

Pantheon Report

Generated at 2018-01-16 03:36:27 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

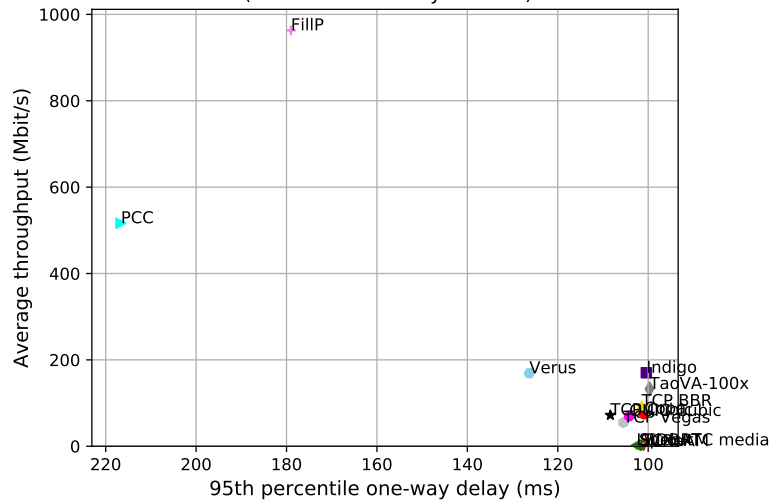
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

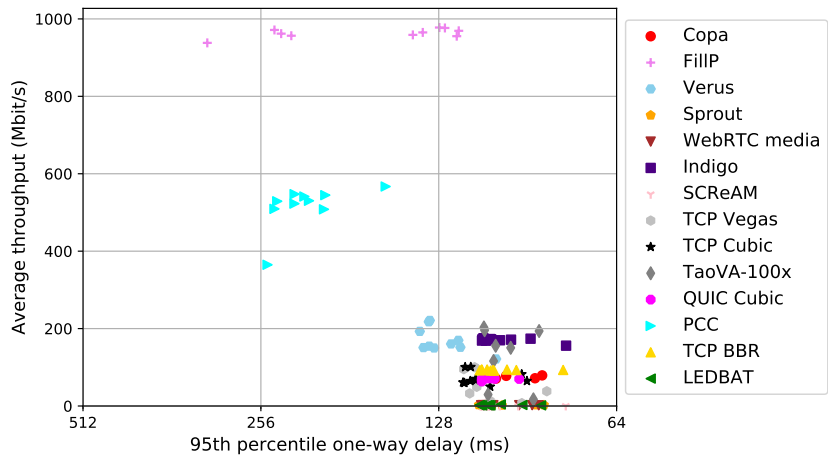
Git summary:

```
branch: master @ af8abdfba95588b0c5f2aeca9e856a1656b0c598
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	93.01	101.47	0.78
TCP Cubic	10	72.00	108.37	0.94
LEDBAT	10	2.11	102.61	0.78
PCC	10	516.46	216.63	2.83
QUIC Cubic	9	70.17	104.20	0.95
SCReAM	10	0.21	101.74	0.70
WebRTC media	10	2.14	101.02	0.89
Sprout	10	2.33	102.02	1.34
TaoVA-100x	8	132.65	99.71	0.55
TCP Vegas	10	54.74	105.51	0.90
Verus	10	169.03	126.30	0.82
Copa	9	75.19	100.89	0.69
FillP	10	963.10	179.04	1.29
Indigo	10	170.13	100.41	0.82

Run 1: Statistics of TCP BBR

Start at: 2018-01-15 22:44:50

End at: 2018-01-15 22:45:20

Below is generated by plot.py at 2018-01-16 02:49:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.16 Mbit/s

95th percentile per-packet one-way delay: 78.820 ms

Loss rate: 0.78%

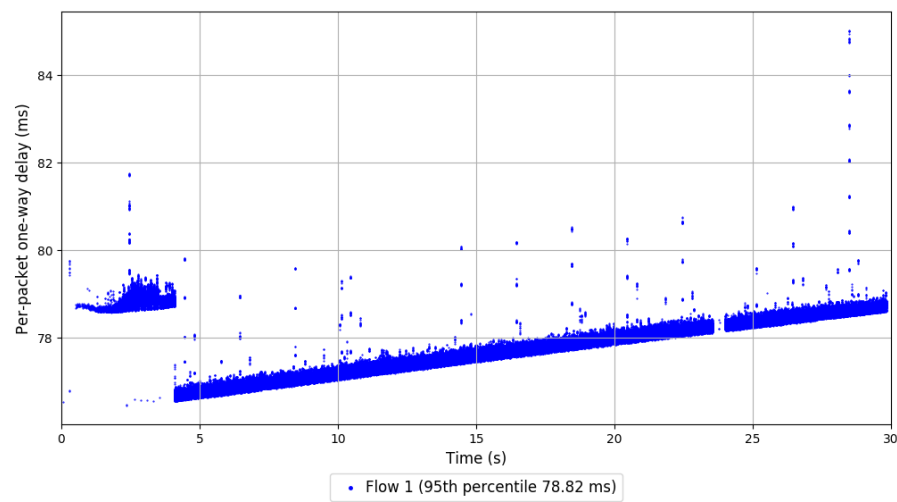
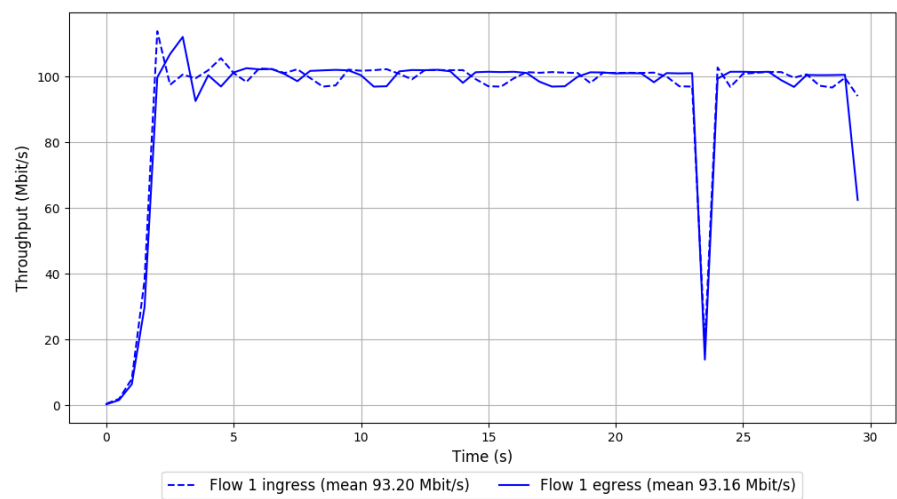
-- Flow 1:

Average throughput: 93.16 Mbit/s

95th percentile per-packet one-way delay: 78.820 ms

Loss rate: 0.78%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-15 22:56:55

End at: 2018-01-15 22:57:25

Below is generated by plot.py at 2018-01-16 02:49:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.85 Mbit/s

95th percentile per-packet one-way delay: 94.602 ms

Loss rate: 0.78%

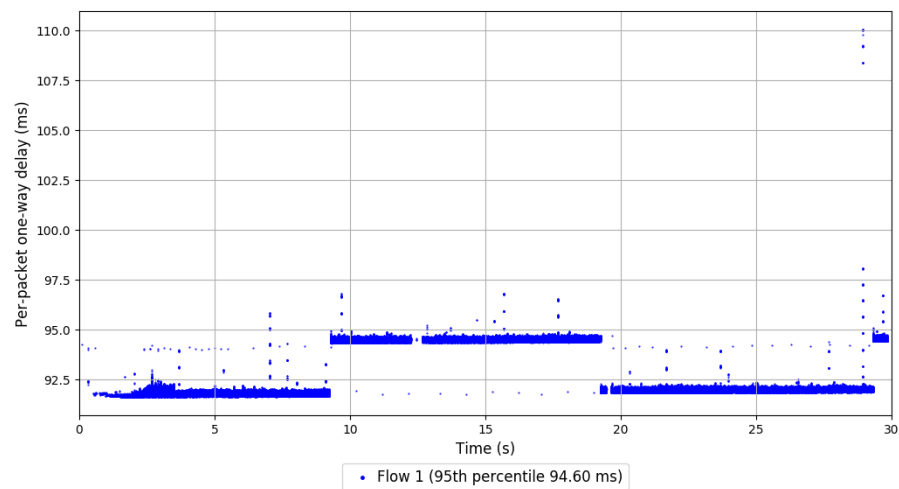
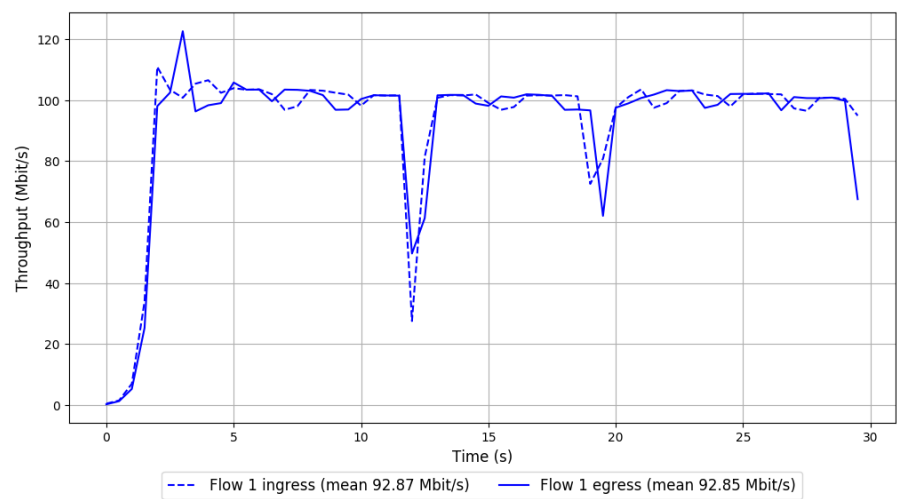
-- Flow 1:

Average throughput: 92.85 Mbit/s

95th percentile per-packet one-way delay: 94.602 ms

Loss rate: 0.78%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-15 23:09:23

End at: 2018-01-15 23:09:53

Below is generated by plot.py at 2018-01-16 02:49:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.17 Mbit/s

95th percentile per-packet one-way delay: 98.112 ms

Loss rate: 0.79%

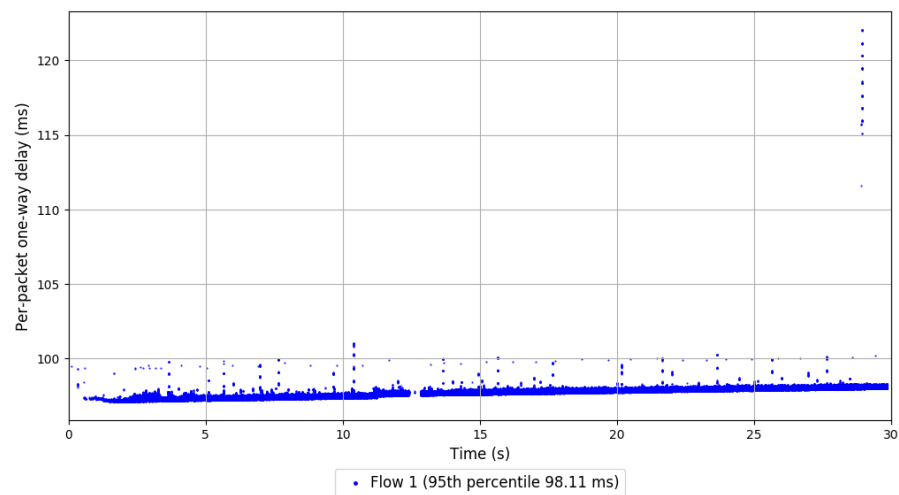
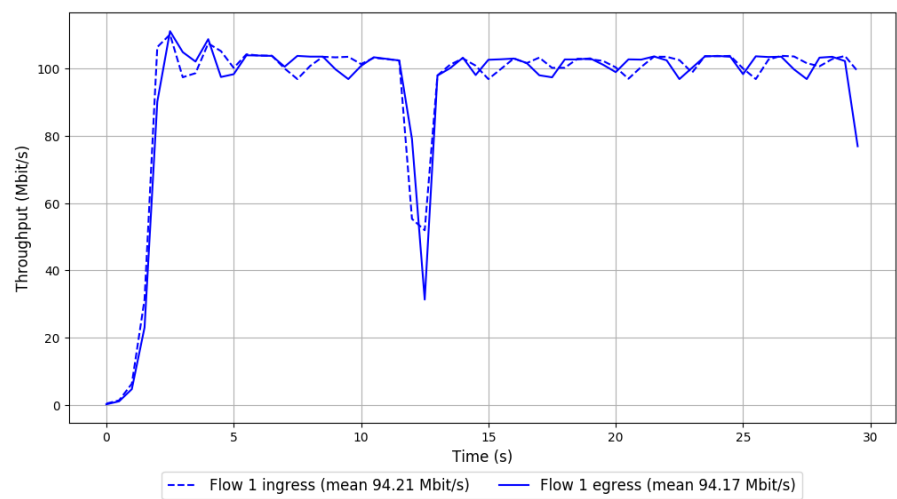
-- Flow 1:

Average throughput: 94.17 Mbit/s

95th percentile per-packet one-way delay: 98.112 ms

Loss rate: 0.79%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-15 23:21:57

End at: 2018-01-15 23:22:27

Below is generated by plot.py at 2018-01-16 02:49:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.90 Mbit/s

95th percentile per-packet one-way delay: 103.597 ms

Loss rate: 0.78%

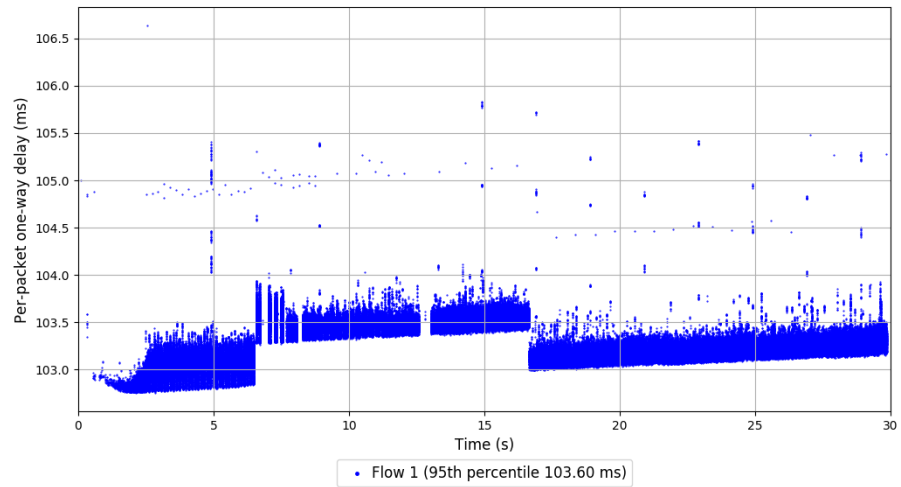
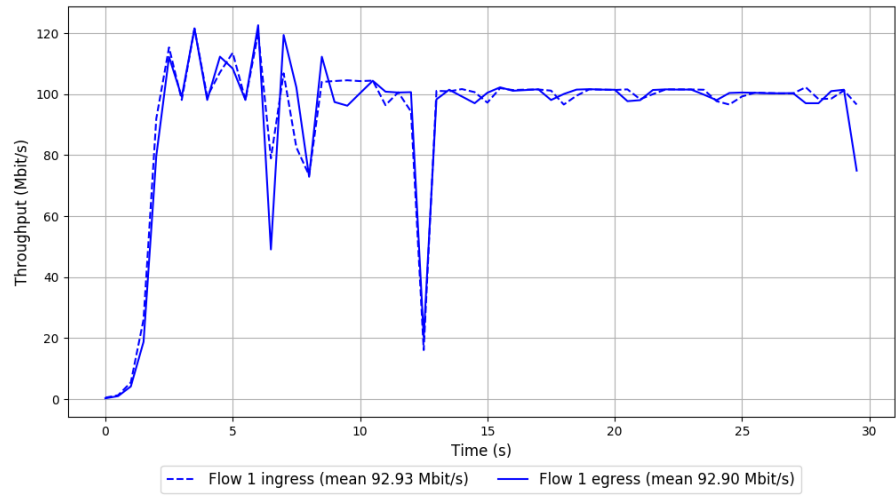
-- Flow 1:

Average throughput: 92.90 Mbit/s

95th percentile per-packet one-way delay: 103.597 ms

Loss rate: 0.78%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-15 23:34:30

End at: 2018-01-15 23:35:00

Below is generated by plot.py at 2018-01-16 02:49:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.34 Mbit/s

95th percentile per-packet one-way delay: 105.998 ms

Loss rate: 0.79%

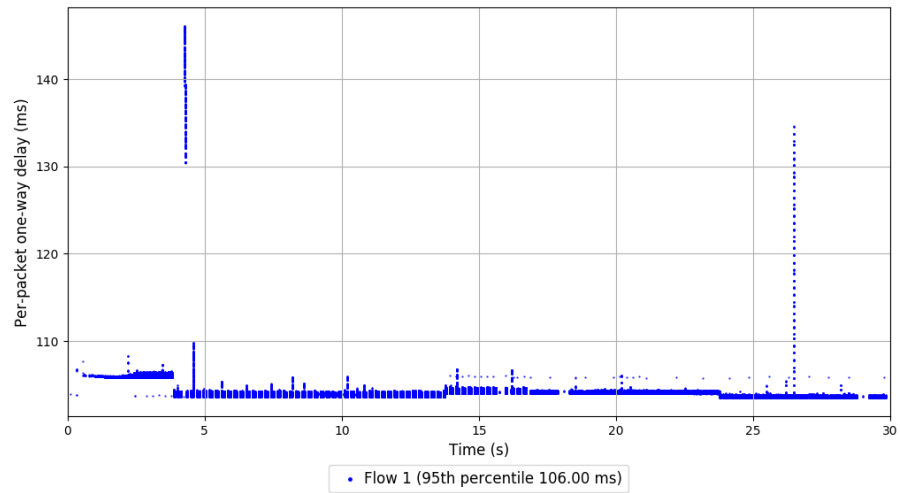
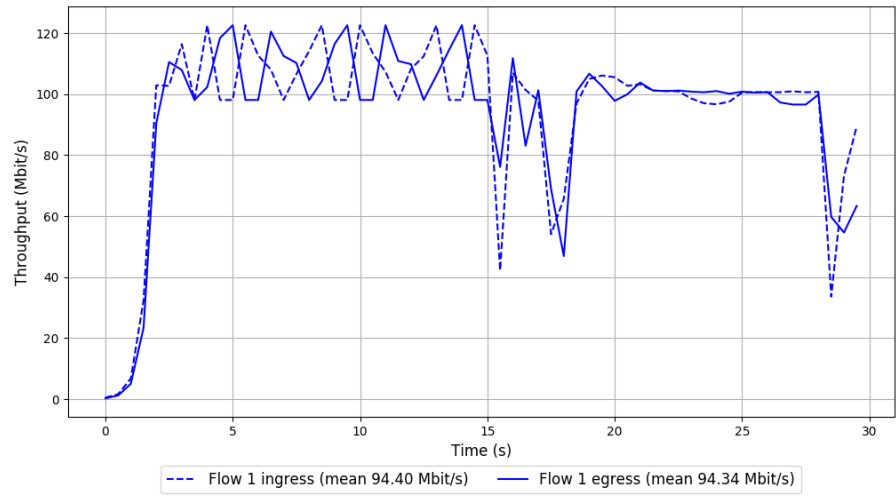
-- Flow 1:

Average throughput: 94.34 Mbit/s

95th percentile per-packet one-way delay: 105.998 ms

Loss rate: 0.79%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-15 23:47:02

End at: 2018-01-15 23:47:32

Below is generated by plot.py at 2018-01-16 02:49:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.40 Mbit/s

95th percentile per-packet one-way delay: 103.156 ms

Loss rate: 0.81%

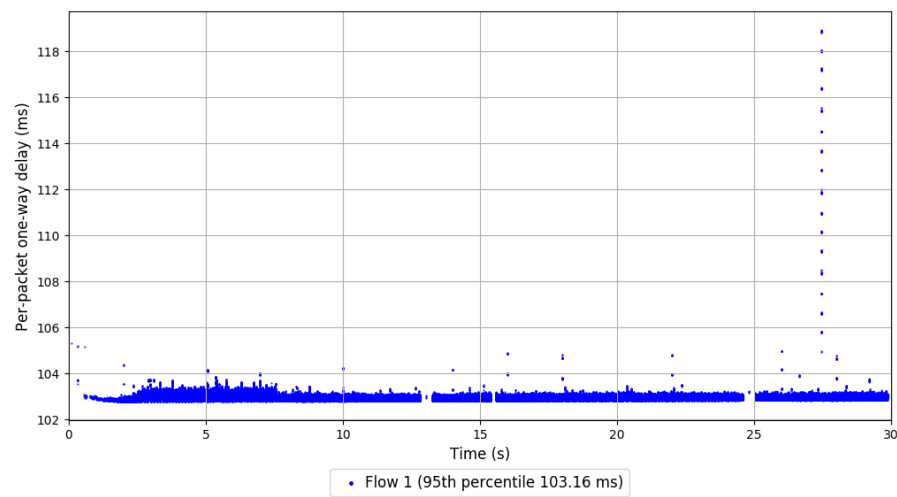
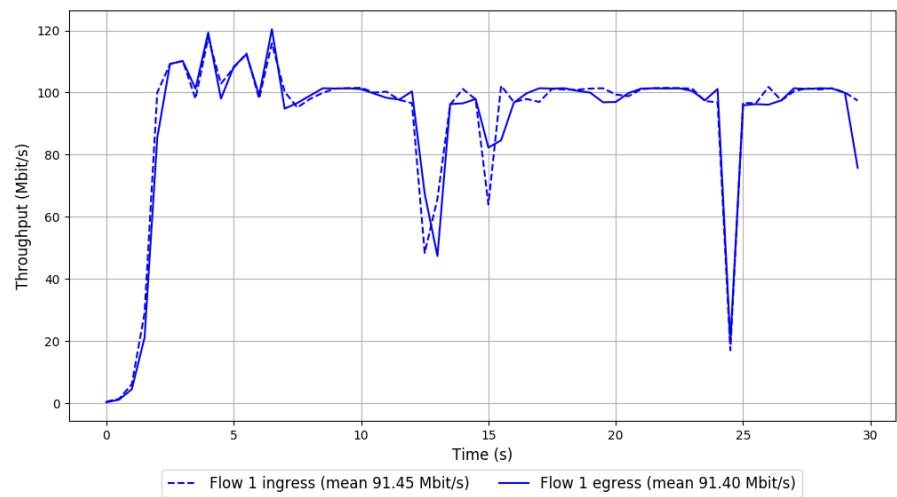
-- Flow 1:

Average throughput: 91.40 Mbit/s

95th percentile per-packet one-way delay: 103.156 ms

Loss rate: 0.81%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-15 23:59:17

End at: 2018-01-15 23:59:47

Below is generated by plot.py at 2018-01-16 02:49:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.58 Mbit/s

95th percentile per-packet one-way delay: 104.594 ms

Loss rate: 0.79%

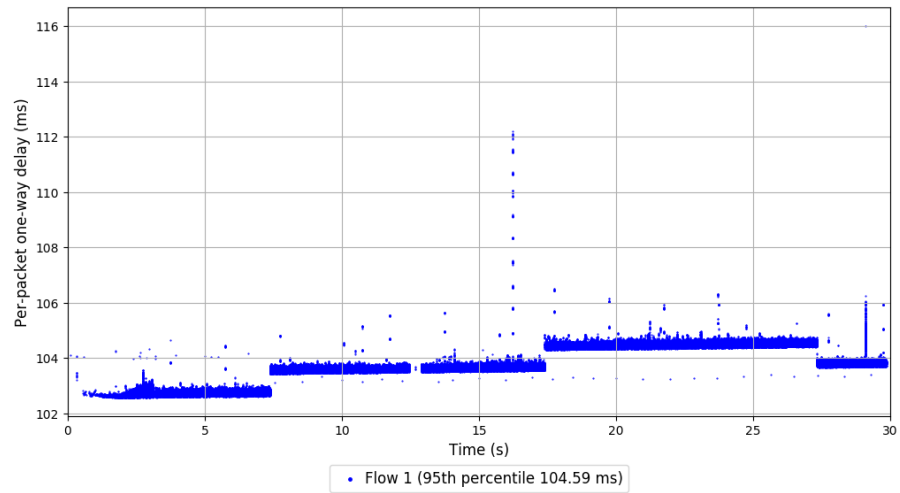
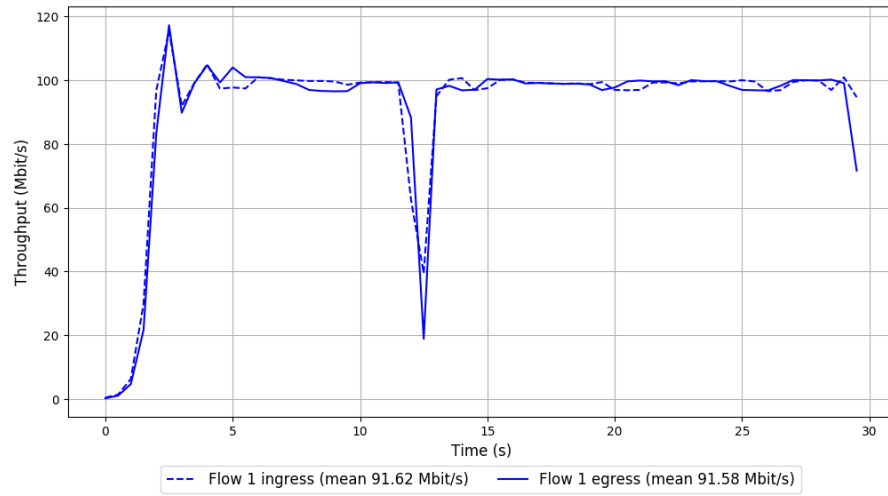
-- Flow 1:

Average throughput: 91.58 Mbit/s

95th percentile per-packet one-way delay: 104.594 ms

Loss rate: 0.79%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-16 00:11:45

End at: 2018-01-16 00:12:15

Below is generated by plot.py at 2018-01-16 02:49:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.13 Mbit/s

95th percentile per-packet one-way delay: 108.414 ms

Loss rate: 0.78%

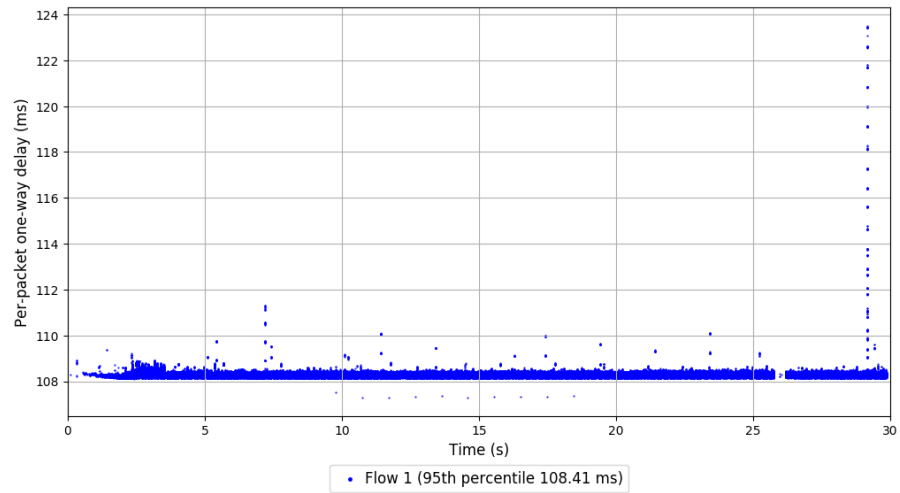
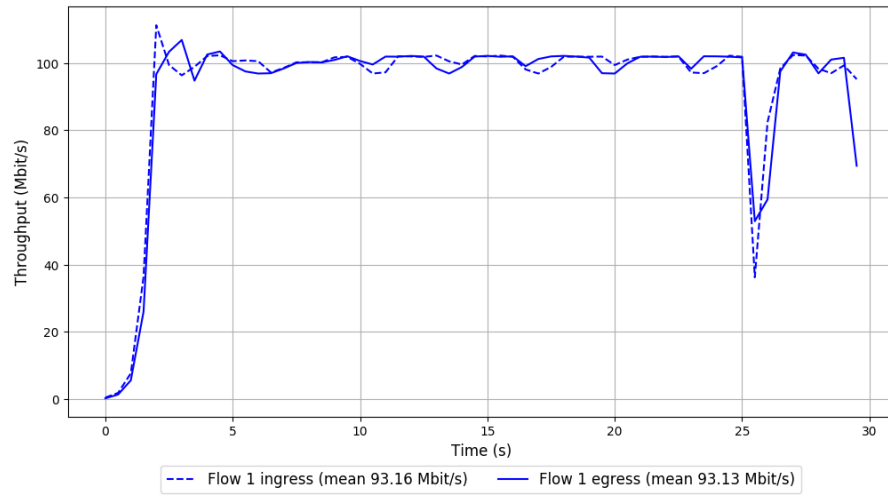
-- Flow 1:

Average throughput: 93.13 Mbit/s

95th percentile per-packet one-way delay: 108.414 ms

Loss rate: 0.78%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-16 00:24:02

End at: 2018-01-16 00:24:32

Below is generated by plot.py at 2018-01-16 02:51:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.42 Mbit/s

95th percentile per-packet one-way delay: 108.243 ms

Loss rate: 0.76%

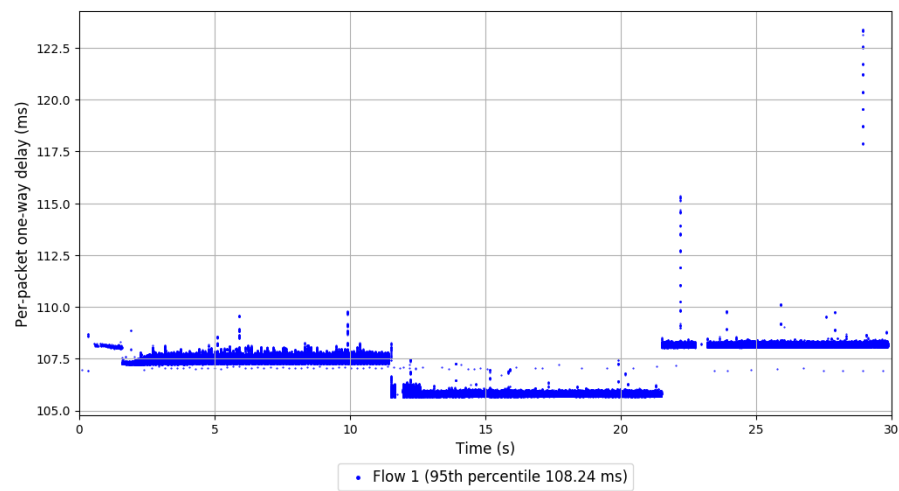
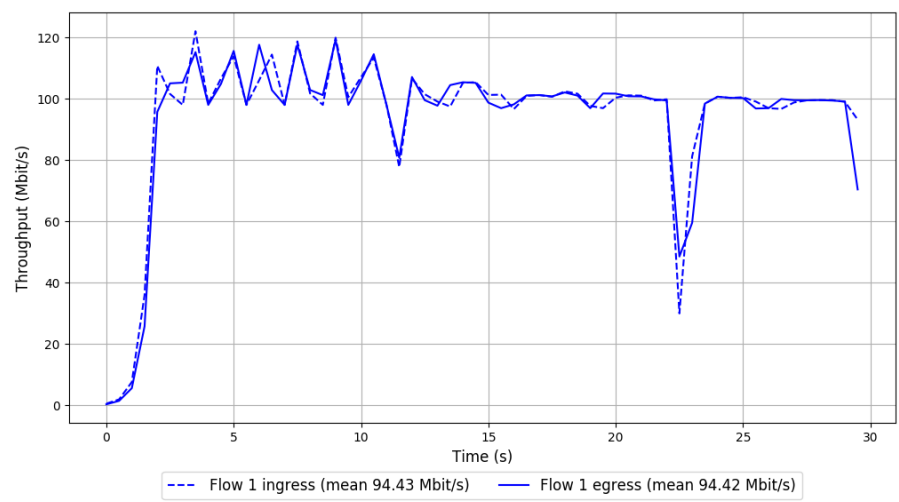
-- Flow 1:

Average throughput: 94.42 Mbit/s

95th percentile per-packet one-way delay: 108.243 ms

Loss rate: 0.76%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-16 00:36:24

End at: 2018-01-16 00:36:54

Below is generated by plot.py at 2018-01-16 02:51:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.17 Mbit/s

95th percentile per-packet one-way delay: 109.117 ms

Loss rate: 0.79%

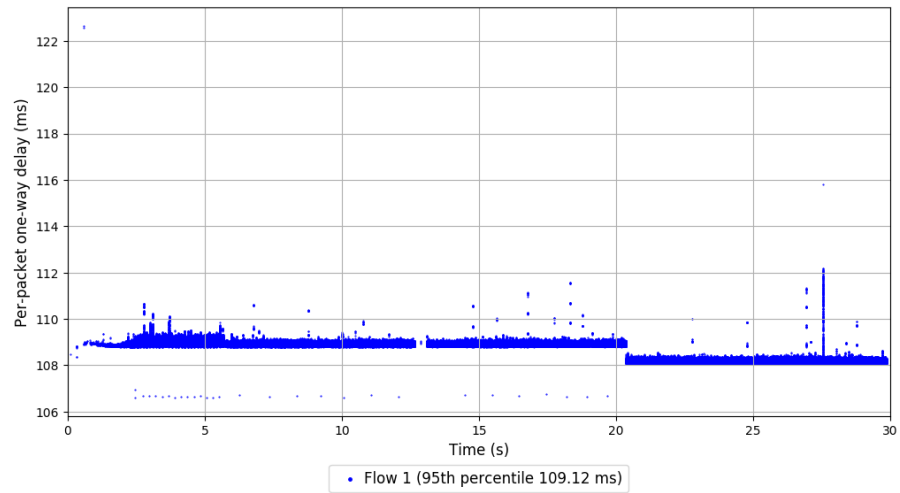
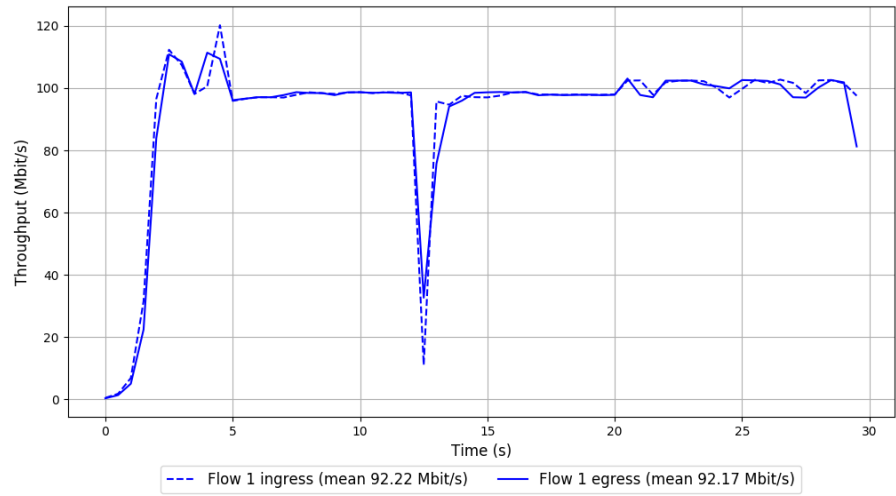
-- Flow 1:

Average throughput: 92.17 Mbit/s

95th percentile per-packet one-way delay: 109.117 ms

Loss rate: 0.79%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-15 22:40:20

End at: 2018-01-15 22:40:50

Below is generated by plot.py at 2018-01-16 02:51:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.74 Mbit/s

95th percentile per-packet one-way delay: 90.771 ms

Loss rate: 1.58%

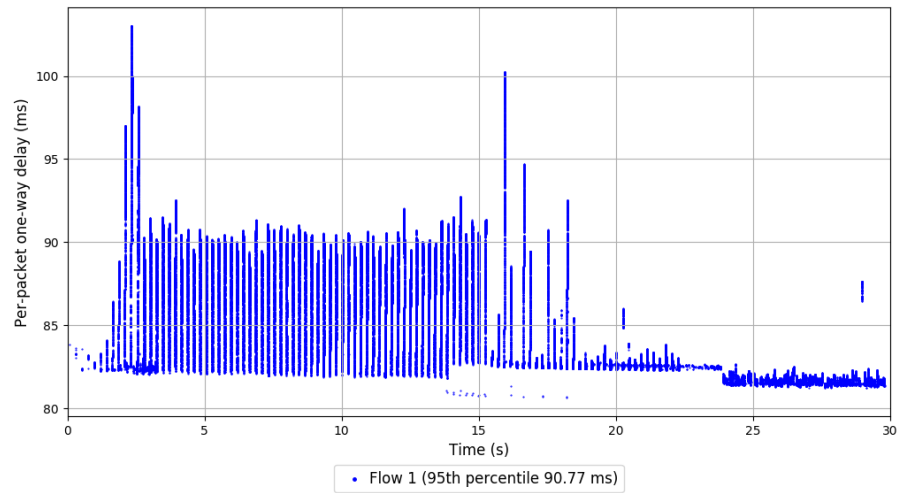
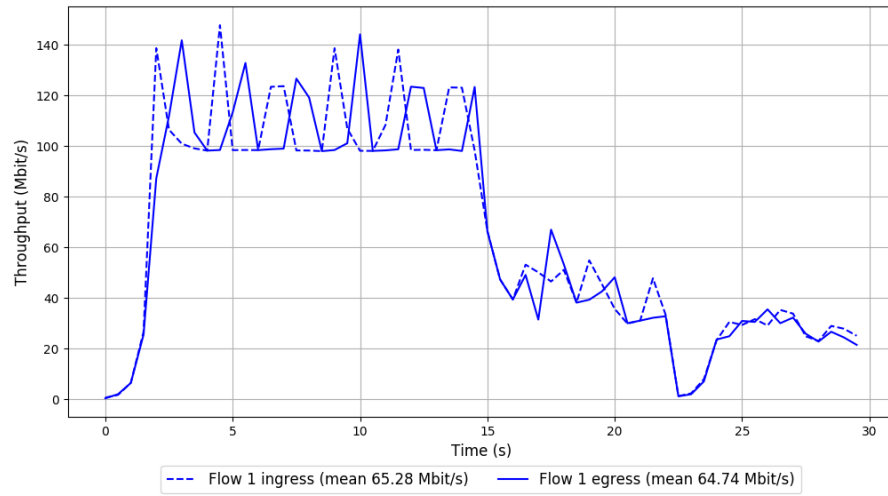
-- Flow 1:

Average throughput: 64.74 Mbit/s

95th percentile per-packet one-way delay: 90.771 ms

Loss rate: 1.58%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-15 22:52:22

End at: 2018-01-15 22:52:52

Below is generated by plot.py at 2018-01-16 02:51:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.15 Mbit/s

95th percentile per-packet one-way delay: 92.643 ms

Loss rate: 1.06%

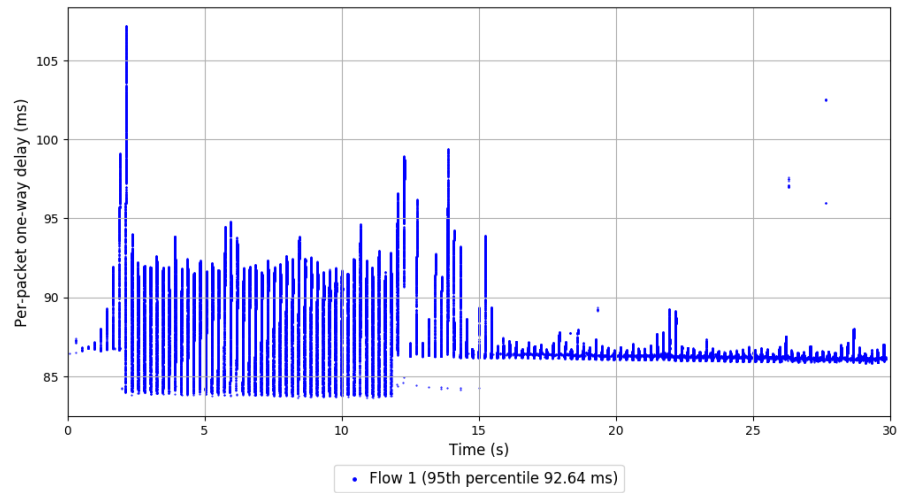
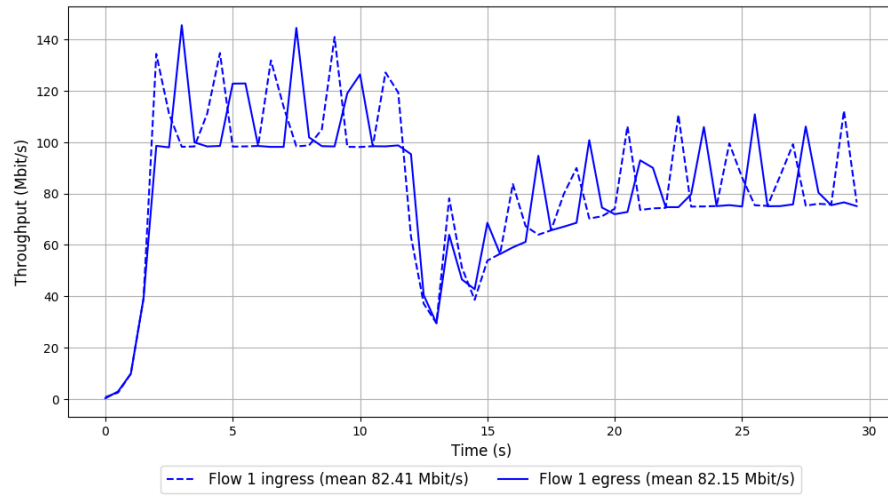
-- Flow 1:

Average throughput: 82.15 Mbit/s

95th percentile per-packet one-way delay: 92.643 ms

Loss rate: 1.06%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-15 23:04:50

End at: 2018-01-15 23:05:20

Below is generated by plot.py at 2018-01-16 02:51:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.99 Mbit/s

95th percentile per-packet one-way delay: 104.774 ms

Loss rate: 1.05%

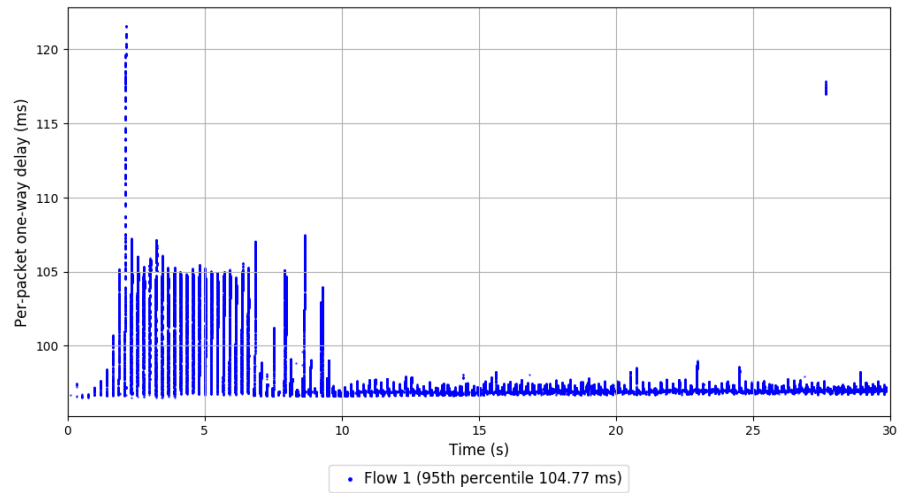
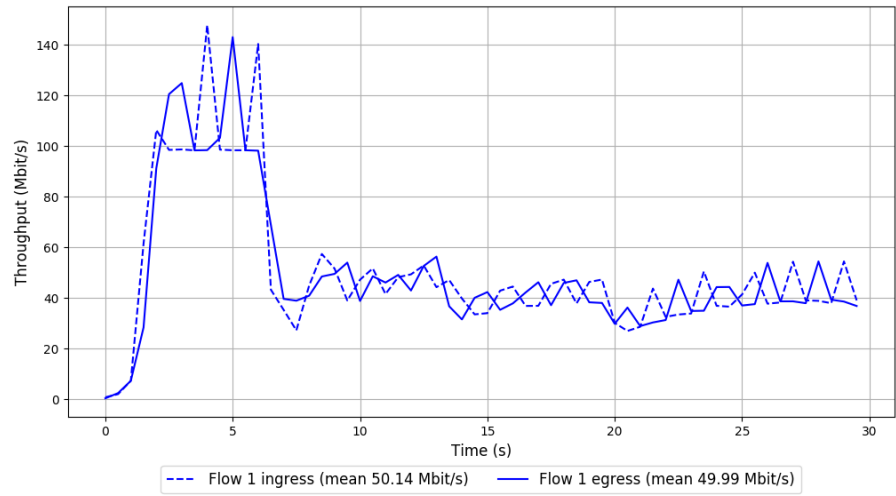
-- Flow 1:

Average throughput: 49.99 Mbit/s

95th percentile per-packet one-way delay: 104.774 ms

Loss rate: 1.05%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-15 23:17:26

End at: 2018-01-15 23:17:56

Below is generated by plot.py at 2018-01-16 02:51:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.29 Mbit/s

95th percentile per-packet one-way delay: 110.788 ms

Loss rate: 0.75%

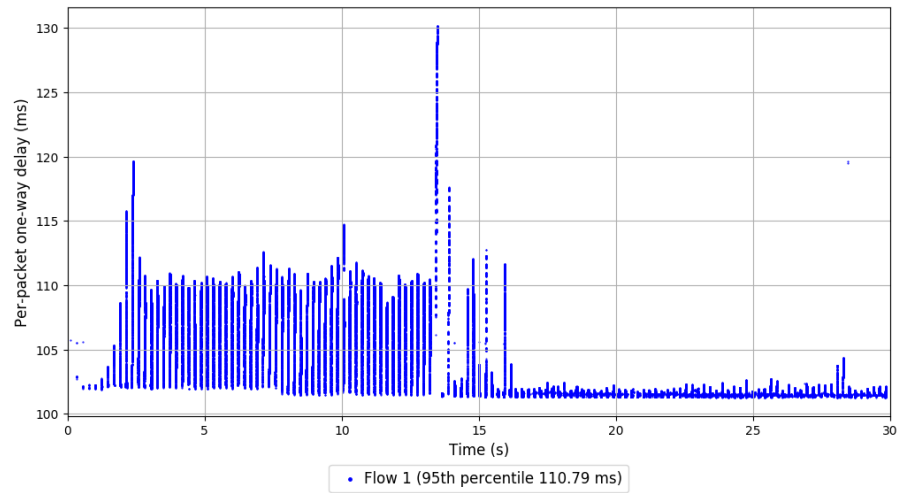
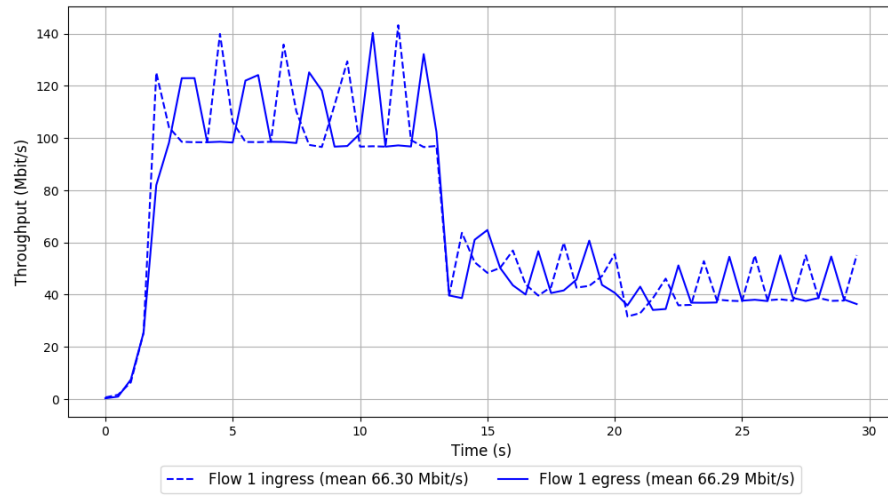
-- Flow 1:

Average throughput: 66.29 Mbit/s

95th percentile per-packet one-way delay: 110.788 ms

Loss rate: 0.75%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-15 23:30:00

End at: 2018-01-15 23:30:30

Below is generated by plot.py at 2018-01-16 02:51:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.63 Mbit/s

95th percentile per-packet one-way delay: 113.190 ms

Loss rate: 0.88%

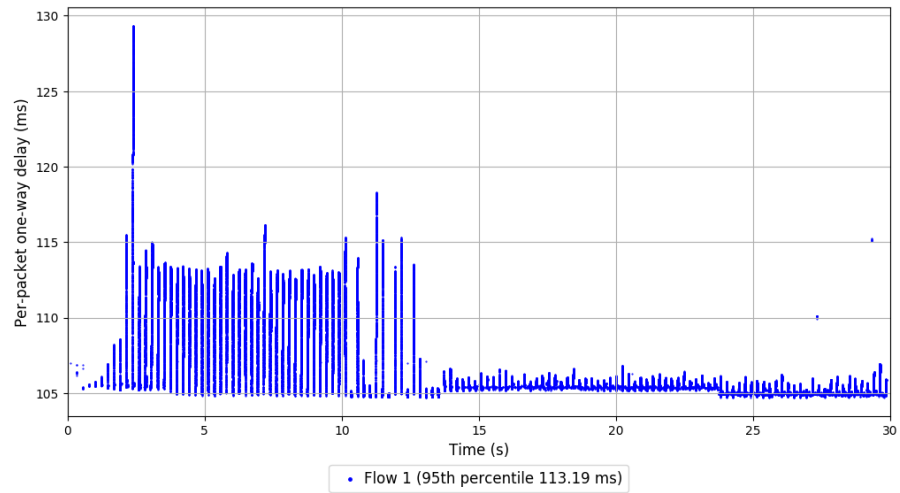
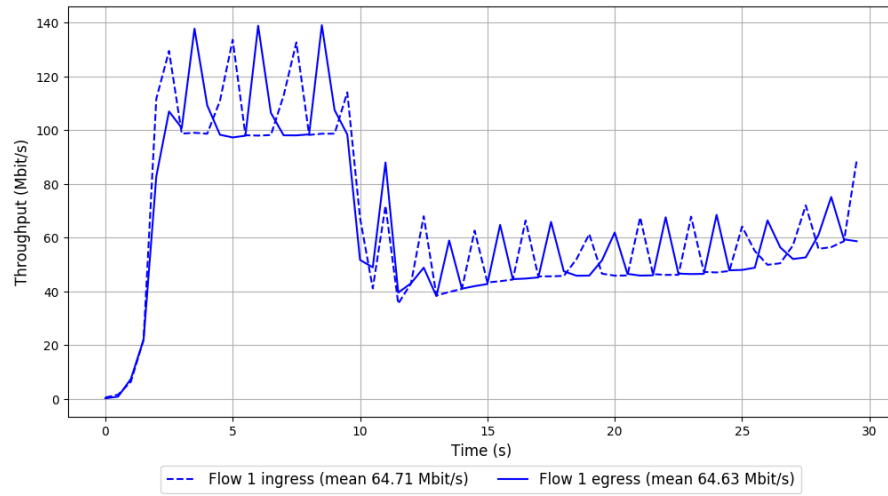
-- Flow 1:

Average throughput: 64.63 Mbit/s

95th percentile per-packet one-way delay: 113.190 ms

Loss rate: 0.88%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-15 23:42:31

End at: 2018-01-15 23:43:01

Below is generated by plot.py at 2018-01-16 02:51:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.09 Mbit/s

95th percentile per-packet one-way delay: 110.838 ms

Loss rate: 0.72%

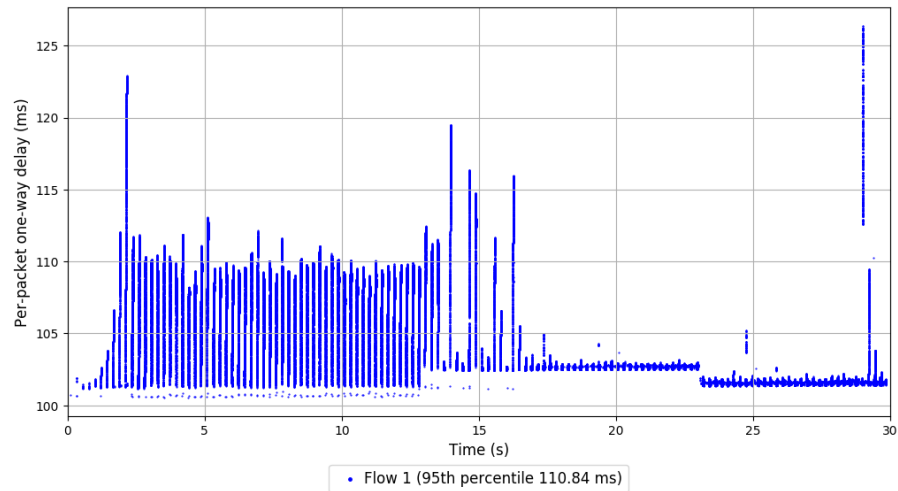
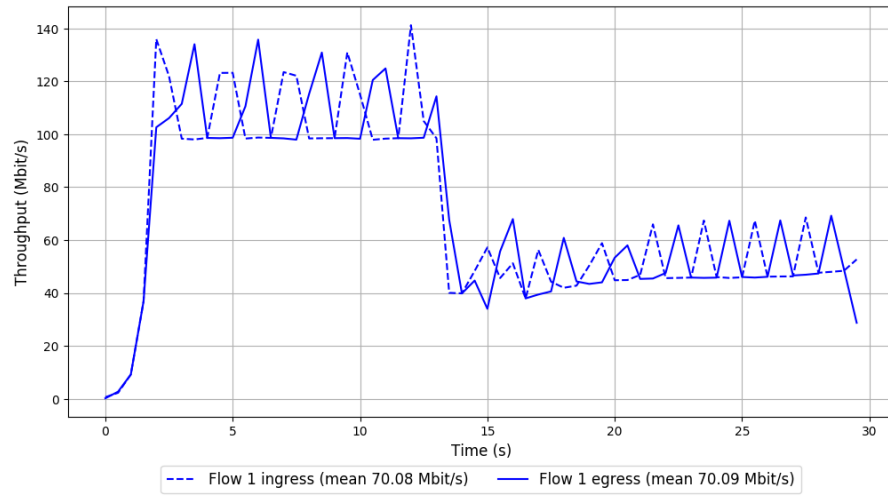
-- Flow 1:

Average throughput: 70.09 Mbit/s

95th percentile per-packet one-way delay: 110.838 ms

Loss rate: 0.72%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-15 23:54:44

End at: 2018-01-15 23:55:14

Below is generated by plot.py at 2018-01-16 02:52:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.94 Mbit/s

95th percentile per-packet one-way delay: 112.987 ms

Loss rate: 0.75%

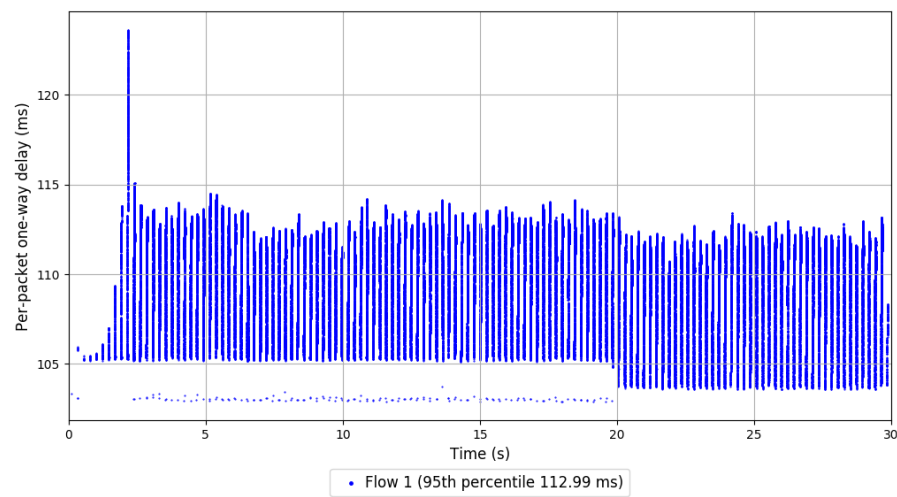
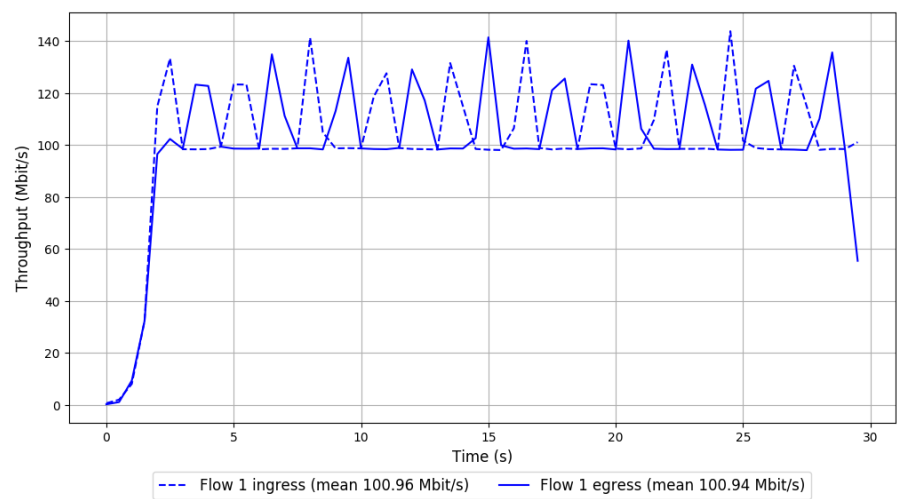
-- Flow 1:

Average throughput: 100.94 Mbit/s

95th percentile per-packet one-way delay: 112.987 ms

Loss rate: 0.75%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-16 00:07:15

End at: 2018-01-16 00:07:45

Below is generated by plot.py at 2018-01-16 02:52:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.68 Mbit/s

95th percentile per-packet one-way delay: 115.821 ms

Loss rate: 1.24%

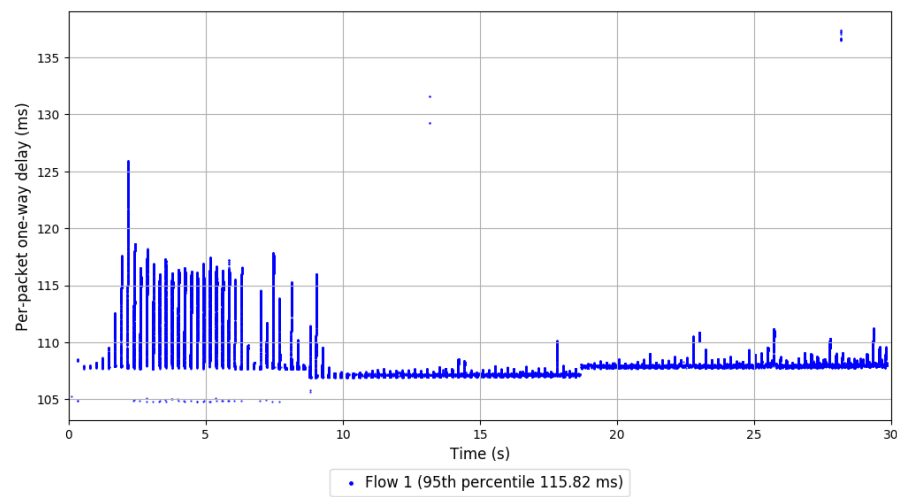
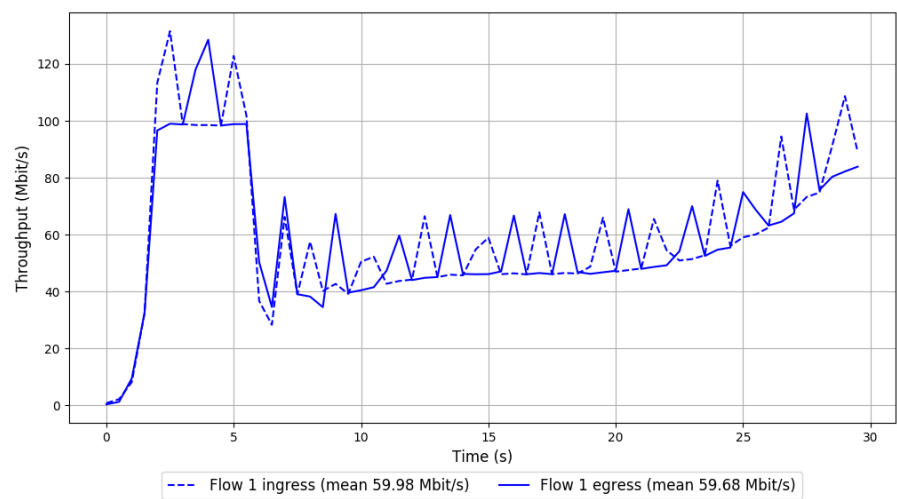
-- Flow 1:

Average throughput: 59.68 Mbit/s

95th percentile per-packet one-way delay: 115.821 ms

Loss rate: 1.24%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-16 00:19:30

End at: 2018-01-16 00:20:00

Below is generated by plot.py at 2018-01-16 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.58 Mbit/s

95th percentile per-packet one-way delay: 115.482 ms

Loss rate: 0.40%

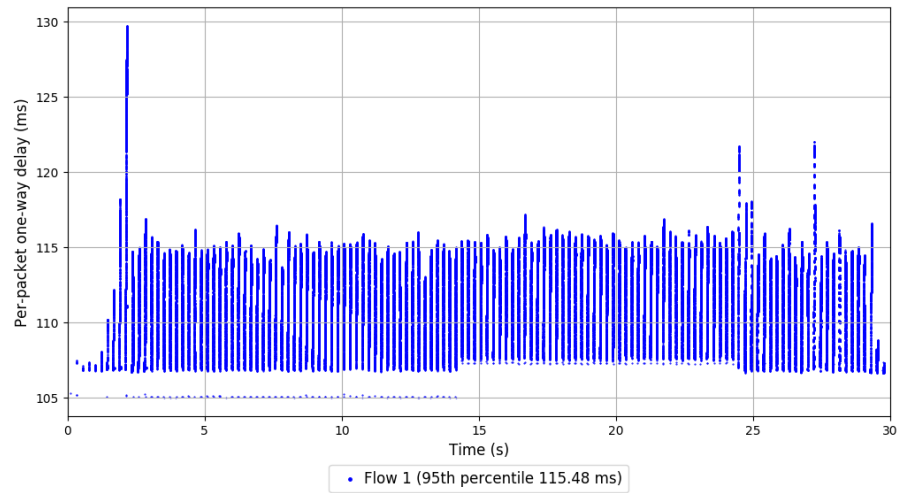
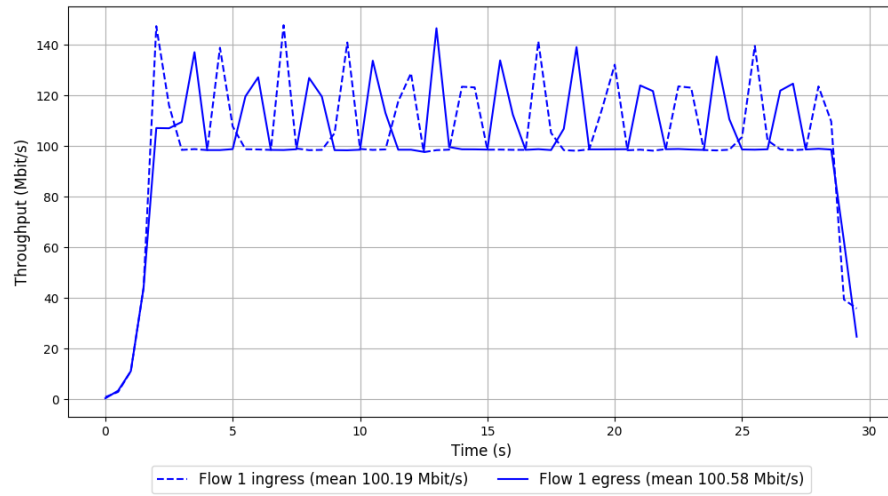
-- Flow 1:

Average throughput: 100.58 Mbit/s

95th percentile per-packet one-way delay: 115.482 ms

Loss rate: 0.40%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-16 00:31:53

End at: 2018-01-16 00:32:23

Below is generated by plot.py at 2018-01-16 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.95 Mbit/s

95th percentile per-packet one-way delay: 116.431 ms

Loss rate: 0.98%

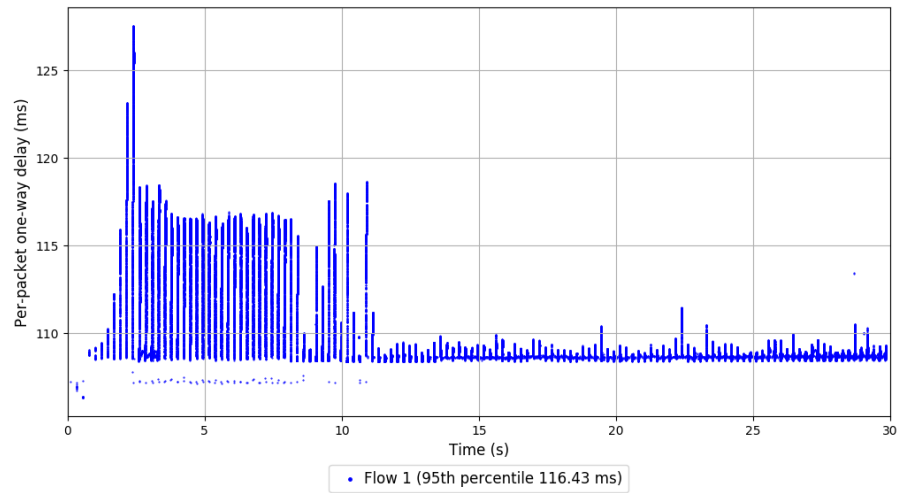
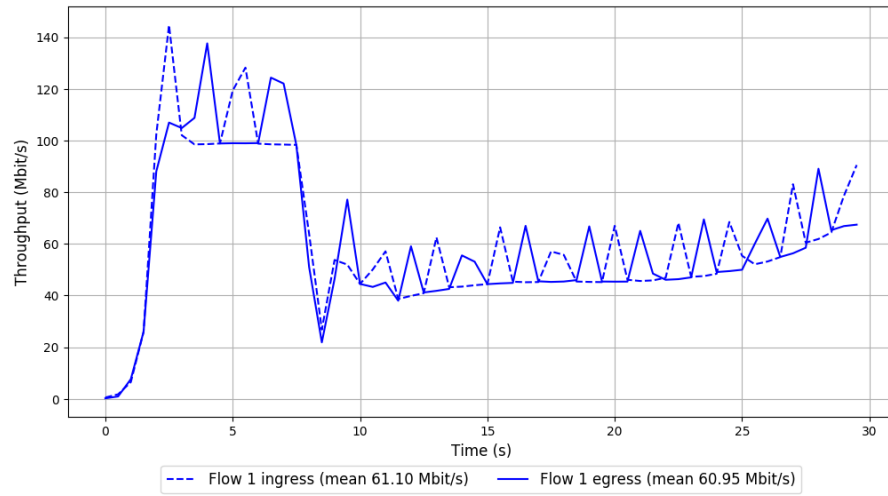
-- Flow 1:

Average throughput: 60.95 Mbit/s

95th percentile per-packet one-way delay: 116.431 ms

Loss rate: 0.98%

Run 10: Report of TCP Cubic — Data Link

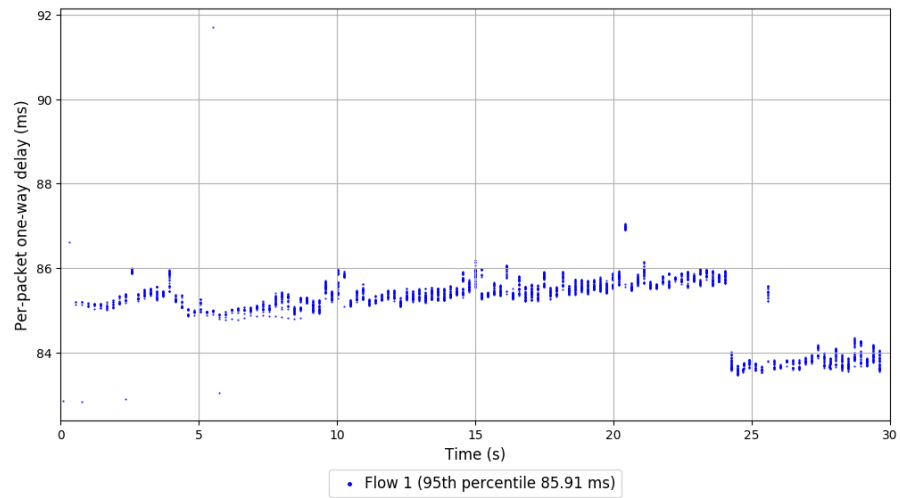
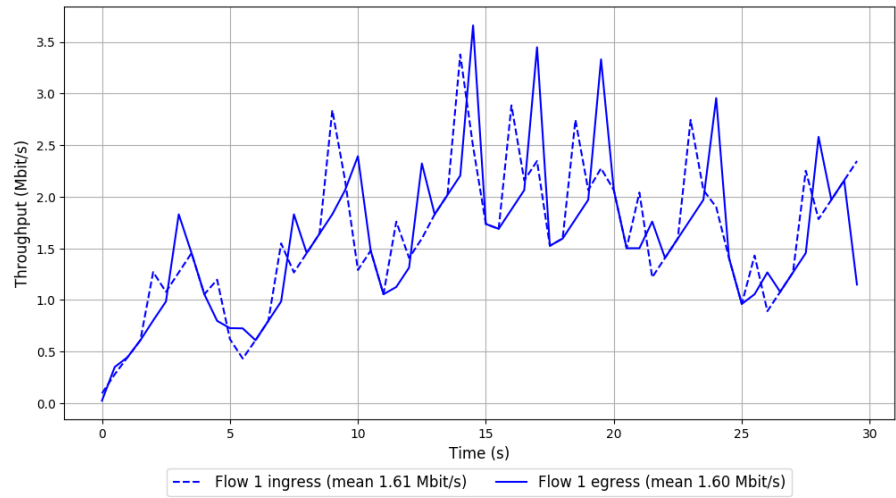


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Run 1: Statistics of LEDBAT

Start at: 2018-01-15 22:46:20
End at: 2018-01-15 22:46:50

# Below is generated by plot.py at 2018-01-16 02:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 85.909 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 85.909 ms
Loss rate: 1.25%
```


