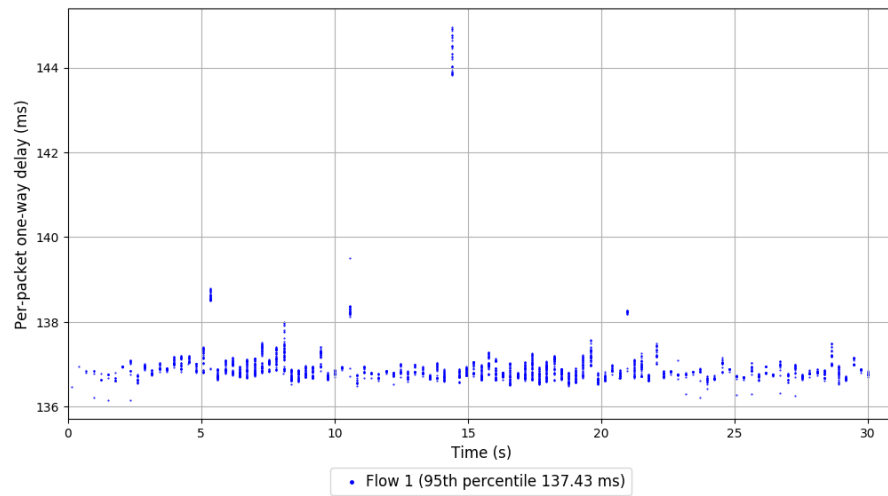
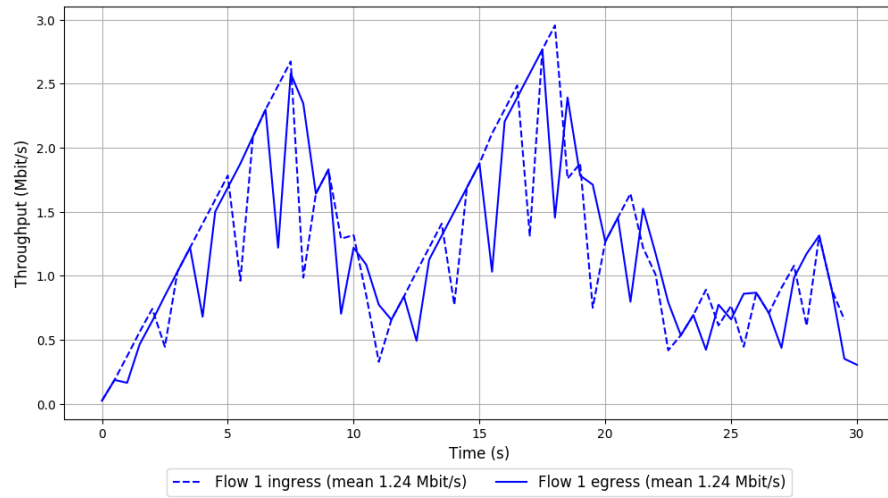


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-02 11:51:56
End at: 2018-01-02 11:52:26

# Below is generated by plot.py at 2018-01-02 14:36:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 137.430 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 137.430 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-01-02 12:04:55

End at: 2018-01-02 12:05:25

Below is generated by plot.py at 2018-01-02 14:36:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.24 Mbit/s

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

Loss rate: 0.00%

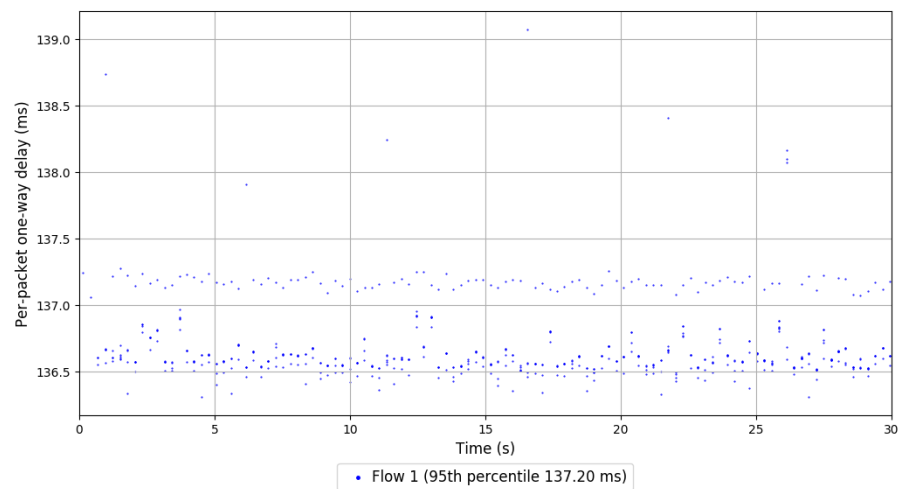
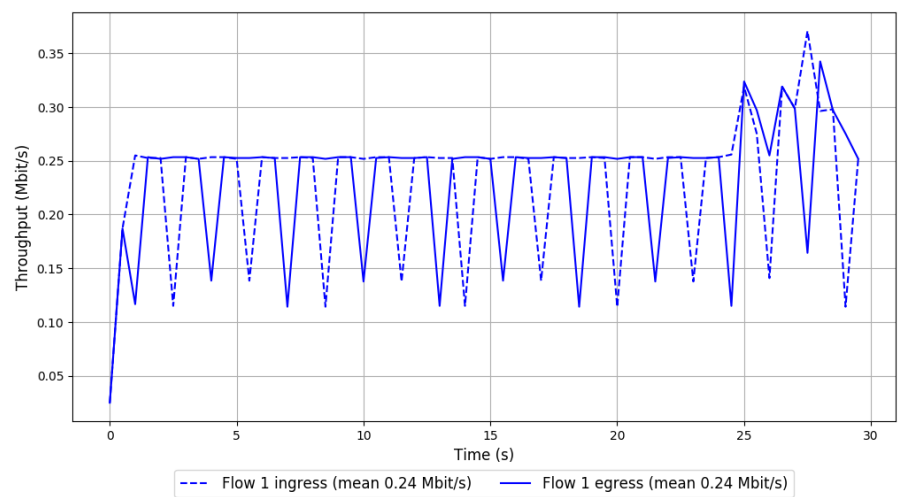
-- Flow 1:

Average throughput: 0.24 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-02 12:17:41

End at: 2018-01-02 12:18:11

Below is generated by plot.py at 2018-01-02 14:36:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.24 Mbit/s

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

Loss rate: 0.00%

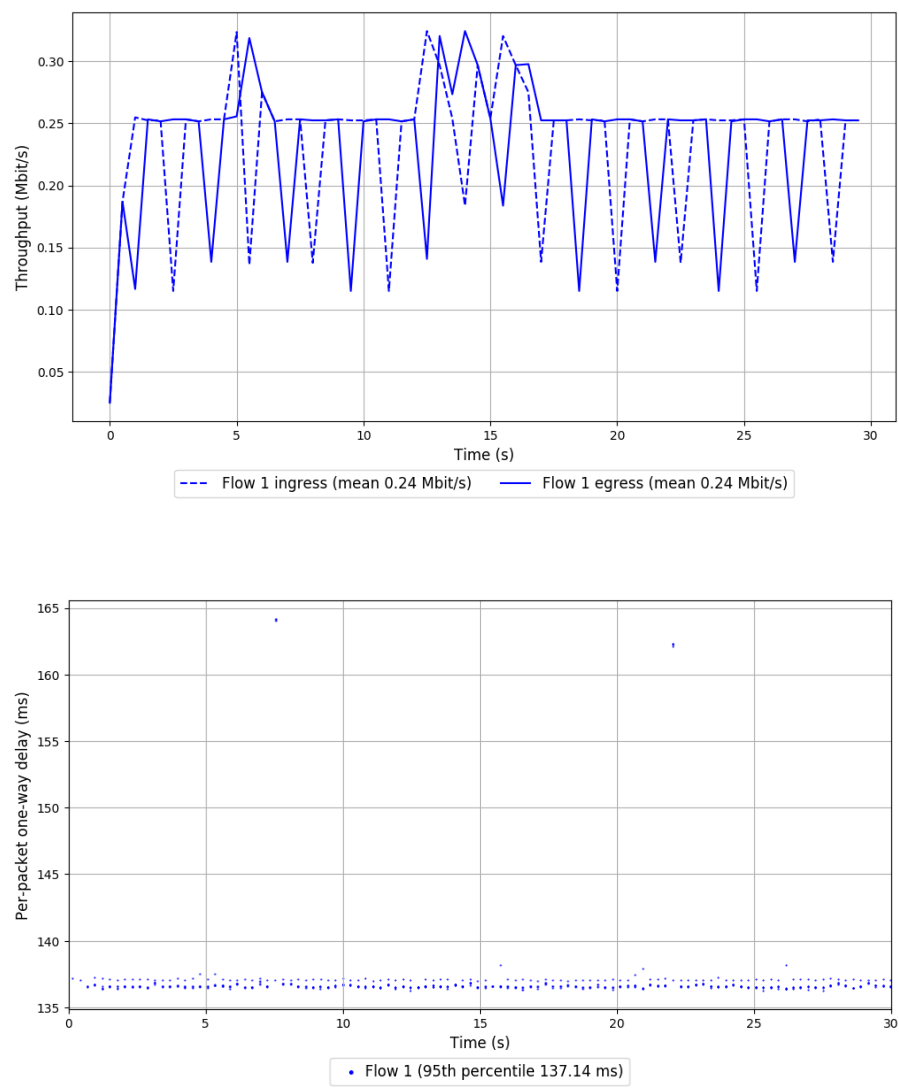
-- Flow 1:

Average throughput: 0.24 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-02 12:30:22

End at: 2018-01-02 12:30:52

Below is generated by plot.py at 2018-01-02 14:36:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 137.064 ms

Loss rate: 0.00%

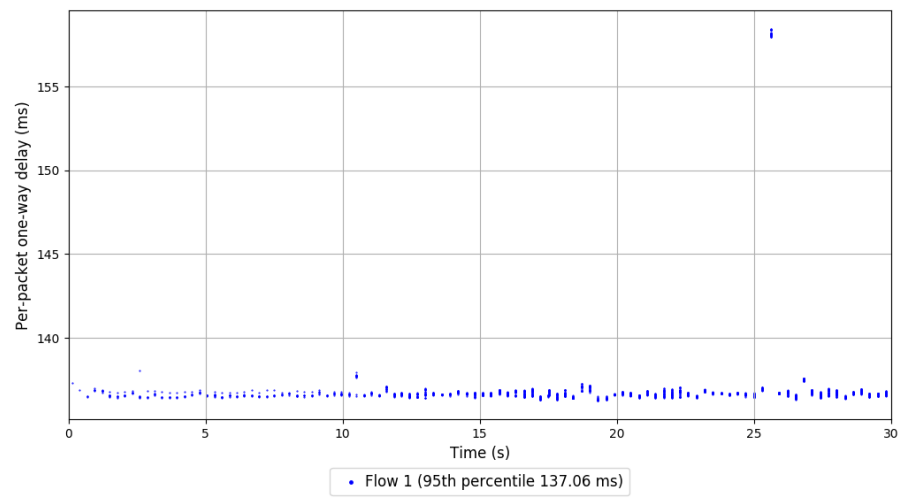
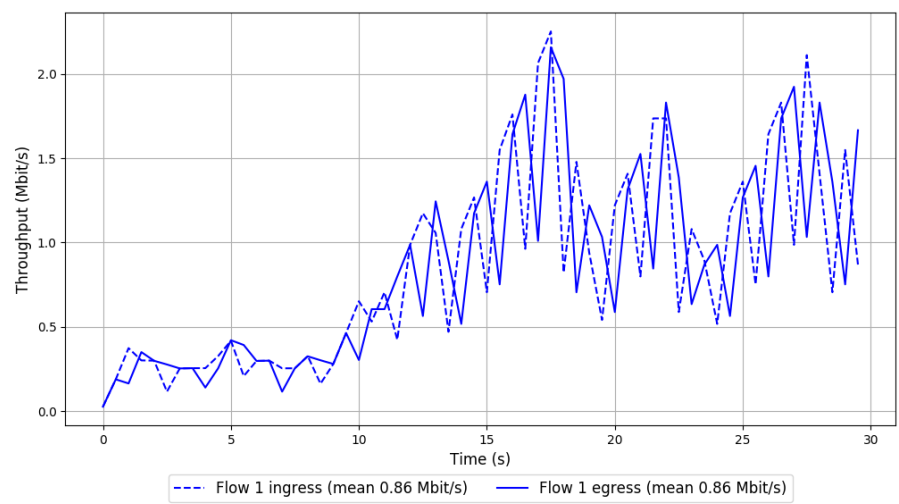
-- Flow 1:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 137.064 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-02 12:42:59

End at: 2018-01-02 12:43:29

Below is generated by plot.py at 2018-01-02 14:36:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 136.780 ms

Loss rate: 2.94%

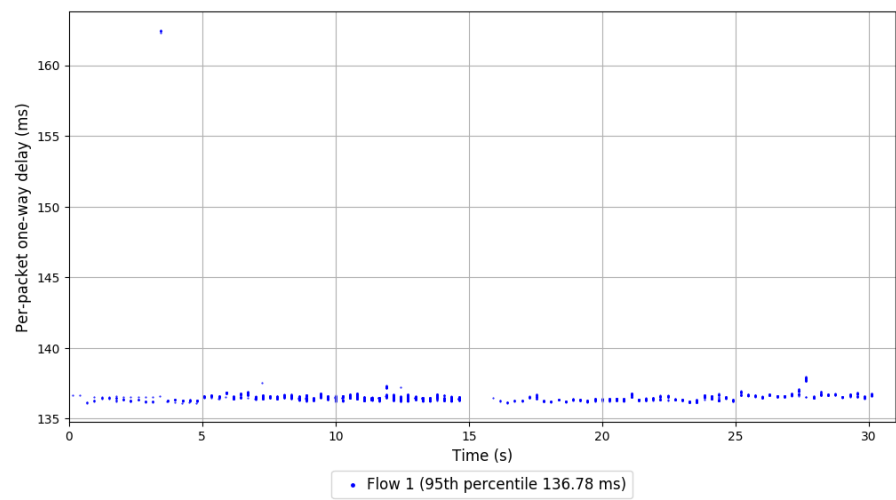
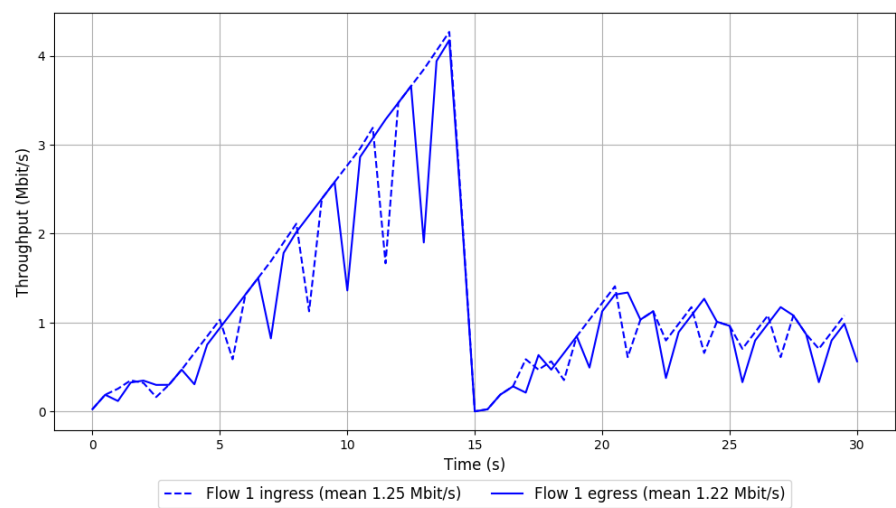
-- Flow 1:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 136.780 ms

Loss rate: 2.94%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-02 12:55:48

End at: 2018-01-02 12:56:18

Below is generated by plot.py at 2018-01-02 14:36:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 137.054 ms

Loss rate: 0.00%

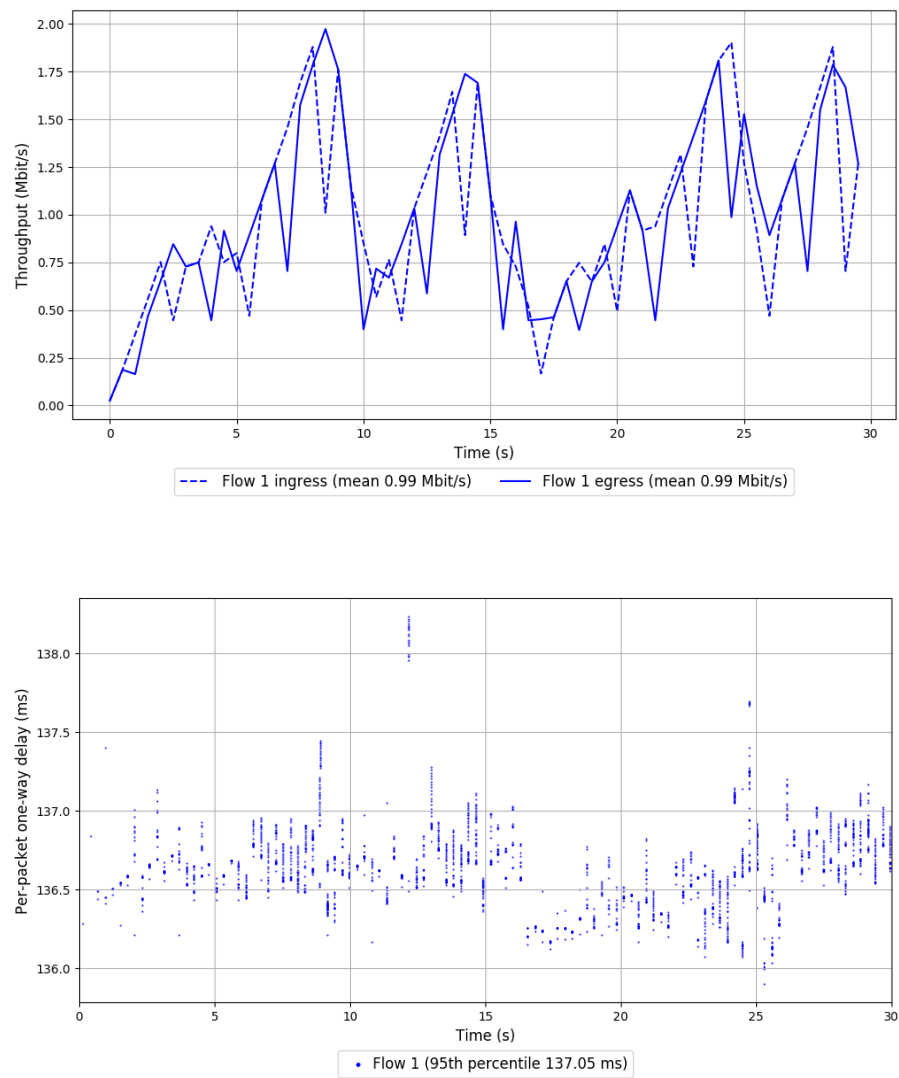
-- Flow 1:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 137.054 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-02 13:08:56

End at: 2018-01-02 13:09:27

Below is generated by plot.py at 2018-01-02 14:36:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 137.211 ms

Loss rate: 0.00%

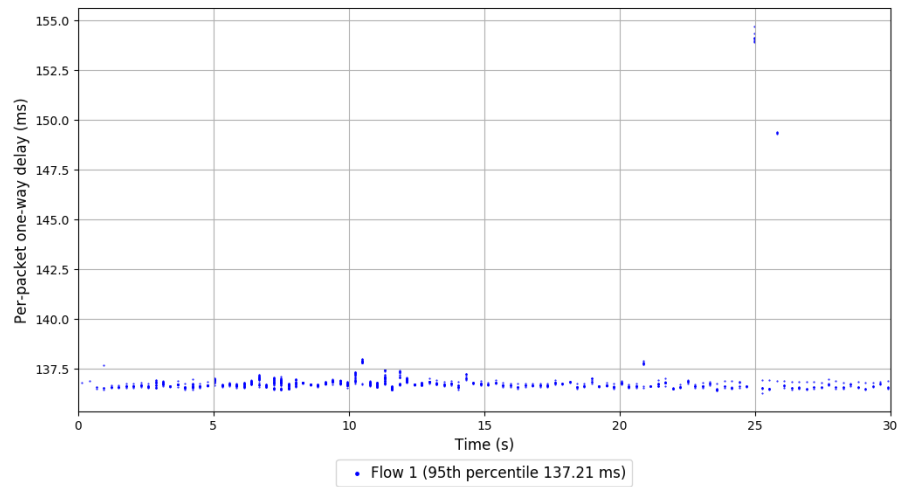
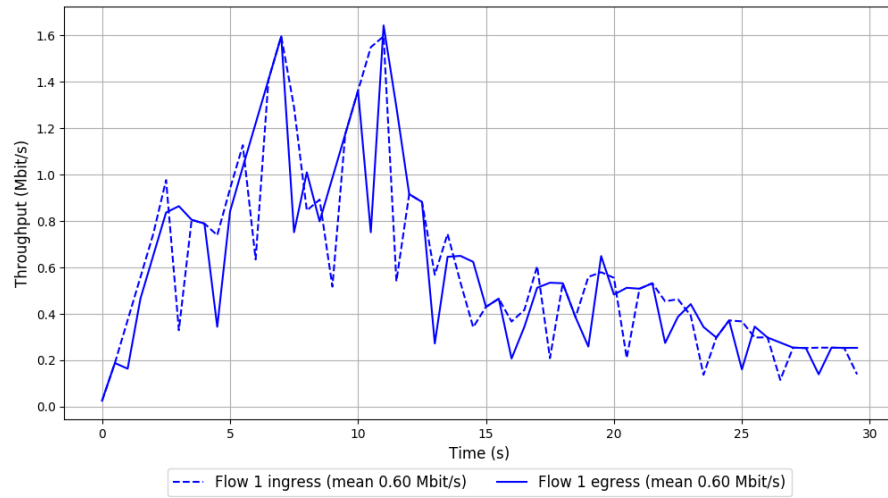
-- Flow 1:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 137.211 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-02 13:21:50

End at: 2018-01-02 13:22:20

Below is generated by plot.py at 2018-01-02 14:36:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 137.138 ms

Loss rate: 0.00%

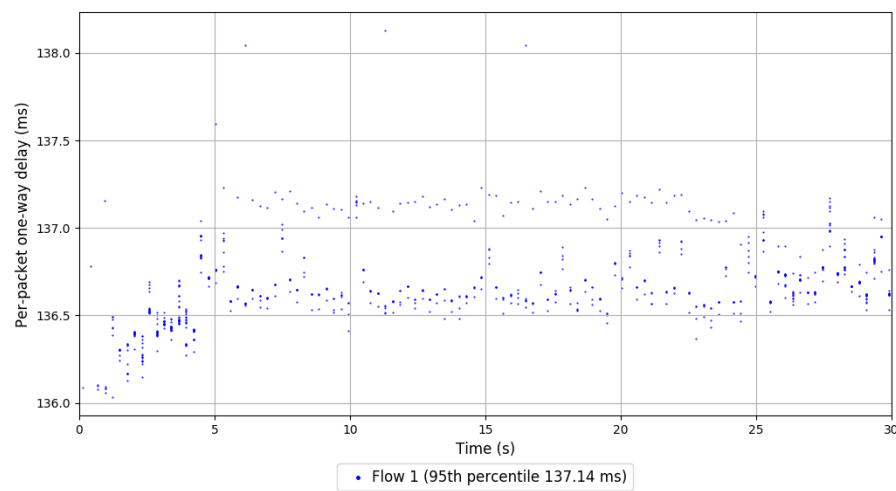
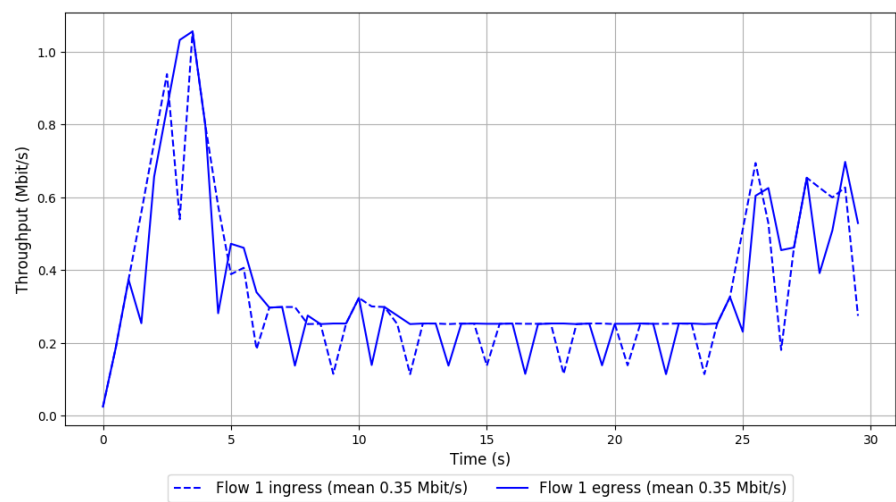
-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 137.138 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-02 13:34:46

End at: 2018-01-02 13:35:16

Below is generated by plot.py at 2018-01-02 14:36:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.02 Mbit/s

95th percentile per-packet one-way delay: 137.288 ms

Loss rate: 0.00%

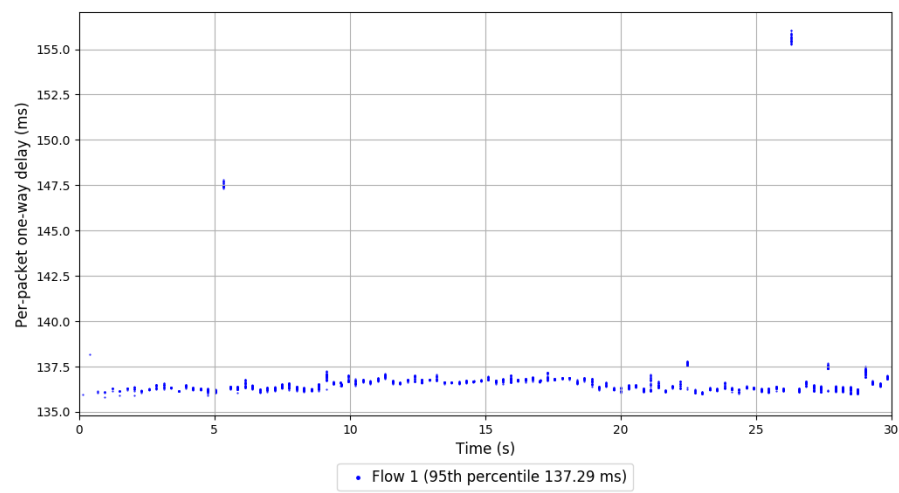
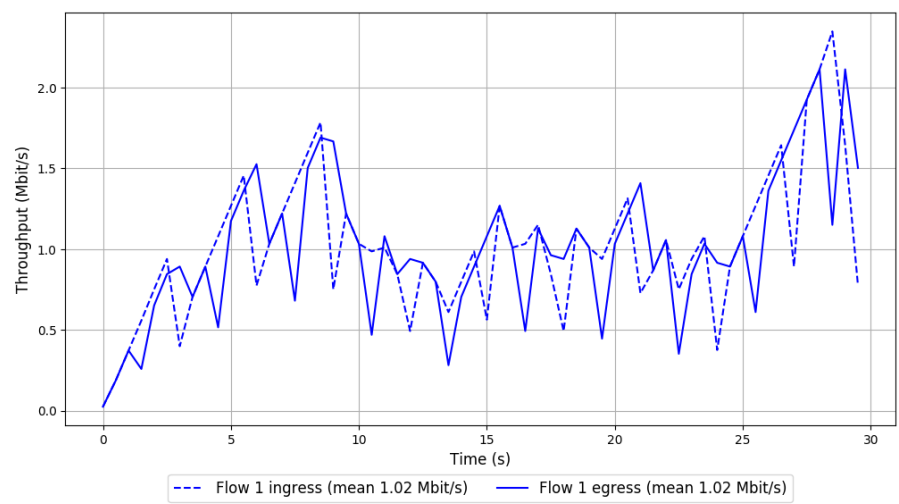
-- Flow 1:

Average throughput: 1.02 Mbit/s

95th percentile per-packet one-way delay: 137.288 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-02 13:47:37

End at: 2018-01-02 13:48:07

Below is generated by plot.py at 2018-01-02 14:36:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 137.107 ms

Loss rate: 0.00%

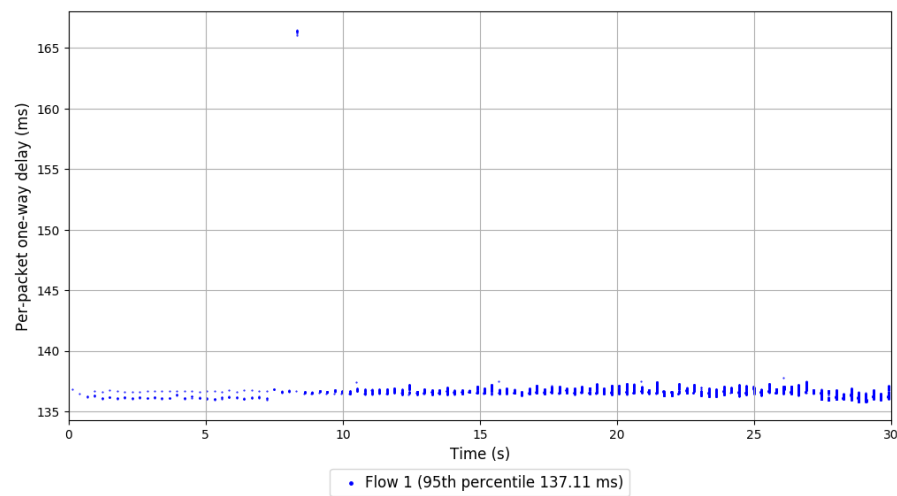
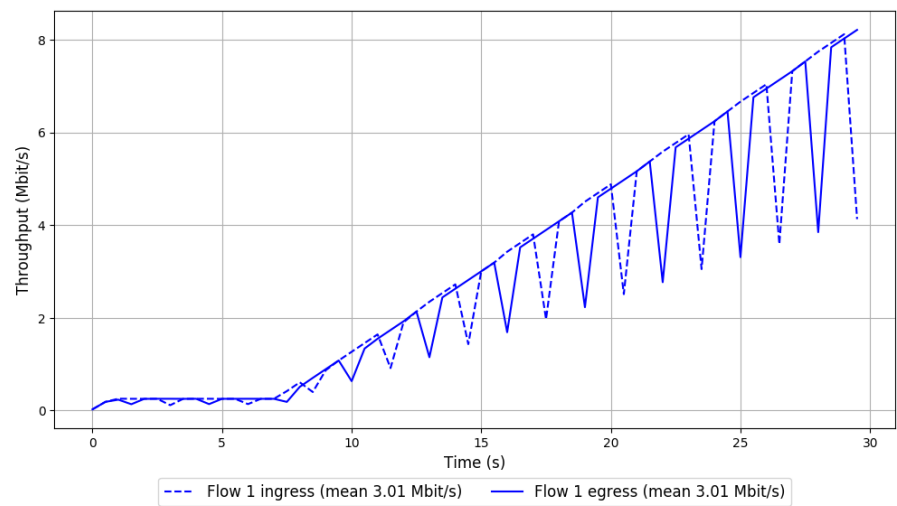
-- Flow 1:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 137.107 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

