

Pantheon Report

Generated at 2018-01-09 12:19:48 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

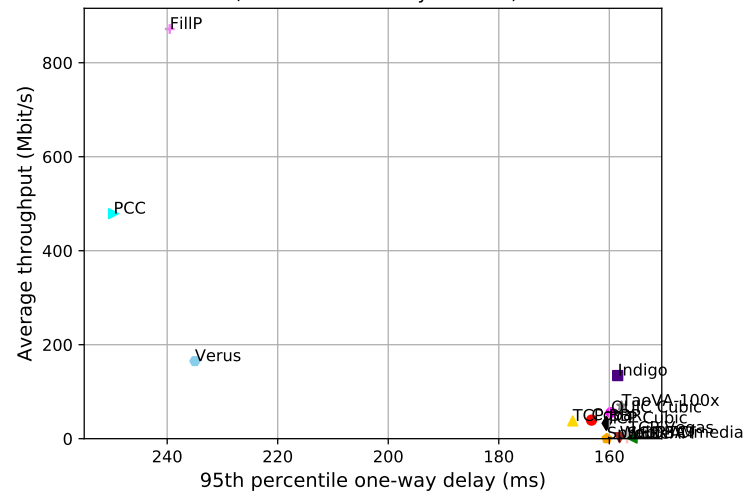
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

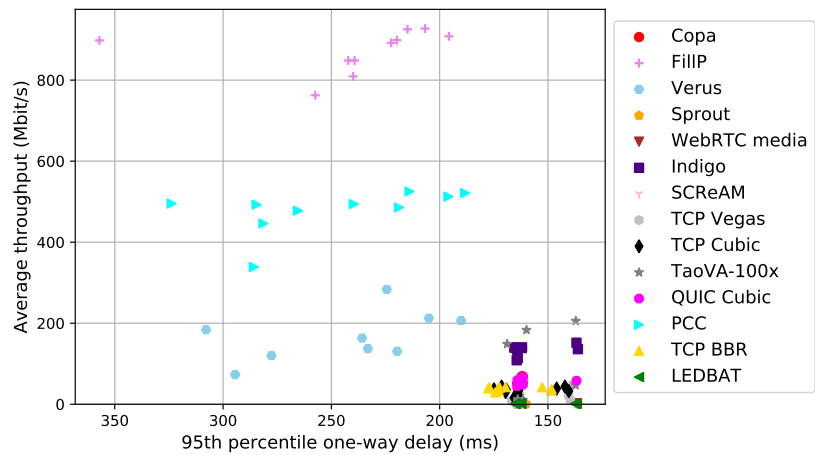
Git summary:

```
branch: master @ 56d1792c316a5efca3f2d21342905405fedffb48
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	37.86	166.62	0.66
TCP Cubic	10	32.75	160.53	0.47
LEDBAT	10	1.30	155.88	0.40
PCC	10	478.92	249.71	2.37
QUIC Cubic	9	55.93	159.69	0.04
SCReAM	10	0.22	156.79	0.04
WebRTC media	10	2.07	158.14	0.02
Sprout	10	0.37	160.45	0.01
TaoVA-100x	9	69.80	157.79	0.06
TCP Vegas	10	12.18	156.57	0.74
Verus	10	165.03	234.99	1.04
Copa	10	39.49	163.22	0.03
FillP	10	871.86	239.54	3.20
Indigo	10	134.33	158.49	0.09

Run 1: Statistics of TCP BBR

Start at: 2018-01-09 08:47:22

End at: 2018-01-09 08:47:52

Below is generated by plot.py at 2018-01-09 11:39:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.80 Mbit/s

95th percentile per-packet one-way delay: 148.708 ms

Loss rate: 0.00%

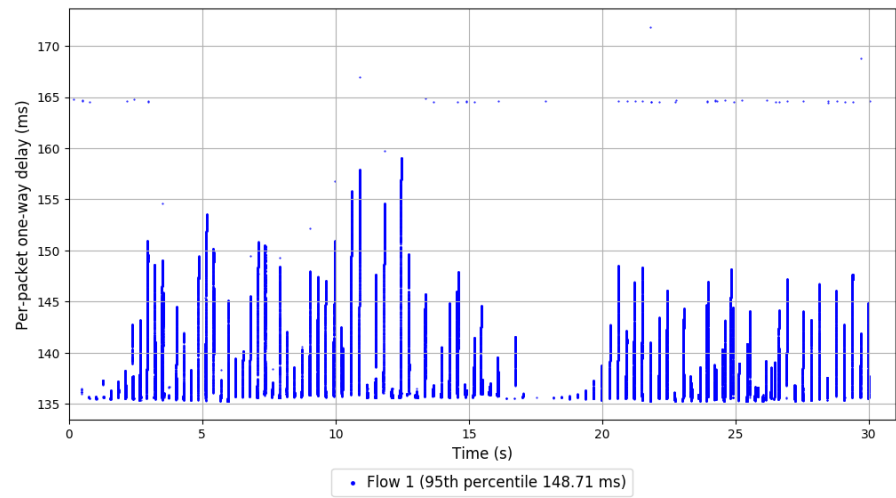
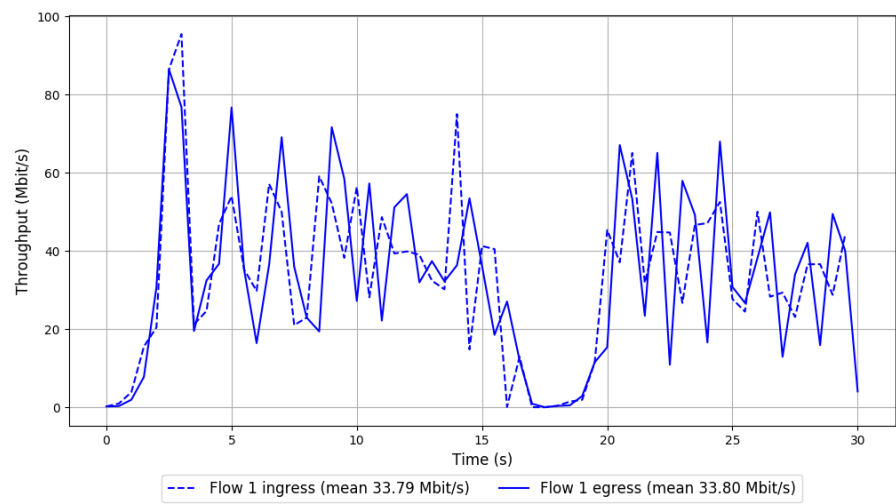
-- Flow 1:

Average throughput: 33.80 Mbit/s

95th percentile per-packet one-way delay: 148.708 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-09 09:00:17

End at: 2018-01-09 09:00:47

Below is generated by plot.py at 2018-01-09 11:39:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.94 Mbit/s

95th percentile per-packet one-way delay: 172.272 ms

Loss rate: 0.68%

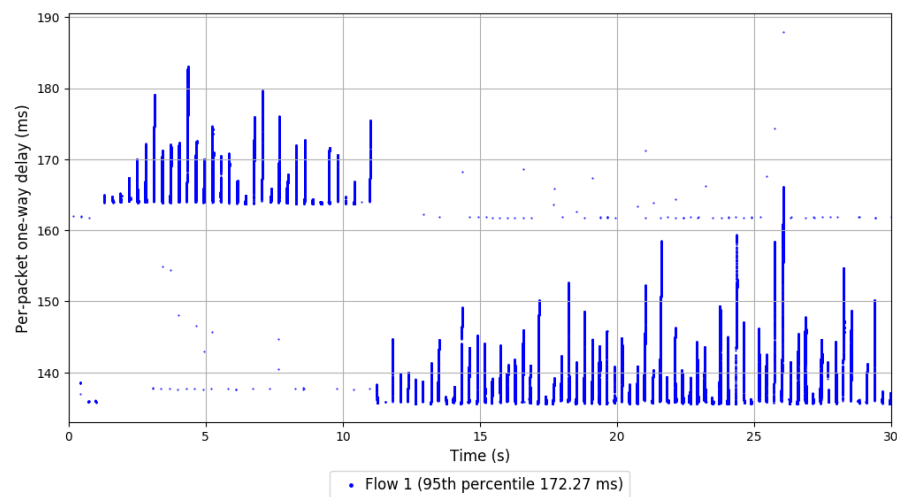
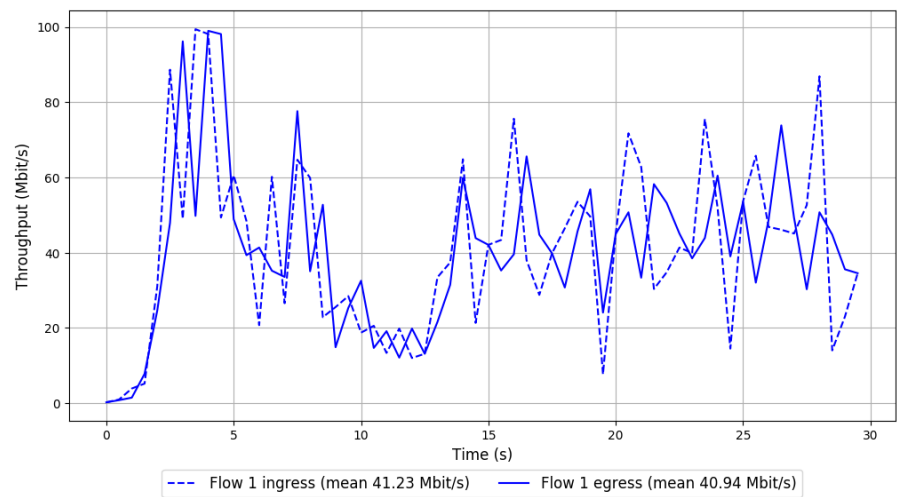
-- Flow 1:

Average throughput: 40.94 Mbit/s

95th percentile per-packet one-way delay: 172.272 ms

Loss rate: 0.68%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-09 09:12:52

End at: 2018-01-09 09:13:22

Below is generated by plot.py at 2018-01-09 11:39:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.17 Mbit/s

95th percentile per-packet one-way delay: 177.567 ms

Loss rate: 0.04%

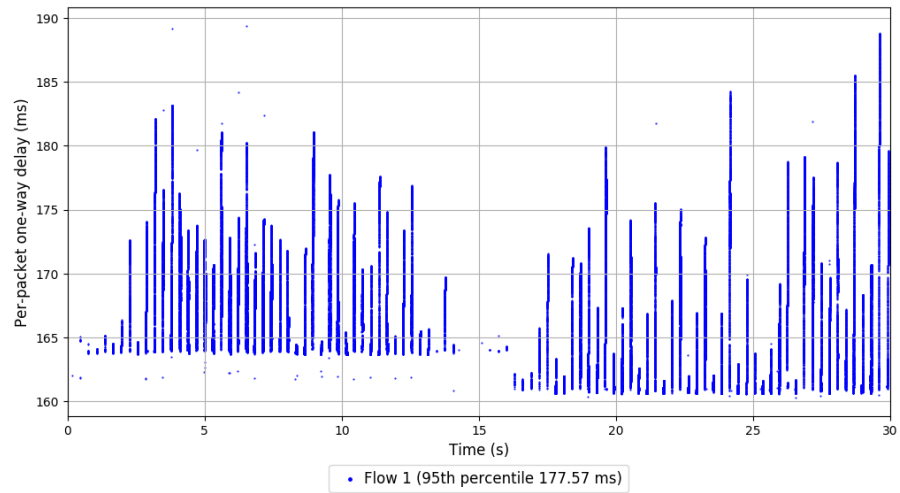
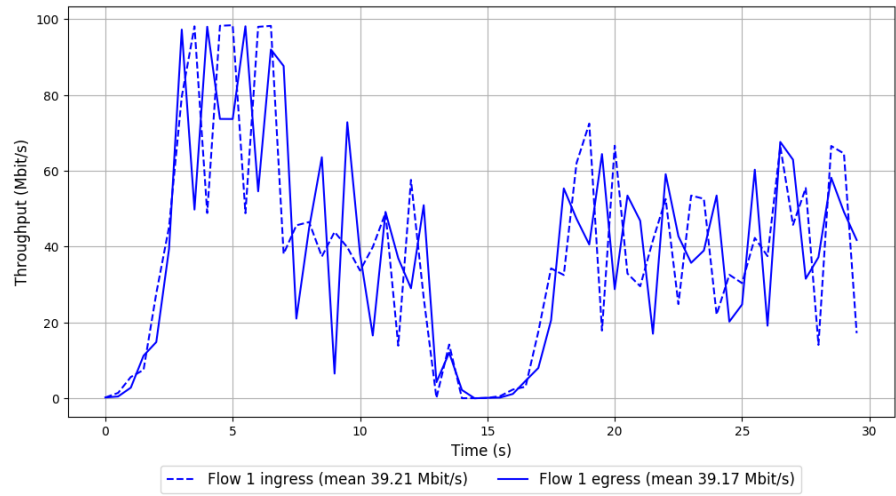
-- Flow 1:

Average throughput: 39.17 Mbit/s

95th percentile per-packet one-way delay: 177.567 ms

Loss rate: 0.04%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-09 09:25:29

End at: 2018-01-09 09:25:59

Below is generated by plot.py at 2018-01-09 11:39:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.58 Mbit/s

95th percentile per-packet one-way delay: 172.740 ms

Loss rate: 1.96%

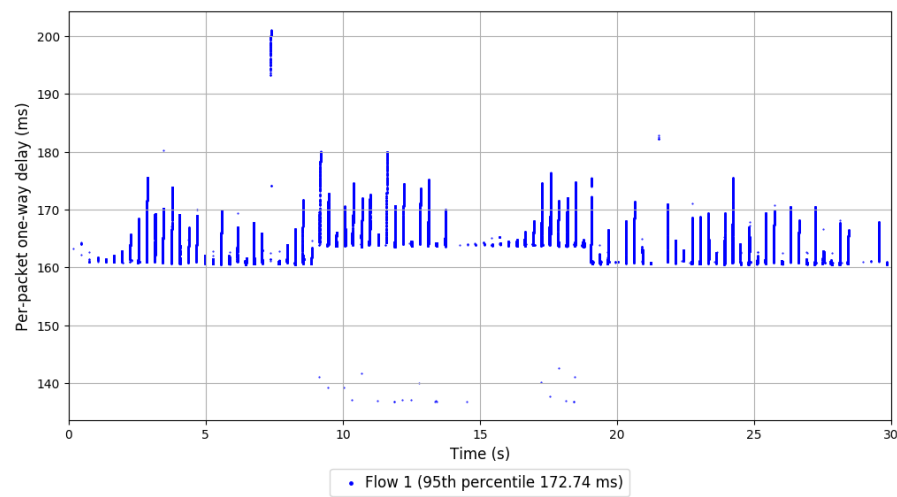
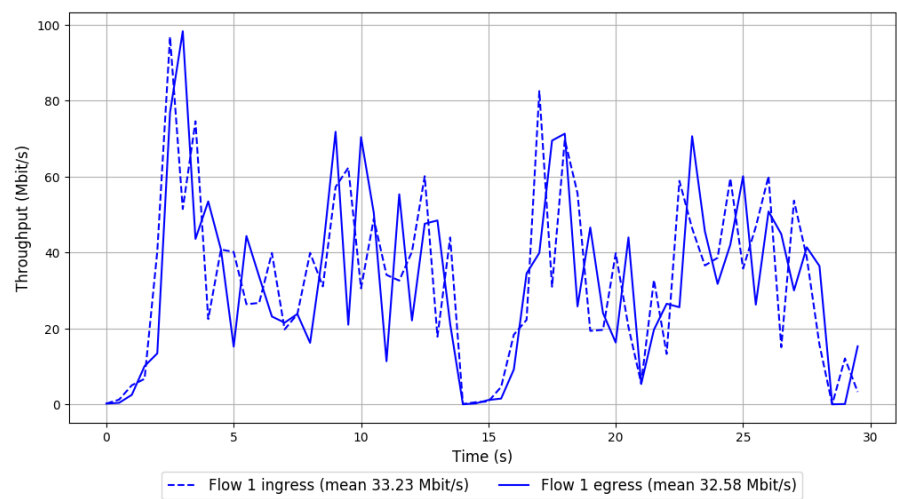
-- Flow 1:

Average throughput: 32.58 Mbit/s

95th percentile per-packet one-way delay: 172.740 ms

Loss rate: 1.96%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-09 09:38:12

End at: 2018-01-09 09:38:42

Below is generated by plot.py at 2018-01-09 11:39:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.03 Mbit/s

95th percentile per-packet one-way delay: 177.048 ms

Loss rate: 0.05%

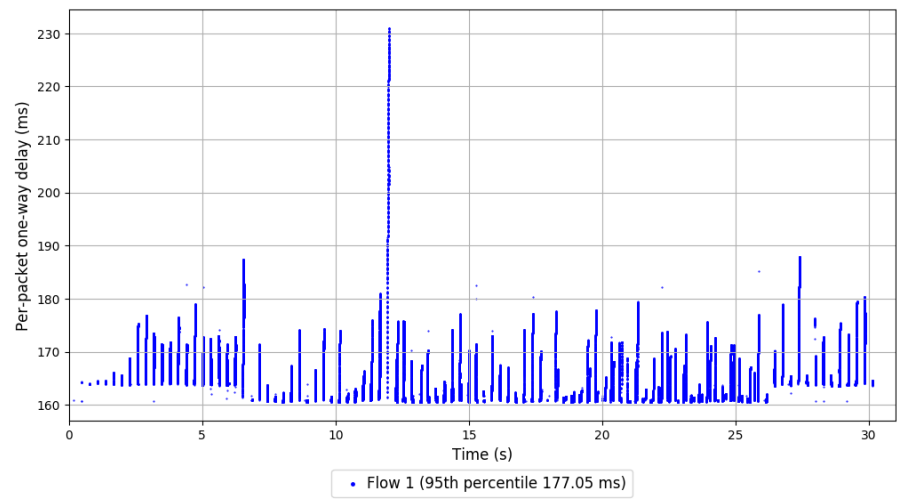
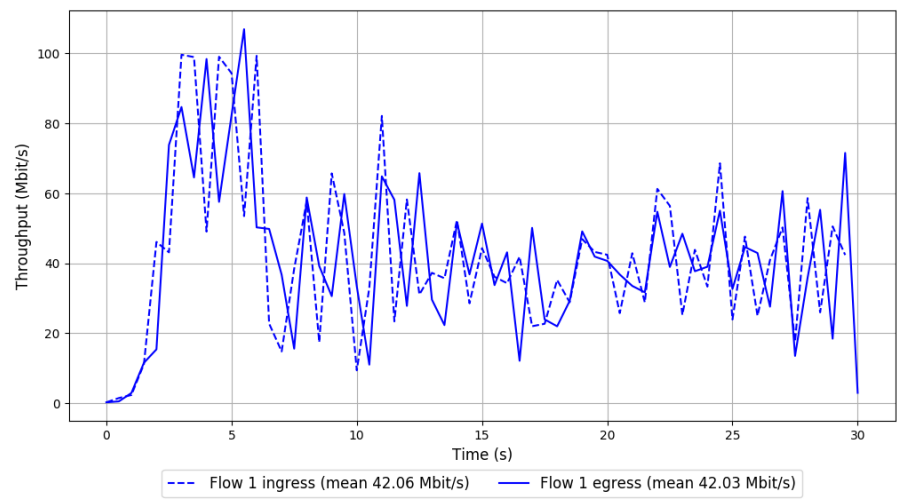
-- Flow 1:

Average throughput: 42.03 Mbit/s

95th percentile per-packet one-way delay: 177.048 ms

Loss rate: 0.05%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

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

End at: 2018-01-09 09:51:17

Below is generated by plot.py at 2018-01-09 11:39:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.41 Mbit/s

95th percentile per-packet one-way delay: 174.281 ms

Loss rate: 0.54%

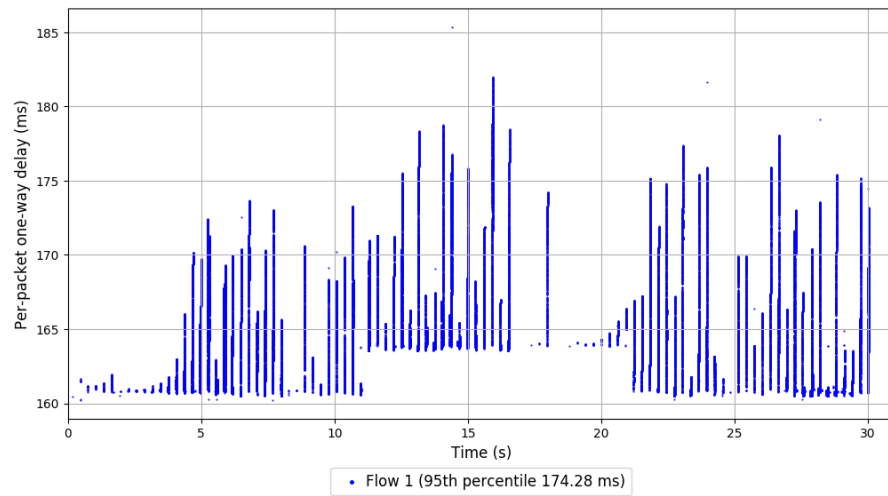
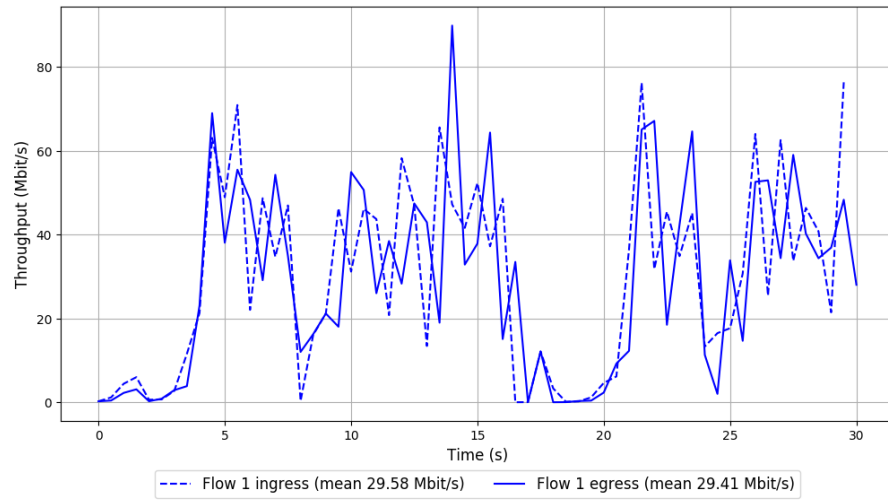
-- Flow 1:

Average throughput: 29.41 Mbit/s

95th percentile per-packet one-way delay: 174.281 ms

Loss rate: 0.54%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-09 10:03:46

End at: 2018-01-09 10:04:16

Below is generated by plot.py at 2018-01-09 11:39:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.35 Mbit/s

95th percentile per-packet one-way delay: 169.592 ms

Loss rate: 0.27%

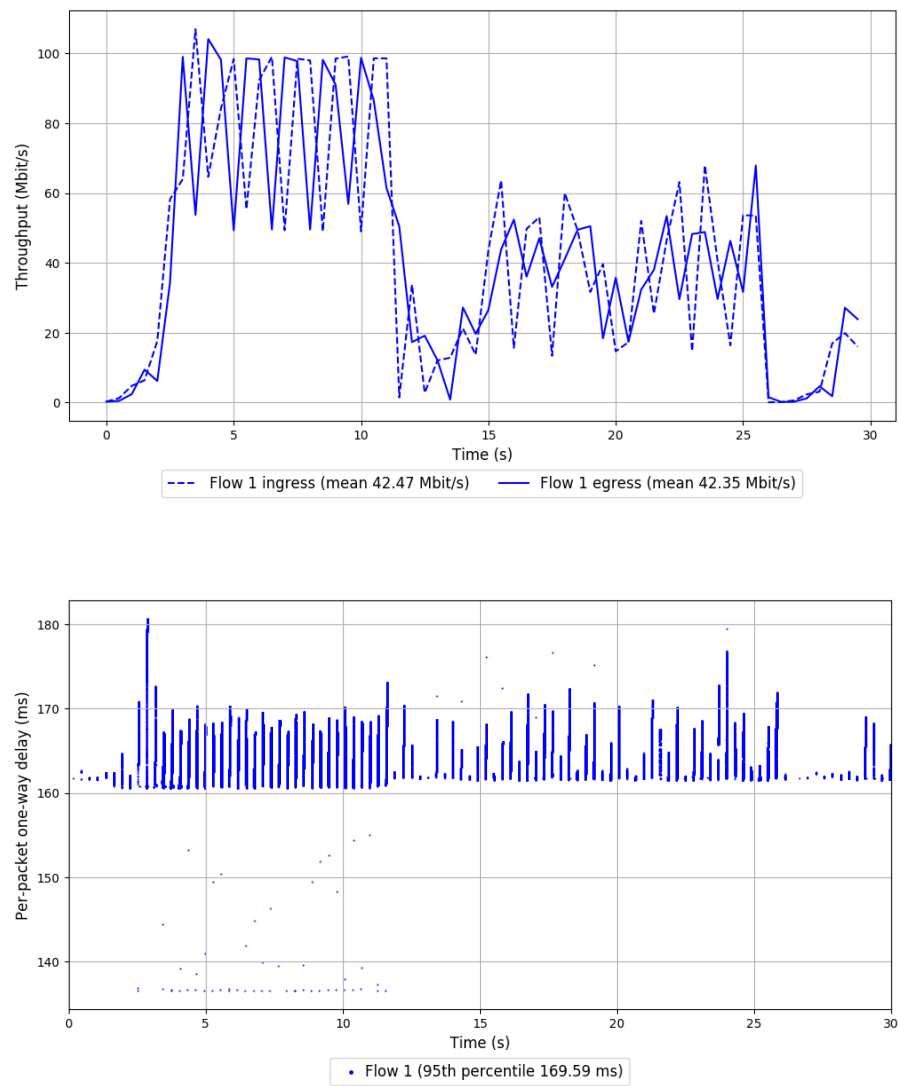
-- Flow 1:

Average throughput: 42.35 Mbit/s

95th percentile per-packet one-way delay: 169.592 ms

Loss rate: 0.27%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-09 10:16:33

End at: 2018-01-09 10:17:03

Below is generated by plot.py at 2018-01-09 11:39:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.81 Mbit/s

95th percentile per-packet one-way delay: 173.052 ms

Loss rate: 1.51%

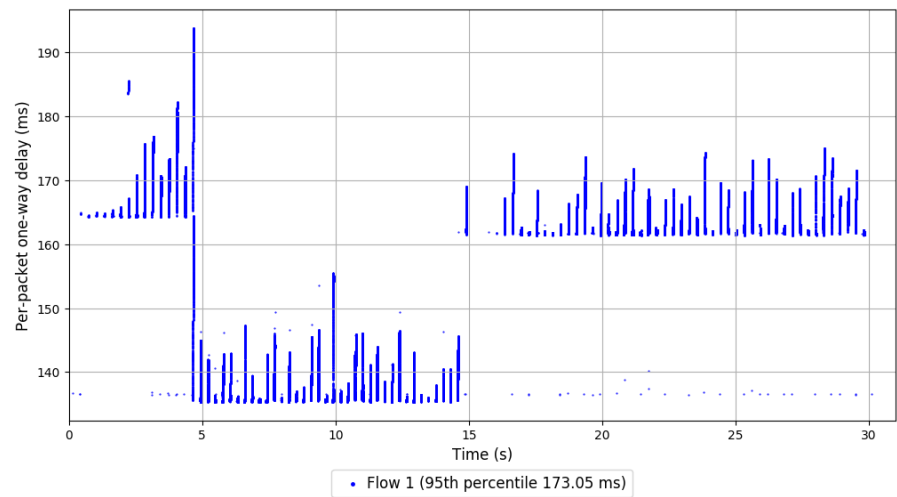
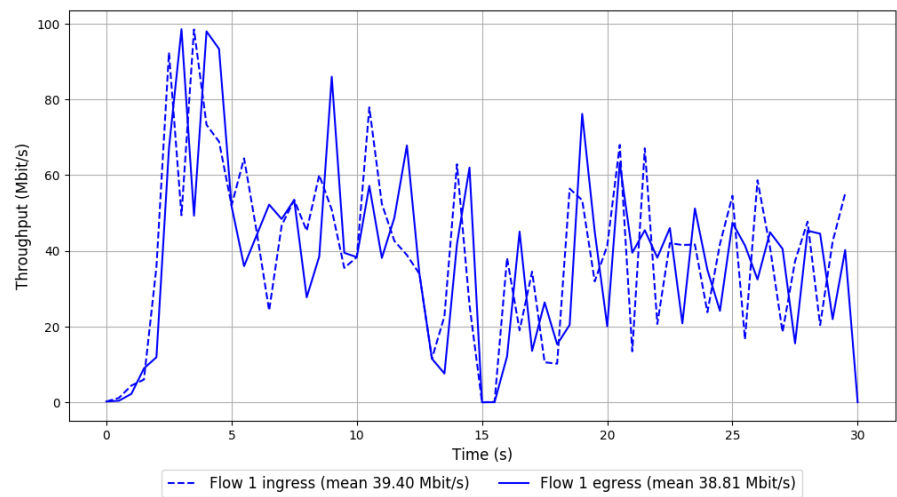
-- Flow 1:

Average throughput: 38.81 Mbit/s

95th percentile per-packet one-way delay: 173.052 ms

Loss rate: 1.51%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-09 10:29:18

End at: 2018-01-09 10:29:48

Below is generated by plot.py at 2018-01-09 11:40:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.14 Mbit/s

95th percentile per-packet one-way delay: 152.652 ms

Loss rate: 0.34%

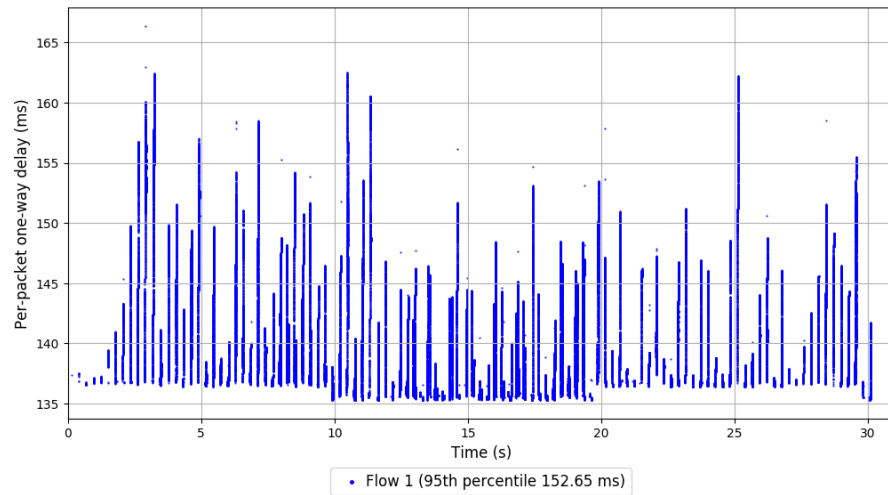
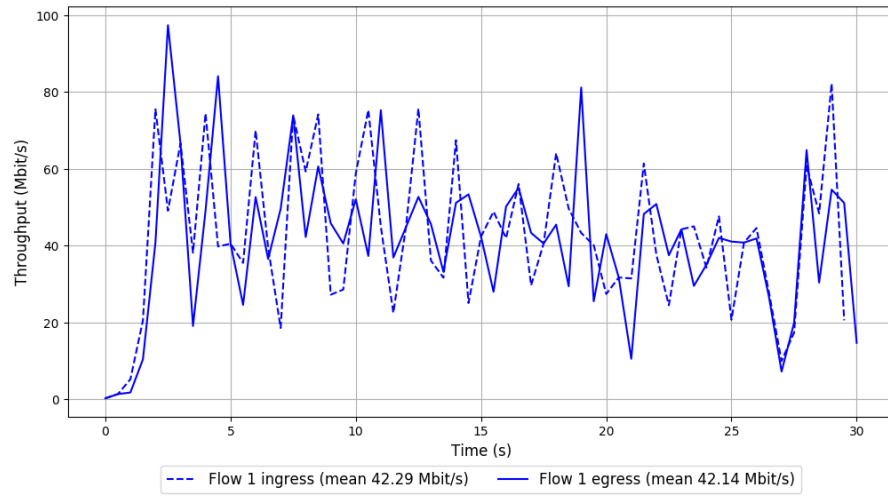
-- Flow 1:

Average throughput: 42.14 Mbit/s

95th percentile per-packet one-way delay: 152.652 ms

Loss rate: 0.34%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-09 10:42:14

End at: 2018-01-09 10:42:44

Below is generated by plot.py at 2018-01-09 11:40:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.35 Mbit/s

95th percentile per-packet one-way delay: 148.311 ms

Loss rate: 1.17%

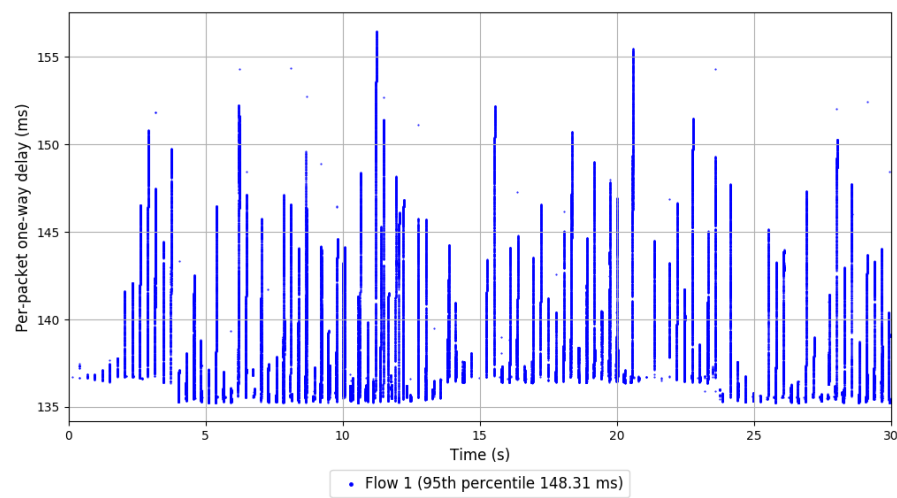
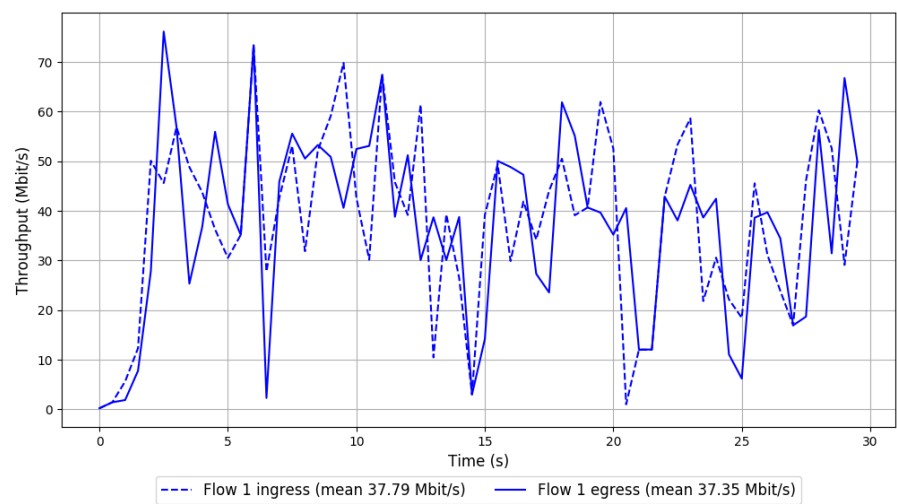
-- Flow 1:

Average throughput: 37.35 Mbit/s

95th percentile per-packet one-way delay: 148.311 ms

Loss rate: 1.17%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-09 08:44:05

End at: 2018-01-09 08:44:35

Below is generated by plot.py at 2018-01-09 11:40:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.72 Mbit/s

95th percentile per-packet one-way delay: 142.148 ms

Loss rate: 0.02%

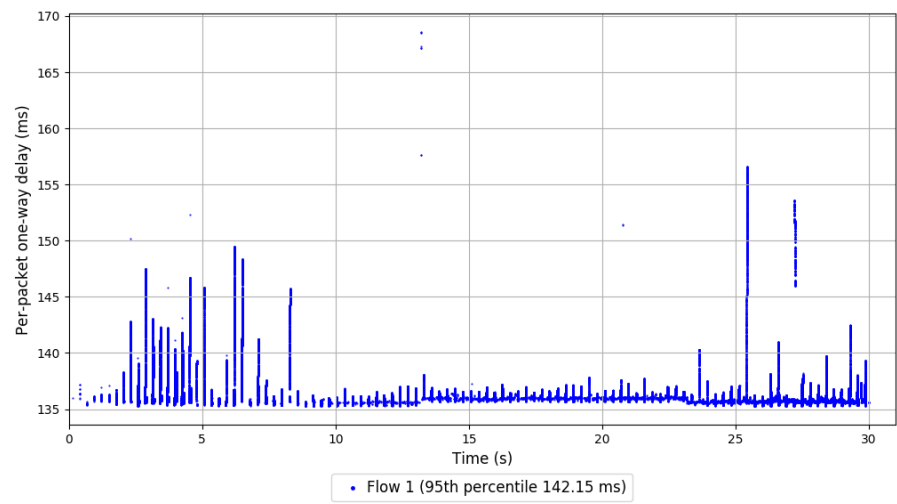
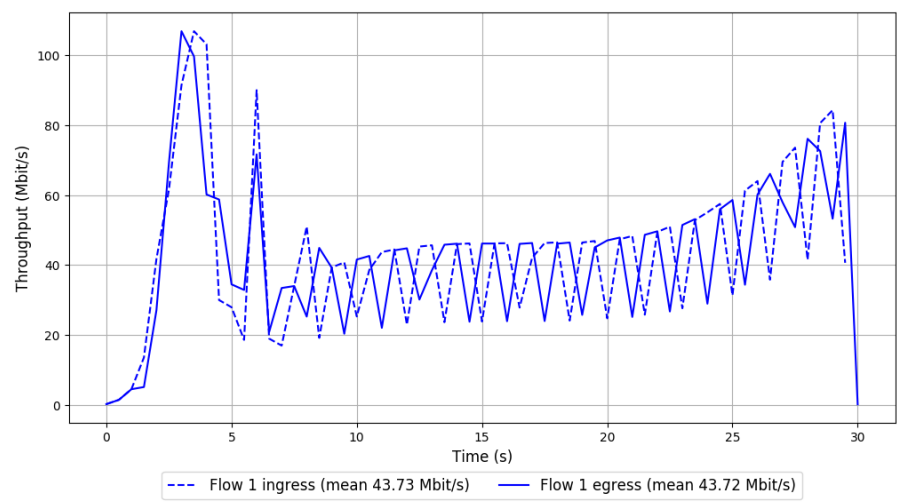
-- Flow 1:

Average throughput: 43.72 Mbit/s

95th percentile per-packet one-way delay: 142.148 ms

Loss rate: 0.02%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-09 08:57:02

End at: 2018-01-09 08:57:32

Below is generated by plot.py at 2018-01-09 11:40:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.79 Mbit/s

95th percentile per-packet one-way delay: 145.971 ms

Loss rate: 0.03%

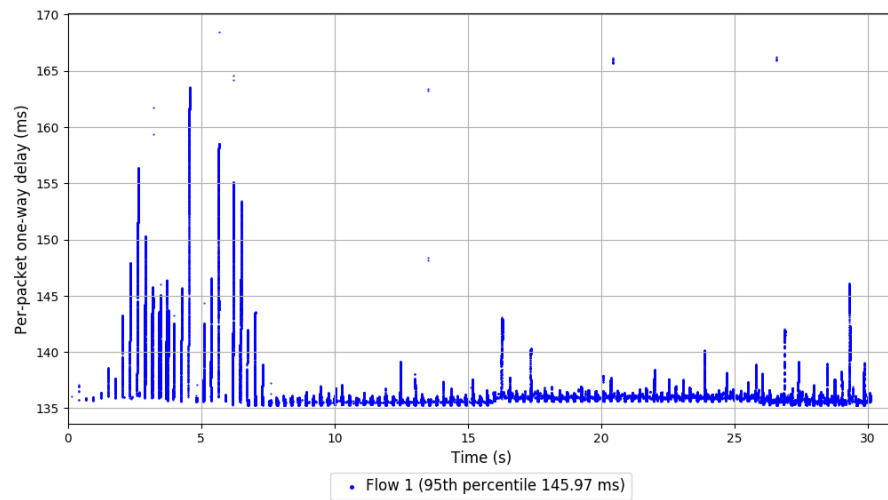
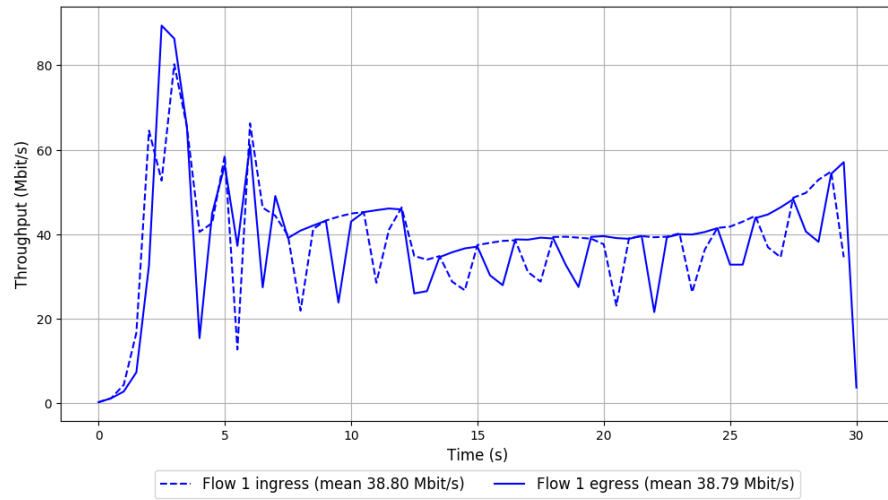
-- Flow 1:

Average throughput: 38.79 Mbit/s

95th percentile per-packet one-way delay: 145.971 ms

Loss rate: 0.03%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-09 09:09:33

End at: 2018-01-09 09:10:03

Below is generated by plot.py at 2018-01-09 11:40:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.20 Mbit/s

95th percentile per-packet one-way delay: 169.161 ms

Loss rate: 1.01%

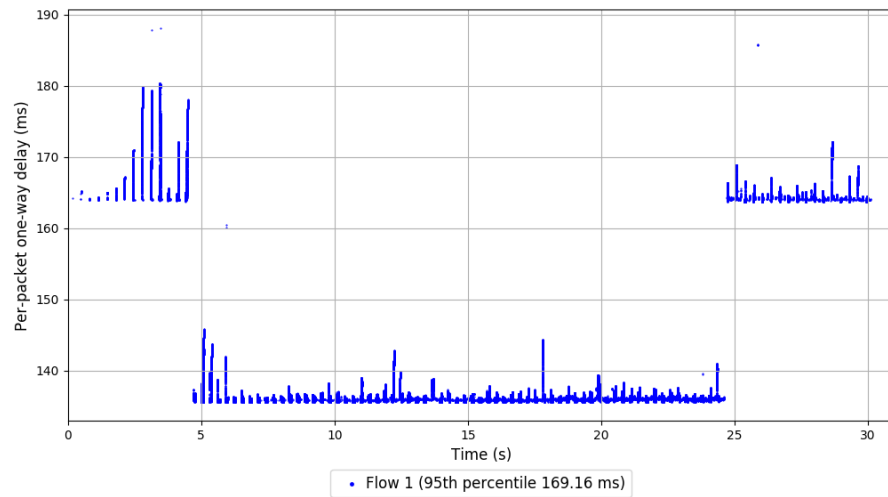
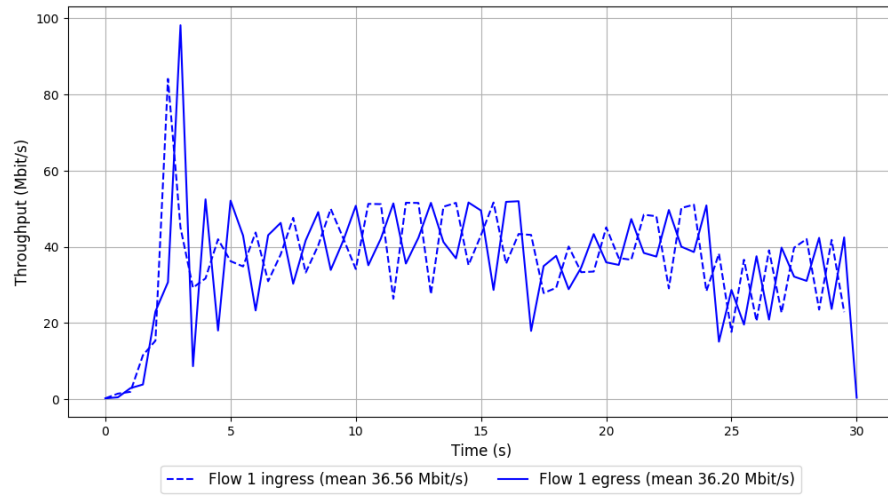
-- Flow 1:

Average throughput: 36.20 Mbit/s

95th percentile per-packet one-way delay: 169.161 ms

Loss rate: 1.01%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-09 09:22:10

End at: 2018-01-09 09:22:40

Below is generated by plot.py at 2018-01-09 11:40:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.63 Mbit/s

95th percentile per-packet one-way delay: 171.391 ms

Loss rate: 0.00%

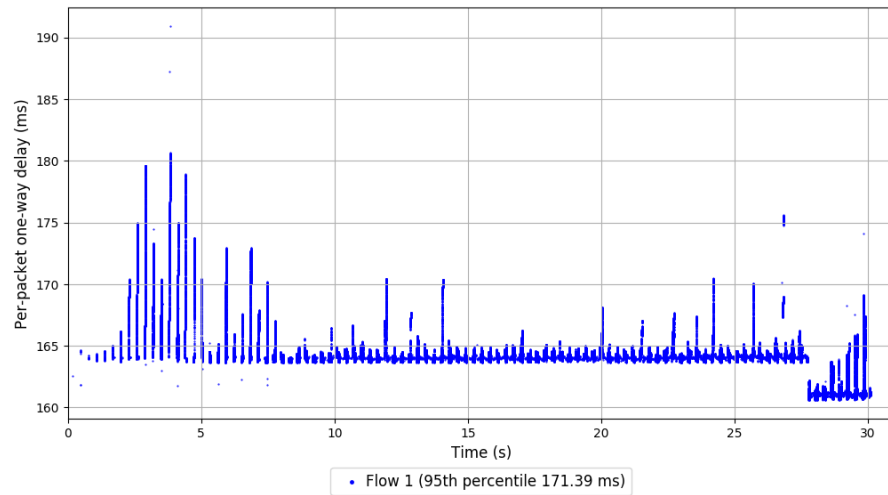
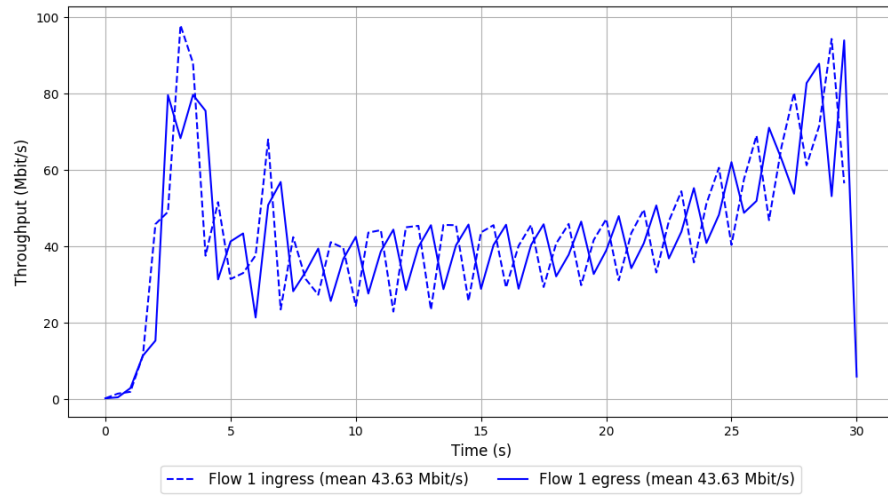
-- Flow 1:

Average throughput: 43.63 Mbit/s

95th percentile per-packet one-way delay: 171.391 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-09 09:34:53

End at: 2018-01-09 09:35:23

Below is generated by plot.py at 2018-01-09 11:40:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.89 Mbit/s

95th percentile per-packet one-way delay: 174.910 ms

Loss rate: 0.02%

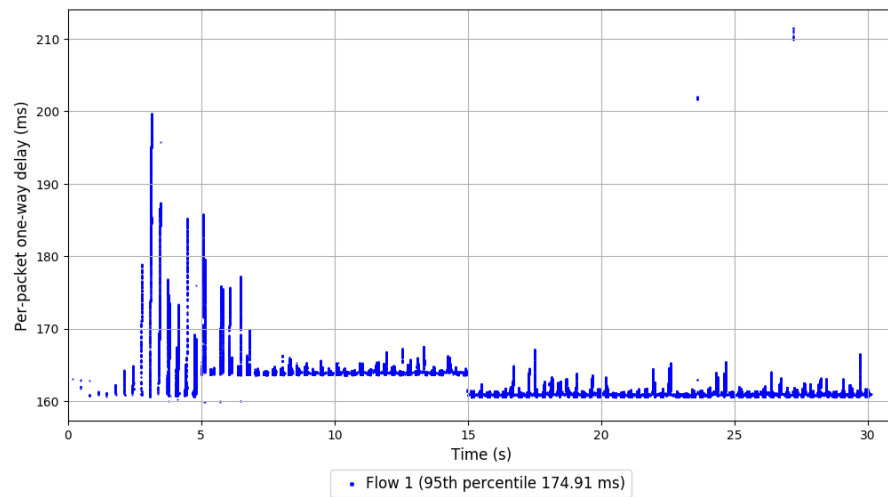
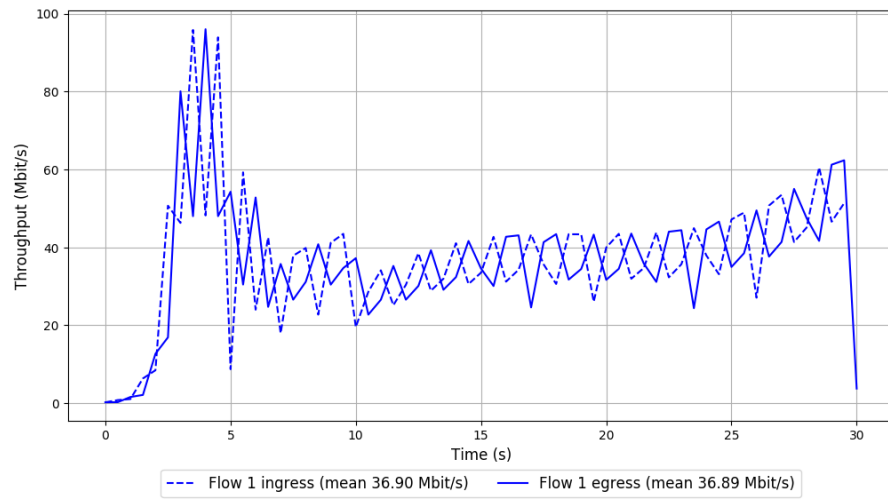
-- Flow 1:

Average throughput: 36.89 Mbit/s

95th percentile per-packet one-way delay: 174.910 ms

Loss rate: 0.02%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-09 09:47:33

End at: 2018-01-09 09:48:03

Below is generated by plot.py at 2018-01-09 11:40:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.19 Mbit/s

95th percentile per-packet one-way delay: 165.668 ms

Loss rate: 0.05%

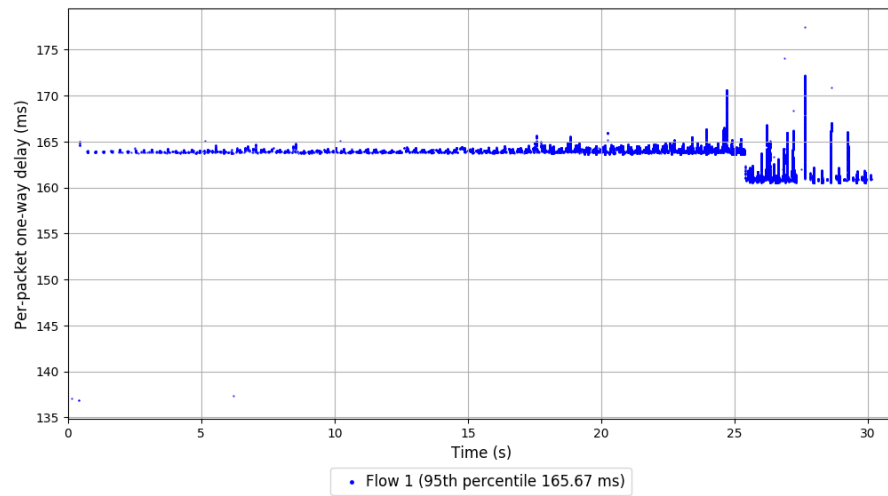
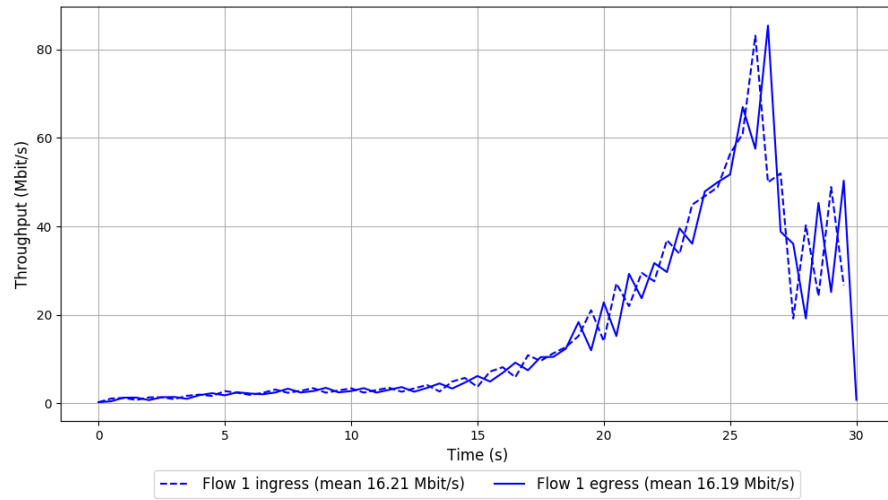
-- Flow 1:

Average throughput: 16.19 Mbit/s

95th percentile per-packet one-way delay: 165.668 ms

Loss rate: 0.05%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-09 10:00:32

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

Below is generated by plot.py at 2018-01-09 11:40:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.01 Mbit/s

95th percentile per-packet one-way delay: 169.520 ms

Loss rate: 1.43%

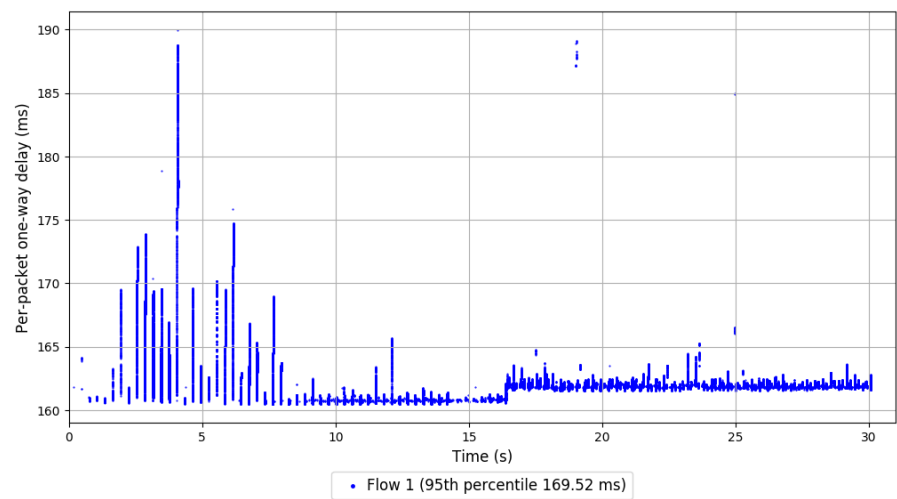
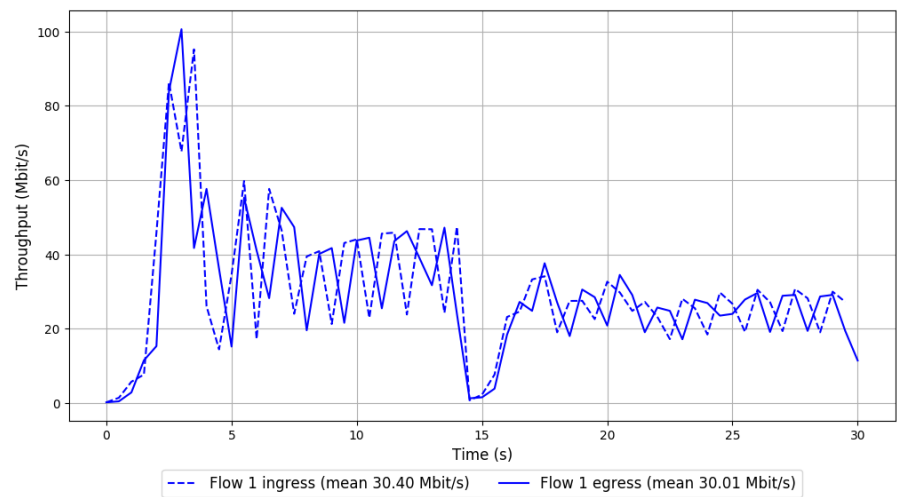
-- Flow 1:

Average throughput: 30.01 Mbit/s

95th percentile per-packet one-way delay: 169.520 ms

Loss rate: 1.43%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-09 10:13:19

End at: 2018-01-09 10:13:49

Below is generated by plot.py at 2018-01-09 11:41:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.56 Mbit/s

95th percentile per-packet one-way delay: 163.462 ms

Loss rate: 0.00%

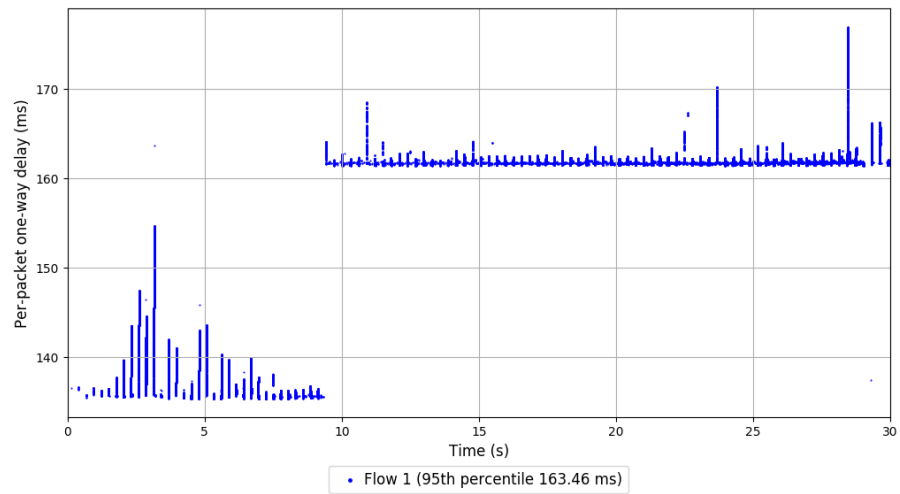
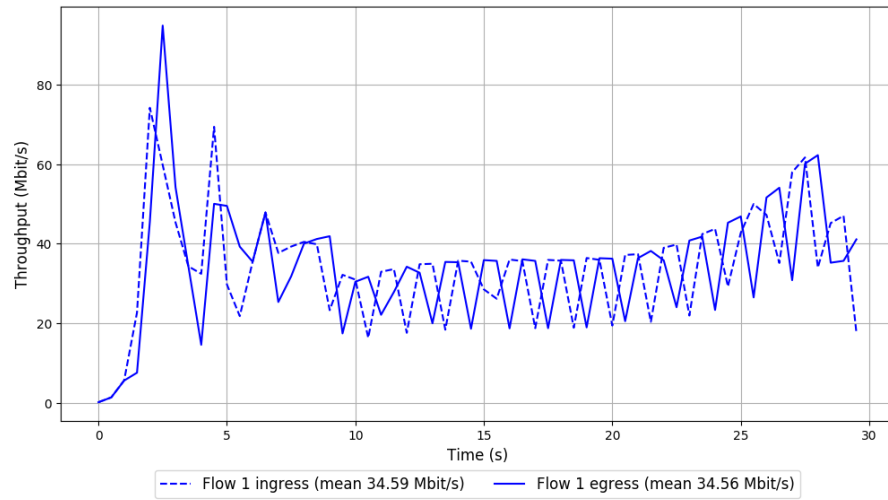
-- Flow 1:

Average throughput: 34.56 Mbit/s

95th percentile per-packet one-way delay: 163.462 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-09 10:26:05

End at: 2018-01-09 10:26:35

Below is generated by plot.py at 2018-01-09 11:41:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.94 Mbit/s

95th percentile per-packet one-way delay: 162.741 ms

Loss rate: 2.12%

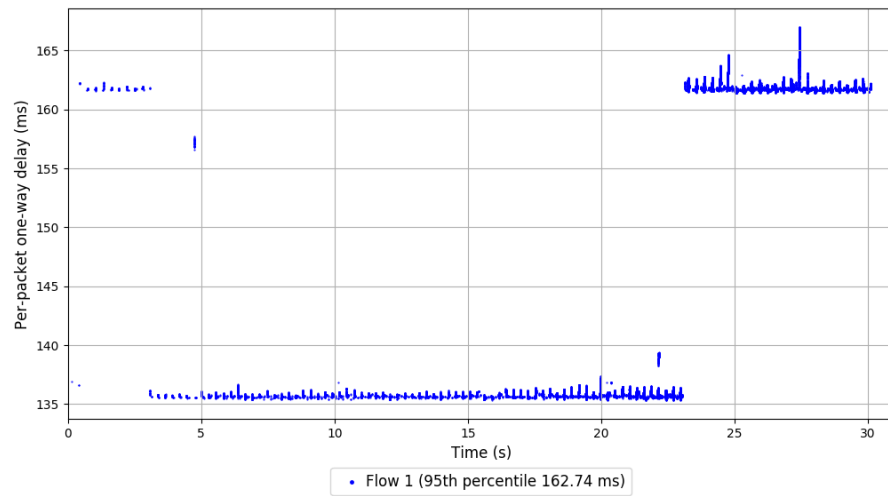
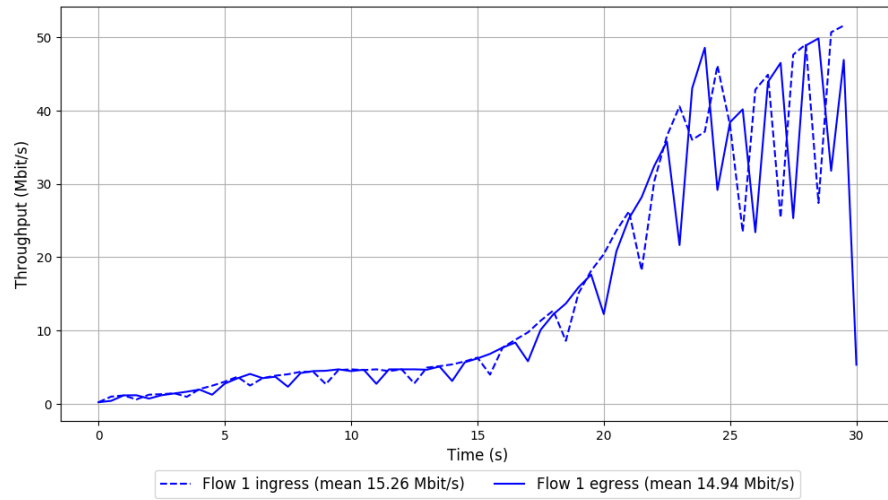
-- Flow 1:

Average throughput: 14.94 Mbit/s

95th percentile per-packet one-way delay: 162.741 ms

Loss rate: 2.12%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-09 10:38:59

End at: 2018-01-09 10:39:29

Below is generated by plot.py at 2018-01-09 11:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.58 Mbit/s

95th percentile per-packet one-way delay: 140.360 ms

Loss rate: 0.00%

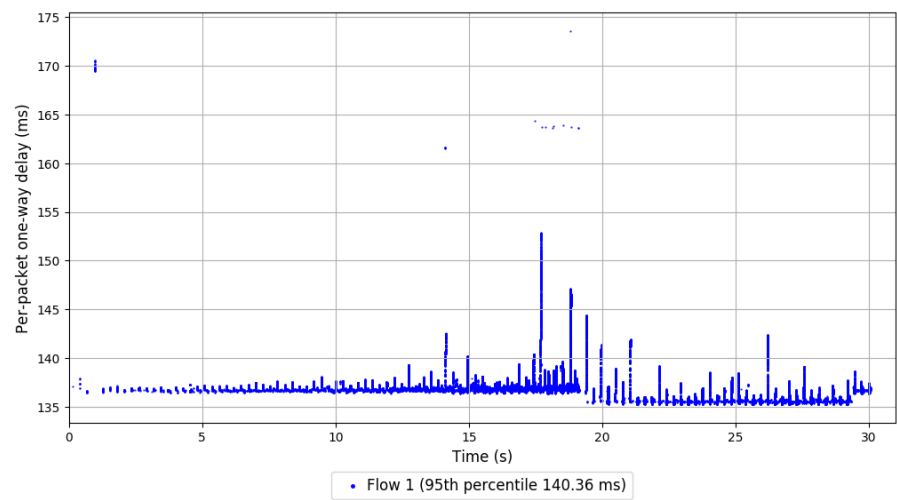
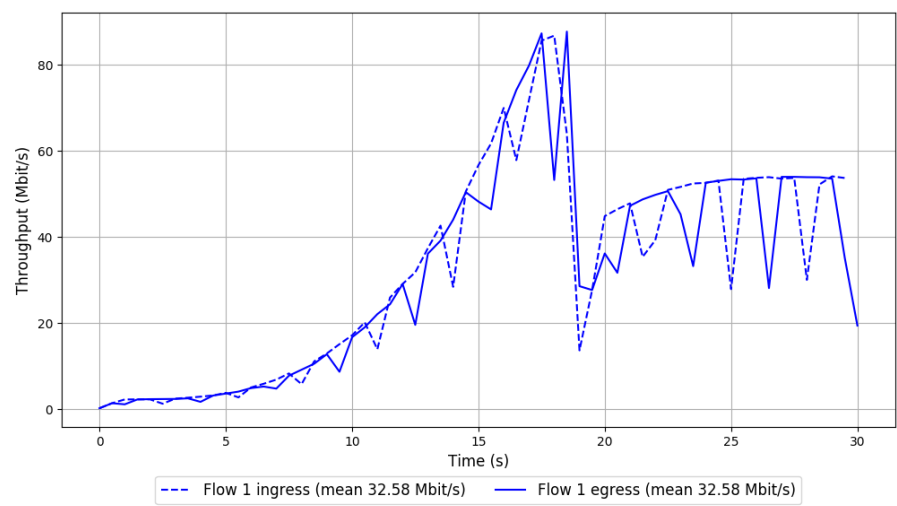
-- Flow 1:

Average throughput: 32.58 Mbit/s

95th percentile per-packet one-way delay: 140.360 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

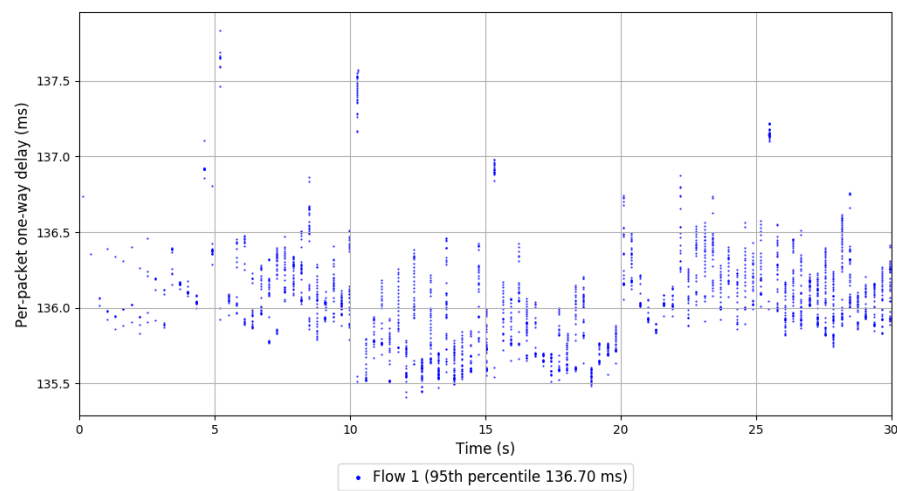
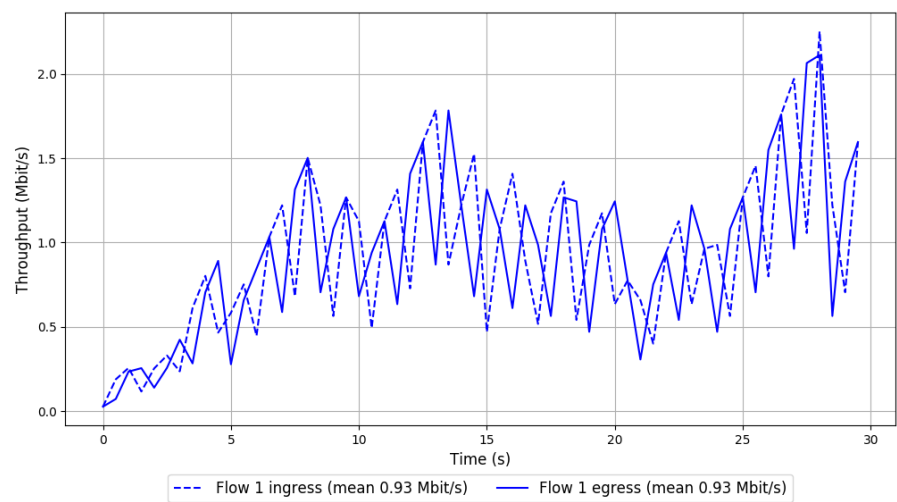


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-09 08:56:18
End at: 2018-01-09 08:56:48

# Below is generated by plot.py at 2018-01-09 11:41:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 136.704 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 136.704 ms
Loss rate: 0.25%
```