Run 1: Report of LEDBAT — Data Link

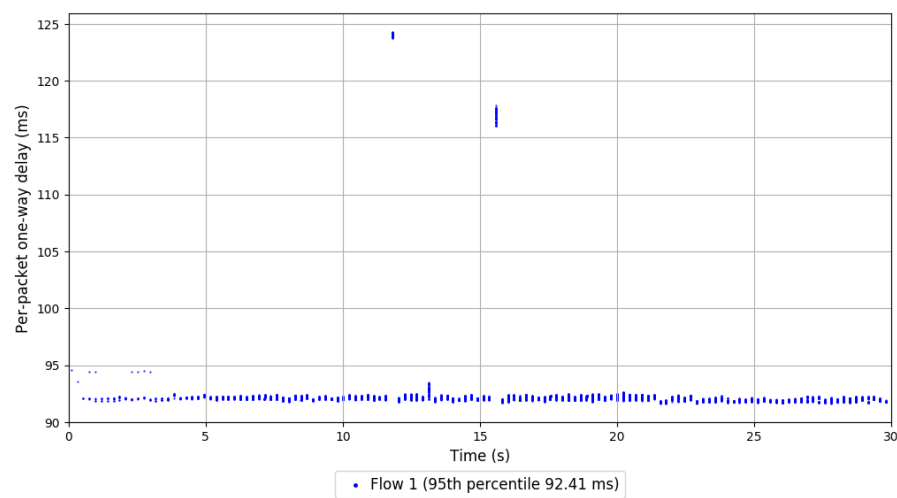
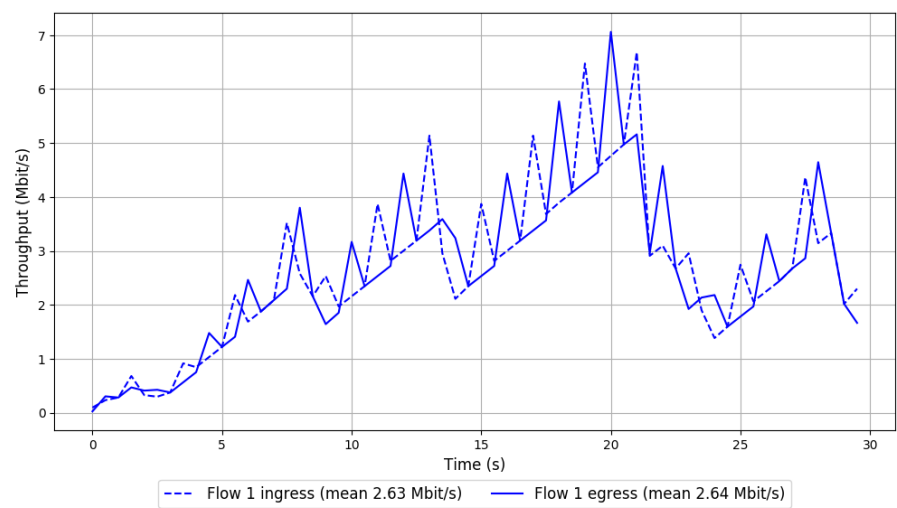


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-15 22:58:23
End at: 2018-01-15 22:58:53

# Below is generated by plot.py at 2018-01-16 02:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 92.405 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 92.405 ms
Loss rate: 0.40%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-15 23:10:55

End at: 2018-01-15 23:11:25

Below is generated by plot.py at 2018-01-16 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 100.510 ms

Loss rate: 1.05%

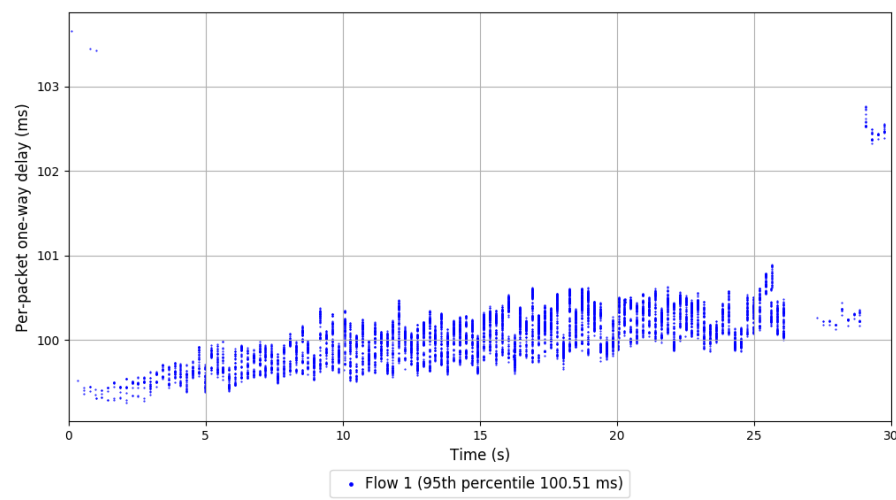
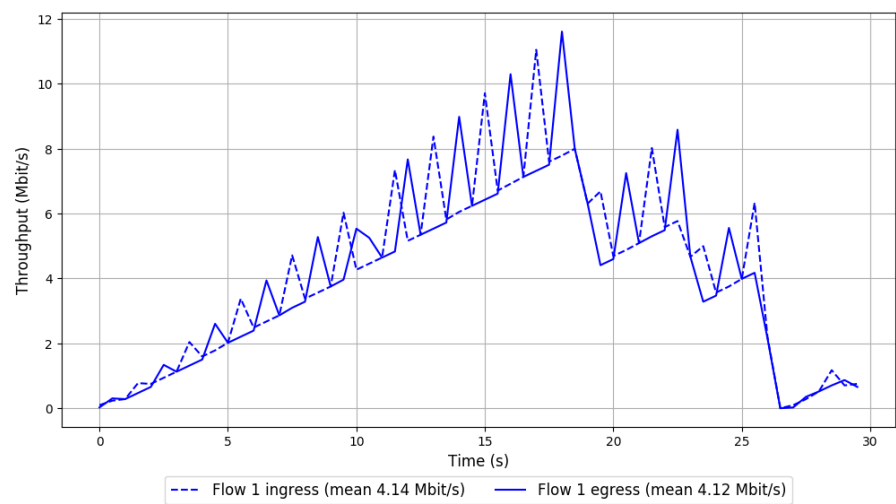
-- Flow 1:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 100.510 ms

Loss rate: 1.05%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-15 23:23:28

End at: 2018-01-15 23:23:58

Below is generated by plot.py at 2018-01-16 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 105.067 ms

Loss rate: 0.65%

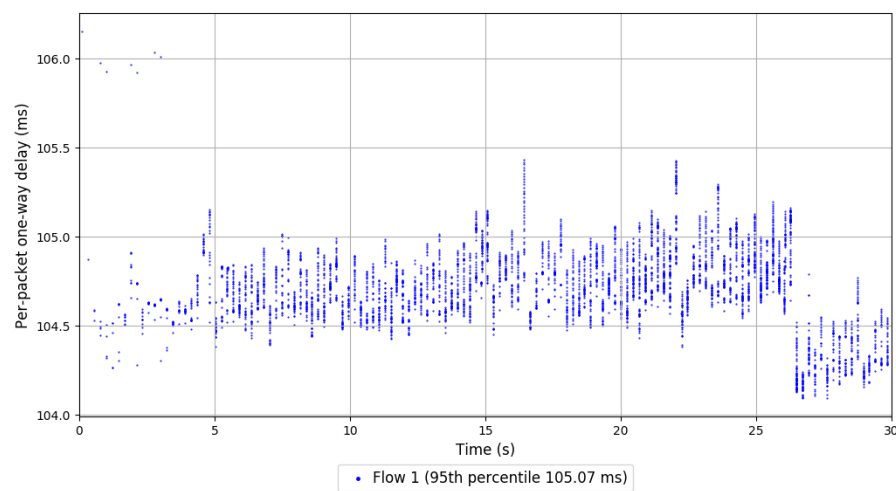
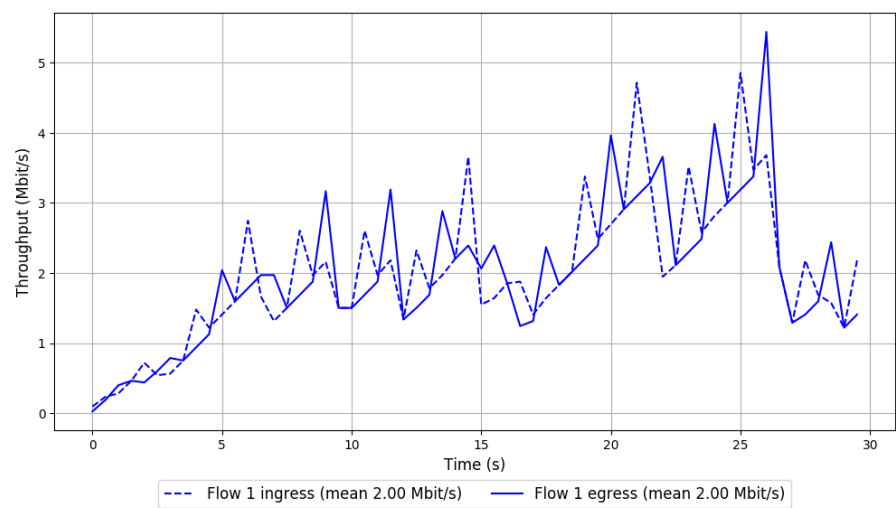
-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 105.067 ms

Loss rate: 0.65%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-15 23:36:03

End at: 2018-01-15 23:36:33

Below is generated by plot.py at 2018-01-16 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 104.651 ms

Loss rate: 1.16%

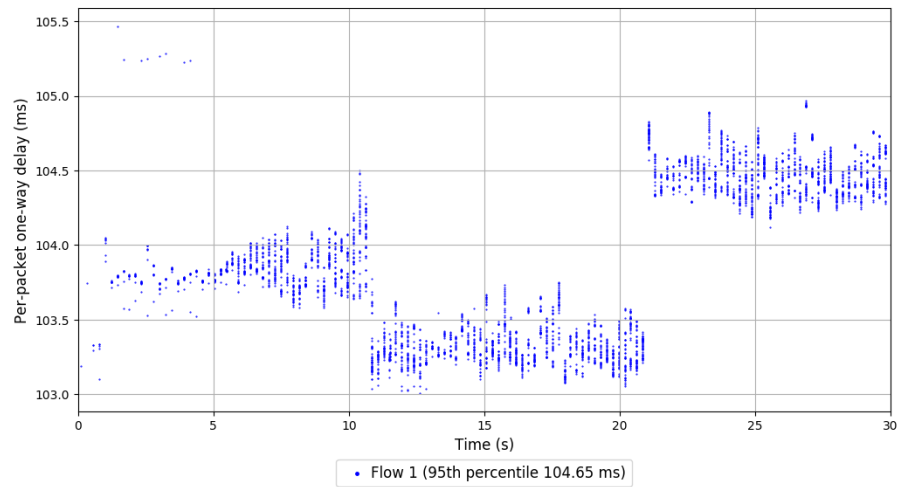
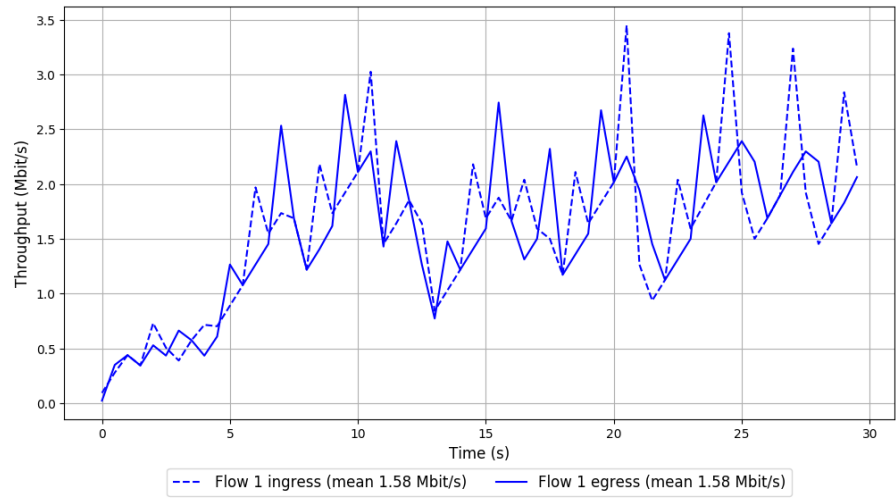
-- Flow 1:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 104.651 ms

Loss rate: 1.16%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-15 23:48:34

End at: 2018-01-15 23:49:04

Below is generated by plot.py at 2018-01-16 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 105.480 ms

Loss rate: 0.60%

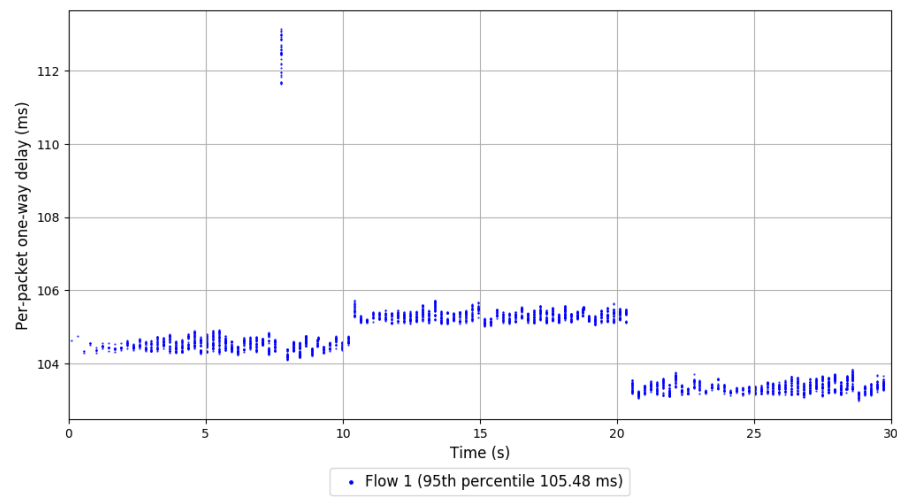
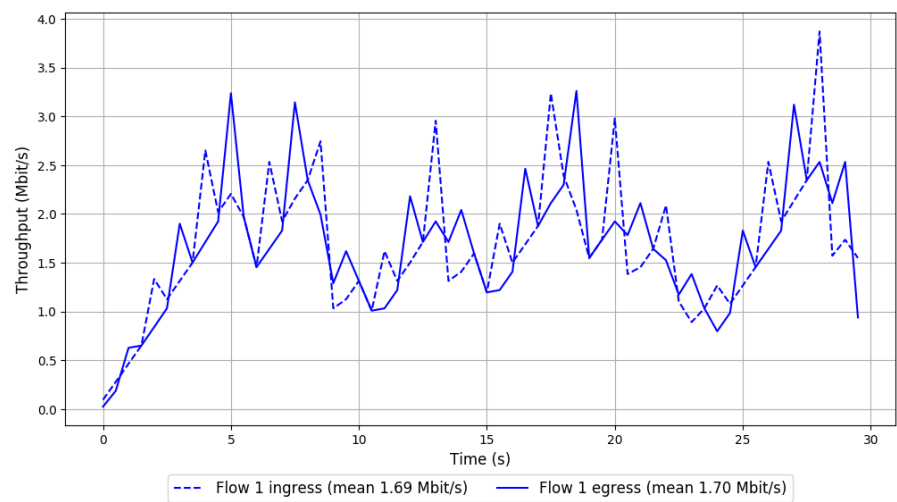
-- Flow 1:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 105.480 ms

Loss rate: 0.60%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-16 00:00:45

End at: 2018-01-16 00:01:15

Below is generated by plot.py at 2018-01-16 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 105.911 ms

Loss rate: 0.71%

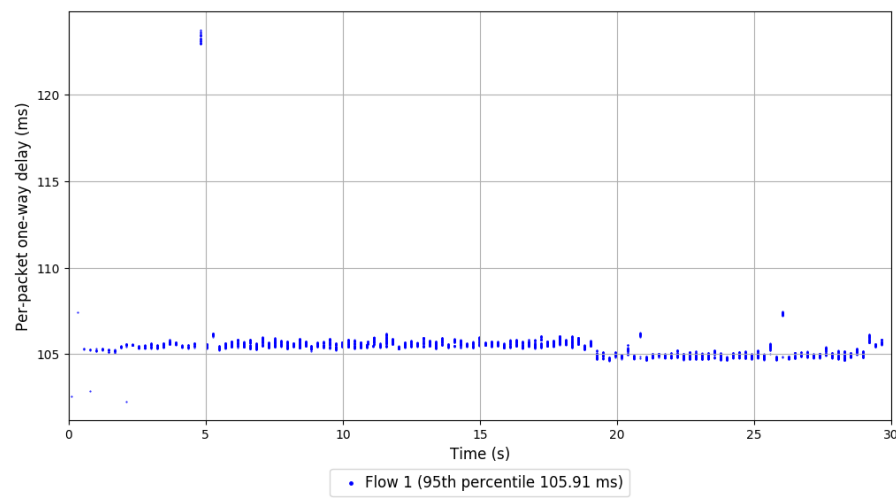
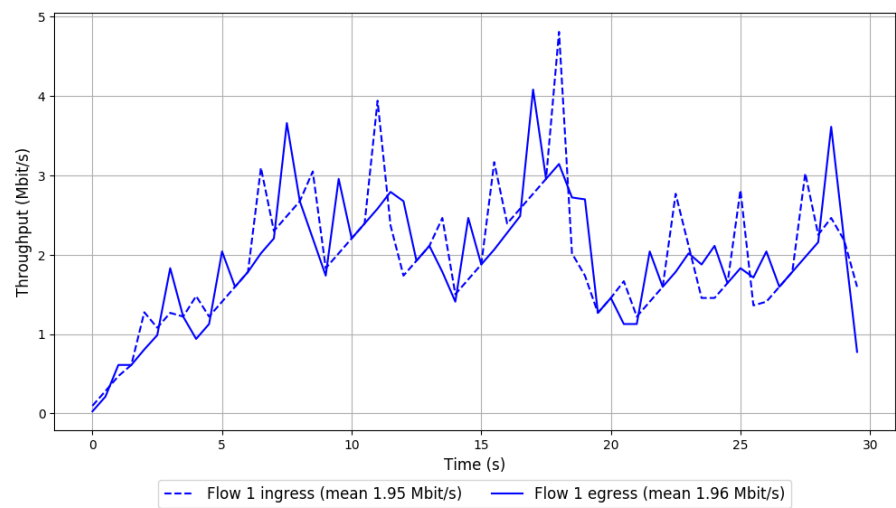
-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 105.911 ms

Loss rate: 0.71%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-16 00:13:16

End at: 2018-01-16 00:13:46

Below is generated by plot.py at 2018-01-16 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 108.781 ms

Loss rate: 0.61%

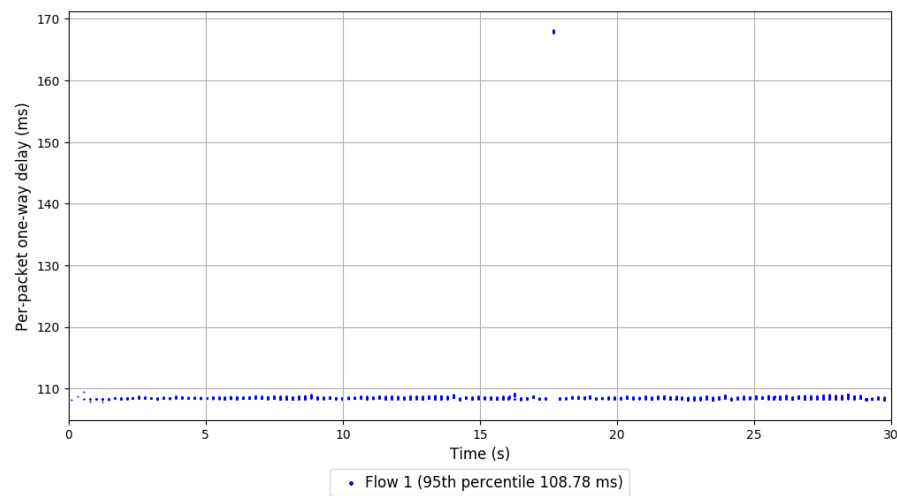
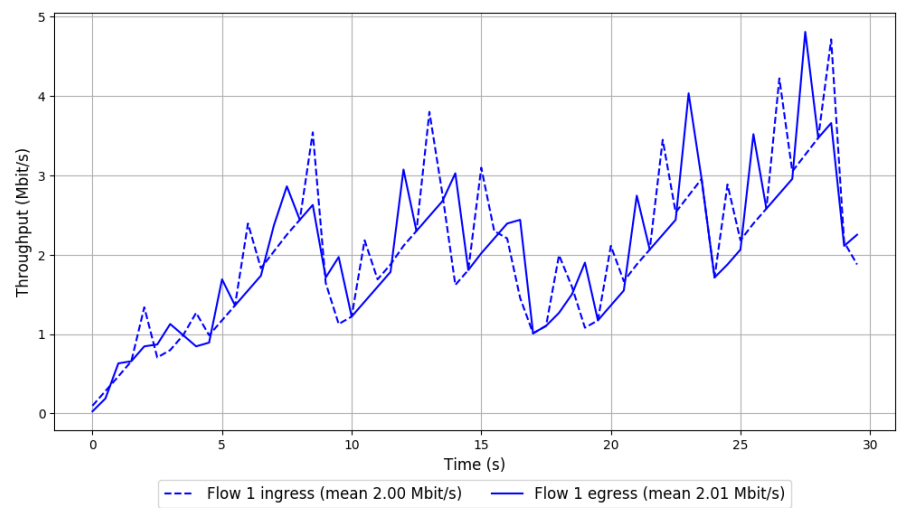
-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 108.781 ms

Loss rate: 0.61%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-16 00:25:32

End at: 2018-01-16 00:26:02

Below is generated by plot.py at 2018-01-16 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 108.060 ms

Loss rate: 0.58%

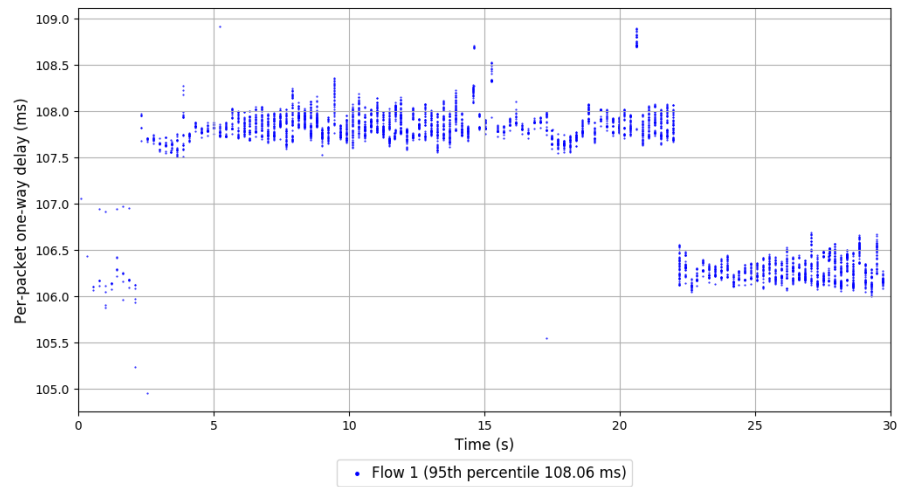
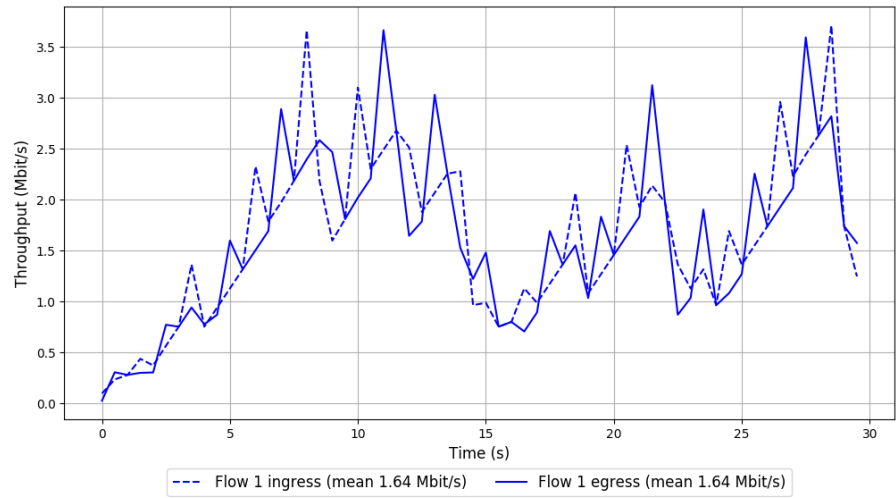
-- Flow 1:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 108.060 ms

Loss rate: 0.58%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-16 00:37:56

End at: 2018-01-16 00:38:26

Below is generated by plot.py at 2018-01-16 02:52:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 109.321 ms

Loss rate: 0.81%

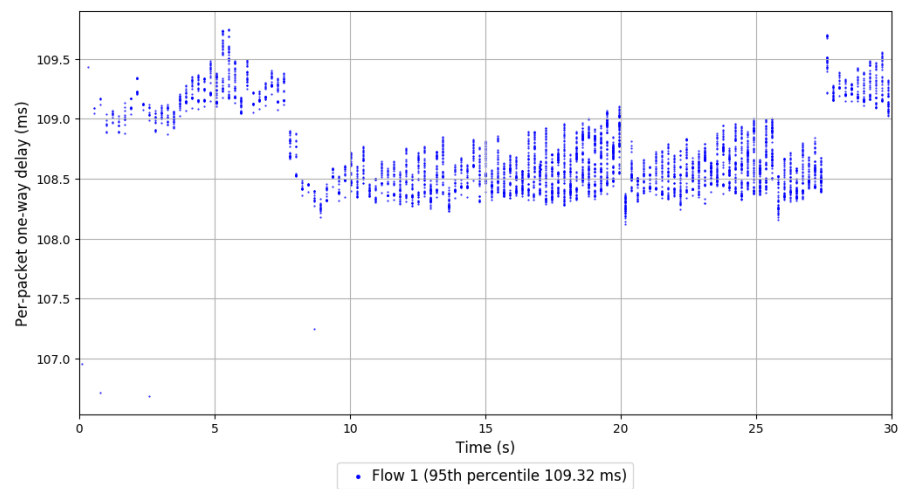
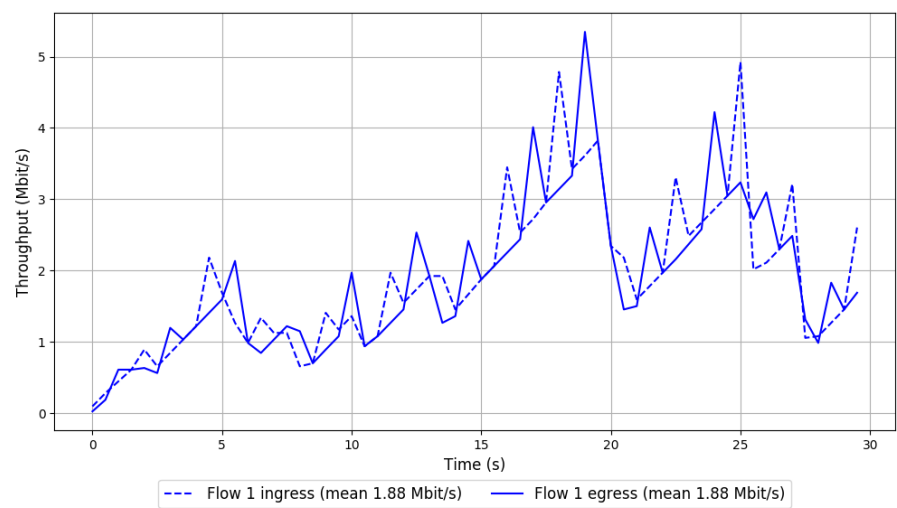
-- Flow 1:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 109.321 ms