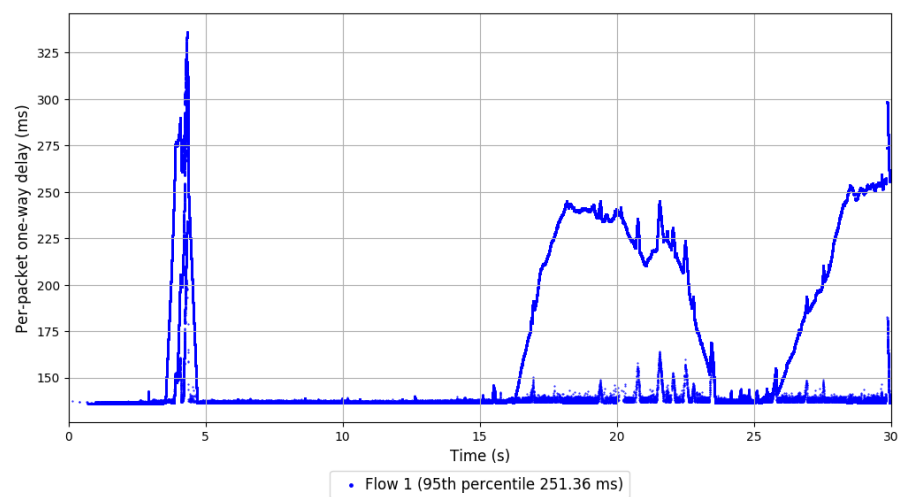
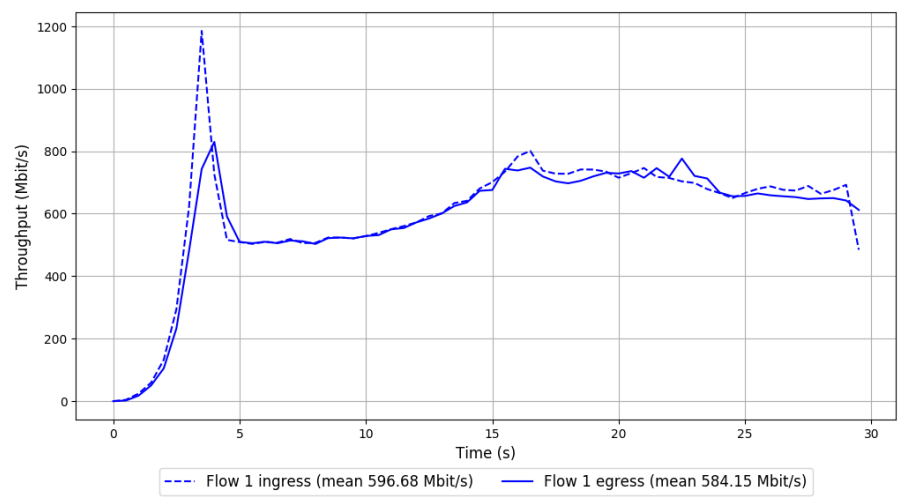


```
Run 1: Statistics of PCC

Start at: 2018-01-02 11:53:21
End at: 2018-01-02 11:53:51

# Below is generated by plot.py at 2018-01-02 14:45:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 584.15 Mbit/s
95th percentile per-packet one-way delay: 251.360 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 584.15 Mbit/s
95th percentile per-packet one-way delay: 251.360 ms
Loss rate: 2.10%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-02 12:06:19

End at: 2018-01-02 12:06:49

Below is generated by plot.py at 2018-01-02 14:45:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 583.00 Mbit/s

95th percentile per-packet one-way delay: 244.208 ms

Loss rate: 1.98%

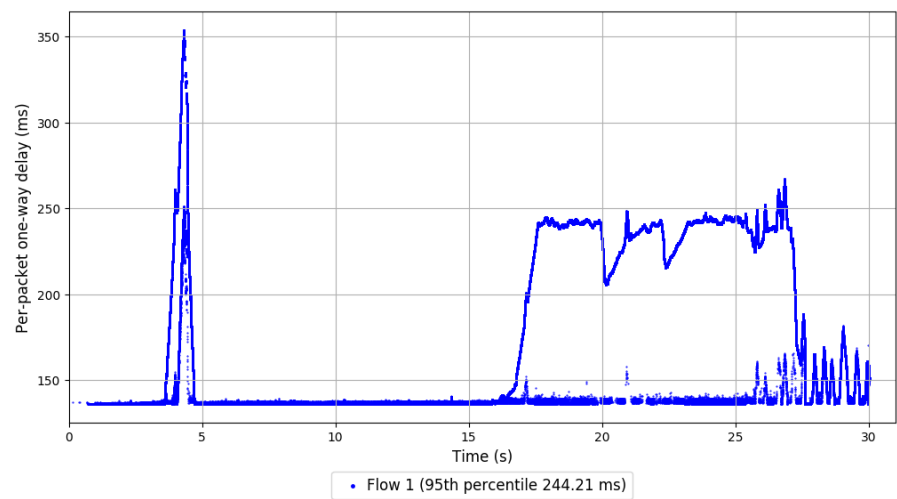
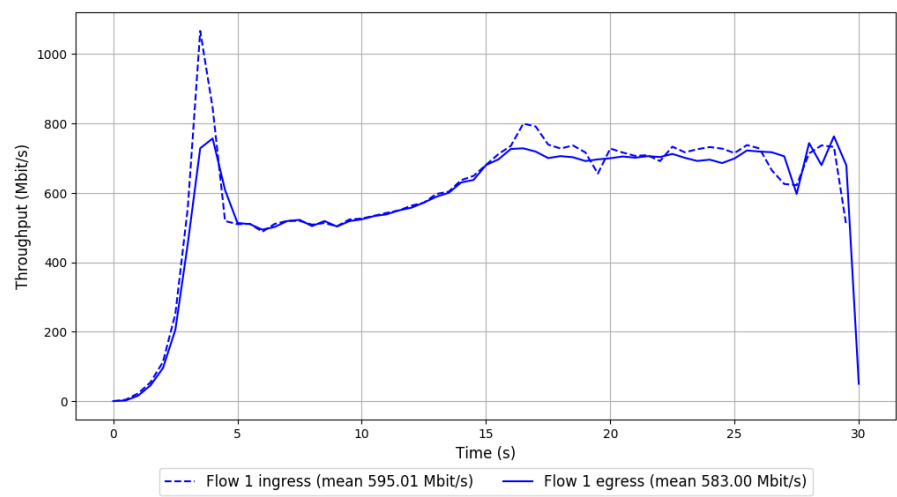
-- Flow 1:

Average throughput: 583.00 Mbit/s

95th percentile per-packet one-way delay: 244.208 ms

Loss rate: 1.98%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-02 12:19:05

End at: 2018-01-02 12:19:35

Below is generated by plot.py at 2018-01-02 14:45:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 555.85 Mbit/s

95th percentile per-packet one-way delay: 243.907 ms

Loss rate: 1.33%

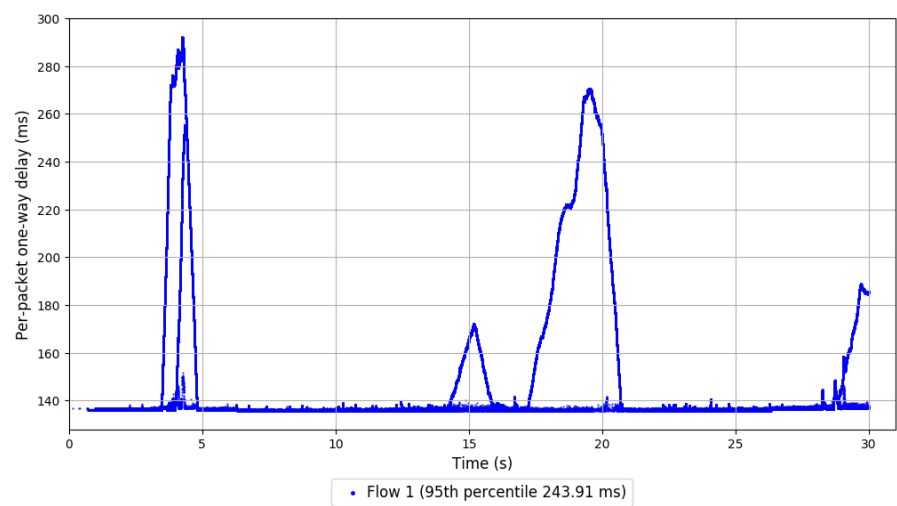
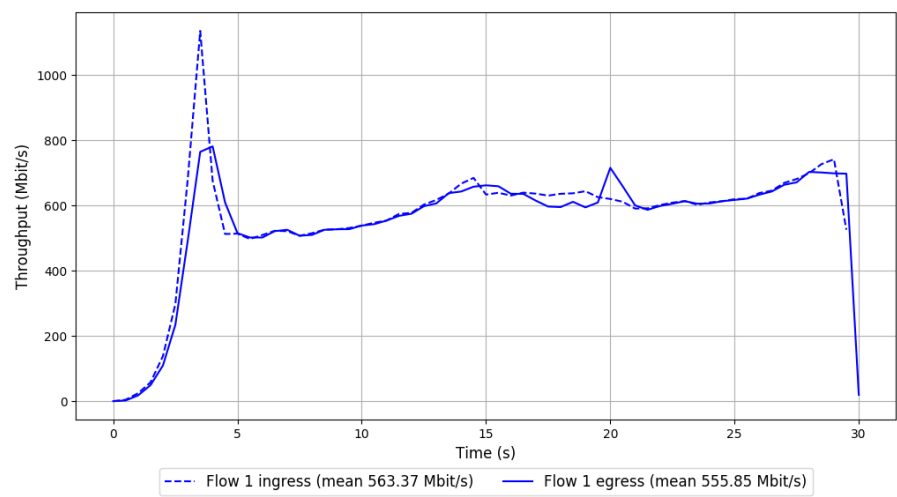
-- Flow 1:

Average throughput: 555.85 Mbit/s

95th percentile per-packet one-way delay: 243.907 ms

Loss rate: 1.33%

Run 3: Report of PCC — Data Link

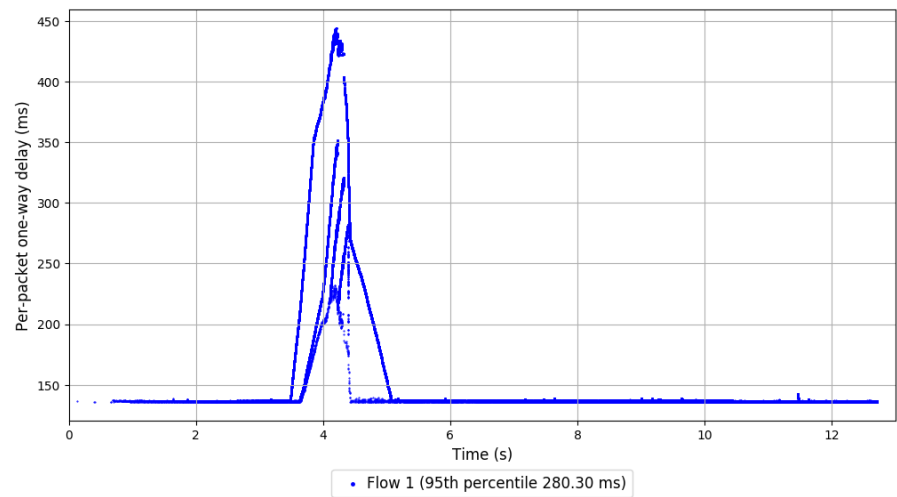
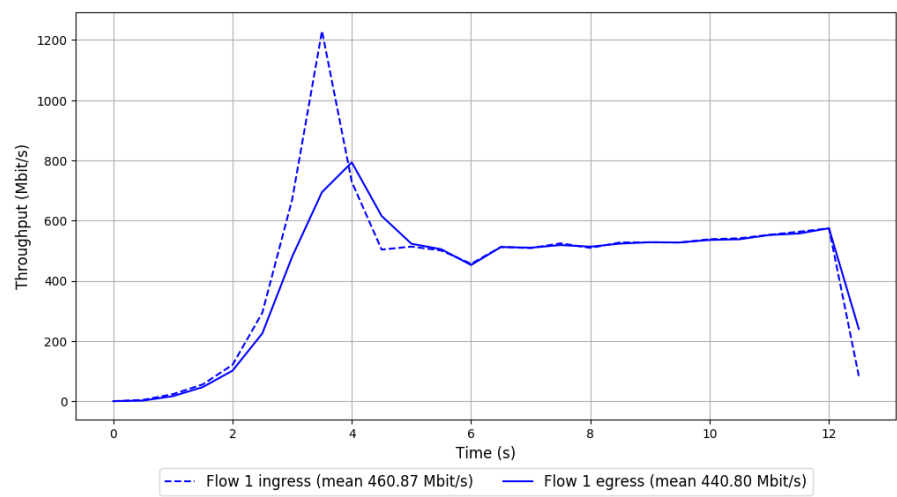


Run 4: Statistics of PCC

Start at: 2018-01-02 12:31:47

End at: 2018-01-02 12:32:17

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-02 12:44:24

End at: 2018-01-02 12:44:54

Below is generated by plot.py at 2018-01-02 14:45:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 549.91 Mbit/s

95th percentile per-packet one-way delay: 252.211 ms

Loss rate: 2.02%

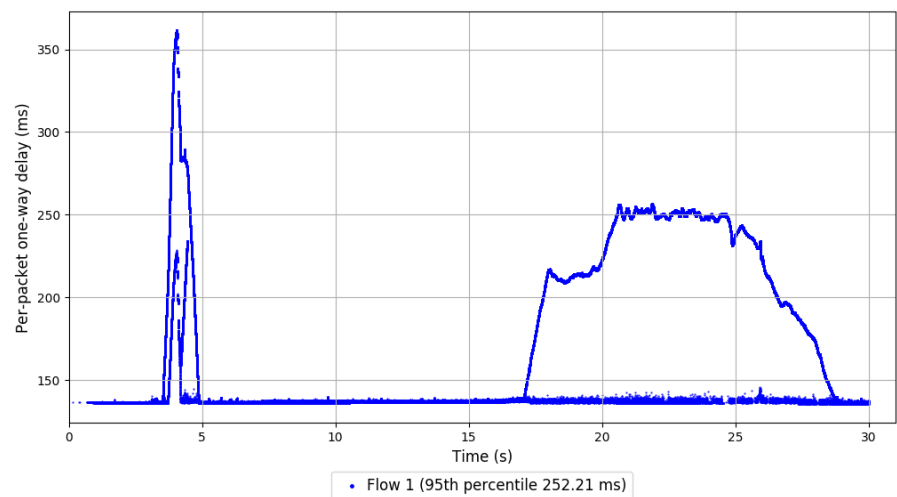
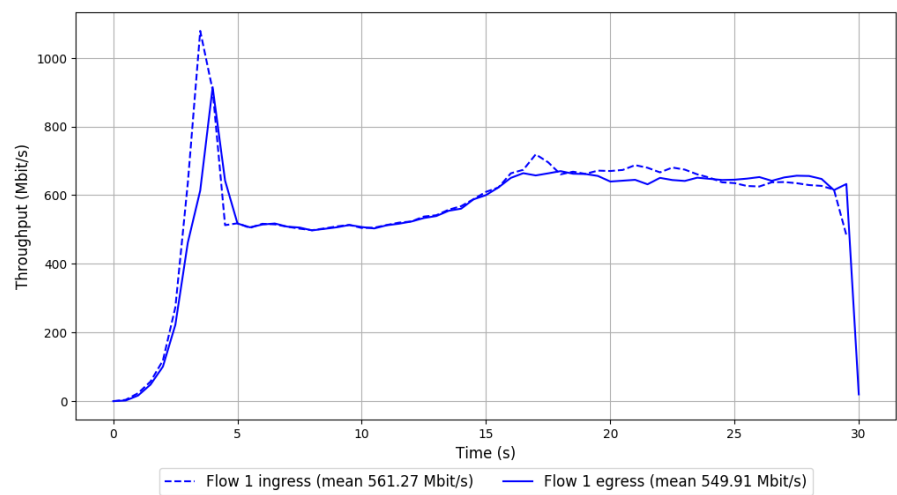
-- Flow 1:

Average throughput: 549.91 Mbit/s

95th percentile per-packet one-way delay: 252.211 ms

Loss rate: 2.02%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-02 12:57:13

End at: 2018-01-02 12:57:43

Below is generated by plot.py at 2018-01-02 14:45:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 584.99 Mbit/s

95th percentile per-packet one-way delay: 151.172 ms

Loss rate: 1.15%

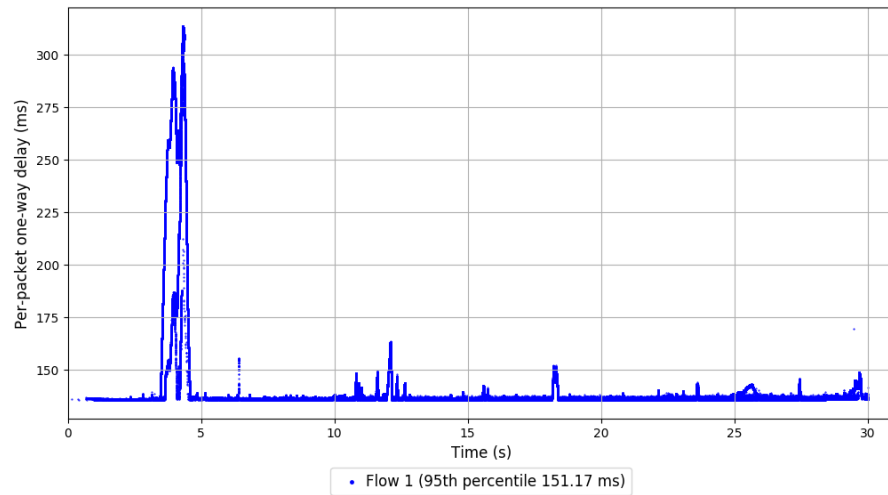
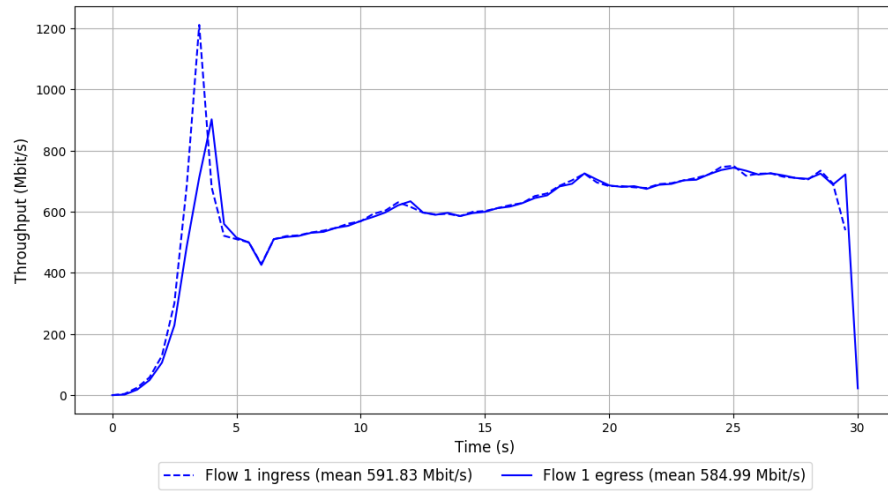
-- Flow 1:

Average throughput: 584.99 Mbit/s

95th percentile per-packet one-way delay: 151.172 ms

Loss rate: 1.15%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-02 13:10:21

End at: 2018-01-02 13:10:51

Below is generated by plot.py at 2018-01-02 14:46:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 579.38 Mbit/s

95th percentile per-packet one-way delay: 239.946 ms

Loss rate: 1.39%

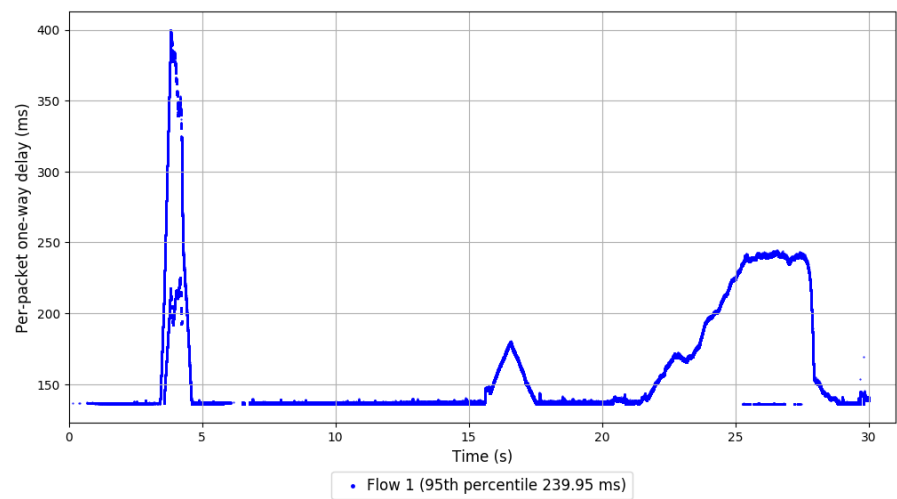
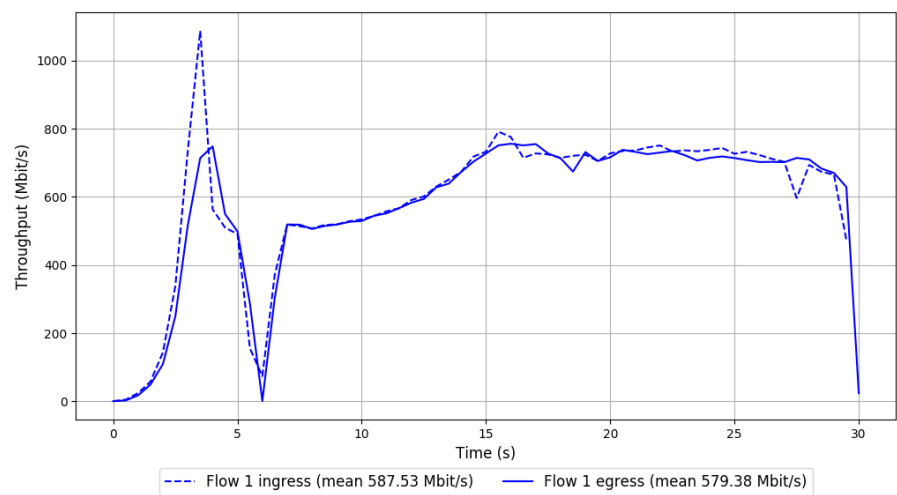
-- Flow 1:

Average throughput: 579.38 Mbit/s

95th percentile per-packet one-way delay: 239.946 ms

Loss rate: 1.39%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-02 13:23:14

End at: 2018-01-02 13:23:44

Below is generated by plot.py at 2018-01-02 14:47:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 619.08 Mbit/s

95th percentile per-packet one-way delay: 187.509 ms

Loss rate: 1.06%

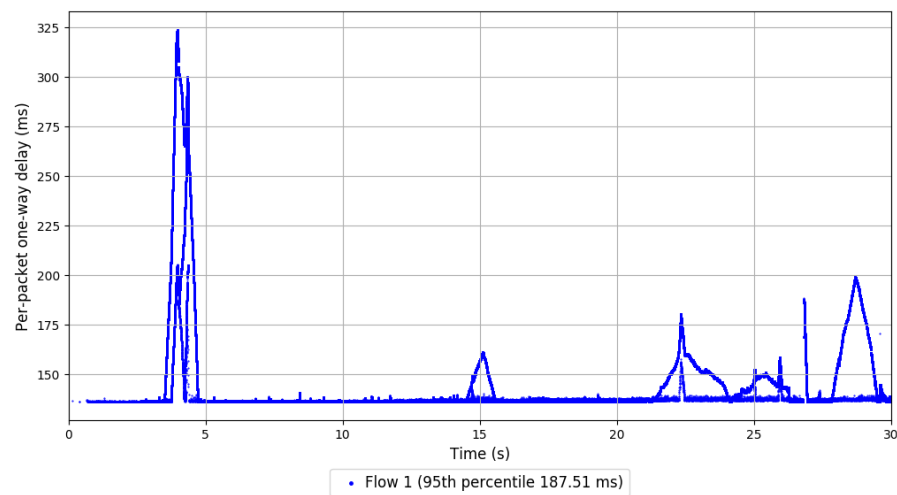
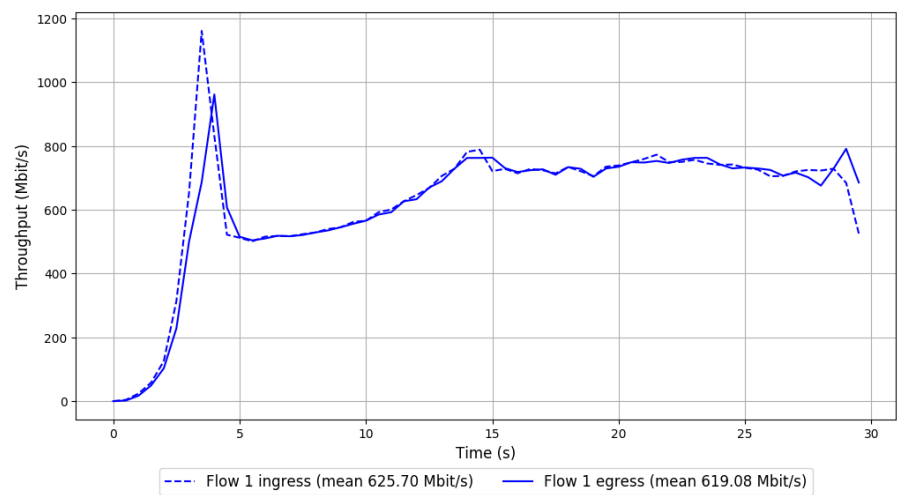
-- Flow 1:

Average throughput: 619.08 Mbit/s

95th percentile per-packet one-way delay: 187.509 ms

Loss rate: 1.06%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-02 13:36:10

End at: 2018-01-02 13:36:40

Below is generated by plot.py at 2018-01-02 14:50:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 587.74 Mbit/s

95th percentile per-packet one-way delay: 157.724 ms

Loss rate: 0.64%

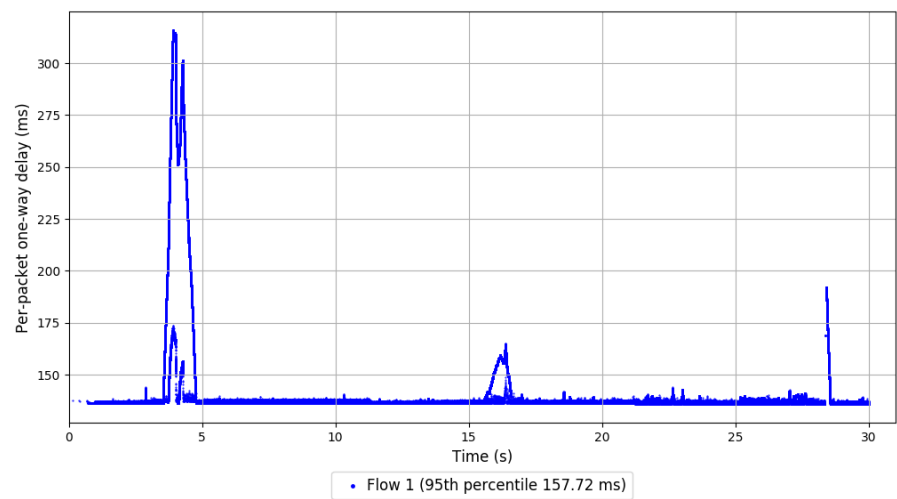
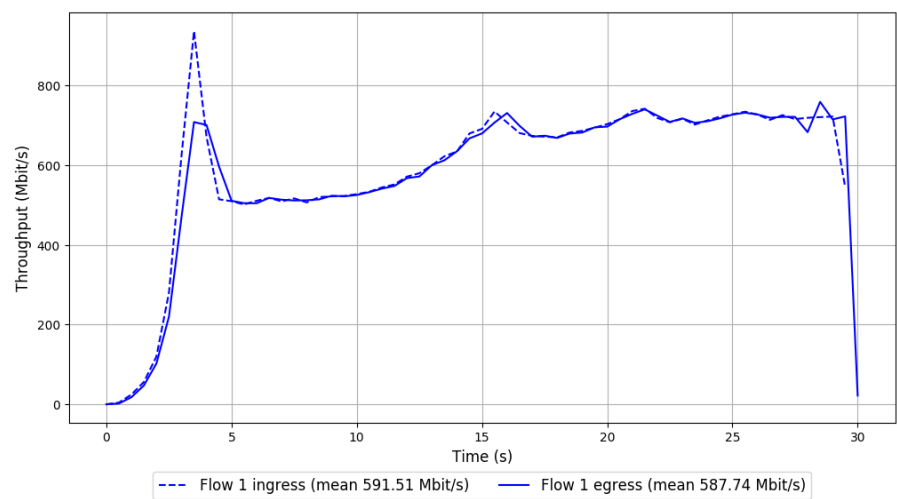
-- Flow 1:

Average throughput: 587.74 Mbit/s

95th percentile per-packet one-way delay: 157.724 ms

Loss rate: 0.64%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-02 13:49:03

End at: 2018-01-02 13:49:33

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 566.32 Mbit/s

95th percentile per-packet one-way delay: 166.668 ms

Loss rate: 0.77%

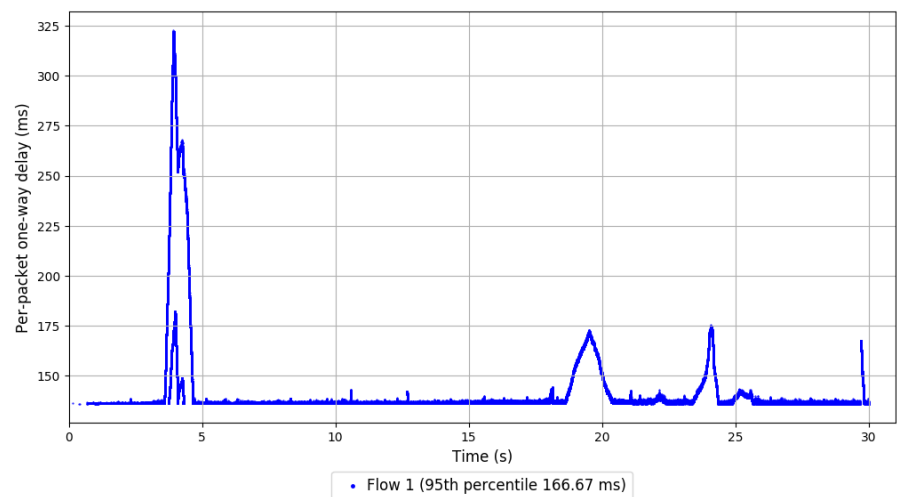
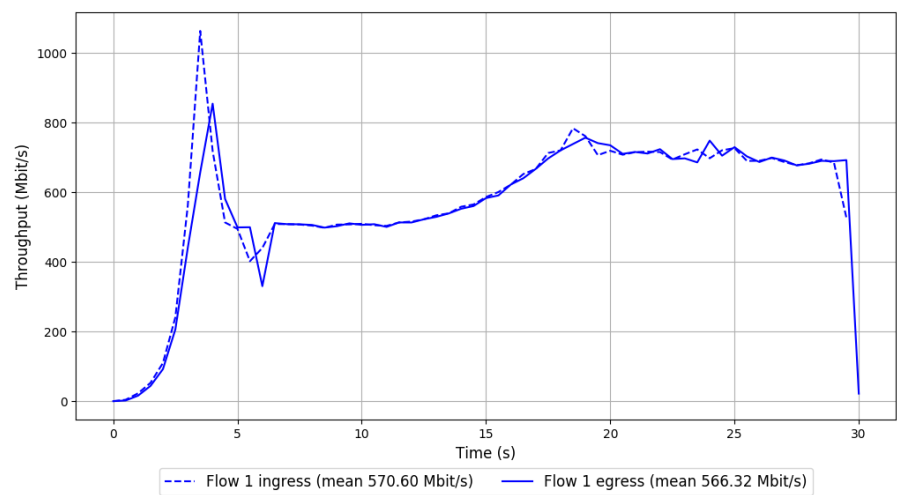
-- Flow 1:

Average throughput: 566.32 Mbit/s

95th percentile per-packet one-way delay: 166.668 ms

Loss rate: 0.77%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-01-02 11:54:29

End at: 2018-01-02 11:54:59

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.87 Mbit/s

95th percentile per-packet one-way delay: 137.075 ms

Loss rate: 0.00%

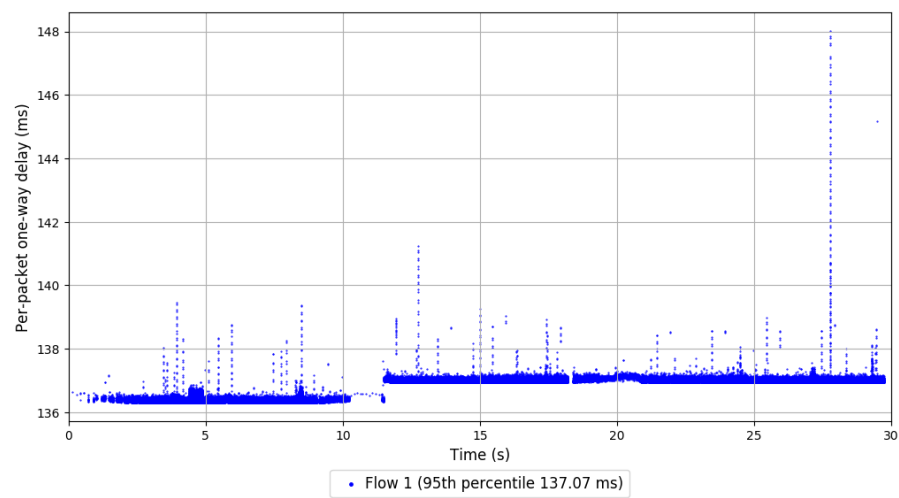
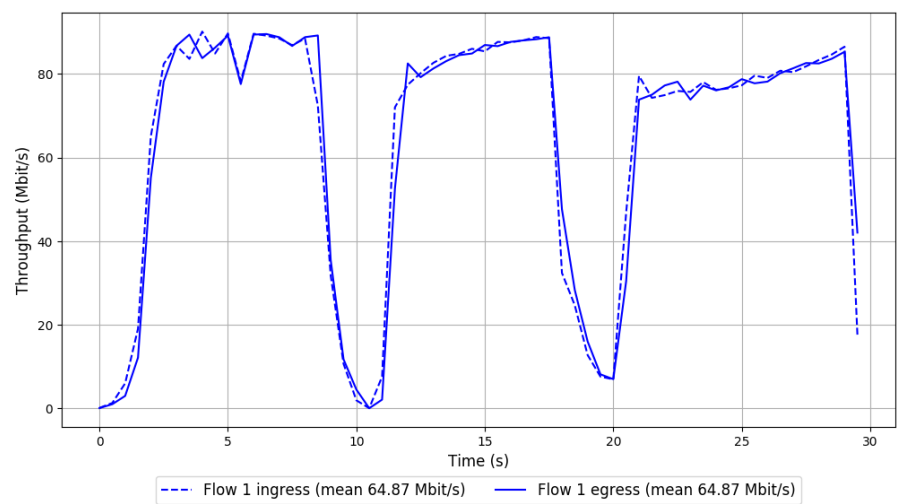
-- Flow 1:

Average throughput: 64.87 Mbit/s

95th percentile per-packet one-way delay: 137.075 ms

Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-02 12:07:27

End at: 2018-01-02 12:07:57

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 136.988 ms

Loss rate: 0.00%

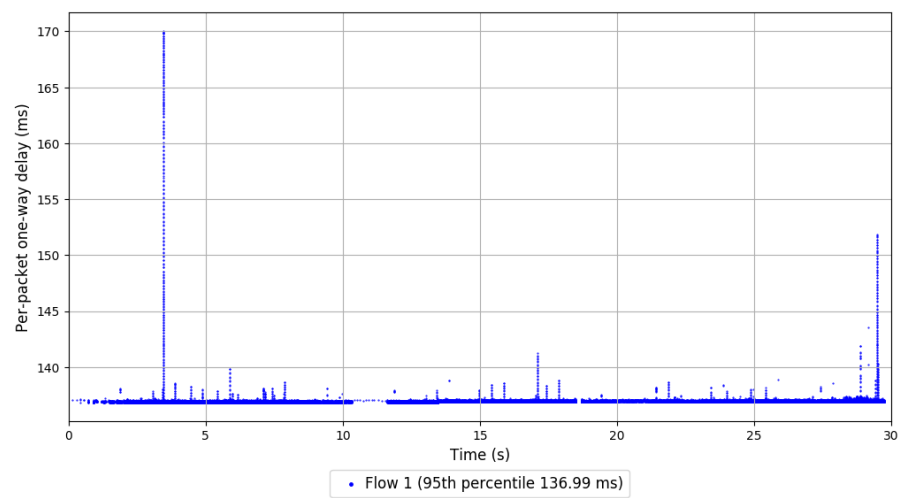
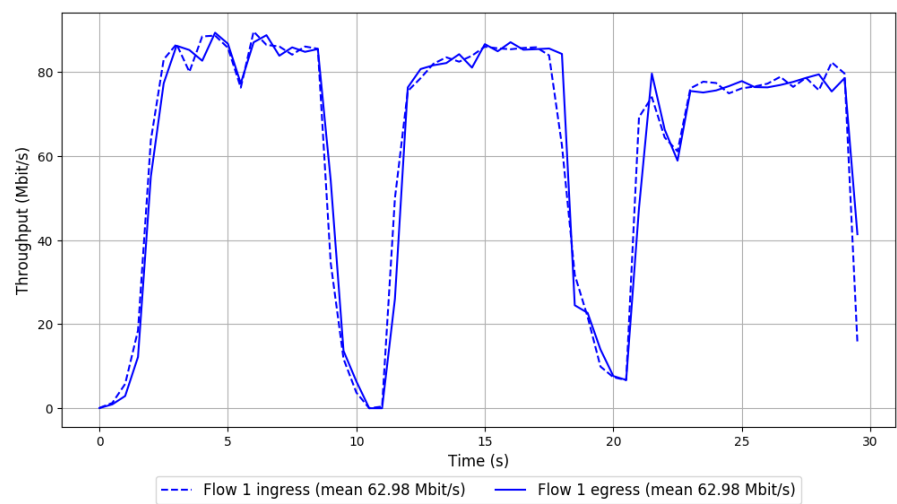
-- Flow 1:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 136.988 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-02 12:20:12

End at: 2018-01-02 12:20:42

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.17 Mbit/s

95th percentile per-packet one-way delay: 136.850 ms

Loss rate: 0.00%

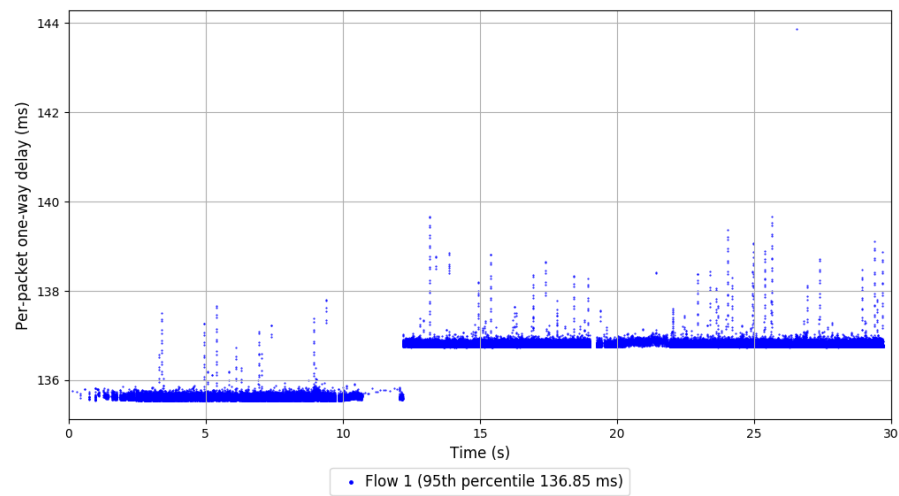
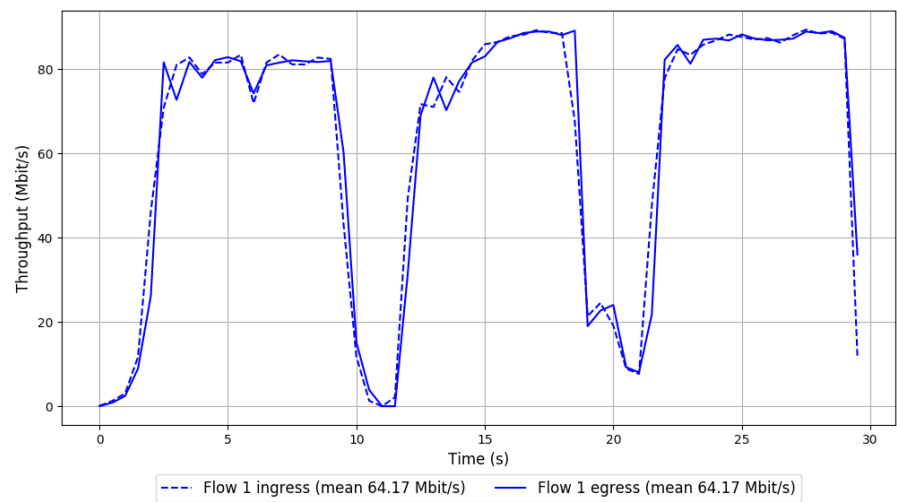
-- Flow 1:

Average throughput: 64.17 Mbit/s

95th percentile per-packet one-way delay: 136.850 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-02 12:32:38

End at: 2018-01-02 12:33:08

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.74 Mbit/s

95th percentile per-packet one-way delay: 137.087 ms

Loss rate: 0.00%

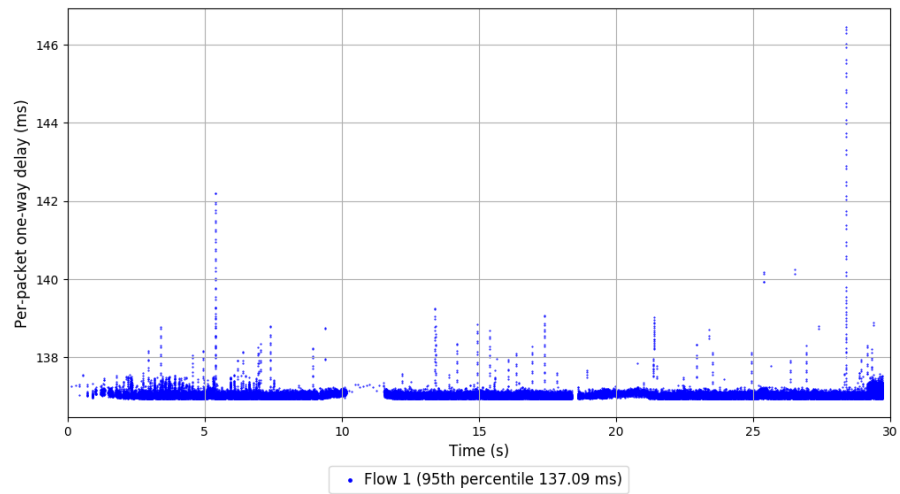
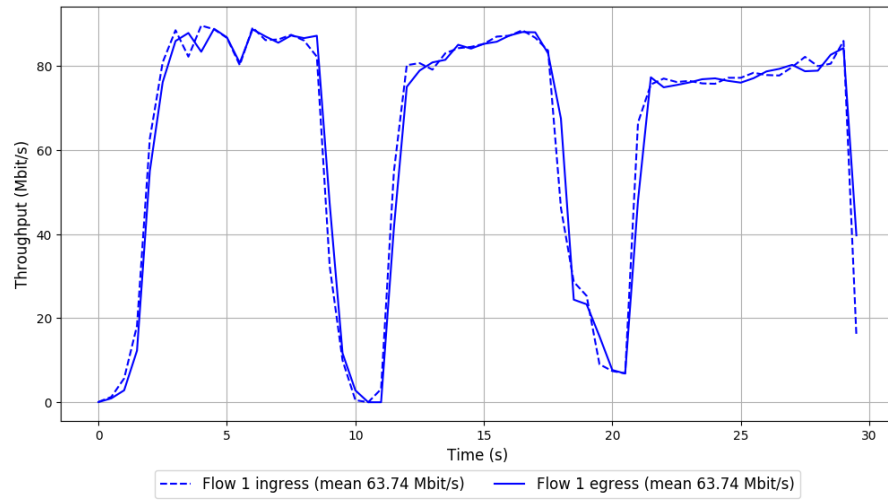
-- Flow 1:

Average throughput: 63.74 Mbit/s

95th percentile per-packet one-way delay: 137.087 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-02 12:45:30

End at: 2018-01-02 12:46:00

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.50 Mbit/s

95th percentile per-packet one-way delay: 137.084 ms

Loss rate: 0.00%

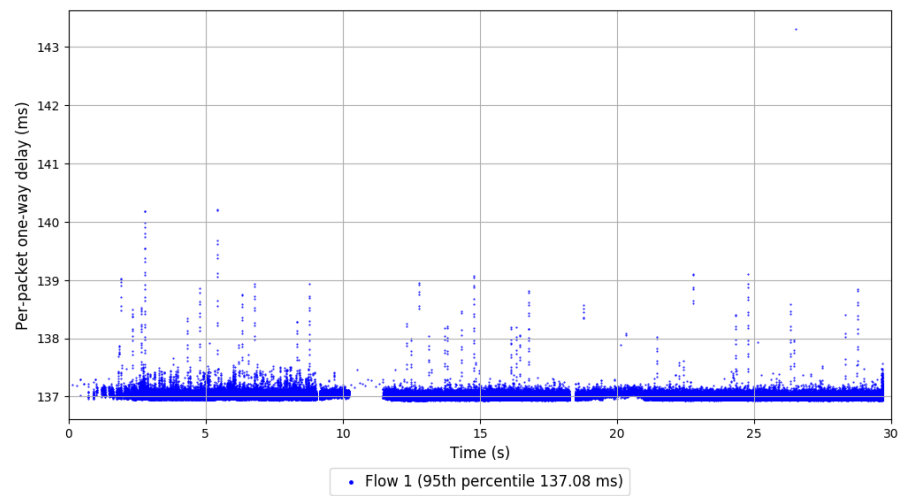
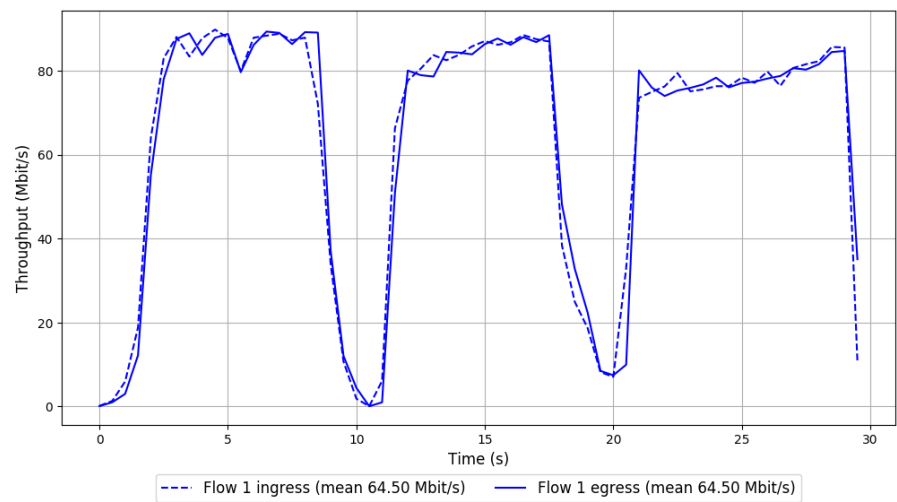
-- Flow 1:

Average throughput: 64.50 Mbit/s

95th percentile per-packet one-way delay: 137.084 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-02 12:58:21

End at: 2018-01-02 12:58:51

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.57 Mbit/s

95th percentile per-packet one-way delay: 136.999 ms

Loss rate: 0.00%

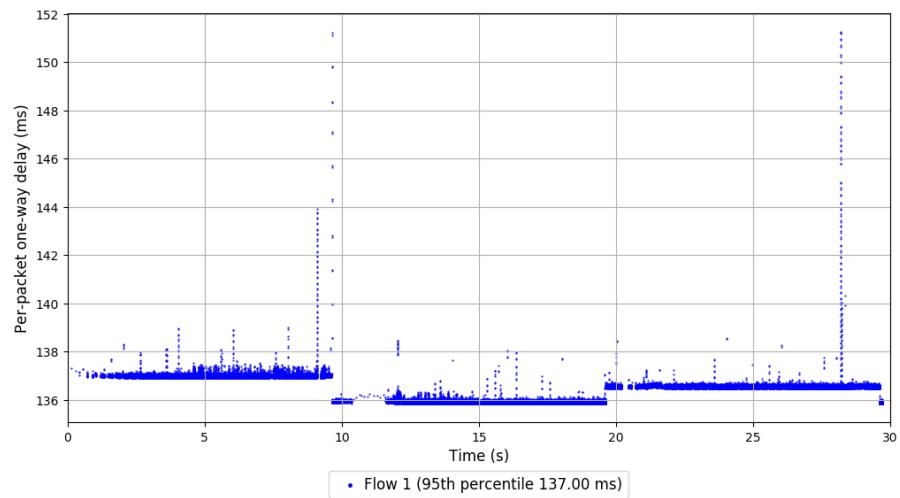
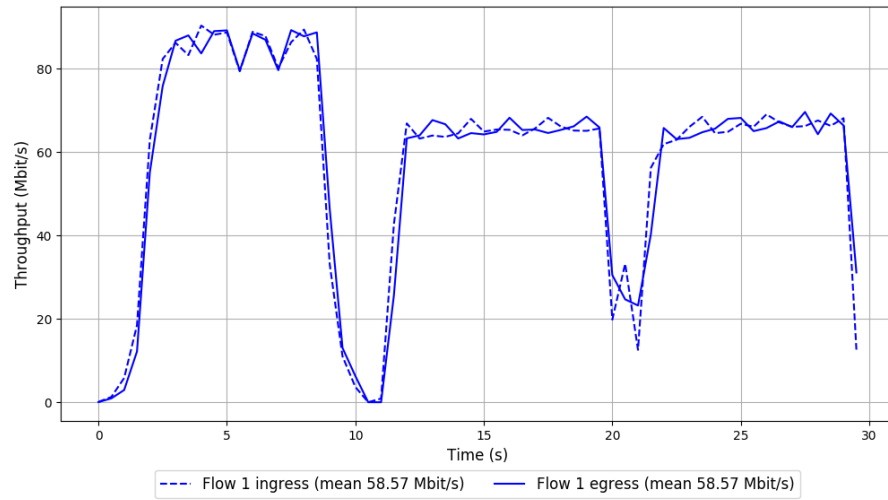
-- Flow 1:

Average throughput: 58.57 Mbit/s

95th percentile per-packet one-way delay: 136.999 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-02 13:11:29

End at: 2018-01-02 13:11:59

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.10 Mbit/s

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

Loss rate: 0.06%

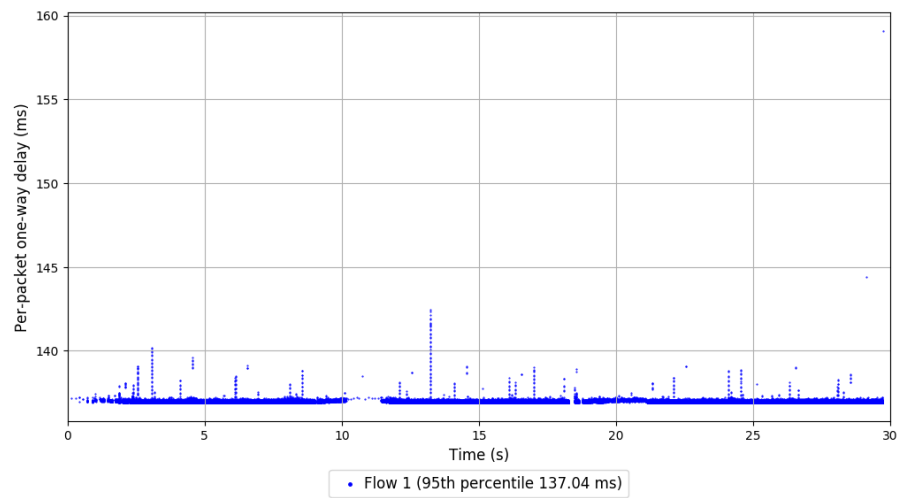
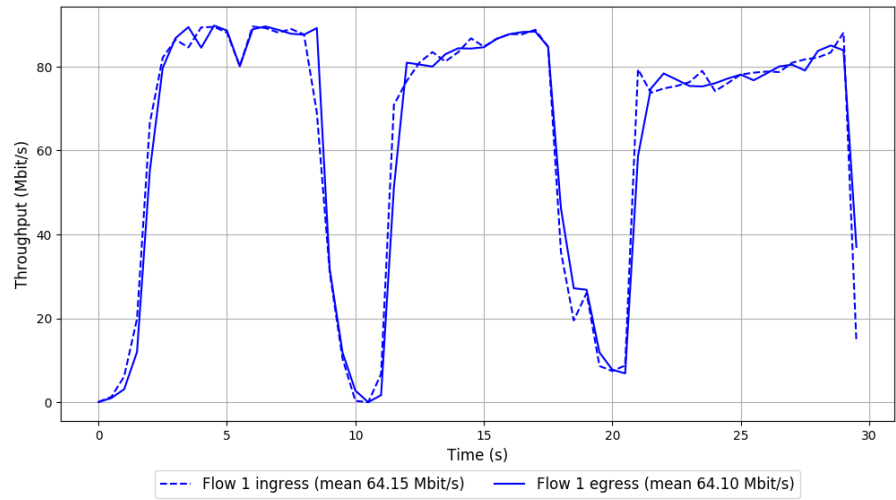
-- Flow 1:

Average throughput: 64.10 Mbit/s

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

Loss rate: 0.06%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-02 13:24:24

End at: 2018-01-02 13:24:54

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.08 Mbit/s

95th percentile per-packet one-way delay: 136.721 ms

Loss rate: 0.00%

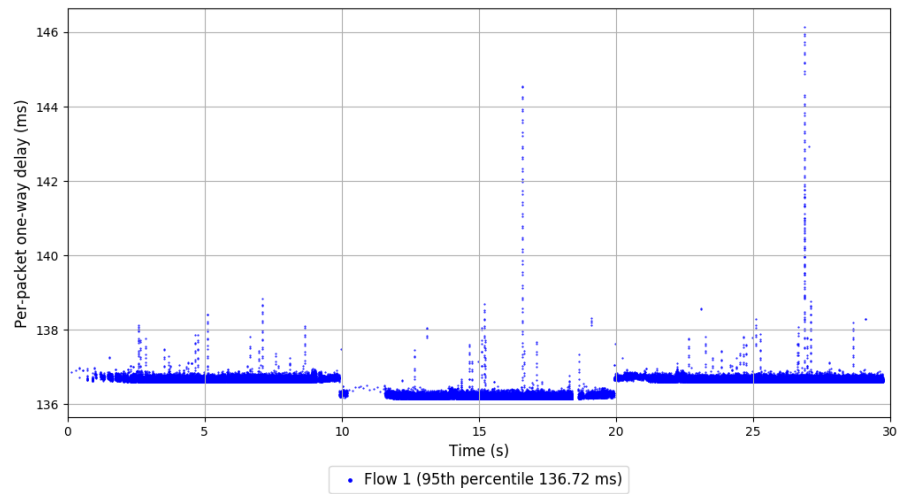
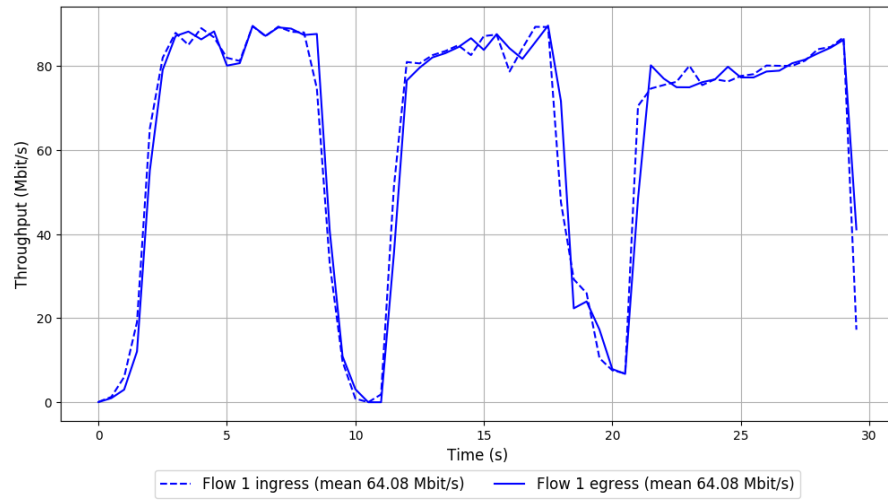
-- Flow 1:

Average throughput: 64.08 Mbit/s

95th percentile per-packet one-way delay: 136.721 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-02 13:37:18

End at: 2018-01-02 13:37:48

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.87 Mbit/s

95th percentile per-packet one-way delay: 136.558 ms

Loss rate: 0.00%

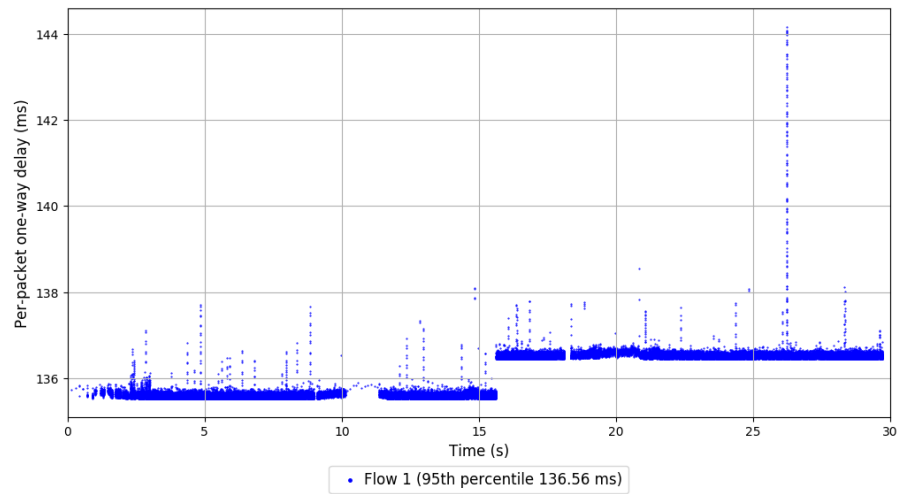
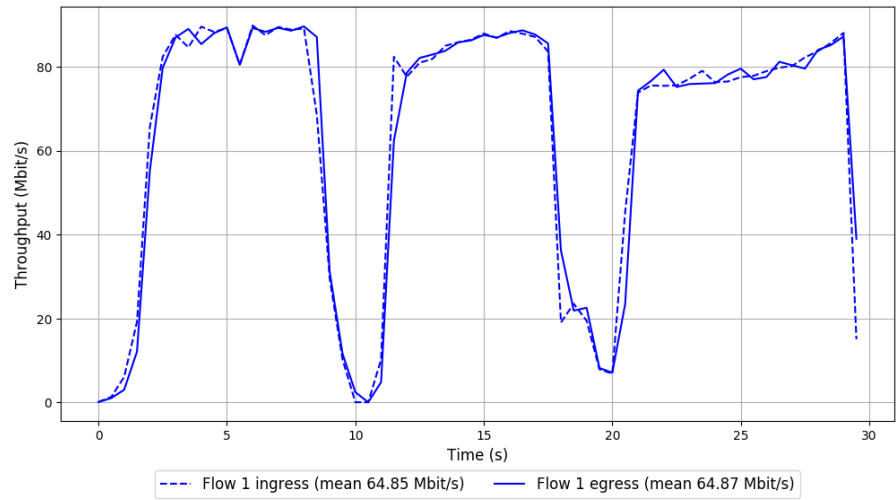
-- Flow 1:

Average throughput: 64.87 Mbit/s

95th percentile per-packet one-way delay: 136.558 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-02 13:50:11

End at: 2018-01-02 13:50:41

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.57 Mbit/s

95th percentile per-packet one-way delay: 136.911 ms

Loss rate: 0.00%

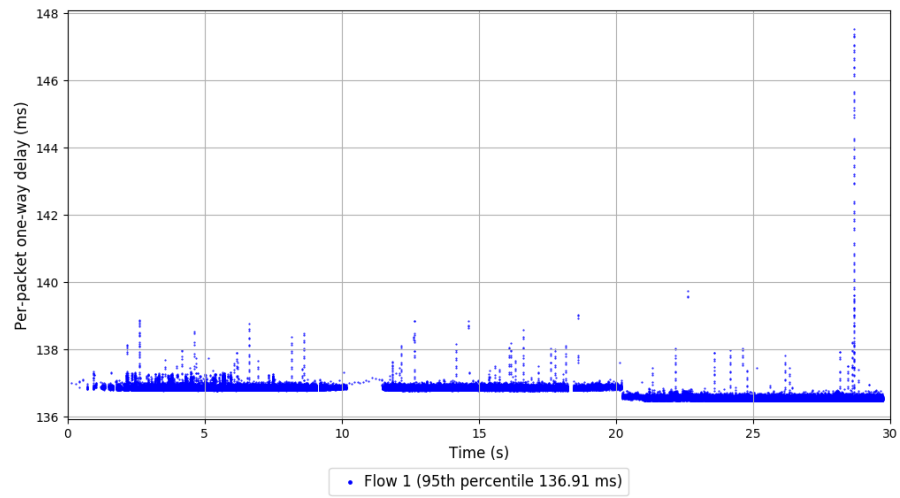
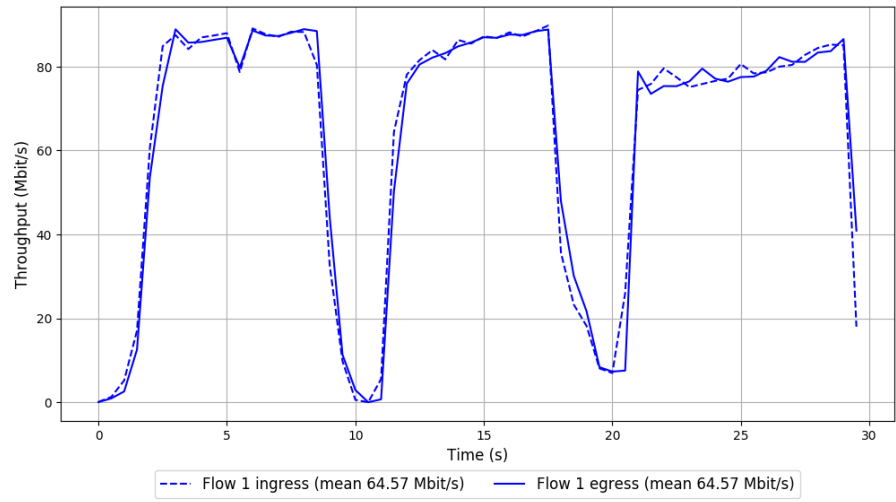
-- Flow 1:

Average throughput: 64.57 Mbit/s

95th percentile per-packet one-way delay: 136.911 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

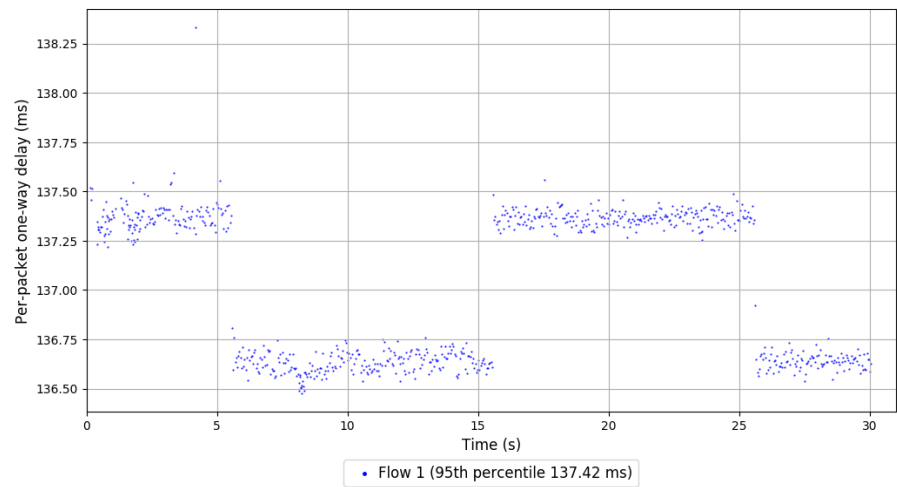
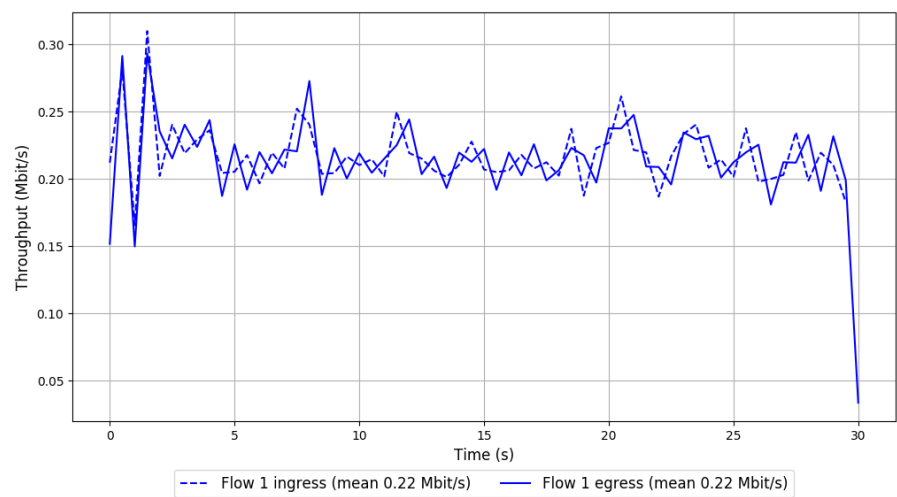


