

Pantheon Report

Generated at 2018-01-25 21:21:17 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

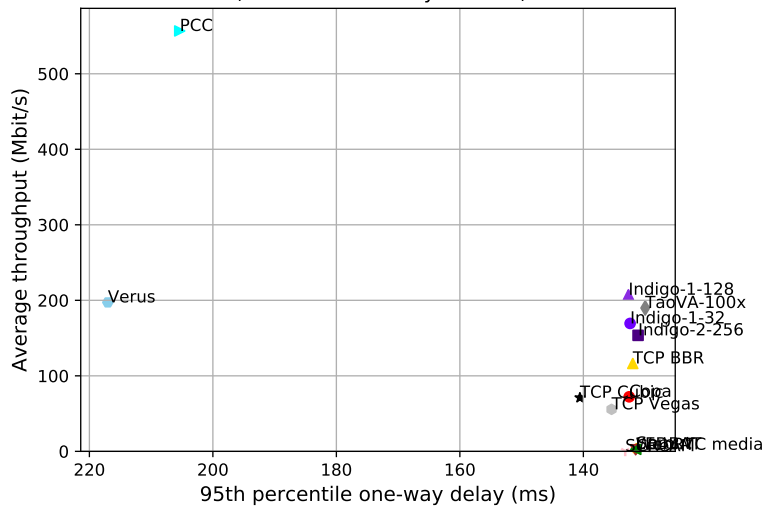
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

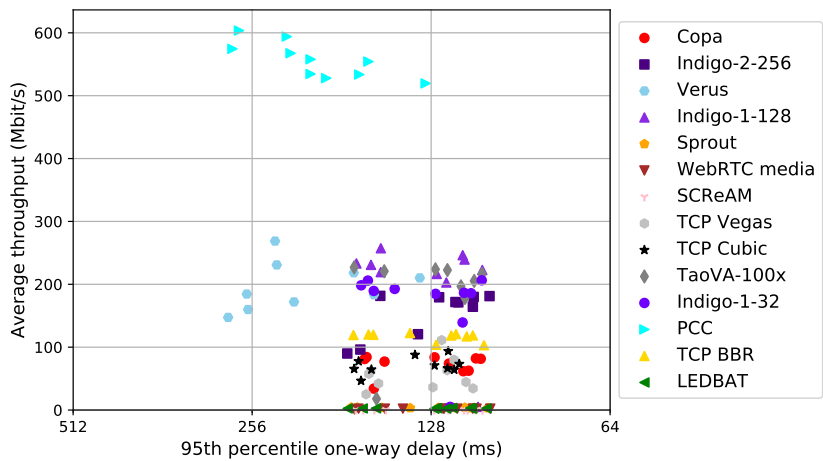
Git summary:

```
branch: master @ f23294ec38436c9f802847d477a41b7343ec76e6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
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 @ f1a14bffe749737437f61b1eaeab30b267cde681
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/vivace @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE Sydney Ethernet to GCE Iowa 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	116.38	132.00	0.68
TCP Cubic	10	71.04	140.56	0.64
LEDBAT	10	2.63	131.51	0.94
PCC	10	556.71	205.37	2.81
QUIC Cubic	0	N/A	N/A	N/A
SCReAM	10	0.22	133.22	0.69
WebRTC media	10	2.08	131.54	0.98
Sprout	10	3.62	131.40	0.91
TaoVA-100x	9	189.85	129.98	0.82
TCP Vegas	10	55.63	135.44	0.59
Verus	9	197.24	217.02	2.51
Copa	10	72.22	132.58	0.55
Indigo-2-256	10	153.61	131.14	0.58
Indigo-1-32	10	169.40	132.43	0.73
Indigo-1-128	10	207.36	132.70	0.62

Run 1: Statistics of TCP BBR

Start at: 2018-01-25 16:20:06

End at: 2018-01-25 16:20:36

Below is generated by plot.py at 2018-01-25 20:39:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.43 Mbit/s

95th percentile per-packet one-way delay: 138.906 ms

Loss rate: 0.64%

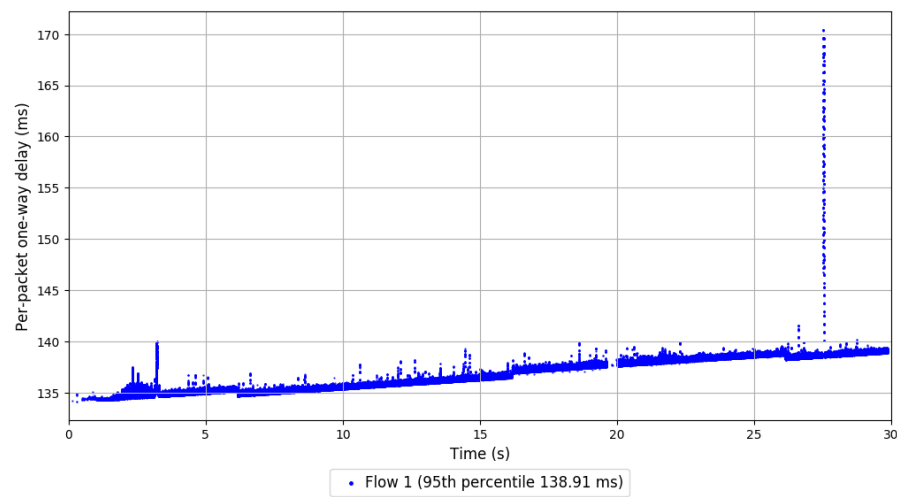
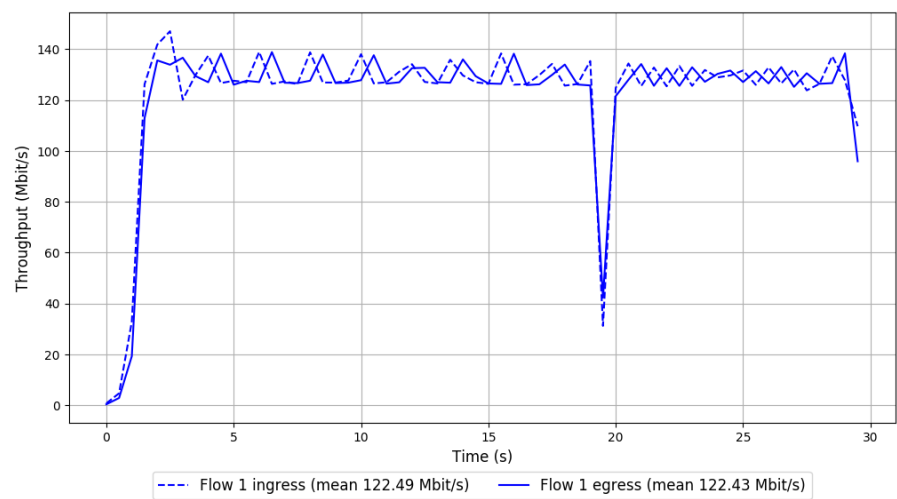
-- Flow 1:

Average throughput: 122.43 Mbit/s

95th percentile per-packet one-way delay: 138.906 ms

Loss rate: 0.64%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-25 16:33:05

End at: 2018-01-25 16:33:35

Below is generated by plot.py at 2018-01-25 20:39:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.66 Mbit/s

95th percentile per-packet one-way delay: 160.079 ms

Loss rate: 0.66%

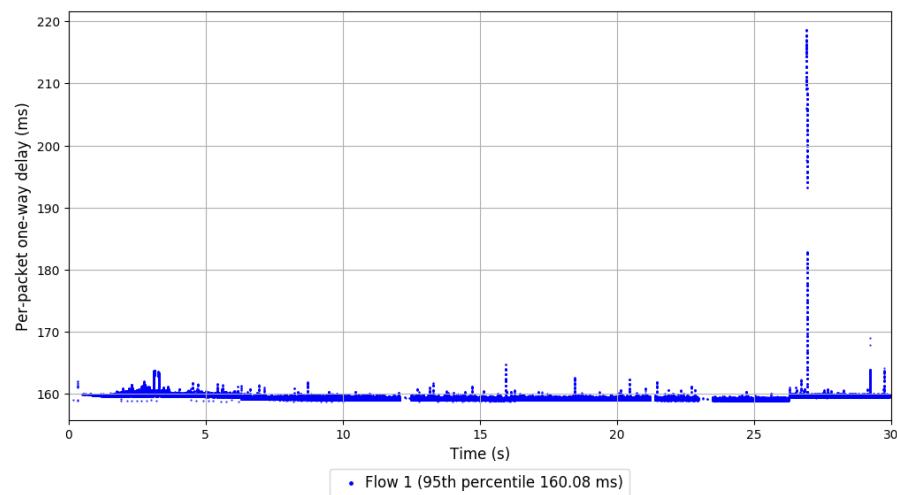
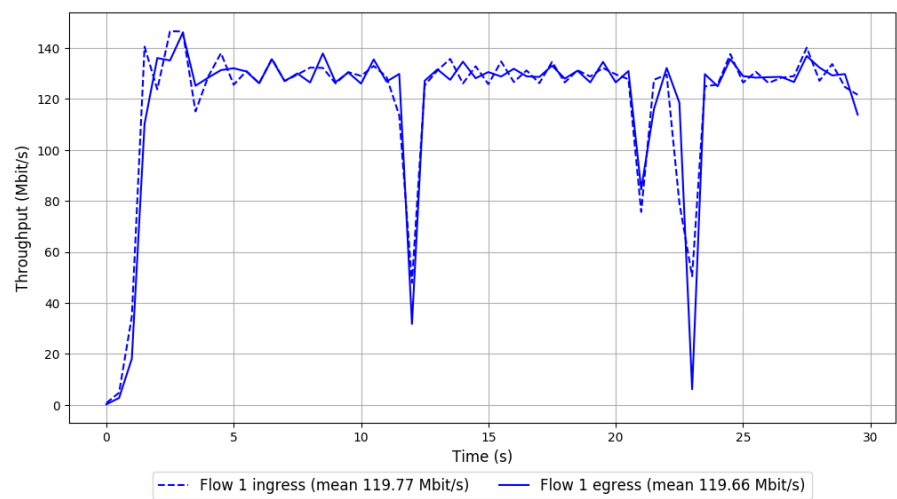
-- Flow 1:

Average throughput: 119.66 Mbit/s

95th percentile per-packet one-way delay: 160.079 ms

Loss rate: 0.66%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-25 16:45:59

End at: 2018-01-25 16:46:29

Below is generated by plot.py at 2018-01-25 20:39:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.33 Mbit/s

95th percentile per-packet one-way delay: 172.920 ms

Loss rate: 0.69%

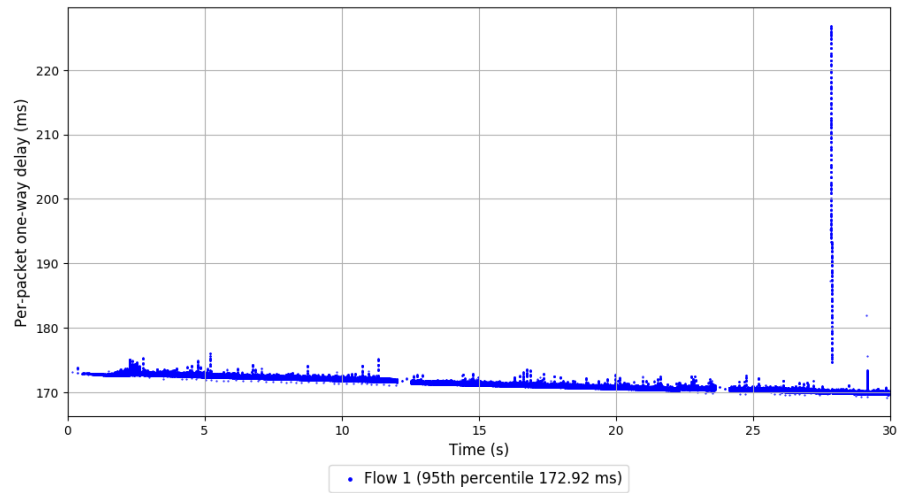
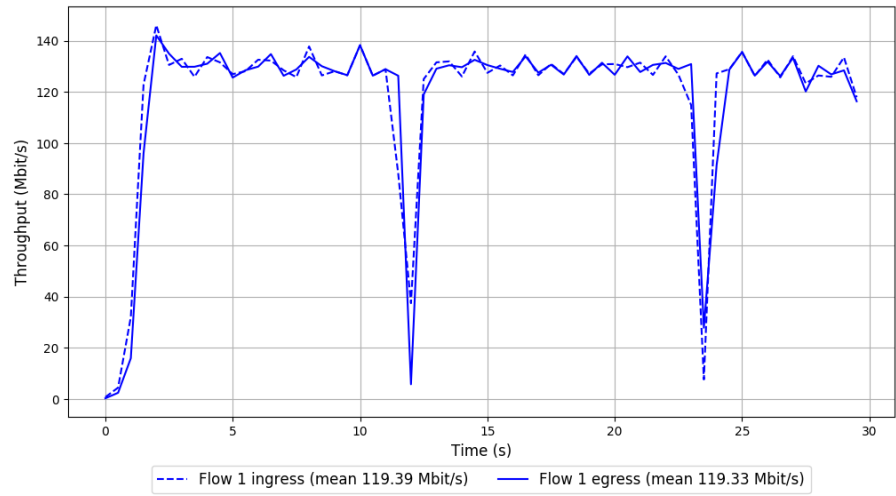
-- Flow 1:

Average throughput: 119.33 Mbit/s

95th percentile per-packet one-way delay: 172.920 ms

Loss rate: 0.69%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-25 16:58:50

End at: 2018-01-25 16:59:20

Below is generated by plot.py at 2018-01-25 20:39:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.13 Mbit/s

95th percentile per-packet one-way delay: 163.143 ms

Loss rate: 0.79%

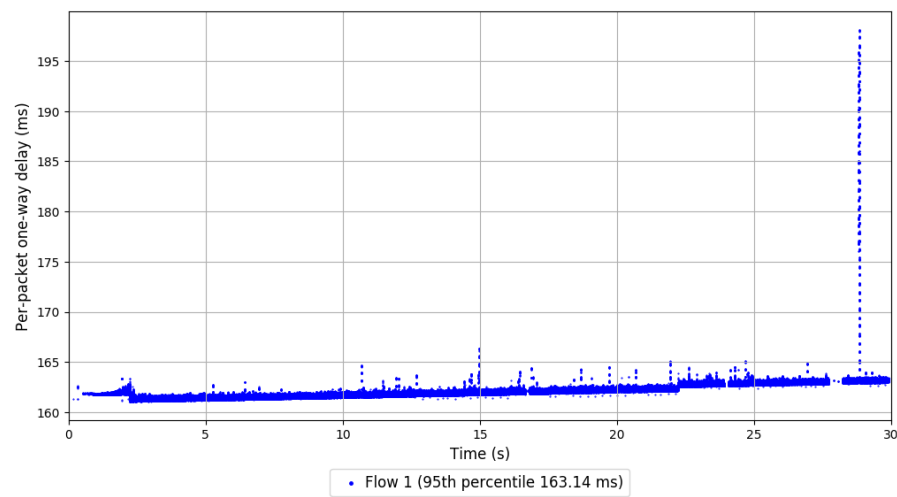
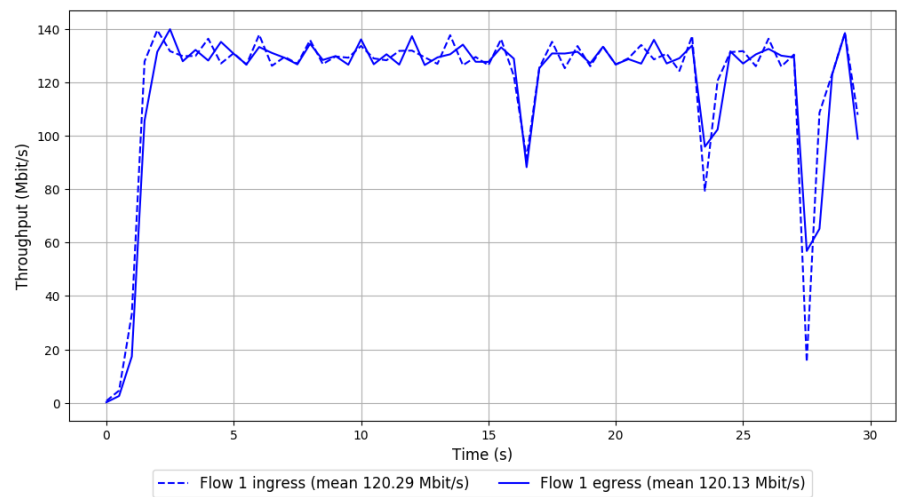
-- Flow 1:

Average throughput: 120.13 Mbit/s

95th percentile per-packet one-way delay: 163.143 ms

Loss rate: 0.79%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-25 17:11:38

End at: 2018-01-25 17:12:08

Below is generated by plot.py at 2018-01-25 20:39:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.86 Mbit/s

95th percentile per-packet one-way delay: 116.233 ms

Loss rate: 0.73%

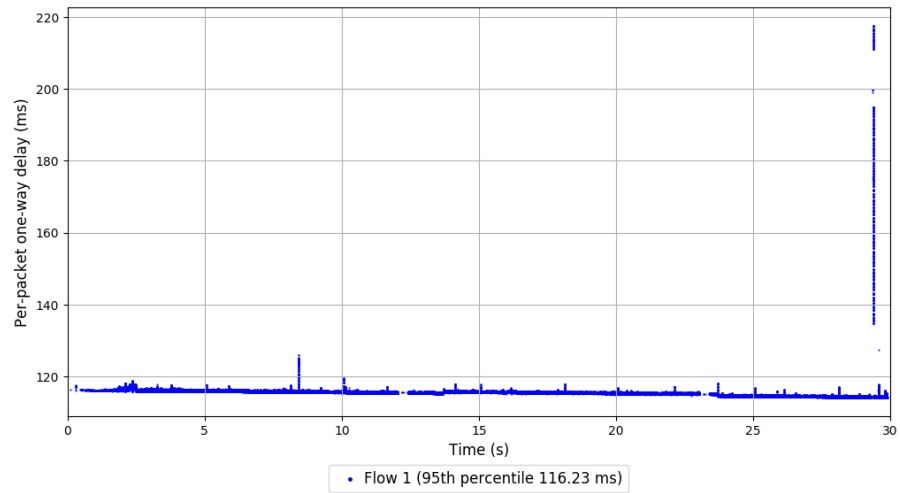
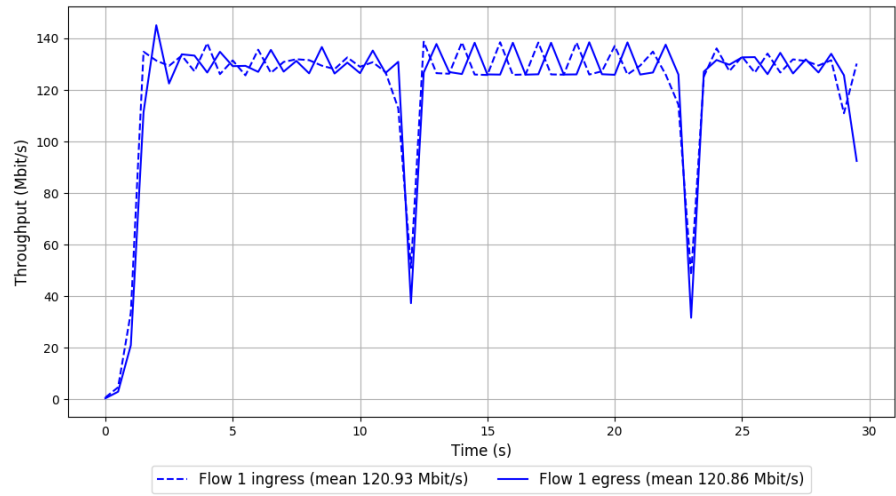
-- Flow 1:

Average throughput: 120.86 Mbit/s

95th percentile per-packet one-way delay: 116.233 ms

Loss rate: 0.73%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-25 17:24:32

End at: 2018-01-25 17:25:02

Below is generated by plot.py at 2018-01-25 20:39:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.17 Mbit/s

95th percentile per-packet one-way delay: 104.324 ms

Loss rate: 0.69%

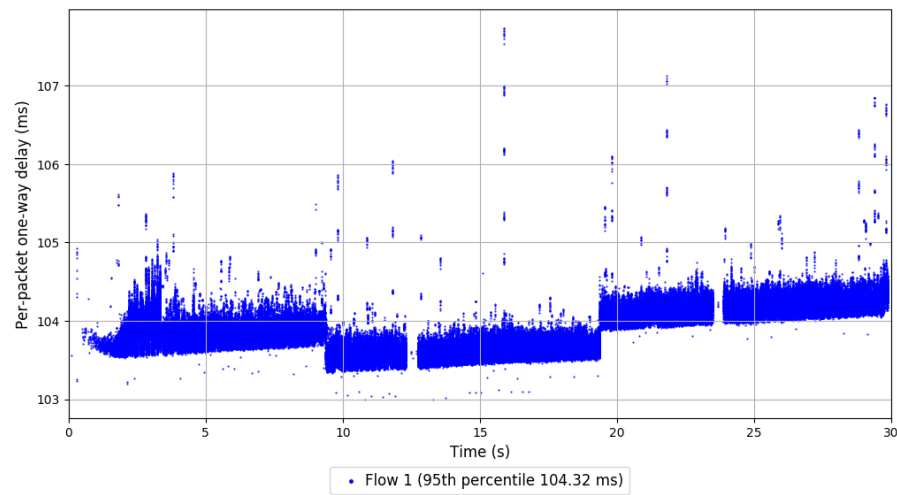
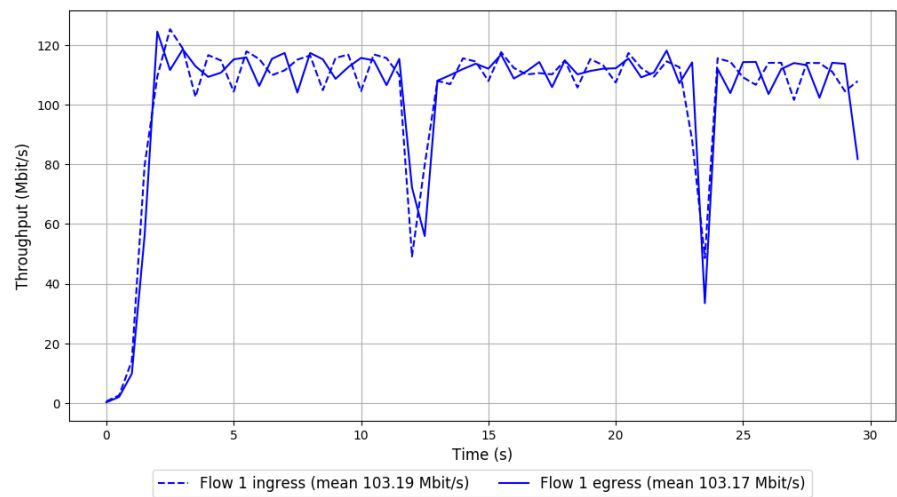
-- Flow 1:

Average throughput: 103.17 Mbit/s

95th percentile per-packet one-way delay: 104.324 ms

Loss rate: 0.69%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-25 17:37:16

End at: 2018-01-25 17:37:46

Below is generated by plot.py at 2018-01-25 20:39:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.16 Mbit/s

95th percentile per-packet one-way delay: 111.525 ms

Loss rate: 0.74%

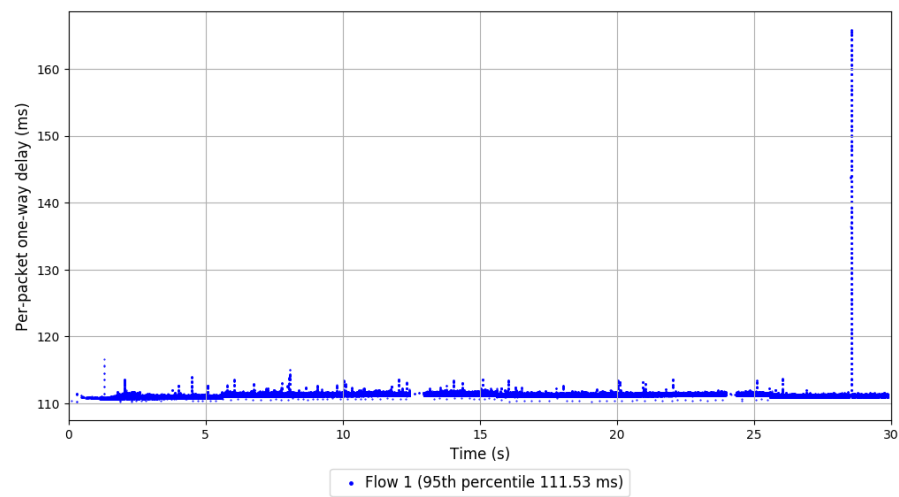
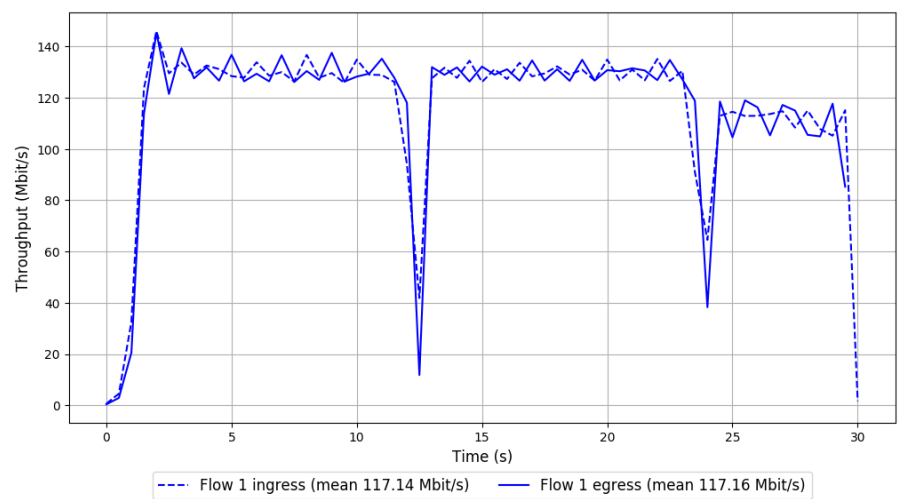
-- Flow 1:

Average throughput: 117.16 Mbit/s

95th percentile per-packet one-way delay: 111.525 ms

Loss rate: 0.74%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-25 17:50:23

End at: 2018-01-25 17:50:53

Below is generated by plot.py at 2018-01-25 20:39:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.72 Mbit/s

95th percentile per-packet one-way delay: 108.904 ms

Loss rate: 0.63%

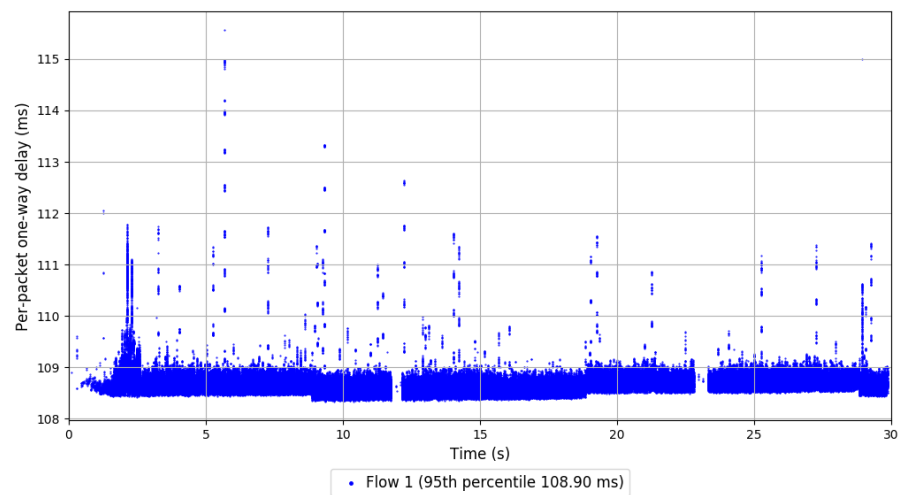
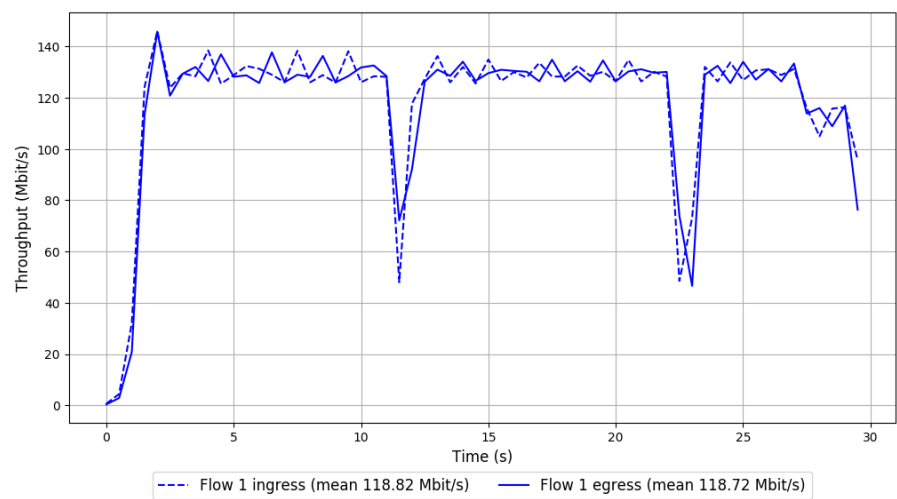
-- Flow 1:

Average throughput: 118.72 Mbit/s

95th percentile per-packet one-way delay: 108.904 ms

Loss rate: 0.63%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-25 18:03:23

End at: 2018-01-25 18:03:53

Below is generated by plot.py at 2018-01-25 20:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.56 Mbit/s

95th percentile per-packet one-way delay: 118.391 ms

Loss rate: 0.60%

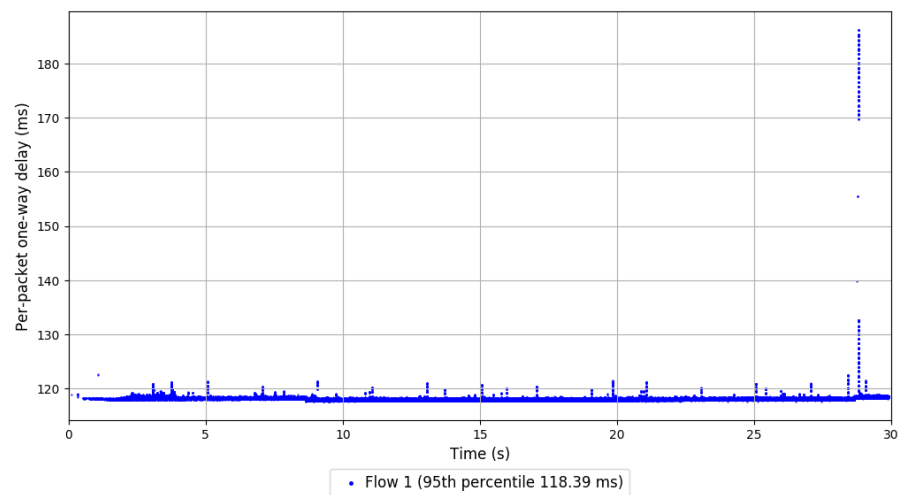
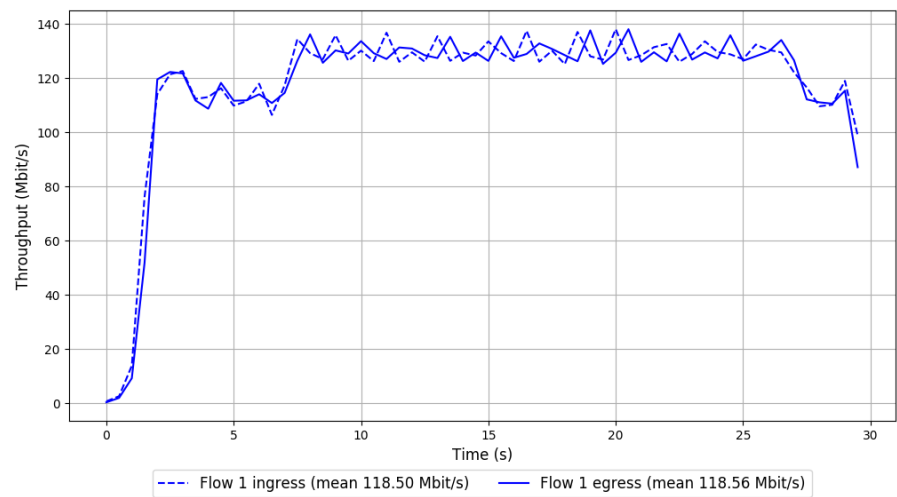
-- Flow 1:

Average throughput: 118.56 Mbit/s

95th percentile per-packet one-way delay: 118.391 ms

Loss rate: 0.60%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-25 18:16:12

End at: 2018-01-25 18:16:42

Below is generated by plot.py at 2018-01-25 20:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.78 Mbit/s

95th percentile per-packet one-way delay: 125.543 ms

Loss rate: 0.68%

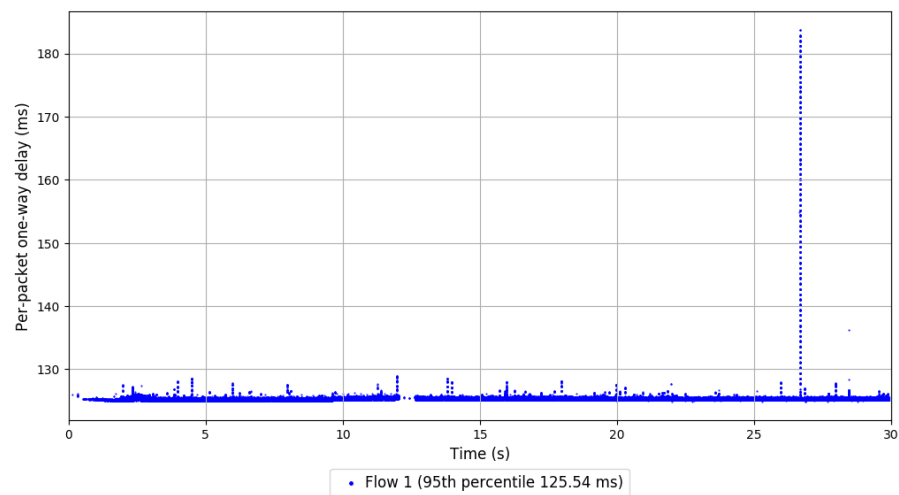
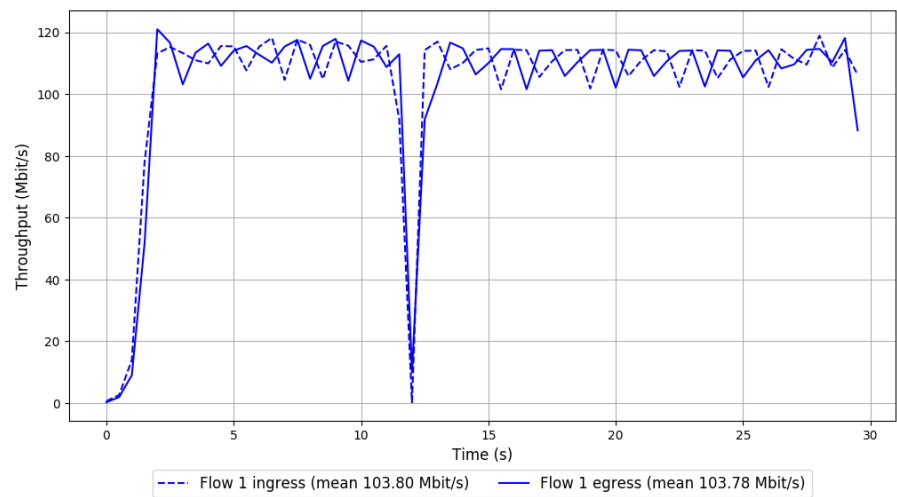
-- Flow 1:

Average throughput: 103.78 Mbit/s

95th percentile per-packet one-way delay: 125.543 ms

Loss rate: 0.68%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-25 16:21:47

End at: 2018-01-25 16:22:17

Below is generated by plot.py at 2018-01-25 20:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.45 Mbit/s

95th percentile per-packet one-way delay: 161.294 ms

Loss rate: 0.67%

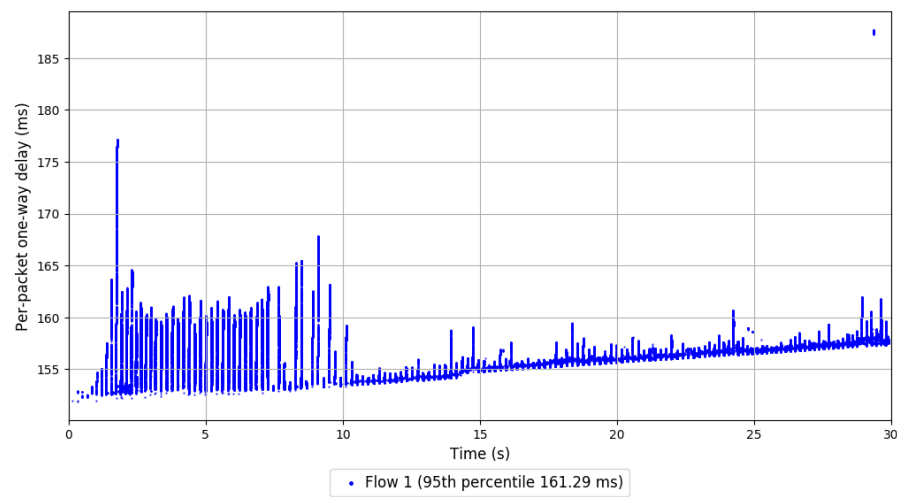
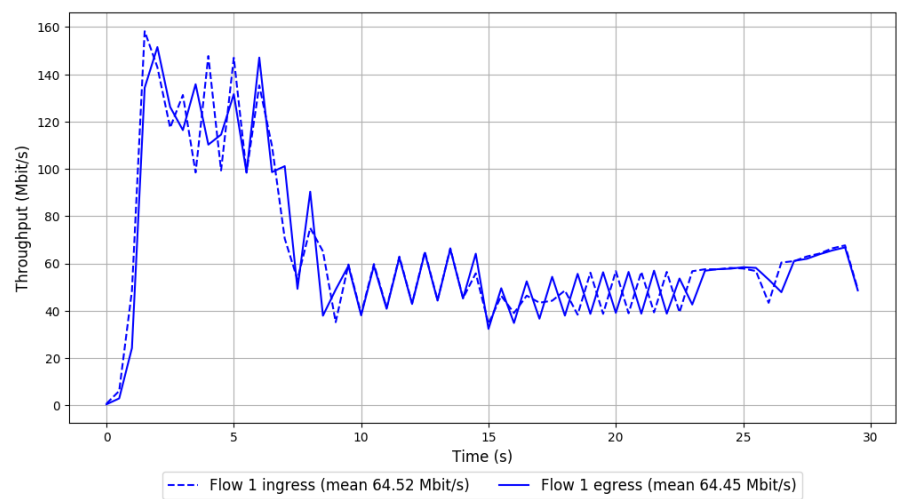
-- Flow 1:

Average throughput: 64.45 Mbit/s

95th percentile per-packet one-way delay: 161.294 ms

Loss rate: 0.67%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-25 16:34:48

End at: 2018-01-25 16:35:18

Below is generated by plot.py at 2018-01-25 20:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.56 Mbit/s

95th percentile per-packet one-way delay: 167.909 ms

Loss rate: 0.54%

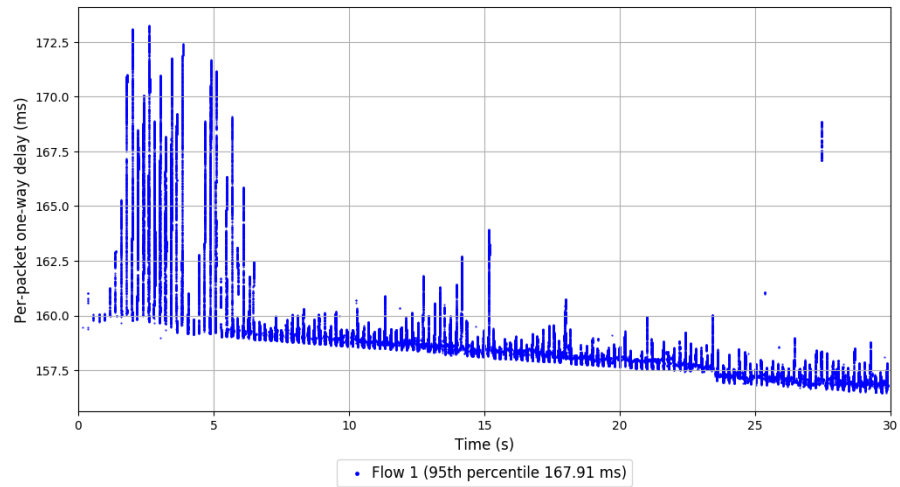
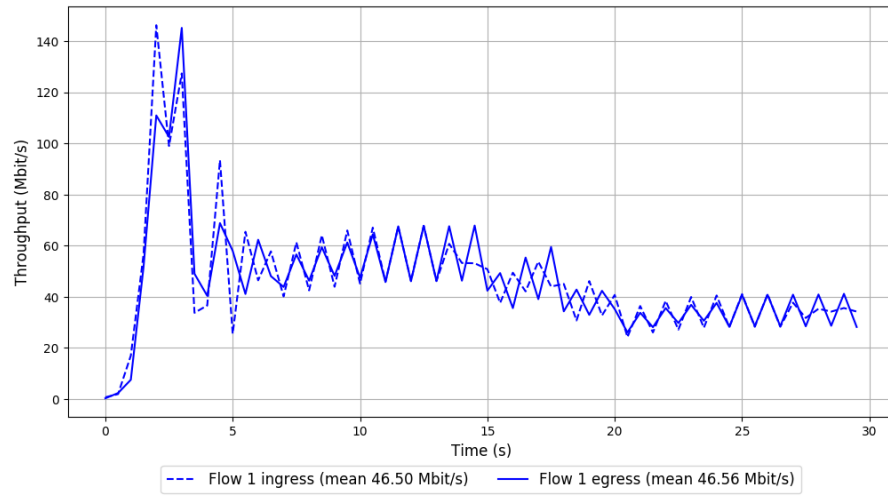
-- Flow 1:

Average throughput: 46.56 Mbit/s

95th percentile per-packet one-way delay: 167.909 ms

Loss rate: 0.54%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-25 16:47:42

End at: 2018-01-25 16:48:12

Below is generated by plot.py at 2018-01-25 20:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.44 Mbit/s

95th percentile per-packet one-way delay: 172.486 ms

Loss rate: 0.66%

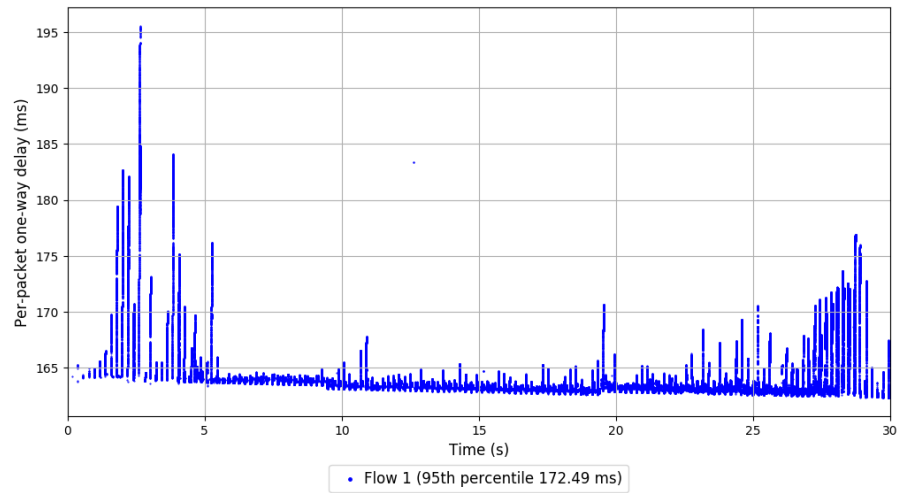
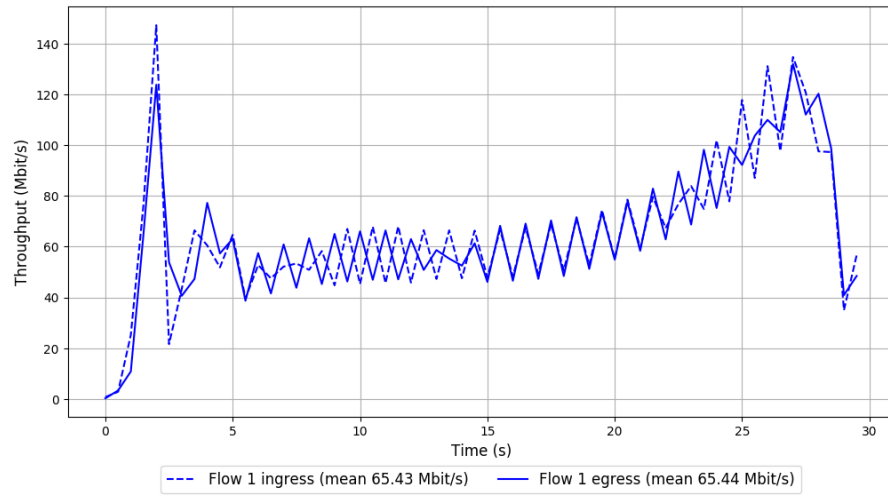
-- Flow 1:

Average throughput: 65.44 Mbit/s

95th percentile per-packet one-way delay: 172.486 ms

Loss rate: 0.66%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-25 17:00:33

End at: 2018-01-25 17:01:03

Below is generated by plot.py at 2018-01-25 20:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.58 Mbit/s

95th percentile per-packet one-way delay: 169.531 ms

Loss rate: 1.04%

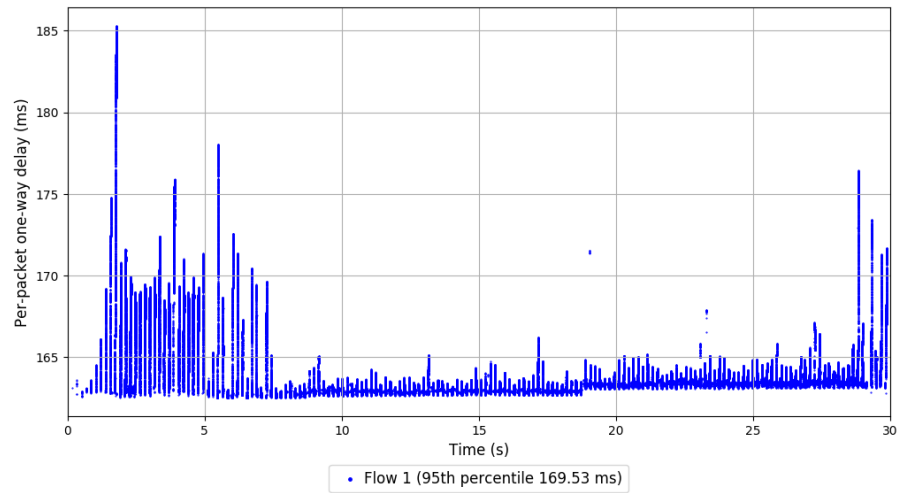
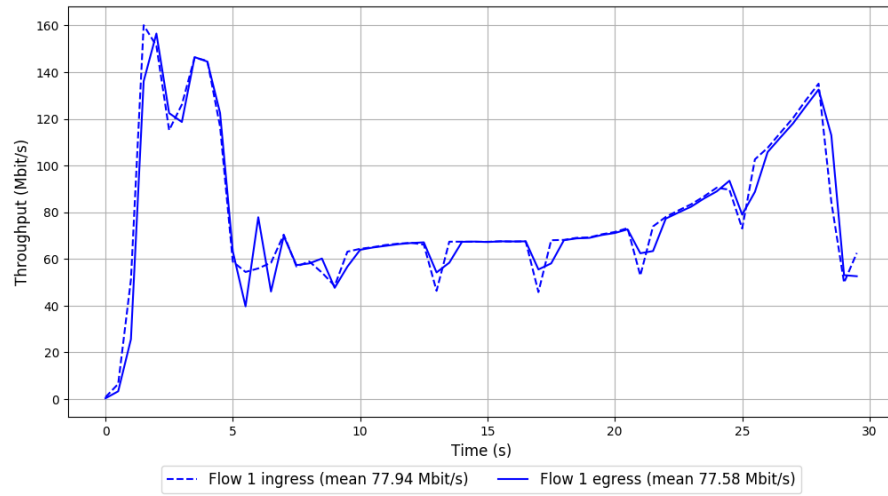
-- Flow 1:

Average throughput: 77.58 Mbit/s

95th percentile per-packet one-way delay: 169.531 ms

Loss rate: 1.04%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-25 17:13:16

End at: 2018-01-25 17:13:46

Below is generated by plot.py at 2018-01-25 20:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.19 Mbit/s

95th percentile per-packet one-way delay: 117.060 ms

Loss rate: 0.62%

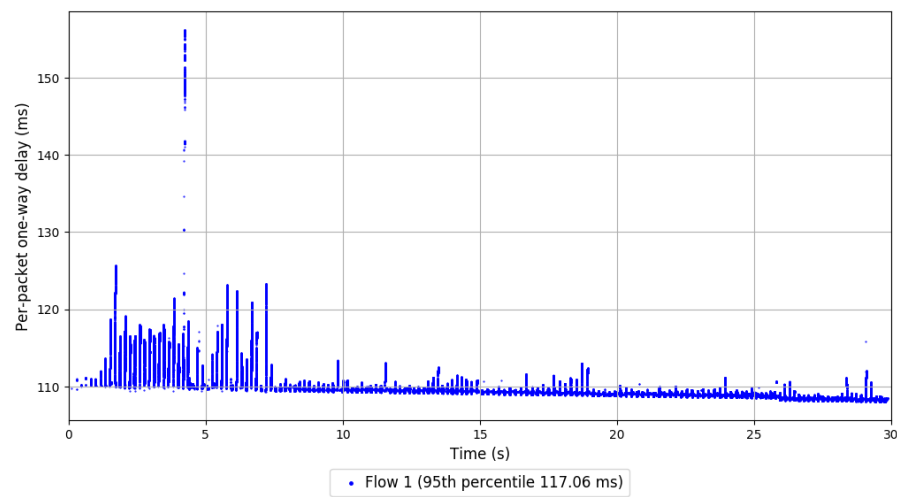
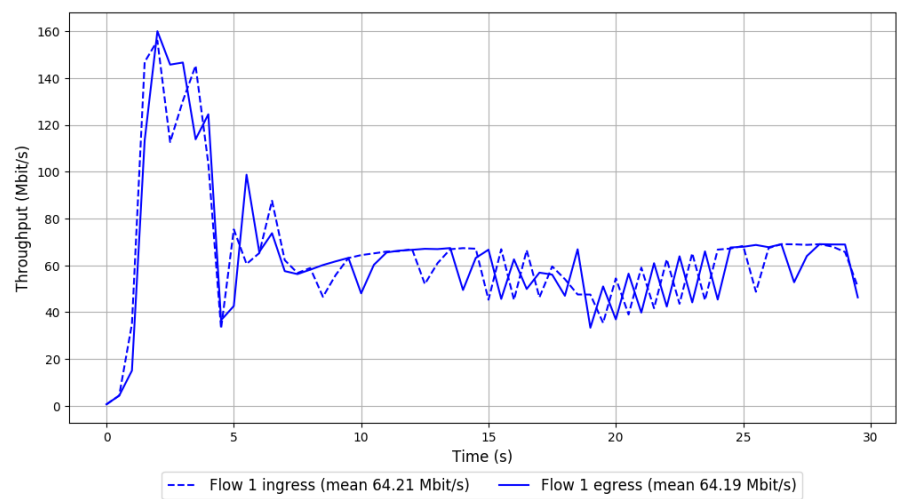
-- Flow 1:

Average throughput: 64.19 Mbit/s

95th percentile per-packet one-way delay: 117.060 ms

Loss rate: 0.62%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-25 17:26:14

End at: 2018-01-25 17:26:44

Below is generated by plot.py at 2018-01-25 20:41:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.29 Mbit/s

95th percentile per-packet one-way delay: 114.769 ms

Loss rate: 0.51%

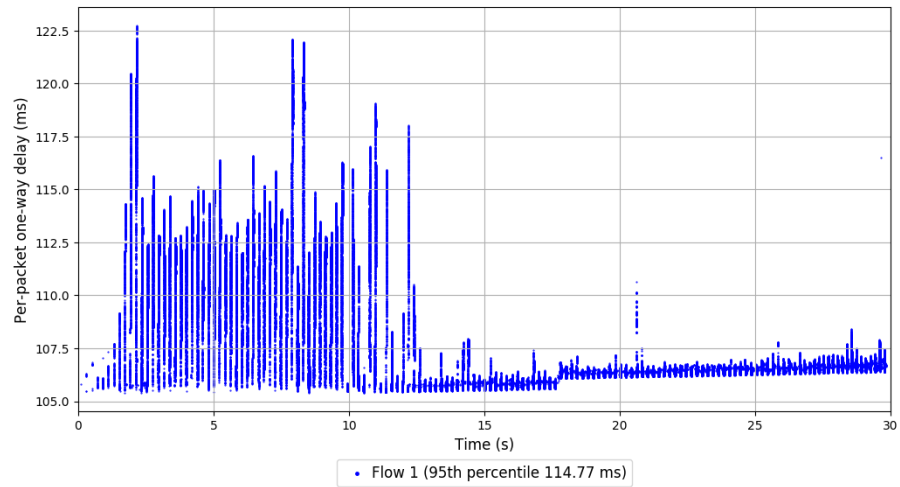
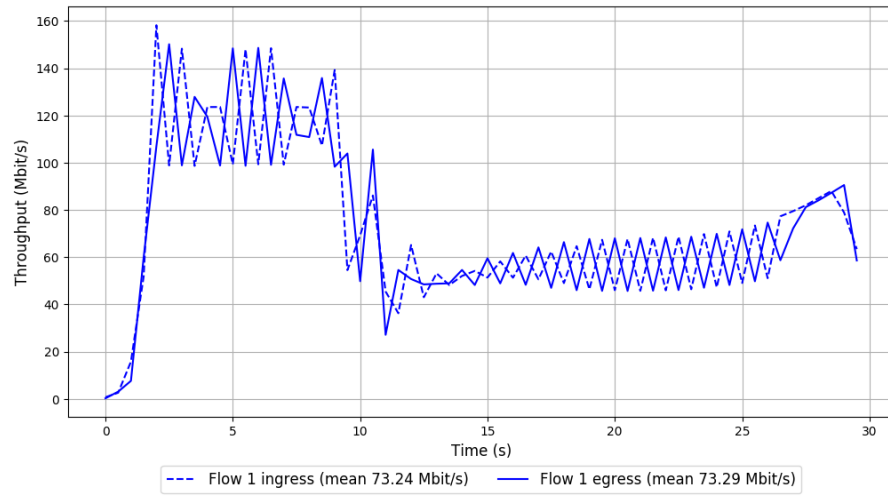
-- Flow 1:

Average throughput: 73.29 Mbit/s

95th percentile per-packet one-way delay: 114.769 ms

Loss rate: 0.51%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-25 17:38:57

End at: 2018-01-25 17:39:27

Below is generated by plot.py at 2018-01-25 20:41:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.41 Mbit/s

95th percentile per-packet one-way delay: 120.119 ms

Loss rate: 0.74%

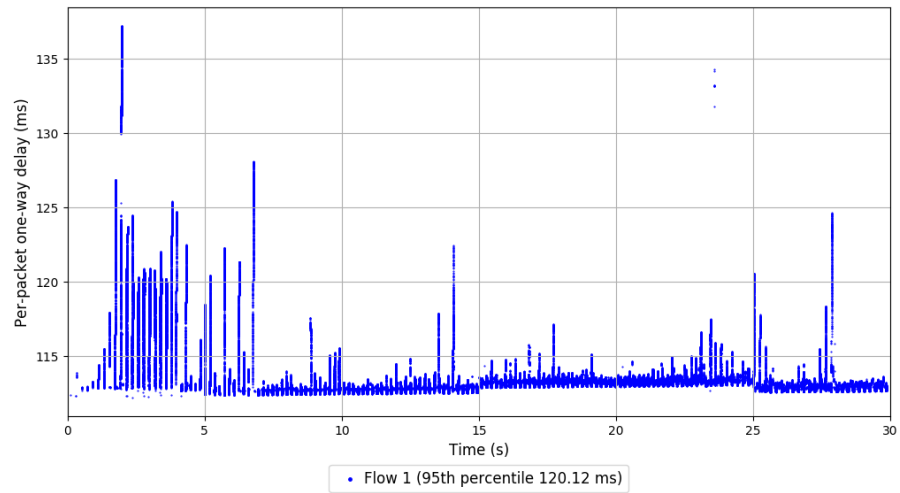
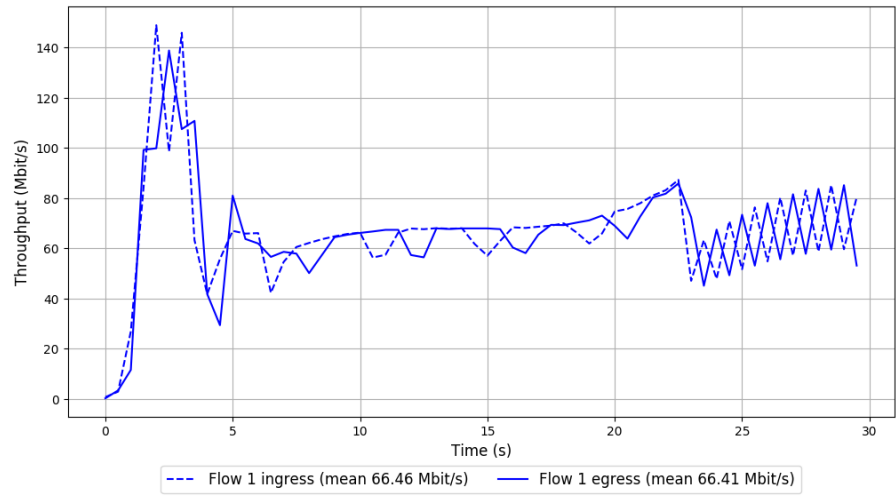
-- Flow 1:

Average throughput: 66.41 Mbit/s

95th percentile per-packet one-way delay: 120.119 ms

Loss rate: 0.74%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-25 17:52:04

End at: 2018-01-25 17:52:34

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.74 Mbit/s

95th percentile per-packet one-way delay: 119.812 ms

Loss rate: 0.32%

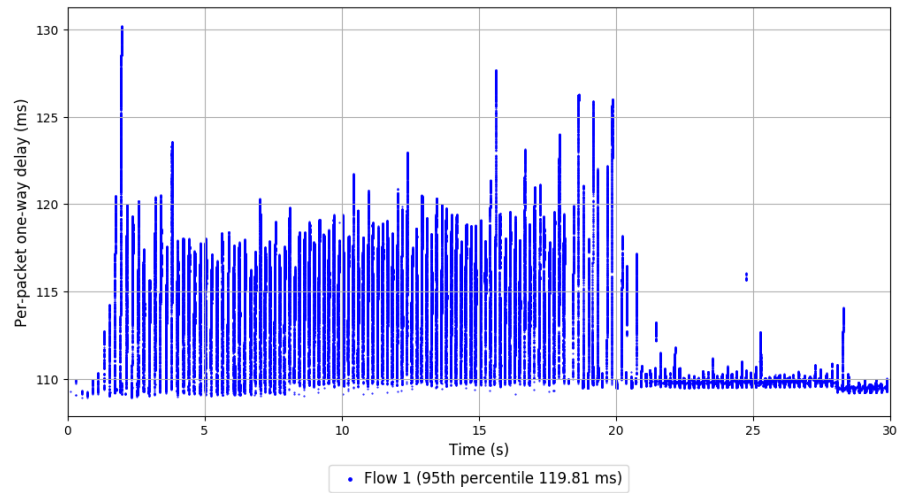
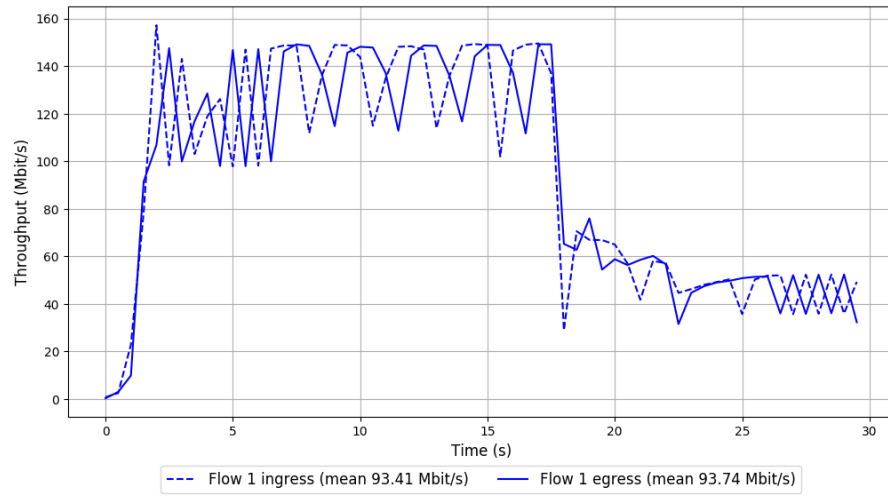
-- Flow 1:

Average throughput: 93.74 Mbit/s

95th percentile per-packet one-way delay: 119.812 ms

Loss rate: 0.32%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-25 18:04:51

End at: 2018-01-25 18:05:21

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.95 Mbit/s

95th percentile per-packet one-way delay: 126.352 ms

Loss rate: 0.84%

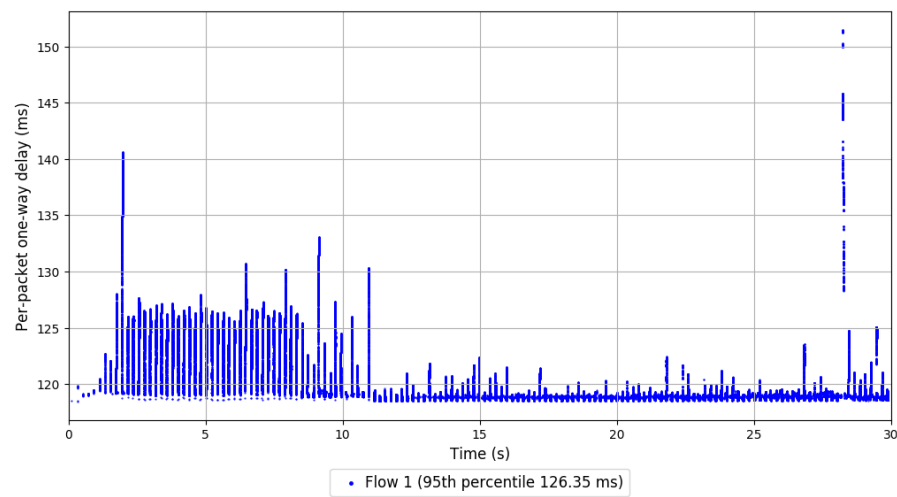
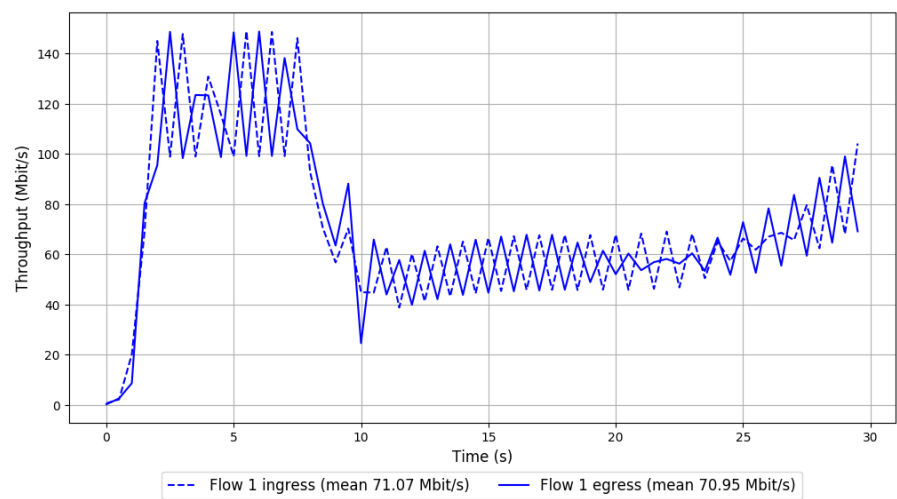
-- Flow 1:

Average throughput: 70.95 Mbit/s

95th percentile per-packet one-way delay: 126.352 ms

Loss rate: 0.84%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-25 18:17:52

End at: 2018-01-25 18:18:22

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.79 Mbit/s

95th percentile per-packet one-way delay: 136.241 ms

Loss rate: 0.44%

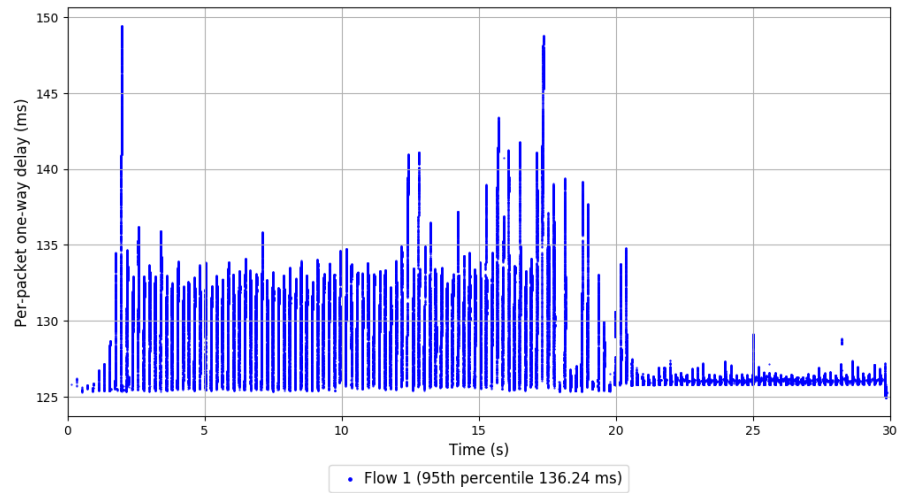
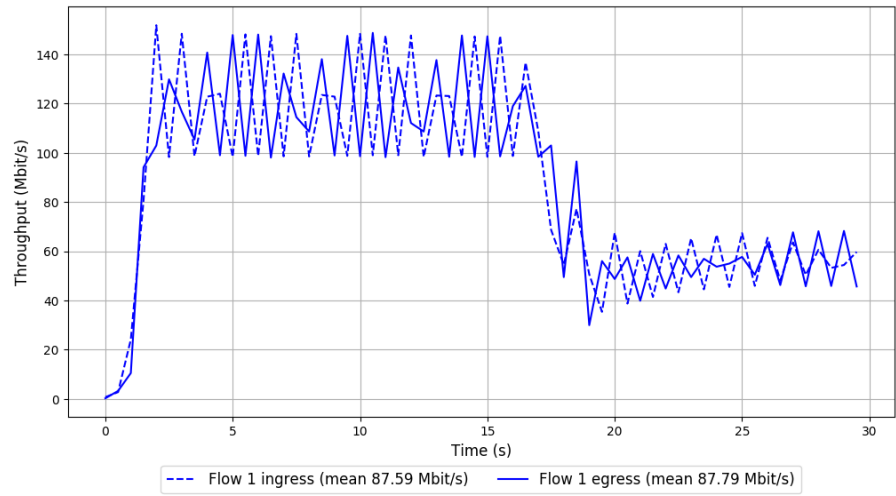
-- Flow 1:

Average throughput: 87.79 Mbit/s

95th percentile per-packet one-way delay: 136.241 ms

Loss rate: 0.44%

Run 10: Report of TCP Cubic — Data Link

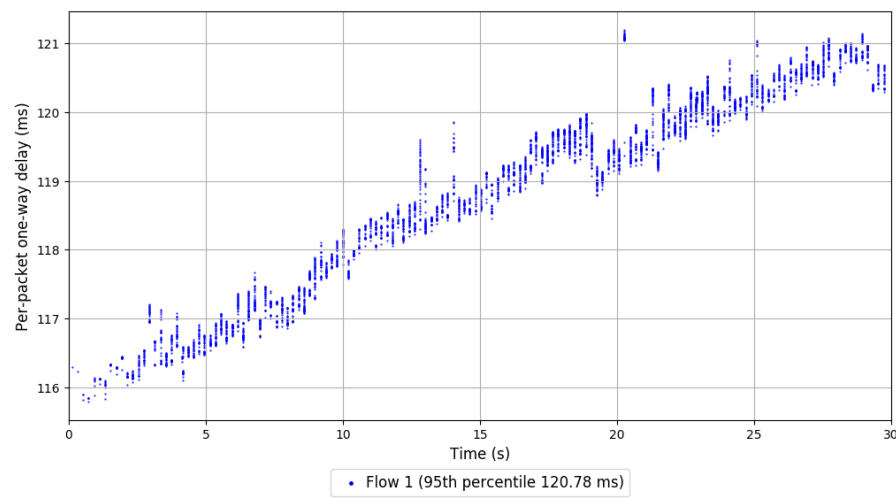
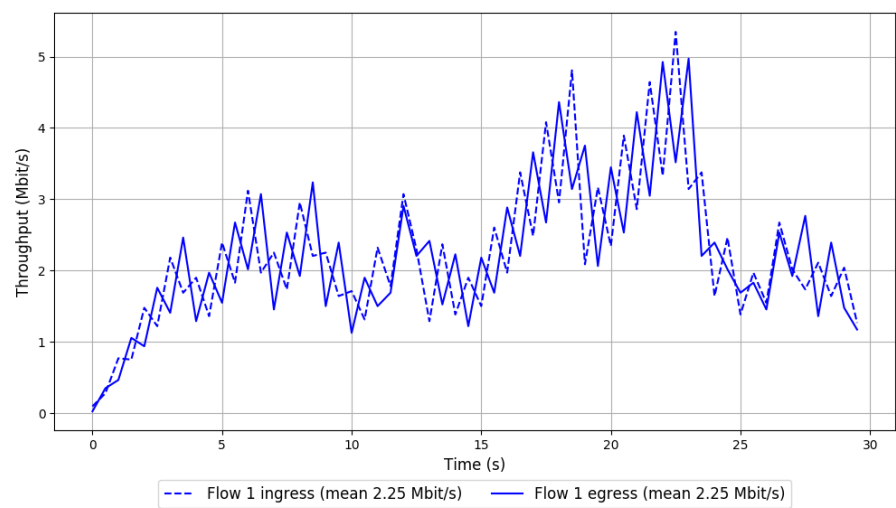


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-25 16:18:23
End at: 2018-01-25 16:18:53

# Below is generated by plot.py at 2018-01-25 20:41:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 120.779 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 120.779 ms
Loss rate: 0.53%
```


