

Pantheon Report

Generated at 2018-01-02 14:33:09 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

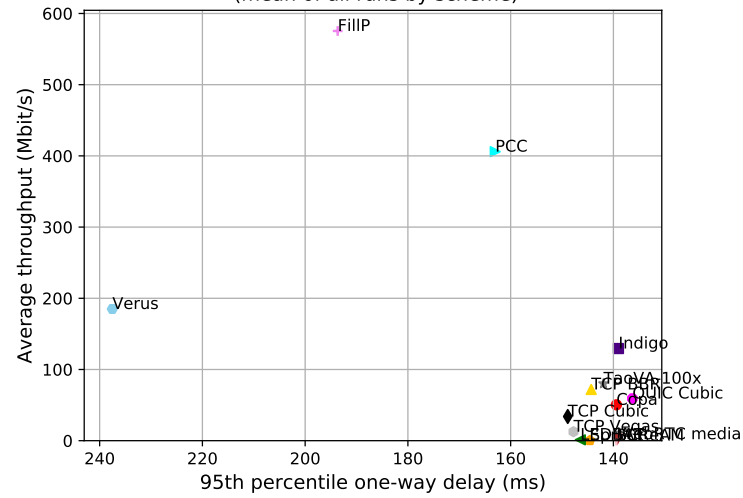
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

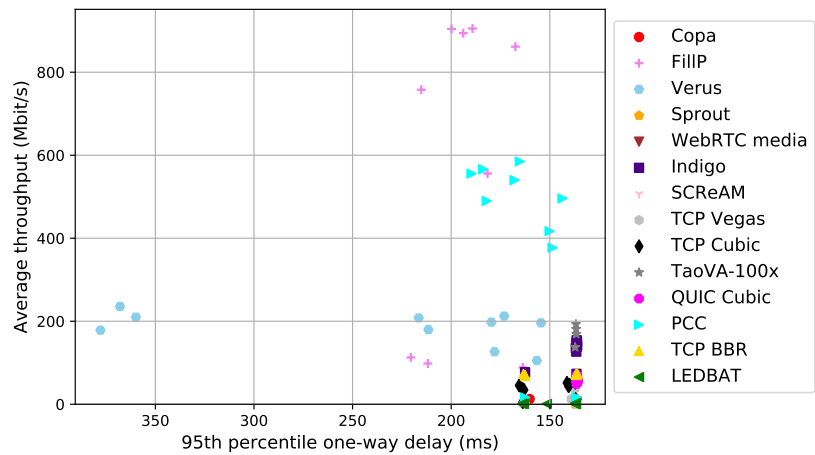
Git summary:

```
branch: 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 London Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	71.95	144.32	1.11
TCP Cubic	10	33.98	148.89	1.51
LEDBAT	10	1.21	146.45	1.56
PCC	10	405.97	163.00	2.39
QUIC Cubic	6	59.26	136.31	1.30
SCReAM	10	0.22	139.41	0.89
WebRTC media	10	2.09	139.25	1.02
Sprout	10	0.34	144.59	0.91
TaoVA-100x	10	80.07	141.93	1.45
TCP Vegas	10	12.62	147.76	2.07
Verus	10	184.98	237.53	8.90
Copa	8	50.37	139.42	0.91
FillP	9	575.44	193.67	0.96
Indigo	10	129.43	139.02	1.20

Run 1: Statistics of TCP BBR

Start at: 2018-01-02 09:49:59

End at: 2018-01-02 09:50:29

Below is generated by plot.py at 2018-01-02 13:57:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.54 Mbit/s

95th percentile per-packet one-way delay: 136.016 ms

Loss rate: 1.08%

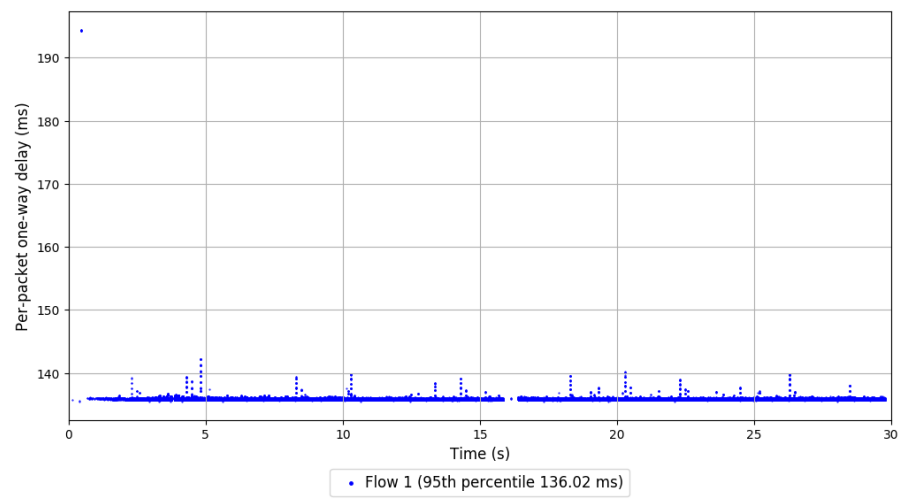
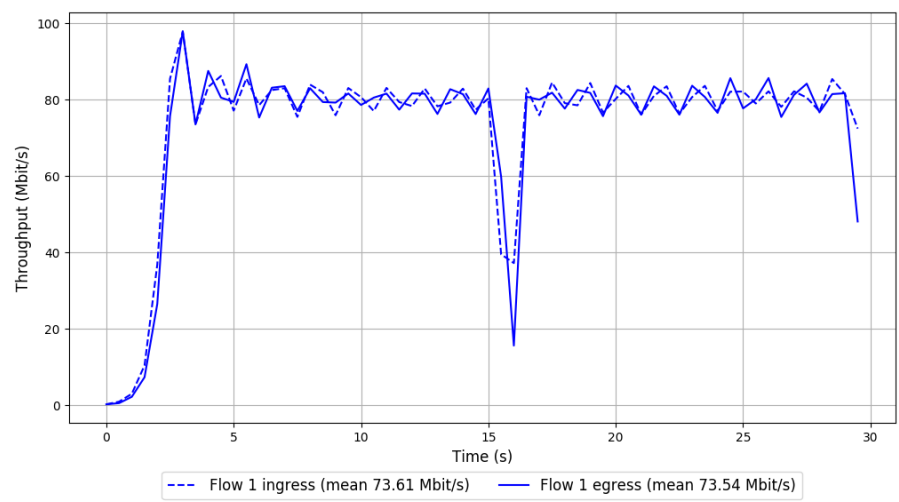
-- Flow 1:

Average throughput: 73.54 Mbit/s

95th percentile per-packet one-way delay: 136.016 ms

Loss rate: 1.08%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-02 10:02:58

End at: 2018-01-02 10:03:28

Below is generated by plot.py at 2018-01-02 13:57:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.02 Mbit/s

95th percentile per-packet one-way delay: 136.274 ms

Loss rate: 0.90%

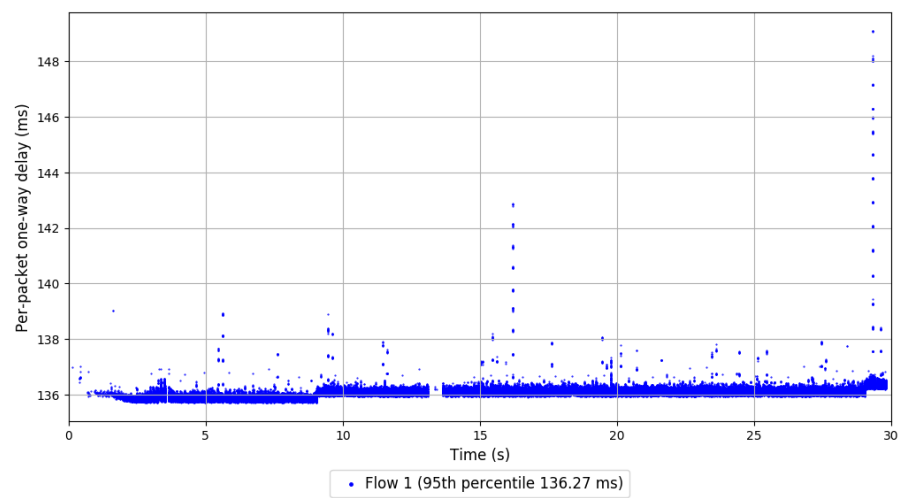
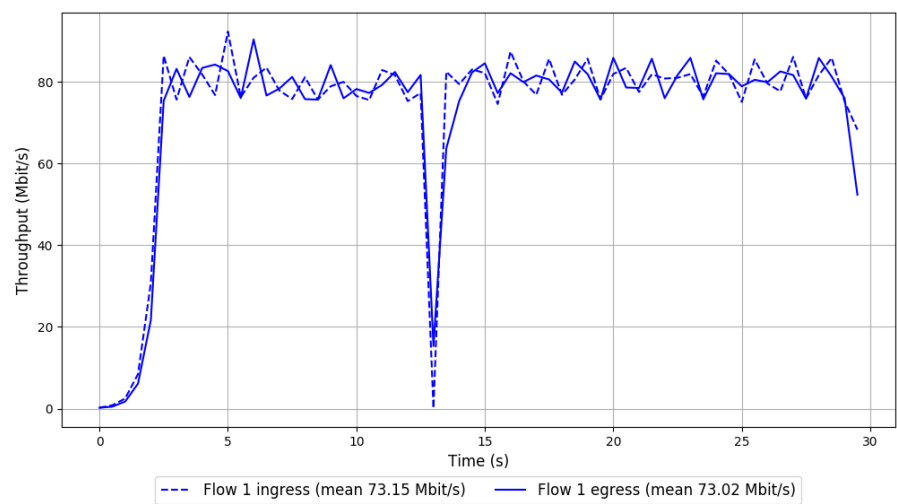
-- Flow 1:

Average throughput: 73.02 Mbit/s

95th percentile per-packet one-way delay: 136.274 ms

Loss rate: 0.90%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-02 10:15:18

End at: 2018-01-02 10:15:48

Below is generated by plot.py at 2018-01-02 13:57:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.50 Mbit/s

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

Loss rate: 0.98%

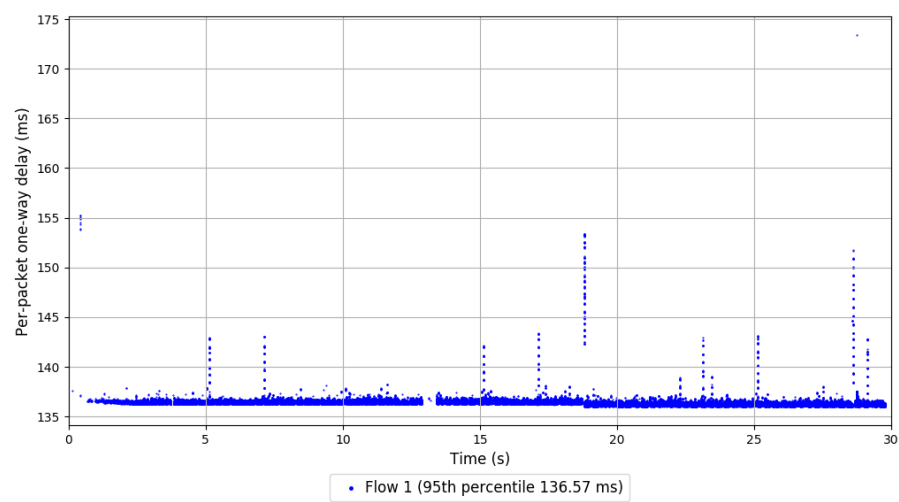
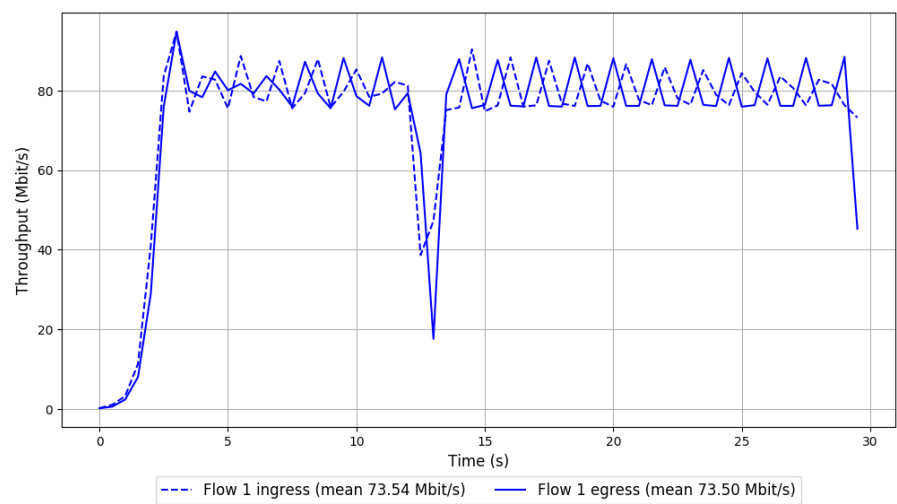
-- Flow 1:

Average throughput: 73.50 Mbit/s

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

Loss rate: 0.98%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-02 10:27:33

End at: 2018-01-02 10:28:03

Below is generated by plot.py at 2018-01-02 13:57:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.29 Mbit/s

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

Loss rate: 1.09%

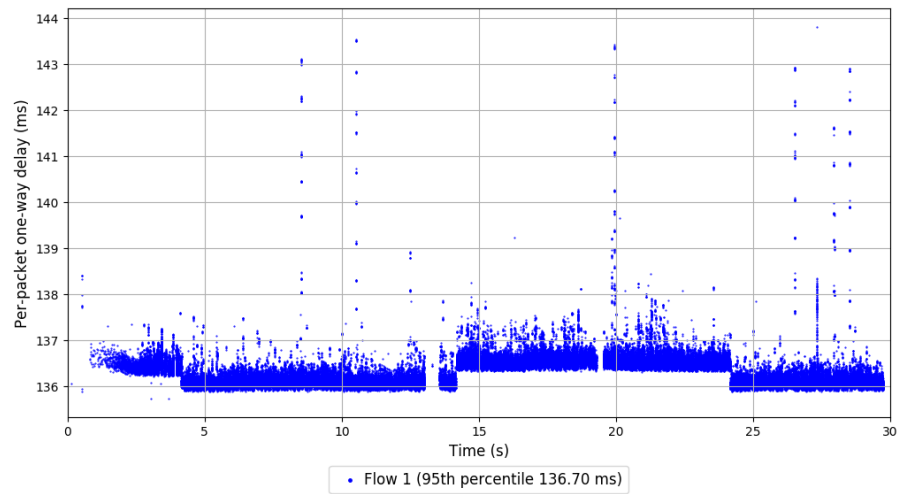
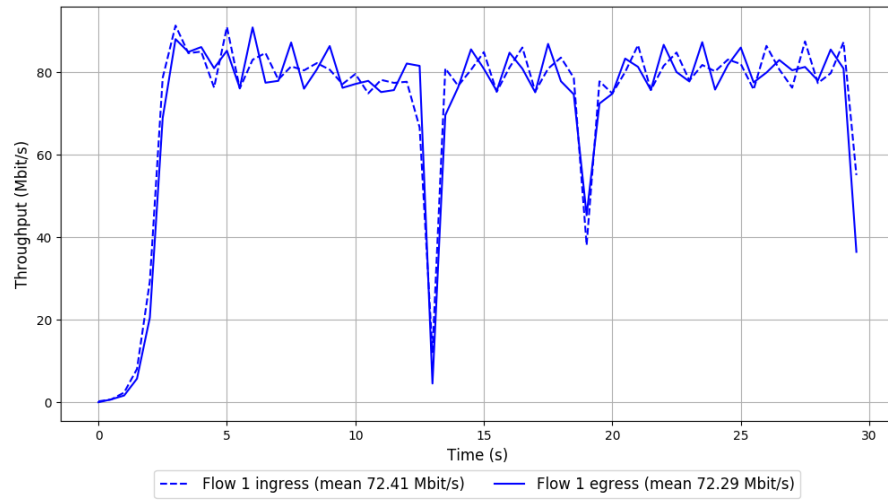
-- Flow 1:

Average throughput: 72.29 Mbit/s

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

Loss rate: 1.09%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-02 10:39:28

End at: 2018-01-02 10:39:58

Below is generated by plot.py at 2018-01-02 13:57:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.84 Mbit/s

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

Loss rate: 1.26%

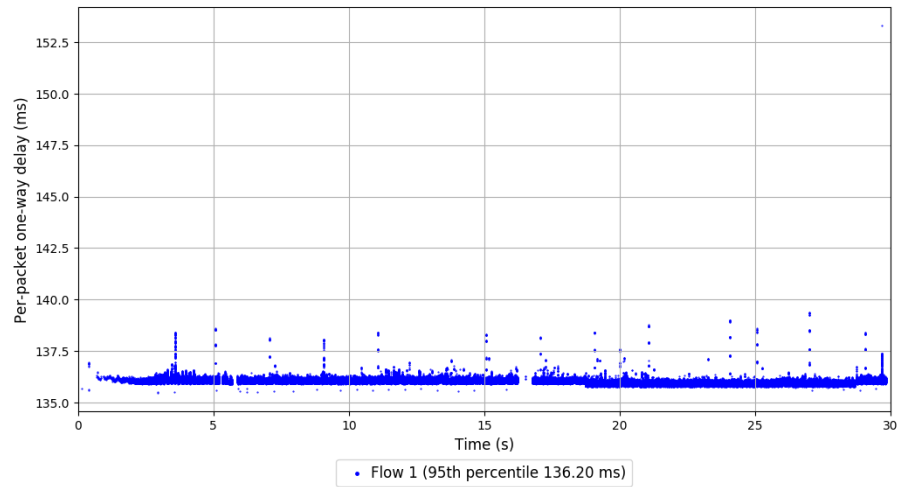
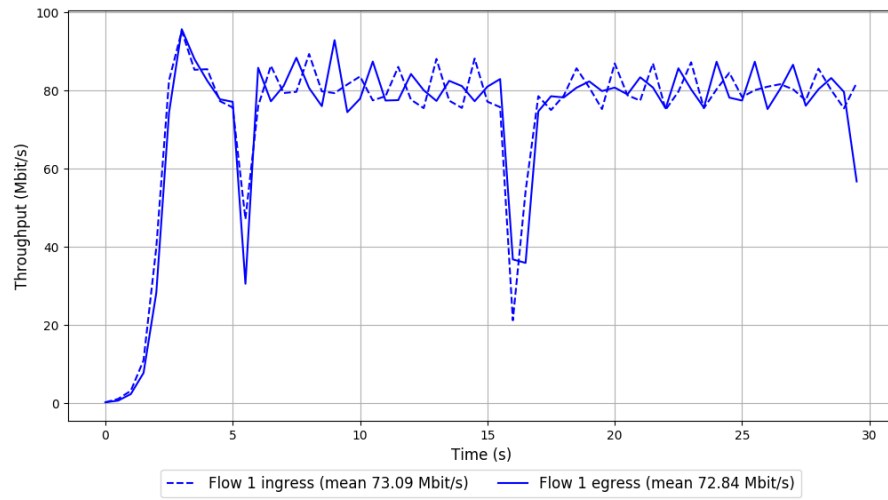
-- Flow 1:

Average throughput: 72.84 Mbit/s

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

Loss rate: 1.26%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-02 10:52:25

End at: 2018-01-02 10:52:55

Below is generated by plot.py at 2018-01-02 13:57:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.66 Mbit/s

95th percentile per-packet one-way delay: 136.562 ms

Loss rate: 1.44%

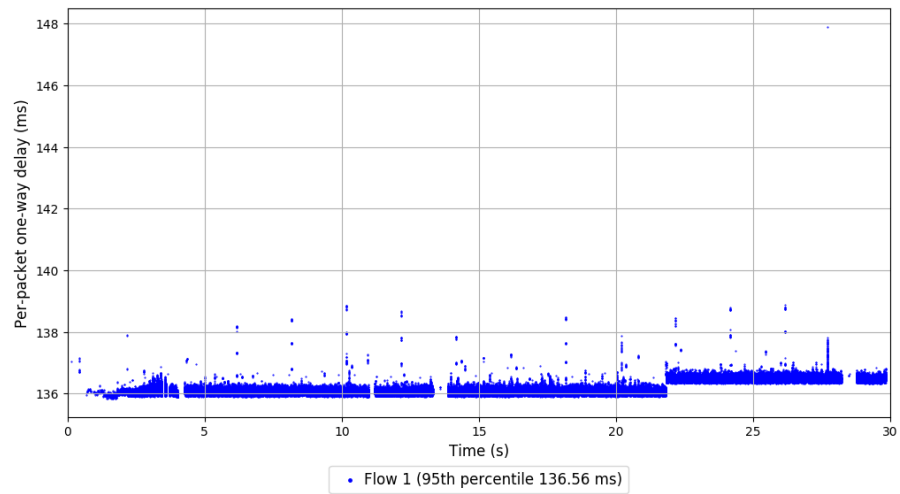
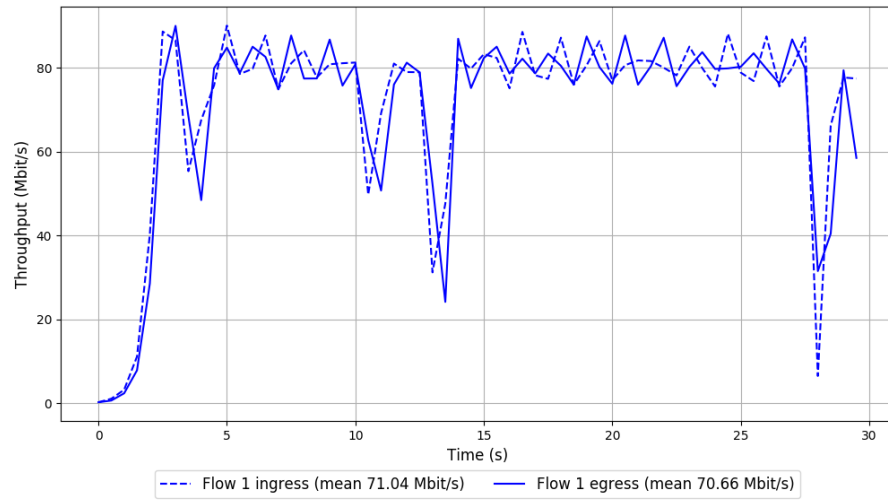
-- Flow 1:

Average throughput: 70.66 Mbit/s

95th percentile per-packet one-way delay: 136.562 ms

Loss rate: 1.44%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-02 11:05:19

End at: 2018-01-02 11:05:49

Below is generated by plot.py at 2018-01-02 13:57:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.60 Mbit/s

95th percentile per-packet one-way delay: 162.541 ms

Loss rate: 1.13%

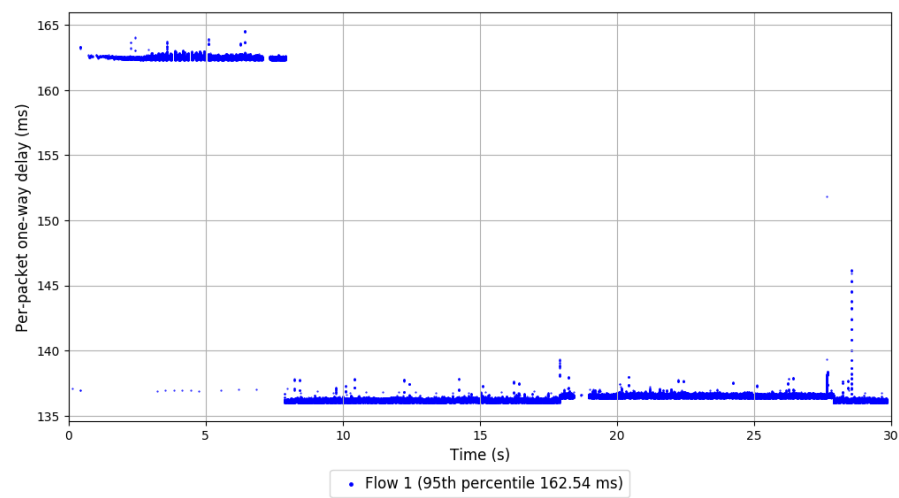
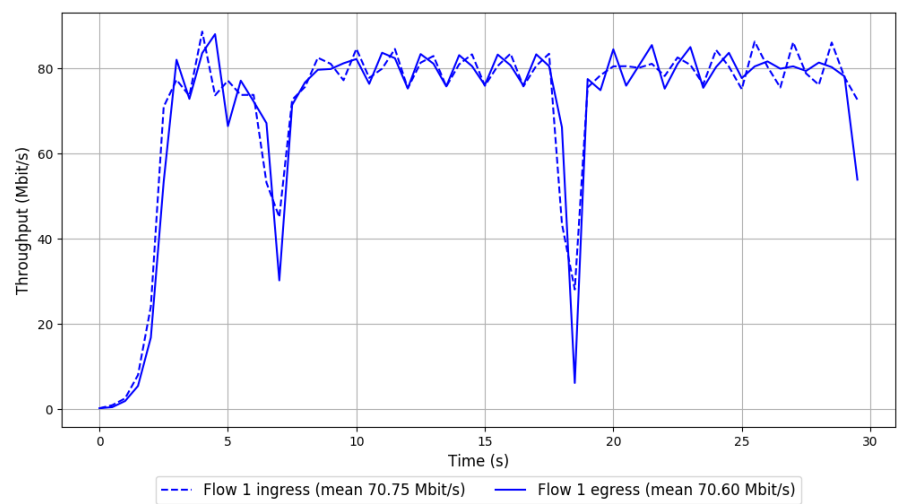
-- Flow 1:

Average throughput: 70.60 Mbit/s

95th percentile per-packet one-way delay: 162.541 ms

Loss rate: 1.13%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-02 11:17:46

End at: 2018-01-02 11:18:16

Below is generated by plot.py at 2018-01-02 13:57:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.61 Mbit/s

95th percentile per-packet one-way delay: 136.344 ms

Loss rate: 0.99%

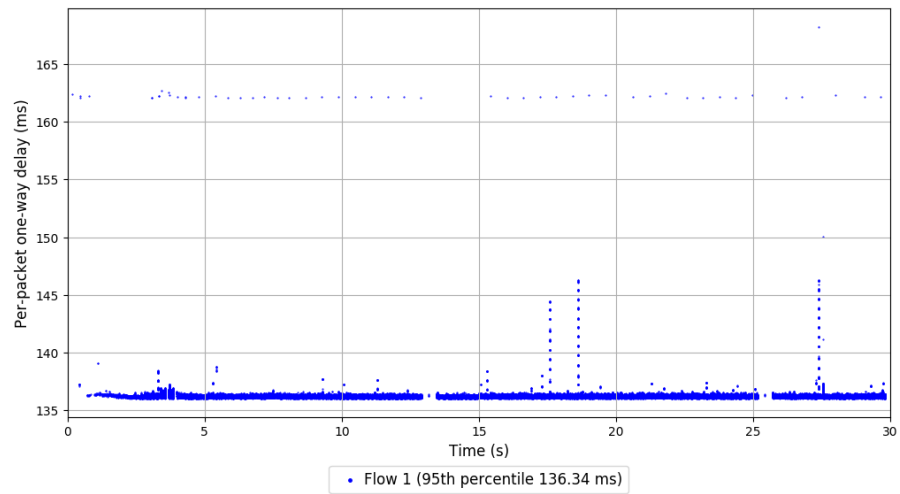
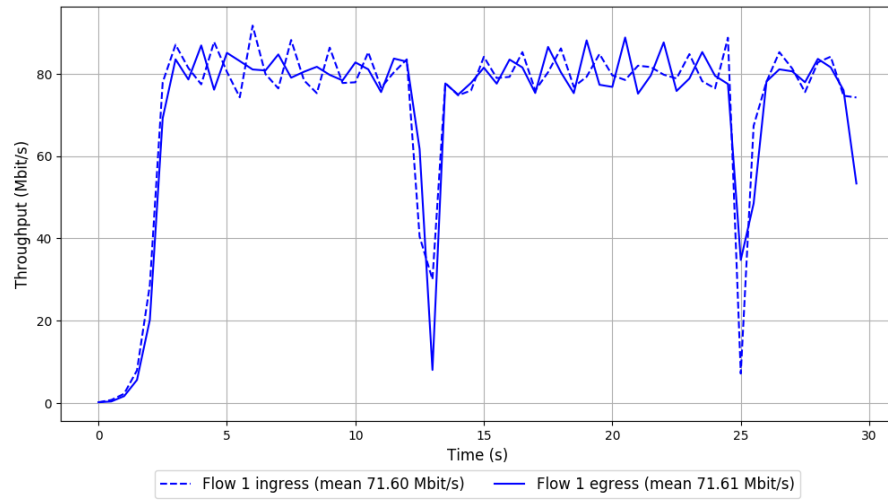
-- Flow 1:

Average throughput: 71.61 Mbit/s

95th percentile per-packet one-way delay: 136.344 ms

Loss rate: 0.99%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

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

End at: 2018-01-02 11:30:32

Below is generated by plot.py at 2018-01-02 13:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.41 Mbit/s

95th percentile per-packet one-way delay: 162.605 ms

Loss rate: 1.29%

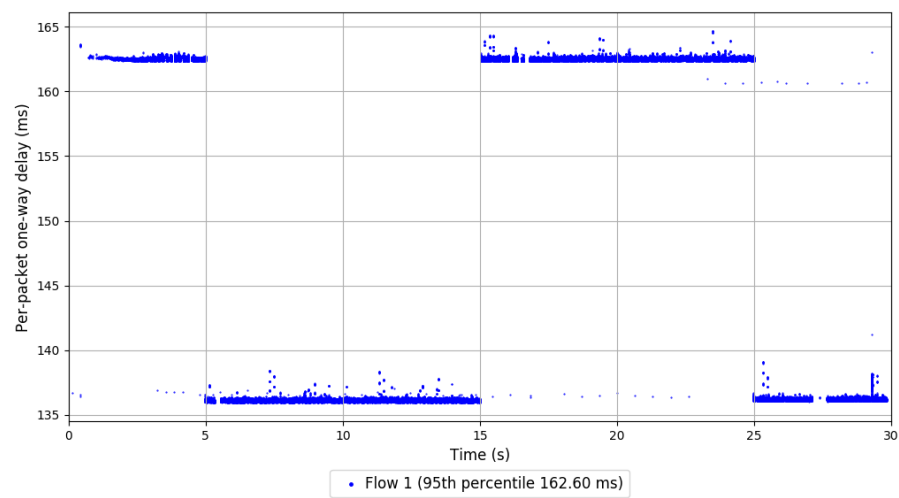
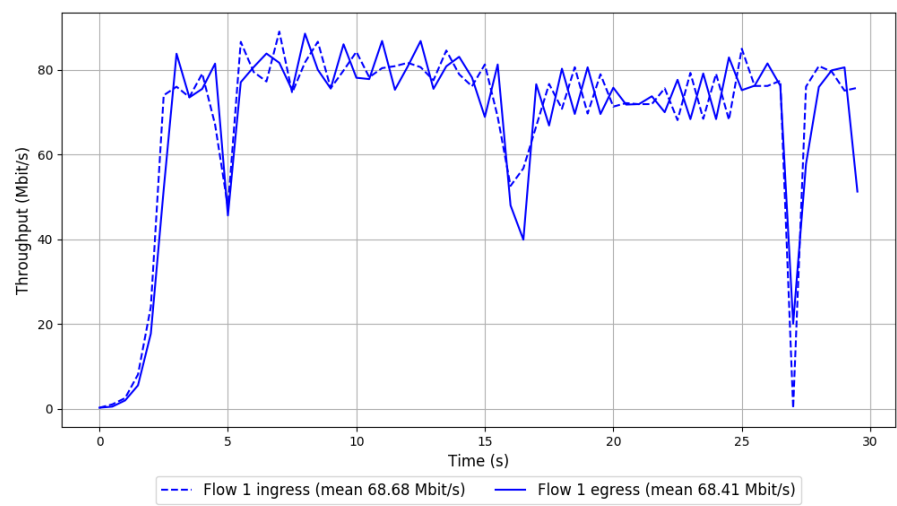
-- Flow 1:

Average throughput: 68.41 Mbit/s

95th percentile per-packet one-way delay: 162.605 ms

Loss rate: 1.29%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-02 11:42:01

End at: 2018-01-02 11:42:31

Below is generated by plot.py at 2018-01-02 13:59:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.05 Mbit/s

95th percentile per-packet one-way delay: 163.351 ms

Loss rate: 0.97%

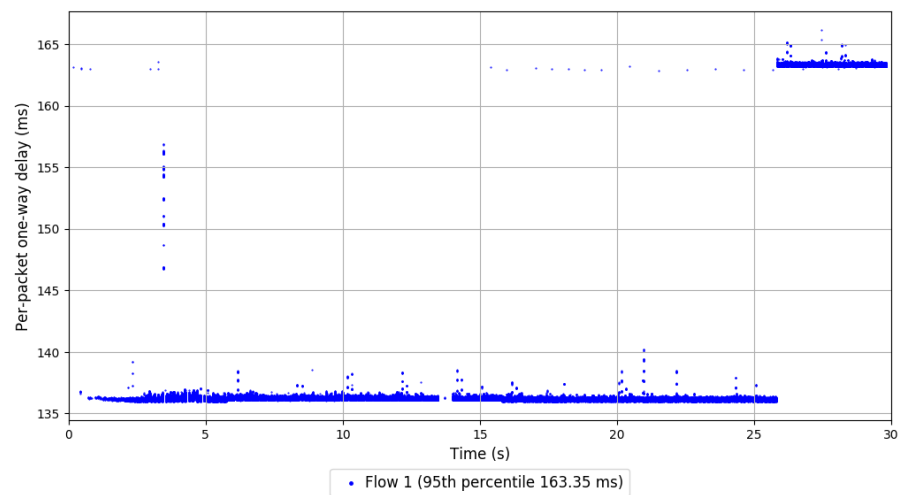
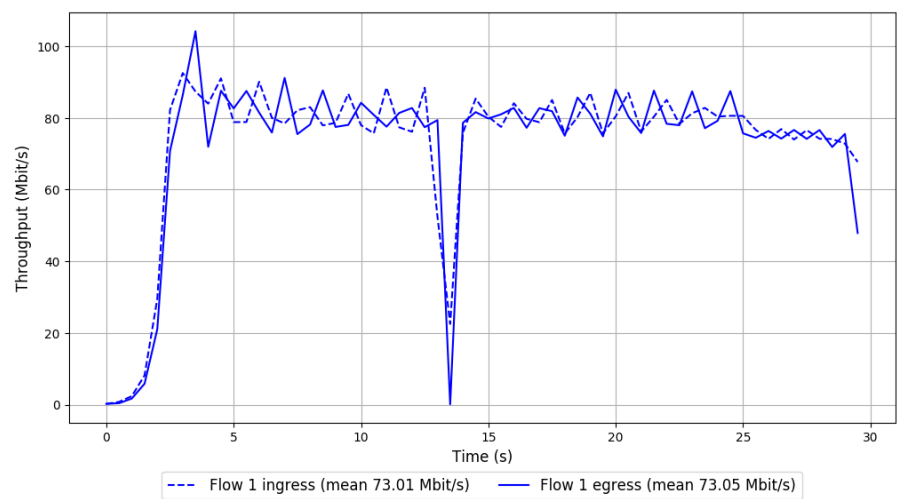
-- Flow 1:

Average throughput: 73.05 Mbit/s

95th percentile per-packet one-way delay: 163.351 ms

Loss rate: 0.97%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-02 09:50:46

End at: 2018-01-02 09:51:16

Below is generated by plot.py at 2018-01-02 13:59:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.37 Mbit/s

95th percentile per-packet one-way delay: 140.477 ms

Loss rate: 1.02%

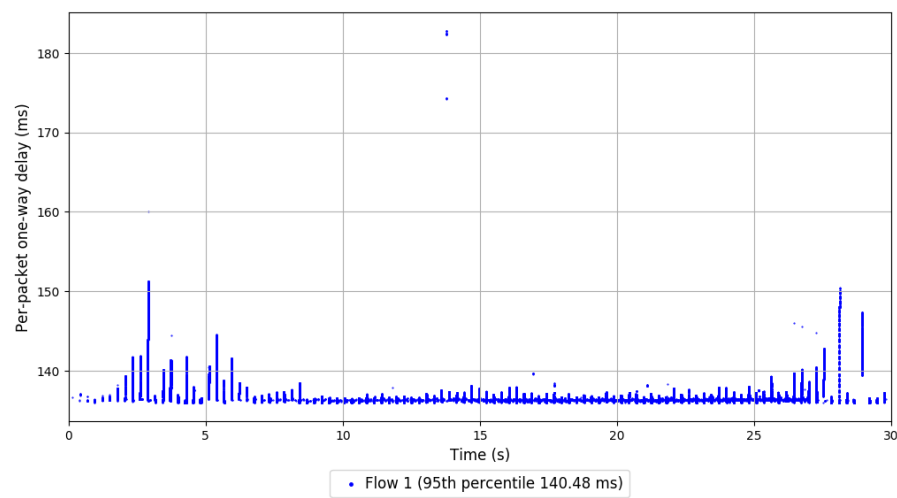
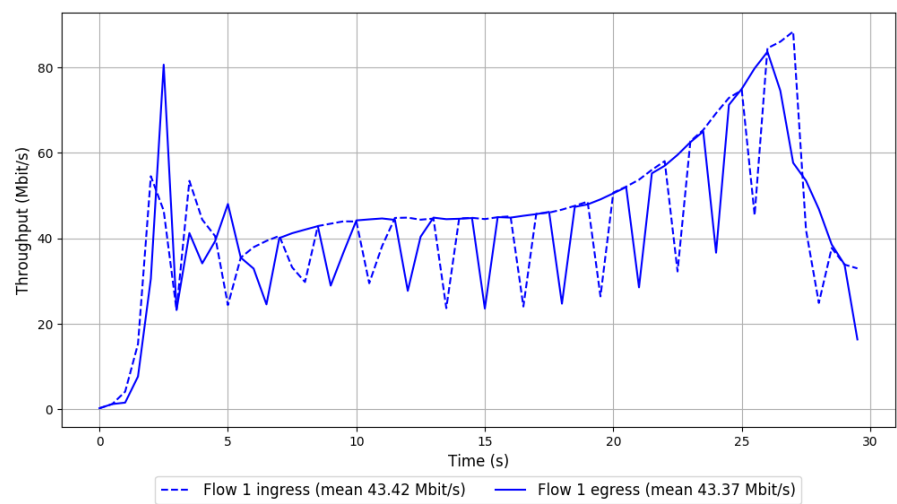
-- Flow 1:

Average throughput: 43.37 Mbit/s

95th percentile per-packet one-way delay: 140.477 ms

Loss rate: 1.02%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-02 10:03:45

End at: 2018-01-02 10:04:15

Below is generated by plot.py at 2018-01-02 13:59:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.06 Mbit/s

95th percentile per-packet one-way delay: 136.929 ms

Loss rate: 2.14%

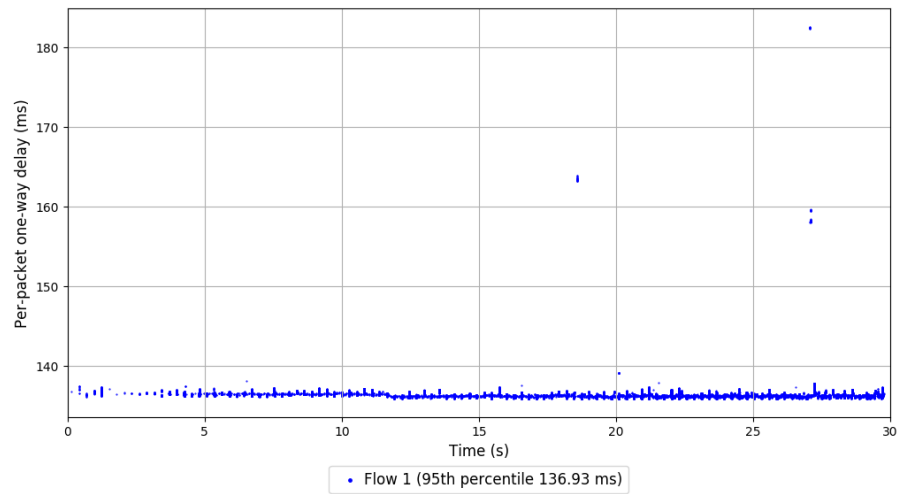
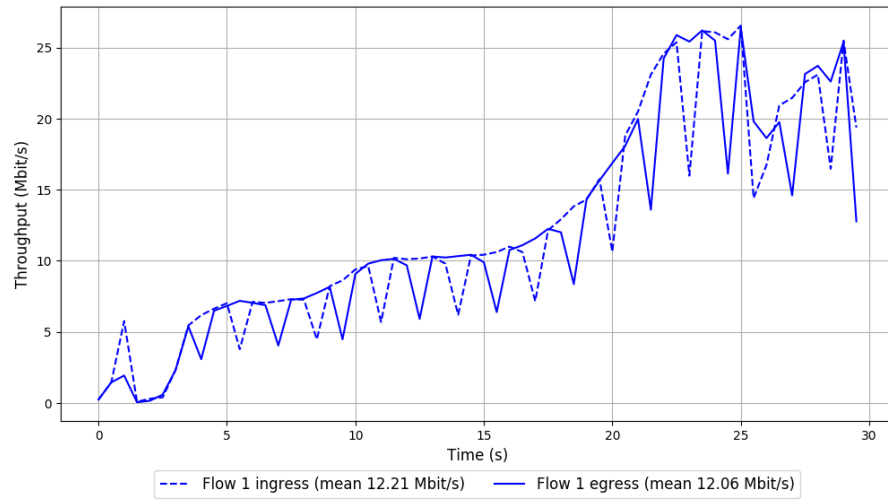
-- Flow 1:

Average throughput: 12.06 Mbit/s

95th percentile per-packet one-way delay: 136.929 ms

Loss rate: 2.14%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-02 10:16:06

End at: 2018-01-02 10:16:36

Below is generated by plot.py at 2018-01-02 13:59:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.02 Mbit/s

95th percentile per-packet one-way delay: 137.085 ms

Loss rate: 1.11%

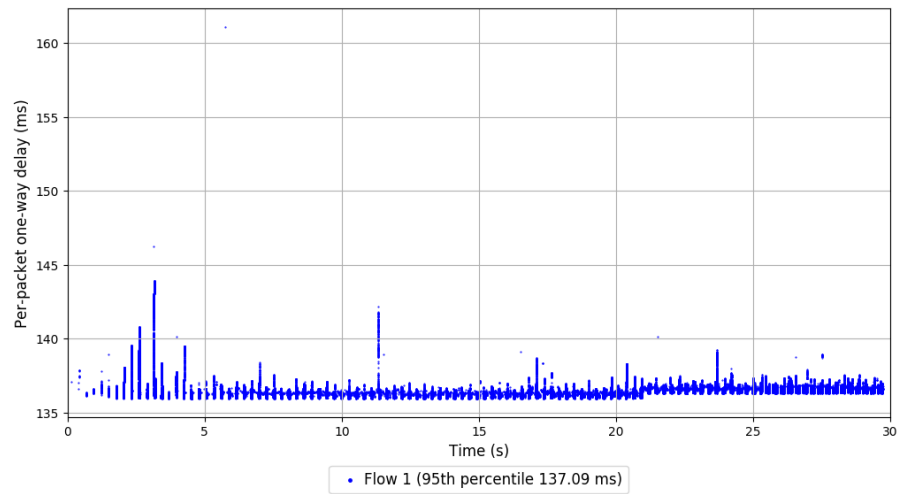
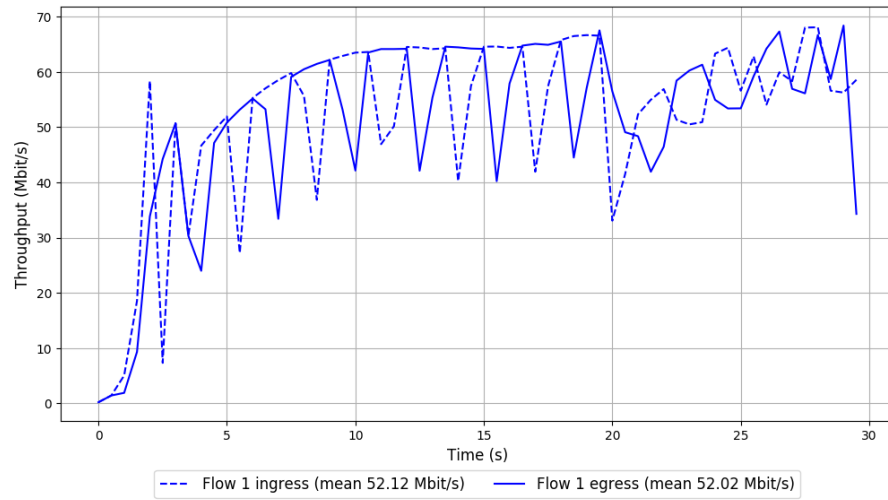
-- Flow 1:

Average throughput: 52.02 Mbit/s

95th percentile per-packet one-way delay: 137.085 ms

Loss rate: 1.11%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-02 10:28:20

End at: 2018-01-02 10:28:50

Below is generated by plot.py at 2018-01-02 13:59:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.57 Mbit/s

95th percentile per-packet one-way delay: 136.864 ms

Loss rate: 2.05%

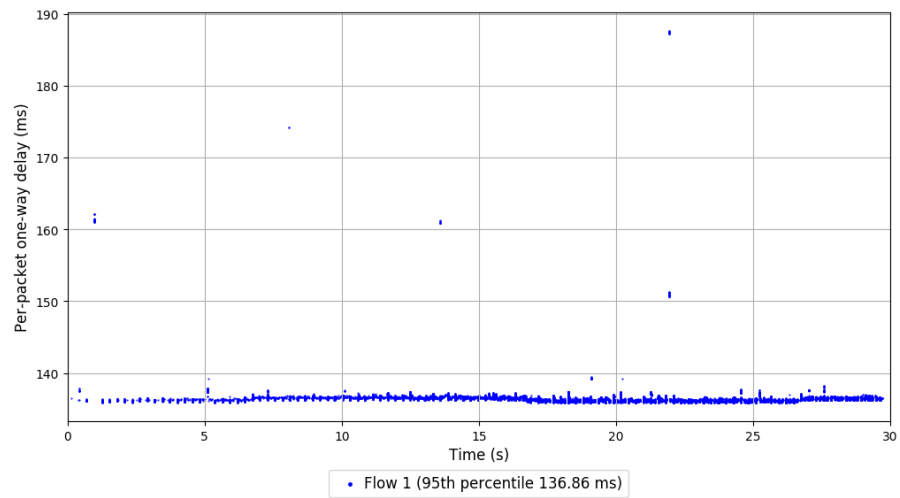
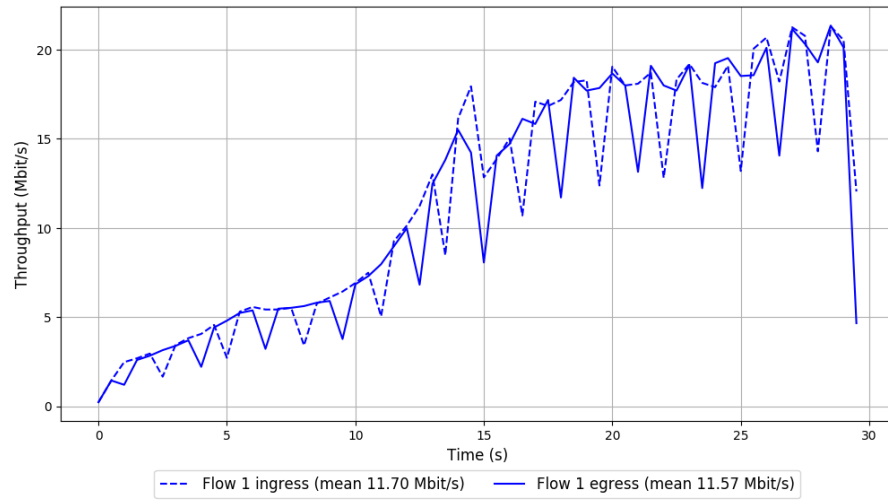
-- Flow 1:

Average throughput: 11.57 Mbit/s

95th percentile per-packet one-way delay: 136.864 ms

Loss rate: 2.05%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-02 10:40:15

End at: 2018-01-02 10:40:45

Below is generated by plot.py at 2018-01-02 13:59:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.73 Mbit/s

95th percentile per-packet one-way delay: 140.053 ms

Loss rate: 0.52%

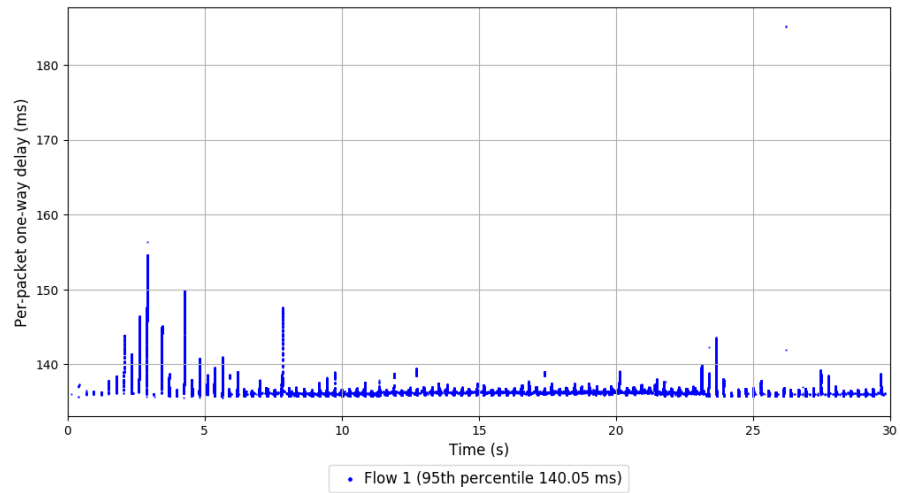
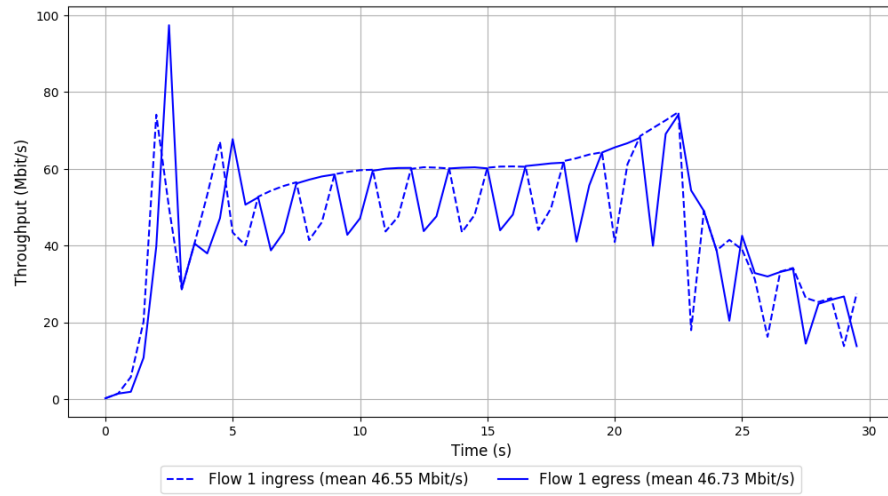
-- Flow 1:

Average throughput: 46.73 Mbit/s

95th percentile per-packet one-way delay: 140.053 ms

Loss rate: 0.52%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-02 10:53:12

End at: 2018-01-02 10:53:42

Below is generated by plot.py at 2018-01-02 13:59:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.53 Mbit/s

95th percentile per-packet one-way delay: 141.307 ms

Loss rate: 1.21%

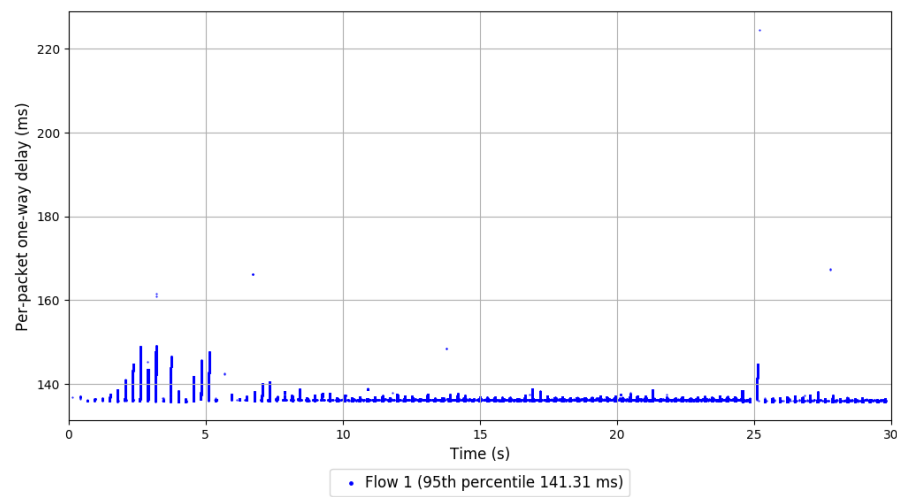
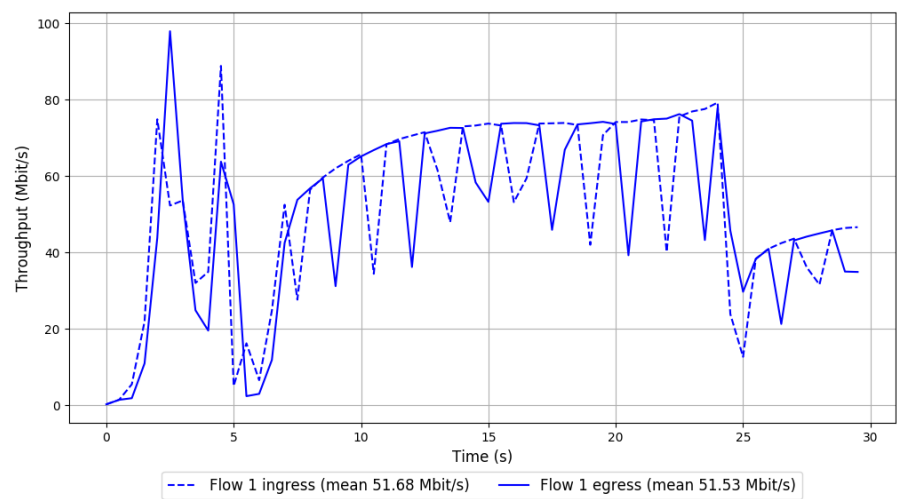
-- Flow 1:

Average throughput: 51.53 Mbit/s

95th percentile per-packet one-way delay: 141.307 ms

Loss rate: 1.21%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-02 11:06:06

End at: 2018-01-02 11:06:36

Below is generated by plot.py at 2018-01-02 13:59:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.55 Mbit/s

95th percentile per-packet one-way delay: 163.090 ms

Loss rate: 2.13%

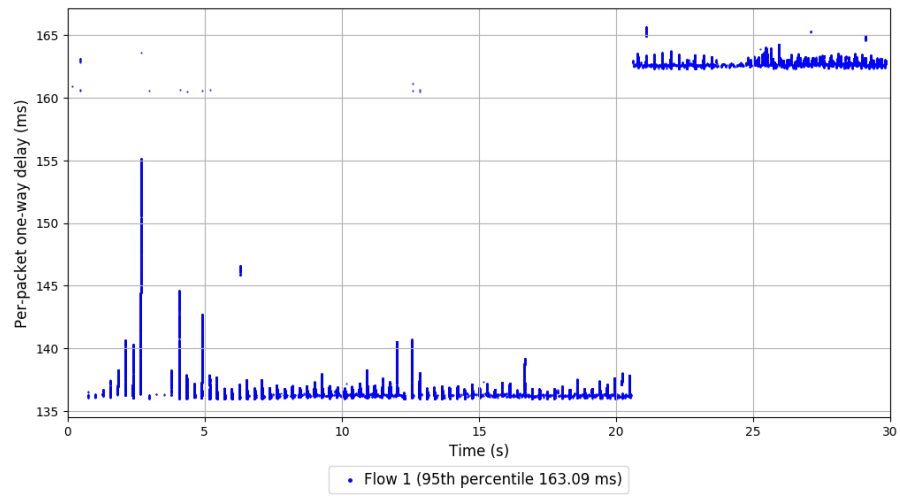
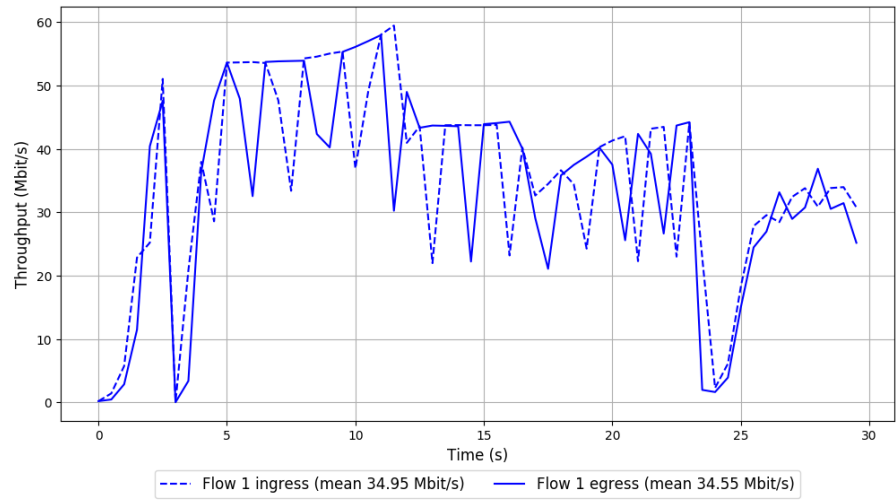
-- Flow 1:

Average throughput: 34.55 Mbit/s

95th percentile per-packet one-way delay: 163.090 ms

Loss rate: 2.13%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-02 11:18:34

End at: 2018-01-02 11:19:04

Below is generated by plot.py at 2018-01-02 13:59:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.35 Mbit/s

95th percentile per-packet one-way delay: 165.521 ms

Loss rate: 1.48%

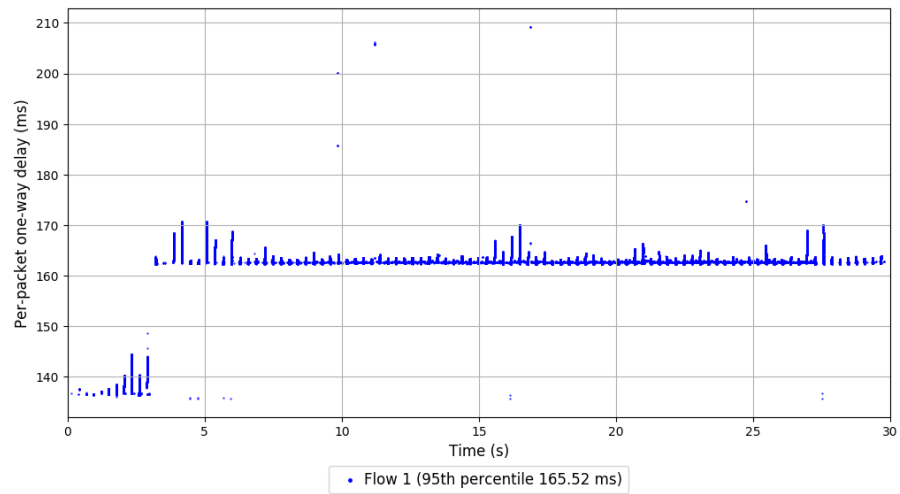
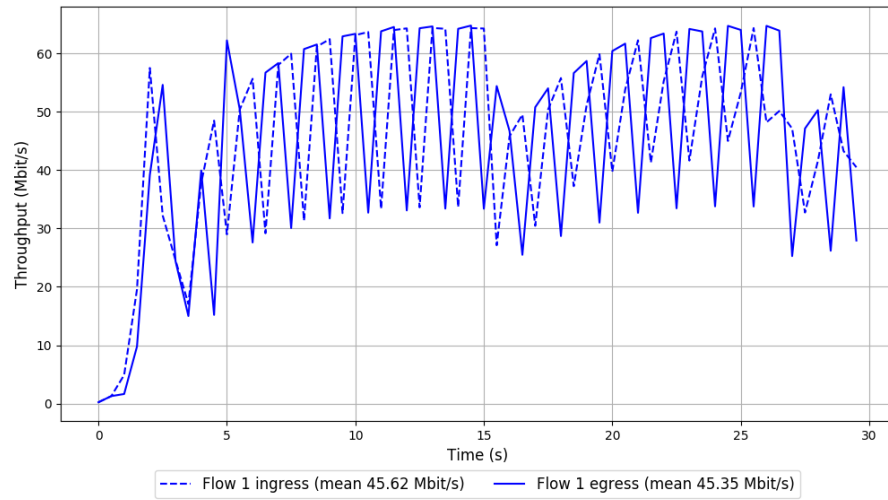
-- Flow 1:

Average throughput: 45.35 Mbit/s

95th percentile per-packet one-way delay: 165.521 ms

Loss rate: 1.48%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-02 11:30:49

End at: 2018-01-02 11:31:19

Below is generated by plot.py at 2018-01-02 13:59:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.20 Mbit/s

95th percentile per-packet one-way delay: 163.814 ms

Loss rate: 1.75%

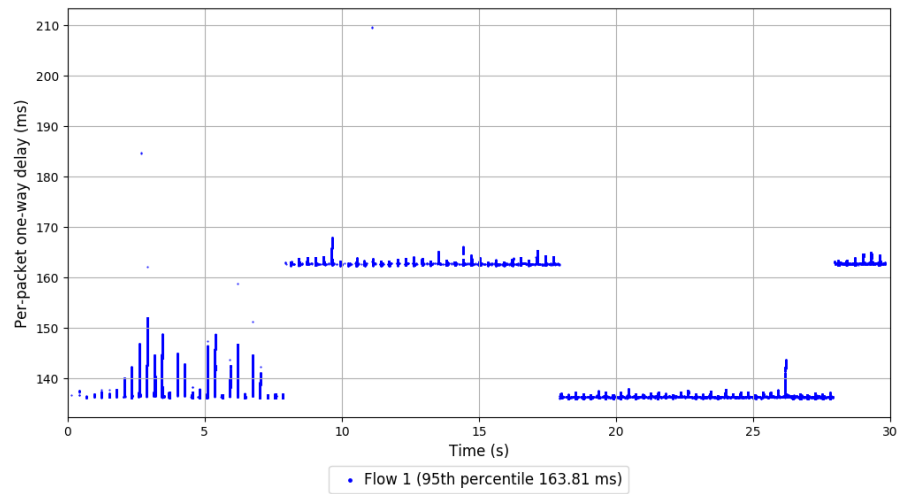
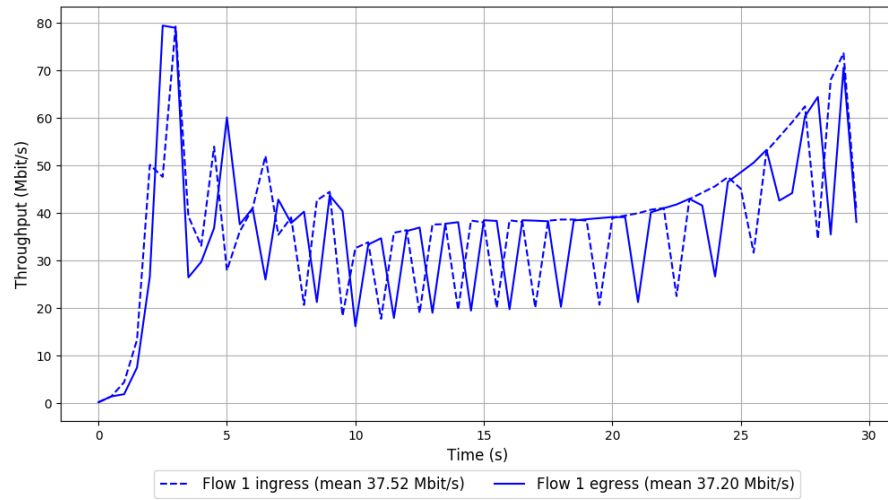
-- Flow 1:

Average throughput: 37.20 Mbit/s

95th percentile per-packet one-way delay: 163.814 ms

Loss rate: 1.75%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-02 11:42:49

End at: 2018-01-02 11:43:19

Below is generated by plot.py at 2018-01-02 13:59:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 163.714 ms

Loss rate: 1.65%

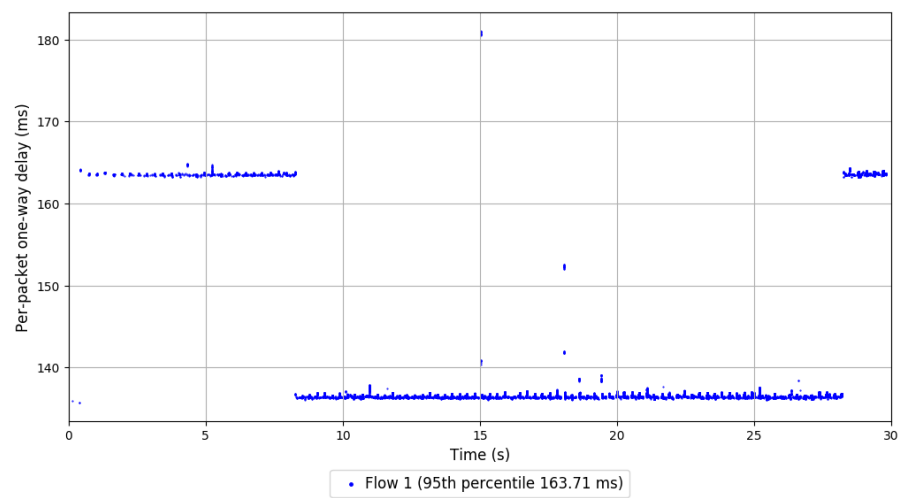
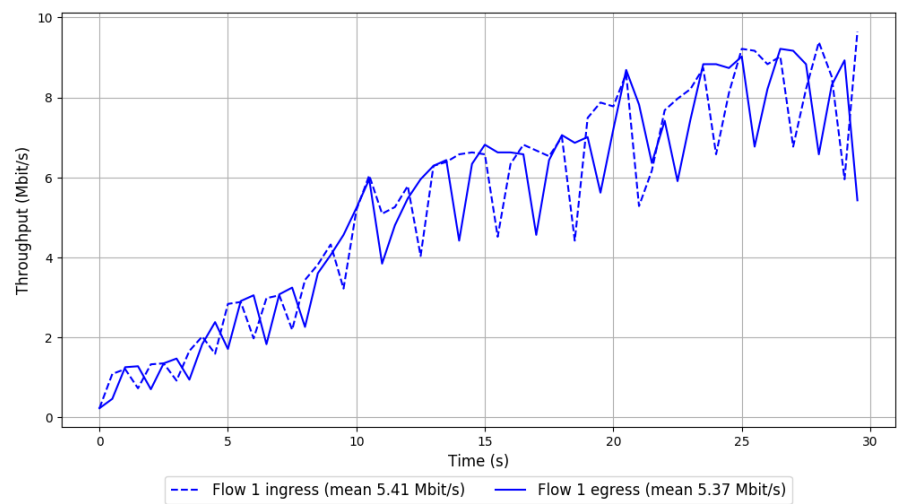
-- Flow 1:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 163.714 ms

Loss rate: 1.65%

Run 10: Report of TCP Cubic — Data Link

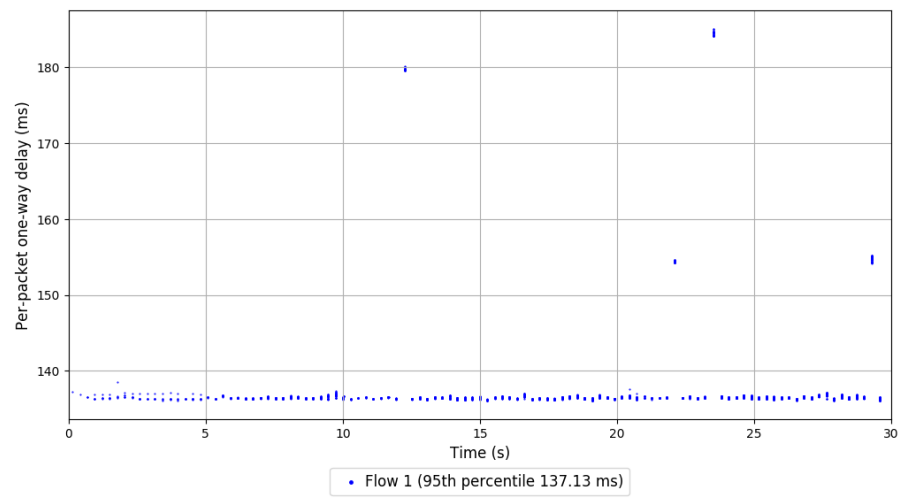
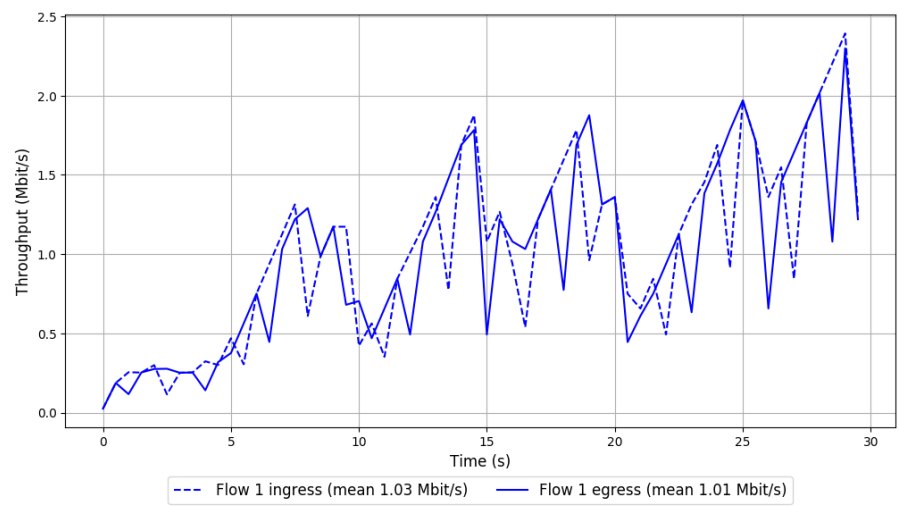


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-02 09:47:08
End at: 2018-01-02 09:47:38

# Below is generated by plot.py at 2018-01-02 13:59:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 137.130 ms
Loss rate: 2.23%
-- Flow 1:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 137.130 ms
Loss rate: 2.23%
```