Run 1: Report of LEDBAT — Data Link

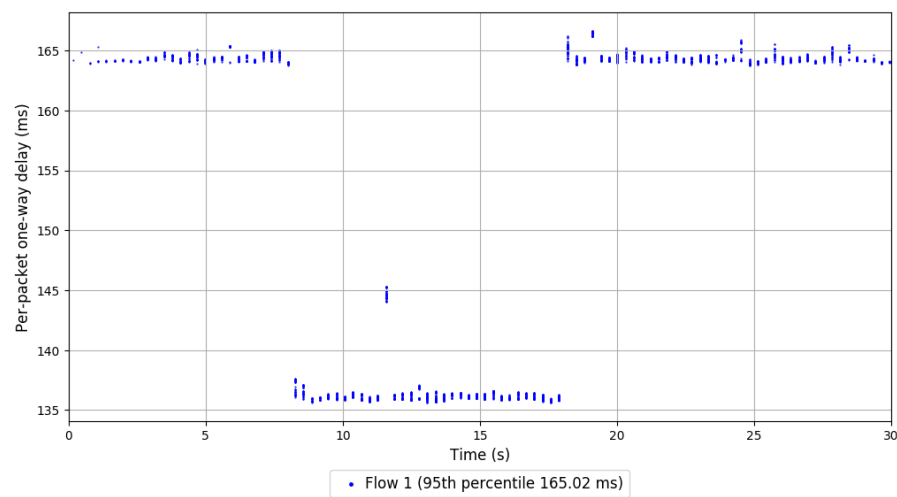
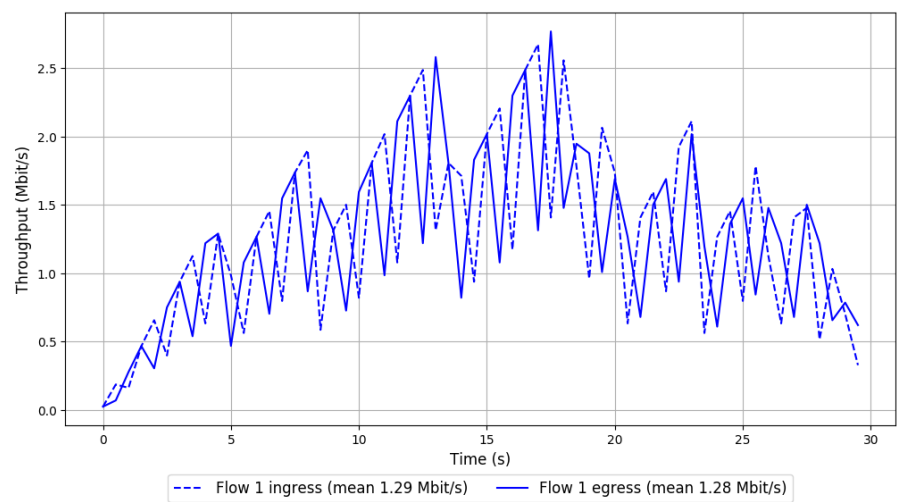


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-09 09:08:50
End at: 2018-01-09 09:09:20

# Below is generated by plot.py at 2018-01-09 11:41:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 165.023 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 165.023 ms
Loss rate: 1.28%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-09 09:21:26

End at: 2018-01-09 09:21:56

Below is generated by plot.py at 2018-01-09 11:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 164.842 ms

Loss rate: 0.15%

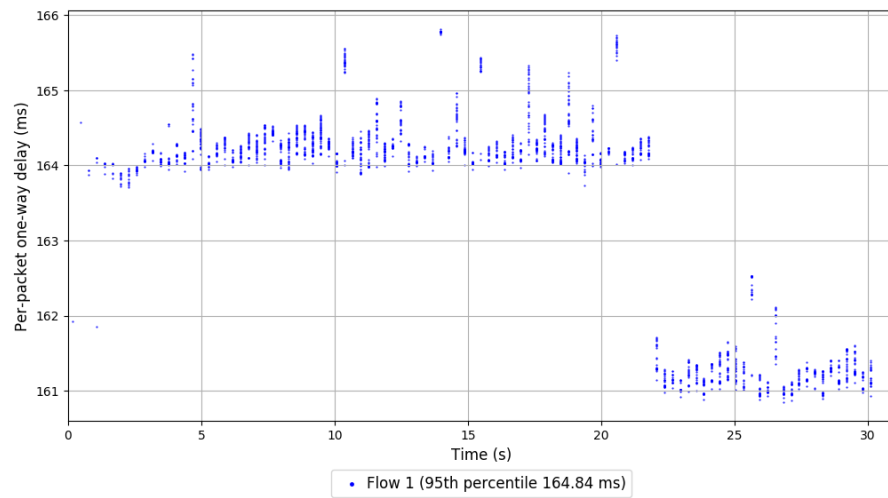
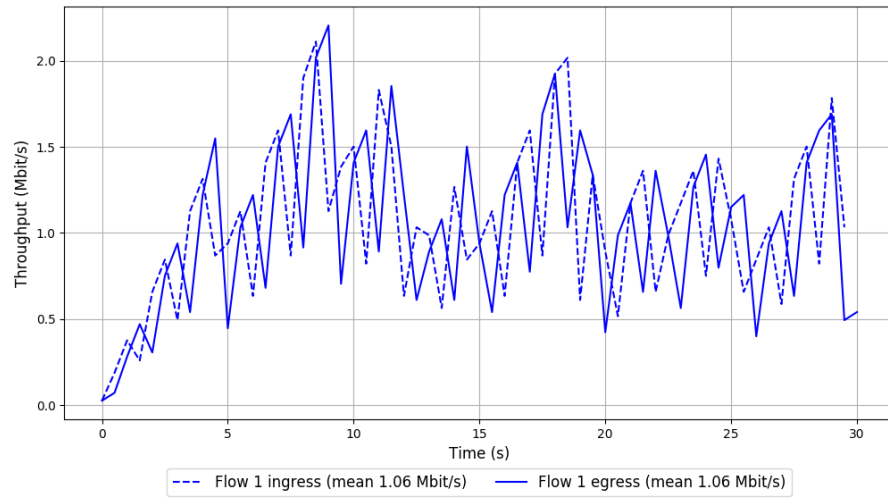
-- Flow 1:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 164.842 ms

Loss rate: 0.15%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

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

End at: 2018-01-09 09:34:39

Below is generated by plot.py at 2018-01-09 11:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 164.979 ms

Loss rate: 0.89%

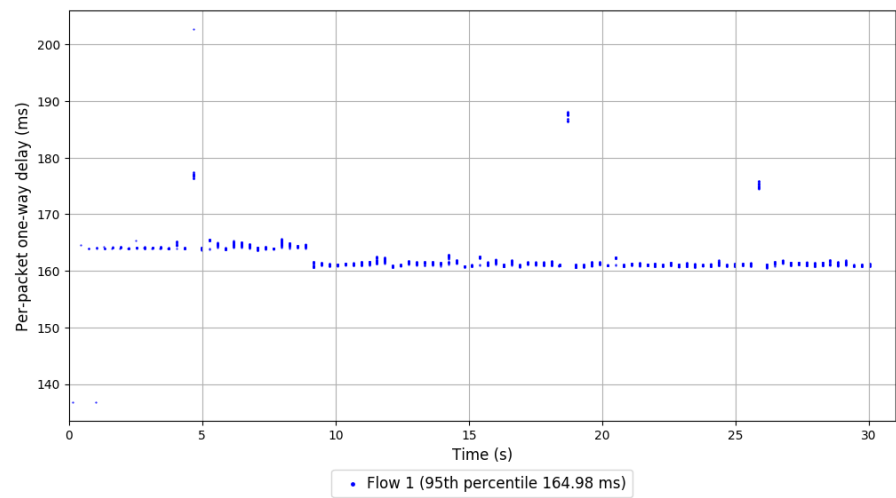
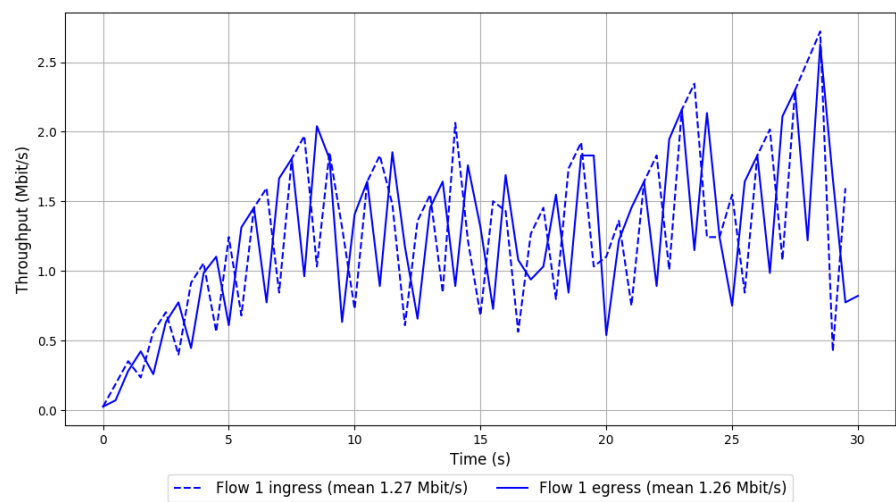
-- Flow 1:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 164.979 ms

Loss rate: 0.89%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

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

End at: 2018-01-09 09:47:20

Below is generated by plot.py at 2018-01-09 11:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 165.173 ms

Loss rate: 0.00%

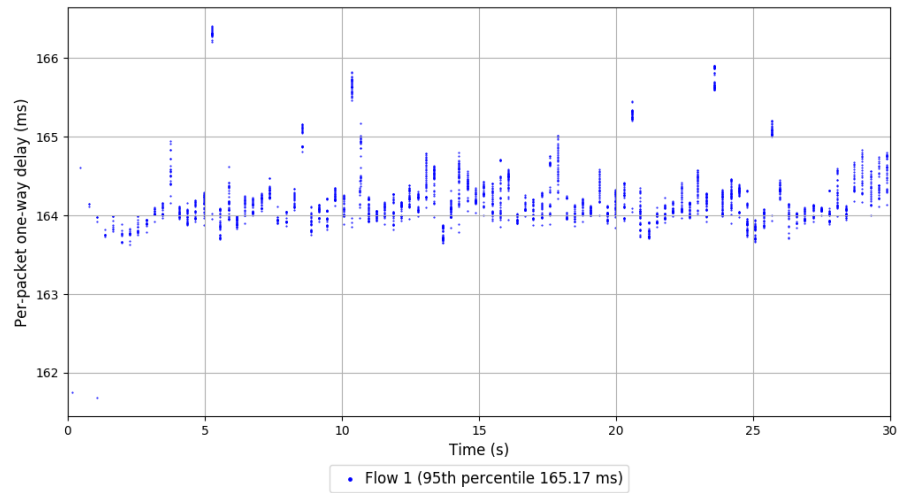
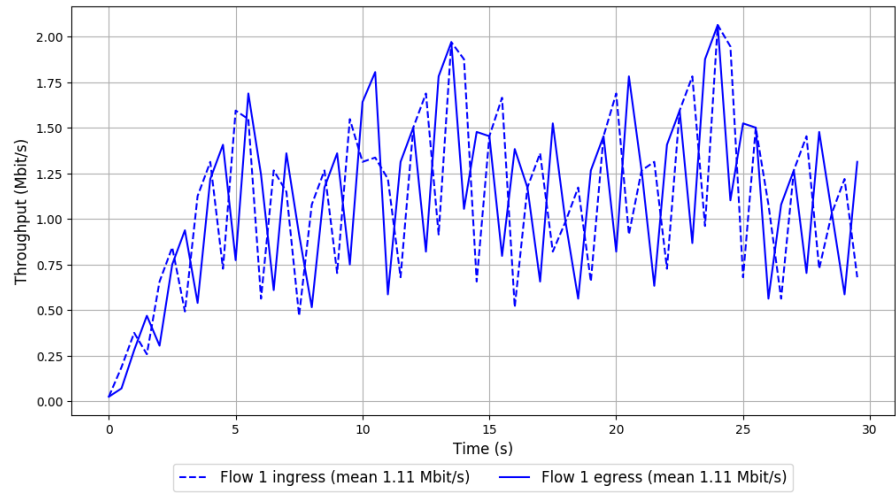
-- Flow 1:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 165.173 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-09 09:59:47

End at: 2018-01-09 10:00:17

Below is generated by plot.py at 2018-01-09 11:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 162.608 ms

Loss rate: 0.18%

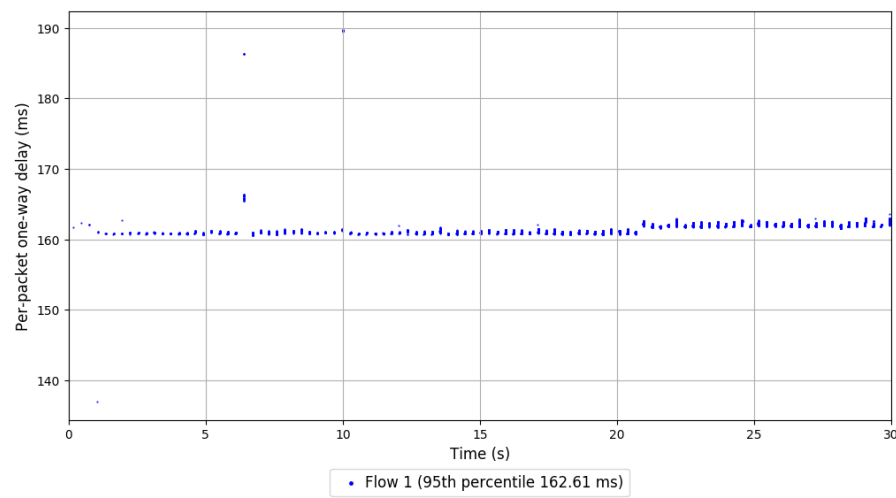
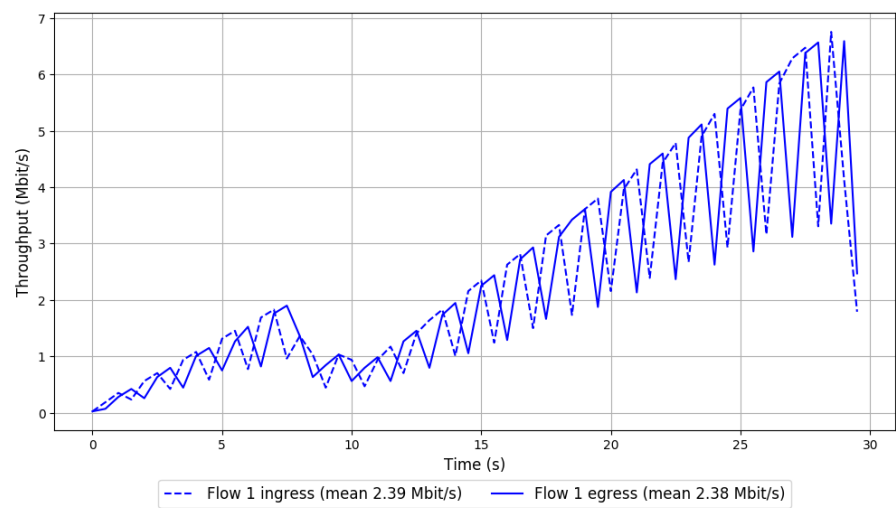
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 162.608 ms

Loss rate: 0.18%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-09 10:12:35

End at: 2018-01-09 10:13:05

Below is generated by plot.py at 2018-01-09 11:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.74 Mbit/s

95th percentile per-packet one-way delay: 162.245 ms

Loss rate: 0.00%

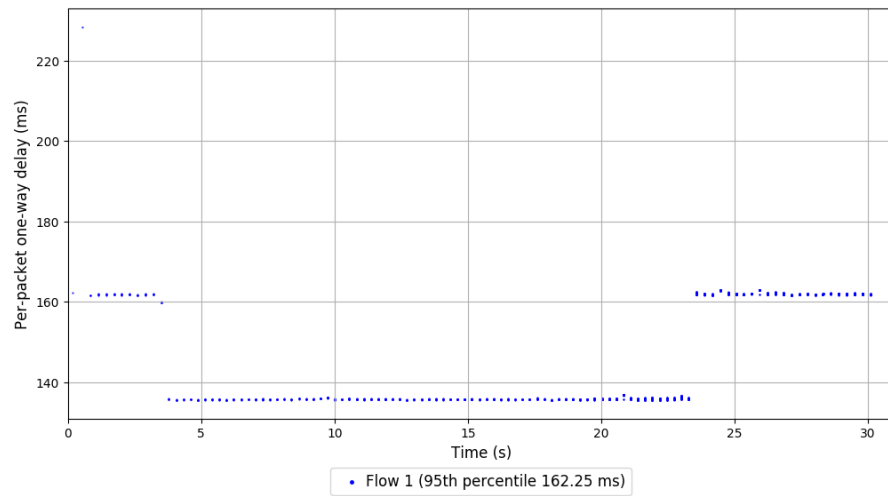
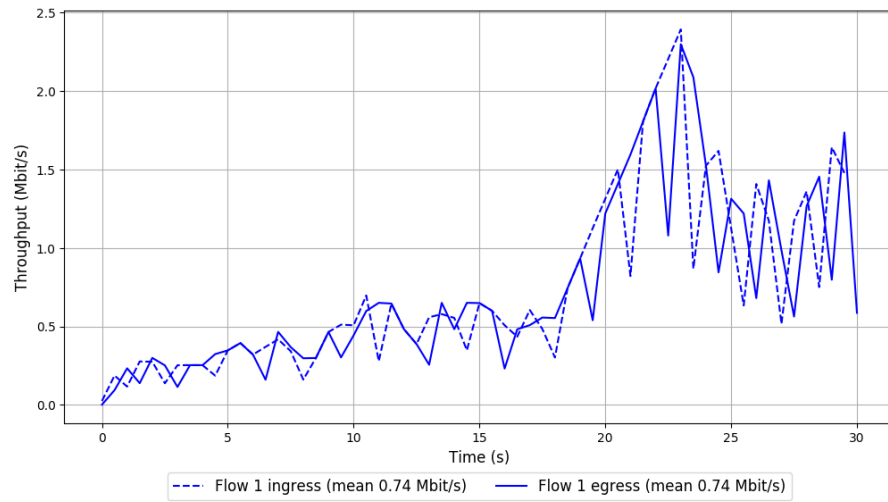
-- Flow 1:

Average throughput: 0.74 Mbit/s

95th percentile per-packet one-way delay: 162.245 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-09 10:25:21

End at: 2018-01-09 10:25:52

Below is generated by plot.py at 2018-01-09 11:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 162.352 ms

Loss rate: 0.33%

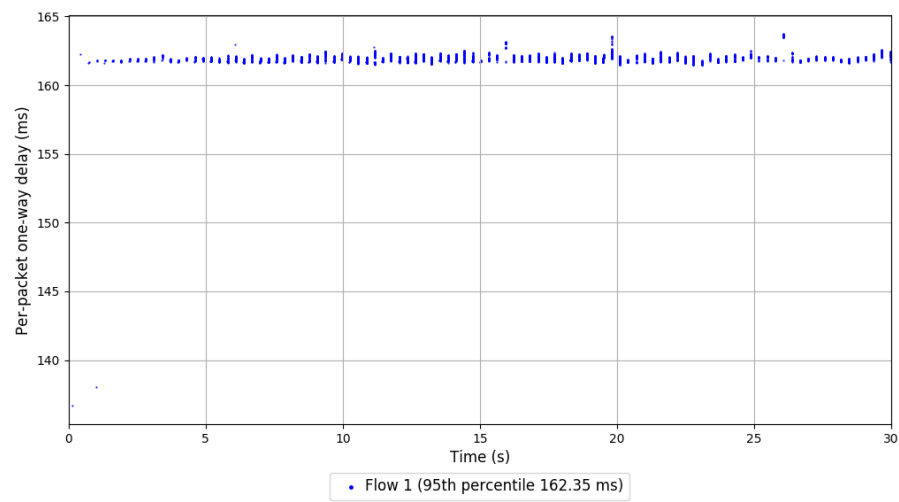
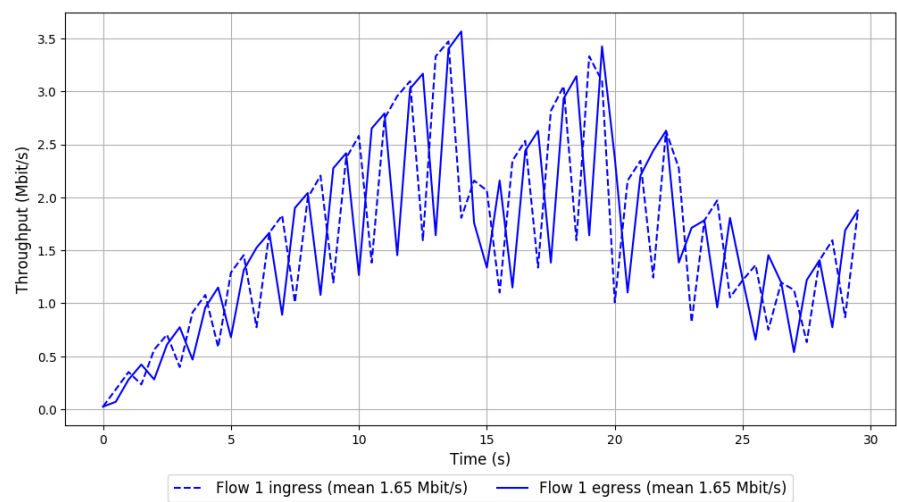
-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 162.352 ms

Loss rate: 0.33%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-09 10:38:16

End at: 2018-01-09 10:38:46

Below is generated by plot.py at 2018-01-09 11:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 137.414 ms

Loss rate: 0.62%

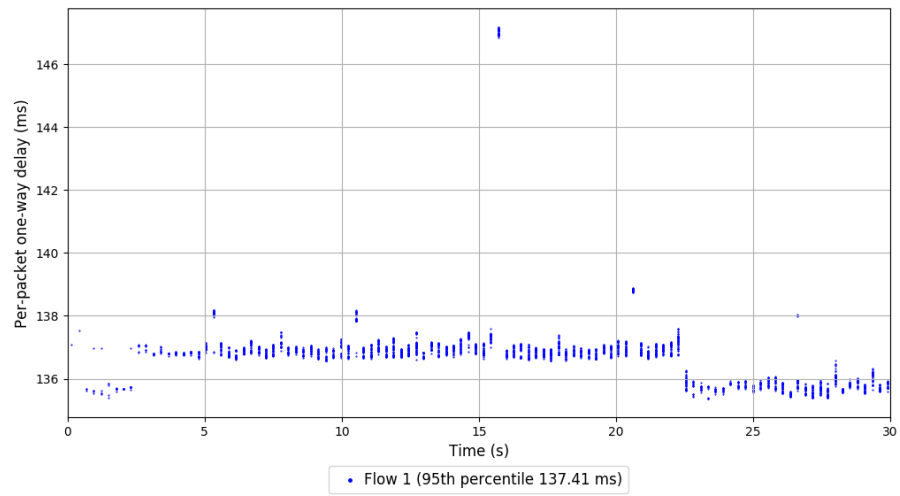
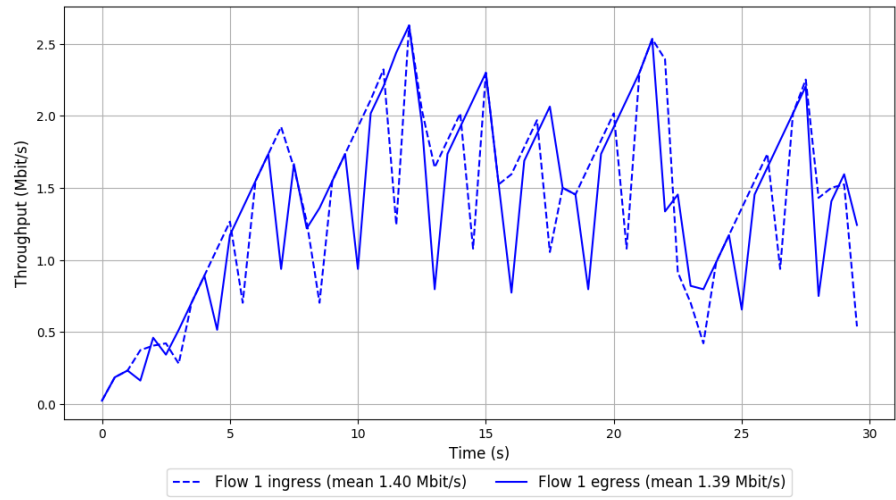
-- Flow 1:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 137.414 ms

Loss rate: 0.62%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-09 10:50:52

End at: 2018-01-09 10:51:22

Below is generated by plot.py at 2018-01-09 11:41:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 137.500 ms

Loss rate: 0.34%

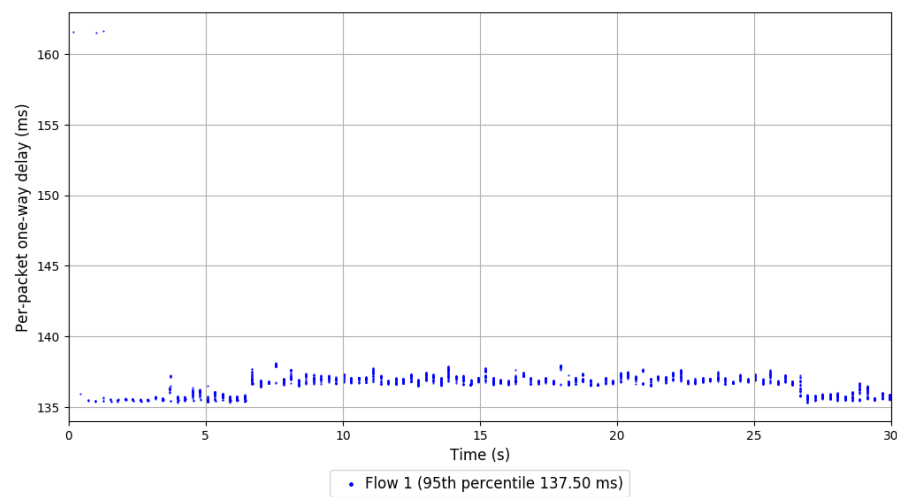
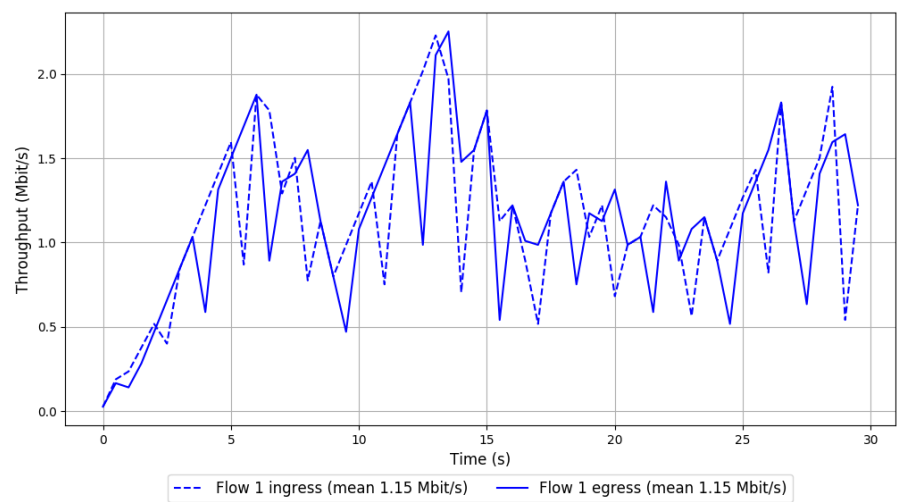
-- Flow 1:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 137.500 ms