Run 1: Report of LEDBAT — Data Link

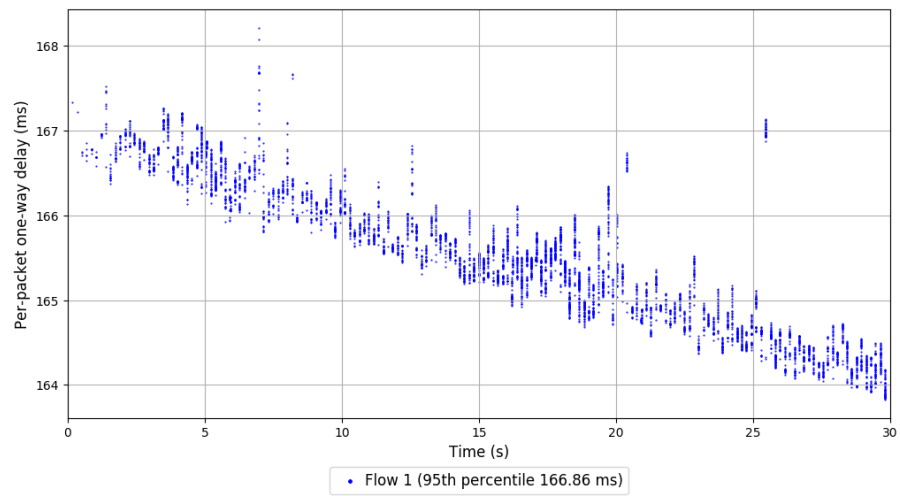
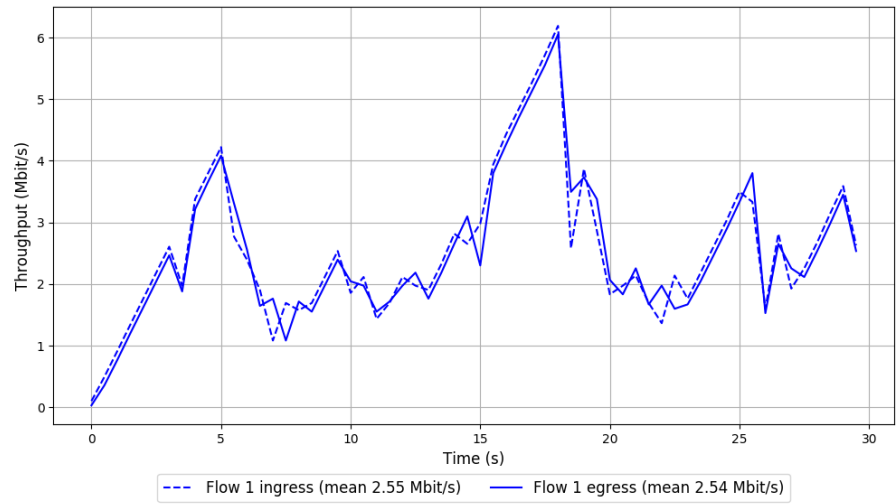


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-25 16:31:22
End at: 2018-01-25 16:31:52

# Below is generated by plot.py at 2018-01-25 20:41:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 166.861 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 166.861 ms
Loss rate: 1.17%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-25 16:44:15

End at: 2018-01-25 16:44:45

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 176.862 ms

Loss rate: 0.88%

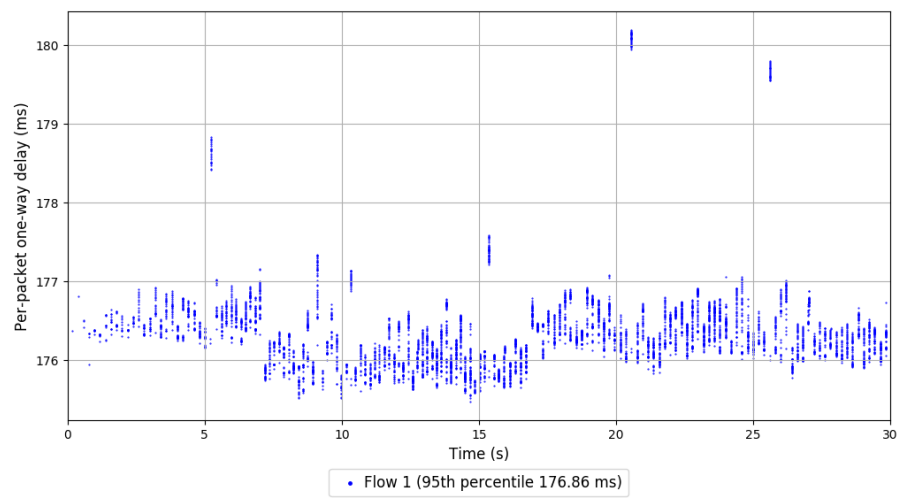
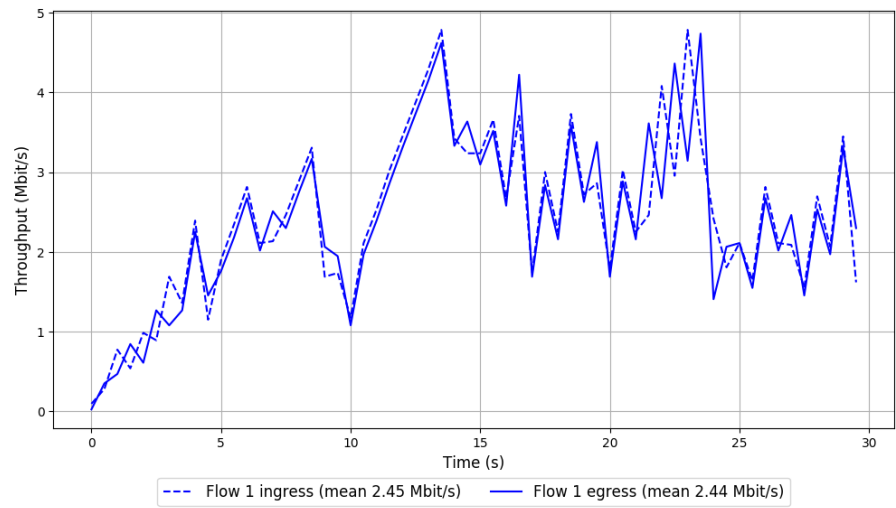
-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 176.862 ms

Loss rate: 0.88%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-25 16:57:05

End at: 2018-01-25 16:57:35

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 158.489 ms

Loss rate: 1.45%

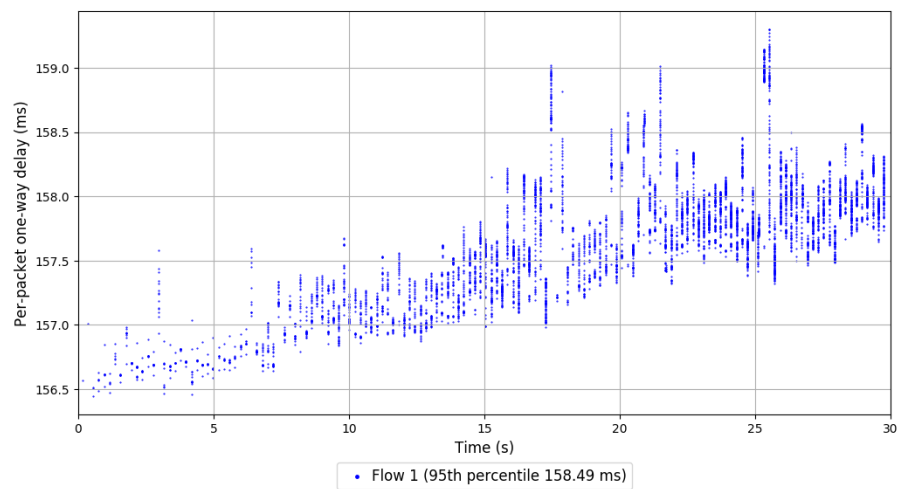
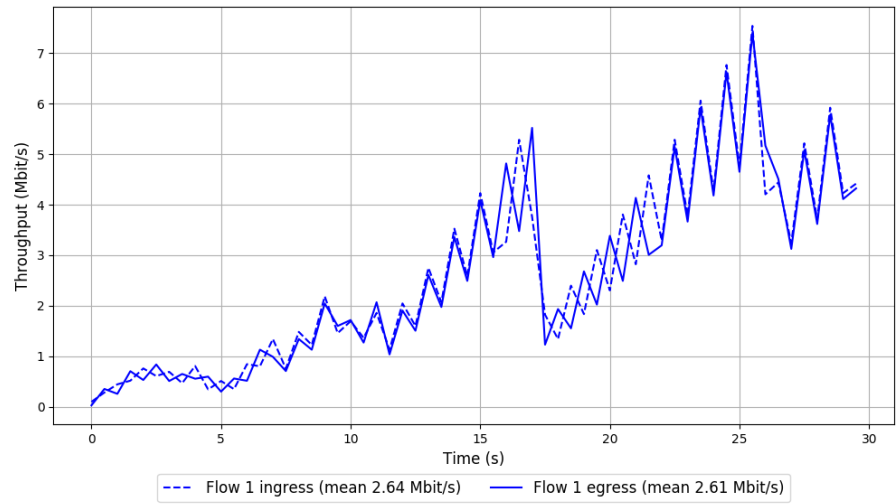
-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 158.489 ms

Loss rate: 1.45%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-25 17:09:55

End at: 2018-01-25 17:10:25

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 126.422 ms

Loss rate: 0.99%

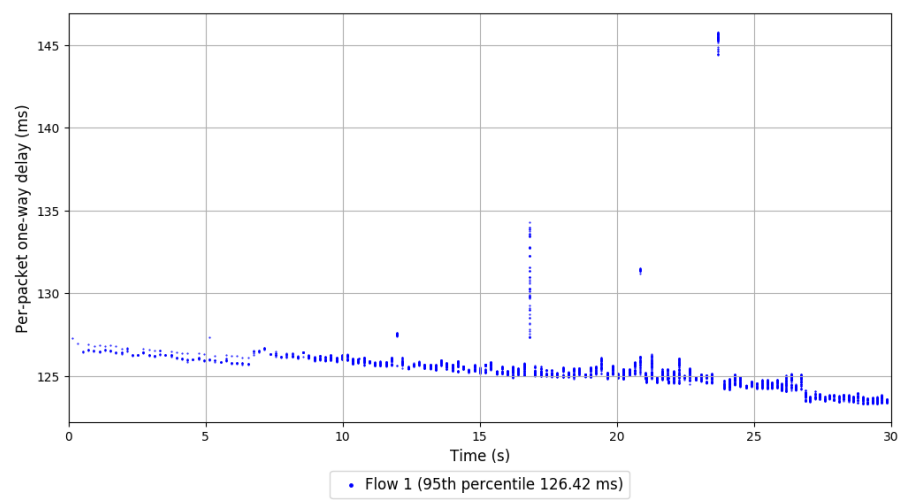
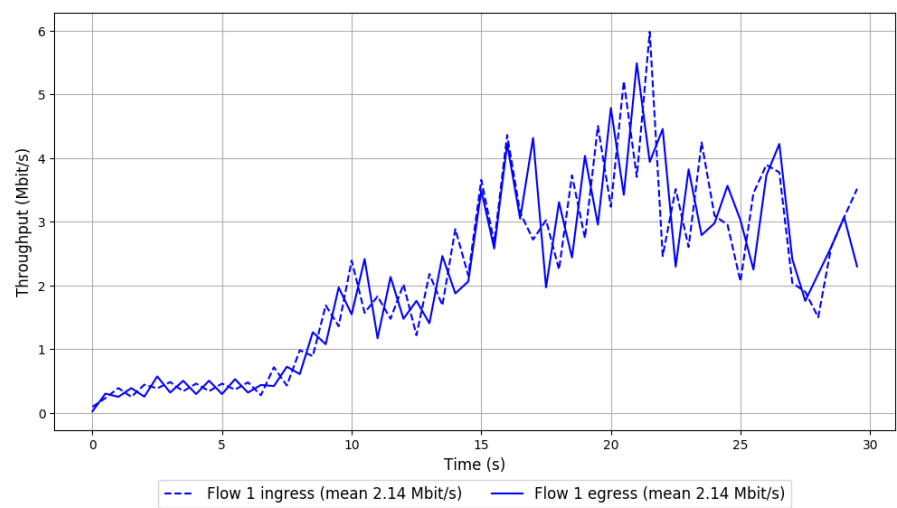
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 126.422 ms

Loss rate: 0.99%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-25 17:22:46

End at: 2018-01-25 17:23:16

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 103.319 ms

Loss rate: 0.93%

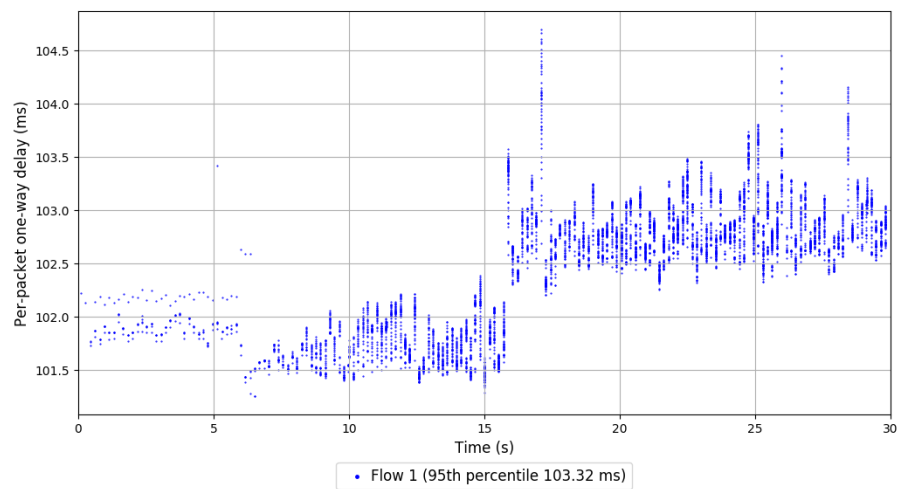
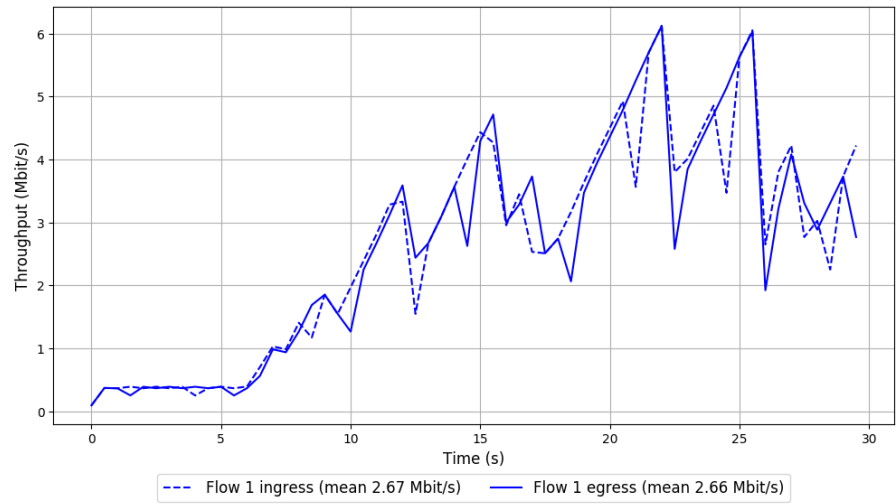
-- Flow 1:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 103.319 ms

Loss rate: 0.93%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-25 17:35:32

End at: 2018-01-25 17:36:02

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 110.029 ms

Loss rate: 1.08%

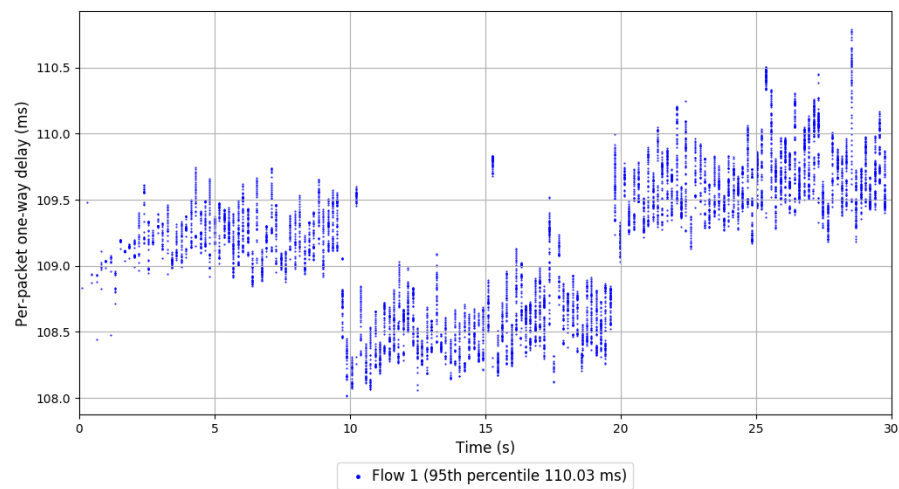
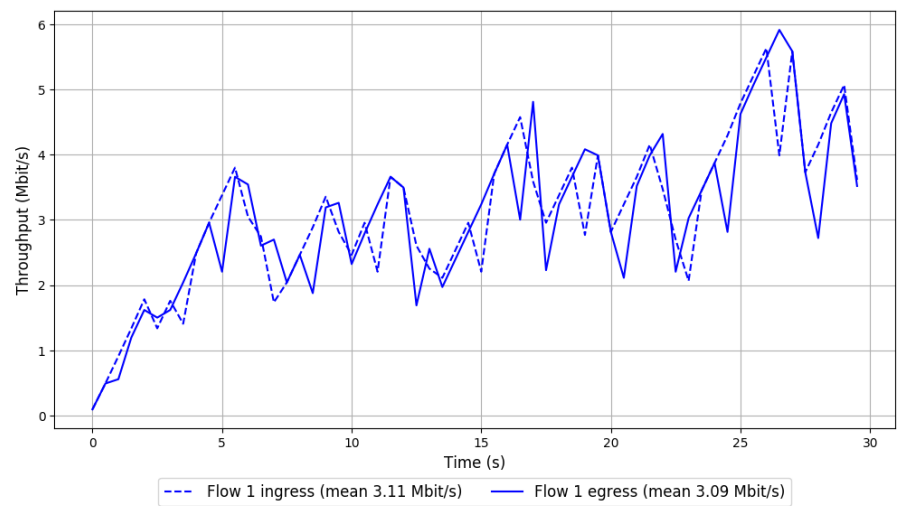
-- Flow 1:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 110.029 ms

Loss rate: 1.08%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-25 17:48:40

End at: 2018-01-25 17:49:10

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 109.342 ms

Loss rate: 1.11%

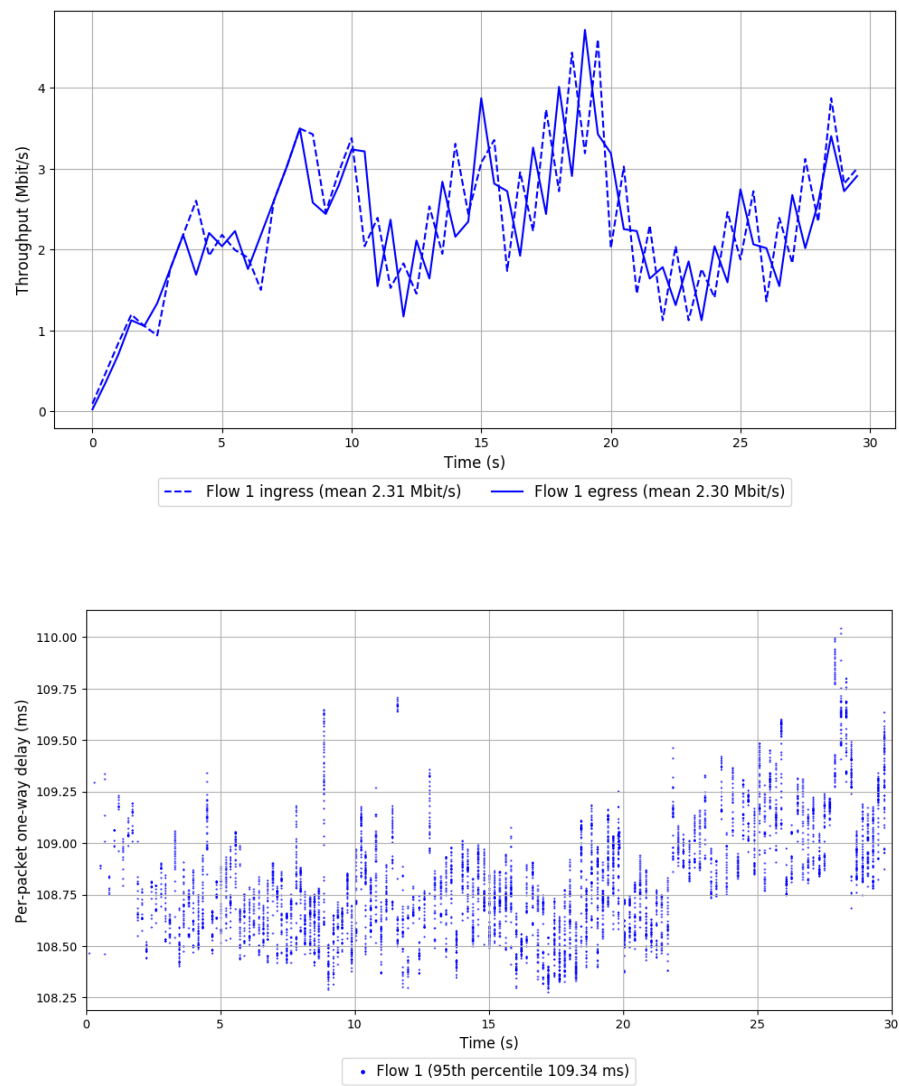
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 109.342 ms

Loss rate: 1.11%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-25 18:01:38

End at: 2018-01-25 18:02:09

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 117.914 ms

Loss rate: 0.49%

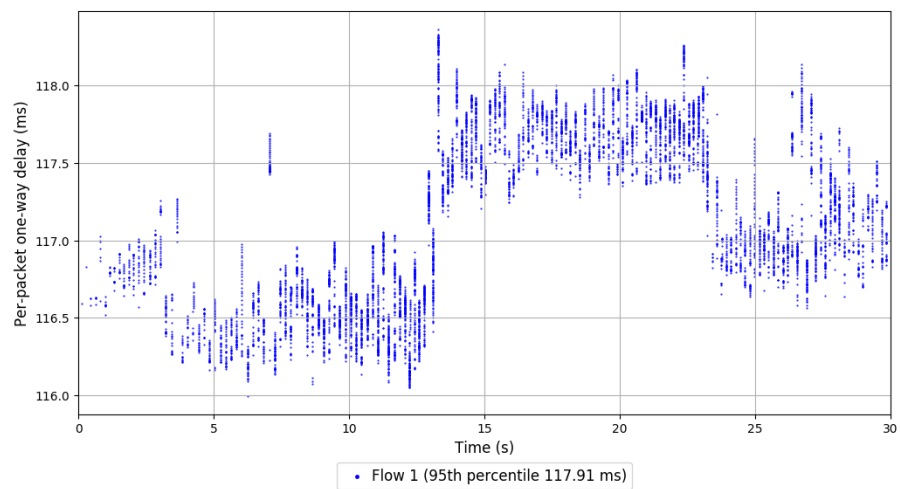
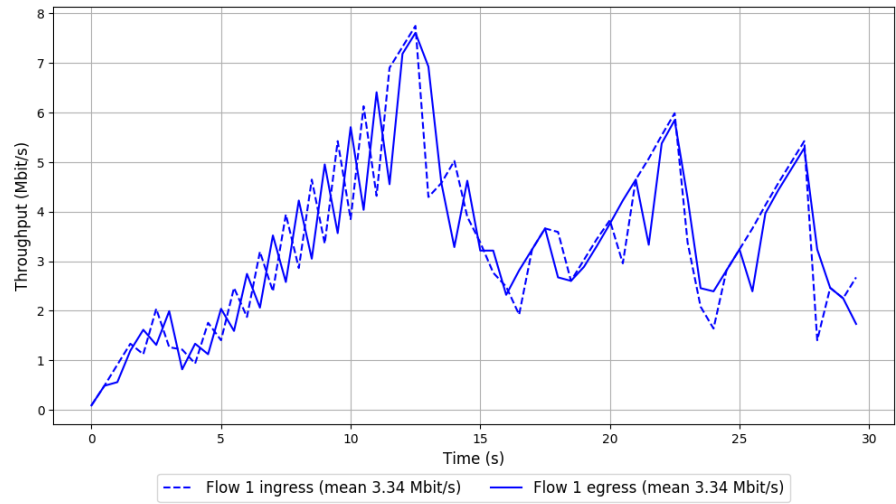
-- Flow 1:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 117.914 ms

Loss rate: 0.49%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-25 18:14:27

End at: 2018-01-25 18:14:57

Below is generated by plot.py at 2018-01-25 20:41:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 125.104 ms

Loss rate: 0.78%

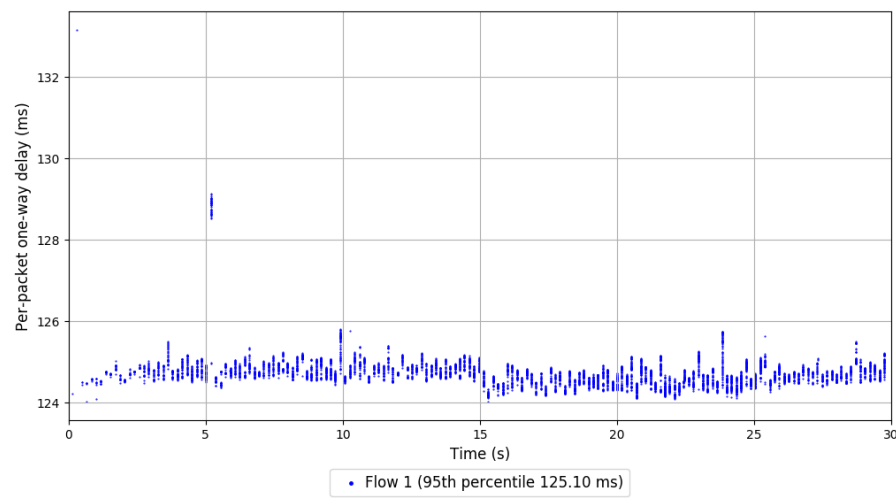
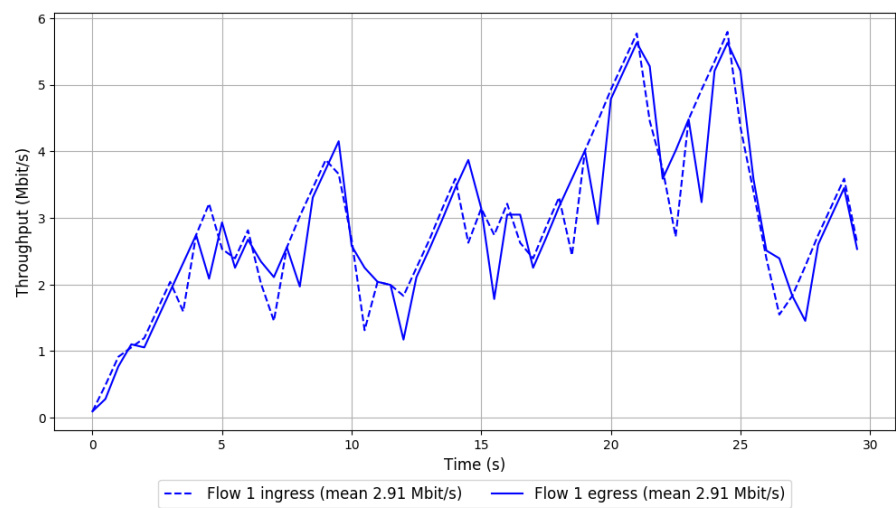
-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 125.104 ms