```
Run 1: Statistics of SCReAM

Start at: 2018-01-02 11:52:39
End at: 2018-01-02 11:53:09

# Below is generated by plot.py at 2018-01-02 14:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.424 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.424 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-01-02 12:05:37

End at: 2018-01-02 12:06:07

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.313 ms

Loss rate: 0.00%

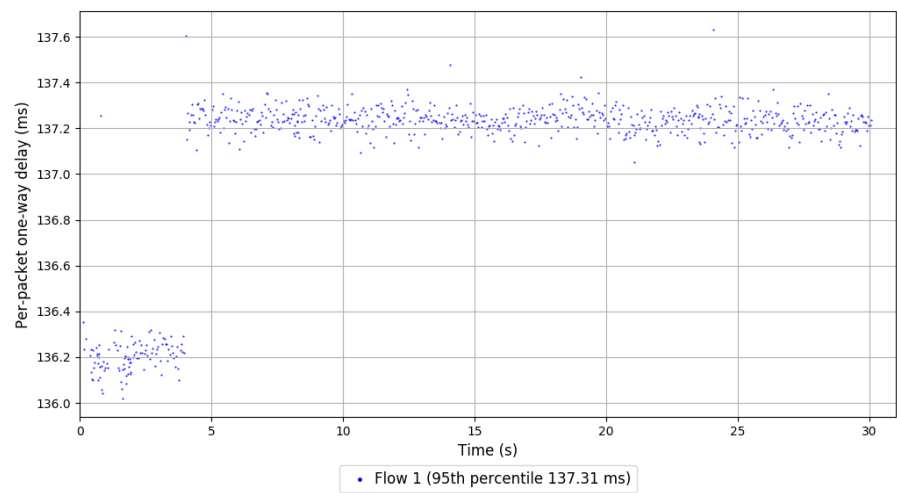
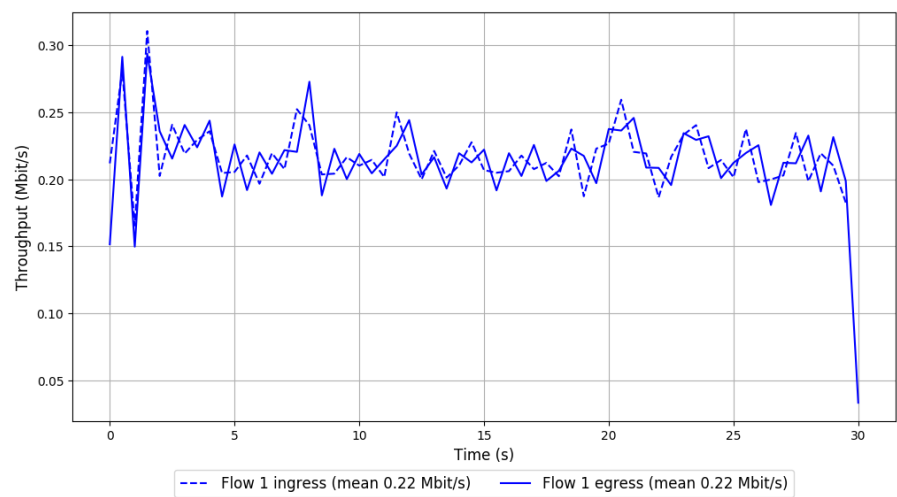
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.313 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-02 12:18:23

End at: 2018-01-02 12:18:53

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.497 ms

Loss rate: 0.00%

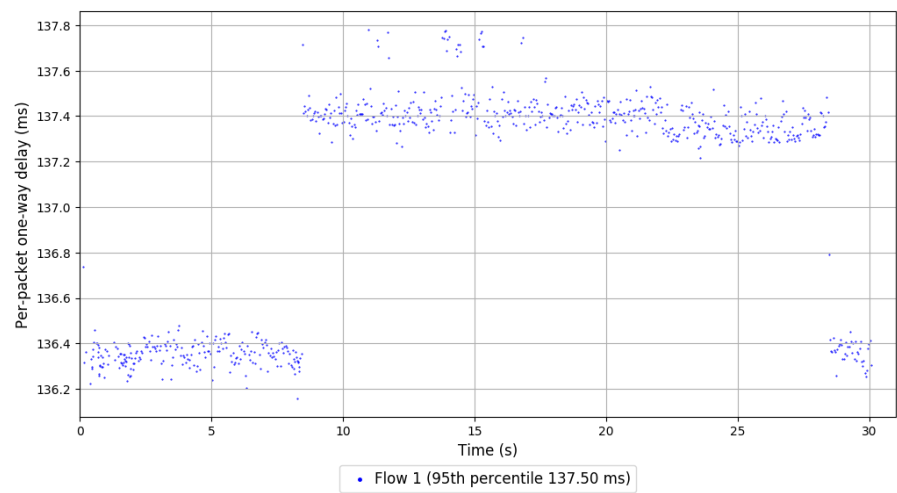
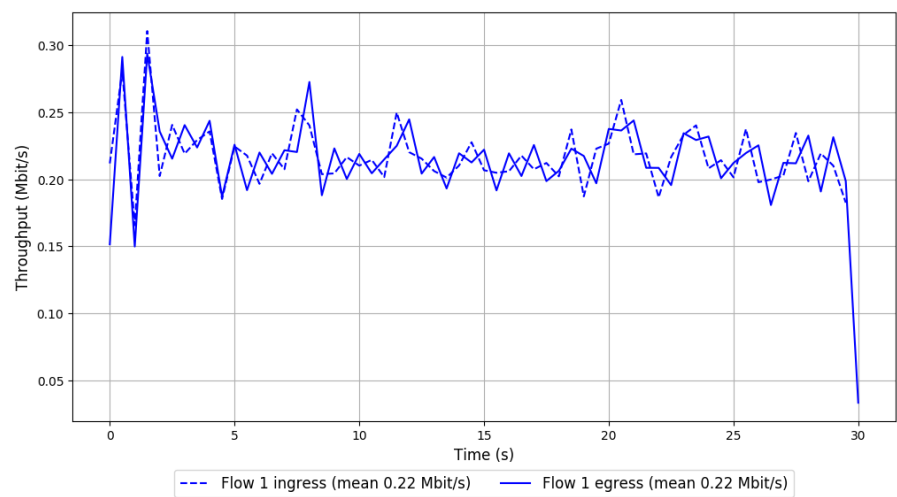
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.497 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-01-02 12:31:05

End at: 2018-01-02 12:31:35

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.107 ms

Loss rate: 0.00%

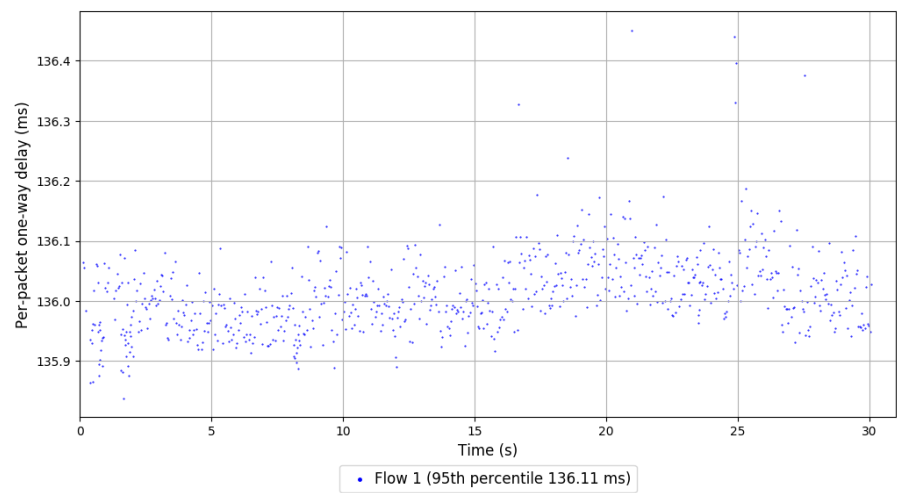
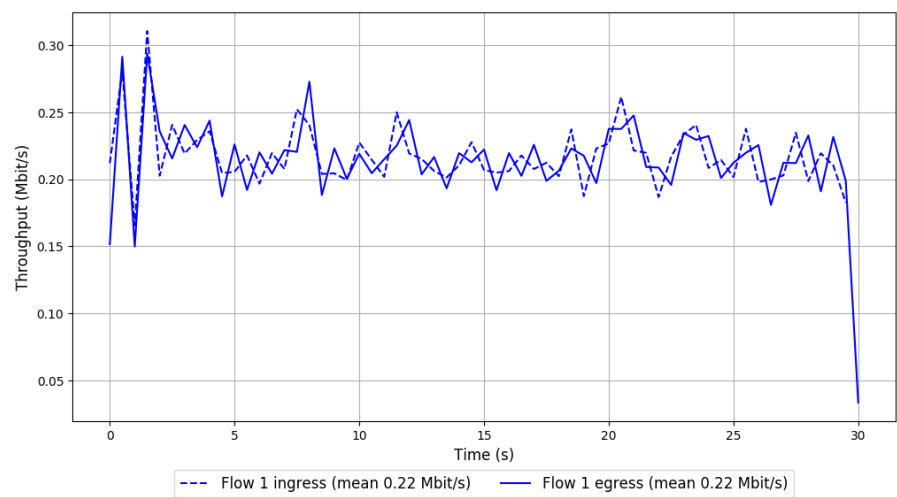
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.107 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-02 12:43:42

End at: 2018-01-02 12:44:12

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.232 ms

Loss rate: 0.00%

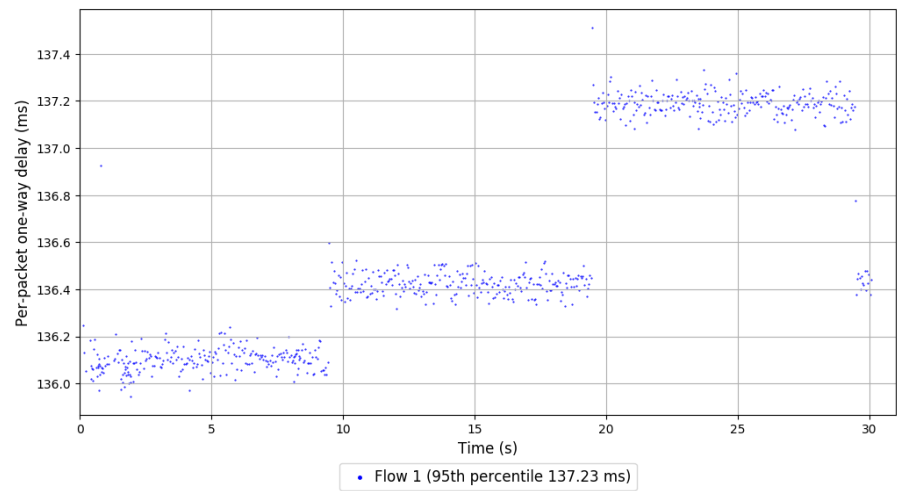
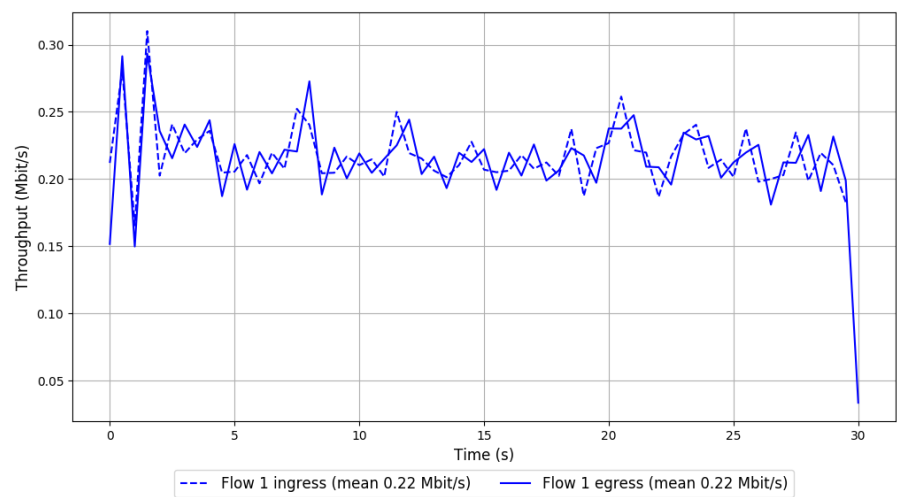
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.232 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-02 12:56:31

End at: 2018-01-02 12:57:01

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.089 ms

Loss rate: 0.00%

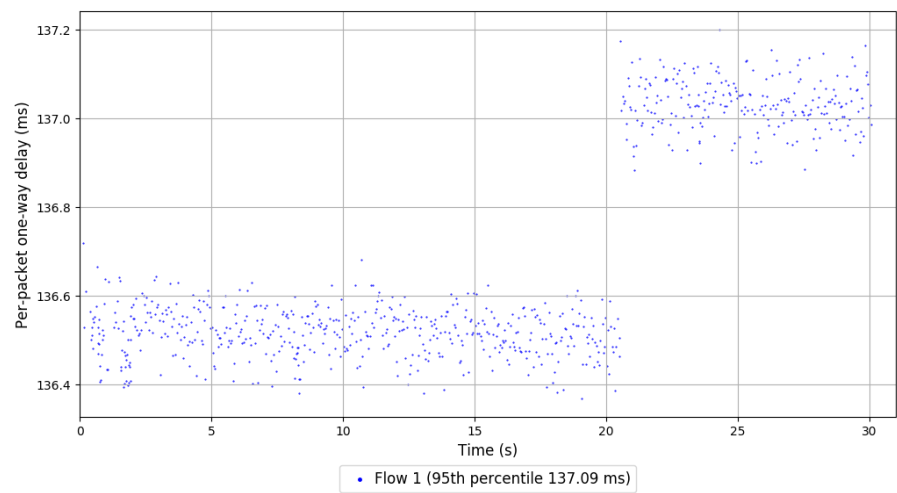
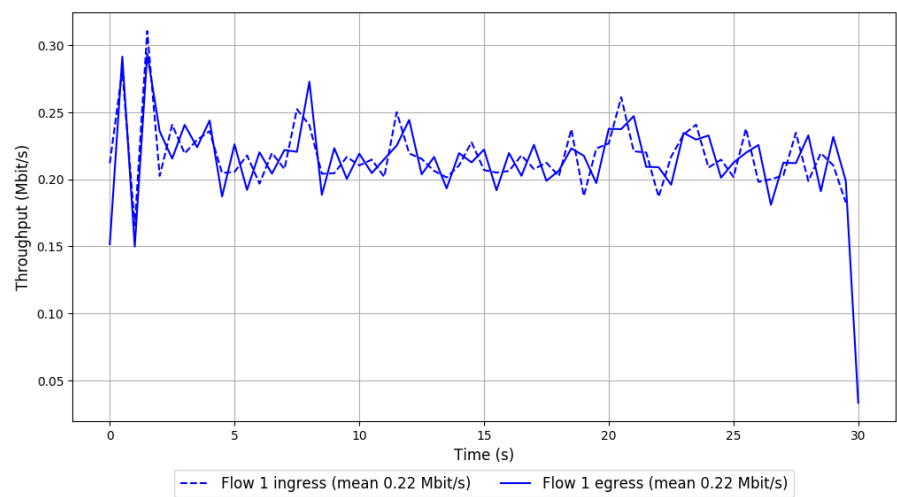
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.089 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-02 13:09:39

End at: 2018-01-02 13:10:09

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.596 ms

Loss rate: 0.00%

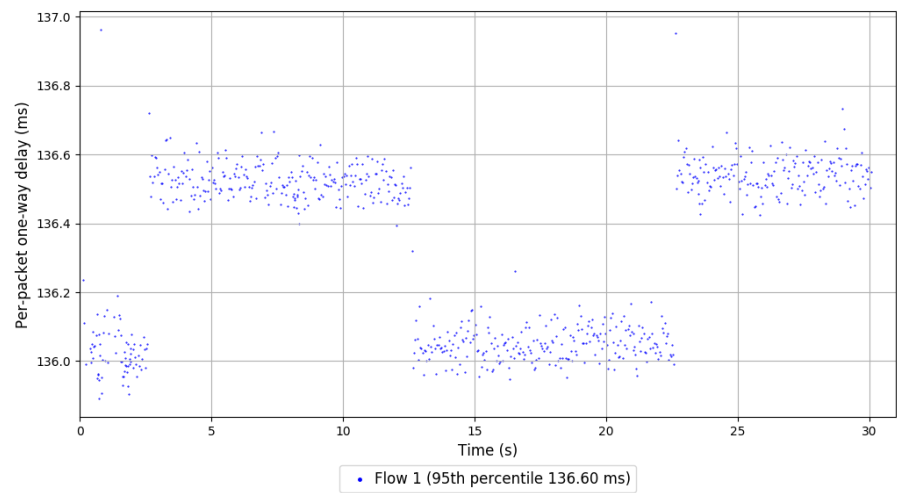
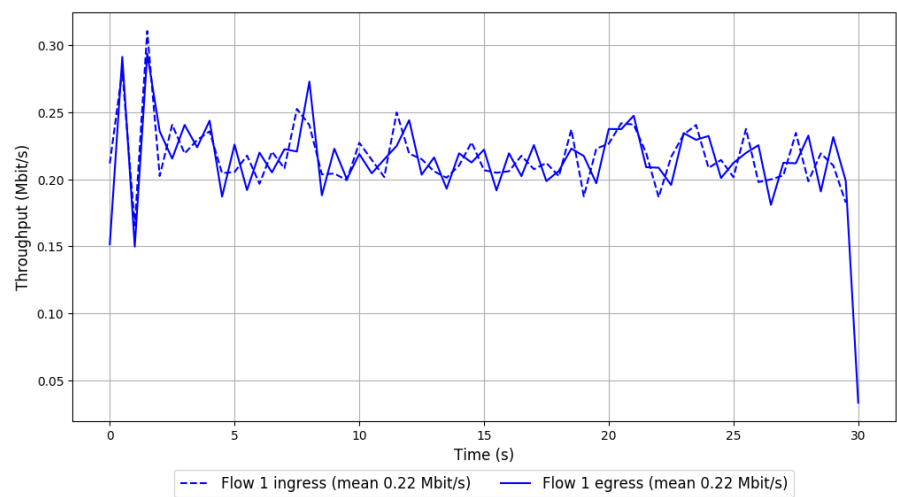
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.596 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-02 13:22:32

End at: 2018-01-02 13:23:02

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.244 ms

Loss rate: 0.00%

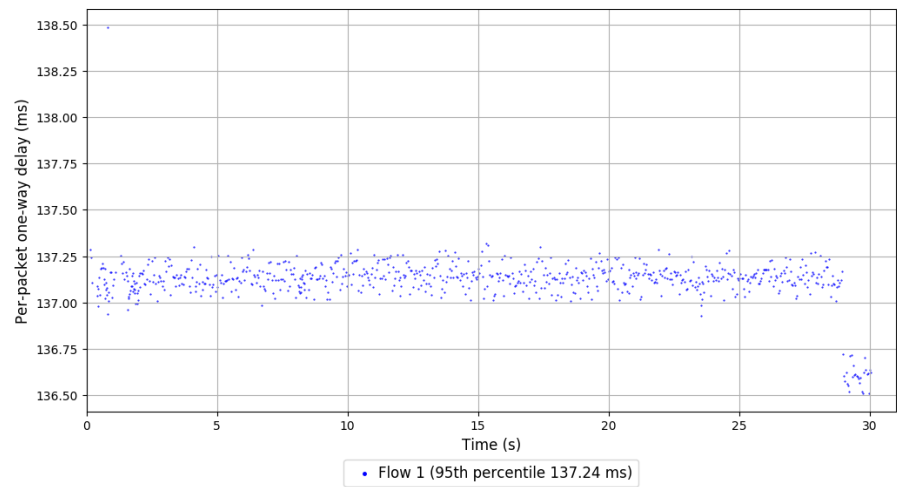
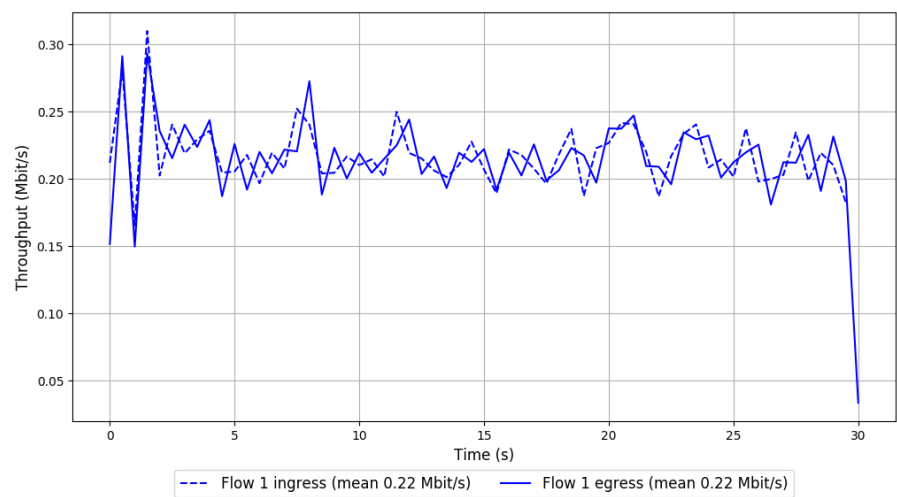
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.244 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-02 13:35:28

End at: 2018-01-02 13:35:58

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

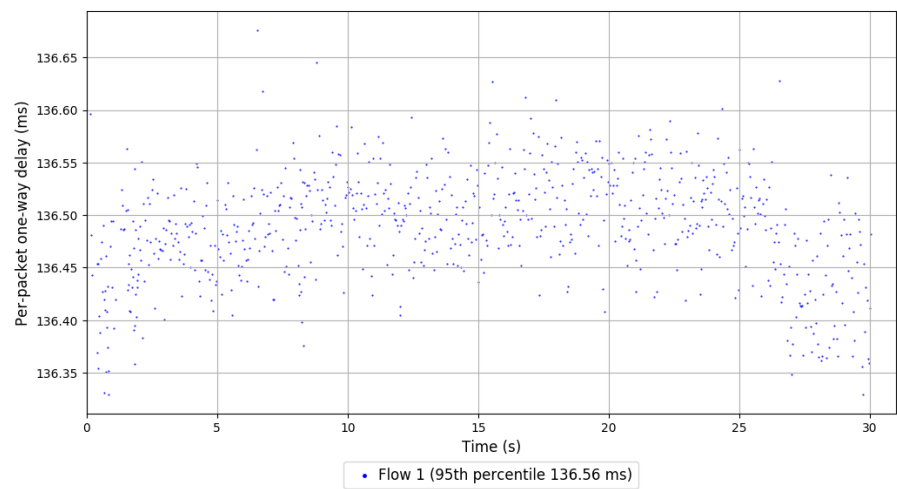
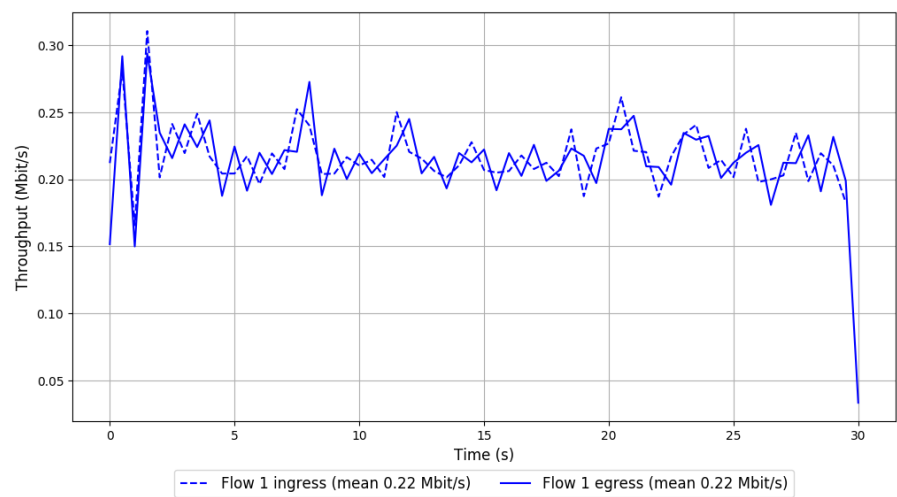
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

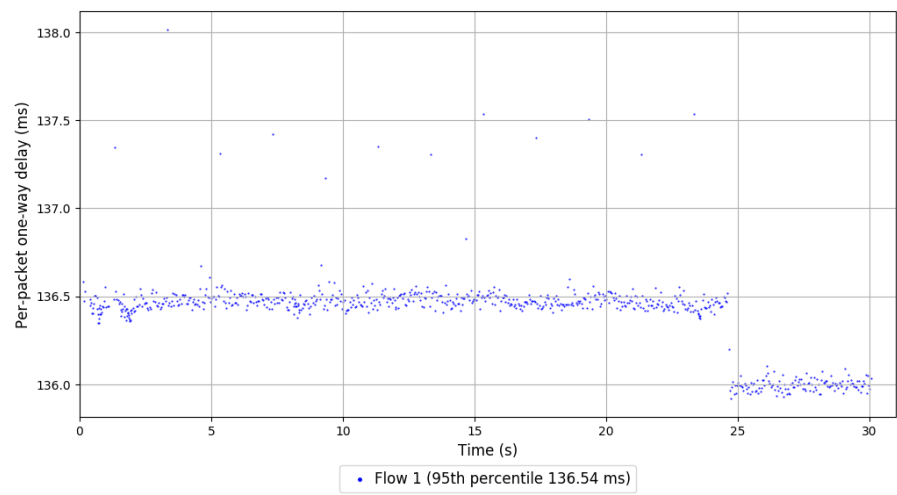
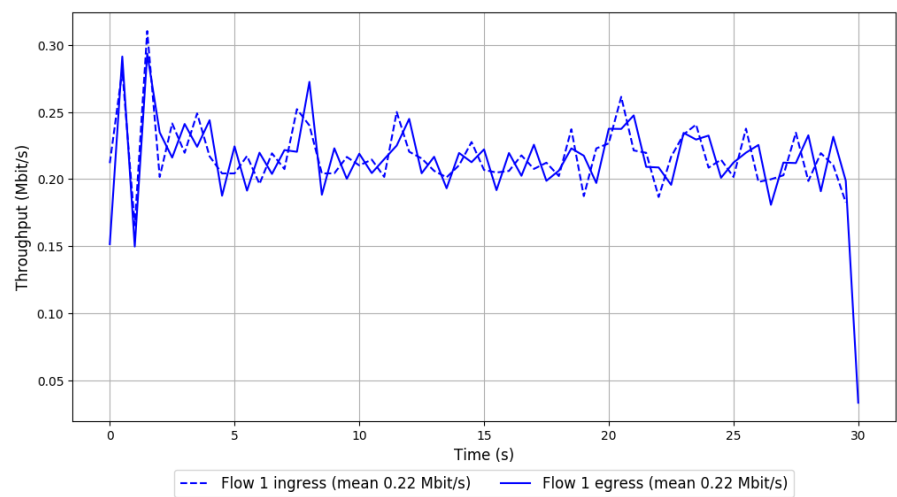


```
Run 10: Statistics of SReAM

Start at: 2018-01-02 13:48:20
End at: 2018-01-02 13:48:50

# Below is generated by plot.py at 2018-01-02 14:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.543 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.543 ms
Loss rate: 0.00%
```

Run 10: Report of SCRaM — Data Link

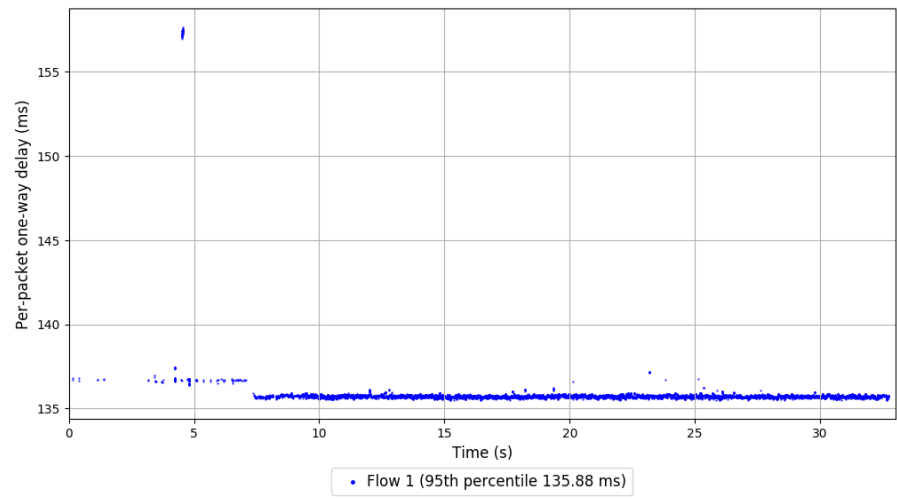
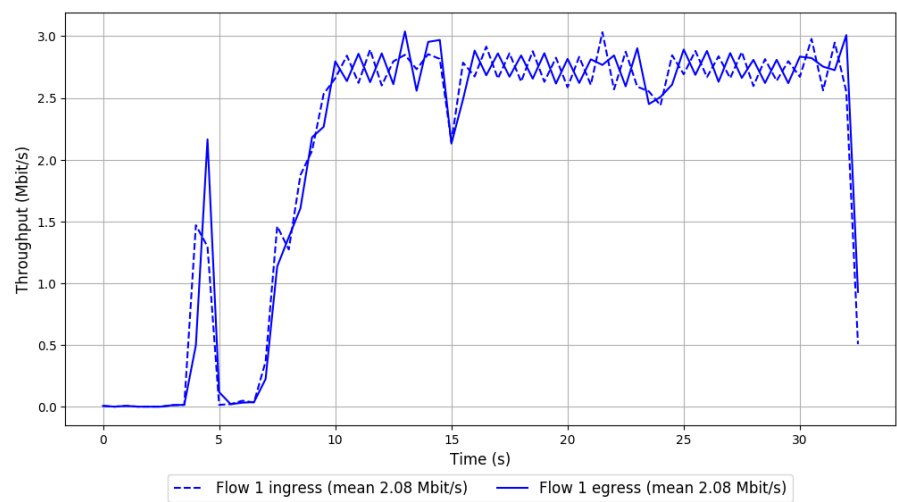


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-02 11:44:17
End at: 2018-01-02 11:44:47

# Below is generated by plot.py at 2018-01-02 14:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 135.879 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 135.879 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-02 11:57:04

End at: 2018-01-02 11:57:34

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 137.264 ms

Loss rate: 0.00%

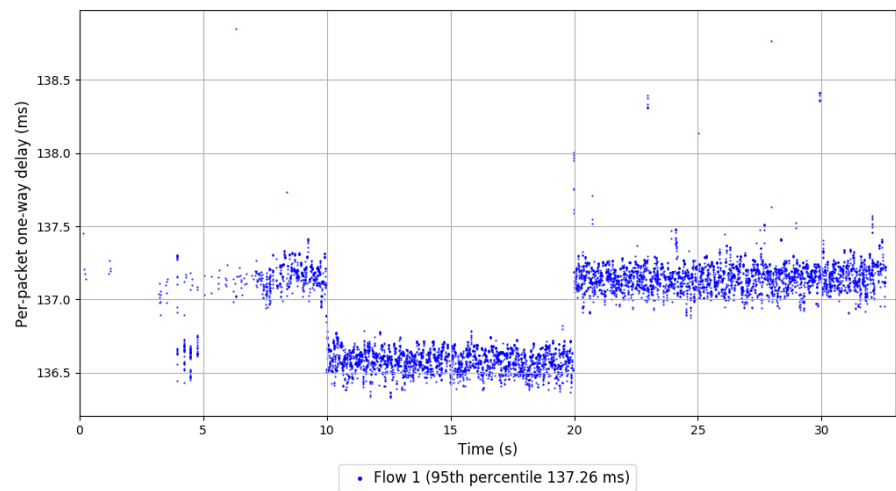
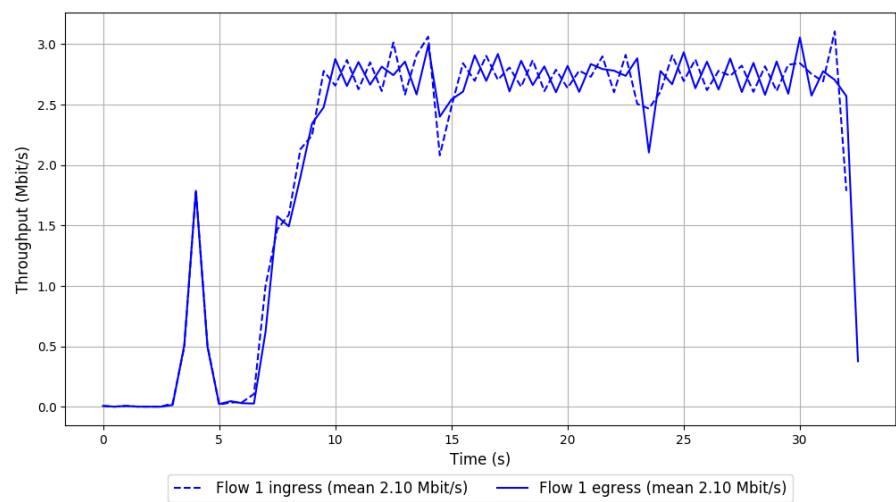
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 137.264 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-02 12:09:46

End at: 2018-01-02 12:10:16

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 137.156 ms

Loss rate: 0.00%

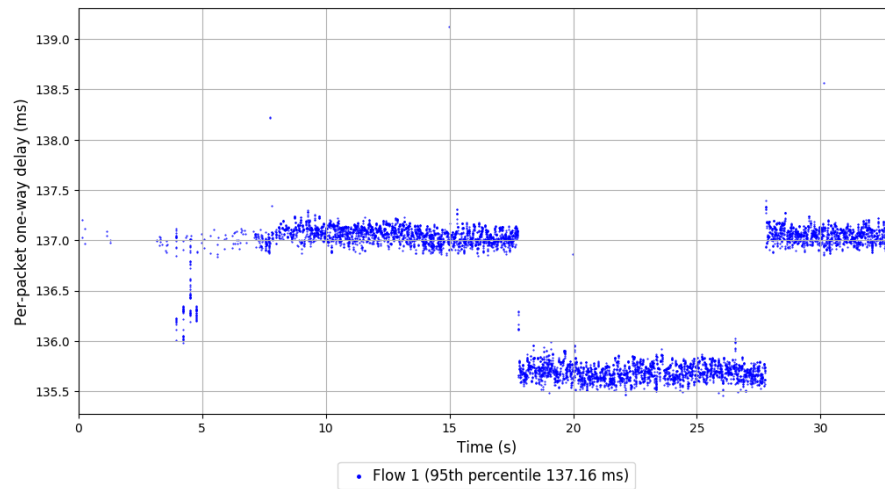
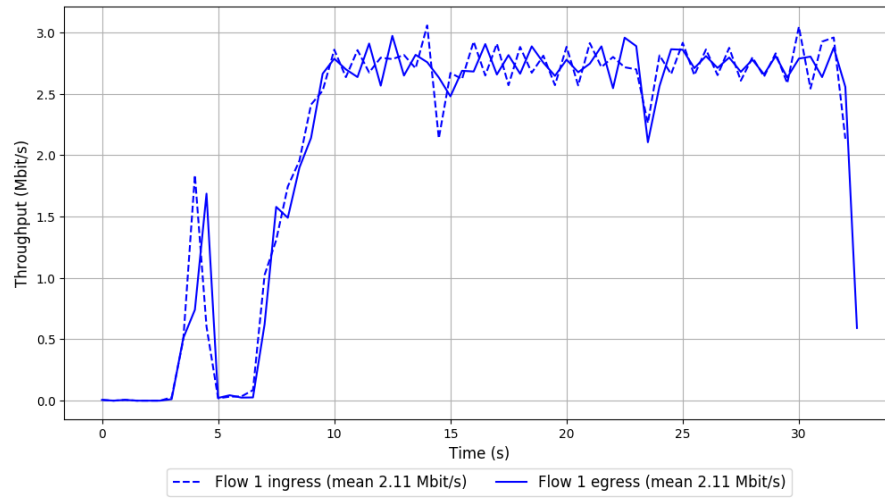
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 137.156 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-02 12:22:30

End at: 2018-01-02 12:23:00

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 137.332 ms

Loss rate: 0.00%

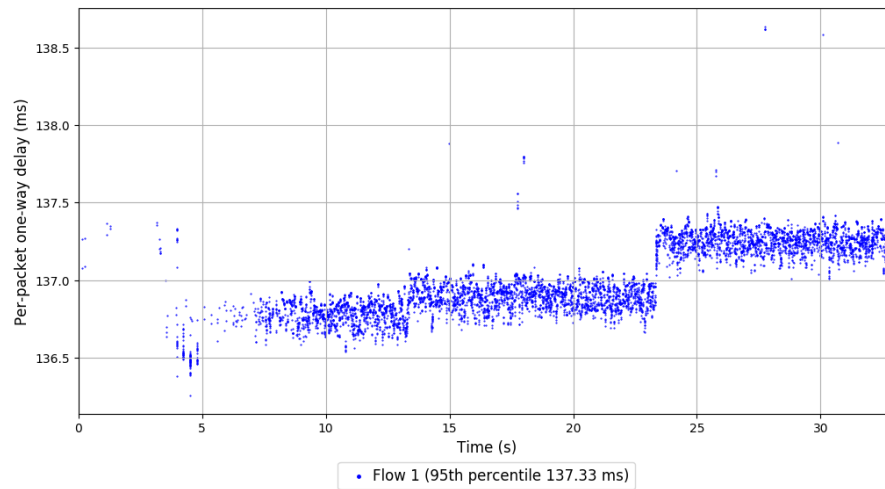
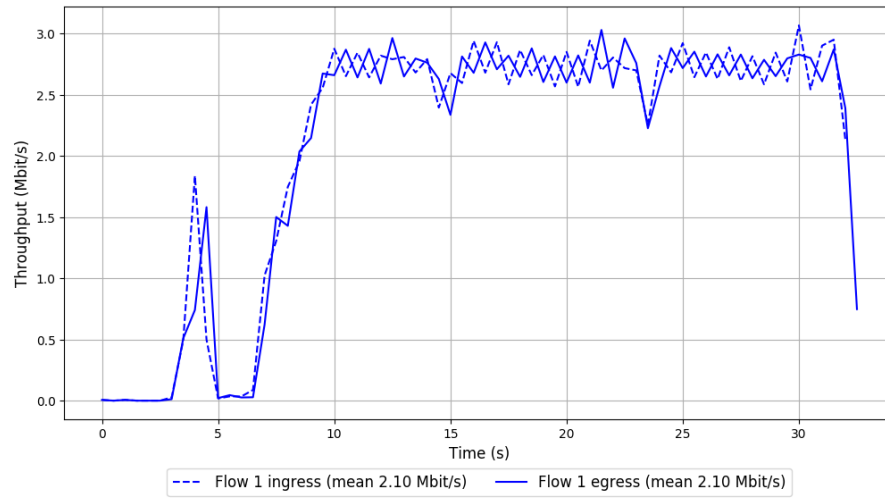
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 137.332 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-02 12:35:04

End at: 2018-01-02 12:35:34

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 137.222 ms

Loss rate: 0.00%

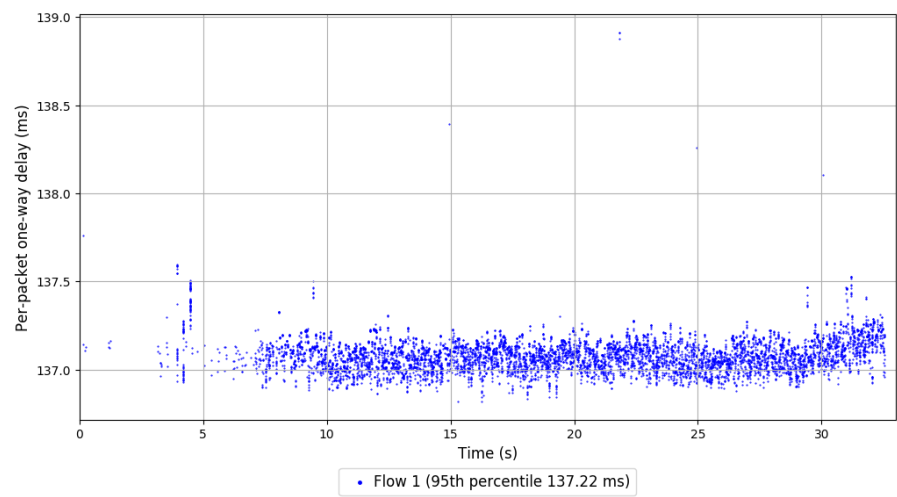
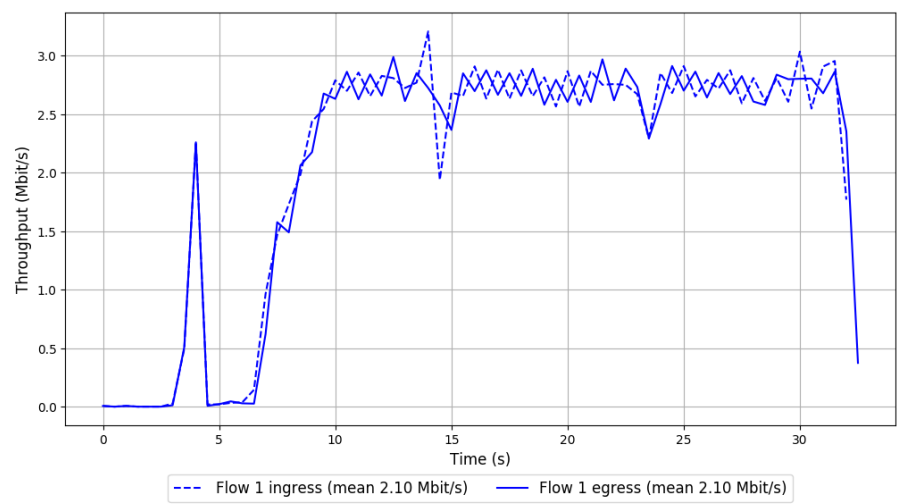
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 137.222 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-02 12:47:49