Loss rate: 0.34%

Run 10: Report of LEDBAT — Data Link

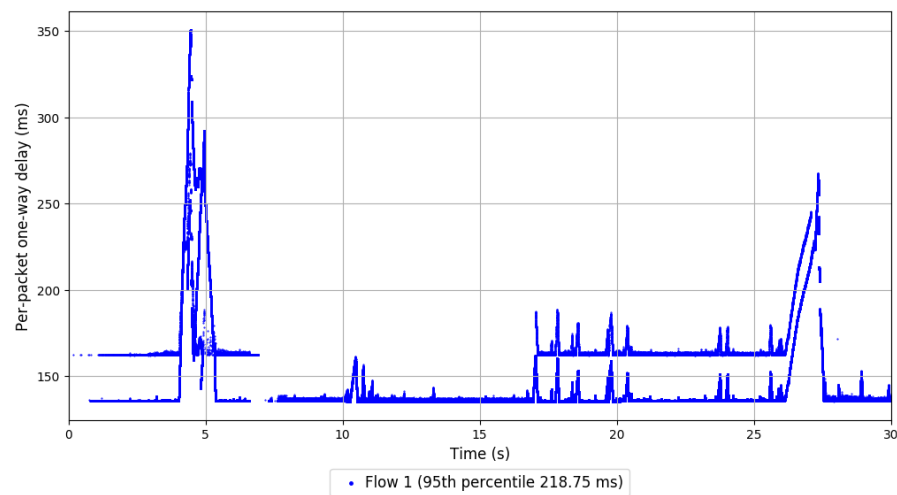
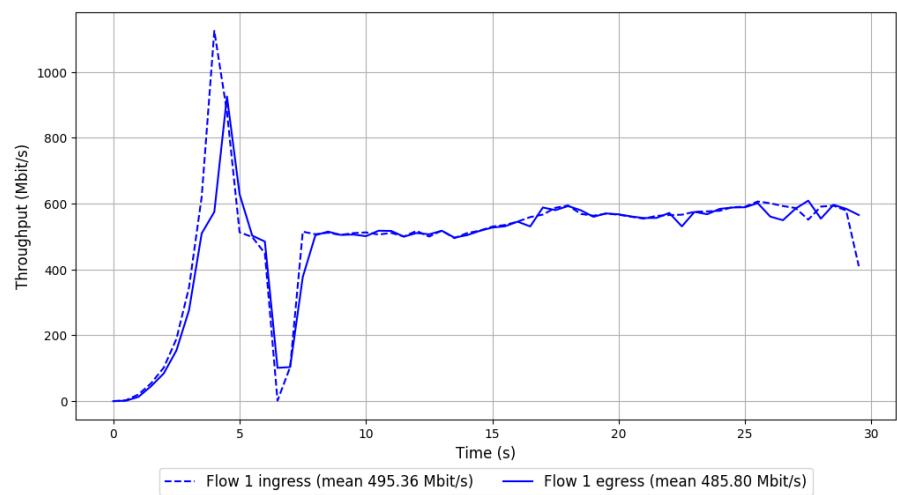


```
Run 1: Statistics of PCC

Start at: 2018-01-09 08:51:58
End at: 2018-01-09 08:52:28

# Below is generated by plot.py at 2018-01-09 11:48:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 485.80 Mbit/s
95th percentile per-packet one-way delay: 218.745 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 485.80 Mbit/s
95th percentile per-packet one-way delay: 218.745 ms
Loss rate: 2.02%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-09 09:04:53

End at: 2018-01-09 09:05:23

Below is generated by plot.py at 2018-01-09 11:48:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 446.12 Mbit/s

95th percentile per-packet one-way delay: 281.333 ms

Loss rate: 4.49%

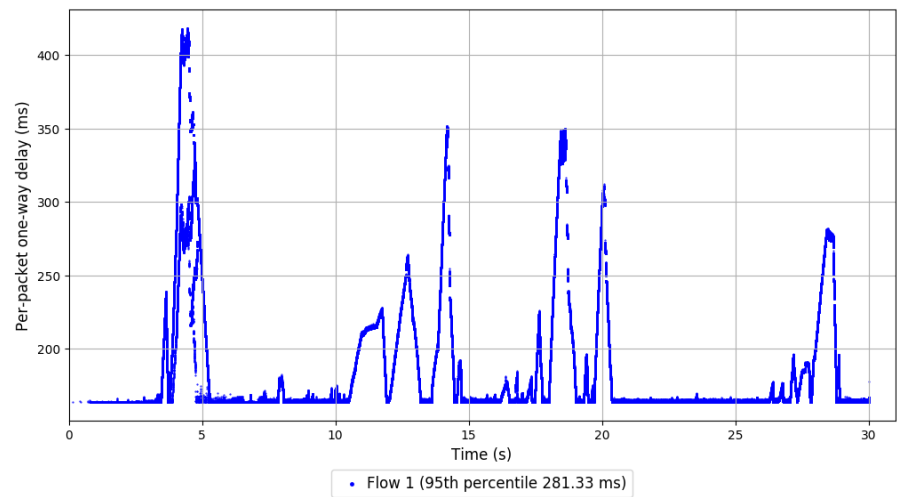
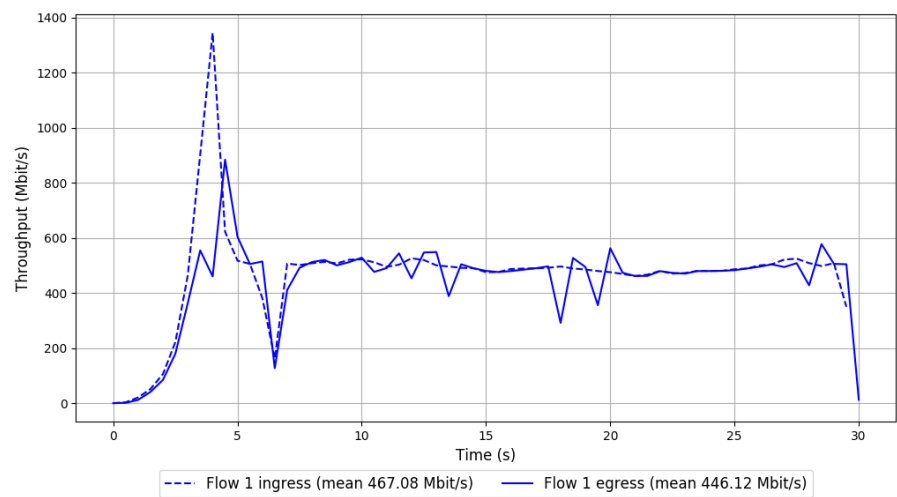
-- Flow 1:

Average throughput: 446.12 Mbit/s

95th percentile per-packet one-way delay: 281.333 ms

Loss rate: 4.49%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-09 09:17:21

End at: 2018-01-09 09:17:51

Below is generated by plot.py at 2018-01-09 11:48:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 477.66 Mbit/s

95th percentile per-packet one-way delay: 265.398 ms

Loss rate: 2.87%

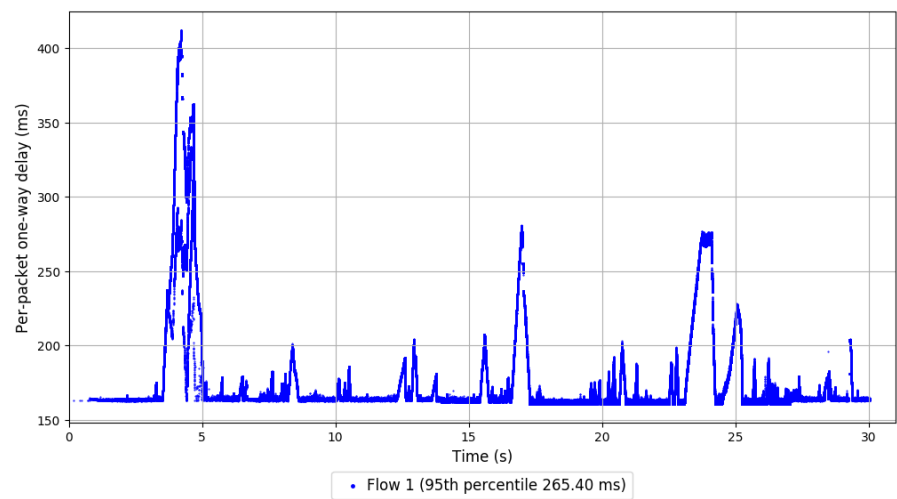
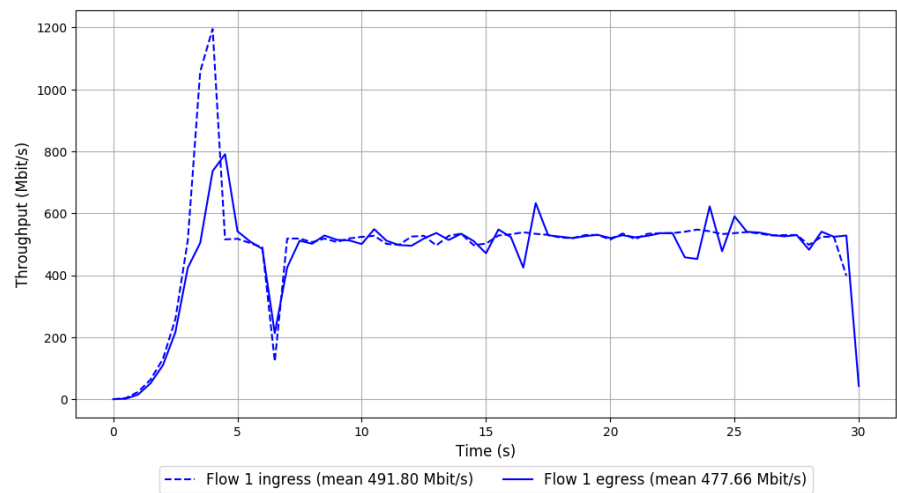
-- Flow 1:

Average throughput: 477.66 Mbit/s

95th percentile per-packet one-way delay: 265.398 ms

Loss rate: 2.87%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-09 09:30:08

End at: 2018-01-09 09:30:38

Below is generated by plot.py at 2018-01-09 11:48:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 338.74 Mbit/s

95th percentile per-packet one-way delay: 285.737 ms

Loss rate: 2.70%

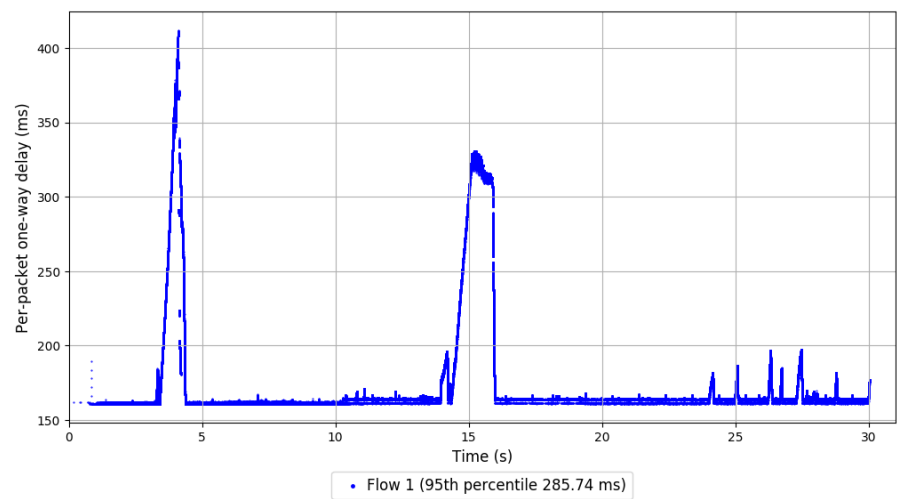
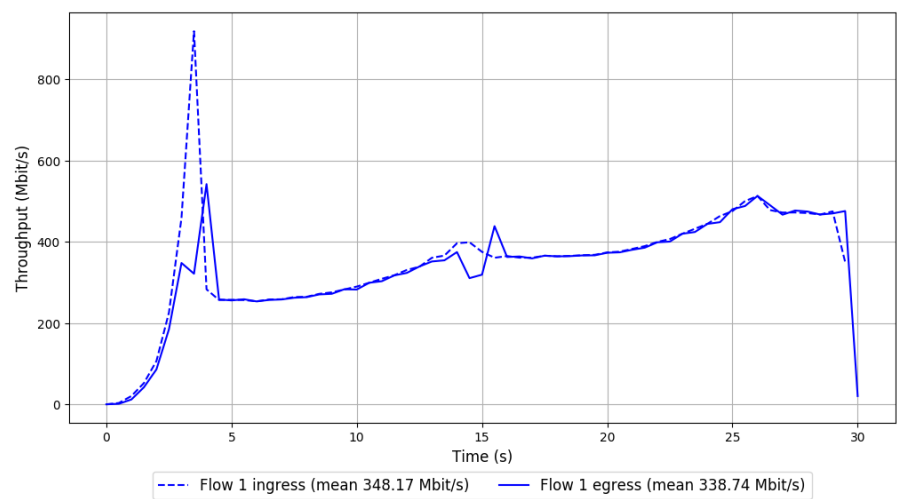
-- Flow 1:

Average throughput: 338.74 Mbit/s

95th percentile per-packet one-way delay: 285.737 ms

Loss rate: 2.70%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-09 09:42:51

End at: 2018-01-09 09:43:21

Below is generated by plot.py at 2018-01-09 11:48:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 494.09 Mbit/s

95th percentile per-packet one-way delay: 239.637 ms

Loss rate: 1.61%

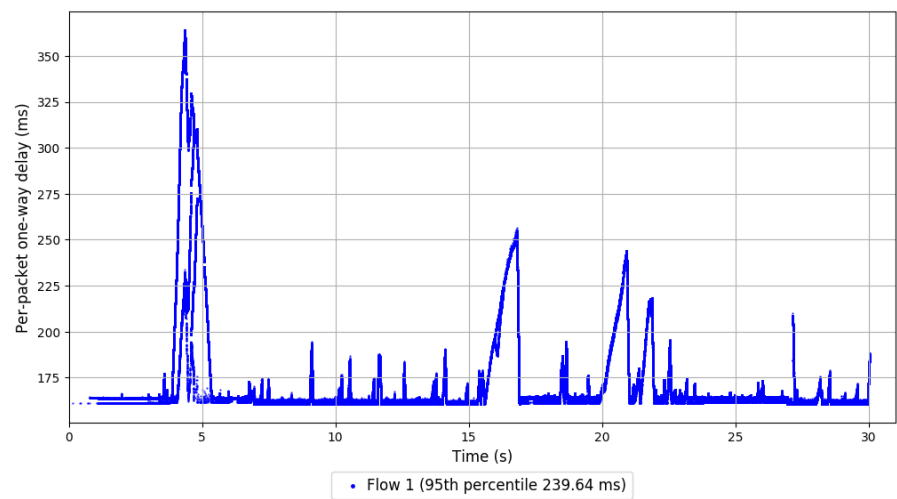
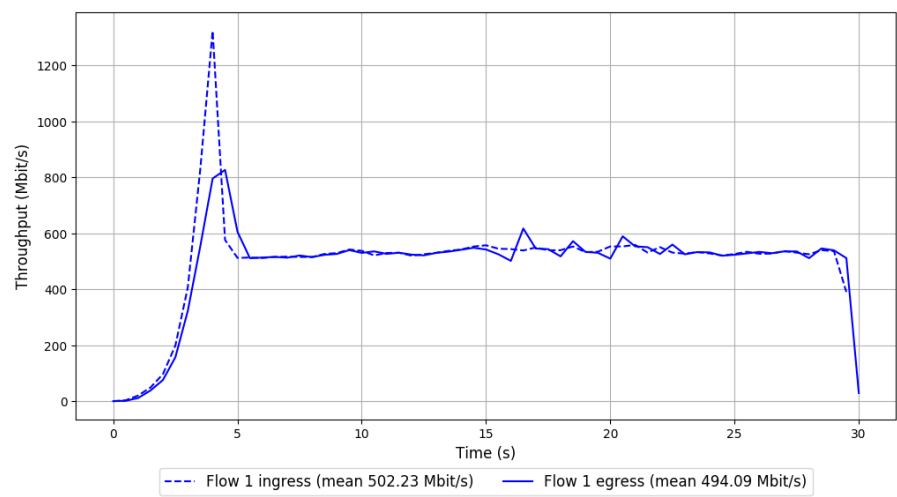
-- Flow 1:

Average throughput: 494.09 Mbit/s

95th percentile per-packet one-way delay: 239.637 ms

Loss rate: 1.61%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-09 09:55:29

End at: 2018-01-09 09:55:59

Below is generated by plot.py at 2018-01-09 11:48:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 495.28 Mbit/s

95th percentile per-packet one-way delay: 323.695 ms

Loss rate: 2.47%

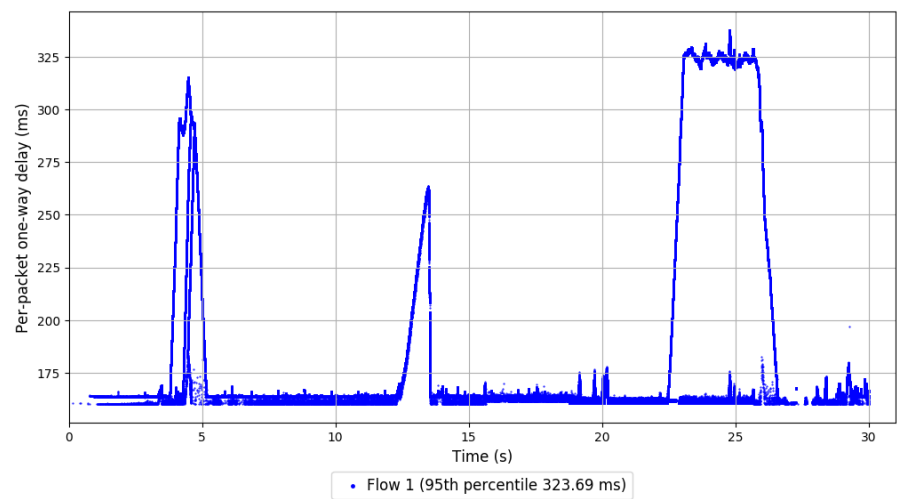
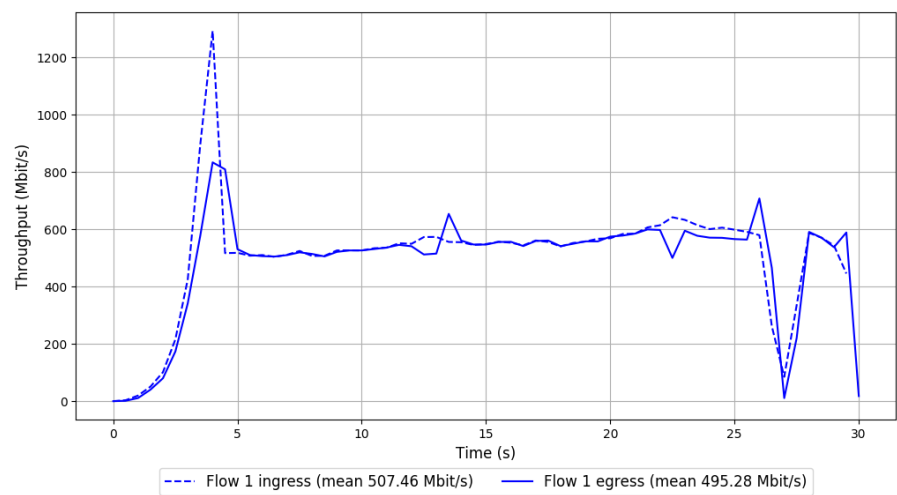
-- Flow 1:

Average throughput: 495.28 Mbit/s

95th percentile per-packet one-way delay: 323.695 ms

Loss rate: 2.47%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-09 10:08:28

End at: 2018-01-09 10:08:58

Below is generated by plot.py at 2018-01-09 11:48:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 492.66 Mbit/s

95th percentile per-packet one-way delay: 284.527 ms

Loss rate: 1.58%

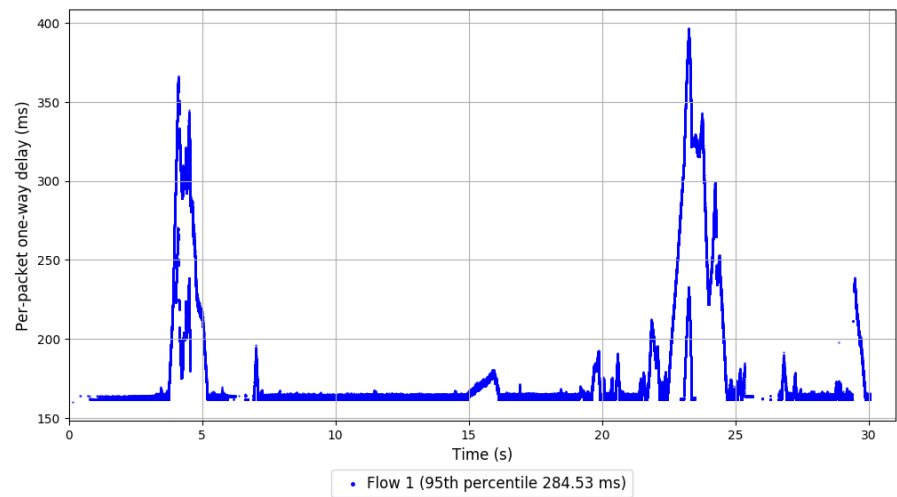
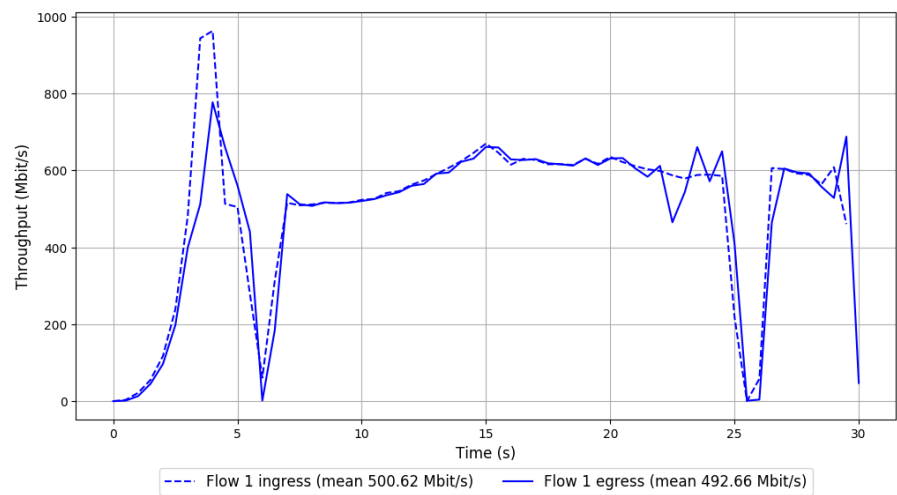
-- Flow 1:

Average throughput: 492.66 Mbit/s

95th percentile per-packet one-way delay: 284.527 ms

Loss rate: 1.58%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-09 10:21:17

End at: 2018-01-09 10:21:47

Below is generated by plot.py at 2018-01-09 11:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 512.61 Mbit/s

95th percentile per-packet one-way delay: 195.921 ms

Loss rate: 1.82%

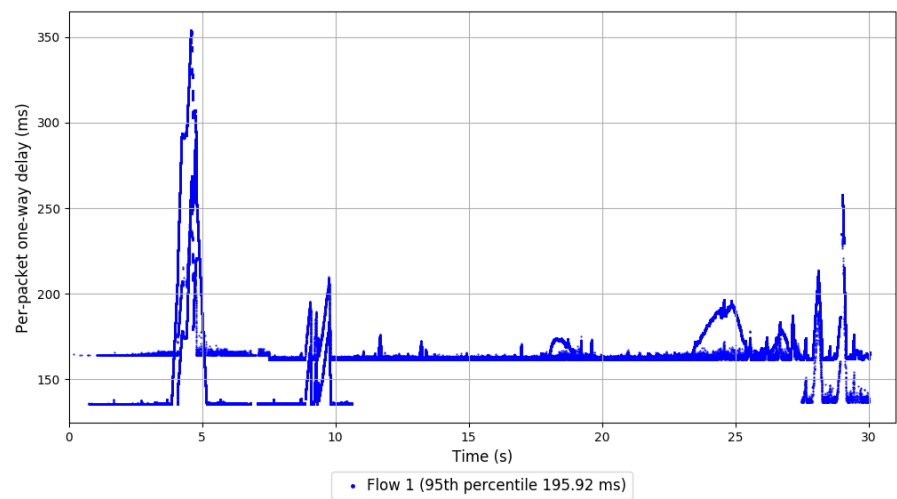
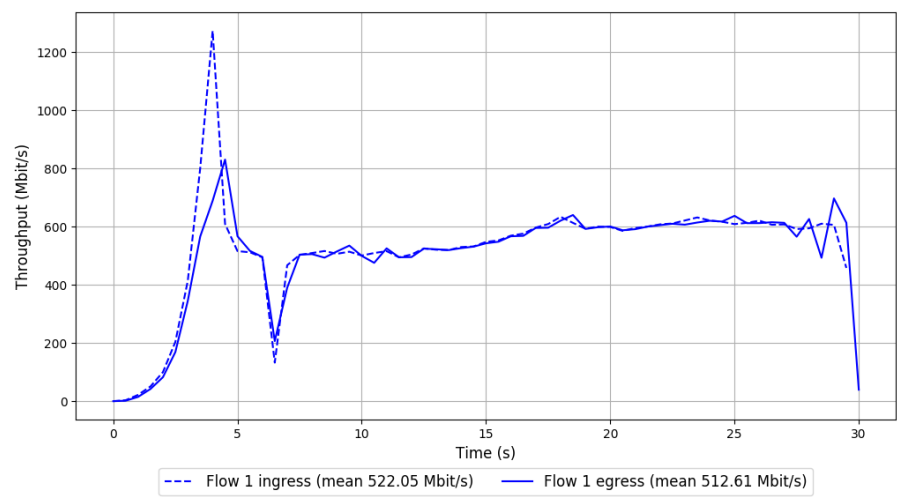
-- Flow 1:

Average throughput: 512.61 Mbit/s

95th percentile per-packet one-way delay: 195.921 ms

Loss rate: 1.82%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-09 10:33:51

End at: 2018-01-09 10:34:21

Below is generated by plot.py at 2018-01-09 11:56:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 525.01 Mbit/s

95th percentile per-packet one-way delay: 213.917 ms

Loss rate: 2.74%

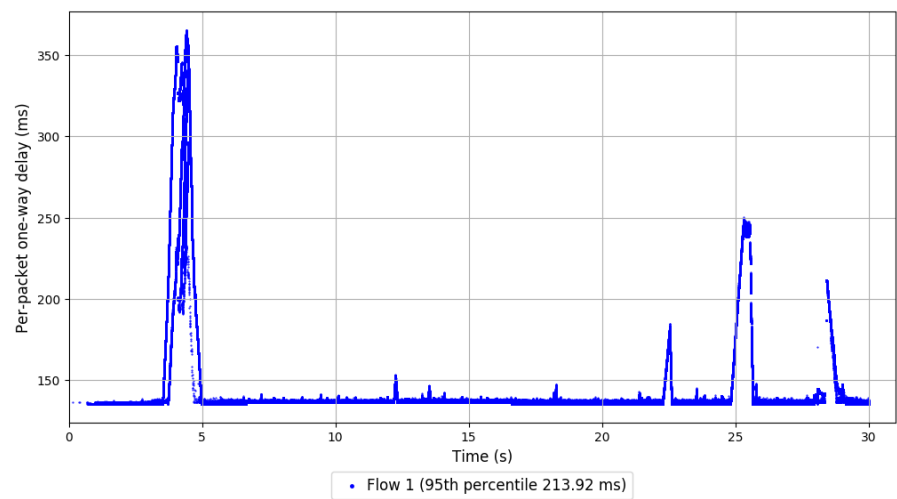
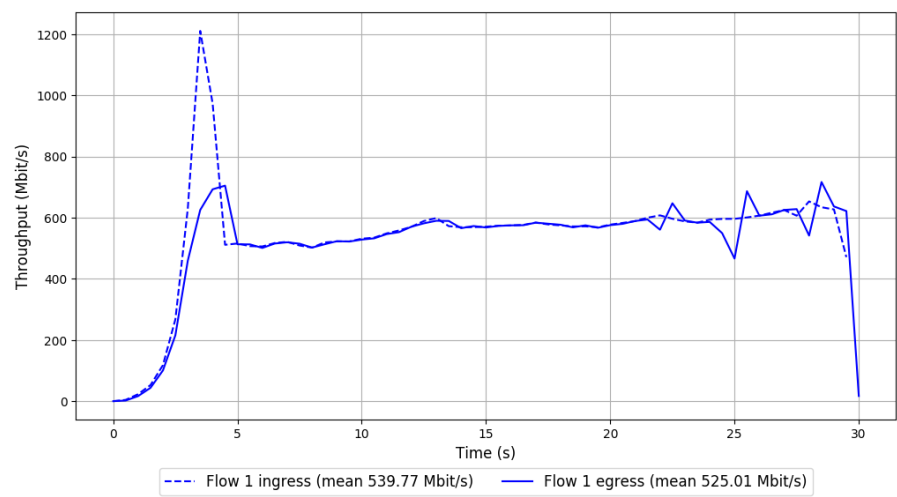
-- Flow 1:

Average throughput: 525.01 Mbit/s

95th percentile per-packet one-way delay: 213.917 ms

Loss rate: 2.74%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-09 10:46:48

End at: 2018-01-09 10:47:18

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 521.20 Mbit/s

95th percentile per-packet one-way delay: 188.167 ms

Loss rate: 1.37%

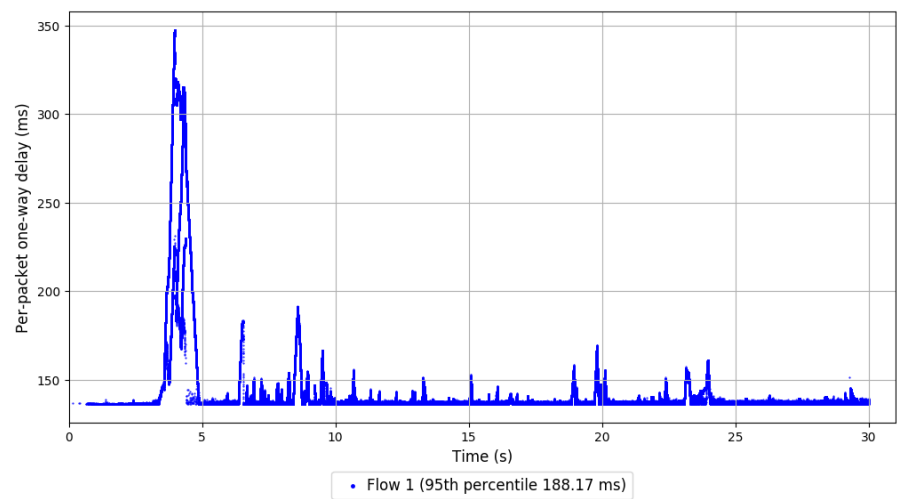
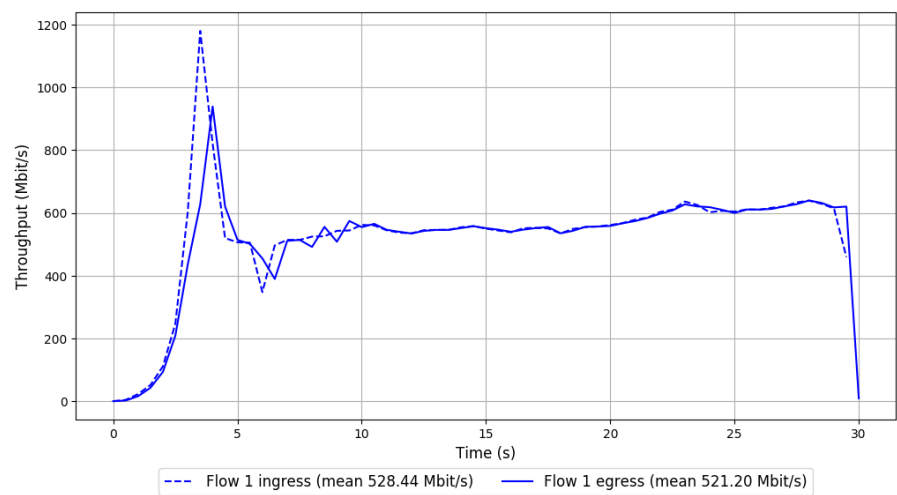
-- Flow 1:

Average throughput: 521.20 Mbit/s

95th percentile per-packet one-way delay: 188.167 ms

Loss rate: 1.37%

Run 10: Report of PCC — Data Link

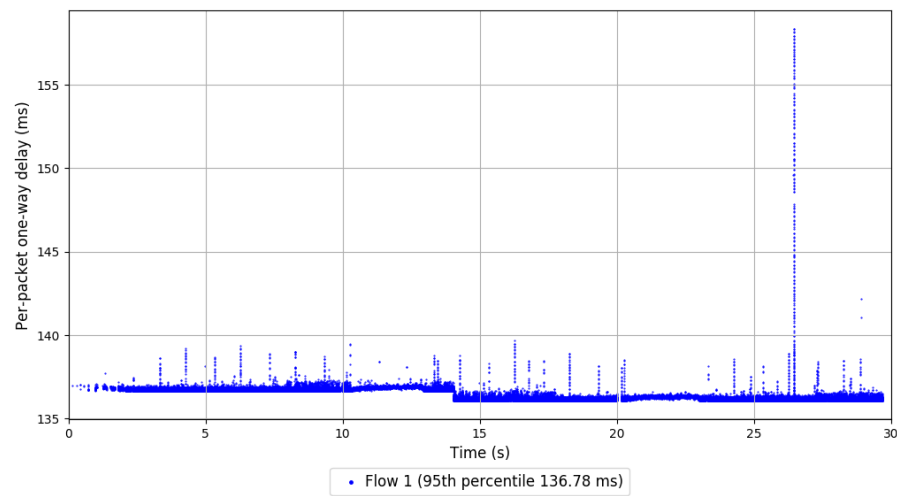
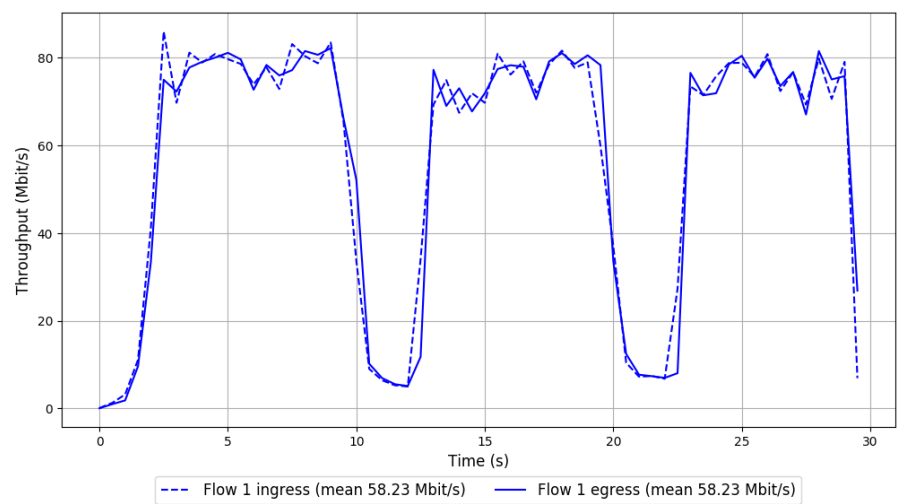


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-09 08:51:10
End at: 2018-01-09 08:51:40

# Below is generated by plot.py at 2018-01-09 11:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.23 Mbit/s
95th percentile per-packet one-way delay: 136.785 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.23 Mbit/s
95th percentile per-packet one-way delay: 136.785 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-09 09:04:07

End at: 2018-01-09 09:04:37

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.12 Mbit/s

95th percentile per-packet one-way delay: 161.741 ms

Loss rate: 0.09%

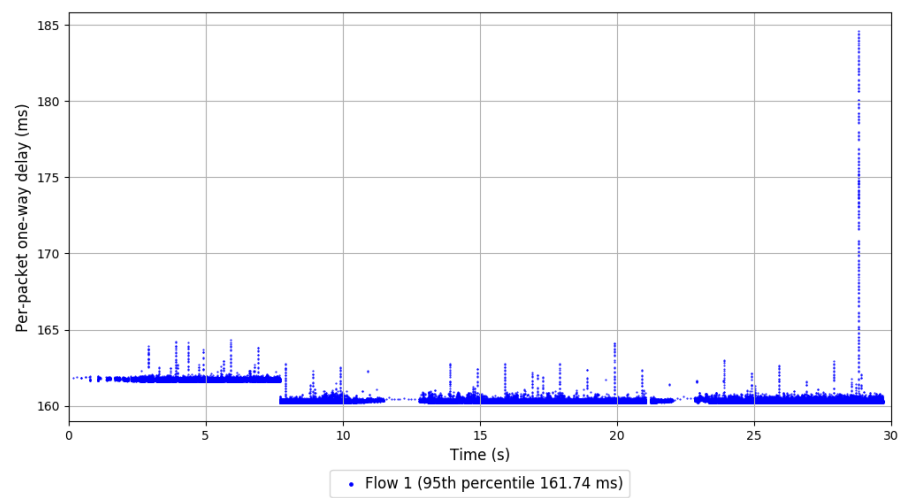
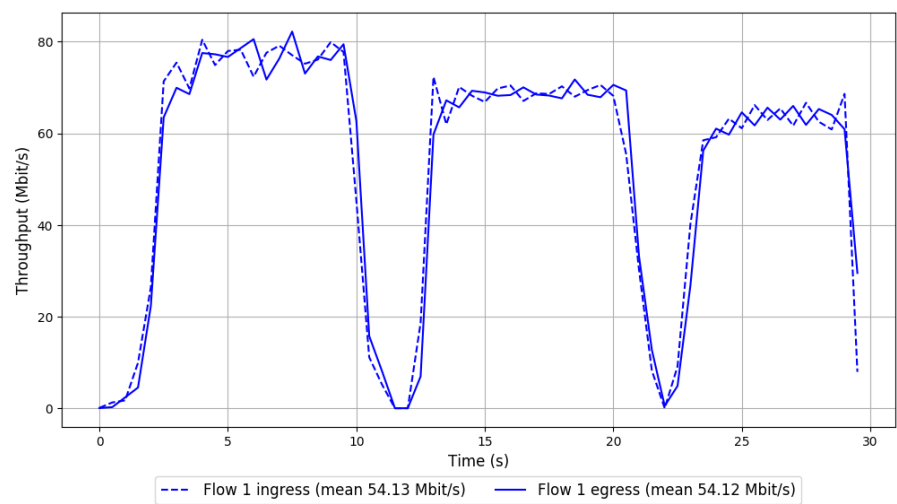
-- Flow 1:

Average throughput: 54.12 Mbit/s

95th percentile per-packet one-way delay: 161.741 ms

Loss rate: 0.09%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-09 09:16:33

End at: 2018-01-09 09:17:03

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.03 Mbit/s

95th percentile per-packet one-way delay: 163.863 ms

Loss rate: 0.00%

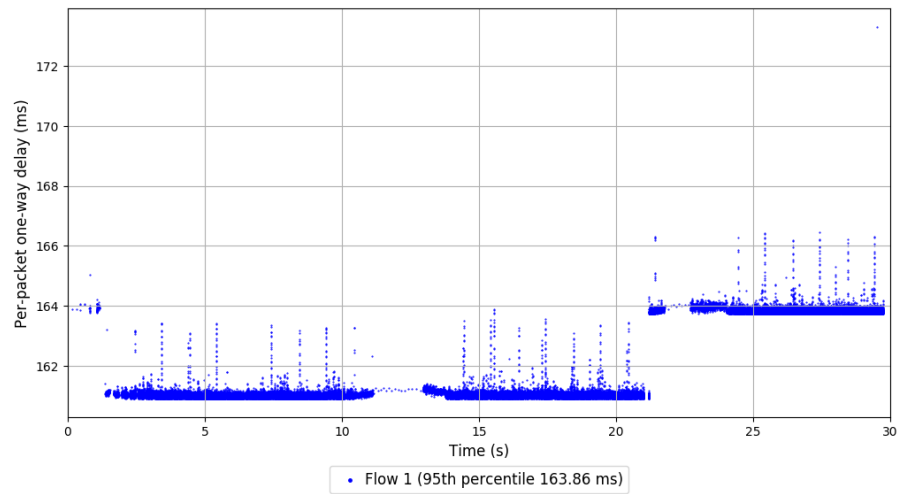
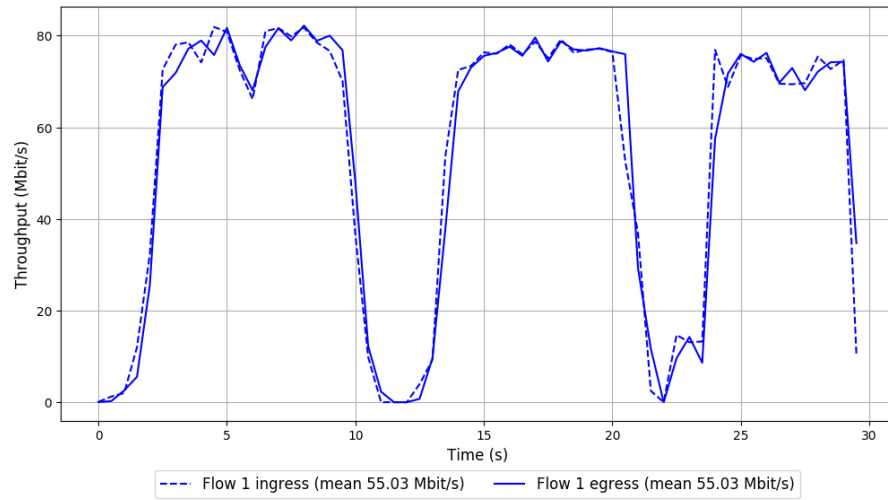
-- Flow 1:

Average throughput: 55.03 Mbit/s

95th percentile per-packet one-way delay: 163.863 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-09 09:29:20

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

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.53 Mbit/s

95th percentile per-packet one-way delay: 164.133 ms

Loss rate: 0.00%

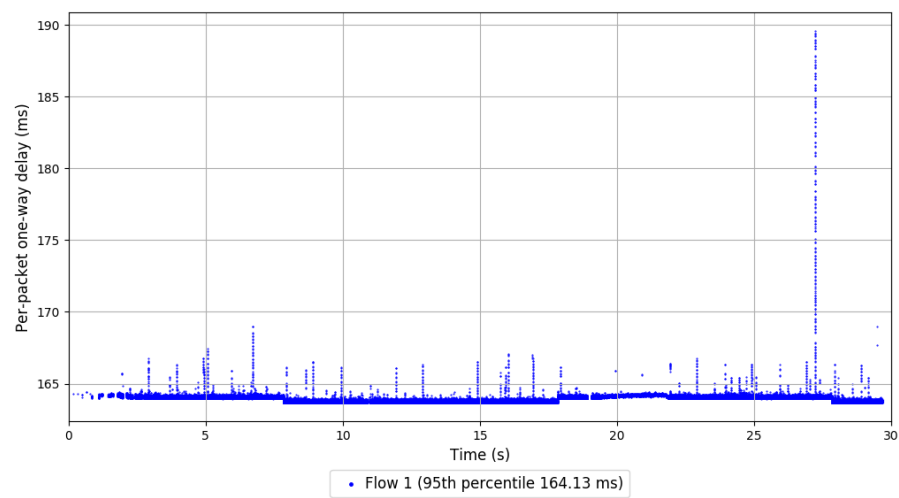
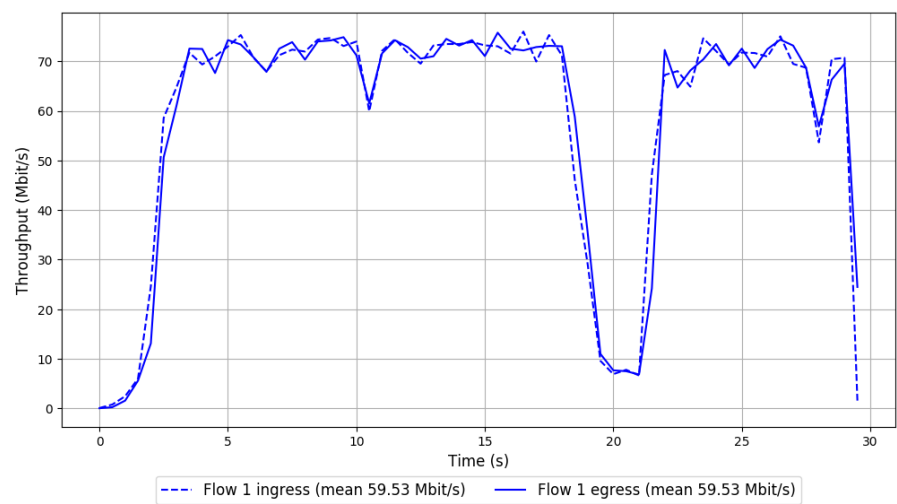
-- Flow 1:

Average throughput: 59.53 Mbit/s

95th percentile per-packet one-way delay: 164.133 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-09 09:42:04

End at: 2018-01-09 09:42:34

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.81 Mbit/s

95th percentile per-packet one-way delay: 161.587 ms

Loss rate: 0.03%

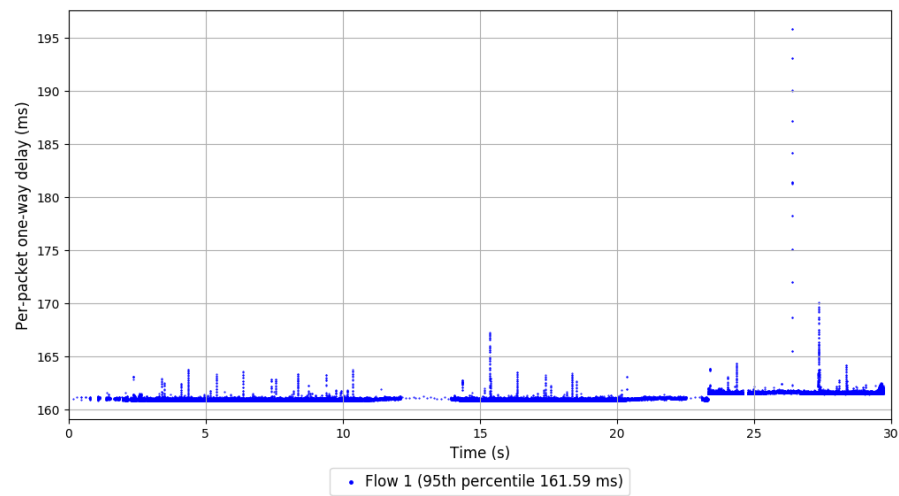
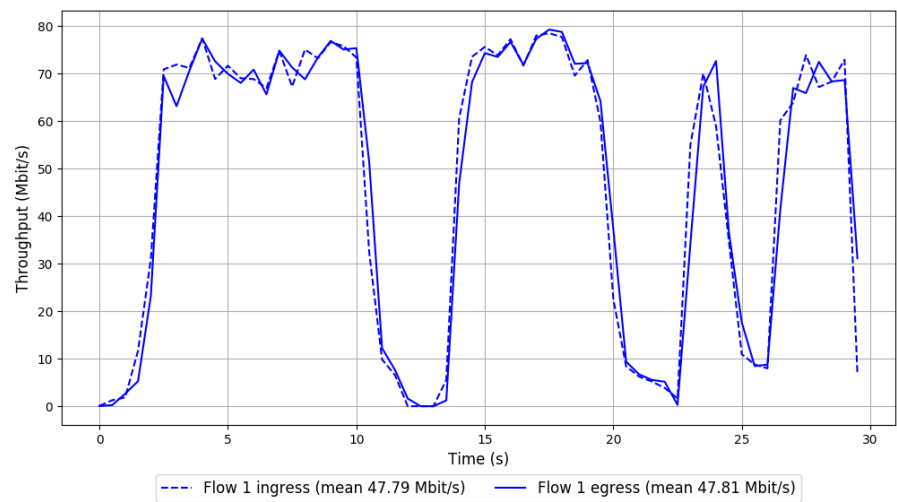
-- Flow 1:

Average throughput: 47.81 Mbit/s

95th percentile per-packet one-way delay: 161.587 ms

Loss rate: 0.03%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-09 09:54:42

End at: 2018-01-09 09:55:12

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.17 Mbit/s

95th percentile per-packet one-way delay: 161.768 ms

Loss rate: 0.10%

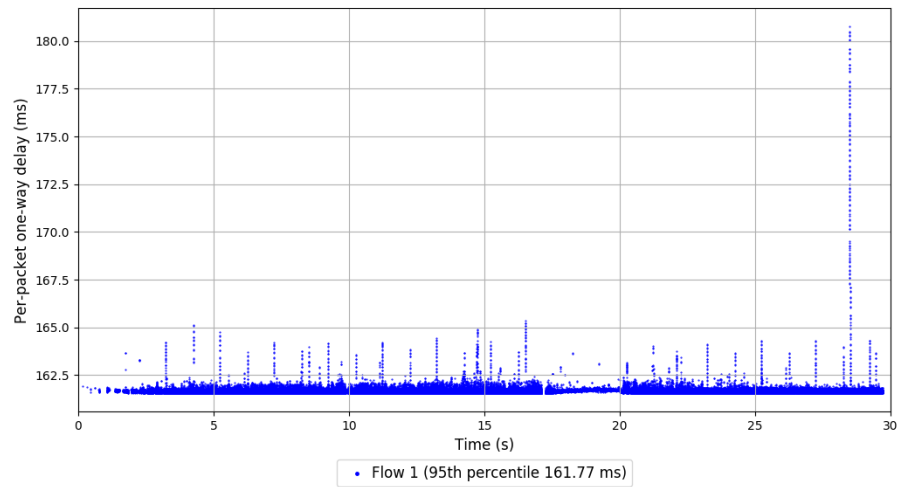
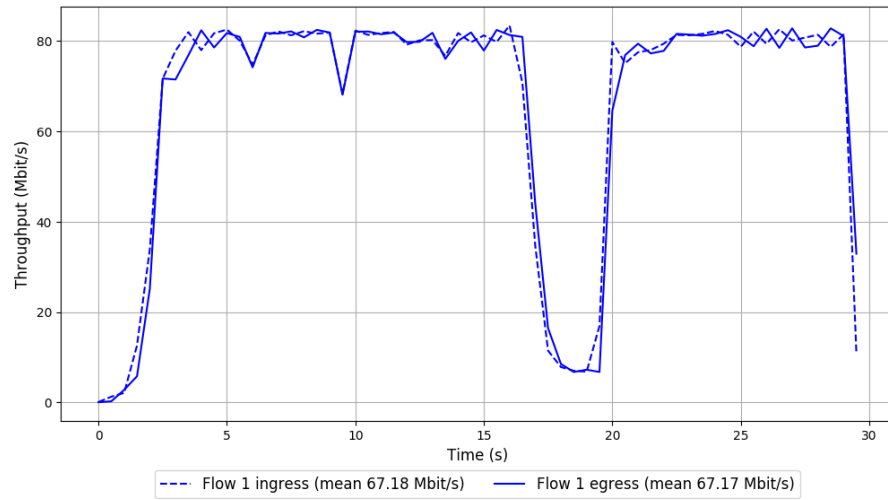
-- Flow 1:

Average throughput: 67.17 Mbit/s

95th percentile per-packet one-way delay: 161.768 ms

Loss rate: 0.10%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-09 10:07:41

End at: 2018-01-09 10:08:11

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.49 Mbit/s

95th percentile per-packet one-way delay: 164.235 ms

Loss rate: 0.01%

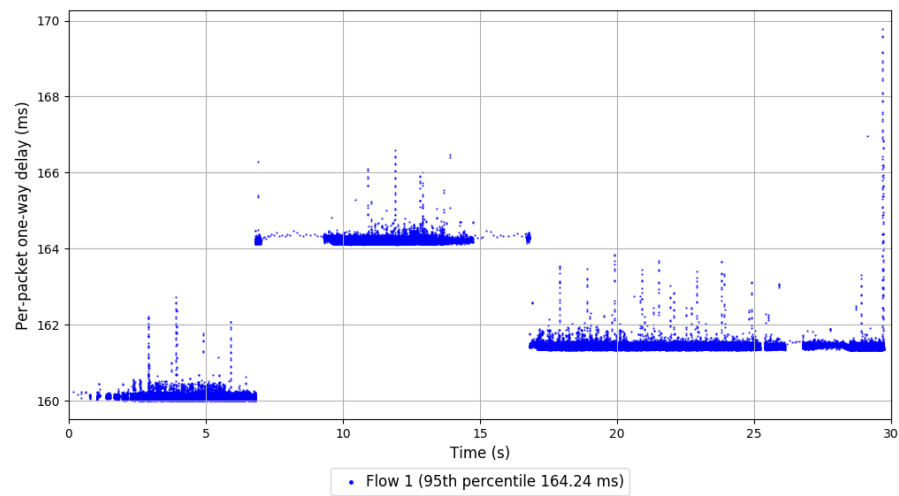
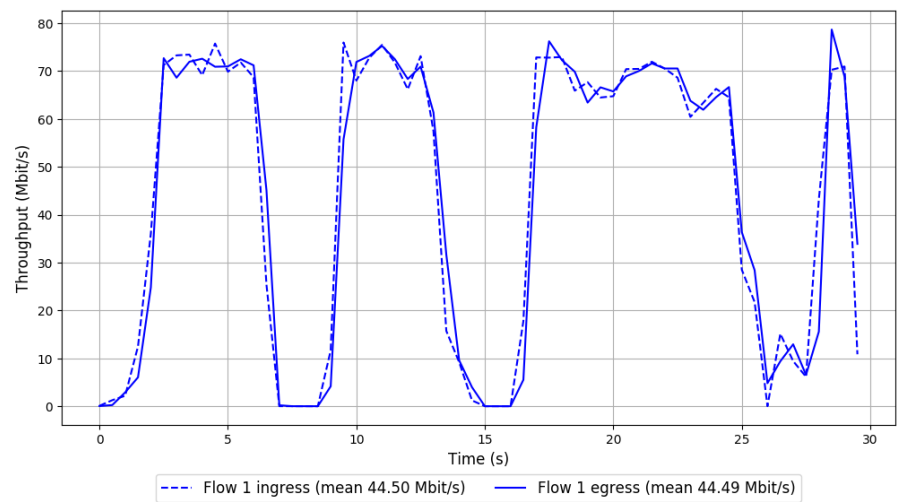
-- Flow 1:

Average throughput: 44.49 Mbit/s

95th percentile per-packet one-way delay: 164.235 ms

Loss rate: 0.01%

Run 7: Report of QUIC Cubic — Data Link

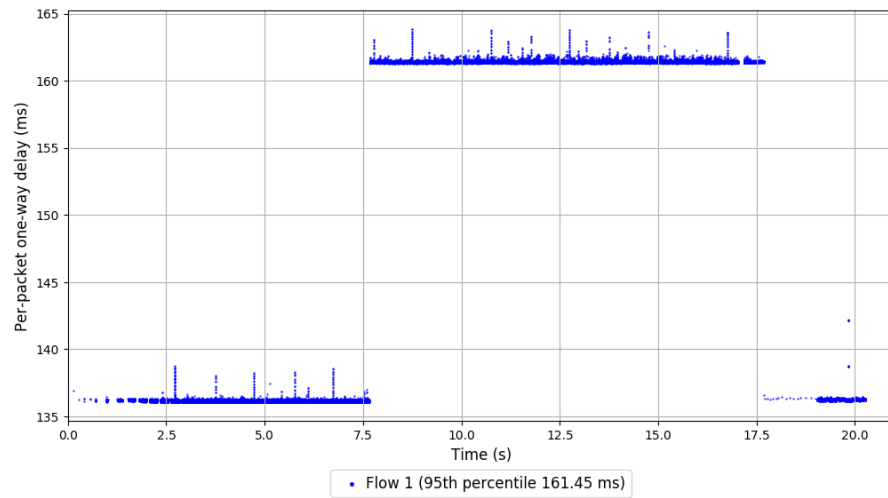
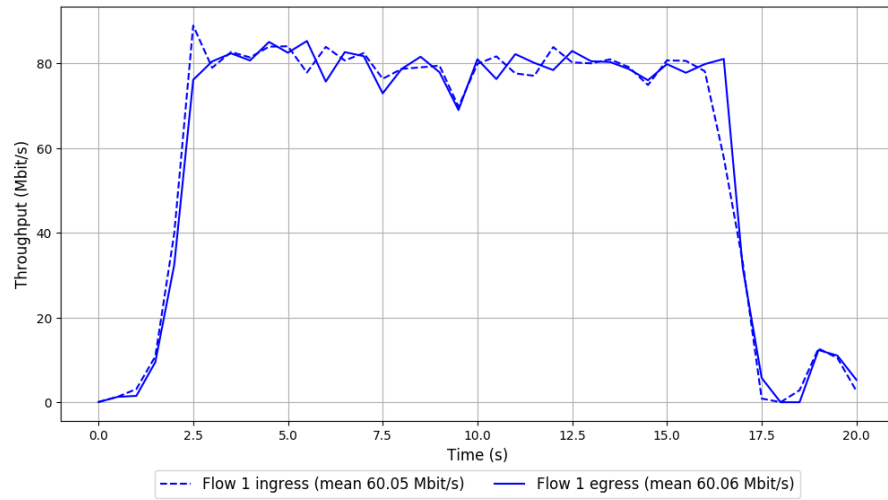


Run 8: Statistics of QUIC Cubic

Start at: 2018-01-09 10:20:31

End at: 2018-01-09 10:21:01

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-09 10:33:05

End at: 2018-01-09 10:33:35

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.41 Mbit/s

95th percentile per-packet one-way delay: 161.603 ms

Loss rate: 0.04%

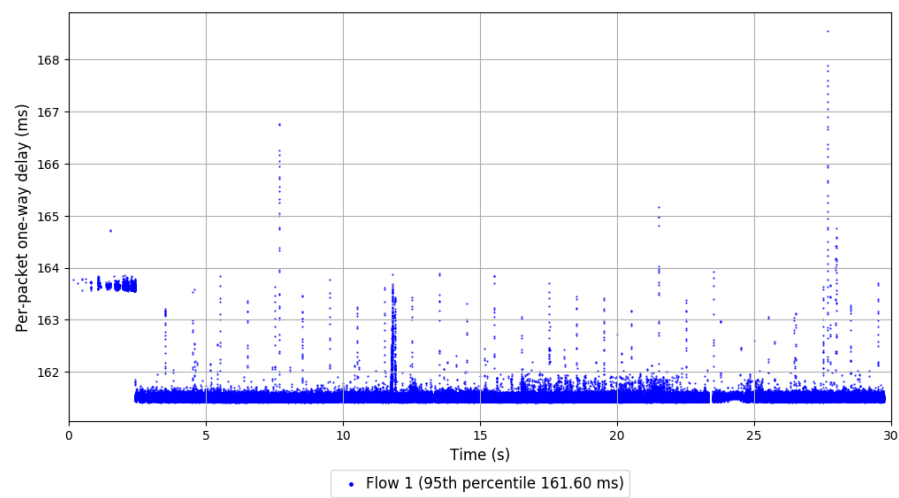
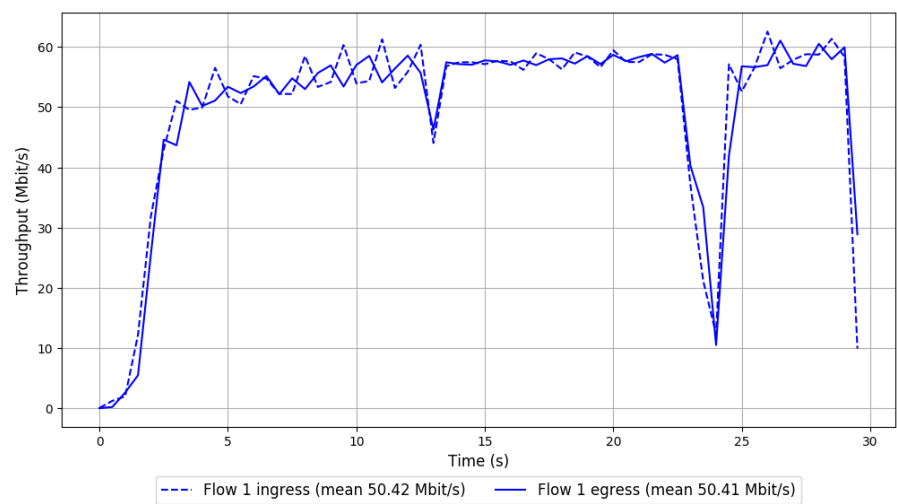
-- Flow 1:

Average throughput: 50.41 Mbit/s

95th percentile per-packet one-way delay: 161.603 ms

Loss rate: 0.04%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-09 10:46:00

End at: 2018-01-09 10:46:30

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.60 Mbit/s

95th percentile per-packet one-way delay: 161.480 ms

Loss rate: 0.09%

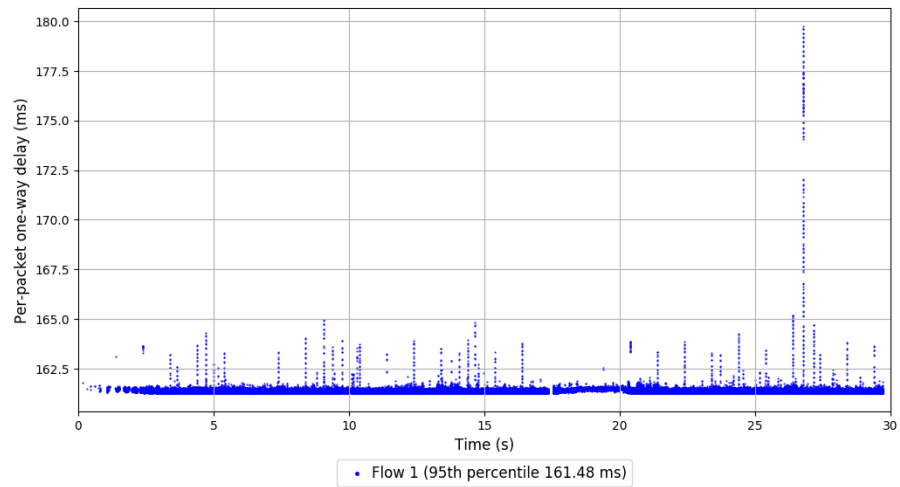
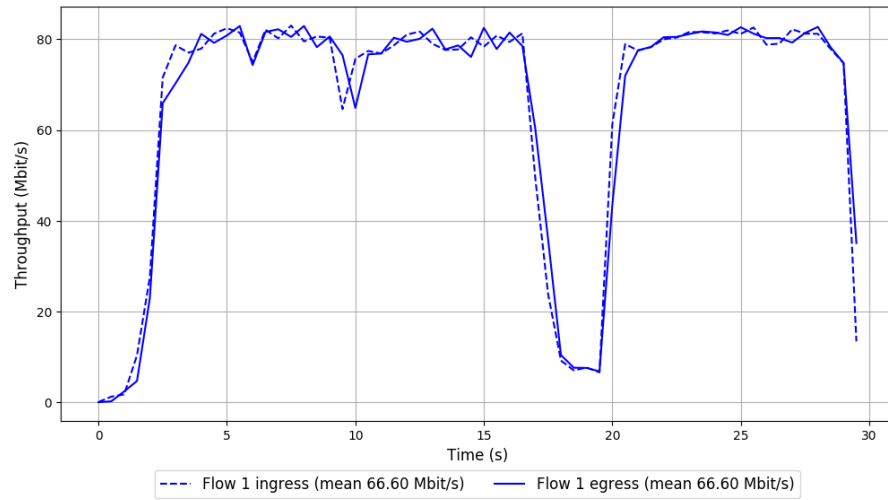
-- Flow 1:

Average throughput: 66.60 Mbit/s

95th percentile per-packet one-way delay: 161.480 ms

Loss rate: 0.09%

Run 10: Report of QUIC Cubic — Data Link

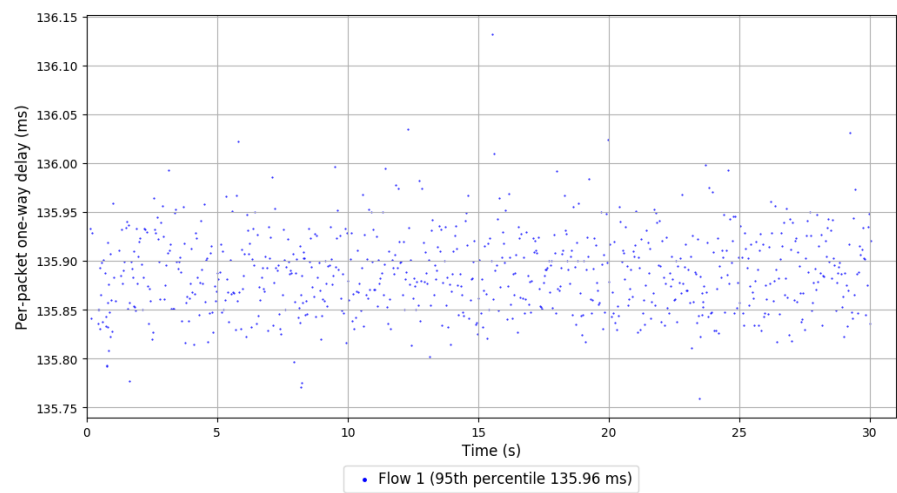
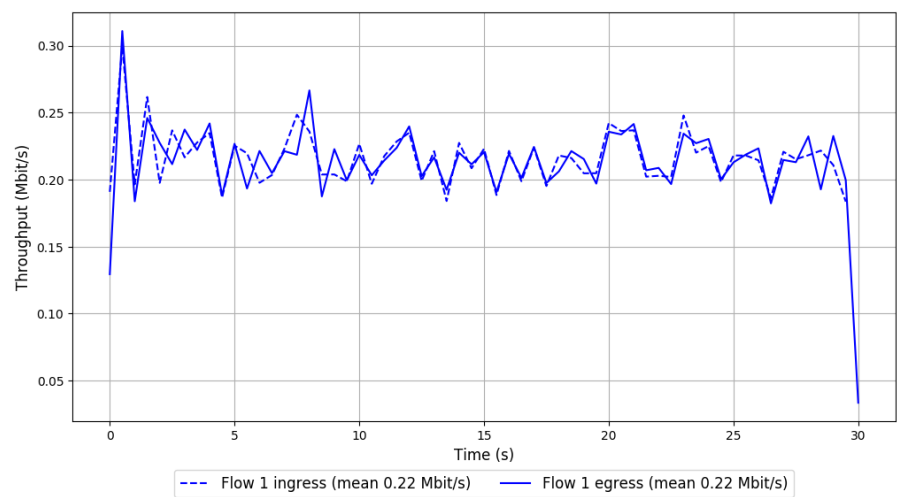


```
Run 1: Statistics of SCReAM

Start at: 2018-01-09 08:53:02
End at: 2018-01-09 08:53:32

# Below is generated by plot.py at 2018-01-09 11:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.955 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.955 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