Run 1: Report of LEDBAT — Data Link

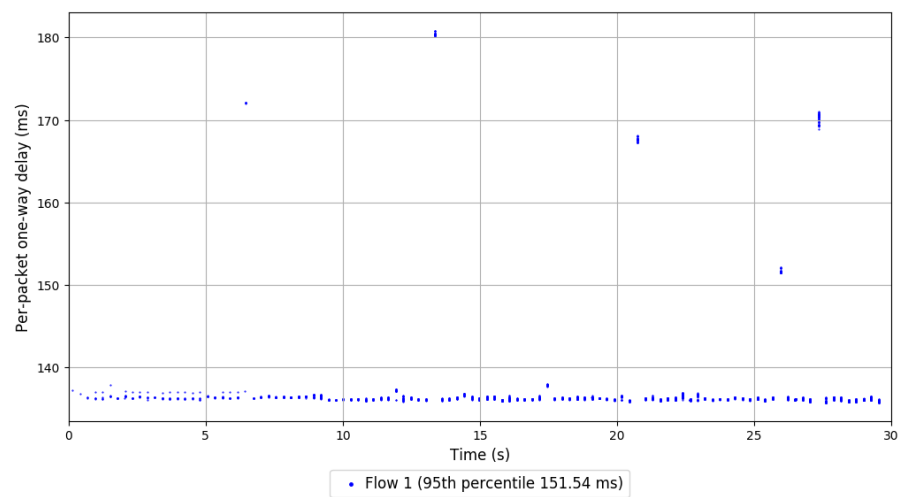
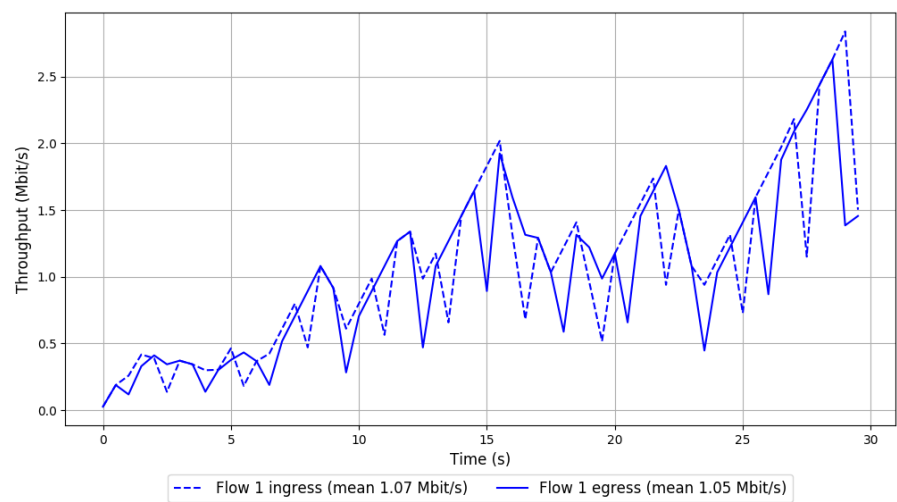


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-02 10:00:08
End at: 2018-01-02 10:00:38

# Below is generated by plot.py at 2018-01-02 13:59:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 151.544 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 151.544 ms
Loss rate: 2.56%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-02 10:12:25

End at: 2018-01-02 10:12:55

Below is generated by plot.py at 2018-01-02 13:59:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 137.303 ms

Loss rate: 1.65%

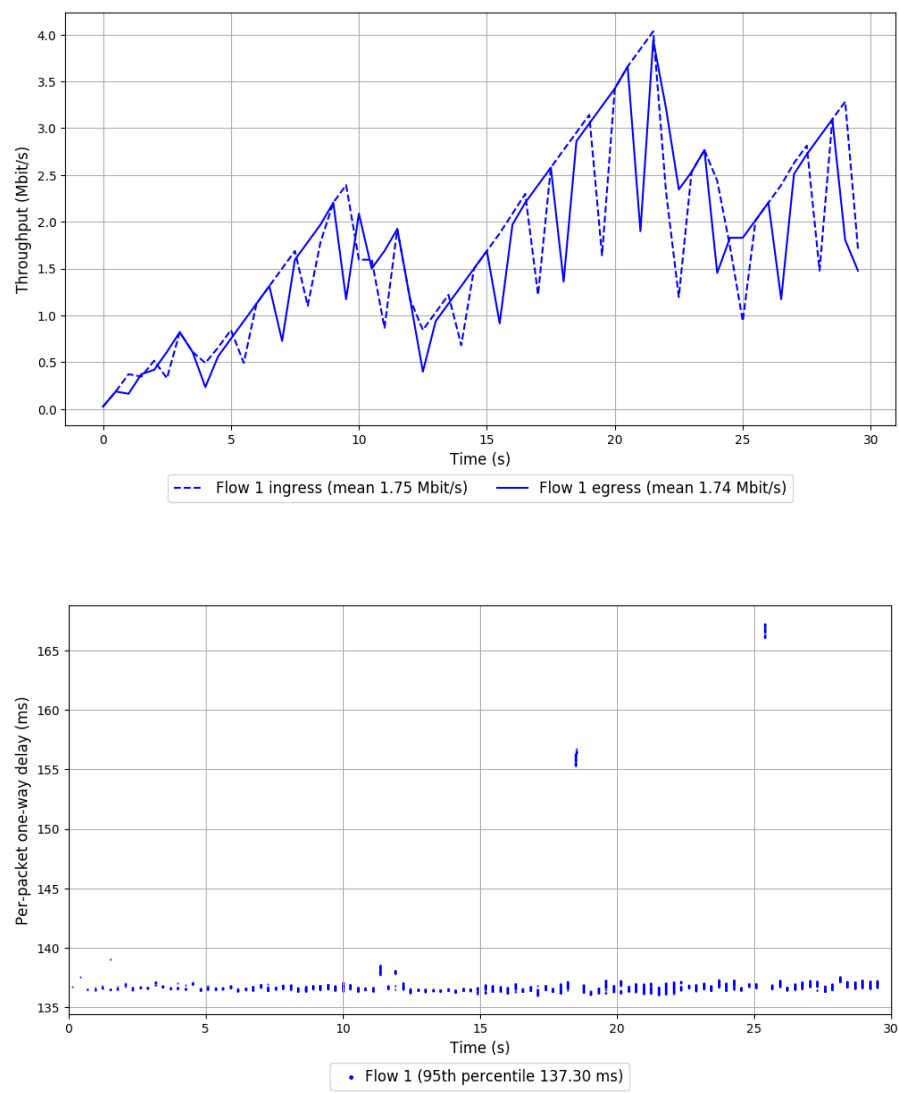
-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 137.303 ms

Loss rate: 1.65%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-02 10:24:41

End at: 2018-01-02 10:25:11

Below is generated by plot.py at 2018-01-02 13:59:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 137.012 ms

Loss rate: 0.20%

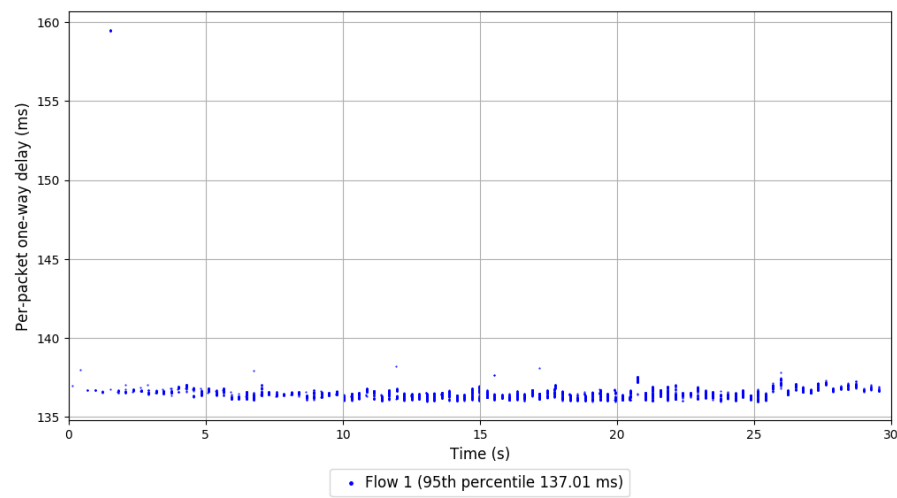
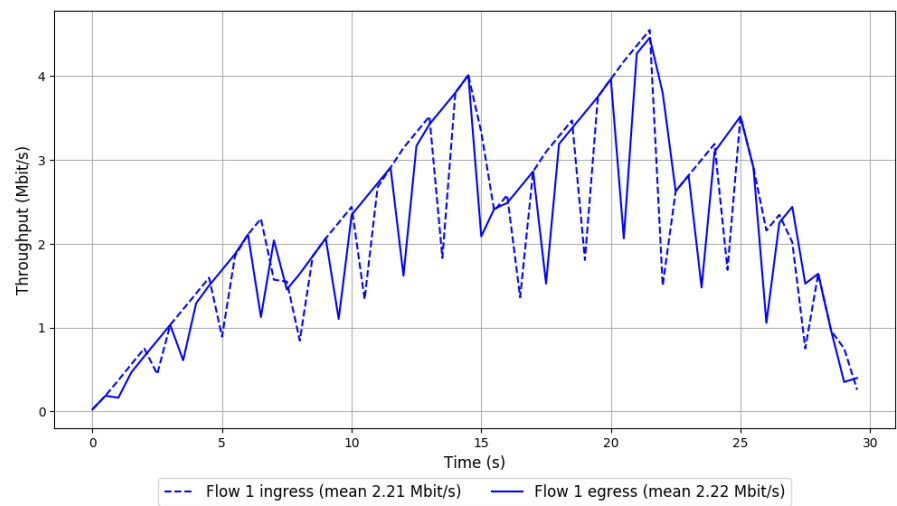
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 137.012 ms

Loss rate: 0.20%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-02 10:36:38

End at: 2018-01-02 10:37:08

Below is generated by plot.py at 2018-01-02 13:59:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 136.776 ms

Loss rate: 0.81%

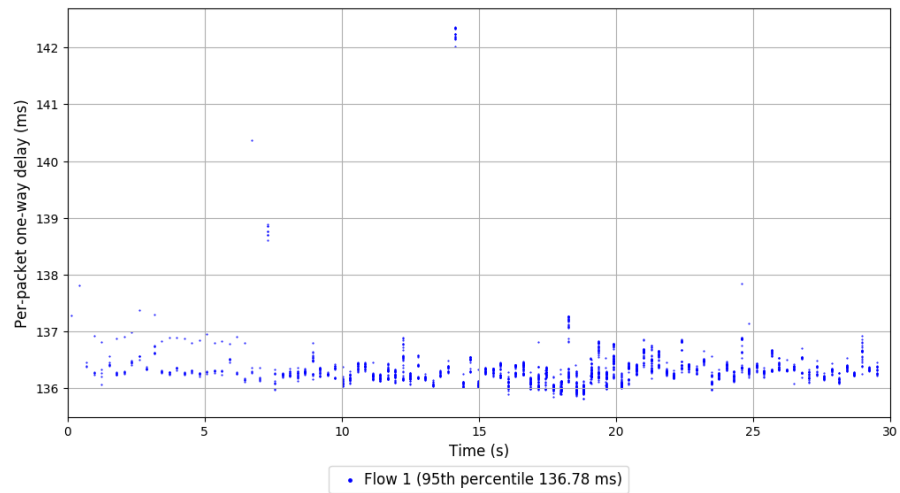
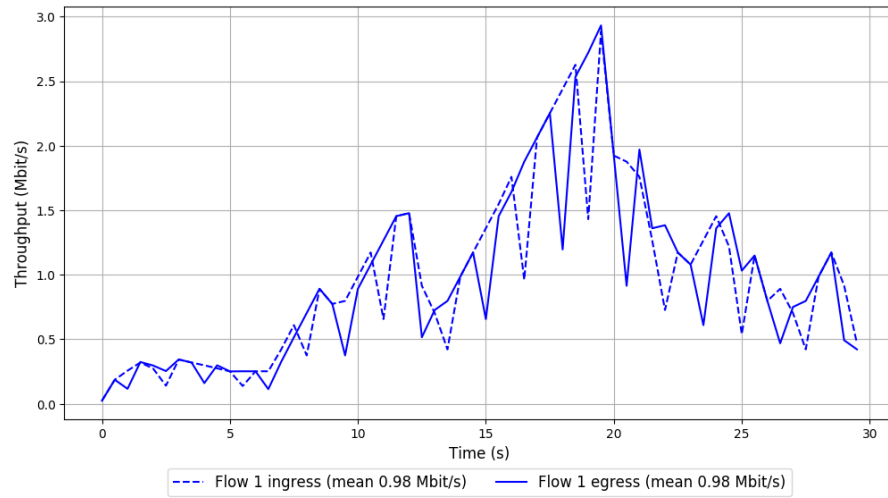
-- Flow 1:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 136.776 ms

Loss rate: 0.81%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-02 10:49:31

End at: 2018-01-02 10:50:01

Below is generated by plot.py at 2018-01-02 13:59:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 136.744 ms

Loss rate: 0.96%

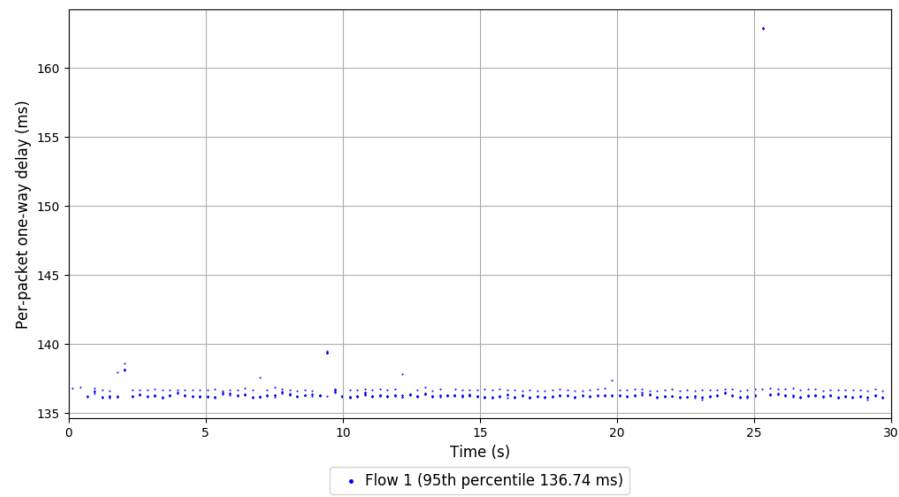
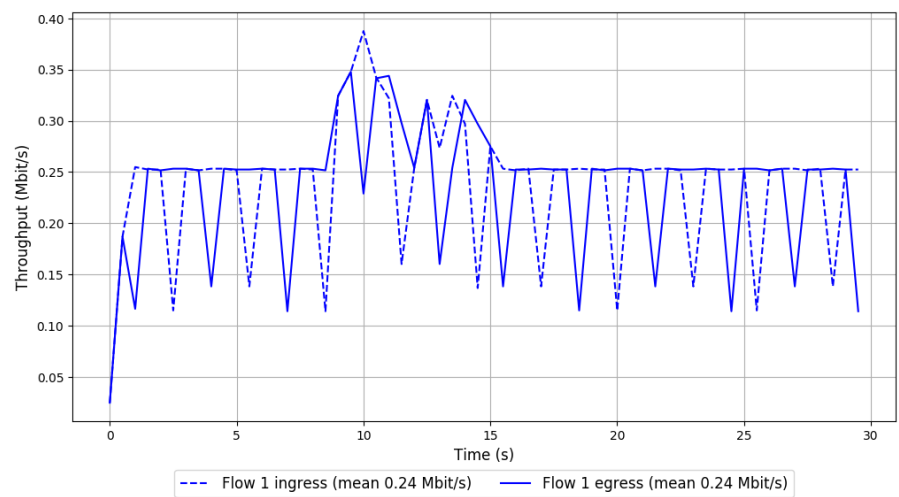
-- Flow 1:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 136.744 ms

Loss rate: 0.96%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

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

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

Below is generated by plot.py at 2018-01-02 13:59:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 136.924 ms

Loss rate: 0.60%

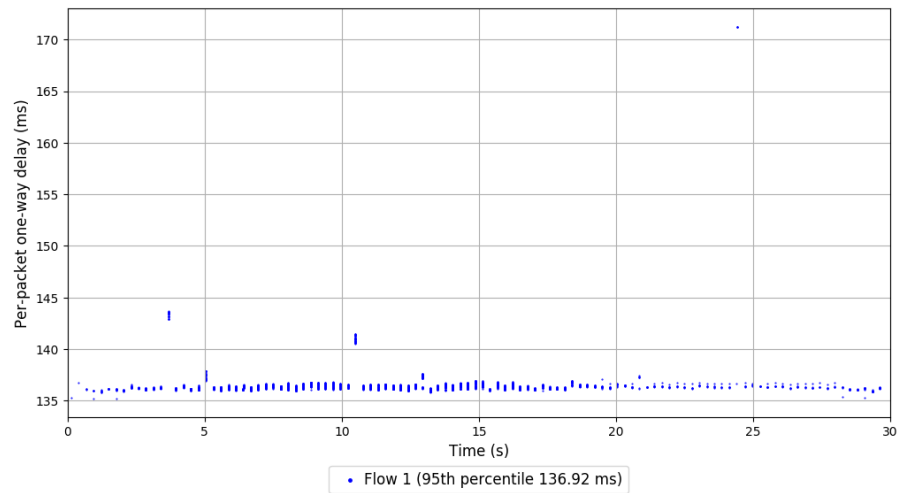
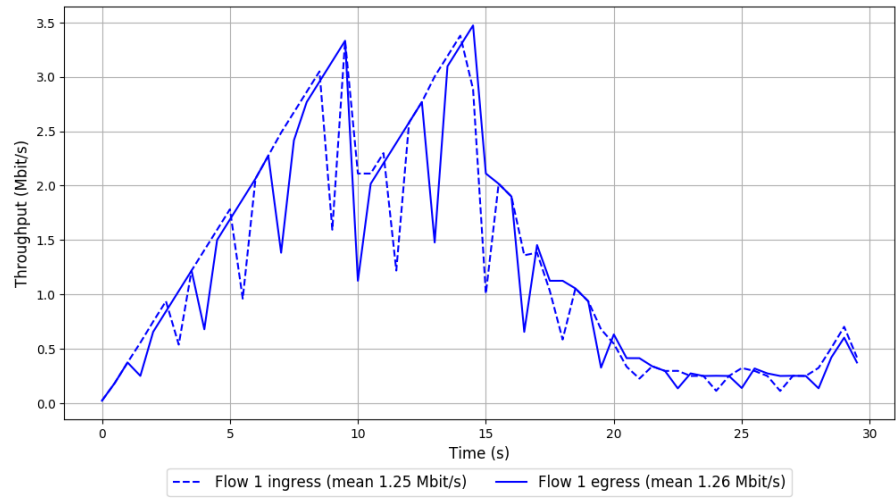
-- Flow 1:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 136.924 ms

Loss rate: 0.60%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-02 11:14:56

End at: 2018-01-02 11:15:26

Below is generated by plot.py at 2018-01-02 13:59:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 163.104 ms

Loss rate: 1.63%

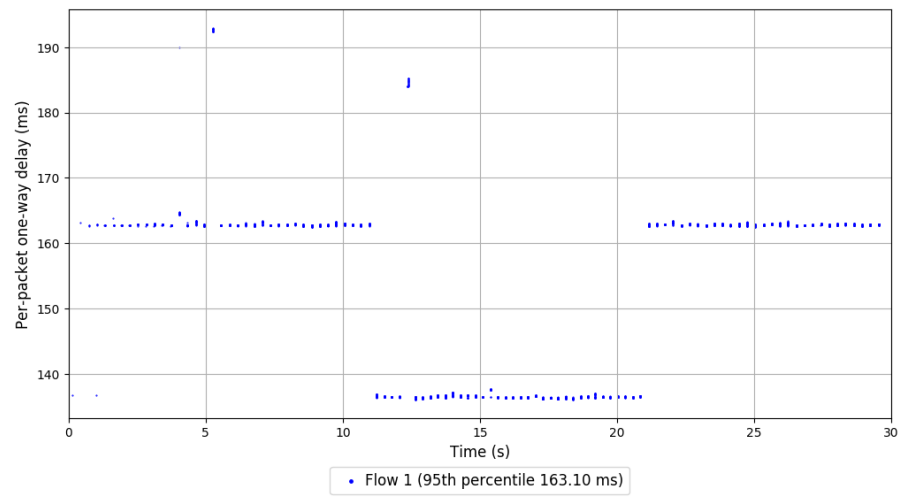
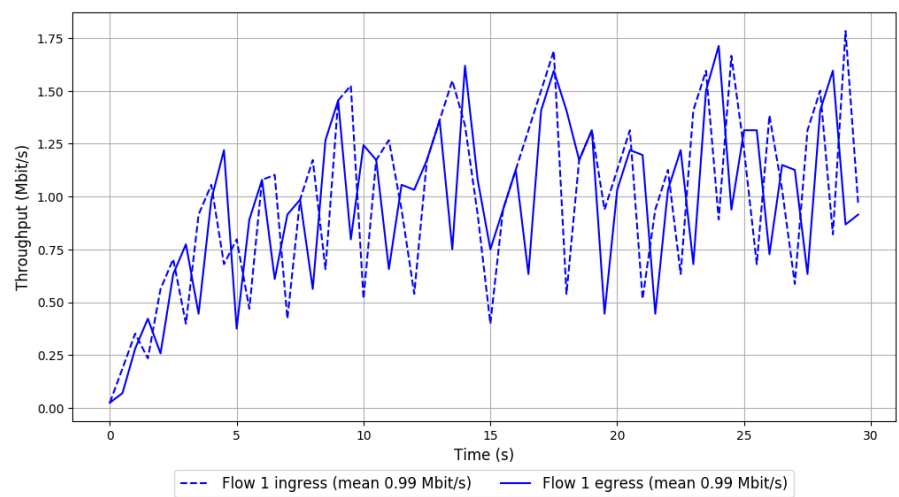
-- Flow 1:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 163.104 ms

Loss rate: 1.63%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-02 11:27:12

End at: 2018-01-02 11:27:42

Below is generated by plot.py at 2018-01-02 13:59:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 163.998 ms

Loss rate: 2.45%

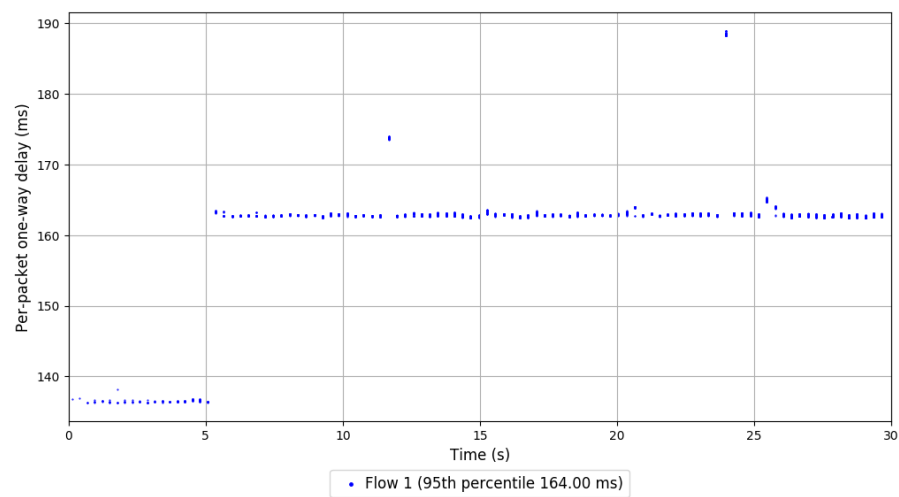
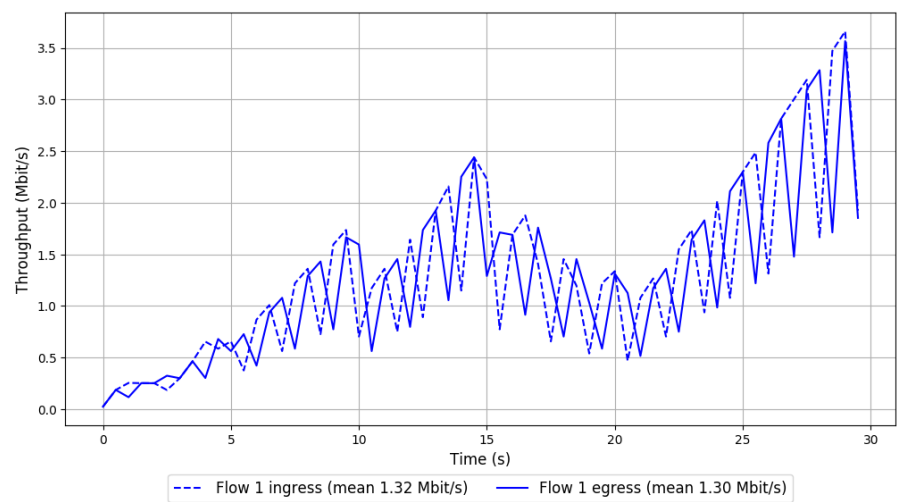
-- Flow 1:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 163.998 ms

Loss rate: 2.45%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

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

End at: 2018-01-02 11:39:41

Below is generated by plot.py at 2018-01-02 13:59:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 163.928 ms

Loss rate: 2.48%

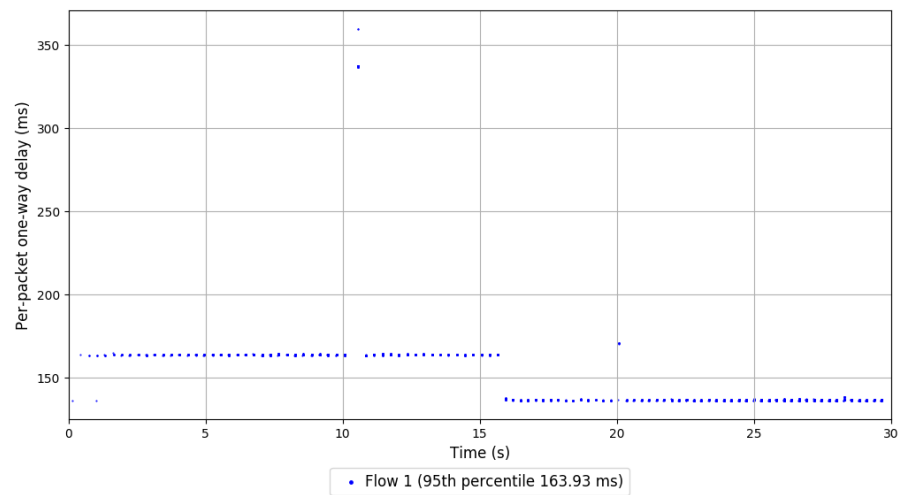
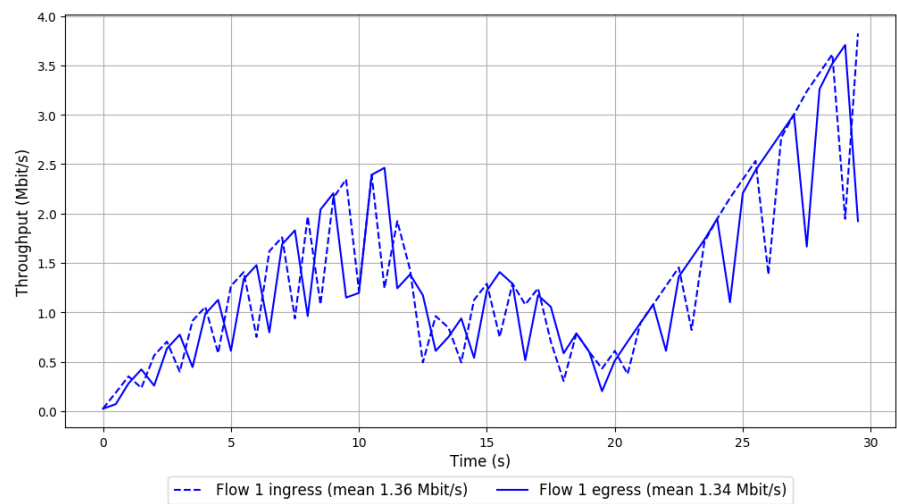
-- Flow 1:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 163.928 ms