Loss rate: 0.78%

Run 10: Report of LEDBAT — Data Link

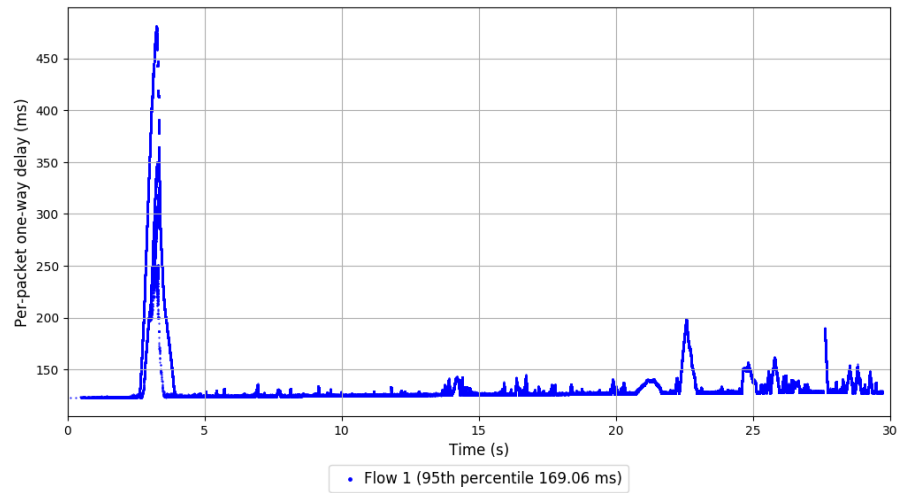
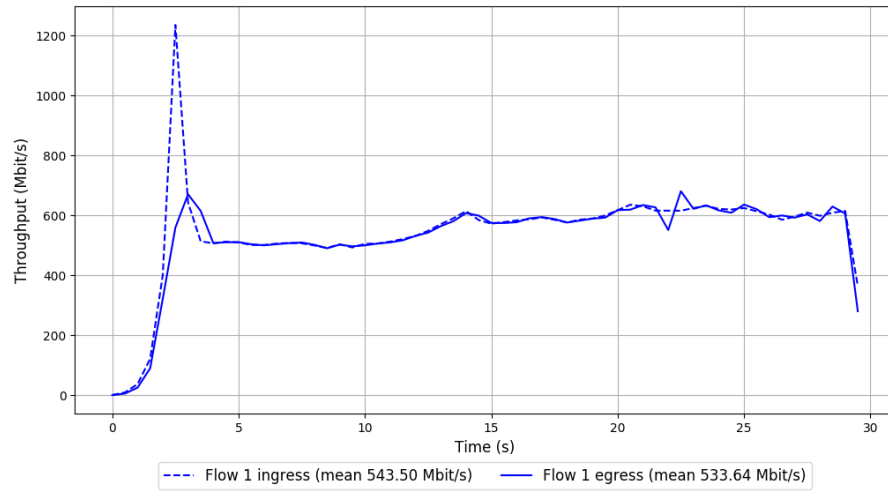


```
Run 1: Statistics of PCC

Start at: 2018-01-25 16:19:03
End at: 2018-01-25 16:19:33

# Below is generated by plot.py at 2018-01-25 20:50:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 533.64 Mbit/s
95th percentile per-packet one-way delay: 169.057 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 533.64 Mbit/s
95th percentile per-packet one-way delay: 169.057 ms
Loss rate: 2.46%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-25 16:32:02

End at: 2018-01-25 16:32:32

Below is generated by plot.py at 2018-01-25 20:50:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 534.49 Mbit/s

95th percentile per-packet one-way delay: 204.164 ms

Loss rate: 2.00%

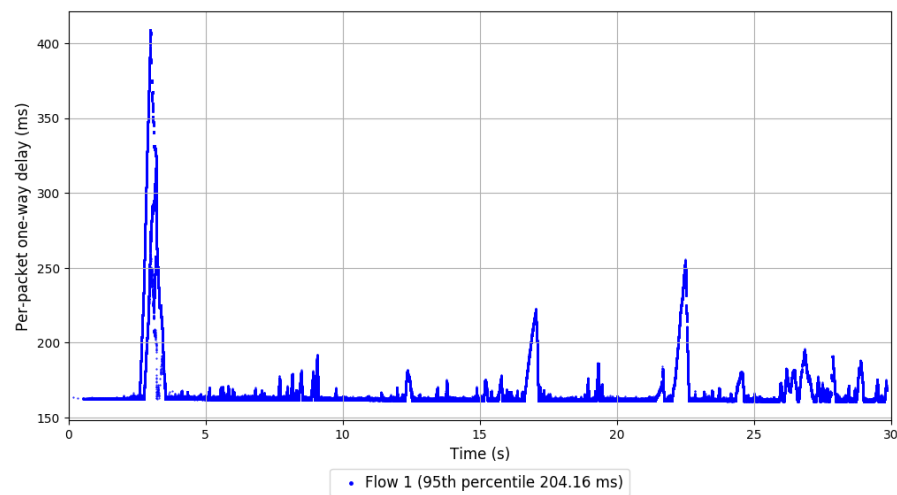
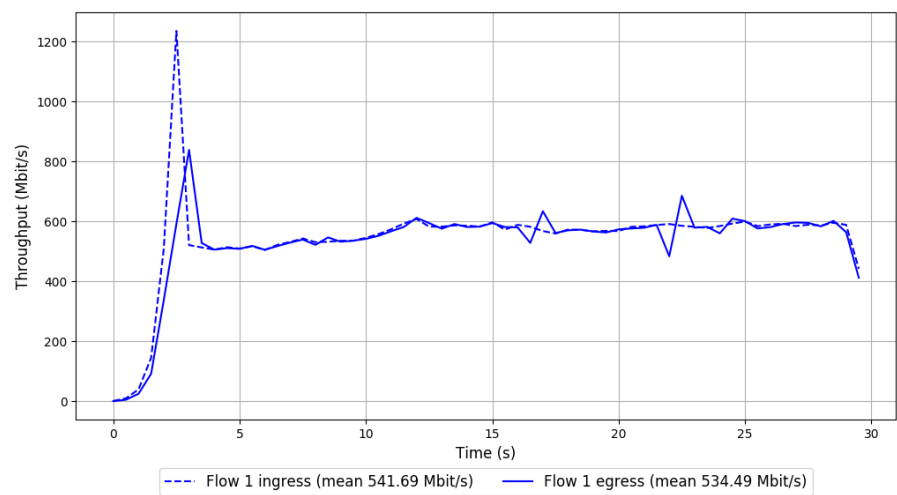
-- Flow 1:

Average throughput: 534.49 Mbit/s

95th percentile per-packet one-way delay: 204.164 ms

Loss rate: 2.00%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-25 16:44:55

End at: 2018-01-25 16:45:25

Below is generated by plot.py at 2018-01-25 20:51:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 557.84 Mbit/s

95th percentile per-packet one-way delay: 204.157 ms

Loss rate: 2.31%

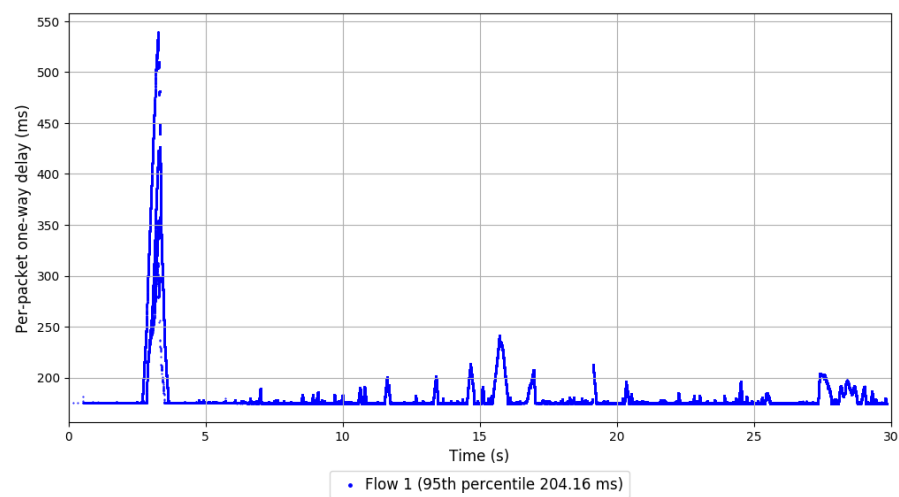
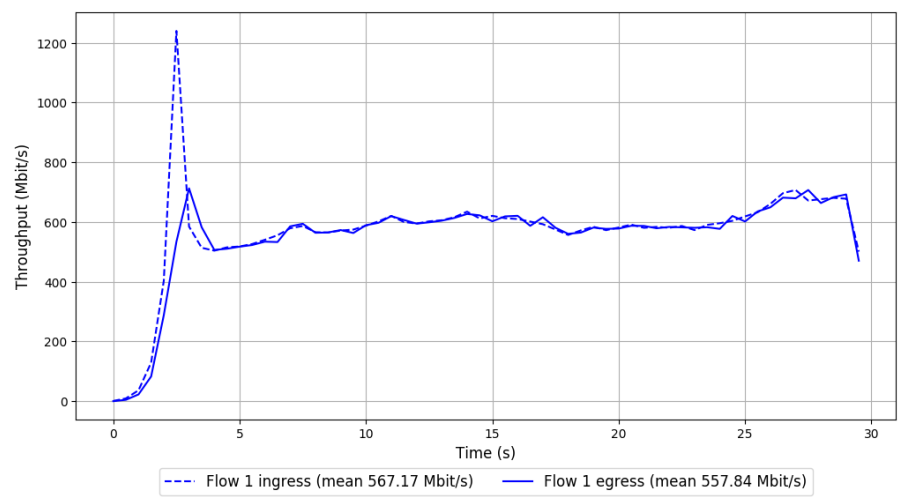
-- Flow 1:

Average throughput: 557.84 Mbit/s

95th percentile per-packet one-way delay: 204.157 ms

Loss rate: 2.31%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-25 16:57:45

End at: 2018-01-25 16:58:15

Below is generated by plot.py at 2018-01-25 20:51:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 574.46 Mbit/s

95th percentile per-packet one-way delay: 276.266 ms

Loss rate: 3.14%

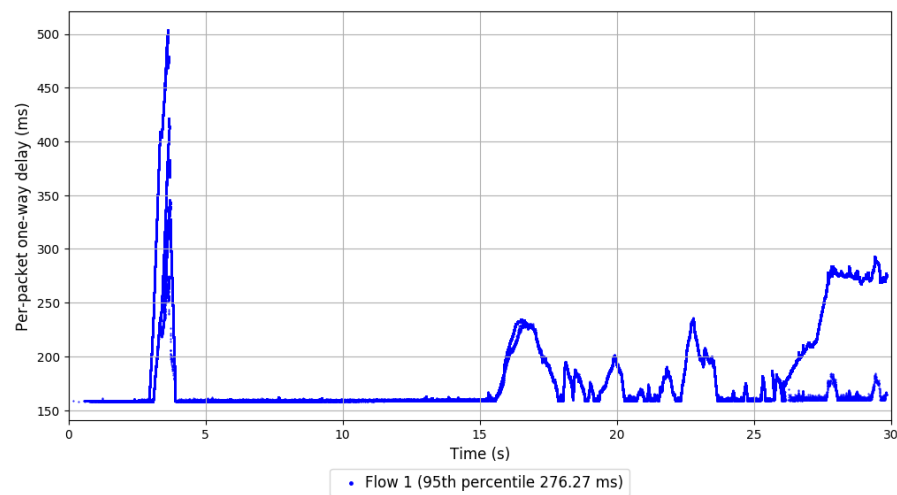
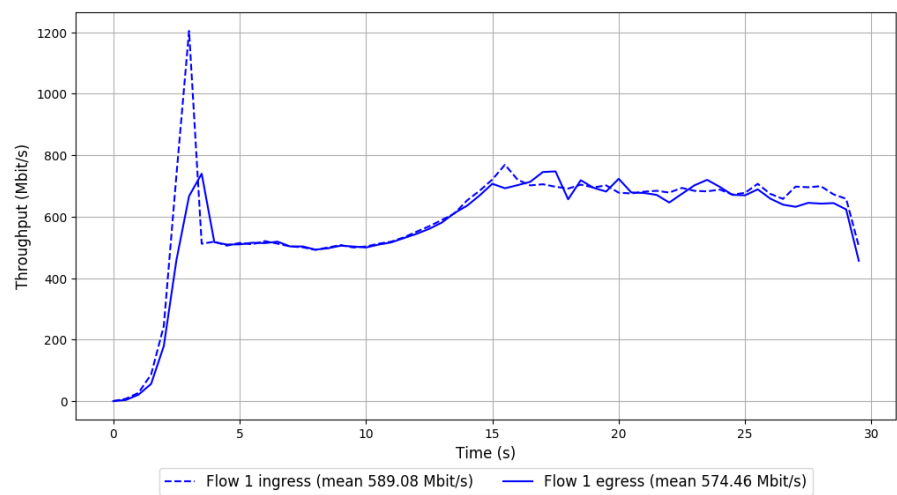
-- Flow 1:

Average throughput: 574.46 Mbit/s

95th percentile per-packet one-way delay: 276.266 ms

Loss rate: 3.14%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-25 17:10:35

End at: 2018-01-25 17:11:05

Below is generated by plot.py at 2018-01-25 20:51:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 527.88 Mbit/s

95th percentile per-packet one-way delay: 192.163 ms

Loss rate: 3.14%

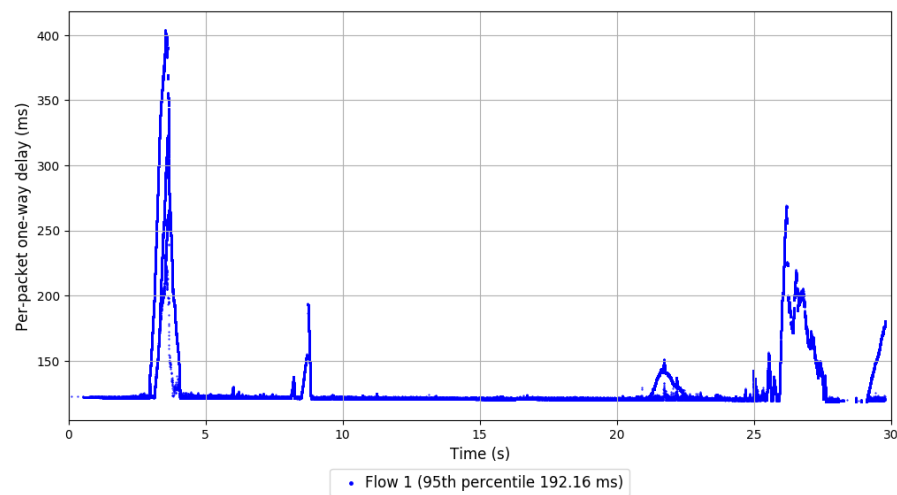
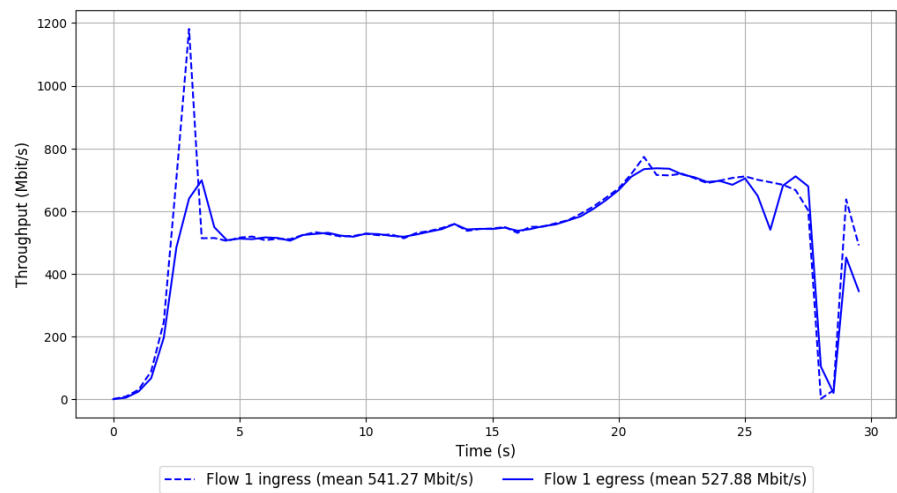
-- Flow 1:

Average throughput: 527.88 Mbit/s

95th percentile per-packet one-way delay: 192.163 ms

Loss rate: 3.14%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-25 17:23:26

End at: 2018-01-25 17:23:56

Below is generated by plot.py at 2018-01-25 20:52:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 594.01 Mbit/s

95th percentile per-packet one-way delay: 223.882 ms

Loss rate: 3.43%

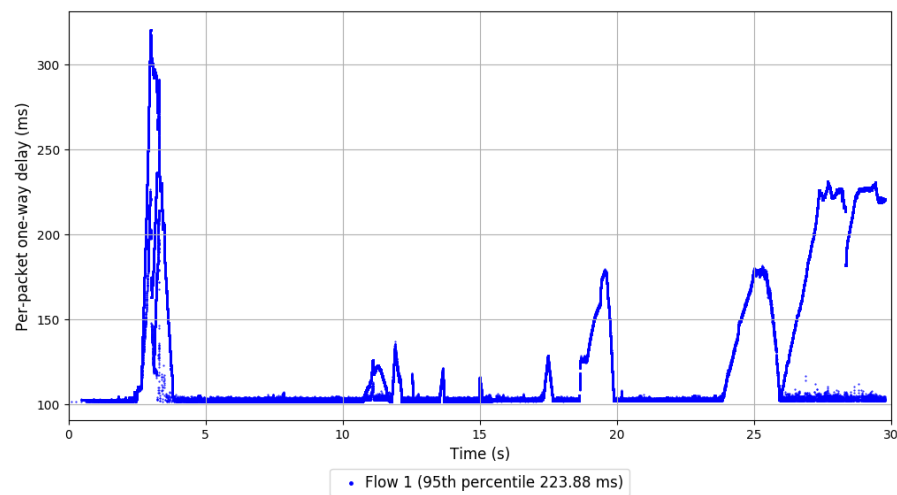
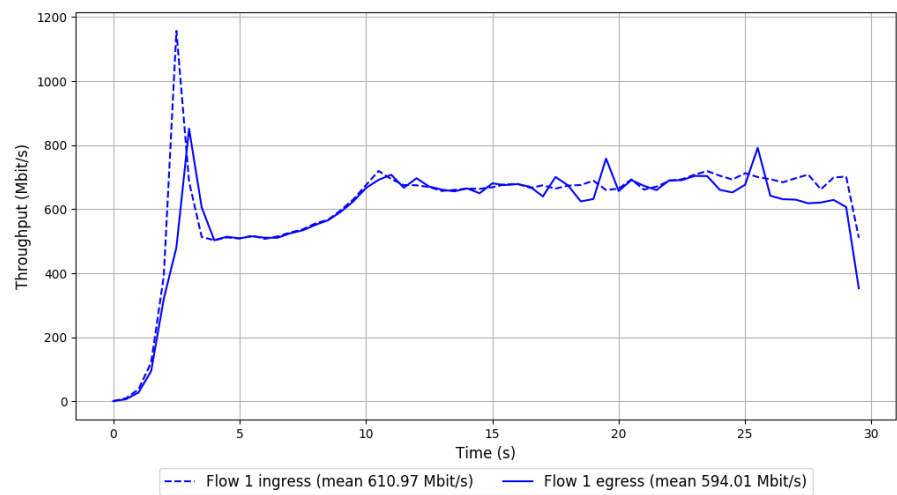
-- Flow 1:

Average throughput: 594.01 Mbit/s

95th percentile per-packet one-way delay: 223.882 ms

Loss rate: 3.43%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-25 17:36:12

End at: 2018-01-25 17:36:42

Below is generated by plot.py at 2018-01-25 20:52:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 554.27 Mbit/s

95th percentile per-packet one-way delay: 163.184 ms

Loss rate: 2.13%

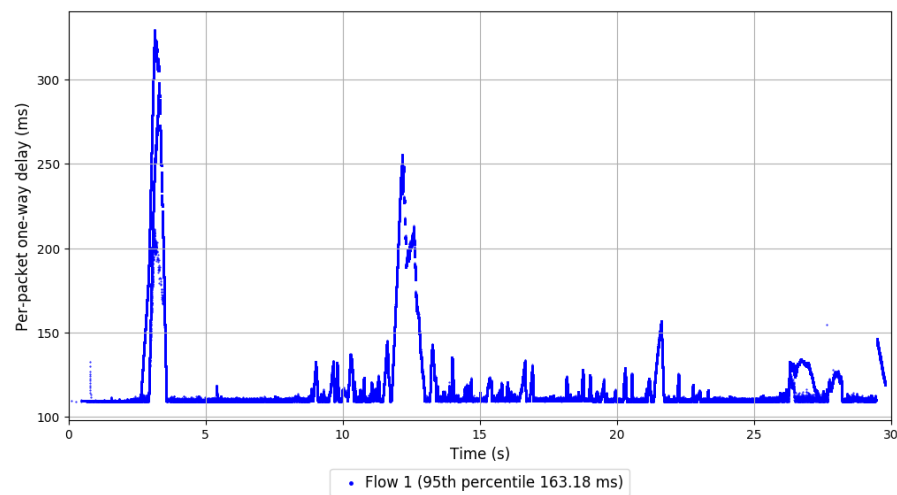
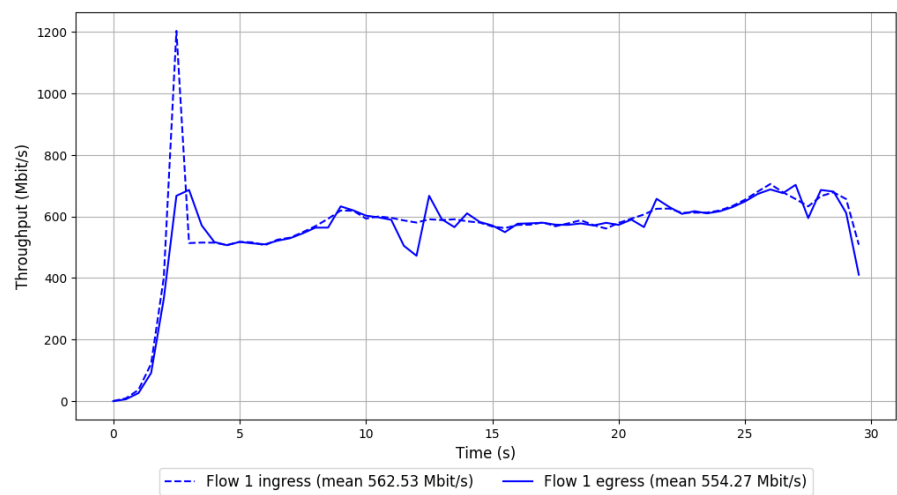
-- Flow 1:

Average throughput: 554.27 Mbit/s

95th percentile per-packet one-way delay: 163.184 ms

Loss rate: 2.13%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-25 17:49:20

End at: 2018-01-25 17:49:50

Below is generated by plot.py at 2018-01-25 20:52:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 519.51 Mbit/s

95th percentile per-packet one-way delay: 130.771 ms

Loss rate: 3.88%

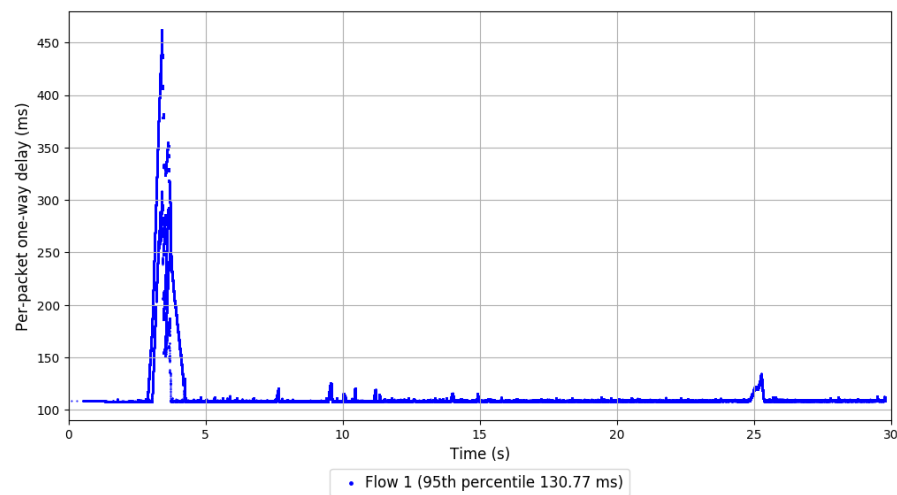
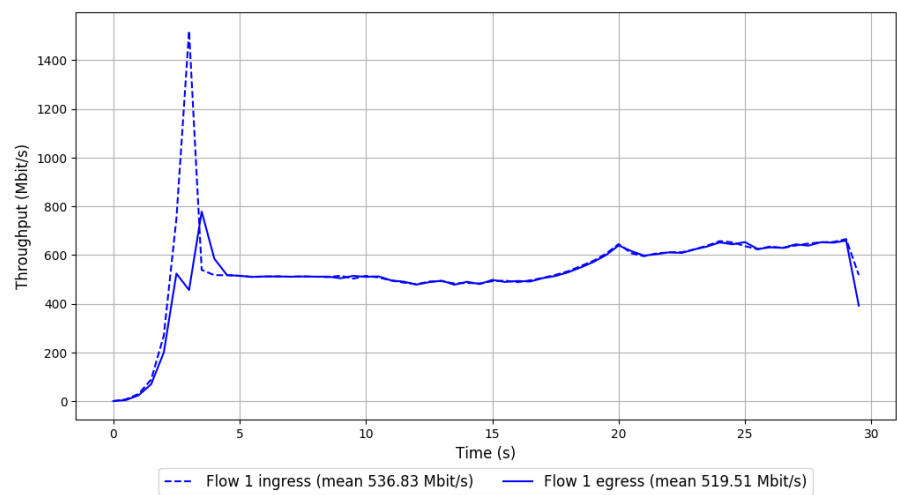
-- Flow 1:

Average throughput: 519.51 Mbit/s

95th percentile per-packet one-way delay: 130.771 ms

Loss rate: 3.88%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-25 18:02:19

End at: 2018-01-25 18:02:49

Below is generated by plot.py at 2018-01-25 21:01:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 567.49 Mbit/s

95th percentile per-packet one-way delay: 220.629 ms

Loss rate: 2.56%

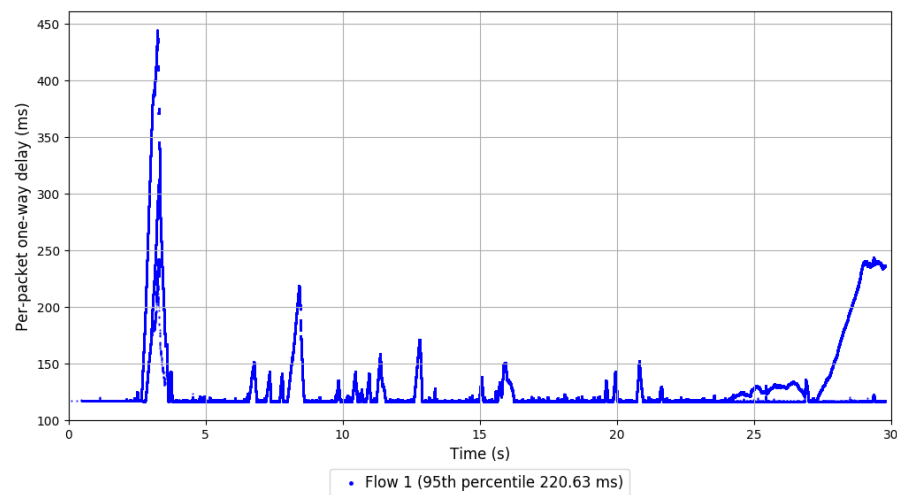
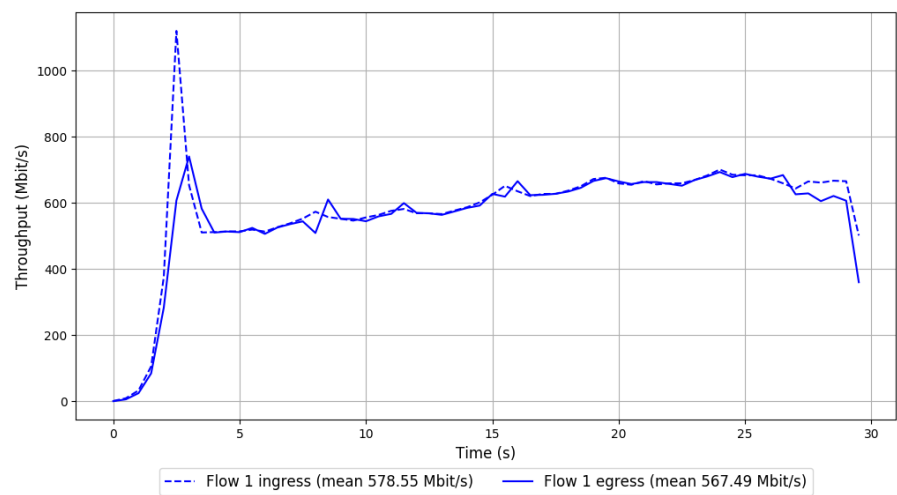
-- Flow 1:

Average throughput: 567.49 Mbit/s

95th percentile per-packet one-way delay: 220.629 ms

Loss rate: 2.56%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-25 18:15:07

End at: 2018-01-25 18:15:37

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 603.54 Mbit/s

95th percentile per-packet one-way delay: 269.399 ms

Loss rate: 3.09%

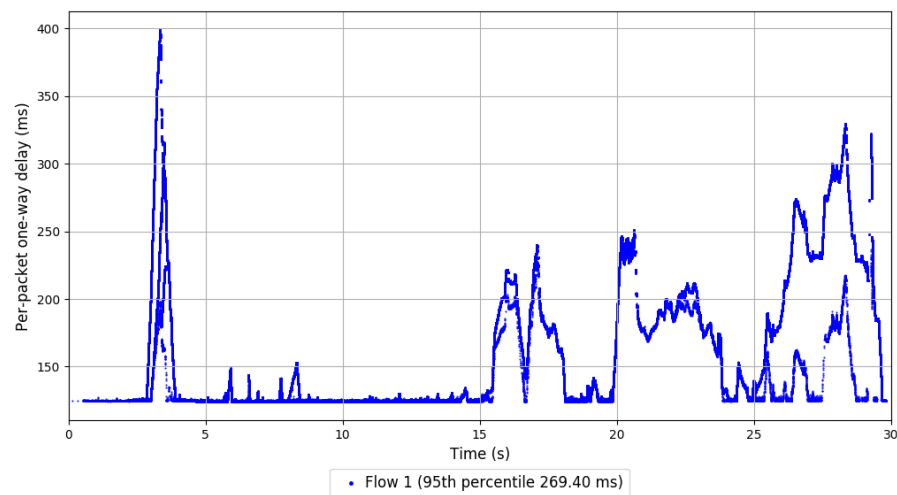
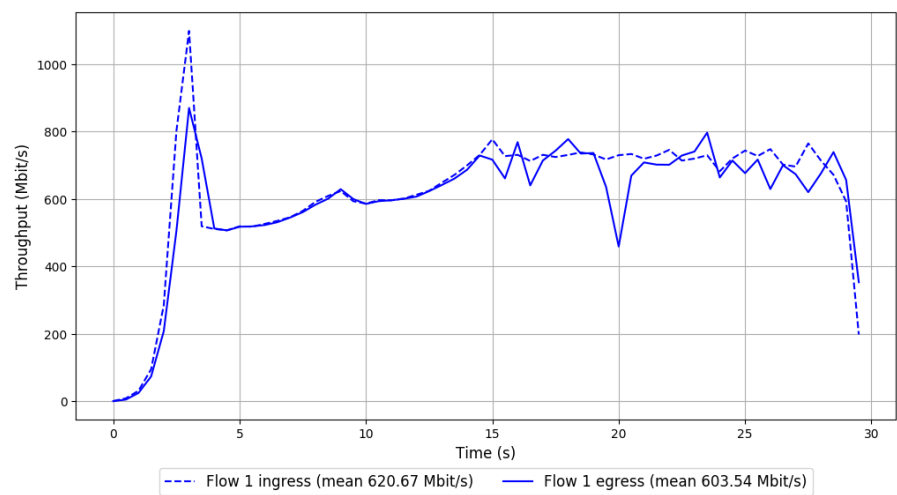
-- Flow 1:

Average throughput: 603.54 Mbit/s

95th percentile per-packet one-way delay: 269.399 ms

Loss rate: 3.09%

Run 10: Report of PCC — Data Link

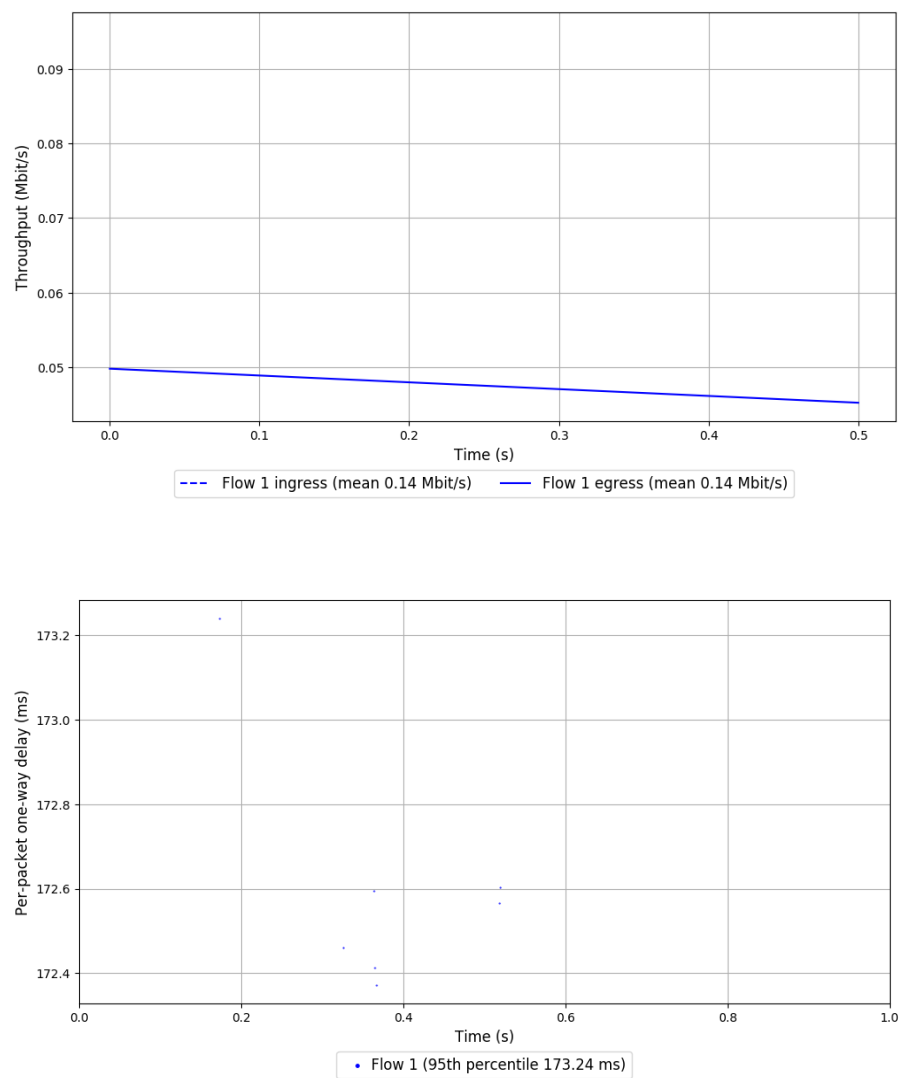


Run 1: Statistics of QUIC Cubic

Start at: 2018-01-25 16:27:39

End at: 2018-01-25 16:28:09

Run 1: Report of QUIC Cubic — Data Link

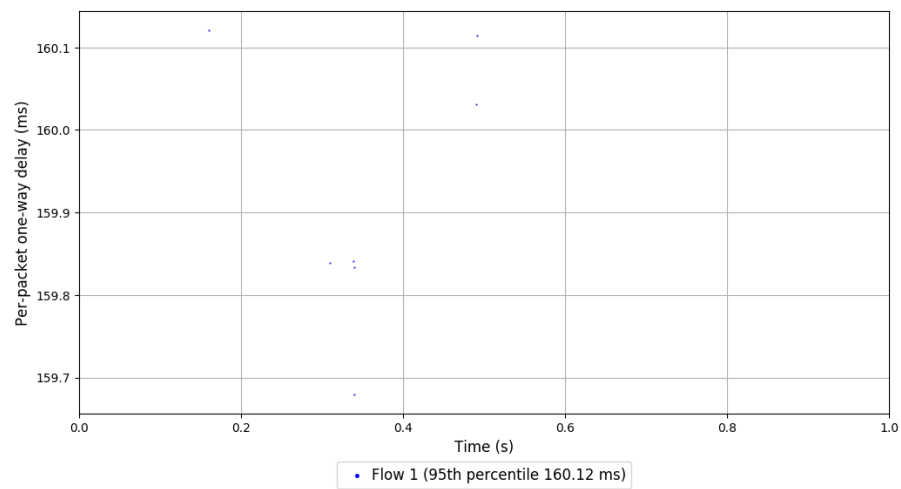
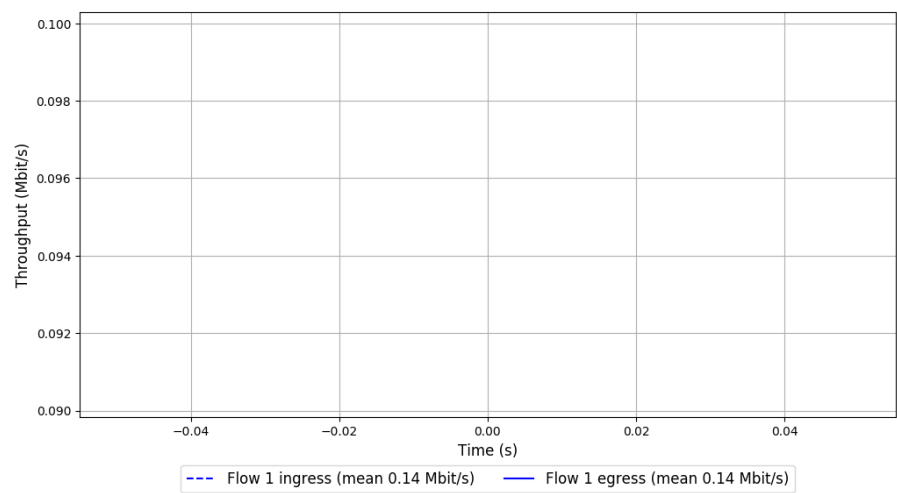


Run 2: Statistics of QUIC Cubic

Start at: 2018-01-25 16:40:35

End at: 2018-01-25 16:41:05

Run 2: Report of QUIC Cubic — Data Link

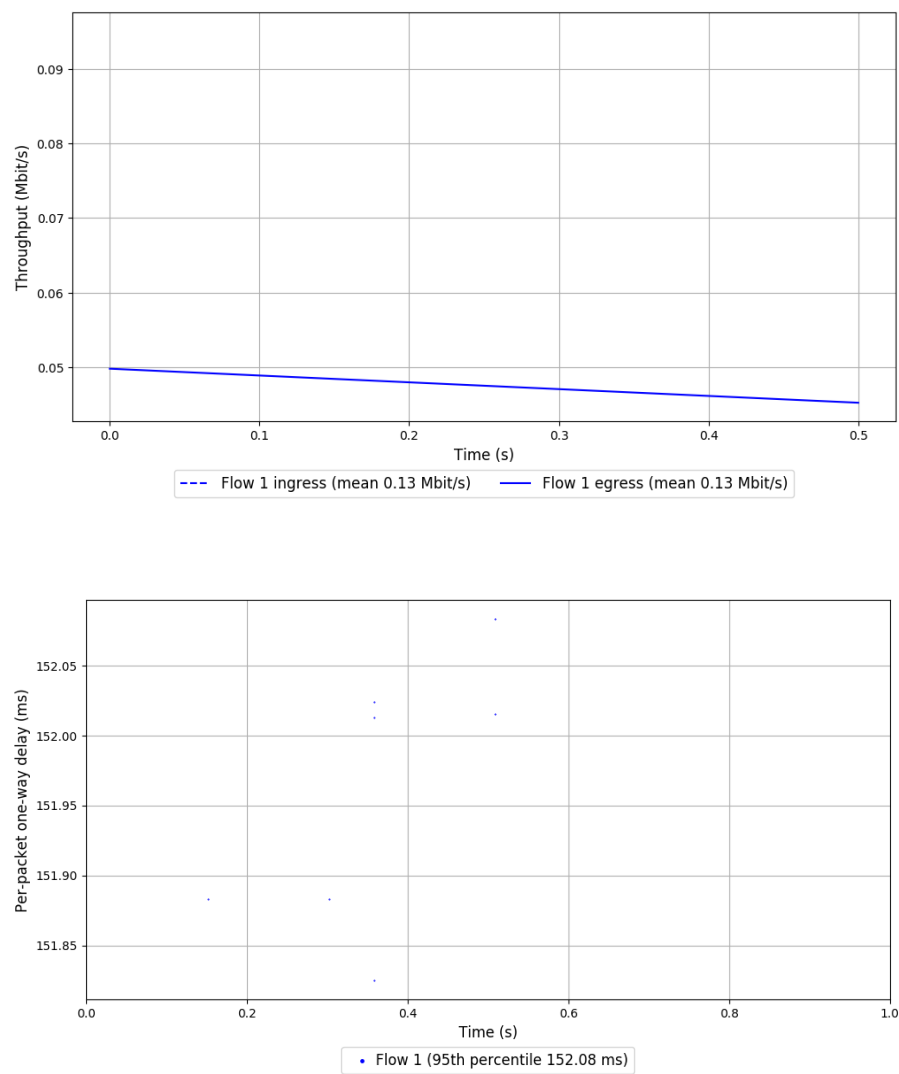


Run 3: Statistics of QUIC Cubic

Start at: 2018-01-25 16:53:09

End at: 2018-01-25 16:53:39

Run 3: Report of QUIC Cubic — Data Link

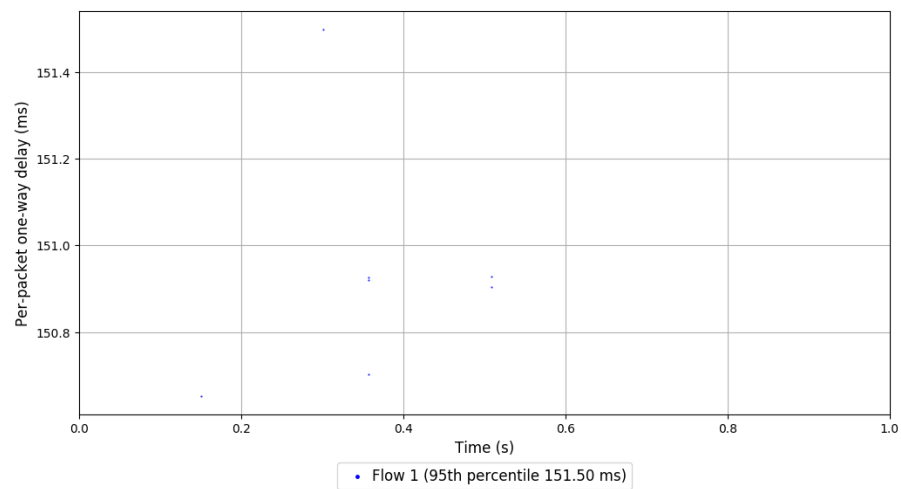
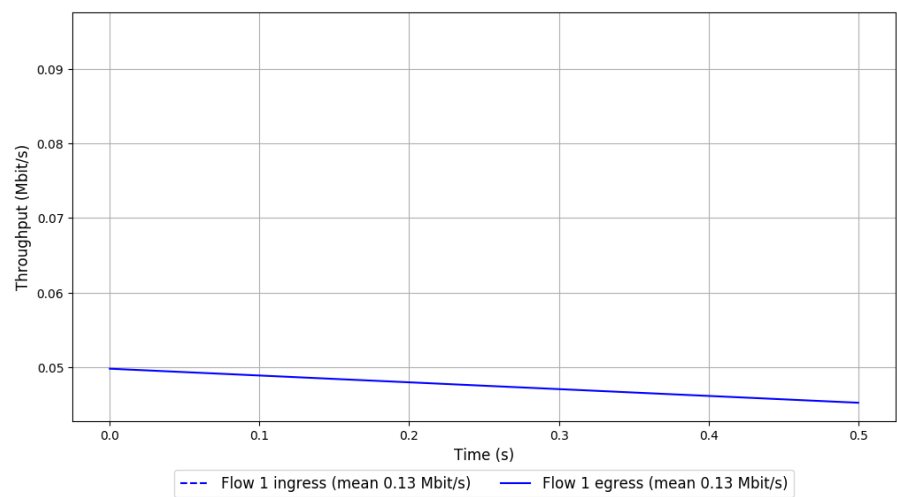


Run 4: Statistics of QUIC Cubic

Start at: 2018-01-25 17:06:11

End at: 2018-01-25 17:06:42

Run 4: Report of QUIC Cubic — Data Link

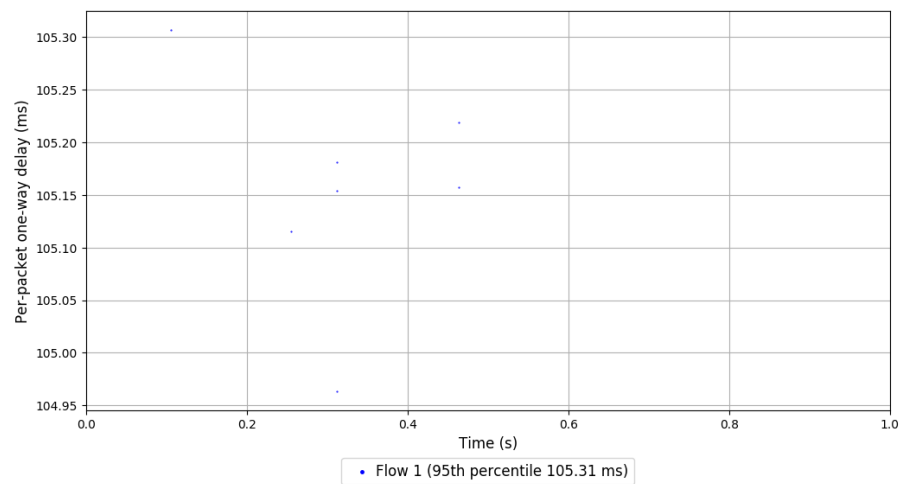
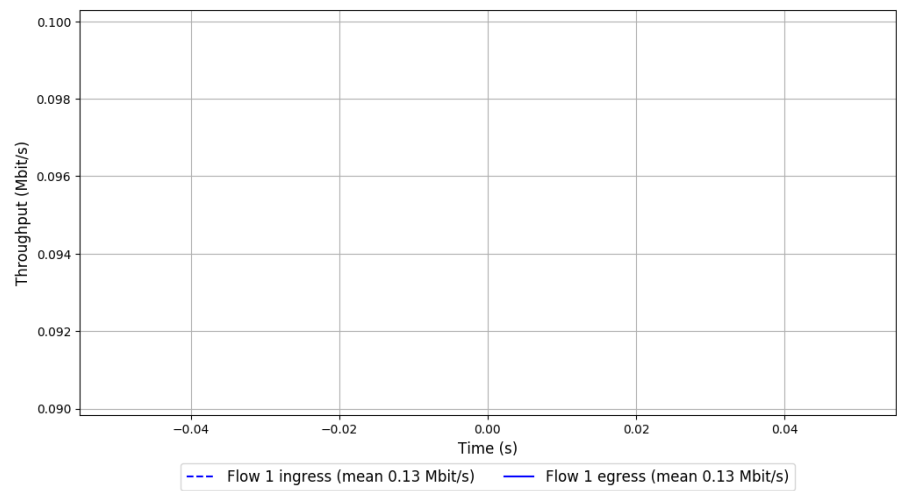


Run 5: Statistics of QUIC Cubic

Start at: 2018-01-25 17:18:55

End at: 2018-01-25 17:19:25

Run 5: Report of QUIC Cubic — Data Link

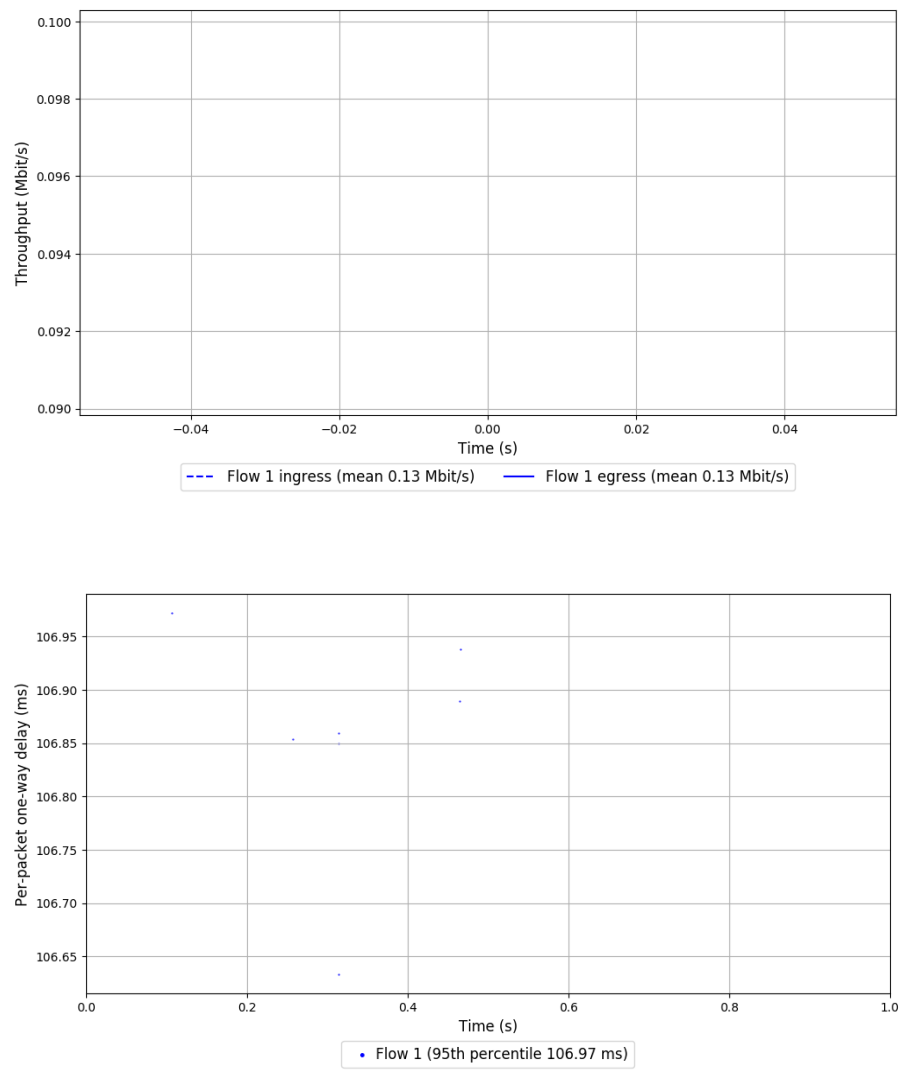


Run 6: Statistics of QUIC Cubic

Start at: 2018-01-25 17:31:45

End at: 2018-01-25 17:32:15

Run 6: Report of QUIC Cubic — Data Link

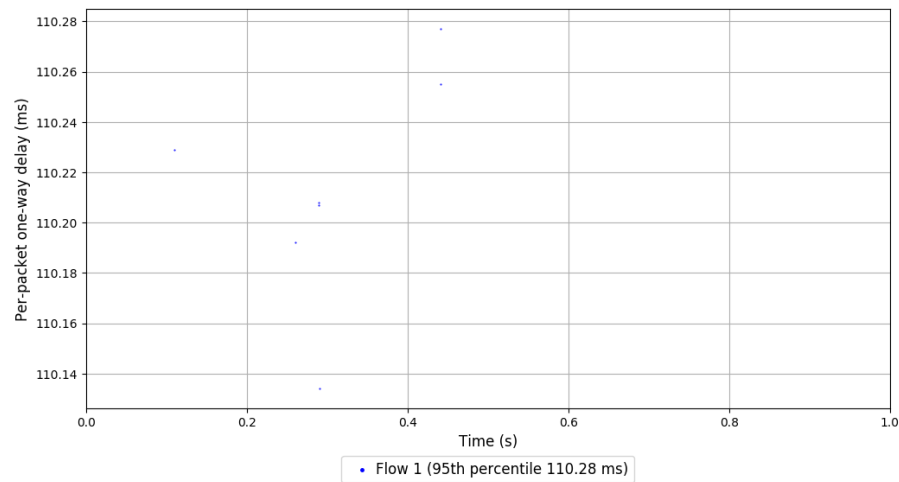
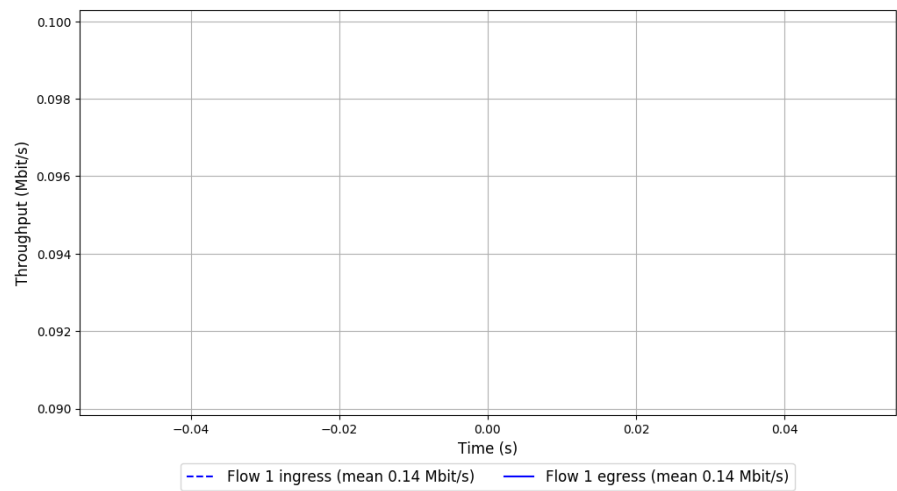


Run 7: Statistics of QUIC Cubic

Start at: 2018-01-25 17:44:48

End at: 2018-01-25 17:45:18

Run 7: Report of QUIC Cubic — Data Link

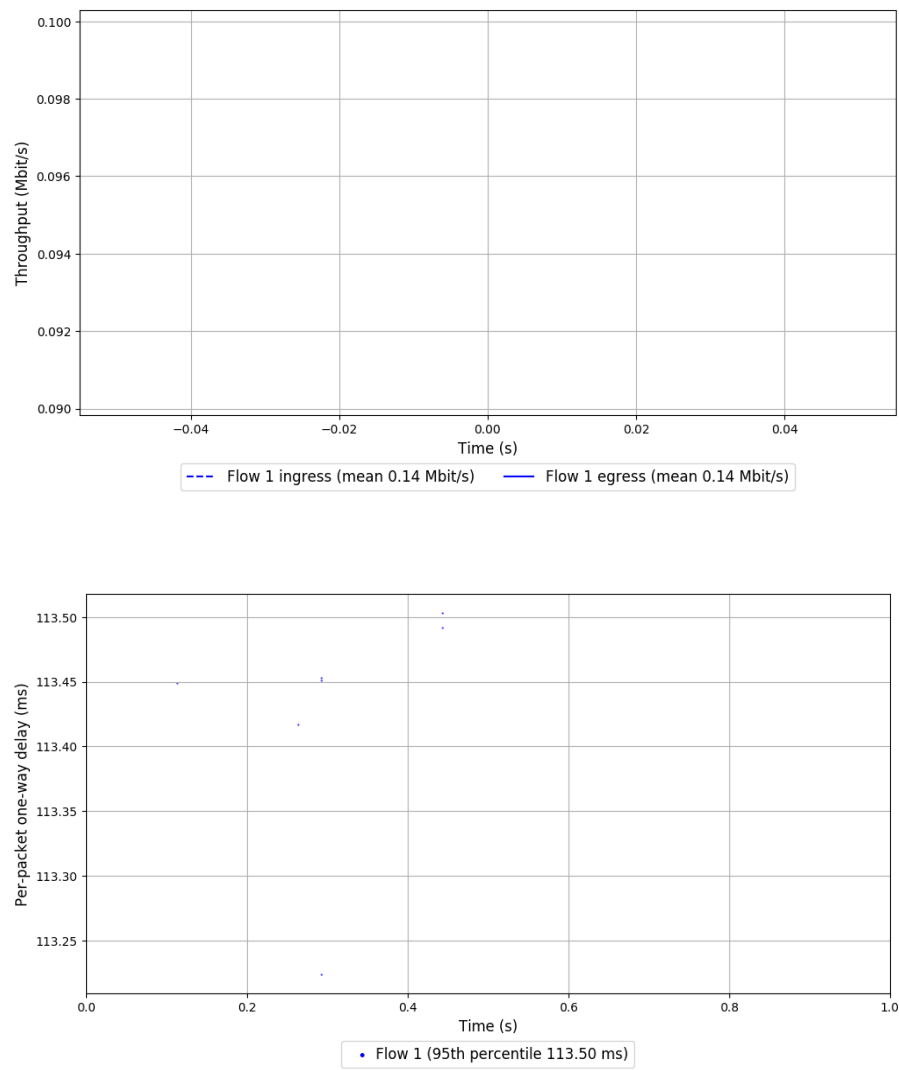


Run 8: Statistics of QUIC Cubic

Start at: 2018-01-25 17:57:49

End at: 2018-01-25 17:58:19

Run 8: Report of QUIC Cubic — Data Link

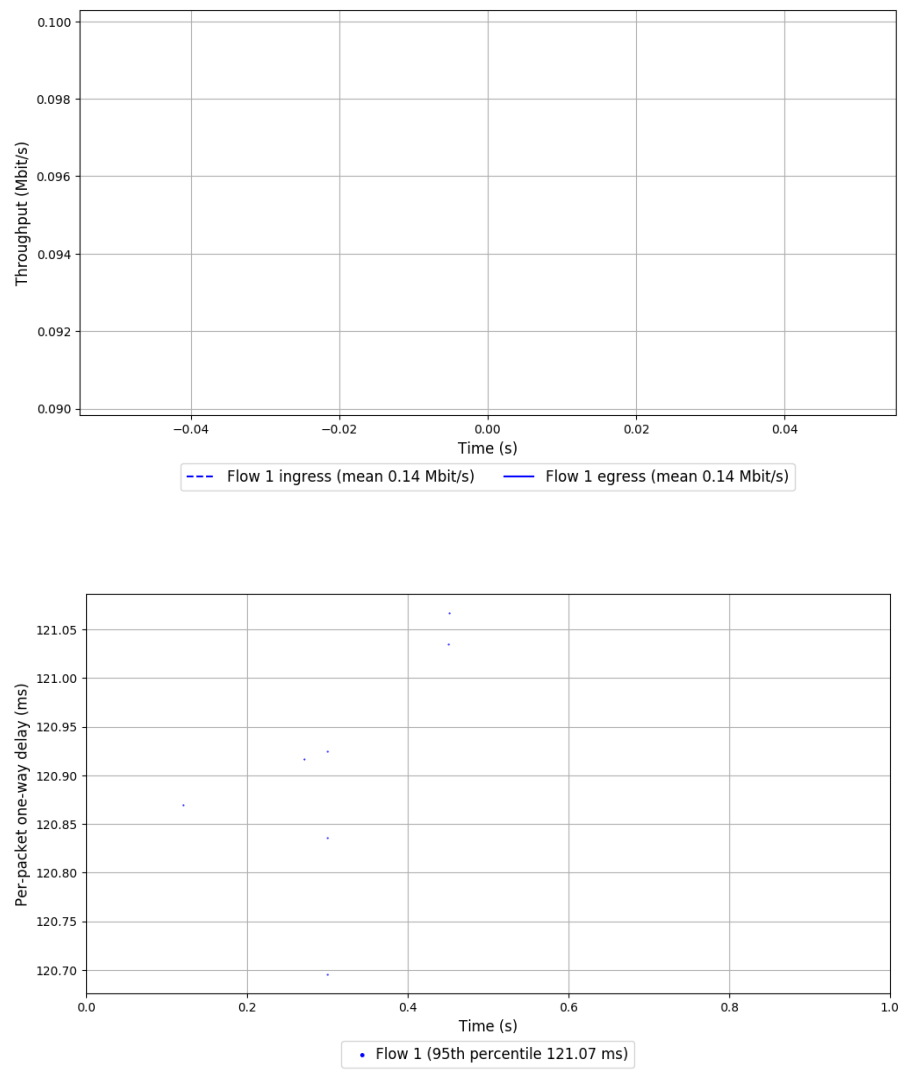


Run 9: Statistics of QUIC Cubic

Start at: 2018-01-25 18:10:38

End at: 2018-01-25 18:11:08

Run 9: Report of QUIC Cubic — Data Link

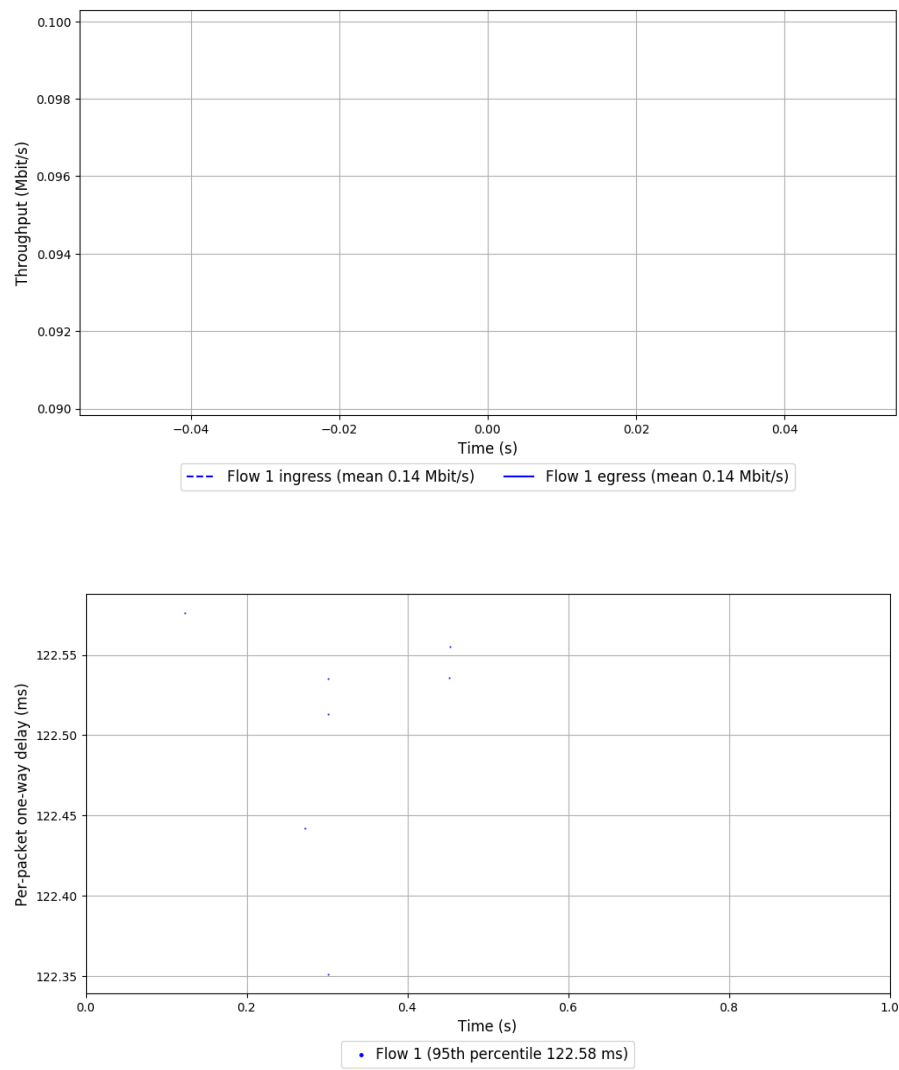


Run 10: Statistics of QUIC Cubic

Start at: 2018-01-25 18:23:43

End at: 2018-01-25 18:24:13

Run 10: Report of QUIC Cubic — Data Link

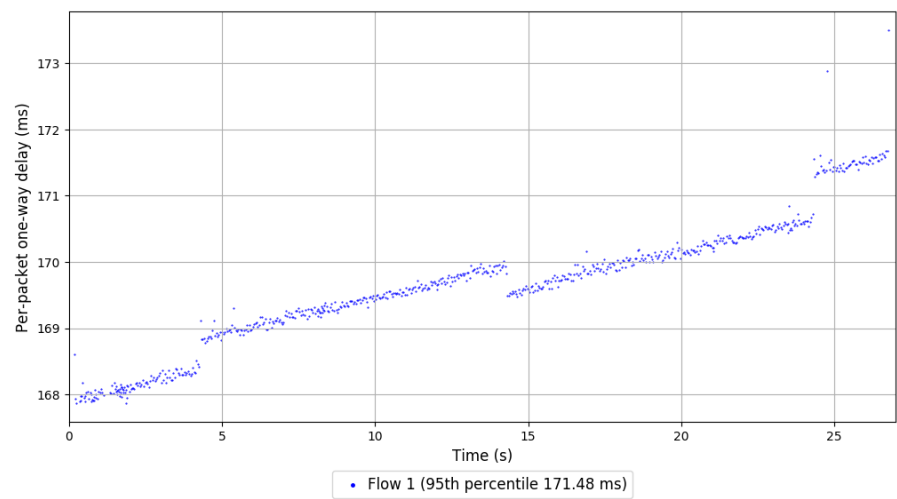
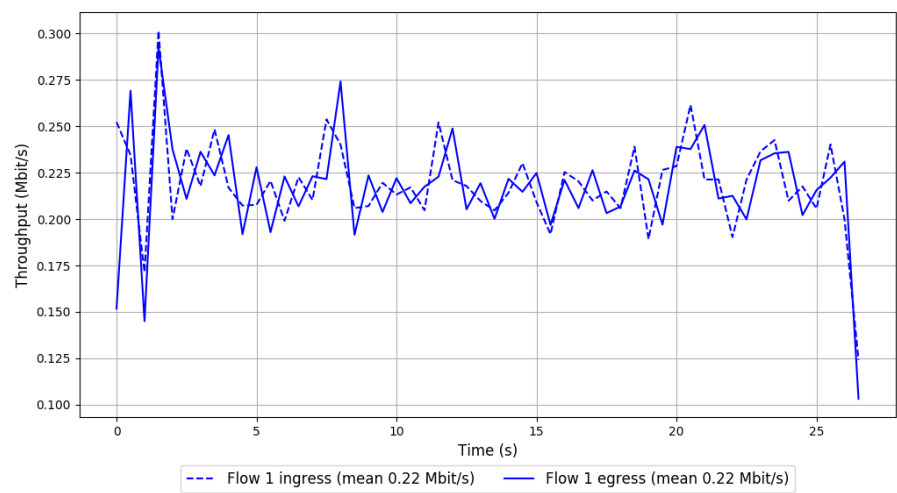


```
Run 1: Statistics of SCReAM

Start at: 2018-01-25 16:24:04
End at: 2018-01-25 16:24:34

# Below is generated by plot.py at 2018-01-25 21:01:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 171.478 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 171.478 ms
Loss rate: 0.68%
```

Run 1: Report of SReAM — Data Link

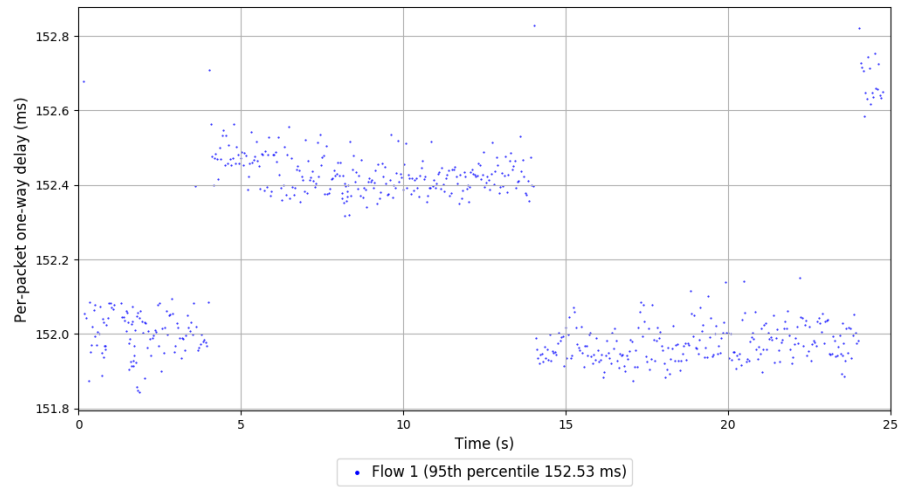
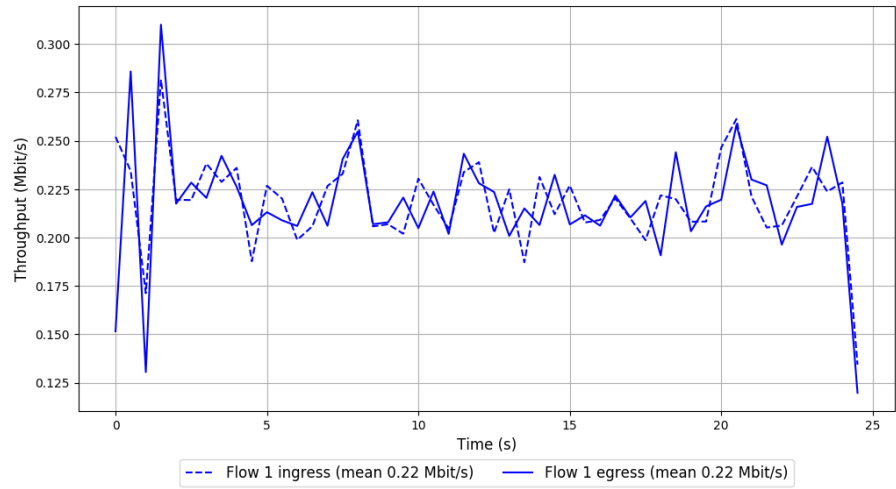


```
Run 2: Statistics of SCReAM

Start at: 2018-01-25 16:37:03
End at: 2018-01-25 16:37:33

# Below is generated by plot.py at 2018-01-25 21:01:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 152.529 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 152.529 ms
Loss rate: 0.75%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-25 16:49:54

End at: 2018-01-25 16:50:24

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 159.456 ms

Loss rate: 0.78%

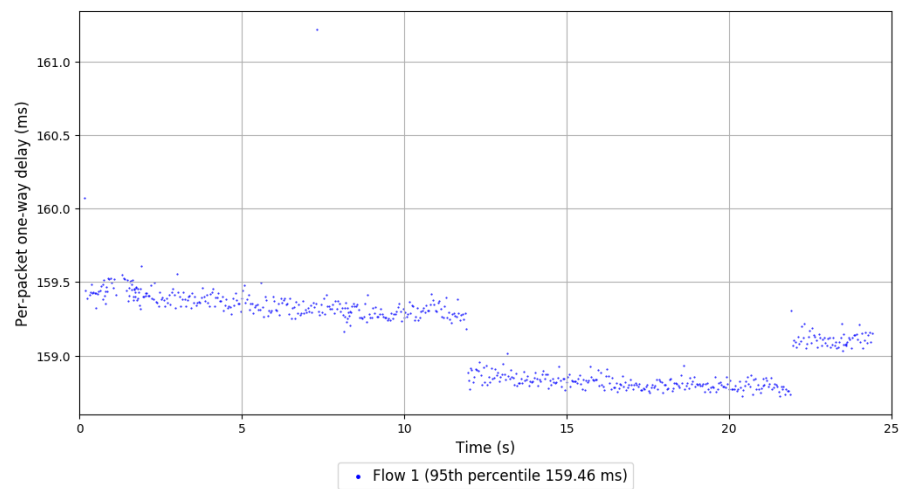
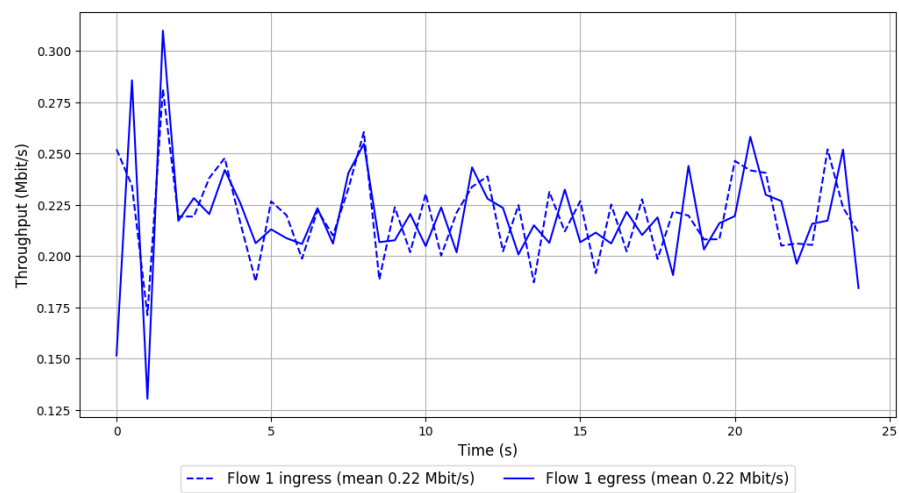
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 159.456 ms

Loss rate: 0.78%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-01-25 17:02:49

End at: 2018-01-25 17:03:19

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 166.370 ms

Loss rate: 0.80%

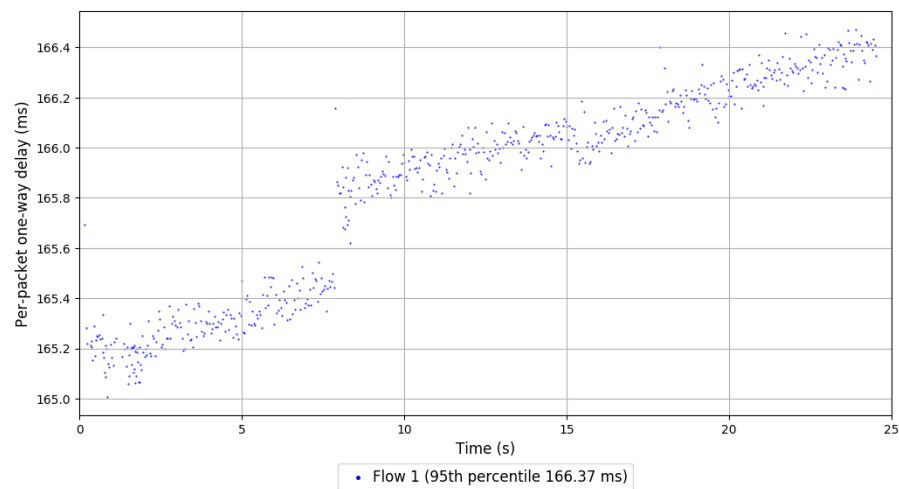
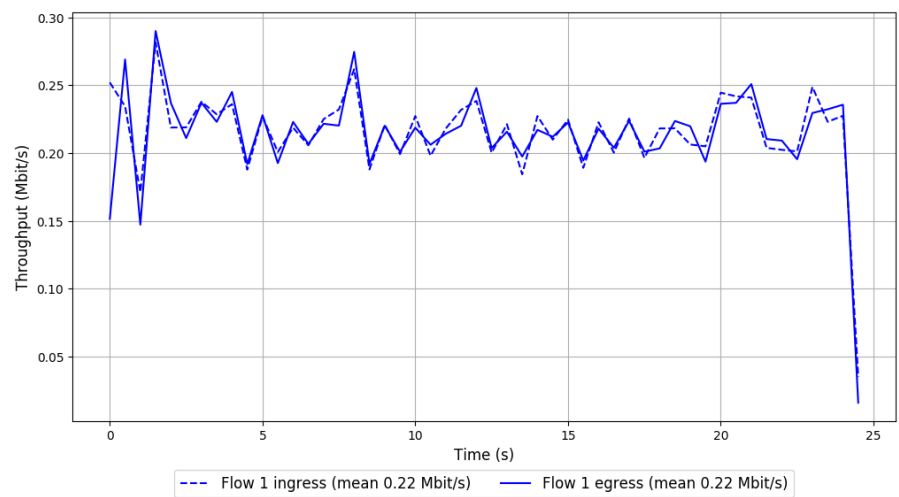
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 166.370 ms

Loss rate: 0.80%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-25 17:15:33

End at: 2018-01-25 17:16:03

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 104.859 ms

Loss rate: 0.64%

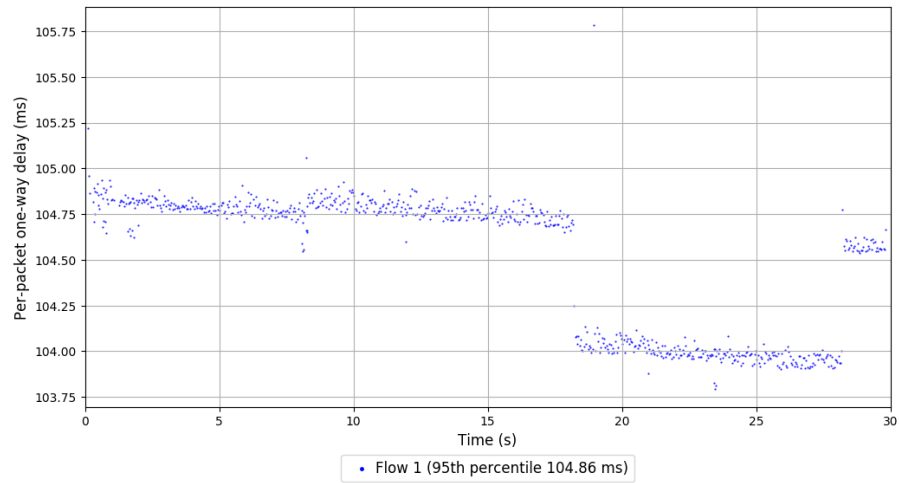
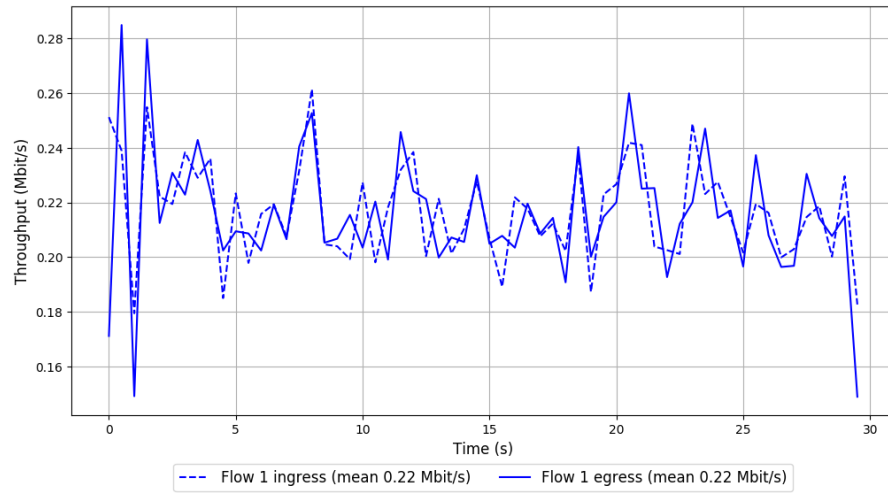
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 104.859 ms

Loss rate: 0.64%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-25 17:28:30