Loss rate: 0.81%

Run 10: Report of LEDBAT — Data Link

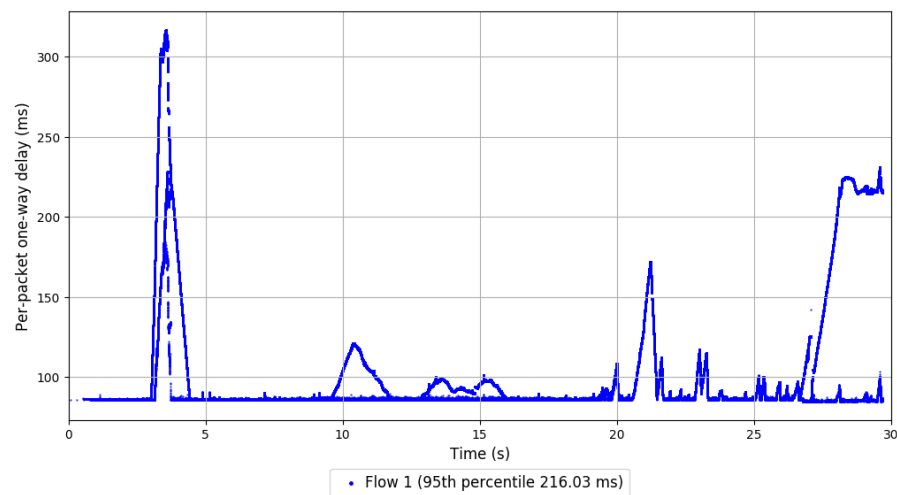
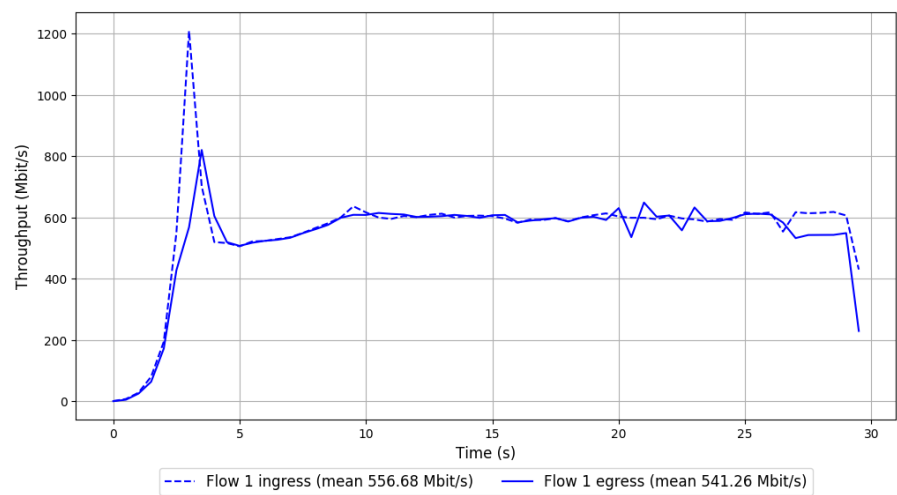


```
Run 1: Statistics of PCC

Start at: 2018-01-15 22:36:47
End at: 2018-01-15 22:37:17

# Below is generated by plot.py at 2018-01-16 03:00:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 541.26 Mbit/s
95th percentile per-packet one-way delay: 216.027 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 541.26 Mbit/s
95th percentile per-packet one-way delay: 216.027 ms
Loss rate: 3.51%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-15 22:49:14

End at: 2018-01-15 22:49:44

Below is generated by plot.py at 2018-01-16 03:00:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 364.86 Mbit/s

95th percentile per-packet one-way delay: 249.423 ms

Loss rate: 3.18%

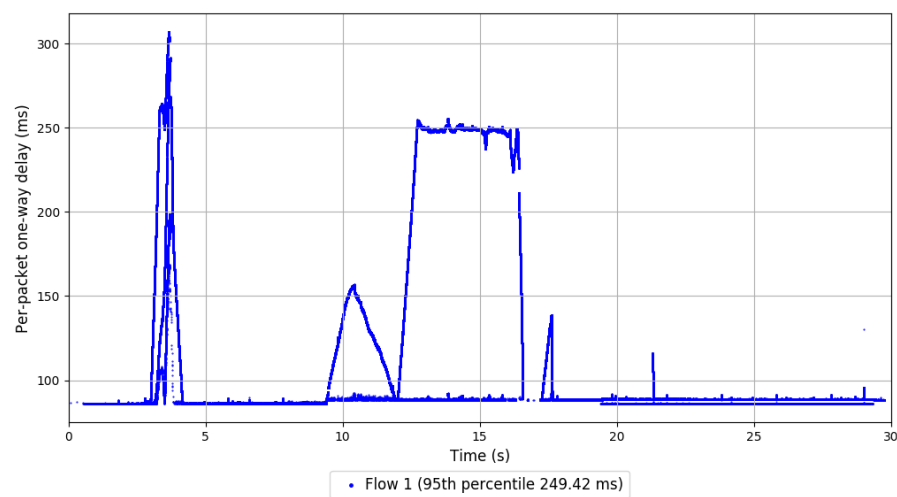
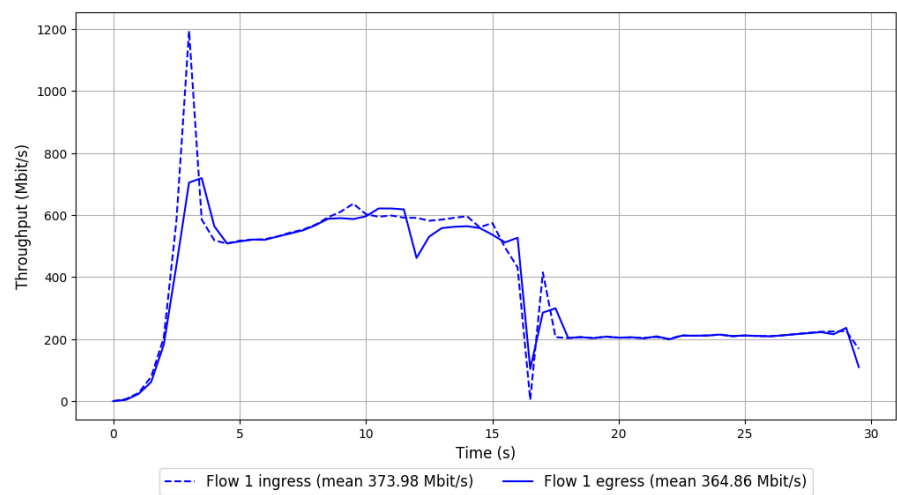
-- Flow 1:

Average throughput: 364.86 Mbit/s

95th percentile per-packet one-way delay: 249.423 ms

Loss rate: 3.18%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-15 23:01:23

End at: 2018-01-15 23:01:53

Below is generated by plot.py at 2018-01-16 03:00:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 522.78 Mbit/s

95th percentile per-packet one-way delay: 224.576 ms

Loss rate: 2.51%

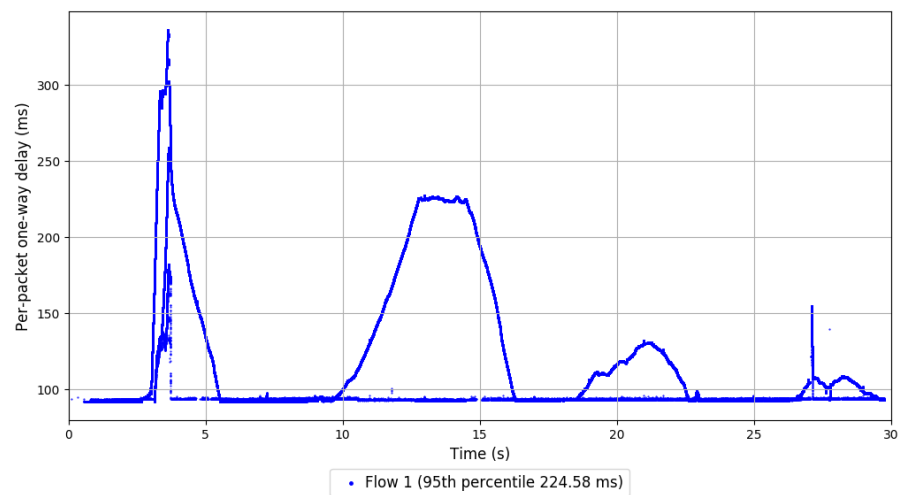
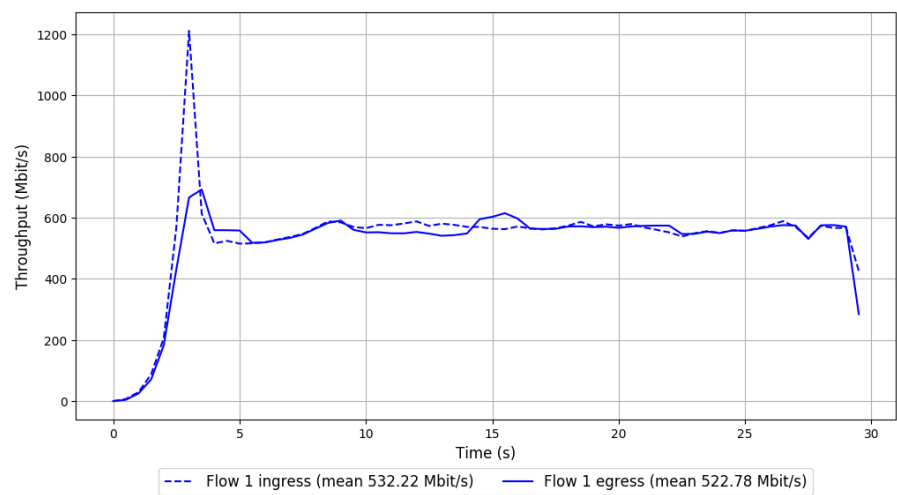
-- Flow 1:

Average throughput: 522.78 Mbit/s

95th percentile per-packet one-way delay: 224.576 ms

Loss rate: 2.51%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-15 23:14:00

End at: 2018-01-15 23:14:30

Below is generated by plot.py at 2018-01-16 03:00:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 508.14 Mbit/s

95th percentile per-packet one-way delay: 200.175 ms

Loss rate: 2.54%

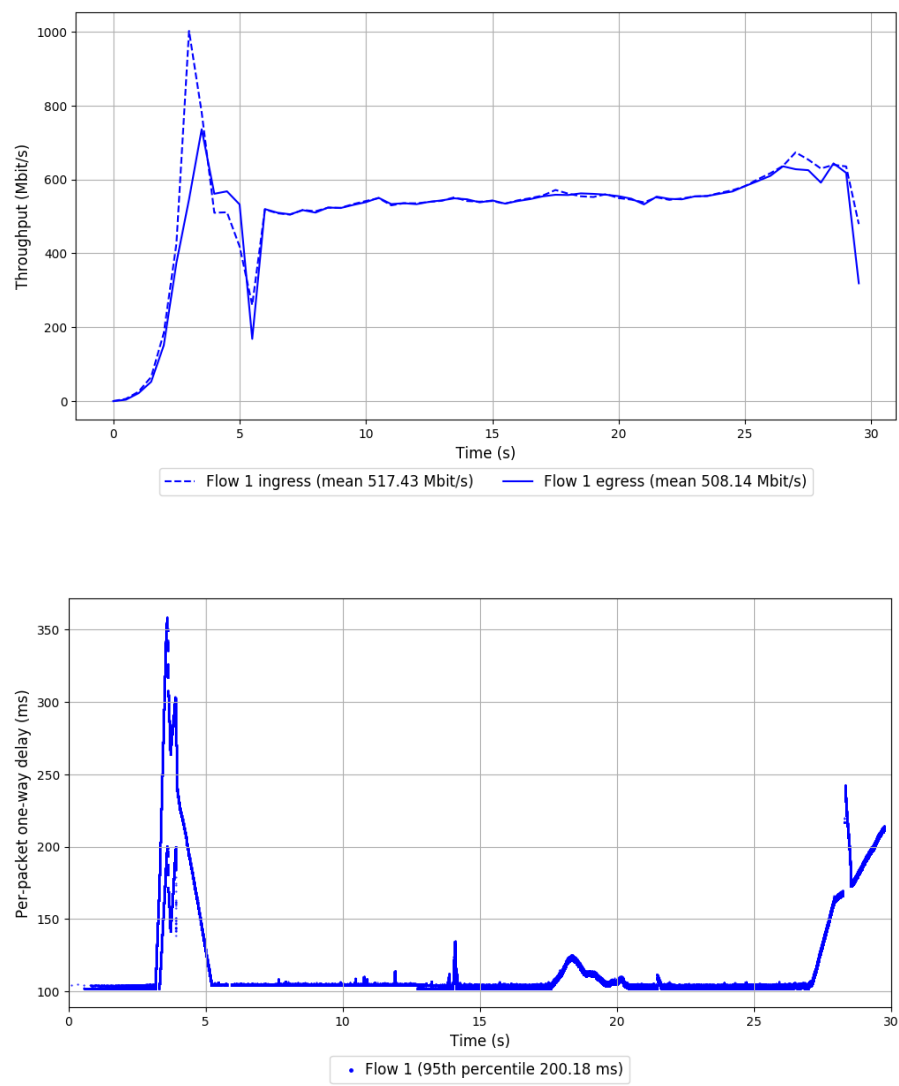
-- Flow 1:

Average throughput: 508.14 Mbit/s

95th percentile per-packet one-way delay: 200.175 ms

Loss rate: 2.54%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-15 23:26:28

End at: 2018-01-15 23:26:58

Below is generated by plot.py at 2018-01-16 03:00:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 567.06 Mbit/s

95th percentile per-packet one-way delay: 157.394 ms

Loss rate: 1.37%

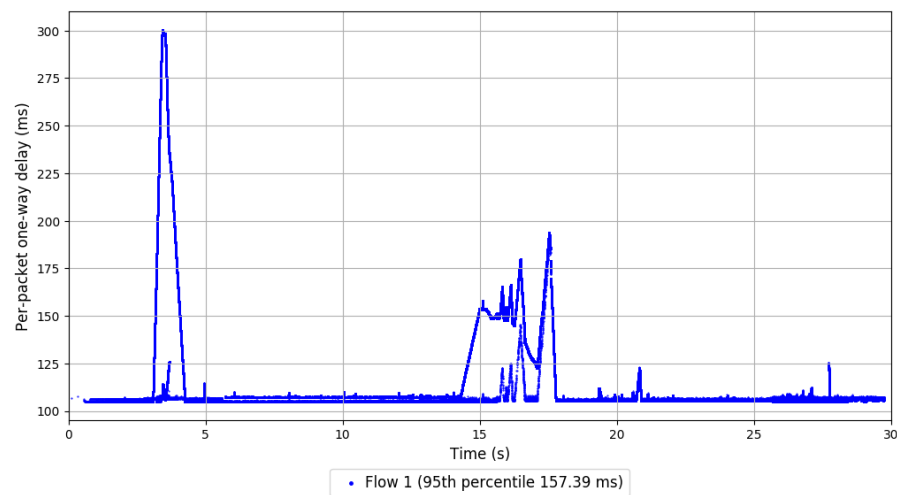
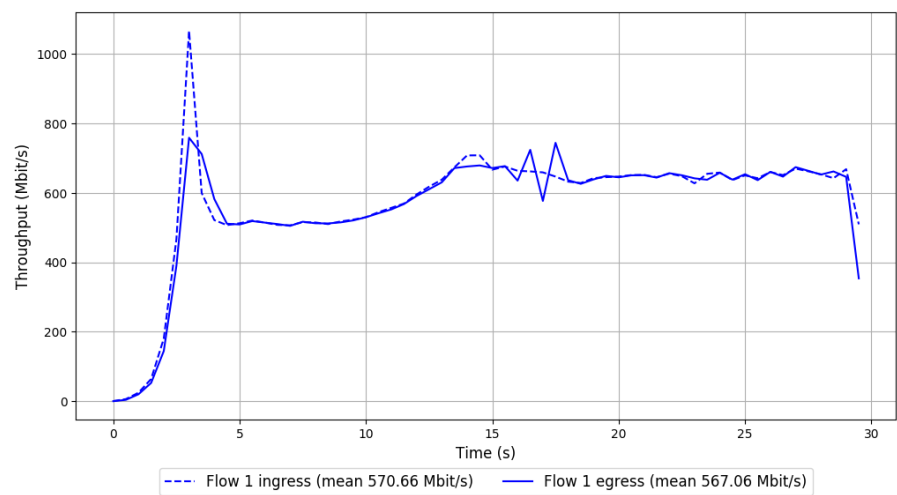
-- Flow 1:

Average throughput: 567.06 Mbit/s

95th percentile per-packet one-way delay: 157.394 ms

Loss rate: 1.37%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-15 23:39:07

End at: 2018-01-15 23:39:37

Below is generated by plot.py at 2018-01-16 03:00:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 547.35 Mbit/s

95th percentile per-packet one-way delay: 224.451 ms

Loss rate: 2.87%

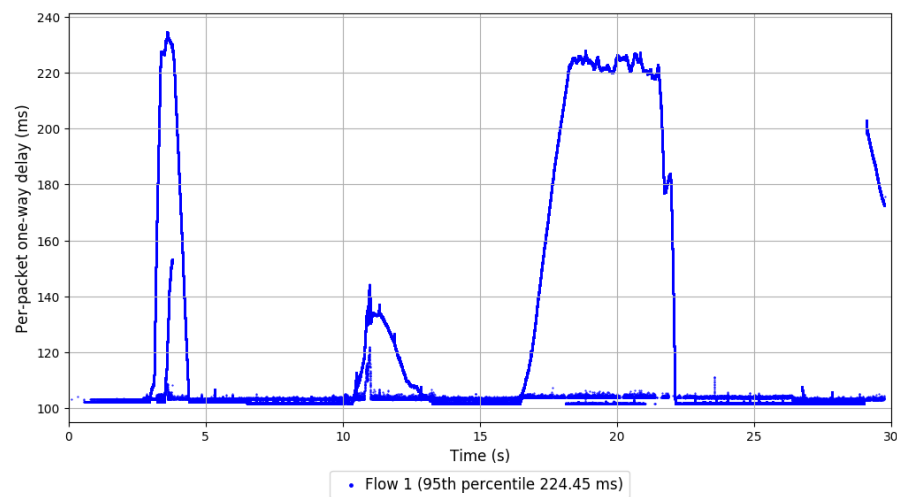
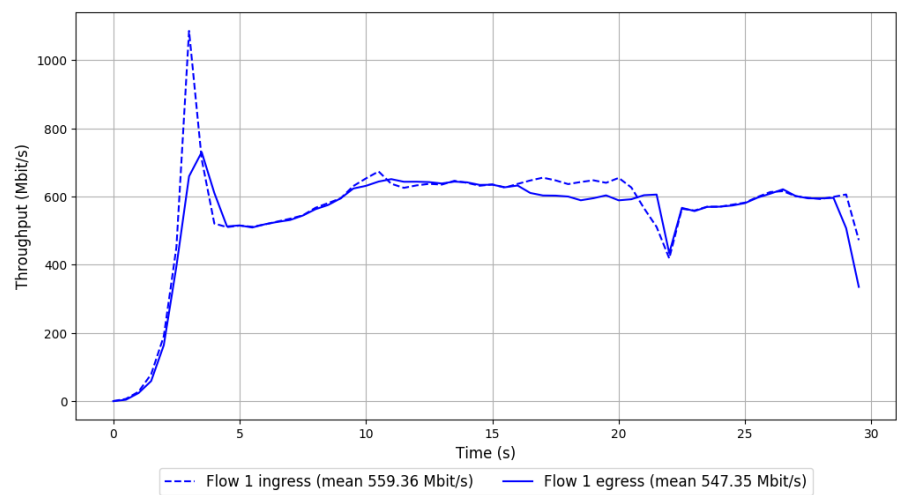
-- Flow 1:

Average throughput: 547.35 Mbit/s

95th percentile per-packet one-way delay: 224.451 ms

Loss rate: 2.87%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-15 23:51:37

End at: 2018-01-15 23:52:07

Below is generated by plot.py at 2018-01-16 03:00:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 544.70 Mbit/s

95th percentile per-packet one-way delay: 199.135 ms

Loss rate: 1.62%

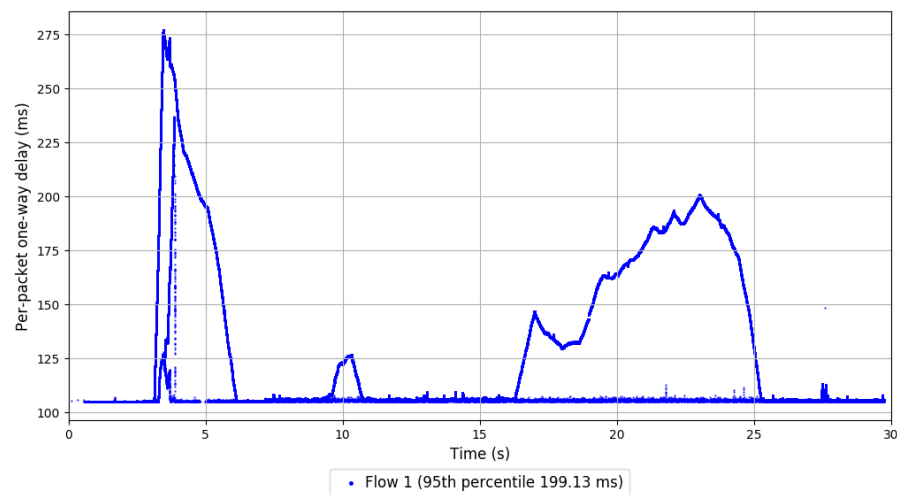
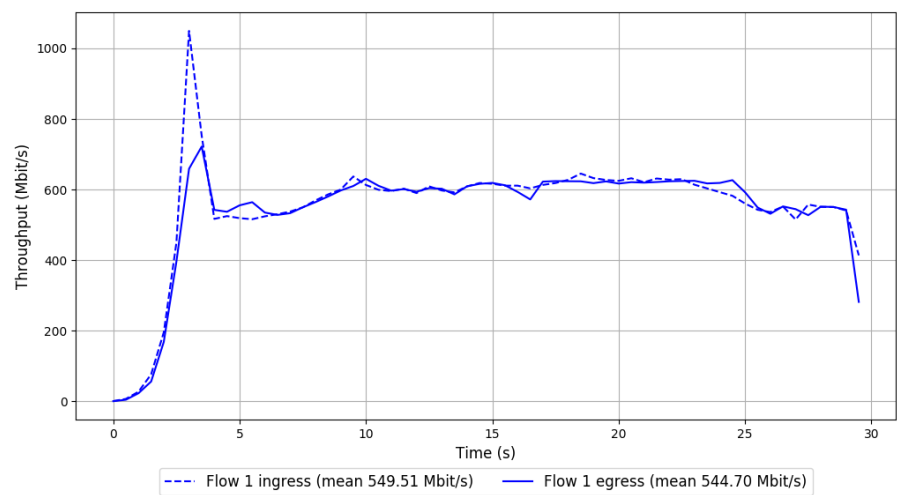
-- Flow 1:

Average throughput: 544.70 Mbit/s

95th percentile per-packet one-way delay: 199.135 ms

Loss rate: 1.62%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-16 00:03:45

End at: 2018-01-16 00:04:15

Below is generated by plot.py at 2018-01-16 03:00:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 530.21 Mbit/s

95th percentile per-packet one-way delay: 212.223 ms

Loss rate: 2.38%

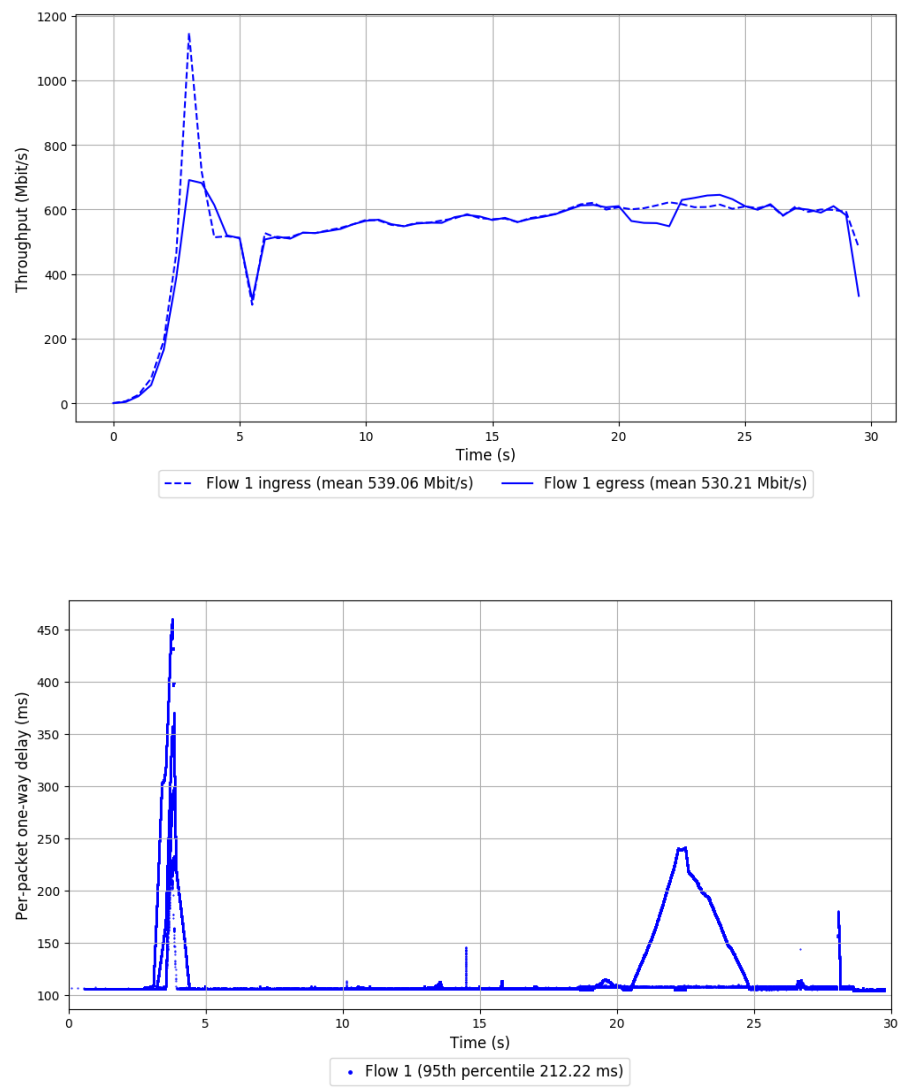
-- Flow 1:

Average throughput: 530.21 Mbit/s

95th percentile per-packet one-way delay: 212.223 ms

Loss rate: 2.38%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-16 00:16:16

End at: 2018-01-16 00:16:46

Below is generated by plot.py at 2018-01-16 03:06:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 509.30 Mbit/s

95th percentile per-packet one-way delay: 242.778 ms

Loss rate: 5.15%

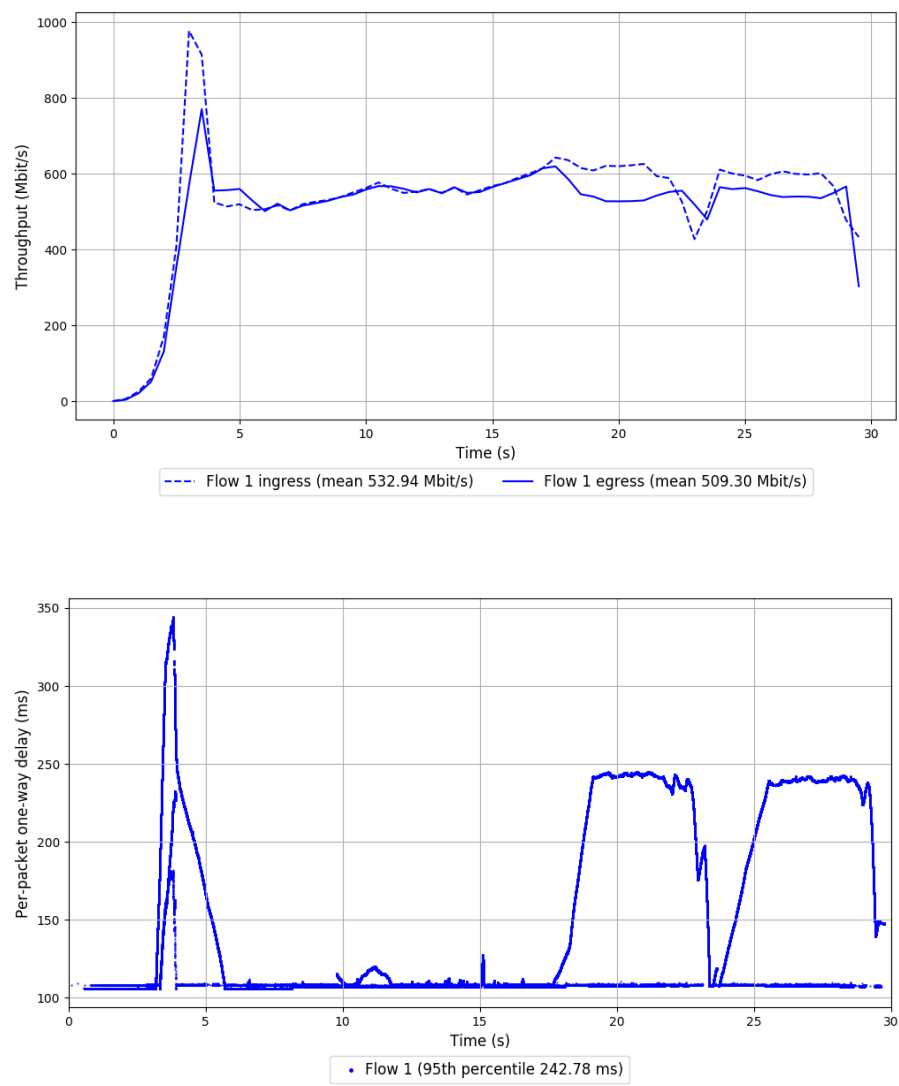
-- Flow 1:

Average throughput: 509.30 Mbit/s

95th percentile per-packet one-way delay: 242.778 ms

Loss rate: 5.15%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-16 00:28:33

End at: 2018-01-16 00:29:03

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 528.92 Mbit/s

95th percentile per-packet one-way delay: 240.157 ms

Loss rate: 3.22%

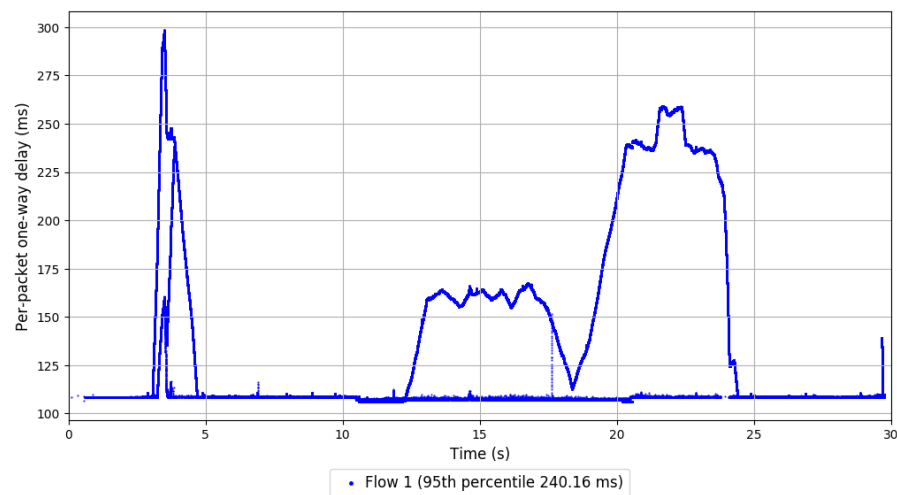
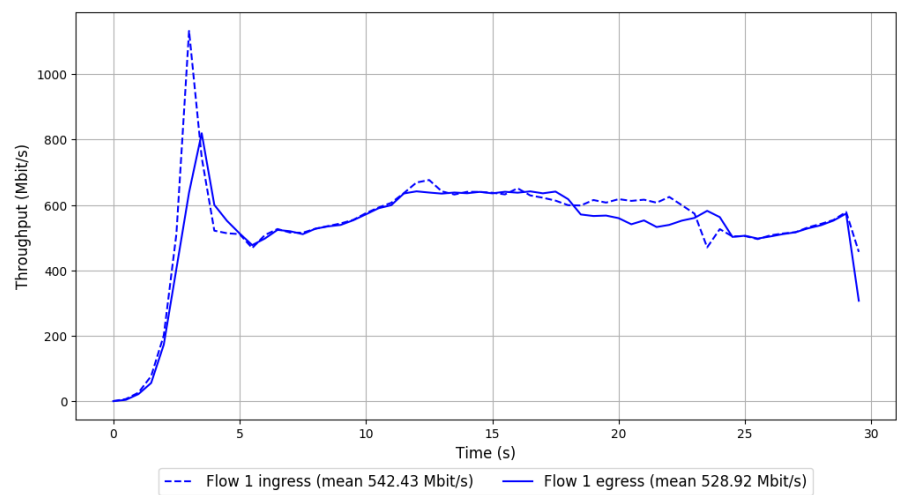
-- Flow 1:

Average throughput: 528.92 Mbit/s

95th percentile per-packet one-way delay: 240.157 ms

Loss rate: 3.22%

Run 10: Report of PCC — Data Link

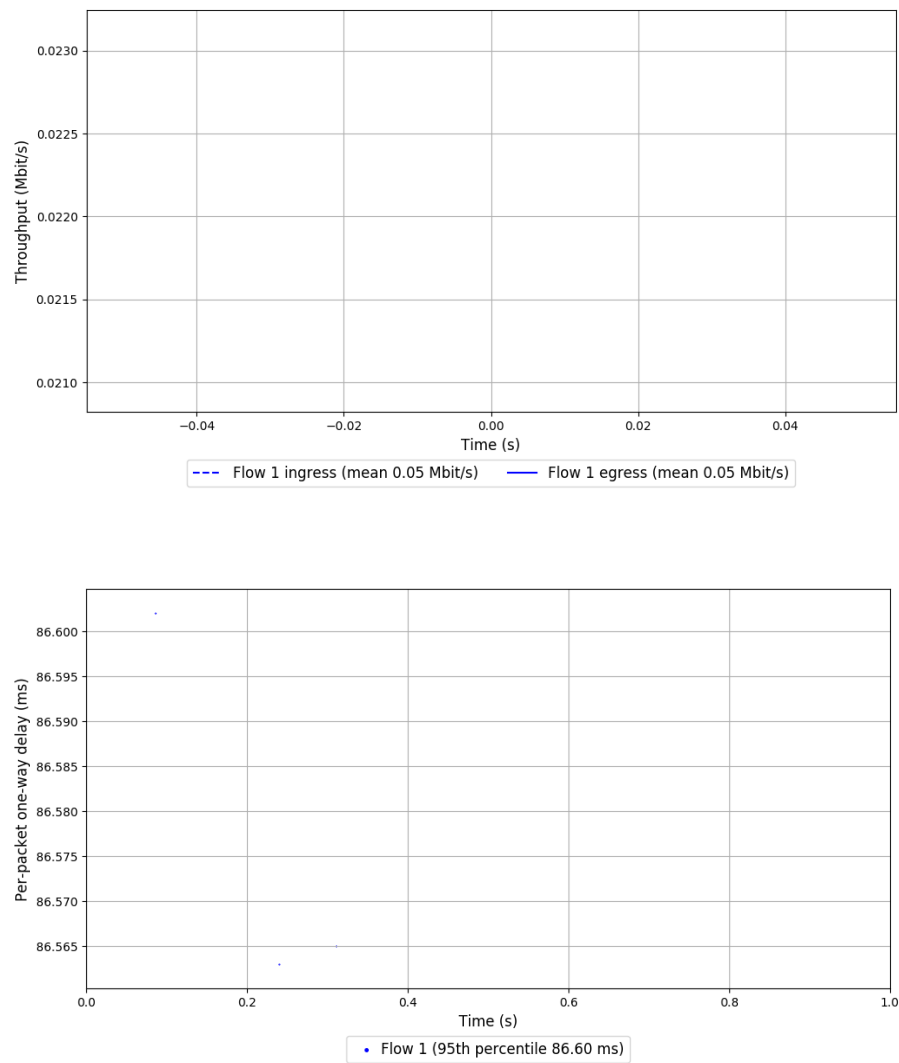


Run 1: Statistics of QUIC Cubic

Start at: 2018-01-15 22:47:00

End at: 2018-01-15 22:47:30

Run 1: Report of QUIC Cubic — Data Link

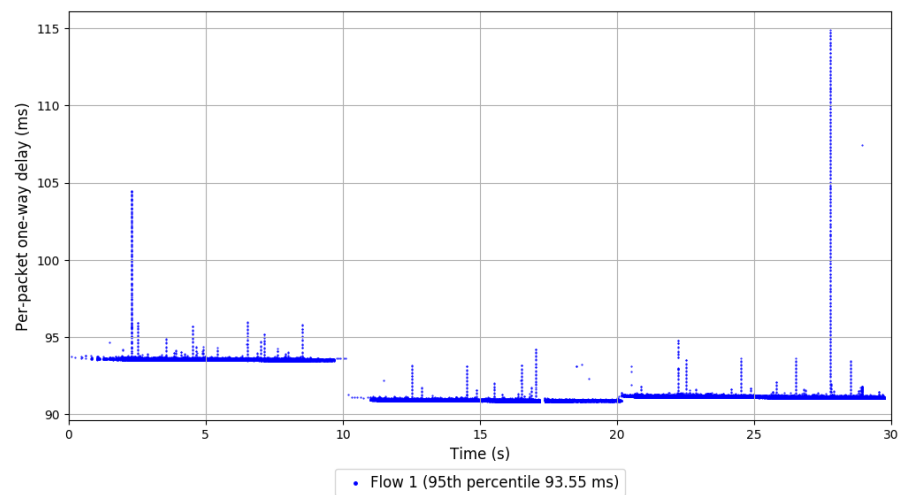
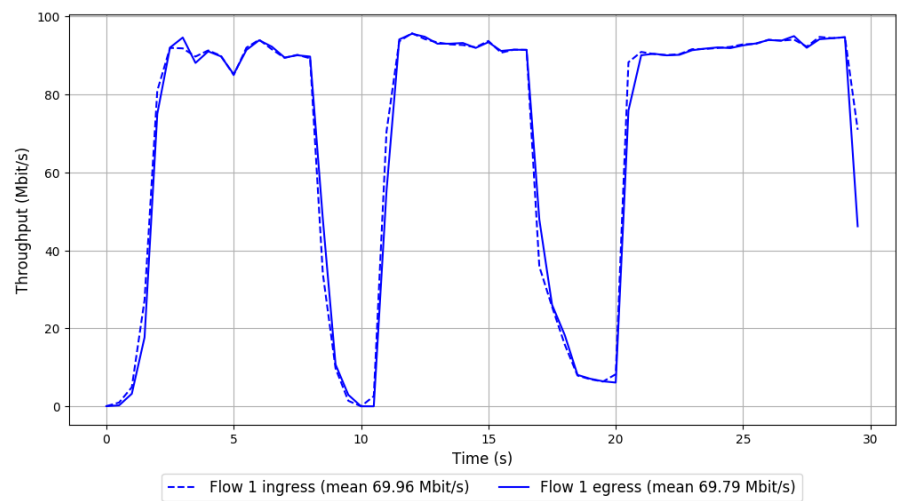


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-15 22:59:04
End at: 2018-01-15 22:59:34

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.79 Mbit/s
95th percentile per-packet one-way delay: 93.554 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 69.79 Mbit/s
95th percentile per-packet one-way delay: 93.554 ms
Loss rate: 1.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-15 23:11:36

End at: 2018-01-15 23:12:06

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.26 Mbit/s

95th percentile per-packet one-way delay: 102.928 ms

Loss rate: 0.87%

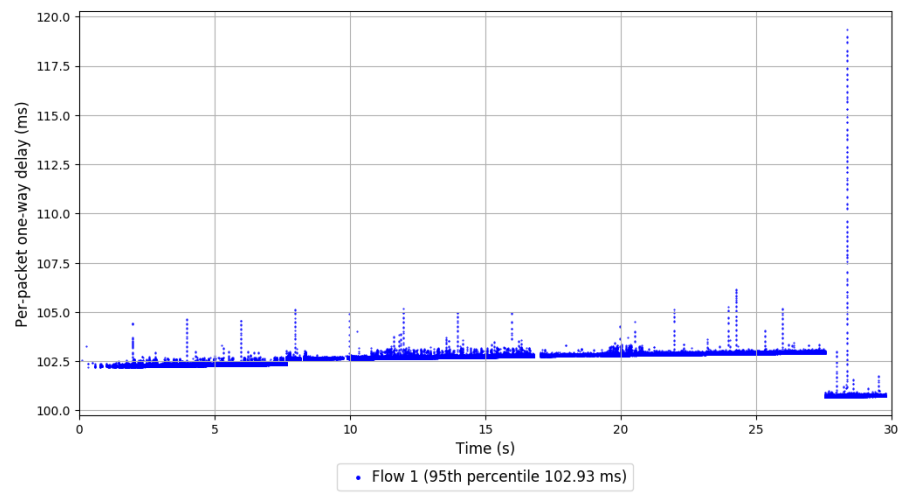
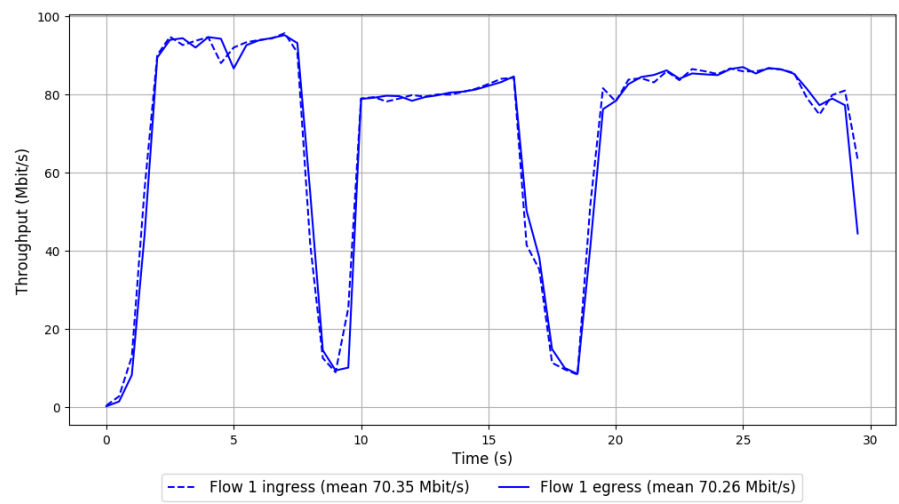
-- Flow 1:

Average throughput: 70.26 Mbit/s

95th percentile per-packet one-way delay: 102.928 ms

Loss rate: 0.87%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-15 23:24:09

End at: 2018-01-15 23:24:39

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.43 Mbit/s

95th percentile per-packet one-way delay: 106.205 ms

Loss rate: 0.96%

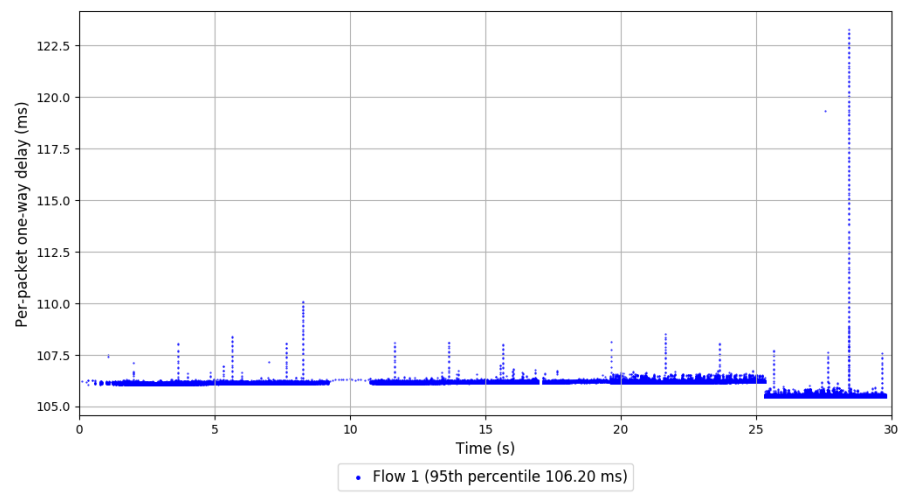
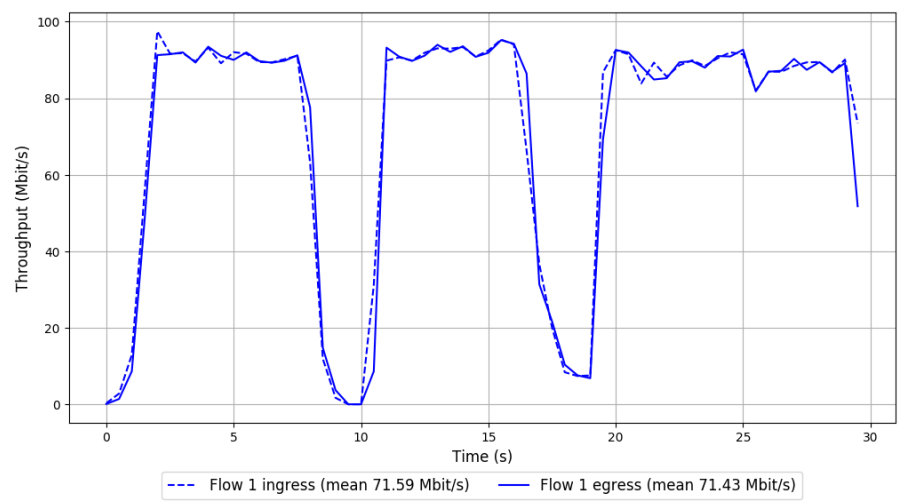
-- Flow 1:

Average throughput: 71.43 Mbit/s

95th percentile per-packet one-way delay: 106.205 ms

Loss rate: 0.96%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-15 23:36:44

End at: 2018-01-15 23:37:14

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.09 Mbit/s

95th percentile per-packet one-way delay: 104.906 ms

Loss rate: 0.94%

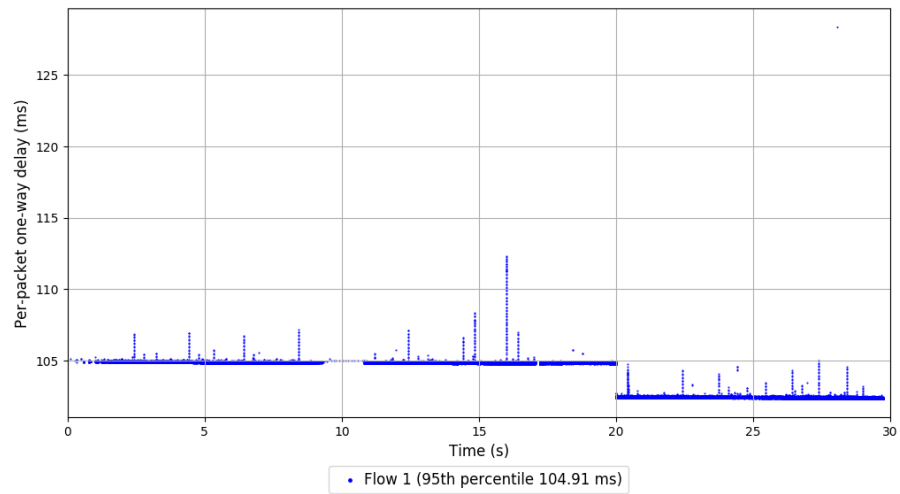
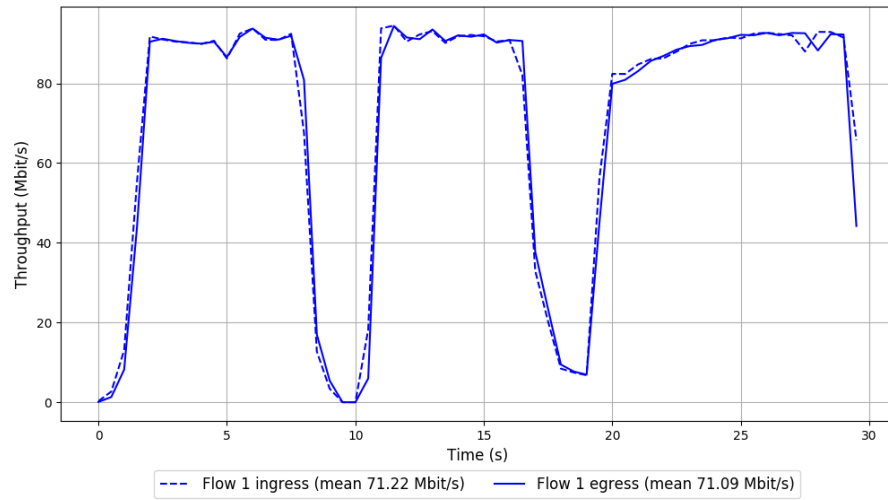
-- Flow 1:

Average throughput: 71.09 Mbit/s

95th percentile per-packet one-way delay: 104.906 ms

Loss rate: 0.94%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-15 23:49:14

End at: 2018-01-15 23:49:44

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.57 Mbit/s

95th percentile per-packet one-way delay: 103.092 ms

Loss rate: 0.98%

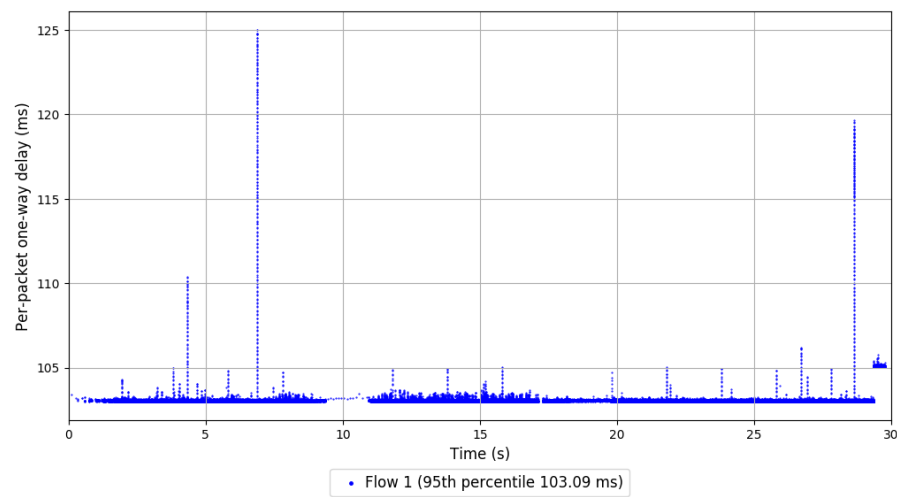
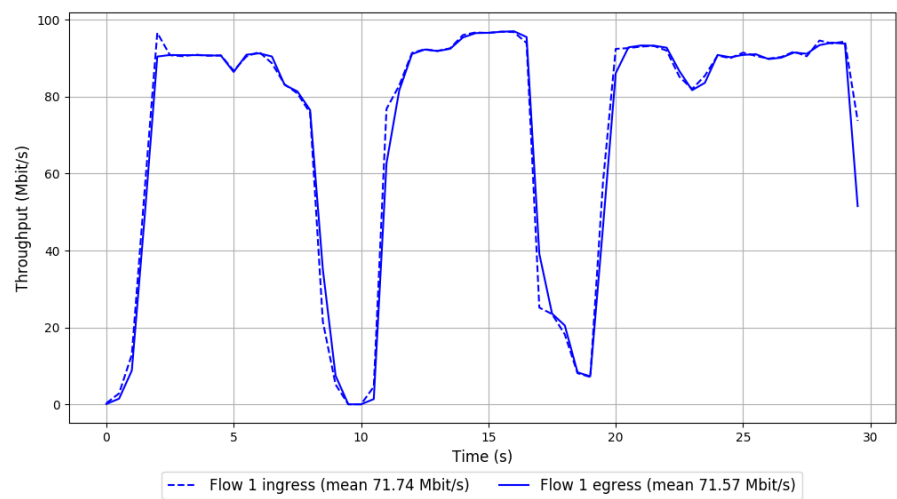
-- Flow 1:

Average throughput: 71.57 Mbit/s

95th percentile per-packet one-way delay: 103.092 ms

Loss rate: 0.98%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-16 00:01:26

End at: 2018-01-16 00:01:56

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.48 Mbit/s

95th percentile per-packet one-way delay: 103.407 ms

Loss rate: 0.94%

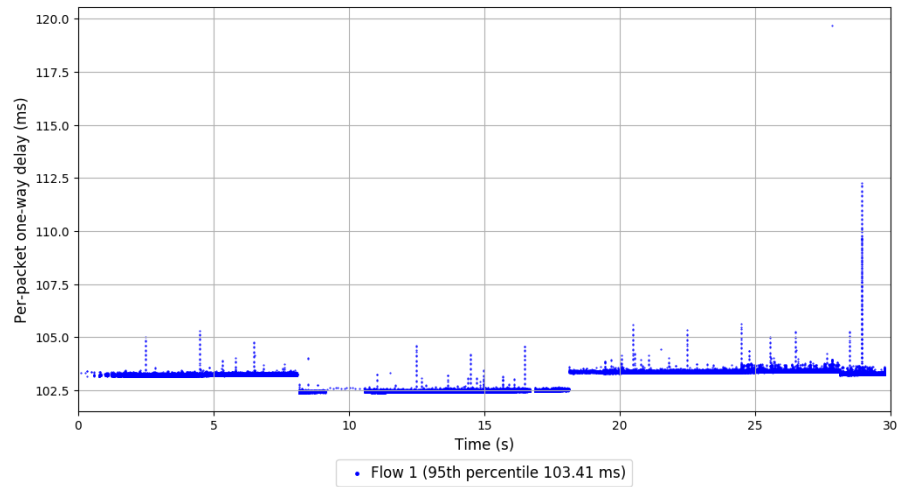
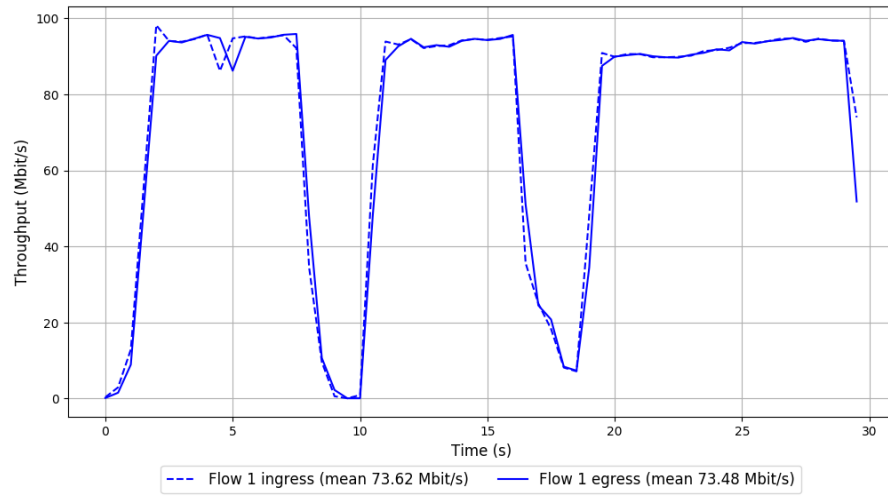
-- Flow 1:

Average throughput: 73.48 Mbit/s

95th percentile per-packet one-way delay: 103.407 ms

Loss rate: 0.94%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-16 00:13:57

End at: 2018-01-16 00:14:27

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.57 Mbit/s

95th percentile per-packet one-way delay: 108.255 ms

Loss rate: 1.00%

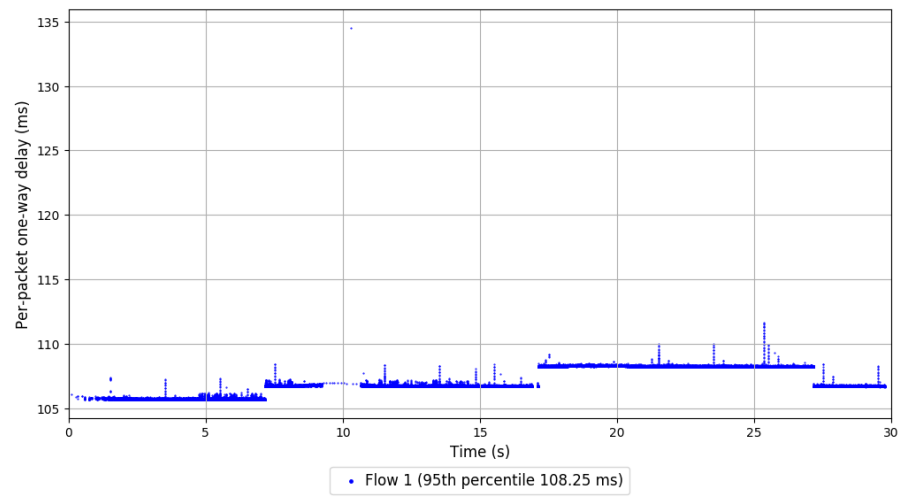
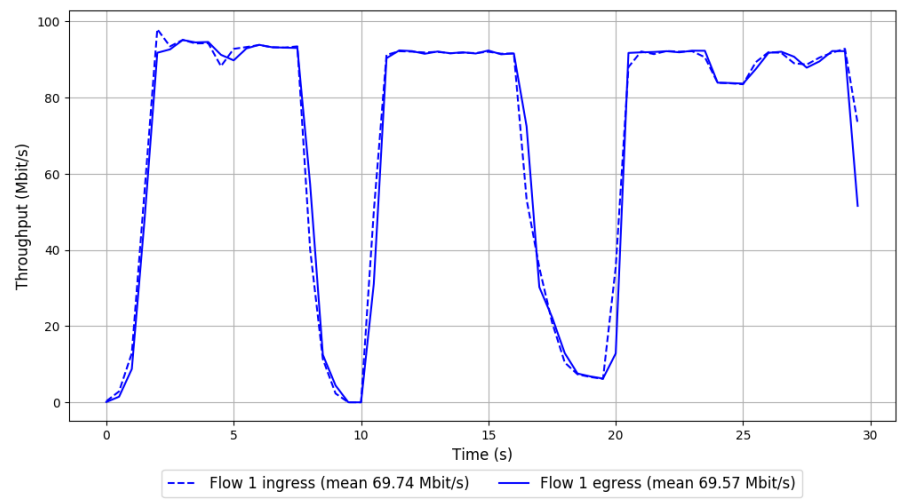
-- Flow 1:

Average throughput: 69.57 Mbit/s

95th percentile per-packet one-way delay: 108.255 ms

Loss rate: 1.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-16 00:26:13

End at: 2018-01-16 00:26:43

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.93 Mbit/s

95th percentile per-packet one-way delay: 107.161 ms

Loss rate: 0.92%

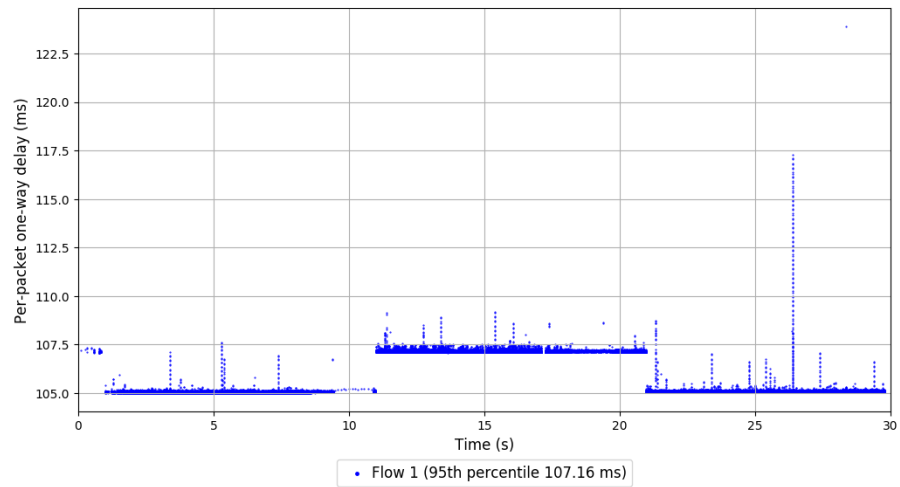
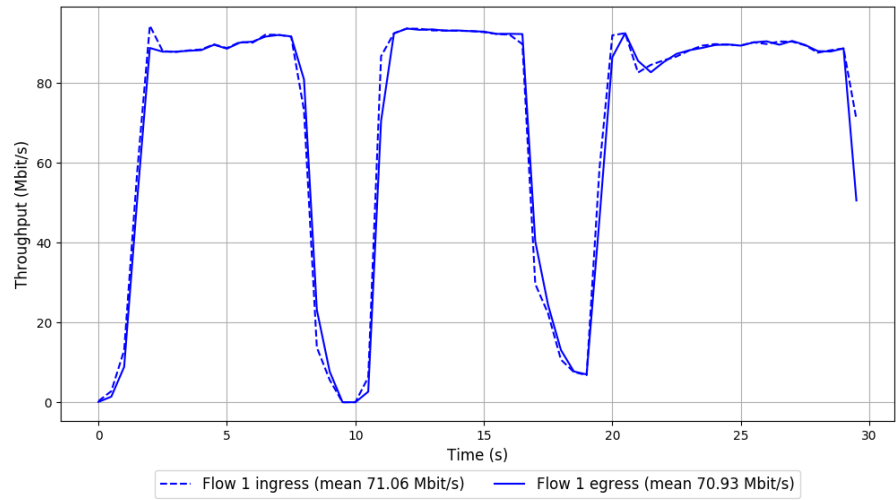
-- Flow 1:

Average throughput: 70.93 Mbit/s

95th percentile per-packet one-way delay: 107.161 ms

Loss rate: 0.92%

Run 9: Report of QUIC Cubic — Data Link

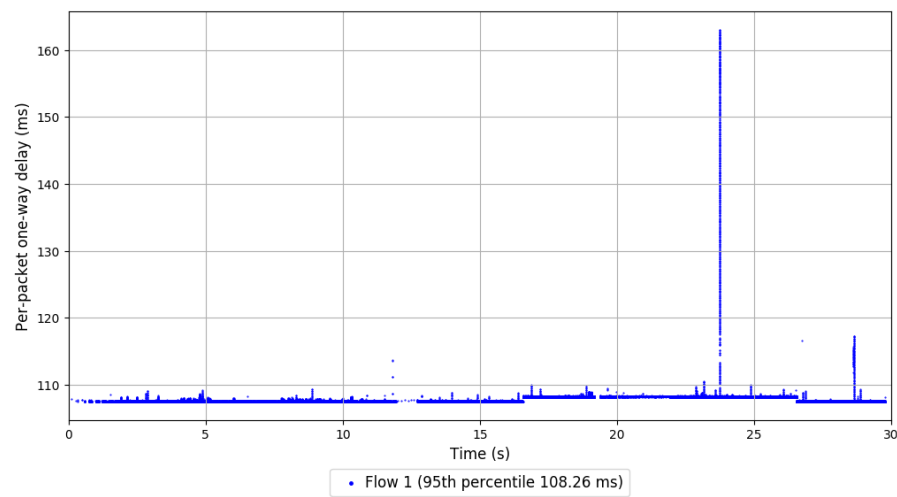
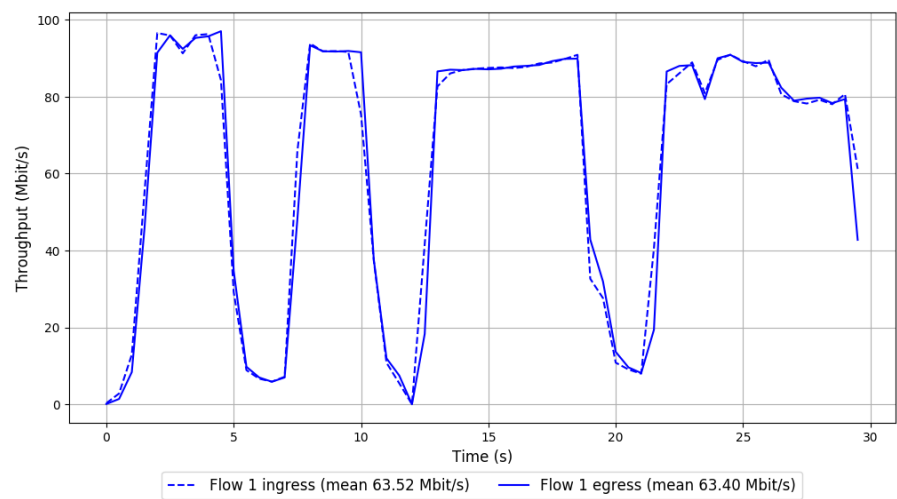


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-16 00:38:37
End at: 2018-01-16 00:39:07

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.40 Mbit/s
95th percentile per-packet one-way delay: 108.261 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 63.40 Mbit/s
95th percentile per-packet one-way delay: 108.261 ms
Loss rate: 0.93%
```

Run 10: Report of QUIC Cubic — Data Link

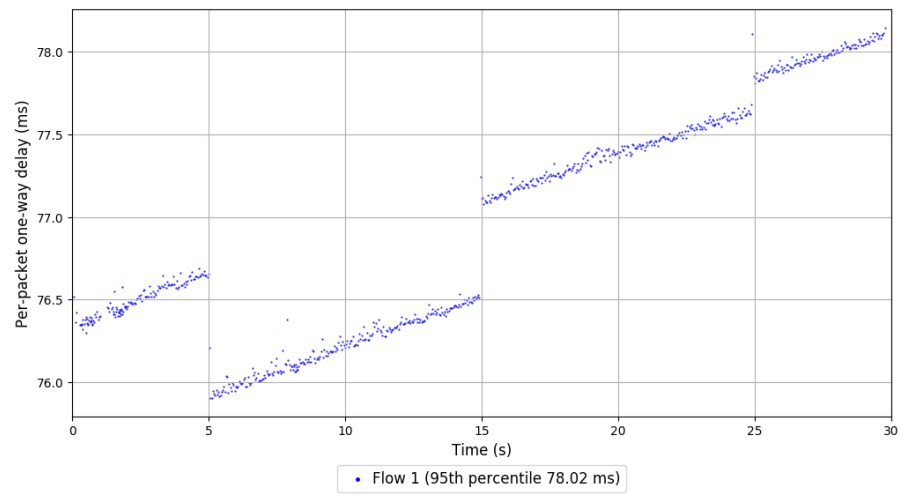
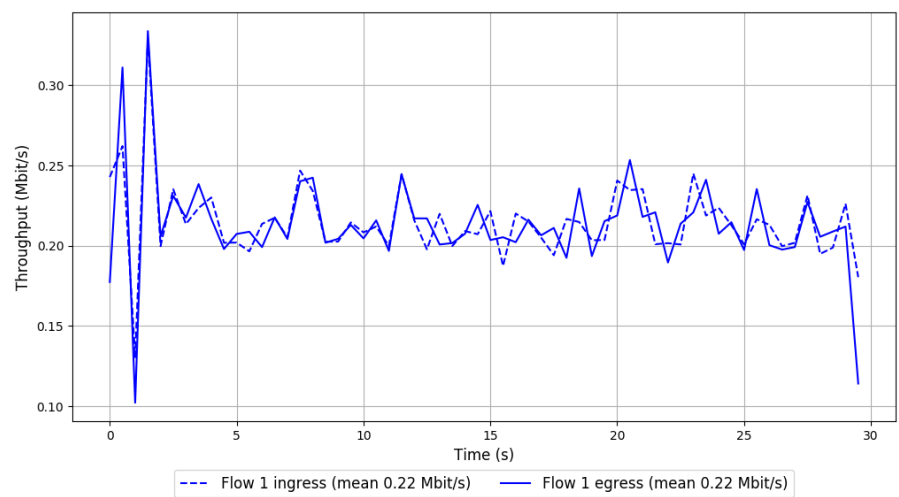


```
Run 1: Statistics of SCReAM

Start at: 2018-01-15 22:44:09
End at: 2018-01-15 22:44:39

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.021 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.021 ms
Loss rate: 0.76%
```