End at: 2018-01-02 12:48:19

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 137.060 ms

Loss rate: 0.00%

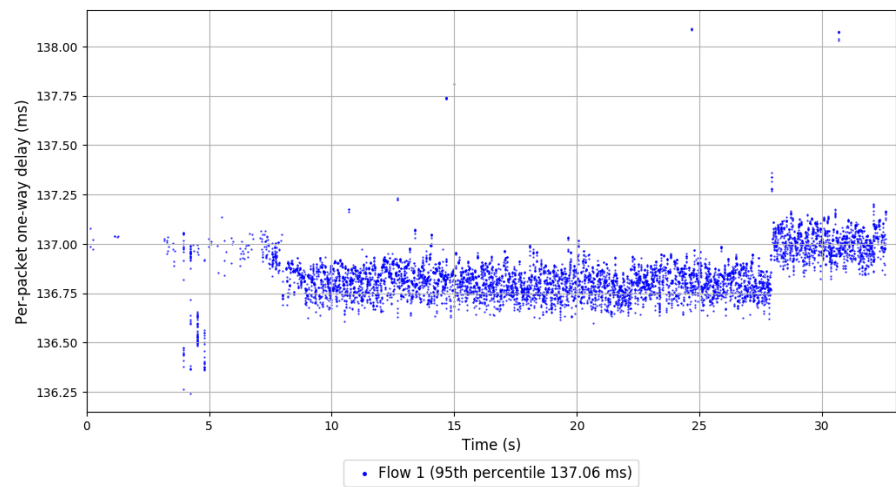
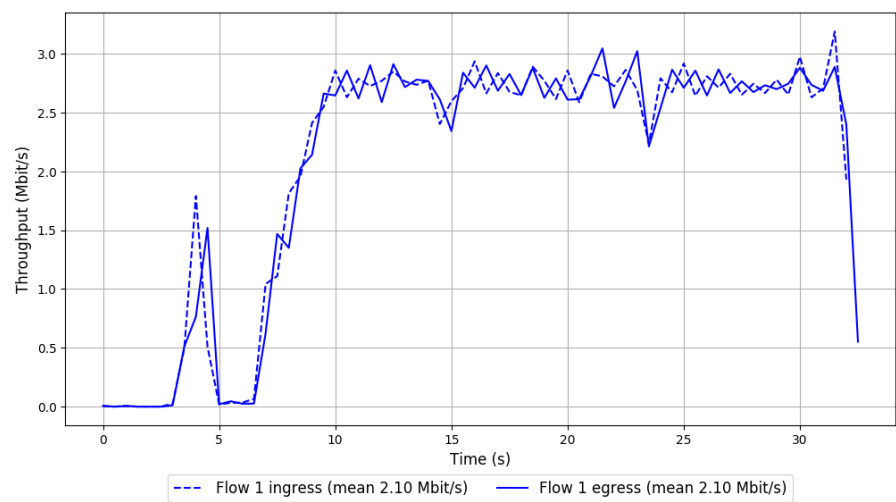
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 137.060 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-02 13:00:57

End at: 2018-01-02 13:01:27

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 136.561 ms

Loss rate: 0.00%

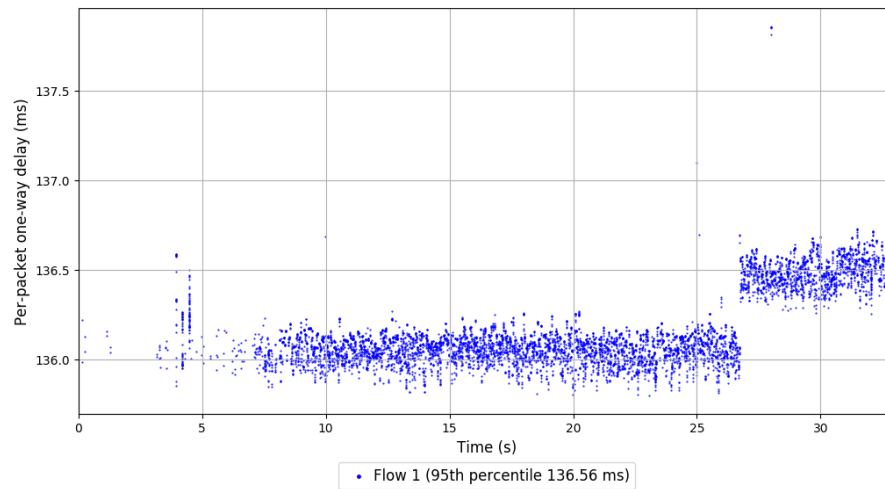
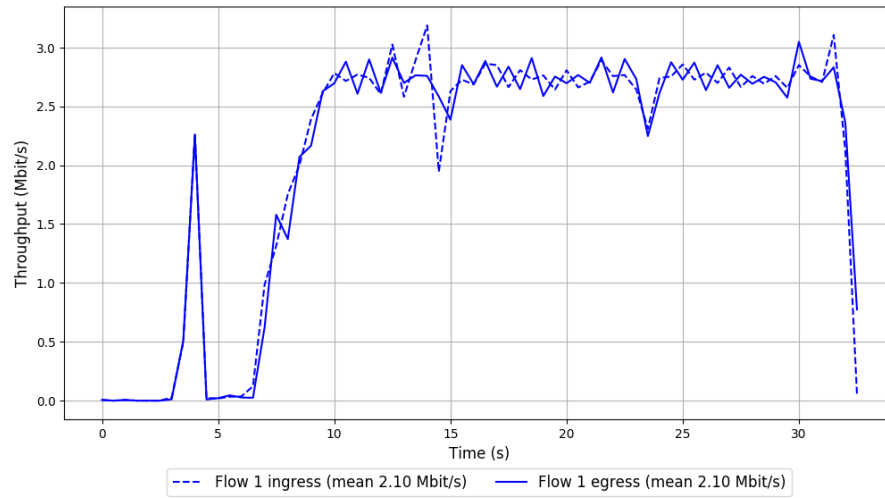
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 136.561 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-02 13:14:07

End at: 2018-01-02 13:14:37

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

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

Loss rate: 0.00%

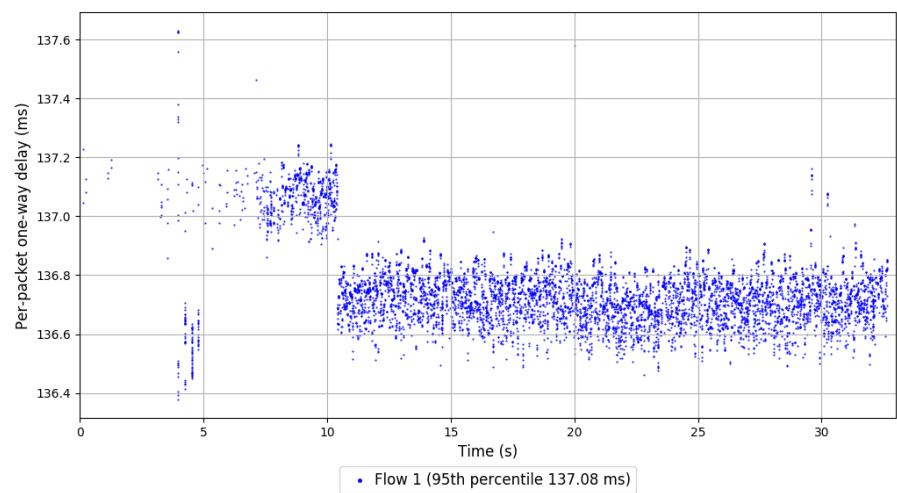
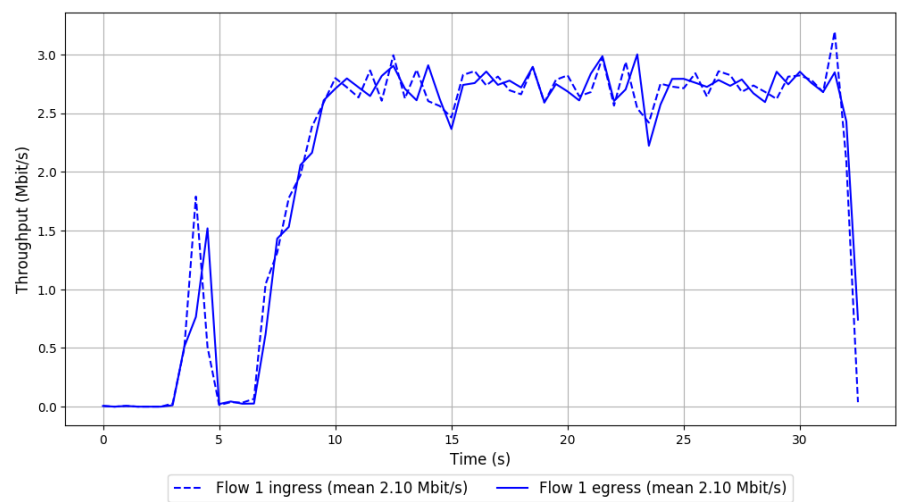
-- Flow 1:

Average throughput: 2.10 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-02 13:26:43

End at: 2018-01-02 13:27:13

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

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

Loss rate: 0.00%

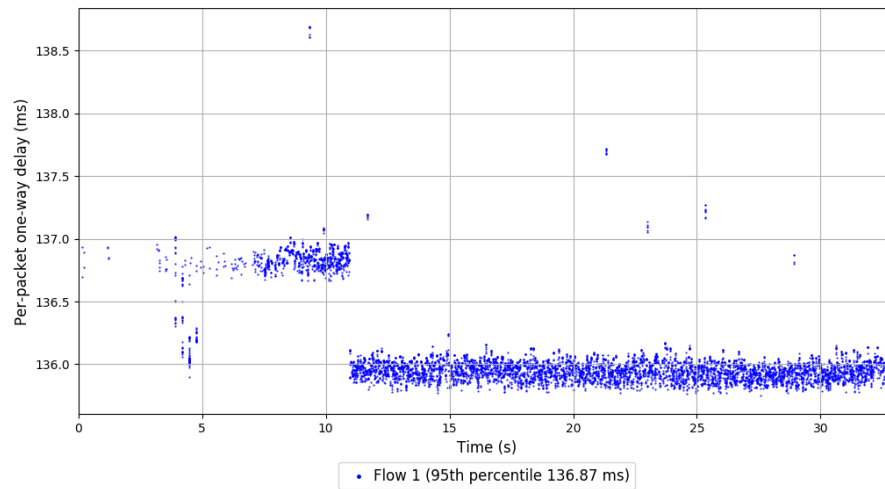
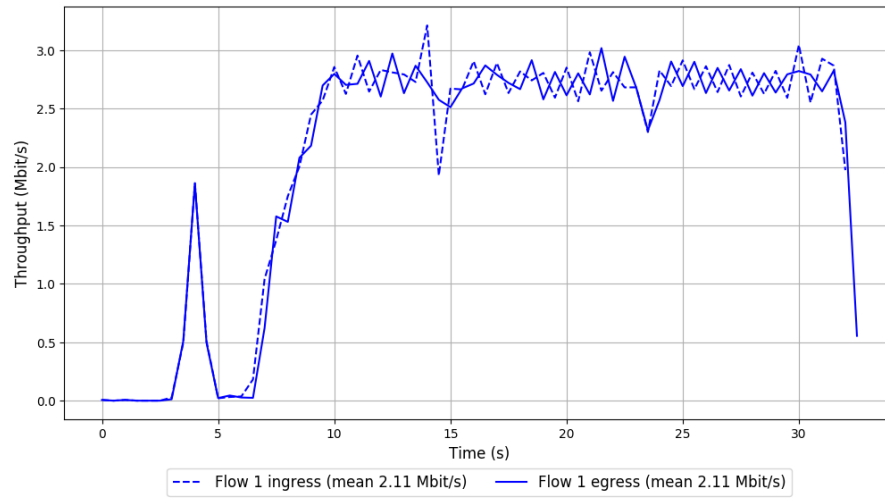
-- Flow 1:

Average throughput: 2.11 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link

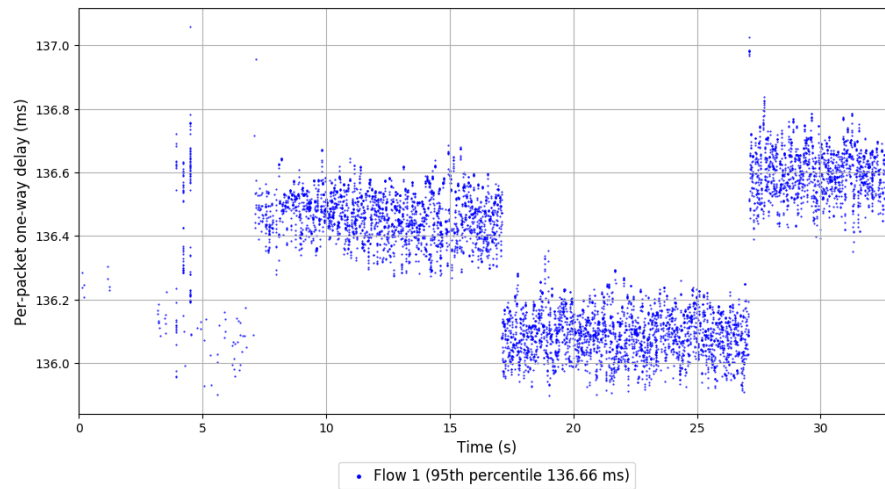
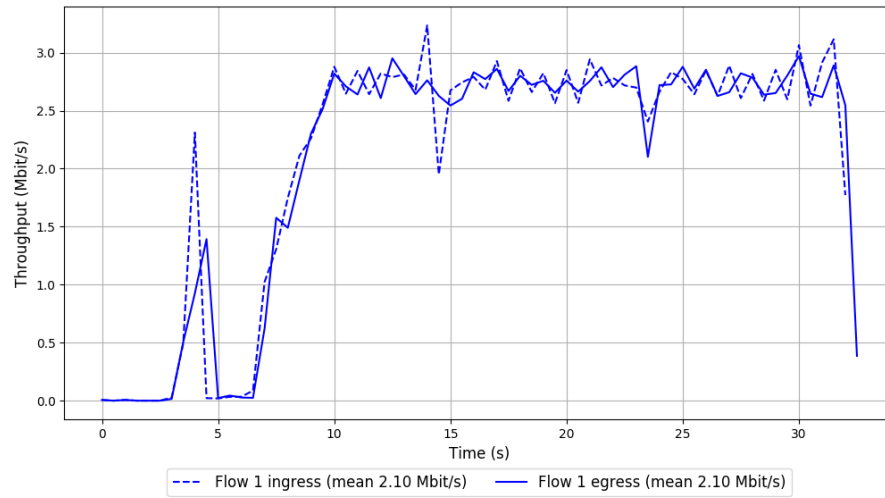


```
Run 10: Statistics of WebRTC media

Start at: 2018-01-02 13:39:37
End at: 2018-01-02 13:40:07

# Below is generated by plot.py at 2018-01-02 14:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 136.664 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 136.664 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link

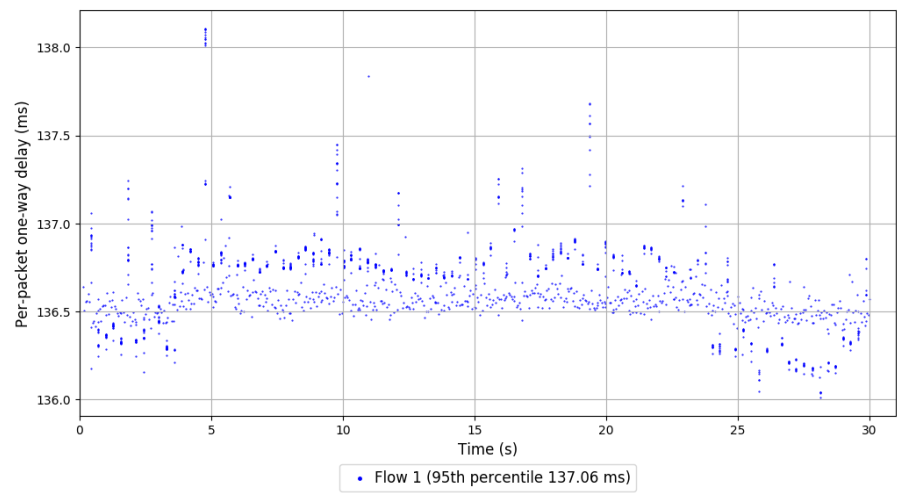
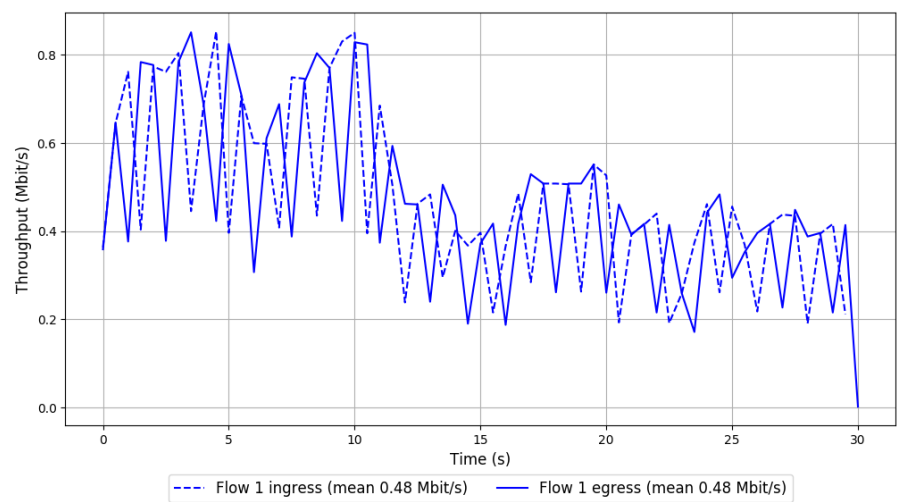


```
Run 1: Statistics of Sprout

Start at: 2018-01-02 11:48:01
End at: 2018-01-02 11:48:31

# Below is generated by plot.py at 2018-01-02 14:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 137.064 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 137.064 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-02 12:00:57

End at: 2018-01-02 12:01:27

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.48 Mbit/s

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

Loss rate: 0.00%

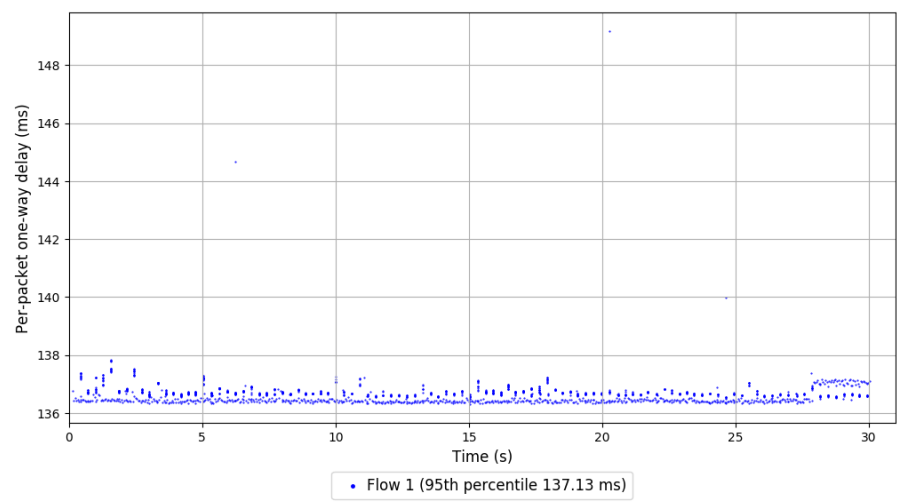
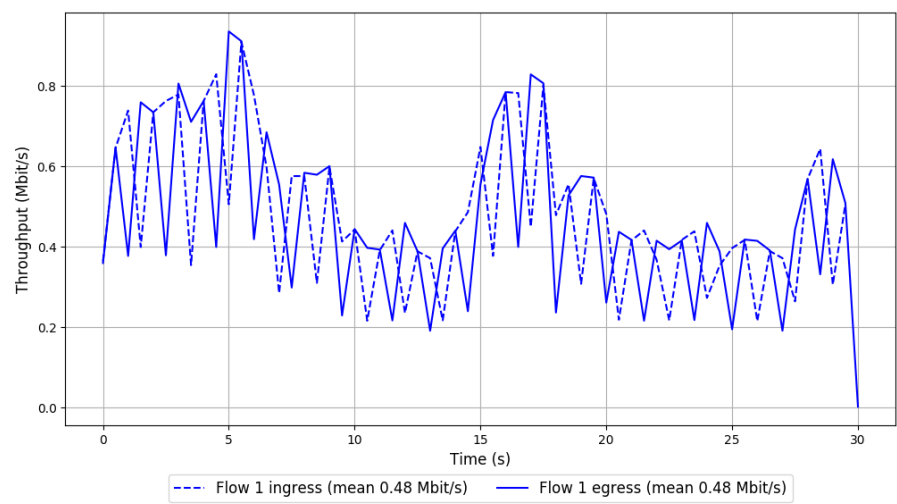
-- Flow 1:

Average throughput: 0.48 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-02 12:13:39

End at: 2018-01-02 12:14:09

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 137.127 ms

Loss rate: 0.00%

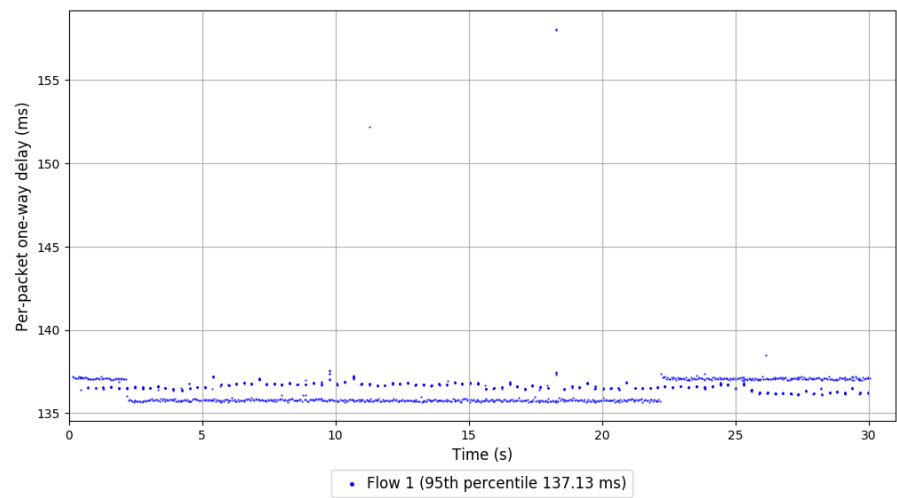
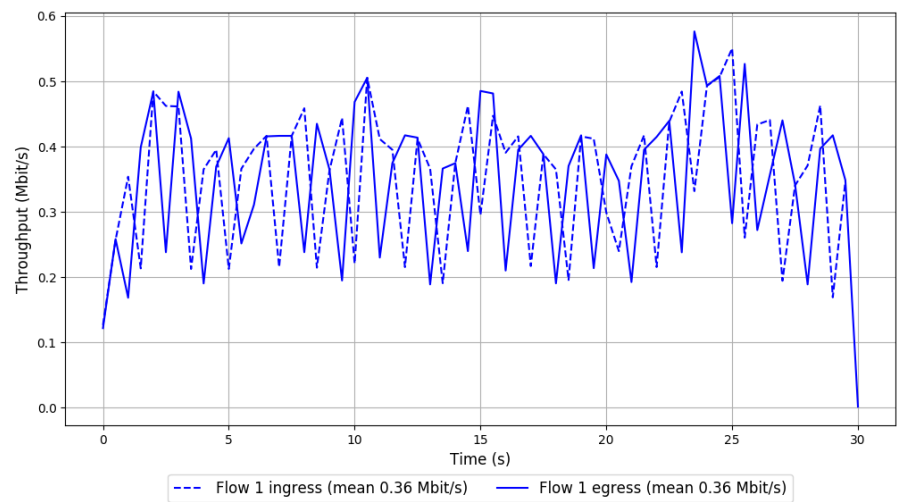
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 137.127 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-02 12:26:22

End at: 2018-01-02 12:26:52

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.311 ms

Loss rate: 0.00%

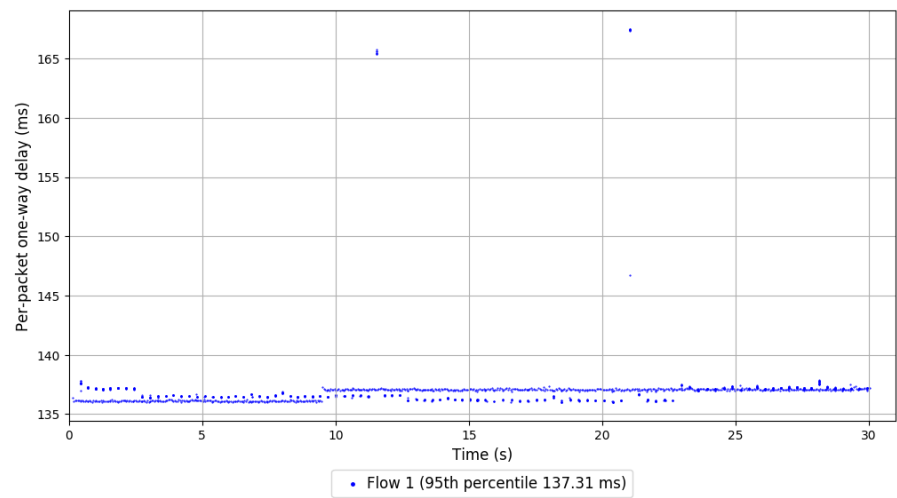
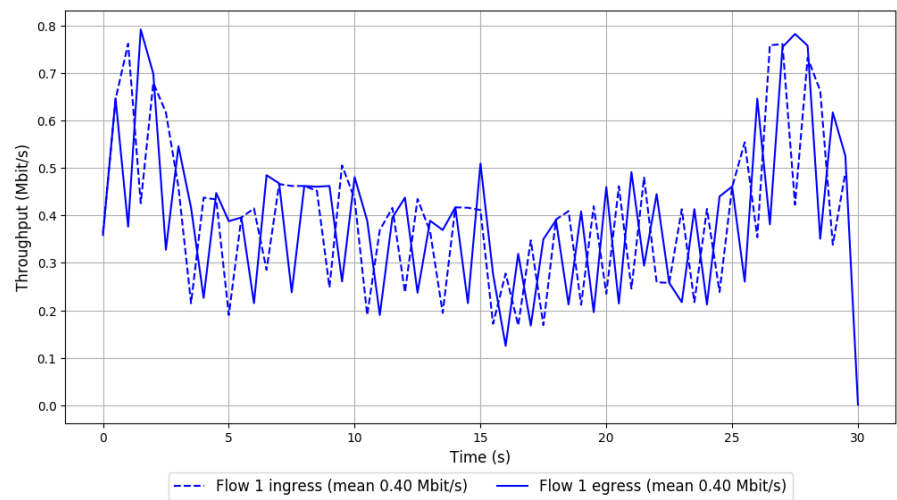
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.311 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-02 12:38:58

End at: 2018-01-02 12:39:28

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.175 ms

Loss rate: 0.00%

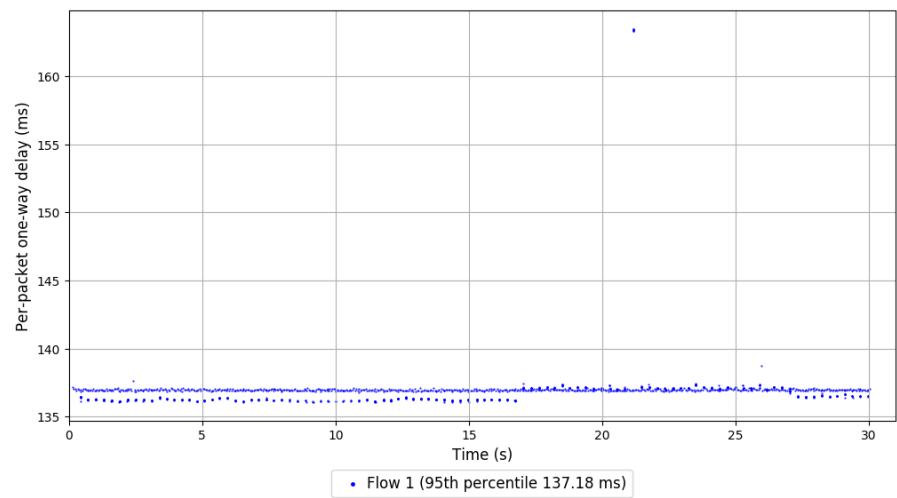
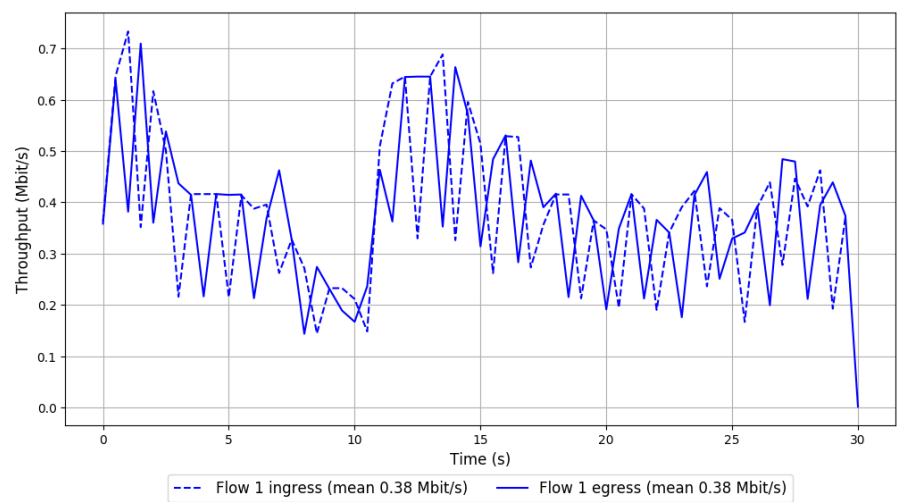
-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.175 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-02 12:51:42

End at: 2018-01-02 12:52:12

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.167 ms

Loss rate: 0.00%

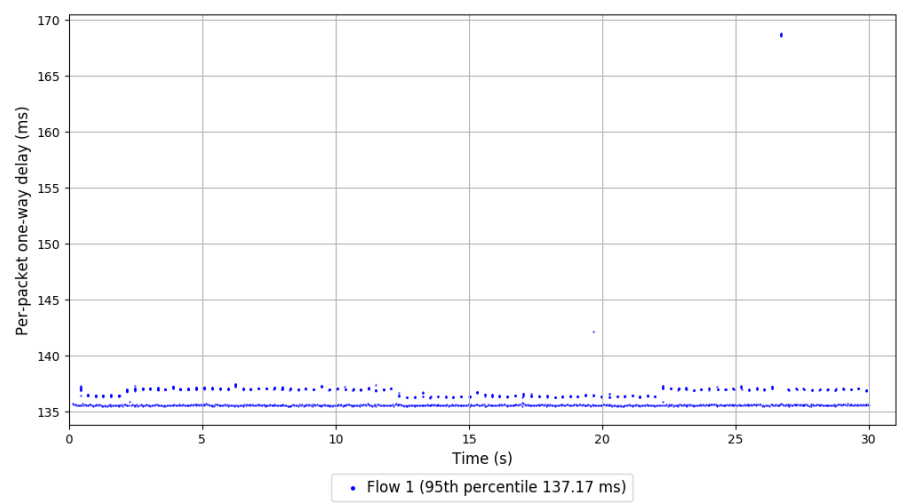
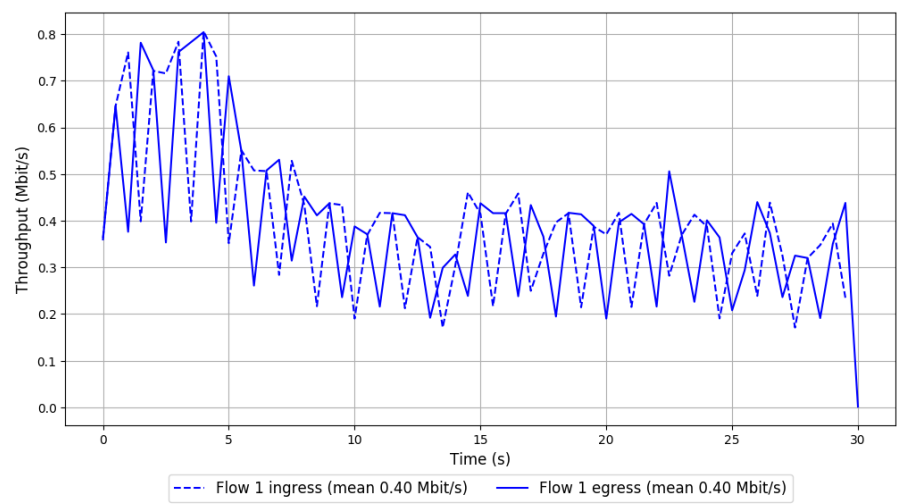
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.167 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-02 13:04:50

End at: 2018-01-02 13:05:20

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.46 Mbit/s

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

Loss rate: 0.00%

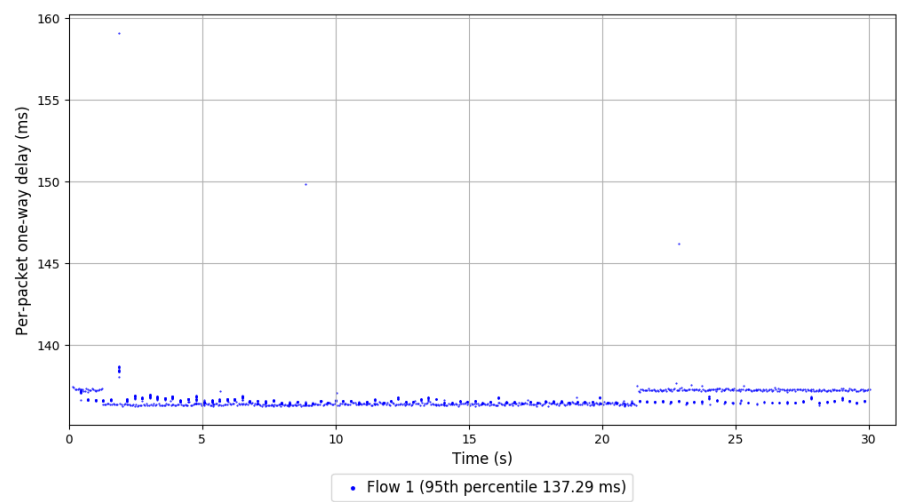
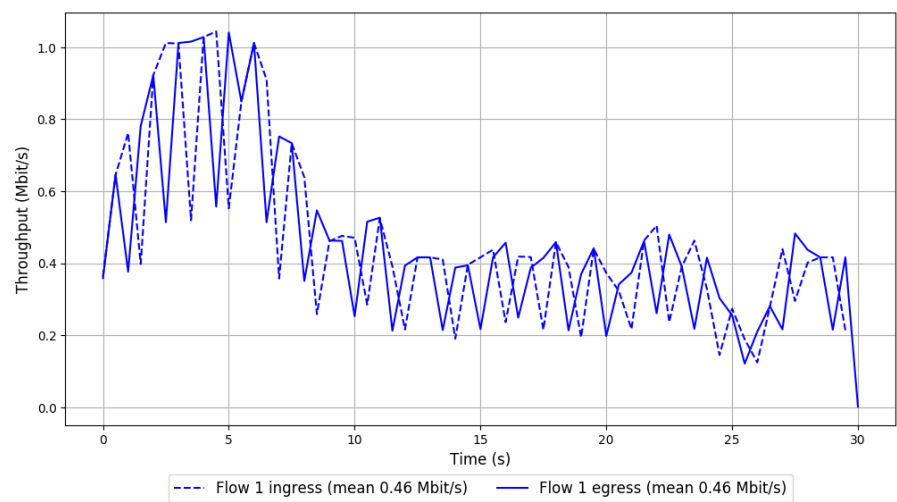
-- Flow 1:

Average throughput: 0.46 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-02 13:17:52

End at: 2018-01-02 13:18:22

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.35 Mbit/s

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

Loss rate: 0.00%

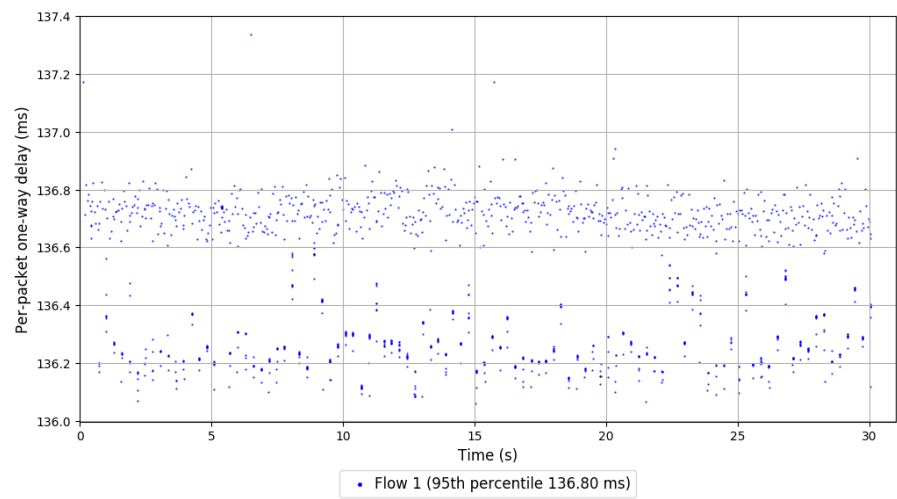
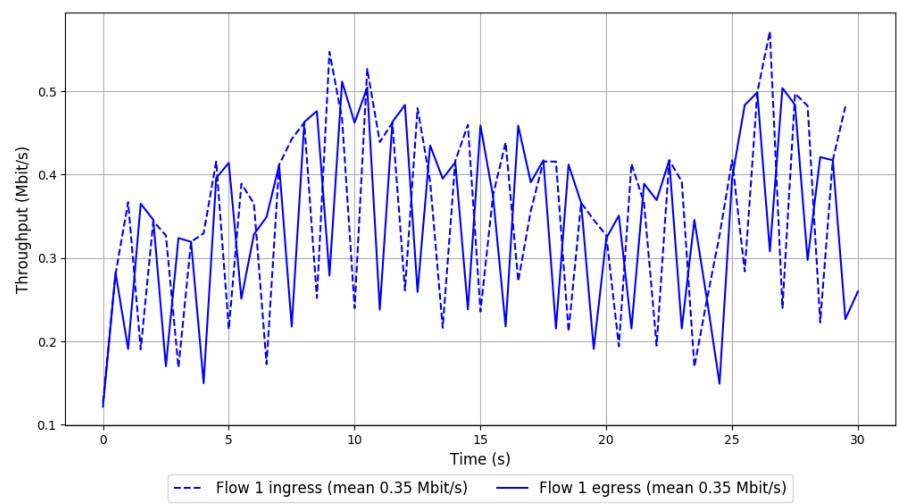
-- Flow 1:

Average throughput: 0.35 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-02 13:30:35

End at: 2018-01-02 13:31:05

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

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

Loss rate: 0.00%

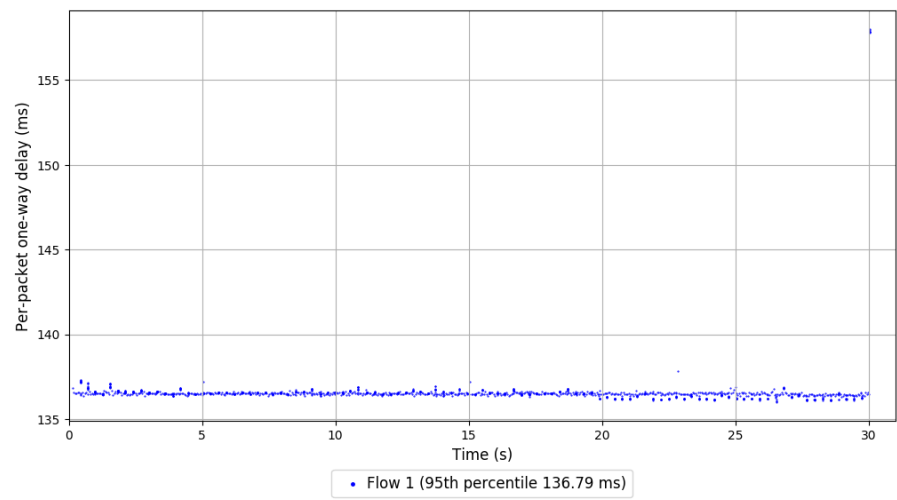
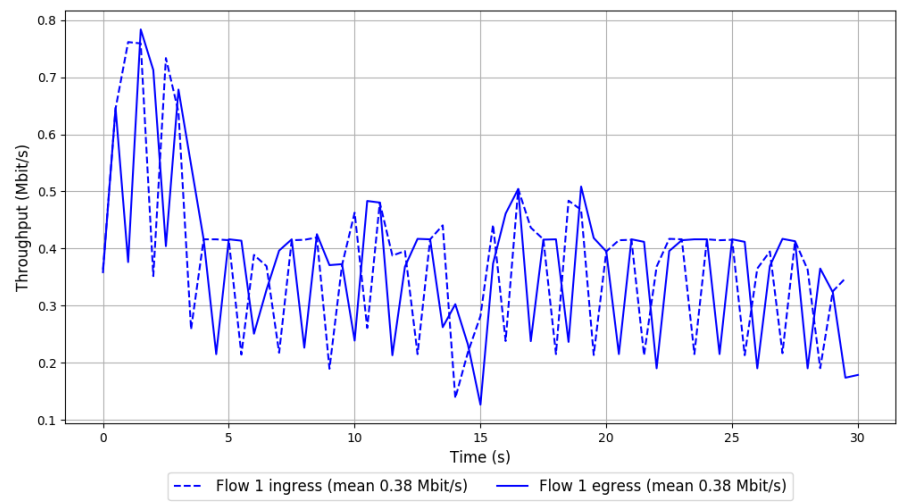
-- Flow 1:

Average throughput: 0.38 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-02 13:43:28

End at: 2018-01-02 13:43:58

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 136.672 ms

Loss rate: 0.00%

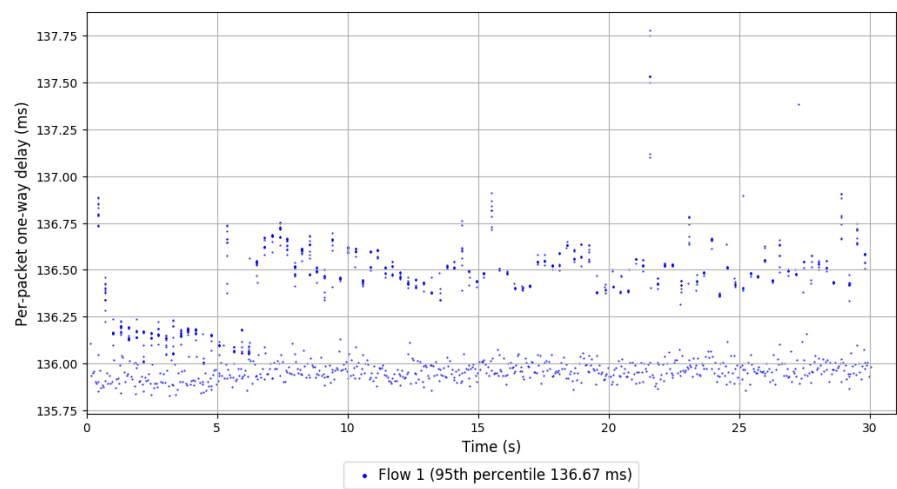
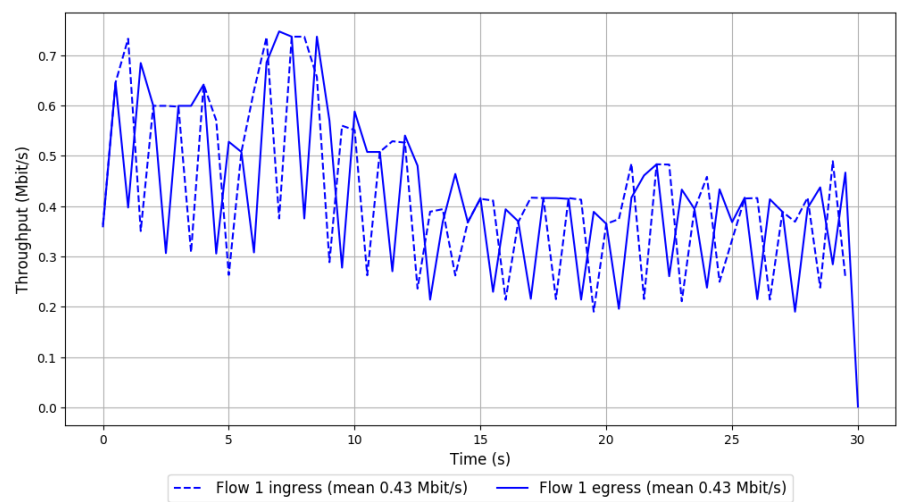
-- Flow 1:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 136.672 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

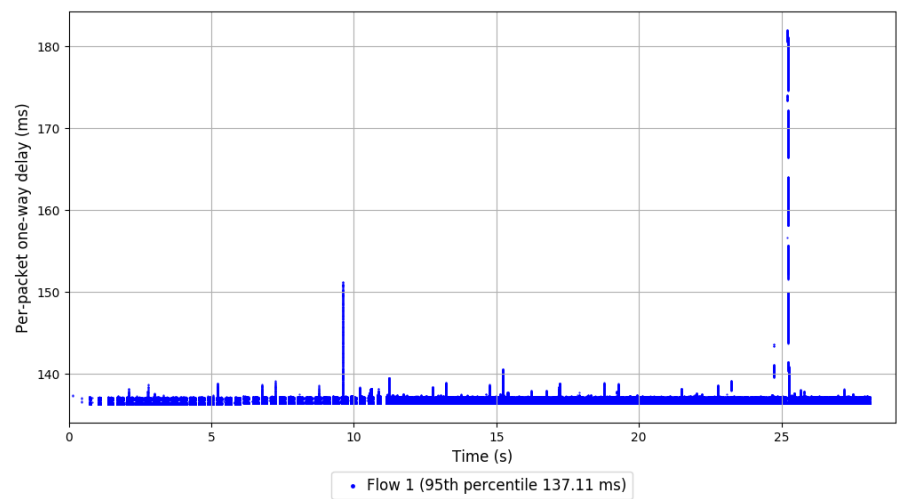
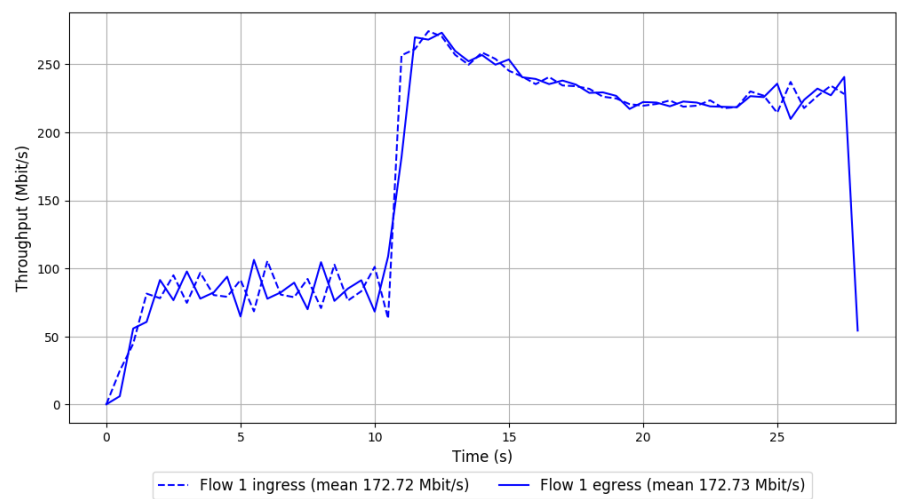