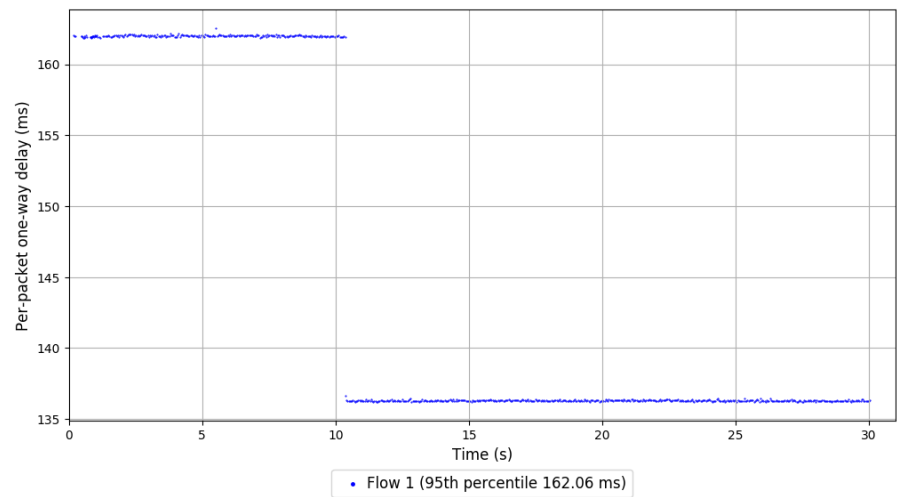
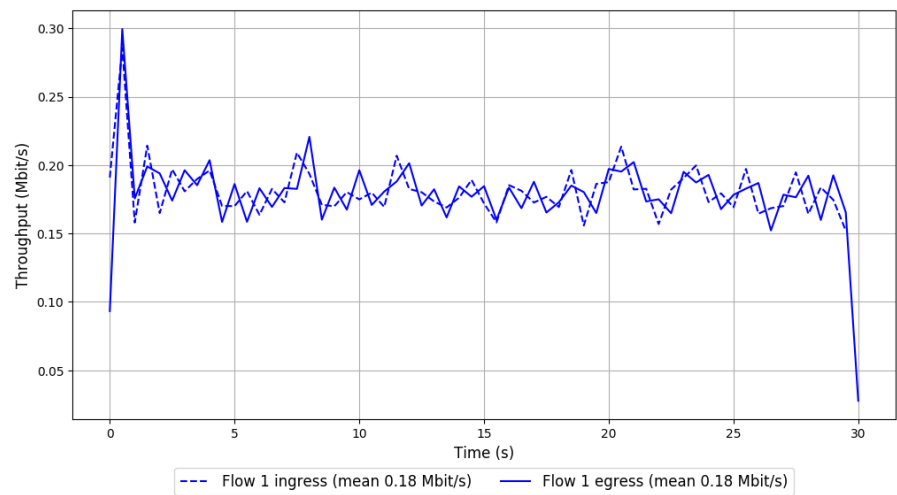


```
Run 2: Statistics of SCReAM

Start at: 2018-01-09 09:05:58
End at: 2018-01-09 09:06:28

# Below is generated by plot.py at 2018-01-09 11:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 162.061 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 162.061 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-09 09:18:26

End at: 2018-01-09 09:18:56

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 162.328 ms

Loss rate: 0.00%

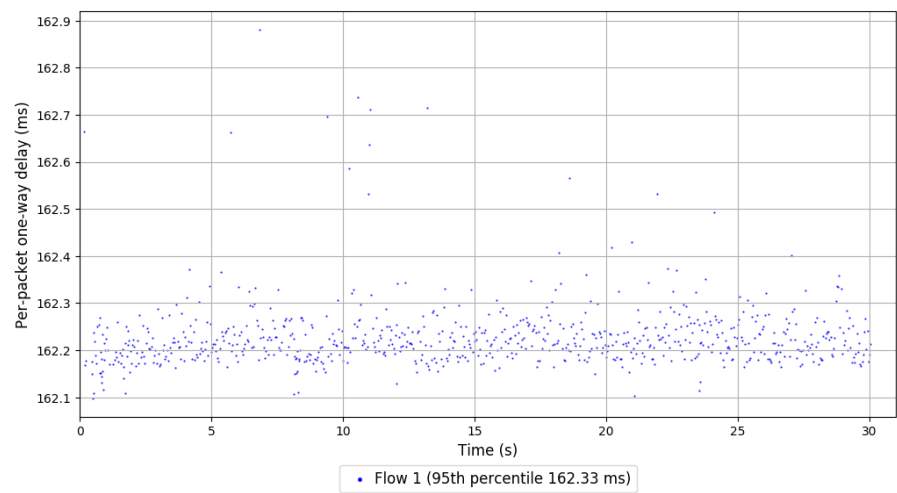
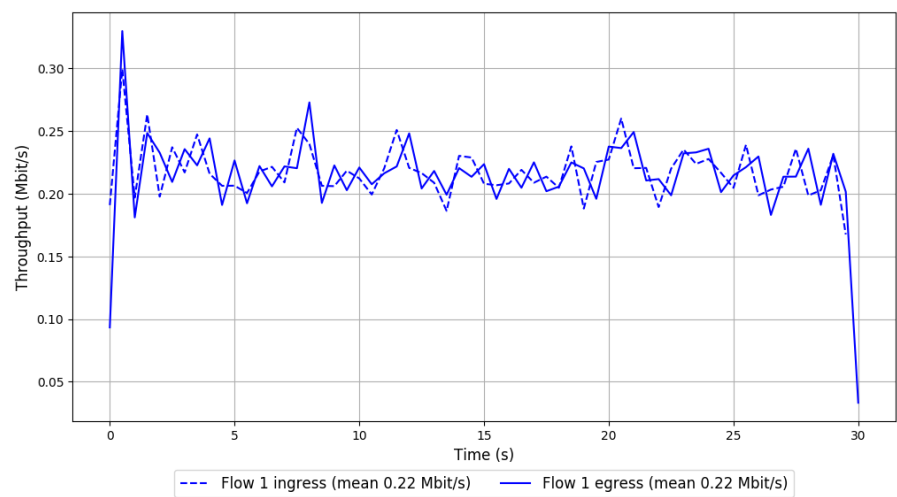
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 162.328 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

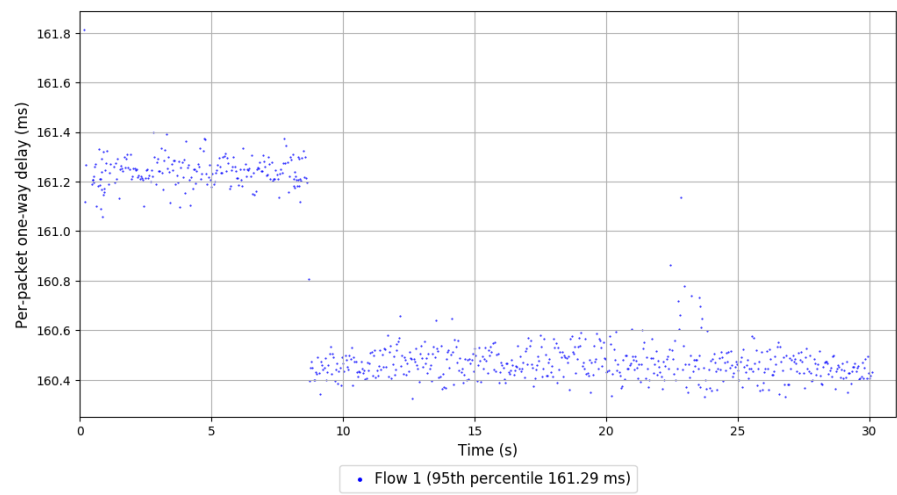
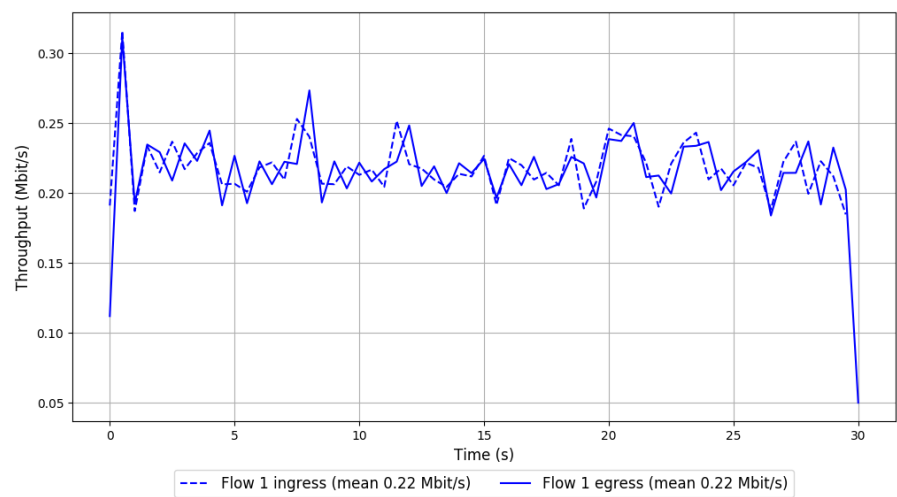


```
Run 4: Statistics of SCReAM

Start at: 2018-01-09 09:31:06
End at: 2018-01-09 09:31:36

# Below is generated by plot.py at 2018-01-09 11:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 161.291 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 161.291 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-09 09:43:56

End at: 2018-01-09 09:44:26

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 162.248 ms

Loss rate: 0.00%

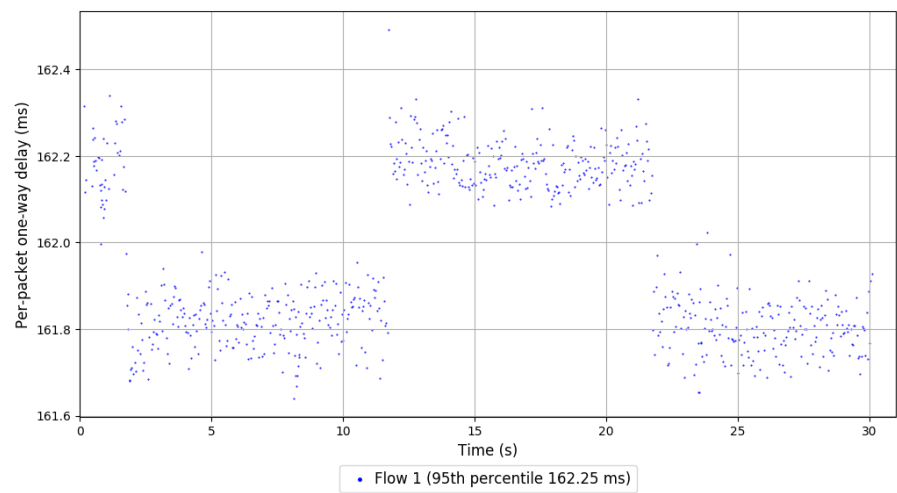
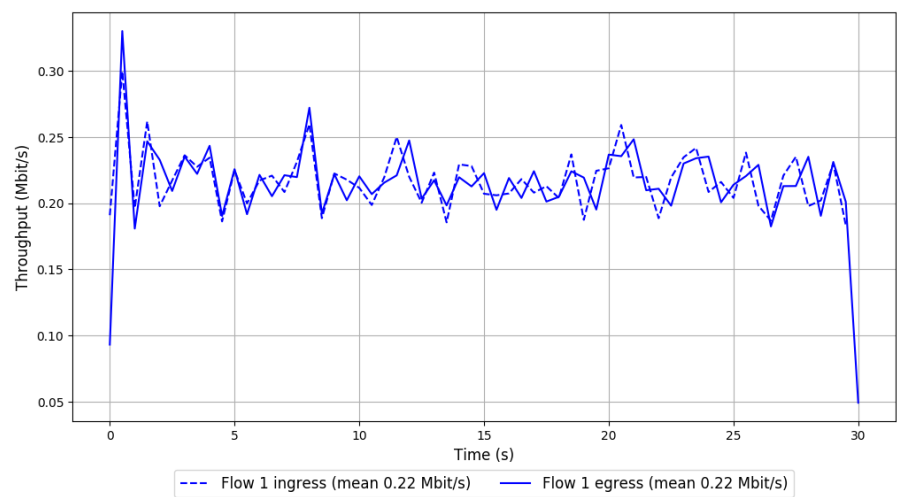
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 162.248 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-09 09:56:33

End at: 2018-01-09 09:57:03

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.875 ms

Loss rate: 0.13%

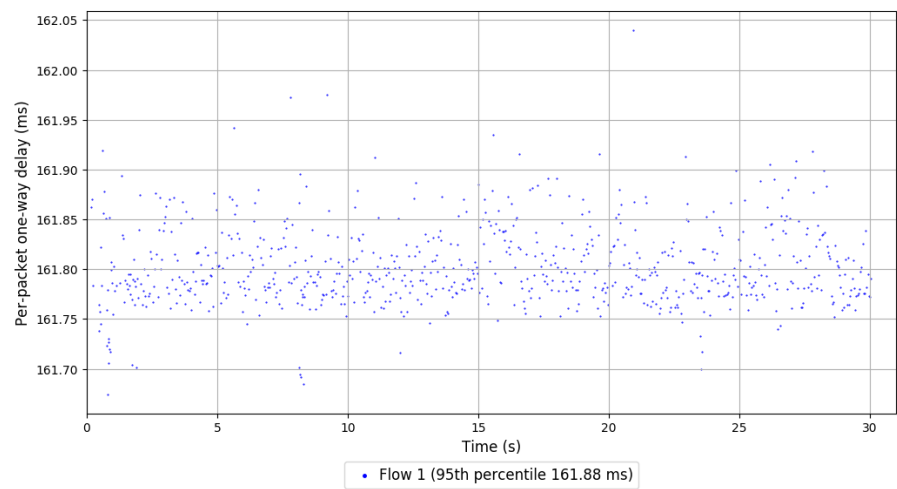
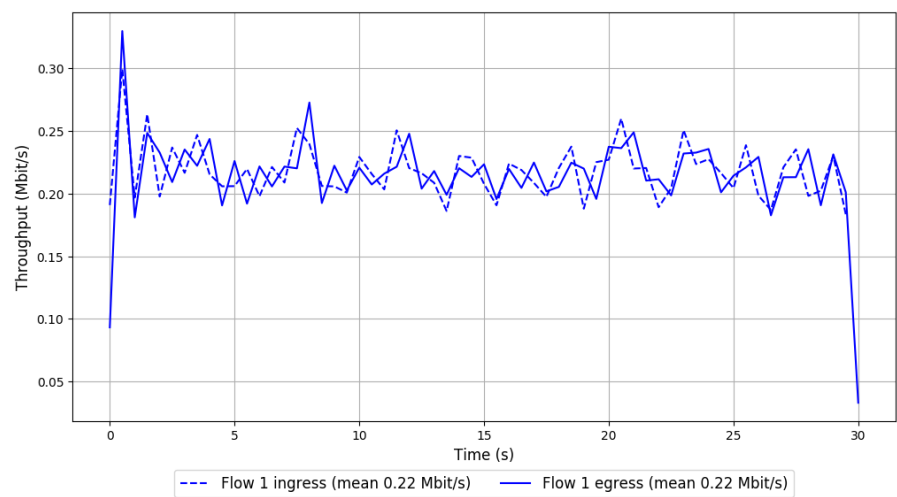
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.875 ms

Loss rate: 0.13%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-09 10:09:33

End at: 2018-01-09 10:10:03

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.784 ms

Loss rate: 0.13%

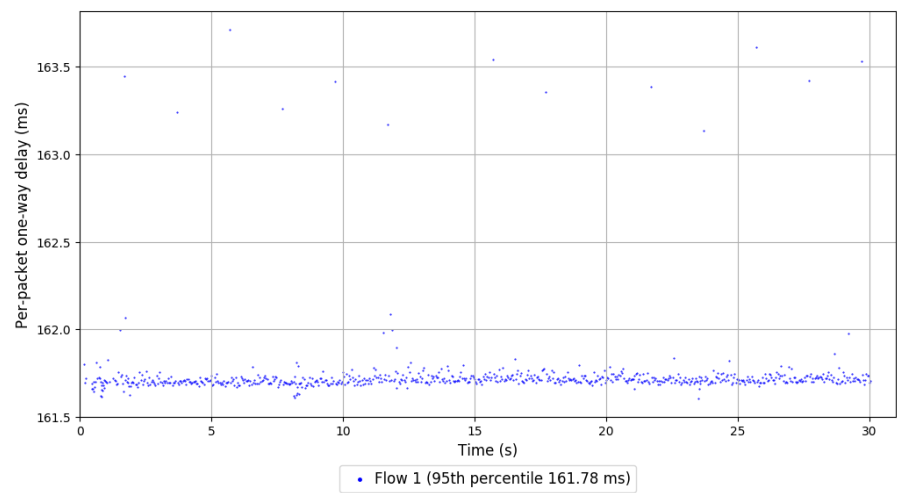
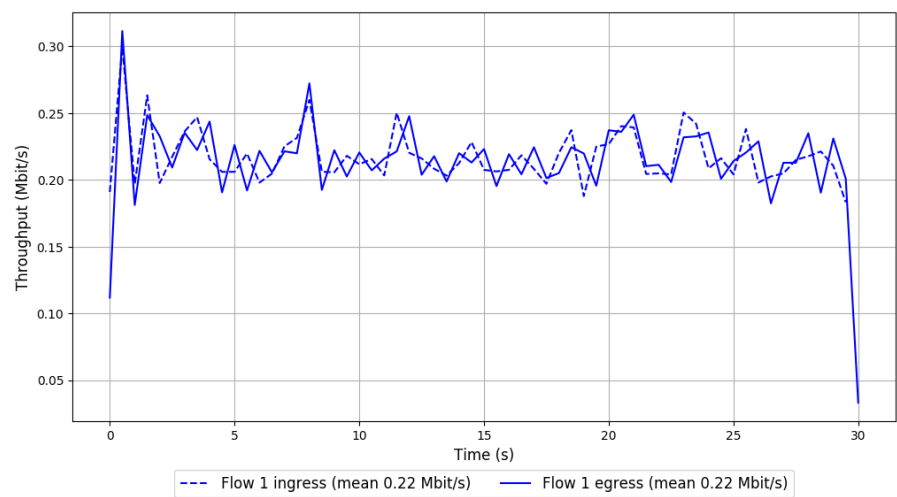
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.784 ms

Loss rate: 0.13%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-09 10:22:24

End at: 2018-01-09 10:22:54

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 162.000 ms

Loss rate: 0.00%

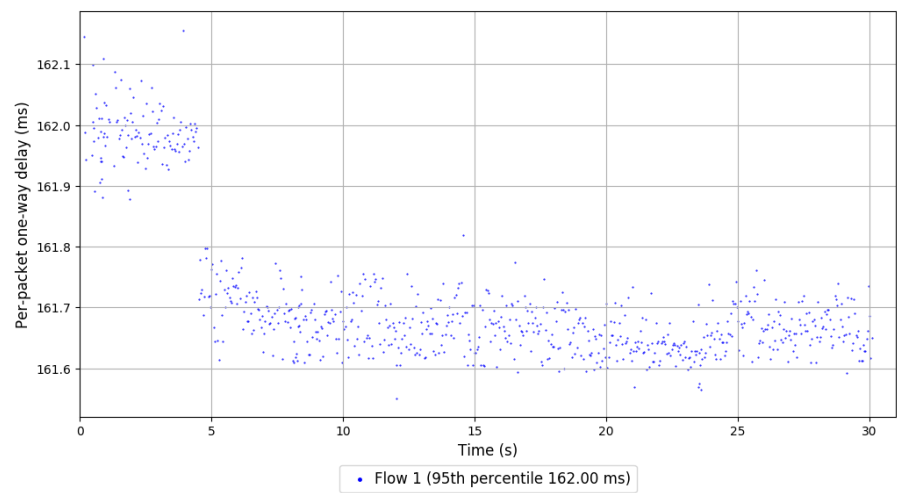
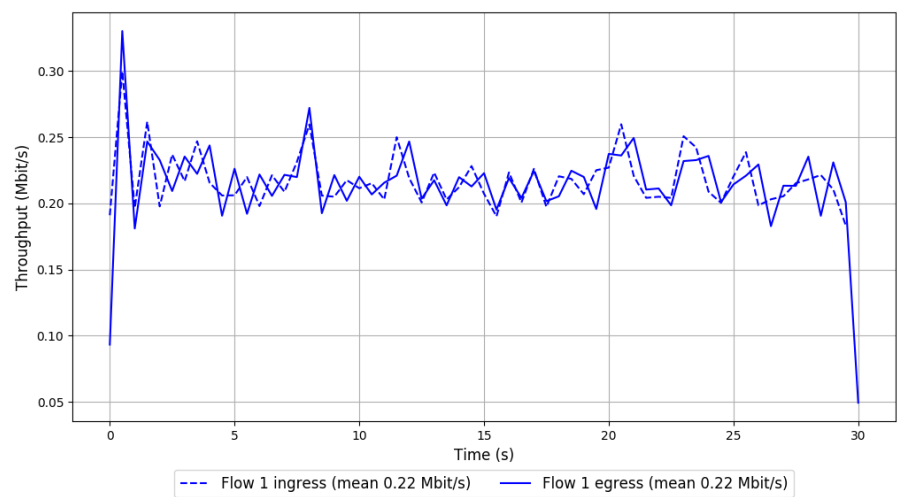
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 162.000 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-09 10:34:57

End at: 2018-01-09 10:35:27

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

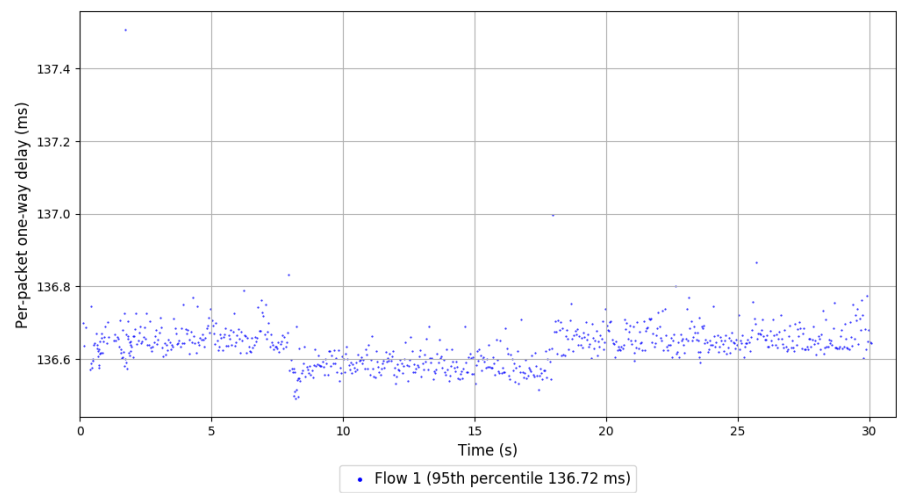
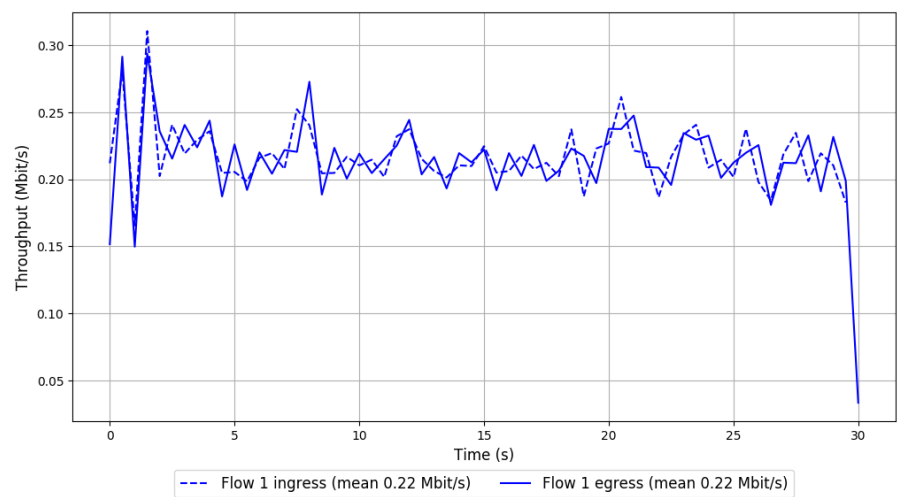
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-01-09 10:47:53

End at: 2018-01-09 10:48:23

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.622 ms

Loss rate: 0.12%

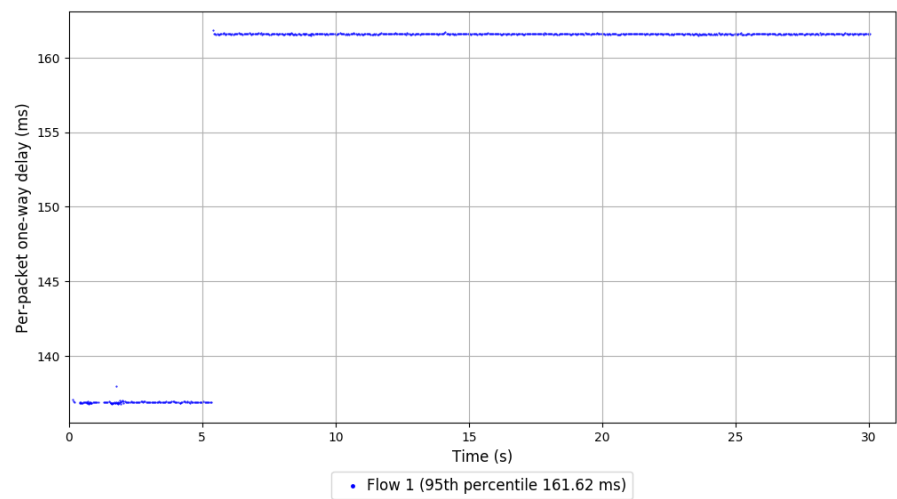
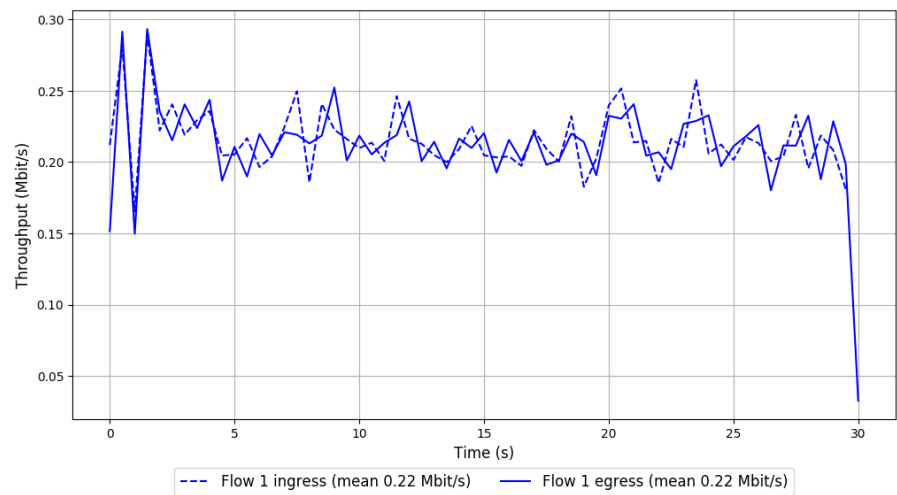
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.622 ms

Loss rate: 0.12%

Run 10: Report of SReAM — Data Link

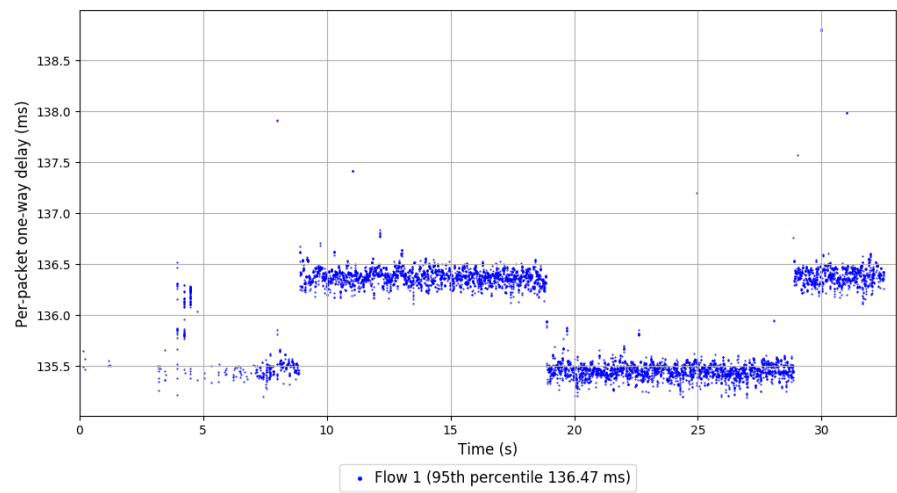
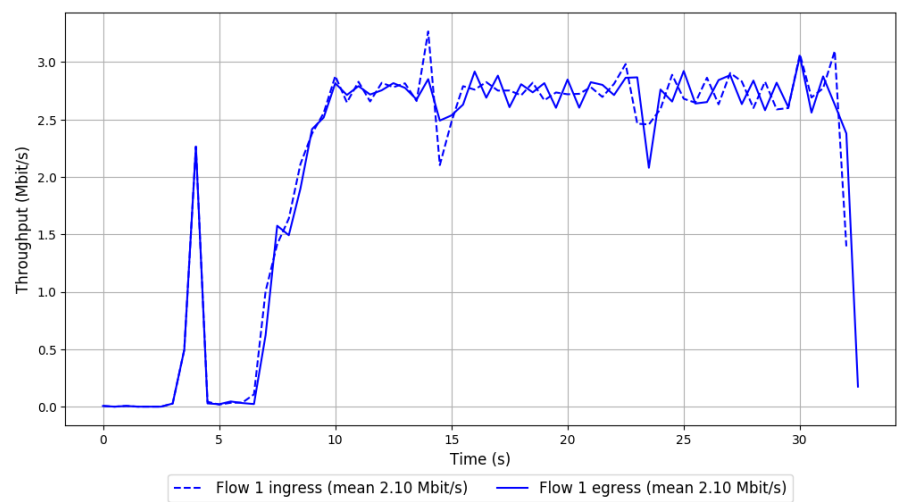


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-09 08:44:52
End at: 2018-01-09 08:45:22

# Below is generated by plot.py at 2018-01-09 11:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 136.474 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 136.474 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-09 08:57:48

End at: 2018-01-09 08:58:18

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 162.087 ms

Loss rate: 0.13%

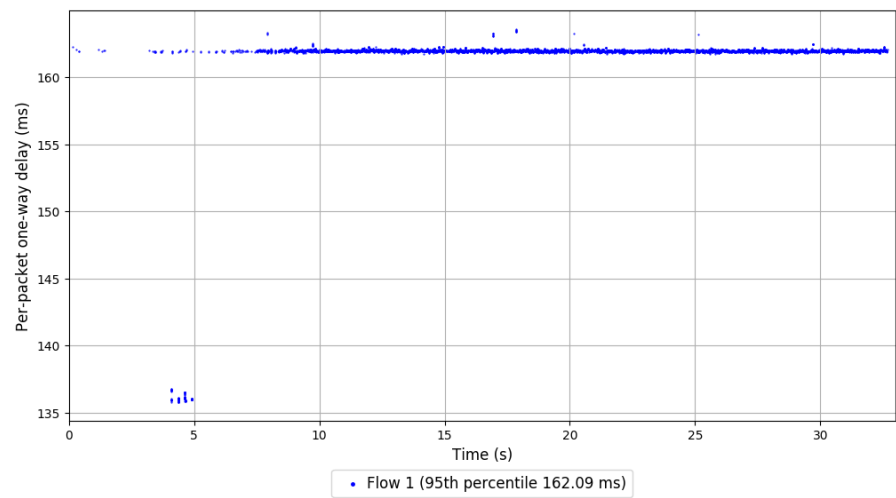
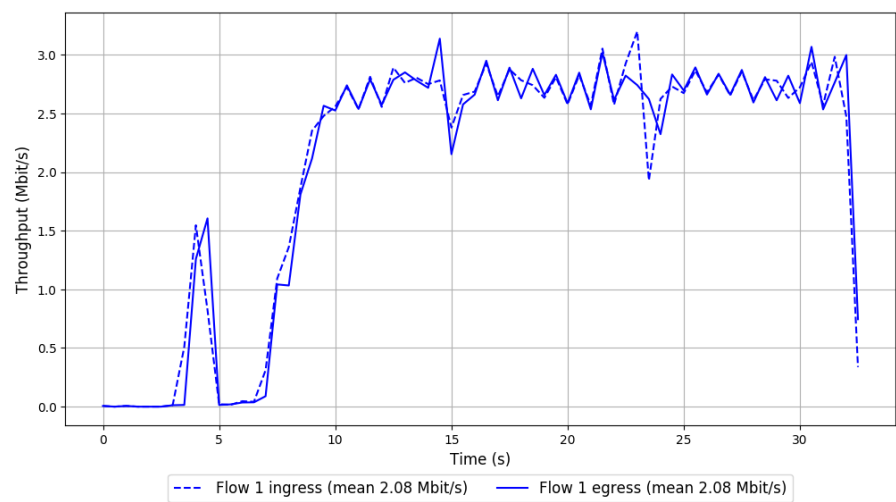
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 162.087 ms

Loss rate: 0.13%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-09 09:10:20

End at: 2018-01-09 09:10:50

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 164.654 ms

Loss rate: 0.00%

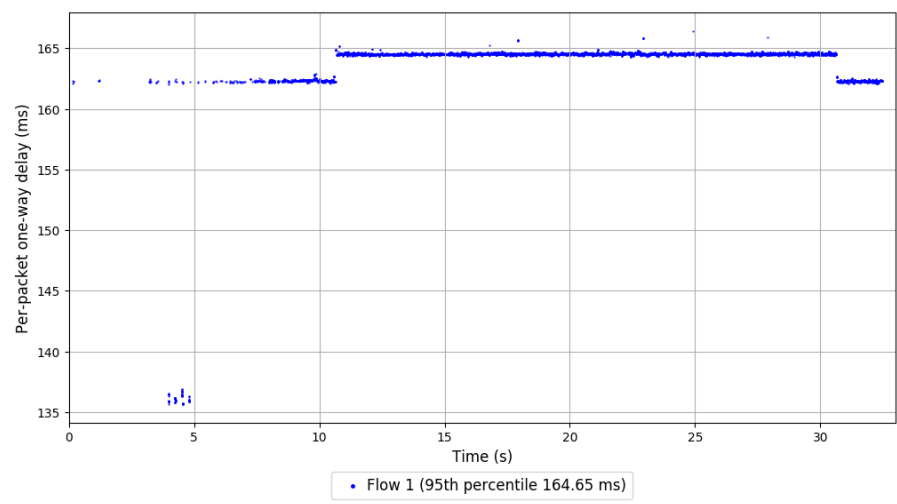
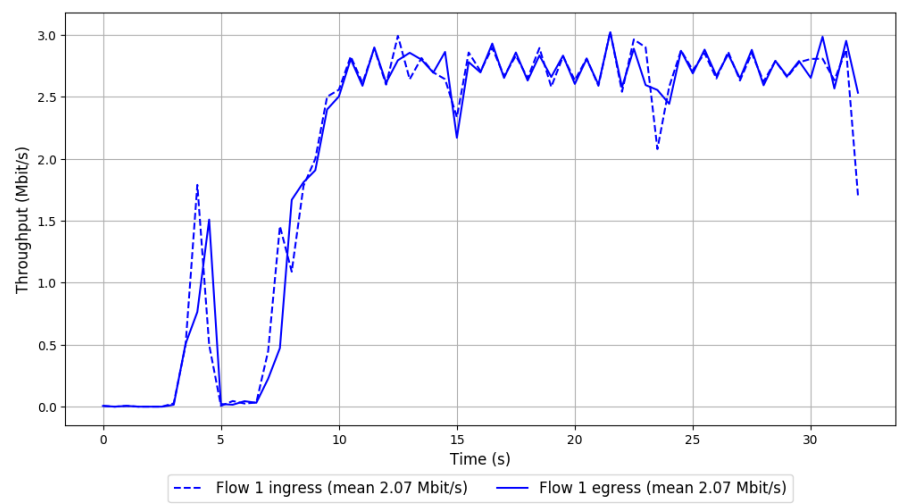
-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 164.654 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-09 09:22:57

End at: 2018-01-09 09:23:27

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 164.111 ms

Loss rate: 0.00%

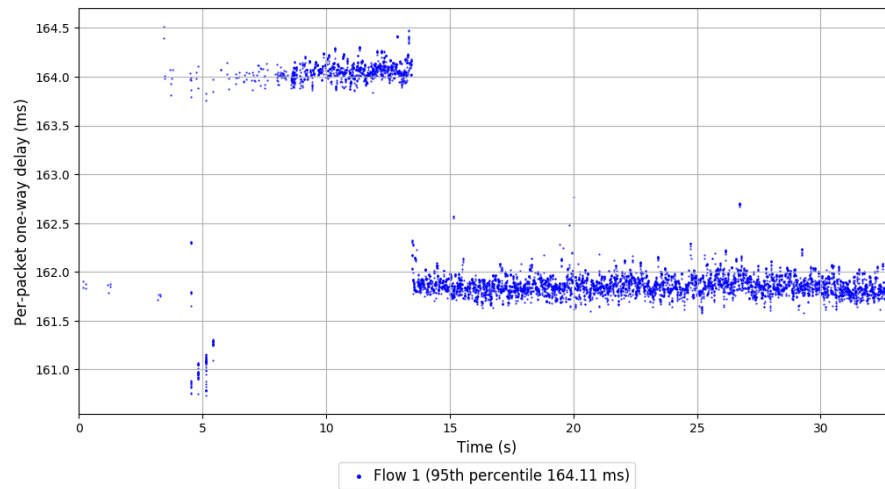
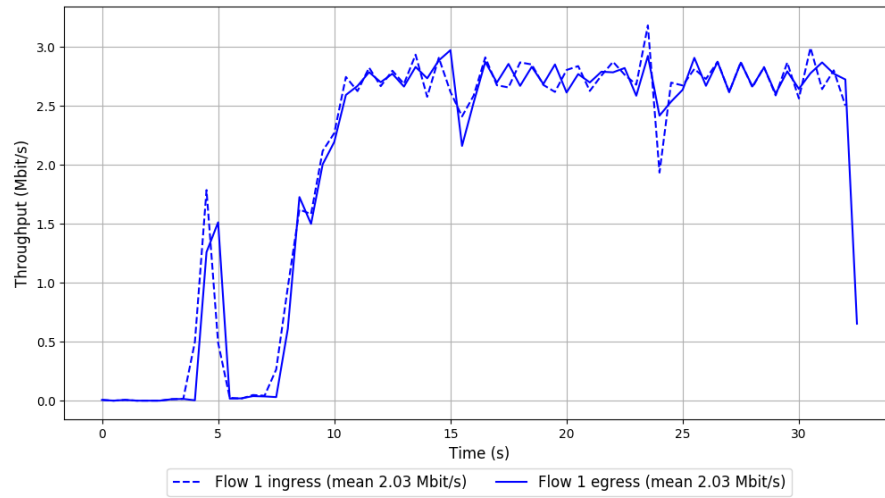
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 164.111 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-09 09:35:40

End at: 2018-01-09 09:36:10

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 163.027 ms

Loss rate: 0.00%

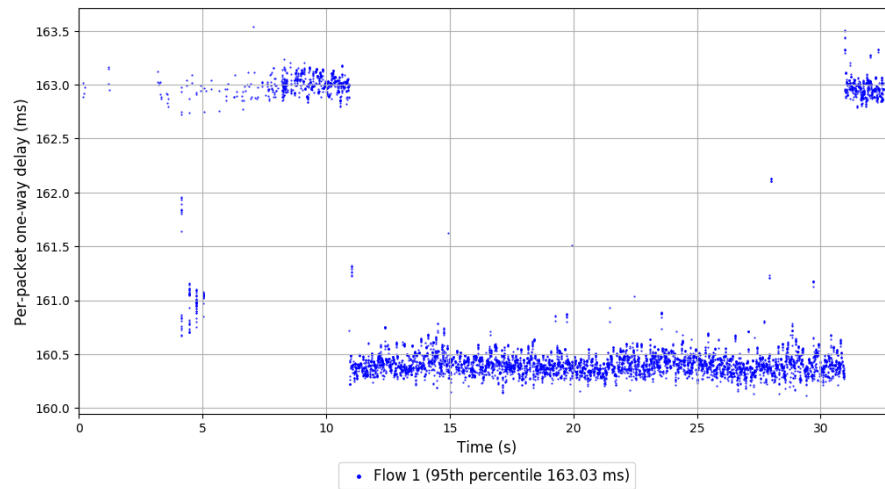
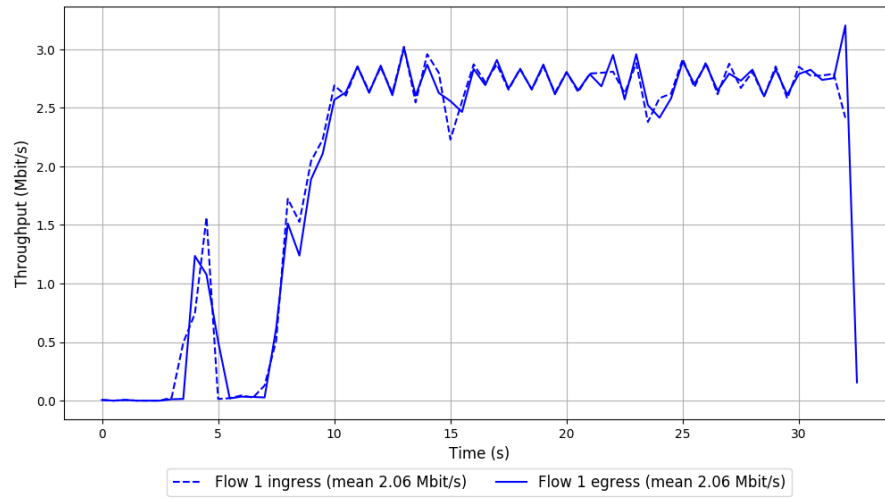
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 163.027 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-09 09:48:17

End at: 2018-01-09 09:48:47

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 163.969 ms

Loss rate: 0.10%

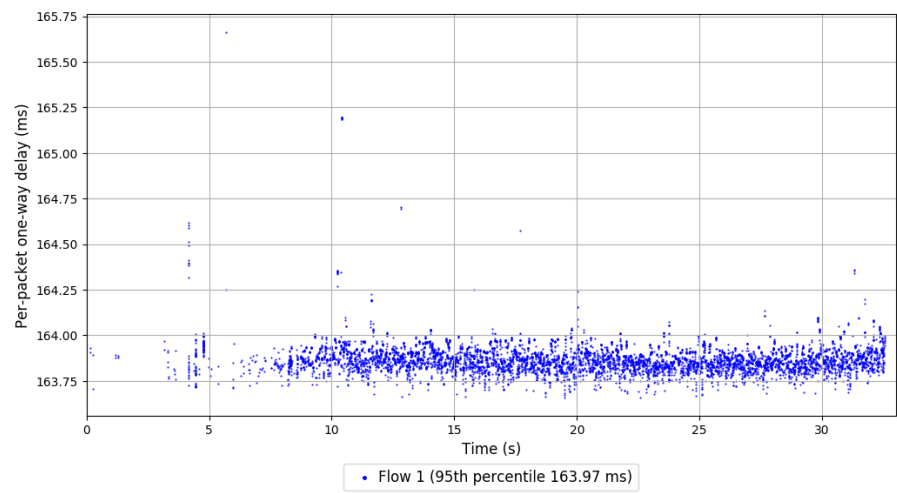
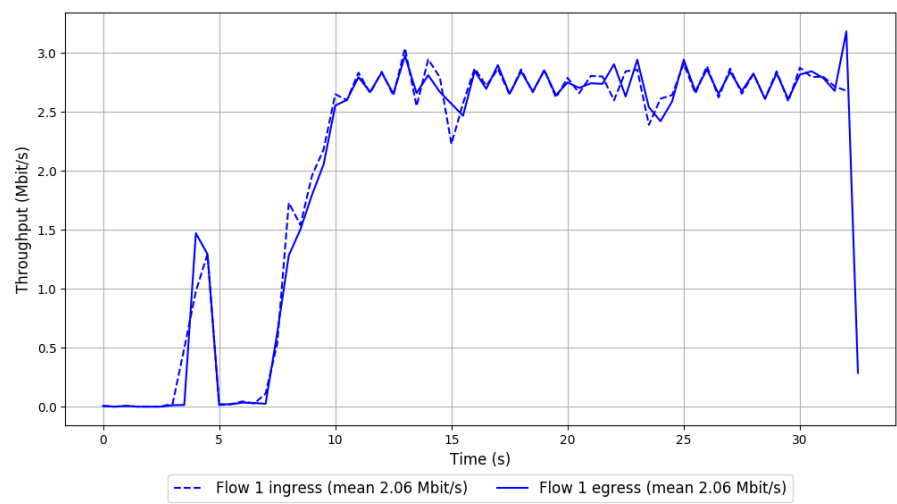
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 163.969 ms

Loss rate: 0.10%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-09 10:01:17

End at: 2018-01-09 10:01:47

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 162.171 ms

Loss rate: 0.00%

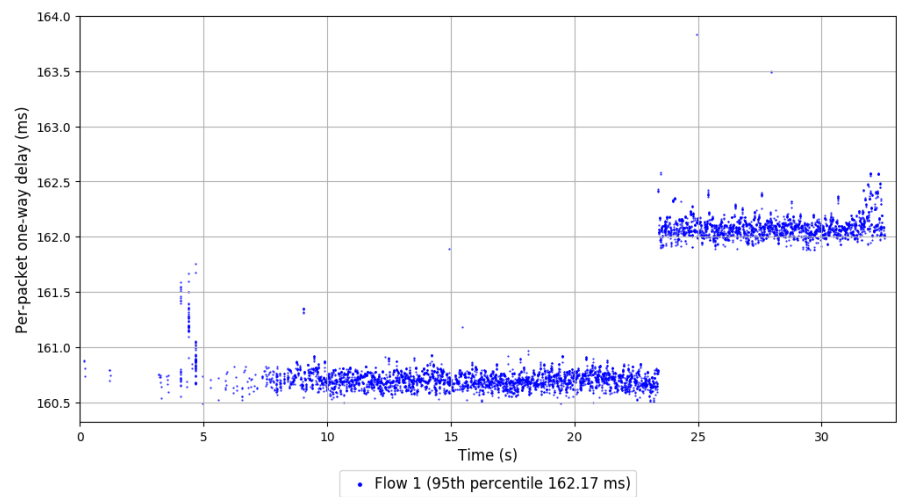
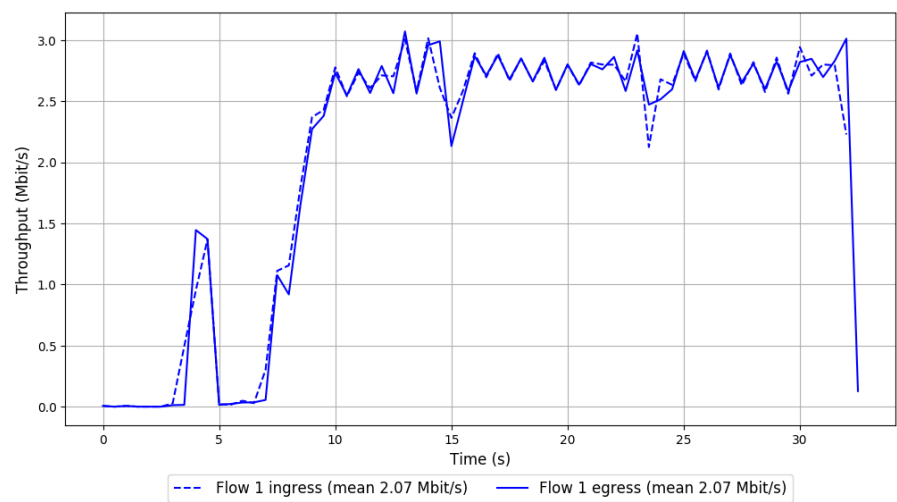
-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 162.171 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-09 10:14:05

End at: 2018-01-09 10:14:35

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 164.419 ms

Loss rate: 0.00%

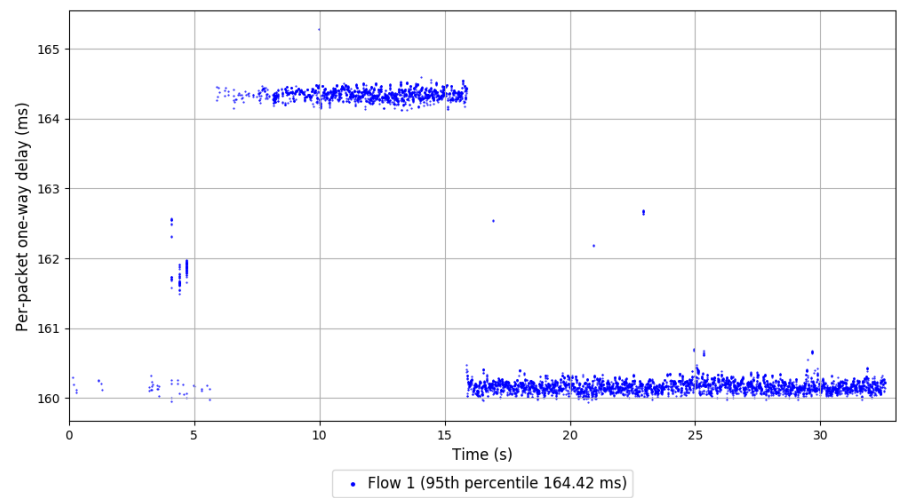
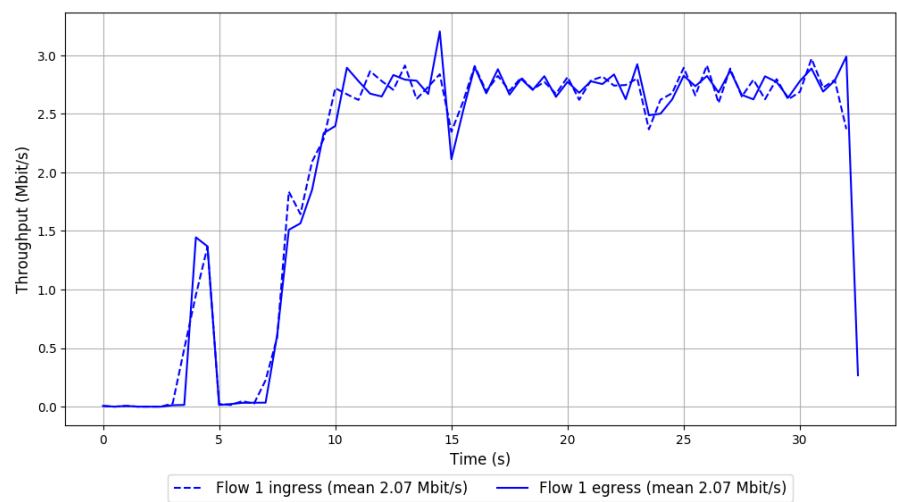
-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 164.419 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-09 10:26:49

End at: 2018-01-09 10:27:19

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 163.800 ms

Loss rate: 0.00%

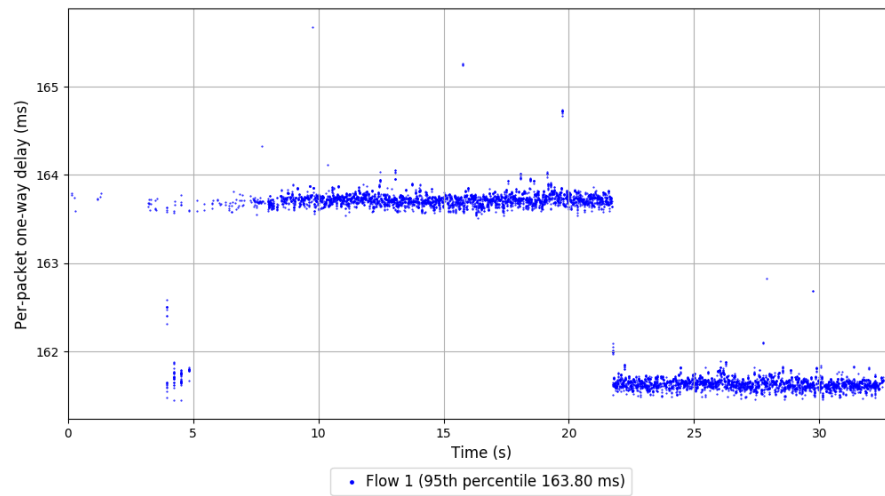
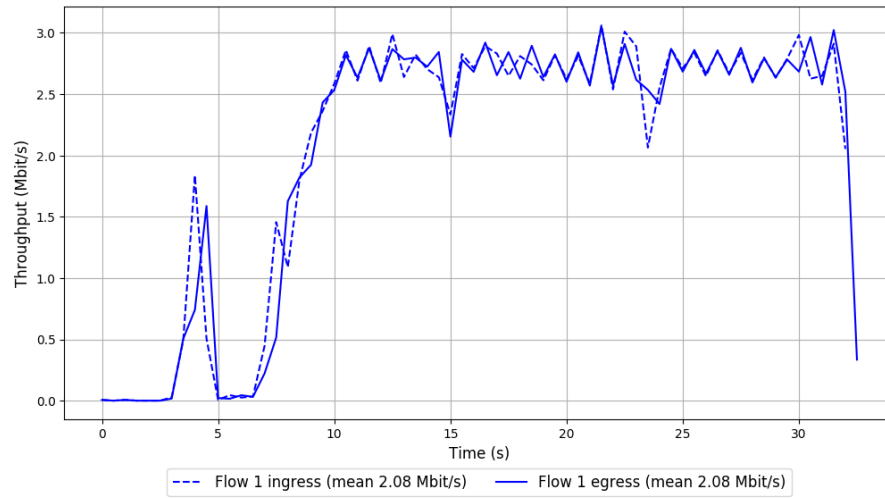
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 163.800 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-09 10:39:44