Run 1: Report of SReAM — Data Link

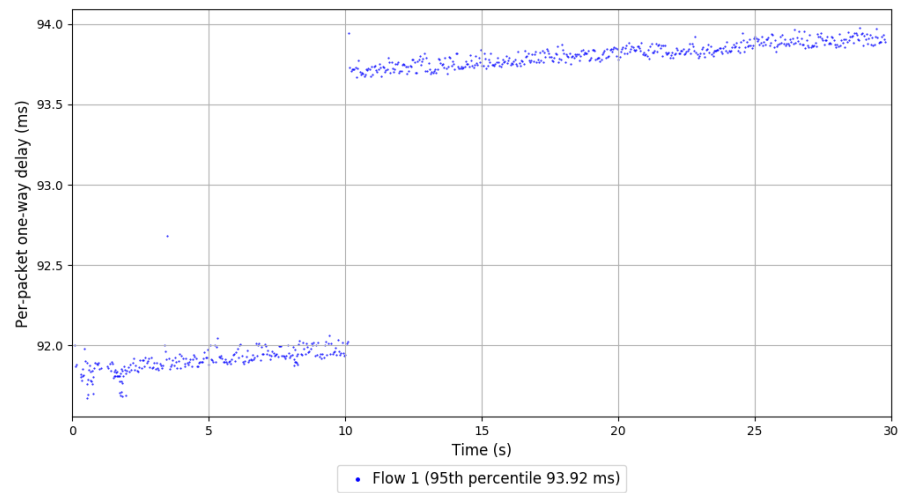
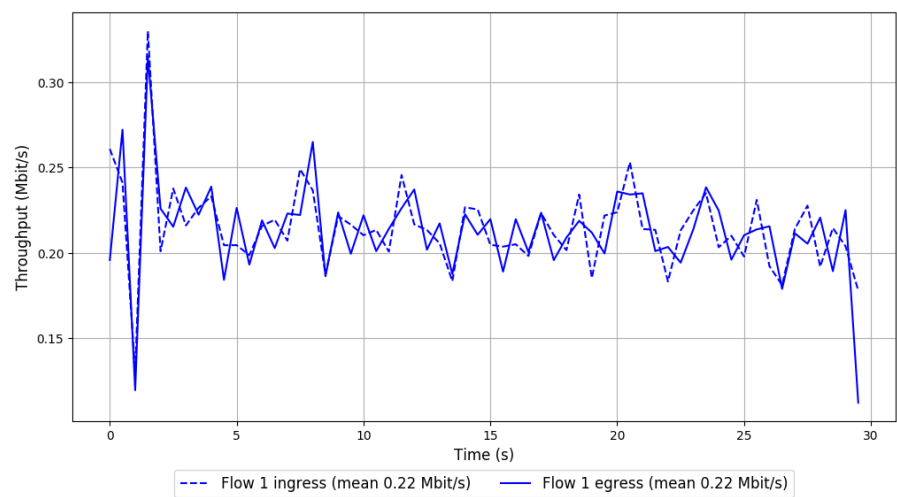


```
Run 2: Statistics of SCReAM

Start at: 2018-01-15 22:56:14
End at: 2018-01-15 22:56:44

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 93.917 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 93.917 ms
Loss rate: 0.75%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-15 23:08:42

End at: 2018-01-15 23:09:12

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 100.923 ms

Loss rate: 0.75%

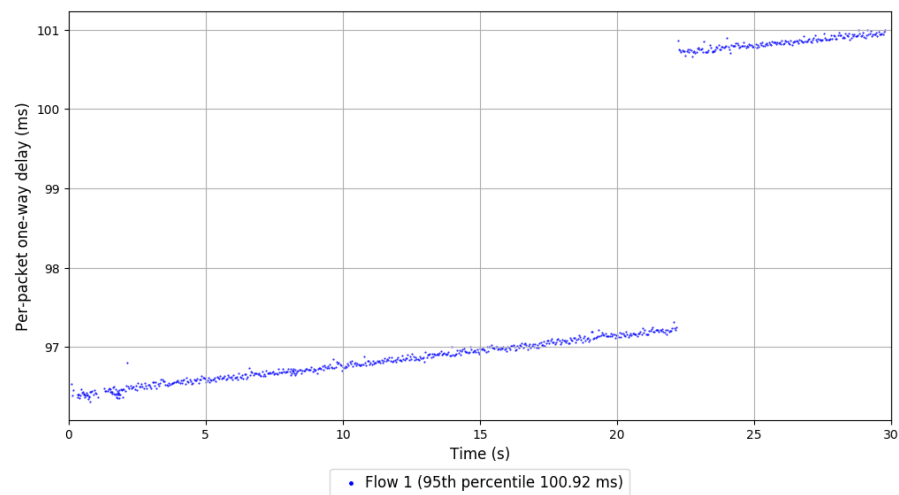
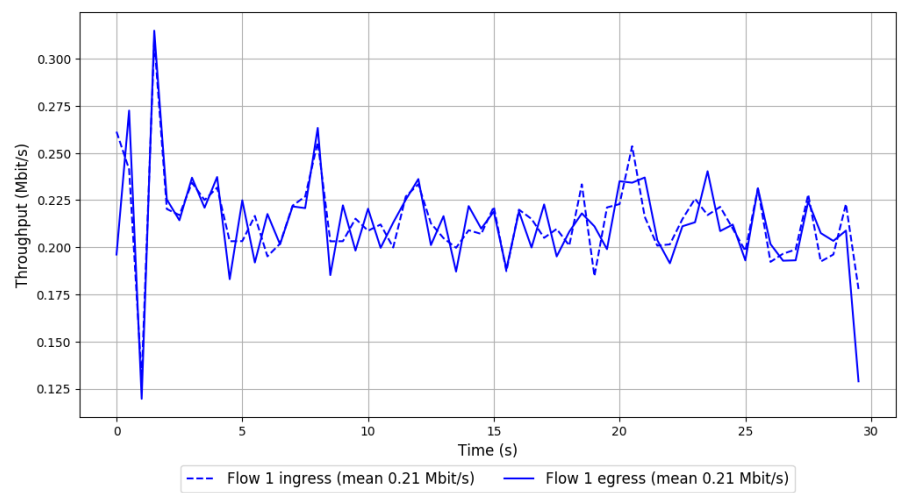
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 100.923 ms

Loss rate: 0.75%

Run 3: Report of SReAM — Data Link

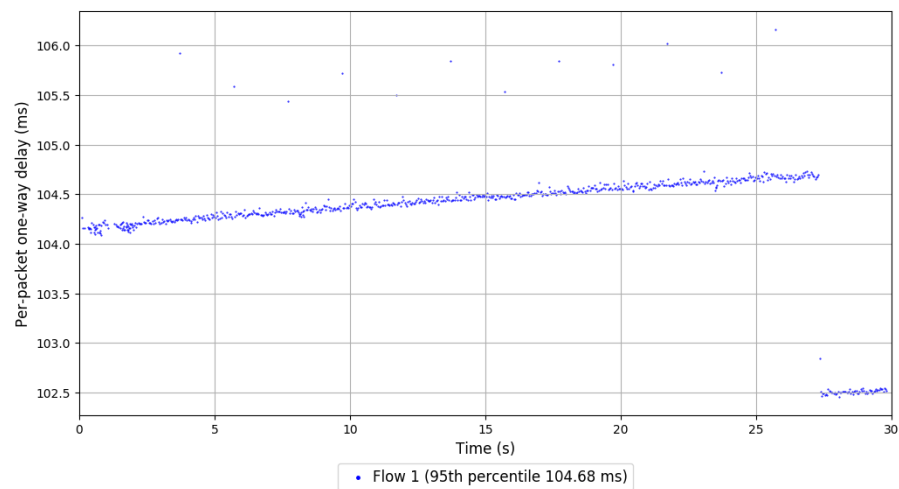
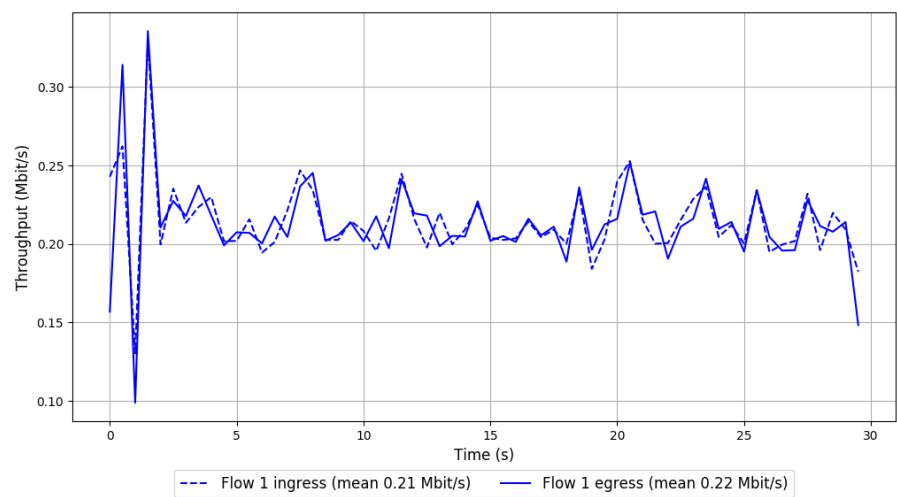


```
Run 4: Statistics of SCReAM

Start at: 2018-01-15 23:21:17
End at: 2018-01-15 23:21:47

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 104.684 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 104.684 ms
Loss rate: 0.65%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-15 23:33:49

End at: 2018-01-15 23:34:19

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 106.163 ms

Loss rate: 0.64%

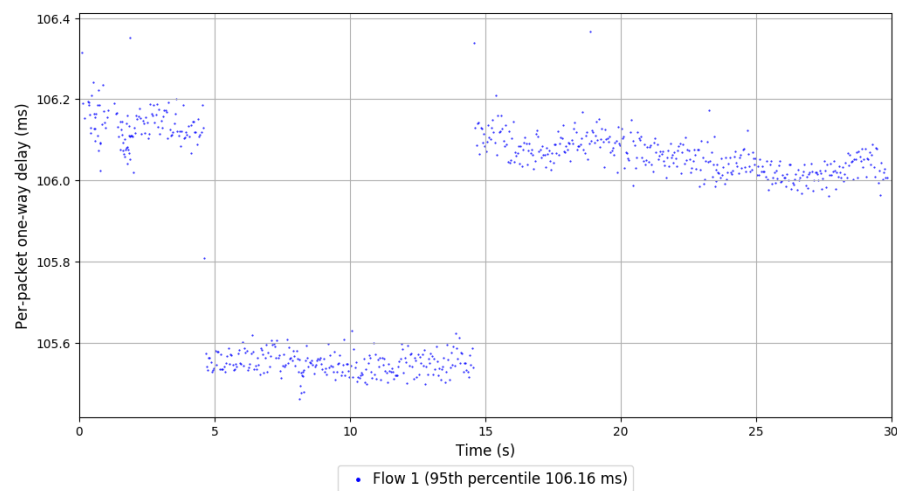
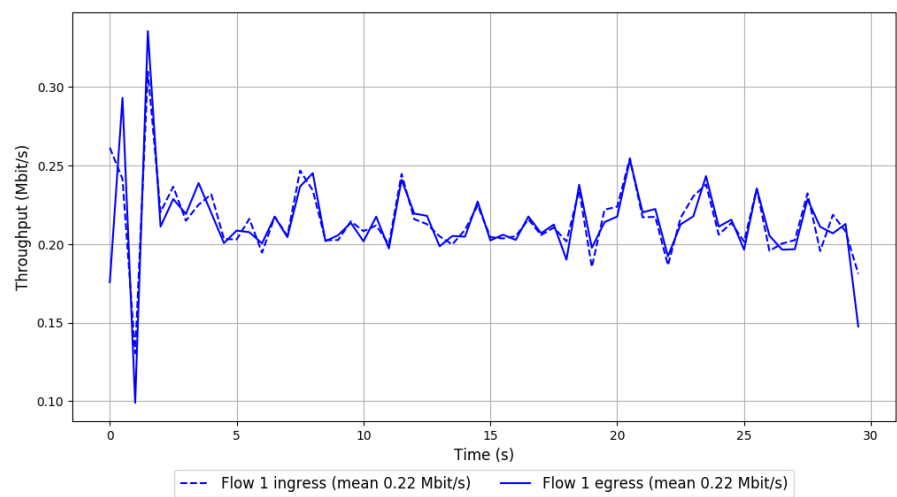
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 106.163 ms

Loss rate: 0.64%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-15 23:46:21

End at: 2018-01-15 23:46:51

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 105.342 ms

Loss rate: 0.76%

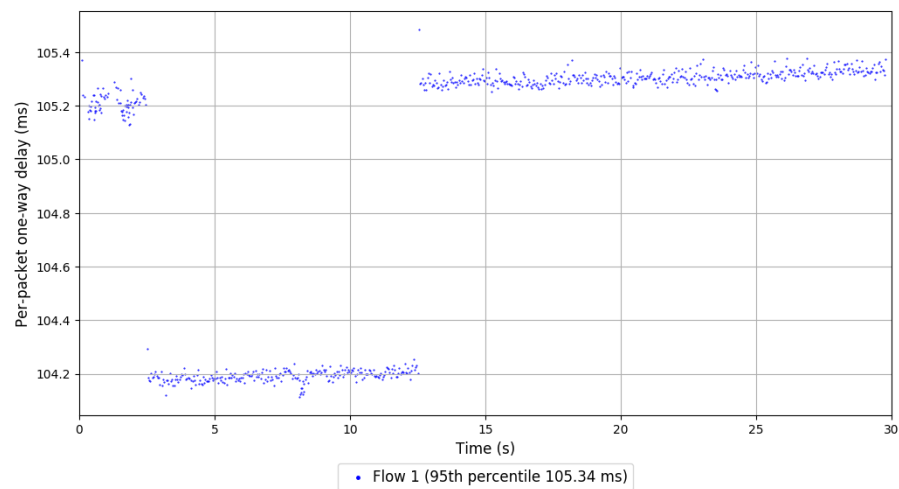
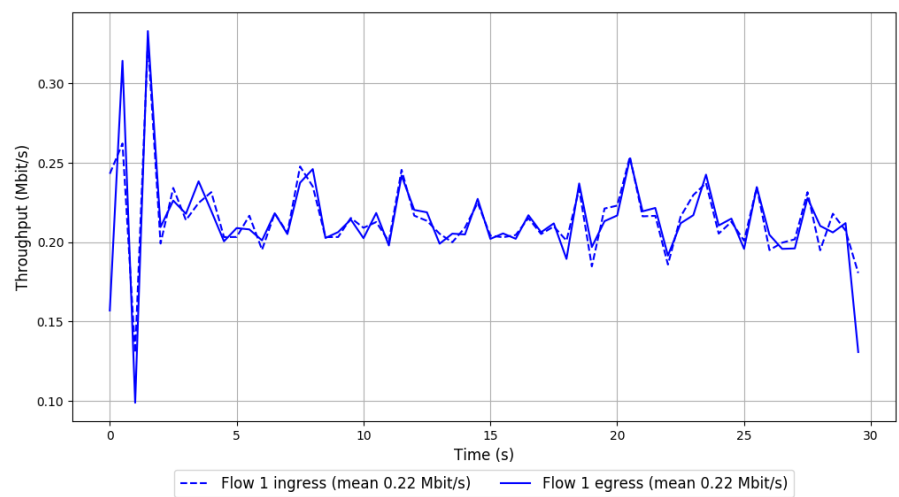
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 105.342 ms

Loss rate: 0.76%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-15 23:58:36

End at: 2018-01-15 23:59:06

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 103.766 ms

Loss rate: 0.64%

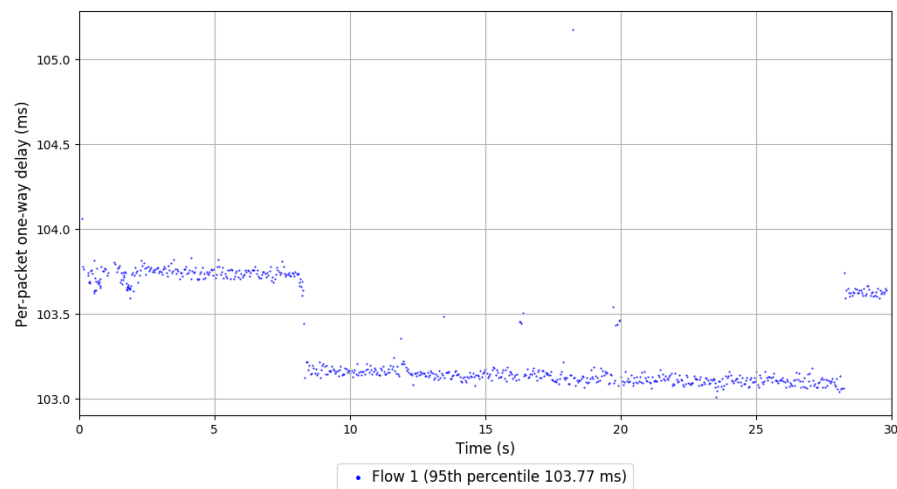
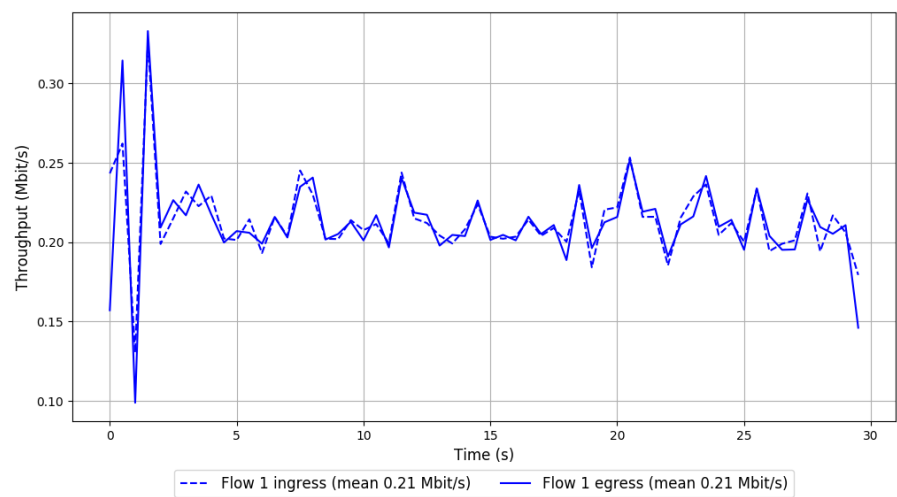
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 103.766 ms

Loss rate: 0.64%

Run 7: Report of SCRaM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-16 00:11:04

End at: 2018-01-16 00:11:34

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 108.367 ms

Loss rate: 0.77%

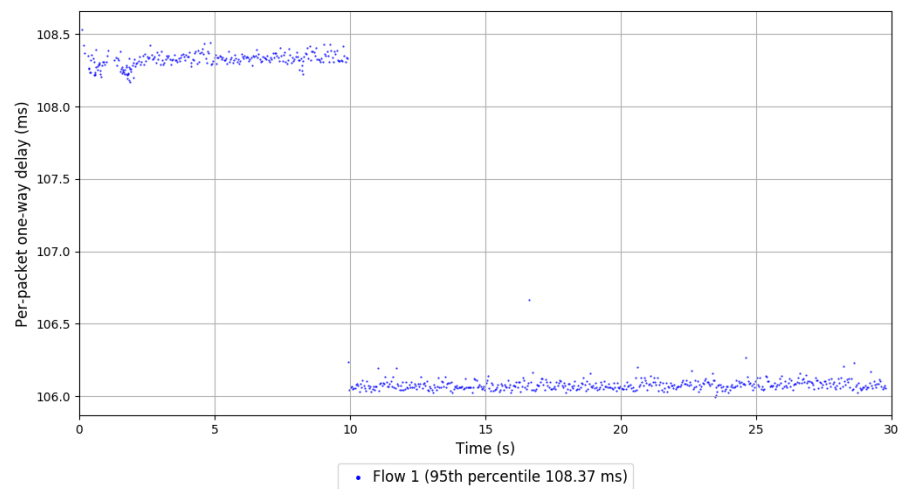
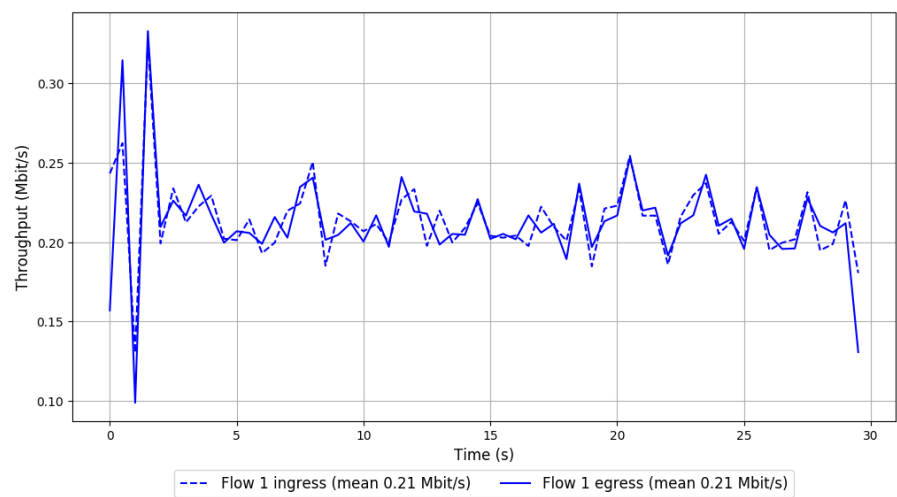
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 108.367 ms

Loss rate: 0.77%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-16 00:23:21

End at: 2018-01-16 00:23:51

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 107.423 ms

Loss rate: 0.64%

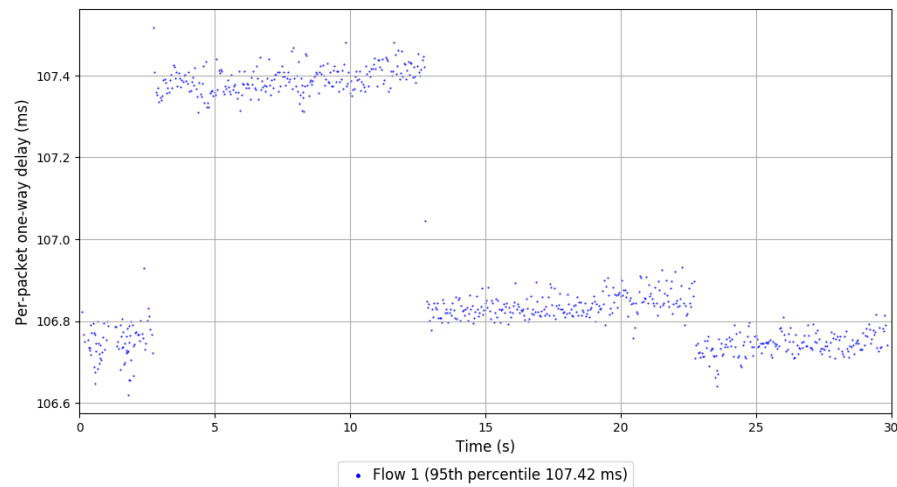
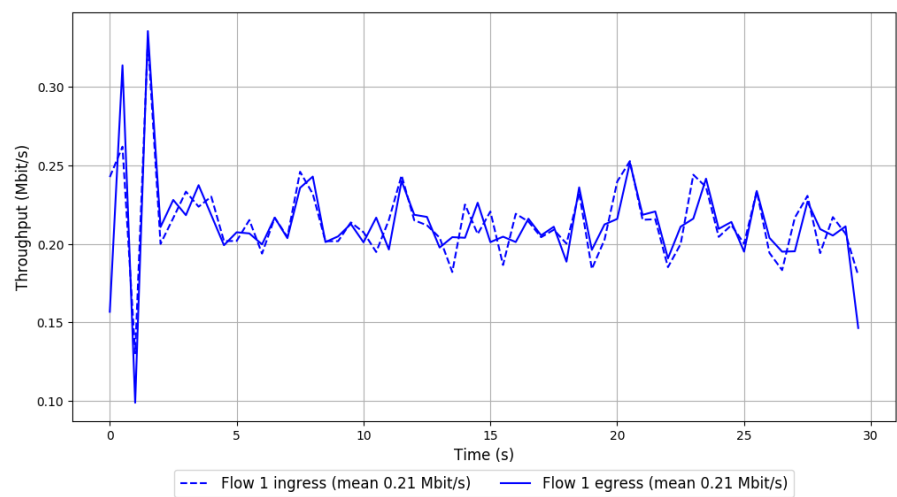
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 107.423 ms

Loss rate: 0.64%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-01-16 00:35:43

End at: 2018-01-16 00:36:13

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 108.823 ms

Loss rate: 0.64%

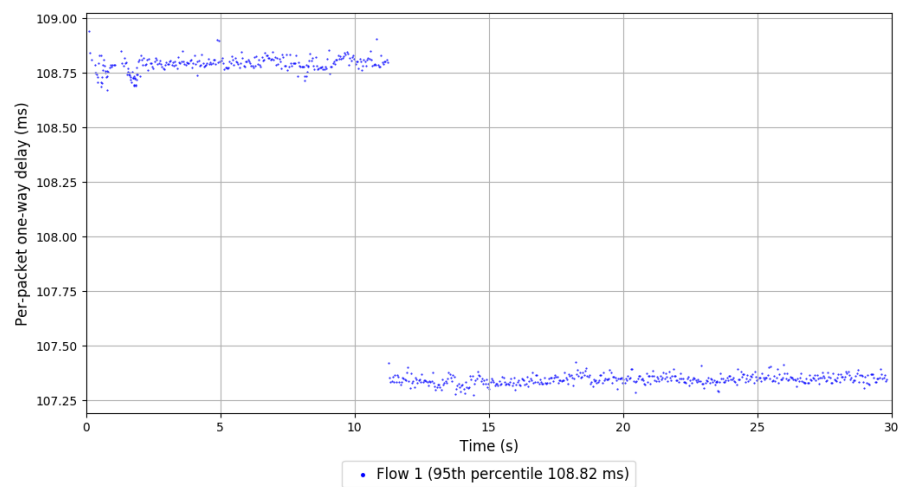
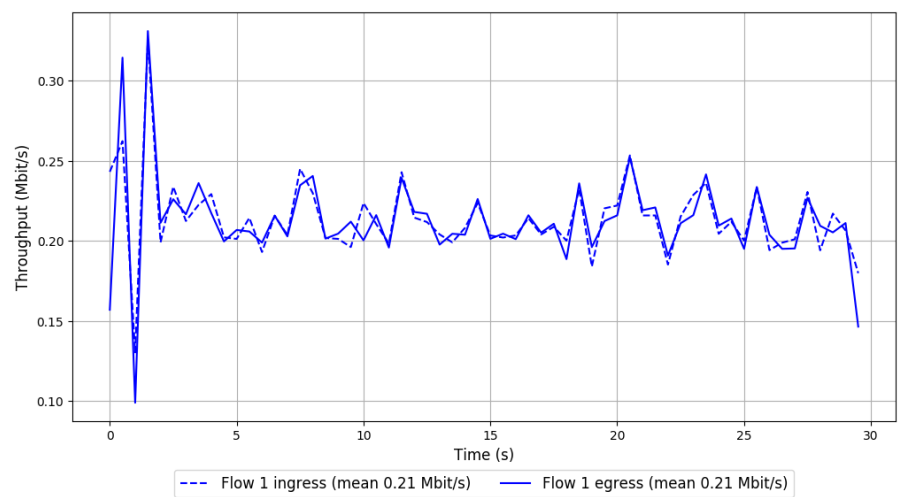
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 108.823 ms

Loss rate: 0.64%

Run 10: Report of SReAM — Data Link

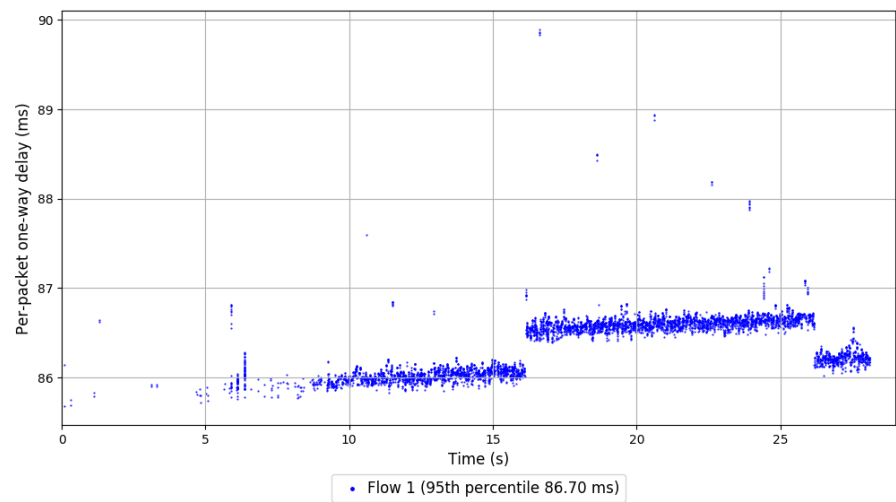
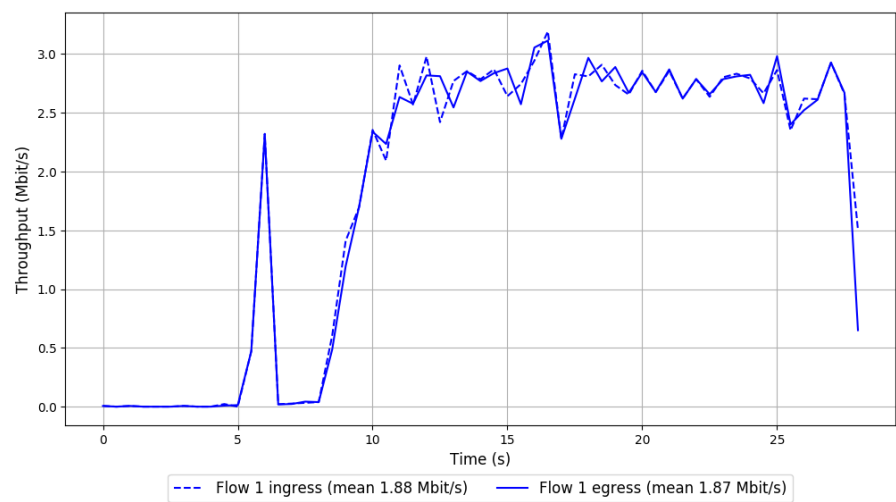


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-15 22:36:06
End at: 2018-01-15 22:36:36