End at: 2018-01-25 17:29:00

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 107.559 ms

Loss rate: 0.64%

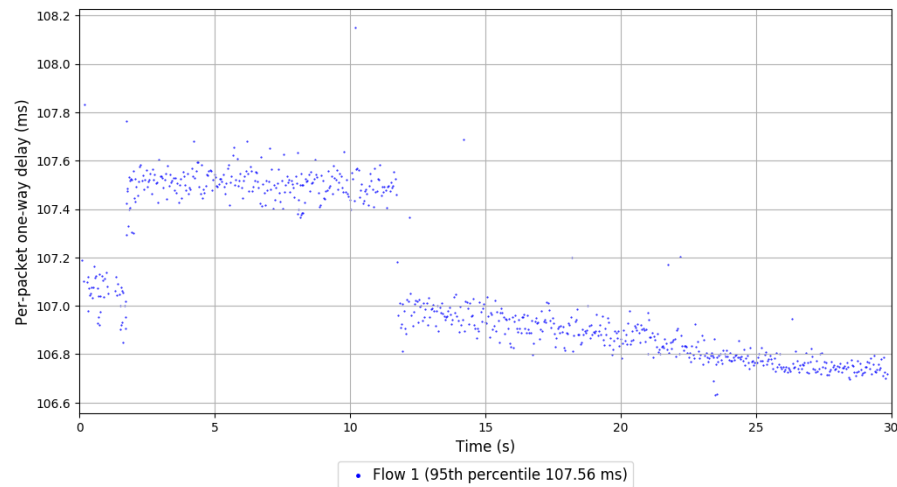
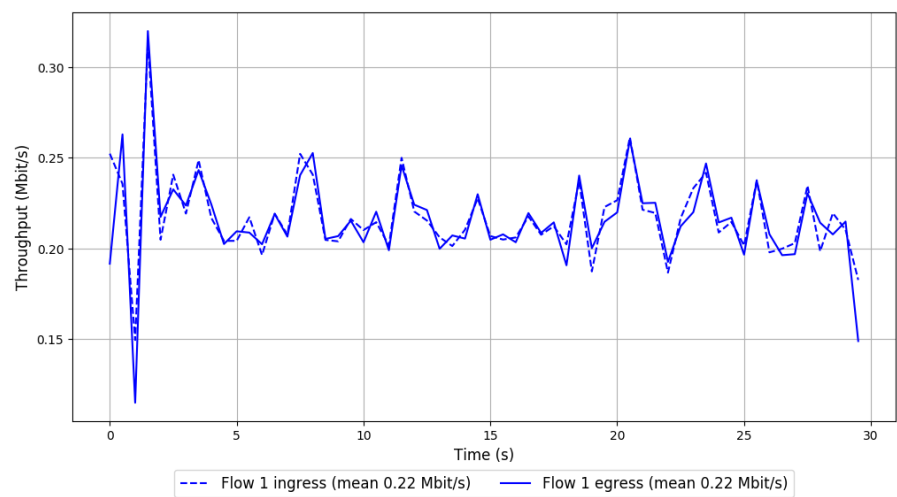
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 107.559 ms

Loss rate: 0.64%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-25 17:41:15

End at: 2018-01-25 17:41:45

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.690 ms

Loss rate: 0.64%

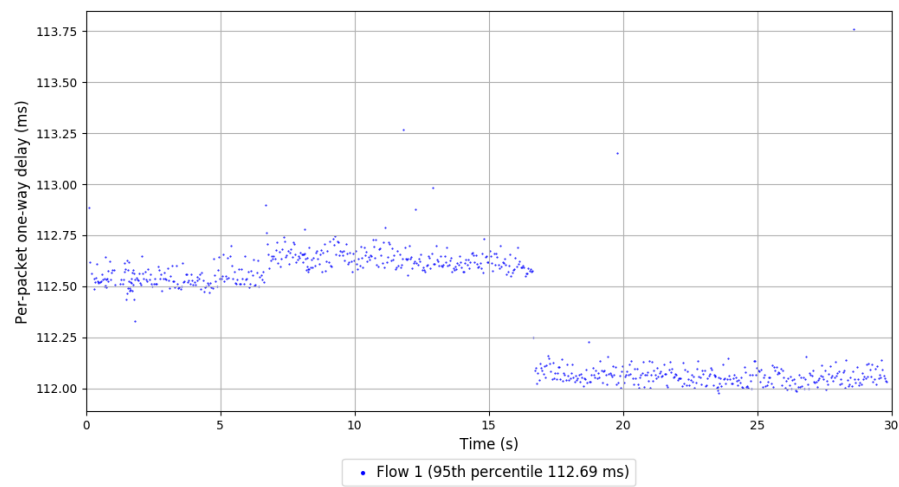
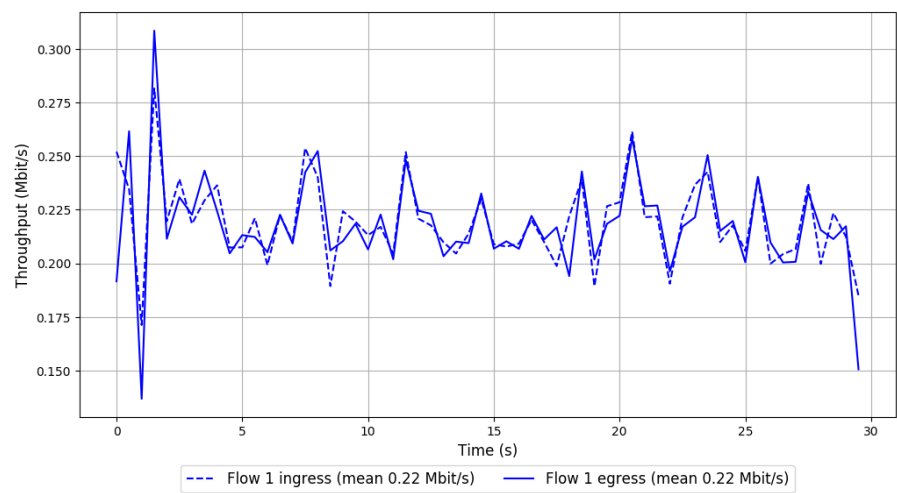
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.690 ms

Loss rate: 0.64%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-25 17:54:20

End at: 2018-01-25 17:54:50

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.197 ms

Loss rate: 0.65%

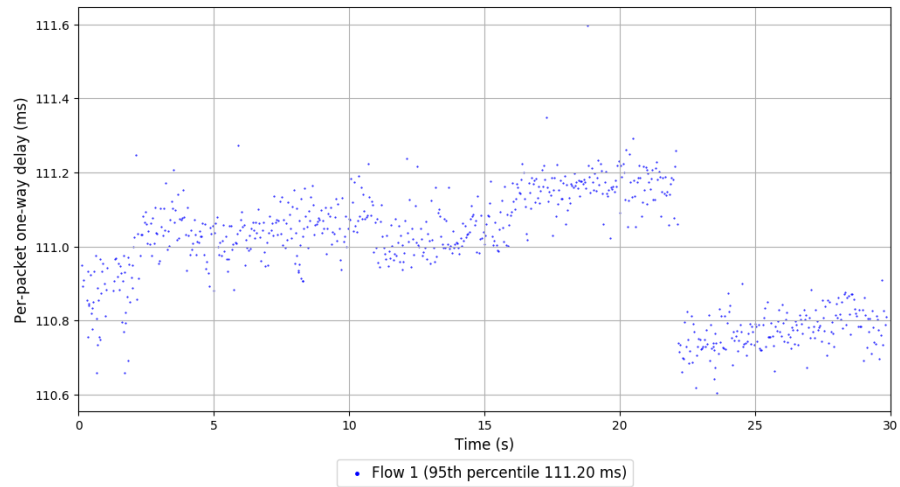
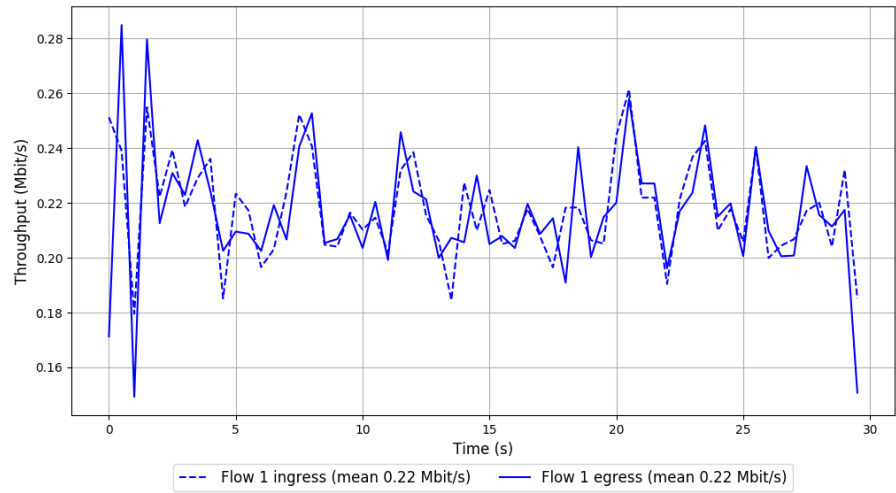
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.197 ms

Loss rate: 0.65%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-25 18:07:07

End at: 2018-01-25 18:07:37

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 119.643 ms

Loss rate: 0.64%

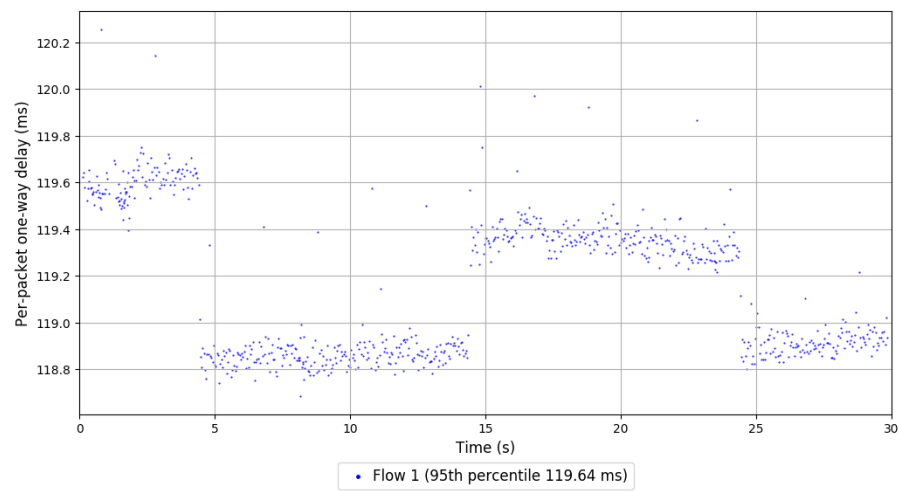
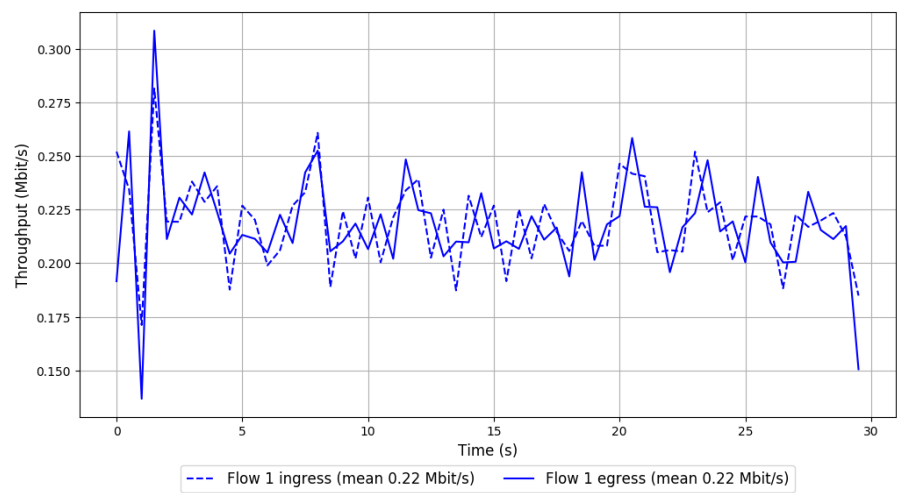
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 119.643 ms

Loss rate: 0.64%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-01-25 18:20:09

End at: 2018-01-25 18:20:39

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 126.440 ms

Loss rate: 0.64%

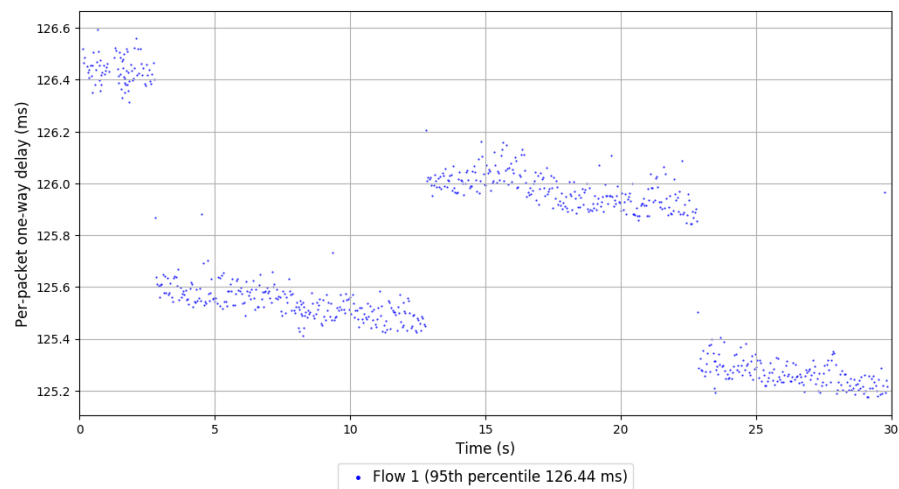
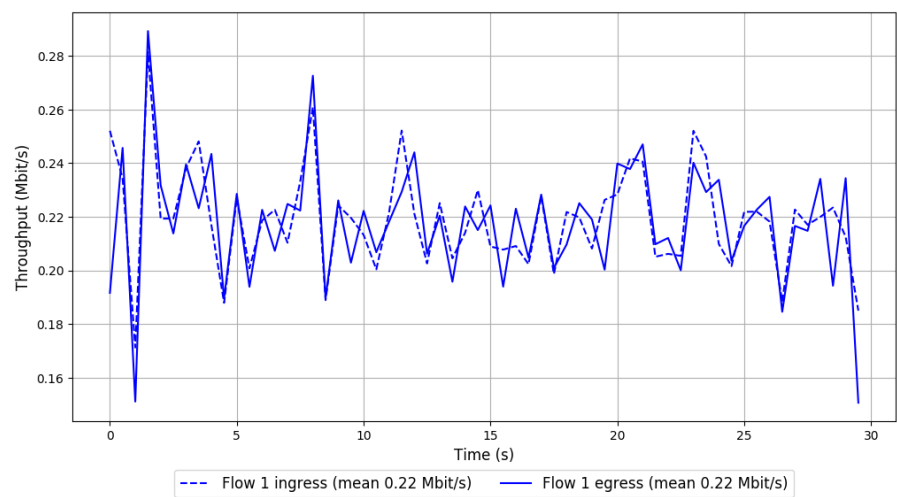
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 126.440 ms

Loss rate: 0.64%

Run 10: Report of SCRaM — Data Link

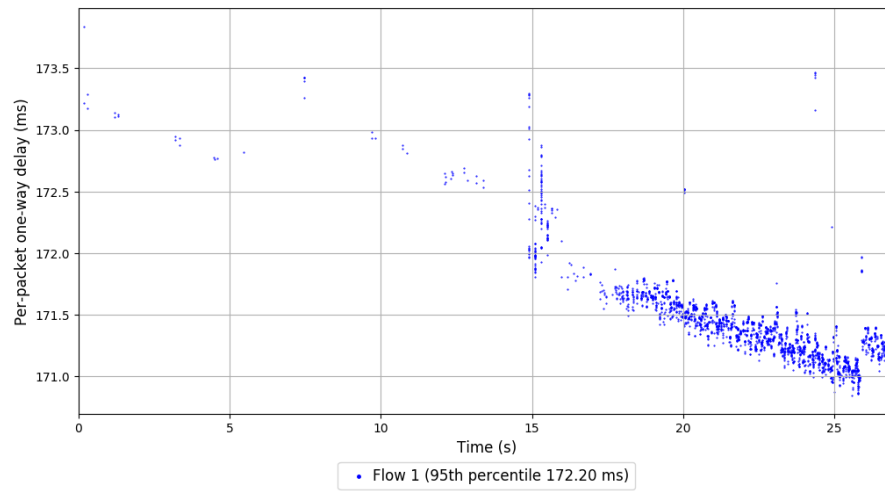
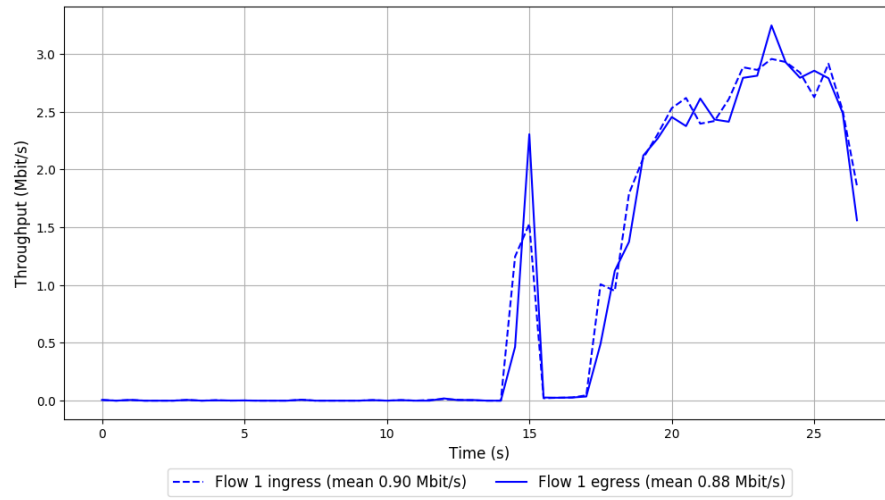


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-25 16:29:13
End at: 2018-01-25 16:29:43

# Below is generated by plot.py at 2018-01-25 21:01:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 172.196 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 172.196 ms
Loss rate: 2.46%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-25 16:42:06

End at: 2018-01-25 16:42:36

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 169.556 ms

Loss rate: 0.80%

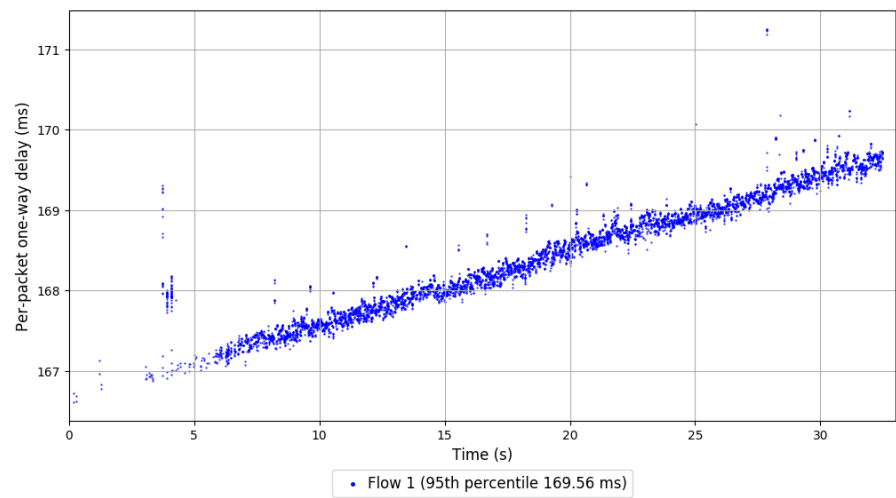
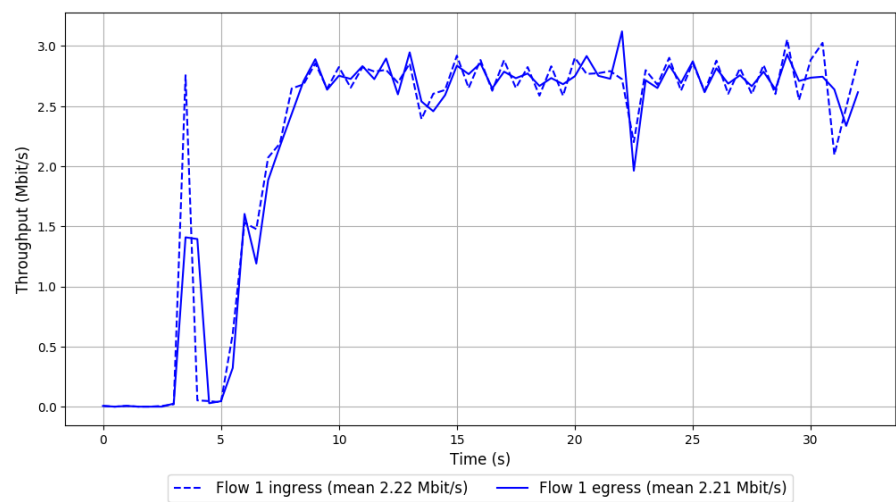
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 169.556 ms

Loss rate: 0.80%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-25 16:54:50

End at: 2018-01-25 16:55:20

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 153.134 ms

Loss rate: 0.87%

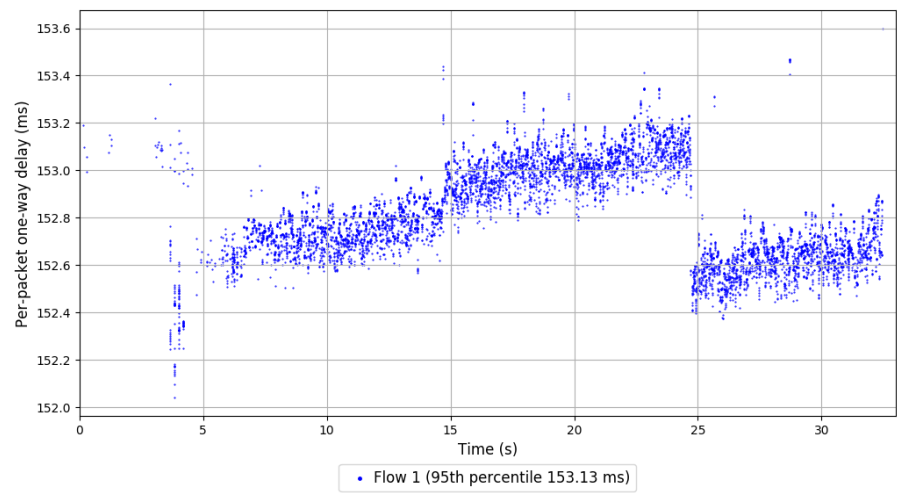
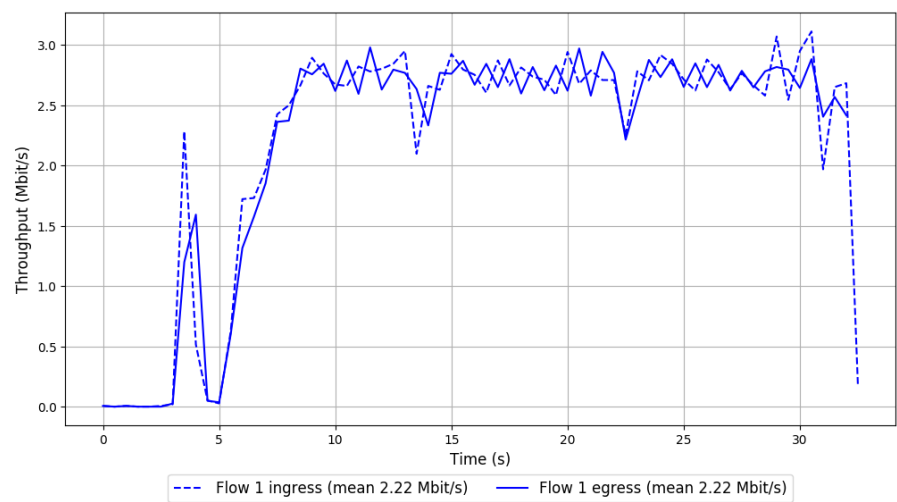
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 153.134 ms

Loss rate: 0.87%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-25 17:07:45

End at: 2018-01-25 17:08:15

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 142.781 ms

Loss rate: 0.88%

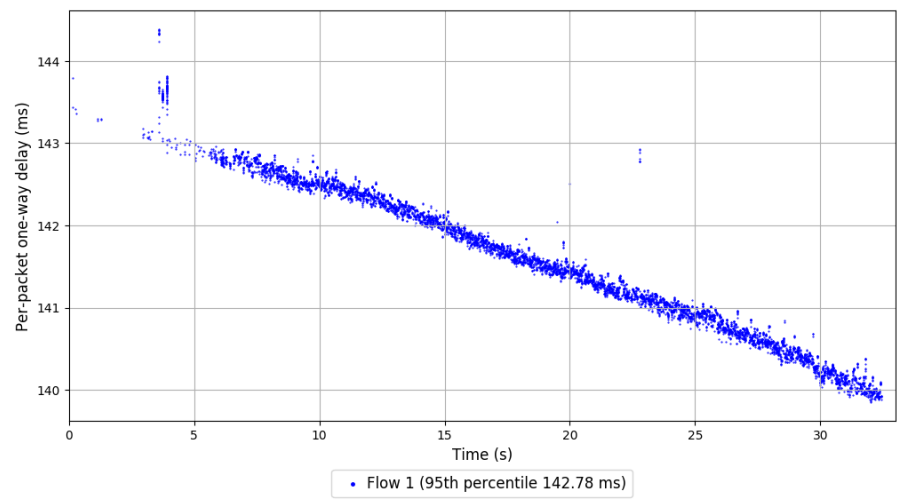
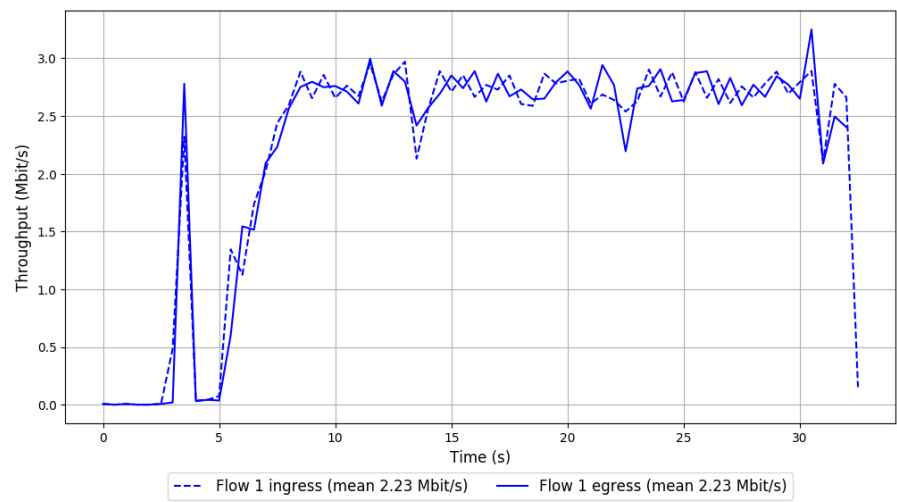
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 142.781 ms

Loss rate: 0.88%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-25 17:20:31

End at: 2018-01-25 17:21:01

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 101.794 ms

Loss rate: 0.76%

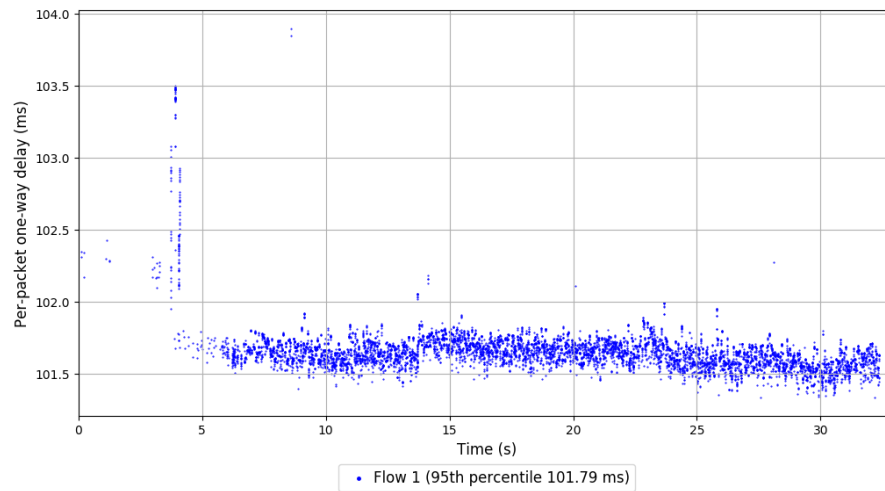
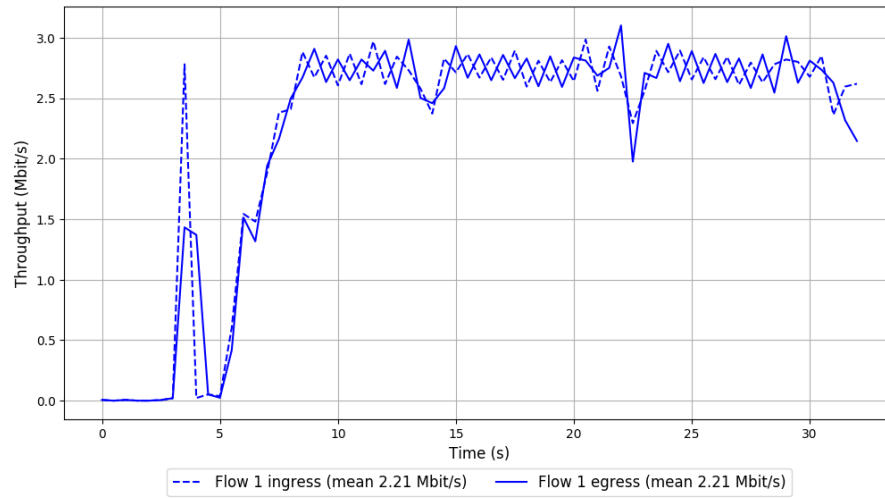
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 101.794 ms

Loss rate: 0.76%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-25 17:33:17

End at: 2018-01-25 17:33:47

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 107.336 ms

Loss rate: 0.77%

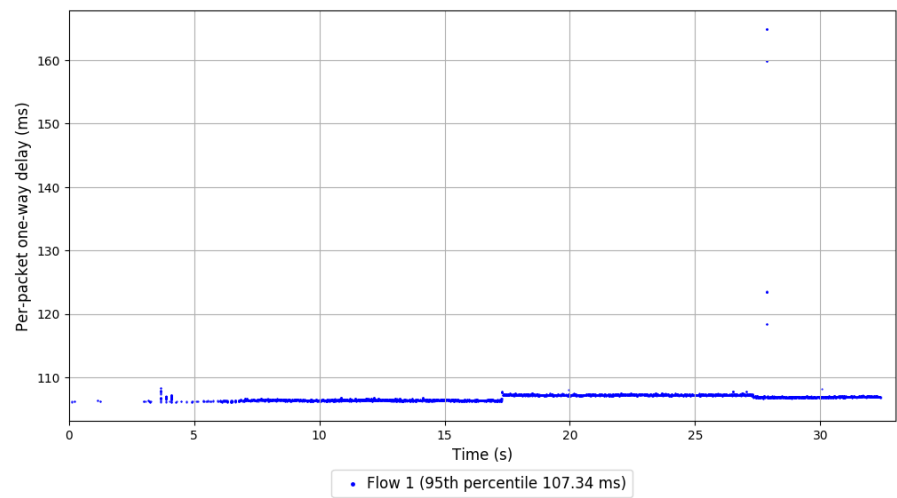
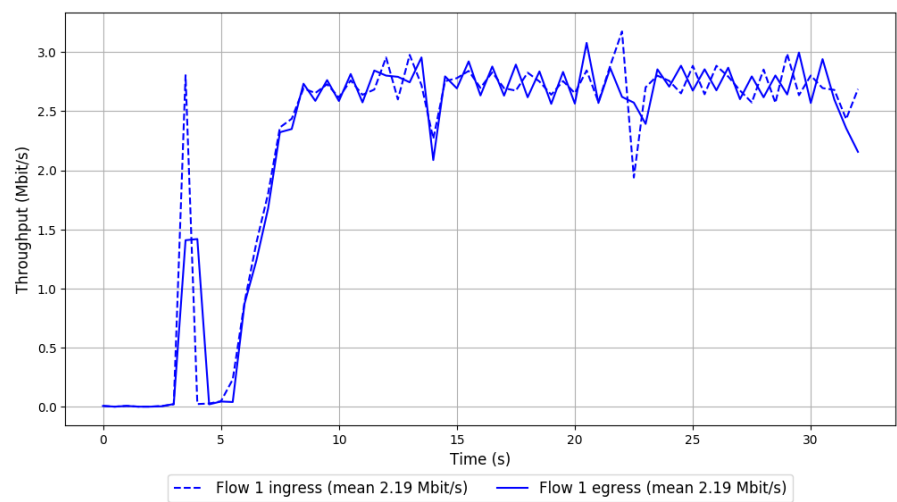
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 107.336 ms

Loss rate: 0.77%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-25 17:46:26

End at: 2018-01-25 17:46:56

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 108.925 ms

Loss rate: 0.78%

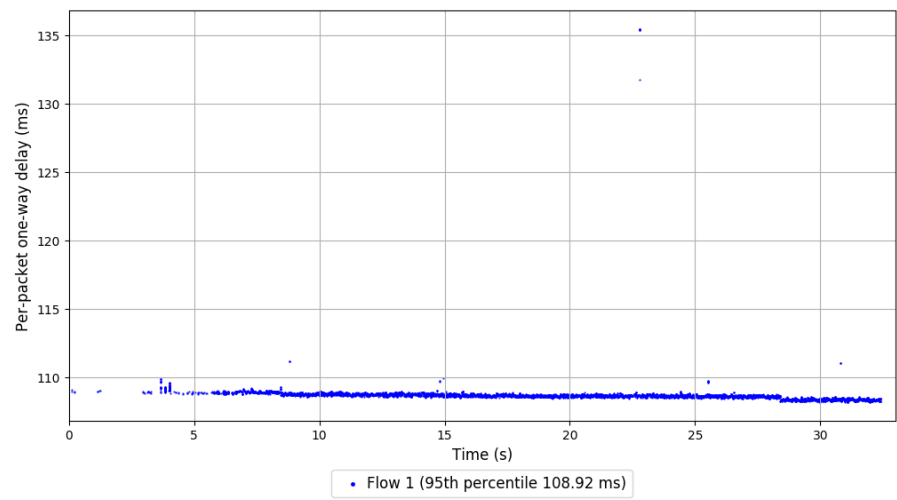
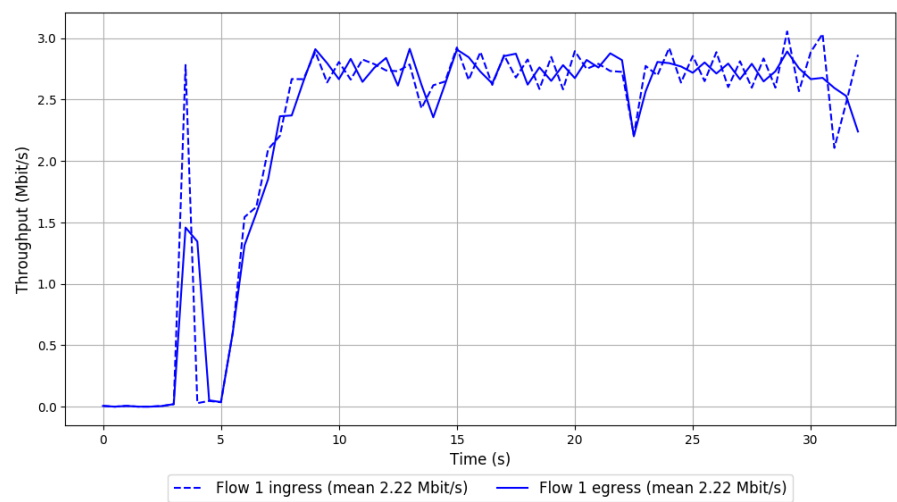
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 108.925 ms

Loss rate: 0.78%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-25 17:59:23

End at: 2018-01-25 17:59:53

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 115.691 ms

Loss rate: 0.76%

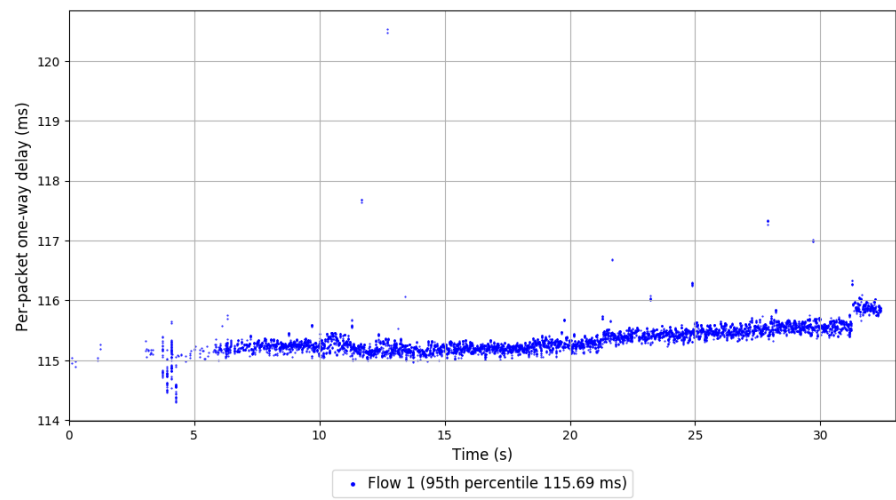
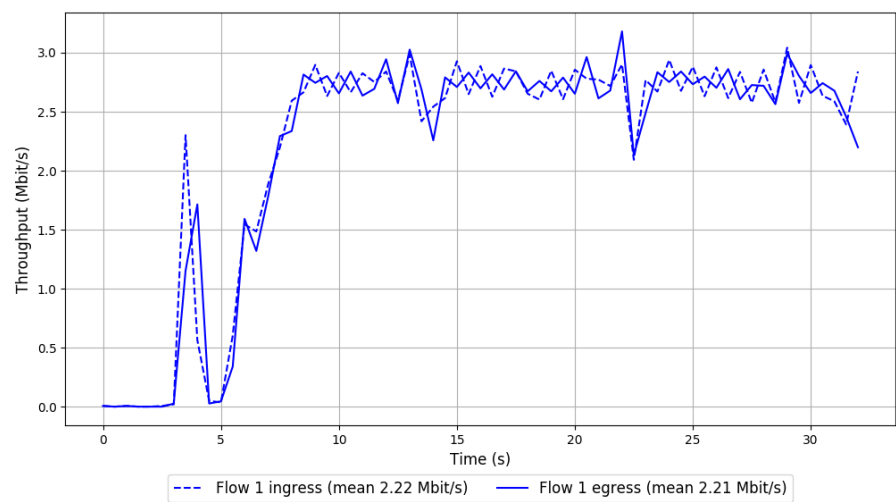
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 115.691 ms

Loss rate: 0.76%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-25 18:12:12

End at: 2018-01-25 18:12:42

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 122.202 ms

Loss rate: 0.92%

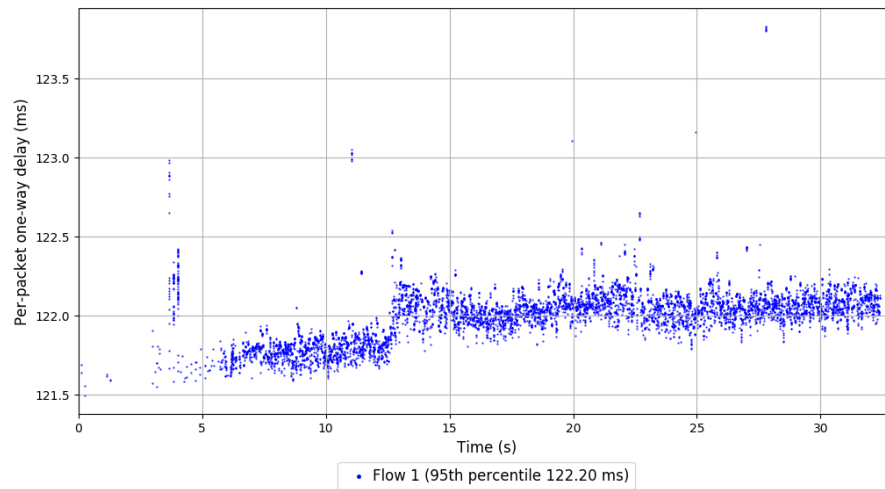
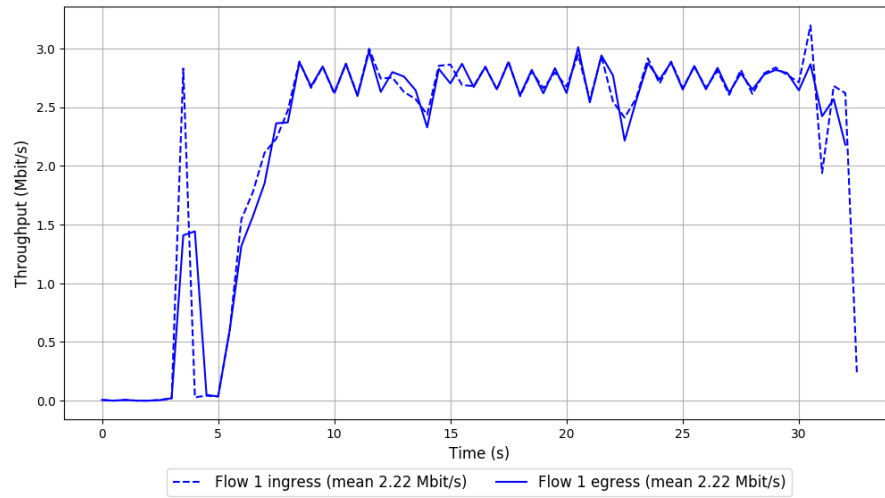
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 122.202 ms

Loss rate: 0.92%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-25 18:25:20

End at: 2018-01-25 18:25:50

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 121.745 ms

Loss rate: 0.77%

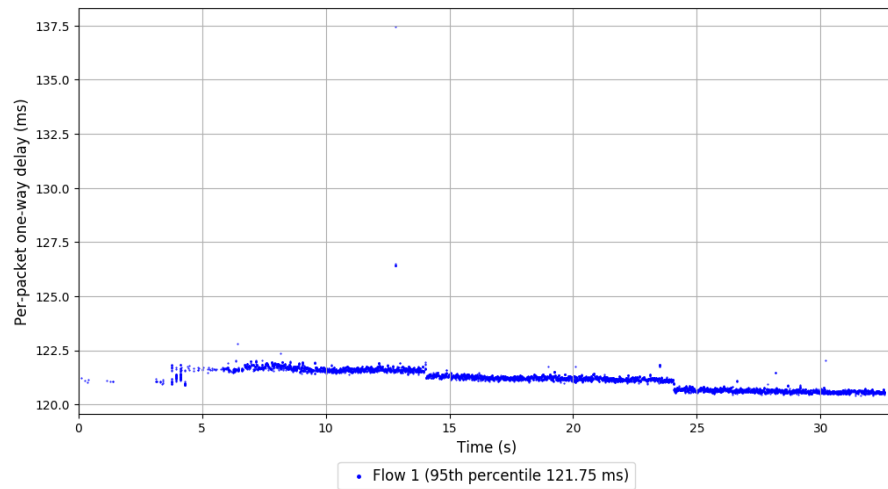
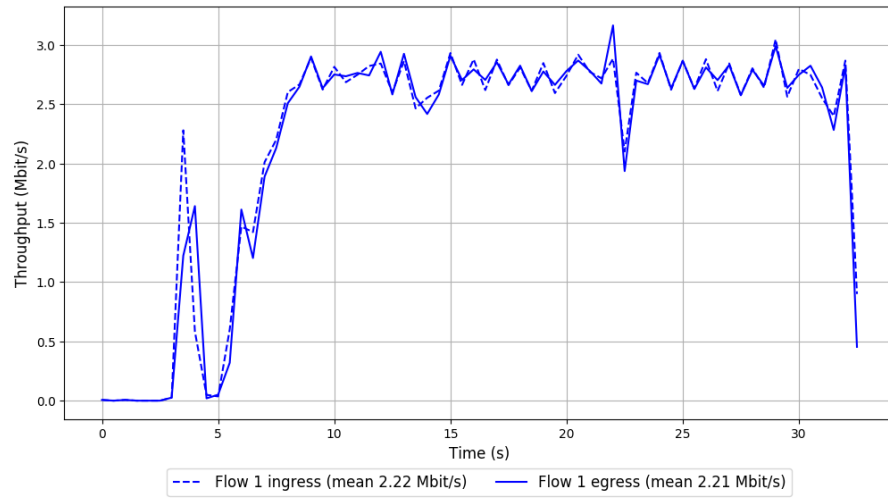
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 121.745 ms

Loss rate: 0.77%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-25 16:16:51

End at: 2018-01-25 16:17:21

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 112.374 ms

Loss rate: 1.24%

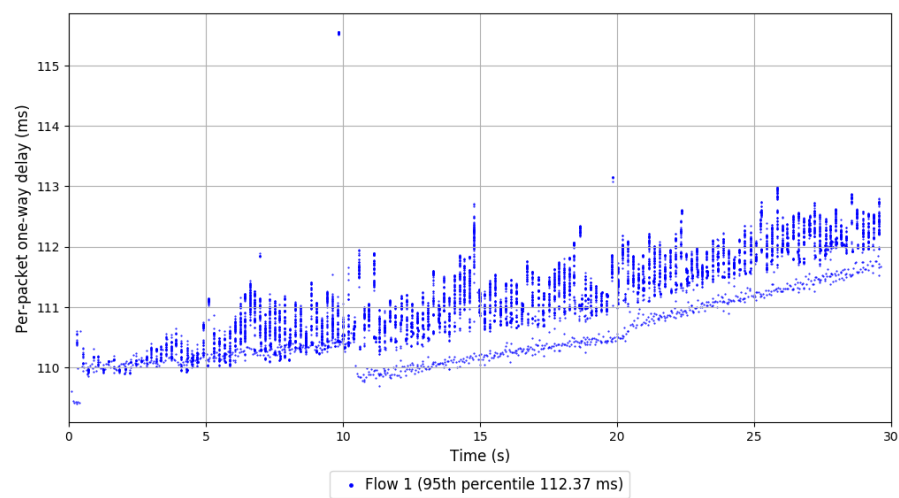
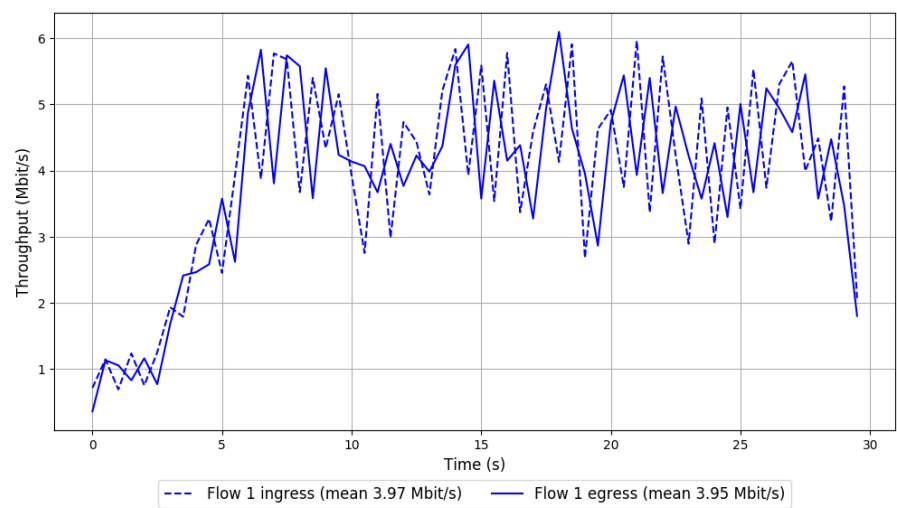
-- Flow 1:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 112.374 ms

Loss rate: 1.24%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-25 16:29:53

End at: 2018-01-25 16:30:23

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 170.298 ms

Loss rate: 0.92%

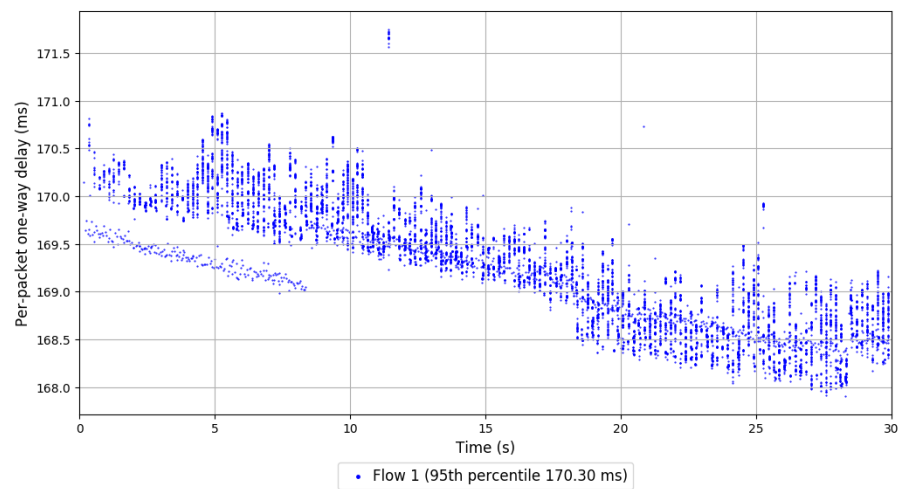
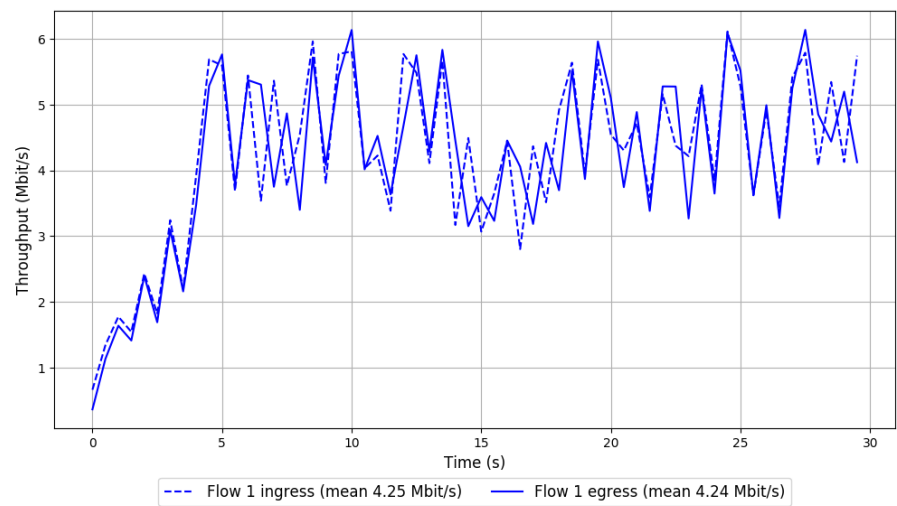
-- Flow 1:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 170.298 ms

Loss rate: 0.92%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-25 16:42:47

End at: 2018-01-25 16:43:17

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 174.363 ms

Loss rate: 0.61%

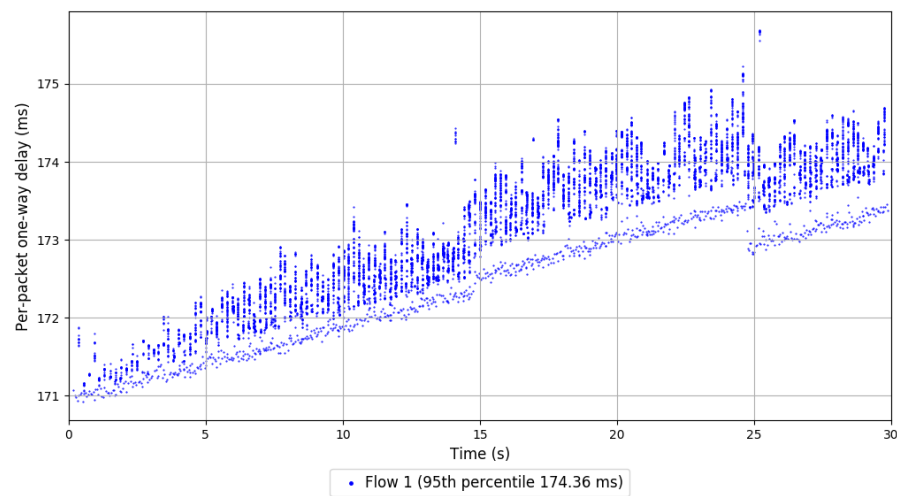
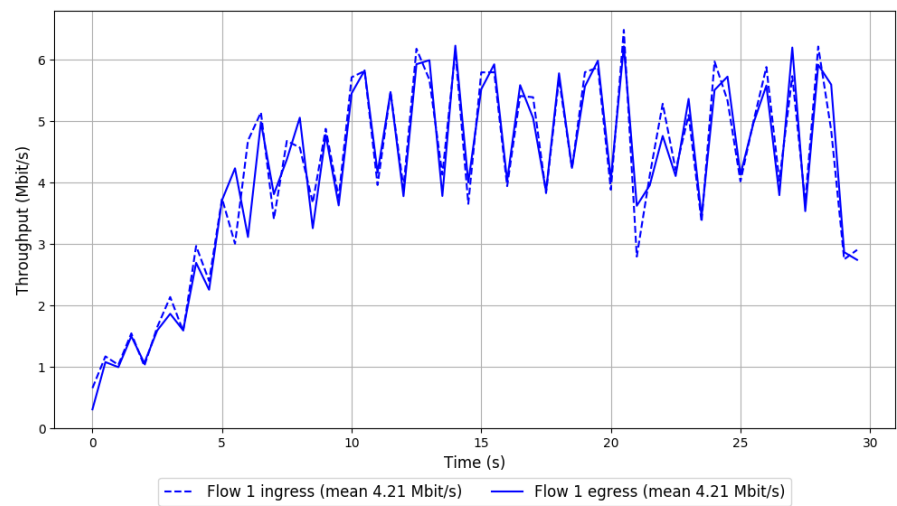
-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 174.363 ms

Loss rate: 0.61%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-25 16:55:31

End at: 2018-01-25 16:56:01

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 154.961 ms

Loss rate: 0.94%

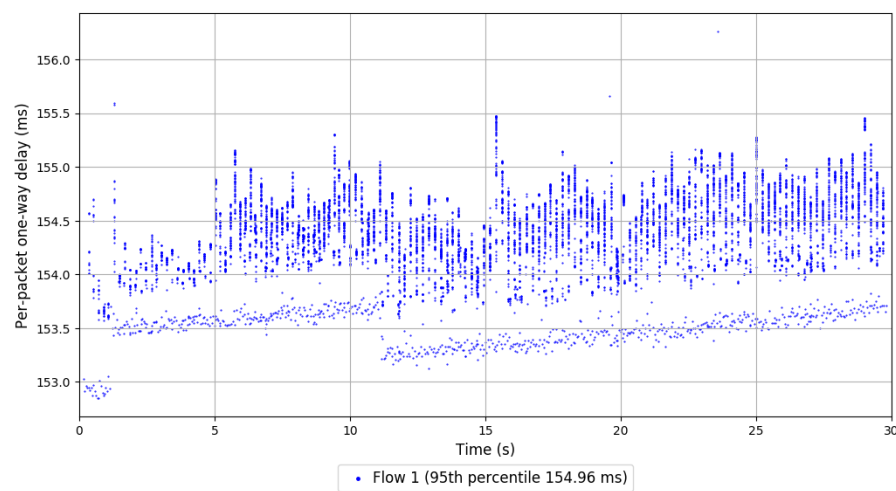
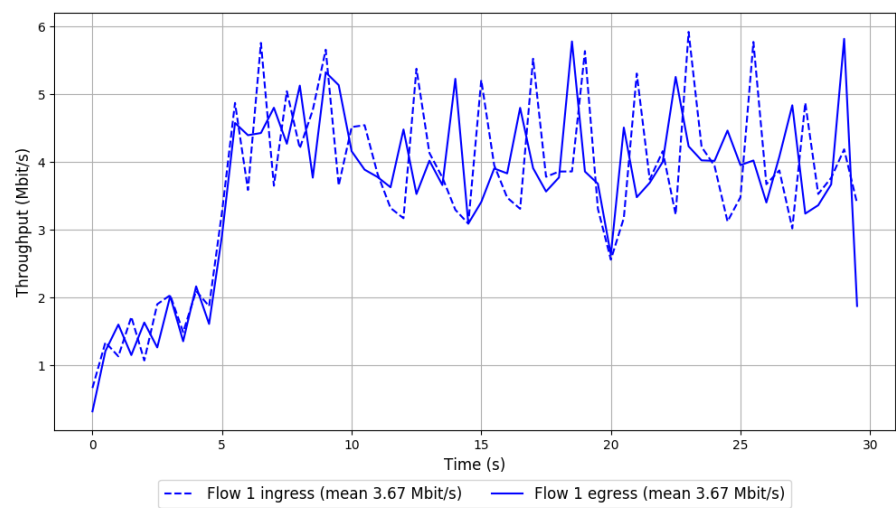
-- Flow 1:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 154.961 ms

Loss rate: 0.94%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-25 17:08:25

End at: 2018-01-25 17:08:55

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 138.827 ms

Loss rate: 0.92%

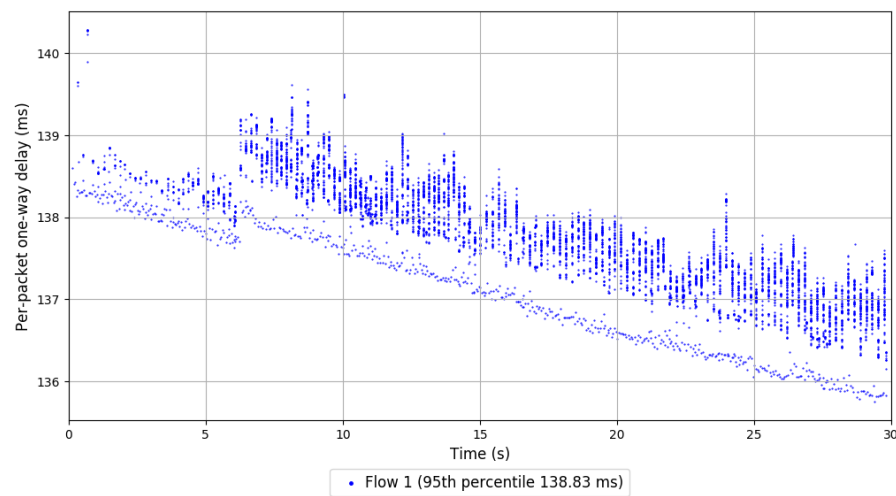
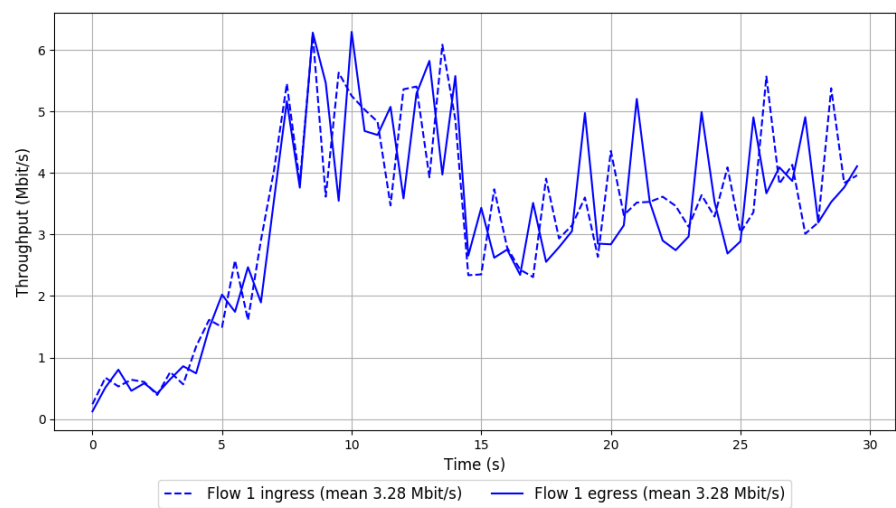
-- Flow 1:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 138.827 ms

Loss rate: 0.92%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-25 17:21:11