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-02 11:55:16
End at: 2018-01-02 11:55:46

# Below is generated by plot.py at 2018-01-02 14:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.73 Mbit/s
95th percentile per-packet one-way delay: 137.111 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 172.73 Mbit/s
95th percentile per-packet one-way delay: 137.111 ms
Loss rate: 0.00%
```


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

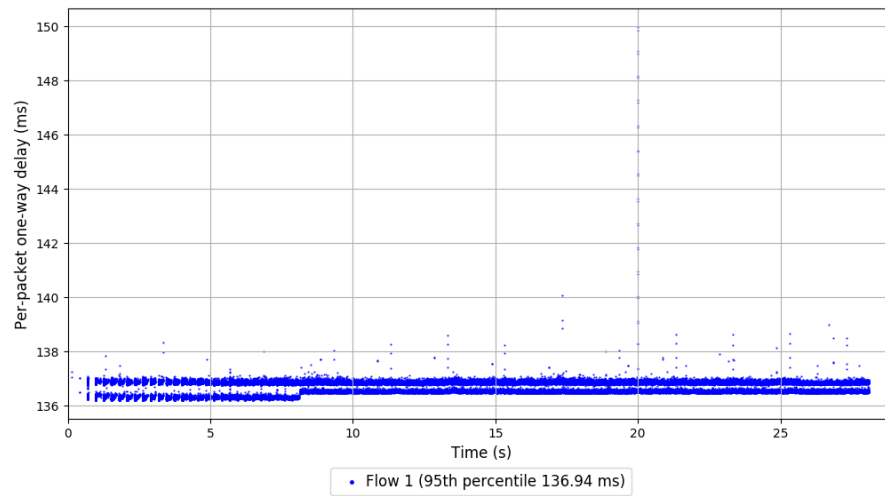
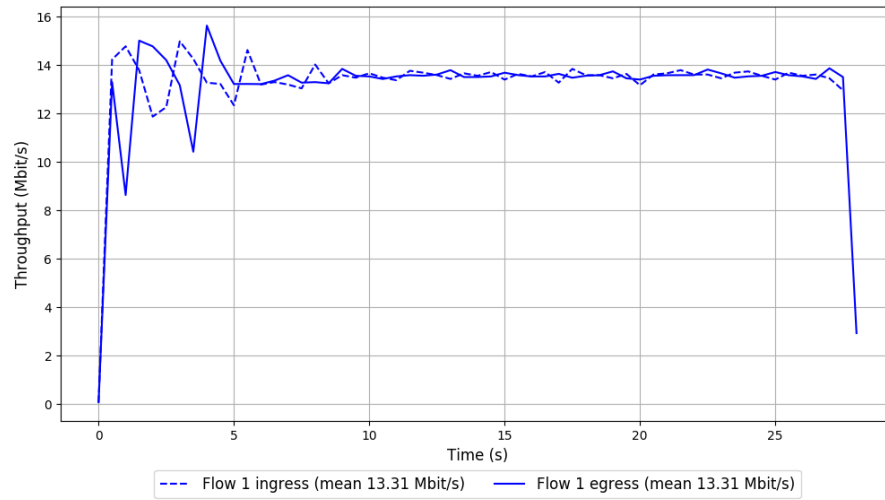


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-02 12:08:14
End at: 2018-01-02 12:08:44

# Below is generated by plot.py at 2018-01-02 14:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.31 Mbit/s
95th percentile per-packet one-way delay: 136.942 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.31 Mbit/s
95th percentile per-packet one-way delay: 136.942 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-01-02 12:20:59

End at: 2018-01-02 12:21:29

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.00 Mbit/s

95th percentile per-packet one-way delay: 136.828 ms

Loss rate: 0.45%

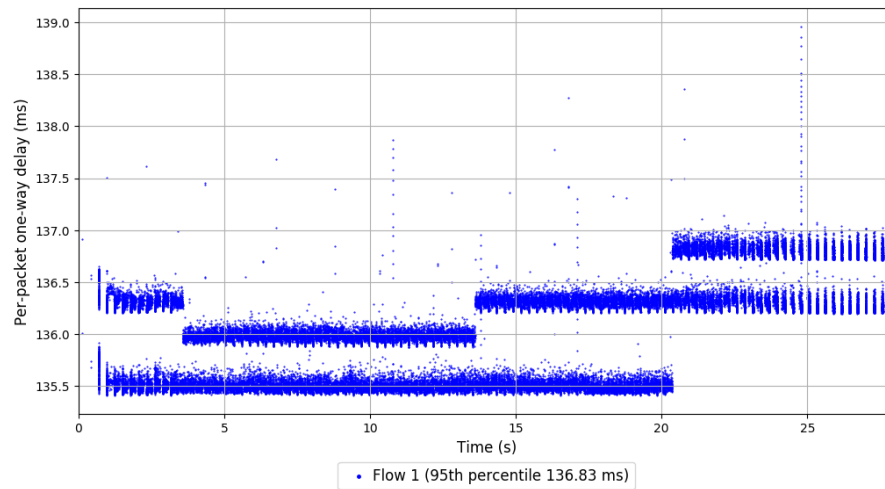
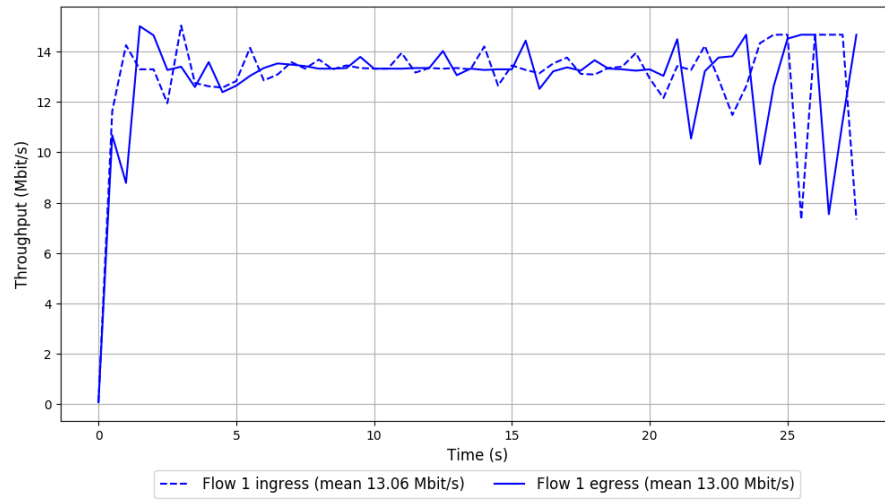
-- Flow 1:

Average throughput: 13.00 Mbit/s

95th percentile per-packet one-way delay: 136.828 ms

Loss rate: 0.45%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-02 12:33:25

End at: 2018-01-02 12:33:55

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.01 Mbit/s

95th percentile per-packet one-way delay: 137.099 ms

Loss rate: 0.00%

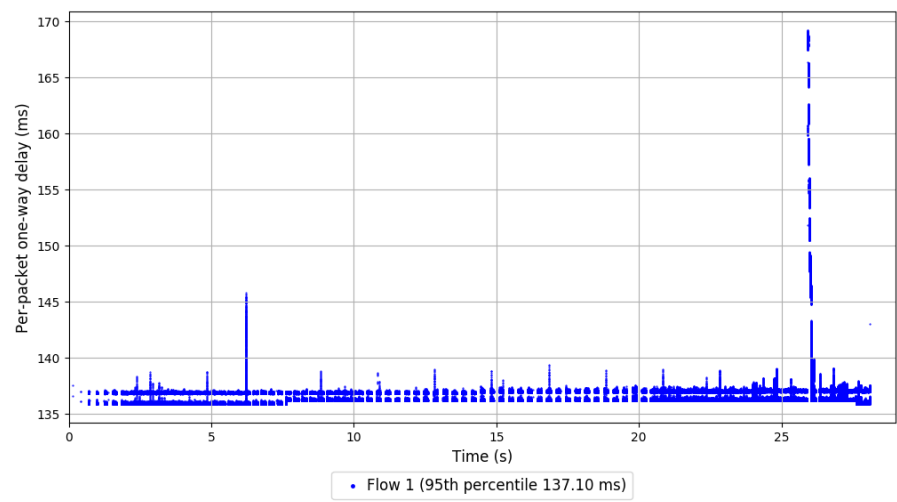
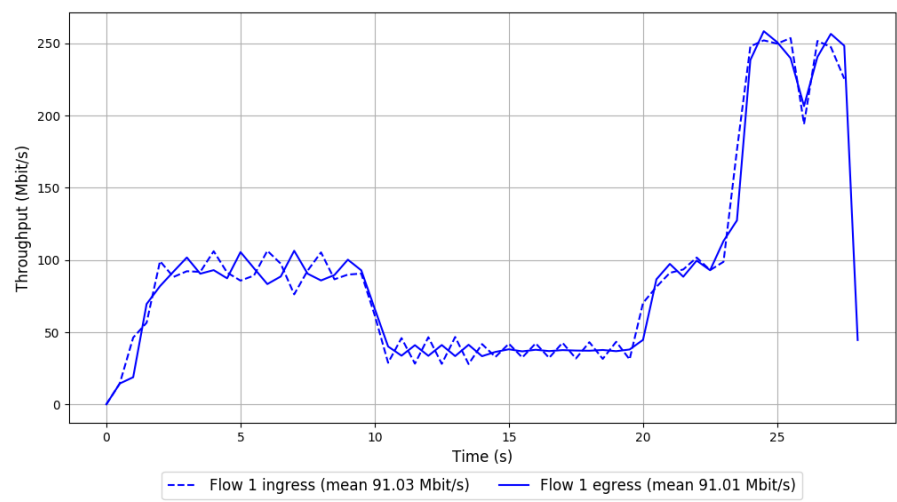
-- Flow 1:

Average throughput: 91.01 Mbit/s

95th percentile per-packet one-way delay: 137.099 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-02 12:46:18

End at: 2018-01-02 12:46:48

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.23 Mbit/s

95th percentile per-packet one-way delay: 137.025 ms

Loss rate: 0.08%

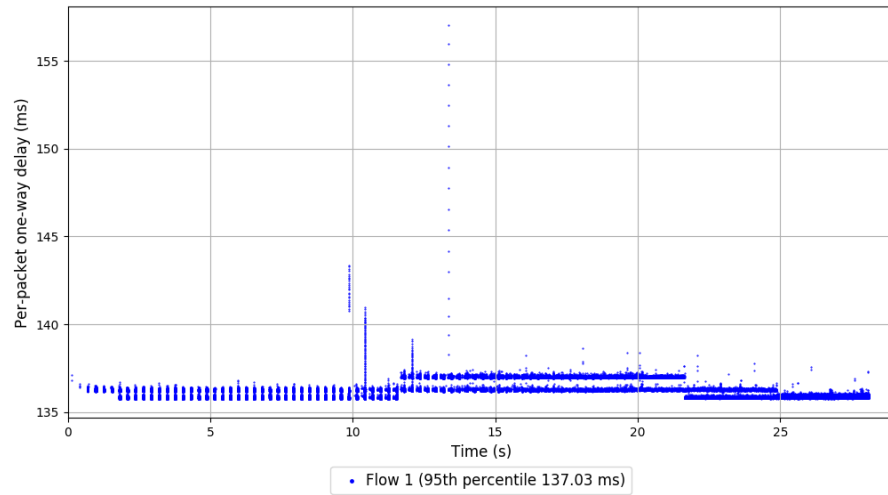
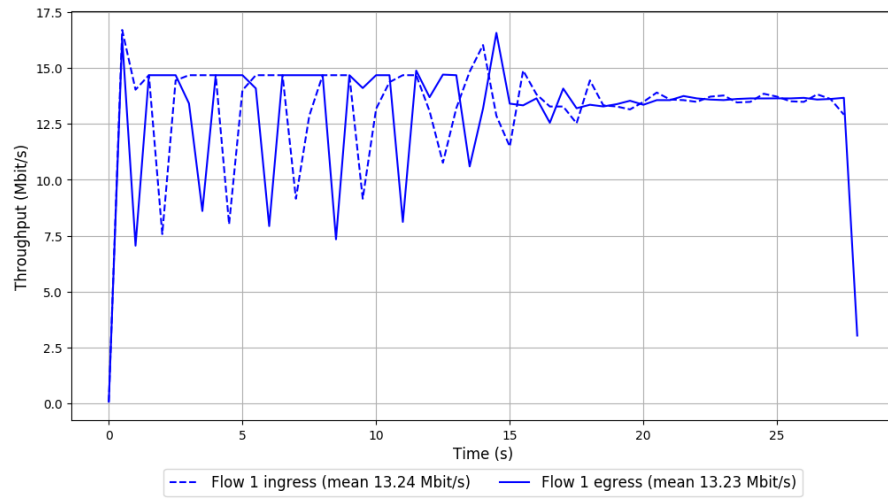
-- Flow 1:

Average throughput: 13.23 Mbit/s

95th percentile per-packet one-way delay: 137.025 ms

Loss rate: 0.08%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-02 12:59:08

End at: 2018-01-02 12:59:38

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.97 Mbit/s

95th percentile per-packet one-way delay: 136.851 ms

Loss rate: 0.00%

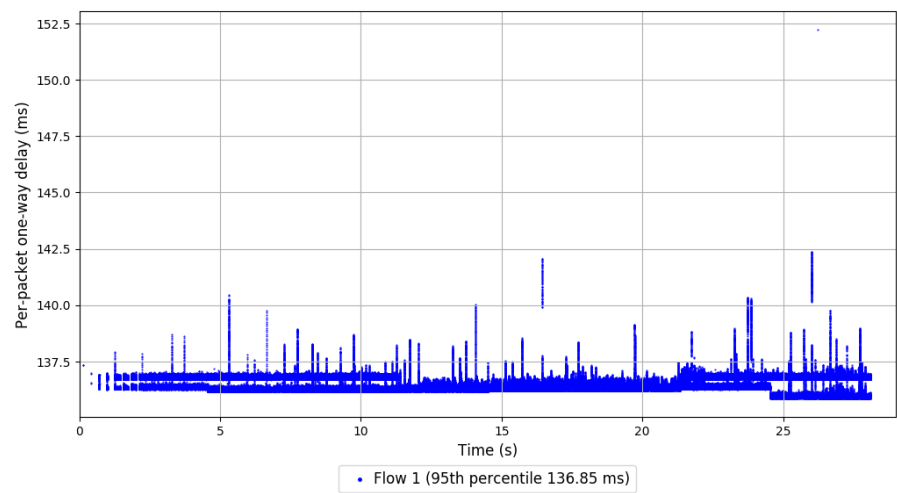
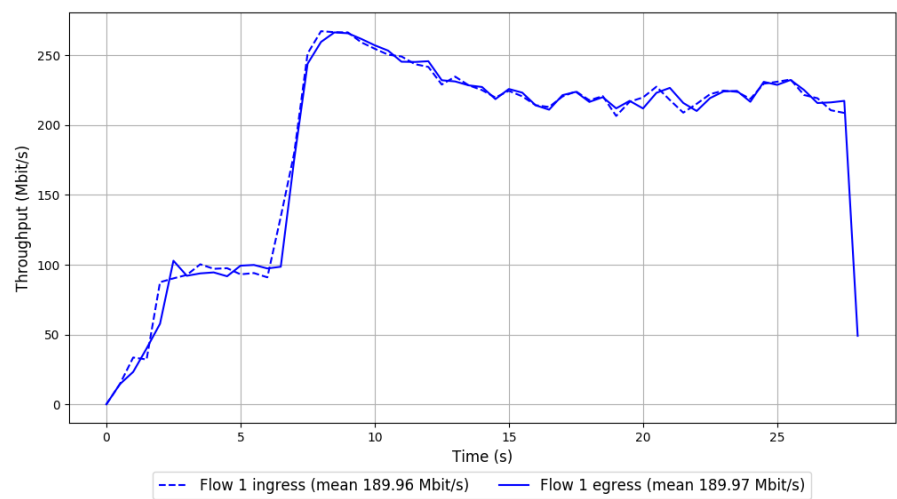
-- Flow 1:

Average throughput: 189.97 Mbit/s

95th percentile per-packet one-way delay: 136.851 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-02 13:12:16

End at: 2018-01-02 13:12:46

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 203.41 Mbit/s

95th percentile per-packet one-way delay: 136.716 ms

Loss rate: 0.00%

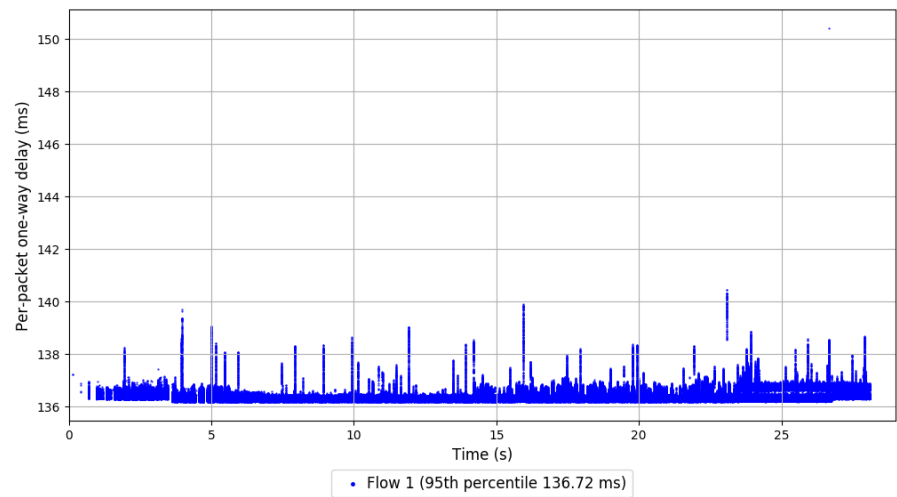
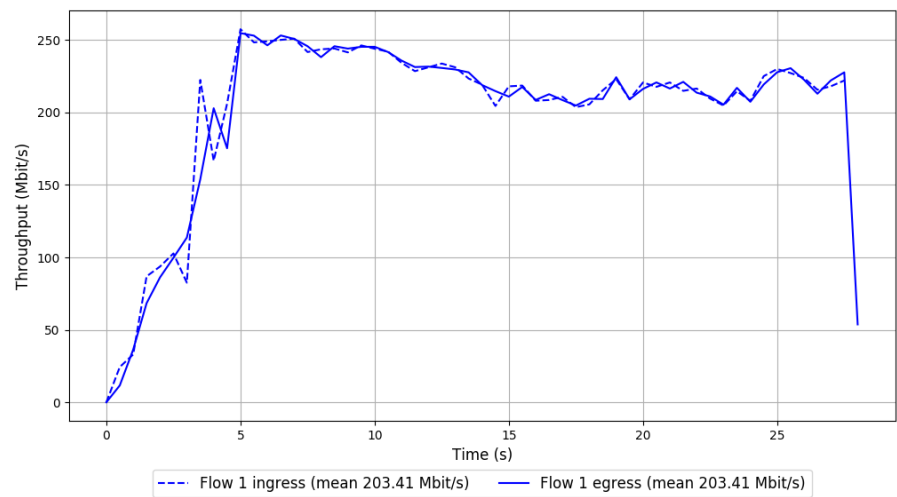
-- Flow 1:

Average throughput: 203.41 Mbit/s

95th percentile per-packet one-way delay: 136.716 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-02 13:25:11

End at: 2018-01-02 13:25:41

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.27 Mbit/s

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

Loss rate: 0.00%

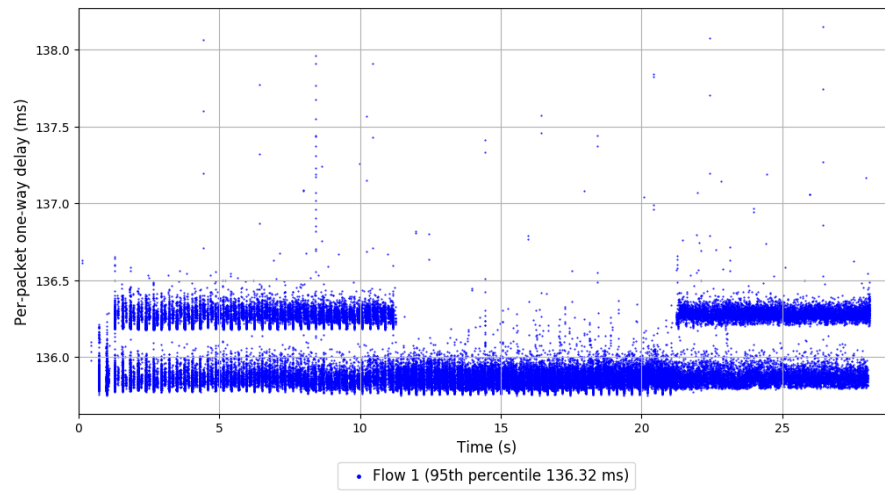
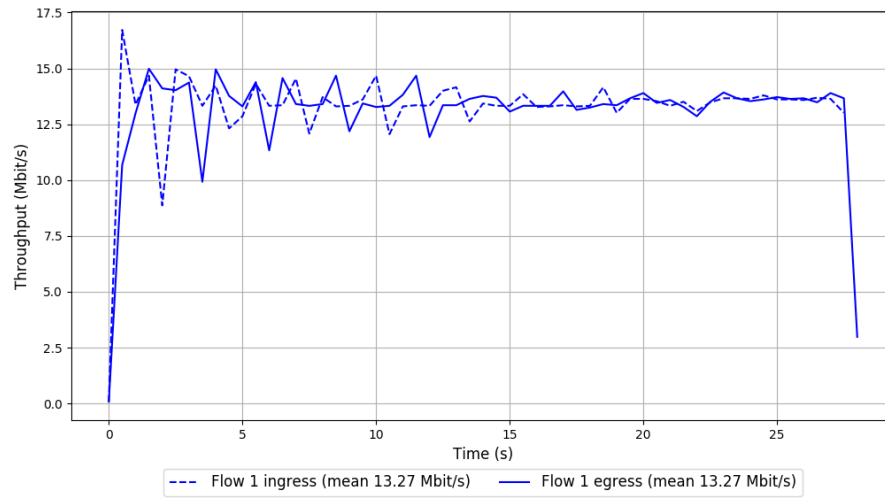
-- Flow 1:

Average throughput: 13.27 Mbit/s

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

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-02 13:38:05

End at: 2018-01-02 13:38:35

Below is generated by plot.py at 2018-01-02 14:55:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.30 Mbit/s

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

Loss rate: 0.00%

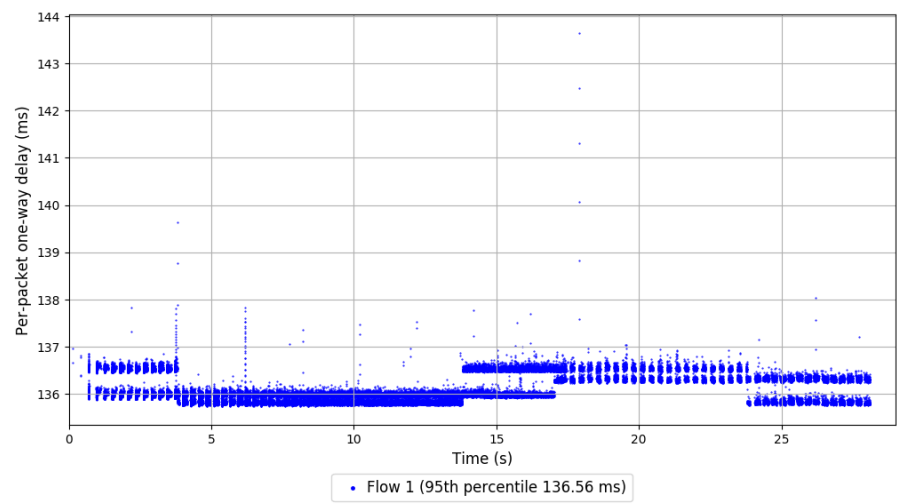
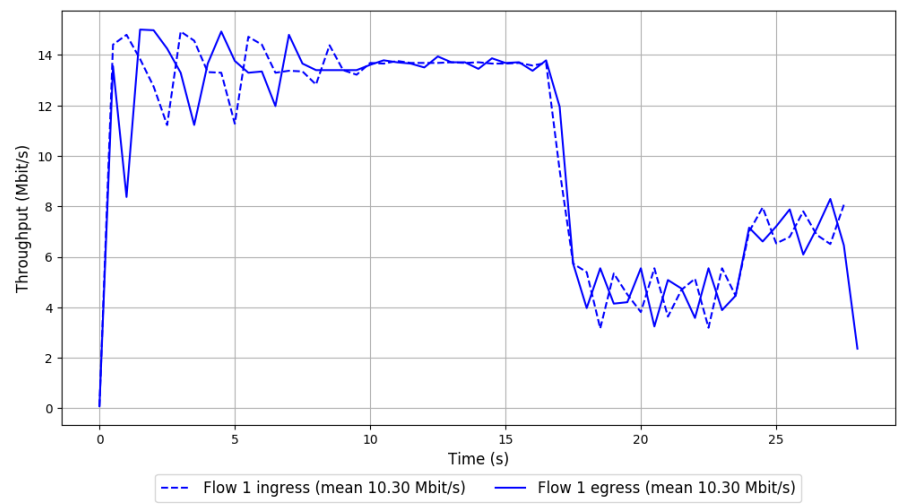
-- Flow 1:

Average throughput: 10.30 Mbit/s

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

Loss rate: 0.00%

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

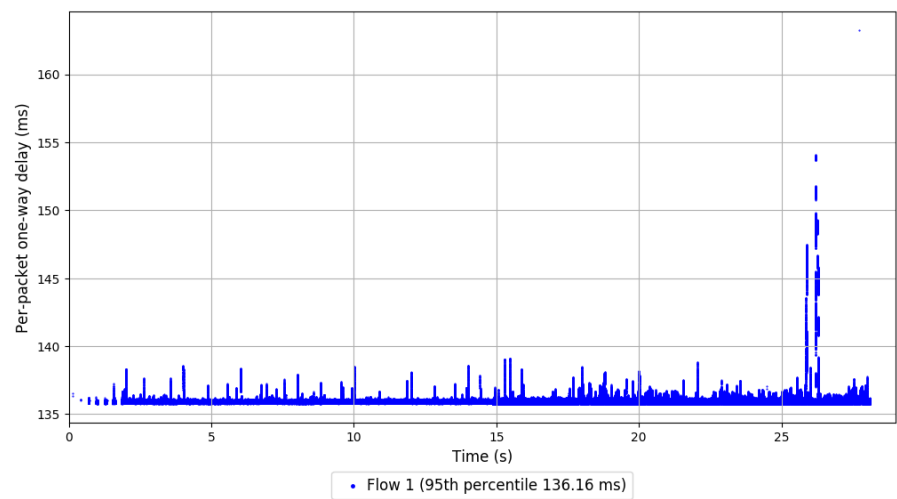
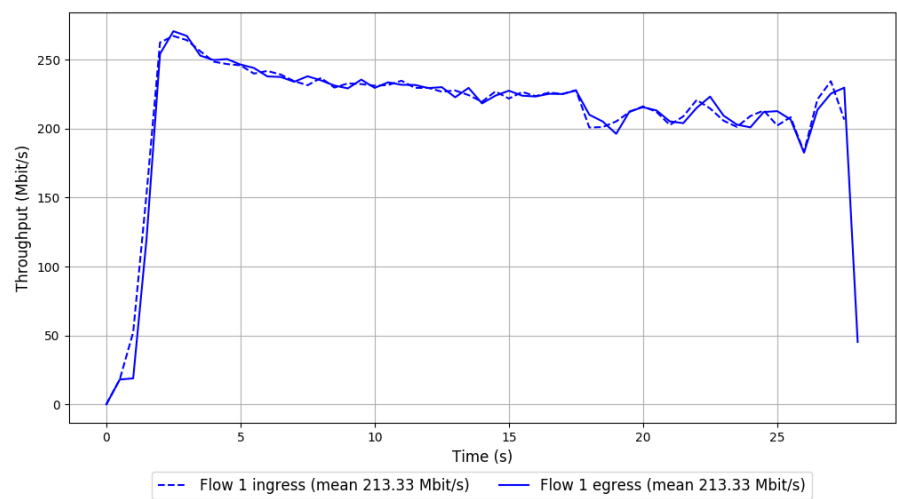


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-02 13:50:58
End at: 2018-01-02 13:51:28

# Below is generated by plot.py at 2018-01-02 14:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.33 Mbit/s
95th percentile per-packet one-way delay: 136.157 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 213.33 Mbit/s
95th percentile per-packet one-way delay: 136.157 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-02 11:51:13

End at: 2018-01-02 11:51:43

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 137.005 ms

Loss rate: 0.81%

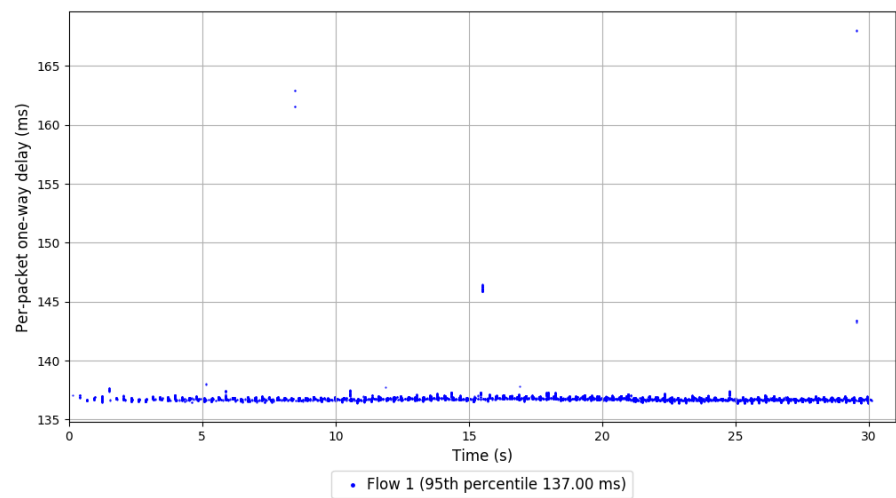
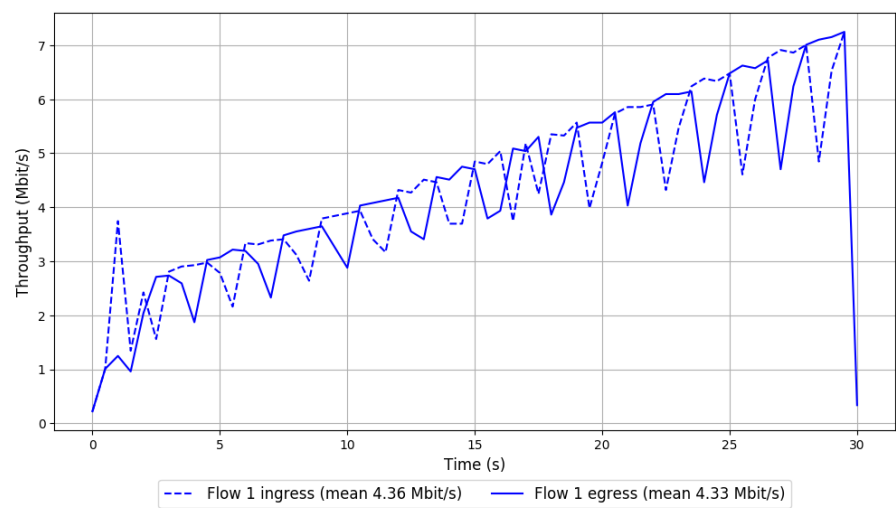
-- Flow 1:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 137.005 ms

Loss rate: 0.81%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-02 12:04:10

End at: 2018-01-02 12:04:40

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.25 Mbit/s

95th percentile per-packet one-way delay: 139.205 ms

Loss rate: 0.44%

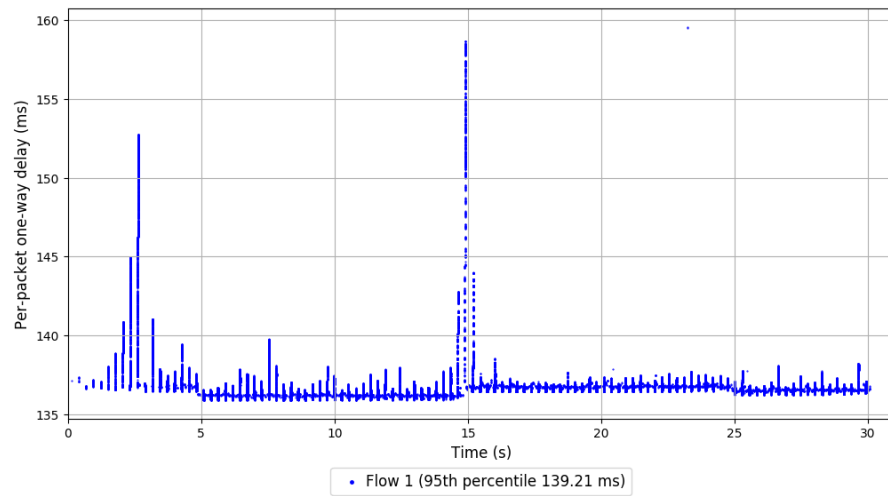
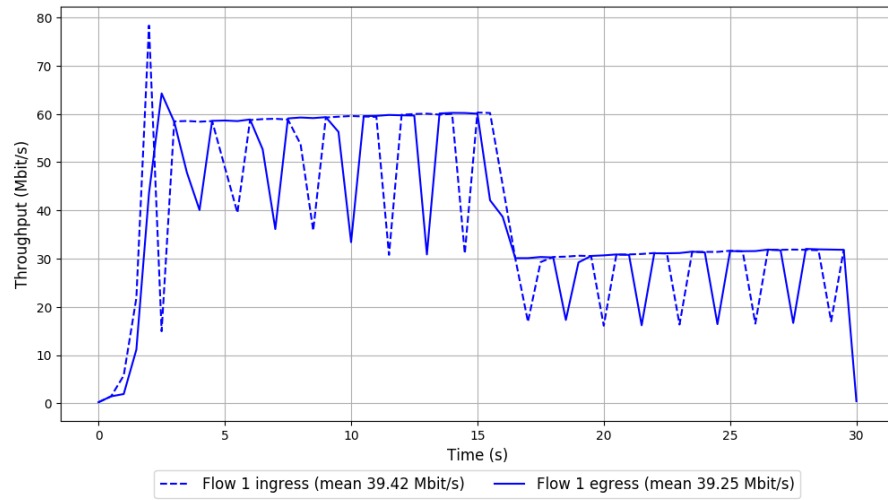
-- Flow 1:

Average throughput: 39.25 Mbit/s

95th percentile per-packet one-way delay: 139.205 ms

Loss rate: 0.44%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-02 12:16:56

End at: 2018-01-02 12:17:26

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.26 Mbit/s

95th percentile per-packet one-way delay: 145.509 ms

Loss rate: 1.75%

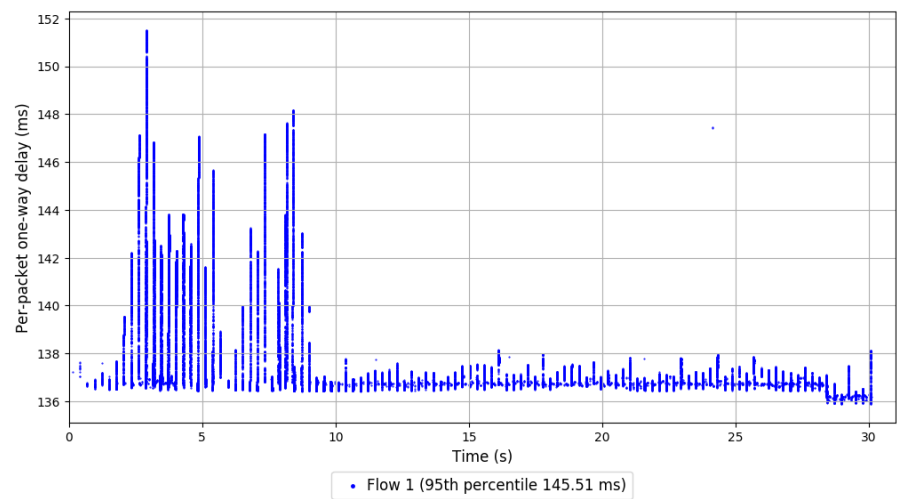
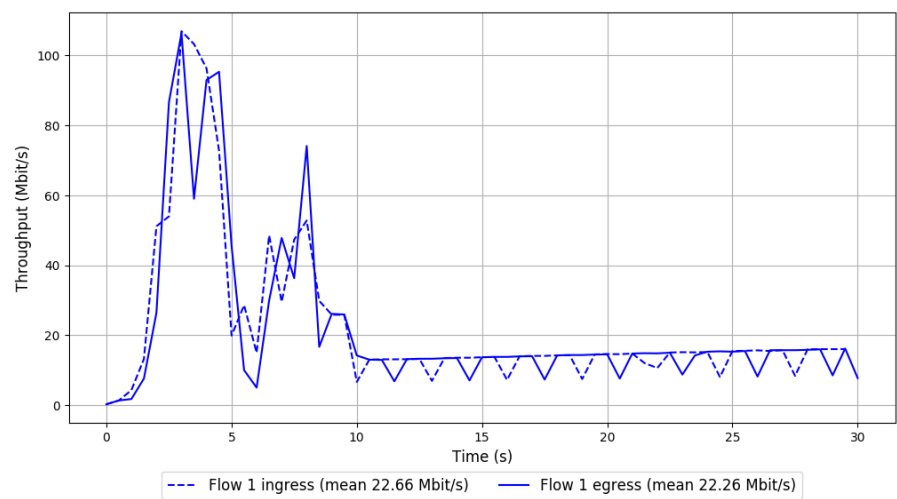
-- Flow 1:

Average throughput: 22.26 Mbit/s

95th percentile per-packet one-way delay: 145.509 ms

Loss rate: 1.75%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-02 12:29:38

End at: 2018-01-02 12:30:08

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.94 Mbit/s

95th percentile per-packet one-way delay: 140.050 ms

Loss rate: 0.00%

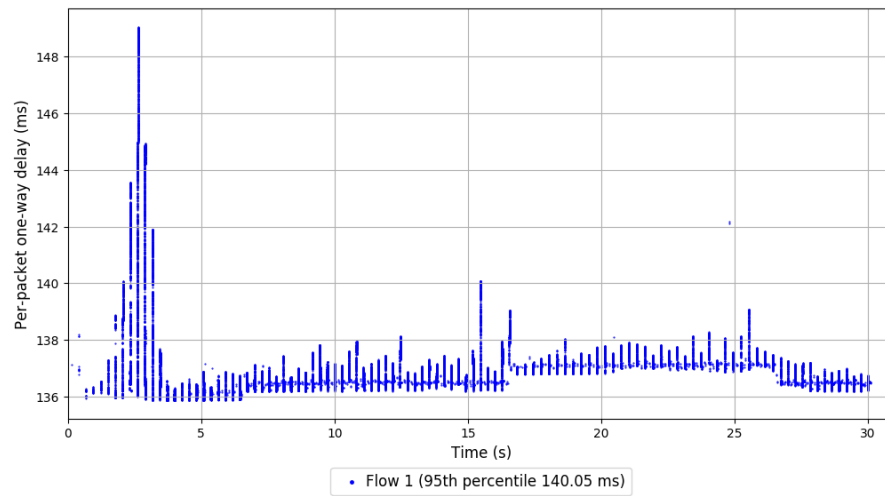
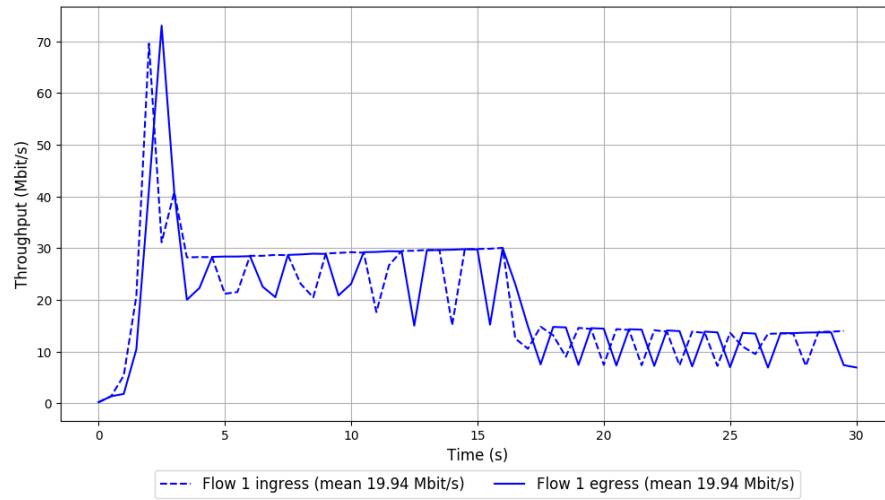
-- Flow 1:

Average throughput: 19.94 Mbit/s

95th percentile per-packet one-way delay: 140.050 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-02 12:42:15

End at: 2018-01-02 12:42:45

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.41 Mbit/s

95th percentile per-packet one-way delay: 138.000 ms

Loss rate: 1.15%

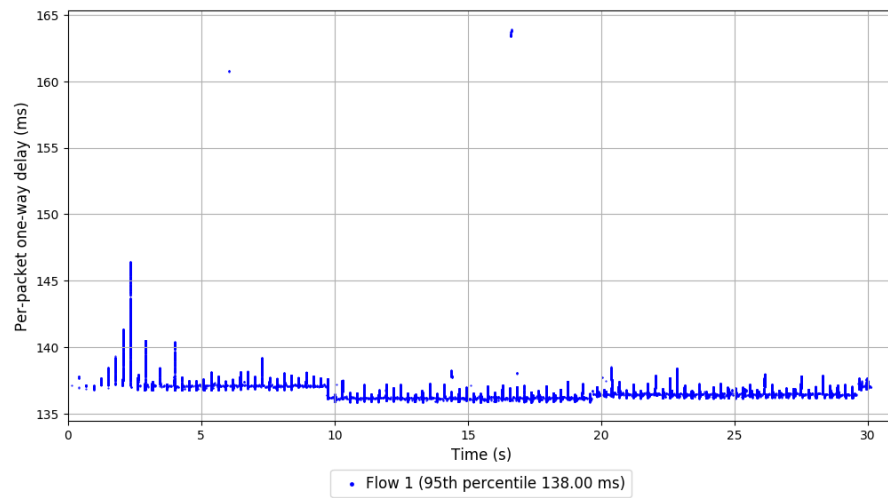
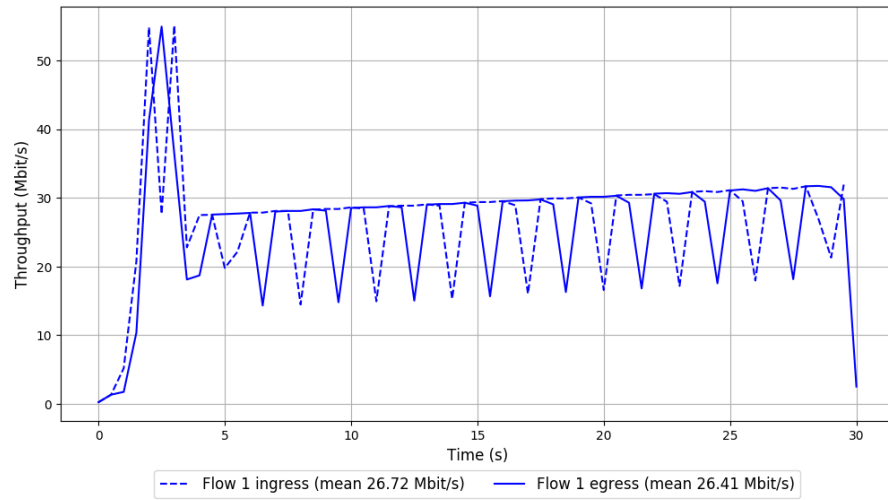
-- Flow 1:

Average throughput: 26.41 Mbit/s

95th percentile per-packet one-way delay: 138.000 ms

Loss rate: 1.15%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-02 12:55:03

End at: 2018-01-02 12:55:33

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.42 Mbit/s

95th percentile per-packet one-way delay: 138.140 ms

Loss rate: 0.00%

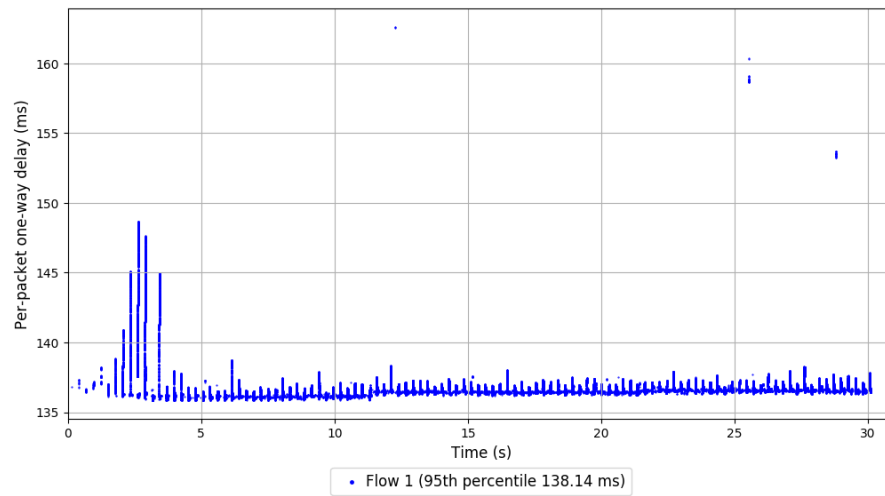
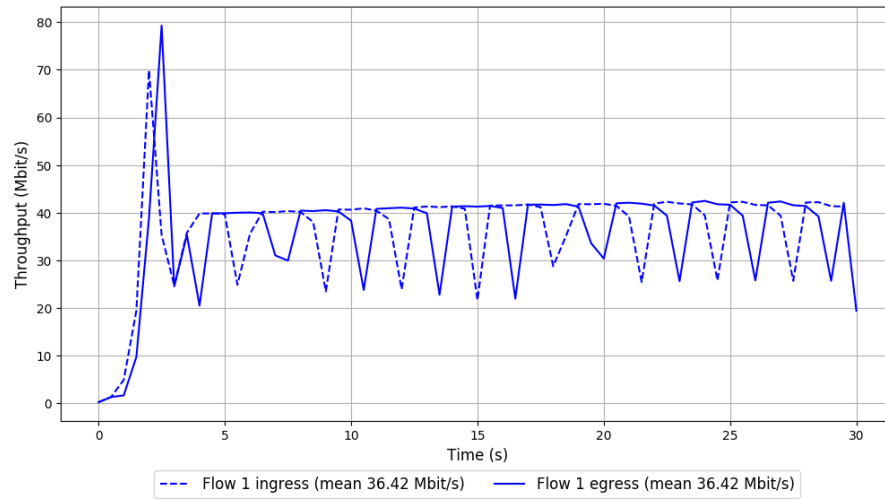
-- Flow 1:

Average throughput: 36.42 Mbit/s

95th percentile per-packet one-way delay: 138.140 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-02 13:08:11

End at: 2018-01-02 13:08:42

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.63 Mbit/s

95th percentile per-packet one-way delay: 143.426 ms

Loss rate: 0.65%

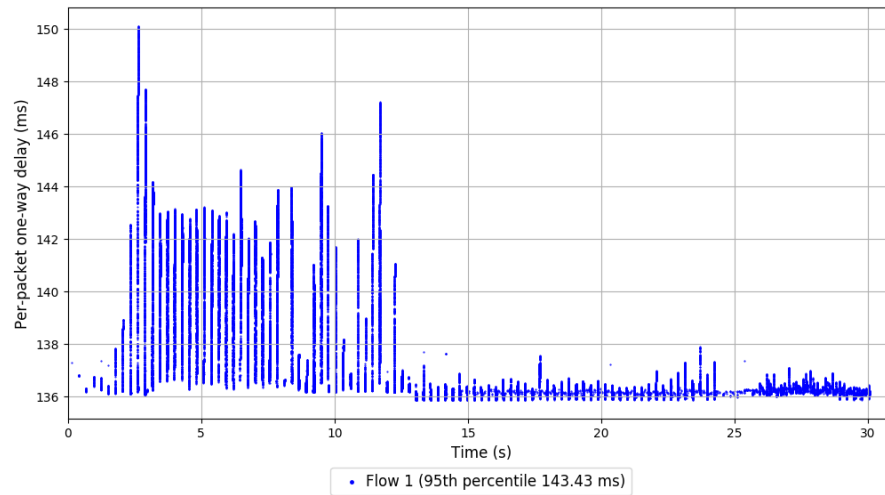
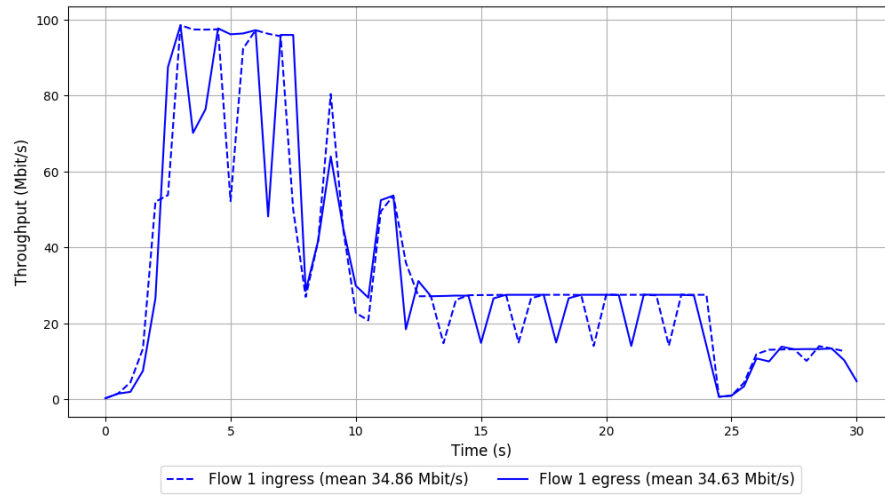
-- Flow 1:

Average throughput: 34.63 Mbit/s

95th percentile per-packet one-way delay: 143.426 ms

Loss rate: 0.65%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-02 13:21:06

End at: 2018-01-02 13:21:36

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.18 Mbit/s

95th percentile per-packet one-way delay: 138.631 ms

Loss rate: 0.12%

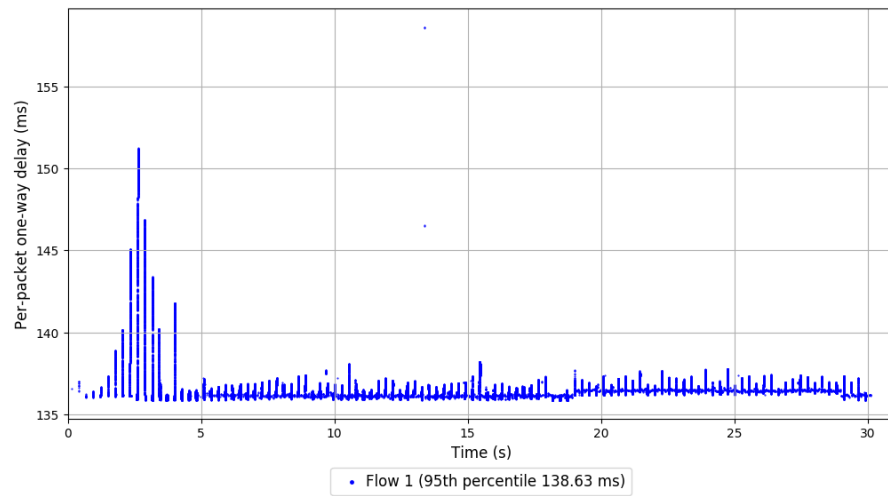
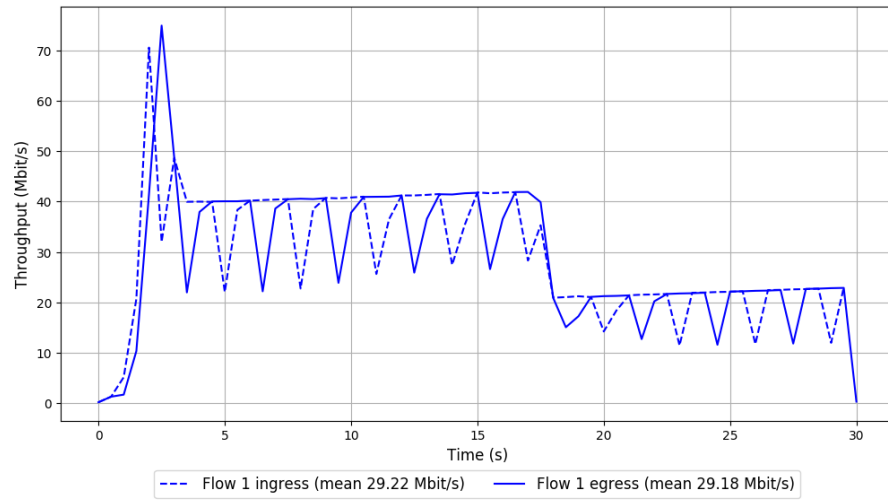
-- Flow 1:

Average throughput: 29.18 Mbit/s

95th percentile per-packet one-way delay: 138.631 ms

Loss rate: 0.12%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-02 13:34:00

End at: 2018-01-02 13:34:30

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.11 Mbit/s

95th percentile per-packet one-way delay: 142.048 ms

Loss rate: 0.51%

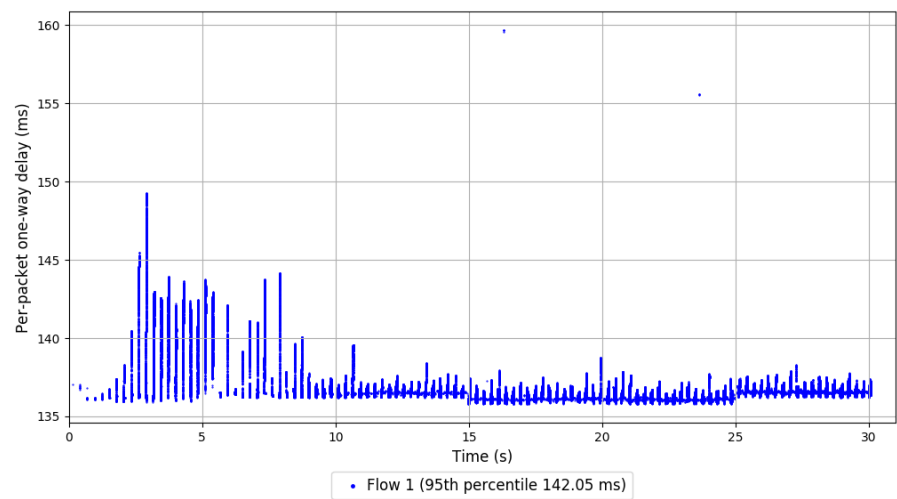
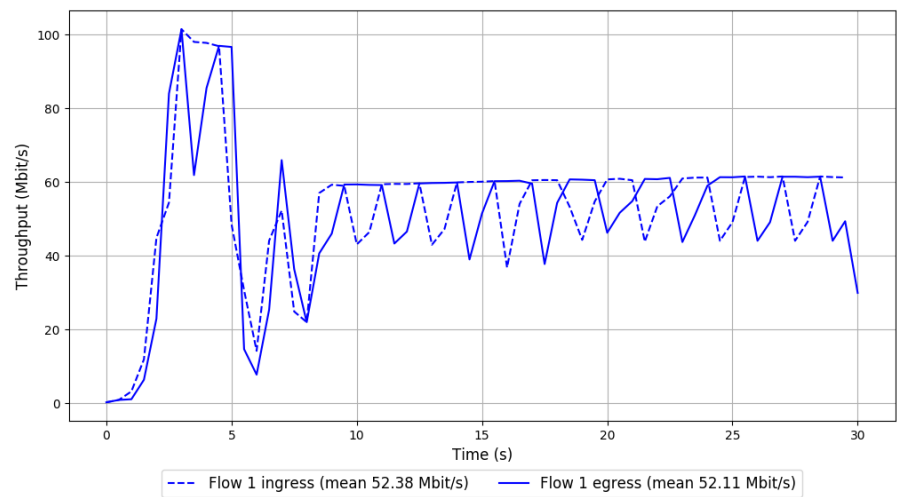
-- Flow 1:

Average throughput: 52.11 Mbit/s

95th percentile per-packet one-way delay: 142.048 ms

Loss rate: 0.51%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-02 13:46:50

End at: 2018-01-02 13:47:20

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.95 Mbit/s

95th percentile per-packet one-way delay: 142.504 ms

Loss rate: 0.00%

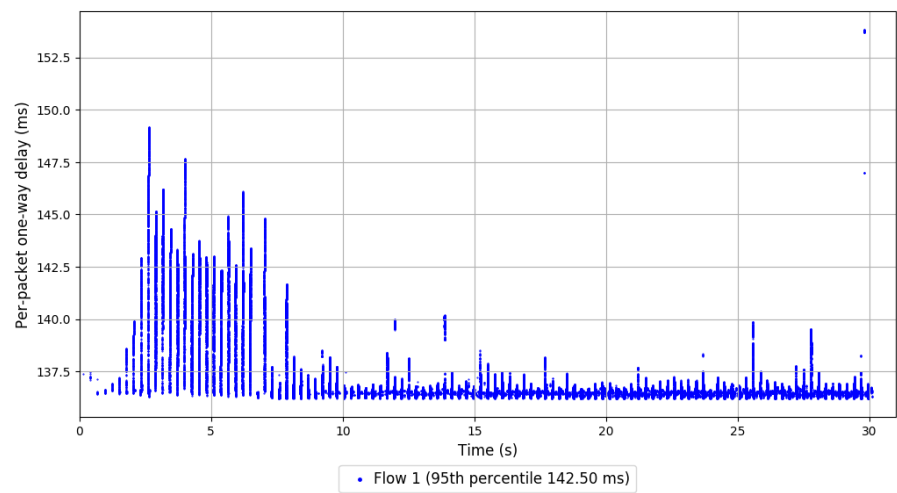
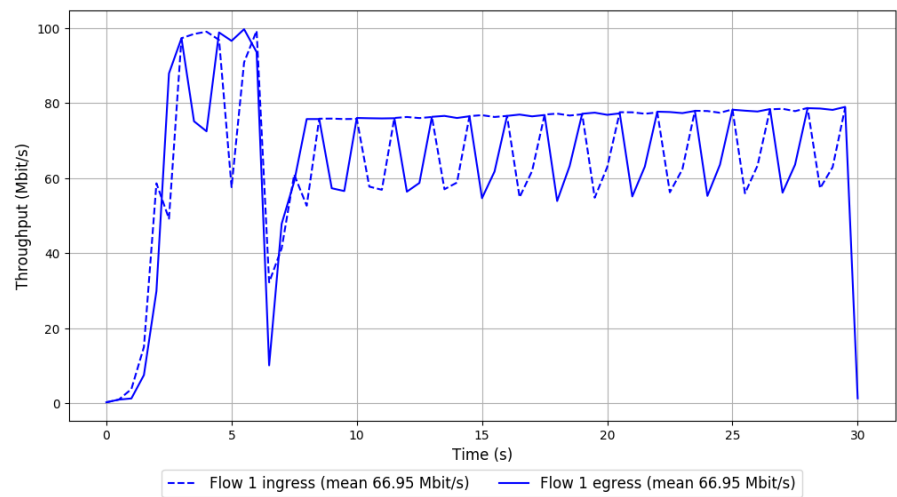
-- Flow 1:

Average throughput: 66.95 Mbit/s

95th percentile per-packet one-way delay: 142.504 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

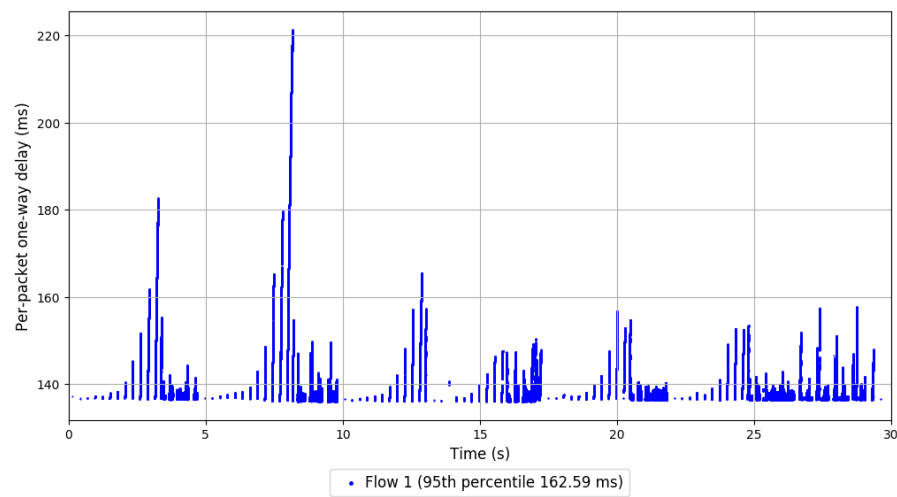
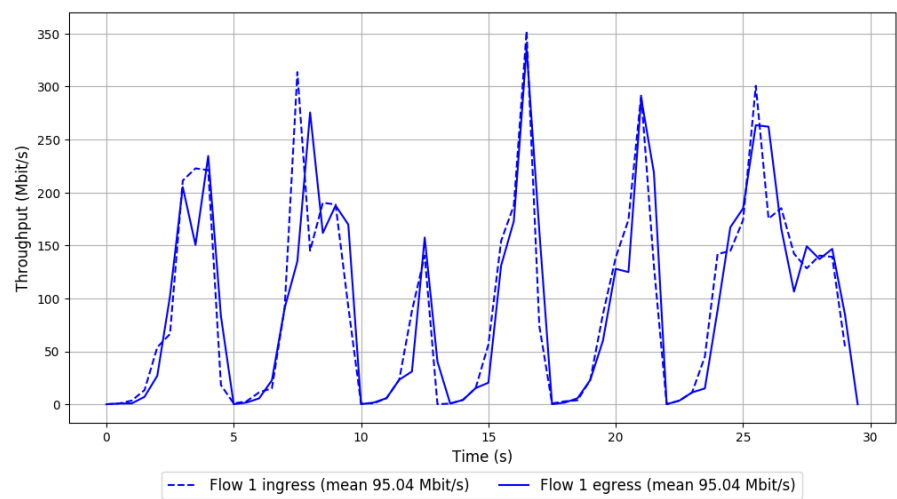