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 86.697 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 86.697 ms
Loss rate: 1.21%
```


Run 1: Report of WebRTC media — Data Link

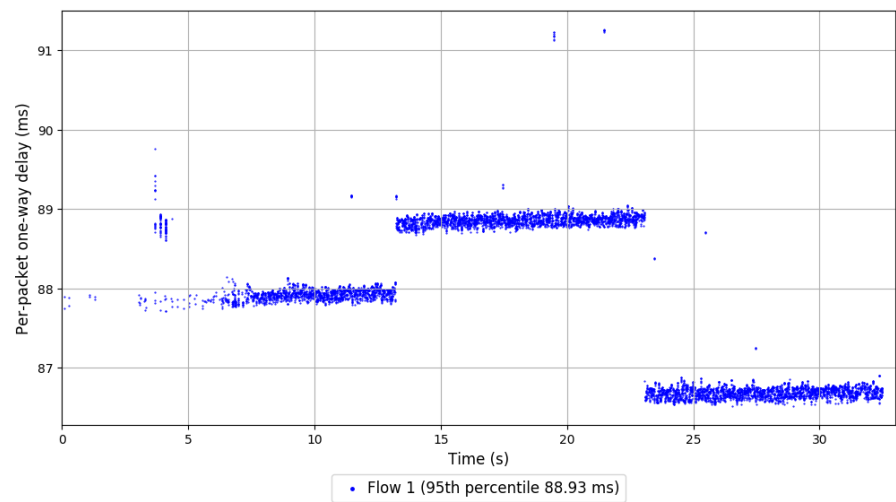
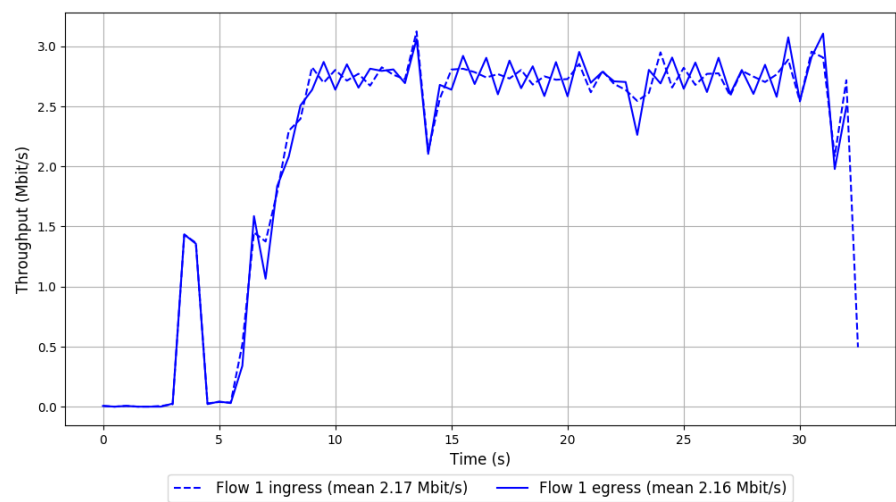


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-15 22:48:33
End at: 2018-01-15 22:49:03

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 88.933 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 88.933 ms
Loss rate: 0.77%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-15 23:00:42

End at: 2018-01-15 23:01:12

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 93.537 ms

Loss rate: 0.80%

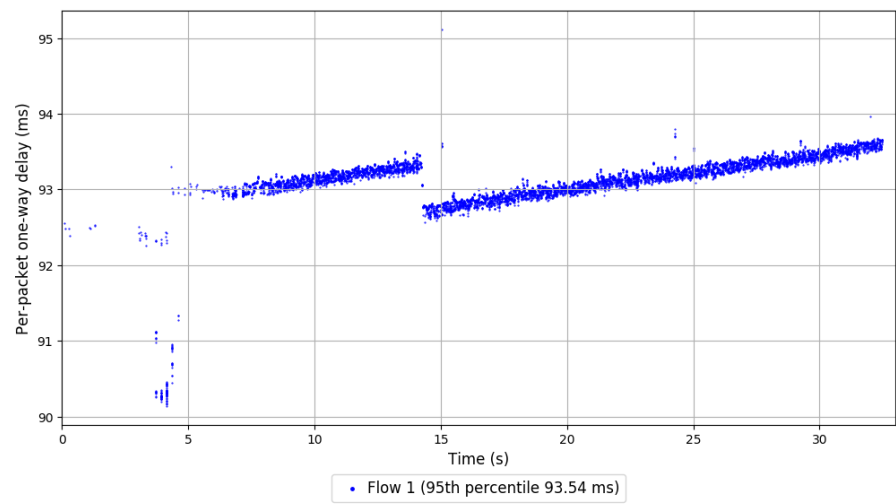
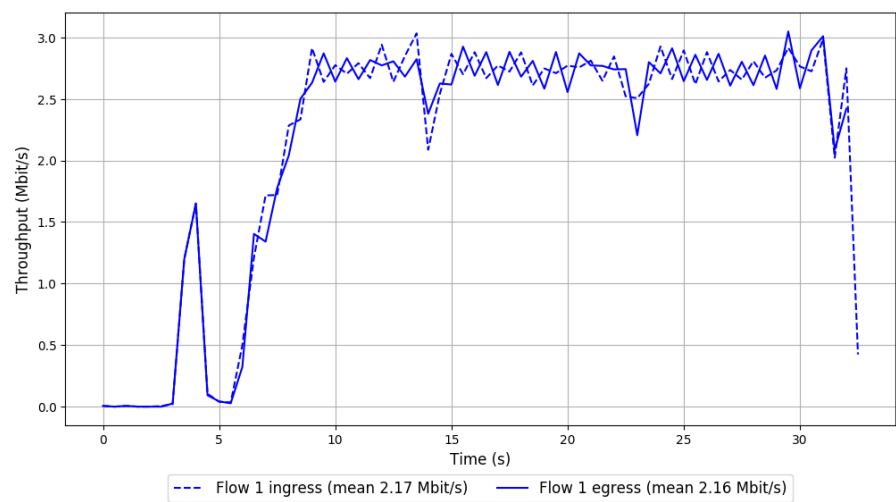
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 93.537 ms

Loss rate: 0.80%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-15 23:13:19

End at: 2018-01-15 23:13:49

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 104.221 ms

Loss rate: 0.88%

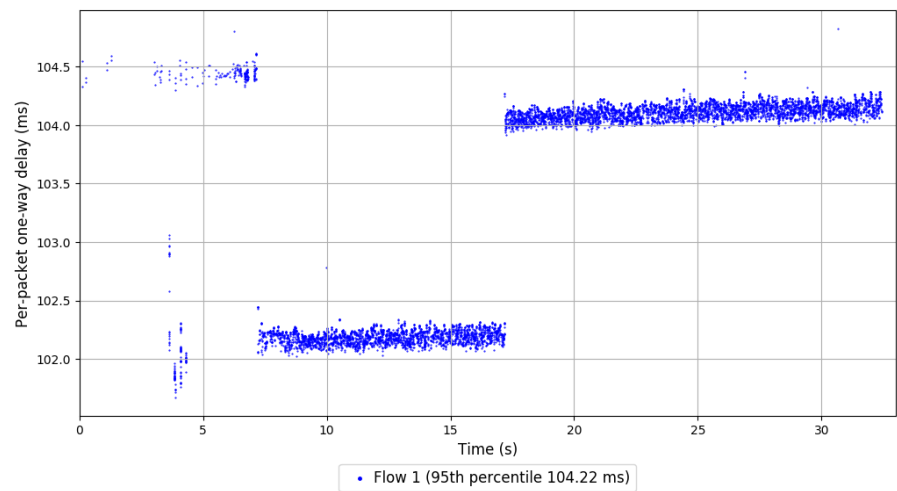
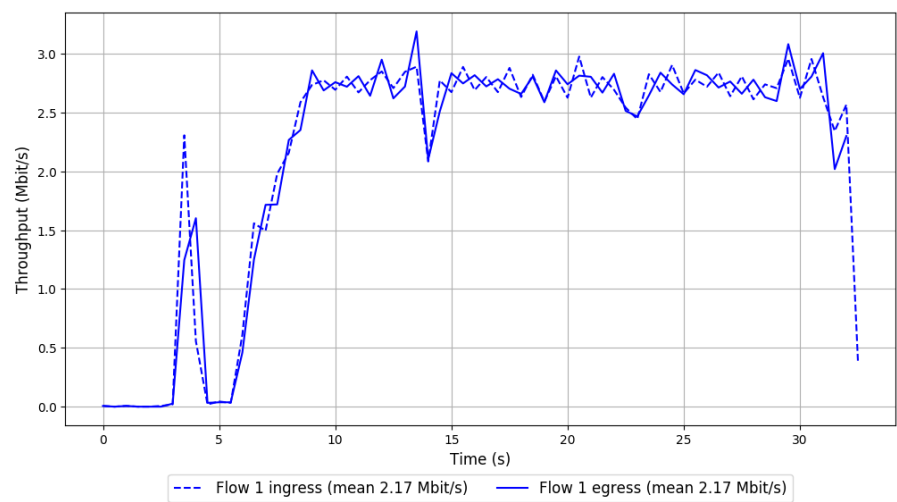
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 104.221 ms

Loss rate: 0.88%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-15 23:25:47

End at: 2018-01-15 23:26:17

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 107.356 ms

Loss rate: 0.82%

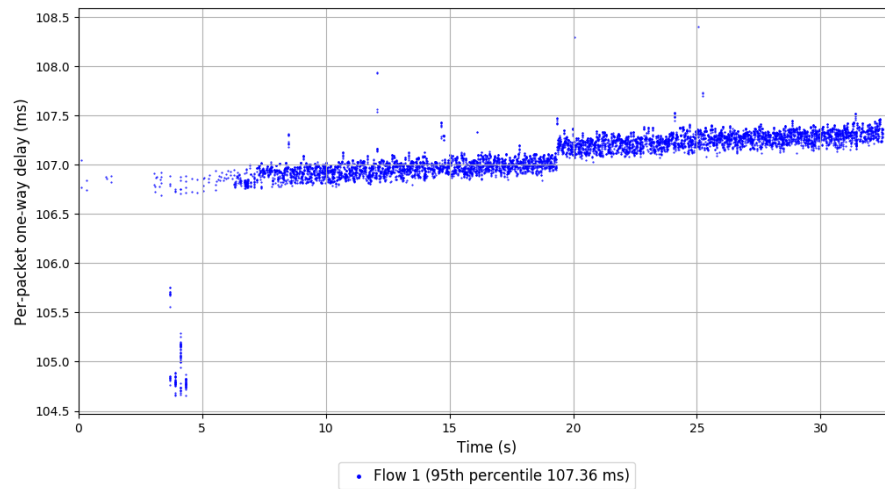
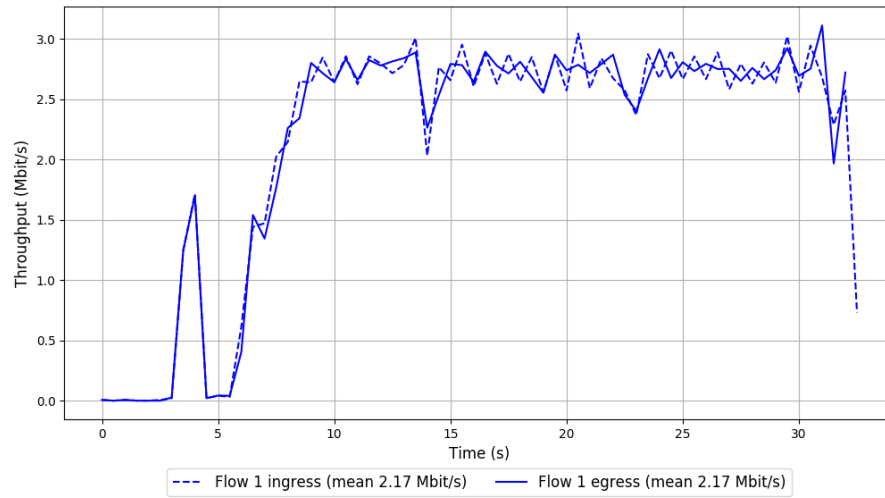
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 107.356 ms

Loss rate: 0.82%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-15 23:38:26

End at: 2018-01-15 23:38:56

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 103.449 ms

Loss rate: 0.92%

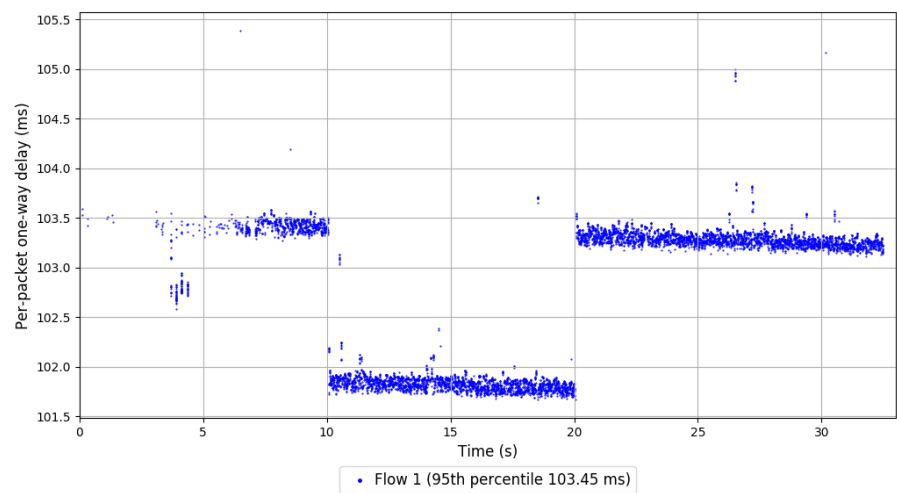
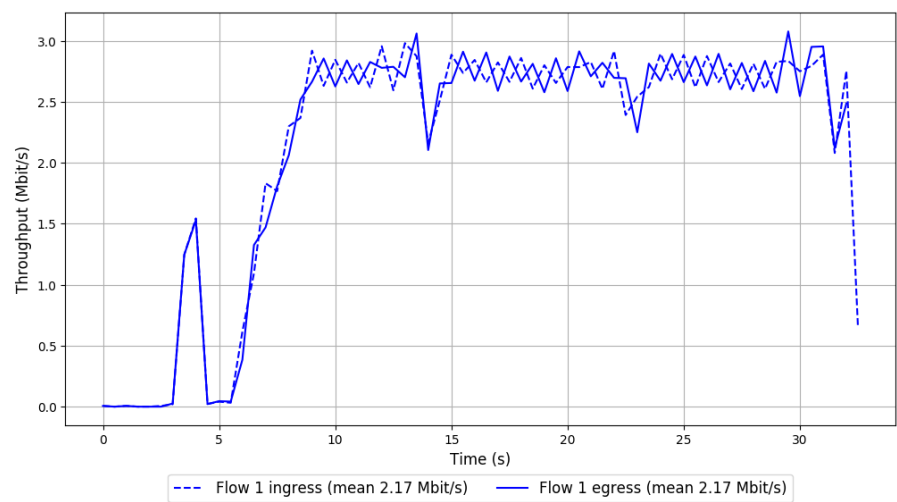
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 103.449 ms

Loss rate: 0.92%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-15 23:50:55

End at: 2018-01-15 23:51:25

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 105.188 ms

Loss rate: 0.81%

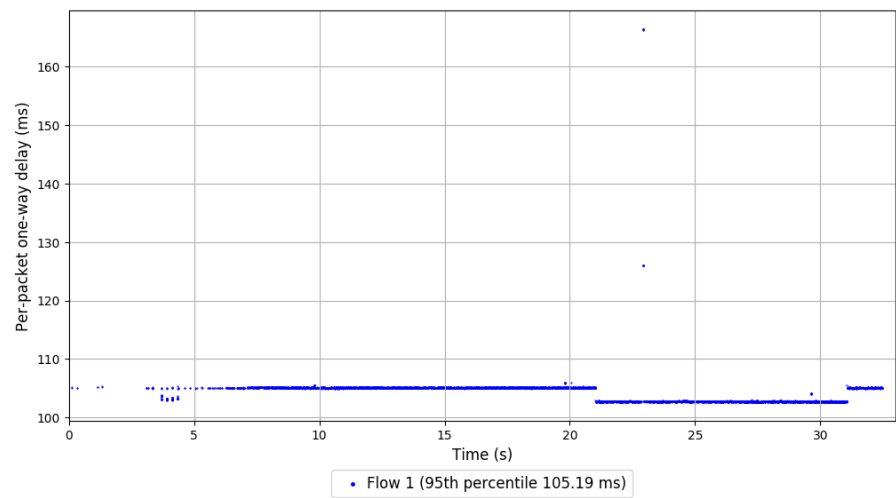
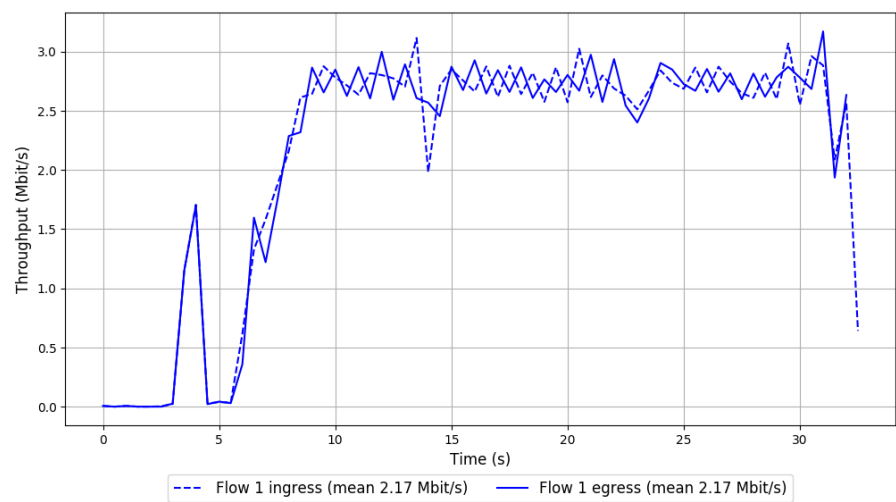
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 105.188 ms

Loss rate: 0.81%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-16 00:03:04

End at: 2018-01-16 00:03:34

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 106.413 ms

Loss rate: 0.77%

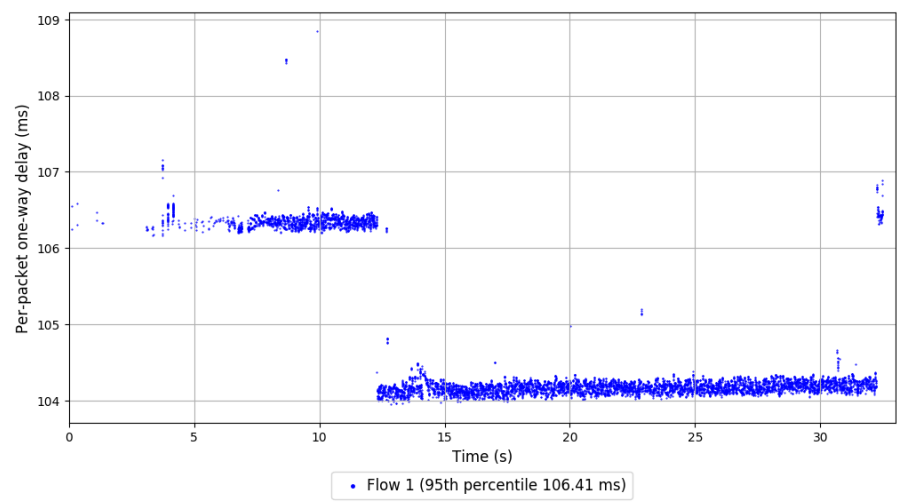
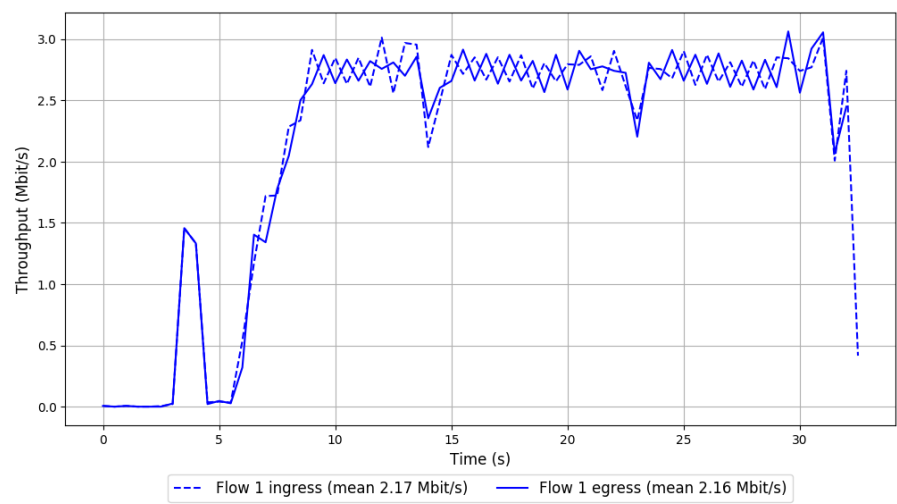
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 106.413 ms

Loss rate: 0.77%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-16 00:15:35

End at: 2018-01-16 00:16:05

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 105.940 ms

Loss rate: 0.94%

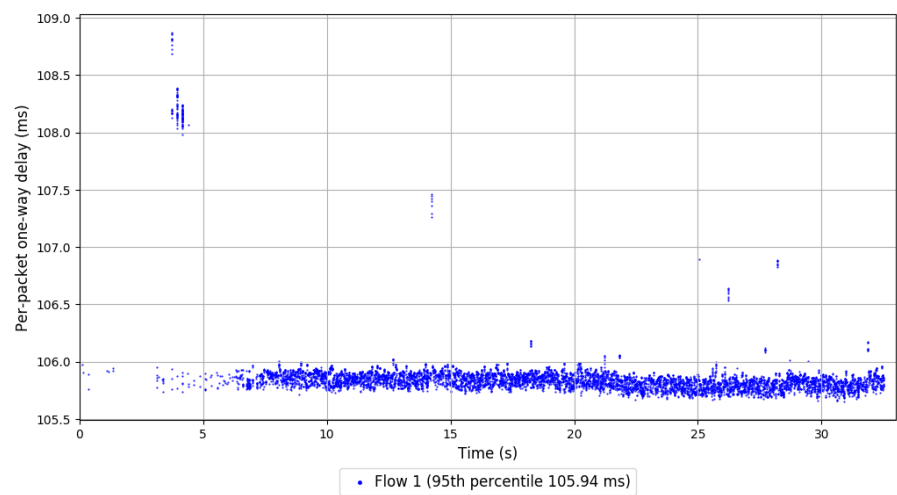
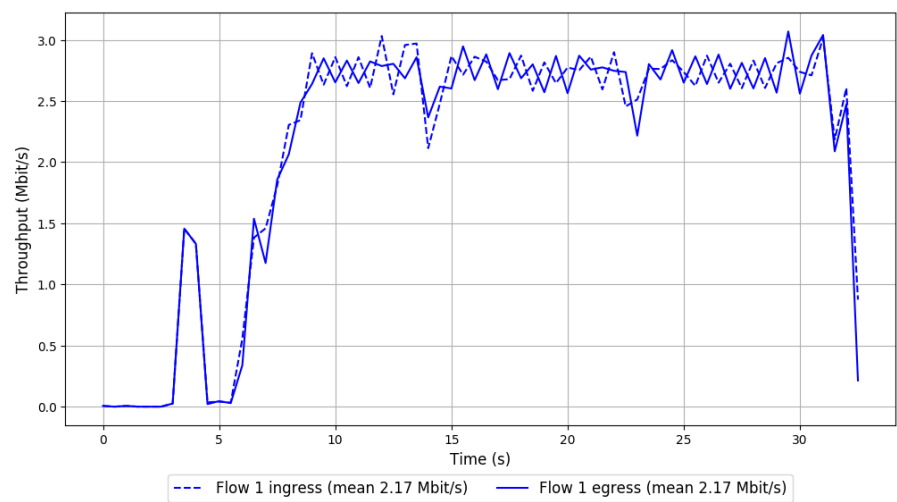
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 105.940 ms

Loss rate: 0.94%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-16 00:27:52

End at: 2018-01-16 00:28:22

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 108.491 ms

Loss rate: 0.94%

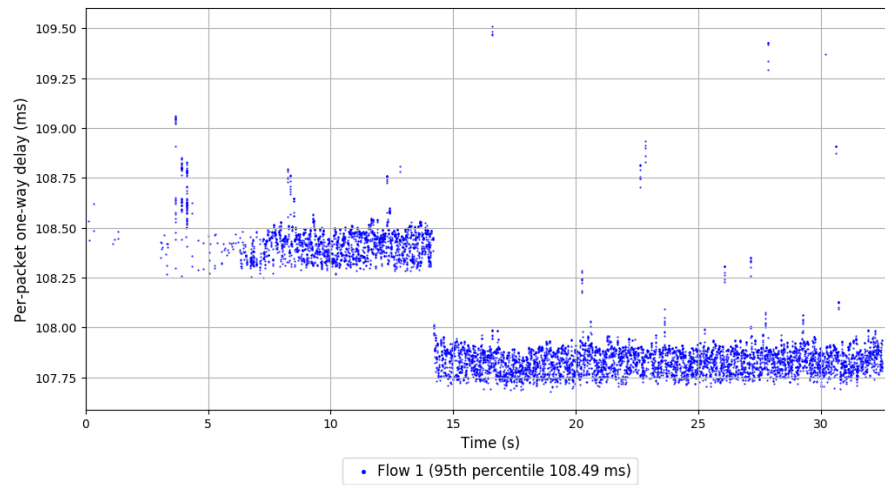
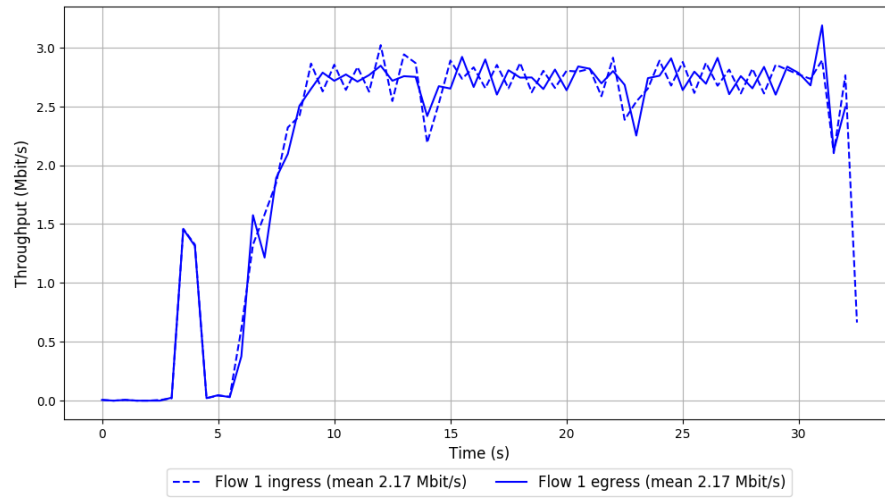
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 108.491 ms

Loss rate: 0.94%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-15 22:39:39

End at: 2018-01-15 22:40:09

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 84.950 ms

Loss rate: 1.43%

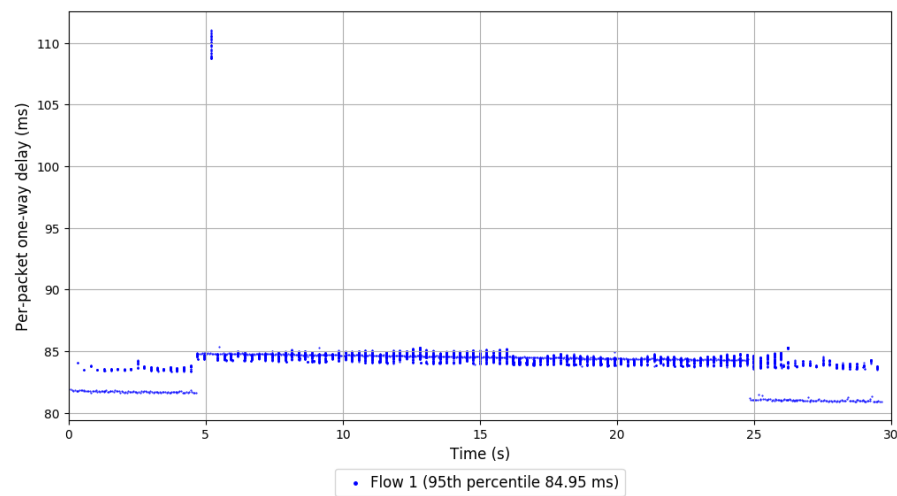
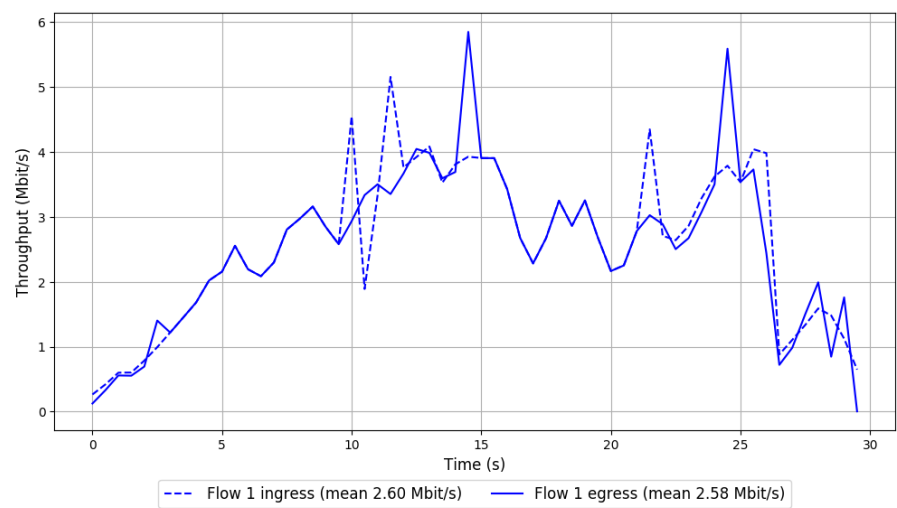
-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 84.950 ms

Loss rate: 1.43%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-15 22:51:41

End at: 2018-01-15 22:52:11

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 87.508 ms

Loss rate: 0.00%

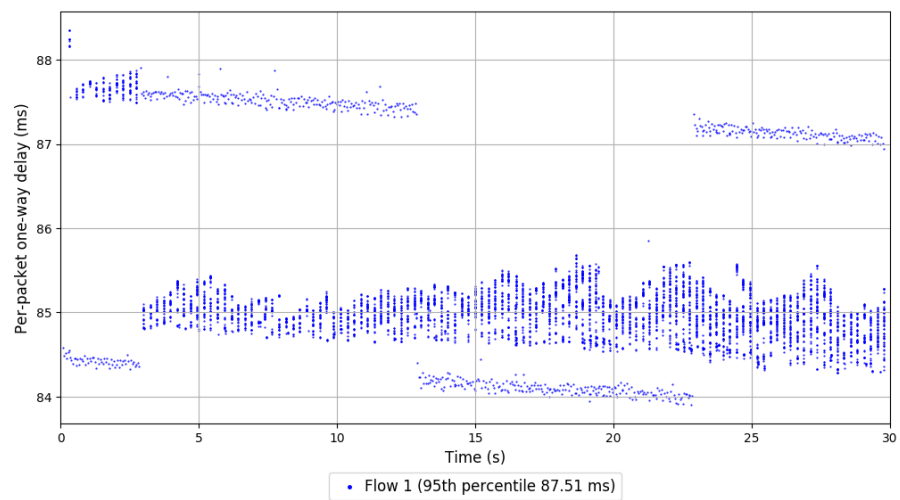
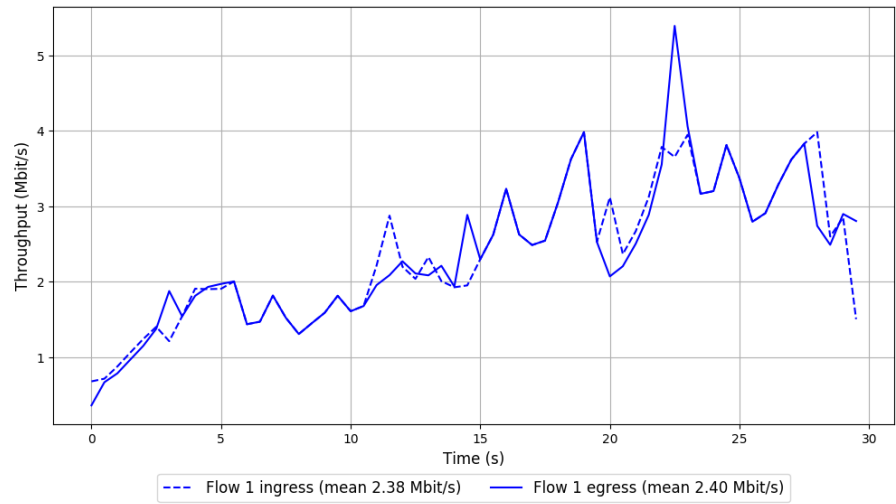
-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 87.508 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-15 23:04:09

End at: 2018-01-15 23:04:39

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 100.061 ms

Loss rate: 2.59%

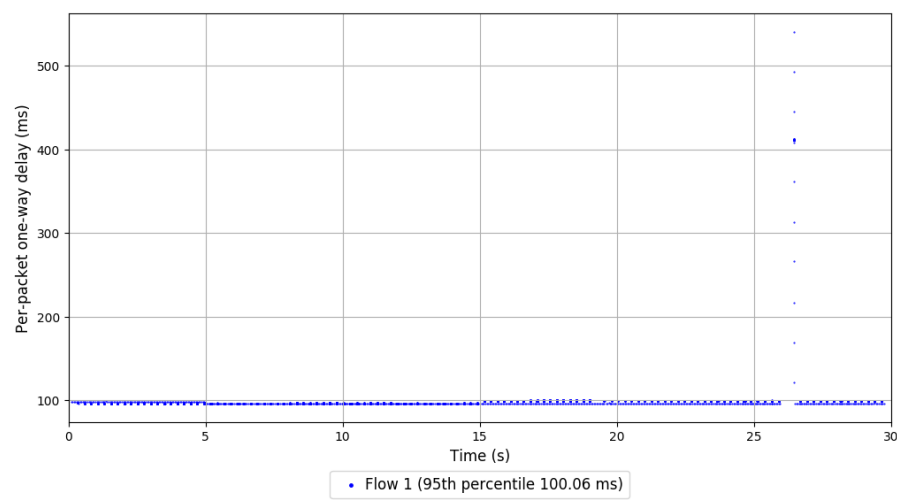
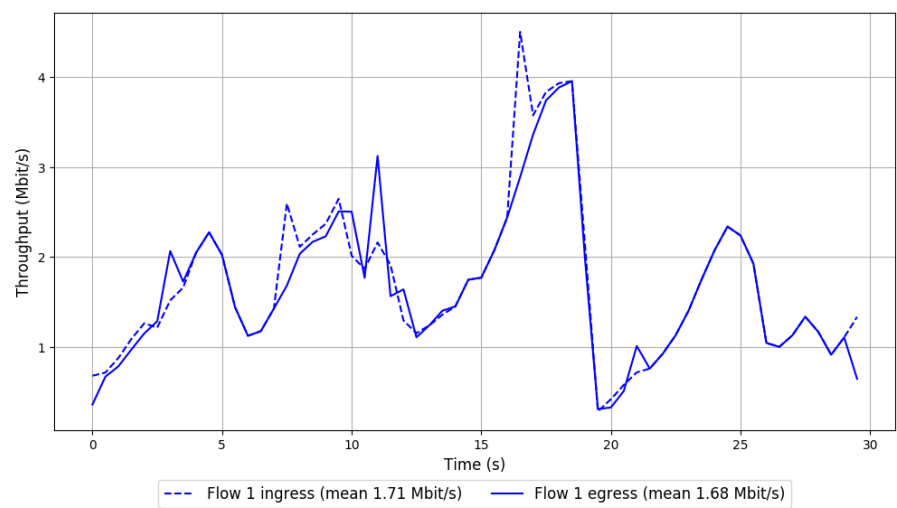
-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 100.061 ms

Loss rate: 2.59%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-15 23:16:45

End at: 2018-01-15 23:17:15

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 103.933 ms

Loss rate: 2.68%

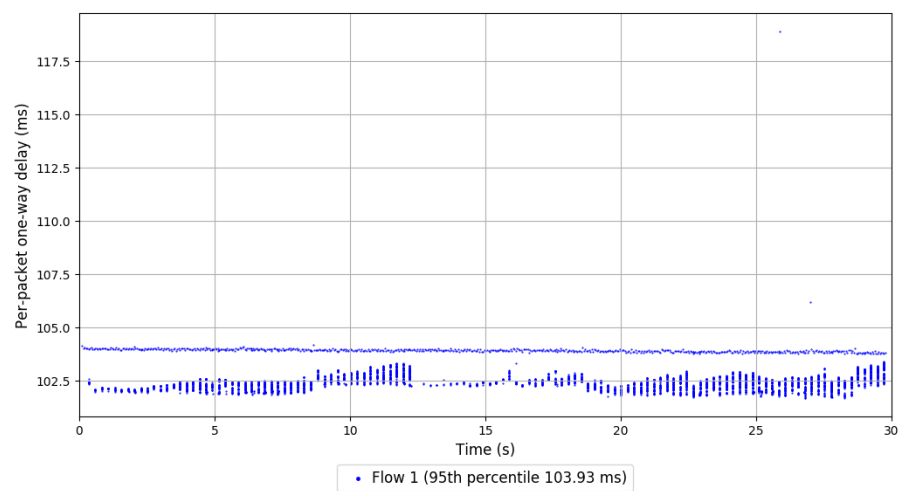
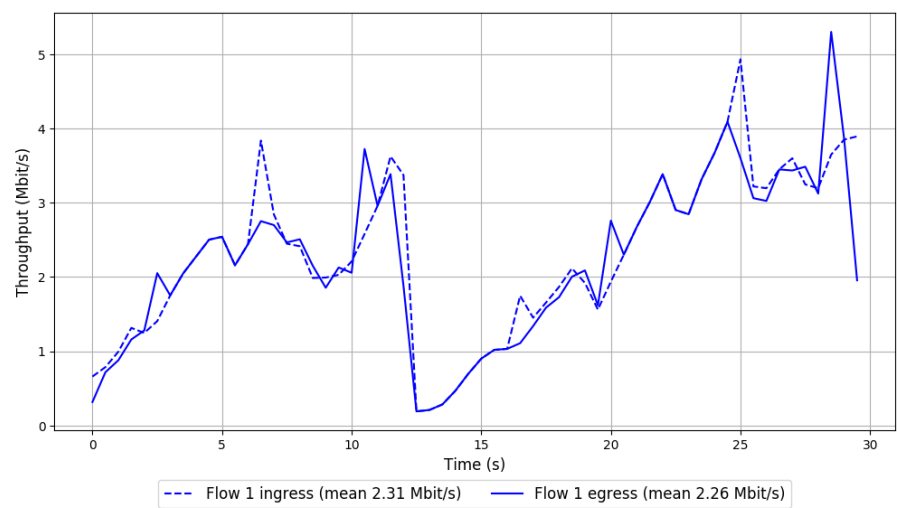
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 103.933 ms

Loss rate: 2.68%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-15 23:29:19

End at: 2018-01-15 23:29:49

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 107.496 ms

Loss rate: 0.91%

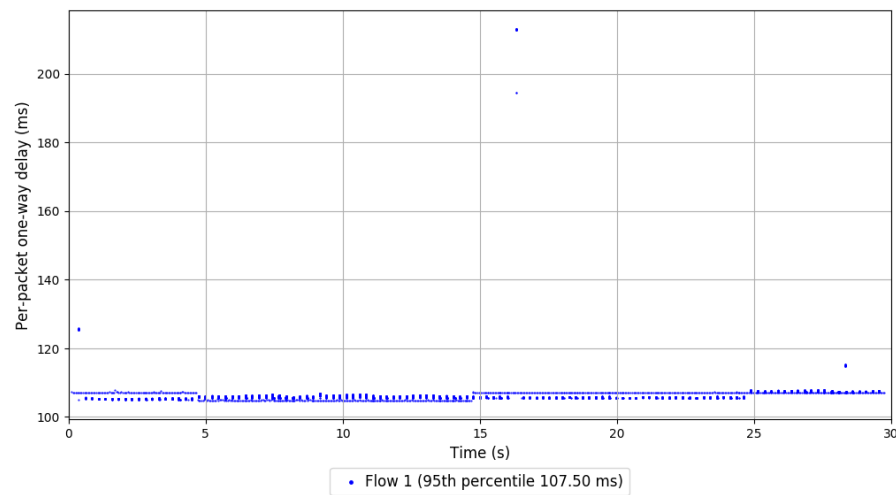
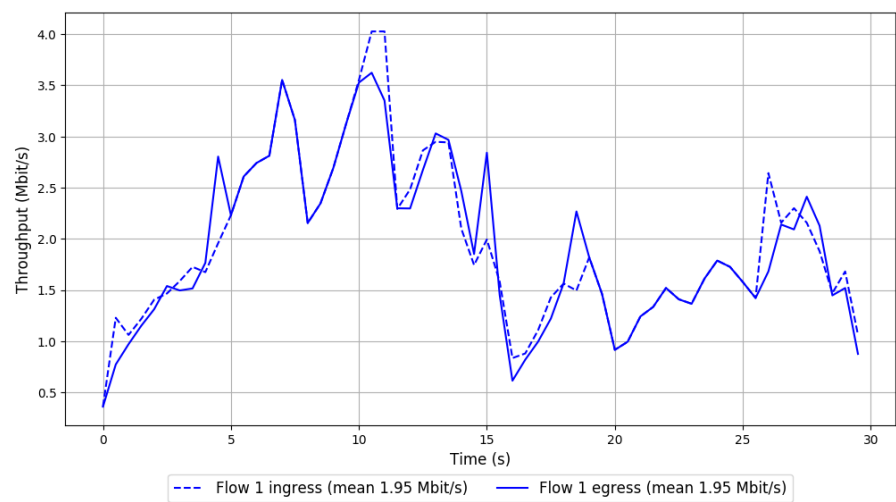
-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 107.496 ms

Loss rate: 0.91%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-15 23:41:50

End at: 2018-01-15 23:42:20

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 103.935 ms

Loss rate: 0.62%

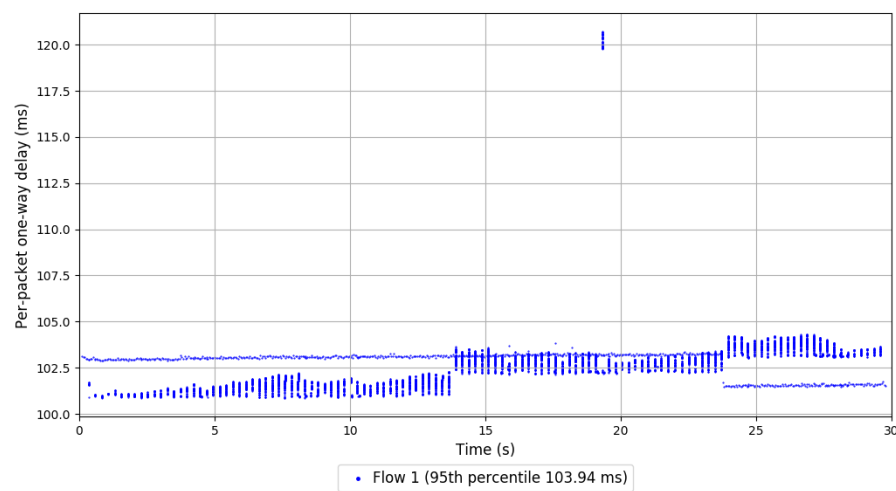
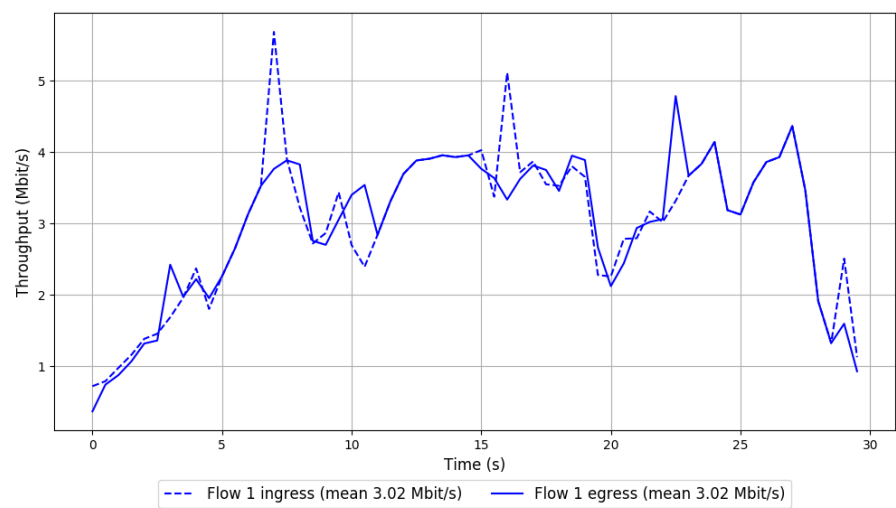
-- Flow 1:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 103.935 ms

Loss rate: 0.62%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-15 23:54:03

End at: 2018-01-15 23:54:33

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 106.369 ms

Loss rate: 0.43%

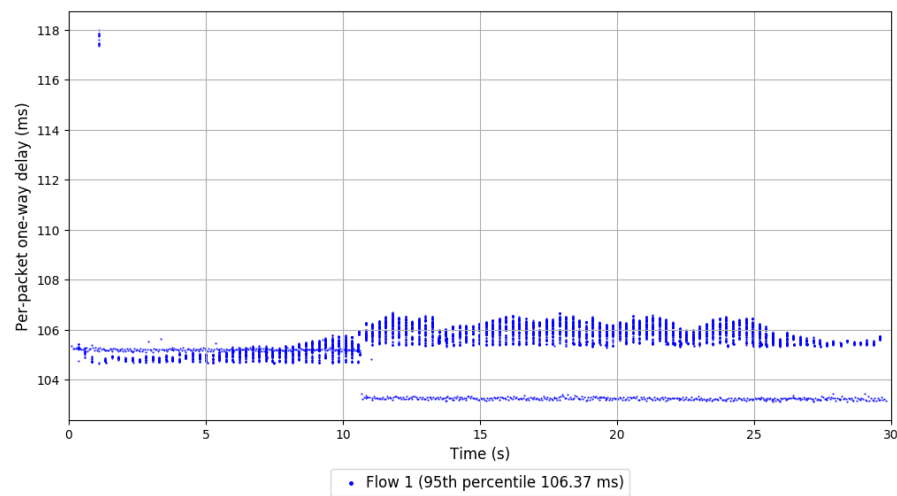
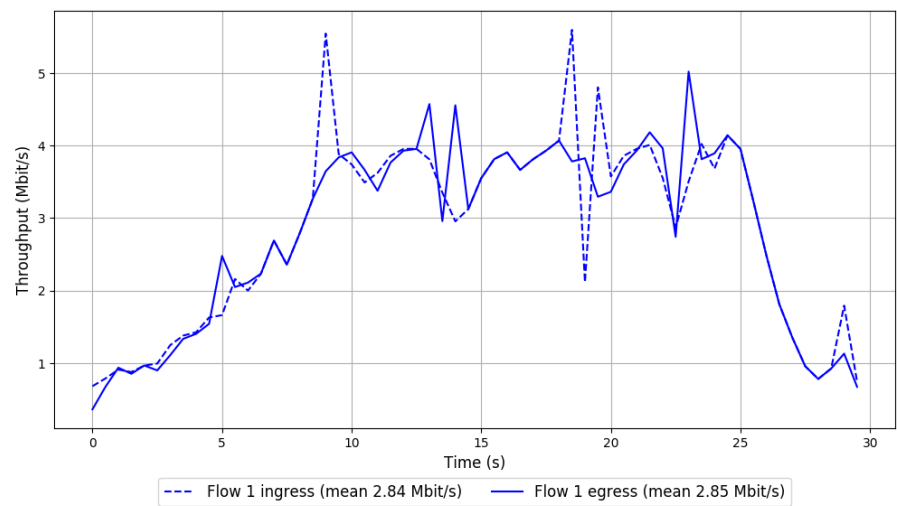
-- Flow 1:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 106.369 ms

Loss rate: 0.43%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-16 00:06:34

End at: 2018-01-16 00:07:04

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 108.207 ms

Loss rate: 2.88%

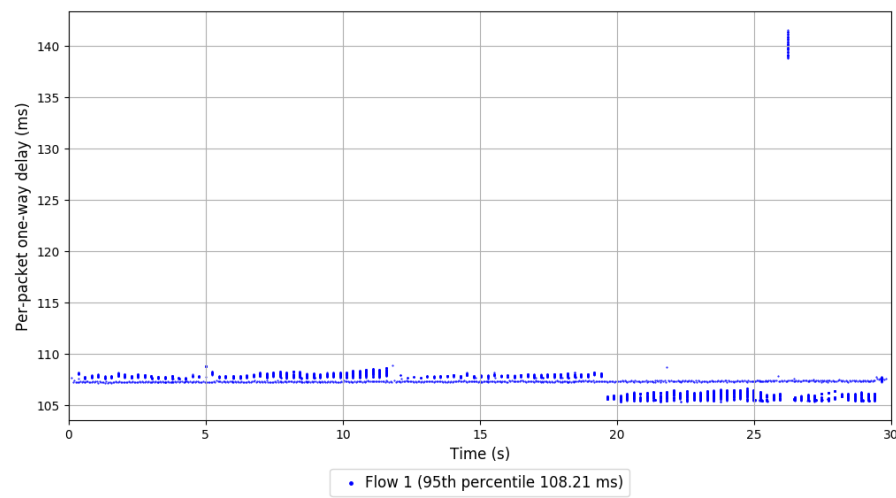
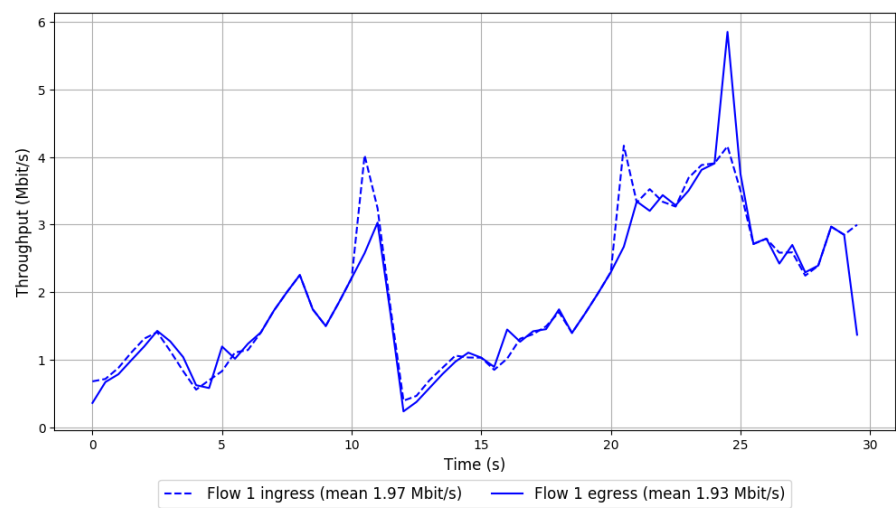
-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 108.207 ms

Loss rate: 2.88%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-16 00:18:49

End at: 2018-01-16 00:19:19

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 108.282 ms

Loss rate: 1.01%

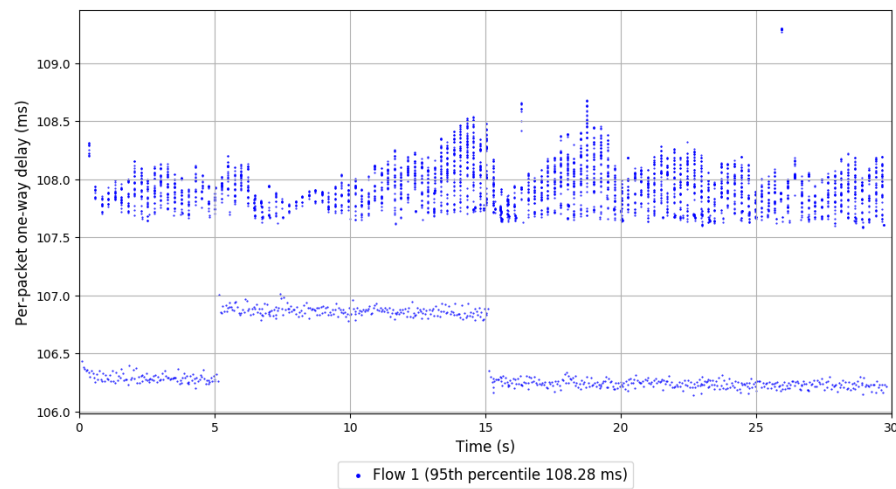
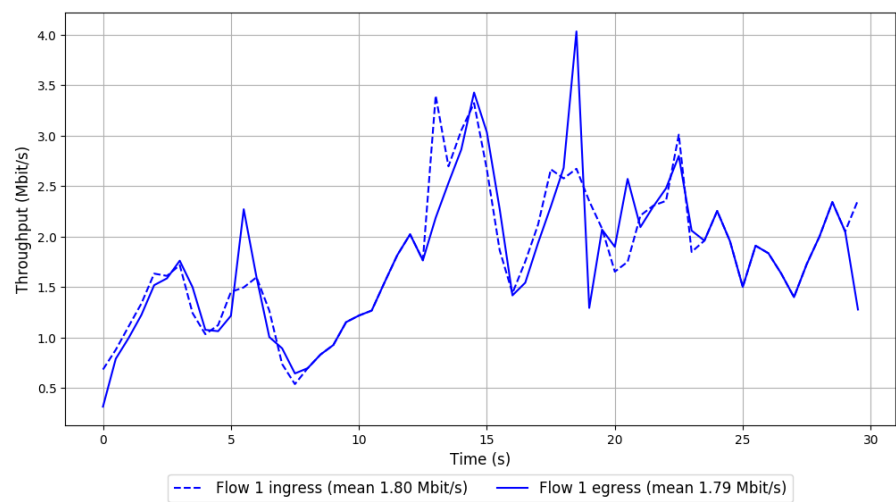
-- Flow 1:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 108.282 ms

Loss rate: 1.01%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-16 00:31:12

End at: 2018-01-16 00:31:42

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 109.490 ms

Loss rate: 0.81%

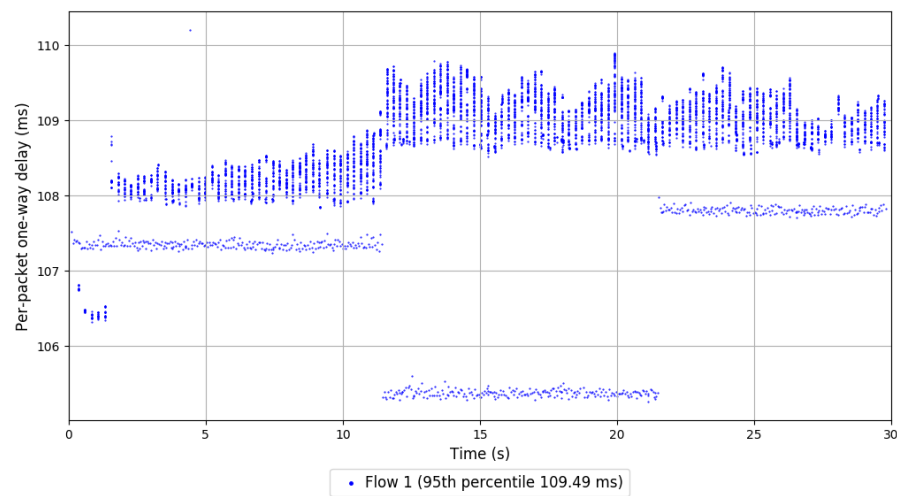
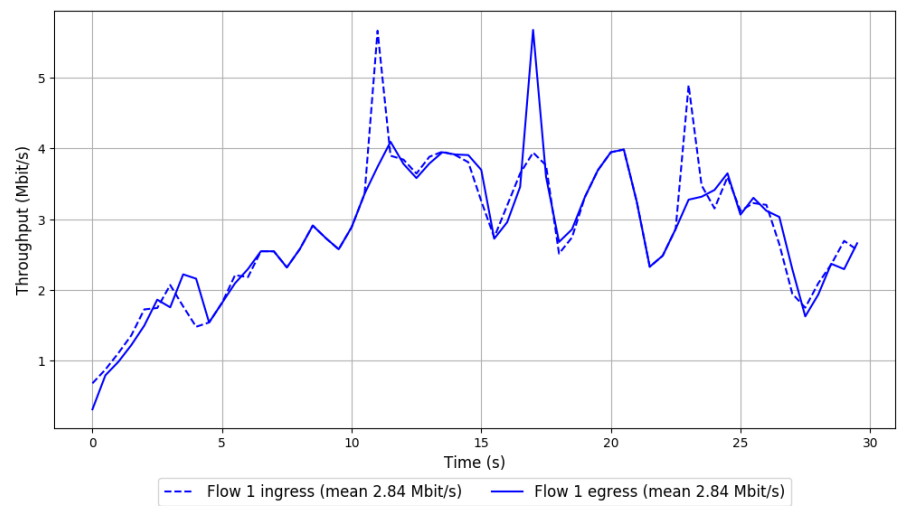
-- Flow 1:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 109.490 ms

Loss rate: 0.81%

Run 10: Report of Sprout — Data Link

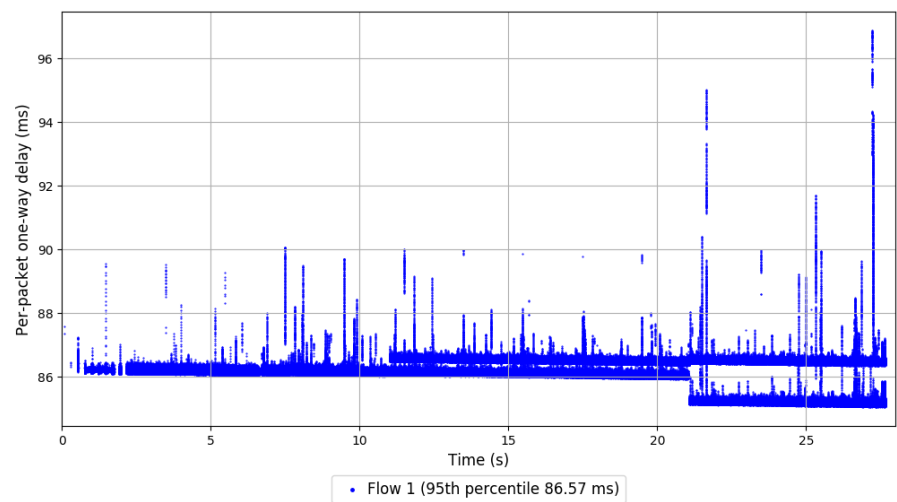
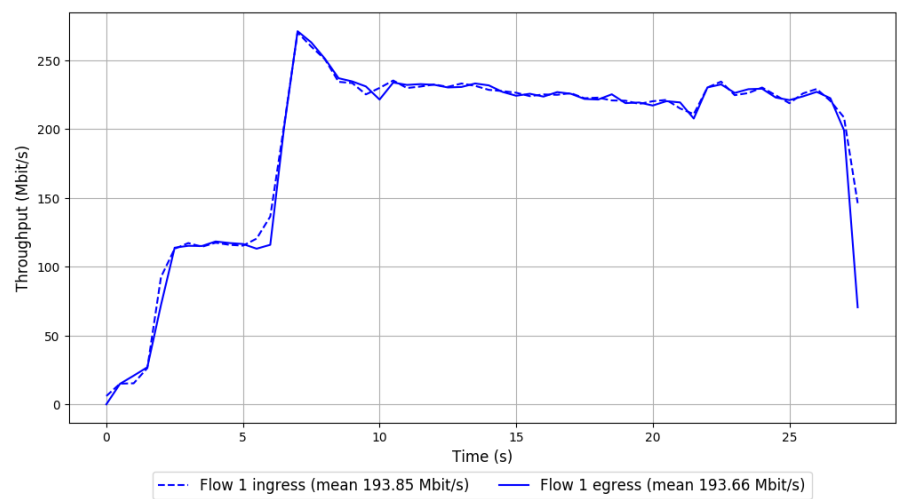


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-15 22:37:51
End at: 2018-01-15 22:38:21

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.66 Mbit/s
95th percentile per-packet one-way delay: 86.570 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 193.66 Mbit/s
95th percentile per-packet one-way delay: 86.570 ms
Loss rate: 1.15%
```


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

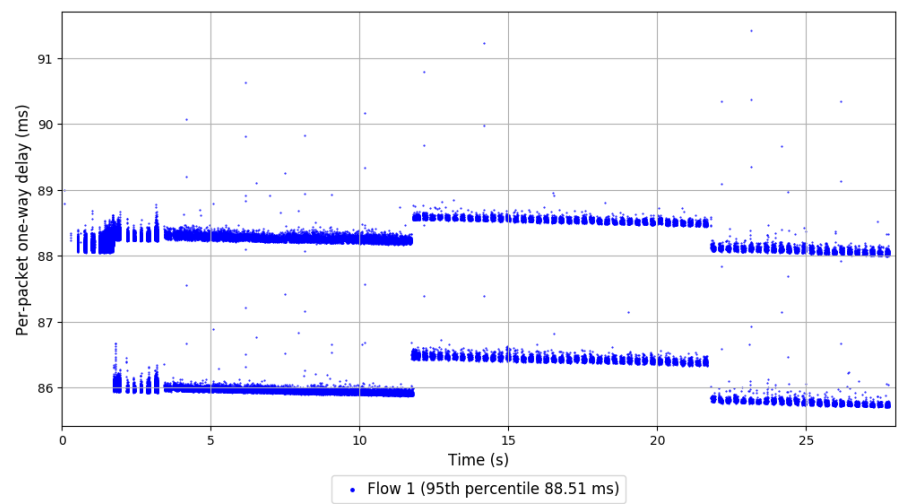
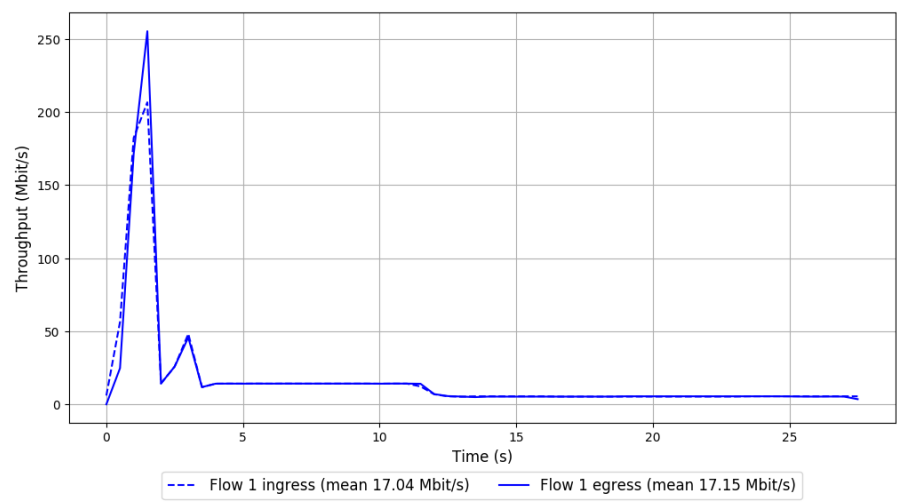


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-15 22:50:10
End at: 2018-01-15 22:50:40

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.15 Mbit/s
95th percentile per-packet one-way delay: 88.507 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 17.15 Mbit/s
95th percentile per-packet one-way delay: 88.507 ms
Loss rate: 0.29%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-01-15 23:02:25

End at: 2018-01-15 23:02:55

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.37 Mbit/s

95th percentile per-packet one-way delay: 96.701 ms

Loss rate: 0.03%

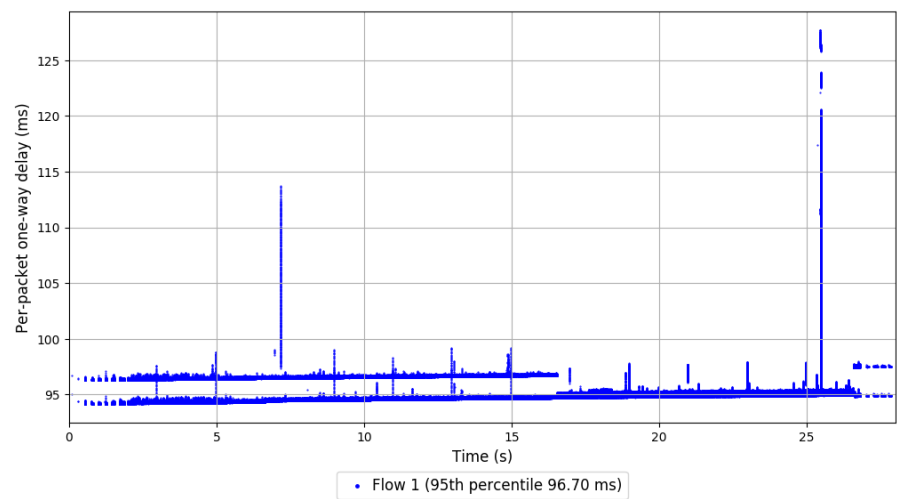
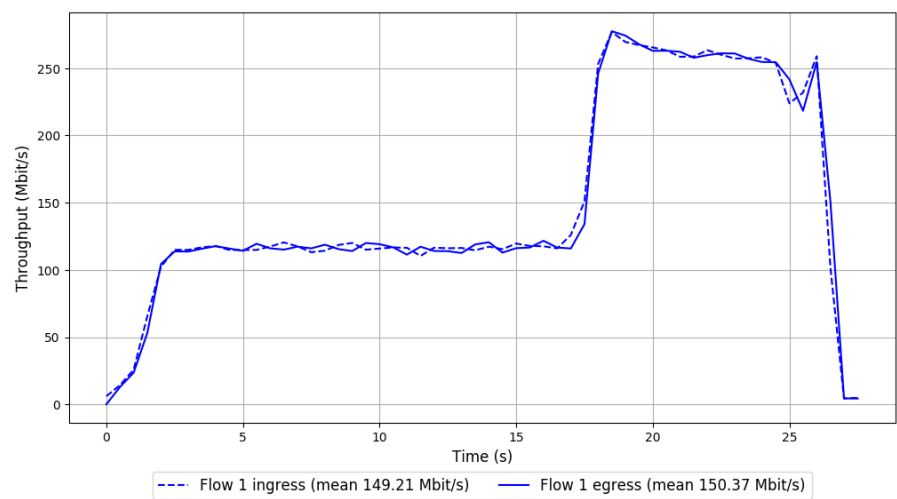
-- Flow 1:

Average throughput: 150.37 Mbit/s

95th percentile per-packet one-way delay: 96.701 ms

Loss rate: 0.03%

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

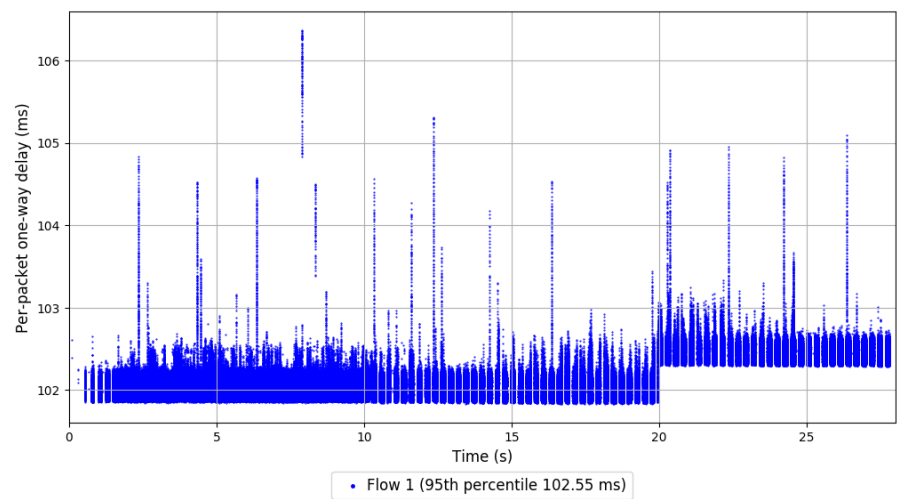
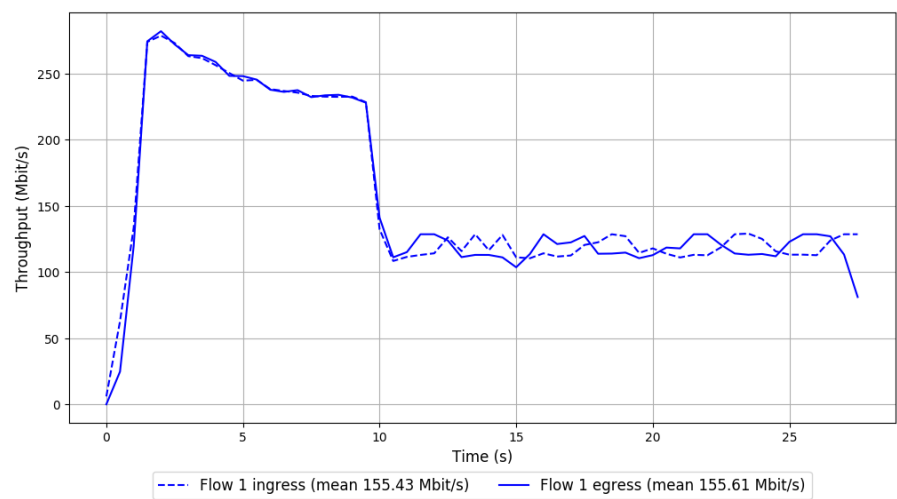


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-15 23:15:02
End at: 2018-01-15 23:15:32

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 155.61 Mbit/s
95th percentile per-packet one-way delay: 102.545 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 155.61 Mbit/s
95th percentile per-packet one-way delay: 102.545 ms
Loss rate: 0.85%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-15 23:27:31

End at: 2018-01-15 23:28:01

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.89 Mbit/s

95th percentile per-packet one-way delay: 107.342 ms

Loss rate: 0.91%

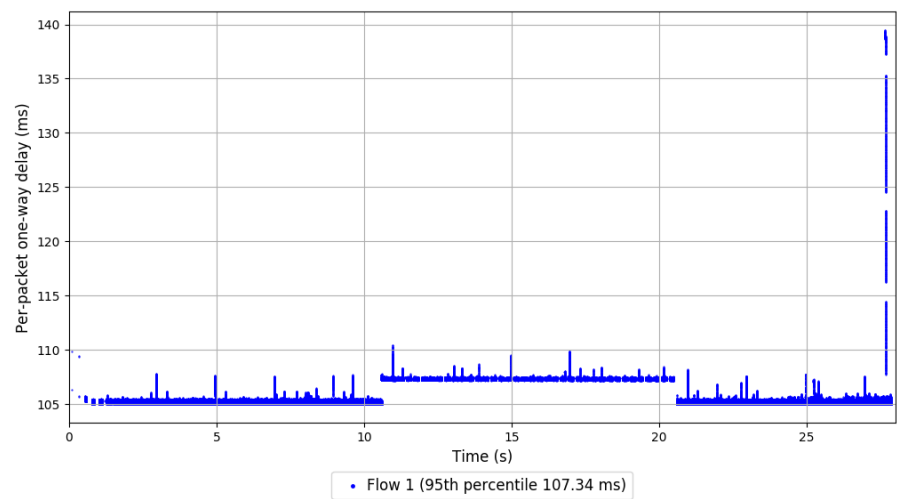
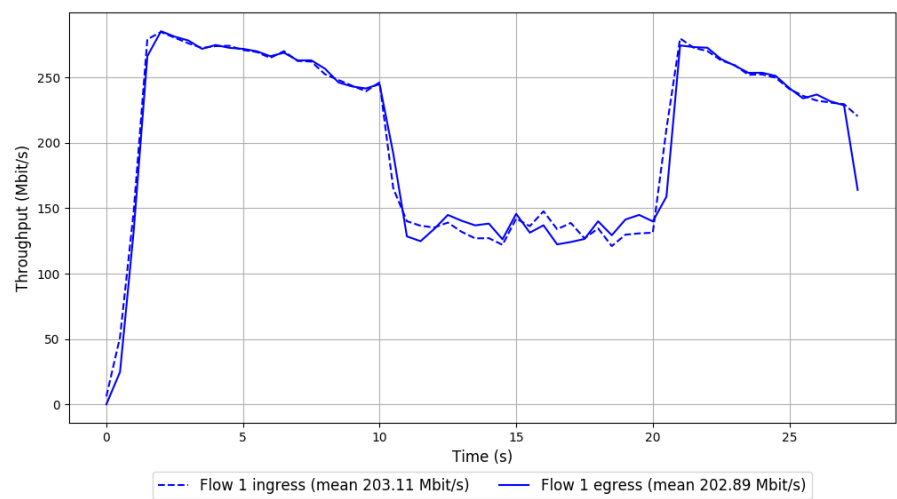
-- Flow 1:

Average throughput: 202.89 Mbit/s

95th percentile per-packet one-way delay: 107.342 ms

Loss rate: 0.91%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-15 23:40:10

End at: 2018-01-15 23:40:40

Below is generated by plot.py at 2018-01-16 03:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.14 Mbit/s

95th percentile per-packet one-way delay: 103.378 ms

Loss rate: 0.99%

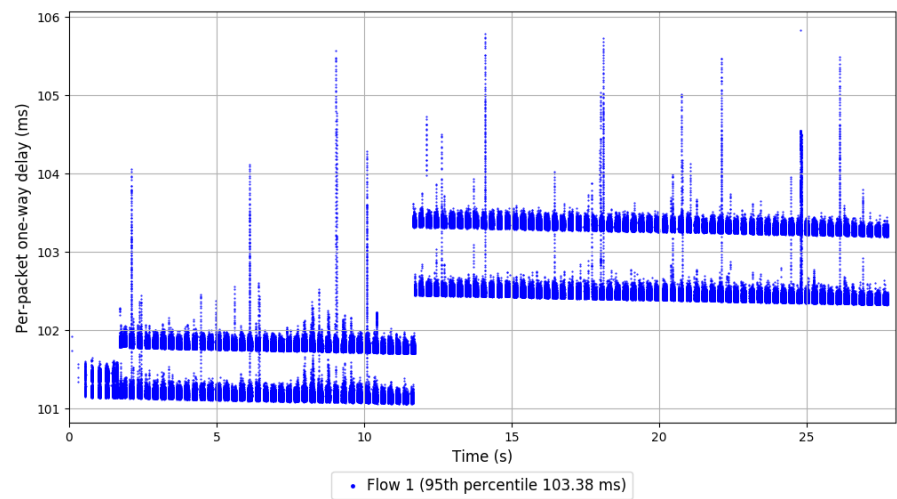
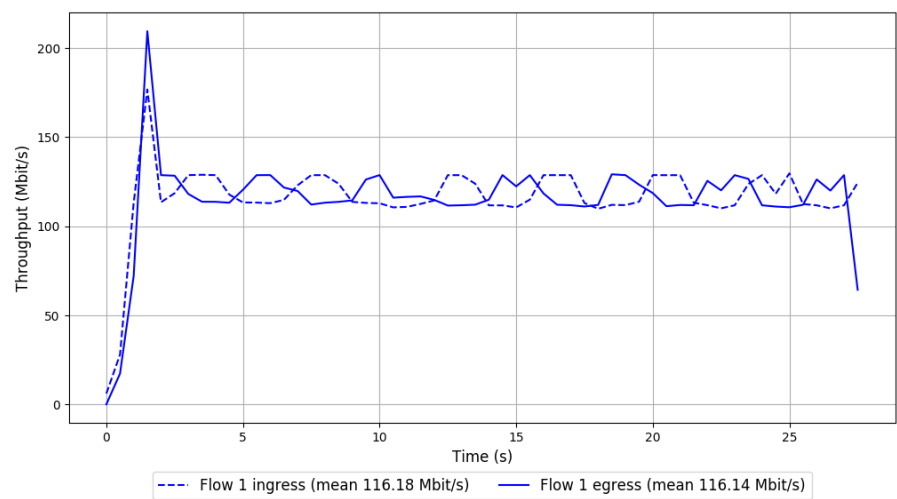
-- Flow 1:

Average throughput: 116.14 Mbit/s

95th percentile per-packet one-way delay: 103.378 ms

Loss rate: 0.99%

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

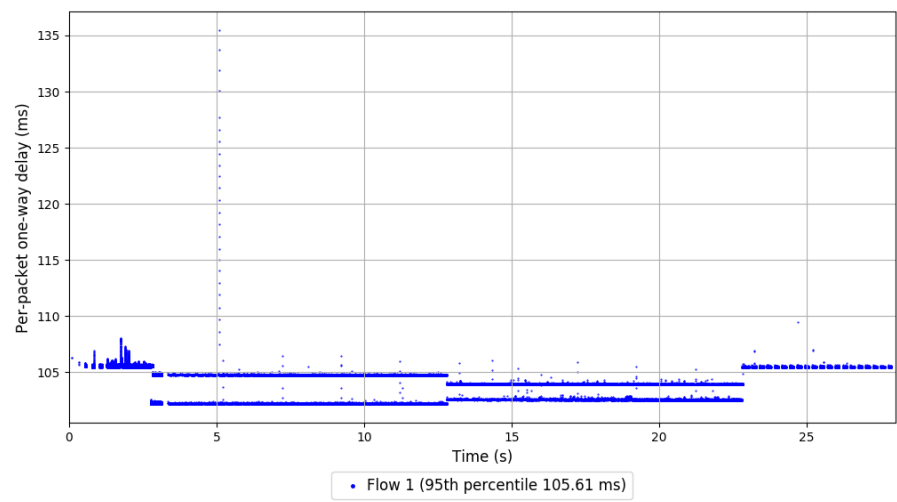
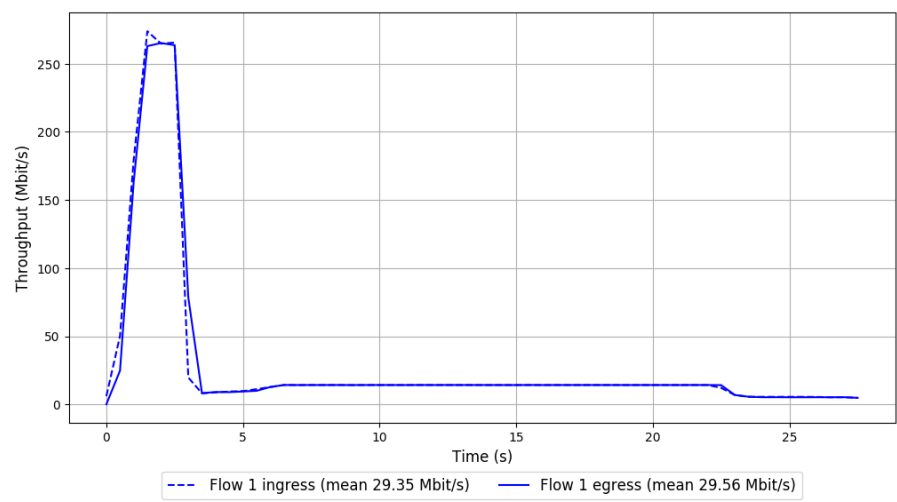


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-15 23:52:39
End at: 2018-01-15 23:53:09

# Below is generated by plot.py at 2018-01-16 03:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 105.613 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 105.613 ms
Loss rate: 0.13%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-16 00:04:47

End at: 2018-01-16 00:05:17

Below is generated by plot.py at 2018-01-16 03:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.85 Mbit/s