End at: 2018-01-25 17:21:41

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 102.767 ms

Loss rate: 1.02%

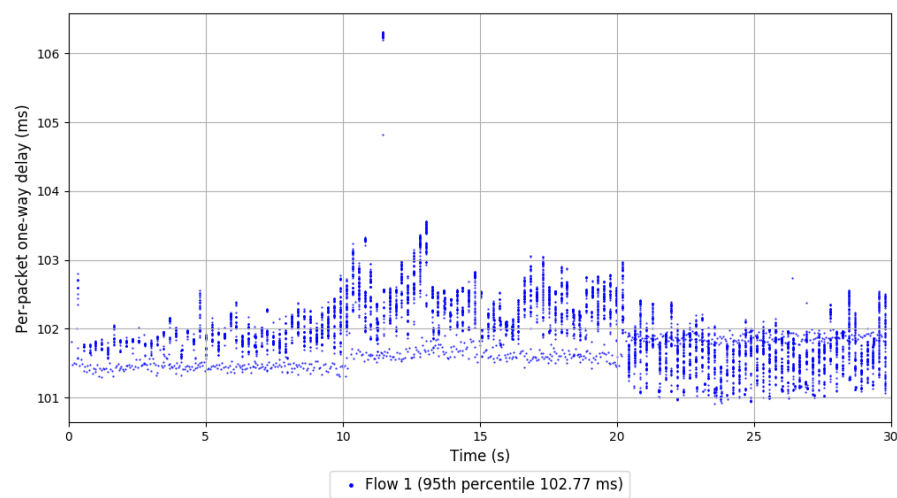
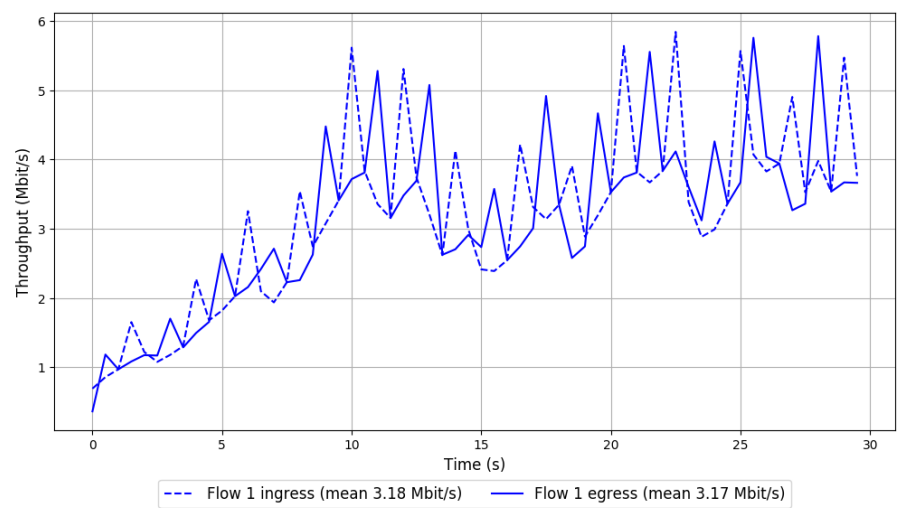
-- Flow 1:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 102.767 ms

Loss rate: 1.02%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-25 17:33:58

End at: 2018-01-25 17:34:28

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 108.531 ms

Loss rate: 0.25%

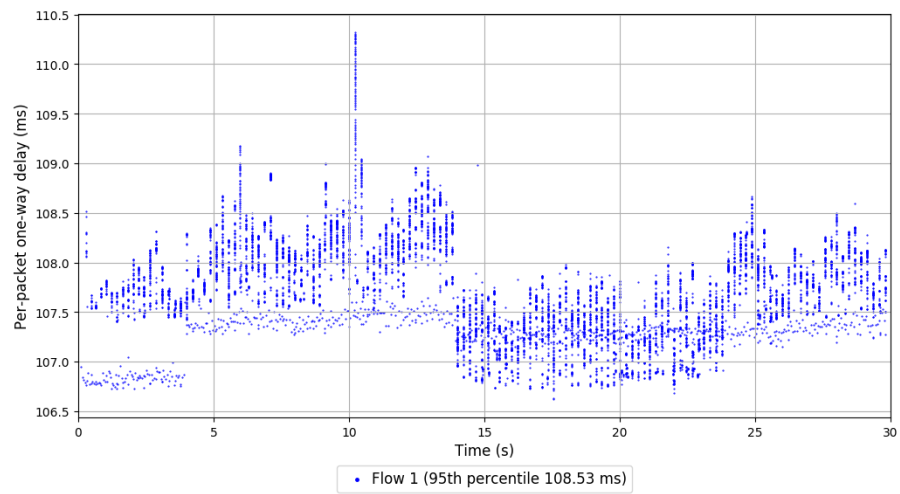
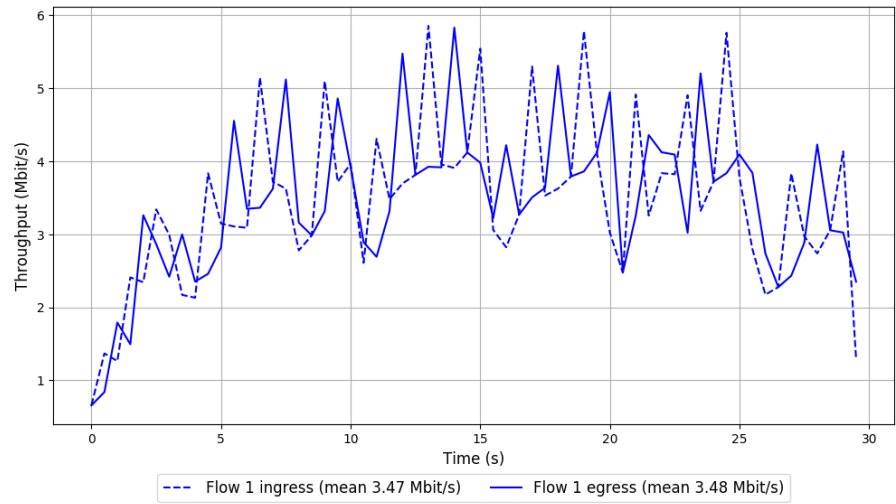
-- Flow 1:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 108.531 ms

Loss rate: 0.25%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-25 17:47:07

End at: 2018-01-25 17:47:37

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 110.085 ms

Loss rate: 1.33%

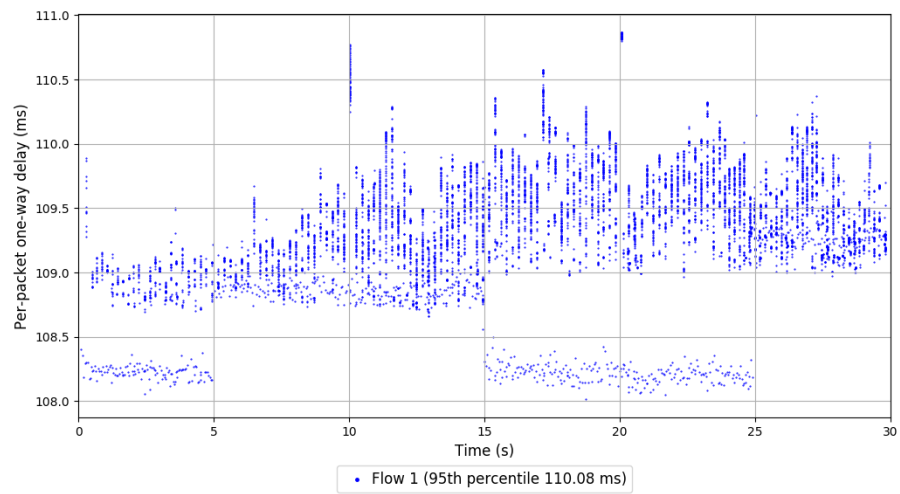
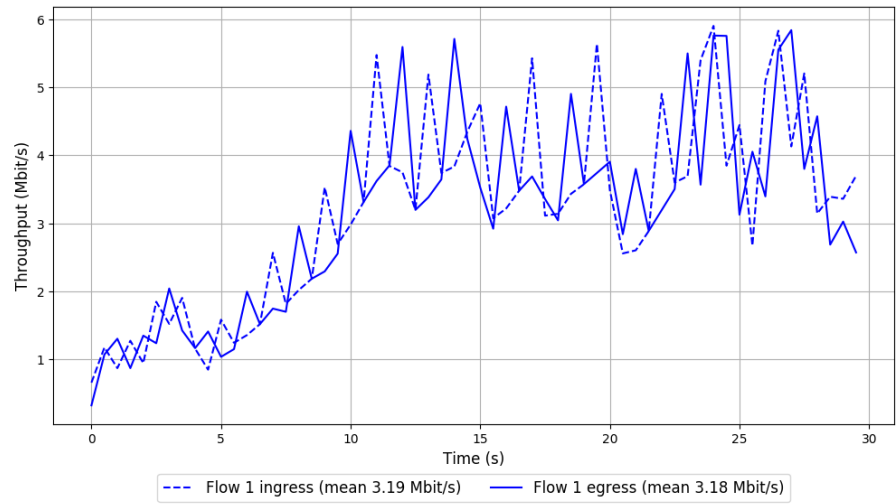
-- Flow 1:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 110.085 ms

Loss rate: 1.33%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-25 18:00:04

End at: 2018-01-25 18:00:34

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 117.228 ms

Loss rate: 0.90%

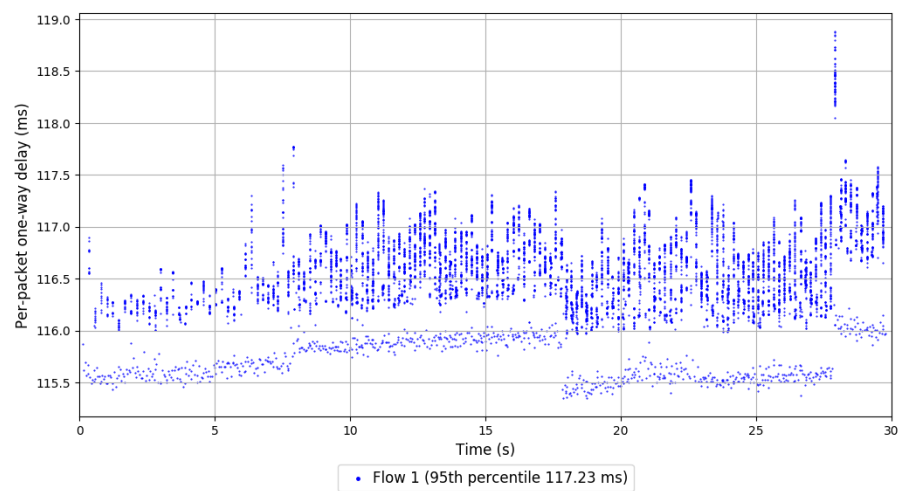
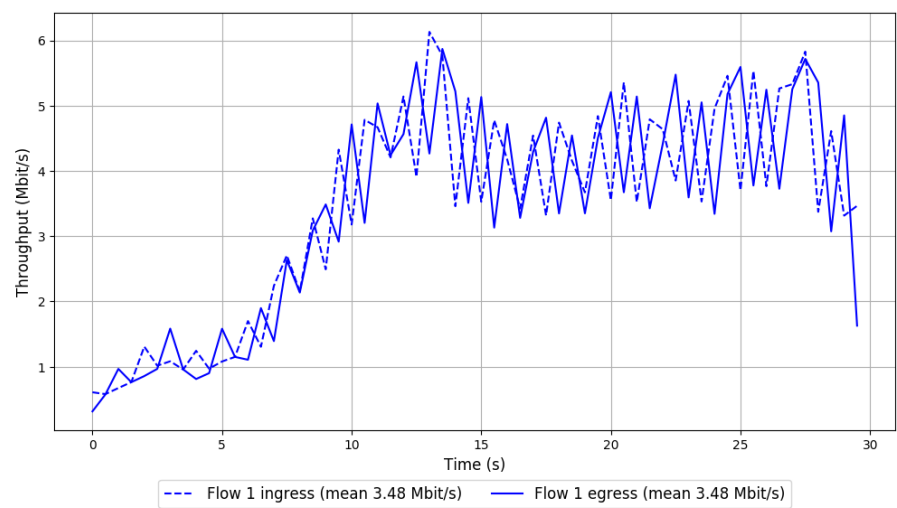
-- Flow 1:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 117.228 ms

Loss rate: 0.90%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-25 18:12:52

End at: 2018-01-25 18:13:22

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 124.541 ms

Loss rate: 0.92%

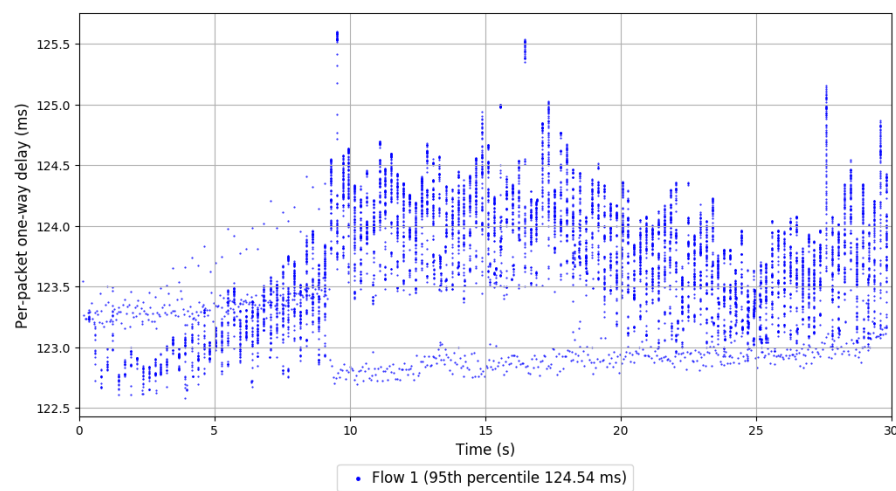
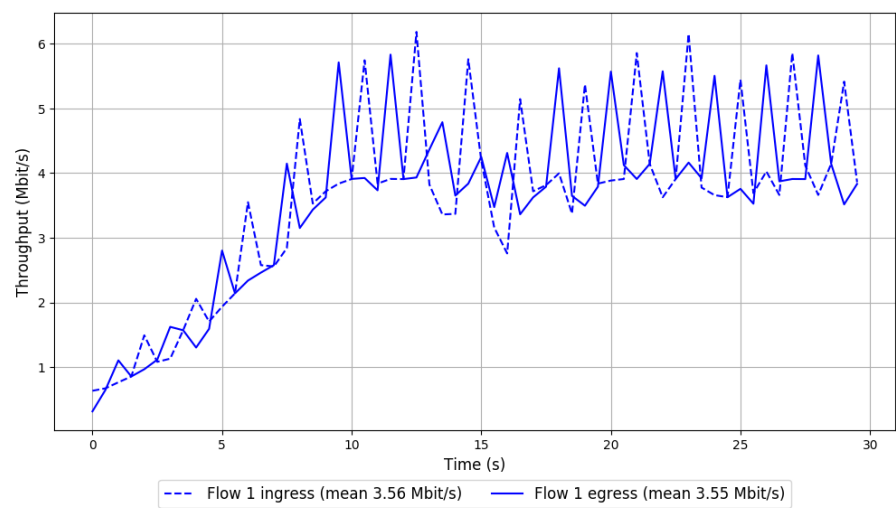
-- Flow 1:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 124.541 ms

Loss rate: 0.92%

Run 10: Report of Sprout — Data Link

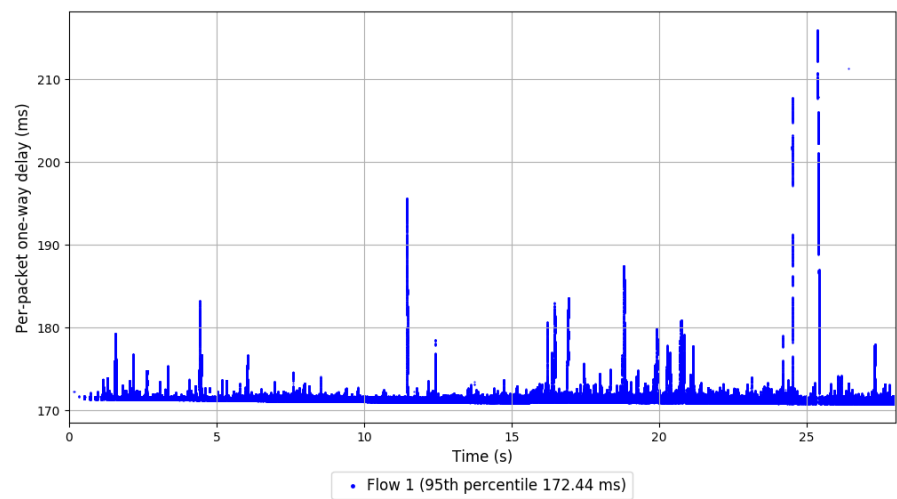
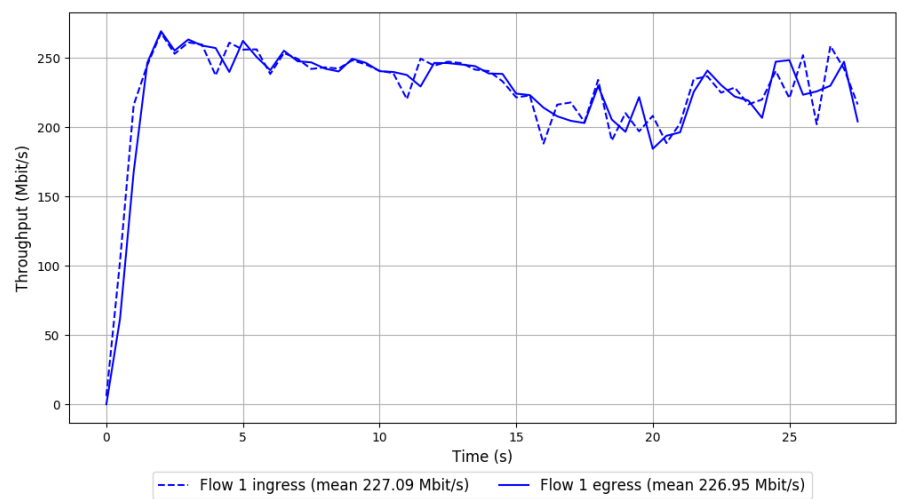


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-25 16:24:44
End at: 2018-01-25 16:25:14

# Below is generated by plot.py at 2018-01-25 21:01:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.95 Mbit/s
95th percentile per-packet one-way delay: 172.436 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 226.95 Mbit/s
95th percentile per-packet one-way delay: 172.436 ms
Loss rate: 0.78%
```


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

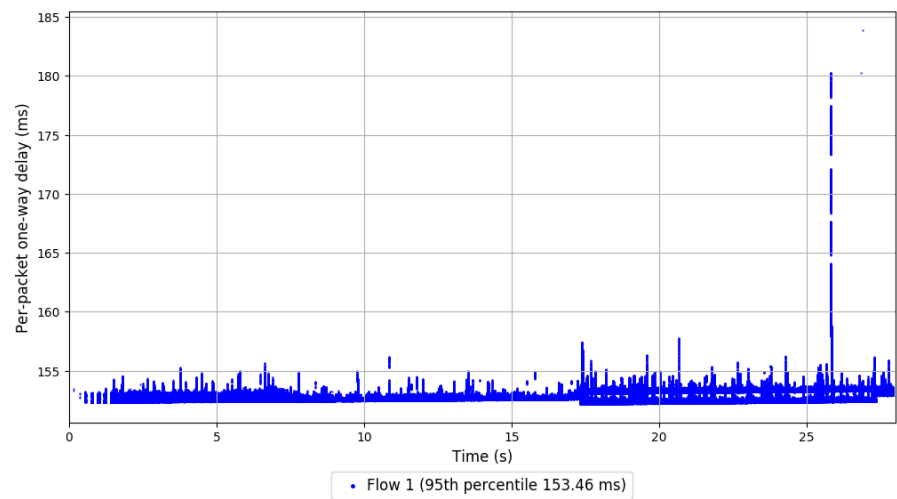
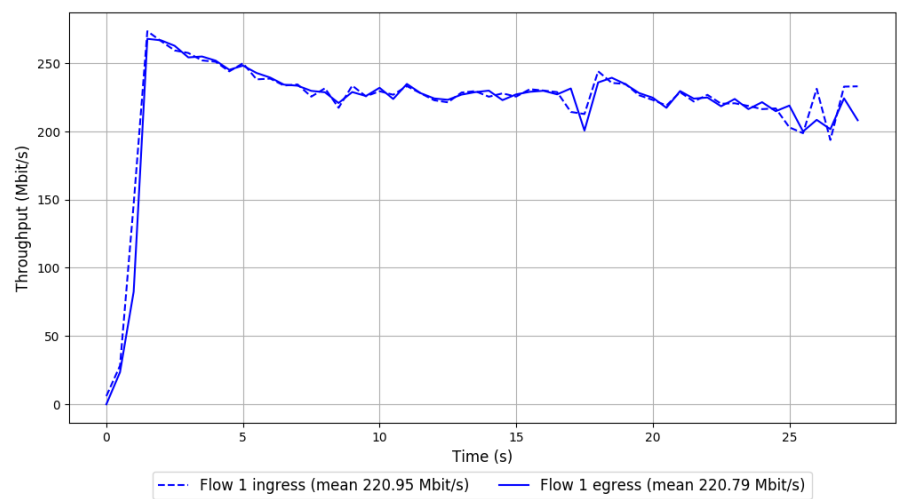


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-25 16:37:42
End at: 2018-01-25 16:38:12

# Below is generated by plot.py at 2018-01-25 21:01:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.79 Mbit/s
95th percentile per-packet one-way delay: 153.457 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 220.79 Mbit/s
95th percentile per-packet one-way delay: 153.457 ms
Loss rate: 0.79%
```

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

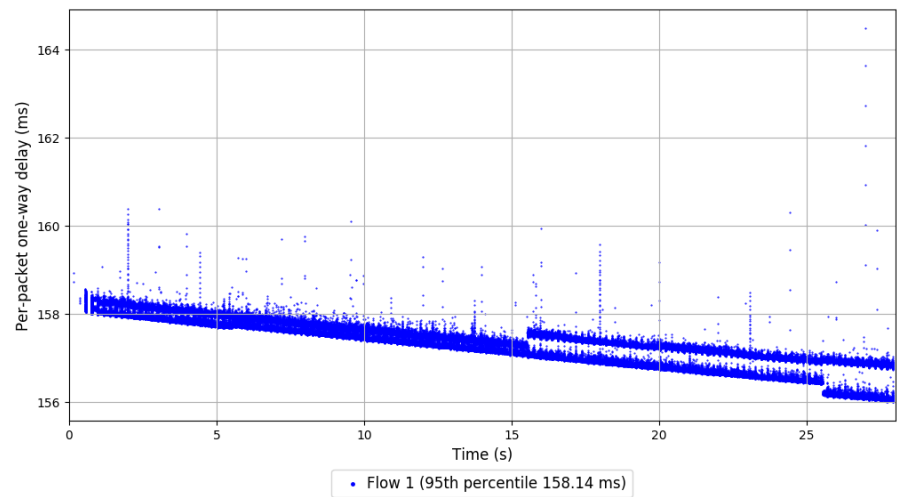
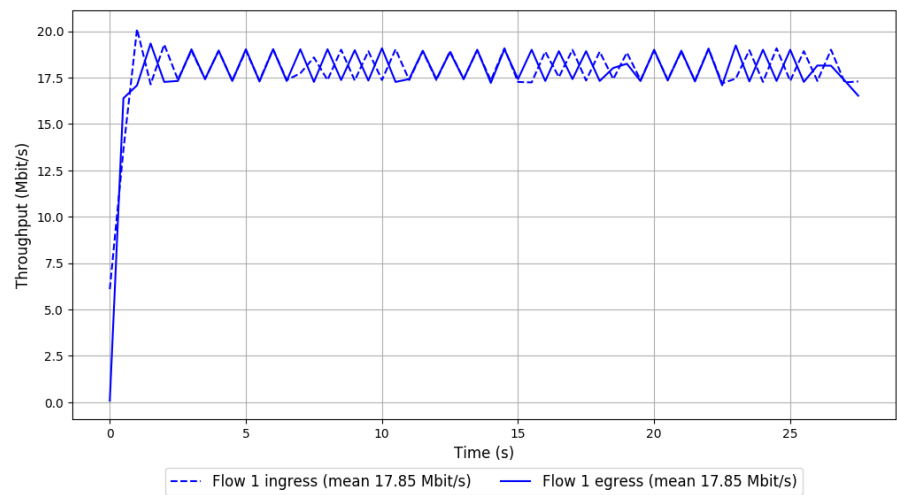


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-25 16:50:34
End at: 2018-01-25 16:51:04