Loss rate: 2.48%

Run 10: Report of LEDBAT — Data Link

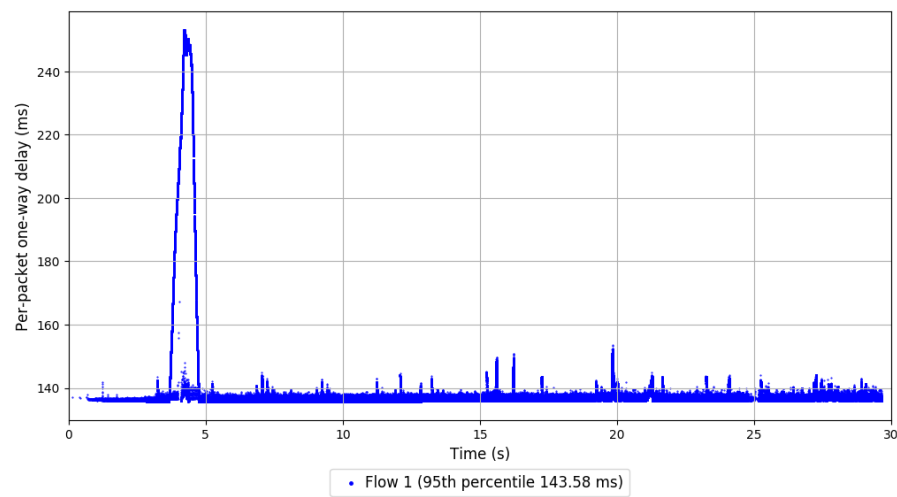
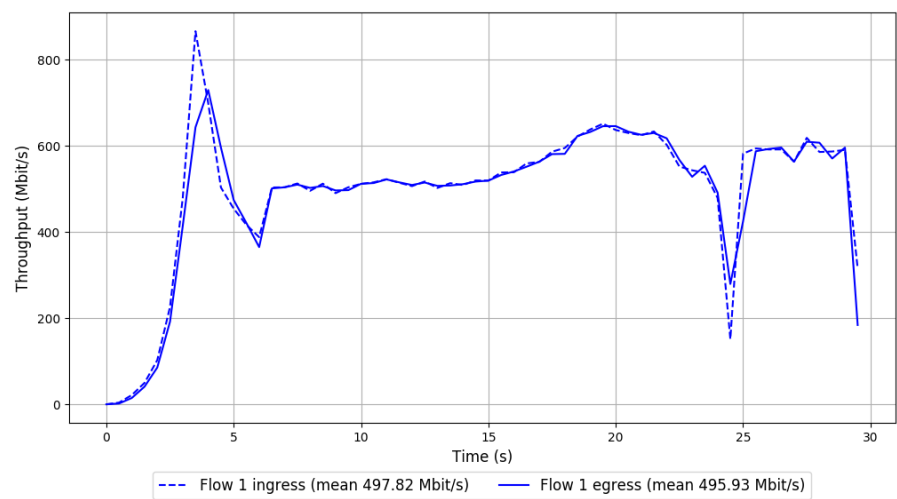


```
Run 1: Statistics of PCC

Start at: 2018-01-02 09:39:54
End at: 2018-01-02 09:40:24

# Below is generated by plot.py at 2018-01-02 14:07:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 495.93 Mbit/s
95th percentile per-packet one-way delay: 143.581 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 495.93 Mbit/s
95th percentile per-packet one-way delay: 143.581 ms
Loss rate: 1.30%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-02 09:52:16

End at: 2018-01-02 09:52:46

Below is generated by plot.py at 2018-01-02 14:08:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 539.97 Mbit/s

95th percentile per-packet one-way delay: 167.885 ms

Loss rate: 2.26%

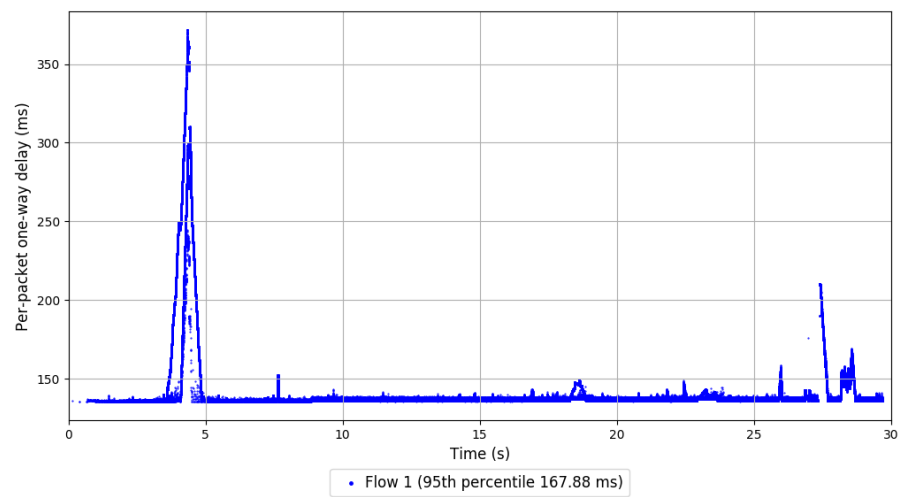
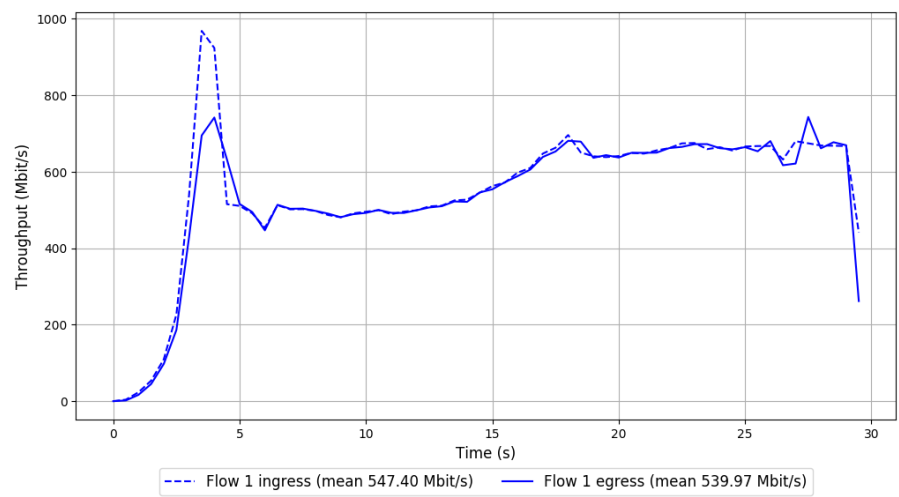
-- Flow 1:

Average throughput: 539.97 Mbit/s

95th percentile per-packet one-way delay: 167.885 ms

Loss rate: 2.26%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-02 10:05:12

End at: 2018-01-02 10:05:42

Below is generated by plot.py at 2018-01-02 14:09:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 555.65 Mbit/s

95th percentile per-packet one-way delay: 189.696 ms

Loss rate: 2.29%

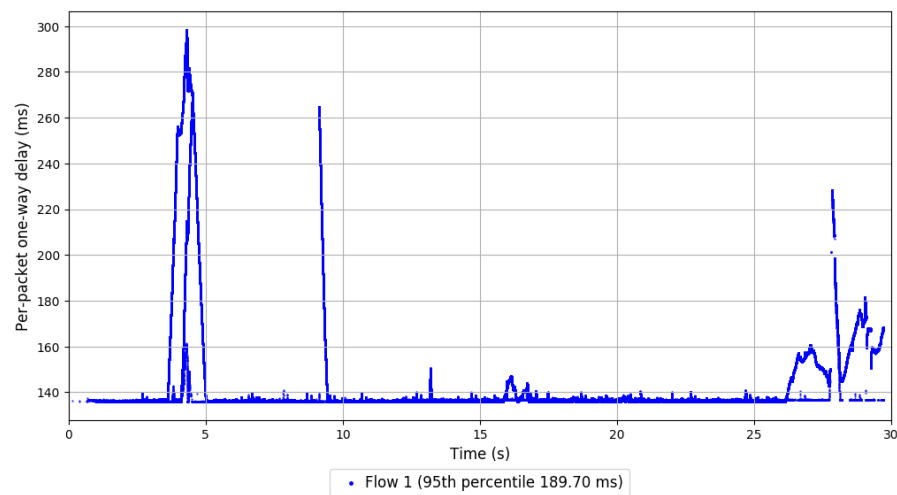
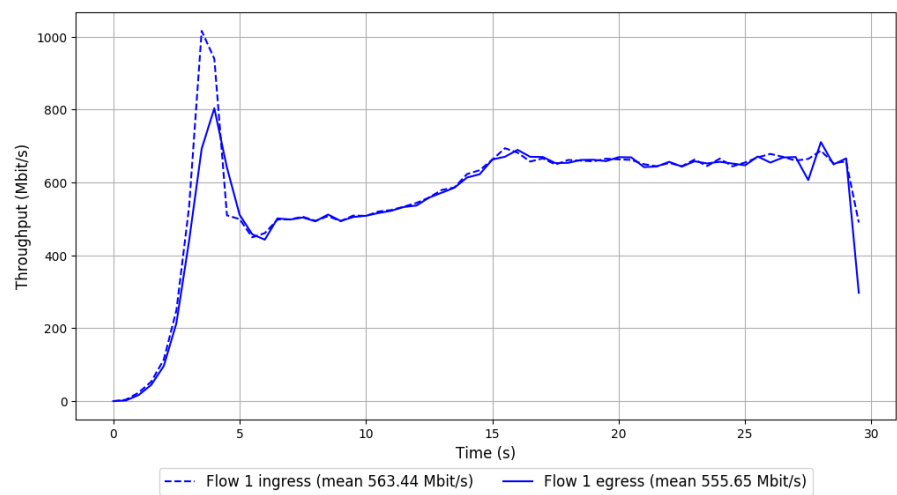
-- Flow 1:

Average throughput: 555.65 Mbit/s

95th percentile per-packet one-way delay: 189.696 ms

Loss rate: 2.29%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-02 10:17:36

End at: 2018-01-02 10:18:06

Below is generated by plot.py at 2018-01-02 14:09:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 377.33 Mbit/s

95th percentile per-packet one-way delay: 148.619 ms

Loss rate: 0.82%

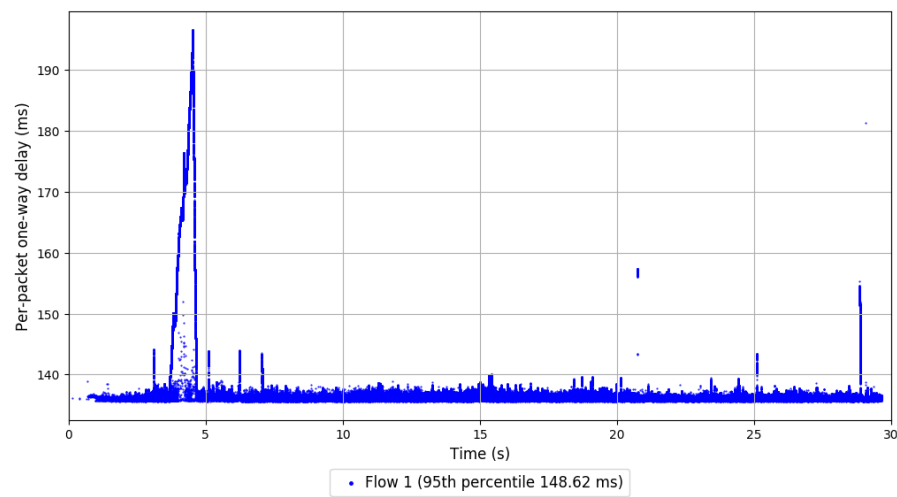
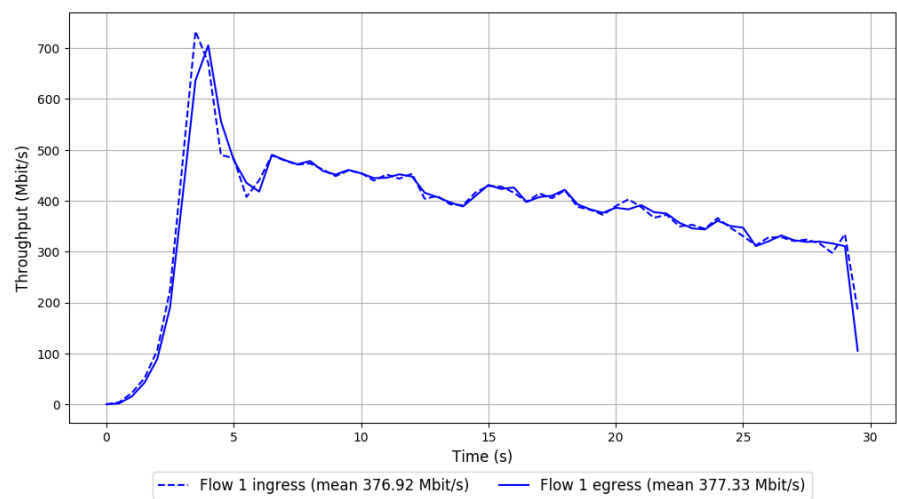
-- Flow 1:

Average throughput: 377.33 Mbit/s

95th percentile per-packet one-way delay: 148.619 ms

Loss rate: 0.82%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-02 10:29:47

End at: 2018-01-02 10:30:18

Below is generated by plot.py at 2018-01-02 14:09:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 416.92 Mbit/s

95th percentile per-packet one-way delay: 150.097 ms

Loss rate: 0.87%

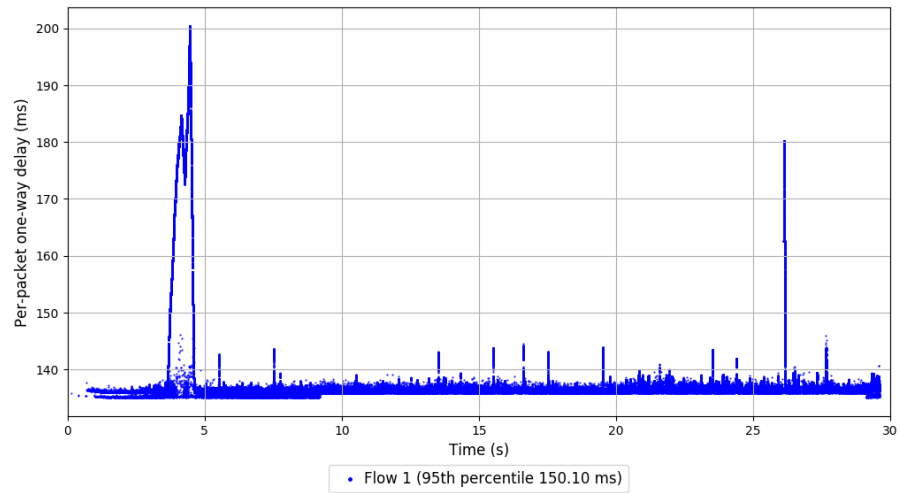
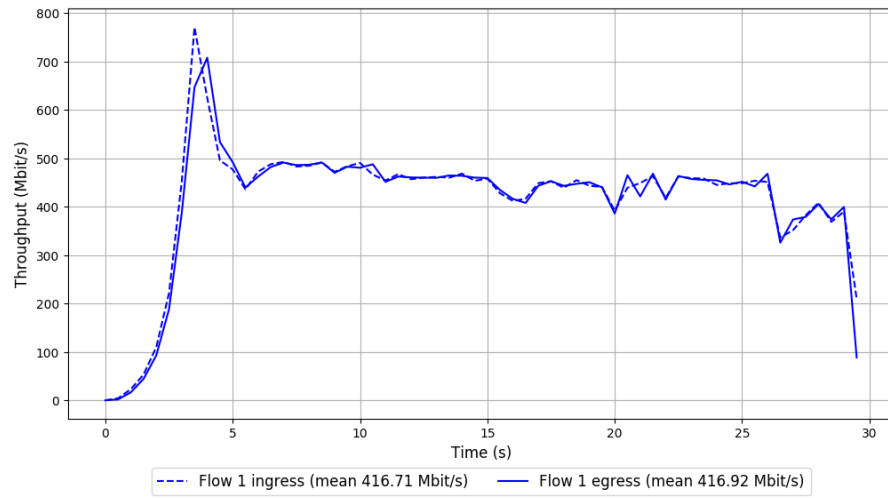
-- Flow 1:

Average throughput: 416.92 Mbit/s

95th percentile per-packet one-way delay: 150.097 ms

Loss rate: 0.87%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-02 10:41:45

End at: 2018-01-02 10:42:15

Below is generated by plot.py at 2018-01-02 14:09:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 566.26 Mbit/s

95th percentile per-packet one-way delay: 183.773 ms

Loss rate: 2.41%

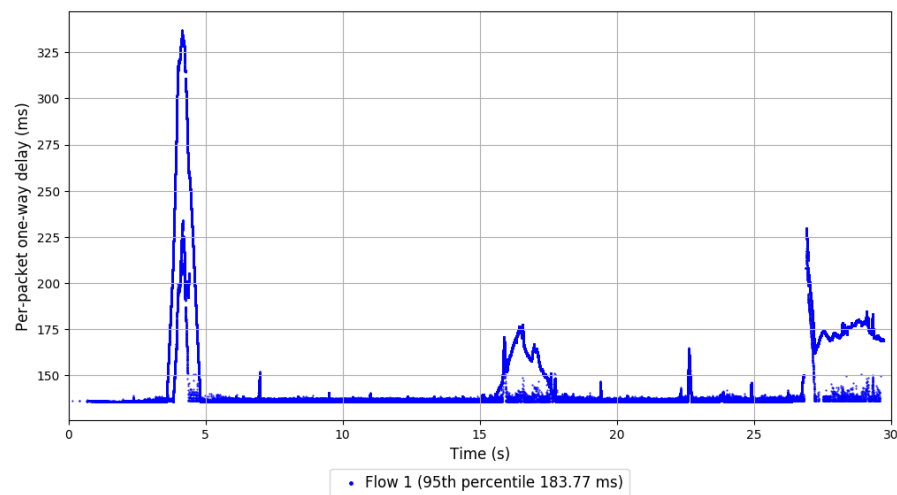
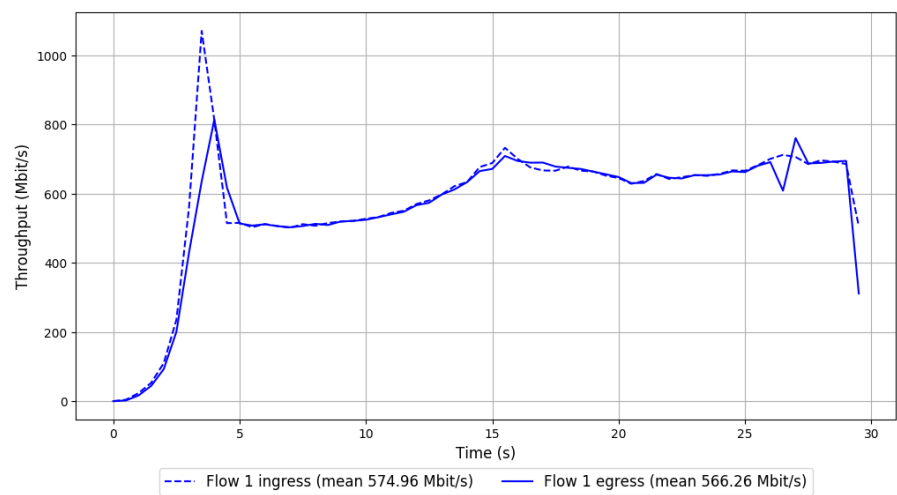
-- Flow 1:

Average throughput: 566.26 Mbit/s

95th percentile per-packet one-way delay: 183.773 ms

Loss rate: 2.41%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-02 10:54:42

End at: 2018-01-02 10:55:12

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 584.93 Mbit/s

95th percentile per-packet one-way delay: 165.222 ms

Loss rate: 2.06%

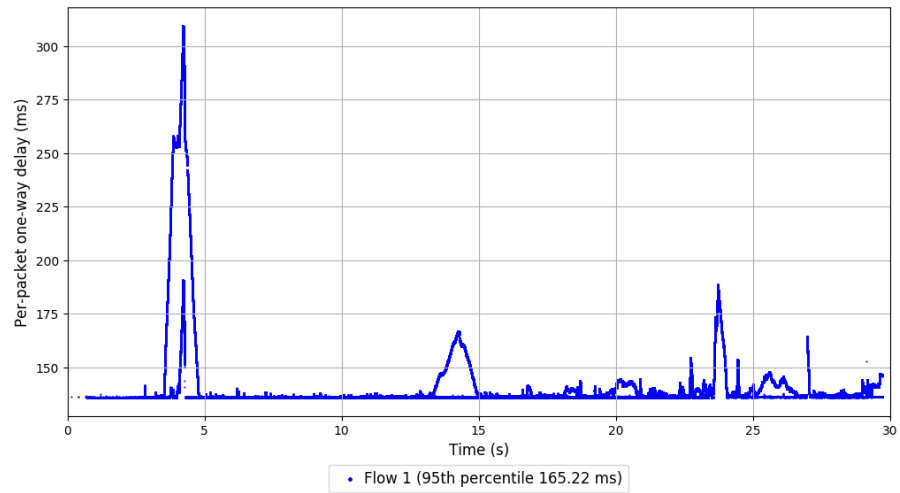
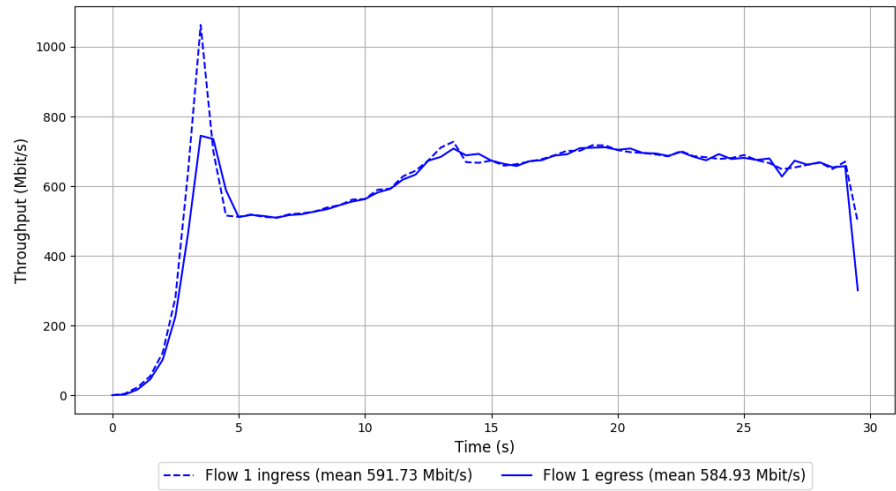
-- Flow 1:

Average throughput: 584.93 Mbit/s

95th percentile per-packet one-way delay: 165.222 ms

Loss rate: 2.06%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-02 11:07:36

End at: 2018-01-02 11:08:06

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 489.80 Mbit/s

95th percentile per-packet one-way delay: 181.990 ms

Loss rate: 3.52%

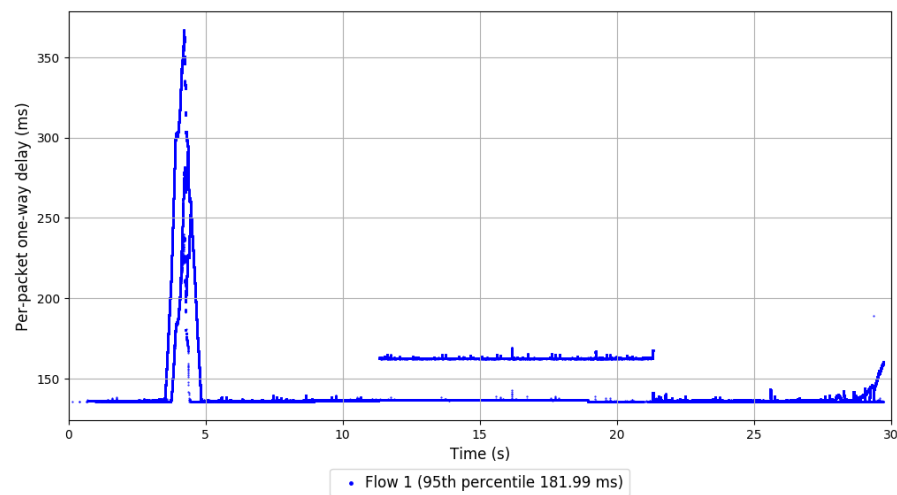
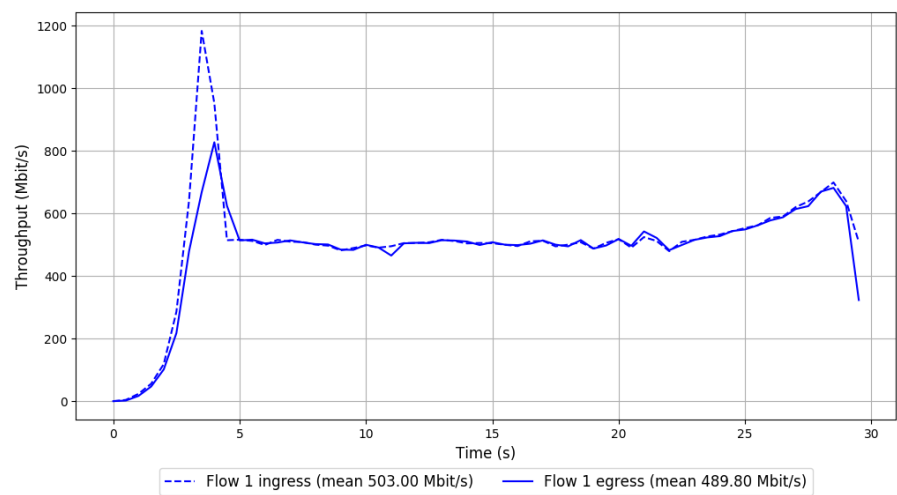
-- Flow 1:

Average throughput: 489.80 Mbit/s

95th percentile per-packet one-way delay: 181.990 ms

Loss rate: 3.52%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-02 11:20:03

End at: 2018-01-02 11:20:33

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.53 Mbit/s

95th percentile per-packet one-way delay: 136.602 ms

Loss rate: 5.47%

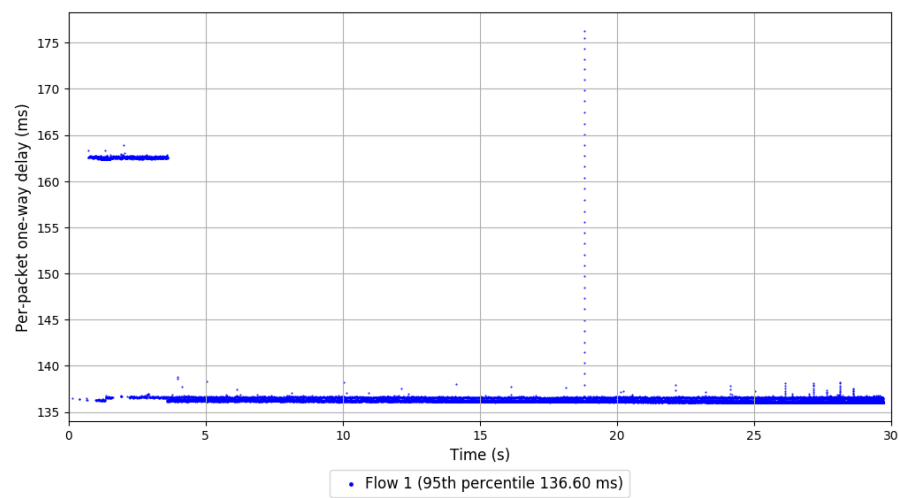
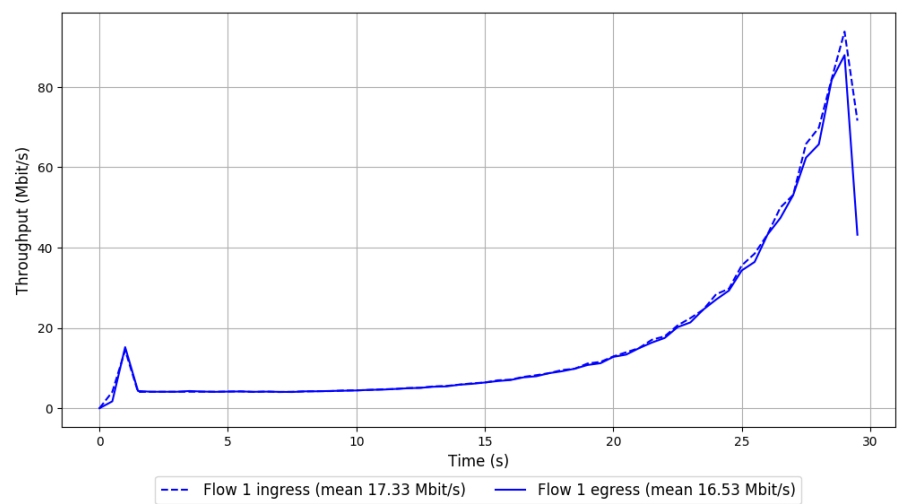
-- Flow 1:

Average throughput: 16.53 Mbit/s

95th percentile per-packet one-way delay: 136.602 ms

Loss rate: 5.47%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-02 11:32:18

End at: 2018-01-02 11:32:48

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.38 Mbit/s

95th percentile per-packet one-way delay: 162.502 ms

Loss rate: 2.88%

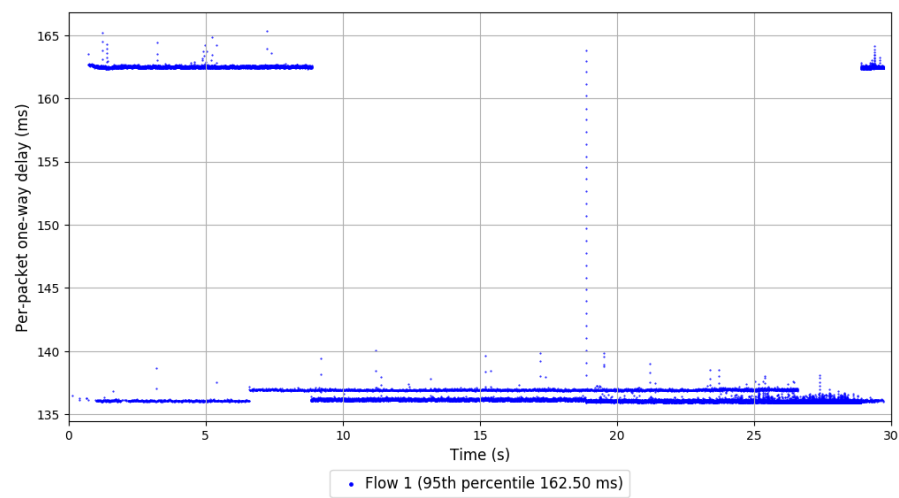
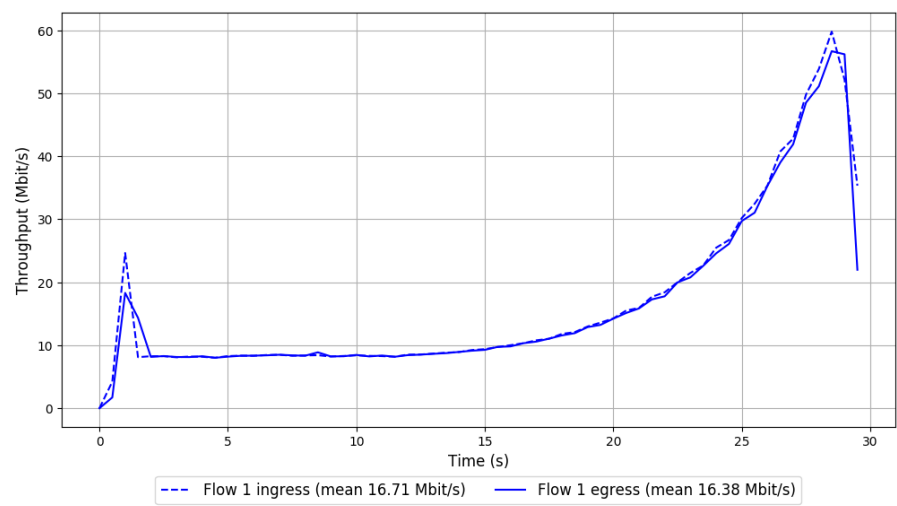
-- Flow 1:

Average throughput: 16.38 Mbit/s

95th percentile per-packet one-way delay: 162.502 ms

Loss rate: 2.88%

Run 10: Report of PCC — Data Link

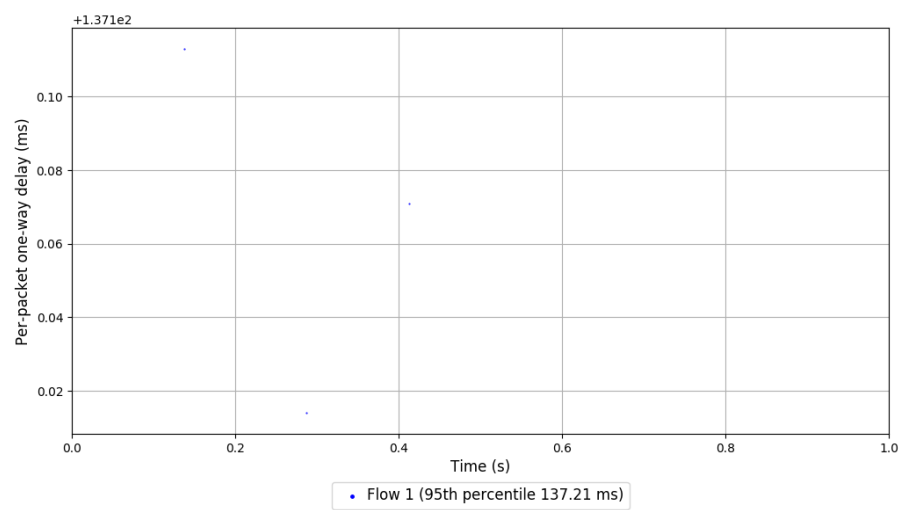
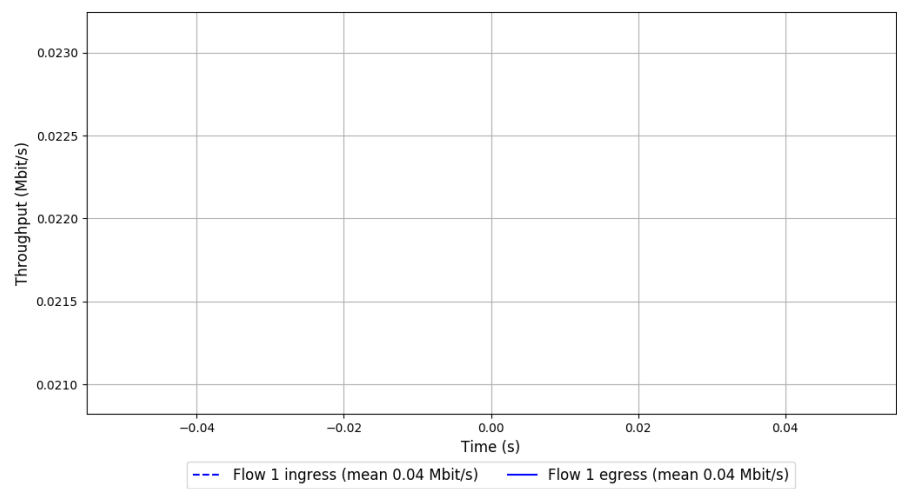


Run 1: Statistics of QUIC Cubic

Start at: 2018-01-02 09:42:00

End at: 2018-01-02 09:42:30

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-02 09:54:12

End at: 2018-01-02 09:54:42

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.87 Mbit/s

95th percentile per-packet one-way delay: 135.628 ms

Loss rate: 1.26%

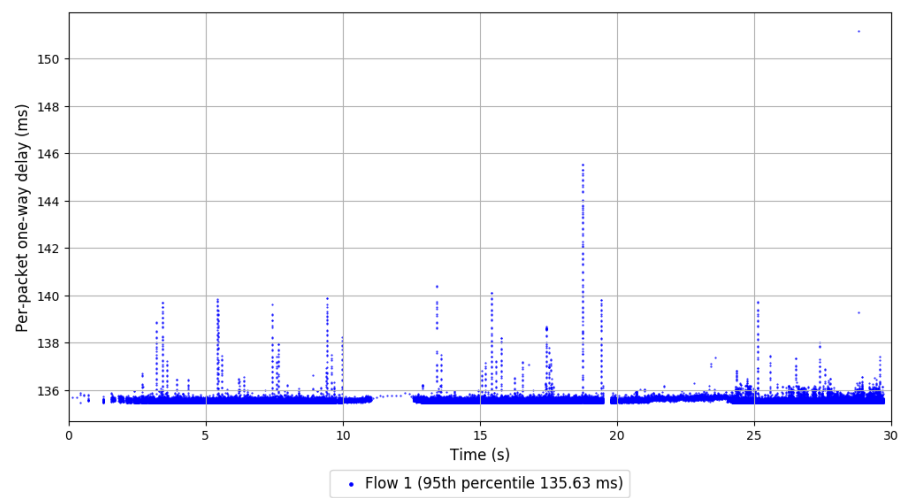
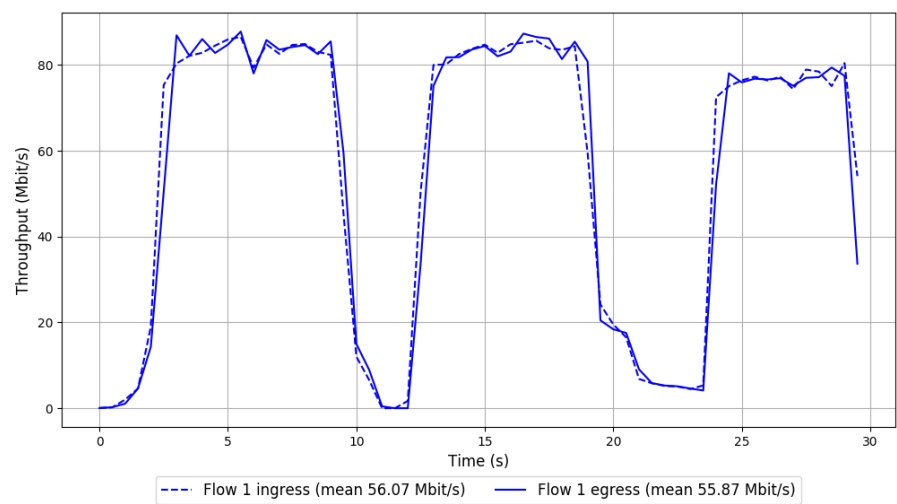
-- Flow 1:

Average throughput: 55.87 Mbit/s

95th percentile per-packet one-way delay: 135.628 ms

Loss rate: 1.26%

Run 2: Report of QUIC Cubic — Data Link

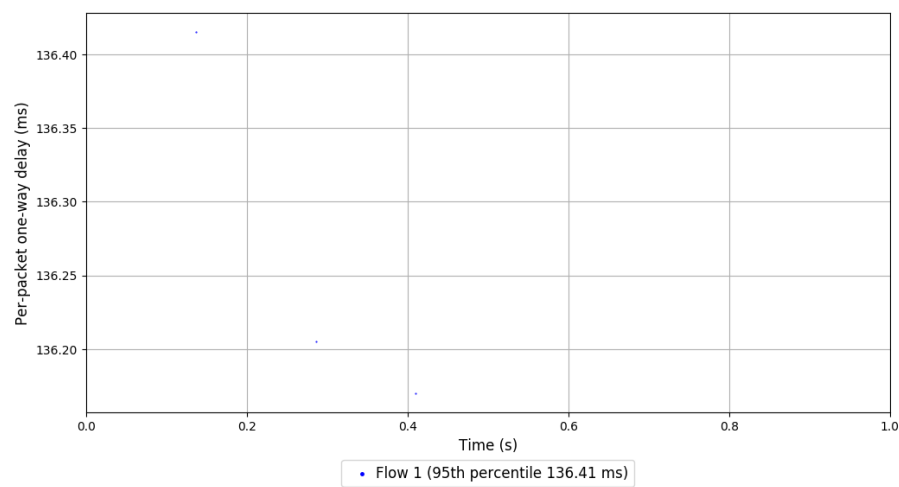
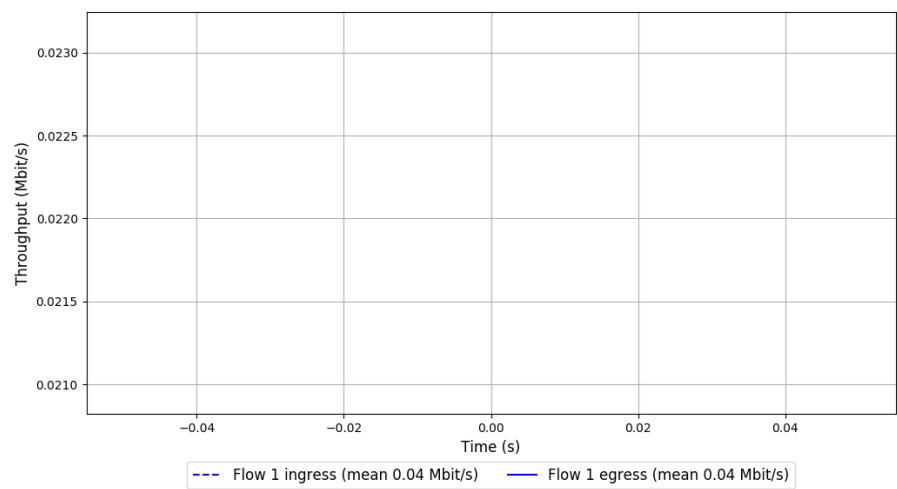


Run 3: Statistics of QUIC Cubic

Start at: 2018-01-02 10:07:08

End at: 2018-01-02 10:07:38

Run 3: Report of QUIC Cubic — Data Link

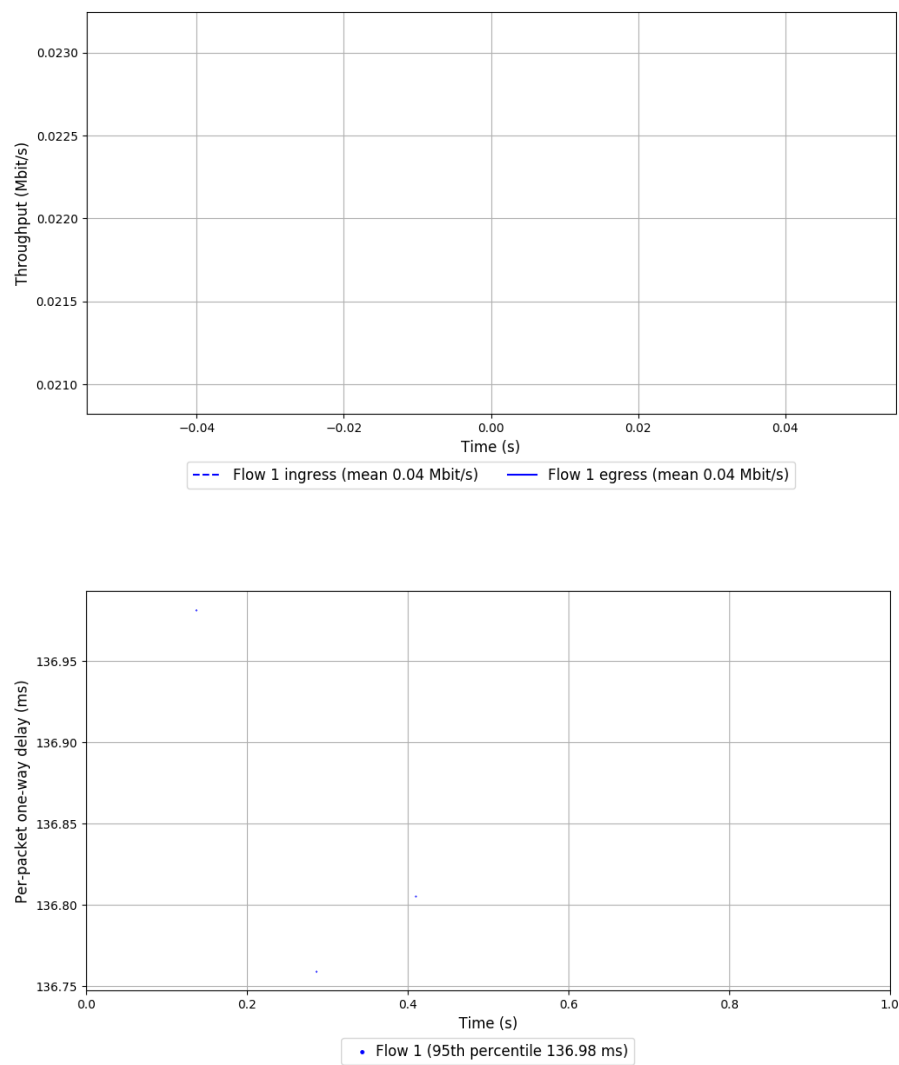


Run 4: Statistics of QUIC Cubic

Start at: 2018-01-02 10:19:24

End at: 2018-01-02 10:19:54

Run 4: Report of QUIC Cubic — Data Link

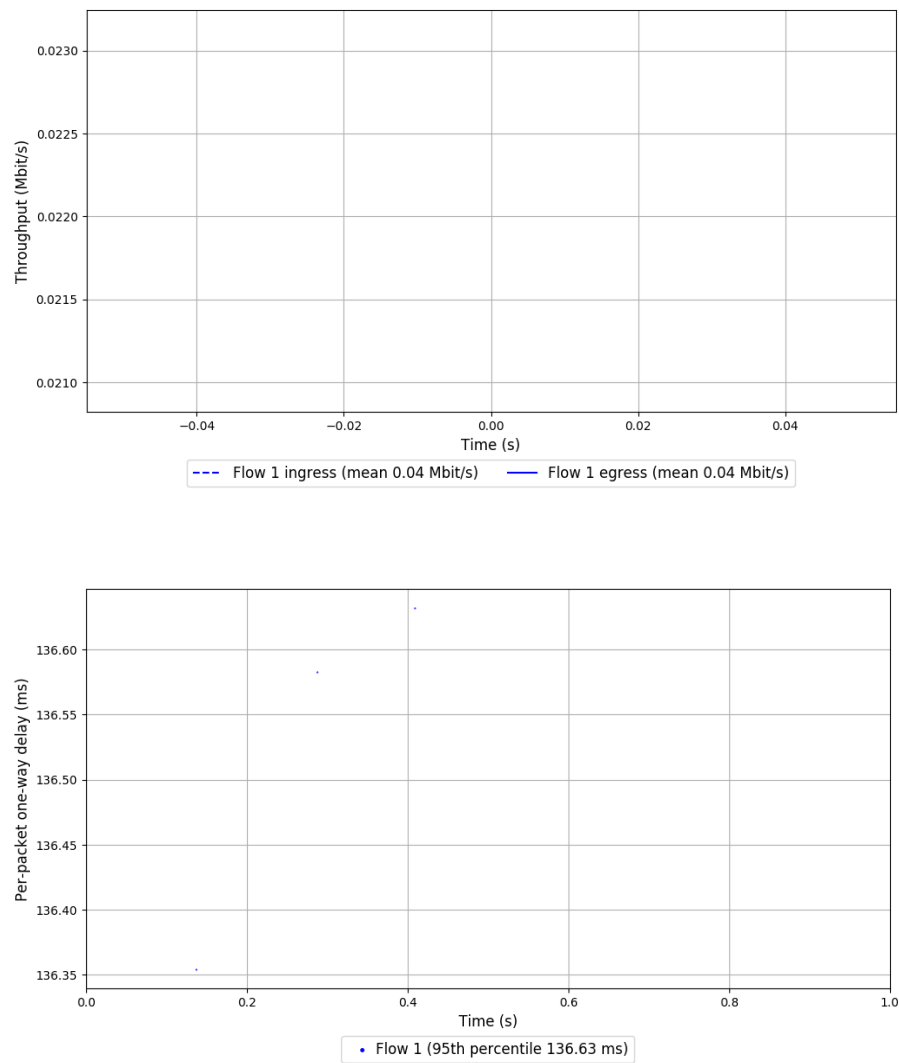


Run 5: Statistics of QUIC Cubic

Start at: 2018-01-02 10:31:37

End at: 2018-01-02 10:32:07

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-02 10:43:42

End at: 2018-01-02 10:44:12

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.17 Mbit/s

95th percentile per-packet one-way delay: 136.312 ms

Loss rate: 1.66%

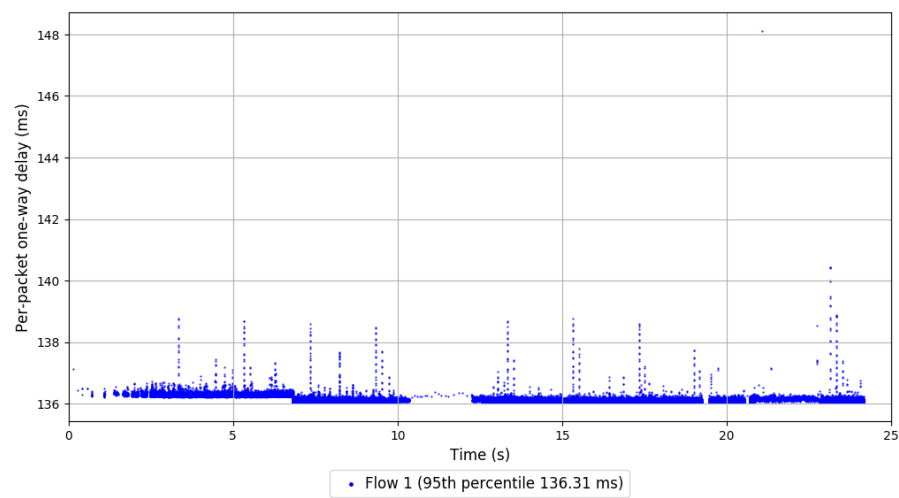
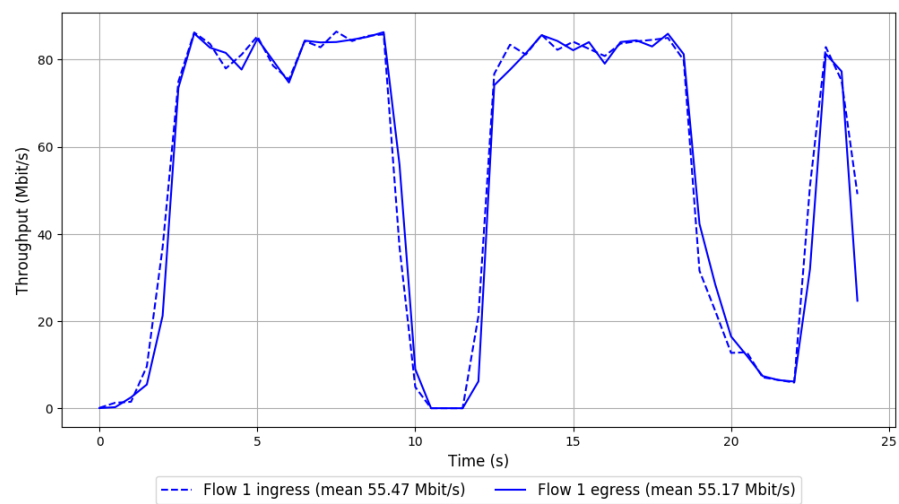
-- Flow 1:

Average throughput: 55.17 Mbit/s

95th percentile per-packet one-way delay: 136.312 ms

Loss rate: 1.66%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-02 10:56:37

End at: 2018-01-02 10:57:07

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.63 Mbit/s

95th percentile per-packet one-way delay: 136.575 ms

Loss rate: 0.99%

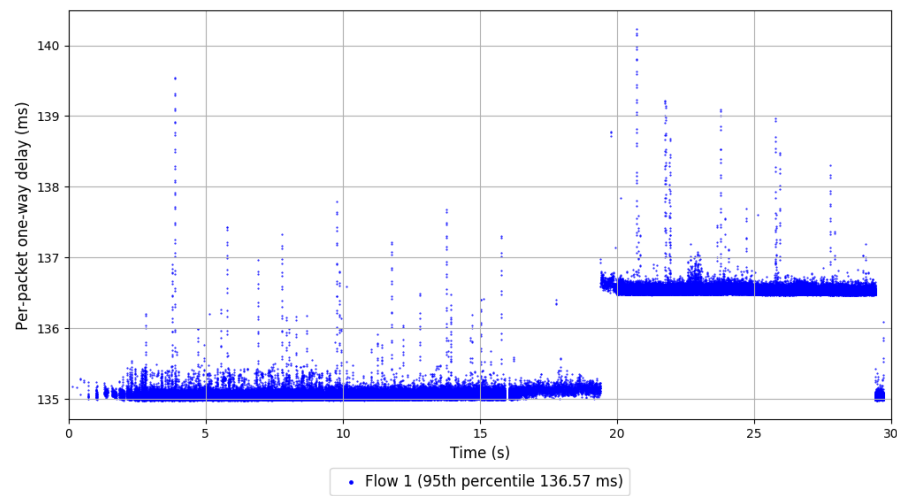
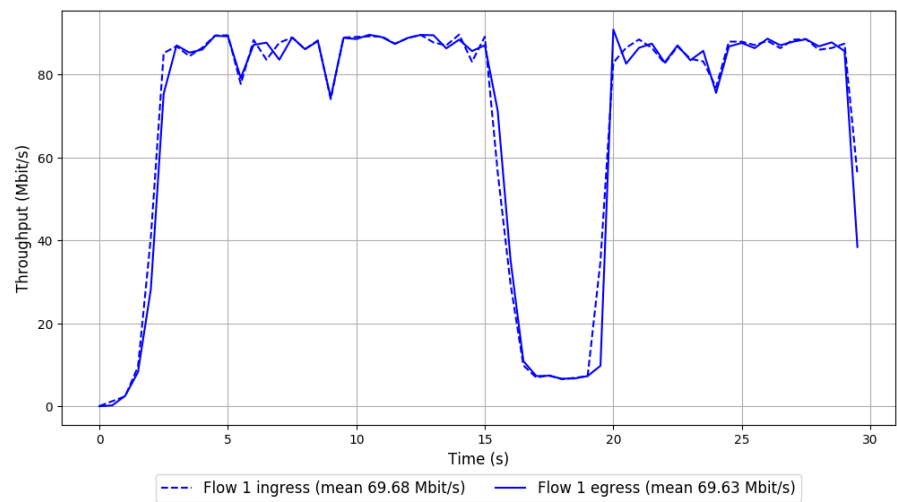
-- Flow 1:

Average throughput: 69.63 Mbit/s

95th percentile per-packet one-way delay: 136.575 ms

Loss rate: 0.99%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-02 11:09:22

End at: 2018-01-02 11:09:52

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.82 Mbit/s

95th percentile per-packet one-way delay: 136.510 ms

Loss rate: 1.45%

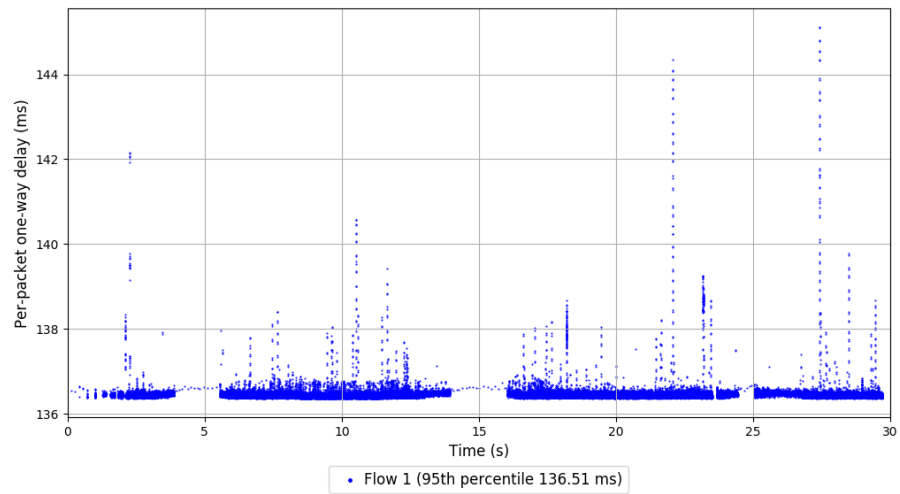
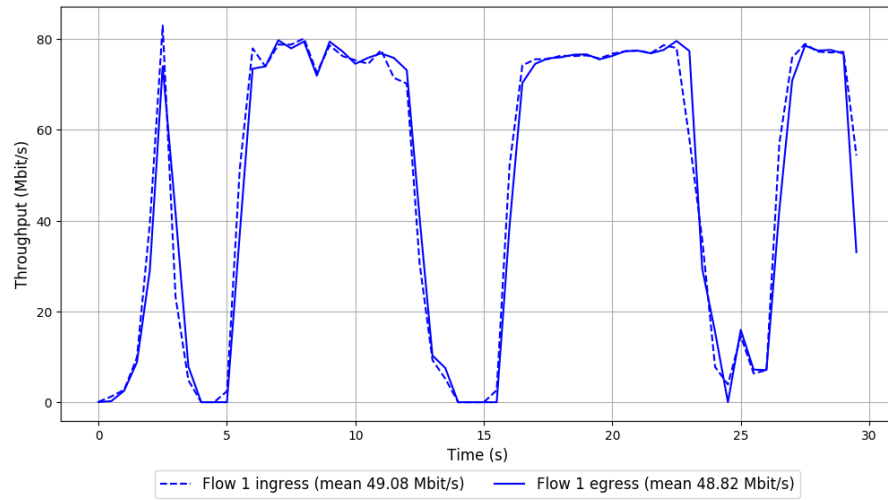
-- Flow 1:

Average throughput: 48.82 Mbit/s

95th percentile per-packet one-way delay: 136.510 ms

Loss rate: 1.45%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-02 11:21:31

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

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.54 Mbit/s

95th percentile per-packet one-way delay: 136.180 ms

Loss rate: 1.10%

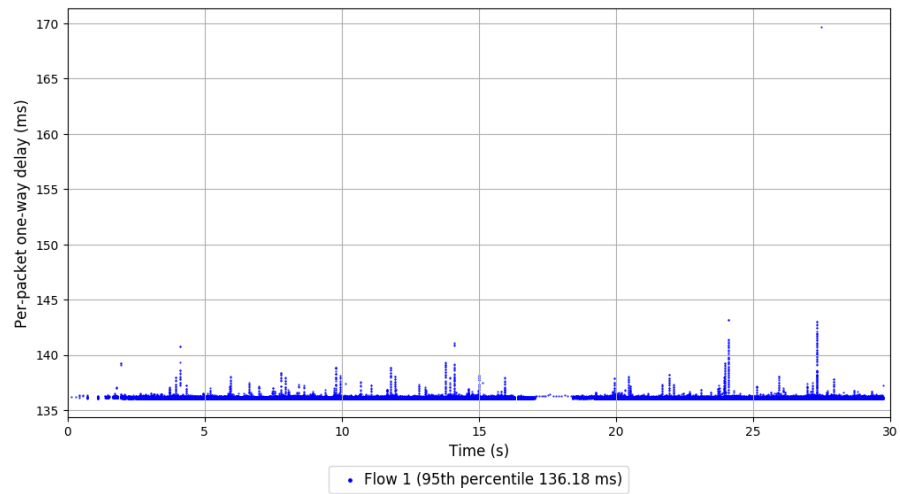
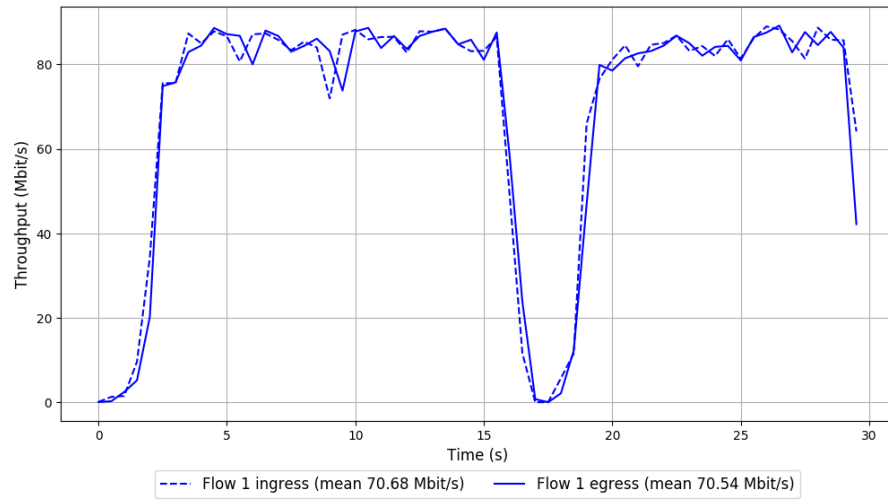
-- Flow 1:

Average throughput: 70.54 Mbit/s

95th percentile per-packet one-way delay: 136.180 ms

Loss rate: 1.10%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-02 11:33:51

End at: 2018-01-02 11:34:21

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.52 Mbit/s

95th percentile per-packet one-way delay: 136.627 ms

Loss rate: 1.32%

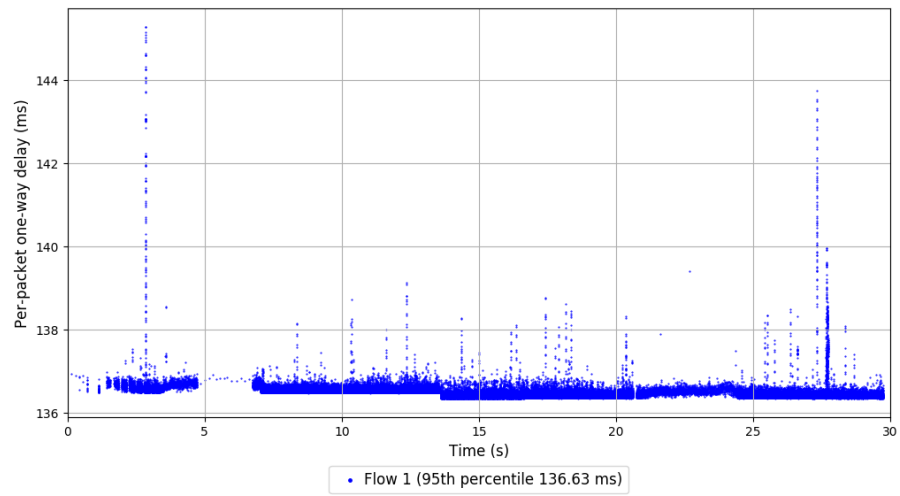
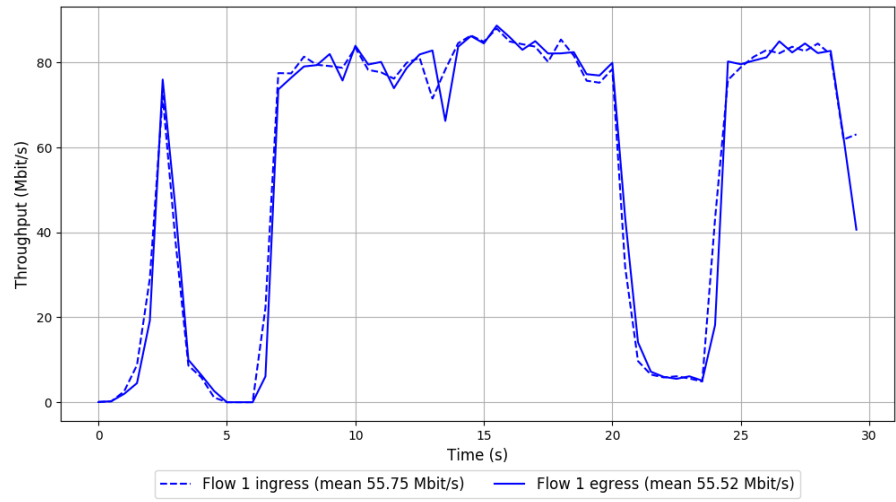
-- Flow 1:

Average throughput: 55.52 Mbit/s

95th percentile per-packet one-way delay: 136.627 ms

Loss rate: 1.32%

Run 10: Report of QUIC Cubic — Data Link

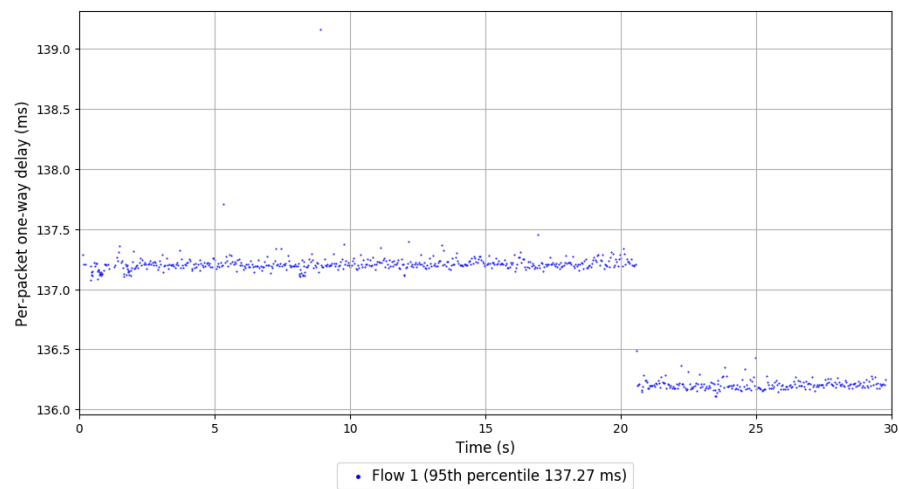
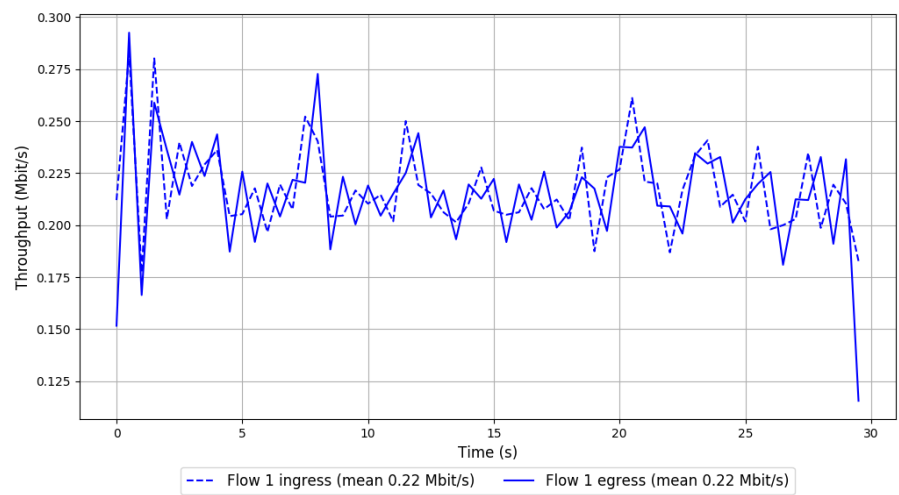