End at: 2018-01-09 10:40:14

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 136.695 ms

Loss rate: 0.00%

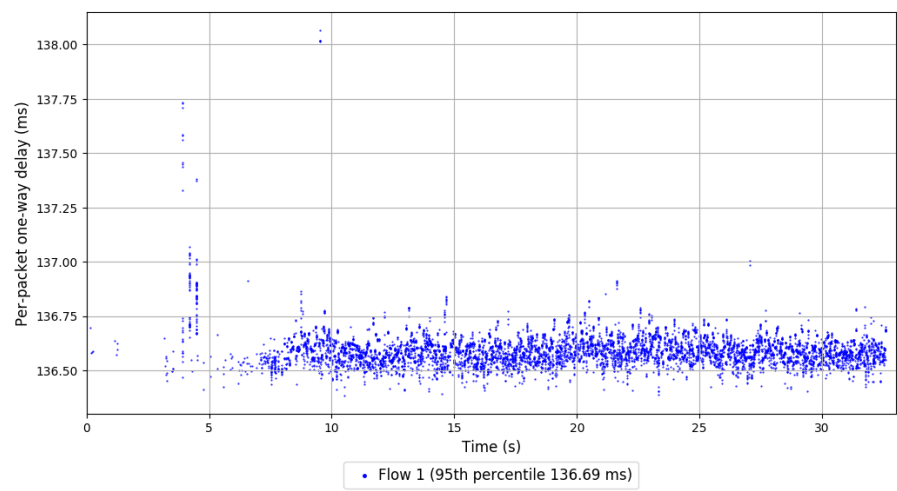
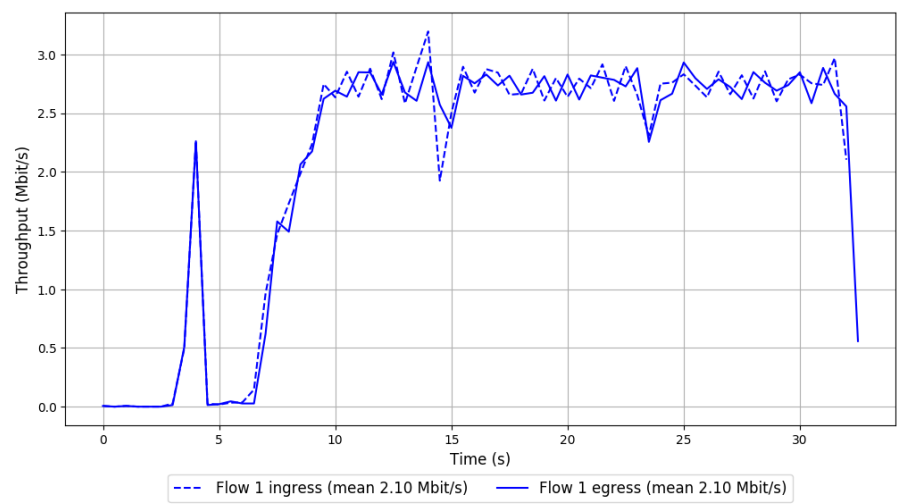
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 136.695 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-09 08:50:28

End at: 2018-01-09 08:50:58

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 136.087 ms

Loss rate: 0.00%

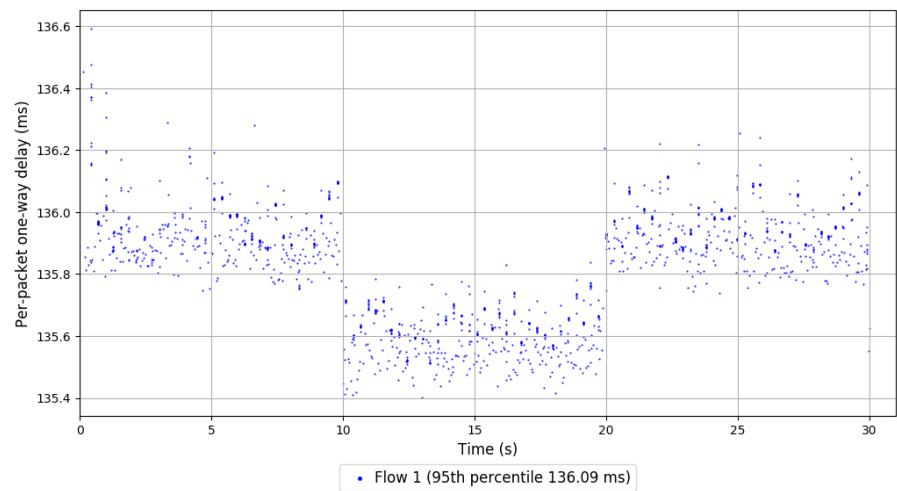
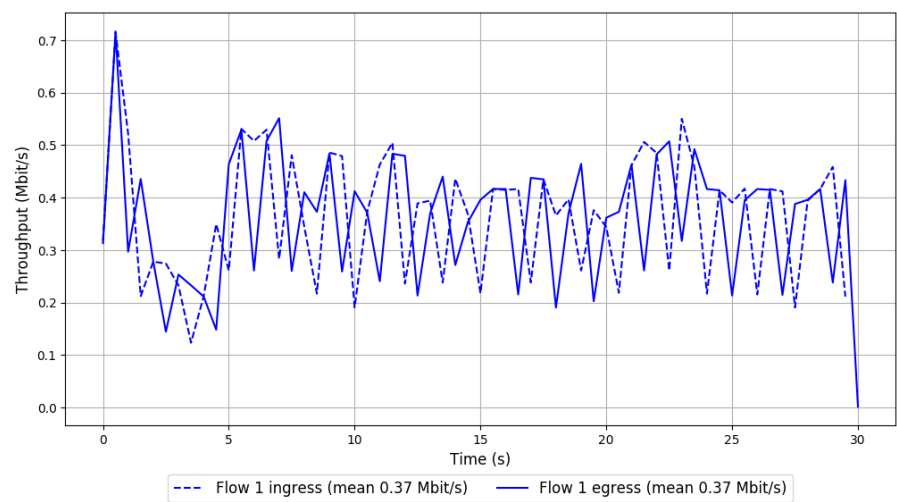
-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 136.087 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-09 09:03:24

End at: 2018-01-09 09:03:54

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 164.234 ms

Loss rate: 0.00%

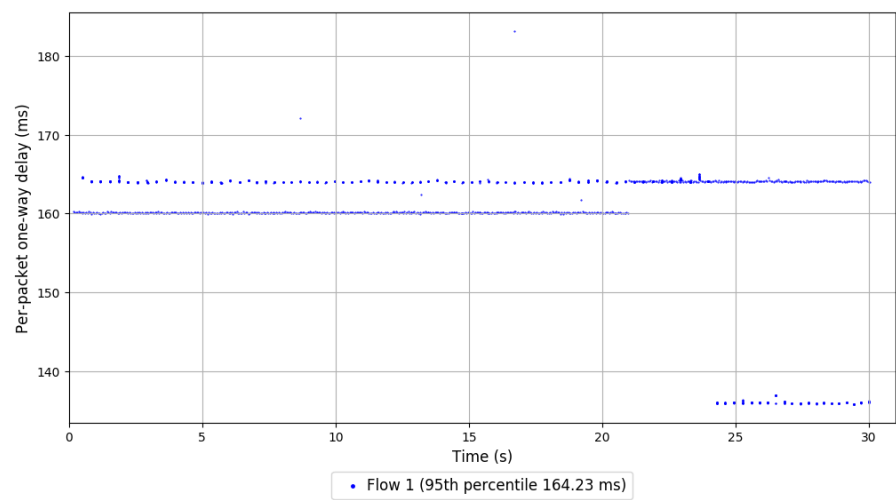
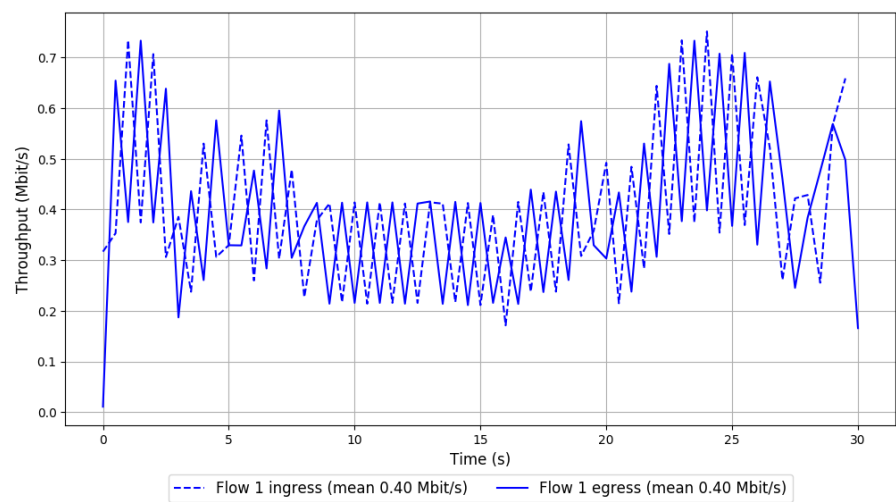
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 164.234 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-09 09:15:50

End at: 2018-01-09 09:16:20

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 164.359 ms

Loss rate: 0.00%

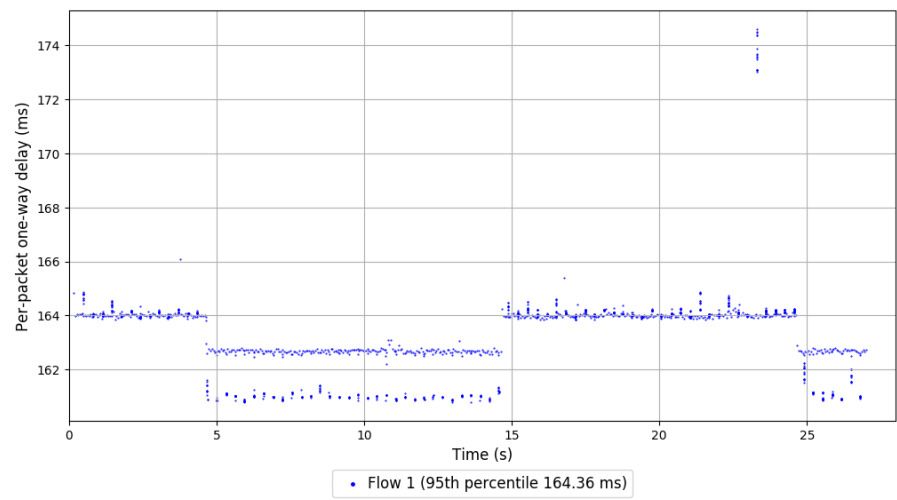
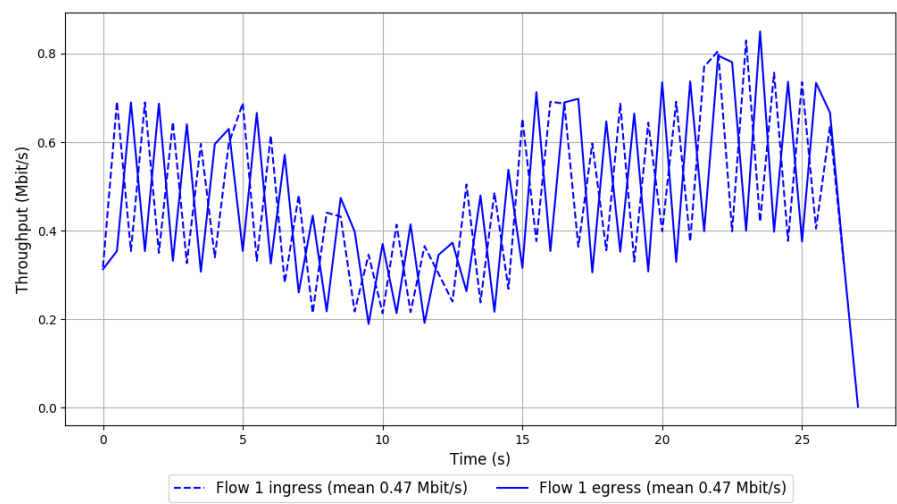
-- Flow 1:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 164.359 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-09 09:28:36

End at: 2018-01-09 09:29:06

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 164.205 ms

Loss rate: 0.00%

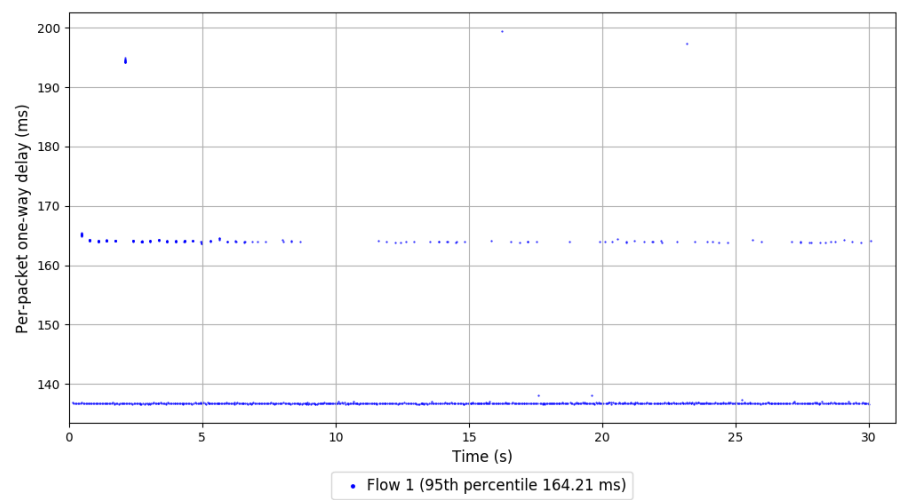
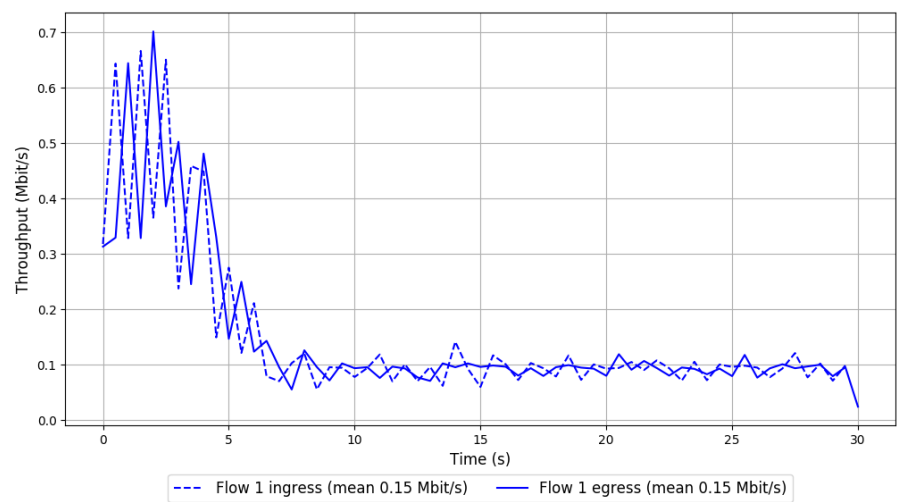
-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 164.205 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-09 09:41:21

End at: 2018-01-09 09:41:51

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 163.970 ms

Loss rate: 0.00%

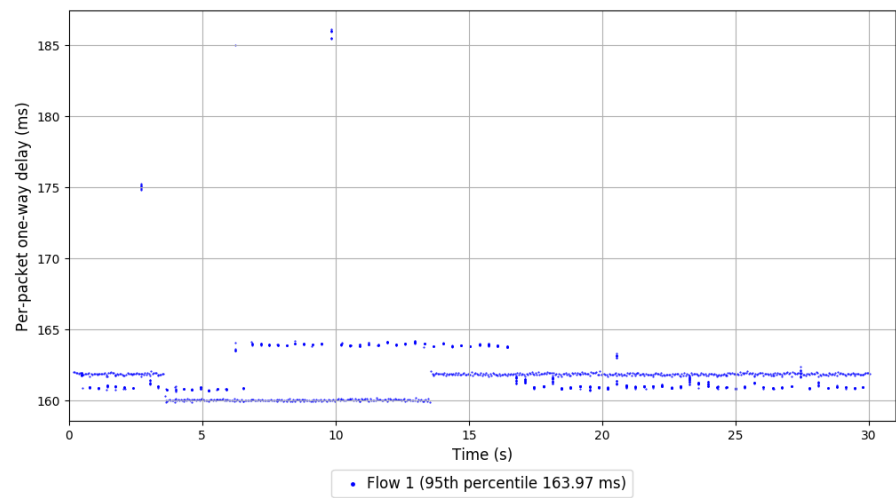
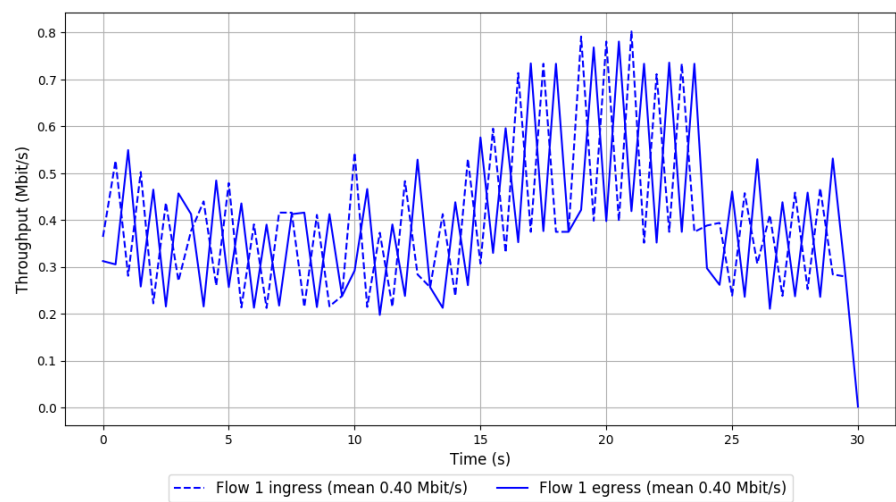
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 163.970 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-09 09:53:59

End at: 2018-01-09 09:54:29

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 164.241 ms

Loss rate: 0.00%

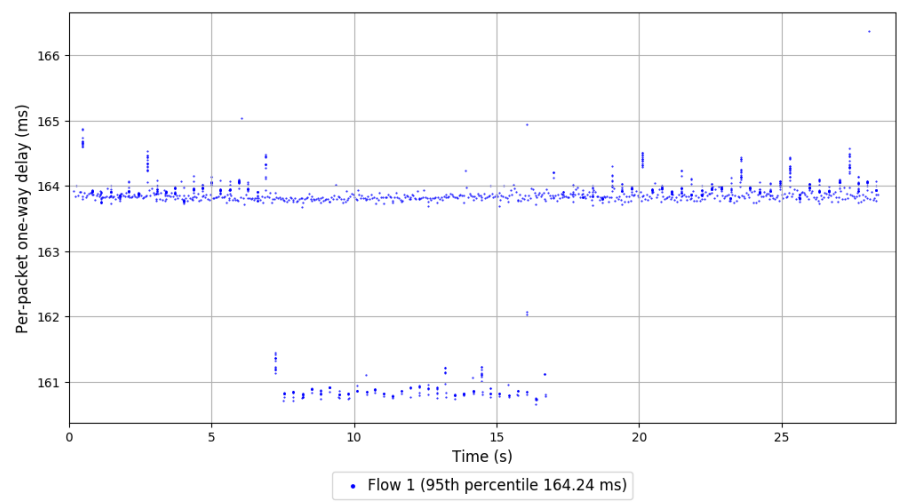
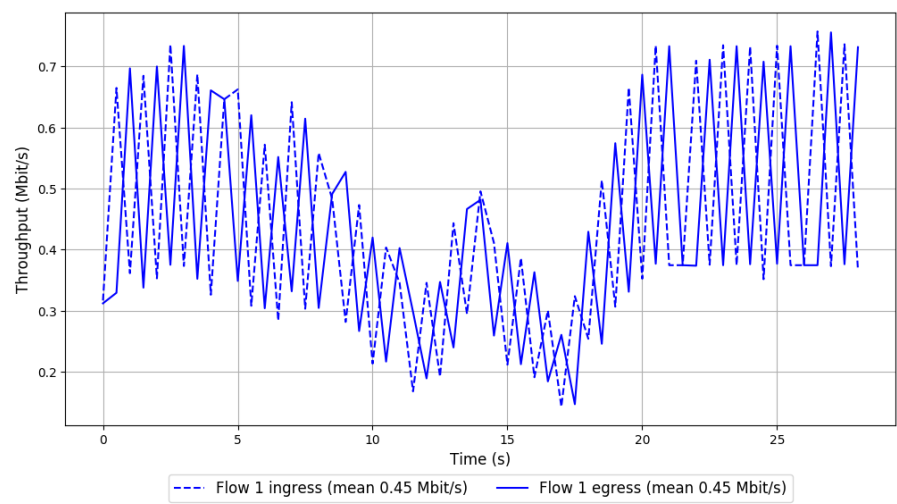
-- Flow 1:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 164.241 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-09 10:06:58

End at: 2018-01-09 10:07:28

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 161.783 ms

Loss rate: 0.00%

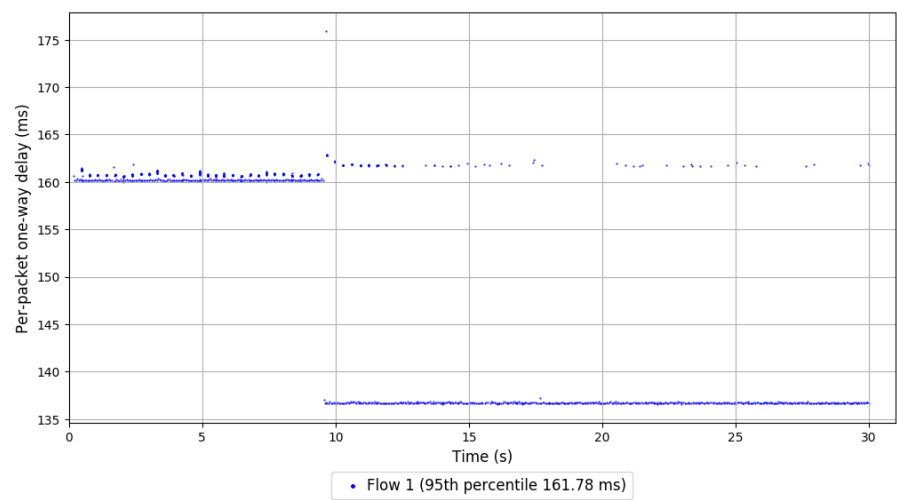
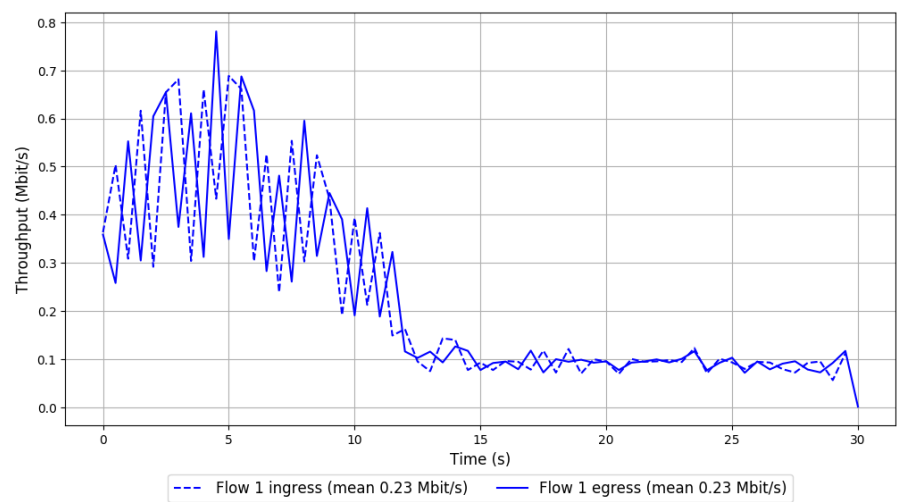
-- Flow 1:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 161.783 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-09 10:19:48

End at: 2018-01-09 10:20:18

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 161.768 ms

Loss rate: 0.00%

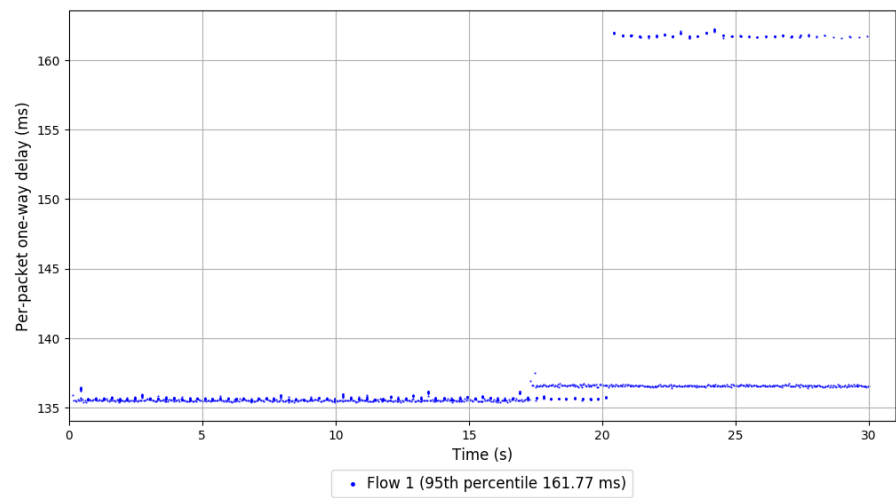
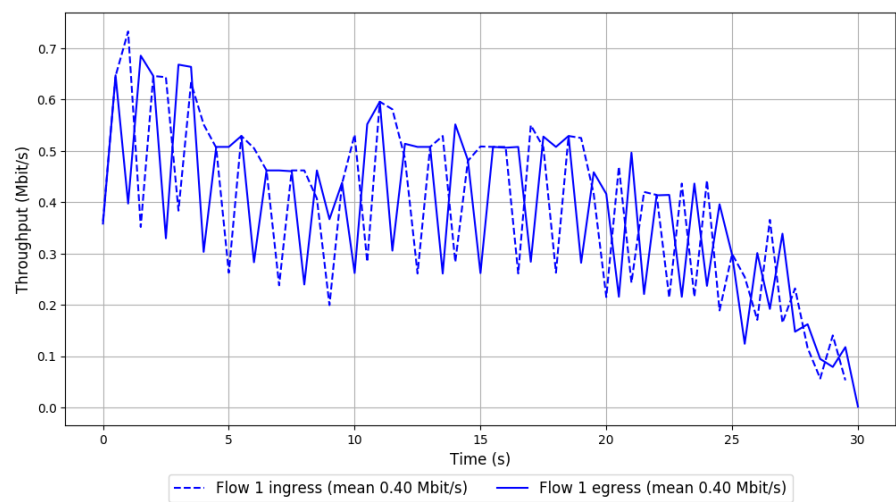
-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 161.768 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-09 10:32:23

End at: 2018-01-09 10:32:53

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 160.083 ms

Loss rate: 0.00%

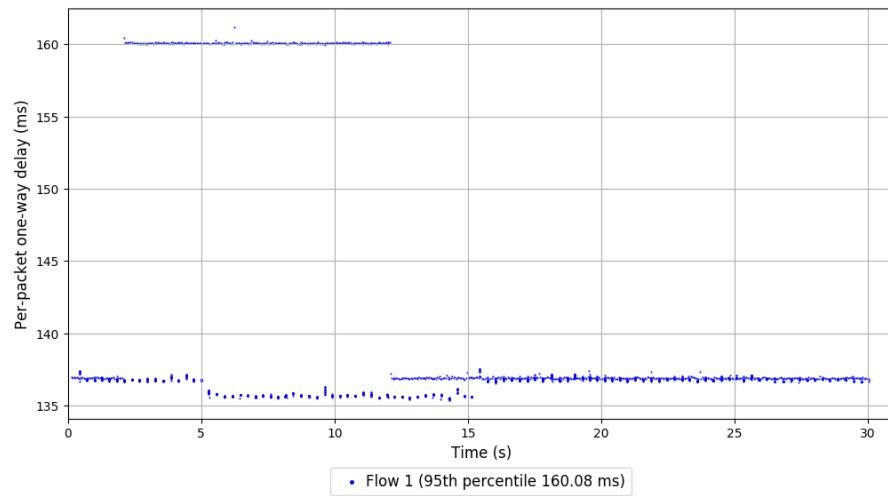
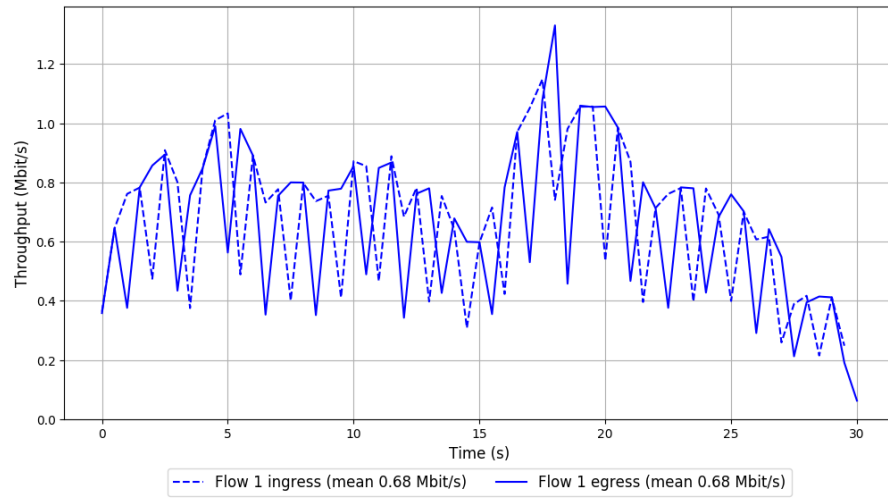
-- Flow 1:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 160.083 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-09 10:45:18

End at: 2018-01-09 10:45:48

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 163.808 ms

Loss rate: 0.09%

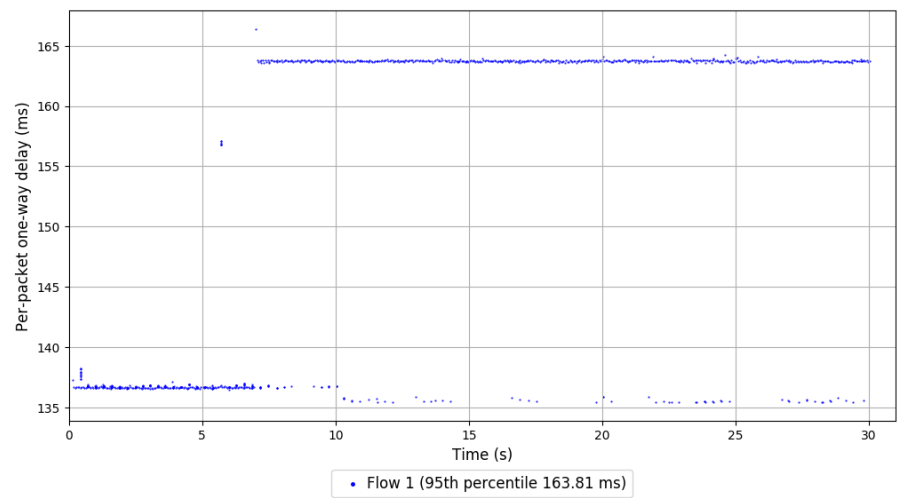
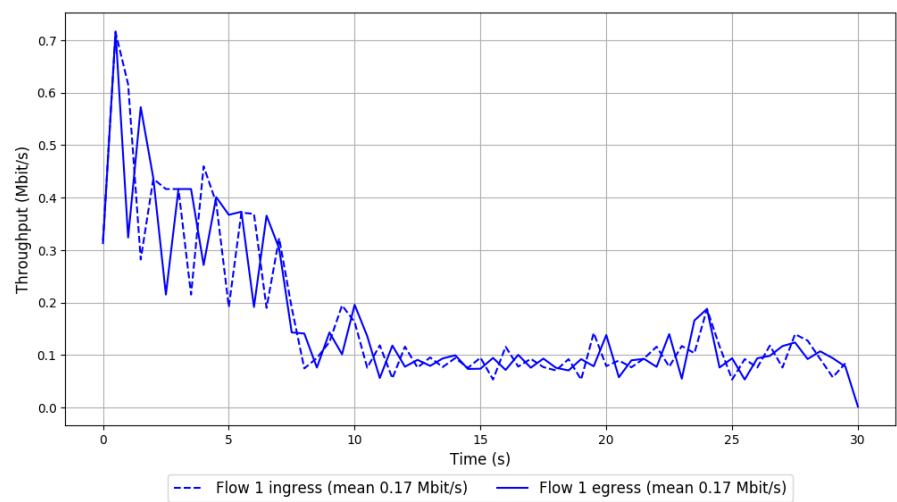
-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 163.808 ms

Loss rate: 0.09%

Run 10: Report of Sprout — Data Link

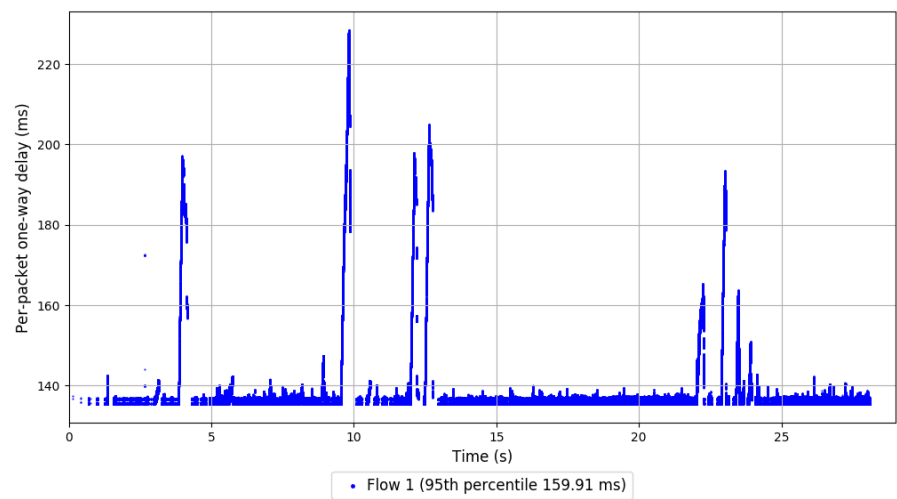
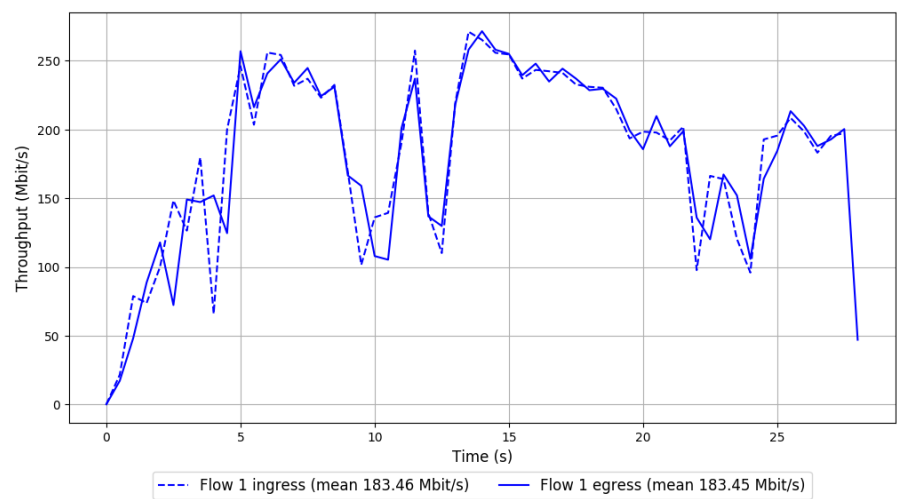


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-09 08:54:30
End at: 2018-01-09 08:55:00

# Below is generated by plot.py at 2018-01-09 11:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.45 Mbit/s
95th percentile per-packet one-way delay: 159.910 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.45 Mbit/s
95th percentile per-packet one-way delay: 159.910 ms
Loss rate: 0.00%
```


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

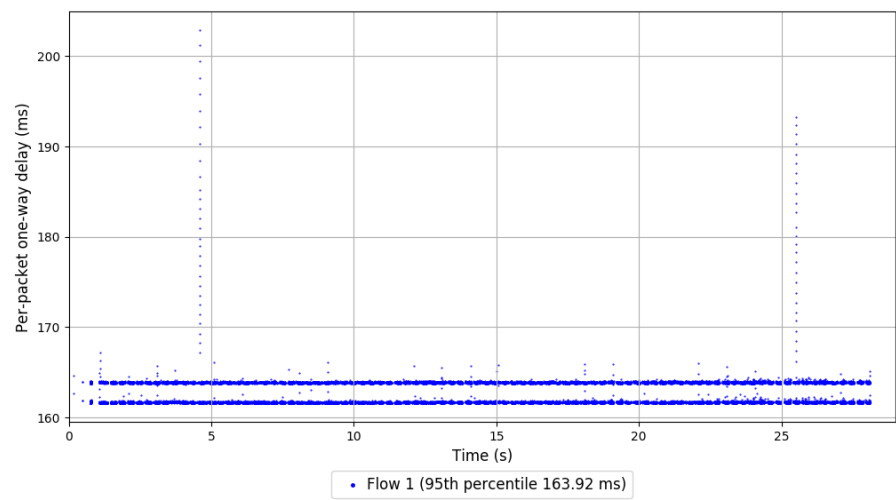
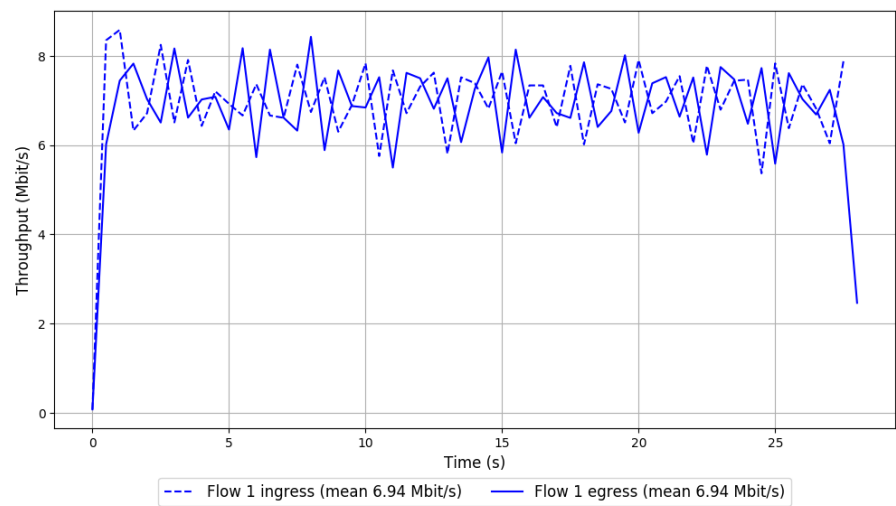


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-09 09:07:24
End at: 2018-01-09 09:07:54

# Below is generated by plot.py at 2018-01-09 11:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 163.921 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 163.921 ms
Loss rate: 0.15%
```

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

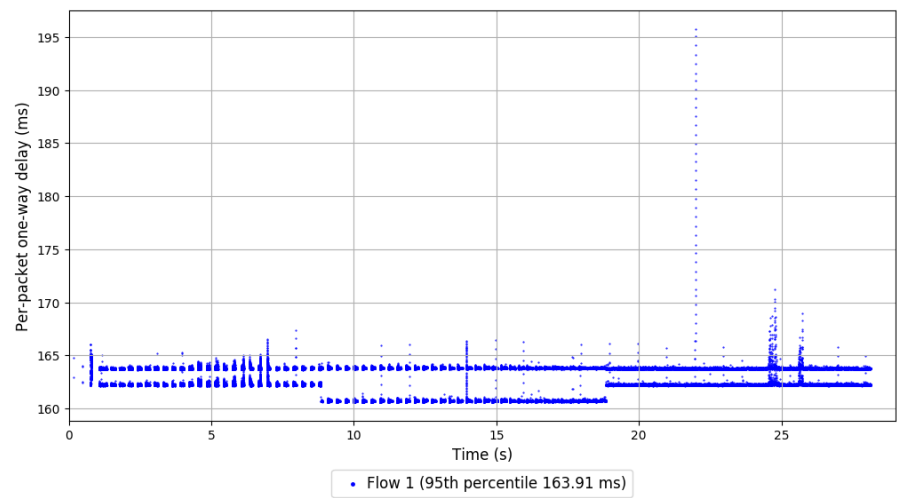
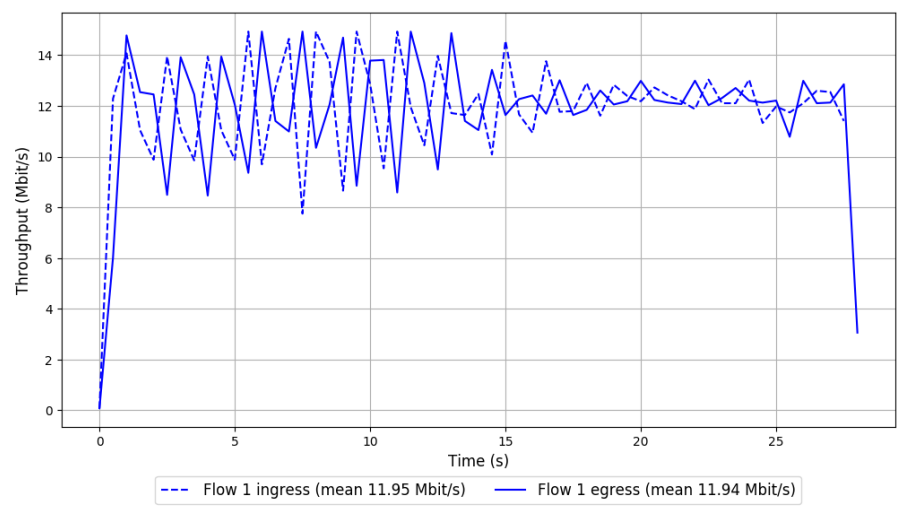


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-09 09:19:57
End at: 2018-01-09 09:20:27

# Below is generated by plot.py at 2018-01-09 11:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 163.909 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 163.909 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-09 09:32:40

End at: 2018-01-09 09:33:10

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 163.799 ms

Loss rate: 0.00%

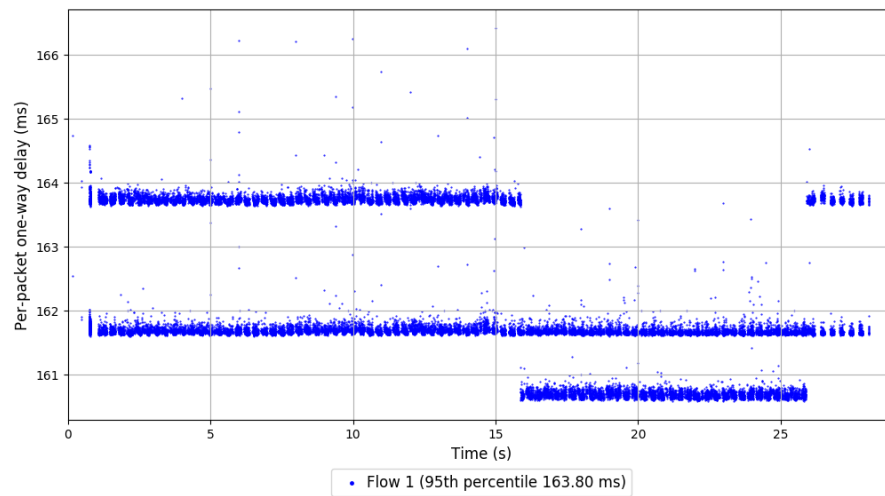
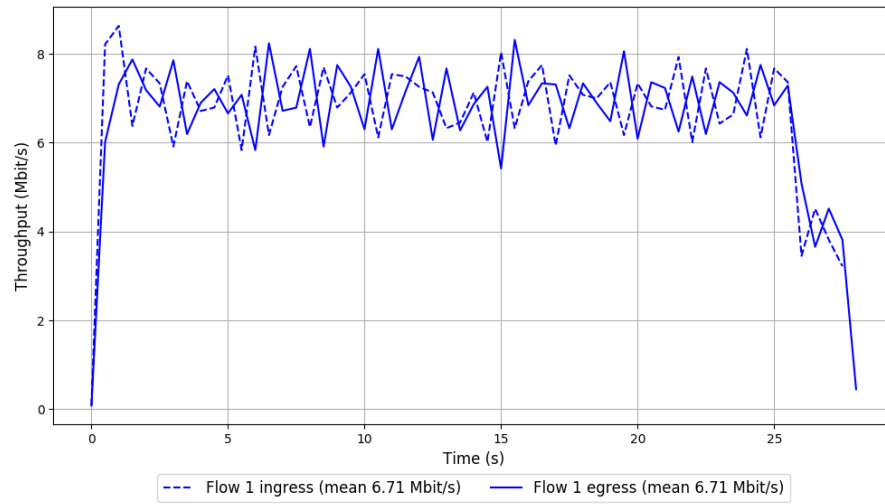
-- Flow 1:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 163.799 ms

Loss rate: 0.00%

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

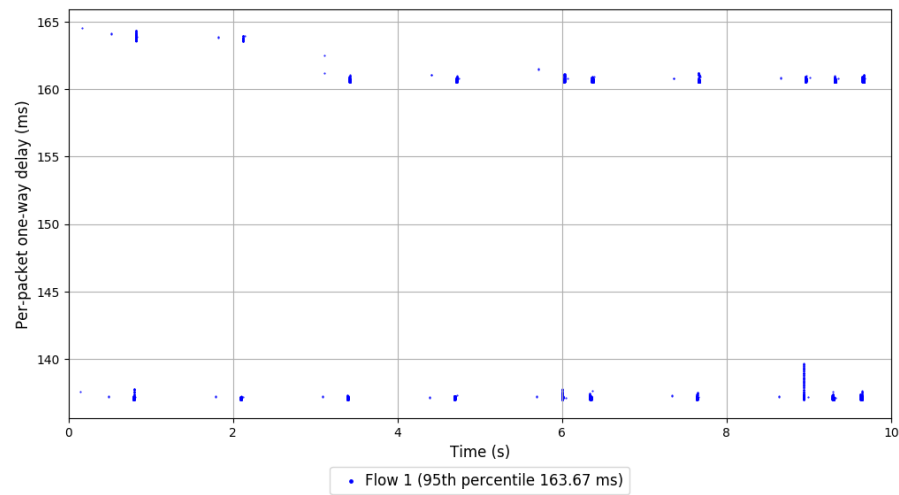
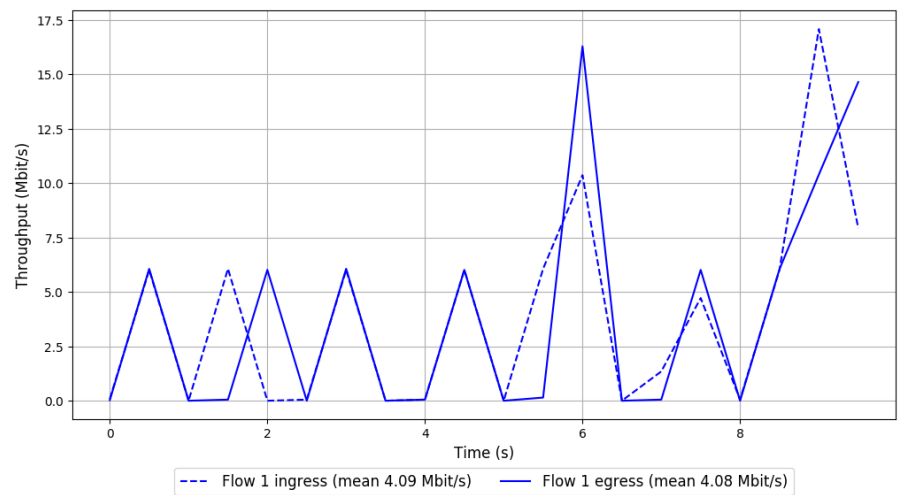


Run 5: Statistics of TaoVA-100x

Start at: 2018-01-09 09:45:23

End at: 2018-01-09 09:45:53

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-09 09:58:04

End at: 2018-01-09 09:58:34

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.66 Mbit/s

95th percentile per-packet one-way delay: 168.856 ms

Loss rate: 0.16%

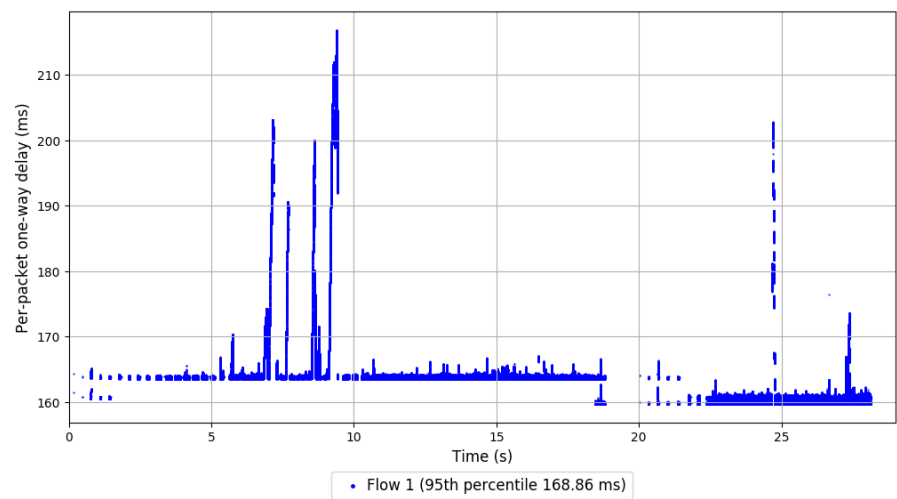
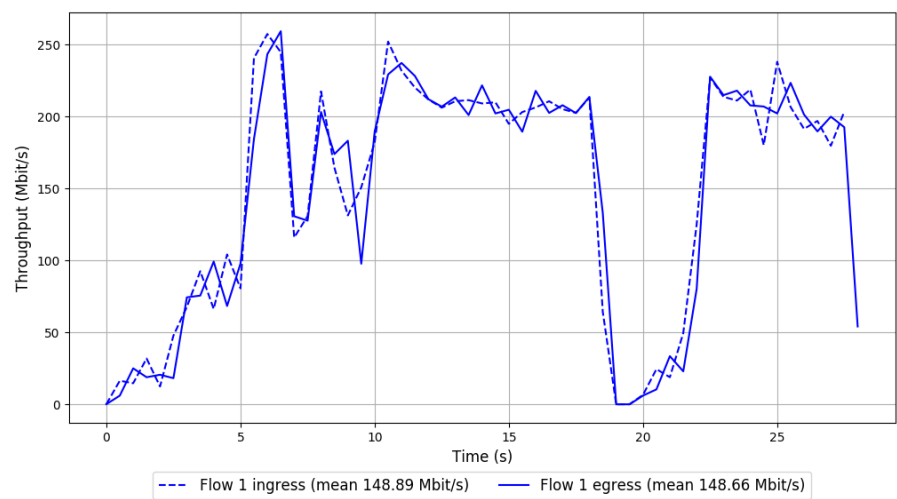
-- Flow 1:

Average throughput: 148.66 Mbit/s

95th percentile per-packet one-way delay: 168.856 ms

Loss rate: 0.16%

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

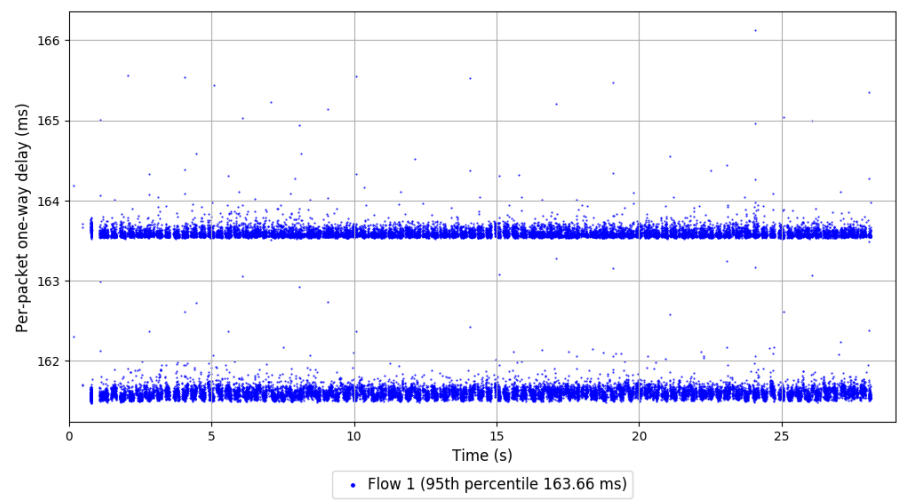
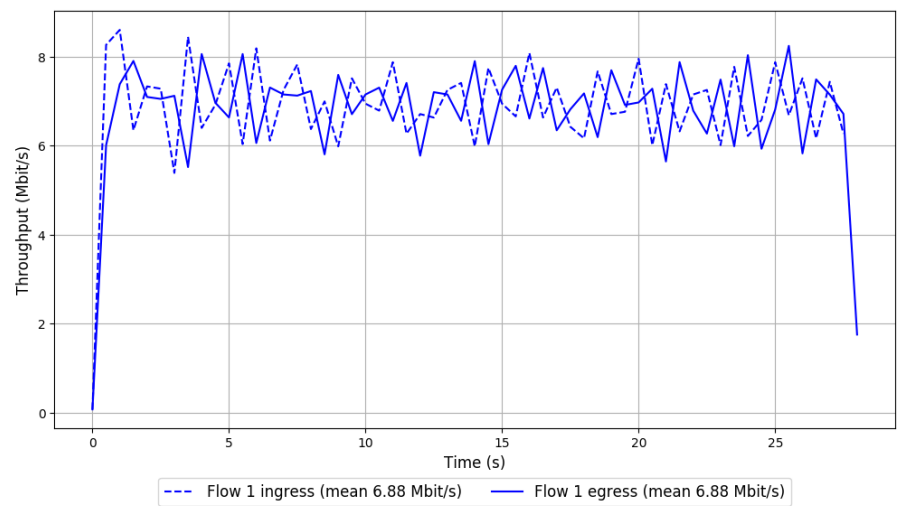


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-09 10:11:07
End at: 2018-01-09 10:11:37

# Below is generated by plot.py at 2018-01-09 11:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 163.659 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 163.659 ms
Loss rate: 0.01%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-09 10:23:55

End at: 2018-01-09 10:24:25

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.75 Mbit/s

95th percentile per-packet one-way delay: 161.580 ms

Loss rate: 0.00%

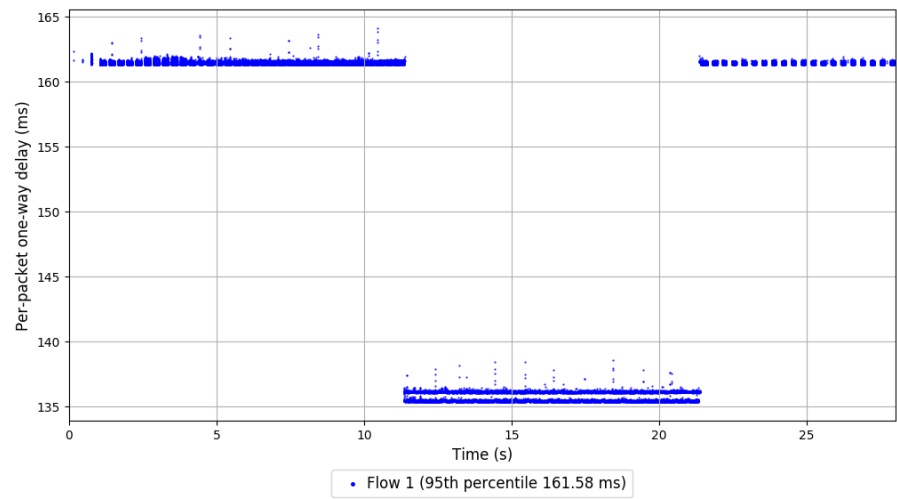
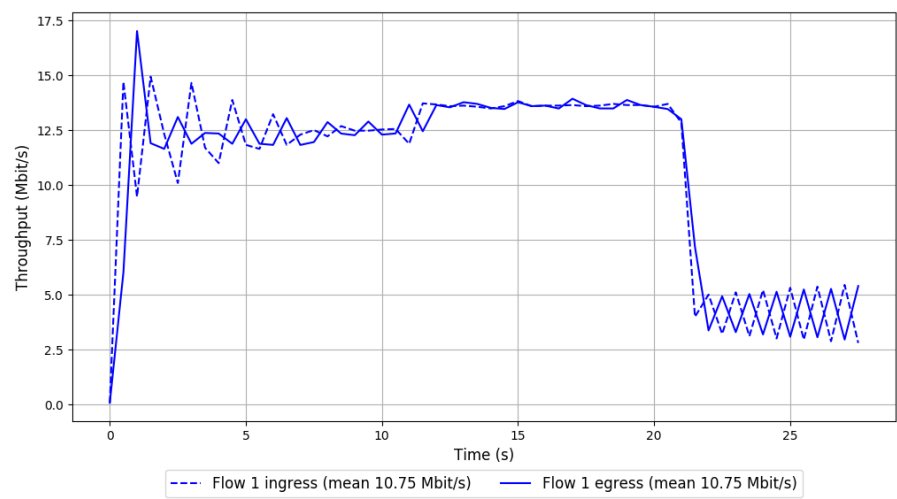
-- Flow 1:

Average throughput: 10.75 Mbit/s

95th percentile per-packet one-way delay: 161.580 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-09 10:36:28

End at: 2018-01-09 10:36:58

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.76 Mbit/s

95th percentile per-packet one-way delay: 137.177 ms

Loss rate: 0.00%

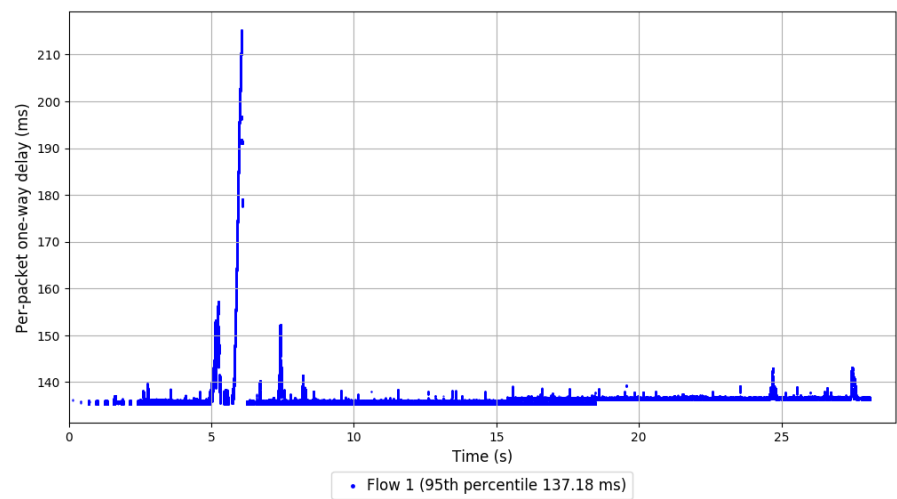
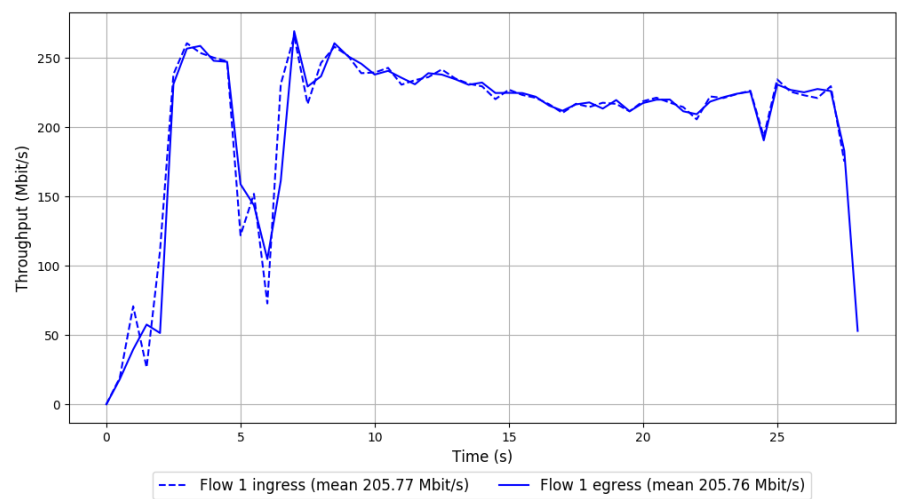
-- Flow 1:

Average throughput: 205.76 Mbit/s

95th percentile per-packet one-way delay: 137.177 ms

Loss rate: 0.00%

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

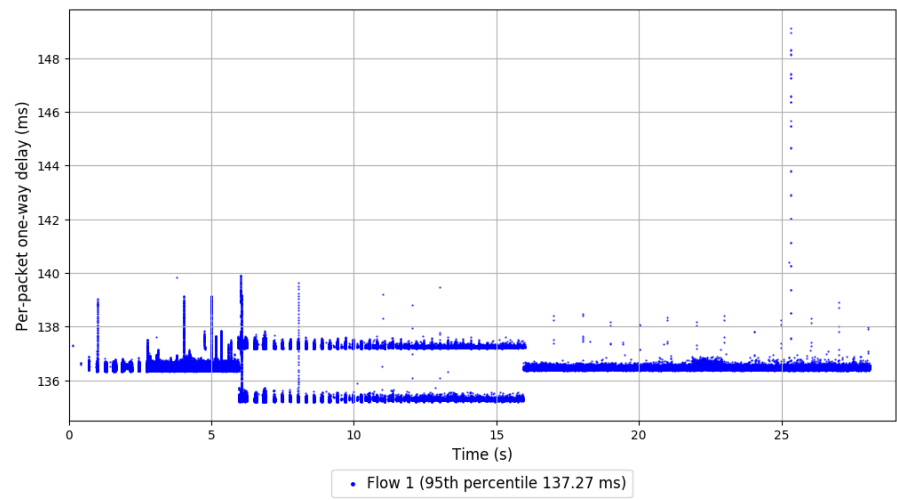
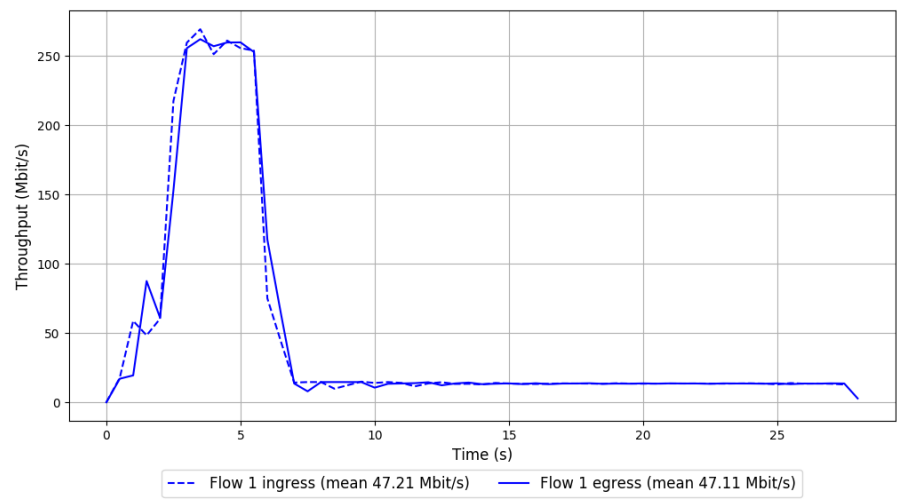


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-09 10:49:20
End at: 2018-01-09 10:49:50

# Below is generated by plot.py at 2018-01-09 11:56:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.11 Mbit/s
95th percentile per-packet one-way delay: 137.271 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 47.11 Mbit/s
95th percentile per-packet one-way delay: 137.271 ms
Loss rate: 0.20%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-09 08:55:32

End at: 2018-01-09 08:56:02

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.36 Mbit/s

95th percentile per-packet one-way delay: 138.360 ms

Loss rate: 0.30%

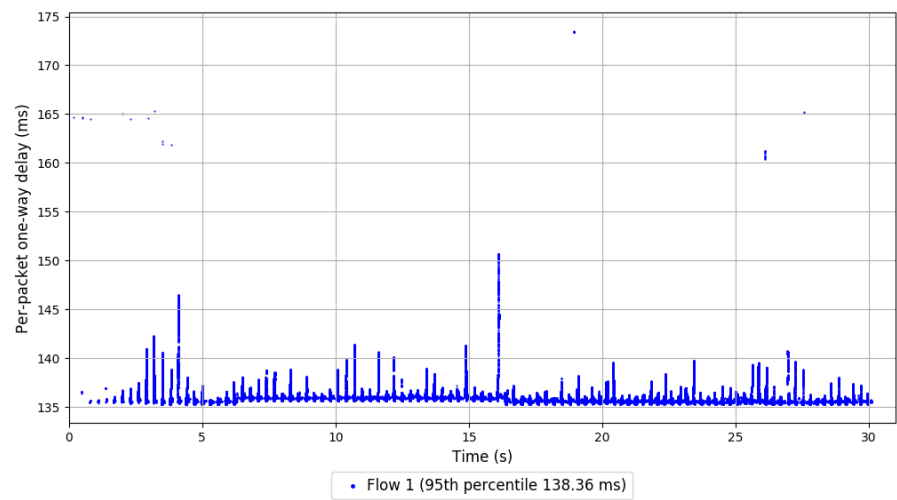
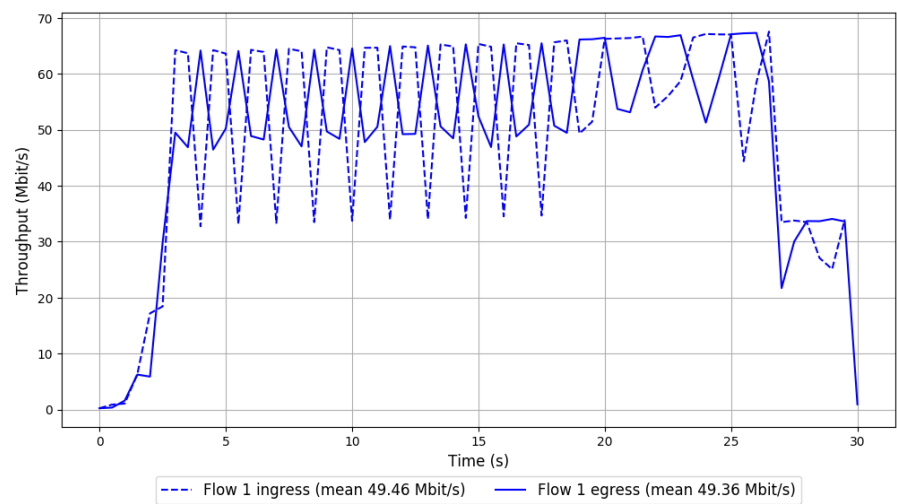
-- Flow 1:

Average throughput: 49.36 Mbit/s

95th percentile per-packet one-way delay: 138.360 ms

Loss rate: 0.30%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-09 09:08:08

End at: 2018-01-09 09:08:38

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 164.409 ms

Loss rate: 0.00%

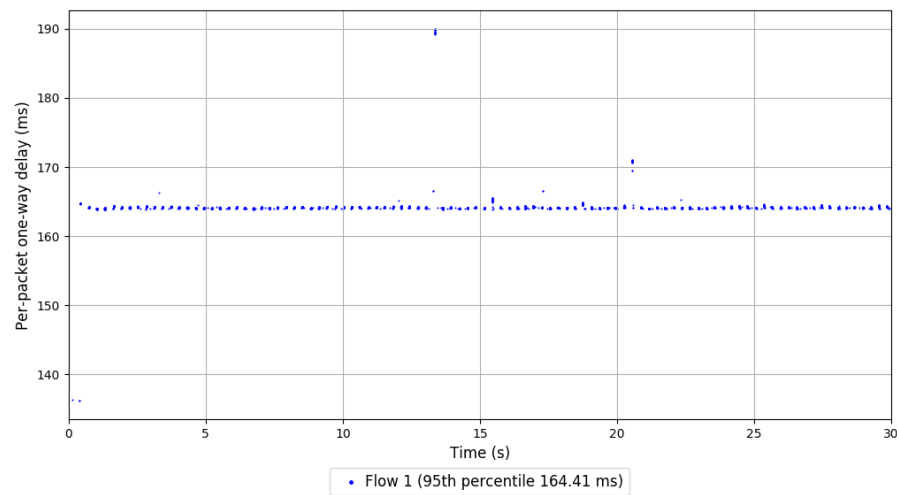
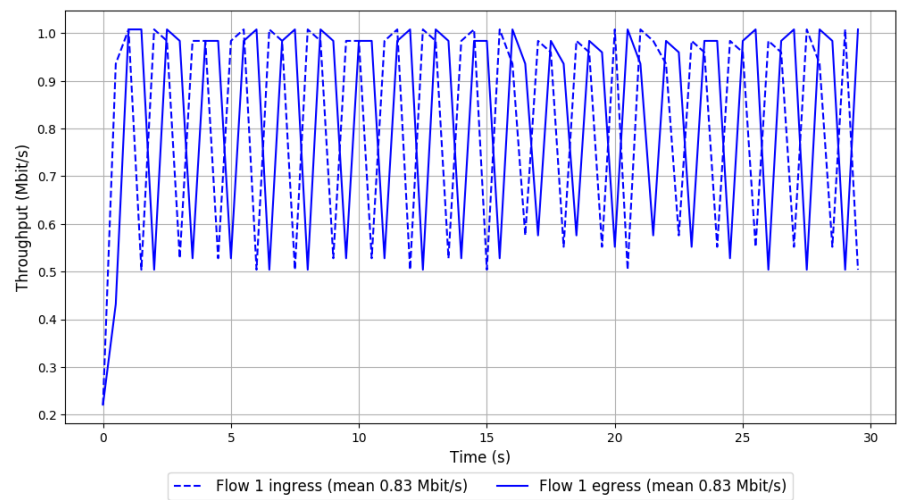
-- Flow 1:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 164.409 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-09 09:20:43

End at: 2018-01-09 09:21:13

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.11 Mbit/s

95th percentile per-packet one-way delay: 164.922 ms

Loss rate: 4.11%

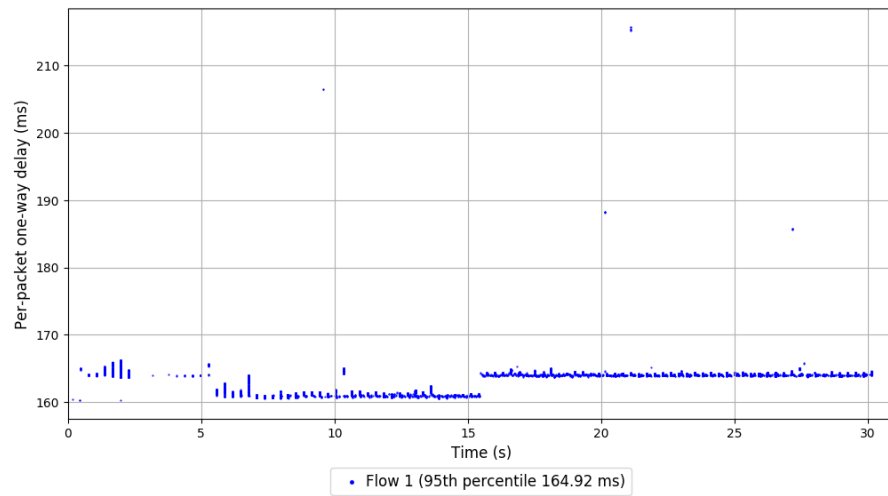
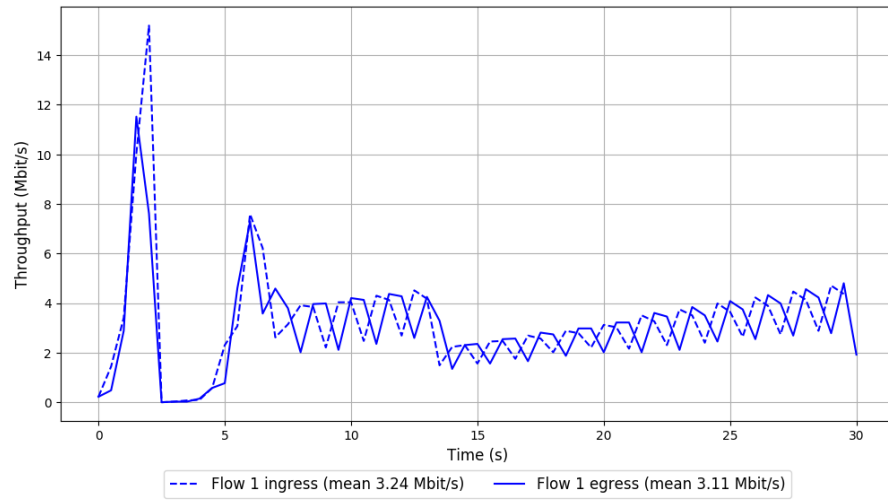
-- Flow 1:

Average throughput: 3.11 Mbit/s

95th percentile per-packet one-way delay: 164.922 ms

Loss rate: 4.11%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-09 09:33:25

End at: 2018-01-09 09:33:55

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.61 Mbit/s

95th percentile per-packet one-way delay: 166.768 ms

Loss rate: 0.89%

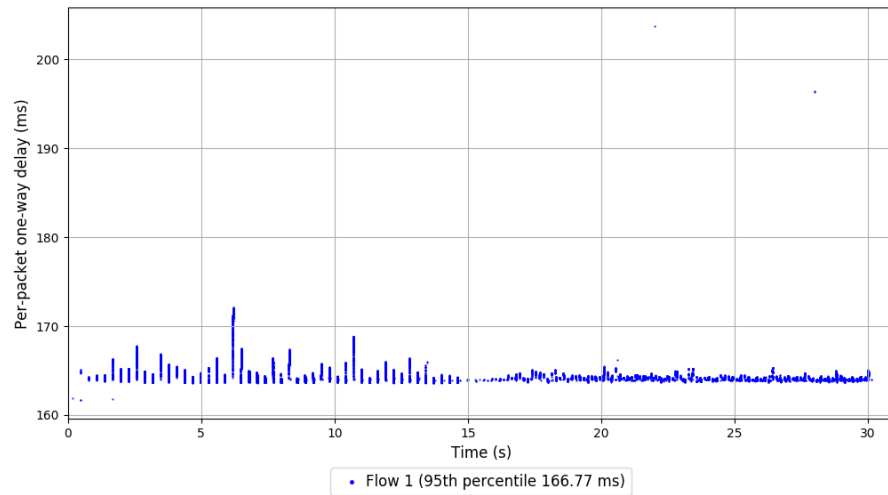
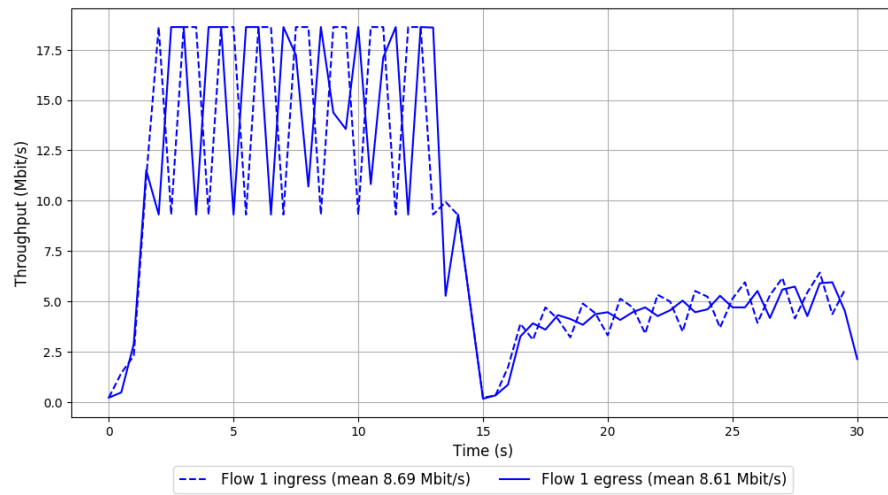
-- Flow 1:

Average throughput: 8.61 Mbit/s

95th percentile per-packet one-way delay: 166.768 ms

Loss rate: 0.89%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-09 09:46:07

End at: 2018-01-09 09:46:37

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 164.265 ms

Loss rate: 0.10%

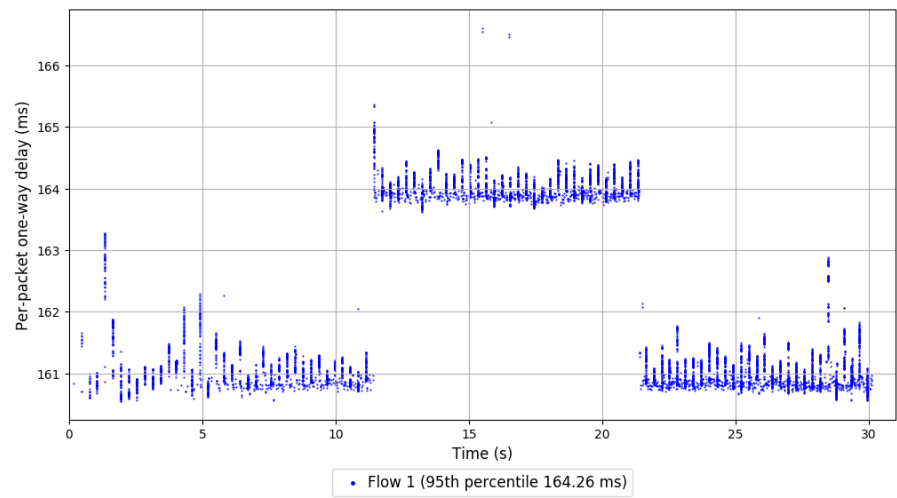
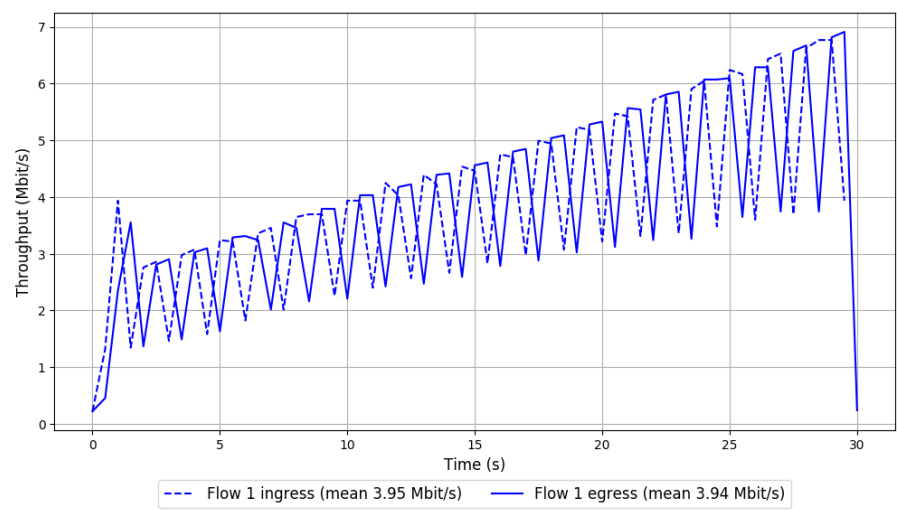
-- Flow 1:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 164.265 ms

Loss rate: 0.10%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

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

End at: 2018-01-09 09:59:32

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.58 Mbit/s

95th percentile per-packet one-way delay: 163.052 ms

Loss rate: 0.03%

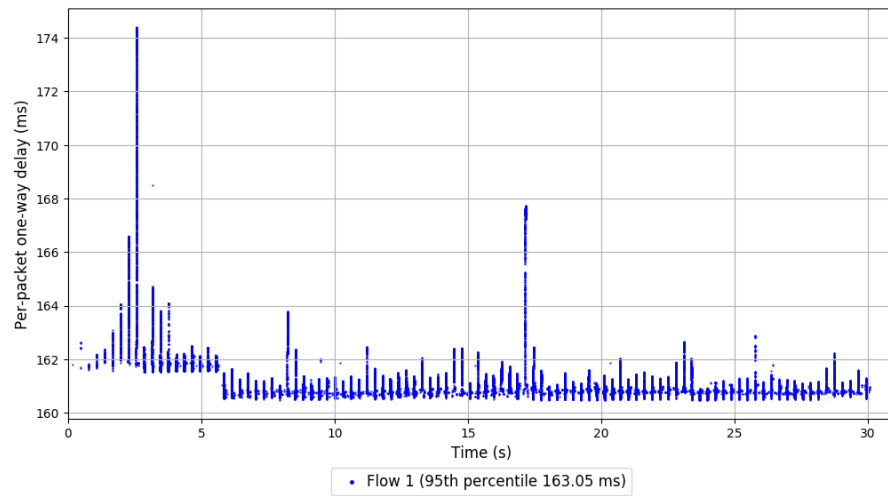
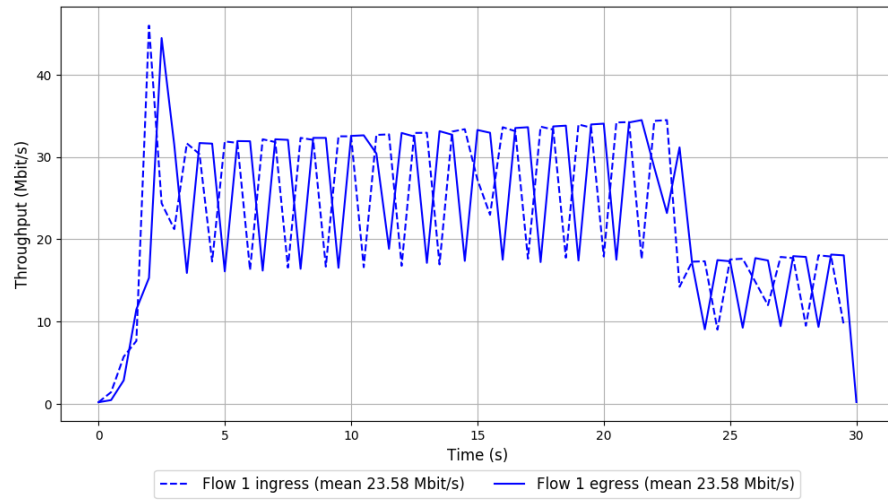
-- Flow 1:

Average throughput: 23.58 Mbit/s

95th percentile per-packet one-way delay: 163.052 ms

Loss rate: 0.03%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-09 10:11:52

End at: 2018-01-09 10:12:22

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 162.030 ms

Loss rate: 0.00%

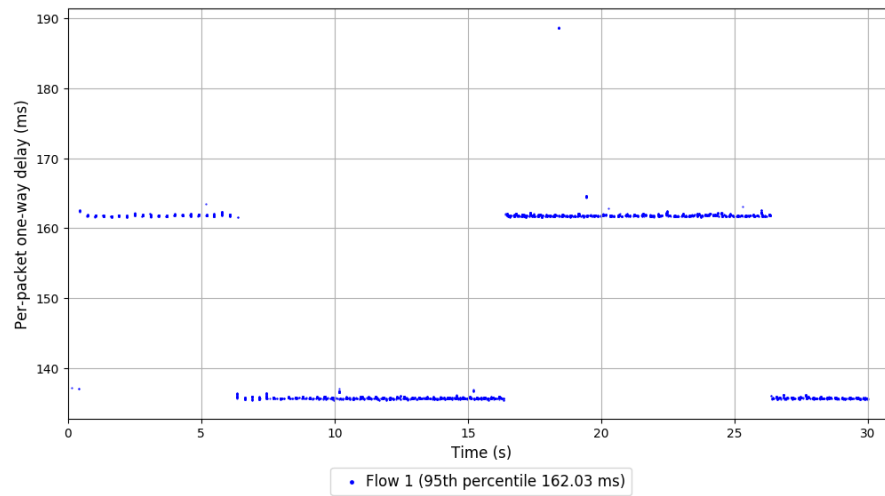
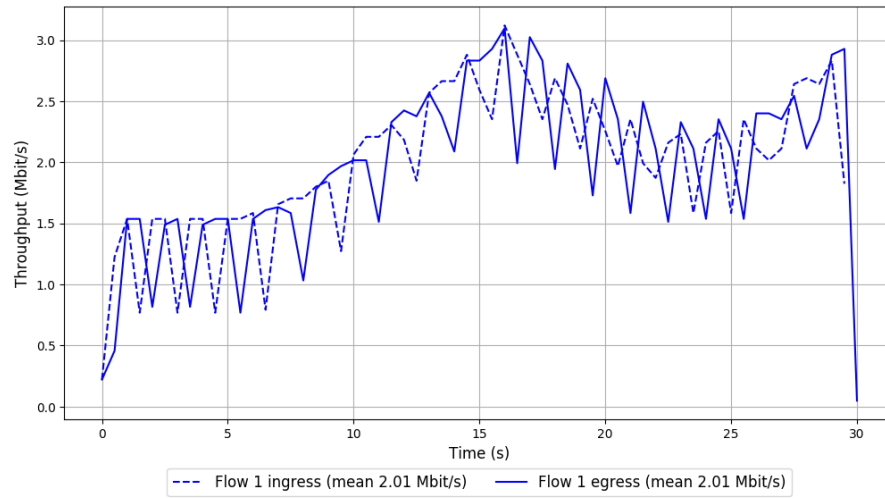
-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 162.030 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-09 10:24:39

End at: 2018-01-09 10:25:09

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 161.929 ms

Loss rate: 0.00%

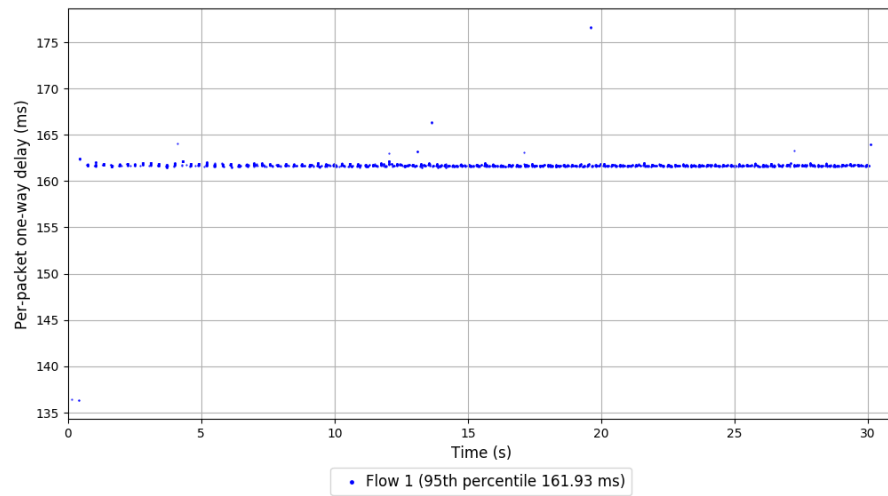
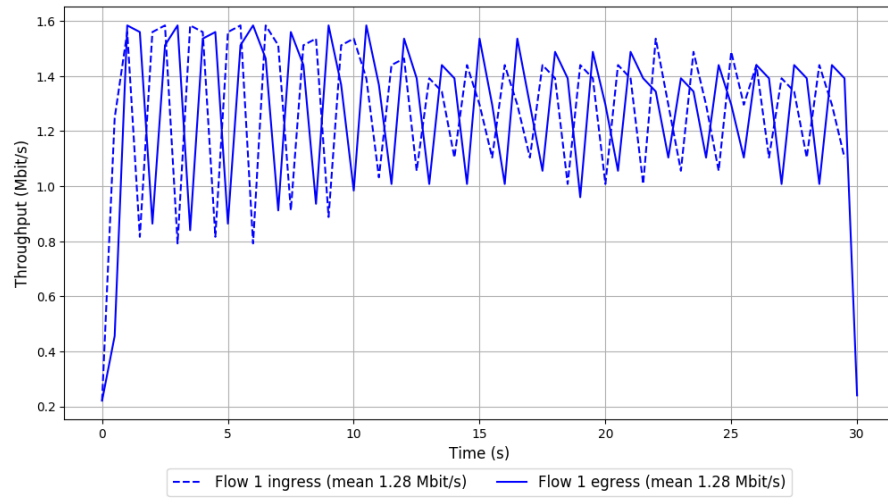
-- Flow 1:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 161.929 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-09 10:37:31

End at: 2018-01-09 10:38:01

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.63 Mbit/s

95th percentile per-packet one-way delay: 140.396 ms

Loss rate: 1.85%

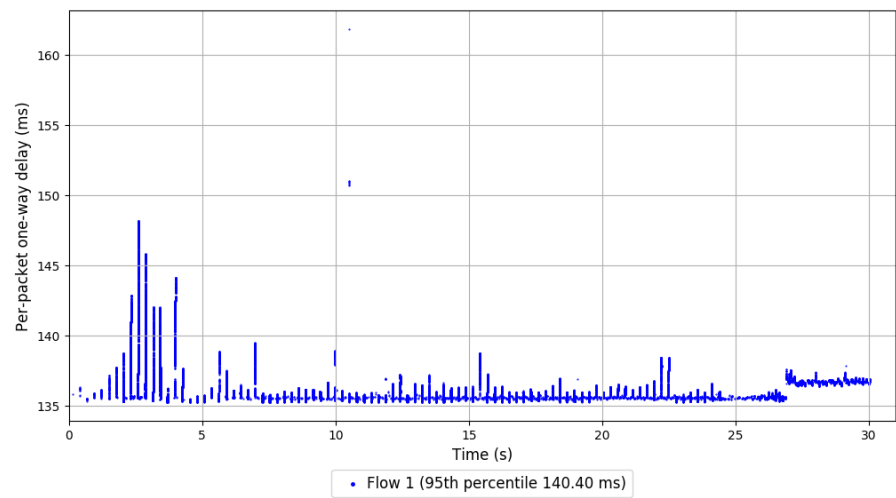
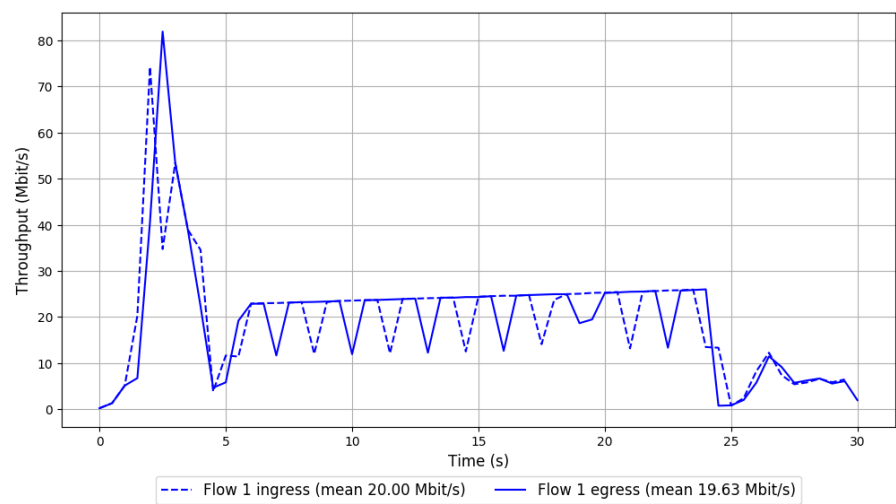
-- Flow 1:

Average throughput: 19.63 Mbit/s

95th percentile per-packet one-way delay: 140.396 ms

Loss rate: 1.85%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-09 10:50:08

End at: 2018-01-09 10:50:38

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.40 Mbit/s

95th percentile per-packet one-way delay: 139.611 ms

Loss rate: 0.14%

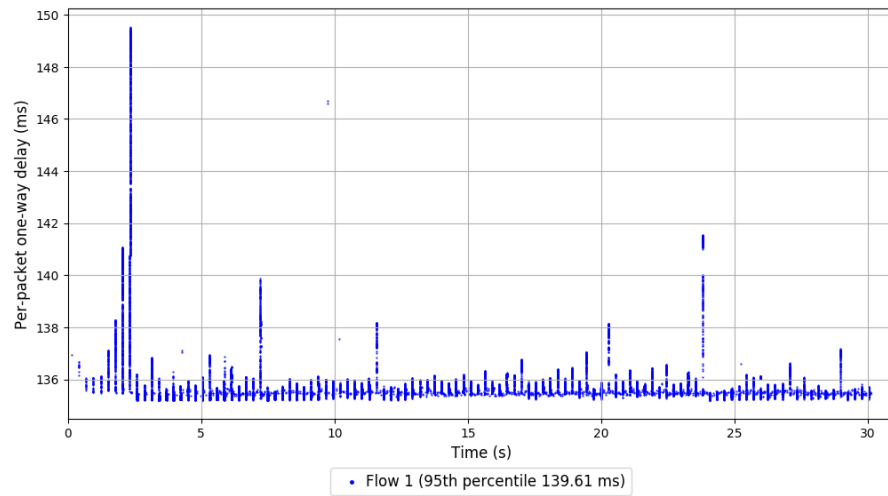
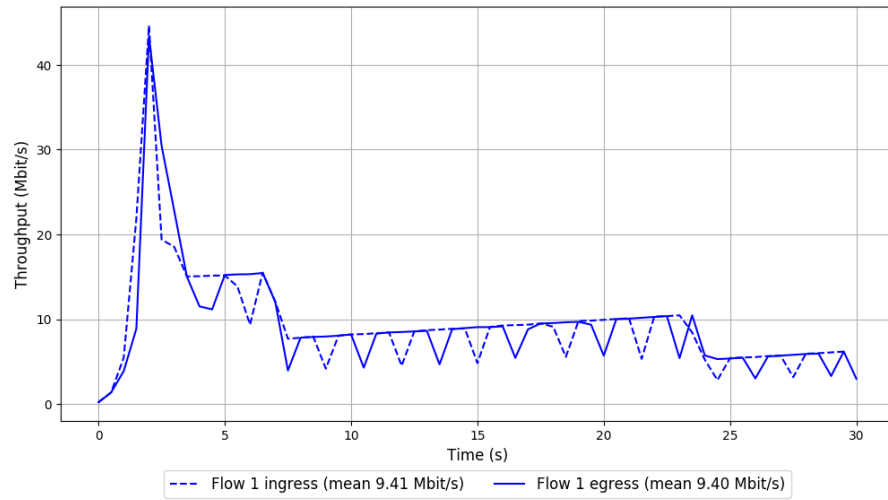
-- Flow 1:

Average throughput: 9.40 Mbit/s

95th percentile per-packet one-way delay: 139.611 ms

Loss rate: 0.14%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-09 08:49:34

End at: 2018-01-09 08:50:04

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.52 Mbit/s

95th percentile per-packet one-way delay: 161.796 ms

Loss rate: 0.01%

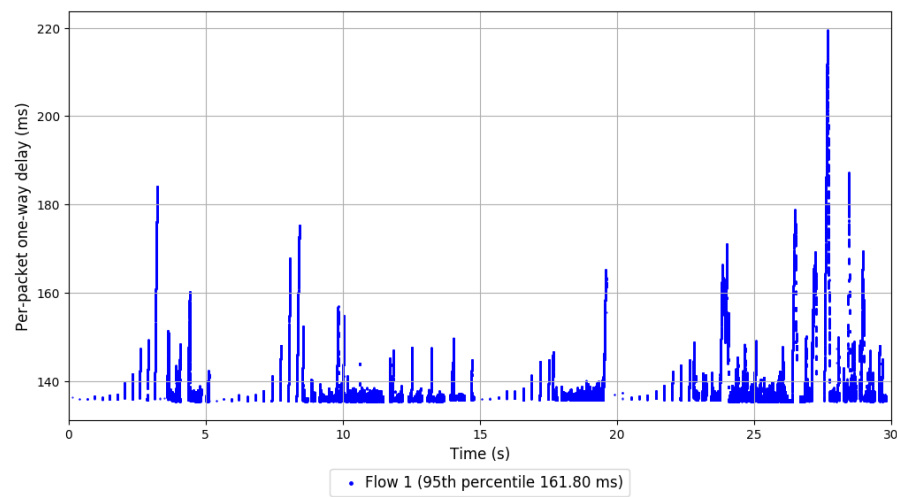
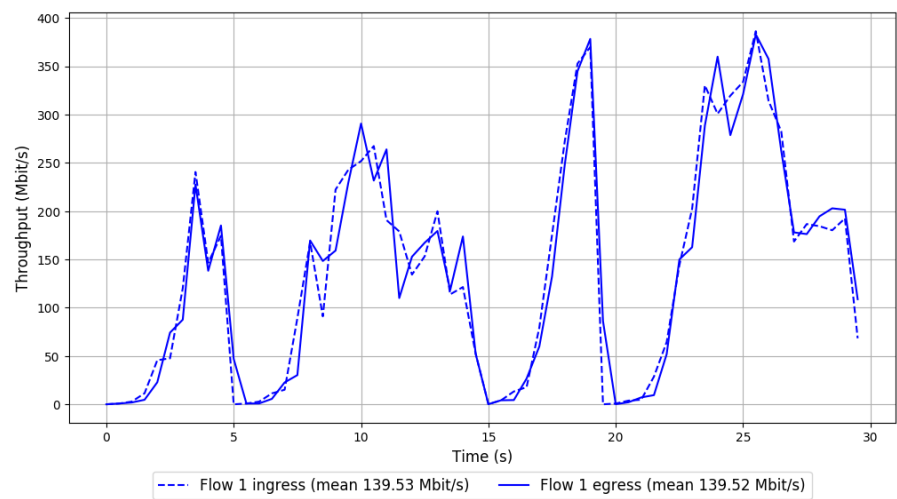
-- Flow 1:

Average throughput: 139.52 Mbit/s

95th percentile per-packet one-way delay: 161.796 ms

Loss rate: 0.01%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-09 09:02:30

End at: 2018-01-09 09:03:00

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 130.63 Mbit/s

95th percentile per-packet one-way delay: 219.631 ms

Loss rate: 0.61%

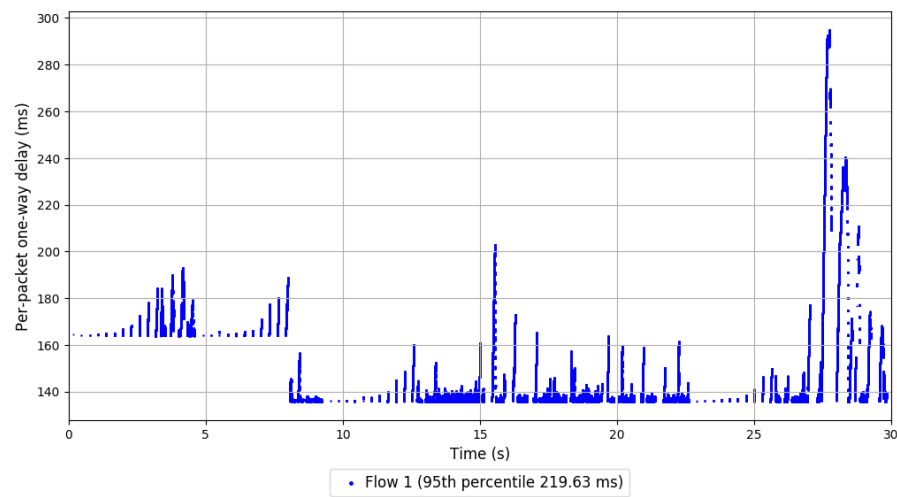
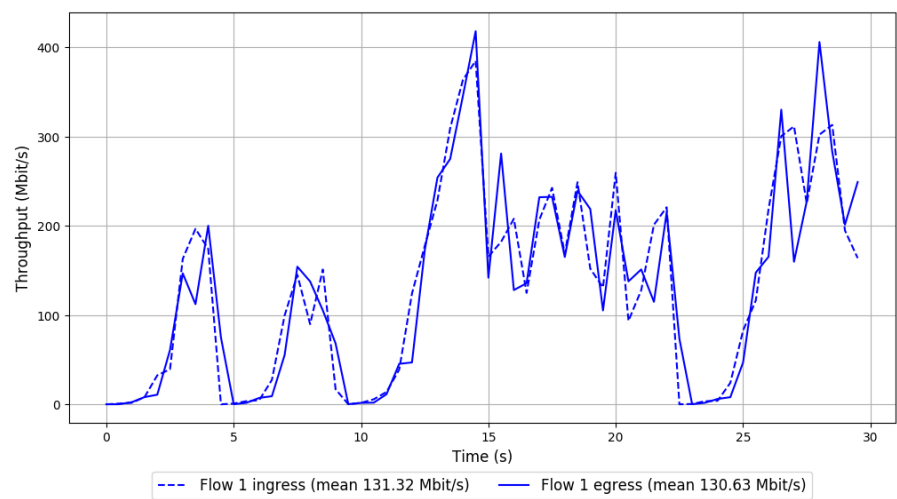
-- Flow 1:

Average throughput: 130.63 Mbit/s

95th percentile per-packet one-way delay: 219.631 ms

Loss rate: 0.61%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-09 09:15:00

End at: 2018-01-09 09:15:30

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.11 Mbit/s

95th percentile per-packet one-way delay: 294.413 ms

Loss rate: 2.33%

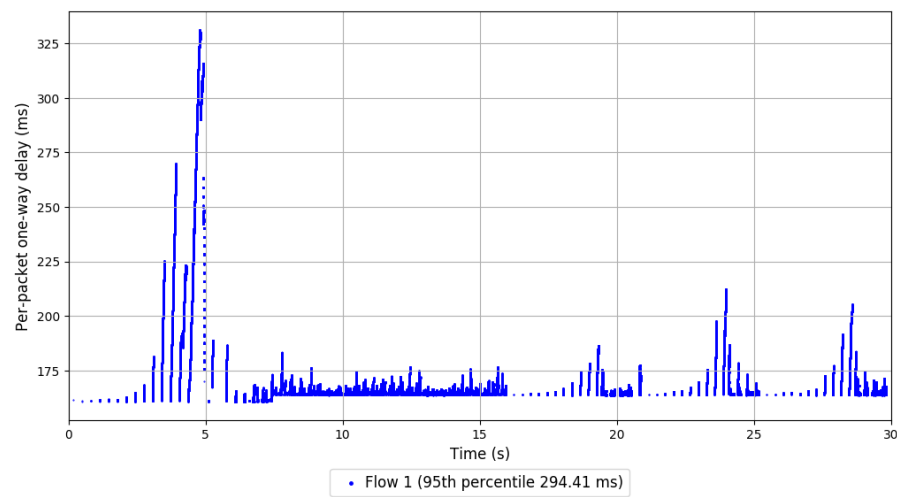
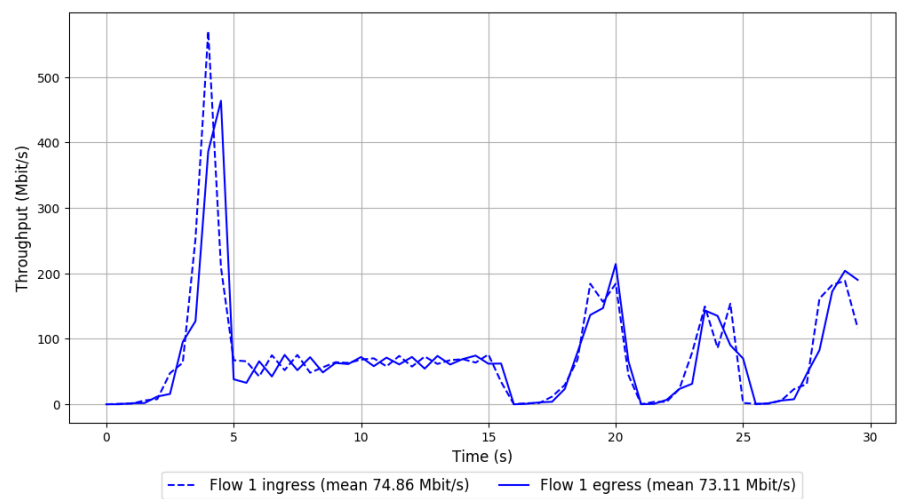
-- Flow 1:

Average throughput: 73.11 Mbit/s

95th percentile per-packet one-way delay: 294.413 ms

Loss rate: 2.33%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-09 09:27:40

End at: 2018-01-09 09:28:10

Below is generated by plot.py at 2018-01-09 11:56:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 163.36 Mbit/s

95th percentile per-packet one-way delay: 235.825 ms

Loss rate: 0.69%

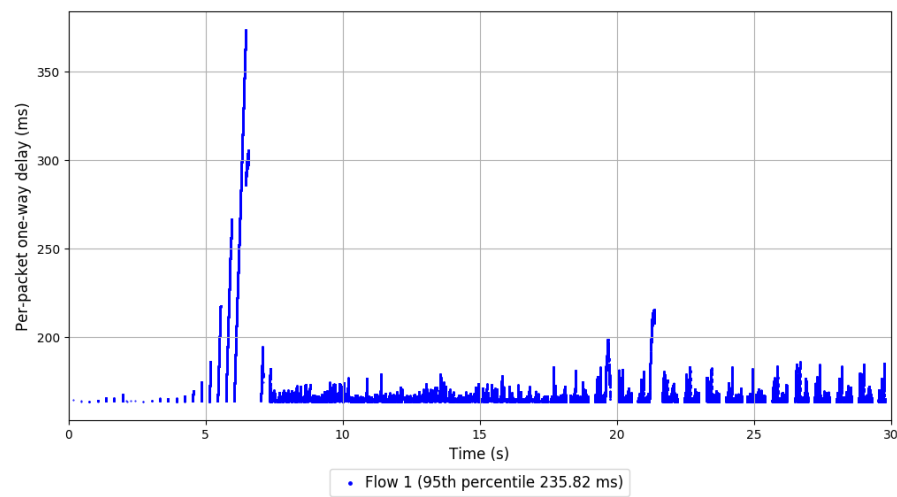
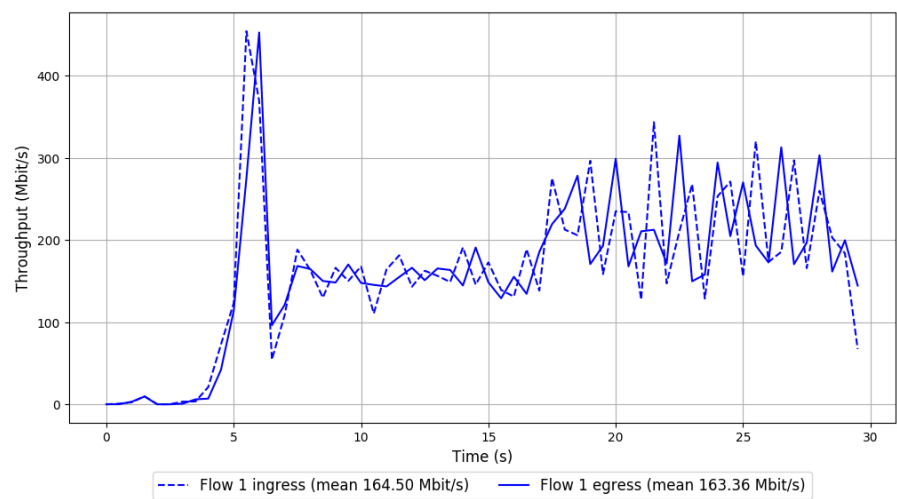
-- Flow 1:

Average throughput: 163.36 Mbit/s

95th percentile per-packet one-way delay: 235.825 ms

Loss rate: 0.69%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-09 09:40:23

End at: 2018-01-09 09:40:53

Below is generated by plot.py at 2018-01-09 11:57:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.94 Mbit/s

95th percentile per-packet one-way delay: 307.852 ms

Loss rate: 3.32%

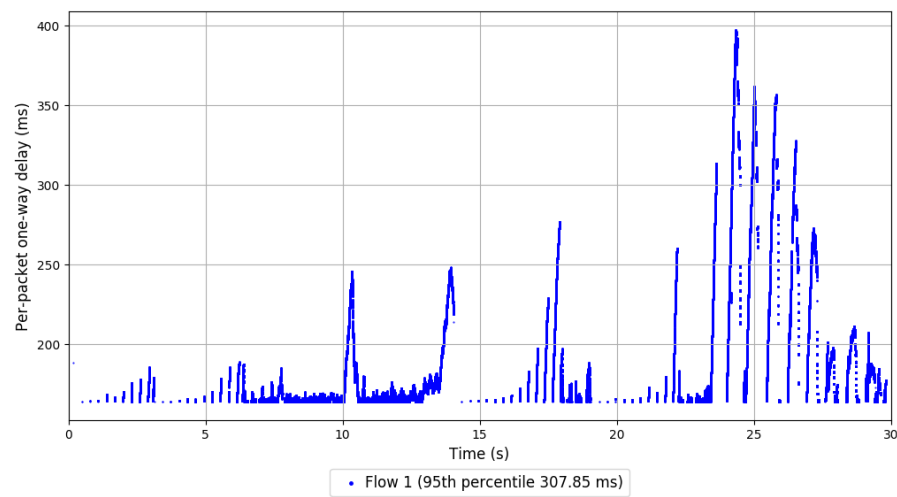
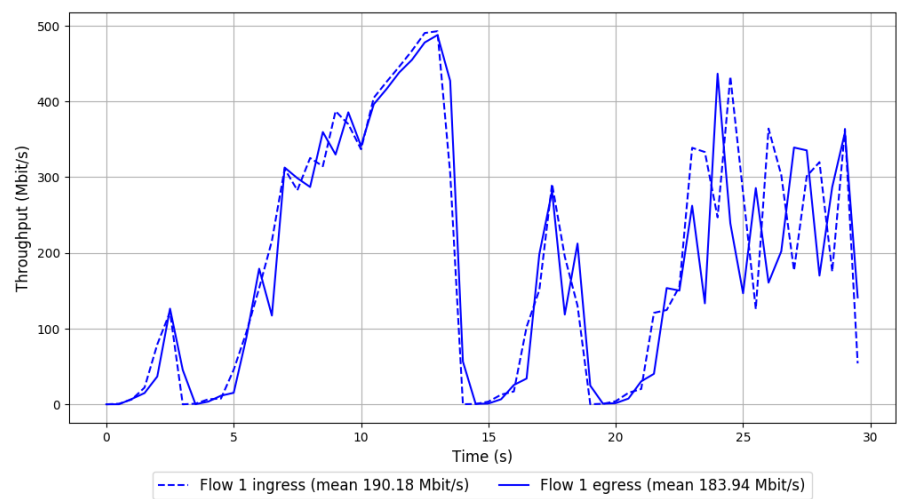
-- Flow 1:

Average throughput: 183.94 Mbit/s

95th percentile per-packet one-way delay: 307.852 ms

Loss rate: 3.32%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-09 09:52:54

End at: 2018-01-09 09:53:24

Below is generated by plot.py at 2018-01-09 11:59:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 283.34 Mbit/s