# Below is generated by plot.py at 2018-01-25 21:01:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.85 Mbit/s
95th percentile per-packet one-way delay: 158.142 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 17.85 Mbit/s
95th percentile per-packet one-way delay: 158.142 ms
Loss rate: 0.68%
```

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

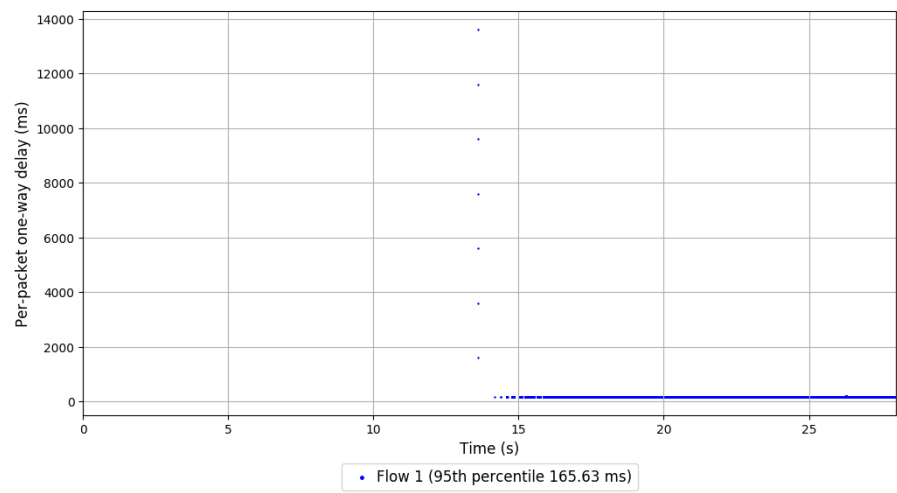
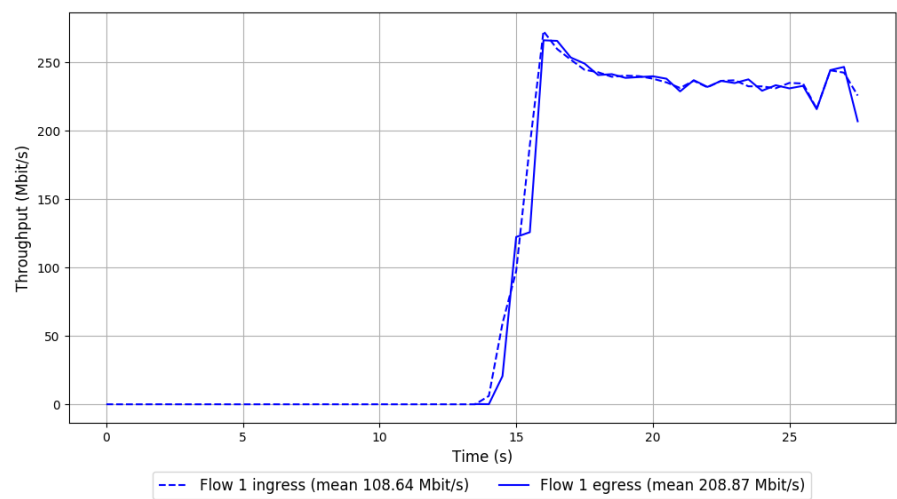


Run 4: Statistics of TaoVA-100x

Start at: 2018-01-25 17:03:28

End at: 2018-01-25 17:03:58

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-25 17:16:13

End at: 2018-01-25 17:16:43

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.31 Mbit/s

95th percentile per-packet one-way delay: 105.100 ms

Loss rate: 0.74%

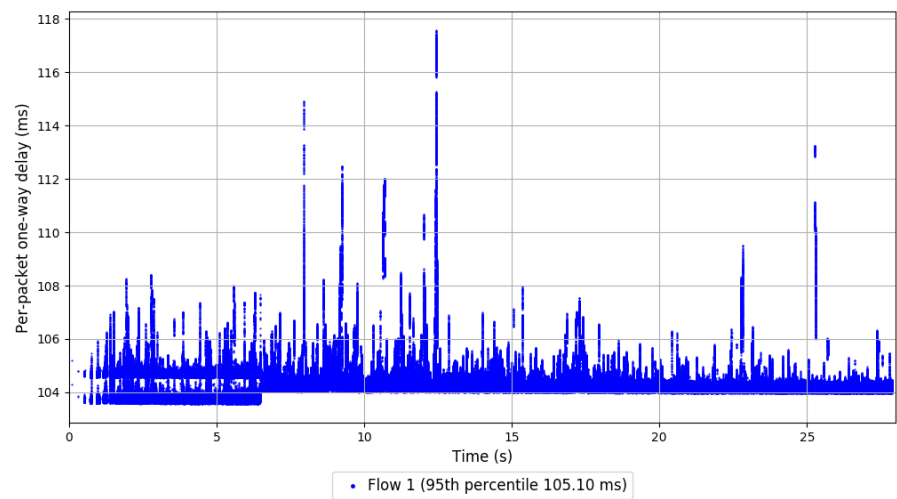
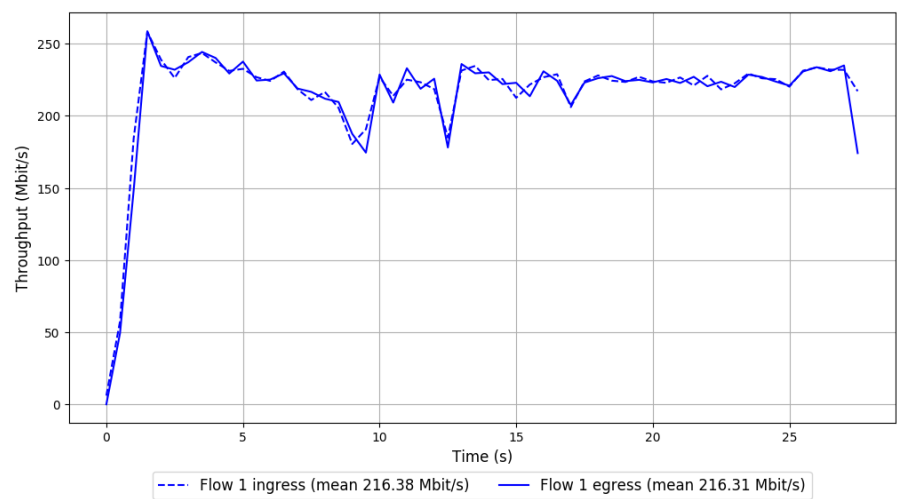
-- Flow 1:

Average throughput: 216.31 Mbit/s

95th percentile per-packet one-way delay: 105.100 ms

Loss rate: 0.74%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-25 17:29:10

End at: 2018-01-25 17:29:40

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.37 Mbit/s

95th percentile per-packet one-way delay: 108.346 ms

Loss rate: 0.79%

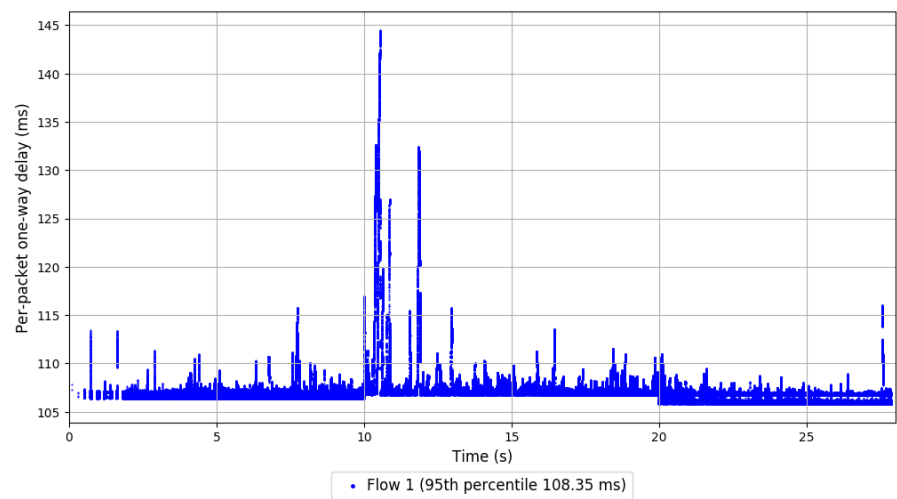
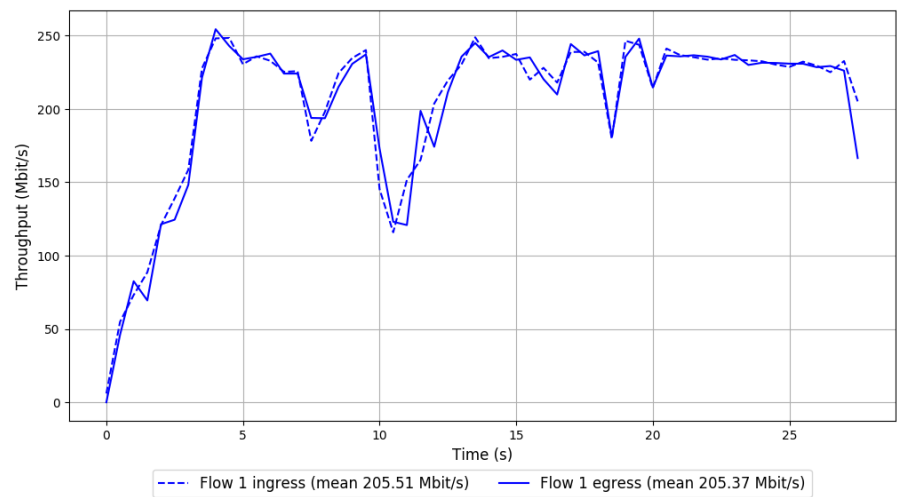
-- Flow 1:

Average throughput: 205.37 Mbit/s

95th percentile per-packet one-way delay: 108.346 ms

Loss rate: 0.79%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-25 17:41:55

End at: 2018-01-25 17:42:25

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.78 Mbit/s

95th percentile per-packet one-way delay: 114.025 ms

Loss rate: 0.97%

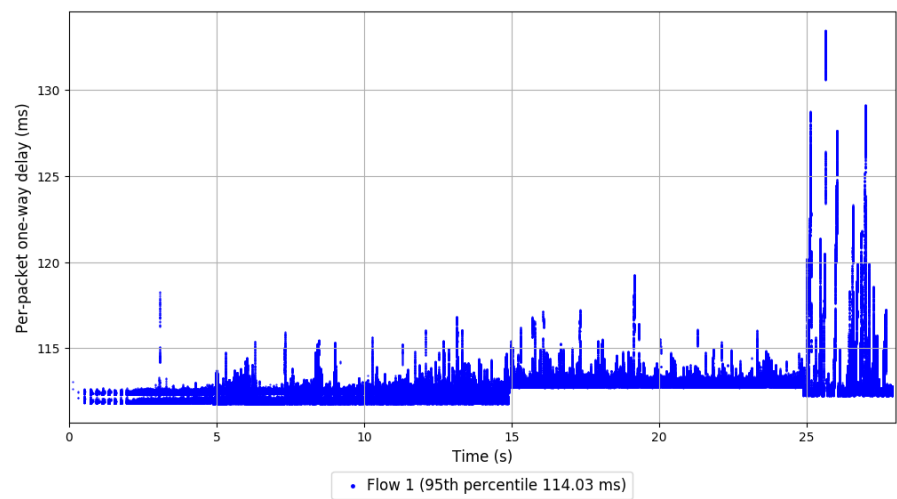
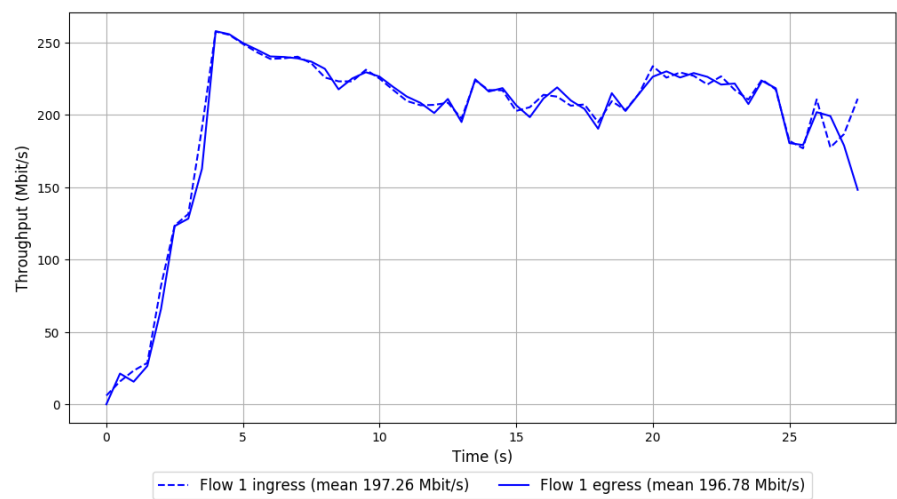
-- Flow 1:

Average throughput: 196.78 Mbit/s

95th percentile per-packet one-way delay: 114.025 ms

Loss rate: 0.97%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-25 17:54:59

End at: 2018-01-25 17:55:29

Below is generated by plot.py at 2018-01-25 21:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.22 Mbit/s

95th percentile per-packet one-way delay: 112.280 ms

Loss rate: 1.05%

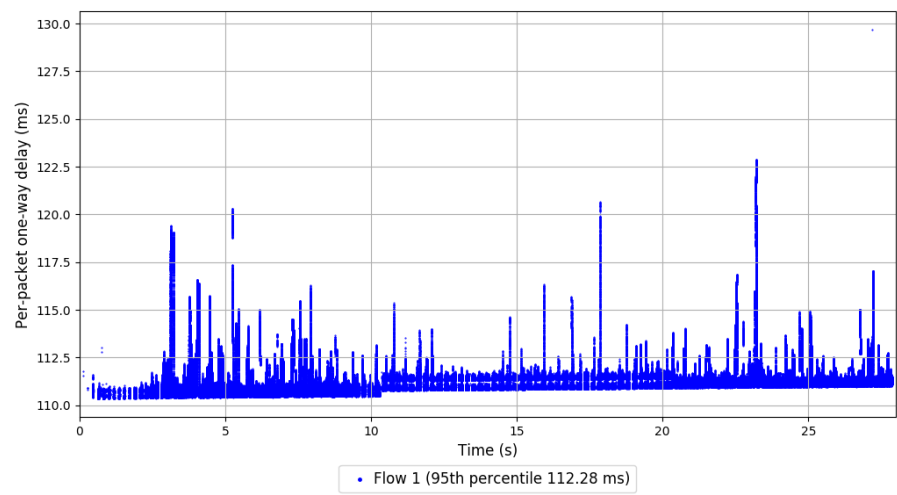
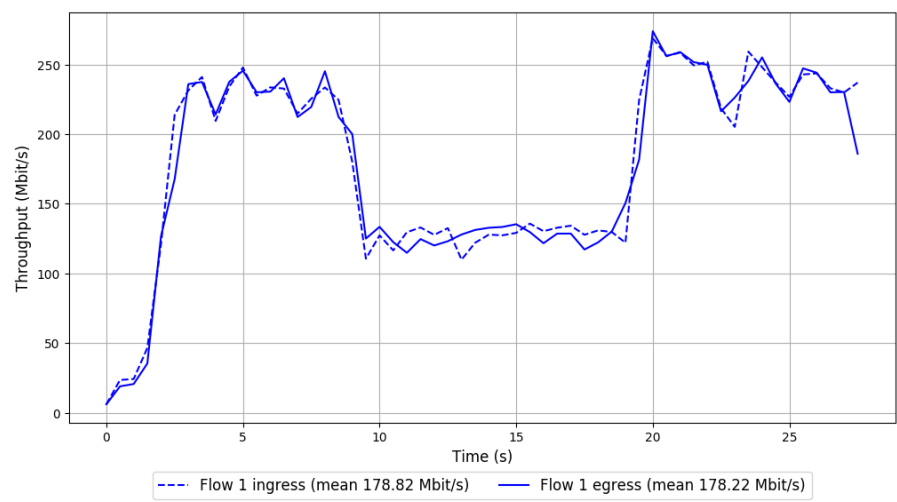
-- Flow 1:

Average throughput: 178.22 Mbit/s

95th percentile per-packet one-way delay: 112.280 ms

Loss rate: 1.05%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-25 18:07:47

End at: 2018-01-25 18:08:17

Below is generated by plot.py at 2018-01-25 21:05:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.59 Mbit/s

95th percentile per-packet one-way delay: 120.163 ms

Loss rate: 0.72%

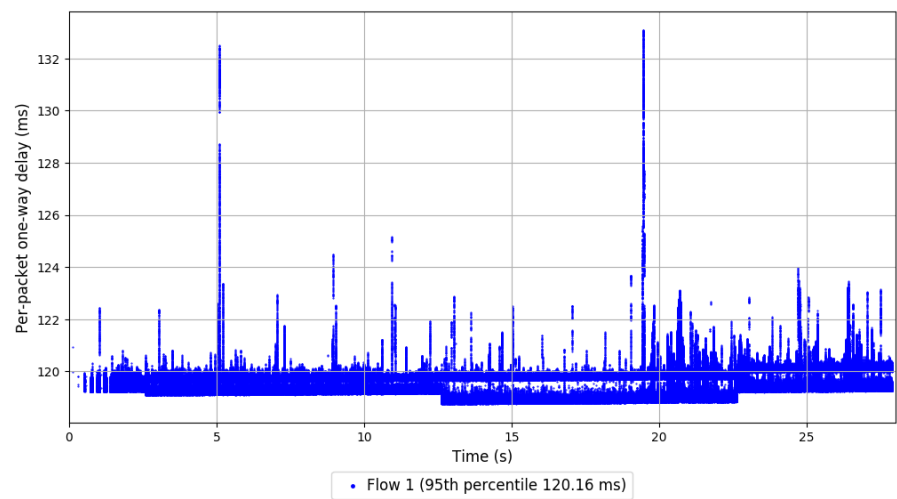
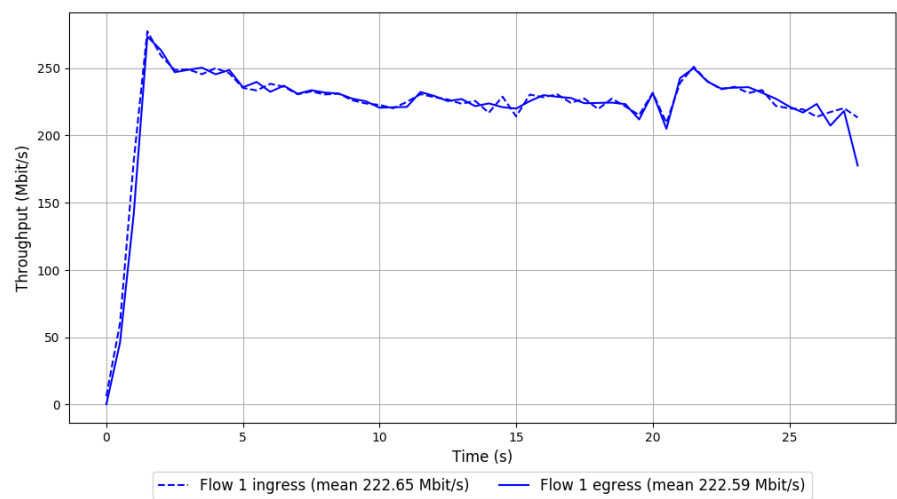
-- Flow 1:

Average throughput: 222.59 Mbit/s

95th percentile per-packet one-way delay: 120.163 ms

Loss rate: 0.72%

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

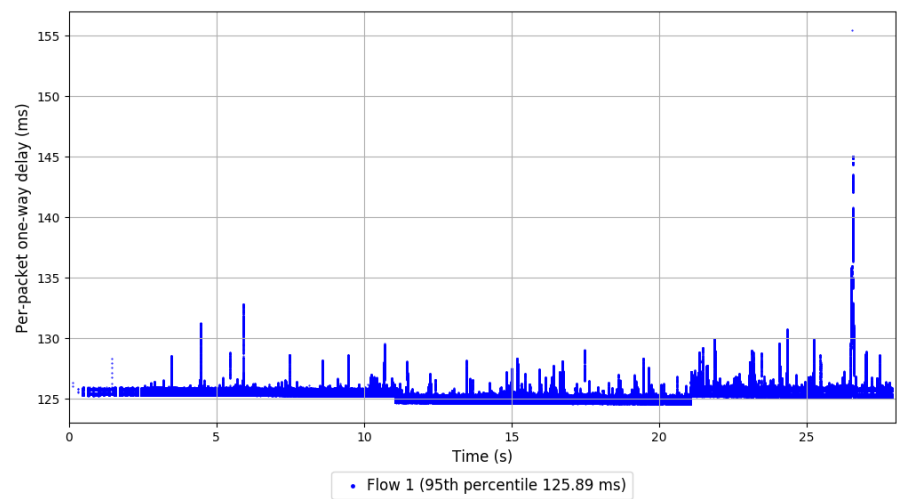
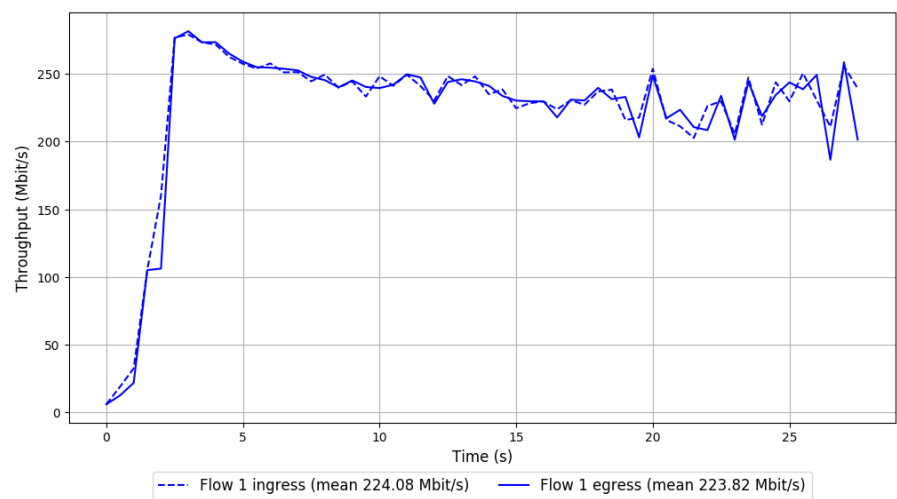


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-25 18:20:49
End at: 2018-01-25 18:21:19

# Below is generated by plot.py at 2018-01-25 21:05:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.82 Mbit/s
95th percentile per-packet one-way delay: 125.885 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 223.82 Mbit/s
95th percentile per-packet one-way delay: 125.885 ms
Loss rate: 0.83%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-25 16:22:32

End at: 2018-01-25 16:23:02

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.97 Mbit/s

95th percentile per-packet one-way delay: 161.740 ms

Loss rate: 0.41%

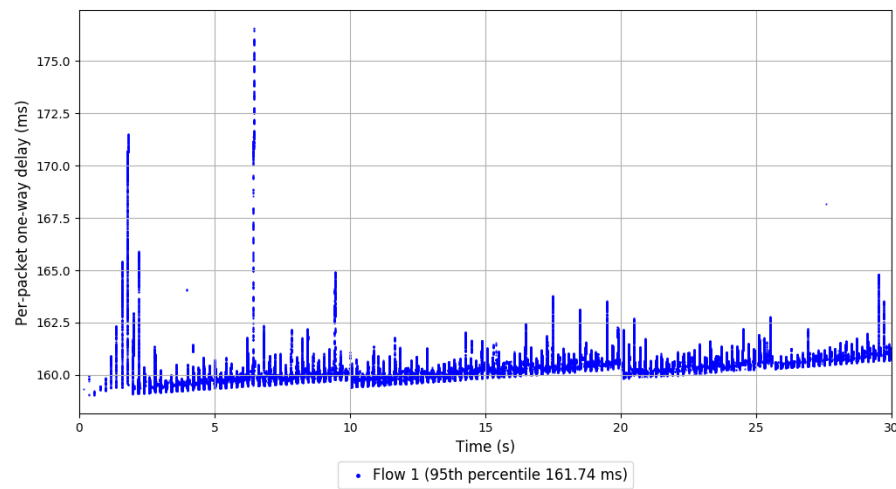
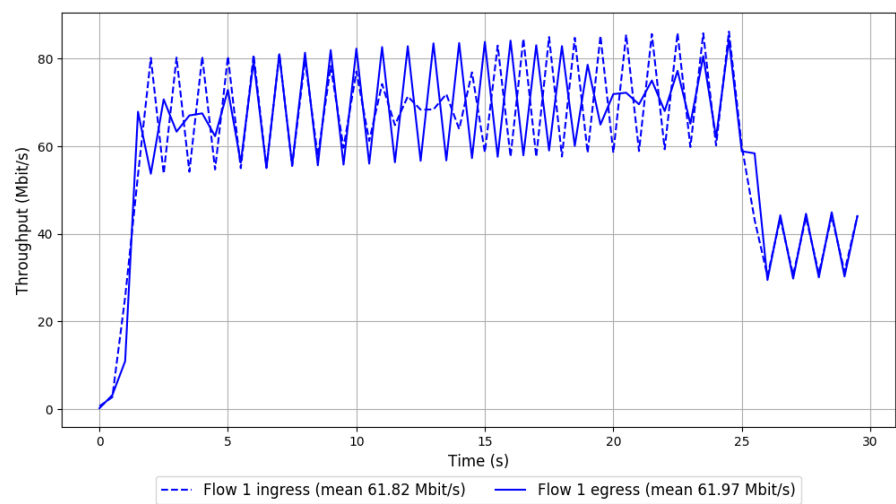
-- Flow 1:

Average throughput: 61.97 Mbit/s

95th percentile per-packet one-way delay: 161.740 ms

Loss rate: 0.41%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-25 16:35:32

End at: 2018-01-25 16:36:02

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.24 Mbit/s

95th percentile per-packet one-way delay: 156.902 ms

Loss rate: 0.63%

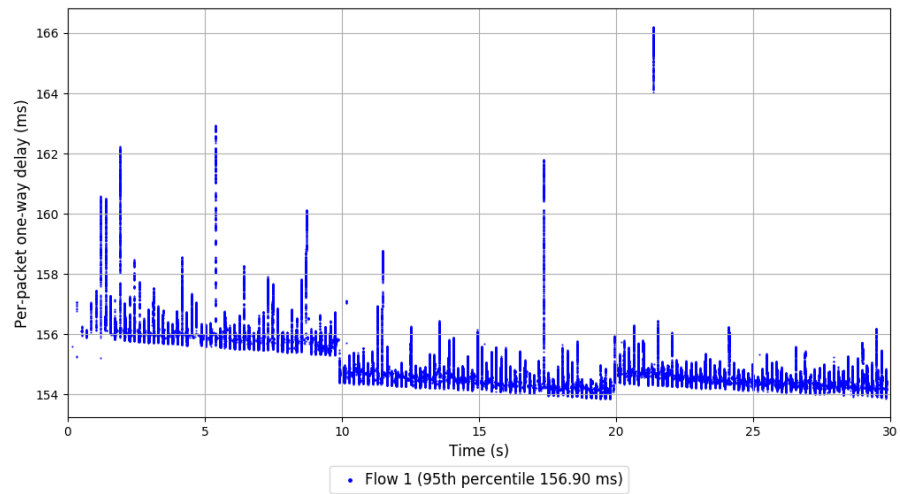
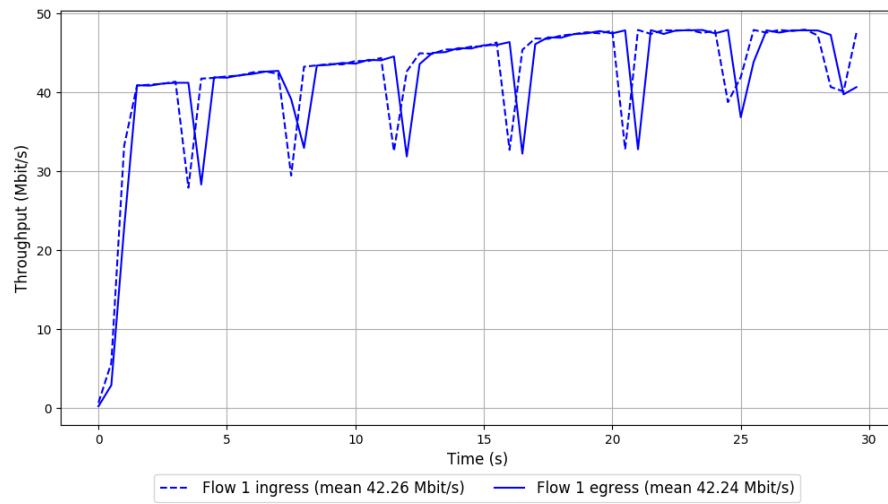
-- Flow 1:

Average throughput: 42.24 Mbit/s

95th percentile per-packet one-way delay: 156.902 ms

Loss rate: 0.63%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-25 16:48:27

End at: 2018-01-25 16:48:57

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.57 Mbit/s

95th percentile per-packet one-way delay: 162.880 ms

Loss rate: 0.64%

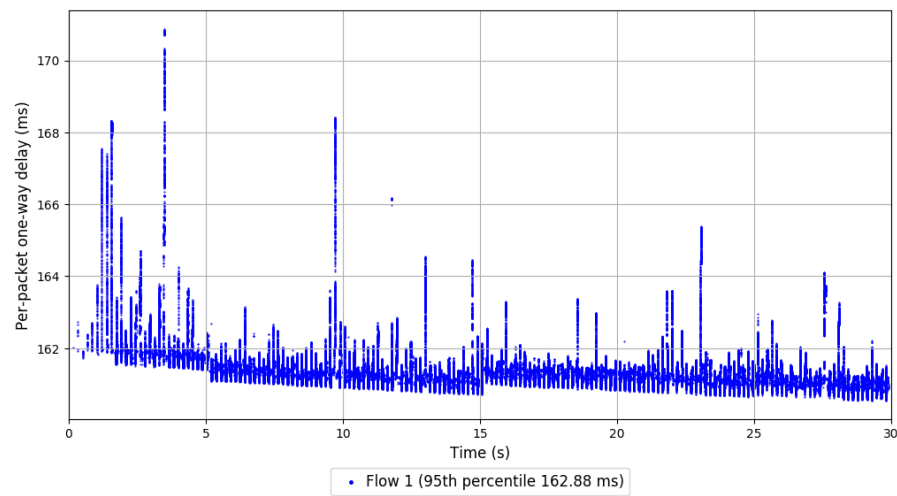
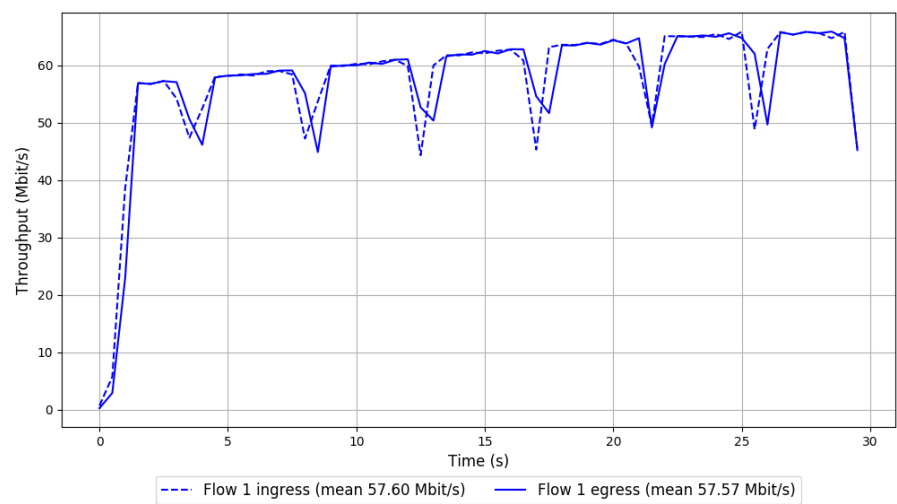
-- Flow 1:

Average throughput: 57.57 Mbit/s

95th percentile per-packet one-way delay: 162.880 ms

Loss rate: 0.64%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-25 17:01:18

End at: 2018-01-25 17:01:48

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.03 Mbit/s

95th percentile per-packet one-way delay: 164.663 ms

Loss rate: 0.77%

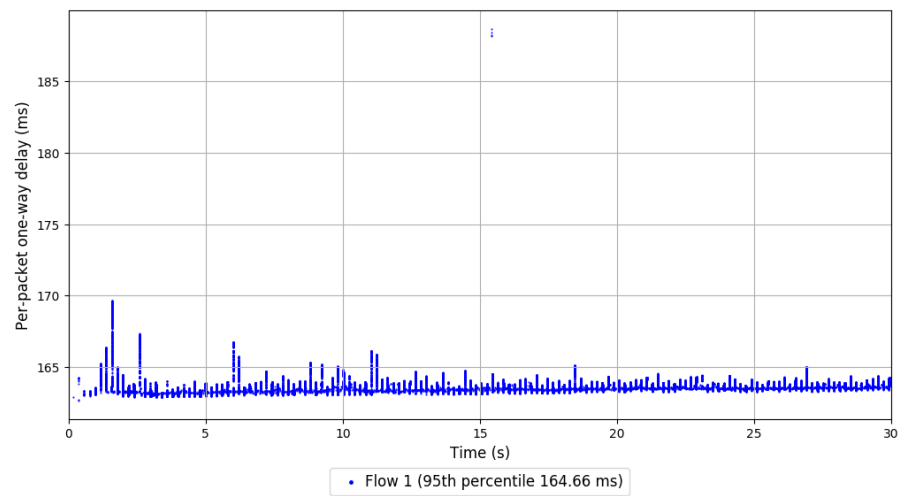
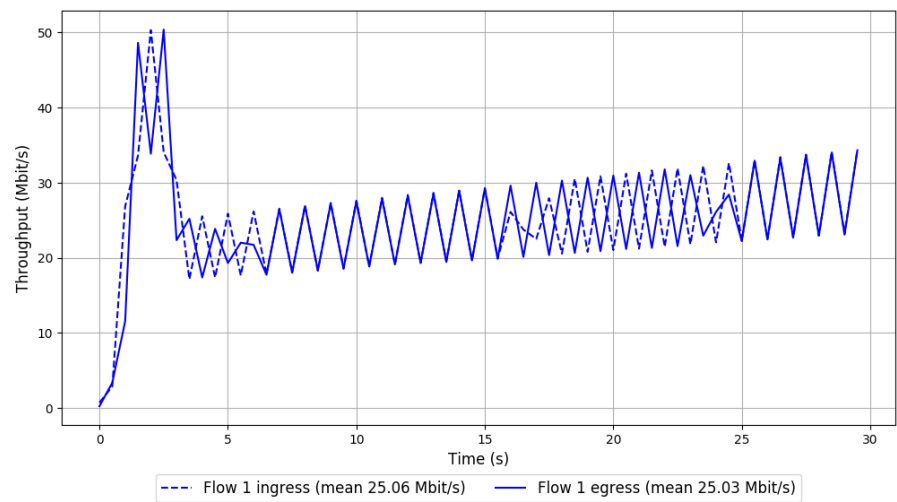
-- Flow 1:

Average throughput: 25.03 Mbit/s

95th percentile per-packet one-way delay: 164.663 ms

Loss rate: 0.77%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-25 17:14:00

End at: 2018-01-25 17:14:30

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.92 Mbit/s

95th percentile per-packet one-way delay: 117.127 ms

Loss rate: 0.54%

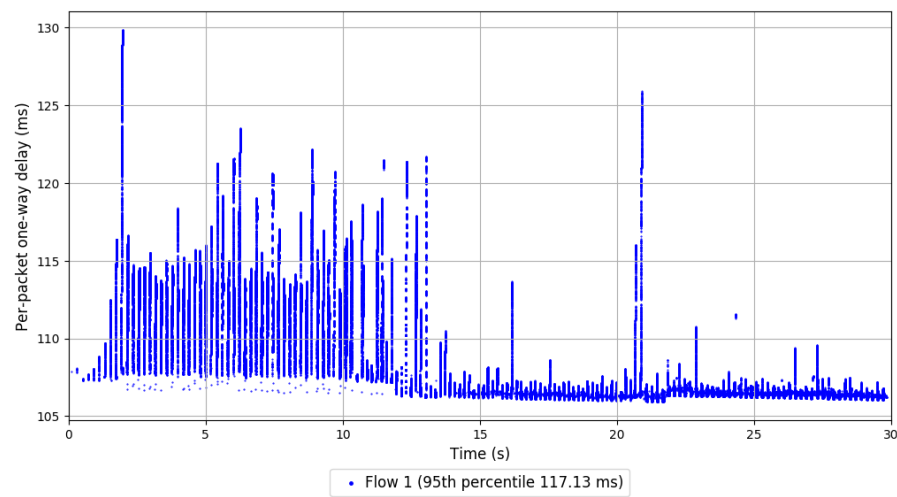
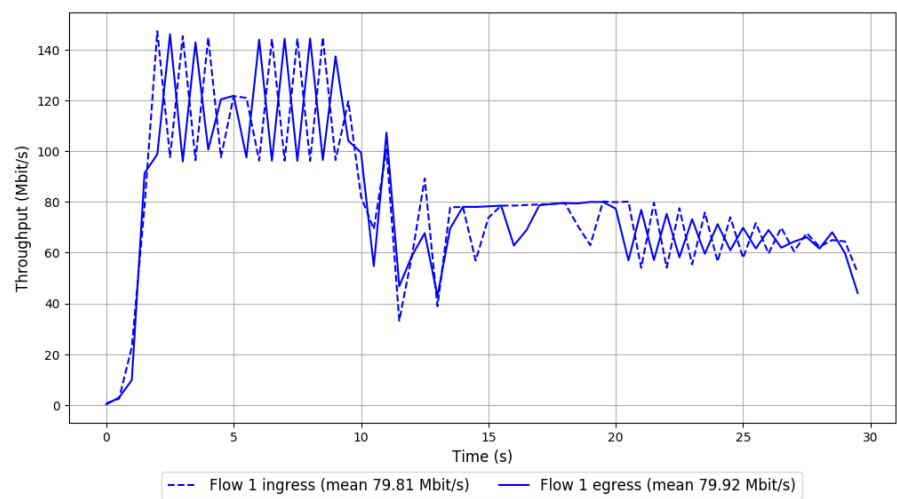
-- Flow 1:

Average throughput: 79.92 Mbit/s

95th percentile per-packet one-way delay: 117.127 ms

Loss rate: 0.54%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-25 17:26:59

End at: 2018-01-25 17:27:29

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.38 Mbit/s

95th percentile per-packet one-way delay: 108.838 ms

Loss rate: 0.40%

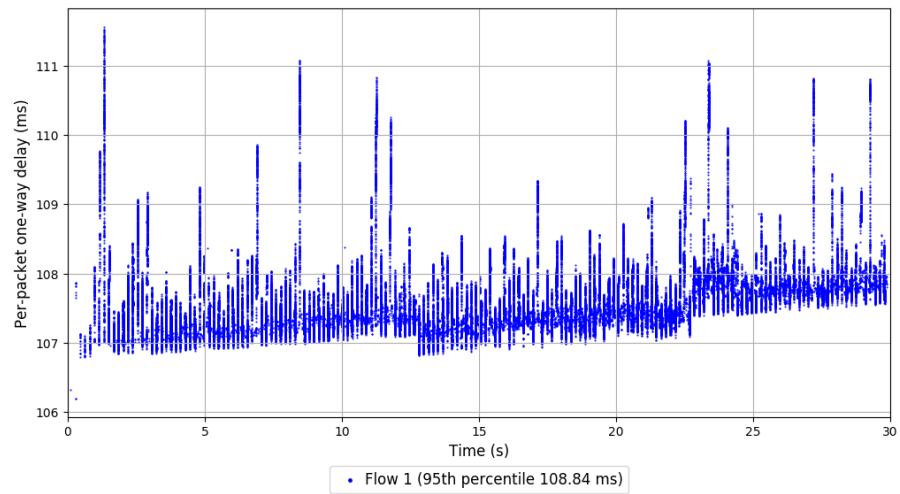
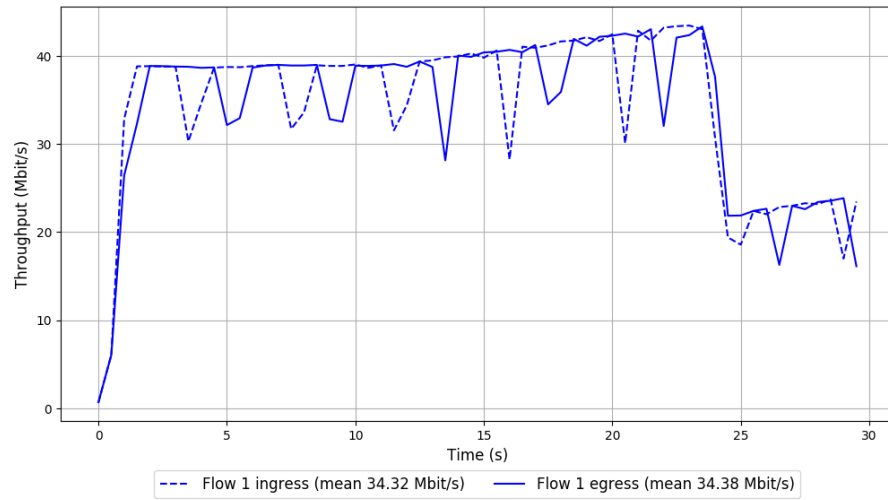
-- Flow 1:

Average throughput: 34.38 Mbit/s

95th percentile per-packet one-way delay: 108.838 ms

Loss rate: 0.40%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-25 17:39:41

End at: 2018-01-25 17:40:11

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.23 Mbit/s

95th percentile per-packet one-way delay: 122.902 ms

Loss rate: 0.73%

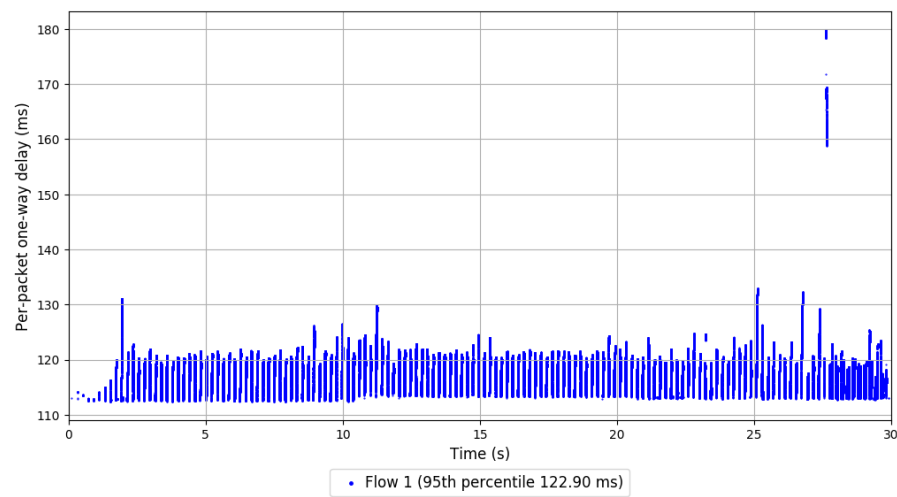
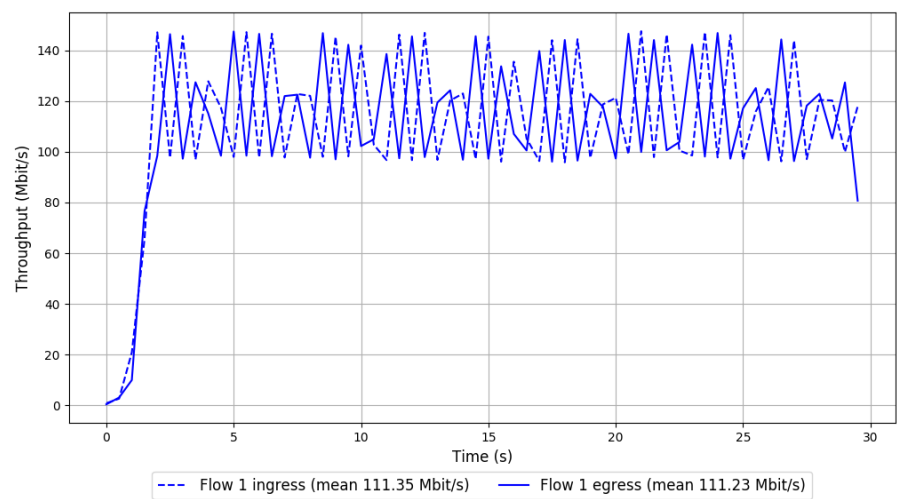
-- Flow 1:

Average throughput: 111.23 Mbit/s

95th percentile per-packet one-way delay: 122.902 ms

Loss rate: 0.73%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-25 17:52:50

End at: 2018-01-25 17:53:20

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.51 Mbit/s

95th percentile per-packet one-way delay: 111.845 ms

Loss rate: 0.68%

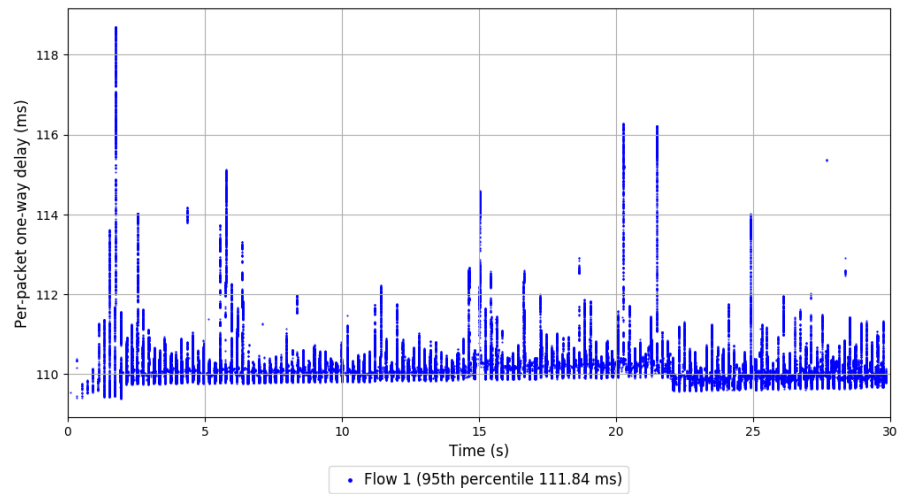
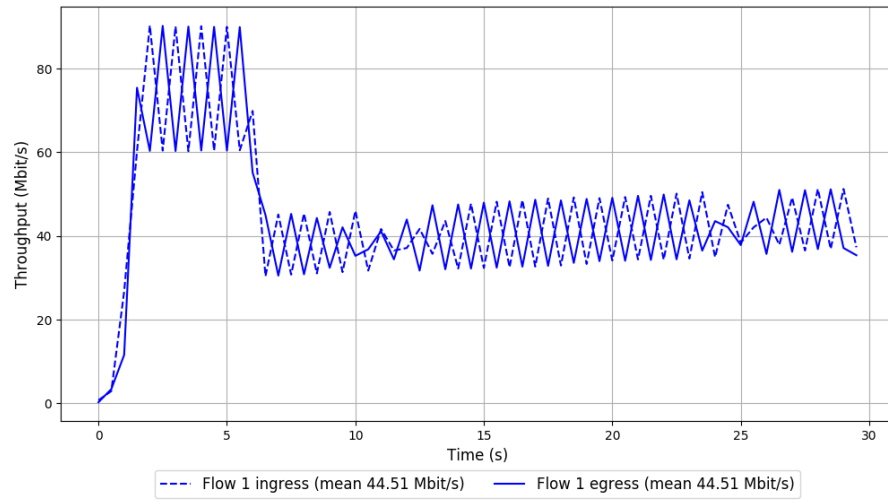
-- Flow 1:

Average throughput: 44.51 Mbit/s

95th percentile per-packet one-way delay: 111.845 ms

Loss rate: 0.68%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-25 18:05:36

End at: 2018-01-25 18:06:06

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.24 Mbit/s

95th percentile per-packet one-way delay: 120.336 ms

Loss rate: 0.39%

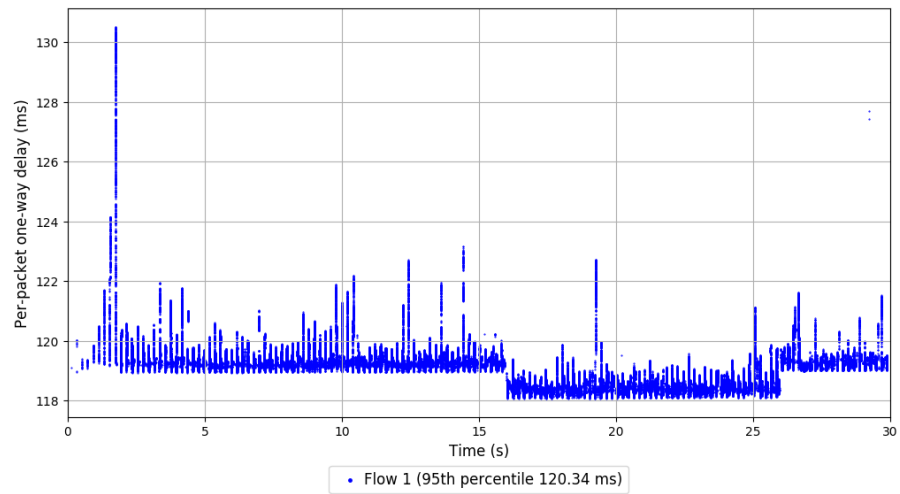
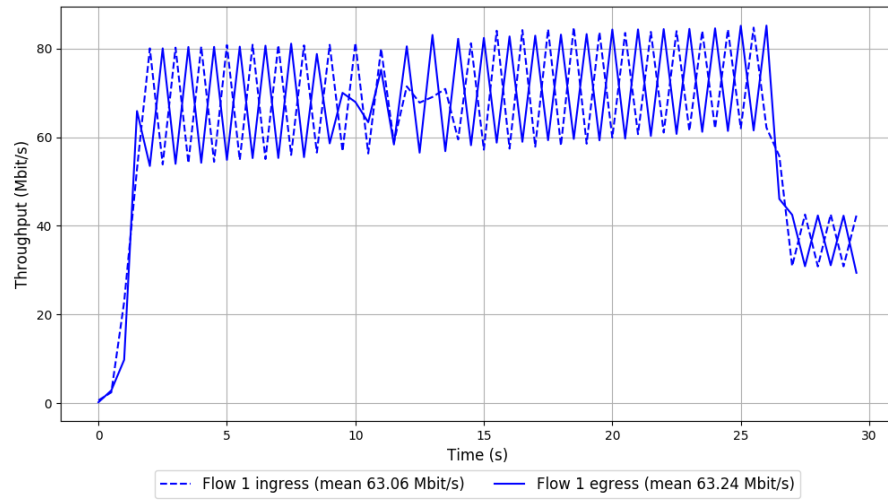
-- Flow 1:

Average throughput: 63.24 Mbit/s

95th percentile per-packet one-way delay: 120.336 ms

Loss rate: 0.39%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-25 18:18:38

End at: 2018-01-25 18:19:08

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.23 Mbit/s

95th percentile per-packet one-way delay: 127.121 ms

Loss rate: 0.75%

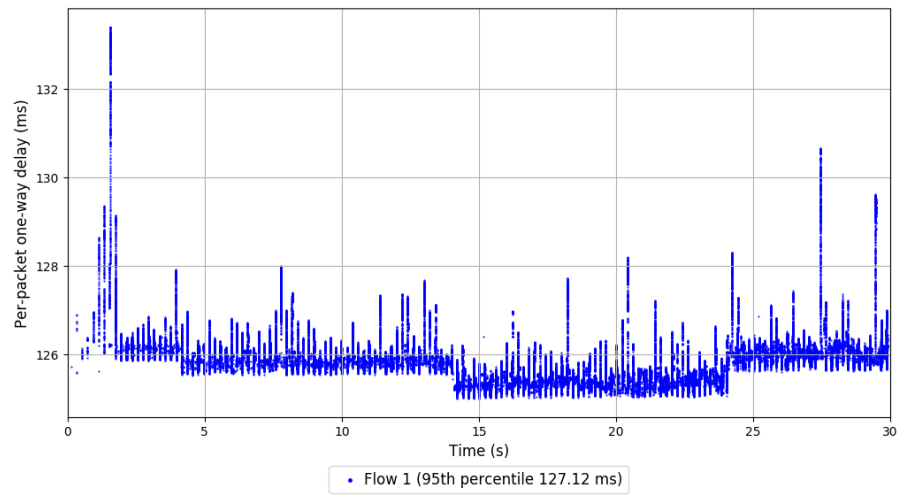
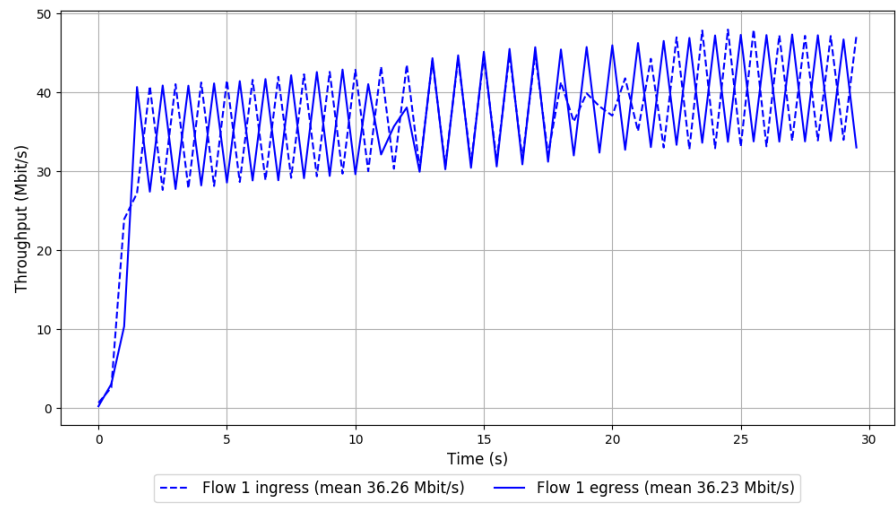
-- Flow 1:

Average throughput: 36.23 Mbit/s

95th percentile per-packet one-way delay: 127.121 ms

Loss rate: 0.75%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-25 16:28:18

End at: 2018-01-25 16:28:48

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.46 Mbit/s

95th percentile per-packet one-way delay: 261.346 ms

Loss rate: 4.05%

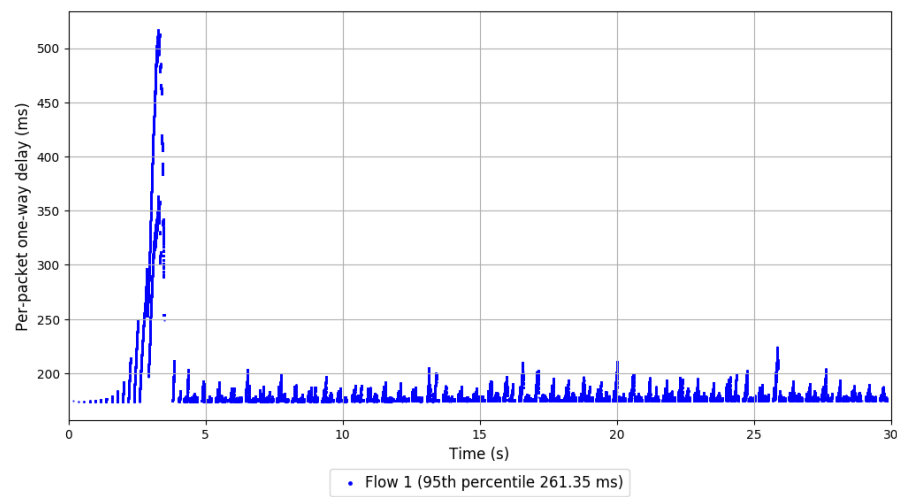
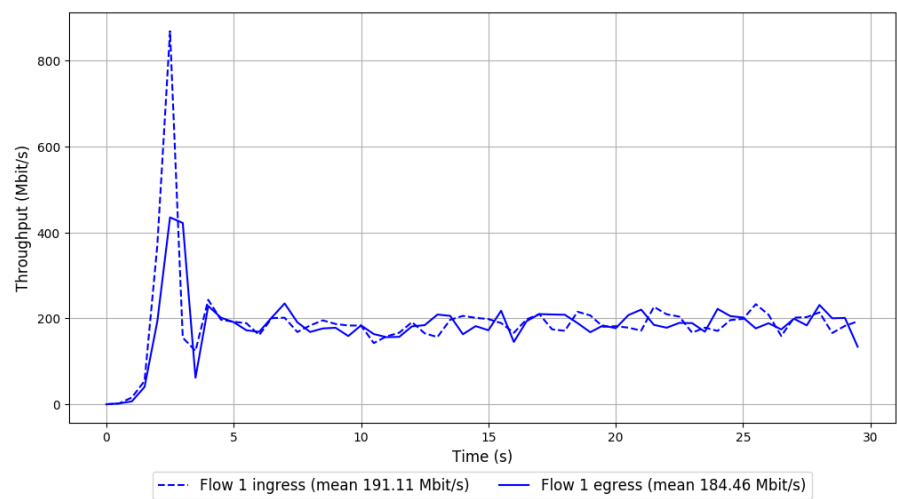
-- Flow 1:

Average throughput: 184.46 Mbit/s

95th percentile per-packet one-way delay: 261.346 ms

Loss rate: 4.05%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-25 16:41:15

End at: 2018-01-25 16:41:45

Below is generated by plot.py at 2018-01-25 21:05:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 147.32 Mbit/s

95th percentile per-packet one-way delay: 280.963 ms

Loss rate: 3.63%

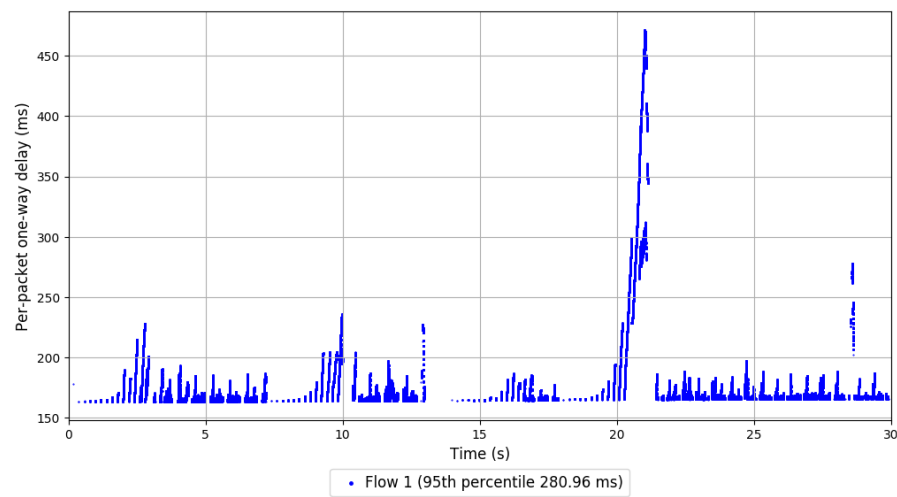
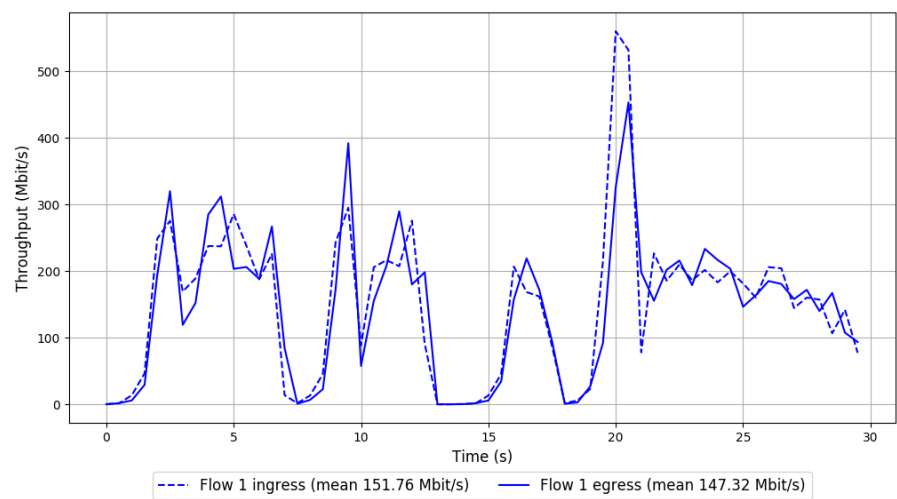
-- Flow 1:

Average throughput: 147.32 Mbit/s

95th percentile per-packet one-way delay: 280.963 ms

Loss rate: 3.63%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-25 16:53:49

End at: 2018-01-25 16:54:19

Below is generated by plot.py at 2018-01-25 21:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 268.75 Mbit/s

95th percentile per-packet one-way delay: 234.261 ms

Loss rate: 0.62%

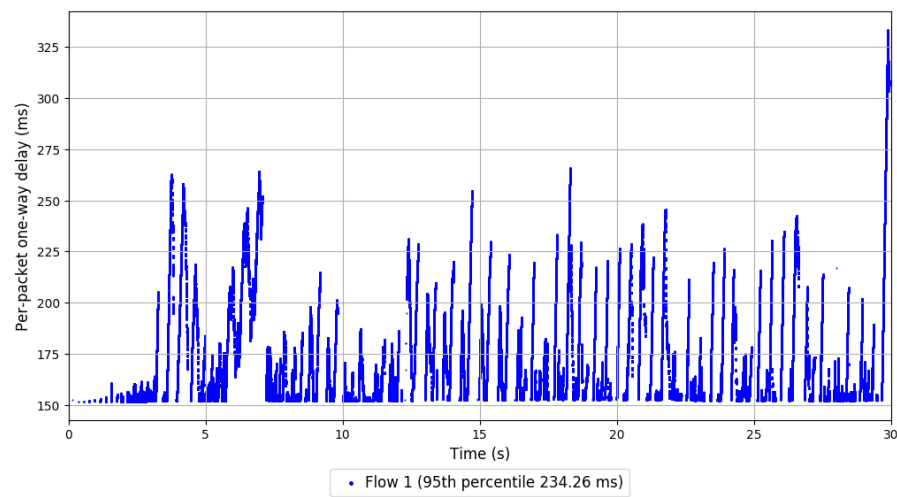
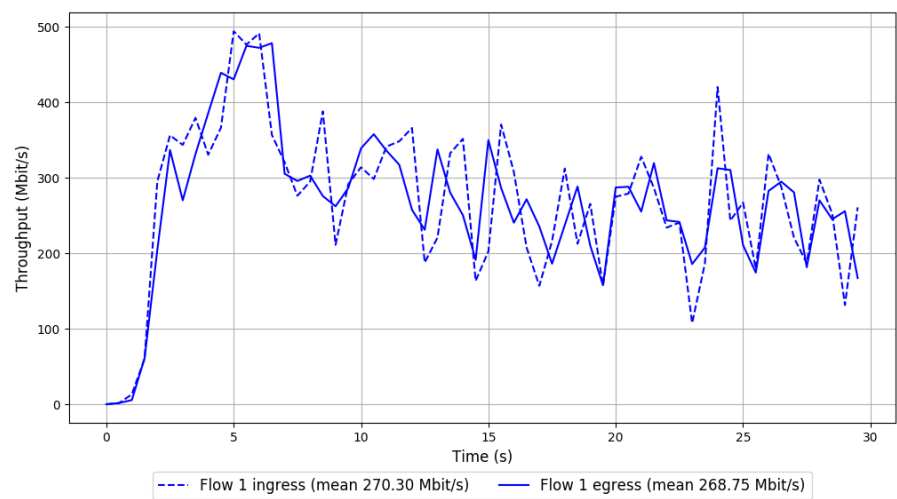
-- Flow 1:

Average throughput: 268.75 Mbit/s

95th percentile per-packet one-way delay: 234.261 ms

Loss rate: 0.62%

Run 3: Report of Verus — Data Link

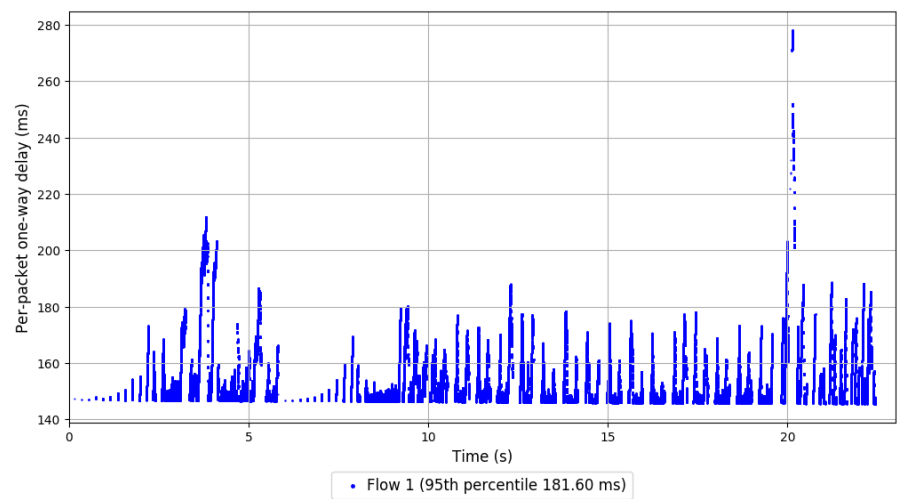
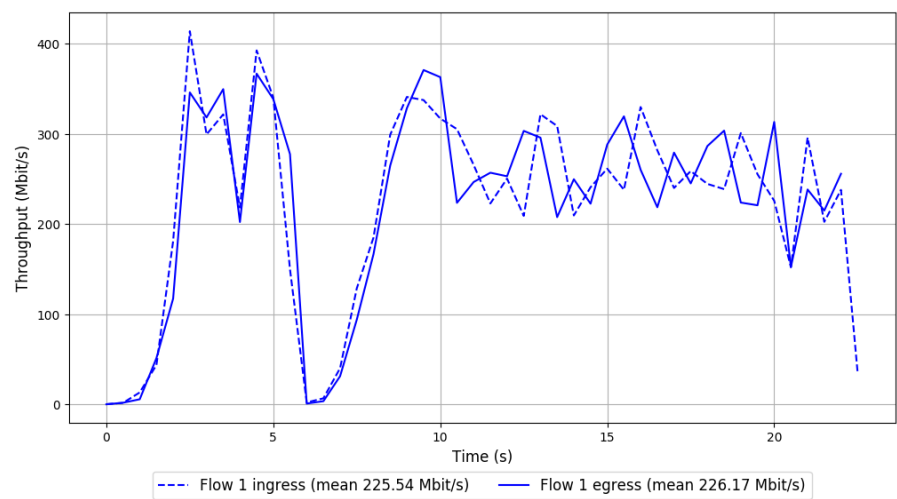


Run 4: Statistics of Verus

Start at: 2018-01-25 17:06:51

End at: 2018-01-25 17:07:21

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-25 17:19:35

End at: 2018-01-25 17:20:05

Below is generated by plot.py at 2018-01-25 21:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.22 Mbit/s

95th percentile per-packet one-way delay: 133.738 ms

Loss rate: 1.14%

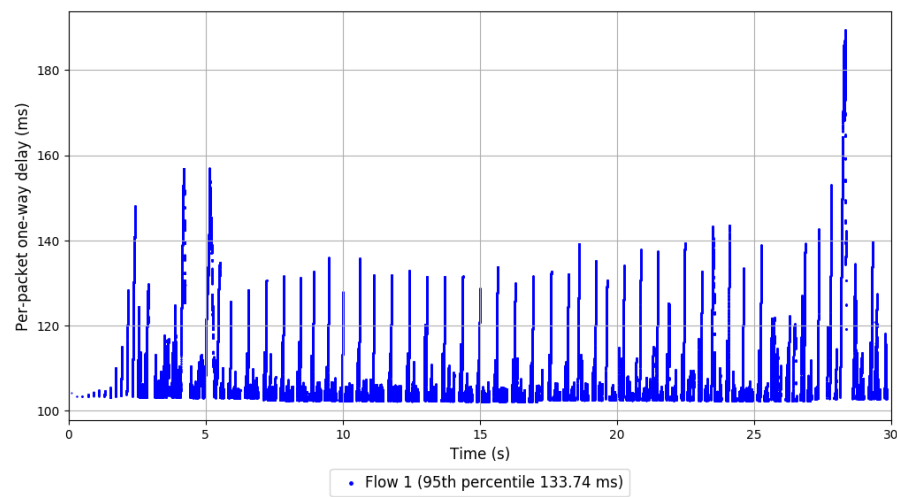
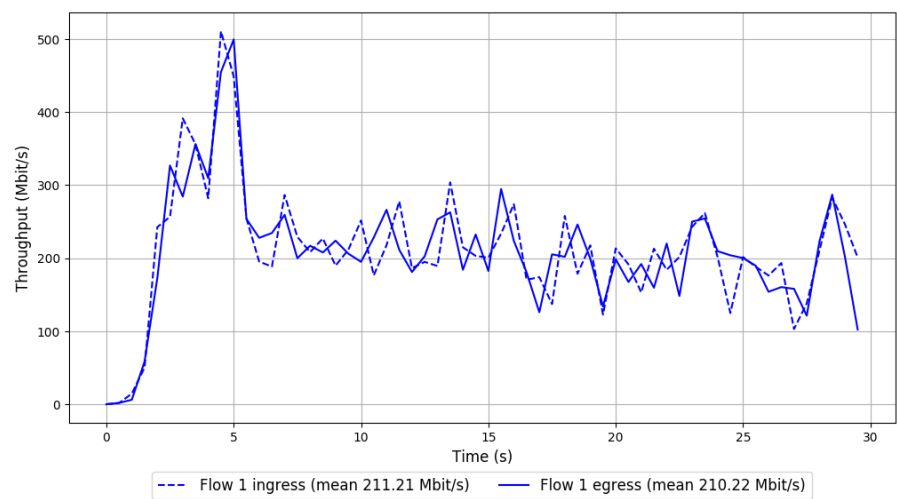
-- Flow 1:

Average throughput: 210.22 Mbit/s

95th percentile per-packet one-way delay: 133.738 ms

Loss rate: 1.14%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-25 17:32:24

End at: 2018-01-25 17:32:54

Below is generated by plot.py at 2018-01-25 21:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 159.87 Mbit/s

95th percentile per-packet one-way delay: 260.076 ms

Loss rate: 5.20%

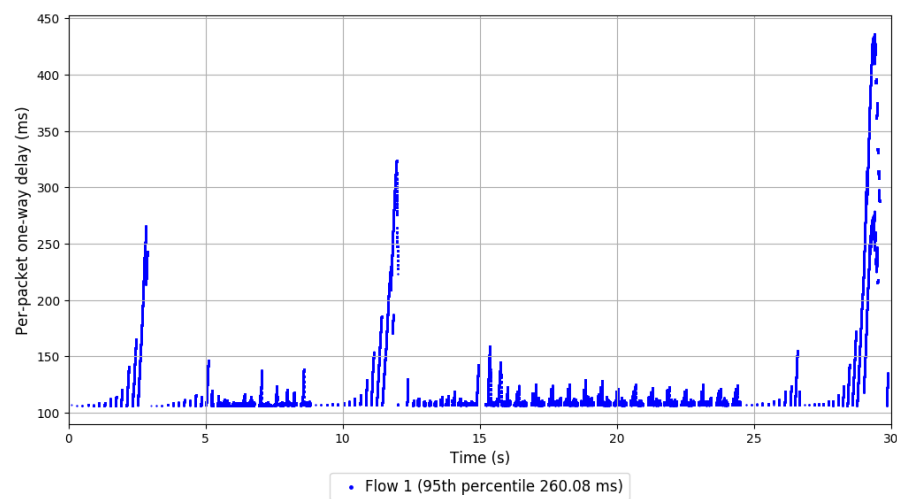
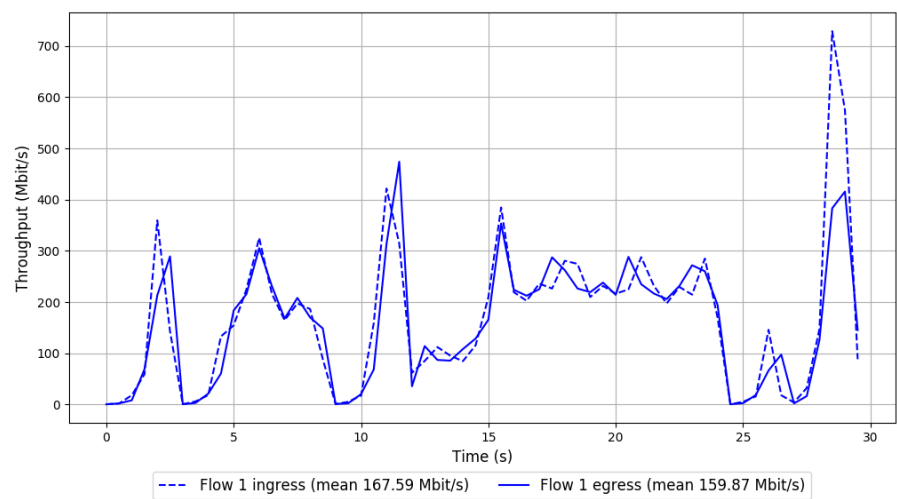
-- Flow 1:

Average throughput: 159.87 Mbit/s

95th percentile per-packet one-way delay: 260.076 ms

Loss rate: 5.20%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-25 17:45:28

End at: 2018-01-25 17:45:58

Below is generated by plot.py at 2018-01-25 21:07:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.82 Mbit/s

95th percentile per-packet one-way delay: 232.698 ms

Loss rate: 1.83%

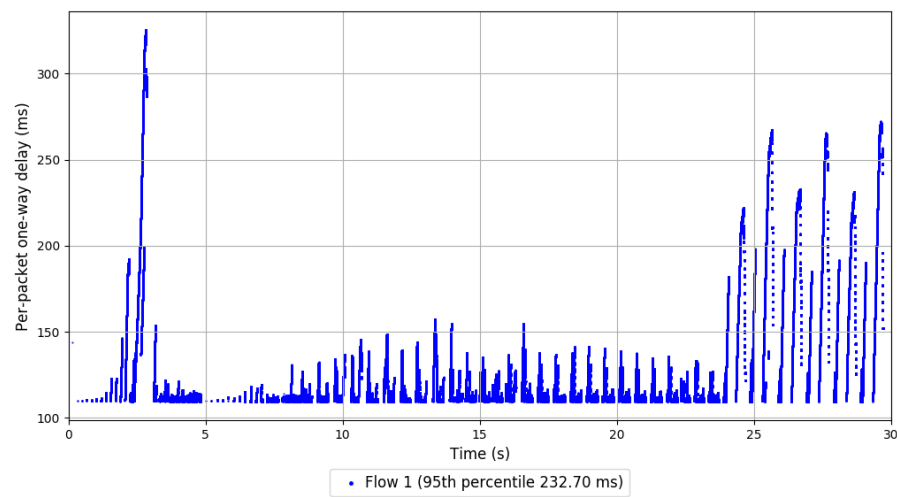
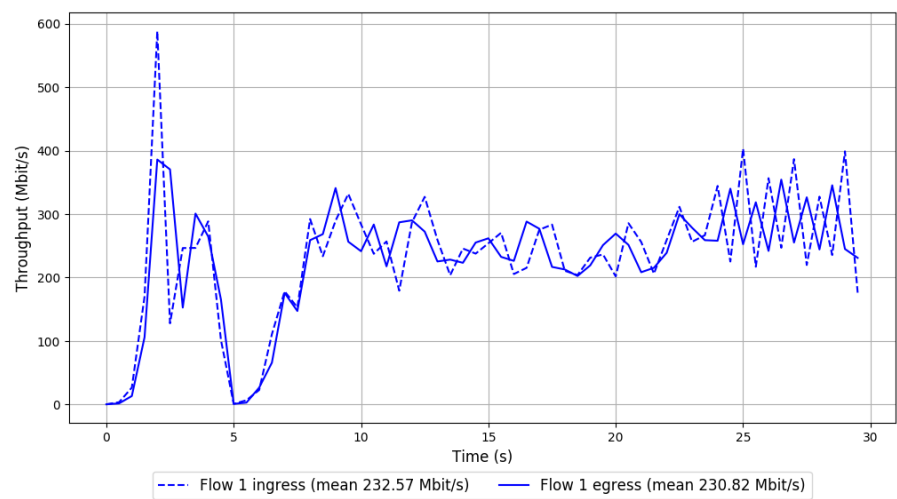
-- Flow 1:

Average throughput: 230.82 Mbit/s

95th percentile per-packet one-way delay: 232.698 ms

Loss rate: 1.83%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-25 17:58:28

End at: 2018-01-25 17:58:58

Below is generated by plot.py at 2018-01-25 21:07:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.36 Mbit/s

95th percentile per-packet one-way delay: 159.705 ms

Loss rate: 0.55%

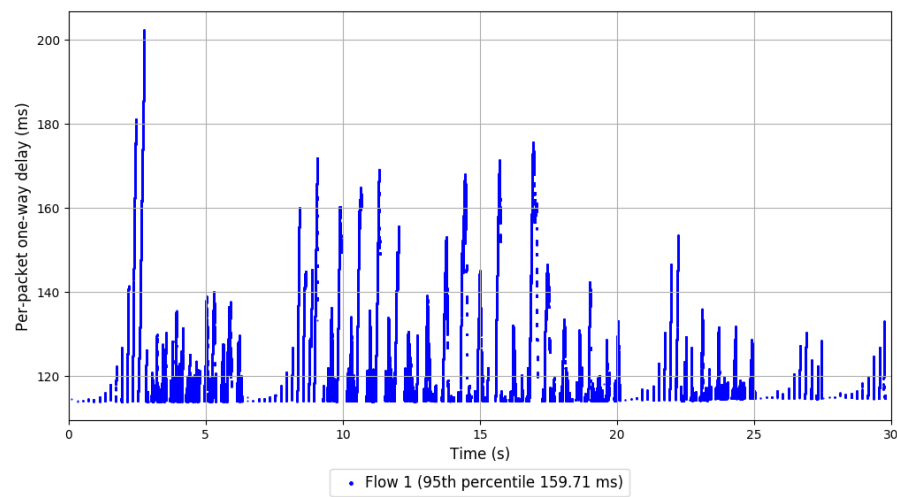
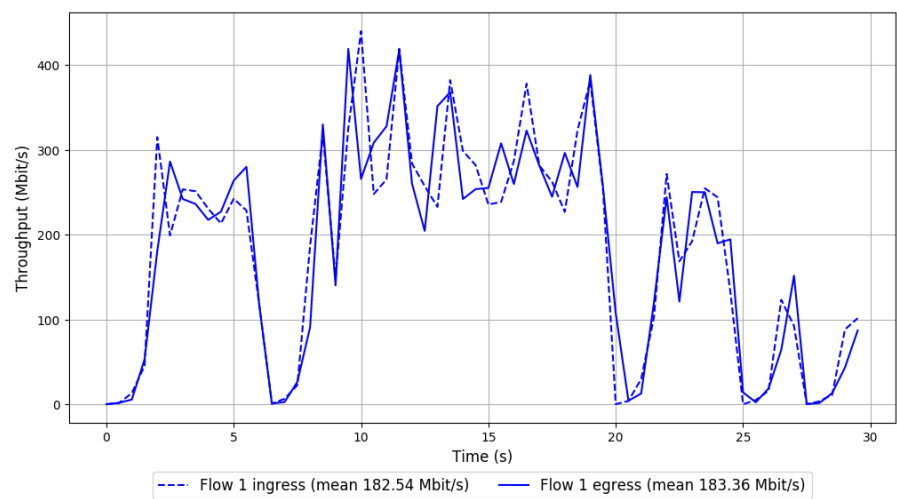
-- Flow 1:

Average throughput: 183.36 Mbit/s

95th percentile per-packet one-way delay: 159.705 ms

Loss rate: 0.55%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-25 18:11:18

End at: 2018-01-25 18:11:48

Below is generated by plot.py at 2018-01-25 21:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.00 Mbit/s

95th percentile per-packet one-way delay: 217.669 ms

Loss rate: 4.28%

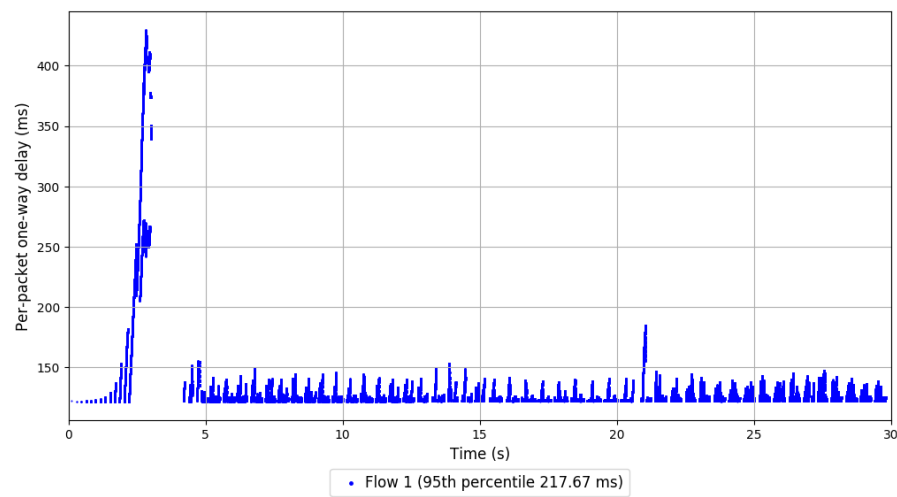
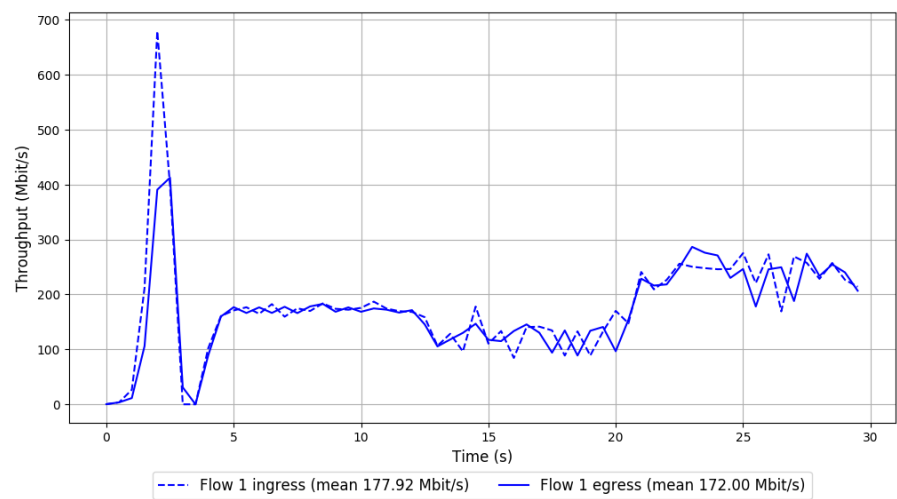
-- Flow 1:

Average throughput: 172.00 Mbit/s

95th percentile per-packet one-way delay: 217.669 ms

Loss rate: 4.28%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-25 18:24:23

End at: 2018-01-25 18:24:53

Below is generated by plot.py at 2018-01-25 21:09:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.33 Mbit/s

95th percentile per-packet one-way delay: 172.686 ms

Loss rate: 1.32%

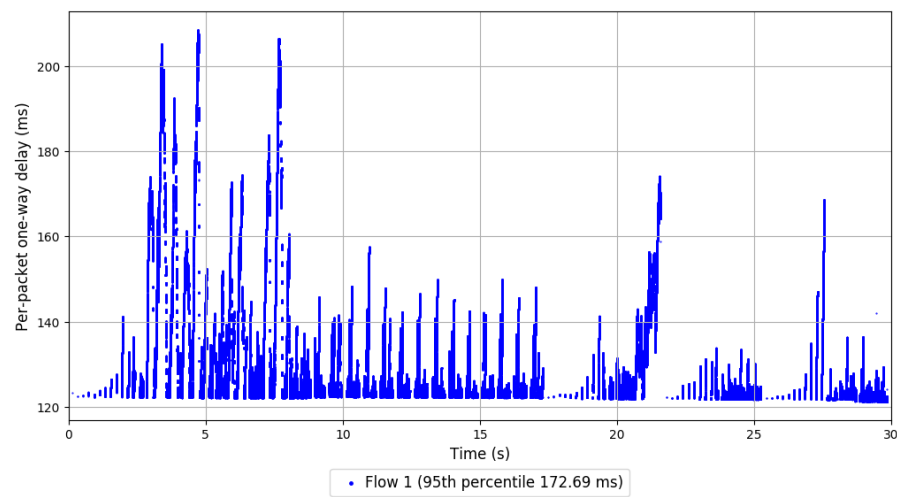
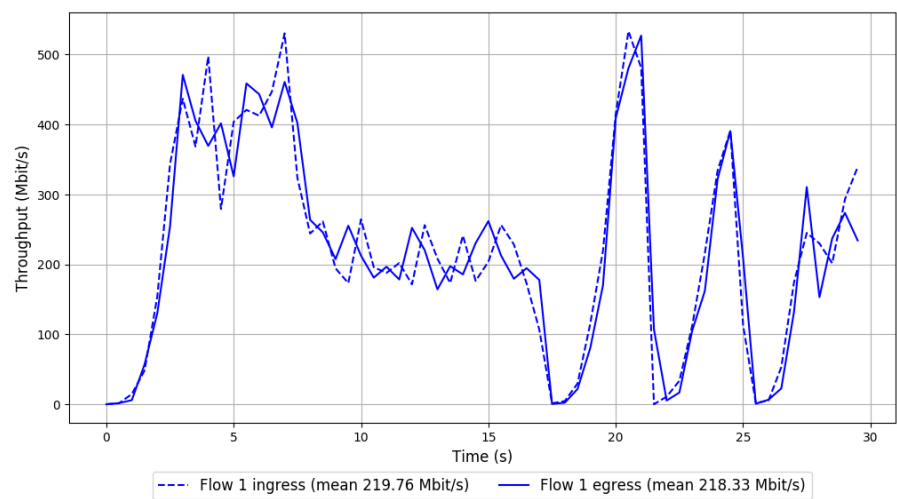
-- Flow 1:

Average throughput: 218.33 Mbit/s

95th percentile per-packet one-way delay: 172.686 ms

Loss rate: 1.32%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-01-25 16:23:16

End at: 2018-01-25 16:23:46

Below is generated by plot.py at 2018-01-25 21:09:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.17 Mbit/s

95th percentile per-packet one-way delay: 165.606 ms

Loss rate: 0.68%

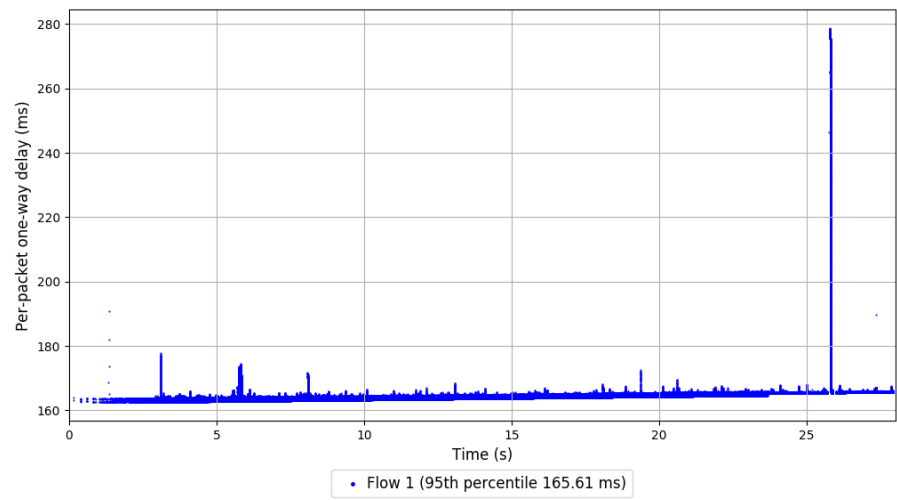
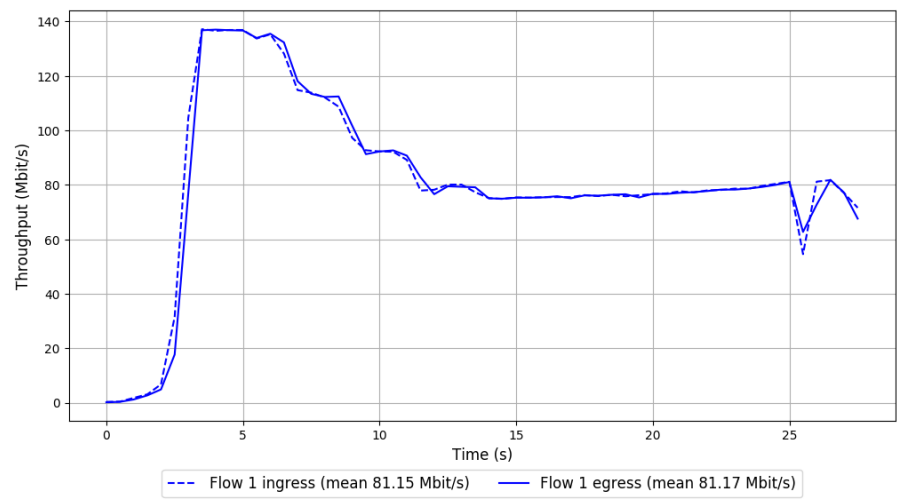
-- Flow 1:

Average throughput: 81.17 Mbit/s

95th percentile per-packet one-way delay: 165.606 ms

Loss rate: 0.68%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-25 16:36:15

End at: 2018-01-25 16:36:45

Below is generated by plot.py at 2018-01-25 21:09:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.07 Mbit/s

95th percentile per-packet one-way delay: 153.319 ms

Loss rate: 0.34%

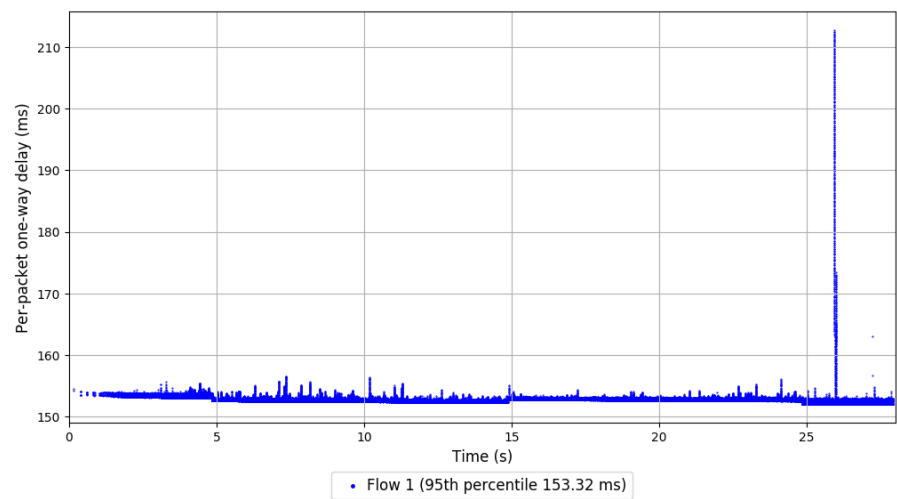
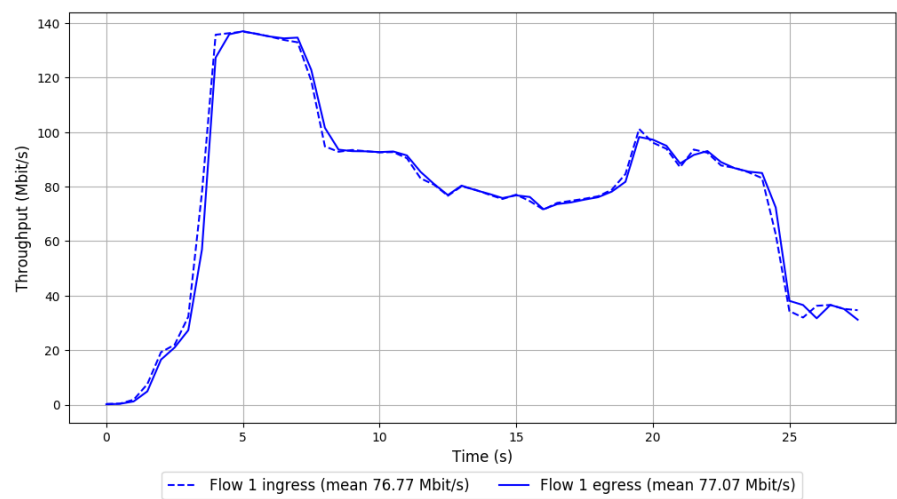
-- Flow 1:

Average throughput: 77.07 Mbit/s

95th percentile per-packet one-way delay: 153.319 ms

Loss rate: 0.34%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-25 16:49:11

End at: 2018-01-25 16:49:41

Below is generated by plot.py at 2018-01-25 21:09:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.06 Mbit/s

95th percentile per-packet one-way delay: 159.785 ms

Loss rate: 0.15%

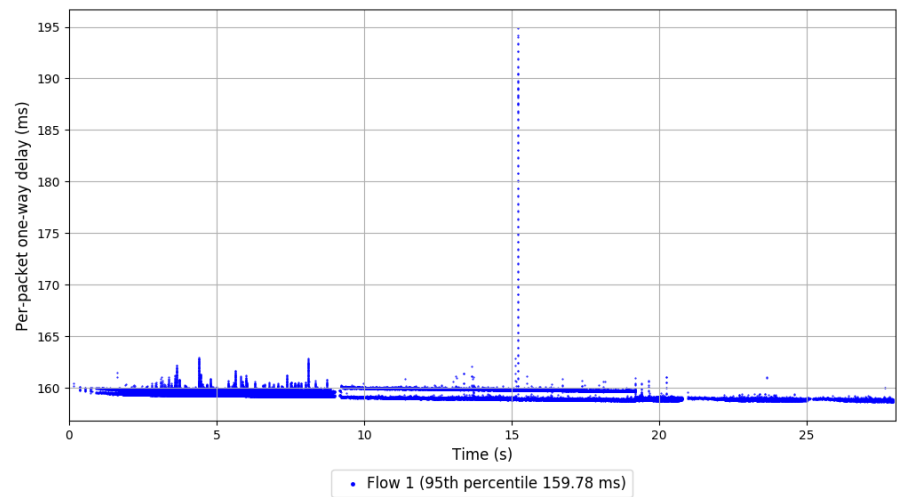
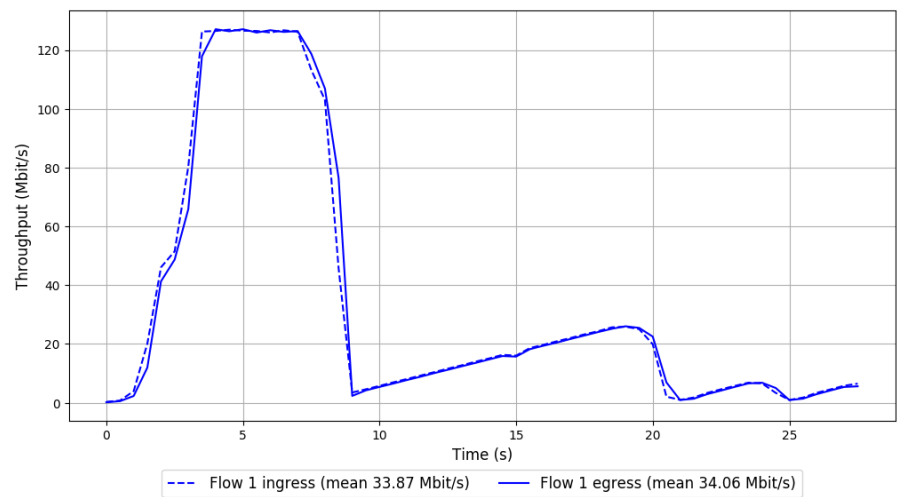
-- Flow 1:

Average throughput: 34.06 Mbit/s

95th percentile per-packet one-way delay: 159.785 ms

Loss rate: 0.15%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-25 17:02:00

End at: 2018-01-25 17:02:30

Below is generated by plot.py at 2018-01-25 21:09:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.22 Mbit/s

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

Loss rate: 0.64%

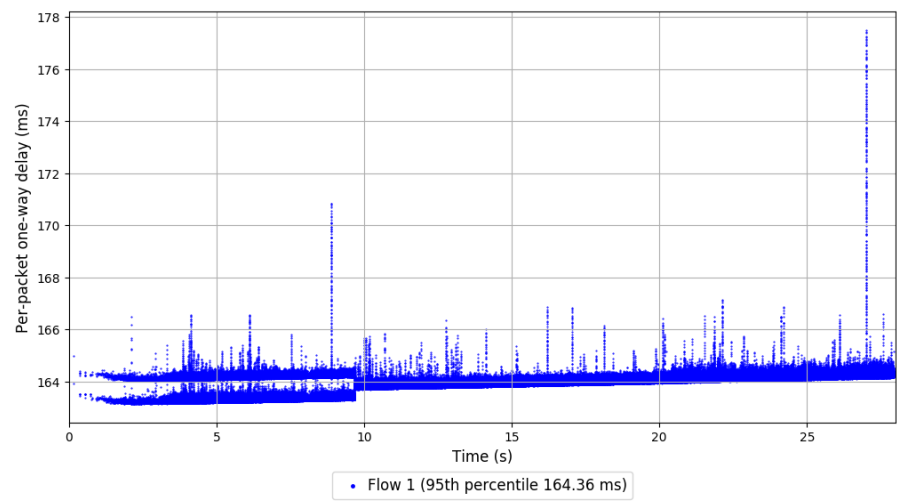
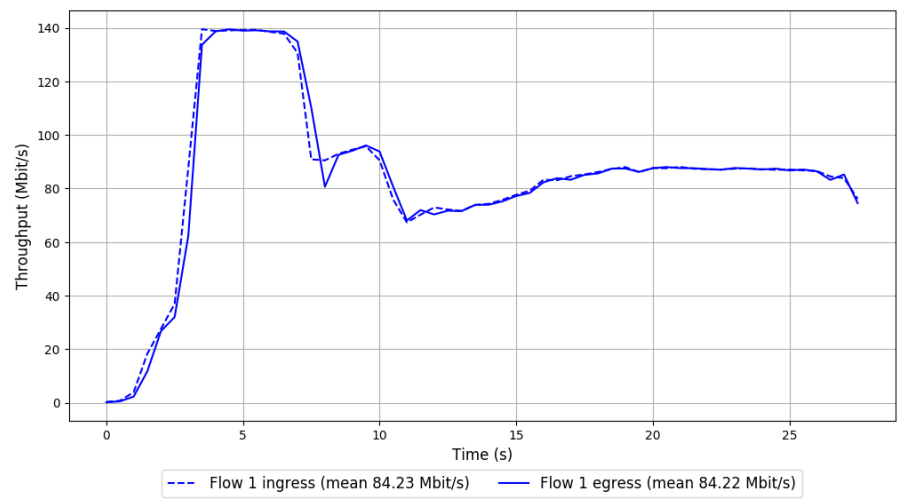
-- Flow 1:

Average throughput: 84.22 Mbit/s

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

Loss rate: 0.64%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-25 17:14:45

End at: 2018-01-25 17:15:15

Below is generated by plot.py at 2018-01-25 21:09:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.52 Mbit/s

95th percentile per-packet one-way delay: 105.627 ms

Loss rate: 0.72%

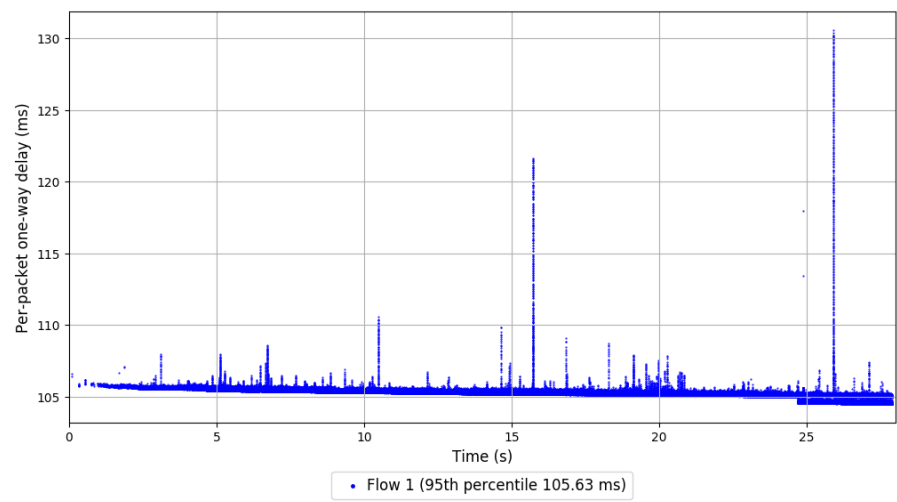
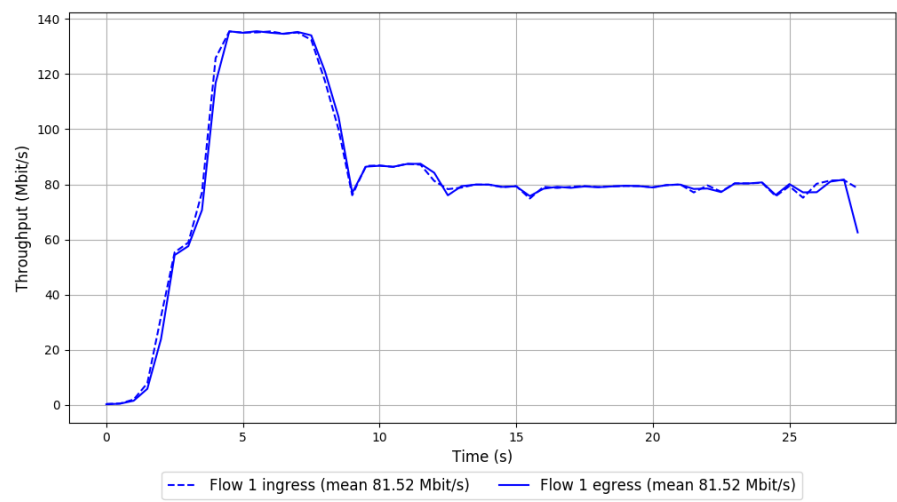
-- Flow 1:

Average throughput: 81.52 Mbit/s

95th percentile per-packet one-way delay: 105.627 ms

Loss rate: 0.72%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-25 17:27:42

End at: 2018-01-25 17:28:12

Below is generated by plot.py at 2018-01-25 21:10:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.15 Mbit/s

95th percentile per-packet one-way delay: 107.625 ms

Loss rate: 0.74%

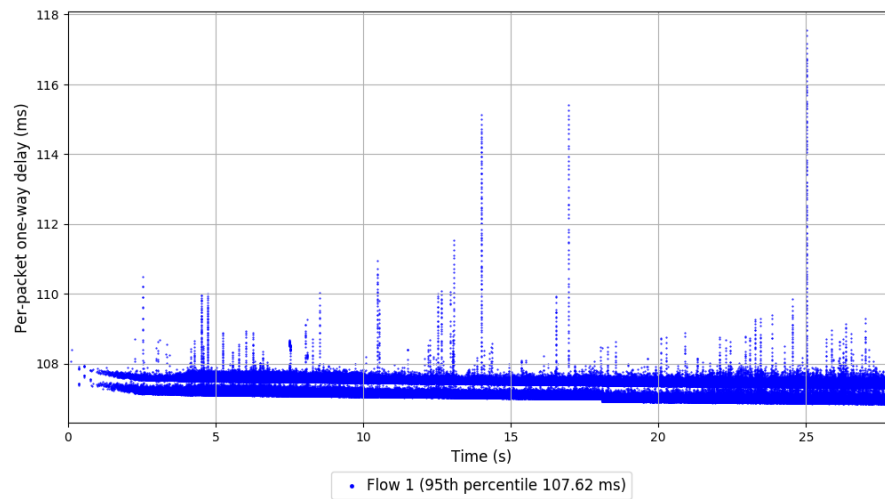
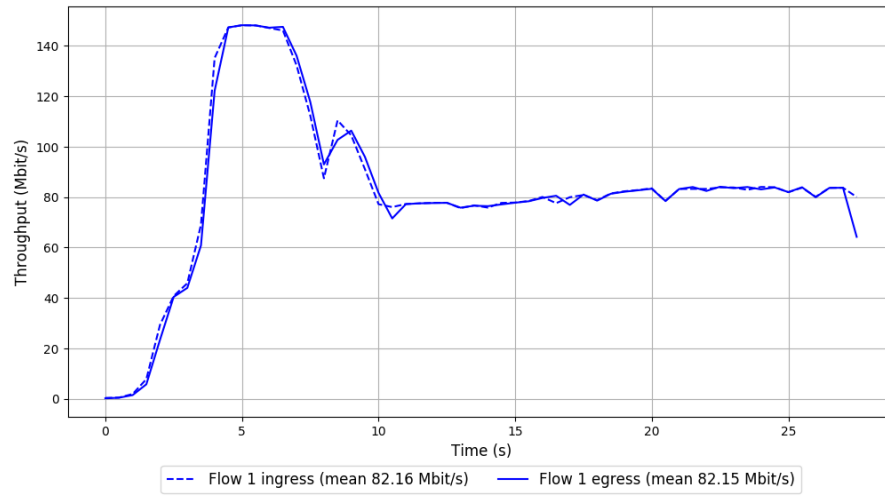
-- Flow 1:

Average throughput: 82.15 Mbit/s

95th percentile per-packet one-way delay: 107.625 ms

Loss rate: 0.74%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-25 17:40:28

End at: 2018-01-25 17:40:58

Below is generated by plot.py at 2018-01-25 21:10:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.72 Mbit/s

95th percentile per-packet one-way delay: 112.988 ms

Loss rate: 0.73%

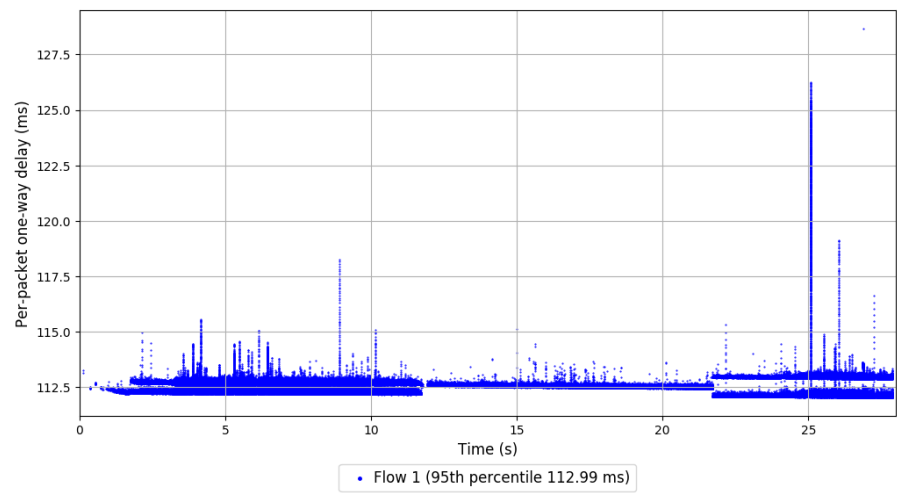
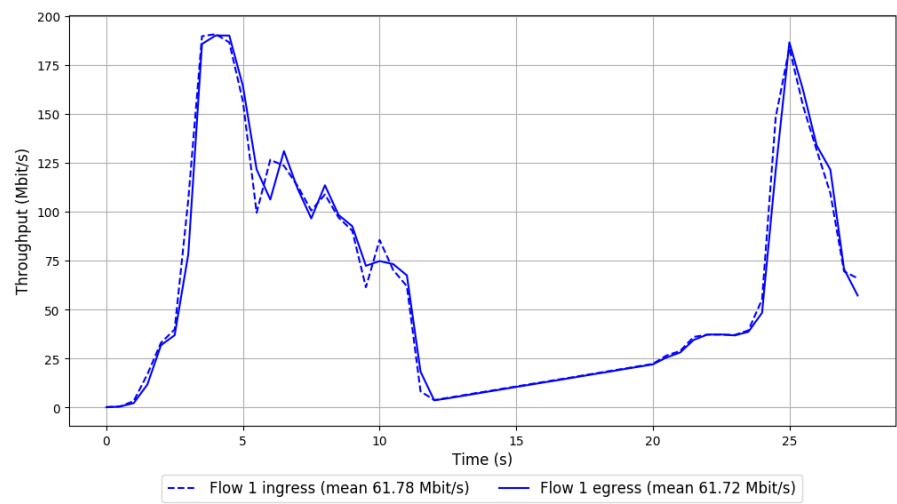
-- Flow 1:

Average throughput: 61.72 Mbit/s

95th percentile per-packet one-way delay: 112.988 ms

Loss rate: 0.73%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-25 17:53:33

End at: 2018-01-25 17:54:03

Below is generated by plot.py at 2018-01-25 21:10:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.55 Mbit/s

95th percentile per-packet one-way delay: 110.706 ms

Loss rate: 0.36%

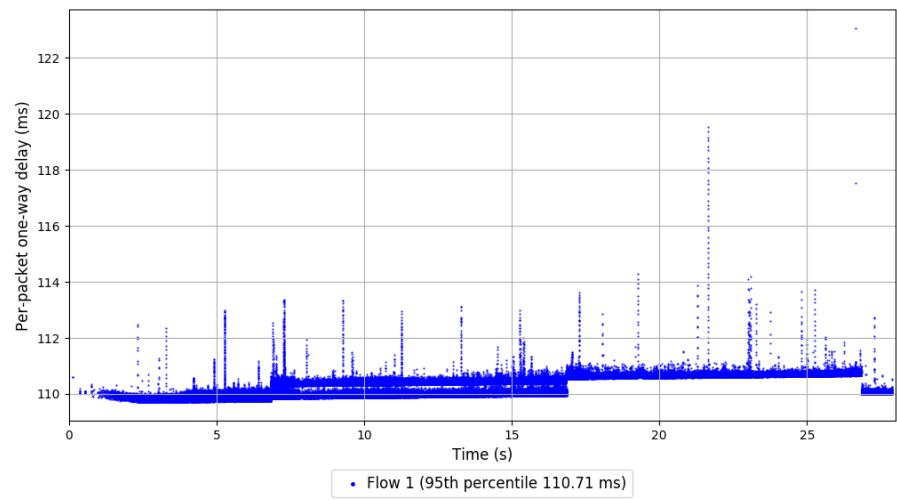
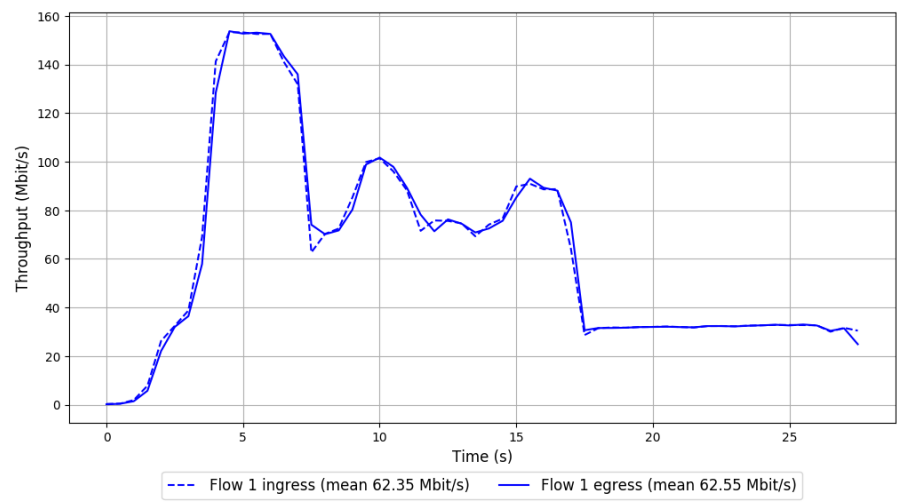
-- Flow 1:

Average throughput: 62.55 Mbit/s

95th percentile per-packet one-way delay: 110.706 ms

Loss rate: 0.36%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-25 18:06:20

End at: 2018-01-25 18:06:50

Below is generated by plot.py at 2018-01-25 21:10:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.87 Mbit/s

95th percentile per-packet one-way delay: 119.481 ms

Loss rate: 0.50%

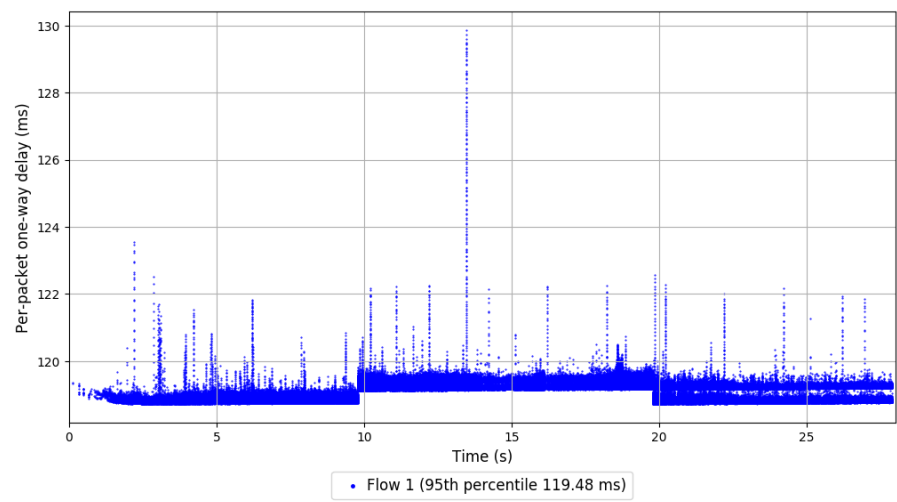
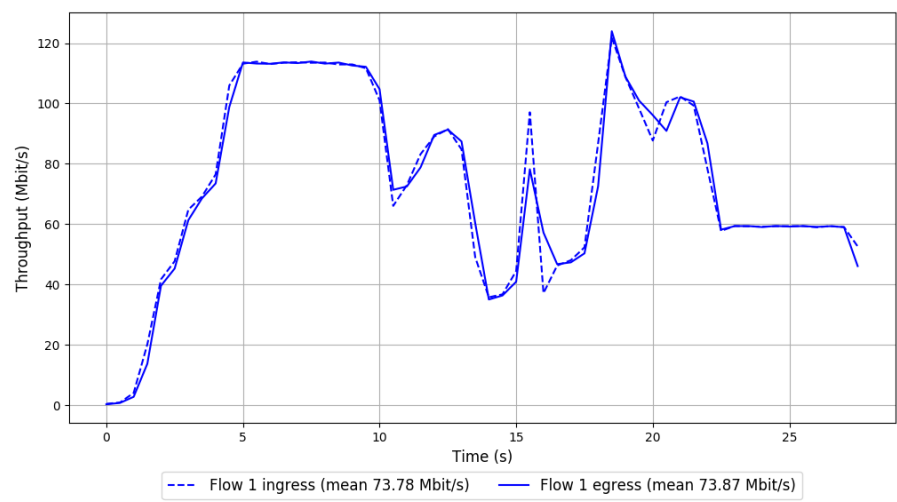
-- Flow 1:

Average throughput: 73.87 Mbit/s

95th percentile per-packet one-way delay: 119.481 ms

Loss rate: 0.50%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-25 18:19:20

End at: 2018-01-25 18:19:50

Below is generated by plot.py at 2018-01-25 21:10:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.83 Mbit/s

95th percentile per-packet one-way delay: 126.302 ms

Loss rate: 0.66%

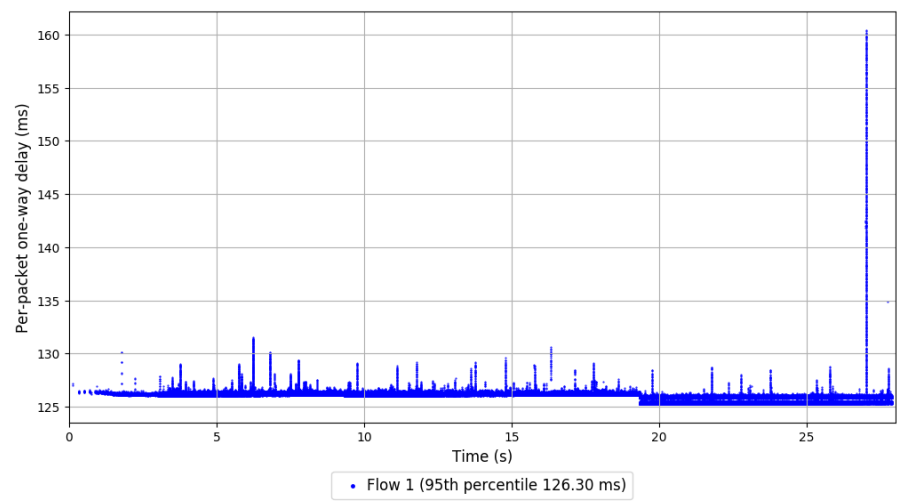
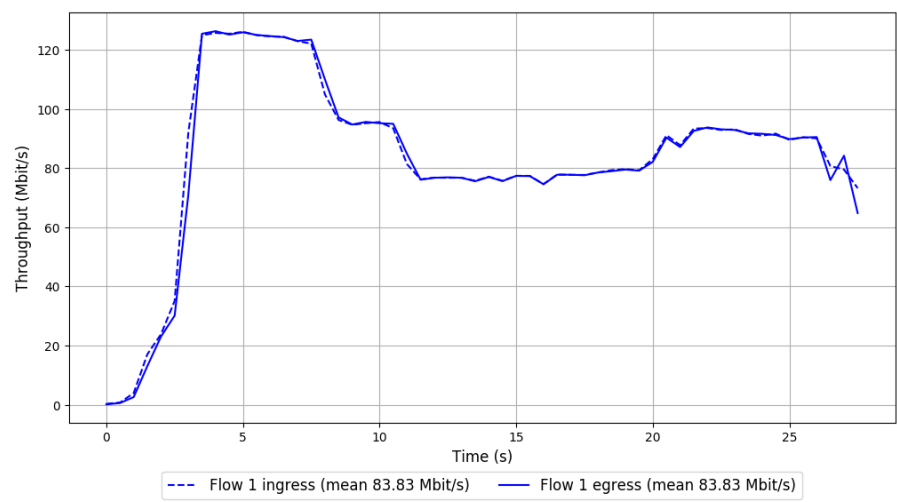
-- Flow 1:

Average throughput: 83.83 Mbit/s

95th percentile per-packet one-way delay: 126.302 ms

Loss rate: 0.66%

Run 10: Report of Copa — Data Link

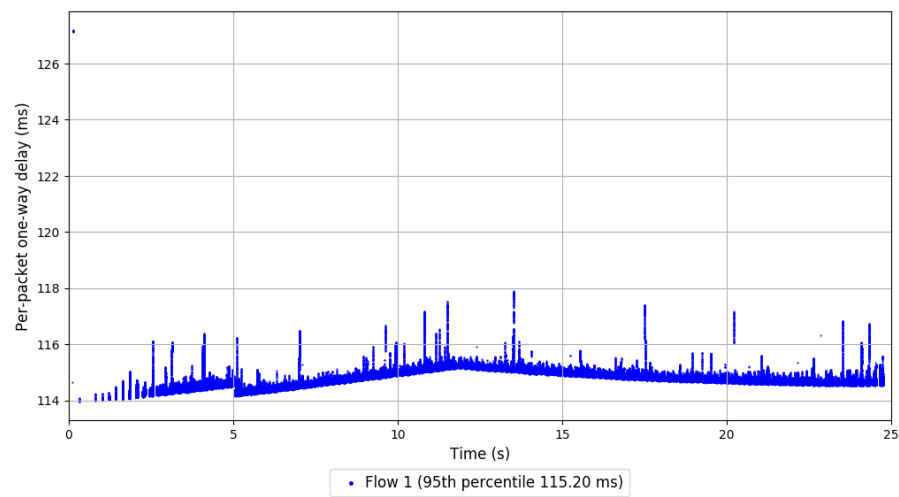
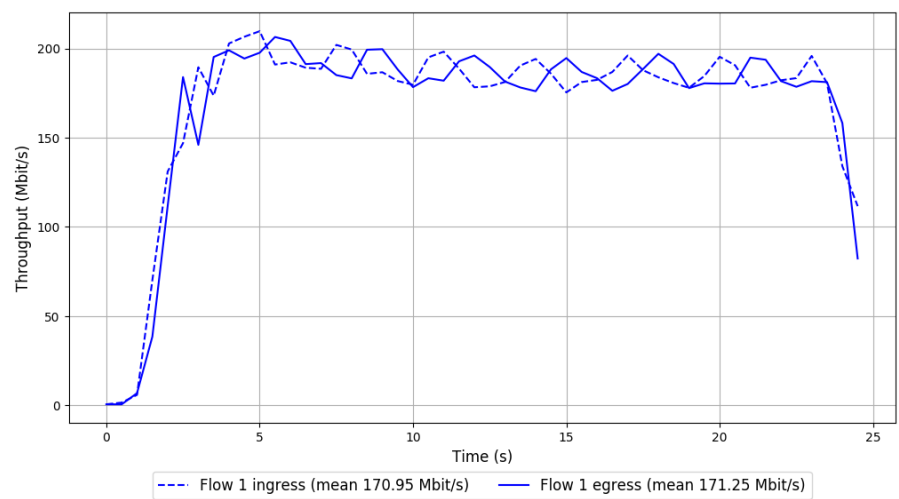