```
Run 1: Statistics of SCReAM

Start at: 2018-01-02 09:48:34
End at: 2018-01-02 09:49:04

# Below is generated by plot.py at 2018-01-02 14:10:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.273 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.273 ms
Loss rate: 0.90%
```

Run 1: Report of SReAM — Data Link

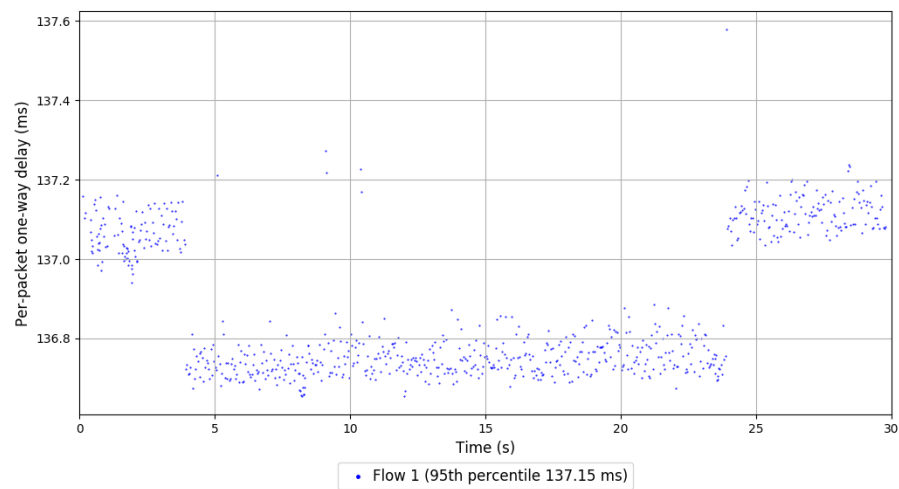
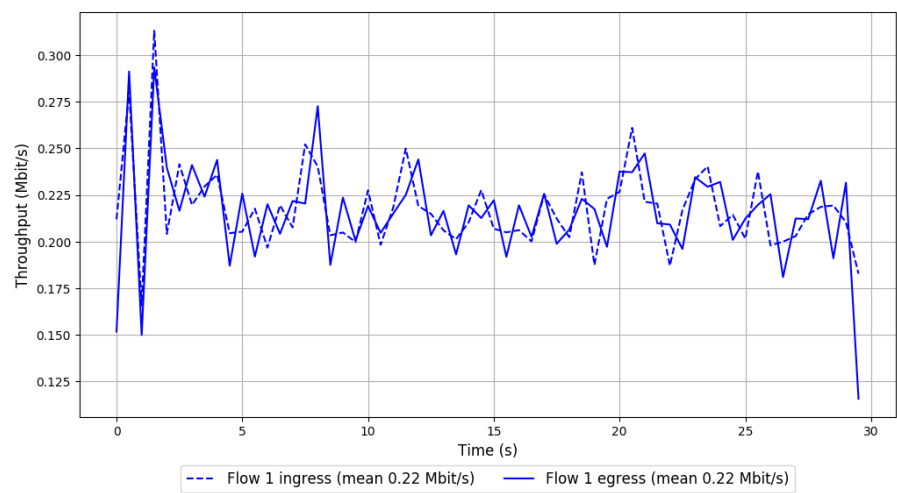


```
Run 2: Statistics of SCReAM

Start at: 2018-01-02 10:01:33
End at: 2018-01-02 10:02:03

# Below is generated by plot.py at 2018-01-02 14:10:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.152 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.152 ms
Loss rate: 0.89%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-02 10:13:53

End at: 2018-01-02 10:14:23

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.399 ms

Loss rate: 0.77%

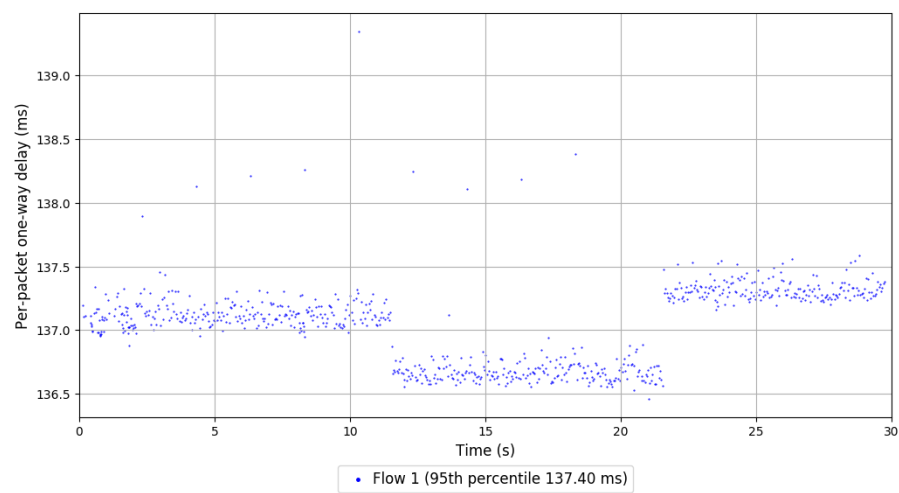
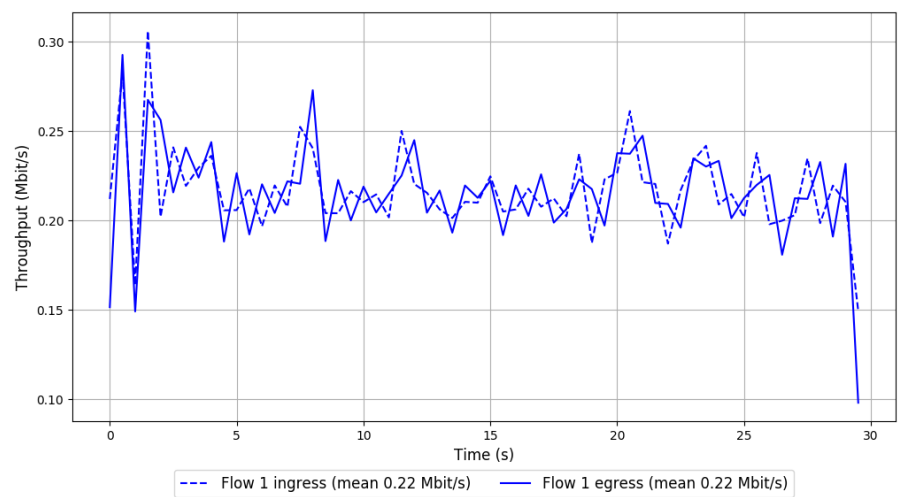
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.399 ms

Loss rate: 0.77%

Run 3: Report of SReAM — Data Link

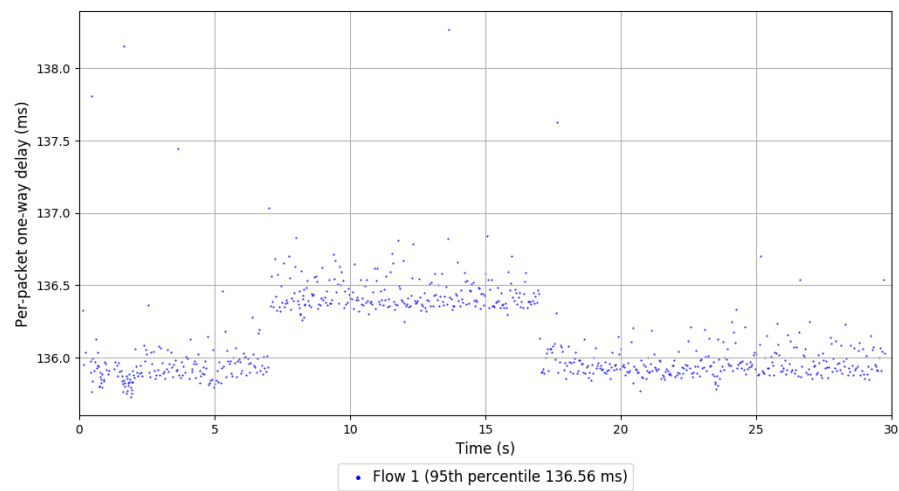
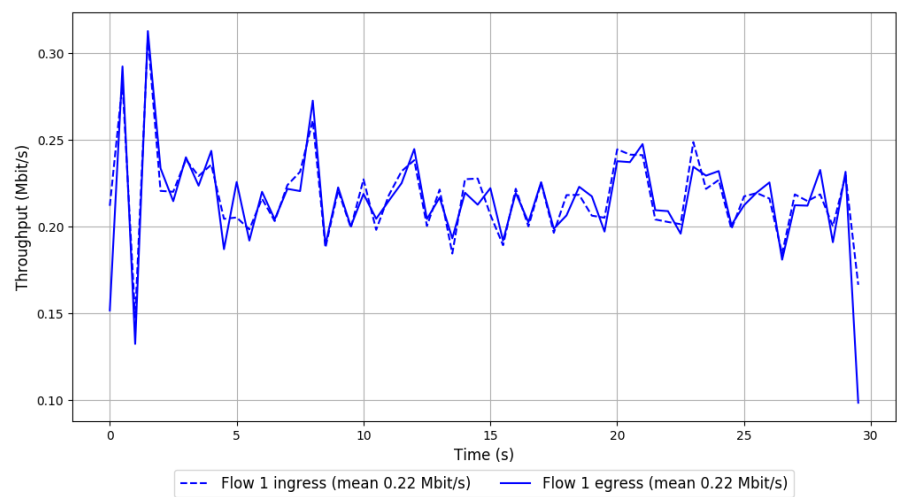


```
Run 4: Statistics of SCReAM

Start at: 2018-01-02 10:26:07
End at: 2018-01-02 10:26:37

# Below is generated by plot.py at 2018-01-02 14:10:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.564 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.564 ms
Loss rate: 0.90%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-02 10:38:03

End at: 2018-01-02 10:38:33

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.533 ms

Loss rate: 0.90%

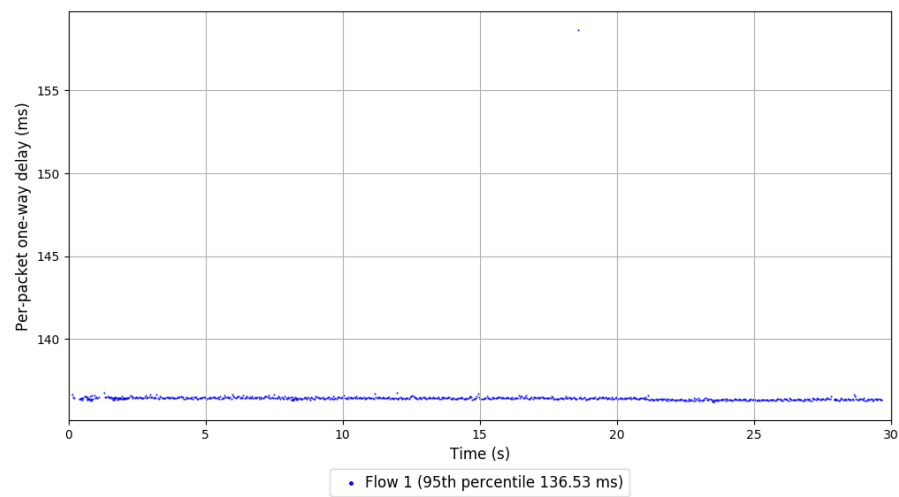
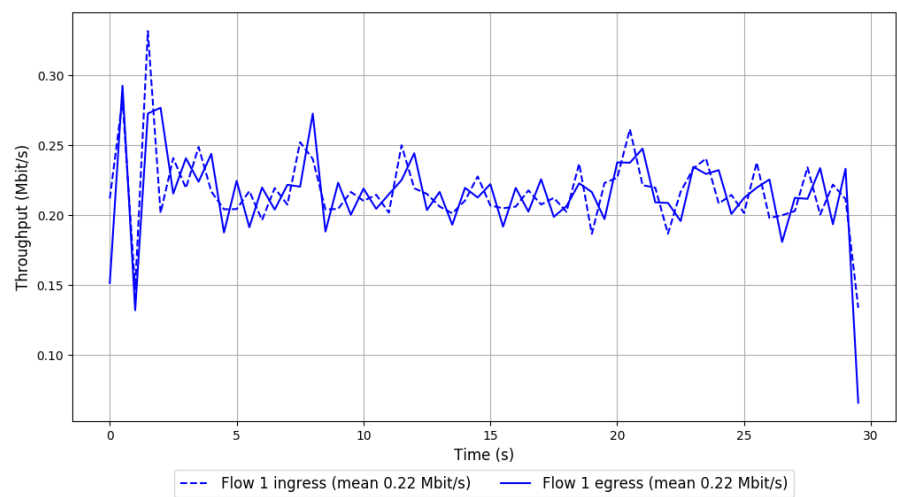
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.533 ms

Loss rate: 0.90%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-02 10:50:59

End at: 2018-01-02 10:51:29

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.066 ms

Loss rate: 0.89%

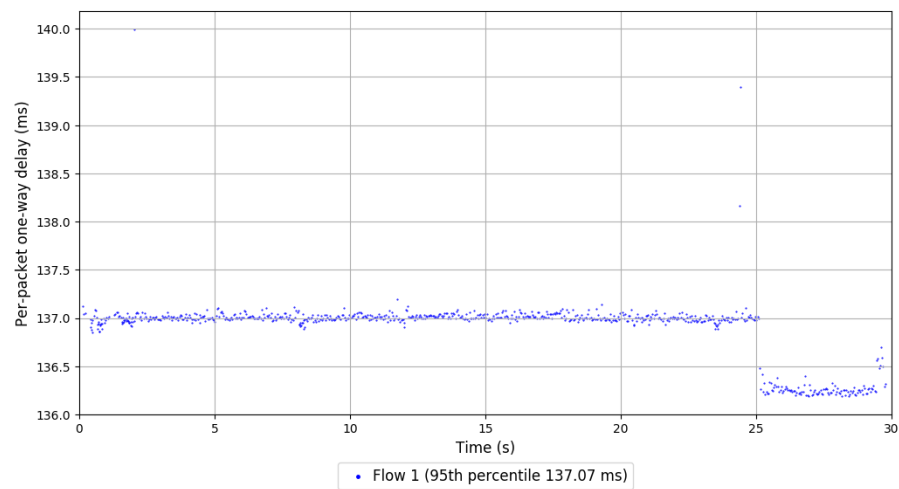
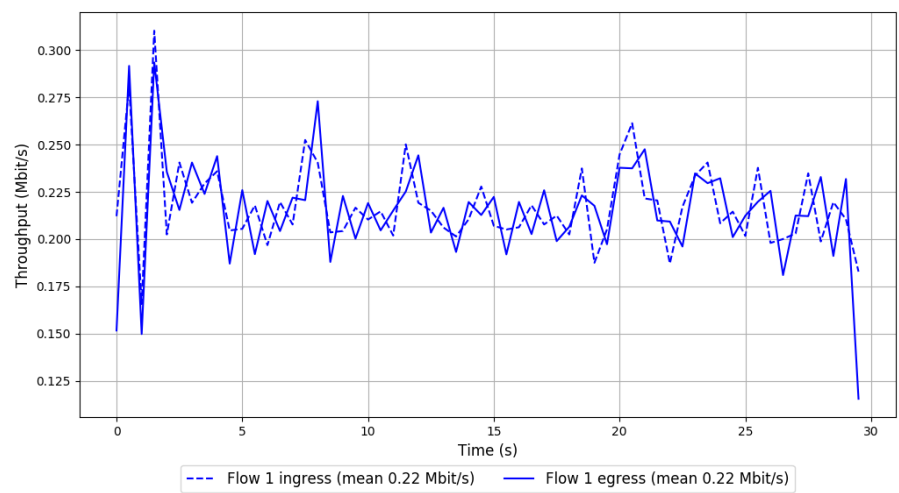
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.066 ms

Loss rate: 0.89%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-02 11:03:54

End at: 2018-01-02 11:04:24

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 162.290 ms

Loss rate: 0.96%

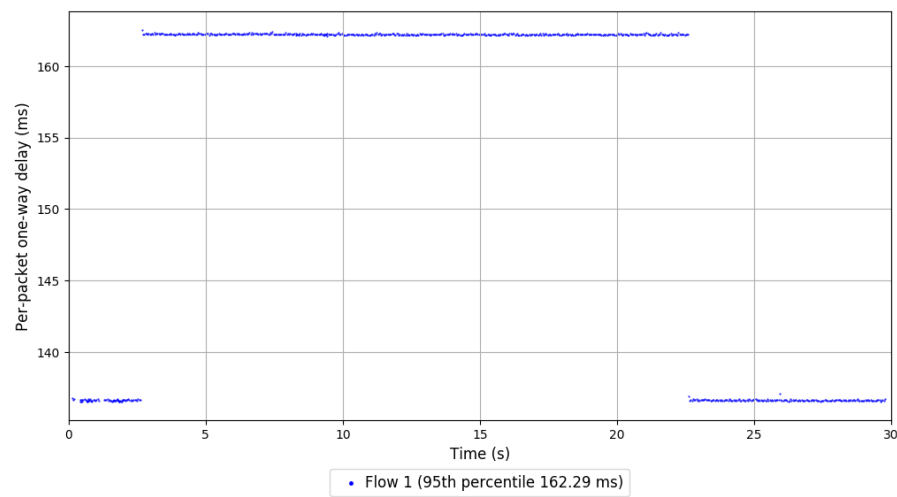
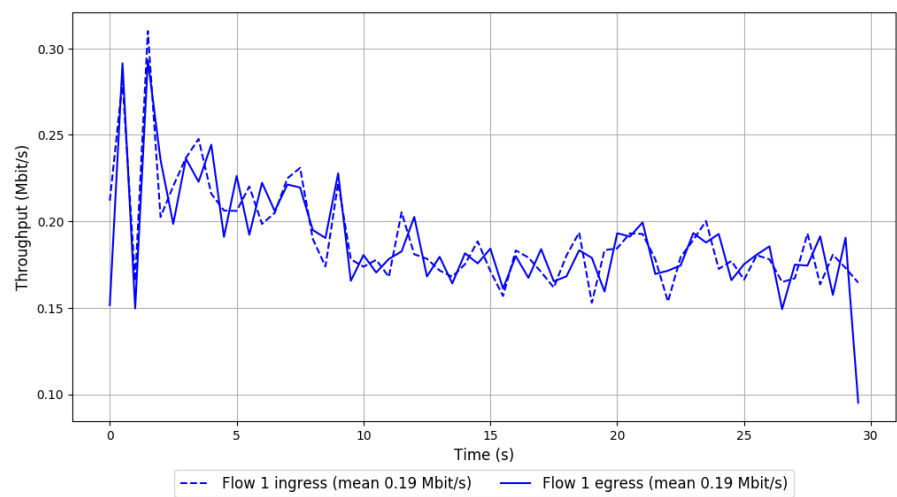
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 162.290 ms

Loss rate: 0.96%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-02 11:16:21

End at: 2018-01-02 11:16:51

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.831 ms

Loss rate: 0.90%

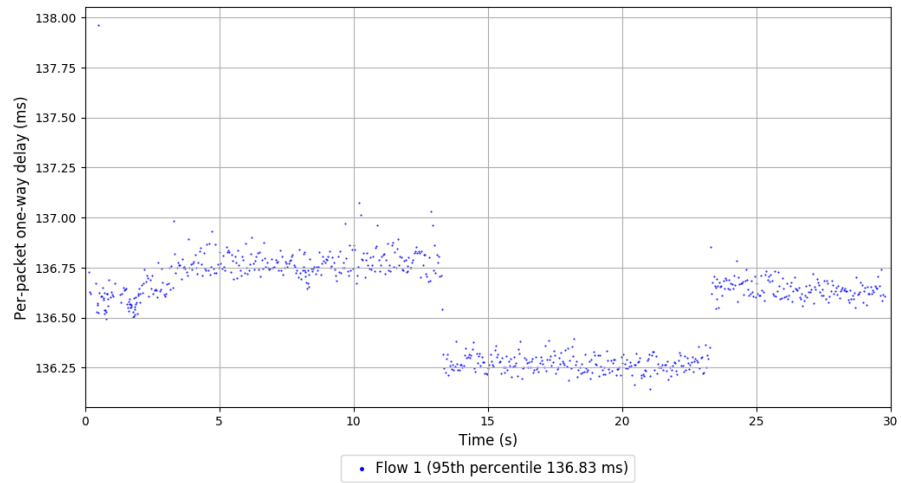
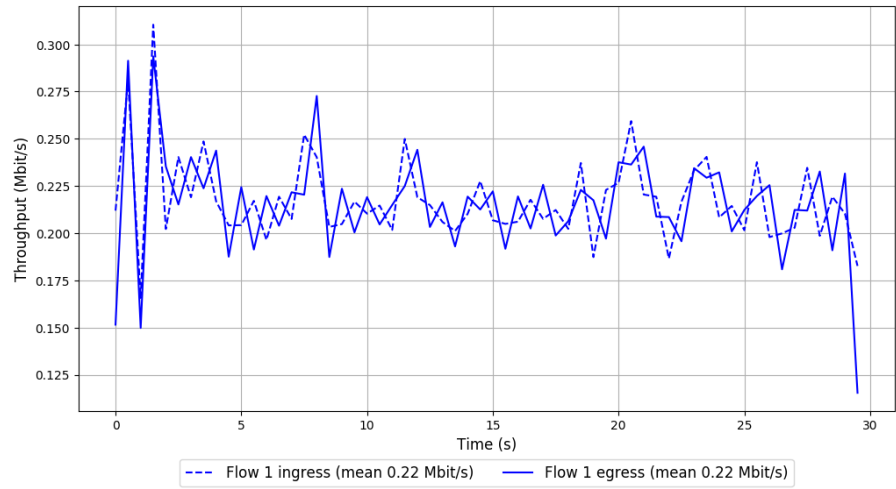
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.831 ms

Loss rate: 0.90%

Run 8: Report of SCRaM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-02 11:28:37

End at: 2018-01-02 11:29:07

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.540 ms

Loss rate: 0.89%

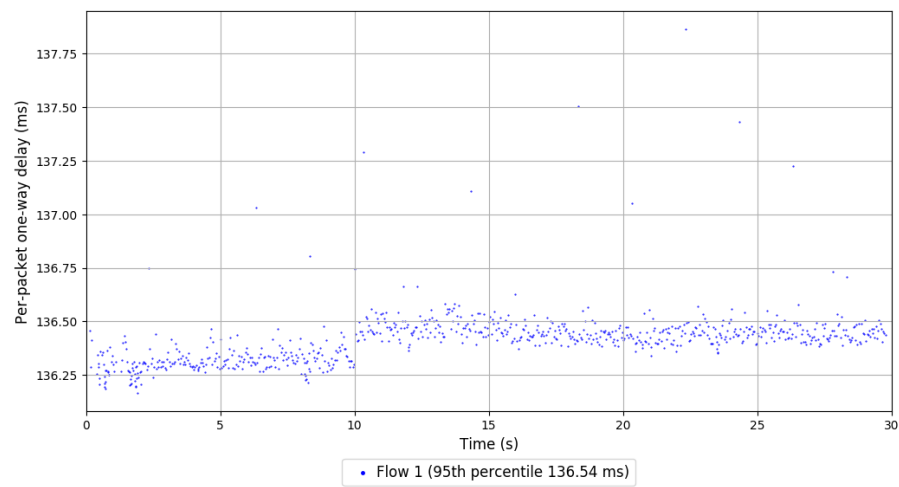
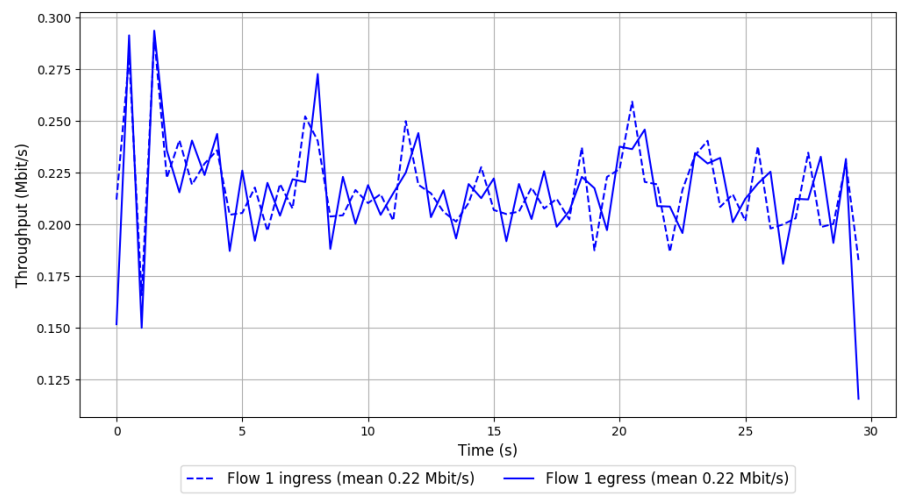
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.540 ms

Loss rate: 0.89%

Run 9: Report of SReAM — Data Link

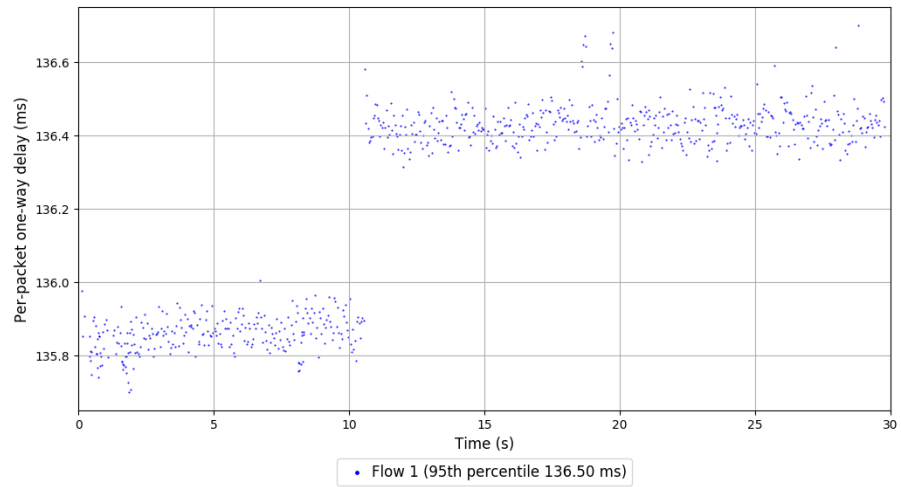
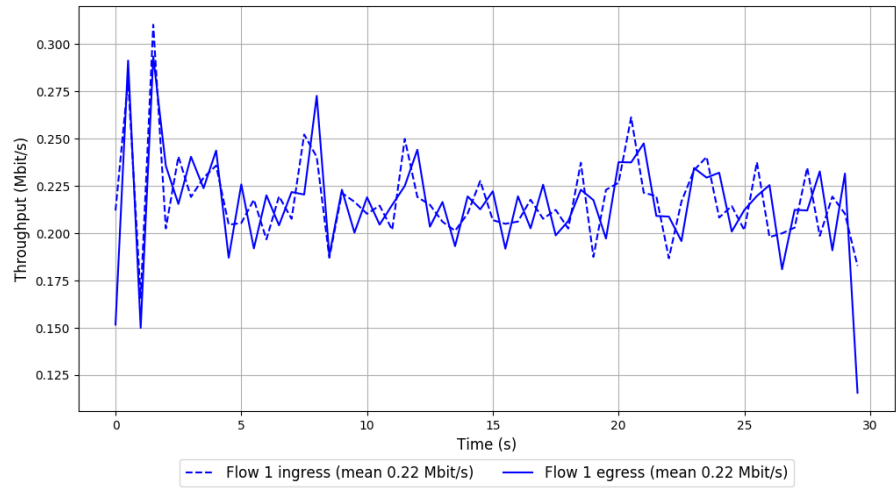