95th percentile per-packet one-way delay: 107.061 ms

Loss rate: 0.08%

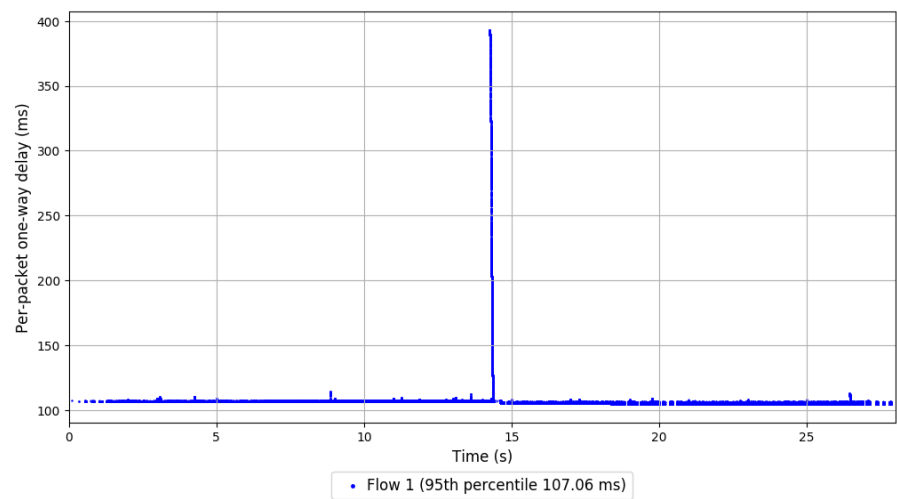
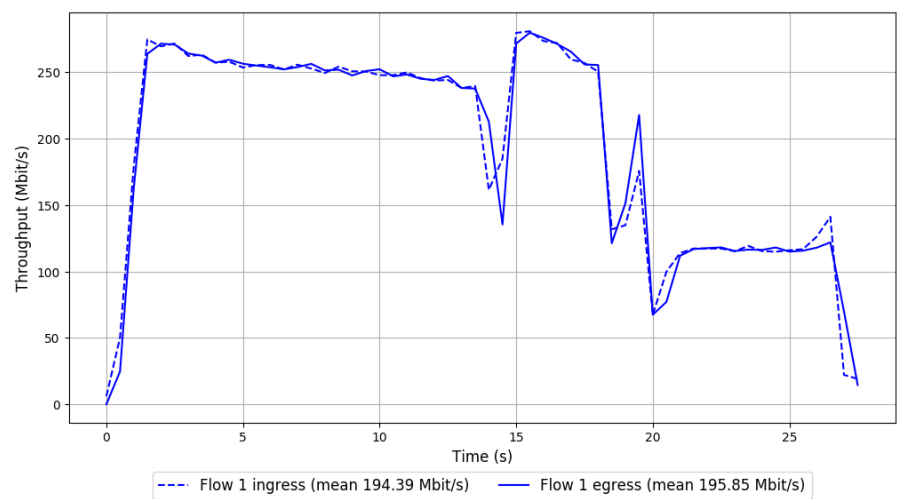
-- Flow 1:

Average throughput: 195.85 Mbit/s

95th percentile per-packet one-way delay: 107.061 ms

Loss rate: 0.08%

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

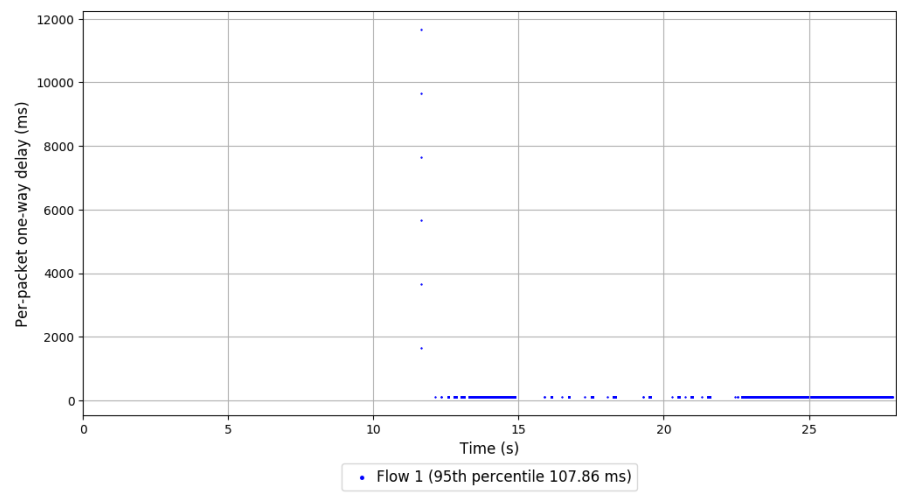
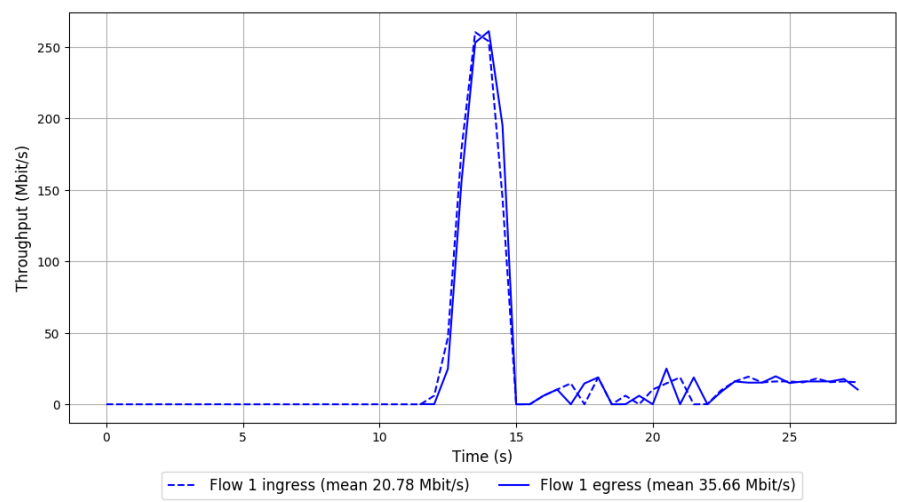


Run 9: Statistics of TaoVA-100x

Start at: 2018-01-16 00:17:17

End at: 2018-01-16 00:17:47

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

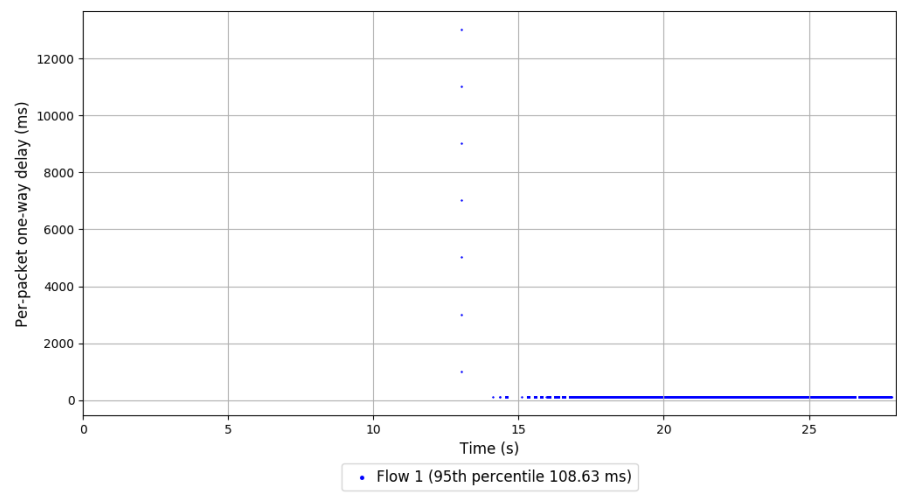
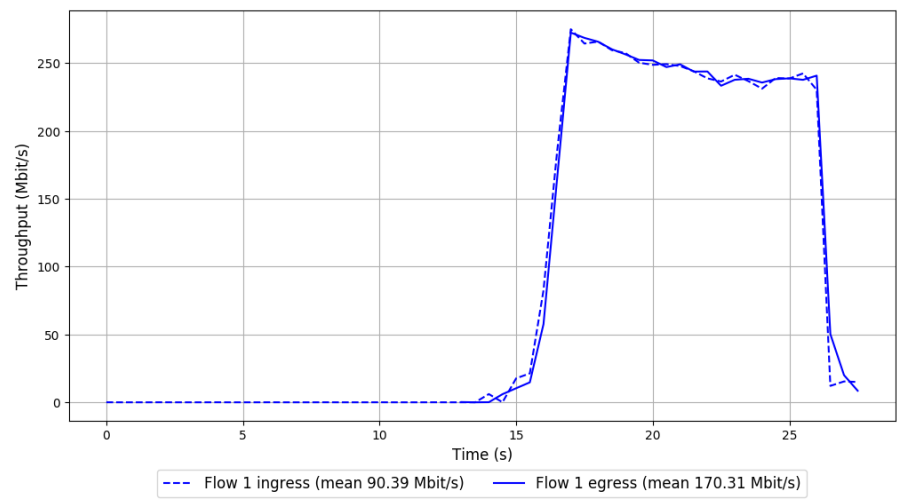


Run 10: Statistics of TaoVA-100x

Start at: 2018-01-16 00:29:36

End at: 2018-01-16 00:30:06

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-15 22:45:36

End at: 2018-01-15 22:46:06

Below is generated by plot.py at 2018-01-16 03:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.13 Mbit/s

95th percentile per-packet one-way delay: 84.019 ms

Loss rate: 0.70%

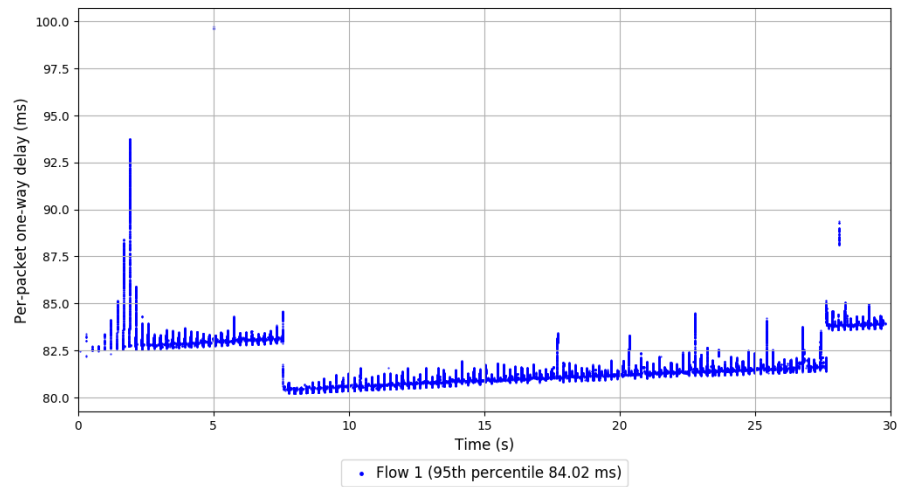
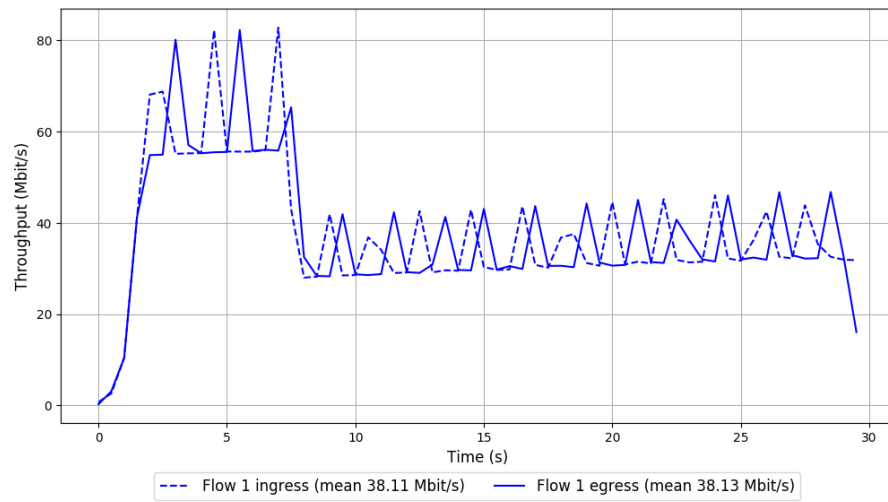
-- Flow 1:

Average throughput: 38.13 Mbit/s

95th percentile per-packet one-way delay: 84.019 ms

Loss rate: 0.70%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-15 22:57:41

End at: 2018-01-15 22:58:11

Below is generated by plot.py at 2018-01-16 03:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 92.594 ms

Loss rate: 1.98%

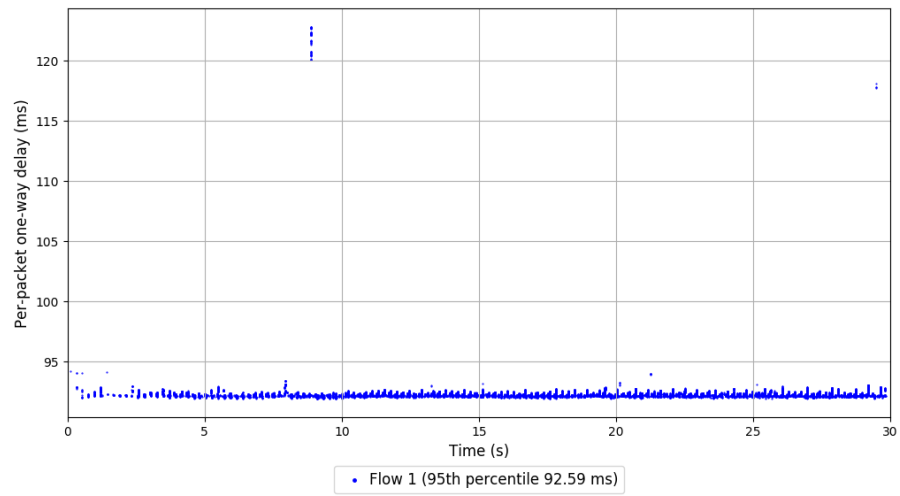
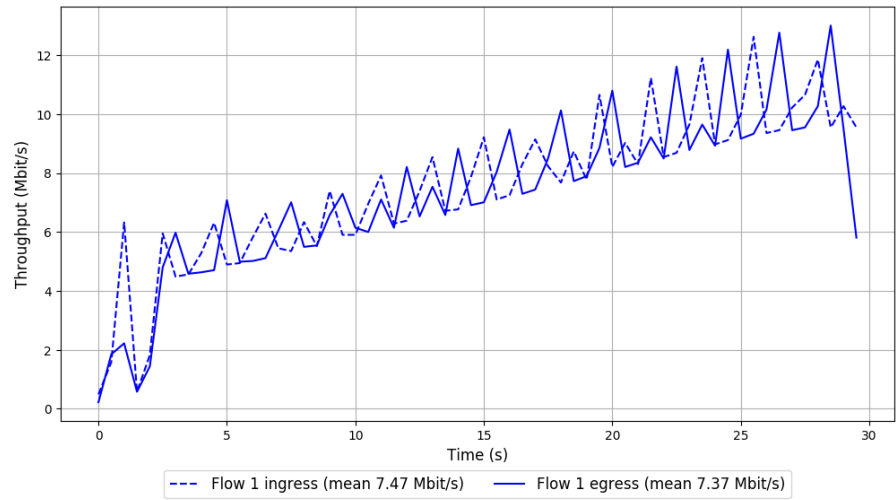
-- Flow 1:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 92.594 ms

Loss rate: 1.98%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-15 23:10:09

End at: 2018-01-15 23:10:39

Below is generated by plot.py at 2018-01-16 03:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.02 Mbit/s

95th percentile per-packet one-way delay: 108.441 ms

Loss rate: 0.70%

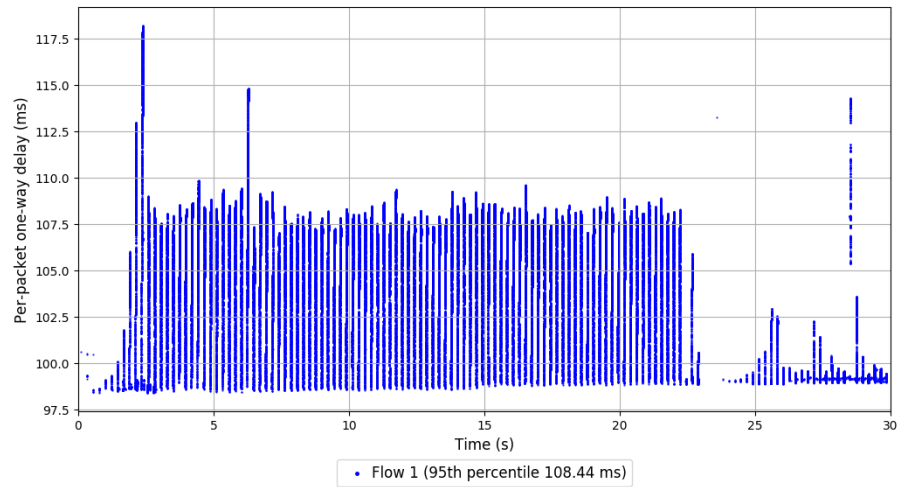
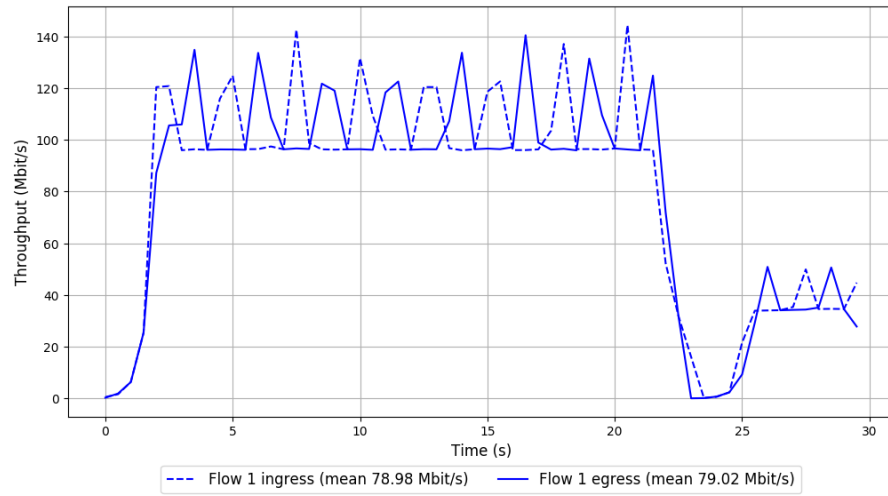
-- Flow 1:

Average throughput: 79.02 Mbit/s

95th percentile per-packet one-way delay: 108.441 ms

Loss rate: 0.70%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-15 23:22:44

End at: 2018-01-15 23:23:14

Below is generated by plot.py at 2018-01-16 03:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.56 Mbit/s

95th percentile per-packet one-way delay: 110.384 ms

Loss rate: 0.76%

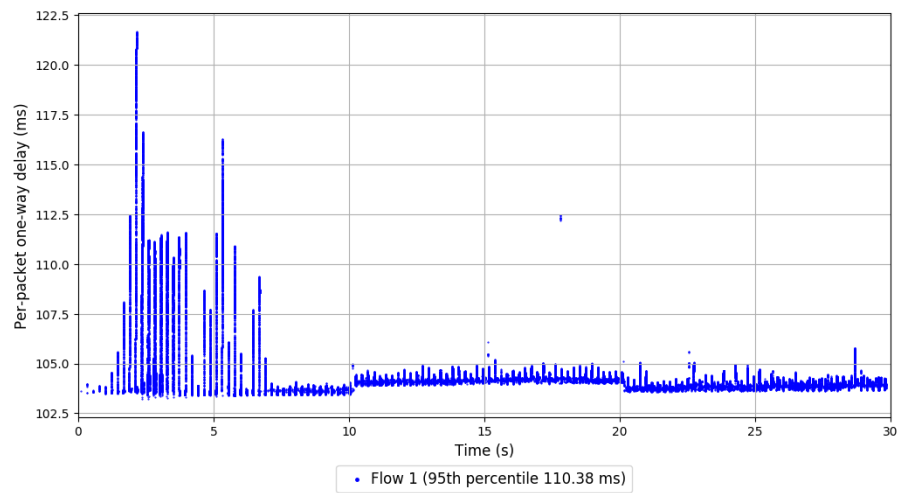
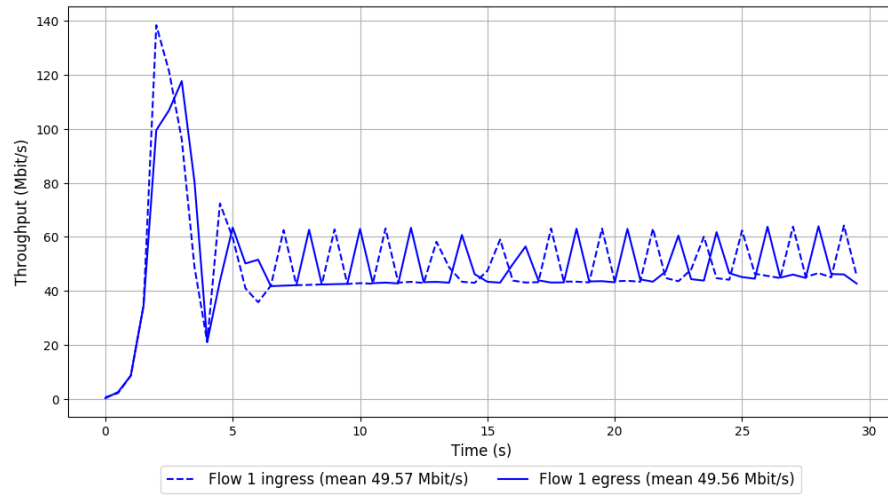
-- Flow 1:

Average throughput: 49.56 Mbit/s

95th percentile per-packet one-way delay: 110.384 ms

Loss rate: 0.76%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-15 23:35:16

End at: 2018-01-15 23:35:46

Below is generated by plot.py at 2018-01-16 03:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.26 Mbit/s

95th percentile per-packet one-way delay: 111.305 ms

Loss rate: 0.81%

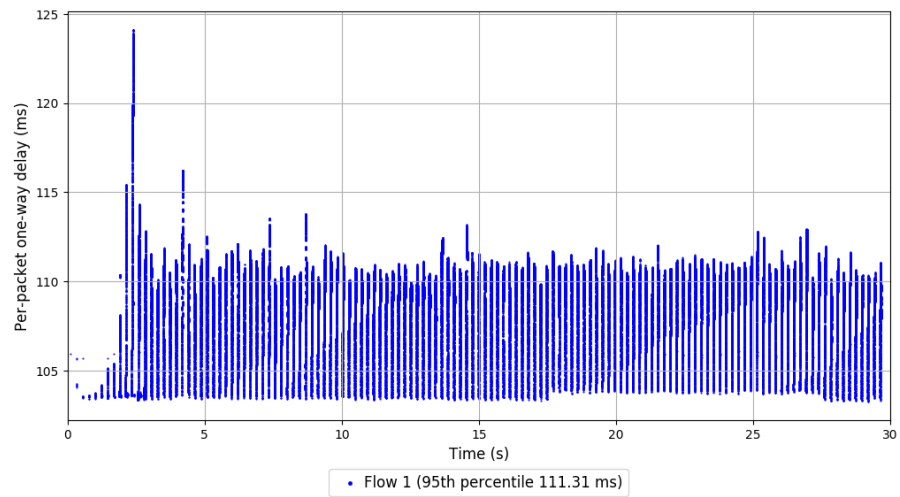
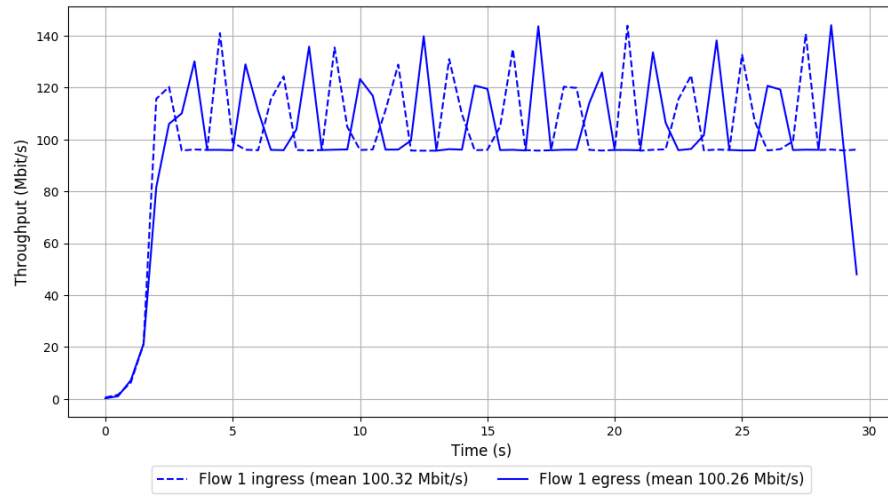
-- Flow 1:

Average throughput: 100.26 Mbit/s

95th percentile per-packet one-way delay: 111.305 ms

Loss rate: 0.81%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-15 23:47:49

End at: 2018-01-15 23:48:19

Below is generated by plot.py at 2018-01-16 03:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.32 Mbit/s

95th percentile per-packet one-way delay: 105.050 ms

Loss rate: 0.79%

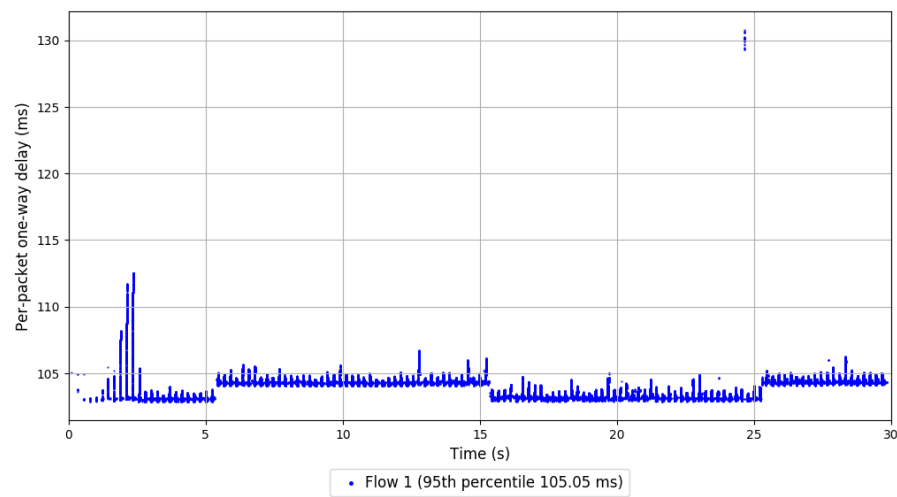
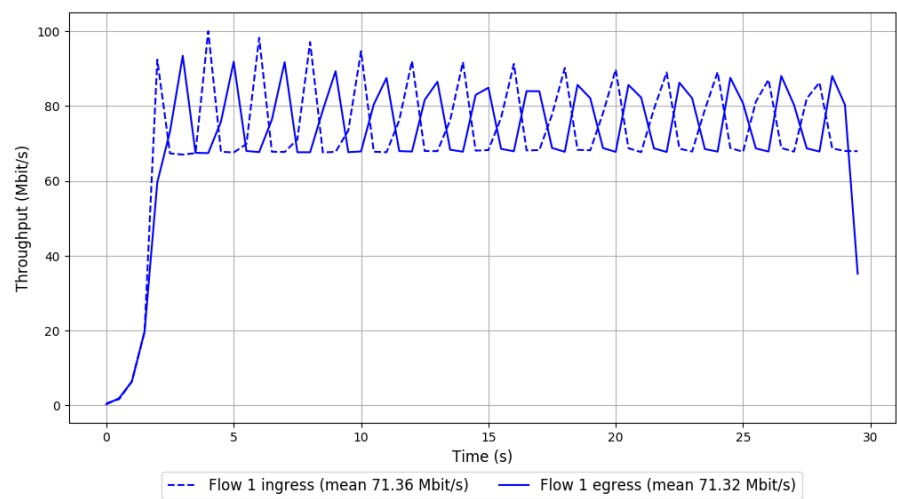
-- Flow 1:

Average throughput: 71.32 Mbit/s

95th percentile per-packet one-way delay: 105.050 ms

Loss rate: 0.79%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-16 00:00:03

End at: 2018-01-16 00:00:33

Below is generated by plot.py at 2018-01-16 03:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.22 Mbit/s

95th percentile per-packet one-way delay: 104.783 ms

Loss rate: 1.57%

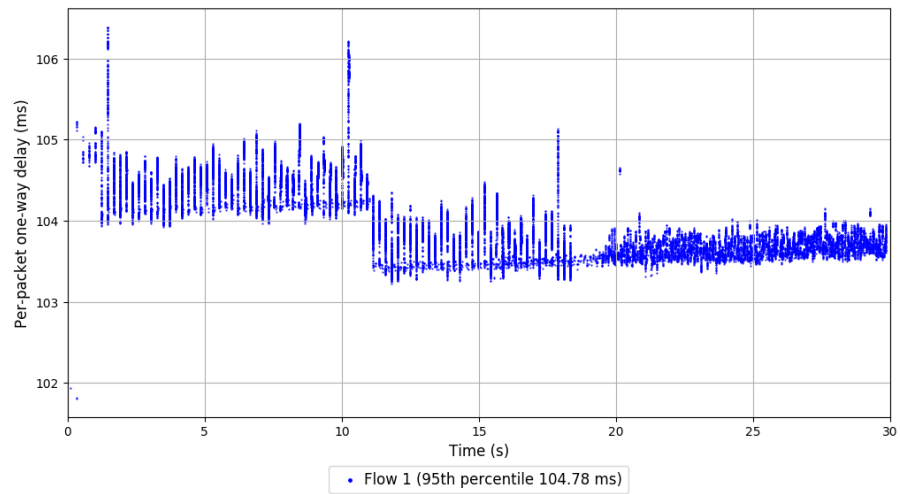
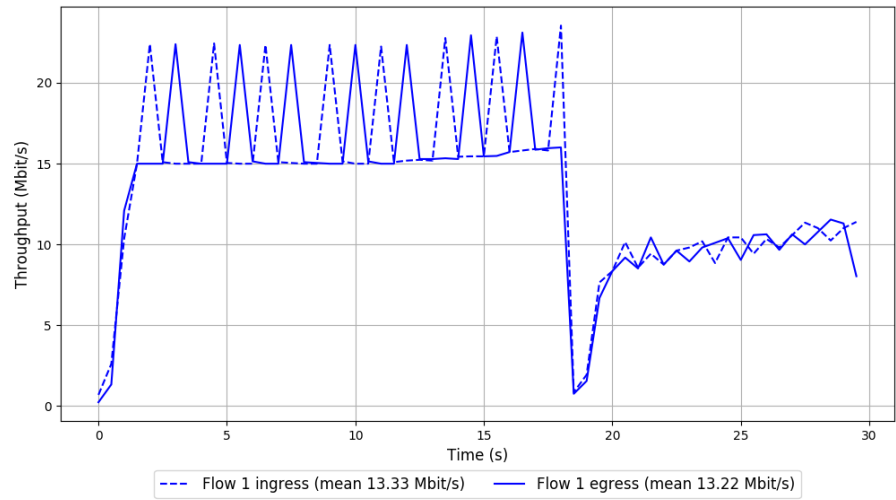
-- Flow 1:

Average throughput: 13.22 Mbit/s

95th percentile per-packet one-way delay: 104.783 ms

Loss rate: 1.57%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-16 00:12:31

End at: 2018-01-16 00:13:01

Below is generated by plot.py at 2018-01-16 03:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.74 Mbit/s

95th percentile per-packet one-way delay: 108.911 ms

Loss rate: 0.81%

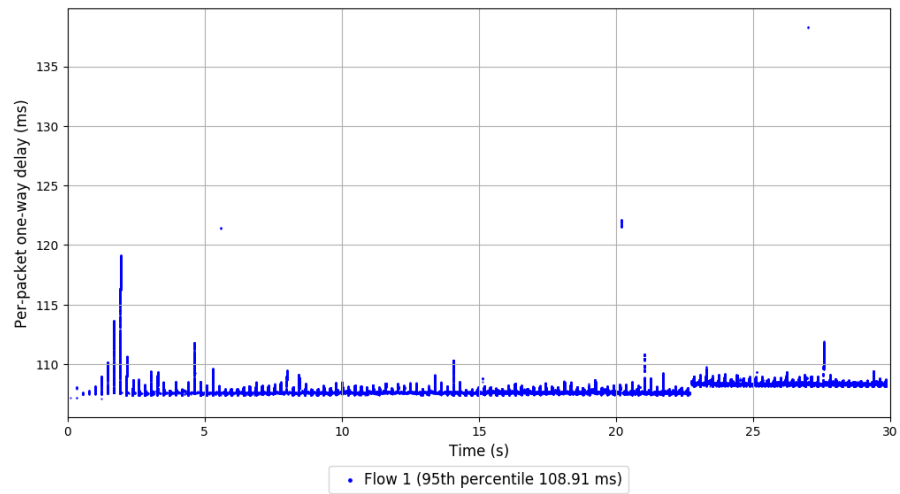
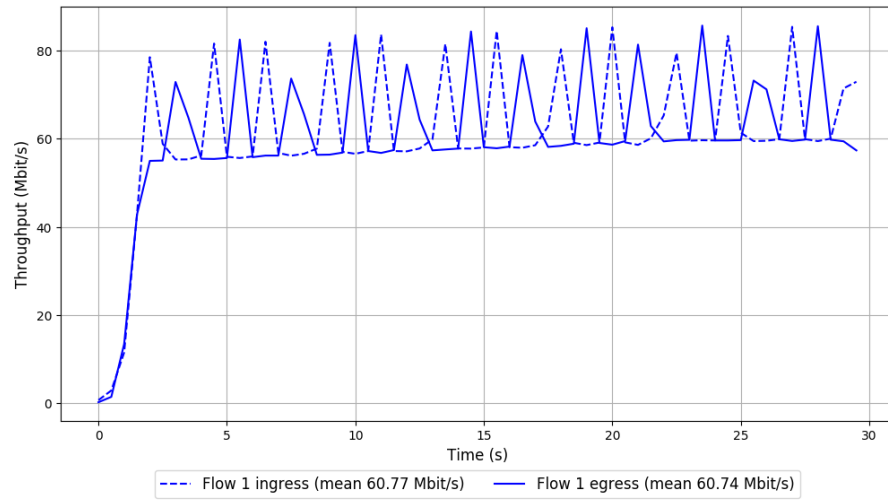
-- Flow 1:

Average throughput: 60.74 Mbit/s

95th percentile per-packet one-way delay: 108.911 ms

Loss rate: 0.81%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-16 00:24:49

End at: 2018-01-16 00:25:19

Below is generated by plot.py at 2018-01-16 03:09:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.53 Mbit/s

95th percentile per-packet one-way delay: 113.460 ms

Loss rate: 0.40%

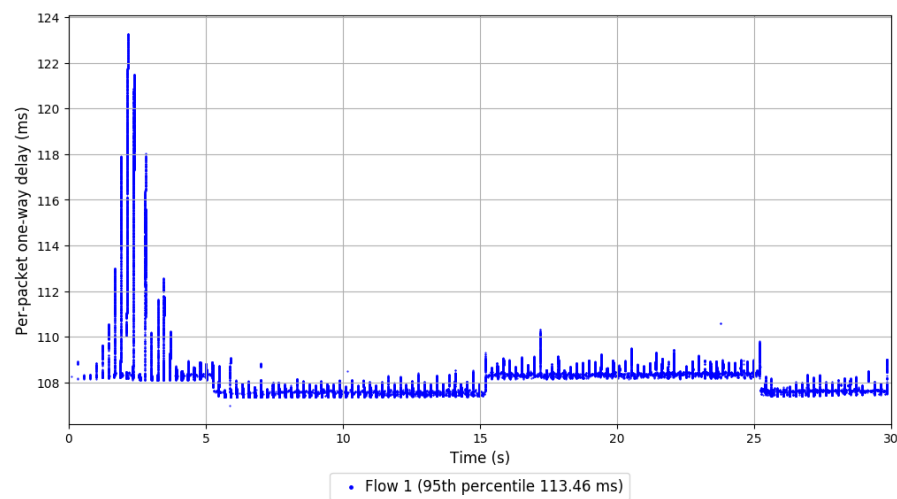
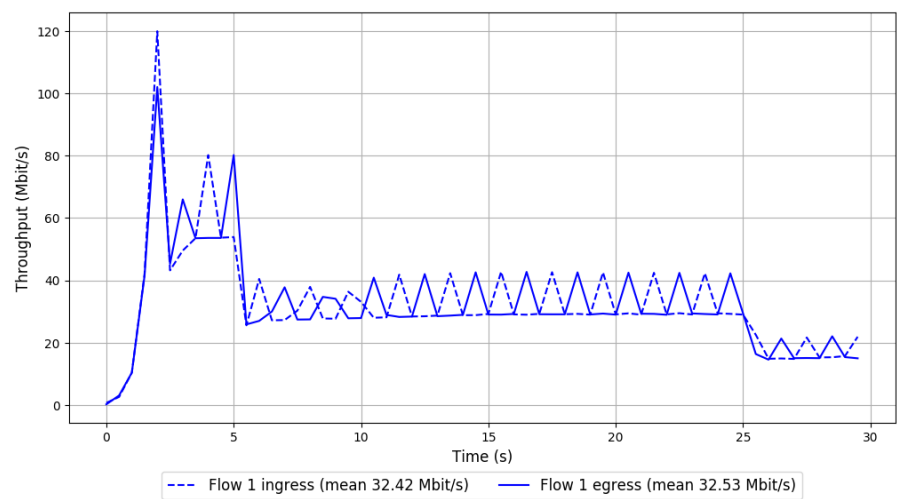
-- Flow 1:

Average throughput: 32.53 Mbit/s

95th percentile per-packet one-way delay: 113.460 ms

Loss rate: 0.40%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-16 00:37:10

End at: 2018-01-16 00:37:40

Below is generated by plot.py at 2018-01-16 03:09:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.22 Mbit/s

95th percentile per-packet one-way delay: 116.113 ms

Loss rate: 0.50%

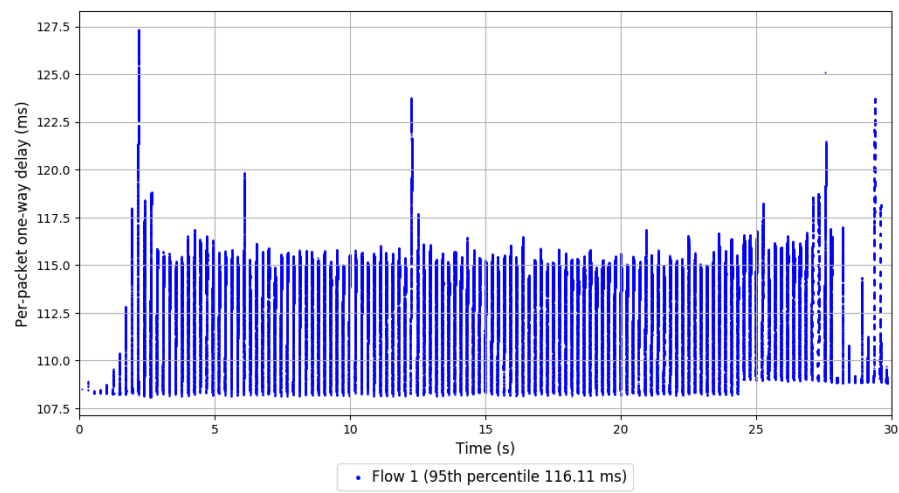
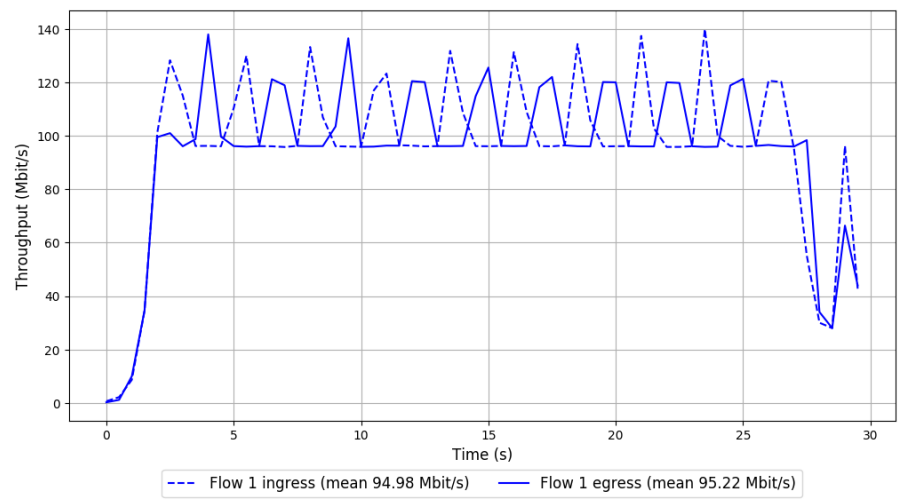
-- Flow 1:

Average throughput: 95.22 Mbit/s

95th percentile per-packet one-way delay: 116.113 ms

Loss rate: 0.50%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-15 22:35:15

End at: 2018-01-15 22:35:45

Below is generated by plot.py at 2018-01-16 03:10:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.53 Mbit/s

95th percentile per-packet one-way delay: 102.357 ms

Loss rate: 2.09%

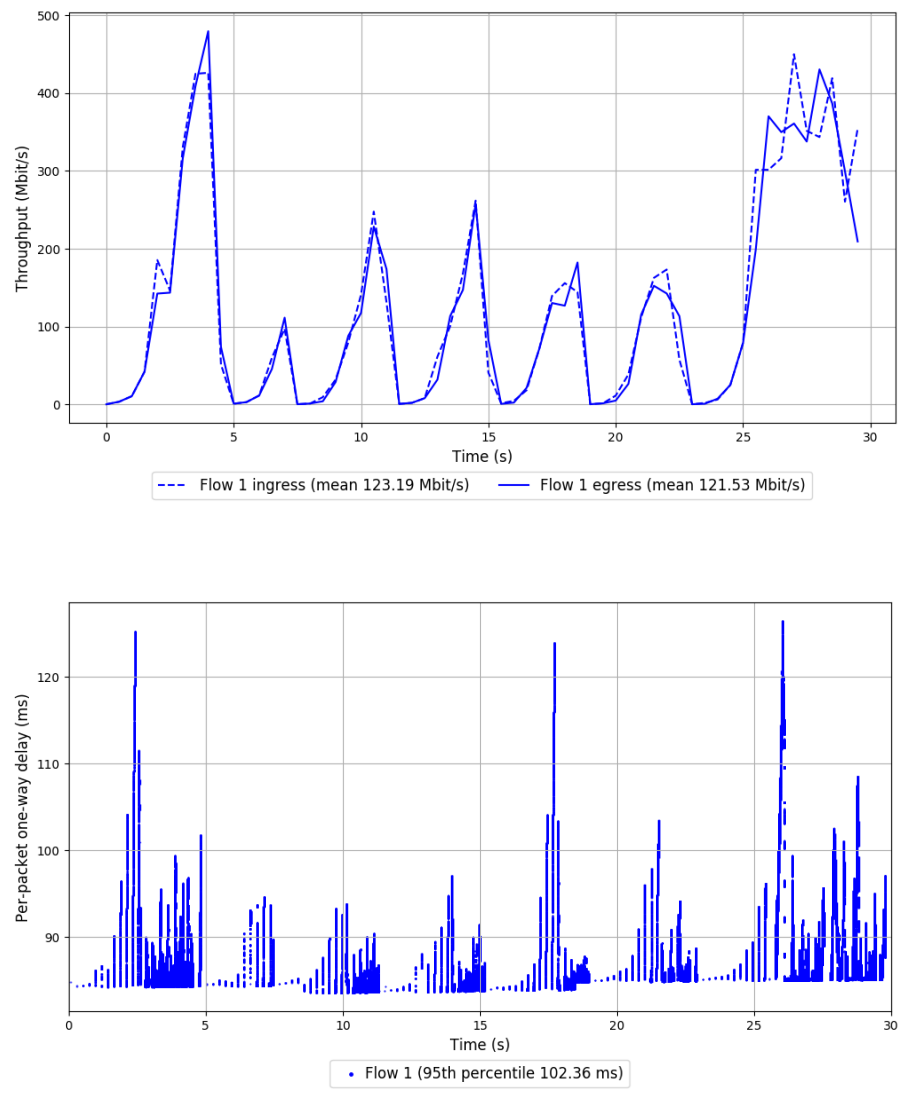
-- Flow 1:

Average throughput: 121.53 Mbit/s

95th percentile per-packet one-way delay: 102.357 ms

Loss rate: 2.09%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-15 22:47:41

End at: 2018-01-15 22:48:11

Below is generated by plot.py at 2018-01-16 03:10:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 151.72 Mbit/s

95th percentile per-packet one-way delay: 117.635 ms

Loss rate: 0.00%

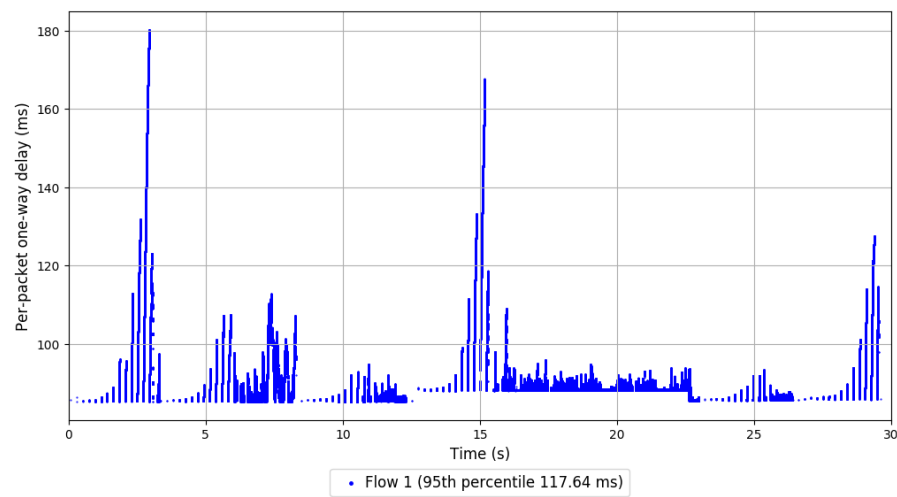
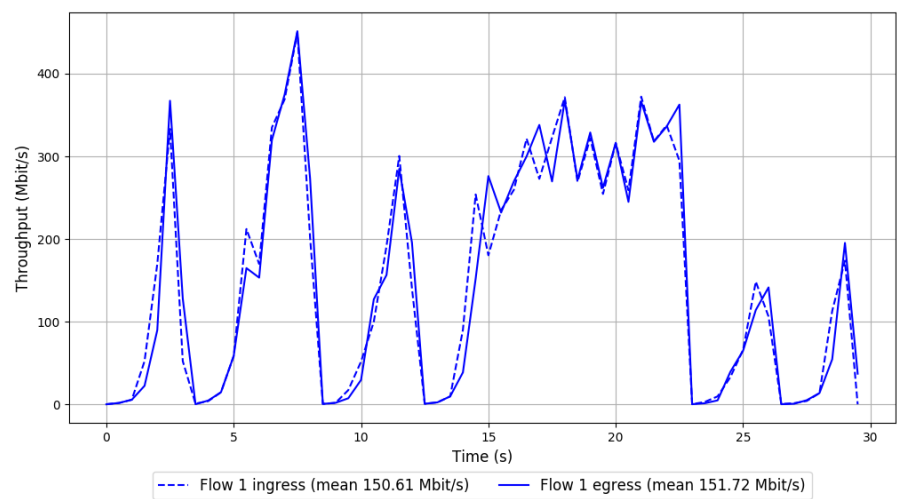
-- Flow 1:

Average throughput: 151.72 Mbit/s

95th percentile per-packet one-way delay: 117.635 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-15 22:59:50

End at: 2018-01-15 23:00:20

Below is generated by plot.py at 2018-01-16 03:10:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 154.57 Mbit/s

95th percentile per-packet one-way delay: 132.825 ms

Loss rate: 0.94%

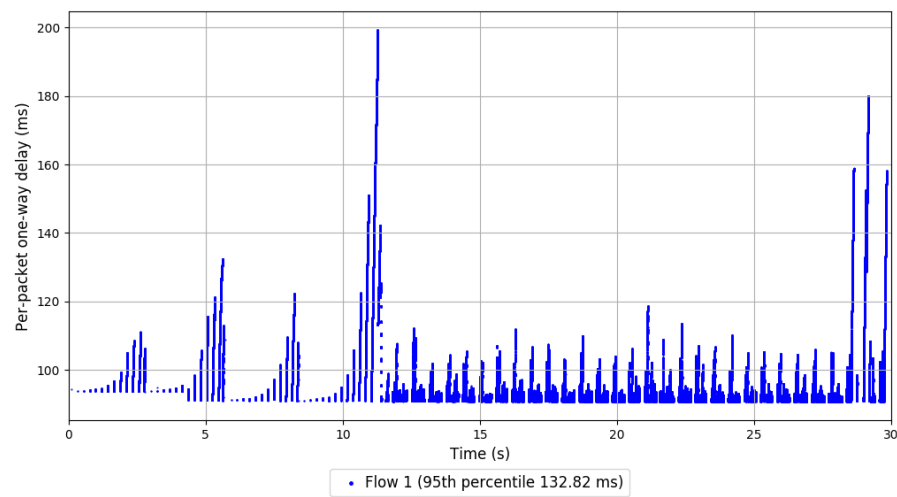
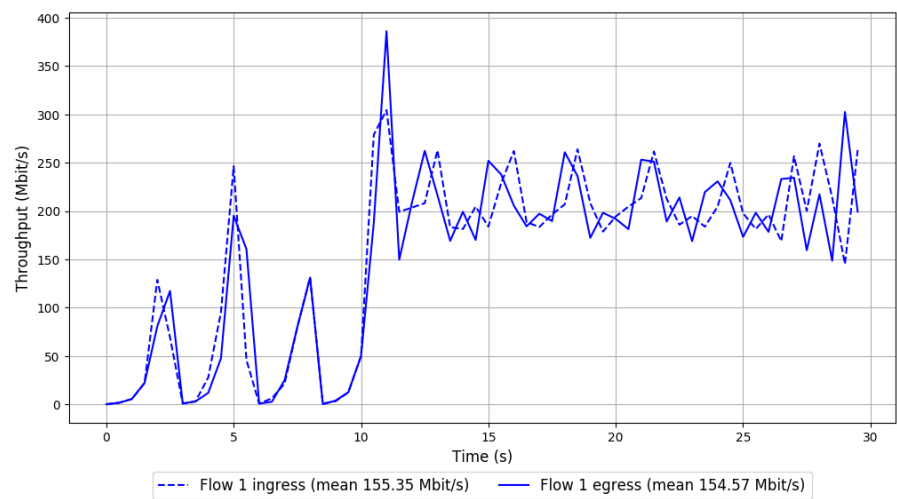
-- Flow 1:

Average throughput: 154.57 Mbit/s

95th percentile per-packet one-way delay: 132.825 ms

Loss rate: 0.94%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-15 23:12:22

End at: 2018-01-15 23:12:52

Below is generated by plot.py at 2018-01-16 03:12:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.70 Mbit/s

95th percentile per-packet one-way delay: 133.060 ms

Loss rate: 0.20%

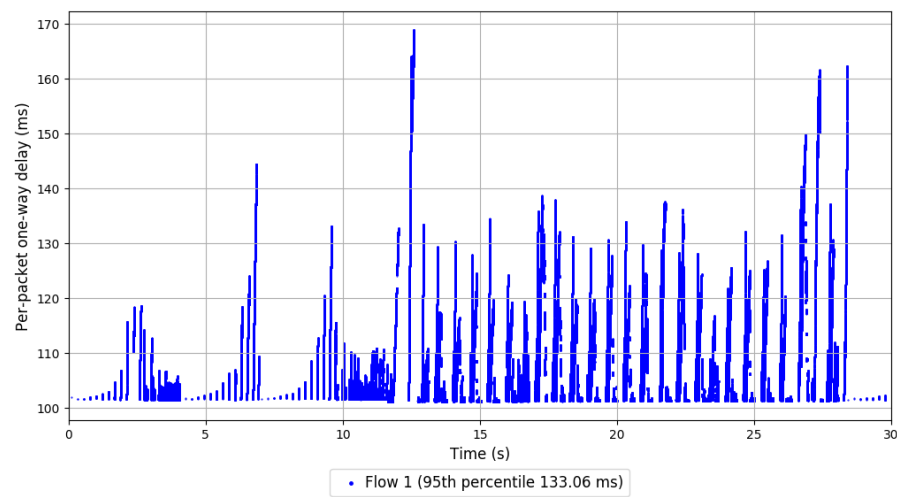
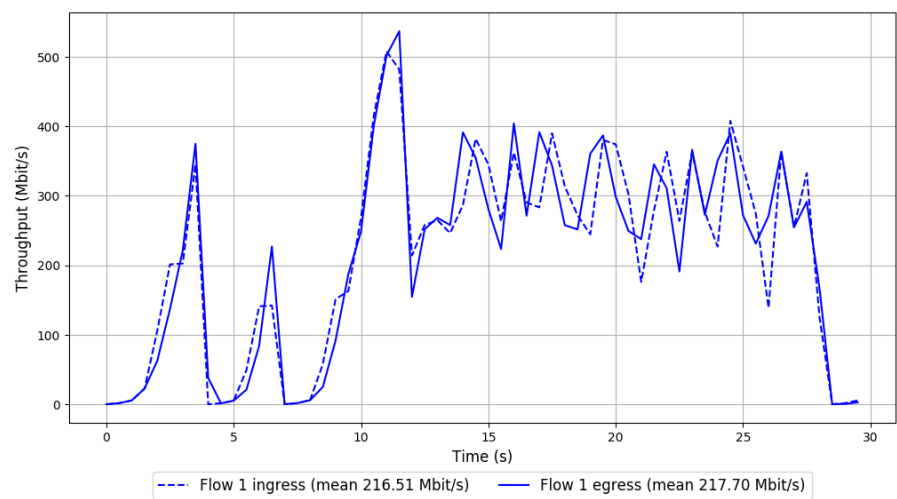
-- Flow 1:

Average throughput: 217.70 Mbit/s

95th percentile per-packet one-way delay: 133.060 ms

Loss rate: 0.20%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-15 23:24:55

End at: 2018-01-15 23:25:25

Below is generated by plot.py at 2018-01-16 03:12:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 160.39 Mbit/s

95th percentile per-packet one-way delay: 121.999 ms

Loss rate: 0.78%

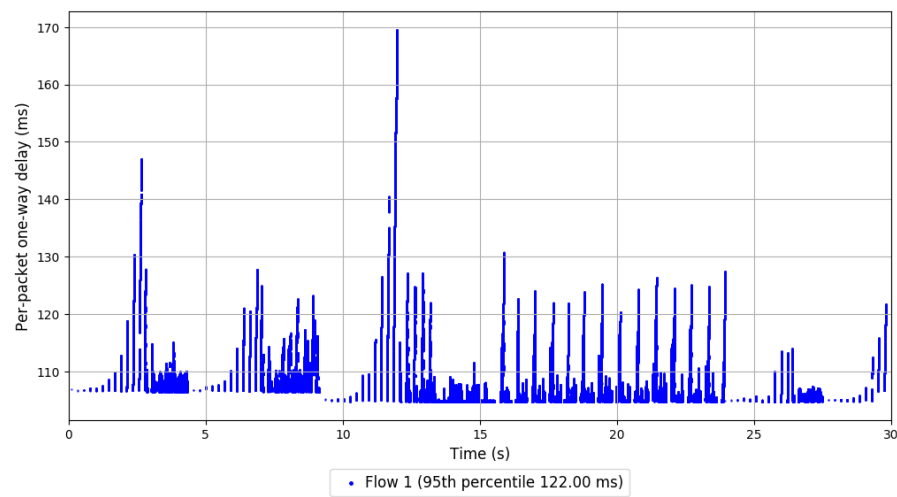
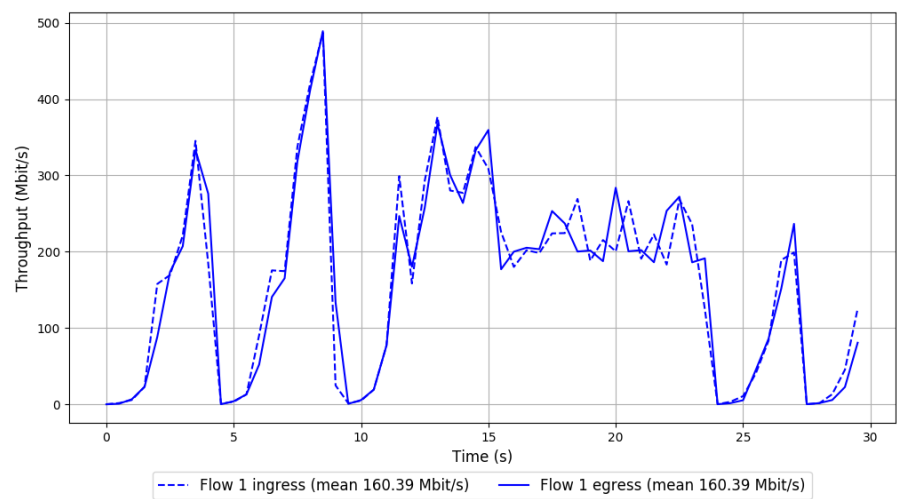
-- Flow 1:

Average throughput: 160.39 Mbit/s

95th percentile per-packet one-way delay: 121.999 ms

Loss rate: 0.78%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-15 23:37:30

End at: 2018-01-15 23:38:00

Below is generated by plot.py at 2018-01-16 03:12:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.10 Mbit/s

95th percentile per-packet one-way delay: 132.532 ms

Loss rate: 0.02%

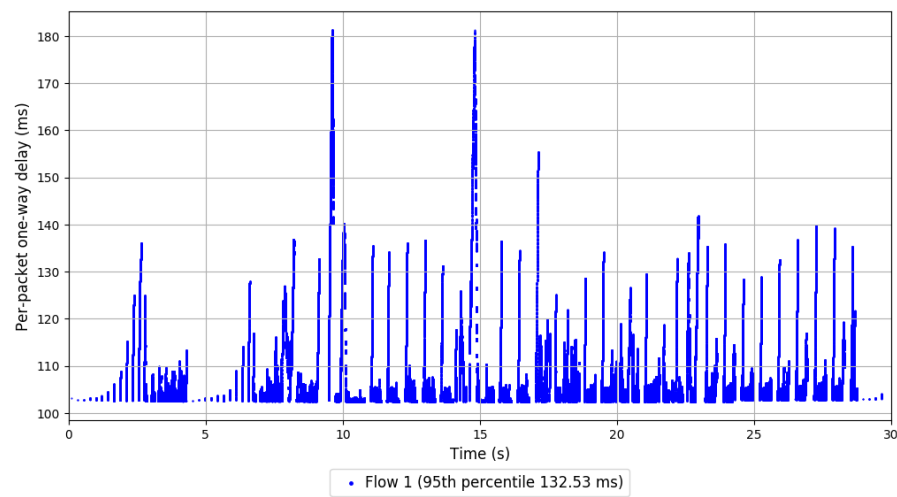
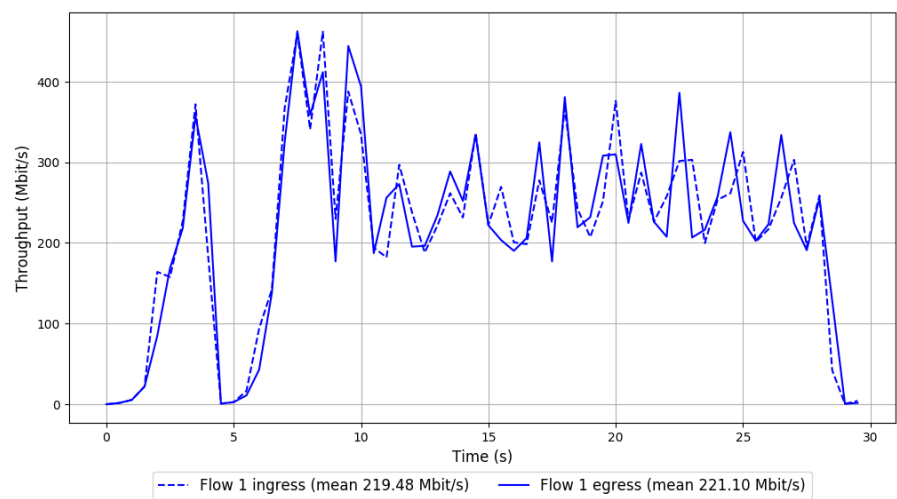
-- Flow 1:

Average throughput: 221.10 Mbit/s

95th percentile per-packet one-way delay: 132.532 ms

Loss rate: 0.02%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-15 23:50:00

End at: 2018-01-15 23:50:30

Below is generated by plot.py at 2018-01-16 03:12:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.79 Mbit/s

95th percentile per-packet one-way delay: 137.809 ms

Loss rate: 1.34%

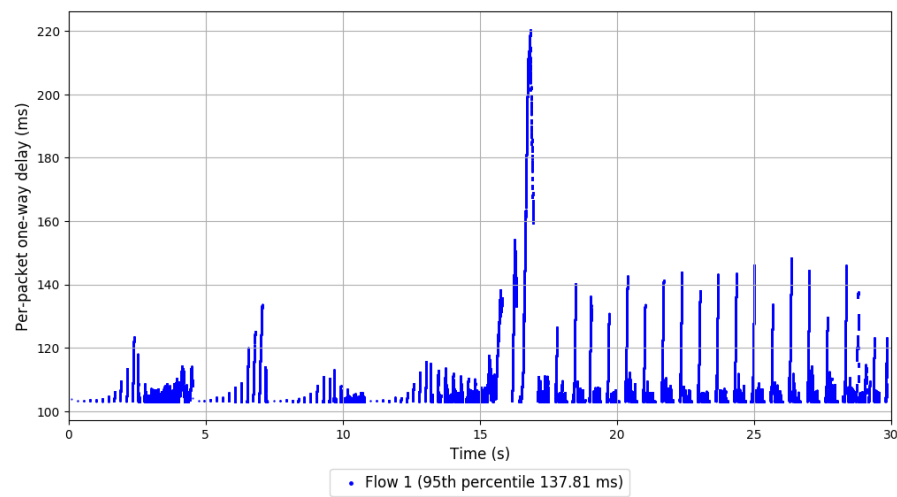
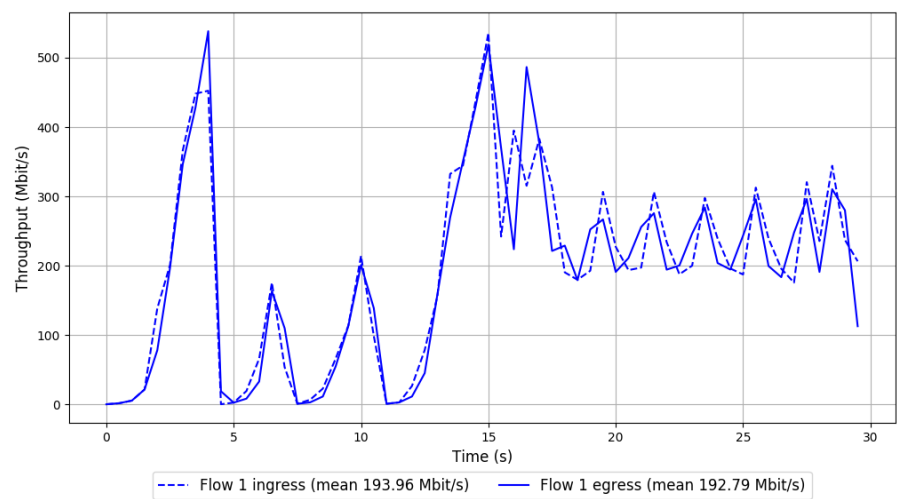
-- Flow 1:

Average throughput: 192.79 Mbit/s

95th percentile per-packet one-way delay: 137.809 ms

Loss rate: 1.34%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-16 00:02:12

End at: 2018-01-16 00:02:42

Below is generated by plot.py at 2018-01-16 03:12:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 149.94 Mbit/s

95th percentile per-packet one-way delay: 130.336 ms

Loss rate: 2.42%

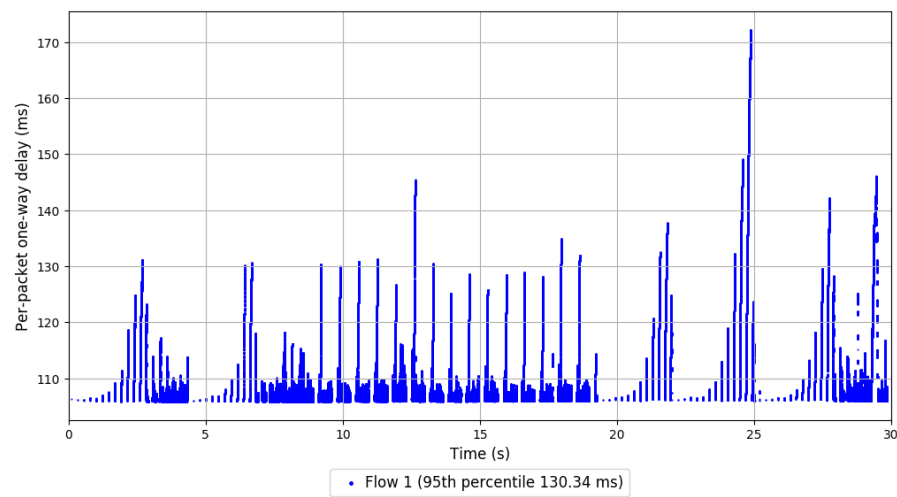
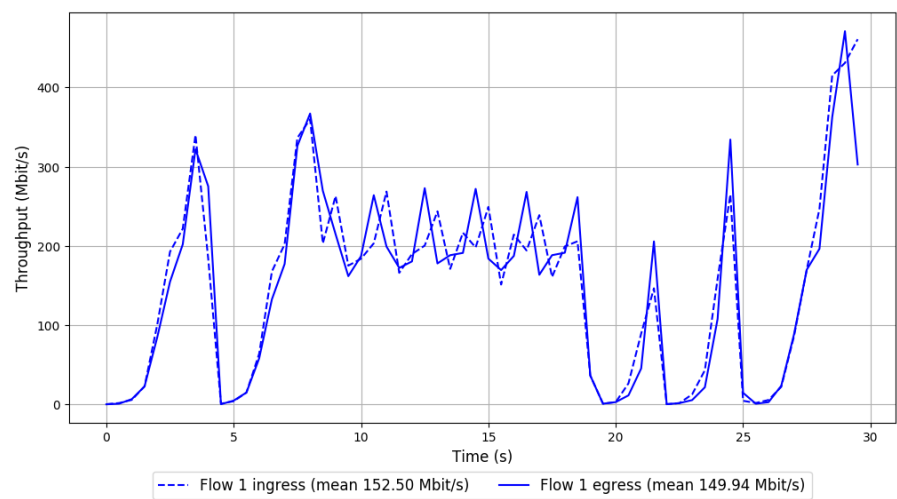
-- Flow 1:

Average throughput: 149.94 Mbit/s

95th percentile per-packet one-way delay: 130.336 ms

Loss rate: 2.42%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-16 00:14:43

End at: 2018-01-16 00:15:13

Below is generated by plot.py at 2018-01-16 03:12:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.92 Mbit/s

95th percentile per-packet one-way delay: 135.855 ms

Loss rate: 0.15%

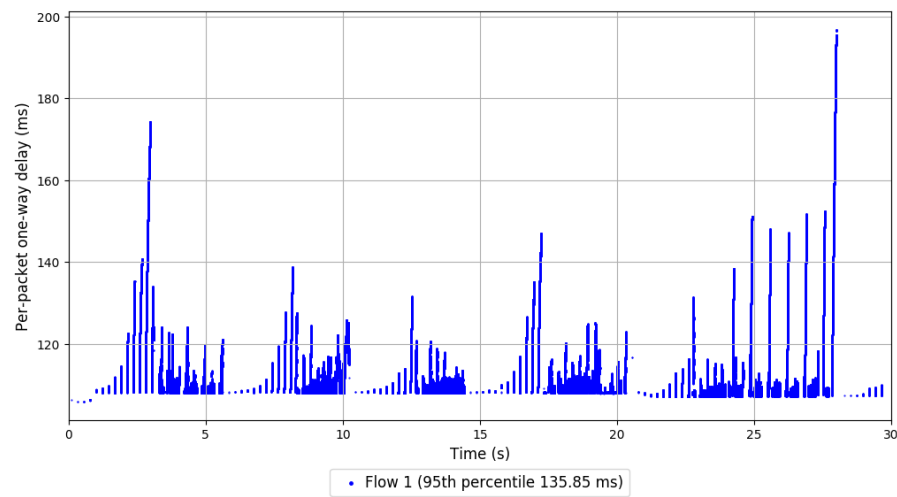
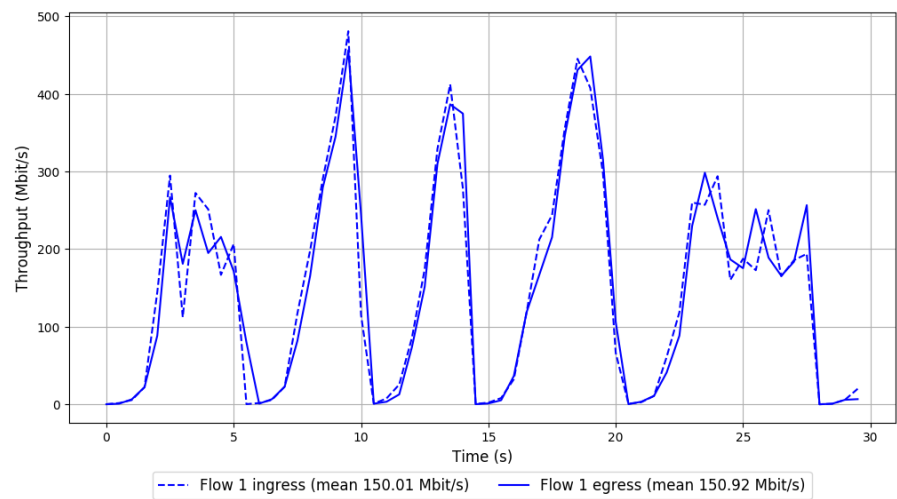
-- Flow 1:

Average throughput: 150.92 Mbit/s

95th percentile per-packet one-way delay: 135.855 ms

Loss rate: 0.15%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-16 00:26:59

End at: 2018-01-16 00:27:29

Below is generated by plot.py at 2018-01-16 03:13:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.67 Mbit/s

95th percentile per-packet one-way delay: 118.579 ms

Loss rate: 0.26%

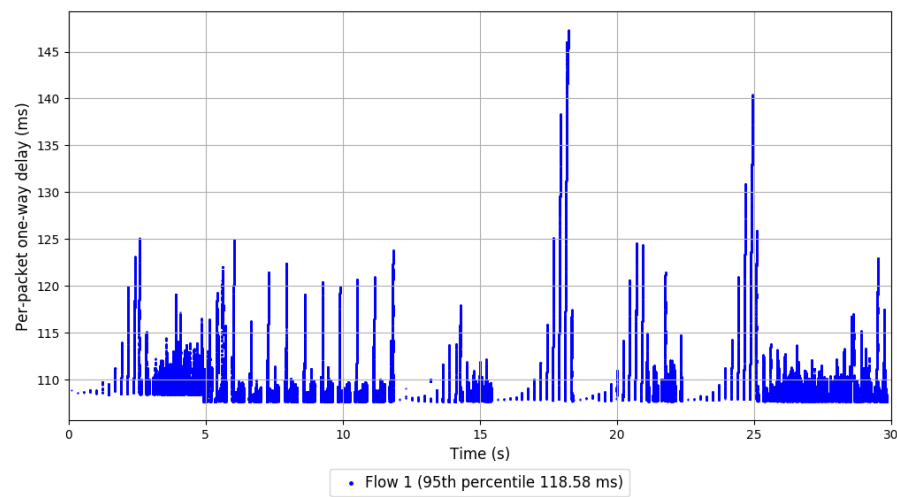
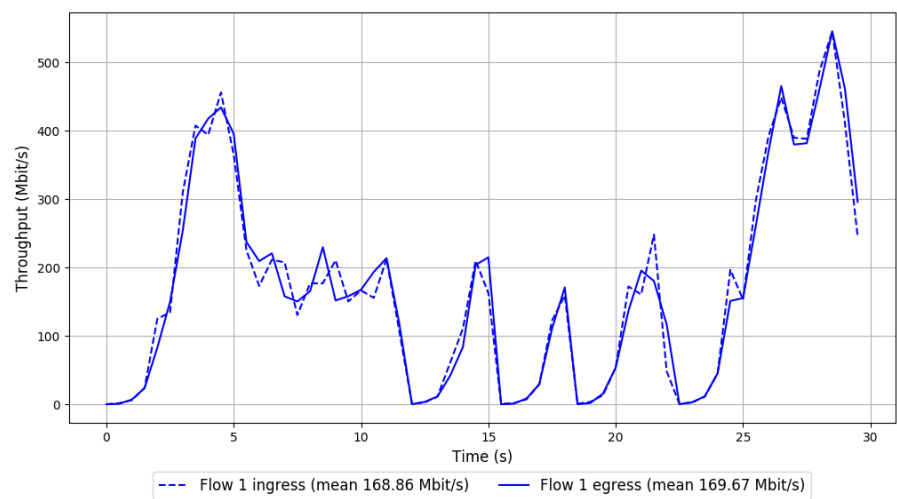
-- Flow 1:

Average throughput: 169.67 Mbit/s

95th percentile per-packet one-way delay: 118.579 ms

Loss rate: 0.26%

Run 10: Report of Verus — Data Link

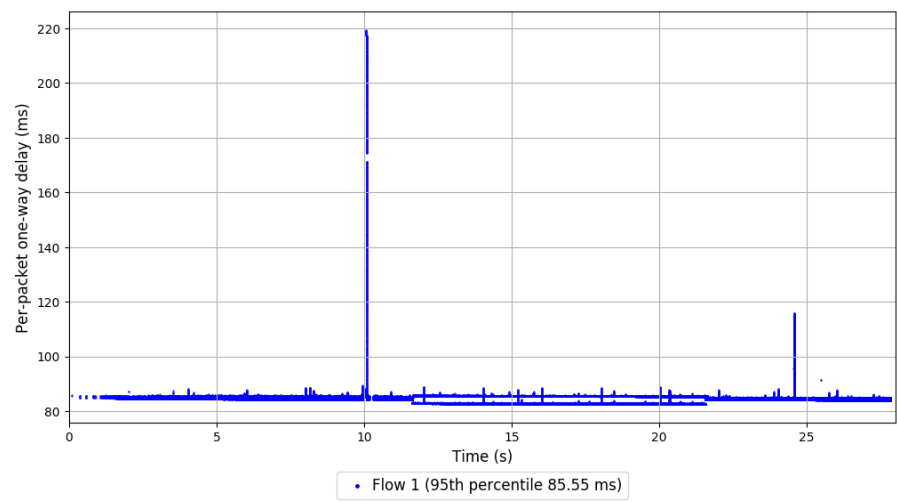
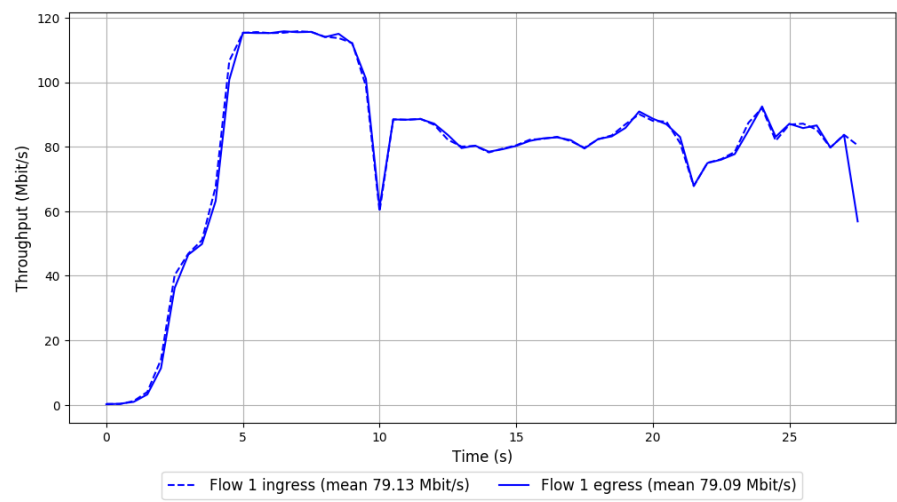


```
Run 1: Statistics of Copa

Start at: 2018-01-15 22:38:50
End at: 2018-01-15 22:39:20

# Below is generated by plot.py at 2018-01-16 03:13:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.09 Mbit/s
95th percentile per-packet one-way delay: 85.552 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 79.09 Mbit/s
95th percentile per-packet one-way delay: 85.552 ms
Loss rate: 0.85%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-15 22:50:53

End at: 2018-01-15 22:51:23

Below is generated by plot.py at 2018-01-16 03:13:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.70 Mbit/s

95th percentile per-packet one-way delay: 87.960 ms

Loss rate: 0.68%

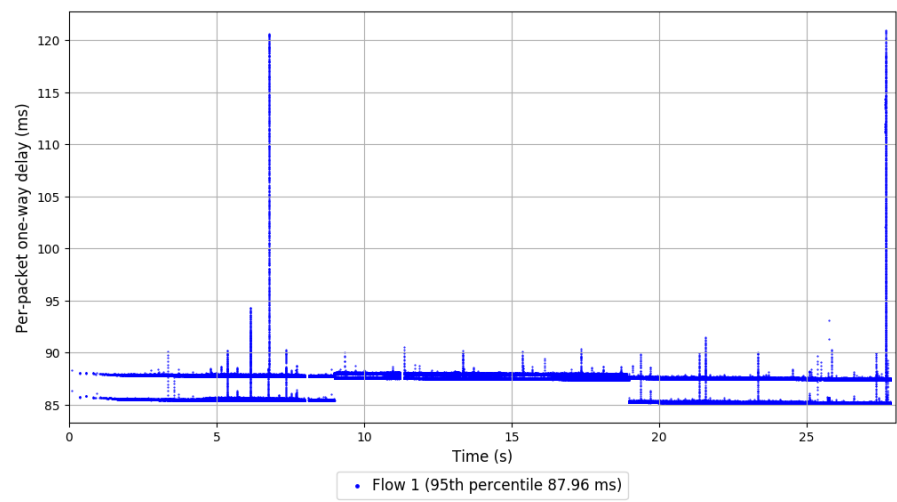
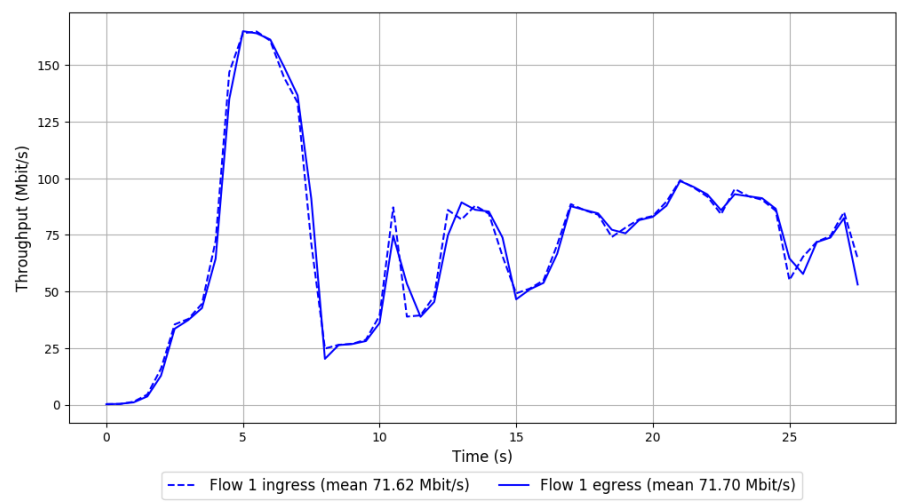
-- Flow 1:

Average throughput: 71.70 Mbit/s

95th percentile per-packet one-way delay: 87.960 ms

Loss rate: 0.68%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-15 23:03:20

End at: 2018-01-15 23:03:50

Below is generated by plot.py at 2018-01-16 03:13:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.93 Mbit/s

95th percentile per-packet one-way delay: 98.411 ms

Loss rate: 0.86%

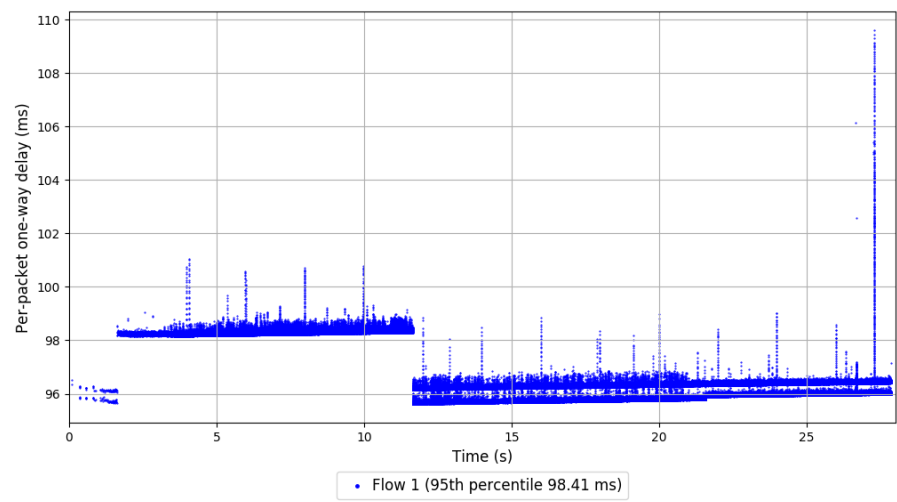
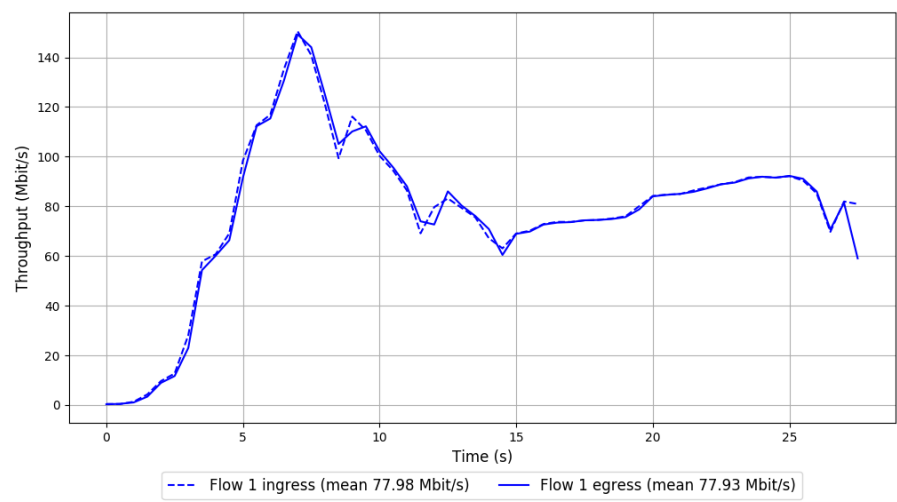
-- Flow 1:

Average throughput: 77.93 Mbit/s

95th percentile per-packet one-way delay: 98.411 ms

Loss rate: 0.86%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-15 23:15:57

End at: 2018-01-15 23:16:27

Below is generated by plot.py at 2018-01-16 03:13:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.69 Mbit/s

95th percentile per-packet one-way delay: 102.425 ms

Loss rate: 0.88%

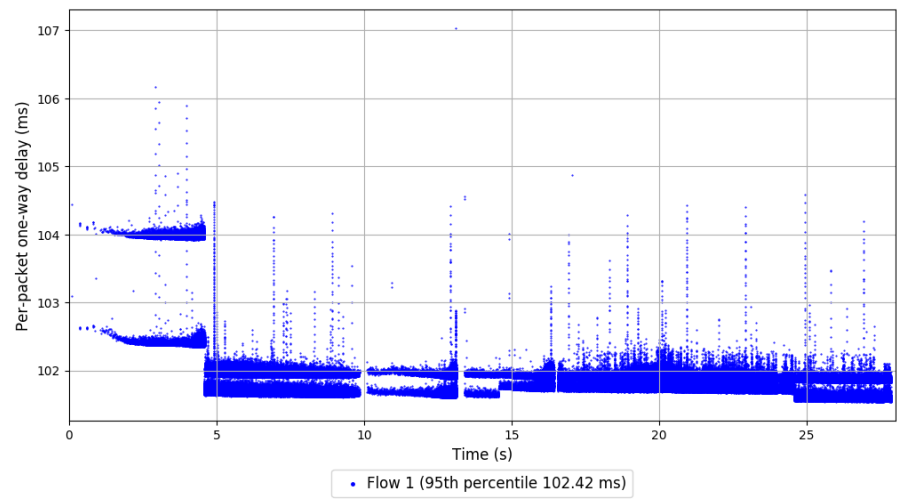
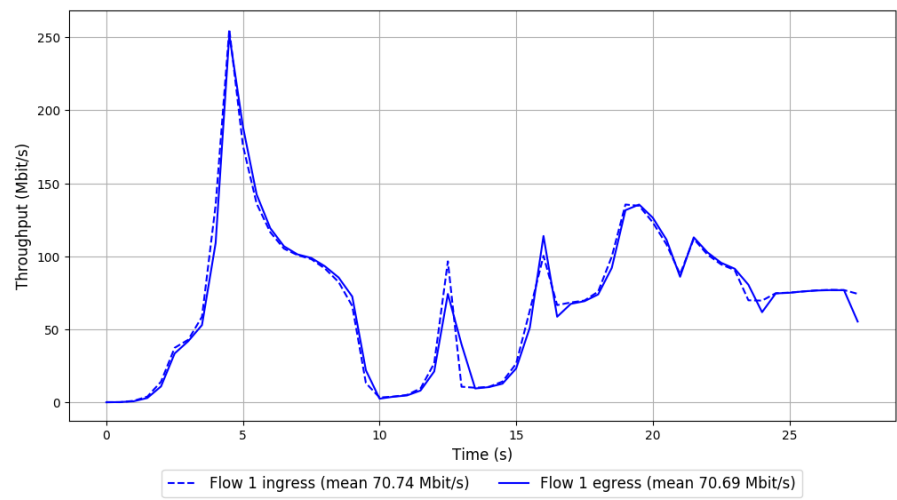
-- Flow 1:

Average throughput: 70.69 Mbit/s

95th percentile per-packet one-way delay: 102.425 ms

Loss rate: 0.88%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-15 23:28:31

End at: 2018-01-15 23:29:01

Below is generated by plot.py at 2018-01-16 03:14:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.76 Mbit/s

95th percentile per-packet one-way delay: 107.103 ms

Loss rate: 0.35%

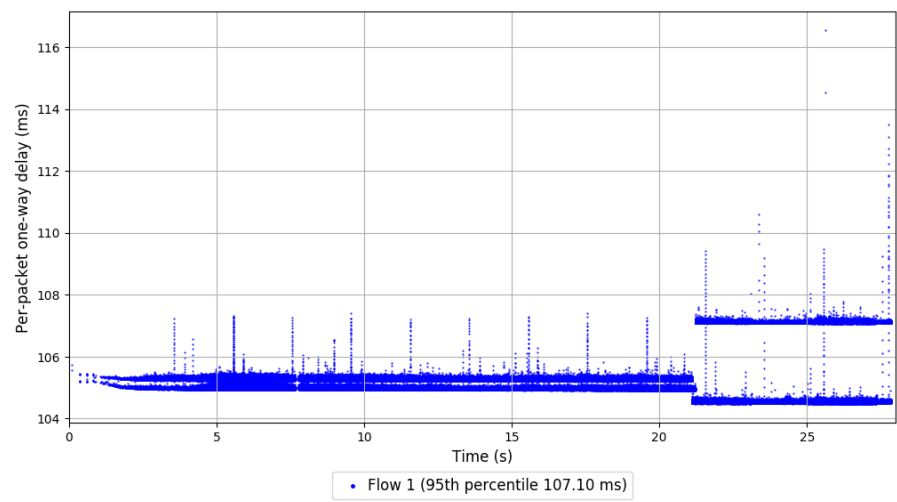
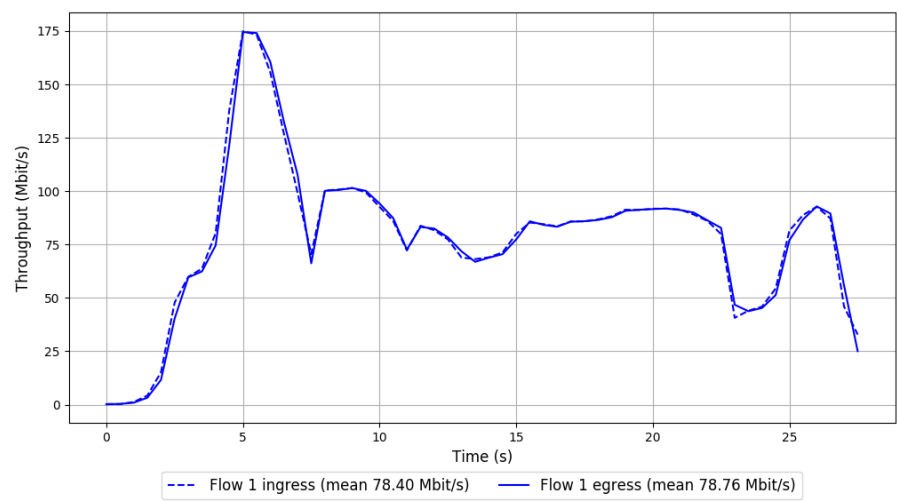
-- Flow 1:

Average throughput: 78.76 Mbit/s

95th percentile per-packet one-way delay: 107.103 ms

Loss rate: 0.35%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-15 23:41:02

End at: 2018-01-15 23:41:32

Below is generated by plot.py at 2018-01-16 03:14:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.29 Mbit/s

95th percentile per-packet one-way delay: 103.068 ms

Loss rate: 0.53%

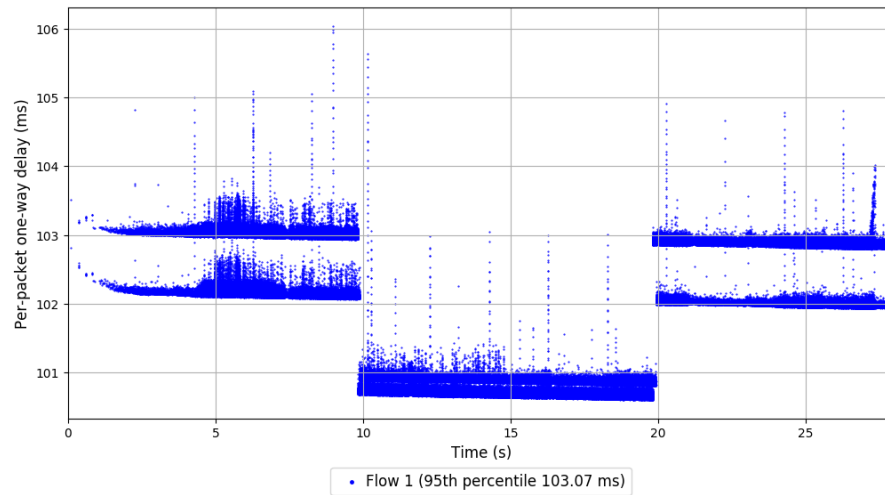
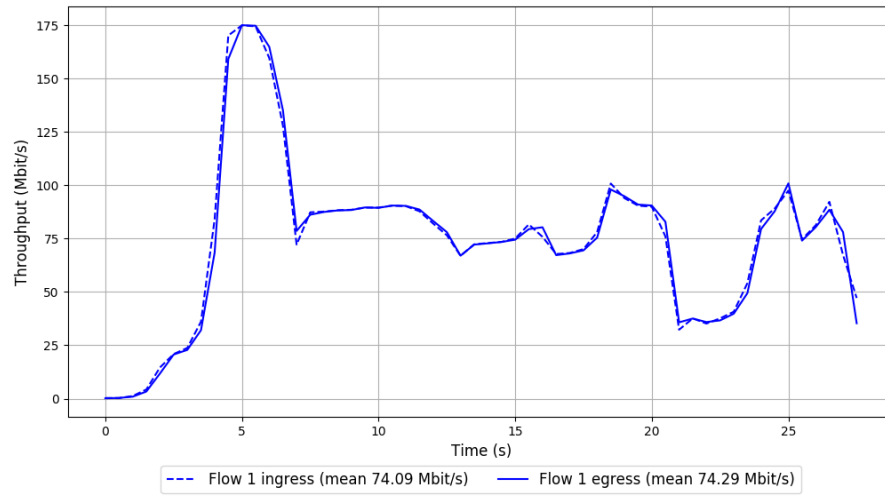
-- Flow 1:

Average throughput: 74.29 Mbit/s

95th percentile per-packet one-way delay: 103.068 ms

Loss rate: 0.53%

Run 6: Report of Copa — Data Link

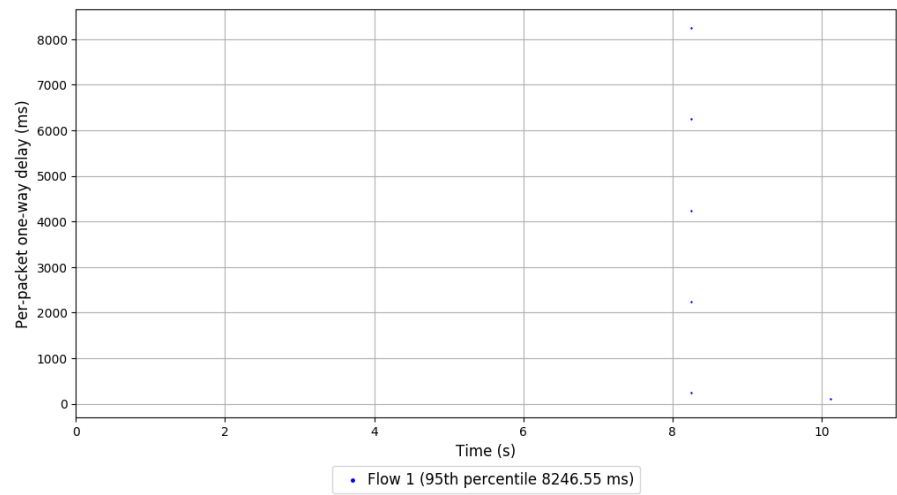
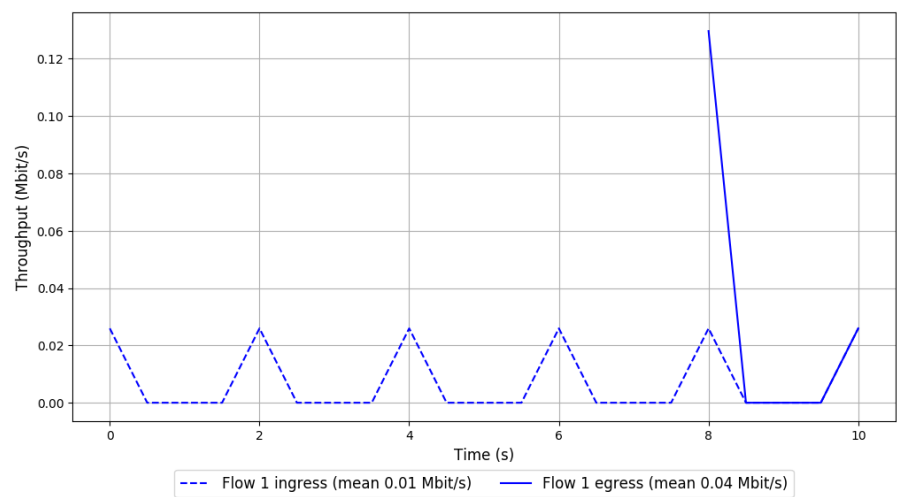


Run 7: Statistics of Copa

Start at: 2018-01-15 23:53:23

End at: 2018-01-15 23:53:53

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-16 00:05:46

End at: 2018-01-16 00:06:16

Below is generated by plot.py at 2018-01-16 03:14:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.36 Mbit/s

95th percentile per-packet one-way delay: 107.373 ms

Loss rate: 0.85%

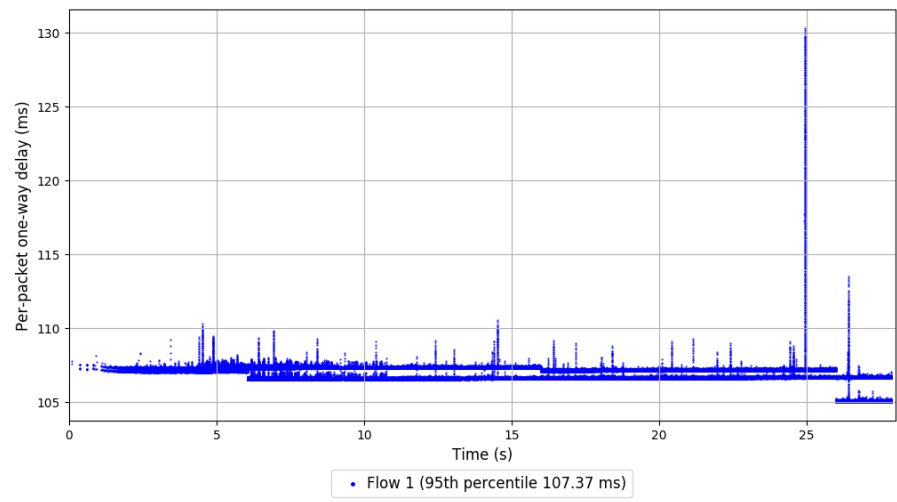
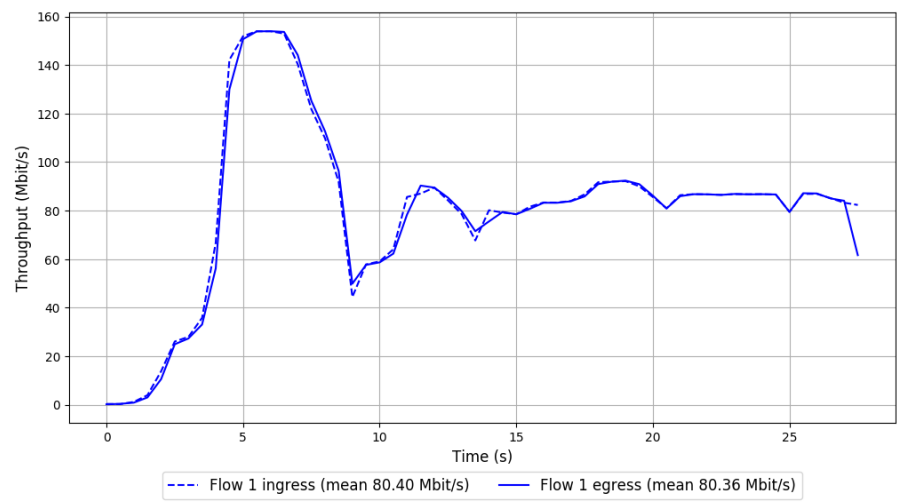
-- Flow 1:

Average throughput: 80.36 Mbit/s

95th percentile per-packet one-way delay: 107.373 ms

Loss rate: 0.85%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-16 00:18:00

End at: 2018-01-16 00:18:30

Below is generated by plot.py at 2018-01-16 03:15:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.78 Mbit/s

95th percentile per-packet one-way delay: 107.557 ms

Loss rate: 0.65%

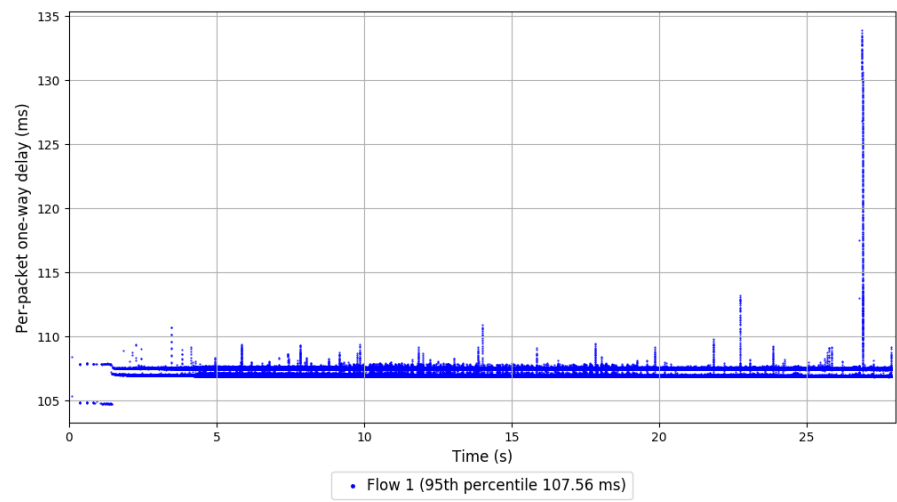
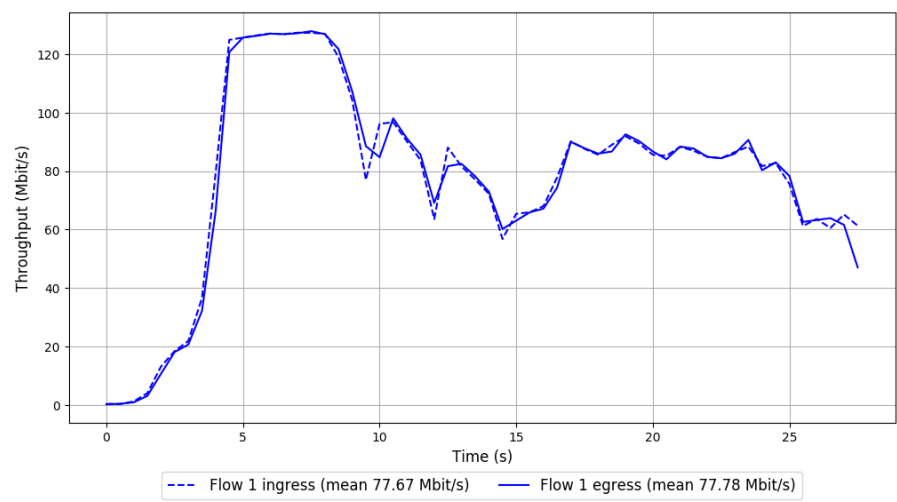
-- Flow 1:

Average throughput: 77.78 Mbit/s

95th percentile per-packet one-way delay: 107.557 ms

Loss rate: 0.65%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-16 00:30:25

End at: 2018-01-16 00:30:55

Below is generated by plot.py at 2018-01-16 03:15:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.11 Mbit/s

95th percentile per-packet one-way delay: 108.530 ms

Loss rate: 0.57%

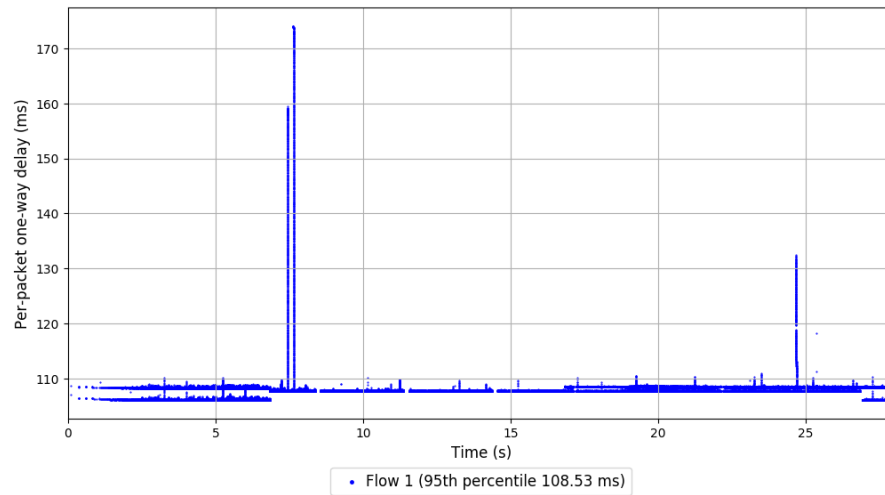
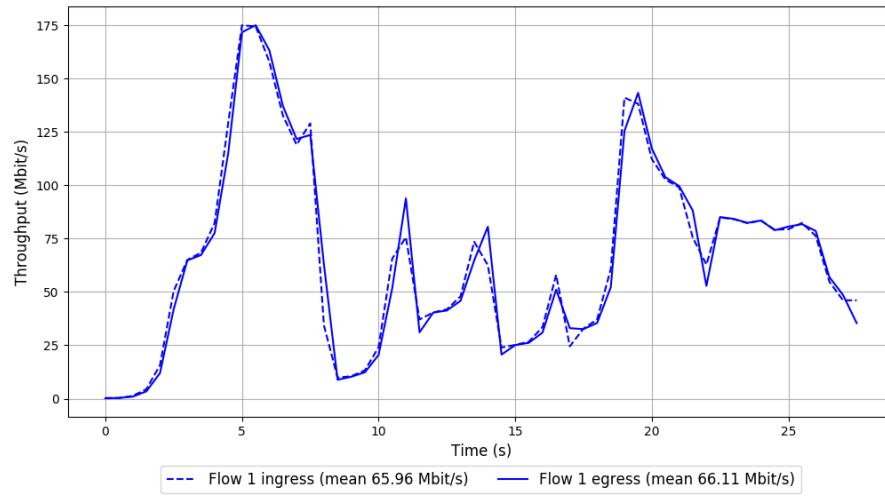
-- Flow 1:

Average throughput: 66.11 Mbit/s

95th percentile per-packet one-way delay: 108.530 ms

Loss rate: 0.57%

Run 10: Report of Copa — Data Link

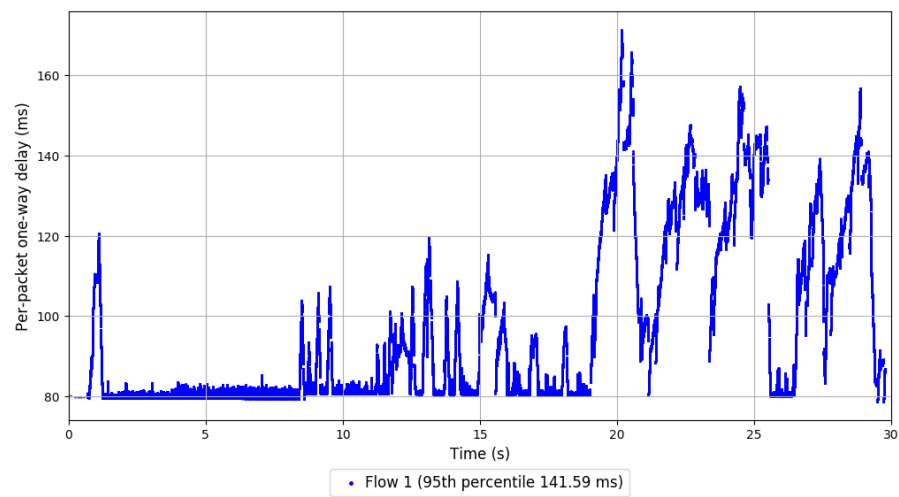
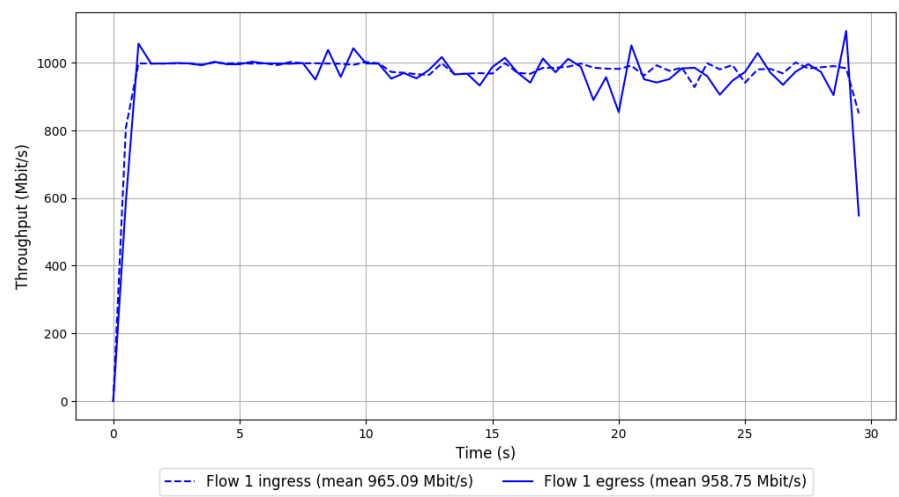


```
Run 1: Statistics of FillP

Start at: 2018-01-15 22:41:05
End at: 2018-01-15 22:41:35

# Below is generated by plot.py at 2018-01-16 03:29:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 958.75 Mbit/s
95th percentile per-packet one-way delay: 141.592 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 958.75 Mbit/s
95th percentile per-packet one-way delay: 141.592 ms
Loss rate: 1.40%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-15 22:53:08

End at: 2018-01-15 22:53:38

Below is generated by plot.py at 2018-01-16 03:29:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 956.57 Mbit/s

95th percentile per-packet one-way delay: 227.382 ms

Loss rate: 1.15%

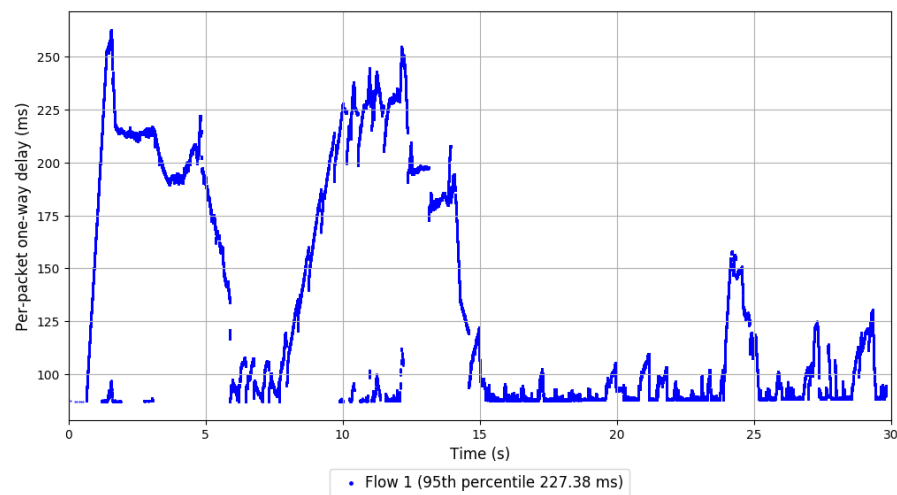
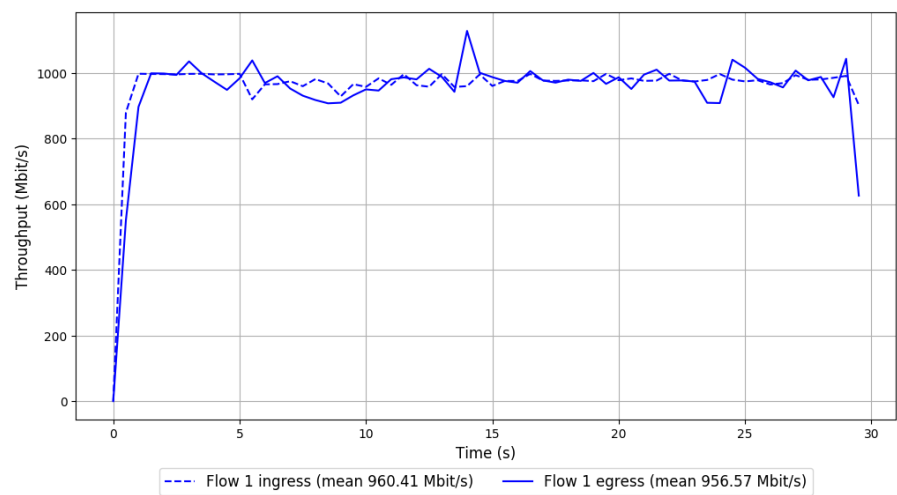
-- Flow 1:

Average throughput: 956.57 Mbit/s

95th percentile per-packet one-way delay: 227.382 ms

Loss rate: 1.15%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-15 23:05:34

End at: 2018-01-15 23:06:04

Below is generated by plot.py at 2018-01-16 03:29:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 938.09 Mbit/s

95th percentile per-packet one-way delay: 315.449 ms

Loss rate: 3.32%

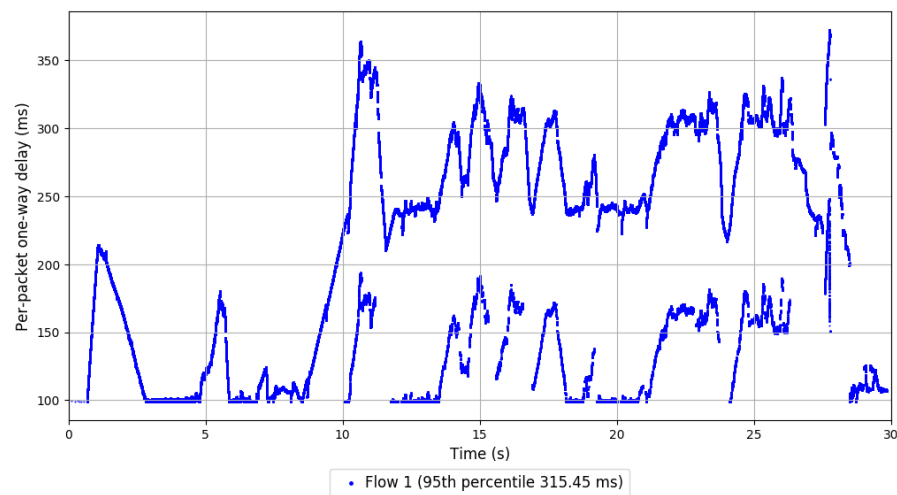
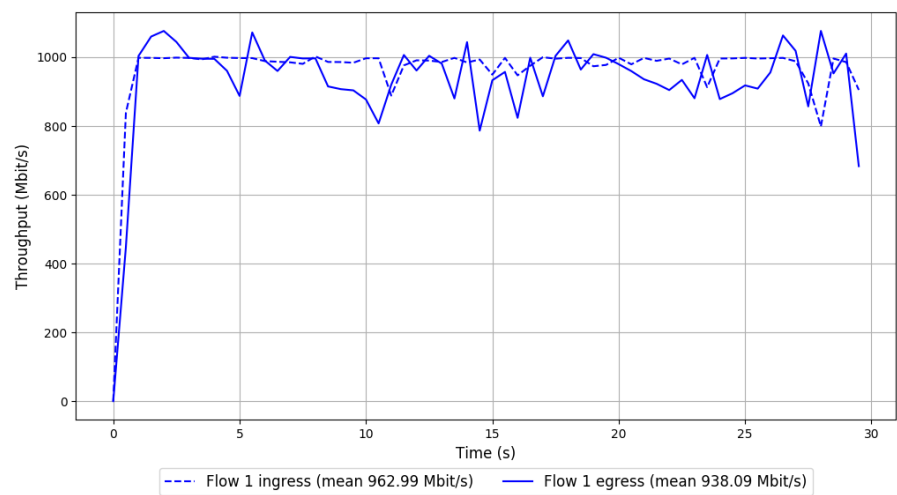
-- Flow 1:

Average throughput: 938.09 Mbit/s

95th percentile per-packet one-way delay: 315.449 ms

Loss rate: 3.32%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-15 23:18:11

End at: 2018-01-15 23:18:41

Below is generated by plot.py at 2018-01-16 03:30:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 965.12 Mbit/s

95th percentile per-packet one-way delay: 136.221 ms

Loss rate: 0.97%

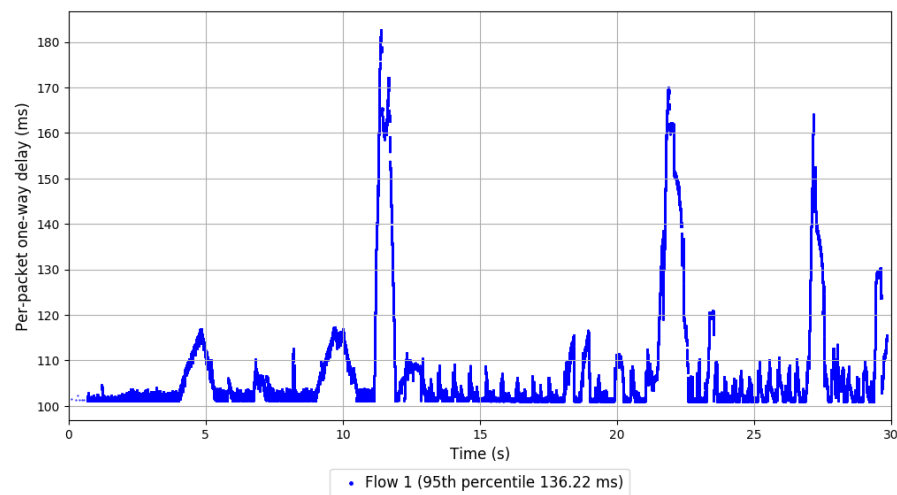
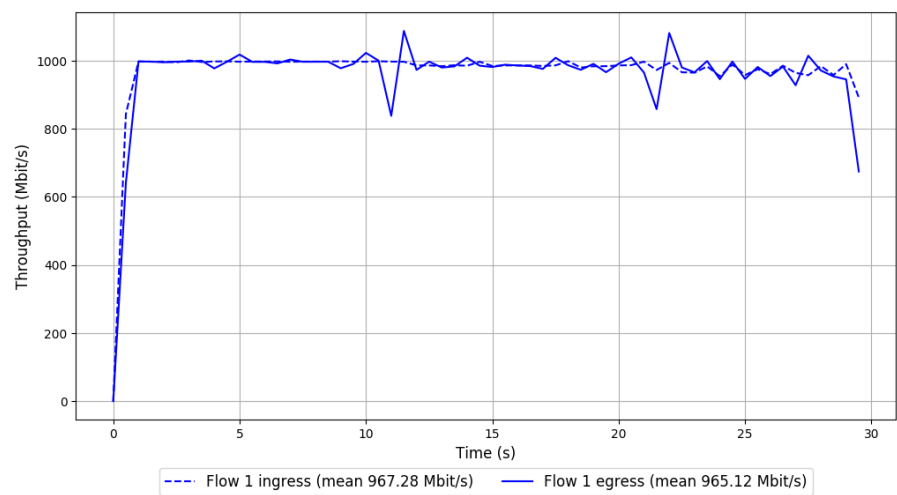
-- Flow 1:

Average throughput: 965.12 Mbit/s

95th percentile per-packet one-way delay: 136.221 ms

Loss rate: 0.97%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-15 23:30:45

End at: 2018-01-15 23:31:15

Below is generated by plot.py at 2018-01-16 03:30:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 955.39 Mbit/s

95th percentile per-packet one-way delay: 119.329 ms

Loss rate: 0.73%

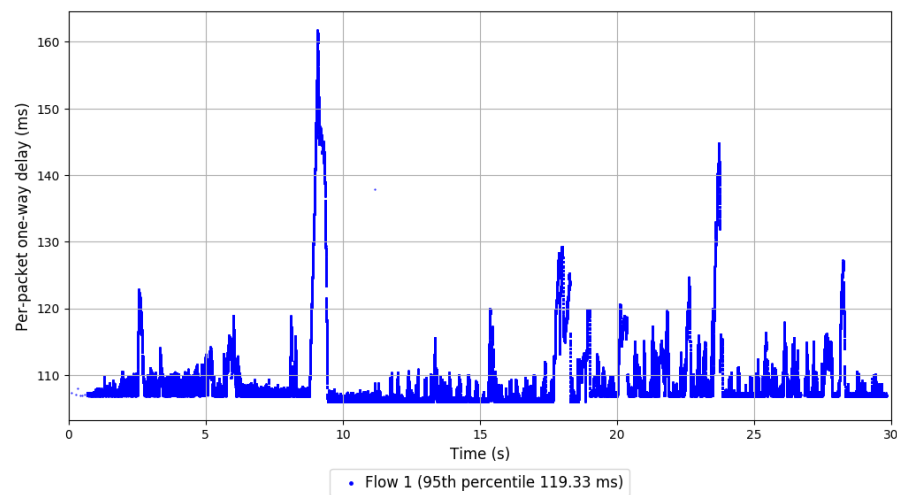
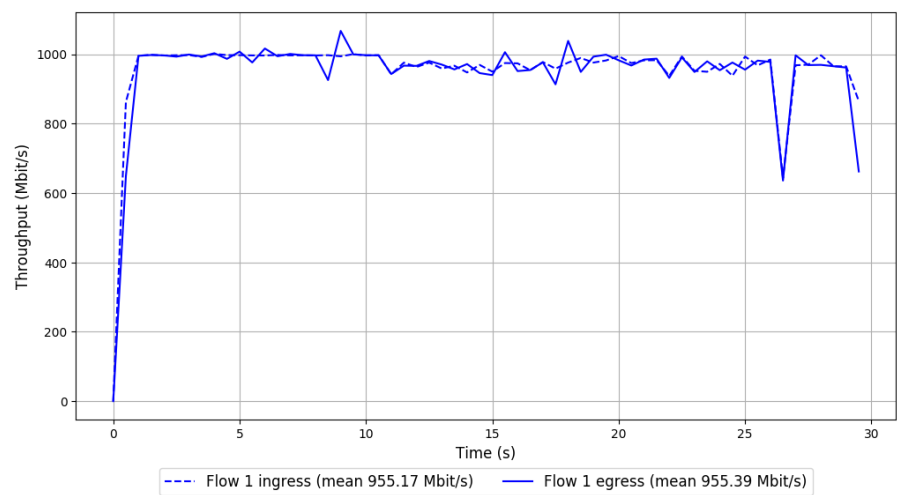
-- Flow 1:

Average throughput: 955.39 Mbit/s

95th percentile per-packet one-way delay: 119.329 ms

Loss rate: 0.73%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-15 23:43:16

End at: 2018-01-15 23:43:46

Below is generated by plot.py at 2018-01-16 03:30:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 971.47 Mbit/s

95th percentile per-packet one-way delay: 242.807 ms

Loss rate: 0.86%

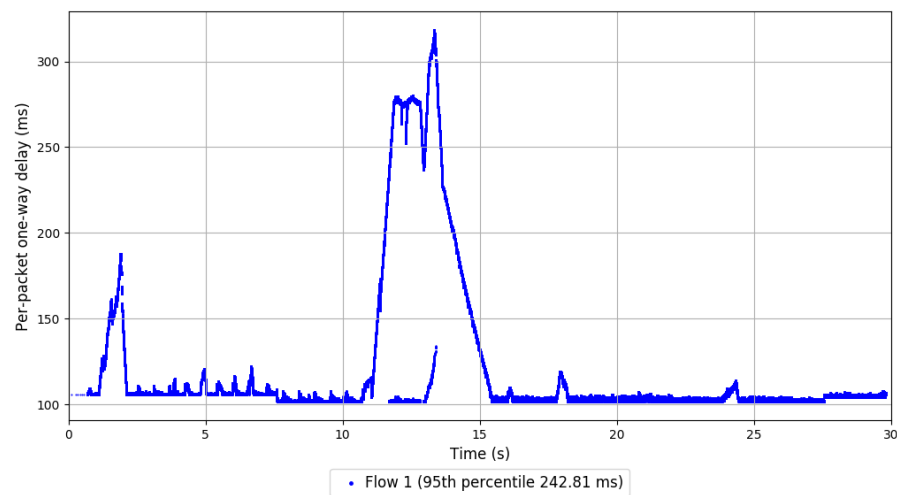
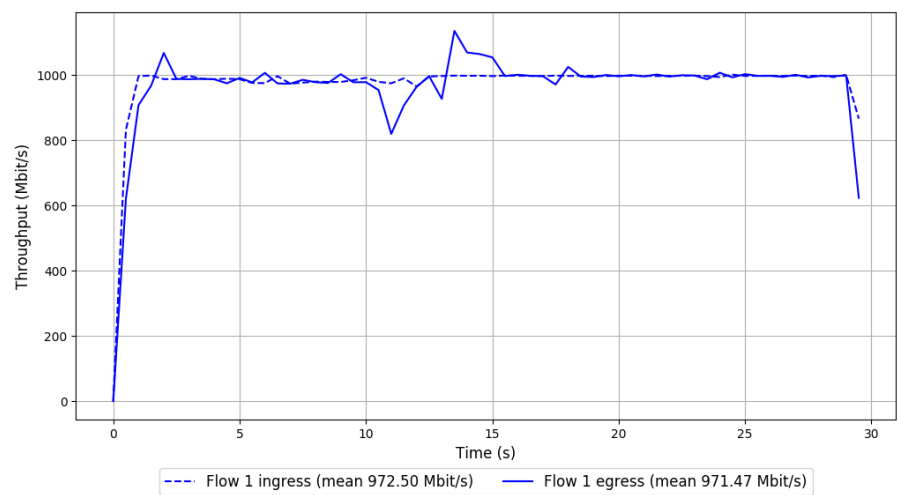
-- Flow 1:

Average throughput: 971.47 Mbit/s

95th percentile per-packet one-way delay: 242.807 ms

Loss rate: 0.86%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-15 23:55:31

End at: 2018-01-15 23:56:01

Below is generated by plot.py at 2018-01-16 03:30:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 969.26 Mbit/s

95th percentile per-packet one-way delay: 118.404 ms

Loss rate: 1.28%

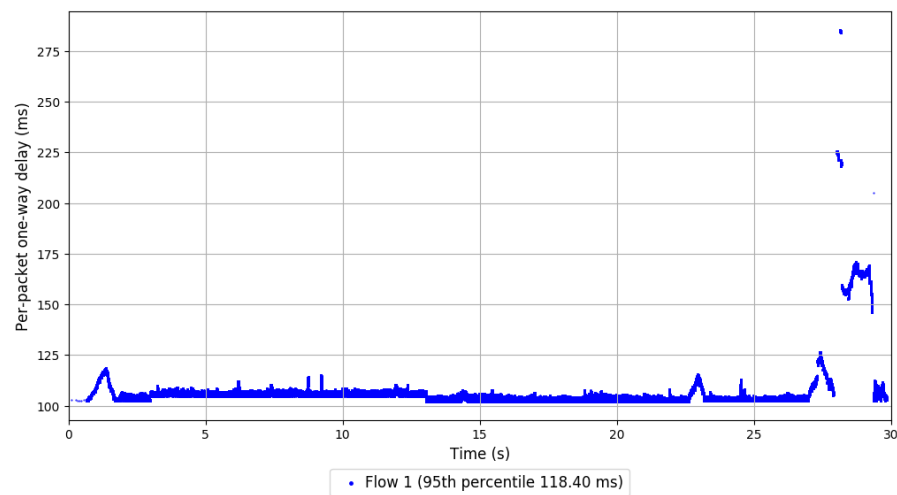
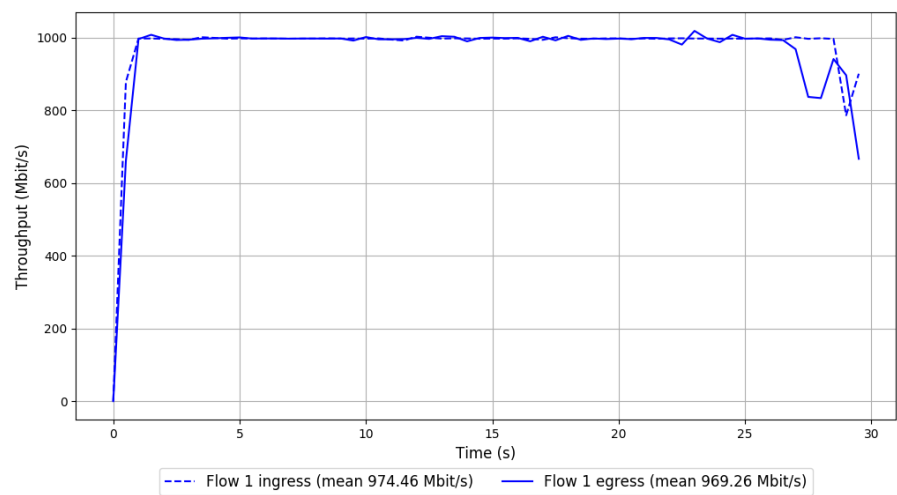
-- Flow 1:

Average throughput: 969.26 Mbit/s

95th percentile per-packet one-way delay: 118.404 ms

Loss rate: 1.28%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-16 00:08:00

End at: 2018-01-16 00:08:30

Below is generated by plot.py at 2018-01-16 03:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 977.76 Mbit/s

95th percentile per-packet one-way delay: 127.686 ms

Loss rate: 0.77%

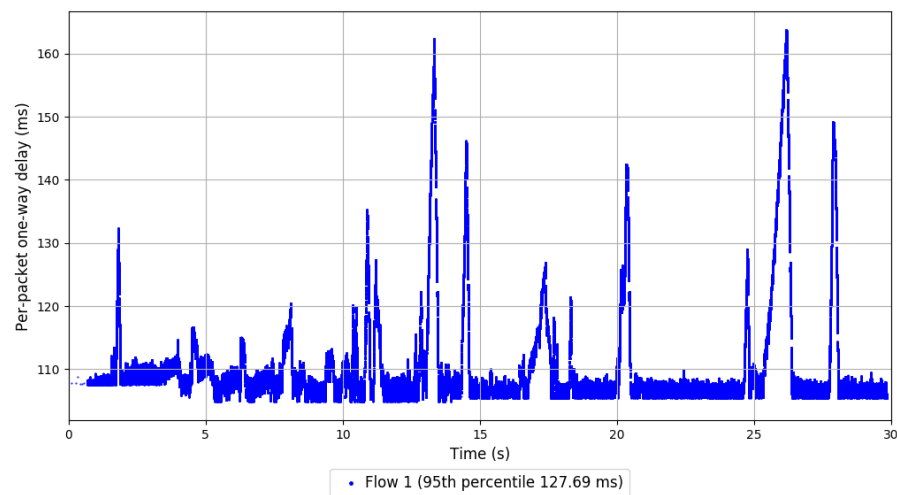
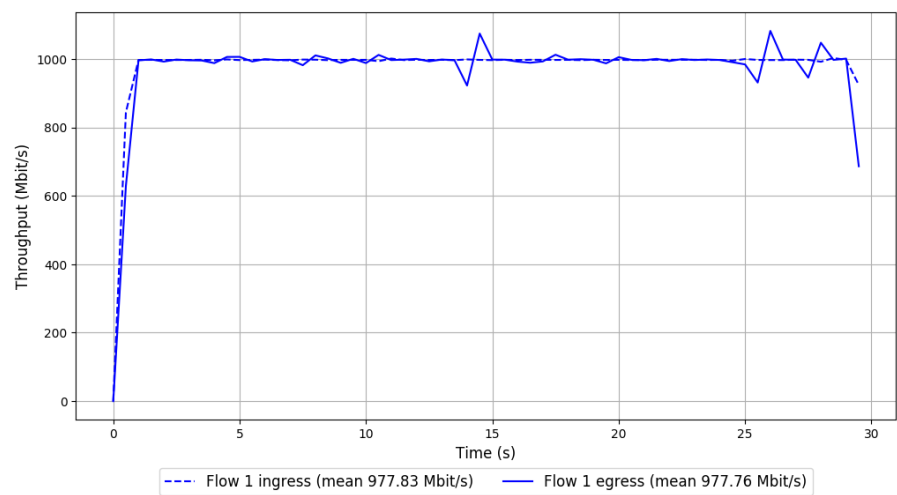
-- Flow 1:

Average throughput: 977.76 Mbit/s

95th percentile per-packet one-way delay: 127.686 ms

Loss rate: 0.77%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-16 00:20:16

End at: 2018-01-16 00:20:46

Below is generated by plot.py at 2018-01-16 03:36:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 961.95 Mbit/s

95th percentile per-packet one-way delay: 236.536 ms

Loss rate: 1.66%

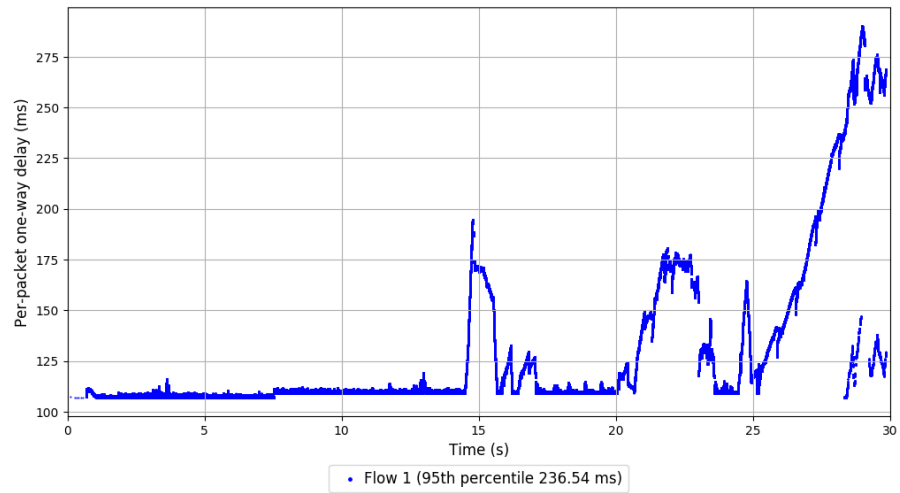
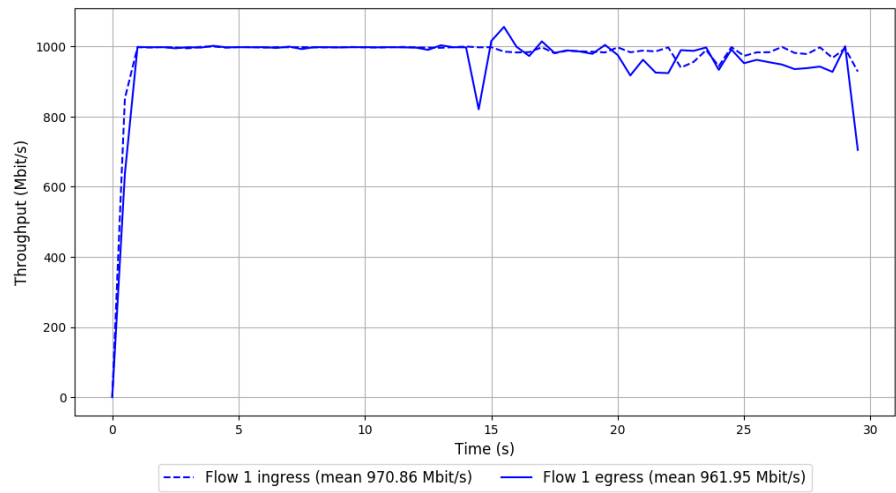
-- Flow 1:

Average throughput: 961.95 Mbit/s

95th percentile per-packet one-way delay: 236.536 ms

Loss rate: 1.66%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-16 00:32:38

End at: 2018-01-16 00:33:08

Below is generated by plot.py at 2018-01-16 03:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 976.61 Mbit/s

95th percentile per-packet one-way delay: 124.960 ms

Loss rate: 0.77%

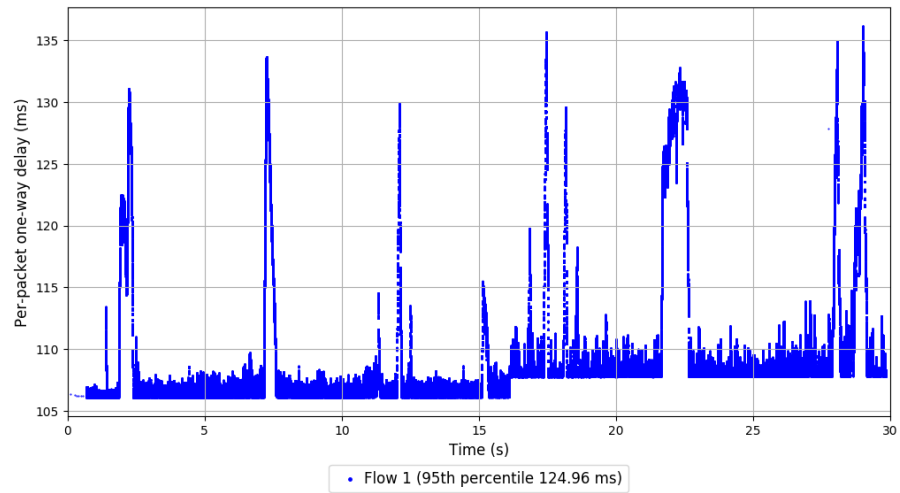
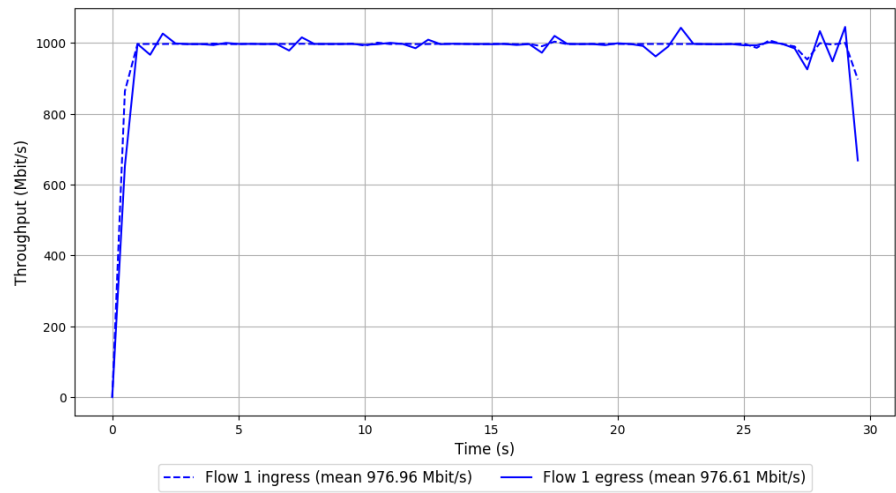
-- Flow 1:

Average throughput: 976.61 Mbit/s

95th percentile per-packet one-way delay: 124.960 ms

Loss rate: 0.77%

Run 10: Report of FillP — Data Link

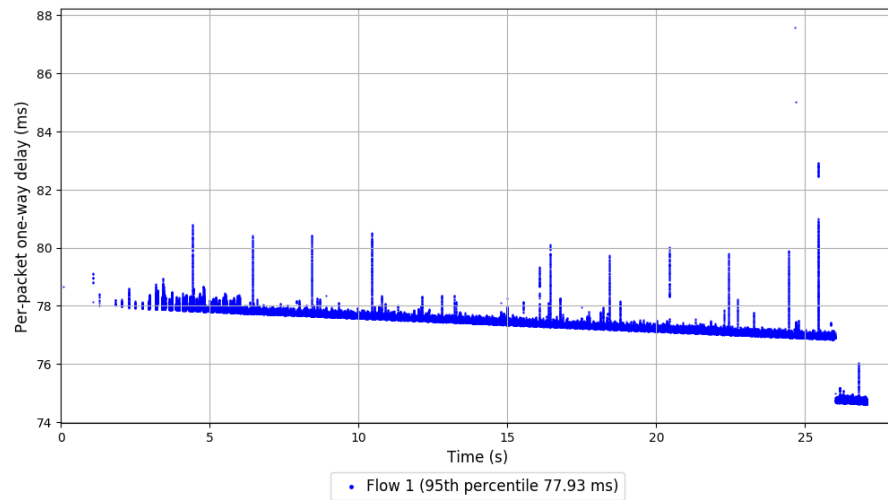
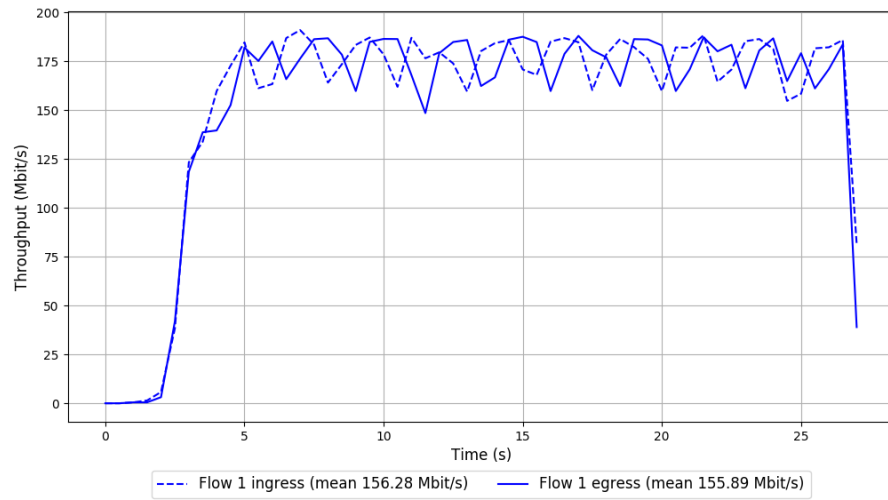


```
Run 1: Statistics of Indigo

Start at: 2018-01-15 22:42:25
End at: 2018-01-15 22:42:55

# Below is generated by plot.py at 2018-01-16 03:36:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 155.89 Mbit/s
95th percentile per-packet one-way delay: 77.929 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 155.89 Mbit/s
95th percentile per-packet one-way delay: 77.929 ms
Loss rate: 1.08%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-15 22:54:28

End at: 2018-01-15 22:54:58

Below is generated by plot.py at 2018-01-16 03:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.92 Mbit/s

95th percentile per-packet one-way delay: 89.497 ms

Loss rate: 0.79%

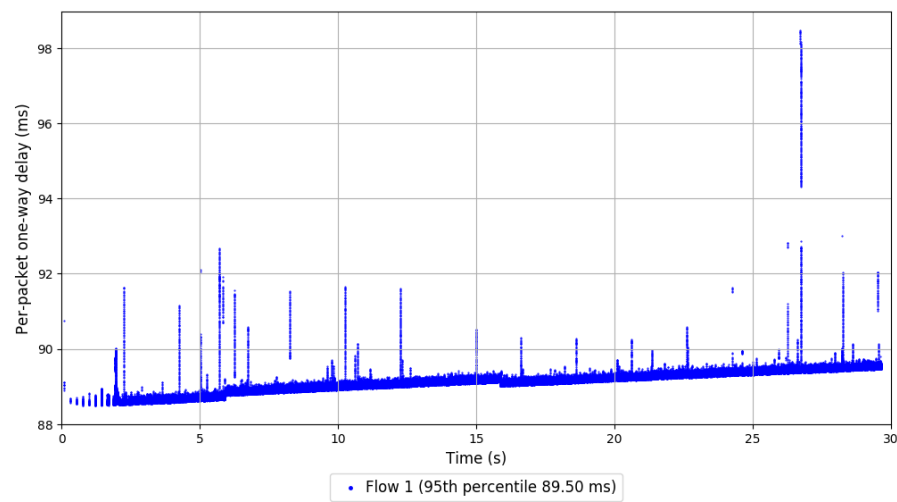
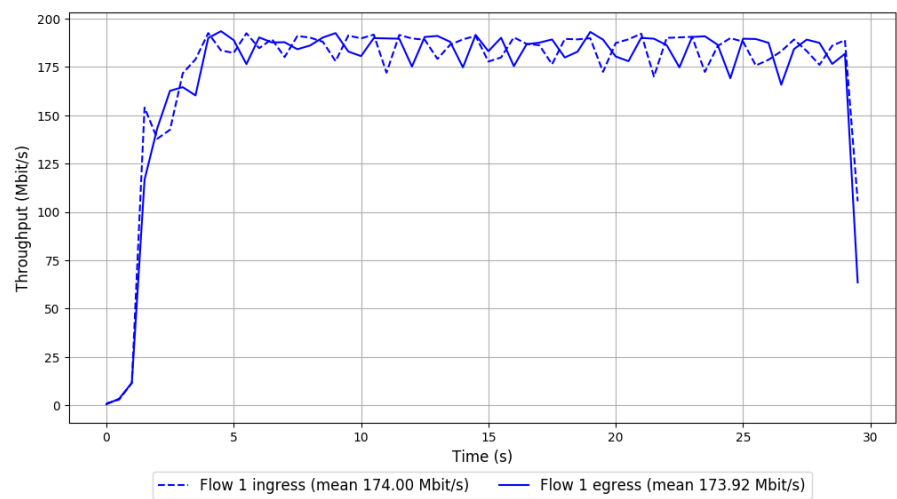
-- Flow 1:

Average throughput: 173.92 Mbit/s

95th percentile per-packet one-way delay: 89.497 ms

Loss rate: 0.79%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-15 23:06:56

End at: 2018-01-15 23:07:26

Below is generated by plot.py at 2018-01-16 03:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.35 Mbit/s

95th percentile per-packet one-way delay: 96.584 ms

Loss rate: 0.81%

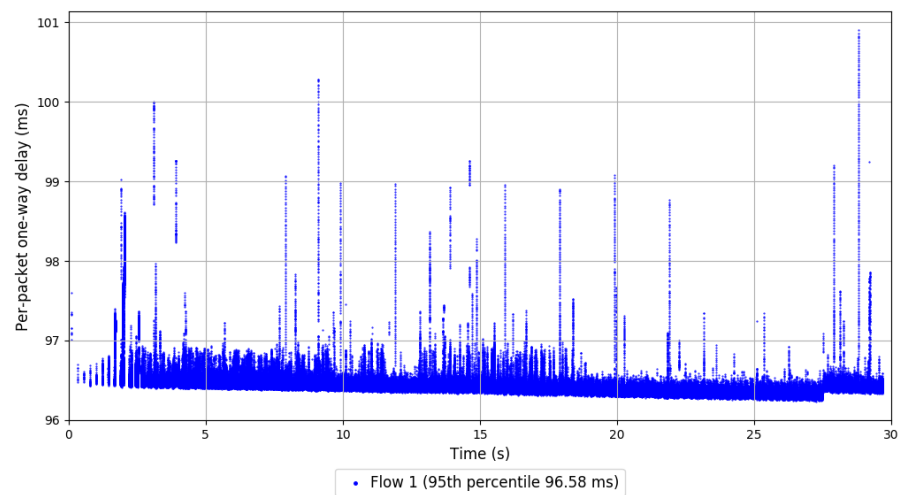
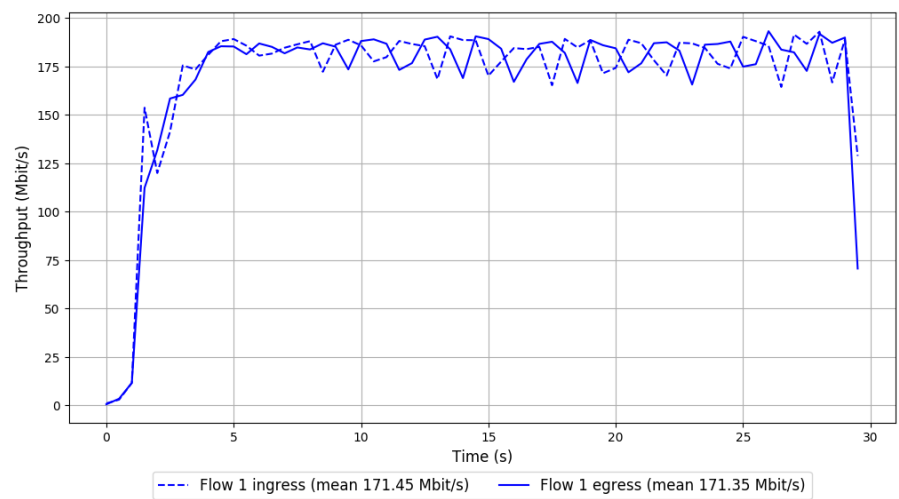
-- Flow 1:

Average throughput: 171.35 Mbit/s

95th percentile per-packet one-way delay: 96.584 ms

Loss rate: 0.81%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-15 23:19:31

End at: 2018-01-15 23:20:01

Below is generated by plot.py at 2018-01-16 03:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.85 Mbit/s

95th percentile per-packet one-way delay: 100.831 ms

Loss rate: 0.79%

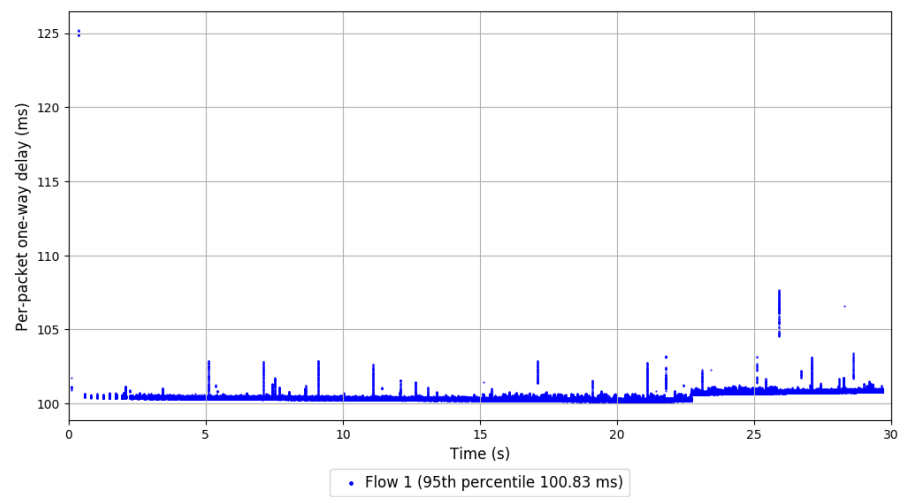
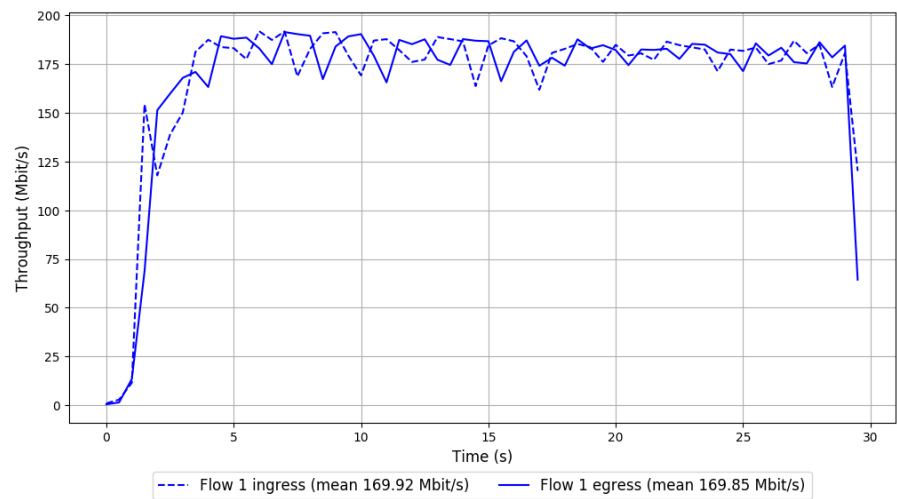
-- Flow 1:

Average throughput: 169.85 Mbit/s

95th percentile per-packet one-way delay: 100.831 ms

Loss rate: 0.79%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-15 23:32:04

End at: 2018-01-15 23:32:34

Below is generated by plot.py at 2018-01-16 03:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 168.78 Mbit/s

95th percentile per-packet one-way delay: 106.509 ms

Loss rate: 0.81%

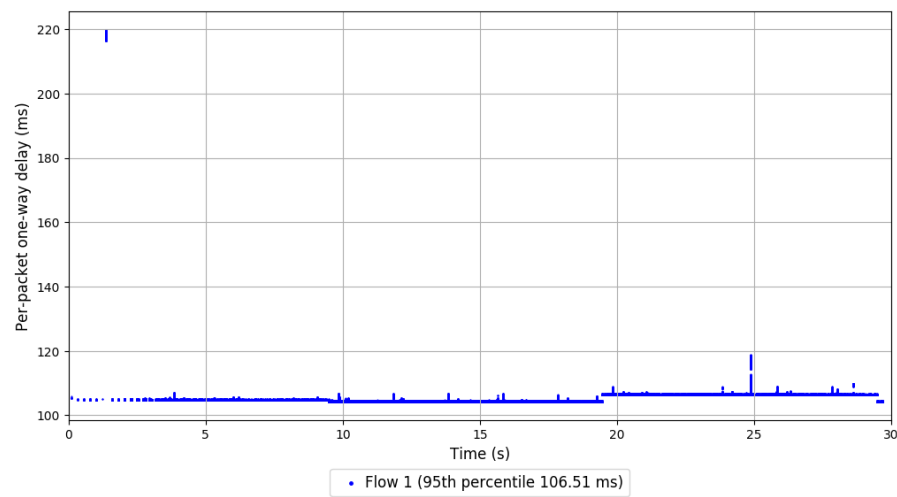
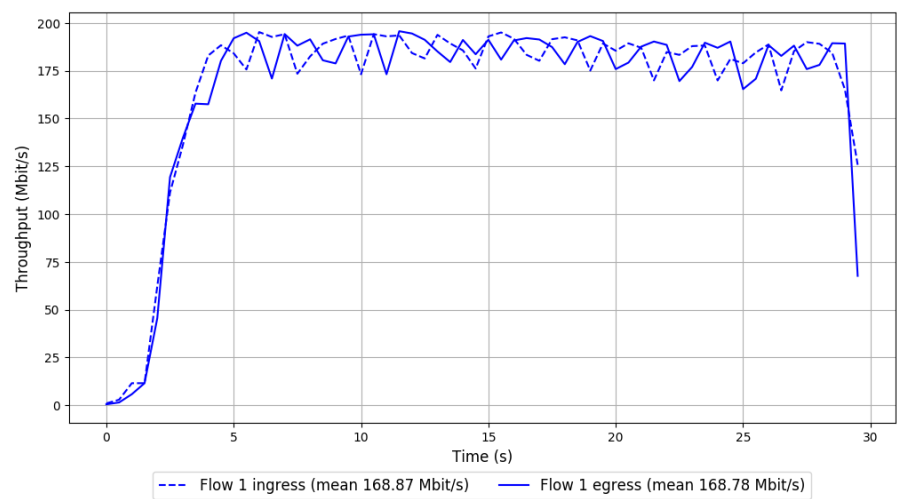
-- Flow 1:

Average throughput: 168.78 Mbit/s

95th percentile per-packet one-way delay: 106.509 ms

Loss rate: 0.81%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-15 23:44:36

End at: 2018-01-15 23:45:06

Below is generated by plot.py at 2018-01-16 03:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.24 Mbit/s

95th percentile per-packet one-way delay: 104.339 ms

Loss rate: 0.79%

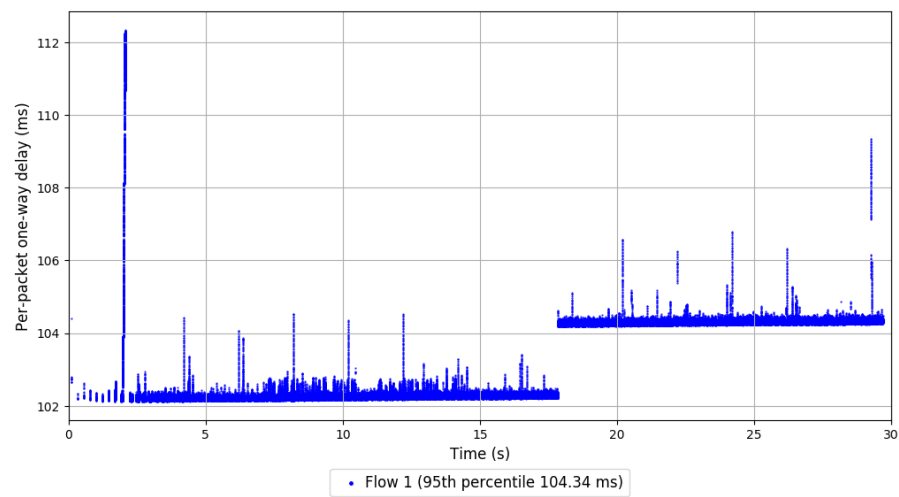
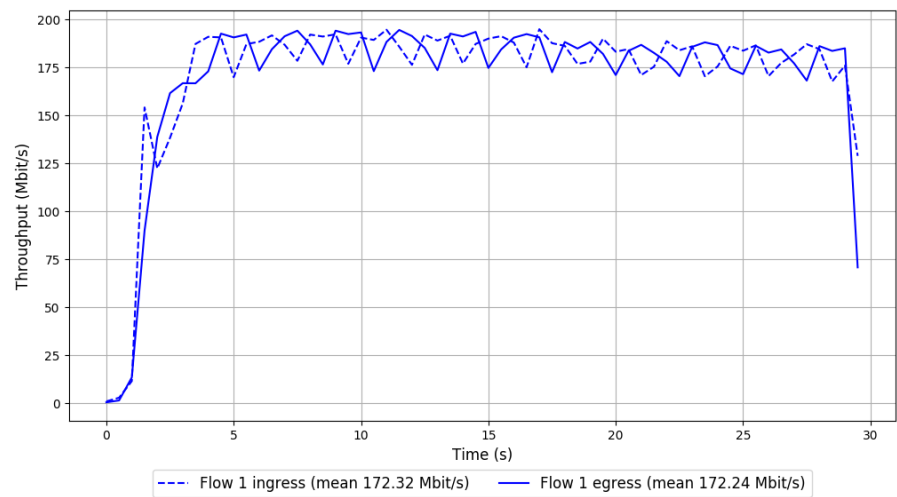
-- Flow 1:

Average throughput: 172.24 Mbit/s

95th percentile per-packet one-way delay: 104.339 ms

Loss rate: 0.79%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-15 23:56:50

End at: 2018-01-15 23:57:20

Below is generated by plot.py at 2018-01-16 03:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.99 Mbit/s

95th percentile per-packet one-way delay: 104.725 ms

Loss rate: 0.76%

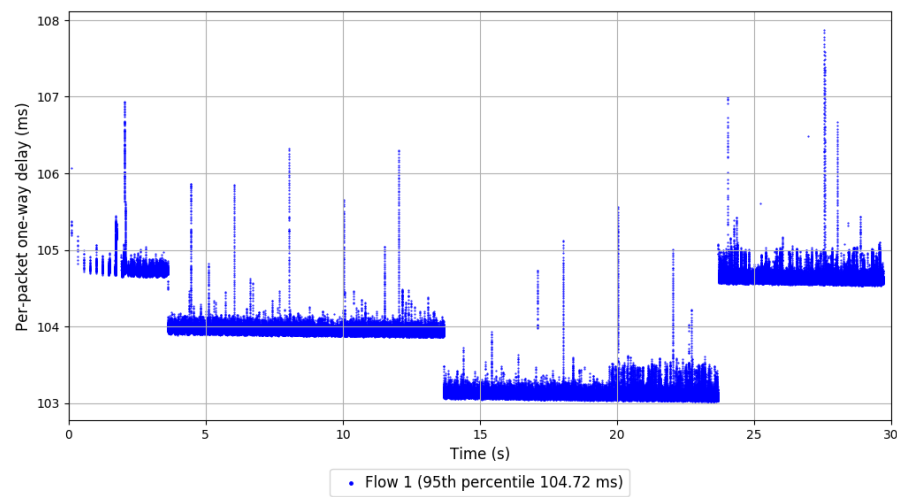
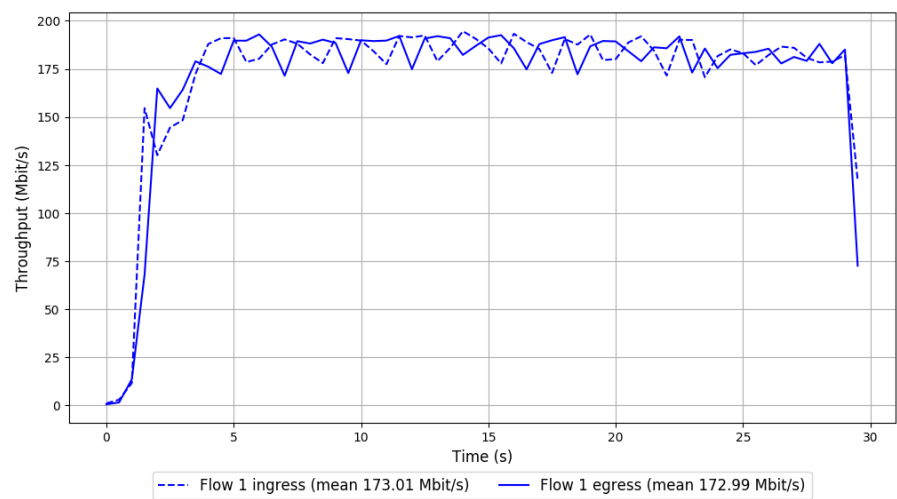
-- Flow 1:

Average throughput: 172.99 Mbit/s

95th percentile per-packet one-way delay: 104.725 ms

Loss rate: 0.76%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-16 00:09:19

End at: 2018-01-16 00:09:49

Below is generated by plot.py at 2018-01-16 03:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.03 Mbit/s

95th percentile per-packet one-way delay: 108.143 ms

Loss rate: 0.76%

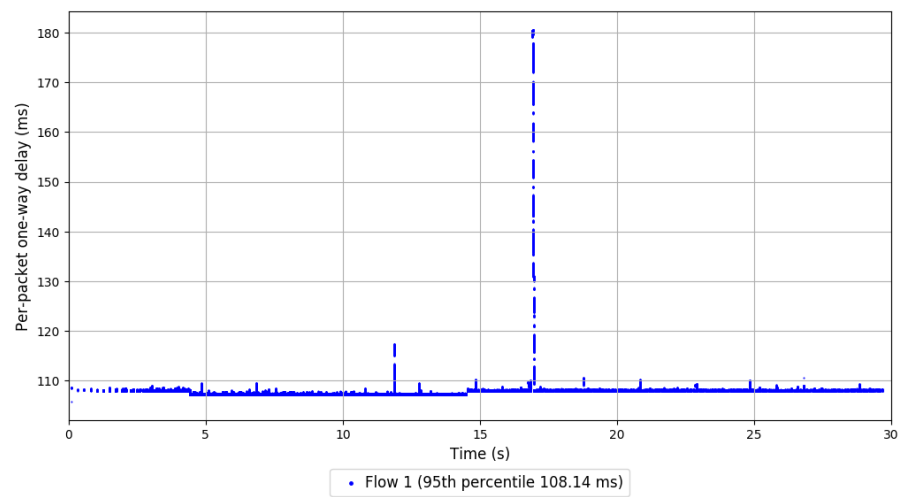
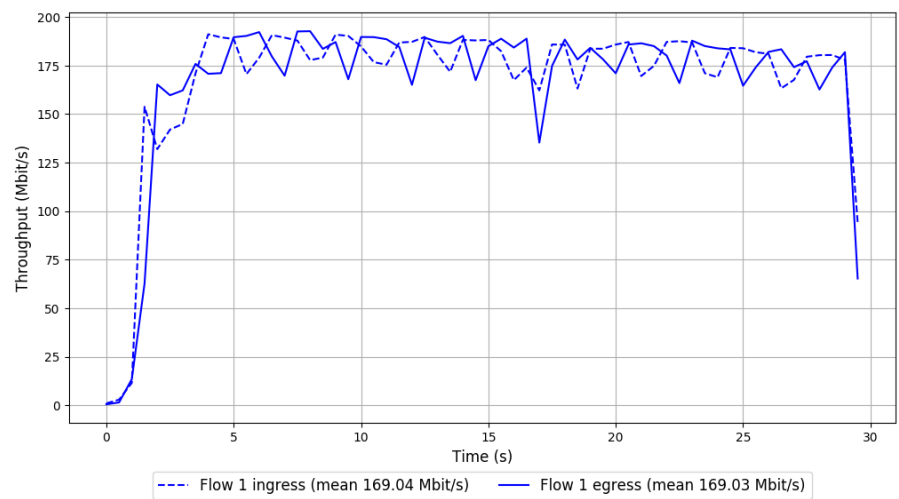
-- Flow 1:

Average throughput: 169.03 Mbit/s

95th percentile per-packet one-way delay: 108.143 ms

Loss rate: 0.76%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-16 00:21:36

End at: 2018-01-16 00:22:06

Below is generated by plot.py at 2018-01-16 03:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 175.04 Mbit/s

95th percentile per-packet one-way delay: 107.555 ms

Loss rate: 0.80%

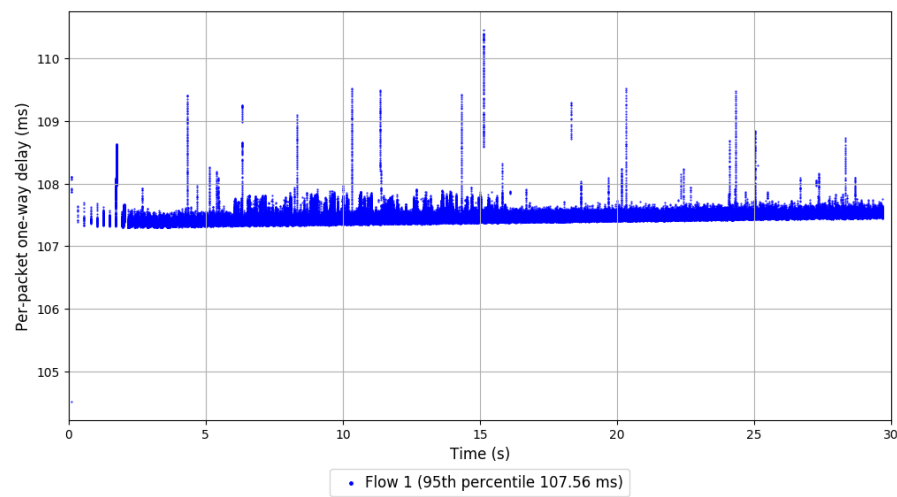
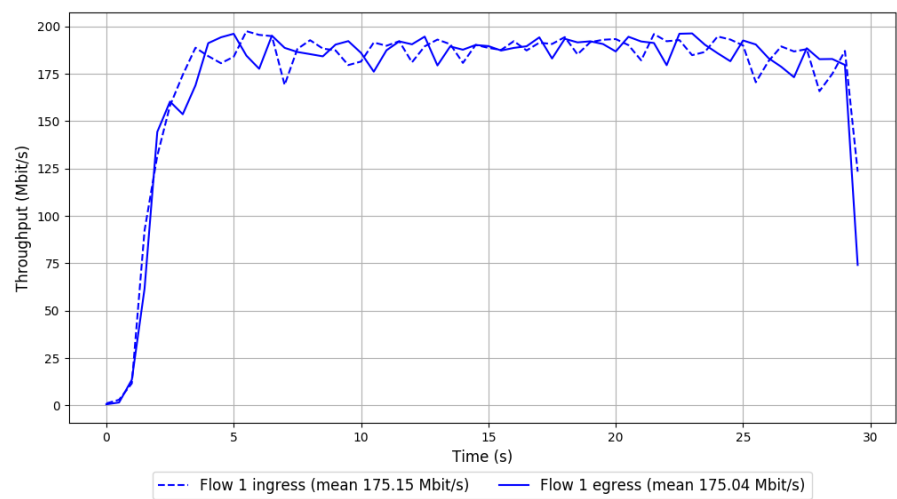
-- Flow 1:

Average throughput: 175.04 Mbit/s

95th percentile per-packet one-way delay: 107.555 ms

Loss rate: 0.80%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-16 00:33:58

End at: 2018-01-16 00:34:28

Below is generated by plot.py at 2018-01-16 03:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.17 Mbit/s

95th percentile per-packet one-way delay: 108.010 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 172.17 Mbit/s

95th percentile per-packet one-way delay: 108.010 ms

Loss rate: 0.77%

Run 10: Report of Indigo — Data Link