```
Run 1: Statistics of Indigo-2-256

Start at: 2018-01-25 16:17:32
End at: 2018-01-25 16:18:02

# Below is generated by plot.py at 2018-01-25 21:11:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 171.25 Mbit/s
95th percentile per-packet one-way delay: 115.203 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 171.25 Mbit/s
95th percentile per-packet one-way delay: 115.203 ms
Loss rate: 0.64%
```


Run 1: Report of Indigo-2-256 — Data Link

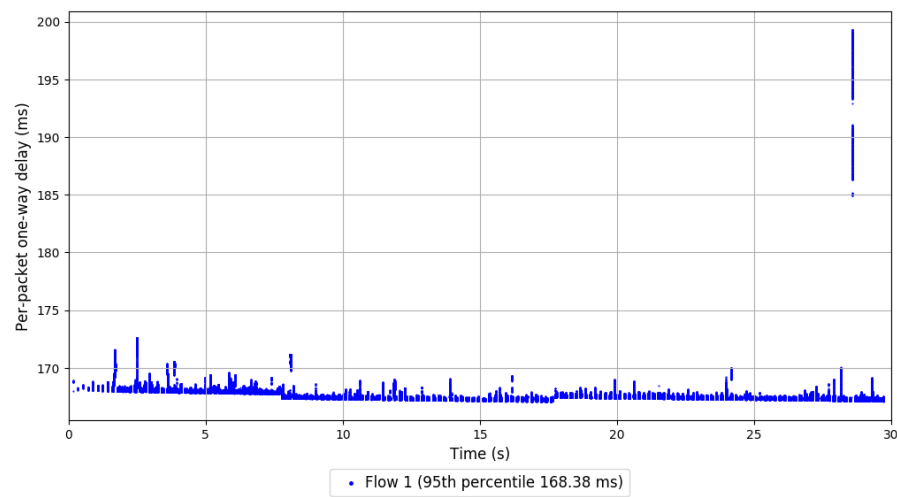
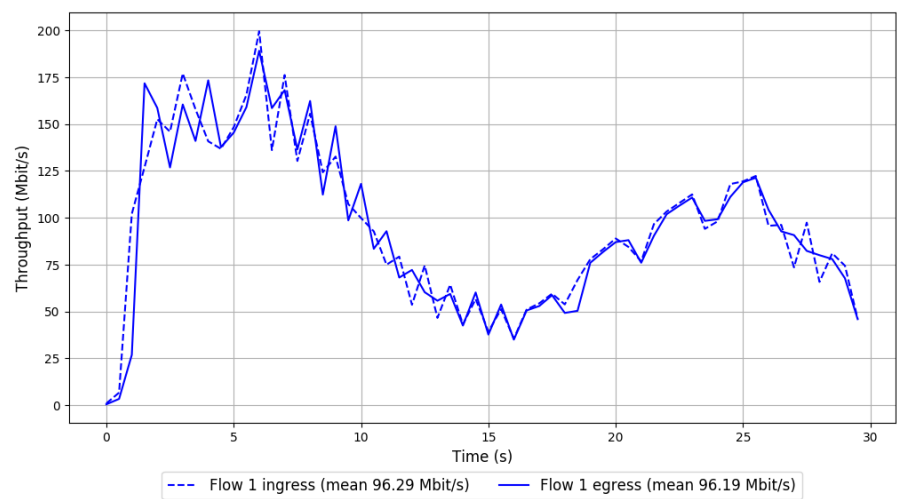


```
Run 2: Statistics of Indigo-2-256

Start at: 2018-01-25 16:30:34
End at: 2018-01-25 16:31:04

# Below is generated by plot.py at 2018-01-25 21:11:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 168.377 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 168.377 ms
Loss rate: 0.79%
```

Run 2: Report of Indigo-2-256 — Data Link



Run 3: Statistics of Indigo-2-256

Start at: 2018-01-25 16:43:28

End at: 2018-01-25 16:43:58

Below is generated by plot.py at 2018-01-25 21:11:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.91 Mbit/s

95th percentile per-packet one-way delay: 177.111 ms

Loss rate: 0.79%

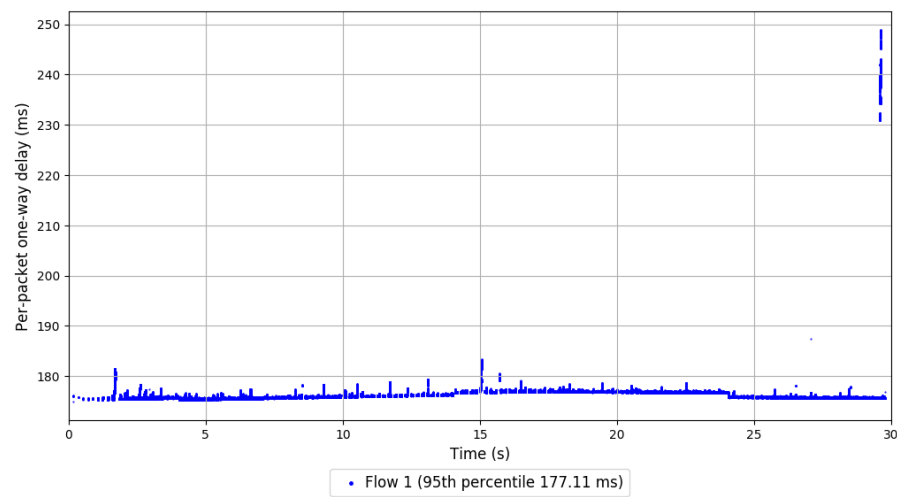
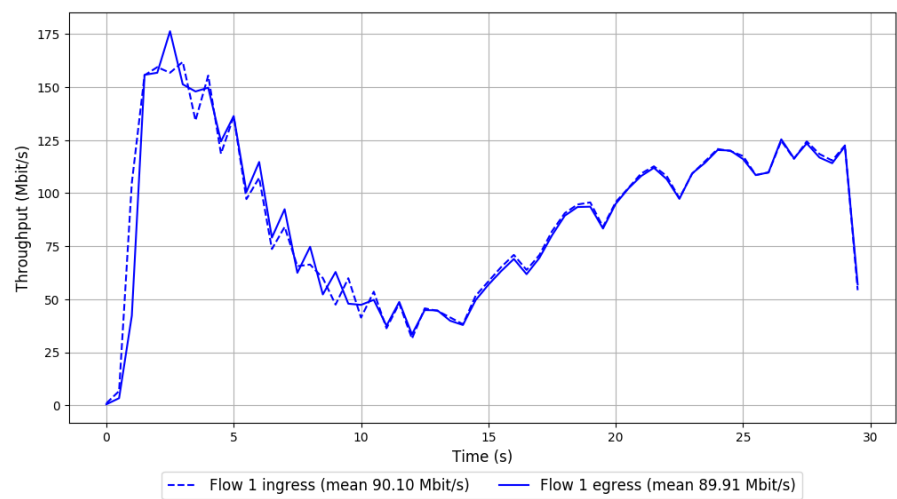
-- Flow 1:

Average throughput: 89.91 Mbit/s

95th percentile per-packet one-way delay: 177.111 ms

Loss rate: 0.79%

Run 3: Report of Indigo-2-256 — Data Link



Run 4: Statistics of Indigo-2-256

Start at: 2018-01-25 16:56:11

End at: 2018-01-25 16:56:41

Below is generated by plot.py at 2018-01-25 21:12:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.61 Mbit/s

95th percentile per-packet one-way delay: 155.849 ms

Loss rate: 0.68%

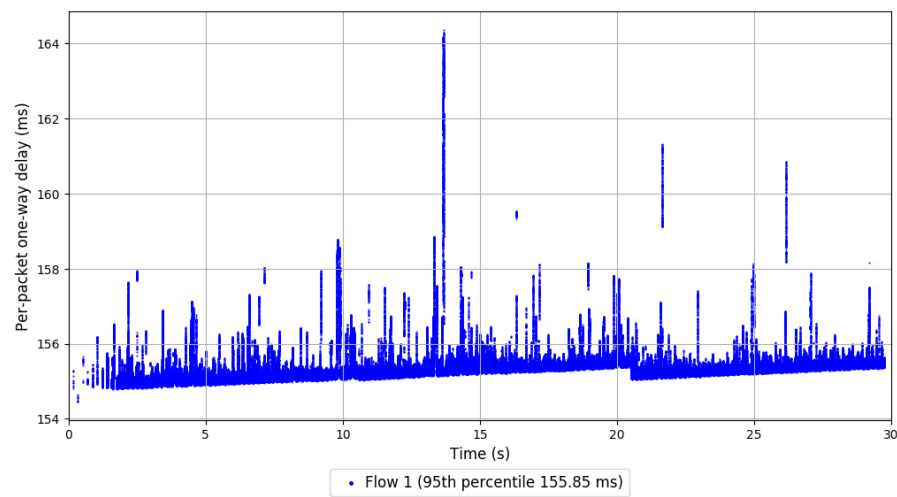
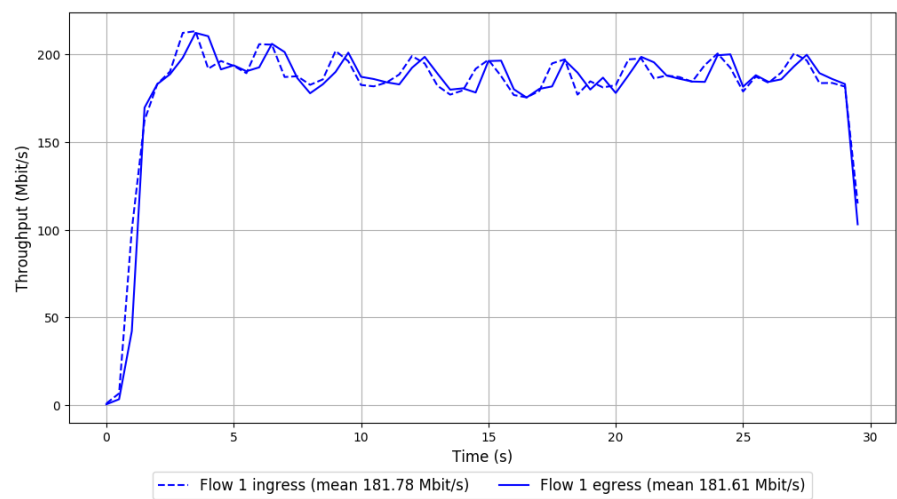
-- Flow 1:

Average throughput: 181.61 Mbit/s

95th percentile per-packet one-way delay: 155.849 ms

Loss rate: 0.68%

Run 4: Report of Indigo-2-256 — Data Link



Run 5: Statistics of Indigo-2-256

Start at: 2018-01-25 17:09:06

End at: 2018-01-25 17:09:36

Below is generated by plot.py at 2018-01-25 21:12:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.62 Mbit/s

95th percentile per-packet one-way delay: 134.698 ms

Loss rate: 0.37%

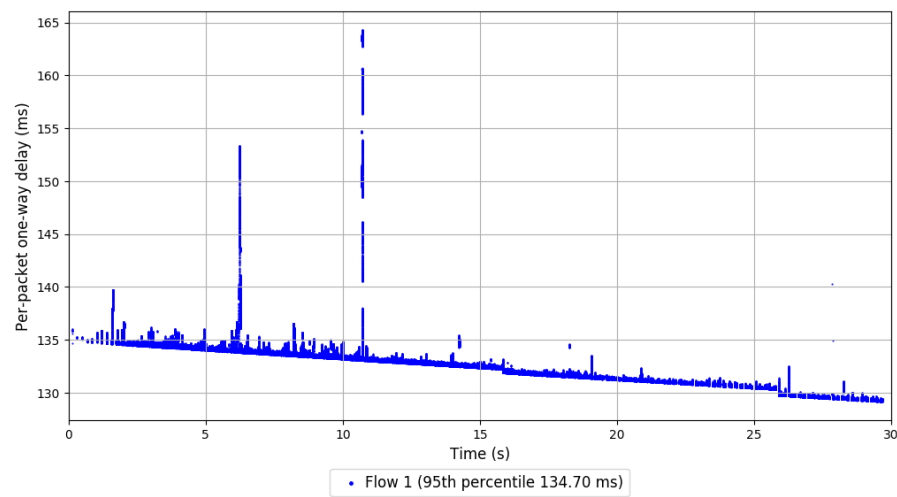
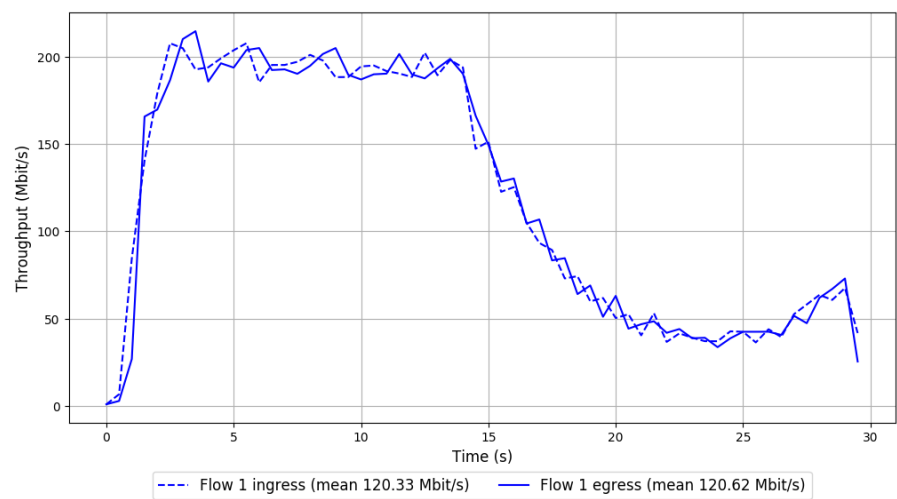
-- Flow 1:

Average throughput: 120.62 Mbit/s

95th percentile per-packet one-way delay: 134.698 ms

Loss rate: 0.37%

Run 5: Report of Indigo-2-256 — Data Link



Run 6: Statistics of Indigo-2-256

Start at: 2018-01-25 17:21:52

End at: 2018-01-25 17:22:22

Below is generated by plot.py at 2018-01-25 21:13:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.22 Mbit/s

95th percentile per-packet one-way delay: 102.088 ms

Loss rate: 0.63%

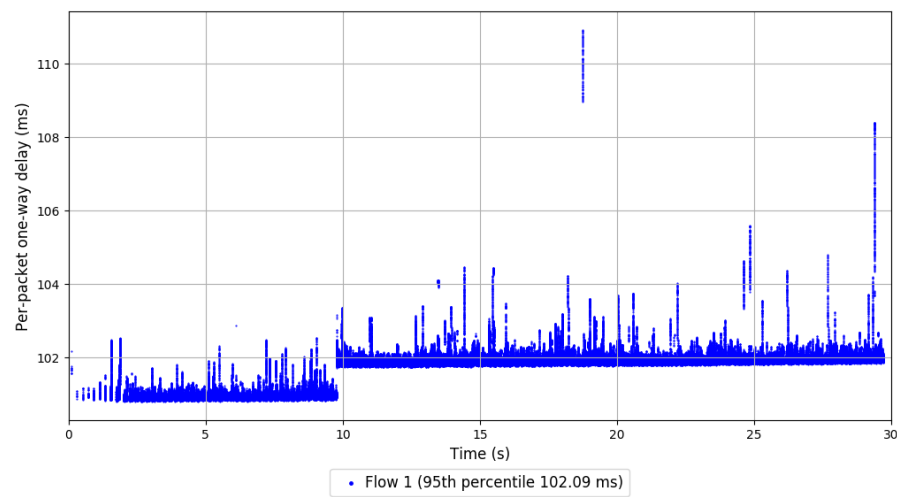
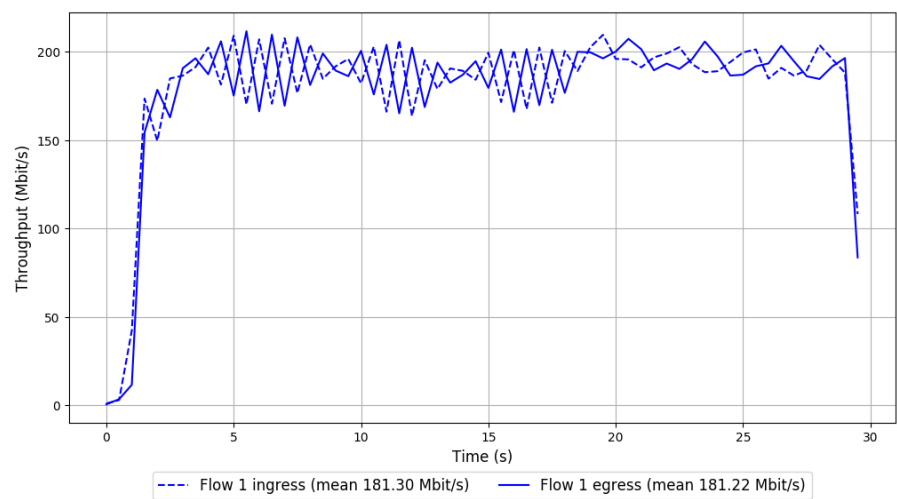
-- Flow 1:

Average throughput: 181.22 Mbit/s

95th percentile per-packet one-way delay: 102.088 ms

Loss rate: 0.63%

Run 6: Report of Indigo-2-256 — Data Link



Run 7: Statistics of Indigo-2-256

Start at: 2018-01-25 17:34:38

End at: 2018-01-25 17:35:08

Below is generated by plot.py at 2018-01-25 21:13:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.91 Mbit/s

95th percentile per-packet one-way delay: 108.553 ms

Loss rate: 0.72%

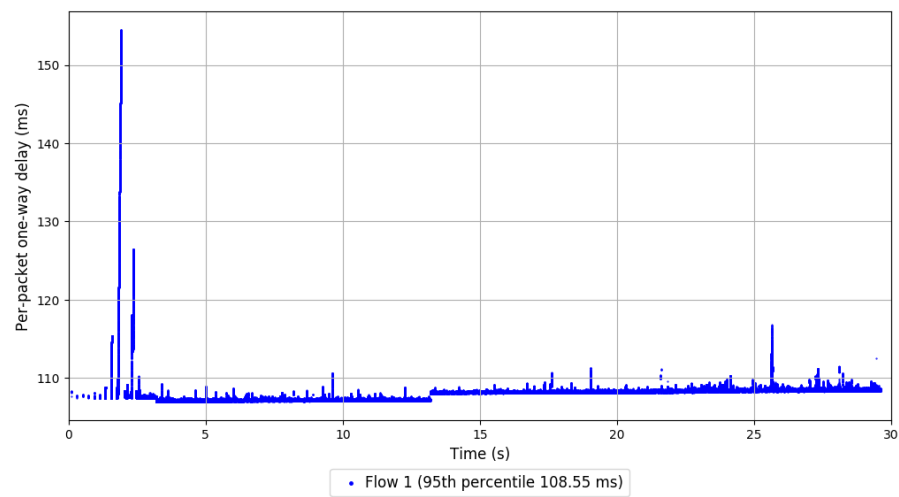
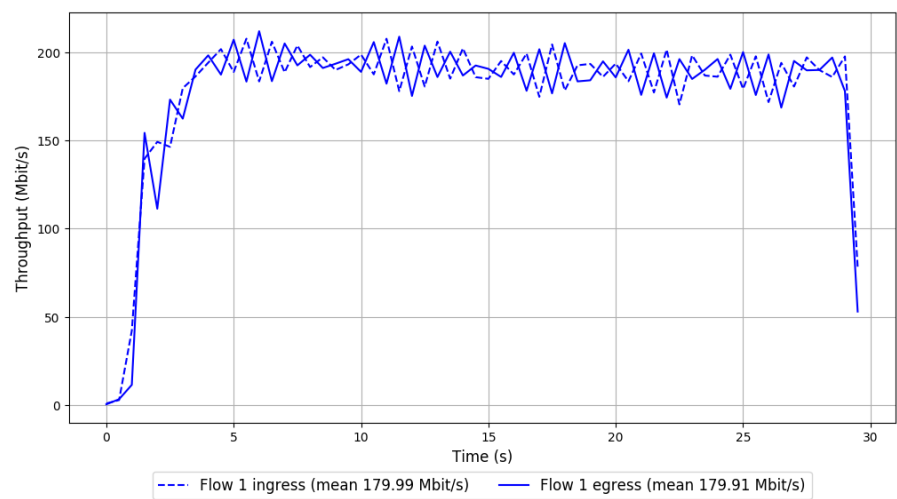
-- Flow 1:

Average throughput: 179.91 Mbit/s

95th percentile per-packet one-way delay: 108.553 ms

Loss rate: 0.72%

Run 7: Report of Indigo-2-256 — Data Link



Run 8: Statistics of Indigo-2-256

Start at: 2018-01-25 17:47:47

End at: 2018-01-25 17:48:17

Below is generated by plot.py at 2018-01-25 21:13:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 164.27 Mbit/s

95th percentile per-packet one-way delay: 108.901 ms

Loss rate: 0.23%

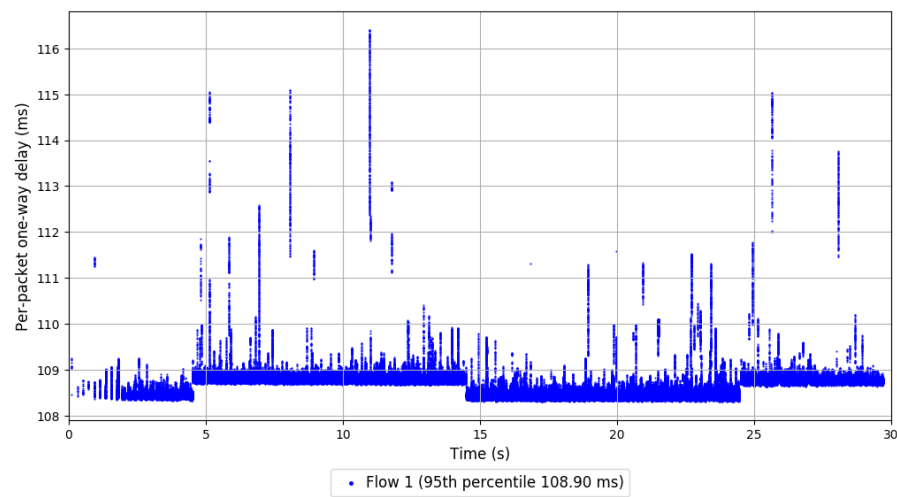
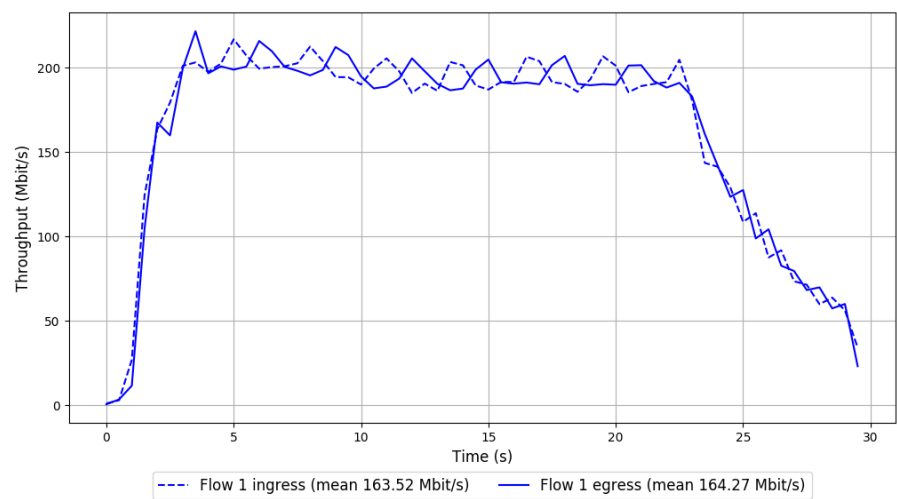
-- Flow 1:

Average throughput: 164.27 Mbit/s

95th percentile per-packet one-way delay: 108.901 ms

Loss rate: 0.23%

Run 8: Report of Indigo-2-256 — Data Link



Run 9: Statistics of Indigo-2-256

Start at: 2018-01-25 18:00:44

End at: 2018-01-25 18:01:14

Below is generated by plot.py at 2018-01-25 21:14:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.79 Mbit/s

95th percentile per-packet one-way delay: 116.504 ms

Loss rate: 0.28%

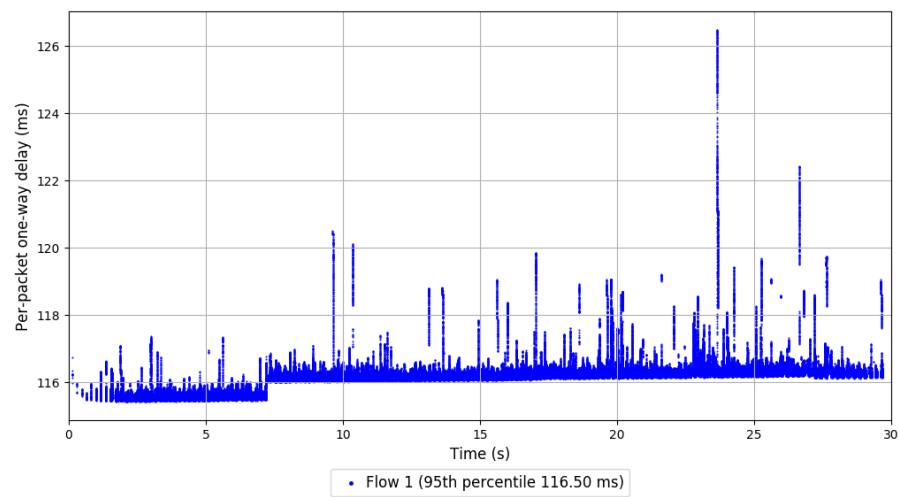
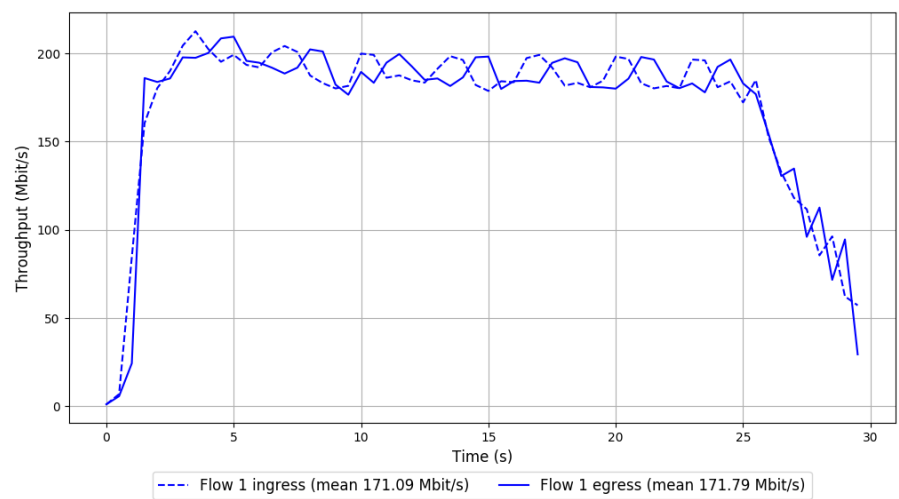
-- Flow 1:

Average throughput: 171.79 Mbit/s

95th percentile per-packet one-way delay: 116.504 ms

Loss rate: 0.28%

Run 9: Report of Indigo-2-256 — Data Link



Run 10: Statistics of Indigo-2-256

Start at: 2018-01-25 18:13:33

End at: 2018-01-25 18:14:03

Below is generated by plot.py at 2018-01-25 21:14:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.32 Mbit/s

95th percentile per-packet one-way delay: 124.092 ms

Loss rate: 0.71%

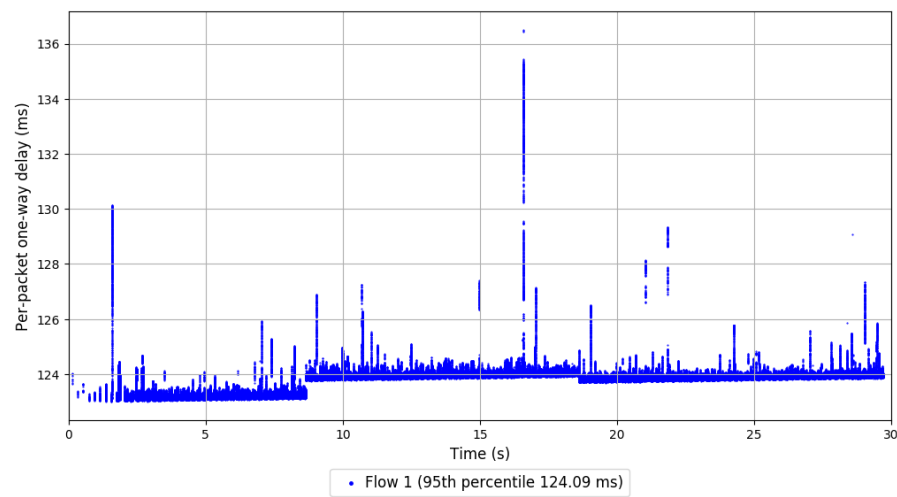
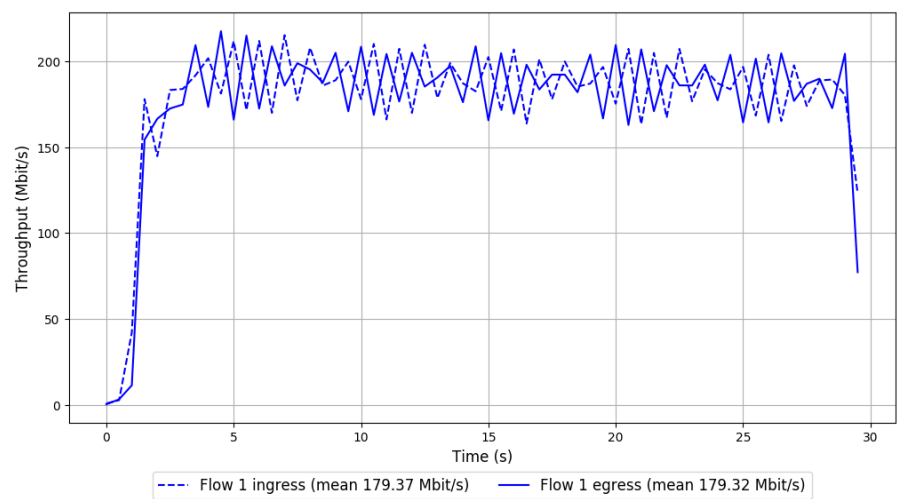
-- Flow 1:

Average throughput: 179.32 Mbit/s

95th percentile per-packet one-way delay: 124.092 ms

Loss rate: 0.71%

Run 10: Report of Indigo-2-256 — Data Link

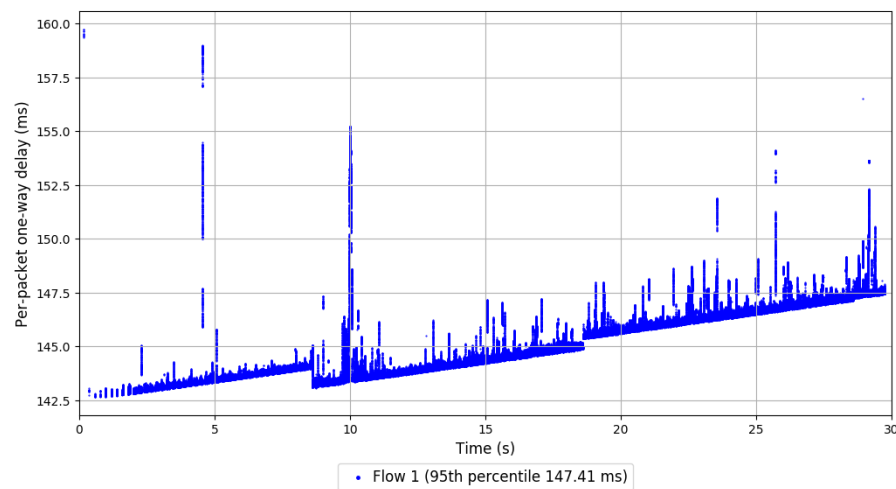
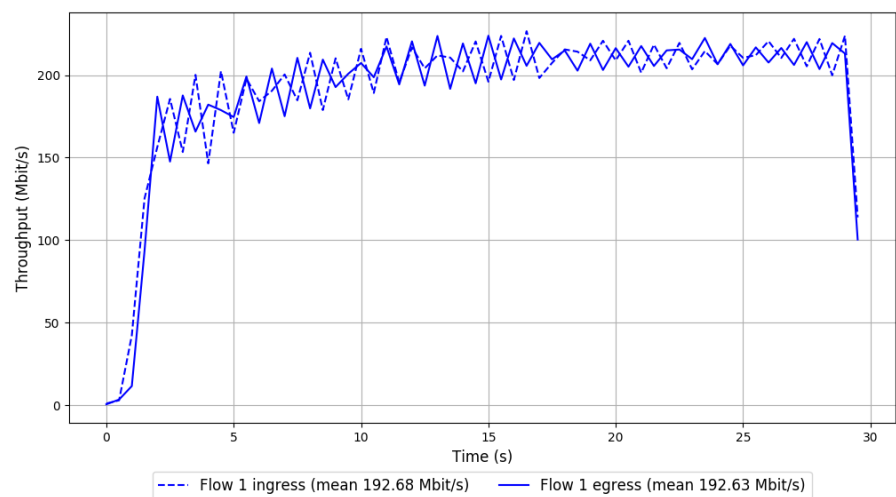


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-01-25 16:20:53
End at: 2018-01-25 16:21:23

# Below is generated by plot.py at 2018-01-25 21:15:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.63 Mbit/s
95th percentile per-packet one-way delay: 147.410 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 192.63 Mbit/s
95th percentile per-packet one-way delay: 147.410 ms
Loss rate: 0.74%
```

Run 1: Report of Indigo-1-32 — Data Link



Run 2: Statistics of Indigo-1-32

Start at: 2018-01-25 16:33:53

End at: 2018-01-25 16:34:23

Below is generated by plot.py at 2018-01-25 21:15:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.43 Mbit/s