```
Run 1: Statistics of Verus

Start at: 2018-01-02 11:49:37
End at: 2018-01-02 11:50:07

# Below is generated by plot.py at 2018-01-02 14:55:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.04 Mbit/s
95th percentile per-packet one-way delay: 162.593 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 95.04 Mbit/s
95th percentile per-packet one-way delay: 162.593 ms
Loss rate: 0.01%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-02 12:02:32

End at: 2018-01-02 12:03:03

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 106.14 Mbit/s

95th percentile per-packet one-way delay: 148.020 ms

Loss rate: 0.32%

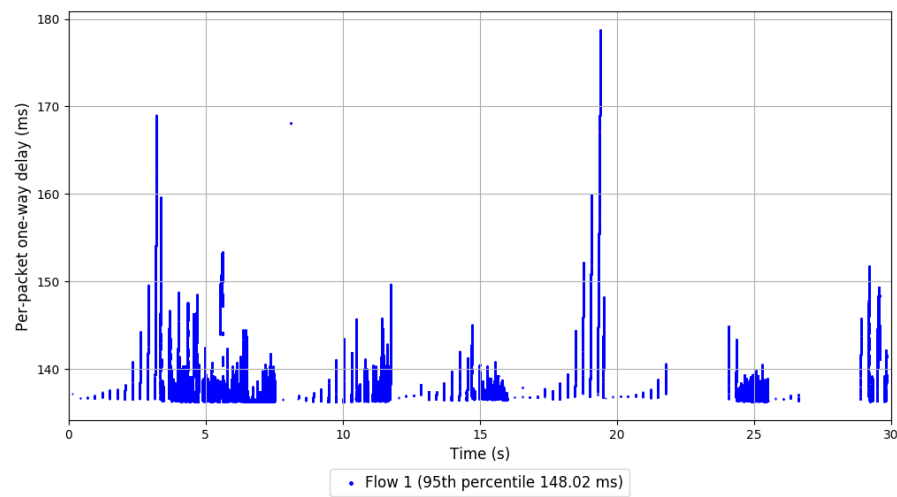
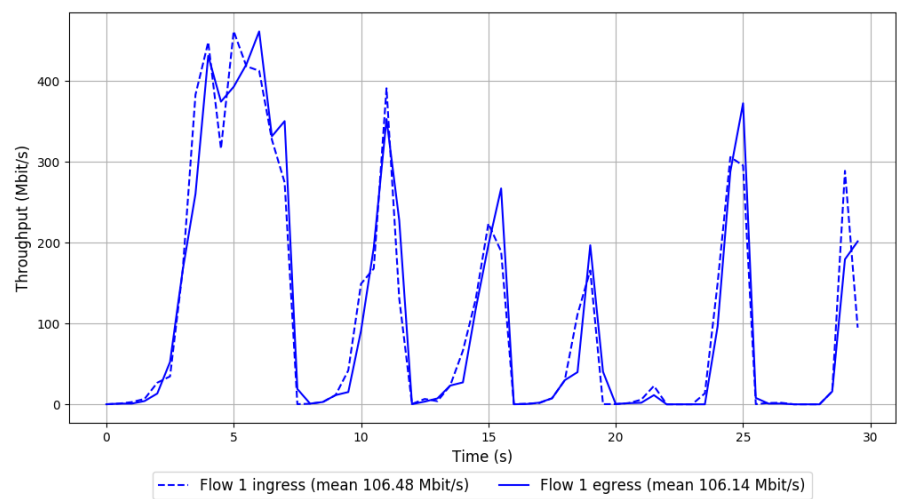
-- Flow 1:

Average throughput: 106.14 Mbit/s

95th percentile per-packet one-way delay: 148.020 ms

Loss rate: 0.32%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-02 12:15:16

End at: 2018-01-02 12:15:46

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 149.86 Mbit/s

95th percentile per-packet one-way delay: 147.665 ms

Loss rate: 0.01%

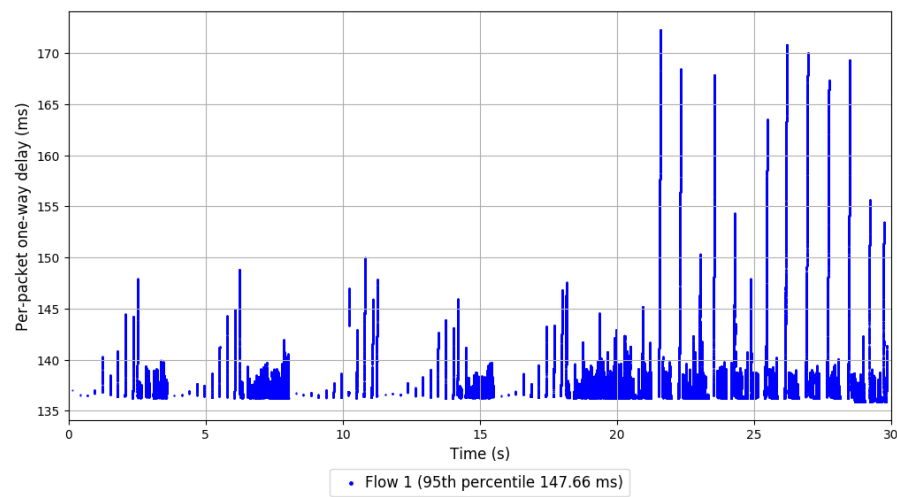
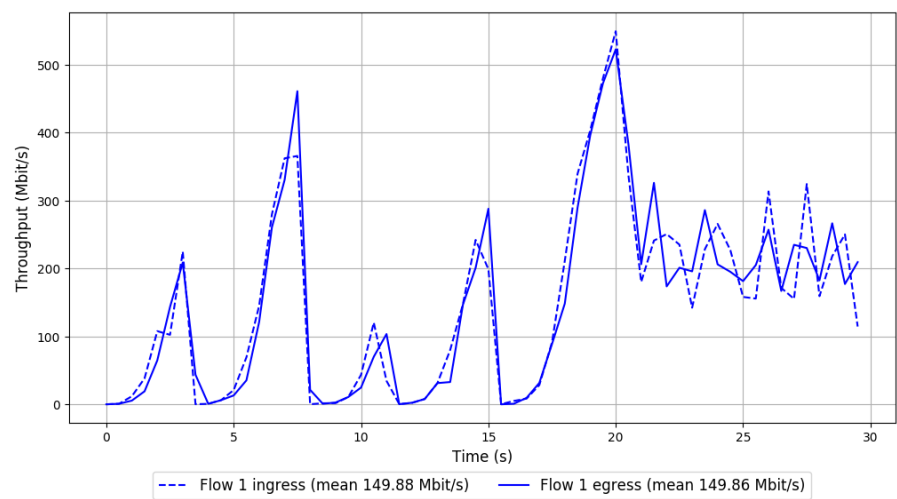
-- Flow 1:

Average throughput: 149.86 Mbit/s

95th percentile per-packet one-way delay: 147.665 ms

Loss rate: 0.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-02 12:27:58

End at: 2018-01-02 12:28:28

Below is generated by plot.py at 2018-01-02 14:55:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.25 Mbit/s

95th percentile per-packet one-way delay: 172.974 ms

Loss rate: 0.70%

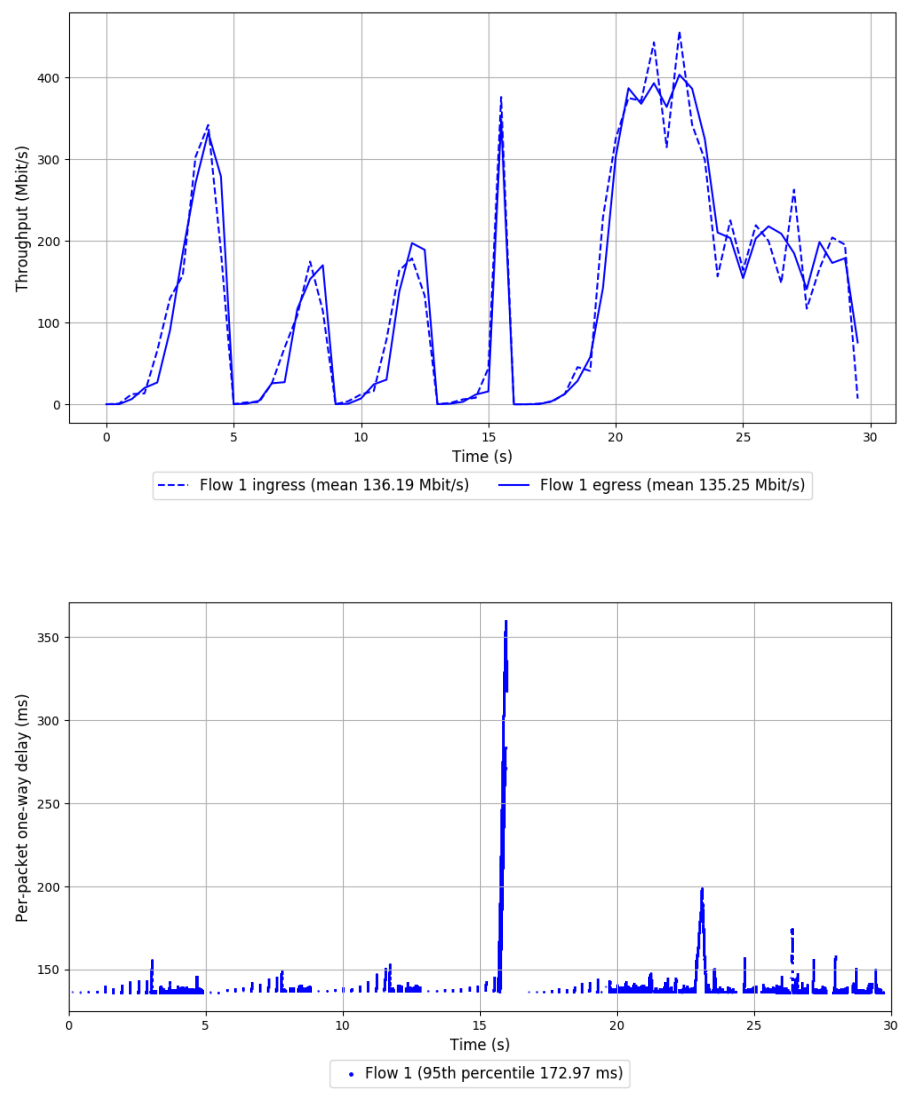
-- Flow 1:

Average throughput: 135.25 Mbit/s

95th percentile per-packet one-way delay: 172.974 ms

Loss rate: 0.70%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-02 12:40:34

End at: 2018-01-02 12:41:04

Below is generated by plot.py at 2018-01-02 14:55:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 163.37 Mbit/s

95th percentile per-packet one-way delay: 161.950 ms

Loss rate: 0.03%

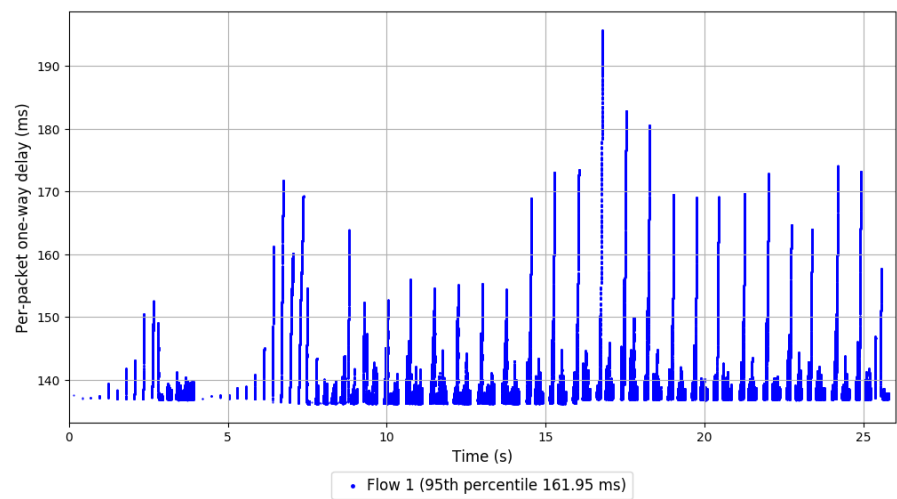
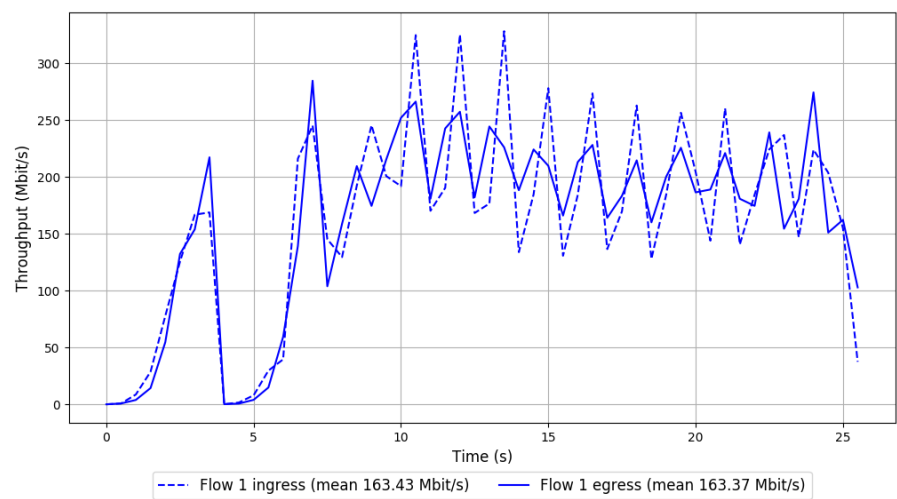
-- Flow 1:

Average throughput: 163.37 Mbit/s

95th percentile per-packet one-way delay: 161.950 ms

Loss rate: 0.03%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-02 12:53:20

End at: 2018-01-02 12:53:50

Below is generated by plot.py at 2018-01-02 14:57:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.92 Mbit/s

95th percentile per-packet one-way delay: 164.851 ms

Loss rate: 0.00%

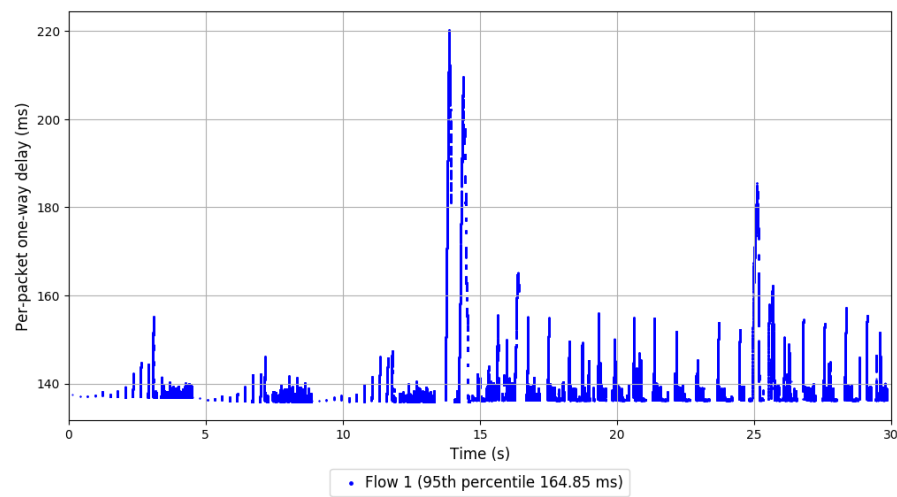
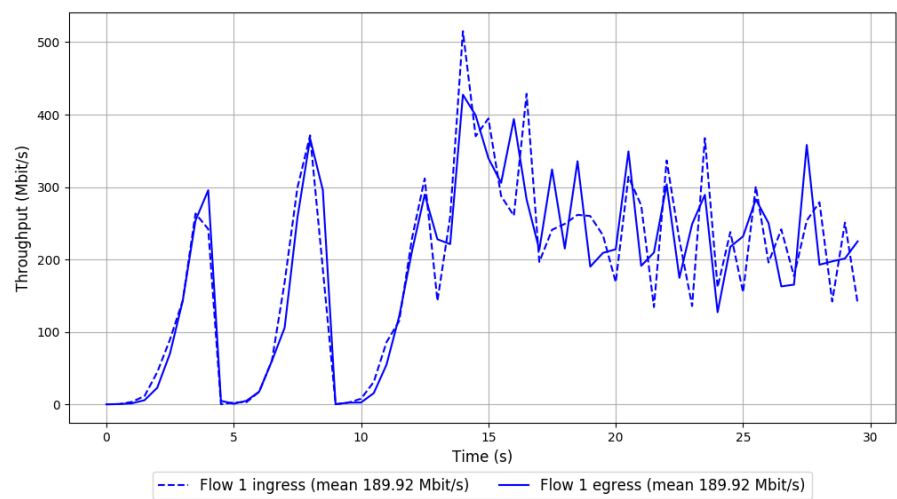
-- Flow 1:

Average throughput: 189.92 Mbit/s

95th percentile per-packet one-way delay: 164.851 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-02 13:06:26

End at: 2018-01-02 13:06:56

Below is generated by plot.py at 2018-01-02 14:58:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.26 Mbit/s

95th percentile per-packet one-way delay: 146.635 ms

Loss rate: 0.01%

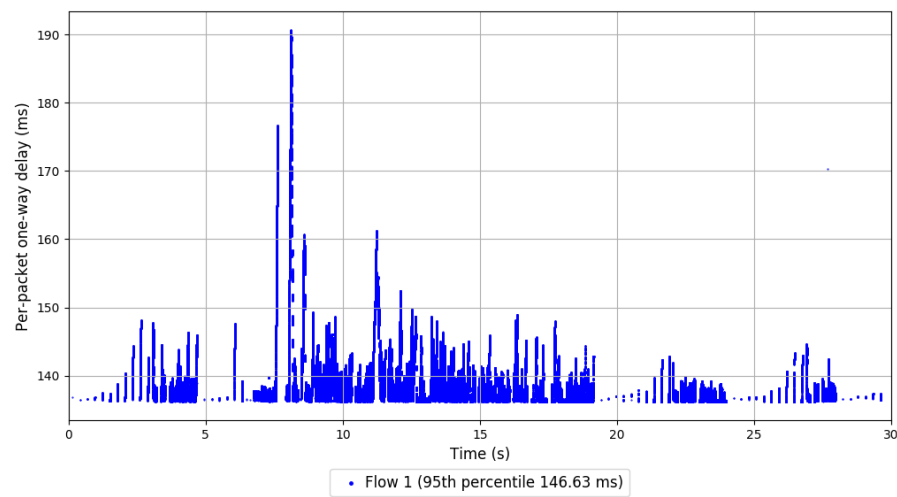
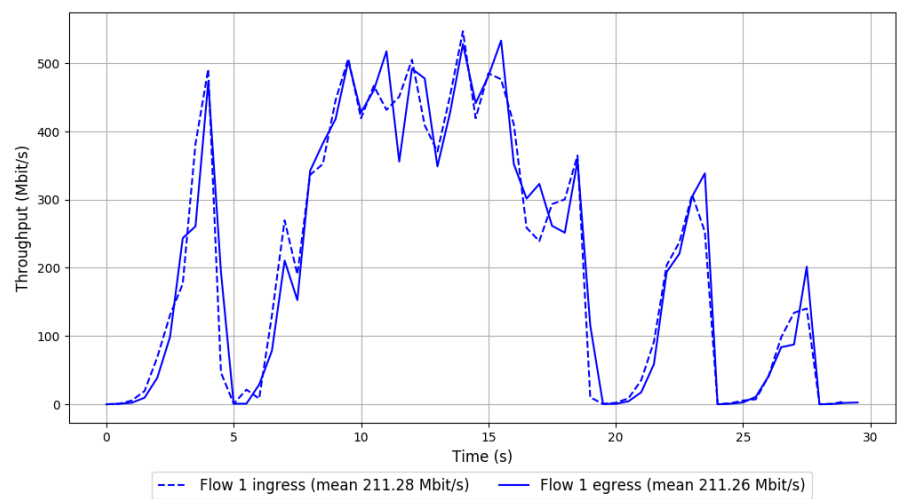
-- Flow 1:

Average throughput: 211.26 Mbit/s

95th percentile per-packet one-way delay: 146.635 ms

Loss rate: 0.01%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-02 13:19:28

End at: 2018-01-02 13:19:58

Below is generated by plot.py at 2018-01-02 14:58:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.31 Mbit/s

95th percentile per-packet one-way delay: 156.936 ms

Loss rate: 0.00%

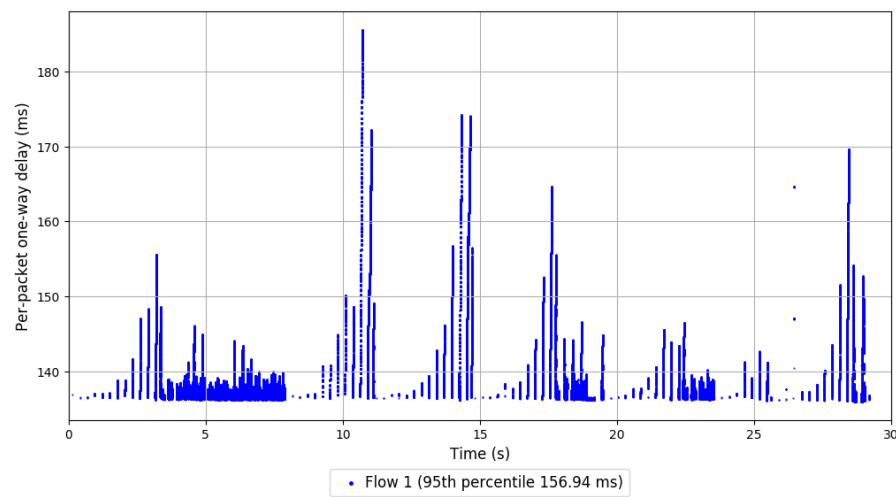
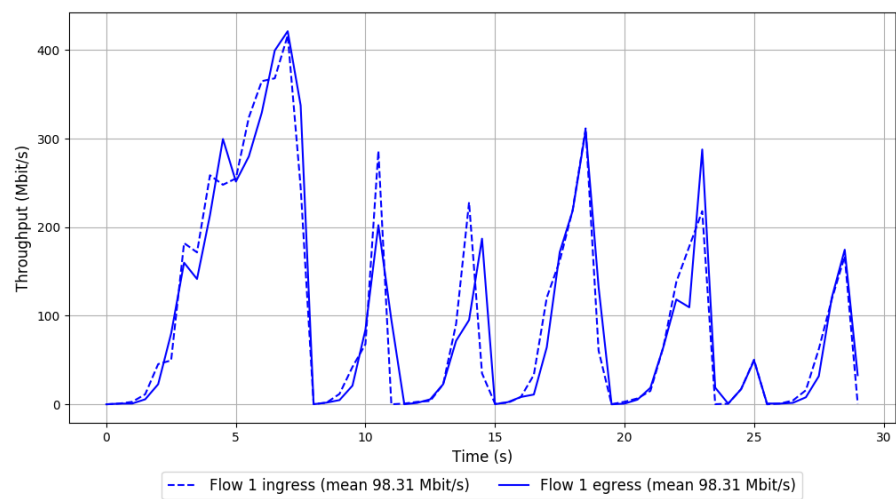
-- Flow 1:

Average throughput: 98.31 Mbit/s

95th percentile per-packet one-way delay: 156.936 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-02 13:32:11

End at: 2018-01-02 13:32:41

Below is generated by plot.py at 2018-01-02 14:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 254.11 Mbit/s

95th percentile per-packet one-way delay: 216.284 ms

Loss rate: 0.30%

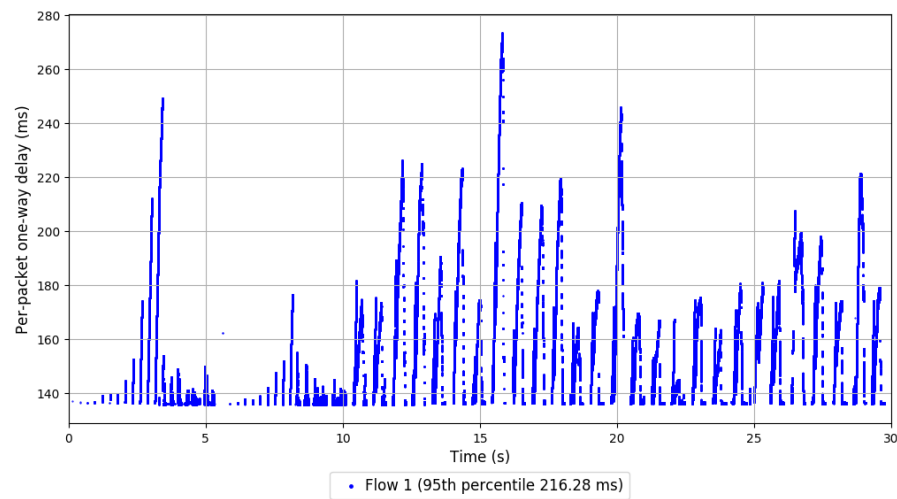
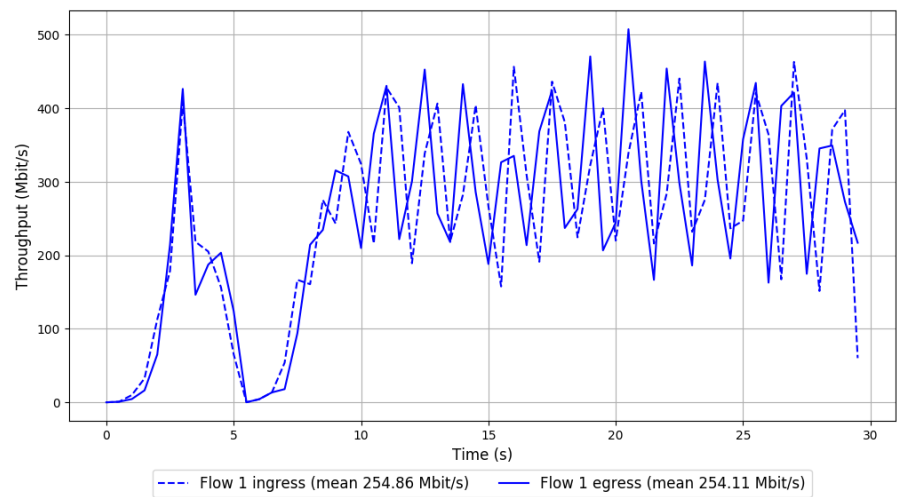
-- Flow 1:

Average throughput: 254.11 Mbit/s

95th percentile per-packet one-way delay: 216.284 ms

Loss rate: 0.30%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-02 13:45:05

End at: 2018-01-02 13:45:35

Below is generated by plot.py at 2018-01-02 14:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 203.55 Mbit/s

95th percentile per-packet one-way delay: 160.852 ms

Loss rate: 0.00%

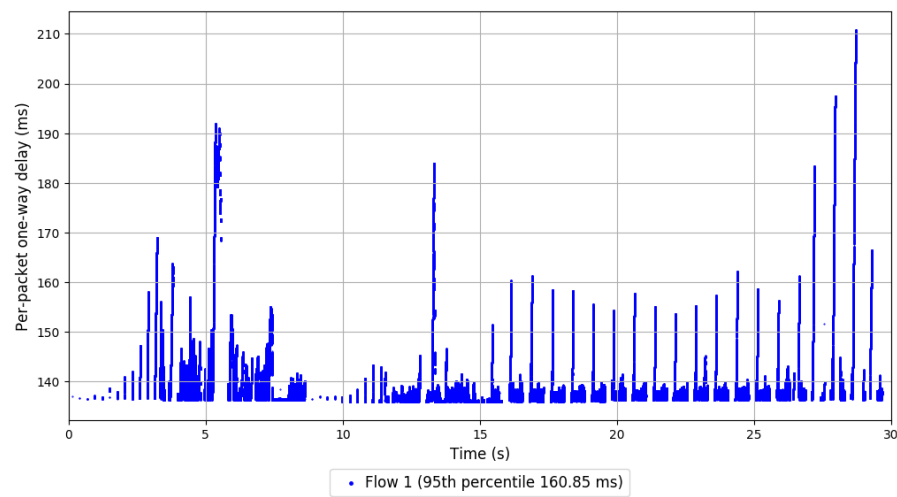
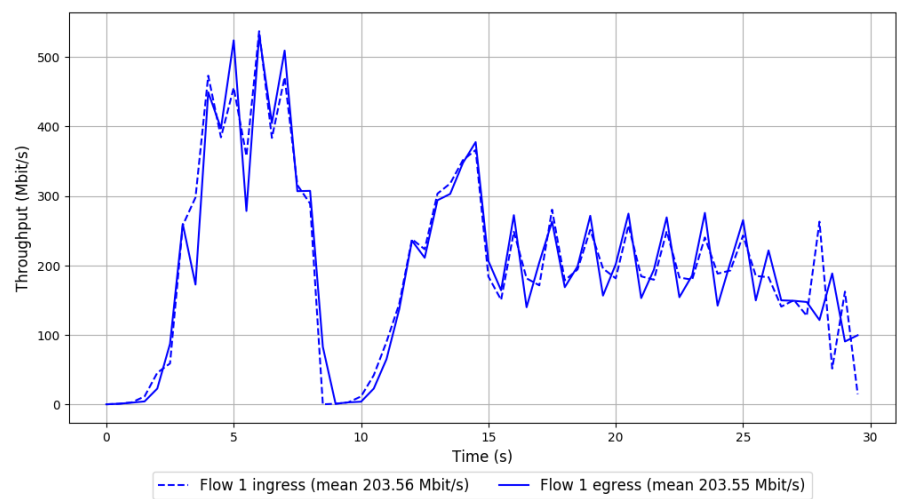
-- Flow 1:

Average throughput: 203.55 Mbit/s

95th percentile per-packet one-way delay: 160.852 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link

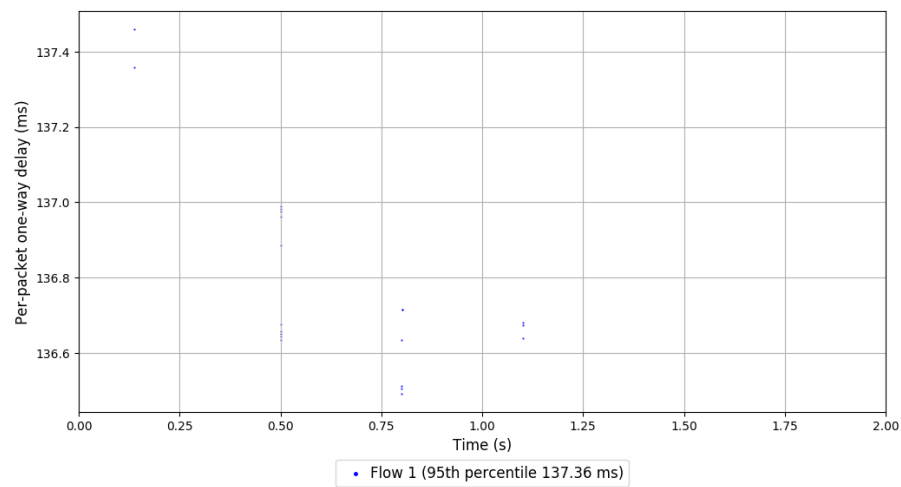
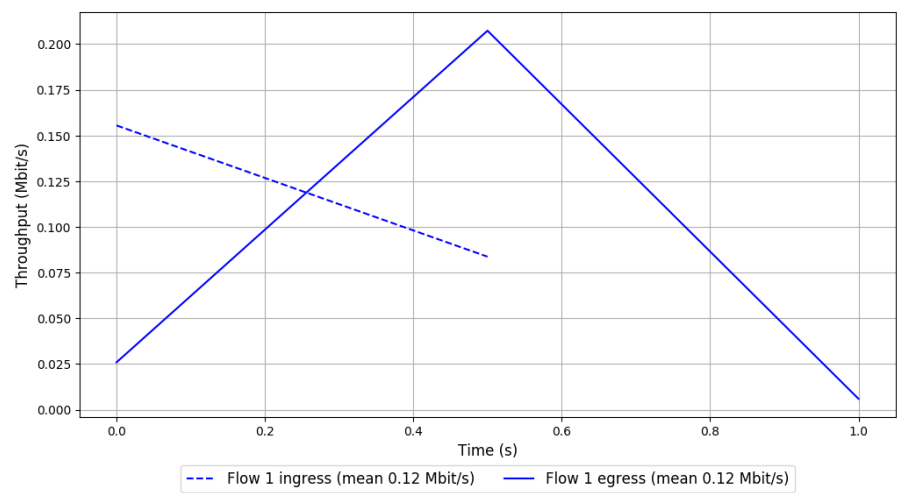


Run 1: Statistics of Copa

Start at: 2018-01-02 11:45:52

End at: 2018-01-02 11:46:22

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-02 11:58:39

End at: 2018-01-02 11:59:10

Below is generated by plot.py at 2018-01-02 14:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.62 Mbit/s

95th percentile per-packet one-way delay: 136.680 ms

Loss rate: 0.00%

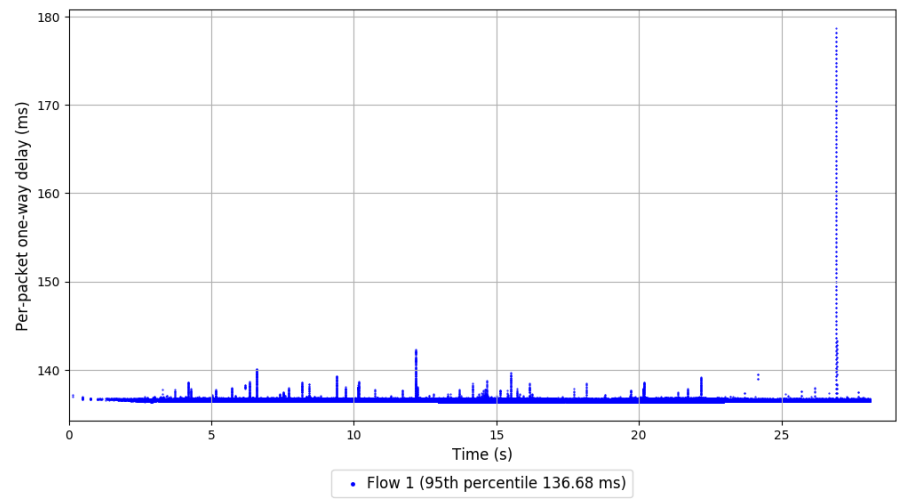
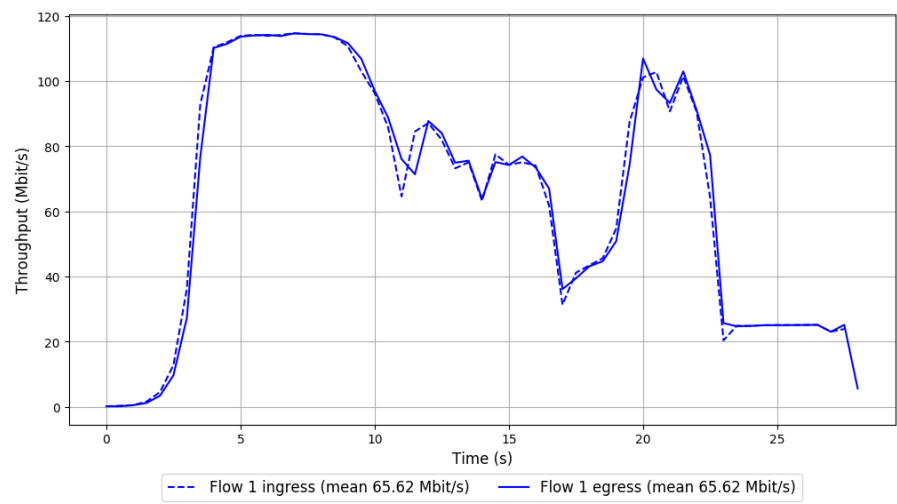
-- Flow 1:

Average throughput: 65.62 Mbit/s

95th percentile per-packet one-way delay: 136.680 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-02 12:11:21

End at: 2018-01-02 12:11:51

Below is generated by plot.py at 2018-01-02 14:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.24 Mbit/s

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

Loss rate: 0.00%

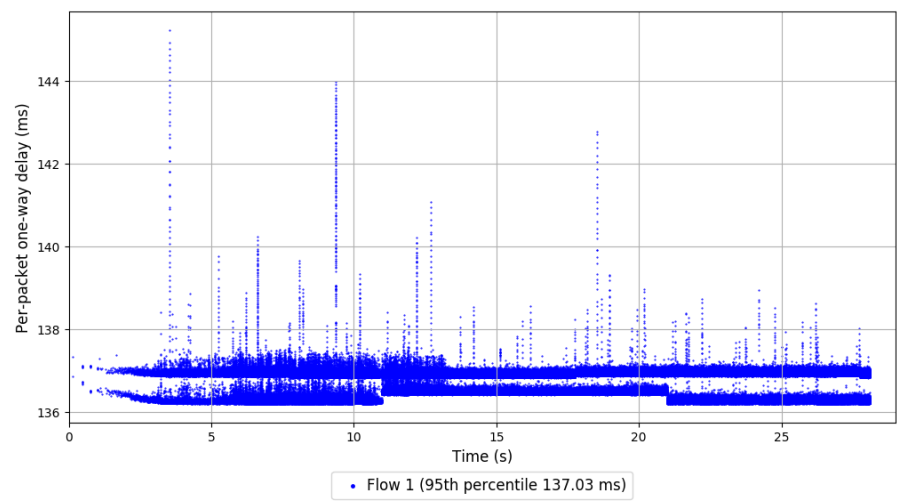
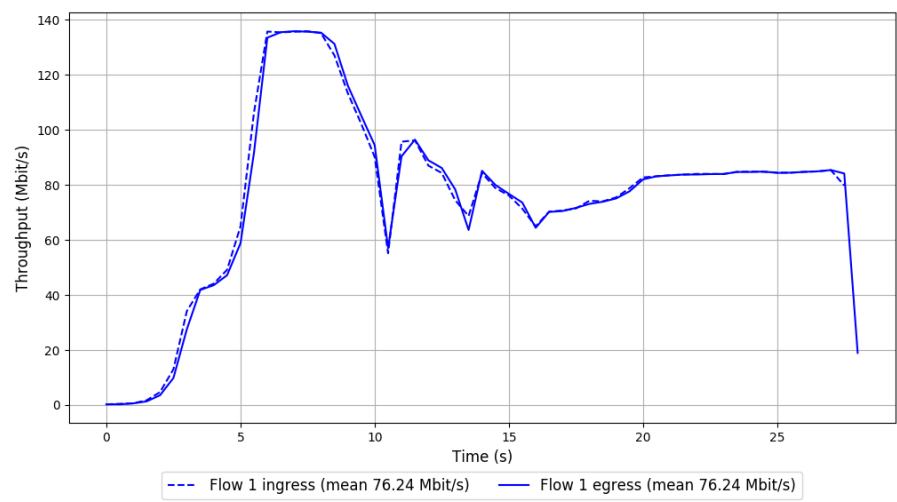
-- Flow 1:

Average throughput: 76.24 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-02 12:24:06

End at: 2018-01-02 12:24:36

Below is generated by plot.py at 2018-01-02 14:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.25 Mbit/s

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

Loss rate: 0.00%

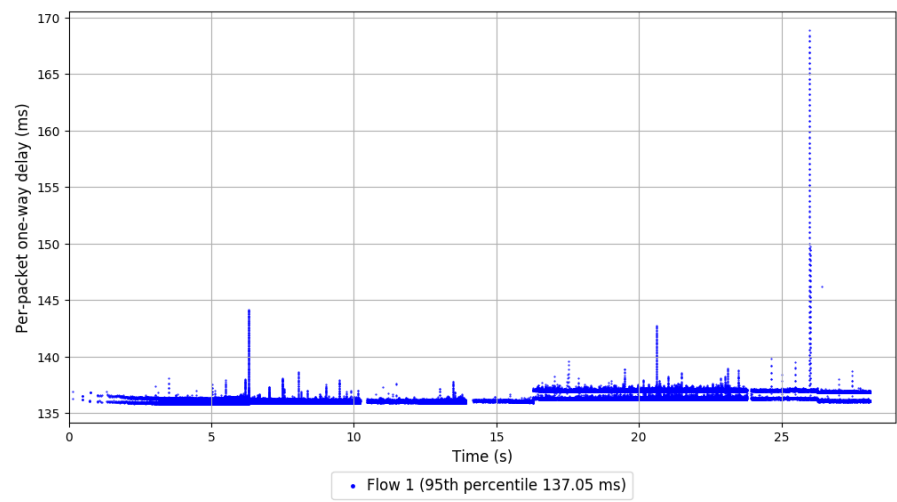
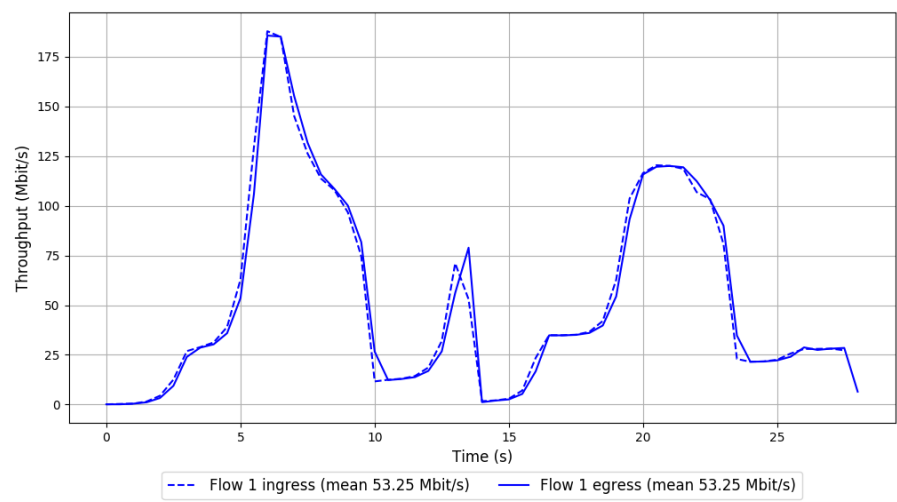
-- Flow 1:

Average throughput: 53.25 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-02 12:36:40

End at: 2018-01-02 12:37:10

Below is generated by plot.py at 2018-01-02 14:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.50 Mbit/s

95th percentile per-packet one-way delay: 137.032 ms

Loss rate: 0.00%

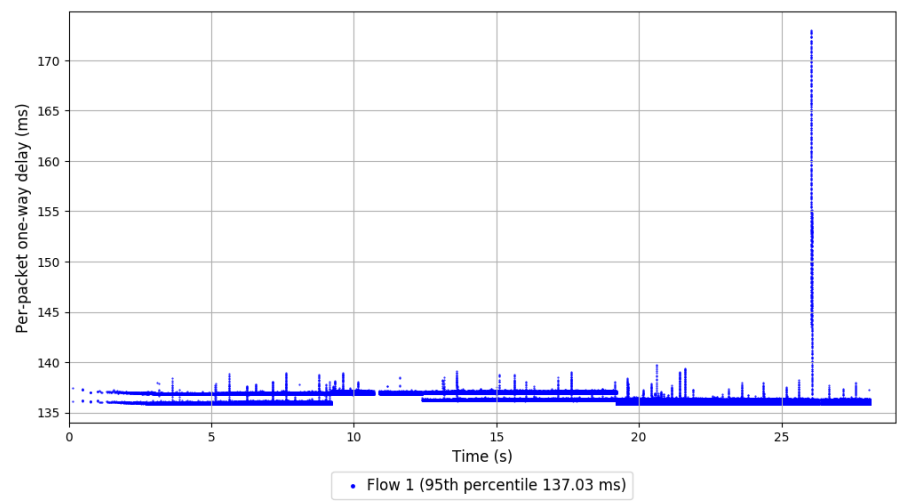
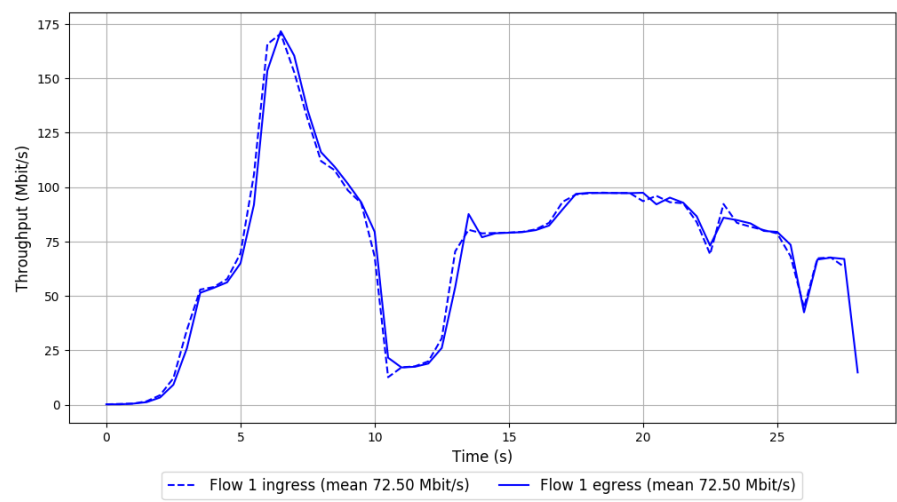
-- Flow 1:

Average throughput: 72.50 Mbit/s

95th percentile per-packet one-way delay: 137.032 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-02 12:49:25

End at: 2018-01-02 12:49:55

Below is generated by plot.py at 2018-01-02 14:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.80 Mbit/s

95th percentile per-packet one-way delay: 137.025 ms

Loss rate: 0.00%

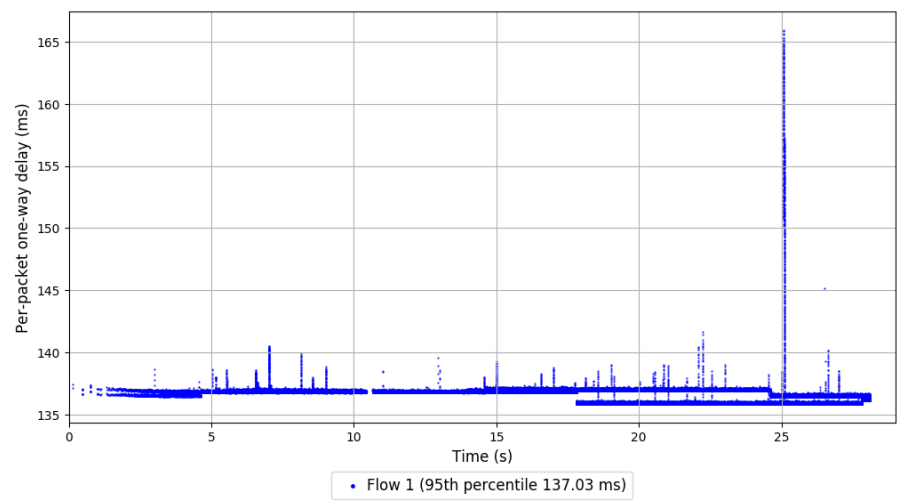
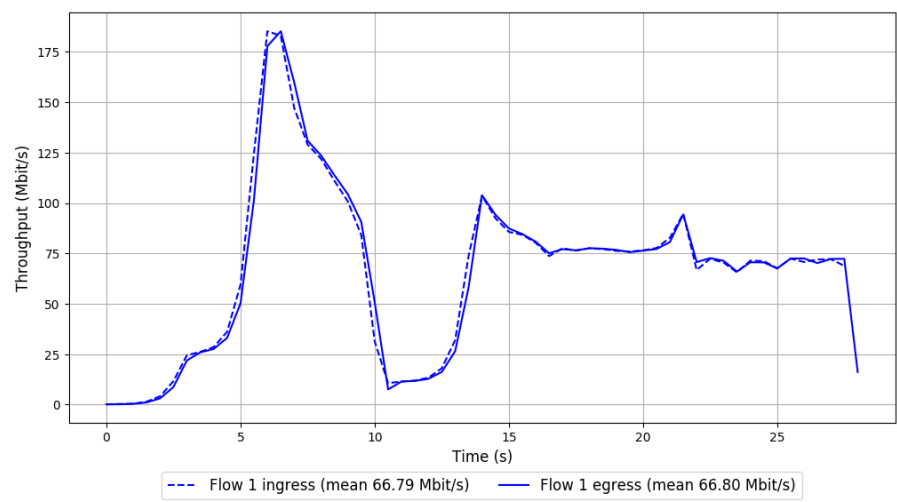
-- Flow 1:

Average throughput: 66.80 Mbit/s

95th percentile per-packet one-way delay: 137.025 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-02 13:02:33

End at: 2018-01-02 13:03:03

Below is generated by plot.py at 2018-01-02 14:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.87 Mbit/s

95th percentile per-packet one-way delay: 136.363 ms

Loss rate: 0.00%

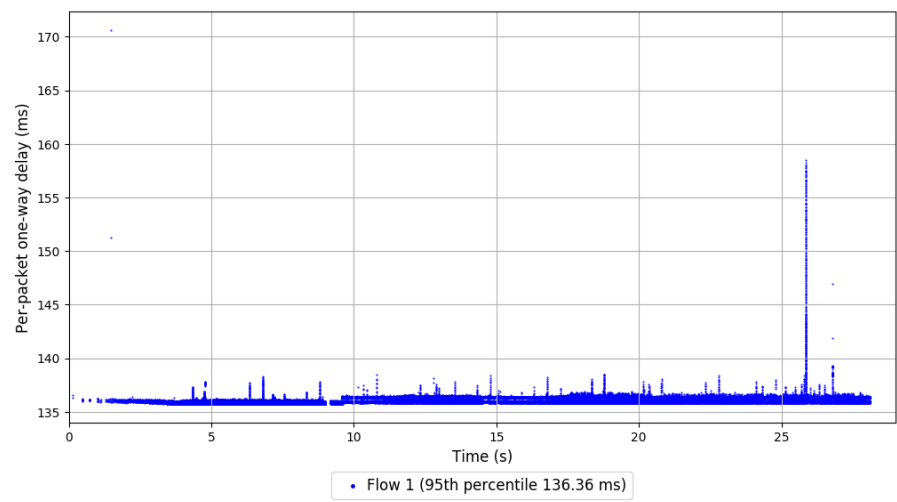
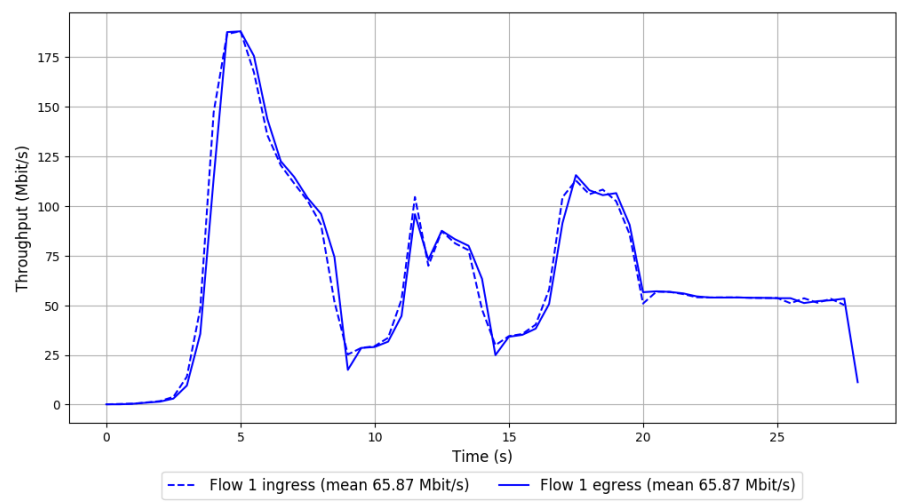
-- Flow 1:

Average throughput: 65.87 Mbit/s

95th percentile per-packet one-way delay: 136.363 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link

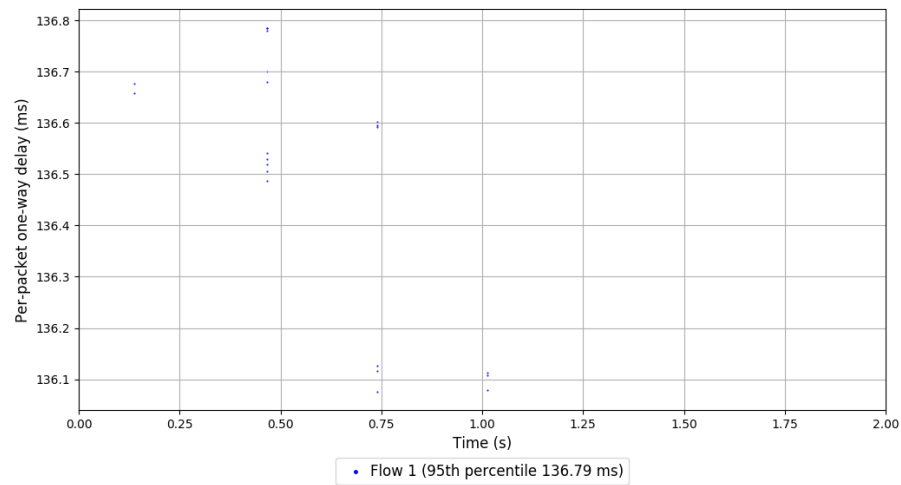
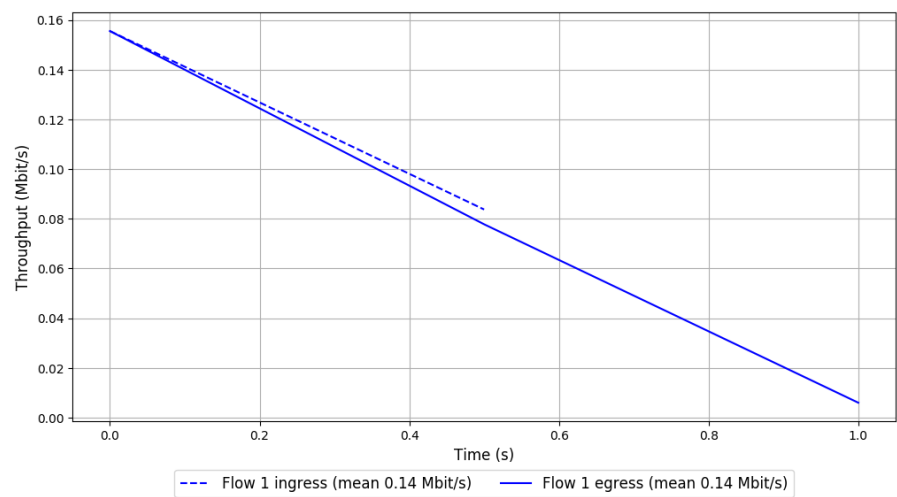


Run 8: Statistics of Copa

Start at: 2018-01-02 13:15:42

End at: 2018-01-02 13:16:12

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-02 13:28:19

End at: 2018-01-02 13:28:49

Below is generated by plot.py at 2018-01-02 14:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.37 Mbit/s

95th percentile per-packet one-way delay: 136.570 ms

Loss rate: 0.00%

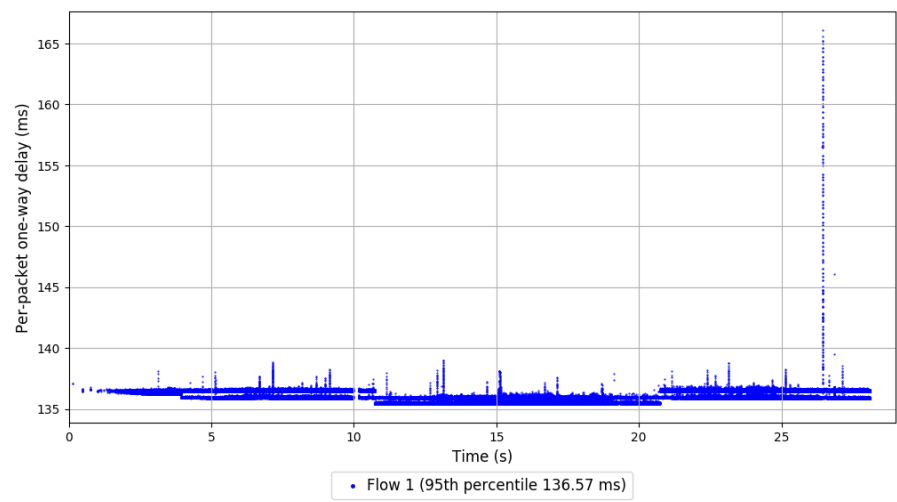
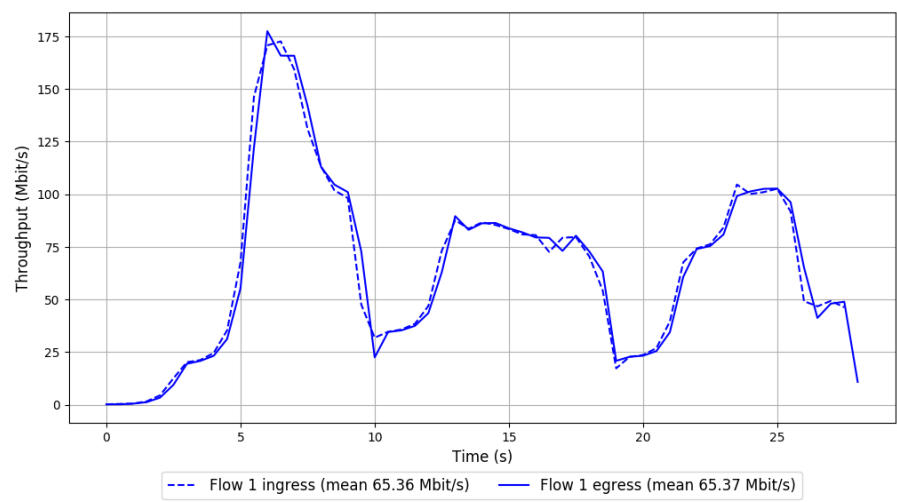
-- Flow 1:

Average throughput: 65.37 Mbit/s

95th percentile per-packet one-way delay: 136.570 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-02 13:41:12

End at: 2018-01-02 13:41:42

Below is generated by plot.py at 2018-01-02 14:59:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.15 Mbit/s

95th percentile per-packet one-way delay: 136.559 ms

Loss rate: 0.00%

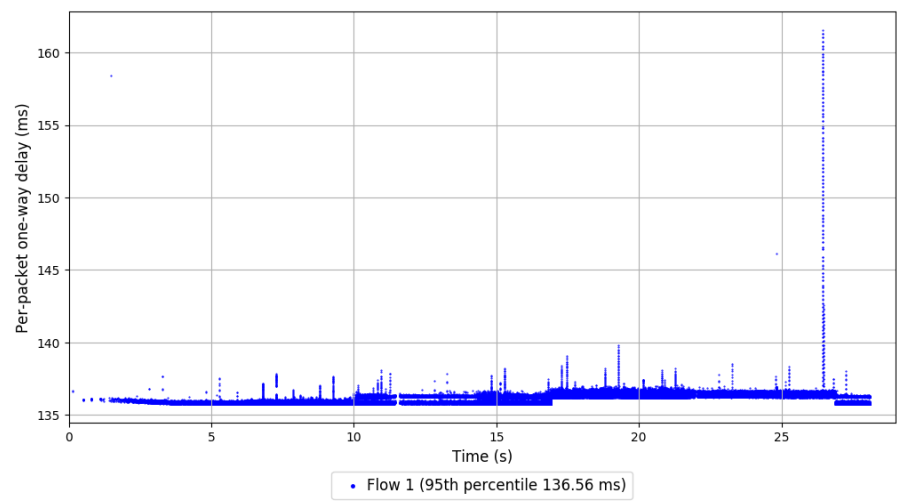
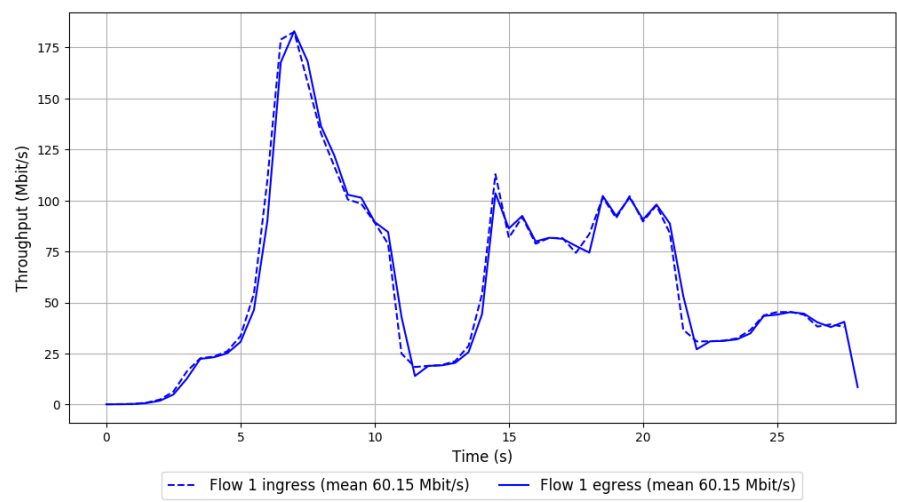
-- Flow 1:

Average throughput: 60.15 Mbit/s

95th percentile per-packet one-way delay: 136.559 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