95th percentile per-packet one-way delay: 224.455 ms

Loss rate: 0.26%

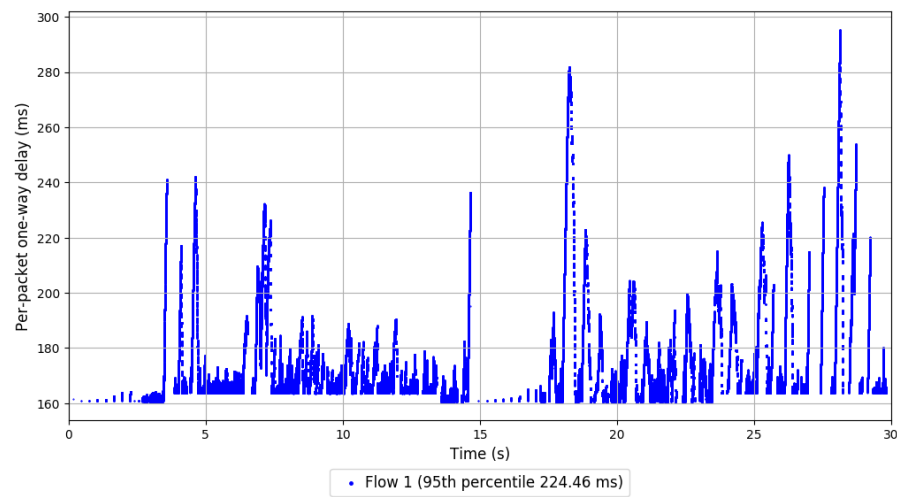
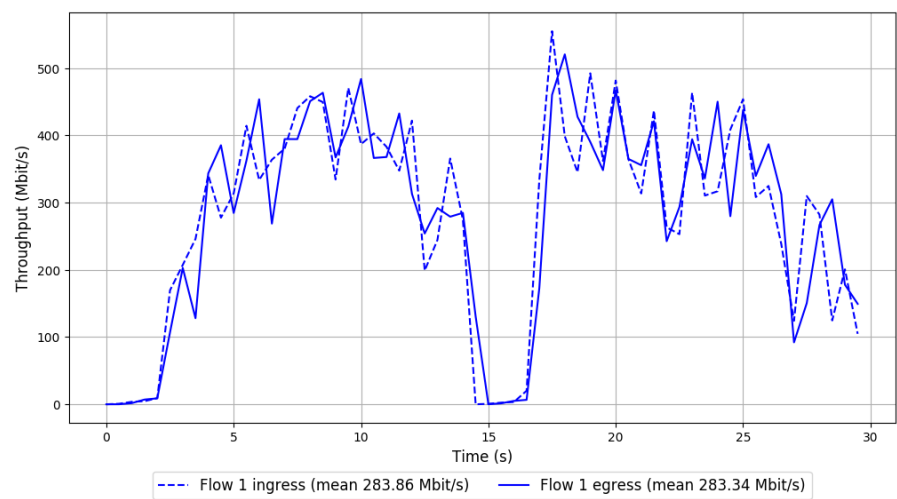
-- Flow 1:

Average throughput: 283.34 Mbit/s

95th percentile per-packet one-way delay: 224.455 ms

Loss rate: 0.26%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-09 10:05:59

End at: 2018-01-09 10:06:29

Below is generated by plot.py at 2018-01-09 11:59:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 206.50 Mbit/s

95th percentile per-packet one-way delay: 190.091 ms

Loss rate: 0.25%

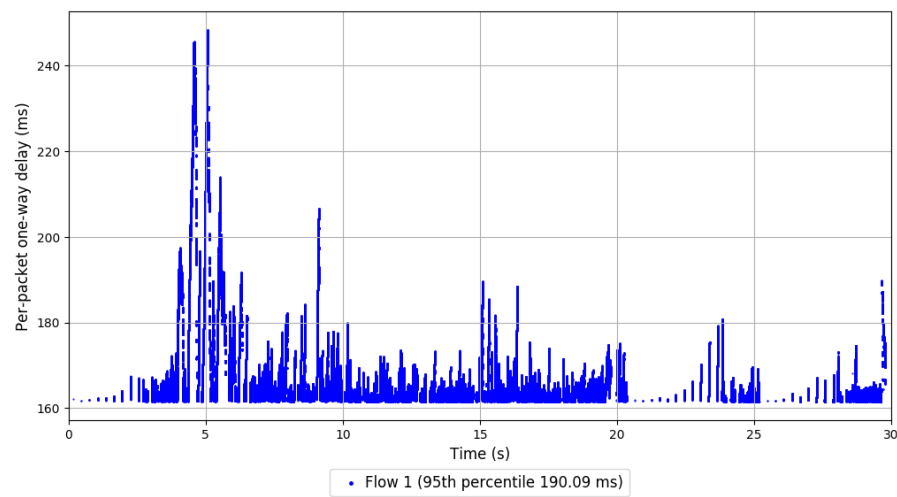
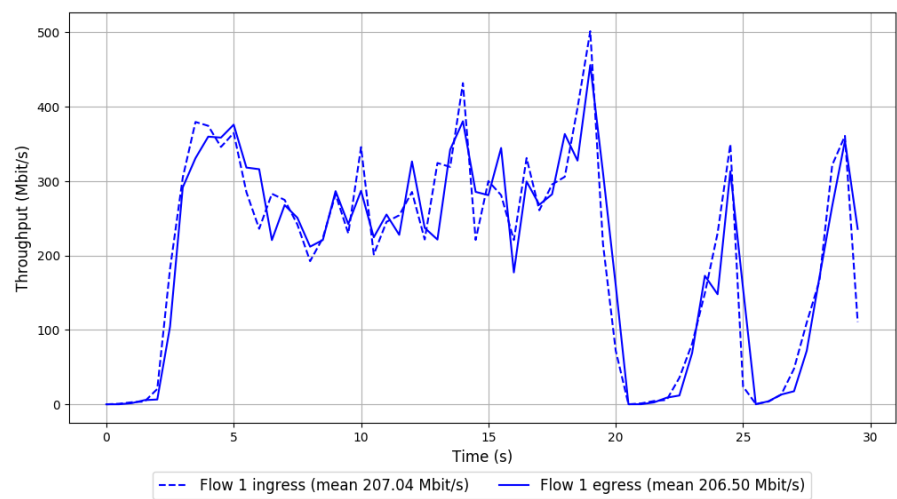
-- Flow 1:

Average throughput: 206.50 Mbit/s

95th percentile per-packet one-way delay: 190.091 ms

Loss rate: 0.25%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-09 10:18:48

End at: 2018-01-09 10:19:18

Below is generated by plot.py at 2018-01-09 11:59:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.44 Mbit/s

95th percentile per-packet one-way delay: 204.991 ms

Loss rate: 0.00%

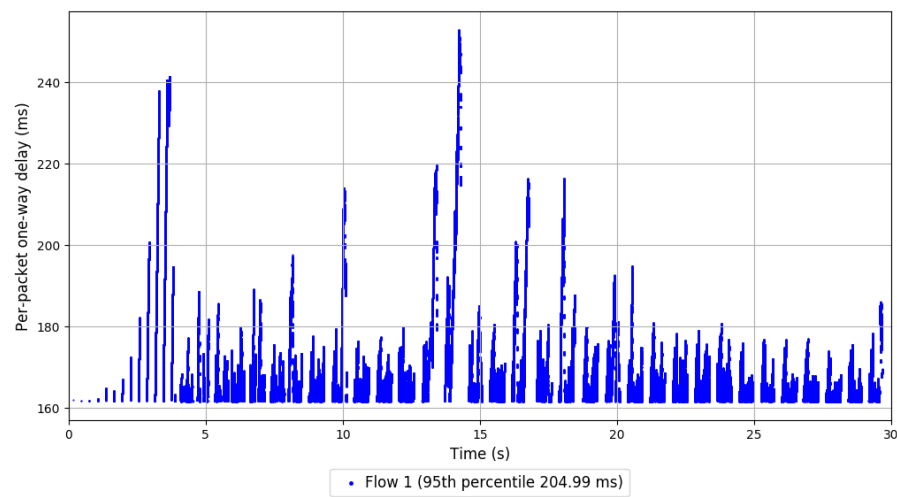
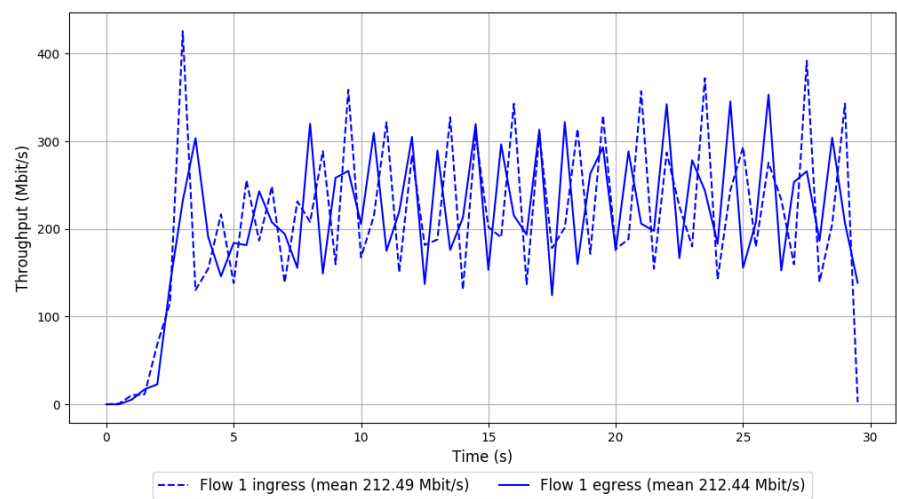
-- Flow 1:

Average throughput: 212.44 Mbit/s

95th percentile per-packet one-way delay: 204.991 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-09 10:31:30

End at: 2018-01-09 10:32:00

Below is generated by plot.py at 2018-01-09 11:59:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.15 Mbit/s

95th percentile per-packet one-way delay: 277.654 ms

Loss rate: 0.53%

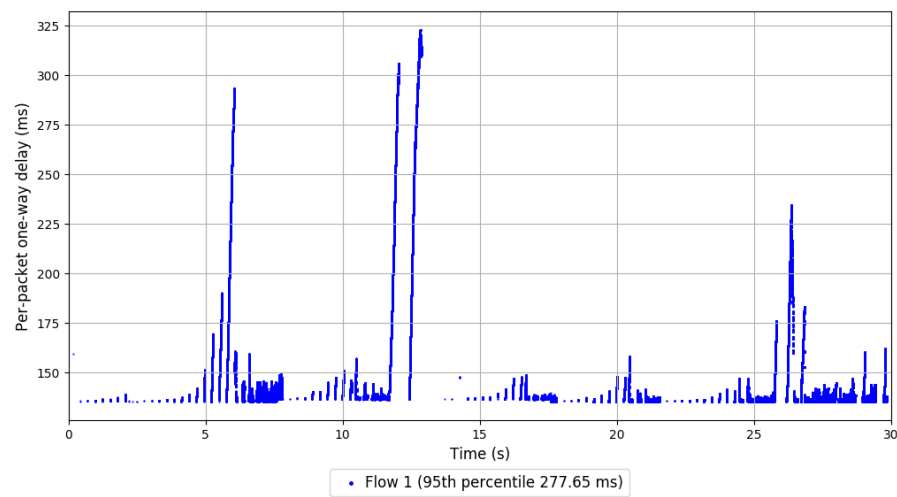
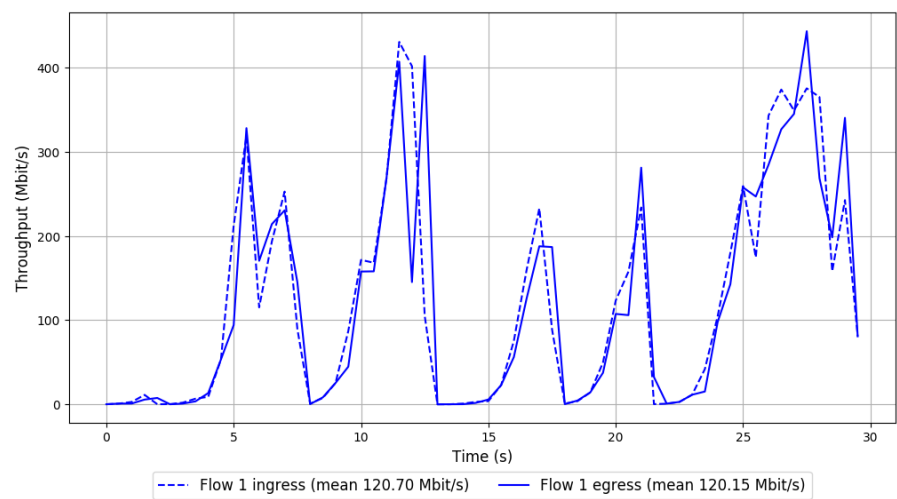
-- Flow 1:

Average throughput: 120.15 Mbit/s

95th percentile per-packet one-way delay: 277.654 ms

Loss rate: 0.53%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-09 10:44:24

End at: 2018-01-09 10:44:54

Below is generated by plot.py at 2018-01-09 11:59:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 137.31 Mbit/s

95th percentile per-packet one-way delay: 233.170 ms

Loss rate: 2.44%

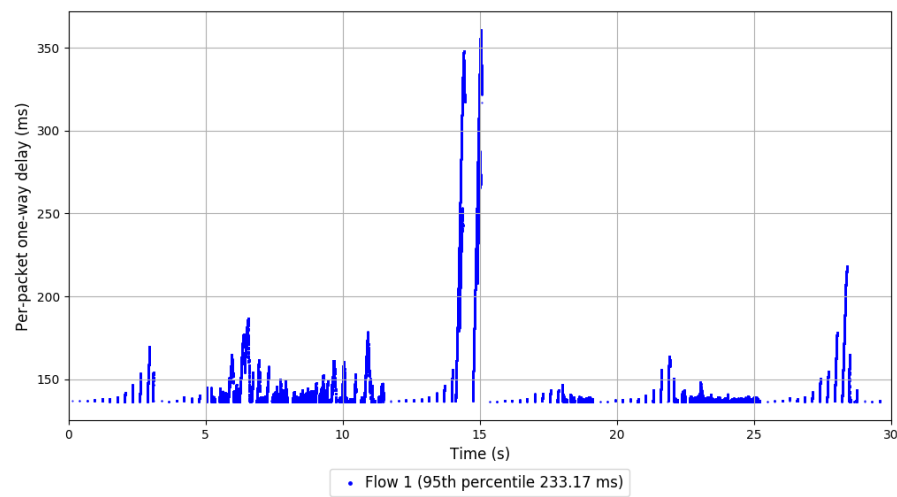
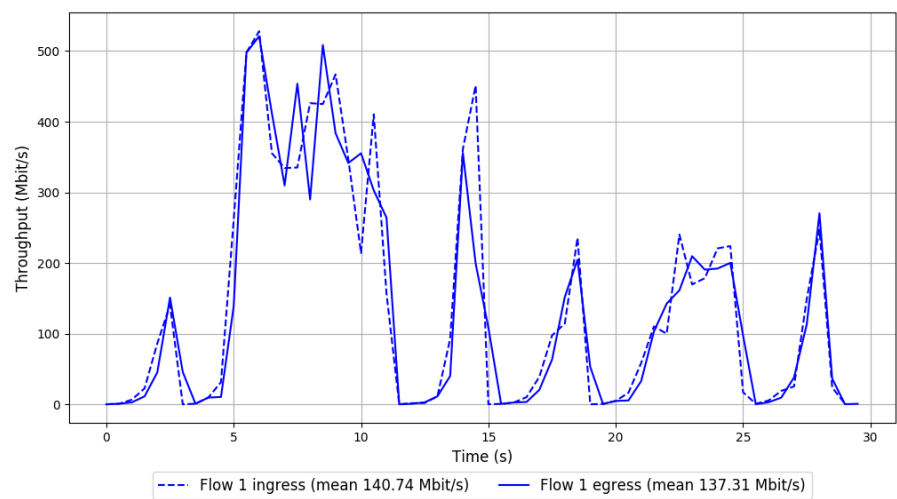
-- Flow 1:

Average throughput: 137.31 Mbit/s

95th percentile per-packet one-way delay: 233.170 ms

Loss rate: 2.44%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-01-09 08:53:45

End at: 2018-01-09 08:54:15

Below is generated by plot.py at 2018-01-09 11:59:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.56 Mbit/s

95th percentile per-packet one-way delay: 163.880 ms

Loss rate: 0.00%

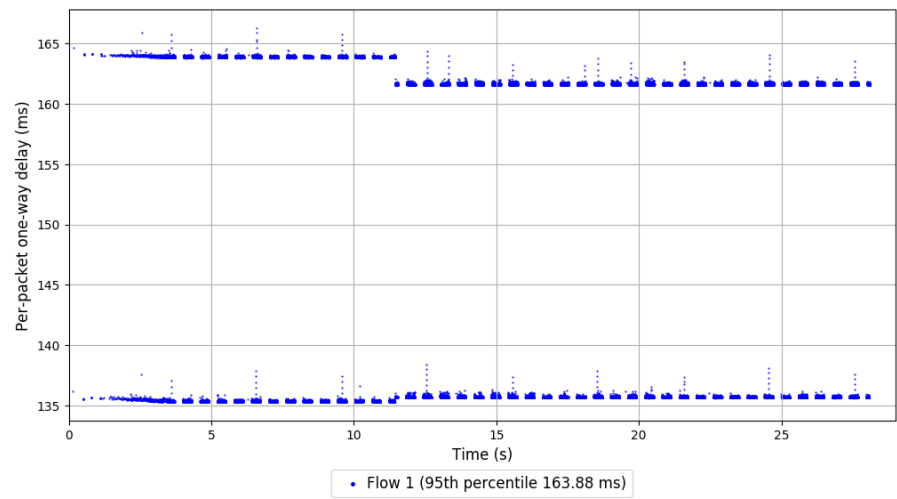
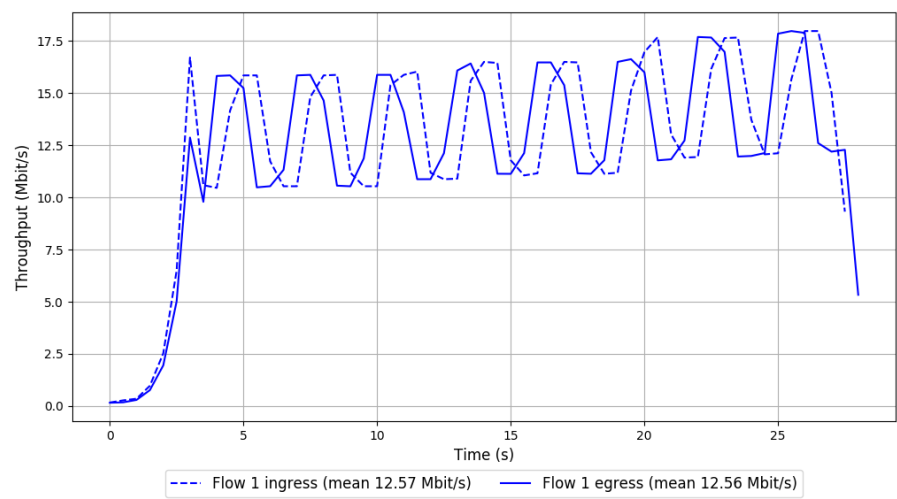
-- Flow 1:

Average throughput: 12.56 Mbit/s

95th percentile per-packet one-way delay: 163.880 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-09 09:06:40

End at: 2018-01-09 09:07:10

Below is generated by plot.py at 2018-01-09 11:59:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.82 Mbit/s

95th percentile per-packet one-way delay: 163.849 ms

Loss rate: 0.09%

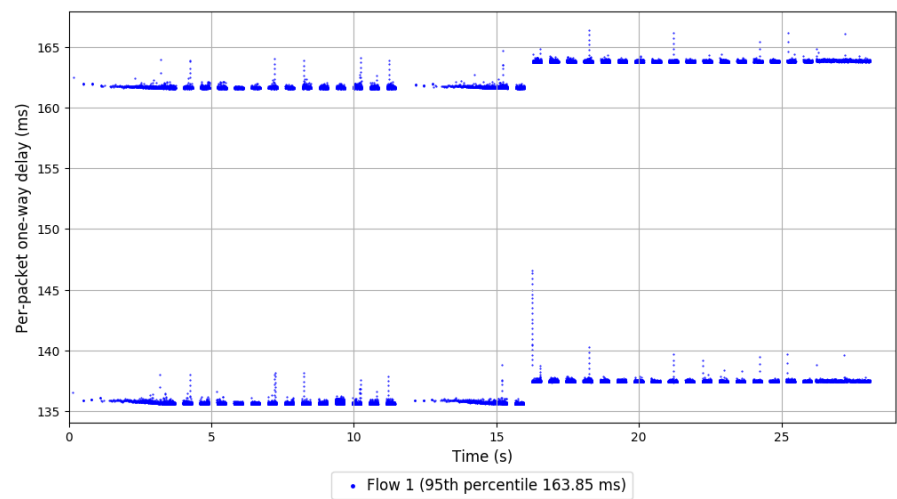
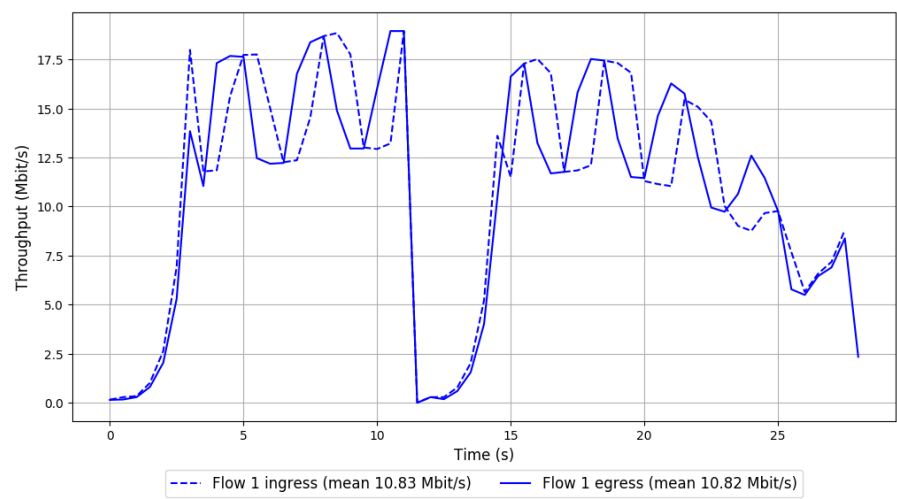
-- Flow 1:

Average throughput: 10.82 Mbit/s

95th percentile per-packet one-way delay: 163.849 ms

Loss rate: 0.09%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-09 09:19:09

End at: 2018-01-09 09:19:39

Below is generated by plot.py at 2018-01-09 11:59:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.89 Mbit/s

95th percentile per-packet one-way delay: 163.827 ms

Loss rate: 0.00%

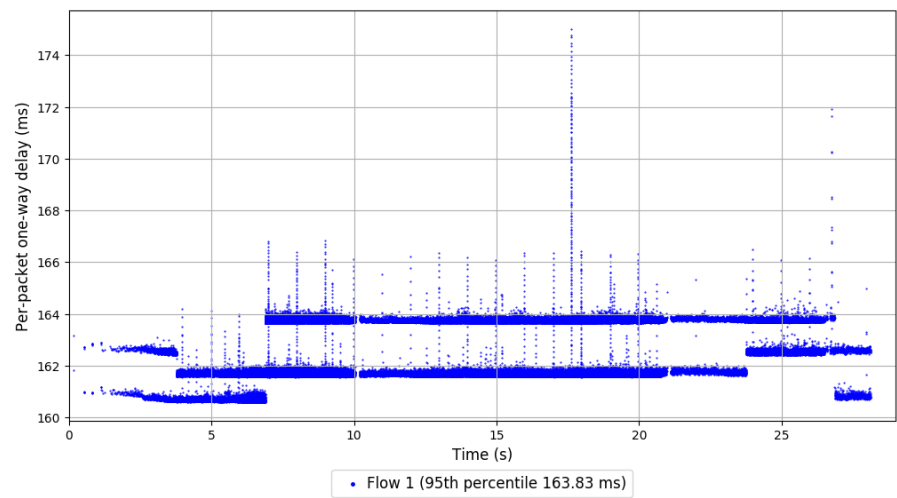
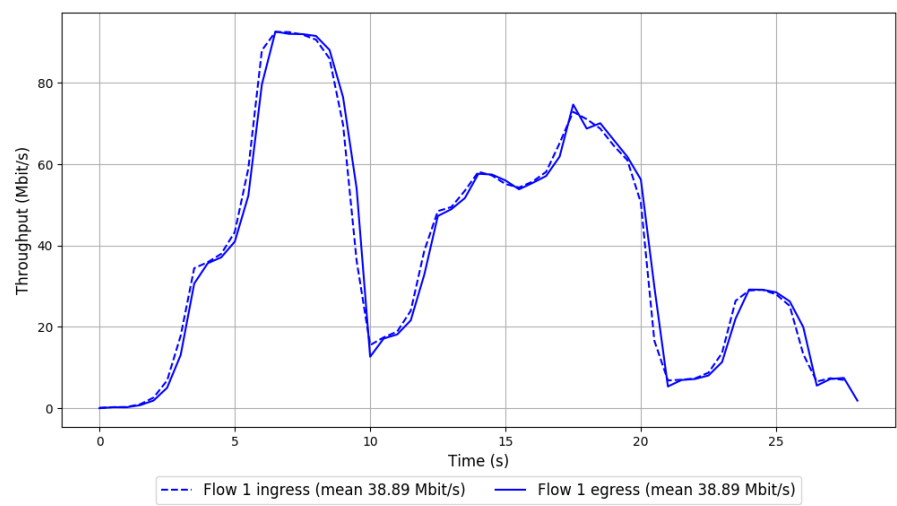
-- Flow 1:

Average throughput: 38.89 Mbit/s

95th percentile per-packet one-way delay: 163.827 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-09 09:31:49

End at: 2018-01-09 09:32:19

Below is generated by plot.py at 2018-01-09 11:59:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.76 Mbit/s

95th percentile per-packet one-way delay: 162.122 ms

Loss rate: 0.00%

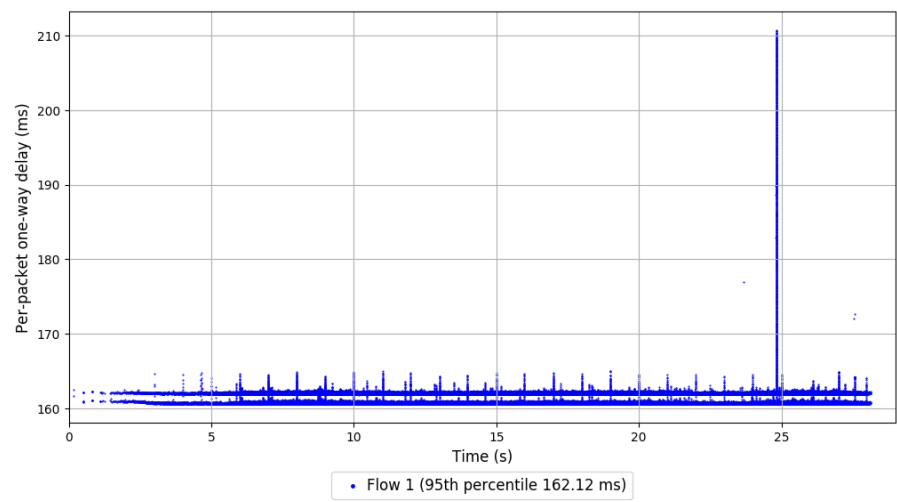
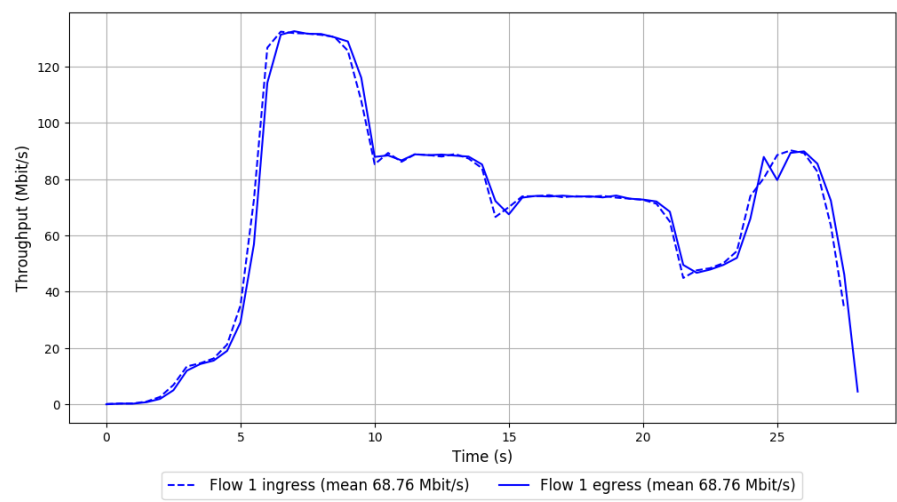
-- Flow 1:

Average throughput: 68.76 Mbit/s

95th percentile per-packet one-way delay: 162.122 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-09 09:44:39

End at: 2018-01-09 09:45:09

Below is generated by plot.py at 2018-01-09 11:59:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.58 Mbit/s

95th percentile per-packet one-way delay: 163.744 ms

Loss rate: 0.09%

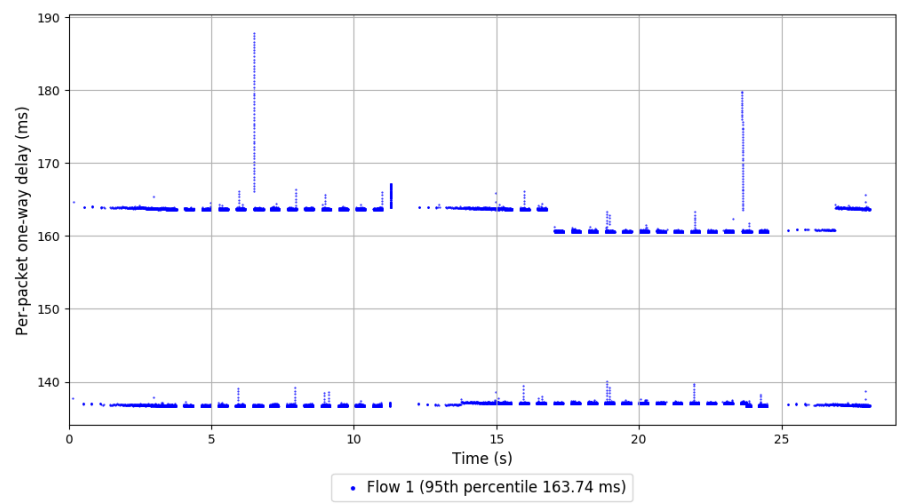
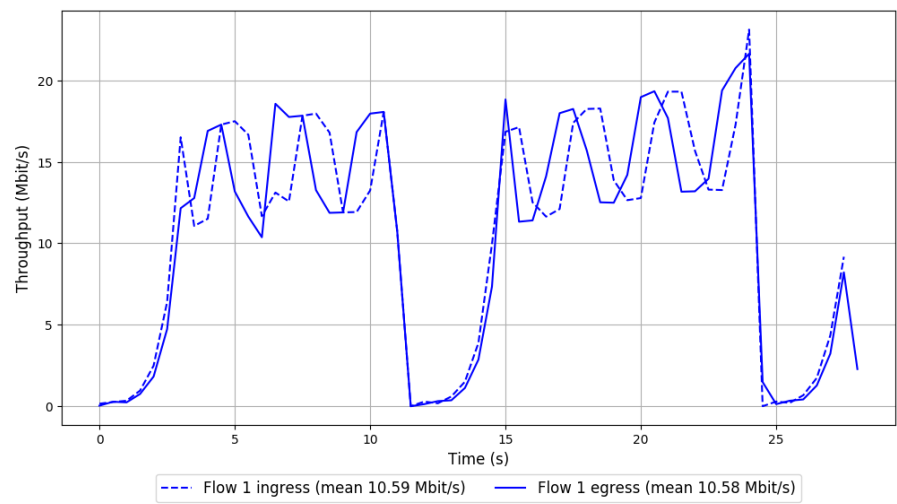
-- Flow 1:

Average throughput: 10.58 Mbit/s

95th percentile per-packet one-way delay: 163.744 ms

Loss rate: 0.09%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-09 09:57:16

End at: 2018-01-09 09:57:46

Below is generated by plot.py at 2018-01-09 11:59:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.79 Mbit/s

95th percentile per-packet one-way delay: 163.694 ms

Loss rate: 0.15%

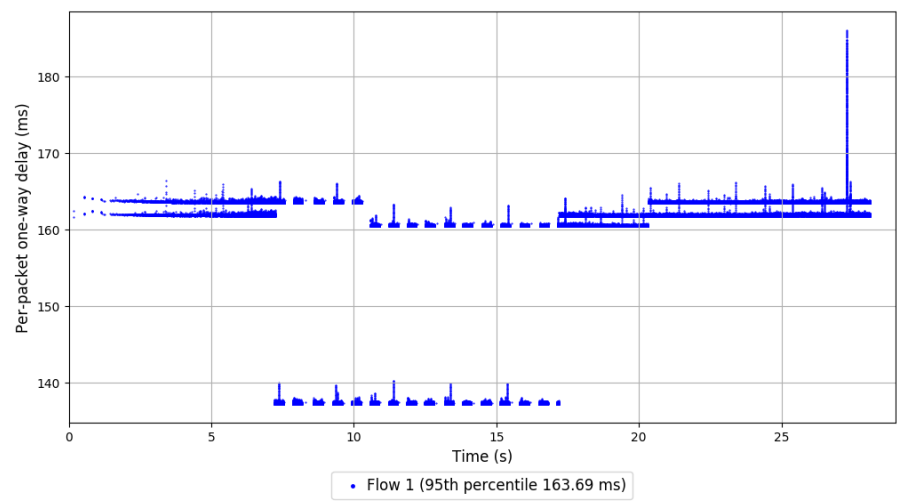
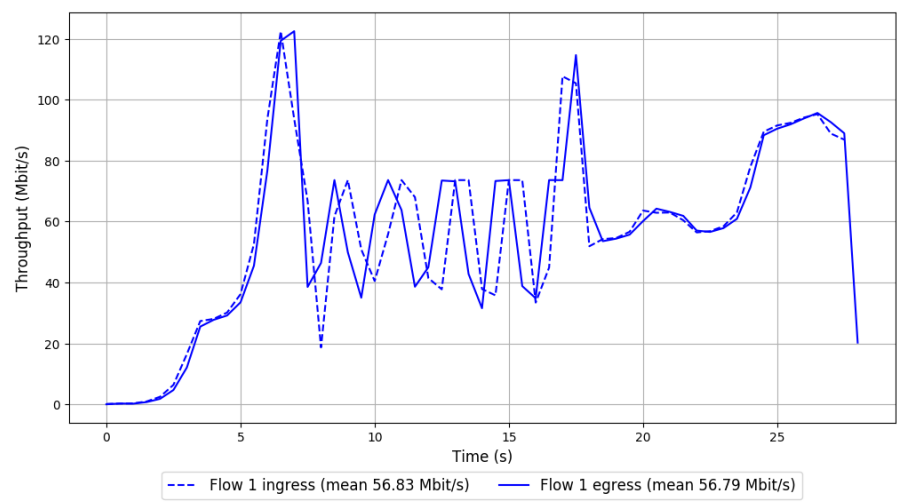
-- Flow 1:

Average throughput: 56.79 Mbit/s

95th percentile per-packet one-way delay: 163.694 ms

Loss rate: 0.15%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-09 10:10:16

End at: 2018-01-09 10:10:46

Below is generated by plot.py at 2018-01-09 12:00:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.88 Mbit/s

95th percentile per-packet one-way delay: 161.616 ms

Loss rate: 0.00%

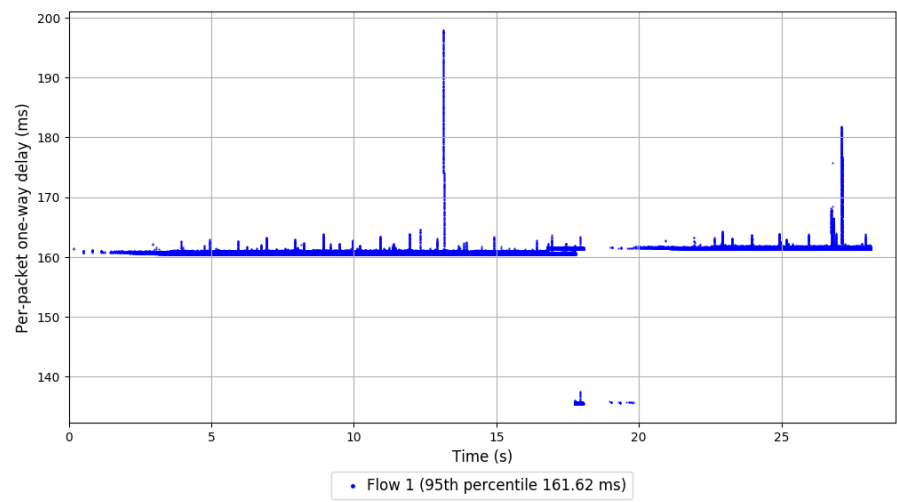
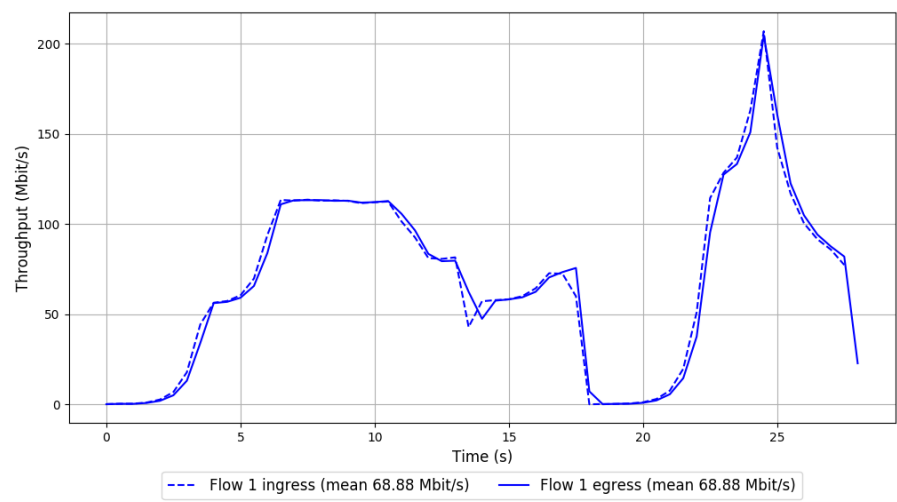
-- Flow 1:

Average throughput: 68.88 Mbit/s

95th percentile per-packet one-way delay: 161.616 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-09 10:23:06

End at: 2018-01-09 10:23:36

Below is generated by plot.py at 2018-01-09 12:00:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.45 Mbit/s

95th percentile per-packet one-way delay: 164.175 ms

Loss rate: 0.00%

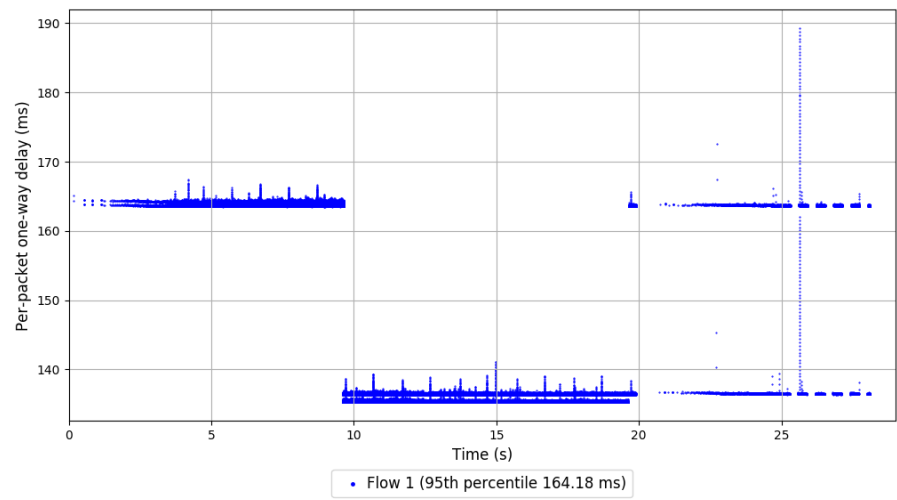
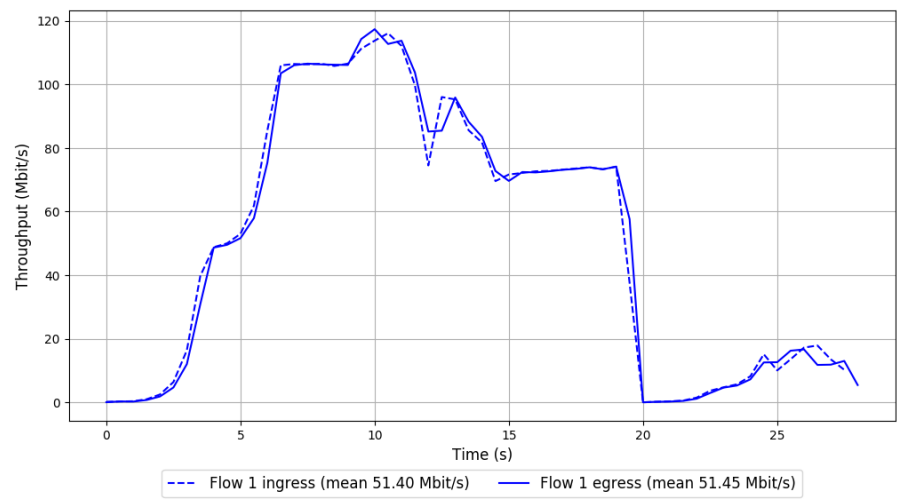
-- Flow 1:

Average throughput: 51.45 Mbit/s

95th percentile per-packet one-way delay: 164.175 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-09 10:35:39

End at: 2018-01-09 10:36:09

Below is generated by plot.py at 2018-01-09 12:00:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.94 Mbit/s

95th percentile per-packet one-way delay: 161.755 ms

Loss rate: 0.00%

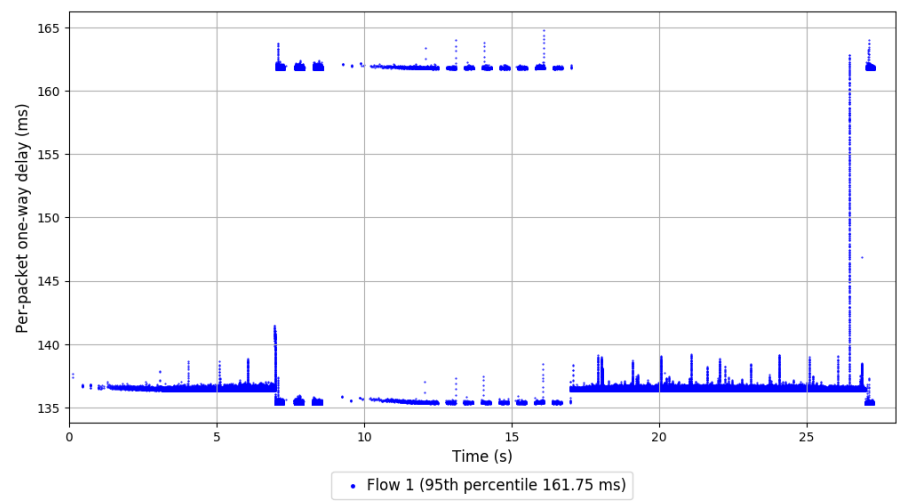
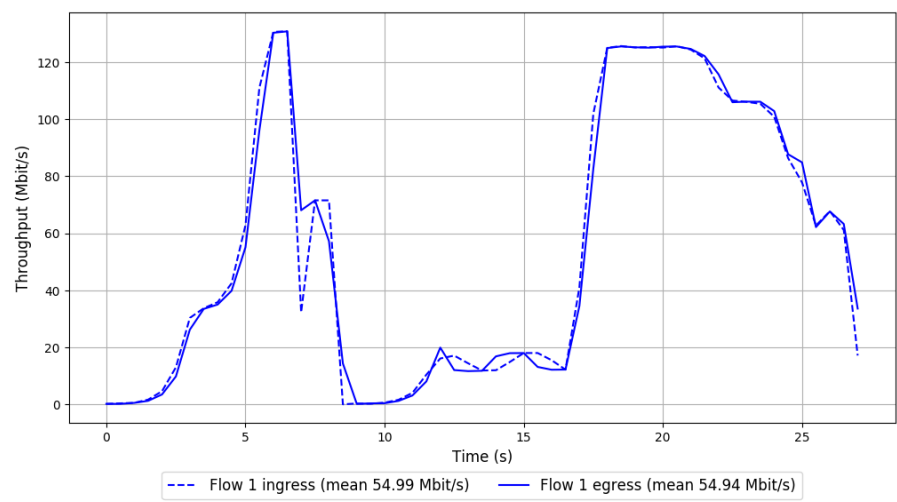
-- Flow 1:

Average throughput: 54.94 Mbit/s

95th percentile per-packet one-way delay: 161.755 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-09 10:48:35

End at: 2018-01-09 10:49:05

Below is generated by plot.py at 2018-01-09 12:00:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.23 Mbit/s

95th percentile per-packet one-way delay: 163.529 ms

Loss rate: 0.00%

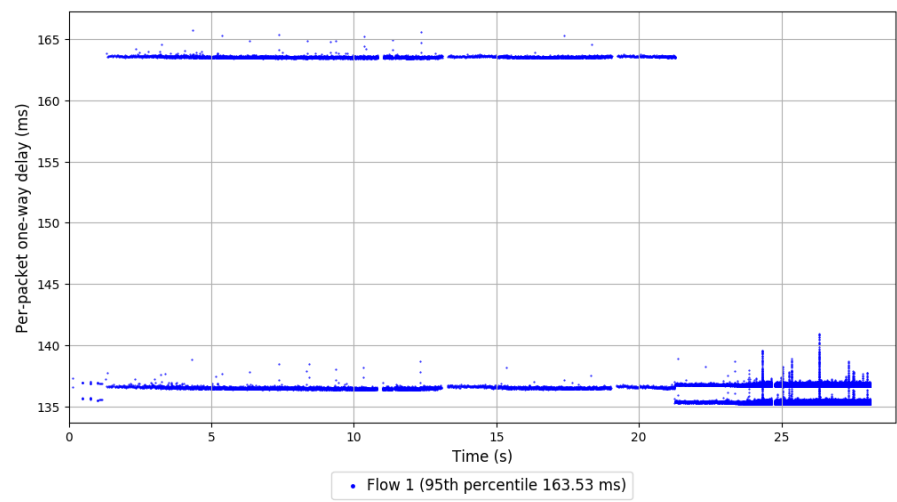
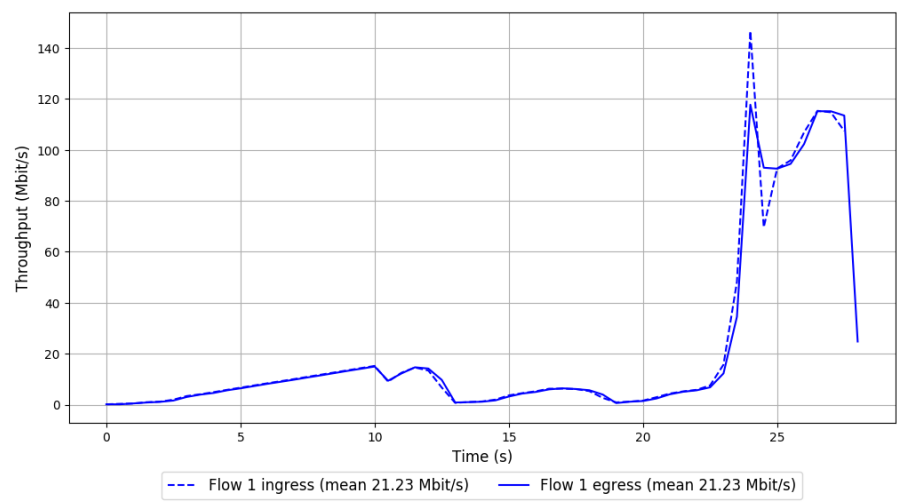
-- Flow 1:

Average throughput: 21.23 Mbit/s

95th percentile per-packet one-way delay: 163.529 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