95th percentile per-packet one-way delay: 159.860 ms

Loss rate: 0.76%

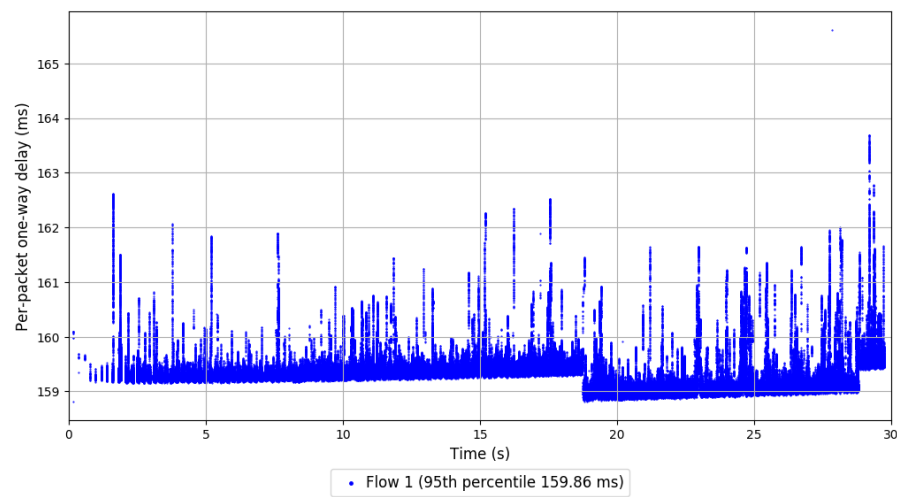
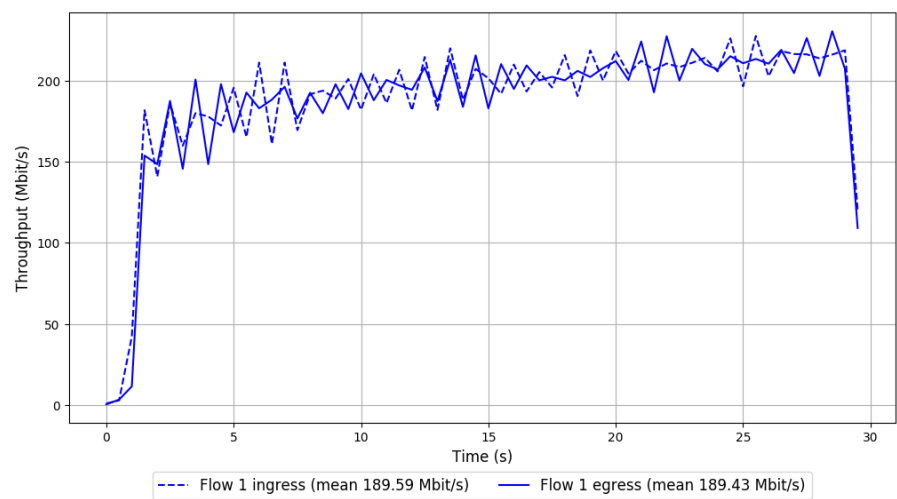
-- Flow 1:

Average throughput: 189.43 Mbit/s

95th percentile per-packet one-way delay: 159.860 ms

Loss rate: 0.76%

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-01-25 16:46:47

End at: 2018-01-25 16:47:17

Below is generated by plot.py at 2018-01-25 21:16:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.37 Mbit/s

95th percentile per-packet one-way delay: 167.825 ms

Loss rate: 0.63%

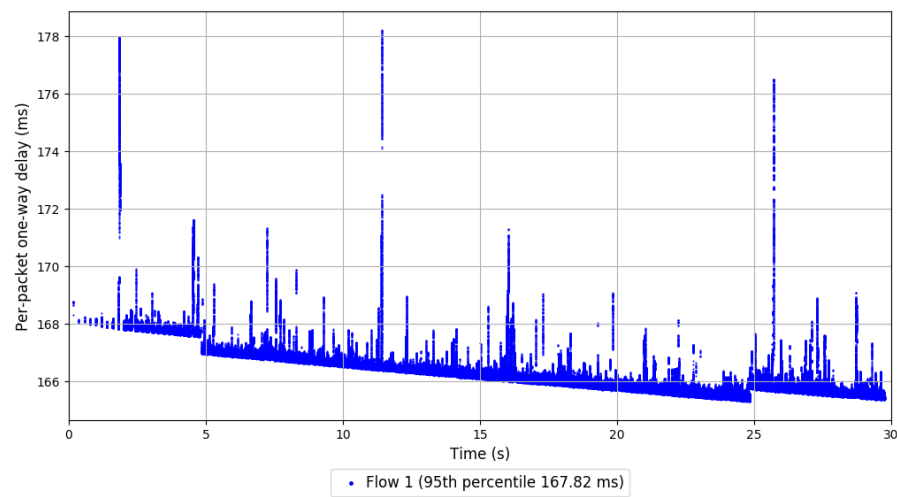
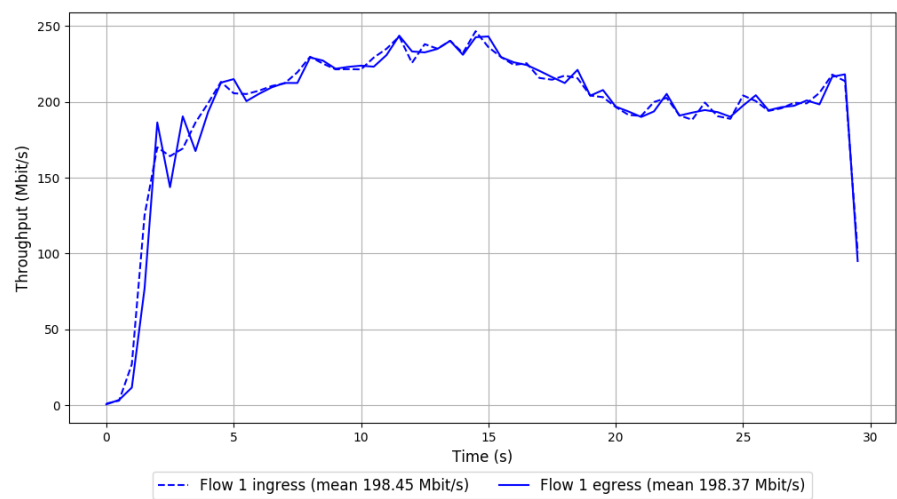
-- Flow 1:

Average throughput: 198.37 Mbit/s

95th percentile per-packet one-way delay: 167.825 ms

Loss rate: 0.63%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-01-25 16:59:37

End at: 2018-01-25 17:00:07

Below is generated by plot.py at 2018-01-25 21:16:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.93 Mbit/s

95th percentile per-packet one-way delay: 163.521 ms

Loss rate: 0.74%

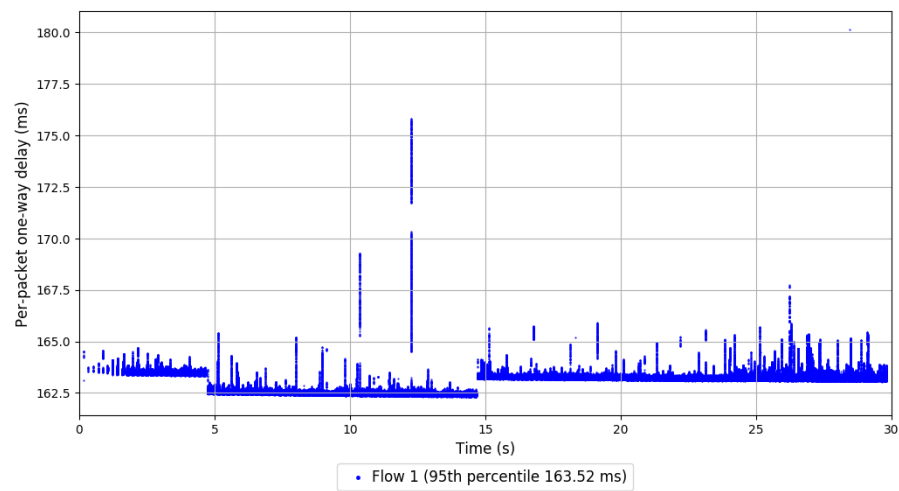
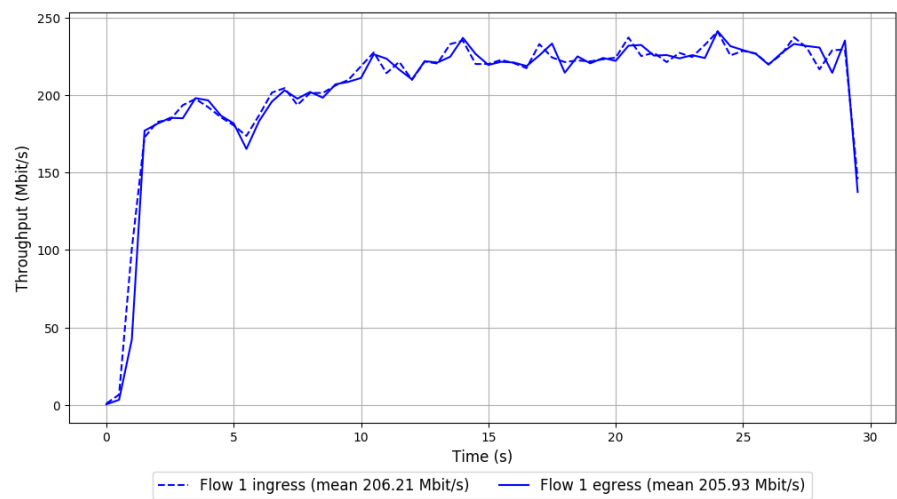
-- Flow 1:

Average throughput: 205.93 Mbit/s

95th percentile per-packet one-way delay: 163.521 ms

Loss rate: 0.74%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-01-25 17:12:25

End at: 2018-01-25 17:12:55

Below is generated by plot.py at 2018-01-25 21:16:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.29 Mbit/s

95th percentile per-packet one-way delay: 113.318 ms

Loss rate: 0.64%

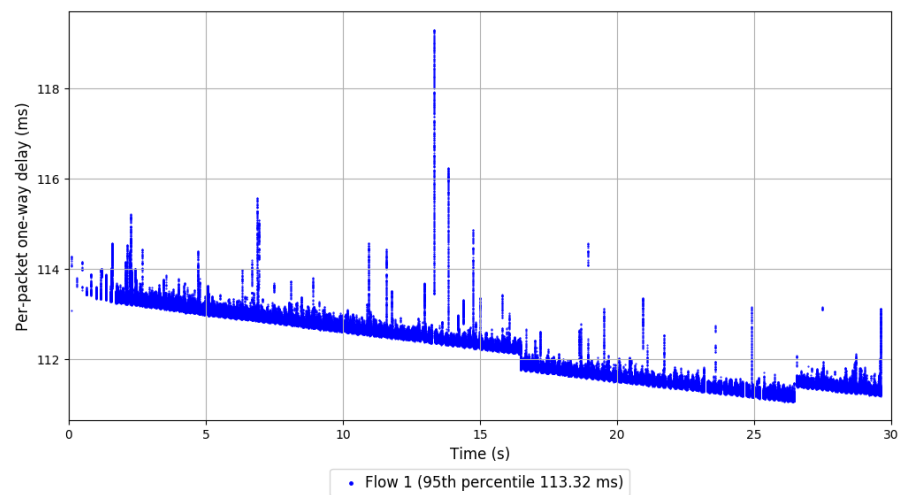
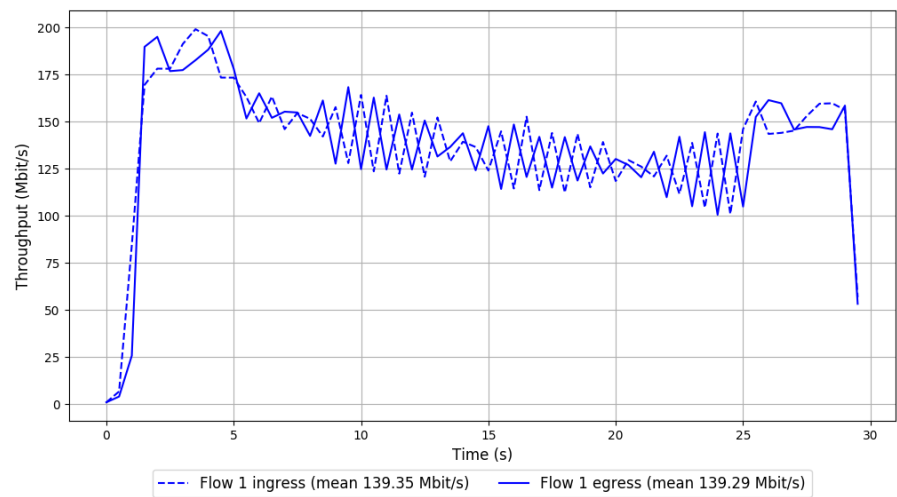
-- Flow 1:

Average throughput: 139.29 Mbit/s

95th percentile per-packet one-way delay: 113.318 ms

Loss rate: 0.64%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-01-25 17:25:19

End at: 2018-01-25 17:25:49

Below is generated by plot.py at 2018-01-25 21:17:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 206.36 Mbit/s

95th percentile per-packet one-way delay: 105.228 ms

Loss rate: 0.73%

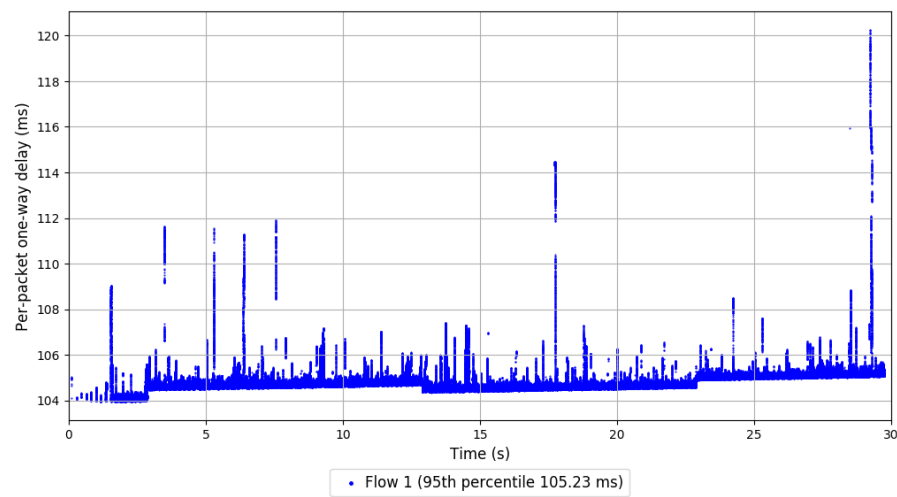
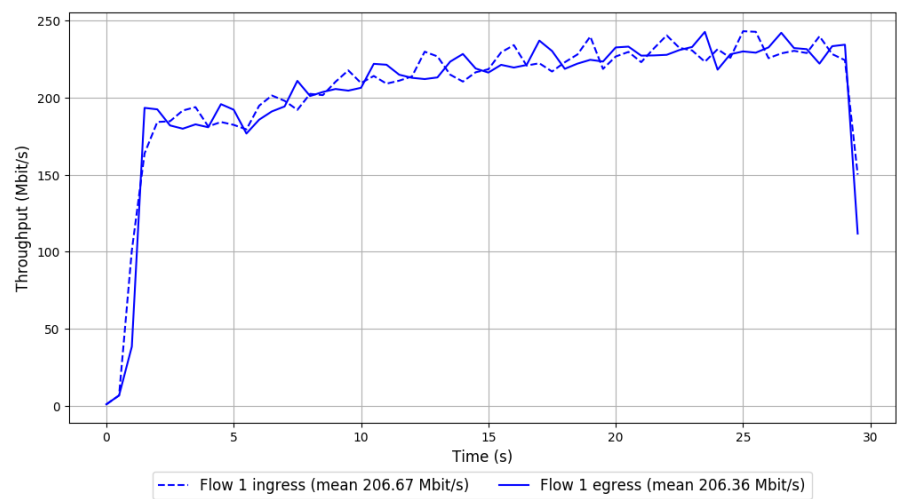
-- Flow 1:

Average throughput: 206.36 Mbit/s

95th percentile per-packet one-way delay: 105.228 ms

Loss rate: 0.73%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-01-25 17:38:03

End at: 2018-01-25 17:38:33

Below is generated by plot.py at 2018-01-25 21:17:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.49 Mbit/s

95th percentile per-packet one-way delay: 112.706 ms

Loss rate: 0.77%

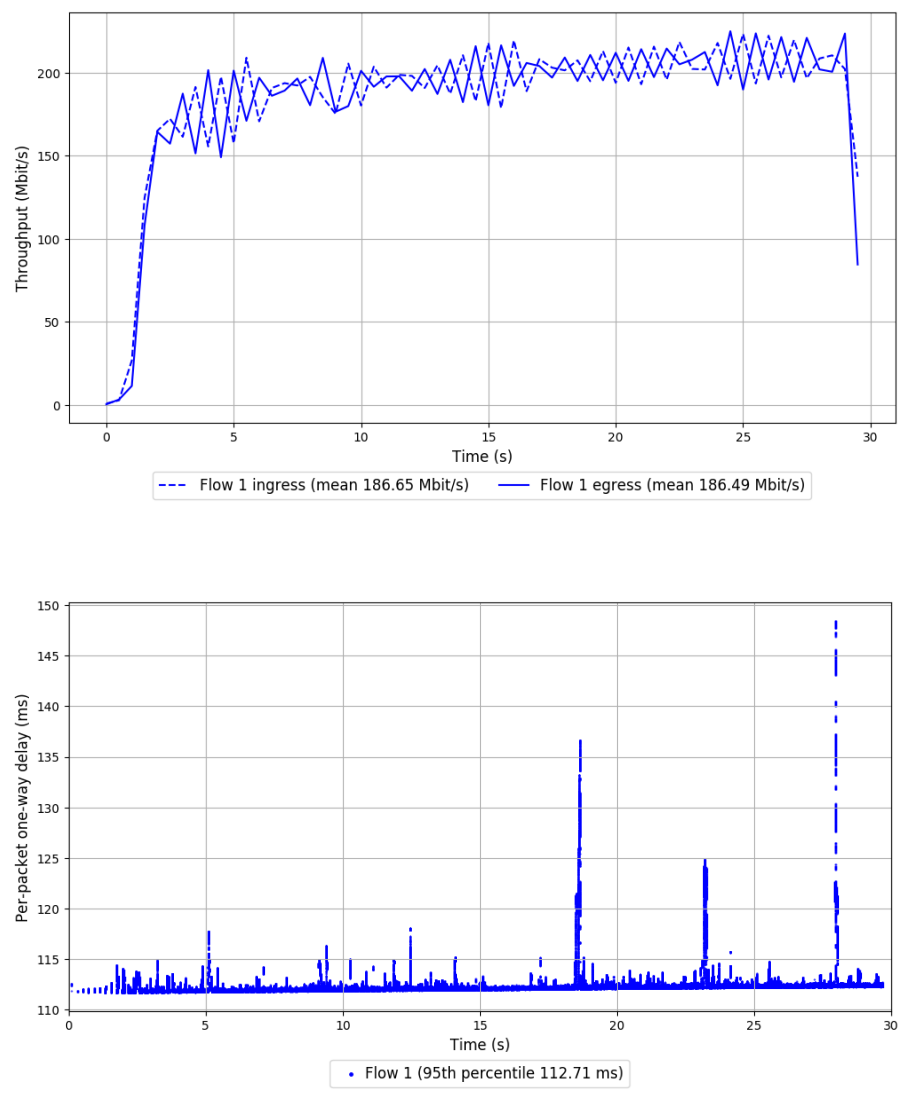
-- Flow 1:

Average throughput: 186.49 Mbit/s

95th percentile per-packet one-way delay: 112.706 ms

Loss rate: 0.77%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-01-25 17:51:10

End at: 2018-01-25 17:51:40

Below is generated by plot.py at 2018-01-25 21:17:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.73 Mbit/s

95th percentile per-packet one-way delay: 109.681 ms

Loss rate: 0.56%

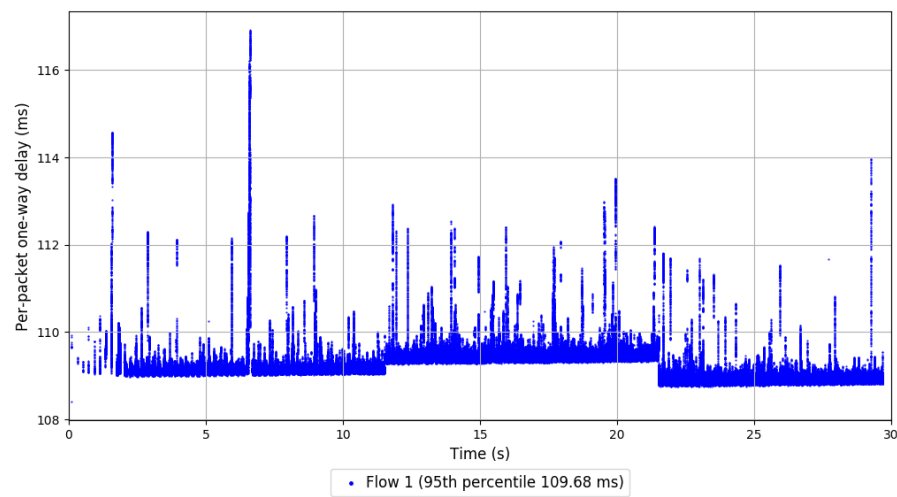
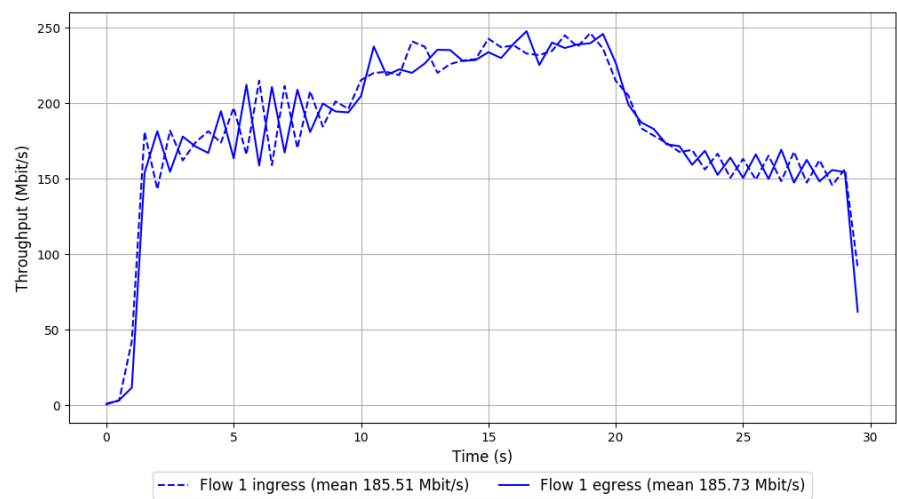
-- Flow 1:

Average throughput: 185.73 Mbit/s

95th percentile per-packet one-way delay: 109.681 ms

Loss rate: 0.56%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-01-25 18:04:10

End at: 2018-01-25 18:04:40

Below is generated by plot.py at 2018-01-25 21:17:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.00 Mbit/s

95th percentile per-packet one-way delay: 118.914 ms

Loss rate: 0.90%

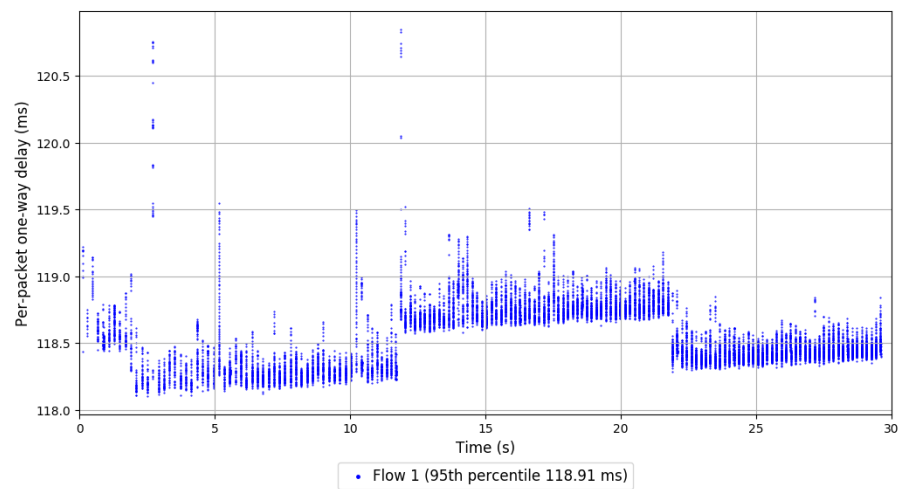
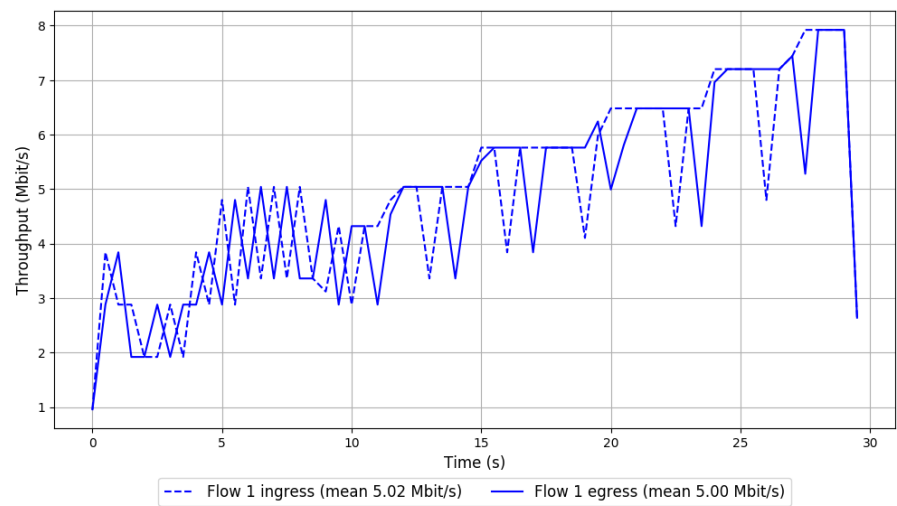
-- Flow 1:

Average throughput: 5.00 Mbit/s

95th percentile per-packet one-way delay: 118.914 ms

Loss rate: 0.90%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-01-25 18:16:58

End at: 2018-01-25 18:17:28

Below is generated by plot.py at 2018-01-25 21:18:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.78 Mbit/s

95th percentile per-packet one-way delay: 125.828 ms

Loss rate: 0.79%

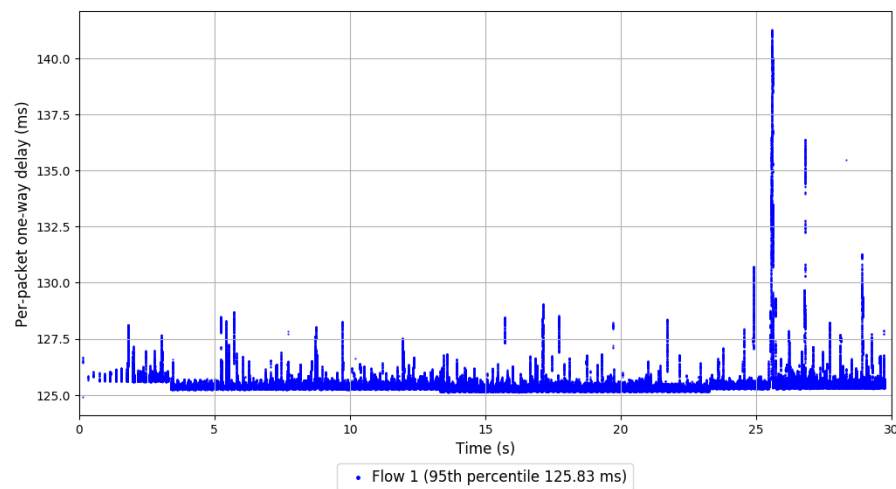
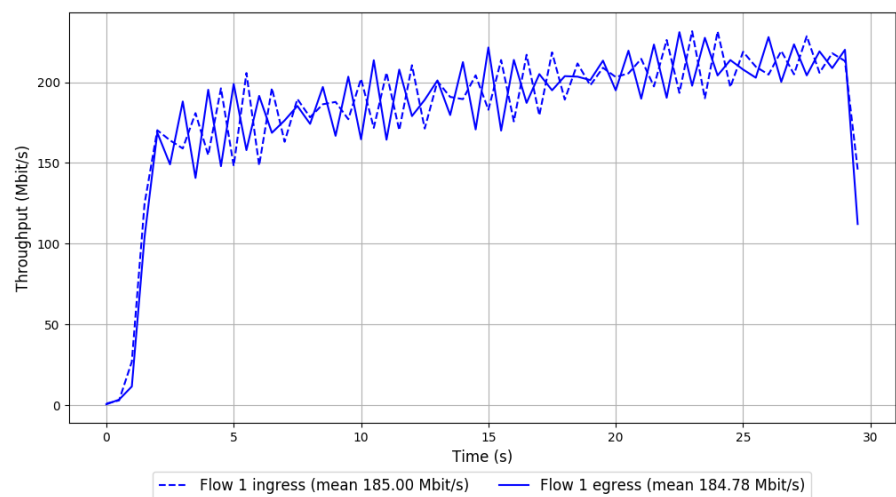
-- Flow 1:

Average throughput: 184.78 Mbit/s

95th percentile per-packet one-way delay: 125.828 ms

Loss rate: 0.79%

Run 10: Report of Indigo-1-32 — Data Link

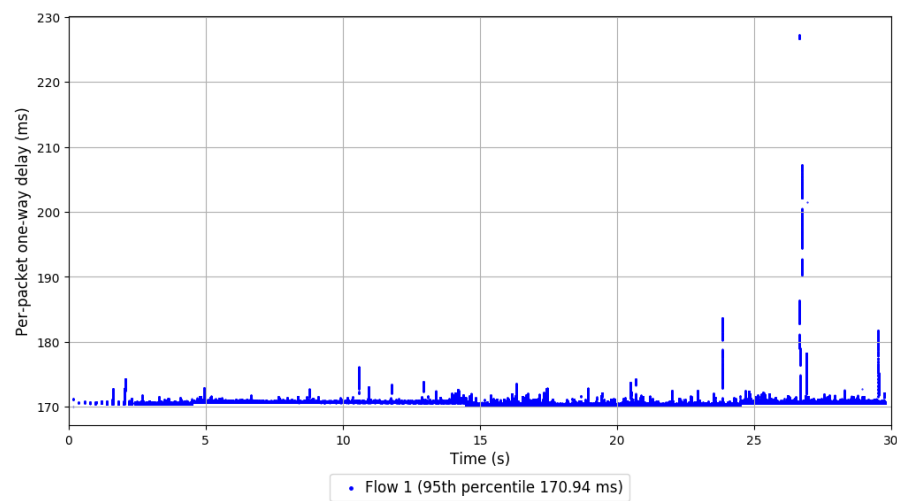
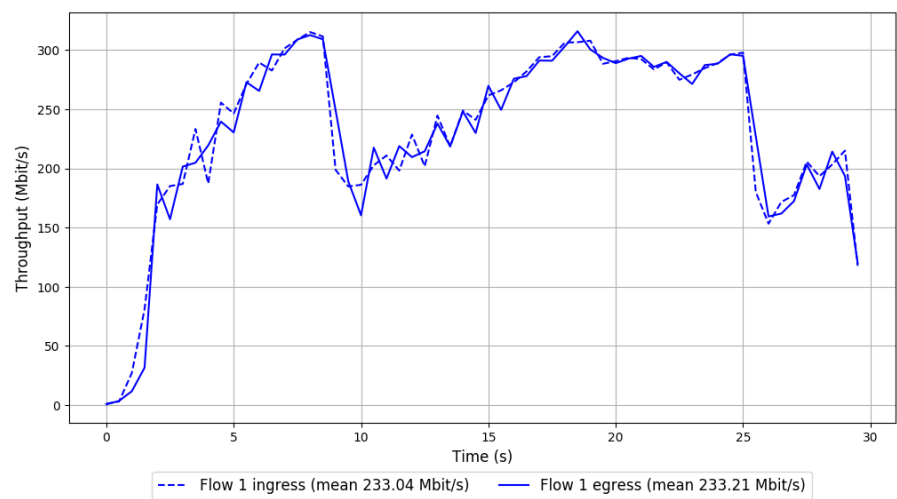


```
Run 1: Statistics of Indigo-1-128

Start at: 2018-01-25 16:25:47
End at: 2018-01-25 16:26:17

# Below is generated by plot.py at 2018-01-25 21:19:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 233.21 Mbit/s
95th percentile per-packet one-way delay: 170.940 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 233.21 Mbit/s
95th percentile per-packet one-way delay: 170.940 ms
Loss rate: 0.60%
```


Run 1: Report of Indigo-1-128 — Data Link



Run 2: Statistics of Indigo-1-128

Start at: 2018-01-25 16:38:44

End at: 2018-01-25 16:39:14

Below is generated by plot.py at 2018-01-25 21:19:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.30 Mbit/s

95th percentile per-packet one-way delay: 155.577 ms

Loss rate: 0.58%

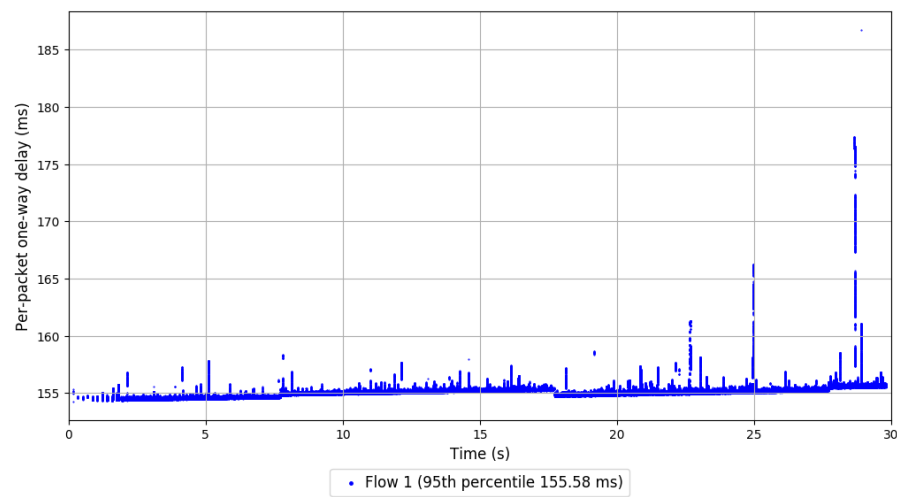
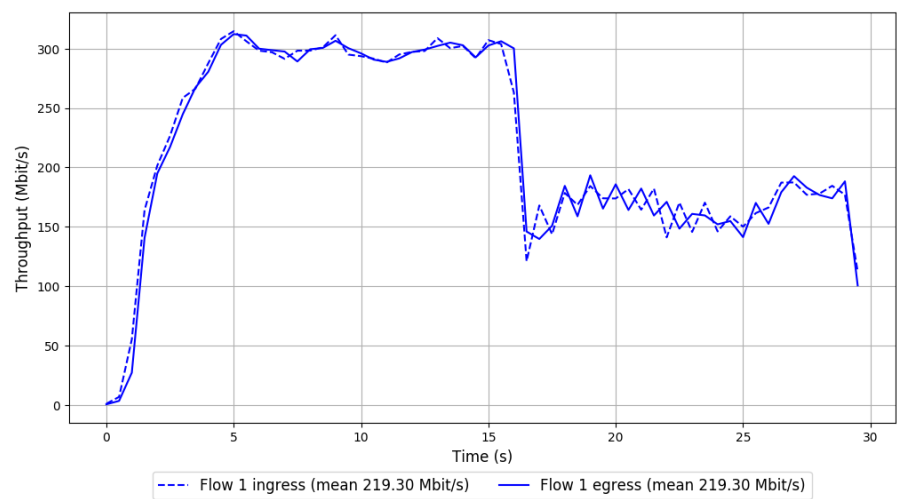
-- Flow 1:

Average throughput: 219.30 Mbit/s

95th percentile per-packet one-way delay: 155.577 ms

Loss rate: 0.58%

Run 2: Report of Indigo-1-128 — Data Link



Run 3: Statistics of Indigo-1-128

Start at: 2018-01-25 16:51:16

End at: 2018-01-25 16:51:46

Below is generated by plot.py at 2018-01-25 21:20:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 257.35 Mbit/s

95th percentile per-packet one-way delay: 155.514 ms

Loss rate: 0.48%

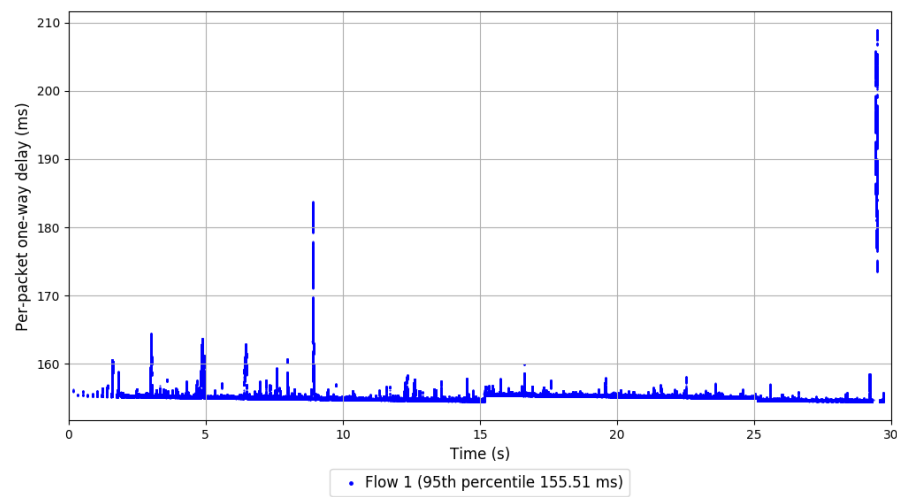
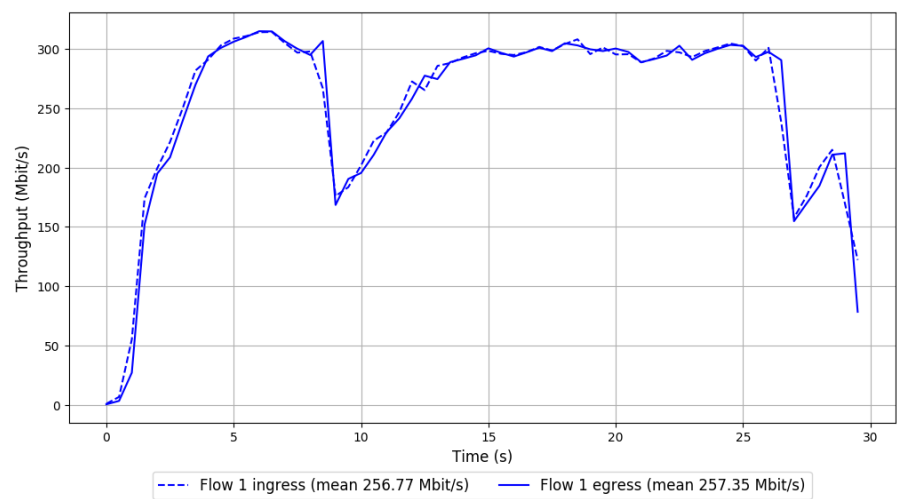
-- Flow 1:

Average throughput: 257.35 Mbit/s

95th percentile per-packet one-way delay: 155.514 ms

Loss rate: 0.48%

Run 3: Report of Indigo-1-128 — Data Link



Run 4: Statistics of Indigo-1-128

Start at: 2018-01-25 17:04:20

End at: 2018-01-25 17:04:50

Below is generated by plot.py at 2018-01-25 21:20:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.91 Mbit/s

95th percentile per-packet one-way delay: 161.561 ms

Loss rate: 0.46%

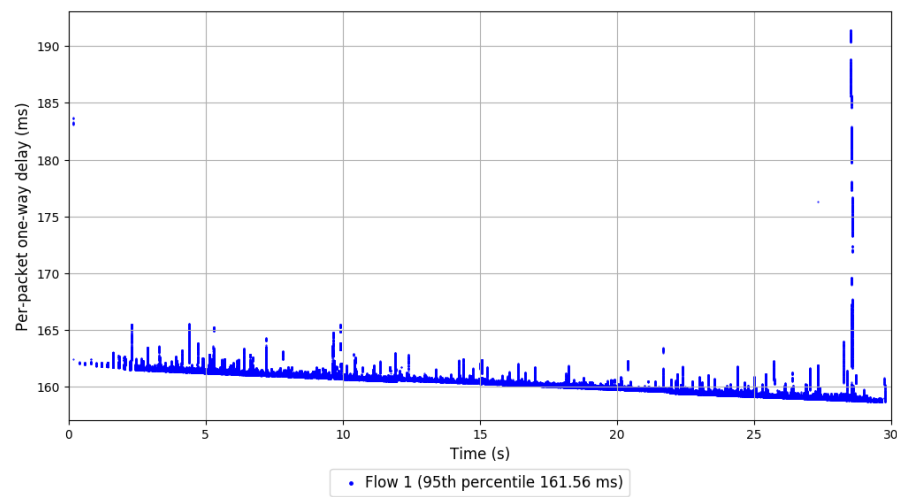
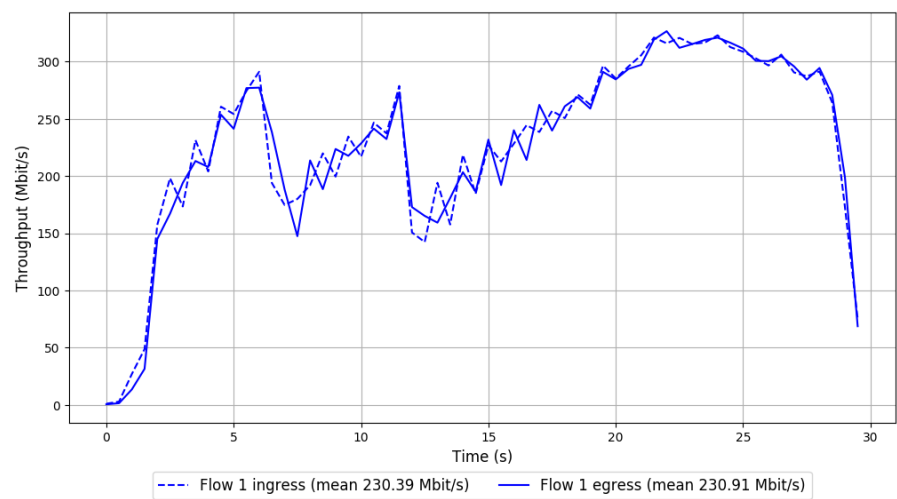
-- Flow 1:

Average throughput: 230.91 Mbit/s

95th percentile per-packet one-way delay: 161.561 ms

Loss rate: 0.46%

Run 4: Report of Indigo-1-128 — Data Link



Run 5: Statistics of Indigo-1-128

Start at: 2018-01-25 17:17:14

End at: 2018-01-25 17:17:44

Below is generated by plot.py at 2018-01-25 21:20:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.69 Mbit/s

95th percentile per-packet one-way delay: 104.987 ms

Loss rate: 0.83%

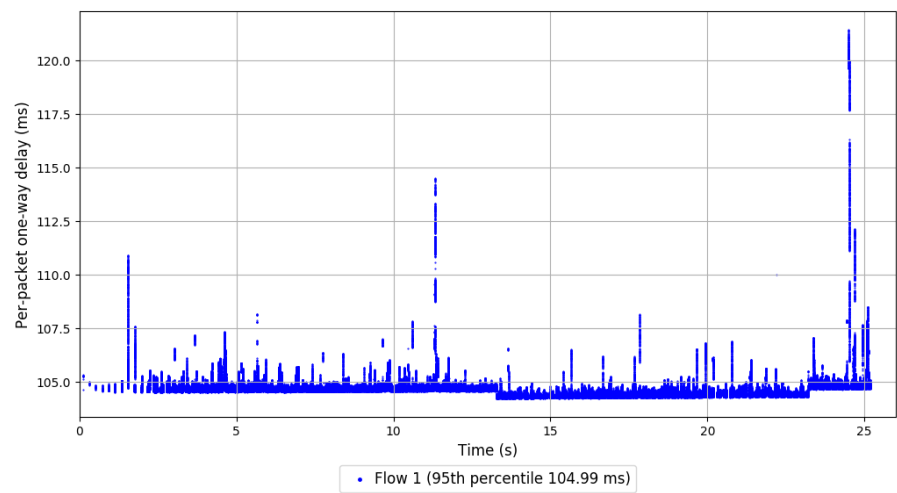
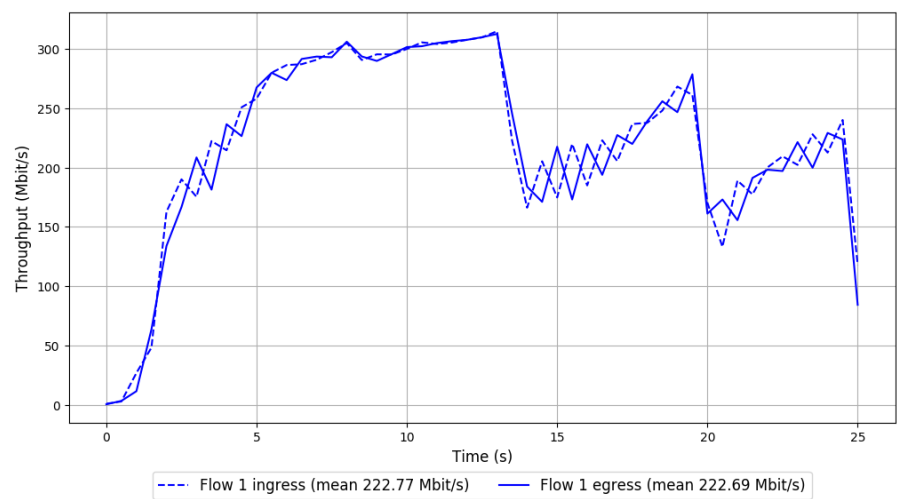
-- Flow 1:

Average throughput: 222.69 Mbit/s

95th percentile per-packet one-way delay: 104.987 ms

Loss rate: 0.83%

Run 5: Report of Indigo-1-128 — Data Link



Run 6: Statistics of Indigo-1-128

Start at: 2018-01-25 17:30:09

End at: 2018-01-25 17:30:39

Below is generated by plot.py at 2018-01-25 21:20:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 106.735 ms

Loss rate: 1.01%

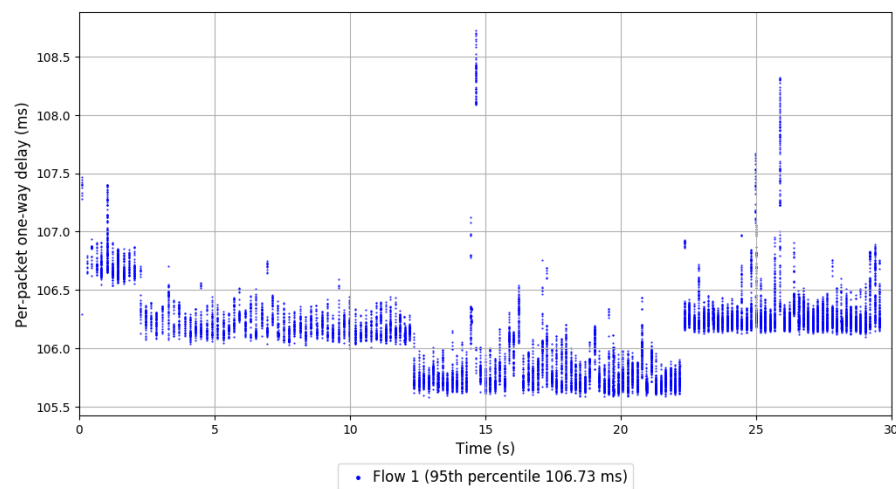
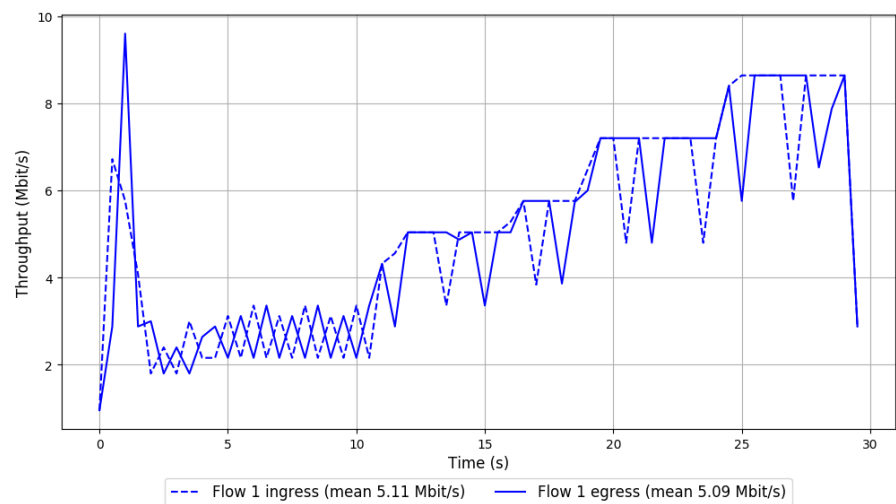
-- Flow 1:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 106.735 ms

Loss rate: 1.01%

Run 6: Report of Indigo-1-128 — Data Link



Run 7: Statistics of Indigo-1-128

Start at: 2018-01-25 17:42:55

End at: 2018-01-25 17:43:25

Below is generated by plot.py at 2018-01-25 21:21:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 246.32 Mbit/s

95th percentile per-packet one-way delay: 113.267 ms

Loss rate: 0.45%

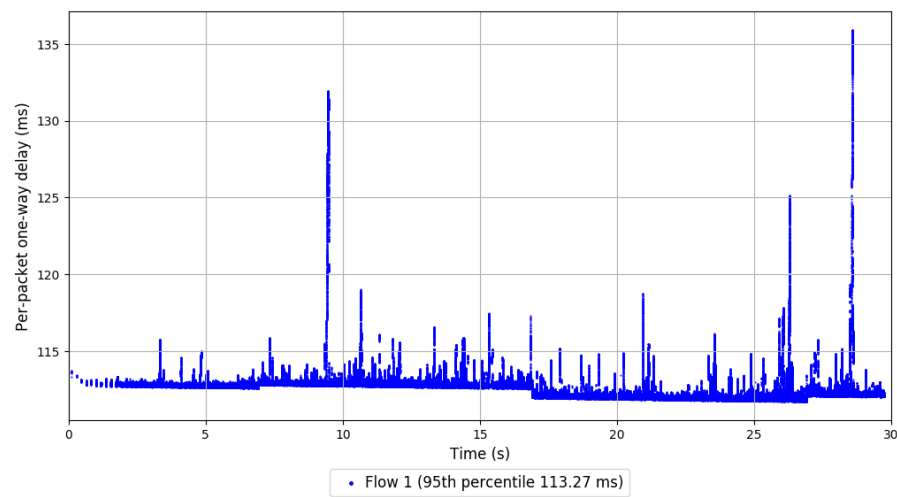
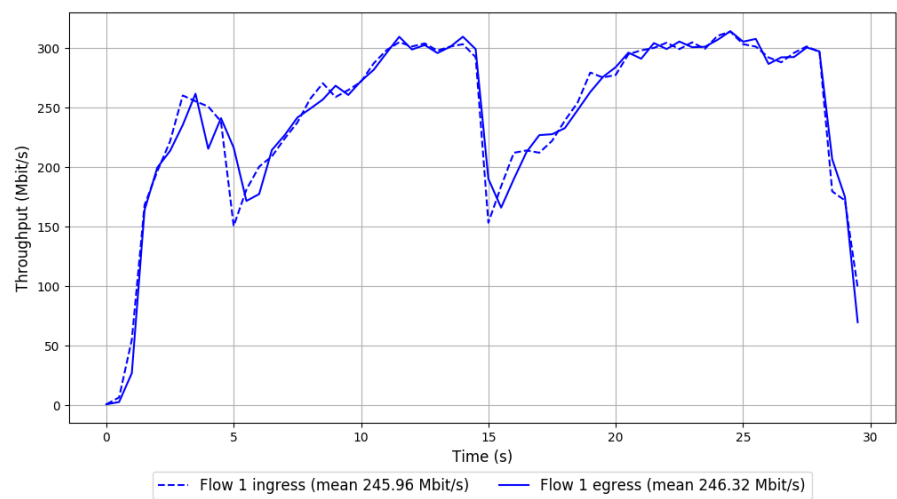
-- Flow 1:

Average throughput: 246.32 Mbit/s

95th percentile per-packet one-way delay: 113.267 ms

Loss rate: 0.45%

Run 7: Report of Indigo-1-128 — Data Link



Run 8: Statistics of Indigo-1-128

Start at: 2018-01-25 17:55:56

End at: 2018-01-25 17:56:26

Below is generated by plot.py at 2018-01-25 21:21:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 239.40 Mbit/s

95th percentile per-packet one-way delay: 112.469 ms

Loss rate: 0.65%

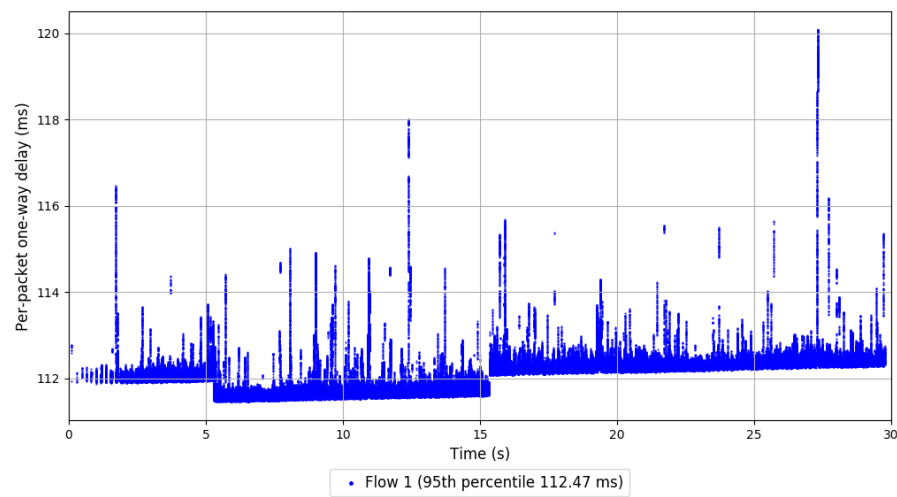
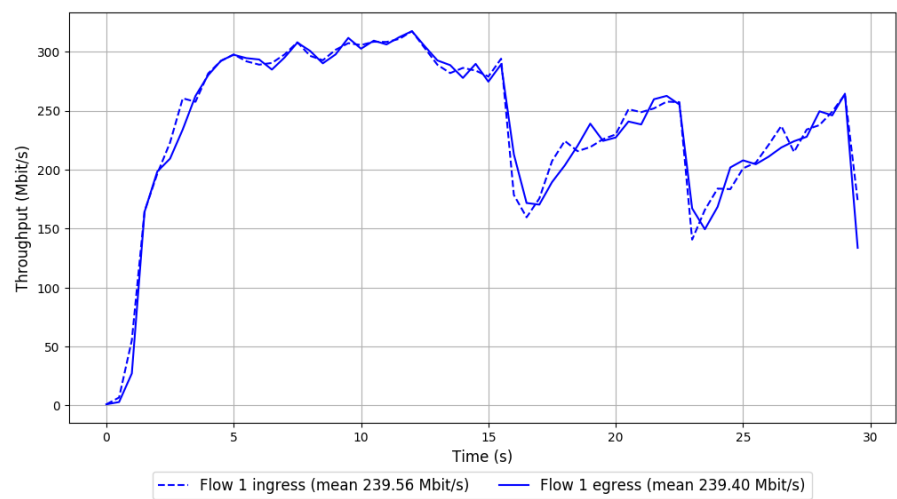
-- Flow 1:

Average throughput: 239.40 Mbit/s

95th percentile per-packet one-way delay: 112.469 ms

Loss rate: 0.65%

Run 8: Report of Indigo-1-128 — Data Link



Run 9: Statistics of Indigo-1-128

Start at: 2018-01-25 18:08:49

End at: 2018-01-25 18:09:19

Below is generated by plot.py at 2018-01-25 21:21:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.87 Mbit/s

95th percentile per-packet one-way delay: 120.682 ms

Loss rate: 0.62%

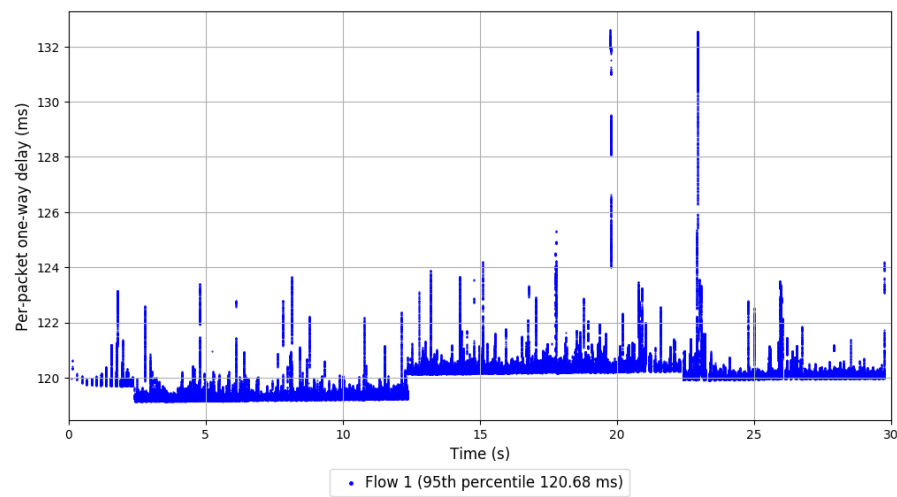
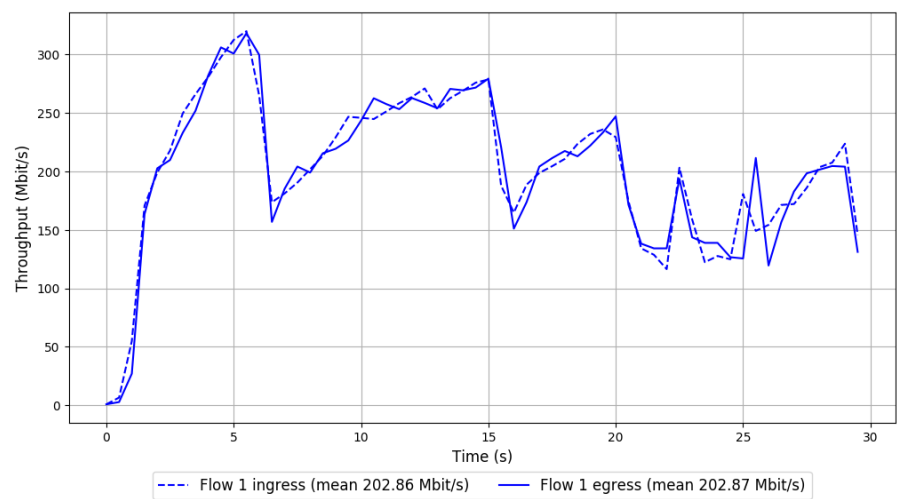
-- Flow 1:

Average throughput: 202.87 Mbit/s

95th percentile per-packet one-way delay: 120.682 ms

Loss rate: 0.62%

Run 9: Report of Indigo-1-128 — Data Link



Run 10: Statistics of Indigo-1-128

Start at: 2018-01-25 18:21:51

End at: 2018-01-25 18:22:21

Below is generated by plot.py at 2018-01-25 21:21:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.47 Mbit/s

95th percentile per-packet one-way delay: 125.266 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 216.47 Mbit/s

95th percentile per-packet one-way delay: 125.266 ms

Loss rate: 0.55%

Run 10: Report of Indigo-1-128 — Data Link