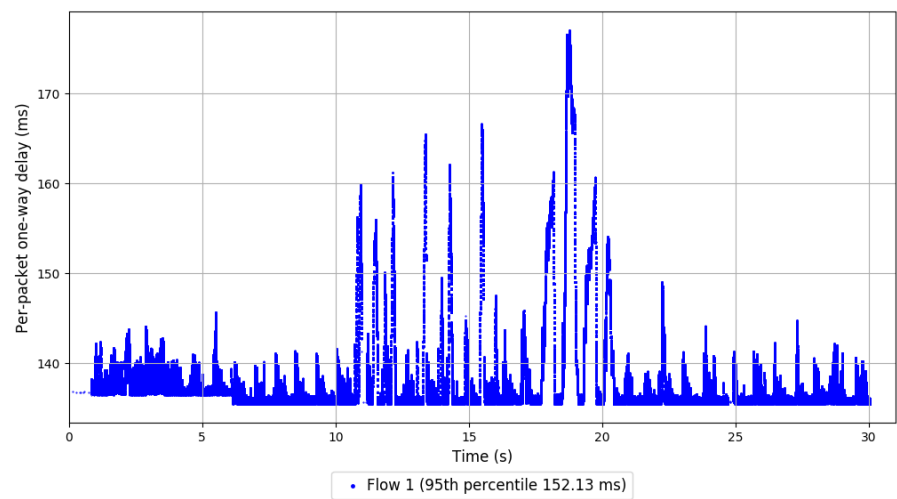
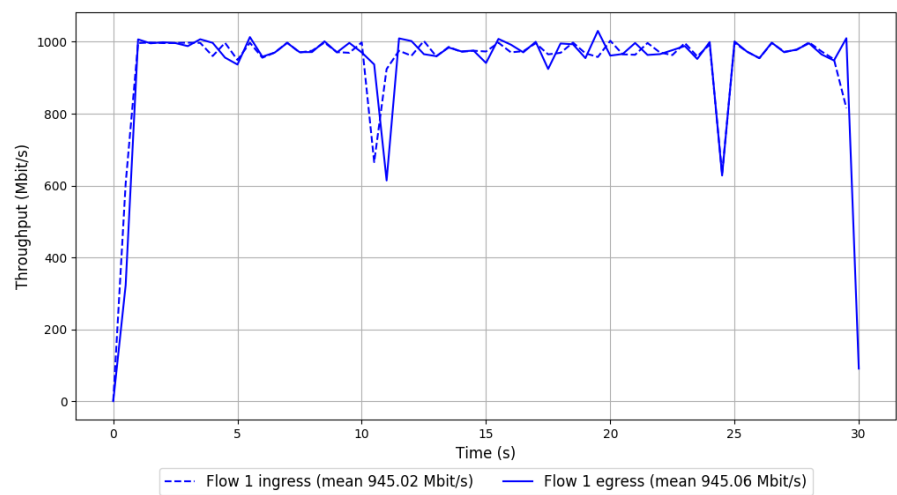


```
Run 1: Statistics of FillP

Start at: 2018-01-02 11:46:35
End at: 2018-01-02 11:47:05

# Below is generated by plot.py at 2018-01-02 15:16:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 945.06 Mbit/s
95th percentile per-packet one-way delay: 152.129 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 945.06 Mbit/s
95th percentile per-packet one-way delay: 152.129 ms
Loss rate: 0.00%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-02 11:59:30

End at: 2018-01-02 12:00:00

Below is generated by plot.py at 2018-01-02 15:16:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 959.91 Mbit/s

95th percentile per-packet one-way delay: 171.441 ms

Loss rate: 0.43%

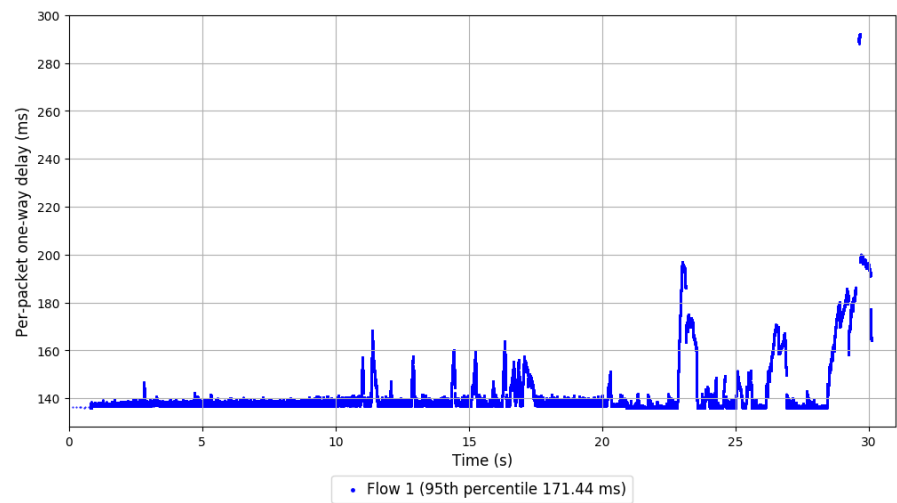
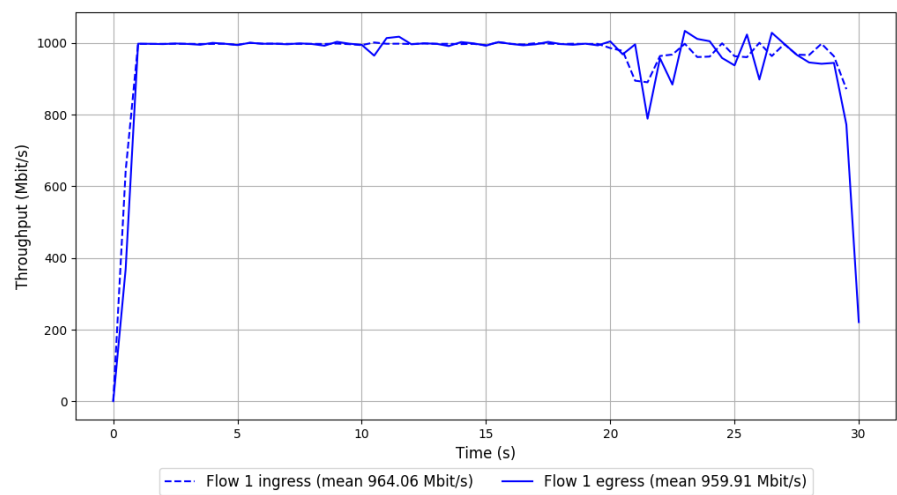
-- Flow 1:

Average throughput: 959.91 Mbit/s

95th percentile per-packet one-way delay: 171.441 ms

Loss rate: 0.43%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-02 12:12:13

End at: 2018-01-02 12:12:43

Below is generated by plot.py at 2018-01-02 15:16:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 953.88 Mbit/s

95th percentile per-packet one-way delay: 149.611 ms

Loss rate: 0.03%

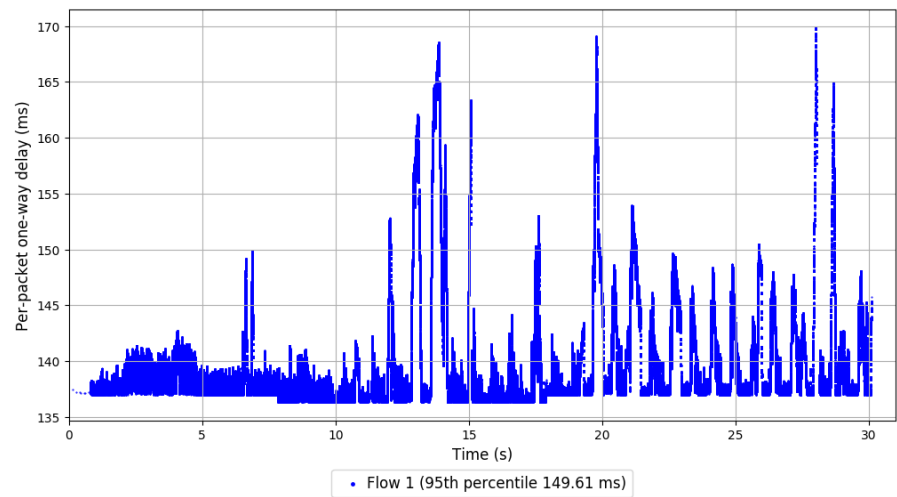
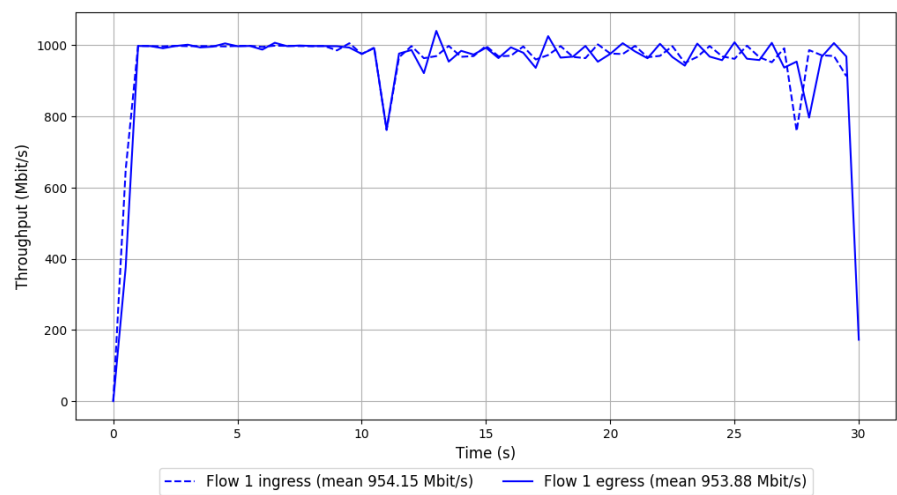
-- Flow 1:

Average throughput: 953.88 Mbit/s

95th percentile per-packet one-way delay: 149.611 ms

Loss rate: 0.03%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-02 12:24:56

End at: 2018-01-02 12:25:26

Below is generated by plot.py at 2018-01-02 15:17:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 973.21 Mbit/s

95th percentile per-packet one-way delay: 142.572 ms

Loss rate: 0.15%

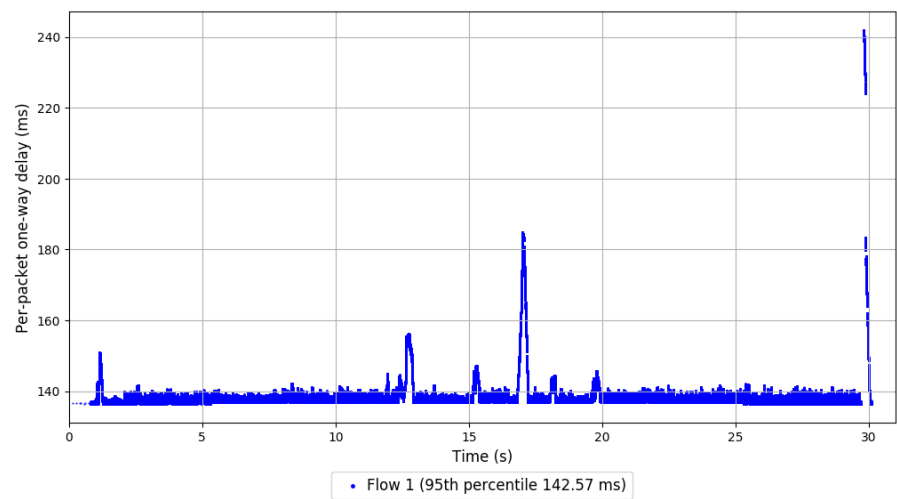
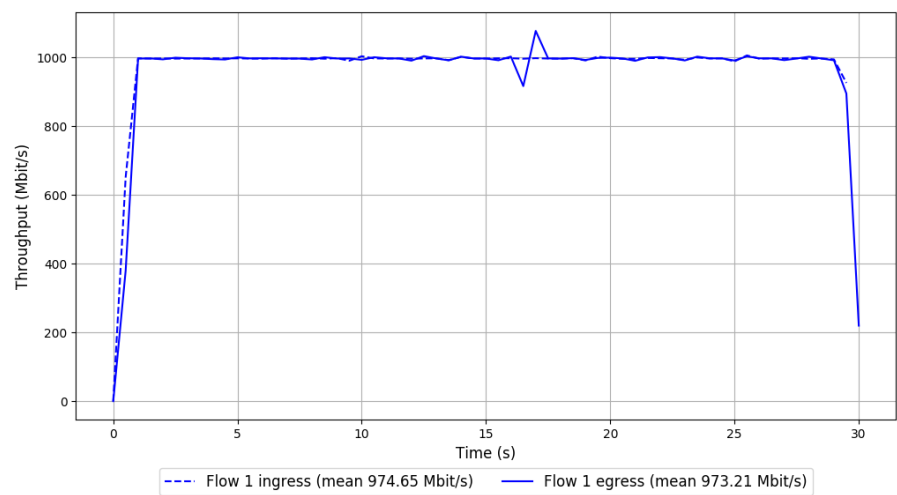
-- Flow 1:

Average throughput: 973.21 Mbit/s

95th percentile per-packet one-way delay: 142.572 ms

Loss rate: 0.15%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-02 12:37:32

End at: 2018-01-02 12:38:02

Below is generated by plot.py at 2018-01-02 15:17:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 972.58 Mbit/s

95th percentile per-packet one-way delay: 154.541 ms

Loss rate: 0.00%

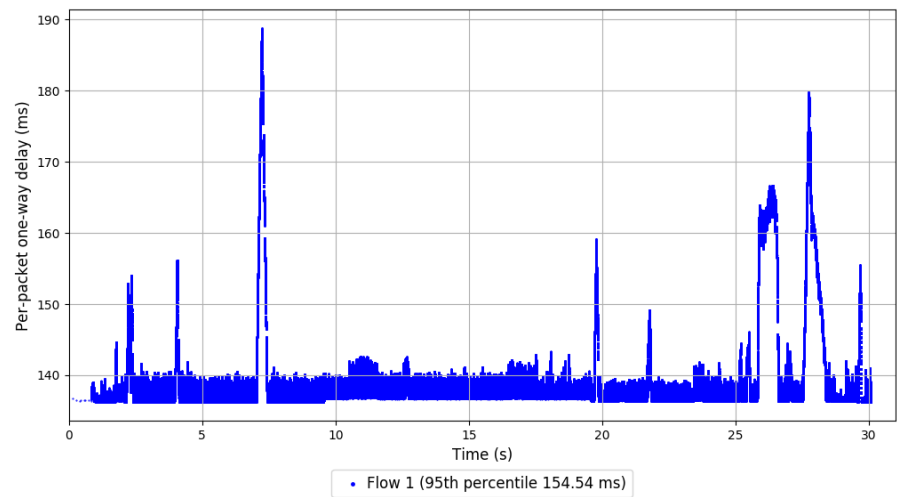
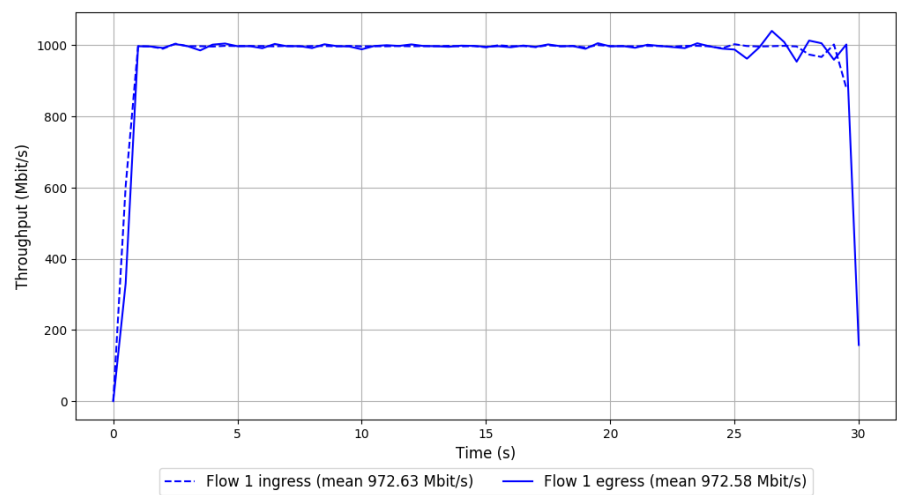
-- Flow 1:

Average throughput: 972.58 Mbit/s

95th percentile per-packet one-way delay: 154.541 ms

Loss rate: 0.00%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-02 12:50:15

End at: 2018-01-02 12:50:46

Below is generated by plot.py at 2018-01-02 15:17:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 949.53 Mbit/s

95th percentile per-packet one-way delay: 140.166 ms

Loss rate: 0.00%

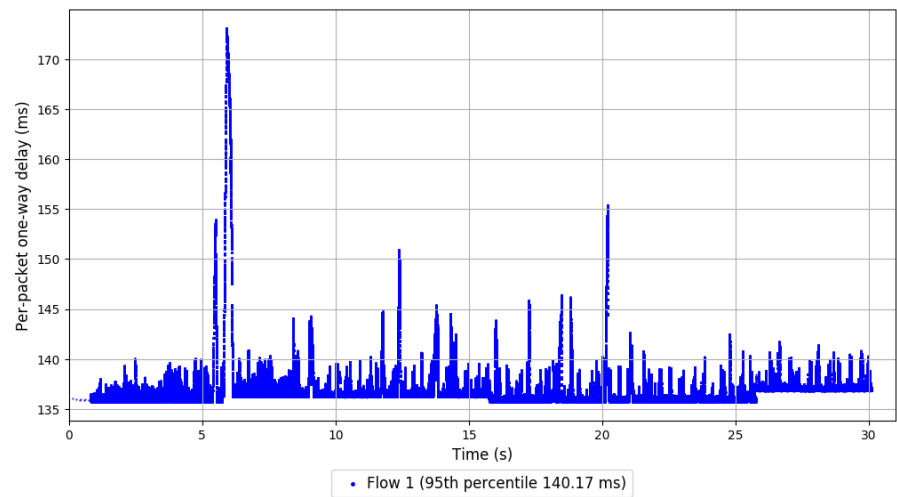
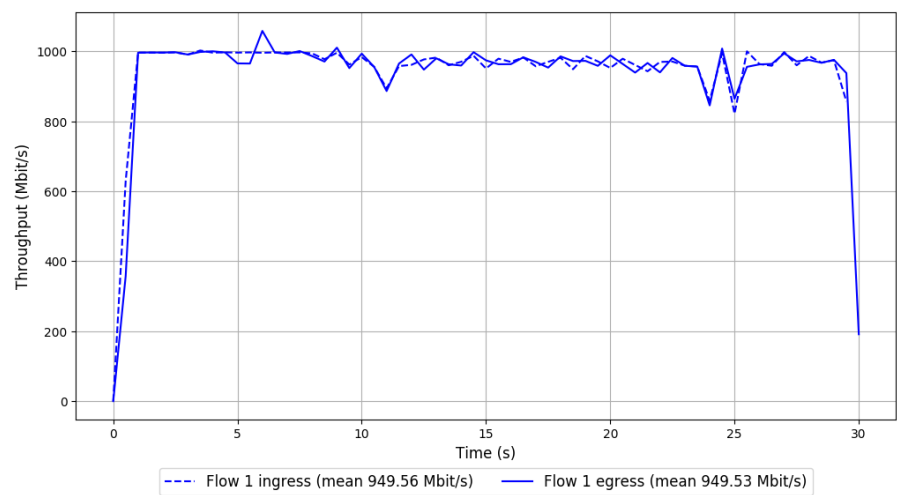
-- Flow 1:

Average throughput: 949.53 Mbit/s

95th percentile per-packet one-way delay: 140.166 ms

Loss rate: 0.00%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-02 13:03:25

End at: 2018-01-02 13:03:55

Below is generated by plot.py at 2018-01-02 15:17:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 937.67 Mbit/s

95th percentile per-packet one-way delay: 182.052 ms

Loss rate: 0.12%

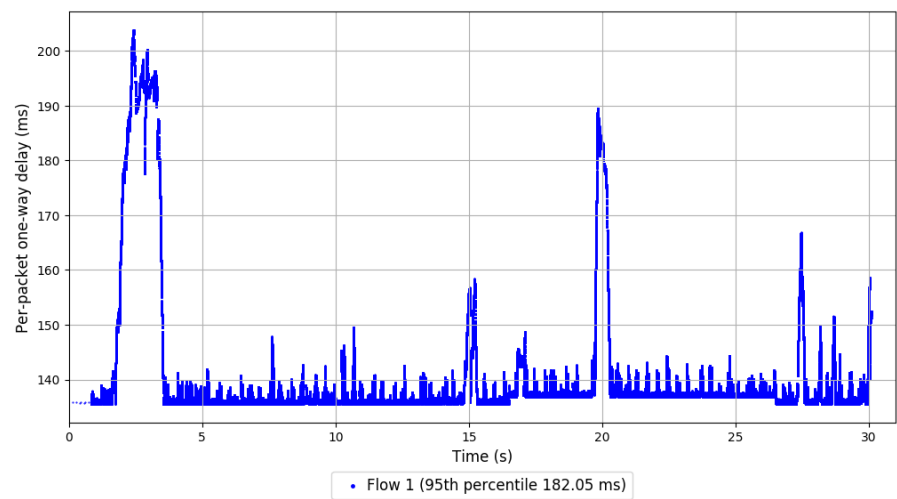
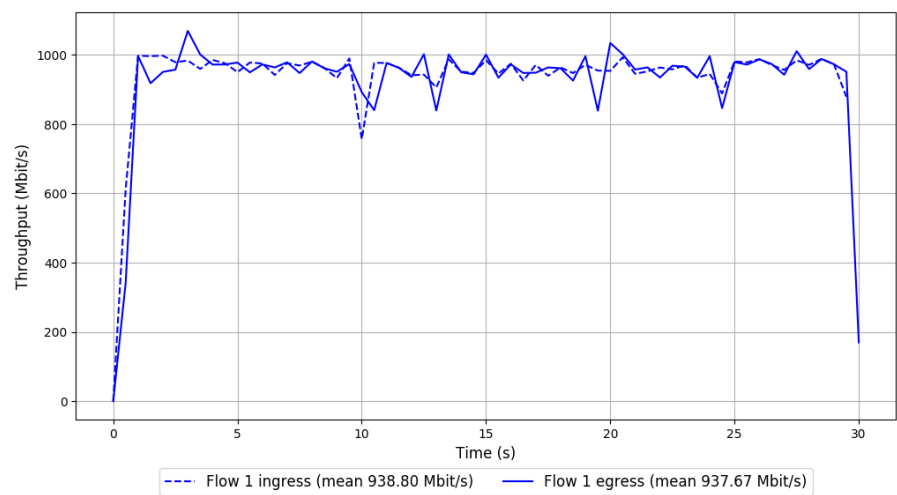
-- Flow 1:

Average throughput: 937.67 Mbit/s

95th percentile per-packet one-way delay: 182.052 ms

Loss rate: 0.12%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-02 13:16:25

End at: 2018-01-02 13:16:55

Below is generated by plot.py at 2018-01-02 15:17:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 946.37 Mbit/s

95th percentile per-packet one-way delay: 149.270 ms

Loss rate: 0.02%

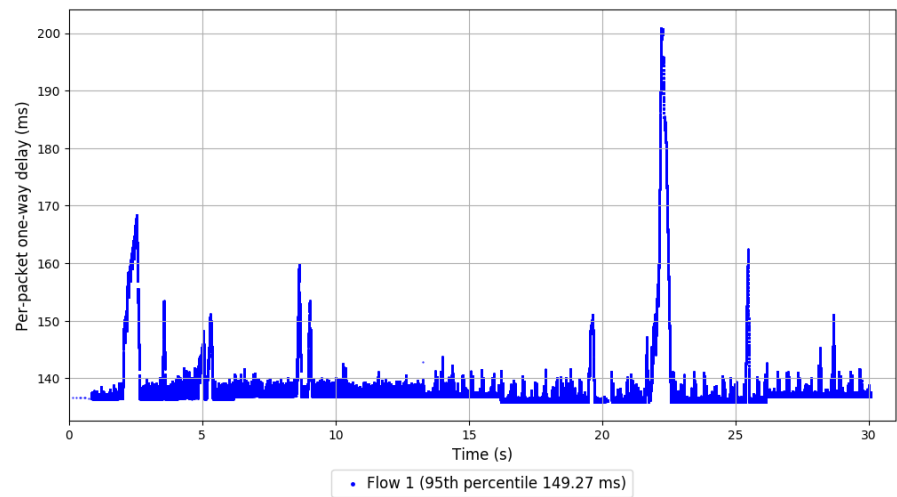
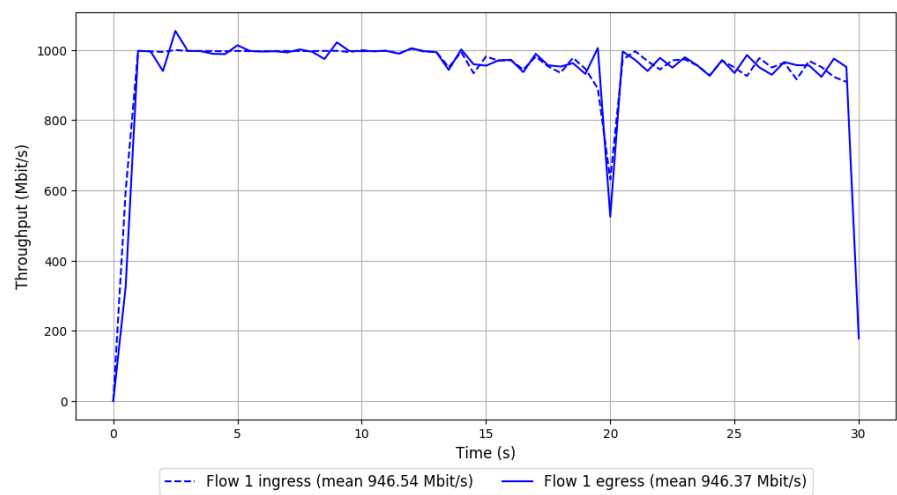
-- Flow 1:

Average throughput: 946.37 Mbit/s

95th percentile per-packet one-way delay: 149.270 ms

Loss rate: 0.02%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-02 13:29:09

End at: 2018-01-02 13:29:39

Below is generated by plot.py at 2018-01-02 15:22:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 922.59 Mbit/s

95th percentile per-packet one-way delay: 197.680 ms

Loss rate: 0.36%

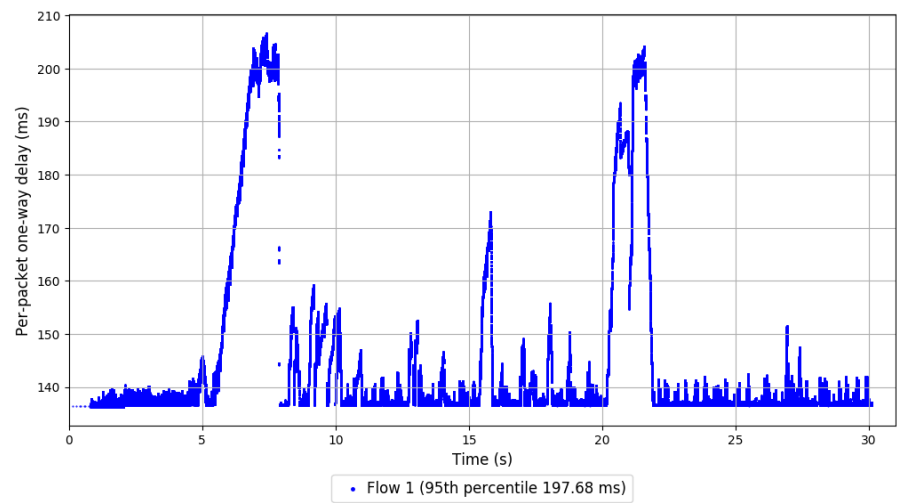
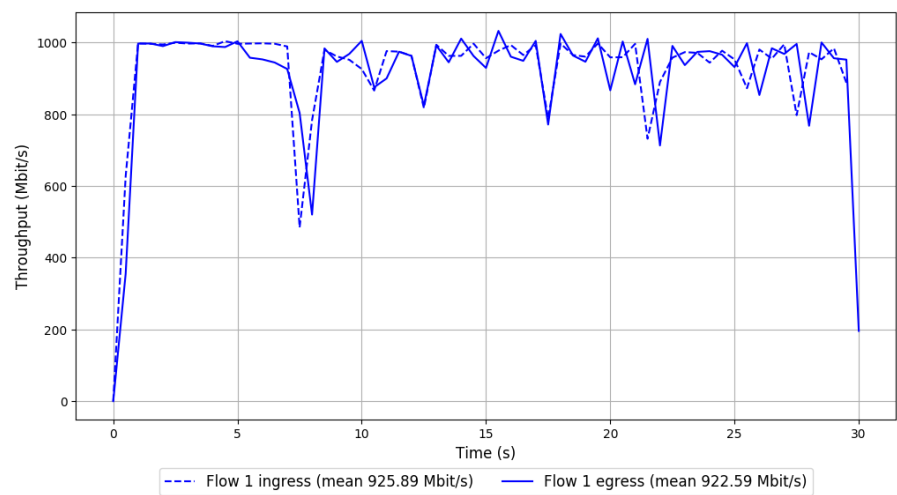
-- Flow 1:

Average throughput: 922.59 Mbit/s

95th percentile per-packet one-way delay: 197.680 ms

Loss rate: 0.36%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-02 13:42:03

End at: 2018-01-02 13:42:33

Below is generated by plot.py at 2018-01-02 15:22:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 959.59 Mbit/s

95th percentile per-packet one-way delay: 152.064 ms

Loss rate: 0.27%

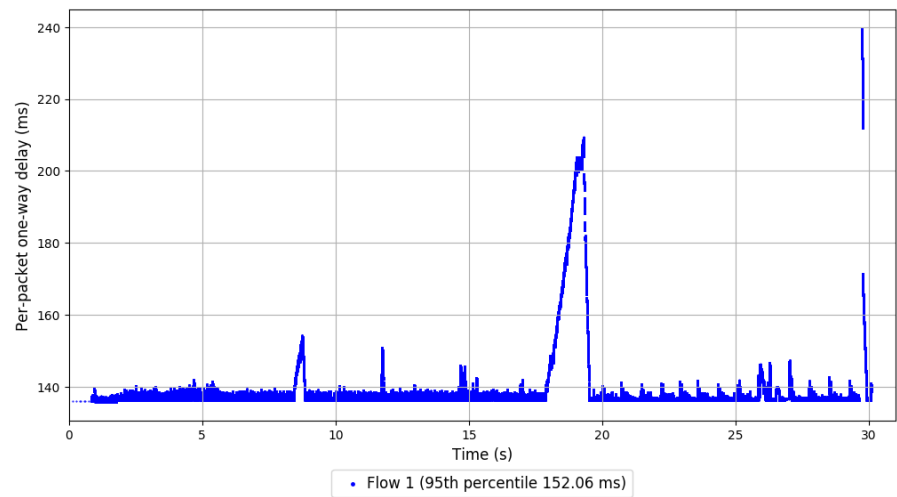
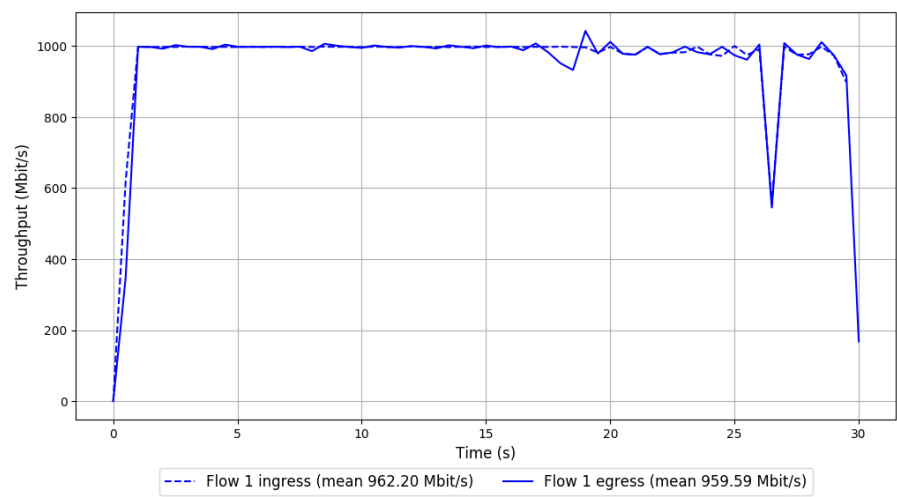
-- Flow 1:

Average throughput: 959.59 Mbit/s

95th percentile per-packet one-way delay: 152.064 ms

Loss rate: 0.27%

Run 10: Report of FillP — Data Link

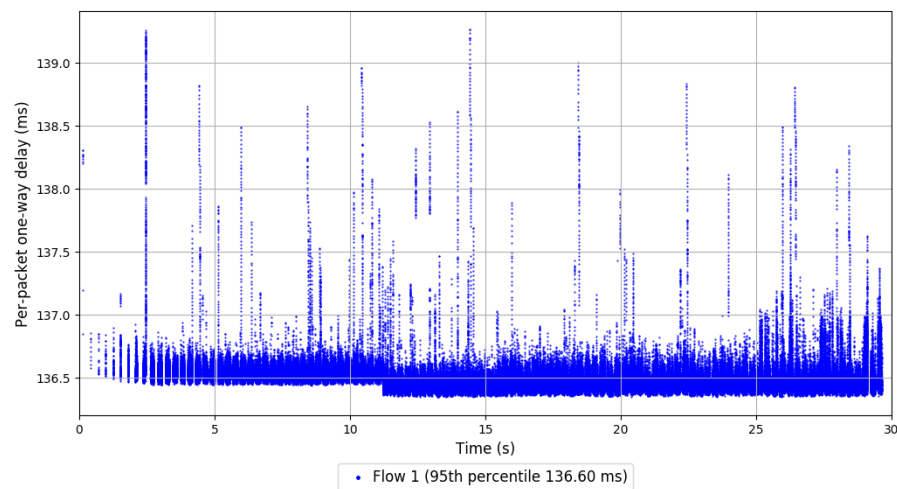
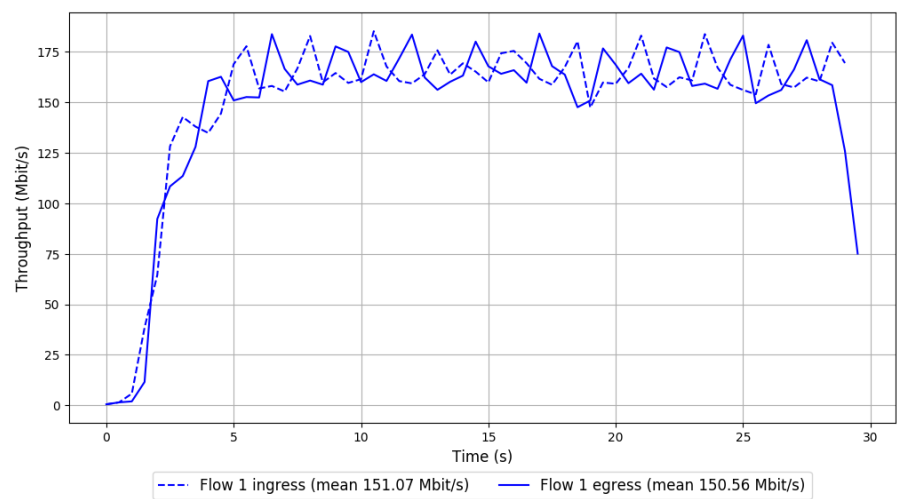


```
Run 1: Statistics of Indigo

Start at: 2018-01-02 11:48:43
End at: 2018-01-02 11:49:13

# Below is generated by plot.py at 2018-01-02 15:22:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 150.56 Mbit/s
95th percentile per-packet one-way delay: 136.605 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 150.56 Mbit/s
95th percentile per-packet one-way delay: 136.605 ms
Loss rate: 0.34%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-02 12:01:39

End at: 2018-01-02 12:02:09

Below is generated by plot.py at 2018-01-02 15:22:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.62 Mbit/s

95th percentile per-packet one-way delay: 136.576 ms

Loss rate: 0.00%

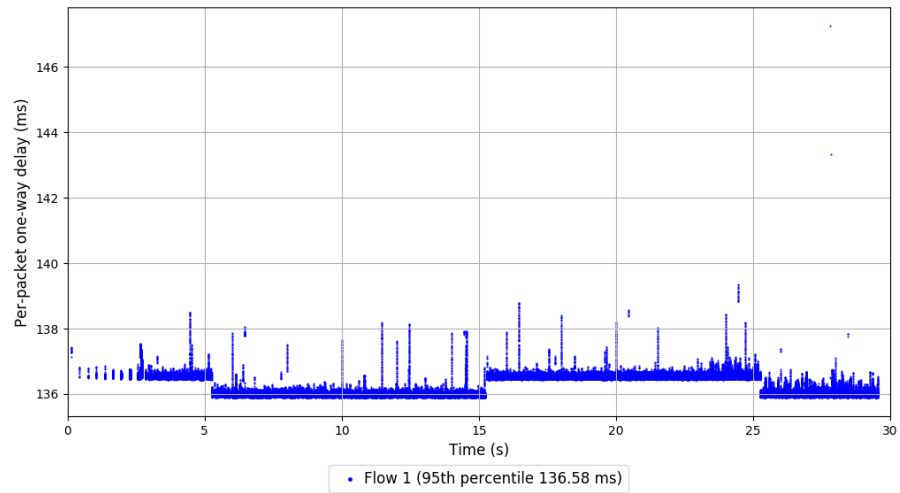
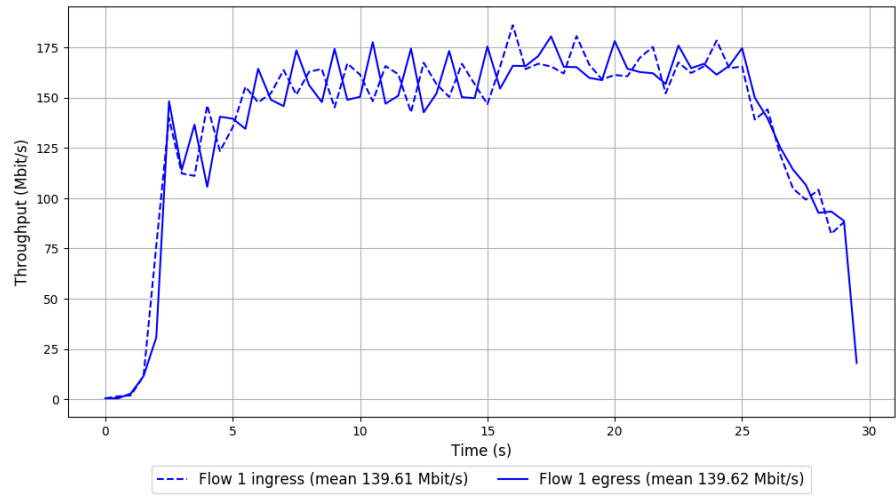
-- Flow 1:

Average throughput: 139.62 Mbit/s

95th percentile per-packet one-way delay: 136.576 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-02 12:14:21

End at: 2018-01-02 12:14:51

Below is generated by plot.py at 2018-01-02 15:22:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.04 Mbit/s

95th percentile per-packet one-way delay: 136.578 ms

Loss rate: 0.25%

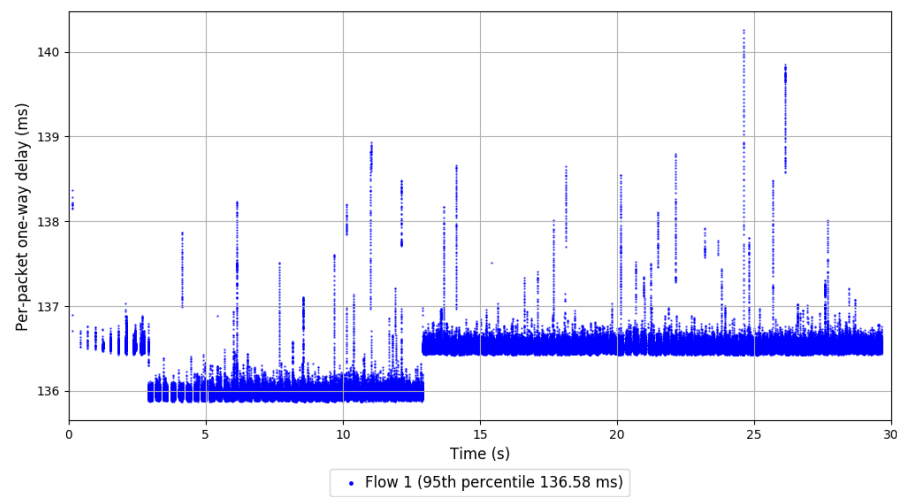
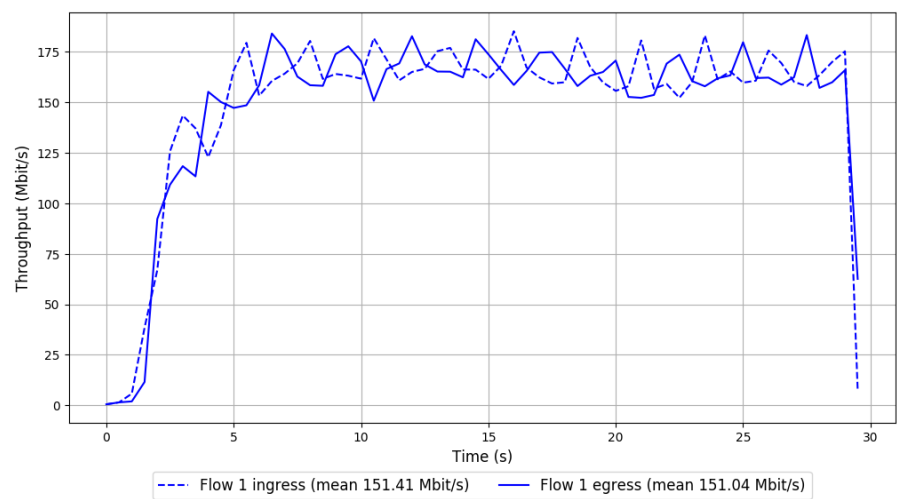
-- Flow 1:

Average throughput: 151.04 Mbit/s

95th percentile per-packet one-way delay: 136.578 ms

Loss rate: 0.25%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-02 12:27:04

End at: 2018-01-02 12:27:34

Below is generated by plot.py at 2018-01-02 15:22:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.37 Mbit/s

95th percentile per-packet one-way delay: 136.356 ms

Loss rate: 0.23%

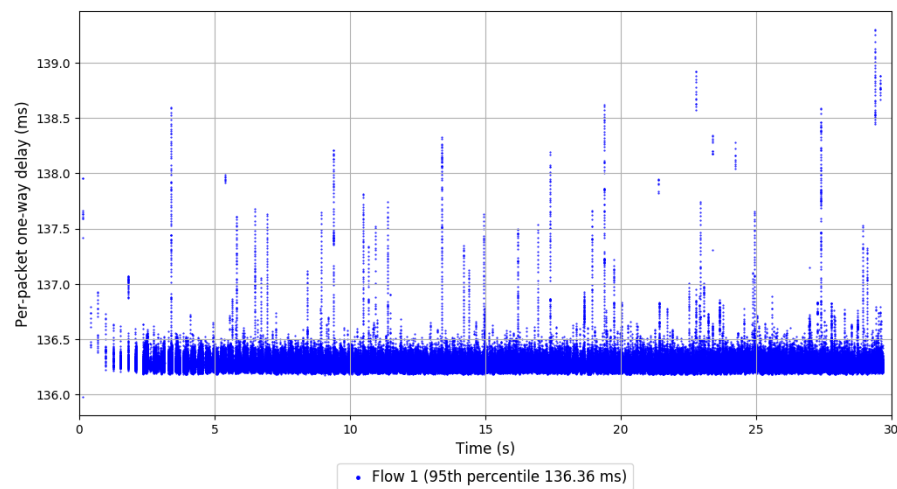
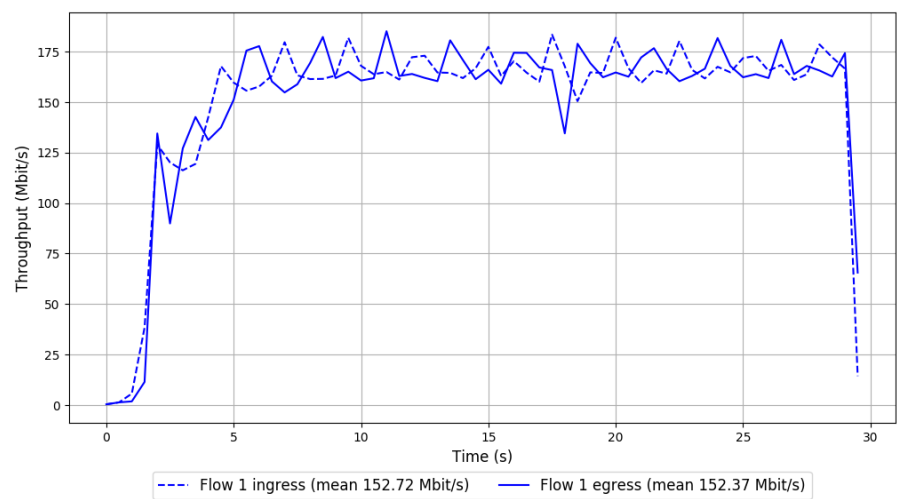
-- Flow 1:

Average throughput: 152.37 Mbit/s

95th percentile per-packet one-way delay: 136.356 ms

Loss rate: 0.23%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-02 12:39:40

End at: 2018-01-02 12:40:10

Below is generated by plot.py at 2018-01-02 15:22:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.77 Mbit/s

95th percentile per-packet one-way delay: 136.931 ms

Loss rate: 0.14%

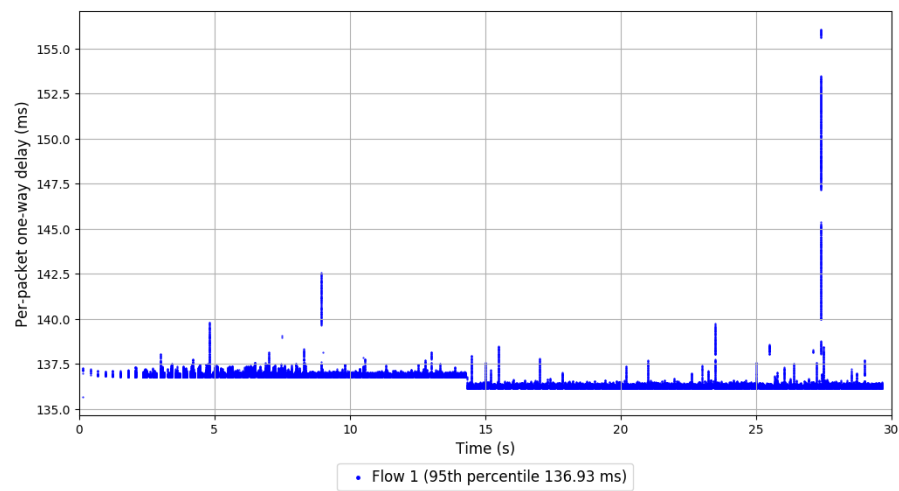
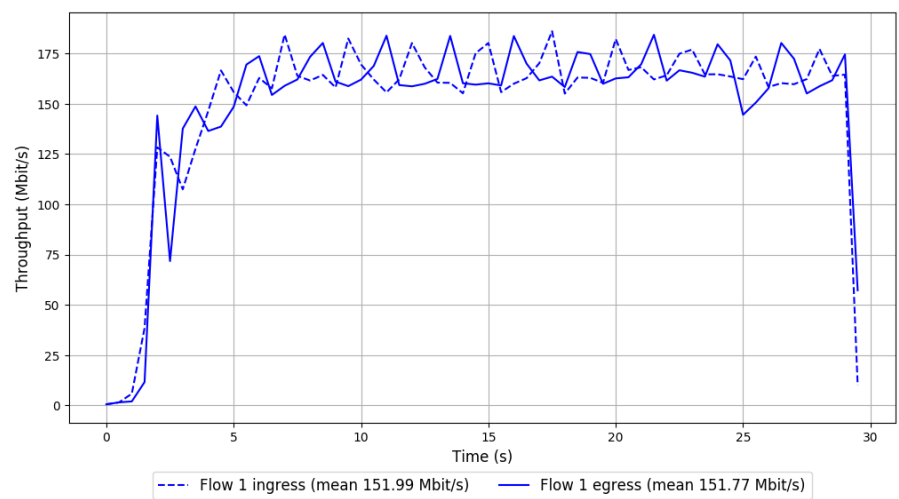
-- Flow 1:

Average throughput: 151.77 Mbit/s

95th percentile per-packet one-way delay: 136.931 ms

Loss rate: 0.14%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-02 12:52:24

End at: 2018-01-02 12:52:54

Below is generated by plot.py at 2018-01-02 15:22:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.35 Mbit/s

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

Loss rate: 0.00%

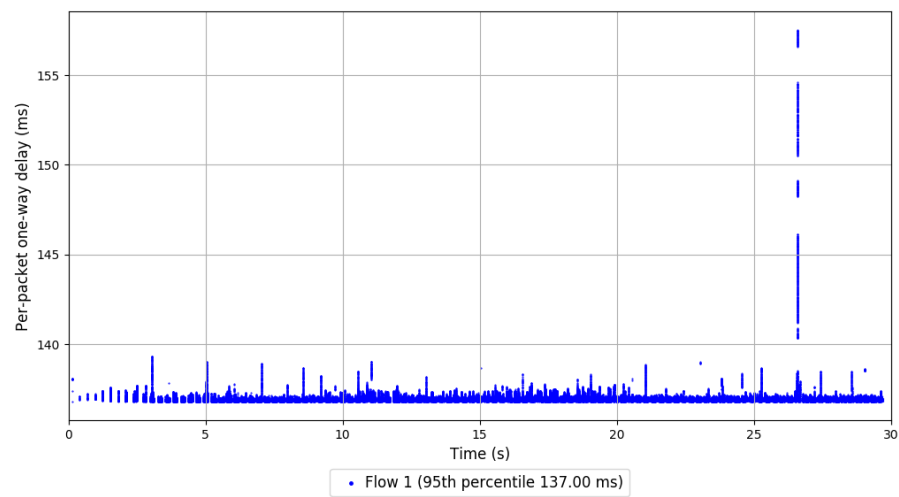
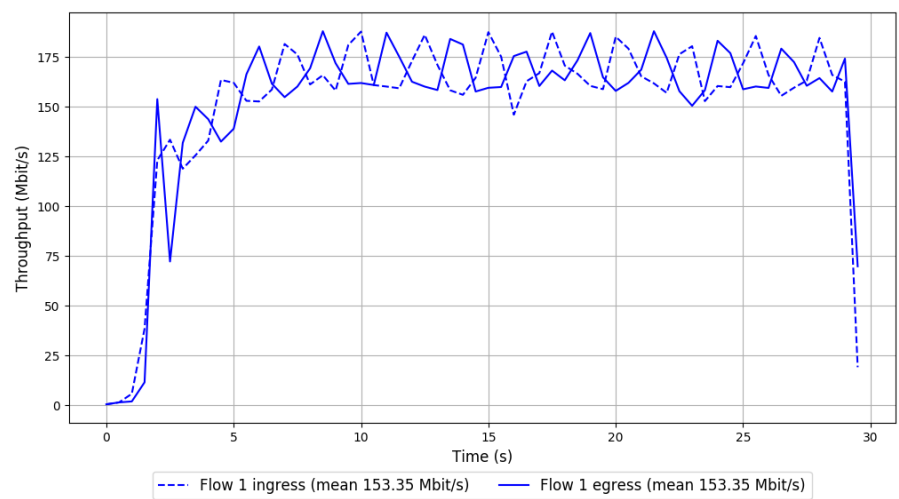
-- Flow 1:

Average throughput: 153.35 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-02 13:05:32

End at: 2018-01-02 13:06:02

Below is generated by plot.py at 2018-01-02 15:22:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.22 Mbit/s

95th percentile per-packet one-way delay: 136.321 ms

Loss rate: 0.00%

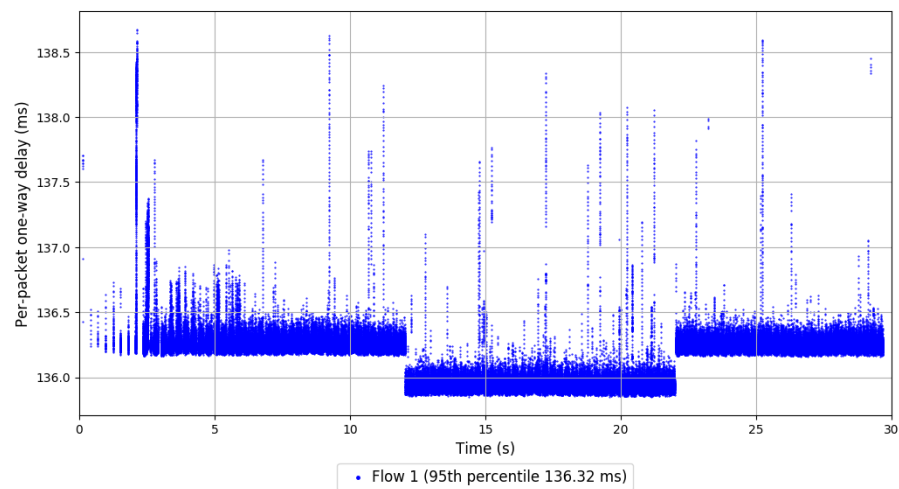
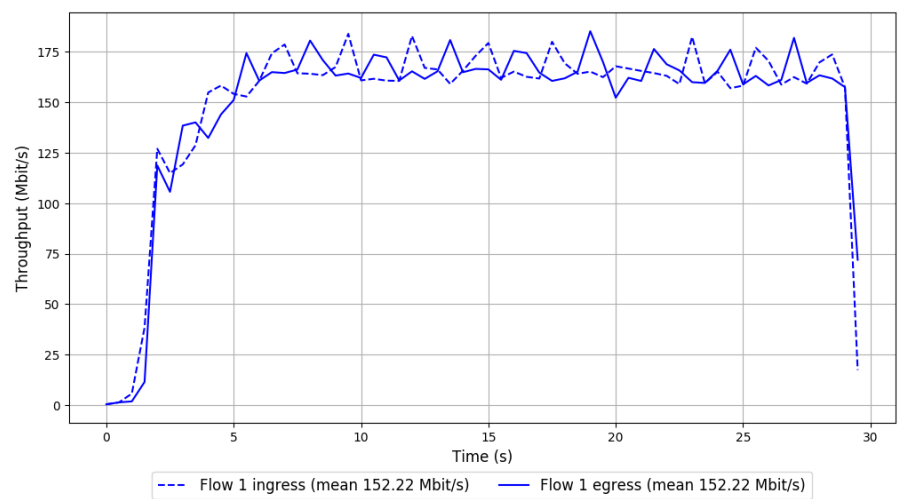
-- Flow 1:

Average throughput: 152.22 Mbit/s

95th percentile per-packet one-way delay: 136.321 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-02 13:18:34

End at: 2018-01-02 13:19:04

Below is generated by plot.py at 2018-01-02 15:22:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 152.34 Mbit/s

95th percentile per-packet one-way delay: 136.430 ms

Loss rate: 0.06%

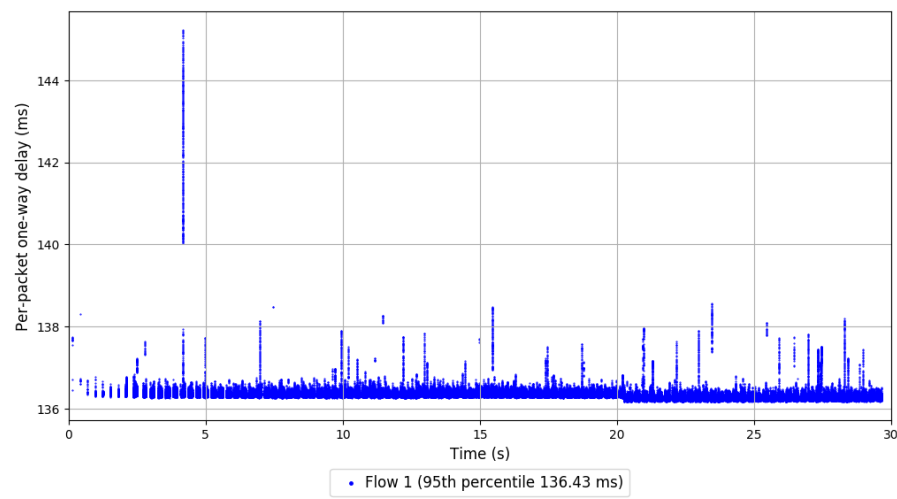
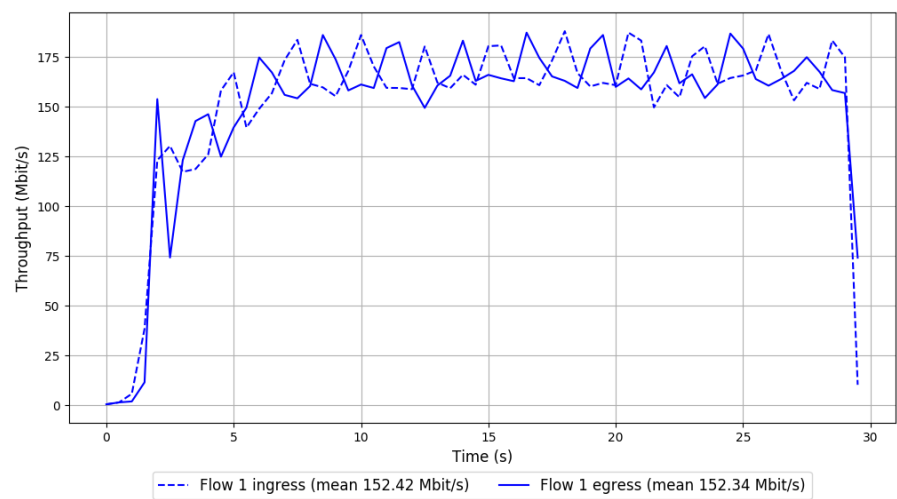
-- Flow 1:

Average throughput: 152.34 Mbit/s

95th percentile per-packet one-way delay: 136.430 ms

Loss rate: 0.06%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-02 13:31:17

End at: 2018-01-02 13:31:47

Below is generated by plot.py at 2018-01-02 15:22:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 146.64 Mbit/s

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

Loss rate: 0.00%

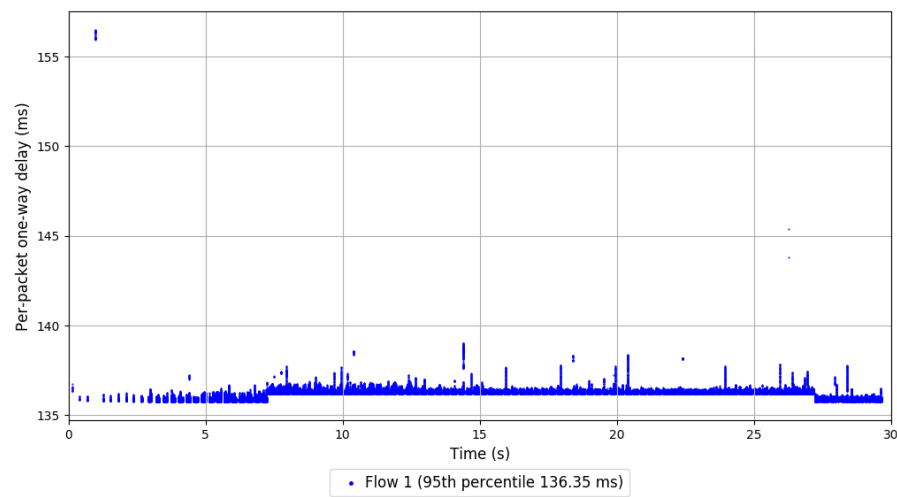
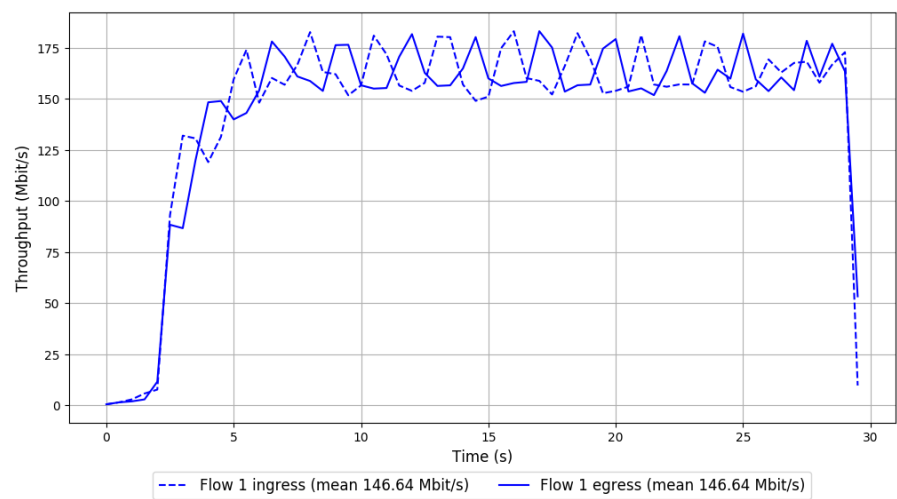
-- Flow 1:

Average throughput: 146.64 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-02 13:44:10

End at: 2018-01-02 13:44:40

Below is generated by plot.py at 2018-01-02 15:22:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.33 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 151.33 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