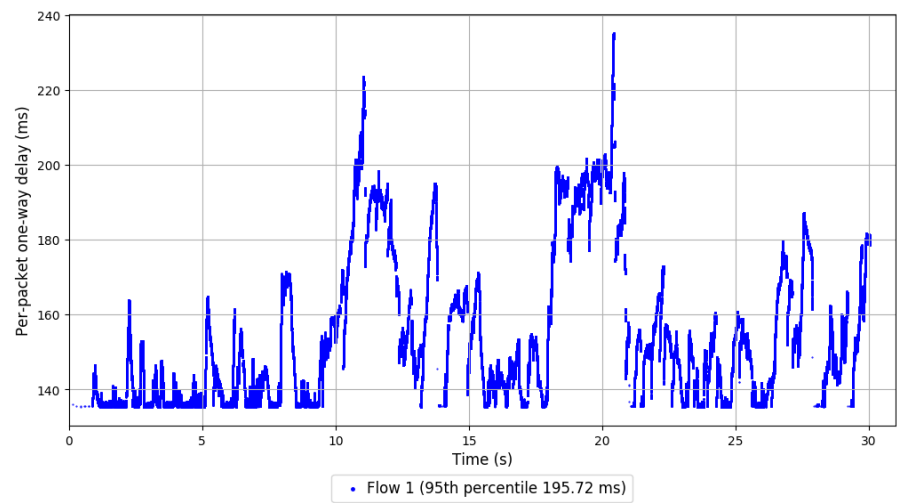
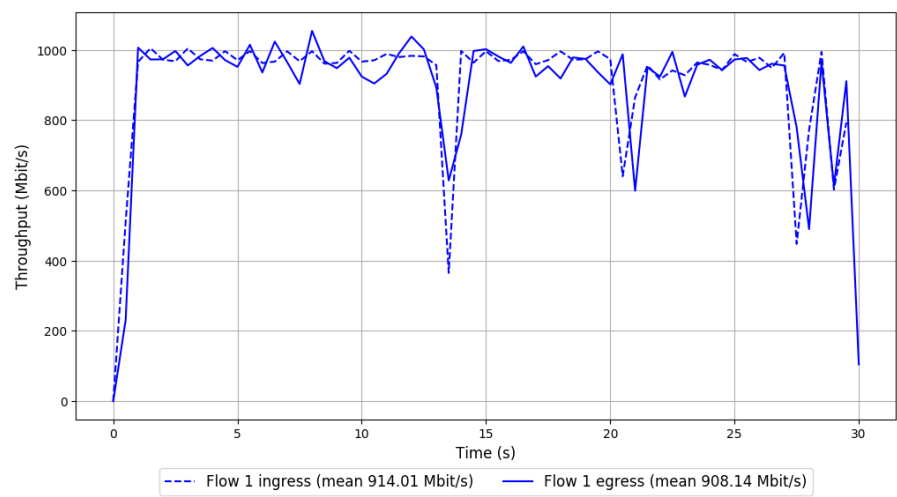


```
Run 1: Statistics of FillP

Start at: 2018-01-09 08:48:09
End at: 2018-01-09 08:48:39

# Below is generated by plot.py at 2018-01-09 12:14:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 908.14 Mbit/s
95th percentile per-packet one-way delay: 195.718 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 908.14 Mbit/s
95th percentile per-packet one-way delay: 195.718 ms
Loss rate: 0.63%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-09 09:01:04

End at: 2018-01-09 09:01:34

Below is generated by plot.py at 2018-01-09 12:14:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 898.75 Mbit/s

95th percentile per-packet one-way delay: 219.753 ms

Loss rate: 1.89%

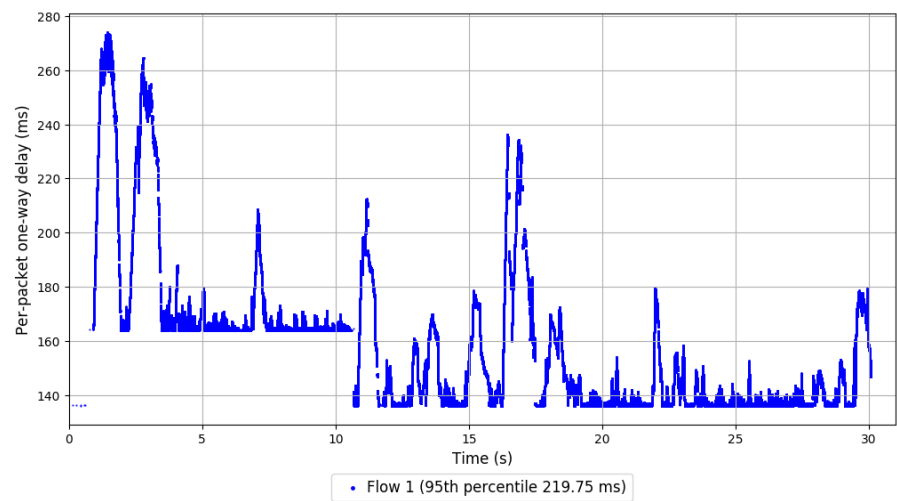
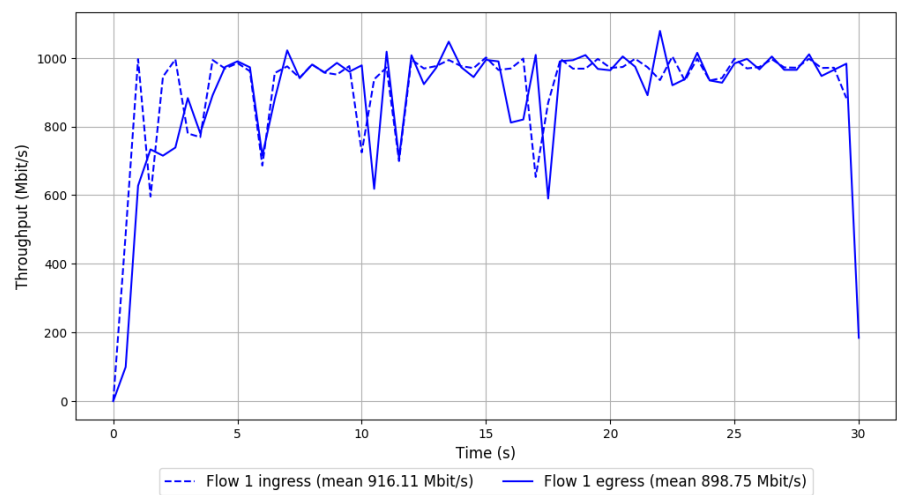
-- Flow 1:

Average throughput: 898.75 Mbit/s

95th percentile per-packet one-way delay: 219.753 ms

Loss rate: 1.89%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-09 09:13:40

End at: 2018-01-09 09:14:10

Below is generated by plot.py at 2018-01-09 12:14:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 762.79 Mbit/s

95th percentile per-packet one-way delay: 257.411 ms

Loss rate: 9.87%

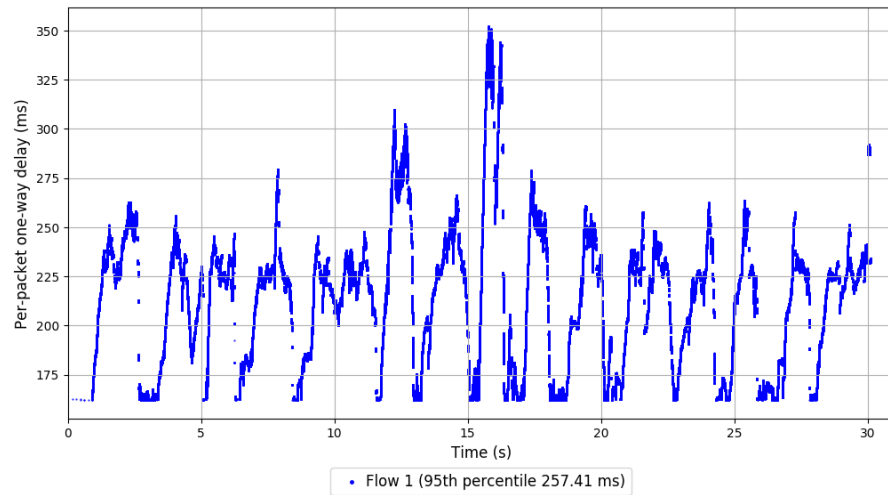
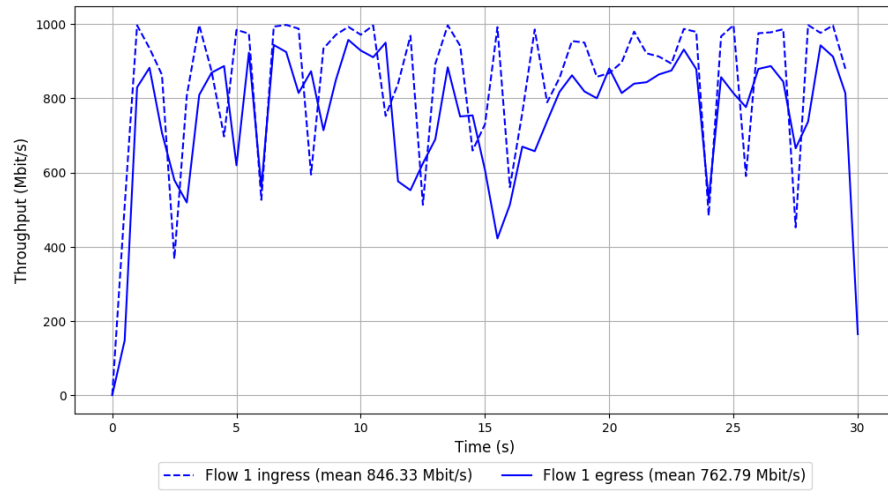
-- Flow 1:

Average throughput: 762.79 Mbit/s

95th percentile per-packet one-way delay: 257.411 ms

Loss rate: 9.87%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-09 09:26:17

End at: 2018-01-09 09:26:47

Below is generated by plot.py at 2018-01-09 12:14:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 848.52 Mbit/s

95th percentile per-packet one-way delay: 242.192 ms

Loss rate: 4.70%

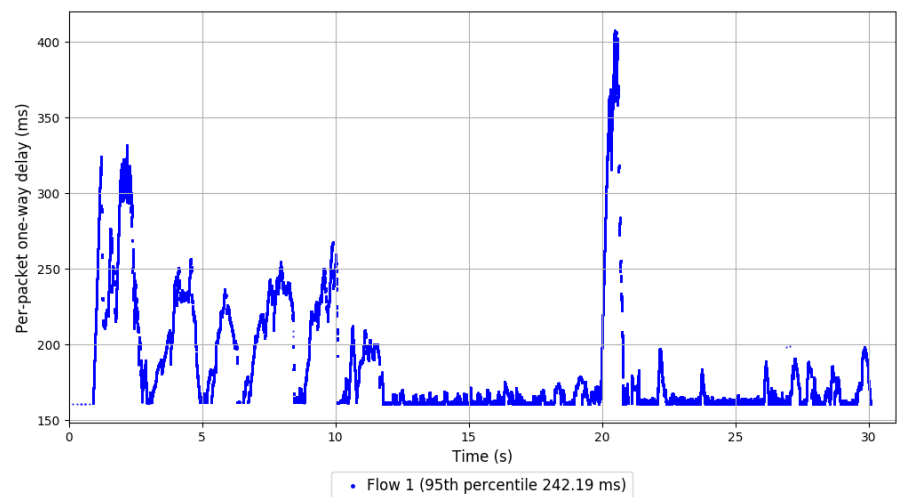
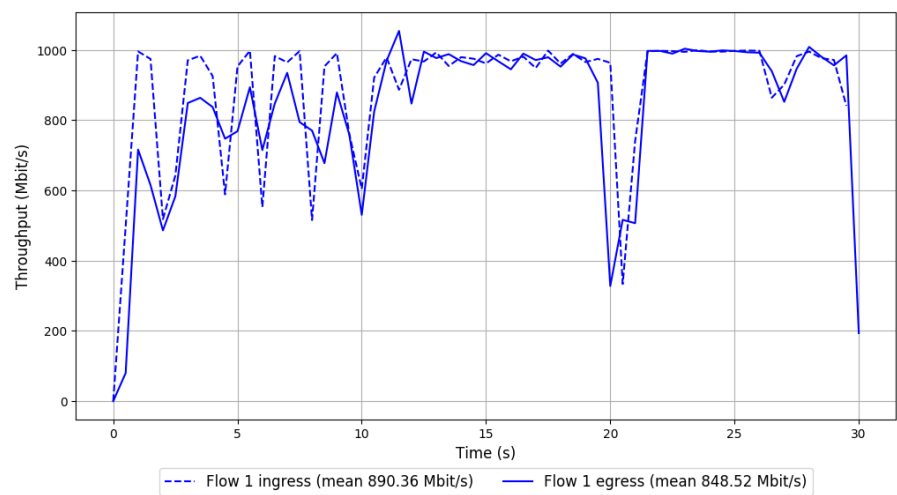
-- Flow 1:

Average throughput: 848.52 Mbit/s

95th percentile per-packet one-way delay: 242.192 ms

Loss rate: 4.70%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-09 09:39:00

End at: 2018-01-09 09:39:30

Below is generated by plot.py at 2018-01-09 12:14:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 848.46 Mbit/s

95th percentile per-packet one-way delay: 239.266 ms

Loss rate: 4.54%

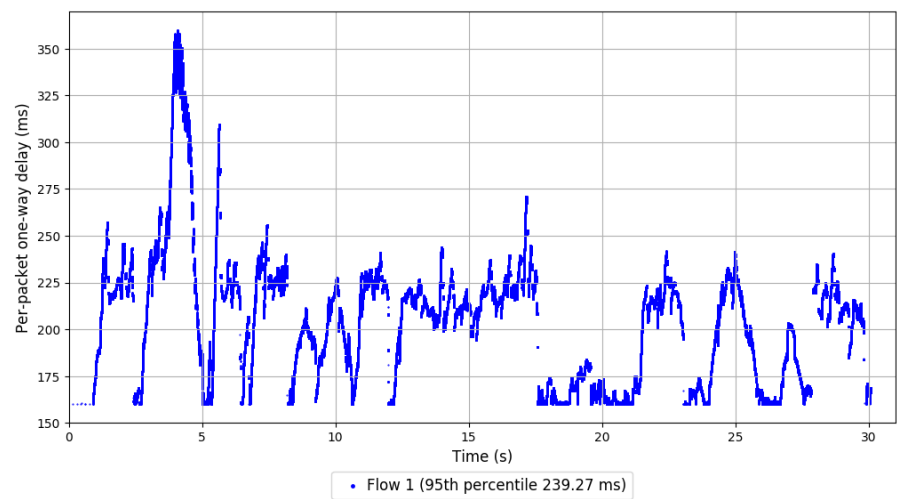
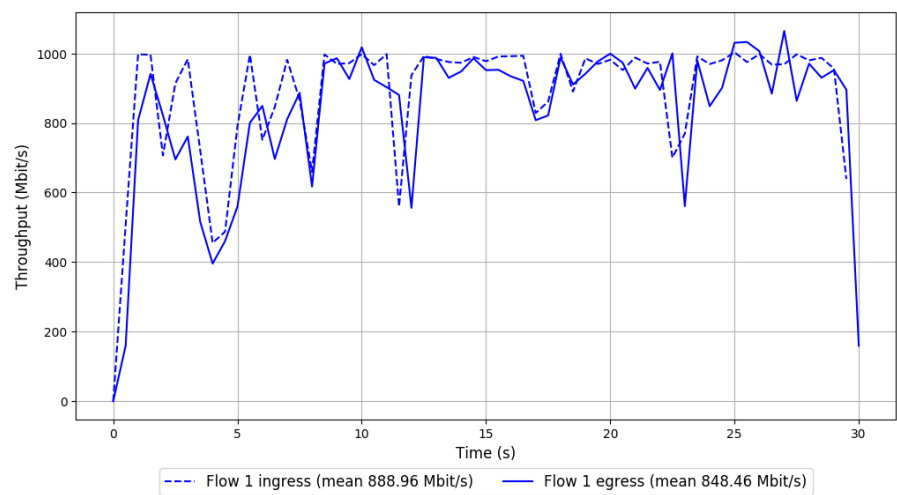
-- Flow 1:

Average throughput: 848.46 Mbit/s

95th percentile per-packet one-way delay: 239.266 ms

Loss rate: 4.54%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-09 09:51:33

End at: 2018-01-09 09:52:03

Below is generated by plot.py at 2018-01-09 12:14:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 809.13 Mbit/s

95th percentile per-packet one-way delay: 239.960 ms

Loss rate: 4.65%

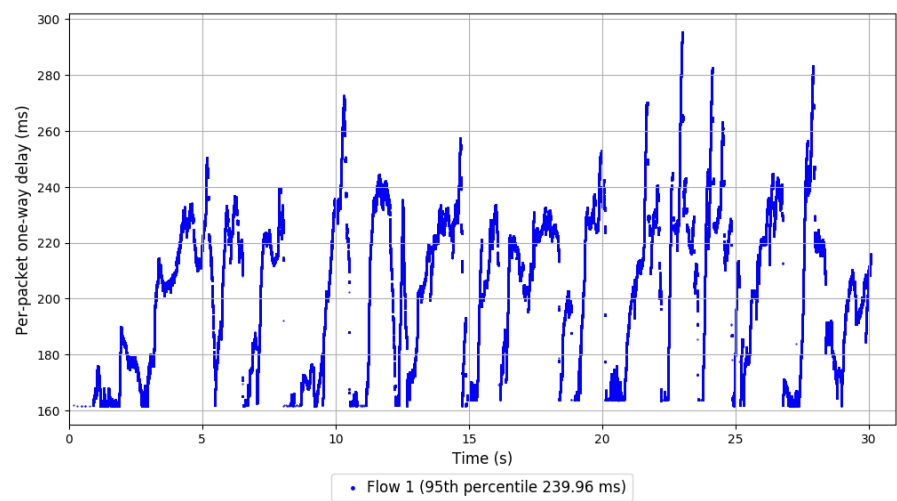
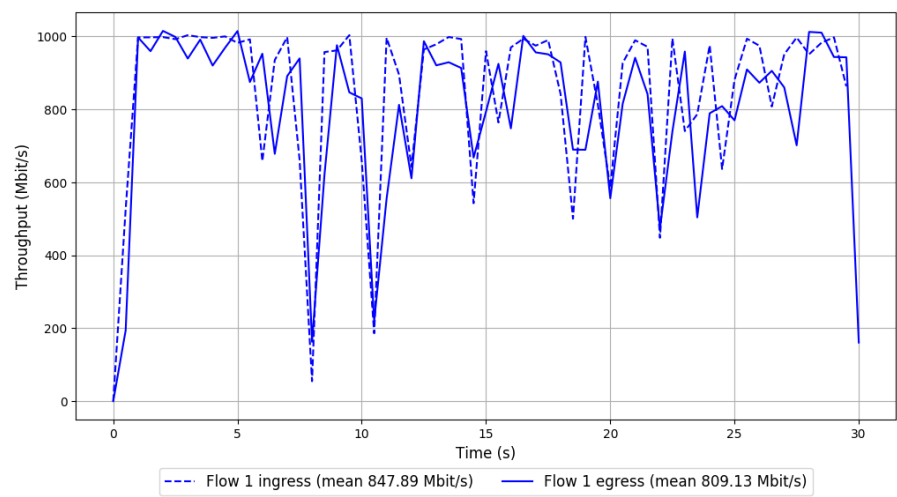
-- Flow 1:

Average throughput: 809.13 Mbit/s

95th percentile per-packet one-way delay: 239.960 ms

Loss rate: 4.65%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-09 10:04:34

End at: 2018-01-09 10:05:04

Below is generated by plot.py at 2018-01-09 12:15:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 925.59 Mbit/s

95th percentile per-packet one-way delay: 214.855 ms

Loss rate: 0.65%

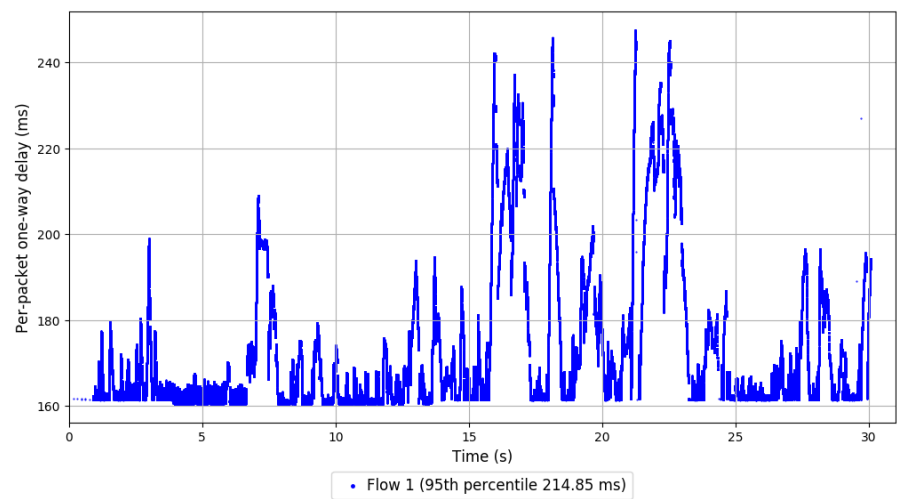
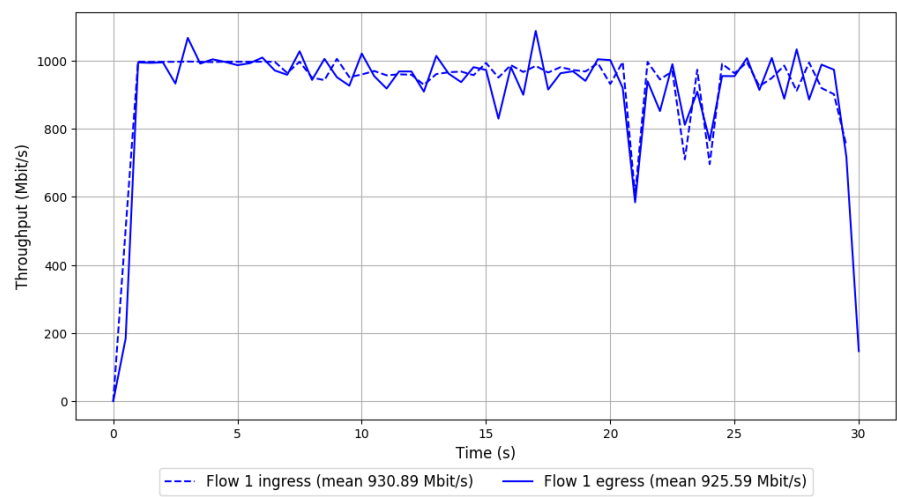
-- Flow 1:

Average throughput: 925.59 Mbit/s

95th percentile per-packet one-way delay: 214.855 ms

Loss rate: 0.65%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-09 10:17:21

End at: 2018-01-09 10:17:51

Below is generated by plot.py at 2018-01-09 12:16:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 927.37 Mbit/s

95th percentile per-packet one-way delay: 206.706 ms

Loss rate: 0.99%

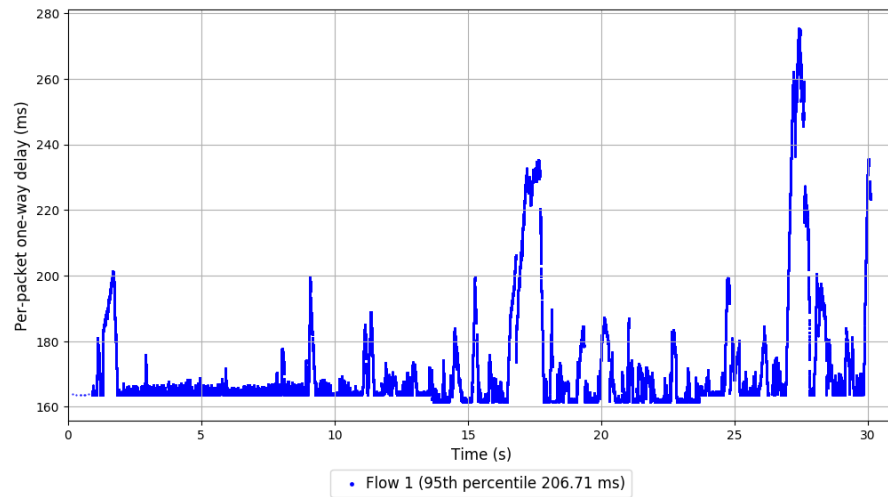
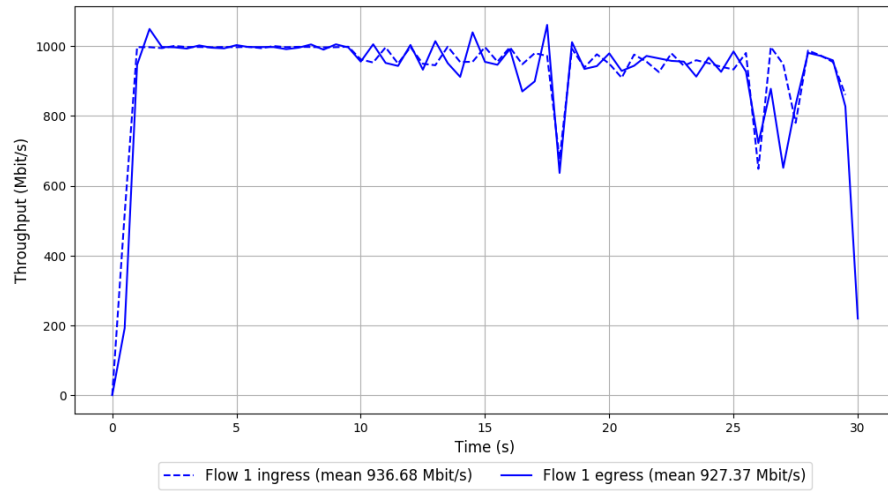
-- Flow 1:

Average throughput: 927.37 Mbit/s

95th percentile per-packet one-way delay: 206.706 ms

Loss rate: 0.99%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-09 10:30:05

End at: 2018-01-09 10:30:35

Below is generated by plot.py at 2018-01-09 12:19:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 897.96 Mbit/s

95th percentile per-packet one-way delay: 357.123 ms

Loss rate: 2.92%

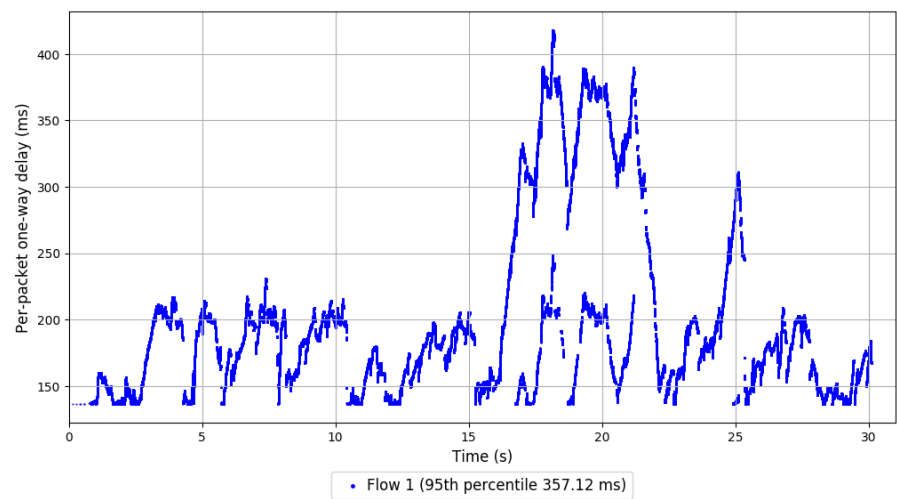
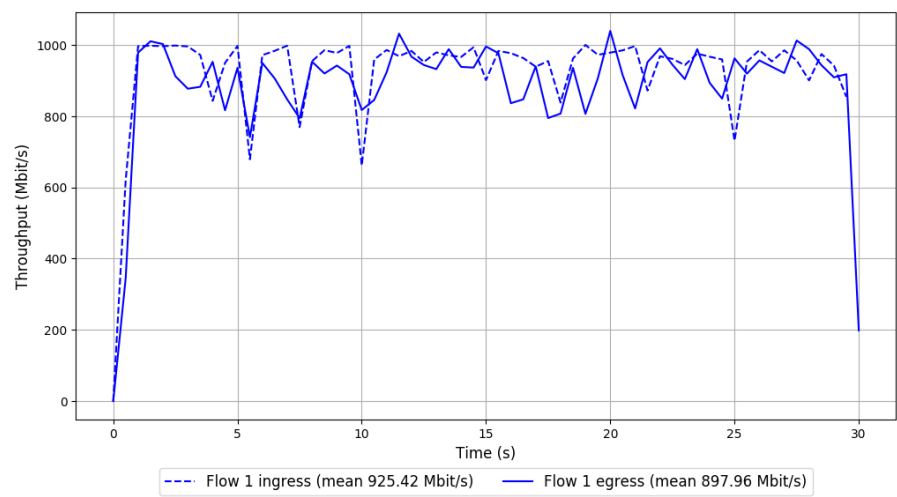
-- Flow 1:

Average throughput: 897.96 Mbit/s

95th percentile per-packet one-way delay: 357.123 ms

Loss rate: 2.92%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-09 10:43:02

End at: 2018-01-09 10:43:32

Below is generated by plot.py at 2018-01-09 12:19:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 891.93 Mbit/s

95th percentile per-packet one-way delay: 222.399 ms

Loss rate: 1.18%

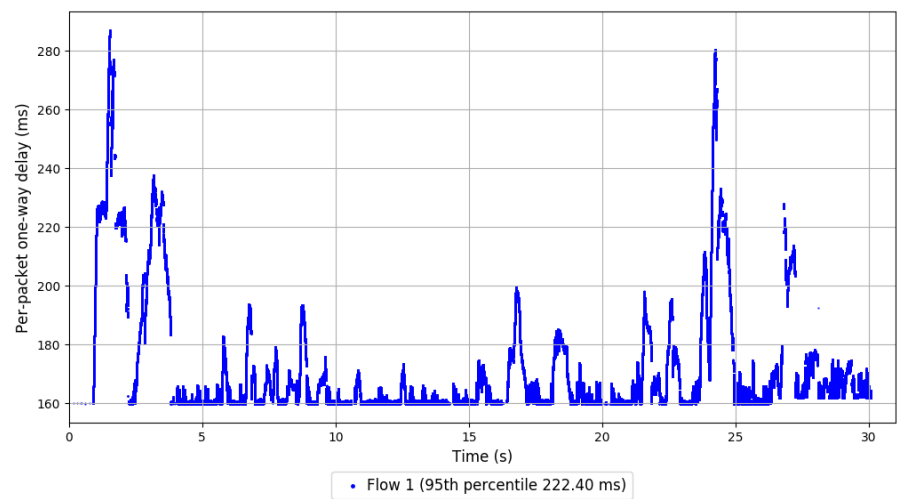
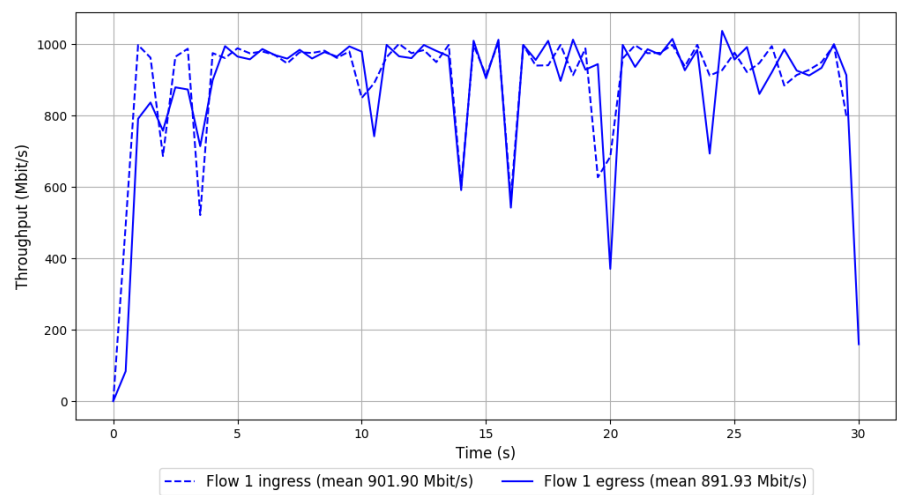
-- Flow 1:

Average throughput: 891.93 Mbit/s

95th percentile per-packet one-way delay: 222.399 ms

Loss rate: 1.18%

Run 10: Report of FillP — Data Link

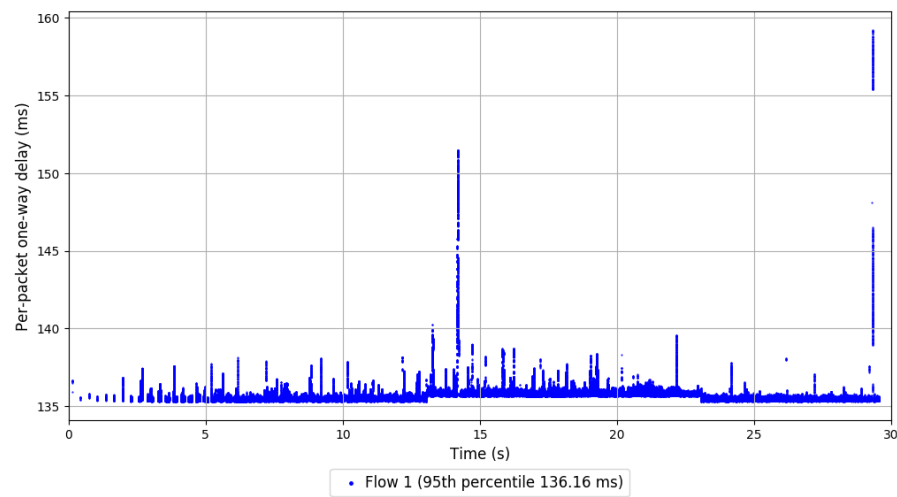
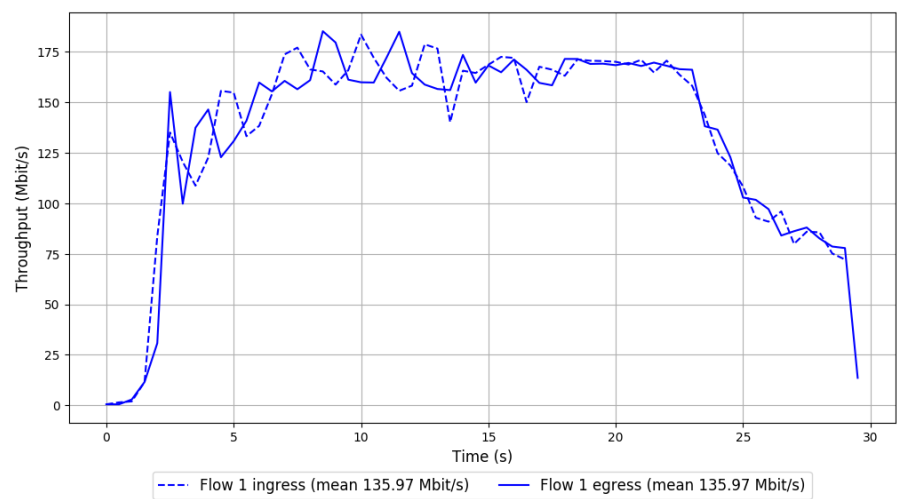


```
Run 1: Statistics of Indigo

Start at: 2018-01-09 08:45:34
End at: 2018-01-09 08:46:04

# Below is generated by plot.py at 2018-01-09 12:19:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 135.97 Mbit/s
95th percentile per-packet one-way delay: 136.165 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 135.97 Mbit/s
95th percentile per-packet one-way delay: 136.165 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-09 08:58:31

End at: 2018-01-09 08:59:01

Below is generated by plot.py at 2018-01-09 12:19:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.71 Mbit/s

95th percentile per-packet one-way delay: 163.949 ms

Loss rate: 0.03%

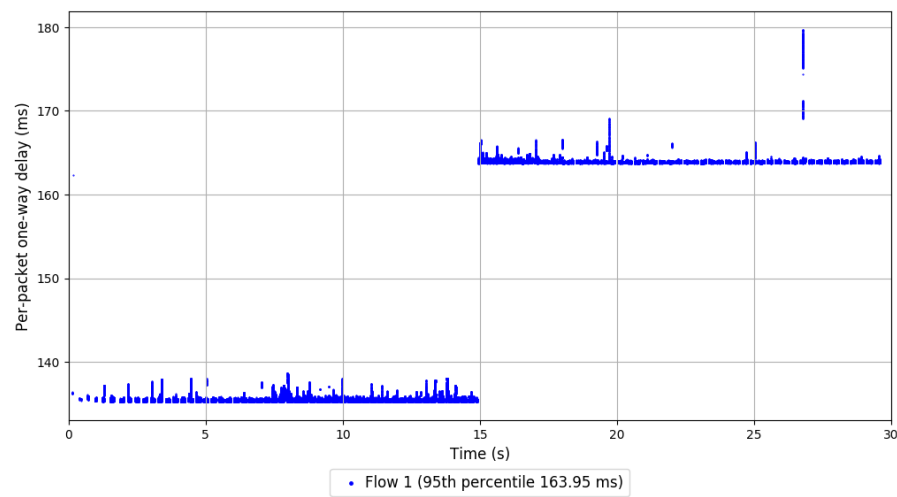
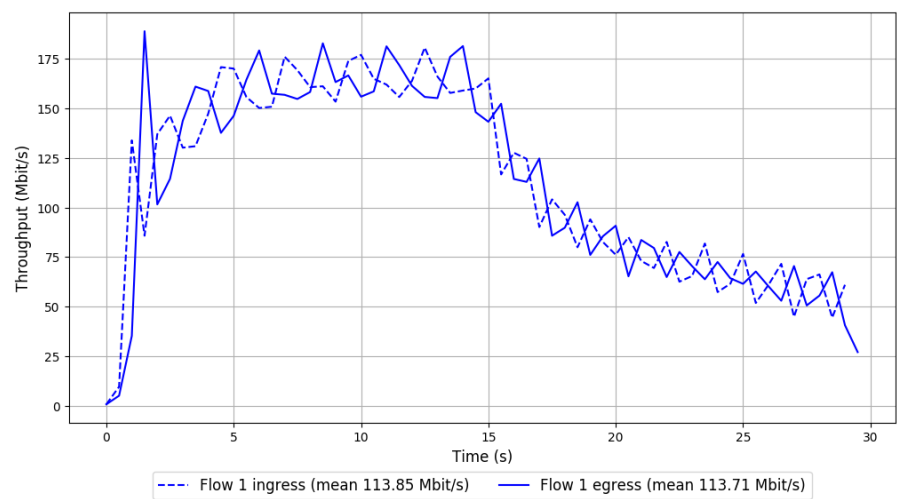
-- Flow 1:

Average throughput: 113.71 Mbit/s

95th percentile per-packet one-way delay: 163.949 ms

Loss rate: 0.03%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-09 09:11:03

End at: 2018-01-09 09:11:33

Below is generated by plot.py at 2018-01-09 12:19:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 138.67 Mbit/s

95th percentile per-packet one-way delay: 164.424 ms

Loss rate: 0.17%

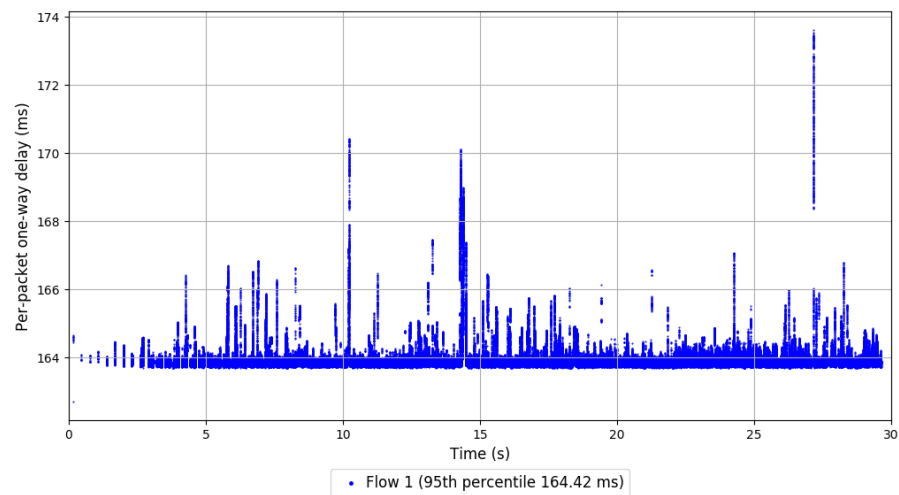
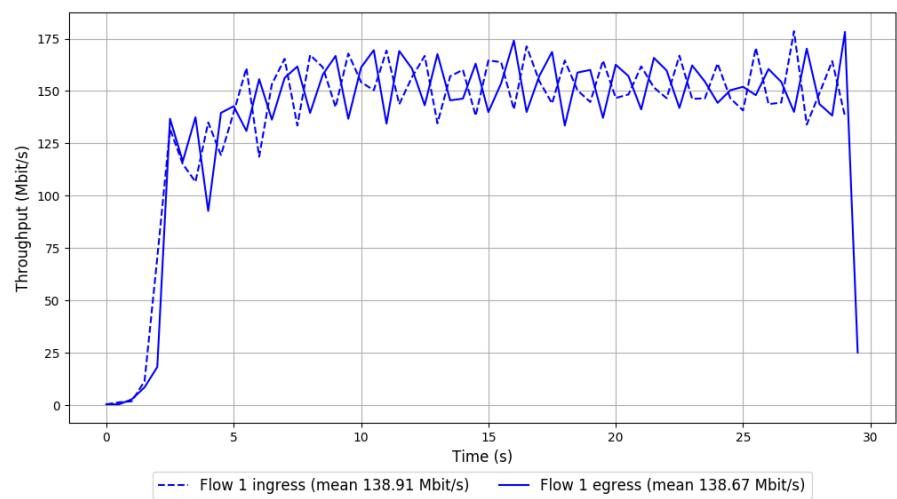
-- Flow 1:

Average throughput: 138.67 Mbit/s

95th percentile per-packet one-way delay: 164.424 ms

Loss rate: 0.17%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-09 09:23:41

End at: 2018-01-09 09:24:11

Below is generated by plot.py at 2018-01-09 12:19:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.78 Mbit/s

95th percentile per-packet one-way delay: 165.559 ms

Loss rate: 0.01%

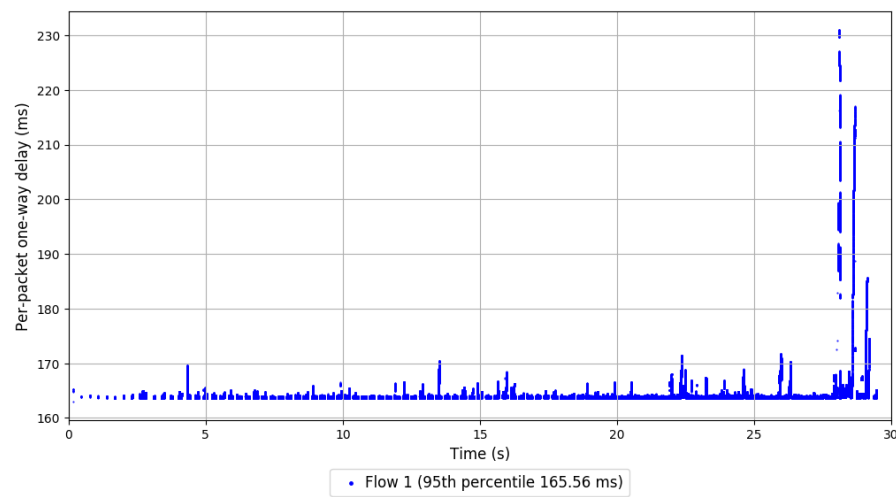
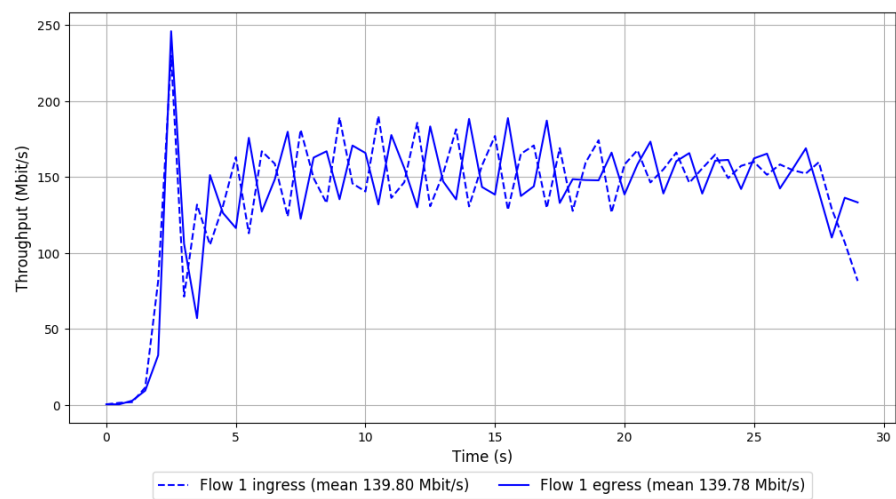
-- Flow 1:

Average throughput: 139.78 Mbit/s

95th percentile per-packet one-way delay: 165.559 ms

Loss rate: 0.01%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-09 09:36:23

End at: 2018-01-09 09:36:53

Below is generated by plot.py at 2018-01-09 12:19:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.28 Mbit/s

95th percentile per-packet one-way delay: 165.094 ms

Loss rate: 0.08%

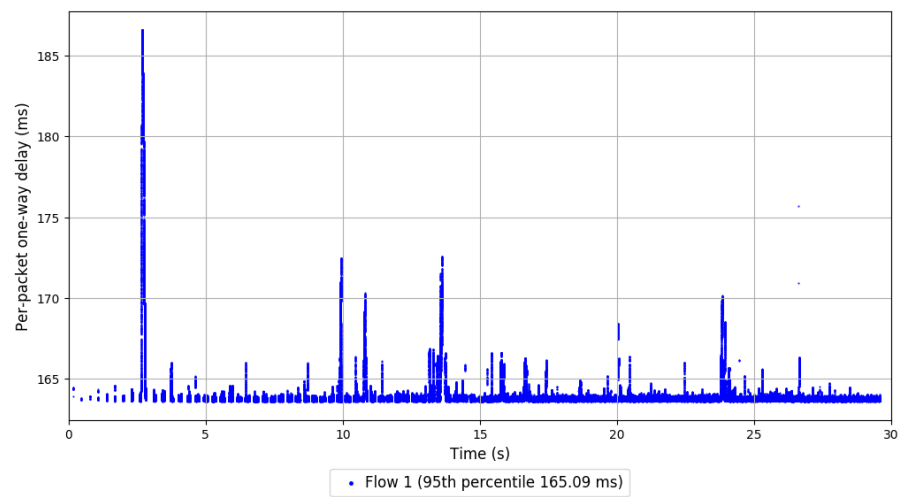
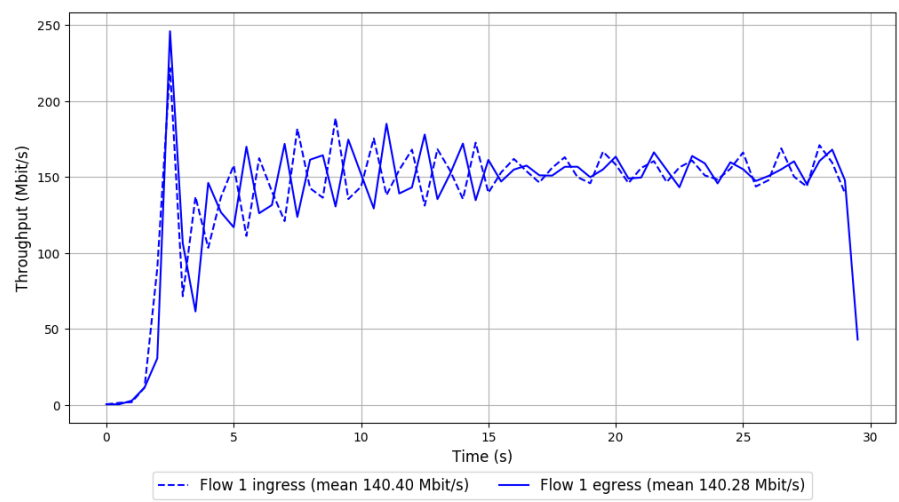
-- Flow 1:

Average throughput: 140.28 Mbit/s

95th percentile per-packet one-way delay: 165.094 ms

Loss rate: 0.08%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-09 09:49:00

End at: 2018-01-09 09:49:30

Below is generated by plot.py at 2018-01-09 12:19:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.34 Mbit/s

95th percentile per-packet one-way delay: 164.271 ms

Loss rate: 0.16%

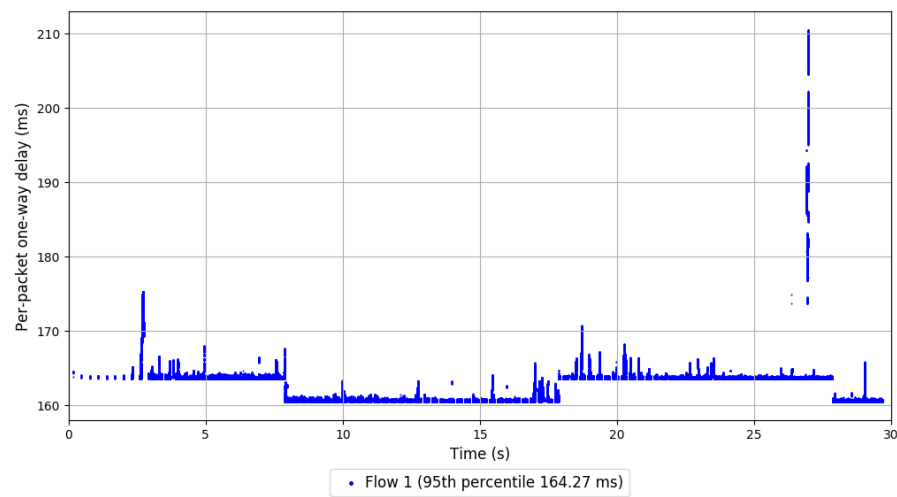
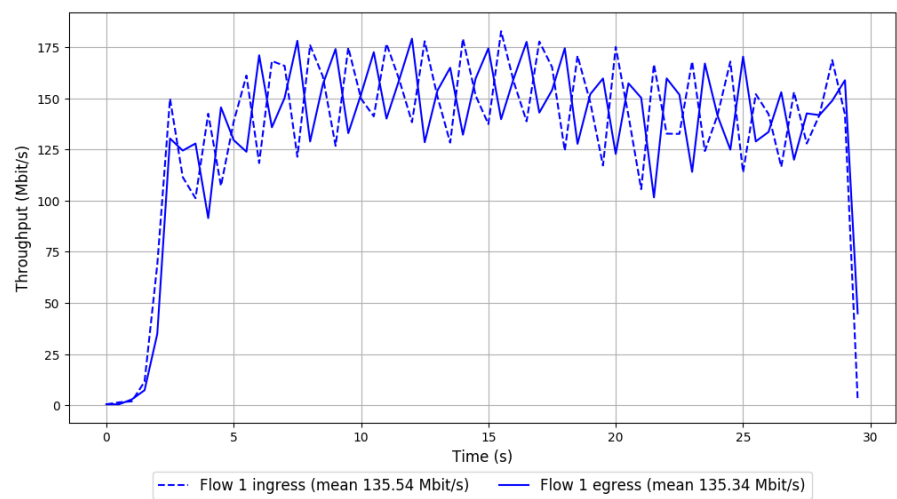
-- Flow 1:

Average throughput: 135.34 Mbit/s

95th percentile per-packet one-way delay: 164.271 ms

Loss rate: 0.16%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-09 10:02:00

End at: 2018-01-09 10:02:30

Below is generated by plot.py at 2018-01-09 12:19:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.48 Mbit/s

95th percentile per-packet one-way delay: 161.967 ms

Loss rate: 0.00%

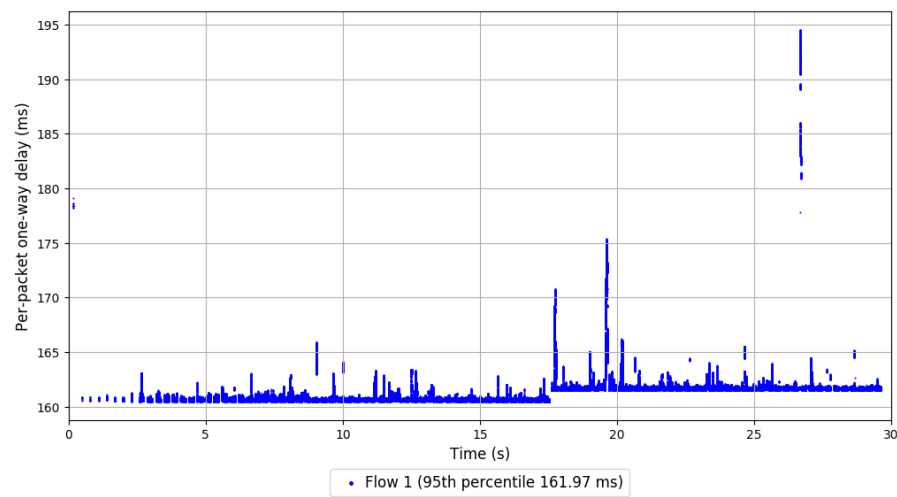
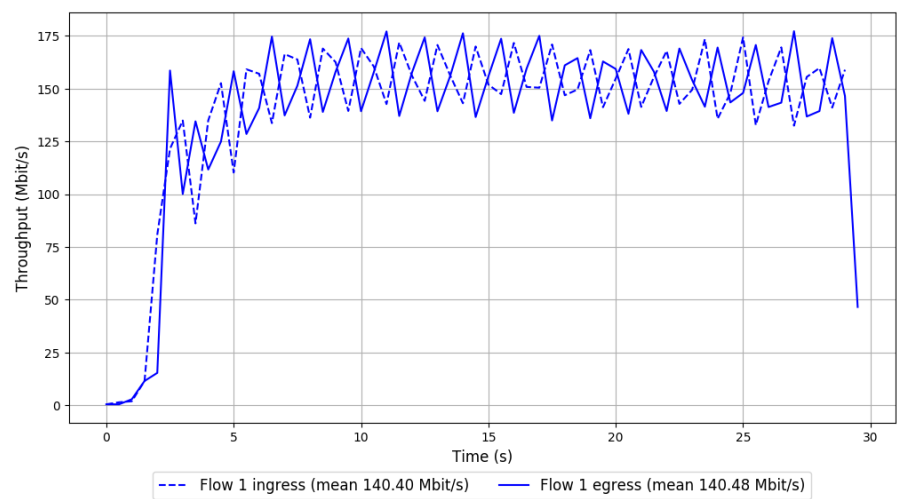
-- Flow 1:

Average throughput: 140.48 Mbit/s

95th percentile per-packet one-way delay: 161.967 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-09 10:14:47

End at: 2018-01-09 10:15:17

Below is generated by plot.py at 2018-01-09 12:19:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.66 Mbit/s

95th percentile per-packet one-way delay: 164.436 ms

Loss rate: 0.00%

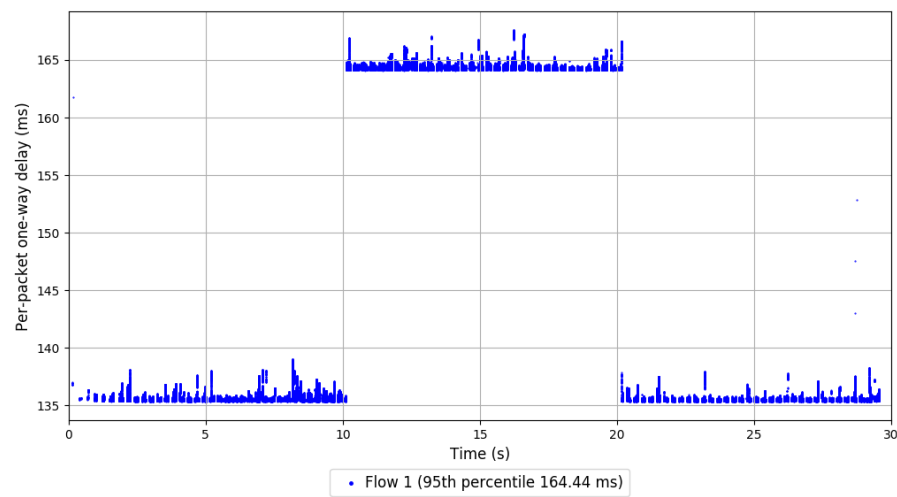
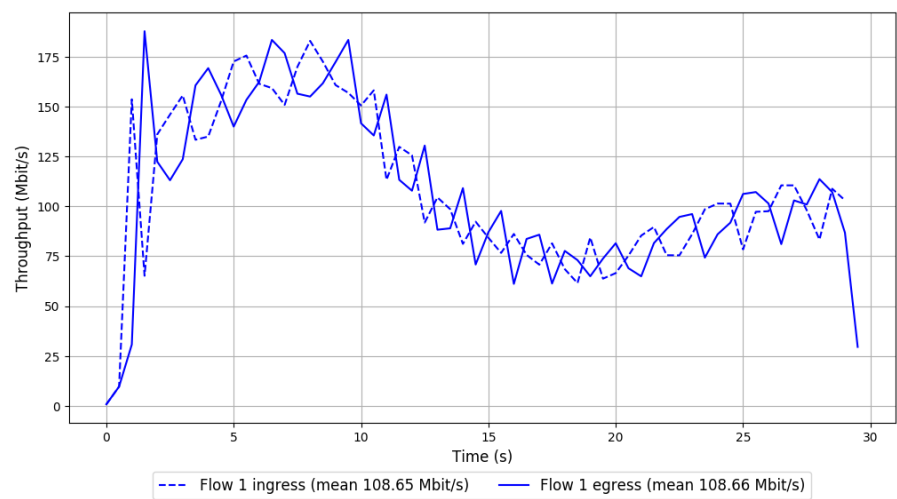
-- Flow 1:

Average throughput: 108.66 Mbit/s

95th percentile per-packet one-way delay: 164.436 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-09 10:27:32

End at: 2018-01-09 10:28:02

Below is generated by plot.py at 2018-01-09 12:19:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 138.53 Mbit/s

95th percentile per-packet one-way delay: 162.161 ms

Loss rate: 0.26%

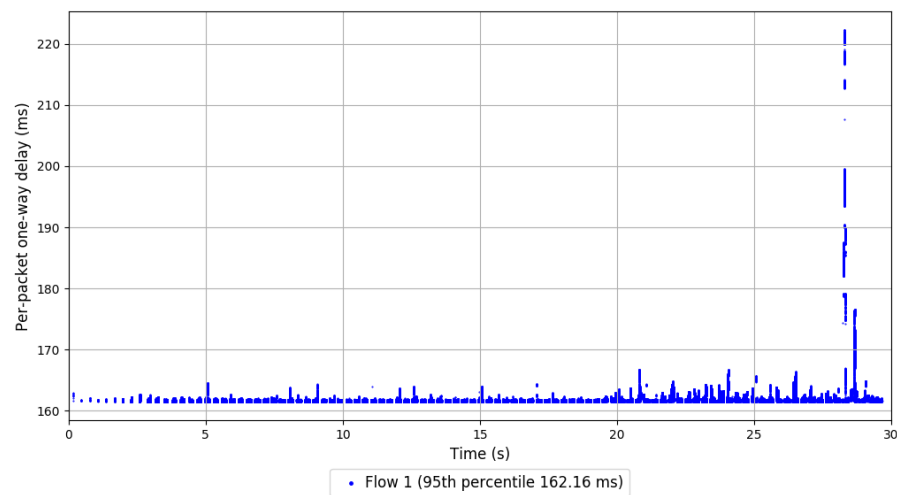
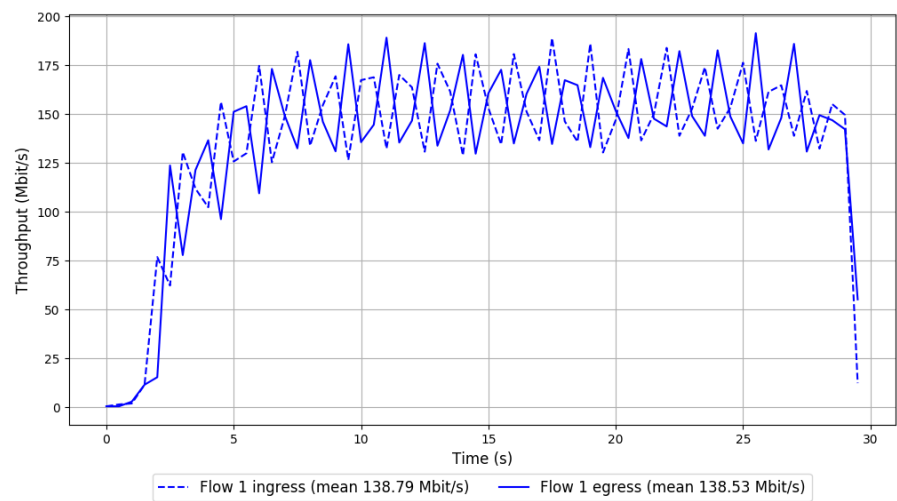
-- Flow 1:

Average throughput: 138.53 Mbit/s

95th percentile per-packet one-way delay: 162.161 ms

Loss rate: 0.26%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-09 10:40:26

End at: 2018-01-09 10:40:56

Below is generated by plot.py at 2018-01-09 12:19:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.92 Mbit/s

95th percentile per-packet one-way delay: 136.833 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 151.92 Mbit/s

95th percentile per-packet one-way delay: 136.833 ms

Loss rate: 0.19%

Run 10: Report of Indigo — Data Link