```
Run 10: Statistics of SReAM

Start at: 2018-01-02 11:40:36
End at: 2018-01-02 11:41:06

# Below is generated by plot.py at 2018-01-02 14:10:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.495 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.495 ms
Loss rate: 0.89%
```

Run 10: Report of SReAM — Data Link

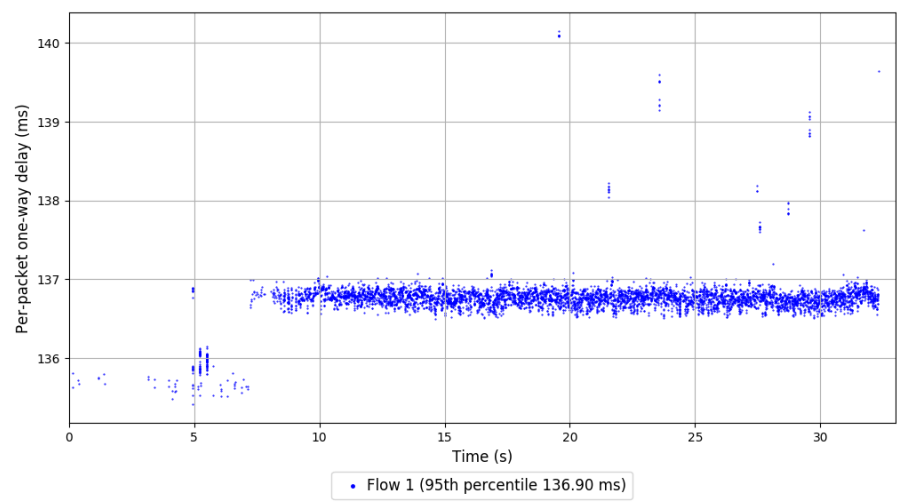
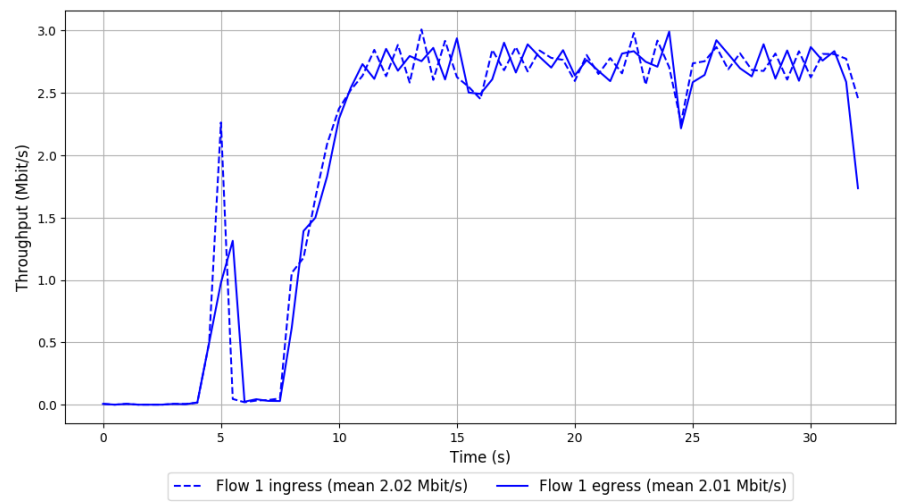


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-02 09:51:32
End at: 2018-01-02 09:52:02

# Below is generated by plot.py at 2018-01-02 14:10:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 136.900 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 136.900 ms
Loss rate: 1.20%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-02 10:04:29

End at: 2018-01-02 10:04:59

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 136.498 ms

Loss rate: 0.92%

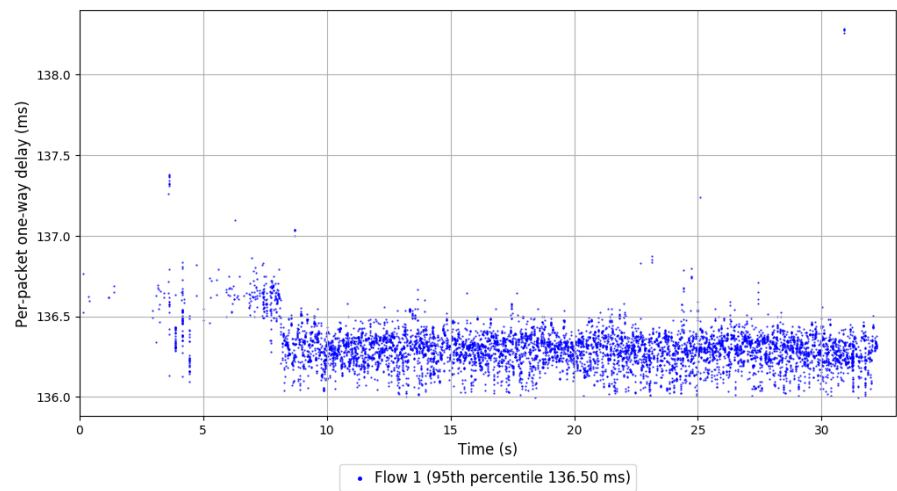
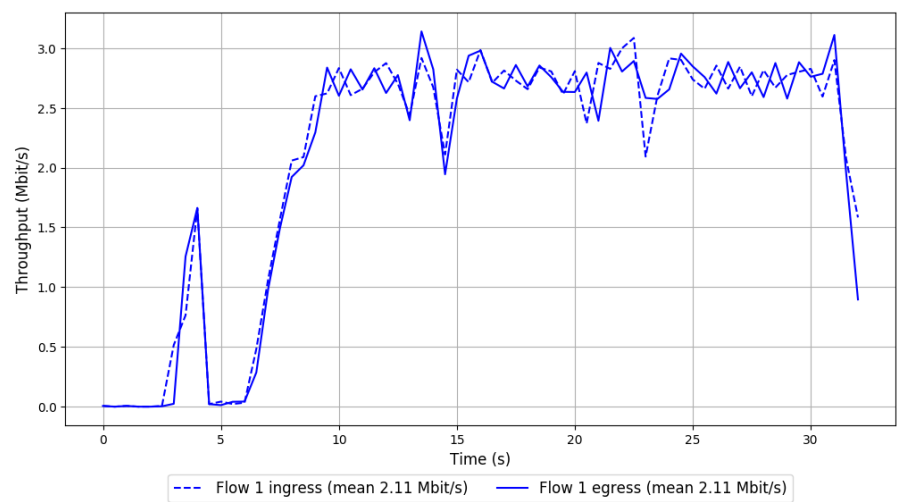
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 136.498 ms

Loss rate: 0.92%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-02 10:16:52

End at: 2018-01-02 10:17:22

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

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

Loss rate: 1.27%

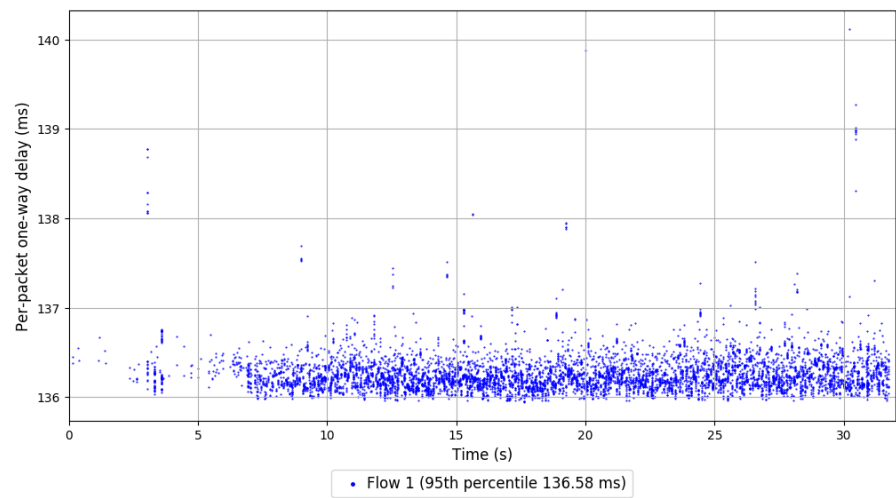
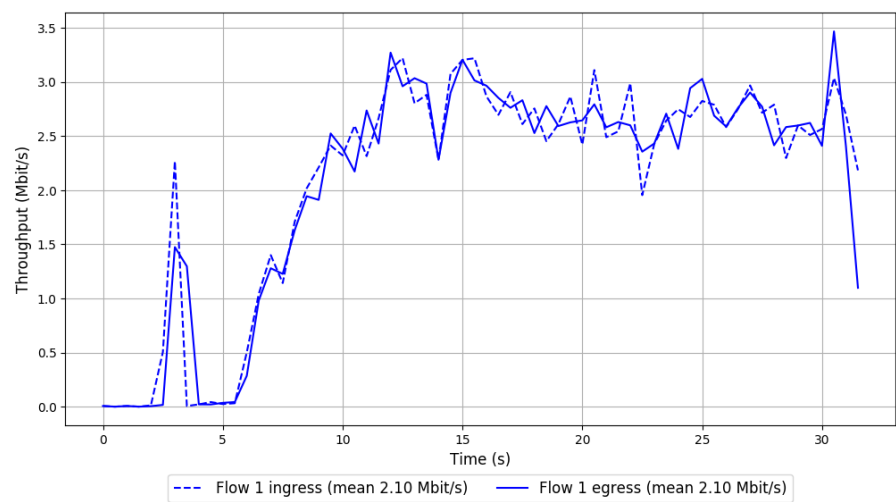
-- Flow 1:

Average throughput: 2.10 Mbit/s

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

Loss rate: 1.27%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-02 10:29:04

End at: 2018-01-02 10:29:34

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 136.650 ms

Loss rate: 1.21%

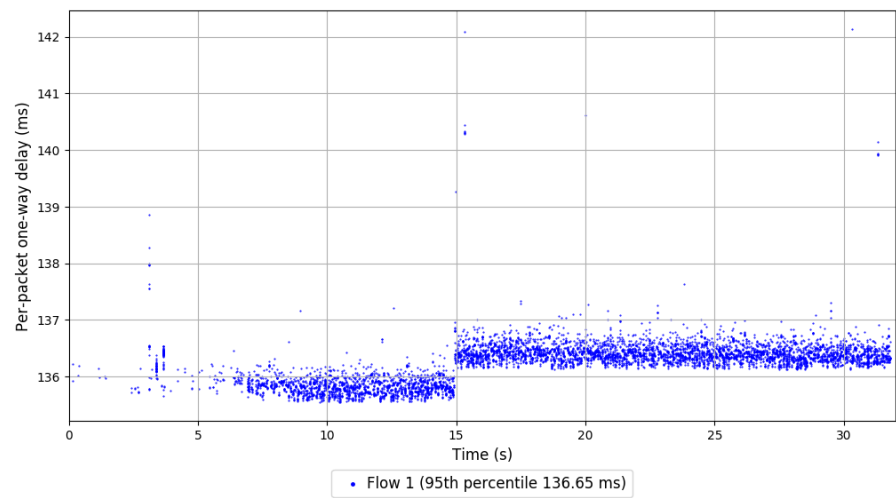
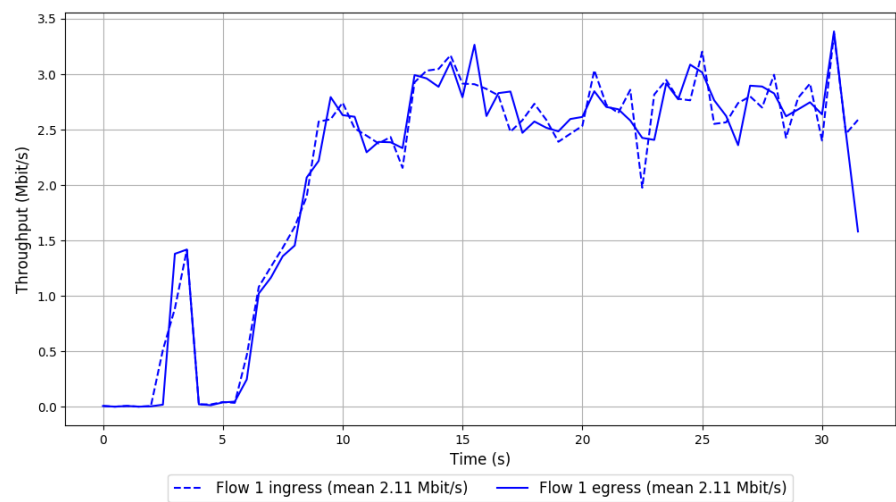
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 136.650 ms

Loss rate: 1.21%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-02 10:41:01

End at: 2018-01-02 10:41:31

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 136.890 ms

Loss rate: 0.89%

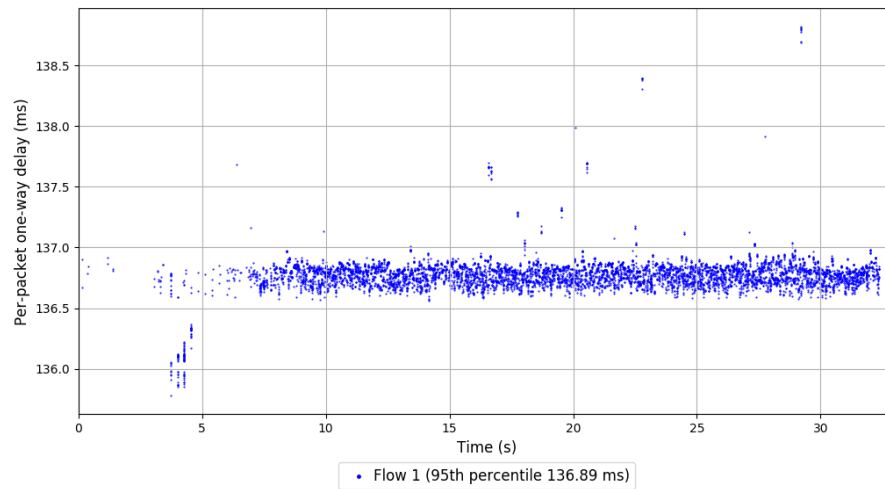
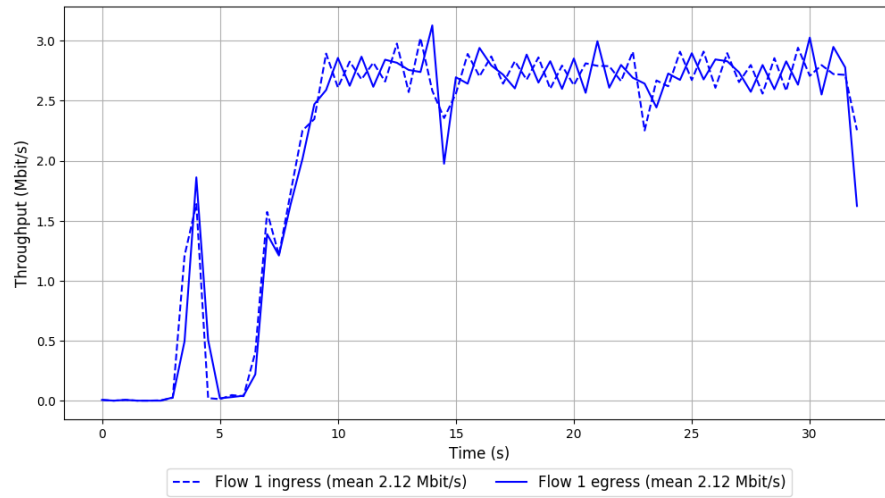
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 136.890 ms

Loss rate: 0.89%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-02 10:53:58

End at: 2018-01-02 10:54:28

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

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

Loss rate: 1.00%

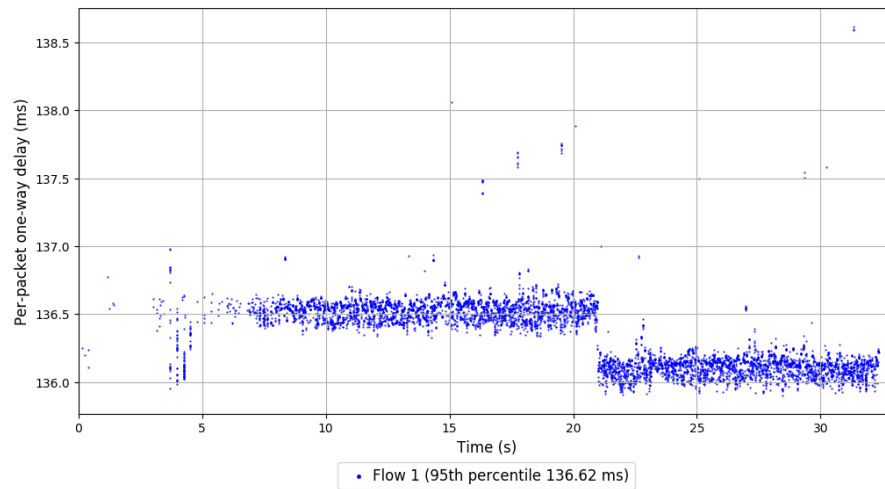
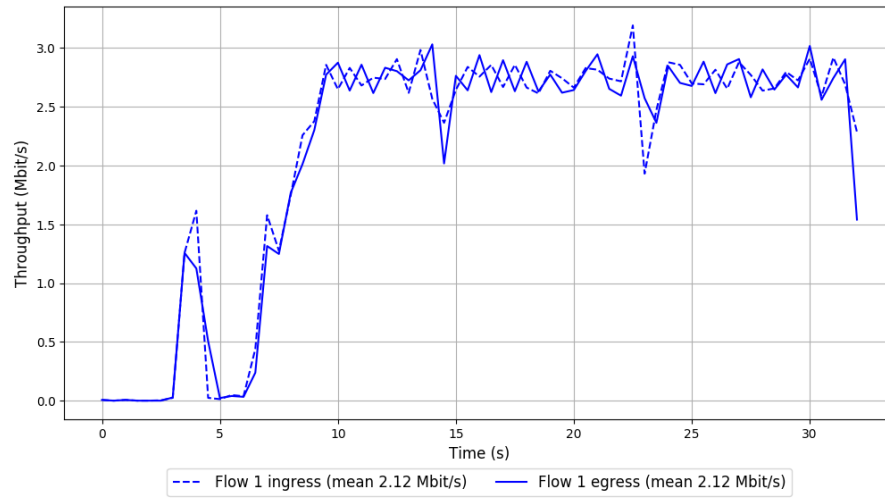
-- Flow 1:

Average throughput: 2.12 Mbit/s

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

Loss rate: 1.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-02 11:06:52

End at: 2018-01-02 11:07:22

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 136.606 ms

Loss rate: 0.85%

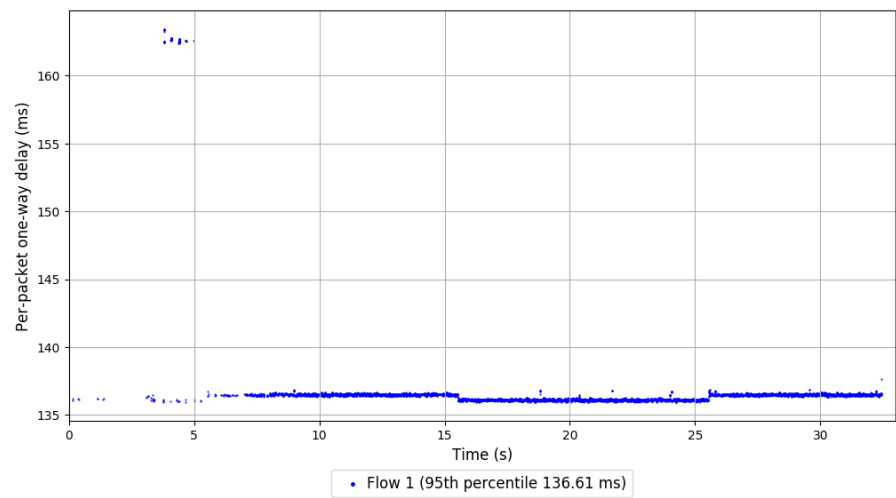
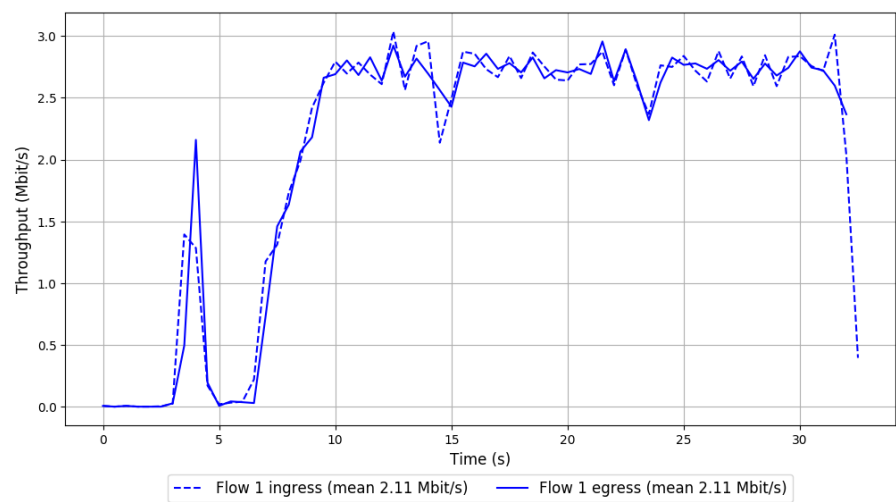
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 136.606 ms

Loss rate: 0.85%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-02 11:19:20

End at: 2018-01-02 11:19:50

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 136.398 ms

Loss rate: 0.85%

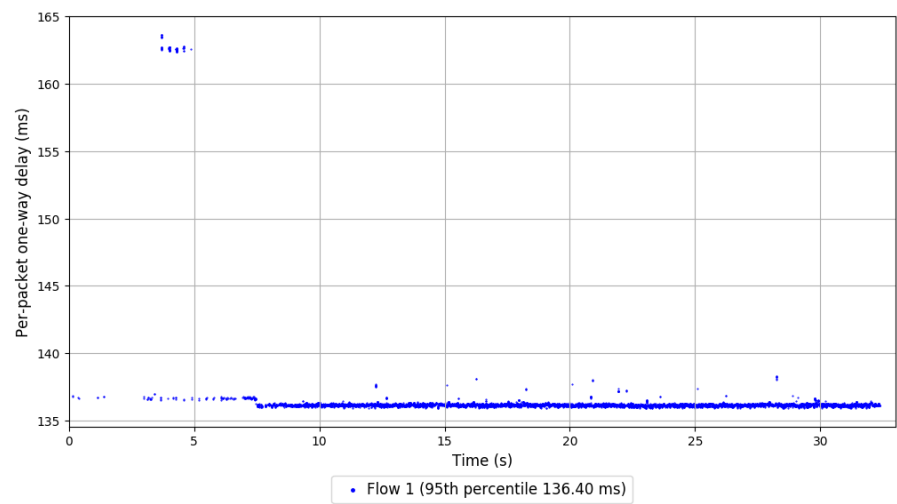
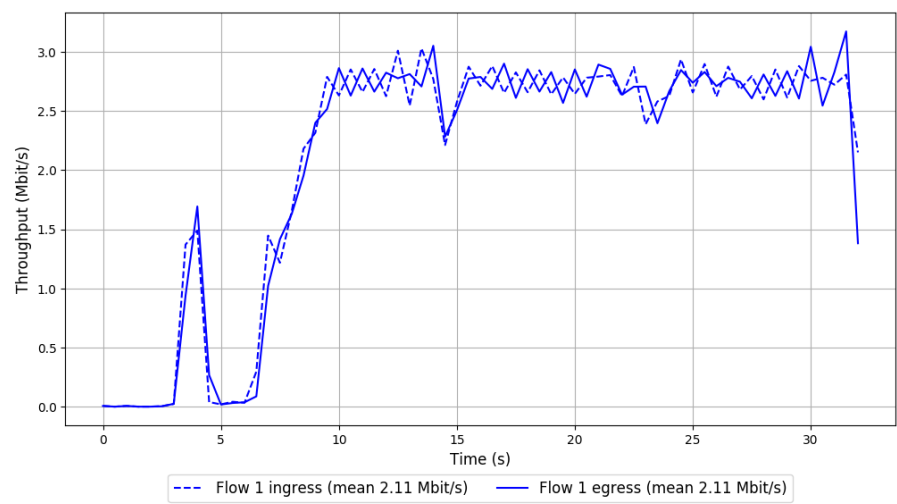
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 136.398 ms

Loss rate: 0.85%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-02 11:31:34

End at: 2018-01-02 11:32:04

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 162.278 ms

Loss rate: 1.04%

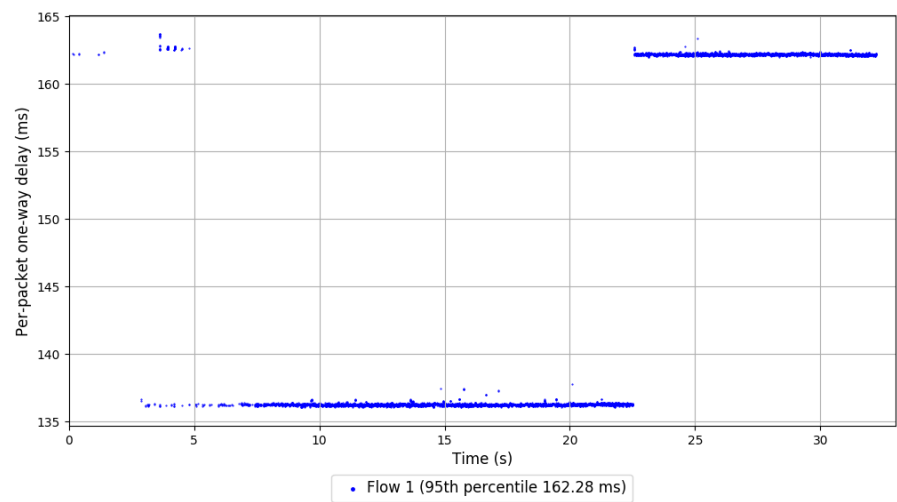
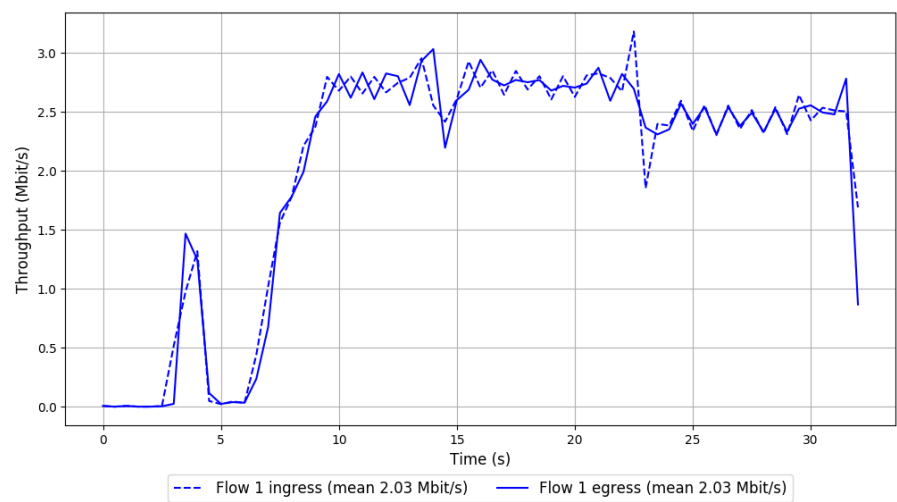
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 162.278 ms

Loss rate: 1.04%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-02 11:43:32

End at: 2018-01-02 11:44:02

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 137.116 ms

Loss rate: 1.01%

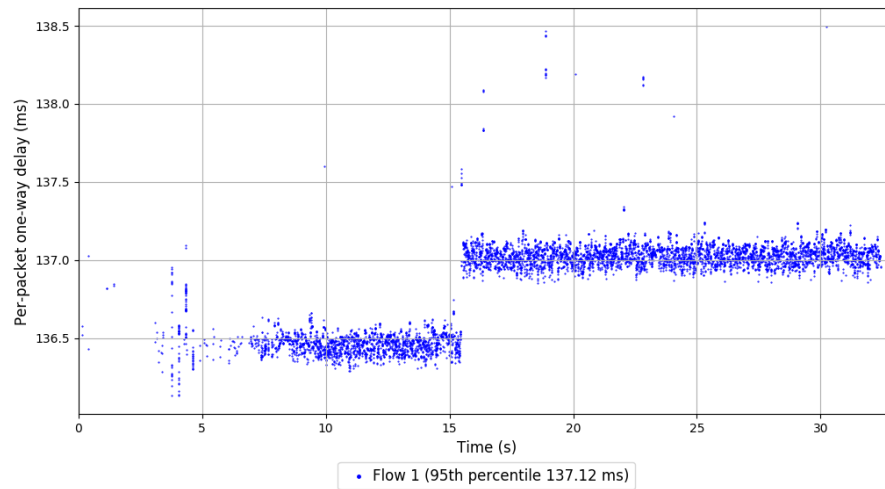
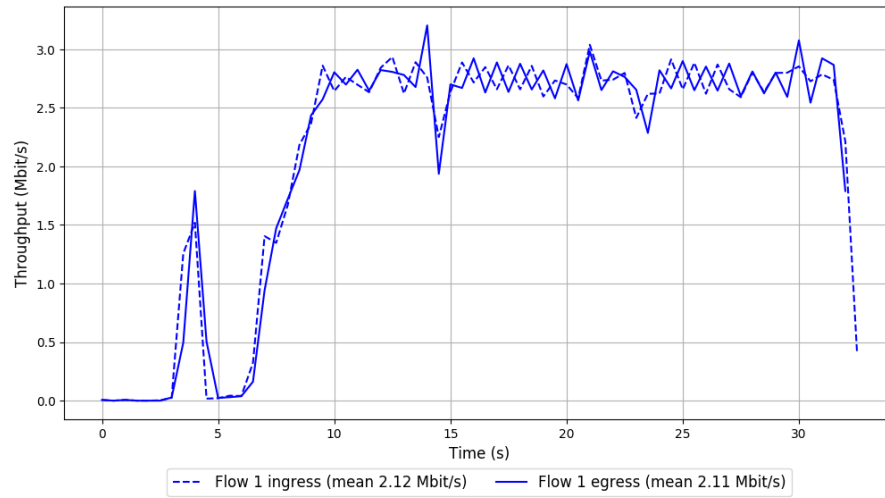
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 137.116 ms

Loss rate: 1.01%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-02 09:49:16

End at: 2018-01-02 09:49:46

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 136.804 ms

Loss rate: 0.89%

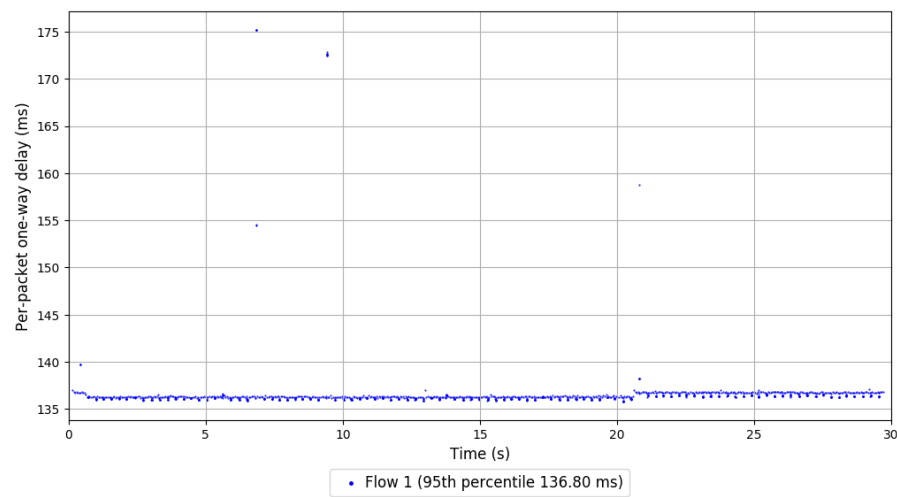
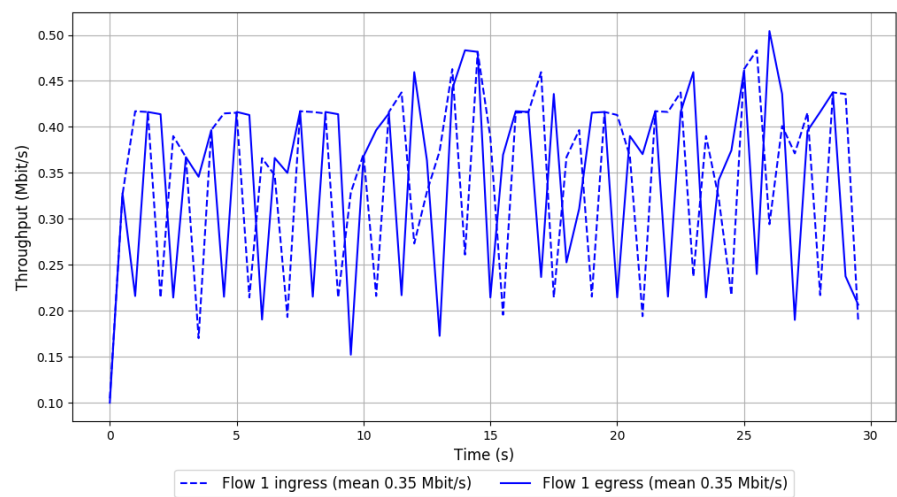
-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 136.804 ms

Loss rate: 0.89%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-02 10:02:15

End at: 2018-01-02 10:02:45

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

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

Loss rate: 1.28%

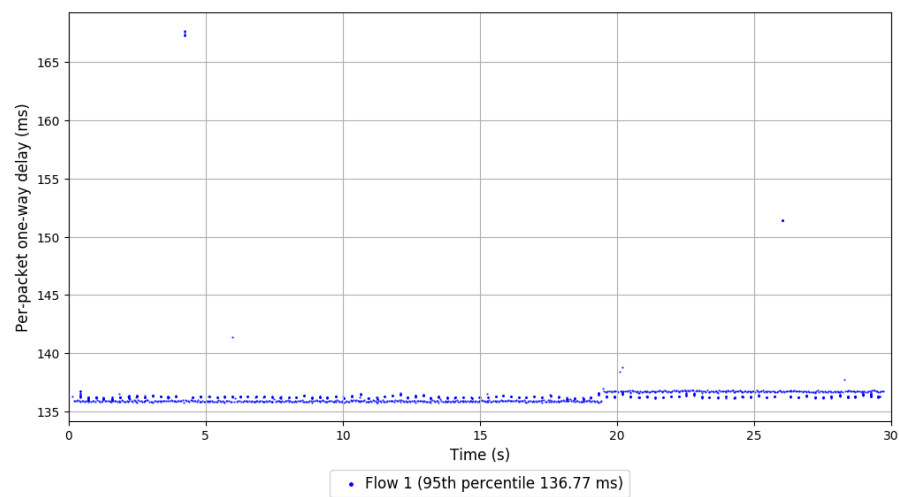
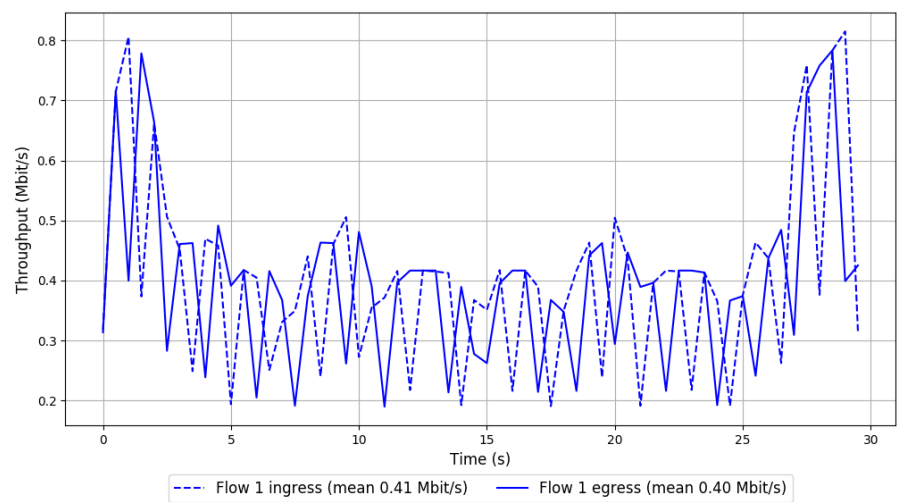
-- Flow 1:

Average throughput: 0.40 Mbit/s

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

Loss rate: 1.28%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-02 10:14:35

End at: 2018-01-02 10:15:05

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

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

Loss rate: 0.93%

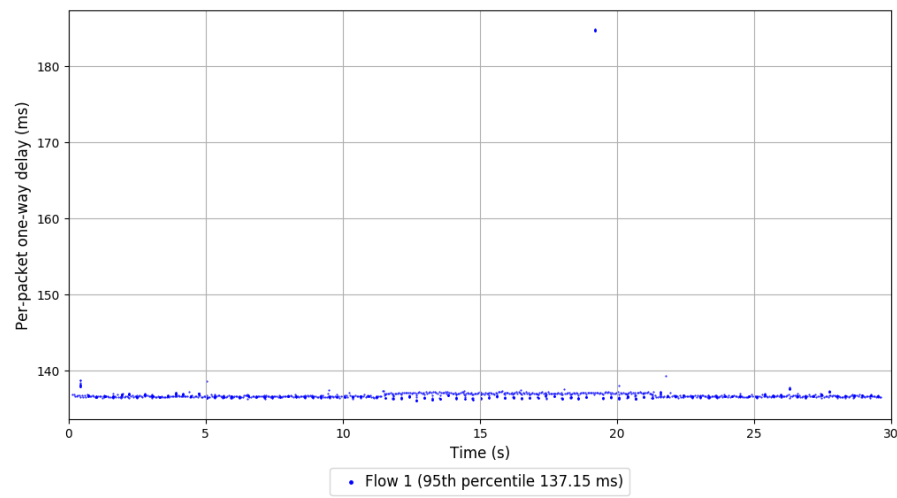
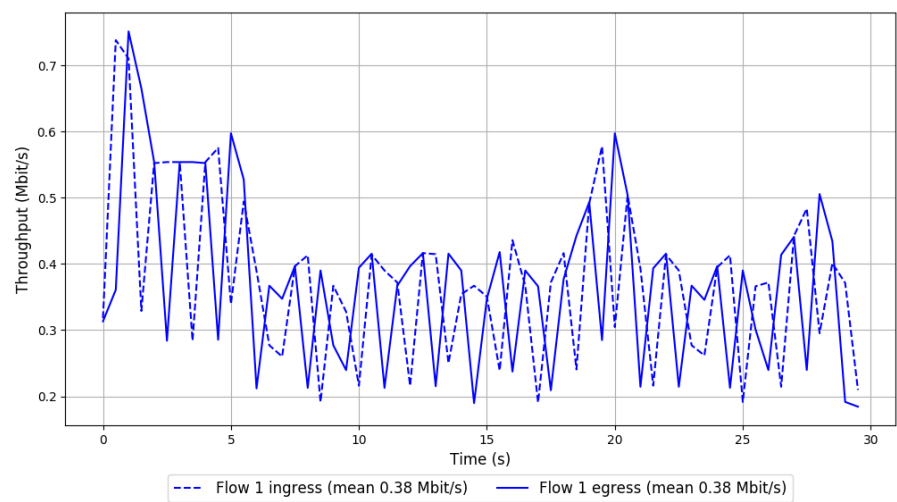
-- Flow 1:

Average throughput: 0.38 Mbit/s

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

Loss rate: 0.93%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-02 10:26:50

End at: 2018-01-02 10:27:20

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 136.806 ms

Loss rate: 0.97%

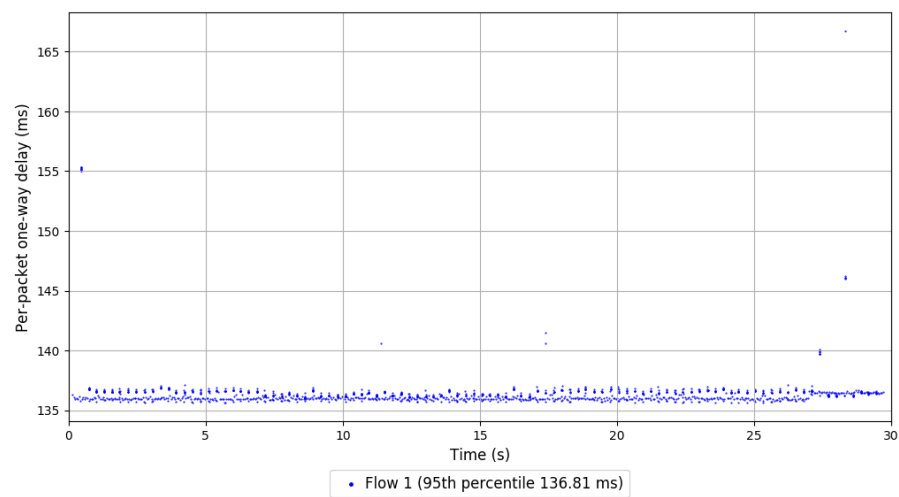
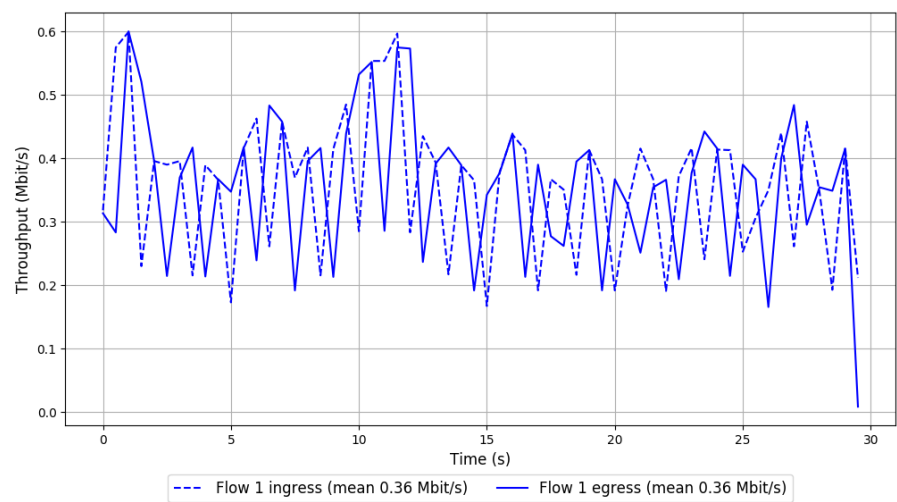
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 136.806 ms

Loss rate: 0.97%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-02 10:38:45

End at: 2018-01-02 10:39:15

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 136.702 ms

Loss rate: 0.91%

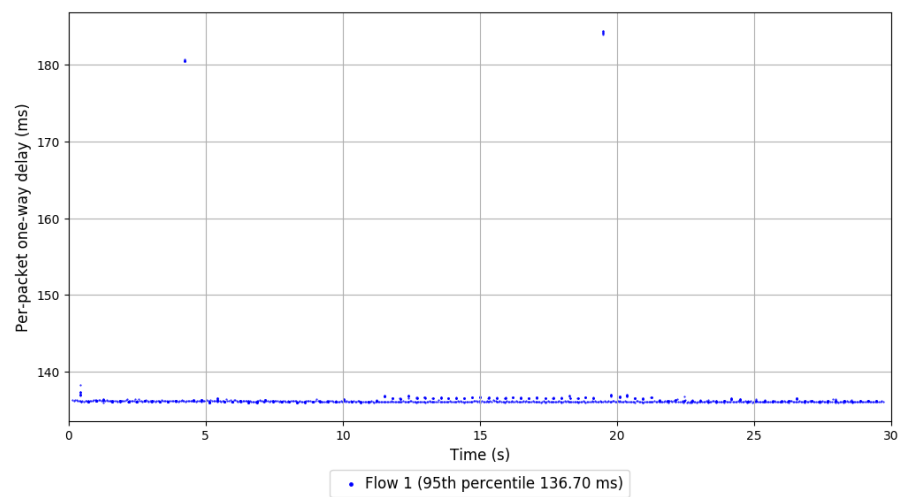
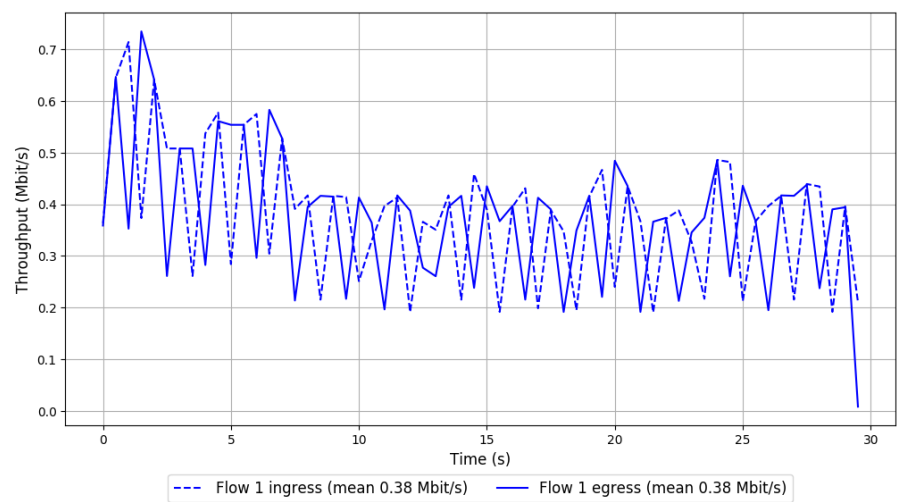
-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 136.702 ms

Loss rate: 0.91%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-02 10:51:42

End at: 2018-01-02 10:52:12

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.740 ms

Loss rate: 0.86%

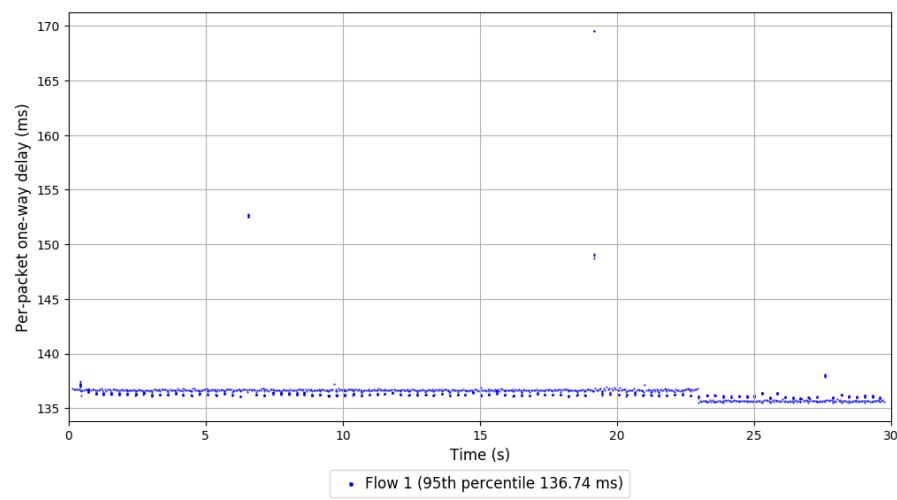
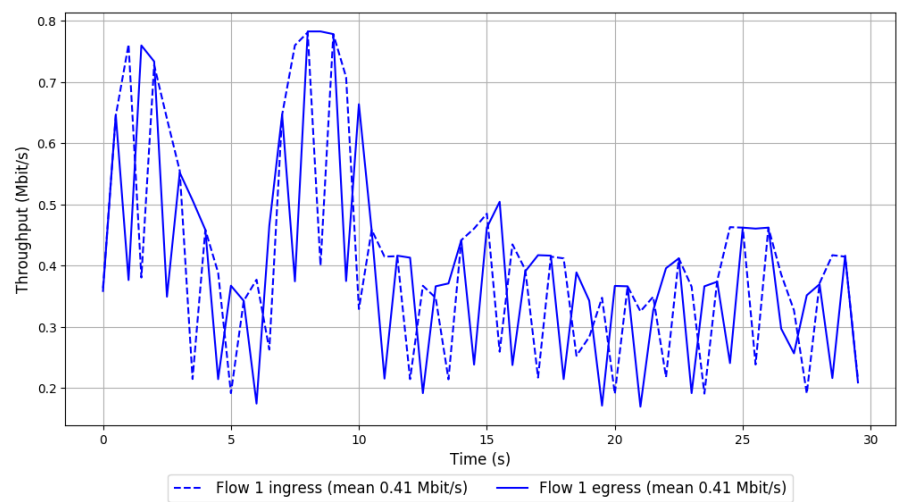
-- Flow 1:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.740 ms

Loss rate: 0.86%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-02 11:04:36

End at: 2018-01-02 11:05:06

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 162.529 ms

Loss rate: 0.52%

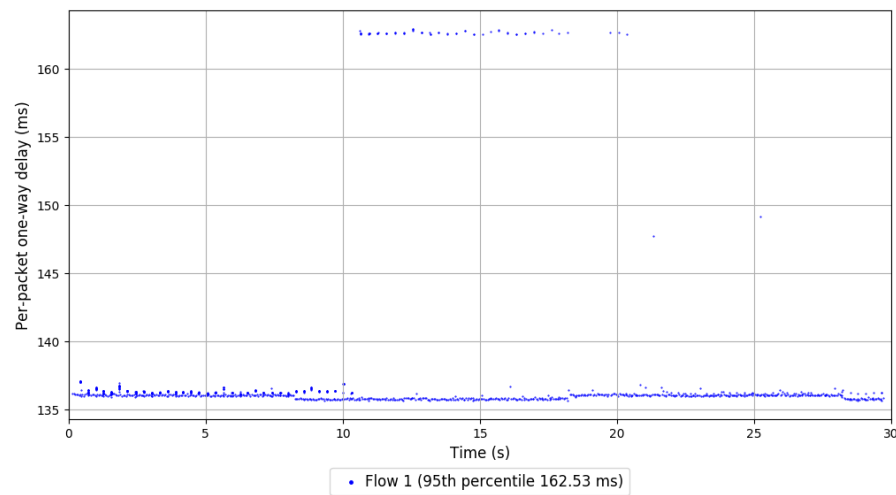
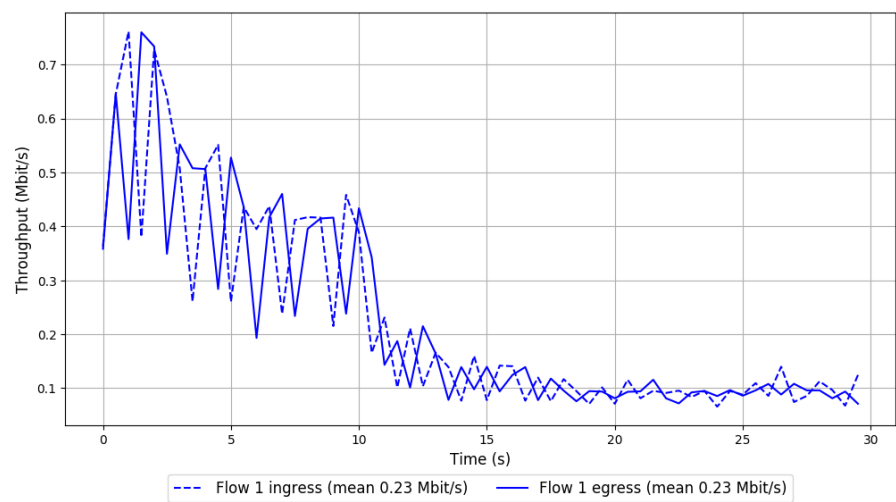
-- Flow 1:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 162.529 ms

Loss rate: 0.52%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-02 11:17:03

End at: 2018-01-02 11:17:33

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 162.756 ms

Loss rate: 0.25%

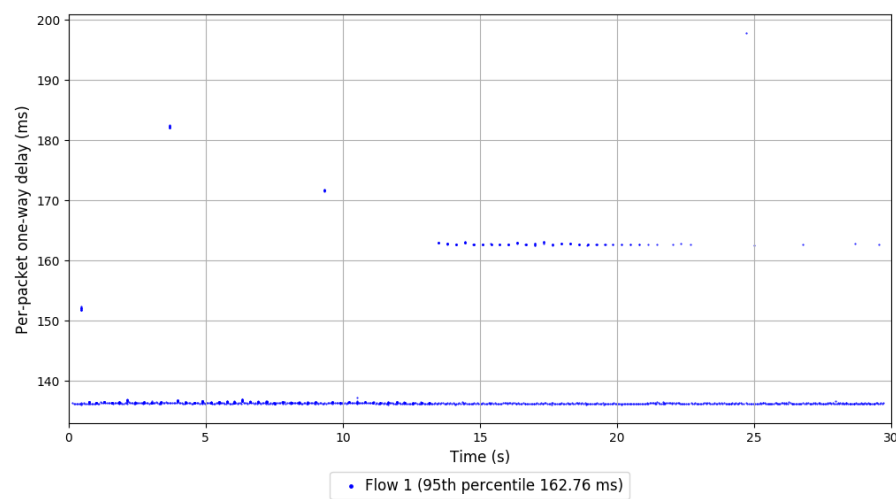
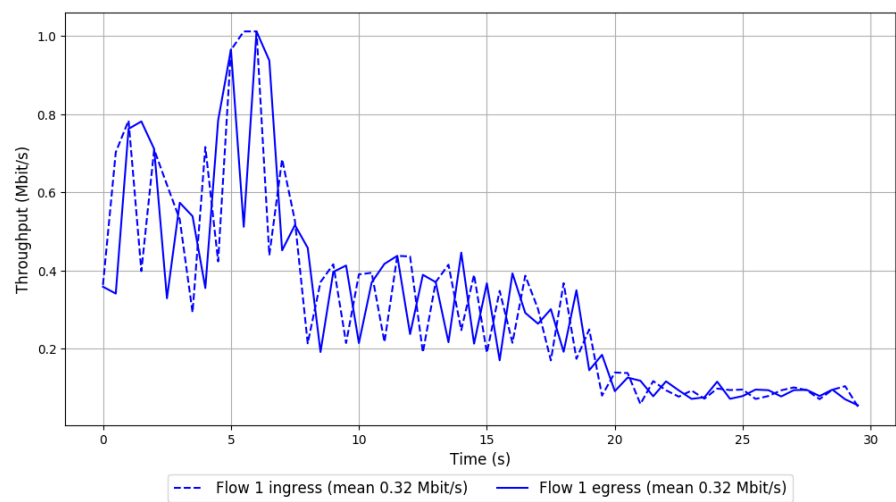
-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 162.756 ms

Loss rate: 0.25%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-02 11:29:19

End at: 2018-01-02 11:29:49

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 162.769 ms

Loss rate: 1.80%

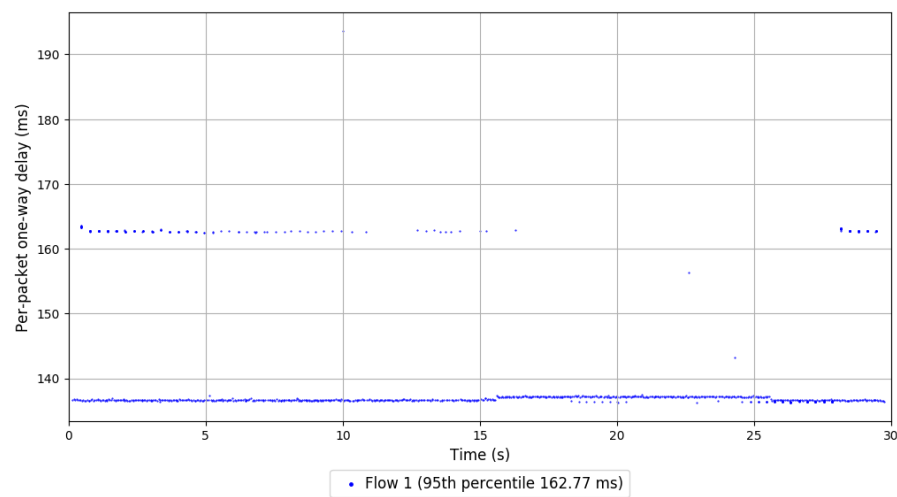
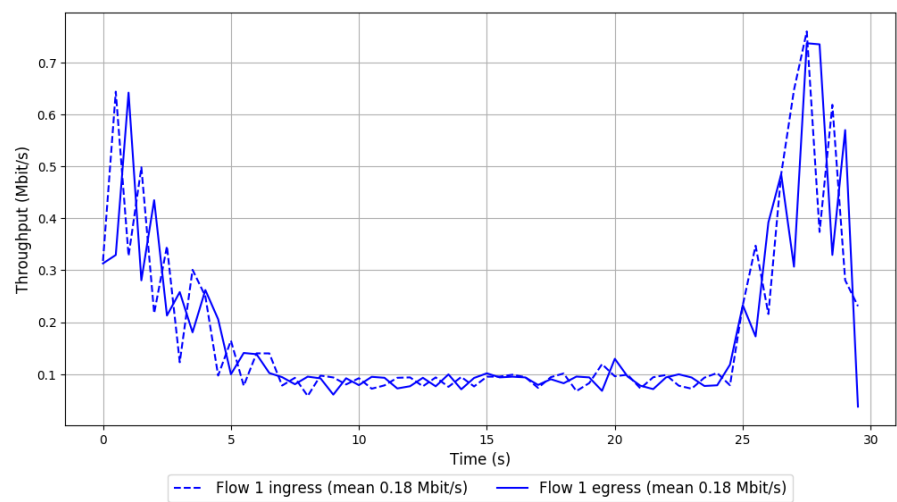
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 162.769 ms

Loss rate: 1.80%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-02 11:41:18

End at: 2018-01-02 11:41:48

Below is generated by plot.py at 2018-01-02 14:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.867 ms

Loss rate: 0.69%

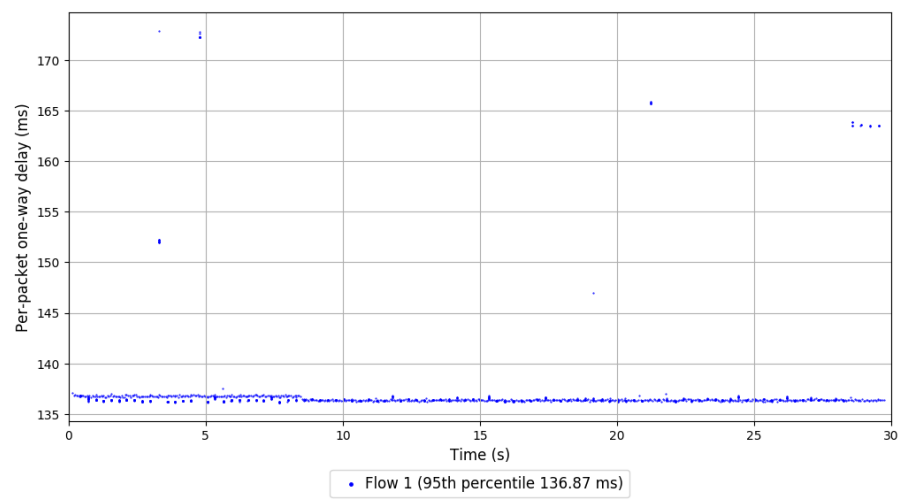
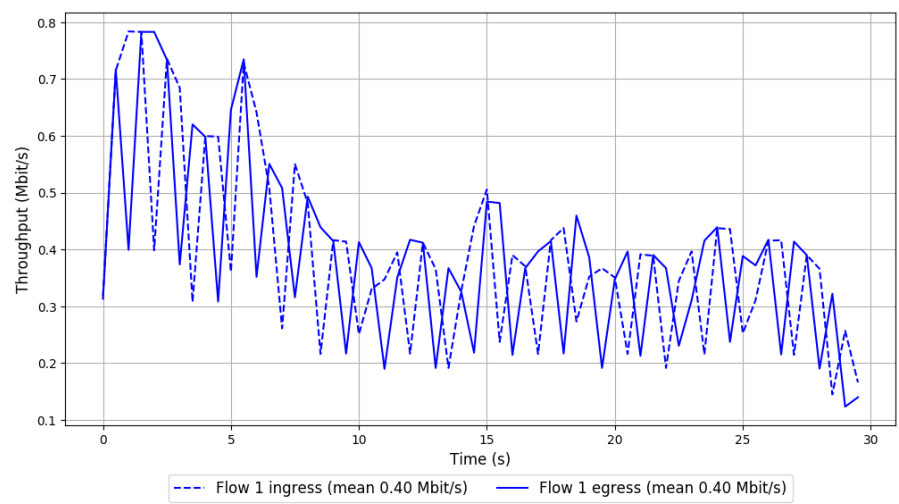
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.867 ms

Loss rate: 0.69%

Run 10: Report of Sprout — Data Link

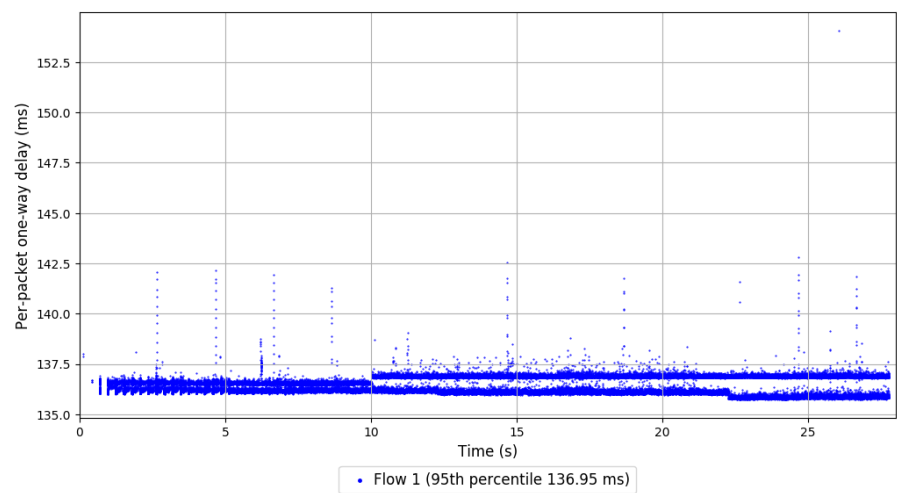
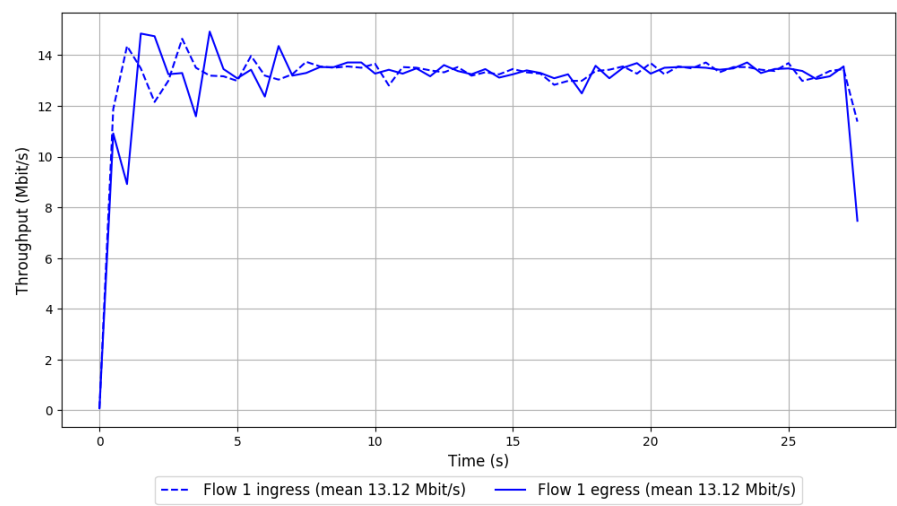


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-02 09:43:42
End at: 2018-01-02 09:44:13

# Below is generated by plot.py at 2018-01-02 14:10:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 136.953 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 136.953 ms
Loss rate: 1.02%
```


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

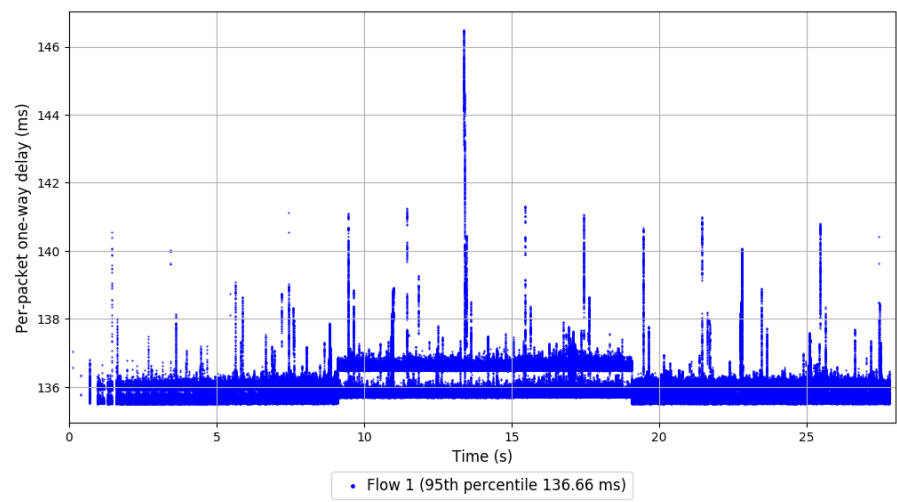
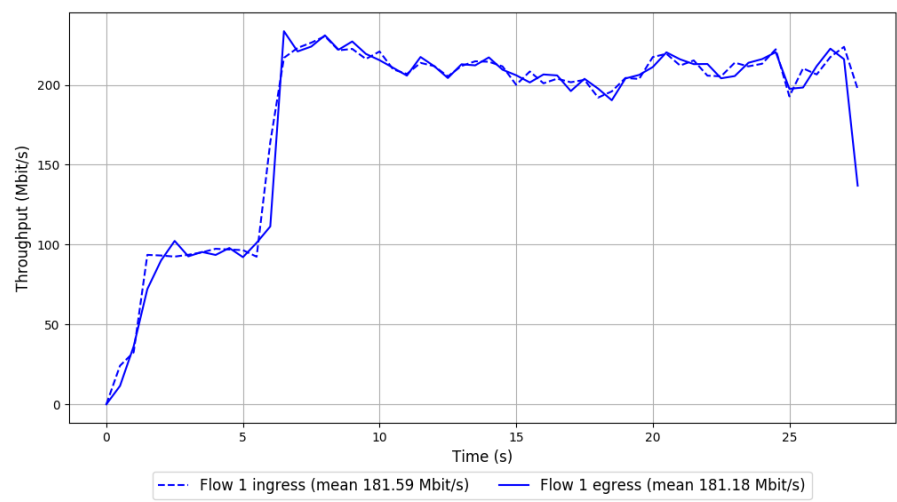


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-02 09:55:56
End at: 2018-01-02 09:56:26

# Below is generated by plot.py at 2018-01-02 14:14:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.18 Mbit/s
95th percentile per-packet one-way delay: 136.655 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 181.18 Mbit/s
95th percentile per-packet one-way delay: 136.655 ms
Loss rate: 1.21%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-01-02 10:08:50

End at: 2018-01-02 10:09:20

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.84 Mbit/s

95th percentile per-packet one-way delay: 136.736 ms

Loss rate: 1.07%

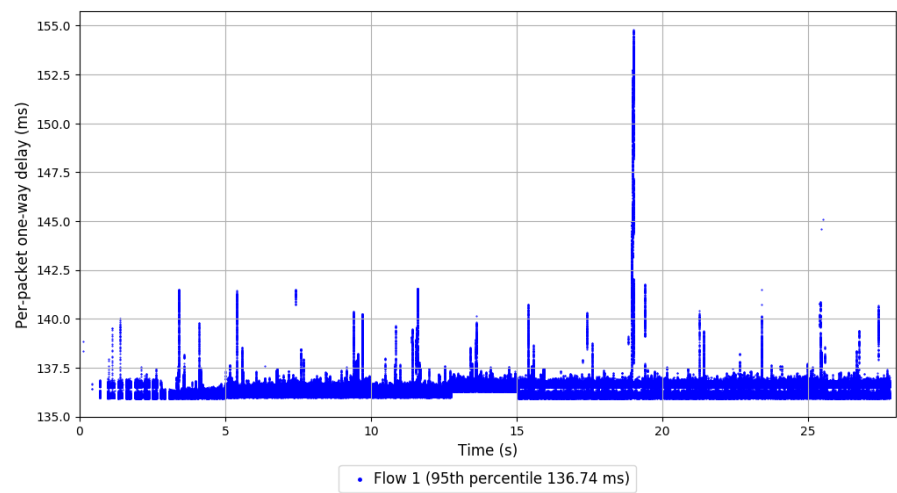
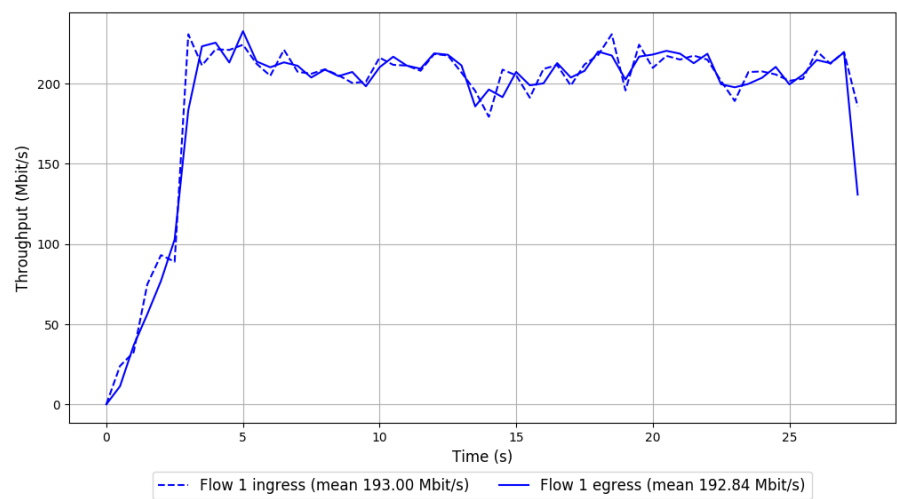
-- Flow 1:

Average throughput: 192.84 Mbit/s

95th percentile per-packet one-way delay: 136.736 ms

Loss rate: 1.07%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-02 10:21:04

End at: 2018-01-02 10:21:34

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.11 Mbit/s

95th percentile per-packet one-way delay: 136.617 ms

Loss rate: 1.04%

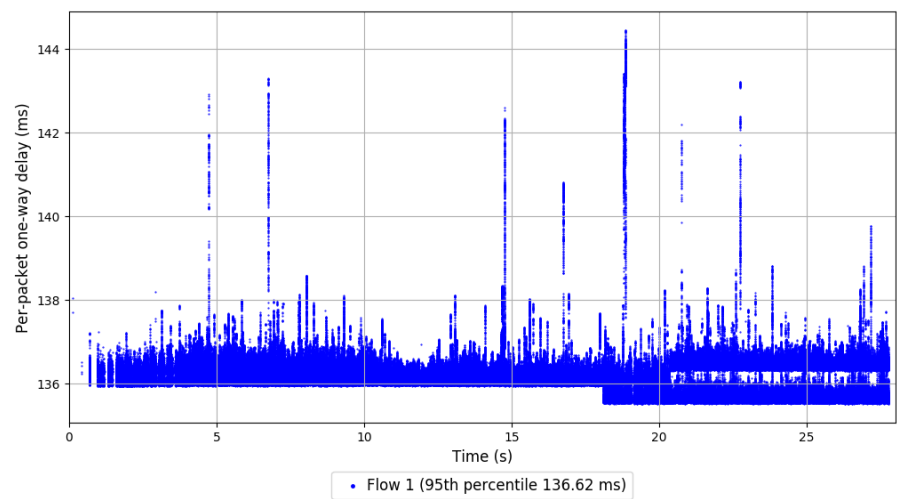
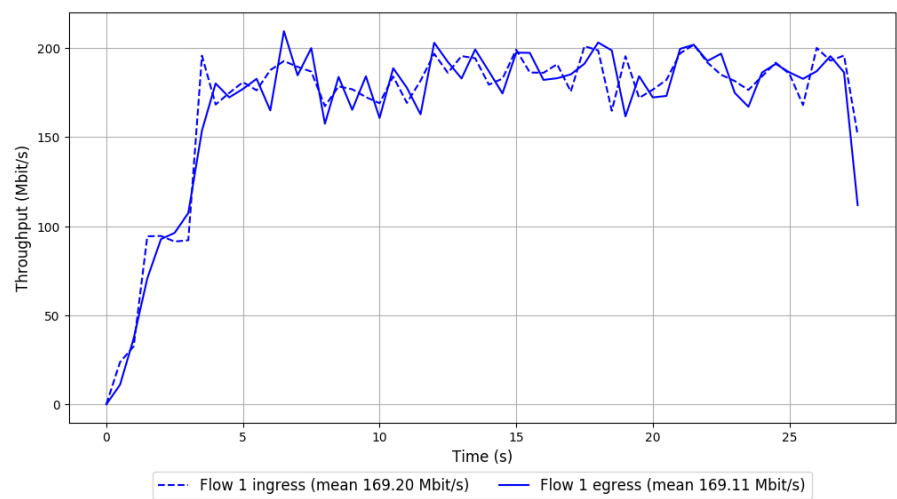
-- Flow 1:

Average throughput: 169.11 Mbit/s

95th percentile per-packet one-way delay: 136.617 ms

Loss rate: 1.04%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-02 10:33:11

End at: 2018-01-02 10:33:41

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 137.52 Mbit/s

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

Loss rate: 1.08%

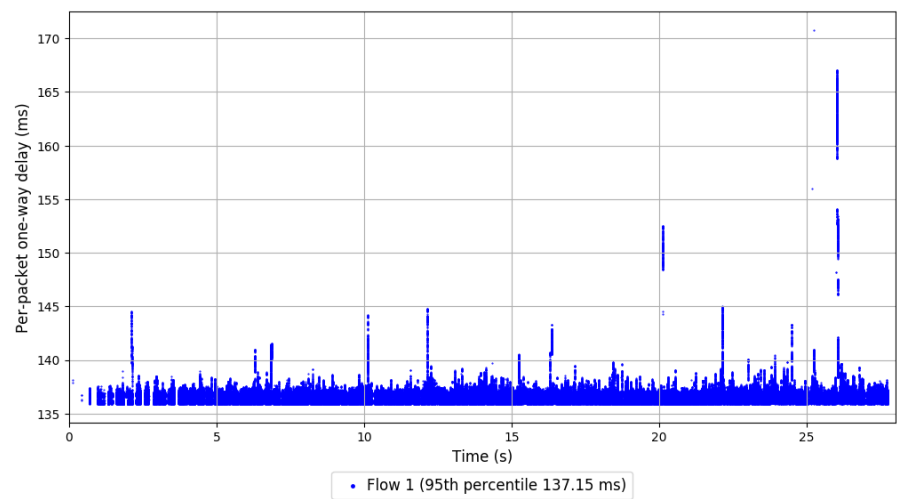
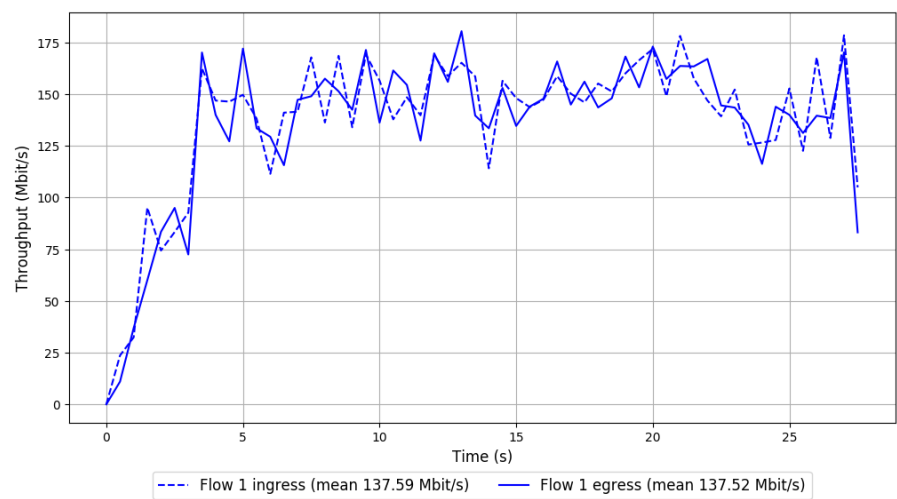
-- Flow 1:

Average throughput: 137.52 Mbit/s

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

Loss rate: 1.08%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-02 10:45:29

End at: 2018-01-02 10:45:59

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.39 Mbit/s

95th percentile per-packet one-way delay: 136.095 ms

Loss rate: 1.00%

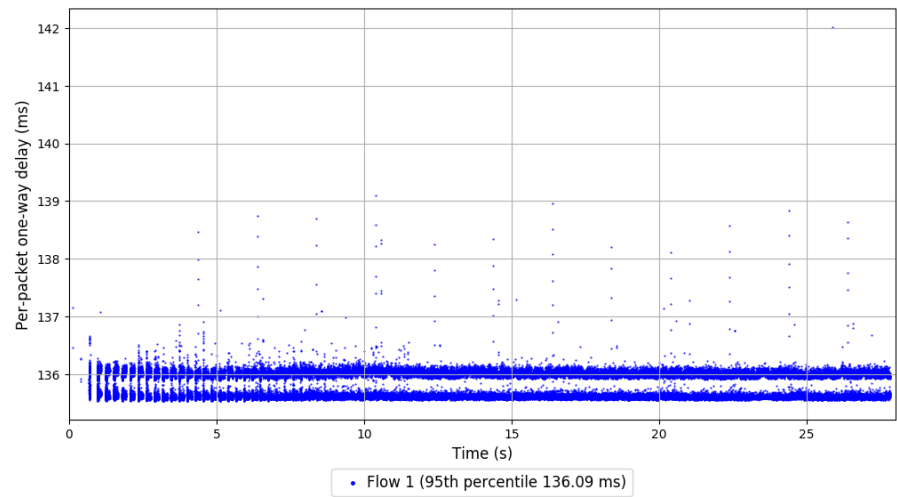
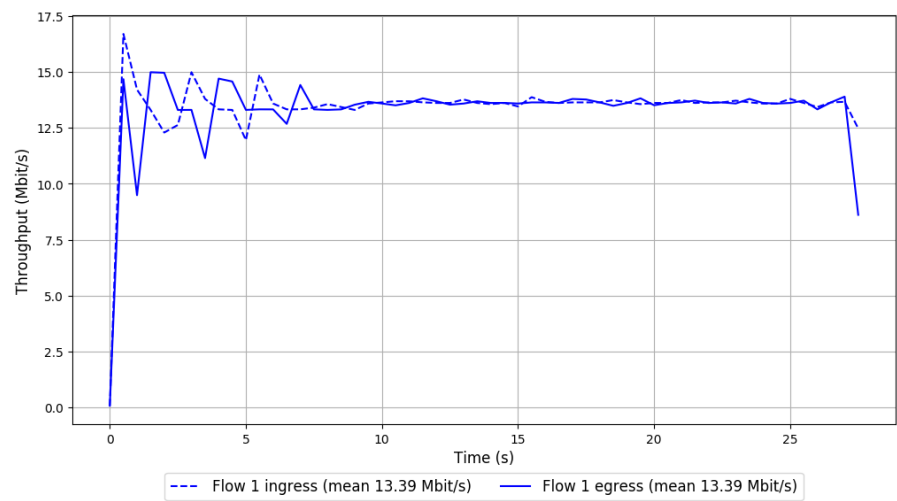
-- Flow 1:

Average throughput: 13.39 Mbit/s

95th percentile per-packet one-way delay: 136.095 ms

Loss rate: 1.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-02 10:58:30

End at: 2018-01-02 10:59:00

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.31 Mbit/s

95th percentile per-packet one-way delay: 136.414 ms

Loss rate: 1.00%

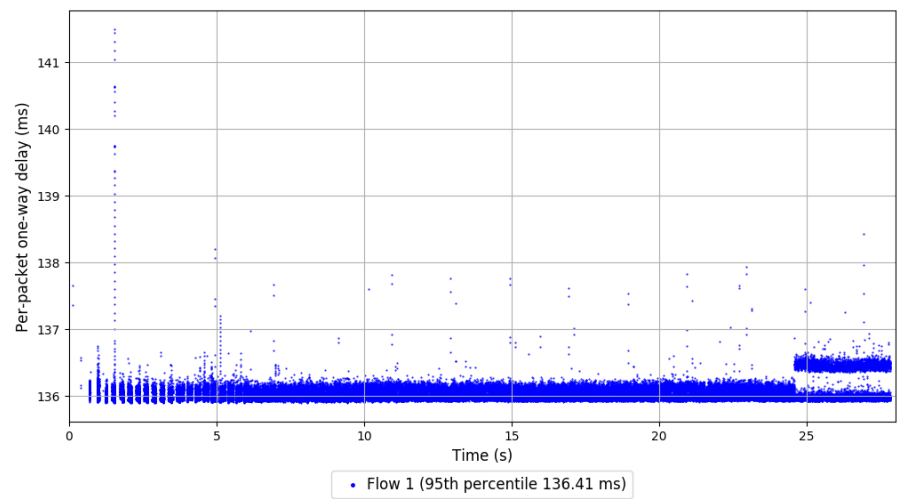
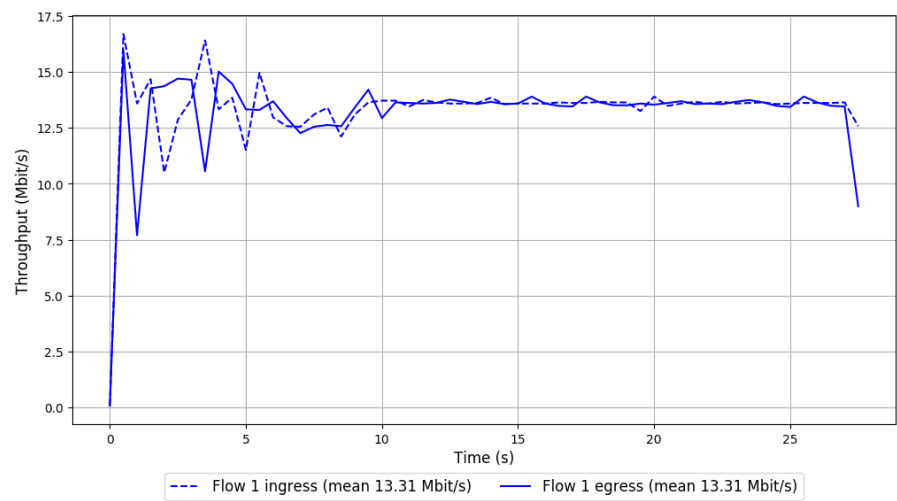
-- Flow 1:

Average throughput: 13.31 Mbit/s

95th percentile per-packet one-way delay: 136.414 ms

Loss rate: 1.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-02 11:11:06

End at: 2018-01-02 11:11:36

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.19 Mbit/s

95th percentile per-packet one-way delay: 162.438 ms

Loss rate: 3.61%

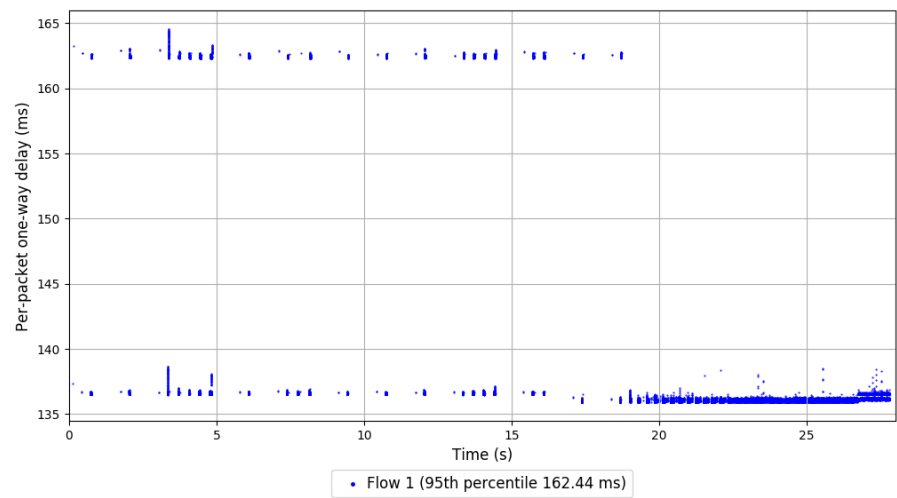
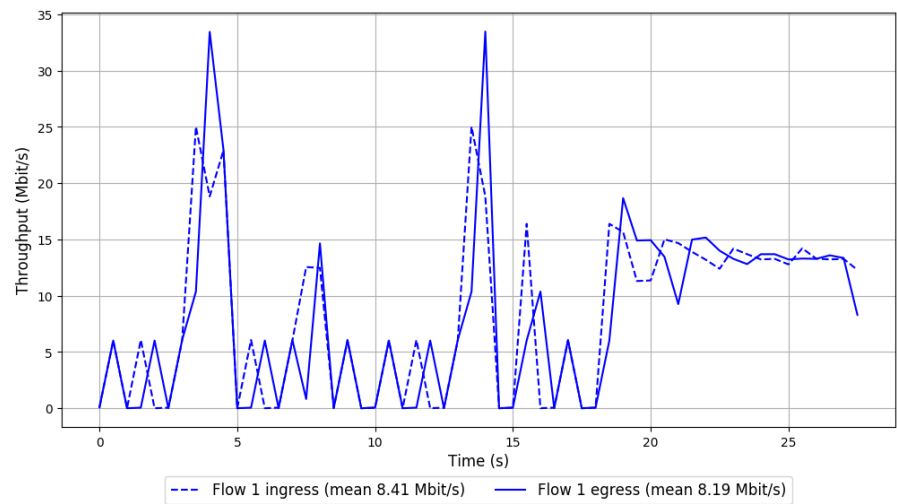
-- Flow 1:

Average throughput: 8.19 Mbit/s

95th percentile per-packet one-way delay: 162.438 ms

Loss rate: 3.61%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-02 11:23:17

End at: 2018-01-02 11:23:47

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.73 Mbit/s

95th percentile per-packet one-way delay: 136.765 ms

Loss rate: 3.43%

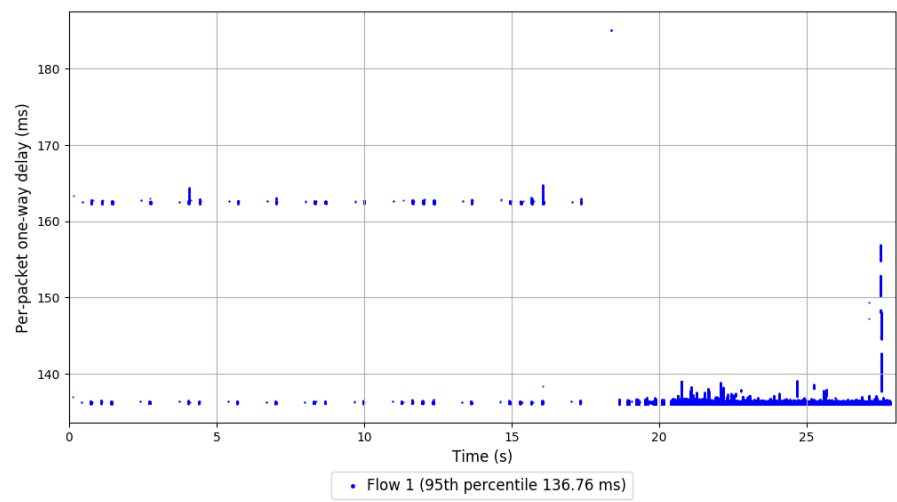
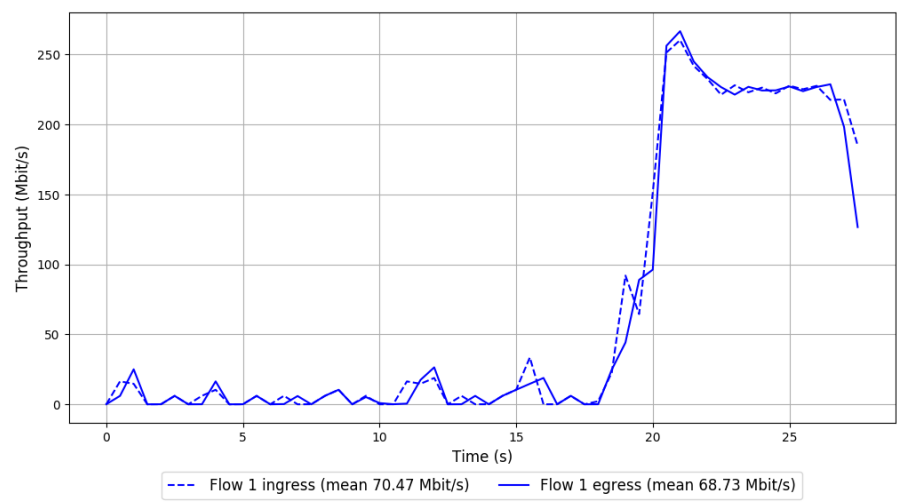
-- Flow 1:

Average throughput: 68.73 Mbit/s

95th percentile per-packet one-way delay: 136.765 ms

Loss rate: 3.43%

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

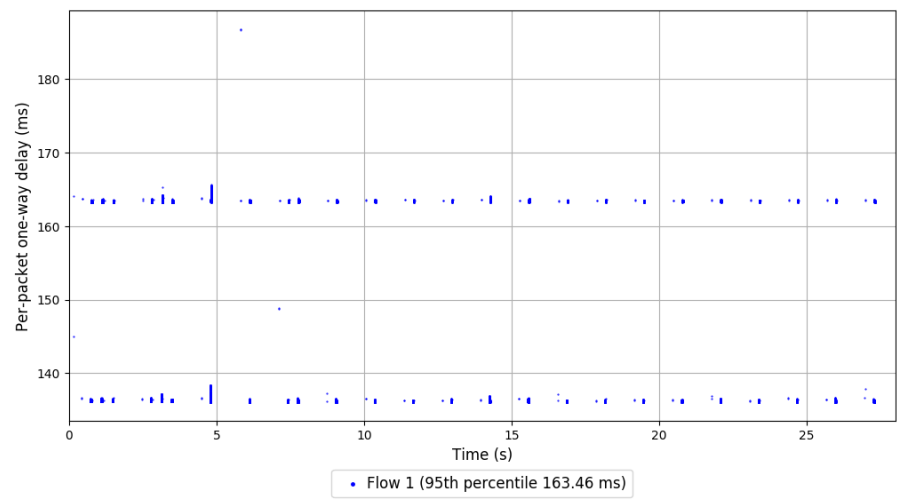
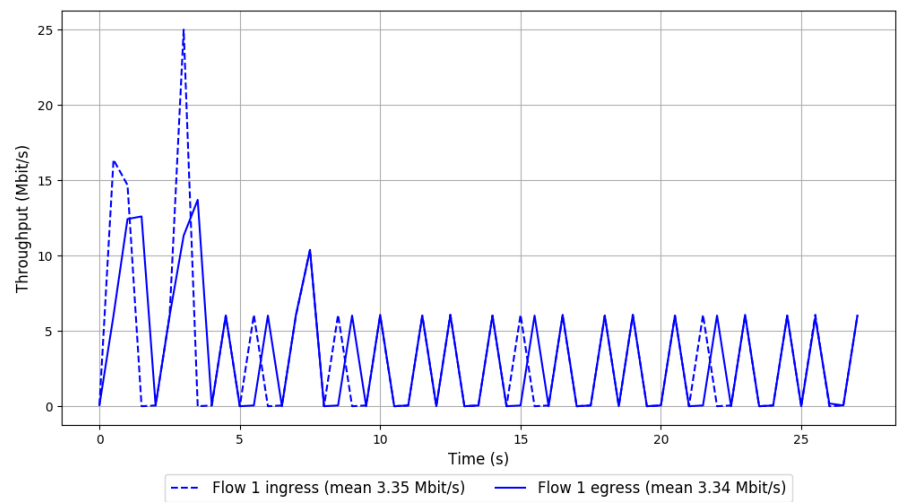


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-02 11:35:31
End at: 2018-01-02 11:36:01

# Below is generated by plot.py at 2018-01-02 14:14:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 163.458 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 163.458 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-02 09:47:50

End at: 2018-01-02 09:48:20

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.51 Mbit/s

95th percentile per-packet one-way delay: 139.129 ms

Loss rate: 1.76%

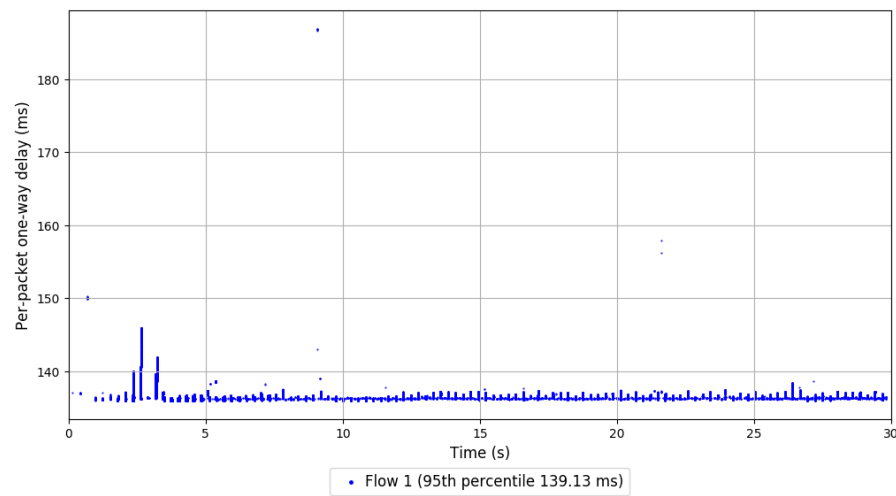
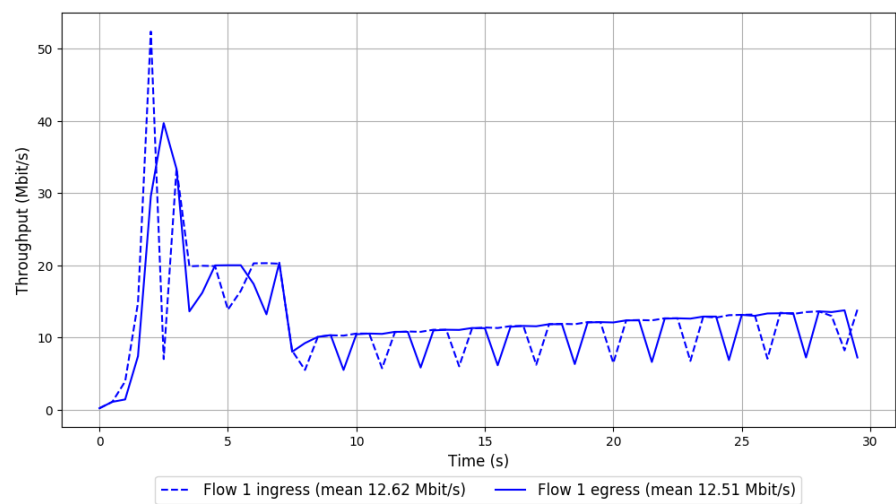
-- Flow 1:

Average throughput: 12.51 Mbit/s

95th percentile per-packet one-way delay: 139.129 ms

Loss rate: 1.76%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-02 10:00:50

End at: 2018-01-02 10:01:20

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 136.608 ms

Loss rate: 5.78%

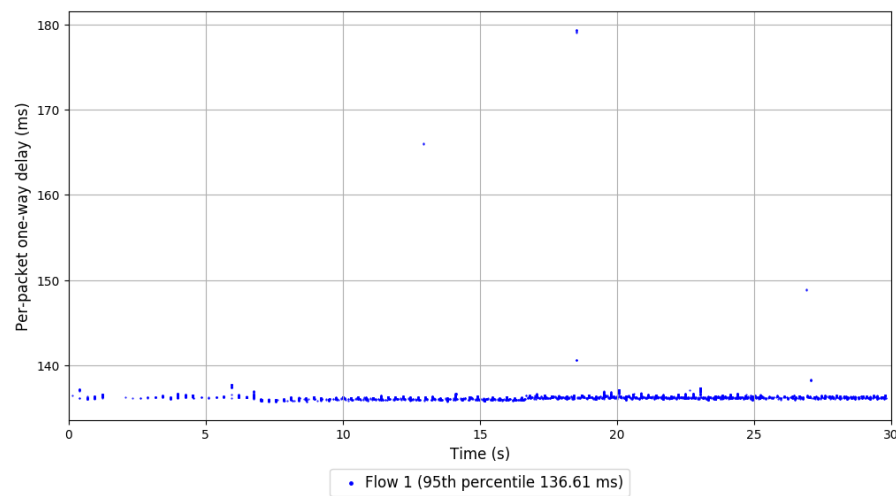
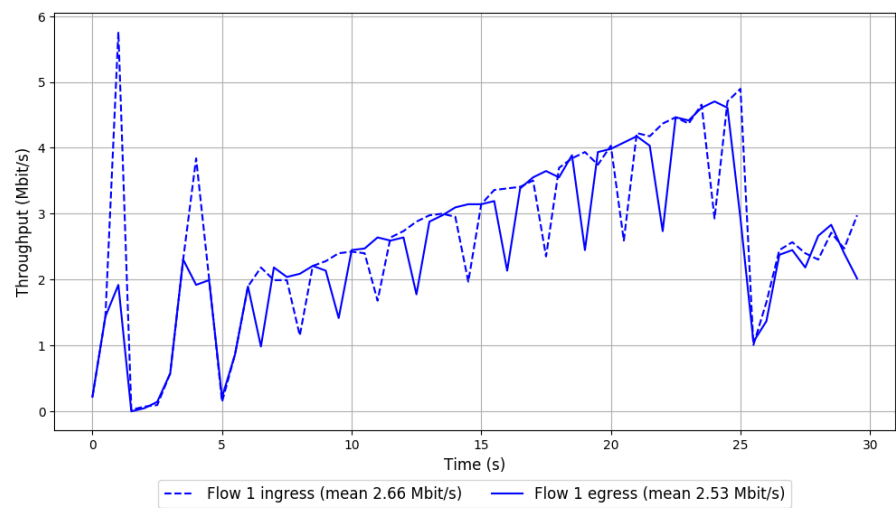
-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 136.608 ms

Loss rate: 5.78%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-02 10:13:07

End at: 2018-01-02 10:13:37

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.52 Mbit/s

95th percentile per-packet one-way delay: 137.252 ms

Loss rate: 0.70%

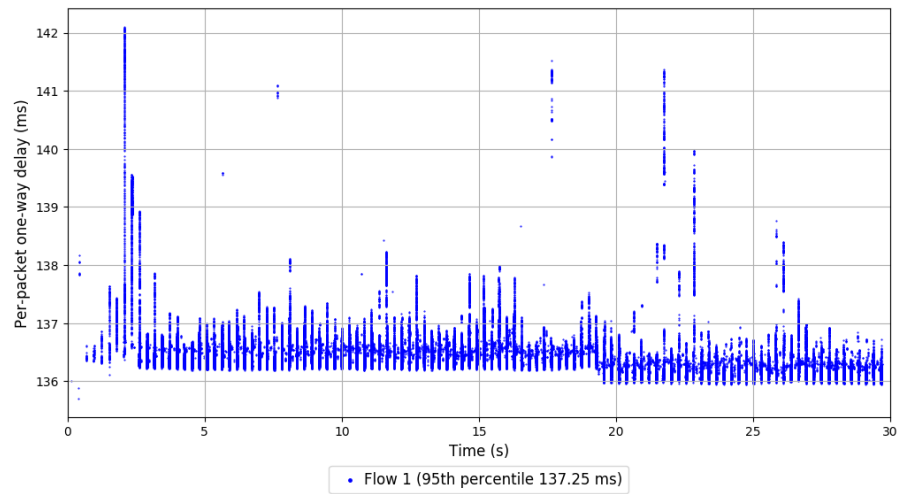
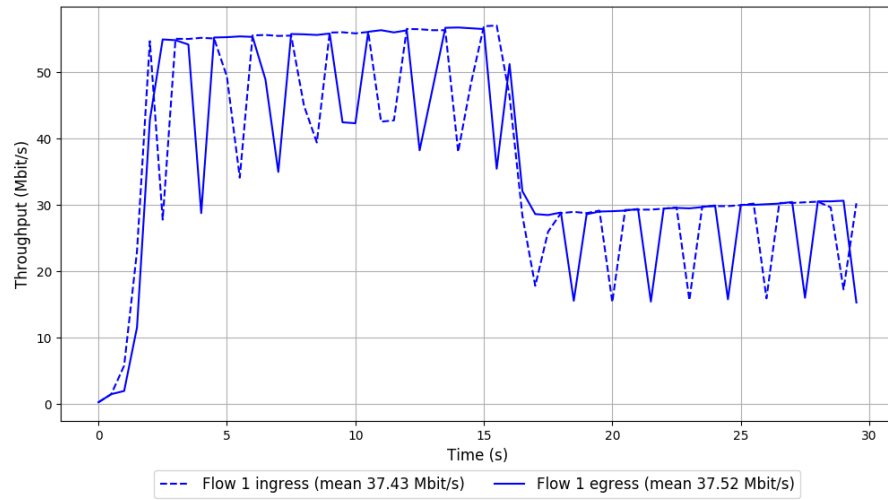
-- Flow 1:

Average throughput: 37.52 Mbit/s

95th percentile per-packet one-way delay: 137.252 ms

Loss rate: 0.70%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-02 10:25:24

End at: 2018-01-02 10:25:54

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 136.647 ms

Loss rate: 4.23%

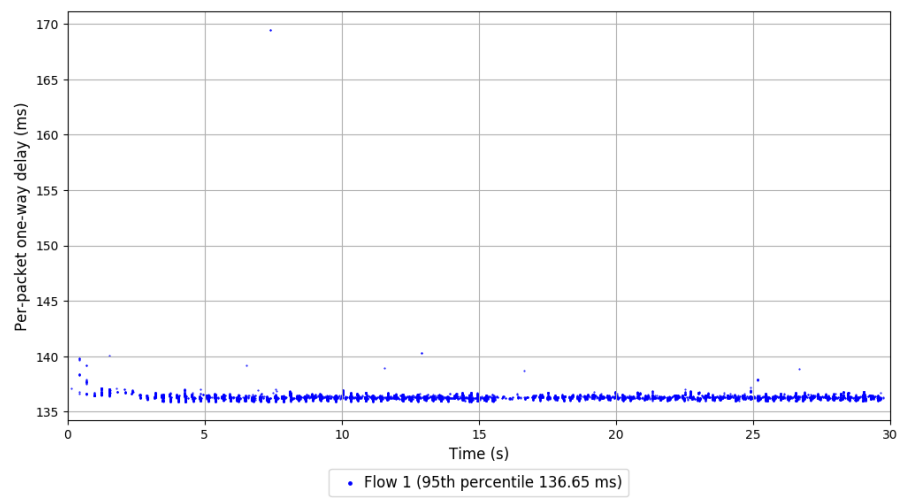
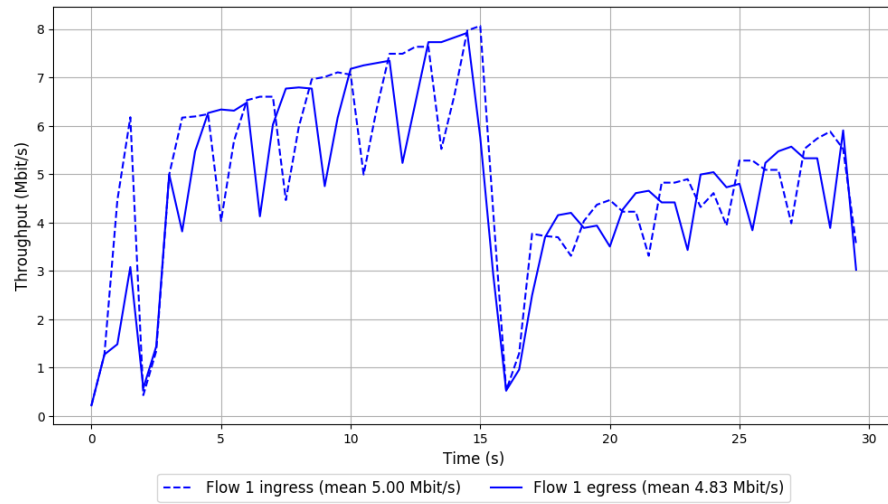
-- Flow 1:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 136.647 ms

Loss rate: 4.23%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-02 10:37:20

End at: 2018-01-02 10:37:50

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.63 Mbit/s

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

Loss rate: 1.73%

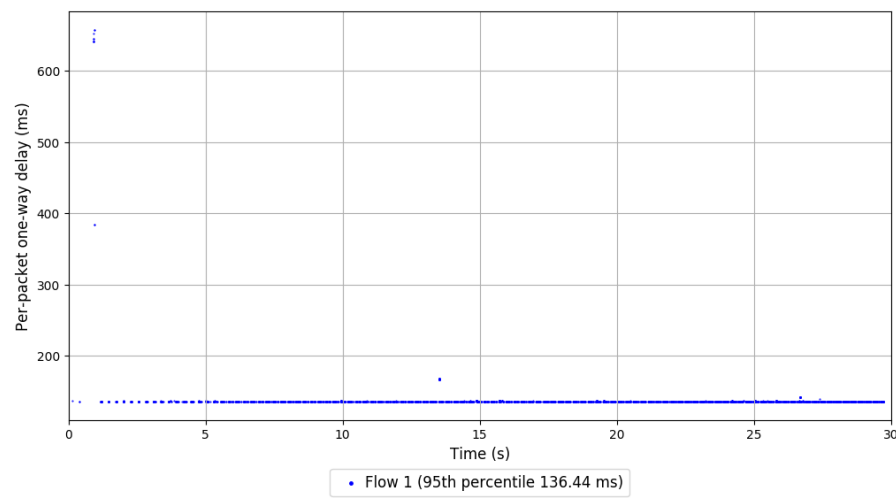
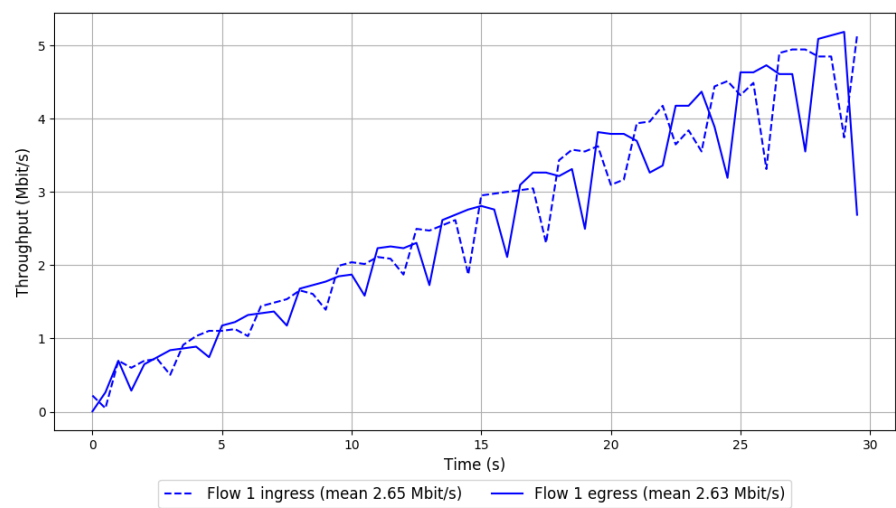
-- Flow 1:

Average throughput: 2.63 Mbit/s

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

Loss rate: 1.73%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-02 10:50:13

End at: 2018-01-02 10:50:43

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.35 Mbit/s

95th percentile per-packet one-way delay: 139.040 ms

Loss rate: 0.96%

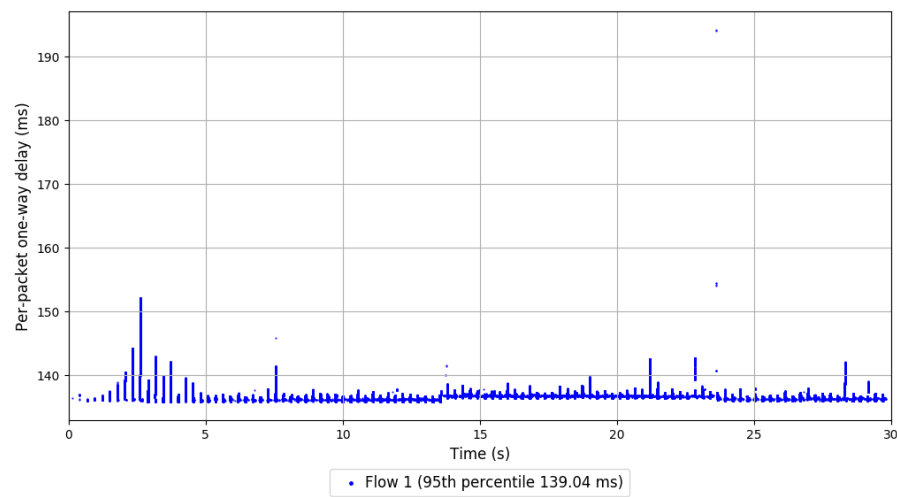
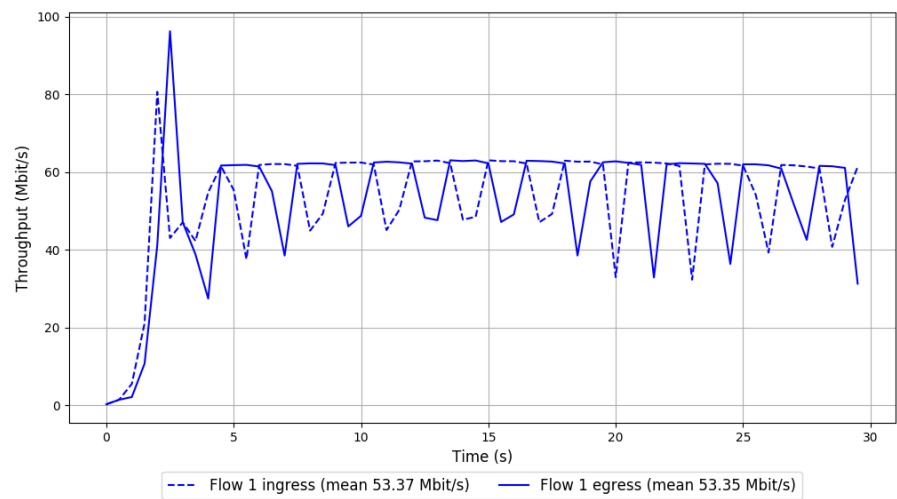
-- Flow 1:

Average throughput: 53.35 Mbit/s

95th percentile per-packet one-way delay: 139.040 ms

Loss rate: 0.96%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-02 11:03:11

End at: 2018-01-02 11:03:41

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 162.956 ms

Loss rate: 0.79%

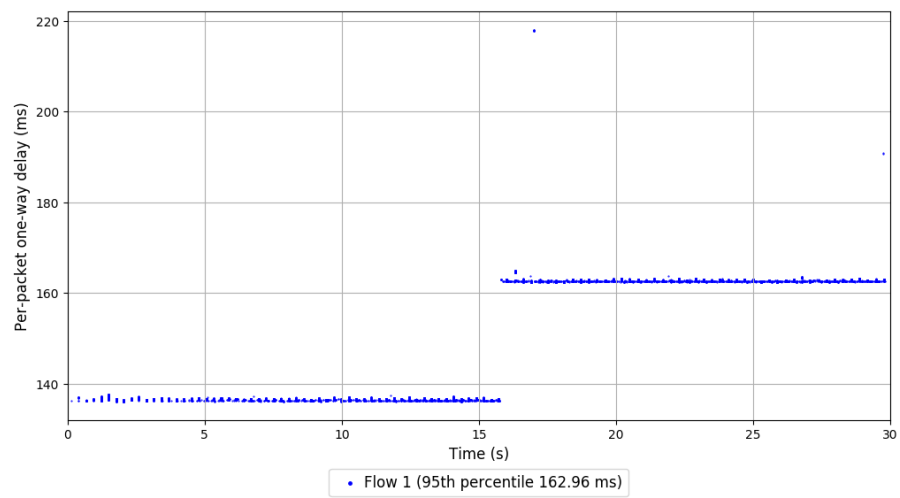
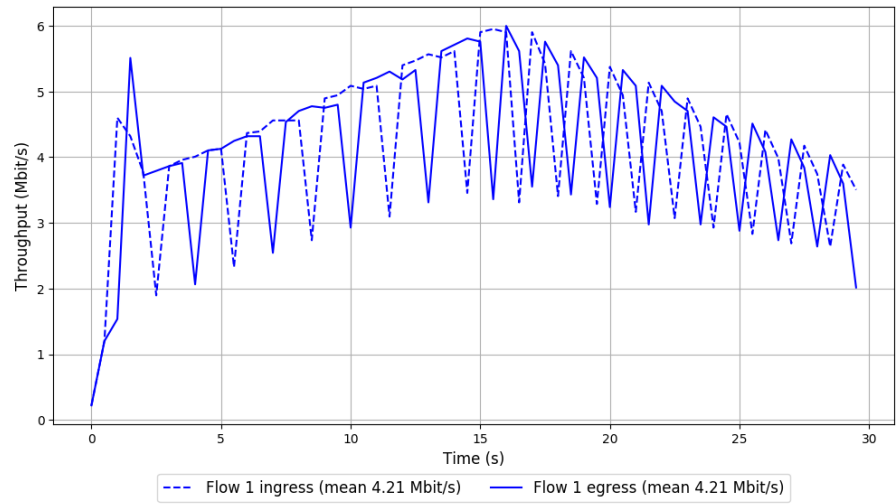
-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 162.956 ms

Loss rate: 0.79%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-02 11:15:38

End at: 2018-01-02 11:16:08

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 163.074 ms

Loss rate: 1.63%

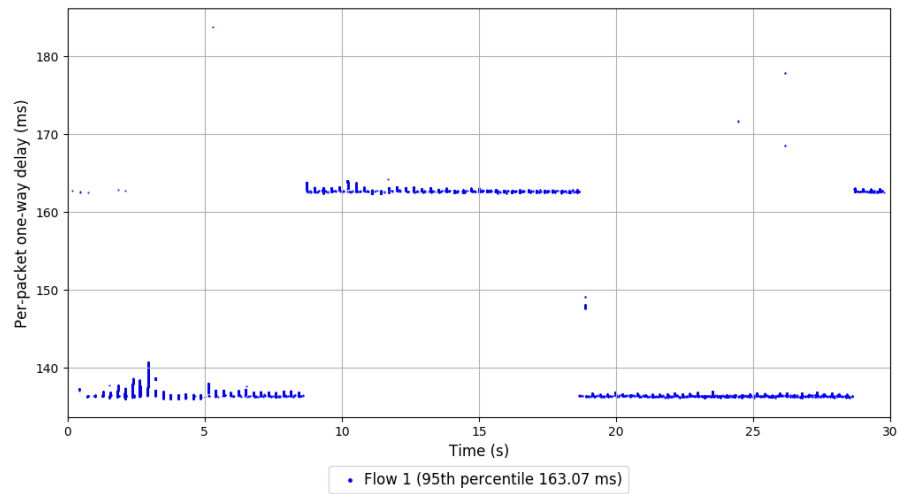
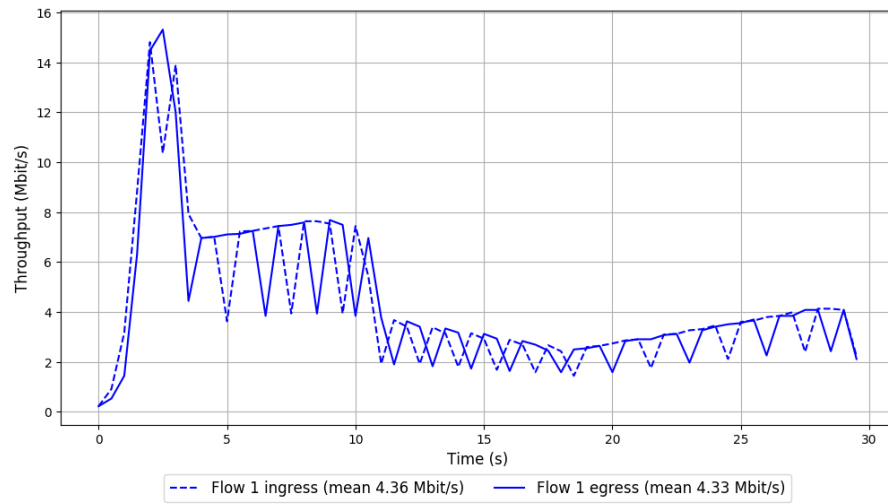
-- Flow 1:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 163.074 ms

Loss rate: 1.63%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-02 11:27:54

End at: 2018-01-02 11:28:24

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 162.848 ms

Loss rate: 1.32%

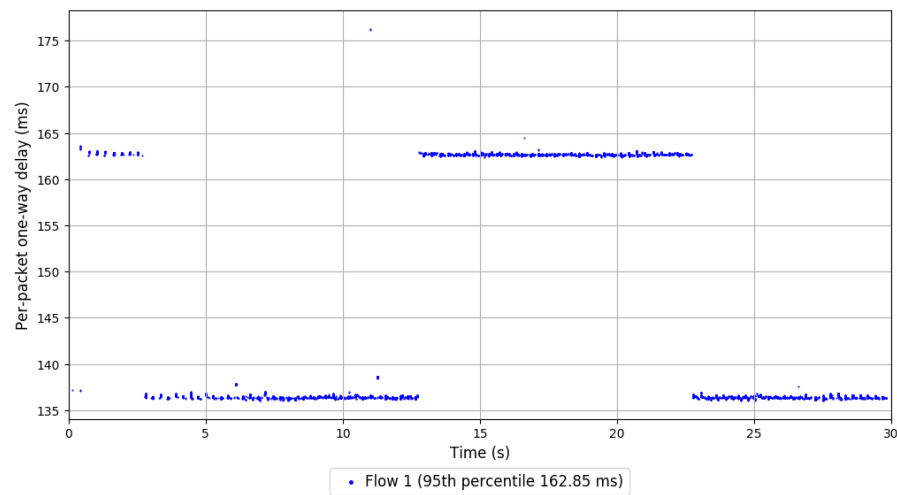
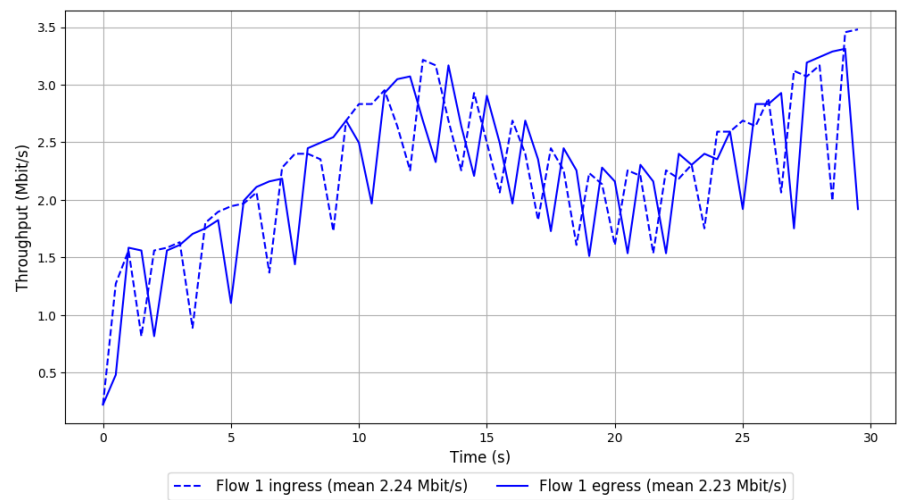
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 162.848 ms

Loss rate: 1.32%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-02 11:39:54

End at: 2018-01-02 11:40:24

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 163.651 ms

Loss rate: 1.79%

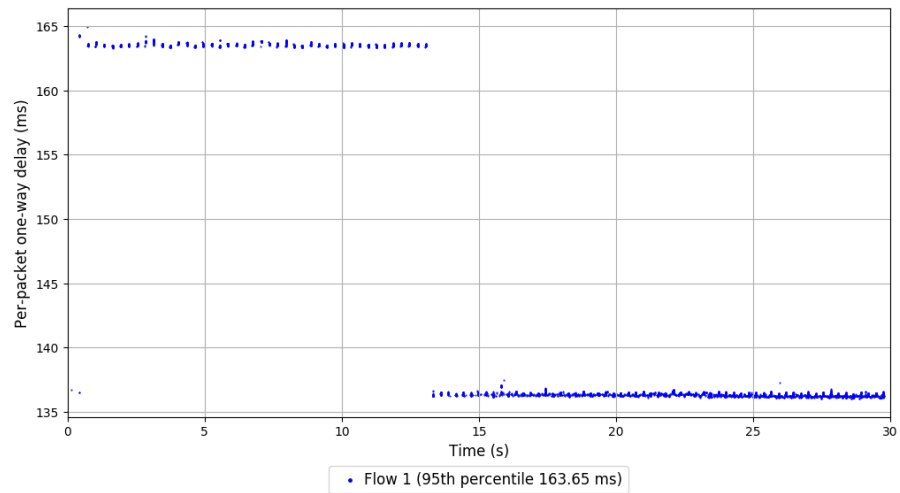
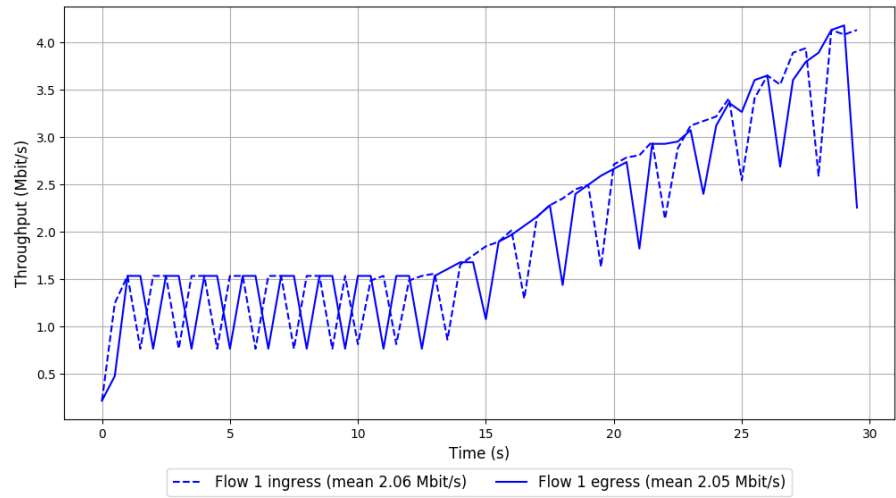
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 163.651 ms

Loss rate: 1.79%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-02 09:42:42

End at: 2018-01-02 09:43:12

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.03 Mbit/s

95th percentile per-packet one-way delay: 216.454 ms

Loss rate: 2.57%

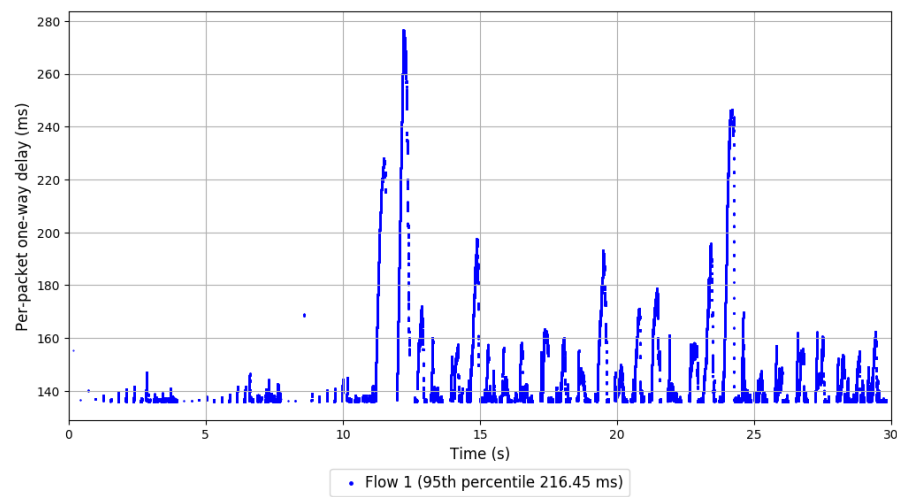
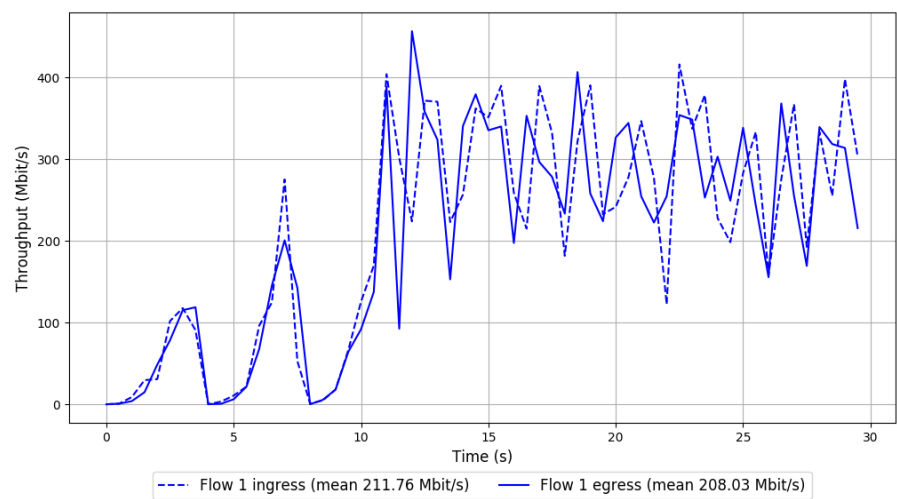
-- Flow 1:

Average throughput: 208.03 Mbit/s

95th percentile per-packet one-way delay: 216.454 ms

Loss rate: 2.57%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-02 09:54:58

End at: 2018-01-02 09:55:28

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.76 Mbit/s

95th percentile per-packet one-way delay: 211.556 ms

Loss rate: 2.24%

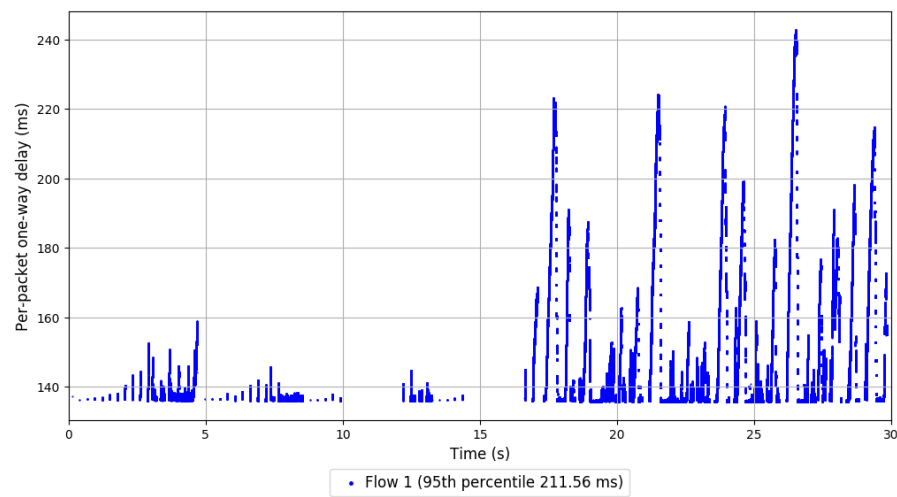
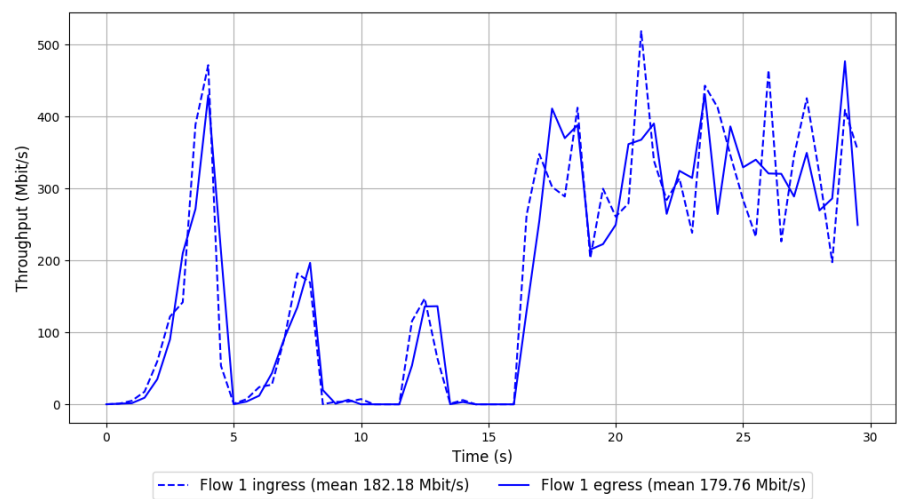
-- Flow 1:

Average throughput: 179.76 Mbit/s

95th percentile per-packet one-way delay: 211.556 ms

Loss rate: 2.24%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-02 10:07:50

End at: 2018-01-02 10:08:20

Below is generated by plot.py at 2018-01-02 14:15:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.37 Mbit/s

95th percentile per-packet one-way delay: 173.095 ms

Loss rate: 1.28%

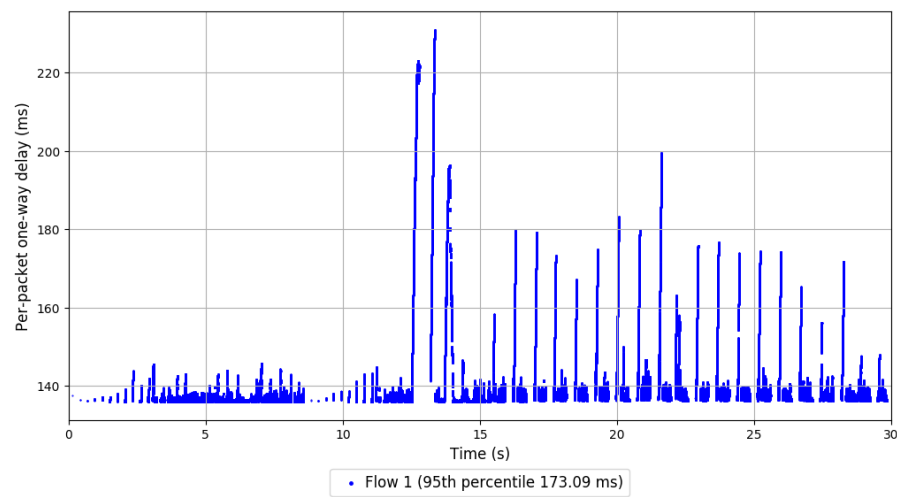
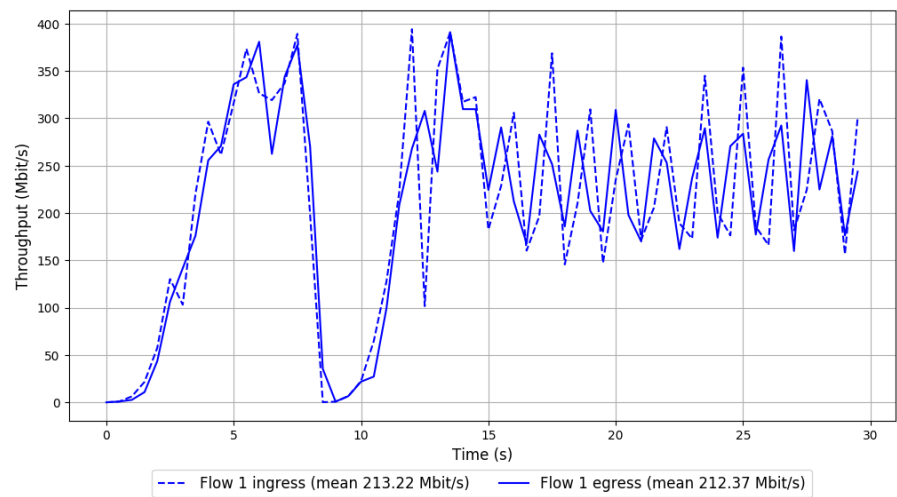
-- Flow 1:

Average throughput: 212.37 Mbit/s

95th percentile per-packet one-way delay: 173.095 ms

Loss rate: 1.28%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-02 10:20:06

End at: 2018-01-02 10:20:36

Below is generated by plot.py at 2018-01-02 14:15:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.10 Mbit/s

95th percentile per-packet one-way delay: 154.459 ms

Loss rate: 0.64%

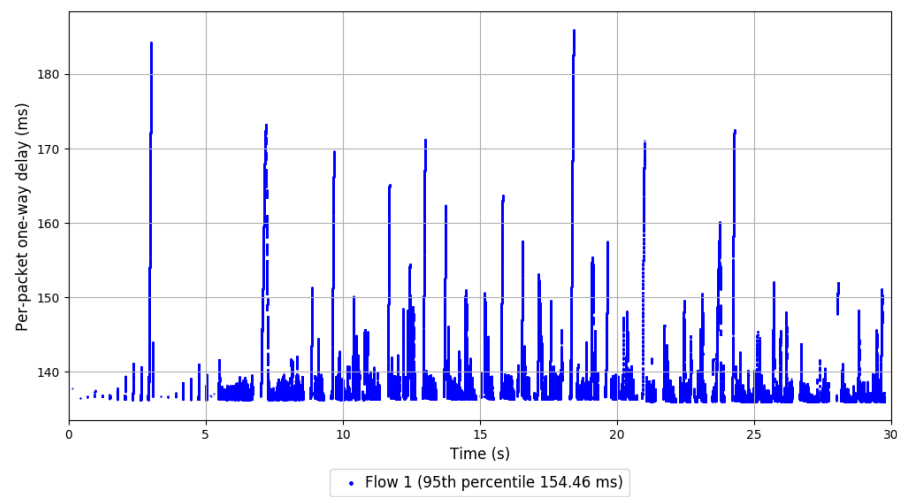
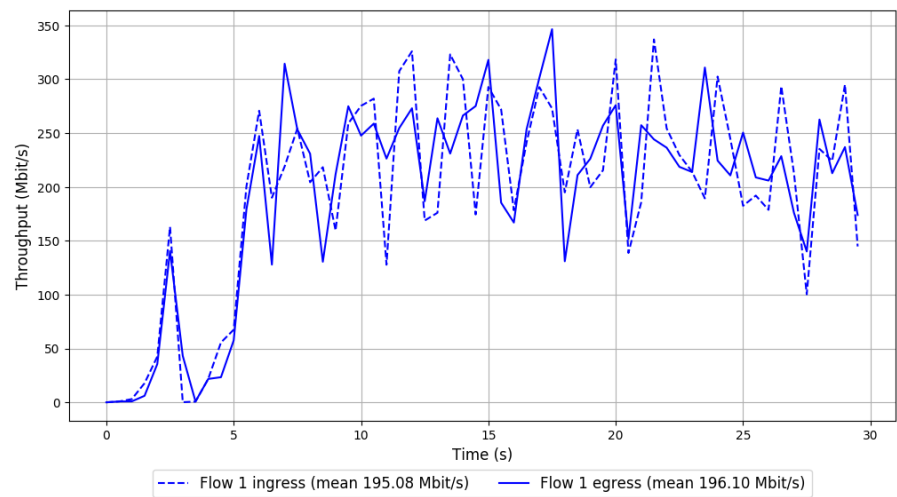
-- Flow 1:

Average throughput: 196.10 Mbit/s

95th percentile per-packet one-way delay: 154.459 ms

Loss rate: 0.64%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-02 10:32:19

End at: 2018-01-02 10:32:49

Below is generated by plot.py at 2018-01-02 14:15:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.21 Mbit/s

95th percentile per-packet one-way delay: 156.582 ms

Loss rate: 0.63%

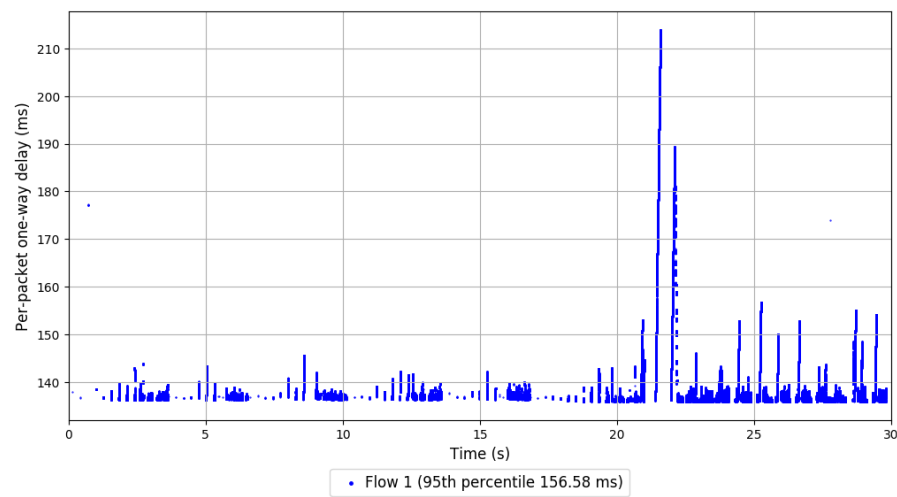
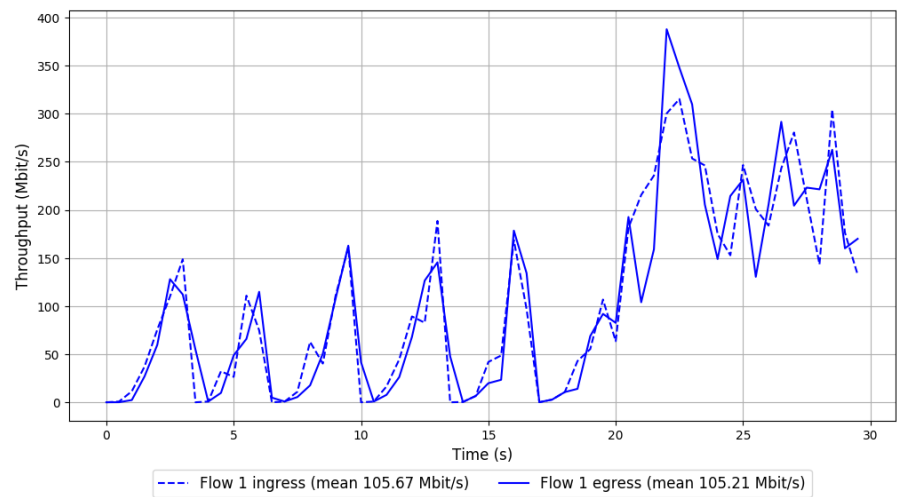
-- Flow 1:

Average throughput: 105.21 Mbit/s

95th percentile per-packet one-way delay: 156.582 ms

Loss rate: 0.63%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-02 10:44:28

End at: 2018-01-02 10:44:58

Below is generated by plot.py at 2018-01-02 14:17:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.84 Mbit/s

95th percentile per-packet one-way delay: 359.846 ms

Loss rate: 23.09%

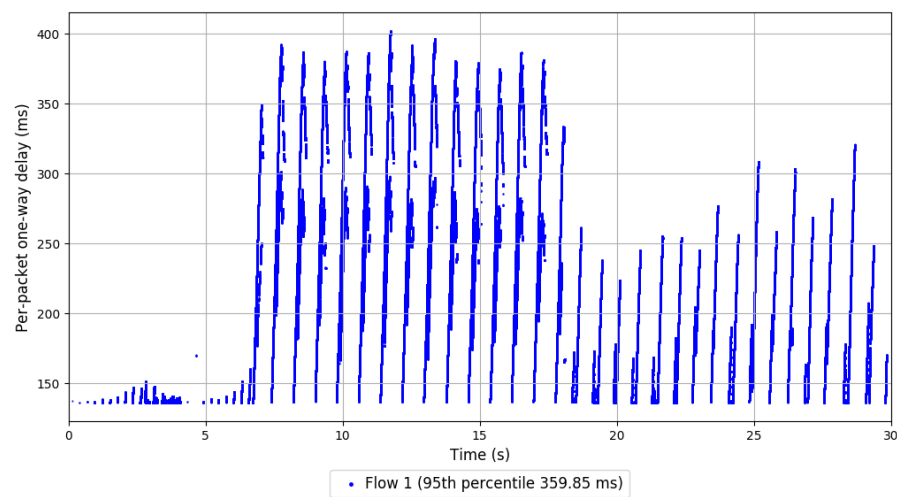
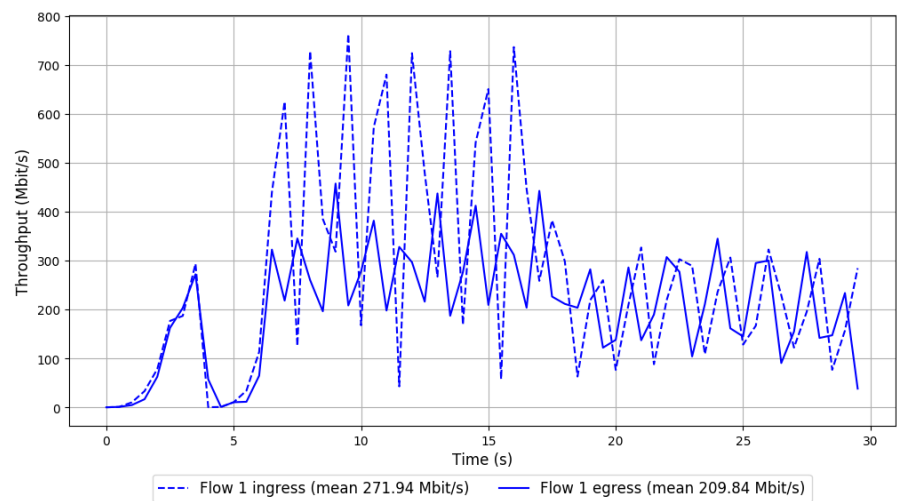
-- Flow 1:

Average throughput: 209.84 Mbit/s

95th percentile per-packet one-way delay: 359.846 ms

Loss rate: 23.09%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-02 10:57:26

End at: 2018-01-02 10:57:56

Below is generated by plot.py at 2018-01-02 14:18:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 235.65 Mbit/s

95th percentile per-packet one-way delay: 367.928 ms

Loss rate: 34.82%

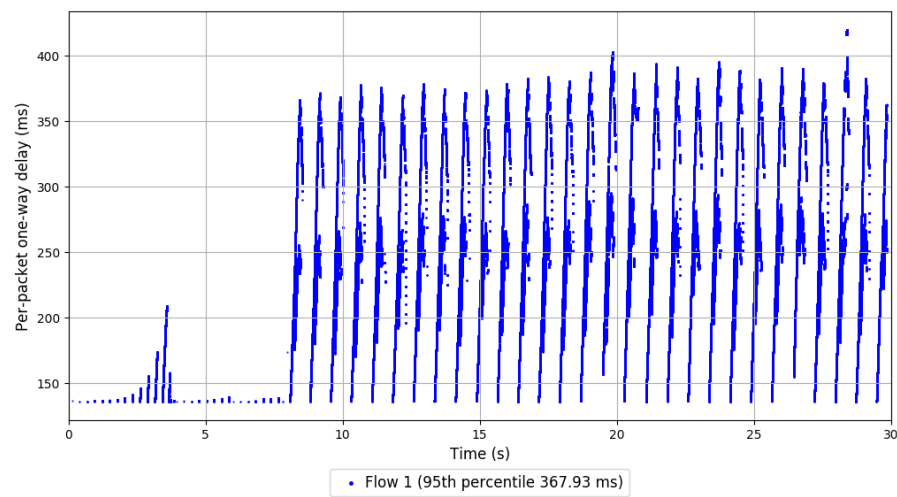
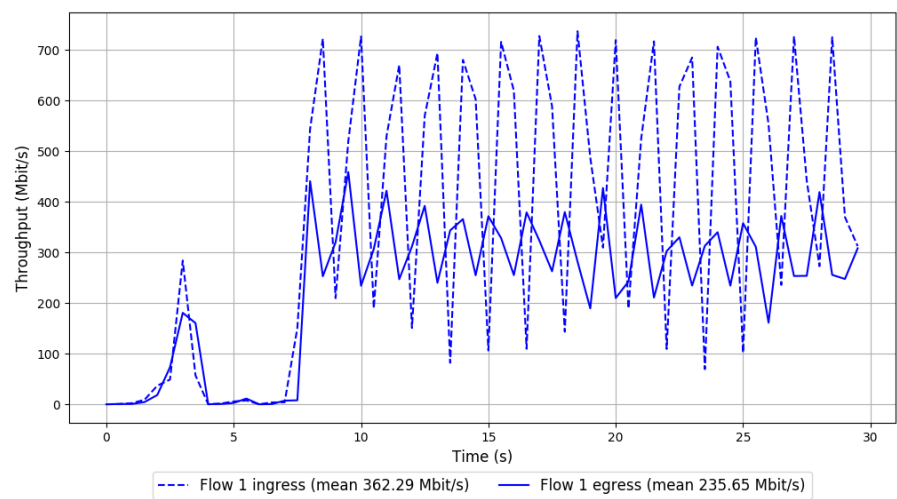
-- Flow 1:

Average throughput: 235.65 Mbit/s

95th percentile per-packet one-way delay: 367.928 ms

Loss rate: 34.82%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-02 11:10:08

End at: 2018-01-02 11:10:38

Below is generated by plot.py at 2018-01-02 14:18:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.50 Mbit/s

95th percentile per-packet one-way delay: 377.840 ms

Loss rate: 21.82%

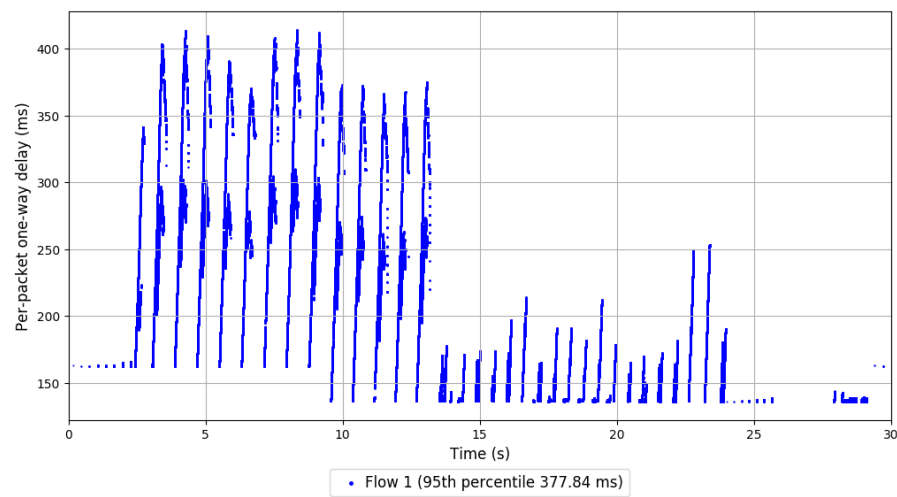
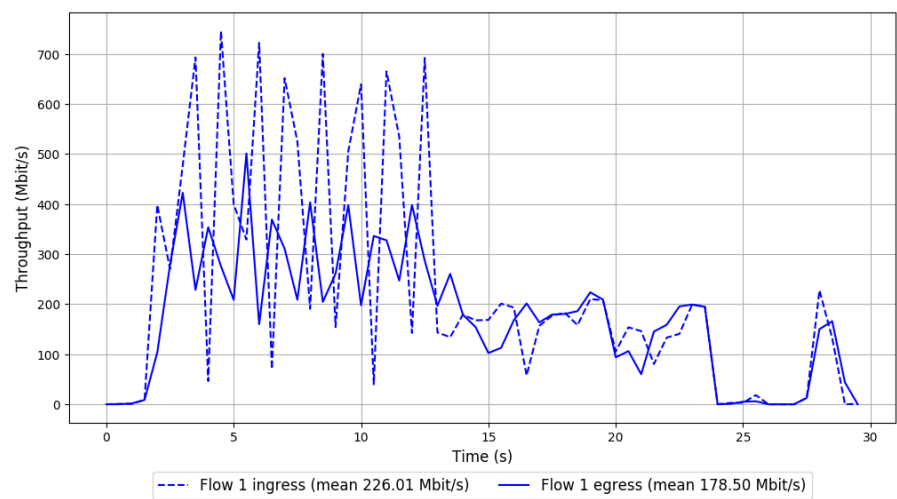
-- Flow 1:

Average throughput: 178.50 Mbit/s

95th percentile per-packet one-way delay: 377.840 ms

Loss rate: 21.82%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-02 11:22:19

End at: 2018-01-02 11:22:49

Below is generated by plot.py at 2018-01-02 14:18:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.81 Mbit/s

95th percentile per-packet one-way delay: 179.597 ms

Loss rate: 1.16%

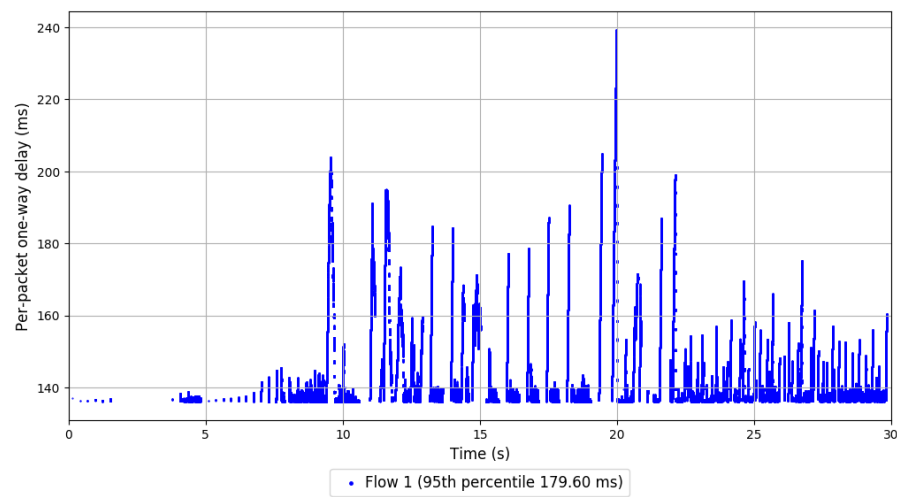
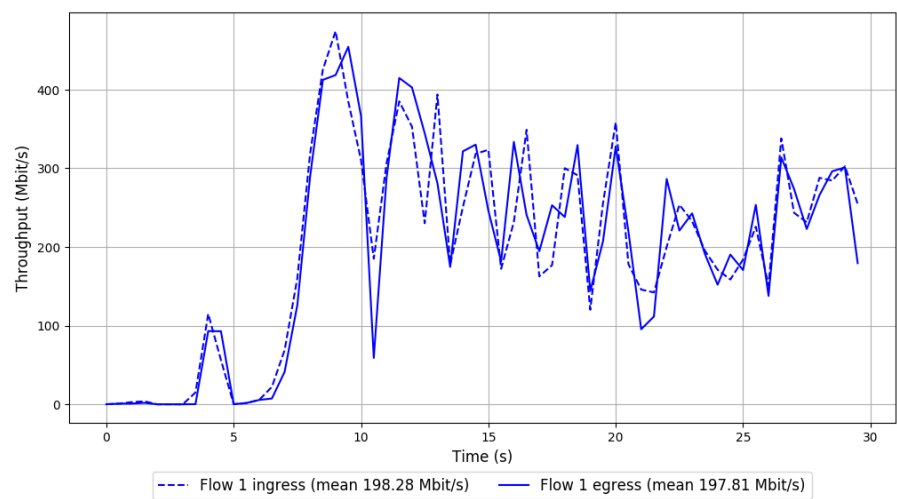
-- Flow 1:

Average throughput: 197.81 Mbit/s

95th percentile per-packet one-way delay: 179.597 ms

Loss rate: 1.16%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-02 11:34:38

End at: 2018-01-02 11:35:08

Below is generated by plot.py at 2018-01-02 14:18:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 126.50 Mbit/s

95th percentile per-packet one-way delay: 177.992 ms

Loss rate: 0.76%

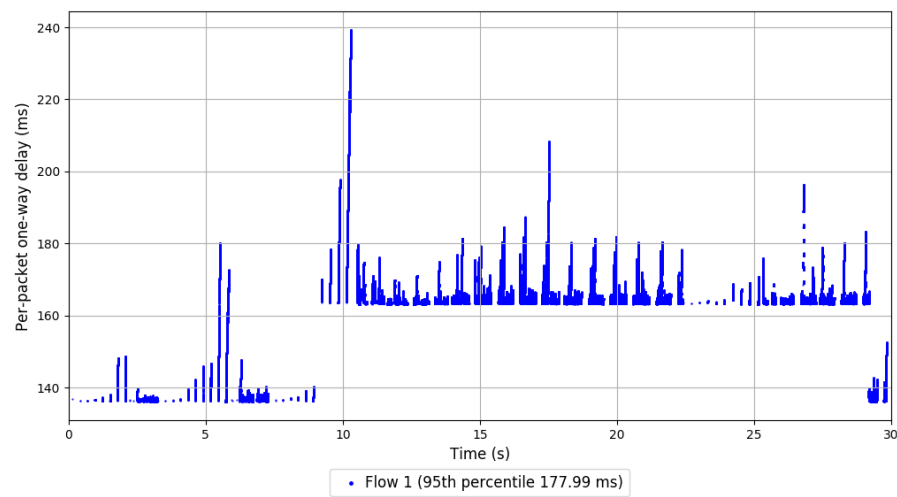
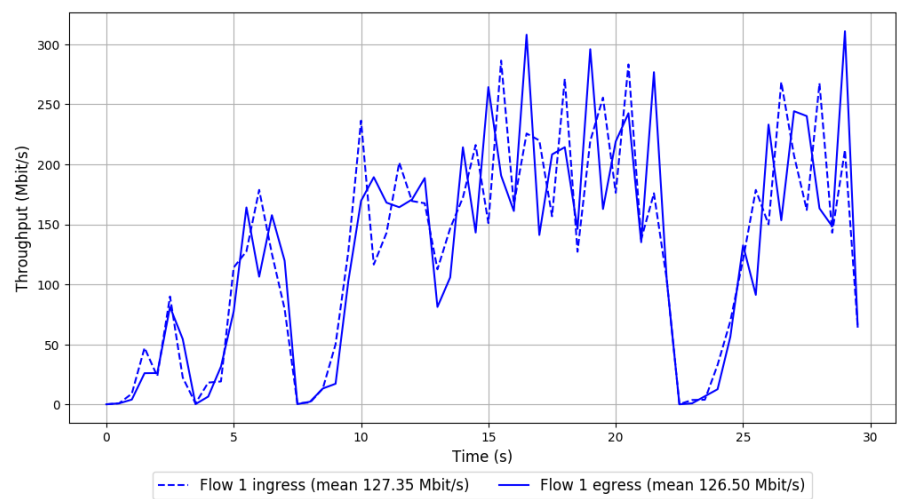
-- Flow 1:

Average throughput: 126.50 Mbit/s

95th percentile per-packet one-way delay: 177.992 ms

Loss rate: 0.76%

Run 10: Report of Verus — Data Link

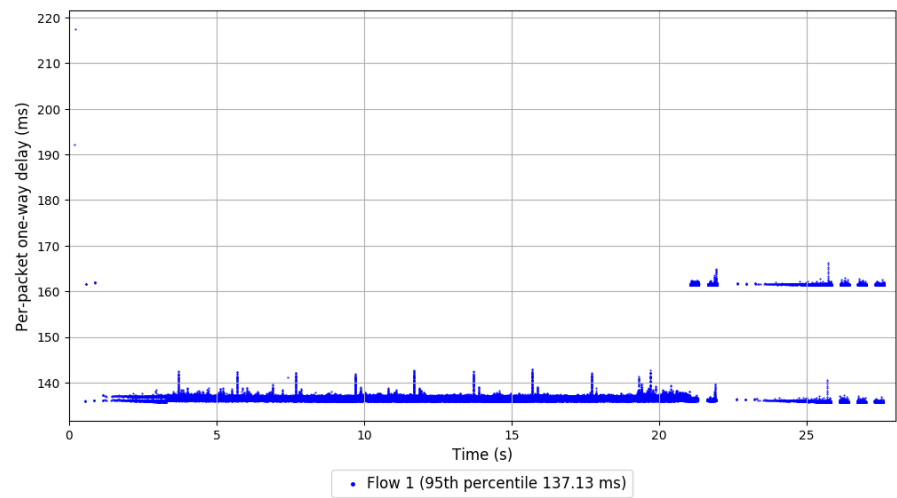
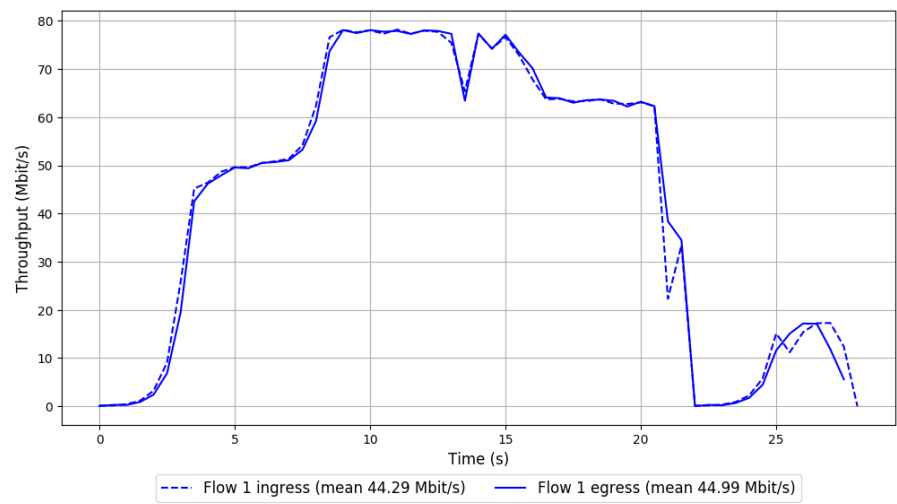


```
Run 1: Statistics of Copa

Start at: 2018-01-02 09:41:11
End at: 2018-01-02 09:41:41

# Below is generated by plot.py at 2018-01-02 14:18:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.99 Mbit/s
95th percentile per-packet one-way delay: 137.135 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 44.99 Mbit/s
95th percentile per-packet one-way delay: 137.135 ms
Loss rate: 0.50%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-02 09:53:22

End at: 2018-01-02 09:53:52

Below is generated by plot.py at 2018-01-02 14:18:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.38 Mbit/s

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

Loss rate: 1.27%

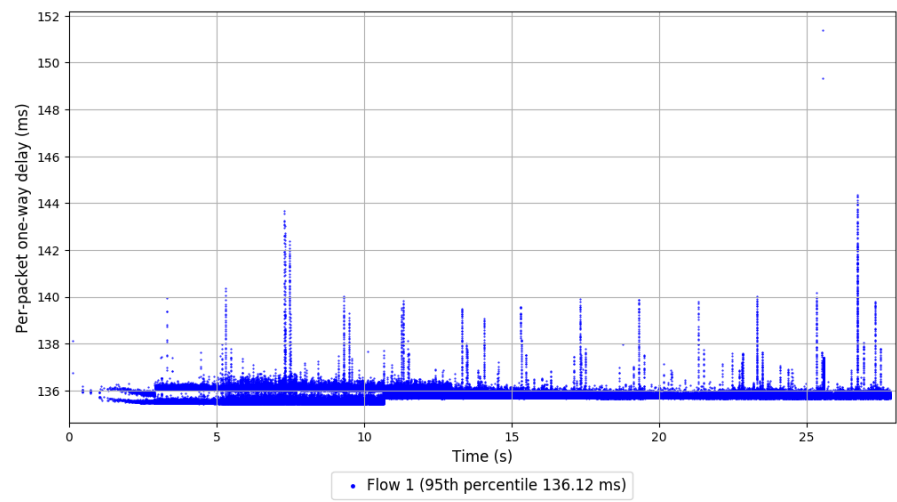
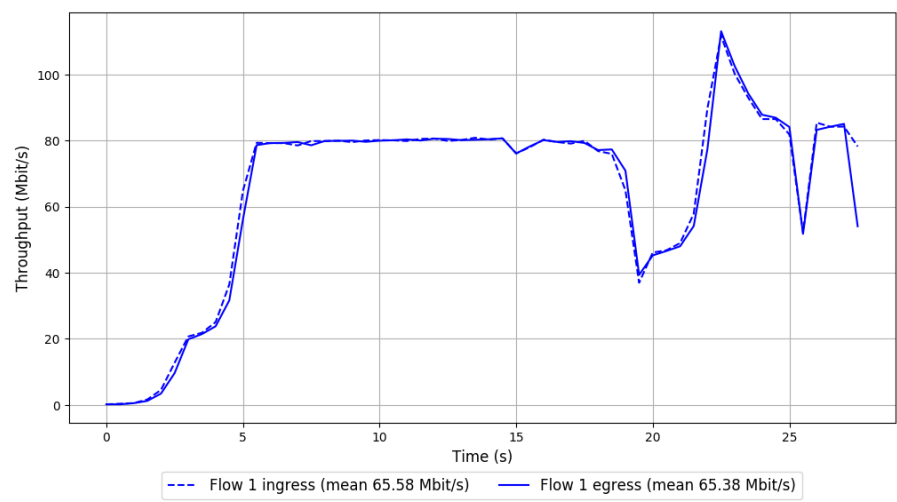
-- Flow 1:

Average throughput: 65.38 Mbit/s

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

Loss rate: 1.27%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-02 10:06:20

End at: 2018-01-02 10:06:50

Below is generated by plot.py at 2018-01-02 14:18:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.58 Mbit/s

95th percentile per-packet one-way delay: 136.341 ms

Loss rate: 0.83%

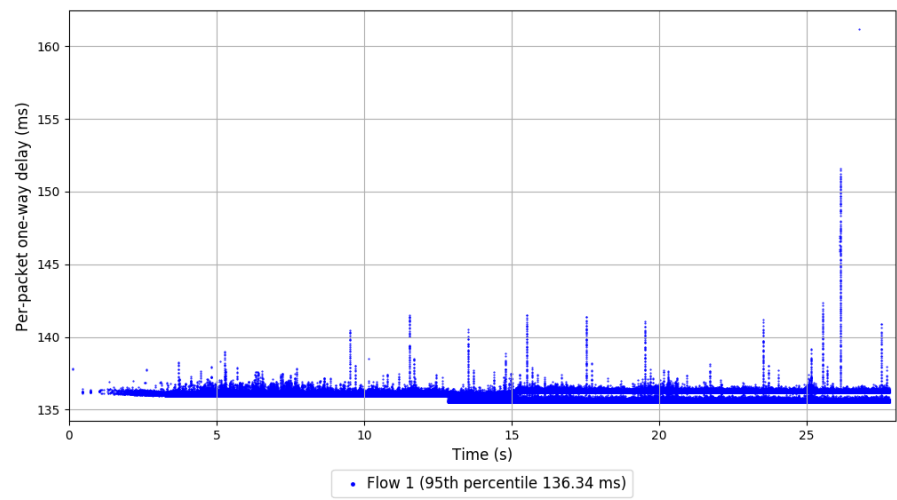
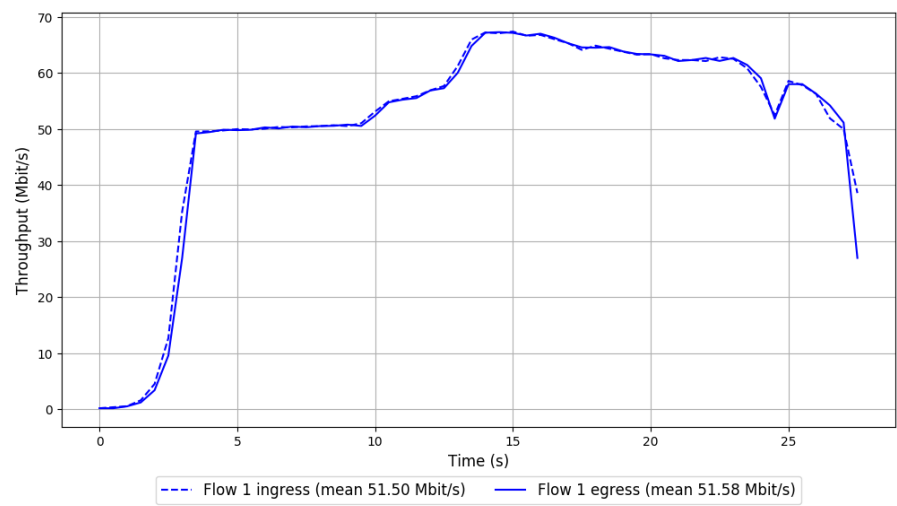
-- Flow 1:

Average throughput: 51.58 Mbit/s

95th percentile per-packet one-way delay: 136.341 ms

Loss rate: 0.83%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-02 10:18:35

End at: 2018-01-02 10:19:05

Below is generated by plot.py at 2018-01-02 14:18:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.76 Mbit/s

95th percentile per-packet one-way delay: 136.224 ms

Loss rate: 1.09%

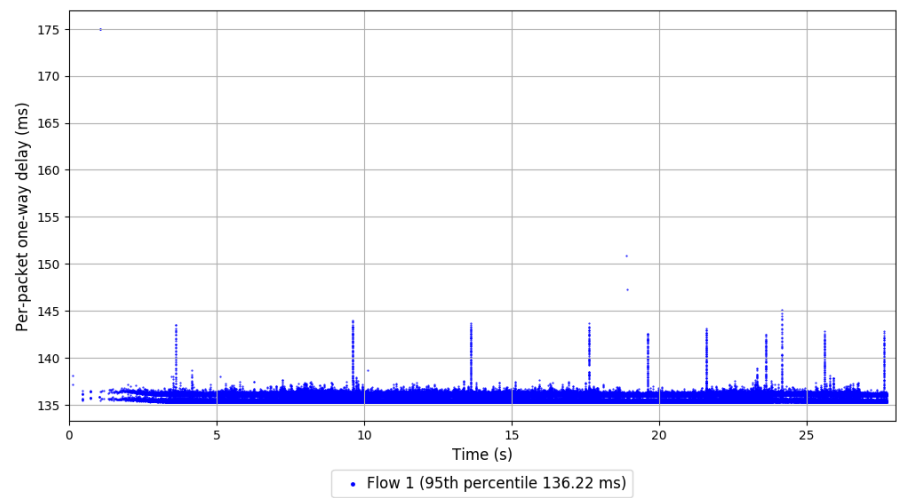
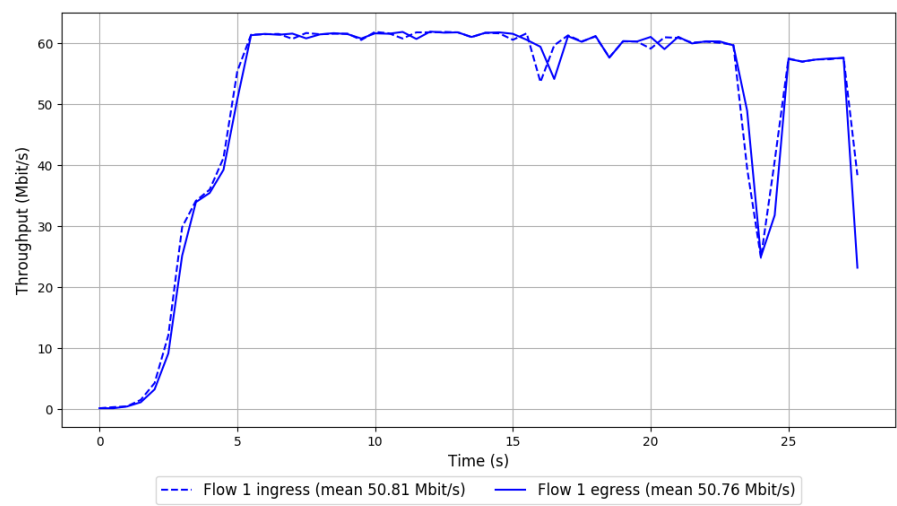
-- Flow 1:

Average throughput: 50.76 Mbit/s

95th percentile per-packet one-way delay: 136.224 ms

Loss rate: 1.09%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-02 10:30:48

End at: 2018-01-02 10:31:18

Below is generated by plot.py at 2018-01-02 14:18:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.65 Mbit/s

95th percentile per-packet one-way delay: 136.639 ms

Loss rate: 1.08%

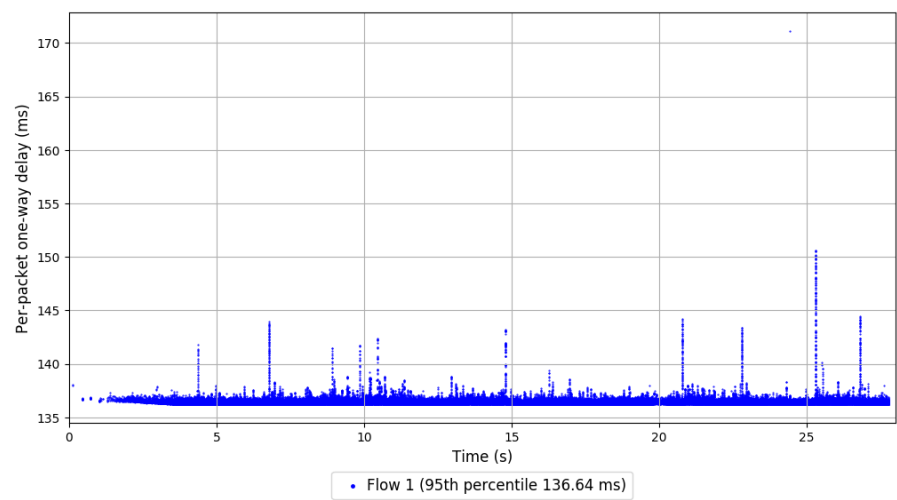
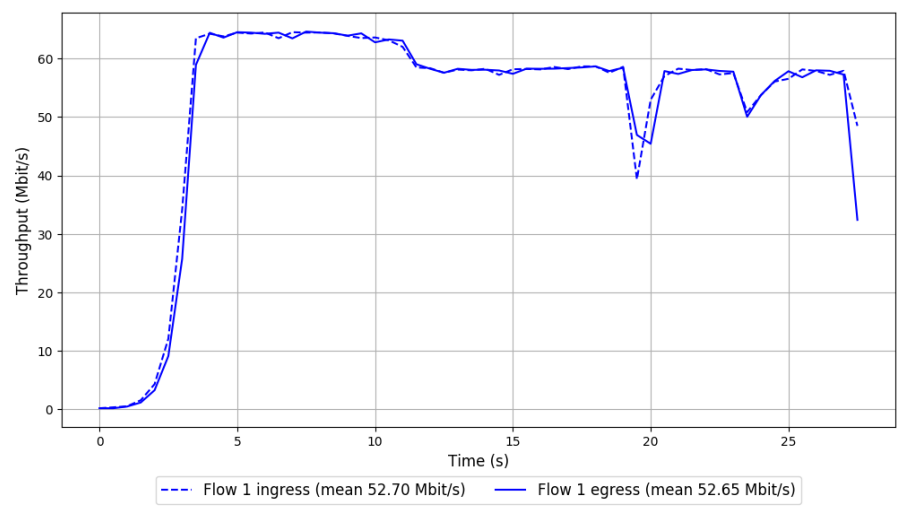
-- Flow 1:

Average throughput: 52.65 Mbit/s

95th percentile per-packet one-way delay: 136.639 ms

Loss rate: 1.08%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-02 10:42:52

End at: 2018-01-02 10:43:22

Below is generated by plot.py at 2018-01-02 14:19:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.30 Mbit/s

95th percentile per-packet one-way delay: 136.390 ms

Loss rate: 1.11%

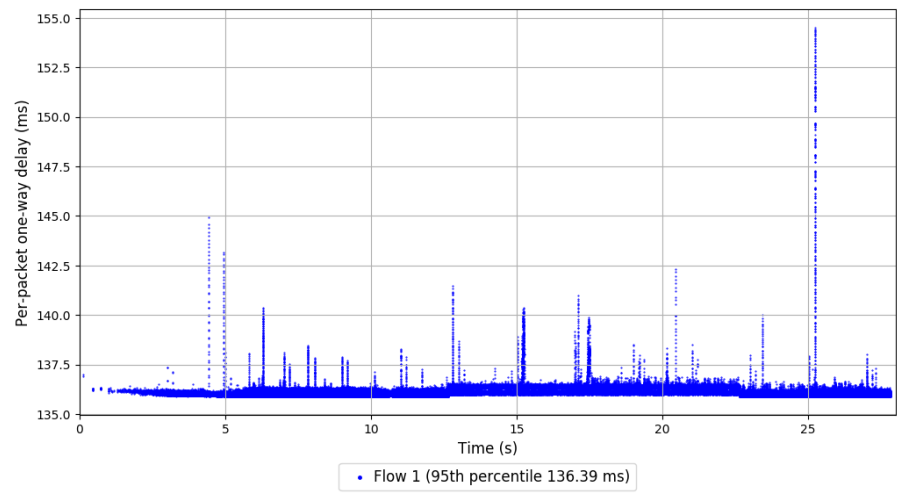
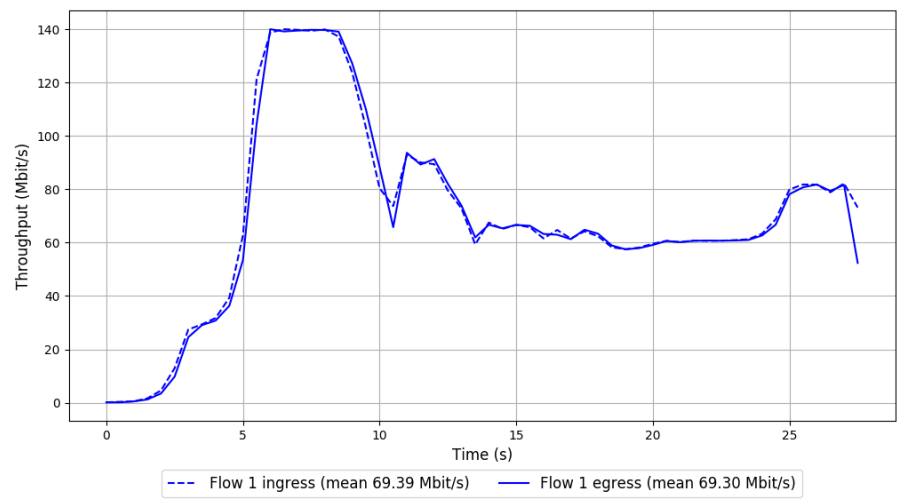
-- Flow 1:

Average throughput: 69.30 Mbit/s

95th percentile per-packet one-way delay: 136.390 ms

Loss rate: 1.11%

Run 6: Report of Copa — Data Link

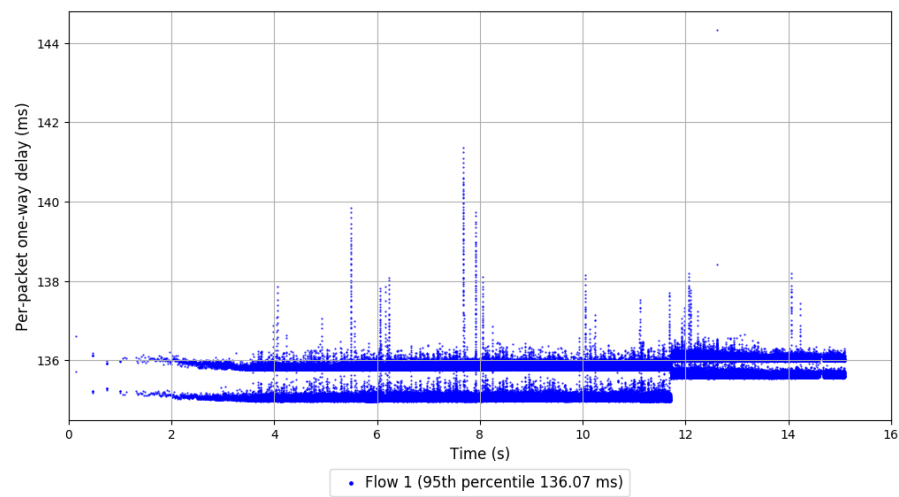
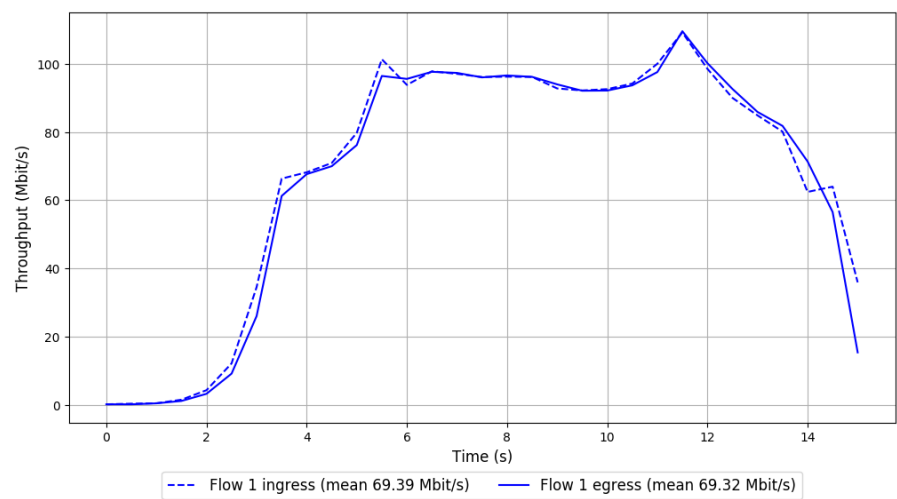


Run 7: Statistics of Copa

Start at: 2018-01-02 10:55:50

End at: 2018-01-02 10:56:20

Run 7: Report of Copa — Data Link

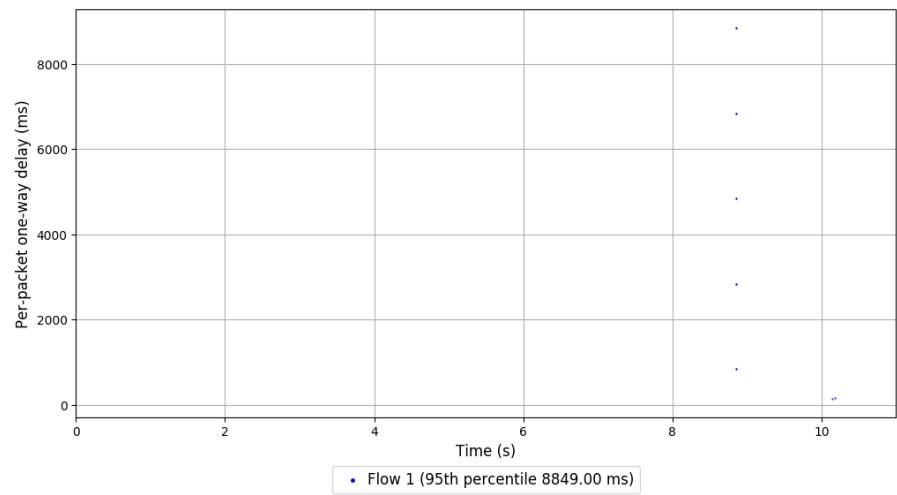
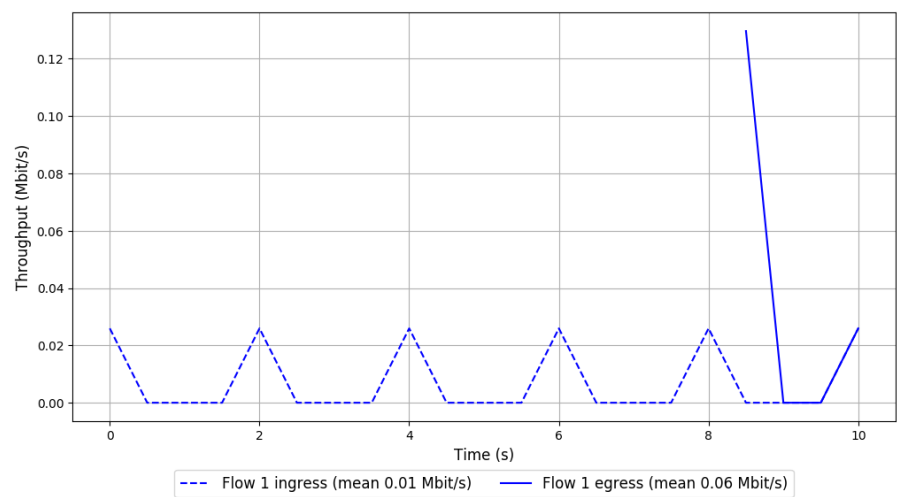


Run 8: Statistics of Copa

Start at: 2018-01-02 11:08:40

End at: 2018-01-02 11:09:10

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-02 11:20:47

End at: 2018-01-02 11:21:17

Below is generated by plot.py at 2018-01-02 14:19:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.60 Mbit/s

95th percentile per-packet one-way delay: 160.242 ms

Loss rate: 1.23%

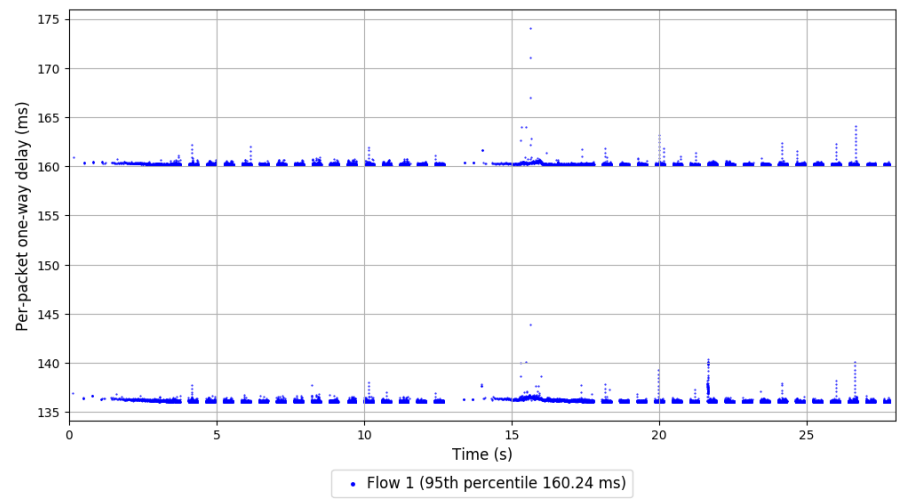
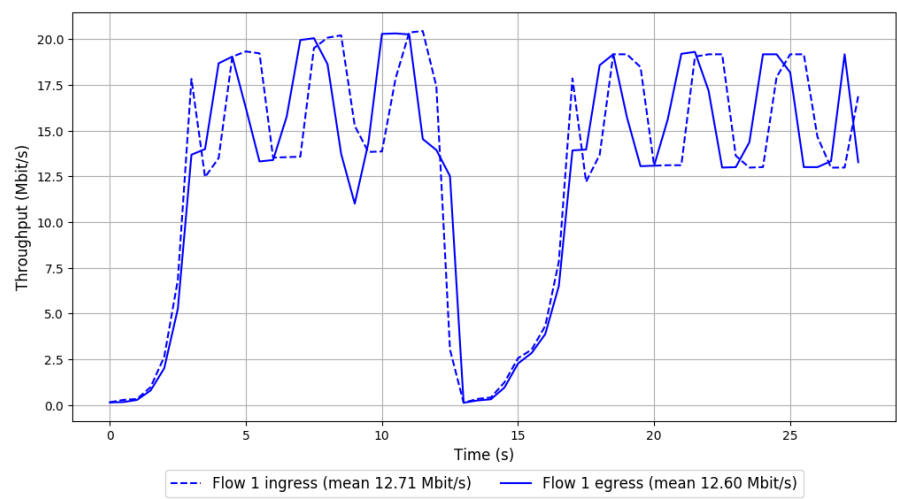
-- Flow 1:

Average throughput: 12.60 Mbit/s

95th percentile per-packet one-way delay: 160.242 ms

Loss rate: 1.23%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-02 11:33:02

End at: 2018-01-02 11:33:32

Below is generated by plot.py at 2018-01-02 14:19:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.72 Mbit/s

95th percentile per-packet one-way delay: 136.253 ms

Loss rate: 0.20%

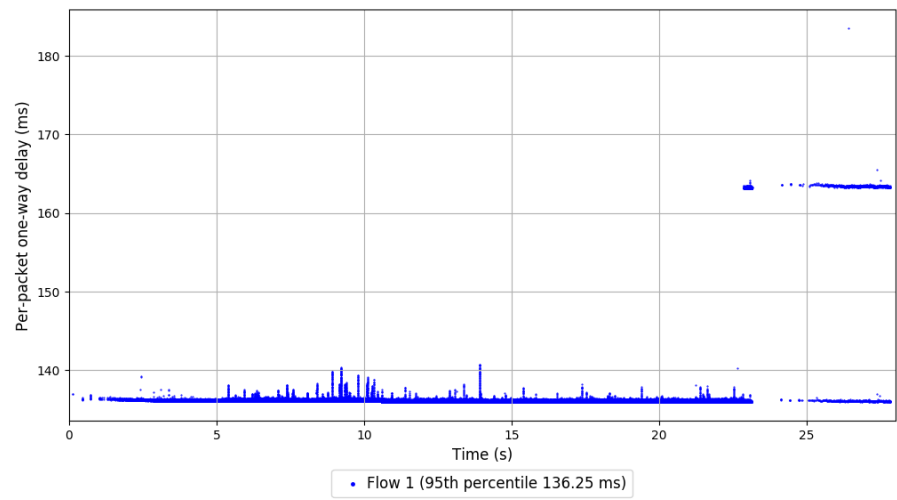
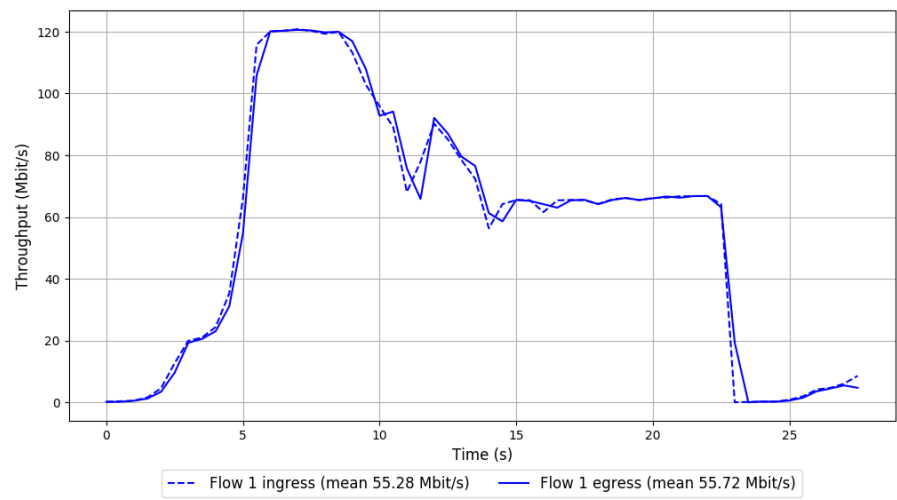
-- Flow 1:

Average throughput: 55.72 Mbit/s

95th percentile per-packet one-way delay: 136.253 ms

Loss rate: 0.20%

Run 10: Report of Copa — Data Link

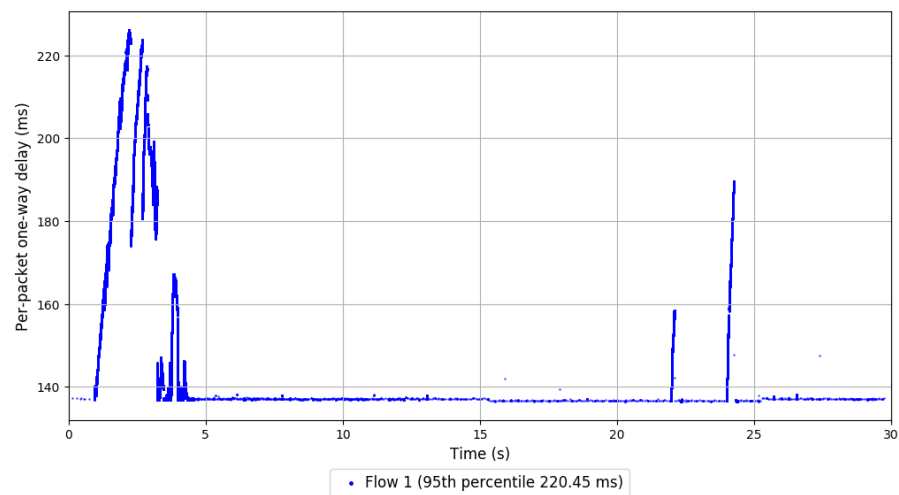
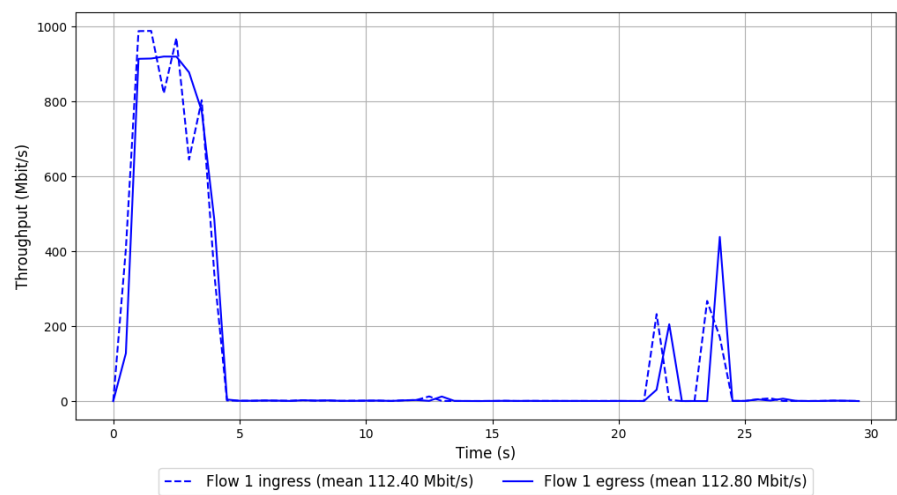


```
Run 1: Statistics of FillP

Start at: 2018-01-02 09:44:29
End at: 2018-01-02 09:44:59

# Below is generated by plot.py at 2018-01-02 14:19:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 112.80 Mbit/s
95th percentile per-packet one-way delay: 220.454 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 112.80 Mbit/s
95th percentile per-packet one-way delay: 220.454 ms
Loss rate: 0.40%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-02 09:56:58

End at: 2018-01-02 09:57:28

Below is generated by plot.py at 2018-01-02 14:32:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 861.58 Mbit/s

95th percentile per-packet one-way delay: 167.466 ms

Loss rate: 0.86%

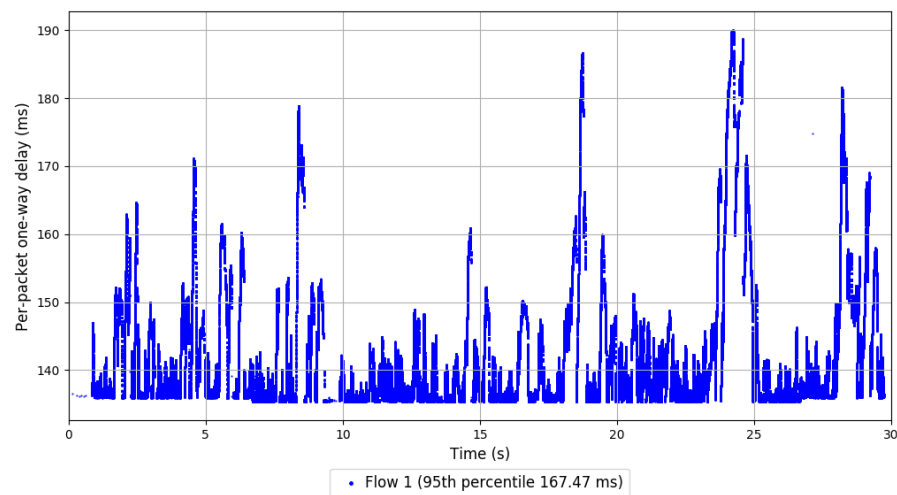
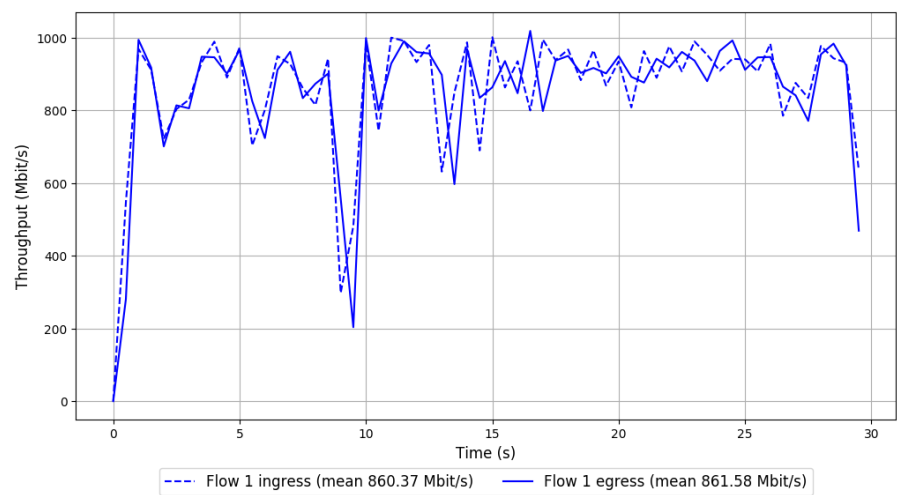
-- Flow 1:

Average throughput: 861.58 Mbit/s

95th percentile per-packet one-way delay: 167.466 ms

Loss rate: 0.86%

Run 2: Report of FillP — Data Link

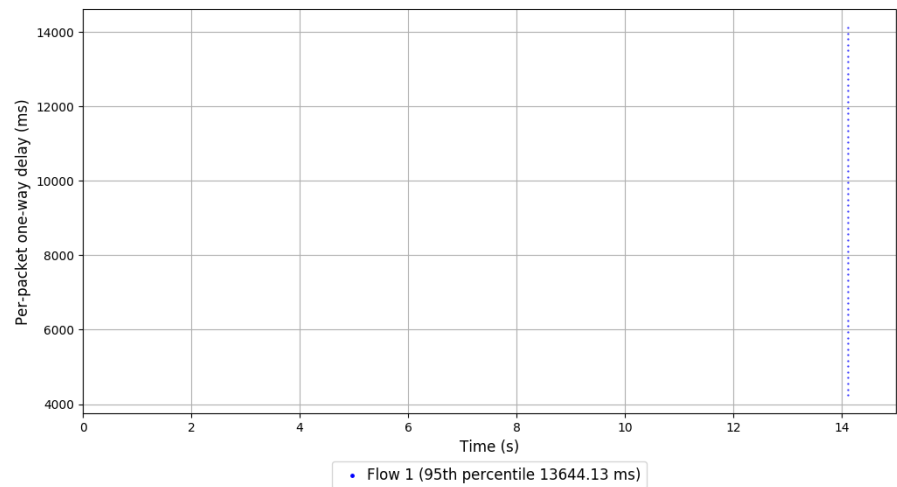
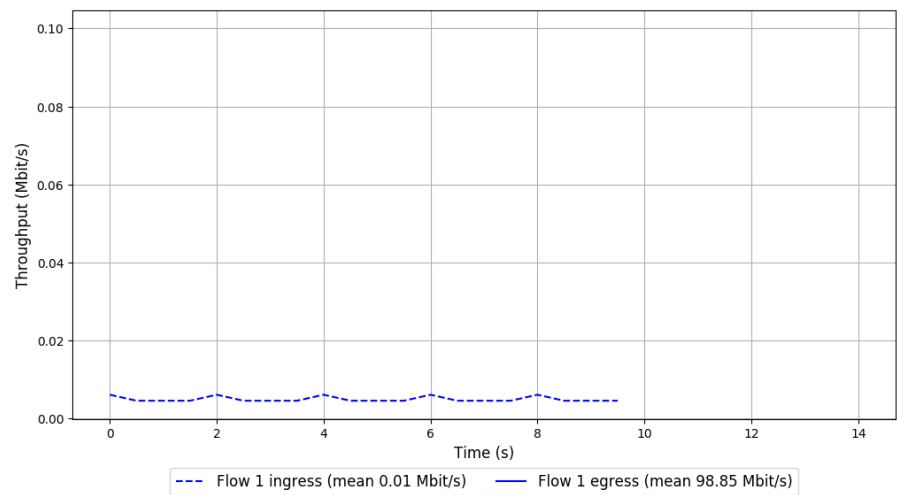


Run 3: Statistics of FillP

Start at: 2018-01-02 10:09:56

End at: 2018-01-02 10:10:26

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-02 10:22:06

End at: 2018-01-02 10:22:36

Below is generated by plot.py at 2018-01-02 14:32:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.86 Mbit/s

95th percentile per-packet one-way delay: 163.655 ms

Loss rate: 0.00%

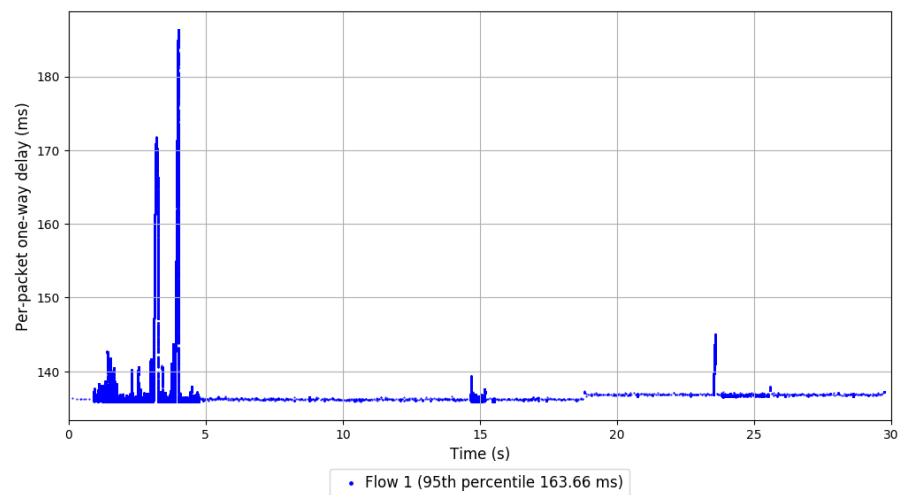
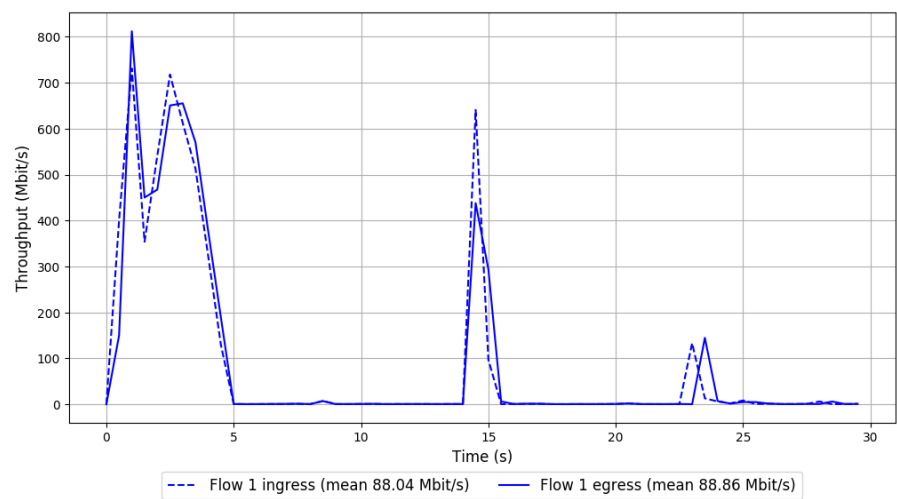
-- Flow 1:

Average throughput: 88.86 Mbit/s

95th percentile per-packet one-way delay: 163.655 ms

Loss rate: 0.00%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-02 10:34:09

End at: 2018-01-02 10:34:39

Below is generated by plot.py at 2018-01-02 14:32:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.18 Mbit/s

95th percentile per-packet one-way delay: 211.834 ms

Loss rate: 1.46%

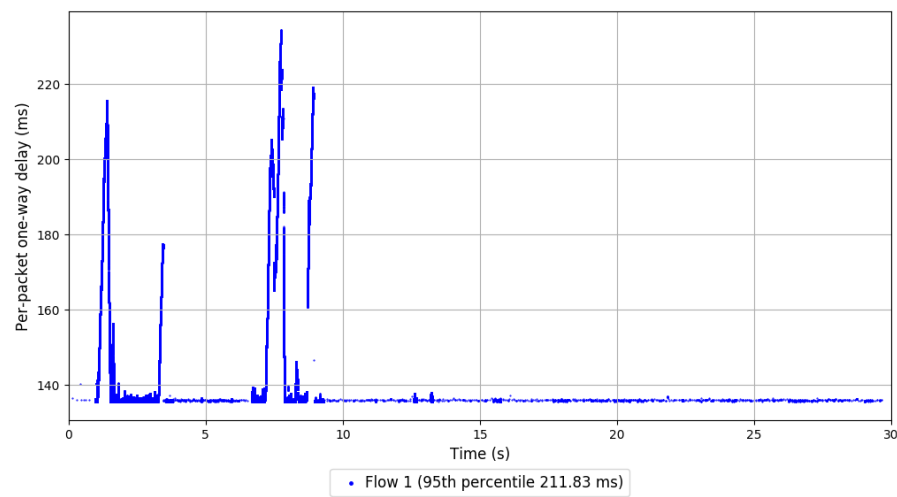
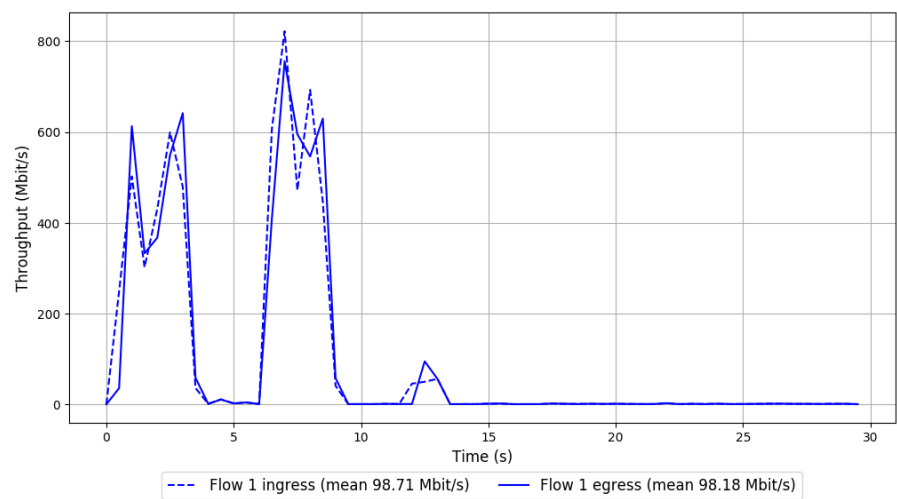
-- Flow 1:

Average throughput: 98.18 Mbit/s

95th percentile per-packet one-way delay: 211.834 ms

Loss rate: 1.46%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-02 10:46:14

End at: 2018-01-02 10:46:44

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 905.28 Mbit/s

95th percentile per-packet one-way delay: 189.193 ms

Loss rate: 1.10%

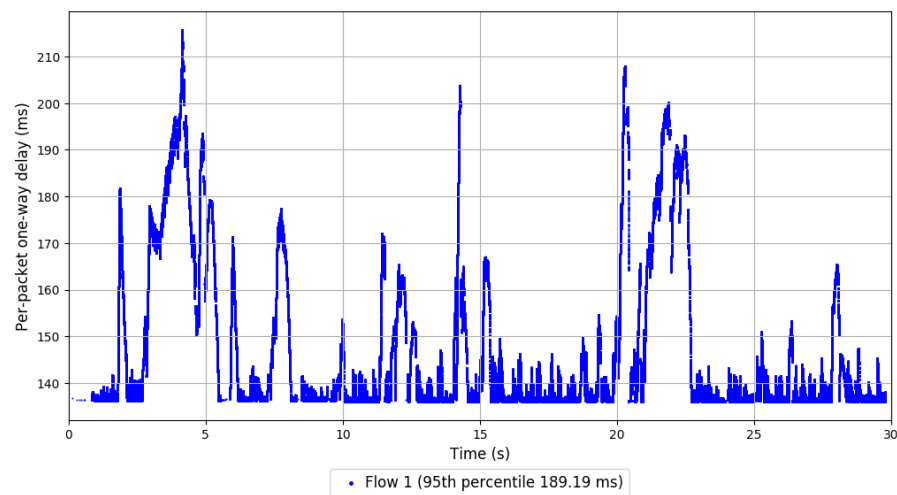
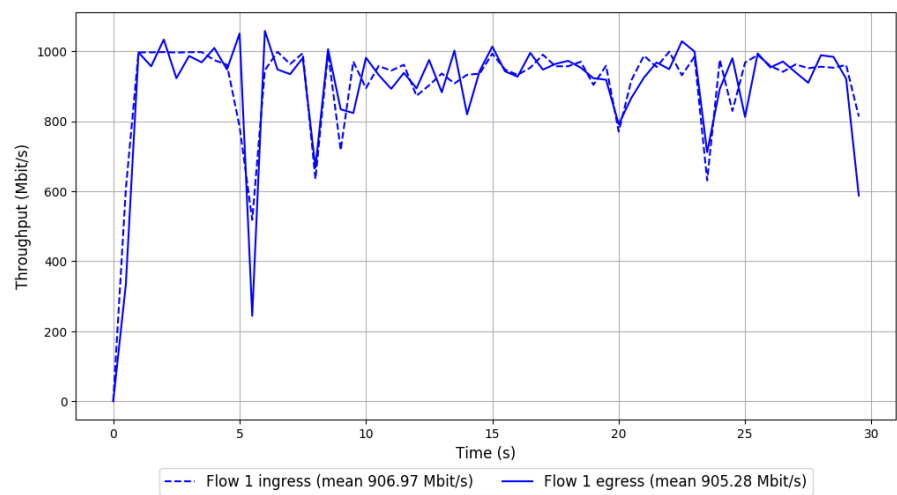
-- Flow 1:

Average throughput: 905.28 Mbit/s

95th percentile per-packet one-way delay: 189.193 ms

Loss rate: 1.10%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-02 10:59:16

End at: 2018-01-02 10:59:46

Below is generated by plot.py at 2018-01-02 14:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 904.31 Mbit/s

95th percentile per-packet one-way delay: 199.816 ms

Loss rate: 1.82%

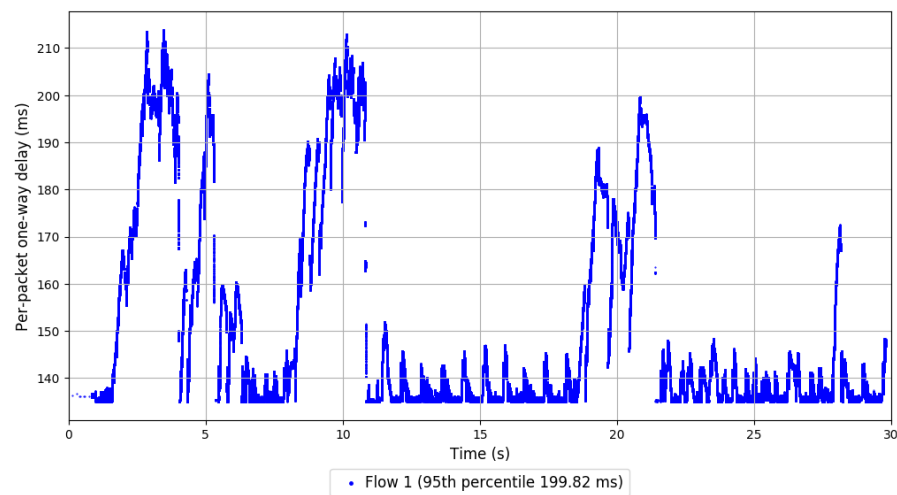
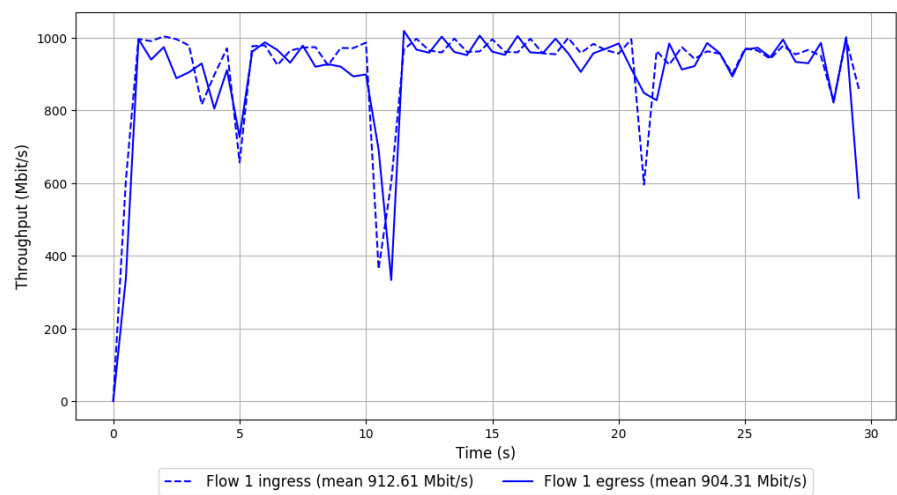
-- Flow 1:

Average throughput: 904.31 Mbit/s

95th percentile per-packet one-way delay: 199.816 ms

Loss rate: 1.82%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

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

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

Below is generated by plot.py at 2018-01-02 14:33:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 757.87 Mbit/s

95th percentile per-packet one-way delay: 215.161 ms

Loss rate: 0.56%

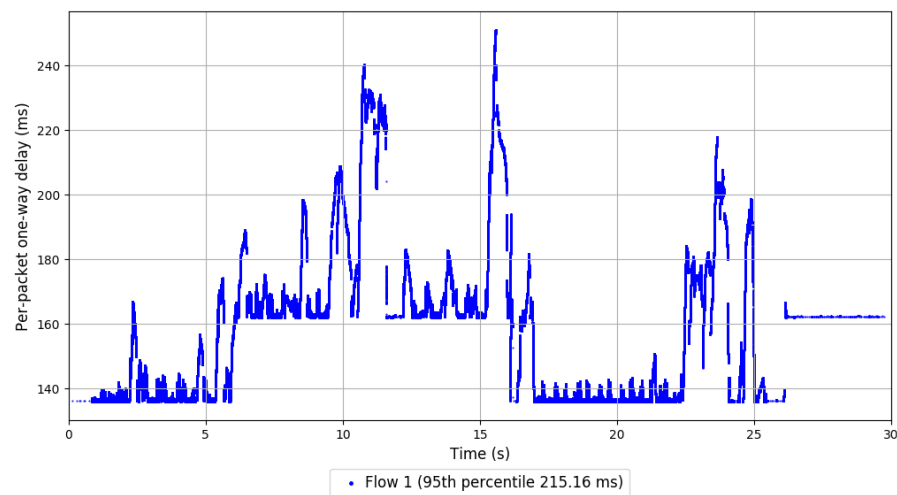
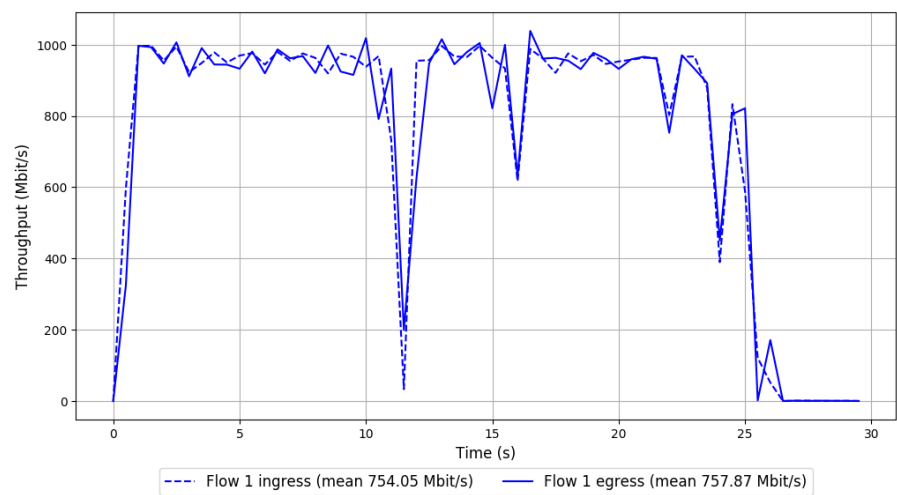
-- Flow 1:

Average throughput: 757.87 Mbit/s

95th percentile per-packet one-way delay: 215.161 ms

Loss rate: 0.56%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-02 11:24:08

End at: 2018-01-02 11:24:38

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 894.02 Mbit/s

95th percentile per-packet one-way delay: 193.868 ms

Loss rate: 0.98%

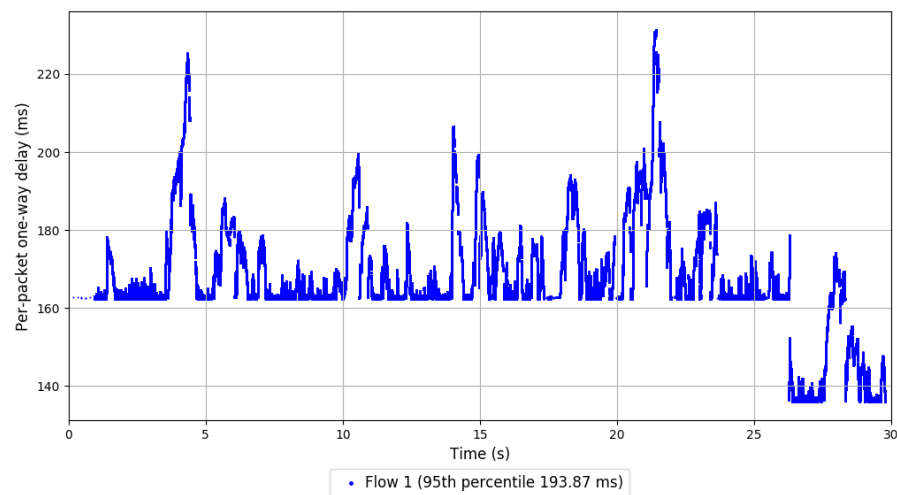
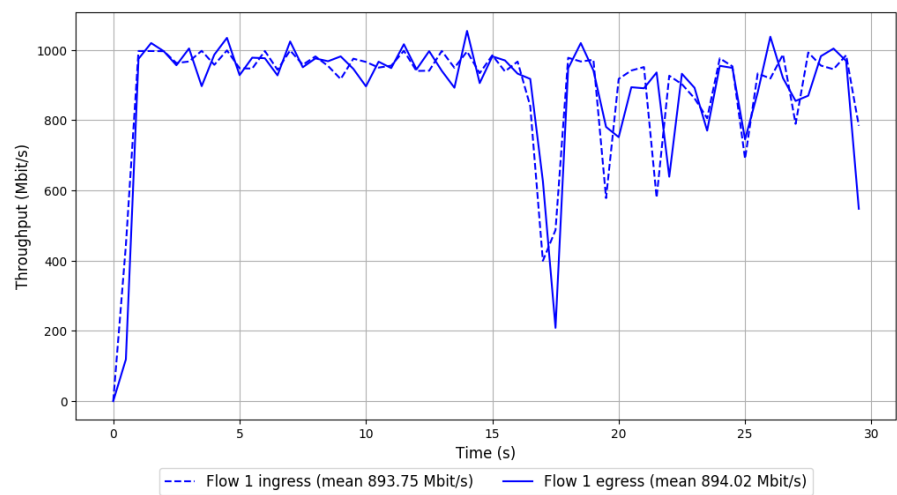
-- Flow 1:

Average throughput: 894.02 Mbit/s

95th percentile per-packet one-way delay: 193.868 ms

Loss rate: 0.98%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-02 11:36:15

End at: 2018-01-02 11:36:45

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 556.09 Mbit/s

95th percentile per-packet one-way delay: 181.577 ms

Loss rate: 1.45%

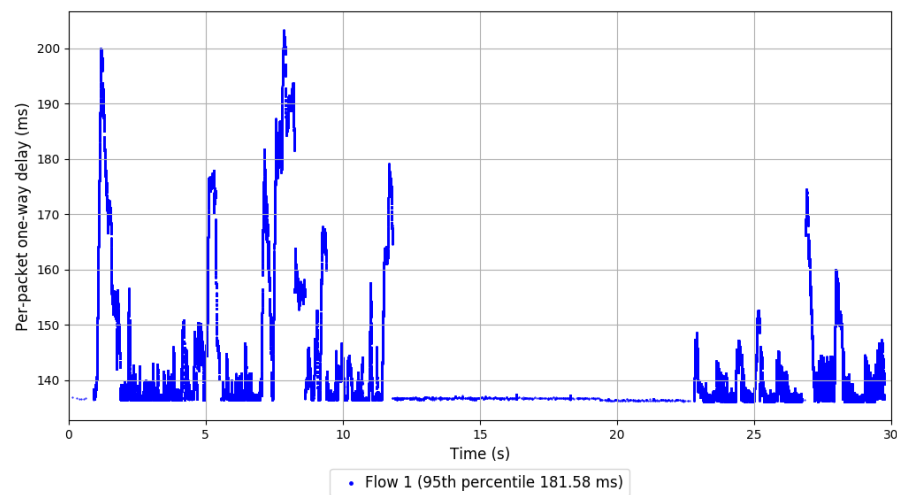
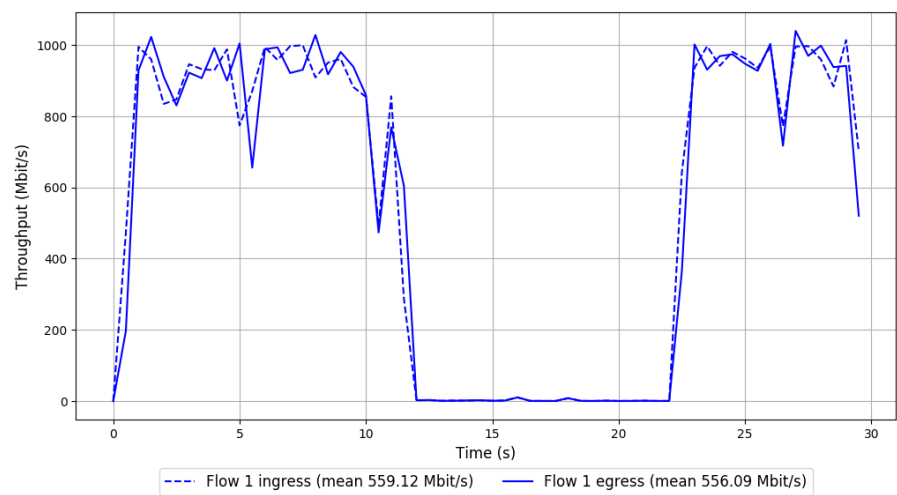
-- Flow 1:

Average throughput: 556.09 Mbit/s

95th percentile per-packet one-way delay: 181.577 ms

Loss rate: 1.45%

Run 10: Report of FillP — Data Link

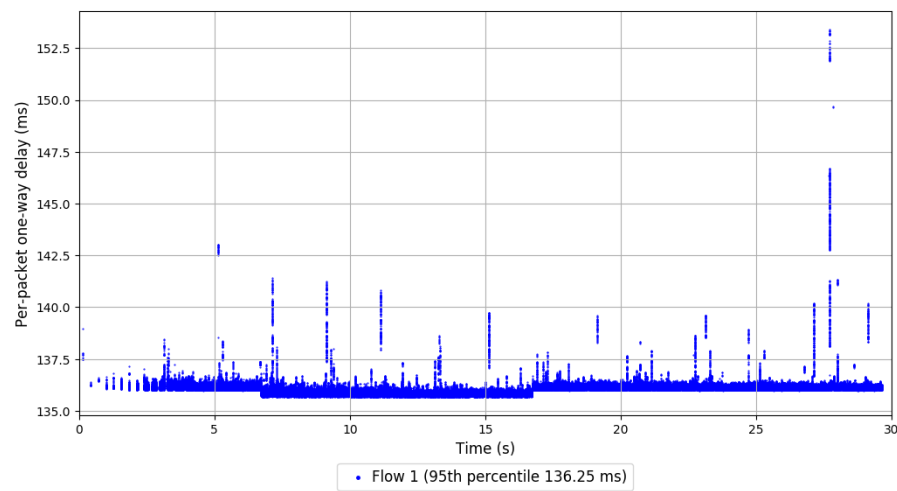
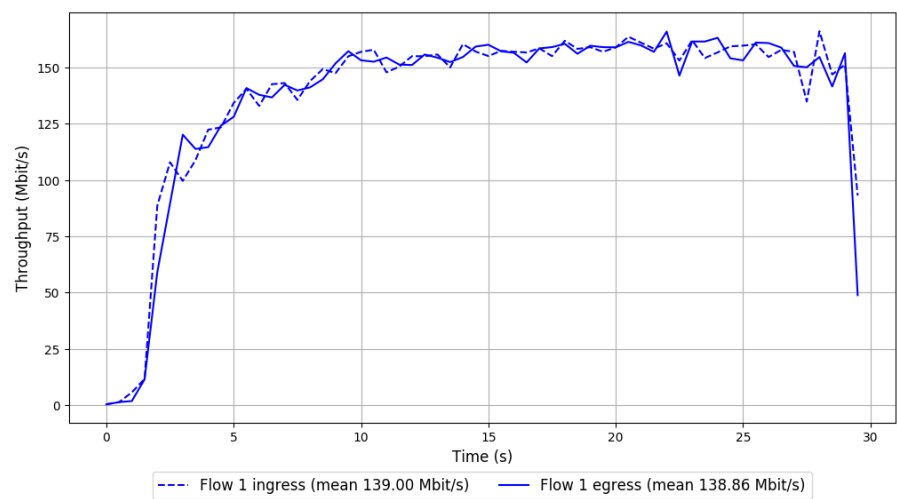


```
Run 1: Statistics of Indigo

Start at: 2018-01-02 09:45:20
End at: 2018-01-02 09:45:50

# Below is generated by plot.py at 2018-01-02 14:33:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 138.86 Mbit/s
95th percentile per-packet one-way delay: 136.255 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 138.86 Mbit/s
95th percentile per-packet one-way delay: 136.255 ms
Loss rate: 1.03%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-02 09:58:21

End at: 2018-01-02 09:58:51

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 141.87 Mbit/s

95th percentile per-packet one-way delay: 136.169 ms

Loss rate: 1.02%

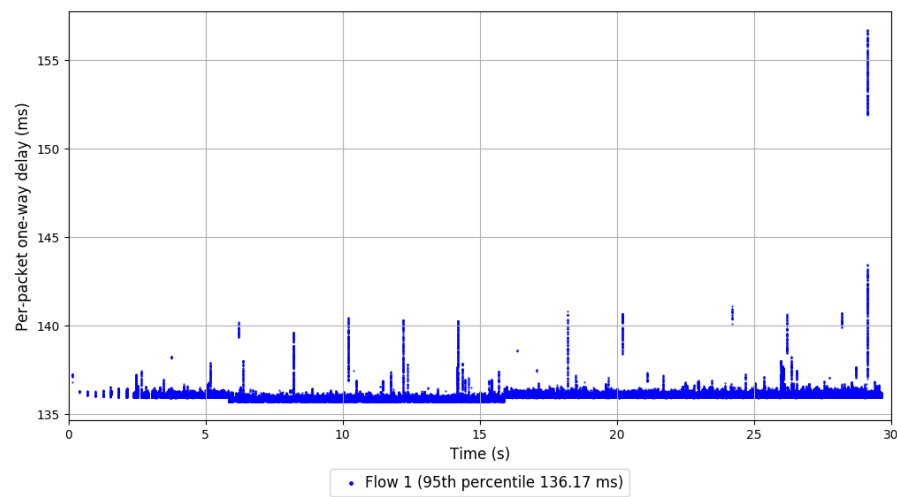
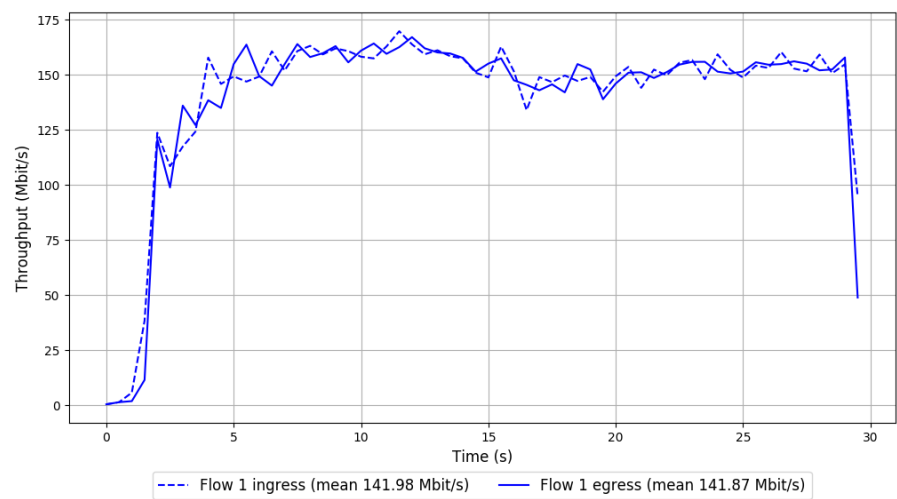
-- Flow 1:

Average throughput: 141.87 Mbit/s

95th percentile per-packet one-way delay: 136.169 ms

Loss rate: 1.02%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-02 10:10:39

End at: 2018-01-02 10:11:09

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 126.74 Mbit/s

95th percentile per-packet one-way delay: 136.571 ms

Loss rate: 1.17%

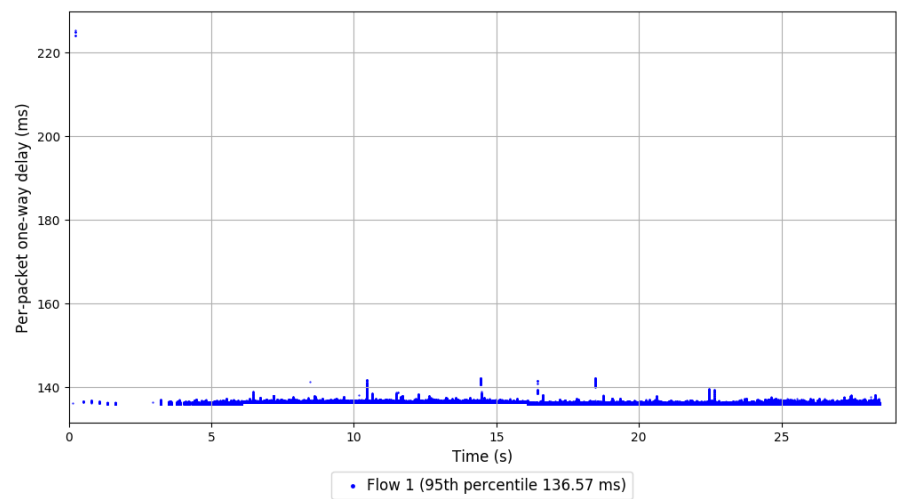
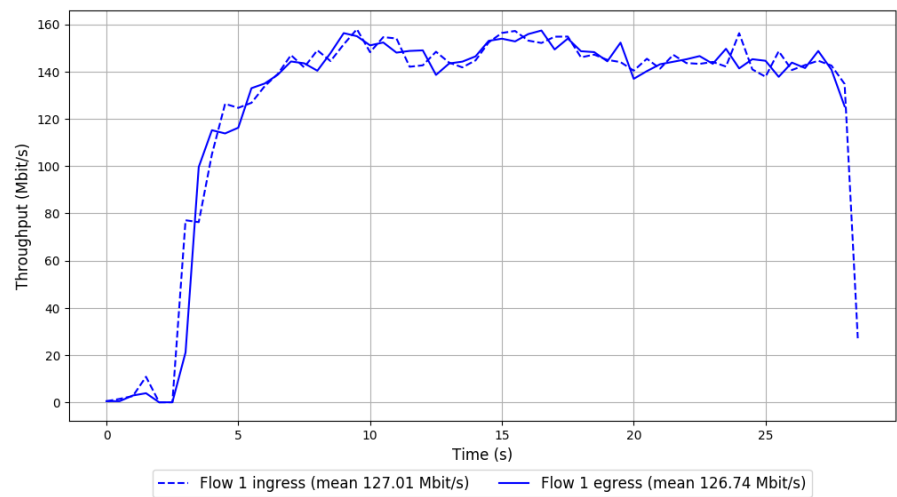
-- Flow 1:

Average throughput: 126.74 Mbit/s

95th percentile per-packet one-way delay: 136.571 ms

Loss rate: 1.17%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-02 10:22:55

End at: 2018-01-02 10:23:25

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.25 Mbit/s

95th percentile per-packet one-way delay: 136.825 ms

Loss rate: 1.07%

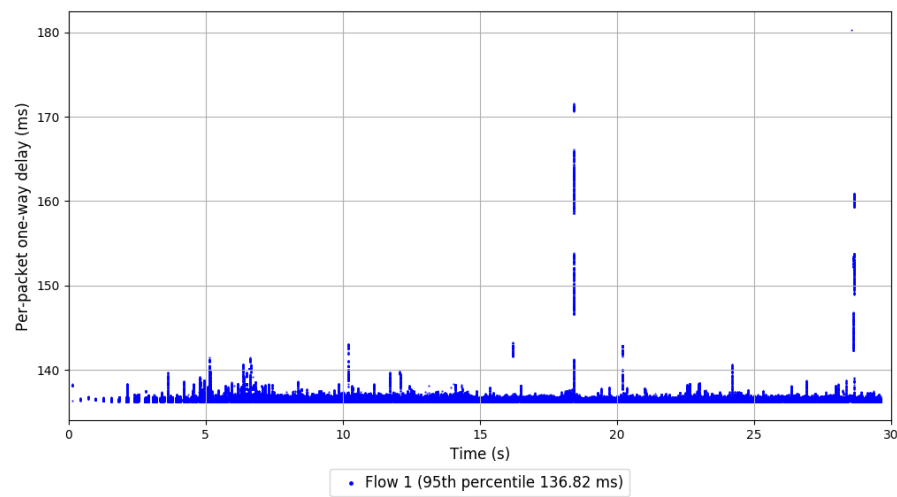
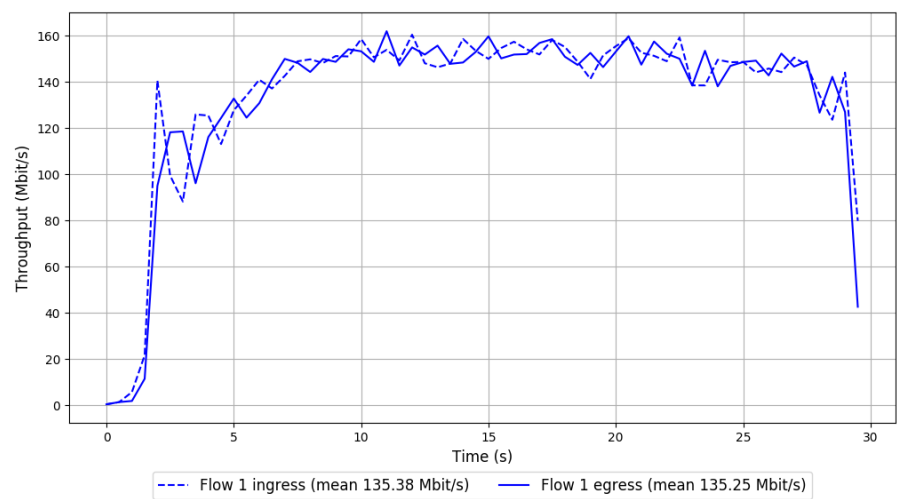
-- Flow 1:

Average throughput: 135.25 Mbit/s

95th percentile per-packet one-way delay: 136.825 ms

Loss rate: 1.07%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-02 10:34:59

End at: 2018-01-02 10:35:29

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.28 Mbit/s

95th percentile per-packet one-way delay: 136.487 ms

Loss rate: 1.37%

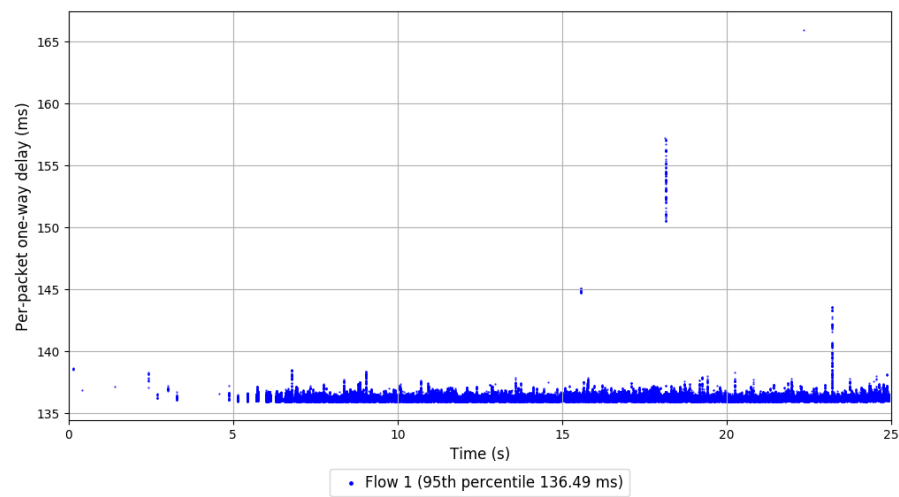
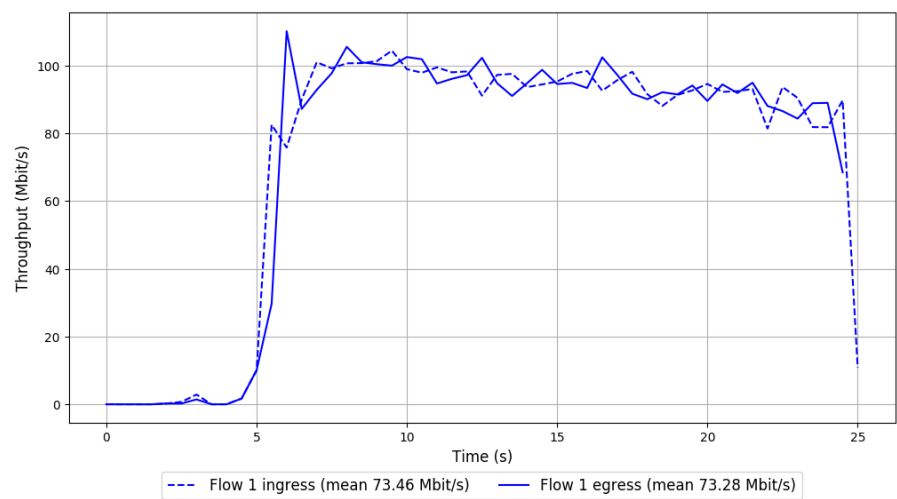
-- Flow 1:

Average throughput: 73.28 Mbit/s

95th percentile per-packet one-way delay: 136.487 ms

Loss rate: 1.37%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-02 10:47:43

End at: 2018-01-02 10:48:13

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 147.36 Mbit/s

95th percentile per-packet one-way delay: 136.481 ms

Loss rate: 1.70%

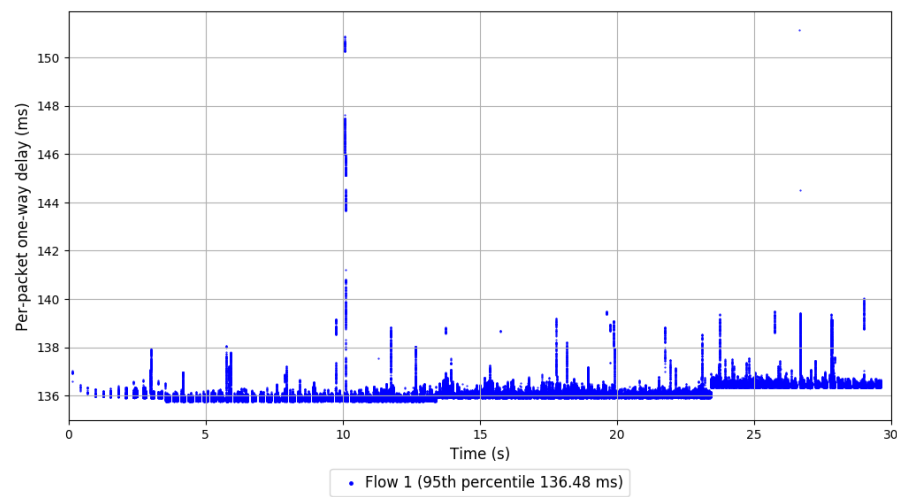
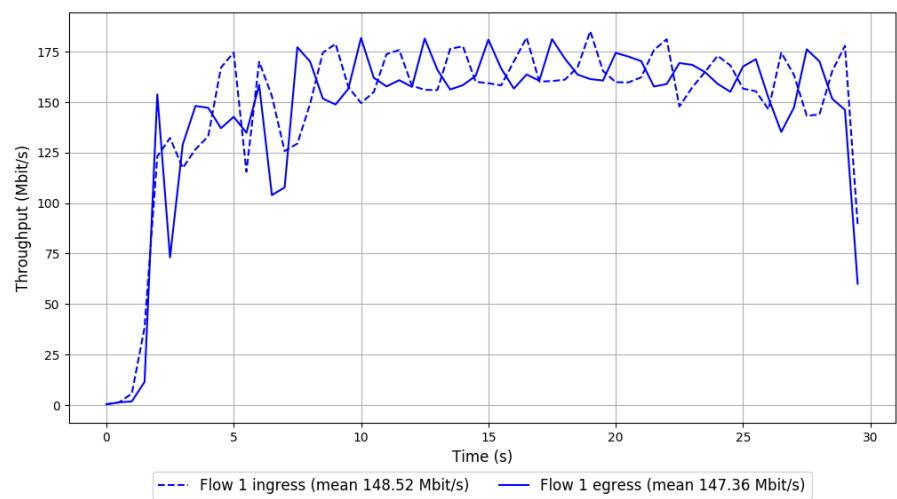
-- Flow 1:

Average throughput: 147.36 Mbit/s

95th percentile per-packet one-way delay: 136.481 ms

Loss rate: 1.70%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-02 11:00:41

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

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.44 Mbit/s

95th percentile per-packet one-way delay: 136.225 ms

Loss rate: 1.01%

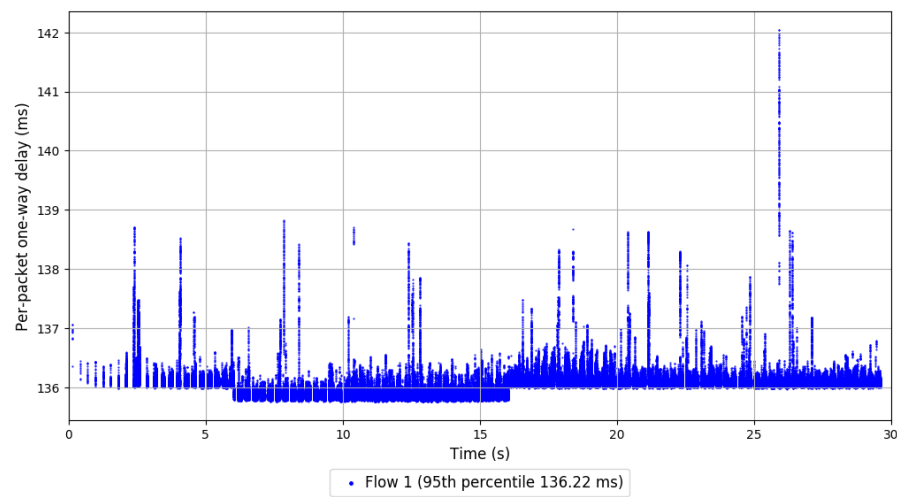
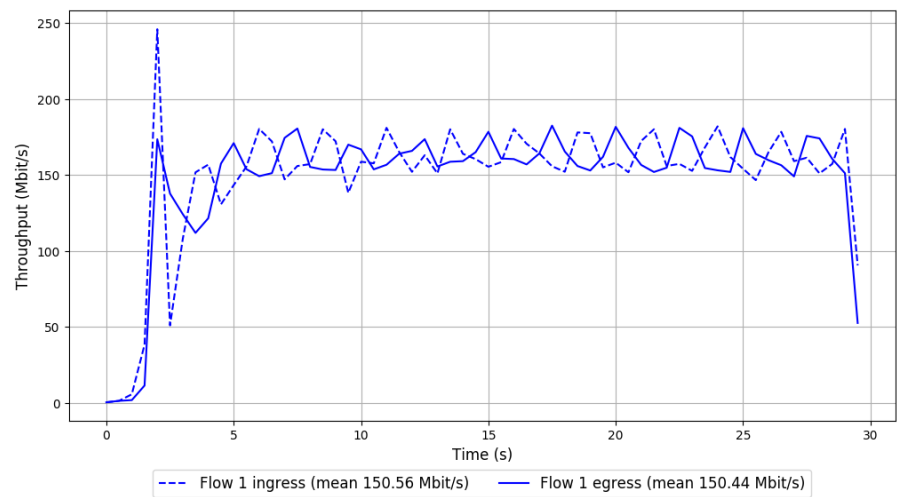
-- Flow 1:

Average throughput: 150.44 Mbit/s

95th percentile per-packet one-way delay: 136.225 ms

Loss rate: 1.01%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

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

End at: 2018-01-02 11:13:38

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 149.34 Mbit/s

95th percentile per-packet one-way delay: 136.263 ms

Loss rate: 1.01%

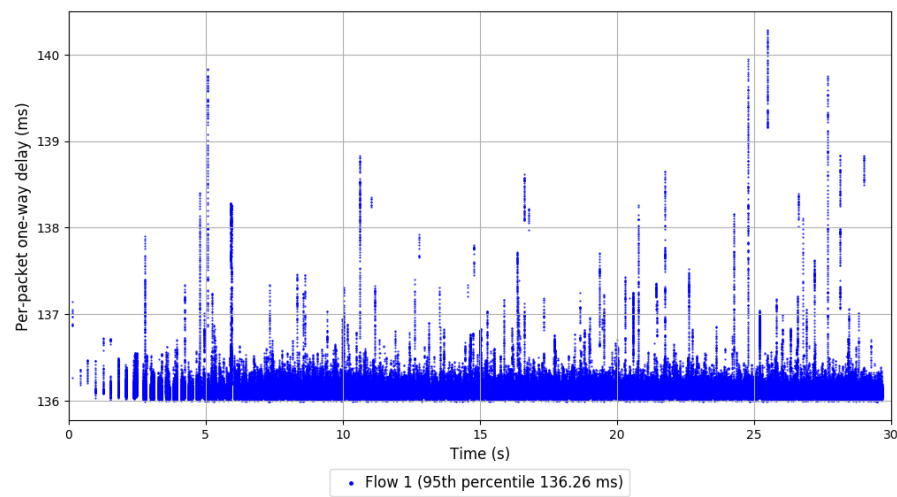
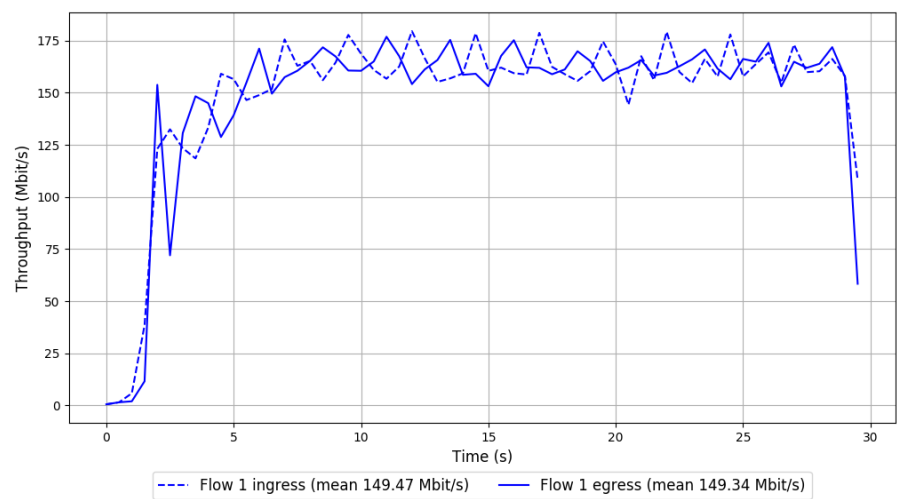
-- Flow 1:

Average throughput: 149.34 Mbit/s

95th percentile per-packet one-way delay: 136.263 ms

Loss rate: 1.01%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-02 11:25:31

End at: 2018-01-02 11:26:01

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.11 Mbit/s

95th percentile per-packet one-way delay: 162.537 ms

Loss rate: 1.07%

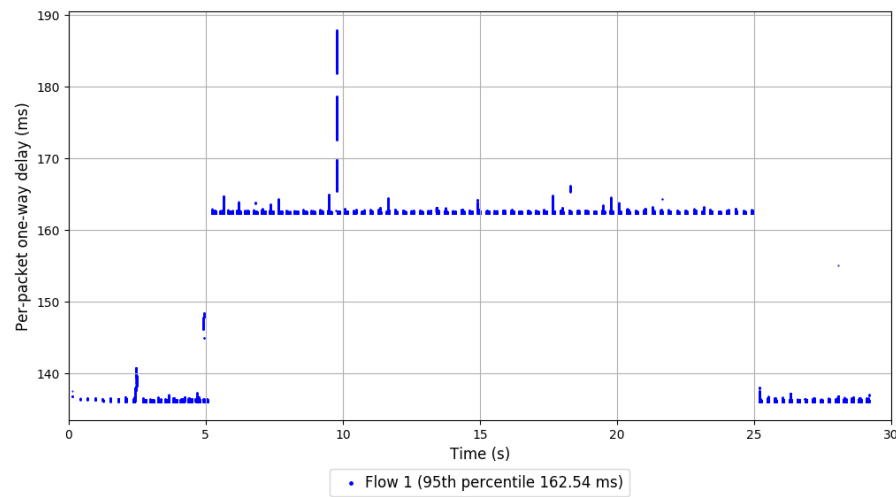
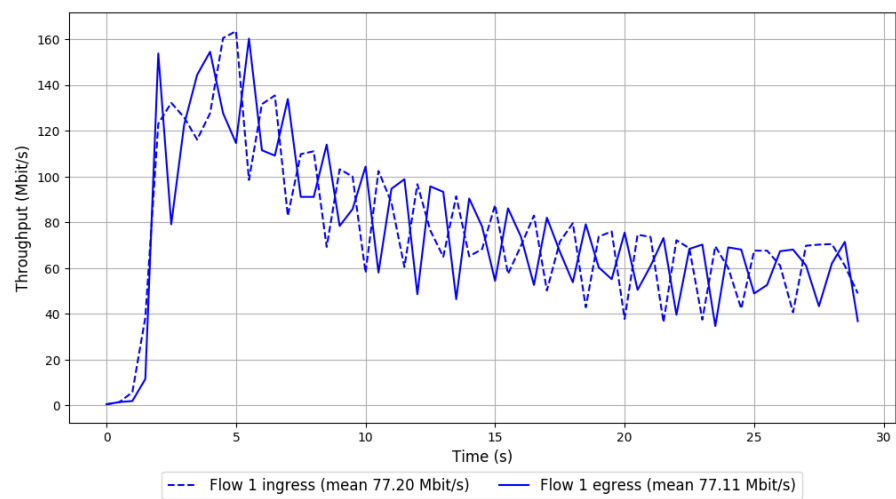
-- Flow 1:

Average throughput: 77.11 Mbit/s

95th percentile per-packet one-way delay: 162.537 ms

Loss rate: 1.07%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-02 11:37:24

End at: 2018-01-02 11:37:54

Below is generated by plot.py at 2018-01-02 14:33:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 154.10 Mbit/s

95th percentile per-packet one-way delay: 136.384 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 154.10 Mbit/s

95th percentile per-packet one-way delay: 136.384 ms

Loss rate: 1.55%

Run 10: Report of Indigo — Data Link

